

Jiaju Zhou · Guirong Xie · Xinjian Yan

# Encyclopedia of Traditional Chinese Medicines

Molecular Structures, Pharmacological Activities,  
Natural Sources and Applications

## Vol.1

Isolated Compounds A-C

 Springer

Encyclopedia of Traditional Chinese Medicines  
Molecular Structures, Pharmacological Activities,  
Natural Sources and Applications





Jiaju Zhou • Guirong Xie • Xinjian Yan

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Traditional Chinese Medicines  
Molecular Structures, Pharmacological  
Activities, Natural Sources and Applications

Vol. 1: Isolated Compounds A-C

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# Encyclopedia of Traditional Chinese Medicines

Molecular Structures, Pharmacological Activities, Natural Sources and Applications

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# Preface

A significant preoccupation of modern traditional Chinese medicine (TCM) research has been the characterization of TCM components, such as pertain to their isolation, purification, structural determination, and pharmacological activity. As a reference tool, this *Encyclopedia of Traditional Chinese Medicines* presents a comprehensive and integrative work on surveying TCM plant sources, chemistry, pharmacology and medicinal effects and indications in a systematic manner.

This encyclopedia is an integrated achievement of a long-term TCM research project by the authors at the Chinese Academy of Sciences<sup>[1-4]</sup>, involving three parts and now organized in six volumes:

Part I (Volumes 1 to 4 and part of Volume 5) provides structural, physical, pharmacological and natural source information on 23,033 isolated chemicals captured from 5,535 references, basically up to year 2005. A great deal of effort has been paid on overlapping or contradictory data in order to provide readers with an accurate and reliable resource.

Part II (last part of Volume 5) describes 6,926 TCM plants and congeners, together with their medicinal effects and indications. The contents of Part I and Part II are all organized in alphabetical order.

Part III (Volume 6) includes seven indexes produced by a computer program. Based on the indexes, users can readily find concerned contents in multiple ways.

With this encyclopedia, the authors attempt to provide a bridge for the communication between the TCM system and Western medicinal systems, and a platform with multiple-subjects in support of research and development of the health sciences.

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# Introduction

This encyclopedia mainly consists two parts - compound and plant. Its core content is the structural and pharmacological information of 23,033 phytochemicals, as well as medical effects and indications of 6,926 plant species from which the phytochemicals were isolated. The compounds, i.e. phytochemicals, are ordered alphabetically, and their ordinal numbers are used as compound unique codes. The plant species are coded from T0001 to T6926. With this code system, the complicated “many to many” relationship between compounds and plants can be clearly expressed, and any individual compound or plant could be located easily in this 6 volumes book.

## 1. Compound Entry

**Format of Compound Entry.** A compound entry starts with a title line, in which there are two items: the compound’s unique code and main name. Following the title line is the compound physical, pharmacological and source information, which may include 8 items:

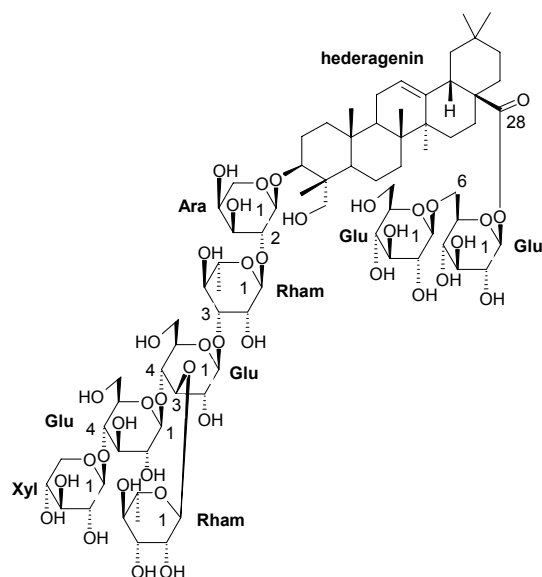
**Title line (code number, main name)**

- A. Synonyms of the compound (if any);
- B. CASRN number (if any);
- C. Formula (relative molecular mass);
- D. Physicochemical properties;
- E. Pharmacological data (if any);
- F. Source(s);
- G. Reference(s);
- H. Graphic structure.

**Chemical Names and Synonyms.** Generally, a compound may have one scientific name and several trivial names. In the encyclopedia, based on original articles, we select one name as the “main name” (appeared at the title line of each compound entry), and use it to alphabetically order the 23,033 compounds in the first 5 volumes. The main name is either a scientific name or a trivial name. All of other names of each compound, if any, are presented after the title line.

**Stereochemistry of Chemical Structure.** We protracted all compound structures down to atom-bond level including complicated glycosides, with stereo-chemical information based on the data in the original papers. For example, the structure with full stereochemistry of compound 22,834 (isolated from CHUAN XU DUAN *Dipsacus asperoides*) is:





3-*O*-[ $\beta$ -*D*-Xylopyranosyl(1 $\rightarrow$ 4)]- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 4)]  
 [ $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 3)-  
 $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl hederagenin-  
 28-*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside

**Normalization of Pharmacological Data.** More than 8,000 TCM components in this encyclopedia have a variety of pharmacological data, which are valuable not only for the study of TCM, but also for the development of Western medicine. Because different expressions are used for the same kind of data in different articles, we have to define and normalize thousands pharmacological terms, so that the data could be expressed by a unified way, and be easily understood by readers.

The pharmacological terms in the encyclopedia are presented by a multi-layered structure. In the top layer, there are around 20 types of pharmacological activity terms, they are cytotoxic (*in vitro* anticancer), antineoplastic (*in vivo* anticancer), antibacterial, antifungal, antiviral, anti-HIV, anti-inflammatory, antioxidant, antimalarial, enzyme inhibitors, NO production inhibitors, cardiovascular activity, smooth muscle relaxant and stimulant, toxin and medium lethal dose LD<sub>50</sub>, and so forth. For each term there is a regulation about how to describe related pharmacological data. The following is an example:

**Term name** (*in vitro/in vivo*,  
 target cell **1**, quantitative data,  
 control Compound, control's data;  
 target cell **2**, quantitative data,  
 control Compound, control's data;  
 target cell **3**, quantitative data,  
 control Compound, control's data;  
 terse description of related mechanism if any).

Under the subtitle “Pharm:” of compound entry 248 (17-Acetoxyabda-7,12(*E*),14-triene), a set of bio-data is presented as follows:

Pharm: **Cytotoxic** (*in vitro*,  
 BT474 human galactophore cancer cell, IC<sub>50</sub> = 4.7µg/mL,  
 control Doxorubicin hydrochloride, IC<sub>50</sub> = 0.08µg/mL;  
 CHAGO human undifferentiated lung cancer cell, IC<sub>50</sub> = 5.7µg/mL,  
 control Doxorubicin hydrochloride, IC<sub>50</sub> = 2.3µg/mL;  
 HepG2 human liver cancer cell, IC<sub>50</sub> = 6.5µg/mL,  
 control Doxorubicin hydrochloride, IC<sub>50</sub> = 0.9µg/mL;  
 Kato3 human gastric cancer cell, IC<sub>50</sub> = 5.3µg/mL,  
 control Doxorubicin hydrochloride, IC<sub>50</sub> = 1.7µg/mL;  
 SW620 human colorectal adenocarcinoma cell, IC<sub>50</sub> = 5.6µg/mL,  
 control Doxorubicin hydrochloride, IC<sub>50</sub> = 1.1µg/mL).

In order to standardize abbreviations of cancer cells, such as BT474, CHAGO, etc., we defined and used 270 cancer cell codes (CCC) in the encyclopedia. For explanations of these codes, please see “Cancer Cell Codes in the Pharmacological Models” in Volume 1 of the encyclopedia.

By means of the formatted and structuralized methods, we normalized expressions of most pharmacological data appeared in the encyclopedia. For complete information of all 3367 normalized pharmacological activity terms, please see “Compound Pharmacological Activities Index” in Volume 6.

## 2. Plant Entry

**One Species One Entry.** Conventionally, a TCM name may include more than one plant species that have the same medical functions; therefore, a plant may not have an independent TCM entry and may be described under a TCM name. In this book, modern botany classification regulation is adopted and each plant species has an independent entry.

For example, traditional Chinese medicine DAN SHEN includes three species. They are equivalent in both effects and indications in TCM practice. In this encyclopedia, we defined three plant entries for each one of them.

T5680 *Salvia miltiorrhiza* (Lamiaceae); DAN SHEN; Danshen;  
 T5681 *Salvia miltiorrhiza* f. *alba* (Lamiaceae); BAI HUA DAN SHEN; Whiteflower Danshen;  
 T5688 *Salvia przewalskii* (Lamiaceae); GAN XI SHU WEI CAO; Przewalsk Sage.

With this method, we are able to smoothly link TCM information with that of modern botany.

**Simplified Latin Name.** For each TCM plant or TCM congener, four names are used in the encyclopedia. They are Latin name, English name, PIN-YIN name and Chinese

name, while the Chinese name only appears in TCM Plants PIN-YIN/Chinese Names Index” not in the main part of the book. For plant Latin name (e.g. scientific name), we use a simplified nomenclature, in which the nomenclator(s) information is not included. For example the Latin name of Chinese Angelica (DANG GUI) in the encyclopedia is “*Angelica sinensis*”, not “*Angelica sinensis* (Oliv.) Diels”.

**Family Name.** According to the “International Code of Botanical Nomenclature” (2007), the following eight authoritative family names are used in the encyclopedia. The family names of long usage, which are not used in are the encyclopedia, indicated in parentheses:

Apiaceae (Umbelliferae);  
 Arecaceae (Palmae);  
 Asteraceae (Compositae);  
 Brassicaceae (Cruciferae);  
 Clusiaceae (Guttiferae);  
 Fabaceae (Leguminosae);  
 Lamiaceae (Labiatae) and  
 Poaceae (Gramineae).

**PIN-YIN Name and Chinese Name.** A simplified PIN-YIN name system is used in the encyclopedia. That is not to include the four-tone mark. However, there are exceptions. Among the thousand PIN-YIN names in the book, there are seven confusing cases. For each mistakable name, a superscript is attached to the name for indicating its four-tone in order to distinguish it from other plant species. For example: BAI MAO GEN<sup>(1)</sup> and BAI MAO GEN<sup>(4)</sup> are two different TCM plants:

T3416 *Imperata cylindrica* var. *major* (Poaceae); BAI MAO GEN<sup>(1)</sup>; Lalang Grass Rhizome.  
 T3309 *Hydrastis canadensis* (Ranunculaceae); BAI MAO GEN<sup>(4)</sup>; Golden-seal.

Other six cases are:

T1449 *Cirsium japonicum* (Asteraceae); DA JI<sup>(4)</sup>; Japanese Thistle.  
 T2608 *Euphorbia pekinensis* (Euphorbiaceae); DA JI<sup>(3)</sup>; Peking Euphorbia.  
 T4124 *Matricaria chamomilla* [Syn. *Matricaria recutita*] (Asteraceae); MU<sup>(3)</sup> JU; Mayweed.  
 T0197 *Aegle marmelos* (Rutaceae); MU<sup>(4)</sup> JU; Sepiaria.  
 T1039 *Bruguiera gymnorrhiza* (Rhizophoraceae); MU LAN<sup>(3)</sup>; Common Bruguiera.  
 T3423 *Indigofera tinctoria* (Fabaceae); MU LAN<sup>(2)</sup>; True Indigo.  
 T6798 *Vitis vinifera* (Vitaceae); PU<sup>(2)</sup> TAO; European Grape.  
 T6267 *Syzygium jambos* (Myrtaceae); PU<sup>(3)</sup> TAO; Roseapple.  
 T2107 *Dendrobium nobile* (Orchidaceae); SHI HU<sup>(4)</sup>; Noble Dendrobium.  
 T2646 *Evodia rutaecarpa* var. *officinalis* (Rutaceae); SHI HU<sup>(3)</sup>; Official Evodia.  
 T1221 *Caryopteris divaricata* (Verbenaceae); YOU<sup>(2)</sup>; Divaricate Bluebeard.  
 T1478 *Citrus grandis* (Rutaceae); YOU<sup>(4)</sup>; Pummelo.

**Translation of TCM Effects Terms.** In the Volume 5 of the encyclopedia, 6,926 TCM Plant entries list in alphabetical order of *Latin names*, including 2,923 original TCM plants (including few of animals)<sup>[R01-R04]</sup> and 4,003 congeners (including a few of non-TCM medicinal plants). For each TCM plant, two most important features are traditional TCM effects and indications.

For preparing this encyclopedia, one of the greatest challenges is how to correctly translate each TCM term into correspondent English, so that Western readers are able to understand the true meaning of the content in the book. After comparing several translation systems, we decided to use Wiseman's terminological system<sup>[R05-R07]</sup> for this book.

Wiseman's system obeys two most important principles: (1). The English-language terms should be faithful to the original concepts in traditional Chinese medicine. (2). The English-language TCM terminology should be flexible enough to allow modifications and extensions so that derivative effects can be described by a structuralized manner. For instance, the term "quicken blood" describes a general effect meaning "activating blood flow" or "promoting blood circulation". Elaboration of this term produces "quicken blood and transform stasis", "quicken blood and relieve pain", "quicken blood and regulate menstruation", and so on. The following illustrations are an example of the structuralized expressions related to the term "quicken blood":

quicken blood and disinhibit water  
 quicken blood and dispel stasis  
 quicken blood and dispel wind  
 quicken blood and disperse swelling  
 quicken blood and disperse welling abscess  
 quicken blood and dissipate binds  
 quicken blood and dissipate stasis  
 quicken blood and free menstruation  
 quicken blood and free network vessels  
 quicken blood and free vessels  
 quicken blood and joint bones  
 quicken blood and move *qi*  
 quicken blood and move stasis  
 quicken blood and nourish heart  
 quicken blood and promote milk  
 quicken blood and quiet spirit  
 quicken blood and regulate menstruation  
 quicken blood and relieve pain  
 quicken blood and resolve toxin  
 quicken blood and settle pain  
 quicken blood and soothe sinews  
 quicken blood and stanch bleeding  
 quicken blood and strengthen sinews  
 quicken blood and transform stasis  
 quicken blood and vessels

**Translation of TCM Indications Terms.** Based on Wiseman's terminological system, "Chinese-English Dictionary of Traditional Chinese Medicine" compiled by Guangzhen Gao *et al.*<sup>[R08]</sup>, "An English-Chinese Medical Dictionary, Second Edition" compiled by Weiyi Chen *et al.*<sup>[R09]</sup>, and other reference dictionaries, we defined over 3,800 standard indication terms for translating TCM indications terms from Chinese to English. Among the 3,800 terms, 2,526 terms are actually used in the encyclopedia, in which 85% terms are traditional TCM terms and the rest 15% are common modern medicinal terms. Some typical examples of traditional TCM indication terms are as follows:

*yin* vacuity internal heat  
*yin* vacuity lung dryness  
*yin* vacuity tidal fever  
 chest impediment  
 chest impediment and heart pain  
 chest impediment and heart pain over back  
 chest oppression and pain  
 chest oppression with breathe hard  
 distention pain in rib-side  
 distention pain in stomach duct  
 distention pain in stomach duct and abdomen  
 externally contracted summer heat-damp  
 externally contracted wind evil  
 externally contracted wind-cold  
 externally contracted wind-heat  
 knocks and falls  
 sores  
 sores clove boil  
 swelling of sores and boils  
 sore scab and lichen  
 toxin swelling of sores

In summary, this encyclopedia provides a collection of more than 23,000 TCM chemical components isolated from natural resources and a large number of pharmacological activity data of these components. It may be used not only as a handbook to look for structures and pharmacological activities of TCM chemical components and source plant information, but also a fundamental platform for studying TCM with a systematic and integrative approach.

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# How to Use the Books

## 1. Three Kinds of “Many to Many” Relationships

To help readers effectively search and use of the books, authors strongly suggest readers being familiar with the structure of the encyclopedia and certain important linkers or pointers between different data sets.

Firstly, in order to avoid confusing cases, please keep in mind the following three features of the book:

(a) In the encyclopedia, all of pharmacological data belong to compounds, not to plants. In other words, the encyclopedia doesn't include plants' pharmacological data.

(b) All effect and indication terms belong to TCM plants, not to compounds. And almost all of effect terms as well as 85% indication terms are pure Chinese traditional concepts.

(c) In the encyclopedia, there are three kinds of “many to many” relationships: (i), compounds to plants, which is the most important relationship. (ii), pharmacological data to compounds in the molecular level only. (iii), plants to effects/indications in the species level.

Pharm. data ↔ Compound 1		Plant T0001 ↔ effects, indications
Pharm. data ↔ Compound 2		Plant T0002 ↔ effects, indications
Pharm. data ↔ Compound 3	↔	Plant T0003 ↔ effects, indications
.....		.....
Pharm. data ↔ Compound 23032		Plant T6925 ↔ effects, indications
Pharm. data ↔ Compound 23033		Plant T6926 ↔ effects, indications
(Molecular level)		(Species level)

### Sketch Map of Three Important “Many to Many” Relationships

## 2. Seven Useful Indexes

In Volume 6, there are seven indexes for data searching.

The indexes 1-3 are tools to search compounds from different starting-points:

**Index 1** (Compound Pharmacological Activity Index) links pharmacological terms

with related compound codes. For example, if there is a question as:

“Which compounds have *in vitro* cytotoxic activity against human breast cancer cells?”

From the index 1, the answer can easily be obtained as follows:

Cytotoxic, BC hmn breast cancer cells 24, 349, 526, 2244, 3416, 3429, 3708, 4775, 5095, 6759, 6759, 6759, 12453, 12454, 15494, 15495, 18515, 20671.

Cytotoxic, BC-1 hmn breast cancer cells 1277, 2260, 5064, 5327, 6759, 6759, 8220, 8221, 8222, 8235, 10250, 10297, 10511, 11353, 13489, 13490, 13491, 13492, 13493, 13494, 13495, 15919, 17008, 18866, 20809.

Cytotoxic, BCA-1 hmn breast cancer cells 6759, 13468, 13469, 13470, 15739.

Cytotoxic, Bcap37 hmn breast cancer cells 843, 11392, 13123, 16183, 17717, 18499.

Then, from compounds code numbers, one can get detailed data for each compound.

**Index 2** (Compound Molecular Formula Index) connects a molecular formula to its all isomers. For example, there are five isomers with formula  $C_{45}H_{76}O_{18}$ :

$C_{45}H_{76}O_{18}$

Abutiloside F, 40

Asp-IV, 1905

Asp-V, 1906

Trigoneoside IIIa, 21669

Trigoneoside IIIb, 21670

**Index 3** (Compound Synonym Index) is useful for searching a compound from a known name. A strong suggestion to readers is that when searching a compound from a known name, to search twice probably is necessary: firstly from entry title in the encyclopedia text and then from the index 3.

The indexes 4–7 are tools to search TCM plants:

**Index 4** (TCM Plant English Name Index) links a Plant English Name to other names of the plant, for example:

Chinese Angelica = T0495 *Angelica sinensis* = DANG GUI

Siberian Phlojodicarpus = T4804 *Phlojodicarpus sibiricus* = ZHANG GUO QIN

Dahurian Angelica = T0478 *Angelica dahurica* [Syn. *Angelica porphyrocaulis*] = BAI ZHI

Gigantic Angelica = T0483 *Angelica gigas* = CHAO XIAN DANG GUI

Narrowleaf Angelica = T0476 *Angelica anomala* = XIA YE DANG GUI

**Index 5** (TCM Plant PIN-YIN and Chinese Name Index) links PIN-YIN name to Latin name and/or English name, for example:

BAI HUA QIAN HU = T4768 *Peucedanum praeruptorum* = Whiteflower Hogfennel

BAI HUA SHE GAN = T3457 *Iris dichotoma* = Vesper Iris

BAI HUA SHE SHE CAO = T4485 *Oldenlandia diffusa* [Syn. *Hedyotis diffusa*] = Spreading Hedyitis

**Index 6** (TCM Plant Traditional Effects Index) and **Index 7** (TCM Plant Traditional Indications Index) connect specific effect and/or indication to related plants.

For example, to search all plants with effect “nourish heart and quiet spirit”, the result is:

**nourish heart and quiet spirit:**

T0944 *Biota orientalis* [Syn. *Thuja orientalis*; *Platyclusus orientalis*],  
 T1292 *Celastrus orbiculatus* [Syn. *Celastrus articulatus*],  
 T1381 *Choerospondias axillaris*,  
 T4194 *Menyanthes trifoliata*,  
 T4400 *Nelumbo nucifera*,  
 T4902 *Pimpinella thelungiana*,  
 T5108 *Polygonum multiflorum*,  
 T5497 *Rhodiola kirilowii*,  
 T5701 *Salvia yunnanensis*.

If searching all plants with indication “angina pectoris” (a modern medicinal term), “externally contracted wind-cold” (a TCM term), and “externally contracted wind-heat” (a TCM term), you will obtain the following results:

**angina pectoris:** T1215 *Carthamus tinctorius*, T1395 *Chrysanthemum morifolium* [Syn. *Dendranthema morifolium*], T1775 *Crataegus pinnatifida*, T1778 *Crataegus pinnatifida* var. *major*, T2274 *Dryobalanops aromatica*, T2389 *Epimedium acuminatum*, T2390 *Epimedium brevicornum*, T2392 *Epimedium davidii*, T2394 *Epimedium elongatum*, T2398 *Epimedium koreanum*, T2401 *Epimedium pubescens*, T2402 *Epimedium sagittatum*, T2404 *Epimedium sutchuenense*, T2406 *Epimedium wushanense*, T2846 *Ganoderma japonicum* [Syn. *Ganoderma sinense*], T2848 *Ganoderma lucidum*, T2964 *Ginkgo biloba*, T3388 *Ilex chinensis* [Syn. *Ilex purpurea*], T3396 *Ilex pubescens*, T3397 *Ilex pubescens* var. *glaber*, T3875 *Liriope spicata* var. *prolifera*, T3925 *Loranthus parasiticus* [Syn. *Loranthus chinensis*; *Taxillus chinensis*], T3926 *Loropetalum chinense*, T4303 *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*, T4507 *Ophiopogon japonicus*, T4608 *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*], T4953 *Piper longum*, T5312 *Pueraria edulis*, T5313 *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*], T5316 *Pueraria omeiensis*, T5318 *Pueraria phaseoloides*, T5320 *Pueraria thomsonii*, T5680 *Salvia miltiorrhiza*, T5681 *Salvia miltiorrhiza* f. *alba*, T5688 *Salvia przewalskii*, T6510 *Trichosanthes kirilowii*, T6513 *Trichosanthes rosthornii* [Syn. *Trichosanthes uniflora*], T6584 *Typha angustata*, T6585 *Typha angustifolia*, T6587 *Typha latifolia*.

**externally contracted wind-cold:** T4039 *Magnolia grandiflora*, T4445 *Notopterygium forbesii* [Syn. *Notopterygium franchetii*], T4446 *Notopterygium incisum*, T4956 *Piper mullesua*, T5727 *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*].

**externally contracted wind-heat:** T0480 *Angelica decursiva* [Syn. *Peucedanum decursivum*], T1395 *Chrysanthemum morifolium* [Syn. *Dendranthema morifolium*], T1933 *Cyclea sutchuenensis*, T2798 *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*], T3819 *Ligusticum brachylobum*, T4413 *Nepeta cataria*, T4761 *Peucedanum longshengens*, T4768 *Peucedanum praeruptorum*, T4769 *Peucedanum rubricaulis*, T6791 *Vitex rotundifolia* [Syn. *Vitex trifolia* var. *simplicifolia*], T6793 *Vitex trifolia*.

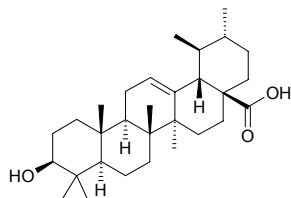
### 3. Data Survey Example of Compound Entry

At last, we would like to take Ursolic acid (compound code 22270 in the books) as a data survey example. Under this compound there are a quite number of data as follows:

**22270 Ursolic acid**

$\beta$ -Ursolic acid [77-52-1] C<sub>30</sub>H<sub>48</sub>O<sub>3</sub> (456.72).

White solid powder (chloroform–methanol), mp 298~294°C, 265~267°C.

**Pharm: (27 items)**

**Cytotoxic** (KB, ED<sub>50</sub> > 25μg/mL, control Doxorubicin, ED<sub>50</sub> = 0.12μg/mL; Hep3B, ED<sub>50</sub> > 25μg/mL, control Doxorubicin, ED<sub>50</sub> = 0.14μg/mL; Colon205, ED<sub>50</sub> > 25μg/mL, control Doxorubicin, ED<sub>50</sub> = 0.10μg/mL; HeLa, ED<sub>50</sub> > 25μg/mL, control Doxorubicin, ED<sub>50</sub> = 0.11μg/mL)<sup>[4369]</sup>;

**cytotoxic** (*in vitro*, HONE-1 cell, IC<sub>50</sub> = (8.8±1.5)μmol/L, control Etoposide, IC<sub>50</sub> = (0.5±0.2)μmol/L, *cis*-Platin, IC<sub>50</sub> = (3.2±0.5)μmol/L; KB cell, IC<sub>50</sub> = (8.2±2.7)μmol/L, Etoposide, IC<sub>50</sub> = (0.9±0.3)μmol/L, *cis*-Platin, IC<sub>50</sub> = (4.4±0.9)μmol/L; HT29 cell, IC<sub>50</sub> = (4.7±1.5)μmol/L, Etoposide, IC<sub>50</sub> = (2.4±0.5)μmol/L, *cis*-Platin, IC<sub>50</sub> = (5.7±1.1)μmol/L)<sup>[5254]</sup>;

**antineoplastic** (liver cancer cells *in vitro*, mus ascites carcinoma *in vivo*, life was prolonged);

**antibacterial** (*Escherichia coli*, IZD = 13~15mm, control Chloramphenicol, IZD = 16~20mm, control DMSO (4%), IZD < 10mm; *Staphylococcus aureus*, IZD = 10~12mm, control Chloramphenicol, IZD = 16~20mm, control DMSO (4%), IZD < 10mm; *Bacillus subtilis*, IZD = 13~15mm; control Chloramphenicol, IZD = 16~20mm, control DMSO (4%), IZD < 10mm)<sup>[5315]</sup>;

**antibacterial** (*Staphylococcus* spp. *in vitro*, MIC = 300μg/mL, gram-positive bacteria *in vitro*, MIC = 50~400μg/mL, gram-negative bacteria *in vitro*, MIC = 200~800μg/mL, microzyme *in vitro*, MIC = 100~700μg/mL);

**antitubercular** (*Mycobacterium tuberculosis*, MIC = 41.9μg/mL, cytotoxic, Vero cells, IC<sub>50</sub> = 46.5μg/mL, SI (IC<sub>50</sub>/MIC) = 1.11, positive control Rifampin, MIC = 0.03μg/mL, IC<sub>50</sub> = 98.3μg/mL, SI = 3277)<sup>[4986]</sup>;

**anticonvulsant** (induced by corazol);

**anti-inflammatory** (rat, induced by embedding woolball, 12.5mg/(kg·d) ip, 7 days, effective);

**anti-inflammatory** (*in vitro*, murine macrophage RAW264.7 Cells, inhibits LPS-induced NO and PGE<sub>2</sub> release)<sup>[5016]</sup>;

**COX-2 enzyme selective inhibitor** (mean IC<sub>50</sub> of isomers = 130μmol/L)<sup>[4415]</sup>;

**COX-2 enzyme inhibitor** (PMA-treated hmn mammary and oral epithelial cells, molecular mechanisms is mediated by a cAMP response element in the COX-2 promoter, associated with inhibition of protein kinases)<sup>[4415]</sup>;

**antipyretic** (clearly reduces normal body temperature of rat);

**reduces serum transaminase** (animal, 100mg/kg);

**antitrypanosomal** (epimastigotes of *Trypanosoma cruzi*, MLC = 6.2μmol/L, control Gentian violet, MLC = 6.2μmol/L)<sup>[2579]</sup>;

**mucin release stimulator** (acts directly on airway mucin-secreting cells, increased mucin release (40~50)% above control at the highest concentrations 0.00001~0.001mol/L, possible use to treatment of chronic airway diseases)<sup>[4084]</sup>;

**platelet aggregation inhibitor** (2~5mg/mL collagen-induced, IC<sub>50</sub> = (511±4)μmol/L, control ASA, IC<sub>50</sub> = (420±3)μmol/L; 1~4μmol/L epinephrine-induced with 0.8~1.0mg/mL collagen, IC<sub>50</sub> = (82.6±2.8)μmol/L, ASA, IC<sub>50</sub> = (53.0±4.5)μmol/L; 10~40μmol/L Sodium arachidonate-induced with 0.8~1.0mg/mL collagen, IC<sub>50</sub> =

(669±12)μmol/L, ASA, IC<sub>50</sub> = (66.0±2.1)μmol/L; 1~5μmol/L PGH<sub>2</sub>/TXA<sub>2</sub> receptor agonist U46619-induced with 0.8~1.0mg/mL collagen, IC<sub>50</sub> > 1000μmol/L, ASA, IC<sub>50</sub> = (340±12)μmol/L)<sup>[4994]</sup>;

**tissue factor inhibitor inactive**<sup>[5387]</sup>;

**antirheumatic**<sup>[5341]</sup>;

**anti-diabetic**<sup>[5341]</sup>;

**antiulcer**<sup>[5341]</sup>;

**hypolipidemic**<sup>[5341]</sup>;

**anti-atherosclerotic**<sup>[5341]</sup>;

**anti-HIV**<sup>[5341]</sup>;

**TGF-β1 antagonist** (inhibits the binding of <sup>125</sup>I-TGF-β1 to its receptor in Balb/c 3T3 cell, IC<sub>50</sub> = (6.9±0.8)μmol/L, suggests TGF-β1 antagonistic activity is responsible, at least in part, for therapeutic efficacy of *Clerodendranthus spicatus* to treat humans with renal disease)<sup>[5496]</sup>;

**glucocorticoid** (enhances glycogen in liver, reduces glycogen in heart and striated muscles);

**LD<sub>50</sub>** (mus, ip) = 680mg/kg.

### Sources: (52 species)

BAI HUA SHE SHE CAO *Oldenlandia diffusa* [Syn. *Hedyotis diffusa*] (whole herb: mean content of 16 origins = 0.211%)<sup>[5508]</sup>;

BI LU GOU TENG *Uncaria tomentosa*,

CHE QIAN *Plantago asiatica* (whole herb: content scope = 0.28%~2.32%, mean content = 0.97%)<sup>[5508]</sup>;

CHI NAN *Syzygium buxifolium*,

CHONG YA YAO *Isodon ternifolius*,

CI WU JIA YE *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*],

DA CHE QIAN *Plantago major*,

DA ZAO *Ziziphus jujuba* (ripe fruit: mean content = 0.016%)<sup>[5508]</sup>,

DAN SHEN *Salvia miltiorrhiza*,

DIAN NAN HONG HOU KE *Calophyllum polyanthum* (seed: yield = 0.0064%dw),

DONG LING CAO *Rabdosia rubescens* (whole herb: mean content = 0.414%)<sup>[5508]</sup>; leaf: mean content = 0.573%)<sup>[5508]</sup>;

DU ZHONG *Eucommia ulmoides*,

DUAN TING SHAN MAI DONG *Liriope muscari* (tuber),

GOU GU YE *Ilex cornuta* (leaf: mean content = 0.96%)<sup>[5508]</sup>,

GUANG JING QIAN CAO *Rubia wallichiana* (stem),

HONG HUA LU TI CAO *Pyrola incarnata* (whole herb: content = 2.06%)<sup>[5508]</sup>,

HU BEI SHAN ZHA *Crataegus hupehensis* (dried ripe fruit: mean content = 0.455%),

JIAN YE TOU WU GEN *Ligularia sagitta*,

LIAN QIAN CAO *Glechoma lungituba*,

LIAN QIAO *Forsythia suspensa*,

LIU QIU SHE GEN CAO *Ophiorrhiza liukiensis* (whole herb),

MA BIAN CAO *Verbena officinalis* (whole herb: mean content of 5 batch samples = 0.227%)<sup>[5508]</sup>,

MAO CAO LONG *Ludwigia octovalvis* (whole herb: yield = 0.00012%dw),

MAO PAO TONG *Paulownia tomentosa*,

MAO XU CAO *Clerodendranthus spicatus*,

MU GUA *Chaenomeles sinensis*,

NV ZHEN ZI *Ligustrum lucidum*,

PI PA YE *Eriobotrya japonica* (dried leaf: mean content = 0.677%)<sup>[5508]</sup>,

PI PA YE *Eriobotrya japonica* (stem and leaf),

PING CHE QIAN *Plantago depressa* (whole herb: mean content = 0.276%)<sup>[5508]</sup>,

RI BEN LU TI CAO *Pyrola japonica*,

RONG SHU *Ficus microcarpa* (aerial root),  
 SHAN DI XIANG CHA CAI *Isodon oresbia*,  
 SHAN LI HONG *Crataegus pinnatifida* var. *major*,  
 SHAN ZHA *Crataegus pinnatifida* (fruit: content scope = 0.31%~0.56%)<sup>[5501]</sup>,  
 SHAN ZHU YU *Cornus officinalis* [Syn. *Macrocarpium officinale*] (dried ripe fruit: content  
 scope = 0.24%~0.32%)<sup>[5501]</sup>, mean content = 0.263%)<sup>[5508]</sup>,  
 SHI NAN *Photinia serrulata* (leaf: mean content = 1.50%)<sup>[5508]</sup>,  
 SHI SHENG BIAN LEI *Gentianopsis paludosa*,  
 SHI YE *Diospyros kaki* (dried leaf: mean content = 0.784%)<sup>[5508]</sup>,  
 SHU HUA JIE CAO *Valeriana laxiflora* (aerial parts and root),  
 SUAN ZAO *Ziziphus jujuba* var. *spinosa* (ripe fruit: content = 0.030%)<sup>[5508]</sup>,  
 SUO YANG *Cynomorium songaricum* (fleshy stem: content = 0.78%)<sup>[5508]</sup>,  
 WEI LING CAI *Potentilla chinensis*,  
 WU GENG WU JIA PI *Acanthopanax sessiliflorus* (fruit),  
 XIA KU CAO *Prunella vulgaris* (dried spike: content = 0.780%)<sup>[5508]</sup>,  
 YANG MEI SHU PI *Myrica rubra* (bark: content = 0.027%),  
 YE SHAN ZHA *Crataegus cuneata* (dried ripe fruit: mean content of 3 origins =  
 0.399%)<sup>[5508]</sup>,  
 YI LANG QING LAN *Dracocephalum kotschyi*,  
 ZHI ZI *Gardenia jasminoides* [Syn. *Gardenia florida*] (dried ripe fruit: mean content =  
 0.041%)<sup>[5508]</sup>,  
 ZHOU YE LU TI CAO *Pyrola rugosa* (whole herb: content = 3.00%)<sup>[5508]</sup>,  
*Cussonia bancoensis*,  
 Occurs in many plants.

**Ref:** 4, 367, 428, 454, 501, 592, 595, 600, 658, 660, 2579, 3005, 3061, 4084, 4163, 4369,  
 4415, 4527, 4767, 4772, 4986, 4994, 5016, 5254, 5315, 5382, 5387, 5341, 5496, 5501,  
 5508.

# Abbreviations and Symbols

12(S)-HETE	12(S)-Hydroxy-5,8,10,14-EicosaTetraEnoic acid	cAMP-PDE	cAMP-phosphodiesterase
<sup>125</sup> I-TGF- $\beta$ 1	<sup>125</sup> I-Transforming Growth Factor- $\beta$ 1	CAPE	Caffeic Acid Phenethyl Ester
5-FU	5-FluoroUracil	CB	cytochalasin B
5-HT	5-HydroxyTryptamine (serotonin)	CC	macrophage inflammatory protein (MIP-1 $\beta$ ), monocyte chemotactic protein (MCP-2), and C lymphotactin (ltn) (a chemokine family)
95%FL (=CI <sub>95</sub> )	95% Fiducial Limits (=95% Confidence Interval)	CC <sub>0</sub>	Minimum cytotoxic concentration
AA	Arachidonic Acid	CC <sub>50</sub>	IC <sub>50</sub> of cytotoxicity (concentration of the 50% cytotoxic effect)
AAPH	2,2'-Azo-bis-(2-AmidinoPropane)-diHydrochloride	CCR1	chemokine receptor 1
ABTS <sup>+</sup>	2,2'-Azino-Bis-(3-ethylbenzThiazoline 6-Sulphonic acid), radical	CD	concentration required to double enzyme (induction) activity
ACAT	Acyl-CoA Cholesterol acyltransferase	CD	Concentration required to double quinone reductase (induction) activity
ACE	Angiotensin Converting Enzyme	CD <sub>50</sub>	medium Convulsive Dose
Ach	Acetylcholine	cGMP	cyclic guanosine monophosphate
AChE	Acetylcholinesterase	cGMP-PDE	cGMP-phosphodiesterase
ACTH	AdrenoCorticoTropic Hormone	CGN	<i>cis</i> -Golgi network
AD	Alzheimer's disease	CGRP	Calcitonin gene-related peptide
ADM	adriamycin	CHO	Chinese hamster ovarian
ADP	adenosine diphosphate	CI	Chemopreventive index (=IC <sub>50</sub> /CD)
AG	aminoguanidine	CI <sub>95</sub> (=95%FL)	95% Confidence Interval (=95% Fiducial Limits)
AggRt	aggregation rate	CIC	complete inhibiting concentration
AIDS	acquired immunodeficiency syndrome	CIMC	complete inhibiting minimum concentration
ALS	amyotrophic lateral sclerosis	CINC-1	cytokine-induced neutrophil chemoattractant 1
ALT	alanine aminotransferase	CMV	Cytomegalovirus
AMP	adenosine monophosphate	CNQX	6-Cyano-7-nitroquinoxaline-2,3-dione (non-NMDA receptor antagonist)
AMV	avian myeloblastosis virus	CNS	central nervous system
AP	angina pectoris	ConA	concanavalin A
AP-1	activator protein-1	COX	cyclooxygenase
APN	Aminopeptidase N	COX-1	cyclooxygenase-1
APV	<i>dl</i> -2-Amino-5-phosphonovaleric acid (a competitive antagonist of the NMDA receptor)	COX-2	cyclooxygenase-2
aq.	aqueous solution	CPT	camptothecin
ASA	AcetylSalicylic Acid	CRF	corticotrophin releasing factor
AST	aspartate transaminase; aspartate aminotransferase	CRH-1	corticotrophin releasing hormone-1
AT-III	Antithrombase-III	CRP	C-reactive protein
ATPase	Adenosine triphosphatase	CV-3988	<i>rac</i> -3-( <i>N</i> -octadecylcarbomoyloxy)-2-methoxypropyl 2-thiazoliethyl phosphate
AZT	3'-azido-3'-deoxythymidine	CVS	cardiac vascular system
BACE1	$\beta$ -Secretase	CXC	Stromal cell-derived factor (SDF)-1 $\alpha$ and IL-8 (a chemokine)
BChE	Butyrylcholinesterase	CYP1A	Cytochrome P450 1A
bFGF	basic Fibroblast Growth Factor	CYP2D6	Cytochrome P450 2D6
BHA	Butylated HydroxyAnisole; 3- <i>tert</i> -Butyl-4-HydroxyAnisole	CYP3A4	Cytochrome P450 3A4
BHT	Butylated HydroxyToluene	d	day
bid	bis in die (Latin)	DCFH	2',7'-dichlorodihydrofluorescein dye
BLM	bleomycin	DDDP	DNA-dependent DNA polymerase
bp	boiling point	dec	decomposition
BST	Brine Shrimp lethality bioassay = Brine Shrimp Test	<i>D</i> -GalN	<i>D</i> -galactosamine
<i>c</i>	concentration		
C5a	complement 5a		
cAMP	cyclic adenosine monophosphate		



DGAT	Diacylglycerol acyltransferase	GSH	Glutathione; <i>N</i> -( <i>N</i> - <i>L</i> - $\gamma$ -Glutamyl- <i>L</i> -cysteinyl)glycine
dil.	dilute	GTP	Guanosine TriPhosphate
DIZ	Diameter of Inhibitory Zone	GVHR	Graft-Versus-HostReaction
DMBA	9,10-dimethyl-1,2-benzanthracene (carcinogen); 7,12-dimethyl-benz[a]anthracene (carcinogen)	h	hour
DMDP	(2 <i>R</i> ,3 <i>R</i> ,4 <i>R</i> ,5 <i>R</i> )-2,5-DihydroxyMethyl-3,4-Dihydroxy-Pyrrolidine	HAD	hmn immunodeficiency virus associated dementia
DMSO	DiMethyl SulphOxide	HBeAg	hmn type B Hepatitis, e Antigen
DNA	deoxyribonucleic acid	HBsAg	hmn type B Hepatitis, Surface Antigen
DNJ	1-Deoxynojirimucin (one kind of polyhydroxy alkaloid, glucosidase inhibitor)	HBV	Hepatitis B Virus
DOX	doxorubicin	HC <sub>50</sub>	medium Hemolytic Concentration
DPI	Diphenyleneiodonium	HCoV-229E	hmn coronavirus strain 229E
DPPH	1,1-DiPhenyl-2-PicrylHydrazyl free radical	HD	Huntington's disease
DS8000	Dextran sulphate, prepared from average Mr 8000	HER rat	Hypertensive Essential Rat
DSCG	DiSodium ChromoGlycate (anti-allergic agent)	HIV	hmn immunodeficiency virus
dw	dried weight	HIV-1	hmn immunodeficiency virus type 1
E.A.	Enzyme Activity	HIV-1 IN	hmn immunodeficiency virus type 1 integrase
EBV-EA	Epstein-Barr Virus Early Antigen	HIV-1 RT	hmn immunodeficiency virus type 1 reverse transcriptase
EC	Effective Concentration	HIV-RT	hmn immunodeficiency virus reverse transcriptase
EC <sub>50</sub>	medium Effective Concentration	hmn	human
ED	Effective Dose	HSV-1	herpes simplex virus 1
ED <sub>25</sub>	Effective Dose for 25%	HSV-2	herpes simplex virus 2
ED <sub>50</sub>	medium Effective Dose (in some cases for the medium Effective Concentration)	HVA	homovanillic acid
EGCG (EGCg)	(-)-Epigallocatechin gallate	hydroxyl radical	OH <sup>•</sup>
EGF	Epidermal Growth Factor (it protects MPP <sup>+</sup> -induced cell death)	ia	intra-arterial injection
EGFR	Epidermal Growth Factor Receptor	IAA	indole-3-acetic acid
ELAM-1	Endothelial-Leukocyte Adhesion Molecule-1	IC	Inhibiting Concentration
ELISA	Enzyme-Linked ImmunoSorbent Assay	IC <sub>50</sub>	median Inhibiting Concentration
eotaxin	eosinophilous cytotoxin	IC <sub>100</sub>	Absolute Inhibiting Concentration
ERK	Extracellular signal-Regulated Kinase	ICAM-1	Intercellular Cell Adhesion Molecule-1
ET	experimental times	ICR	Imprinting Control Region mouse
FAG	Fagomine (one kind of polyhydroxy alkaloid, glucosidase inhibitor)	id	intradermal injection
FCA	Freund's complete adjuvant	ID	Inhibiting Dose
FI	Feeding Index (= ((C-T)/(C+T)×100)	ID <sub>50</sub>	Median Inhibiting Dose
Flu-A	influenza virus type A	IFN	interferon
fMLP	<i>N</i> -formyl- <i>L</i> -Methionyl- <i>L</i> -Leucyl- <i>L</i> -Phenylalanine	IFN- $\gamma$	Interferon- $\gamma$
fp	freezing point	IgE	Immunoglobulin E
FR <sub>50</sub>	Feeding ratio when the consumed area of control disc (CCD) is 50% [FR = CTD(consumed area of treated disc)/CCD]	IgG	Immunoglobulin G
fw	fresh weight	IL	interleukin
G6PD	Glucose-6-Phosphate Dehydrogenase	IL-1	Interleukin-1
GABA	$\gamma$ -aminobutyric acid	IL-1 $\alpha$	interleukin-1 $\alpha$
GaIN	galactosamine	IL-1 $\beta$	interleukin-1 $\beta$
GI	growth inhibition	IL-2	Interleukin-2
GI <sub>50</sub>	the concentration of sample necessary to inhibit the growth to 50% of the control	IL-4	Interleukin-4
Glu	glutamate	IL-6	Interleukin-6
GOT	Glutamate-Oxaloacetate Transaminase	IL-8	Interleukin-8
Gp	Gastro protective effect	IL-10	Interleukin-10
gpg	guinea pig	IL-12	Interleukin-12
GPT	GlutamicPyruvic Transaminase	im	intramuscular injection
GRO	Growth-Related Oncogene	<i>in vitro</i>	<i>in vitro</i>
		<i>in vivo</i>	<i>in vivo</i>
		Indo	indomethacin
		iNOS	inducible Nitric Oxide Synthase
		InRt	inhibitive rate
		ip	intraperitoneal injection

i.t.	intrathecal injection	MMP	Matrix MetalloProteinases
iv	intravenous injection	MMP-2	Matrix MetalloProteinase-2
IZA	Inhibition Zone Area (mm <sup>2</sup> )	mp	melting point
IZD	Inhibition Zone Diameter (mm)	mPGES	microsomal ProstaGlandin E Synthase
J774.A1	murine monocyte/macrophage cell J774.A1	MPP+	1-methyl-4-phenylpyridinium ion (neurotoxin)
JNK	c-Jun NH <sub>2</sub> -terminal kinase	MRSA	Methicillin-Resistant <i>Staphylococcus aureus</i>
KD <sub>50</sub>	Dose required to Knock down 50% of the population of insects	MSSA	Methicillin-Sensitive <i>Staphylococcus aureus</i>
LC <sub>50</sub>	concentration at which only 50% of the cell are viable	MTC	Minimal Toxic Concentration
LC <sub>50</sub>	concentration of inhibiting luminous intensity 50%	MTT	A Cytotoxicity measurement method (tetrazolium-based colorimetric assay used for cytotoxicity bioassay, see Rubinstein L. V., et al., <i>Nat. Cancer Inst.</i> , 82, 1113-1118, 1990)
LCIC	Lowest Complete Inhibition Concentration	mus	mouse
LD	Lethal Dose	<i>n</i>	number of parallel experiments
LD <sub>100</sub>	100% Lethal Dose	nAChR	neuronal nicotinic AcetylCholine Receptor
LD <sub>50</sub>	medium Lethal Dose	NADH	reduced nicotinamide adenine dinucleotide
LDH	lactate dehydrogenase	NADPH	cytochrome C reductase
LDL	Low Density Lipoprotein	NCCLS	A standard antibacterial activity test method (see Wayne P. A., "National Committee for Clinical Laboratory Standards Performance Standards for Antimicrobial Disk Susceptibility Tests," 6th ed., Approved standards M2-A6. NCCLS, 1997)
L-NA	N <sup>o</sup> -L-nitroarginine	NDGA	Nordihydroguaiaretic acid
L-NMMA	N <sup>G</sup> -monomethyl-L-arginine	NEP	Neutral EndoPeptidase
LOX	Lipoxygenase	NF	Nuclear Factor
LPO	lipid peroxidation	NF-κB	Nuclear Factor κB
LPS	lipopolysaccharide	NFAT	Nuclear Factor of Activated T cell
LTB <sub>4</sub>	Leukotriene B <sub>4</sub>	NGF	Nerve Growth Factor
LTC <sub>4</sub>	Leukotriene C <sub>4</sub>	NMDA	<i>N</i> -methyl- <i>D</i> -aspartate
LTD <sub>4</sub>	Leukotriene D <sub>4</sub>	NO	nitric oxide
MA	maytenfolic acid	non-oral	paraoral
MA	maslinic acid	NOR1	(+/-)-(E)-4-methyl-2-[(E)-hydroxyimino]-5-nitro-6-methoxy-3-hexenamid
MA	minimal amount	NOS-2	Nitric oxide synthase type-2
MABA	Microplate Alamar Blue Assay	OCIF	OsteoClastogenesis-Inhibitory Factor
MAC-1	integrin MAC-1	oral	oral
MAO-A	Monoamine oxidase A	OVA	ovalbumin
MAO-B	Monoamine oxidase B	oxazolone	oxazolone
MAPK	Mitogen-Activated Protein Kinase	OZ	opsonized zymosan
MCC	Minimum Cytocidal Concentration	P450	Cytochrome P450
MCP	Monocyte Chemotactic Protein	PAF	Platelet Activating Factor
MCTHBE	Minimum Concentration for Total Haemolysis of Bovine Erythrocytes (µg/mL)	PAF	Platelet Aggregation Factor
MDA	Methylene Dihydroxy Amphetamine	PAI-1	Plasminogen Activator Inhibitor type 1
MDA	Malondialdehyde	Para-3 (=PIV3)	Parainfluenza type 3 virus
MDR	MultiDrug Resistance	PBMC	hmN Peripheral Blood Mononuclear Cell
MED	Minimal Effective Dose	PCA reaction	Passive Cutaneous Anaphylaxis reaction
MFC	Minimal Fungicidal Concentration	PD	Parkinson's Disease
MIA	Minimal Inhibitory Amounts (µg/disc)	PD	a cytotoxic model
MIC	Minimum Inhibitory Concentration	pD2 (=pEC <sub>50</sub> )	negative logarithm (-logM) of the concentration required to produce 50% of the maximum response (EC <sub>50</sub> )
MIC <sub>80</sub>	Minimal Inhibitive Concentration for 80%	PDE	phosphodiesterase
MIC <sub>90</sub>	Minimal Inhibitive Concentration for 90%	PDTC	pyrrolidine dithiocarbamate
min	minute	PEBP2αA	polyoma enhancer binding protein 2αA
MIP-1α/β	macrophage inflammatory protein	pEC <sub>50</sub>	negative logarithm (-logM) of the concentration required to produce 50% of the maximum response (EC <sub>50</sub> )
MIQ	Minimum inhibitory quantity (µg)		
MK-801	dizocipline maleate (a non-competitive antagonist of the NMDA receptor)		
MLC	Minimum Lethal Concentration		
MLD	Minimum Lethal Dose		
MMDC	Minimal Morphological Deformation Concentration		
MMOC	Mouse Mammary Organ Culture model		

PEG	PolyEthylene Glycol	Singlet oxygen	$^1\text{O}_2$
PEP	Prolyl endopeptidase (a serine protease)	SIZ	sulfisoxazole
pet. ether	petroleum ether	SNP	sodium nitroprusside
PFTase	farnesylprenyltransferase	SOD	Superoxide dismutase
PGD <sub>2</sub>	prostaglandin D <sub>2</sub>	sp.	species
PGE <sub>2</sub>	prostaglandin E <sub>2</sub>	SP-A	pulmonary surfactant Protein A
PGF <sub>2<math>\alpha</math></sub>	prostaglandin F <sub>2<math>\alpha</math></sub>	spp.	species (plural)
PGH <sub>2</sub>	prostaglandin H <sub>2</sub>	SRSA	Slow-Reacting Substance of Anaphylaxis
PGI <sub>2</sub>	prostacyclin (prostaglandin I <sub>2</sub> )	StRt	Stimulatory Rate
PHA	phytohemagglutinin	STZ	streptozotocin
Phe	Phenylephrine	superoxide anion	$\text{O}_2^{\bullet-}$
pIC <sub>50</sub>	negative logarithm (-logM) of IC <sub>50</sub>	SuRt	survival rate
PK	protein kinase	Syn.(= ‡)	Synonym
PKC	protein kinase C	T/C	survival ratio
PLA <sub>2</sub>	phospholipase A <sub>2</sub>	TACE	$\alpha$ -Secretase (a serine protease)
PMA (=TPA)	Phorbol-12-Myristate-13-Acetate	TBARS	ThioBarbituric Acid Reactive Substance assay
PMNs	polymorphonuclear cell	TC <sub>50</sub>	50% cytoToxic Concentration
pNPPase	<i>p</i> -nitrophenylphosphate enzyme	TCM	Traditional Chinese Medicines
POA	pentacyclic oxindole alkaloids	TFP	Trifluoperazine (calmodulin antagonist)
PPase1	Protein serine/threonine Phosphatase	TGF- $\beta_1$	Transforming Growth Factor- $\beta_1$
PRA	Plaque Reduction Assay	TGI	Total Growth Inhibition, concentration at which no growth was observed
PTH	parathyroid hormone	TI	Therapeutic Index (=IC <sub>50</sub> /EC <sub>50</sub> )
PTN	parthenolide	TNF- $\alpha$	Tumor Necrosis Factor- $\alpha$
PTP1B	Protein Tyrosine Phosphatase 1B	TOA	tetracyclic oxindole alkaloids
QR	quinone reductase	topo II	DNA topoisomerase II
RA	rheumatoid arthritis	TP	Thymidine phosphorylase
Raji	EBV-transformed B cell line	tPA	tissue Plasminogen Activator
rat	white rat	TPA (=PMA)	12- <i>O</i> -tetradecanoyl phorbol 13-acetate
rbt	rabbit	TrkA	proto-oncogene TrkA
RDDP	RNA-dependent DNA polymerase	TXA <sub>2</sub>	thromboxane A <sub>2</sub>
RDS	Respiratory Distress Syndrome	TXB <sub>2</sub>	thromboxane B <sub>2</sub>
rel-InRt	relative inhibitive rate (taking the control compound as 100%)	UDP-MurNac	UDP- <i>N</i> -acetylmuramic acid
RM	Relative Mobility	VCAM-1	Vascular Cell Adhesion Molecule-1
RNA	ribonucleic acid	VCR	vincristine
RNase H	inherent ribonuclease H	VEGF	Vascular Endothelial Growth Factor
ROS	reactive oxygen species (they are involved in the genesis of various cancers, arteriosclerosis, rheumatism and ageing)	Veraguensin	veraguensin
RSV	Respiratory Syncytial Virus	VHR DS-PTPase	VHR Dual-Specificity Protein Tyrosine Phosphatase
RT	Reverse Transcriptase	VHR protein	Vaccina open reading-frame H1-Related protein phosphatase
RT-PCR	reverse-transcribed polymerase chain reaction	VP-16	A positive control for cytotoxic assay (Sigma product)
sALT	serum alanine transaminase	VRE	Vancomycin-Resistant <i>Enterococci</i> sp
sAST	serum aspartate transaminase	VSE	Vancomycin-Sensitive <i>Enterococci</i> sp
sc	subcutaneous injection	VSV	Vesicular Stomatitis Virus
SC <sub>50</sub>	Half-maximal radical Scavenging Concentration	ww	wet weight
SC <sub>50</sub>	50% Scavenging Concentration	XTT	sodium 3'-[1-(phenylaminocarbonyl)-3,4-tetrazolium] bis(4-methoxy-6-nitrobenzene)sulfonic acid
ScRt	scavenging rate	†	homonym mark
SDF	Stromal cell-Derived Factor	‡ (=Syn.)	synonym mark
SGOT	serum Glutamic Oxalacetic Transaminase	*	the name is given by the authors of the books
SGPT	serum Glutamic Pyruvic Transaminase		
SHR rat	Spontaneously Hypertensive Rats		
SI	Selective index = cytotoxic CC <sub>50</sub> /target EC <sub>50</sub>		
SI	Selective index = cytotoxic IC <sub>50</sub> /target IC <sub>50</sub>		
SI	Selective index = cytotoxic IC <sub>50</sub> /target MIC		

# Cancer Cell Codes

This set of codes for 270 cancer cells, named as **CCC code**, are defined and tried out in the books for the first time by the authors.

<b>1A9</b>	hmn ovarian cancer (cell).	<b>CaEs-17</b>	hmn esophageal cancer (cell).
<b>212</b>	inducible <i>Ha-ras</i> oncogene transformed from the NIH/3T3 cell line.	<b>CAKI</b>	hmn renal cancer (cell).
<b>308</b>	cultured mouse epidermal cells.	<b>CAKI-1</b>	hmn renal cancer (cell).
<b>3LL</b>	mus Lewis lung cancer (cell).	<b>Calu1</b>	hmn lung cancer (cell).
<b>3PS</b>	mouse leukemia (cell).	<b>Capan1</b>	pancreas cancer (cell).
<b>780-6</b>	renal cancer (cell).	<b>Capan2</b>	pancreas cancer (cell).
<b>9KB</b>	hmn epidermatoid nasopharyngeal carcinoma (cell).	<b>CaSki</b>	hmn cervical carcinoma (cell).
<b>9L</b>	rat glioma (cell).	<b>CEM</b>	leukemia (cell).
<b>9PS</b>	mouse lymphocytic leukemia (cell).	<b>CHAGO</b>	hmn undifferentiated lung cancer (cell).
<b>A2780</b>	hmn ovarian cancer (cell).	<b>CNE</b>	hmn nasopharyngeal carcinoma (cell).
<b>A375</b>	hmn melanoma (cell).	<b>Col1</b>	hmn colorectal cancer (cell).
<b>A431</b>	hmn epidermic cancer (cell).	<b>Col2</b>	hmn colorectal cancer (cell).
<b>A498</b>	hmn renal cancer (cell).	<b>COLO320DM</b>	hmn colorectal cancer (cell).
<b>A549</b>	hmn non-small cell lung cancer (cell).	<b>Colon205</b>	colorectal cancer (cell).
<b>ACHN</b>	hmn renal cancer (cell).	<b>Colon26-L5</b>	mus colorectal cancer (cell).
<b>AGS</b>	gastric adenocarcinoma (cell).	<b>COS-7</b>	monkey kidney cells.
<b>APM1840</b>	hmn leukemia (cell).	<b>CPAE</b>	calf pulmonary arterial endothelial cells.
<b>B16</b>	mouse melanoma (cell).	<b>CT-26</b>	mus colorectal cancer (cell).
<b>B16(F-10)</b>	mouse melanoma (cell).	<b>CTV1</b>	hmn leukemia (cell).
<b>BAEC</b>	bovine aortic endothelial cells.	<b>CXF94L</b>	hmn tumor (cell).
<b>BC</b>	hmn breast cancer (cell).	<b>DLD</b>	hmn colorectal adenocarcinoma (cell).
<b>BC-1</b>	hmn breast cancer (cell).	<b>DLD-1</b>	hmn colorectal adenocarcinoma (cell).
<b>BCA-1</b>	hmn breast cancer (cell).	<b>DMS114</b>	hmn lung cancer (cell).
<b>Bcap37</b>	hmn breast cancer (cell).	<b>DMS273</b>	hmn lung cancer (cell).
<b>Bel7402</b>	hmn liver cancer (cell).	<b>DU145</b>	prostatic cancer (cell).
<b>Bel7405</b>	hmn liver cancer (cell).	<b>EAC</b>	Ehrlich ascites cancer (cell).
<b>BGC823</b>	hmn gastric cancer (cell).	<b>EJ-1</b>	hmn bladder cancer (cell).
<b>BIU87</b>	bladder cancer (cell).	<b>FM3A</b>	mus breast cancer (cell).
<b>BL6</b>	mouse melanoma (cell).	<b>H.Ep.-2</b>	hmn cutis cancer cells in throat.
<b>Bowes</b>	skin cancer cells.	<b>H116</b>	hmn colorectal cancer (cell).
<b>Bre04</b>	hmn breast cancer (cell).	<b>H9</b>	lymphocytes.
<b>BSY1</b>	breast cancer (cell).	<b>HBC4</b>	breast cancer (cell).
<b>BT474</b>	hmn galactophore cancer (cell).	<b>HBC5</b>	breast cancer (cell).
<b>BT549</b>	hmn galactophore cancer (cell).	<b>HCC2998</b>	hmn colorectal cancer (cell).
<b>BXPC3</b>	pancreas cancer (cell).	<b>HCT</b>	hmn colorectal cancer (cell).
<b>C6</b>	rat glioma (cell).	<b>HCT116</b>	hmn colorectal cancer (cell).
<b>CA</b>	hmn liver cancer (cell).	<b>HCT15</b>	hmn colorectal cancer (cell).

**HCT8** hmn colorectal cancer (cell).  
**HEK-293** hmn epithelial kidney cell.  
**HEL** hmn embryonic lung fibrocytes.  
**HeLa** culture cervical epithelial cancer (cell) from Henrietta Lack.  
**HeLa ATCC-17** hmn cervical epithelial cancer (cell).  
**HeLa-S3** hmn cervical epithelial cancer (cell).  
**HELF** normal hmn embryo lung fibroblasts.  
**Hep2** hmn liver cancer (cell).  
**Hep2,2,15** hmn liver cancer (cell) transfected with hepatitis B virus.  
**Hep3B** hmn liver cancer (cell).  
**Hepa** hmn liver cancer (cell).  
**Hepa1c1c7** mus liver cancer (cell).  
**Hepa59T/VGH** hmn liver cancer (cell).  
**HepG2** hmn liver cancer (cell).  
**HEPZ** hmn epithelial cancer (cell).  
**HFF** hmn foreskin fibroblasts.  
**HGF** normal hmn gingival fibroblast cells.  
**HL-60** hmn acute promyelocytic leukemia (cell).  
**HM02** hmn melanoma (cell).  
**HMC-1** hmn leukemic mast cells.  
**HMEC** hmn microvascular endothelial cells.  
**HO-8910** hmn ovarian cancer (cell).  
**HOG.R5** green fluorescent protein (GFP)-based reporter cell.  
**HONE-1** hmn nasopharyngeal carcinoma (cell).  
**HOP-62** non-small cell lung cancer (cell).  
**Hs578T** hmn breast cancer (cell).  
**Hs740T** hmn gastric cancer (cell).  
**Hs742T** hmn breast cancer (cell).  
**Hs756T** hmn gastric cancer (cell).  
**HSC-2** hmn oral squamous cell carcinoma cells.  
**HSG** hmn salivary gland tumor (cell).  
**HT** sarcoma (cell).  
**HT1080** hmn fibrosarcoma (cell).  
**HT29** hmn colorectal cancer (cell).  
**HT3** hmn cervical carcinoma (cell).  
**hTERT-RPE1** hmn telomerase reverse transcriptase-retinal pigment epithelial cells.  
**Huh7** hmn hepatoma (cell).  
**HUVEC** hmn umbilical vein endothelial cell.  
**Jurkat-T** hmn T-cell leukemia (cell).  
**K562** hmn leukemia (cell).  
**K562/ADM** hmn leukemia (cell) of adriamycin-resistant.  
**Kato3** hmn gastric cancer (cell).  
**KB** hmn nasopharyngeal carcinoma (cell).  
**KB15** hmn nasopharyngeal carcinoma (cell).  
**KB16** hmn nasopharyngeal carcinoma (cell).  
**KB3** hmn nasopharyngeal carcinoma (cell).  
**KBV200** MDR nasopharyngeal carcinoma (cell).  
**KB-VIN** vincristine-resistant nasopharyngeal carcinoma (cell).  
**Ketr3** hmn renal cancer (cell).  
**KG-1** hmn leukemia (cell).  
**KM12** hmn colorectal cancer (cell).  
**KM20L2** hmn colorectal cancer (cell).  
**KU-1** hmn bladder cancer (cell).  
**L<sub>1210</sub>** Lymphocytic leukemia (cell).  
**L5178Y** lymphosarcoma (cell).  
**L-6** rat skeletal myoblasts.  
**L<sub>615</sub>** mouse spleen leukemia (cell).  
**L<sub>7212</sub>** mouse leukemia (cell).  
**L-929** fibrosarcoma (cell).  
**LLC** mouse Lewis lung cancer (cell).  
**LMTK** mouse fiber cells.  
**LNCaP** hmn prostatic cancer (cell).  
**LNCaP-FGC** hmn prostatic cancer (cell).  
**LO2** hmn liver cell.  
**LoVo** hmn colorectal cancer (cell).  
**LoVo/Doxo** hmn colorectal cancer cell, drug-resistant subclone.  
**LOX** melanoma (cell).  
**LOX-IMVI** melanoma (cell).  
**LS174T** colorectal cancer (cell).  
**Lu04** hmn lung cancer (cell).  
**Lu1** hmn lung cancer (cell).  
**LXFL529L** hmn large cell lung cancer (cell).  
**M1** mus myelocytic leukemia (cell).  
**M14** melanoma (cell).  
**M4BEU** hmn melanoma (cell).  
**M5076** ovarian sarcoma (cell).  
**Ma7373** mus breast cancer (cell).  
**MALME-3M** melanoma (cell).  
**MBT-2** mus bladder cancer (cell).  
**MCF7** hmn breast cancer (cell).  
**MCF7/6** hmn breast cancer (cell).  
**MCF7/ADR-RES** hmn breast cancer (cell).  
**MCF7-ras** hmn breast cancer (cell).  
**MDA231** hmn breast cancer (cell).  
**MDA-MB-231** hmn breast cancer (cell).  
**MDA-MB-435** hmn breast cancer (cell).  
**MDCK** Madin-Darby Canine.  
**MEL-28** hmn melanoma cell.  
**Meth-A** Meth-A sarcoma (cell).  
**MGc803** hmn gastric adenocarcinoma (cell).  
**MH-60** mus leukemia (cell).  
**MI4** melanoma (cell).  
**MIA-PaCa-2** hmn pancreas cancer (cell).  
**MK1** hmn gastric cancer (cell).  
**MKN1** hmn gastric cancer (cell).  
**MKN28** hmn gastric cancer (cell).  
**MKN45** hmn gastric cancer (cell).  
**MKN7** hmn gastric cancer (cell).  
**MKN74** hmn gastric cancer (cell).  
**MM1** highly invasive clone isolated from parental rat ascites hepatoma AH130 cells.  
**Molt4** hmn lymphoma (cell).  
**Mono-Mac-6** mononuclear cells.  
**MQc80-3** gastric adenocarcinoma (cell).  
**MRC-5** hmn diploid embryonic cells.

**MS301** mus breast cancer (cell).  
**MS310** mus breast cancer (cell).  
**N04** hmn neuroma (cell).  
**NCI-H1417** hmn small cell lung cancer (cell).  
**NCI-H187** hmn small cell lung cancer (cell).  
**NCI-H226** hmn non-small cell lung cancer (cell).  
**NCI-H23** hmn lung cancer (cell).  
**NCI-H460** hmn lung cancer (cell).  
**NCI-H522** hmn lung cancer (cell).  
**NK/LY** ascites cancer (cell).  
**NSCLC-N6** hmn non-small cell lung cancer (cell).  
**NUGC** hmn gastric cancer (cell).  
**NUGC-3** hmn gastric cancer (cell).  
**NUGC-4** hmn gastric cancer (cell).  
**OVCAR-2780** ovarian adenocarcinoma (cell).  
**OVCAR-3** ovarian adenocarcinoma (cell).  
**OVCAR-4** ovarian adenocarcinoma (cell).  
**OVCAR-5** ovarian adenocarcinoma (cell).  
**OVCAR-8** ovarian adenocarcinoma (cell).  
**P1534** mus, transplanted leukemia (cell).  
**P<sub>388</sub>** mouse lymphocytic leukemia (cell).  
**P<sub>388</sub>/ADM** mouse lymphocytic leukemia (cell) of adriamycin-resistant.  
**PACA-2** hmn pancreas cancer (cell) .  
**PANC1** pancreas cancer (cell).  
**PBMC** peripheral blood mononuclear cells.  
**PC12** hmn lung cancer (cell).  
**PC3** hmn prostatic cancer (cell).  
**PC-6** hmn lung cancer (cell).  
**PLC/PRF/5** hmn liver cancer (cell).  
**PSN1** hmn pancreas cancer (cell).  
**PTX10** ovarian cancer cells with  $\beta$ -tubulin mutation.  
**QGY-7703** hmn liver cancer (cell).  
**RAW264.7** mouse macrophages.  
**RBL-2H3** rat basophilic cells.  
**RL33** rbt lung cancer (cell).  
**RPMI-7951** melanoma (cell).  
**RPMI-8226** leukemia (cell).  
**RXF-393** renal cancer (cell).  
**RXF-631L** renal cancer (cell).  
**S<sub>180</sub>** mouse sarcoma (cell).  
**S37** mouse sarcoma (cell).  
**Sca7901** hmn gastric adenocarcinoma (cell).  
**SCL** hmn gastric cancer (cell).  
**SCL-37\*6** hmn gastric cancer (cell).  
**SCL-6** hmn gastric cancer (cell).  
**SCL-9** hmn gastric cancer (cell).  
**SF268** hmn brain tumor (cell).  
**SF295** hmn brain tumor (cell).  
**SF539** hmn brain tumor (cell).  
**SGC** hmn gastric cancer (cell).  
**SGC7901** hmn gastric cancer (cell).  
**SiHa** hmn cervical carcinoma (cell).  
**SKBR3** hmn breast cancer (cell).  
**SKCO1** colorectal cancer (cell).  
**SK-MEL** hmn caucasian melanoma (cell).  
**SK-MEL-2** hmn melanoma (cell).  
**SK-MEL-28** hmn melanoma (cell).  
**SK-MEL-5** hmn melanoma (cell).  
**SK-MES-1** bronchogenic carcinoma cell.  
**SK-OV-3** ovarian adenocarcinoma (cell).  
**SMMC-7721** hmn liver cancer (cell).  
**SNB75** hmn brain tumor (cell).  
**SNB78** hmn brain tumor (cell).  
**SNU638** hmn gastric adenocarcinoma (cell).  
**SR** leukemia (cell).  
**St4** gastric cancer (cell).  
**SVR** mouse endothelial cells.  
**SW620** hmn colorectal adenocarcinoma (cell).  
**T24** hmn liver cancer (cell).  
**T24S** hmn bladder cancer (cell).  
**T47D** hmn breast cancer (cell).  
**T98G** hmn caucasian glioblastoma (cell).  
**TK10** renal cancer (cell).  
**Tmolt3** hmn leukemia (cell).  
**U14** mouse cervical carcinoma (cell).  
**U251** brain tumor (cell).  
**U373** caucasian glioblastoma (cell).  
**U4** mouse cervical carcinoma (cell).  
**U-87-MG** caucasian glioblastoma (cell).  
**U937** hmn monocytic leukemia (cell).  
**UACC62** melanoma (cell).  
**UO-31** renal cancer (cell).  
**Vero** green monkey kidney tumour (cell).  
**W<sub>256</sub>** rat Walker sarcoma (cell).  
**WEHI-164** mus fibrosarcoma (cell).  
**WHCO1** hmn esophageal cancer (cell).  
**WI-38** hmn lung fibrocyte (normal hmn diploid fibrocyte).  
**WiDr** colorectal adenocarcinoma (cell).  
**Wish** transformed epithelial tumour (cell).  
**XF-498** hmn tumor (cell).  
**ZR-75-1** hmn breast cancer (cell).



# Volume 1 Isolated Compounds (A-C)

The Isolated Compounds part of the books lists in alphabetical order all 23033 isolated compounds key names isolated from 6926 TCM original plants and congeners. Following symbols in prefix are ineffective in ordering: *D-*, *L-*, *dl*, *R-*, *S-*, *E-*, *Z-*, *O-*, *N-*, *C-*, *H-*, *cis-*, *trans-*, *ent-*, *meso-*, *rel-*, *erythro-*, *threo-*, *sec-*, *chiro-*, *para-*, *exo-*, *m-*, *o-*, *p-*, *n-*, *α-*, *β-*, *γ-*, *δ-*, *ε-*, *κ-*, *ζ-*, *ψ-*, *ω-*, (+), (-), (±) etc., and: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, {, }, [, ], (, ), ,, ;, \*, ', ", "", →, etc.

For each compound entry, data terms are listed as following format:

**Title line:** **compound code** **main name**

**Data body:** other name(s) [CASRN] formula (relative molecular mass). Physico-chemical properties. **Pharm:** a sequence of formatted pharmacological activity data. **Source:** a sequence of combination of plant PIN-YIN name and Latin name. **Ref:** a sequence of reference numbers.

STRUCTURE DIAGRAM

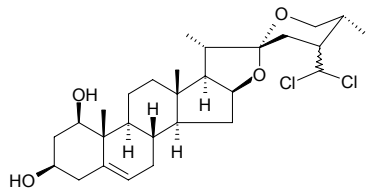




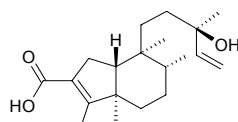
## A

**1 Abamagenin**

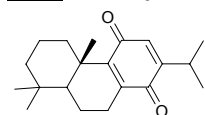
[38094-55-2]  $C_{28}H_{42}Cl_2O_4$  (513.55). Source: HU WEI LAN *Sansevieria trifasciata*. Ref: 1552.

**2 (+)-(4→2)-Abeo-kolavleool-3-oic acid**

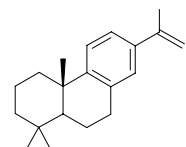
$C_{20}H_{34}O_3$  (320.48). Colorless amorphous solid,  $[\alpha]_D^{25} = +23.8^\circ$  ( $c = 0.04$ ,  $CHCl_3$ ). Source: BA XI MA DOU LING *Aristolochia chamissonis*. Ref: 1904.

**3 Abieta-8,12-dien-11,14-dione**

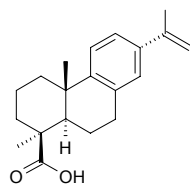
12-Deoxyroyleanone  $C_{20}H_{28}O_2$  (300.44).  $[\alpha]_D^{20} = -60.0^\circ$  ( $c = 0.05$ ,  $CHCl_3$ ). Source: TU ER QI SHU WEI CAO *Salvia cilicica*. Ref: 1930.

**4 (+)-8,11,13,15-Abietatetraene**

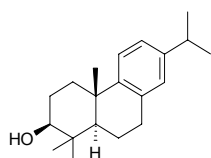
$C_{20}H_{28}$  (268.45).  $[\alpha]_D^{24} = +48.2^\circ$  ( $c = 0.22$ , MeOH). Source: MIN WAN BA JIAO *Illicium minwanense* (pericarp; yield = 0.00011%dw). Ref: 4697.

**5 8,11,13,15-Abietatetraen-19-oic acid**

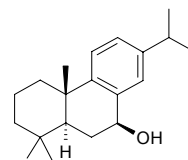
$C_{20}H_{26}O_2$  (298.43). White amorphous powder. Source: JIA DI FENG PI *Illicium jiadifengpi* (bark). Ref: 4560.

**6 Abietatriene-3β-ol**

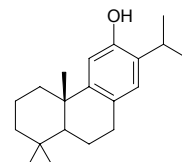
[78078-41-8]  $C_{20}H_{30}O$  (286.46). mp 109~111°C, (nat.), 136.5~138°C (syn.),  $[\alpha]_D = +50.4^\circ$  ( $CHCl_3$ ). Source: MAN JING ZI *Vitex trifolia*. Ref: 746, 1521.

**7 Abieta-8,11,13-trien-7β-ol**

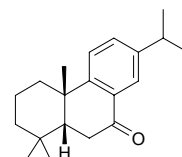
$C_{20}H_{30}O$  (286.46).  $[\alpha]_D^{25} = +34.2^\circ$  ( $c = 1.0$ ,  $CHCl_3$ ). Source: CHANG GENG CU FEI *Cephalotaxus harringtonia* var. *drupacea*. Ref: 5401.

**8 (+)-8,11,13-Abietatrien-12-ol**

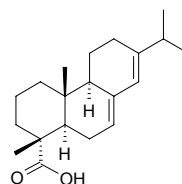
$C_{20}H_{30}O$  (286.46). Orange gum,  $[\alpha]_D^{26.7} = +20.7^\circ$  ( $c = 10.15$ ,  $CHCl_3$ ). Pharm: Antiplasmodial (*Plasmodium falciparum* K1 *in vitro*,  $IC_{50} = (0.63 \pm 0.05) \mu g/mL$ , control Chloroquine,  $IC_{50} = (0.18 \pm 0.01) \mu g/mL$ ; D10,  $IC_{50} = (0.95 \pm 0.08) \mu g/mL$ , Chloroquine,  $IC_{50} = (0.012 \pm 0.001) \mu g/mL$ ); cytotoxic (CHO, *in vitro*,  $IC_{50} = (51.69 \pm 2.67) \mu g/mL$ ; control Daunorubicin  $IC_{50} = (1.53 \pm 0.15) \mu g/mL$ ; HepG2  $IC_{50} = (43.71 \pm 6.07) \mu g/mL$ , Daunorubicin  $IC_{50} = (1.46 \pm 0.20) \mu g/mL$ ). Source: NAN FEI GOU MA *Harpagophytum procumbens*. Ref: 5438.

**9 Abieta-8,11,13-trien-7-one**

$C_{20}H_{28}O$  (284.45). Pharm: 12(S)-LOX inhibitor inactive (hmn platelets, 100  $\mu g/mL$ , 12(S)-HETE Production inhibitor inactive). Source: OU ZHOU CI BAI *Juniperus communis* (wood), YUAN BAI *Sabina chinensis*. Ref: 4980.

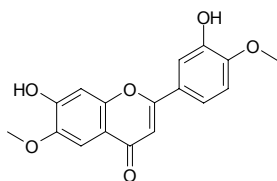
**10 Abietic acid**

7,13-Abietadien-18-oil acid; Sylvic acid [514-10-3]  $C_{20}H_{30}O_2$  (302.46). Lamellar crystals (ethanol), mp 171~173°C,  $[\alpha]_D^{15} = -102^\circ$  (ethanol); mp (-) 171~173°C, ( $\pm$ ) 148~150°C. Pharm: Antibacterial (*Streptococcus* var., MIC = 25mg/L; *Staphylococcus aureus*, MIC = 100mg/L; *Corynebacterium acnes*, MIC = 25  $\mu g/mL$ ); antineoplastic ( $S_{180}$ ); antithrombotic;  $Na^+$ ,  $K^+$ -ATP inhibitor; antiulcerative; promotes growth of bacteria producing butyric and lactic acids; topical protectant; toxin (pulmonary toxicity). Source: SONG XIANG *Pinus massoniana*. Ref: 6, 631, 900.

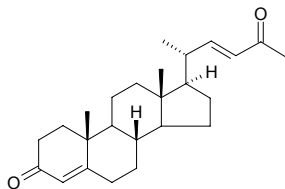


**11 Abrectorin**

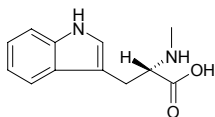
3',7-Dihydroxy-4',6-dimethoxyflavone C<sub>17</sub>H<sub>14</sub>O<sub>6</sub> (314.30). Crystals, mp 229~230°C, 273~274°C. Source: XIANG SI TENG *Abrus precatorius*. Ref: 660.

**12 Abridin**

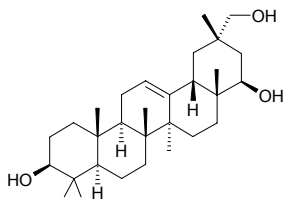
C<sub>25</sub>H<sub>36</sub>O<sub>2</sub> (368.56). Crystals (MeOH), mp 67~68°C. Source: XIANG SI ZI *Abrus precatorius*. Ref: 660.

**13 Abrine**

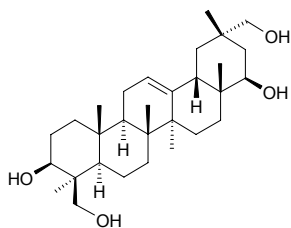
*N*-Methyl-*L*-tryptophan [526-31-8] C<sub>12</sub>H<sub>14</sub>N<sub>2</sub>O<sub>2</sub> (218.26). Prismatic crystals (water), mp 295°C (dec). Source: JI GU CAO *Abrus fruticulosus* [Syn. *Abrus cantoniensis*] (dried whole herb: content = 0.0317%<sup>[5508]</sup>), XIANG SI ZI *Abrus precatorius*. Ref: 1, 5, 6, 5508.

**14 Abrisapogenol A**

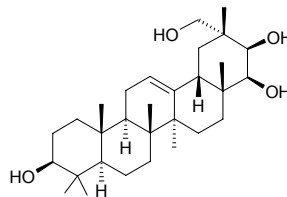
C<sub>30</sub>H<sub>50</sub>O<sub>3</sub> (458.73). Source: JI GU CAO *Abrus fruticulosus* [Syn. *Abrus cantoniensis*]. Ref: 1523.

**15 Abrisapogenol B**

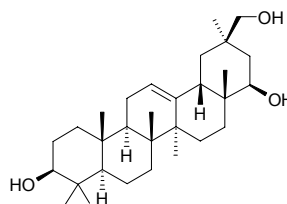
[121994-06-7] C<sub>30</sub>H<sub>50</sub>O<sub>4</sub> (474.73). Source: JI GU CAO *Abrus fruticulosus* [Syn. *Abrus cantoniensis*]. Ref: 1524.

**16 Abrisapogenol C**

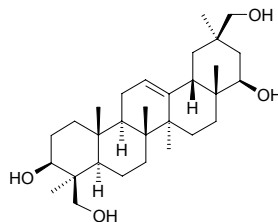
C<sub>30</sub>H<sub>50</sub>O<sub>4</sub> (474.73). Source: JI GU CAO *Abrus fruticulosus* [Syn. *Abrus cantoniensis*], SHAN DOU GEN *Sophora subprostrata* [Syn. *Sophora tonkinensis*]. Ref: 1523, 1525.

**17 Abrisapogenol D**

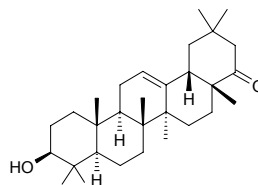
[10379-65-4] C<sub>30</sub>H<sub>50</sub>O<sub>3</sub> (458.73). Source: JI GU CAO *Abrus fruticulosus* [Syn. *Abrus cantoniensis*], SHAN DOU GEN *Sophora subprostrata* [Syn. *Sophora tonkinensis*]. Ref: 1524, 1525.

**18 Abrisapogenol E**

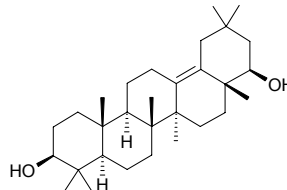
[121994-07-8] C<sub>30</sub>H<sub>50</sub>O<sub>4</sub> (474.73). Source: JI GU CAO *Abrus fruticulosus* [Syn. *Abrus cantoniensis*], SHAN DOU GEN *Sophora subprostrata* [Syn. *Sophora tonkinensis*]. Ref: 1524, 1525.

**19 Abrisapogenol F**

[121994-08-9] C<sub>30</sub>H<sub>48</sub>O<sub>2</sub> (440.72). Source: JI GU CAO *Abrus fruticulosus* [Syn. *Abrus cantoniensis*]. Ref: 1524.

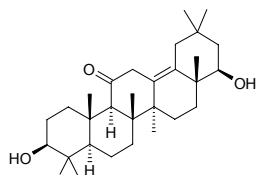
**20 Abrisapogenol G**

[121994-09-0] C<sub>30</sub>H<sub>50</sub>O<sub>2</sub> (442.73). Source: JI GU CAO *Abrus fruticulosus* [Syn. *Abrus cantoniensis*]. Ref: 1524.

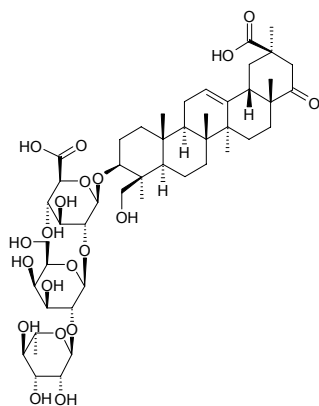


**21 Abrisapogenol J**

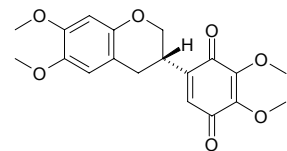
$C_{30}H_{48}O_3$  (456.72). Source: XIANG SI ZI *Abrus precatorius*. Ref: 1527.

**22 Abrisaponin I**

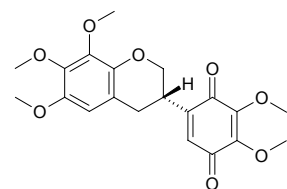
$C_{48}H_{74}O_{20}$  (971.11). Source: JI GU CAO *Abrus fruticulosus* [Syn. *Abrus cantoniensis*], SHAN DOU GEN *Sophora subprostrata* [Syn. *Sophora tonkinensis*]. Ref: 1521, 1526.

**23 Abruquinone A**

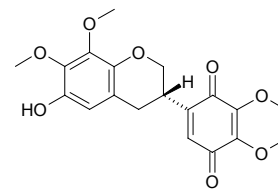
[71593-10-7]  $C_{19}H_{20}O_7$  (360.37). Pharm: Platelet aggregation inhibitor; antiallergic and anti-inflammatory (inhibits formation of peroxide,  $IC_{50} < 0.3 \mu\text{g/mL}$ , inhibits rat neutrophilic cell,  $IC_{50} < 1 \mu\text{g/mL}$ , inhibits release of  $\beta$ -glucuronidase, lysozym and histamine in mastocyte,  $IC_{50} < 1 \mu\text{g/mL}$ ); reduces plasma's exsmosis (normal or treated mus, bradykinin-induced or P substance-induced). Source: XIANG SI ZI *Abrus precatorius*. Ref: 1528, 1687.

**24 Abruquinone B**

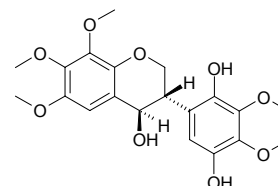
[71593-09-4]  $C_{20}H_{22}O_8$  (390.39). Brown viscous liquid,  $[\alpha]_D^{25} = +128.6^\circ$  ( $c = 0.25$ , MeOH). Pharm: platelet aggregation inhibitor (rbt, caused by arachidonic acid,  $IC_{50} < 5 \mu\text{g/mL}$ , caused by collagen,  $IC_{50} < 5 \mu\text{g/mL}$ )<sup>[1528]</sup>; antituberculosic (MIC =  $(12.5 \pm 0.0) \mu\text{g/mL}$ )<sup>[4956]</sup>; antimalarial (antiplasmodial,  $IC_{50} = (1.5 \pm 0.2) \mu\text{g/mL}$ )<sup>[4956]</sup>; cytotoxic (Vero cells,  $IC_{50} > 50 \mu\text{g/mL}$ ; KB cells,  $IC_{50} = (9.9 \pm 0.3) \mu\text{g/mL}$ ; BC cells,  $IC_{50} = (5.7 \pm 0.2) \mu\text{g/mL}$ )<sup>[4956]</sup>. Source: XIANG SI ZI *Abrus precatorius*, XIANG SI TENG *Abrus precatorius* (aerial parts). Ref: 1528, 4956.

**25 Abruquinone C**

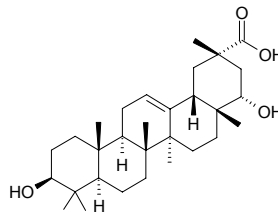
[71593-11-8]  $C_{19}H_{20}O_8$  (376.37). Source: XIANG SI ZI *Abrus precatorius*. Ref: 1528.

**26 Abruquinone G**

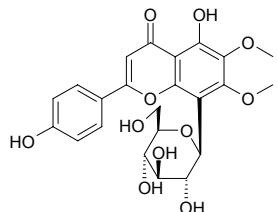
$C_{20}H_{24}O_9$  (408.41). White needles,  $[\alpha]_D^{25} = -56.3^\circ$  ( $c = 0.64$ , MeOH). Pharm: Antiviral ( $IC_{50} = 20\text{--}50 \mu\text{g/mL}$ ); cytotoxic (Vero cell,  $IC_{50} = 30\text{--}40 \mu\text{g/mL}$ ). Source: XIANG SI TENG *Abrus precatorius* (aerial parts). Ref: 4956.

**27 Abrusgenic acid**

Maytenfolic acid;  $3\beta,22\alpha$ -Dihydroxyolean-12-en-29-oic acid [84108-17-8]  $C_{30}H_{48}O_4$  (472.71). Colorless acicular crystals, mp  $320\text{--}322^\circ\text{C}$ ,  $[\alpha]_D = 34.2^\circ$  ( $c = 1.2$ , pyridine). Pharm: Antineoplastic ( $P_{388}$ , 6.25mg/kg, biotic prolonged rate = 148%)<sup>[1207]</sup>; anti-HIV (inhibits HIV replication, H9 lymphocytes,  $IC_{50}$  (concentration that inhibits uninfected H9 cell growth by 50%)  $> 25 \mu\text{g/mL}$ ,  $EC_{50} = 5.65 \mu\text{g/mL}$ , TI =  $4.40 \mu\text{g/mL}$ , control AZT,  $IC_{50} = 500 \mu\text{g/mL}$ ,  $EC_{50} = 0.0007 \mu\text{g/mL}$ , TI = 737207)<sup>[4267]</sup>; anti-inflammatory<sup>[1207]</sup>; DPPH scavenger inactive (for  $40 \mu\text{mol/L}$  DPPH radical,  $SC_{50} > 40 \mu\text{mol/L}$ )<sup>[4378]</sup>. Source: HEI MAN *Tripterygium regelii*, KUN MING SHAN HAI TANG *Tripterygium hypoglaucum*, LEI GONG TENG *Tripterygium wilfordii*, SI MIAN MU *Euonymus bungeanus*, SUO LA MU *Salacia prinoides* [Syn. *Salacia chinensis*] (stem), XIANG SI TENG *Abrus precatorius*, XIANG SI ZI *Abrus precatorius*, NAN TOU QIU HAI TANG *Begonia nantoensis* (rhizome). Ref: 1207, 1300, 4267, 4378.

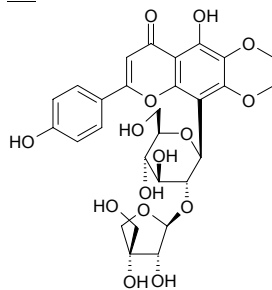
**28 Abrusin**

[120727-02-8]  $C_{23}H_{24}O_{11}$  (476.44). Source: XIANG SI ZI *Abrus precatorius*. Ref: 1527.

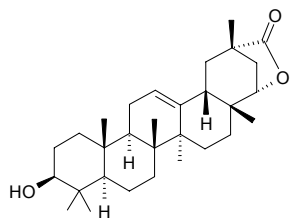


**29 Abrusin-2''-O-apioside**

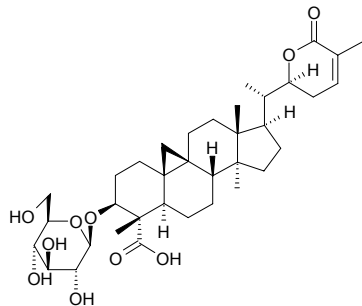
[120727-04-0] C<sub>28</sub>H<sub>32</sub>O<sub>15</sub> (608.56). Source: XIANG SI ZI *Abrus precatorius*.  
Ref: 1527.

**30 Abruslactone A**

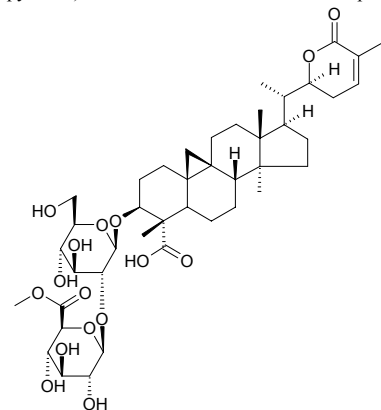
[84104-71-2] C<sub>30</sub>H<sub>46</sub>O<sub>3</sub> (454.70). Source: BAO XING WEI MAO *Euonymus mupinensis*, LEI GONG TENG *Tripterygium wilfordii*, XIANG SI TENG *Abrus precatorius*, XIANG SI ZI *Abrus precatorius*. Ref: 2, 278, 1300.

**31 Abrusoside A**

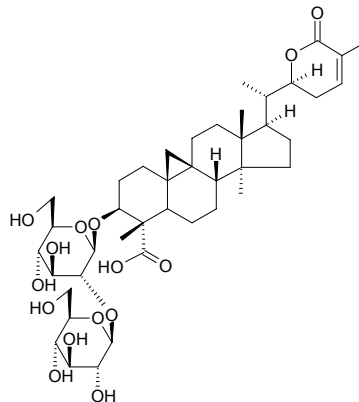
[124962-06-7] C<sub>36</sub>H<sub>54</sub>O<sub>10</sub> (646.83). Pharm: Sweetener. Source: JI GU CAO *Abrus fruticulosus* [Syn. *Abrus cantoniensis*], XIANG SI ZI *Abrus precatorius*. Ref: 658.

**32 Abrusoside B**

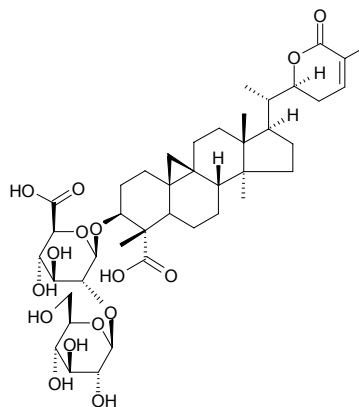
C<sub>43</sub>H<sub>64</sub>O<sub>16</sub> (836.98). Crystals, mp 243~245°C, [α]<sub>D</sub> = +5.8° (c = 0.35, pyridine). Source: XIANG SI TENG *Abrus precatorius*. Ref: 660.

**33 Abrusoside C**

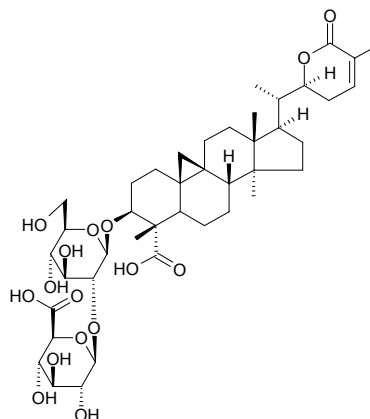
C<sub>42</sub>H<sub>64</sub>O<sub>15</sub> (808.97). Crystals, mp 260~262°C, [α]<sub>D</sub> = +31.4° (c = 0.34, pyridine). Source: XIANG SI TENG *Abrus precatorius*. Ref: 660.

**34 Abrusoside D**

C<sub>42</sub>H<sub>62</sub>O<sub>16</sub> (822.95). Crystals, mp 237~239°C, [α]<sub>D</sub> = +9.9° (c = 0.31, pyridine). Source: XIANG SI TENG *Abrus precatorius*. Ref: 660.

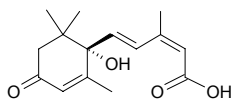
**35 Abrusoside E**

C<sub>42</sub>H<sub>62</sub>O<sub>16</sub> (822.95). Amorphous powder, mp 265°C (dec), [α]<sub>D</sub> = +2° (c = 0.2, pyridine). Source: XIANG SI TENG *Abrus precatorius*. Ref: 1521.

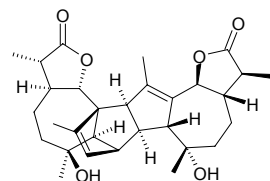


**36 Abscisic acid**

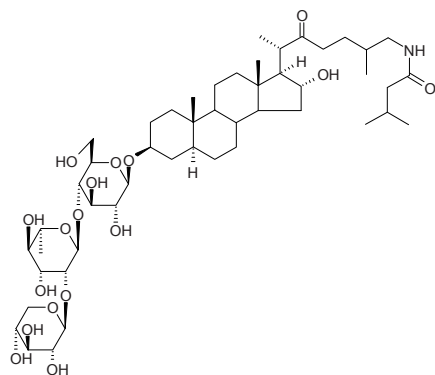
[21293-29-8]  $C_{15}H_{20}O_4$  (264.32). mp 160~163°C, soluble in diethyl ether. **Pharm:** Hormone of defoliation; germination inhibitor (seed and ball root). **Source:** LU DI MIAN *Gossypium hirsutum* [Syn. *Gossypium mexicanum*], SHAN YAO *Dioscorea batatas* [Syn. *Dioscorea opposita*], WAN DOU *Pisum sativum* (in 1967, the compound was isolated from the plant by Y. Isogaya, et al.)<sup>[5505]</sup>, XIANG SI ZI *Abrus precatorius*. **Ref:** 2, 658, 5505.

**37 Absinthin**

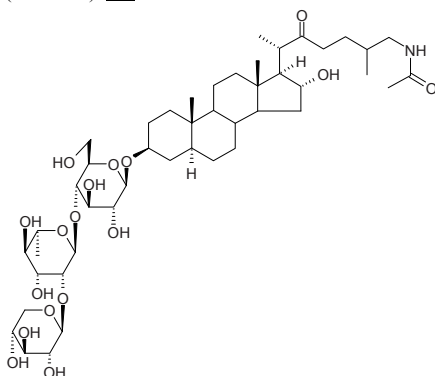
[1362-42-1]  $C_{30}H_{40}O_6$  (496.65). Orange acicular crystals (anhydrous ether), mp 179~183°C (dec). **Pharm:** Anti-inflammatory (rat, orl, experimental gastric ulcer, also promotes gastric wall regeneration); supertoxic agent (causes tension, hyperspasmia, and even death after aspiration). **Source:** ZHONG YA KU HAO *Artemisia absinthium*, BAI HAO *Artemisia sieversiana*. **Ref:** 1, 6.

**38 Abutiloside A**

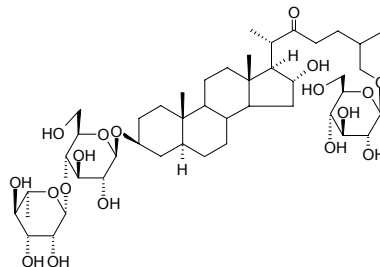
$C_{49}H_{83}NO_{17}$  (958.20). **Source:** MA ZHUANG QIE *Solanum abutiloides* (fresh root). **Ref:** 4166.

**39 Abutiloside B**

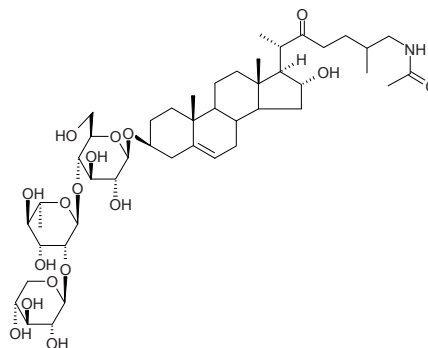
$C_{46}H_{77}NO_{17}$  (916.12). **Source:** MA ZHUANG QIE *Solanum abutiloides* (fresh root). **Ref:** 4166.

**40 Abutiloside F**

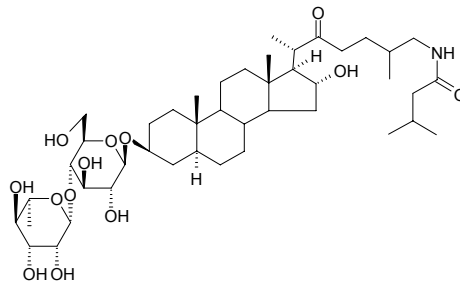
$C_{45}H_{76}O_{18}$  (905.10). **Source:** MAZHUANG QIE *Solanum abutiloides* (fresh root). **Ref:** 4166.

**41 Abutiloside H**

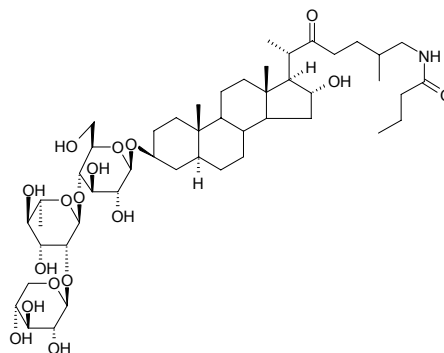
26-Acetylamino-3 $\beta$ ,16 $\alpha$ -dihydroxy-cholest-5-en-22-one-3-O- $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranoside  $C_{46}H_{75}NO_{17}$  (914.11). White powder,  $[\alpha]_D^{25} = -107.0^\circ$  ( $c = 0.20$ , MeOH). **Source:** MA ZHUANG QIE *Solanum abutiloides* (fresh root). **Ref:** 4166.

**42 Abutiloside I**

$C_{44}H_{75}NO_{13}$  (826.09). White powder,  $[\alpha]_D^{25} = -38.7^\circ$  ( $c = 0.15$ , MeOH). **Source:** MA ZHUANG QIE *Solanum abutiloides* (fresh root). **Ref:** 4166.

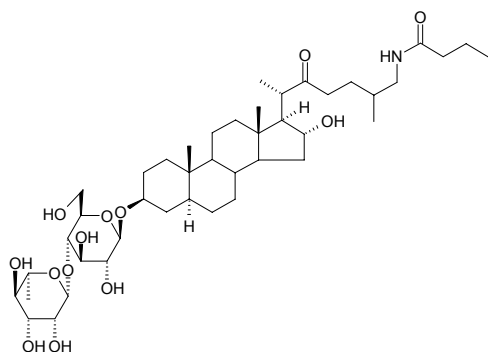
**43 Abutiloside J**

$C_{48}H_{81}NO_{17}$  (944.18). White powder,  $[\alpha]_D^{25} = -54.1^\circ$  ( $c = 0.95$ , MeOH). **Source:** MA ZHUANG QIE *Solanum abutiloides* (fresh root). **Ref:** 4166.

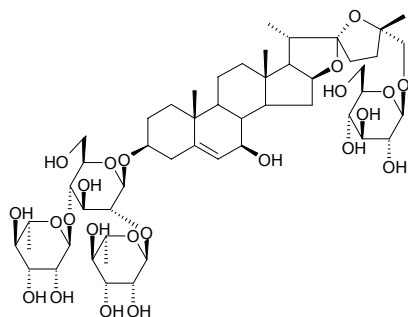


**44 Abutiloside K**

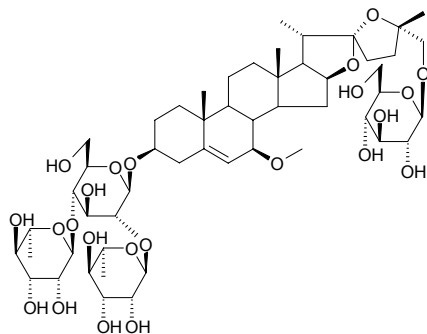
$C_{43}H_{73}NO_{13}$  (812.06). White powder,  $[\alpha]_D^{25} = -50.4^\circ$  ( $c = 0.25$ , MeOH). Source: MA ZHUANG QIE *Solanum abutiloides* (fresh root). Ref: 4166.

**45 Abutiloside L**

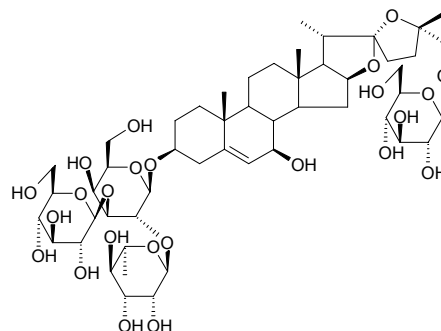
(22*S*,25*S*)-26-*O*- $\beta$ -*D*-Glucopyranosyl-22,25-epoxy-furost-5-ene-3 $\beta$ ,7 $\beta$ ,26-triol 3-*O*- $\beta$ -chactrioxide  $C_{51}H_{82}O_{23}$  (1063.21). White powder,  $[\alpha]_D^{25} = -107.1^\circ$  ( $c = 1.15$ , MeOH). Source: MA ZHUANG QIE *Solanum abutiloides* (fruit). Ref: 3496.

**46 Abutiloside M**

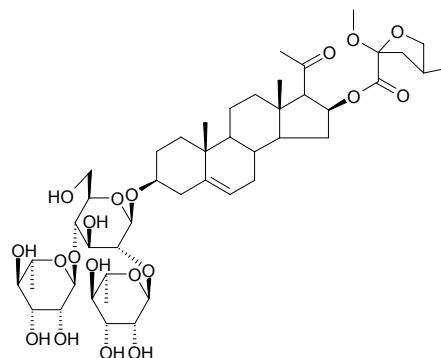
(22*S*,25*S*)-26-*O*- $\beta$ -*D*-Glucopyranosyl-22,25-epoxy-7 $\beta$ -methoxy-furost-5-ene-3 $\beta$ ,26-diol 3-*O*- $\beta$ -chactrioxide  $C_{52}H_{84}O_{23}$  (1077.24). White powder,  $[\alpha]_D^{25} = -110.9^\circ$  ( $c = 0.37$ , MeOH). Source: MA ZHUANG QIE *Solanum abutiloides* (fruit). Ref: 3496.

**47 Abutiloside N**

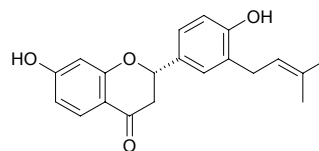
(22*S*,25*S*)-26-*O*- $\beta$ -*D*-Glucopyranosyl-22,25-epoxy-furost-5-ene-3 $\beta$ ,7 $\beta$ ,26-triol 3-*O*- $\beta$ -sallatrioxide  $C_{51}H_{82}O_{24}$  (1079.21). White powder,  $[\alpha]_D^{25} = -84.8^\circ$  ( $c = 0.24$ , MeOH). Source: MA ZHUANG QIE *Solanum abutiloides* (fruit). Ref: 3496.

**48 Abutiloside O**

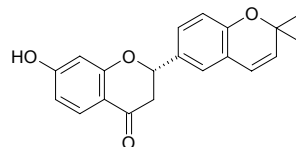
3-*O*- $\beta$ -*D*-Chactrioxyl-3 $\beta$ ,16 $\beta$ -dihydroxy-pregn-5-en-20-one-16-*O*-(2,5-epoxy-2-methoxy-4-methyl-pentanoic acid)-ester  $C_{46}H_{72}O_{19}$  (929.08). White powder,  $[\alpha]_D^{25} = -46.5^\circ$  ( $c = 0.34$ , MeOH). Source: MA ZHUANG QIE *Solanum abutiloides* (fruit). Ref: 3496.

**49 (2*R*)-Abyssinone**

$C_{20}H_{20}O_4$  (324.38). Source: GUANG GUO GAN CAO *Glycyrrhiza glabra*. Ref: 2431.

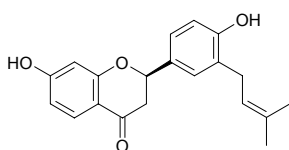
**50 (2*R*)-Abyssinone I**

[77263-07-1]  $C_{20}H_{18}O_4$  (322.36). Pharm: Antibacterial (*Staphylococcus aureus*, MIC = 25  $\mu$ g/mL; *Bacillus subtilis*, MIC = 25  $\mu$ g/mL; *Sclerotinia libertiana*, MIC = 12.5  $\mu$ g/mL; *Mucor mucedo*, MIC = 50  $\mu$ g/mL). Source: A BI XI NI YA CI TONG *Erythrina abyssinica*. Ref: 1551.



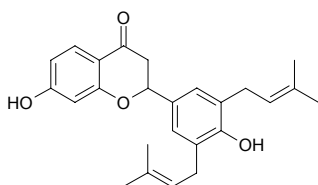
### 51 (2S)-Abyssinone II

4',7-Dihydroxy-3'-prenylflavanone C<sub>20</sub>H<sub>20</sub>O<sub>4</sub> (324.38). **Pharm:** Aromatase inhibitor (*in vitro*, IC<sub>50</sub> = 0.4μmol/L; control Aminoglutethimide, IC<sub>50</sub> = 6.4μmol/L)<sup>[3090]</sup>; cytotoxic (aromatase inhibitor, a promising lead as potential cancer chemopreventive agent)<sup>[5038]</sup>; antibacterial (*Escherichia coli*, MIA = 10.00μg, control Chloramphenicol, MIA = 0.001μg; *Staphylococcus aureus*, MIA = 0.50μg, Chloramphenicol, MIA = 0.0001μg; *Bacillus subtilis*, MIA = 0.50μg, Chloramphenicol, MIA = 0.0001μg)<sup>[5247]</sup>; antifungal (*Candida mycoderma*, MIA = 0.01μg, control Miconazole, MIA = 0.0001μg)<sup>[5247]</sup>; antioxidant (DPPH scavenger, TLC, MIA = 0.5μg, IC<sub>50</sub> = 630μg/mL; control Quercetin, MIA < 0.05μg, IC<sub>50</sub> = 7μg/mL, Gallic acid, MIA < 0.05μg, IC<sub>50</sub> = 4μg/mL; Ascorbic acid, MIA < 0.10μg, IC<sub>50</sub> = 18μg/mL)<sup>[5247]</sup>. **Source:** GOU SHU *Broussonetia papyrifera*, JI KUAN CI TONG *Erythrina latissima* (stem wood). **Ref:** 3090, 5038, 5247.



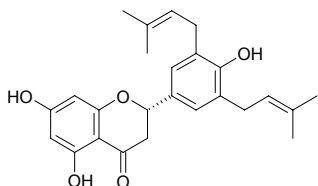
### 52 Abyssinone IV

C<sub>25</sub>H<sub>28</sub>O<sub>4</sub> (392.50). **Pharm:** Antimalarial (*Plasmodium falciparum* D6 strain, IC<sub>50</sub> = (5.4±1.5)μg/mL, control Chloroquine, IC<sub>50</sub> = (0.009±0.002)μg/mL, Quinine, IC<sub>50</sub> = (0.04±0.01)μg/mL; *Plasmodium falciparum* W2 strain, IC<sub>50</sub> = (5.9±1.8)μg/mL, Chloroquine, IC<sub>50</sub> = (0.08±0.003)μg/mL, Quinine, IC<sub>50</sub> = (0.21±0.01)μg/mL)<sup>[3879]</sup>; antimalarial (antiplasmodial *in vitro*, *Plasmodium falciparum*, W2 strain, IC<sub>50</sub> = (7.7±1.6)μmol/L, control Quinine, IC<sub>50</sub> = (0.21±0.01)μmol/L; D6 strain, IC<sub>50</sub> = (9.0±2.1)μmol/L, Quinine, IC<sub>50</sub> = (0.042±0.002)μmol/L)<sup>[5420]</sup>. **Source:** A BI XI NI YA CI TONG *Erythrina abyssinica* (stem bark, root bark). **Ref:** 3879, 5420.



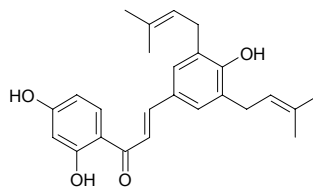
### 53 Abyssinone V

[77263-11-7] C<sub>25</sub>H<sub>28</sub>O<sub>5</sub> (408.50). **Pharm:** Antimalarial (*Plasmodium falciparum* D6 strain, IC<sub>50</sub> = (4.9±0.8)μg/mL, control Chloroquine, IC<sub>50</sub> = (0.009±0.002)μg/mL, Quinine, IC<sub>50</sub> = (0.04±0.01)μg/mL; *Plasmodium falciparum* W2 strain, IC<sub>50</sub> = (6.1±1.3)μg/mL, Chloroquine, IC<sub>50</sub> = (0.08±0.003)μg/mL, Quinine, IC<sub>50</sub> = (0.21±0.01)μg/mL)<sup>[3879]</sup>; antibacterial (*Staphylococcus aureus*, *Bacillus subtilis* and *Micrococcus lysodeikticus*)<sup>[658]</sup>. **Source:** A BI XI NI YA CI TONG *Erythrina abyssinica*. **Ref:** 658, 3879.



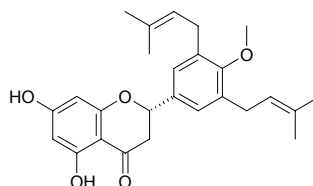
### 54 Abyssinone VI

[77263-12-8] C<sub>25</sub>H<sub>28</sub>O<sub>4</sub> (392.50). **Pharm:** Platelet aggregation inhibitor (rbt). **Source:** A BI XI NI YA CI TONG *Erythrina abyssinica*. **Ref:** 658.



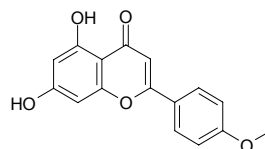
### 55 Abyssinone V-4'-methyl ether

C<sub>26</sub>H<sub>30</sub>O<sub>5</sub> (422.53). **Pharm:** Antimalarial (*Plasmodium falciparum* D6, IC<sub>50</sub> = (11.3±2.1)μg/mL, control Chloroquine, IC<sub>50</sub> = (0.009±0.002)μg/mL, Quinine, IC<sub>50</sub> = (0.04±0.01)μg/mL; *Plasmodium falciparum* W2, IC<sub>50</sub> = (11.1±2.4)μg/mL, Chloroquine, IC<sub>50</sub> = (0.08±0.003)μg/mL, Quinine, IC<sub>50</sub> = (0.21±0.01)μg/mL)<sup>[3879]</sup>. **Source:** A BI XI NI YA CI TONG *Erythrina abyssinica* (stem bark), KEN NI YA CI TONG *Erythrina burttii*. **Ref:** 1521, 3879.



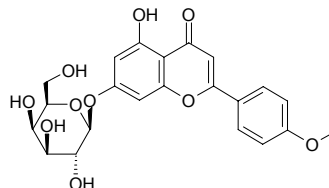
### 56 Acacetin

5,7-Dihydroxy-4'-methoxyflavone [480-44-4] C<sub>16</sub>H<sub>12</sub>O<sub>5</sub> (284.27). Yellow acicular crystals (95% alcohol), mp 263°C, soluble in ethanol. **Pharm:** Anti-inflammatory (mus, orl 25~100mg/kg, reduces formaldehyde edema; mus, orl, 50~100mg/kg, reduces intestinal vascular permeability and brittleness); antispasmodic; similar action with vitamin P (quercetin-like action); LD<sub>50</sub> (mus) = 933mg/kg. **Source:** CI HUI HUA *Robinia pseudoacacia*, FENG JIAO *Apis mellifera ligustica*, HUO XIANG *Agastache rugosus*, JIAN QIU LUO MAO RUI HUA *Verbascum lychnites*, JU HUA *Chrysanthemum morifolium* [Syn. *Dendranthema morifolium*], LI ZHI HAO *Ajuga forrestii*, MI MENG HUA *Buddleja officinalis*, YE JU HUA *Chrysanthemum indicum*, *Nuxia sphaerocephala* (leaf). **Ref:** 1, 7, 319, 369, 463, 4419, 5501.



### 57 Acacetin-7-O-β-D-galactopyranoside

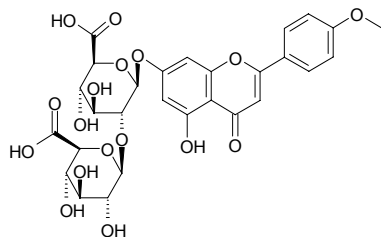
C<sub>22</sub>H<sub>22</sub>O<sub>10</sub> (446.41). Crystals (MeOH-Me<sub>2</sub>CO), mp 259°C (dec), [α]<sub>D</sub><sup>25</sup> = -36.6° (c = 0.55, DMF), [α]<sub>D</sub><sup>25</sup> = -60° (MeOH). **Source:** YE JU HUA *Chrysanthemum indicum*. **Ref:** 660.



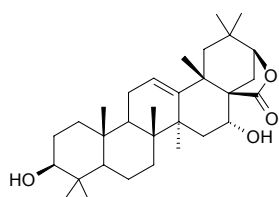


**58 Acacetin-7-glucurono-(1→2)-glucuronide**

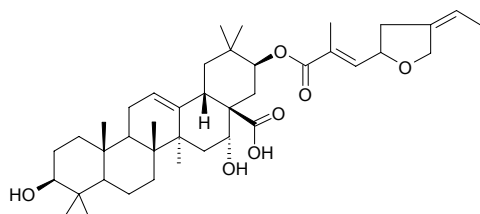
$C_{28}H_{28}O_{17}$  (636.53). mp 191~205°C (dec). Source: CHOU WU TONG *Clerodendron trichotomum*. Ref: 6.

**59 Acacic acid lactone**

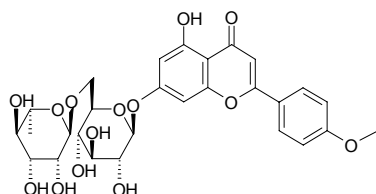
$C_{30}H_{46}O_4$  (470.70). Needles (EtOH), mp 255~257°C,  $[\alpha]_D^{20} = +4.2^\circ$  (CHCl<sub>3</sub>). Source: HE HUAN PI *Albizia julibrissin*, *Acacia* spp. Ref: 660, 1521.

**60 Acacigenin B**

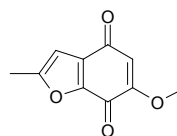
$C_{40}H_{60}O_7$  (652.92). Source: HE HUAN PI *Albizia julibrissin*. Ref: 660.

**61 Acaciin**

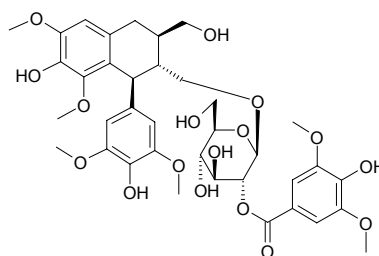
Acacetin 7-*O*-(6''-*α*-L-rhamnopyranosyl)-β-*D*-glucopyranoside [480-36-4]  $C_{28}H_{32}O_{14}$  (592.56). mp 263°C. Pharm: Phosphodiesterase inhibitor (selectively inhibits phosphodiesterase in cerebrum, cardiac muscle and EAC cell); aldose reductase inhibitor (mus, eye lens, IC<sub>50</sub> = 0.75 μmol/L); antihepatotoxin (1.0g/mL, inhibits the rise of GPT caused by CCl<sub>4</sub> and galactosamine). Source: BEI YE JU *Chrysanthemum boreale*, CI HUAI HUA *Robinia pseudoacacia*, LING *Trapa bispinosa*, HUO XIANG *Agastache rugosus*, MI MENG HUA *Buddleja officinalis*, YE JU HUA *Chrysanthemum indicum* (capitulum: content scope of 14 origins = 0.01%~2.33%, mean content = 0.70%<sup>[5508]</sup>), ZHI ZHU XIANG *Valeriana jatamansii* [Syn. *Valeriana wallichii*]. Ref: 2, 6, 369, 388, 660, 1286, 1606, 1607, 4214, 5501, 5508.

**62 Acamelin**

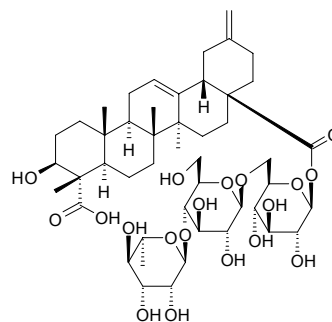
[74161-27-6]  $C_{10}H_8O_4$  (192.17). Pharm: Allergen (Effective component in *Acacia melanoxylon* (HEI MU JIN HE HUAN) known to cause contact dermatitis). Source: HEI MU JIN HE HUAN *Acacia melanoxylon*. Ref: 658.

**63 Acanfolioside**

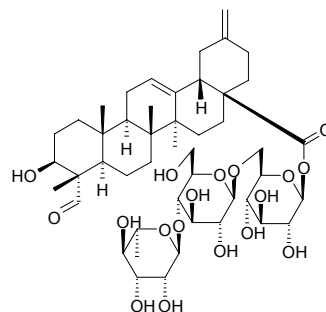
(+)-Lyoniresinol-3*α*-[2-(3,5-dimethoxy-4-hydroxy)-benzoyl]-*O*-β-glucopyranoside  $C_{37}H_{46}O_{17}$  (762.77). Amorphous powder,  $[\alpha]_D^{22} = +28.3^\circ$  ( $c = 2.7$ , MeOH). Source: LAO SHU LE *Acanthus ilicifolius* (aerial parts). Ref: 5135.

**64 Acanjaposide A**

$C_{47}H_{72}O_{19}$  (941.09). White powder,  $[\alpha]_D^{25} = +24.8^\circ$  ( $c = 0.60$ , MeOH). Source: RI BEN WU JIA *Acanthopanax japonicus*. Ref: 1989.

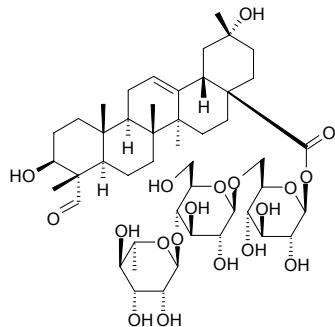
**65 Acanjaposide B**

$C_{47}H_{72}O_{18}$  (925.09). White solid,  $[\alpha]_D^{25} = +18.9^\circ$  ( $c = 0.82$ , MeOH) Source: RI BEN WU JIA *Acanthopanax japonicus*. Ref: 1989.

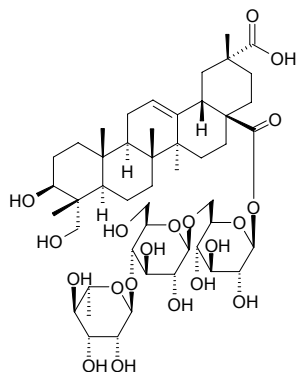


**66 Acanjaposide C**

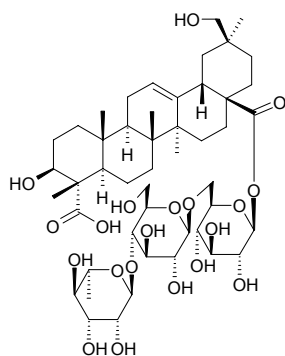
$C_{47}H_{74}O_{19}$  (943.10). White powder,  $[\alpha]_D^{25} = +6.5^\circ$  ( $c = 0.85$ , MeOH). Source: RI BEN WU JIA *Acanthopanax japonicus*. Ref: 1989.

**67 Acanjaposide D**

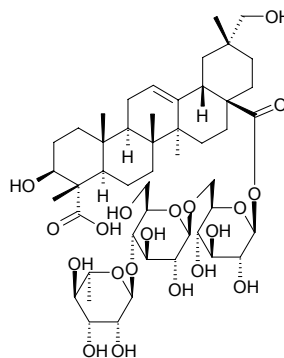
$3\beta,23$ -Dihydroxy-olean-12-ene-28,29-dioic acid 28-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)]- $\beta$ -*D*-glucopyranoside  $C_{48}H_{76}O_{20}$  (973.13). White powder,  $[\alpha]_D^{25} = -12.0^\circ$  ( $c = 0.61$ , MeOH). Source: RI BEN WU JIA *Acanthopanax japonicus* (leaf). Ref: 4505.

**68 Acanjaposide E**

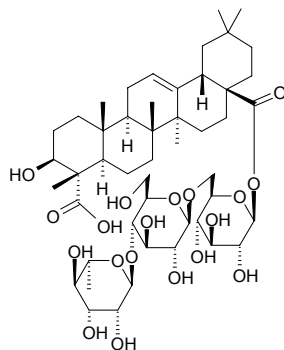
$3\beta,30$ -Dihydroxy-olean-12-en-23,28-dioic acid 28-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)]- $\beta$ -*D*-glucopyranoside  $C_{48}H_{76}O_{20}$  (973.13). White powder,  $[\alpha]_D^{25} = -3.6^\circ$  ( $c = 1.08$ , MeOH). Source: RI BEN WU JIA *Acanthopanax japonicus* (leaf). Ref: 4505.

**69 Acanjaposide F**

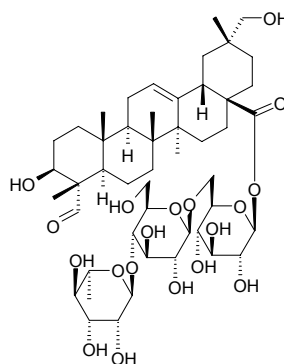
$3\beta,29$ -Hydroxy-olean-12-en-23,28-dioic acid 28-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)]- $\beta$ -*D*-glucopyranoside  $C_{48}H_{76}O_{20}$  (973.13). White powder,  $[\alpha]_D^{25} = +1.9^\circ$  ( $c = 0.60$ , MeOH). Source: RI BEN WU JIA *Acanthopanax japonicus* (leaf). Ref: 4505.

**70 Acanjaposide G**

Gypsogenic acid 28-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)]- $\beta$ -*D*-glucopyranoside  $C_{48}H_{76}O_{19}$  (957.13). White powder,  $[\alpha]_D^{25} = +1.5^\circ$  ( $c = 1.15$ , MeOH). Source: RI BEN WU JIA *Acanthopanax japonicus* (leaf). Ref: 4505.

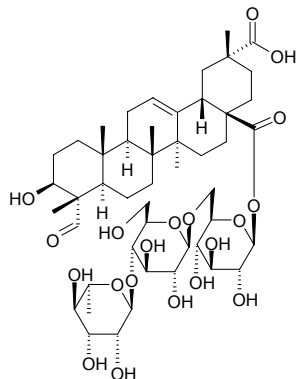
**71 Acanjaposide H**

$3\beta$ -Hydroxyl-23-oxo-olean-12-en-28-oic acid 28-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)]- $\beta$ -*D*-glucopyranoside  $C_{48}H_{76}O_{19}$  (957.13). White powder,  $[\alpha]_D^{25} = +3.4^\circ$  ( $c = 0.54$ , MeOH). Source: RI BEN WU JIA *Acanthopanax japonicus* (leaf). Ref: 4505.

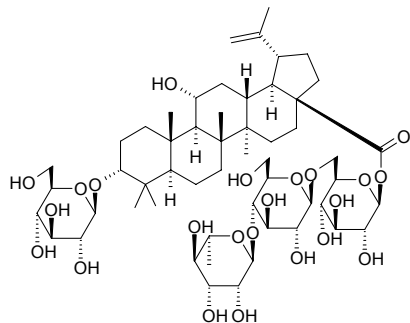


**72 Acanjaposide I**

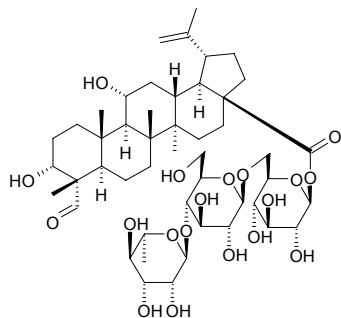
3 $\beta$ -Hydroxyl-olean-12-en-28,29-dioic acid 28-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside C<sub>48</sub>H<sub>74</sub>O<sub>20</sub> (971.11). White powder,  $[\alpha]_D^{25} = +3.6^\circ$  ( $c = 0.56$ , MeOH). Source: RI BEN WU JIA *Acanthopanax japonicus* (leaf). Ref: 4505.

**73 Acankoreoside C**

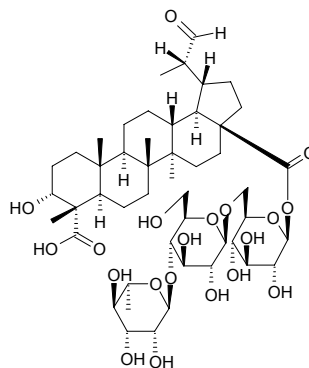
3-*O*- $\beta$ -*D*-Glucopyranosyl 3 $\alpha$ ,11 $\alpha$ -dihydroxylup-20(29)-en-28-oic acid 28-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl ester C<sub>54</sub>H<sub>88</sub>O<sub>23</sub> (1105.29). White powder, mp 247~249°C (dil. MeOH),  $[\alpha]_D^{26} = -44.6^\circ$  ( $c = 0.36$ , EtOH). Source: CHAO XIAN WU JIA *Acanthopanax koreanum*. Ref: 1877.

**74 Acankoreoside D**

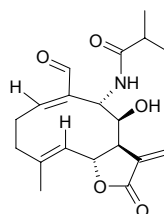
3 $\alpha$ ,11 $\alpha$ -Dihydroxylup-23-al-20(29)-en-28-oic acid 28-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl ester C<sub>48</sub>H<sub>76</sub>O<sub>19</sub> (957.13). White powder, mp 222~225°C (dil. MeOH),  $[\alpha]_D^{26} = -40.8^\circ$  ( $c = 0.37$ , EtOH). Source: CHAO XIAN WU JIA *Acanthopanax koreanum*. Ref: 1877.

**75 Acankoreoside E**

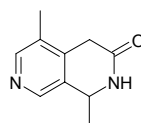
(20*S*)-3 $\alpha$ -Hydroxy-30-oxolupan-23,28-dioic acid 28-*O*-[ $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl]-ester C<sub>48</sub>H<sub>76</sub>O<sub>20</sub> (973.13). White powder, mp 223~227°C,  $[\alpha]_D^{26} = -20.4^\circ$  ( $c = 0.49$ , MeOH). Source: CHAO XIAN WU JIA *Acanthopanax koreanum*. Ref: 2533.

**76 Acanthamolide**

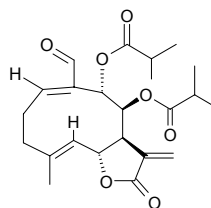
[64852-96-6] C<sub>19</sub>H<sub>25</sub>NO<sub>5</sub> (347.41). Colorless trapezoid crystals (benzene-methanol), mp 249~251°C. Pharm: Cytotoxic (KB *in vitro*, ED<sub>50</sub> = 2.2 $\mu$ g/mL). Source: GUANG CI BAO JU *Acanthospermum glabratum*. Ref: 1, 5, 661.

**77 Acanthifoline**

C<sub>10</sub>H<sub>12</sub>N<sub>2</sub>O (176.22). Source: LAO SHU LE *Acanthus ilicifolius*. Ref: 2080.

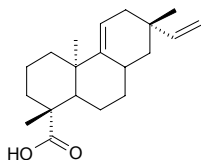
**78 Acanthoglabrolide**

[75744-66-0] C<sub>23</sub>H<sub>30</sub>O<sub>7</sub> (418.49). Pharm: Cytotoxic (KB *in vitro*, ED<sub>50</sub> = 3.1 $\mu$ g/mL). Source: GUANG CI BAO JU *Acanthospermum glabratum*. Ref: 1, 5.

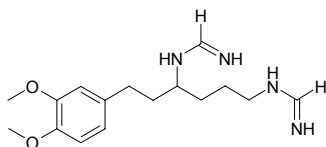


**79 Acanthoic acid**

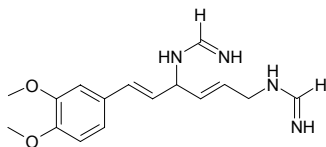
$C_{20}H_{30}O_2$  (302.46). Amorphous powder, mp 135~136°C,  $[\alpha]_D^{20} = -55.7^\circ$  ( $c = 1.0$ , MeOH). **Pharm:** IL-8 secretion inhibitor (TNF- $\alpha$ -stimulated hmn colon adenocarcinoma cell line HT29, 1, 10 and 100 $\mu$ mol/L, InRt = 23.9%, 37.1% and 72.1%, respectively); TNF- $\alpha$  secretion inhibitor (trypsin-stimulated hmn leukemic mast cell line HMC-1, 1, 10 and 100 $\mu$ mol/L, InRt = 3.1%, 65.0% and 74.1%, respectively). **Source:** CHAO XIAN WU JIA *Acanthopanax koreanum* (root). **Ref:** 4346.

**80 Acanthoidine**

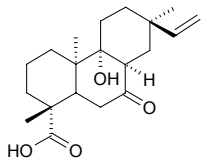
$C_{16}H_{26}N_4O_2$  (306.41). **Pharm:** Antihypertensive. **Source:** JIE MAO FEI LIAN *Carduus acanthoides*, FEI LIAN *Carduus crispus*. **Ref:** 6, 658.

**81 Acanthoine**

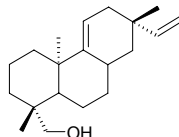
$C_{16}H_{22}N_4O_2$  (302.38). **Source:** FEI LIAN *Carduus crispus*. **Ref:** 6.

**82 Acanthokoreoic acid A**

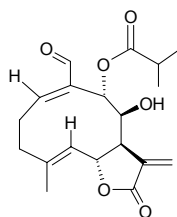
$C_{20}H_{30}O_4$  (334.46). White powder, mp 60~62°C,  $[\alpha]_D^{20} = +3.5^\circ$  ( $c = 1.0$ , MeOH). **Pharm:** IL-8 secretion inhibitor (TNF- $\alpha$ -stimulated hmn colon adenocarcinoma cell line HT29, 1, 10 and 100 $\mu$ mol/L, InRt = 12.7%, 18.6% and 3.9%, respectively)<sup>[4346]</sup>; TNF- $\alpha$  secretion inhibitor (trypsin-stimulated hmn leukemic mast cell line HMC-1, 1, 10 and 100 $\mu$ mol/L, InRt = 0.6%, 2.1% and 9.2%, respectively)<sup>[4346]</sup>. **Source:** CHAO XIAN WU JIA *Acanthopanax koreanum* (root). **Ref:** 4346.

**83 Acanthol**

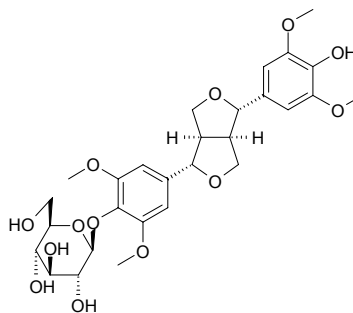
$C_{20}H_{32}O$  (288.48). White powder, mp 73~74°C,  $[\alpha]_D^{20} = -14.9^\circ$  ( $c = 0.2$ , MeOH). **Pharm:** IL-8 secretion inhibitor (TNF- $\alpha$ -stimulated hmn colon adenocarcinoma cell line HT29, 1 $\mu$ mol/L, 10 $\mu$ mol/L and 100 $\mu$ mol/L, InRt = 0.4%, 0.6% and 1.1%, respectively); TNF- $\alpha$  secretion inhibitor (trypsin-stimulated hmn leukemic mast cell line HMC-1, 1 $\mu$ mol/L, 10 $\mu$ mol/L and 100 $\mu$ mol/L, InRt = 0.9%, 12.1% and 18.2%, respectively). **Source:** CHAO XIAN WU JIA *Acanthopanax koreanum* (root). **Ref:** 4346.

**84 Acantholide**

[72548-16-4]  $C_{19}H_{24}O_6$  (348.40). Colorless acicular crystals, mp 208°C. **Pharm:** Cytotoxic (KB *in vitro*, ED<sub>50</sub> = 2.2 $\mu$ g/mL). **Source:** GUANG CI BAO JU *Acanthospermum glabratum*. **Ref:** 1, 5.

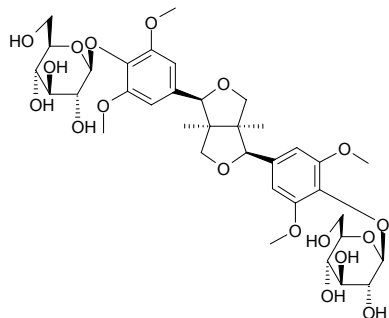
**85 Acanthoside B**

Syringaresinol-4'-*O*- $\beta$ -*D*-glucopyranoside; (+)-Syringaresinol *O*- $\beta$ -*D*-glucopyranoside [7374-79-0]  $C_{28}H_{36}O_{13}$  (580.59). Amorphous powder, mp 150°C,  $[\alpha]_D^{26} = -23.8^\circ$  ( $c = 0.08$ , MeOH). **Pharm:** Immunomodulator; aldose reductase inhibitor (IC<sub>50</sub> > 100 $\mu$ mol/L, 100 $\mu$ mol/L InRt = 38%, control Epalrestat, IC<sub>50</sub> = 0.072 $\mu$ mol/L). **Source:** DU ZHONG *Eucommia ulmoides*, HOU PO *Magnolia officinalis*, HUANG HUA REN *Sida acuta*, HUO YAN HUA *Phlogacanthus curviflorus* (root: yield = 0.0011%dw), JIA HUI SE JIU LI XIANG PO PO NA *Veronica thymoides* ssp. *pseudocinerea*, LAN SHAI PIAO *Sambucus sieboldiana* (leaf), SHUI MU XUE LIAN HUA *Saussurea medusa* (whole plant), WU GENG WU JIA PI *Acanthopanax sessiliflorus*, XI JING SHI HU *Dendrobium moniliforme* (stem: yield = 0.002%dw<sup>[4717]</sup>), XIAO LONG YE KUO BAO JU *Baccharis dracunculifolia* (aerial parts). **Ref:** 2, 6, 540, 658, 660, 3846, 4184, 4192, 4530, 4717, 4799.

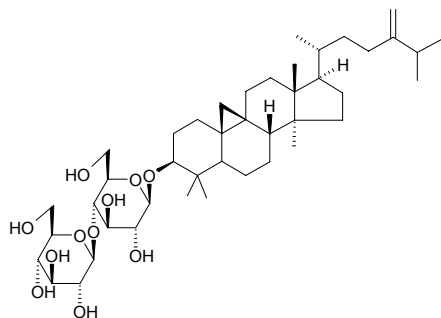


**86 Acanthoside D**

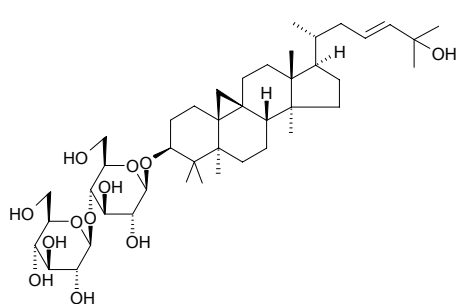
Eleutheroside E [96038-87-8]  $C_{34}H_{46}O_{18}$  (742.73). Colorless acicular crystals (dil. methanol), mp 245–247°C,  $[\alpha]_D = -33^\circ$ ; mp 235°C,  $[\alpha]_D = 0^\circ$  ( $c = 5.0$ , 50% methanol); mp 265–272°C,  $[\alpha]_D^{20} = -5^\circ$  ( $c = 0.5$ , methanol). **Pharm:** Sedative; anti-stress; prevents atrophy of prostate and spermary. **Source:** WU GENG WU JIA PI *Acanthopanax sessiliflorus*. **Ref:** 6, 235, 658, 660, 661.

**87 Acanthoside K<sub>2</sub>**

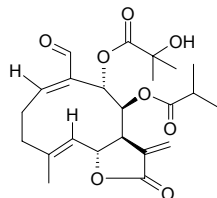
$C_{43}H_{72}O_{11}$  (765.05). **Source:** WU GENG WU JIA PI *Acanthopanax sessiliflorus* (root). **Ref:** 660.

**88 Acanthoside K<sub>3</sub>**

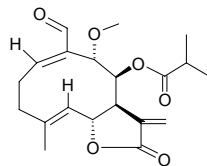
$C_{42}H_{70}O_{12}$  (767.02). **Source:** WU GENG WU JIA PI *Acanthopanax sessiliflorus* (root). **Ref:** 660.

**89 Acanthospermal A**

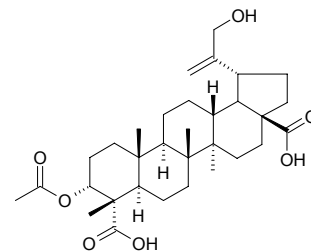
[56689-33-9]  $C_{23}H_{30}O_8$  (434.49). **Pharm:** Cytotoxic (KB *in vitro*,  $ED_{50} = 211\mu\text{g/mL}$ ). **Source:** GUANG CI BAO JU *Acanthospermum glabratum*. **Ref:** 1, 5.

**90 Acanthospermolide**

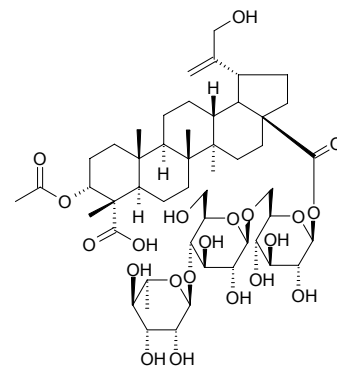
[75744-64-8]  $C_{20}H_{26}O_6$  (362.43). mp 154°C. **Pharm:** Cytotoxic (KB *in vitro*,  $ED_{50} = 0.54\mu\text{g/mL}$ ,  $P_{388}$  *in vivo*,  $ED_{50} = 12.5\text{mg/kg}$ ). **Source:** GUANG CI BAO JU *Acanthospermum glabratum*. **Ref:** 1, 5.

**91 Acantrifoside A**

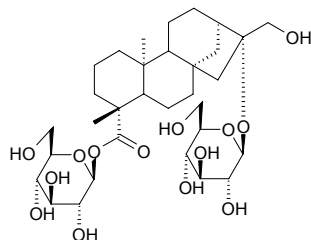
3 $\alpha$ -Acetoxy-30-hydroxylup-20(29)-ene-23,28-dioic Acid  $C_{32}H_{48}O_7$  (544.74). White crystals, mp 278–279°C,  $[\alpha]_D^{25} = -12.9^\circ$  ( $c = 0.51$ , MeOH). **Source:** CI SAN JIA *Acanthopanax trifoliatum* (leaf). **Ref:** 4412.

**92 Acantrifoside C**

3 $\alpha$ -Acetoxy-30-hydroxylup-20(29)-ene-23,28-dioic Acid 28-*O*- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl ester  $C_{50}H_{77}O_{21}$  (1015.17). White powder, mp 217–218°C,  $[\alpha]_D^{25} = -19.5^\circ$  ( $c = 0.51$ , MeOH). **Source:** CI SAN JIA *Acanthopanax trifoliatum* (leaf). **Ref:** 4412.

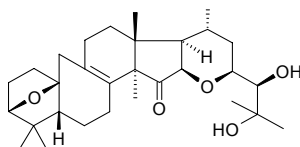
**93 Acantrifoside D**

16 $\alpha$ ,17-Dihydroxy-*ent*-kauran-19-oic acid 16-*O*- $\beta$ -D-glucopyranoside 19-*O*- $\beta$ -D-glucopyranosyl ester  $C_{32}H_{52}O_{14}$  (660.76). White powder, mp 167–170°C,  $[\alpha]_D^{25} = -45^\circ$  ( $c = 0.50$ , MeOH). **Source:** CI SAN JIA *Acanthopanax trifoliatum* (stem bark). **Ref:** 4957.

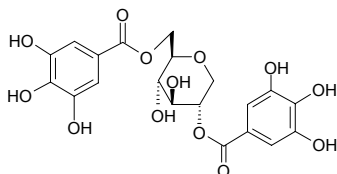


**94 Acerionol**

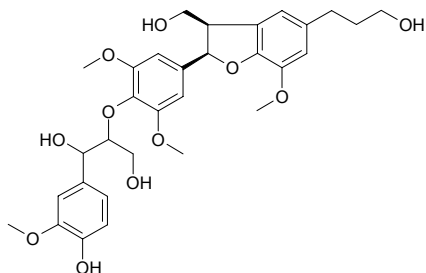
[59665-59-7] C<sub>30</sub>H<sub>46</sub>O<sub>5</sub> (486.70). mp 248~249.5°C. Source: SAN MIAN DAO *Cimicifuga acerina*. Ref: 1521.

**95 Aceritannin**

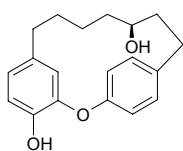
[76746-56-0] C<sub>20</sub>H<sub>20</sub>O<sub>13</sub> (468.37). Source: CHA TIAO QI *Acer ginnala*. Ref: 1521.

**96 Acernikol**

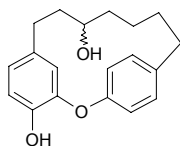
C<sub>31</sub>H<sub>38</sub>O<sub>11</sub> (586.64). White powder,  $[\alpha]_D^{22} = +4.7^\circ$  ( $c = 0.20$ , EtOH). Source: MAO GUO QI *Acer nikoense* (stem bark: yield = 0.0020%). Ref: 4304.

**97 Acerogenin A**

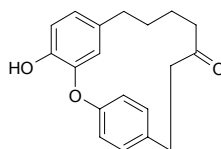
C<sub>19</sub>H<sub>22</sub>O<sub>3</sub> (298.39). Pharm:  $\beta$ -Hexosaminidase inhibitor (RBL-2H3 cells, inhibits release of  $\beta$ -Hexosaminidase, 100 $\mu$ mol/L, InRt = (40.0 $\pm$ 1.1)%),  $p < 0.01$ ). Source: MAO GUO QI *Acer nikoense* (stem bark). Ref: 4304.

**98 Acerogenin B**

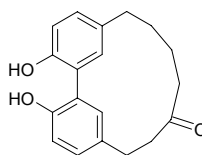
C<sub>19</sub>H<sub>22</sub>O<sub>3</sub> (298.39). Pharm:  $\beta$ -Hexosaminidase inhibitor (RBL-2H3 cells, inhibits release of  $\beta$ -hexosaminidase, IC<sub>50</sub> = 50 $\mu$ mol/L, control antiallergic Tranilast, IC<sub>50</sub> = 490 $\mu$ mol/L, Ketotifen fumarate, IC<sub>50</sub> = 220 $\mu$ mol/L). Source: MAO GUO QI *Acer nikoense* (stem bark). Ref: 4304.

**99 Acerogenin C**

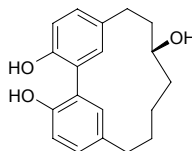
C<sub>19</sub>H<sub>20</sub>O<sub>3</sub> (296.37). Pharm: Antibacterial (disk susceptibility tests, standard NCCLS method, 50 $\mu$ g/disk (control 30 $\mu$ g/disk), gram-positive bacteria: *Staphylococcus aureus*, 9mm/diameter, positive control Kanamycin, 10mm/diameter; *Bacillus subtilis*, 9mm/diameter, positive control Kanamycin, 18mm/diameter; *Bacillus sphaericus*, 8mm/diameter, positive control Kanamycin, 20mm/diameter; gram-negative bacteria: *Chromobacterium violaceum*, 9mm/diameter, positive control Kanamycin, 17mm/diameter; *Klebsiella aerogenes*, 10mm/diameter, positive control Kanamycin, 15mm/diameter; *Pseudomonas aeruginosa*, 9mm/diameter, positive control Kanamycin, 27mm/diameter; *Pseudomonas fluorescens*, 7mm/diameter, positive control Kanamycin, 15mm/diameter). Source: TUO YUAN YE RU XIANG SHU *Boswellia ovalifoliolata* (stem). Ref: 4380.

**100 Acerogenin E**

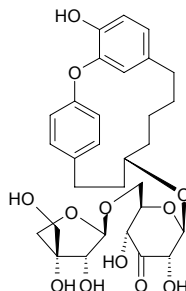
C<sub>19</sub>H<sub>20</sub>O<sub>3</sub> (296.37). Pharm:  $\beta$ -Hexosaminidase inhibitor (RBL-2H3 cells, inhibits release of  $\beta$ -Hexosaminidase, 100 $\mu$ mol/L, InRt = (47.9 $\pm$ 1.1)%),  $p < 0.01$ ). Source: MAO GUO QI *Acer nikoense* (stem bark). Ref: 4304.

**101 Acerogenin K**

C<sub>19</sub>H<sub>22</sub>O<sub>3</sub> (298.39). Pharm:  $\beta$ -Hexosaminidase inhibitor (RBL-2H3 cells, inhibits release of  $\beta$ -hexosaminidase, IC<sub>50</sub> = 33 $\mu$ mol/L, control antiallergic Tranilast, IC<sub>50</sub> = 490 $\mu$ mol/L, Ketotifen fumarate, IC<sub>50</sub> = 220 $\mu$ mol/L). Source: MAO GUO QI *Acer nikoense* (stem bark). Ref: 4304.

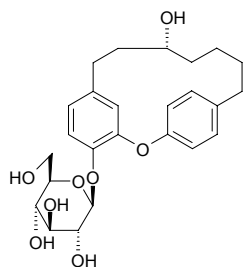
**102 Aceroketoside**

C<sub>30</sub>H<sub>38</sub>O<sub>12</sub> (590.63). Source: MAO GUO QI *Acer nikoense* (stem bark). Ref: 4304.

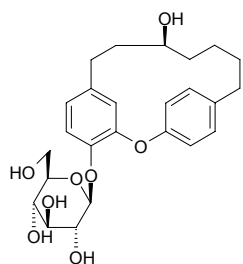


**103 Aceroside B<sub>1</sub>**

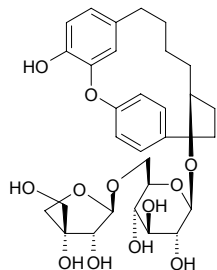
$C_{25}H_{32}O_8$  (460.53). Source: MAO GUO QI *Acer nikoense* (stem bark). Ref: 4304.

**104 Aceroside B<sub>2</sub>**

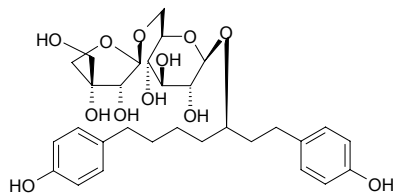
$C_{25}H_{32}O_8$  (460.53). Source: MAO GUO QI *Acer nikoense* (stem bark). Ref: 4304.

**105 Aceroside III**

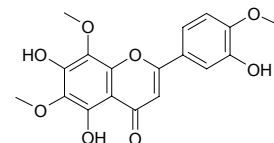
$C_{30}H_{40}O_{12}$  (592.65). Source: MAO GUO QI *Acer nikoense* (stem bark: yield = 0.0075%). Ref: 4304.

**106 Aceroside VIII**

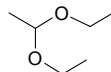
$C_{30}H_{42}O_{12}$  (594.66). Source: MAO GUO QI *Acer nikoense* (stem bark: yield = 0.0038%). Ref: 4304.

**107 Acerosin**

$C_{18}H_{16}O_8$  (360.32). Pharm: Spermaticidal (causes breakdown of dog sperm during last period of formation). Source: LIN DI XIANG RI KUI *Helianthus strumosus*, HUANG JING YE *Vitex negundo*, *Gardenia* sp. Ref: 658.

**108 Acetal**

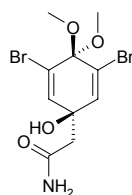
1,1-Diethoxyethane [105-57-7]  $C_6H_{14}O_2$  (118.18). bp 103.2°C/761mmHg. Source: CU vinegar. Ref: 6.

**109 Acetamide**

Acetic acid amide [60-35-5]  $C_2H_5NO$  (59.07). mp 82–83°C. Source: XIANG XUN *Lentinus edodes*. Ref: 6.

**110 Acetamide-3,5-dibromo-1-hydroxy-4,4-dimethoxy-2,5-cyclohexadiene**

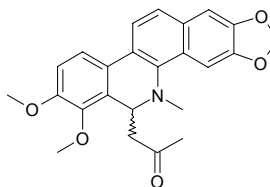
$C_{10}H_{13}Br_2NO_4$  (371.03). White granular crystals, mp 191–192°C. Source: *Pseudoceratina purpurea* (from the South China Sea). Ref: 4888.

**111 Acetoin**

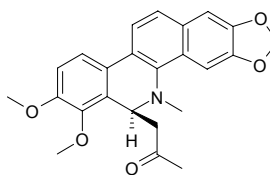
3-Hydroxy-2-butanone [513-86-0]  $C_4H_8O_2$  (88.11). mp (±) –72°C, bp (+) 142–144°C, (–) 143°C, (±) 148°C. Source: CU vinegar. Ref: 6.

**112 (±)-6-Acetyldihydrochelerythrine**

$C_{24}H_{23}NO_5$  (405.45). Colorless prisms, mp 194–197°C,  $[\alpha]_D^{24} = 0^\circ$  ( $c = 2.14$ ,  $CHCl_3$ ). Pharm: Anti-HIV (H9 lymphocytes,  $EC_{50} = 1.77\mu g/mL$ , TI (Therapeutic Index) = 14.6; control AZT,  $IC_{50} = 500\mu g/mL$ ,  $EC_{50} = 0.0317\mu g/mL$ , TI = 15,800). Source: JI YING SU *Argemone mexicana*. Ref: 5364.

**113 6-Acetyldihydrochelerythrine**

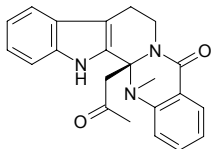
$C_{24}H_{23}NO_5$  (405.45). White needles, mp 192–194°C,  $[\alpha]_D^{23} = -135^\circ$  ( $c = 0.1$ ,  $CHCl_3$ ). Pharm: Antioxidant (TLC-based assay, DPPH scavenger, MIQ = 10 $\mu g$ ; control Quercetin, MIQ = 1 $\mu g$ ). Source: *Fagara xanthoxyloides*. Ref: 5385.



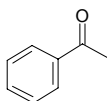
**114 Acetonylevodiamine**

$C_{22}H_{21}N_3O_2$  (359.43). Colorless rhombus lamellar crystals, mp 163~164°C.

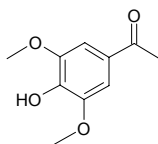
Source: WU ZHU YU *Evodia rutaecarpa*. Ref: 2482.

**115 Acetophenone**

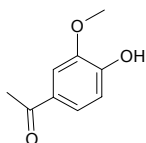
Phenylethanone [98-86-2]  $C_8H_8O$ . (120.15). Pharm: Hypnotic. Source: ZHI YANG *Populus balsamifera*, YI ZHU QIAN MA *Urtica dioica*, SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. Ref: 2, 658.

**116 Acetosyringone**

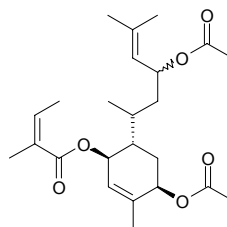
[2478-38-8]  $C_{10}H_{12}O_4$  (196.20). Pharm: Causes plant to be infected by *Agrobacterium tumefaciens*. Source: YAN CAO *Nicotiana tabacum*. Ref: 658.

**117 Acetovanillone**

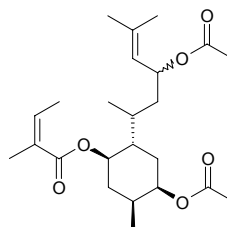
1-(4-Hydroxy-3-methoxyphenyl)-ethanone [498-02-2]  $C_9H_{10}O_3$  (166.18). Tiny acicular crystals (water), mp 115°C, bp 295~300°C. Pharm: Choleric (rbt); uterine stimulant (rat); inhibits contraction of heart (frog heart); anti-inflammatory inactive (no significant inhibitory effects on mast cells and neutrophils stimulated with various inducers; no significant inhibitory effects on TNF- $\alpha$  formation from RAW264.7 stimulated with LPS and N9 microglial cells stimulated with LPS/IFN- $\gamma$ )<sup>[3054]</sup>. Source: BAI WEI *Cynanchum atratum* (root)<sup>[3054]</sup>, DIAN DI MEI YE CHA YE HUA *Apocynum androsaemifolium*, HU HUANG LIAN *Picrorhiza kurrooa*, JIA ZHU TAO MA *Apocynum cannabinum*, MIAN HUA GEN *Gossypium herbaceum*, *Iris* sp. Ref: 6, 658, 661, 3054.

**118 (1R\*,3S\*,4R\*,6S\*)-9-(Acetoxy)-4-acetoxy-1-[(2Z)-2-methylbut-2-enyloxy]bisabol-2(3),10(11)-diene**

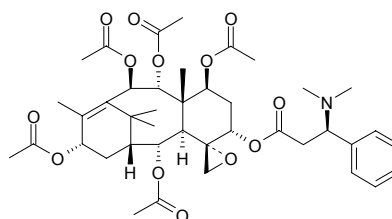
$C_{24}H_{36}O_6$  (420.55). Pharm: Leukotriene biosynthesis Inhibitor (*in vitro*,  $IC_{50}$  = 10.1  $\mu$ mol/L,  $p < 0.05$ ; control Zileuton,  $IC_{50}$  = 10.4  $\mu$ mol/L,  $p < 0.05$ )<sup>[5037]</sup>; anti-inflammatory (anti-oedema, control oedema = (7.8 $\pm$ 0.3)mg, 100  $\mu$ g/cm<sup>2</sup>, oedema = (5.2 $\pm$ 0.4)mg,  $p < 0.05$ , reduction = 33%, Indomethacin oedema = (3.4 $\pm$ 0.3)mg,  $p < 0.05$ , reduction = 56%)<sup>[4985]</sup>; effect on leukocytes infiltration (control E.A. at 6h = (24.6 $\pm$ 1.6)U/(mL·min), 100  $\mu$ g/cm<sup>2</sup>, E.A. at 6h = (22.8 $\pm$ 3.3)U/(mL·min), Reduce = 7%)<sup>[4985]</sup>. Source: GAO SHAN HUO RONG CAO *Leontopodium alpinum* (root). Ref: 4985, 5037.

**119 (1R\*,3S\*,4R\*,6S\*)-9-(Acetoxy)-4-acetoxy-1-[(2Z)-2-methylbut-2-enyloxy]bisabol-10(11)-ene**

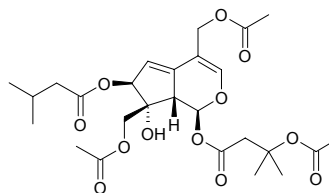
$C_{24}H_{38}O_6$  (422.57). Pharm: Leukotriene biosynthesis Inhibitor (*in vitro*,  $IC_{50}$  = 7.7  $\mu$ mol/L,  $p < 0.05$ ; control Zileuton,  $IC_{50}$  = 10.4  $\mu$ mol/L,  $p < 0.05$ )<sup>[5037]</sup>; anti-inflammatory (anti-oedema, control oedema = (7.8 $\pm$ 0.3)mg, 100  $\mu$ g/cm<sup>2</sup>, oedema = (4.2 $\pm$ 0.4)mg,  $p < 0.05$ , reduction = 46%, Indomethacin oedema = (3.4 $\pm$ 0.3)mg,  $p < 0.05$ , reduction = 56%)<sup>[4985]</sup>; effect on leukocytes infiltration (control E.A. at 6h = (24.6 $\pm$ 1.6)U/(mL·min), 100  $\mu$ g/cm<sup>2</sup>, E.A. at 6h = (19.4 $\pm$ 0.6)U/(mL·min), Reduce = 25%,  $p < 0.05$ )<sup>[4985]</sup>. Source: GAO SHAN HUO RONG CAO *Leontopodium alpinum* (root). Ref: 4985, 5037.

**120 7 $\beta$ -Acetoxy-9-acetylspicataxine**

$C_{41}H_{55}NO_{13}$  (769.89). Source: MEI LI HONG DOU SHAN *Taxus mairei*. Ref: 662.

**121 10-Acetoxy-1-acevaltrate hydrin**

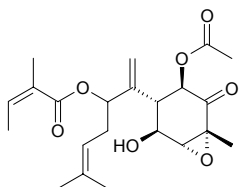
$C_{26}H_{36}O_{12}$  (540.57). Oil,  $[\alpha]_D^{24}$  = +194.6° ( $c$  = 0.01, MeOH). Source: ZHI ZHU XIANG *Valeriana jatamansii* [Syn. *Valeriana wallichii*] (rhizome and root; yield = 0.000007%dw)<sup>[4672]</sup>. Ref: 4672.





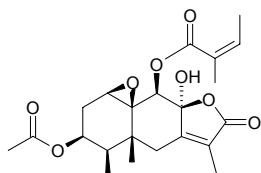
**122 (1R,3R,4R,5S,6S)-1-Acetoxy-8-angeloyloxy-3,4-epoxy-5-hydroxy-bisabola-7(14),10-dien-2-one**

$C_{22}H_{30}O_7$  (406.48). Colorless oil,  $[\alpha]_D^{23} = -32.0^\circ$  ( $c = 0.4$ ,  $CHCl_3$ ). Source: KUAN DONG HUA *Tussilago farfara* (flower bud). Ref: 3531.



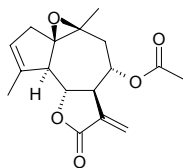
**123 3β-Acetoxy-9β-angeloyloxy-1β,10β-epoxy-8α-hydroxyeremophil-7(11)-en-8β(12)-olide**

$C_{22}H_{28}O_8$  (420.46). White columns (MeOH), mp 212~214°C,  $[\alpha]_D^{25} = -71^\circ$  ( $c = 0.41$ , acetone). Pharm: Antibacterial (Bacillus subtilis, 100μg/mL, IZD = 13~15mm, moderate, control Chloromycetin, IZD = 16~20mm; Escherichia coli, 100μg/mL, IZD = 13~15mm, Chloromycetin, IZD = 16~20mm). Source: JIA TUO WU *Ligulariopsis shichuana* (whole herb: yield = 0.0030%dw). Ref: 4627.



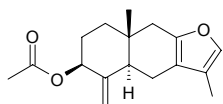
**124 8α-Acetoxyarglabin**

$C_{17}H_{20}O_5$  (304.35). Source: YI KUA *Artemisia myriantha* (aerial parts). Ref: 4618.



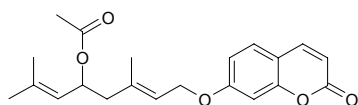
**125 3β-Acetoxy-atractylon**

$C_{17}H_{22}O_3$  (274.36). Source: CANG ZHU *Atractylodes lancea*. Ref: 2.



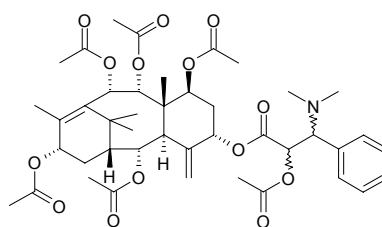
**126 Acetoxyauraptene**

$C_{21}H_{24}O_5$  (356.42). Pharm: Antibacterial; smooth muscle relaxant; anticoagulant; photosensitive agent; ichthyotoxin; toxin. Source: *Zanthoxylum* sp. Ref: 2176.



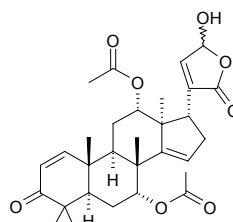
**127 2α-Acetoxyaustrospicatine**

[119777-81-0]  $C_{43}H_{57}NO_{14}$  (811.93). Source: AO DA LI YA HONG DOU SHAN *Austrotaxus spicata*. Ref: 662.



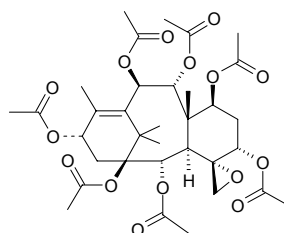
**128 12α-Acetoxyazadironolide**

$C_{30}H_{38}O_8$  (526.63). White crystalline, mp 97~99°C. Source: XIAO YE DU LIAN *Turraea parvifolia*. Ref: 2052.



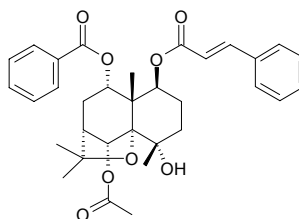
**129 1-Acetoxy-baccatin I**

$C_{34}H_{46}O_{15}$  (694.74). Colorless quadratus crystal. Source: YUN NAN HONG DOU SHAN *Taxus yunnanensis*. Ref: 2166.



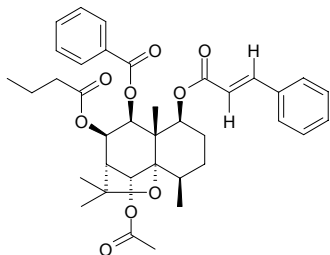
**130 5α-Acetoxy-1β-benzoyl-8α-cinnamoyl-4α-hydroxy-dihydroagarofuran**

$C_{33}H_{38}O_8$  (562.67). Amorphous powder,  $[\alpha]_D^{25} = +109.4^\circ$  ( $c = 1.3$ , MeOH). Source: NAN RI BEN LEI GONG TENG *Tripterygium doianum*. Ref: 1916.



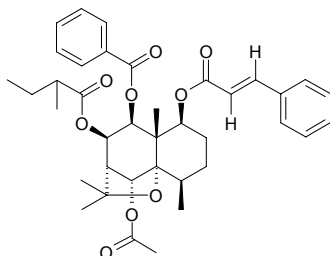
**131 6 $\alpha$ -Acetoxy-9 $\beta$ -benzoyloxy-1 $\beta$ -cinnamoyloxy-8 $\beta$ -butanoyloxy- $\beta$ -dihydroagarofuran**

C<sub>37</sub>H<sub>44</sub>O<sub>9</sub> (632.76). White powder (EtOAc), mp 181~183°C, [ $\alpha$ ]<sub>D</sub> = -7.0° (c = 0.75, MeOH). **Pharm:** NO production inhibitor (mus, macrophage RAW264.7 cells activated by LPS, very weak activity). **Source:** NAN SHE TENG GUO *Celastrus orbiculatus* [Syn. *Celastrus articulatus*]. **Ref:** 2584.



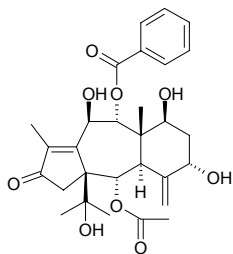
**132 6 $\alpha$ -Acetoxy-9 $\beta$ -benzoyloxy-1 $\beta$ -cinnamoyloxy-8 $\beta$ -(2-methylbutanoyloxy)- $\beta$ -dihydroagarofuran**

C<sub>38</sub>H<sub>46</sub>O<sub>9</sub> (646.78). White powder (EtOAc), mp 231~233°C, [ $\alpha$ ]<sub>D</sub> = -8.9° (c = 0.40, MeOH). **Pharm:** NO production inhibitor (mus, macrophage RAW264.7 cells activated by LPS, very weak activity). **Source:** NAN SHE TENG GUO *Celastrus orbiculatus* [Syn. *Celastrus articulatus*]. **Ref:** 2584.



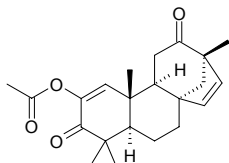
**133 2 $\alpha$ -Acetoxy-9 $\alpha$ -benzoyloxy-5 $\alpha$ ,7 $\beta$ ,10 $\beta$ ,15-tetrahydroxy-11(15→1)-abeotaxa-4(20),11-dien-13-one**

C<sub>29</sub>H<sub>36</sub>O<sub>9</sub> (528.60). Colorless amorphous solid, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +31.6° (c = 0.32, CHCl<sub>3</sub>). **Source:** YUN NAN HONG DOU SHAN *Taxus yunnanensis* (bark). **Ref:** 3481.



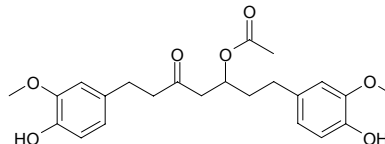
**134 2-Acetoxy-1,15-beyeradiene-3,12-dione**

C<sub>22</sub>H<sub>28</sub>O<sub>4</sub> (356.47). Colorless needles (MeOH), mp 136~138°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -294.2° (c = 2.1, CHCl<sub>3</sub>). **Source:** HAI QI *Excoecaria agallocha* (root: yield = 0.0015%dw). **Ref:** 4613.



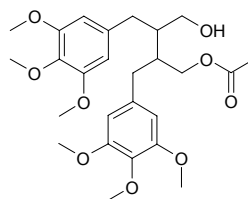
**135 (5S)-5-Acetoxy-1,7-bis(4-hydroxy-3-methoxyphenyl)heptan-3-one**

C<sub>23</sub>H<sub>28</sub>O<sub>7</sub> (416.48). Colorless oil, [ $\alpha$ ]<sub>D</sub><sup>24</sup> = +3.0° (c = 0.60, CHCl<sub>3</sub>). **Source:** SHENG JIANG *Zingiber officinale*. **Ref:** 3803.



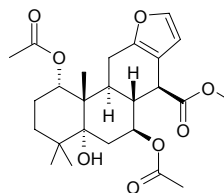
**136 4-Acetoxy-2,3-bis(3,4,5-trimethoxybenzyl)-1-butanol**

C<sub>26</sub>H<sub>36</sub>O<sub>9</sub> (492.57). **Pharm:** Antineoplastic; cathartic; sthenic; pesticide; ichthyotoxin; muscle relaxant. **Source:** *Zanthoxylum* sp. **Ref:** 2176.



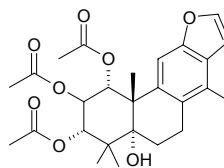
**137 7-Acetoxybonducellpin C**

C<sub>25</sub>H<sub>34</sub>O<sub>8</sub> (462.54). **Source:** CI GUO SU MU *Caesalpinia crista* (seed kernel). **Ref:** 4434.



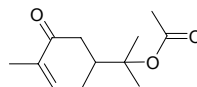
**138 2-Acetoxycaesaldekarin E**

C<sub>26</sub>H<sub>32</sub>O<sub>8</sub> (472.54). **Source:** CI GUO SU MU *Caesalpinia crista* (seed kernel). **Ref:** 4434.



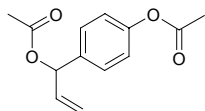
**139 D-8-Acetoxy-carvotanacetone**

C<sub>12</sub>H<sub>18</sub>O<sub>3</sub> (210.28). mp 45.3~46.2°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +32.2° (c = 10, CHCl<sub>3</sub>). **Pharm:** Anthelmintic (with anaphylactic action to skin). **Source:** BO HE *Mentha haplocalyx* [Syn. *Mentha canadaensis*; *Mentha arvensis* var. *haplocalyx*; *Mentha arvensis*]. **Ref:** 1, 660.

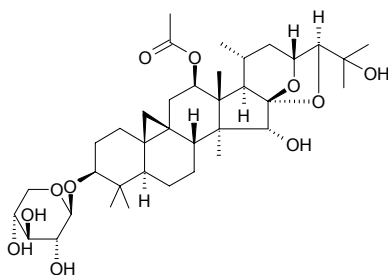


**140 1'-Acetoxychavicol acetate**

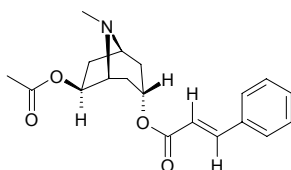
[108147-21-3] C<sub>13</sub>H<sub>14</sub>O<sub>4</sub> (234.25). [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -80° (c = 1, alcohol). **Pharm:** Antineoplastic (S<sub>180</sub>, 10mg/(kg·d), growth rate = 1%); antifungal; antiulcerative (rat, ip, gastric ulcer, 2mg/kg, InRt = 20%, 5mg/kg, InRt = 77%); toxin. **Source:** DA LIANG JIANG *Alpinia galanga*. **Ref:** 1, 995, 1134.

**141 12β-Acetoxycimigenol-3-O-β-D-xylopyranoside**

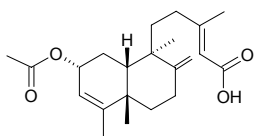
C<sub>37</sub>H<sub>58</sub>O<sub>11</sub> (678.87). White powder, mp 185~187°C, [ $\alpha$ ]<sub>D</sub><sup>24</sup> = -41° (c = 0.55, MeOH:CHCl<sub>3</sub> = 1:1). **Source:** SHENG MA *Cimicifuga foetida* (rhizome). **Ref:** 4573.

**142 trans-6β-Acetoxy-3α-(cinnamoyloxy)tropane**

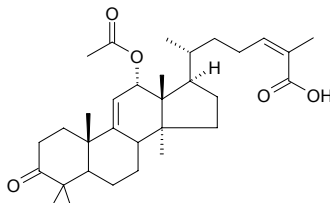
C<sub>19</sub>H<sub>23</sub>NO<sub>4</sub> (329.40). **Source:** XI LAN GU KE *Erythroxylum zeylanicum* (twig and leaf). **Ref:** 3919.

**143 2-α-Acetoxy-cis-cleroda-3,13(Z),8(17)-trien-15-oic acid**

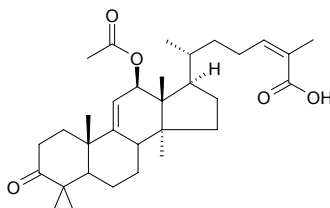
C<sub>22</sub>H<sub>32</sub>O<sub>4</sub> (360.50). Colorless oil, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -32.5° (c = 0.6, CHCl<sub>3</sub>). **Pharm:** Antibacterial (*Bacillus cereus*, MIC = 1.25μg, control Tetracyclin, MIC = 0.25μg; *Bacillus coagulans*, MIC = 2.5μg, Tetracyclin, MIC = 0.25μg; *Bacillus subtilis*, MIC = 1.25μg, Tetracyclin, MIC = 0.25μg; *Micrococcus luteus*, MIC = 1.25μg, Tetracyclin, MIC = 0.25μg; *Staphylococcus aureus*, MIC = 1.25μg, Tetracyclin, MIC = 5.0μg). **Source:** *Haplopappus foliosus*. **Ref:** 5419.

**144 12α-Acetoxycoocinic acid**

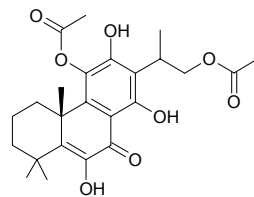
C<sub>32</sub>H<sub>48</sub>O<sub>5</sub> (512.74). **Pharm:** Antineoplastic<sup>[2523]</sup>, anti-HIV<sup>[2523]</sup>. **Source:** LENG FAN TUAN *Kadsura coccinea* [syn. *Kadsura chenensis*; *Kadsura hainanensis*], YI XING NAN WU WEI ZI *Kadsura heteroclita* [Syn. *Uvaria heteroclita*]. **Ref:** 2436, 2523.

**145 12β-Acetoxycoocinic acid**

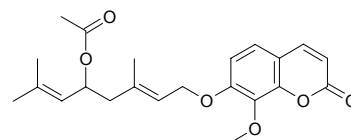
C<sub>32</sub>H<sub>48</sub>O<sub>5</sub> (512.74). **Pharm:** Antineoplastic<sup>[2523]</sup>, anti-HIV<sup>[2523]</sup>. **Source:** LENG FAN TUAN *Kadsura coccinea* [syn. *Kadsura chenensis*; *Kadsura hainanensis*], YI XING NAN WU WEI ZI *Kadsura heteroclita* [Syn. *Uvaria heteroclita*]. **Ref:** 2436, 2523.

**146 16-Acetoxycoleon U 11-acetate**

11,16-Diacetoxy-6,12,14-trihydroxyabieta-5,8,11,13-tetraen-7-one C<sub>24</sub>H<sub>30</sub>O<sub>8</sub> (446.5). Yellow amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>25,9</sup> = +32.3° (c = 0.87, CHCl<sub>3</sub>). **Source:** HUANG QIAO RUI HUA *Coleus xanthanthus* (aerial parts: yield = 0.00023%dw). **Ref:** 4625.

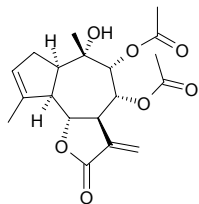
**147 (-)-Acetoxycollinin**

[148777-25-7] C<sub>22</sub>H<sub>26</sub>O<sub>6</sub> (386.45). **Pharm:** Platelet aggregation inhibitor. **Source:** QING JIAO Zhanthoxylum *schinifolium*, QUAN YUAN YE HUA *Zanthoxylum integrifoliolum*. **Ref:** 1521, 2176.

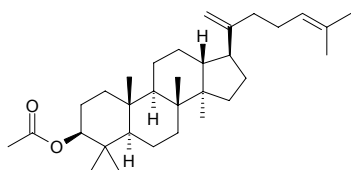


**148 9 $\alpha$ -Acetoxycumambrin A**

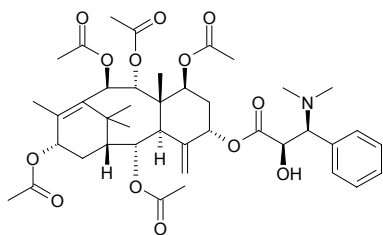
C<sub>19</sub>H<sub>24</sub>O<sub>7</sub> (364.40). Source: *Anthemis carpatica* (aerial parts). Ref: 3974.

**149 3 $\beta$ -Acetoxy-dammara-20,24-diene**

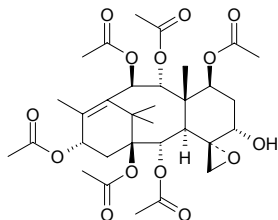
Dammardenyl acetate C<sub>32</sub>H<sub>52</sub>O<sub>2</sub> (468.77). Glassy amorphous solid, mp 148~149°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +11°C (c = 0.08, CHCl<sub>3</sub>). Source: PEI LAN *Eupatorium fortunei*, TU MU XIANG *Inula helenium*, XIAO SHE JU GEN *Microglossa pyrifolia*, *Santolina oblongifolia*. Ref: 6, 5374.

**150 2 $\alpha$ -Acetoxy-2' $\beta$ -deacetylaustrospicatine**

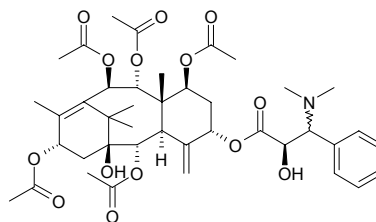
[119777-82-1] C<sub>41</sub>H<sub>55</sub>NO<sub>13</sub> (769.89). Pharm: Cytotoxic (A549, ED<sub>50</sub> = (28.3±3.8) μmol/L)<sup>[5225]</sup>. Source: AO DA LI YA HONG DOU SHAN *Austrotaxus spicata*, XI MA LA YA HONG DOU SHAN *Taxus wallichiana* (needle). Ref: 662, 5225.

**151 1 $\beta$ -Acetoxy-5 $\alpha$ -deacetyl-baccatin I**

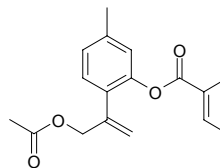
C<sub>32</sub>H<sub>44</sub>O<sub>14</sub> (652.70). mp 240~241°C. Source: MEI LI HONG DOU SHAN *Taxus mairei*. Ref: 662.

**152 2 $\alpha$ -Acetoxy-2'-deacetyl-1-hydroxyaustrospicatine**

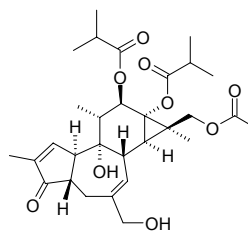
C<sub>41</sub>H<sub>55</sub>NO<sub>14</sub> (785.89). Source: JIANG GUO ZI SHAN *Taxus baccata*. Ref: 662.

**153 9-Acetoxy-8,10-dehydrothymol 3-O-tiglate**

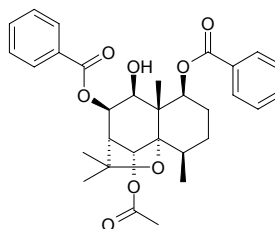
C<sub>17</sub>H<sub>20</sub>O<sub>4</sub> (288.35). Source: PEI LAN *Eupatorium fortunei* (aerial parts). Ref: 3077.

**154 17-Acetoxy-4-deoxyphorbol 12,13-bis(isobutyrate)**

[250258-03-8] C<sub>30</sub>H<sub>42</sub>O<sub>9</sub> (546.66). Oil, [ $\alpha$ ]<sub>D</sub> = +70° (c = 1.2, CHCl<sub>3</sub>). Source: DUN YE DA JI *Euphorbia obtusifolia* var. *obtusifolia*. Ref: 2365.

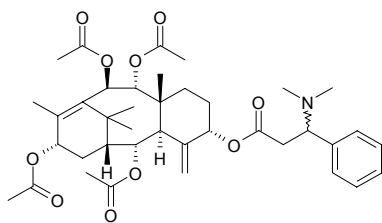
**155 6 $\alpha$ -Acetoxy-1 $\beta$ ,8 $\beta$ -dibenzyloxy-9 $\beta$ -hydroxy- $\beta$ -dihydroagarofuran**

C<sub>31</sub>H<sub>36</sub>O<sub>8</sub> (536.63). White powder (EtOAc), mp 217~219°C, [ $\alpha$ ]<sub>D</sub> = -286° (c = 0.70, MeOH). Pharm: NO production inhibitor (mus, macrophage RAW264.7 cells activated by LPS, very weak activity)<sup>[2584]</sup>. Source: NAN SHE TENG GUO *Celastrus orbiculatus* [Syn. *Celastrus articulatus*]. Ref: 2584.

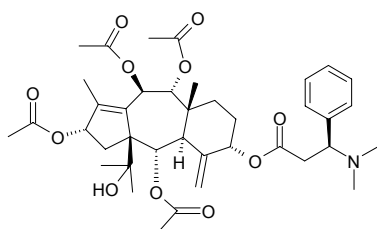


**156 2 $\alpha$ -Acetoxy-2',7-dideacetoxy austrospicatine**

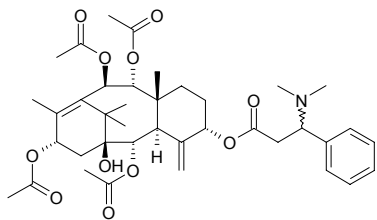
C<sub>39</sub>H<sub>53</sub>NO<sub>10</sub> (695.86). Source: HONG DOU SHAN *Taxus chinensis*. Ref: 662.

**157 (-)-2 $\alpha$ -Acetoxy-2',7-dideacetoxy-1-hydroxy-11(15→1)-abeoaustrospicatine**

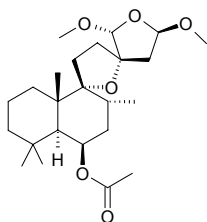
C<sub>39</sub>H<sub>53</sub>NO<sub>11</sub> (711.86). [ $\alpha$ ]<sub>D</sub> = -46° (CHCl<sub>3</sub>). Source: JIANG GUO ZI SHAN *Taxus baccata*. Ref: 662.

**158 (+)-2 $\alpha$ -Acetoxy-2',7-dideacetoxy-1-hydroxyaustrospicatine**

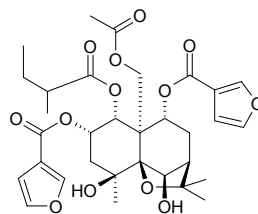
C<sub>39</sub>H<sub>53</sub>NO<sub>11</sub> (711.86). Source: JIANG GUO ZI SHAN *Taxus baccata*. Ref: 662.

**159 (rel-5S,6R,8R,9R,10S,13S,15R,16R)-6-Acetoxy-9,13;15,16-diepoxy-15,16-dimethoxylabdane**

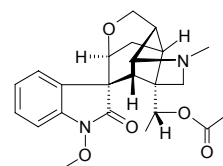
C<sub>24</sub>H<sub>40</sub>O<sub>6</sub> (424.58). Pharm: Cytotoxic (*in vitro*, PC12, GI<sub>50</sub> > 5 μg/mL, control Cisplatin, GI<sub>50</sub> = 0.111 μg/mL; HCT116, GI<sub>50</sub> > 5 μg/mL, Cisplatin, GI<sub>50</sub> = 0.794 μg/mL)<sup>[4623]</sup>. Source: DAN YE MAN JING ZI *Vitex rotundifolia* [Syn. *Vitex trifolia* var. *simplicifolia*]. Ref: 4623.

**160 15-Acetoxy-2 $\alpha$ ,9 $\beta$ -di-( $\beta$ -furancarboxyloxy)-4 $\beta$ ,6 $\beta$ -dihydroxy-1 $\alpha$ -(2-methylbutanoyloxy)-dihydro- $\beta$ -agarofuran**

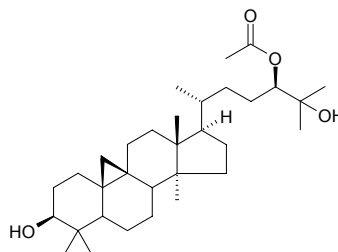
C<sub>32</sub>H<sub>40</sub>O<sub>13</sub> (632.67). Colorless oil, [ $\alpha$ ]<sub>D</sub><sup>23</sup> = +39.7° (*c* = 0.39, CHCl<sub>3</sub>). Source: OU ZHOU WEI MAO *Euonymus europaeus* (seed). Ref: 4162.

**161 19-(R)-Acetoxydihydrogelsevirine**

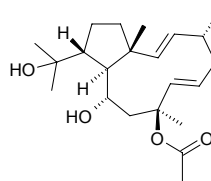
C<sub>23</sub>H<sub>28</sub>N<sub>2</sub>O<sub>5</sub> (412.49). mp 186–189°C, [ $\alpha$ ]<sub>D</sub> = -6.7°. Source: GOU WEN *Gelsemium elegans*. Ref: 14.

**162 24R-Acetoxy-3 $\beta$ ,25-dihydroxycycloartane**

C<sub>32</sub>H<sub>54</sub>O<sub>4</sub> (502.78). Crystals (CHCl<sub>3</sub>-hexane), mp 160°C. Source: MA LA BA JIAN MU *Dysoxylum malabaricum* (leaf). Ref: 5130.

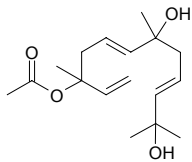
**163 10-Acetoxy-8,18-dihydroxy-2,6-dolabelladiene**

C<sub>22</sub>H<sub>36</sub>O<sub>4</sub> (364.53). Colorless oil, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -60° (*c* = 0.5, CHCl<sub>3</sub>). Pharm: Anti-HSV-1 (Vero cells infected by HSV-1, 50 μmol/L, (87±4)% of cytopathic effect inhibition of herpes virus); cytotoxic inactive (200 μmol/L); HIV-1 RT inhibitor (40 μmol/L, InRt = 20%, positive control AZT: 0.01 μmol/L, InRt = 85%). Source: BA XI ZONG ZAO *Dictyota pfaflii*. Ref: 5023.

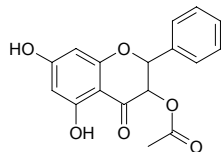


**164 3-Acetoxy-7,11-dihydroxy-farnesa-1,5,9-triene**

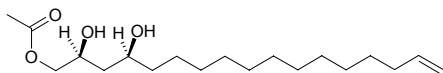
$C_{17}H_{28}O_4$  (296.41).  $[\alpha]_D^{20} = +5^\circ$  ( $c = 0.24$ ,  $CHCl_3$ ). Source: *Gackstroemia decipiens*. Ref: 3907.

**165 trans-3-Acetoxy-5,7-dihydroxyflavanone**

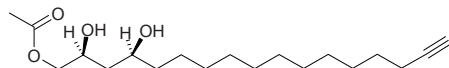
$C_{17}H_{14}O_6$  (314.30). Colorless columnar crystals, mp 264~266°C. Source: SHAN YANG *Populus davidiana*. Ref: 2212.

**166 1-Acetoxy-2,4-dihydroxy-N-heptadeca-16-ene**

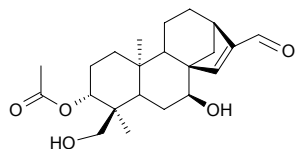
$C_{19}H_{36}O_4$  (328.50).  $[\alpha]_D^{22} = -2.5^\circ$  ( $c = 0.89$ ,  $CHCl_3$ ). Source: E LI *Persea americana* [Syn. *Persea gratissima*] (fruit). Ref: 3953.

**167 1-Acetoxy-2,4-dihydroxy-N-heptadeca-16-yne**

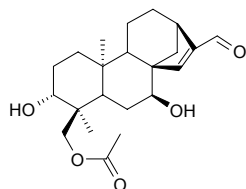
$C_{19}H_{34}O_4$  (326.48).  $[\alpha]_D^{22} = -2.7^\circ$  ( $c = 0.24$ ,  $CHCl_3$ ). Source: E LI *Persea americana* [Syn. *Persea gratissima*] (fruit). Ref: 3953.

**168 ent-3β-Acetoxy-7α,18-dihydroxykaur-15-en-17-al**

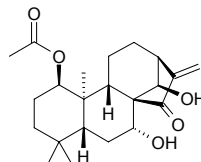
$C_{22}H_{32}O_5$  (376.50). Syrup,  $[\alpha]_D = -8.2^\circ$  ( $c = 0.5$ ,  $CHCl_3$ ). Source: MU ER DU MA CAO *Sideritis moorei* (aerial parts). Ref: 5295.

**169 ent-18-Acetoxy-3β,7α-dihydroxykaur-15-en-17-al**

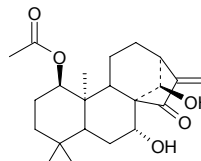
$C_{22}H_{32}O_5$  (376.50). Syrup,  $[\alpha]_D = -13.6^\circ$  ( $c = 1$ ,  $CHCl_3$ ). Source: MU ER DU MA CAO *Sideritis moorei* (aerial parts). Ref: 5295.

**170 ent-1α-Acetoxy-7β,14α-dihydroxykaur-16-en-15-one**

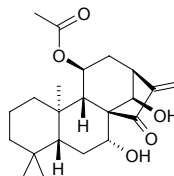
$C_{22}H_{32}O_5$  (376.50). White needles (acetone), mp 97~98°C,  $[\alpha]_D^{20} = -96.0^\circ$  ( $c = 0.80$ , MeOH). Source: DONG JIN BA DOU *Croton tonkinensis* (leaf). Ref: 4342.

**171 1β-Acetoxy-7α,14β-dihydroxykaur-16-en-15-one**

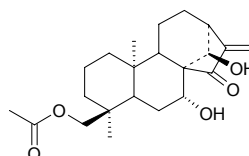
$C_{22}H_{32}O_5$  (376.5). White amorphous powder, mp 110~111°C,  $[\alpha]_D^{18} = -36.7^\circ$  ( $c = 1.1$ ,  $CHCl_3$ ). Pharm: Anti-inflammatory (inhibits LPS-induced NF-κB activation in murine macrophage RAW264.7 cells,  $IC_{50} = 0.42\mu\text{mol/L}$ ; control Parthenolide,  $IC_{50} = 2.34\mu\text{mol/L}$ ; NO production inhibitor ( $IC_{50} = 0.47\mu\text{mol/L}$ ; control Parthenolide,  $IC_{50} = 2.01\mu\text{mol/L}$ ). Source: DONG JIN BA DOU *Croton tonkinensis* (leaf; yield = 0.00062%dw). Ref: 4724.

**172 ent-11α-Acetoxy-7β,14α-dihydroxykaur-16-en-15-one**

$C_{22}H_{32}O_5$  (376.50). Oil,  $[\alpha]_D^{19} = +21.3^\circ$  ( $c = 0.41$ ). Source: DONG JIN BA DOU *Croton tonkinensis* (leaf), JIE XING YE TAI *Jungermannia truncata*. Ref: 4201, 4444.

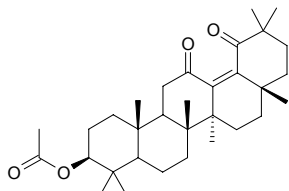
**173 18-Acetoxy-7α,14β-dihydroxykaur-16-en-15-one**

$C_{22}H_{32}O_5$  (376.50). White amorphous powder, mp 173~175°C,  $[\alpha]_D^{18} = -20^\circ$  ( $c = 0.6$ ,  $CHCl_3$ ). Pharm: Anti-inflammatory (inhibits LPS-induced NF-κB activation in murine macrophage RAW264.7 cells,  $IC_{50} = 0.07\mu\text{mol/L}$ ; control Parthenolide,  $IC_{50} = 2.34\mu\text{mol/L}$ ; NO production inhibitor ( $IC_{50} = 0.15\mu\text{mol/L}$ ; control Parthenolide,  $IC_{50} = 2.01\mu\text{mol/L}$ ). Source: DONG JIN BA DOU *Croton tonkinensis* (leaf; yield = 0.0014%dw). Ref: 4724.

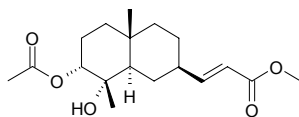


**174 3 $\beta$ -Acetoxy-12,19-dioxo-13(18)-oleanene**

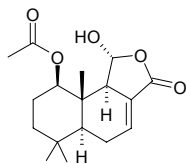
C<sub>32</sub>H<sub>48</sub>O<sub>4</sub> (496.74). Colorless solid, mp 244–247°C, [ $\alpha$ ]<sub>D</sub><sup>24</sup> = -94.9° (*c* = 1.0, CHCl<sub>3</sub>). **Pharm:** Cytotoxic inactive (HONE-1 cell, IC<sub>50</sub> > 10 $\mu$ mol/L; KB cell, IC<sub>50</sub> > 10 $\mu$ mol/L; HT29 cell, IC<sub>50</sub> > 10 $\mu$ mol/L). **Source:** RONG SHU *Ficus microcarpa* (aerial root). **Ref:** 5254.

**175 3 $\alpha$ -Acetoxydiversifolol**

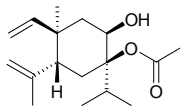
3 $\alpha$ -Acetoxy-4 $\alpha$ -hydroxy-4 $\beta$ ,10 $\beta$ -dimethyl-7 $\beta$ -(methyl-1*E*-propenoate)-*trans*-decalin C<sub>18</sub>H<sub>28</sub>O<sub>5</sub> (324.42). Colorless gel, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -71.8° (*c* = 0.071, MeOH). **Pharm:** Cytotoxic (antiproliferative, Col2 cells, IC<sub>50</sub> > 20 $\mu$ g/mL); cytotoxic (cellular differentiation inducer, hmn promyelocytic leukemia HL-60 cells, 4 $\mu$ g/mL, activity denotes percentage of cells differentiated < 10%); cytotoxic (MMOC model, inhibits DMBA-induced preneoplastic lesion formation, not tested). **Source:** ZHONG BIN JU *Tithonia diversifolia* (aerial parts: yield = 0.00056%dw). **Ref:** 4622.

**176 1 $\beta$ -Acetoxy-7-drimen-11 $\alpha$ -ol-12,11-lactone**

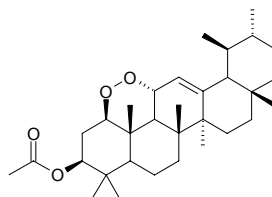
C<sub>17</sub>H<sub>24</sub>O<sub>5</sub> (308.38). Colorless amorphous solid, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -46.4° (*c* = 0.65, CHCl<sub>3</sub>). **Source:** YUN NAN HONG DOU SHAN *Taxus yunnanensis* (bark). **Ref:** 3481.

**177 7-Acetoxy-elema-1,3-dien-8-ol**

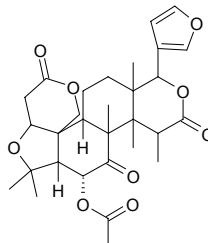
(+)-(1*R*,2*R*,4*R*,5*R*)-4-Ethenyl-2-hydroxy-4-methyl-5-(1-methylethenyl)-1-(1-methylethyl)-cyclohexylacetate C<sub>17</sub>H<sub>28</sub>O<sub>3</sub> (280.41). Colorless oil. **Source:** YING ZHI YE TAI *Lepidozia vitrea* (essential oil). **Ref:** 5209.

**178 3 $\beta$ -Acetoxy-1 $\beta$ ,11 $\alpha$ -epidioxy-12-ursene**

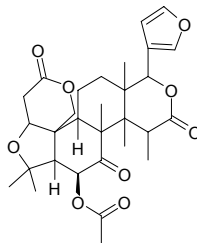
C<sub>32</sub>H<sub>50</sub>O<sub>4</sub> (498.75). Colorless solid (CH<sub>2</sub>Cl<sub>2</sub>), mp 250–253°C, [ $\alpha$ ]<sub>D</sub><sup>29</sup> = +29.4° (*c* = 0.9, CHCl<sub>3</sub>). **Source:** RONG SHU *Ficus microcarpa* (aerial root: yield = 0.000072%dw). **Ref:** 3047.

**179 6 $\alpha$ -Acetoxy-5-epilimonin**

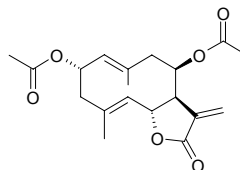
C<sub>30</sub>H<sub>38</sub>O<sub>9</sub> (542.63). **Source:** WU ZHU YU *Evodia rutaecarpa*. **Ref:** 877.

**180 6 $\beta$ -Acetoxy-5-epilimonin**

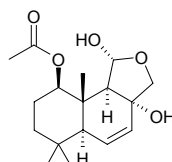
C<sub>30</sub>H<sub>38</sub>O<sub>9</sub> (542.63). **Source:** WU ZHU YU *Evodia rutaecarpa*. **Ref:** 877.

**181 2 $\alpha$ -Acetoxyepitulipinolide**

C<sub>19</sub>H<sub>24</sub>O<sub>6</sub> (348.40). Oil, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +70.4° (*c* = 0.27, CHCl<sub>3</sub>). **Source:** KU YE DAO ZE LAN *Eupatorium sachalinense* [Syn. *Eupatorium glehni*]. **Ref:** 4226.

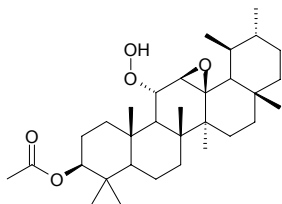
**182 1 $\beta$ -Acetoxy-11,12-epoxy-6-drimen-8 $\alpha$ ,11 $\alpha$ -diol**

C<sub>17</sub>H<sub>26</sub>O<sub>5</sub> (310.39). Colorless amorphous solid, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -16.4° (*c* = 0.32, CHCl<sub>3</sub>). **Source:** YUN NAN HONG DOU SHAN *Taxus yunnanensis* (bark). **Ref:** 3481.

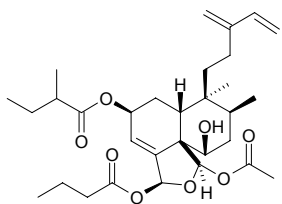


**183 3 $\beta$ -Acetoxy-12 $\beta$ ,13 $\beta$ -epoxy-11 $\alpha$ -hydroperoxyursane**

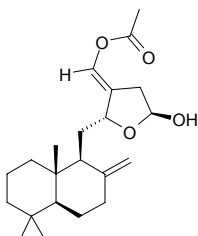
C<sub>32</sub>H<sub>52</sub>O<sub>5</sub> (516.77). Colorless solid (CH<sub>2</sub>Cl<sub>2</sub>), mp 187~193°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +14.4° (c = 0.2, CHCl<sub>3</sub>). Source: RONG SHU *Ficus microcarpa* (aerial root): yield = 0.000044%dw). Ref: 3047.

**184 rel-(2S,5R,6R,8S,9S,10R,18S,19R)-19-Acetoxy-18,19-epoxy-6-hydroxy-18-butanoyloxy-2-(2-methylbutanoyloxy)cleroda-3,13(16),14-triene**

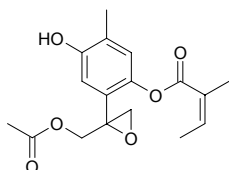
C<sub>31</sub>H<sub>46</sub>O<sub>8</sub> (546.71). Colorless viscous liquid, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +26° (c = 0.135, CH<sub>2</sub>Cl<sub>2</sub>). Pharm: Antitrypanosomal (Flagellate protozoan *Trypanosoma cruzi* causing Chagas' disease, MIC = 0.59 $\mu$ g/mL). Source: SHE XING LIN SHENG JIAO GU CUI *Casearia sylvestris* var. *lingua* (root bark). Ref: 4080.

**185 16-Acetoxy-12(R),15-epoxy-15 $\beta$ -hydroxyabda-8(17),13(16)-diene**

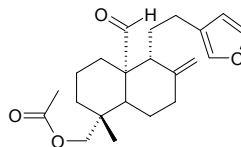
C<sub>22</sub>H<sub>34</sub>O<sub>4</sub> (362.51). Yellowish oil, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +35.0° (c = 1.4, CHCl<sub>3</sub>). Source: *Turreanthus africanus* (seed). Ref: 3884.

**186 9-Acetoxy-8,10-epoxy-6-hydroxythymol 3-O-angelate**

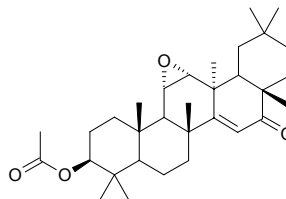
C<sub>17</sub>H<sub>20</sub>O<sub>6</sub> (320.35). [ $\alpha$ ]<sub>D</sub><sup>23</sup> = -8.5° (c = 0.68, CHCl<sub>3</sub>). Source: PEI LAN *Eupatorium fortunei* (aerial parts). Ref: 3077.

**187 19-Acetoxy-15,16-epoxy-8(17),13(16),14-ent-labdatrien-20-al**

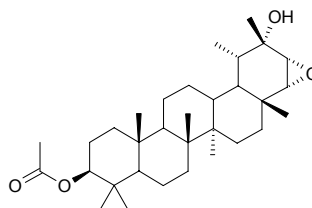
C<sub>22</sub>H<sub>30</sub>O<sub>4</sub> (358.48). White amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -17.1° (c = 0.52, CHCl<sub>3</sub>). Pharm: Phytotoxin (*Raphidocelis subcapitata*, IC<sub>50</sub> = 58.27 $\mu$ mol/L). Source: FU YE YAN ZI CAI *Potamogeton natans*. Ref: 5184.

**188 3 $\beta$ -Acetoxy-11 $\alpha$ ,12 $\alpha$ -epoxy-16-oxo-14-taraxerene**

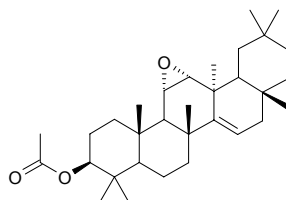
C<sub>32</sub>H<sub>48</sub>O<sub>4</sub> (496.74). Colorless solid, mp > 300°C, [ $\alpha$ ]<sub>D</sub><sup>24</sup> = -39.3° (c = 0.2, CHCl<sub>3</sub>). Source: RONG SHU *Ficus microcarpa* (aerial root). Ref: 5254.

**189 3 $\beta$ -Acetoxy-21 $\alpha$ ,22 $\alpha$ -epoxytaraxastan-20 $\alpha$ -ol**

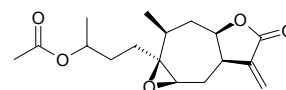
C<sub>32</sub>H<sub>52</sub>O<sub>4</sub> (500.77). Colorless solid, mp > 300°C, [ $\alpha$ ]<sub>D</sub><sup>21</sup> = +5.6° (c = 0.6, CHCl<sub>3</sub>). Source: RONG SHU *Ficus microcarpa* (aerial root). Ref: 5254.

**190 3 $\beta$ -Acetoxy-11 $\alpha$ ,12 $\alpha$ -epoxy-14-taraxerene**

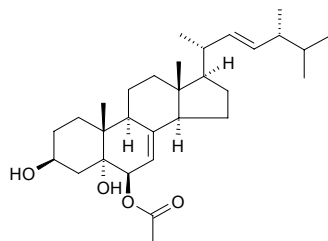
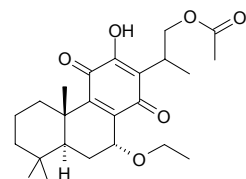
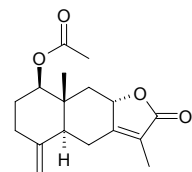
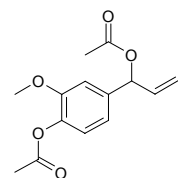
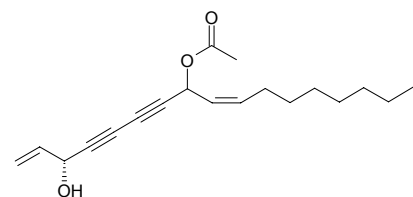
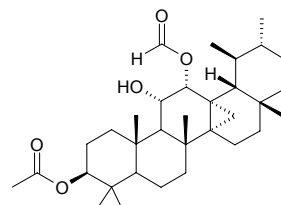
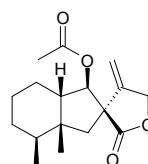
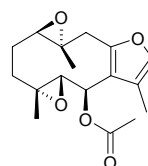
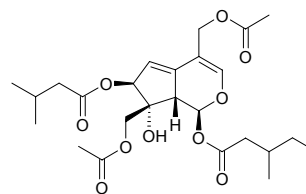
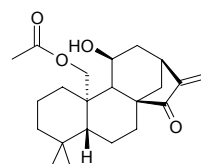
C<sub>32</sub>H<sub>50</sub>O<sub>3</sub> (482.75). Source: RONG SHU *Ficus microcarpa* (aerial root). Ref: 5254.

**191 4-Acetoxy-1 $\beta$ ,5 $\beta$ -epoxy-10 $\alpha$ H-xantha-11(13)-en-12,8 $\beta$ -olide**

C<sub>17</sub>H<sub>24</sub>O<sub>5</sub> (308.38). Colorless gum, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +26.2° (c = 0.68, CHCl<sub>3</sub>). Source: CHANG YE TIAN MING JING *Carpesium longifolium* (aerial part): yield = 0.0007%dw). Ref: 4736.

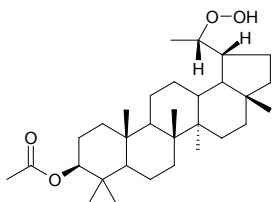




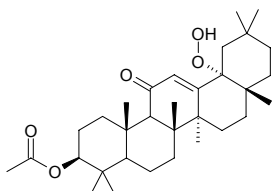
**192 6 $\beta$ -Acetoxy-(22E)-ergosta-7,22-diene-3 $\beta$ ,5 $\alpha$ -diol**C<sub>30</sub>H<sub>48</sub>O<sub>4</sub> (472.71). Source: *Pleurotus eryngii*. Ref: 4183.**193 16-Acetoxy-7 $\alpha$ -ethoxyroyleanone**C<sub>24</sub>H<sub>34</sub>O<sub>6</sub> (418.53). mp 182~184°C. Source: XI HUANG CAO *Rabdosia serra*. Ref: 4067.**194 1 $\beta$ -Acetoxyeudesman-4(15),7(11)-dien-8 $\alpha$ ,12-olide**C<sub>17</sub>H<sub>22</sub>O<sub>4</sub> (290.36). Pharm: Cytotoxic (*in vitro*, P<sub>388</sub>, IC<sub>50</sub> = 42 $\mu$ g/mL). Source: XIAO MEI WEI QIN *Smyrniium olusatrum* (fruit). Ref: 5162.**195 1'-Acetoxyeugenol acetate**[108093-85-2] C<sub>14</sub>H<sub>16</sub>O<sub>5</sub> (264.28). Pharm: Antineoplastic (S<sub>180</sub>, 10mg/kg, growth rate = 10.0%); antiulcerative (rat, ip, gastric ulcer, 5mg/kg, InRt = 36%; 10mg/kg, InRt = 100%); low toxin. Source: DA LIANG JIANG *Alpinia galanga*. Ref: 1, 995, 1134.**196 8-Acetoxyfalcarinol**C<sub>19</sub>H<sub>26</sub>O<sub>3</sub> (302.42). Source: *Niphogeton ternata*. Ref: 4156.**197 3 $\beta$ -Acetoxy-12 $\alpha$ -formyloxy-13,27-cycloursan-11 $\alpha$ -ol**C<sub>33</sub>H<sub>52</sub>O<sub>5</sub> (528.78). mp 269~273°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +38.0° (c = 0.5, CHCl<sub>3</sub>). Source: RONG SHU *Ficus microcarpa* (aerial root). Ref: 3524.**198 9-Acetoxyfukinanolide**[35945-70-1] C<sub>17</sub>H<sub>24</sub>O<sub>4</sub> (292.38). mp 96~97°C. Source: FENG DOU CAI *Petasites japonicus*. Ref: 6.**199 6 $\beta$ -Acetoxyglechomafuran**C<sub>17</sub>H<sub>22</sub>O<sub>5</sub> (306.38). Colorless gum. Source: NIAN MAO SHU WEI CAO *Salvia roborowskii*. Ref: 5439.**200 10-Acetoxy-1-homovaltrate hydrin**C<sub>25</sub>H<sub>36</sub>O<sub>10</sub> (496.56). Oil, [ $\alpha$ ]<sub>D</sub><sup>24</sup> = +197.5° (c = 0.01, MeOH). Source: ZHI ZHU XIANG *Valeriana jatamansii* [Syn. *Valeriana wallichii*] (rhizome and root; yield = 0.000005%dw). Ref: 4672.**201 ent-20-Acetoxy-11 $\alpha$ -hydroxy-16-kauren-15-one**C<sub>22</sub>H<sub>32</sub>O<sub>4</sub> (360.50). Oil, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -94.0° (c = 0.41). Source: JIE XING YE TAI *Jungermannia truncata*. Ref: 4201.

**202 (20S)-3 $\beta$ -Acetoxy-20-hydroperoxy-30-norlupane**

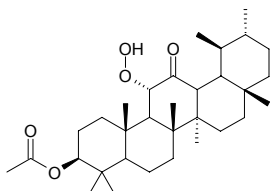
C<sub>31</sub>H<sub>52</sub>O<sub>4</sub> (488.76). Colorless solid (CH<sub>2</sub>Cl<sub>2</sub>), mp 159–162°C, [ $\alpha$ ]<sub>D</sub><sup>29</sup> = +6.8° (*c* = 3.9, CHCl<sub>3</sub>). Source: RONG SHU *Ficus microcarpa* (aerial root: yield = 0.00025%dw). Ref: 3047.

**203 3 $\beta$ -Acetoxy-18 $\alpha$ -hydroperoxy-12-oleanen-11-one**

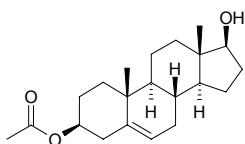
C<sub>32</sub>H<sub>50</sub>O<sub>5</sub> (514.75). Colorless solid (CH<sub>2</sub>Cl<sub>2</sub>), mp 205–207°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +23.7° (*c* = 0.7, CHCl<sub>3</sub>). Source: RONG SHU *Ficus microcarpa* (aerial root: yield = 0.000050%dw). Ref: 3047.

**204 3 $\beta$ -Acetoxy-11 $\alpha$ -hydroperoxy-13 $\alpha$ H-ursan-12-one**

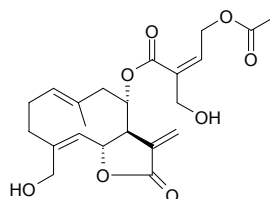
C<sub>32</sub>H<sub>52</sub>O<sub>5</sub> (516.77). Amorphous solid, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +63.9° (*c* = 0.4, CHCl<sub>3</sub>). Source: RONG SHU *Ficus microcarpa* (aerial root: yield = 0.000056%dw). Ref: 3047.

**205 3 $\beta$ -Acetoxy-17 $\beta$ -hydroxy-androst-5-ene**

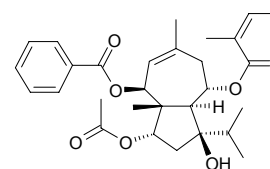
C<sub>21</sub>H<sub>32</sub>O<sub>3</sub> (332.49). Pharm: Anti-inflammation (mouse, TPA-induced ear edema, control, difference in ear thickness = (67.0±0.7)/mm<sup>3</sup>; 1.0mg/ear, difference in ear thickness = (25.0±1.6)/mm<sup>3</sup>, InRt of inflammation = 67.8%, *p*<0.001; 2.0mg/ear, difference in ear thickness = (13.2±2.6)/mm<sup>3</sup>, InRt of inflammation = 82.4%, *p*<0.001; control Indomethacin, 0.5mg/ear, difference in ear thickness = (15.0±1.7)/mm<sup>3</sup>, InRt of inflammation = 79.2%, *p*<0.001; MeOH extract A of *Acacia nilotica* (aerial parts) 5.0mg/ear, difference in ear thickness = (25.0±2.3)/mm<sup>3</sup>, InRt of inflammation = 68.4%, *p*<0.001). Source: A LA BO JIAO JIN HE HUAN *Acacia nilotica* (aerial parts). Ref: 5375.

**206 8 $\alpha$ -[(4-Acetoxy-5-hydroxy)-angelate]salonitenolide**

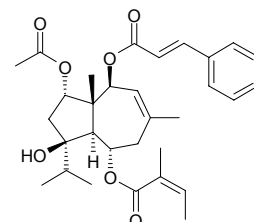
C<sub>22</sub>H<sub>28</sub>O<sub>8</sub> (420.46). Pharm: Antifungal (*Aspergillus niger*, MIC = 0.03μg/mL, control Miconazole, MIC = 1.5μg/mL; *Aspergillus ochraceus*, MIC = 0.03μg/mL, Miconazole, MIC = 1.5μg/mL; *Aspergillus versicolor*, MIC = 0.06μg/mL, Miconazole, MIC = 2μg/mL; *Aspergillus flavus*, MIC = 0.25μg/mL, Miconazole, MIC = 0.5μg/mL; *Penicillium ochrochloron*, MIC = 0.125μg/mL, Miconazole, MIC = 2μg/mL; *Penicillium funiculosum*, MIC = 0.25μg/mL, Miconazole, MIC = 2μg/mL; *Trichoderma viride*, MIC = 0.25μg/mL, Miconazole, MIC = 2μg/mL; *Cladosporium cladosporioides*, MIC = 0.125μg/mL, Miconazole, MIC = 0.03μg/mL; *Alternaria alternata*, MIC = 0.125μg/mL, Miconazole, MIC = 0.5μg/mL). Source: *Centaurea thessala* ssp. *drakiensis* (aerial parts), *Centaurea attica* ssp. *attica* (aerial parts). Ref: 5115.

**207 2 $\alpha$ -Acetoxy-4 $\beta$ -hydroxy-6 $\alpha$ -angeloyloxy-10 $\beta$ -benzoyloxy-dauc-8-ene**

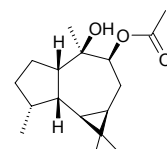
C<sub>29</sub>H<sub>38</sub>O<sub>7</sub> (498.62). Amorphous white powder, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +8.8° (*c* = 0.10, CHCl<sub>3</sub>). Pharm: Antibacterial (*Staphylococcus aureus*, MIC = 1.6mg/mL; *Streptomyces scabies*, MIC = 1.4mg/mL; *Bacillus subtilis*, MIC = 1.2mg/mL; *Bacillus cereus*, MIC = 1.3mg/mL; *Pseudomonas aeruginosa*, MIC = 1.5mg/mL)<sup>[5305]</sup>; antifungal (*Fusarium oxysporum*, MIC = 0.4mg/mL; *Aspergillus niger*, MIC = 0.25mg/mL). Source: HE SHI FENG *Daucus carota* (root). Ref: 5305.

**208 2 $\alpha$ -Acetoxy-4 $\beta$ -hydroxy-6 $\alpha$ -angeloyloxy-10 $\beta$ -cinnamoyloxy-dauc-8-ene**

C<sub>31</sub>H<sub>40</sub>O<sub>7</sub> (524.66). Amorphous yellowish powder. Source: HE SHI FENG *Daucus carota* (root). Ref: 5305.

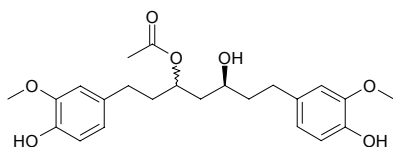
**209 9-Acetoxy-10-hydroxyaromadendrane**

C<sub>17</sub>H<sub>28</sub>O<sub>3</sub> (280.41). Colorless oil, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +34.4° (*c* = 0.1, CHCl<sub>3</sub>). Source: *Tylianthus renifolius*. Ref: 3491.



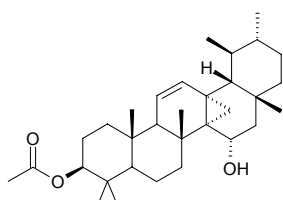
**210 (3*R*,5*S*)-3-Acetoxy-5-hydroxy-1,7-bis(4-hydroxy-3-methoxyphenyl)heptane**

C<sub>23</sub>H<sub>30</sub>O<sub>7</sub> (418.49). Colorless oil,  $[\alpha]_D^{24} = +6.0^\circ$  ( $c = 0.56$ , CHCl<sub>3</sub>). Source: SHENG JIANG *Zingiber officinale*. Ref: 3803.



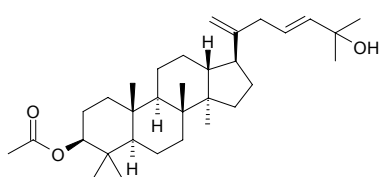
**211 3β-Acetoxy-15α-hydroxy-13,27-cyclours-11-ene**

C<sub>32</sub>H<sub>50</sub>O<sub>3</sub> (482.75). Colorless crystals, mp 130–135°C,  $[\alpha]_D^{25} = +16.8^\circ$  ( $c = 1.6$ , CHCl<sub>3</sub>). Source: RONG SHU *Ficus microcarpa* (aerial root). Ref: 3524.



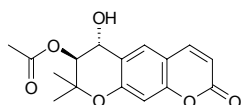
**212 3β-Acetoxy-25-hydroxydammara-20,23-diene**

C<sub>32</sub>H<sub>52</sub>O<sub>3</sub> (484.77). Glassy amorphous solid,  $[\alpha]_D^{20} = +40^\circ$  ( $c = 0.12$ , CHCl<sub>3</sub>). Source: XIAO SHE JU GEN *Microglossa pyrifolia*. Ref: 5374.



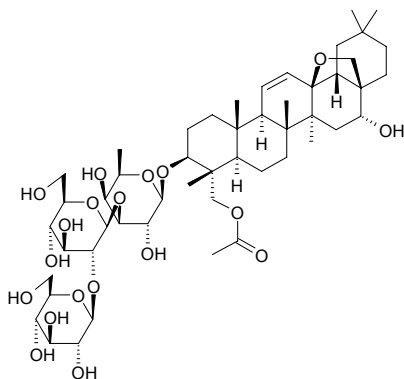
**213 3'(S)-Acetoxy-4'(R)-hydroxy-3',4'-dihydroxanthyletin**

C<sub>16</sub>H<sub>16</sub>O<sub>6</sub> (304.30). Light yellow powder, mp 158–160°C,  $[\alpha]_D^{23} = +61.5^\circ$  ( $c = 0.5$ , CHCl<sub>3</sub>). Source: QIAN HU *Angelica decursiva* [Syn. *Peucedanum decursivum*]. Ref: 874.



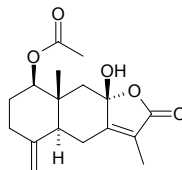
**214 23-Acetoxy-16α-hydroxy-13,28-epoxyolean-11-en-3β-yl-β-D-glucopyranosyl(1→2)-[β-D-glucopyranosyl(1→3)]-β-D-fucopyranoside**

C<sub>50</sub>H<sub>80</sub>O<sub>19</sub> (985.18). Source: GUAN MU CHAI HU *Bupleurum fruticosum*. Ref: 2247.



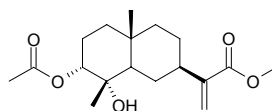
**215 1β-Acetoxy-8β-hydroxyeudesman-4(15),7(11)-dien-8α,12-olide**

C<sub>17</sub>H<sub>22</sub>O<sub>5</sub> (306.36). Pharm: Cytotoxic (*in vitro*, P<sub>388</sub>, IC<sub>50</sub> = 58 μg/mL). Source: XIAO MEI WEI QIN *Smyrniolum olusatrum* (fruit). Ref: 5162.



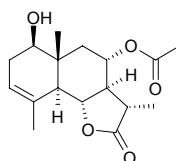
**216 3α-Acetoxy-4α-hydroxy-11(13)-eudesmen-12-oic acid methyl ester**

C<sub>18</sub>H<sub>28</sub>O<sub>5</sub> (324.42). Source: ZHONG BIN JU *Tithonia diversifolia* (aerial parts). Ref: 4622.



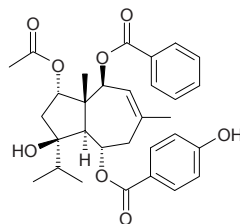
**217 8α-Acetoxy-1β-hydroxyeudesm-3-en-5α,6β,7α,11βH-12,6-olide**

C<sub>17</sub>H<sub>24</sub>O<sub>5</sub> (308.38). White needles (hexane–CH<sub>2</sub>Cl<sub>2</sub>), mp 137–139°C,  $[\alpha]_D^{25} = +61^\circ$  ( $c = 0.5$ , CHCl<sub>3</sub>). Source: JIA NA LI HAO *Artemisia canariensis*. Ref: 2332.



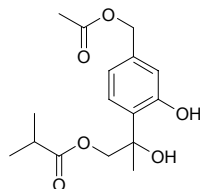
**218 2α-Acetoxy-4β-hydroxy-6α-p-hydroxybenzoyloxy-10β-benzoyloxydauc-8-ene**

C<sub>31</sub>H<sub>36</sub>O<sub>8</sub> (536.63). White powder,  $[\alpha]_D^{25} = +22.8^\circ$  ( $c = 0.30$ , CHCl<sub>3</sub>). Pharm: Antibacterial (*Staphylococcus aureus*, MIC = 1.8 mg/mL; *Streptomyces scabies*, MIC = 1.2 mg/mL; *Bacillus subtilis*, MIC = 1.00 mg/mL; *Bacillus cereus*, MIC = 1.5 mg/mL; *Pseudomonas aeruginosa*, MIC = 1.3 mg/mL)<sup>[5305]</sup>; antifungal (*Fusarium oxysporum*, MIC = 0.5 mg/mL; *Aspergillus niger*, MIC = 0.3 mg/mL). Source: HE SHI FENG *Daucus carota* (root). Ref: 5305.



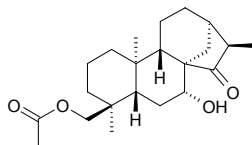
**219 7-Acetoxy-8-hydroxy-9-isobutyryloxythymol**

C<sub>16</sub>H<sub>22</sub>O<sub>6</sub> (310.35).  $[\alpha]_D^{23} = -13.6^\circ$  ( $c = 0.24$ , CHCl<sub>3</sub>). Source: PEI LAN *Eupatorium fortunei* (aerial parts). Ref: 3077.

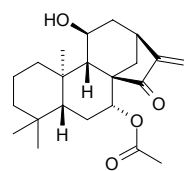


**220 ent-(16S)-18-Acetoxy-7β-hydroxykauran-15-one**

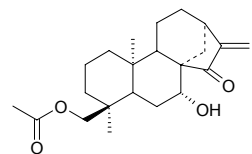
$C_{22}H_{34}O_4$  (362.51). Colorless needles, mp 175–176°C,  $[\alpha]_D^{15} = -18^\circ$  ( $c = 0.10$ , MeOH). Source: DONG JIN BA DOU *Croton tonkinensis* (leaf). Ref: 4057.

**221 ent-7β-Acetoxy-11α-hydroxykaur-16-en-15-one**

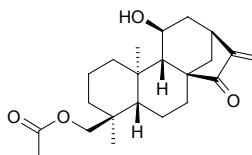
$C_{22}H_{32}O_4$  (360.50). White amorphous powder,  $[\alpha]_D^{25} = -127.3^\circ$  ( $c = 0.20$ ,  $CHCl_3$ ). Pharm: Cytotoxic (BST test, weak active). Source: DONG JIN BA DOU *Croton tonkinensis* (leaf). Ref: 4444.

**222 18-Acetoxy-7α-hydroxykaur-16-en-15-one**

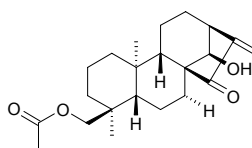
$C_{22}H_{32}O_4$  (360.5). White amorphous powder, mp 119–120°C,  $[\alpha]_D^{18} = -10^\circ$  ( $c = 0.3$ ,  $CHCl_3$ ). Pharm: Anti-inflammatory (inhibits LPS-induced NF-κB activation in murine macrophage RAW264.7 cells,  $IC_{50} = 0.10 \mu\text{mol/L}$ ; control Parthenolide,  $IC_{50} = 2.34 \mu\text{mol/L}$ ); NO production inhibitor ( $IC_{50} = 0.21 \mu\text{mol/L}$ ; control Parthenolide,  $IC_{50} = 2.01 \mu\text{mol/L}$ ). Source: DONG JIN BA DOU *Croton tonkinensis* (leaf; yield = 0.060% dw). Ref: 4724.

**223 ent-18-Acetoxy-11α-hydroxykaur-16-en-15-one**

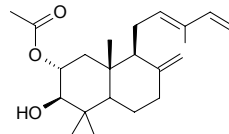
$C_{22}H_{32}O_4$  (360.50). White amorphous powder,  $[\alpha]_D^{25} = -155.6^\circ$  ( $c = 0.20$ ,  $CHCl_3$ ). Pharm: Cytotoxic (BST test, weak active). Source: DONG JIN BA DOU *Croton tonkinensis* (leaf). Ref: 4444.

**224 ent-18-Acetoxy-14α-hydroxykaur-16-en-15-one**

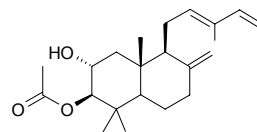
$C_{22}H_{32}O_4$  (360.50). White amorphous powder,  $[\alpha]_D^{15} = -30^\circ$  ( $c = 0.30$ , MeOH). Source: DONG JIN BA DOU *Croton tonkinensis* (leaf). Ref: 4057.

**225 2-Acetoxy-3-hydroxy-labda-8(17),12(E),14-triene**

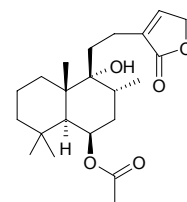
$C_{22}H_{34}O_3$  (346.51). White solid, mp 102–103°C,  $[\alpha]_D^{20} = +50.17^\circ$  ( $c = 1.0$ ,  $CHCl_3$ ). Pharm: Cytotoxic (Kato3,  $IC_{50} = 5.7 \mu\text{g/mL}$ , control Doxorubicin hydrochloride,  $IC_{50} = 1.7 \mu\text{g/mL}$ ; SW620,  $IC_{50} = 7.1 \mu\text{g/mL}$ , Doxorubicin hydrochloride,  $IC_{50} = 1.1 \mu\text{g/mL}$ ; BT474,  $IC_{50} > 10 \mu\text{g/mL}$ , Doxorubicin hydrochloride,  $IC_{50} = 0.08 \mu\text{g/mL}$ ; HepG2,  $IC_{50} > 10 \mu\text{g/mL}$ , Doxorubicin hydrochloride,  $IC_{50} = 0.9 \mu\text{g/mL}$ ; CHAGO,  $IC_{50} > 10 \mu\text{g/mL}$ , Doxorubicin hydrochloride,  $IC_{50} = 2.3 \mu\text{g/mL}$ ). Source: GUANG YE BA DOU *Croton oblongifolius* [Syn. *Croton laevigatus*] (stem bark). Ref: 5121.

**226 3-Acetoxy-2-hydroxy-labda-8(17),12(E),14-triene**

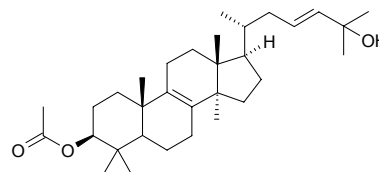
$C_{22}H_{34}O_3$  (346.51). White solid, mp 99–101°C,  $[\alpha]_D^{20} = +9.46^\circ$  ( $c = 1.0$ ,  $CHCl_3$ ). Pharm: Cytotoxic (Kato3,  $IC_{50} = 3.3 \mu\text{g/mL}$ , control Doxorubicin hydrochloride,  $IC_{50} = 1.7 \mu\text{g/mL}$ ; SW620,  $IC_{50} > 10 \mu\text{g/mL}$ , Doxorubicin hydrochloride,  $IC_{50} = 1.1 \mu\text{g/mL}$ ; BT474,  $IC_{50} = 5.9 \mu\text{g/mL}$ , Doxorubicin hydrochloride,  $IC_{50} = 0.08 \mu\text{g/mL}$ ; HepG2,  $IC_{50} > 10 \mu\text{g/mL}$ , Doxorubicin hydrochloride,  $IC_{50} = 0.9 \mu\text{g/mL}$ ; CHAGO,  $IC_{50} > 10 \mu\text{g/mL}$ , Doxorubicin hydrochloride,  $IC_{50} = 2.3 \mu\text{g/mL}$ ). Source: GUANG YE BA DOU *Croton oblongifolius* [Syn. *Croton laevigatus*] (stem bark). Ref: 5121.

**227 6-Acetoxy-9-hydroxy-13(14)-labden-16,15-olide**

$C_{22}H_{34}O_5$  (378.51). Colorless oil,  $[\alpha]_D = -7.3^\circ$  ( $c = 0.8$ , acetone),  $[\alpha]_D = -10.0^\circ$  ( $c = 3.3$ , acetone). Pharm: Antitrypanosomal (epimastigotes of *Trypanosoma cruzi*, *in vitro*, MLC =  $66 \mu\text{mol/L}$ ). Source: MAN JING ZI *Vitex trifolia*. Ref: 2550.

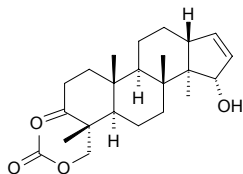
**228 3β-Acetoxy-25-hydroxy-lanosta-8,23-diene**

$C_{32}H_{52}O_3$  (484.77). Pharm: Cytotoxic (*in vitro*, HONE-1 cell,  $IC_{50} > 10 \mu\text{mol/L}$ , control Etoposide,  $IC_{50} = (0.5 \pm 0.2) \mu\text{mol/L}$ , *cis*-Platin,  $IC_{50} = (3.2 \pm 0.5) \mu\text{mol/L}$ ; KB cell,  $IC_{50} > 10 \mu\text{mol/L}$ , Etoposide,  $IC_{50} = (0.9 \pm 0.3) \mu\text{mol/L}$ , *cis*-Platin,  $IC_{50} = (4.4 \pm 0.9) \mu\text{mol/L}$ ; HT29 cell,  $IC_{50} = (9.3 \pm 1.6) \mu\text{mol/L}$ , Etoposide,  $IC_{50} = (2.4 \pm 0.5) \mu\text{mol/L}$ , *cis*-Platin,  $IC_{50} = (5.7 \pm 1.1) \mu\text{mol/L}$ ). Source: RONG SHU *Ficus microcarpa* (aerial root). Ref: 5254.

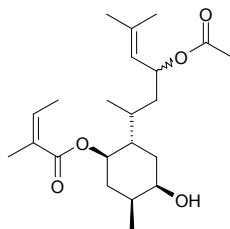


**229 18-Acetoxy-15 $\alpha$ -hydroxymansumbinone**

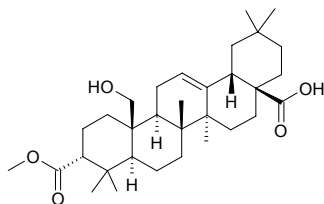
C<sub>24</sub>H<sub>36</sub>O<sub>4</sub> (388.55). Colorless crystals (*n*-hexane:CH<sub>2</sub>Cl<sub>2</sub> = 1:2), mp 135~137°C, [ $\alpha$ ]<sub>D</sub><sup>22</sup> = +25° (*c* = 1.0, CHCl<sub>3</sub>). Source: KEN NI YA MO YAO *Commiphora kua* var. *gowllo*. Ref: 1991.

**230 (1*R*\*,3*S*\*,4*R*\*,6*S*\*)-9-(Acetoxy)-4-hydroxy-1-[(2*Z*)-2-methylbut-2-enoyloxy]bisabol-10(11)-ene**

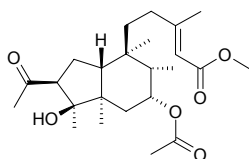
C<sub>22</sub>H<sub>36</sub>O<sub>5</sub> (380.53). Colorless gum, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +29.45°, (*c* = 1.613, MeOH). Pharm: Leukotriene biosynthesis Inhibitor (*in vitro*, IC<sub>50</sub> = 11.4 μmol/L, *p* < 0.05, control Zileuton, IC<sub>50</sub> = 10.4 μmol/L, *p* < 0.05). Source: GAO SHAN HUO RONG CAO *Leontopodium alpinum* (root). Ref: 5037.

**231 3 $\alpha$ -Acetoxy-25-hydroxyolean-12-en-28-oic acid**

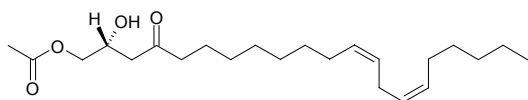
C<sub>33</sub>H<sub>50</sub>O<sub>5</sub> (514.75). Colorless columnar crystals, mp 274~276°C. Source: LU LU TONG *Liquidambar formosana* [Syn. *Liquidambar taiwaniana*]. Ref: 2226.

**232 7-Acetoxy-4-hydroxy-3-oxo-4(3→2)-abeo-13-clerodaen-15-oic acid methyl ester**

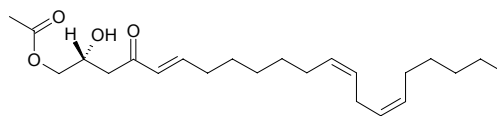
C<sub>24</sub>H<sub>38</sub>O<sub>6</sub> (422.57). [ $\alpha$ ]<sub>D</sub><sup>24</sup> = -28.0° (*c* = 0.25, CHCl<sub>3</sub>). Source: GAO YI ZHI HUANG HUA *Solidago altissima*. Ref: 2366.

**233 (Z,Z)-1-Acetoxy-2-hydroxy-4-oxo-heneicosa-12,15-diene**

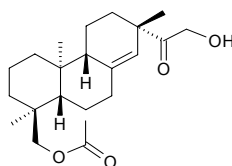
C<sub>23</sub>H<sub>40</sub>O<sub>4</sub> (380.57). Pharm: Antifungal (*Colletotrichum gloeosporioides*, ED<sub>50</sub> = 600 μg/mL). Source: E LI *Persea americana* [Syn. *Persea gratissima*] (fruit). Ref: 3953.

**234 (E,Z,Z)-1-Acetoxy-2-hydroxy-4-oxo-heneicosa-5,12,15-triene**

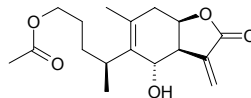
C<sub>23</sub>H<sub>38</sub>O<sub>4</sub> (378.56). [ $\alpha$ ]<sub>D</sub><sup>22</sup> = +11.7° (*c* = 0.22, CHCl<sub>3</sub>). Pharm: Antifungal (*Colletotrichum gloeosporioides*, ED<sub>50</sub> = 600 μg/mL). Source: E LI *Persea americana* [Syn. *Persea gratissima*] (fruit). Ref: 3953.

**235 ent-18-Acetoxy-16-hydroxy-8(14)-pimaren-15-one**

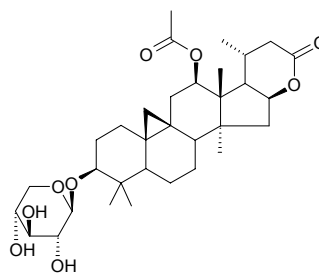
C<sub>22</sub>H<sub>34</sub>O<sub>4</sub> (362.51). Viscous oil, [ $\alpha$ ]<sub>D</sub><sup>26</sup> = -0.4° (*c* = 0.85, MeOH). Source: HAI NAN JIAN MU *Dysoxylum hainanense*. Ref: 750.

**236 1-Acetoxy-6 $\alpha$ -hydroxy-4 $\alpha$ H-1,10-secoeudesma-5(10),11(13)-dien-12,8 $\beta$ -olide**

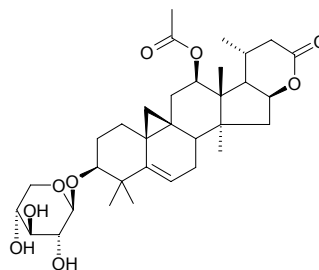
C<sub>17</sub>H<sub>24</sub>O<sub>5</sub> (308.38). Pharm: Cytotoxic inactive (SMMC-7721 IC<sub>50</sub> > 200 μg/mL, control Vincristine IC<sub>50</sub> = (30.35±2.23) μg/mL; HO-8910 IC<sub>50</sub> > 200 μg/mL, Vincristine IC<sub>50</sub> = (20.74±1.91) μg/mL). Source: JIN FEI CAO *Inula japonica*. Ref: 5422.

**237 12 $\beta$ -Acetoxy-3 $\beta$ -hydroxy-24,25,26,27-tetranorcycloartan-23,16 $\beta$ -olide 3-O- $\beta$ -D-xylopyranoside**

C<sub>33</sub>H<sub>50</sub>O<sub>9</sub> (590.76). White powder, [ $\alpha$ ]<sub>D</sub> = -75.0° (MeOH). Source: *Cimicifuga* sp. Ref: 4385.

**238 12 $\beta$ -Acetoxy-3 $\beta$ -hydroxy-24,25,26,27-tetranorcycloart-7-en-23,16 $\beta$ -olide 3-O- $\beta$ -D-xylopyranoside**

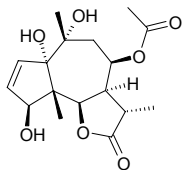
C<sub>33</sub>H<sub>48</sub>O<sub>9</sub> (588.75). White powder, [ $\alpha$ ]<sub>D</sub> = -134.9° (MeOH). Source: *Cimicifuga* sp. Ref: 4385.



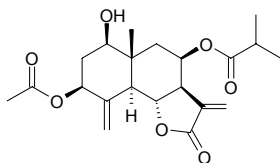
**239 8- $\beta$ -Acetoxysterone C**

$C_{17}H_{24}O_7$  (340.38). Viscous mass,  $[\alpha]_D^{25} = +32.67^\circ$  ( $c = 0.08$ , MeOH).

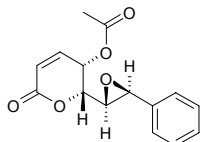
Source: YIN JIAO JU *Parthenium hysterophorus* (flower). Ref: 4489.

**240 3 $\beta$ -Acetoxy-8 $\beta$ -isobutyryloxyreynosin**

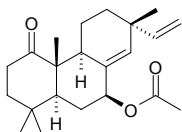
Anticancer Sesquiterpene PMV70P691-133  $C_{21}H_{28}O_7$  (392.45). Pharm: Cytotoxic (antiproliferative, Col2 cells,  $IC_{50} = 5.9\mu\text{g/mL}$ )<sup>[4622]</sup>; cytotoxic (cellular differentiation inducer, hmn promyelocytic leukemia HL-60 cells,  $4\mu\text{g/mL}$ , activity denotes percentage of cells differentiated = 33.9%)<sup>[4622, 5038]</sup>; cytotoxic (mouse mammary organ culture model (MMOC), inhibits DMBA-induced preneoplastic lesion formation,  $10\mu\text{g/mL}$ , rel-InRt = 63.0%, control DMBA, rel-InRt = 100%)<sup>[4622]</sup>. Source: ZHONG BIN JU *Tithonia diversifolia* (aerial parts: yield = 0.0035%dw)<sup>[4622]</sup>. Ref: 4622, 5038

**241 5-Acetoxyisogoniothalamin oxide**

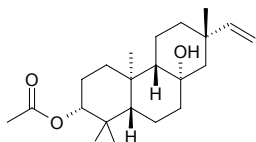
$C_{15}H_{14}O_5$  (274.28). Pharm: NADH oxidase inhibitor (mammalian mitochondrial respiratory chain inhibitor,  $IC_{50} = (3.0\pm 0.3)\mu\text{mol/L}$ ,  $IC_{100} = (22\pm 2)\mu\text{mol/L}$ ). Source: TIAN YE GE NA XIANG *Goniothalamus arvensis* (stem bark). Ref: 3961.

**242 7 $\beta$ -Acetoxyisopimara-8(14),15-dien-1-one**

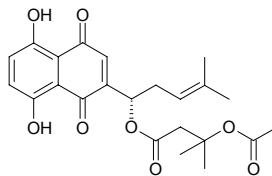
$C_{22}H_{32}O_3$  (344.50). Amorphous powder,  $[\alpha]_D = +5.0^\circ$  ( $c = 0.5$ ,  $\text{CHCl}_3$ ). Pharm: Antifungal (TLC bioautographic assay, plant pathogenic fungus *Cladosporium cucumerinum*, MA = 25–50 $\mu\text{g}$ , yeast *Candida albicans*, MA = 25–50 $\mu\text{g}$ ). Source: PU FU QIANG DAO YAO *Hypoestes serpens*. Ref: 3438.

**243 ent-3 $\beta$ -Acetoxyisopimar-15-en-8 $\beta$ -ol**

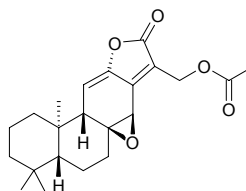
$C_{22}H_{36}O_3$  (348.53). mp 172.5–175 $^\circ\text{C}$ ,  $[\alpha]_D^{20} = -20.4^\circ$  ( $c = 0.11$ , MeOH). Source: XIAO YE XIANG CHA CAI *Isodon parvifolia*. Ref: 4067.

**244  $\alpha$ -Acetoxyisovalerylalkannin**

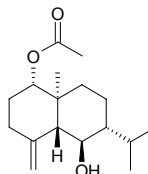
$C_{23}H_{26}O_8$  (430.46). Source: ZI CAO *Lithospermum erythrorhizon*, XIN ZANG JIA ZI CAO *Arnebia euchroma*. Ref: 2193.

**245 17-Acetoxyjolkinoide A**

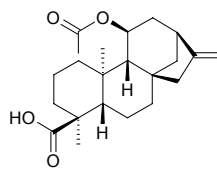
$C_{22}H_{26}O_5$  (372.47). Yellowish oil,  $[\alpha]_D^{20} = +70^\circ$  ( $c = 0.002$ ,  $\text{CHCl}_3$ ). Source: LANG DU DA JI *Euphorbia fischeriana*. Ref: 2350.

**246 1 $\alpha$ -Acetoxy-ent-junenol**

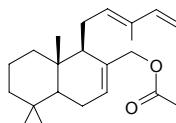
1 $\alpha,5\beta,6\beta,7\alpha,10\alpha$ -4(15)-Eudesmen-6-ol-1-yl-acetate  $C_{17}H_{28}O_3$  (280.41). Amorphous powder,  $[\alpha]_D^{22} = -11.2^\circ$  ( $c = 0.45$ ,  $\text{CHCl}_3$ ). Source: JING HONG AN LUO *Polyalthia cheliensis*. Ref: 2095.

**247 ent-11 $\alpha$ -Acetoxykaur-16-en-18-oic acid**

$C_{22}H_{32}O_4$  (360.50). White amorphous powder,  $[\alpha]_D^{25} = -91.2^\circ$  ( $c = 0.60$ ,  $\text{CHCl}_3$ ). Pharm: Cytotoxic inactive (BST test). Source: DONG JIN BA DOU *Croton tonkinensis* (leaf). Ref: 4444.

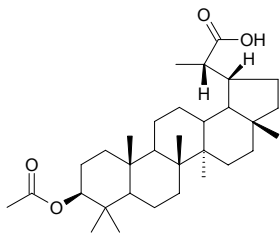
**248 17-Acetoxyabda-7,12(E),14-triene**

$C_{22}H_{34}O_2$  (330.52). Viscous liquid,  $[\alpha]_D^{20} = -10.71^\circ$  ( $c = 1.4$ ,  $\text{CHCl}_3$ ). Pharm: Cytotoxic (*in vitro*, BT474,  $IC_{50} = 4.7\mu\text{g/mL}$ , control Doxorubicin hydrochloride,  $IC_{50} = 0.08\mu\text{g/mL}$ ; CHAGO,  $IC_{50} = 5.7\mu\text{g/mL}$ , Doxorubicin hydrochloride,  $IC_{50} = 2.3\mu\text{g/mL}$ ; HepG2,  $IC_{50} = 6.5\mu\text{g/mL}$ , Doxorubicin hydrochloride,  $IC_{50} = 0.9\mu\text{g/mL}$ ; Kato3,  $IC_{50} = 5.3\mu\text{g/mL}$ , Doxorubicin hydrochloride,  $IC_{50} = 1.7\mu\text{g/mL}$ ; SW620,  $IC_{50} = 5.6\mu\text{g/mL}$ , Doxorubicin hydrochloride,  $IC_{50} = 1.1\mu\text{g/mL}$ ). Source: GUANG YE BA DOU *Croton oblongifolius* [Syn. *Croton laevigatus*]. Ref: 5363.

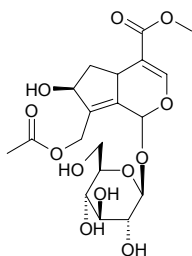


**249 (20S)-3 $\beta$ -Acetoxylupan-29-oic acid**

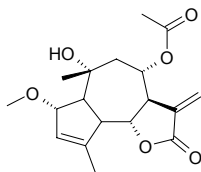
C<sub>32</sub>H<sub>52</sub>O<sub>4</sub> (500.77). Colorless solid, mp 287~290°C, [ $\alpha$ ]<sub>D</sub><sup>29</sup> = +18.9° (*c* = 0.7, CHCl<sub>3</sub>). Source: RONG SHU *Ficus microcarpa* (aerial root: yield = 0.000044%dw). Ref: 3047.

**250 10-Acetoxymanjoroside**

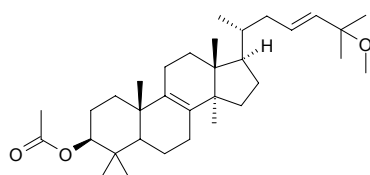
C<sub>19</sub>H<sub>26</sub>O<sub>12</sub> (446.41). [ $\alpha$ ]<sub>D</sub> = -59° (*c* = 0.3, MeOH). Source: DA CHE QIAN *Plantago major*, JIAO ZHUANG CHE QIAN *Plantago cornuti*. Ref: 2404.

**251 8-Acetoxy-2-methoxy-10-hydroxy-3,11(13)-guaiaadien-12,6-olide**

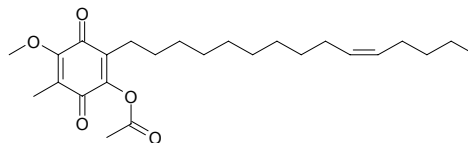
C<sub>18</sub>H<sub>24</sub>O<sub>6</sub> (336.39). [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +120.9° (*c* = 1.583, CHCl<sub>3</sub>). Pharm: Cytotoxic (*in vitro*, ACHN cell lines, IC<sub>50</sub> = (1.21±0.21)μg/mL, control Adriamycin, IC<sub>50</sub> = (0.09±0.03)μg/mL; LOX-IMVI, IC<sub>50</sub> = (4.86±0.34)μg/mL, Adriamycin, IC<sub>50</sub> = (0.05±0.02)μg/mL; SW620, IC<sub>50</sub> = (1.65±0.28)μg/mL, Adriamycin, IC<sub>50</sub> = (0.19±0.07)μg/mL; PC3, IC<sub>50</sub> = (4.00±0.15)μg/mL, Adriamycin, IC<sub>50</sub> = (0.76±0.12)μg/mL; A549, IC<sub>50</sub> = (3.53±0.26)μg/mL, Adriamycin, IC<sub>50</sub> = (0.28±0.09)μg/mL); anti-apoptosis (etoposide-induced, IC<sub>50</sub> = (8.6±0.7)μg/mL; control PDTC, IC<sub>50</sub> = (8.0±0.5)μg/mL). Source: BEI YE JU *Chrysanthemum boreale*. Ref: 5455.

**252 3 $\beta$ -Acetoxy-25-methoxy-lanosta-8,23-diene**

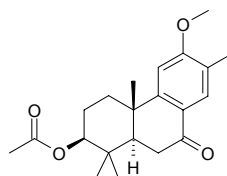
C<sub>33</sub>H<sub>54</sub>O<sub>3</sub> (498.80). Colorless solid, mp 148~150°C, [ $\alpha$ ]<sub>D</sub><sup>26</sup> = +30.4° (*c* = 2.7, CHCl<sub>3</sub>). Pharm: Cytotoxic inactive (HONE-1 cell, IC<sub>50</sub> > 10μmol/L; KB cell, IC<sub>50</sub> > 10μmol/L; HT29 cell, IC<sub>50</sub> > 10μmol/L). Source: RONG SHU *Ficus microcarpa* (aerial root). Ref: 5254.

**253 2-Acetoxy-5-methoxy-6-methyl-3-[(Z)-10'-pentadecenyl]-1,4-benzoquinone**

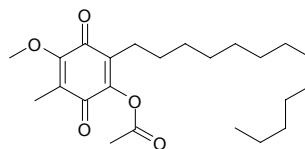
C<sub>25</sub>H<sub>38</sub>O<sub>5</sub> (418.58). Yellow gum. Source: PI ZHEN DU JING SHAN *Maesa lanceolata*. Ref: 1860.

**254 3 $\beta$ -Acetoxy-12-methoxy-13-methyl-podocarpa-8,11,13-trien-7-one**

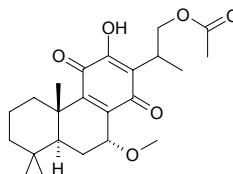
C<sub>21</sub>H<sub>28</sub>O<sub>4</sub> (344.45). White crystals, mp 158~159°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -25.2° (*c* = 0.5, CHCl<sub>3</sub>). Source: MA FENG SHU *Jatropha curcas* (aerial parts). Ref: 4287.

**255 2-Acetoxy-5-methoxy-6-methyl-3-tridecyl-1,4-benzoquinone**

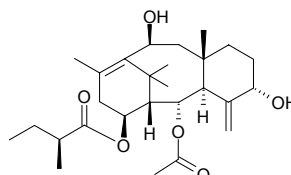
C<sub>23</sub>H<sub>36</sub>O<sub>5</sub> (392.54). Pale-yellow needles (hot *n*-hexane) mp 56~57°C Source: PI ZHEN DU JING SHAN *Maesa lanceolata*. Ref: 1860.

**256 16-Acetoxy-7 $\alpha$ -methoxyroyleanone**

C<sub>23</sub>H<sub>32</sub>O<sub>6</sub> (404.51). Yellow acicular crystals, mp 185~187°C, [ $\alpha$ ]<sub>D</sub><sup>16</sup> = +12.3° (*c* = 0.3, methanol). Source: CHANG YE XIANG CHA CAI *Rabdosia stracheyi*. Ref: 76, 4067.

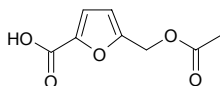
**257 2 $\alpha$ -Acetoxy-14 $\beta$ -[(S)-2-methyl-butiryloxy]-4(20),11-taxadiene**

C<sub>27</sub>H<sub>42</sub>O<sub>6</sub> (462.63). Source: YUN NAN HONG DOU SHAN *Taxus yunnanensis* (wood). Ref: 5407.

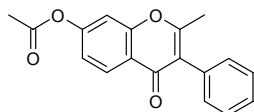


**258 5-(Acetoxymethyl)-furan-2-carboxylic acid**

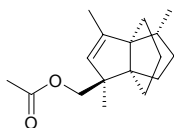
$C_8H_8O_5$  (184.15). Amorphous powder. **Pharm:** Antioxidant inactive (DPPH radical scavenger, 25 $\mu$ g/mL, ScRt = 5.9%; control BHT, 25 $\mu$ g/mL, ScRt = 18.6%); antioxidant inactive (thiobarbituric acid assay, inhibits peroxidation of linolenic acid, 37mg/mL, InRt = 2.3%; BHT 37mg/mL, InRt = 73.9%). **Source:** fungus *Epicoccum* sp. **Ref:** 5445.

**259 7-Acetoxy-2-methylisoflavone**

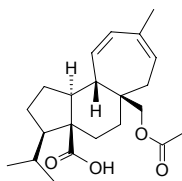
$C_{18}H_{14}O_4$  (294.31). **Source:** GUANG GUO GAN CAO *Glycyrrhiza glabra*. **Ref:** 2, 660.

**260 14-Acetoxymodhephene**

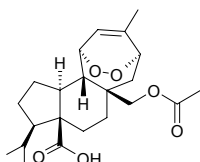
$C_{17}H_{26}O_2$  (262.40). Colorless oil,  $[\alpha]_{589nm} = +15^\circ$ ,  $[\alpha]_{578nm} = +16^\circ$ ,  $[\alpha]_{546nm} = +19^\circ$ ,  $[\alpha]_{436nm} = +31^\circ$ ,  $[\alpha]_{365nm} = +47^\circ$  ( $c = 2.02$ ,  $CHCl_3$ ). **Source:** JUAN MAO KUO BAO JU *Pluchea sericea*. **Ref:** 2277.

**261 17-Acetoxytulipin-11,13-dien-20-oic acid**

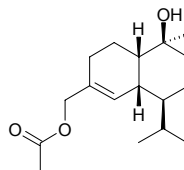
$C_{22}H_{32}O_4$  (360.50). **Pharm:** Antimalarial (*in vivo Plasmodium berghei* NK65 on infected mouse, ip 10mg/(kg·d), growth InRt on parasite erythrocytic life cycle = 60%; control Chloroquine,  $IC_{50} = 2.5$ mg/(kg·d)). **Source:** MI XIAO YING QIN *Azorella compacta* (aerial parts). **Ref:** 3815.

**262 17-Acetoxytulipinic acid**

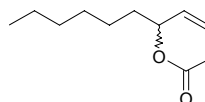
$C_{22}H_{32}O_6$  (392.50). **Pharm:** Antimalarial (*in vivo Plasmodium berghei* NK65 on infected mouse, ip 10mg/(kg·d), growth InRt on parasite erythrocytic life cycle = 26%; control Chloroquine,  $IC_{50} = 2.5$ mg/(kg·d)). **Source:** MI XIAO YING QIN *Azorella compacta* (aerial parts). **Ref:** 3815.

**263 15-Acetoxy-T-muurolol**

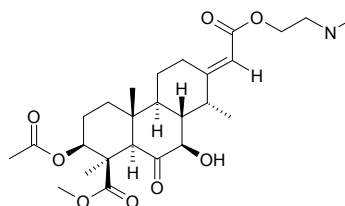
$C_{17}H_{28}O_3$  (280.41). Amorphous solid,  $[\alpha]_D^{31} = -51.2^\circ$  ( $c = 0.08$ ,  $CHCl_3$ ). **Source:** TAI WAN SHAN *Taiwania cryptomerioides* (root). **Ref:** 4371.

**264 3-Acetoxy-1-nonene**

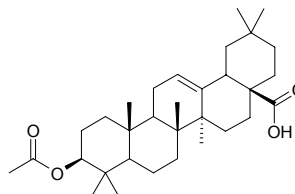
[31795-37-6]  $C_{11}H_{20}O_2$  (184.28). **Source:** FENG DOU CAI *Petasites japonicus*. **Ref:** 6.

**265 3β-Acetoxynererythrosumine**

[58189-26-7]  $C_{26}H_{39}NO_8$  (493.60). mp 173~175°C. **Pharm:** Cytotoxic (KB,  $ED_{50} = 0.003$  $\mu$ g/mL). **Source:** LU SUI GE MU *Erythrophleum chlorostachyum*. **Ref:** 1, 5, 661.

**266 3β-Acetoxyolean-12-en-28-oic acid**

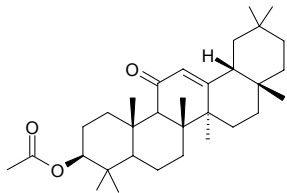
3 $\beta$ -Acetyloleanolic acid [4339-72-4]  $C_{32}H_{50}O_4$  (498.75). Colorless acicular crystals, mp 258~268°C,  $[\alpha]_D^{25} = +74^\circ$  ( $c = 1.0$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (Col2,  $IC_{50} = 10.4$  $\mu$ g/mL, control Ellipticine,  $IC_{50} = 0.3$  $\mu$ g/mL; LNCaP,  $IC_{50} > 20$  $\mu$ g/mL; KB,  $IC_{50} > 20$  $\mu$ g/mL; LU1,  $IC_{50} > 20$  $\mu$ g/mL)<sup>[5400]</sup>; inhibits promotor of cancer (skin tumor); immunoenhancer; antimalarial (*Plasmodium falciparum* FcB1,  $IC_{50} = (7.65 \pm 0.49)$  $\mu$ g/mL; control Chloroquine,  $IC_{50} = (0.05 \pm 0.002)$  $\mu$ g/mL)<sup>[4419]</sup>. **Source:** BAI TOU WENG *Pulsatilla chinensis*, HUA MU PI *Betula platyphylla*, KUN MING SHAN HAI TANG *Tripterygium hypoglucum*, LONG NAO GAO XIANG *Dryobalanops aromatica*, MEI SHANG LU *Phytolacca americana* [Syn. *Phytolacca decandra*], NV ZHEN ZI *Ligustrum lucidum*, QIAN CAO GEN *Rubia cordifolia*, XIONG RUI ZHUANG SHU WEI CAO *Salvia staminea*, ZI MEI SHU *Millingtonia hortensis*, *Drypetes molunduana* (stem), *Nuxia sphaerocephala* (leaf). **Ref:** 6, 660, 1667, 1668, 3989, 4419, 5400.



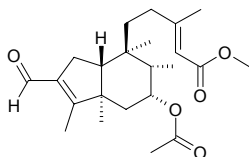


**267 3 $\beta$ -Acetoxy-12-oleanen-11-one**

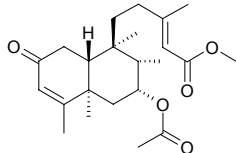
C<sub>32</sub>H<sub>50</sub>O<sub>3</sub> (482.75). Colorless solid (CH<sub>2</sub>Cl<sub>2</sub>), mp 283–286°C. Source: RONG SHU *Ficus microcarpa* (aerial root; yield = 0.00026%dw). Ref: 3047.

**268 7-Acetoxy-3-oxo-4(3→2)-abeo-2(4),13-clerodadien-15-oic acid methyl ester**

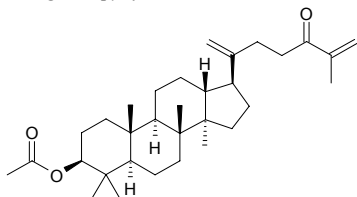
C<sub>23</sub>H<sub>34</sub>O<sub>5</sub> (390.52). [ $\alpha$ ]<sub>D</sub><sup>23</sup> = +12.0° (*c* = 0.69, CHCl<sub>3</sub>). Source: GAO YI ZHI HUANG HUA *Solidago altissima*. Ref: 2366.

**269 7-Acetoxy-2-oxo-3,13-clerodadien-15-oic acid methyl ester**

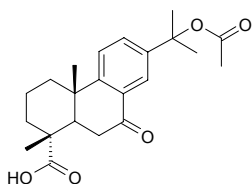
C<sub>23</sub>H<sub>34</sub>O<sub>5</sub> (390.52). mp 195–198°C (EtOAc), [ $\alpha$ ]<sub>D</sub><sup>22</sup> = –80.9° (*c* = 1.02, CHCl<sub>3</sub>). Source: GAO YI ZHI HUANG HUA *Solidago altissima*. Ref: 2366.

**270 3 $\beta$ -Acetoxy-24-oxo-dammara-20,25-diene**

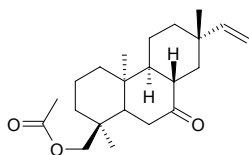
C<sub>32</sub>H<sub>50</sub>O<sub>3</sub> (482.75). Glassy amorphous solid. Source: XIAO SHE JU GEN *Microglossa pyrifolia*. Ref: 5374.

**271 15-Acetoxy-7-oxo-dehydroabietic acid**

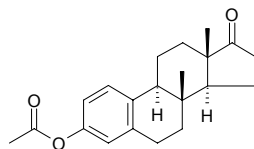
C<sub>22</sub>H<sub>28</sub>O<sub>5</sub> (372.47). Amorphous solid, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +7.2° (*c* = 0.34, CHCl<sub>3</sub>). Source: TAI WAN YUN SHAN *Picea morrisonicola* (heartwood). Ref: 4054.

**272 18-Acetoxy-7-oxo-9-epi-ent-pimara-15-ene**

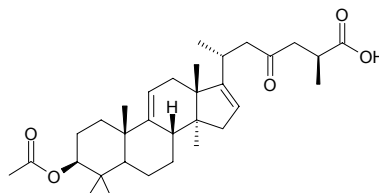
C<sub>22</sub>H<sub>34</sub>O<sub>3</sub> (346.51). Source: TENG CANG CHI MEI *Gibberella fujikuroi*. Ref: 3916.

**273 3-Acetoxy-17-oxo-estra-1,3,5(10)-triene**

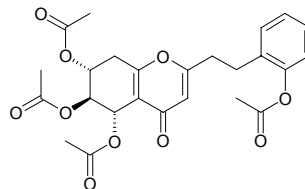
C<sub>20</sub>H<sub>24</sub>O<sub>3</sub> (312.41). Reddish plates (MeOH), mp 92–94°C. Source: DUAN ROU MAO ZHI XIE MU *Holarrhena pubescens* (bark). Ref: 5231.

**274 (25R)-3 $\beta$ -Acetoxy-23-oxo-9,16-lanostandien-26-oic acid**

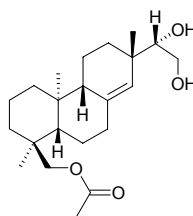
C<sub>32</sub>H<sub>48</sub>O<sub>5</sub> (512.74). Source: MEI LI TENG HUANG *Garcinia speciosa* (bark). Ref: 3762.

**275 (5S,6S,7R)-2-[2-(2-Acetoxyphenyl)ethyl]-5 $\alpha$ ,6 $\beta$ ,7 $\alpha$ -triacetoxy-5,6,7,8-tetrahydrochromone (AH9)**

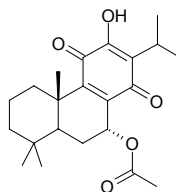
C<sub>25</sub>H<sub>26</sub>O<sub>10</sub> (486.48). Colorless acicular crystals, mp 147–148°C, [ $\alpha$ ]<sub>D</sub> = –11.1°. Source: CHEN XIANG *Aquilaria agallocha*. Ref: 13.

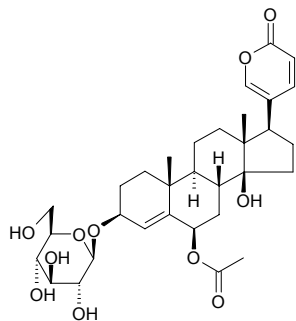
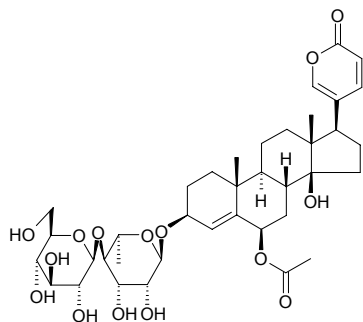
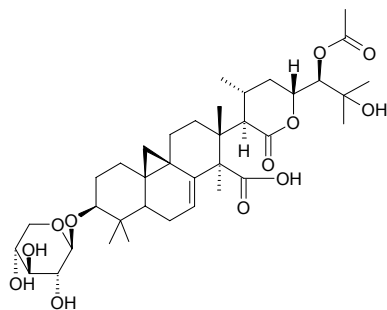
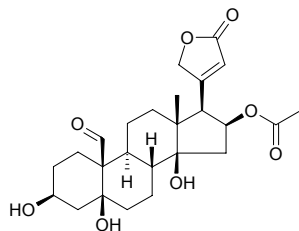
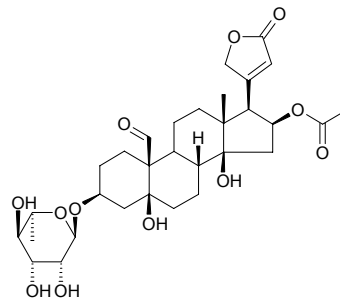
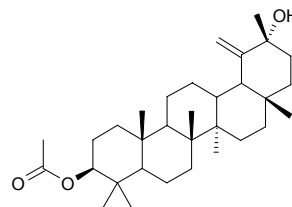
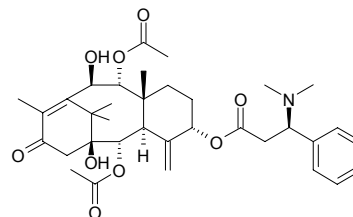
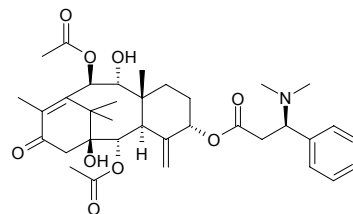
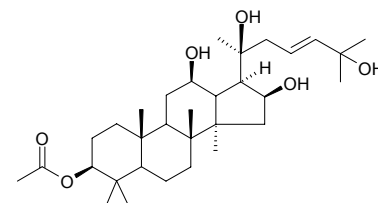
**276 ent-18-Acetoxy-8(14)-pimarene-15S,16-diol**

C<sub>22</sub>H<sub>36</sub>O<sub>4</sub> (364.53). Viscous oil, [ $\alpha$ ]<sub>D</sub><sup>26</sup> = –3.5° (*c* = 0.50, MeOH). Source: HAI NAN JIAN MU *Dysoxylum hainanense*. Ref: 750.

**277 7 $\alpha$ -Acetoxyroyleanone**

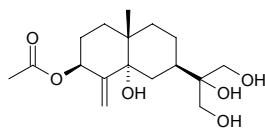
C<sub>22</sub>H<sub>30</sub>O<sub>5</sub> (374.48). Yellow crystals, mp 194–198°C. Source: XIU QIU SHU WEI CAO *Salvia hydrangea* (root). Ref: 5447.



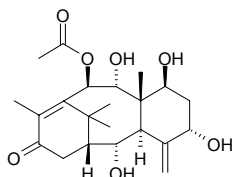
**278 6 $\beta$ -Acetoxy scillarenin 3-O- $\beta$ -D-glucopyranoside**C<sub>32</sub>H<sub>44</sub>O<sub>11</sub> (604.70). Amorphous powder,  $[\alpha]_D^{28} = -52.4^\circ$  ( $c = 8.04$ , MeOH).Source: HAI CONG *Urginea maritima* (bulb). Ref: 3513.**279 6 $\beta$ -Acetoxy scillarenin 3-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -L-rhamnopyranoside**C<sub>38</sub>H<sub>54</sub>O<sub>15</sub> (750.85). Amorphous powder,  $[\alpha]_D^{26} = -83.4^\circ$  ( $c = 0.6$ , MeOH).Source: HAI CONG *Urginea maritima* (bulb). Ref: 3513.**280 24-Acetoxy-15,16-seco-cycloart-7-en 3-O-xyloside**C<sub>37</sub>H<sub>56</sub>O<sub>12</sub> (692.85). White needles,  $[\alpha]_D = -31.2^\circ$  (MeOH). Source:*Cimicifuga* sp. (Rhizome). Ref: 4396.**281 16 $\beta$ -Acetoxystrophanthidin**C<sub>25</sub>H<sub>34</sub>O<sub>8</sub> (462.54). mp 232~237°C. Source: HEI GANG LIU *Periploca**nigrescens*. Ref: 1521, 2498.**282 16 $\beta$ -Acetoxy-strophanthidin-3- $\beta$ -D-O-rhamnoside**C<sub>31</sub>H<sub>44</sub>O<sub>12</sub> (608.69). mp 262~268°C,  $[\alpha]_D = -13.4^\circ$ . Source: HEI GANG LIU*Periploca nigrescens*. Ref: 1521, 2498.**283 3 $\beta$ -Acetoxy-19(29)-taraxasten-20 $\alpha$ -ol**C<sub>32</sub>H<sub>52</sub>O<sub>3</sub> (484.77). Colorless solid, mp 245~248°C,  $[\alpha]_D^{24} = +55.3^\circ$  ( $c = 0.5$ ,CHCl<sub>3</sub>). Source: RONG SHU *Ficus microcarpa* (aerial root). Ref: 5254.**284 9-Acetoxytaxine B**C<sub>35</sub>H<sub>47</sub>NO<sub>9</sub> (625.77). Source: JIANG GUO ZI SHAN *Taxus baccata*. Ref: 662.**285 10-Acetoxytaxine B**C<sub>35</sub>H<sub>47</sub>NO<sub>9</sub> (625.77). Source: JIANG GUO ZI SHAN *Taxus baccata*. Ref: 662.**286 (20S)-3 $\beta$ -Acetoxy-12 $\beta$ ,16 $\beta$ ,25-tetrahydrodammar-23-ene**C<sub>32</sub>H<sub>54</sub>O<sub>6</sub> (534.78). Colorless crystals, mp 244~246°C,  $[\alpha]_D^{25} = +76^\circ$  ( $c = 1.0$ ,CH<sub>2</sub>Cl<sub>2</sub>). Source: HUN XIAO MO YAO *Commiphora confusa* (resin). Ref: 4335.

**287 3 $\beta$ -Acetoxy-5 $\alpha$ ,11,12,13-tetrahydroxy-eudesm-4(15)-ene**

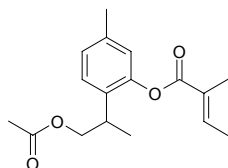
C<sub>17</sub>H<sub>28</sub>O<sub>6</sub> (328.41). [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +6.9° (c = 0.42, CHCl<sub>3</sub>). Source: XI LA SI MAO SHI *Achillea holosericea*. Ref: 2008.

**288 10 $\beta$ -Acetoxy-2 $\alpha$ ,5 $\alpha$ ,7 $\beta$ ,9 $\alpha$ -tetrahydroxytaxa-4(20),11-dien-13-one**

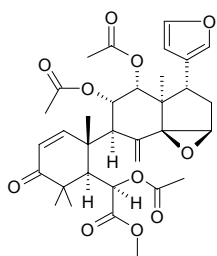
C<sub>22</sub>H<sub>32</sub>O<sub>7</sub> (408.50). Colorless amorphous solid, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +22.2° (c = 0.16, CHCl<sub>3</sub>). Source: YUN NAN HONG DOU SHAN *Taxus yunnanensis* (bark). Ref: 3481.

**289 9-Acetoxythymo 13-O-tiglate**

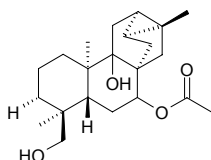
C<sub>17</sub>H<sub>22</sub>O<sub>4</sub> (290.36). [ $\alpha$ ]<sub>D</sub><sup>24</sup> = -10.5° (c = 0.57, CHCl<sub>3</sub>). Source: PEI LAN *Eupatorium fortunei* (aerial parts). Ref: 3077.

**290 Acetoxytoonacilin**

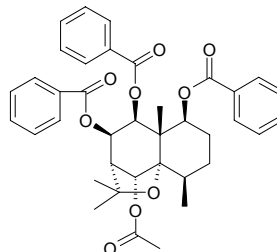
[66610-70-6] C<sub>33</sub>H<sub>40</sub>O<sub>11</sub> (612.68). Prismatic crystals, mp 215°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +42.5° (c = 1g/100ml, chloroform). Pharm: Pesticide. Source: HONG CHUN *Toona ciliata*. Ref: 661.

**291 7 $\beta$ -Acetoxytrachyloban-18-oic acid**

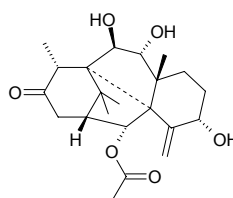
C<sub>22</sub>H<sub>34</sub>O<sub>4</sub> (362.51). Source: ZAN BI XI BA DOU *Croton zambesicus*. Ref: 4552.

**292 6 $\alpha$ -Acetoxy-1 $\beta$ ,8 $\beta$ ,9 $\beta$ -tribenzoyloxy- $\beta$ -dihydroagarofuran**

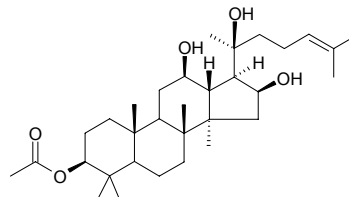
C<sub>38</sub>H<sub>40</sub>O<sub>9</sub> (640.74). Pharm: NO production inhibitor (mus, macrophage RAW264.7 cells activated by LPS, very weak activity). Source: NAN SHE TENG GUO *Celastrus orbiculatus* [Syn. *Celastrus articulatus*]. Ref: 2584.

**293 (12 $\alpha$ )-2 $\alpha$ -Acetoxy-5 $\alpha$ ,9 $\alpha$ ,10 $\beta$ -trihydroxy-3,11-cyclotax-4(20)-en-13-one**

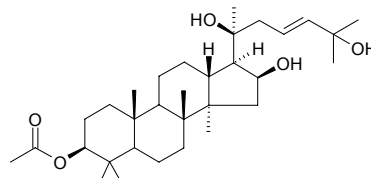
C<sub>22</sub>H<sub>32</sub>O<sub>6</sub> (392.50). Gum, [ $\alpha$ ]<sub>D</sub><sup>24</sup> = -17° (c = 0.01, CHCl<sub>3</sub>). Source: YUN NAN HONG DOU SHAN *Taxus yunnanensis* (seed). Ref: 3991.

**294 3 $\beta$ -Acetoxy-12 $\beta$ ,16 $\beta$ ,20S-trihydroxydammar-24-ene**

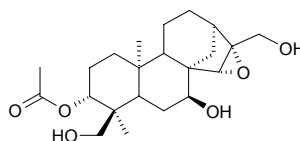
C<sub>32</sub>H<sub>54</sub>O<sub>5</sub> (518.78). Colorless needles, mp 188~190°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +46.7° (c = 1.0, CH<sub>2</sub>Cl<sub>2</sub>). Source: HUN XIAO MO YAO *Commiphora confusa* (resin). Ref: 4335.

**295 3 $\beta$ -Acetoxy-16 $\beta$ ,20S,25-trihydroxydammar-23-ene**

C<sub>32</sub>H<sub>54</sub>O<sub>5</sub> (518.78). Colorless needles, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +38.3° (c = 0.5, CH<sub>2</sub>Cl<sub>2</sub>). Source: KU A MO YAO *Commiphora kua* (resin). Ref: 4334.

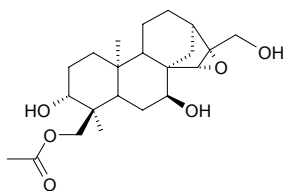
**296 ent-3 $\beta$ -Acetoxy-7 $\alpha$ ,17,18-trihydroxy-15 $\beta$ ,16 $\beta$ -epoxykaurane**

C<sub>22</sub>H<sub>34</sub>O<sub>6</sub> (394.51). Syrup, [ $\alpha$ ]<sub>D</sub> = +13.5° (c = 1, CHCl<sub>3</sub>). Source: MU ER DU MA CAO *Sideritis moorei* (aerial parts). Ref: 5295.

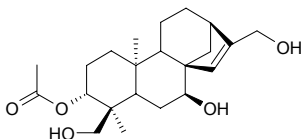


**297 ent-18-Acetoxy-3 $\beta$ ,7 $\alpha$ ,17-trihydroxy-15 $\beta$ ,16 $\beta$ -epoxykaurane**

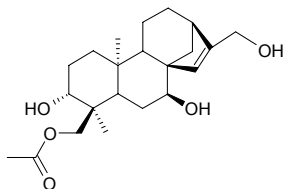
C<sub>22</sub>H<sub>34</sub>O<sub>6</sub> (394.51). White solid, mp 134–136°C, [ $\alpha$ ]<sub>D</sub> = +12.8° (*c* = 0.5, CHCl<sub>3</sub>). Source: MU ER DU MA CAO *Sideritis moorei* (aerial parts). Ref: 5295.

**298 ent-3 $\beta$ -Acetoxy-7 $\alpha$ ,17,18-trihydroxykaur-15-ene**

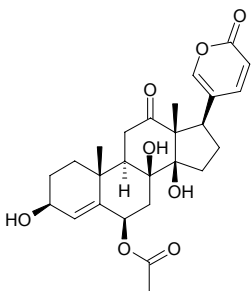
C<sub>22</sub>H<sub>34</sub>O<sub>5</sub> (378.51). White solid, mp 147–149°C, [ $\alpha$ ]<sub>D</sub> = +13.2° (*c* = 0.5, CHCl<sub>3</sub>). Source: MU ER DU MA CAO *Sideritis moorei* (aerial parts). Ref: 5295.

**299 ent-18-Acetoxy-3 $\beta$ ,7 $\alpha$ ,17-trihydroxykaur-15-ene**

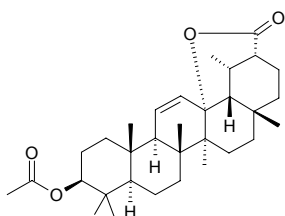
C<sub>22</sub>H<sub>34</sub>O<sub>5</sub> (378.51). Syrup, [ $\alpha$ ]<sub>D</sub> = +8.6° (*c* = 0.63, CHCl<sub>3</sub>). Source: MU ER DU MA CAO *Sideritis moorei* (aerial parts). Ref: 5295.

**300 6 $\beta$ -Acetoxy-3 $\beta$ ,8 $\beta$ ,14 $\beta$ -trihydroxy-12-oxobufa-4,20,22-trienolide**

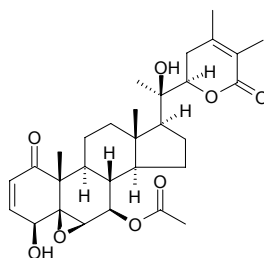
C<sub>26</sub>H<sub>32</sub>O<sub>8</sub> (472.54). Yellow amorphous compound. Source: CHU TU HAI CONG *Urginea epigea* (bulb). Ref: 3882.

**301 3 $\beta$ -Acetoxy-11-ursen-13 $\alpha$ ,30-olide**

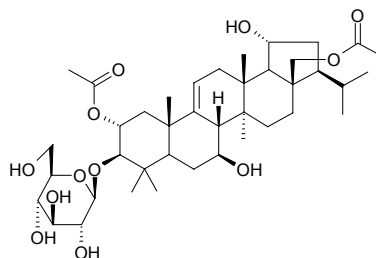
C<sub>32</sub>H<sub>48</sub>O<sub>4</sub> (496.74). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +46.9° (*c* = 0.3, MeOH). Source: NAN RI BEN LEI GONG TENG *Tripterygium doianum*. Ref: 1916.

**302 7 $\beta$ -Acetoxywithanolide D**

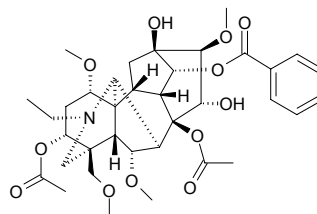
7 $\beta$ -Acetoxy-4 $\beta$ ,20 $R$ -dihydroxy-5 $\beta$ ,6 $\beta$ -epoxy-1-oxo-witha-2,24-dienolide C<sub>30</sub>H<sub>40</sub>O<sub>8</sub> (528.65). mp 151–153°C (EtOAc). Source: BA XI YE YAN *Acnistus arborescens*. Ref: 2003.

**303 2-O-Acetyl-28-O-acetyl-rubianoside IV**

C<sub>40</sub>H<sub>64</sub>O<sub>12</sub> (736.95). Pharm: Anti-inflammatory inactive (inhibits nitric oxide production, LPS-activated mouse peritoneal macrophages, 100 $\mu$ mol/L, InRt = (0.1 $\pm$ 0.3)%, control *L*-NMMA, IC<sub>50</sub> = 57 $\mu$ mol/L);  $\beta$ -hexosaminidase inhibitor inactive (rat basophilic cell RBL-2H3, inhibits release of  $\beta$ -hexosaminidase, 100 $\mu$ mol/L, InRt = (1.2 $\pm$ 2.4)%). Source: XIAO HONG SHEN *Rubia yunnanensis* (root). Ref: 4347.

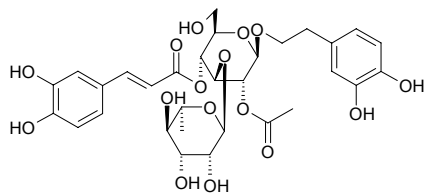
**304 3-Acetylaconitine**

Flaconitine [77181-26-1] C<sub>36</sub>H<sub>49</sub>NO<sub>12</sub> (687.79). White crystals (absolute alcohol), mp 196–197°C, [ $\alpha$ ]<sub>D</sub><sup>24</sup> = +18.6° (*c* = 1, chloroform). Pharm: Anti-inflammatory; antipyretic; causes arrhythmia (rat, iv, 0.097mg/kg); antihypertensive (dose < 0.097mg/kg); inhibits myocardial contractility (dose < 0.097mg/kg); analgesic (for all 1500 cases in clinic, analgesic effective rate = (95–97)%, non-habitual); LD<sub>50</sub> (mus, sc) = 1.4mg/kg, (mus, iv) = 0.470mg/kg. Source: BEI WU TOU *Aconitum kusnezoffii*, XUAN WEI WU TOU *Aconitum nagarum* var. *lasiandrum*. Ref: 900.

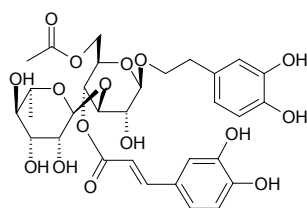


**305 2'-Acetyllactoside**

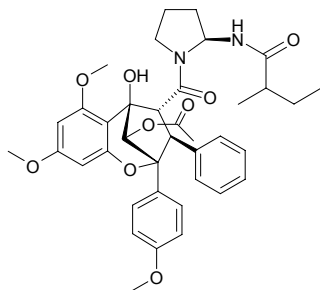
[94492-24-7] C<sub>31</sub>H<sub>38</sub>O<sub>16</sub> (666.64). Source: GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], ROU CONG RONG *Cistanche deserticola*. Ref: 2, 628.

**306 6'-O-Acetyllactoside**

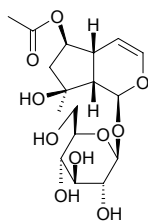
C<sub>31</sub>H<sub>38</sub>O<sub>16</sub> (666.64). Pharm: Elastase inhibitor (hmn leukocyte *in vitro*, IC<sub>50</sub> = 47 μg/mL = 70 μmol/L; control Caffeic acid, IC<sub>50</sub> = 86 μg/mL = 475 μmol/L). Source: NAN FEI GOU MA *Harpagophytum procumbens*. Ref: 5458.

**307 10-O-Acetylglaine B**

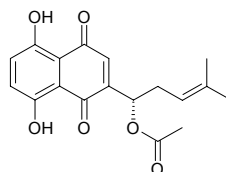
C<sub>38</sub>H<sub>44</sub>N<sub>2</sub>O<sub>9</sub> (672.78). Amorphous powder, [α]<sub>D</sub><sup>20</sup> = +20.4° (c = 0.83, MeOH). Source: TUE YUAN MI ZI LAN *Aglaia elliptica* (leaf). Ref: 4127.

**308 6-O-Acetylajugol**

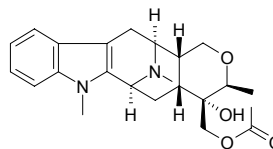
C<sub>17</sub>H<sub>26</sub>O<sub>10</sub> (390.39). Powder. Source: BO SI YI MU CAO *Leonurus persicus*. Ref: 2499.

**309 Acetylalkannin**

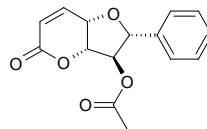
C<sub>18</sub>H<sub>18</sub>O<sub>6</sub> (330.34). Red acicular crystals (petroleum spirit), mp 92–94°C. Pharm: Anti-inflammatory (rat, tampon granuloma and swell-foot induced by formaldehyde); platelet aggregation inhibitor; antioxidant. Source: ZI CAO *Lithospermum erythrorhizon*, XIN ZANG JIA ZI CAO *Arnebia euchroma*, JIA ZI CAO *Arnebia guttata*, DIAN ZI CAO *Onosma paniculatum*. Ref: 1, 2, 658, 660, 2193.

**310 Acetyl-alstohentine**

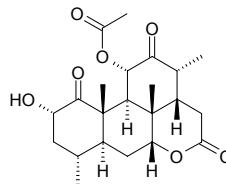
C<sub>23</sub>H<sub>30</sub>N<sub>2</sub>O<sub>4</sub> (398.51). Source: DA YE TANG JIAO SHU *Alstonia macrophylla* (leaf). Ref: 3020.

**311 3-Acetylalholactone**

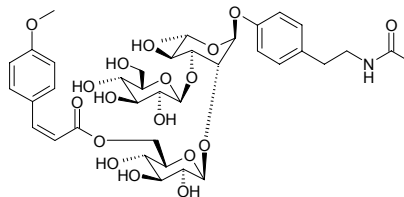
C<sub>15</sub>H<sub>14</sub>O<sub>5</sub> (274.28). mp 140–142°C, [α]<sub>D</sub> = +166.6° (c = 0.3, EtOH). Pharm: NADH oxidase inhibitor (mammalian mitochondrial respiratory chain inhibitor, IC<sub>50</sub> = (4.7±1.6) μmol/L, IC<sub>100</sub> = (32±4) μmol/L). Source: TIAN YE GE NA XIANG *Goniiothalamus arvensis* (stem bark). Ref: 3961.

**312 Acetylamarolide**

C<sub>22</sub>H<sub>30</sub>O<sub>7</sub> (406.48). mp 264–265°C. Source: CHU BAI PI *Ailanthus altissima*. Ref: 6.

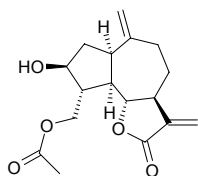
**313 4-Acetylaminoethylphenyl-1-O-[6-O-(Z)-p-methoxycinnamoyl-β-D-glucopyranosyl(1→2)]-[β-D-glucopyranosyl(1→3)]-α-L-rhamnopyranoside**

C<sub>38</sub>H<sub>51</sub>NO<sub>18</sub> (809.83). White needles (MeOH), mp 198–199°C, [α]<sub>D</sub><sup>25</sup> = –14.1° (c = 0.75, MeOH). Source: SI CHI SI LENG CAO *Schnabelia tetradonta* (aerial part; yield = 0.00062%dw). Ref: 4665.

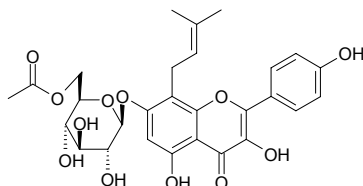


**314 15-O-Acetylaphoricarpolide**

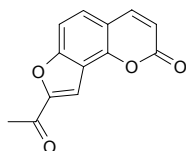
$C_{17}H_{22}O_5$  (306.36). Colorless oil,  $[\alpha]_D^{25} = -40.5^\circ$  ( $c = 0.44$ ,  $CHCl_3$ ). Source: *Amphoricarpus neumayeri* ssp. *neumayeri* (aerial parts), *Amphoricarpus neumayeri* ssp. *murbeckii* (aerial parts). Ref: 3842.

**315 6'''-O-Acetylamurensin**

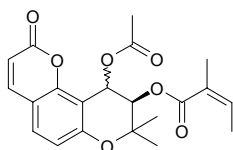
$C_{28}H_{30}O_{12}$  (558.54). Yellow powder, mp 235–237°C,  $[\alpha]_D^{25} = -91.3^\circ$  ( $c = 0.05$ , MeOH). Source: RI BEN HUANG BAI *Phellodendron japonicum* (leaf). Ref: 4502.

**316 2'-Acetylangelicin**

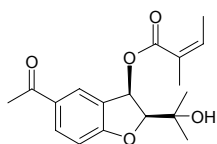
$C_{13}H_8O_4$  (228.21). Light yellow acicular crystals, mp 200–202°C (ethanol). Source: SHE CHUANG ZI *Cnidium monnieri*. Ref: 352.

**317 (±)-4'-O-Acetyl-3'-O-angeloyl-cis-khellactone**

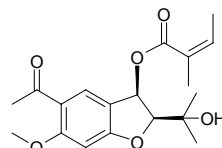
$C_{21}H_{22}O_7$  (386.41). Pharm: Induces mitochondria-mediated apoptosis (HL-60 cells). Source: BAI HUA QIAN HU *Peucedanum praeruptorum* (root). Ref: 4983.

**318 5-Acetyl-3β-angeloyloxy-2β-(1-hydroxyisopropyl)-2,3-dihydrobenzofuran**

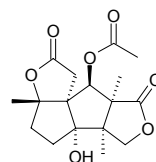
$C_{18}H_{22}O_5$  (318.37). Yellowish oil,  $[\alpha]_D^{25} = -75.7^\circ$  ( $c = 0.57$ ,  $CHCl_3$ ). Pharm: Antifungal (*Trichophyton mentagrophytes* ATCC28185, MIC = 200μg/mL, control Miconazole, MIC = 8μg/mL; *Trichophyton rubrum* ATCC28188, MIC = 100μg/mL, Miconazole, MIC = 8μg/mL). Source: *Eupatorium aschenbornianum*. Ref: 5472.

**319 5-Acetyl-3β-angeloyloxy-2β-(1-hydroxyisopropyl)-6-methoxy-2,3-dihydrobenzofuran**

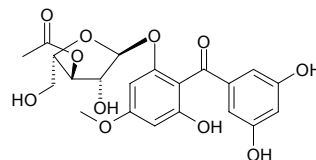
$C_{19}H_{24}O_6$  (348.40). Colorless oil,  $[\alpha]_D^{25} = -30.4^\circ$  ( $c = 0.53$ ,  $CHCl_3$ ). Pharm: Antifungal (*Trichophyton mentagrophytes* ATCC28185, MIC = 50μg/mL, control Miconazole, MIC = 8μg/mL; *Trichophyton rubrum* ATCC28188, MIC = 50μg/mL, Miconazole, MIC = 8μg/mL). Source: *Eupatorium aschenbornianum*. Ref: 5472.

**320 7-O-Acetylanislactone B**

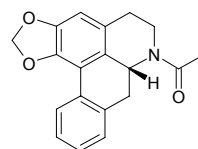
$C_{17}H_{22}O_7$  (338.36). Source: *Illicium merrillianum* (pericarp: yield = 0.00006%dw). Ref: 3046.

**321 Acetylannulatophenonoside**

$C_{21}H_{22}O_{11}$  (450.40). Colorless prismatic crystals ( $H_2O-EtOH$ ), mp 177.5–179.5°C,  $[\alpha]_D^{20} = -7.48^\circ$  ( $c = 1.055$ , MeOH). Source: HUAN ZHUANG JIN SI TAO *Hypericum annulatum*. Ref: 2009.

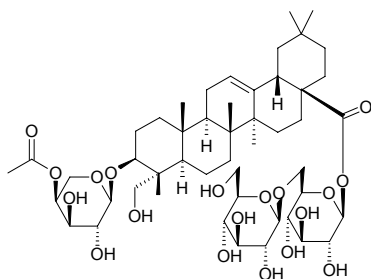
**322 N-Acetylanonaine**

$C_{19}H_{17}NO_3$  (307.35). Pharm: Platelet aggregation inhibitor (rat blood: 2–5μmol/L ADP-induced,  $IC_{50} = 450\mu\text{mol/L}$ , control Acetylsalicylic acid,  $IC_{50} > 1000\mu\text{mol/L}$ ; 2–5μg/mL collagen-induced,  $IC_{50} = 32\mu\text{mol/L}$ , Acetylsalicylic acid,  $IC_{50} = 420\mu\text{mol/L}$ ; 1–4μmol/L epinephrine-induced with threshold concentration of collagen (0.8–1.0μg/mL),  $IC_{50} = 0.39\mu\text{mol/L}$ , Acetylsalicylic acid,  $IC_{50} = 53\mu\text{mol/L}$ ; 10–40μmol/L AA-induced with threshold concentration of collagen (0.8–1.0μg/mL),  $IC_{50} = 0.25\mu\text{mol/L}$ , Acetylsalicylic acid,  $IC_{50} = 66\mu\text{mol/L}$ ; 1–5μmol/L U46619-induced with threshold concentration of collagen (0.8–1.0μg/mL),  $IC_{50} = 3.6\mu\text{mol/L}$ , Acetylsalicylic acid,  $IC_{50} = 340\mu\text{mol/L}$ ; 1–2μmol/L hmn U46619 in 1mmol/L acetylsalicylic acid-induced,  $IC_{50} = 64\mu\text{mol/L}$ , control Pentolamine,  $IC_{50} > 100\mu\text{mol/L}$ , control Yohimbine,  $IC_{50} > 100\mu\text{mol/L}$ ). Source: RI BEN HOU PO *Magnolia obovata* (leaf). Ref: 5381.



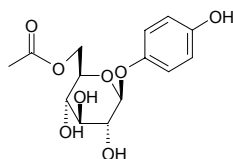
**323 3-O-(4-O-Acetyl)- $\alpha$ -L-arabinopyranosyl-hederagenin 28-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside**

C<sub>49</sub>H<sub>78</sub>O<sub>19</sub> (971.16). White powder, mp 198–201°C, [ $\alpha$ ]<sub>D</sub><sup>23</sup> = +19.7° (c = 0.25, methanol). Source: CHUAN XU DUAN *Dipsacus asperoides*. Ref: 201.



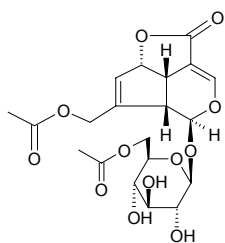
**324 6-O-Acetylbutin**

Pyroside [10338-88-2] C<sub>14</sub>H<sub>18</sub>O<sub>8</sub> (314.29). mp 214–216°C, [ $\alpha$ ]<sub>D</sub><sup>23</sup> = –58.8° (c = 2.0, H<sub>2</sub>O). Source: XI YANG LI *Pyrus communis*, YUE JU YE *Vaccinium vitis-idaea*. Ref: 6, 1521.



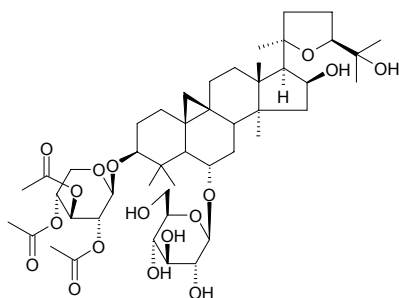
**325 6'-Acetyl asperuloside**

C<sub>20</sub>H<sub>24</sub>O<sub>12</sub> (456.41). White powder, [ $\alpha$ ]<sub>D</sub> = –104.6° (c = 0.085, methanol). Source: JIN MAO ER CAO *Hedyotis chrysotricha* [Syn. *Oldenlandia chrysotricha*]. Ref: 400.



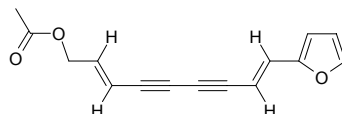
**326 Acetyl astragaloside I**

C<sub>47</sub>H<sub>74</sub>O<sub>17</sub> (911.10). Source: HUANG QI *Astragalus membranaceus*. Ref: 660.



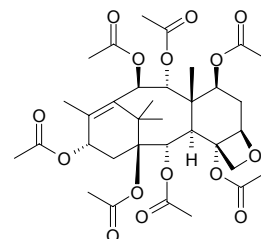
**327 Acetyl-atractylodinol**

[61582-39-6] C<sub>15</sub>H<sub>12</sub>O<sub>3</sub> (240.26). Source: BEI CANG ZHU *Atractylodes chinensis*. Ref: 2.



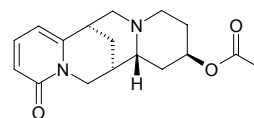
**328 1 $\beta$ -Acetylbaccatin IV**

C<sub>34</sub>H<sub>46</sub>O<sub>15</sub> (694.74). Source: YUN NAN HONG DOU SHAN *Taxus yunnanensis*. Ref: 662.



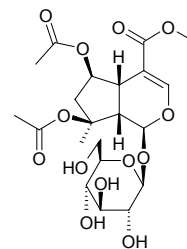
**329 13-O-Acetylbaptifoline**

C<sub>17</sub>H<sub>22</sub>N<sub>2</sub>O<sub>3</sub> (302.38). Colorless oleaginous substance, [ $\alpha$ ]<sub>D</sub> = –101° (c = 0.18, EtOH). Source: MU MA DOU *Thermopsis lanceolata*. Ref: 699.



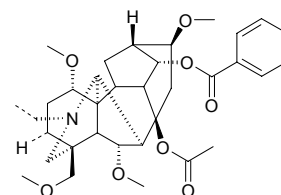
**330 Acetylbarlerin**

C<sub>21</sub>H<sub>30</sub>O<sub>13</sub> (490.47). [ $\alpha$ ]<sub>D</sub><sup>30</sup> = –113.7° (c = 0.105, MeOH). Pharm: Cytotoxic inactive (Vero cells)<sup>[5456]</sup>; COX-2 inhibitor inactive<sup>[5456]</sup>. Source: HUA YE JIA DU JUAN *Barleria lupulina* (flower). Ref: 5456.



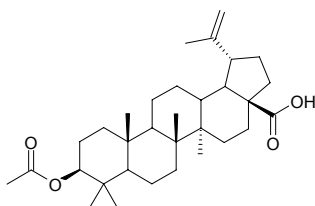
**331 8-Acetyl-14-benzoylchamanine**

[4296-54-2] C<sub>34</sub>H<sub>47</sub>NO<sub>8</sub> (597.76). Colorless acicular crystals, mp 150–152°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +9.8° (c = 0.08, ethanol). Source: SONG PAN WU TOU *Aconitum sungpanense*. Ref: 107.

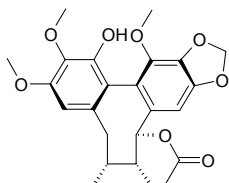


**332 Acetylbetulinic acid**

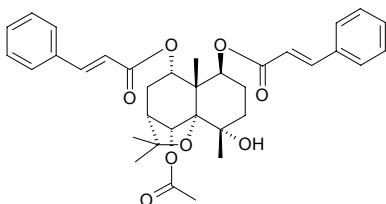
$C_{32}H_{50}O_4$  (498.75). **Pharm:** Cytotoxic (*in vitro*, HONE-1 cell,  $IC_{50}$  =  $(4.7 \pm 1.9) \mu\text{mol/L}$ , control Etoposide,  $IC_{50}$  =  $(0.5 \pm 0.2) \mu\text{mol/L}$ , *cis*-Platin,  $IC_{50}$  =  $(3.2 \pm 0.5) \mu\text{mol/L}$ ; KB cell,  $IC_{50}$  =  $(6.7 \pm 2.6) \mu\text{mol/L}$ , Etoposide,  $IC_{50}$  =  $(0.9 \pm 0.3) \mu\text{mol/L}$ , *cis*-Platin,  $IC_{50}$  =  $(4.4 \pm 0.9) \mu\text{mol/L}$ ; HT29 cell,  $IC_{50}$  >  $10 \mu\text{mol/L}$ , Etoposide,  $IC_{50}$  =  $(2.4 \pm 0.5) \mu\text{mol/L}$ , *cis*-Platin,  $IC_{50}$  =  $(5.7 \pm 1.1) \mu\text{mol/L}$ ). **Source:** RONG SHU *Ficus microcarpa* (aerial root). **Ref:** 5254.

**333 Acetylbinankadsurin A**

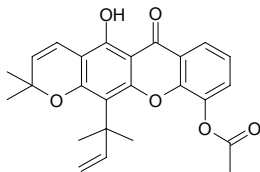
$C_{24}H_{28}O_8$  (444.49). **Source:** RI BEN NAN WU WEI ZI *Kadsura japonica*. **Ref:** 660.

**334 5 $\alpha$ -Acetyl-1 $\beta$ ,8 $\alpha$ -bis-cinnamoyl-4 $\alpha$ -hydroxydihydroagarofuran**

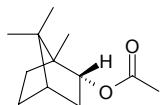
$C_{35}H_{40}O_8$  (588.70). Amorphous powder,  $[\alpha]_D^{25}$  =  $+198.0^\circ$  ( $c$  = 0.3, MeOH). **Source:** NAN RI BEN LEI GONG TENG *Tripterygium doianum*. **Ref:** 1916.

**335 Acetyl blancoxanthone**

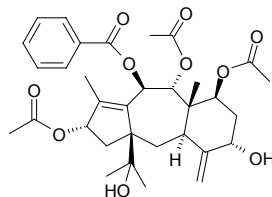
$C_{25}H_{24}O_6$  (420.47). Yellowish powder. **Source:** *Calophyllum blancoi* (root). **Ref:** 4441.

**336 Acetylborneol**

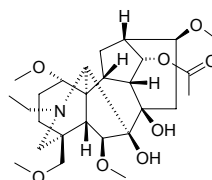
1,7,7-Trimethyl-acetate-endobicyclo[2.2.1]heptan-2-ol [76-49-3]  $C_{12}H_{20}O_2$  (196.29). mp  $26.5\text{--}29.0^\circ\text{C}$ , bp  $225\text{--}226^\circ\text{C}$ . **Source:** HOU PO *Magnolia officinalis*, HUANG HUA HAO *Artemisia annua*, LIAO XI XIN *Asarum heterotropoides* var. *mandshuricum*, QIANG HUO *Notopterygium incisum*, SHENG JIANG *Zingiber officinale*, WU WEI ZI *Schisandra chinensis*, XI XIN *Asarum sieboldii*, YIN CHEN HAO *Artemisia capillaris*, YU XING CAO *Houttuynia cordata*. **Ref:** 1, 2, 6, 660.

**337 13-Acetylbrevifoliosol**

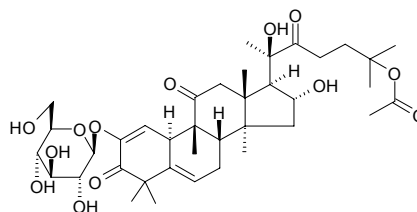
$C_{33}H_{42}O_{10}$  (598.70).  $[\alpha]_D$  =  $+8^\circ$  (MeOH). **Source:** XI MA LA YA HONG DOU SHAN *Taxus wallichiana*. **Ref:** 662.

**338 Acetylbrowniine**

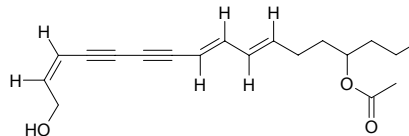
[65601-04-9]  $C_{27}H_{43}NO_8$  (509.65). **Pharm:** Ileal smooth muscle stimulant (gpg, 0.2mmol/L). **Source:** XI SHAN CUI QUE *Delphinium oreophilum*, LIANG SI FEI YAN CAO *Consolida ambigua*. **Ref:** 658.

**339 25-O-Acetylbryoamaride**

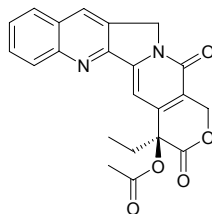
$C_{38}H_{56}O_{13}$  (720.86). Pale yellow amorphous solid,  $[\alpha]_D$  =  $-61.0^\circ$  ( $c$  = 0.94,  $\text{CHCl}_3$ ). **Source:** FENG GUA *Gymnopetalum integrifolium* (fruit). **Ref:** 4189.

**340 Acetyl-bupleurotoxin**

$C_{19}H_{24}O_3$  (300.40). Colorless lamellar crystals, mp  $48^\circ\text{C}$ ,  $[\alpha]_D^{18}$  =  $-10^\circ$  ( $c$  = 0.04, methanol). **Pharm:** Toxin. **Source:** DA YE CHAI HU *Bupleurum longiradiatum*. **Ref:** 81.

**341 20-O-Acetylcamptothecin**

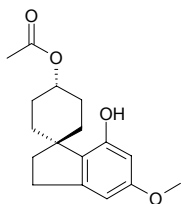
$C_{22}H_{18}N_2O_5$  (390.40). **Source:** XI SHU *Camptotheca acuminata*. **Ref:** 4097.



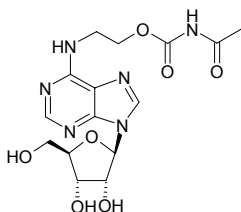


**342 Acetyl cannabispipol**

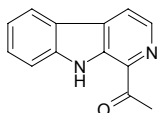
$C_{17}H_{22}O_4$  (290.36). Source: MA YE *Cannabis sativa*. Ref: 660.

**343  $N^6$ -[ $\beta$ -(Acetylcarbamoyloxy)ethyl] adenosine**

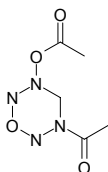
$C_{15}H_{20}N_6O_7$  (396.36). White crystal powder. Source: REN GONG YONG CHONG CAO *Cordyceps militaris* cv. Ref: 858.

**344 1-Acetyl- $\beta$ -carboline**

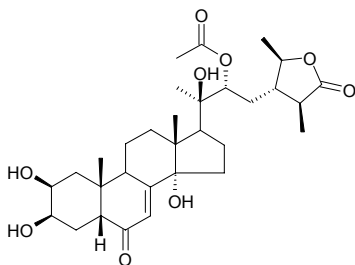
[50892-83-6]  $C_{13}H_{10}N_2O$  (210.24). Source: KU MU *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. Ref: 12.

**345 3-Acetyl-5-carbomethoxy-2H-3,4,5,6-tetrahydro-1-oxa-2,3,5,6-tetrazine**

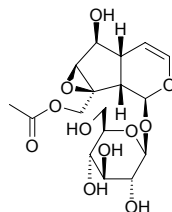
$C_5H_{10}N_4O_4$  (190.16). Source: XIAN MAO *Curculigo orchoides*. Ref: 660.

**346 22-Acetylasterone**

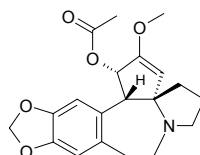
$C_{31}H_{46}O_9$  (562.71). White amorphous solid, mp 212~214°C,  $[\alpha]_D^{25} = +111.7^\circ$  ( $c = 0.007$ ,  $CHCl_3$ ). Source: TAI WAN JIN GU CAO *Ajuga taiwanensis* (whole plant). Ref: 4483.

**347 Acetylcatalpol**

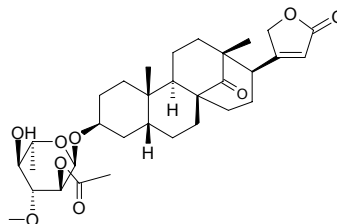
$C_{17}H_{24}O_{11}$  (404.37). Source: GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*]. Ref: 2.

**348 Acetylcephalotaxine**

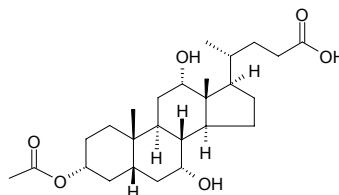
[24274-60-0]  $C_{20}H_{23}NO_5$  (357.41). Source: SAN JIAN SHAN *Cephalotaxus fortunei*. Ref: 2.

**349 2'-O-Acetyl cerleaside A**

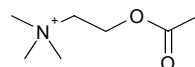
$C_{32}H_{46}O_9$  (574.72). White solid, mp 209~211°C,  $[\alpha]_D^{26} = -62.50^\circ$  ( $c = 0.0016$ ,  $CHCl_3$ ). Pharm: Cytotoxic (KB,  $ED_{50} = 7.56\mu g/mL$ ; BC,  $ED_{50} = 4.62\mu g/mL$ ; NCI-H187,  $ED_{50} = 7.42\mu g/mL$ ; control Ellipticine,  $ED_{50} = 0.3\text{--}0.6\mu g/mL$ )<sup>[3777]</sup>. Source: AO DAO LA MU HAI MANG GUO *Cerbera odollam* (seed), NIU XIN QIE ZI *Cerbera manghas*. Ref: 2594, 3777.

**350 Acetylcholic acid**

$C_{26}H_{42}O_6$  (450.62). Source: XIANG DAN *Elephas maximus*. Ref: 6.

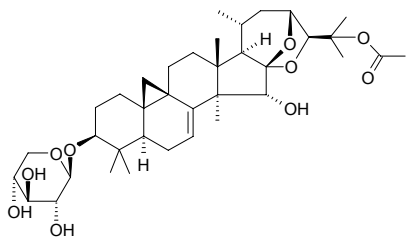
**351 Acetylcholine**

*O*-Acetylcholine [51-84-3]  $C_7H_{16}NO_2^+$  (146.21). Source: FENG MI *Apis cerana*, FENG RU *Apis cerana*, JI CAI *Capsella bursa-pastoris*, MAI JIAO *Claviceps purpurea*, SHAN ZHA *Crataegus pinnatifida*, SHAN ZHA YE *Crataegus pinnatifida*, SHI QI *Diospyros kaki*, XIONG DAN *Selenarctos thibetanus*; *Ursus arctos*. Ref: 6, 660.

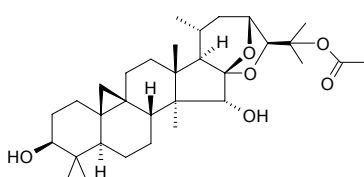


**352 Acetylcimifugoside**

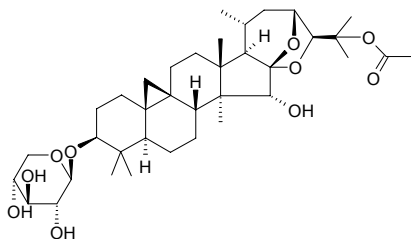
25-*O*-Acetyl-7,8-didehydrocimigenol 3-*O*- $\beta$ -D-xylopyranoside C<sub>37</sub>H<sub>56</sub>O<sub>10</sub> (660.85). Source: XING AN SHENG MA *Cimicifuga dahurica* (rhizome), YE SHENG MA *Cimicifuga simplex*. Ref: 6, 4140.

**353 25-*O*-Acetylcimigenol**

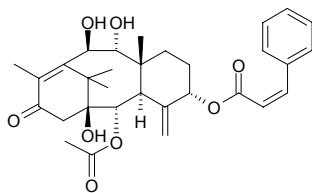
C<sub>37</sub>H<sub>50</sub>O<sub>6</sub> (530.75). mp 193~194°C. Source: SAN MIAN DAO *Cimicifuga acerina*. Ref: 6.

**354 25-*O*-Acetylcimigenoside**

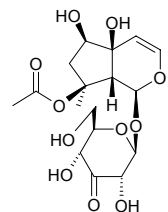
C<sub>37</sub>H<sub>58</sub>O<sub>10</sub> (662.87). mp 234~235°C. Source: SAN MIAN DAO *Cimicifuga acerina*, YE SHENG MA *Cimicifuga simplex*. Ref: 6.

**355 2-*O*-Acetyl-5-*O*-cinnamoyltaxicin I**

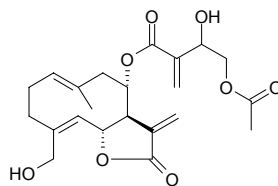
C<sub>31</sub>H<sub>38</sub>O<sub>8</sub> (538.64). Source: JIANG GUO ZI SHAN *Taxus baccata*. Ref: 662.

**356 8-*O*-Acetylclandonoside**

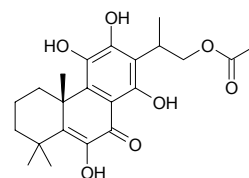
8-*O*-Acetylharpagide-aglucone-1-*O*- $\beta$ -D-ribohexo-3-ulopyranoside [239449-45-7] C<sub>17</sub>H<sub>24</sub>O<sub>11</sub> (404.37). White amorphous powder. Source: ZHAO JIAO YOU<sup>(2)</sup> *Caryopteris clandonensis*. Ref: 2312.

**357 4'-Acetylenicin**

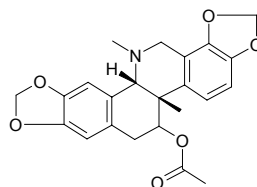
C<sub>22</sub>H<sub>28</sub>O<sub>8</sub> (420.46). Pharm: Antifungal (*Aspergillus niger*, MIC = 0.125 $\mu$ g/mL, control Miconazole, MIC = 1.5 $\mu$ g/mL; *Aspergillus ochraceus*, MIC = 0.06 $\mu$ g/mL, Miconazole, MIC = 1.5 $\mu$ g/mL; *Aspergillus versicolor*, MIC = 0.125 $\mu$ g/mL, Miconazole, MIC = 2 $\mu$ g/mL; *Aspergillus flavus*, MIC = 0.125 $\mu$ g/mL, Miconazole, MIC = 0.5 $\mu$ g/mL; *Penicillium ochrochloron*, MIC = 0.25 $\mu$ g/mL, Miconazole, MIC = 2 $\mu$ g/mL; *Penicillium funiculosum*, MIC = 0.5 $\mu$ g/mL, Miconazole, MIC = 2 $\mu$ g/mL; *Trichoderma viride*, MIC = 0.5 $\mu$ g/mL, Miconazole, MIC = 2 $\mu$ g/mL; *Cladosporium cladosporioides*, MIC = 0.125 $\mu$ g/mL, Miconazole, MIC = 0.03 $\mu$ g/mL; *Alternaria alternata*, MIC = 0.125 $\mu$ g/mL, Miconazole, MIC = 0.5 $\mu$ g/mL). Source: *Centaurea thessala* ssp. *drakiensis* (aerial parts), *Centaurea attica* ssp. *attica* (aerial parts). Ref: 5115.

**358 16-*O*-Acetylcoleon C**

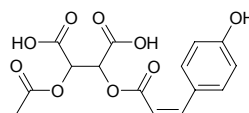
C<sub>22</sub>H<sub>28</sub>O<sub>7</sub> (404.46). Source: HUANG QIAO RUI HUA *Coleus xanthanthus* (aerial parts: yield = 0.00021% dw). Ref: 4625.

**359 Acetylcorynoline**

C<sub>23</sub>H<sub>23</sub>NO<sub>6</sub> (409.44). mp 157~159°C. Source: KU DI DING *Corydalis bungeana* (whole herb with root: content scope of 5 origins = 0.032%~0.059%, mean content = 0.058%<sup>[5508]</sup>), YUN QIAN HU *Peucedanum rubricaulis*, ZI HUA YU DENG CAO *Corydalis incisa*. Ref: 6, 436, 5501, 5508.

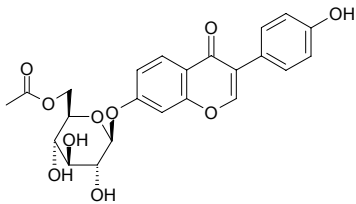
**360 2-*O*-Acetyl-3-(*p*-coumaroyl)-*meso*-tartaric acid**

C<sub>15</sub>H<sub>14</sub>O<sub>9</sub> (338.27). Source: BO CAI *Spinacia oleracea*. Ref: 6.

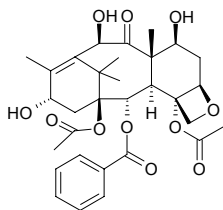


**361 6"-O-Acetylaidzin**

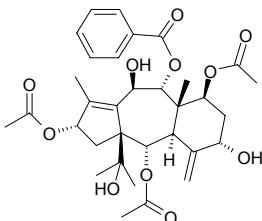
Daidzein 7-O-β-D-(6"-O-acetylglucopyranoside) [71385-83-6] C<sub>27</sub>H<sub>22</sub>O<sub>10</sub> (458.43). Needles, mp 186~189°C. **Pharm:** Phyto-estrogen; antioxidant. **Source:** DOU YOU *Glycine max*, DA DOU *Glycine max* (Soybean phytochemical concentrate: yield = 0.036%dw)<sup>[4630]</sup>. **Ref:** 2200, 4630.

**362 1-Acetyl-10-deacetylbaaccatin III**

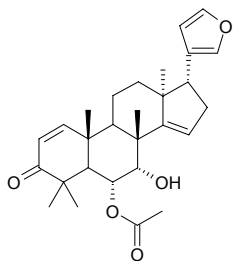
C<sub>31</sub>H<sub>38</sub>O<sub>11</sub> (586.64). **Source:** JIA NA DA HONG DOU SHAN *Taxus canadensis*. **Ref:** 662.

**363 13-Acetyl-9-deacetyl-9-benzoyl-10-debenzoyltaxchinin A**

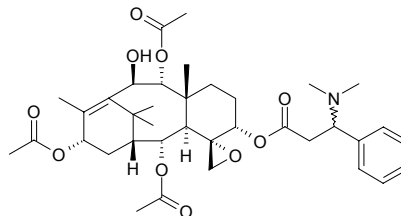
C<sub>33</sub>H<sub>42</sub>O<sub>11</sub> (614.70). mp 121~122°C, [α]<sub>D</sub> = -14.9° (CHCl<sub>3</sub>). **Source:** HONG DOU SHAN *Taxus chinensis*. **Ref:** 662.

**364 6α-O-Acetyl-7-deacetylnimocinol**

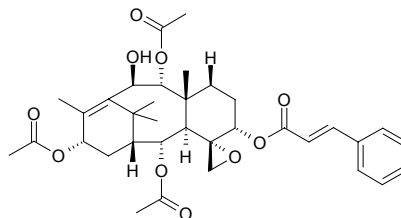
24,25,26,27-Tetra-norapotirucalla-(apoeupha)-6α-acetoxy-7α-hydroxy-1,14,20,22-tetraen-21,23-epoxy-3-one C<sub>28</sub>H<sub>36</sub>O<sub>5</sub> (452.60). Slender rods (MeOH), mp 60~62°C, [α]<sub>D</sub><sup>27</sup> = +6.6° (c = 0.12, CHCl<sub>3</sub>). **Pharm:** Insecticidal (*Aedes aegypti*, 21.0mg/L, mean mortalities = 50%, Range = (41.84~58.15)%; 31.5 mg/L, mean mortalities = 62%, Range = (56.84~67.16)%; 42.0 mg/L, mean mortalities = 72%, Range = (66.84~77.16)%; 52.5 mg/L, mean mortalities = 84%, Range = (77.68~90.32)%; 63.0 mg/L, mean mortalities = 92%, Range = (86.84~97.16)%). **Source:** YIN DU LIAN *Azadiractica indica* (fresh leaf). **Ref:** 3914.

**365 9α-Acetyl-10β-deacetyl-spicataxine**

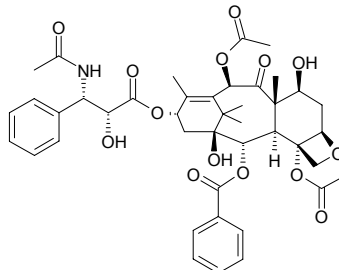
[126585-91-9] C<sub>37</sub>H<sub>51</sub>NO<sub>10</sub> (669.82). **Source:** AO DA LI YA HONG DOU SHAN *Austrotaxus spicata*. **Ref:** 662.

**366 9α-Acetyl-10β-deacetyl-spicataine**

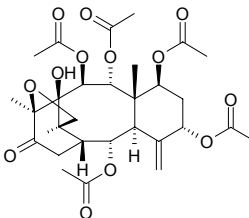
[126617-15-0] C<sub>35</sub>H<sub>44</sub>O<sub>10</sub> (624.73). **Source:** AO DA LI YA HONG DOU SHAN *Austrotaxus spicata*. **Ref:** 662.

**367 N-Acetyl-N-debenzoyltaxol**

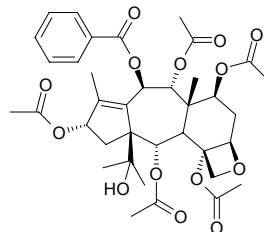
C<sub>42</sub>H<sub>49</sub>NO<sub>14</sub> (791.86). Gum. **Source:** JIA NA DA HONG DOU SHAN *Taxus canadensis* (needle leaf). **Ref:** 3958.

**368 5α-Acetyl-5α-decinnamoyltaxagifine**

C<sub>30</sub>H<sub>40</sub>O<sub>13</sub> (608.65). **Source:** HONG DOU SHAN *Taxus chinensis*. **Ref:** 662.

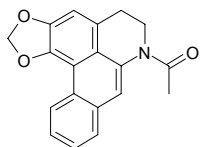
**369 13-Acetyl-13-decinnamoyltaxchinin B**

C<sub>37</sub>H<sub>46</sub>O<sub>14</sub> (718.77). mp 243~244°C, [α]<sub>D</sub> = -54° (CHCl<sub>3</sub>). **Source:** JIANG GUO ZI SHAN *Taxus baccata*. **Ref:** 662.

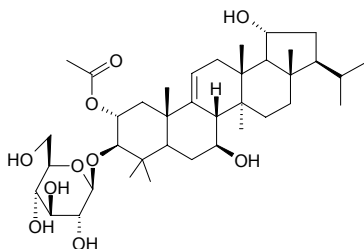


**370 N-Acetyldehydroanonaine**

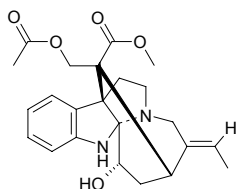
$C_{19}H_{15}NO_3$  (305.34). **Pharm:** Platelet aggregation inhibitor; DNA isomerase inhibitor; antibacterial; cytotoxic. **Source:** YE HUA JIAO YE *Zanthoxylum simulans*. **Ref:** 2176.

**371 2-O-Acetyl-28-dehydroxy-rubianoside IV**

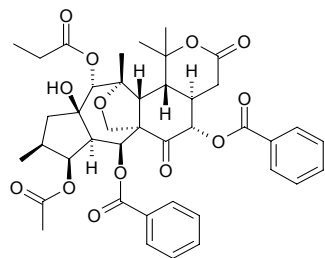
$C_{38}H_{62}O_{10}$  (678.91). **Pharm:** Anti-inflammatory inactive (inhibits nitric oxide production, LPS-activated mouse peritoneal macrophages, 100 $\mu$ mol/L, InRt = (5.8 $\pm$ 3.8)%; control *L*-NMMA, IC<sub>50</sub> = 57 $\mu$ mol/L);  $\beta$ -hexosaminidase inhibitor inactive (rat basophilic cell RBL-2H3, inhibits release of  $\beta$ -hexosaminidase, 100 $\mu$ mol/L, InRt = (-15.4 $\pm$ 1.4)%). **Source:** XIAO HONG SHEN *Rubia yunnanensis* (root). **Ref:** 4347.

**372 22-O-Acetyl-N<sub>6</sub>-demethyl-echitamine**

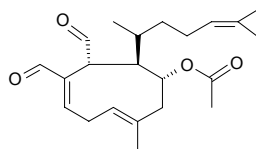
$C_{23}H_{28}N_2O_5$  (412.49). White acicular crystals, mp 234°C. **Source:** PEN JIA SHU *Winchia calophylla*. **Ref:** 270.

**373 3-Acetyl-5 $\beta$ ,8 $\alpha$ -dibenzylformyl-14-propanoyl myrsinoltype diterpene with C9-C10 cyclized to form an additional lactone ring**

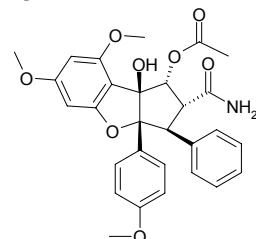
$C_{41}H_{46}O_{13}$  (746.82). White acicular crystals, mp 276–278°C. **Source:** TU GUA LANG DU *Euphorbia prolifera*. **Ref:** 807.

**374 4 $\alpha$ -Acetyldictyodial**

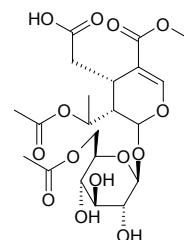
$C_{20}H_{32}O_4$  (360.50). Colorless oil,  $[\alpha]_D^{20} = -163.6^\circ$  ( $c = 0.30$ ,  $CH_2Cl_2$ ). **Source:** XIAN ZHUANG WANG DI ZAO *Dictyota linearis*. **Ref:** 3818.

**375 1-O-Acetyl-N,N-didemethylcroglamide**

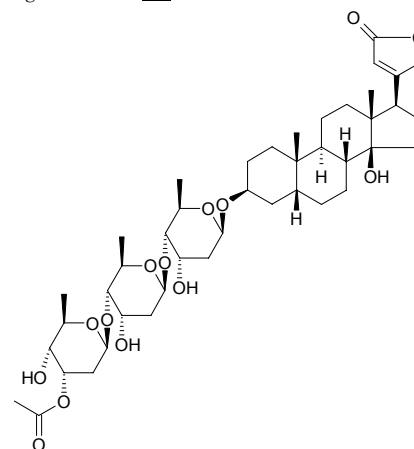
[259143-57-2]  $C_{29}H_{29}NO_8$  (519.56). **Pharm:** Insecticidal (neonate larvae of *Spodoptera littoralis*, LC<sub>50</sub> = 1.97mg/L, EC<sub>50</sub> = 0.14mg/L; control Azadirachtin, LC<sub>50</sub> = 0.9mg/L, EC<sub>50</sub> = 0.04mg/L). **Source:** *Aglaia duperreana*. **Ref:** 2376.

**376 6'-O-Acetyldideroside**

6'-Acetyl- $\beta$ -D-glucopyranosyldideroside  $C_{21}H_{30}O_{14}$  (506.46). Amorphous powder,  $[\alpha]_D^{25} = -76.5^\circ$  ( $c = 1.0$ , MeOH). **Pharm:** Antitrypanosomal (trypomastigotes of *Trypanosoma cruzi*, *in vitro*, IC<sub>50</sub> = 90.2 $\mu$ g/mL, control Gentian violet, IC<sub>50</sub> = 7.5 $\mu$ g/mL). **Source:** *Calycophyllum spruceanum*. **Ref:** 3439.

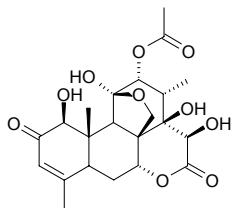
**377  $\alpha$ -Acetyldigitoxin**

[1111-39-3]  $C_{43}H_{66}O_{14}$  (809.96). White, tiny lamellar crystal powder, mp 217–221°C,  $[\alpha]_D^{20} = +5^\circ$  ( $c = 0.7$ , pyridine). **Pharm:** Cardiotonic (same action and usage as digitoxin). **Source:** MAO HUA MAO DI HUANG *Digitalis lanata*. **Ref:** 661.

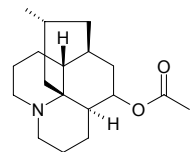


**378 12-Acetyl-13,21-dihydroeurycomanone**

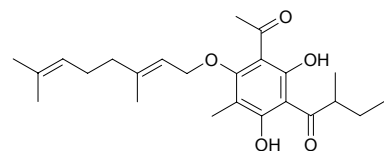
$C_{22}H_{28}O_{10}$  (452.46). **Pharm:** Cytotoxic (P<sub>388</sub> cells, IC<sub>50</sub> = 0.94 μg/mL). **Source:** *Eurycoma* sp. **Ref:** 4556.

**379 O-Acetyl-dihydrolycopodine**

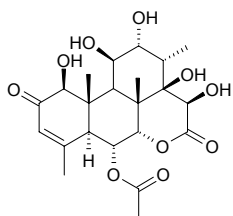
$C_{18}H_{29}NO_2$  (291.44). **Source:** YU BAI SHI SONG *Lycopodium obscurum*. **Ref:** 660.

**380 2-Acetyl-3,5-dihydroxy-1-geranoxy-6-methyl-4-(2-methyl)butyrylbenzene**

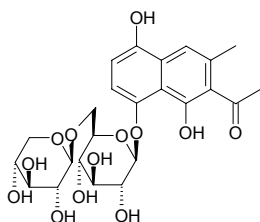
$C_{24}H_{34}O_5$  (402.54). Colorless oil,  $[\alpha]_D^{31.2} = -7.02^\circ$  ( $c = 0.057$ , MeOH). **Source:** DI ER CAO *Hypericum japonicum*. **Ref:** 762.

**381 6α-Acetyl-14β,15β-dihydroxyklaineanone**

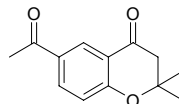
$C_{22}H_{30}O_{10}$  (454.48). **Source:** *Eurycoma* sp. **Ref:** 4556.

**382 2-Acetyl-1,5-dihydroxy-3-methyl-8-O(β-xylopyranosyl-(1→6)-O-(β-glucopyranosyl)) naphthalene**

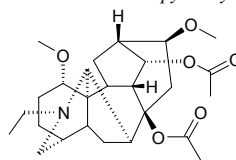
$C_{24}H_{30}O_{13}$  (526.50). **Source:** TA SI MA NI YA JIE GENG LAN *Dianella tasmanica* (berry), HEI JIE GENG LAN *Dianella nigra* (berry). **Ref:** 5214.

**383 6-Acetyl-2,2-dimethylchroman-4-one**

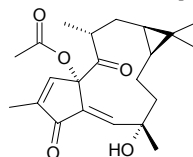
$C_{13}H_{14}O_3$  (218.25). **Pharm:** Platelet aggregation inhibitor (washed rabbit platelets, 100 μg/mL, 100 μmol/L AA-induced, AggRt = 100%, control 50 μmol/L Aspirin, AggRt = 100%; 10 μg/mL collagen-induced, AggRt = 11.1%, 100 μmol/L Aspirin, AggRt = 4.9%; 0.1 U/mL thrombin-induced, AggRt = 6.7%, 100 μmol/L Aspirin, AggRt = 1.7%; 2 ng/mL PAF-induced, AggRt = 16.8%, 100 μmol/L Aspirin, AggRt = 2.1%). **Source:** SAN QI CAO *Gynura segetum* [Syn. *Gynura japonica*] (rhizome). **Ref:** 5427.

**384 8-Acetyldolaconine**

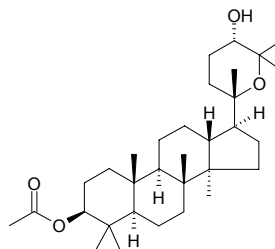
[132160-38-4]  $C_{26}H_{39}NO_6$  (461.60). Wax solid. **Source:** WAN ZHUO WU TOU *Aconitum campylorrhynchum*. **Ref:** 158.

**385 15-O-Acetyl-15-epi-(4E)-jatrogrossidentadione**

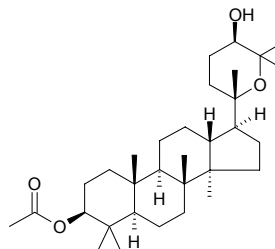
$C_{22}H_{30}O_5$  (374.48). Semi solid,  $[\alpha]_D^{25} = -165.2^\circ$  ( $c = 0.5$ , CHCl<sub>3</sub>). **Source:** MA FENG SHU *Jatropha curcas* (aerial parts). **Ref:** 4287.

**386 3β-Acetyl-20,25-epoxydammarane-24α-ol**

$C_{32}H_{54}O_4$  (502.78). White amorphous solid,  $[\alpha]_D = 22.7^\circ$  ( $c = 0.022$ , CHCl<sub>3</sub>). **Source:** LIAN QIAO *Forsythia suspensa*. **Ref:** 753.

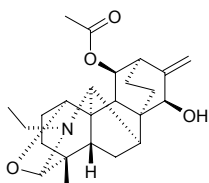
**387 3β-Acetyl-20,25-epoxydammarane-24β-ol**

$C_{32}H_{54}O_4$  (502.78). White gum,  $[\alpha]_D = 81^\circ$  ( $c = 0.05$ , CHCl<sub>3</sub>). **Source:** LIAN QIAO *Forsythia suspensa*. **Ref:** 753.

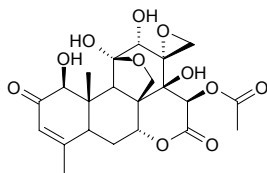


**388 11-Acetyl-1,19-epoxydenudatine**

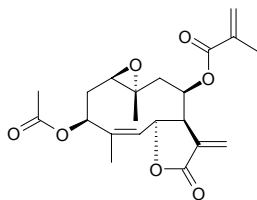
$C_{24}H_{33}NO_4$  (399.53). Colorless needles, mp 201~202°C (acetone). Source: JI LIN WU TOU *Aconitum kirinense*. Ref: 2515.

**389 15-Acetyl-13 $\alpha$ (21)-epoxyeurycomanone**

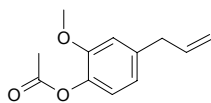
$C_{22}H_{26}O_{11}$  (466.45). Source: *Eurycoma* sp. Ref: 4556.

**390 Acetylerioflorin**

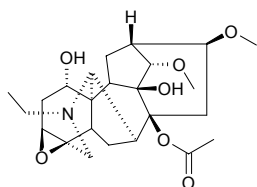
$C_{21}H_{26}O_7$  (390.44). Source: *Viguiera eriophora* ssp. *eriphora* (aerial parts). Ref: 5090.

**391 Acetyleugenol**

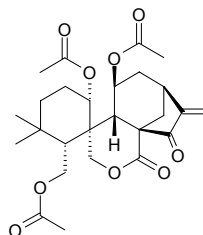
Eugenyl acetate [93-28-7]  $C_{12}H_{14}O_3$  (206.24). mp 30~31°C, bp 281~282°C/752mmHg. Source: DING XIANG *Syzygium aromaticum* [Syn. *Eugenia caryophyllata*] (dried bud, content scope = 1.12%~2.72%<sup>[5501]</sup>), YUE GUI ZI *Laurus nobilis*. Ref: 6, 660, 5501.

**392 8-Acetylcelsine**

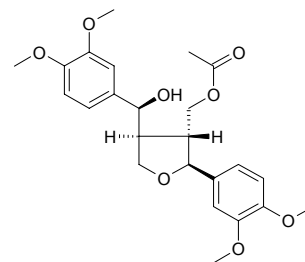
$C_{24}H_{35}NO_7$  (449.55). White resinoid solid. Source: JI LIN WU TOU *Aconitum kirinense*. Ref: 2515.

**393 Acetylexidonin**

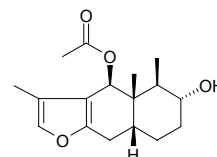
Acetylraabosin B  $C_{26}H_{34}O_9$  (490.56). mp 165~167°C. Source: LAN E XIANG CHA CAI *Isodon japonica* var. *glaucoalyx*. Ref: 4067.

**394 9'-O-Acetyl-(7R,8S,7R,8S)-(-)-fargesol**

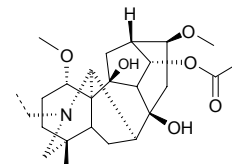
$C_{24}H_{30}O_8$  (446.50). Colorless oil,  $[\alpha]_D^{21.2} = +35.2^\circ$  ( $c = 1.20$ ,  $CHCl_3$ ). Source: ZHOU YE MU LAN *Magnolia praecocissima* (seed). Ref: 4181.

**395 6-Acetylfuranofukinol**

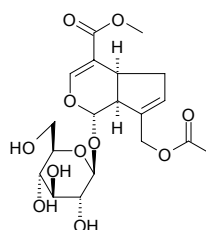
$C_{17}H_{24}O_4$  (292.38). Source: FENG DOU CAI *Petasites japonicus*. Ref: 6.

**396 14-Acetylgenicunine B**

$C_{25}H_{39}NO_6$  (449.59). Amorphous solid,  $[\alpha]_D^{20} = +24.2^\circ$  ( $c = 0.55$ ,  $CHCl_3$ ). Source: BAN HUA WU TOU *Aconitum variegatum* (aerial parts). Ref: 5270.

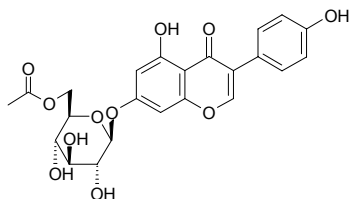
**397 10-O-Acetylgeniposide**

$C_{19}H_{26}O_{11}$  (430.41). Source: ZHI ZI *Gardenia jasminoides* [Syn. *Gardenia florida*]. Ref: 2, 660, 626.

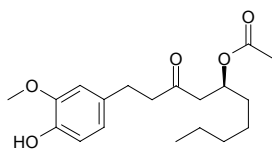


**398 6"-O-Acetylgenistin**

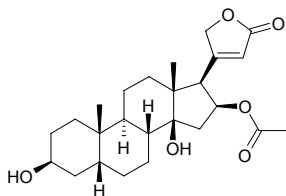
Genistein 7-O- $\beta$ -D-(6"-O-acetylglucopyranoside) [73566-30-0] C<sub>23</sub>H<sub>22</sub>O<sub>11</sub> (474.43). Needles, mp 185~186°C. **Pharm:** Phyto-estrogen; antioxidant. **Source:** DOU YOU *Glycine max*, DA DOU *Glycine max* (Soybean phytochemical concentrate: yield = 0.039%dw)<sup>[4630]</sup>. **Ref:** 2200, 4630.

**399 6-Acetyl gingerol**

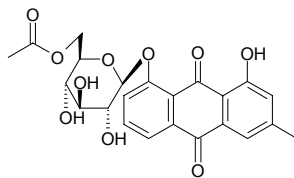
C<sub>19</sub>H<sub>28</sub>O<sub>5</sub> (336.43). **Source:** SHENG JIANG *Zingiber officinale*. **Ref:** 660.

**400 16-Acetylgitoxigenin**

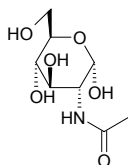
Oleandrigenin [465-15-6] C<sub>25</sub>H<sub>36</sub>O<sub>6</sub> (432.56). Crystals (Me<sub>2</sub>CO-Et<sub>2</sub>O), mp 225~228°C, [ $\alpha$ ]<sub>D</sub><sup>16</sup> = -9.5° (MeOH). **Source:** JIA ZHU TAO *Nerium indicum*, QING MING HUA *Beaumontia grandiflora*. **Ref:** 6, 660, 1521.

**401 8-O- $\beta$ -D-(6'-O-Acetyl)glucopyranosylchrysophanol**

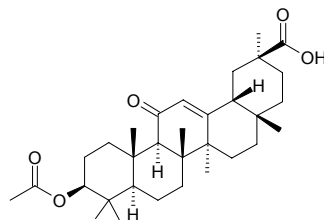
C<sub>23</sub>H<sub>22</sub>O<sub>10</sub> (458.43). **Source:** ZANG BIAN DA HUANG *Rheum emodi* [Syn. *Rheum australe*] (root). **Ref:** 4273.

**402 N-Acetyl-D-glucosamine**

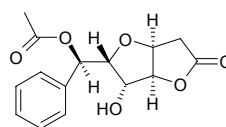
2-Acetyl-amino-2-deoxy-D-glucose [7512-17-6] C<sub>8</sub>H<sub>15</sub>NO<sub>6</sub> (221.21). **Source:** MA YE *Cannabis sativa*, XIE KE *Eriocher sinensis*, YUAN ZHI *Polygala tenuifolia*. **Ref:** 2, 6, 660.

**403 3-O-Acetyl-glycyrrhetic acid**

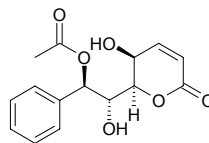
Glycyrrhetic acid acetate C<sub>32</sub>H<sub>48</sub>O<sub>5</sub> (512.74). **Source:** GAN CAO *Glycyrrhiza uralensis*. **Ref:** 2.

**404 8-Acetyl goniofufurone**

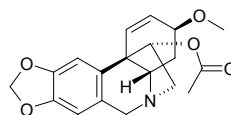
(4*S*,5*R*,6*S*,7*S*,8*R*)-6-Hydroxy-7-( $\alpha$ -acetoxybenzyl)-tetrahydrofuro[3,2-*b*]furan-2-one C<sub>15</sub>H<sub>16</sub>O<sub>6</sub> (292.29). Colorless prismatic crystals (acetone), mp 188~189°C. **Pharm:** Antineoplastic. **Source:** DA HUA GE NA XIANG *Goniothalamus griffithii*. **Ref:** 667.

**405 8-O-Acetylgoniotriol**

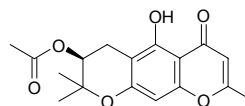
C<sub>15</sub>H<sub>16</sub>O<sub>6</sub> (292.29). [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +66.0° (*c* = 0.39, MeOH). **Source:** DA HUA GE NA XIANG *Goniothalamus griffithii*. **Ref:** 5453.

**406 11-O-Acetyl haemanthamine**

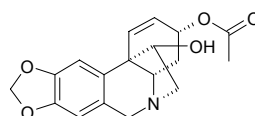
C<sub>19</sub>H<sub>21</sub>NO<sub>5</sub> (343.38). mp. 92~96°C, [ $\alpha$ ]<sub>D</sub><sup>22</sup> = 9.1° (*c* = 0.55, MeOH). **Source:** YI BI LI YA SHUI XIAN *Narcissus bujei*. **Ref:** 1887.

**407 3'-O-Acetylhamaudol**

C<sub>17</sub>H<sub>18</sub>O<sub>6</sub> (318.33). **Source:** FANG FENG *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*]. **Ref:** 2.

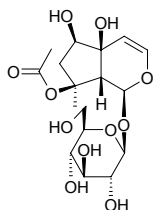
**408 3-O-Acetylhamayne**

C<sub>18</sub>H<sub>19</sub>NO<sub>5</sub> (329.36). **Pharm:** AChE inhibitor (IC<sub>50</sub> = (594±8)μmol/L, control Galanthamine, IC<sub>50</sub> = (1.9±0.2)μmol/L). **Source:** LIN JING ZHONG ZI WEN SHU LAN *Crinum bulbispermum*. **Ref:** 4952.

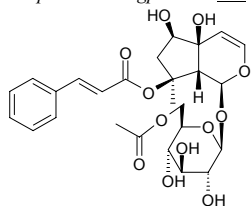


**409 8-Acetylharpagide**

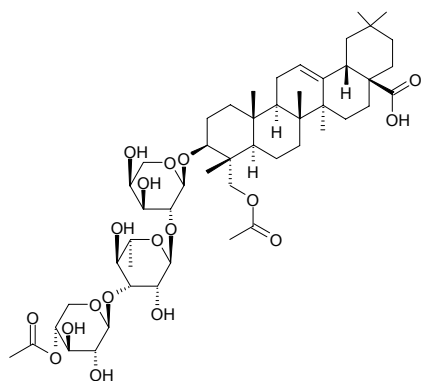
8-*O*-Acetylharpagide C<sub>17</sub>H<sub>26</sub>O<sub>11</sub> (406.39). White powder. Pharm: Antineoplastic (mus-skin *in vivo*, strongly inhibits EBV-EA induction). Source: BAI MAO XIA KU CAO *Ajuga decumbens*, BO SI YI MU CAO *Leonurus persicus*, LI ZHI HAO *Ajuga forrestii*, LONG TU ZHU *Clerodendrum thomsonae*, PU FU JIN GU CAO *Ajuga reptans*, TAI WAN JIN GU CAO *Ajuga taiwanensis* (whole plant). Ref: 660, 693, 1521, 2499, 4483.

**410 6'-*O*-Acetylharpagoside**

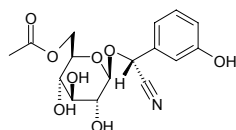
C<sub>26</sub>H<sub>32</sub>O<sub>12</sub> (536.54). White amorphous powder. Source: XUAN SHEN *Scrophularia ningpoensis*. Ref: 781.

**411 23-*O*-Acetylhederagenin 3-*O*-(4-*O*-acetyl-β-*D*-xylopyranosyl)-(1→3)-α-*L*-rhamnopyranosyl-(1→2)-α-*L*-arabinopyranoside**

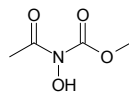
C<sub>50</sub>H<sub>78</sub>O<sub>18</sub> (967.17). White amorphous powder, [α]<sub>D</sub><sup>22</sup> = -10.4° (*c* = 0.7, MeOH). Source: AO TOU WU HUAN ZI *Sapindus emarginatus* (pericarp). Ref: 4123.

**412 6-Acetyl holocalin**

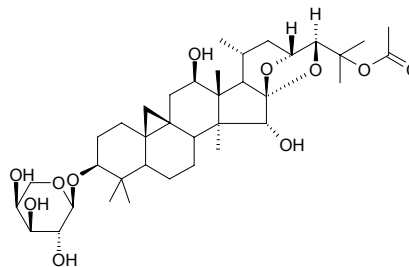
C<sub>16</sub>H<sub>19</sub>NO<sub>8</sub> (353.33). Pharm: Plant growth stimulatory or inhibitory activity (radicle length: *Lactuca sativa*, 1 μmol/L, StRt/InRt < 10%, 10 μmol/L, StRt/InRt < 10%, 100 μmol/L, StRt/InRt < 10%, 1 mmol/L, InRt = (10~30)%; *Raphanus sativus*, 1 μmol/L, StRt/InRt < 10%, 10 μmol/L, StRt/InRt < 10%, 100 μmol/L, StRt/InRt < 10%, 1 mmol/L, StRt/InRt < 10%; *Allium cepa*, 1 μmol/L, StRt/InRt < 10%, 10 μmol/L, InRt = (10~30)%, 100 μmol/L, StRt/InRt < 10%, 1 mmol/L, StRt/InRt < 10%). Source: XI YANG JIE GU MU *Sambucus nigra*. Ref: 5217.

**413 *N*-Acetyl-*N*-hydroxy-2-carbamic acid methyl ester**

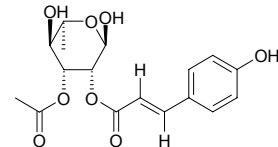
C<sub>4</sub>H<sub>7</sub>NO<sub>4</sub> (133.10). Source: XIAN MAO *Curculigo orchoides*. Ref: 660.

**414 25-*O*-Acetyl-12β-hydroxycimigenol 3-*O*-α-*L*-arabinopyranoside**

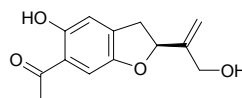
C<sub>37</sub>H<sub>58</sub>O<sub>11</sub> (678.87). Amorphous solid, [α]<sub>D</sub><sup>26</sup> = +26.0° (*c* = 0.10, MeOH). Pharm: Cytotoxic (HSC-2 cells, IC<sub>50</sub> = 142 μmol/L, control Etoposide, IC<sub>50</sub> = 24 μmol/L; HGF cells, IC<sub>50</sub> = 271 μmol/L). Source: ZONG ZHUANG SHENG MA *Cimicifuga racemosa* (rhizome). Ref: 4158.

**415 3-*O*-Acetyl-2-*O*-(*p*-hydroxycinnamoyl)-α-*L*-rhamnose**

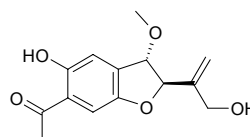
Ningposide C C<sub>17</sub>H<sub>20</sub>O<sub>8</sub> (352.34). Oil, [α]<sub>D</sub><sup>30</sup> = +79.63° (*c* = 0.38, acetone). Source: XUAN SHEN *Scrophularia ningpoensis*. Ref: 674, 741.

**416 6-Acetyl-5-hydroxy-2-(1-hydroxy-2-propenyl)-2,3-dihydrobenzofuran**

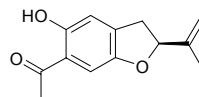
Viscidone C<sub>13</sub>H<sub>14</sub>O<sub>4</sub> (234.25). Glassy amorphous solid. Source: XIAO SHE JU GEN *Microglossa pyrifolia*, NIAN ZHI JIN ZHI JU *Chrysothamnus viscidiflorus*. Ref: 5374.

**417 6-Acetyl-5-hydroxy-2-(1-hydroxy-2-propenyl)-3-methoxy-2,3-dihydrobenzofuran**

C<sub>14</sub>H<sub>16</sub>O<sub>5</sub> (264.28). Glassy amorphous solid. Source: XIAO SHE JU GEN *Microglossa pyrifolia*. Ref: 5374.

**418 6-Acetyl-5-hydroxy-2-isopropenyl-2,3-dihydrobenzofuran**

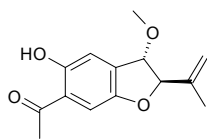
C<sub>13</sub>H<sub>14</sub>O<sub>3</sub> (218.25). Glassy amorphous solid. Source: XIAO SHE JU GEN *Microglossa pyrifolia*, *Trichocline reptans*. Ref: 5374.



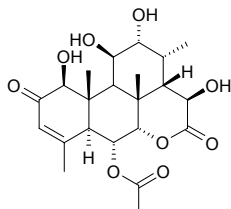


**419 6-Acetyl-5-hydroxy-2-isopropenyl-3-methoxy-2,3-dihydrobenzofuran**

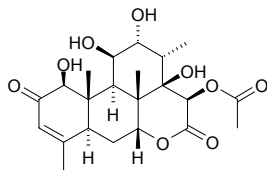
C<sub>14</sub>H<sub>16</sub>O<sub>4</sub> (248.28). Glassy amorphous solid. Source: XIAO SHE JU GEN *Microglossa pyriformis*, *Acritopappus* spp. Ref: 5374.

**420 6 $\alpha$ -Acetyl-15 $\beta$ -hydroxyklaineanone**

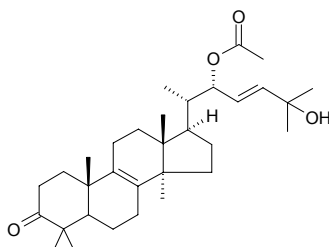
C<sub>22</sub>H<sub>30</sub>O<sub>9</sub> (438.48). Source: *Eurycoma* sp. Ref: 4556.

**421 15 $\beta$ -O-Acetyl-14-hydroxyklaineanone**

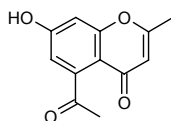
C<sub>22</sub>H<sub>30</sub>O<sub>9</sub> (438.48). Pharm: Plant growth inhibitor (Cucumber seedling, root growth, IC<sub>50</sub> = (17.6±0.5)μmol/L, shoot growth, IC<sub>50</sub> > 200μmol/L; Rice seedling, root growth, IC<sub>50</sub> > 200μmol/L, shoot growth, IC<sub>50</sub> > 200μmol/L)<sup>[5215]</sup>. Source: CHANG YE KUAN MU *Eurycoma longifolia* (leaf), *Eurycoma* sp. Ref: 4556, 5215.

**422****(20S,22S,23E)-22-O-Acetyl-25-hydroxylanosta-8,23(E)-dien-3-one**

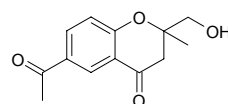
C<sub>32</sub>H<sub>50</sub>O<sub>4</sub> (498.75). mp 166~168°C, [ $\alpha$ ]<sub>D</sub><sup>31</sup> = +62.1° (c = 0.15, CHCl<sub>3</sub>). Pharm: Anti-HSV-1 (IC<sub>50</sub> = 5.2μg/mL; control Acyclovir, IC<sub>50</sub> = 2.0~5.0μg/mL); cytotoxic inactive (hmn small cell lung cancer cells NCI-H187). Source: HUANG YING PI MA BO *Scleroderma citrinum*. Ref: 5406.

**423 5-Acetyl-7-hydroxy-2-methylbenzopyran- $\gamma$ -one**

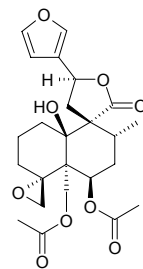
C<sub>12</sub>H<sub>10</sub>O<sub>4</sub> (218.21). Source: DA HUANG *Rheum officinale*. Ref: 2.

**424 6-Acetyl-2-hydroxymethyl-2-methylchroman-4-one**

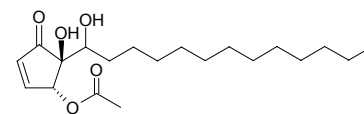
C<sub>13</sub>H<sub>14</sub>O<sub>4</sub> (234.25). [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +10.8° (c = 0.1, CHCl<sub>3</sub>). Pharm: Platelet aggregation inhibitor (washed rabbit platelets, 100μg/mL, 100μmol/L AA-induced, AggRt = 10.3%, control 50μmol/L Aspirin, AggRt = 100%; 10μg/mL collagen-induced, AggRt = 1.9%, 100μmol/L Aspirin, AggRt = 4.9%; 0.1U/mL thrombin-induced, AggRt = 4.9%, 100μmol/L Aspirin, AggRt = 1.7%; 2ng/mL PAF-induced, AggRt = 3.6%, 100μmol/L Aspirin, AggRt = 2.1%). Source: SAN QI CAO *Gynura segetum* [Syn. *Gynura japonica*] (rhizome). Ref: 5427.

**425 6-Acetyl-10-hydroxyteucjaponin B**

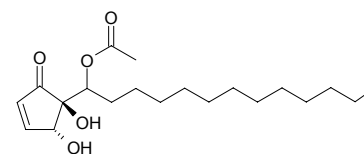
10-Hydroxymontanin C C<sub>24</sub>H<sub>30</sub>O<sub>9</sub> (462.50). White amorphous solid, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +35.2° (c = 0.13, CHCl<sub>3</sub>). Pharm: Insect antifeedant (fifth instar larvae of *Spodoptera littoralis*, dual-choice feeding assays, dose = 10μg/cm<sup>2</sup>, FR<sub>50</sub> = 0.08±0.01, dose = 1μg/cm<sup>2</sup>, FR<sub>50</sub> = 0.16±0.02). Source: GUAN CONG XIANG KE KE *Teucrium fruticans*. Ref: 3761.

**426 4-O-Acetyl hygrophorone A<sup>12</sup>**

4,5-*trans*-4-Acetoxy-5-hydroxy-5-(1-hydroxytridecyl)-2-cyclopenten-1-one C<sub>20</sub>H<sub>34</sub>O<sub>5</sub> (354.49). Colorless oil. Pharm: Antifungal (*Cladosporium cucumerinum*, 20μg, IZA = 188mm<sup>2</sup>, 40μg, IZA = 217mm<sup>2</sup>). Source: *Hygrophorus persoonii*. Ref: 3800.

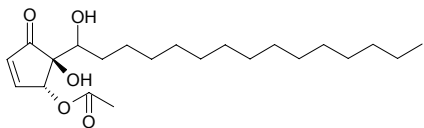
**427 6-O-Acetyl hygrophorone A<sup>12</sup>**

4,5-*trans*-4,5-Dihydroxy-5-(1-acetoxytridecyl)-2-cyclopenten-1-one C<sub>20</sub>H<sub>34</sub>O<sub>5</sub> (354.49). Colorless oil. Source: *Hygrophorus persoonii*. Ref: 3800.

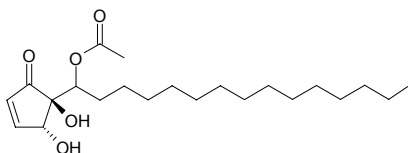


**428 4-O-Acetyl hygrophorone A<sup>14</sup>**

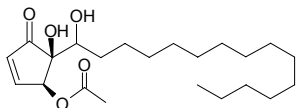
4,5-*trans*-4-Acetoxy-5-hydroxy-5-(1-hydroxypentadecyl)-2-cyclopenten-1-one C<sub>22</sub>H<sub>38</sub>O<sub>5</sub> (382.55). Colorless oil. Source: *Hygrophorus persoonii*. Ref: 3800.

**429 6-O-Acetyl hygrophorone A<sup>14</sup>**

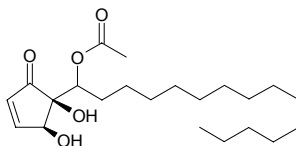
4,5-*trans*-4,5-Dihydroxy-5-(1-acetoxypentadecyl)-2-cyclopenten-1-one C<sub>22</sub>H<sub>38</sub>O<sub>5</sub> (382.55). Colorless oil. Source: *Hygrophorus persoonii*. Ref: 3800.

**430 4-O-Acetyl hygrophorone B<sup>14</sup>**

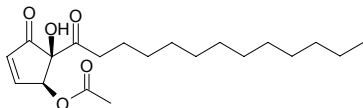
4,5-*cis*-4-Acetoxy-5-hydroxy-5-(1-hydroxypentadecyl)-2-cyclopenten-1-one C<sub>22</sub>H<sub>38</sub>O<sub>5</sub> (382.55). Colorless oil. Source: *Hygrophorus olivaceoalbus*. Ref: 3800.

**431 6-O-Acetyl hygrophorone B<sup>14</sup>**

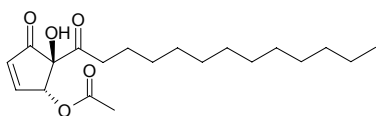
4,5-*cis*-4,5-Dihydroxy-5-(1-acetoxypentadecyl)-2-cyclopenten-1-one C<sub>22</sub>H<sub>38</sub>O<sub>5</sub> (382.55). Colorless oil. Source: *Hygrophorus olivaceoalbus*. Ref: 3800.

**432 4-O-Acetyl hygrophorone C<sup>12</sup>**

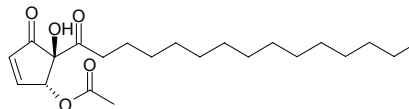
*cis*-4-Acetoxy-5-hydroxy-5-tridecanoyl-2-cyclopenten-1-one C<sub>20</sub>H<sub>32</sub>O<sub>5</sub> (352.48). White solid. Pharm: Antifungal (*Cladosporium cucumerinum*, 20µg, IZA = 86mm<sup>2</sup>, 40µg, IZA = 148mm<sup>2</sup>). Source: *Hygrophorus pustulatus*. Ref: 3800.

**433 4-O-Acetyl hygrophorone D<sup>12</sup>**

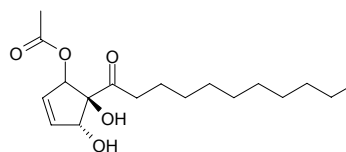
*trans*-4-Acetoxy-5-hydroxy-5-tridecanoyl-2-cyclopenten-1-one C<sub>20</sub>H<sub>32</sub>O<sub>5</sub> (352.48). Color oil, [α]<sub>D</sub><sup>23</sup> = +111.7° (c = 0.470, MeOH). Pharm: Antifungal (*Cladosporium cucumerinum*, 20µg, IZA = 55mm<sup>2</sup>, 40µg, IZA = 82mm<sup>2</sup>). Source: *Hygrophorus latitabundus*. Ref: 3800.

**434 4-O-Acetyl hygrophorone D<sup>14</sup>**

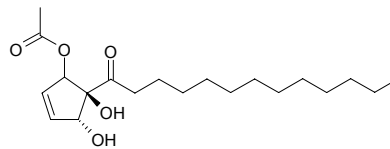
*trans*-4-Acetoxy-5-hydroxy-5-pentadecanoyl-2-cyclopenten-1-one C<sub>22</sub>H<sub>36</sub>O<sub>5</sub> (380.53). Colorless oil, [α]<sub>D</sub><sup>23</sup> = +98.7° (c = 0.475, MeOH). Pharm: Antifungal (*Cladosporium cucumerinum*, 20µg, IZA = 14mm<sup>2</sup>; 40µg, IZA = 15mm<sup>2</sup>). Source: *Hygrophorus latitabundus*. Ref: 3800.

**435 1-O-Acetyl hygrophorone E<sup>10</sup>**

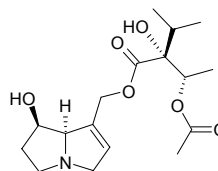
1-(2-Acetoxy-1,5-dihydroxy-cyclopent-3-enyl)-undecan-1-one C<sub>18</sub>H<sub>30</sub>O<sub>5</sub> (326.44). Colorless oil. Source: *Hygrophorus latitabundus*. Ref: 3800.

**436 1-O-Acetyl hygrophorone E<sup>12</sup>**

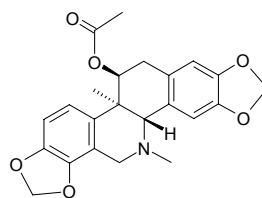
1-(2-Acetoxy-1,5-dihydroxy-cyclopent-3-enyl)-tridecan-1-one C<sub>20</sub>H<sub>34</sub>O<sub>5</sub> (354.49). Colorless oil. Pharm: Antifungal (*Cladosporium cucumerinum*, 20µg, IZA = 1mm<sup>2</sup>; 40µg, IZA = 28mm<sup>2</sup>). Source: *Hygrophorus latitabundus*. Ref: 3800.

**437 Acetyлиндicine**

[11014-09-8] C<sub>17</sub>H<sub>27</sub>NO<sub>6</sub> (341.41). Source: DA WEI YAO *Heliotropium indicum*. Ref: 6.

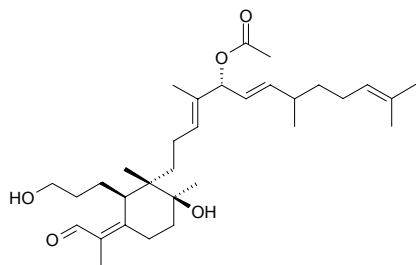
**438 Acetyliscorynoline**

[42881-67-4] C<sub>23</sub>H<sub>23</sub>NO<sub>6</sub> (409.44). mp 205–209°C. Source: YUN QIAN HU *Peucedanum rubricaulae*, ZI HUA YU DENG CAO *Corydalis incisa*. Ref: 6, 436.

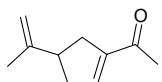


**439 16-O-Acetyl isoiridogermanal**

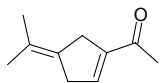
$C_{32}H_{52}O_5$  (516.77). Source: SHE GAN *Belamcanda chinensis*. Ref: 660.

**440 1-Acetyl-4-isopropenyl cyclopentene**

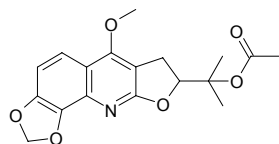
$C_{10}H_{14}O$  (150.22). Source: AN YE *Eucalyptus globulus* (oil), RU XIANG *Boswellia carterii*. Ref: 660, 1521.

**441 1-Acetyl-4-isopropylidene-cyclopentene**

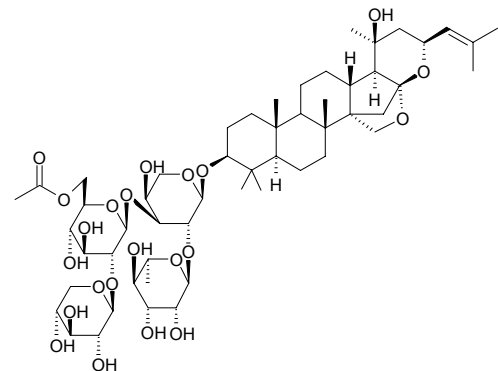
$C_{10}H_{14}O$  (150.22). Source: AN YE *Eucalyptus globulus*. Ref: 6.

**442 3'-O-Acetylisopteleflorine**

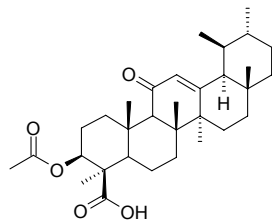
$C_{18}H_{19}NO_6$  (345.36). Source: CHOU SHAN YANG *Orixa japonica* (stem: yield = 0.00059% dw). Ref: 4774.

**443 Acetyljujuboside B**

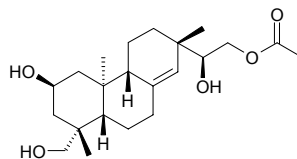
[194737-13-8]  $C_{54}H_{86}O_{22}$  (1087.27). Colorless acicular crystals, (methanol–water), mp 207~210°C,  $[\alpha]_D^{28} = -42.8^\circ$  ( $c = 0.3$ , methanol). Pharm: Antihistamine (inhibits histamine release, rat peritoneum cells *in vitro*, caused by antigen-antibody reaction, 100  $\mu$ mol/L InRt = 14.5 %). Source: SUAN ZAO REN *Ziziphus jujuba* var. *spinosa*. Ref: 971.

**444 Acetyl-11-keto- $\beta$ -boswellic acid**

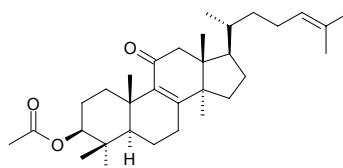
$C_{32}H_{48}O_5$  (512.74). Pharm: 5-LOX inhibitor (rat neutrophils, in a non-competitive and specific manner,  $IC_{50} = 1.5 \mu$ mol/L). Source: RU XIANG *Boswellia carterii*. Ref: 4415.

**445 16-Acetylkirenenol**

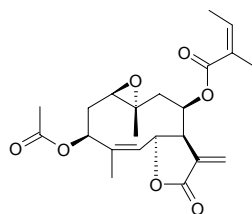
$C_{22}H_{36}O_5$  (380.53). Source: MAO GENG XI XIAN *Siegesbeckia orientalis* var. *glabrescens* [Syn. *Siegesbeckia glabrescens*], XI XIAN *Siegesbeckia orientalis* (aerial part: yield = 0.0003%)<sup>[4764]</sup>. Ref: 2, 660, 4764.

**446 3 $\beta$ -Acetyl-5 $\alpha$ -lanosta-8,24-diene-11-one**

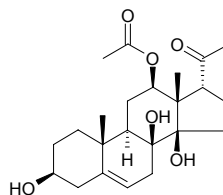
$C_{32}H_{50}O_3$  (482.75). mp 144~147°C. Source: SHUI TONG MU *Ficus fistulosa* [Syn. *Ficus harlandii*]. Ref: 1906.

**447 Acetyllepocarpin**

$C_{22}H_{28}O_7$  (404.46). Source: *Viguiera puruana* (aerial parts). Ref: 5090.

**448 12-O-Acetyllineolone**

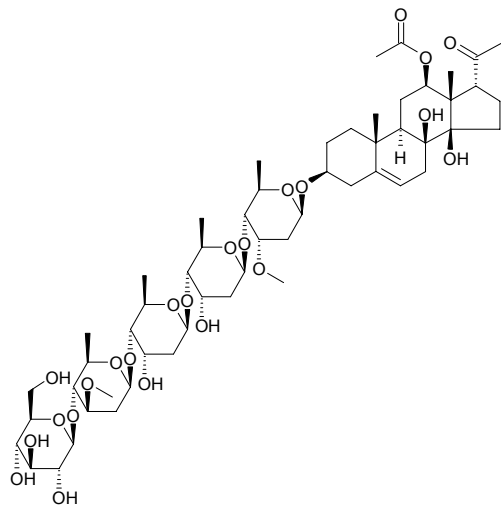
$C_{23}H_{34}O_6$  (406.52). Amorphous powder,  $[\alpha]_D^{21} = -70.2^\circ$  ( $c = 0.26$ , MeOH). Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.



**449 12-O-Acetyllineolon 3-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-cymaropyranoside**

$C_{55}H_{88}O_{23}$  (1117.30). Amorphous powder,  $[\alpha]_D^{27} = -10.0^\circ$  ( $c = 1.01$ , MeOH).

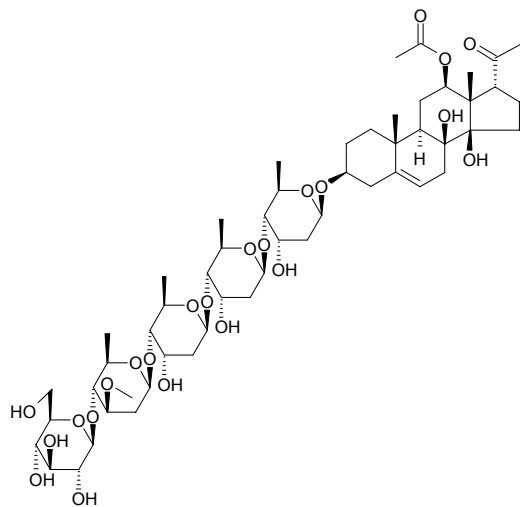
Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.



**450 12-O-Acetyllineolon 3-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-digitoxopyranoside**

$C_{54}H_{86}O_{23}$  (1103.27). Amorphous powder,  $[\alpha]_D^{27} = -13.8^\circ$  ( $c = 1.47$ , MeOH).

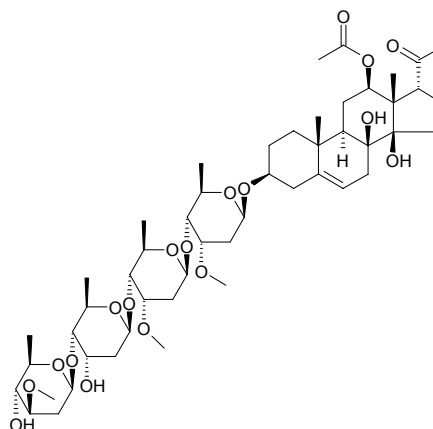
Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.



**451 12-O-Acetyllineolon 3-O- $\beta$ -D-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-cymaropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-cymaropyranoside**

$C_{50}H_{80}O_{18}$  (969.18). Amorphous powder,  $[\alpha]_D^{27} = -2.7^\circ$  ( $c = 0.17$ , MeOH).

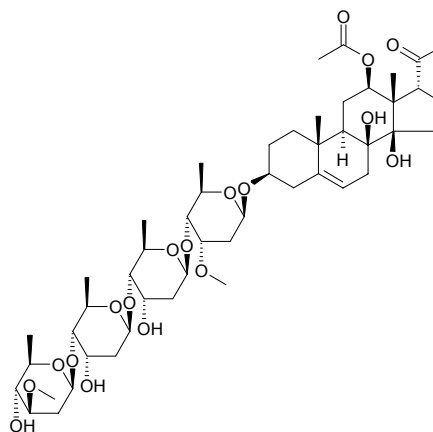
Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.



**452 12-O-Acetyllineolon 3-O- $\beta$ -D-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-cymaropyranoside**

$C_{49}H_{78}O_{18}$  (955.16). Amorphous powder,  $[\alpha]_D^{23} = -16.7^\circ$  ( $c = 0.66$ , MeOH).

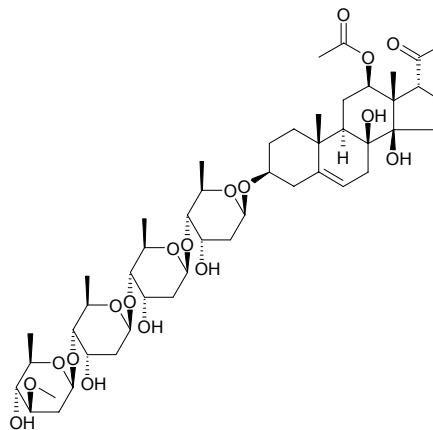
Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.



**453 12-O-Acetyllineolon 3-O- $\beta$ -D-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-digitoxopyranoside**

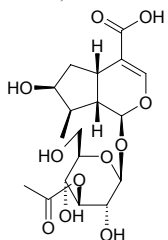
$C_{48}H_{76}O_{18}$  (941.13). Amorphous powder,  $[\alpha]_D^{24} = +21.5^\circ$  ( $c = 0.59$ , MeOH).

Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.

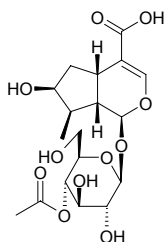


**454 3'-O-Acetylloganic acid**

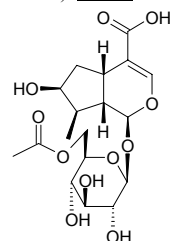
$C_{18}H_{26}O_{11}$  (418.40). White amorphous solid,  $[\alpha]_D^{20} = -70.1^\circ$  ( $c = 0.06$ , MeOH). Source: MA QIAN ZI *Strychnos nux-vomica*. Ref: 3492.

**455 4'-O-Acetylloganic acid**

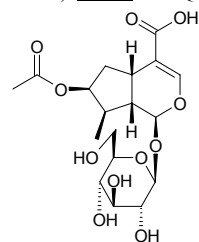
$C_{18}H_{26}O_{11}$  (418.40). White amorphous solid,  $[\alpha]_D^{20} = -67.6^\circ$  ( $c = 0.07$ , MeOH). Source: MA QIAN ZI *Strychnos nux-vomica*. Ref: 3492.

**456 6'-O-Acetylloganic acid**

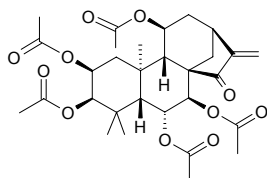
$C_{18}H_{26}O_{11}$  (418.40). White amorphous solid,  $[\alpha]_D^{20} = -85.1^\circ$  ( $c = 0.07$ , MeOH). Source: MA QIAN ZI *Strychnos nux-vomica*. Ref: 3492.

**457 7-O-Acetylloganic acid**

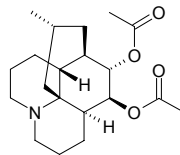
$C_{18}H_{26}O_{11}$  (418.40). White amorphous solid,  $[\alpha]_D^{20} = -67.2^\circ$  ( $c = 0.07$ , MeOH). Source: MA QIAN ZI *Strychnos nux-vomica*. Ref: 3492.

**458 7-Acetylshanrubescensin A**

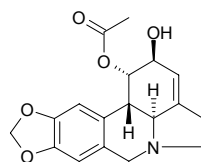
$C_{30}H_{40}O_{11}$  (576.65). mp 185–186°C,  $[\alpha]_D^{22} = -54.5^\circ$  ( $c = 0.46$ ,  $CHCl_3$ ). Source: MAO GENG XIA YE XIANG CHA CAI *Isodon angustifolius* var. *glabrescens*. Ref: 4067.

**459 Acetyllycoclavine**

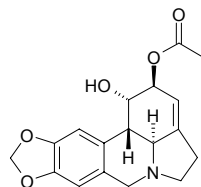
$C_{20}H_{31}NO_4$  (349.47). Source: QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*]. Ref: 4388.

**460 1-O-Acetyllycorine**

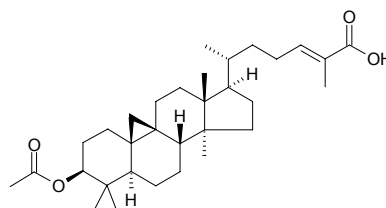
$C_{18}H_{19}NO_5$  (329.36). Pharm: AChE inhibitor ( $IC_{50} = (0.96 \pm 0.04) \mu\text{mol/L}$ , control Galanthamine,  $IC_{50} = (1.9 \pm 0.2) \mu\text{mol/L}$ ). Source: *Crinum moorei*. Ref: 4952.

**461 2-O-Acetyllycorine**

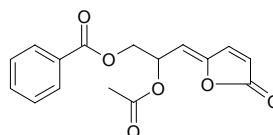
$C_{18}H_{19}NO_5$  (329.36). Pale yellow crystals, 224–225°C,  $[\alpha]_D^{28} = +22^\circ$  ( $c = 0.1$ , EtOH). Source: XUE PIAN LIAN *Leucojum vernum* (bulb). Ref: 5026.

**462 3β-O-Acetyl-mangiferolic acid**

3β-Acetoxy-9,19-cyclolanost-24(E)-en-26-oic acid  $C_{32}H_{50}O_4$  (498.75). Colorless acicular crystals, mp 180–182°C (petroleum spirit-acetic ester). Source: DI FENG PI *Illicium difengpi*. Ref: 395.

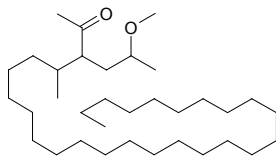
**463 Acetylmelodorinol**

$C_{16}H_{14}O_6$  (302.29). Pharm: Cytotoxic (BT474:  $IC_{50} = 0.2 \mu\text{g/mL}$ , control Doxorubicin hydrochloride,  $IC_{50} = 0.1 \mu\text{g/mL}$ ; CHAGO:  $IC_{50} = 3.1 \mu\text{g/mL}$ , Doxorubicin hydrochloride,  $IC_{50} = 2.3 \mu\text{g/mL}$ ; HepG2:  $IC_{50} = 2.1 \mu\text{g/mL}$ , Doxorubicin hydrochloride,  $IC_{50} = 0.9 \mu\text{g/mL}$ ; Kato3:  $IC_{50} = 0.4 \mu\text{g/mL}$ , Doxorubicin hydrochloride,  $IC_{50} = 1.7 \mu\text{g/mL}$ ; SW 620:  $IC_{50} = 0.3 \mu\text{g/mL}$ , Doxorubicin hydrochloride,  $IC_{50} = 1.1 \mu\text{g/mL}$ ). Source: *Melodorum fruticosum* (flower). Ref: 5245.

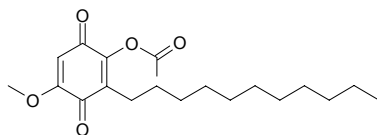


**464 4-Acetyl-2-methoxy-5-methyltriacontane**

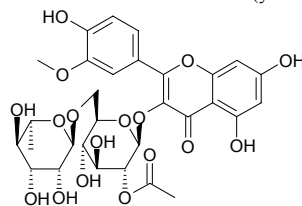
$C_{34}H_{68}O_2$  (508.92). Source: XIAN MAO *Curculigo orchoides*. Ref: 660.

**465 2-O-Acetyl-5-O-methylembelin**

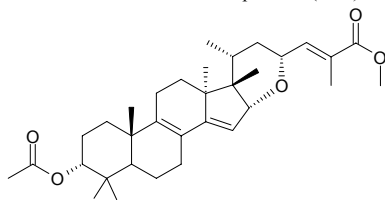
$C_{20}H_{30}O_5$  (350.46). Yellow amorphous powder. Pharm: Cytotoxic inactive (*in vitro*, HL-60,  $IC_{50} > 100\mu\text{g/mL}$ ; Bel7402,  $IC_{50} > 100\mu\text{g/mL}$ ; HeLa,  $IC_{50} > 100\mu\text{g/mL}$ ; U937,  $IC_{50} > 100\mu\text{g/mL}$ ; control Colchicine, HL-60,  $IC_{50} = 1.6\mu\text{g/mL}$ ; Bel7402,  $IC_{50} = 0.4\mu\text{g/mL}$ ; HeLa,  $IC_{50} = 0.1\mu\text{g/mL}$ ; U937,  $IC_{50} = 0.1\mu\text{g/mL}$ ). Source: LA ZHU GUO *Aegiceras corniculatum* (stem and twig; yield = 0.00019%). Ref: 4746.

**466 2''-O-Acetyl-3'-O-methylrutin**

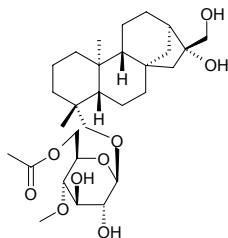
3'-O-Methylquercetin-3-O- $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 6)-2''-O-acetyl- $\beta$ -D-glucopyranoside  $C_{30}H_{34}O_{17}$  (666.6). Yellow powder,  $[\alpha]_D^{27} = -13.0^\circ$  ( $c = 1.0$ , MeOH). Pharm: Aldose reductase inhibitor (*in vitro*, rat lens aldose reductase,  $IC_{50} = 9.8\mu\text{mol/L}$ ; control Epalrestat,  $IC_{50} = 0.072\mu\text{mol/L}$ ). Source: BAI MEI HUA *Prunus mume* (yield = 0.0008%fw). Ref: 4641.

**467 3-O-Acetyl-methyl-(24E)-3 $\alpha$ ,16 $\alpha$ ,23 $\alpha$ (=16R,23R)-trihydroxy-epoxy-17,14-friedolan-8,14,24-trien-26-oate**

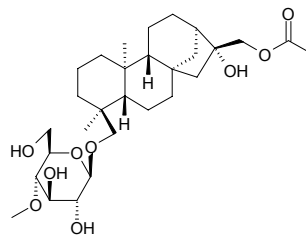
$C_{33}H_{48}O_5$  (524.75). Gum,  $[\alpha]_D^{25} = -13^\circ$  ( $c = 0.0093$ ,  $\text{CHCl}_3$ ). Source: MEI LI TENG HUANG *Garcinia speciosa* (bark). Ref: 3762.

**468 6'-O-Acetylmicrolepin**

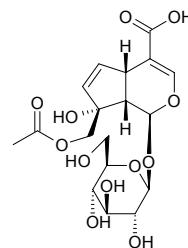
$C_{29}H_{48}O_9$  (540.70). Source: BIAN YUAN LIN GAI JUE *Microlepis marginata*. Ref: 660.

**469 17-O-Acetylmicrolepin**

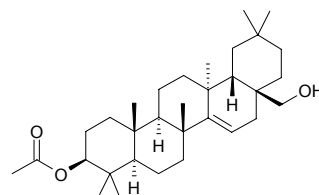
$C_{29}H_{48}O_9$  (540.70). Source: BIAN YUAN LIN GAI JUE *Microlepis marginata*. Ref: 660.

**470 10-O-Acetylmonotropein**

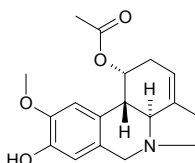
$C_{18}H_{24}O_{12}$  (432.38). Amorphous powder,  $[\alpha]_D^{19} = -95.3^\circ$  ( $c = 1.2$ , MeOH). Source: TAI GUO BA JI *Morinda coreia*. Ref: 2002.

**471 Acetylmyricadiol**

$C_{32}H_{52}O_3$  (484.77). Source: SHANG LU *Phytolacca esculenta* [Syn. *Phytolacca acinosa*] (berry; yield = 0.001%dw). Ref: 4714.

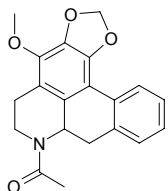
**472 1-O-Acetylnorpluviine**

1-O-Acetyl-9-O-demethylpluviine  $C_{18}H_{21}NO_4$  (315.37). White amorphous powder (acetone-hexane), mp 185~187°C,  $[\alpha]_D^{22} = -67^\circ$  ( $c = 0.25$ , EtOH); white crystalline, mp 173°C. Pharm: Antiplasmodial (strain D10,  $IC_{50} = 28.3\mu\text{g/mL}$ , control Hamayne,  $IC_{50} = 15.6\mu\text{g/mL}$ , Chloroquine,  $IC_{50} = 0.002\mu\text{g/mL}$ ; strain FAC8,  $IC_{50} = 34.2\mu\text{g/mL}$ , Hamayne,  $IC_{50} = 18.2\mu\text{g/mL}$ , Chloroquine,  $IC_{50} = 0.01\mu\text{g/mL}$ ; cytotoxic, BL6,  $IC_{50} = 1.6\mu\text{g/mL}$ , Hamayne,  $IC_{50} = 9.4\mu\text{g/mL}$ , Chloroquine,  $IC_{50} = 20.9\mu\text{g/mL}$ , Daunomycin,  $IC_{50} = 0.43\mu\text{g/mL}$ )<sup>[3931]</sup>. Source: BU LANG WEI JI *Brunsvigia radulosa* (bulb)<sup>[3931]</sup>, *Ammocharis coranica* (bulb)<sup>[3952]</sup>. Ref: 3931, 3952.

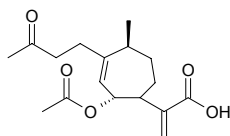


**473 (-)-N-Acetylnorstephalagine**

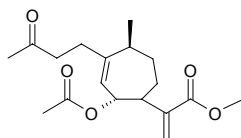
$C_{20}H_{19}NO_4$  (337.38). **Pharm:** Cytotoxic (*in vitro*, HepG<sub>2</sub>, IC<sub>50</sub> = 9.8 μg/mL; Hep2,2,15, IC<sub>50</sub> = 9.3 μg/mL). **Source:** YOU GOU YING ZHAO *Artabotrys uncinatus* (root). **Ref:** 3083.

**474 6- $\alpha$ -Acetyl-4-O-oxobedfordiaic acid**

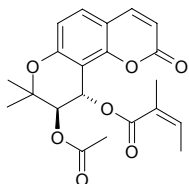
$C_{17}H_{24}O_5$  (308.38). Gummy material,  $[\alpha]_D^{25} = -15.5^\circ$ . **Source:** MAO RUI HUA YE TU MU XIANG *Inula verbascifolia*. **Ref:** 2041.

**475 6- $\alpha$ -Acetyl-4-O-oxobedfordiaic methyl ester**

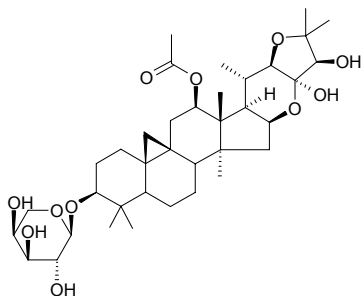
$C_{18}H_{26}O_5$  (322.40). Oil,  $[\alpha]_D^{25} = -19.53^\circ$ . **Source:** MAO RUI HUA YE TU MU XIANG *Inula verbascifolia*. **Ref:** 2041.

**476 (-)-3'-(S)-Acetyloxy-4'-(S)-angeloyloxy-3',4'-dihydroreselin**

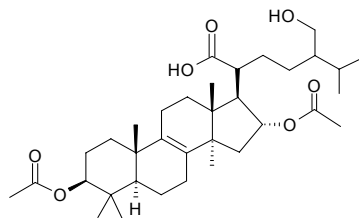
$C_{21}H_{22}O_7$  (386.41). Colorless acicular crystals, mp 172~174°C (petroleum spirit-acetic ester),  $[\alpha]_D^{18} = -27.2^\circ$  ( $c = 0.25$ , chloroform). **Source:** NAN LING QIAN HU *Peucedanum longshengens*. **Ref:** 373.

**477 (22R,23R,24R)-12 $\beta$ -Acetyloxy-16 $\beta$ ,23:22,25-diepoxy-23,24-dihydroxy-9,19-cyclolanostan-3 $\beta$ -yl  $\alpha$ -L-arabinopyranoside**

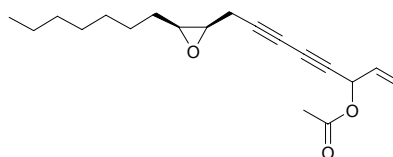
$C_{37}H_{58}O_{11}$  (678.87). Amorphous solid,  $[\alpha]_D^{26} = -20.0^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Cytotoxic (HSC-2 cells, IC<sub>50</sub> = 170 μmol/L, control Etoposide, IC<sub>50</sub> = 24 μmol/L; HGF cells, IC<sub>50</sub> = 261 μmol/L). **Source:** ZONG ZHUANG SHENG MA *Cimicifuga racemosa* (rhizome). **Ref:** 4158.

**478 O-Acetylpachymic acid-25-ol**

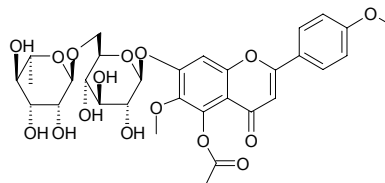
$C_{35}H_{56}O_7$  (588.83). Colorless acicular crystals, mp 244~245°C. **Source:** FU LING *Poria cocos*. **Ref:** 809.

**479 Acetyl panaxydol**

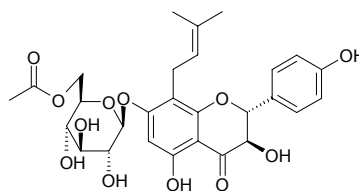
$C_{19}H_{26}O_3$  (302.42). **Source:** XI YANG SHEN *Panax quinquefolium*. **Ref:** 660.

**480 Acetylpectolarin**

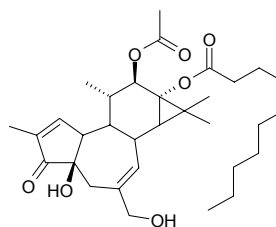
$C_{31}H_{36}O_{16}$  (664.62). mp 134~138°C (petroleum ether),  $[\alpha]_D^{18} = -68.5^\circ$ . **Pharm:** Diuretic; laxative. **Source:** LIU CHUAN YU *Linaria vulgaris*. **Ref:** 1.

**481 6'''-O-Acetylphellamurin**

$C_{28}H_{32}O_{12}$  (560.56). White powder. **Source:** RI BEN HUANG BAI *Phellodendron japonicum* (leaf). **Ref:** 4502.

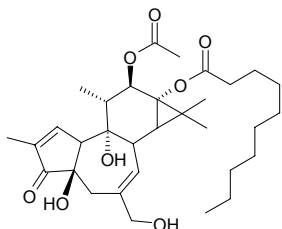
**482 12-O-Acetylphorbla-13-decanoate**

$C_{32}H_{48}O_7$  (544.74). **Source:** BA DOU *Croton tiglium*. **Ref:** 4552.

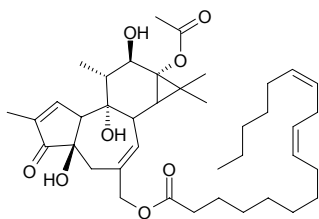


**483 12-O-Acetylphorbol-13-decanoate**

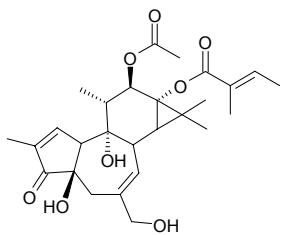
$C_{32}H_{48}O_8$  (560.73). **Pharm:** Anti-HIV-1 (MT-4 cells, HIV-1-induced cytopathic effect inhibitor,  $IC_{100} = 0.0076\mu\text{g/mL}$ ,  $CC_0 = 62.5\mu\text{g/mL}$ , control DS8000,  $IC_{100} = 3.9\mu\text{g/mL}$ ,  $CC_0 > 1000\mu\text{g/mL}$ ); PKC activator inactive (10ng/mL, activity rate = 0%). **Source:** BA DOU *Croton tiglium*. **Ref:** 3921.

**484 13-O-Acetylphorbol-20-linoleate**

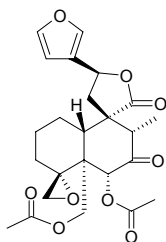
13-O-Acetylphorbol-20-(9Z,12Z-octadecadienoate)  $C_{40}H_{60}O_8$  (668.92). Oil,  $[\alpha]_D = +50^\circ$  ( $c = 0.05$ ,  $\text{CHCl}_3$ ). **Pharm:** Anti-HIV-1 (MT-4 cells, HIV-1-induced cytopathic effect inhibitor,  $IC_{100} = 15.6\mu\text{g/mL}$ ,  $CC_0 = 62.5\mu\text{g/mL}$ , control DS8000,  $IC_{100} = 3.9\mu\text{g/mL}$ ,  $CC_0 > 1000\mu\text{g/mL}$ ); PKC activator inactive (10ng/mL, activity rate = 0%). **Source:** BA DOU *Croton tiglium*. **Ref:** 3921.

**485 12-O-Acetylphorbol-13-tiglate**

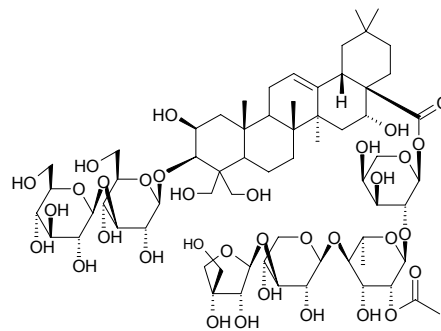
$C_{27}H_{36}O_8$  (488.58). Oil,  $[\alpha]_D = +17.0^\circ$  ( $c = 0.05$ ,  $\text{CHCl}_3$ ). **Pharm:** Anti-HIV-1 (MT-4 cells, HIV-1-induced cytopathic effect inhibitor,  $IC_{100} = 125\mu\text{g/mL}$ ,  $CC_0 = 500\mu\text{g/mL}$ , control DS8000,  $IC_{100} = 3.9\mu\text{g/mL}$ ,  $CC_0 > 1000\mu\text{g/mL}$ ); PKC activator (10ng/mL, activity rate = 16%). **Source:** BA DOU *Croton tiglium*. **Ref:** 3921.

**486 6-Acetylpicropoline**

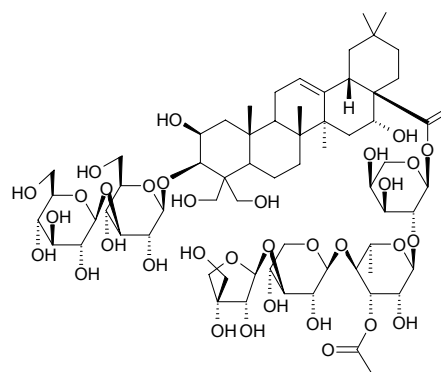
$C_{24}H_{28}O_9$  (460.49). **Pharm:** Bitter principle. **Source:** HUI BAI SHI CAN *Teucrium polium*. **Ref:** 658.

**487 2''-O-Acetylplatycodin D<sub>2</sub>**

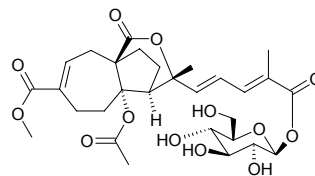
$C_{65}H_{104}O_{34}$  (1429.53). **Source:** JIE GENG *Platycodon grandiflorum*. **Ref:** 660.

**488 3''-O-Acetylplatycodin D<sub>2</sub>**

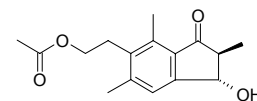
$C_{65}H_{104}O_{34}$  (1429.53). **Source:** JIE GENG *Platycodon grandiflorum*. **Ref:** 660.

**489 6'-O-Acetylpsedolaric acid B-O-beta-D-glucopyranoside**

$C_{29}H_{38}O_{13}$  (594.62). White amorphous powder,  $[\alpha]_D^{20} = -7.2^\circ$  ( $c = 0.77$ ,  $\text{Me}_2\text{CO}$ ). **Source:** TU JING PI *Pseudolarix amabilis* [Syn. *Larix amabilis*; *Pseudolarix kaempferi*] (root bark: yield = 0.000067% dw). **Ref:** 4637.

**490 Acetylpterosin C**

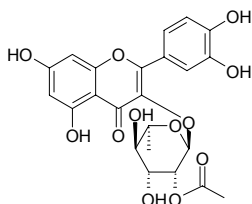
$C_{16}H_{20}O_4$  (276.34). mp 115~116°C. **Source:** JUE *Pteridium aquilinum* var. *latiusculum*. **Ref:** 6.



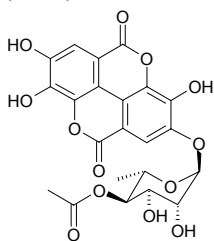


**491 2''-O-Acetylquercitrin**

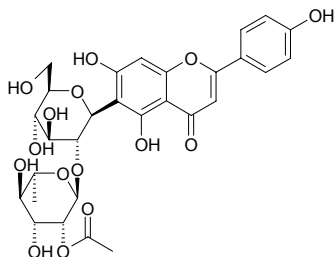
Quercetin-3-O-(2''-O-acetyl- $\alpha$ -rhamnopyranoside) C<sub>23</sub>H<sub>22</sub>O<sub>12</sub> (490.42). **Pharm:** Aldose reductase inhibitor (0.1  $\mu$ mol/L, InRt = 87%, 0.04  $\mu$ mol/L, InRt = 50%); used in treatment of diabetic cataract (one of the effective components in Red Wing Azalea). **Source:** LAN SHUI LIAN *Nymphaea caerulea*, *Azalea* sp. **Ref:** 1, 2342.

**492 4-(4''-O-Acetyl- $\alpha$ -rhamnopyranosyl)jellagic acid**

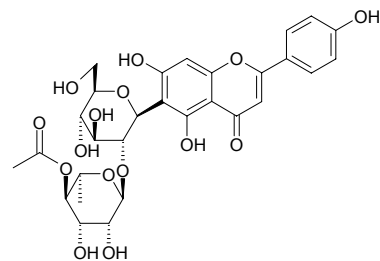
C<sub>22</sub>H<sub>18</sub>O<sub>13</sub> (490.38).  $[\alpha]_D^{27} = -84^\circ$  ( $c = 0.1$ , MeOH). **Pharm:** Cytotoxic (*in vitro*, P<sub>388</sub>, IC<sub>50</sub> = 52  $\mu$ g/mL; P<sub>388</sub>/ADM, IC<sub>50</sub> = 19  $\mu$ g/mL; K562, IC<sub>50</sub> = 80  $\mu$ g/mL; K562/ADM, IC<sub>50</sub> = 56  $\mu$ g/mL; B16, IC<sub>50</sub> = 52  $\mu$ g/mL; HeLa, IC<sub>50</sub> = 76  $\mu$ g/mL; KB, IC<sub>50</sub> = 61  $\mu$ g/mL); HIV-1 protease inhibitor (IC<sub>50</sub> = 11.0  $\mu$ g/mL). **Source:** YUN NAN FENG CHE ZI *Combretum yunnanensis* (branch) **Ref:** 4693.

**493 2'''-O-Acetyl-2''-O- $\alpha$ -L-rhamnopyranosylisovitexin**

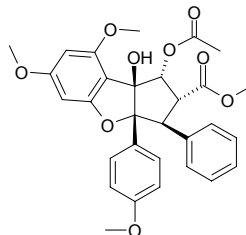
C<sub>29</sub>H<sub>32</sub>O<sub>15</sub> (620.57). Amorphous powder. **Source:** RI BEN SHUANG HU DIE *Tripterospermum japonicum*. **Ref:** 3533.

**494 4'''-O-Acetyl-2''-O- $\alpha$ -L-rhamnopyranosylisovitexin**

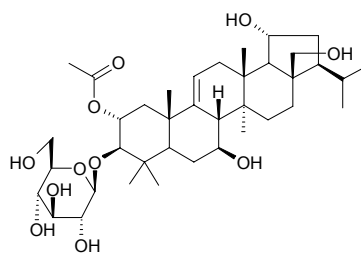
C<sub>29</sub>H<sub>32</sub>O<sub>15</sub> (620.57). Amorphous powder,  $[\alpha]_D^{22} = -34.8^\circ$  ( $c = 0.58$ , MeOH). **Source:** RI BEN SHUANG HU DIE *Tripterospermum japonicum*. **Ref:** 3533.

**495 1-O-Acetyl-rocaglic acid methyl ester**

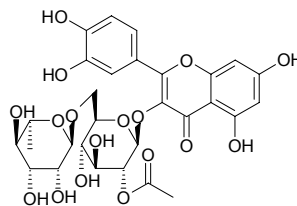
[253271-50-0] C<sub>30</sub>H<sub>30</sub>O<sub>9</sub> (534.57). **Pharm:** Insecticidal (neonate larvae of *Spodoptera littoralis*, LC<sub>50</sub> = 6.62 mg/L, EC<sub>50</sub> = 1.03 mg/L; control Azadirachtin, LC<sub>50</sub> = 0.9 mg/L, EC<sub>50</sub> = 0.04 mg/L)<sup>[2376]</sup>. **Source:** *Aglaia duperreana*. **Ref:** 2376.

**496 2-O-Acetyl-rubianoside IV**

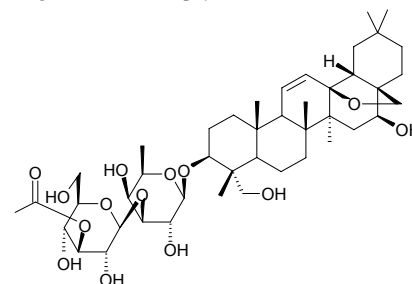
C<sub>38</sub>H<sub>62</sub>O<sub>11</sub> (694.91). **Pharm:** Anti-inflammatory inactive (inhibits nitric oxide production, LPS-activated mouse peritoneal macrophages, 100  $\mu$ mol/L, InRt = (-6.8 ± 3.6)%, control L-NMMA, IC<sub>50</sub> = 57  $\mu$ mol/L);  $\beta$ -hexosaminidase inhibitor inactive (rat basophilic cell RBL-2H3, inhibits release of  $\beta$ -hexosaminidase, 100  $\mu$ mol/L, InRt = (-2.1 ± 4.2)%). **Source:** XIAO HONG SHEN *Rubia yunnanensis* (root). **Ref:** 4347.

**497 2''-O-Acetylrutin**

Quercetin-3-O- $\alpha$ -L-rhamnopyranosyl(1→6)-2''-O-acetyl- $\beta$ -D-glucopyranoside C<sub>29</sub>H<sub>32</sub>O<sub>17</sub> (652.57). Yellow powder,  $[\alpha]_D^{28} = -28.9^\circ$  ( $c = 0.80$ , MeOH). **Pharm:** Aldose reductase inhibitor (*in vitro*, rat lens aldose reductase, IC<sub>50</sub> = 18  $\mu$ mol/L; control Epalrestat, IC<sub>50</sub> = 0.072  $\mu$ mol/L). **Source:** BAI MEI HUA *Prunus mume* (flower: yield = 0.0039%fw). **Ref:** 4641.

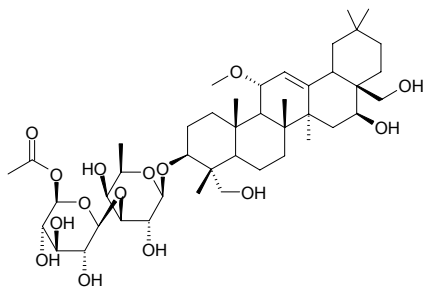
**498 3''-O-Acetylsaikosaponin A**

C<sub>44</sub>H<sub>70</sub>O<sub>14</sub> (823.04). **Source:** ZHAI ZHU YE CHAI HU *Bupleurum marginatum* var. *stenophyllum*. **Ref:** 660.

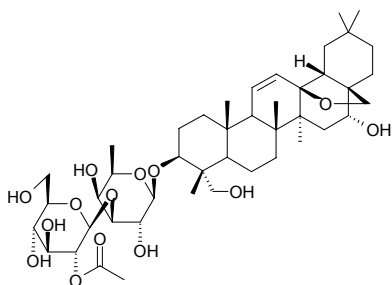


**499 6''-O-Acetylsaikosaponin B<sub>3</sub>**

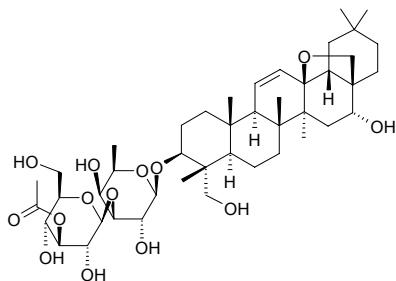
C<sub>44</sub>H<sub>72</sub>O<sub>15</sub> (841.06). Source: WEN CHUAN CHAI HU *Bupleurum wenchuanense*. Ref: 660.

**500 2''-O-Acetylsaikosaponin D**

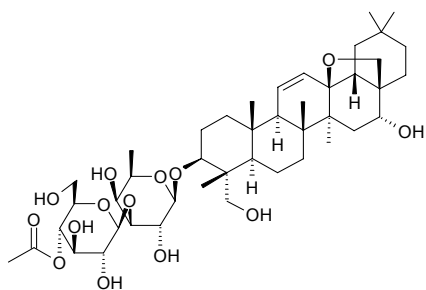
C<sub>44</sub>H<sub>70</sub>O<sub>14</sub> (823.04). Source: WEN CHUAN CHAI HU *Bupleurum wenchuanense*. Ref: 660.

**501 3''-O-Acetylsaikosaponin D**

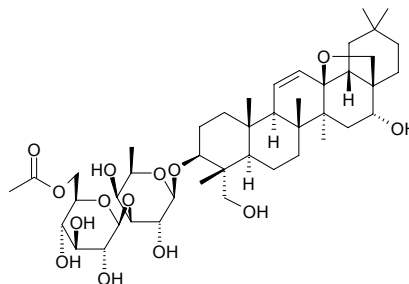
C<sub>44</sub>H<sub>70</sub>O<sub>14</sub> (823.04). Source: HONG CHAI HU *Bupleurum scorzonerifolium*. Ref: 2247.

**502 4''-O-Acetylsaikosaponin D**

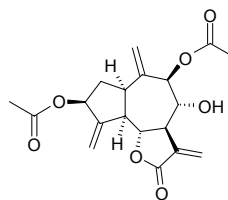
C<sub>44</sub>H<sub>70</sub>O<sub>14</sub> (823.04). Source: ZI HU *Bupleurum falcatum*. Ref: 2247.

**503 6''-O-Acetylsaikosaponin D**

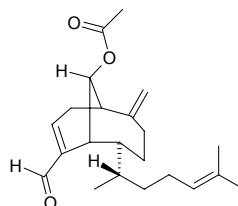
C<sub>44</sub>H<sub>70</sub>O<sub>14</sub> (823.04). Source: HONG CHAI HU *Bupleurum scorzonerifolium*. Ref: 2247.

**504 9-O-Acetylsalograviolide A**

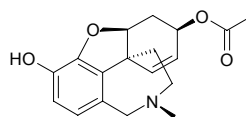
C<sub>19</sub>H<sub>22</sub>O<sub>7</sub> (362.38). Pharm: Antifungal (*Aspergillus niger*, MIC = 3.13 μg/mL; *Aspergillus ochraceus*, MIC = 0.78 μg/mL; *Penicillium ochrocloron*, MIC = 6.25 μg/mL; *Cladosporium cladosporioides*, MIC = 0.78 μg/mL; *Fusarium tricinctum*, MIC = 6.25 μg/mL; *Phomopsis helianthi*, MIC = 0.78 μg/mL; *Trichoderma viride*, inactive)<sup>[2361]</sup>. Source: NI GU LA SHI CHE JU *Centaurea nicolai*. Ref: 2361.

**505 Acetylsanadaol**

C<sub>22</sub>H<sub>32</sub>O<sub>3</sub> (344.50). [α]<sub>D</sub><sup>20</sup> = +12.86° (c = 0.30, CH<sub>2</sub>Cl<sub>2</sub>). Source: XIAN ZHUANG WANG DI ZAO *Dictyota linearis*. Ref: 3818.

**506 3-O-Acetylsanguinine**

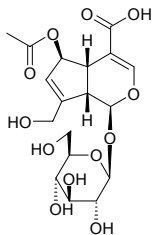
C<sub>18</sub>H<sub>21</sub>NO<sub>4</sub> (315.37). mp 215–218°C, [α]<sub>D</sub><sup>20</sup> = -13.5° (c = 0.2, MeOH). Pharm: Antitrypanosomal (*Trypanosoma brucei*, IC<sub>50</sub> = 1.1 μg/mL; *Trypanosoma cruzi*, IC<sub>50</sub> = 2.3 μg/mL); antiprotozoal inactive (*Plasmodium falciparum*, *Leishmania donovani*). Source: KEN NI YA WEN SHU LAN *Crinum kirkii* (bulb). Ref: 3892.



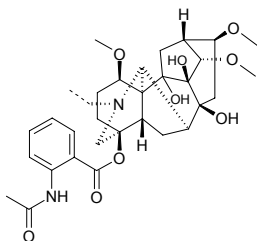
**507 6-O-Acetylscandoside**

$C_{18}H_{24}O_{12}$  (432.38). Amorphous powder,  $[\alpha]_D^{19} = -82.7^\circ$  ( $c = 1.2$ , MeOH).

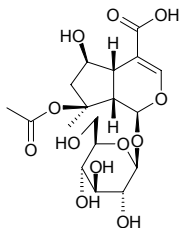
**Source:** TAI GUO BA JI *Morinda coreia*. **Ref:** 2002.

**508 N-Acetylsepaconitine**

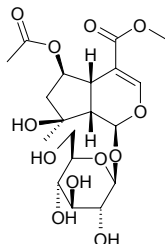
$C_{32}H_{44}N_2O_9$  (600.72). **Pharm:** Anti-inflammatory (modified assay of Berridge, 100 $\mu$ g/mL, InRt = 25.00%); tyrosinase inhibitor inactive (control Kojic acid,  $IC_{50} = (16.67 \pm 0.52) \mu\text{mol/L}$ , *L*-Mimosine,  $IC_{50} = (3.68 \pm 0.02) \mu\text{mol/L}$ ); antioxidant (DPPH scavenger, 1 $\mu$ mol/L, ScRt = 38.1%; control BHA, 1 $\mu$ mol/L, ScRt = 92.5%). **Source:** BAI HOU WU TOU *Aconitum leucostomum*, *Aconitum leave* (aerial parts). **Ref:** 1521, 5271.

**509 8-O-Acetylshanzhiside**

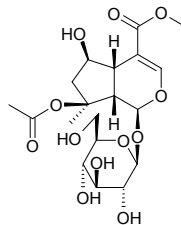
$C_{18}H_{26}O_{12}$  (434.40).  $[\alpha]_D^{28} = -91.7^\circ$  ( $c = 0.102$ , MeOH). **Pharm:** Cytotoxic inactive (Vero cells); COX-2 inhibitor inactive. **Source:** HUA YE JIA DU JUAN *Barleria lupulina* (flower). **Ref:** 5456.

**510 6-O-Acetylshanzhiside methyl ester**

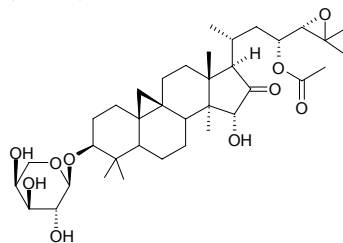
$C_{19}H_{28}O_{12}$  (448.23).  $[\alpha]_D^{28} = -118.0^\circ$  ( $c = 0.15$ , MeOH). **Pharm:** Cytotoxic inactive (Vero cells); COX-2 inhibitor inactive. **Source:** HUA YE JIA DU JUAN *Barleria lupulina* (flower). **Ref:** 5456.

**511 8-O-Acetylshanzhiside methyl ester**

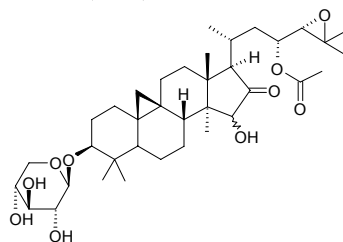
Barlerin  $C_{19}H_{28}O_{12}$  (448.43).  $[\alpha]_D^{29} = -56.0^\circ$  ( $c = 0.103$ , MeOH). **Pharm:** Cytotoxic inactive (Vero cells)<sup>[5456]</sup>; COX-2 inhibitor inactive<sup>[5456]</sup>. **Source:** HUA YE JIA DU JUAN *Barleria lupulina* (flower), MENG GU CAO SU *Phlomis mongolica*. **Ref:** 381, 560, 5456.

**512 23-O-Acetylshengmanol 3-O- $\alpha$ -L-arabinopyranoside**

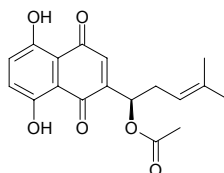
$C_{37}H_{58}O_{10}$  (662.87). Amorphous solid,  $[\alpha]_D^{26} = -26.0^\circ$  ( $c = 0.10$ , MeOH); white powder, mp 262~263 $^\circ$ C,  $[\alpha]_D^{20} = -0.012^\circ$  ( $c = 0.43$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (HSC-2 cells,  $IC_{50} = 63 \mu\text{mol/L}$ , control Etoposide,  $IC_{50} = 24 \mu\text{mol/L}$ ; HGF cells,  $IC_{50} = 267 \mu\text{mol/L}$ )<sup>[4158]</sup>. **Source:** SHENG MA *Cimicifuga foetida*, ZONG ZHUANG SHENG MA *Cimicifuga racemosa* (rhizome). **Ref:** 2218, 4158.

**513 Acetyl shengmanol xyloside**

$C_{37}H_{58}O_{10}$  (662.87). **Source:** RI BEN SHENG MA *Cimicifuga japonica*. **Ref:** 660.

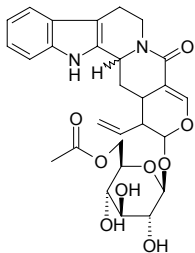
**514 Acetylshikonin**

$C_{18}H_{18}O_6$  (330.34). **Pharm:** Contracts blood vessels (inhibits ACh-induced relaxation on intact thoracic aorta,  $IC_{50} = (0.831 \pm 0.138) \mu\text{mol/L}$ , control 1,4-Naphthoquinone  $IC_{50} = (1.504 \pm 0.171) \mu\text{mol/L}$ )<sup>[4916]</sup>. **Source:** DIAN ZI CAO *Onosma paniculatum* (root: mean content of 3 origins = 0.14%<sup>[5508]</sup>), JIA ZI CAO *Arnebia guttata* (root: mean content of 2 origins = 0.18%<sup>[5508]</sup>), XI HUA DIAN ZI CAO *Onosma hookeri* (root: content = 0.15%<sup>[5508]</sup>), XIN ZANG JIA ZI CAO *Arnebia euchroma* (root: mean content of 3 origins = 1.23%<sup>[5508]</sup>), ZI CAO *Lithospermum erythrorhizon* (root: mean content of 6 origins = 0.45%<sup>[5508]</sup>). **Ref:** 1521, 2193, 4916, 5501, 5508.

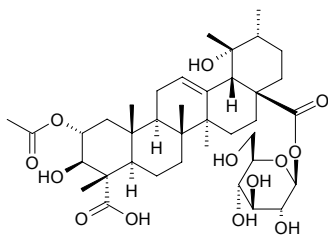


**515 6-O-Acetylstritosamide**

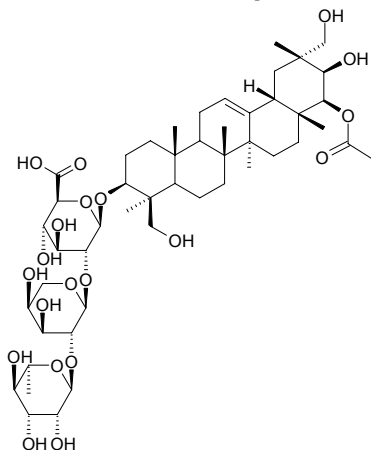
$C_{28}H_{32}N_2O_9$  (540.58).  $[\alpha]_D = -50.5^\circ$  ( $c = 0.62$ , MeOH). **Pharm:** Antibacterial (*in vitro*: *Staphylococcus aureus*, *Bacillus subtilis*, *Bacillus coli*, *Bacillus diphtheriae*, *Streptococcus sp.*, *Streptobacillus sp.*, *Salmonella sp.*, *Bacillus proteus*, *Bacillus lactis*, *Klebsiella pneumoniae*); antileishmanial; antifungal (*Aspergillus niger*).  
**Source:** DONG FANG WU TAN *Nauclea orientalis*. **Ref:** 2178.

**516 2-O-Acetylsuavissimoside F<sub>1</sub>**

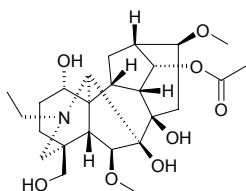
$C_{38}H_{58}O_{13}$  (722.88). Amorphous,  $[\alpha]_D^{28} = -11.9^\circ$  ( $c = 0.25$ , MeOH) **Source:** SHE PAO JIN *Rubus cochinchinensis*. **Ref:** 1905.

**517 Acetyl-subproside II**

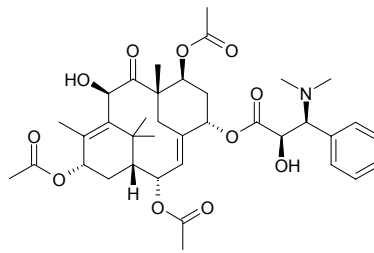
3-O- $\alpha$ -L-Rhamnopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranosyl(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranosyl kudzusapogenol A 22-O-acetate  $C_{49}H_{78}O_{20}$  (987.16). **Source:** CHAO XIAN LANG YA CI *Sophora koreensis* (root). **Ref:** 4056.

**518 14-O-Acetyltakaosamine**

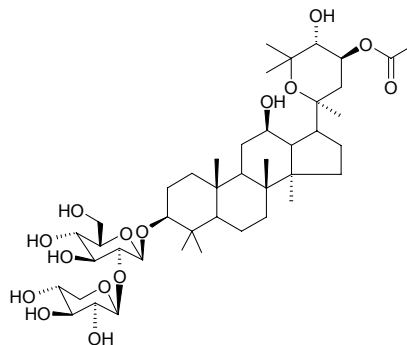
$C_{25}H_{39}NO_8$  (481.59). Amorphous solid,  $[\alpha]_D^{25} = +25.3^\circ$  ( $c = 0.4$ ,  $CHCl_3$ ).  
**Source:** DONG FANG FEI YAN CAO *Consolida orientalis* (aerial parts).  
**Ref:** 4283.

**519 7-O-Acetyltaxine A**

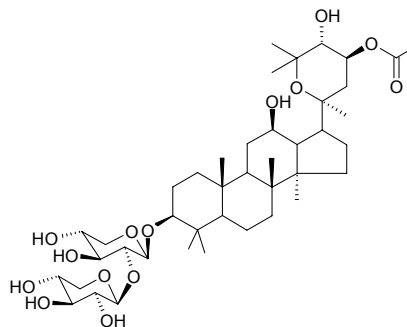
$C_{37}H_{49}NO_{11}$  (683.80). mp 178~180°C,  $[\alpha]_D = -96^\circ$  ( $CHCl_3$ ). **Pharm:** Cytotoxic inactive (A549 cell line)<sup>[5225]</sup>. **Source:** JIANG GUO ZI SHAN *Taxus baccata*, XI MA LA YA HONG DOU SHAN *Taxus wallichiana* (needle leaf). **Ref:** 662, 5225.

**520 23-O-Acetyl-3 $\beta$ ,12 $\beta$ ,23S,24R-tetrahydroxy-20S,25-epoxydammarane 3-O- $[\beta$ -D-xylopyranosyl(1 $\rightarrow$ 2)]- $\beta$ -D-glucopyranoside**

$C_{43}H_{72}O_{15}$  (829.04). Amorphous powder,  $[\alpha]_D^{20} = +39.5^\circ$  ( $c = 0.83$ , MeOH).  
**Source:** JIAO GU LAN *Gynostemma pentaphyllum* (aerial part: yield = 0.0035%dw). **Ref:** 4751.

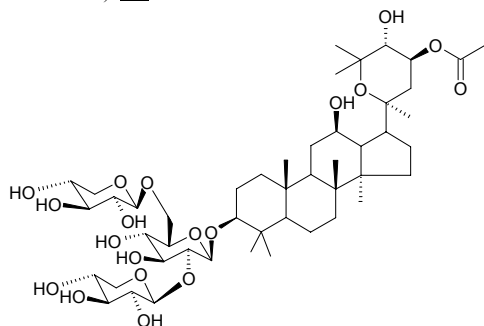
**521 23-O-Acetyl-3 $\beta$ ,12 $\beta$ ,23S,24R-tetrahydroxy-20S,25-epoxydammarane 3-O- $[\beta$ -D-xylopyranosyl(1 $\rightarrow$ 2)]- $\beta$ -D-xylopyranoside**

$C_{42}H_{70}O_{14}$  (799.02). Amorphous powder,  $[\alpha]_D^{20} = +36.8^\circ$  ( $c = 0.98$ , MeOH).  
**Source:** JIAO GU LAN *Gynostemma pentaphyllum* (aerial parts: yield = 0.0027%dw). **Ref:** 4751.



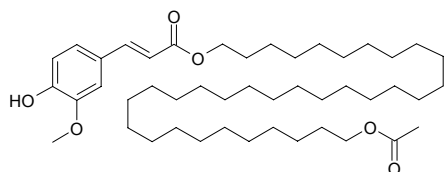
**522 23-O-Acetyl-3 $\beta$ ,12 $\beta$ ,23S,24R-tetrahydroxy-20S,25-epoxydammarane 3-O-[ $\beta$ -D-xylopyranosyl(1 $\rightarrow$ 2)] [ $\beta$ -D-xylopyranosyl(1 $\rightarrow$ 6)]- $\beta$ -D-glucopyranoside**

C<sub>48</sub>H<sub>80</sub>O<sub>19</sub> (961.16). Amorphous powder,  $[\alpha]_D^{20} = +17.6^\circ$  ( $c = 1.03$ , MeOH).  
**Source:** JIAO GU LAN *Gynostemma pentaphyllum* (aerial part: yield = 0.0035%dw). **Ref:** 4751.



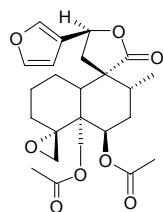
**523 34-O-Acetyltetracontanylferulate**

C<sub>46</sub>H<sub>80</sub>O<sub>6</sub> (729.15). Colorless powder, mp 68–69°C. **Source:** SHUANG SE JI DAN HUA *Plumeria bicolor*. **Ref:** 2286.



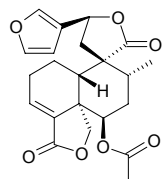
**524 6-Acetyl-teucjaponin B**

Montanin C C<sub>24</sub>H<sub>30</sub>O<sub>8</sub> (446.50). **Pharm:** Insect antifeedant (fifth instar larvae of *Spodoptera littoralis*, dual-choice feeding assays, dose = 10 μg/cm<sup>2</sup>, FR<sub>50</sub> = 0.07±0.02, dose = 1 μg/cm<sup>2</sup>, FR<sub>50</sub> = 0.34±0.06<sup>[3761]</sup>). **Source:** SHAN XIANG KE KE *Teucrium montanum*, SUAN WEI XIANG KE KE *Teucrium scordium*. **Ref:** 1521, 3761.



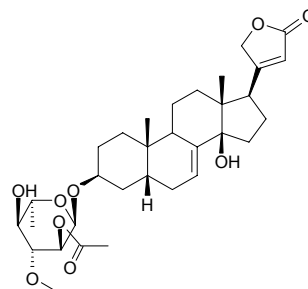
**525 6 $\beta$ -Acetylteuscordin**

C<sub>22</sub>H<sub>24</sub>O<sub>7</sub> (400.43). **Pharm:** Insect antifeedant (*Spodoptera litura*, 10 μg/cm<sup>2</sup>, antifeedant activity = (73±2)%, control Azadirachtin A, 0.5 μg/cm<sup>2</sup>, antifeedant activity = (79±2)%; *Plutella xylostella*, 10 μg/cm<sup>2</sup>, antifeedant activity = (72±2)%, Azadirachtin A, 0.5 μg/cm<sup>2</sup>, antifeedant activity = (71±2)%). **Source:** RONG MAO XIANG KE KE *Teucrium tomentosum* (aerial parts), SUAN WEI XIANG KE KE *Teucrium scordium*. **Ref:** 3478.



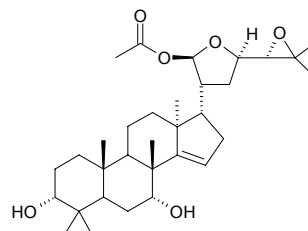
**526 3 $\beta$ -O-(2'-O-Acetyl- $\alpha$ -L-thevetosyl)-14 $\beta$ -hydroxy-7-en-5 $\beta$ -card-20(22)-enolide**

7,8-Dehydrocerberin C<sub>32</sub>H<sub>46</sub>O<sub>9</sub> (574.72). White solid, mp 103–105°C.  
**Pharm:** Cytotoxic (KB, ED<sub>50</sub> = 1.75 μg/mL; BC, ED<sub>50</sub> = 0.0006 μg/mL; NCI-H187, ED<sub>50</sub> = 16.7 μg/mL). **Source:** NIU XIN QIE ZI *Cerbera manghas*. **Ref:** 2594.



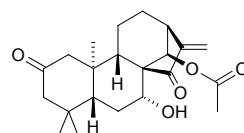
**527 21-O-Acetyl toosendantriol**

C<sub>32</sub>H<sub>50</sub>O<sub>6</sub> (530.75). **Source:** CHUAN LIAN ZI *Melia toosendan*. **Ref:** 660.



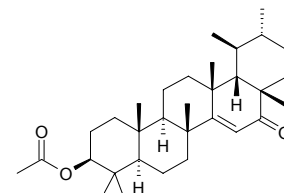
**528 14-Acetylbrosin B**

C<sub>22</sub>H<sub>30</sub>O<sub>5</sub> (374.48). mp 194–196°C. **Source:** XIANG CHA CAI *Isodon amethystoides*. **Ref:** 4067.



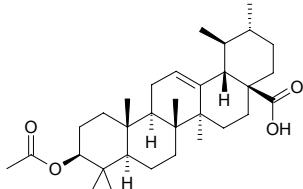
**529 3 $\beta$ -Acetylursa-14-en-16-one**

C<sub>32</sub>H<sub>50</sub>O<sub>3</sub> (482.75). mp 167–169°C. **Source:** SHUI TONG MU *Ficus fistulosa* [Syn. *Ficus harlandii*]. **Ref:** 1906.

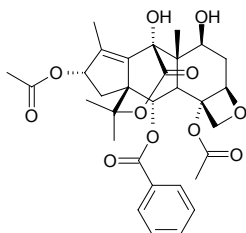


**530 3-O-Acetylursolic acid**

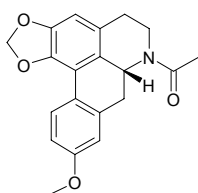
$C_{32}H_{50}O_4$  (498.75). mp 289~290°C. **Pharm:** Cytotoxic (*in vitro*, HONE-1 cell,  $IC_{50} > 10\mu\text{mol/L}$ , control Etoposide,  $IC_{50} = (0.5\pm 0.2)\mu\text{mol/L}$ , *cis*-Platin,  $IC_{50} = (3.2\pm 0.5)\mu\text{mol/L}$ ; KB cell,  $IC_{50} = (8.4\pm 2.9)\mu\text{mol/L}$ , Etoposide,  $IC_{50} = (0.9\pm 0.3)\mu\text{mol/L}$ , *cis*-Platin,  $IC_{50} = (4.4\pm 0.9)\mu\text{mol/L}$ ; HT29 cell,  $IC_{50} > 10\mu\text{mol/L}$ , Etoposide,  $IC_{50} = (2.4\pm 0.5)\mu\text{mol/L}$ , *cis*-Platin,  $IC_{50} = (5.7\pm 1.1)\mu\text{mol/L}$ )<sup>[5254]</sup>. **Source:** NV ZHEN ZI *Ligustrum lucidum*, QIU MU GUA *Chaenomeles lagenaria* [Syn. *Chaenomeles speciosa*], RONG SHU *Ficus microcarpa* (aerial root), SUO YANG *Cynomorium songaricum*, YANG MEI SHU PI *Myrica rubra* (bark: yield = 0.0021%)<sup>[4163]</sup>, occurs in many plants. **Ref:** 610, 660, 4163, 5254.

**531 13-O-Acetylwallifolol**

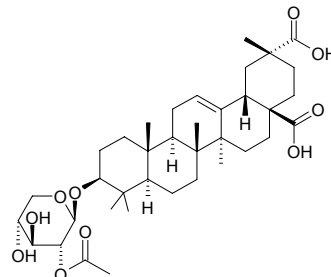
[Up here]  $C_{31}H_{36}O_{11}$  (584.63). Yellow solid. **Pharm:** Cytotoxic (*in vitro*, KB,  $IC_{50} = 2.91\mu\text{g/mL}$ , Hepa59T/VGH,  $IC_{50} = 13.92\mu\text{g/mL}$ ; control Paclitaxel, KB,  $IC_{50} = 0.001\mu\text{g/mL}$ , Hepa59T/VGH,  $IC_{50} = 0.001\mu\text{g/mL}$ ). **Source:** SU MEN DA LA HONG DOU SHAN *Taxus sumatрана* (leaf and twig: yield = 0.00014%dw). **Ref:** 4666.

**532 N-Acetylxylopin**

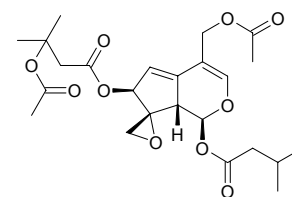
$C_{20}H_{19}NO_4$  (337.38). **Pharm:** Platelet aggregation inhibitor (rat blood: 2~5 $\mu\text{mol/L}$  ADP-induced,  $IC_{50} = 440\mu\text{mol/L}$ , control Acetylsalicylic acid,  $IC_{50} > 1000\mu\text{mol/L}$ ; 2~5 $\mu\text{g/mL}$  collagen-induced,  $IC_{50} = 8.0\mu\text{mol/L}$ , Acetylsalicylic acid,  $IC_{50} = 420\mu\text{mol/L}$ ; 1~4 $\mu\text{mol/L}$  epinephrine-induced with threshold concentration of collagen (0.8~1.0 $\mu\text{g/mL}$ ),  $IC_{50} = 0.28\mu\text{mol/L}$ , Acetylsalicylic acid,  $IC_{50} = 53\mu\text{mol/L}$ ; 10~40 $\mu\text{mol/L}$  AA-induced with threshold concentration of collagen (0.8~1.0 $\mu\text{g/mL}$ ),  $IC_{50} = 0.37\mu\text{mol/L}$ , Acetylsalicylic acid,  $IC_{50} = 66\mu\text{mol/L}$ ; 1~5 $\mu\text{mol/L}$  U46619-induced with threshold concentration of collagen (0.8~1.0 $\mu\text{g/mL}$ ),  $IC_{50} = 3.7\mu\text{mol/L}$ , Acetylsalicylic acid,  $IC_{50} = 340\mu\text{mol/L}$ ; 1~2 $\mu\text{mol/L}$  hmn U46619 in 1mmol/L acetylsalicylic acid-induced,  $IC_{50} = 47\mu\text{mol/L}$ , control Pentolamine,  $IC_{50} > 100\mu\text{mol/L}$ , control Yohimbine,  $IC_{50} > 100\mu\text{mol/L}$ ). **Source:** RI BEN HOU PO *Magnolia obovata* (leaf). **Ref:** 5381.

**533 3-O- $\alpha$ -(2''-O-Acetyl)-D-xylopyranosyl-3 $\beta$ -hydroxyolean-12-ene-28,29-dioic acid**

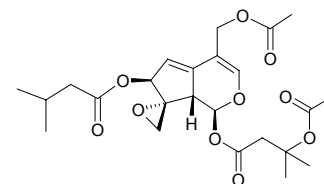
$C_{37}H_{56}O_{10}$  (660.85). White powder, mp 267~270°C,  $[\alpha]_D^{20} = +3.55^\circ$  ( $c = 0.1$ , methanol). **Source:** YI YE LIANG WANG CHA *Nothopanax davidii*. **Ref:** 216.

**534 Acevaltrate**

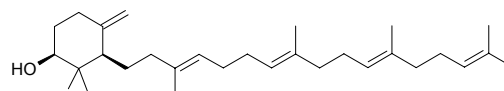
$C_{24}H_{32}O_{10}$  (480.52). **Source:** ZHI ZHU XIANG *Valeriana jatamansii* [Syn. *Valeriana wallichii*]. (rhizome and root: yield = 0.000019%dw). **Ref:** 4672.

**535 Acevaltratrum**

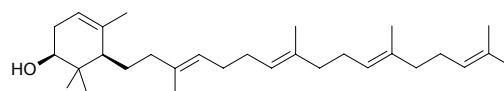
[25161-41-5]  $C_{24}H_{32}O_{10}$  (480.52). White acicular crystals (ethane), mp 83~84°C,  $[\alpha]_D^{24} = +163.7^\circ$  (methanol). **Pharm:** Sedative. **Source:** ZHI ZHU XIANG *Valeriana jatamansii* [Syn. *Valeriana wallichii*]. **Ref:** 1.

**536 Achilleol A**

$C_{30}H_{50}O$  (426.73). **Source:** MEI LI TENG HUANG *Garcinia speciosa* (trunk bark and stems). **Ref:** 5491.

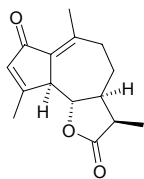
**537 Achilleol C**

Camelliol C  $C_{30}H_{50}O$  (426.73). **Pharm:** Antineoplastic (EBV-EA induced by TPA, mol ratio/TPA = 1000, relative percentage of EBV-EA = 20.1% (positive control value 32pmol, 20ng TPA = 100%), viability of Raji cells = 70%; reference compound  $\beta$ -Carotene, relative percentage = 8.6%)<sup>[4606]</sup>. **Source:** HUO YANG LE *Euphorbia antiquorum* (latex), MEI LI TENG HUANG *Garcinia speciosa* (trunk bark and stems). **Ref:** 4606, 5491.

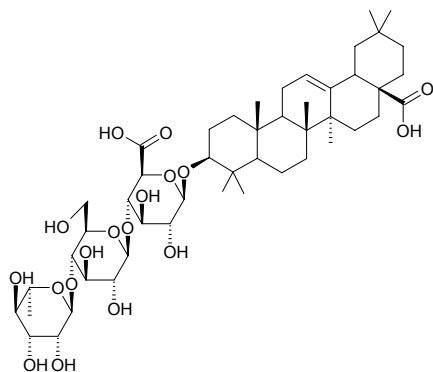


**538 Achillin**

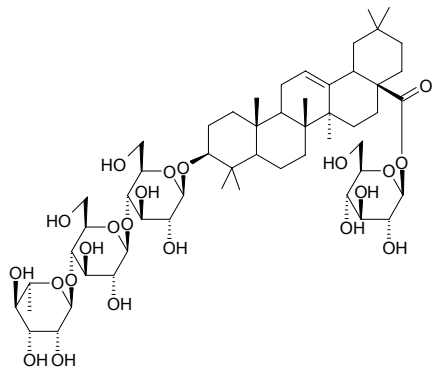
$C_{15}H_{18}O_3$  (246.31). mp 144~145°C. Pharm: Anti-inflammatory; plant growth inhibitor. Source: YI ZHI HAO *Achillea alpina* [Syn. *Achillea sibirica*], YUN NAN SHI *Achillea wilsoniana*, YANG SHI CAO *Achillea millefolium*. Ref: 6, 658.

**539 Achyranthes saponin A**

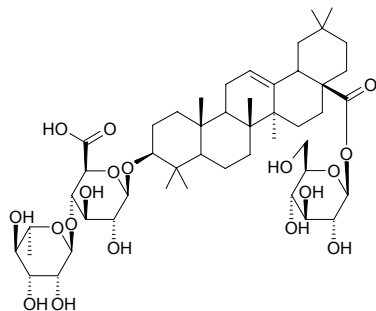
$C_{48}H_{76}O_{18}$  (941.13). Source: TU NIU XI *Achyranthes aspera* (seed). Ref: 660.

**540 Achyranthes saponin B**

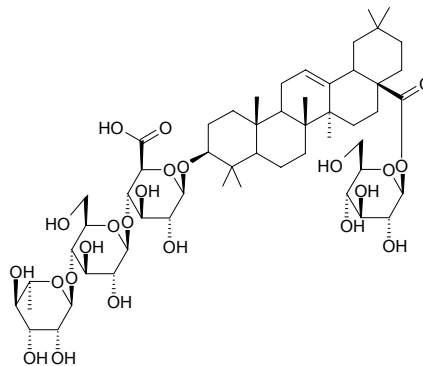
$C_{54}H_{88}O_{22}$  (1089.29). Source: TU NIU XI *Achyranthes aspera* (seed). Ref: 660.

**541 Achyranthes saponin C**

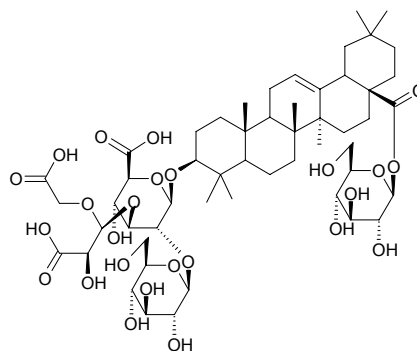
$C_{48}H_{76}O_{18}$  (941.13). Source: TU NIU XI *Achyranthes aspera*. Ref: 660.

**542 Achyranthes saponin D**

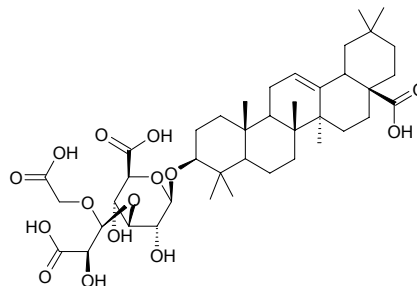
$C_{54}H_{86}O_{23}$  (1103.27). Source: TU NIU XI *Achyranthes aspera*. Ref: 660.

**543 Achyranthoside I**

3-*O*-[2'- $\beta$ -*D*-Glucopyranosyl-3'-*O*-(2''-hydroxy-1''-carboxyethoxycarboxypropyl)]- $\beta$ -*D*-glucopyranosyl oleanolic acid 28-*O*- $\beta$ -*D*-glucopyranoside  $C_{53}H_{82}O_{25}$  (1119.23). Colorless needles, mp 205~207°C,  $[\alpha]_D^{20} = +12.5^\circ$  ( $c = 0.4$ , MeOH). Source: NIU XI *Achyranthes bidentata*. Ref: 4891.

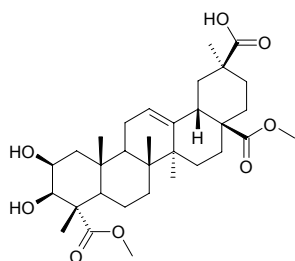
**544 Achyranthoside II**

Oleanolic acid 3-*O*-[3'-*O*-(2''-hydroxy-1''-carboxyethoxycarboxypropyl)]- $\beta$ -*D*-glucopyranoside  $C_{41}H_{62}O_{15}$  (794.94). Colorless needles, mp 186~188°C,  $[\alpha]_D^{20} = +10.5^\circ$  ( $c = 0.1$ , MeOH). Source: NIU XI *Achyranthes bidentata*. Ref: 4891.

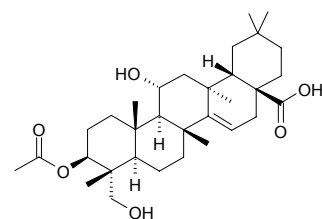


**545 Acinospesigenin**

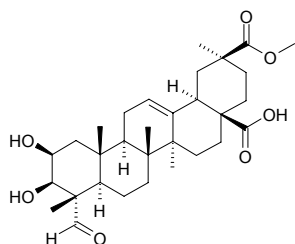
$C_{32}H_{48}O_8$  (560.73). Source: SHANG LU *Phytolacca esculenta* [Syn. *Phytolacca acinosa*] (berry: yield = 0.002%dw). Ref: 660, 4714.

**546 Acinospesigenin A**

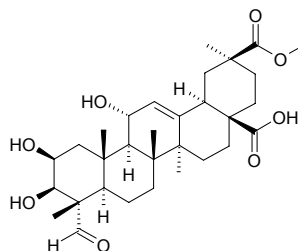
3 $\beta$ -Acetoxy-11 $\alpha$ ,23-dihydroxytaraxer-14-en-28-oic acid  $C_{32}H_{50}O_6$  (530.75). Colorless crystals, mp 189~190°C (Me<sub>2</sub>CO–petroleum ether),  $[\alpha]_D^{20} = +47.1^\circ$  ( $c = 0.01$ , MeOH). Pharm: Anti-inflammatory (edema was induced in hind paw of rats by injecting 2mL DMSO, ED<sub>50</sub> = 25mg/kg mass; control Cortisone, ED<sub>50</sub> = 30mg/kg mass; Prednisolone, ED<sub>50</sub> = 60mg/kg mass). Source: SHANG LU *Phytolacca esculenta* [Syn. *Phytolacca acinosa*] (berry: yield = 0.002%dw). Ref: 4714.

**547 Acinospesigenin B**

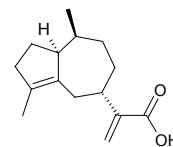
Olean-12-en-23-al-2 $\beta$ ,3 $\beta$ -dihydroxy-30-methoxycarbonyl-28-oic acid  $C_{31}H_{46}O_7$  (530.71). Colorless crystals, mp 224~225°C (MeOH–CHCl<sub>3</sub>),  $[\alpha]_D^{25} = +36.2^\circ$  ( $c = 0.01$ , C<sub>5</sub>H<sub>5</sub>N). Pharm: Anti-inflammatory (edema was induced in hind paw of rats by injecting 2mL DMSO, ED<sub>50</sub> = 10~15mg/kg mass; control Cortisone, ED<sub>50</sub> = 30mg/kg mass; Prednisolone, ED<sub>50</sub> = 60mg/kg mass). Source: SHANG LU *Phytolacca esculenta* [Syn. *Phytolacca acinosa*] (berry: yield = 0.0018%dw). Ref: 4714.

**548 Acinospesigenin C**

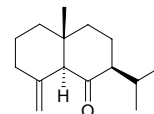
Olean-12-en-23-al-2 $\beta$ ,3 $\beta$ ,11 $\alpha$ -trihydroxy-30-methoxycarbonyl-28-oic acid  $C_{31}H_{46}O_8$  (546.71). Colorless crystalline compound, mp 236~237°C (MeOH–CHCl<sub>3</sub>),  $[\alpha]_D^{25} = +48.9^\circ$  ( $c = 0.01$ , C<sub>5</sub>H<sub>5</sub>N). Pharm: Anti-inflammatory (edema was induced in hind paw of rats by injecting 2mL DMSO, ED<sub>50</sub> = 10~15mg/kg mass; control Cortisone, ED<sub>50</sub> = 30mg/kg mass; Prednisolone, ED<sub>50</sub> = 60mg/kg mass). Source: SHANG LU *Phytolacca esculenta* [Syn. *Phytolacca acinosa*] (berry: yield = 0.0013%dw). Ref: 4714.

**549 Aciphyllic acid**

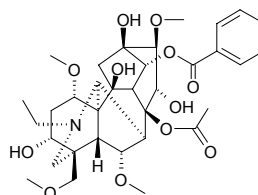
$C_{15}H_{22}O_2$  (234.34). Source: XIN JIANG YI ZHI HAO *Artemisia rupestris* [Syn. *Artemisia dentata*; *Artemisia viridis*; *Artemisia viridifolia*], *Anthemis* spp. Ref: 660, 1521.

**550 Acolamone**

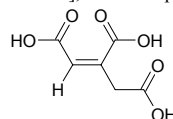
[39012-14-1]  $C_{15}H_{24}O$  (220.36). Source: BAI CHANG *Acorus calamus*. Ref: 6.

**551 Aconifine**

[41849-35-8]  $C_{34}H_{47}NO_{12}$  (661.75). Pharm: Toxin. Source: DUO GEN WU TOU *Aconitum karakolicum*, BAO SHAN WU TOU *Aconitum bullatifolium* var. *homotrichum* [Syn. *Aconitum nagarum*]. Ref: 658.

**552 cis-Aconitic acid**

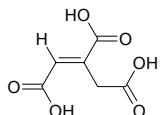
[585-84-2]  $C_6H_6O_6$  (174.11). mp (*cis*-) 125°C, (*trans*-) 194~195°C. Pharm: Antineoplastic (mus, inhibits carcinogenesis of 3, 4-benzopyrene). Source: GAN ZHE *Saccharum sinensis*, GU JIE CAO *Equisetum palustre*, HEI DA DOU *Glycine max*, HEI DA DOU YE *Glycine max*, JIN CAO *Arthraxon hispidus*, OU WU TOU *Aconitum napellus*, YAO YONG GAN ZHE *Saccharum officinarum*, YI ZHI HAO *Achillea alpina* [Syn. *Achillea sibirica*], *Achillea* sp. Ref: 1, 6.



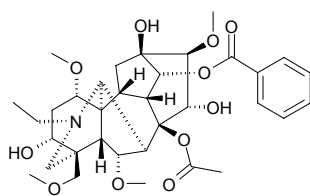


**553 trans-Aconitic acid**

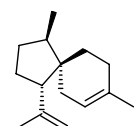
*trans*-1-Propene-1,2,3-tricarboxylic acid [4023-65-8] C<sub>6</sub>H<sub>6</sub>O<sub>6</sub> (174.11). mp (*cis*-) 125°C, (*trans*-) 194–195°C. Source: GAN ZHE *Saccharum sinensis*, GU JIE CAO *Equisetum palustre*, HEI DA DOU YE *Glycine max*, JIN CAO *Arthraxon hispidus*, YI ZHI HAO *Achillea alpina* [Syn. *Achillea sibirica*]. Ref: 1, 6.

**554 Aconitine**

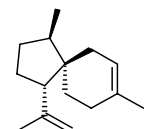
[302-27-2] C<sub>34</sub>H<sub>47</sub>NO<sub>11</sub> (645.75). mp 204°C, [α]<sub>D</sub> = +17.3°, soluble in chloroform, benzene, ethanol and ether, insoluble in water. Pharm: Analgesic; local anesthetic (anesthesia against peripheral nerve ending); antihypertensive; antipyretic; slows heart rate; supertoxic agent (hmn, causes death upon transcutaneous absorption, orl, 0.2mg causes intoxication); LD<sub>50</sub> (mus, iv) = 0.166mg/kg, (mus, ip) = 0.328mg/kg, (mus, orl) = 1mg/kg. Source: BEI WU TOU *Aconitum kusnezoffii* (dried tuberoid: content = 0.008%<sup>[5508]</sup>), FU ZI *Aconitum carmichaeli* (daughter root: content = 0.0049%<sup>[5508]</sup>), OU WU TOU *Aconitum napellus*, WU TOU *Aconitum carmichaeli* (tuberoid: mean content = 0.021%<sup>[5508]</sup>, in 1959, isolated from the plant by K. Wiesner, et al<sup>[5505]</sup>), XUE SHANG YI ZHI HAO *Aconitum brachypodum*. Ref: 2, 4, 5, 6, 658, 660, 5501, 5505, 5507, 5508.

**555 α-Acoradiene**

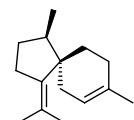
[24048-44-0] C<sub>15</sub>H<sub>24</sub> (204.36). Source: DANG GUI *Angelica sinensis*, DU SONG SHI *Juniperus rigida*. Ref: 2.

**556 β-Acoradiene**

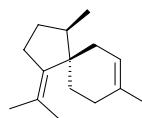
[28477-64-7] C<sub>15</sub>H<sub>24</sub> (204.36). Source: DANG GUI *Angelica sinensis*, DU SONG SHI *Juniperus rigida*. Ref: 2.

**557 γ-Acoradiene**

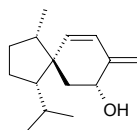
[28400-12-6] C<sub>15</sub>H<sub>24</sub> (204.36). Source: DANG GUI *Angelica sinensis*, DU SONG SHI *Juniperus rigida*. Ref: 2.

**558 δ-Acoradiene**

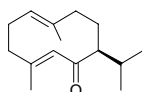
[28400-13-7] C<sub>15</sub>H<sub>24</sub> (204.36). Source: DANG GUI *Angelica sinensis*. Ref: 2.

**559 1S\*,4S\*,5S\*-Acora-8(15),9-dien-7R\*-ol**

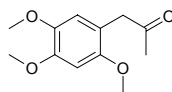
C<sub>15</sub>H<sub>24</sub>O (220.36). Oil, [α]<sub>D</sub><sup>20</sup> = -165.0° (c = 0.2, MeOH). Source: *Bazzania madagassa*. Ref: 4458.

**560 Acoragermacrone**

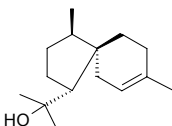
C<sub>15</sub>H<sub>24</sub>O (220.36). Source: BAI CHANG *Acorus calamus*, JI JI *Chloranthus serratus*. Ref: 660.

**561 Acoramone**

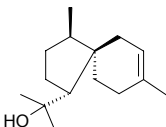
C<sub>12</sub>H<sub>16</sub>O<sub>4</sub> (224.26). Source: BAI CHANG *Acorus calamus*. Ref: 660.

**562 α-Acorenol**

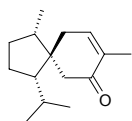
[28296-85-7] C<sub>15</sub>H<sub>26</sub>O (222.37). Source: DU SONG SHI *Juniperus rigida*. Ref: 6.

**563 β-Acorenol**

[28400-11-5] C<sub>15</sub>H<sub>26</sub>O (222.37). Source: DU SONG SHI *Juniperus rigida*. Ref: 6.

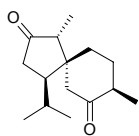
**564 Acorenone**

[5956-05-8] C<sub>15</sub>H<sub>24</sub>O (220.36). Source: BAI CHANG *Acorus calamus*. Ref: 6.

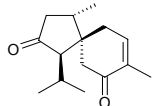


**565 Acorone**

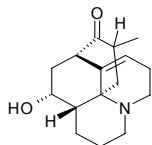
[10121-28-5] C<sub>15</sub>H<sub>24</sub>O<sub>2</sub> (236.36). mp 100°C. Source: BAI CHANG *Acorus calamus*. Ref: 6.

**566 Acoronene**

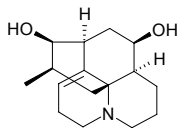
[33983-45-8] C<sub>15</sub>H<sub>22</sub>O<sub>2</sub> (234.34). mp 69°C. Source: BAI CHANG *Acorus calamus*. Ref: 6.

**567 Acrifoline**

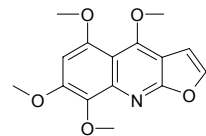
[664-24-4] C<sub>16</sub>H<sub>23</sub>NO<sub>2</sub> (261.37). mp 103~104°C. Pharm: Toxin. Source: XIAO JIE JIN CAO *Huperzia selago* [Syn. *Lycopodium selago*], LIANG NIAN SHI SONG *Lycopodium annotinum* var. *acrifolium*. Ref: 6.

**568 Acrifolinol**

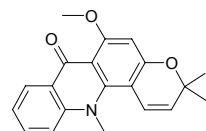
C<sub>16</sub>H<sub>25</sub>NO<sub>2</sub> (263.38). Source: YU BAI SHI SONG *Lycopodium obscurum*. Ref: 660.

**569 Acronycidine**

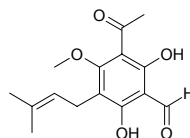
[521-43-7] C<sub>15</sub>H<sub>15</sub>NO<sub>5</sub> (289.29). Pharm: CNS depressant; antibacterial inactive (*Staphylococcus aureus* MIC > 20mg/mL, control Amoxycillin, MIC = 2.0µg/mL; *Staphylococcus epidermidis* MIC > 20mg/mL; *Pseudomonas aeruginosa* MIC > 20mg/mL; *Enterobacter cloacae* MIC > 20mg/mL; *Klebsiella pneumoniae* MIC > 20mg/mL; *Escherichia coli* MIC > 20mg/mL). Source: BAO RUI SHAN YOU GAN *Acronychia baueri*, *Sarcomelicope megistophylla* (bark). Ref: 658, 4172.

**570 Acronycine**

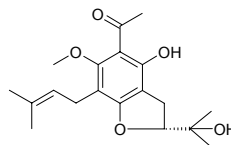
[7008-42-6] C<sub>20</sub>H<sub>19</sub>NO<sub>3</sub> (321.38). Pharm: Antineoplastic (marrow-leukemia C1498, phlogocyte myeloma X5563 and Shingi cancer 115). Source: BAO RUI SHAN YOU GAN *Acronychia baueri*, DAN YE YOU GAN *Acronychia haplophylla*, JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*], SHA TANG MU *Acronychia pedunculata*. Ref: 1, 6, 11.

**571 Acronyculatin A**

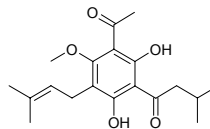
1-[3'-Formyl-2',4'-dihydroxy-6'-methoxy-5'-(3"-methylbut-2"-enyl)]acetophenone C<sub>15</sub>H<sub>18</sub>O<sub>5</sub> (278.31). Colorless syrup. Pharm: Antioxidant inactive (500µmol/L); tyrosinase inhibitor inactive (500µmol/L). Source: SHA TANG MU *Acronychia pedunculata* (root bark and stem: yield = 0.0028%). Ref: 4704.

**572 Acronyculatin B**

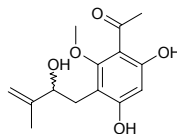
1-[2'-Hydroxy-3',4'-(2"-isopropanoyldihydrofuran)-6'-methoxy-5'-(3"-methylbut-2"-enyl)]acetophenone C<sub>19</sub>H<sub>26</sub>O<sub>5</sub> (334.42). Colorless powder, mp 118~119°C, [α]<sub>D</sub><sup>25</sup> = -58.0° (c = 0.013, MeOH). Pharm: Antioxidant inactive (500µmol/L); tyrosinase inhibitor inactive (500µmol/L). Source: SHA TANG MU *Acronychia pedunculata* (root bark and stem: yield = 0.0093%). Ref: 4704.

**573 Acronyculatin C**

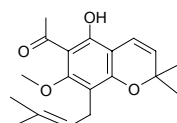
1-[2',4'-Dihydroxy-6'-methoxy-3'-(3"-methylbutanoyl)-5'-(3"-methylbut-2"-enyl)]acetophenone C<sub>19</sub>H<sub>26</sub>O<sub>5</sub> (334.42). Colorless syrup. Pharm: Antioxidant inactive (500µmol/L); tyrosinase inhibitor inactive (500µmol/L). Source: SHA TANG MU *Acronychia pedunculata* (root bark and stem: yield = 0.00083%). Ref: 4704.

**574 Acronyculatin D**

1-[2',4'-Dihydroxy-5'-(2"-hydroxy-3"-methyl-3"-butenyl)-6'-methoxy]acetophenone C<sub>14</sub>H<sub>18</sub>O<sub>5</sub> (266.3). Colorless syrup, [α]<sub>D</sub><sup>25</sup> = -31.0° (c = 0.029, MeOH). Pharm: Antioxidant inactive (500µmol/L); tyrosinase inhibitor inactive (500µmol/L). Source: SHA TANG MU *Acronychia pedunculata* (root bark and stem: yield = 0.0017%). Ref: 4704.

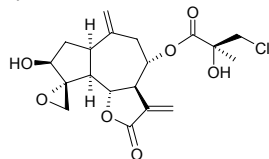
**575 Acronyculatin E**

1-[2'-Hydroxy-6'-methoxy-5'-(2"-hydroxy-3"-methyl-3"-butenyl)-3',4'-3"-dimethyl-1"-pyrenyl)]acetophenone C<sub>19</sub>H<sub>24</sub>O<sub>5</sub> (316.4). Colorless syrup. Pharm: Antioxidant inactive (500µmol/L); tyrosinase inhibitor inactive (500µmol/L). Source: SHA TANG MU *Acronychia pedunculata* (root bark, stem: yield = 0.0057%). Ref: 4704.

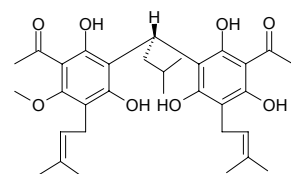


**576 Acroptilin**

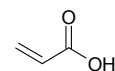
[41787-75-1] C<sub>19</sub>H<sub>23</sub>ClO<sub>7</sub> (398.84). **Pharm:** Antineoplastic; antiprotozoal (*Trichomonas vaginalis* and *Amoeba histolytica*, EC = 0.24~7.8µg/mL); cytotoxic. **Source:** DING YU JU *Acroptilon repens*. **Ref:** 658.

**577 Acrovestone**

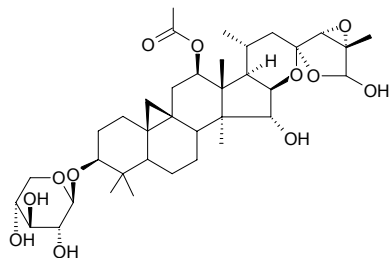
[24177-16-0] C<sub>32</sub>H<sub>42</sub>O<sub>8</sub> (554.69). **Pharm:** Cytotoxic (A549, KB, P<sub>388</sub> and L<sub>1210</sub>)<sup>[658]</sup>; antioxidant (DPPH weak scavenger, IC<sub>50</sub> = 493µmol/L; control Vitamin E, IC<sub>50</sub> = 8.3µmol/L)<sup>[4704]</sup>; tyrosinase inhibitor (IC<sub>50</sub> = 333µmol/L, weak activity; control Kojic acid, IC<sub>50</sub> = 125µmol/L)<sup>[4704]</sup>. **Source:** BAO SHAN YOU GAN *Acronychia vestita*, SHA TANG MU *Acronychia pedunculata* (root bark, stem: yield = 5.25%)<sup>[4704]</sup>. **Ref:** 658, 4704.

**578 Acrylic acid**

Propenoic acid; Vinylformic acid [79-10-7] C<sub>3</sub>H<sub>4</sub>O<sub>2</sub> (72.06). mp 13°C, bp 141°C. **Source:** KONG SHI CHUN *Ulva pertusa*, SHUI SONG *Codium fragile*. **Ref:** 6, 660.

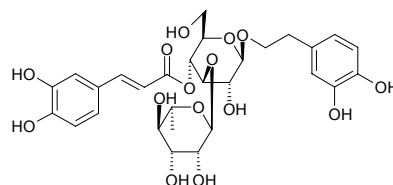
**579 Actein**

C<sub>37</sub>H<sub>56</sub>O<sub>12</sub> (692.85). **Pharm:** Cytotoxic (HSC-2 cells, IC<sub>50</sub> = 44µmol/L, control Etoposide, IC<sub>50</sub> = 24µmol/L; HGF, IC<sub>50</sub> = 141µmol/L). **Source:** ZONG ZHUANG SHENG MA *Cimicifuga racemosa* (rhizome). **Ref:** 4158.

**580 Acteroside**

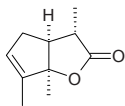
Verbascoside [61276-17-3] C<sub>29</sub>H<sub>36</sub>O<sub>15</sub> (624.60). mp 142°C, colorless amorphous powder, [α]<sub>D</sub><sup>20</sup> = -83° (c = 0.3, MeOH). **Pharm:** Antioxidant (DPPH scavenger, IC<sub>50</sub> = 0.24mmol/L, control *dl*-Vitamin E, IC<sub>50</sub> = 0.48mmol/L, BHA, IC<sub>50</sub> = 0.63mmol/L)<sup>[4211]</sup>; antioxidant (DPPH scavenger, IC<sub>50</sub> = 63µmol/L, control Ascorbic acid, IC<sub>50</sub> = 129µmol/L)<sup>[5449]</sup>; antioxidant (ferric thiocyanate method, 0.5mmol/L, peroxidation value = 5.9%, control BHA, 0.5mmol/L, peroxidation value = 4.5%, control α-Tocopherol 0.5mmol/L, peroxidation value = 14.7%)<sup>[4508]</sup>; antioxidant (antihemolysis, *in vitro*, AAPH-induced hemolysis of RBC, IC<sub>50</sub> = 28µmol/L; control Trolox,

IC<sub>50</sub> = 101µmol/L)<sup>[4698]</sup>; antioxidant (relative potency > 6.9, compared with resveratrol, relative potency = 1)<sup>[4920]</sup>; antioxidant (*in vitro* inhibits LDL peroxidation, Cu<sup>2+</sup>-induced and AAPH-induced)<sup>[5370]</sup>; inhibits minimally oxidized LDL-induced cellular toxicity (cultured bovine aortic endothelial cells, BAEC)<sup>[5370]</sup>; anti-apoptosis (cerebellar granule neurons, protects MPP<sup>+</sup>-induced CGNs death, improves cell viability and inhibits lactate dehydrogenase (LDH) release, effective dose = 12.5, 25 and 50µmol/L, control EGF 100ng/mL)<sup>[5348]</sup>; anti-apoptosis (prevents CGNs apoptosis, neurotoxin MPP<sup>+</sup>-induced, flowcytometric analysis of CGNs, effective dose = 20 and 50µmol/L, control EGF 100ng/mL, a decrease in the number of the MPP<sup>+</sup>-induced apoptotic cells was observed, *p*<0.001)<sup>[5348]</sup>; anti-apoptosis (inhibits the active caspase-3 fragment (*p*<0.001) and proteolytic poly (ADP-ribose) polymerase (PARP) fragment expression (*p*<0.001) following MPP<sup>+</sup> treatment in CGNs, Western blot analysis, control EGF 100ng/mL)<sup>[5348]</sup>; elastase inhibitor (hmn leukocyte *in vitro*, IC<sub>50</sub> > 500µg/mL = >800µmol/L; control Caffeic acid, IC<sub>50</sub> = 86µg/mL = 475µmol/L)<sup>[5458]</sup>; antihepatotoxin; anti-inflammatory; increases blood pressure; 5-lipoxygenase inhibitor (hmn leukocyte); aldose reductase inhibitor (eye lens); antitrypanosomal (*Trypanosoma b. rhodesiense*, IC<sub>50</sub> = 14.2µg/mL, control Melarsoprol, IC<sub>50</sub> = 0.00098µg/mL; *Trypanosoma cruzi*, IC<sub>50</sub> > 90µg/mL, control Benzimidazole, IC<sub>50</sub> = 1.06µg/mL)<sup>[5009]</sup>; antimalarial (*Plasmodium falciparum*, IC<sub>50</sub> > 50µg/mL, control Artemisinin, IC<sub>50</sub> = 0.0022µg/mL)<sup>[5009]</sup>; antileishmanial (*Leishmania donovani*, IC<sub>50</sub> = 8.7µg/mL, control Miltefosine, IC<sub>50</sub> = 0.102µg/mL)<sup>[5009]</sup>; cytotoxic (L6, IC<sub>50</sub> = 37.1µg/mL, control Podophyllotoxin, IC<sub>50</sub> = 0.008µg/mL)<sup>[5009]</sup>. **Source:** A LA BO PO PO NA *Veronica persica* (aerial parts), CHA RU SHI WAN CUO *Asystasia intrusa*, CHANG YE CHE QIAN *Plantago lanceolata*, CHE QIAN *Plantago asiatica*, CU ZHUANG NV ZHEN *Ligustrum robustum* (leaf: yield = 0.012%dw)<sup>[4698]</sup>, DA CHE QIAN *Plantago major*, DI ZHONG HAI MAO RUI HUA *Verbascum sinuatum*, DU HONG HUA *Callicarpa formosana* (dried leaf: content scope of 5 origins = 0.73%~1.36%, mean content = 1.06%)<sup>[5222]</sup>, GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], JIN ZHONG HUA *Forsythia viridissima*, LIE DANG *Orobanchae coerulea* (whole herb), MA LAN GEN *Baphicacanthus cusia* [Syn. *Strobilanthes cusia*], MAO PAO TONG *Paulownia tomentosa*, MI MENG HUA *Buddleja officinalis* (flower: mean content of 10 origins = 1.26%)<sup>[5508]</sup>, NAN FEI GOU MA *Harpagophytum procumbens*, OU XIA ZHI CAO *Marrubium vulgare* (aerial parts), QIU HUA ZUI YU CAO *Buddleja globosa*, ROU CONG RONG *Cistanche deserticola* (fleshy stem: content = 0.338%)<sup>[5508]</sup>, TIAN SHE CAO *Lippia dulcis* (aerial parts), XIAO YE ZHI MA *Galeobdolon chinense* [Syn. *Lamium chinense*] (dried whole herb: mean content of 4 origins = 1.17%)<sup>[5508]</sup>, YAN SHENG ROU CONG RONG *Cistanche salsa*, ZI HUA GUAN MAO RUI HUA *Verbascum wiedemannianum*, ZONG KUI CAO SU *Phlomis brunneogaleata*, *Sideritis ozturkii* (aerial parts), *Forsythia* sp., occurs in many plants. **Ref:** 2, 529, 628, 629, 658, 660, 2577, 2589, 3827, 4211, 4508, 4698, 4920, 5009, 5346, 5370, 5020, 5449, 5458, 5508, 5522.

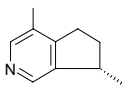


**581 Actinidialactone**

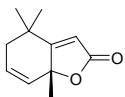
$C_{10}H_{14}O_2$  (166.22). Source: MU TIAN LIAO *Actinidia polygama*. Ref: 660.

**582 Actinidine**

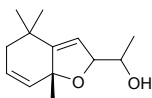
[524-03-8]  $C_{10}H_{13}N$  (147.22). mp ( $\pm$ )142~143°C, bp 100~103°C/9mmHg,  $[\alpha]_D^{11} = -7.2^\circ$  ( $c = 17.54$ , chloroform). Pharm: Enhances sedative effects of phenobarbital; antihypertensive; salivary secretion promotor. Source: HUANG ZHONG HUA *Tecoma stans*, MI HOU LI *Actinidia arguta*, MI HOU TAO *Actinidia chinensis*, MU TIAN LIAO *Actinidia polygama*, XIE CAO *Valeriana officinalis*. Ref: 1, 4, 1521.

**583 Actinidiolide**

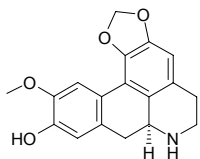
$C_{11}H_{14}O_2$  (178.23). Source: MU TIAN LIAO *Actinidia polygama*. Ref: 660.

**584 Actinidol**

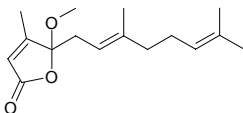
$C_{13}H_{20}O_2$  (208.30). Source: MU TIAN LIAO *Actinidia polygama*. Ref: 660.

**585 Actinodaphnine**

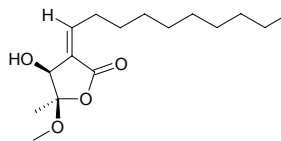
[517-69-1]  $C_{18}H_{17}NO_4$  (311.34). Mp (+) 210~211°C. Pharm: Antibacterial; antitrypanosomal (*Trypanosoma brucei brucei*,  $IC_{50} = 3.2\mu\text{mol/L}$ , Suramin,  $IC_{50} = 0.06\mu\text{mol/L}$ ; cytotoxic, hmn cervixcarcinoma cell HeLa,  $IC_{50} = 15\mu\text{mol/L}$ )<sup>[4969]</sup>. Source: LA ZHI MU JIANG ZI *Litsea sebifera*, WU YE TENG *Cassytha filiformis*, YUE GUI ZI *Laurus nobilis*. Ref: 6, 658, 4969.

**586 Actinolide A**

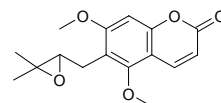
$C_{16}H_{24}O_3$  (264.37). Colorless oil,  $[\alpha]_D^{26.5} = +5.1^\circ$  ( $c = 0.33$ ,  $CHCl_3$ ) Source: PI ZHEN YE HUANG ROU NAN *Actinodaphne lancifolia*. Ref: 2011.

**587 Actinolide B**

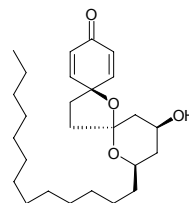
$C_{16}H_{28}O_4$  (284.40). Colorless oil,  $[\alpha]_D^{25} = +14.7^\circ$  ( $c = 1.00$ ,  $CHCl_3$ ). Source: PI ZHEN YE HUANG ROU NAN *Actinodaphne lancifolia*. Ref: 2011.

**588 Aculeatin**

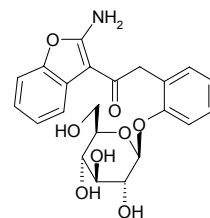
[523-51-3]  $C_{16}H_{18}O_5$  (290.32). mp 113°C. Source: FEI LONG ZHANG XUE *Toddalia asiatica* [Syn. *Toddalia aculeata*; *Paullinia asiatica*]. Ref: 6.

**589 Aculeatin D**

*rel*-(2*R*,4*S*,6*S*)-4-Hydroxy-2-tridecyl-1,7-dioxo-dispiro[5.1.5.2]pentadeca-9,12-dien-11-one  $C_{26}H_{42}O_4$  (418.62). Yellow oil,  $[\alpha]_D^{20} = +46.5^\circ$  ( $c = 1$ ,  $CHCl_3$ ). Pharm: Cytotoxic (KB,  $IC_{50} = 0.38\mu\text{g/mL}$ , control Podophyllotoxin,  $IC_{50} = 0.01\mu\text{g/mL}$ ; rat skeletal myoblasts L-6,  $IC_{50} = 1.00\mu\text{g/mL}$ ); antimalarial (*Plasmodium falciparum* K1,  $IC_{50} = 0.42\mu\text{g/mL}$ , control Chloroquine,  $IC_{50} = 0.09\mu\text{g/mL}$ ; *Plasmodium falciparum* NF54,  $IC_{50} = 0.47\mu\text{g/mL}$ , Chloroquine,  $IC_{50} = 0.004\mu\text{g/mL}$ ); antitrypanosomal (*Trypanosoma brucei rhodesiense*,  $IC_{50} = 0.20\mu\text{g/mL}$ , control Melarsoprol,  $IC_{50} = 0.0007\mu\text{g/mL}$ ; *Trypanosoma cruzi*,  $IC_{50} = 0.49\mu\text{g/mL}$ , Benznidazole,  $IC_{50} = 2.1\mu\text{g/mL}$ ); antibacterial (*Bacillus cereus*, MIC =  $16\mu\text{g/mL}$ , control Chloramphenicol, MIC =  $4\mu\text{g/mL}$ ; *Escherichia coli*, MIC =  $16\mu\text{g/mL}$ , Chloramphenicol, MIC =  $2\mu\text{g/mL}$ ; *Staphylococcus epidermidis*, MIC =  $8\mu\text{g/mL}$ , Chloramphenicol, MIC =  $4\mu\text{g/mL}$ ); antifungal inactive (*Candida albicans*). Source: CI DOU KOU *Amomum aculeatum* (rhizome). Ref: 5176.

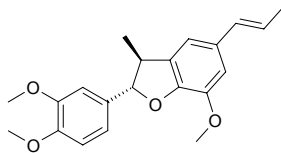
**590 Acuminaminoside**

$C_{22}H_{23}NO_8$  (429.43). Colorless needles (MeOH), mp 212~215°C,  $[\alpha]_D^{28} = -33.3^\circ$  ( $c = 0.75$ , MeOH). Source: JIAN JIAN SUAN PAN ZI *Glochidion acuminatum* (leaf). Ref: 4286.

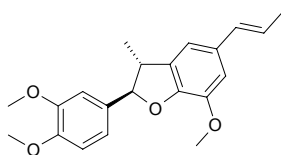


**591 Acuminatin**

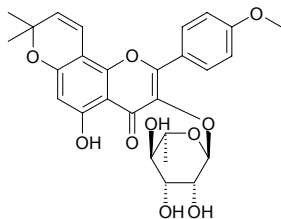
$C_{21}H_{24}O_4$  (340.42). Source: YU LAN *Magnolia denudata* [Syn. *Magnolia heptapata*]. Ref: 4439.

**592 (+)-Acuminatin**

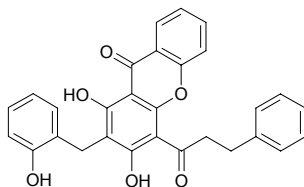
$C_{21}H_{24}O_4$  (340.42). Pharm: NO production inhibitor (mus, macrophage-like cell line RAW264.7 activated by LPS/IFN,  $IC_{50} = 56.7 \mu\text{mol/L}$ , control Quercetin,  $IC_{50} = 26.8 \mu\text{mol/L}$ )<sup>[2537]</sup>. Source: HAI FENG TENG *Piper kadsura* [Syn. *Piper futokadsura*], JIAN JIAN MU LAN *Magnolia acuminata* Ref: 1521, 2537.

**593 Acuminatin II\***

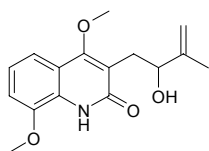
$C_{27}H_{28}O_{10}$  (512.52). Yellow needles, mp 151~152°C. Source: CU MAO YIN YANG HUO *Epimedium acuminatum*. Ref: 230.

**594 Acumitin**

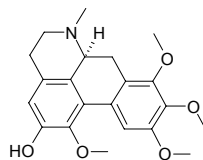
$C_{29}H_{22}O_6$  (466.50). Colorless crystals, mp 186~187°C ( $\text{CHCl}_3$ ). Pharm: Cytotoxic (hmn promyelocytic leukemia HL-60 cells,  $IC_{50} = 4.1 \mu\text{mol/L}$ ). Source: JIAN ZI YU PAN *Uvaria acuminata* (root). Ref: 4261.

**595 Acutifolidin**

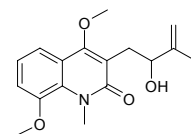
[145237-08-7]  $C_{16}H_{19}NO_4$  (289.33). Pharm: Platelet aggregation inhibitor; DNA isomerase inhibitor; antibacterial; cytotoxic. Source: JIAN YE HUA JIAO *Zanthoxylum acutifolium*. Ref: 2176.

**596 Acutifolidine**

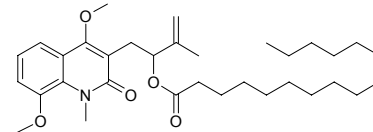
[126595-93-5]  $C_{21}H_{25}NO_5$  (371.44). Source: JIAN YE TANG SONG CAO *Thalictrum acutifolium* (root). Ref: 660, 1521.

**597 Acutifolin**

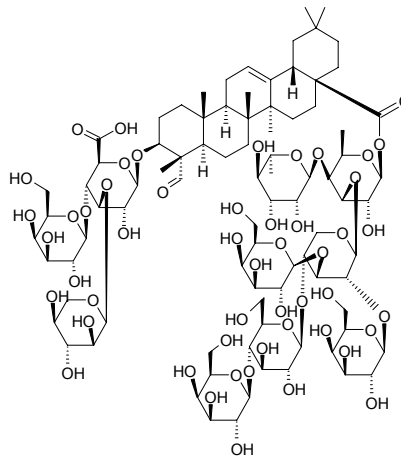
[145237-07-6]  $C_{17}H_{21}NO_4$  (303.36). Pharm: Platelet aggregation inhibitor; DNA isomerase inhibitor; antibacterial; cytotoxic. Source: JIAN YE HUA JIAO *Zanthoxylum acutifolium*. Ref: 2176.

**598 Acutifolin palmitate**

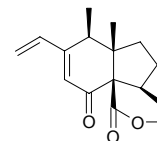
$C_{33}H_{55}NO_5$  (541.78). Pharm: Platelet aggregation inhibitor; DNA isomerase inhibitor; antibacterial; cytotoxic. Source: JIAN YE HUA JIAO *Zanthoxylum acutifolium*. Ref: 2176.

**599 Acutifoliside**

$C_{88}H_{140}O_{51}$  (2014.07). Source: HUANG JIE GU DAN *Gypsophila acutifolia*. Ref: 6.

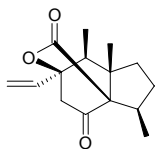
**600 Acutifolone A**

$C_{16}H_{22}O_3$  (262.35). Colorless prisms, mp 102~104°C,  $[\alpha]_D^{19} = +2.10^\circ$  ( $c = 1.73$ ,  $\text{CHCl}_3$ ). Source: SHANG ZUO JIAN YE GUANG E TAI *Porella acutifolia* ssp. *tosana*. Ref: 3932.

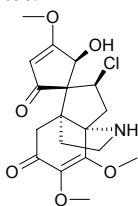


**601 Acutifolone B**

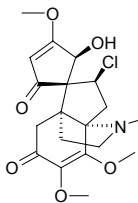
$C_{15}H_{20}O_3$  (248.32). Colorless prisms, mp 138~140°C,  $[\alpha]_D^{19} = -94.9^\circ$  ( $c = 0.66$ ,  $CHCl_3$ ). Source: SHANG ZUO JIAN YE GUANG E TAI *Porella acutifolia* ssp. *tosana*. Ref: 3932.

**602 Acutumidine**

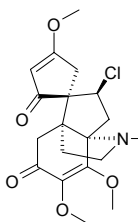
[18145-26-1]  $C_{18}H_{22}ClNO_6$  (383.83). mp 239~241°C (dec). Pharm: Antimalarial (similar action with quinine). Source: BIAN FU GE GEN *Menispermum dauricum*, QING FENG TENG *Sinomenium acutum*. Ref: 6, 658.

**603 Acutumine**

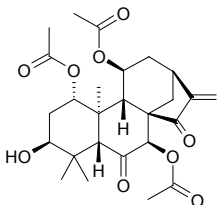
[17088-50-5]  $C_{19}H_{24}ClNO_6$  (397.86). mp 238~240°C (dec). Source: BIAN FU GE *Menispermum dauricum*, BIAN FU GE GEN *Menispermum dauricum*, QING FENG TENG *Sinomenium acutum*. Ref: 6.

**604 Acutuminine**

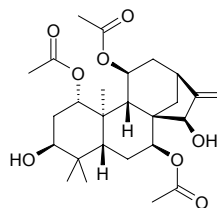
$C_{19}H_{24}ClNO_5$  (381.86). mp 175~177°C. Source: BIAN FU GE *Menispermum dauricum*, BIAN FU GE GEN *Menispermum dauricum*. Ref: 6.

**605 Adenanthin**

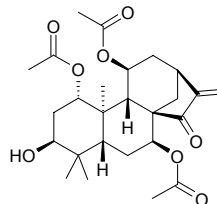
$C_{26}H_{34}O_9$  (490.56). mp 251~255°C,  $[\alpha]_D^{13} = -76^\circ$  ( $c = 0.25$ ,  $CHCl_3$ ). Source: XIAN HUA XIANG CHA CAI *Rabdosia adenantha* (leaf: yield = 0.015%dw)<sup>[4640]</sup>. Ref: 4067, 4640.

**606 Adenanthin B**

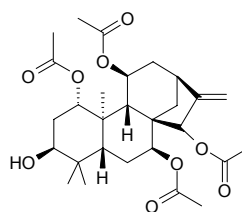
$C_{26}H_{38}O_8$  (478.59). Colorless cubes (acetone), mp 210.5~212.5°C,  $[\alpha]_D^{22} = 0^\circ$  ( $c = 0.25$ ,  $CHCl_3$ ). Source: XIAN HUA XIANG CHA CAI *Rabdosia adenantha* (leaf: yield = 0.033%dw)<sup>[4640]</sup>. Ref: 4067, 4640.

**607 Adenanthin C**

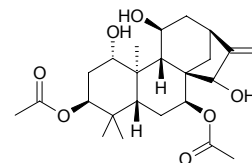
3 $\beta$ -Hydroxy-1 $\alpha$ ,7 $\beta$ ,11 $\beta$ -triacetoxy-*ent*-kaur-16-en-15-one  $C_{26}H_{36}O_8$  (476.57). Colorless cubes (acetone), mp 228~229°C,  $[\alpha]_D^{22.5} = -23.2^\circ$  ( $c = 0.42$ ,  $CHCl_3$ ). Pharm: Cytotoxic (*in vitro*, K562,  $IC_{50} = 3.3\mu g/mL$ ; control *cis*-Platin,  $IC_{50} = 1.9\mu g/mL$ )<sup>[4640]</sup>. Source: XIAN HUA XIANG CHA CAI *Rabdosia adenantha* (leaf: yield = 0.203%dw)<sup>[4640]</sup>. Ref: 4067, 4640.

**608 Adenanthin D**

3 $\beta$ -Hydroxy-1 $\alpha$ ,7 $\beta$ ,11 $\beta$ ,15 $\beta$ -tetraacetoxy-*ent*-kaur-16-ene  $C_{28}H_{40}O_9$  (520.63). Colorless crystals (acetone), mp 147~148°C,  $[\alpha]_D^{27} = +14.4^\circ$  ( $c = 0.18$ , MeOH). Source: XIAN HUA XIANG CHA CAI *Rabdosia adenantha* (leaf: yield = 0.0097%dw). Ref: 4640.

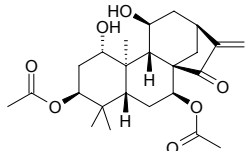
**609 Adenanthin E**

1 $\alpha$ ,11 $\beta$ ,15 $\beta$ -Trihydroxy-3 $\beta$ ,7 $\beta$ -diacetoxy-*ent*-kaur-16-ene  $C_{24}H_{36}O_7$  (436.55). Amorphous powder,  $[\alpha]_D^{27} = +33.0^\circ$  ( $c = 0.27$ , MeOH). Source: XIAN HUA XIANG CHA CAI *Rabdosia adenantha* (leaf: yield = 0.0031%dw). Ref: 4640.

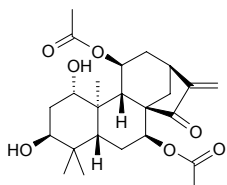


**610 Adenanthin F**

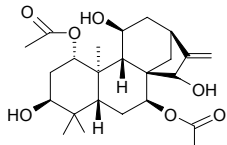
1 $\alpha$ ,11 $\beta$ -Dihydroxy-3 $\beta$ ,7 $\beta$ -diacetoxy-*ent*-kaur-16-en-15-one C<sub>24</sub>H<sub>34</sub>O<sub>7</sub> (434.53). Colorless crystals, mp 121–122°C, [ $\alpha$ ]<sub>D</sub><sup>26</sup> = –9.2° (*c* = 0.33, MeOH). **Pharm:** Cytotoxic (*in vitro*, K562, IC<sub>50</sub> = 3.6 $\mu$ g/mL; control *cis*-Platin, IC<sub>50</sub> = 1.9 $\mu$ g/mL). **Source:** XIAN HUA XIANG CHA CAI *Rabdosia adenantha* (leaf: yield = 0.0090%dw). **Ref:** 4640.

**611 Adenanthin G**

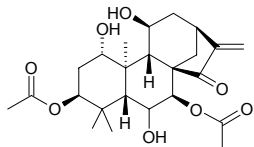
1 $\alpha$ ,3 $\beta$ -Dihydroxy-7 $\beta$ ,11 $\beta$ -diacetoxy-*ent*-kaur-16-en-15-one C<sub>24</sub>H<sub>34</sub>O<sub>7</sub> (434.53). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>26</sup> = –30.7° (*c* = 0.49, MeOH). **Source:** XIAN HUA XIANG CHA CAI *Rabdosia adenantha* (leaf: yield = 0.00036%dw). **Ref:** 4640.

**612 Adenanthin H**

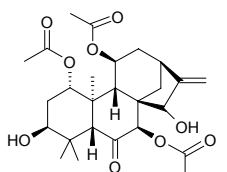
3 $\beta$ ,11 $\beta$ ,15 $\beta$ -Trihydroxy-1 $\alpha$ ,7 $\beta$ -diacetoxy-*ent*-kaur-16-ene C<sub>24</sub>H<sub>36</sub>O<sub>7</sub> (436.55). Colorless crystals, mp 188–190°C, [ $\alpha$ ]<sub>D</sub><sup>27</sup> = –33.3° (*c* = 0.15, MeOH). **Source:** XIAN HUA XIANG CHA CAI *Rabdosia adenantha* (leaf: yield = 0.00058%dw). **Ref:** 4640.

**613 Adenanthin I**

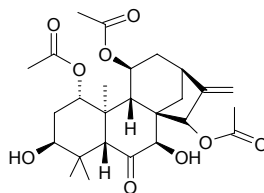
1 $\alpha$ ,6 $\alpha$ ,11 $\beta$ -Trihydroxy-3 $\beta$ ,7 $\beta$ -diacetoxy-*ent*-kaur-16-en-15-one C<sub>24</sub>H<sub>34</sub>O<sub>8</sub> (450.53). Colorless needles, mp 215–217°C, [ $\alpha$ ]<sub>D</sub><sup>26</sup> = –4.0° (*c* = 0.46, MeOH). **Source:** XIAN HUA XIANG CHA CAI *Rabdosia adenantha* (leaf: yield = 0.0021%dw). **Ref:** 4640.

**614 Adenanthin J**

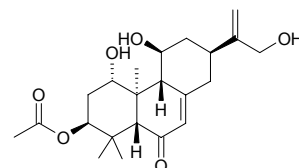
3 $\beta$ ,15 $\beta$ -Dihydroxy-1 $\alpha$ ,7 $\beta$ ,11 $\beta$ -triacetoxy-*ent*-kaur-16-en-6-one C<sub>26</sub>H<sub>36</sub>O<sub>9</sub> (492.57). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>27</sup> = –7.9° (*c* = 0.71, MeOH). **Source:** XIAN HUA XIANG CHA CAI *Rabdosia adenantha* (leaf: yield = 0.0025%dw). **Ref:** 4640.

**615 Adenanthin K**

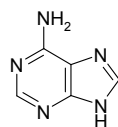
3 $\beta$ ,7 $\beta$ -Dihydroxy-1 $\alpha$ ,11 $\beta$ ,15 $\beta$ -triacetoxy-*ent*-kaur-16-en-6-one C<sub>26</sub>H<sub>36</sub>O<sub>9</sub> (492.57). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>26</sup> = –170.5° (*c* = 0.21, MeOH). **Source:** XIAN HUA XIANG CHA CAI *Rabdosia adenantha* (leaf: yield = 0.00098%dw). **Ref:** 4640.

**616 Adenanthin L**

1 $\alpha$ ,11 $\beta$ ,16-Trihydroxy-3 $\beta$ -acetoxy-*ent*-abieta-7,15(17)-dien-6-one C<sub>22</sub>H<sub>32</sub>O<sub>6</sub> (392.5). Colorless crystals, mp 272–273°C, [ $\alpha$ ]<sub>D</sub><sup>17</sup> = +28.5° (*c* = 0.44, MeOH). **Source:** XIAN HUA XIANG CHA CAI *Rabdosia adenantha* (leaf: yield = 0.0092%dw). **Ref:** 4640.

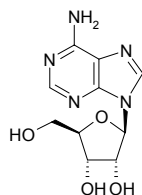
**617 Adenine**

[73-24-5] C<sub>5</sub>H<sub>5</sub>N<sub>5</sub> (135.13). Trihydrate: white trapezoid acicular crystals, 110°C (dehydrate), 220°C (sub), mp 360–365°C. **Pharm:** Leukopoietic; reagent used in biochemistry research; antioxidant inactive (SOD-like activity, EC<sub>50</sub> = 695 $\mu$ mol/L, control Gallic acid, EC<sub>50</sub> = 31.7 $\mu$ mol/L, *L*-Ascorbic acid, EC<sub>50</sub> = 34.6 $\mu$ mol/L)<sup>[3408]</sup>; antioxidant inactive (DPPH scavenger, EC<sub>50</sub> > 1000 $\mu$ mol/L, Gallic acid, EC<sub>50</sub> = 5.88 $\mu$ mol/L, *L*-Ascorbic acid, EC<sub>50</sub> = 6.25 $\mu$ mol/L)<sup>[3408]</sup>. **Source:** CHE QIAN *Plantago asiatica*, DANG GUI *Angelica sinensis* (root: content = 0.009%<sup>[5514]</sup>), DONG CHONG XIA CAO *Cordyceps sinensis* (dried fungal stroma growing on larva of a caterpillar: content = 0.011%<sup>[5512]</sup>), FU LING *Poria cocos*, GUI GAI *Coprinus atramentarius*, HU TAO REN *Juglans regia*, HUANG QI *Astragalus membranaceus* (root: content = 0.025%<sup>[5514]</sup>), JU HUA *Chrysanthemum morifolium* [Syn. *Dendranthema morifolium*], NAN GUA *Cucurbita moschata*, PING CHE QIAN *Plantago depressa*, QIE ZI *Solanum melongena*, REN GONG YONG CHONG CAO *Cordyceps militaris* cv. (sclerotium and stroma: content = 0.023%<sup>[5512]</sup>), REN SHEN *Panax ginseng* [Syn. *Panax schinseng*] (root: content = 0.0034%<sup>[5514]</sup>), SANG YE *Morus alba*, SU TIE SHU GUO *Cycas revoluta*, TIAN NAN XING *Arisaema consanguineum* (dried tuber: mean content = 0.018%<sup>[5508]</sup>), XIANG XUN *Lentinus edodes*, ZI YUN YING *Astragalus sinicus*. **Ref:** 658, 661, 3408, 5501, 5508, 5512, 5514.

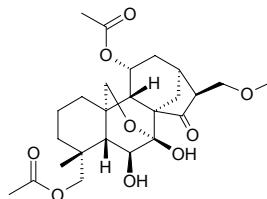


**618 Adenine nucleoside**

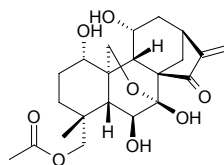
Adenosine; 9- $\beta$ -D-Ribofuranosyl-9H-purin-6-amine; Adenine riboside [58-61-7] C<sub>10</sub>H<sub>13</sub>N<sub>5</sub>O<sub>4</sub> (267.25). Crystals (H<sub>2</sub>O), mp 234~236°C, [ $\alpha$ ]<sub>D</sub><sup>11</sup> = -61.7° (c = 0.7, H<sub>2</sub>O); white acicular crystals, mp 233.5~234.5°C (alcohol), [ $\alpha$ ]<sub>D</sub><sup>24</sup> = -60.2° (c = 0.49, H<sub>2</sub>O); mp 235~236°C, soluble in water, insoluble in EtOH. **Pharm:** Antiarrhythmic, tyrosinase inhibitor (333.3 $\mu$ mol/L, InRt = 21.6%; control Kojic acid, 333.3 $\mu$ mol/L, InRt = 59.8%)<sup>[4233]</sup>; CNS stimulant; antifungal inactive (hmm pathogenic yeasts *Candida albicans*, *Candida glabrata* and *Candida tropicalis*); antioxidant inactive (DPPH scavenger, EC<sub>50</sub> > 50 $\mu$ g/mL, 50 $\mu$ g/mL, InRt = 4%, control Ascorbic acid, EC<sub>50</sub> = 1.6 $\mu$ g/mL = 9.1 $\mu$ mol/L)<sup>[4154]</sup>; antioxidant inactive (SOD-like activity, EC<sub>50</sub> > 1000 $\mu$ mol/L, control Gallic acid, EC<sub>50</sub> = 31.7 $\mu$ mol/L, L-Ascorbic acid, EC<sub>50</sub> = 34.6 $\mu$ mol/L)<sup>[3408]</sup>; antioxidant inactive (DPPH scavenger, EC<sub>50</sub> > 1000 $\mu$ mol/L, control Gallic acid, EC<sub>50</sub> = 5.88 $\mu$ mol/L, L-Ascorbic acid, EC<sub>50</sub> = 6.25 $\mu$ mol/L)<sup>[3408]</sup>. **Source:** AN HUI BEI MU *Fritillaria anhuiensis*, BAI FAN DOU *Phaseolus vulgaris*, BAN LAN GEN *Isatis indigotica*, BAO JING KU MAI CAI *Ixeris sonchifolia*, BEI SHA SHEN *Glehnia littoralis* (fruit), BEI SHA SHEN *Glehnia littoralis* (underground part), CANG ZHU *Atractylodes lancea*, CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochera rosea*], DA QING YE *Isatis indigotica*, DA SUAN *Allium sativum*, DANG GUI *Angelica sinensis* (root: content = 0.027%<sup>[5514]</sup>), DONG BEI HE SHI *Lappula echinata*, DONG CHONG XIA CAO *Cordyceps sinensis* (dried fungal stroma growing on larva of a caterpillar: content = 0.030%<sup>[5512]</sup>), GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], GAN SU BEI MU *Fritillaria przewalskii*, GOU GU SHU PI *Ilex cornuta*, GOU GU YE *Ilex cornuta*, GUAN HUA ROU CONG RONG *Cistanche tubulosa* (fleshy stem: content = 0.009%<sup>[5514]</sup>), HONG HUA *Carthamus tinctorius* (flower oil: content scope of 4 origins = 0.0038%~0.039%, mean content = 0.0175%<sup>[5508]</sup>), HONG MAO WU JIA PI *Acanthopanax giraldui* [Syn. *Acanthopanax giraldui* var. *inermis*; *Eleutherococcus giraldui*], HU BEI SHAN MAI DONG *Liriope spicata* var. *prolifera*, HU DIE HUA DOU *Clitoria ternatea*, HU TAO REN *Juglans regia*, HUANG QI *Astragalus membranaceus* (root: content = 0.010%<sup>[5514]</sup>), JIU CAI *Allium tuberosum*, JUAN BAI *Selaginella tamariscina* (dried whole herb: content scope = 0.317%~0.846%<sup>[5508]</sup>), LING ZHI *Ganoderma lucidum*, LING ZHI *Ganoderma lucidum* (dried sporocarp: content = 0.002%<sup>[5508]</sup>), MA BIAN CAO *Verbena officinalis*, MAI DONG *Ophiopogon japonicus* (tuberoid: content = trace<sup>[5514]</sup>), PING BEI MU *Fritillaria ussuriensis*, QI BAI ZHI *Angelica dahurica* cv. *Qibaizhi*, REN GONG YONG CHONG CAO *Cordyceps militaris* cv. (sclerotium and stroma: content = 0.250%<sup>[5512]</sup>), REN SHEN *Panax ginseng* [Syn. *Panax schinseng*] (root: content = 0.038%<sup>[5514]</sup>), SHAN YAO *Dioscorea batatas* [Syn. *Dioscorea opposita*], XIAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], XIE BAI *Allium macrostemon*, YANG CONG *Allium cepa*, YONG CHONG CAO *Cordyceps militaris*, ZANG HONG HUA *Crocus sativus* (pollen), ZANG HONG HUA *Crocus sativus* (stigma: yield = 0.00033%<sup>[4653]</sup>), ZHANG YE BAN XIA *Pinellia pedatisecta*, ZHE BEI MU *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*], widely distributed in nature. **Ref:** 569, 660, 900, 1521, 2576, 3408, 3525, 4154, 4233, 4348, 4653, 5501, 5507, 5508, 5512, 5514.

**619 Adenolin A**

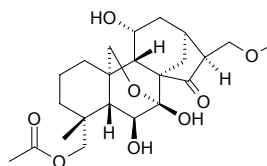
C<sub>25</sub>H<sub>36</sub>O<sub>9</sub> (480.56). mp 182~184°C, [ $\alpha$ ]<sub>D</sub><sup>19</sup> = -121.7°. **Source:** XIAN HUA XIANG CHA CAI *Rabdosia adenantha*. **Ref:** 4067.

**620 Adenolin B**

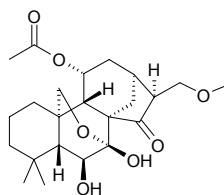
C<sub>22</sub>H<sub>30</sub>O<sub>8</sub> (422.48). mp 253~255°C, [ $\alpha$ ]<sub>D</sub><sup>19</sup> = -204.5°. **Source:** SHAN DI XIANG CHA CAI *Isodon oresbia* (aerial parts). **Ref:** 4067.

**621 Adenolin C**

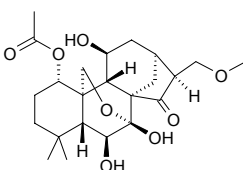
C<sub>23</sub>H<sub>34</sub>O<sub>8</sub> (438.52). mp 214~216°C, [ $\alpha$ ]<sub>D</sub><sup>19</sup> = -100.8°. **Source:** XIAN HUA XIANG CHA CAI *Rabdosia adenantha*. **Ref:** 4067.

**622 Adenolin D**

C<sub>23</sub>H<sub>34</sub>O<sub>7</sub> (422.52). mp 204~206°C, [ $\alpha$ ]<sub>D</sub><sup>19</sup> = -78.9°. **Source:** XIAN HUA XIANG CHA CAI *Rabdosia adenantha*. **Ref:** 4067.

**623 Adenolin E**

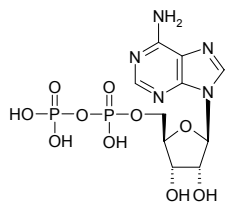
C<sub>23</sub>H<sub>34</sub>O<sub>8</sub> (438.52). mp 213.5~215°C, [ $\alpha$ ]<sub>D</sub><sup>19</sup> = -82.9°. **Source:** XIAN HUA XIANG CHA CAI *Rabdosia adenantha*. **Ref:** 4067.



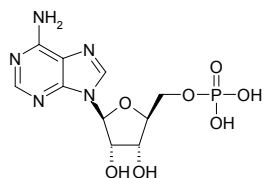


**624 Adenosine diphosphate**

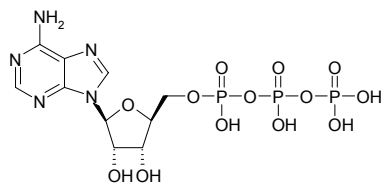
$C_{10}H_{15}N_5O_{10}P_2$  (427.21). Source: XIANG XUN *Lentinus edodes*. Ref: 660.

**625 5'-Adenosine monophosphate**

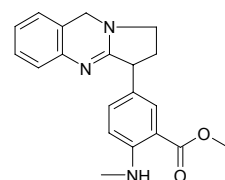
[61-19-8]  $C_{10}H_{14}N_5O_7P$  (347.23). mp 195°C. Source: MO GU *Agaricus campestris*. Ref: 6.

**626 Adenosine triphosphate**

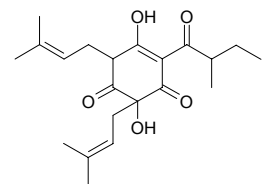
[56-65-5]  $C_{10}H_{16}N_5O_{13}P_3$  (507.19). Pharm: Coenzyme of energy transfer in phosphate bonds; reagent used in biochemistry research. Source: HA SHI MA *Rana temporaria chensinensis*; *Rana amurensis*, LU RONG *Cervus nippon*; *Cervus elaphus*, QING WA *Rana nigromaculata*; *Rana plancyi*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. Ref: 2, 6, 658.

**627 Adhatodine**

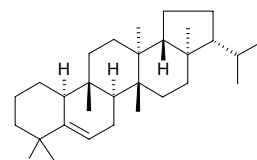
[33903-14-9]  $C_{20}H_{21}N_3O_2$  (335.41). mp 183°C. Source: DA BO GU *Adhatoda vasica*. Ref: 6.

**628 Adhumulone**

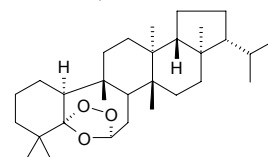
$C_{21}H_{30}O_5$  (362.47). Source: PI JIU HUA *Humulus lupulus*. Ref: 660.

**629 Adianene**

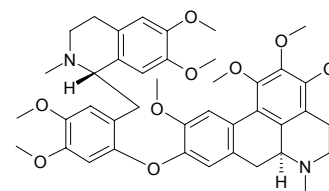
$C_{30}H_{50}$  (410.73). Source: DAN GAI TIE XIAN JUE *Adiantum monochlamys*. Ref: 660.

**630 Adian-5-ene ozonide**

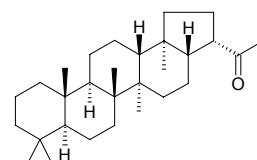
$C_{30}H_{50}O_3$  (458.73). Source: DAN GAI TIE XIAN JUE *Adiantum monochlamys*, GAO SHAN TIAO JUE *Oleandra wallichii*. Ref: 660, 1521.

**631 Adiantifoline**

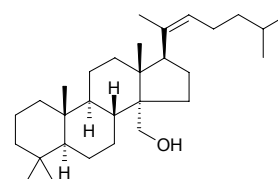
[20823-96-5]  $C_{42}H_{50}N_2O_9$  (726.87). Dark yellow acicular crystals (alcohol), thin acicular crystals (alcohol-ether), mp 142–143°C, dark yellow needle crystals (anhydrous alcohol), mp 143.5–144°C,  $[\alpha]_D^{28} = +90^\circ$  ( $c = 0.11$ , methanol). Pharm: Antihypertensive (rbt, 1mg/kg, blood pressure is lowered by 3.33kPa for 2min); supertoxic agent. Source: HE NAN TANG SONG CAO *Thalictrum honanense*, TIE XIAN JUE YE TANG SONG CAO *Thalictrum minus* var. *adiantifolium*. Ref: 1, 537.

**632 Adiantone**

[1253-69-6]  $C_{29}H_{48}O$  (412.71). mp 222–224°C. Source: BIAN YE TIE XIAN JUE *Adiantum caudatum*, GUAN ZHONG *Dryopteris crassirhizoma*, TIE SI QI *Adiantum pedatum*, ZHU ZONG CAO *Adiantum capillus-veneris*. Ref: 6.

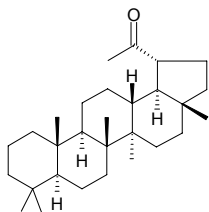
**633 Adiantulanosterol**

Lanost-20(22)-ene-30-ol  $C_{30}H_{52}O$  (428.75). Colorless crystals, mp 170–172°C,  $[\alpha]_D^{20} = -29.4^\circ$  ( $c = 0.07$ ,  $CHCl_3$ ). Source: XI YE TIE XIAN JUE *Adiantum venustum* (aerial parts). Ref: 3957.

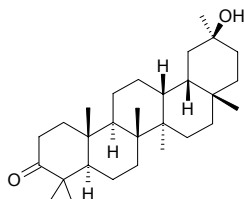


**634 Adiantulupanone**

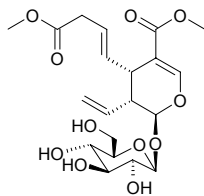
30-Normethyl lupane-20-one  $C_{29}H_{48}O$  (412.71). Colorless rhombic crystals, mp 212~215°C. Source: XI YE TIE XIAN JUE *Adiantum venustum* (aerial parts). Ref: 3957.

**635 Adiantuoleanone**

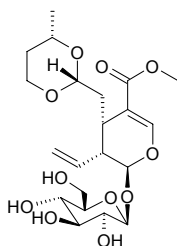
30-Normethyl olean-3-on-30 $\beta$ -ol  $C_{29}H_{48}O_2$  (428.70). mp 268~269°C. Source: XI YE TIE XIAN JUE *Adiantum venustum* (aerial parts). Ref: 3957.

**636 Adinoside A**

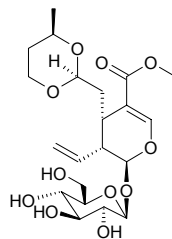
$C_{20}H_{28}O_{11}$  (444.44). Amorphous powder,  $[\alpha]_D^{26} = -40^\circ$  ( $c = 0.5$ , MeOH). Source: JI ZI MU *Sinoadina Racemosa* [Syn. *Adina racemosa*] (leaf, flower and twig: yield = 0.00073%dw). Ref: 4723.

**637 Adinoside B**

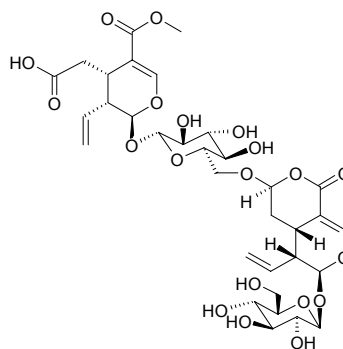
$C_{21}H_{32}O_{11}$  (460.48). Amorphous powder,  $[\alpha]_D^{31} = -111^\circ$  ( $c = 0.93$ , MeOH). Source: JI ZI MU *Sinoadina Racemosa* [Syn. *Adina racemosa*] (leaf, flower and twig: yield = 0.0031%dw). Ref: 4723.

**638 Adinoside C**

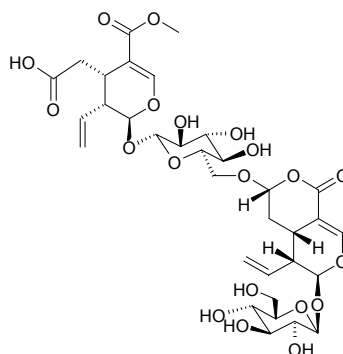
$C_{21}H_{32}O_{11}$  (460.48). Amorphous powder,  $[\alpha]_D^{23} = -134^\circ$  ( $c = 0.5$ , MeOH). Source: JI ZI MU *Sinoadina Racemosa* [Syn. *Adina racemosa*] (leaf, flower and twig: yield = 0.0037%dw). Ref: 4723.

**639 Adinoside D**

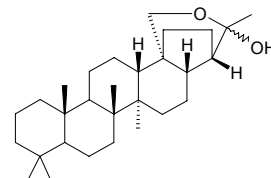
$C_{33}H_{44}O_{20}$  (760.71). Amorphous powder,  $[\alpha]_D^{28} = -137^\circ$  ( $c = 1.0$ , MeOH). Source: JI ZI MU *Sinoadina Racemosa* [Syn. *Adina racemosa*] (leaf, flower and twig: yield = 0.0042%dw). Ref: 4723.

**640 Adinoside E**

$C_{33}H_{44}O_{20}$  (760.71). Amorphous powder,  $[\alpha]_D^{28} = -181^\circ$  ( $c = 1.0$ , MeOH). Source: JI ZI MU *Sinoadina Racemosa* [Syn. *Adina racemosa*] (leaf, flower and twig: yield = 0.0023%dw). Ref: 4723.

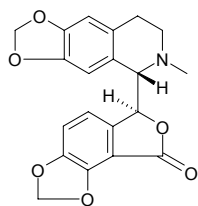
**641 Adipedatol**

[13843-87-3]  $C_{29}H_{48}O_2$  (428.70). mp 185~188°C. Source: TIE SI QI *Adiantum pedatum*. Ref: 6.

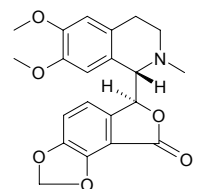


**642 Adlumidine**

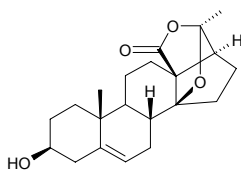
Bicuculline [550-49-2]  $C_{20}H_{17}NO_6$  (367.36). Orthogonal lamellar crystals ( $CHCl_3$ -MeOH), mp 236~238°C; 215°C,  $[\alpha]_D^{25} = +116.2^\circ$  ( $c = 22$ ,  $CHCl_3$ ), almost insoluble in water, very slightly soluble in alcohol, ether and ethane. **Pharm:**  $\gamma$ -Aminobutyric acid antagonist; eclampptogenic, acts violently, attacks quickly and persistently; uterine stimulant. **Source:** BIAN BING HUANG JIN *Corydalis mucronifera*, DOU ZHUANG HE BAO MU DAN *Dicentra cucullaria*, QUAN YE YAN HU SUO *Corydalis repens* (rhizome: content = 0.03%<sup>[5508]</sup>), TU YAN HU *Corydalis repens* var. *humosides*, XIA TIAN WU *Corydalis decumbens* [Syn. *Corydalis amabilis*] (rhizome: content = 0.15%<sup>[5508]</sup>), XUN ZHUANG SHAN YUAN CAO *Adlumia cirrhosa* [Syn. *Adlumia fungosa*], ZI HUA YU DENG CAO *Corydalis incisa*, YAN HUANG LIAN *Corydalis thalictrifolia*. **Ref:** 1, 6, 5508.

**643 Adlumine**

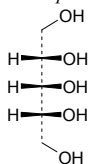
[524-46-9]  $C_{21}H_{21}NO_6$  (383.40). **Pharm:** Inhibits heart; uterine stimulant; smooth muscle stimulant (small intestinal). **Source:** CANG BAI ZI JIN *Corydalis sempervirens*, MEI GUI HONG JIN *Corydalis rosea*, SHE GUO HUANG JIN *Corydalis ophiocarpa*, SI KAO LE ZI JIN *Corydalis scouleri*, TIAO LIE HUANG JIN *Corydalis linearoides*, XIA TIAN WU *Corydalis decumbens* [Syn. *Corydalis amabilis*], XUN ZHUANG SHAN YUAN CAO *Adlumia cirrhosa* [Syn. *Adlumia fungosa*]. **Ref:** 1, 5501.

**644 Adonilide**

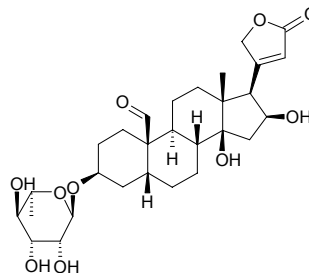
[21132-14-9]  $C_{21}H_{28}O_4$  (344.45). mp 268~270°C. **Source:** FU SHOU CAO *Adonis amurensis*. **Ref:** 6.

**645 Adonitol**

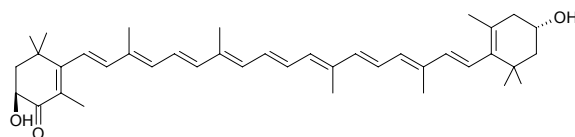
1,2,3,4-Pentanepentol [488-81-3]  $C_5H_{12}O_5$  (152.15). mp 104°C, soluble in water and ethanol. **Source:** CHAI HU *Bupleurum chinense*, JI CAI *Capsella bursa-pastoris*. **Ref:** 2.

**646 Adonitoxin**

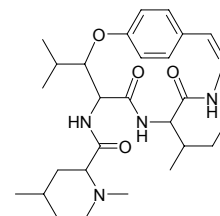
[17651-61-5]  $C_{29}H_{42}O_{10}$  (550.66).  $[\alpha]_D^{22} = -19.9^\circ$  ( $c = 0.33$ , MeOH)<sup>[5507]</sup>. **Pharm:** Toxin (vertebrate)<sup>[658]</sup>; cardiotoxic<sup>[5507]</sup>. **Source:** BEI CE JIN ZHAN HUA *Adonis sibirica*<sup>[5507]</sup>, CHUN FU SHOU CAO *Adonis vernalis*<sup>[658]</sup>, FU ER JIA CE JIN ZHAN HUA *Adonis wolgensis*<sup>[5507]</sup>. **Ref:** 658, 5507.

**647 Adonixanthin**

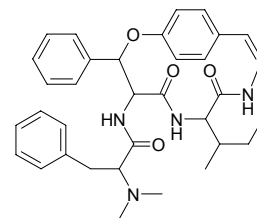
$C_{40}H_{54}O_3$  (582.87). **Source:** QIU FU SHOU CAO *Adonis annua* **Ref:** 660.

**648 Adouetine X**

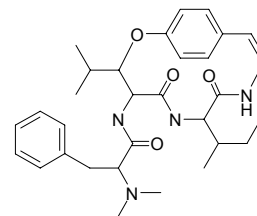
[19542-37-1]  $C_{28}H_{44}N_4O_4$  (500.69). mp 277~279°C. **Source:** HE TA CAO *Waltheria americana*. **Ref:** 6.

**649 Adouetine Y**

[19542-38-2]  $C_{34}H_{40}N_4O_4$  (568.72). mp 292°C. **Source:** HE TA CAO *Waltheria americana*. **Ref:** 6.

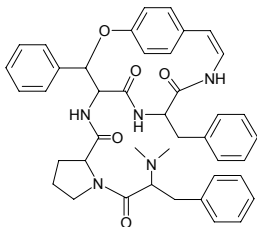
**650 Adouetine Y'**

[19542-39-3]  $C_{31}H_{42}N_4O_4$  (534.70). mp 289.0~290.5°C. **Source:** HE TA CAO *Waltheria americana*. **Ref:** 6.

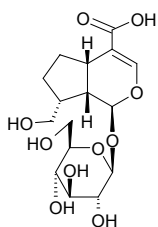


**651 Adouetine Z**

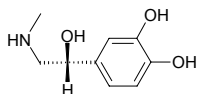
[19542-40-6] C<sub>42</sub>H<sub>45</sub>N<sub>5</sub>O<sub>5</sub> (699.86). mp 140~145°C. **Pharm:** Antipyretic (low dose); causes anorexia (high dose); antihypertensive; sedative (low dose); LD<sub>50</sub> (mus) = 52.5mg/kg. **Source:** HE TA CAO *Waltheria americana*. **Ref:** 1, 6.

**652 Adoxosidic acid**

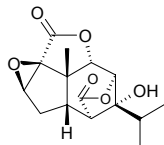
C<sub>16</sub>H<sub>24</sub>O<sub>10</sub> (376.36). **Source:** GUAN HUA ROU CONG RONG *Cistanche tubulosa*. **Ref:** 2448.

**653 Adrenaline**

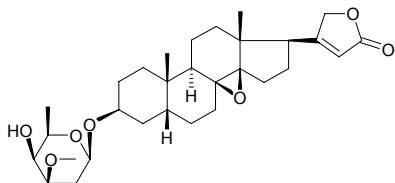
*L*-Epinephrine [51-43-4] C<sub>9</sub>H<sub>13</sub>NO<sub>3</sub> (183.21). mp 211~212°C, soluble in acetic acid. **Source:** CHAN SU *Bufo bufo gargarizans*; *Bufo melanostictus*, NIU SHEN *Bos taurus domesticus*; *Bubalus bubalis*, JIN YU *Carassius auratus*, WEI NAO *Erinaceus europaeus*; *Hemiechinus dauuricus*; *Hemiechinus auritus*, WEI XIN GAN *Erinaceus europaeus*; *Hemiechinus dauuricus*; *Hemiechinus auritus*, XIANG JIAO *Musa paradisiaca* var. *sapientum* [Syn. *Musa sapientum*]. **Ref:** 6, 660, 1521.

**654 Aduncin**

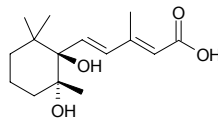
C<sub>15</sub>H<sub>18</sub>O<sub>6</sub> (294.31). **Source:** GOU ZHUANG SHI HU *Dendrobium aduncum*. **Ref:** 660.

**655 Adynerin**

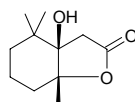
[35109-93-4] C<sub>30</sub>H<sub>44</sub>O<sub>7</sub> (516.68). mp 234°C. **Pharm:** Toxin (vertebrate). **Source:** JIA ZHU TAO *Nerium indicum*, OU ZHOU JIA ZHU TAO *Nerium oleander*. **Ref:** 6, 658.

**656 Aeginetic acid**

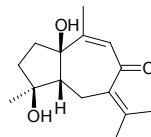
[53337-92-1] C<sub>15</sub>H<sub>24</sub>O<sub>4</sub> (268.36). mp 205°C. **Source:** YE GU *Aeginetia indica*. **Ref:** 6.

**657 Aeginetolide**

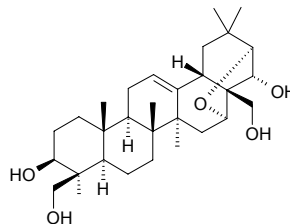
[53337-93-2] C<sub>11</sub>H<sub>18</sub>O<sub>3</sub> (198.26). mp 169~170°C. **Source:** YE GU *Aeginetia indica*. **Ref:** 6.

**658 Aerugidiol**

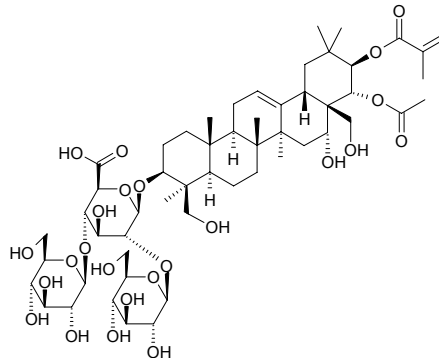
C<sub>15</sub>H<sub>22</sub>O<sub>3</sub> (250.34). **Pharm:** NO production inhibitor inactive (mus peritoneal macrophages, induced by LPS, 100μmol/L, InRt = (12.5±1.6)%, control *L*-NMMA, 100μmol/L, InRt = (79.2±0.9)%)<sup>[4150]</sup>. **Source:** PING E SHU *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*]. **Ref:** 660, 4150.

**659 Aescigenin**

[17806-68-7] C<sub>30</sub>H<sub>48</sub>O<sub>5</sub> (488.71). mp 307°C, mp 317~318°C. **Source:** RI BEN QI YE SHU *Aesculus turbinata*. **Ref:** 6, 660.

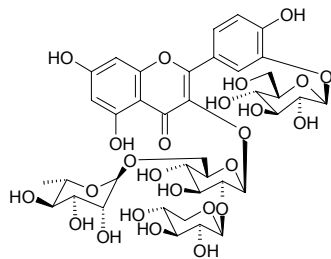
**660 Aescin**

21-*O*-Angeloyl-22-*O*-acetylprotoaescigenin-3-*O*-[β-*D*-glucopyranosyl(1→2)][β-*D*-glucopyranosyl(1→4)]-β-*D*-glucopyranosiduronic acid C<sub>55</sub>H<sub>86</sub>O<sub>24</sub> (1131.29). **Pharm:** Antineoplastic; antifungal; anti-inflammatory (mus, assay of Dimethyl benzene-induced inflammation, dose 30mg/kg, InRt = 71.5%; control Dexamethasone, dose 1mg/kg, InRt = 55.6%); astringent; hemolytic. **Source:** OU ZHOU QI YE SHU *Aesculus hippocastanum*, QI YE SHU *Aesculus chinensis* (seed), SUO LUO ZI *Aesculus wilsonii*. **Ref:** 658, 2578.

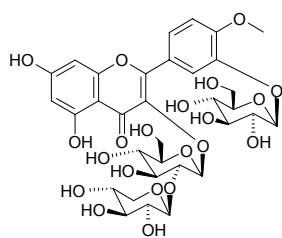


**661 Aesculflavoside**

Quercetin-3-*O*-[ $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 2)]-[ $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 6)]- $\beta$ -*D*-glucopyranoside-3'-*O*- $\beta$ -*D*-glucopyranoside C<sub>38</sub>H<sub>48</sub>O<sub>25</sub> (904.79). Yellow powder,  $[\alpha]_D^{22} = -107.8^\circ$  ( $c = 1.25$ , MeOH). **Pharm:** Antiviral (*in vitro*, RSV, IC<sub>50</sub> = 4.5 $\mu$ g/mL, CC<sub>50</sub> = 71.3 $\mu$ g/mL; Para-3, IC<sub>50</sub> = 35.6 $\mu$ g/mL, CC<sub>50</sub> = 71.3 $\mu$ g/mL; Flu-A, IC<sub>50</sub> > 100 $\mu$ g/mL, CC<sub>50</sub> = 107.5 $\mu$ g/mL; control Ribavirin: RSV, IC<sub>50</sub> = 2.6 $\mu$ g/mL, CC<sub>50</sub> = 62.5 $\mu$ g/mL; PIV3, IC<sub>50</sub> = 2.6 $\mu$ g/mL, CC<sub>50</sub> = 62.5 $\mu$ g/mL; Flu-A, IC<sub>50</sub> = 62.5 $\mu$ g/mL, CC<sub>50</sub> > 125 $\mu$ g/mL)<sup>[4740]</sup>. **Source:** QI YE SHU *Aesculus chinensis* (seed). **Ref:** 4740.

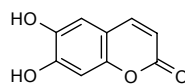
**662 Aesculflavoside A**

4'-Methoxyquercetin-3-*O*- $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranoside-3'-*O*- $\beta$ -*D*-glucopyranoside C<sub>33</sub>H<sub>40</sub>O<sub>21</sub> (772.67). Yellow powder,  $[\alpha]_D^{22} = -102.1^\circ$  ( $c = 0.25$ , MeOH). **Source:** QI YE SHU *Aesculus chinensis* (seed). **Ref:** 4740.

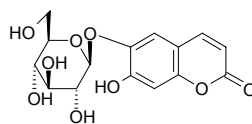
**663 Aesculetin**

Esculetin; Cichorigenin [305-01-1] C<sub>9</sub>H<sub>6</sub>O<sub>4</sub> (178.15). Rhomboid crystals (icy acetic acid); leaflike crystals (sub under vacuum); mp 268~270°C; mp 242~248°C (dec). **Pharm:** Antiasthmatic; antibacterial (*Bacillus coli* and *Staphylococcus aureus in vitro*); antifungal; anti-inflammatory (swollen foot model caused by carrageenan, large dose, inhibits increase of blood capillary permeability induced by histamine); antitussive (dispels phlegm); LD (mus, sc) = 250mg/kg. **Source:** BAI LA SHU *Fraxinus chinensis*, CEN PI *Fraxinus rhynchophylla* [Syn. *Fraxinus chinensis* var. *rhynchophylla*] (bark: content scope = 0.122%~1.01%<sup>[5501]</sup>), HENG GEN FEI CAI *Sedum kamschaticum*, HUA BAI LA SHU *Fraxinus ornus*, HUANG GUO QIE *Solanum xanthocarpum*, JIAN YE CEN *Fraxinus szaboana* [Syn. *Fraxinus chinensis* var. *acuminata*], JU QU *Cichorium intybus*, LANG PA CAO *Bidens tripartita*, LI MENG *Citrus limonia*, LIU YE CEN *Fraxinus stylosa* (bark: mean content = 0.14%<sup>[5508]</sup>), LONG YAN DU HUO *Aralia fargesii*, MAO YAN CAO *Euphorbia lunulata*, NING MENG YE *Citrus limon*, OU ZHOU QI YE SHU *Aesculus hippocastanum* (in 1938 the compound was isolated from the plant by Genya Shimada)<sup>[5505]</sup>, PI HAN CAO *Melilotus suaveolens*, QIAN JIN ZI *Euphorbia lathyris* (dried ripe seed: mean content of 3 origins = 0.238%<sup>[5508]</sup>), QIN LING BAI LA SHU *Fraxinus paxiana* (bark: content = 0.05%<sup>[5508]</sup>), RI BEN HUANG BAI *Phellodendron japonicum* (leaf), RI BEN QI YE SHU *Aesculus turbinata*, SHUI QU LIU *Fraxinus mandshurica* (bark: content = 0.06%<sup>[5508]</sup>), XI LA GANG LIU

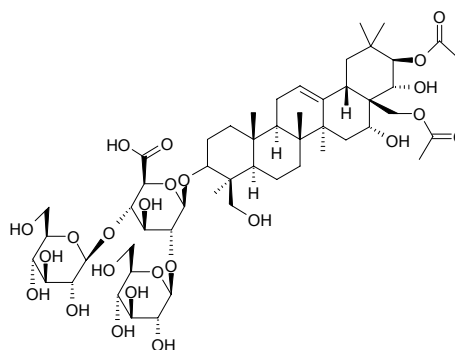
*Periploca graeca*, XIAO YE CEN *Fraxinus bungeana*, XIE WEI JU *Koelpinia linearis*, YI WO SI JING TIAN *Sedum ewersii*, YING GUO OU SHI NAN *Erica vagans*, ZANG QIE *Anisodus tanguticus* [Syn. *Scopolia tangutica*], occurs in many plants. **Ref:** 4, 6, 572, 658, 660, 661, 4502, 5501, 5505, 5508.

**664 Aesculin**

Bicoloirin; Esculin [531-75-9] C<sub>15</sub>H<sub>16</sub>O<sub>9</sub> (340.29). Sesquihydrate, acicular (hot water), mp 204~206°C,  $[\alpha]_D^{18} = -78.4^\circ$  ( $c = 2.5$ , 50% dioxane). **Pharm:** Antibacterial; platelet aggregation inhibitor; anti-inflammatory (rat: swollen foot model caused by carrageenan, 10mg/kg ip, InRt = 35%, caused by glucosan, 10mg/kg ip, InRt = 28%, caused by 5-HT, 10mg/kg ip, InRt = 20%, caused by histamine, 10mg/kg ip, InRt = 8%; gpg: erythema reaction on back from ultraviolet irradiation); inhibits increase of blood capillary permeability (gpg, induced by histamine); diuretic (mus); inhibits carcinogenic action of chemicals; aldose reductase inhibitor (rat eye lens). **Source:** CEN PI *Fraxinus rhynchophylla* [Syn. *Fraxinus chinensis* var. *rhynchophylla*] (bark: content scope = 2.63%~6.79%<sup>[5501]</sup>), HUA BAI LA SHU *Fraxinus ornus*, JIAN YE CEN *Fraxinus szaboana* [Syn. *Fraxinus chinensis* var. *acuminata*], JU QU *Cichorium intybus*, LIU YE CEN *Fraxinus stylosa* (bark: mean content = 1.77%<sup>[5508]</sup>), OU MAN TUO LUO GEN *Datura stramonium*, OU ZHOU QI YE SHU *Aesculus hippocastanum*, PI HAN CAO *Melilotus suaveolens*, QIAN JIN ZI *Euphorbia lathyris* (content scope = 0.88%~1.17%<sup>[5501]</sup>), QIN LING BAI LA SHU *Fraxinus paxiana* (bark: content = 0.02%<sup>[5508]</sup>), SHUI QU LIU *Fraxinus mandshurica* (bark: content = 0.03%<sup>[5508]</sup>), TU LIAN QIAO *Hymenodictyon excelsum*, XIAO YE CEN *Fraxinus bungeana*, YING GUO SHAN ZHA *Crataegus oxyacantha*. **Ref:** 4, 6, 660, 661, 5501, 5508.

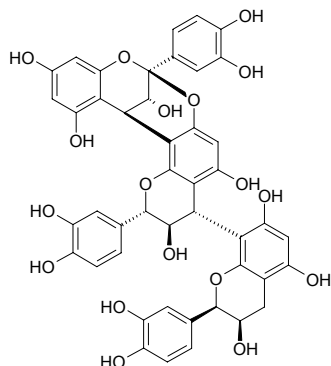
**665 Aesculidide A**

21,28-Di-*O*-acetylprotoaescigenin-3-*O*-[ $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 2)][ $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 4)]- $\beta$ -*D*-glucopyranosiduronic acid C<sub>52</sub>H<sub>82</sub>O<sub>24</sub> (1091.22). White powder,  $[\alpha]_D^{25} = -11.2^\circ$  ( $c = 1.25$ , MeOH). **Source:** QI YE SHU *Aesculus chinensis* (seed). **Ref:** 2578.



**666 Aesculitannin B**

$C_{45}H_{36}O_{18}$  (864.78). Pale yellow amorphous powder,  $[\alpha]_D^{21} = +125.3^\circ$  ( $c = 1.92$ , MeOH). Source: CHANG JIE ZHU *Parameria laevigata* (bark). Ref: 3523.

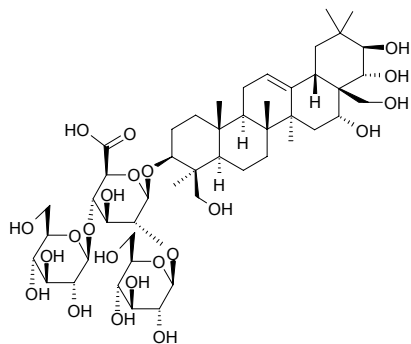
**667 Aesculuside B**

Desacylescigenin I;

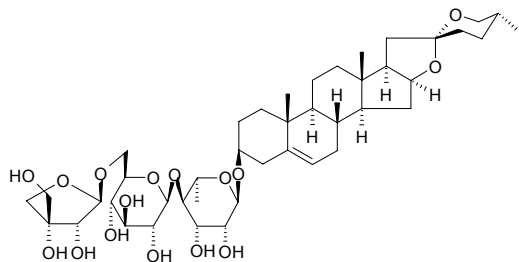
Protoaescigenin-3-*O*-[ $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 2)][ $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 4)]- $\beta$ -*D*-glucopyranosiduronic acid [26339-92-4]  $C_{48}H_{78}O_{22}$  (1007.14).

Colorless fine crystals, mp 260–262°C,  $[\alpha]_D^{25} = -33.9^\circ$  ( $c = 1.15$ , MeOH).

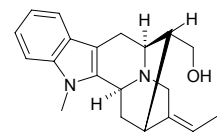
Source: QI YE SHU *Aesculus chinensis* (seed). Ref: 2578, 3528.

**668 Aferoside A**

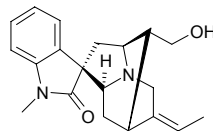
$C_{43}H_{68}O_{16}$  (841.01). Pharm: Anti-inflammatory (used to treatment of arthritis). Source: FEI ZHOU BI QIAO JIANG *Costus afer*. Ref: 2165.

**669 Affinisine**

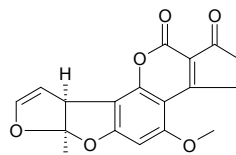
[2912-11-0]  $C_{20}H_{24}N_2O$  (308.42). Pharm: Analgesic (rat); CNS depressant (mus). Source: DA YE TANG JIAO SHU *Alstonia macrophylla*. Ref: 658.

**670 Affinisine oxindole**

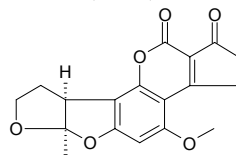
$C_{20}H_{24}N_2O_2$  (324.43). Light yellowish oil,  $[\alpha]_D = -70^\circ$  ( $c = 0.06$ ,  $CHCl_3$ ). Source: XIA YE JI GU CHANG SHAN *Alstonia angustifolia* (leaf). Ref: 3780.

**671 Aflatoxin B<sub>1</sub>**

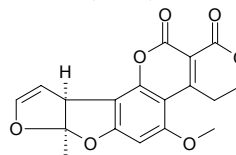
$C_{17}H_{12}O_6$  (312.28). Source: WU HUA GUO *Ficus carica*. Ref: 660.

**672 Aflatoxin B<sub>2</sub>**

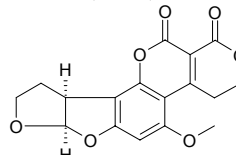
$C_{17}H_{14}O_6$  (314.30). Source: WU HUA GUO *Ficus carica*. Ref: 660.

**673 Aflatoxin G<sub>1</sub>**

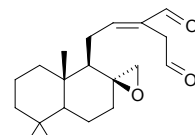
$C_{17}H_{12}O_7$  (328.28). Source: WU HUA GUO *Ficus carica*. Ref: 660.

**674 Aflatoxin G<sub>2</sub>**

$C_{17}H_{14}O_7$  (330.30). Source: WU HUA GUO *Ficus carica*. Ref: 660.

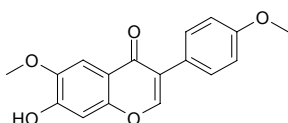
**675 Aframodial**

(*E*)-8 $\beta$ (17)-Epoxyabd-12-ene-15,16-dial [115795-58-9]  $C_{20}H_{30}O_3$  (318.46). Colorless acicular crystals (methanol–water), mp 90–92°C,  $[\alpha]_D = +27.3^\circ$  ( $c = 0.27$ ,  $CHCl_3$ ). Pharm: Antibacterial (gram-negative, gram-positive bacteria and *Penicillium aureus*); antifungal (*Candida albicans*, MIC = 12.5  $\mu$ g/mL); cytotoxic (KB, ED<sub>50</sub> = 22.5  $\mu$ g/mL); antihypercholesterolemic (rat liver homogenate, inhibits biosynthesis of cholesterol); antimalarial (*in vitro*, *Plasmodium falciparum* 3D7, IC<sub>50</sub> = (24.3 $\pm$ 0.6)  $\mu$ g/mL = (76.3 $\pm$ 1.9)  $\mu$ mol/L)<sup>[3022]</sup>. Source: DA LIANG JIANG *Alpinia galanga*, DUO NI FEI SHA REN *Aframomum daniellin*, SHENG JIANG *Zingiber officinale*. Ref: 983, 1139, 1140, 1521, 3022.

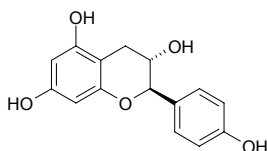


**676 Afrormosin**

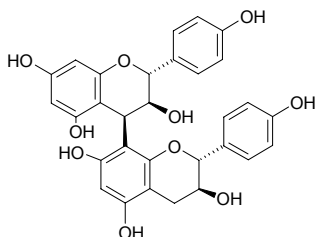
Castanin [550-79-8] C<sub>17</sub>H<sub>14</sub>O<sub>5</sub> (298.30). Colorless needles, mp 236–237°C. **Pharm:** Antifungal; antimalarial (*Plasmodium falciparum* PoW, IC<sub>50</sub> = (36.6±3.3)µg/mL, control Chloroquine diphosphate, IC<sub>50</sub> = (0.006±0.002)µg/mL; Dd2, IC<sub>50</sub> = (38.5±7.3)µg/mL, Chloroquine diphosphate, IC<sub>50</sub> = (0.06±0.01)µg/mL)<sup>[5208]</sup>. **Source:** MI HUA DOU *Spatholobus suberectus*, KUN MING JI XUE TENG *Millettia dielsiana*, WU CI KE YA SHU *Andira inermis* (leaf), XI FEI HONG DOU SHU *Afrormosia elata*. **Ref:** 658, 2205, 5208.

**677 Afzelechin**

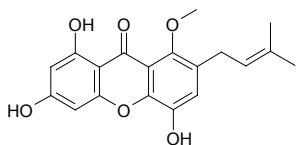
C<sub>15</sub>H<sub>14</sub>O<sub>5</sub> (274.28). **Source:** HAI ER CHA *Acacia catechu*. **Ref:** 660.

**678 Afzelechin-(4α→8)-afzelechin**

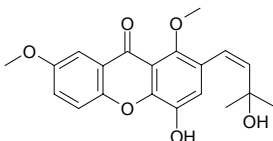
[101339-37-1] C<sub>30</sub>H<sub>26</sub>O<sub>10</sub> (546.54). **Pharm:** Tanning agent. **Source:** QIU QIE SHU *Kandelia candel*. **Ref:** 658.

**679 Afzeliixanthone A**

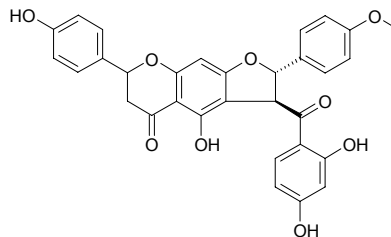
C<sub>19</sub>H<sub>18</sub>O<sub>6</sub> (342.35). Yellow oil. **Pharm:** Antioxidant (DPPH scavenger, IC<sub>50</sub> = 0.177µg/mL, control BHA, IC<sub>50</sub> = 0.135µg/mL, Vitamin E, IC<sub>50</sub> = 0.138µg/mL). **Source:** A FU ZE LI SHAN ZHU ZI *Garcinia afzelii* (stem bark: yield = 0.00006%dw)<sup>[2084]</sup>. **Ref:** 2084.

**680 Afzeliixanthone B**

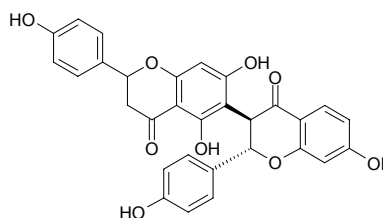
C<sub>20</sub>H<sub>20</sub>O<sub>6</sub> (356.38). Yellow oil. **Pharm:** Antioxidant (DPPH scavenger, IC<sub>50</sub> = 0.140µg/mL, control BHA, IC<sub>50</sub> = 0.135µg/mL, Vitamin E, IC<sub>50</sub> = 0.138µg/mL). **Source:** A FU ZE LI SHAN ZHU ZI *Garcinia afzelii* (stem bark: yield = 0.00007%dw)<sup>[2084]</sup>. **Ref:** 2084.

**681 Afzelone A**

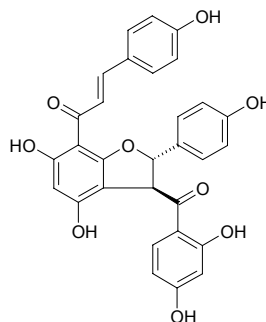
C<sub>31</sub>H<sub>24</sub>O<sub>9</sub> (540.53). Amorphous pale yellow solid, [α]<sub>D</sub><sup>25</sup> = +193° (c = 0.4, Me<sub>2</sub>CO). **Source:** *Ochna afzelii*. **Ref:** 3449.

**682 Afzelone B**

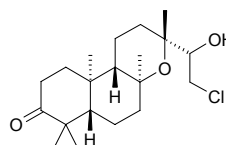
C<sub>30</sub>H<sub>22</sub>O<sub>9</sub> (526.50). Amorphous pale yellow solid, [α]<sub>D</sub><sup>25</sup> = -19° (c = 0.6, Me<sub>2</sub>CO). **Source:** *Ochna afzelii*. **Ref:** 3449.

**683 Afzelone C**

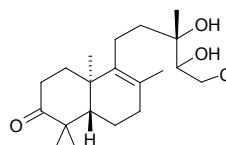
C<sub>30</sub>H<sub>22</sub>O<sub>9</sub> (526.50). **Source:** *Ochna afzelii*. **Ref:** 3449.

**684 Agallochin A**

3-Oxo-*ent*-13epi-8(13)-epoxy-15-chloro-14-hydroxylabdane C<sub>20</sub>H<sub>33</sub>ClO<sub>3</sub> (356.94). Colorless needles (MeOH), mp 145–148°C, [α]<sub>D</sub><sup>25</sup> = -38.0° (c = 1.5, CHCl<sub>3</sub>). **Source:** HAI QI *Excoecaria agallocha* (root). **Ref:** 5114.

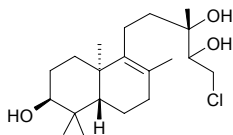
**685 Agallochin B**

*ent*-15-Chloro-13,14-dihydroxylabd-8(9)-en-3-one C<sub>20</sub>H<sub>33</sub>ClO<sub>3</sub> (356.94). Colorless needles (MeOH), mp 157–159°C, [α]<sub>D</sub><sup>25</sup> = -45.1° (c = 1.75, CHCl<sub>3</sub>). **Source:** HAI QI *Excoecaria agallocha* (root). **Ref:** 5114.

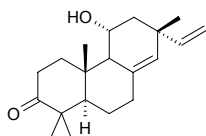


**686 Agallochin C**

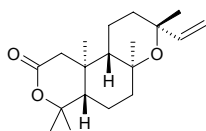
*ent*-15-Chloro-labd-8(9)ene-3 $\alpha$ ,13,14-triol C<sub>20</sub>H<sub>35</sub>ClO<sub>3</sub> (358.95). Colorless oil,  $[\alpha]_D^{25} = -26.4^\circ$  ( $c = 1.7$ , CHCl<sub>3</sub>). Source: HAI QI *Excoecaria agallocha* (root). Ref: 5114.

**687 Agallochin D**

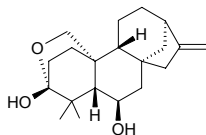
*ent*-11 $\beta$ -Hydroxy-8(14),15-isopimaradien-3-one C<sub>20</sub>H<sub>30</sub>O<sub>2</sub> (302.46). Colorless needles, mp 145~148°C,  $[\alpha]_D^{25} = +45.3^\circ$  ( $c = 1.9$ , CHCl<sub>3</sub>). Source: HAI QI *Excoecaria agallocha* (root). Ref: 5114.

**688 Agallochin E**

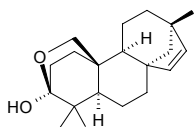
8,13-Epoxy-3-nor-2,3-seco-14-epilabden-2,4-olide C<sub>19</sub>H<sub>30</sub>O<sub>3</sub> (306.45). Colorless needles, mp 140~142°C,  $[\alpha]_D^{25} = -101.2^\circ$  ( $c = 1.6$ , CHCl<sub>3</sub>). Source: HAI QI *Excoecaria agallocha* (root). Ref: 5114.

**689 Agallochin F**

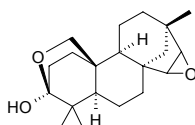
*ent*-3 $\beta$ ,20-Epoxy-3 $\alpha$ ,6 $\alpha$ -dihydroxykaur-16-ene C<sub>20</sub>H<sub>30</sub>O<sub>3</sub> (318.46). Colorless oil,  $[\alpha]_D^{25} = -21.6^\circ$  ( $c = 1.2$ , CHCl<sub>3</sub>). Source: HAI QI *Excoecaria agallocha* (root; yield = 0.00075%dw). Ref: 4613.

**690 Agallochin G**

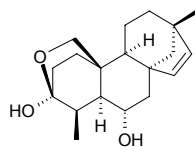
3 $\beta$ ,20-Epoxy-3 $\alpha$ -hydroxybeyer-15-ene C<sub>20</sub>H<sub>30</sub>O<sub>2</sub> (302.46). Colorless needles (MeOH), mp 152~54°C,  $[\alpha]_D^{25} = -59.2^\circ$  ( $c = 1.9$ , CHCl<sub>3</sub>). Source: HAI QI *Excoecaria agallocha* (root; yield = 0.00088%dw). Ref: 4613.

**691 Agallochin H**

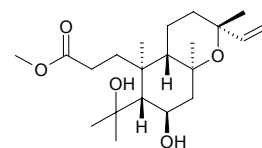
3 $\beta$ ,20:15*R*,16*S*-Diepoxy-3 $\alpha$ -beyeranol C<sub>20</sub>H<sub>30</sub>O<sub>3</sub> (318.46). Colorless needles (*n*-hexane-EtOAc), mp 164~166°C,  $[\alpha]_D^{25} = -76.4^\circ$  ( $c = 0.7$ , CHCl<sub>3</sub>). Source: HAI QI *Excoecaria agallocha* (root; yield = 0.00063%dw). Ref: 4613.

**692 Agallochin I**

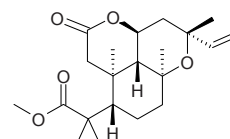
3 $\beta$ ,20-Epoxy-3 $\alpha$ ,6 $\alpha$ -dihydroxy-18-nor-beyer-15-ene C<sub>19</sub>H<sub>28</sub>O<sub>3</sub> (304.43). Colorless oil,  $[\alpha]_D^{25} = -52.2^\circ$  ( $c = 1.0$ , CHCl<sub>3</sub>). Source: HAI QI *Excoecaria agallocha* (root; yield = 0.0010%dw). Ref: 4613.

**693 Agallochin M**

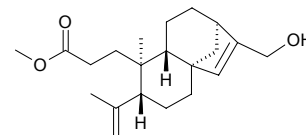
C<sub>21</sub>H<sub>36</sub>O<sub>5</sub> (368.52). Colorless oil,  $[\alpha]_D^{25} = -46.4^\circ$  ( $c = 0.2$ , CHCl<sub>3</sub>). Source: HAI QI *Excoecaria agallocha*. Ref: 2057.

**694 Agallochin N**

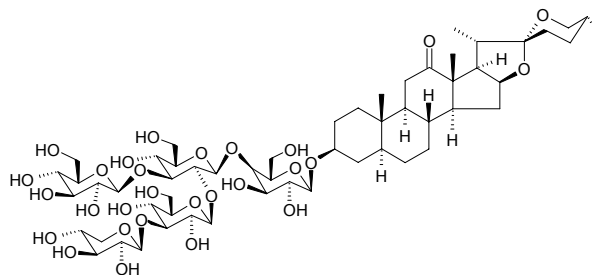
C<sub>21</sub>H<sub>32</sub>O<sub>5</sub> (364.49). Colorless needles (MeOH), mp 160~162°C  $[\alpha]_D^{25} = -54.2^\circ$  ( $c = 0.1$ , CHCl<sub>3</sub>). Source: HAI QI *Excoecaria agallocha*. Ref: 2057.

**695 Agallochin O**

C<sub>21</sub>H<sub>32</sub>O<sub>3</sub> (332.49). Colorless oil,  $[\alpha]_D^{25} = -28.0^\circ$  ( $c = 0.1$ , CHCl<sub>3</sub>). Source: HAI QI *Excoecaria agallocha*. Ref: 2057.

**696 Agamenoside F**

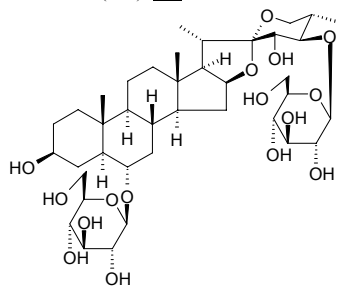
C<sub>56</sub>H<sub>90</sub>O<sub>28</sub> (1211.32). Pharm: Cytotoxic (*in vitro*, HeLa, IC<sub>50</sub> = 5.1  $\mu$ g/mL; control *cis*-Platin, IC<sub>50</sub> = 0.75  $\mu$ g/mL). Source: WAN XIANG YU *Polianthes tuberosa* (tuber; yield = 0.0018%fw). Ref: 3002.



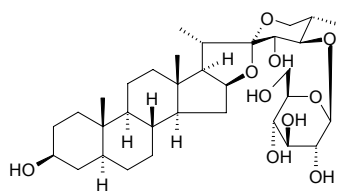


**697 Agamenoside H**

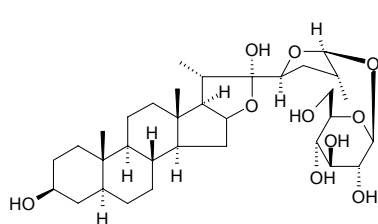
(22S,23S,24R,25S)-24-[( $\beta$ -D-Glucopyranosyl)oxy]-5 $\alpha$ -spirostane-3 $\beta$ ,6 $\alpha$ ,23-triol 6-O- $\beta$ -D-glucopyranoside C<sub>39</sub>H<sub>64</sub>O<sub>16</sub> (788.94). White amorphous powder,  $[\alpha]_D^{21} = -42.1^\circ$  ( $c = 0.011$ , pyridine). Source: FAN MA *Agave Americana* (leaf). Ref: 4293.

**698 Agamenoside I**

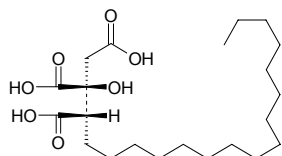
(22S,23S,24R,25S)-5 $\alpha$ -Spirostane-3 $\beta$ ,23,24-triol-24-O- $\beta$ -D-glucopyranoside C<sub>33</sub>H<sub>54</sub>O<sub>10</sub> (610.79). White amorphous powder,  $[\alpha]_D^{14} = -39.9^\circ$  ( $c = 0.041$ , pyridine). Source: FAN MA *Agave Americana* (leaf). Ref: 4293.

**699 Agamenoside J**

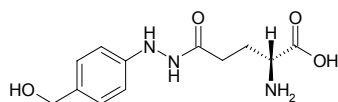
(22S,23S,25R,26S)-23,26-Epoxy-5 $\alpha$ -furostane-3 $\beta$ ,22,26-triol 26-O- $\beta$ -D-glucopyranoside C<sub>33</sub>H<sub>54</sub>O<sub>10</sub> (610.79). White amorphous powder,  $[\alpha]_D^{21} = -37.1^\circ$  ( $c = 0.018$ , pyridine). Source: FAN MA *Agave Americana* (leaf). Ref: 4293.

**700 Agaricic acid**

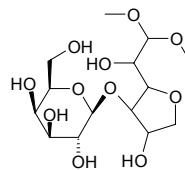
2-Hydroxy-1,2,3-nonadecanetricarboxylic acid [666-99-9] C<sub>22</sub>H<sub>40</sub>O<sub>7</sub> (416.56). mp 142°C (dec). Source: SANG HUANG *Phellinus igniarius*. Ref: 6.

**701 Agaritine**

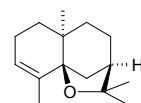
[2757-90-6] C<sub>12</sub>H<sub>17</sub>N<sub>3</sub>O<sub>4</sub> (267.29). mp 205~209°C (dec). Pharm: Mutagen (*Salmonella aertrycke*). Source: SHUANG BAO MO GU *Agaricus bisporus*, MO GU *Agaricus campestris*. Ref: 6, 658.

**702 Agarobiose dimethylacetal**

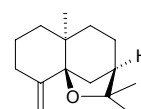
C<sub>14</sub>H<sub>26</sub>O<sub>11</sub> (370.36). bp 155~156°C/0.052mmHg. Source: LU JIAO CAI *Gloiopeltis furcata*. Ref: 6.

**703  $\alpha$ -Agarofuran**

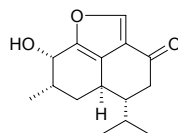
[5956-12-7] C<sub>15</sub>H<sub>24</sub>O (220.36). bp 134°C/6mmHg. Source: CHEN XIANG *Aquilaria agallocha*. Ref: 6, 16.

**704  $\beta$ -Agarofuran**

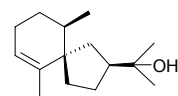
[6040-08-0] C<sub>15</sub>H<sub>24</sub>O (220.36). bp 130°C/8mmHg. Source: BAI MU XIANG *Aquilaria sinensis*, CHEN XIANG *Aquilaria agallocha*. Ref: 6, 13.

**705 Agarol**

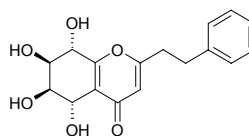
[5956-13-9] C<sub>15</sub>H<sub>20</sub>O<sub>3</sub> (248.32). Source: CHEN XIANG *Aquilaria agallocha*. Ref: 13.

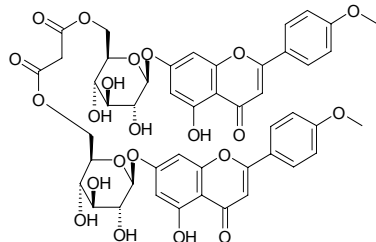
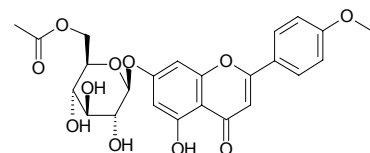
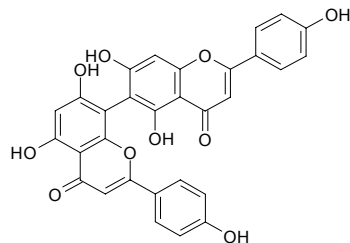
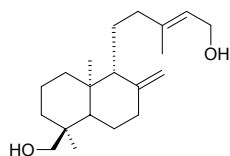
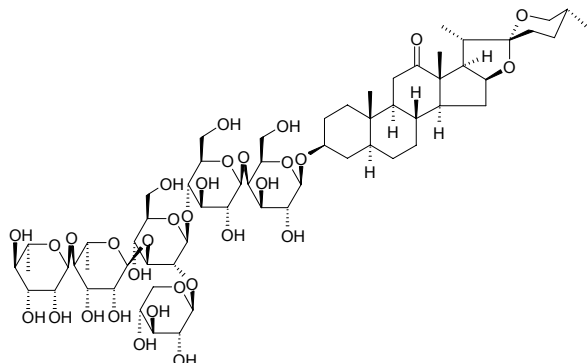
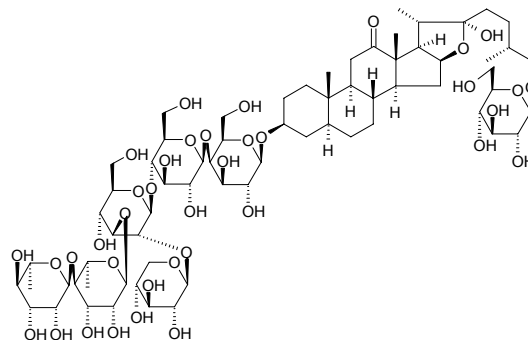
**706 Agarospirol**

[1460-73-7] C<sub>15</sub>H<sub>26</sub>O (222.37). bp 90~91°C/0.1mmHg. Pharm: CNS depressant (mus, inhibits spontaneous motion induced by pervitine and apomorphine, increases content of homovanillic acid in cerebrum). Source: BAI MU XIANG *Aquilaria sinensis*, CHEN XIANG *Aquilaria agallocha*. Ref: 13, 5501.

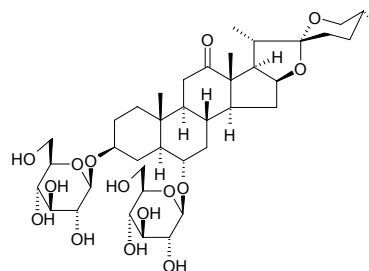
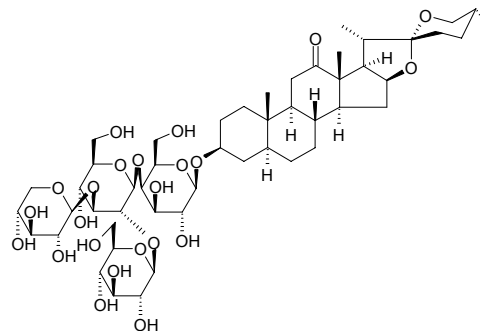
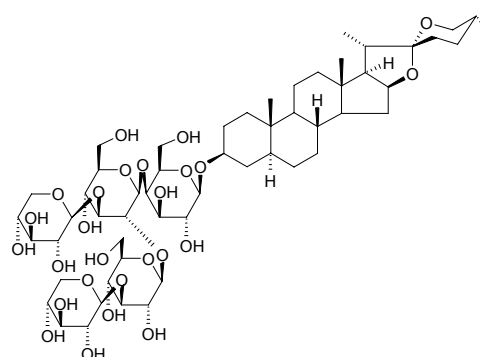
**707 Agarotetrol**

AH1 [69809-22-9] C<sub>17</sub>H<sub>18</sub>O<sub>6</sub> (318.33). Colorless acicular crystals, mp 179~181°C,  $[\alpha]_D^{24} = -21.3^\circ$ . Source: CHEN XIANG *Aquilaria agallocha*. Ref: 13.



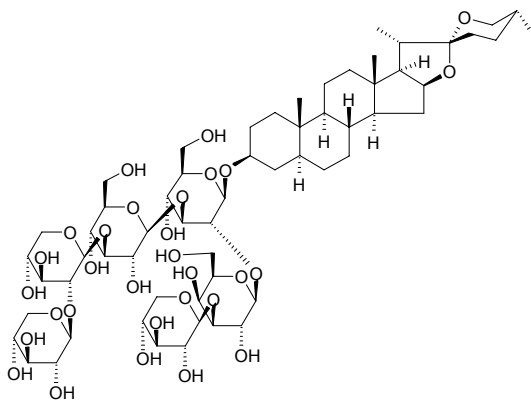
**708 Agastachin**[78897-46-8] C<sub>47</sub>H<sub>44</sub>O<sub>22</sub> (960.87). Source: HUO XIANG *Agastache rugosus*.Ref: 2.**709 Agastachoside**[76410-61-2] C<sub>24</sub>H<sub>24</sub>O<sub>11</sub> (488.45). Source: HUO XIANG *Agastache rugosus*.Ref: 2, 7.**710 Agathisflavone**C<sub>30</sub>H<sub>18</sub>O<sub>10</sub> (538.47). Pharm: Cyclonucleotide phosphodiesterase inhibitor.Source: BEI KE SHAN *Agathis dammara*, DA YE NAN YANG SHAN*Araucaria bidwillii*. Ref: 658.**711 Agathodienediol**C<sub>20</sub>H<sub>34</sub>O<sub>2</sub> (306.49). mp 107~108°C. Source: HAI SONG ZI *Pinus koraiensis*.Ref: 6.**712 Agavasaponin E**[58546-19-3] C<sub>62</sub>H<sub>100</sub>O<sub>31</sub> (1341.47). mp 304~308°C, [α]<sub>D</sub> = -130°. Source:FAN MA *Agave americana*. Ref: 2503.**713 Agavasaponin H**C<sub>68</sub>H<sub>112</sub>O<sub>37</sub> (1521.63). mp 228~230°C, [α]<sub>D</sub> = -113°. Source: FAN MA*Agave americana*. Ref: 2503.**714 Agave americana Compound 3**C<sub>39</sub>H<sub>62</sub>O<sub>15</sub> (770.92). [α]<sub>D</sub> = -57.1°. Source: FAN MA *Agave americana*. Ref:

2503.

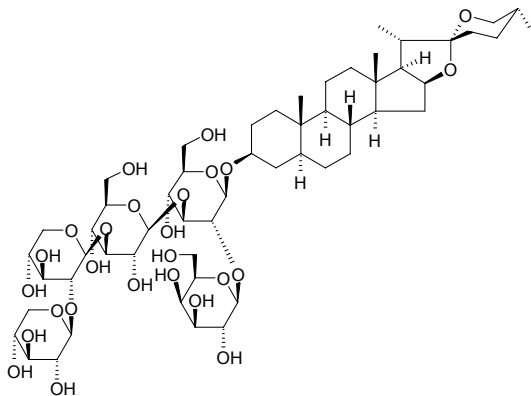
**715 Agave americana Compound 4**C<sub>50</sub>H<sub>80</sub>O<sub>23</sub> (1049.18). [α]<sub>D</sub> = -52°. Source: FAN MA *Agave americana*. Ref: 2503.**716 Agave americana Glycoside 1**C<sub>53</sub>H<sub>90</sub>O<sub>26</sub> (1167.31). mp 260~263°C. Source: FAN MA *Agave americana*. Ref: 2503.

**717 *Agave cantala* Agaveside A**

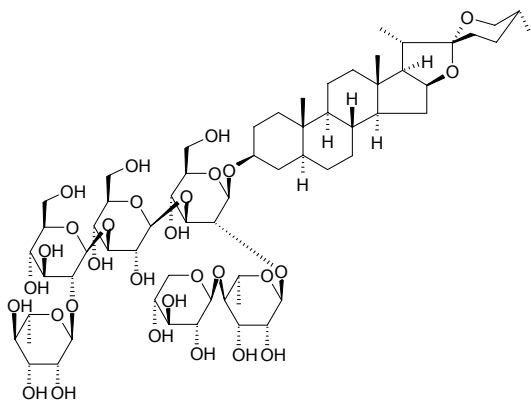
$C_{60}H_{98}O_{30}$  (1299.43). mp 278~280°C,  $[\alpha]_D = -50^\circ$ . Source: XIA YE LONG SHE LAN *Agave cantala*. Ref: 2503.

**718 *Agave cantala* Agaveside B**

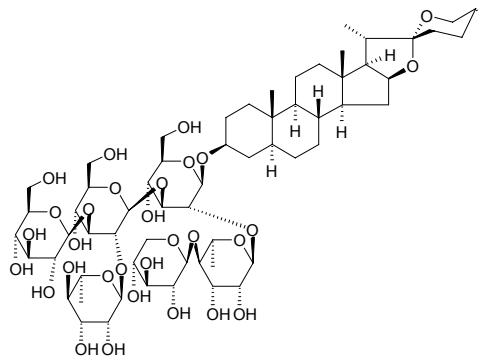
$C_{55}H_{90}O_{26}$  (1167.31). mp 283~285°C. Source: XIA YE LONG SHE LAN *Agave cantala*. Ref: 2503.

**719 *Agave cantala* Agaveside C**

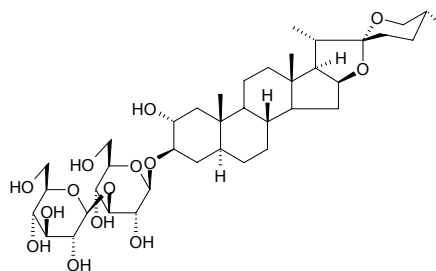
$C_{62}H_{102}O_{30}$  (1327.49). mp 256~260°C,  $[\alpha]_D = -39.4^\circ$ . Source: XIA YE LONG SHE LAN *Agave cantala*. Ref: 2503.

**720 *Agave cantala* Agaveside D**

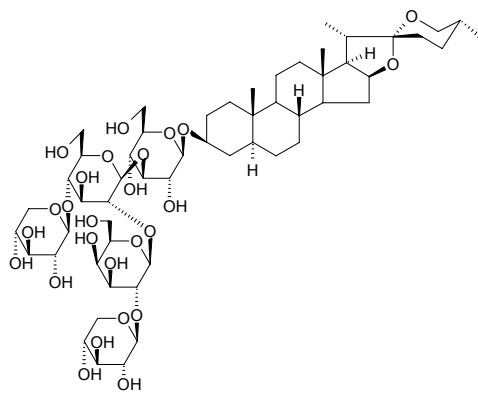
$C_{62}H_{102}O_{30}$  (1327.49). mp 256~260°C. Source: XIA YE LONG SHE LAN *Agave cantala*. Ref: 2503.

**721 *Agave cantala* Compound 1**

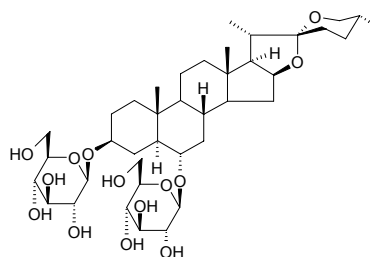
$C_{39}H_{64}O_{14}$  (756.94). mp 235~338°C,  $[\alpha]_D = -62.0^\circ$ . Source: XIA YE LONG SHE LAN *Agave cantala*. Ref: 2503.

**722 *Agave cantala* Compound 1'**

$C_{55}H_{90}O_{26}$  (1167.31). mp 301~304°C. Source: XIA YE LONG SHE LAN *Agave cantala*. Ref: 2503.

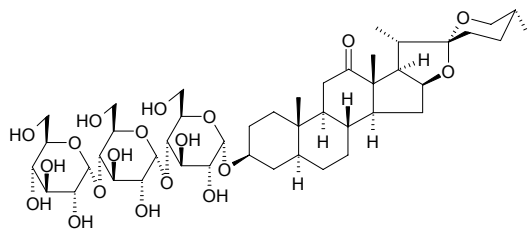
**723 *Agave cantala* Saponin 1**

$C_{39}H_{64}O_{14}$  (756.94). mp 245~246°C,  $[\alpha]_D = -78.0^\circ$ . Source: XIA YE LONG SHE LAN *Agave cantala*. Ref: 2503.

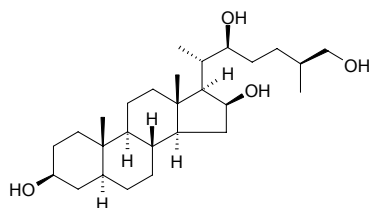


**724 *Agave cantala* Substance 1**

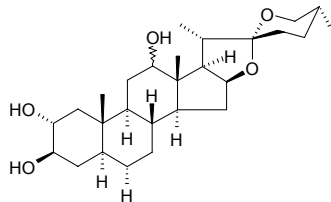
$C_{45}H_{72}O_{19}$  (917.06). mp 240–243°C,  $[\alpha]_D = +95.5^\circ$ . Source: XIA YE LONG SHE LAN *Agave cantala*. Ref: 2503.

**725 Agavegenin D**

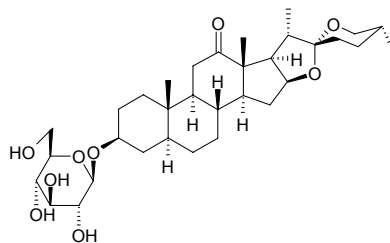
(22*S*,25*S*)-5*α*-Cholestane-3*β*,16*β*,22,26-tetrol  $C_{27}H_{48}O_4$  (436.68). White amorphous powder,  $[\alpha]_D^{21} = -13.3^\circ$  ( $c = 0.017$ , pyridine). Source: FAN MA *Agave Americana* (leaf). Ref: 4293.

**726 Agavogenin**

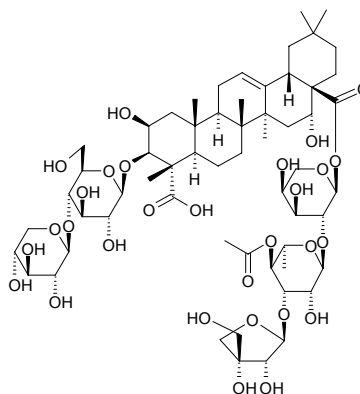
$C_{27}H_{44}O_5$  (448.65). mp 242°C. Source: *Agave huahucensis*. Ref: 2503.

**727 Agavoside A**

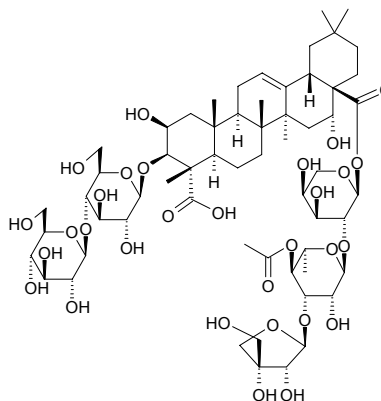
$C_{33}H_{52}O_9$  (592.78). Pharm: Antineoplastic (KB of tissue culture, leukemia). Source: FAN MA *Agave americana*. Ref: 658.

**728 Ageratoside A<sub>1</sub>**

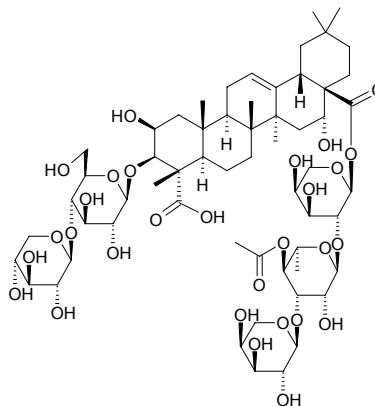
3-*O*-[*O*-*β*-*D*-Xylopyranosyl-(1→4)-*β*-*D*-glucopyranosyl] 2*β*,3*β*,16*α*-trihydroxyolean-12-ene-23,28-dioic acid (zanhic acid) 28-*O*-*β*-*D*-apiofuranosyl-(1→3)-*O*-(4-*O*-acetyl)-*α*-*L*-rhamnopyranosyl-(1→2)-*O*-*α*-*L*-arabinopyranosyl ester  $C_{59}H_{92}O_{29}$  (1265.37). White powder,  $[\alpha]_D^{22} = -42.8^\circ$  ( $c = 1.0$ , MeOH). Source: LUAN YE SAN ZHE MAI ZI WAN *Aster ageratoides* var. *ovatus* (aerial parts). Ref: 2285.

**729 Ageratoside A<sub>2</sub>**

3-*O*-[*O*-*β*-*D*-Glucopyranosyl-(1→4)-*β*-*D*-glucopyranosyl] zanhic acid 28-*O*-*β*-*D*-apiofuranosyl-(1→3)-*O*-(4-*O*-acetyl)-*α*-*L*-rhamnopyranosyl-(1→2)-*O*-*α*-*L*-arabinopyranosyl ester  $C_{60}H_{94}O_{30}$  (1295.40). White powder,  $[\alpha]_D^{22} = -38.9^\circ$  ( $c = 1.0$ , MeOH). Source: LUAN YE SAN ZHE MAI ZI WAN *Aster ageratoides* var. *ovatus* (aerial parts). Ref: 2285.

**730 Ageratoside A<sub>3</sub>**

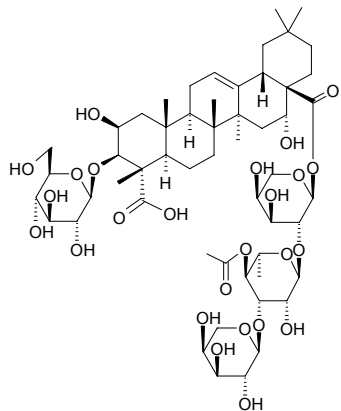
3-*O*-[*O*-*β*-*D*-Xylopyranosyl-(1→4)-*β*-*D*-glucopyranosyl] zanhic acid 28-*O*-*α*-*L*-arabinopyranosyl-(1→3)-*O*-(4-*O*-acetyl)-*α*-*L*-rhamnopyranosyl-(1→2)-*O*-*α*-*L*-arabinopyranosyl ester  $C_{59}H_{92}O_{29}$  (1265.37). White powder,  $[\alpha]_D^{22} = -25.7^\circ$  ( $c = 1.0$ , MeOH). Source: LUAN YE SAN ZHE MAI ZI WAN *Aster ageratoides* var. *ovatus* (aerial parts). Ref: 2285.



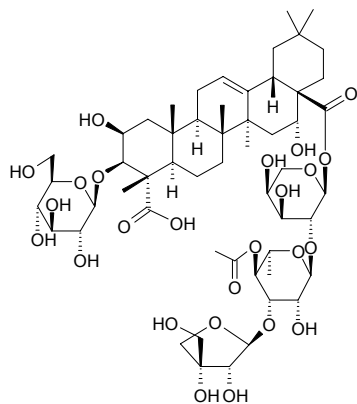
**731 Ageratoside A<sub>4</sub>**

3-*O*- $\beta$ -*D*-Glucopyranosyl zanhic acid 28-*O*- $\alpha$ -*L*-arabinopyranosyl-(1 $\rightarrow$ 3)-*O*-(4-*O*-acetyl)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)-*O*- $\alpha$ -*L*-arabinopyranosyl ester C<sub>54</sub>H<sub>84</sub>O<sub>25</sub> (1133.26). White powder,  $[\alpha]_D^{22} = -16.7^\circ$  ( $c = 1.0$ , MeOH).

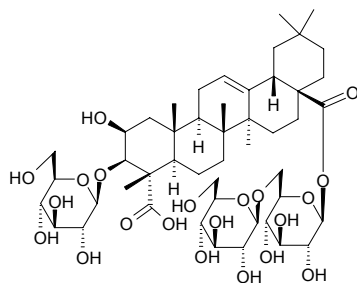
Source: LUAN YE SAN ZHE MAI ZI WAN *Aster ageratoides* var. *ovatus* (aerial parts). Ref: 2285.

**732 Ageratoside A<sub>5</sub>**

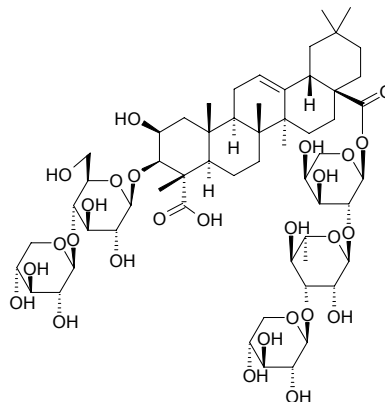
3-*O*- $\beta$ -*D*-Glucopyranosyl zanhic acid 28-*O*- $\beta$ -*D*-apiofuranosyl-(1 $\rightarrow$ 3)-*O*-(4-*O*-acetyl)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)-*O*- $\alpha$ -*L*-arabinopyranosyl ester C<sub>54</sub>H<sub>84</sub>O<sub>25</sub> (1133.26). White powder,  $[\alpha]_D^{22} = -30.9^\circ$  ( $c = 0.5$ , MeOH). Source: LUAN YE SAN ZHE MAI ZI WAN *Aster ageratoides* var. *ovatus* (aerial parts). Ref: 2285.

**733 Ageratoside B<sub>1</sub>**

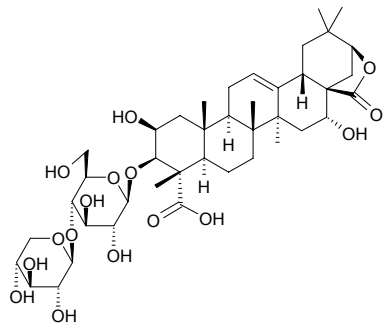
3-*O*- $\beta$ -*D*-Glucopyranosyl-2 $\beta$ ,3 $\beta$ -dihydroxyolean-12-ene-23,28-dioic acid (medicagenic acid) 28-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)-*O*- $\beta$ -*D*-glucopyranosyl ester C<sub>48</sub>H<sub>76</sub>O<sub>21</sub> (989.13). White powder,  $[\alpha]_D^{22} = +18.3^\circ$  ( $c = 0.5$ , MeOH). Source: LUAN YE SAN ZHE MAI ZI WAN *Aster ageratoides* var. *ovatus* (aerial parts). Ref: 2285.

**734 Ageratoside B<sub>2</sub>**

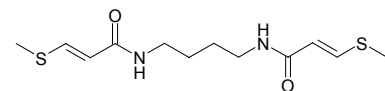
3-*O*-[*O*- $\beta$ -*D*-Xylopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl] medicagenic acid 28-*O*- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 3)-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)-*O*- $\alpha$ -*L*-arabinopyranosyl ester [233761-49-4] C<sub>57</sub>H<sub>90</sub>O<sub>27</sub> (1207.34). White powder,  $[\alpha]_D^{22} = -12.8^\circ$  ( $c = 0.5$ , MeOH). Source: LUAN YE SAN ZHE MAI ZI WAN *Aster ageratoides* var. *ovatus* (aerial parts). Ref: 2285.

**735 Ageratoside C<sub>1</sub>**

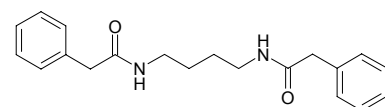
3-*O*-[*O*- $\beta$ -*D*-Xylopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl]-2 $\beta$ ,3 $\beta$ ,16 $\alpha$ ,21 $\beta$ -tetrahydroxyolean-12-ene-23,28-dioic acid 21,28-lactone C<sub>41</sub>H<sub>62</sub>O<sub>16</sub> (810.94). White powder,  $[\alpha]_D^{22} = -2.3^\circ$  ( $c = 0.5$ , MeOH). Source: LUAN YE SAN ZHE MAI ZI WAN *Aster ageratoides* var. *ovatus* (aerial parts). Ref: 2285.

**736 Aglaidithioduline**

*N*-[*N'*-(*E*)-(3-Methylthio-2-propenyl)-4-aminobutyl]-(*E*)-3-methylthiopropenamide C<sub>12</sub>H<sub>20</sub>N<sub>2</sub>O<sub>2</sub>S<sub>2</sub> (288.43). Pale orange needles (MeOH), mp 164–165°C. Pharm: Antiviral (HSV-1 and HSV-2, slight activity)<sup>[2382]</sup>. Source: KE SHI MI ZI LAN *Aglaiia edulis* (leaf). Ref: 2382.

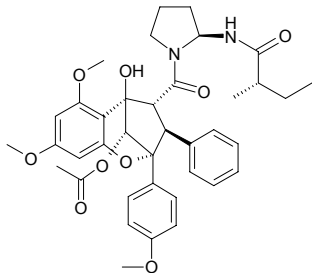
**737 Aglaiduline**

*N*-[*N'*-(Phenylacetyl)-4-aminobutyl]phenylacetamide C<sub>20</sub>H<sub>24</sub>N<sub>2</sub>O<sub>2</sub> (324.43). Colorless needles (MeOH), mp 162–163°C. Source: KE SHI MI ZI LAN *Aglaiia edulis* (leaf). Ref: 2382.

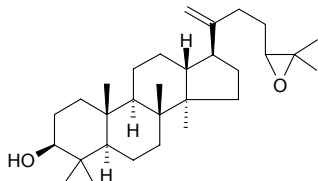


**738 Aglaine A**

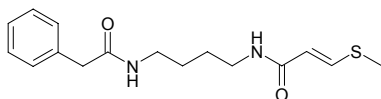
$C_{38}H_{44}N_2O_9$  (672.78). Amorphous powder. Source: TUE YUAN MI ZI LAN *Aglaiia elliptica* (leaf). Ref: 4127.

**739 Aglaiol**

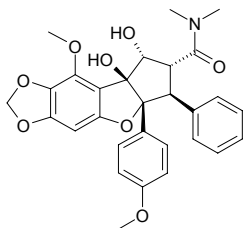
$C_{30}H_{50}O_2$  (442.73). mp 113~114°C. Source: MI ZI LAN *Aglaiia odorata*. Ref: 6.

**740 Aglalthioduline**

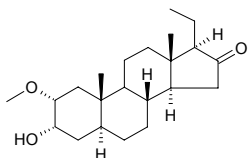
*N*-[*N'*-(*E*)-(3-Methylthio-2-propenyl)-4-aminobutyl] phenylacetamide  
 $C_{16}H_{22}N_2O_2S$  (306.43). Colorless needles (MeOH), mp 140~141°C. Pharm:  
 Antiviral (HSV-1 and HSV-2, slight activity). Source: KE SHI MI ZI  
 LAN *Aglaiia edulis* (leaf). Ref: 2382.

**741 Aglaroxin A**

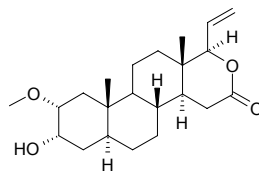
(-)-(1*R*,2*R*,3*S*,3*aR*)-16,7,8,8*a*-Tetrahydro-8,8*a*-dihydroxy-9-methoxy-5*a*-(4-methoxyphenyl)-6-phenyl-5*aH*-cyclopenta[4,5]furo[2,3-*f*]-1,3-benzodioxole-7-*N,N*-dimethyl amide  $C_{29}H_{29}NO_8$  (519.56).  $[\alpha]_D^{20} = -81^\circ$  ( $c = 0.4$ ,  $CHCl_3$ ). Pharm: Insecticidal (neonate larvae of *Spodoptera littoralis*, survival rate  $LC_{50} = 3.4\mu g/g$ , control Azadirachtin, survival rate  $LC_{50} = 6.1\mu g/g$ ; growth inhibition  $EC_{50} = 0.21\mu g/g$ , Azadirachtin, growth inhibition  $EC_{50} = 0.11\mu g/g$ ). Source: KE SHI MI ZI LAN *Aglaiia edulis*. Ref: 2355.

**742 Aglatomin A**

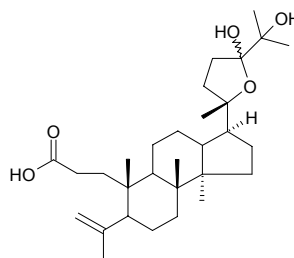
$C_{22}H_{36}O_3$  (348.53).  $[\alpha]_D = -32^\circ$  ( $c = 1$ ,  $CHCl_3$ ). Source: RONG MAO MI ZI LAN *Aglaiia tomentosa*. Ref: 2335.

**743 Aglatomin B**

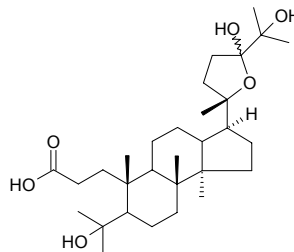
$C_{22}H_{34}O_4$  (362.51).  $[\alpha]_D = -6^\circ$  ( $c = 1$ ,  $CHCl_3$ ). Source: RONG MAO MI ZI LAN *Aglaiia tomentosa*. Ref: 2335.

**744 Aglinin A**

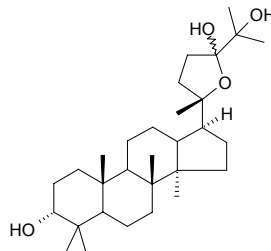
$C_{30}H_{50}O_5$  (490.73). Source: RONG MAO MI ZI LAN *Aglaiia tomentosa*, *Aglaiia lawii*. Ref: 2335.

**745 Aglinin B**

$C_{30}H_{52}O_6$  (508.75). Source: RONG MAO MI ZI LAN *Aglaiia tomentosa*, *Aglaiia lawii*. Ref: 2335.

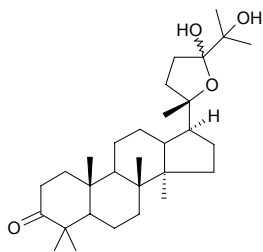
**746 Aglinin C**

$C_{30}H_{52}O_4$  (476.75).  $[\alpha]_D = +17^\circ$  ( $c = 1$ ,  $CHCl_3$ ). Source: RONG MAO MI ZI LAN *Aglaiia tomentosa*, *Aglaiia lawii*. Ref: 2335.

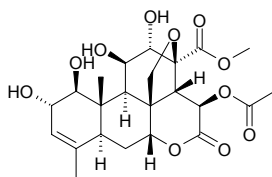


**747 Aglinin D**

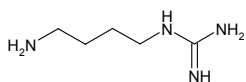
$C_{30}H_{50}O_4$  (474.73).  $[\alpha]_D^{25} = +14^\circ$  ( $c = 1$ ,  $CHCl_3$ ). Source: RONG MAO MI ZI LAN *Aglaiia tomentosa*, *Aglaiia lawii*. Ref: 2335.

**748 Aglycone of yadanzioside D**

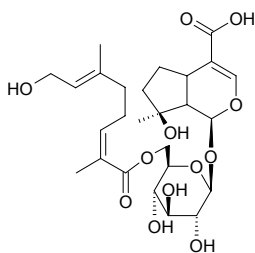
$C_{23}H_{30}O_{11}$  (482.49). Source: YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*] (seed: yield = 0.00055%dw). Ref: 4748.

**749 Agmatine**

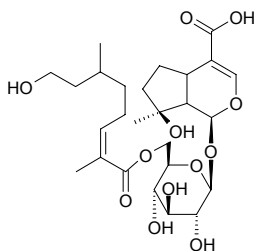
[306-60-5]  $C_5H_{14}N_4$  (130.19). Source: MAI JIAO *Claviceps purpurea*. Ref: 6.

**750 Agnucastoides A**

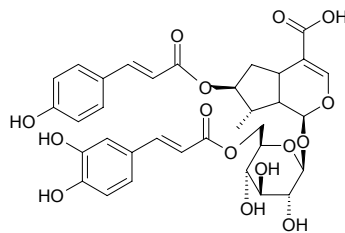
6'-*O*-Foliamenthylmussaenosidic acid  $C_{26}H_{38}O_{12}$  (542.59). Source: SUI HUA MU JING *Vitex agnuscastus*. Ref: 3429.

**751 Agnucastoides B**

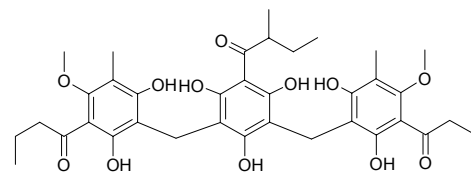
6'-*O*-(6,7-Dihydrofoliamenthyl)mussaenosidic acid  $C_{26}H_{40}O_{12}$  (544.60). Source: SUI HUA MU JING *Vitex agnuscastus*. Ref: 3429.

**752 Agnucastoides C**

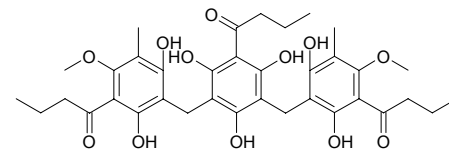
7-*O*-*trans*-*p*-Coumaroyl-6'-*O*-*trans*-caffeoyl-8-epiloganic acid  $C_{34}H_{36}O_{15}$  (684.66). Source: SUI HUA MU JING *Vitex agnuscastus*. Ref: 3429.

**753 (R)-(-)-Agrimol B**

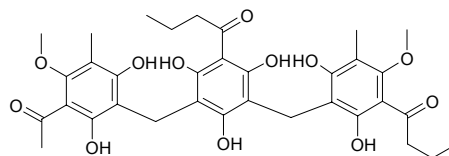
[55576-66-4]  $C_{37}H_{46}O_{12}$  (682.77). Yellow acicular crystals, mp 173–175°C,  $[\alpha]_D^{19} = -3.3^\circ$  ( $c = 1$ ,  $CHCl_3$ ). Source: XIAN HE CAO *Agrimonia pilosa* var. *japonica*. Ref: 129.

**754 Agrimol C**

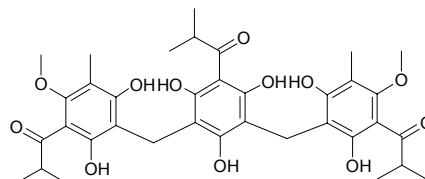
[55785-59-6]  $C_{36}H_{44}O_{12}$  (668.74). Pharm: Antibacterial. Source: LONG YA CAO *Agrimonia pilosa*, XIAN HE CAO *Agrimonia pilosa* var. *japonica*. Ref: 2, 658.

**755 Agrimol F**

[121693-16-1]  $C_{34}H_{40}O_{12}$  (640.69). Pharm: Antibacterial (*Staphylococcus aureus* MIC = 25.0µg/mL; *Bacillus cereus* MIC = 25.0µg/mL). Source: XIAN HE CAO *Agrimonia pilosa* var. *japonica*. Ref: 2, 1725.

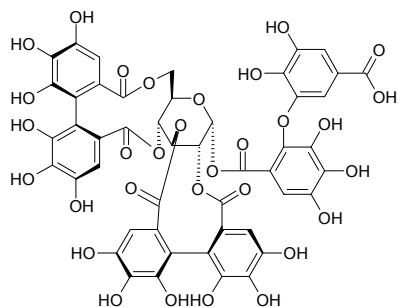
**756 Agrimol G**

[121693-17-2]  $C_{36}H_{44}O_{12}$  (668.75). Pharm: Antibacterial (*Staphylococcus aureus* MIC = 12.5µg/mL, *Bacillus cereus* MIC = 50µg/mL). Source: XIAN HE CAO *Agrimonia pilosa* var. *japonica*. Ref: 2, 1725.

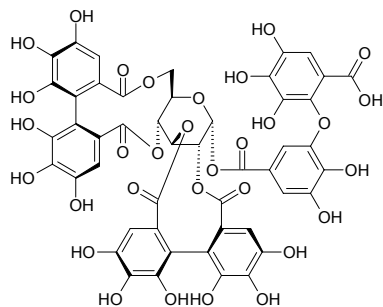


**757 Agrimonic acid A**

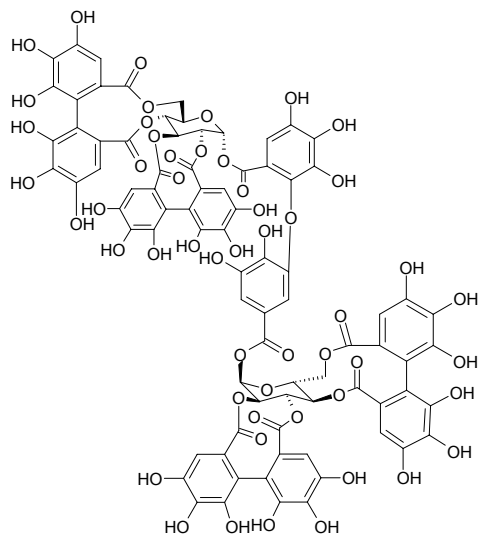
$C_{48}H_{32}O_{31}$  (1104.77). Source: JIN YING ZI *Rosa laevigata* (pericarp), RI BEN LONG YA CAO *Agrimonia japonica* (root). Ref: 660, 1521.

**758 Agrimonic acid B**

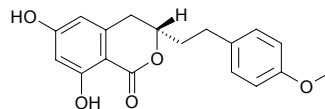
$C_{48}H_{32}O_{31}$  (1104.77). Source: JIN YING ZI *Rosa laevigata* (pericarp), RI BEN LONG YA CAO *Agrimonia japonica* (root). Ref: 660, 1521.

**759 Agrimoniin**

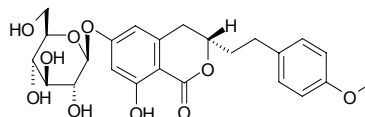
$C_{82}H_{54}O_{52}$  (1871.33). Pharm: Antineoplastic ( $S_{180}$ ); antidiarrheal; anthelmintic; hemostatic; antioxidant (rat, lipid in liver mitochondria). Source: LONG YA CAO *Agrimonia pilosa*, RI BEN LONG YA CAO *Agrimonia japonica*, SHE HAN WEI LING CAI *Potentilla kleiniana*. Ref: 658.

**760 Agrimonolide**

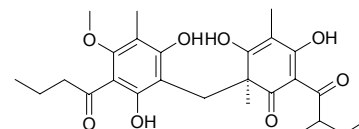
$C_{18}H_{18}O_5$  (314.34). Colorless columnar crystals, mp 173~175°C,  $[\alpha]_D^{18} = +8.1^\circ$ . Pharm: Intestinal smooth muscle relaxant (mus *in vivo*, rbt intestine *in vitro*). Source: XIAN HE CAO *Agrimonia pilosa* var. *japonica*. Ref: 1, 2, 5.

**761 Agrimonolide-6-O-β-D-glucopyranoside**

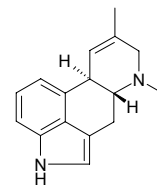
$C_{24}H_{28}O_{10}$  (476.48). White acicular crystals, mp 165~167°C,  $[\alpha]_D^{14} = -30.8^\circ$  ( $c = 1$ , acetone). Source: XIAN HE CAO *Agrimonia pilosa* var. *japonica*. Ref: 144.

**762 Agrimophol**

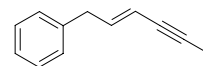
$C_{26}H_{34}O_8$  (474.55). Light yellow-green crystals, mp 138.5~139.5°C, easily soluble in chloroform, benzene, slightly soluble in alcohol, acetone, almost insoluble in water.<sup>[5507]</sup> Pharm: Antibacterial; anthelmintic (tapeworm, ascarid); schistosomacide; spermaticidal (0.0025g/mL, 1~5min, lethal rate = 100%). Source: LONG YA CAO *Agrimonia pilosa* (aerial part: mean content of 6 samples = 0.022%<sup>[5508]</sup>), XIAN HE CAO *Agrimonia pilosa* var. *japonica*, XIAN HE CAO GEN YA *Agrimonia pilosa* var. *japonica*. Ref: 1, 2, 4, 5, 6, 5501, 5507, 5508.

**763 Agroclavine**

[548-42-5]  $C_{16}H_{18}N_2$  (238.34). mp 203°C (dec). Pharm: Dopaminergic; uterine stimulant. Source: MAI JIAO *Claviceps purpurea*. Ref: 1, 6.

**764 Agropyrene**

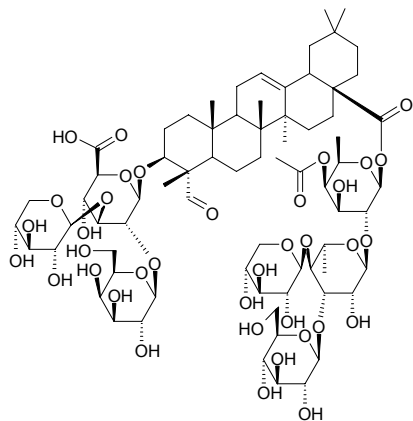
$C_{12}H_{12}$  (156.23). bp 140~143°C/10mmHg. Source: HUANG HAO *Artemisia scoparia* [Syn. *Artemisia capillaris* var. *scoparia*]. Ref: 6, 660.



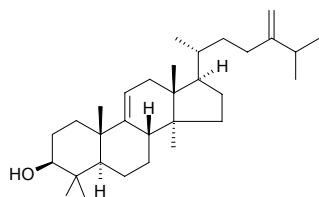


**765 Agrostemmasaponin 1**

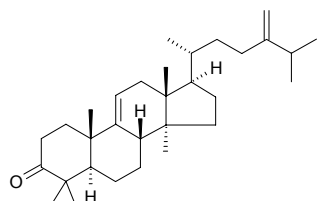
$C_{72}H_{112}O_{37}$  (1569.67). **Pharm:** Cytotoxic (showed mechanism of “cooperative toxicity”, combined with agrostin)<sup>[5464]</sup>. **Source:** MAI XIAN WENG *Agrostemma githago* (root). **Ref:** 5464.

**766 Agrostophyllinol**

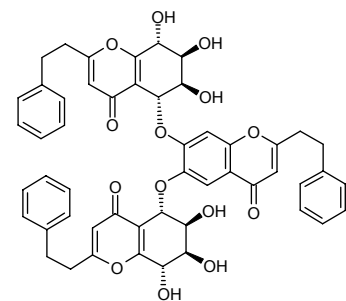
24-Methylene-lanosta-9(11)-en-3 $\beta$ -ol  $C_{31}H_{52}O$  (440.76). mp 175°C,  $[\alpha]_D = +46^\circ$  (CHCl<sub>3</sub>). **Source:** DUAN BING HE YE LAN *Agrostophyllum brevipes*. **Ref:** 3360.

**767 Agrostophyllinone**

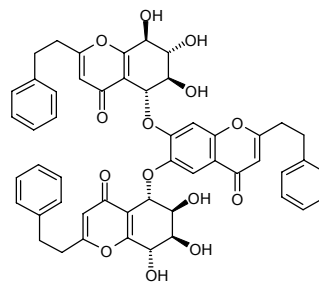
24-Methylene-lanosta-9(11)-en-3-one  $C_{31}H_{50}O$  (438.74). mp 125°C,  $[\alpha]_D = +79^\circ$  (CHCl<sub>3</sub>). **Source:** DUAN BING HE YE LAN *Agrostophyllum brevipes*, YING PI HE YE LAN *Agrostophyllum callosum*. **Ref:** 3360.

**768 AH18**

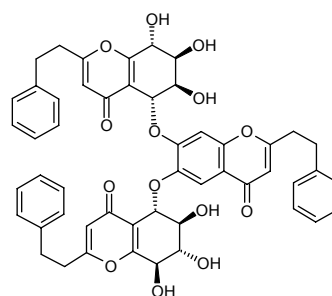
[113981-50-3]  $C_{51}H_{46}O_{14}$  (882.93). White powder, mp 147~148°C,  $[\alpha]_D = -109.1^\circ$ . **Source:** CHEN XIANG *Aquilaria agallocha*. **Ref:** 13.

**769 AH19a**

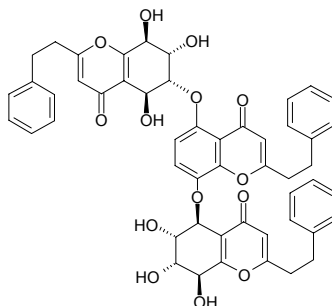
$C_{51}H_{46}O_{14}$  (882.93). White powder, mp 165~167°C,  $[\alpha]_D = -33.89^\circ$ . **Source:** CHEN XIANG *Aquilaria agallocha*. **Ref:** 13.

**770 AH19b**

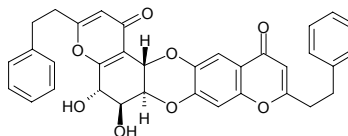
$C_{51}H_{46}O_{14}$  (882.93). White powder, mp 130~133°C,  $[\alpha]_D = -64.04^\circ$ . **Source:** CHEN XIANG *Aquilaria agallocha*. **Ref:** 13.

**771 AH20**

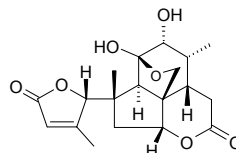
[135309-01-2]  $C_{51}H_{46}O_{14}$  (882.93). White powder, mp 143~145°C,  $[\alpha]_D = -27.83^\circ$ . **Source:** CHEN XIANG *Aquilaria agallocha*. **Ref:** 13.

**772 AH21**

[138822-70-5]  $C_{34}H_{28}O_8$  (564.60). White powder, mp 123~125°C,  $[\alpha]_D = -75.2^\circ$ . **Source:** CHEN XIANG *Aquilaria agallocha*. **Ref:** 13.

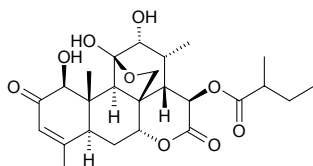
**773 Ailanquassin**

$C_{19}H_{24}O_7$  (364.40). **Source:** *Eurycoma harmandiana* (root). **Ref:** 5164.

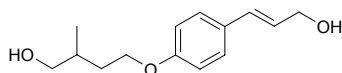


**774 Ailanthinone**

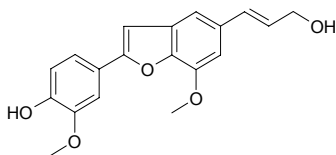
[53683-73-1]  $C_{25}H_{34}O_9$  (478.51). Acicular crystals (acetone–ethane), mp 227–230°C,  $[\alpha]_D^{27} = +90^\circ$  ( $c = 0.10$ ,  $CHCl_3$ ). **Pharm:** Antiamoebic. **Source:** CHU BAI PI *Ailanthus altissima*. **Ref:** 1, 5.

**775 Ailanthoidiol**

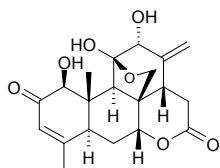
$C_{14}H_{20}O_3$  (236.31). **Source:** CHU YE HUA JIAO *Zanthoxylum ailanthoides*, *Zanthoxylum* sp. **Ref:** 1521, 2176.

**776 Ailanthoidol**

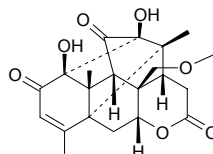
[156398-61-7]  $C_{19}H_{18}O_5$  (326.35). Colorless amorphous solid. **Source:** CHU YE HUA JIAO *Zanthoxylum ailanthoides*, *Zanthoxylum* sp., *Sarcomelicope megistophylla*. **Ref:** 1521, 2176, 5408.

**777 Ailanthone**

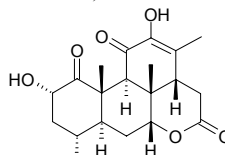
[981-15-7]  $C_{20}H_{24}O_7$  (376.41). mp 234–238°C (alcohol),  $[\alpha]_D = +12.5^\circ$  (EtOH). **Pharm:** Antiamoebic (amebic dysentery,  $IC_{50} = 0.14\mu g/mL$ ); antineoplastic ( $P_{388}$ , 0.12–4.00mg/kg); antimalarial (*Plasmodium falciparum* *in vitro*,  $IC_{50} = 0.015\mu g/mL$ , *mus Plasmodium* sp. *in vivo*,  $ED_{50} = 0.76mg/(kg \cdot d)$ ); antiulcerative (rat, ulcer induced by waterlogging, 1.0mg/kg or l, InRt = 89.7%, induced by indometacin, 1.0mg/kg, InRt = 95.8%,  $ED_{50} = 0.36mg/kg$ ); cytotoxic (KB,  $ED_{50} = 0.001\text{--}0.01\mu g/mL$ ); gastric secretion inhibitor (rat,  $ED_{50} = 0.04mg/kg$ , 1.0mg/kg, InRt = 96.6%); plant growth inhibitor. **Source:** CHU BAI PI *Ailanthus altissima*, GAO CHU *Ailanthus excelsa*. **Ref:** 6, 900.

**778 Ailantinal E**

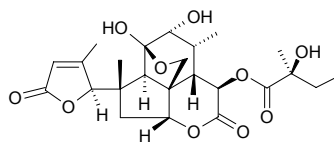
$C_{21}H_{24}O_7$  (388.42). Colorless amorphous powder, mp 144–146°C,  $[\alpha]_D^{25} = -166^\circ$  ( $c = 0.14$ , MeOH). **Pharm:** Antineoplastic (*in vitro*, inhibits TPA-induced EBV-EA activation in Raji cells, shows potent activity for antitumor without showing any cytotoxicity to Raji cells); antioxidant (inhibits NOR1 (nitric oxide donor) action, ratio of inhibitory = 2.9 with 350nmol/L, positive control NOR1, ratio of inhibitory = 1.0 with 350nmol/L). **Source:** CHU BAI PI *Ailanthus altissima* (aerial parts). **Ref:** 4332.

**779 Ailantinal F**

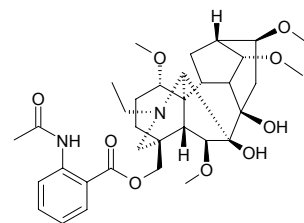
$C_{20}H_{26}O_6$  (362.43). Colorless amorphous powder, mp 93–95°C,  $[\alpha]_D^{25} = +23.3^\circ$  ( $c = 0.06$ , MeOH). **Pharm:** Antineoplastic (*in vitro*, inhibits TPA-induced EBV-EA activation in Raji cells, shows potent activity for antitumor without showing any cytotoxicity to Raji cells); antioxidant (inhibits NOR1 (nitric oxide donor) action, ratio of inhibitory = 3.0 with 350nmol/L, positive control NOR1, ratio of inhibitory = 1.0 with 350nmol/L). **Source:** CHU BAI PI *Ailanthus altissima* (aerial parts). **Ref:** 4332.

**780 Ailantinal G**

$C_{24}H_{32}O_{10}$  (480.52). Colorless needles, mp 230–232°C (dec),  $[\alpha]_D^{25} = +80.0^\circ$  ( $c = 0.12$ , MeOH). **Pharm:** Antineoplastic (*in vitro*, inhibits TPA-induced EBV-EA activation in Raji cells, shows potent activity for antitumor without showing any cytotoxicity to Raji cells); antioxidant (inhibits NOR1 (nitric oxide donor) action, ratio of inhibitory = 1.7 with 350nmol/L, positive control NOR1, ratio of inhibitory = 1.0 with 350nmol/L). **Source:** CHU BAI PI *Ailanthus altissima* (aerial parts). **Ref:** 4332.

**781 Ajacine**

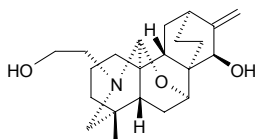
[509-17-1]  $C_{34}H_{48}N_2O_9$  (628.77). Acicular crystals (70% alcohol), mp 154°C,  $[\alpha]_D^{22} = +49.5^\circ$  ( $c = 2$ , anhydrous alcohol),  $[\alpha]_D^{16} = +53^\circ$  ( $c = 0.66$ , chloroform). **Pharm:** Pesticide (lousicide). **Source:** FEI YAN CAO *Consolida ajacis* [Syn. *Delphinium ajacis*], CAO DI WU TOU *Aconitum umbrosum*. **Ref:** 1, 6.



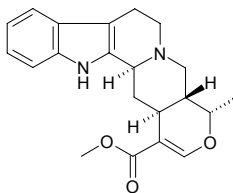
**782 Ajaconine**

[545-61-9]  $C_{22}H_{33}NO_3$  (359.51). Prismatic crystals (dil. alcohol), mp 172°C,  $[\alpha]_D^{18} = -119^\circ$  ( $c = 2$ , anhydrous alcohol), mp 167,  $[\alpha]_D = -122^\circ$  ( $c = 1.75$ ).

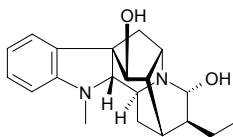
**Pharm:** Pesticide; toxin. **Source:** DAN LV CUI QUE *Delphinium virescens*, FEI YAN CAO *Consolida ajacis* [Syn. *Delphinium ajacis*], KA LUO LAI NA CUI QUE *Delphinium carolinianum*, KANG DING CUI QUE HUA *Delphinium tatsienense*. **Ref:** 1, 6.

**783 Ajmalicine**

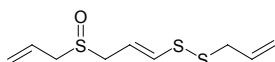
Ervine [483-04-5]  $C_{21}H_{24}N_2O_3$  (352.44). Prismatic crystals (methanol), mp 257°C (dec),  $[\alpha]_D^{20} = -60^\circ$  ( $c = 0.5$ ,  $CHCl_3$ ),  $[\alpha]_D^{20} = -45^\circ$  ( $c = 0.5$ , pyridine),  $[\alpha]_D^{20} = -39^\circ$  ( $c = 0.25$ , methanol). **Pharm:** Antiarrhythmic (cat, iv, chloride ED = 0.5~1.0mg/kg, rat, induced by aconitine, ED = 5mg/kg, rat, induced by  $CaCl_2$ ); antibacterial; antihypertensive; antihypertensive; sedative; coronary and cerebral vasodilator. **Source:** BAN BIAN LIAN ZHUANG LI LU *Veratrum album* var. *lobelianum* [Syn. *Veratrum lobelianum*], CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochera rosea*], DONG FANG GOU TENG *Uncaria orientalis*, FEI ZHOU GOU TENG *Uncaria africana*, GUANG LIANG LUO FU MU *Rauwolfia nitida*, LUO FU MU *Rauwolfia verticillata*, YIN DU LUO FU MU *Rauwolfia serpentina*, TUO YUAN GOU TENG *Uncaria elliptica*, YUN NAN LUO FU MU *Rauwolfia yunnanensis*. **Ref:** 1, 2, 6, 660, 661, 5341.

**784 Ajmaline**

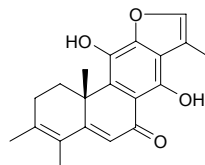
Rauwolfine; Aritmina; Tachmalin [4360-12-7]  $C_{20}H_{26}N_2O_2$  (326.44). mp 205~207°C,  $[\alpha]_D^{20} = +144^\circ$  (chloroform), soluble in chloroform, ethanol, ether, slightly soluble in water.<sup>[55071]</sup> **Pharm:** Antihypertensive; antiviral; sedative; coronary vasodilator. **Source:** BEI SHI SHAN CHENG *Melodinus balansae*, CUI TU LUO FU MU *Rauwolfia vomitoria*, HAI NAN LUO FU MU *Rauwolfia verticillata* var. *hainanensis*, LUO FU MU *Rauwolfia verticillata*, PI LI LUO FU MU *Rauwolfia perakensis*, YIN DU LUO FU MU *Rauwolfia serpentina*. **Ref:** 1, 6, 660, 5507.

**785 Ajoene**

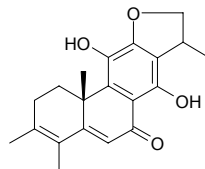
$C_9H_{14}OS_3$  (234.40). **Source:** DA SUAN *Allium sativum*. **Ref:** 660.

**786 Ajuforrestine A**

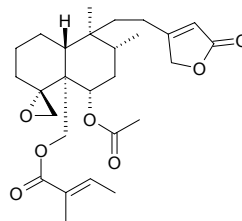
12,16-Epoxy-11,14-dihydroxy-3,5,8,11,13,15-abietahexaene-7-one [157110-18-4]  $C_{20}H_{20}O_4$  (324.38). Red brown crystals, mp 245~248°C,  $[\alpha]_D^{28} = -51.5^\circ$  ( $CHCl_3$ ). **Source:** LI ZHI HAO *Ajuga forrestii*. **Ref:** 319.

**787 Ajuforrestine B**

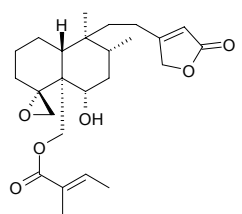
12,16-Epoxy-11,14-dihydroxy-3,5,8,11,13-abietapentaene-7-one  $C_{20}H_{22}O_4$  (326.40). Yellow crystals, mp 182~185°C,  $[\alpha]_D^{28} = -61.8^\circ$  ( $CHCl_3$ ). **Source:** LI ZHI HAO *Ajuga forrestii*. **Ref:** 319.

**788 Ajugacumbin A**

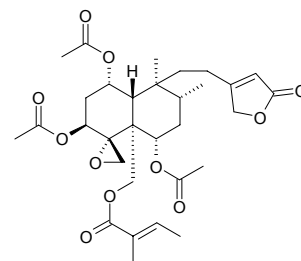
$C_{27}H_{38}O_7$  (474.60). **Pharm:** Insect antifeedant. **Source:** BAI MAO XIA KU CAO *Ajuga decumbens*. **Ref:** 660.

**789 Ajugacumbin B**

$C_{25}H_{36}O_6$  (432.56). **Pharm:** Insect antifeedant. **Source:** BAI MAO XIA KU CAO *Ajuga decumbens*. **Ref:** 660.

**790 Ajugacumbin C**

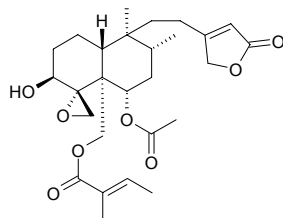
$C_{31}H_{42}O_{11}$  (590.67). **Source:** BAI MAO XIA KU CAO *Ajuga decumbens*. **Ref:** 660.



**791 Ajugacumbin D**

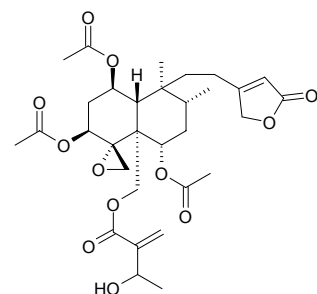
$C_{27}H_{38}O_8$  (490.60). Source: BAI MAO XIA KU CAO *Ajuga decumbens*.

Ref: 660.

**792 Ajugacumbin E**

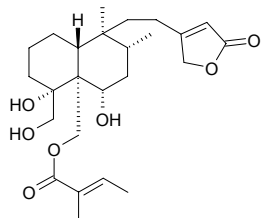
$C_{31}H_{42}O_{12}$  (606.67). Source: BAI MAO XIA KU CAO *Ajuga decumbens*.

Ref: 660.

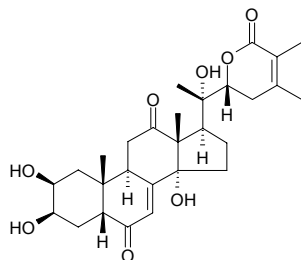
**793 Ajugacumbin F**

$C_{25}H_{38}O_7$  (450.58). Source: BAI MAO XIA KU CAO *Ajuga decumbens*.

Ref: 660.

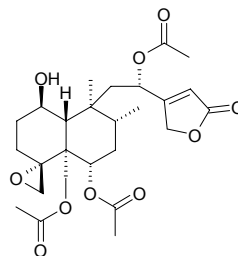
**794 Ajugalactone**

[42975-12-2]  $C_{29}H_{40}O_8$  (516.64). mp 225~235°C (dec). Pharm: Insect ecdysone. Source: BAI MAO XIA KU CAO *Ajuga decumbens*, HUANG JIN GU CAO *Ajuga chamaepitys*, PU FU JIN GU CAO *Ajuga reptans*, TAI WAN JIN GU CAO *Ajuga taiwanensis* (whole herb). Ref: 6, 658, 4483.

**795 Ajugalide A**

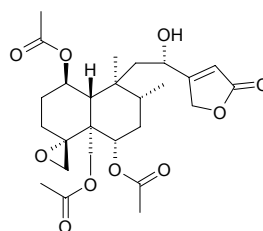
(12*S*)-6 $\alpha$ ,12,19-Triacetoxy-1 $\beta$ -hydroxy-4,18-epoxyneoclerod-13(14)-en-15,16-olide  $C_{26}H_{36}O_{10}$  (508.57). White amorphous solid, mp 205~206°C.

Source: TAI WAN JIN GU CAO *Ajuga taiwanensis*. Ref: 4431, 4483.

**796 Ajugalide B**

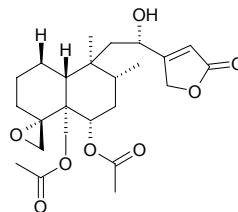
(12*S*)-1 $\beta$ ,6 $\alpha$ ,19-Triacetoxy-12-hydroxy-4,18-epoxyneoclerod-13(14)-en-15,16-olide  $C_{26}H_{36}O_{10}$  (508.57). White amorphous solid, mp 209~210°C,  $[\alpha]_D^{25} = +2.4^\circ$  ( $c = 0.27$ ,  $CHCl_3$ ).

Source: TAI WAN JIN GU CAO *Ajuga taiwanensis*. Ref: 4431, 4483.

**797 Ajugalide C**

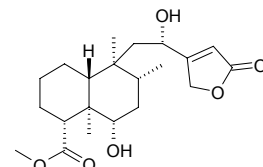
(12*S*)-6 $\alpha$ ,19-Diacetoxy-12-hydroxy-4,18-epoxyneoclerod-13(14)-en-15,16-olide  $C_{24}H_{34}O_8$  (450.53). White amorphous solid, mp 158~160°C,  $[\alpha]_D^{25} = -10.4^\circ$  ( $c = 0.07$ ,  $CHCl_3$ ).

Source: TAI WAN JIN GU CAO *Ajuga taiwanensis*. Ref: 4431, 4483.

**798 Ajugalide D**

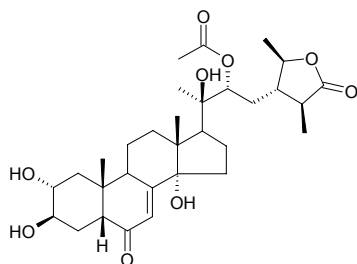
(12*S*)-Methyl-6 $\alpha$ ,12-dihydroxy-4 $\alpha$ -methoxycarbonyl-18-norneo-clerod-13(14)-en-15,16-olide  $C_{21}H_{32}O_6$  (380.49). White amorphous solid, mp 210~212°C,  $[\alpha]_D^{25} = -12.7^\circ$  ( $c = 0.05$ ,  $CHCl_3$ ).

Source: TAI WAN JIN GU CAO *Ajuga taiwanensis*. Ref: 4431, 4483.

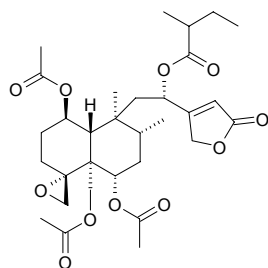


**799 Ajugalide E**

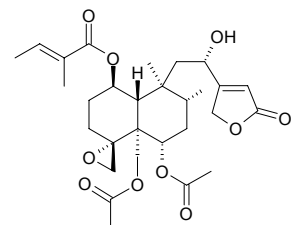
$C_{31}H_{46}O_9$  (562.71). White amorphous solid, mp 210~212°C,  $[\alpha]_D^{25} = +133.6^\circ$  ( $c = 0.007$ ,  $CHCl_3$ ). **Source:** TAI WAN JIN GU CAO *Ajuga taiwanensis* (whole herb). **Ref:** 4483.

**800 Ajugamacrin B**

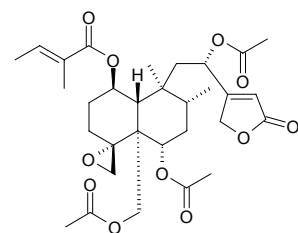
[123313-59-7]  $C_{31}H_{44}O_{11}$  (592.69). **Source:** DA ZI JIN GU CAO *Ajuga macrosperma* TAI WAN JIN GU CAO *Ajuga taiwanensis* (whole herb). **Ref:** 1521, 4431, 4483.

**801 Ajugamarin**

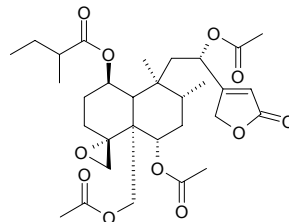
$C_{29}H_{40}O_{10}$  (548.64). **Source:** BAI MAO XIA KU CAO *Ajuga decumbens*, ZI BEI JIN PAN *Ajuga nipponensis*. **Ref:** 660.

**802 Ajugamarin A<sub>2</sub>**

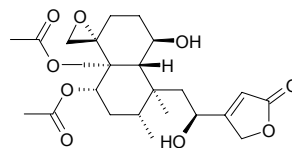
$C_{31}H_{42}O_{11}$  (590.67). **Source:** BAI MAO XIA KU CAO *Ajuga decumbens*, ZI BEI JIN PAN *Ajuga nipponensis*. **Ref:** 660.

**803 Ajugamarin B<sub>2</sub>**

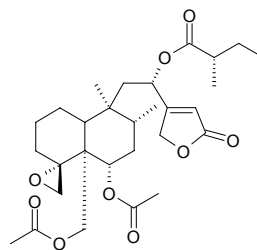
$C_{31}H_{44}O_{11}$  (592.69). **Source:** BAI MAO XIA KU CAO *Ajuga decumbens*, ZI BEI JIN PAN *Ajuga nipponensis*. **Ref:** 660.

**804 Ajugamarin C<sub>1</sub>**

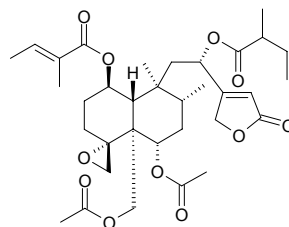
$C_{24}H_{34}O_9$  (466.53). **Source:** TAI WAN JIN GU CAO *Ajuga taiwanensis* (whole herb). **Ref:** 4431, 4483.

**805 Ajugamarin F<sub>4</sub>**

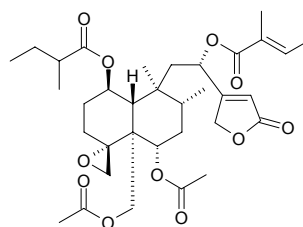
$C_{29}H_{42}O_9$  (534.65). **Source:** BAI MAO XIA KU CAO *Ajuga decumbens*, ZI BEI JIN PAN *Ajuga nipponensis*. **Ref:** 660.

**806 Ajugamarin G<sub>1</sub>**

$C_{34}H_{48}O_{11}$  (632.76). **Source:** BAI MAO XIA KU CAO *Ajuga decumbens*, ZI BEI JIN PAN *Ajuga nipponensis*. **Ref:** 660.

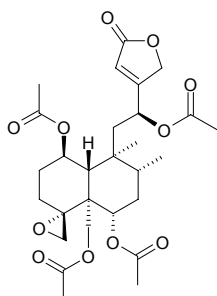
**807 Ajugamarin H<sub>1</sub>**

$C_{34}H_{48}O_{11}$  (632.76). **Source:** BAI MAO XIA KU CAO *Ajuga decumbens*, ZI BEI JIN PAN *Ajuga nipponensis*. **Ref:** 660.

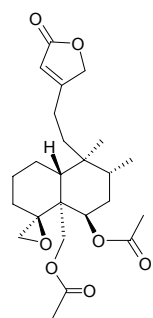


**808 Ajugapantin A**

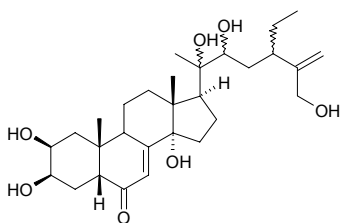
$C_{28}H_{38}O_{11}$  (550.61). Source: TAI WAN JIN GU CAO *Ajuga taiwanensis* (whole herb). Ref: 4431, 4483.

**809 Ajugarin I**

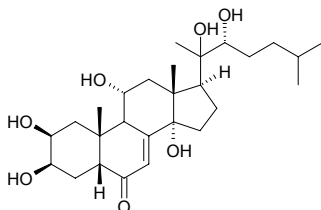
[62640-05-5]  $C_{24}H_{34}O_7$  (434.54). Pharm: Insect antifeedant (African armyworm). Source: YUAN JU JIN GU CAO *Ajuga remota*. Ref: 658.

**810 Ajugasterone B**

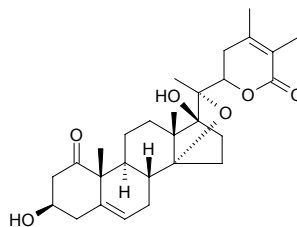
$C_{29}H_{46}O_7$  (506.69). Source: BAI MAO XIA KU CAO *Ajuga decumbens*, ZI BEI JIN PAN *Ajuga nipponensis*. Ref: 660.

**811 Ajugasterone C**

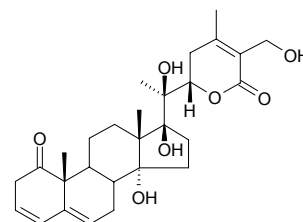
$C_{27}H_{44}O_7$  (480.65). Pharm: Insect ecdysone (molting hormone). Source: BAI MAO XIA KU CAO *Ajuga decumbens*, LU CAO *Rhaponticum carthamoides*, ZHEN ZHU LU SHUI CAO *Cyanotis arachnoidea* [Syn. *Cyanotis bodinieri*]. Ref: 6, 658, 660.

**812 Ajugin**

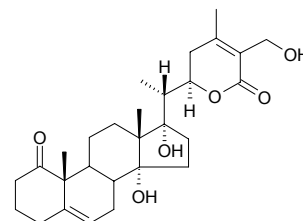
$3\beta,17\beta$ -Dihydroxy-14,20-epoxy-1-oxo-22R-witha-5,24-dienolide  $C_{28}H_{38}O_6$  (470.61). Amorphous powder,  $[\alpha]_D^{21} = +70.5^\circ$  ( $c = 0.23$ , MeOH). Source: XIAO HUA XIA KU CAO *Ajuga parviflora*. Ref: 2308.

**813 Ajugin E**

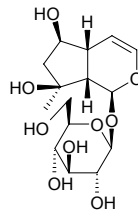
$C_{28}H_{38}O_7$  (486.61). White amorphous solid,  $[\alpha]_D^{21} = +125^\circ$  ( $c = 0.058$ , MeOH). Source: XIAO HUA XIA KU CAO *Ajuga parviflora*. Ref: 2396.

**814 Ajugin F**

$C_{28}H_{40}O_6$  (472.63). White amorphous,  $[\alpha]_D^{21} = +57^\circ$  ( $c = 0.063$ , MeOH). Source: XIAO HUA XIA KU CAO *Ajuga parviflora*. Ref: 2396.

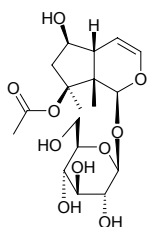
**815 Ajugol**

Leonuride [52949-83-4]  $C_{15}H_{24}O_9$  (348.35). Pharm: Antitrypanosomal (*Trypanosoma brucei rhodesiense*,  $IC_{50} = 31.8\mu\text{g/mL}$ , control Melarsoprol,  $IC_{50} = 0.0033\mu\text{g/mL}$ ; *Trypanosoma cruzi*,  $IC_{50} > 90\mu\text{g/mL}$ , control Benznidazole,  $IC_{50} = 0.70\mu\text{g/mL}$ )<sup>[5251]</sup>; antileishmanial (*Leishmania donovani*,  $IC_{50} = 7.2\mu\text{g/mL}$ , control Miltefosine,  $IC_{50} = 0.32\mu\text{g/mL}$ )<sup>[5251]</sup>; antimalarial (*Plasmodium falciparum*,  $IC_{50} > 50\mu\text{g/mL}$ , control Artemisinin,  $IC_{50} = 0.002\mu\text{g/mL}$ )<sup>[5251]</sup>; cytotoxic (L6 cells,  $IC_{50} > 90\mu\text{g/mL}$ , control Podophyllotoxin,  $IC_{50} = 0.0075\mu\text{g/mL}$ )<sup>[5251]</sup>. Source: CHA RU SHI WAN CUO *Asystasia intrusa*, GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *Huechingensis*], LIN PIAN XUAN SHEN *Scrophularia lepidota* (root), ROU CONG RONG *Cistanche deserticola*. Ref: 2, 7, 628, 2589, 5251.

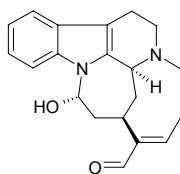


**816 Ajugoside**

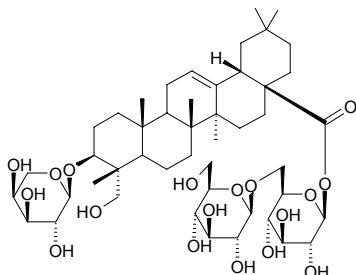
[51916-96-8] C<sub>17</sub>H<sub>26</sub>O<sub>10</sub> (390.39). **Pharm:** Antitrypanosomal (*Trypanosoma brucei rhodesiense*, IC<sub>50</sub> = 56.4 μg/mL, control Melarsoprol, IC<sub>50</sub> = 0.0033 μg/mL; *Trypanosoma cruzi*, IC<sub>50</sub> > 90 μg/mL, control Benznidazole, IC<sub>50</sub> = 0.70 μg/mL)<sup>[5251]</sup>; antileishmanial (*Leishmania donovani*, IC<sub>50</sub> = 8.5 μg/mL, control Miltefosine, IC<sub>50</sub> = 0.32 μg/mL)<sup>[5251]</sup>; antimalarial (*Plasmodium falciparum*, IC<sub>50</sub> > 50 μg/mL, control Artemisinin, IC<sub>50</sub> = 0.002 μg/mL)<sup>[5251]</sup>; cytotoxic (L6 cells, IC<sub>50</sub> > 90 μg/mL, control Podophyllotoxin, IC<sub>50</sub> = 0.0075 μg/mL)<sup>[5251]</sup>. **Source:** DU ZHONG *Eucommia ulmoides*, GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], LONG TU ZHU *Clerodendrum thomsonae*, PU FU JIN GU CAO *Ajuga reptans*, WEI YI MU CAO *Leonurus cardiaca*, XIAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], LIN PIAN XUAN SHEN *Scrophularia lepidota* (root). **Ref:** 2, 7, 660, 1521, 5251.

**817 Akagerine**

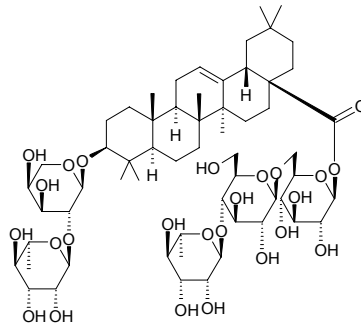
C<sub>20</sub>H<sub>24</sub>N<sub>2</sub>O<sub>2</sub> (324.43). mp 188°C, [α]<sub>D</sub><sup>20</sup> = -16.6° (c = 1, MeOH). **Source:** DONG FEI MA QIAN *Strychnos usambarensis* (root), DUI SHENG MA QIAN *Strychnos decussata* (root bark), *Strychnos camptoneura*, *Strychnos gardneri*, *Strychnos jobertiana*, *Strychnos parvifolia*, *Strychnos nigrifolia*, *Strychnos spinosa* (leaf), *Strychnos vanprukii* (stem). **Ref:** 1521, 3471.

**818 Akebia saponin D**

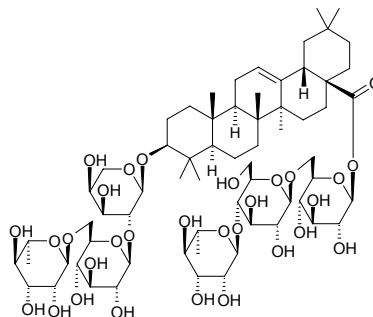
3-*O*- $\alpha$ -L-Arabinopyranosyl hederagenin  
28-*O*- $\beta$ -D-glucopyranosyl(1→6)- $\beta$ -D-glucopyranoside C<sub>47</sub>H<sub>76</sub>O<sub>18</sub> (929.12).  
**Source:** CHUAN XU DUAN *Dipsacus asperoides*. **Ref:** 660.

**819 Akeboside st<sub>4</sub>**

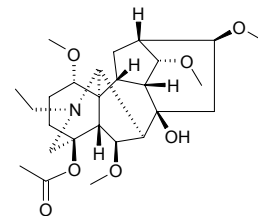
Hederasaponin B; Eleutheroside M; Hederacoside B; Hederacolchiside C; Tauroside G<sub>2</sub>; 3 $\beta$ -[(*O*- $\alpha$ -L-Rhamnopyranosyl (1→2)- $\alpha$ -L-arabinopyranosyl)oxy]olean-12-en-28-oic acid *O*- $\alpha$ -L-rhamnopyranosyl (1→4)-*O*- $\beta$ -D-glucopyranosyl (1→6)- $\beta$ -D-glucopyranosyl ester C<sub>59</sub>H<sub>96</sub>O<sub>25</sub> (1205.41). mp 221–222°C (dec). **Source:** CI WU JIA YE *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*], MU TONG *Akebia quinata*, MU TONG GEN *Akebia quinata*, SAN YE MU TONG *Akebia trifoliata* (stem), XI ZANG TIE XIAN LIAN *Clematis tibetana* (aerial parts). **Ref:** 6, 660, 3530, 4545.

**820 Akeboside st<sub>3</sub>**

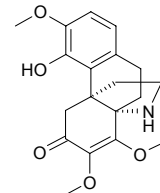
C<sub>65</sub>H<sub>106</sub>O<sub>30</sub> (1367.55). mp 224–226°C (dec). **Source:** MU TONG *Akebia quinata*, MU TONG GEN *Akebia quinata*. **Ref:** 6.

**821 Akirane**

C<sub>26</sub>H<sub>41</sub>NO<sub>7</sub> (479.62). Colorless needles, mp 126–130°C (acetone). **Source:** JI LIN WU TOU *Aconitum kirinense*. **Ref:** 2515.

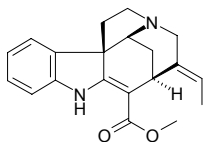
**822 Aknadicine**

[24148-89-8] C<sub>19</sub>H<sub>23</sub>NO<sub>5</sub> (345.40). **Pharm:** Antibacterial; used in treatment of fever, diarrhea and diseases of the urinary system. **Source:** RU LAN *Stephania hernandifolia*. **Ref:** 658.

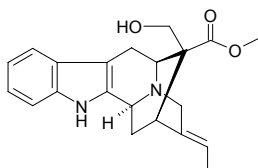


**823 Akuammicine**

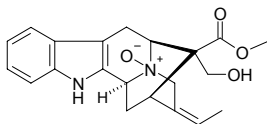
[639-43-0]  $C_{20}H_{22}N_2O_2$  (322.41). **Pharm:** Gonad stimulating principle. **Source:** CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochera rosea*], GOU TENG *Uncaria rhynchophylla* [Syn. *Nauclea rhynchophylla*]. **Ref:** 2, 658.

**824 19-(Z)-Akuammidine**

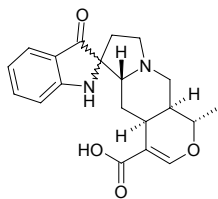
[639-36-1]  $C_{21}H_{24}N_2O_3$  (352.44). mp 247~250°C,  $[\alpha]_D = +9^\circ$ . **Pharm:** Local anesthetic; antihypertensive; skeletal muscle relaxant. **Source:** GOU WEN *Gelsemium elegans*. **Ref:** 14, 658.

**825 Akuammidine N-oxide**

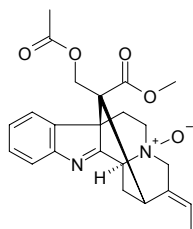
$C_{21}H_{24}N_2O_4$  (368.44). mp 250°C (dec). **Source:** GOU WEN *Gelsemium elegans*. **Ref:** 14.

**826 Akuammigine pseudoindoxyl**

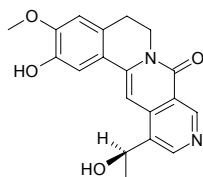
$C_{20}H_{22}N_2O_4$  (354.41). **Source:** TUO YUAN GOU TENG *Uncaria elliptica*. **Ref:** 5341.

**827 Akuammiline N(4)-oxide**

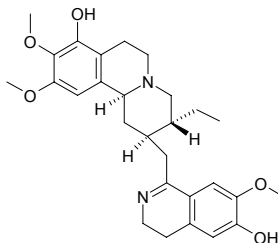
$C_{23}H_{26}N_2O_5$  (410.47).  $[\alpha]_D = -144^\circ$  ( $c = 0.13$ ,  $CHCl_3$ ). **Source:** MA LAI XI YA RUI MU *Kopsia griffithii*. **Ref:** 1854.

**828 Alamarine**

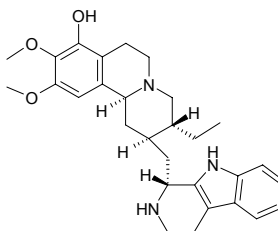
[77156-18-4]  $C_{19}H_{18}N_2O_4$  (338.37). **Pharm:** Treatment of leprosy; dermatitis suppressant. **Source:** AN GE LA BA JIAO FENG *Alangium lamarckii*. **Ref:** 658.

**829 Alangicine**

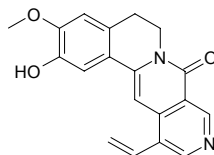
[16531-04-7]  $C_{28}H_{36}N_2O_5$  (480.61). **Pharm:** Treatment of leprosy; dermatitis suppressant. **Source:** AN GE LA BA JIAO FENG *Alangium lamarckii*. **Ref:** 658.

**830 Alangimarckine**

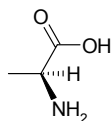
[13849-53-1]  $C_{29}H_{37}N_3O_3$  (475.64). **Pharm:** Treatment of leprosy; dermatitis suppressant. **Source:** AN GE LA BA JIAO FENG *Alangium lamarckii*. **Ref:** 658.

**831 Alangimarine**

[77156-16-2]  $C_{19}H_{16}N_2O_3$  (320.35). **Pharm:** Treatment of leprosy; dermatitis suppressant. **Source:** AN GE LA BA JIAO FENG *Alangium lamarckii*. **Ref:** 658.

**832 L-Alanine**

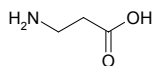
[56-41-7]  $C_3H_7NO_2$  (89.09). **Pharm:** Food additive; reverses glucopenia and ketosis caused by starvation; glucagon secretion promotor (patients with pancreatitis). **Source:** BAN XIA *Pinellia ternata* (dried tuber: content scope of 4 origins = 0.74%~1.70%, mean content = 1.20%<sup>[5521]</sup>), CHANG JIAO DOU *Ceratonia siliqua*. **Ref:** 658, 5521.



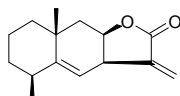


**833  $\beta$ -Alanine**

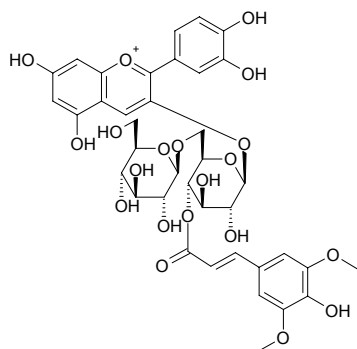
[107-95-9]  $C_3H_7NO_2$  (89.09). **Pharm:** Neurotoxin (bird). **Source:** DAN JI ER YUAN WEI *Iris tingitana*, *Lunaria* sp. **Ref:** 658.

**834 Alantolactone**

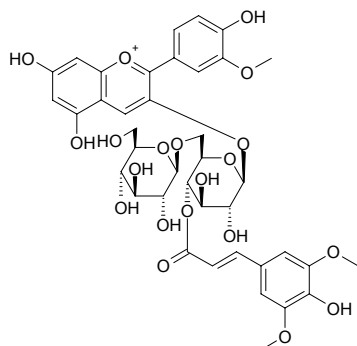
[546-43-0]  $C_{15}H_{20}O_2$  (232.33). mp 76–79°C, bp 275°C, soluble in benzene, diethyl ether, ethanol. **Pharm:** Antibacterial; antifungal; anthelmintic; choleric; used in treatment of urethral infection; antitussive (dispels phlegm); plant growth and germination inhibitor (seed); kills liver-fluke (*Fasciola hepatica*). **Source:** TU MU XIANG *Inula helenium* (root: content scope = 1.33%–2.79%<sup>[5501]</sup>, mean content of 3 batch samples = 1.19%<sup>[5508]</sup>), DA YE TU MU XIANG *Inula grandis*, MEI LI XUAN FU HUA *Inula magnifica*, DI TANG HUA *Kerria japonica*, KONG QUE CAO *Tagetes patula*, MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*], ZONG ZHUANG TU MU XIANG *Inula racemosa* (root: mean content of 4 batch samples = 2.02%<sup>[5508]</sup>). **Ref:** 1, 2, 5501, 5508.

**835 Alatanin 1**

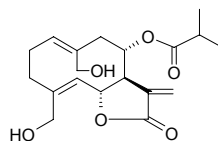
Cyanidin 3-*O*-(4"-*O*-sinapoyl gentiobioside)  $C_{38}H_{41}O_{20}^+$  (817.74). **Source:** MAO SHU *Dioscorea alata*. **Ref:** 660.

**836 Alatanin 2**

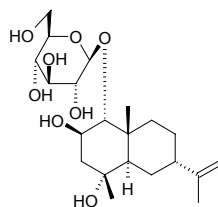
Peonidin 3-*O*-(4"-*O*-sinapoyl gentiobioside)  $C_{39}H_{43}O_{20}^+$  (831.77). **Source:** MAO SHU *Dioscorea alata*. **Ref:** 660.

**837 Alatolide**

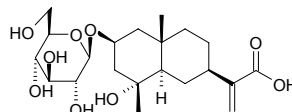
[41929-10-6]  $C_{19}H_{26}O_6$  (350.42). mp 59–61°C,  $[\alpha]_D^{25} = +64.4^\circ$ . **Pharm:** Antineoplastic (mus inoculated tumor, strongly inhibits cellular hyperplasia, EAC, InRt = 96%, HeLa, 56  $\mu$ mol/L, InRt to protein synthesis = 93.8%, InRt to DNA synthesis = 91.9%, HeLa, 28  $\mu$ mol/L, InRt to protein synthesis = 73%, InRt to DNA synthesis = 5.7%); cytotoxic (KB, hmn epicytoma HEPZ). **Source:** YI CHI LING JU *Jurinea alata*. **Ref:** 1.

**838 Alatoside A**

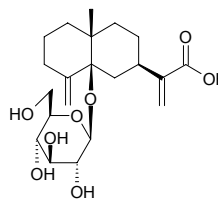
1 $\alpha$ -*O*-( $\beta$ -*D*-Glucopyranosyloxy)-7-epi-eudesma-11-en-2b,4 $\alpha$ -diol  $C_{21}H_{36}O_8$  (416.52). Gum,  $[\alpha]_D^{20} = -93.1^\circ$  ( $c = 0.44$ , MeOH). **Source:** LIU LENG JU *Laggera alata*. **Ref:** 3411.

**839 Alatoside B**

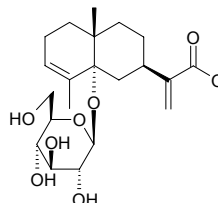
2 $\beta$ -*O*-( $\beta$ -*D*-Glucopyranosyloxy)-eudesma-4 $\alpha$ -hydroxyl-11(13)-en-12-oic-acid  $C_{21}H_{34}O_9$  (430.50). Gum,  $[\alpha]_D^{20} = -108.4^\circ$  ( $c = 0.20$ , MeOH). **Source:** LIU LENG JU *Laggera alata*. **Ref:** 3411.

**840 Alatoside C**

5 $\beta$ -*O*-( $\beta$ -*D*-Glucopyranosyloxy)-eudesma-4(15),11(13)-dien-12-oic-acid  $C_{21}H_{32}O_8$  (412.48). Gum,  $[\alpha]_D^{20} = -88.0^\circ$  ( $c = 0.17$ , MeOH). **Source:** LIU LENG JU *Laggera alata*. **Ref:** 3411.

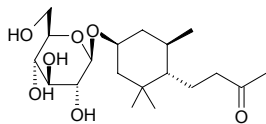
**841 Alatoside D**

5 $\alpha$ -*O*-( $\beta$ -*D*-Glucopyranosyloxy)-eudesma-3,11(13)-dien-12-oic acid  $C_{21}H_{32}O_8$  (412.48). Gum,  $[\alpha]_D^{20} = -16.5^\circ$  ( $c = 0.24$ , MeOH). **Source:** LIU LENG JU *Laggera alata*. **Ref:** 3411.

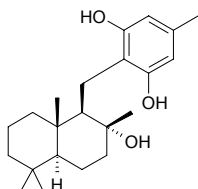


**842 Alatoside E**

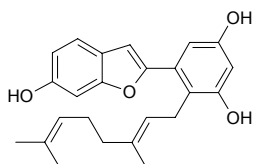
$3\beta$ -*O*-( $\beta$ -D-Glucopyranosyloxy)-megastigma-9-one  $C_{19}H_{34}O_7$  (374.48). Gum,  $[\alpha]_D^{20} = -18^\circ$  ( $c = 0.20$ , MeOH). Source: LIU LENG JU *Laggera alata*. Ref: 3411.

**843 Albaconol**

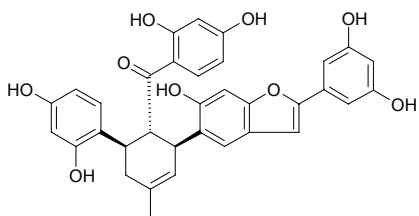
$C_{22}H_{34}O_3$  (346.51). Pharm: Vanilloid receptor 1 (VR1) antagonist ( $IC_{50} = 5\mu\text{mol/L}$ ); cytotoxic (inhibits significantly growth of hmn tumor cell lines: K562,  $IC_{50} = (8.0\pm 0.4)\mu\text{mol/L}$ ; A549,  $IC_{50} = (3.17\pm 0.89)\mu\text{mol/L}$ ; BGC823,  $IC_{50} = (4.18\pm 0.14)\mu\text{mol/L}$ ; Bcap-37,  $IC_{50} = (7.5\pm 2.5)\mu\text{mol/L}$ ; acts on DNA topo II)<sup>[5014]</sup>; smooth muscle contractor (tracheal,  $pEC_{50} = 4.23\pm 0.18$ ,  $n = 10$ )<sup>[5431]</sup>. Source: YUN NAN DI HUA JUN *Albatrellus confluens*. Ref: 2271, 5014, 5431.

**844 Albufuran A**

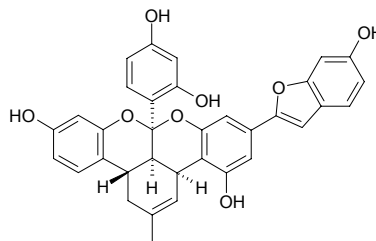
[84323-14-8]  $C_{24}H_{26}O_4$  (378.47). Pharm: Antifungal. Source: SANG YE *Morus alba*. Ref: 658.

**845 Albufuran C**

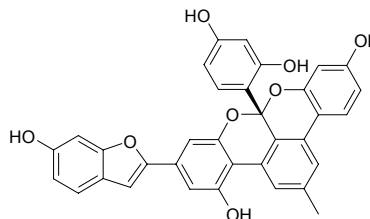
$C_{34}H_{28}O_9$  (580.60).  $[\alpha]_D^{29} = -463.8^\circ$  ( $c = 0.13$ , MeOH). Pharm: Antioxidant ( $100\mu\text{mol/L}$ , InRt of MDA = 94.2%, control Vitamin E, InRt of MDA = 81.5%;  $10\mu\text{mol/L}$ , InRt of MDA = 76.2%, Vitamin E, InRt of MDA = 33.9%). Source: NAI SANG *Morus macroura* (stem bark). Ref: 5013.

**846 Albanol A**

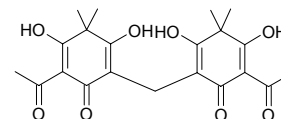
[87085-00-5]  $C_{34}H_{26}O_8$  (562.58). Pharm: Antihypertensive; cytotoxic (aromatase inhibitor)<sup>[5038]</sup>; aromatase inhibitor (*in vitro*,  $IC_{50} = 7.5\mu\text{mol/L}$ ; control Aminoglutethimide,  $IC_{50} = 6.4\mu\text{mol/L}$ )<sup>[3090]</sup>. Source: GOU SHU *Broussonetia papyrifera*, SANG YE *Morus alba*. Ref: 658, 3090, 5038.

**847 ( $\pm$ )-Albanol B**

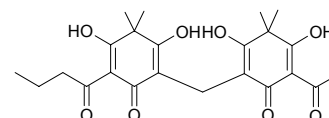
$C_{34}H_{22}O_8$  (558.55). Pharm: Antibacterial (*Enterococcus faecalis* JCM7783 (VSE), MIC =  $3.13\mu\text{g/mL}$ , control Linezolid, MIC =  $1.56\mu\text{g/mL}$ ; *Enterococcus faecalis* JU1856 (VRE, VanA), MIC =  $3.13\mu\text{g/mL}$ , Linezolid, MIC =  $0.78\mu\text{g/mL}$ ; *Enterococcus faecalis* JU1782 (VRE, VanB), MIC =  $3.13\mu\text{g/mL}$ , Linezolid, MIC =  $0.78\mu\text{g/mL}$ ; *Enterococcus faecium* JCM5804 (VSE) (= ATCC 29212), MIC =  $6.25\mu\text{g/mL}$ , Linezolid, MIC =  $1.56\mu\text{g/mL}$ ; *Enterococcus faecium* JU1858 (VRE, VanA), MIC =  $3.13\mu\text{g/mL}$ , Linezolid, MIC =  $0.78\mu\text{g/mL}$ ; *Enterococcus faecium* JU1777 (VRE, VanB), MIC =  $3.13\mu\text{g/mL}$ , Linezolid, MIC =  $1.56\mu\text{g/mL}$ ; *Enterococcus gallinarum* JU2786 (VRE, VanC), MIC =  $3.13\mu\text{g/mL}$ , Linezolid, MIC =  $0.78\mu\text{g/mL}$ ; *Staphylococcus aureus* JCM2874 (MSSA) (=ATCC29213), MIC =  $3.13\mu\text{g/mL}$ , Linezolid, MIC =  $1.56\mu\text{g/mL}$ ; *Staphylococcus aureus* (MRSA, 10 strains), MIC =  $3.13\mu\text{g/mL}$ , Linezolid, MIC =  $0.78\mu\text{g/mL}$ ; *Staphylococcus aureus* (MRSA, 8 strains), mean  $MIC_{80} = 3.13\mu\text{g/mL}$ , Linezolid, mean  $MIC_{80} = 0.78\mu\text{g/mL}$ ). Source: *Morus lhou*. Ref: 5007.

**848 Albaspidin AA**

$C_{21}H_{24}O_8$  (404.42). Source: DE LA MENG DE JIN SI TAO *Hypericum drummondii*. Ref: 1521.

**849 Albaspidin AB**

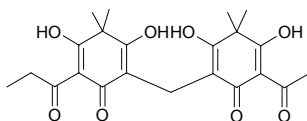
$C_{23}H_{28}O_8$  (432.47). Source: MAO GUAN ZHONG *Dryopteris championii*. Ref: 660.



**850 Albaspidin AP**

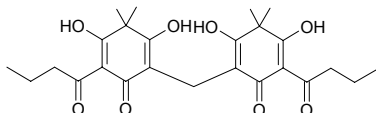
$C_{22}H_{26}O_8$  (418.45). Source: MAO GUAN ZHONG *Dryopteris championii*.

Ref: 660.

**851 Albaspidin BB**

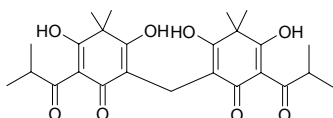
$C_{25}H_{32}O_8$  (460.53). Source: AO DI LI LIN MAO JUE *Dryopteris austriaca*,

MAO GUAN ZHONG *Dryopteris championii*. Ref: 660.

**852 Albaspidin iBiB**

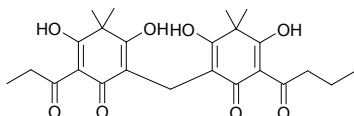
Japonicine A  $C_{25}H_{32}O_8$  (460.53). Source: DI ER CAO *Hypericum japonicum*.

Ref: 660.

**853 Albaspidin PB**

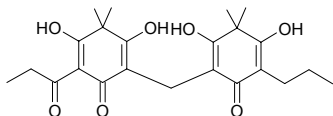
$C_{24}H_{30}O_8$  (446.50). Source: MAO GUAN ZHONG *Dryopteris championii*.

Ref: 660.

**854 Albaspidin PP**

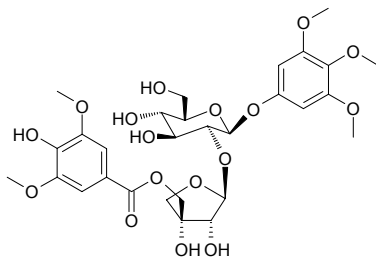
$C_{23}H_{30}O_7$  (418.49). Source: MAO GUAN ZHONG *Dryopteris championii*.

Ref: 660.

**855 Albibrissinoside A**

3,4,5-Trimethoxyphenyl-1-O-β-D-(5-O-syringoyl)-apiofuranosyl-(1→2)-β-D-glucopyranoside  $C_{29}H_{38}O_{17}$  (658.62). Amorphous powder,  $[\alpha]_D^{20} = +3.70^\circ$

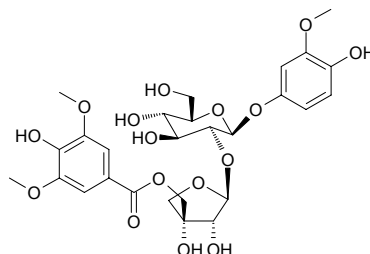
( $c = 0.015$ , MeOH). Source: HE HUAN PI *Albizzia julibrissin*. Ref: 2553.

**856 Albibrissinoside B**

4-Hydroxy-3-methoxyphenyl-1-O-β-D-(5-O-syringoyl)-apiofuranosyl-(1→2)-β-D-glucopyranoside  $C_{27}H_{34}O_{16}$  (614.56). Amorphous powder,  $[\alpha]_D^{20} =$

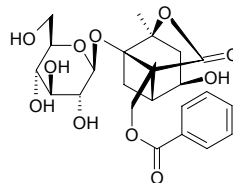
$+3.29^\circ$  ( $c = 0.002$ , MeOH). Pharm: Antioxidant (DPPH scavenger). Source:

HE HUAN PI *Albizzia julibrissin*. Ref: 2553.

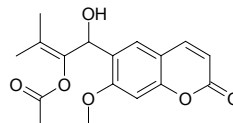
**857 Albiflorin**

[39011-90-0]  $C_{23}H_{28}O_{11}$  (480.47). Source: BAI SHAO *Paeonia albiflora*

[Syn. *Paeonia lactiflora*], CHI SHAO *Paeonia lactiflora* wild. Ref: 2.

**858 Albiflorin-1**

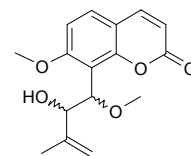
$C_{17}H_{18}O_6$  (318.33). mp 128°C. Source: YAN JIAO CAO *Boenninghausenia albiflora*. Ref: 2495.

**859 Albiflorin-2**

7-Methoxy-8-(1'-methoxy-2'-hydroxy-3'-methyl-3'-butenyl)coumarin

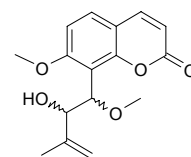
$C_{16}H_{18}O_5$  (290.32). mp 94~95°C. Source: JIU LI XIANG *Murraya*

*paniculata* [Syn. *Chalcas paniculata*], YAN JIAO CAO *Boenninghausenia albiflora*. Ref: 11, 2495.

**860 Albiflorin-3**

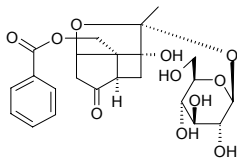
$C_{16}H_{18}O_5$  (290.32). Diastereomer of Albiflorin 2, mp 144~145°C. Source:

YAN JIAO CAO *Boenninghausenia albiflora*. Ref: 2495.

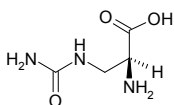


**861 Albiflorin R<sub>1</sub>**

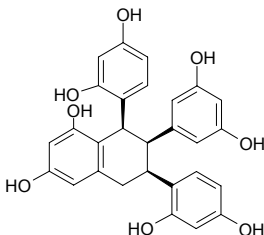
C<sub>23</sub>H<sub>28</sub>O<sub>11</sub> (480.47). Colorless needles, mp 203~205°C. Source: BAI SHAO *Paeonia albiflora* [Syn. *Paeonia lactiflora*]. Ref: 2239.

**862 L-Albizziine**

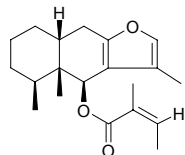
L(-)-2-Amino-3-ureidopropionic acid [1483-07-4] C<sub>4</sub>H<sub>9</sub>N<sub>3</sub>O<sub>3</sub> (147.34). mp 214~215°C. Pharm: Pesticide. Source: HE HUAN PI *Albizia julibrissin*, YU ZHUANG HE HUAN *Albizia lophantha*, *Acacia* sp. Ref: 6, 658.

**863 Albotalol**

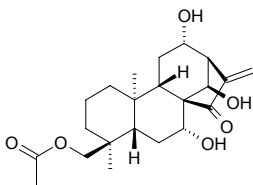
C<sub>28</sub>H<sub>24</sub>O<sub>8</sub> (488.50). Source: SANG ZHI *Morus alba*. Ref: 1521.

**864 Albopetasin**

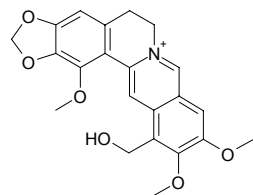
C<sub>20</sub>H<sub>28</sub>O<sub>3</sub> (316.44). mp 106~107°C. Source: FENG DOU CAI *Petasites japonicus*. Ref: 6.

**865 Albopilosin A**

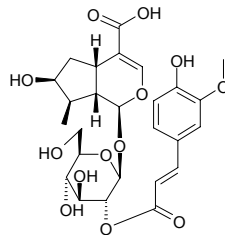
C<sub>22</sub>H<sub>32</sub>O<sub>6</sub> (392.50). mp 240~242°C, [α]<sub>D</sub><sup>26</sup> = -46.5° (c = 1.0, C<sub>5</sub>H<sub>5</sub>N). Source: BAI ROU MAO XIANG CHA CAI *Isodon albopilosus*. Ref: 4067.

**866 Alborine**

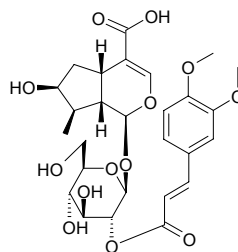
C<sub>22</sub>H<sub>22</sub>NO<sub>6</sub> (396.42). Source: HONG HUA LV RONG HAO *Meconopsis punicea*. Ref: 660.

**867 Alboside I**

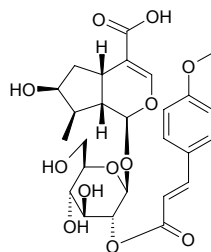
C<sub>26</sub>H<sub>32</sub>O<sub>13</sub> (552.54). Amorphous solid, [α]<sub>D</sub> = -46.7° (c = 2.4, H<sub>2</sub>O). Source: BAI XUE GUO MU *Chiococca alba*. Ref: 2313.

**868 Alboside II**

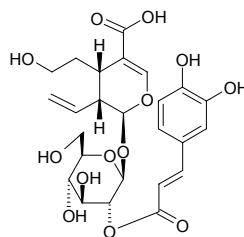
C<sub>27</sub>H<sub>34</sub>O<sub>13</sub> (566.56). Amorphous solid, [α]<sub>D</sub> = -30.7° (c = 0.9, MeOH). Source: BAI XUE GUO MU *Chiococca alba*. Ref: 2313.

**869 Alboside III**

C<sub>26</sub>H<sub>32</sub>O<sub>12</sub> (536.54). Amorphous solid, [α]<sub>D</sub> = -46.7° (c = 0.9, MeOH). Source: BAI XUE GUO MU *Chiococca alba*. Ref: 2313.

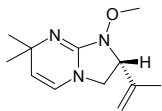
**870 Alboside IV**

C<sub>25</sub>H<sub>30</sub>O<sub>13</sub> (538.51). Gum, [α]<sub>D</sub> = -51.5° (c = 0.5, H<sub>2</sub>O). Pharm: Antimutant (DNA repair-deficient mutant of *Saccharomyces cerevisiae* RS321, moderate activity)<sup>[2313]</sup>. Source: BAI XUE GUO MU *Chiococca alba*. Ref: 2313.

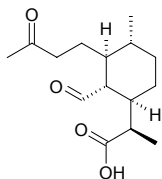


**871 Alchorneine**

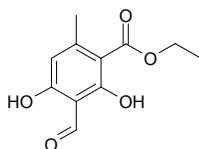
[28340-21-8] C<sub>12</sub>H<sub>19</sub>N<sub>3</sub>O (221.30). Pharm: Antispasmodic (dog); parasympathetic ganglionic blocker (anti-vagus); inhibits intestinal movement. Source: DUO HUA SHAN MA GAN *Alchornea floribunda*. Ref: 658.

**872 1 $\alpha$ -Aldehyde-2 $\beta$ -[3-butanone]-3 $\alpha$ -methyl-6 $\beta$ -[2-propanoic acid]-cyclohexane**

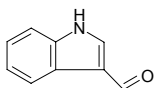
C<sub>15</sub>H<sub>24</sub>O<sub>4</sub> (268.36). Colorless oil, [ $\alpha$ ]<sub>D</sub> = -21.8° (*c* = 0.3, CHCl<sub>3</sub>). Source: HUANG HUA HAO *Artemisia annua* (seed). Ref: 3435.

**873 3-Aldehyde-6-methyl-2,4-dihydroxy-ethyl-benzoate**

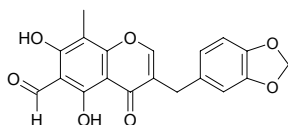
C<sub>11</sub>H<sub>12</sub>O<sub>5</sub> (224.22). White bar crystals. Source: JIN SI SHUA *Lethariella cladonioides*. Ref: 4582.

**874 3-Aldehydoindole**

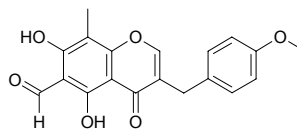
3-Formyl indole C<sub>9</sub>H<sub>7</sub>NO (145.16). Source: DUAN ROU MAO DA JI *Euphorbia pubescens*, NAN CHUAN GUAN CHUN HUA *Microtoena prainiana* (stem: yield = 0.00009%dw), RI BEN HUANG BAI *Phellodendron japonicum* (leaf), TAI WAN HUANG BO *Phellodendron amurense* var. *wilsonii* (leaf: yield = 0.00013%dw), TAI WAN PU GONG YING *Taraxacum formosanum* (fresh root), YI ZHU QIAN MA *Urtica dioica*. Ref: 660, 4488, 4502, 4722, 4752, 5384.

**875 6-Aldehyde-isoophiopogone A**

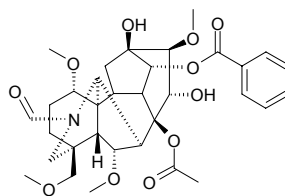
6-Aldehyde-isoophiopogonone A C<sub>19</sub>H<sub>14</sub>O<sub>7</sub> (354.32). Orange acicular crystals, mp 170~172°C. Source: MAI DONG *Ophiopogon japonicus* (tuber). Ref: 83, 4663.

**876 6-Aldehyde-isoophiopogone B**

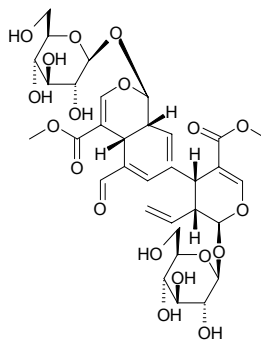
5,7-Dihydroxy-8-methyl-6-aldehyde-3-(4'-methoxybenzyl) chromone C<sub>19</sub>H<sub>16</sub>O<sub>6</sub> (340.34). Light red acicular crystals, mp 144~145°C. Source: MAI DONG *Ophiopogon japonicus*. Ref: 83.

**877 Aldohypaconitine**

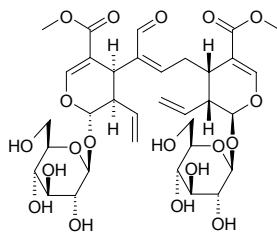
C<sub>33</sub>H<sub>43</sub>NO<sub>11</sub> (629.71). White clustered crystals, mp 262~264°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -56.9° (*c* = 0.30, CHCl<sub>3</sub>). Source: WU TOU *Aconitum carmichaeli*. Ref: 460.

**878 (E)-Aldosecologanin**

C<sub>34</sub>H<sub>46</sub>O<sub>19</sub> (758.73). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>26</sup> = -135.6° (*c* = 0.295, MeOH). Source: JIN YIN HUA *Lonicera japonica* (stem and leaf). Ref: 4220.

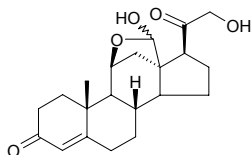
**879 (Z)-Aldosecologanin**

C<sub>34</sub>H<sub>46</sub>O<sub>19</sub> (758.73). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>26</sup> = -164.3° (*c* = 0.141, MeOH). Source: JIN YIN HUA *Lonicera japonica* (stem and leaf). Ref: 4220.

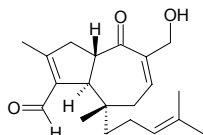


**880 Aldosterone**

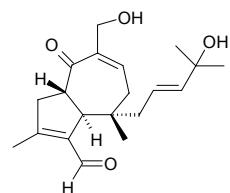
3,20-Diketo-11 $\beta$ ,18-oxido-4-pregnene-14,21-diol [52-39-1] C<sub>21</sub>H<sub>28</sub>O<sub>5</sub> (360.45). mp 164~169°C. Source: NIU SHEN *Bos taurus domesticus*; *Bubalus bubalis*. Ref: 6.

**881 Aldovibsanin B**

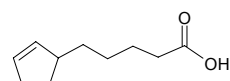
C<sub>20</sub>H<sub>28</sub>O<sub>3</sub> (316.44). Source: XIANG QI JIA MI *Viburnum odoratissimum* (leaf and flower: yield = 0.00001%dw)<sup>[3004]</sup>. Ref: 3004.

**882 Aldovibsanin C**

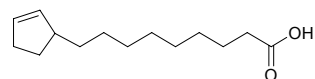
C<sub>20</sub>H<sub>28</sub>O<sub>4</sub> (332.44). Colorless amorphous solid, [ $\alpha$ ]<sub>D</sub> = +0.9° (c = 0.1, CHCl<sub>3</sub>). Source: XIANG QI JIA MI *Viburnum odoratissimum* (leaf and flower: yield = 0.00005%dw). Ref: 3004.

**883 Aleprestic acid**

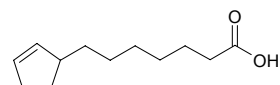
C<sub>10</sub>H<sub>16</sub>O<sub>2</sub> (168.24). Source: DA FENG ZI *Hydnocarpus anthelminticus*. Ref: 1.

**884 Aleptic acid**

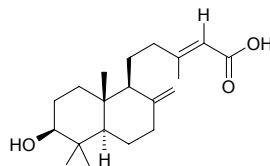
[2519-24-6] C<sub>14</sub>H<sub>24</sub>O<sub>2</sub> (224.35). mp 48°C. Source: DA FENG ZI *Hydnocarpus anthelminticus*. Ref: 1.

**885 Aleprylic acid**

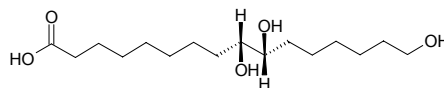
[2348-91-6] C<sub>12</sub>H<sub>20</sub>O<sub>2</sub> (196.29). mp 32°C. Source: DA FENG ZI *Hydnocarpus anthelminticus*. Ref: 1.

**886 Alepterolic acid**

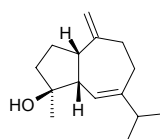
[63399-38-2] C<sub>20</sub>H<sub>32</sub>O<sub>3</sub> (320.48). mp 162.5~163.0°C. Source: TONG JING CAO *Aleuritopteris argentea*. Ref: 6.

**887 Aleuritic acid**

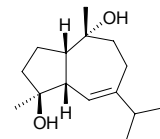
[533-87-9] C<sub>16</sub>H<sub>32</sub>O<sub>5</sub> (304.43). mp 102°C. Source: ZI CAO RONG *Laccifer lacca*. Ref: 6.

**888 Alismol**

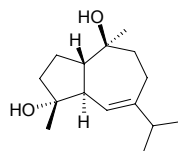
(+)-Alismol C<sub>15</sub>H<sub>24</sub>O (220.36). Colorless oil, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +14.65° (c = 0.087, CHCl<sub>3</sub>). Source: ZE XIE *Alisma orientale* [Syn. *Alisma plantago-aquatica* var. *orientale*], *Lobophytum* sp. Ref: 660, 4565.

**889 Alismoxide 1**

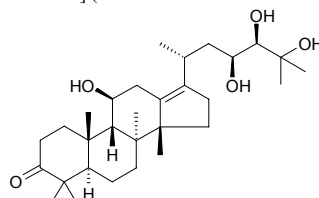
C<sub>15</sub>H<sub>26</sub>O<sub>2</sub> (238.37). Pharm: NO production inhibitor (mus peritoneal macrophages, induced by LPS, 100 $\mu$ mol/L, InRt = (33.1 $\pm$ 4.1)%), control *L*-NMMA, 100 $\mu$ mol/L, InRt = (79.2 $\pm$ 0.9)%, *p* < 0.01)<sup>[4150]</sup>. Source: PING E SHU *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*]. Ref: 4150.

**890 Alismoxide 2**

C<sub>15</sub>H<sub>26</sub>O<sub>2</sub> (238.37). White solid. Source: *Lobophytum* sp. Ref: 4565.

**891 Alisol A**

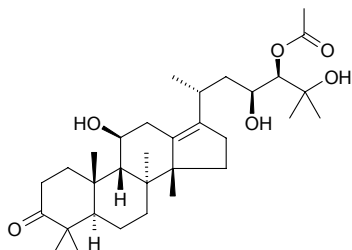
Epialisol A [19885-10-0] C<sub>30</sub>H<sub>50</sub>O<sub>5</sub> (490.73). mp 90~91°C. Pharm: Antihypercholesterolemic (mus, reduces the level of cholesterol in serum). Source: ZE XIE *Alisma orientale* [Syn. *Alisma plantago-aquatica* var. *orientale*] (tuber: content = 0.035%<sup>[5501]</sup>). Ref: 1, 6, 5501.



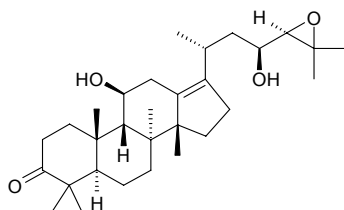
**892 Alisol A monoacetate**

[18674-16-3]  $C_{32}H_{52}O_6$  (532.77). mp 194~196°C. **Pharm:**

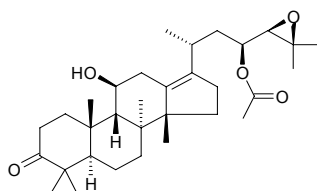
Antihypercholesterolemic (high-cholesterol rat, reduces blood-fat by 61%); anti-allergic (rat, orl, swollen foot model caused by antigen, 0.05mmol/kg and 0.20mmol/kg); antihepatotoxin (mus, liver damage caused by  $CCl_4$ ); diuretic (mus, sc, 100mg/kg, increases potassium drain). **Source:** ZE XIE *Alisma orientale* [Syn. *Alisma plantago-aquatica* var. *orientale*] (tuber: content = 0.15%<sup>[5501]</sup>). **Ref:** 6, 1661, 1662, 1663, 1664, 5501.

**893 Alisol B**

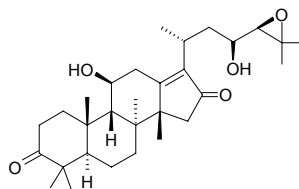
[18649-92-9]  $C_{30}H_{48}O_4$  (472.71). mp 166~168°C. **Pharm:** Antiallergic (rat, orl, swollen foot model caused by antigen, 0.05mmol/kg and 0.20mmol/kg); diuretic (rat, orl, 30mg/kg, increases amount of urine and sodium drain); acetylcholine transferase activator (*in vitro*); inhibits ileal contraction (rat, ileum *in vitro*, induced by 5-isoleucine+angiotensin I, InRt = 65%, induced by bradykinin, InRt = 63%, induced by acetylcholine, InRt = 50%); inhibits vasomotion (high concentration KCl-induced). **Source:** ZE XIE *Alisma orientale* [Syn. *Alisma plantago-aquatica* var. *orientale*] (tuber: content = 0.030%<sup>[5501]</sup>). **Ref:** 6, 1662, 1664, 1665, 1666, 1743, 5501.

**894 Alisol B monoacetate**

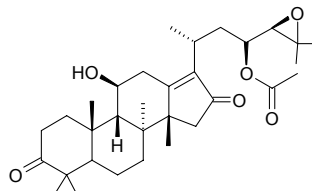
[26575-95-1]  $C_{32}H_{50}O_5$  (514.75). mp 162~163°C. **Pharm:** Antihypercholesterolemic (high-cholesterol rat, reduces blood-fat by 55%); antihepatotoxin (mus, liver damage by  $CCl_4$ ); acetylcholine transferase activator (*in vitro*); inhibits vasomotion (high concentration KCl-induced). **Source:** ZE XIE *Alisma orientale* [Syn. *Alisma plantago-aquatica* var. *orientale*] (tuber: content = 0.075%<sup>[5501]</sup>). **Ref:** 6, 1661, 1663, 1665, 1666, 5501.

**895 Alisol C**

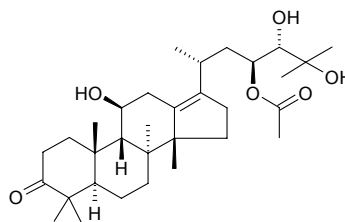
$C_{30}H_{46}O_5$  (486.70). **Source:** ZE XIE *Alisma orientale* [Syn. *Alisma plantago-aquatica* var. *orientale*]. **Ref:** 660.

**896 Alisol C monoacetate**

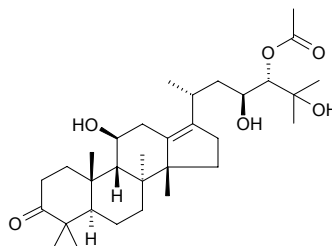
$C_{32}H_{48}O_6$  (528.74). **Pharm:** Antihypercholesterolemic (high-cholesterol rat, reduces blood-fat by 51%); antihepatotoxin (mus, liver damage caused by  $CCl_4$ ); acetylcholine transferase activator (*in vitro*); inhibits vasomotion (high concentration KCl-induced). **Source:** ZE XIE *Alisma orientale* [Syn. *Alisma plantago-aquatica* var. *orientale*] (tuber: content = 0.25%<sup>[5501]</sup>). **Ref:** 660, 5501.

**897 Alisol E 23-acetate**

$C_{32}H_{52}O_6$  (532.77). Needles, mp 167.5~169.0°C. **Source:** ZE XIE *Alisma orientale* [Syn. *Alisma plantago-aquatica* var. *orientale*]. **Ref:** 2213.

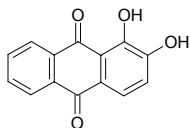
**898 Alisol E 24-acetate**

$C_{32}H_{52}O_6$  (532.77). Needles, mp 169~170°C. **Source:** ZE XIE *Alisma orientale* [Syn. *Alisma plantago-aquatica* var. *orientale*]. **Ref:** 2213.

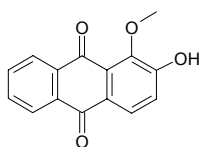


**899 Alizarin**

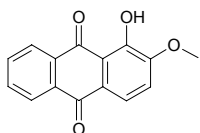
[72-48-0] C<sub>14</sub>H<sub>8</sub>O<sub>4</sub> (240.22). mp 289~290°C, bp 430°C. **Pharm:** Antibacterial (*Staphylococcus aureus*); antineoplastic (leukemia); antihypertensive (animals, no influence on heart); anti-inflammatory (rat, inhibits phoroplast permeability); diuretic; immunosuppressant; Irritant (intestinal vasculature, *in vitro*). **Source:** HAI BA JI *Morinda citrifolia*, QIAN CAO GEN *Rubia cordifolia* (root: content scope = 0.0126%~0.0141%)<sup>[5501]</sup>, YANG QIAN CAO *Rubia tinctorum*, YANG JIAO TENG *Morinda umbellata*, XIANG CHE YE CAO *Asperula odorata*, ZHANG YE DA HUANG *Rheum palmatum*, *Galium* sp. **Ref:** 1, 4, 6, 7, 5501.

**900 Alizarin-1-methylether**

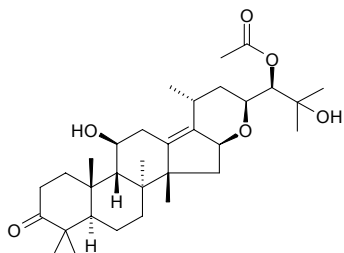
2-Hydroxy-1-methoxyanthraquinone C<sub>15</sub>H<sub>10</sub>O<sub>4</sub> (254.24). mp 179°C. **Source:** GUANG JING QIAN CAO *Rubia wallichiana* (stem), HAI BA JI *Morinda citrifolia* (fruit), HU CI *Damnacanthus indicus*, YANG JIAO TENG *Morinda umbellata*. **Ref:** 6, 4369, 4542.

**901 Alizarin-2-methylether**

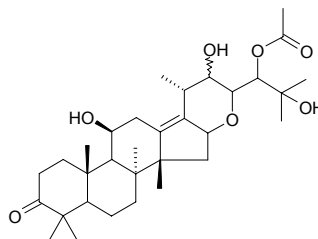
1-Hydroxy-2-methoxyanthraquinone C<sub>15</sub>H<sub>10</sub>O<sub>4</sub> (254.24). mp 232~233°C. **Pharm:** Antibacterial (*Bacillus subtilis* and *Escherichia coli*); cytotoxic (KB, ED<sub>50</sub> > 25µg/mL, control Doxorubicin, ED<sub>50</sub> = 0.12µg/mL; Hep3B, ED<sub>50</sub> > 25µg/mL, Doxorubicin, ED<sub>50</sub> = 0.14µg/mL; Colon205, ED<sub>50</sub> > 25µg/mL, Doxorubicin, ED<sub>50</sub> = 0.10µg/mL; HeLa, ED<sub>50</sub> > 25µg/mL, Doxorubicin, ED<sub>50</sub> = 0.11µg/mL). **Source:** QIAN CAO GEN *Rubia cordifolia*, GUANG JING QIAN CAO *Rubia wallichiana* (stem), YANG QIAN CAO *Rubia tinctorum*, YANG JIAO TENG *Morinda umbellata*, XIANG CHE YE CAO *Asperula odorata*, *Galium* sp. **Ref:** 6, 658, 4369.

**902 Alizexol A**

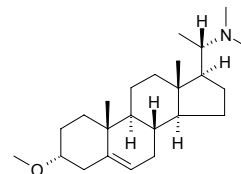
Alisol F 24-acetate; 16β,23β-Epoxy-11β,25-dihydroxy-24(R)-acetoxyprotost-13(17)-en-3-one C<sub>32</sub>H<sub>50</sub>O<sub>6</sub> (530.75). Colorless prisms, mp 227~228°C; colorless acicular crystals, mp 203~205°C. **Source:** ZE XIE *Alisma orientale* [Syn. *Alisma plantago-aquatica* var. *orientale*] **Ref:** 8, 2151.

**903 Alizexol B**

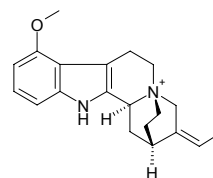
C<sub>32</sub>H<sub>50</sub>O<sub>7</sub> (546.75). White needles, mp 264~266°C. **Source:** ZE XIE *Alisma orientale* [Syn. *Alisma plantago-aquatica* var. *orientale*]. **Ref:** 8.

**904 Alkaloid C**

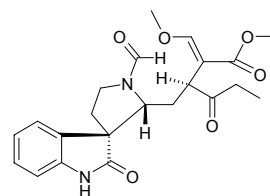
C<sub>24</sub>H<sub>41</sub>NO (359.60). White amorphous powder, mp 156~157°C, [α]<sub>D</sub><sup>20</sup> = -29° (c = 0.015, CHCl<sub>3</sub>). **Pharm:** Spasmolytic (spontaneous contraction of rabbit jejunum, EC<sub>50</sub> = 215.0µg/mL, control Verapamil, EC<sub>50</sub> = 0.1µg/mL; K<sup>+</sup> 80mmol/L contracted rabbit jejunum, EC<sub>50</sub> = 200.5µg/mL, Verapamil, EC<sub>50</sub> = 0.1µg/mL); AChE inhibitor (EC<sub>50</sub> = 15.2µg/mL, Verapamil, EC<sub>50</sub> = 8.9µg/mL). **Source:** YE SHAN HUA *Sarcococca saligna* (whole herb). **Ref:** 5054.

**905 C-Alkaloid O**

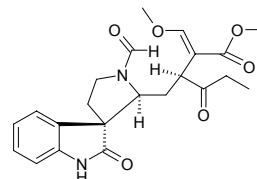
C<sub>20</sub>H<sub>25</sub>N<sub>2</sub>O (309.44). **Pharm:** Neuromuscular toxicity (neuromuscular transmission inhibitor, IC<sub>50</sub> = 290µmol/L; Venezuelan calabash curare, IC<sub>50</sub> = 6.5µmol/L). **Source:** *Strychnos guianensis* (stem bark). **Ref:** 5202.

**906 Alkaloid US-7**

C<sub>22</sub>H<sub>26</sub>N<sub>2</sub>O<sub>6</sub> (414.46). **Source:** XIA GOU TENG *Uncaria attenuata*. **Ref:** 5341.

**907 Alkaloid US-8**

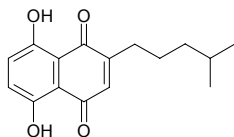
C<sub>22</sub>H<sub>26</sub>N<sub>2</sub>O<sub>6</sub> (414.46). **Source:** XIA GOU TENG *Uncaria attenuata*. **Ref:** 5341.



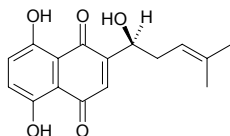


**908 Alkannan**

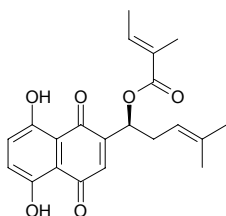
[517-90-8] C<sub>16</sub>H<sub>18</sub>O<sub>4</sub> (274.32). Source: ZI CAO *Lithospermum erythrorhizon*. Ref: 2.

**909 (-)-Alkannin**

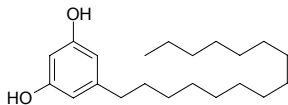
[517-88-4] C<sub>16</sub>H<sub>16</sub>O<sub>5</sub> (288.30). Brownish red prismatic crystals (benzene), mp 149°C, [α]<sub>D</sub><sup>20</sup> = -165° (benzene); -22.6° (CHCl<sub>3</sub>). Pharm: Antibacterial (*Staphylococcus aureus*, *Staphylococcus epidermidis*); antineoplastic; antifungal (*Candida albicans*); astringent; immunomodulator (low dose); inhibits granulocyte and lymphocyte (high dose); LD<sub>50</sub> (male mus) = (3.0±1.0)g/kg, (female mus) = (3.1±0.1)g/kg, (rat) > 1.0g/kg. Source: OU ZI CAO *Alkanna tinctoria*, GAO GUI JIA ZI CAO *Arnebia nobilis*, XIN ZANG JIA ZI CAO *Arnebia euchroma* (root). Ref: 661, 4916.

**910 Alkannin angelate**

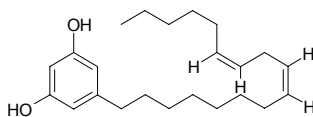
C<sub>21</sub>H<sub>22</sub>O<sub>6</sub> (370.41). Pharm: Antineoplastic (rat, Walker sarcoma). Source: GAO GUI JIA ZI CAO *Arnebia nobilis*, ZI CAO *Lithospermum erythrorhizon*. Ref: 2, 658.

**911 Alkylresorcinol A**

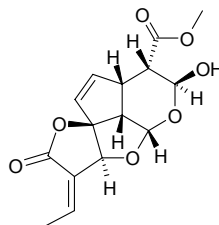
C<sub>21</sub>H<sub>36</sub>O<sub>2</sub> (320.52). Pharm: DPPH scavenger (IC<sub>50</sub> = 90 μmol/L, control Trolox, IC<sub>50</sub> = (25.4±0.8) μmol/L)<sup>[4244]</sup>; cytotoxic (murine breast cancer cell line FM3A, IC<sub>50</sub> = 2.8 μmol/L)<sup>[4244]</sup>. Source: YOU SE ZI JIN NIU *Ardisia colorata* (fruit). Ref: 4244.

**912 Alkylresorcinol C**

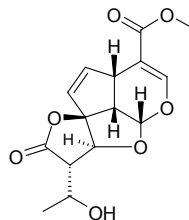
C<sub>23</sub>H<sub>36</sub>O<sub>2</sub> (344.54). Pharm: DPPH scavenger (IC<sub>50</sub> = 80 μmol/L, control Trolox, IC<sub>50</sub> = (25.4±0.8) μmol/L)<sup>[4244]</sup>; cytotoxic (murine breast cancer cell line FM3A, IC<sub>50</sub> = 2.2 μmol/L)<sup>[4244]</sup>. Source: YOU SE ZI JIN NIU *Ardisia colorata* (fruit). Ref: 4244.

**913 Allamandin**

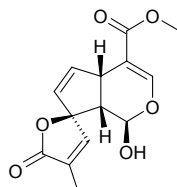
[51820-82-7] C<sub>15</sub>H<sub>16</sub>O<sub>7</sub> (308.29). Thin lamellar crystals (methanol-ethyl acetate), mp 212~215°C, [α]<sub>D</sub><sup>21</sup> = +15° (c = 0.06, methanol). Pharm: Cytotoxic (KB, ED<sub>50</sub> = 2.1 μg/mL; P<sub>388</sub>). Source: RUAN ZHI HUANG CHAN *Allemanda cathartica*. Ref: 658, 661.

**914 Allamansicin**

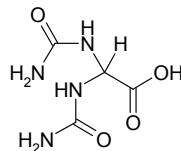
C<sub>15</sub>H<sub>16</sub>O<sub>7</sub> (308.29). Lamellar crystals (ether-hexane), mp 117~118°C, [α]<sub>D</sub><sup>21</sup> = +293° (c = 0.42, CHCl<sub>3</sub>). Pharm: Cytotoxic (KB, ED<sub>50</sub> > 10 μg/mL, P<sub>388</sub>). Source: RUAN ZHI HUANG CHAN *Allemanda cathartica*. Ref: 658, 661.

**915 Allamdin**

[51820-84-9] C<sub>15</sub>H<sub>16</sub>O<sub>6</sub> (292.29). Acicular crystals (ether-hexane), mp 131~132°C (dec), [α]<sub>D</sub><sup>21</sup> = -35° (c = 0.46, CHCl<sub>3</sub>). Pharm: Cytotoxic (KB, ED<sub>50</sub> > 10 μg/mL, P<sub>388</sub>). Source: RUAN ZHI HUANG CHAN *Allemanda cathartica*. Ref: 658, 661.

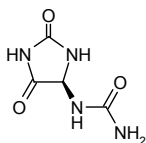
**916 Allantoic acid**

[99-16-1] C<sub>4</sub>H<sub>8</sub>N<sub>4</sub>O<sub>4</sub> (176.13). mp 173°C (dec). Source: ZI TENG *Wisteria sinensis*. Ref: 6.

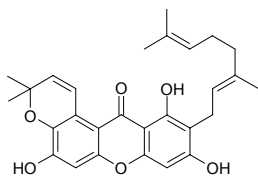


**917 Allantoin**

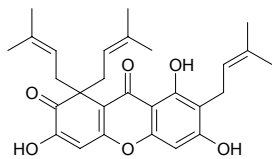
[97-59-6]  $C_4H_6N_4O_3$  (158.12). mp 238–240°C, soluble in water and ethanol, almost insoluble in diethyl ether. **Pharm:** Astringent (aluminum salt); deodorant (aluminum salt); sedative. **Source:** BEI MA DOU LING GEN *Aristolochia contorta*, BIAN ZHONG CHANG YE AN LUO *Polyalthia longifolia* var. *pendula*, GE GEN *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*], GUANG FANG JI *Aristolochia fangchi*, LU JIAO QI SHU *Rhus typhina*, MA DOU LING *Aristolochia debilis* [Syn. *Aristolochia longa*], MIAN MAO MA DOU LING *Aristolochia mollissima* (root and stem: yield = 0.051%<sub>dw</sub>)<sup>[3026]</sup>, QING MU XIANG *Aristolochia debilis* [Syn. *Aristolochia longa*], SHAN YAO *Dioscorea batatas* [Syn. *Dioscorea opposita*] (tuber: content scope = 0.115%–0.570%, mean content = 0.387%<sup>[5508]</sup>), SHE XIANG *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*, XIAO MAI *Triticum aestivum* [Syn. *Triticum vulgare*], YAO YONG DAO TI HU *Cynoglossum officinale*, ZI TENG *Wisteria sinensis*. **Ref:** 4, 658, 660, 3026, 5386, 5501, 5508.

**918 Allaxanthone B**

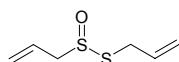
2-Geranyl-1,3,6-trihydroxy-2',2'-dimethyl[5',6':7,8]xanthone  $C_{28}H_{30}O_6$  (462.55). Yellow powder, mp 158–160°C. **Source:** *Allanblackia monticola* (stem bark). **Ref:** 3856.

**919 Allaxanthone C**

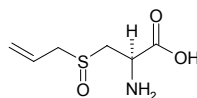
$C_{28}H_{32}O_6$  (464.56). Sticky yellow oil. **Pharm:** Antimalarial (antiplasmodial *in vitro*, FcM29-Cameroon (Chloroquine resistant),  $IC_{50}$  24h = (2.6±0.9)μg/mL,  $IC_{50}$  72h = (0.6±0.02)μg/mL), F32 (Chloroquine sensitive),  $IC_{50}$  24h = (3.2±0.0)μg/mL,  $IC_{50}$  72h = (3.2±0.3)μg/mL); cytotoxic (hmn melanoma cell A375 *in vitro*,  $IC_{50}$  24h = (83.8±7.1)μg/mL). **Source:** *Allanblackia monticola* (stem bark: yield = 0.0065%)<sup>[912]</sup>. **Ref:** 912.

**920 Allicin**

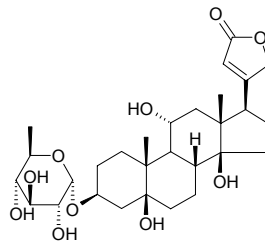
Diallyl disulfide oxide [539-86-6]  $C_6H_{10}OS_2$  (162.27). Yellow liquid, soluble in water, ethanol, diethyl ether and benzene. **Pharm:** Antibacterial; antidiabetic; antihypertensive; antithrombotic. **Source:** DA SUAN *Allium sativum* (bulb: content scope = 1.28%–6.63%<sup>[5501]</sup>), CONG BAI *Allium fistulosum*. **Ref:** 2, 4, 658, 5501, 5507.

**921 Alliin**

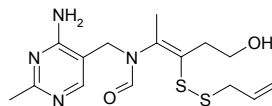
[556-27-4]  $C_6H_{11}NO_3S$  (177.22). **Pharm:** Antithrombotic; platelet aggregation inhibitor. **Source:** YANG CONG *Allium cepa*, DA SUAN *Allium sativum*. **Ref:** 2, 658.

**922 Alliside**

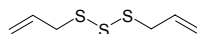
$C_{29}H_{44}O_{10}$  (552.67). **Source:** GUI ZHU XIANG *Cheiranthus cheiri*. **Ref:** 660.

**923 Allithiamine**

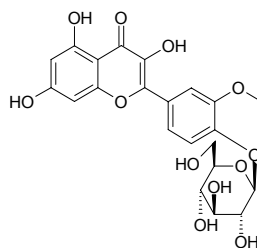
[554-44-9]  $C_{15}H_{22}N_4O_2S_2$  (354.50). mp 132–133°C (dec). **Source:** DA SUAN *Allium sativum*. **Ref:** 6.

**924 Allitridin**

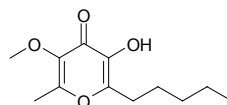
Diallyl trisulfide [2050-87-5]  $C_6H_{10}S_3$  (178.34). bp 87–88°C. **Pharm:** Antifungal (*Candida albicans*, EC = 1:51200; *Cryptococcus neoformans*, EC = 1:200800); cytotoxic (carcinoma of stomach cell, EC = 24μg/mL); antihepatotoxin (rat, liver damage caused by CCl<sub>4</sub>); Spermicidal (men, rat, 0.15%, 3min, inactivation); LD<sub>50</sub> (mus, iv) = 70mg/kg, (mus, orl) = 600mg/kg. **Source:** DA SUAN *Allium sativum*. **Ref:** 4, 5501.

**925 Allioside A**

Quercetin 3'-methoxy-4'-O-β-D-glucopyranoside  $C_{22}H_{22}O_{12}$  (478.41). Light yellow powder, mp 252–254°C. **Source:** FEN NIE CONG TOU *Allium cepa* var. *agrogatum*. **Ref:** 859.

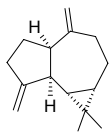
**926 Allixin**

$C_{12}H_{18}O_4$  (226.27). **Source:** DA SUAN *Allium sativum*. **Ref:** 660.

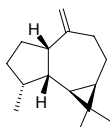


**927 (+)-(1R,5S,6S,7S)-Allo-aromadendra-4(15),10(14)-diene**

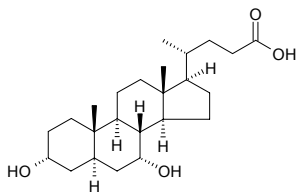
(+)-(1S,4aR,7aS,8S)-1,1-Dimethyl-4,7-dimethylenedecahydro-cyclopropa[e]azulene C<sub>15</sub>H<sub>22</sub> (202.34). Colorless oil. Source: *Saccogyna viticulosa* (essential oil). Ref: 3839.

**928 Alloaromadendrene**

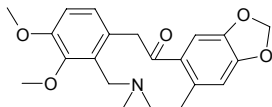
C<sub>15</sub>H<sub>24</sub> (204.36). Source: HOU PO *Magnolia officinalis*, GUANG HUO XIANG *Pogostemon cablin* [Syn. *Mentha cablin*], REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], SHENG JIANG *Zingiber officinale*, XIE CAO *Valeriana officinalis*. Ref: 2, 660.

**929 Allochenodeoxycholic acid**

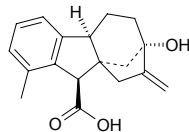
[15357-34-7] C<sub>24</sub>H<sub>40</sub>O<sub>4</sub> (392.58). mp 245~246°C. Source: LI YU DAN *Cyprinus carpio*. Ref: 6.

**930 Allocryptopine**

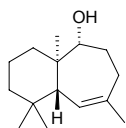
[24240-04-8] C<sub>21</sub>H<sub>23</sub>NO<sub>5</sub> (369.42). Colorless prisms, mp 162~164°C, mp 163°C. Pharm: Antiarrhythmic; antibacterial (*Staphylococcus* sp.); oxytocic; anti-HIV inactive (H9 lymphocytes, control AZT, IC<sub>50</sub> = 500µg/mL, EC<sub>50</sub> = 0.0317µg/mL, TI = 15,800)<sup>[53641]</sup>. Source: BAI QU CAI *Chelidonium majus*, BAN RUI TANG SONG CAO *Thalictrum petaloideum* (root: content < 0.001%)<sup>[5508]</sup>, BO LUO HUI *Macleaya cordata*, CHI BAN YAN HU SUO *Corydalis remota* [Syn. *Corydalis bulbosa* var. *typica*] (rhizome: content = 0.03%<sup>[5508]</sup>), DA YE TANG SONG CAO *Thalictrum faberi* (root: content < 0.001%)<sup>[5508]</sup>, DONG BEI YAN HU SUO *Corydalis ambigua* var. *amurensis* [Syn. *Corydalis ambigua*] (rhizome: content = 0.01%<sup>[5508]</sup>), HE QING HUA *Hylomecon japonica*, JI YING SU *Argemone mexicana*, JIN SI MA WEI LIAN *Thalictrum glandulosissimum* (root: content < 0.005%)<sup>[5508]</sup>, MA WEI LIAN *Thalictrum foliolosum* (root: content < 0.001%)<sup>[5508]</sup>, XIA XU TANG SONG CAO *Thalictrum atriplex* (root: content < 0.001%)<sup>[5508]</sup>, XIAO GUO TANG SONG CAO *Thalictrum microgynum* (root: content = 0.25%)<sup>[5508]</sup>, YAN GUO CAO *Thalictrum thumbergii* (root: content < 0.001%)<sup>[5508]</sup>, YAN HU SUO *Corydalis yanhusuo* [Syn. *Corydalis turtschaninovii* f. *yanhusuo*] (rhizome: content = 0.036%)<sup>[5508]</sup>, YING SHUI HUANG LIAN *Thalictrum simplex* [Syn. *Thalictrum simplex* var. *brevipes*] (root: content < 0.005%)<sup>[5508]</sup>. Ref: 6, 658, 5364, 5508.

**931 Allogibberic acid**

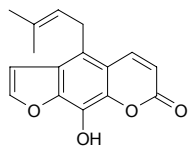
[427-79-2] C<sub>18</sub>H<sub>20</sub>O<sub>3</sub> (284.36). Pharm: Inhibits bloom. Source: XI MAI FU PING *Lemna perpusilla*. Ref: 658.

**932 Allohimachalol**

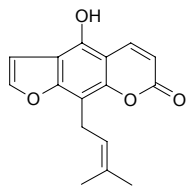
C<sub>15</sub>H<sub>26</sub>O (222.37). Source: XUE SONG *Cedrus deodara*. Ref: 660.

**933 Alloimperatorin**

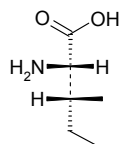
[642-05-7] C<sub>16</sub>H<sub>14</sub>O<sub>4</sub> (270.29). Pharm: Antimicrobial; Piscicide. Source: BAI ZHI *Angelica dahurica* [Syn. *Angelica porphyrocaulis*], DA A MI *Ammi majus*, GOU JU *Poncirus trifoliata*, MU<sup>(4)</sup> JU *Aegle marmelos*, NI BO ER DU HUO *Heracleum nepalense*, SHE CHUANG ZI *Cnidium monnieri*, SHUAN CHI QIN *Prangos pabularia*, YU SHU SHU *Zea mays*. Ref: 2, 6, 7, 658.

**934 Alloisoimperatorin**

5-Hydroxy-8-(1',1'-dimethylallyl) psoralen [35214-83-6] C<sub>16</sub>H<sub>14</sub>O<sub>4</sub> (270.29). Source: BAI ZHI *Angelica dahurica* [Syn. *Angelica porphyrocaulis*], HANG BAI ZHI *Angelica taiwaniana*, QIANG HUO *Notopterygium incisum*. Ref: 2, 660.

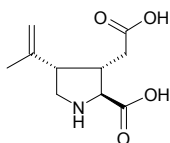
**935 Alloisoleucine**

L-Alloisoleucine C<sub>6</sub>H<sub>13</sub>NO<sub>2</sub> (131.18). mp 280~281°C (dec). Source: QUN DAI CAI *Undaria pinnatifida*. Ref: 6, 660.

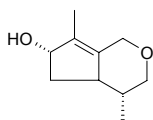


**936  $\alpha$ -Allokainic acid**

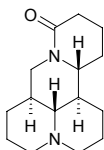
Kainic acid [4071-39-0]  $C_{10}H_{15}NO_4$  (213.24). mp 237~238°C (dec); mp 253~254°C (dec). **Pharm:** Anthelmintic (hmn, orl, ED = 20mg). **Source:** HAI REN CAO *Digenea simplex*, ZHE GU CAI *Caloglossa leprieurii*. **Ref:** 6, 658.

**937 Allomatatabiol**

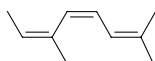
$C_{10}H_{16}O_2$  (168.24). **Source:** MU TIAN LIAO *Actinidia polygama*. **Ref:** 6.

**938 (+)-Allomatrine**

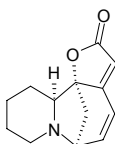
$C_{15}H_{24}N_2O$  (248.37). **Source:** KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. **Ref:** 660.

**939 Alloocimene**

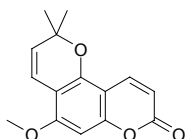
2,6-Dimethyl-2,4,6-octatriene  $C_{10}H_{16}$  (136.24). **Source:** DANG GUI *Angelica sinensis*. **Ref:** 2.

**940 Allosecurinine**

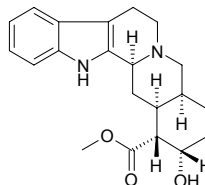
[884-68-4]  $C_{13}H_{15}NO_2$  (217.27). mp 136~138°C. **Source:** YI YE QIU *Securinega suffruticosa*. **Ref:** 6.

**941 Alloxanthoxyletin**

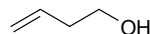
[731-75-9]  $C_{15}H_{14}O_4$  (258.28). **Pharm:** Cytotoxic (inhibits DNA biosynthesis by blocking thymidine to go into HL-60 cells). **Source:** MEI ZHOU HUA JIAO *Zanthoxylum americanum* [Syn. *Xanthoxylum americanum*] **Ref:** 2176.

**942 Alloyohimbine**

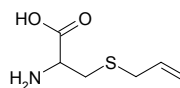
[522-94-1]  $C_{21}H_{26}N_2O_3$  (354.45). White powder, mp 139~140°C,  $[\alpha]_D^{24} = -76.7^\circ$  ( $c = 0.48$ , pyridine). **Source:** YANG JIAO MIAN *Alstonia maireri*. **Ref:** 633.

**943 Allylcarbinol**

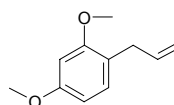
3-Buten-1-ol [627-27-0]  $C_4H_8O$  (72.11). Liquid, bp 112.5~113.5°C(755mmHg). **Source:** PU<sup>(2)</sup> TAO *Vitis vinifera* (seed oil). **Ref:** 1521.

**944 S-Allyl-L-cystein**

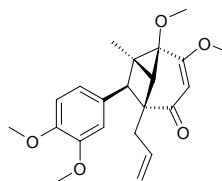
$C_6H_{11}NO_2S$  (161.22). **Source:** DA SUAN *Allium sativum*. **Ref:** 660.

**945 1-Allyl-2,4-dimethoxybenzene**

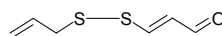
$C_{11}H_{14}O_2$  (178.23). **Source:** XIANG GEN QIN *Osmorhiza aristata* var. *laxa*. **Ref:** 6.

**946 6-Allyl-7-(3,4-dimethoxyphenyl)-2,3-dimethoxy-8-methyl-tricyclo-[4.2.0.0<sup>2,8</sup>]oct-3-en-5-one**

$C_{22}H_{26}O_5$  (370.45). Amorphous powder,  $[\alpha]_D = +67.2^\circ$  ( $c = 1.68$ ,  $CHCl_3$ ). **Source:** YU LAN *Magnolia denudata* [Syn. *Magnolia heptapata*]. **Ref:** 4439.

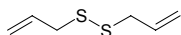
**947 3-Allyldisulfanyl-propenal**

$C_6H_8OS_2$  (160.26). Colorless oil liquid. **Source:** DA SUAN *Allium sativum*. **Ref:** 2186.

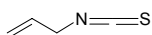


**948 Allyl disulfide**

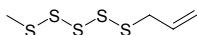
Diallyldisulfide [2179-57-9] C<sub>6</sub>H<sub>10</sub>S<sub>2</sub> (146.27). bp 100°C/48mmHg. **Pharm:** Pesticide. **Source:** BO NIANG HAO *Descurainia sophia*, DA SUAN *Allium sativum*, GE CONG *Allium victorialis*, JIU CAI *Allium tuberosum*, YANG CONG *Allium cepa*. **Ref:** 6, 658.

**949 Allyl isothiocyanate**

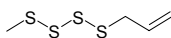
3-Isothiocyanato-1-propene [57-06-7] C<sub>4</sub>H<sub>5</sub>NS (99.16). mp -80°C, bp 151°C. **Source:** BO NIANG HAO *Descurainia sophia*, GAN LAN *Brassica oleracea* var. *capitata*, JIE ZI *Brassica juncea*. **Ref:** 6, 660.

**950 Allyl methyl pentasulfide**

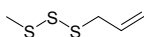
Methyl allyl pentasulfide C<sub>4</sub>H<sub>8</sub>S<sub>5</sub> (216.43). **Source:** DA SUAN *Allium sativum*. **Ref:** 2.

**951 Allyl methyl tetrasulfide**

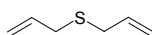
Methylallyltetrasulfide C<sub>4</sub>H<sub>8</sub>S<sub>4</sub> (184.36). **Source:** DA SUAN *Allium sativum*. **Ref:** 2, 1394.

**952 Allyl methyl trisulfide**

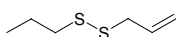
Methyl 2-propenyl trisulfide [34135-85-8] C<sub>4</sub>H<sub>8</sub>S<sub>3</sub> (152.30). **Pharm:** Platelet aggregation inhibitor (hmn, plasma with rich platelet, IC < 10µmol/L); antineoplastic (female mus, cardiaie sinus cancer induced by benzopyrene, activates glutathione S-transferase in cardiaie sinus). **Source:** XIE BAI *Allium macrostemon*, DA SUAN *Allium sativum*, GE CONG *Allium victorialis*. **Ref:** 2, 61, 391, 1471, 1683, 1684.

**953 Allyl monosulfide**

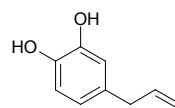
Allyl sulphide [592-88-1] C<sub>6</sub>H<sub>10</sub>S (114.21). bp 139°C/758mmHg. **Pharm:** Irritant (to skin and eyes). **Source:** CONG BAI *Allium fistulosum*, DA SUAN *Allium sativum*, YANG CONG *Allium cepa*. **Ref:** 2, 6, 658.

**954 Allyl propyl disulfide**

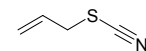
2-Propenyl propyl disulfide [2179-59-1] C<sub>6</sub>H<sub>12</sub>S<sub>2</sub> (148.29). **Source:** DA SUAN *Allium sativum*. **Ref:** 2, 1394.

**955 Allylpyrocatechol**

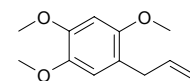
4-Allylpyrocatechol; 4-Allylcatechol [1126-61-0] C<sub>9</sub>H<sub>10</sub>O<sub>2</sub> (150.18). mp 48-49°C. **Pharm:** Cytotoxic (*in vitro*, hmn gastric tumor cell NUGC, 50µmol/L, InRt = 96%)<sup>[4676]</sup>; platelet aggregation inhibitor (rbt platelets induced by thrombin, 100µg/mL, add thrombin 0.1u/mL, AggRt = (90.8±0.4)%, control AggRt = (92.6±0.4)%); add ASA, 100µmol/L, 100µg/mL, AggRt = (0.0±0.0)%, 0.5µg/mL, AggRt = (79.9±3.9)%, control AggRt = (87.8±0.3)%, Aspirin 50µg/mL, AggRt = (11.7±10.1)%; add collagen 10µg/mL, 100µg/mL, AggRt = (7.6±3.9)%, 0.5µg/mL, AggRt = (86.9±0.7)%, control AggRt = (89.3±0.5)%, Aspirin 100µg/mL, AggRt = (81.3±0.5)%; add PAF 2ng/mL, 100µg/mL, AggRt = (88.7±0.9)%, control AggRt = (93.0±0.6)%<sup>[4938]</sup>. **Source:** JU JIANG YE *Piper betle*, KAI KOU JIAN *Tupistra chinensis* (underground part), LONG XUE SHU *Dracaena draco* (stem bark), TAI WAN HU JIAO *Piper taiwanense* (stem). **Ref:** 6, 4676, 4696, 4938.

**956 Allylthiocyanate**

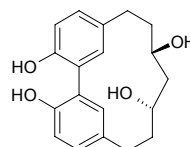
[764-49-8] C<sub>4</sub>H<sub>5</sub>NS (99.16). bp 161°C. **Source:** GUI ZHU TANG JIE *Erysimum cheiranthoides*. **Ref:** 6.

**957 1-Allyl-2,4,5-trimethoxy-benzene**

γ-Asarone; Isoasarone [5353-15-1] C<sub>12</sub>H<sub>16</sub>O<sub>3</sub> (208.26). Colorless acicular crystals (ethyl acetate), mp 28°C, bp 145-147°C (bath temperature). **Pharm:** Antiasthmatic; antibacterial (*Bacillus coli* and *Bacillus subtilis*, EC = 25mg/L); antispasmodic (gpg, trachea and ileum *in vitro*). **Source:** BAI CHANG *Acorus calamus*, JIA JU *Piper sarmentosum*, JIN QIAN PU *Acorus gramineus*, JIN QIAN PU YE *Acorus gramineus*, SHAN ZHU YU *Cornus officinalis* [Syn. *Macrocarpum officinale*]. **Ref:** 6, 660, 900.

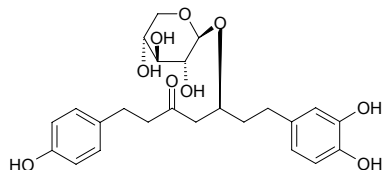
**958 Alnusdiol**

C<sub>19</sub>H<sub>22</sub>O<sub>4</sub> (314.38). **Source:** CHI YANG *Alnus japonica*. **Ref:** 660.

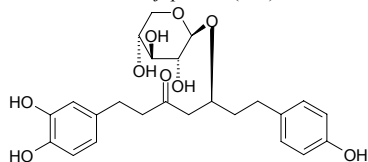


**959 Alnuside A**

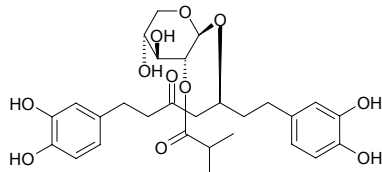
7-(3,4-Dihydroxyphenyl)-5-hydroxy-1-(4-hydroxyphenyl)-3-heptanone-5-*O*- $\beta$ -*D*-xylopyranoside C<sub>24</sub>H<sub>30</sub>O<sub>9</sub> (462.50). Colorless viscous liquid, [ $\alpha$ ]<sub>D</sub> = -19.5° (*c* = 0.03, MeOH). **Pharm:** Antioxidant (3.125 $\mu$ g/mL, superoxide radical scavenging activity = 14.0%, control Urcumin 16.1%; 6.25 $\mu$ g/mL, DPPH radical scavenging activity = 29.0%, control Urcumin 50.0%). **Source:** CHI YANG *Alnus japonica* (leaf). **Ref:** 4535.

**960 Alnuside B**

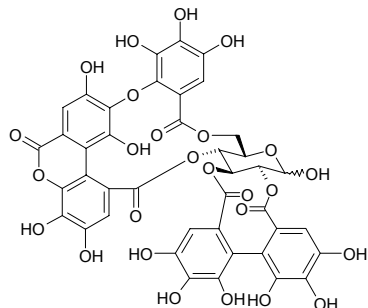
1-(3,4-Dihydroxyphenyl)-5-hydroxy-7-(4-hydroxyphenyl)-3-heptanone-5-*O*- $\beta$ -*D*-xylopyranoside C<sub>24</sub>H<sub>30</sub>O<sub>9</sub> (462.50). Colorless viscous liquid, [ $\alpha$ ]<sub>D</sub> = -15.5° (*c* = 0.04, MeOH). **Pharm:** Antioxidant (3.125 $\mu$ g/mL, superoxide radical scavenging activity = 14.5%, control Urcumin 16.1%; 6.25 $\mu$ g/mL, DPPH radical scavenging activity = 31.1%, control Urcumin 50.0%). **Source:** CHI YANG *Alnus japonica* (leaf). **Ref:** 4535.

**961 Alnuside C**

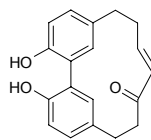
1,7-Bis-(3,4-dihydroxyphenyl)-5-hydroxy-3-heptanone-5-*O*-[2-(2-methylbutenyl)]- $\beta$ -*D*-xylopyranoside C<sub>29</sub>H<sub>38</sub>O<sub>11</sub> (562.62). Colorless viscous liquid, [ $\alpha$ ]<sub>D</sub> = -15.6° (*c* = 0.04, MeOH). **Pharm:** Antioxidant (3.125 $\mu$ g/mL, superoxide radical scavenging activity = 19.2%, control Urcumin 16.1%; 6.25 $\mu$ g/mL, DPPH radical scavenging activity = 31.5%, control Urcumin 50.0%). **Source:** CHI YANG *Alnus japonica* (leaf). **Ref:** 4535.

**962 Alnusiin**

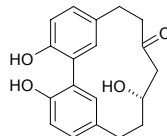
[78836-99-4] C<sub>41</sub>H<sub>26</sub>O<sub>26</sub> (934.65). **Pharm:** Antineoplastic (S<sub>180</sub>); antioxidant (lipid peroxidation inhibitor, rat, mitochondria of fat cells and macrosome of liver cells). **Source:** XI BO DE QI MU *Alnus sieboldiana*. **Ref:** 658.

**963 Alnusone**

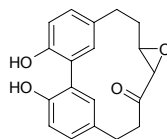
C<sub>19</sub>H<sub>18</sub>O<sub>3</sub> (294.35). **Source:** CHI YANG *Alnus japonica*. **Ref:** 660.

**964 Alnusonol**

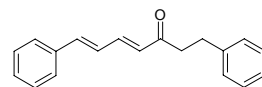
[52330-12-8] C<sub>19</sub>H<sub>20</sub>O<sub>4</sub> (312.37). **Source:** CHI YANG *Alnus japonica*. **Ref:** 660.

**965 Alnusoxide**

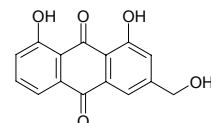
C<sub>19</sub>H<sub>18</sub>O<sub>4</sub> (310.35). **Source:** CHI YANG *Alnus japonica*. **Ref:** 660.

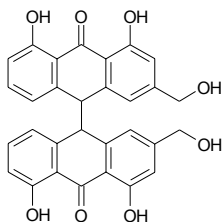
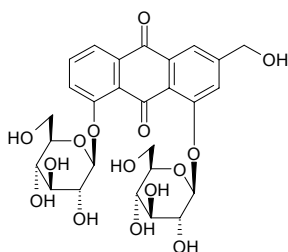
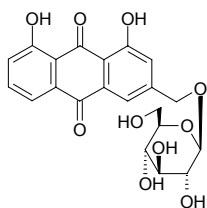
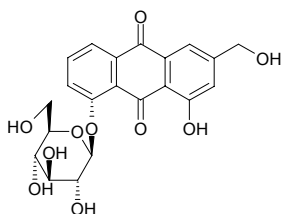
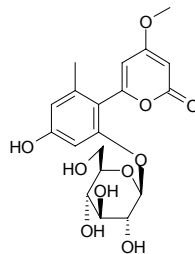
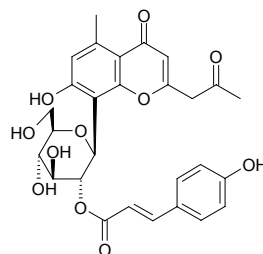
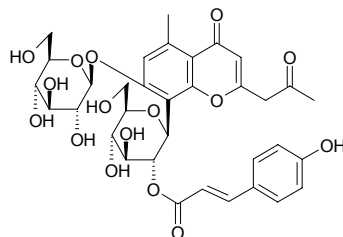
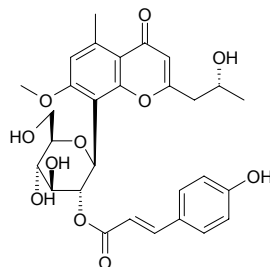
**966 Alnustone**

*trans,trans*-1,7-Diphenyl-1,3-heptadien-5-one [33457-62-4] C<sub>19</sub>H<sub>18</sub>O (262.35). Yellowish acicular crystals (heptane-acetone), mp 63–64°C. **Pharm:** Anti-inflammatory (swollen model by carrageenan). **Source:** CAO DOU KOU *Alpinia katsumadai*, CHUI QI MU *Alnus pendula*, HUANG GEN JIANG *HUANG Curcuma xanthorrhiza*. **Ref:** 952, 978, 1124, 1151, 1521.

**967 Aloemodin**

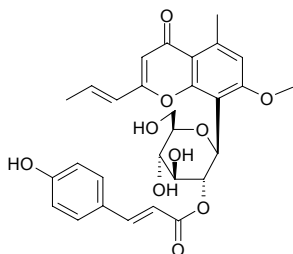
[481-72-1] C<sub>15</sub>H<sub>10</sub>O<sub>5</sub> (270.24). **Pharm:** Antibacterial (*Staphylococcus* sp., *Streptococcus* sp., *Bacillus diphtheriae*, *Bacillus subtilis*, *Bacillus anthracis*, *Bacillus paratyphosus*, *Bacillus dysenteriae*, EC = 15–25 $\mu$ g/mL); to treat leukemia; genotoxic; laxative. **Source:** BAN WEN LU HUI *Aloe vera* var. *chinensis*, DA HUANG *Rheum officinale*, DUN YE JUE MING *Cassia obtusifolia* (ripe seed: mean content = 0.0094%<sup>[5508]</sup>), HAO WANG JIAO LU HUI *Aloe ferox*, JIAN YE FAN XIE YE *Cassia acutifolia*, JUE MING ZI *Cassia tora* (ripe seed: content = 0.0034%<sup>[5508]</sup>), LU HUI *Aloe vera* [Syn. *Aloe barbadensis*], MU HU DIE *Oroxylum indicum*, NIU SHE CAO *Rumex dentatus*, NIU XI XI *Rumex patientia*, SHAN BIAN DOU ZI *Cassia mimosoides*, SHU LI *Rhamnus davurica*, TANG GU TE DA HUANG *Rheum tanguticum*, WANG JIANG NAN *Cassia occidentalis*, WANG JIANG NAN ZI *Cassia occidentalis*, YOU MU *Tectona grandis*, ZANG BIAN DA HUANG *Rheum emodi* [Syn. *Rheum australe*] (stem and rhizome: content < 0.01%<sup>[5508]</sup>), ZHANG YE DA HUANG *Rheum palmatum* (stem and rhizome: content = 0.23%<sup>[5508]</sup>), *Aloe* sp., *Hemerocallis* sp. **Ref:** 2, 534, 555, 658, 660, 2195, 5501, 5508.



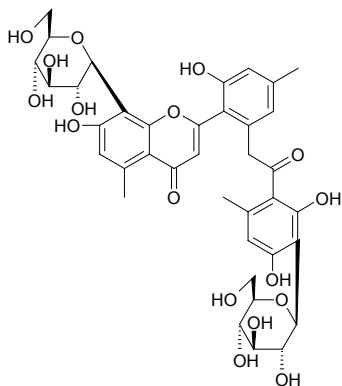
**968 Aloemodin bianthrone**[4461-75-0] C<sub>30</sub>H<sub>22</sub>O<sub>8</sub> (510.51). Dark brown solid, mp > 260°C (dec).Source: FAN XIE YE *Cassia angustifolia*, OU SHU LI *Rhamnus frangula* [Syn. *Frangula alnus*]. Ref: 2274.**969 Aloemodin diglucoside**C<sub>27</sub>H<sub>30</sub>O<sub>15</sub> (594.53). Source: ZHANG YE DA HUANG *Rheum palmatum*.Ref: 2, 660.**970 Aloemodin-*o*-O-β-D-glucopyranoside**C<sub>21</sub>H<sub>20</sub>O<sub>10</sub> (432.39). Source: DA HUANG *Rheum officinale*, TANG GU TE DA HUANG *Rheum tanguticum*, ZHANG YE DA HUANG *Rheum palmatum*. Ref: 2, 660.**971 Aloemodin-8-monoglucoside**C<sub>21</sub>H<sub>20</sub>O<sub>10</sub> (432.39). Pharm: Laxative. Source: TANG GU TE DA HUANG *Rheum tanguticum* (dried stem and rhizome: mean content of 3 origins = 0.38%<sup>[5517]</sup>), ZHANG YE DA HUANG *Rheum palmatum* (dried stem and rhizome: mean content of 4 origins = 0.36%<sup>[5517]</sup>). Ref: 658, 5517.**972 Aloenin**[38412-46-3] C<sub>19</sub>H<sub>22</sub>O<sub>10</sub> (410.38). Source: LU HUI *Aloe vera* [Syn. *Aloe barbadensis*]. Ref: 2, 5501.**973 Aloeresin A**2'-*O*-*p*-Coumaroylaloenin [74545-79-2] C<sub>28</sub>H<sub>28</sub>O<sub>11</sub> (540.53). Source: LU HUI *Aloe vera* [Syn. *Aloe barbadensis*], *Aloe* spp. Ref: 2, 727.**974 Aloeresin C**[98449-41-3] C<sub>34</sub>H<sub>38</sub>O<sub>16</sub> (702.67). mp 199~202°C, [α]<sub>D</sub><sup>30</sup> = -48.3° (c = 0.06, MeOH). Source: HAO WANG JIAO LU HUI *Aloe ferox*. Ref: 733.**975 Aloeresin D**C<sub>29</sub>H<sub>32</sub>O<sub>11</sub> (556.57). Source: HAO WANG JIAO LU HUI *Aloe ferox*. Ref: 660.

**976 Aloeresin G**

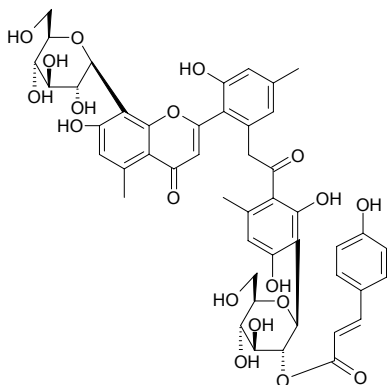
2-[*E*]-Propenyl-7-methoxy-8-*C*- $\beta$ -*D*-[2'-(*E*)-*p*-coumaroyl]-glucopyranosyl-5-methylchromone C<sub>29</sub>H<sub>30</sub>O<sub>10</sub> (538.56). White powder, mp 167~169°C. Source: LU HUI *Aloe vera* [Syn. *Aloe barbadensis*]. Ref: 841.

**977 Aloeresin H**

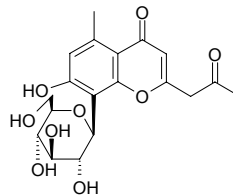
C<sub>38</sub>H<sub>42</sub>O<sub>17</sub> (770.75). Pharm: Anti-inflammatory (*in vivo*, mouse ear oedema induced by croton oil, 1.0 $\mu$ mol/cm<sup>2</sup>, oedema from (6.9 $\pm$ 0.3)mg to (4.8 $\pm$ 0.3)mg, InRt = 30%, control Indomethacin, 0.3 $\mu$ mol/cm<sup>2</sup>, oedema (2.7 $\pm$ 0.2)mg, InRt = 61%)<sup>[5047]</sup>. Source: HAO WANG JIAO LU HUI *Aloe ferox*. Ref: 5047.

**978 Aloeresin I**

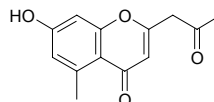
C<sub>47</sub>H<sub>48</sub>O<sub>19</sub> (916.90). Amorphous powder, mp 227~229°C (dec), [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -91.7° (*c* = 0.5, MeOH). Pharm: Anti-inflammatory (*in vivo*, mouse ear oedema induced by croton oil, 1.0 $\mu$ mol/cm<sup>2</sup>, oedema from (6.9 $\pm$ 0.3)mg to (4.2 $\pm$ 0.3)mg, InRt = 39%, control Indomethacin, 0.3 $\mu$ mol/cm<sup>2</sup>, oedema (2.7 $\pm$ 0.2)mg, InRt = 61%)<sup>[5047]</sup>. Source: HAO WANG JIAO LU HUI *Aloe ferox*. Ref: 5047.

**979 Aloesin**

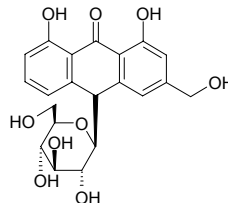
[30861-27-9] C<sub>19</sub>H<sub>22</sub>O<sub>9</sub> (394.38). Source: BAN WEN LU HUI *Aloe vera* var. *chinensis*. Ref: 2, 534, 660.

**980 Aloesone**

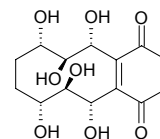
[40738-40-7] C<sub>13</sub>H<sub>12</sub>O<sub>4</sub> (232.24). Source: HAO WANG JIAO LU HUI *Aloe ferox*. Ref: 729.

**981 Aloin**

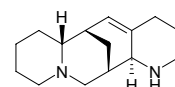
Isobarbaloin C<sub>21</sub>H<sub>22</sub>O<sub>9</sub> (418.40). Pharm: Laxative. Source: BAN WEN LU HUI *Aloe vera* var. *chinensis* (leaf: content scope of 11 origins = 0.0006%~0.0261%, mean content = 0.0106%<sup>[5508]</sup>), HAO WANG JIAO LU HUI *Aloe ferox*, LU HUI *Aloe vera* [Syn. *Aloe barbadensis*] (leaf: content = 0.0319%<sup>[5508]</sup>), PEI LI LU HUI *Aloe perryi*, WU GONG ZHANG *Aloe arborescens* var. *natalensis*. Ref: 2, 660, 5501, 5508.

**982 Alopecuquinone**

5 $\alpha$ ,6 $\beta$ ,7 $\alpha$ ,10 $\alpha$ ,11 $\beta$ ,12 $\alpha$ -Hexahydroxycyclodeca-1,4-benzoquinone C<sub>14</sub>H<sub>18</sub>O<sub>8</sub> (314.29). Orange amorphous material. Source: KAN MAI NIANG ZHUANG SHA CAO *Cyperus alopecuroides*. Ref: 1959.

**983 Aloperine**

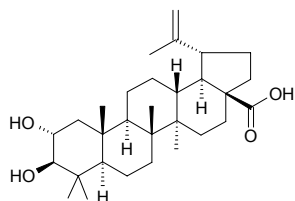
[56293-29-9] C<sub>15</sub>H<sub>24</sub>N<sub>2</sub> (232.37). Pharm: Antiallergic (allergic reaction of type III and IV); antiarrhythmic (rat, arrhythmia induced by aconitine, ED = 10mg/kg, mus, ventricular fibrillation induced by chloroform, ip); anti-inflammatory (variety of acute inflammation); CNS depressant; platelet aggregation inhibitor (rbt, caused by arachidonic acid and collagen of low concentration, IC<sub>50</sub> = 184 $\mu$ g/L and 38.3 $\mu$ g/L respectively); antihypertensive; paralyzes CNS and respiration; slows heart rate; toxin; treatment of bacillary dysentery. Source: KU DOU ZI *Sophora alopecuroides*. Ref: 658.



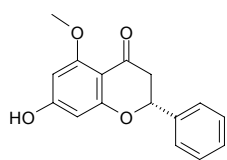


**984 Alphitolic acid**

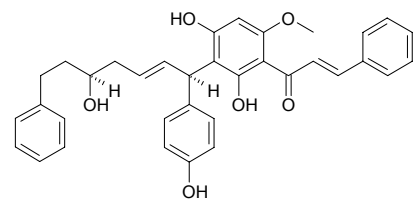
2 $\alpha$ ,3 $\beta$ -Dihydroxylup-20(29)-en-28-oic acid [19533-92-7] C<sub>30</sub>H<sub>48</sub>O<sub>4</sub> (472.71). Colorless needles (CHCl<sub>3</sub>-MeOH), mp 275~278°C, [ $\alpha$ ]<sub>D</sub><sup>19</sup> = -4.0° (c = 1.0, pyridine). **Pharm:** Cytotoxic inactive (K562, ED<sub>50</sub> > 20 $\mu$ mol/L, control Adriamycin, ED<sub>50</sub> = (0.09 $\pm$ 0.03) $\mu$ mol/L; B-16 (F-10), ED<sub>50</sub> > 20 $\mu$ mol/L, Adriamycin, ED<sub>50</sub> = (0.06 $\pm$ 0.10) $\mu$ mol/L; SK-MEL-2, ED<sub>50</sub> > 20 $\mu$ mol/L, Adriamycin, ED<sub>50</sub> = (0.09 $\pm$ 0.3) $\mu$ mol/L; PC3, ED<sub>50</sub> > 20 $\mu$ mol/L, Adriamycin, ED<sub>50</sub> = (0.83 $\pm$ 0.18) $\mu$ mol/L; LOX-IMVI, ED<sub>50</sub> > 20 $\mu$ mol/L, Adriamycin, ED<sub>50</sub> = (0.38 $\pm$ 0.33) $\mu$ mol/L; A549, ED<sub>50</sub> > 20 $\mu$ mol/L, Adriamycin, ED<sub>50</sub> = (0.67 $\pm$ 0.21) $\mu$ mol/L)<sup>[5479]</sup>. **Source:** BING PIAN *Dryobalanops aromatica*, DA ZAO *Ziziphus jujuba*, SAN YE MU TONG *Akebia trifoliata* (stem), SUAN ZAO REN *Ziziphus jujuba* var. *spinosa*, YANG MEI SHU PI *Myrica rubra*. **Ref:** 2, 4163, 4545, 5479.

**985 Alpinetin**

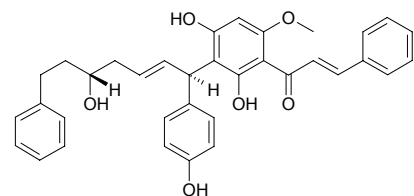
[36052-37-6] C<sub>16</sub>H<sub>14</sub>O<sub>4</sub> (270.29). mp 225°C. **Source:** CAO DOU KOU *Alpinia katsumadai* (dried closing-ripe seed: mean content = 0.74%<sup>[5508]</sup>), DA CAO KOU *Alpinia speciosa*, LIAN JIANG *Alpinia chinensis*. **Ref:** 6, 5508.

**986 Alpinnanin A**

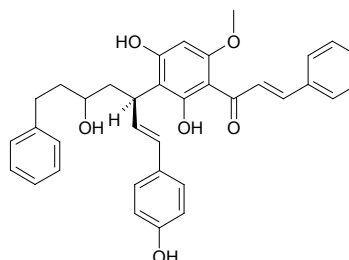
C<sub>35</sub>H<sub>34</sub>O<sub>6</sub> (550.66). Pale yellow amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -33.3° (c = 0.21, MeOH). **Source:** ZHU SUI SHAN JIANG *Alpinia pinnanensis* (rhizome). **Ref:** 4522.

**987 Alpinnanin B**

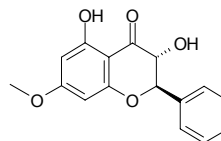
C<sub>35</sub>H<sub>34</sub>O<sub>6</sub> (550.66). Pale yellow amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -39.3° (c = 0.28, MeOH). **Source:** ZHU SUI SHAN JIANG *Alpinia pinnanensis* (rhizome). **Ref:** 4522.

**988 Alpinnanin C**

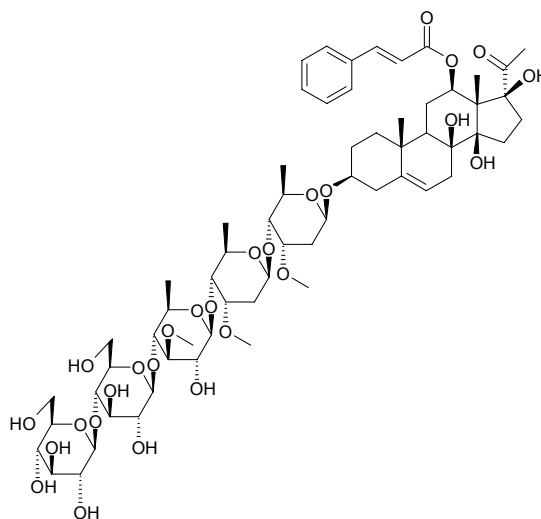
C<sub>35</sub>H<sub>34</sub>O<sub>6</sub> (550.66). Pale yellow amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +42.9° (c = 0.14, MeOH). **Source:** ZHU SUI SHAN JIANG *Alpinia pinnanensis* (rhizome). **Ref:** 4522.

**989 Alpinone**

[480-13-7] C<sub>16</sub>H<sub>14</sub>O<sub>5</sub> (286.29). mp 186~187°C. **Source:** TU SHA REN *Alpinia japonica*. **Ref:** 6.

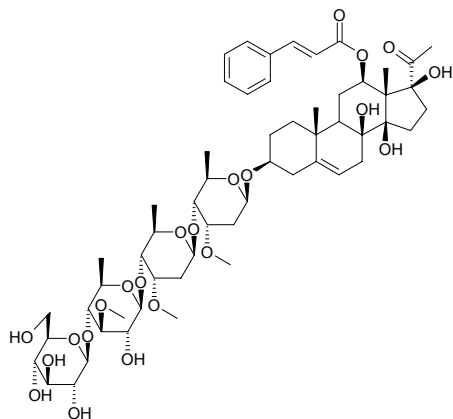
**990 Alpinoside A**

Kidjolanin-3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-thevetopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-cymaropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-cymaropyranoside C<sub>63</sub>H<sub>94</sub>O<sub>27</sub> (1283.44). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -32.8° (c = 0.1, MeOH). **Source:** BIAN ZHONG JIAN HUI TENG *Oxystelma esculentum* var. *alpinii* (leaf). **Ref:** 3798.

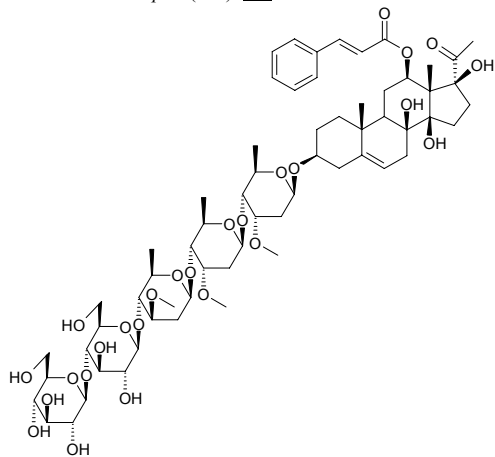


**991 Alpinoside B**

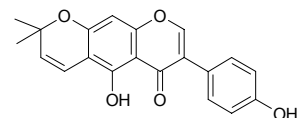
Kidjolanin 3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-thevetopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-cymaropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-cymaropyranoside C<sub>57</sub>H<sub>84</sub>O<sub>22</sub> (1121.29). Amorphous powder,  $[\alpha]_D^{25} = -14.6^\circ$  ( $c = 0.1$ , MeOH). Source: BIAN ZHONG JIAN HUI TENG *Oxystelma esculentum* var. *alpini* (leaf). Ref: 3798.

**992 Alpinoside C**

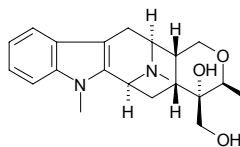
Kidjolanin 3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-cymaropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-cymaropyranoside C<sub>63</sub>H<sub>94</sub>O<sub>26</sub> (1267.44). Amorphous powder,  $[\alpha]_D^{25} = -26.2^\circ$  ( $c = 0.1$ , MeOH). Source: BIAN ZHONG JIAN HUI TENG *Oxystelma esculentum* var. *alpini* (leaf). Ref: 3798.

**993 Alpinumisoflavone**

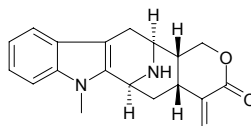
C<sub>20</sub>H<sub>16</sub>O<sub>5</sub> (336.35). Pharm: Cytotoxic (HSC-2 cells, CC<sub>50</sub> = 0.40mmol/L; HGF, CC<sub>50</sub> > 0.60mmol/L)<sup>[3025]</sup>, cytotoxic (KB, EC<sub>50</sub> = 4.13 $\mu$ g/mL)<sup>[5220]</sup>, hepatoprotective (mus primary cultured hepatocytes, antihepatotoxin induced by *D*-galactosamine (GalN), 100 $\mu$ mol/L, InRt = (1.1 $\pm$ 0.8)%, inactive, control Silybin, 100 $\mu$ mol/L, InRt = (77.0 $\pm$ 5.5)%)<sup>[4095]</sup>. Source: CI TONG *Erythrina variegata* [Syn. *Erythrina indica*] (stem bark), GOU JI *Cudrania cochinchinensis* (root: yield = 0.00017%dw), GUANG BU DING GONG TENG *Erycibe expansa*. Ref: 3025, 4095, 5220.

**994 Alstohentine**

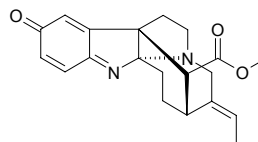
C<sub>21</sub>H<sub>28</sub>N<sub>2</sub>O<sub>3</sub> (356.49). Yellowish oil,  $[\alpha]_D = -58^\circ$  ( $c = 0.22$ , CHCl<sub>3</sub>). Source: DA YE TANG JIAO SHU *Alstonia macrophylla* (leaf: yield = 0.0003%). Ref: 3020.

**995 Alstolactone**

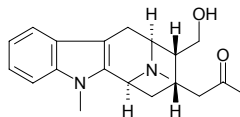
C<sub>20</sub>H<sub>22</sub>N<sub>2</sub>O<sub>2</sub> (322.41). Light yellowish oil,  $[\alpha]_D = -10^\circ$  ( $c = 0.05$ , CHCl<sub>3</sub>). Source: XIA YE JI GU CHANG SHAN *Alstonia angustifolia* (leaf). Ref: 3780.

**996 Alstomaline**

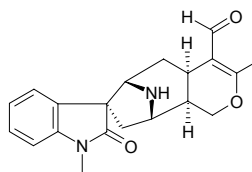
C<sub>20</sub>H<sub>22</sub>N<sub>2</sub>O<sub>3</sub> (338.41). Source: DA YE TANG JIAO SHU *Alstonia macrophylla* (leaf: yield = 0.00006%). Ref: 3020.

**997 Alstomicine**

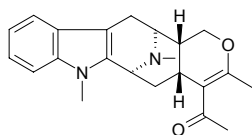
C<sub>20</sub>H<sub>26</sub>N<sub>2</sub>O<sub>2</sub> (326.44). Light yellowish oil,  $[\alpha]_D = +74^\circ$  ( $c = 0.14$ , CHCl<sub>3</sub>). Source: DA YE TANG JIAO SHU *Alstonia macrophylla* (leaf: yield = 0.0002%). Ref: 3020.

**998 Alstonal**

C<sub>20</sub>H<sub>22</sub>N<sub>2</sub>O<sub>3</sub> (338.41). Source: DA YE TANG JIAO SHU *Alstonia macrophylla* (leaf: yield = 0.00003%). Ref: 3020.

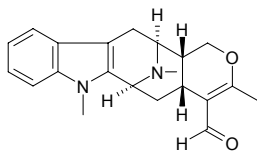
**999 Alstonerinal**

C<sub>22</sub>H<sub>26</sub>N<sub>2</sub>O<sub>2</sub> (350.46). Source: DA YE TANG JIAO SHU *Alstonia macrophylla* (leaf: yield = 0.0022%). Ref: 3020.

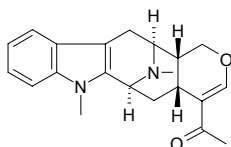


**1000 Alstonerinal II\***

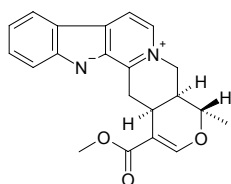
$C_{21}H_{24}N_2O_2$  (336.44).  $[\alpha]_D = -32^\circ$  ( $c = 0.03$ ,  $CHCl_3$ ). Source: DA YE TANG JIAO SHU *Alstonia macrophylla*. Ref: 2320.

**1001 Alstonerine**

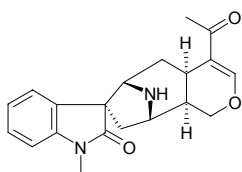
$C_{21}H_{24}N_2O_2$  (336.44). Source: DA YE TANG JIAO SHU *Alstonia macrophylla* (leaf: yield = 0.0070%). Ref: 3020.

**1002 Alstonine**

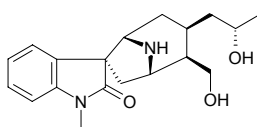
[47485-83-6]  $C_{21}H_{20}N_2O_3$  (348.43). Pharm: Antineoplastic (mus, mammary cancer MS301, 400 $\mu$ g/d for 15 days, weight of tumor was reduced to 1.6~1.7g on average, whereas 3.2g for control). Source: CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochera rosea*], CUI TU LUO FU MU *Rauwolfia vomitoria*, GANG GUO LUO FU MU *Rauwolfia obscura*, SHU JI GU CHANG SHAN *Alstonia constricta*. Ref: 2, 658, 660.

**1003 Alstonisine**

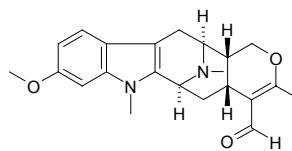
$C_{20}H_{22}N_2O_3$  (338.41). Source: DA YE TANG JIAO SHU *Alstonia macrophylla* (leaf: yield = 0.0001%). Ref: 3020.

**1004 Alstonoxine B**

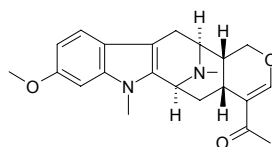
$C_{19}H_{26}N_2O_3$  (330.43). Source: DA YE TANG JIAO SHU *Alstonia macrophylla* (leaf: yield = 0.0040%). Ref: 3020.

**1005 Alstophyllal**

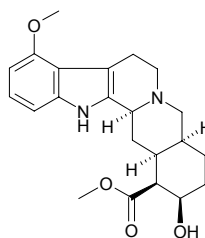
$C_{22}H_{26}N_2O_3$  (366.46). Light yellowish oil. Source: DA YE TANG JIAO SHU *Alstonia macrophylla* (leaf: yield = 0.0096%). Ref: 3020.

**1006 Alstophylline**

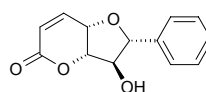
$C_{22}H_{26}N_2O_3$  (366.46). Light yellowish oil. Source: DA YE TANG JIAO SHU *Alstonia macrophylla* (leaf: yield = 0.0027%). Ref: 3020.

**1007 Alstovenine**

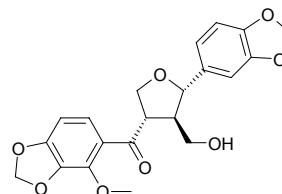
[4837-79-0]  $C_{22}H_{28}N_2O_4$  (384.48). Chloride quaternary amine salt: mp 216 $^\circ$ C (dec); quaternary amine salt of picric acid: mp 257~258 $^\circ$ C; free alkali: mp 170~172 $^\circ$ C. Pharm: Monoamine oxidase inhibitor (low dose); CNS stimulant (high dose). Source: YIN DU YA JIAO SHU *Alstonia venenata*. Ref: 66, 658.

**1008 Altholactone**

Goniothalenol [65408-91-5]  $C_{13}H_{12}O_4$  (232.24). Pharm: NADH oxidase inhibitor (mammalian mitochondrial respiratory chain inhibitor,  $IC_{50} = (25 \pm 7) \mu\text{mol/L}$ ,  $IC_{100} = (84 \pm 6) \mu\text{mol/L}$ )<sup>[3961]</sup>; cytotoxic ( $P_{388}$ ); toxin (sea shrimp). Source: DA GE NA XIANG *Goniothalamus giganteus*, TIAN YE GE NA XIANG *Goniothalamus arvensis* (stem bark). Ref: 658, 3961.

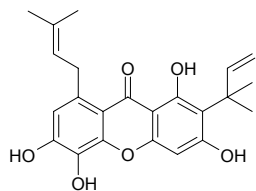
**1009 (-)-Altissinone**

$C_{21}H_{20}O_8$  (400.39). Pale green flakes, mp 151~152 $^\circ$ C,  $[\alpha]_D^{25} = -40.3^\circ$  ( $c = 0.5$ ,  $CHCl_3$ ). Source: ZUI GAO MU JING YE *Vitex altissima* (leaf). Ref: 5309.

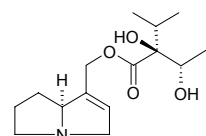


**1010 Alvaxanthone**

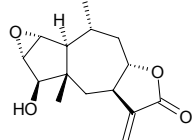
$C_{23}H_{24}O_6$  (396.44). **Pharm:** Cytotoxic (HSC-2 cells,  $CC_{50} = 0.022\text{mmol/L}$ ; HGF,  $CC_{50} = 0.025\text{mmol/L}$ ). **Source:** GOU JI *Cudrania cochinchinensis* (root: yield = 0.0045%dw). **Ref:** 3025.

**1011 Amabiline**

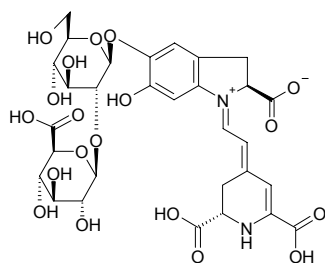
[17958-43-9]  $C_{15}H_{25}NO_4$  (283.37). **Pharm:** Toxin (exhibits hepatic toxicity). **Source:** NAN FANG LIU LI CAO *Cynoglossum australe*, GOU SHI HUA *Cynoglossum amabile*. **Ref:** 6, 658.

**1012 Amaralin**

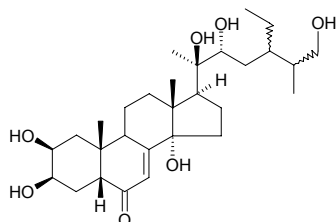
[6831-10-3]  $C_{15}H_{20}O_4$  (264.32). Colorless acicular crystals, mp 195–198°C,  $[\alpha]_D^{25} = +5^\circ$  (chloroform). **Pharm:** Analgesic; cytotoxic (KB *in vitro*,  $ED_{50} = 4.9\mu\text{g/mL}$ ). **Source:** KU WEI DUI XIN JU *Helenium amarum*. **Ref:** 658, 661.

**1013 Amaranthin**

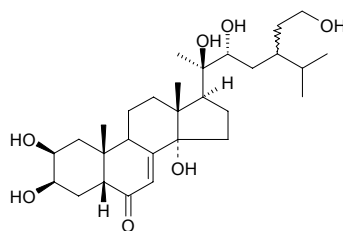
[15167-84-7]  $C_{30}H_{34}N_2O_{19}$  (726.61). **Pharm:** Purple phytochrome. **Source:** JI GUAN HUA *Celosia cristata*, QIAN RI HONG *Gomphrena globosa*, WEI SUI XIAN *Amaranthus caudatus*, XIAN SE LI *Chenopodium amaranticolor*, YAN LAI HONG *Amaranthus tricolor*. **Ref:** 5, 15, 658.

**1014 Amarasterone A**

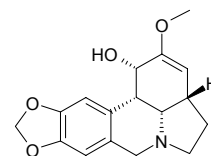
[20853-88-7]  $C_{29}H_{48}O_7$  (508.70). mp 210–211°C. **Source:** MA NIU XI *Cyathula capitata*. **Ref:** 6.

**1015 Amarasterone B**

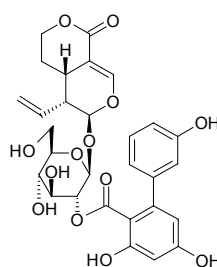
[21132-15-0]  $C_{30}H_{50}O_7$  (522.73). mp 284–285°C. **Source:** MA NIU XI *Cyathula capitata*. **Ref:** 6.

**1016 (-)-Amarbellisine**

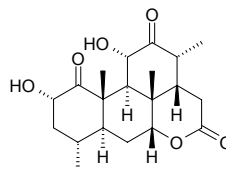
$C_{17}H_{19}NO_4$  (301.35). White needles, mp < 300°C,  $[\alpha]_D^{25} = -39.2^\circ$  ( $c = 0.7$ ). **Pharm:** Antibacterial (*Staphylococcus aureus*, IZD = 22mm, MIC = 125 $\mu\text{g/mL}$ ; *Escherichia coli*, IZD = 22mm); antifungal (*Candida albicans*, IZD = 24mm, MIC = 63 $\mu\text{g/mL}$ ). **Source:** GU TING HUA *Amaryllis belladonna* (bulb). **Ref:** 3829.

**1017 Amarogentin**

[21018-84-8]  $C_{29}H_{30}O_{13}$  (586.55). **Pharm:** Bitter principle; tonic (using source plant *Gentiana*). **Source:** HUANG LONG DAN *Gentiana lutea*, LONG DAN *Gentiana scabra*, DONG BEI LONG DAN *Gentiana manshurica*, DIAN LONG DAN *Gentiana rigescens*, DANG YAO *Swertia chinensis* (in 1966, the compound was isolated from the plant by H.Inouye, et al.<sup>[5505]</sup>). **Ref:** 2, 658, 660, 5505.

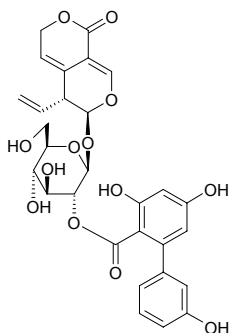
**1018 Amarolide**

[29913-86-8]  $C_{20}H_{28}O_6$  (364.44). mp 253–255°C. **Source:** CHU BAI PI *Ailanthus altissima*. **Ref:** 6.

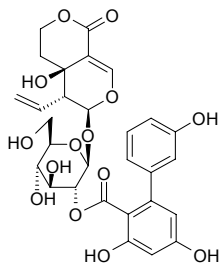


**1019 Amaronitidin**

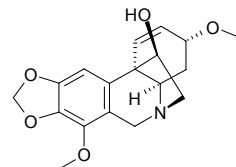
$C_{29}H_{28}O_{13}$  (584.54). Colorless amorphous powder,  $[\alpha]_D^{23} = -76.1^\circ$  ( $c = 1.40$ , MeOH). Source: GUANG LIANG JIA LONG DAN *Gentianaella nitida* (whole herb). Ref: 3542.

**1020 Amaroswerin**

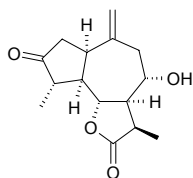
[21233-18-1]  $C_{29}H_{30}O_{14}$  (602.55). Pharm: Antihepatotoxin (rat, liver damage caused by  $CCl_4$ , GPT = 83% of control, liver damage caused by galactosamine Ga1N, GPT = 75% of control); mutagen (*S. typhimurium* TA98 and TA100, treated by nitrite); prevention and cure of ulcer and gastritis. Source: LONG DAN *Gentiana scabra*, DONG BEI LONG DAN *Gentiana manshurica*, SAN HUA LONG DAN *Gentiana triflora*, DIAN LONG DAN *Gentiana rigescens*, DANG YAO *Swertia chinensis* (in 1966, the compound was isolated from the plant by H.Inouye, et al.)<sup>[5505]</sup>. Ref: 2, 7, 660, 1676, 1796, 1797, 5505.

**1021 Ambelline**

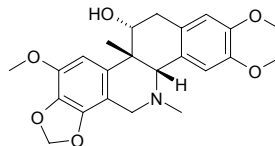
[3660-62-6]  $C_{18}H_{21}NO_5$  (331.37). Pharm: Analgesic; supertoxic agent. Source: GU TING HUA *Amaryllis belladonna*, LAO SHI WEN SHU LAN *Crinum laurentii*. Ref: 658.

**1022 Amberboin**

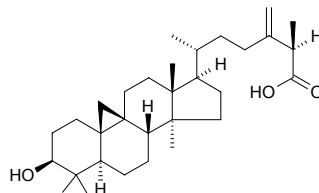
[22339-28-2]  $C_{15}H_{20}O_4$  (264.32). mp  $145^\circ C$ ,  $[\alpha]_D^{20} = +169^\circ$ . Pharm: Cytotoxic (HeLa,  $IC_{50} = 50 \mu g/mL$ ). Source: LI PU PO JU *Amberboa lippii*. Ref: 658, 661.

**1023 Ambinine**

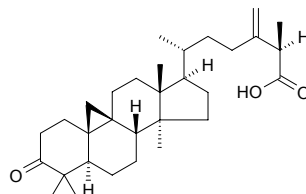
$C_{23}H_{27}NO_6$  (413.47). Source: DONG BEI YAN HU SUO *Corydalis ambigua* var. *amurensis* [Syn. *Corydalis ambigua*]. Ref: 660.

**1024 Ambolic acid**

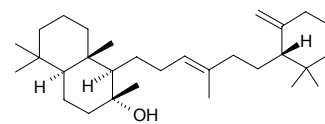
[13878-93-8]  $C_{31}H_{50}O_3$  (470.74). mp  $168-170^\circ C$ . Source: MANG GUO *Mangifera indica*. Ref: 6.

**1025 Ambonic acid**

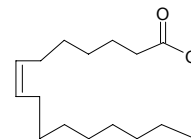
[17984-17-7]  $C_{31}H_{48}O_3$  (468.73). mp  $149-150^\circ C$ . Source: MANG GUO *Mangifera indica*, MANG GUO SHU PI *Mangifera indica*. Ref: 6.

**1026 Ambrein**

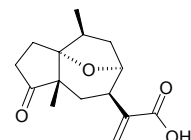
[473-03-0]  $C_{30}H_{52}O$  (428.75). mp  $81-83^\circ C$ . Source: LONG XIAN XIANG *Physeter catodon*, XIAN CHI SHE PU TAO *Ampelopsis grossedentata* [Syn. *Ampelopsis cantoniensis* var. *grossedentata*]. Ref: 6.

**1027 Ambrettolide**

[123-69-3]  $C_{16}H_{28}O_2$  (252.40). bp  $154-156^\circ C/1mmHg$ . Source: HUANG KUI *Abelmoschus moschatus* [Syn. *Hibiscus abelmoschus*]. Ref: 6.

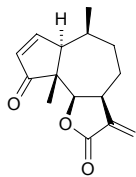
**1028 Ambrosic acid**

$C_{15}H_{20}O_4$  (264.32). Source: MEI ZHOU TUN CAO *Ambrosia artemisiaefolium* (in 1972, the compound was isolated from the plant). Ref: 5505.

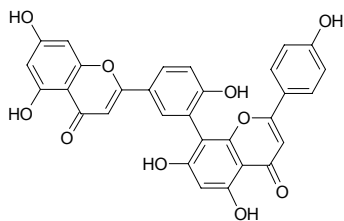


**1029 Ambrosin**

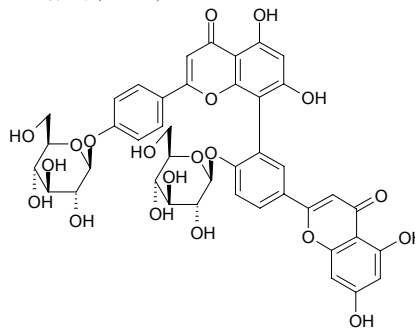
[509-93-3] C<sub>15</sub>H<sub>18</sub>O<sub>3</sub> (246.31). mp 146°C, [α]<sub>D</sub><sup>22</sup> = -154.50° (c = 2, ethanol). **Pharm:** Antineoplastic (P<sub>388</sub>); molluscicide. **Source:** YAN HAI TUN CAO *Ambrosia maritima*, MEI GUO HAI MO JU *Hymenoclea salsola*. **Ref:** 658, 661.

**1030 Amentoflavone**

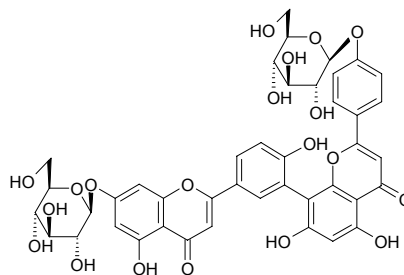
[1617-53-4] C<sub>30</sub>H<sub>18</sub>O<sub>10</sub> (538.47). Yellow amorphous powder (MeOH), mp 298~300°C, [α]<sub>D</sub><sup>17.8</sup> = +7.71° (c = 0.23, C<sub>5</sub>H<sub>5</sub>N). **Pharm:** Antifungal (*Aspergillus fumigatus*, *Botrytis cinerea* and *Trichoderma glaucum*); nucleotide diphosphatase inhibitor; anti-HIV-1 inactive (*in vitro*)<sup>[4234]</sup>; tissue proteinase B inhibitor (IC<sub>50</sub> = 1.75 μmol/L); cytotoxic (BGC823, IC<sub>50</sub> = 3.51 μmol/L); vasorelaxant (via endothelium-dependent nitric oxide-cGMP signaling, with possible involvement of non-specific K<sup>+</sup> and Ca<sup>2+</sup> channels)<sup>[5010]</sup>. **Source:** BAI GUO *Ginkgo biloba*, CE BAI YE *Thuja orientalis* [Syn. *Platyclusus orientalis*; *Biota orientalis*], CUI YUN CAO *Selaginella uncinata* (dried whole herb: content = 0.131%<sup>[5508]</sup>), DA YE CAI *Selaginella doederleinii* (dried whole herb: mean content = 0.182%<sup>[5508]</sup>), DIAN ZHUANG JUAN BAI *Selaginella pulvinata* (dried whole herb: mean content = 0.185%<sup>[5508]</sup>), DU SONG SHI *Juniperus rigida*, E MEI JUAN BAI *Selaginella omeiensis* (dried whole herb: content = 0.326%<sup>[5508]</sup>), HUI<sup>(4)</sup> YE *Sobina chinensis*, HAN SHENG JUAN BAI *Selaginella stauntoniana* (dried whole herb: content = 0.750%<sup>[5508]</sup>), JIANG NAN JUAN BAI *Selaginella moellendorffii* (dried whole herb: mean content = 0.963%<sup>[5508]</sup>), JUAN BAI *Selaginella tamariscina* (dried whole herb: mean content = 0.439%<sup>[5508]</sup>), LIN BEI ZI *Toxicodendron succedaneum* [Syn. *Rhus succedanea*], MAN SHENG JUAN BAI *Selaginella davidii* (dried whole herb: mean content = 1.154%<sup>[5508]</sup>), MAO ZHI JUAN BAI *Selaginella braunii* (dried whole herb: mean content = 0.276%<sup>[5508]</sup>), MO XI GE LUO YU SHAN *Taxodium mucronatum* (twig and leaf), SAN JIAN SHAN *Cephalotaxus fortunei*, SHAN DI LUO HAN SONG *Podocarpus montanus*, SU TIE SHU GUO *Cycas revoluta*, XI FANG CI BAI *Juniperus occidentalis* (leaf), YAN ZHOU JUAN BAI *Selaginella involvens* (dried whole herb: content = 0.685%<sup>[5508]</sup>), YUAN ZHI JUAN BAI *Selaginella sanguinolenta* (dried whole herb: content = 0.678%<sup>[5508]</sup>), YUN NAN FEI SHU *Torreya yunnanensis* (leaf and twig: yield = 0.0076%<sup>[4707]</sup>), ZHONG HUA JUAN BAI *Selaginella sinensis* (dried whole herb: content = 1.364%<sup>[5508]</sup>). **Ref:** 2, 6, 658, 4234, 4398, 4571, 4707, 5010, 5508.

**1031 Amentoflavone-4',4'''-di-O-β-D-glucopyranoside**

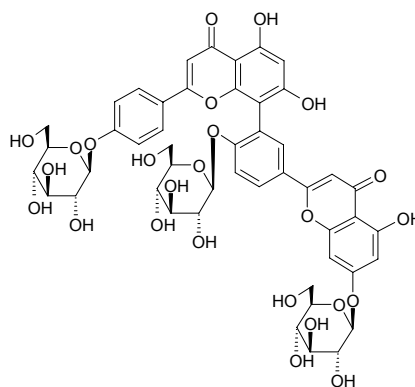
C<sub>42</sub>H<sub>38</sub>O<sub>20</sub> (862.76). **Source:** SHI SHUA BA *Psilotum nudum*. **Ref:** 660.

**1032 Amentoflavone-7,4'''-di-O-β-D-glucopyranoside**

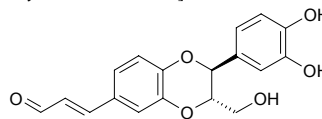
C<sub>42</sub>H<sub>38</sub>O<sub>20</sub> (862.76). **Source:** SHI SHUA BA *Psilotum nudum*. **Ref:** 660.

**1033 Amentoflavone-7,4',4'''-tri-O-β-D-glucopyranoside**

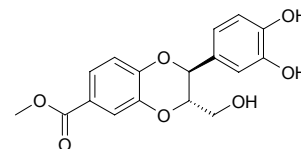
C<sub>48</sub>H<sub>48</sub>O<sub>25</sub> (1024.90). **Source:** SHI SHUA BA *Psilotum nudum*. **Ref:** 660.

**1034 Americanin A**

C<sub>18</sub>H<sub>16</sub>O<sub>6</sub> (328.32). **Source:** MEI SHANG LU *Phytolacca americana* [Syn. *Phytolacca decandra*]. **Ref:** 660.

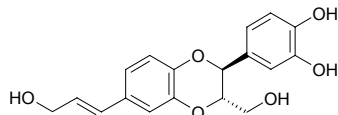
**1035 Americanic acid methyl ester**

C<sub>17</sub>H<sub>16</sub>O<sub>7</sub> (332.31). [α]<sub>D</sub><sup>20</sup> = 0° (c = 0.31, MeOH). **Pharm:** Neurite outgrowth enhancer (0.01~1.0 μmol/L)<sup>[4407]</sup>. **Source:** MEI SHANG LU *Phytolacca americana* [Syn. *Phytolacca decandra*] (seed). **Ref:** 4407.

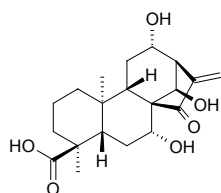


**1036 Americanol**

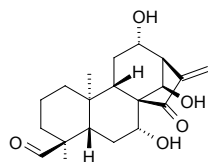
$C_{18}H_{18}O_6$  (330.34). Colorless arris crystals, mp 125–128°C (ethyl acetate–acetone)  $[\alpha]_D^{27} = 0^\circ$  ( $c = 1.11$ , alcohol). **Pharm:** Nourishes nerve, cholinesterase activator (rat cerebrum, EC = 10  $\mu$ mol/L). **Source:** MEI SHANG LU *Phytolacca americana* [Syn. *Phytolacca decandra*]. **Ref:** 1022.

**1037 Amethystoic acid**

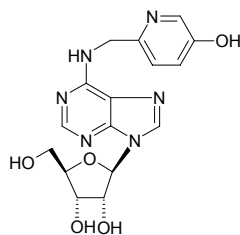
$C_{20}H_{28}O_6$  (364.44). mp > 300°C,  $[\alpha]_D^{13} = -86.1^\circ$  ( $c = 0.33$ ,  $C_5H_5N$ ). **Source:** XIANG CHA CAI *Isodon amethystoides*. **Ref:** 4067.

**1038 Amethystonal**

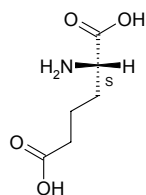
Macrocalyxin C  $C_{20}H_{28}O_5$  (348.44). mp 185.6–189°C,  $[\alpha]_D^{29} = -75.8^\circ$  ( $c = 0.2$ ,  $C_5H_5N$ ). **Source:** XIANG CHA CAI *Isodon amethystoides*. **Ref:** 4067.

**1039 AMG-1**

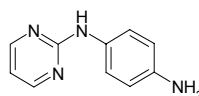
Adenosine, *N*-[(5-hydroxy-2-pyridinyl)methyl] [123369-41-5]  $C_{16}H_{18}N_6O_5$  (374.36). Colorless powder. **Pharm:** Antidote; CNS depressant; protects cerebrum (mus); treatment of mental disorder. **Source:** ZHEN MO *Armillariella mellea*. **Ref:** 900.

**1040  $\alpha$ -Aminoadipic acid**

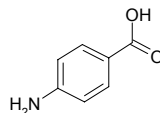
[1118-90-7]  $C_6H_{11}NO_4$  (161.16). mp 206°C. **Source:** MO GU *Agaricus campestris*, MU XU GEN *Medicago sativa*. **Ref:** 6.

**1041 2-(4'-Aminobenzenamine)-pyrimidine**

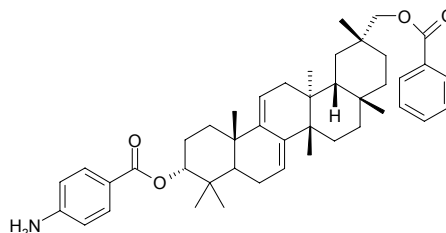
$C_{10}H_{10}N_4$  (186.22). White needles (MeOH), mp 270–271°C. **Pharm:** Adrenergic  $\alpha_1$ -receptor antagonist. **Source:** MA DE LI MIAN ZAO ER *Scilla maderensis* [Syn. *Autonoë madeirensis*]. **Ref:** 5482.

**1042 *p*-Aminobenzoic acid**

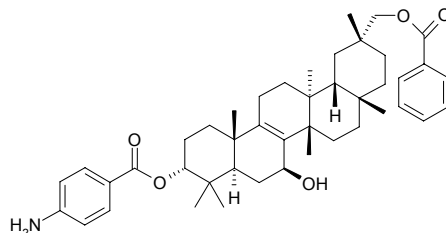
[150-13-0]  $C_7H_7NO_2$  (137.14). mp 186–187°C. **Pharm:** Sulfonamide antagonist; ultraviolet screen. **Source:** JI ZI BAI *Gallus gallus domesticus*, JI ZI HUANG *Gallus gallus domesticus*. **Ref:** 6, 658.

**1043****3-*O*-*p*-Aminobenzoyl-29-*O*-benzoylmultiflora-7,9(11)-diene-3 $\alpha$ ,29-diol**

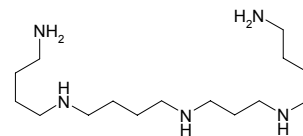
$C_{44}H_{57}NO_4$  (663.95). Powder (Et<sub>2</sub>O), mp = 204–206°C,  $[\alpha]_D^{25} = -130^\circ$  ( $c = 0.90$ , CHCl<sub>3</sub>). **Source:** XI HU LU *Cucurbita pepo*. **Ref:** 2334.

**1044 3-*O*-*p*-Aminobenzoyl-29-*O*-benzoylmultiflora-8-ene-3 $\alpha$ ,7 $\beta$ ,29-triol**

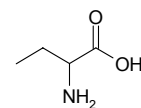
$C_{44}H_{59}NO_5$  (681.96). Powder (Et<sub>2</sub>O), mp 158–160°C,  $[\alpha]_D^{25} = -52^\circ$  ( $c = 0.90$ ,  $C_5H_5N$ ). **Source:** XI HU LU *Cucurbita pepo*. **Ref:** 2334.

**1045 Aminobutyl canavalmine**

$C_{15}H_{37}N_5$  (287.50). **Source:** DAO DOU *Canavalia gladiata*. **Ref:** 660.

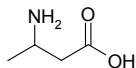
**1046  $\alpha$ -Aminobutyric acid**

$C_4H_9NO_2$  (103.12). mp (+) 292°C (dec), (–) 292°C (dec). **Source:** KU GUA *Momordica charantia*, XI GUA *Citrullus vulgaris* [Syn. *Citrullus lanatus*]. **Ref:** 6.

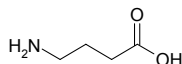


**1047  $\beta$ -Aminobutyric acid**

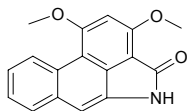
$C_4H_9NO_2$  (103.12). mp 220°C (dec). Source: BAN XIA *Pinellia ternata*, CAO YUAN LAO GUAN CAO *Geranium pratense*. Ref: 6.

**1048  $\gamma$ -Aminobutyric acid**

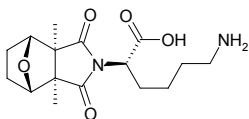
[56-12-2]  $C_4H_9NO_2$  (103.12). Pharm: Adrenergic antagonist; neurotransmitter (inhibitory); antihypertensive; diuretic; hypnotic; vasodilator. Source: BAN LAN GEN *Isatis indigotica*, CHAN SU *Bufo bufo gargarizans*; *Bufo melanostictus*, CHONG BAN XUAN CAO *Hemerocallis fulva* var. *kwanso*, DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*], DUO XU YAN HUANG QI *Hedysarum polybotrys*, GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], GAN ZHE *Saccharum sinensis*, GOU QI ZI *Lycium chinense*, GUA LOU *Trichosanthes kirilowii*, JI NAO *Gallus gallus domesticus*, LI ZI *Prunus salicina*, MING DANG SHEN *Changium myrsinioides*, MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*], QIANG HUO *Notopterygium incisum*, SU MI *Setaria italica*, TIAN HUA FEN *Trichosanthes kirilowii*, XI GUA *Citrullus vulgaris* [Syn. *Citrullus lanatus*], *Pisum* sp., *Vicia* sp., *Phaseolus* sp., occurs in many plants. Ref: 2, 4, 506, 658, 660, 5501.

**1049 10-Amino-2,4-dimethoxyphenanthrene-1-carboxylic acid lactam**

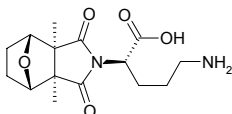
$C_{17}H_{13}NO_3$  (279.30). Yellow acicular crystals (acetone), mp 242–244°C. Source: DA HUA GE NA XIANG *Goniiothalamus griffithii*. Ref: 822.

**1050 (2S)-6-Amino-2-[(3aR\*,4S\*,7R\*,7aS\*)-3a,7a-dimethyl-1,3-dioxo-4,7-epoxyoctahydroisoindol-2-yl]-hexanoic Acid**

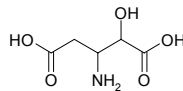
$C_{16}H_{24}N_2O_5$  (234.38). Powder, mp 159.0–162.0°C,  $[\alpha]_D = -23.3^\circ$  ( $c = 0.30$ , MeOH). Source: BAN MAO *Mylabris phalerata*; *Mylabris cichorii*. Ref: 4052.

**1051 (2S)-5-Amino-2-[(3aR\*,4S\*,7R\*,7aS\*)-3a,7a-dimethyl-1,3-dioxo-4,7-epoxyoctahydroisoindol-2-yl]-pentanoic acid**

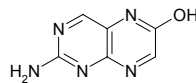
$C_{15}H_{22}N_2O_5$  (310.35). Powder, mp 157.0–160.0°C,  $[\alpha]_D = -26.9^\circ$  ( $c = 0.26$ , MeOH). Source: BAN MAO *Mylabris phalerata*; *Mylabris cichorii*. Ref: 4052.

**1052 3-Amino-2-hydroxy pentanedioic acid**

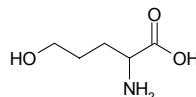
$C_5H_9NO_5$  (163.13). White powder, mp 114–116°C,  $[\alpha]_D^{25} = +16.33^\circ$  ( $c = 0.049$ , water). Source: BAO BAN E GAO *Amanita pantherina*. Ref: 335.

**1053 2-Amino-6-hydroxypteridine**

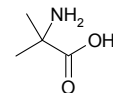
$C_6H_5N_5O$  (163.14). Source: HEI MA YI *Formica fusca*. Ref: 6.

**1054 L- $\alpha$ -Amino- $\delta$ -hydroxyvaleric acid**

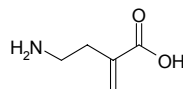
$C_5H_{11}NO_3$  (133.15). mp 223–224°C. Source: DAO DOU *Canavalia gladiata*. Ref: 6.

**1055 Aminoisobutyric acid**

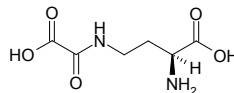
2-Amino-2-methylpropionic acid [62-57-7]  $C_4H_9NO_2$  (103.12). mp 280°C (sub). Source: MO GU *Agaricus campestris*. Ref: 6.

**1056  $\gamma$ -Amino- $\alpha$ -methylene butyric acid**

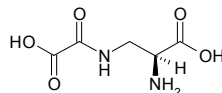
[65370-67-4]  $C_5H_9NO_2$  (115.13). Source: LUO HUA SHENG *Arachis hypogaea*. Ref: 6.

**1057 L- $\alpha$ -Amino- $\gamma$ -oxalylaminobutyric acid**

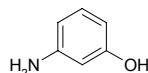
$C_6H_{10}N_2O_5$  (190.16). Pharm: Neurotoxin. Source: SU GEN XIANG WAN DOU *Lathyrus latifolius*, *Acacia* sp. Ref: 658.

**1058 L- $\alpha$ -Amino- $\beta$ -oxalylaminopropionic acid**

$\beta$ -N-Oxalyl-L- $\alpha$ , $\beta$ -diaminopropionic acid  $C_5H_8N_2O_5$  (176.31). Pharm: Neurotoxin; stanch bleeding. Source: CAO XIANG WAN DOU *Lathyrus sativus*, SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. Ref: 2, 658, 2790.

**1059 m-Aminophenol**

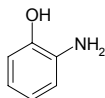
$C_6H_7NO$  (109.13). Source: FU ZI *Aconitum carmichaeli*. Ref: 2.



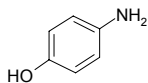


**1060 *o*-Aminophenol**

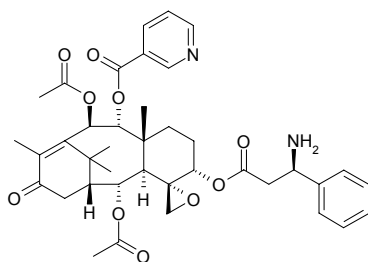
[95-55-6] C<sub>6</sub>H<sub>7</sub>NO (109.13). Source: FU ZI *Aconitum carmichaeli*. Ref: 2.

**1061 *p*-Aminophenol**

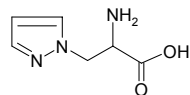
C<sub>6</sub>H<sub>7</sub>NO (109.13). Source: FU ZI *Aconitum carmichaeli*. Ref: 2.

**1062 5 $\alpha$ -O-(3'-Amino-3'-phenylpropionyl)nicotaxine**

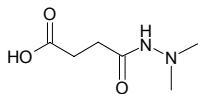
C<sub>39</sub>H<sub>46</sub>N<sub>2</sub>O<sub>10</sub> (702.81). Source: AO DA LI YA HONG DOU SHAN *Austrotaxus spicata*. Ref: 662.

**1063  $\alpha$ -Amino- $\beta$ -(pyrazolyl-*N*)propionic acid**

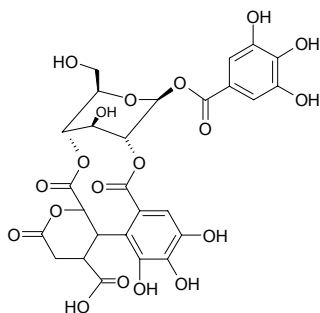
C<sub>6</sub>H<sub>9</sub>N<sub>3</sub>O<sub>2</sub> (155.16). mp 236–238°C (dec). Source: XI GUA *Citrullus vulgaris* [Syn. *Citrullus lanatus*], XI GUA ZI REN *Citrullus vulgaris* [Syn. *Citrullus lanatus*]. Ref: 6.

**1064 Aminozide**

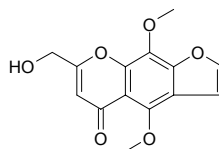
Mono(2,2-dimethylhydrazide) butanedioic acid [1596-84-5] C<sub>6</sub>H<sub>12</sub>N<sub>2</sub>O<sub>3</sub> (160.17). Source: JU HUA *Chrysanthemum morifolium* [Syn. *Dendranthema morifolium*]. Ref: 6.

**1065 Amlaic acid**

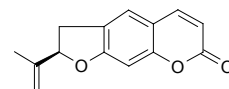
C<sub>27</sub>H<sub>24</sub>O<sub>19</sub> (652.48). mp 206°C. Source: YOU GAN YE *Phyllanthus emblica*. Ref: 6.

**1066 Ammiol**

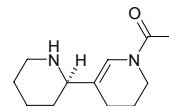
[668-10-0] C<sub>14</sub>H<sub>12</sub>O<sub>6</sub> (276.25). mp 211°C. Source: YE SHENG MA *Cimicifuga simplex*. Ref: 6.

**1067 Ammirin**

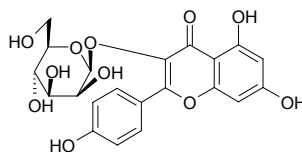
C<sub>14</sub>H<sub>12</sub>O<sub>3</sub> (228.25). Pharm: Phytogrowth inhibitor (100μg/mL, *Amaranthus hypochondriacus*, InRt = (61.1±1.7)%, *P*<0.05; *E. crusgalli*, InRt = (61.6±1.9)%, *P*<0.05); cytotoxic (*in vitro*, A549, ED<sub>50</sub> = 27.5μg/mL, control Adriamycin, ED<sub>50</sub> = 0.0322μg/mL; MCF7, ED<sub>50</sub> = 46.9μg/mL, Adriamycin, ED<sub>50</sub> = 0.0204μg/mL; HT29, ED<sub>50</sub> = 34.8μg/mL, Adriamycin, ED<sub>50</sub> = 0.0421μg/mL; A498, ED<sub>50</sub> = 34.1μg/mL, Adriamycin, ED<sub>50</sub> = 0.00348μg/mL; PC3, ED<sub>50</sub> = 37.9μg/mL, Adriamycin, ED<sub>50</sub> = 0.241μg/mL; PACA-2, ED<sub>50</sub> = 37.0μg/mL, Adriamycin, ED<sub>50</sub> = 0.0120μg/mL). Source: *Stauranthus perforatus* (root). Ref: 5253.

**1068 (+)-Ammodendrine**

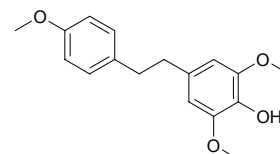
[27542-15-0] C<sub>12</sub>H<sub>20</sub>N<sub>2</sub>O (208.31). Pharm: Toxin (insects). Source: MIN HUA I *Sophora franchetiana*. Ref: 658.

**1069 Amoenin A<sub>3</sub>**

Kaempferol 3- $\beta$ -*D*-mannoside C<sub>27</sub>H<sub>20</sub>O<sub>11</sub> (448.39). Yellow-white acicular crystals, mp 235–236°C. Source: SHAN YE WAN DOU *Vicia amoena*. Ref: 375.

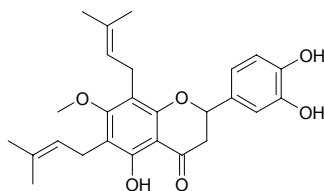
**1070 Amoenylin**

C<sub>17</sub>H<sub>20</sub>O<sub>4</sub> (288.35). mp 112°C. Source: KE AI SHI HU *Dendrobium amoenum*. Ref: 2397.

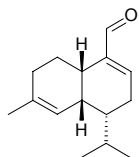


**1071 Amoradicin**

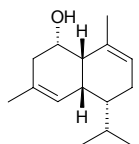
$C_{26}H_{30}O_6$  (438.53). **Pharm:** TNF- $\alpha$  production inhibitor (murine macrophages, LPS-stimulated,  $IC_{50}$  = 28.5  $\mu$ mol/mL). **Source:** ZI SUI HUAI *Amorpha fruticosa*. **Ref:** 4416.

**1072 Amorpha-4,9-dien-14-al**

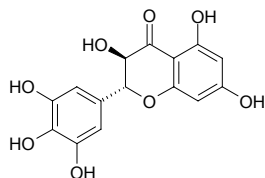
(+)-(4*R*,4*aR*,8*aS*)-3,4,4*a*,7,8,8*a*-Hexahydro-6-methyl-4-(1-methylethyl)-naphthalene-1-carbaldehyde  $C_{15}H_{22}O$  (218.34). Colorless oil. **Source:** DONG YA ZHI YE TAI *Lepidozia fauriana* (essential oil). **Ref:** 5209.

**1073 Amorpha-4,9-dien-2-ol**

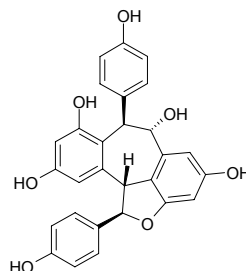
(+)-(1*S*,4*aS*,5*R*,8*aS*)-1,2,4*a*,5,6,8*a*-Hexahydro-3,8-dimethyl-5-(1-methylethyl)-naphthalenol  $C_{15}H_{24}O$  (220.36). Colorless oil. **Source:** DONG YA ZHI YE TAI *Lepidozia fauriana* (essential oil). **Ref:** 5209.

**1074 Ampelopsin**

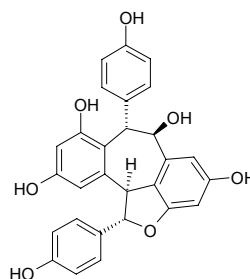
Dihydromyricetin [27200-12-0]  $C_{15}H_{12}O_8$  (320.26). White acicular crystals, mp 245~246°C. **Pharm:** Antioxidant. **Source:** BAI LIAN *Ampelopsis japonica* [Syn. *Paullinia japonica*], DA YE SHE PU TAO *Ampelopsis megalophylla* (stem and leaf: mean content = 58.54%<sup>[5508]</sup>), RI BEN LIAN XIANG SHU *Cercidiphyllum japonicum*, XIAN CHI SHE PU TAO *Ampelopsis grossedentata* [Syn. *Ampelopsis cantoniensis* var. *grossedentata*], ZHI JU ZI *Hovenia dulcis*, ZHU SHA DU JUAN *Rhododendron cinnabarinum*, *Pinus* sp., *Cedrus* sp. **Ref:** 6, 391, 466, 605, 658, 5508.

**1075 (+)-Ampelopsin A**

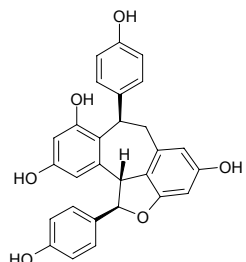
[130608-11-6]  $C_{28}H_{22}O_7$  (470.48). **Source:** GUANG YE SHE PU TAO *Ampelopsis brevipedunculata* var. *hancei*. **Ref:** 2233, 2234.

**1076 (-)-Ampelopsin A**

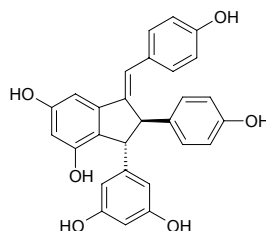
$C_{28}H_{22}O_7$  (470.48). Colorless solid.  $[\alpha]_D = -170^\circ$  ( $c = 0.09$ , MeOH). **Source:** XIAO HUA PO LEI *Hopea parviflora* (bark). **Ref:** 3936.

**1077 Ampelopsin B**

[130518-19-3]  $C_{28}H_{22}O_6$  (454.48). **Source:** GUANG YE SHE PU TAO *Ampelopsis brevipedunculata* var. *hancei*. **Ref:** 2233, 2234.

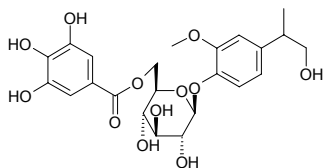
**1078 Ampelopsin D**

[149418-37-1]  $C_{28}H_{22}O_6$  (454.48). **Source:** GUANG YE SHE PU TAO *Ampelopsis brevipedunculata* var. *hancei*. **Ref:** 2234.

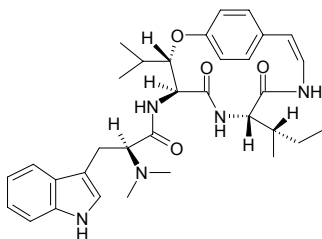


**1079 Ampelopsisin**

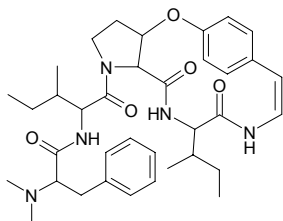
$C_{23}H_{28}O_{12}$  (496.47). White amorphous powder. Source: YU YE SHE PU TAO *Ampelopsis chaffanjonii*. Ref: 434.

**1080 Amphibine A**

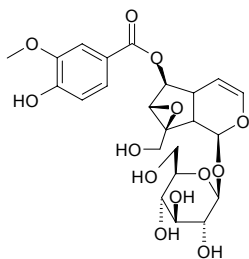
[36535-97-4]  $C_{33}H_{43}N_5O_4$  (573.74). Pharm: Antibacterial. Source: SHUI LU ZAO *Ziziphus amphibia*. Ref: 658.

**1081 Amphibine D**

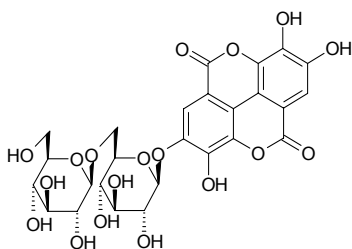
[38496-02-5]  $C_{36}H_{49}N_5O_5$  (631.82). Source: MIAN ZAO *Ziziphus mauritiana*. Ref: 6.

**1082 Amphicoside**

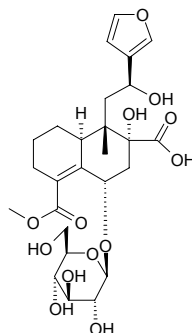
$C_{23}H_{28}O_{13}$  (512.47). Source: A LA BO PO PO NA *Veronica persica* (aerial parts). Ref: 4211.

**1083 Amritoside**

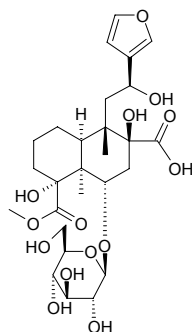
$C_{26}H_{26}O_{18}$  (626.49). mp 248~250°C. Source: FAN SHI LIU PI *Psidium guajava*, FAN SHI LIU YE *Psidium guajava*. Ref: 6.

**1084 Amritoside A**

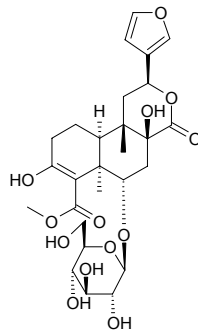
$C_{26}H_{36}O_{13}$  (556.57). Amritoside A pentaacetate: White crystals (MeOH), mp 138~139°C,  $[\alpha]_D^{22} = -53.6^\circ$  ( $c = 0.110$ ,  $CHCl_3$ ). Source: XIN XING YE QING NIU DAN *Tinospora cordifolia* (stem). Ref: 3822.

**1085 Amritoside B**

$C_{27}H_{40}O_{14}$  (588.61). Amritoside B pentaacetate: White solid, mp 157~158°C,  $[\alpha]_D^{22} = -37.9^\circ$  ( $c = 0.131$ ,  $CHCl_3$ ). Source: XIN XING YE QING NIU DAN *Tinospora cordifolia* (stem). Ref: 3822.

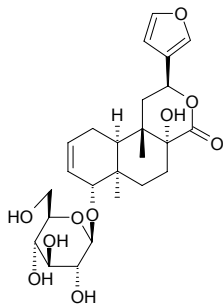
**1086 Amritoside C**

$C_{27}H_{36}O_{13}$  (568.58). Amritoside C pentaacetate: Powder,  $[\alpha]_D^{22} = -77.9^\circ$  ( $c = 0.101$ ,  $CHCl_3$ ). Source: XIN XING YE QING NIU DAN *Tinospora cordifolia* (stem). Ref: 3822.

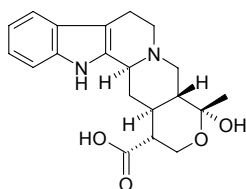


**1087 Amritoside D**

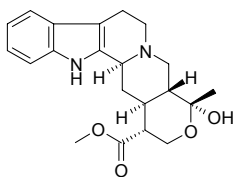
$C_{25}H_{34}O_{10}$  (494.54). Amritoside D pentaacetate: Powder,  $[\alpha]_D^{22} = -17.2^\circ$  ( $c = 0.120$ ,  $CHCl_3$ ). Source: XIN XING YE QING NIU DAN *Tinospora cordifolia* (stem). Ref: 3822.

**1088 Amsonic acid**

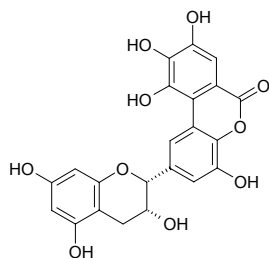
$C_{20}H_{24}N_2O_4$  (356.43). White powder, mp 278–280°C,  $[\alpha]_D^{12} = -16.7^\circ$  (MeOH). Source: SHUI GAN CAO *Amsonia sinensis*. Ref: 2092.

**1089 Amsosinine**

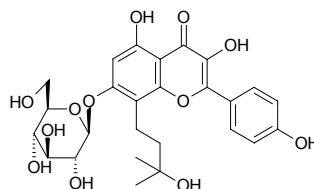
[136092-57-4]  $C_{21}H_{26}N_2O_4$  (370.45). Source: SHUI GAN CAO *Amsonia sinensis*. Ref: 2093.

**1090 Amurenisin**

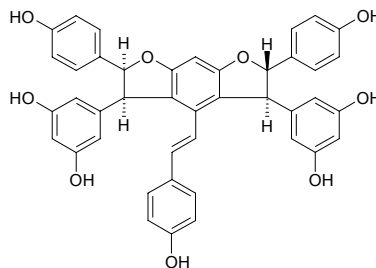
$C_{22}H_{16}O_{10}$  (440.37). White powder,  $[\alpha]_D^{22} = -47^\circ$  ( $c = 0.03$ , MeOH). Source: SHAN PU TAO *Vitis amurensis*. Ref: 772.

**1091 Amurensin**

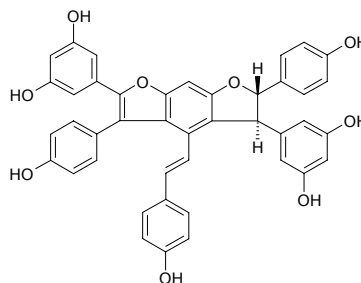
[641-94-1]  $C_{26}H_{30}O_{12}$  (534.52). mp 290°C. Pharm: Antioxidant (DPPH scavenger,  $IC_{50} = 94.0\mu\text{mol/L}$ , control Vitamin E,  $IC_{50} = 27.0\mu\text{mol/L}$ )<sup>[4502]</sup>, antioxidant (DPPH scavenger,  $IC_{50} = 88.3\mu\text{mol/L}$ ; control Vitamin E,  $IC_{50} = 8.3\mu\text{mol/L}$ ); tyrosinase inhibitor ( $333\mu\text{mol/L}$ , InRt = 15.4%; control Kojic acid,  $IC_{50} = 125\mu\text{mol/L}$ )<sup>[4722]</sup>. Source: HUANG BAI *Phellodendron amurense* (in 1935, the compound was isolated from the plant)<sup>[5505]</sup>, RI BEN HUANG BAI *Phellodendron japonicum* (leaf), TAI WAN HUANG BO *Phellodendron amurense* var. *wilsonii* (leaf: 2.57%dw)<sup>[4722]</sup>. Ref: 6, 4502, 4722, 5505.

**1092 Amurenisin B**

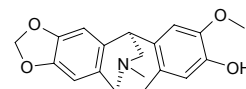
$C_{42}H_{32}O_9$  (680.72). Source: SHAN PU TAO *Vitis amurensis*. Ref: 2233, 2234.

**1093 Amurenisin D**

$C_{42}H_{30}O_9$  (678.70). Source: SHAN PU TAO *Vitis amurensis*. Ref: 2233, 2234.

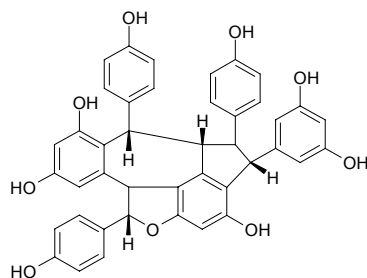
**1094 Amurensine**

[10481-92-2]  $C_{19}H_{19}NO_4$  (325.37). Pharm: Analgesic; antitussive (dispels phlegm); sedative. Source: GAO SHAN YING SU *Papaver alpinum*, HEI SHUI YE YING SU *Papaver nudicaule* ssp. *amurense*. Ref: 658.

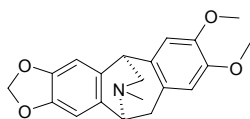


**1095 Amurensin G**

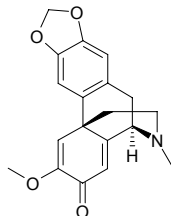
$C_{42}H_{32}O_9$  (680.72). Source: SHAN PU TAO *Vitis amurensis*. Ref: 2233, 2234.

**1096 Amurensinine**

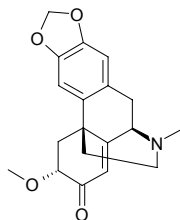
$C_{20}H_{21}NO_4$  (339.39). Source: DUO CI LV RONG HAO *Meconopsis horridula*, LIE YE YE YING SU *Papaver nudicaule* var. *chinense*. Ref: 660.

**1097 Amurine**

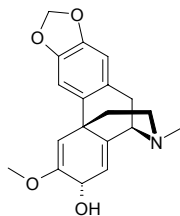
[4984-99-0]  $C_{19}H_{19}NO_4$  (325.34). Pharm: Analgesic; antitussive (dispels phlegm); sedative. Source: HEI SHUI YE YING SU *Papaver nudicaule* ssp. *amurense*, JU HUANG YING SU *Papaver auranticum*. Ref: 658.

**1098 Amurinine**

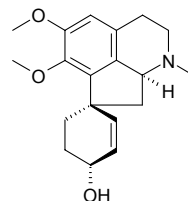
$C_{19}H_{21}NO_4$  (327.38). Source: YE YING SU *Papaver nudicaule*. Ref: 660.

**1099 Amurinol I**

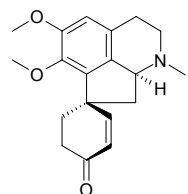
Nudaurine  $C_{19}H_{21}NO_4$  (327.38). Source: YE YING SU *Papaver nudicaule*. Ref: 660.

**1100 Amuroline**

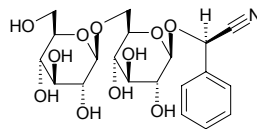
$C_{19}H_{25}NO_3$  (315.42). Source: HEI SHUI YE YING SU *Papaver nudicaule* ssp. *amurense*, LIE YE YE YING SU *Papaver nudicaule* var. *chinense*. Ref: 660.

**1101 Amurone**

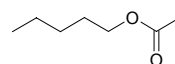
$C_{19}H_{23}NO_3$  (313.40). Source: HEI SHUI YE YING SU *Papaver nudicaule* ssp. *amurense*. Ref: 660.

**1102 Amygdalin**

[29883-15-6]  $C_{20}H_{27}NO_{11}$  (457.44). Colorless crystals, mp 223–226°C,  $[\alpha]_D^{20} = -41.96^\circ$ , easily soluble in boiling water, slightly soluble in EtOH, almost insoluble in ether.<sup>[5507]</sup> Pharm: MLD (hmn) = 0.5–3.5mg/kg. Source: BA DAN XING REN *Prunus amygdalus*, CI WU JIA *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*], FU LANG HUA *Gerbera jamesonii*, LI HE REN *Prunus salicina*, LI ZI *Prunus salicina*, MEI HE REN *Prunus mume*, PI PA *Eriobotrya japonica*, PI PA HE *Eriobotrya japonica*, PI PA YE *Eriobotrya japonica*, SHAN XING REN *Prunus armeniaca* var. *ansu* ( $\approx 2\%$ <sup>[5507]</sup>), SHAN XING REN *Prunus armeniaca* var. *ansu* (dried ripe seed: content = 5.02%<sup>[5508]</sup>), SHAN ZHA *Crataegus pinnatifida*, TAO *Prunus persica*, TAO REN *Prunus persica* (dried ripe seed: content scope = 2.24%–3.68%, mean content = 3.84%<sup>[5508]</sup>), TIAN SHAN HUA QIU *Sorbus tianschanica*, WEN PO *Cydonia oblonga*, WU MEI *Prunus mume*, XING REN *Prunus armeniaca* (content scope = 3.19%–5.50%<sup>[5501]</sup>), XING REN *Prunus armeniaca* (dried ripe seed: mean content of 2 origins = 5.51%<sup>[5508]</sup>), YING GUO SHAN ZHA *Crataegus oxyacantha*, YU LI REN *Prunus japonica* [Syn. *Cerasus japonica*]. Ref: 2, 4, 530, 658, 660, 5501, 5507, 5508.

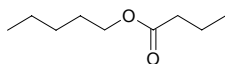
**1103 Amyl acetate**

Pentyl ethanoate [628-63-7]  $C_7H_{14}O_2$  (130.19). bp 148°C/737mmHg. Source: JIU Liquor. Ref: 6.

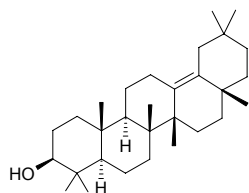


**1104 Amyl butyrate**

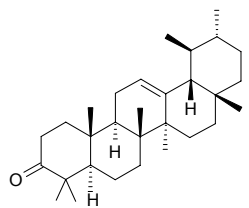
Pentyl butanoate [540-18-1]  $C_9H_{18}O_2$  (158.24). bp 185°C. Source: JIU Liquor. Ref: 6.

**1105  $\delta$ -Amyrenol**

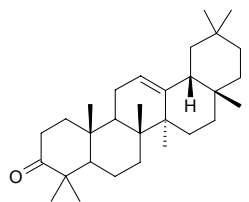
$C_{30}H_{50}O$  (426.73). mp 212.0~213.5°C. Source: XIAO JIAN CAO *Sedum bulbiferum*. Ref: 6.

**1106  $\alpha$ -Amyrenone**

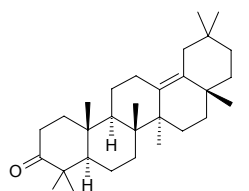
[638-96-0]  $C_{30}H_{48}O$  (424.72). Colorless acicular crystals (chloroform-methanol), mp 119~121°C. Source: QIU HUA NIU NAI CAI *Marsdenia globifera*. Ref: 464.

**1107  $\beta$ -Amyrenone**

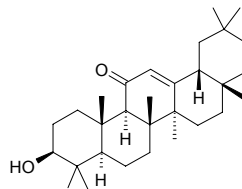
$C_{30}H_{48}O$  (424.72). Pharm: DPPH scavenger inactive (for 40  $\mu$ mol/L DPPH radical,  $SC_{50} > 40 \mu$ mol/L)<sup>[4378]</sup>; cytotoxic inactive (A2780 ovarian cancer cell line,  $IC_{50} = 26.8 \text{ mg/mL}$ )<sup>[5379]</sup>. Source: MU SHU DI SHANG BU FEN *Manihot esculenta*, SUO LA MU *Salacia prinooides* [Syn. *Salacia chinensis*] (stem). Ref: 4378, 5379.

**1108  $\delta$ -Amyrenone**

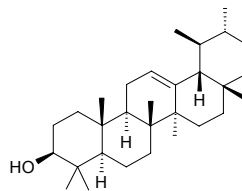
$\delta$ -Amyrone [20248-08-2]  $C_{30}H_{48}O$  (424.72). mp 198~201°C. Source: XIAO JIAN CAO *Sedum bulbiferum*. Ref: 6.

**1109  $\beta$ -Amyrenonol**

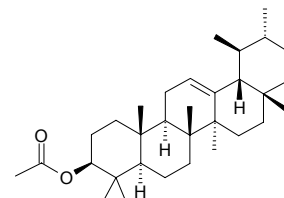
11-Oxo-3 $\beta$ -hydroxy-olean-12-ene  $C_{30}H_{48}O_2$  (440.72). Grained crystals (EtOAc), easily soluble in  $CHCl_3$ , MeOH, mp 188~190°C; mp 229~230°C. Source: SHAN REN YE *Rhodomyrtus tomentosa*, SI CHUAN QING FENG TENG *Sabia schumanniana* (aerial parts). Ref: 6, 4883.

**1110  $\alpha$ -Amyrin**

Urs-12-en-3 $\beta$ -ol [638-95-9]  $C_{30}H_{50}O$  (426.73). White acicular crystals (chloroform-methanol), mp 180~186°C. Pharm: 15-Lipoxygenase inhibitor ( $IC_{50} = (15 \pm 3) \mu$ mol/L)<sup>[4953]</sup>. Source: AI YE *Artemisia argyi*, CHI YANG *Alnus japonica*, DA JI<sup>(4)</sup> *Cirsium japonicum*, HUANG LONG DAN *Gentiana lutea* (rhizome and root), HUI BAO HAO *Artemisia roxbugiana*, JU QU *Cichorium intybus*, LUO DI SHENG GEN *Bryophyllum pinnatum*, MA QIAN ZI *Strychnos nux-vomica*, MAO LIAN HAO *Artemisia vestita*, MI DIE XIANG *Rosmarinus officinalis*, PAI QIAN CAO GEN *Desmodium pulchellum* [Syn. *Phylloidium pulchellum*], QING GUO *Canarium album*, QIU HUA NIU NAI CAI *Marsdenia globifera*, SAI ER WEI YA SHI CAO *Achillea alexandri-regis*, SHAN LI HONG *Crataegus pinnatifida* var. *major*, XI CHANG NAN MEI DOU *Anadenanthera colubrine* (aerial parts), XIANG JIA PI *Periploca sepium*, XIANG PI MU *Alstonia scholaris*, XIAO QIAO MU ZI JIN NIU *Ardisia arborescens* (whole herb)<sup>[4769]</sup>, XIN JIANG LAN CI TOU *Echinops ritro*, YANG MEI *Myrica rubra*, ZAN BI XI BA DOU *Croton zambesicus* (leaf), occurs in many plants. Ref: 6, 464, 474, 503, 620, 660, 2545, 3807, 4307, 4769, 4953.

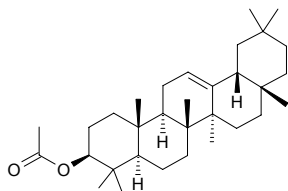
**1111  $\alpha$ -Amyrin acetate**

$C_{32}H_{52}O_2$  (468.77). White scale crystals (chloroform-methanol), mp 220~226°C. Source: AI YE *Artemisia argyi*, CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochera rosea*], HUI BAO HAO *Artemisia roxbugiana*, LU ZHU GEN *Arundo donax*, QIU HUA NIU NAI CAI *Marsdenia globifera*, WU MU XIE *Diospyros ebenum*, XIANG JIA PI *Periploca sepium*, XIANG PI MU *Alstonia scholaris*, XIN JIANG LAN CI TOU *Echinops ritro*. Ref: 6, 503, 660.

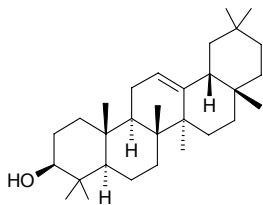


**1112  $\beta$ -Amyrin acetate**

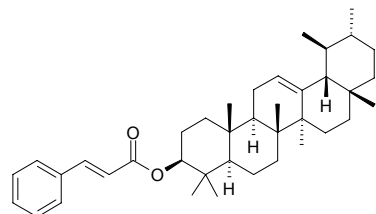
$C_{32}H_{52}O_2$  (468.77). mp 236°C. Source: BI LI *Ficus pumila*, DA JI<sup>(4)</sup> *Cirsium japonicum*, DI SHAO GUA *Cynanchum thesioides*, FU LING *Poria cocos*, HUI BAO HAO *Artemisia roxburgiana*, LU ZHU GEN *Arundo donax*, WU TONG YE, *Firmiana simplex*, XIANG JIA PI *Periploca sepium*. Ref: 6, 236, 503, 536.

**1113  $\beta$ -Amyrin**

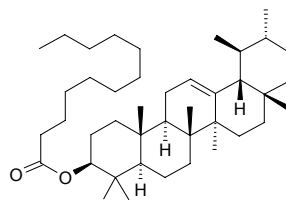
[559-70-6]  $C_{30}H_{50}O$  (426.73). mp 197.0~197.5°C. Pharm: DPPH scavenger inactive (for 40 $\mu$ mol/L DPPH radical,  $SC_{50} > 40\mu$ mol/L)<sup>[4378]</sup>; cytotoxic inactive (A2780 ovarian cancer cell line,  $IC_{50} = 21.6\text{mg/mL}$ )<sup>[5379]</sup>. Source: CHI YANG *Alnus japonica*, CU LIU GUO *Hippophae rhamnoides*, DA FEI YANG CAO *Euphorbia hirta*, DA JI<sup>(4)</sup> *Cirsium japonicum*, DA YE DONG QING *Ilex latifolia*, DUO SUI SHI KE YE *Lithocarpus polystachyus*, GE XUN *Balanophora japonica*, GOU QI ZI *Lycium chinense*, HUANG LONG DAN *Gentiana lutea* (rhizome and root), HUO YANG LE *Euphorbia antiqorum*, JIU BI YING *Ilex rotunda*, LONG XU CAO *Poa sphondylodes*, LUO DI SHENG GEN *Bryophyllum pinnatum*, MAO YE BA DOU *Croton caudatus* var. *tomentosus*, MI DIE XIANG *Rosmarinus officinalis*, MU SHU DI SHANG BU FEN *Manihot esculenta*, QIU FENG MU *Bischofia javanica* [Syn. *Bischofia trifoliata*], SAI ER WEI YA SHI CAO *Achillea alexandri-regis*, SANG JI SHENG *Loranthus parasiticus* [Syn. *Loranthus chinensis*; *Taxillus chinensis*], SHAN REN YE *Rhodomyrtus tomentosa*, SHAN WO JU *Lactuca indica*, SHE PU TAO *Ampelopsis brevipedunculata*, SUO LA MU *Salacia prinoides* [Syn. *Salacia chinensis*] (stem), TAI WAN XIU XIAN JU *Spiraea formosana*, WU HUA GUO YE *Ficus carica*, WU TONG YE, *Firmiana simplex*, XI YE DA JI *Euphorbia esula* var. *cyparissoides*, XIANG JIA PI *Periploca sepium*, XIANG SI ZI *Abrus precatorius*, YANG MEI *Myrica rubra*, YAO YONG PU GONG YING *Taraxacum officinale*, occurs in many plants. Ref: 2, 6, 408, 552, 660, 2545, 2575, 4307, 4378, 5379.

**1114  $\alpha$ -Amyrin cinnamate**

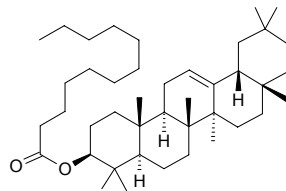
$C_{39}H_{56}O_2$  (556.88). Crystals, mp 97~100°C. Source: SU KU BA DOU HUA *Himatanthus succuba*. Ref: 4143.

**1115  $\alpha$ -Amyrin laurate**

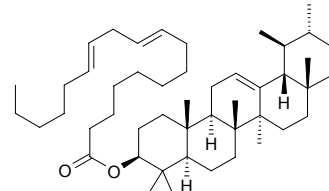
$C_{42}H_{72}O_2$  (609.04). Source: TIAN WEN CAO *Spilanthes acmella*. Ref: 6.

**1116  $\beta$ -Amyrin laurate**

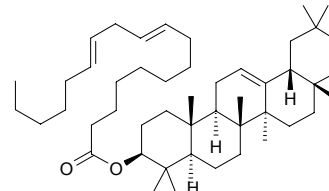
$C_{42}H_{72}O_2$  (609.04). Source: TIAN WEN CAO *Spilanthes acmella*. Ref: 6.

**1117  $\alpha$ -Amyrin linoleate**

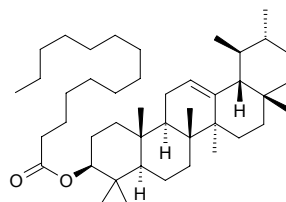
$C_{48}H_{80}O_2$  (689.17). Source: TIAN WEN CAO *Spilanthes acmella*. Ref: 6.

**1118  $\beta$ -Amyrin linoleate**

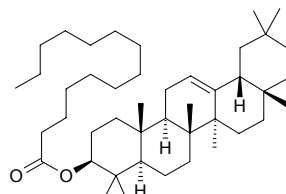
$C_{48}H_{80}O_2$  (689.17). Source: TIAN WEN CAO *Spilanthes acmella*. Ref: 6.

**1119  $\alpha$ -Amyrin myristate**

$C_{44}H_{76}O_2$  (637.10). Source: TIAN WEN CAO *Spilanthes acmella*. Ref: 6.

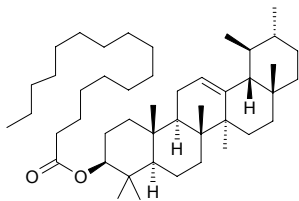
**1120  $\beta$ -Amyrin myristate**

$C_{44}H_{76}O_2$  (637.10). Source: TIAN WEN CAO *Spilanthes acmella*. Ref: 6.

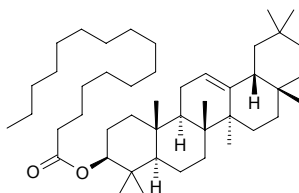


**1121  $\alpha$ -Amyrin palmitate**

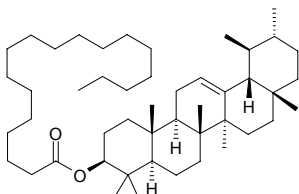
[22255-10-3] C<sub>46</sub>H<sub>80</sub>O<sub>2</sub> (665.15). White lamellar crystals (acetone-methanol), mp 114~116°C. Source: MENG GU SHAN LUO BO *Scabiosa comosa*, QIU HUA NIU NAI CAI *Marsdenia globifera*, TIAN WEN CAO *Spilanthes acmella*. Ref: 6, 464.

**1122  $\beta$ -Amyrin palmitate**

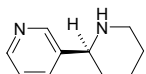
Balanophorin A C<sub>46</sub>H<sub>80</sub>O<sub>2</sub> (665.15). White amorphous powder (acetone), mp 77°C, soluble in chloroform and benzene. Source: MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*], TIAN WEN CAO *Spilanthes acmella*, YIN DU SHE GU *Balanophora indica* [Syn. *Langodorfia indica*]. Ref: 2, 6, 423, 660.

**1123  $\alpha$ -Amyrin stearate**

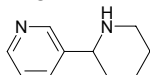
C<sub>48</sub>H<sub>84</sub>O<sub>2</sub> (693.20). Source: MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*]. Ref: 2.

**1124 Anabasine**

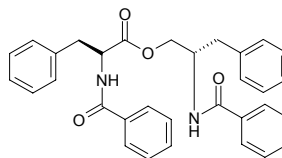
Neonicotine; 3-(2-Piperidinyl)pyridine [494-52-0] C<sub>10</sub>H<sub>14</sub>N<sub>2</sub> (162.24). bp (-) 276°C; soluble in water and most of organic solvents<sup>[5507]</sup>. Pharm: Insecticidal; respiratory stimulant. Source: BAI RI CAO *Zinnia elegans*, GUA MU *Alangium platanifolium*, JIAN XING YAN CAO *Nicotiana acuminata*, MAO BA JIAO FENG *Alangium kurzii*, WU YE JIA MU ZEII *Anabasis aphylla*, YAN CAO *Nicotiana tabacum*. Ref: 6, 658, 5507.

**1125 ( $\pm$ )-Anabasine**

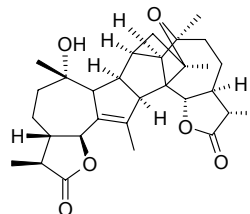
[13078-04-1] C<sub>10</sub>H<sub>14</sub>N<sub>2</sub> (162.24). Alkaline colorless crystals liquid, slightly pungent, easy dissolved in water and common organic solvent, can be distilled with vapor, bp 110°C/1mmHg, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = 0°. Pharm: Muscle relaxant; neuromuscular blocker (effective component in *Alangium chinense* BA JIAO FENG); pesticide; toxin (acute or inferior acute). Source: BA JIAO FENG *Alangium chinense*, YAN CAO *Nicotiana tabacum*. Ref: 658, 661.

**1126 Anabellamide**

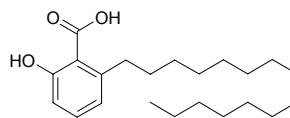
C<sub>32</sub>H<sub>30</sub>N<sub>2</sub>O<sub>4</sub> (506.61). Source: LIU JI NU *Artemisia anomala*. Ref: 660.

**1127 Anabsinthin**

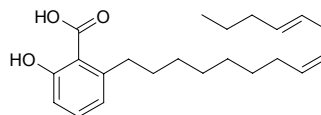
C<sub>30</sub>H<sub>40</sub>O<sub>6</sub> (496.65). mp 267°C, [ $\alpha$ ]<sub>D</sub> = +113° (c = 0.10, CHCl<sub>3</sub>). Source: YOU RUI XIANG *Daphne oleoides*. Ref: 2302.

**1128 Anacardic acid A**

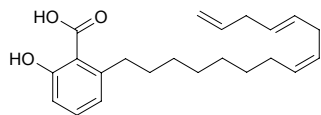
Hydroginkgolic acid [16611-84-0] C<sub>22</sub>H<sub>36</sub>O<sub>3</sub> (348.53). mp 92.5~93°C. Pharm: Antineoplastic. Source: BAI GUO *Ginkgo biloba*, BAI GUO YE *Ginkgo biloba*, DU XIAN ZI *Anacardium occidentale*. Ref: 2, 6, 658, 660.

**1129 Anacardic acid C**

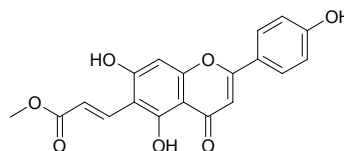
C<sub>22</sub>H<sub>32</sub>O<sub>3</sub> (344.50). Source: BAI GUO *Ginkgo biloba*. Ref: 2.

**1130 Anacardic acid D**

C<sub>22</sub>H<sub>30</sub>O<sub>3</sub> (342.48). Source: BAI GUO *Ginkgo biloba*. Ref: 2.

**1131 Anadanthoflavone**

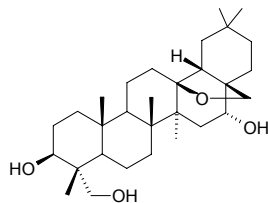
C<sub>19</sub>H<sub>14</sub>O<sub>7</sub> (354.32). Yellow powder, mp 290°C (dec). Pharm: 12-Lipoxygenase inhibitor (hmn platelet, IC<sub>50</sub> = (13±3)μmol/L); 15-lipoxygenase inhibitor (hmn reticulocyte, IC<sub>50</sub> = (17±3)μmol/L). Source: XI CHANG NAN MEI DOU *Anadenanthera colubrina* (aerial parts). Ref: 4953.



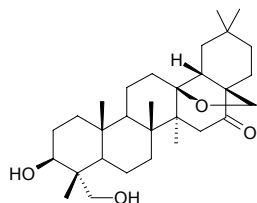


**1132 Anagalligenin B**

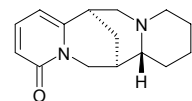
$C_{30}H_{50}O_4$  (474.73). Source: LIU LI FAN LV *Anagallis arvensis*. Ref: 660.

**1133 Anagalligenone B**

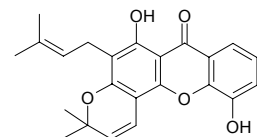
$C_{30}H_{48}O_4$  (472.71). Source: LIU LI FAN LV *Anagallis arvensis*. Ref: 660.

**1134 Anagyrine**

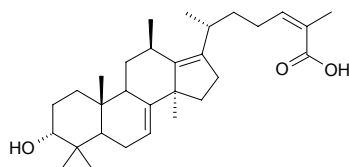
[486-89-5]  $C_{15}H_{20}N_2O$  (244.34). bp (-) 210–215°C/4mmHg. Pharm: Causes tachycardia; ganglionic blocker; CNS stimulant (reflective); teratogen; supertoxic agent. Source: CHOU WEI HONG DOU *Anagryis foetida*, DU DOU *Laburnum anagyroides*, SHAN DOU GEN *Sophora subprostrata* [Syn. *Sophora tonkinensis*], KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*], MU MA DOU *Thermopsis lanceolata*. Ref: 6, 658.

**1135 Ananixanthone**

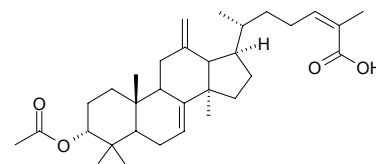
1-Deoxymorusignin J  $C_{23}H_{22}O_5$  (378.43). Pharm: Antibacterial (MRSA, MIC = 32µg/mL; control Vancomycin, MIC = 2µg/mL)<sup>[4735]</sup>. Source: HEI XIAN TIAO TENG HUANG *Garcinia nigrolineata* (leaf: yield = 0.0002%dw)<sup>[4735]</sup>, KA MAI LONG XIN FO NI A *Symphonia globulifera*. Ref: 1521, 4735.

**1136 Ananolic acid A**

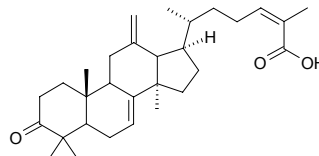
18-(13→12β)-Abeo-lanostene triterpenoid acid  $C_{30}H_{46}O_3$  (454.70). Colorless crystals, mp 132–134°C,  $[\alpha]_D = -67.7^\circ$  ( $c = 0.65$ ,  $CHCl_3$ ). Pharm: Cytotoxic (*in vitro*, murine leukemia ATCC: CCRF-CEM,  $IC_{50} = 45.4\mu g/mL$ ; HeLa ATCC-17 cells,  $IC_{50} = 0.46\mu g/mL$ )<sup>[4749]</sup>. Source: BO LUO XIANG TENG *Kadsura ananosma*, BO LUO XIANG TENG *Kadsura ananosma* (stem bark). Ref: 4749, 5242.

**1137 Ananolic acid B**

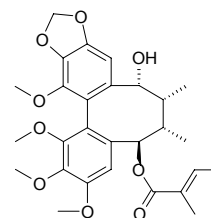
$C_{32}H_{48}O_4$  (496.74). Amorphous powder,  $[\alpha]_D = -55.0^\circ$  ( $c = 0.10$ ,  $CHCl_3$ ). Pharm: Cytotoxic (*in vitro*, murine leukemia ATCC: CCRF-CEM,  $IC_{50} = 49.6\mu g/mL$ ; HeLa ATCC-17 cells,  $IC_{50} = 0.54\mu g/mL$ ). Source: BO LUO XIANG TENG *Kadsura ananosma* (stem: yield = 0.0029%dw). Ref: 4749.

**1138 Ananolic acid C**

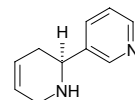
$C_{30}H_{44}O_3$  (452.68). Amorphous powder,  $[\alpha]_D = -62.0^\circ$  ( $c = 0.1$ ,  $CHCl_3$ ). Pharm: Cytotoxic (*in vitro*, murine leukemia ATCC: CCRF-CEM,  $IC_{50} = 45.2\mu g/mL$ ; HeLa ATCC-17 cells,  $IC_{50} = 0.48\mu g/mL$ ). Source: BO LUO XIANG TENG *Kadsura ananosma* (stem: yield = 0.0013%dw). Ref: 4749.

**1139 Ananosin A**

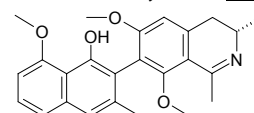
Dibenzocyclooctadiene lignan  $C_{28}H_{34}O_9$  (514.58). Colorless crystals, mp 132–134°C,  $[\alpha]_D = -16.5^\circ$  ( $c = 0.59$ ,  $CHCl_3$ ). Source: BO LUO XIANG TENG *Kadsura ananosma* (stem bark). Ref: 5242.

**1140 Anatabine**

[581-49-7]  $C_{10}H_{12}N_2$  (160.22). bp (-) 145–146°C/10mmHg. Source: YAN CAO *Nicotiana tabacum*. Ref: 6.

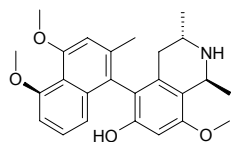
**1141 Ancistrocladidine**

$C_{25}H_{27}NO_4$  (405.50). Amorphous solid,  $[\alpha]_D^{25} = -122.3^\circ$  ( $c = 0.05$ , MeOH);  $[\alpha]_D^{25} = -129.7^\circ$  ( $c = 0.06$ ,  $CHCl_3$ ). Pharm: Antimalarial (*Plasmodium falciparum* K1,  $IC_{50} = 0.3\mu g/mL$ , control Chloroquine,  $IC_{50} = 0.041\mu g/mL$ ); antileishmanial (*Leishmania donovani*,  $IC_{50} = 2.9\mu g/mL$ ; control Miltefosine,  $IC_{50} = 0.31\mu g/mL$ ); antitrypanosomal (Chagas' disease, *Trypanosoma cruzi*,  $IC_{50} = 23.4\mu g/mL$ , control Benznidazole,  $IC_{50} = 0.53\mu g/mL$ ; African sleeping sickness, *Trypanosoma brucei rhodesiense*,  $IC_{50} = 2\mu g/mL$ , control Melarsoprol,  $IC_{50} = 0.00046\mu g/mL$ ). Source: HAI NI GOU ZHI TENG *Ancistrocladus heyneanus*. Ref: 3872.

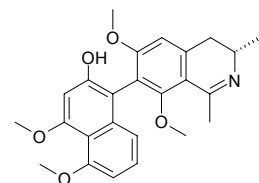


**1142 Ancistrocladine**

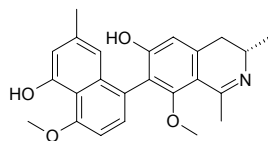
$C_{25}H_{29}NO_4$  (407.51). Source: HAI NI GOU ZHI TENG *Ancistrocladus heyneanus*. Ref: 3872.

**1143 Ancistrocladisine**

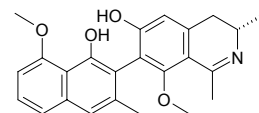
$C_{25}H_{27}NO_5$  (421.50). Source: HAI NI GOU ZHI TENG *Ancistrocladus heyneanus*. Ref: 3872.

**1144 Ancistroheynine A**

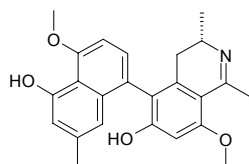
$C_{24}H_{25}NO_4$  (391.47). Source: HAI NI GOU ZHI TENG *Ancistrocladus heyneanus*. Ref: 3872.

**1145 Ancistroheynine B**

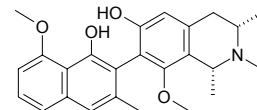
$C_{24}H_{25}NO_4$  (391.47). Yellow oil,  $[\alpha]_D^{25} = -194.9^\circ$  ( $c = 0.025$ , MeOH). Pharm: Antimalarial (*Plasmodium falciparum* K1,  $IC_{50} = 0.5\mu\text{g/mL}$ , control Chloroquine,  $IC_{50} = 0.041\mu\text{g/mL}$ ); antileishmanial (*Leishmania donovani*,  $IC_{50} = 22.3\mu\text{g/mL}$ ; control Miltefosine,  $IC_{50} = 0.31\mu\text{g/mL}$ ); antitrypanosomal (Chagas' disease, *Trypanosoma cruzi*,  $IC_{50} = 47.5\mu\text{g/mL}$ , control Benznidazole,  $IC_{50} = 0.53\mu\text{g/mL}$ ); African sleeping sickness, *Trypanosoma brucei rhodesiense*,  $IC_{50} = 2.9\mu\text{g/mL}$ , Melarsoprol,  $IC_{50} = 0.00046\mu\text{g/mL}$ ). Source: HAI NI GOU ZHI TENG *Ancistrocladus heyneanus*. Ref: 3872.

**1146 Ancistrollokine D**

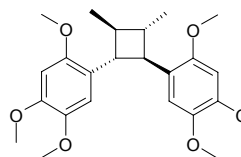
$C_{24}H_{25}NO_4$  (391.47). Colorless solid, mp 122~124°  $[\alpha]_D^{25} = +191.6^\circ$  ( $c = 0.15$ ,  $CHCl_3$ ). Pharm: Antileishmanial (*Leishmania donovani*); antitrypanosomal (*Trypanosoma cruzi*, and *Trypanosoma brucei rhodesiense*). Source: ZHONG FEI GOU ZHI TENG *Ancistrocladus likoko*. Ref: 2024.

**1147 Ancistrotanzanine C**

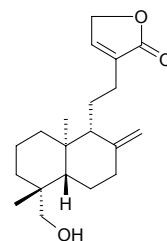
$C_{25}H_{29}NO_4$  (407.51). Yellow oil,  $[\alpha]_D^{25} = -76.0^\circ$  ( $c = 0.01$ ,  $CHCl_3$ );  $[\alpha]_D^{25} = -75.5^\circ$  ( $c = 0.01$ ,  $CHCl_3$ ). Pharm: Antimalarial (*Plasmodium falciparum* K1,  $IC_{50} = 0.1\mu\text{g/mL}$ , control Chloroquine,  $IC_{50} = 0.041\mu\text{g/mL}$ ); antitrypanosomal (Chagas' disease, *Trypanosoma cruzi*,  $IC_{50} = 14\mu\text{g/mL}$ , control Benznidazole,  $IC_{50} = 0.53\mu\text{g/mL}$ ); African sleeping sickness, *Trypanosoma brucei rhodesiense*,  $IC_{50} = 1.3\mu\text{g/mL}$ , control Melarsoprol,  $IC_{50} = 0.00046\mu\text{g/mL}$ ). Source: HAI NI GOU ZHI TENG *Ancistrocladus heyneanus*. Ref: 3872.

**1148 Andamanicin**

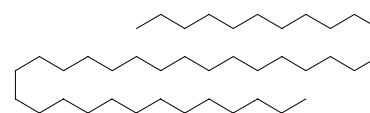
[130323-08-9]  $C_{24}H_{32}O_6$  (416.52). Source: SHI JI NING *Mosla scabra* [Syn. *Mosla punctata*]. Ref: 740.

**1149 Andrograpanin**

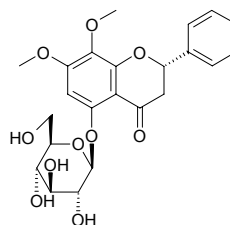
$C_{20}H_{30}O_3$  (318.46). Source: CHUAN XIN LIAN *Andrographis paniculata* [Syn. *Justicia paniculata*]. Ref: 660.

**1150 Andrographan**

$C_{40}H_{82}$  (563.10). Source: CHUAN XIN LIAN *Andrographis paniculata* [Syn. *Justicia paniculata*]. Ref: 2.

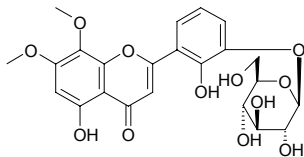
**1151 Andrographidine A**

[113963-37-4]  $C_{23}H_{26}O_{10}$  (462.46). Source: CHUAN XIN LIAN *Andrographis paniculata* [Syn. *Justicia paniculata*]. Ref: 2.

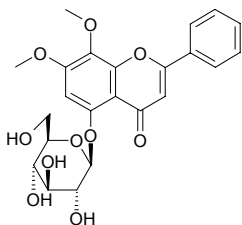


**1152 Andrographidine B**

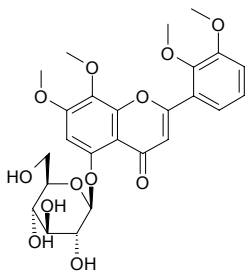
[113963-38-5] C<sub>23</sub>H<sub>24</sub>O<sub>12</sub> (492.44). Source: CHUAN XIN LIAN *Andrographis paniculata* [Syn. *Justicia paniculata*]. Ref: 2.

**1153 Andrographidine C**

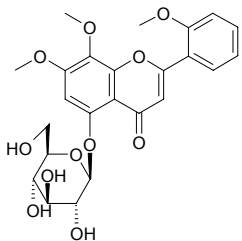
[113963-39-6] C<sub>23</sub>H<sub>24</sub>O<sub>10</sub> (460.44). Source: CHUAN XIN LIAN *Andrographis paniculata* [Syn. *Justicia paniculata*]. Ref: 2.

**1154 Andrographidine D**

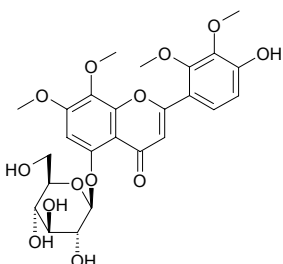
[113963-40-9] C<sub>25</sub>H<sub>28</sub>O<sub>12</sub> (520.49). Source: CHUAN XIN LIAN *Andrographis paniculata* [Syn. *Justicia paniculata*]. Ref: 2.

**1155 Andrographidine E**

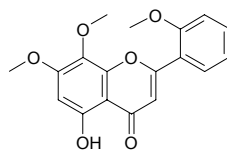
[113963-41-0] C<sub>24</sub>H<sub>26</sub>O<sub>11</sub> (490.47). Source: CHUAN XIN LIAN *Andrographis paniculata* [Syn. *Justicia paniculata*]. Ref: 2.

**1156 Andrographidine F**

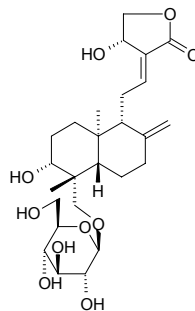
C<sub>25</sub>H<sub>28</sub>O<sub>13</sub> (536.49). Source: CHUAN XIN LIAN *Andrographis paniculata* [Syn. *Justicia paniculata*]. Ref: 2, 660.

**1157 Andrographin**

[1165-40-8] C<sub>18</sub>H<sub>16</sub>O<sub>6</sub> (328.22). mp 190~191°C. Source: CHUAN XIN LIAN *Andrographis paniculata* [Syn. *Justicia paniculata*]. Ref: 2.

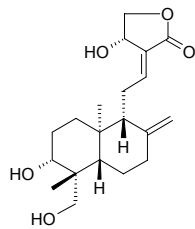
**1158 Andrographoside**

Andrographoside [82209-76-5] C<sub>26</sub>H<sub>40</sub>O<sub>10</sub> (512.60). Source: CHUAN XIN LIAN *Andrographis paniculata* [Syn. *Justicia paniculata*]. Ref: 2, 660, 1521.

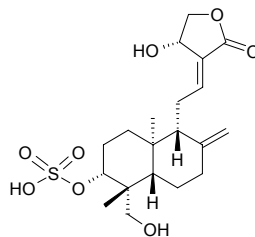
**1159 Andrographolide**

[5508-58-7] C<sub>20</sub>H<sub>30</sub>O<sub>5</sub> (350.46). mp 230~231°C, [α]<sub>D</sub><sup>17</sup> = -126.6° (ice vinegar), slightly soluble in water, soluble in ethanol, chloroform, acetone, ether.<sup>[5507]</sup>

Pharm: Antibacterial; treatment of bacillary dysentery and inflammation of upper-respiratory tract, anti-inflammatory (NO production inhibitor)<sup>[4415]</sup>. Source: CHUAN XIN LIAN *Andrographis paniculata* [Syn. *Justicia paniculata*] (dried aerial parts: content = 1.5%<sup>[5508]</sup>, in 1971 isolated from the plant by H.W.Fehlhaber<sup>[5505]</sup>). Ref: 4, 658, 1521, 4415, 5501, 5505, 5507, 5508.

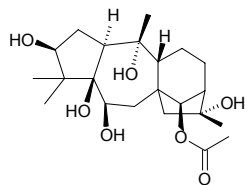
**1160 Andrographolide-3-O-sulfate**

C<sub>20</sub>H<sub>30</sub>O<sub>8</sub>S (430.52). White amorphous powder. Source: REN NIAO *Homo sapiens*. Ref: 4300.

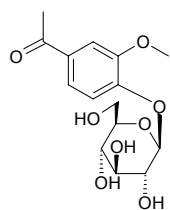


**1161 Andromedotoxin**

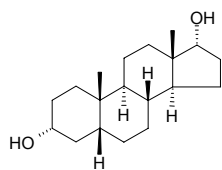
[4720-09-6]  $C_{22}H_{36}O_7$  (412.53). mp 267~270°C. **Pharm:** Cytotoxic (mus *in vitro*,  $ED_{50} = 60\mu\text{g/mL}$ );  $LD_{50}$  (mus, ip) = 1.31mg/kg. **Source:** DU JUAN HUA *Rhododendron simsii*, DU JUAN HUA YE *Rhododendron simsii*, LONG SHU DU JUAN *Rhododendron przewalskii* (leaf: content = 0.10%<sup>[5508]</sup>), MAN SHAN HONG *Rhododendron dauricum*, MEI TE NI DU JUAN HUA *Rhododendron metternichii* var. *hondoese*, NAO YANG HUA *Rhododendron molle*, ZHAO SHAN BAI *Rhododendron micranthum*. **Ref:** 4, 6, 658, 5508.

**1162 Androsin**

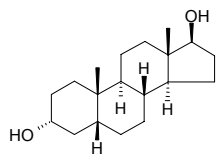
[531-28-2]  $C_{15}H_{20}O_8$  (328.32). White acicular crystals (hot water), mp 226°C,  $[\alpha]_D = -47.1^\circ$  ( $c = 0.01$ , water). **Pharm:** Antihepatotoxin (rat, liver damage caused by  $CCl_4$  or GalN); antiasthmatic (gpg, bronchus contraction caused by ovalbumin and PAF); 11- $\beta$ -hydroxylase inhibitor; antioxidant inactive (hydroxyl radical scavenger,  $IC_{50} > 400\mu\text{mol/L}$ , control Ascorbic acid,  $IC_{50} = 51.8\mu\text{mol/L}$ , superoxide anion radical scavenger,  $IC_{50} > 400\mu\text{mol/L}$ , control Ascorbic acid,  $IC_{50} = 86.2\mu\text{mol/L}$ )<sup>[4289]</sup>. **Source:** FAN QIE *Lycopersicon esculentum*, HU HUANG LIAN *Picrorhiza kurroa*, XI ZANG HU HUANG LIAN *Picrorhiza scrophulariiflora*. **Ref:** 900, 4289.

**1163 5 $\beta$ -Androstan-3 $\alpha$ ,17 $\alpha$ -diol**

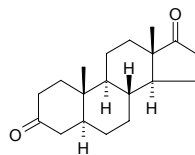
3 $\alpha$ ,17 $\alpha$ -Dihydroxy-5 $\beta$ -androstan-3 $\alpha$ ,17 $\alpha$ -diol [5856-10-0]  $C_{19}H_{32}O_2$  (292.47). **Source:** SHE XIANG *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*. **Ref:** 2.

**1164 5 $\beta$ -Androstan-3 $\alpha$ ,17 $\beta$ -diol**

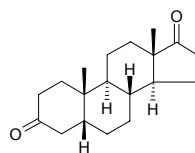
3 $\alpha$ ,17 $\beta$ -Dihydroxy-5 $\beta$ -androstan-3 $\alpha$ ,17 $\beta$ -diol [1851-23-6]  $C_{19}H_{32}O_2$  (292.47). **Source:** SHE XIANG *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*. **Ref:** 2, 660.

**1165 5 $\alpha$ -Androstan-3,17-dione**

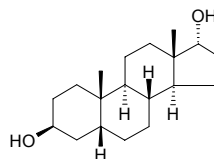
[846-46-8]  $C_{19}H_{28}O_2$  (288.43). **Source:** SHE XIANG *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*. **Ref:** 2.

**1166 5 $\beta$ -Androstan-3,17-dione**

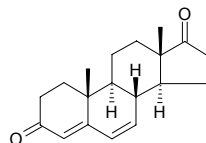
[1229-12-5]  $C_{19}H_{28}O_2$  (288.43). **Source:** SHE XIANG *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*. **Ref:** 2.

**1167 5 $\alpha$ -Androstane-3 $\beta$ ,17 $\alpha$ -diol**

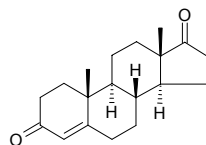
3 $\beta$ ,17 $\alpha$ -Dihydroxy-5 $\alpha$ -androstan-3 $\beta$ ,17 $\alpha$ -diol  $C_{19}H_{32}O_2$  (292.47). **Source:** SHE XIANG *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*. **Ref:** 2, 660.

**1168 Androst-4,6-diene-3,17-dione**

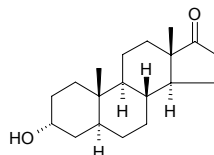
[633-34-1]  $C_{19}H_{24}O_2$  (284.40). **Source:** SHE XIANG *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*. **Ref:** 2.

**1169 Androst-4-ene-3,17-dione**

[63-05-8]  $C_{19}H_{26}O_2$  (286.42). **Pharm:** Androgen (similar action with androgen). **Source:** OU ZHOU CHI SONG *Pinus sylvestris*, SHE XIANG *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*. **Ref:** 2, 658.

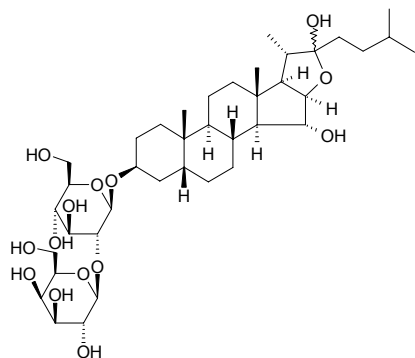
**1170 Androsterone**

3-Epihydroxyetioallocholan-17-one [53-41-8]  $C_{19}H_{30}O_2$  (290.45). mp 178°C. **Source:** SHE XIANG *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*, ZI HE CHE *Homo sapiens*. **Ref:** 2, 6.

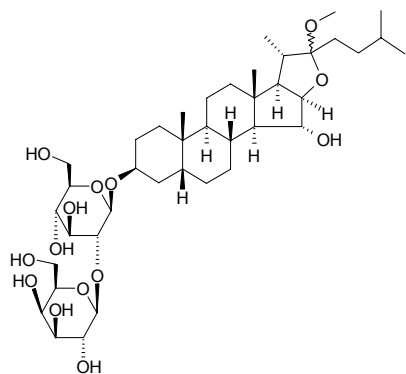


**1171 Anemarrhenasaponin I**

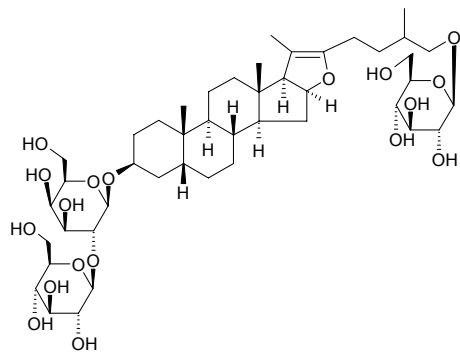
$C_{39}H_{66}O_{14}$  (758.95). White powder. Source: ZHI MU *Anemarrhena asphodeloides*. Ref: 443.

**1172 Anemarrhenasaponin Ia**

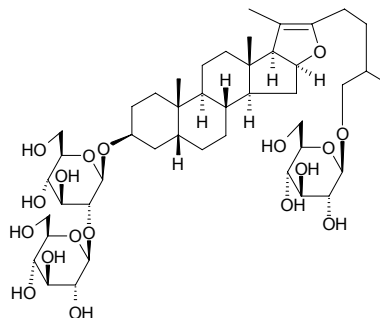
$C_{40}H_{68}O_{14}$  (772.98). White powder. Source: ZHI MU *Anemarrhena asphodeloides*. Ref: 443.

**1173 Anemarsaponin B**

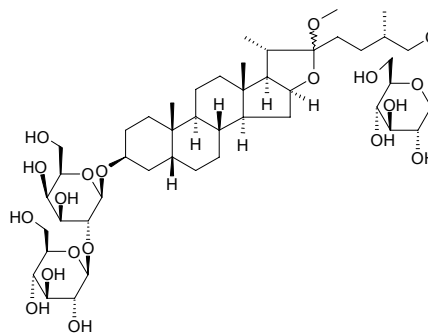
Pseudoprotimosaponin AIII [139051-27-7]  $C_{45}H_{74}O_{18}$  (903.08). White thin acicular crystals, mp 226°C (dec). Pharm: Platelet aggregation inhibitor (rbt, *in vitro*, induced by PAF,  $IC_{50} = 25\mu\text{mol/L}$ ). Source: ZHI MU *Anemarrhena asphodeloides*. Ref: 213, 2990.

**1174 Anemarsaponin C**

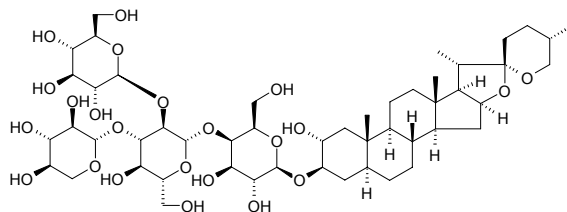
(2S)-O-β-D-Glucopyranosyl-5β-furost-20(22)-ene-3β,26-diol-3-O-β-D-glucopyranosyl-(1→2)-β-D-glucopyranoside  $C_{45}H_{74}O_{18}$  (903.08). White amorphous powder, mp >212°C (dec). Pharm: Free radical scavenger. Source: ZHI MU *Anemarrhena asphodeloides*. Ref: 353, 658.

**1175 Anemarsaponin E**

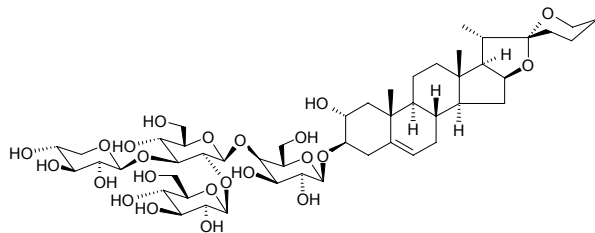
Timosaponin B<sub>1</sub> [136565-73-6]  $C_{46}H_{78}O_{19}$  (935.11). White amorphous powder, mp 244°C; 240~242°C (dec). Pharm: Free radical scavenger. Source: ZHI MU *Anemarrhena asphodeloides*. Ref: 353, 1075.

**1176 Anemarsaponin F**

Timosaponin F [195304-79-1]  $C_{50}H_{82}O_{23}$  (1050.2). White amorphous powder, mp 247°C (dec). Source: ZHI MU *Anemarrhena asphodeloides*. Ref: 719.

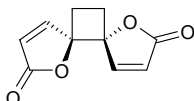
**1177 Anemarsaponin G**

Timosaponin G [195304-82-6]  $C_{50}H_{80}O_{23}$  (1049.18). White amorphous powder, mp 258°C (dec). Pharm: Cytotoxic (HSC-2 cells,  $LD_{50} = 12\mu\text{g/mL}$ ; HGF,  $LD_{50} = 37\mu\text{g/mL}$ )<sup>[3023]</sup>. Source: YE XIANG SHU *Cestrum nocturnum* (leaf; yield = 0.0068%fw)<sup>[3023]</sup>, ZHI MU *Anemarrhena asphodeloides*. Ref: 719, 3023.

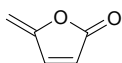


**1178 Anemonin**

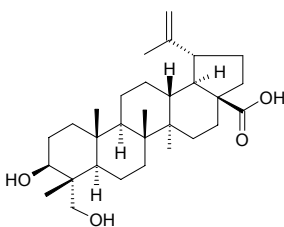
[508-44-1] C<sub>10</sub>H<sub>8</sub>O<sub>4</sub> (192.17). **Pharm:** Analgesic; antibacterial (*Staphylococcus* sp., *Streptococcus* sp. and *Bacillus diphtheriae*, IC = 1:12500, *Mycobacterium tuberculosis* and *Escherichia coli*, IC = 1:50000); antifungal; sedative. **Source:** BAI MAO GEN<sup>(1)</sup> *Imperata cylindrica* var. *major*, BAI TOU WENG *Pulsatilla chinensis*, DA PO WAN HUA *Anemone hupehensis*, MA TI YE *Caltha palustris*, MAO GEN *Ranunculus japonicus*, SHI LONG RUI *Ranunculus sceleratus*, WEI LING XIAN *Clematis chinensis*, YING MAO TI GEN CAO *Helleborus orientalis* var. *hirsutus*. **Ref:** 2, 6, 658, 5501.

**1179 Anemonol**

Protoanemonin [108-28-1] C<sub>5</sub>H<sub>4</sub>O<sub>2</sub> (96.09). Pale-yellow oil, bp 45°C/1.5mmHg, steam-volatile, readily polymerized in air. **Pharm:** Vesicant; antibiotic; antibacterial (*Bacillus coli*, MIC = 12~30µmol/L; *Staphylococcus aureus*, MIC = 16.7µmol/L; *Shigella shigae*, MIC = 16.7µmol/L; *Mycobacterium tuberculosis*, MIC = 2.5µmol/L). **Source:** BAI TOU WENG *Pulsatilla chinensis*, MA TI YE *Caltha palustris*, MAO GEN *Ranunculus japonicus*, SHI LONG RUI *Ranunculus sceleratus*, WEI LING XIAN *Clematis chinensis*, ZI KOU CAO *Ranunculus cantoniensis*, family Ranunculaceae spp. **Ref:** 6, 1521, 5501.

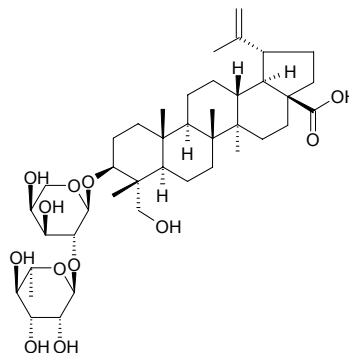
**1180 Anemosapogenin**

[85999-40-2] C<sub>30</sub>H<sub>48</sub>O<sub>4</sub> (472.71). **Source:** BAI TOU WENG *Pulsatilla chinensis*. **Ref:** 2.

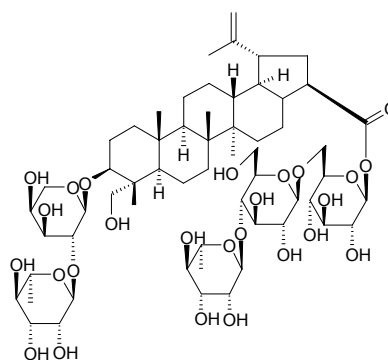
**1181 Anemoside A<sub>3</sub>**

Pulchinenoside A<sub>3</sub> C<sub>41</sub>H<sub>66</sub>O<sub>12</sub> (750.98). Purity >= 99%, [α]<sub>D</sub><sup>20</sup> = -6.0° (c = 0.55, CH<sub>3</sub>OH). **Pharm:** Anti-apoptosis (Protects PC12 Cells apoptosis Induced by sodium cyanide (NaCN, 10mmol/L) and glucose deprivation: MTT assay, control normal cells, survival rate = 100%, injured cells, survival rate = 70.5%, injured cells + 10.0µg/mL Anemoside A<sub>3</sub>, survival rate = 96.4%; LDH release assay, control normal cells, LDH activity = (71.4±5.3)unit/mL, injured cells, LDH activity = (134.4±1.1)unit/mL, injured cells + 10.0µg/mL Anemoside A<sub>3</sub>, LDH activity = (71.1±6.0)unit/mL; flow cytometry assay, control normal cells, apoptosis rate = (2.01±0.81)%, injured cells, apoptosis rate = (18.70±1.90)%, injured cells + 10.0µg/mL

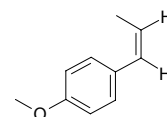
Anemoside A<sub>3</sub>, apoptosis rate = (6.36±1.32)%<sup>[5360]</sup>. **Source:** BAI TOU WENG *Pulsatilla chinensis*. **Ref:** 2, 2985, 3117, 5360.

**1182 Anemoside B<sub>4</sub>**

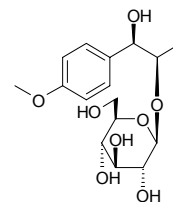
C<sub>59</sub>H<sub>96</sub>O<sub>26</sub> (1221.41). **Source:** BAI TOU WENG *Pulsatilla chinensis*. **Ref:** 2.

**1183 cis-Anethole**

cis-4-(1-Propenyl)anisole [25679-28-1] C<sub>10</sub>H<sub>12</sub>O (148.21). **Source:** HUI XIANG *Foeniculum vulgare*. **Ref:** 6, 7.

**1184 (1'R,2'R)-Anethole Glycol 2'-O-β-D-glucopyranoside**

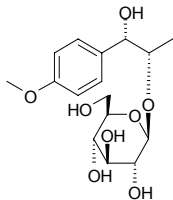
1-(4'-Methoxyphenyl)-(1R,2R)-propan-1-ol 2-O-β-D-glucopyranoside C<sub>16</sub>H<sub>24</sub>O<sub>8</sub> (344.36). Colorless needles (MeOH), mp 80~84°C, [α]<sub>D</sub><sup>22</sup> = -59° (c = 0.4, MeOH); yellow powder, mp 152~155°C, [α]<sub>D</sub><sup>25</sup> = +42.10° (c = 0.142, MeOH). **Pharm:** Anti-sepsis inactive (mouse, TNF-α/D-GaIN-induced lethality, 8mg/kg, SuRt = 20%, control SuRt = 20%, Dexamethasone, 10mg/kg, SuRt = 100%)<sup>[5446]</sup>. **Source:** BA JIAO HUI XIANG *Illicium verum*, HUI QIN *Pimpinella anisum* (fruit). **Ref:** 4242, 5446.



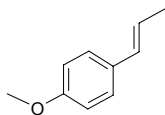
**1185 (1'S,2'S)-Anethole glycol 2'-O-β-D-Glucopyranoside**

[1-(4'-Methoxyphenyl)]-(1S,2S)-propan-1-ol 2-O-β-D-glucopyranoside C<sub>16</sub>H<sub>24</sub>O<sub>8</sub> (344.36). Colorless needles (MeOH), mp 75~78°C, [α]<sub>D</sub><sup>22</sup> = +11° (c = 0.3, MeOH); yellow crystals, mp 64~65°C, [α]<sub>D</sub><sup>25</sup> = +47.95° (c = 0.225, MeOH). **Pharm:** Anti-sepsis inactive (mouse, TNF-α/D-GaIN-induced lethality, 14mg/kg, SuRt = 20%, control SuRt = 20%, Dexamethasone, 10mg/kg, SuRt = 100%)<sup>[5446]</sup>. **Source:** BA JIAO HUI *Illicium verum*, HUI QIN

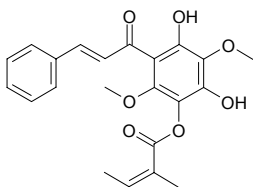
*Pimpinella anisum* (fruit). **Ref:** 4242, 5446.

**1186 Anethole**

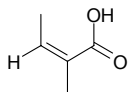
1-Methoxy-4-(1-propenyl)benzene [4180-23-8] C<sub>10</sub>H<sub>12</sub>O (148.21). **Pharm:** Carminative (animal model); leukopoietic. **Source:** BA JIAO HUANG PI *Clausena anisata*, BA JIAO HUI XIANG *Illicium verum* (fruit: content scope of 15 origins = 4.58%~8.88%, mean content = 6.42%<sup>[5508]</sup>), DU SONG SHI *Juniperus rigida*, HUI QIN *Pimpinella anisum*, HUI XIANG *Foeniculum vulgare* (dried ripe fruit: mean content of 3 origins = 0.204%<sup>[5508]</sup>), HUO XIANG *Agastache rugosus*, LIU YE MU LAN *Magnolia salicifolia*, LUO LE *Ocimum basilicum*, QING JIAO *Zanthoxylum schinifolium*, SHEN HAO *Artemisia porrecta*, SHUI HUI XIANG *Limnophila rugosa*, XIANG GEN QIN *Osmorhiza aristata* var. *laxa*, ZI WAN *Aster tataricus*. **Ref:** 2, 6, 7, 660, 1297, 5501, 5508.

**1187 Angelafolone**

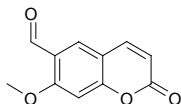
C<sub>22</sub>H<sub>22</sub>O<sub>7</sub> (398.42). **Source:** YU LIAO *Polygonum lapathifolium*. **Ref:** 660.

**1188 Angelic acid**

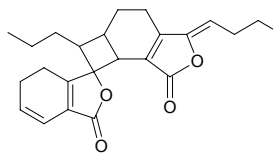
*cis*-2,3-Dimethylacrylic acid [565-63-9] C<sub>5</sub>H<sub>8</sub>O<sub>2</sub> (100.12). **Source:** DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*], FENG DOU CAI *Petasites japonicus*. **Ref:** 2.

**1189 Angelical**

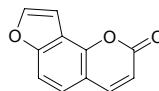
C<sub>11</sub>H<sub>8</sub>O<sub>4</sub> (204.18). mp 250°C. **Source:** YAN JIAO CAO *Boenninghausenia albiflora*. **Ref:** 2495.

**1190 Angelicid**

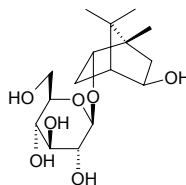
C<sub>24</sub>H<sub>28</sub>O<sub>4</sub> (380.49). **Source:** DANG GUI *Angelica sinensis*. **Ref:** 2.

**1191 Angelicin**

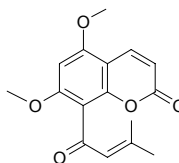
Isopsoralen; Bakuchicin [523-50-2] C<sub>11</sub>H<sub>6</sub>O<sub>3</sub> (186.17). mp 135.0~139.5°C, 142°C. **Pharm:** Antispasmodic (rbt, duodenum smooth muscle relaxant, EC = 20μg/mL, gpg, inhibits ileal contraction induced by acetylcholine, histamine, BaCl<sub>2</sub> and 5-HT by 50%); CNS depressant (mus, ip, 20mg/kg, inhibits spontaneous motion, presents dose-response relationship); photosensitizer; anti-early-pregnancy; anti-rejection symptom in skin grafting; LD<sub>50</sub> (rat, ip) = 165mg/kg, (mus, ip) = 254mg/kg. **Source:** BAI ZHI *Angelica dahurica* [Syn. *Angelica porphyrocaulis*], BU GU ZHI *Psoralea corylifolia* (dried ripe fruit: mean content of 10 origins = 0.427%<sup>[5508]</sup>), GAN SONG *Nardostachys chinensis*, CHAI HU *Bupleurum chinense*, DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*], YONG NING DU HUO *Heracleum yungningense*. **Ref:** 2, 6, 541, 545, 658, 5501, 5508.

**1192 (1R,2S,4S,5R)-Angelicoidenol 2-O-β-D-glucopyranoside**

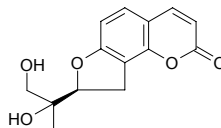
C<sub>16</sub>H<sub>28</sub>O<sub>7</sub> (332.40). **Source:** SUO SHA MI *Amomum xanthioides* (seed). **Ref:** 4365.

**1193 Angelicone**

Glabralactone [37719-98-5] C<sub>16</sub>H<sub>16</sub>O<sub>5</sub> (288.30). mp 129~130°C. **Source:** BEI FANG DANG GUI *Angelica ursina*, DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*], GUANG HUA DANG GUI *Angelica glabra*. **Ref:** 2, 6, 660, 1521.

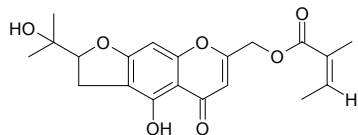
**1194 Angelidiol**

Heramandiol C<sub>14</sub>H<sub>14</sub>O<sub>5</sub> (262.26). Colorless needles, mp 148~150°C, [α]<sub>D</sub> = +122.5° (c = 0.2, CHCl<sub>3</sub>). **Source:** DA YE NIU FANG FENG *Heracleum mantegazzianum*, DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*]. **Ref:** 8, 344, 1521.

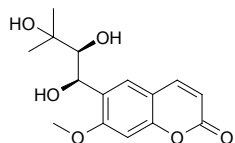


**1195 Angelitin A**

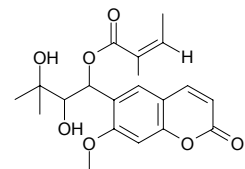
$C_{20}H_{22}O_7$  (374.39). White granular crystals, mp 177~178°C. Source: GUAI QIN *Angelica polymorpha*. Ref: 340.

**1196 Angelitriol**

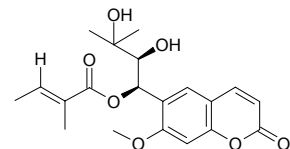
$C_{15}H_{18}O_6$  (294.31). Colorless needles, mp 167~169°C,  $[\alpha]_D^{22} = -69^\circ$  ( $c = 0.12$ ,  $CHCl_3$ ). Source: DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*]. Ref: 8.

**1197 Angelol**

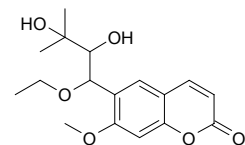
$C_{20}H_{24}O_7$  (376.41). mp 104~105°C. Source: DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*]. Ref: 6.

**1198 Angelol D**

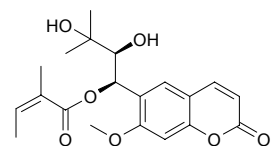
[83199-39-7]  $C_{20}H_{24}O_7$  (376.41). Source: DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*]. Ref: 7.

**1199 Angelol J**

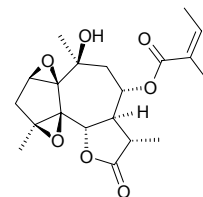
$C_{17}H_{22}O_6$  (322.36). Colorless hyaloid oil,  $[\alpha]_D = -76.4^\circ$  ( $c = 0.30$ ,  $CHCl_3$ ). Source: DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*]. Ref: 8.

**1200 Angelol K**

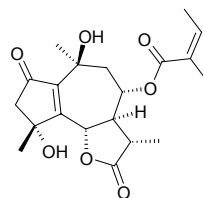
$C_{20}H_{24}O_7$  (376.41). Colorless powder, mp 116~118°C,  $[\alpha]_D = -20.6^\circ$  ( $c = 0.32$ ,  $CHCl_3$ ). Source: DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*]. Ref: 8.

**1201 8α-Angeloxyl-1β,2β:4β,5β-diepoxy-10β-hydroxy-6βH,7αH,11βH-12,6α-guaianolide**

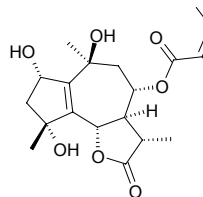
$C_{20}H_{26}O_7$  (378.43).  $[\alpha]_D^{20} = +2.7^\circ$  ( $c = 0.16$ ,  $CHCl_3$ ). Source: YA ZHOU SHI *Achillea asiatica* (aerial parts). Ref: 5229.

**1202 8α-Angeloxyl-4α,10β-dihydroxy-2-oxo-6βH,7αH,11βH-1(5)-guaien-12,6α-olide**

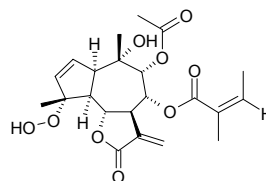
$C_{20}H_{26}O_7$  (378.43).  $[\alpha]_D^{20} = +9.5^\circ$  ( $c = 0.44$ ,  $CHCl_3$ ). Source: YA ZHOU SHI *Achillea asiatica* (aerial parts). Ref: 5229.

**1203 8α-Angeloxyl-2α,4α,10β-trihydroxy-6βH,7αH,11βH-1(5)-guaien-12,6α-olide**

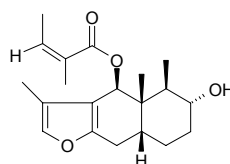
$C_{20}H_{28}O_7$  (380.44).  $[\alpha]_D^{20} = +7.4^\circ$  ( $c = 0.11$ ,  $CHCl_3$ ). Source: YA ZHOU SHI *Achillea asiatica* (aerial parts). Ref: 5229.

**1204 8-O-Angeloyl-9-O-acetylanthemolide B**

$C_{22}H_{28}O_9$  (436.46). Colorless solid. Source: MENG DA NA CHUN HUANG JU *Anthemis cretica* ssp. *cretica* [Syn. *Anthemis montana*]. Ref: 1893.

**1205 6-Angeloylfuranofukinol**

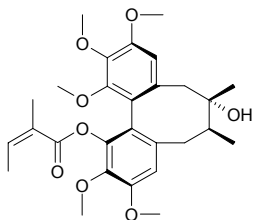
$C_{20}H_{28}O_4$  (332.44). Source: FENG DOU CAI *Petasites japonicus*. Ref: 6.



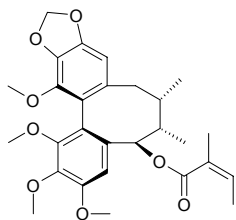


**1206 Angeloyl gomisin H**

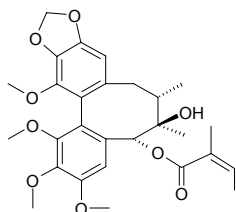
$C_{28}H_{36}O_8$  (500.59). Source: CHANG GENG NAN WU WEI ZI *Kadsura peltigera* [Syn. *Kadsura longipedunculata*], WU WEI ZI *Schisandra chinensis*. Ref: 2, 660.

**1207 Angeloyl gomisin O**

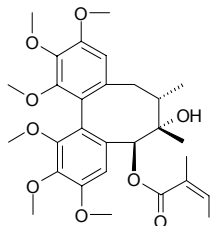
$C_{28}H_{34}O_8$  (498.58). Source: CHANG GENG NAN WU WEI ZI *Kadsura peltigera* [Syn. *Kadsura longipedunculata*], WU WEI ZI *Schisandra chinensis*. Ref: 2, 660.

**1208 Angeloyl gomisin P**

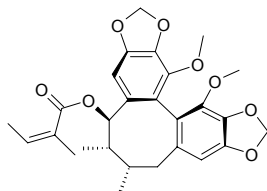
$C_{28}H_{34}O_9$  (514.58). Source: CHANG GENG NAN WU WEI ZI *Kadsura peltigera* [Syn. *Kadsura longipedunculata*], WU WEI ZI *Schisandra chinensis*. Ref: 660.

**1209 Angeloylgomisin Q**

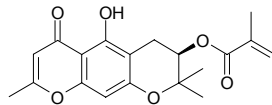
$C_{29}H_{38}O_9$  (530.62). Source: WU WEI ZI *Schisandra chinensis*. Ref: 2.

**1210 Angeloylgomisin R**

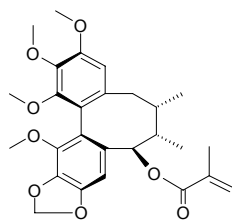
$C_{27}H_{30}O_8$  (482.54). Pharm: Antineoplastic (screened as potential antitumor promoters, EBV-EA induced by TPA, mol ratio/TPA = 1000, relative percentage of EBV-EA = (10.6±0.4)% (positive control value 32pmol, 20ng TPA =100%), viability of Raji cells = 60%). Source: NEI NAN WU WEI ZI *Kadsura interior* (stem). Ref: 4644.

**1211 3-O-Angeloylhamaudol**

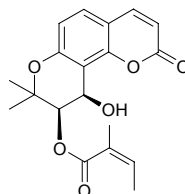
$C_{20}H_{22}O_6$  (358.39). Yellowish columnar crystals (pet. Ether-EtOAc), mp 128–129°C,  $[\alpha]_D = -57^\circ$  (CDCl<sub>3</sub>). Source: MO GUO QIN *Sphallerocarpus gracilis*. Ref: 2500.

**1212 Angeloylisogomisin O**

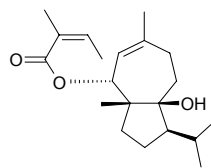
[83864-70-4]  $C_{28}H_{34}O_8$  (498.58). Source: WU WEI ZI *Schisandra chinensis*. Ref: 2.

**1213 3'-Angeloyl-cis-khellactone**

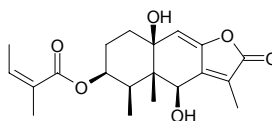
$C_{19}H_{20}O_6$  (344.37). Pharm: NO Production inhibitor (LPS-activated mouse peritoneal macrophages, IC<sub>50</sub> = 82μmol/L, control *L*-NMMA, IC<sub>50</sub> = 28μmol/L). Source: FEN CHA DANG GUI *Angelica furcijuga* (flower). Ref: 4454.

**1214 1α-Angeloyloxycarotol**

$C_{20}H_{32}O_3$  (320.48). Source: FEN CHA DANG GUI *Angelica furcijuga* (flower). Ref: 4454.

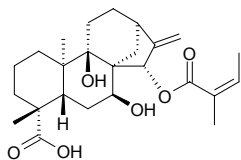
**1215 3β-Angeloyloxy-6β,10β-dihydroxyremophila-7(11),8(9)-dien-8,12-olide**

$C_{20}H_{26}O_6$  (362.43). Colorless gum,  $[\alpha]_D^{20} = +122.6^\circ$  (c = 0.60, CHCl<sub>3</sub>). Pharm: Antibacterial inactive (gram-positive and gram-negative bacteria). Source: TU ER FENG XIE JIA CAO *Cacalia ainsliaeflora*. Ref: 5428.

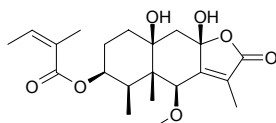


**1216 ent-15 $\beta$ -Angeloyloxy-7 $\alpha$ ,9 $\alpha$ -dihydroxy-kaur-16-en-19-oic acid**

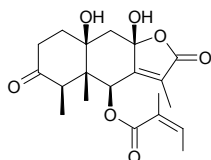
C<sub>25</sub>H<sub>36</sub>O<sub>6</sub> (432.56). [ $\alpha$ ]<sub>D</sub> = -32.75° (*c* = 1.83, MeOH). Source: *Oyedeaea verbesinoides*. Ref: 3379.

**1217 3 $\beta$ -Angeloyloxy-8 $\beta$ ,10 $\beta$ -dihydroxy-6 $\beta$ -methoxyeremophilenolide**

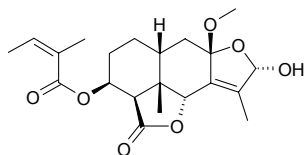
C<sub>21</sub>H<sub>30</sub>O<sub>7</sub> (394.47). Colorless crystals, mp 213.4~214.6°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +107.8° (*c* = 4.3, CHCl<sub>3</sub>). Pharm: Antibacterial inactive (gram-positive and gram-negative bacteria). Source: TU ER FENG XIE JIA CAO *Cacalia ainsliaeflora*. Ref: 5428.

**1218 6 $\beta$ -Angeloyloxy-8 $\beta$ ,10 $\beta$ -dihydroxy-3-oxo-eremophilenolide**

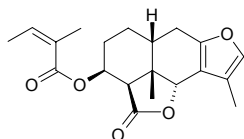
C<sub>20</sub>H<sub>26</sub>O<sub>7</sub> (378.43). Colorless gum, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +114.9° (*c* = 1.05, CHCl<sub>3</sub>). Source: TU ER FENG XIE JIA CAO *Cacalia ainsliaeflora*. Ref: 5428.

**1219 3 $\beta$ -Angeloyloxy-8,12-epoxy-12 $\alpha$ -hydroxy-8 $\beta$ -methoxyeremophil-7(11)-en-14 $\beta$ ,6 $\alpha$ -olide**

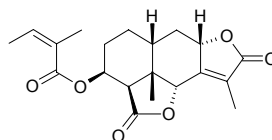
C<sub>21</sub>H<sub>28</sub>O<sub>7</sub> (392.45). Amorphous powder, mp 214~215°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +56.5° (*c* = 0.67, CHCl<sub>3</sub>). Source: NIU BANG YE DU WU *Ligularia lapathifolia* (root and rhizome). Ref: 4948.

**1220 3 $\beta$ -Angeloyloxyeremophil-7,11-dien-14 $\beta$ ,6 $\alpha$ -olide**

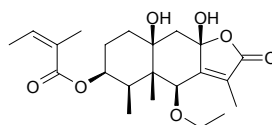
C<sub>20</sub>H<sub>24</sub>O<sub>5</sub> (344.41). Amorphous powder, mp 140~141°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +47.4° (*c* = 0.44, CHCl<sub>3</sub>). Source: NIU BANG YE DU WU *Ligularia lapathifolia* (root and rhizome). Ref: 4948.

**1221 3 $\beta$ -Angeloyloxy-8 $\beta$ H-eremophil-7(11)-ene-12,8 $\alpha$ (14 $\beta$ ,6 $\alpha$ )-diolide**

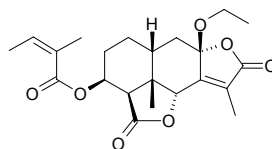
C<sub>20</sub>H<sub>24</sub>O<sub>6</sub> (360.41). Amorphous powder, mp 193~194°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +128.8° (*c* = 0.41, CHCl<sub>3</sub>). Source: NIU BANG YE DU WU *Ligularia lapathifolia* (root and rhizome). Ref: 4948.

**1222 3 $\beta$ -Angeloyloxy-6 $\beta$ -ethoxy-8 $\beta$ ,10 $\beta$ -dihydroxyeremophilenolide**

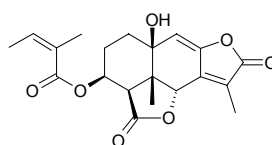
C<sub>22</sub>H<sub>32</sub>O<sub>7</sub> (408.50). Colorless gum, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +117.4° (*c* = 0.60, CHCl<sub>3</sub>). Pharm: Antibacterial inactive (gram-positive and gram-negative bacteria). Source: TU ER FENG XIE JIA CAO *Cacalia ainsliaeflora*. Ref: 5428.

**1223 3 $\beta$ -Angeloyloxy-8 $\beta$ -ethoxyeremophil-7(11)-ene-12,8 $\alpha$ (14 $\beta$ ,6 $\alpha$ )-diolide**

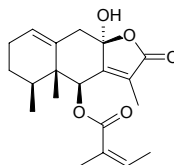
C<sub>22</sub>H<sub>28</sub>O<sub>7</sub> (404.46). Amorphous powder, mp 178~179°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +79.6° (*c* = 0.52, CHCl<sub>3</sub>). Source: NIU BANG YE DU WU *Ligularia lapathifolia* (root and rhizome). Ref: 4948.

**1224 3 $\beta$ -Angeloyloxy-10 $\beta$ -hydroxyeremophil-8(9),7(11)-diene-12,8(14 $\beta$ ,6 $\alpha$ )-diolide**

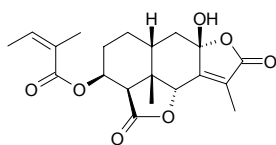
C<sub>20</sub>H<sub>22</sub>O<sub>7</sub> (374.39). Amorphous powder, mp 198~199°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +211.2° (*c* = 1.00, CHCl<sub>3</sub>). Source: NIU BANG YE DU WU *Ligularia lapathifolia* (root and rhizome). Ref: 4948.

**1225 6 $\beta$ -Angeloyloxy-8 $\alpha$ -hydroxyeremophil-1(10),7(11)-dien-8 $\beta$ (12)-olide**

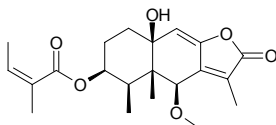
C<sub>20</sub>H<sub>26</sub>O<sub>5</sub> (346.43). Colorless gum, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -107° (*c* = 0.18, acetone). Source: JIA TUO WU *Ligulariopsis shichuana* (whole herb: 00022%dw). Ref: 4627.



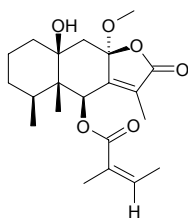
**1226 3 $\beta$ -Angeloyloxy-8 $\beta$ -hydroxyremophil-7(11)-ene-12,8 $\alpha$ (14 $\beta$ ,6 $\alpha$ )-diolide**  
 C<sub>20</sub>H<sub>24</sub>O<sub>7</sub> (376.41). Amorphous powder, mp 201~202°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +136.6° (c = 0.80, CHCl<sub>3</sub>). Source: NIU BANG YE DU WU *Ligularia lapathifolia* (root and rhizome). Ref: 4948.



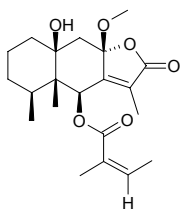
**1227 3 $\beta$ -Angeloyloxy-10 $\beta$ -hydroxy-6 $\beta$ -methoxyremophila-7(11),8(9)-dien-8,12-olide**  
 C<sub>21</sub>H<sub>28</sub>O<sub>6</sub> (376.45). Colorless gum, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +43.3° (c = 0.58, CHCl<sub>3</sub>). Source: TU ER FENG XIE JIA CAO *Cacalia ainsliaeflora*. Ref: 5428.



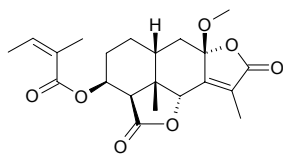
**1228 6 $\beta$ -Angeloyloxy-10 $\beta$ -hydroxy-8 $\alpha$ -methoxyremophil-7(11)-en-12,8 $\beta$ -olide**  
 C<sub>21</sub>H<sub>30</sub>O<sub>6</sub> (378.47). Source: JIAN YE TOU WU GEN *Ligularia sagitta*. Ref: 5382.



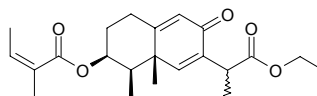
**1229 6 $\beta$ -Angeloyloxy-10 $\beta$ -hydroxy-8 $\beta$ -methoxyremophil-7(11)-en-12,8 $\alpha$ -olide**  
 C<sub>21</sub>H<sub>30</sub>O<sub>6</sub> (378.47). Source: JIAN YE TOU WU GEN *Ligularia sagitta*. Ref: 5382.



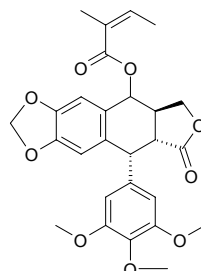
**1230 3 $\beta$ -Angeloyloxy-8 $\beta$ -methoxyremophil-7(11)-ene-12,8 $\alpha$ (14 $\beta$ ,6 $\alpha$ )-diolide**  
 C<sub>21</sub>H<sub>26</sub>O<sub>7</sub> (390.44). Amorphous powder, mp 180~181°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +71.6° (c = 0.54, CHCl<sub>3</sub>). Source: NIU BANG YE DU WU *Ligularia lapathifolia* (root and rhizome). Ref: 4948.



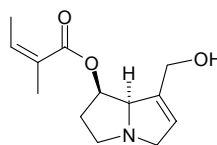
**1231 3 $\beta$ -Angeloyloxy-8-oxoeremophila-6,9-dien-12-oic acid ethyl ester**  
 C<sub>22</sub>H<sub>30</sub>O<sub>5</sub> (374.48). Colorless gum, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +47.6° (c = 0.43, CHCl<sub>3</sub>). Source: TU ER FENG XIE JIA CAO *Cacalia ainsliaeflora*. Ref: 5428.



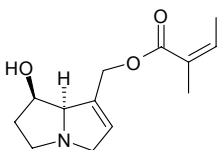
**1232 Angeloylpodophyllotoxin**  
 C<sub>27</sub>H<sub>28</sub>O<sub>9</sub> (496.52). Source: E SHEN *Anthriscus sylvestris*. Ref: 5499.



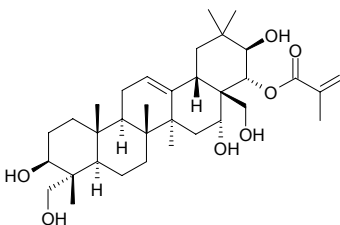
**1233 O<sup>7</sup>-Angeloylretronecine**  
 C<sub>13</sub>H<sub>19</sub>NO<sub>3</sub> (237.30). Source: ZI CAO *Lithospermum erythrorhizon*, XIN ZANG JIA ZI CAO *Arnebia euchroma*. Ref: 2193.



**1234 O<sup>9</sup>-Angeloylretronecine**  
 C<sub>13</sub>H<sub>19</sub>NO<sub>3</sub> (237.30). Source: ZI CAO *Lithospermum erythrorhizon*, XIN ZANG JIA ZI CAO *Arnebia euchroma*. Ref: 2193.

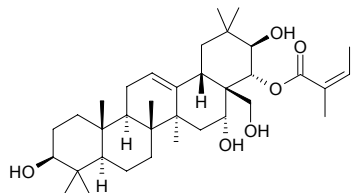


**1235 22-O-Angeloyl theasapogenol A**  
 C<sub>35</sub>H<sub>56</sub>O<sub>7</sub> (588.83). Source: PU ER CHA *Camellia sinensis* var. *assamica*. Ref: 581.

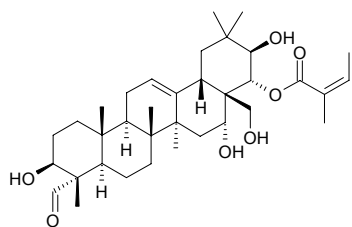


**1236 22-O-Angeloyl theasapogenol B**

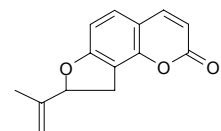
$C_{35}H_{56}O_6$  (573.83). Source: PU ER CHA *Camellia sinensis* var. *assamica*. Ref: 581.

**1237 22-O-Angeloyl theasapogenol E**

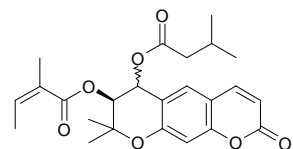
$C_{35}H_{54}O_7$  (586.82). Source: PU ER CHA *Camellia sinensis* var. *assamica*. Ref: 581.

**1238 Angenomalin**

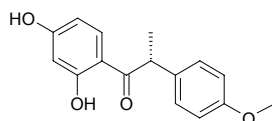
[33792-75-5]  $C_{14}H_{12}O_3$  (228.25). mp 105~126°C. Source: HANG BAI ZHI *Angelica taiwaniana*. Ref: 6.

**1239 3'(S)-Angeroyloxy-4'(R)-isovaleryloxy-3',4'-dihydroxanthyletin**

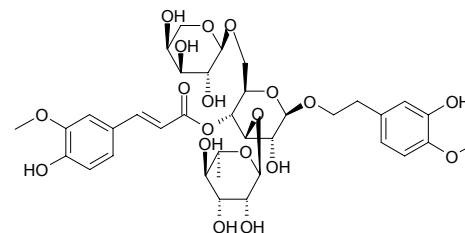
Praeruptorin III  $C_{24}H_{28}O_7$  (428.49). Source: BAI HUA QIAN HU *Peucedanum praeruptorum*. Ref: 660.

**1240 Angolensin**

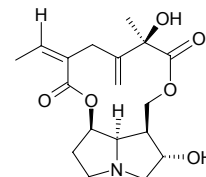
[4842-48-2]  $C_{16}H_{16}O_4$  (272.30). mp (-) 120.5~121.0°C. Source: ZI TAN *Pterocarpus indicus*. Ref: 6.

**1241 Angoroside C**

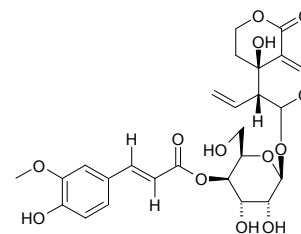
$C_{36}H_{48}O_{19}$  (784.77). Pharm: Antitrypanosomal (*Trypanosoma brucei rhodesiense*,  $IC_{50} = 29.3\mu\text{g/mL}$ , control Melarsoprol,  $IC_{50} = 0.0033\mu\text{g/mL}$ ; *Trypanosoma cruzi*,  $IC_{50} > 90\mu\text{g/mL}$ , control Benznidazole,  $IC_{50} = 0.70\mu\text{g/mL}$ ); antileishmanial (*Leishmania donovani*,  $IC_{50} = 8.0\mu\text{g/mL}$ , control Miltefosine,  $IC_{50} = 0.32\mu\text{g/mL}$ ); antimalarial (*Plasmodium falciparum*,  $IC_{50} > 50\mu\text{g/mL}$ , control Artemisinin,  $IC_{50} = 0.002\mu\text{g/mL}$ )<sup>[5251]</sup>; cytotoxic (L6 cells,  $IC_{50} > 90\mu\text{g/mL}$ , control Podophyllotoxin,  $IC_{50} = 0.0075\mu\text{g/mL}$ ). Source: LIN PIAN XUAN SHEN *Scrophularia lepidota* (root). Ref: 5251.

**1242 Angularine**

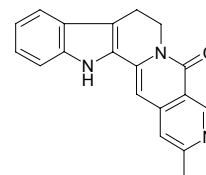
$C_{18}H_{25}NO_6$  (351.40). Pharm: Toxin (exhibits hepatic toxicity, causes necrosis of ox liver cells). Source: LENG JIAO QIAN LI GUANG *Senecio angularatus*. Ref: 658.

**1243 Angustiamarin**

$C_{26}H_{30}O_{13}$  (550.52). Light yellow amorphous powder, mp 115~118°C. Source: XIA YE ZHANG YA CAI *Swertia angustifolia*. Ref: 340.

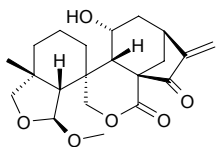
**1244 Angustidine**

[40217-50-3]  $C_{19}H_{15}N_3O$  (301.35). Pharm: Antibacterial (*in vitro*: *Staphylococcus aureus*, *Bacillus subtilis*, *Bacillus coli*, *Bacillus diphtheriae*, *Streptococcus* sp., *Salmonella* sp., *Bacillus proteus*, *Aspergillus niger*, *Bacillus lactis*, *Klebsiella* sp.); antileishmanial. Source: GOU TENG *Uncaria rhynchophylla* [Syn. *Nauclea rhynchophylla*]. Ref: 2, 2178.

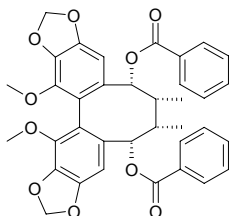


**1245 Angustifolin**

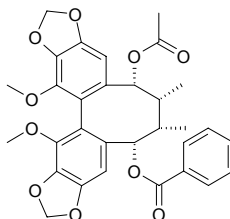
[66548-01-4] C<sub>21</sub>H<sub>28</sub>O<sub>6</sub> (376.45). mp 258~261°C, [α]<sub>D</sub><sup>20</sup> = -60.2° (c = 1.25, C<sub>5</sub>H<sub>5</sub>N). **Pharm:** Cytotoxic (*in vitro*, K562, IC<sub>50</sub> = 0.23 μg/mL; control *cis*-Platin, IC<sub>50</sub> = 0.52 μg/mL)<sup>[4732]</sup>. **Source:** LU SHI DONG LING CAO *Isodon rubescens* var. *lushiensis* (leaf: yield = 0.00029% dw<sup>[4732]</sup>), XIA YE XIANG CHA CAI *Isodon angustifolia*. **Ref:** 1521, 4067, 4732.

**1246 Angustifolin A**

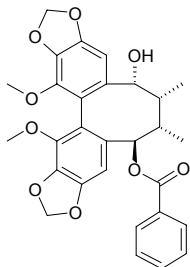
[211632-04-1] C<sub>36</sub>H<sub>32</sub>O<sub>10</sub> (624.65). **Source:** XIA XIE NAN WU WEI ZI *Kadsura angustifolia*. **Ref:** 2436.

**1247 Angustifolin B**

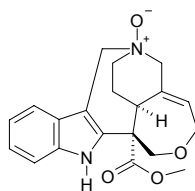
[211632-06-3] C<sub>31</sub>H<sub>30</sub>O<sub>10</sub> (562.58). **Source:** XIA XIE NAN WU WEI ZI *Kadsura angustifolia*. **Ref:** 2436.

**1248 Angustifolin C**

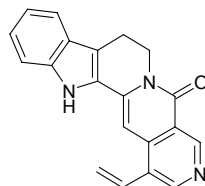
[211632-08-5] C<sub>29</sub>H<sub>28</sub>O<sub>9</sub> (520.54). **Source:** XIA XIE NAN WU WEI ZI *Kadsura angustifolia*, BO LUO XIANG TENG *Kadsura ananosma* (stem bark). **Ref:** 2436, 5242.

**1249 Angustilobine B N4-oxide**

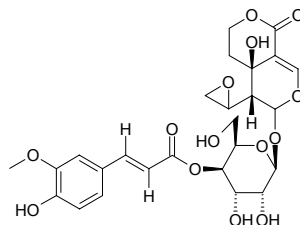
C<sub>20</sub>H<sub>22</sub>N<sub>2</sub>O<sub>4</sub> (354.41). **Source:** XIANG PI MU *Alstonia scholaris* (leaf). **Ref:** 5283.

**1250 Angustine**

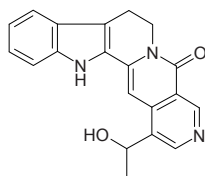
[40041-96-1] C<sub>20</sub>H<sub>15</sub>N<sub>3</sub>O (313.36). **Pharm:** Antibacterial (*in vitro*: *Staphylococcus aureus*, *Bacillus subtilis*, *Bacillus coli*, *Bacillus diphtheriae*, *Streptococcus* sp., *Salmonella* sp., *Bacillus proteus*, *Aspergillus niger*, *Bacillus lactis*, *Klebsiella* sp.); antileishmanial; toxin. **Source:** NIU YAN MA QIAN *Strychnos angustiflora*. **Ref:** 658, 2178.

**1251 Angustioside**

C<sub>26</sub>H<sub>30</sub>O<sub>14</sub> (566.52). Light yellow amorphous powder, bitter flavor, mp 124~128°C. **Source:** XIA YE ZHANG YA CAI *Swertia angustifolia*. **Ref:** 220.

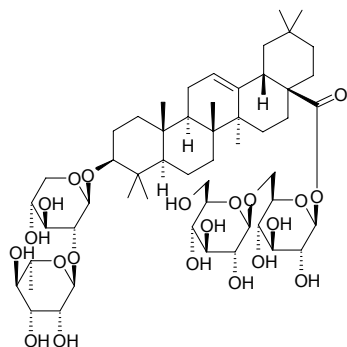
**1252 Angustoline**

[40041-95-0] C<sub>20</sub>H<sub>17</sub>N<sub>3</sub>O<sub>2</sub> (331.38). **Pharm:** Antibacterial (*in vitro*: *Staphylococcus aureus*, *Bacillus subtilis*, *Bacillus coli*, *Bacillus diphtheriae*, *Streptococcus* sp., *Salmonella* sp., *Bacillus proteus*, *Aspergillus niger*, *Bacillus lactis*, *Klebsiella* sp.); antileishmanial. **Source:** GOU TENG *Uncaria rhynchophylla* [Syn. *Nauclea rhynchophylla*]. **Ref:** 2, 2178.

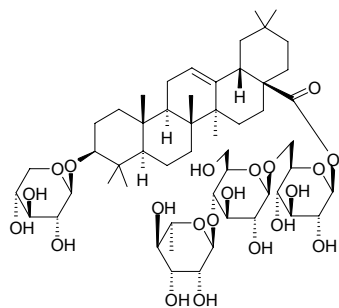


**1253 Anhuienoside C**

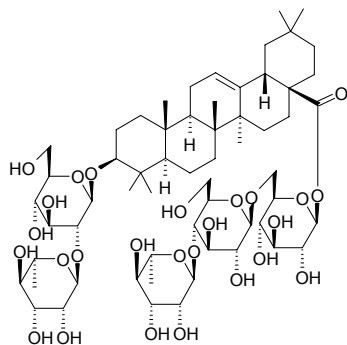
3-*O*- $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-xylopyranosyl oleanolic acid 28-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl ester C<sub>53</sub>H<sub>86</sub>O<sub>21</sub> (1059.26). White powder (MeOH), mp 238~241°C,  $[\alpha]_D^{20} = -8.6^\circ$  ( $c = 0.42$ , MeOH). Source: AN HUI YIN LIAN HUA *Anemone anhuiensis* (rhizome). Ref: 3529.

**1254 Anhuienoside D**

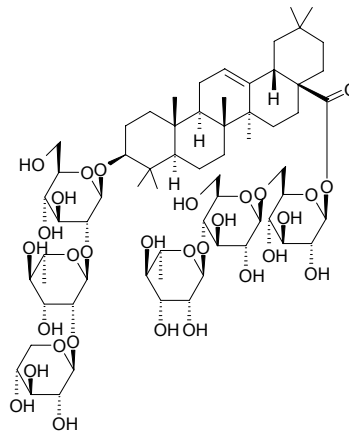
3-*O*- $\beta$ -*D*-Xylopyranosyl oleanolic acid 28-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl ester C<sub>53</sub>H<sub>86</sub>O<sub>21</sub> (1059.26). White powder (MeOH), mp 251~253°C,  $[\alpha]_D^{20} = -63.6^\circ$  ( $c = 0.33$ , MeOH). Source: AN HUI YIN LIAN HUA *Anemone anhuiensis* (rhizome). Ref: 3529.

**1255 Anhuienoside E**

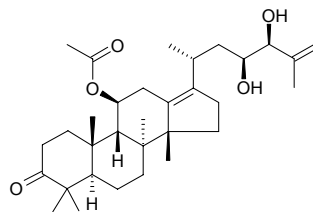
3-*O*- $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl oleanolic acid 28-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl ester C<sub>60</sub>H<sub>98</sub>O<sub>26</sub> (1235.43). White powder (MeOH), mp 224~226°C. Source: AN HUI YIN LIAN HUA *Anemone anhuiensis* (rhizome). Ref: 3529.

**1256 Anhuienoside F**

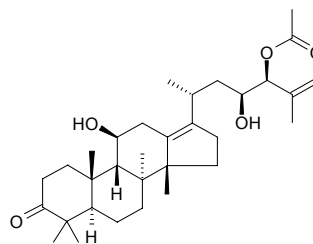
3-*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-xylopyranosyl oleanolic acid 28-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl ester C<sub>65</sub>H<sub>106</sub>O<sub>30</sub> (1367.55). White powder (MeOH), mp 235~236°C. Source: AN HUI YIN LIAN HUA *Anemone anhuiensis* (rhizome). Ref: 3529.

**1257 25-Anhydroalisol A 11-acetate**

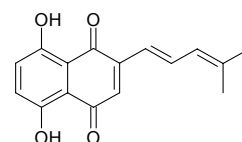
C<sub>32</sub>H<sub>50</sub>O<sub>5</sub> (514.75). Colorless needles, mp 215~216°C. Source: ZE XIE *Alisma orientale* [Syn. *Alisma plantago-aquatica* var. *orientale*]. Ref: 2202.

**1258 25-Anhydroalisol A 24-acetate**

C<sub>32</sub>H<sub>50</sub>O<sub>5</sub> (514.75). Colorless needles, mp 212~213°C. Source: ZE XIE *Alisma orientale* [Syn. *Alisma plantago-aquatica* var. *orientale*]. Ref: 2202.

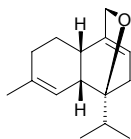
**1259 Anhydroalkannin**

C<sub>16</sub>H<sub>14</sub>O<sub>4</sub> (270.29). Source: ZI CAO *Lithospermum erythrorhizon*, XIN ZANG JIA ZI CAO *Arnebia euchroma*. Ref: 2193.

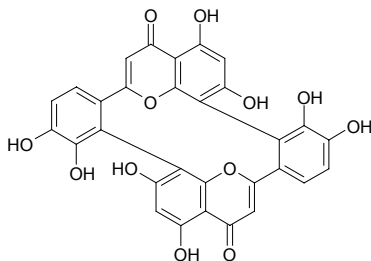


**1260 7,14-Anhydro-amorpha-4,9-diene**

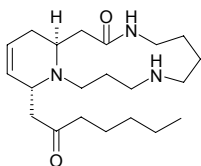
(+)-(2*S*,7*R*,8*S*)-5-Methyl-8-(1-methylethyl)-9-oxa-tricyclo[6.2.2.0<sup>2,7</sup>]dodeca-1(11),5-diene C<sub>15</sub>H<sub>22</sub>O (218.34). Colorless oil. Source: DONG YA ZHI YE TAI *Lepidozia fauriana* (essential oil). Ref: 5209.

**1261 Anhydrobartramiaflavone**

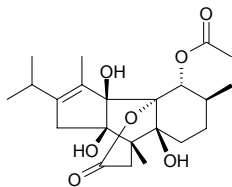
C<sub>30</sub>H<sub>16</sub>O<sub>12</sub> (568.45). Source: LI SHUO ZHU XIAN *Bartramia pomiformis*. Ref: 4549.

**1262 Anhydrocannabisativine**

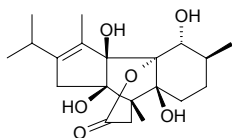
C<sub>21</sub>H<sub>37</sub>N<sub>3</sub>O<sub>2</sub> (363.55). Source: MA GEN *Cannabis sativa*, MA YE *Cannabis sativa*. Ref: 660.

**1263 Anhydrocinnzeylanine**

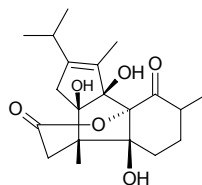
C<sub>23</sub>H<sub>34</sub>O<sub>7</sub> (422.52). Source: GUI ZHI *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*]. Ref: 660.

**1264 Anhydrocinnzeylanol**

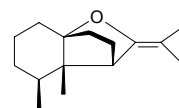
C<sub>21</sub>H<sub>32</sub>O<sub>6</sub> (380.49). Pharm: Antifeedant (*Spodoptera littoralis*, EC<sub>50</sub> = 0.22nmol/cm<sup>2</sup>, *Leptinotarsa decemlineata*, EC<sub>50</sub> = 2.29nmol/cm<sup>2</sup>)<sup>[5128]</sup>. Source: GUI ZHI *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*], YIN DU E LI *Persea indica* (aerial parts). Ref: 660, 5128.

**1265 Anhydrocinnzeylanone**

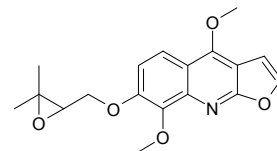
C<sub>20</sub>H<sub>28</sub>O<sub>6</sub> (364.44). Pharm: Antifeedant (*Spodoptera littoralis*, EC<sub>50</sub> > 27nmol/cm<sup>2</sup>, *Leptinotarsa decemlineata*, EC<sub>50</sub> > 27nmol/cm<sup>2</sup>)<sup>[5128]</sup>. Source: YIN DU E LI *Persea indica* (aerial parts). Ref: 5128.

**1266 7,10-Anhydro-11,12-dihydrochiloscypholone**

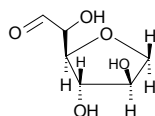
(+)-(1*R*,5*S*,6*S*,7*S*)-5,6-Dimethyl-9-oxo-8-isopropylidene-tricyclo[5.2.2.0<sup>1,6</sup>]undecane C<sub>15</sub>H<sub>24</sub>O (220.36). Colorless oil. Source: DONG YA ZHI YE TAI *Lepidozia fauriana* (essential oil). Ref: 5209.

**1267 Anhydroevoxine**

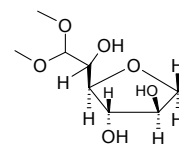
C<sub>18</sub>H<sub>19</sub>NO<sub>5</sub> (329.36). Needles, mp 133–134°C. Source: GAO GUI YOU MU YUN XIANG *Teclea nobilis* (aerial parts). Ref: 3503.

**1268 3,6-Anhydrogalactose**

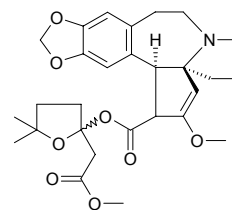
C<sub>6</sub>H<sub>10</sub>O<sub>5</sub> (162.14). Source: QI LIN CAI *Euceuma muricatum*. Ref: 6.

**1269 3,6-Anhydro-L-galactose dimethyl acetal**

C<sub>8</sub>H<sub>16</sub>O<sub>6</sub> (208.21). Source: LU JIAO CAI *Gloiopeltis furcata*. Ref: 6.

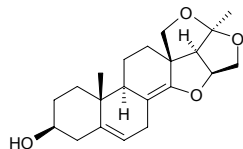
**1270 Anhydroharringtonine**

[142735-74-8] C<sub>28</sub>H<sub>35</sub>NO<sub>8</sub> (513.59). Source: SAN JIAN SHAN *Cephalotaxus fortunei*. Ref: 2.

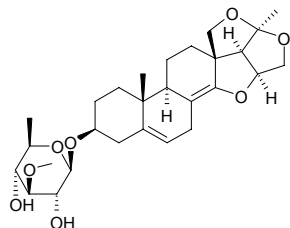


**1271 Anhydrohirundigenin**

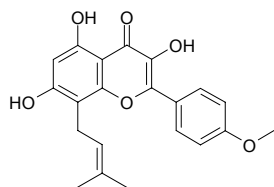
$C_{21}H_{28}O_4$  (344.45). Amorphous powder,  $[\alpha]_D^{25} = -19.62^\circ$  ( $c = 0.107$ , MeOH). **Pharm:** Vasodilator inactive (*in vitro*, rat isolated aortic rings with endothelium, pre-contracted by  $0.1\mu\text{mol/L}$  phenylephrine or  $100\text{mmol/L}$  KCl). **Source:** LIU YE BAI QIAN *Cynanchum stauntonii*. **Ref:** 4077.

**1272 Anhydrohirundigenin monothevetoside**

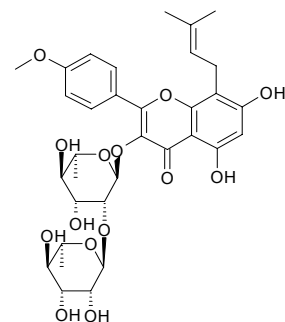
$C_{28}H_{40}O_8$  (504.63). Amorphous powder,  $[\alpha]_D^{25} = -22.82^\circ$  ( $c = 0.241$ , MeOH). **Pharm:** Vasodilator inactive (*in vitro*, rat isolated aortic rings with endothelium, pre-contracted by  $0.1\mu\text{mol/L}$  phenylephrine or  $100\text{mmol/L}$  KCl). **Source:** LIU YE BAI QIAN *Cynanchum stauntonii*. **Ref:** 4077.

**1273 Anhydroicaritin**

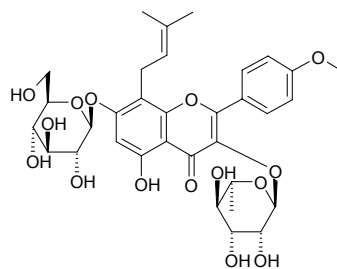
Icaritin [118525-40-9]  $C_{21}H_{20}O_6$  (368.39). Yellow powder, mp  $228\text{--}229^\circ\text{C}$ ; mp  $230\text{--}231^\circ\text{C}$ . **Source:** CHAO XIAN YIN YANG HUO *Epimedium koreanum*, CHUAN DIAN YIN YANG HUO *Epimedium davidii*, CU MAO YIN YANG HUO *Epimedium acuminatum*, WAN SHAN YIN YANG HUO *Epimedium wanshanense*, WU SHAN YIN YANG HUO *Epimedium wushanense*. **Ref:** 465, 458, 539, 660, 1521.

**1274 Anhydroicaritin-3-O- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -L-rhamnopyranoside**

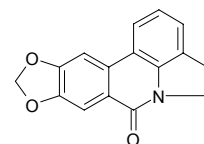
[135293-13-9]  $C_{33}H_{40}O_{14}$  (660.68). **Source:** WAN SHAN YIN YANG HUO *Epimedium wanshanense*. **Ref:** 574.

**1275 Anhydroicaritin-3-O- $\alpha$ -L-rhamnosyl-7-O- $\beta$ -D-glucopyranoside**

Icariin [489-32-7]  $C_{33}H_{40}O_{15}$  (676.68). **Pharm:** Antihypertensive (rbt, mild); coronary vasodilator (increases coronary flow, using original plant *Sagittate Epimedium*, JIAN YE YIN YANG HUO *Epimedium sagittatum*, used in treatment of AP); antidote (significant reduces release of alanine-amino-ferase and sorbito-dehydrogenase,  $1\text{--}20\mu\text{mL}$ , antidotic rate =  $76\%$ )<sup>[5501]</sup>; increases tolerance to anoxia (rat cerebral anoxia, treated by tubocurare)<sup>[5501]</sup>; osteoblastic differentiation stimulator (promotes synthesis and secretion of alkaline phosphatase (AKP) and type I collagen in osteoblasts)<sup>[5501]</sup>; cytotoxic (leukemia)<sup>[5501]</sup>; vasodilator<sup>[5501]</sup>; immunoenhancer (mouse)<sup>[5501]</sup>; antineoplastic<sup>[5501]</sup>. **Source:** CHAO XIAN YIN YANG HUO *Epimedium koreanum* (aerial parts: content scope =  $0.72\%\text{--}3.69\%$ , mean content =  $1.61\%$ )<sup>[5508]</sup>, CHUAN DIAN YIN YANG HUO *Epimedium davidii* (aerial parts: content =  $0.72\%$ )<sup>[5508]</sup>, CHUAN E YIN YANG HUO *Epimedium fargesii* (aerial parts: content =  $0.66\%$ )<sup>[5508]</sup>, CHUAN XI YIN YANG HUO *Epimedium elongatum* (aerial parts: content =  $0.48\%$ )<sup>[5508]</sup>, CU MAO YIN YANG HUO *Epimedium acuminatum* (aerial parts: mean content of 2 origins =  $1.14\%$ )<sup>[5508]</sup>, DA HUA YIN YANG HUO *Epimedium grandiflorum*, JIAN YE YIN YANG HUO *Epimedium sagittatum* (aerial parts: content scope =  $0.33\%\text{--}1.60\%$ , mean content =  $1.11\%$ )<sup>[5508]</sup>, ROU MAO YIN YANG HUO *Epimedium pubescens* (aerial parts: content scope =  $0.29\%\text{--}1.62\%$ , mean content =  $1.21\%$ )<sup>[5508]</sup>, SI CHUAN YIN YANG HUO *Epimedium sutchuenense* (aerial parts: content =  $0.57\%$ )<sup>[5508]</sup>, WU JU YIN YANG HUO *Epimedium ecalcaratum* (aerial parts: content =  $0.67\%$ )<sup>[5508]</sup>, WU SHAN YIN YANG HUO *Epimedium wushanense* (aerial parts: content scope =  $0.44\%\text{--}2.78\%$ , mean content =  $1.26\%$ )<sup>[5508]</sup>, YIN YANG HUO *Epimedium brevicornum* (aerial parts: content scope =  $1.01\%\text{--}8.81\%$ )<sup>[5501]</sup>, mean content =  $1.27\%$ )<sup>[5508]</sup>. **Ref:** 2, 514, 568, 635, 658, 660, 5501, 5508.

**1276 Anhydrolycorin-6-one**

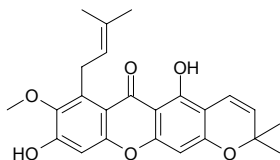
$C_{16}H_{11}NO_3$  (265.27). **Pharm:** Antiplasmodial (strain D10,  $IC_{50} = 6.1\mu\text{g/mL}$ , control Hamayne,  $IC_{50} = 15.6\mu\text{g/mL}$ , Chloroquine,  $IC_{50} = 0.002\mu\text{g/mL}$ ; strain FAC8,  $IC_{50} = 6.4\mu\text{g/mL}$ , Hamayne,  $IC_{50} = 18.2\mu\text{g/mL}$ , Chloroquine,  $IC_{50} = 0.01\mu\text{g/mL}$ ; cytotoxic, BL6,  $IC_{50} = 3.3\mu\text{g/mL}$ , Hamayne,  $IC_{50} = 9.4\mu\text{g/mL}$ , Chloroquine,  $IC_{50} = 20.9\mu\text{g/mL}$ , Daunomycin,  $IC_{50} = 0.43\mu\text{g/mL}$ ). **Source:** BU LANG WEI JI *Brunsvigia radulosa* (bulb). **Ref:** 3931.



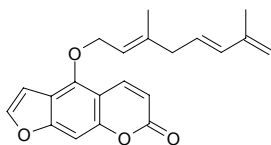


**1277 Anhydromangostanol\***

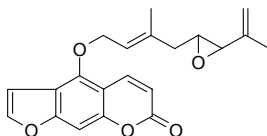
1,6-Dihydroxy-7-methoxy-8-(3-methylbut-2-enyl)6',6'-dimethylpyrano(2',3':3,2)xanthone C<sub>24</sub>H<sub>24</sub>O<sub>6</sub> (408.46). **Pharm:** Cytotoxic (KB cancer cell lines, IC<sub>50</sub> = 3.72µg/mL, control Ellipticine, IC<sub>50</sub> = 1.33µg/mL; BC-1, IC<sub>50</sub> = 3.02µg/mL, Ellipticine, IC<sub>50</sub> = 1.46µg/mL; NCI-H187, IC<sub>50</sub> = 2.19µg/mL Ellipticine, IC<sub>50</sub> = 0.39µg/mL)<sup>[1619]</sup>; antitubercular (*Mycobacterium tuberculosis*, MIC = 12.5µg/mL)<sup>[4358]</sup>. **Source:** DAO NIAN ZI *Garcinia mangostana* (young fruit: yield = 0.018%dw). **Ref:** 1619, 4358.

**1278 Anhydronoptol**

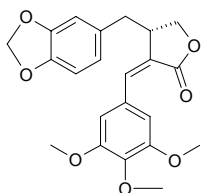
C<sub>21</sub>H<sub>20</sub>O<sub>4</sub> (336.39). **Source:** QIANG HUO *Notopterygium incisum*. **Ref:** 2, 507.

**1279 Anhydronoptoloxide**

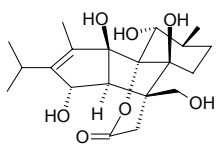
5-[(2E)-3,7-Dimethyl-5,6-epoxy-2,7-octadienyloxy] psoralen C<sub>21</sub>H<sub>20</sub>O<sub>5</sub> (352.39). Colorless oleaginous substance. **Source:** QIANG HUO *Notopterygium incisum*. **Ref:** 325.

**1280 Anhydropodorhizol**

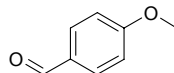
C<sub>22</sub>H<sub>22</sub>O<sub>7</sub> (398.42). **Source:** E SHEN *Anthriscus sylvestris*. **Ref:** 5499.

**1281 Anhydrosipganthol**

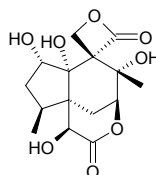
C<sub>20</sub>H<sub>30</sub>O<sub>7</sub> (382.46). Amorphous. **Source:** QU CHONG CAO *Spigelia anthelmia* (aerial parts). **Ref:** 5139.

**1282 p-Anisaldehyde**

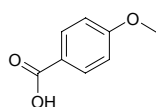
[123-11-5] C<sub>8</sub>H<sub>8</sub>O<sub>2</sub> (136.15). **Pharm:** Antifungal. **Source:** BA JIAO HUI XIANG *Illicium verum*, HUI QIN *Pimpinella anisum*, HUI XIANG *Foeniculum vulgare*, HUO XIANG *Agastache rugosus*, KONG SHI CHUN *Uva pertusa*, LIU YE MU LAN *Magnolia salicifolia*, XIANG GEN QIN *Osmorhiza aristata* var. *laxa*, *Cassia* sp., *Acacia* sp., *Vanilla* sp., *Pinus* sp. **Ref:** 2, 6, 660.

**1283 Anisatin**

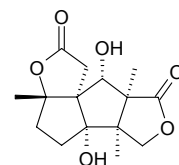
[5230-87-5] C<sub>15</sub>H<sub>20</sub>O<sub>8</sub> (328.32). White acicular crystals (ethyl acetate), mp 211~213°C, [α]<sub>D</sub><sup>20</sup> = -28° (c = 2, dioxocyclohexane). **Pharm:** Antipyretic (mus orl, ED = 0.5mg/kg); analgesic (mus, ED < 0.1mg/kg); toxin (hmn); LD<sub>50</sub> (mus, ip) = 0.7mg/kg. **Source:** RI BEN MANG CAO *Illicium anisatum* (the compound was isolated from the plant in 1965)<sup>[5505]</sup>, HONG HUI XIANG *Illicium henryi*, *Illicium merrillianum* (pericarp: yield = 0.0013%dw)<sup>[3046]</sup>. **Ref:** 658, 900, 3046, 5505.

**1284 Anisic acid**

4-Methoxybenzoic acid [1335-08-6] C<sub>8</sub>H<sub>8</sub>O<sub>3</sub> (152.15). **Pharm:** NO production inhibitor inactive (LPS-activated macrophage-like J774.1 cells, IC<sub>50</sub> = 141µg/mL; control L-NMMA, IC<sub>50</sub> = 27.4µg/mL)<sup>[4473]</sup>. **Source:** BA JIAO HUI XIANG *Illicium verum*, BAI MU XIANG *Aquilaria sinensis*, DANG GUI *Angelica sinensis*, FEI JI CAO *Eupatorium odoratum*, HE SE ZHONG HUA SHU *Tabebuia avellanedae* (inner bark), HUI XIANG *Foeniculum vulgare*, HUI XIANG JING YE *Foeniculum vulgare*, SHUI HUI XIANG *Limnophila rugosa*, TAI WAN PU GONG YING *Taraxacum formosanum* (fresh root). **Ref:** 2, 13, 4473, 4488.

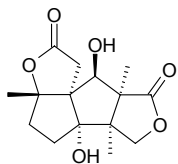
**1285 Anislactone A**

C<sub>15</sub>H<sub>20</sub>O<sub>6</sub> (296.32). **Source:** RI BEN MANG CAO *Illicium anisatum*, *Illicium merrillianum* (pericarp: yield = 0.00006%dw)<sup>[3046]</sup>. **Ref:** 1521, 3046.

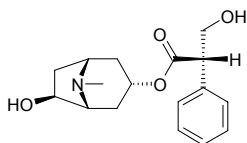


**1286 Anisactone B**

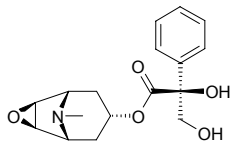
$C_{15}H_{20}O_6$  (296.32). Source: RI BEN MANG CAO *Illicium anisatum*, *Illicium merrillianum* (pericarp: yield = 0.016%dw)<sup>[3046]</sup>. Ref: 1521, 3046.

**1287 Anisodamine**

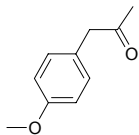
[17659-49-3]  $C_{17}H_{23}NO_4$  (305.38). mp 84.5–85.5°C. Pharm: Analgesic; antiarrhythmic; anticholinergic; antispasmodic (blood vessel); antiulcerative; platelet aggregation inhibitor; smooth muscle relaxant (stomach, duodenum and biliary tract). Source: LANG DANG ZI *Hyoscyamus niger* (dried ripe seed: mean content of 5 origins = 0.0447%<sup>[5508]</sup>), YANG JIN HUA *Datura metel* (flower: content scope of 3 origins = 0.005%–0.027%, mean content = 0.017%<sup>[5508]</sup>), ZANG QIE *Anisodus tanguticus* [Syn. *Scopolia tangutica*] (root: content scope of 3 origins = 0.036%–0.088%, mean content = 0.061%<sup>[5508]</sup>). Ref: 4, 6, 658, 5508.

**1288 Anisodine**

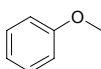
$C_{17}H_{21}NO_5$  (319.36). mp 62–64°C. Pharm: Anticholinergic; antispasmodic; salivary secretion inhibitor; mydriatic. Source: ZANG QIE *Anisodus tanguticus* [Syn. *Scopolia tangutica*] (root: content scope of 2 origins = 0.006%–0.200%, mean content = 0.103%<sup>[5508]</sup>). Ref: 4, 6, 658, 5508.

**1289 Anisolacetone**

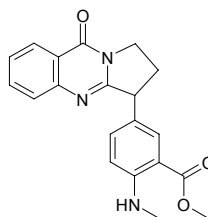
Anisic ketone [122-84-9]  $C_{10}H_{12}O_2$  (164.21). bp 267–269°C. Source: BA JIAO HUI XIANG *Illicium verum*, HUI XIANG *Foeniculum vulgare*. Ref: 6.

**1290 Anisole**

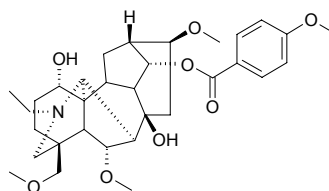
$C_7H_8O$  (108.14). Fragrant liquid, mp –37.3°C, bp 155.5°C/760mmHg; 93.0°C/100mmHg; 70.7°C/40mmHg; 55.8°C/20mmHg; 42.2°C/10mmHg; 30.0°C/5mmHg; 5.4°C/1.0mmHg. Pharm: Estrogenic activity. Source: SAI LE LUO LE *Ocimum selloi*. Ref: 658, 661.

**1291 Anisotine**

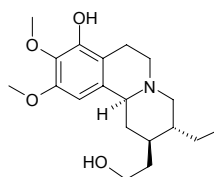
[16688-19-0]  $C_{20}H_{19}N_3O_3$  (349.39). mp 189–190°C. Source: DA BO GU *Adhatoda vasica*. Ref: 6.

**1292 14-O-Anisoylneoline**

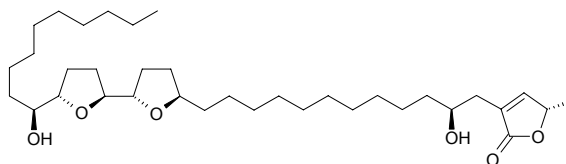
$C_{32}H_{45}NO_8$  (571.72). Amorphous powder (MeOH),  $[\alpha]_D^{22} = +22.3^\circ$  ( $c = 0.7$ ,  $CHCl_3$ ). Source: FU ZI *Aconitum carmichaeli* (tuber). Ref: 4373.

**1293 Ankorine**

[13849-54-2]  $C_{19}H_{29}NO_4$  (335.45). Pharm: Leprostatic (anti-leprosis, using source plants *Alangium lamarckii* and *A. kurzii*); antihypertensive; dermatitis suppressant (treatment of skin disease, using source plants *Alangium lamarckii*, and *A. kurzii*). Source: AN GE LA BA JIAO FENG *Alangium lamarckii*, MAO BA JIAO FENG *Alangium kurzii*. Ref: 658.

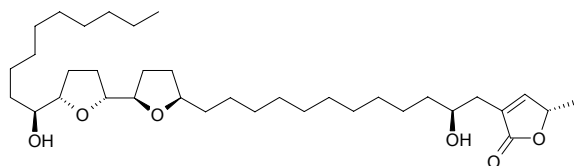
**1294 Annocatacin A**

$C_{35}H_{62}O_6$  (578.88). Yellowish waxy solid,  $[\alpha]_D^{25} = +21.3^\circ$  ( $c = 0.04$ ,  $CHCl_3$ ). Pharm: Cytotoxic (hmn hepatoma cell lines HepG2,  $IC_{50} = 12.11 \mu\text{g/mL}$ , control Adriamycin,  $IC_{50} = 0.241 \mu\text{g/mL}$ ; hmn hepatoma cells transfected with hepatitis B virus Hep2,2,15,  $IC_{50} = 0.0817 \mu\text{g/mL}$ , Adriamycin,  $IC_{50} = 0.450 \mu\text{g/mL}$ ). Source: CI GUO FAN LI ZHI *Annona muricata*. Ref: 5377.

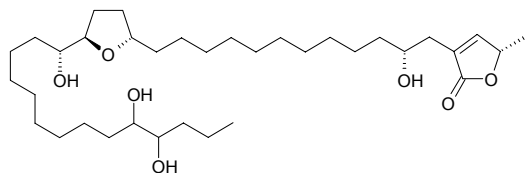


**1295 Annocatacin B**

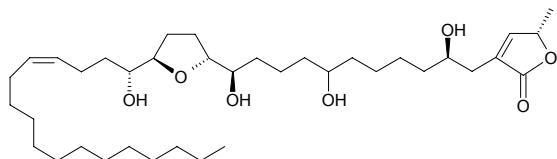
$C_{35}H_{62}O_6$  (578.88). Colorless oil,  $[\alpha]_D^{25} = +13.2^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Cytotoxic (hmn hepatoma cell lines HepG2,  $IC_{50} = 0.0335\mu\text{g/mL}$ , control Adriamycin,  $IC_{50} = 0.241\mu\text{g/mL}$ ; hmn hepatoma cells transfected with hepatitis B virus Hep2,2,15,  $IC_{50} = 0.222\mu\text{g/mL}$ , Adriamycin,  $IC_{50} = 0.450\mu\text{g/mL}$ ). **Source:** CI GUO FAN LI ZHI *Annona muricata*. **Ref:** 5377.

**1296 Annocatalin**

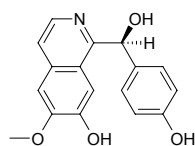
$C_{35}H_{64}O_7$  (596.9). White waxy solid,  $[\alpha]_D^{25} = +23.2^\circ$  ( $c = 0.05$ , MeOH). **Pharm:** Cytotoxic (*in vitro*, HepG2,  $IC_{50} = 5.7\mu\text{g/mL}$ , control Adriamycin,  $IC_{50} = 0.241\mu\text{g/mL}$ ; Hep2,2,15,  $IC_{50} = 0.00348\mu\text{g/mL}$ , control Adriamycin,  $IC_{50} = 0.45\mu\text{g/mL}$ ). **Source:** CI GUO FAN LI ZHI *Annona muricata* (leaf: yield = 0.00013%dw). **Ref:** 4617.

**1297 Annocherimolin**

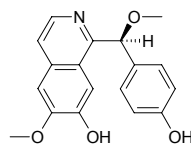
$C_{37}H_{66}O_7$  (622.93). White powder, mp 57.9–58.7°C,  $[\alpha]_D^{23} = -21^\circ$  ( $c = 0.02$ ,  $\text{CH}_2\text{Cl}_2$ ). **Pharm:** Cytotoxic (BST,  $LC_{50} = 0.0058\mu\text{g/mL}$ ; A549,  $ED_{50} = 1.56\mu\text{g/mL}$ , control Adriamycin,  $ED_{50} = 0.00113\mu\text{g/mL}$ ; MCF7,  $ED_{50} = 0.0000406\mu\text{g/mL}$ , Adriamycin,  $ED_{50} = 0.0182\mu\text{g/mL}$ ; HT29,  $ED_{50} = 0.0000249\mu\text{g/mL}$ , Adriamycin,  $ED_{50} = 0.0128\mu\text{g/mL}$ ; A498,  $ED_{50} = 0.153\mu\text{g/mL}$ , Adriamycin,  $ED_{50} = 0.00226\mu\text{g/mL}$ ; PC3,  $ED_{50} = 1.02\mu\text{g/mL}$ , Adriamycin,  $ED_{50} = 0.0502\mu\text{g/mL}$ ; MIA-PaCa-2,  $ED_{50} = 0.000012\mu\text{g/mL}$ , Adriamycin,  $ED_{50} = 0.00262\mu\text{g/mL}$ ). **Source:** MAO YE FAN LI ZHI *Annona cherimolia* (seed: yield = 0.00013%dw). **Ref:** 3049.

**1298 Annocherine A**

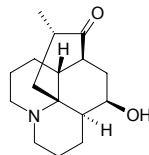
$C_{17}H_{15}NO_4$  (297.31). Yellow acicular crystals, mp 156–158°C,  $[\alpha]_D^{24} = 135^\circ$  ( $c = 0.1$ ,  $\text{CHCl}_3$ ). **Source:** MAO YE FAN LI ZHI *Annona cherimolia*. **Ref:** 751.

**1299 Annocherine B**

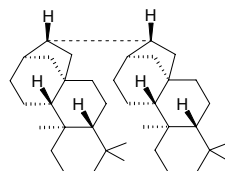
$C_{18}H_{17}NO_4$  (311.43). Yellow amorphous powder, mp 196–198°C,  $[\alpha]_D^{24} = 115^\circ$  ( $c = 0.1$ ,  $\text{CHCl}_3$ ). **Source:** MAO YE FAN LI ZHI *Annona cherimolia*. **Ref:** 751.

**1300 Annofoline**

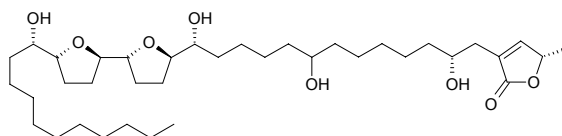
$C_{16}H_{25}NO_2$  (263.38). **Source:** DAN SUI SHI SONG *Lycopodium annotinum*. **Ref:** 660.

**1301 Annoglabayin**

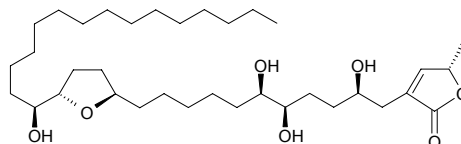
(16→16)-Bis-16β-hydro-*ent*-kaurane  $C_{38}H_{62}$  (518.92). White powder, mp 125–127°C,  $[\alpha]_D^{25} = -5.2^\circ$  ( $c = 0.75$ ,  $\text{CHCl}_3$ ). **Source:** YUAN HUA FAN LI ZHI *Annona glabra* (fruit: yield = 0.00215%fw). **Ref:** 4782.

**1302 Annoglaucin**

$C_{37}H_{66}O_8$  (638.93). Waxy solid,  $[\alpha]_D^{25} = +15.5^\circ$  ( $c = 0.25$ ,  $\text{CHCl}_3$ ). **Pharm:** Cytotoxic (hmn hepatoma cell lines HepG2,  $IC_{50} = 0.888\mu\text{g/mL}$ , control Adriamycin,  $IC_{50} = 0.241\mu\text{g/mL}$ ; hmn hepatoma cells transfected with hepatitis B virus Hep2,2,15,  $IC_{50} = 0.0173\mu\text{g/mL}$ , Adriamycin,  $IC_{50} = 0.450\mu\text{g/mL}$ ). **Source:** CI GUO FAN LI ZHI *Annona muricata*. **Ref:** 5377.

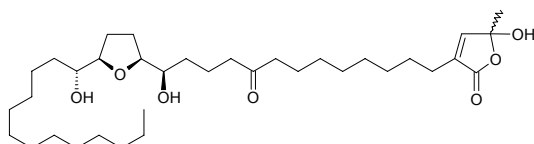
**1303 Annomolin**

$C_{35}H_{64}O_7$  (596.90). White powder, mp 60.5–61.2°C,  $[\alpha]_D^{23} = +4.0^\circ$  ( $c = 0.02$ ,  $\text{CH}_2\text{Cl}_2$ ). **Pharm:** Cytotoxic (BST,  $LC_{50} = 0.0094\mu\text{g/mL}$ ; A549,  $ED_{50} = 2.37\mu\text{g/mL}$ , control Adriamycin,  $ED_{50} = 0.00113\mu\text{g/mL}$ ; MCF7,  $ED_{50} = 0.000115\mu\text{g/mL}$ , Adriamycin,  $ED_{50} = 0.0182\mu\text{g/mL}$ ; HT29,  $ED_{50} = 0.0000892\mu\text{g/mL}$ , Adriamycin,  $ED_{50} = 0.0128\mu\text{g/mL}$ ; A498,  $ED_{50} = 0.000688\mu\text{g/mL}$ , Adriamycin,  $ED_{50} = 0.00226\mu\text{g/mL}$ ; PC3,  $ED_{50} = 0.0000539\mu\text{g/mL}$ , Adriamycin,  $ED_{50} = 0.0502\mu\text{g/mL}$ ; MIA-PaCa-2,  $ED_{50} = 2.18\mu\text{g/mL}$ , Adriamycin,  $ED_{50} = 0.00262\mu\text{g/mL}$ ). **Source:** MAO YE FAN LI ZHI *Annona cherimolia* (seed: yield = 0.00025%dw). **Ref:** 3049.

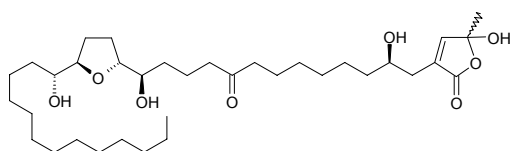


**1304 Annomolon A**

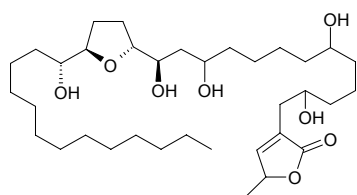
$C_{35}H_{62}O_7$  (594.88). White powder, mp 82.1~82.7°C,  $[\alpha]_D^{23} = -5.0^\circ$  ( $c = 0.02$ ,  $CH_2Cl_2$ ). **Pharm:** The data are from mixture of annomolon A and 34-*epi*-annomolon A: cytotoxic (BST,  $LC_{50} = 0.375\mu g/mL$ ); cytotoxic (*in vitro*, A549,  $ED_{50} = 1.26\mu g/mL$ ; MCF7,  $ED_{50} = 0.303\mu g/mL$ ; HT29,  $ED_{50} = 0.193\mu g/mL$ ; A498,  $ED_{50} = 0.93\mu g/mL$ ; PC3,  $ED_{50} = 0.198\mu g/mL$ ; MIA-PaCa-2,  $ED_{50} = 0.00312\mu g/mL$ ; control Adriamycin: A549,  $ED_{50} = 0.00113\mu g/mL$ ; MCF7,  $ED_{50} = 0.0182\mu g/mL$ ; HT29,  $ED_{50} = 0.0128\mu g/mL$ ; A498,  $ED_{50} = 0.00226\mu g/mL$ ; PC3,  $ED_{50} = 0.0502\mu g/mL$ ; MIA-PaCa-2,  $ED_{50} = 0.00262\mu g/mL$ ). **Source:** MAO YE FAN LI ZHI *Annona cherimolia* (seed). **Ref:** 4731.

**1305 Annomolon B**

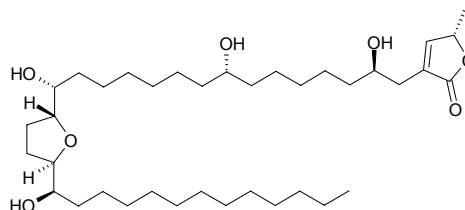
$C_{35}H_{62}O_8$  (610.88). White powder, mp 86.3~87.2°C,  $[\alpha]_D^{23} = +6.0^\circ$  ( $c = 0.02$ ,  $CH_2Cl_2$ ). **Pharm:** The data are from mixtures of annomolon B and 34-*epi*-annomolon B: cytotoxic (BST,  $LC_{50} = 0.07\mu g/mL$ ); cytotoxic (*in vitro*, A549,  $ED_{50} = 1.37\mu g/mL$ ; MCF7,  $ED_{50} = 0.047\mu g/mL$ ; HT29,  $ED_{50} = 0.0719\mu g/mL$ ; A498,  $ED_{50} = 0.377\mu g/mL$ ; PC3,  $ED_{50} = 0.0553\mu g/mL$ ; MIA-PaCa-2,  $ED_{50} = 0.00748\mu g/mL$ ; control Adriamycin: A549,  $ED_{50} = 0.00113\mu g/mL$ ; MCF7,  $ED_{50} = 0.0182\mu g/mL$ ; HT29,  $ED_{50} = 0.0128\mu g/mL$ ; A498,  $ED_{50} = 0.00226\mu g/mL$ ; PC3,  $ED_{50} = 0.0502\mu g/mL$ ; MIA-PaCa-2,  $ED_{50} = 0.00262\mu g/mL$ ). **Source:** MAO YE FAN LI ZHI *Annona cherimolia* (seed). **Ref:** 4731.

**1306 Annomonicin**

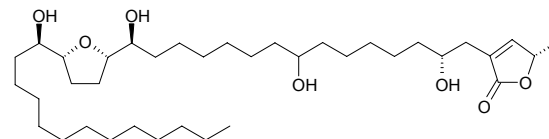
[128741-22-0]  $C_{35}H_{64}O_8$  (612.90). Light yellow wax solid, mp 85~87°C. **Pharm:** Cytotoxic ( $P_{388}$ ,  $ED_{50} = 0.24\mu g/mL$ , KB,  $ED_{50} = 1.73\mu g/mL$ ). **Source:** NIU XIN FAN LI ZHI *Annona reticulata*, SHAN FAN LI ZHI *Annona montana*. **Ref:** 432, 1050, 1521.

**1307 Annomontacin**

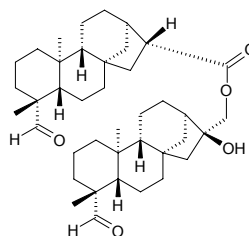
$C_{37}H_{68}O_7$  (624.95). **Pharm:** Produces apoptotic events (increases DNA damage in HepG2 cells, and induces a noticeable decrease in mitochondrial transmembrane potential)<sup>[4782]</sup>. **Source:** CI GUO FAN LI ZHI *Annona muricata* (seed: yield = 0.0045%dw)<sup>[4617]</sup>, SHAN FAN LI ZHI *Annona montana* (seed: yield = 0.00065%<sup>[4775]</sup>), YUAN HUA FAN LI ZHI *Annona glabra* (fruit: yield = 0.0117%fw)<sup>[4782]</sup>. **Ref:** 4617, 4775, 4782.

**1308 cis-Annomontacin**

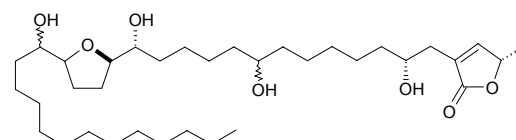
$C_{37}H_{68}O_7$  (624.95). White waxy solid,  $[\alpha]_D^{25} = +36.5^\circ$  ( $c = 0.03$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (*in vitro*, HepG2,  $IC_{50} = 0.298\mu g/mL$ , control Adriamycin,  $IC_{50} = 0.241\mu g/mL$ ; Hep2,2,15,  $IC_{50} = 0.0162\mu g/mL$ , control Adriamycin,  $IC_{50} = 0.45\mu g/mL$ )<sup>[4617]</sup>. **Source:** CI GUO FAN LI ZHI *Annona muricata* (seed: yield = 0.0026%dw)<sup>[4617]</sup>, SHAN FAN LI ZHI *Annona montana* (seed: yield = 0.0003%<sup>[4775]</sup>). **Ref:** 4617, 4775.

**1309 Annomosin A**

$C_{40}H_{60}O_5$  (620.92). White needles, mp 170~171°C,  $[\alpha]_D^{25} = -49.3^\circ$  ( $c = 0.12$ ,  $CHCl_3$ ). **Source:** FAN LI ZHI *Annona squamosa* (stem: yield = 0.00067%fw). **Ref:** 4654.

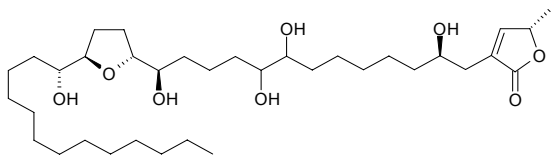
**1310 cis-Annomuricin**

[172586-13-9]  $C_{35}H_{64}O_7$  (596.90). White amorphous powder, mp 77°C,  $[\alpha]_D^{25} = 10^\circ$  ( $c = 17$ , chloroform). **Pharm:** Cytotoxic (BST,  $LC_{50} = 2.3\mu g/mL$ , PD,  $\ln Rt = 28\%$ , A549 *in vitro*,  $IC_{50} = 0.23\mu g/mL$ , MCF7 *in vitro*,  $IC_{50} = 1.18\mu g/mL$ , HT29 *in vitro*,  $IC_{50} = 1.0 \times 10^{-8}\mu g/mL$ ). **Source:** CI GUO FAN LI ZHI *Annona muricata*. **Ref:** 1062.

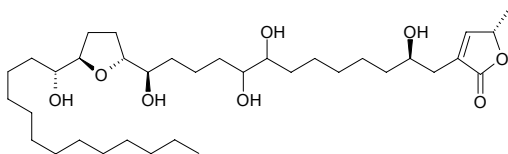


**1311 Annonuricin A**

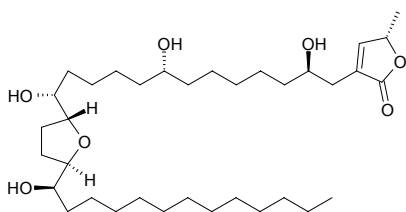
[167172-78-3] C<sub>35</sub>H<sub>64</sub>O<sub>8</sub> (612.90). White amorphous powder,  $[\alpha]_D^{22} = -6.4^\circ$  ( $c = 0.0025$ ). **Pharm:** Cytotoxic (A549 *in vitro*, ED<sub>50</sub> = 0.33 μg/mL; BST, LC<sub>50</sub> = 0.625 μg/mL). **Source:** CI GUO FAN LI ZHI *Annona muricata*. **Ref:** 1047.

**1312 Annonuricin B**

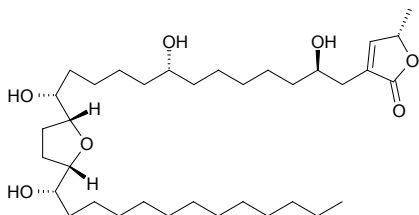
[167355-37-5] C<sub>35</sub>H<sub>64</sub>O<sub>8</sub> (612.89). White amorphous powder,  $[\alpha]_D^{22} = -11.7^\circ$  ( $c = 0.0064$ ). **Pharm:** Cytotoxic (A549, ED<sub>50</sub> = 0.159 μg/mL, HT29 *in vitro*, ED<sub>50</sub> = 0.435 μg/mL, BST *in vitro*, LC<sub>50</sub> = 0.687 μg/mL). **Source:** CI GUO FAN LI ZHI *Annona muricata*. **Ref:** 1047.

**1313 Annonacin**

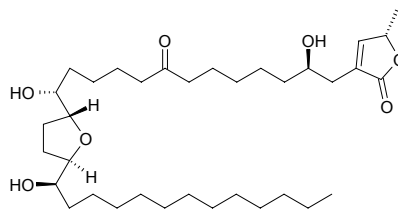
[111035-65-5] C<sub>35</sub>H<sub>64</sub>O<sub>7</sub> (596.90). White amorphous solid. **Pharm:** Antineoplastic (A549, IC<sub>50</sub> = 0.23 μg/mL, MCF7, IC<sub>50</sub> = 1.18 μg/mL, HT29, IC<sub>50</sub> = 1.0 × 10<sup>-8</sup> μg/mL); cytotoxic (BST, LC<sub>50</sub> = 2.3 μg/mL). **Source:** CI GUO FAN LI ZHI *Annona muricata* (seed: yield = 0.105% dw)<sup>[4617]</sup>, JIN PING GE NA XIANG *Goniotalamus leiocarpus*, SHAN FAN LI ZHI *Annona montana* (seed: yield = 0.052%)<sup>[4775]</sup>. **Ref:** 385, 420, 1062, 4617, 4775, 5035.

**1314 cis-Annonacin**

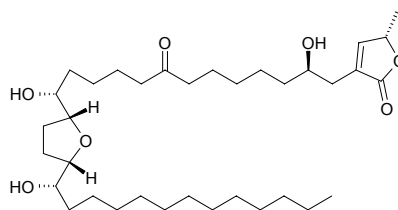
C<sub>35</sub>H<sub>64</sub>O<sub>7</sub> (596.90). **Source:** SHAN FAN LI ZHI *Annona montana* (seed: yield = 0.0011%<sup>[4775]</sup>). **Ref:** 4775, 5035.

**1315 Annonacin-10-one**

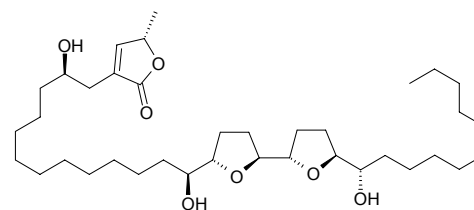
Annonacinone C<sub>35</sub>H<sub>62</sub>O<sub>7</sub> (594.88). **Source:** CI GUO FAN LI ZHI *Annona muricata* (seed: yield = 0.02% dw)<sup>[4617]</sup>, SHAN FAN LI ZHI *Annona montana* (seed). **Ref:** 4617, 5035.

**1316 cis-Annonacin-10-one**

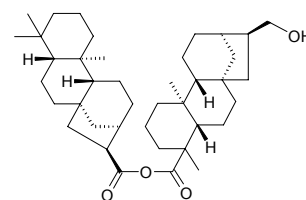
*cis*-Annonacinone C<sub>35</sub>H<sub>62</sub>O<sub>7</sub> (594.88). **Source:** SHAN FAN LI ZHI *Annona montana* (seed). **Ref:** 5035.

**1317 Annonareticin**

Asimicin C<sub>37</sub>H<sub>66</sub>O<sub>7</sub> (622.93). White crystals, mp 72–73°C,  $[\alpha]_D^{25} = +22.3^\circ$  ( $c = 0.1$ , MeOH). **Pharm:** Mitochondrial complex I selective inhibitor (NADH oxidase IC<sub>50</sub> = (0.33 ± 0.03) nmol/L,  $p < 0.001$ , control Rotenone, IC<sub>50</sub> = (5.10 ± 0.09) nmol/L)<sup>[5024]</sup>. **Source:** NIU XIN FAN LI ZHI *Annona reticulata*, MAO YE FAN LI ZHI *Annona cherimolia* (seed). **Ref:** 32, 5024.

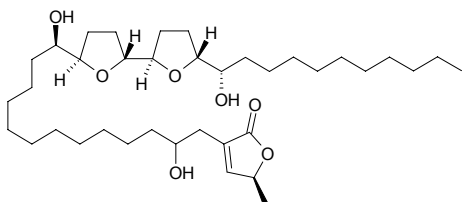
**1318 Annonabinide B**

C<sub>40</sub>H<sub>62</sub>O<sub>4</sub> (606.94). **Source:** YUAN HUA FAN LI ZHI *Annona glabra*. **Ref:** 2524.

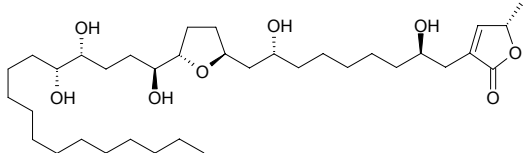


**1319 Annonin VI**

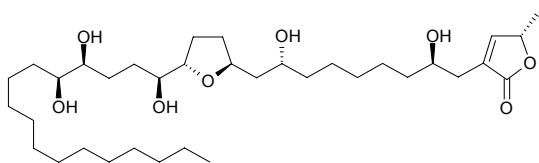
[129212-94-8] C<sub>37</sub>H<sub>66</sub>O<sub>7</sub> (622.93). Colorless solid,  $[\alpha]_D^{25} = +15.3^\circ$  ( $c = 0.4$ , CH<sub>2</sub>Cl<sub>2</sub>). **Pharm:** Anthelmintic (*Caenorhabditis elegans*); cytotoxic (HeLa *in vitro*, ED<sub>50</sub> = 0.05 μg/mL); NADH oxidase inhibitor (ox heart, *in vitro*); glucose dehydrogenase inhibitor (*Bacillus coli*); pesticide. **Source:** FAN LI ZHI *Annona squamosa*. **Ref:** 900.

**1320 Annonpentin A**

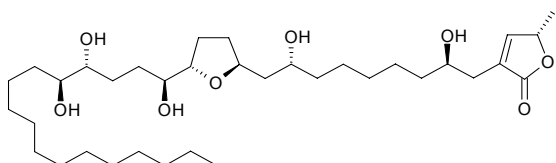
[184093-44-5] C<sub>35</sub>H<sub>64</sub>O<sub>8</sub> (612.89). White amorphous powder,  $[\alpha]_D^{25} = +12^\circ$  ( $c = 14$ , CHCl<sub>3</sub>). **Pharm:** Cytotoxic (*in vitro*, BST, LC<sub>50</sub> = 8.9 mg/L; A549, ED<sub>50</sub> = 0.171 μg/mL; MCF7, ED<sub>50</sub> = 17.93 μg/mL; HT29, ED<sub>50</sub> = 1.63 μg/mL; A498, ED<sub>50</sub> = 0.607 μg/mL; PC3, ED<sub>50</sub> = 1.14 μg/mL; PACA-2, ED<sub>50</sub> = 0.0358 μg/mL). **Source:** CI GUO FAN LI ZHI *Annona muricata*. **Ref:** 1058.

**1321 Annonpentin B**

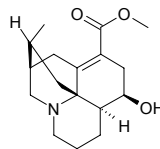
[184093-45-6] C<sub>35</sub>H<sub>64</sub>O<sub>8</sub> (612.89). White oil,  $[\alpha]_D^{25} = +15^\circ$  ( $c = 10$ , CHCl<sub>3</sub>). **Pharm:** Cytotoxic (*in vitro*, BST, LC<sub>50</sub> = 11.2 mg/L; A549, ED<sub>50</sub> = 0.0274 μg/mL; MCF7, ED<sub>50</sub> = 3.56 μg/mL; HT29, ED<sub>50</sub> = 1.64 μg/mL; A498, ED<sub>50</sub> = 0.379 μg/mL; PC3, ED<sub>50</sub> = 0.212 μg/mL; PACA-2, ED<sub>50</sub> = 0.162 μg/mL). **Source:** CI GUO FAN LI ZHI *Annona muricata*. **Ref:** 1058.

**1322 Annonpentin C**

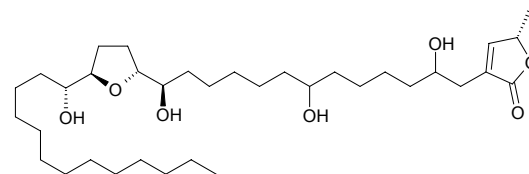
[184093-46-7] C<sub>35</sub>H<sub>64</sub>O<sub>8</sub> (612.89). White oil,  $[\alpha]_D^{25} = 9^\circ$  ( $c = 11$ , CHCl<sub>3</sub>). **Pharm:** Cytotoxic (*in vitro*, BST, LC<sub>50</sub> = 13.8 mg/L; A549, ED<sub>50</sub> = 0.0206 μg/mL; MCF7, ED<sub>50</sub> = 2.97 μg/mL; HT29, ED<sub>50</sub> = 1.24 μg/mL; A498, ED<sub>50</sub> = 0.258 μg/mL; PC3, ED<sub>50</sub> = 0.228 μg/mL; PACA-2, ED<sub>50</sub> = 0.428 μg/mL). **Source:** CI GUO FAN LI ZHI *Annona muricata*. **Ref:** 1058.

**1323 Annopodine**

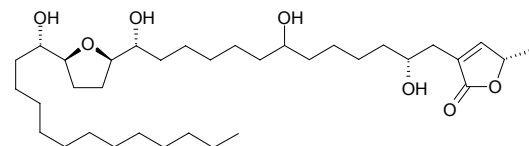
C<sub>17</sub>H<sub>25</sub>NO<sub>3</sub> (291.39). **Source:** DAN SUI SHI SONG *Lycopodium annotinum*. **Ref:** 660.

**1324 Annoreticuin**

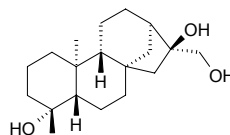
[142488-56-0] C<sub>35</sub>H<sub>64</sub>O<sub>7</sub> (596.90). Light yellow wax solid, mp 75~77°C. **Pharm:** Cytotoxic (*in vitro* HepG2, EC<sub>50</sub> = 0.0064 μg/mL; Hep3B, EC<sub>50</sub> = 2.45 μg/mL; control Doxorubicin, HepG2, EC<sub>50</sub> = 0.38 μg/mL, Hep3B, EC<sub>50</sub> = 0.36 μg/mL)<sup>[5035]</sup>. **Source:** NIU XIN FAN LI ZHI *Annona reticulata*, SHAN FAN LI ZHI *Annona montana* (seed). **Ref:** 432, 5035.

**1325 cis-Annoreticuin**

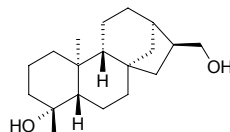
C<sub>35</sub>H<sub>64</sub>O<sub>7</sub> (596.90). Colorless waxy solid,  $[\alpha]_D^{25} = +3.5^\circ$  ( $c = 0.13$ , CHCl<sub>3</sub>). **Pharm:** Cytotoxic (*in vitro* HepG2, EC<sub>50</sub> = 0.0024 μg/mL, Hep3B, EC<sub>50</sub> = 1.98 μg/mL; control Doxorubicin, HepG2, EC<sub>50</sub> = 0.38 μg/mL, Hep3B, EC<sub>50</sub> = 0.36 μg/mL). **Source:** SHAN FAN LI ZHI *Annona montana* (seed). **Ref:** 5035.

**1326 Annosquamosin B**

19-Nor-*ent*-kaurane-4 $\alpha$ ,16 $\beta$ ,17-triol C<sub>19</sub>H<sub>32</sub>O<sub>3</sub> (308.47). **Pharm:** Platelet aggregation selected inhibitor (washed rabbit platelets, 200 μmol/L: 100 μmol/L AA induced, InRt = 8.7%; 10 μg/mL collagen induced, InRt = 21.1%; 1 ng/mL PAF induced, InRt = 8.5%; 0.05 U/mL thrombin induced, InRt = 1.6%). **Source:** FAN LI ZHI *Annona squamosa* (stem: yield = 0.00067%fw). **Ref:** 4654.

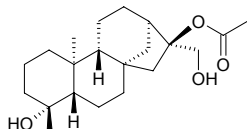
**1327 Annosquamosin C**

16 $\alpha$ -Hydro-17-hydroxy-19-nor-*ent*-kaurane-4 $\alpha$ -ol C<sub>19</sub>H<sub>32</sub>O<sub>2</sub> (292.47). White powder, mp 156~158°C,  $[\alpha]_D^{26} = -47.6^\circ$  ( $c = 0.03$ , MeOH). **Source:** FAN LI ZHI *Annona squamosa* (stem: yield = 0.00033%fw). **Ref:** 4654.

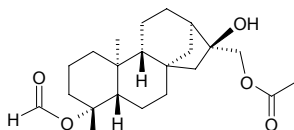


**1328 Annosquamosin D**

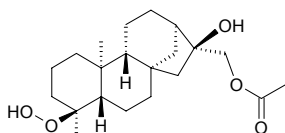
16 $\beta$ -Acetoxy-17-hydroxy-19-nor-*ent*-kauran-4 $\alpha$ -ol C<sub>21</sub>H<sub>34</sub>O<sub>4</sub> (350.5). White powder, mp 169–171°C,  $[\alpha]_D^{26} = -147.0^\circ$  ( $c = 0.02$ , MeOH). **Pharm:** Platelet aggregation inhibitor inactive (washed rabbit platelets, 200 $\mu$ mol/L: 100 $\mu$ mol/L AA induced, InRt = 4.9%; 10 $\mu$ g/mL collagen induced, InRt = 10.6%; 1ng/mL PAF induced, InRt = 9.3%; 0.05U/mL thrombin induced, InRt = 2.0%). **Source:** FAN LI ZHI *Annona squamosa* (stem: yield = 0.00047%fw). **Ref:** 4654.

**1329 Annosquamosin E**

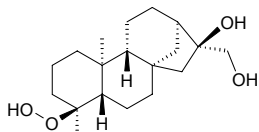
16 $\beta$ -Hydroxy-17-acetoxy-19-nor-*ent*-kauran-4 $\alpha$ -formate C<sub>22</sub>H<sub>34</sub>O<sub>5</sub> (378.51). White powder, mp 172–174°C,  $[\alpha]_D^{26} = -26.8^\circ$  ( $c = 0.05$ , MeOH). **Source:** FAN LI ZHI *Annona squamosa* (stem: yield = 0.00033%fw). **Ref:** 4654.

**1330 Annosquamosin F**

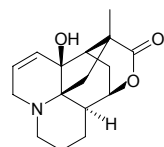
16 $\beta$ -Hydroxy-17-acetoxy-18-nor-*ent*-kauran-4 $\beta$ -hydroperoxide C<sub>21</sub>H<sub>34</sub>O<sub>5</sub> (366.5). White powder, mp 144–146°C,  $[\alpha]_D^{26} = -39.2^\circ$  ( $c = 0.05$ , MeOH). **Source:** FAN LI ZHI *Annona squamosa* (stem: yield = 0.00040%fw). **Ref:** 4654.

**1331 Annosquamosin G**

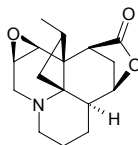
16 $\beta$ ,17-Dihydroxy-18-nor-*ent*-kauran-4 $\beta$ -hydroperoxide C<sub>19</sub>H<sub>32</sub>O<sub>4</sub> (324.46). White powder, mp 175–177°C,  $[\alpha]_D^{26} = -74.4^\circ$  ( $c = 0.02$ , MeOH). **Source:** FAN LI ZHI *Annona squamosa* (stem, yield = 0.00027%fw). **Ref:** 4654.

**1332 Annotine**

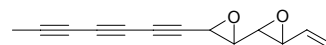
[5096-59-3] C<sub>16</sub>H<sub>21</sub>NO<sub>3</sub> (275.35). **Pharm:** Dermatitis suppressant (used in treatment of skin diseases, using source plants *Lycopodium* spp.). **Source:** DAN SUI SHI SONG *Lycopodium annotinum*. **Ref:** 658.

**1333 Annotinine**

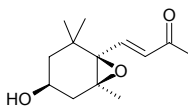
[559-49-9] C<sub>16</sub>H<sub>21</sub>NO<sub>3</sub> (275.35). Prismatic crystals (CHCl<sub>3</sub>–MeOH), mp 232°C. **Pharm:** Uterine stimulant. **Source:** DAN SUI SHI SONG *Lycopodium annotinum*. **Ref:** 658, 661.

**1334 Annuadiepoxide**

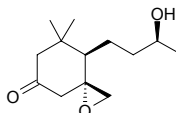
C<sub>13</sub>H<sub>10</sub>O<sub>2</sub> (198.22). **Source:** HUANG HUA HAO *Artemisia annua*. **Ref:** 660.

**1335 Annuionone D**

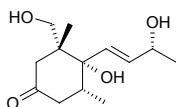
C<sub>13</sub>H<sub>20</sub>O<sub>3</sub> (224.30). Oil. **Source:** ZAI PEI XIANG RI KUI YE *Helianthus annuus* cv. **Ref:** 2370.

**1336 Annuionone E**

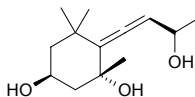
C<sub>13</sub>H<sub>22</sub>O<sub>3</sub> (226.32). Colorless oil,  $[\alpha]_D^{25} = +4.2^\circ$  ( $c = 0.1$ , CH<sub>3</sub>OH). **Source:** XIANG RI KUI YE *Helianthus annuus*. **Ref:** 1927.

**1337 Annuionone F**

(1*R*,5*R*,6*S*,9*R*)-3-Oxo-6,13-dihydroxy-5,6-dihydro- $\beta$ -ionol C<sub>13</sub>H<sub>22</sub>O<sub>4</sub> (242.32). Colorless oil. **Source:** ZAI PEI XIANG RI KUI YE *Helianthus annuus* cv. (fresh leaf). **Ref:** 3881.

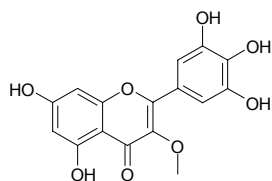
**1338 Annuionone G**

(3*R*,5*R*,7*R*)-3,5-Dihydroxy-5,6-dihydro-6,7-dehydro- $\beta$ -ionol C<sub>13</sub>H<sub>22</sub>O<sub>3</sub> (226.32). Colorless oil,  $[\alpha]_D^{25} = -15.5^\circ$  ( $c = 1.0$ , CHCl<sub>3</sub>). **Source:** ZAI PEI XIANG RI KUI YE *Helianthus annuus* cv. (fresh leaf). **Ref:** 3881.

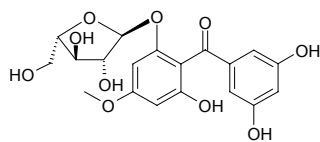


**1339 Annulatin**

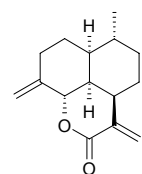
Myricetin-3-*O*-methyl ether C<sub>16</sub>H<sub>12</sub>O<sub>8</sub> (332.27). Yellow amorphous solid.  
 Source: *Goniotalamus thwaitesii* (aerial parts). Ref: 5096.

**1340 Annulatophenonoid**

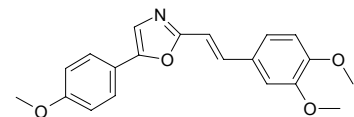
C<sub>19</sub>H<sub>20</sub>O<sub>10</sub> (408.37). Yellow crystalloid mass (H<sub>2</sub>O-EtOH), mp 162~164°C,  
 [α]<sub>D</sub><sup>20</sup> = -79.52° (c = 1.0550, MeOH). Source: HUAN ZHUANG JIN SI TAO  
*Hypericum annulatum*. Ref: 2009.

**1341 Annulide**

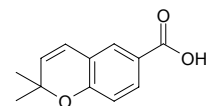
C<sub>15</sub>H<sub>20</sub>O<sub>2</sub> (232.33). Source: HUANG HUA HAO *Artemisia annua* (aerial  
 parts). Ref: 660, 5224.

**1342 Annuloline**

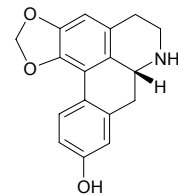
[3988-51-0] C<sub>20</sub>H<sub>19</sub>NO<sub>4</sub> (337.38). Pharm: Antifungal. Source: DUO HUA  
 HEI MAI CAO *Lolium multiflorum*. Ref: 658.

**1343 Anofinic acid**

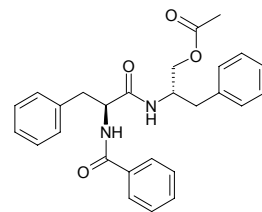
2,2-Dimethyl-2*H*-1-chromene-6-carboxylic acid [34818-56-9] C<sub>12</sub>H<sub>12</sub>O<sub>3</sub>  
 (204.23). Colorless columnar, acicular crystals (80% alcohol), mp 155~158°C,  
 [α]<sub>D</sub><sup>20</sup> = +15° (c = 0.8, alcohol). Pharm: Antifungal (*Cladosporium*  
*cucumerinum*, IC<sub>50</sub> = 50 μg/mL). Source: BAI HUA LONG DAN *Gentiana*  
*algida*, GOU ZHUANG HU JIAO *Piper aduncum*. Ref: 704, 900, 2323.

**1344 Anolobine**

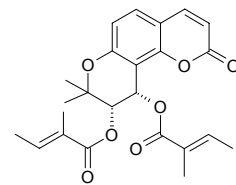
[641-17-8] C<sub>17</sub>H<sub>15</sub>NO<sub>3</sub> (281.31). mp 262°C. Source: YE HE HUA *Magnolia*  
*coco*. Ref: 6.

**1345 Anomalamide**

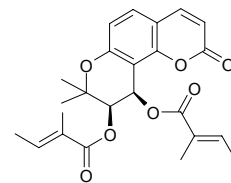
Lyciumamide [56121-42-7] C<sub>27</sub>H<sub>28</sub>N<sub>2</sub>O<sub>4</sub> (444.54). Source: BO LUO MI  
*Artocarpus heterophyllus*, E BU SHI CAO *Centipeda minima*, GOU QI GEN  
*Pi Lycium chinense*, HUANG HUA HAO *Artemisia annua*, LIU JI NU  
*Artemisia anomala*. Ref: 2, 660.

**1346 (+)-Anomalin**

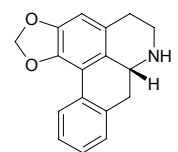
C<sub>24</sub>H<sub>26</sub>O<sub>7</sub> (426.47). mp 171~172°C. Source: LI JIANG QIAN HU  
*Peucedanum govanianum* var. *bicolor*. Ref: 557.

**1347 Anomalin**

[4970-26-7] C<sub>24</sub>H<sub>26</sub>O<sub>7</sub> (426.47). mp 173~174°C. Source: HANG BAI ZHI  
*Angelica taiwaniana*, XIA YE DANG GUI *Angelica anomala* (the compound  
 was isolated from the plant by Qingzhi Qin et al. in 1960)<sup>[5505]</sup>. Ref: 6, 5505.

**1348 Anonaine**

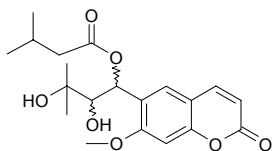
(-)-Anonaine [1862-41-5] C<sub>17</sub>H<sub>15</sub>NO<sub>2</sub> (265.31). mp 122~123°C. Pharm:  
 Antibacterial; insecticidal. Source: NIU XIN FAN LI ZHI *Annona reticulata*,  
 LIAN ZI *Nelumbo nucifera*, FAN LI ZHI *Annona squamosa*, HE YE *Nelumbo*  
*nucifera*, HOU PO *Magnolia officinalis*, YOU GOU YING ZHAO *Artabotrys*  
*uncinatus* (root, stem, leaf)<sup>[3083]</sup>. Ref: 6, 221, 625, 658, 3083.



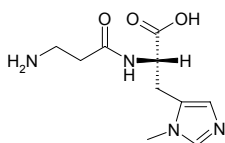


**1349 Anpubesol**

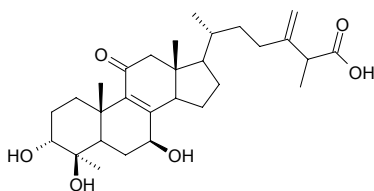
[110064-48-7] C<sub>20</sub>H<sub>26</sub>O<sub>7</sub> (378.43). Colorless and transparent, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -72.5° (c = 0.15, chloroform). Source: DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*]. Ref: 79.

**1350 Anserine**

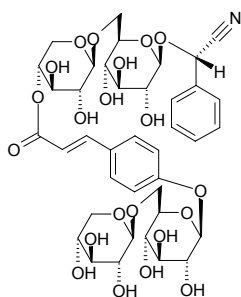
[584-85-0] C<sub>10</sub>H<sub>16</sub>N<sub>4</sub>O<sub>3</sub> (240.26). mp 238-239°C. Source: JI NAO *Gallus gallus domesticus*, XIA TIAN GAO *Bos taurus domesticus*, MAN LI YU *Anguilla japonica*. Ref: 6.

**1351 Antcin K**

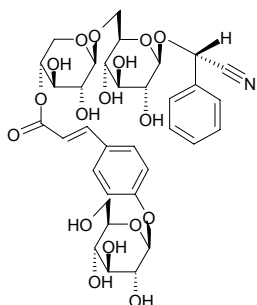
3 $\alpha$ ,4 $\beta$ ,7 $\beta$ -Trihydroxy-4 $\alpha$ -methylergosta-8,24(28)-dien-11-on-26-icoic acid C<sub>29</sub>H<sub>44</sub>O<sub>6</sub> (488.67). Source: *Antrodia camphorata* (fruit body). Ref: 4960.

**1352 Anthemis glycoside A**

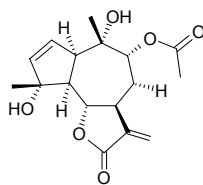
C<sub>39</sub>H<sub>49</sub>NO<sub>21</sub> (867.82). Pharm: Toxin. Source: GAO CHUN HUANG JU *Anthemis altissima*. Ref: 658.

**1353 Anthemis glycoside B**

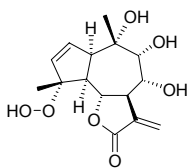
C<sub>34</sub>H<sub>41</sub>NO<sub>17</sub> (735.70). Pharm: Toxin. Source: GAO CHUN HUANG JU *Anthemis altissima*. Ref: 658.

**1354 Anthemolide A**

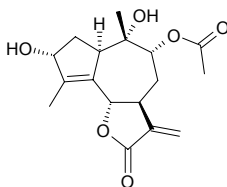
C<sub>17</sub>H<sub>22</sub>O<sub>6</sub> (322.36). Source: *Anthemis carpatica* (aerial parts). Ref: 3974.

**1355 Anthemolide B**

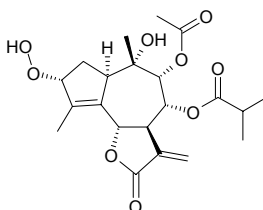
C<sub>15</sub>H<sub>20</sub>O<sub>7</sub> (312.32). colorless solid. Source: MENG DA NA CHUN HUANG JU *Anthemis cretica* ssp. *cretica* [Syn. *Anthemis montana*]. Ref: 1893.

**1356 Anthemolide C**

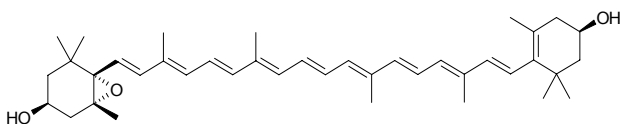
C<sub>17</sub>H<sub>22</sub>O<sub>6</sub> (322.36). Source: *Anthemis carpatica* (aerial parts). Ref: 3974.

**1357 Anthemolide F**

C<sub>21</sub>H<sub>28</sub>O<sub>9</sub> (424.45). Amorphous solid, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +97° (c = 0.33, MeOH). Source: *Anthemis carpatica* (aerial parts). Ref: 3974.

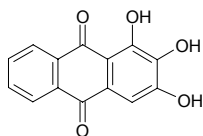
**1358 Antheraxanthin**

C<sub>40</sub>H<sub>56</sub>O<sub>3</sub> (584.89). mp (*cis*) 110°C, (*trans*) 207°C. Pharm: Yellow pigment. Source: DAO CAO *Oryza sativa*, FAN MU GUA *Carica papaya*, HAN LIAN HUA *Tropaeolum majus*, HONG HAI JIAO *Capsicum annuum*, HUA LING CAO *Eschscholzia californica*, JING MI *Oryza sativa*, JUAN DAN *Lilium tigrinum* [Syn. *Lilium lancifolium*], SHE XIANG BAI HE *Lilium longiflorum*, *Rosa* sp. Ref: 6, 660.

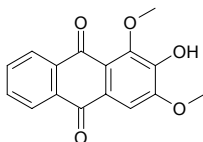


**1359 Anthragallol**

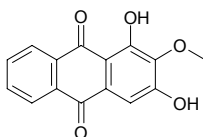
[602-64-2]  $C_{14}H_8O_5$  (256.22). mp 312–313°C. **Pharm:** Cytotoxic (macrophage, T lymphocyte and B lymphocyte in high dose); immunosuppressant (*in vitro*). **Source:** TU LIAN QIAO *Hymenodictyon excelsum*. **Ref:** 6, 658.

**1360 Anthragallol-1,3-dimethylether**

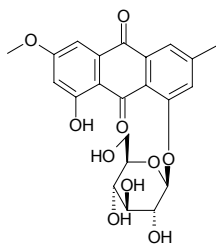
1,3-Dimethoxy-2-hydroxyanthraquinone  $C_{16}H_{12}O_5$  (284.27). **Source:** GUANG JING QIAN CAO *Rubia wallichiana* (stem), HAI BA JI *Morinda citrifolia* (fruit). **Ref:** 4369, 4542.

**1361 Anthragallol-2-methylether**

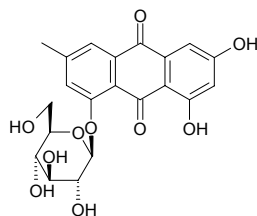
$C_{15}H_{10}O_5$  (270.24). **Source:** HAI BA JI *Morinda citrifolia* (fruit). **Ref:** 4542.

**1362 Anthraglycoside A**

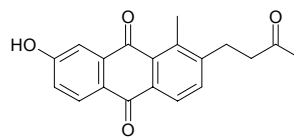
Physcion-8-*O*- $\beta$ -*D*-glucopyranoside  $C_{22}H_{22}O_{10}$  (446.41). mp 230–232°C. **Source:** HU ZHANG *Polygonum cuspidatum*. **Ref:** 6.

**1363 Anthraglycoside B**

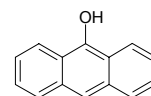
Emodin-8-*O*- $\beta$ -*D*-glucopyranoside  $C_{21}H_{20}O_{10}$  (432.39). mp 190–191°C. **Pharm:** Antioxidant inactive (DPPH radical scavenger,  $IC_{50} > 100\mu\text{g/mL}$ ; control Ascorbic acid,  $IC_{50} = 3.9\mu\text{g/mL}$ )<sup>[4711]</sup>. **Source:** DA HUANG *Rheum officinale*, HU ZHANG *Polygonum cuspidatum*, ZANG BIAN DA HUANG *Rheum emodi* [*Syn. Rheum australe*] (root: yield = 1.02%dw). **Ref:** 2, 6, 4186, 4711.

**1364 Anthrakunthone**

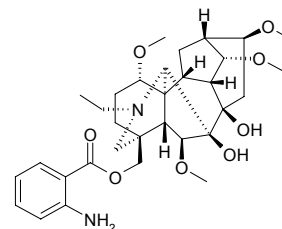
$C_{19}H_{16}O_4$  (308.34). Yellow oil. **Pharm:** Antimalarial (antiplasmodial); toxin (endothelial cell line ECV-304). **Source:** WU GAN DA YU YE QIU *Stereospermum kunthianum*. **Ref:** 2019.

**1365 Anthranol**

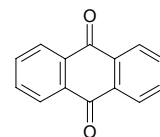
9-Anthracenol [529-86-2]  $C_{14}H_{10}O$  (194.24). **Source:** LU HUI *Aloe vera* [*Syn. Aloe barbadensis*]. **Ref:** 2.

**1366 Anthranoylcoctonine**

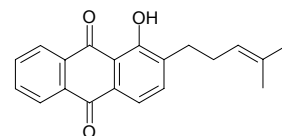
$C_{32}H_{46}N_2O_8$  (586.73). Colorless trapezoid crystals (cyclohexane-acetone). **Pharm:** Neuromuscular blocker (mus); toxin (animal, breathing faintness, palsy, convulsion until death). **Source:** BA BI CUI QUE HUA *Delphinium barbeyi*, E MEI CUI QUE HUA *Delphinium omeiense*, GUA YE WU TOUTOU *Aconitum hemsleyanum*, HEI SHUI CUI QUE HUA BIAN ZHONG *Delphinium potaninii* var. *juifengshanense* (root), XI MA XUAN FU HUA *Inula royleana*. **Ref:** 658, 2190, 2208, 4227.

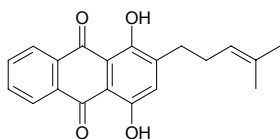
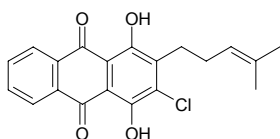
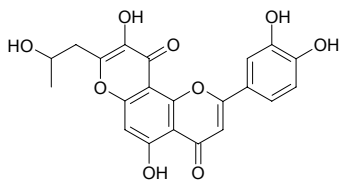
**1367 Anthraquinone**

9,10-Anthracenedione [84-65-1]  $C_{14}H_8O_2$  (208.22). mp 286°C, bp 379–381°C (sub). **Pharm:** Anti-inflammatory (NO production inhibitor)<sup>[4415]</sup>; cytotoxic ( $P_{388}$ ,  $ED_{50} = 8.29\mu\text{g/mL}$ , control Mithramycin,  $ED_{50} = 0.58\mu\text{g/mL}$ ; A549,  $ED_{50} = 37.33\mu\text{g/mL}$ , Mithramycin,  $ED_{50} = 0.073\mu\text{g/mL}$ ; HT29,  $ED_{50} = 20.81\mu\text{g/mL}$ , Mithramycin,  $ED_{50} = 0.076\mu\text{g/mL}$ )<sup>[5421]</sup>. **Source:** MO ZHI JIAO GU CUI *Casearia membranacea* (stem), HU ZHANG *Polygonum cuspidatum*, LUO BU MA *Apocynum venetum*. **Ref:** 6, 4415, 5421.

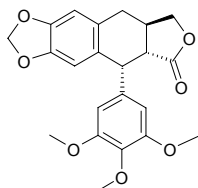
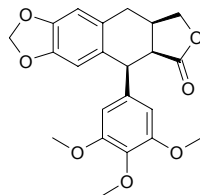
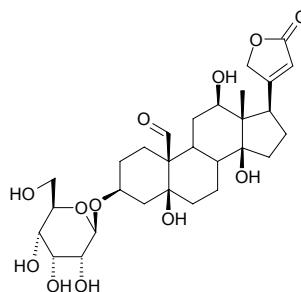
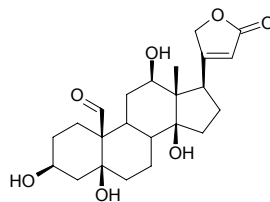
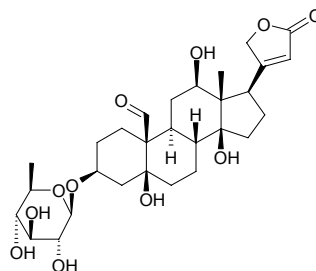
**1368 Anthrasesamone A**

1-Hydroxy-2-(4-methylpent-3-enyl)anthraquinone  $C_{20}H_{18}O_3$  (306.36). Yellow solid. **Source:** HU MA GEN *Sesamum indicum*. **Ref:** 3465.



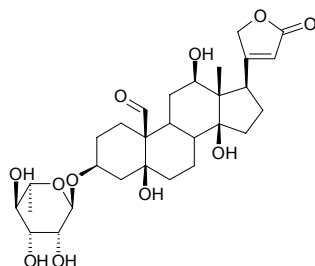
**1369 Anthrasesamone B**1,4-Dihydroxy-2-(4-methylpent-3-enyl)-anthraquinone C<sub>20</sub>H<sub>18</sub>O<sub>4</sub> (322.36).Red solid. Source: HU MA GEN *Sesamum indicum*. Ref: 3465.**1370 Anthrasesamone C**2-Chloro-1,4-dihydroxy-3-(4-methylpent-3-enyl)anthraquinone C<sub>20</sub>H<sub>17</sub>ClO<sub>4</sub>(356.81). Red solid. Source: HU MA GEN *Sesamum indicum*. Ref: 3465.**1371 Anthraxin**C<sub>21</sub>H<sub>16</sub>O<sub>9</sub> (412.36). mp 336°C. Source: JIN CAO *Arthroxon hispidus*. Ref: 6.**1372 Anthricin**Deoxypodophyllotoxin [19186-35-7] C<sub>22</sub>H<sub>22</sub>O<sub>7</sub> (398.42). Colorless prismatic crystals (absolute ethanol), mp 166~169°C, [ $\alpha$ ]<sub>D</sub><sup>27</sup> = (-113.9±1.6)<sup>o</sup> (c = 0.985, chloroform); mp 162~164°C (methanol), [ $\alpha$ ]<sub>D</sub> = -102.5<sup>o</sup> (c = 0.20, CHCl<sub>3</sub>).

Pharm: Cytotoxic (inhibition of TPA-induced ornithine decarboxylase activity with cultured mouse epidermal 308 cells)<sup>[5038]</sup>; antineoplastic (P<sub>388</sub>); antimetabolic; antiviral (HSV-1, measles virus); cytotoxic (KB, ED<sub>50</sub> ≤ 20µg/mL); antihepatotoxin (mus, sc, 10mg/kg, inhibits the rise of GPT in serum caused by CCl<sub>4</sub>). Source: BEI MEI YA BAI *Thuja occidentalis*, CHA ZI YUAN BAI *Juniperus sabina*, CHENG LIU YE YUAN BAI *Juniperus sabina* var. *tamariscifolia*, E SHEN *Anthriscus sylvestris*, LIU JIAO LIAN *Dysosma pleiantha* [Syn. *Podophyllum pleianthum*], LUO HAN BAI *Thujopsis dolobrata*, NAN MEI ZHOU GUI *Juniperus silicicola*, TAO ER QI *Podophyllum emodii* [Syn. *Podophyllum emodii* var. *chinense*; *Podophyllum sikkimensis*; *Sinopodophyllum emodii*] (rhizome: mean content of 2 origins = 0.265%<sup>[5508]</sup>), XIAO YE LIE LAN *Bursera microphylla*, *Libocedrus* sp. Ref: 4, 6, 658, 661, 3543, 5038, 5499, 5508.

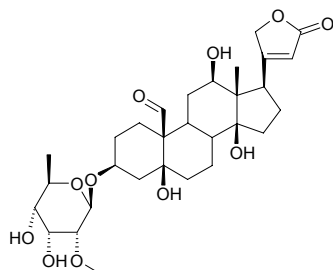
**1373 Anthricin isomer**C<sub>22</sub>H<sub>22</sub>O<sub>7</sub> (398.42). Pharm: Cytotoxic (soft agar transformation assay with JB6 cells); cytotoxic (inhibition of TPA-induced ornithine decarboxylase activity with cultured mouse epidermal 308 cells). Source: BEI MEI YA BAI *Thuja occidentalis*. Ref: 5038.**1374 Antialloside**C<sub>29</sub>H<sub>42</sub>O<sub>12</sub> (582.65). Source: JIAN XUE FENG HOU *Antiaris toxicaria* [Syn. *Ambora toxicaria*]. Ref: 660.**1375 Antiarigenin**C<sub>23</sub>H<sub>32</sub>O<sub>7</sub> (420.51). Source: JIAN XUE FENG HOU *Antiaris toxicaria* [Syn. *Ambora toxicaria*]. Ref: 660.**1376 α-Antiarin**[23605-05-2] C<sub>29</sub>H<sub>42</sub>O<sub>11</sub> (566.65). Pharm: LD<sub>50</sub> (cat, iv) = 0.116mg/kg. Source: JIAN XUE FENG HOU *Antiaris toxicaria* [Syn. *Ambora toxicaria*]. Ref: 658.

**1377  $\beta$ -Antiarin**

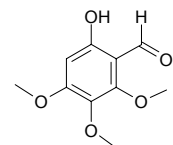
[639-13-4] C<sub>29</sub>H<sub>42</sub>O<sub>11</sub> (566.65). Source: FEI ZHOU JIAN XUE FENG HOU *Antiaris Africana*, GANG GUO JIAN XUE FENG HOU *Antiaris welwitschii*, JIAN XUE FENG HOU *Antiaris toxicaria* [Syn. *Ambora toxicaria*]. Ref: 660, 1521.

**1378 Antiarjavoside**

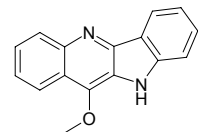
C<sub>30</sub>H<sub>44</sub>O<sub>11</sub> (580.68). Source: JIAN XUE FENG HOU *Antiaris toxicaria* [Syn. *Ambora toxicaria*]. Ref: 660.

**1379 Antiarolaldehyde**

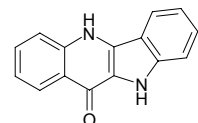
C<sub>10</sub>H<sub>12</sub>O<sub>5</sub> (212.20). mp 60–61°C. Pharm: Antifungal (*Trichophyton interdigitale*) Source: HONG HUA PI *Betula platyphylla* var. *japonica*. Ref: 661.

**1380 Anticancer Alkaloid PMV70P691-050**

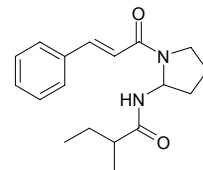
C<sub>16</sub>H<sub>12</sub>N<sub>2</sub>O (248.29). Pharm: Cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells). Source: HUANG HUA REN *Sida acuta*. Ref: 5038.

**1381 Anticancer Alkaloid PMV70P691-051**

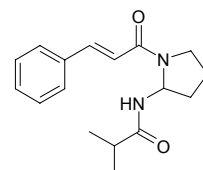
C<sub>15</sub>H<sub>10</sub>N<sub>2</sub>O (234.26). Pharm: Cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells). Source: HUANG HUA REN *Sida acuta*. Ref: 5038.

**1382 Anticancer Amide PMV70P691-052**

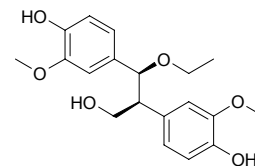
C<sub>18</sub>H<sub>24</sub>N<sub>2</sub>O<sub>2</sub> (300.40). Pharm: Cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells). Source: *Aglaia ponapensis*. Ref: 5038.

**1383 Anticancer Amide PMV70P691-053**

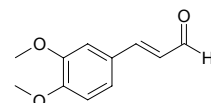
C<sub>17</sub>H<sub>22</sub>N<sub>2</sub>O<sub>2</sub> (286.38). Pharm: Cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells). Source: *Aglaia ponapensis*. Ref: 5038.

**1384 Anticancer Benzenoid PMV70P691-004**

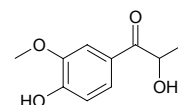
C<sub>10</sub>H<sub>24</sub>O<sub>6</sub> (348.40). Pharm: Cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells). Source: *Couepia ulei*. Ref: 5038.

**1385 Anticancer Benzenoid PMV70P691-57**

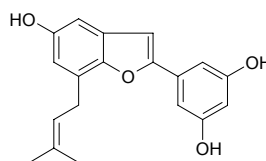
C<sub>11</sub>H<sub>12</sub>O<sub>3</sub> (192.22). Pharm: Cytotoxic (soft agar transformation assay with JB6 cells). Source: WU ZHU MAI DA JI *Euphorbia quinquecostata*. Ref: 5038.

**1386 Anticancer Benzenoid PMV70P691-58**

C<sub>10</sub>H<sub>12</sub>O<sub>4</sub> (196.20). Pharm: Cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells). Source: HUANG HUA REN *Sida acuta*. Ref: 5038.

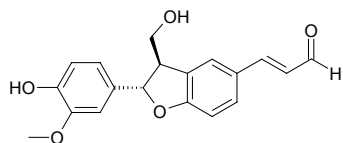
**1387 Anticancer Benzofuran PMV70P691-005**

C<sub>19</sub>H<sub>18</sub>O<sub>4</sub> (310.35). Pharm: Cytotoxic (cyclooxygenase-1 inhibitor); cytotoxic (cyclooxygenase-2 inhibitor). Source: DA DA HE MIAN BAO GUO *Artocarpus dadah*. Ref: 5038.

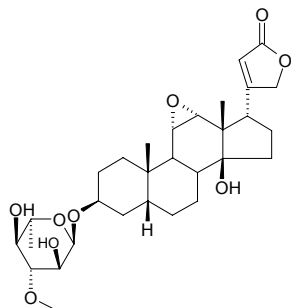


**1388 Anticancer Benzofuran PMV70P691-64**

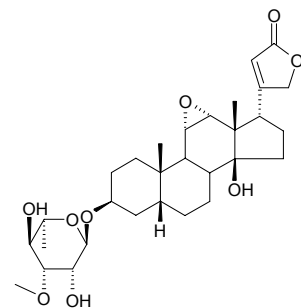
$C_{19}H_{18}O_5$  (326.35). **Pharm:** Cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells). **Source:** XIANG DOU *Dipteryx odorata* (callus and root). **Ref:** 5038.

**1389 Anticancer Cardiac Glycoside PMV70P691-007**

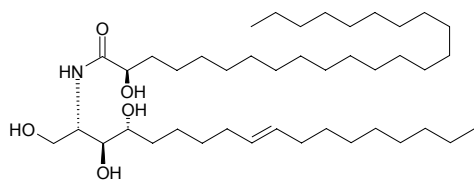
$C_{30}H_{44}O_9$  (548.68). **Pharm:** Cytotoxic (antiproliferative hmn colon cancer assay); cytotoxic (Ishikawa anti-E2 bioassay). **Source:** NIU XIN QIE ZI *Cerbera manghas*. **Ref:** 5038.

**1390 Anticancer Cardiac Glycoside PMV70P691-008**

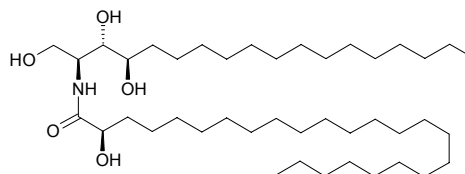
$C_{30}H_{44}O_9$  (548.68). **Pharm:** Cytotoxic (antiproliferative hmn colon cancer assay); cytotoxic (Ishikawa anti-E2 bioassay). **Source:** NIU XIN QIE ZI *Cerbera manghas*. **Ref:** 5038.

**1391 Anticancer Ceramide PMV70P691-009**

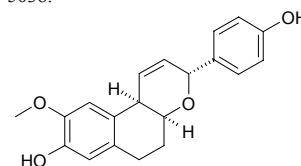
$C_{42}H_{83}NO_5$  (682.13). **Pharm:** Cytotoxic (soft agar transformation assay with JB6 cells). **Source:** FEI CHENG SUAN JIANG *Physalis philadelphica*. **Ref:** 5038.

**1392 Anticancer Ceramide PMV70P691-69**

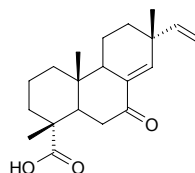
$C_{42}H_{85}NO_5$  (684.15). **Pharm:** Cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells). **Source:** FEI CHENG SUAN JIANG *Physalis philadelphica*. **Ref:** 5038.

**1393 Anticancer Diarylheptanoid PMV70P691-010**

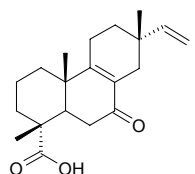
$C_{20}H_{20}O_4$  (324.38). **Pharm:** Cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells). **Source:** FEN BA JIAO ZA JIAO ZHONG ZHI BIAN ZHONG *Musa x paradisiaca* cultivar. **Ref:** 5038.

**1394 Anticancer Diterpenoid PMV70P691-011**

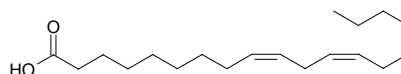
$C_{20}H_{28}O_3$  (316.44). **Pharm:** Cytotoxic (soft agar transformation assay with JB6 cells); cytotoxic (inhibition of TPA-induced ornithine decarboxylase activity with cultured mouse epidermal 308 cells). **Source:** BEI MEI YA BAI *Thuja occidentalis*. **Ref:** 5038.

**1395 Anticancer Diterpenoid PMV70P691-74**

$C_{20}H_{28}O_3$  (316.44). **Pharm:** Cytotoxic (soft agar transformation assay with JB6 cells); cytotoxic (inhibition of TPA-induced ornithine decarboxylase activity with cultured mouse epidermal 308 cells). **Source:** BEI MEI YA BAI *Thuja occidentalis*. **Ref:** 5038.

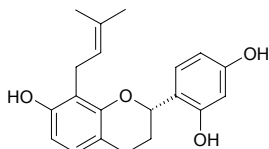
**1396 Anticancer Fatty acid PMV70P691-75**

$C_{19}H_{34}O_2$  (298.48). **Pharm:** Cytotoxic (cyclooxygenase-1 inhibitor); cytotoxic (cyclooxygenase-2 inhibitor). **Source:** SHI DIAO BAI *Asparagus officinalis*. **Ref:** 5038.

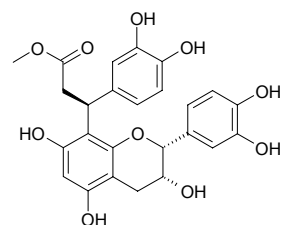


**1397 Anticancer Flavonoid PMV70P691-013**

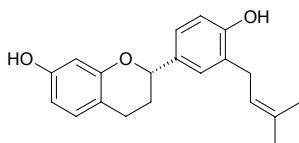
$C_{20}H_{22}O_4$  (326.40). **Pharm:** Cytotoxic (estrogen receptor-binding  $\alpha$  assay); cytotoxic (estrogen receptor-binding  $\beta$  assay); cytotoxic (cyclooxygenase-1 inhibitor). **Source:** GOU SHU *Broussonetia papyrifera*. **Ref:** 5038.

**1398 Anticancer Flavonoid PMV70P691-014**

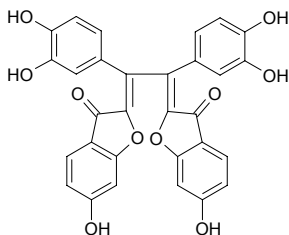
$C_{25}H_{24}O_{10}$  (484.46). **Pharm:** Cytotoxic (cytochrome C antioxidant assay). **Source:** JIAN RUI MAO CHA *Antirhea acutata*. **Ref:** 5038.

**1399 Anticancer Flavonoid PMV70P691-015**

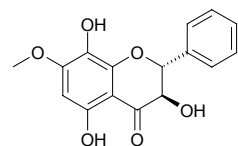
$C_{20}H_{22}O_3$  (310.40). **Pharm:** Cytotoxic (antiproliferative, hmn breast cancer cells). **Source:** HUANG LU *Cotinus coggygia*. **Ref:** 5038.

**1400 Anticancer Flavonoid PMV70P691-018**

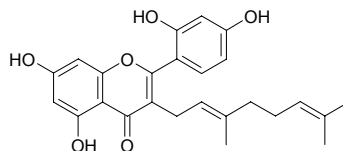
$C_{30}H_{18}O_{10}$  (538.47). **Pharm:** Cytotoxic (antioxidant assay). **Source:** HUANG LU *Cotinus coggygia*. **Ref:** 5038.

**1401 Anticancer Flavonoid PMV70P691-022**

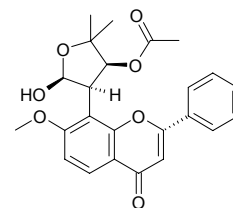
$C_{16}H_{14}O_6$  (302.29). **Pharm:** Cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells). **Source:** YA MAI JIA YING TAO *Muntingia calabura*. **Ref:** 5038.

**1402 Anticancer Flavonoid PMV70P691-024**

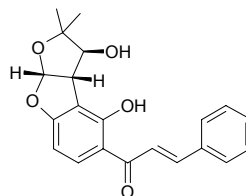
Anticancer Flavonoid PMV70P691-112  $C_{25}H_{26}O_6$  (422.48). **Pharm:** Cytotoxic (aromatase inhibitor). **Source:** GOU SHU *Broussonetia papyrifera*. **Ref:** 5038.

**1403 Anticancer Flavonoid PMV70P691-025**

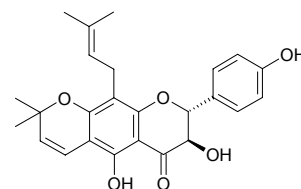
$C_{24}H_{24}O_7$  (424.45). **Pharm:** Cytotoxic (quinone reductase induction assay in cultured Hepal c1c7 mouse hepatoma cells). **Source:** HUI YE *Tephrosia purpurea*. **Ref:** 5038.

**1404 Anticancer Flavonoid PMV70P691-026**

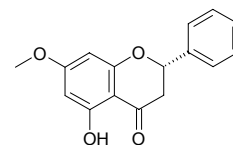
$C_{21}H_{20}O_5$  (352.39). **Pharm:** Cytotoxic (quinone reductase induction assay in cultured Hepal c1c7 mouse hepatoma cells). **Source:** HUI YE *Tephrosia purpurea*. **Ref:** 5038.

**1405 Anticancer Flavonoid PMV70P691-100**

$C_{25}H_{26}O_6$  (422.48). **Pharm:** Cytotoxic (cyclooxygenase-1 inhibitor). **Source:** ZHEN YE XUE TONG *Macaranga conifera*. **Ref:** 5038.

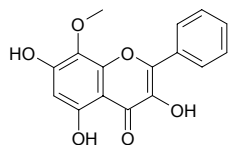
**1406 Anticancer Flavonoid PMV70P691-101**

$C_{16}H_{14}O_4$  (270.29). **Pharm:** Cytotoxic (quinone reductase induction assay in cultured Hepal c1c7 mouse hepatoma cells). **Source:** YA MAI JIA YING TAO *Muntingia calabura*. **Ref:** 5038.

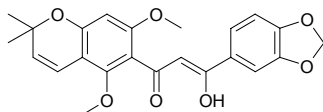


**1407 Anticancer Flavonoid PMV70P691-103**

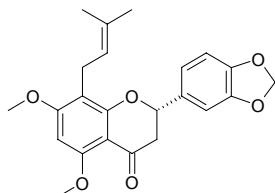
$C_{16}H_{12}O_6$  (300.27). **Pharm:** Cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells). **Source:** YA MAI JIA YING TAO *Muntingia calabura*. **Ref:** 5038.

**1408 Anticancer Flavonoid PMV70P691-105**

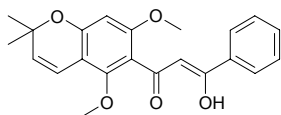
$C_{23}H_{22}O_7$  (410.43). **Pharm:** Cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells). **Source:** SHUI LIU DOU *Pongamia pinnata*. **Ref:** 5038.

**1409 Anticancer Flavonoid PMV70P691-106**

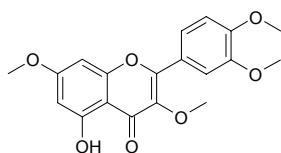
$C_{23}H_{24}O_6$  (396.44). **Pharm:** Cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells). **Source:** SHUI LIU DOU *Pongamia pinnata*. **Ref:** 5038.

**1410 Anticancer Flavonoid PMV70P691-107**

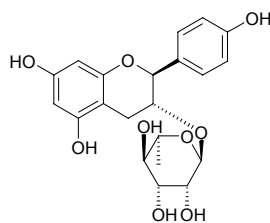
$C_{22}H_{22}O_5$  (366.42). **Pharm:** Cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells). **Source:** SHUI LIU DOU *Pongamia pinnata*. **Ref:** 5038.

**1411 Anticancer Flavonoid PMV70P691-114**

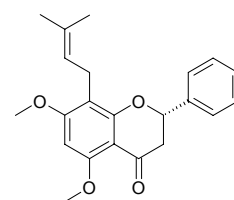
$C_{19}H_{18}O_7$  (358.35). **Pharm:** Cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells). **Source:** SAN LIE XUE TONG *Macaranga triloba*. **Ref:** 5038.

**1412 Anticancer Flavonoid PMV70P691-77**

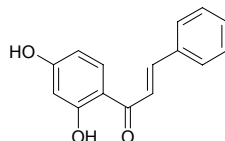
$C_{21}H_{24}O_9$  (420.42). **Pharm:** Cytotoxic (cyclooxygenase-1 inhibitor); cytotoxic (cyclooxygenase-2 inhibitor). **Source:** DA DA HE MIAN BAO GUO *Artocarpus dadah*. **Ref:** 5038.

**1413 Anticancer Flavonoid PMV70P691-82**

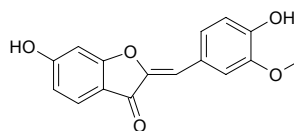
$C_{22}H_{24}O_4$  (352.43). **Pharm:** Cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells). **Source:** SHUI LIU DOU *Pongamia pinnata*. **Ref:** 5038.

**1414 Anticancer Flavonoid PMV70P691-84**

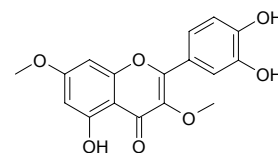
$C_{15}H_{12}O_3$  (240.26). **Pharm:** Cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells). **Source:** YA MAI JIA YING TAO *Muntingia calabura*. **Ref:** 5038.

**1415 Anticancer Flavonoid PMV70P691-85**

$C_{16}H_{12}O_5$  (284.27). **Pharm:** Cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells). **Source:** XIANG DOU *Dipteryx odorata* (callus and root). **Ref:** 5038.

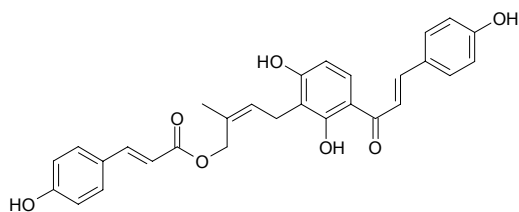
**1416 Anticancer Flavonoid PMV70P691-87**

$C_{17}H_{14}O_7$  (330.30). **Pharm:** Cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells). **Source:** SAN LIE XUE TONG *Macaranga triloba*. **Ref:** 5038.

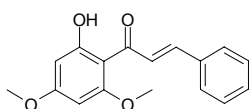


**1417 Anticancer Flavonoid PMV70P691-91**

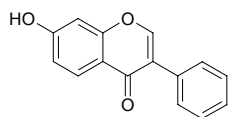
$C_{29}H_{26}O_7$  (486.53). **Pharm:** Cytotoxic (cyclooxygenase-1 inhibitor). **Source:** DA DA HE MIAN BAO GUO *Artocarpus dadah*. **Ref:** 5038.

**1418 Anticancer Flavonoid PMV70P691-93**

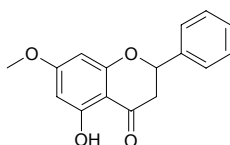
$C_{17}H_{16}O_4$  (284.31). **Pharm:** Cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells). **Source:** *Renalmia nicolaioides*. **Ref:** 5038.

**1419 Anticancer Flavonoid PMV70P691-94**

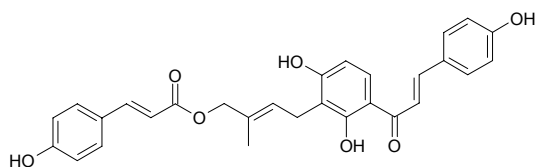
$C_{15}H_{10}O_3$  (238.25). **Pharm:** Cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells). **Source:** YA MAI JIA YING TAO *Muntingia calabura*. **Ref:** 5038.

**1420 Anticancer Flavonoid PMV70P691-95**

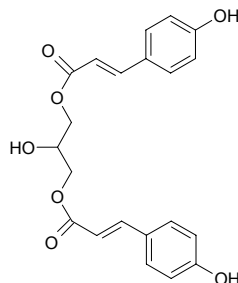
$C_{16}H_{14}O_4$  (270.29). **Pharm:** Cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells). **Source:** *Renalmia nicolaioides*. **Ref:** 5038.

**1421 Anticancer Flavonoid PMV70P691-97**

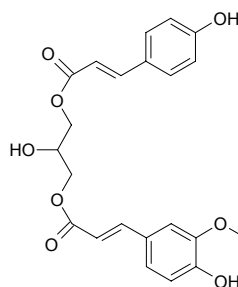
$C_{29}H_{26}O_7$  (486.53). **Pharm:** Cytotoxic (cyclooxygenase-1 inhibitor). **Source:** DA DA HE MIAN BAO GUO *Artocarpus dadah*. **Ref:** 5038.

**1422 Anticancer Glycerol Ester PMV70P691-117**

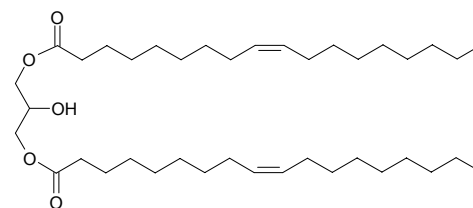
$C_{21}H_{20}O_7$  (384.39). **Pharm:** Cytotoxic (cyclooxygenase-1 inhibitor). **Source:** SHI DIAO BAI *Asparagus officinalis*. **Ref:** 5038.

**1423 Anticancer Glycerol Ester PMV70P691-118**

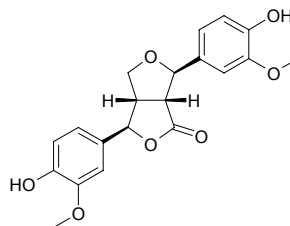
$C_{22}H_{22}O_8$  (414.42). **Pharm:** Cytotoxic (cyclooxygenase-1 inhibitor). **Source:** SHI DIAO BAI *Asparagus officinalis*. **Ref:** 5038.

**1424 Anticancer Glycerol Ester PMV70P691-119**

$C_{39}H_{72}O_5$  (621.01). **Pharm:** Cytotoxic (cyclooxygenase-2 inhibitor). **Source:** YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*]. **Ref:** 5038.

**1425 Anticancer Lignan PMV70P691-124**

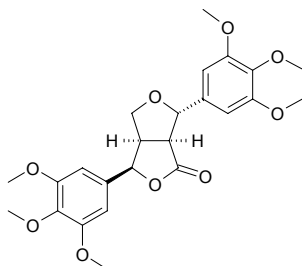
$C_{20}H_{20}O_7$  (372.38). **Pharm:** Cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells). **Source:** HUANG HUA REN *Sida acuta*. **Ref:** 5038.



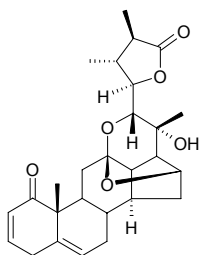


**1426 Anticancer Lignan PMV70P691-126**

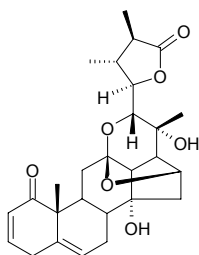
$C_{24}H_{28}O_9$  (460.49). **Pharm:** Cytotoxic (soft agar transformation assay with JB6 cells). **Source:** LIAN YE TONG *Hernandia Sonora* [Syn. *Hernandia ovigera*] (seed). **Ref:** 5038.

**1427 Anticancer Norwithanolide PMV70P691-029**

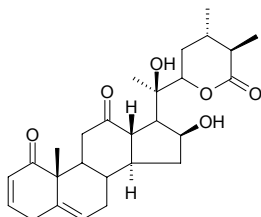
$C_{27}H_{34}O_6$  (454.57). **Pharm:** Cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells). **Source:** *Deprea subtriflora*. **Ref:** 5038.

**1428 Anticancer Norwithanolide PMV70P691-030**

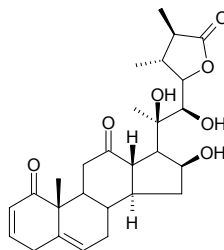
$C_{27}H_{34}O_7$  (470.57). **Pharm:** Cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells); cytotoxic (soft agar transformation assay with JB6 cells). **Source:** *Deprea subtriflora*. **Ref:** 5038.

**1429 Anticancer Norwithanolide PMV70P691-031**

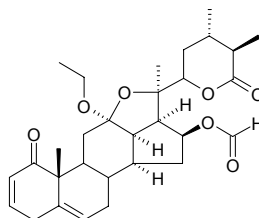
$C_{27}H_{36}O_6$  (456.58). **Pharm:** Cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells); cytotoxic (soft agar transformation assay with JB6 cells). **Source:** *Deprea subtriflora*. **Ref:** 5038.

**1430 Anticancer Norwithanolide PMV70P691-032**

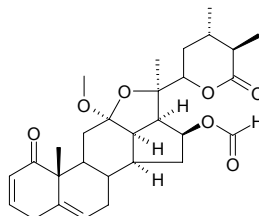
$C_{27}H_{36}O_7$  (472.58). **Pharm:** Cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells). **Source:** *Deprea subtriflora*. **Ref:** 5038.

**1431 Anticancer Norwithanolide PMV70P691-033**

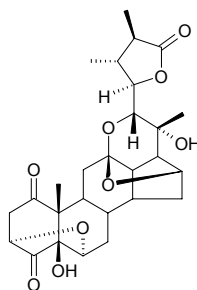
$C_{30}H_{40}O_7$  (512.65). **Pharm:** Cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells). **Source:** *Deprea subtriflora*. **Ref:** 5038.

**1432 Anticancer Norwithanolide PMV70P691-034**

$C_{29}H_{38}O_7$  (498.62). **Pharm:** Cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells). **Source:** *Deprea subtriflora*. **Ref:** 5038.

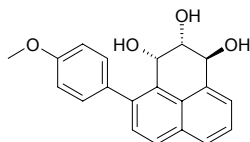
**1433 Anticancer Norwithanolide PMV70P691-035**

$C_{27}H_{34}O_9$  (502.57). **Pharm:** Cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells); cytotoxic (soft agar transformation assay with JB6 cells). **Source:** *Deprea subtriflora*. **Ref:** 5038.

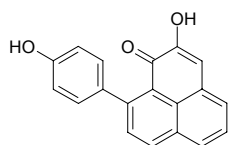


**1434 Anticancer Phenylphenalene PMV70P691-129**

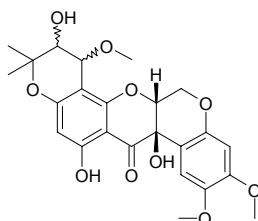
$C_{20}H_{18}O_4$  (322.36). **Pharm:** Cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells). **Source:** FEN BA JIAO ZA JIAO ZHONG ZHI BIAN ZHONG *Musa x paradisiaca* cultivar. **Ref:** 5038.

**1435 Anticancer Phenylphenalene PMV70P691-130**

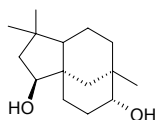
$C_{19}H_{12}O_3$  (288.31). **Pharm:** Cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells). **Source:** FEN BA JIAO ZA JIAO ZHONG ZHI BIAN ZHONG *Musa x paradisiaca* cultivar. **Ref:** 5038.

**1436 Anticancer Rotenoid PMV70P691-036**

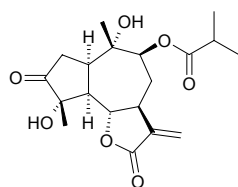
$C_{24}H_{26}O_{10}$  (474.47). **Pharm:** Cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells). **Source:** DU HUI MAO DOU *Tephrosia toxicaria*. **Ref:** 5038.

**1437 Anticancer Sesquiterpene PMV70P691-132**

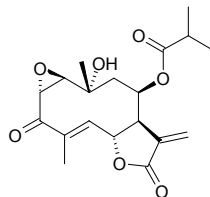
$C_{15}H_{26}O_2$  (238.37). **Pharm:** Cytotoxic (cyclooxygenase-2 inhibitor). **Source:** SAN LIE XUE TONG *Macaranga triloba*. **Ref:** 5038.

**1438 Anticancer Sesquiterpene PMV70P691-134**

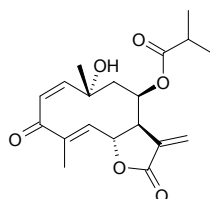
$C_{19}H_{26}O_7$  (366.41). **Pharm:** Cytotoxic (differentiation of HL-60 cells). **Source:** ZHONG BIN JU *Tithonia diversifolia*. **Ref:** 5038.

**1439 Anticancer Sesquiterpene PMV70P691-135**

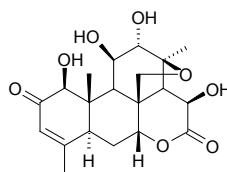
$C_{19}H_{24}O_7$  (364.40). **Pharm:** Cytotoxic (antiproliferative hmn colon cancer assay). **Source:** ZHONG BIN JU *Tithonia diversifolia*. **Ref:** 5038.

**1440 Anticancer Sesquiterpene PMV70P691-136**

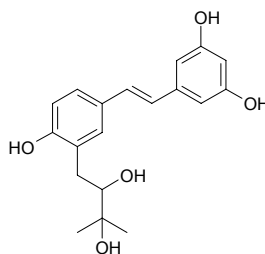
$C_{19}H_{24}O_6$  (348.46). **Pharm:** Cytotoxic (antiproliferative hmn colon cancer assay). **Source:** ZHONG BIN JU *Tithonia diversifolia*. **Ref:** 5038.

**1441 Anticancer Simaroubolide PMV70P691-137**

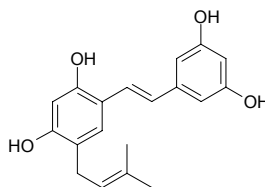
$C_{20}H_{26}O_8$  (394.43). **Pharm:** Cytotoxic (differentiation of HL-60 cells). **Source:** YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*]. **Ref:** 5038.

**1442 Anticancer Stilbenoid PMV70P691-038**

$C_{19}H_{22}O_5$  (330.38). **Pharm:** Cytotoxic (cyclooxygenase-2 inhibitor). **Source:** DA DA HE MIAN BAO GUO *Artocarpus dadah*. **Ref:** 5038.

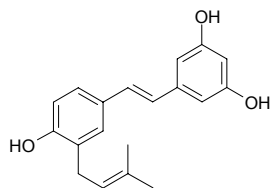
**1443 Anticancer Stilbenoid PMV70P691-039**

$C_{19}H_{20}O_4$  (312.37). **Pharm:** Cytotoxic (cyclooxygenase-1 inhibitor). **Source:** DA DA HE MIAN BAO GUO *Artocarpus dadah*. **Ref:** 5038.

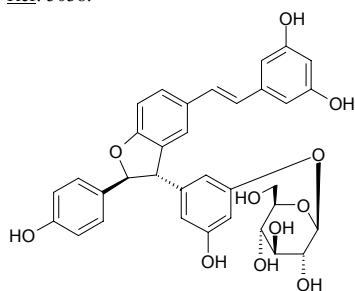


**1444 Anticancer Stilbenoid PMV70P691-040**

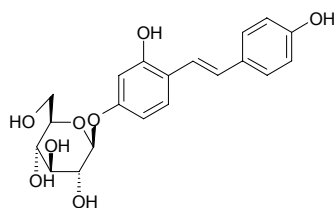
$C_{19}H_{20}O_3$  (296.37). **Pharm:** Cytotoxic (cyclooxygenase-2 inhibitor). **Source:** DA DA HE MIAN BAO GUO *Artocarpus dadah*. **Ref:** 5038.

**1445 Anticancer Stilbenoid PMV70P691-041**

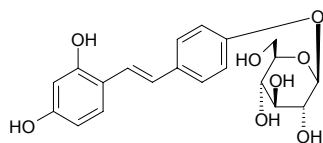
$C_{34}H_{32}O_{11}$  (616.63). **Pharm:** Cytotoxic (cyclooxygenase-1 inhibitor); cytotoxic (cyclooxygenase-2 inhibitor). **Source:** PU<sup>(2)</sup> TAO *Vitis vinifera* (cell culture). **Ref:** 5038.

**1446 Anticancer Stilbenoid PMV70P691-142**

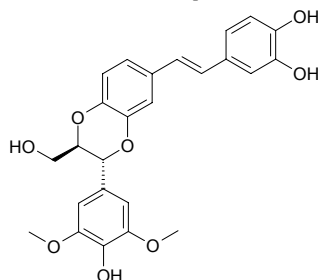
$C_{20}H_{22}O_8$  (390.39). **Pharm:** Cytotoxic (cyclooxygenase-1 inhibitor). **Source:** PU<sup>(2)</sup> TAO *Vitis vinifera* (cell culture). **Ref:** 5038.

**1447 Anticancer Stilbenoid PMV70P691-146**

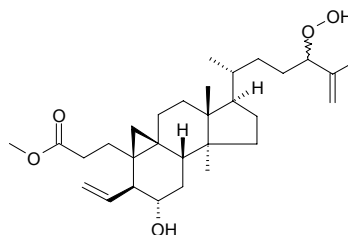
$C_{20}H_{22}O_8$  (390.39). **Pharm:** Cytotoxic (cyclooxygenase-1 inhibitor). **Source:** PU<sup>(2)</sup> TAO *Vitis vinifera* (cell culture). **Ref:** 5038.

**1448 Anticancer Stilbenolignan PMV70P691-042**

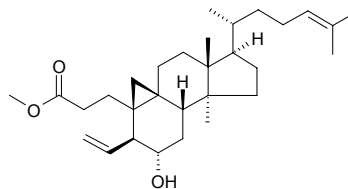
$C_{25}H_{24}O_8$  (452.47). **Pharm:** Cytotoxic (cyclooxygenase-1 inhibitor). **Source:** CI JI NU ZONG LV *Aiphanes aculeata*. **Ref:** 5038.

**1449 Anticancer Triterpene PMV70P691-043**

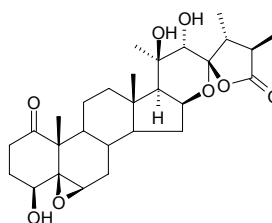
$C_{30}H_{48}O_5$  (488.71). **Pharm:** Cytotoxic (cyclooxygenase-1 inhibitor); cytotoxic (cyclooxygenase-2 inhibitor). **Source:** JIAN RUI MAO CHA *Antirhea acutata*. **Ref:** 5038.

**1450 Anticancer Triterpene PMV70P691-044**

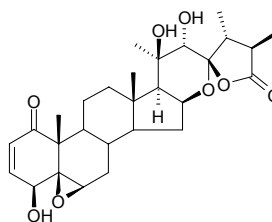
$C_{30}H_{48}O_3$  (456.72). **Pharm:** Cytotoxic (cyclooxygenase-1 inhibitor); cytotoxic (cyclooxygenase-2 inhibitor). **Source:** JIAN RUI MAO CHA *Antirhea acutata*. **Ref:** 5038.

**1451 Anticancer Withanolide PMV70P691-045**

$C_{28}H_{40}O_8$  (504.63). **Pharm:** Cytotoxic (quinone reductase induction assay in cultured Hepal c1c7 mouse hepatoma cells). **Source:** FEI CHENG SUAN JIANG *Physalis philadelphica*. **Ref:** 5038.

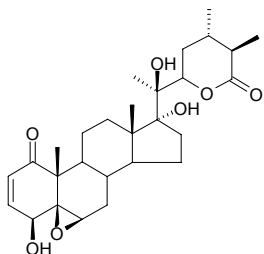
**1452 Anticancer Withanolide PMV70P691-046**

$C_{28}H_{38}O_8$  (502.61). **Pharm:** Cytotoxic (quinone reductase induction assay in cultured Hepal c1c7 mouse hepatoma cells). **Source:** FEI CHENG SUAN JIANG *Physalis philadelphica*. **Ref:** 5038.

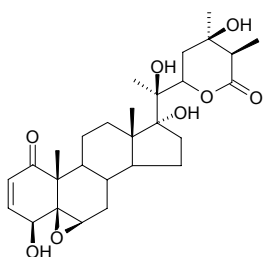


**1453 Anticancer Withanolide PMV70P691-047**

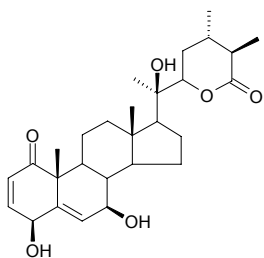
$C_{28}H_{40}O_7$  (488.63). **Pharm:** Cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells); cytotoxic (mouse mammary organ culture assay). **Source:** FEI CHENG SUAN JIANG *Physalis philadelphica*. **Ref:** 5038.

**1454 Anticancer Withanolide PMV70P691-048**

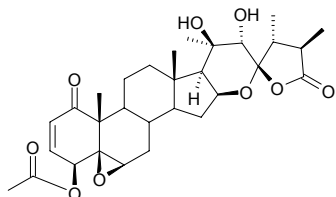
$C_{28}H_{40}O_8$  (504.63). **Pharm:** Cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells); cytotoxic (mouse mammary organ culture assay). **Source:** FEI CHENG SUAN JIANG *Physalis philadelphica*. **Ref:** 5038.

**1455 Anticancer Withanolide PMV70P691-049**

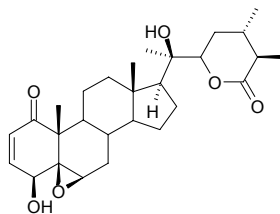
$C_{28}H_{40}O_6$  (472.63). **Pharm:** Cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells). **Source:** FEI CHENG SUAN JIANG *Physalis philadelphica*. **Ref:** 5038.

**1456 Anticancer Withanolide PMV70P691-148**

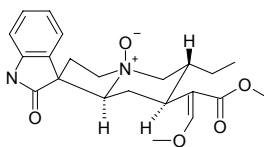
$C_{30}H_{40}O_9$  (544.65). **Pharm:** Cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells). **Source:** FEI CHENG SUAN JIANG *Physalis philadelphica*. **Ref:** 5038.

**1457 Anticancer Withanolide PMV70P691-149**

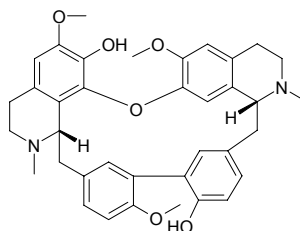
$C_{28}H_{40}O_6$  (472.63). **Pharm:** Cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells). **Source:** *Deprea subtriflora*. **Ref:** 5038.

**1458 Anti-isorhynchophylline N-oxide**

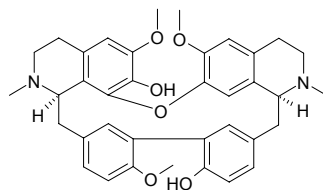
$C_{22}H_{28}N_2O_5$  (400.48). **Source:** FENG XIANG SHU YE *Cephalanthus occidentalis*. **Ref:** 6.

**1459 (+)-Antioquine**

$C_{37}H_{40}N_2O_6$  (608.74). **Pharm:** Mitochondrial respiratory chain complex I inhibitor ( $IC_{50} > 10 \mu\text{mol/L}$ , Rolliniastatin-1,  $IC_{50} = (0.6 \pm 0.04) \text{nmol/L}$ , Rotenone,  $IC_{50} = (5.10 \pm 0.90) \text{nmol/L}$ )<sup>[4954]</sup>. **Source:** GE LUN BI YA MU BAN SHU *Xylopiya columbiana* (fruit). **Ref:** 4954.

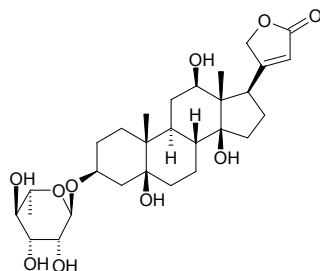
**1460 (-)-Antioquine**

$C_{37}H_{40}N_2O_6$  (608.74). Amorphous,  $[\alpha]_D^{20} = -170^\circ$  ( $c = 0.2$ ,  $\text{CHCl}_3$ ). **Pharm:** Antitrypanosomal (inhibits trypomastigote form of *Trypanosoma cruzi*, strain Y,  $IC_{50} = 47.4 \mu\text{g/mL}$ ,  $IC_{90} = 87.9 \mu\text{g/mL}$ )<sup>[3976]</sup>; antimalarial (*Plasmodium falciparum* D6,  $LC_{50} = 118.7 \text{ng/mL}$ ,  $SI = 56$ ; *Plasmodium falciparum* W2,  $LC_{50} = 132.7 \text{ng/mL}$ ,  $SI = 50$ )<sup>[3976]</sup>; cytotoxic (KB,  $LC_{50} = 6700 \text{ng/mL}$ )<sup>[3976]</sup>. **Source:** *Guatteria boliviana* (stem bark). **Ref:** 3976.

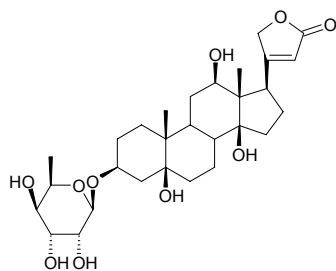


**1461 Antioside**

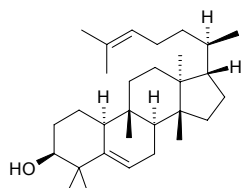
$C_{29}H_{44}O_{10}$  (552.67). Colorless tetrahedral crystals (methanol-ether), mp 183~210°C; 222~230°C,  $[\alpha]_D^{24} = -7.6^\circ$  ( $c = 0.9$ , methanol). **Pharm:** Toxin (vertebrate). **Source:** JIAN XUE FENG HOU *Antiaris toxicaria* [Syn. *Ambora toxicaria*]. **Ref:** 661.

**1462  $\alpha$ -Antioside**

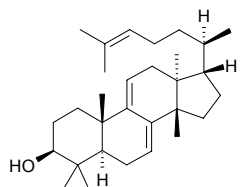
$C_{29}H_{44}O_{10}$  (552.67). **Source:** JIAN XUE FENG HOU *Antiaris toxicaria* [Syn. *Ambora toxicaria*]. **Ref:** 660.

**1463 Antiquol B**

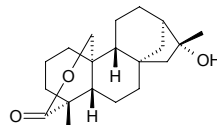
19(10 $\rightarrow$ 9)Abeo-8 $\alpha$ ,9 $\beta$ ,10 $\alpha$ -eupha-5,24-dien-3 $\beta$ -ol  $C_{30}H_{50}O$  (426.73). Needles, mp 75~76°C,  $[\alpha]_D^{25} = +24.8^\circ$  ( $c = 0.21$ ). **Pharm:** Antineoplastic (EBV-EA induced by TPA, mol ratio/TPA = 1000, relative percentage of EBV-EA = 0% (positive control value 32pmol, 20ng TPA = 100%), viability of Raji cells = 70%; reference compound  $\beta$ -Carotene, relative percentage = 8.6%). **Source:** HUO YANG LE *Euphorbia antiquorum* (latex). **Ref:** 4606.

**1464 Antiquol C**

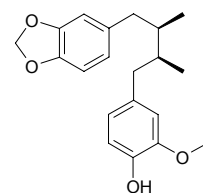
Eupha-7,9(11),24-trien-3 $\beta$ -ol  $C_{30}H_{48}O$  (424.72). Amorphous gum,  $[\alpha]_D^{25} = -35.0^\circ$  ( $c = 0.24$ ). **Pharm:** Antineoplastic (EBV-EA induced by TPA, mol ratio/TPA = 1000, relative percentage of EBV-EA = 0% (positive control value 32pmol, 20ng TPA = 100%), viability of Raji cells = 70%; reference compound  $\beta$ -Carotene, relative percentage = 8.6%). **Source:** HUO YANG LE *Euphorbia antiquorum* (latex). **Ref:** 4606.

**1465 Antriptolactone**

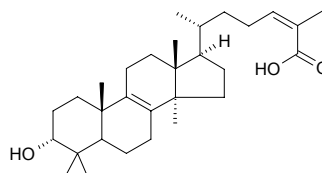
$C_{20}H_{30}O_3$  (318.46). **Source:** LEI GONG TENG *Tripterygium wilfordii*, MA DAN GUO *Gynocardia odorata*. **Ref:** 660, 1521.

**1466 Anwulignan**

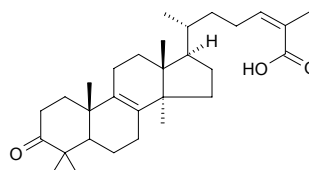
(8*S*,8'*R*)-Macelignan; Calophyn [107534-93-0]  $C_{20}H_{24}O_4$  (328.41). Colorless needles,  $[\alpha]_D^{24} = +5^\circ$  ( $c = 0.96$ ,  $CHCl_3$ ). **Pharm:** Antioxidant (DPPH scavenger,  $IC_{50} = 69\mu\text{mol/L}$ )<sup>[4344]</sup>. **Source:** CHANG GENG NAN WU WEI ZI *Kadsura peltigera* [Syn. *Kadsura longipedunculata*], FENG CHAO CAO *Leucas aspera* (whole herb), HUA ZHONG WU WEI ZI *Schisandra sphenanthera*, YI GENG WU WEI ZI *Schisandra henryi*. **Ref:** 660, 2436, 4344.

**1467 Anwuweizic acid**

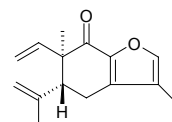
3-Oxolanosta-8,24-dien-26-oic acid  $C_{30}H_{48}O_3$  (456.72). **Pharm:** Antineoplastic<sup>[2523]</sup>, anti-HIV<sup>[2523]</sup>. **Source:** HAN RUI WU WEI ZI *Schisandra propinqua*, HUA ZHONG WU WEI ZI *Schisandra sphenanthera*. **Ref:** 660, 2436, 2523.

**1468 Anwuweizonic acid**

$C_{30}H_{46}O_3$  (454.70). **Source:** ZHONG JIAN WU WEI ZI *Schisandra propinqua* var. *intermedia*. **Ref:** 660.

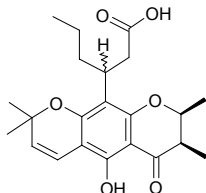
**1469 Aoifuranone**

$C_{15}H_{18}O_2$  (230.31). **Source:** SHUANG YE XI XIN *Asarum caulescens*. **Ref:** 660.

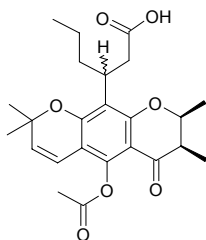


**1470 Apetalic acid**

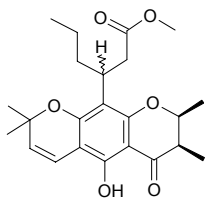
$C_{22}H_{28}O_6$  (388.46). Yellow oil,  $[\alpha]_D^{25} = +23.8^\circ$  ( $c = 1.0$ ,  $CH_2Cl_2$ ). **Pharm:** Cytotoxic (KB,  $ED_{50} = 13.64\mu g/mL$ , HeLa,  $ED_{50} = 17.73\mu g/mL$ , hmn medulloblastoma,  $ED_{50} > 20\mu g/mL$ , control Doxorubicin,  $ED_{50} = 0.15\mu g/mL$ ,  $0.14\mu g/mL$ ,  $0.19\mu g/mL$  respectively)<sup>[4274]</sup>; antifungal inactive (*Aspergillus fumigatus*,  $MIC_{80} > 250\mu g/mL$ ; Amphotericin B,  $MIC_{80} = 8\mu g/mL$ )<sup>[5489]</sup>. **Source:** SU GE LAN HU TONG *Calophyllum caledonicum* (seed), *Calophyllum blancoi* (seed). **Ref:** 4274, 5489.

**1471 Apetalic acid 5-O-acetate**

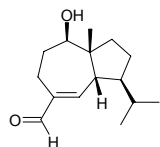
$C_{24}H_{30}O_7$  (430.50). Yellow oil,  $[\alpha]_D^{25} = +77.1^\circ$  ( $c = 1.0$ ,  $CH_2Cl_2$ ). **Pharm:** Cytotoxic,  $ED_{50} = 6.18\mu g/mL$ , HeLa,  $ED_{50} = 6.95\mu g/mL$ , hmn medulloblastoma,  $ED_{50} = 10.18\mu g/mL$ , control Doxorubicin,  $ED_{50} = 0.15\mu g/mL$ ,  $0.14\mu g/mL$ ,  $0.19\mu g/mL$  respectively). **Source:** *Calophyllum blancoi* (seed). **Ref:** 4274.

**1472 Apetalic acid methyl ester**

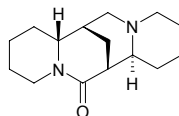
$C_{23}H_{30}O_6$  (402.49). Yellow oil,  $[\alpha]_D^{25} = +220.0^\circ$  ( $c = 1.0$ ,  $CH_2Cl_2$ ). **Pharm:** Cytotoxic,  $ED_{50} = 7.61\mu g/mL$ , HeLa,  $ED_{50} = 8.94\mu g/mL$ , hmn medulloblastoma,  $ED_{50} = 9.91\mu g/mL$ , control Doxorubicin,  $ED_{50} = 0.15\mu g/mL$ ,  $0.14\mu g/mL$ ,  $0.19\mu g/mL$  respectively). **Source:** *Calophyllum blancoi* (seed). **Ref:** 4274.

**1473 Aphanamol II**

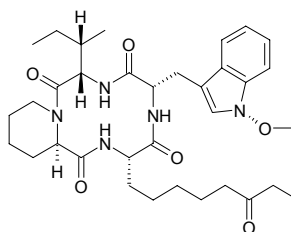
*Aphanamixis grandifolia*  $C_{15}H_{24}O_2$  (236.36). White powder,  $[\alpha]_D^{20} = +37.5^\circ$  ( $c = 0.26$ ,  $CHCl_3$ ). **Pharm:** Anti-HIV-1 inactive (*in vitro*, HOG.R5). **Source:** DIE DA LAO *Litsea verticillata* (leaf and twig: yield = 0.00009%dw). **Ref:** 4688.

**1474 Aphylline**

[577-37-7]  $C_{15}H_{24}N_2O$  (248.37). **Pharm:** Pesticide. **Source:** WU YE JIA MU ZEII *Anabasis aphylla*. **Ref:** 658.

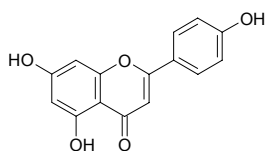
**1475 Apicidin**

[183506-66-3]  $C_{34}H_{49}N_5O_6$  (623.80). Colorless acicular crystals (methanol), mp 195~197°C,  $[\alpha]_D^{22} = -80.4^\circ$  ( $c = 1.2$ , chloroform). **Pharm:** Antimalarial (mus, ip, <10mg/kg); Anthelmintic. **Source:** ZHE BEI MU *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*]. **Ref:** 1177.

**1476 Apigenin**

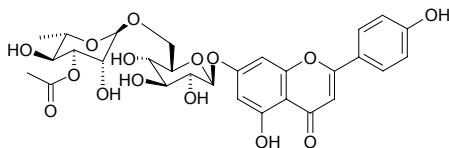
[520-36-5]  $C_{15}H_{10}O_5$  (270.24). Light yellow crystals (methanol), mp 344~347°C; 346~347°C. **Pharm:** Antibacterial; antiulcerative (rat, gastric ulcer); antispasmodic (smooth muscle); diuretic; aldose reductase inhibitor ( $IC_{50} = 2.2\mu mol/L$ , control Epalrestat,  $IC_{50} = 0.072\mu mol/L$ )<sup>[4530]</sup>; antihypertensive; nodulation signal for metabiosis of pea and *Rhizobium leguminosarum*; binding activity to benzodiazepine receptor ( $IC_{50} = (30\pm 4)\mu mol/L$ , control Diazepam,  $IC_{50} = (0.05\pm 0.01)\mu mol/L$ )<sup>[5366]</sup>; anti-inflammatory (IL-5 inhibitor, concentration-dependent manner, mean  $IC_{50} = 16.4\mu mol/L$ )<sup>[4416]</sup>; anti-inflammatory (macrophages, COX-2 inhibitor, prevents COX-2 expression)<sup>[4415]</sup>; anti-inflammatory (NO production inhibitor)<sup>[4415]</sup>; platelet aggregation inhibitor<sup>[4415]</sup>; antioxidant (Takamatsu DCFH method, myelomonocytic HL-60 cells,  $IC_{50} = (27.8\pm 1.6)\mu g/mL$ ; control NDGA,  $IC_{50} = (0.7\pm 0.3)\mu g/mL$ , Vitamin C,  $IC_{50} = (1.9\pm 0.7)\mu g/mL$ , Trolox,  $IC_{50} = (1.4\pm 0.5)\mu g/mL$ )<sup>[3850]</sup>; cytotoxic (XTT assay, HL-60 cells,  $IC_{50} > 25.0\mu g/mL$ ; control NDGA,  $IC_{50} = (2.6\pm 0.2)\mu g/mL$ , Vitamin C,  $IC_{50} > 10.0\mu g/mL$ , Trolox,  $IC_{50} > 10.0\mu g/mL$ )<sup>[3850]</sup>; antioxidant (DPPH scavenger,  $10\mu mol/L$ , ScRt = 18%, control BHT,  $10\mu mol/L$ , ScRt = 43%)<sup>[5319]</sup>. **Source:** BAI GUO YE *Ginkgo biloba*, BAI LI XIANG *Thymus serpyllum*, BEI YE JU *Chrysanthemum boreale*, CU YING MAO DIAN ZI CAO *Onosma hispida* (whole herb), FEN ZHI PO JU *Amberboa ramosa*, FENG JIAO *Apis mellifera ligustica*, GUANG HUO XIANG *Pogostemon cablin* [Syn. *Mentha cablin*], HAN QIN BIAN ZHONG *Apium graveolens* var. *dulce*, HU ZHANG *Polygonum cuspidatum*, JI YAN CAO *Kummerowia striata*, JIA MA CHI XIAN *Bacopa monniera* (whole herb: yield = 0.00004%fw)<sup>[4664]</sup>, JUAN BAI *Selaginella tamariscina*, LAN YU BAI JI *Bletilla formosana* (whole herb), LANG PA CAO *Bidens tripartita* (whole herb: mean content = 0.043%)<sup>[5508]</sup>, LAO SHU LE *Acanthus ilicifolius*, LU CAO *Rhaponticum carthamoides*, MA HUANG *Ephedra sinica*, MI MENG HUA *Buddleja officinalis*, NAN CHUAN GUAN CHUN HUA *Microtoena prainiana* (stem: yield = 0.00017%dw)<sup>[4752]</sup>, NIU SHE TOU *Sonchus arvensis*, RI BEN HUA BAI *Chamaecyparis pisifera* (leaf), SAN CHI LA RUI A *Larrea tridentata* (leaf)<sup>[3850]</sup>, SAN JIAN SHAN

*Cephalotaxus fortunei*, SHAN WO JU *Lactuca indica* (Fresh whole herb: yield = 0.00043%fw)<sup>[4689]</sup>, SHUI MU XUE LIAN HUA *Saussurea medusa* (whole herb), SI CHI SI LENG CAO *Schnabelia tetradonta* (aerial parts: yield = 0.00002%dw)<sup>[4665]</sup>, TAI WAN CU FEI *Cephalotaxus wilsoniana* (leaf: yield = 0.00029%dw)<sup>[4759]</sup>, TIAN SHAN ZHU ZI *Garcinia dulcis* (fruit), WU HUAN ZI YE *Sapindus mukorossi*, WU JU LOU DOU CAI *Aquilegia ecalcarata* (whole herb: yield = 0.00022%dw)<sup>[3029]</sup>, XIONG RUI ZHUANG SHU WEI CAO *Salvia staminea*, YANG SHI CAO *Achillea millefolium*, YAO YONG DAN SHEN YE *Salvia officinalis*, YAO YONG PU GONG YING *Taraxacum officinale*, YUAN BAI *Sabina chinensis*, YUAN HUA *Daphne genkwa* (dried bud: mean content of 19 origins = 0.444%<sup>[5535]</sup>), ZI WEI *Campsis grandiflora* (flower), occurs in many plants (found free or as glycosides in the stem, root, leaf, seed or fruit of a very wide range of plants). Ref: 2, 369, 388, 440, 463, 521, 597, 660, 698, 2080, 2531, 3029, 3850, 4144, 4415, 4416, 4490, 4500, 4530, 4664, 4665, 4689, 4752, 4759, 5319, 5366, 5400, 5501, 5508, 5535.



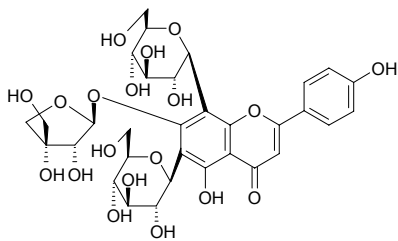
**1477 Apigenin-7-O- $\alpha$ -L-3-O-acetylramnopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside**

$C_{29}H_{32}O_{15}$  (620.57). Yellow powder (MeOH),  $[\alpha]_D^{27} = -45.4^\circ$  ( $c = 0.1$ , MeOH). Pharm: Neurite outgrowth enhancer (PC12D cells, nerve growth factor-mediated, 100 $\mu$ mol/L). Source: YE GAN CAO *Scoparia dulcis* (aerial parts: yield = 0.00019%). Ref: 4745.



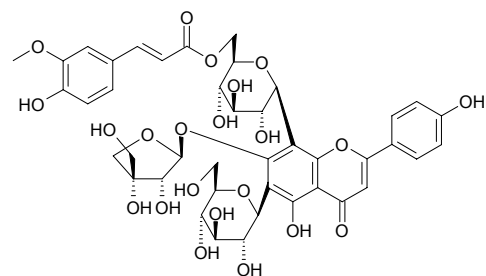
**1478 Apigenin-7-O- $\beta$ -apiofuranosyl-6,8-di-C- $\beta$ -glucopyranoside**

$C_{32}H_{38}O_{19}$  (726.65). Source: *Lupinus hartwegii*. Ref: 3388.



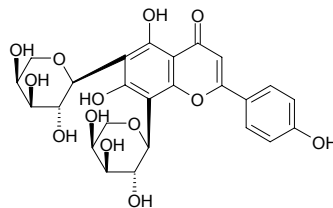
**1479 Apigenin-7-O- $\beta$ -apiofuranosyl-6-C- $\beta$ -glucopyranosyl-8-C-(6'''-O-E-feruloyl)- $\beta$ -glucopyranoside**

$C_{42}H_{46}O_{22}$  (902.82). Source: *Lupinus hartwegii*. Ref: 3388.



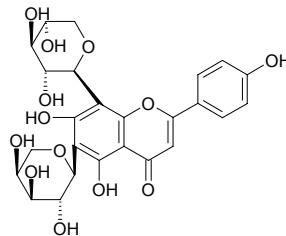
**1480 Apigenin-6-C- $\alpha$ -L-arabinopyranosyl-8-C- $\beta$ -L-arabinopyranoside**

$C_{25}H_{26}O_{13}$  (534.48). Source: SI CHI SI LENG CAO *Schnabelia tetradonta* (aerial parts: yield = 0.0024%dw)<sup>[4665]</sup>, ZI HUA DI DING *Viola yedoensis* (whole herb)<sup>[4393]</sup>. Ref: 4393, 4665.



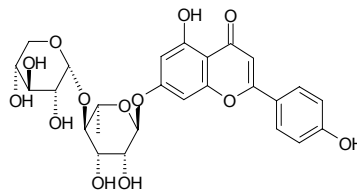
**1481 Apigenin-6-C- $\alpha$ -L-arabinopyranosyl-8-C- $\beta$ -D-xylopyranoside**

$C_{25}H_{26}O_{13}$  (534.48). Source: ZI HUA DI DING *Viola yedoensis* (whole herb). Ref: 4393.



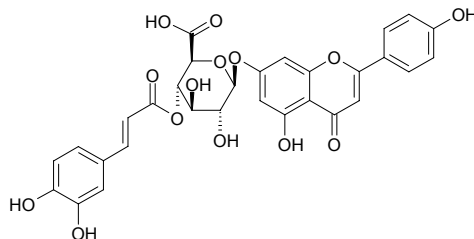
**1482 Apigenin-bioside**

$C_{26}H_{28}O_{13}$  (548.51). mp 257~258°C. Source: CI HUAI HUA *Robinia pseudoacacia*. Ref: 6.



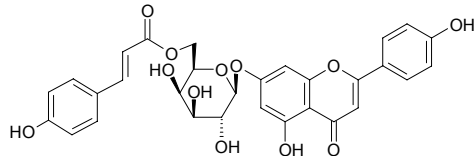
**1483 Apigenin-7-O- $\beta$ -D-(4''-caffeoyl)glucuronide**

$C_{30}H_{24}O_{14}$  (608.52). Pale amorphous powder. Pharm: Anti-HIV-1 (HIV-1 integrase inhibitor,  $IC_{50} = (7.2\pm 3.4)\mu$ g/mL, L-Chicoric acid,  $IC_{50} = (7.4\pm 3.3)\mu$ g/mL); anti-HIV (HIV-1IIIIB-induced MT-4 cells,  $EC_{50} = (41.86\pm 1.43)\mu$ g/mL,  $CC_{50} > 150\mu$ g/mL,  $SI > (3.58\pm 1.15)$ , L-Chicoric acid,  $EC_{50} = (54.33\pm 7.60)\mu$ g/mL,  $CC_{50} > 150\mu$ g/mL,  $SI > (2.81\pm 0.39)$ ). Source: JU HUA *Chrysanthemum morifolium* [Syn. *Dendranthema morifolium*]. Ref: 5444.



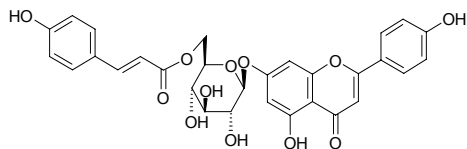
**1484 Apigenin-7-O-(6'''-E)-p-coumaroyl)- $\beta$ -D-galactopyranoside**

$C_{30}H_{26}O_{12}$  (578.53). Yellow granular crystals, mp 194~196°C. Source: XIA ZHI CAO *Lagopsis supina*. Ref: 2222.

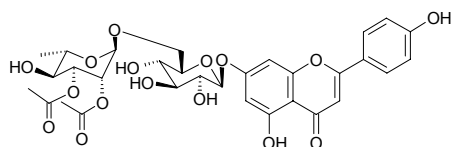


**1485 Apigenin-7-O-β-D-(6''-p-coumaroyl)-glucoside**

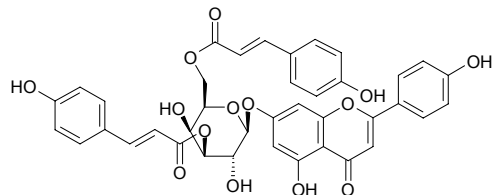
C<sub>30</sub>H<sub>26</sub>O<sub>12</sub> (578.53). Colorless thin acicular crystals, mp 264–265°C,  $[\alpha]_D^{17} = -143.93^\circ$  ( $c = 0.06$ , EtOH). Source: GUANG HUO XIANG *Pogostemon cablin* [Syn. *Mentha cablin*], MAO BAI YANG *Populus tomentosa*, NAN CHUAN GUAN CHUN HUA *Microtoena prainiana* (stem: yield = 0.00002%dw)<sup>[4752]</sup>. Ref: 2, 269, 660, 4752.

**1486 Apigenin-7-O-α-L-2,3-di-O-acetylramnopyranosyl-(1→6)-β-D-glucopyranoside**

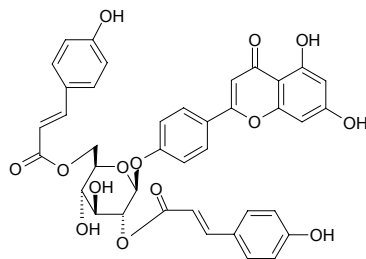
C<sub>31</sub>H<sub>34</sub>O<sub>16</sub> (662.61). Yellow powder (MeOH),  $[\alpha]_D^{27} = -50.2^\circ$  ( $c = 0.2$ , MeOH). Pharm: Neurite outgrowth enhancer (PC12D cells, nerve growth factor-mediated, 100μmol/L). Source: YE GAN CAO *Scoparia dulcis* (aerial parts: yield = 0.00021%). Ref: 4745.

**1487 Apigenin-7-O-(3'',6''-di-(E)-p-coumaroyl)-β-D-galactopyranoside**

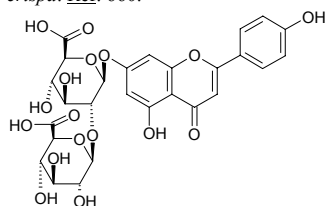
C<sub>39</sub>H<sub>32</sub>O<sub>14</sub> (724.68). Yellowish powdery crystals, mp 206–207°C. Source: XIA ZHI CAO *Lagopsis supina*. Ref: 2222.

**1488 Apigenin-4'-O-(2'',6''-di-O-p-coumaroyl)-β-D-glucoside**

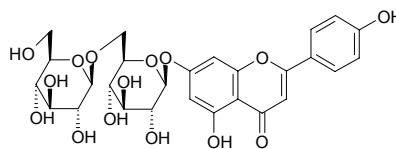
C<sub>39</sub>H<sub>32</sub>O<sub>14</sub> (724.68). Yellow powder, mp 252–253°C (MeOH),  $[\alpha]_D^{22} = -65.0^\circ$  ( $c = 0.30$ , MeOH). Source: PU DI WU GONG *Lycopodium cernuum* (root, stem, leaf: yield = 0.0037%dw). Ref: 4633.

**1489 Apigenin-7-O-diglucuronide**

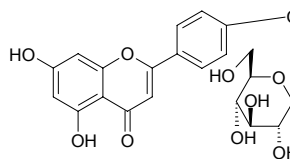
C<sub>27</sub>H<sub>26</sub>O<sub>17</sub> (622.50). Source: HUI HUI SU GENG *Perilla frutescens* var. *crispa*. Ref: 660.

**1490 Apigenin-7-O-gentiobioside**

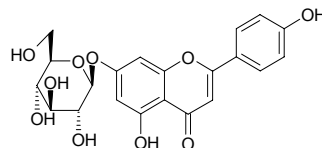
C<sub>27</sub>H<sub>30</sub>O<sub>15</sub> (594.53). Source: LUO SHI TENG *Trachelospermum jasminoides*. Ref: 660.

**1491 Apigenin-4'-O-β-D-glucopyranoside**

C<sub>21</sub>H<sub>20</sub>O<sub>10</sub> (432.39). Pharm: Aldose reductase inhibitor (IC<sub>50</sub> = 3.2μmol/L, control Epalrestat, IC<sub>50</sub> = 0.072μmol/L)<sup>[4530]</sup>. Source: SHUI MU XUE LIAN HUA *Saussurea medusa* (whole herb). Ref: 4530.

**1492 Apigenin-7-O-glucoside**

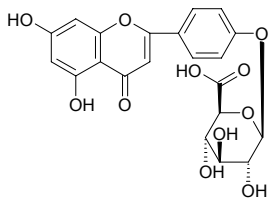
Thalictiin; Cosmosiin; Apigenside [578-74-5] C<sub>21</sub>H<sub>20</sub>O<sub>10</sub> (432.39). Yellow powder, mp 178–180°C,  $[\alpha]_D^{25} = -62^\circ$  ( $c = 0.45$ , MeOH); mp 238.0–239.5°C. Pharm: Cytotoxic (KB oral epidermoid carcinoma, ED<sub>50</sub> = 3.5μg/mL, Hep3B hepatoma cells, ED<sub>50</sub> = 8.7μg/mL)<sup>[4253]</sup>; aldose reductase inhibitor (IC<sub>50</sub> = 4.4μmol/L, control Epalrestat, IC<sub>50</sub> = 0.072μmol/L)<sup>[4530]</sup>; aldose reductase inhibitor (rat lens, IC<sub>50</sub> = 23μmol/L, control Epalrestat, IC<sub>50</sub> = 0.072μmol/L)<sup>[4214]</sup>; nodulation signal for metabiosis of pea and *Rhizobium leguminosarum*; anti-inflammatory (IL-5 inhibitor, concentration-dependent manner, mean IC<sub>50</sub> = 14.2μmol/L)<sup>[4416]</sup>; antioxidant (antihemolysis, *in vitro*, AAPH-induced hemolysis of RBC, IC<sub>50</sub> = 88.4μmol/L; control Trolox, IC<sub>50</sub> = 101μmol/L)<sup>[4698]</sup>. Source: BAI RI CAO *Zinnia elegans*, CU YING MAO DIAN ZI CAO *Onosma hispidum* (whole herb), CU ZHUANG NV ZHEN *Ligustrum robustum* (leaf: yield = 0.0021%dw)<sup>[4698]</sup>, DA BO SI JU *Cosmos bipinnata*, GUANG HUO XIANG *Pogostemon cablin* [Syn. *Mentha cablin*], JI YAN CAO *Kummerowia striata*, JU HUA *Chrysanthemum morifolium* [Syn. *Dendranthema morifolium*] (dried capitulum: mean content of 9 origins = 0.54%<sup>[5530]</sup>), SHUI MU XUE LIAN HUA *Saussurea medusa* (whole herb), TAI WAN CU FEI *Cephalotaxus wilsoniana* (twig), XIAN HE CAO *Agrimonia pilosa* var. *japonica*, XIONG RUI ZHUANG SHU WEI CAO *Salvia staminea*, YAN GUO CAO *Thalictrum thunbergii*, YAO YONG PU GONG YING *Taraxacum officinale*, YE JU HUA *Chrysanthemum indicum*. Ref: 2, 6, 440, 658, 660, 4214, 4253, 4416, 4490, 4530, 4698, 5400, 5530.



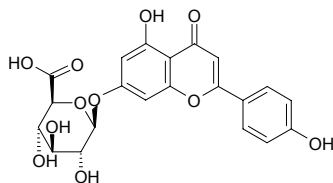


**1493 Apigenin-4'-O-glucuronide**

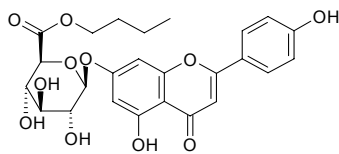
$C_{21}H_{18}O_{11}$  (446.37). Source: DA HUA SHAN QIAN NIU *Thunbergia grandiflora*, DA LI HUA *Dahlia pinnata* [Syn. *Dahlia variabilis*], DENG ZHAN XI XIN *Erigeron breviscapus*, SHE TAI *Conocephalum conicum*, YI NIAN PENG *Erigeron annuus*. Ref: 660.

**1494 Apigenin-7-O-β-D-glucuronide**

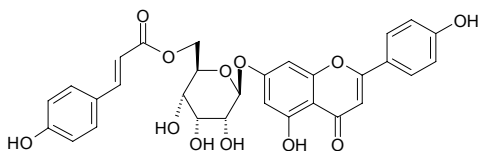
$C_{21}H_{18}O_{11}$  (446.37). mp 335~342°C. Pharm: Anti-HIV-1 (HIV-1 integrase inhibitor,  $IC_{50} = (51 \pm 14) \mu\text{g/mL}$ , *L*-Chicoric acid,  $IC_{50} = (7.4 \pm 3.3) \mu\text{g/mL}$ )<sup>[5444]</sup>; anti-HIV (HIV-1IIIIB-induced MT-4 cells,  $EC_{50} > (0.32 \pm 0.05) \mu\text{g/mL}$ ,  $CC_{50} = (0.32 \pm 0.05) \mu\text{g/mL}$ ,  $SI < 1$ , *L*-Chicoric acid,  $EC_{50} = (54.33 \pm 7.60) \mu\text{g/mL}$ ,  $CC_{50} > 150 \mu\text{g/mL}$ ,  $SI > (2.81 \pm 0.39)$ )<sup>[5444]</sup>. Source: DA YE ZI ZHU *Callicarpa macrophylla*, JIN YU CAO *Antirrhinum majus*, KUAI JING CAO SU *Phlomis tuberosa*, LAO SHU LE *Acanthus ilicifolius*, SHUI FEI JI *Silybum marianum*, YI NIAN PENG *Erigeron annuus*. Ref: 6, 660, 1521, 2080, 5444.

**1495 Apigenin-7-O-β-D-glucuronide butyl ester**

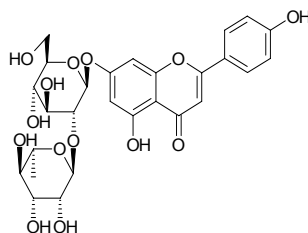
$C_{25}H_{26}O_{11}$  (502.48). mp 237~240°C. Source: DUO SHE FEI PENG *Erigeron multiradiatus*. Ref: 830.

**1496 Apigenin-7-O-β-D-(6'-p-hydroxy-cinnamoyloxy)-mannoside**

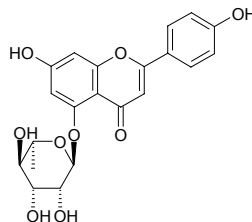
$C_{30}H_{26}O_{12}$  (578.53). Yellow powder, mp 269~270°C. Source: XIAO YE ZHI MA *Galeobdolon chinense* [Syn. *Lamium chinense*]. Ref: 2253.

**1497 Apigenin-7-O-neohesperidoside**

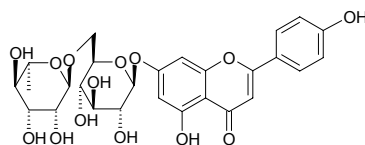
Rhoifolin; Rhoifolioside [17306-46-6]  $C_{27}H_{30}O_{14}$  (578.53). mp 205~208°C, 245°C. Pharm: Xanthinoxidase inhibitor (50μg/mL, InRt = 12.9%); antioxidant (microsome of rat hepatic cells,  $CCl_4$ -induced lipid peroxidization, 100μmol/L InRt = 37.9%,  $FeSO_4$ +cysteine-induced lipid peroxidization, 100μmol/L InRt = 70.1%;  $IC_{50} = 66.1 \mu\text{mol/L}$ ); antineoplastic (TPA-induced EBV-EA, weak activity); antihypertensive (conscious spontaneous hypertensive rat); antioxidant (antihemolysis, *in vitro*, AAPH-induced hemolysis of RBC,  $IC_{50} = 95.9 \mu\text{mol/L}$ ; control Trolox,  $IC_{50} = 101 \mu\text{mol/L}$ )<sup>[4698]</sup>. Source: CU ZHUANG NV ZHEN *Ligustrum robustum* (leaf: yield = 0.0022%<sub>dw</sub>)<sup>[4698]</sup>, DU YI WEI *Lamiophlomis rotata* [Syn. *Phlomis rotata*], GOU JU *Poncirus trifoliata*, GOU JU YE *Poncirus trifoliata*, HUA ZHOU YOU *Citrus grandis* var. *Tomentosa* (exocarp of almost ripe fruit: mean content = 0.655%<sup>[5508]</sup>), LIN BEI ZI *Toxicodendron succedaneum* [Syn. *Rhus succedanea*], LUO SHI TENG *Trachelospermum jasminoides*, YE QI SHU YE *Rhus sylvestris*, YOU<sup>(4)</sup> *Citrus grandis* (exocarp of almost ripe fruit: mean content = 0.090%<sup>[5508]</sup>), ZHI SHI *Citrus aurantium*. Ref: 6, 660, 1632, 1672, 1673, 1674, 4698, 5508.

**1498 Apigenin-5-rhamnoside**

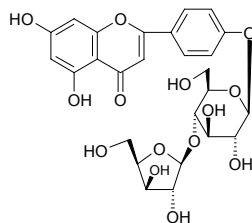
$C_{21}H_{20}O_9$  (416.39). Source: MA HUANG *Ephedra sinica*. Ref: 2.

**1499 Apigenin-7-O-rutinoside**

$C_{27}H_{30}O_{14}$  (578.53). Pharm: Aldose reductase inhibitor ( $IC_{50} = 4.7 \mu\text{mol/L}$ , control Epalrestat,  $IC_{50} = 0.072 \mu\text{mol/L}$ )<sup>[4530]</sup>. Source: SHUI MU XUE LIAN HUA *Saussurea medusa* (whole herb). Ref: 4530.

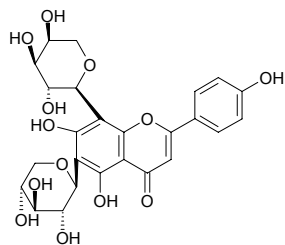
**1500 Apigenin-4'-O-β-D-xylofuranosyl(1→4)-O-β-D-glucopyranoside**

$C_{26}H_{28}O_{14}$  (564.50). Source: FENG XIAN *Impatiens balsamina*, JI XING ZI *Impatiens balsamina*. Ref: 660.

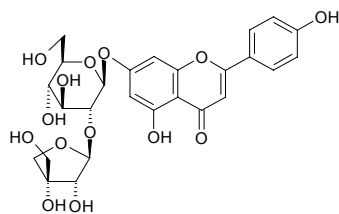


**1501 Apigenin-6-C- $\beta$ -D-xylopyranosyl-8-C- $\alpha$ -L-arabinopyranoside**

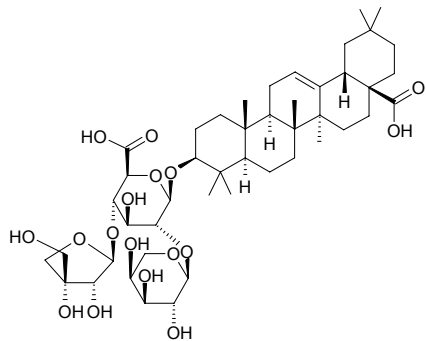
$C_{25}H_{26}O_{13}$  (534.48). Source: ZI HUA DI DING *Viola yedoensis* (whole herb). Ref: 4393.

**1502 Apiin**

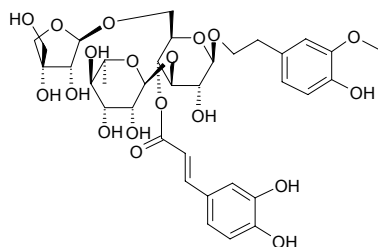
[26544-34-3]  $C_{26}H_{28}O_{14}$  (564.50). mp 228°C. Pharm: Antispasmodic (smooth muscle); aldose reductase inhibitor (eye lens); sedative. Source: GAO GUI CHUN HUANG JU *Anthemis nobilis*, HAN QIN *Apium graveolens*, MU<sup>(3)</sup> JU *Matricaria chamomilla* [Syn. *Matricaria recutita*], XIAO CHAO CAI *Vicia hirsuta*, ZHOU YE OU QIN *Petroselinum crispum*. Ref: 6, 658.

**1503 3-O- $\beta$ -D-Apiofuranosyl-(1 $\rightarrow$ 4)-[ $\alpha$ -L-arabinopyranosyl-(1 $\rightarrow$ 2)] $\beta$ -D-glucuronopyranosyl oleanolic acid**

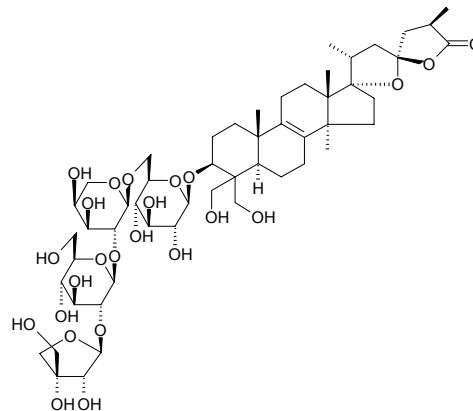
$C_{46}H_{72}O_{17}$  (897.08). Amorphous powder,  $[\alpha]_D^{23} = -3.7^\circ$  ( $c = 1.06$ , MeOH). Source: E ZHANG TENG *Schefflera arboricola*. Ref: 3381.

**1504 6'- $\beta$ -D-Apiofuranosylcistanoside C**

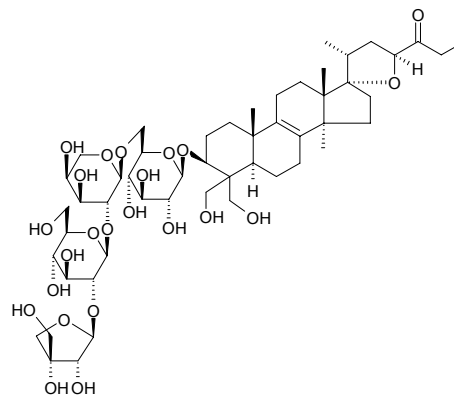
[239436-90-9]  $C_{35}H_{46}O_{19}$  (770.75). Off-white amorphous powder. Source: DU YI WEI *Lamiophlomis rotata* [Syn. *Phlomis rotata*]. Ref: 2318.

**1505 (23S,25R)-3 $\beta$ -[(O- $\beta$ -D-Apiofuranosyl-(1 $\rightarrow$ 2)-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl)oxy]-17 $\alpha$ ,23-epoxy-28,29-dihydroxylanost-8-en-23,26-olide**

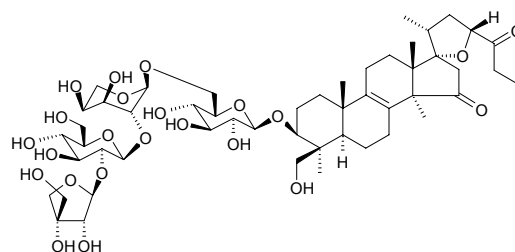
$C_{52}H_{82}O_{24}$  (1091.22). Pharm: Cytotoxic (Hmn oral squamous cell carcinoma cells HSC-2,  $IC_{50} > 50\mu\text{g/mL}$ , control Etoposide,  $IC_{50} = 24\mu\text{g/mL}$ ). Source: XUE GUANG HUA *Chionodoxa luciliae* (fresh bulb). Ref: 4308.

**1506 (23S)-3 $\beta$ -[(O- $\beta$ -D-Apiofuranosyl-(1 $\rightarrow$ 2)-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl)oxy]-17 $\alpha$ ,23-epoxy-28,29-dihydroxy-27-norlanost-8-en-24-one**

$C_{51}H_{82}O_{23}$  (1063.21). Pharm: Cytotoxic (Hmn oral squamous cell carcinoma cells HSC-2,  $IC_{50} > 50\mu\text{g/mL}$ , control Etoposide,  $IC_{50} = 24\mu\text{g/mL}$ ). Source: XUE GUANG HUA *Chionodoxa luciliae* (fresh bulb). Ref: 4308.

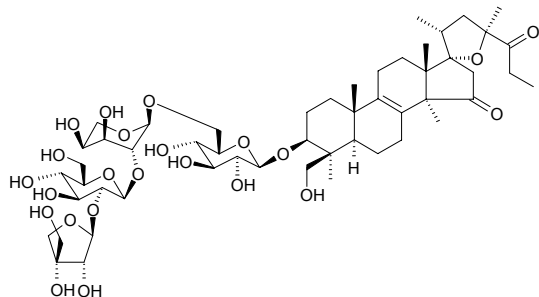
**1507 (23R)-3 $\beta$ -[(O- $\beta$ -D-Apiofuranosyl-(1 $\rightarrow$ 2)-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)-O- $\alpha$ -L-arabinopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl)oxy]-17 $\alpha$ ,23-epoxy-29-hydroxy-27-norlanost-8-ene-15,24-dione**

$C_{51}H_{80}O_{23}$  (1061.19). Amorphous solid,  $[\alpha]_D^{28} = -2.0^\circ$  ( $c = 0.10$ , MeOH). Pharm: Cytotoxic inactive (*in vitro*, HSC-2,  $100\mu\text{mol/L}$ ; control Etoposide,  $IC_{50} = 41\mu\text{mol/L}$ ). Source: QI YI PU TAO FENG XIN ZI *Muscari paradoxum* (bulb: yield = 0.00019%fw). Ref: 4793.



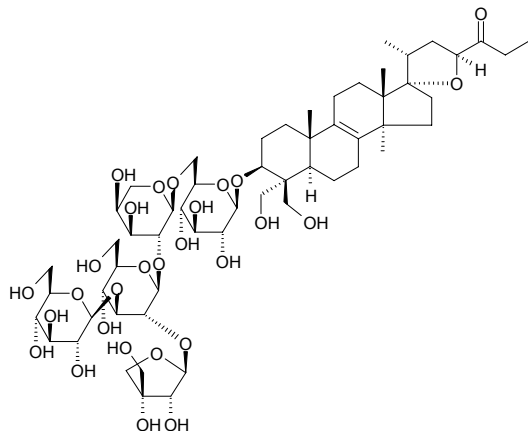
**1508 (23S)-3β-[(O-β-D-Apiofuranosyl-(1→2)-O-β-D-glucopyranosyl-(1→2)-O-α-L-arabinopyranosyl-(1→6)-β-D-glucopyranosyl)oxy]-17α,23-epoxy-29-hydroxy-27-norlanost-8-ene-15,24-dione**

C<sub>51</sub>H<sub>80</sub>O<sub>23</sub> (1061.19). **Pharm:** Cytotoxic (*in vitro*, HSC-2, IC<sub>50</sub> = 6.2 μmol/L; control Etoposide, IC<sub>50</sub> = 41 μmol/L). **Source:** QI YI PU TAO FENG XIN ZI *Muscari paradoxum* (bulb; yield = 0.0007%fw). **Ref:** 4793.



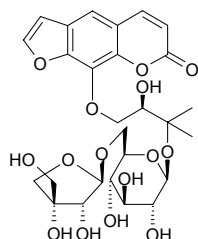
**1509 (23S)-3β-[(O-β-D-Apiofuranosyl-(1→2)-O-β-D-glucopyranosyl-(1→3)-O-β-D-glucopyranosyl-(1→2)-α-L-arabinopyranosyl-(1→6)-β-D-glucopyranosyl)oxy]-17α,23-epoxy-28,29-dihydroxy-27-norlanost-8-en-24-one**

C<sub>57</sub>H<sub>92</sub>O<sub>28</sub> (1225.35). Amorphous solid, [α]<sub>D</sub><sup>26</sup> = -24.0° (c = 0.1, MeOH). **Pharm:** Cytotoxic (Hmn oral squamous cell carcinoma cells HSC-2, IC<sub>50</sub> > 50 μg/mL, control Etoposide, IC<sub>50</sub> = 24 μg/mL). **Source:** XUE GUANG HUA *Chionodoxa luciliae* (fresh bulb). **Ref:** 4308.



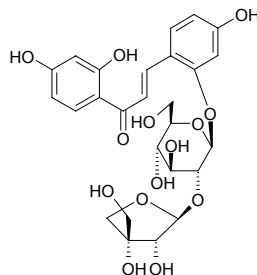
**1510 13-O-[β-D-Apiofuranosyl(1→6)-β-D-glucopyranosyl]-(12R)-heraclenol**

C<sub>27</sub>H<sub>34</sub>O<sub>15</sub> (598.56). Pale-yellow amorphous solid, [α]<sub>D</sub><sup>24.3</sup> = -34.52° (c = 0.44, C<sub>5</sub>H<sub>5</sub>N). **Pharm:** Platelet aggregation inhibitor inactive (rabbit platelets, 4.5 nmol/L PAF-induced, 350 μmol/L AA-induced, 5 μmol/L ADP-induced, 240 μmol/L). **Source:** BAI YUN HUA *Heracleum rapula* (fresh root). **Ref:** 4997.



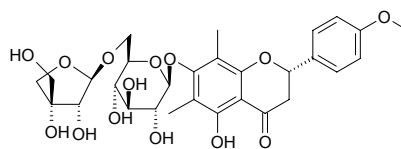
**1511 2'-O-[β-D-Apiofuranosyl(1→2)-β-D-glucopyranosyl]isoliquiritigenin**

C<sub>26</sub>H<sub>30</sub>O<sub>14</sub> (566.52). Yellow crystalline powder, mp 150~151°C. **Source:** JIN YIN HUA *Lonicera japonica*, LIAN QIAO *Forsythia suspensa*. **Ref:** 2453.



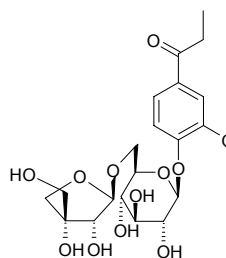
**1512 7-O-β-D-Apiofuranosyl-(1→6)-β-D-glucopyranosylmatteucinol**

C<sub>29</sub>H<sub>36</sub>O<sub>14</sub> (608.6). [α]<sub>D</sub><sup>22.6</sup> = -16.8° (c = 0.37, acetone). **Source:** DU JUAN HUA YE *Rhododendron simsii*. **Ref:** 749.



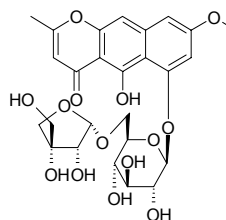
**1513 4-[β-D-Apiofuranosyl-(1→6)-β-D-glucopyranosyloxy]-3-methoxy-propiofenone**

C<sub>21</sub>H<sub>30</sub>O<sub>12</sub> (474.47). Colorless amorphous solid, [α]<sub>D</sub> = -61.3° (c = 0.180, MeOH). **Pharm:** Antioxidant (DPPH scavenger, EC<sub>50</sub> > 50 μg/mL, 50 μg/mL InRt = 14%, control Ascorbic acid, EC<sub>50</sub> = 1.6 μg/mL = 9.1 μmol/L). **Source:** BEI SHA SHEN *Glehnia littoralis* (underground part). **Ref:** 4154.



**1514 6-[(α-Apiofuranosyl-(1→6)-O-β-D-glucopyranosyl)oxy]rubrofuscarin**

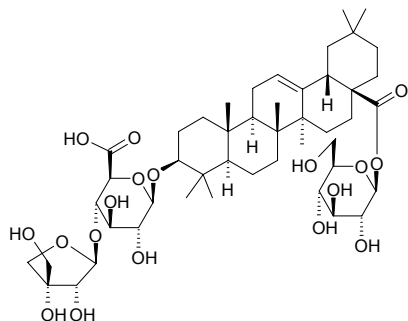
C<sub>26</sub>H<sub>30</sub>O<sub>14</sub> (566.52). **Source:** JUE MING ZI *Cassia tora*. **Ref:** 2.



**1515 3-O- $\beta$ -D-Apiofuranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucuronopyranosyl]oleanolic acid 28-O- $\beta$ -D-glucopyranosyl ester**

C<sub>47</sub>H<sub>74</sub>O<sub>18</sub> (927.10). Amorphous powder,  $[\alpha]_D^{23} = -13.1^\circ$  ( $c = 1.38$ , MeOH).

Source: E ZHANG TENG *Schefflera arboricola*. Ref: 3381.

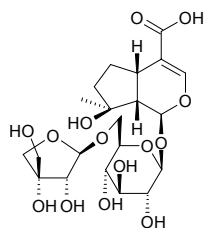


**1516 6-O- $\beta$ -D-Apiofuranosyl-mussaenosidic acid**

C<sub>21</sub>H<sub>32</sub>O<sub>14</sub> (508.48). Amorphous powder,  $[\alpha]_D = -97.1^\circ$  ( $c = 1.02$ , MeOH).

Source: SI XIAO BO SHUANG YE YU GU MU *Canthium berberidifolium*.

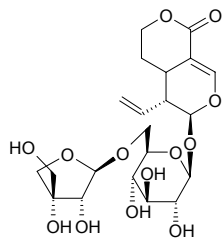
Ref: 1925.



**1517 6'-O- $\beta$ -D-Apiofuranosylsweroside**

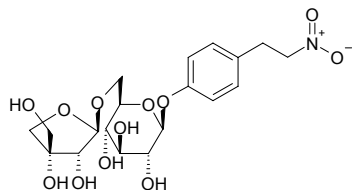
C<sub>21</sub>H<sub>30</sub>O<sub>13</sub> (490.47). Colorless crystalline solid, mp 115~119°C,  $[\alpha]_D^{19} =$

+206° ( $c = 1.21$ , MeOH). Source: WU SHI REN DONG *Lonicera quinquelocularis* (root). Ref: 3926.



**1518 6'-O- $\beta$ -D-Apiofuranosylthalictoside**

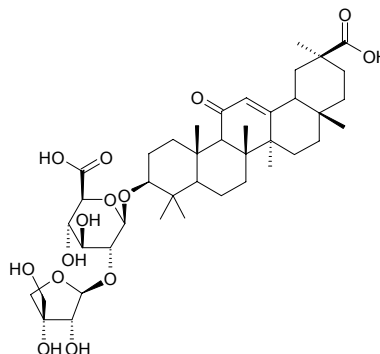
C<sub>19</sub>H<sub>27</sub>NO<sub>12</sub> (461.43). Yellowish oil, easily soluble in H<sub>2</sub>O and MeOH. Source: ZHONG JIAN WU WEI ZI *Schisandra propinqua* var. *intermedia* (stem). Ref: 4845.



**1519 Apioglycyrrhizin**

C<sub>41</sub>H<sub>62</sub>O<sub>14</sub> (778.94). Source: ZHANG GUO GAN CAO *Glycyrrhiza inflata*.

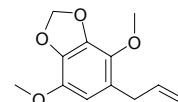
Ref: 660.



**1520 Apiole**

[523-80-8] C<sub>12</sub>H<sub>14</sub>O<sub>4</sub> (222.24). Pharm: Antipyretic; antispasmodic; frees

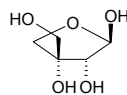
menstruation; pesticide; LD<sub>50</sub> (dog, iv) = 500mg/kg. Source: HUANG HAO *Artemisia scoparia* [Syn. *Artemisia capillaris* var. *scoparia*], QIANG HUO *Notopterygium incisum*, XIA YE HU JIAO *Piper angustifolium*, ZHANG MU *Cinnamomum camphora*, ZHOU YE OU QIN *Petroselinum crispum*. Ref: 2, 658, 660.



**1521 Apiose**

[639-97-4] C<sub>5</sub>H<sub>10</sub>O<sub>5</sub> (150.13). Source: FU PING *Lemma minor*, HAI DAI

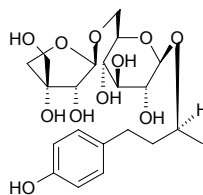
*Zostera marina*. Ref: 6.



**1522 Apiosylepirhododendrin**

C<sub>21</sub>H<sub>32</sub>O<sub>11</sub> (460.48). Source: MAO GUO QI *Acer nikoense* (stem bark: yield =

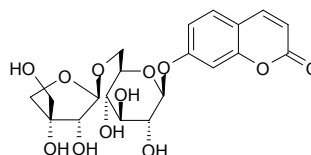
0.027%). Ref: 4304.



**1523 Apiosylskimmin**

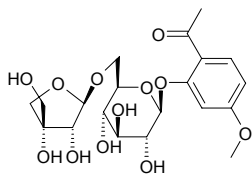
C<sub>20</sub>H<sub>24</sub>O<sub>12</sub> (456.41). Source: FEN CHA DANG GUI *Angelica furcijuga*

(flower). Ref: 4454.

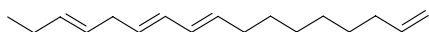


**1524 Aplopaconoside**

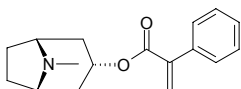
$C_{20}H_{28}O_{12}$  (460.44). Source: MU DAN PI *Paeonia moutan* [Syn. *Paeonia suffruticosa*]. Ref: 2, 50.

**1525 Aplotaxene**

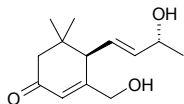
$C_{17}H_{28}$  (232.41). bp 110~115°C/8mmHg. Source: MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*]. Ref: 6.

**1526 Apoatropine**

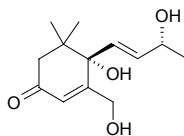
[500-55-0]  $C_{17}H_{21}NO_2$  (271.36). mp 60~62°C. Pharm: Antispasmodic; LD<sub>50</sub> (mus, ip) = 14.1mg/kg. (mus, orl) = 160mg/kg. Source: DIAN QIE *Atropa belladonna*, DONG FANG TIAN XIAN ZI *Hyoscyamus orientalis*, LANG DANG GEN *Hyoscyamus niger*, LANG DANG ZI *Hyoscyamus niger*, MAO MAN TUO LUO YE *Datura innoxia*, YI YE JIA FAN LV *Pseudostellaria heterophylla*. Ref: 6, 658, 660.

**1527 Apocynol A**

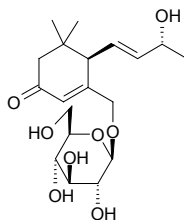
$C_{13}H_{20}O_3$  (224.30). Source: LUO BU MA *Apocynum venetum* (leaf). Ref: 3548.

**1528 Apocynol B**

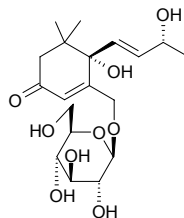
$C_{13}H_{20}O_4$  (240.30). Source: LUO BU MA *Apocynum venetum* (leaf). Ref: 3548.

**1529 Apocynoside I**

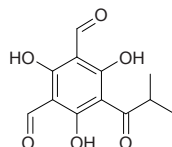
$C_{19}H_{30}O_8$  (386.45). Amorphous powder,  $[\alpha]_D^{27} = +79.2^\circ$  ( $c = 1.2$ , MeOH). Source: LUO BU MA *Apocynum venetum* (leaf). Ref: 3548.

**1530 Apocynoside II**

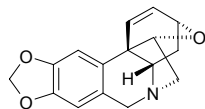
$C_{19}H_{30}O_9$  (402.45). Amorphous powder,  $[\alpha]_D^{26} = +25.1^\circ$  ( $c = 0.4$ , MeOH). Source: LUO BU MA *Apocynum venetum* (leaf). Ref: 3548.

**1531 Apodophyllone**

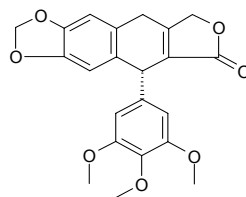
$C_{12}H_{12}O_6$  (252.23). Source: WU BING YE AN *Eucalyptus apodophylla*. Ref: 2331.

**1532 Apohaemanthamine**

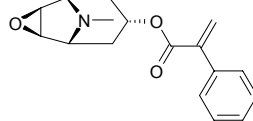
$C_{16}H_{15}NO_3$  (269.30). Colorless amorphous solid, mp 145~147°C,  $[\alpha]_D^{22} = +198^\circ$  ( $c = 0.63$ , CHCl<sub>3</sub>); colorless crystals (cyclohexane), mp 145~147°C,  $[\alpha]_D^{22} = +198^\circ$  ( $c = 0.64$ , CHCl<sub>3</sub>). Pharm: Antiplasmodial inactive (strain D10, IC<sub>50</sub> > 50µg/mL, control Hamayne, IC<sub>50</sub> = 15.6µg/mL, Chloroquine, IC<sub>50</sub> = 0.002µg/mL; strain FAC8, IC<sub>50</sub> > 50µg/mL, Hamayne, IC<sub>50</sub> = 18.2µg/mL, Chloroquine, IC<sub>50</sub> = 0.01µg/mL)<sup>[3931]</sup>; cytotoxic (BL6, IC<sub>50</sub> > 100µg/mL, Hamayne, IC<sub>50</sub> = 9.4µg/mL, Chloroquine, IC<sub>50</sub> = 20.9µg/mL, Daunomycin, IC<sub>50</sub> = 0.43µg/mL)<sup>[3931]</sup>. Source: BU LANG WEI JI *Brunsvigia radulosa* (bulb)<sup>[3931]</sup>, YA MA XUN BAI HE *Eucharis amazonica* (dried bulb and leaf)<sup>[3931]</sup>. Ref: 3931, 4325.

**1533 β-Apopicropodophyllin**

[477-52-1]  $C_{22}H_{20}O_7$  (396.40). mp 220~221°C. Source: WO ER QI *Diphylleia sinensis*. Ref: 6.

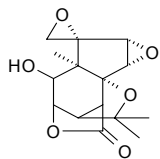
**1534 Aposcopolamine**

[535-26-2]  $C_{17}H_{19}NO_3$  (285.35). Source: REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. Ref: 3.

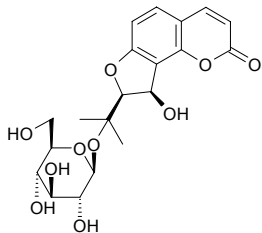


**1535 Apotutin**

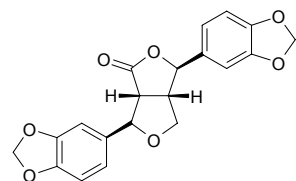
$C_{15}H_{18}O_6$  (294.31). White rhomboid crystals, mp 227–229°C. Source: MA SANG *Coriaria sinica* [Syn. *Coriaria nepalensis*]. Ref: 413.

**1536 Apterin**

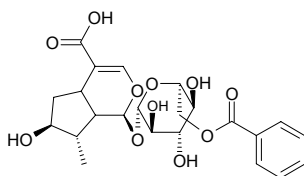
$C_{20}H_{24}O_{10}$  (424.41). Source: BAI HUA QIAN HU *Peucedanum praeruptorum*, FEN CHA DANG GUI *Angelica furcijuga* (flower), JI JI QIN *Zizia aptera*, TANG MU XUN DU HUO *Heracleum thomsoni*. Ref: 660, 1521, 4454.

**1537 (-)-Aptosimon**

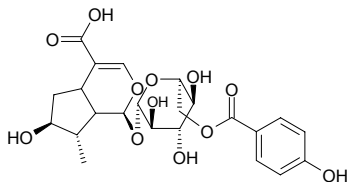
$C_{20}H_{16}O_7$  (368.35). Colorless oil,  $[\alpha]_D^{26} = -101.5^\circ$  ( $c = 2.0$ ,  $CHCl_3$ ). Source: PI ZHEN XING YAO HUA *Wikstroemia lanceolata* (stem and root). Ref: 4947.

**1538 Aquaticoside A**

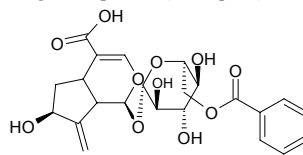
6'-*O*-Benzoyl-8-epiloganic acid  $C_{23}H_{28}O_{11}$  (480.47). Amorphous powder,  $[\alpha]_D^{24} = -77.4^\circ$  ( $c = 0.30$ , MeOH). Source: BEI SHUI KU MAI *Veronica anagallis-aquatica* (aerial parts). Ref: 3833.

**1539 Aquaticoside B**

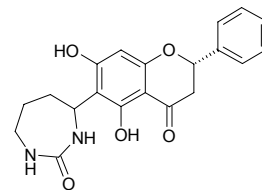
6'-*O*-*p*-Hydroxybenzoyl-8-epiloganic acid  $C_{23}H_{28}O_{12}$  (496.47). Amorphous powder,  $[\alpha]_D^{24} = -58.1^\circ$  ( $c = 0.17$ , MeOH). Source: BEI SHUI KU MAI *Veronica anagallis-aquatica* (aerial parts). Ref: 3833.

**1540 Aquaticoside C**

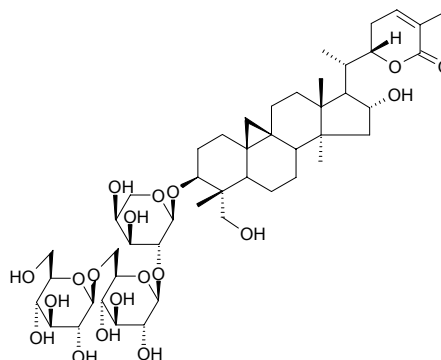
6'-*O*-Benzoyl-gardoside  $C_{23}H_{26}O_{11}$  (478.46). Amorphous powder,  $[\alpha]_D^{24} = +11.5^\circ$  ( $c = 0.16$ , MeOH). Source: BEI SHUI KU MAI *Veronica anagallis-aquatica* (aerial parts). Ref: 3833.

**1541 Aquiledine**

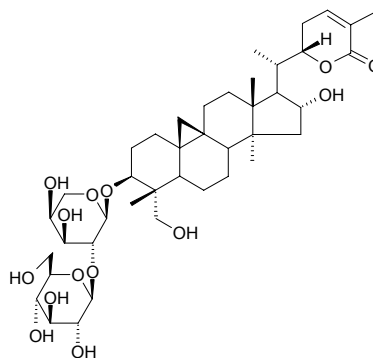
(2*S*)-6-(1,4-Ureylenebutyl)-5,7-dihydroxyflavanone  $C_{20}H_{20}N_2O_5$  (368.39). White amorphous powder (CH<sub>3</sub>OH), mp 214–215°C,  $[\alpha]_D = +21^\circ$  ( $c = 0.54$ , CH<sub>3</sub>OH). Source: WU JU LOU DOU CAI *Aquilegia ecalcarata* (whole herb; yield = 0.00010%dw). Ref: 3029.

**1542 Aquilegioside A**

$C_{47}H_{74}O_{19}$  (943.10). Pharm: Immunosuppressant inactive (mouse, suppressing proliferation of lymphocytes in allogeneic mixed lymphocyte reaction,  $IC_{50} > 1000\mu\text{g/mL}$ , control Cyclosporin A,  $IC_{50} = 0.05\mu\text{g/mL}$ ). Source: OU ZHOU LOU DOU CAI *Aquilegia vulgaris* (aerial parts). Ref: 4349.

**1543 Aquilegioside B**

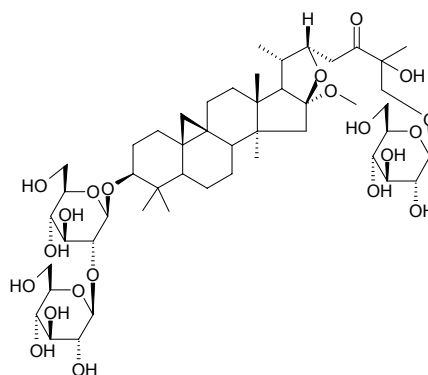
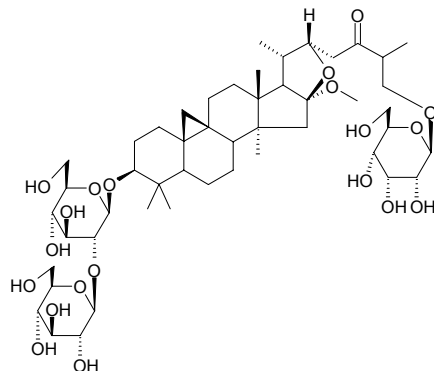
$C_{41}H_{64}O_{14}$  (780.96). Pharm: Immunosuppressant inactive (mouse, suppressing proliferation of lymphocytes in allogeneic mixed lymphocyte reaction,  $IC_{50} > 1000\mu\text{g/mL}$ , control Cyclosporin A,  $IC_{50} = 0.05\mu\text{g/mL}$ ). Source: OU ZHOU LOU DOU CAI *Aquilegia vulgaris* (aerial parts). Ref: 4349.



**1544 Aquilegioside C**

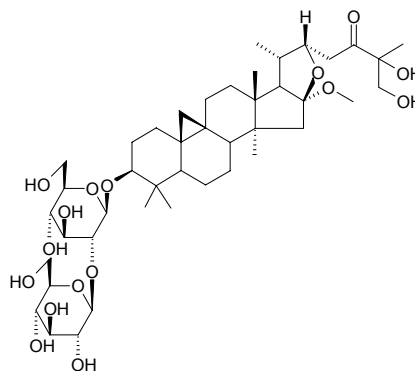
26-*O*- $\beta$ -*D*-Allopyranosyl-(16*S*,20*S*,22*S*)-16 $\beta$ ,22-epoxy-16 $\alpha$ -methoxy-3 $\beta$ ,26-dihydroxy-cycloartan-24-one-3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranoside C<sub>49</sub>H<sub>80</sub>O<sub>20</sub> (989.17). White powder,  $[\alpha]_D^{25} = -28.3^\circ$  ( $c = 1.08$ , pyridine).

**Pharm:** Immunosuppressant (mouse, suppressing proliferation of lymphocytes in allogeneic mixed lymphocyte reaction, IC<sub>50</sub> = 225 $\mu$ g/mL = 227 $\mu$ mol/L, control Cyclosporin A, IC<sub>50</sub> = 0.05 $\mu$ g/mL = 0.04 $\mu$ mol/L). **Source:** OU ZHOU LOU DOU CAI *Aquilegia vulgaris* (aerial parts). **Ref:** 4349.

**1547 Aquilegioside F**

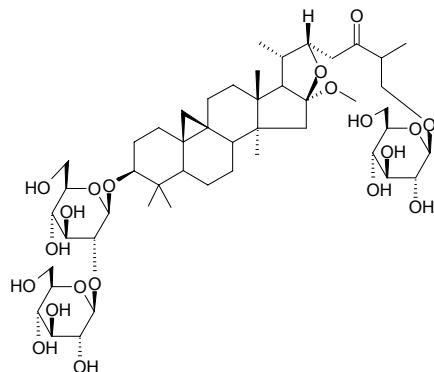
(16*S*,20*S*,22*S*)-16 $\beta$ ,22-Epoxy-16 $\alpha$ -methoxy-3 $\beta$ ,25,26-trihydroxy-cycloartan-24-one 3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranoside C<sub>43</sub>H<sub>70</sub>O<sub>16</sub> (843.03). White powder,  $[\alpha]_D^{25} = -2.5^\circ$  ( $c = 0.35$ , pyridine). **Pharm:**

Immunosuppressant (mouse, suppressing proliferation of lymphocytes in allogeneic mixed lymphocyte reaction, IC<sub>50</sub> = 31 $\mu$ g/mL = 37 $\mu$ mol/L, control Cyclosporin A, IC<sub>50</sub> = 0.05 $\mu$ g/mL = 0.04 $\mu$ mol/L). **Source:** OU ZHOU LOU DOU CAI *Aquilegia vulgaris* (aerial parts). **Ref:** 4349.

**1545 Aquilegioside D**

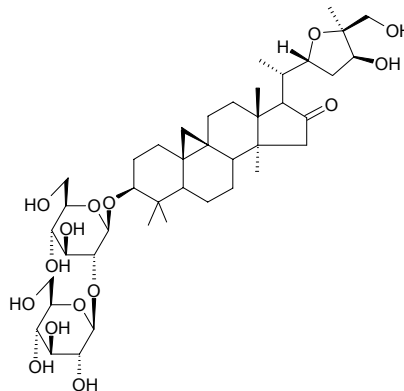
26-*O*- $\beta$ -*D*-Glucopyranosyl-(16*S*,20*S*,22*S*)-16 $\beta$ ,22-epoxy-16 $\alpha$ -methoxy-3 $\beta$ ,26-dihydroxy-cycloartan-24-one-3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranoside C<sub>49</sub>H<sub>80</sub>O<sub>20</sub> (989.17). White powder,  $[\alpha]_D^{25} = -31.7^\circ$  ( $c = 1.07$ , pyridine).

**Pharm:** Immunosuppressant (mouse, suppressing proliferation of lymphocytes in allogeneic mixed lymphocyte reaction, IC<sub>50</sub> = 154 $\mu$ g/mL = 155 $\mu$ mol/L, control Cyclosporin A, IC<sub>50</sub> = 0.05 $\mu$ g/mL = 0.04 $\mu$ mol/L). **Source:** OU ZHOU LOU DOU CAI *Aquilegia vulgaris* (aerial parts). **Ref:** 4349.

**1548 Aquilegioside G**

(20*S*,22*R*,24*S*,25*S*)-22,25-Epoxy-3 $\beta$ ,24,27-trihydroxy-cycloartan-16-one 3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranoside C<sub>42</sub>H<sub>68</sub>O<sub>15</sub> (813.00).

White powder,  $[\alpha]_D^{25} = -30.8^\circ$  ( $c = 0.30$ , MeOH). **Source:** OU ZHOU LOU DOU CAI *Aquilegia vulgaris* (aerial parts). **Ref:** 4370.

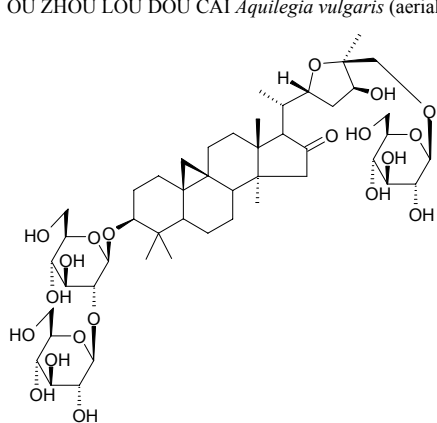
**1546 Aquilegioside E**

26-*O*- $\beta$ -*D*-Glucopyranosyl (16*S*,20*S*,22*S*)-16 $\beta$ ,22-epoxy-16 $\alpha$ -methoxy-3 $\beta$ ,25,26-trihydroxy-cycloartan-24-one 3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranoside C<sub>49</sub>H<sub>80</sub>O<sub>21</sub> (1005.17). White powder,  $[\alpha]_D^{25} = -8.6^\circ$  ( $c = 0.43$ , pyridine). **Pharm:**

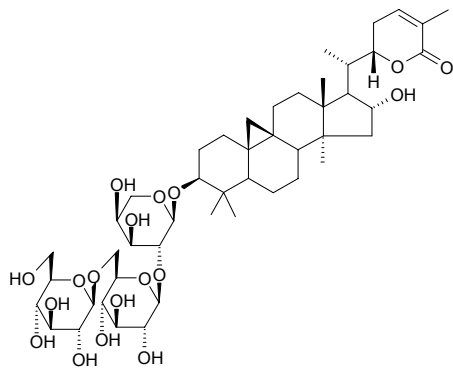
Immunosuppressant (mouse, suppressing proliferation of lymphocytes in allogeneic mixed lymphocyte reaction, IC<sub>50</sub> = 73 $\mu$ g/mL = 72 $\mu$ mol/L, control Cyclosporin A, IC<sub>50</sub> = 0.05 $\mu$ g/mL = 0.04 $\mu$ mol/L). **Source:** OU ZHOU LOU DOU CAI *Aquilegia vulgaris* (aerial parts). **Ref:** 4349.

**1549 Aquilegioside H**

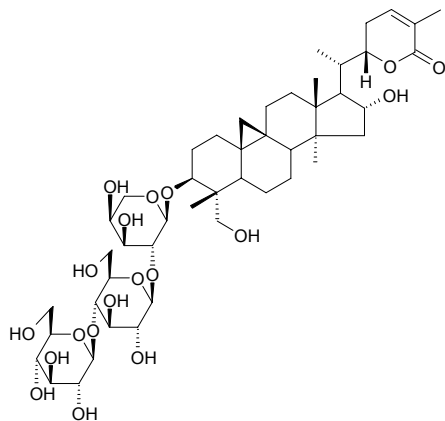
27-*O*- $\beta$ -D-Glucopyranosyl-(20*S*,22*R*,24*S*,25*S*)-22,25-epoxy-3 $\beta$ ,24,27-trihydroxy-cycloartan-16-one-3-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranoside C<sub>48</sub>H<sub>78</sub>O<sub>20</sub> (975.14). White powder,  $[\alpha]_D^{25} = -32.4^\circ$  ( $c = 0.50$ , MeOH). Source: OU ZHOU LOU DOU CAI *Aquilegia vulgaris* (aerial parts). Ref: 4370.

**1550 Aquilegioside I**

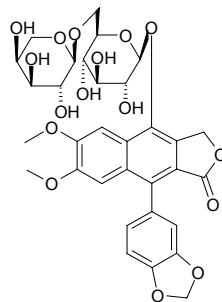
22*S*-3 $\beta$ ,16 $\alpha$ -Dihydroxy-cycloart-24-en-26,22-olide 3-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranoside C<sub>47</sub>H<sub>74</sub>O<sub>18</sub> (927.10). White powder,  $[\alpha]_D^{25} = -1.9^\circ$  ( $c = 0.30$ , MeOH). Source: OU ZHOU LOU DOU CAI *Aquilegia vulgaris* (aerial parts). Ref: 4370.

**1551 Aquilegioside J**

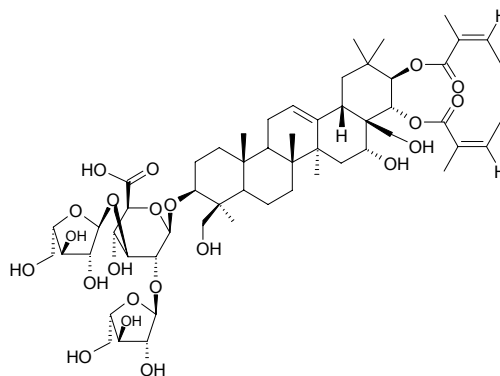
22*S*-3 $\beta$ ,16 $\alpha$ -Dihydroxy-cycloart-24-en-26,22-olide-3-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranoside C<sub>47</sub>H<sub>74</sub>O<sub>19</sub> (943.10). White powder,  $[\alpha]_D^{25} = +15.2^\circ$  ( $c = 0.30$ , MeOH). Source: OU ZHOU LOU DOU CAI *Aquilegia vulgaris* (aerial parts). Ref: 4370.

**1552 Arabelline**

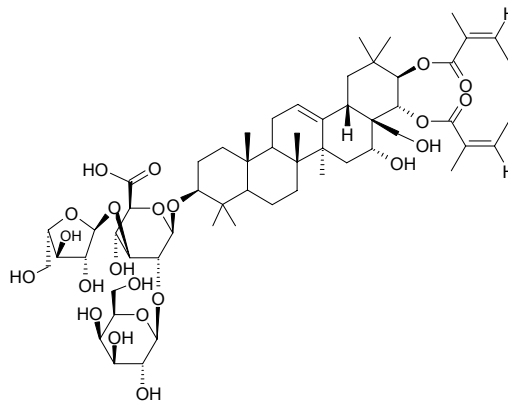
C<sub>32</sub>H<sub>34</sub>O<sub>16</sub> (674.62). Pharm: Cytotoxic (hmn LoVo Cell Line *in vitro*, IC<sub>50</sub> = (63.21 $\pm$ 6.21) $\mu$ L/mL). Source: *Haplophyllum patavinum* (shoot). Ref: 4206.

**1553 3-*O*- $\alpha$ -L-Arabinofuranosyl-(1 $\rightarrow$ 3)-[ $\alpha$ -L-arabinofuranosyl-(1 $\rightarrow$ 2)]- $\beta$ -D-glucuronopyranosyl-21 $\beta$ ,22 $\alpha$ -di-*O*-angeloylprotoaescigenin**

C<sub>56</sub>H<sub>86</sub>O<sub>22</sub> (1111.30).  $[\alpha]_D^{21} = -32.3^\circ$  ( $c = 0.13$ , MeOH). Source: NAN SU GE LAN JIA SHAN LUO *Harpullia austro-caledonica* (stem bark). Ref: 5269.

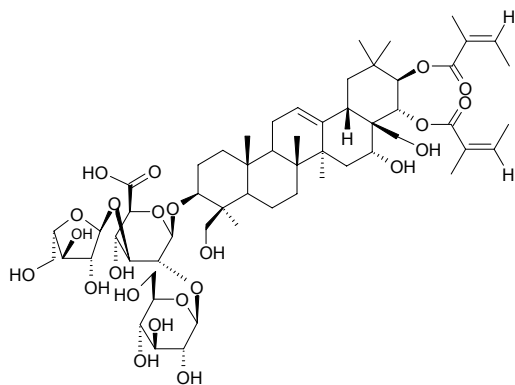
**1554 3-*O*- $\alpha$ -L-Arabinofuranosyl-(1 $\rightarrow$ 3)-[ $\beta$ -D-galactopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -D-glucuronopyranosyl-21 $\beta$ ,22 $\alpha$ -di-*O*-angeloylbarringtonol C**

C<sub>57</sub>H<sub>88</sub>O<sub>22</sub> (1125.32).  $[\alpha]_D^{21} = -10.9^\circ$  ( $c = 0.53$ , MeOH). Pharm: Hemolytic. Source: NAN SU GE LAN JIA SHAN LUO *Harpullia austro-caledonica* (stem bark). Ref: 5269.

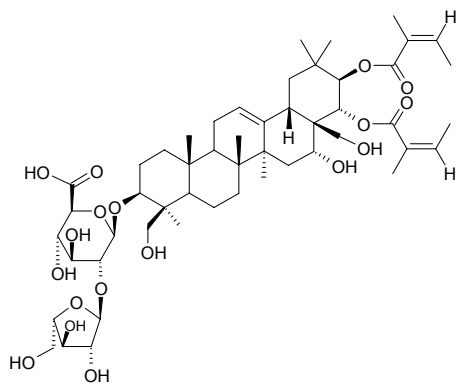




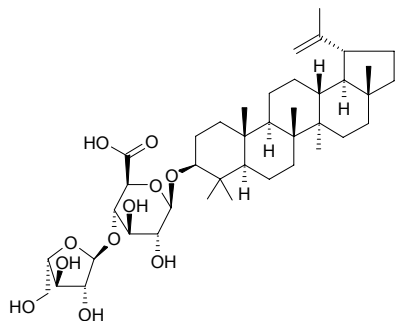
**1555 3-O- $\alpha$ -L-Arabinofuranosyl-(1 $\rightarrow$ 3)-[ $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -D-glucuronopyranosyl-21 $\beta$ ,22 $\alpha$ -di-O-angeloylprotoaescigenin**  
 C<sub>57</sub>H<sub>88</sub>O<sub>23</sub> (1141.32). Source: NAN SU GE LAN JIA SHAN LUO *Harpullia austro-caledonica* (stem bark). Ref: 5269.



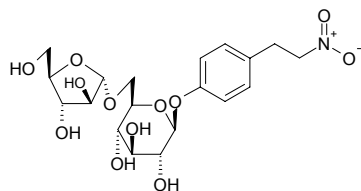
**1556 3-O- $\alpha$ -L-Arabinofuranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucuronopyranosyl-21 $\beta$ ,22 $\alpha$ -di-O-angeloylprotoaescigenin**  
 C<sub>51</sub>H<sub>78</sub>O<sub>18</sub> (979.18). [ $\alpha$ ]<sub>D</sub><sup>21</sup> = -25.5° (c = 0.11, MeOH). Source: NAN SU GE LAN JIA SHAN LUO *Harpullia austro-caledonica* (stem bark). Ref: 5269.



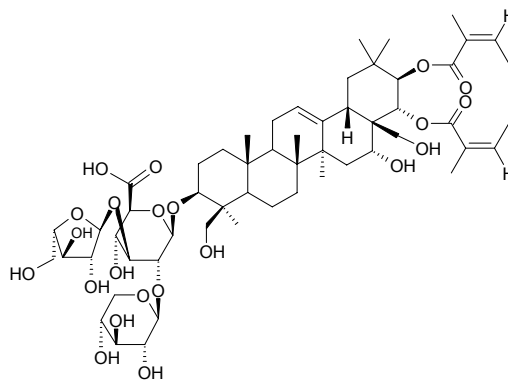
**1557  $\alpha$ -L-Arabinofuranosyl-(1 $\rightarrow$ 4)-O- $\beta$ -D-glucuronopyranosyl-(1 $\rightarrow$ 3)3 $\beta$ -hydroxy-lup-20(29)-ene**  
 C<sub>41</sub>H<sub>66</sub>O<sub>11</sub> (734.98). Source: LAO SHU LE *Acanthus ilicifolius*. Ref: 2083.



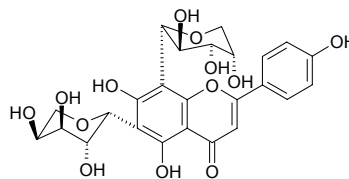
**1558 6'-O- $\alpha$ -L-Arabinofuranosylthaliactoside**  
 C<sub>19</sub>H<sub>27</sub>NO<sub>12</sub> (461.43). Yellowish oil, easily soluble in H<sub>2</sub>O and MeOH. Source: ZHONG JIAN WU WEI ZI *Schisandra propinqua* var. *intermedia* (stem). Ref: 4845.



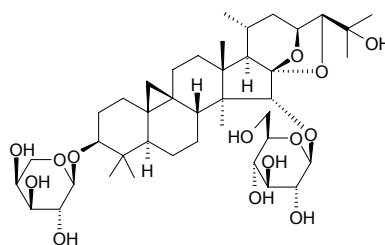
**1559 3-O- $\alpha$ -L-Arabinofuranosyl-(1 $\rightarrow$ 3)-[ $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -D-glucuronopyranosyl-21 $\beta$ ,22 $\alpha$ -di-O-angeloylprotoaescigenin**  
 C<sub>56</sub>H<sub>86</sub>O<sub>22</sub> (1111.30). [ $\alpha$ ]<sub>D</sub><sup>21</sup> = -13.2° (c = 0.25, MeOH). Source: NAN SU GE LAN JIA SHAN LUO *Harpullia austro-caledonica* (stem bark). Ref: 5269.



**1560 6-C- $\beta$ -L-Arabinopyranosyl-8-C- $\alpha$ -L-arabinopyranosylapigenin**  
 C<sub>25</sub>H<sub>26</sub>O<sub>13</sub> (534.45). Amorphous yellow powder (MeOH), mp 206~208°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -42.0° (c = 0.55, DMSO). Source: SI CHI SI LENG CAO *Schnabelia tetradonta* (aerial parts: yield = 0.00015%dw). Ref: 4665.

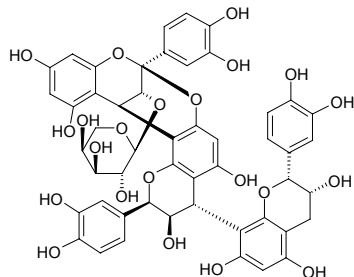


**1561 3-O- $\alpha$ -L-Arabinopyranosylcimigenol 15-O- $\beta$ -D-glucopyranoside**  
 C<sub>41</sub>H<sub>66</sub>O<sub>14</sub> (782.97). White powder (MeOH), mp 224~225°C, [ $\alpha$ ]<sub>D</sub> = +15.9° (c = 0.32, MeOH). Source: XING AN SHENG MA *Cimicifuga dahurica* (rhizome). Ref: 4140.

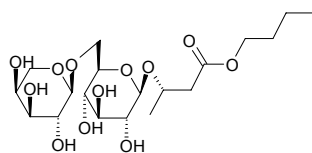


**1562 3*O*- $\alpha$ -L-Arabinopyranosylcinnamtannin B<sub>1</sub>**

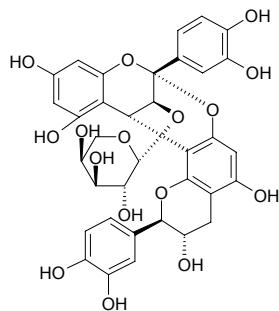
C<sub>50</sub>H<sub>44</sub>O<sub>22</sub> (996.89). Light-brown amorphous powder,  $[\alpha]_D^{20} = +17.1^\circ$  ( $c = 1$ , MeOH). **Pharm:** Antioxidant (inhibits NADPH-dependent lipid peroxidation in microsomes and autoxidation of linoleic acid); DPPH scavenger (effectively scavenges DPPH radical). **Source:** KE KE *Theobroma cacao*. **Ref:** 2023.

**1563 3-*O*- $\alpha$ -L-Arabinopyranosyl-(1→6)- $\beta$ -D-glucopyranoside of butyl (3*S*)-hydroxybutanoate**

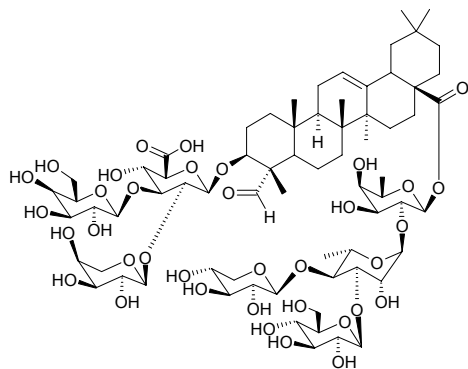
C<sub>19</sub>H<sub>34</sub>O<sub>12</sub> (454.48). **Source:** DENG LONG CAO *Physalis peruviana*. **Ref:** 1997.

**1564 3*T*-*O*-Arabinopyranosyl-*ent*-epicatechin-(2 $\alpha$ →7,4 $\alpha$ →8)-catechin**

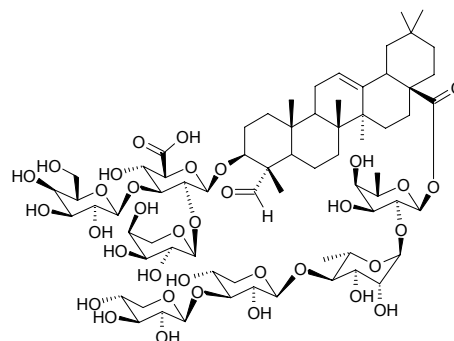
C<sub>35</sub>H<sub>32</sub>O<sub>16</sub> (708.64). Light-brown amorphous powder,  $[\alpha]_D^{20} = -16.4^\circ$  ( $c = 1$ , MeOH). **Pharm:** Antioxidant (inhibits NADPH-dependent lipid peroxidation in microsomes and autoxidation of linoleic acid); free radical scavenger (effectively scavenges DPPH radical). **Source:** KE KE *Theobroma cacao*. **Ref:** 2023.

**1565 3-*O*- $\alpha$ -L-Arabinopyranosyl-(1→2)-[ $\beta$ -D-galactopyranosyl-(1→3)]- $\beta$ -D-glucuronopyranosylgypsogenin-28-*O*- $\beta$ -D-glucopyranosyl(1→3)-[ $\beta$ -D-xylopyranosyl-(1→4)]- $\alpha$ -L-rhamnopyranosyl-(1→2)- $\beta$ -D-fucopyranoside**

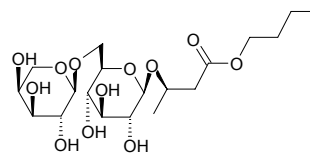
C<sub>70</sub>H<sub>110</sub>O<sub>36</sub> (1527.64). White amorphous powder,  $[\alpha]_D^{20} = -6^\circ$  ( $c = 0.10$ , MeOH). **Source:** LAO NIU JIN *Arenaria juncea* (root). **Ref:** 3095.

**1566 3-*O*- $\alpha$ -L-Arabinopyranosyl-(1→2)-[ $\beta$ -D-galactopyranosyl-(1→3)]- $\beta$ -D-glucuronopyranosylgypsogenin-28-*O*- $\beta$ -D-xylopyranosyl-(1→3)- $\beta$ -D-xylopyranosyl-(1→4)- $\alpha$ -L-rhamnopyranosyl-(1→2)- $\beta$ -D-fucopyranoside**

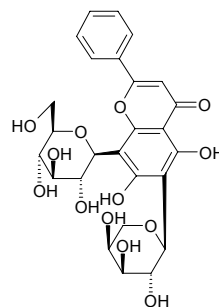
C<sub>69</sub>H<sub>108</sub>O<sub>35</sub> (1497.61). White amorphous powder,  $[\alpha]_D^{20} = +5^\circ$  ( $c = 0.10$ , MeOH). **Source:** LAO NIU JIN *Arenaria juncea* (root). **Ref:** 3095.

**1567 3-*O*- $\alpha$ -L-Arabinopyranosyl-(1→6)- $\beta$ -D-glucopyranoside of butyl (3*R*)-hydroxybutanoate**

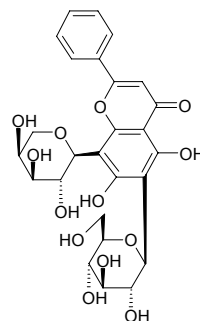
C<sub>19</sub>H<sub>34</sub>O<sub>12</sub> (454.48). **Source:** DENG LONG CAO *Physalis peruviana*. **Ref:** 1997.

**1568 6-*C*-Arabinopyranosyl-8-*C*-glucopyranosyl-5,7-dihydroxyflavone**

C<sub>26</sub>H<sub>28</sub>O<sub>13</sub> (548.51). **Source:** HUANG QIN *Scutellaria baicalensis*. **Ref:** 1557.

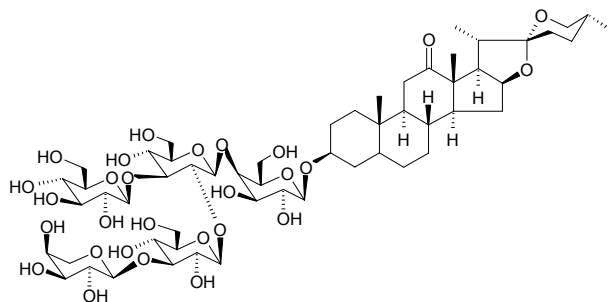
**1569 8-*C*-Arabinopyranosyl-6-*C*-glucopyranosyl-5,7-dihydroxyflavone**

C<sub>26</sub>H<sub>28</sub>O<sub>13</sub> (548.51). **Source:** HUANG QIN *Scutellaria baicalensis*. **Ref:** 1557.



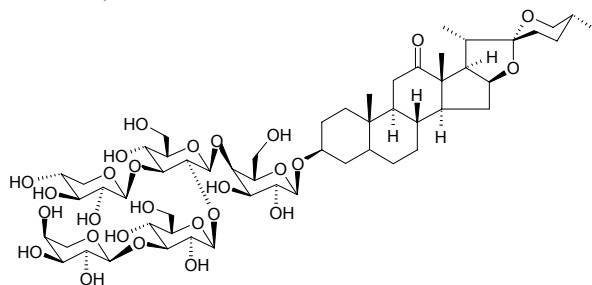
**1570 (25R)-3β-[(O-α-L-Arabinopyranosyl-(1→3)-β-D-glucopyranosyl-(1→2)-O-β-D-glucopyranosyl-(1→3)]-O-β-D-glucopyranosyl-(1→4)-β-D-galactopyranosyl]oxy]-5α-spirostan-12-one**

$C_{56}H_{90}O_{28}$  (1211.32). Amorphous solid,  $[\alpha]_D^{26} = -24.0^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Cytotoxic (*in vitro*, HL-60,  $IC_{50} = 9\mu\text{g/mL}$ ; HSC-2,  $IC_{50} = 13\mu\text{g/mL}$ ; control Etoposide: HL-60,  $IC_{50} = 0.3\mu\text{g/mL}$ ; HSC-2,  $IC_{50} = 24.4\mu\text{g/mL}$ ). **Source:** WAN XIANG YU *Polianthes tuberosa* (underground part: yield = 0.0041%dw). **Ref:** 4651.



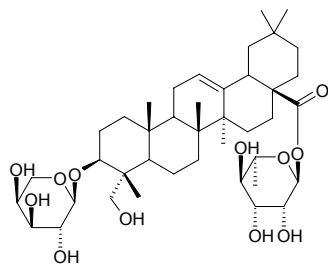
**1571 (25R)-3β-[(O-α-L-Arabinopyranosyl-(1→3)-β-D-glucopyranosyl-(1→2)-O-β-D-xylopyranosyl-(1→3)]-O-β-D-glucopyranosyl-(1→4)-β-D-galactopyranosyl]oxy]-5α-spirostan-12-one**

$C_{55}H_{88}O_{27}$  (1181.3). Amorphous solid,  $[\alpha]_D^{26} = -30.0^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Cytotoxic (*in vitro*, HL-60,  $IC_{50} = 4.4\mu\text{g/mL}$ ; HSC-2,  $IC_{50} = 2.2\mu\text{g/mL}$ ; control Etoposide: HL-60,  $IC_{50} = 0.3\mu\text{g/mL}$ ; HSC-2,  $IC_{50} = 24.4\mu\text{g/mL}$ ). **Source:** WAN XIANG YU *Polianthes tuberosa* (underground part: yield = 0.0085%dw). **Ref:** 4651.



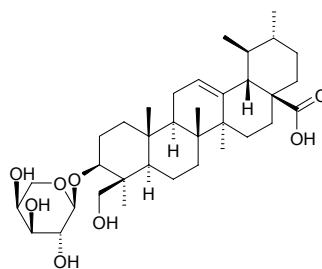
**1572 3-O-α-L-Arabinopyranosyl hederagenin 28-O-α-L-rhamnopyranosyl ester**

$C_{41}H_{66}O_{12}$  (750.98). Colorless needles (MeOH), mp 272~274°C,  $[\alpha]_D^{25} = +46.7^\circ$  ( $c = 0.1$ , MeOH). **Pharm:** Antifungal (*Penicillium avellaneum*, MIA = 10μg/dish, control Amphotericin B, MIA = 0.04μg/dish; *Candida glabrata*, MIA = 8μg/dish, Amphotericin B, MIA = 0.8μg/dish; *Saccharomyces cerevisiae*, MIA = 2μg/dish, Amphotericin B, MIA = 3.2μg/dish; *T. beigelii*, MIA = 10μg/dish, Amphotericin B, MIA = 0.8μg/dish; *P. oryzae*, MIA = 20μg/dish, Amphotericin B, MIA = 0.08μg/dish). **Source:** GAN QING TIE XIAN LIAN *Clematis tangutica*. **Ref:** 5413.



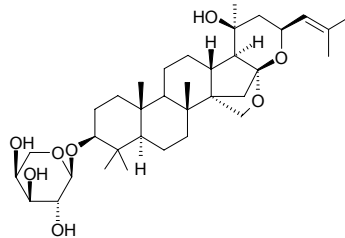
**1573 3-O-α-L-Arabinopyranosyl-23-hydroxyursolic acid**

$C_{35}H_{56}O_8$  (604.83). White amorphous powder (MeOH-CH<sub>2</sub>Cl<sub>2</sub>), 280~281°C,  $[\alpha]_D^{31} = +65.2^\circ$  ( $c = 0.046$ , MeOH). **Pharm:** Anti-inflammatory (*in vitro*, RAW264.7, inhibits LPS-induced NO and PGE<sub>2</sub> release). **Source:** *Cussonia bancoensis*. **Ref:** 5016.



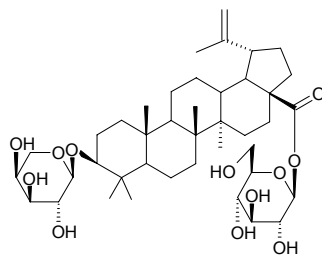
**1574 3-β-O-α-L-Arabinopyranosyl jujubogenin**

$C_{35}H_{56}O_8$  (604.83). **Source:** JIA MA CHI XIAN *Bacopa monniera* (whole herb: yield = 0.0026%fw). **Ref:** 4664.



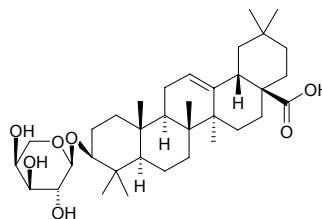
**1575 3β-D-O-(α-L-Arabinopyranosyl)-lup-20(29)-ene-28-O-β-D-glucopyranosyl ester**

$C_{41}H_{66}O_{12}$  (750.98). White powder,  $[\alpha]_D^{25} = +93^\circ$ , ( $c = 0.1$ , MeOH). **Pharm:** Cytotoxic (antiproliferative *in vitro*: J774.A1 cell line,  $IC_{50} = 0.19\mu\text{mol/L}$ , HEK-293,  $IC_{50} = 0.26\mu\text{mol/L}$ , WEHI-164,  $IC_{50} = 0.55\mu\text{mol/L}$ ; control 6-Mercaptopurine, J774.A1,  $IC_{50} = 0.003\mu\text{mol/L}$ , HEK-293,  $IC_{50} = 0.007\mu\text{mol/L}$ , WEHI-164,  $IC_{50} = 0.015\mu\text{mol/L}$ ). **Source:** YUAN YE E ZHANG CHAI *Schefflera rotundifolia* (aerial parts). **Ref:** 5036.



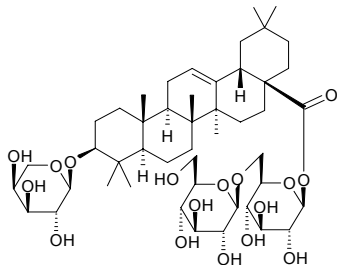
**1576 3-O-α-L-Arabinopyranosyloleanolic acid**

$C_{35}H_{56}O_7$  (588.83). **Pharm:** Cytotoxic (A2780,  $IC_{50} = (8.6\pm 0.3)\mu\text{g/mL}$ ; control Actinomycin D,  $IC_{50} = 2\sim 5\text{ng/mL}$ ). **Source:** HUANG HUA BAI JIANG *Patrinia scabiosaefolia*, CI WU JIA *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*]. **Ref:** 5397.



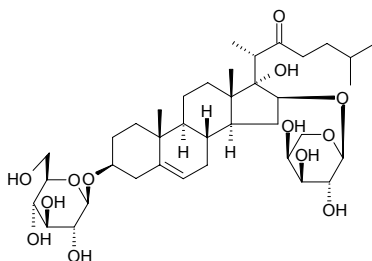
**1577 3-O- $\alpha$ -L-Arabinopyranosyl oleanolic acid 28-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside**

Oleanolic acid-3-O- $\alpha$ -L-arabinopyranosyl-28-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside C<sub>47</sub>H<sub>76</sub>O<sub>17</sub> (913.12). White powder, mp 227~230°C, [ $\alpha$ ]<sub>D</sub><sup>19</sup> = +6.2° (*c* = 0.25, methanol). **Source:** CHUAN XU DUAN *Dipsacus asperoides*, REN DONG TENG *Lonicera japonica*. **Ref:** 201, 2791.



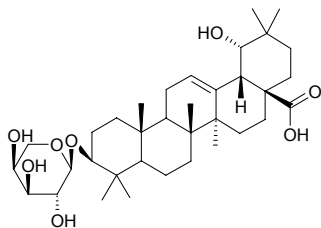
**1578 16β-[( $\alpha$ -L-Arabinopyranosyl)oxy]-3β-[( $\beta$ -D-glucopyranosyl)oxy]-17 $\alpha$ -hydroxycholest-5-en-22-one**

C<sub>38</sub>H<sub>62</sub>O<sub>13</sub> (726.91). Amorphous solid, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -40.0° (*c* = 0.10, MeOH). **Pharm:** Cytotoxic (HL-60 cells, IC<sub>50</sub> = 0.053 μmol/L, control Etoposide, IC<sub>50</sub> = 0.025 μmol/L). **Source:** XIA FENG XIN ZI *Galtonia candicans* (bulb). **Ref:** 4116.



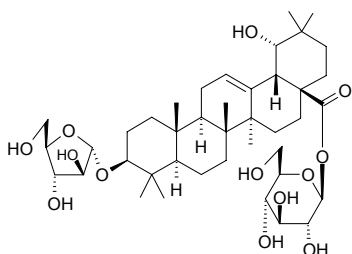
**1579 3β-[( $\alpha$ -L-Arabinopyranosyl)oxy]-19 $\alpha$ -hydroxyolean-12-en-28-oic acid**

C<sub>35</sub>H<sub>56</sub>O<sub>8</sub> (604.83). White amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>28.4</sup> = +24.7° (*c* = 0.64, MeOH). **Source:** DI YU *Sanguisorba officinalis*. **Ref:** 5304.



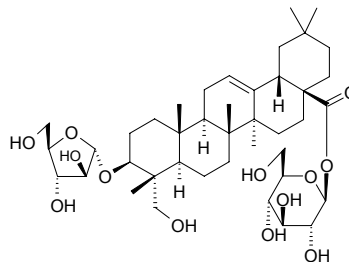
**1580 3β-[( $\alpha$ -L-Arabinopyranosyl)oxy]-19 $\alpha$ -hydroxyolean-12-en-28-oic acid 28-β-D-glucopyranosyl ester**

C<sub>41</sub>H<sub>66</sub>O<sub>13</sub> (766.98). Amorphous solid, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +14.0° (*c* = 0.10, MeOH). **Pharm:** Cytotoxic inactive (HSC-2, IC<sub>50</sub> > 200 μg/mL; HGF, IC<sub>50</sub> > 200 μg/mL). **Source:** DI YU *Sanguisorba officinalis*. **Ref:** 5160.



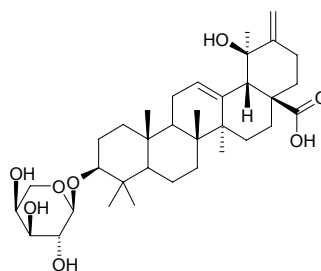
**1581 3β-[( $\alpha$ -L-Arabinopyranosyl)oxy]-23-hydroxyolean-12-en-28-oic acid 28-β-D-glucopyranosyl ester**

C<sub>41</sub>H<sub>66</sub>O<sub>13</sub> (766.98). **Pharm:** Cytotoxic (HSC-2, IC<sub>50</sub> = 18 μg/mL; HGF, IC<sub>50</sub> > 200 μg/mL). **Source:** DI YU *Sanguisorba officinalis*. **Ref:** 5160.



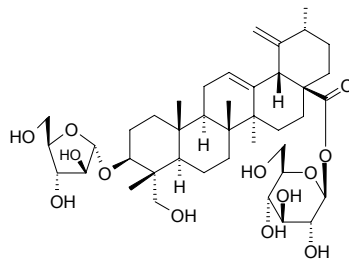
**1582 3β-[( $\alpha$ -L-Arabinopyranosyl)oxy]-19β-hydroxyurs-12,20(30)-dien-28-oic acid**

C<sub>35</sub>H<sub>54</sub>O<sub>8</sub> (602.82). White amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>28.2</sup> = +30.8° (*c* = 0.52, MeOH). **Source:** DI YU *Sanguisorba officinalis*. **Ref:** 5304.



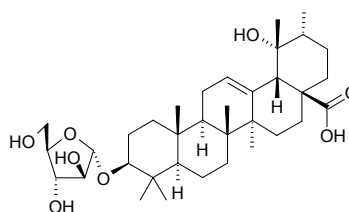
**1583 3β-[( $\alpha$ -L-Arabinopyranosyl)oxy]-23-hydroxyurs-12,19(29)-dien-28-oic acid 28-β-D-glucopyranosyl ester**

C<sub>41</sub>H<sub>64</sub>O<sub>13</sub> (764.96). Amorphous solid, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +24.0° (*c* = 0.10, MeOH). **Pharm:** Cytotoxic (HSC-2, IC<sub>50</sub> = 15 μg/mL; HGF, IC<sub>50</sub> > 200 μg/mL). **Source:** DI YU *Sanguisorba officinalis*. **Ref:** 5160.



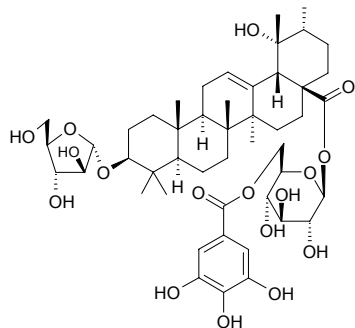
**1584 3β-[( $\alpha$ -L-Arabinopyranosyl)oxy]-19 $\alpha$ -hydroxyurs-12-en-28-oic acid**

C<sub>35</sub>H<sub>56</sub>O<sub>8</sub> (604.83). **Pharm:** Cytotoxic inactive (HSC-2, IC<sub>50</sub> > 200 μg/mL; HGF, IC<sub>50</sub> > 200 μg/mL). **Source:** DI YU *Sanguisorba officinalis*. **Ref:** 5160.



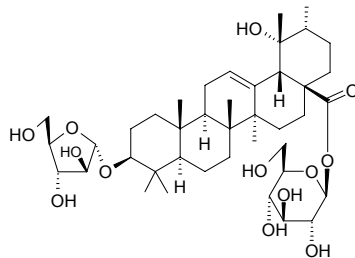
**1585 3 $\beta$ -[( $\alpha$ -L-Arabinopyranosyl)oxy]-19 $\alpha$ -hydroxyurs-12-en-28-oic acid 28-(6-O-galloyl- $\beta$ -D-glucopyranosyl)ester**

C<sub>48</sub>H<sub>70</sub>O<sub>17</sub> (919.08). Pale-yellow amorphous solid,  $[\alpha]_D^{25} = +10.0^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Cytotoxic (HSC-2, IC<sub>50</sub> = 79 $\mu$ g/mL; HGF, IC<sub>50</sub> > 200 $\mu$ g/mL). **Source:** DI YU *Sanguisorba officinalis*. **Ref:** 5160.



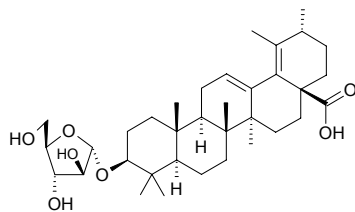
**1586 3 $\beta$ -[( $\alpha$ -L-Arabinopyranosyl)oxy]-19 $\alpha$ -hydroxyurs-12-en-28-oic acid 28- $\beta$ -D-glucopyranosyl ester**

C<sub>41</sub>H<sub>66</sub>O<sub>13</sub> (766.98). **Pharm:** Cytotoxic (HSC-2, IC<sub>50</sub> = 153 $\mu$ g/mL; HGF, IC<sub>50</sub> > 200 $\mu$ g/mL). **Source:** DI YU *Sanguisorba officinalis*. **Ref:** 5160.



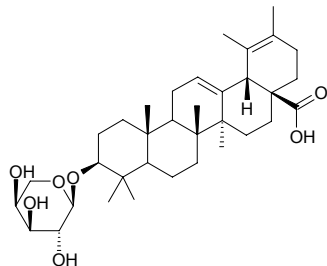
**1587 3 $\beta$ -[( $\alpha$ -L-Arabinopyranosyl)oxy]urs-12,18-dien-28-oic acid**

C<sub>35</sub>H<sub>54</sub>O<sub>7</sub> (586.82). Amorphous solid,  $[\alpha]_D^{25} = +112.0^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Cytotoxic inactive (HSC-2, IC<sub>50</sub> > 200 $\mu$ g/mL; HGF, IC<sub>50</sub> > 200 $\mu$ g/mL). **Source:** DI YU *Sanguisorba officinalis*. **Ref:** 5160.



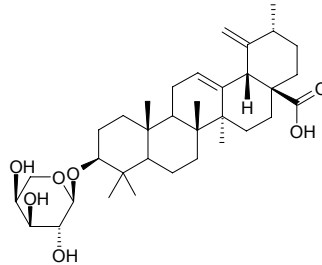
**1588 3 $\beta$ -[( $\alpha$ -L-Arabinopyranosyl)oxy]-urs-12,19-dien-28-oic acid**

C<sub>35</sub>H<sub>54</sub>O<sub>7</sub> (586.82). White amorphous powder,  $[\alpha]_D^{30.4} = -0.32^\circ$  ( $c = 0.30$ , MeOH). **Source:** DI YU *Sanguisorba officinalis*. **Ref:** 5304.



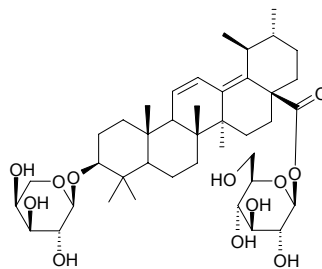
**1589 3 $\beta$ -[( $\alpha$ -L-Arabinopyranosyl)oxy]-urs-12,19(29)-dien-28-oic acid**

C<sub>35</sub>H<sub>54</sub>O<sub>7</sub> (586.82). White amorphous powder,  $[\alpha]_D^{28.2} = +18.4^\circ$  ( $c = 0.38$ , MeOH). **Source:** DI YU *Sanguisorba officinalis*. **Ref:** 5304.



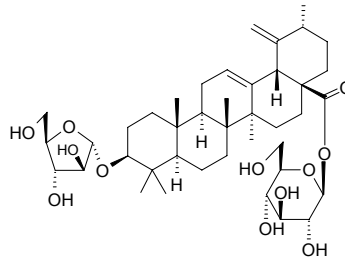
**1590 3 $\beta$ -[( $\alpha$ -L-Arabinopyranosyl)oxy]-urs-11,13(18)-dien-28-oic acid  $\beta$ -D-glucopyranosyl ester**

C<sub>41</sub>H<sub>64</sub>O<sub>12</sub> (748.96). White amorphous powder,  $[\alpha]_D^{29.7} = -25.4^\circ$  ( $c = 0.26$ , MeOH). **Source:** DI YU *Sanguisorba officinalis*. **Ref:** 5304.



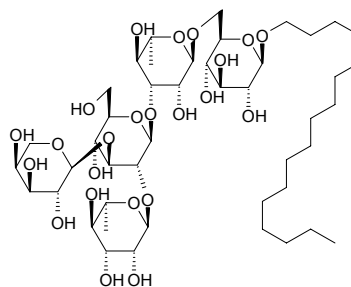
**1591 3 $\beta$ -[( $\alpha$ -L-Arabinopyranosyl)oxy]urs-12,19(29)-dien-28-oic acid 28- $\beta$ -D-glucopyranosyl ester**

C<sub>41</sub>H<sub>64</sub>O<sub>12</sub> (748.96). Amorphous solid,  $[\alpha]_D^{25} = +12.0^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Cytotoxic (HSC-2, IC<sub>50</sub> = 50 $\mu$ g/mL; HGF, IC<sub>50</sub> > 200 $\mu$ g/mL). **Source:** DI YU *Sanguisorba officinalis*. **Ref:** 5160.



**1592 1-O-[( $\alpha$ -L-Arabinopyranosyl-(1 $\rightarrow$ 3)]- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl] hexadecanol**

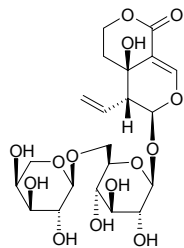
C<sub>45</sub>H<sub>82</sub>O<sub>23</sub> (991.14).  $[\alpha]_D = -26.7^\circ$  ( $c = 0.225$ , CH<sub>3</sub>OH). **Source:** YAN SE LONG YAN *Dimocarpus fumatus*. **Ref:** 1853.



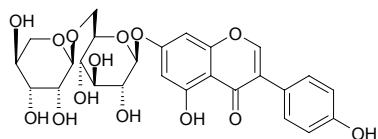
**1593 6'-O- $\alpha$ -L-Arabinopyranosylswertiamarin**

$C_{21}H_{30}O_{14}$  (506.46). Amorphous powder,  $[\alpha]_D^{27} = -92.7^\circ$  ( $c = 0.2$ , MeOH).

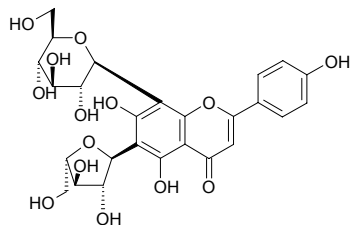
Source: RI BEN ZHANG YA CAI *Swertia japonica*. Ref: 2573.

**1594 6''- $\beta$ -D-Arabinose-genistin**

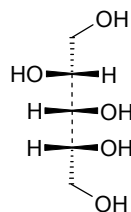
$C_{26}H_{28}O_{14}$  (564.50). Amaranth powder, easily soluble in methanol and alcohol, soluble in water. Source: HEI DA DOU *Glycine max*. Ref: 2457.

**1595 6-C-Arabinosyl-8-C-glucosyl apigenin**

$C_{26}H_{28}O_{14}$  (564.50). Source: QI GU CAO *Sagina japonica* [Syn. *Spergula japonica*] Ref: 660.

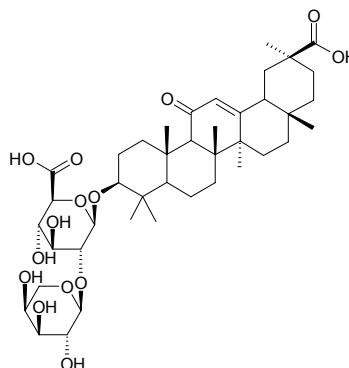
**1596 D-Arabitol**

*D*-Arabinitol [488-82-4]  $C_5H_{12}O_5$  (152.15). Amorphous powder,  $[\alpha]_D^{21} = -7^\circ$ , mp  $103^\circ\text{C}$ . Pharm: Sweetener. Source: E LI *Persea americana* [Syn. *Persea gratissima*], HU SUI ZI *Coriandrum sativum*, JIN SI DAI *Alectoria vivens*, PI QI QIE *Fabiana imbricata*, XUE CHA *Thamnia vermicularis*. Ref: 6, 658, 4302.

**1597 Araboglycyrrhizin**

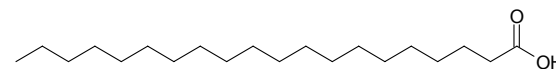
$C_{41}H_{62}O_{14}$  (778.94). Source: ZHANG GUO GAN CAO *Glycyrrhiza inflata*.

Ref: 660.

**1598 Arachidic acid**

[506-30-9]  $C_{20}H_{40}O_2$  (312.54). mp  $77^\circ\text{C}$ , bp  $203\sim 205^\circ\text{C}$ . Pharm: Lubricant.

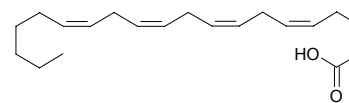
Source: BA DOU *Croton tiglium*, CU LIU GUO *Hippophae rhamnoides*, GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], GE GEN *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*], GUANG JIN QIAN CAO *Desmodium styracifolium*, HONG HUA *Carthamus tinctorius*, LUO HUA SHENG *Arachis hypogaea*, QIANG HUO *Notopterygium incisum*, XING REN *Prunus armeniaca*. Ref: 2, 260.

**1599 Arachidonic acid**

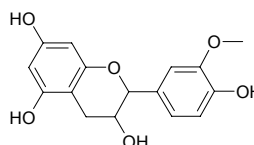
[506-32-1]  $C_{20}H_{32}O_2$  (304.48). Pharm: Extends the period of fertility (rat);

gastric secretion inhibitor; uterine stimulant; dermatitis suppressant (pig and dog, treatment of eczema). Source: BEI MEI TING LI ZI *Lepidium virginicum*,

HUANG YE DU XING CAI *Lepidium campestre*, PU HUANG *Typha angustata*, XIAO YE GUAN ZHONG *Matteuccia struthiopteris*. Ref: 2, 658, 660.

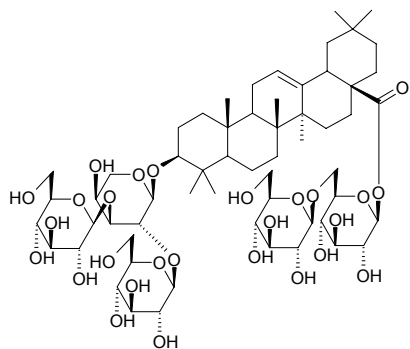
**1600 Arachidoside**

$C_{16}H_{16}O_6$  (304.30). Source: WU ZHU YU *Evodia rutaecarpa*. Ref: 2.

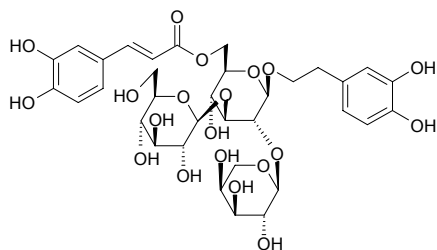


**1601 Aradecoside D**

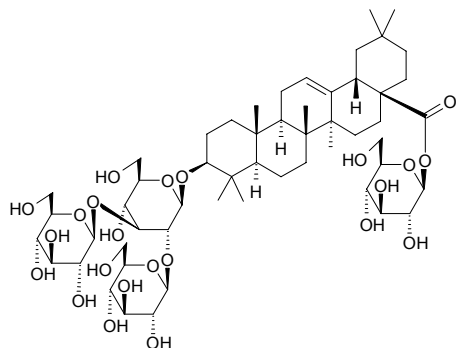
Oleanolic acid 3-*O*-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)][ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)]- $\alpha$ -*L*-arabinopyranosyl-28- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside C<sub>59</sub>H<sub>96</sub>O<sub>27</sub> (1237.41). White amorphous powder, mp 275~279°C. [Source](#): HUANG MAO CONG MU *Aralia decaisneae* (root cortex). [Ref](#): 4880.

**1602 Aragoside**

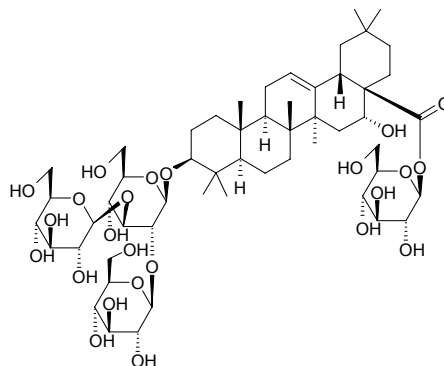
C<sub>34</sub>H<sub>44</sub>O<sub>20</sub> (772.72). [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -51°. [Source](#): *Aragoa cundinamarcensis*. [Ref](#): 3436.

**1603 Aralia-saponin V**

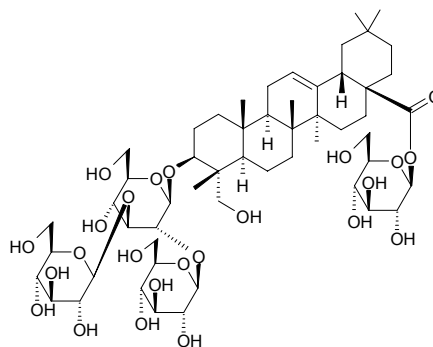
3-*O*-[ $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 2)-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucopyranosyl]oleanolic acid 28-*O*- $\beta$ -*D*-glucopyranosyl ester C<sub>54</sub>H<sub>88</sub>O<sub>23</sub> (1105.29). Colorless amorphous powder, [ $\alpha$ ]<sub>D</sub> = -11.3° (*c* = 0.2, pyridine). [Source](#): LIAO DONG CONG MU *Aralia elata*. [Ref](#): 760.

**1604 Aralia-saponin VI**

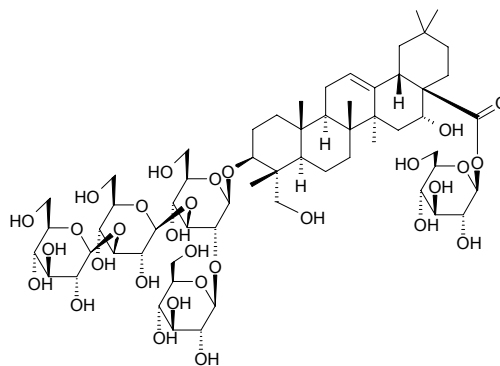
3-*O*-[ $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 2)-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucopyranosyl]echinocystic acid 28-*O*- $\beta$ -*D*-glucopyranosyl ester C<sub>54</sub>H<sub>88</sub>O<sub>24</sub> (1121.29). Colorless amorphous powder, [ $\alpha$ ]<sub>D</sub> = -18.8° (*c* = 0.2, pyridine). [Source](#): LIAO DONG CONG MU *Aralia elata*. [Ref](#): 760.

**1605 Aralia-saponin VII**

3-*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 2)-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucopyranosyl]hederagenin 28-*O*- $\beta$ -*D*-glucopyranosyl ester C<sub>54</sub>H<sub>88</sub>O<sub>24</sub> (1121.29). Colorless amorphous powder, [ $\alpha$ ]<sub>D</sub> = +23.1° (*c* = 0.3, pyridine). [Source](#): LIAO DONG CONG MU *Aralia elata*. [Ref](#): 760.

**1606 Aralia-saponin VIII**

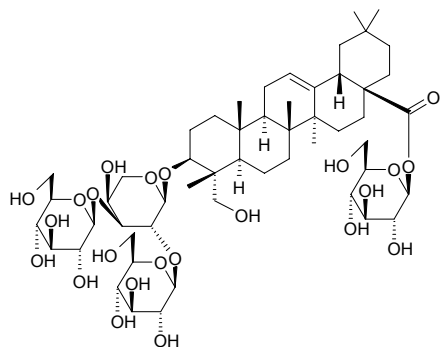
3-*O*-[ $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucopyranosyl]oleanolic acid 28-*O*- $\beta$ -*D*-glucopyranosyl ester C<sub>60</sub>H<sub>98</sub>O<sub>30</sub> (1299.43). Colorless amorphous powder, [ $\alpha$ ]<sub>D</sub> = +23.1° (*c* = 0.3, pyridine). [Source](#): LIAO DONG CONG MU *Aralia elata*. [Ref](#): 760.



**1607 Aralia-saponin IX**

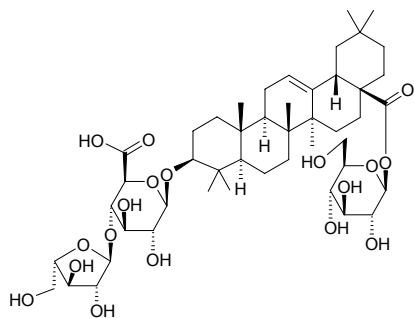
3-*O*-[ $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 2)-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)]- $\alpha$ -*L*-arabinopyranosyl]hederagenin 28-*O*- $\beta$ -*D*-glucopyranosyl ester C<sub>53</sub>H<sub>86</sub>O<sub>23</sub> (1091.26).

Colorless amorphous powder,  $[\alpha]_D = +13.3^\circ$  ( $c = 0.61$ , pyridine). Source: LIAO DONG CONG MU *Aralia elata*. Ref: 760.

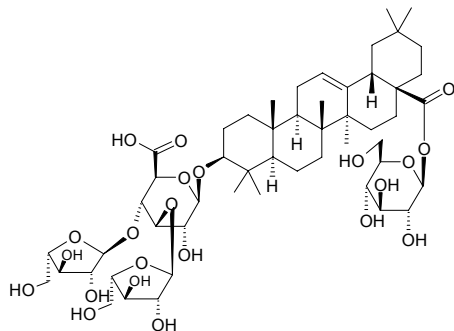
**1608 Araloside A**

Oleanoside E [7518-22-1] C<sub>47</sub>H<sub>74</sub>O<sub>18</sub> (927.10). Pharm: Used in treatment of neurosis (using the source plant LIAO DONG CONG MU, *Aralia elata*).

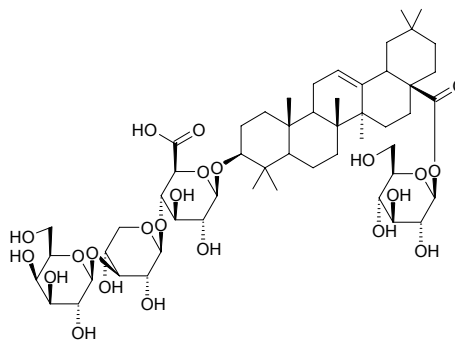
Source: LIAO DONG CONG MU *Aralia elata*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], CONG MU *Aralia chinensis*, TONG TUO MU *Tetrapanax papyriferus*, ZHU JIE SAN QI *Panax pseudo-ginseng* var. *japonicus*. Ref: 2, 6, 183, 235, 658.

**1609 Araloside B**

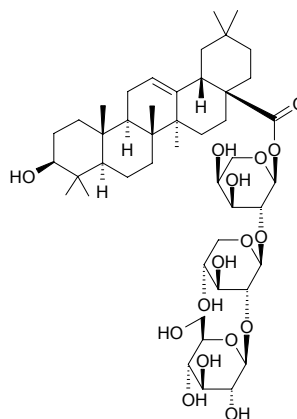
Oleanoside C [7518-23-2] C<sub>52</sub>H<sub>82</sub>O<sub>22</sub> (1059.22).  $[\alpha]_D^{20} = -16.5^\circ$  ( $c = 3.4$ , methanol). Pharm: Treatment of neurasthenic syndrome. Source: LIAO DONG CONG MU *Aralia elata*. Ref: 6, 235, 658, 661.

**1610 Araloside C**

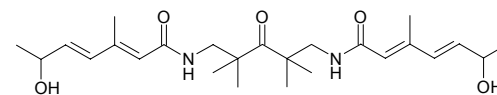
Oleanoside A C<sub>53</sub>H<sub>84</sub>O<sub>23</sub> (1089.25). Source: LIAO DONG CONG MU *Aralia elata*. Ref: 660.

**1611 Araloside D**

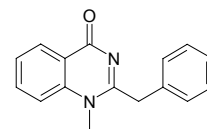
C<sub>46</sub>H<sub>74</sub>O<sub>16</sub> (883.09). White thin acicular powder, mp 157–158°C. Source: CONG MU *Aralia chinensis*. Ref: 183.

**1612 Arboreumine**

C<sub>25</sub>H<sub>40</sub>N<sub>2</sub>O<sub>5</sub> (448.61). Amorphous solid. Pharm: antifungal (*Cladosporium sphaerospermum*, determined by direct bioautography). Source: QIAO MU HU JIAO *Piper arboreum*, LIU TU HU JIAO *Piper tuberculatum*. Ref: 2016.

**1613 Arborine**

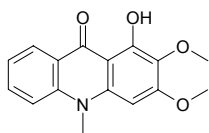
[6873-15-0] C<sub>16</sub>H<sub>14</sub>N<sub>2</sub>O (250.30). Pharm: Antihypophyseal (mus uterus assay); antihypertensive (reduces blood pressure due to CNS, inhibits peripheral action of acetylcholine). Source: CHOU CAO *Ruta graveolens*. Ref: 658.



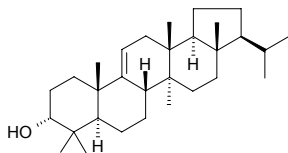


**1614 Arborinine**

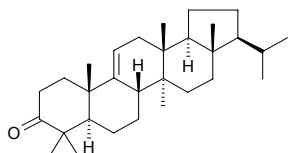
[5489-57-6] C<sub>16</sub>H<sub>15</sub>NO<sub>4</sub> (285.30). mp 175–176°C. **Pharm:** Antihistamine; anti-inflammatory; antispasmodic. **Source:** CHOU CAO *Ruta graveolens*. **Ref:** 6, 658.

**1615 Arborinol**

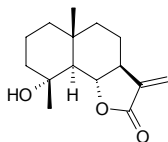
C<sub>30</sub>H<sub>50</sub>O (426.73). mp 274.0–274.5°C. **Source:** MAO CAO YE *Imperata cylindrica* var. *major*. **Ref:** 6.

**1616 Arborinone**

C<sub>30</sub>H<sub>48</sub>O (424.72). mp 214.0–214.5°C. **Source:** MAO CAO YE *Imperata cylindrica* var. *major*, JIN CAO *Hedyotis acutangula*. **Ref:** 6, 660.

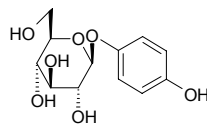
**1617 Arbusculin A**

[27652-22-8] C<sub>15</sub>H<sub>22</sub>O<sub>3</sub> (250.34). **Pharm:** Cytotoxic (*in vitro*, HepG<sub>2</sub>, CD<sub>50</sub> = 10 μg/mL; HeLa, CD<sub>50</sub> = 7.5 μg/mL; OVCAR-3, CD<sub>50</sub> = 7.5 μg/mL; control Cisplatin, HepG<sub>2</sub>, CD<sub>50</sub> = 2.8 μg/mL; HeLa, CD<sub>50</sub> = 5.2 μg/mL; OVCAR-3, CD<sub>50</sub> = 3 μg/mL; without significant antibacterial effect)<sup>[4720]</sup>; plant growth regulator. **Source:** BEI MEI AI HAO *Artemisia arbuscula*, MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*] (root: yield = 0.0015% dw)<sup>[4720]</sup>, SAN CHI HAO *Artemisia tridentata*. **Ref:** 658, 4720.

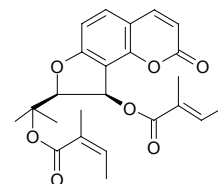
**1618 Arbutin**

[497-76-7] C<sub>12</sub>H<sub>16</sub>O<sub>7</sub> (272.26). Colorless acicular crystals, mp 200°C, [α]<sub>D</sub><sup>25</sup> = –64° (H<sub>2</sub>O), soluble in water, ethanol.<sup>[5507]</sup> **Pharm:** Antitussive; diuretic; antidiabetic, inhibits degradation of insulin (*in vitro*); tyrosinase inhibitor (mushroom tyrosinase, spectrophotometry method of Mason and Peterson, IC<sub>50</sub> = 24 mmol/L)<sup>[4653]</sup>; low toxin. **Source:** FEI CAI *Sedum aizoon*, HOU YE YAN BAI CAI *Bergenia crassifolia*, HU ER CAO *Saxifraga stolonifera*, JI SHI TENG *Paederia scandens*, LI YE *Pyrus bretschneideri*<sup>[5507]</sup>, LU XIAN CAO *Pyrola calliantha* [Syn. *Pyrola rotundifolia* ssp. *chinensis*] (stem: mean content in Sep. to Nov. = 2.21%; leaf: mean content in Sep. to Nov. = 7.00%)<sup>[5508]</sup>, QING MU XIANG *Aristolochia debilis* [Syn. *Aristolochia longa*], RI BEN LU TI CAO *Pyrola japonica*, SHA LI YE *Pyrus pyrifolia*, TIAN NIU ZHI *Origanum majorana*, XI YANG LI *Pyrus communis*, XIONG GUO *Arctostaphylos uva-ursi* (leaf: content scope = 4%–6%)<sup>[5507]</sup>, YAO YONG HEI MIAN SHEN YE *Breynia officinalis* (leaf), YE LI ZHI YE *Pyrus*

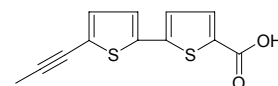
*calleryana*, YUAN YE LU TI CAO *Pyrola rotundifolia*, YUE JU YE *Vaccinium vitis-idaea* (leaf: content scope = 4%–6%)<sup>[5507]</sup>, content = 4.44%<sup>[5508]</sup>, ZHEN ZHU MEI *Sorbaria sorbifolia*. **Ref:** 4, 6, 658, 660, 2583, 5507, 5508.

**1619 Archangelicin**

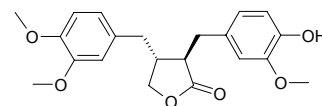
[2607-56-9] C<sub>24</sub>H<sub>26</sub>O<sub>7</sub> (426.47). mp 103–105°C. **Pharm:** Antispasmodic. **Source:** BING SHE CHUANG *Cnidium japonicum*, CHANG BIAN HUA DANG GUI *Angelica longeradiata*, KAI SHI DANG GUI *Angelica keiskei*, SHE CHUANG ZI *Cnidium monnieri*, YUAN DANG GUI *Angelica archangelica*. **Ref:** 6, 658.

**1620 Arctic acid**

[32155-99-0] C<sub>12</sub>H<sub>8</sub>O<sub>2</sub>S<sub>2</sub> (248.32). **Source:** NIU BANG GEN *Arctium lappa*. **Ref:** 6.

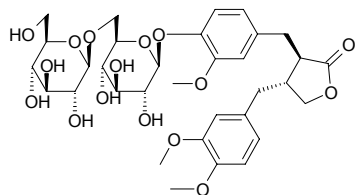
**1621 L-Arctigenin**

[7770-78-7] C<sub>21</sub>H<sub>24</sub>O<sub>6</sub> (372.42). mp [*cis*(–)] 102°C. **Pharm:** Antineoplastic (lymphoma); cyclo-adenyl mononucleotide phosphodiesterase inhibitor; aldose reductase inhibitor inactive (IC<sub>50</sub> > 100 μmol/L, 100 μmol/L InRt = 16%, control Epalrestat, IC<sub>50</sub> = 0.072 μmol/L)<sup>[4530]</sup>; cytotoxic (A549, ED<sub>50</sub> = 5.6 [μmol/L], ED<sub>50</sub> = 15.1 [μg/mL], control Adriamycin, ED<sub>50</sub> = 0.01 [μmol/L], ED<sub>50</sub> = 0.02 [μg/mL]; MCF7, ED<sub>50</sub> = 10.4 [μmol/L], ED<sub>50</sub> = 27.9 [μg/mL], Adriamycin, ED<sub>50</sub> = 0.1 [μmol/L], ED<sub>50</sub> = 0.1 [μg/mL]; HT29, ED<sub>50</sub> = 9.6 [μmol/L], ED<sub>50</sub> = 26.0 [μg/mL], Adriamycin, ED<sub>50</sub> = 0.1 [μmol/L], ED<sub>50</sub> = 0.1 [μg/mL])<sup>[5088]</sup>. **Source:** E SHEN *Anthriscus sylvestris*, JIN ZHONG HUA *Forsythia viridissima*, LIAO GE WANG GEN *Wikstroemia indica*, NIU BANG ZI *Arctium lappa* (dried ripe fruit: content scope of 11 origins = 0.049%–0.354%, mean content = 0.170%)<sup>[5508]</sup>, SHUI MU XUE LIAN HUA *Saussurea medusa* (dried whole herb: content = 0.708%)<sup>[5528]</sup>, TAI WAN SHAN *Taiwania cryptomerioides* (heartwood), WU ZHAO LONG *Ipomoea cairica* [Syn. *Ipomoea palmata*], XUE LIAN *Saussurea involucreta*. **Ref:** 6, 658, 660, 4530, 5088, 5499, 5508, 5528.

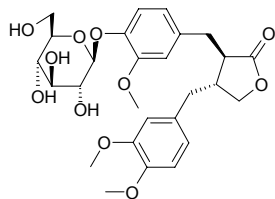


**1622 Arctigenin 4'-gentiobioside**

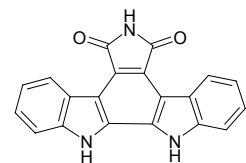
$C_{33}H_{44}O_{16}$  (696.71). Source: DA JIN NIU CAO *Polygala chinensis* [Syn. *Polygala glomerata*]. Ref: 6.

**1623 Arctiin**

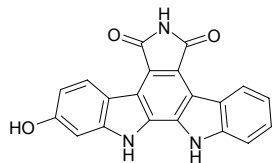
[20362-31-6]  $C_{27}H_{34}O_{11}$  (534.57). mp 111~112°C. Pharm: Aldose reductase. Inhibitor ( $IC_{50}$  = 20  $\mu$ mol/L, control Epalrestat,  $IC_{50}$  = 0.072  $\mu$ mol/L). Source: DA JIN NIU CAO *Polygala chinensis* [Syn. *Polygala glomerata*], JIN ZHONG HUA *Forsythia viridissima*, LUO SHI TENG *Trachelospermum jasminoides*, NIU BANG ZI *Arctium lappa* (dried ripe fruit: content scope = 1.49%~9.96%, mean content = 6.57%<sup>[5508]</sup>), SHUI MU XUE LIAN HUA *Saussurea medusa* (whole herb). Ref: 6, 7, 288, 660, 4530, 5501, 5508.

**1624 Arcyriaflavin A**

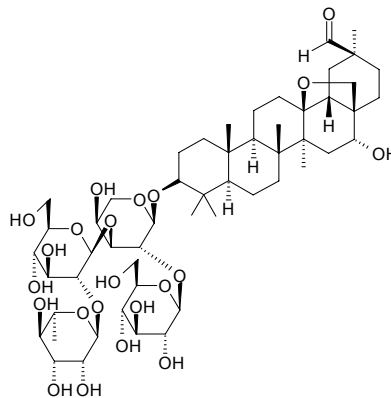
$C_{20}H_{11}N_3O_2$  (325.33). Pharm: Cytotoxic (HeLa cells,  $IC_{50}$  = 47.6  $\mu$ g/mL). Source: FEN LIU JUN *Lycogala epidendrum* (wild sporocarp). Ref: 4465.

**1625 Arcyriaflavin B**

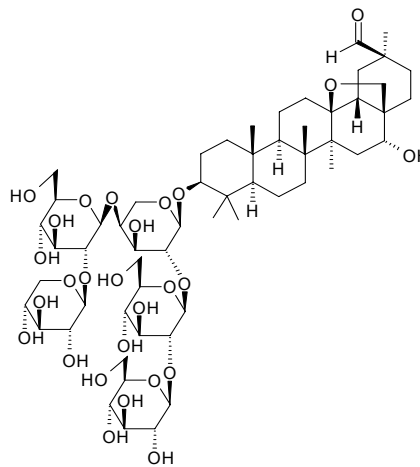
$C_{20}H_{11}N_3O_3$  (341.33). Pharm: Cytotoxic (HeLa cells,  $IC_{50}$  = 4.4  $\mu$ g/mL; KB-VIN,  $IC_{50}$  = 2.28  $\mu$ g/mL, no reversal effect of VCR resistance; a panel assay of 39 hmn cancer cell lines: NCI-H522 lung cancer cells,  $LC_{50}$  = 6.2  $\mu$ mol/L, DMS273 lung cancer cells,  $LC_{50}$  = 6.7  $\mu$ mol/L, BSY1 breast cancer cells,  $LC_{50}$  = 6.8  $\mu$ mol/L, SF539 CNS cancer cells,  $LC_{50}$  = 6.9  $\mu$ mol/L, SNB78 CNS cancer cells,  $LC_{50}$  = 51  $\mu$ mol/L, HT29 colon cancer cells,  $LC_{50}$  = 55  $\mu$ mol/L, NCI-H226 lung cancer cells,  $LC_{50}$  = 58  $\mu$ mol/L, MKN28 stomach cancer cells,  $LC_{50}$  = 55  $\mu$ mol/L). Source: HUI JIN SE TUAN WANG JUN *Arcyria cinerea* (wild sporocarp), FEN LIU JUN *Lycogala epidendrum* (wild sporocarp). Ref: 4465.

**1626 Ardipusilloside I**

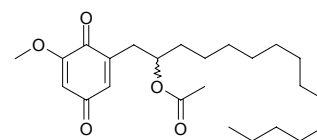
3-*O*-[ $\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)][ $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)]- $\alpha$ -L-arabinopyranosyl cyclamiretin A [153127-34-5]  $C_{53}H_{86}O_{22}$  (1075.26). White acicular crystals, mp 239~241°C,  $[\alpha]_D^{22.8}$  = -26.6° ( $c$  = 0.93, MeOH). Pharm: Antineoplastic (S<sub>180</sub>, ESC and B16); immunoenhancer. Source: CHUAN CHAN JIU JIE LONG *Ardisia pusilla*. Ref: 276.

**1627 Ardipusilloside II**

3-*O*-[ $\alpha$ -L-Xylopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)][ $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)]- $\alpha$ -L-rhamnopyranosyl cyclamiretin A [153127-35-6]  $C_{58}H_{94}O_{27}$  (1223.38). White powder, mp 279~281°C,  $[\alpha]_D^{22.5}$  = -21.91° ( $c$  = 0.79, C<sub>5</sub>H<sub>5</sub>N). Pharm: Antineoplastic (S<sub>180</sub>, ESC and B16); immunoenhancer. Source: CHUAN CHAN JIU JIE LONG *Ardisia pusilla*. Ref: 276.

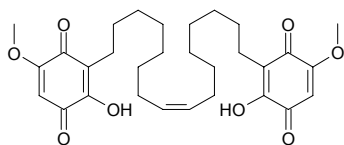
**1628 Ardisianone**

[66398-68-3]  $C_{24}H_{38}O_5$  (406.57). Pharm: Leukotriene inhibitor; antiasthmatic. Source: LUO SAN SHU *Ardisia quinquegona*, XIAN CHI ZI JIN NIU *Ardisia cornudentata*. Ref: 658.

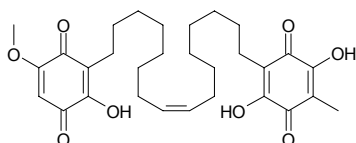


**1629 Ardisiaquinone A**

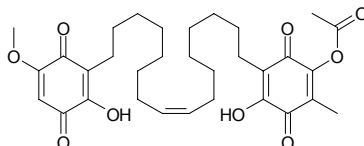
$C_{30}H_{40}O_8$  (528.65). Light yellow, mp 154°C. Source: DONG YA ZI JIN NIU *Ardisia sieboldii* (root cortex; in 1968 the compound was isolated from the plant by Hideco Ogawa et al.)<sup>[5505]</sup>. Ref: 5236, 5505.

**1630 Ardisiaquinone B**

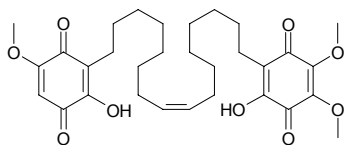
$C_{30}H_{40}O_8$  (528.65). Red, mp 119°C. Source: DONG YA ZI JIN NIU *Ardisia sieboldii* (root cortex; the compound was isolated from the plant by Hideco Ogawa et al. in 1968)<sup>[5505]</sup>. Ref: 5236, 5505.

**1631 Ardisiaquinone C**

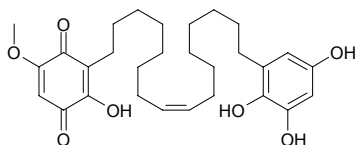
$C_{32}H_{42}O_9$  (570.69). Source: DONG YA ZI JIN NIU *Ardisia sieboldii* (root cortex). Ref: 5236.

**1632 Ardisiaquinone D**

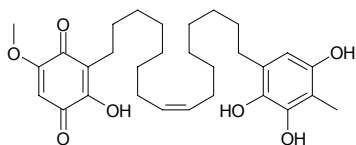
$C_{31}H_{42}O_9$  (558.67). Yellow amorphous powder. Source: DONG YA ZI JIN NIU *Ardisia sieboldii* (root cortex). Ref: 5236.

**1633 Ardisiaquinone E**

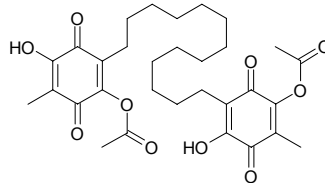
$C_{29}H_{40}O_7$  (500.64). Yellow amorphous powder. Source: DONG YA ZI JIN NIU *Ardisia sieboldii* (root cortex). Ref: 5236.

**1634 Ardisiaquinone F**

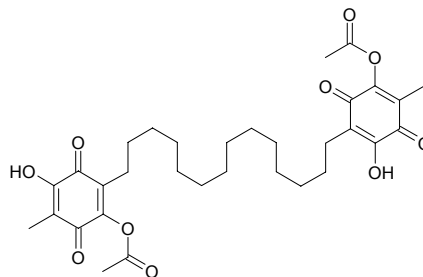
$C_{30}H_{42}O_7$  (514.67). Yellow amorphous powder. Source: DONG YA ZI JIN NIU *Ardisia sieboldii* (root cortex). Ref: 5236.

**1635 Ardisiaquinone G**

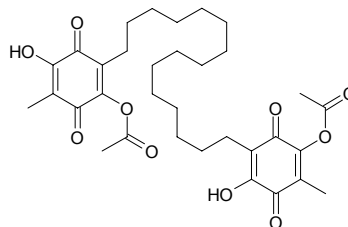
$C_{31}H_{40}O_{10}$  (572.66). Amorphous powder. Pharm: UDP-MurNac synthesis inhibitor (*in vitro*,  $IC_{50} = 35 \mu\text{mol/L}$ ); antibacterial inactive (disk diffusion assay, *Staphylococcus aureus*, *Staphylococcus sanguis*, *Escherichia coli*, *Pseudomonas aeruginosa*). Source: *Ardisia teysmanniana* (leaf). Ref: 5236.

**1636 Ardisiaquinone H**

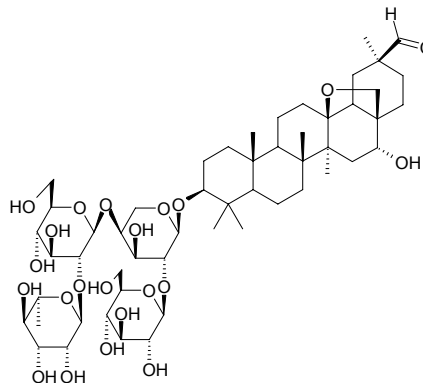
$C_{32}H_{42}O_{10}$  (586.69). Pharm: UDP-MurNac synthesis inhibitor (*in vitro*,  $IC_{50} = 26 \mu\text{mol/L}$ ); antibacterial inactive (disk diffusion assay, *Staphylococcus aureus*, *Staphylococcus sanguis*, *Escherichia coli*, *Pseudomonas aeruginosa*). Source: *Ardisia teysmanniana* (leaf). Ref: 5236.

**1637 Ardisiaquinone I**

$C_{33}H_{44}O_{10}$  (600.71). Pharm: UDP-MurNac synthesis inhibitor (*in vitro*,  $IC_{50} = 26 \mu\text{mol/L}$ ); antibacterial inactive (disk diffusion assay, *Staphylococcus aureus*, *Staphylococcus sanguis*, *Escherichia coli*, *Pseudomonas aeruginosa*). Source: *Ardisia teysmanniana* (leaf). Ref: 5236.

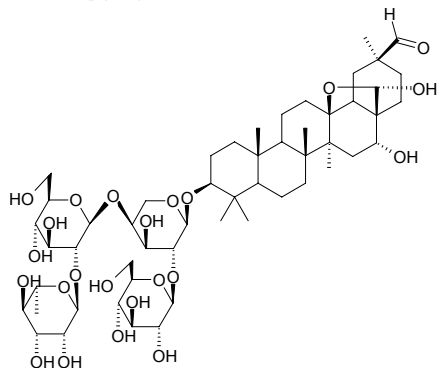
**1638 Ardisicrispin B**

$C_{53}H_{86}O_{22}$  (1075.26). Source: HU SHE HONG *Ardisia mamillata* [Syn. *Timus mamillata*] (root). Ref: 3990.

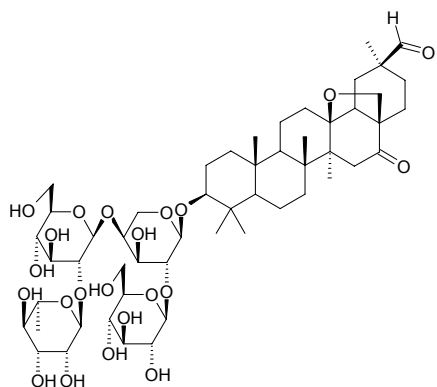


**1639 Ardisimamilloside A**

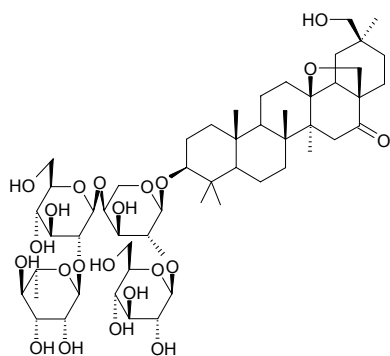
3-*O*-{ $\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)-[ $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)]- $\alpha$ -L-arabinopyranosyl}-3 $\beta$ ,16 $\alpha$ ,28 $\alpha$ -trihydroxy-13 $\beta$ ,28-epoxy-oleanan-30-al C<sub>53</sub>H<sub>86</sub>O<sub>23</sub> (1091.26). mp 235–236°C (dec), [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -20.9° (c = 0.23, MeOH). **Source:** HU SHE HONG *Ardisia mamillata* [Syn. *Tinus mamillata*] (root). **Ref:** 3990.

**1640 Ardisimamilloside B**

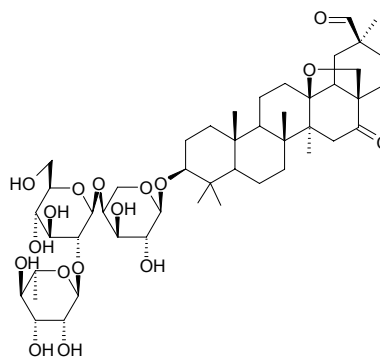
3-*O*-{ $\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)-[ $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)]- $\alpha$ -L-arabinopyranosyl}-3 $\beta$ -hydroxy-13 $\beta$ ,28-epoxy-oleanan-16-oxo-30-al C<sub>53</sub>H<sub>84</sub>O<sub>22</sub> (1073.25). mp 261–262°C (dec), [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -23.5° (c = 0.24, MeOH). **Source:** HU SHE HONG *Ardisia mamillata* [Syn. *Tinus mamillata*] (root). **Ref:** 3990.

**1641 Ardisimamilloside G**

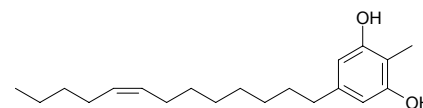
3-*O*-{ $\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)-[ $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)]- $\alpha$ -L-arabinopyranosyl}-13 $\beta$ ,28-epoxy-16-oxo-oleanan-3 $\beta$ ,30-diol C<sub>53</sub>H<sub>86</sub>O<sub>22</sub> (1075.26). [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -22.6° (c = 0.83, MeOH). **Source:** HU SHE HONG *Ardisia mamillata* [Syn. *Tinus mamillata*] (root). **Ref:** 4362.

**1642 Ardisimamilloside H**

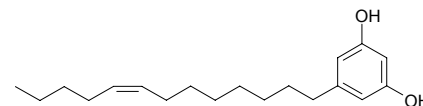
3-*O*-{ $\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -L-arabinopyranosyl}-3 $\beta$ -hydroxy-13 $\beta$ ,28-epoxy-16-oxo-oleanan-30-al C<sub>47</sub>H<sub>74</sub>O<sub>17</sub> (911.10). [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -12.7° (c = 0.23, MeOH). **Source:** HU SHE HONG *Ardisia mamillata* [Syn. *Tinus mamillata*] (root). **Ref:** 4362.

**1643 Ardisinol I**

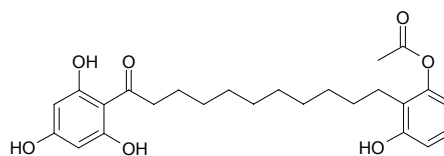
Ardisin [72629-62-0] C<sub>20</sub>H<sub>32</sub>O<sub>2</sub> (304.48). Lamellar crystals (petroleum ether), mp 46–47°C. **Pharm:** Antibacterial (*Mycobacterium tuberculosis*, 12.5 $\mu$ g/mL). **Source:** ZI JIN NIU *Ardisia japonica*. **Ref:** 658, 661.

**1644 Ardisinol II**

RouPELLIOL [62897-10-3] C<sub>19</sub>H<sub>30</sub>O<sub>2</sub> (290.45). Yellowish solid powder, mp 28–29°C. **Pharm:** Antibacterial (*Mycobacterium tuberculosis*, 25 $\mu$ g/mL). **Source:** ZI JIN NIU *Ardisia japonica*. **Ref:** 658, 661.

**1645 Ardisinone A**

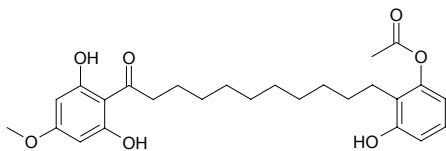
11-(2-Acetoxy-6-hydroxyphenyl)-1-(2,4,6-trihydroxyphenyl)-undecan-1-one C<sub>25</sub>H<sub>32</sub>O<sub>7</sub> (444.53). Pale yellow needles (CHCl<sub>3</sub>), mp 103–104°C. **Pharm:** Antibacterial (*in vitro* disk diffusion assay: *Mycobacterium smegmatis*, active; *Staphylococcus aureus*, slight active; *Bacillus subtilis*, slight active). **Source:** XIAO QIAO MU ZI JIN NIU *Ardisia arborescens* (whole herb: yield = 0.0015%dw). **Ref:** 4769.



**1646 Ardisinone B**

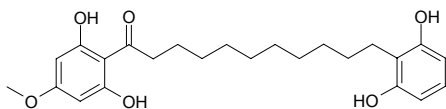
11-(2-Acetoxy-6-hydroxyphenyl)-1-(2,6-dihydroxy-4-methoxyphenyl)undecan-1-one  $C_{26}H_{34}O_7$  (458.56). Pale yellow needles ( $CHCl_3$ ), mp 68–69°C.

**Pharm:** Antibacterial inactive (*in vitro* disk diffusion assay: *Mycobacterium smegmatis*, *Staphylococcus aureus*, *Bacillus subtilis*). **Source:** XIAO QIAO MU ZI JIN NIU *Ardisia arborescens* (whole herb: yield = 0.0045%dw). **Ref:** 4769.

**1647 Ardisinone C**

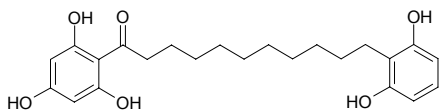
1-(2,6-Dihydroxy-4-methoxyphenyl)-11-(2,6-dihydroxyphenyl)undecan-1-one  $C_{24}H_{32}O_6$  (416.52). White needles ( $CHCl_3$ ), mp 108–109°C. **Pharm:**

Antibacterial inactive (*in vitro* disk diffusion assay: *Mycobacterium smegmatis*, *Staphylococcus aureus*, *Bacillus subtilis*). **Source:** XIAO QIAO MU ZI JIN NIU *Ardisia arborescens* (whole herb: yield = 0.0030%dw). **Ref:** 4769.

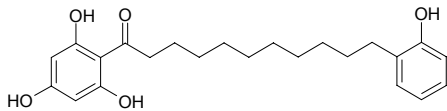
**1648 Ardisinone D**

1-(2,4,6-Trihydroxyphenyl)-11-(2,6-dihydroxyphenyl)undecan-1-one  $C_{23}H_{30}O_6$  (402.49). Pale yellow needles ( $CHCl_3$ ), mp 67–68°C. **Pharm:**

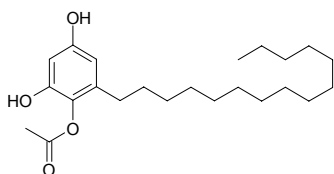
Antibacterial (*in vitro* disk diffusion assay: *Mycobacterium smegmatis*, active; *Staphylococcus aureus*, slight active; *Bacillus subtilis*, slight active). **Source:** XIAO QIAO MU ZI JIN NIU *Ardisia arborescens* (whole herb: yield = 0.0013%dw). **Ref:** 4769.

**1649 Ardisinone E**

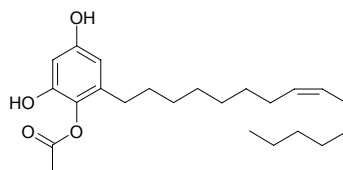
1-(2,4,6-Trihydroxyphenyl)-11-(2-hydroxyphenyl)undecan-1-one  $C_{23}H_{30}O_5$  (386.49). White amorphous solid, mp 52–53°C. **Source:** XIAO QIAO MU ZI JIN NIU *Ardisia arborescens* (whole herb: yield = 0.00023%dw). **Ref:** 4769.

**1650 Ardisiphenol A**

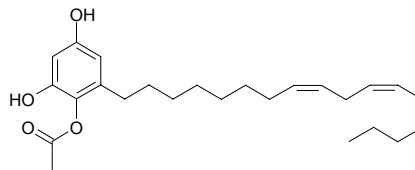
6-Pentadecyl-1,2,4-trihydroxybenzene-1-O-acetate  $C_{23}H_{38}O_4$  (378.56). Colorless oil which darkens on exposure to air. **Pharm:** DPPH scavenger (60 μmol/L, InRt = 47%, control Trolox,  $IC_{50} = (25.4 \pm 0.8) \mu\text{mol/L}$ )<sup>[4244]</sup>; cytotoxic (murine breast cancer cell line FM3A,  $IC_{50} = 1.8 \mu\text{mol/L}$ )<sup>[4244]</sup>. **Source:** YOU SE ZI JIN NIU *Ardisia colorata* (fruit). **Ref:** 4244, 4152.

**1651 Ardisiphenol B**

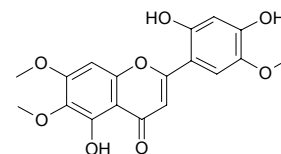
6-(8'Z-Pentadecenyl)-1,2,4-trihydroxybenzene-1-O-acetate  $C_{23}H_{36}O_4$  (376.54). Colorless oil which darkens on exposure to air. **Pharm:** DPPH scavenger (60 μmol/L, InRt = 51%, control Trolox,  $IC_{50} = (25.4 \pm 0.8) \mu\text{mol/L}$ )<sup>[4244]</sup>; cytotoxic (murine breast cancer cell line FM3A,  $IC_{50} = 1.2 \mu\text{mol/L}$ )<sup>[4244]</sup>. **Source:** YOU SE ZI JIN NIU *Ardisia colorata* (fruit). **Ref:** 4244, 4152.

**1652 Ardisiphenol C**

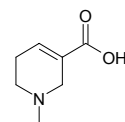
6-(8'Z,11'Z-Heptadecadienyl)-1,2,4-tetrahydroxybenzene-1-O-acetate  $C_{25}H_{38}O_4$  (402.58). Colorless oil which darkens on exposure to air. **Pharm:** DPPH scavenger (60 μmol/L, InRt = 51%, control Trolox,  $IC_{50} = (25.4 \pm 0.8) \mu\text{mol/L}$ )<sup>[4244]</sup>; cytotoxic (murine breast cancer cell line FM3A,  $IC_{50} = 0.5 \mu\text{mol/L}$ )<sup>[4244]</sup>. **Source:** YOU SE ZI JIN NIU *Ardisia colorata* (fruit). **Ref:** 4244, 4152.

**1653 Areapillin**

5,2',4'-Trihydroxy-6,7,5'-trimethoxy flavone  $C_{18}H_{16}O_8$  (360.32). **Source:** HUANG HUA HAO *Artemisia annua*, YIN CHEN HAO *Artemisia capillaris*. **Ref:** 2, 660.

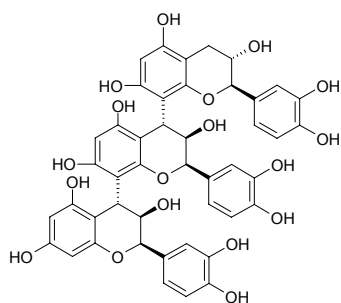
**1654 Arecaidine**

[499-04-7]  $C_7H_{11}NO_2$  (141.17). mp 223–224°C (dec). **Pharm:** Astringent; CNS depressant (anesthetic cat, increases  $\gamma$ -propanaline and  $\beta$ -alanine to inhibit central nerve); inhibits englobement of  $\gamma$ -propanaline and  $\beta$ -alanine (cat, section of spinal cord); anthelmintic (tapeworms); causes miosis; induces sweatiness. **Source:** BING LANG *Areca catechu* (dried ripe seed: content scope 0.31%–0.66%, middle value = 0.49%<sup>[5508]</sup>). **Ref:** 2, 658, 5501, 5508.

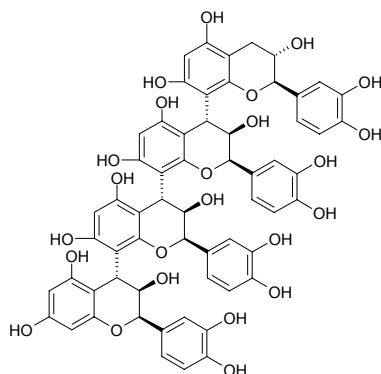


**1655 Arecatannin A<sub>1</sub>**

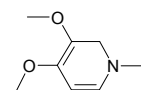
C<sub>45</sub>H<sub>38</sub>O<sub>18</sub> (866.79). Source: BING LANG *Areca catechu*, TAI DA SONG *Pinus taeda*. Ref: 660, 1521.

**1656 Arecatannin A<sub>2</sub>**

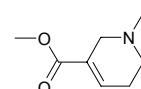
C<sub>60</sub>H<sub>50</sub>O<sub>24</sub> (1155.05). Source: BING LANG *Areca catechu*. Ref: 660, 1521.

**1657 Arecolidine**

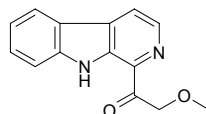
[57680-57-6] C<sub>8</sub>H<sub>13</sub>NO<sub>2</sub> (155.20). Source: BING LANG *Areca catechu*. Ref: 2.

**1658 Arecoline**

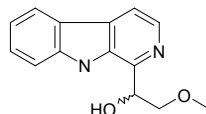
Arecoline; Methylarecaine; Methyl *N*-methyltetrahydronicotinate [63-75-2] C<sub>8</sub>H<sub>13</sub>NO<sub>2</sub> (155.20). Oleaginous liquid, bp 209°C, soluble in chloroform, complete miscibility with water, ethanol and ether.<sup>[5507]</sup> Pharm: Anthelmintic; cholinomimetic (CNS); bronchial smooth muscle stimulant; vasodilator; cholinergic (M-choline receptor agonist and N-choline receptor agonist); skeletal muscle and carotid stimulant; ganglionic stimulant; causes miosis; promotes intestinal motion; promotes platelet production in toxin dose; slows heart rate. Source: BING LANG *Areca catechu* (dried ripe seed: content scope = 0.30%~0.63%, middle value = 0.47%<sup>[5508]</sup>). Ref: 2, 4, 658, 5501, 5507, 5508.

**1659 Arenarine A**

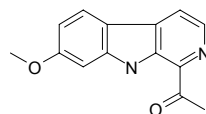
C<sub>14</sub>H<sub>12</sub>N<sub>2</sub>O<sub>2</sub> (240.26). Source: XUE LING ZHI *Arenaria kansuensis* [Syn. *Arenaria kumaonensis*]. Ref: 660.

**1660 Arenarine B**

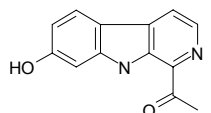
C<sub>14</sub>H<sub>14</sub>N<sub>2</sub>O<sub>2</sub> (242.28). Source: XUE LING ZHI *Arenaria kansuensis* [Syn. *Arenaria kumaonensis*]. Ref: 660.

**1661 Arenarine C**

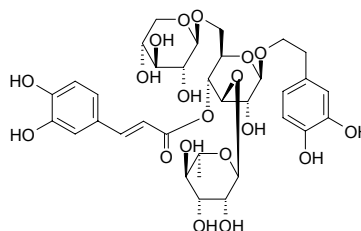
C<sub>14</sub>H<sub>12</sub>N<sub>2</sub>O<sub>2</sub> (240.26). Source: XUE LING ZHI *Arenaria kansuensis* [Syn. *Arenaria kumaonensis*]. Ref: 660.

**1662 Arenarine D**

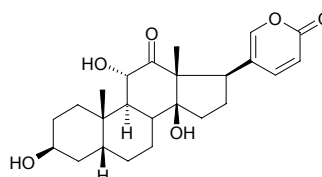
C<sub>13</sub>H<sub>10</sub>N<sub>2</sub>O<sub>2</sub> (226.24). Source: XUE LING ZHI *Arenaria kansuensis* [Syn. *Arenaria kumaonensis*]. Ref: 660.

**1663 Arenarioside**

C<sub>34</sub>H<sub>44</sub>O<sub>19</sub> (756.72). Pharm: Antioxidant (*in vitro* inhibits LDL peroxidation, Cu<sup>2+</sup>-induced and AAPH-induced); inhibits minimally oxidized LDL-induced cellular toxicity (cultured bovine aortic endothelial cells, BAEC). Source: OU XIA ZHI CAO *Marrubium vulgare* (aerial parts). Ref: 5370.

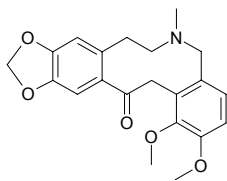
**1664 Arenobufagin**

[464-74-4] C<sub>24</sub>H<sub>32</sub>O<sub>6</sub> (416.52). Source: CHAN SU *Bufo bufo gargarizans*; *Bufo melanostictus*. Ref: 2.

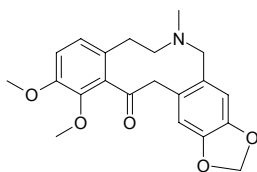


**1665 Argemexicaine A**

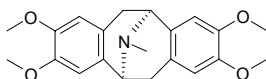
$C_{21}H_{23}NO_5$  (369.42). White powder, mp 158~160°C. **Pharm:** Anti-HIV inactive (H9 lymphocytes, control AZT,  $IC_{50}$  = 500 $\mu$ g/mL,  $EC_{50}$  = 0.0317 $\mu$ g/mL, TI = 15800). **Source:** JI YING SU *Argemone mexicana*. **Ref:** 5364.

**1666 Argemexicaine B**

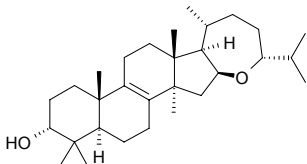
$C_{21}H_{23}NO_5$  (369.42). White powder, mp 131~133°C. **Pharm:** Anti-HIV inactive (H9 lymphocytes, control AZT,  $IC_{50}$  = 500 $\mu$ g/mL,  $EC_{50}$  = 0.0317 $\mu$ g/mL, TI = 15,800). **Source:** JI YING SU *Argemone mexicana*. **Ref:** 5364.

**1667 (-)-Argemonine**

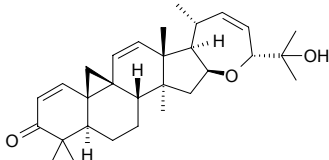
[6901-16-2]  $C_{21}H_{25}NO_4$  (355.44). **Pharm:** Analgesic; antiarrhythmic. **Source:** HOU KE GUI *Cryptocarya chinensis* (wood)<sup>[3092]</sup>, JI YING SU *Argemone mexicana*, XIAO TANG SONG CAO *Thalictrum minus*, YAN GUO CAO *Thalictrum thunbergii*, ZOU WEN TANG SONG CAO *Thalictrum rugosum*. **Ref:** 658, 3092.

**1668 Argentatin E**

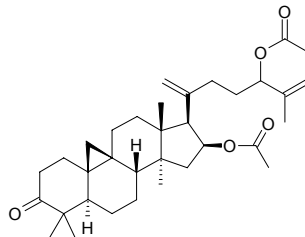
16,24-Epoxy-3 $\alpha$ -hydroxylanost-8-ene  $C_{30}H_{52}O_2$  (442.73). Needles, mp 168~170°C,  $[\alpha]_D^{25}$  = -45° ( $c$  = 2.0,  $CH_2Cl_2$ ). **Source:** ZA JIAO YIN JIAO JU *Parthenium argentatum* x *P. Tomentosa*. **Ref:** 1967.

**1669 Argentatin F**

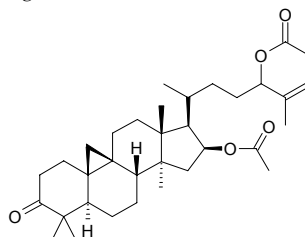
16,24-Epoxy-25-hydroxycycloart-1,11,22-trien-3-one  $C_{30}H_{42}O_3$  (450.67). Solid gum,  $[\alpha]_D^{25}$  = +3.5° ( $c$  = 2.0,  $CH_2Cl_2$ ). **Source:** ZA JIAO YIN JIAO JU *Parthenium argentatum* x *P. Tomentosa*. **Ref:** 1967.

**1670 Argentatin G**

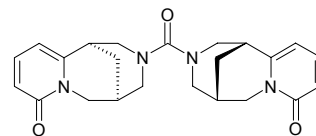
16,24-Dihydroxycycloart-20,25-dien-3-one diacetate  $C_{34}H_{50}O_5$  (538.77). A solid gum,  $[\alpha]_D^{25}$  = +25.6° ( $c$  = 2.5,  $CH_2Cl_2$ ). **Source:** ZA JIAO YIN JIAO JU *Parthenium argentatum* x *P. Tomentosa*. **Ref:** 1967.

**1671 Argentatin H**

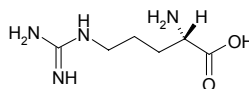
16,24-Dihydroxycycloart-25-en-3-one  $C_{34}H_{52}O_3$  (540.79). A solid gum,  $[\alpha]_D^{25}$  = +18.2° ( $c$  = 2.5,  $CH_2Cl_2$ ). **Source:** ZA JIAO YIN JIAO JU *Parthenium argentatum* x *P. Tomentosa*. **Ref:** 1967.

**1672 Argentine**

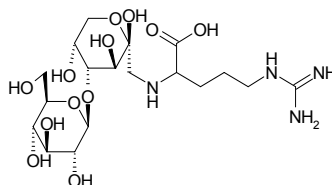
[37551-61-4]  $C_{23}H_{26}N_4O_3$  (406.49). **Source:** MU MA DOU *Thermopsis lanceolata*. **Ref:** 6.

**1673 L-Arginine**

[74-79-3]  $C_6H_{14}N_4O_2$  (174.20). **Pharm:** Reduces ammonia in blood; pituitary stimulant (stimulates hypophysis to release somatotropin); used in treatment of liver coma. **Source:** BAN XIA *Pinellia ternata* (dried tuber: content scope of 4 origins = 0.48%~1.25%, mean content = 1.01%)<sup>[5521]</sup>, HU LU BA *Trigonella foenum-graecum*, MU XU *Medicago sativa*, XIAO BAI BU *Asparagus officinalis*, YI YE JIA FAN LV *Pseudostellaria heterophylla* (tuberoid: mean content of 5 origins = 0.6421%)<sup>[5508]</sup>. **Ref:** 658, 5508, 5521.

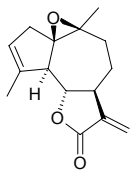
**1674 Argininyl-fructosyl-glucose**

$C_{18}H_{34}N_4O_{12}$  (498.49). White powder, mp 158~160°C. **Source:** REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. **Ref:** 348.

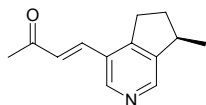


**1675 Arglabin**

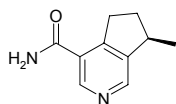
$C_{15}H_{18}O_3$  (246.31). Source: WU MAO HAO *Artemisia glabella*, YI KUA *Artemisia myriantha* (aerial parts). Ref: 1521, 4618.

**1676 Argutine A**

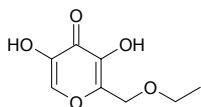
$C_{13}H_{15}NO$  (201.27). White powder, mp 167–169°C,  $[\alpha]_D^{20} = +17.10^\circ$  ( $c = 0.60$ ,  $CHCl_3$ ). Source: MA TONG HUA *Incarvillea arguta*. Ref: 2185.

**1677 Argutine B**

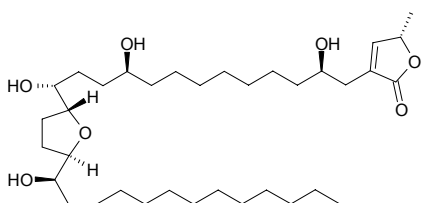
$C_{10}H_{12}N_2O$  (176.22). Colorless oil liquid,  $[\alpha]_D^{20} = +16.37^\circ$  ( $c = 0.58$ ,  $CHCl_3$ ). Source: MA TONG HUA *Incarvillea arguta*. Ref: 2185.

**1678 Argutone**

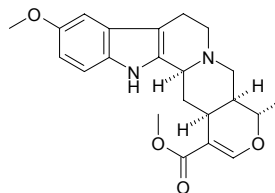
2-Ethoxymethylene-3,5-dihydroxy- $\gamma$ -pyrone  $C_8H_{10}O_5$  (186.17). Colorless acicular crystals, mp 94°C (sub), easily soluble in chloroform, methanol, soluble in benzene, ether, acetone, acetic ester and ethanol, insoluble in water. Source: MA TONG HUA *Incarvillea arguta*. Ref: 85.

**1679 Arianacin**

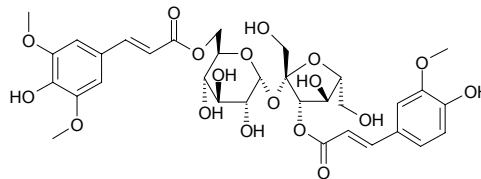
[172430-57-8]  $C_{35}H_{64}O_7$  (596.90). White amorphous powder, mp 64°C,  $[\alpha]_D^{25} = +12.5^\circ$  ( $c = 0.14$ ). Pharm: Cytotoxic (BST,  $LC_{50} = 7.1 \mu g/mL$ , PD, InRt = 26%, A549 *in vitro*,  $IC_{50} = 0.0047 \mu g/mL$ , MCF7 *in vitro*,  $IC_{50} = 0.4 \mu g/mL$ , HT29 *in vitro*,  $IC_{50} = 4.4 \mu g/mL$ ). Source: CI GUO FAN LI ZHI *Annona muricata*. Ref: 1062.

**1680 Aricine**

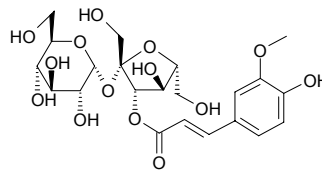
[482-91-7]  $C_{22}H_{26}N_2O_4$  (382.46). mp 188–189°C. Source: CUI TU LUO FU *MU Rauwolfia vomitoria*, JIN JI LE *Cinchona ledgeriana*, LUO FU MU JING YE *Rauwolfia verticillata*. Ref: 6, 660.

**1681 Arillanin A**

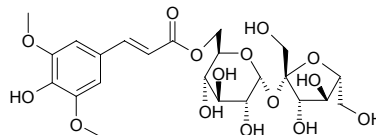
$C_{33}H_{40}O_{18}$  (742.68).  $[\alpha]_D = -88.4^\circ$ . Source: HUANG HUA YUAN ZHI *Polygala arillata*. Ref: 2184.

**1682 Arillanin B**

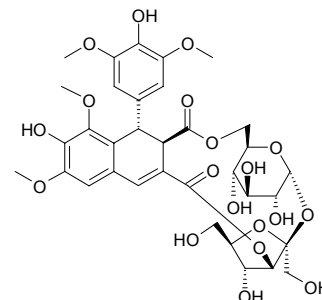
Sibiricose A<sub>5</sub>  $C_{22}H_{30}O_{14}$  (518.48). Amorphous powder;  $[\alpha]_D^{23} = -6^\circ$  ( $c = 2.27$ , MeOH);  $[\alpha]_D = +12.7^\circ$ . Source: HUANG HUA YUAN ZHI *Polygala arillata*, XI BO LI YA YUAN ZHI *Polygala sibirica*. Ref: 691, 2184.

**1683 Arillanin C**

Sibiricose A<sub>1</sub>  $C_{23}H_{32}O_{15}$  (548.50). Amorphous powder;  $[\alpha]_D^{23} = +18^\circ$  ( $c = 4.36$ , MeOH);  $[\alpha]_D = +37.2^\circ$ . Source: HUANG HUA YUAN ZHI *Polygala arillata*, XI BO LI YA YUAN ZHI *Polygala sibirica*. Ref: 691, 2184.

**1684 Arillatose A**

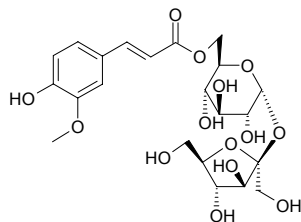
$C_{34}H_{40}O_{19}$  (752.69). Amorphous Powder,  $[\alpha]_D^{27} = +25.1^\circ$  ( $c = 0.12$ , MeOH). Source: HUANG HUA YUAN ZHI *Polygala arillata*. Ref: 1521.



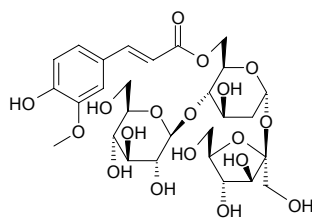


**1685 Arillatose B**

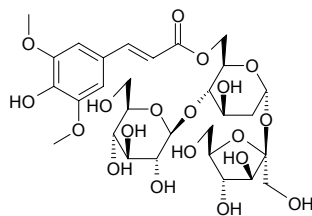
$C_{22}H_{30}O_{14}$  (518.48).  $[\alpha]_D = +15.8^\circ$ . Source: HUANG HUA YUAN ZHI *Polygala arillata*. Ref: 2184.

**1686 Arillatose C**

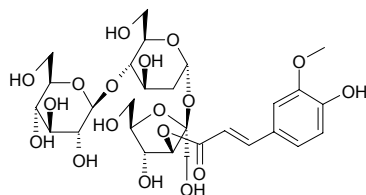
$C_{28}H_{40}O_{18}$  (664.62).  $[\alpha]_D = +15.8^\circ$ . Source: HUANG HUA YUAN ZHI *Polygala arillata*. Ref: 2184.

**1687 Arillatose D**

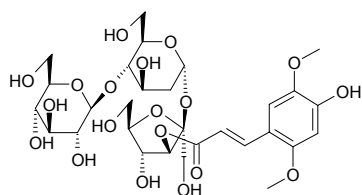
$C_{29}H_{42}O_{19}$  (694.65).  $[\alpha]_D = +2.0^\circ$ . Source: HUANG HUA YUAN ZHI *Polygala arillata*. Ref: 2184.

**1688 Arillatose E**

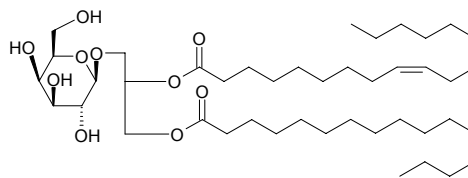
$C_{28}H_{40}O_{18}$  (664.62).  $[\alpha]_D = -20.6^\circ$ . Source: HUANG HUA YUAN ZHI *Polygala arillata*. Ref: 2184.

**1689 Arillatose F**

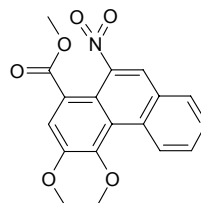
$C_{29}H_{42}O_{19}$  (694.65).  $[\alpha]_D = -4.5^\circ$ . Source: HUANG HUA YUAN ZHI *Polygala arillata*. Ref: 2184.

**1690 Arisaema glyceride 3**

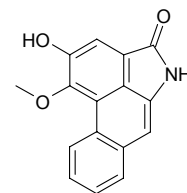
$C_{43}H_{80}O_{10}$  (757.11). Source: LIAO DONG CONG MU YE *Aralia elata*. Ref: 4471.

**1691 Ariskanin A**

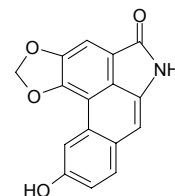
Aristolochic acid BII methyl ester [128397-31-9]  $C_{18}H_{15}NO_6$  (341.32). Yellow acicular crystals ( $CHCl_3$ ), mp 123~124°C, 283°C. Pharm: Cytotoxic ( $P_{388}$  *in vitro*,  $ED_{50} = 1.5\mu g/mL$ ; HT29,  $ED_{50} = 8.0\mu g/mL$ ; HL-60,  $ED_{50} = 9.3\mu g/mL$ ); platelet aggregation inhibitor (*in vitro*, caused by arachidonic acid, collagen and PAF, 100 $\mu g/mL$ , InRt = 100%, 76.2% and 61.2%, respectively). Source: GUAN MU TONG *Aristolochia manshuriensis*, MU TONG *Akebia quinata*, MA DOU LING *Aristolochia debilis* [Syn. *Aristolochia longa*]. Ref: 334, 1128.

**1692 Aristolactam AII**

$C_{16}H_{11}NO_3$  (265.27). Source: GUAN MU TONG *Aristolochia manshuriensis* (stem: yield = 0.00002%)<sup>[4706]</sup>, MIAN MAO MA DOU LING *Aristolochia mollissima* (dried root and stem: yield = 0.00062%dw)<sup>[3206]</sup>, SAN BAI CAO *Saururus chinensis* (aerial parts). Ref: 3026, 4706, 4968.

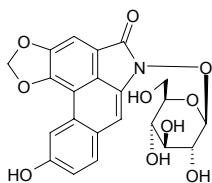
**1693 Aristolactam AIIIa**

3,4-Methylenedioxy-10-hydroxy aristolactam  $C_{16}H_9NO_4$  (279.25). Source: KUAI JING MA DOU LING *Aristolochia tuberosa*, MIAN MAO MA DOU LING *Aristolochia mollissima* (dried root and stem: yield = 0.00062%dw). Ref: 1317, 1318, 3026.

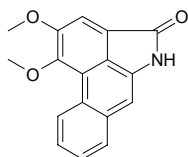


**1694 Aristolactam AIIIa N-β-D-glucoside**

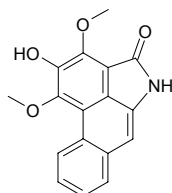
Aristolactam C N-glucoside C<sub>22</sub>H<sub>19</sub>NO<sub>10</sub> (457.40). Source: MIAN MAO MA DOU LING *Aristolochia mollissima* (dried root and stem: yield = 0.00062%dw). Ref: 3026.

**1695 Aristolactam BII**

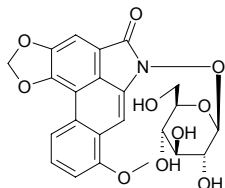
Cepharanone B C<sub>17</sub>H<sub>13</sub>NO<sub>3</sub> (279.30). Pharm: Neuroprotective (glutamate-injured primary cultures of rat cortical cells, nitric oxide production inhibitor)<sup>[4968]</sup>. Source: SAN BAI CAO *Saururus chinensis* (aerial parts), TAI WAN HU JIAO *Piper taiwanense* (stem), YU XING CAO *Houttuynia cordata*. Ref: 2428, 4938, 4968.

**1696 Aristolactam FII**

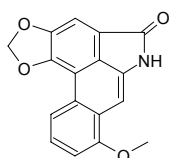
C<sub>17</sub>H<sub>13</sub>NO<sub>4</sub> (295.30). Source: TAI WAN GE NA XIANG *Goniothalamus amuyon* (fresh leaf: yield = 0.00012%fw; stem: yield = 0.00005%fw). Ref: 4686.

**1697 Aristolactam-N-β-D-glucoside**

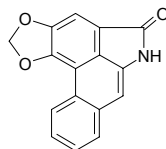
C<sub>23</sub>H<sub>21</sub>NO<sub>10</sub> (471.42). Source: MIAN MAO MA DOU LING *Aristolochia mollissima* (dried root and stem: yield = 0.015%dw). Ref: 3026.

**1698 Aristolactam I**

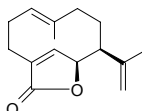
Aristolactam C<sub>17</sub>H<sub>11</sub>NO<sub>4</sub> (293.28). Source: GUAN MU TONG *Aristolochia manshuriensis* (stem: yield = 0.00064%), GUANG FANG JI *Aristolochia fangchi*, MIAN MAO MA DOU LING *Aristolochia mollissima*, RU LAN *Stephania hernandifolia*. Ref: 660, 4706.

**1699 Aristolactam II**

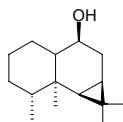
C<sub>16</sub>H<sub>9</sub>NO<sub>3</sub> (263.26). Pharm: Anti-HIV inactive (*in vitro*, acutely infected H-9 lymphocyte cells); cytotoxic inactive (*in vitro*, MCF7 and A549). Source: GUAN MU TONG *Aristolochia manshuriensis* (stem: yield = 0.00083%). Ref: 4706.

**1700 Aristolactone**

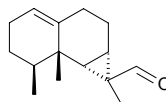
C<sub>15</sub>H<sub>20</sub>O<sub>2</sub> (232.33). Source: MIAN MAO MA DOU LING *Aristolochia mollissima* (dried root and stem: yield = 0.015%dw)<sup>[3026]</sup>. Ref: 660, 3026.

**1701 Aristolan-9β-ol**

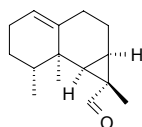
C<sub>15</sub>H<sub>26</sub>O (222.37). Source: GAN SONG *Nardostachys chinensis*. Ref: 660.

**1702 (-)-Aristol-1(10)-en-12-al**

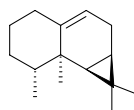
C<sub>15</sub>H<sub>22</sub>O (218.34). Colorless oil. Source: RI BEN BIAN TAI *Bazzania japonica*. Ref: 3399.

**1703 Aristol-1(10)-en-12-al**

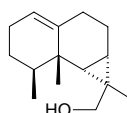
[94271-19-9] C<sub>15</sub>H<sub>22</sub>O (218.34). Crystals (C<sub>2</sub>H<sub>5</sub>OH), mp 65°C. Source: MA DOU LING *Aristolochia debilis* [Syn. *Aristolochia longa*]. Ref: 1521.

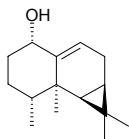
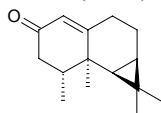
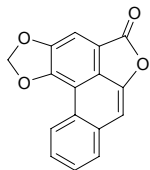
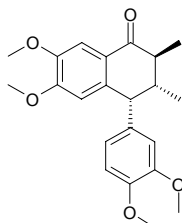
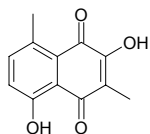
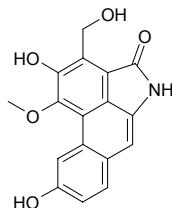
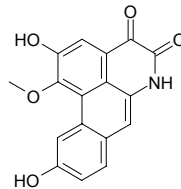
**1704 9-Aristolene**

Aristolene C<sub>15</sub>H<sub>24</sub> (204.36). Source: GAN SONG *Nardostachys chinensis*. Ref: 6.

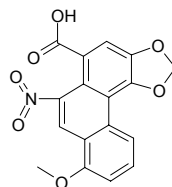
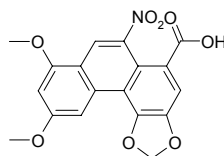
**1705 (-)-Aristol-1(10)-en-12-ol**

C<sub>15</sub>H<sub>24</sub>O (220.36). Colorless oil. Source: RI BEN BIAN TAI *Bazzania japonica*. Ref: 3399.



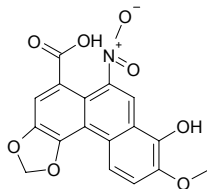
**1706 9-Aristolene-1- $\alpha$ -ol**[26128-14-3] C<sub>15</sub>H<sub>24</sub>O (220.36). Source: GAN SONG *Nardostachys chinensis*.Ref: 6.**1707 1(10)-Aristolene-2-one**C<sub>15</sub>H<sub>22</sub>O (218.34). Source: GAN SONG *Nardostachys chinensis*. Ref: 6.**1708 Aristolide B**C<sub>16</sub>H<sub>8</sub>O<sub>4</sub> (264.24). Source: GUAN MU TONG *Aristolochia manshuriensis* (stem: yield = 0.00015%). Ref: 4706.**1709 (-)-Aristoligone**(7'R,8S,8'R)-8,8'-Dimethyl-3',4',4,5-tetramethoxy-2,7'-cyclo lignan-7-one C<sub>22</sub>H<sub>26</sub>O<sub>5</sub> (370.45). Amorphous yellow solid, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -206.4° (c = 0.72, CHCl<sub>3</sub>). Source: *Aristolochia* sp. *Holostylis reniformis* (root). Ref: 3784.**1710 Aristolindiquinone**[86533-36-0] C<sub>12</sub>H<sub>10</sub>O<sub>4</sub> (218.21). Pharm: Contraceptive. Source: YIN DU MA DOU LING *Aristolochia indica*. Ref: 658.**1711 Aristoliukine A**C<sub>17</sub>H<sub>13</sub>NO<sub>5</sub> (311.30). Source: MIAN MAO MA DOU LING *Aristolochia mollissima* (dried root and stem: yield = 0.00031%dw)<sup>[3026]</sup>. Ref: 3026.**1712 Aristoliukine B**C<sub>17</sub>H<sub>11</sub>NO<sub>5</sub> (309.28). Source: MIAN MAO MA DOU LING *Aristolochia mollissima* (dried root and stem: yield = 0.00031%dw). Ref: 3026.**1713 Aristolochic acid**

Aristolochic acid A; Aristolochic acid I [313-67-7] C<sub>17</sub>H<sub>11</sub>NO<sub>7</sub> (341.28). Lustrous brown leaflike crystals (dimethylformamide–water), mp 281–286°C (dec), 287–292°C (dec); bright yellow, mp 274°C. Pharm: Causes acute glomerulus necrosis; carcinogen; mutagen; immunoenhancer; anti-HIV inactive (*in vitro*, acutely infected H-9 lymphocyte cells)<sup>[4706]</sup>; cytotoxic inactive (*in vitro*, MCF7 and A549)<sup>[4706]</sup>; LD<sub>50</sub> (mus, iv) = 60mg/kg. Source: BEI MA DOU LING *Aristolochia contorta* (dried ripe fruit: mean content = 0.171%<sup>[5508]</sup>), BEI MA DOU LING GEN *Aristolochia contorta*, GUAN MU TONG *Aristolochia manshuriensis* (lianoid stem: mean content of 7 origins = 0.052%<sup>[5508]</sup>; yield = 0.039%<sup>[4706]</sup>), GUANG FANG JI *Aristolochia fangchi* (dried root: content scope of 5 origins = 0.93%–3.66%, mean content = 1.50%<sup>[5508]</sup>), HAN CHENG XI XIN *Asarum sieboldii* var. *seoulensis* (dried whole herb: content = 0.00063%<sup>[5508]</sup>), HAN FANG JI *Aristolochia heterophylla* (dried ripe fruit: mean content = 0.1637%<sup>[5508]</sup>), HUAI TONG *Aristolochia moupinensis*, JIA NA DA XI XIN *Asarum canadense*, KUAI JING MA DOU LING *Aristolochia tuberosa*, LIAO XI XIN *Asarum heterotropoides* var. *mandshuricum* (dried whole herb: content = 0.00098%<sup>[5508]</sup>), MA DOU LING *Aristolochia debilis* [Syn. *Aristolochia longa*] (dried ripe fruit: mean content = 0.139%<sup>[5508]</sup>; in 1963 the compound was isolated from the plant by H. Mitsushashi et al.<sup>[5505]</sup>), MIAN MAO MA DOU LING *Aristolochia mollissima* (dried ripe fruit: mean content = 0.0465%<sup>[5508]</sup>; dried root and stem: yield = 0.071%dw<sup>[3026]</sup>), QING MU XIANG *Aristolochia debilis* [Syn. *Aristolochia longa*] (root: content scope = 0.049%–0.668%<sup>[5501]</sup>), XI XIN *Asarum sieboldii* (dried whole herb: content = 0.00114%<sup>[5508]</sup>), YIN DU MA DOU LING *Aristolochia indica*, ZHU SHA LIAN *Aristolochia kaempferi*. Ref: 6, 334, 517, 660, 658, 661, 3026, 4706, 5501, 5505, 5508.

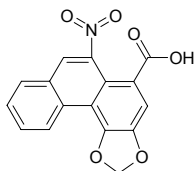
**1714 Aristolochic acid D methyl ether**C<sub>18</sub>H<sub>13</sub>NO<sub>8</sub> (371.31). Source: QING MU XIANG *Aristolochia debilis* [Syn. *Aristolochia longa*]. Ref: 660.

**1715 Aristolochic acid E**

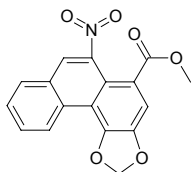
$C_{17}H_{11}NO_8$  (357.28). Red trapezoid crystals, mp 263°C. Source: BEI MA DOU LING *Aristolochia contorta*. Ref: 64.

**1716 Aristolochic acid II**

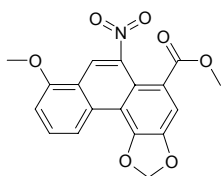
Aristolochic acid B  $C_{16}H_9NO_6$  (311.25). Source: GUAN MU TONG *Aristolochia manshuriensis* (stem: yield = 0.00004%)<sup>[4706]</sup>, MIAN MAO MA DOU LING *Aristolochia mollissima* (dried root and stem: yield = 0.00099%dw)<sup>[3026]</sup>. Ref: 3026, 4706.

**1717 Aristolochic acid II methyl ester**

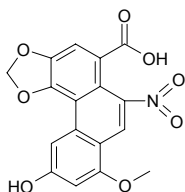
$C_{17}H_{11}NO_6$  (325.28). Source: GUAN MU TONG *Aristolochia manshuriensis* (stem: yield = 0.00002%). Ref: 4706.

**1718 Aristolochic acid I methyl ester**

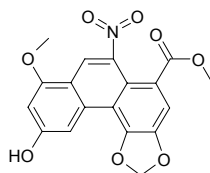
$C_{18}H_{13}NO_7$  (355.31). Pharm: Anti-HIV inactive (*in vitro*, acutely infected H-9 lymphocyte cells); cytotoxic inactive (*in vitro*, MCF7 and A549). Source: GUAN MU TONG *Aristolochia manshuriensis* (stem: yield = 0.0034%). Ref: 4706.

**1719 Aristolochic acid IVa**

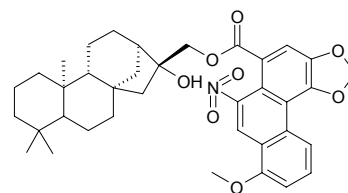
$C_{17}H_{11}NO_8$  (357.28). Source: MIAN MAO MA DOU LING *Aristolochia mollissima* (dried root and stem: yield = 0.0037%dw). Ref: 3026.

**1720 Aristolochic acid IVa methyl ester**

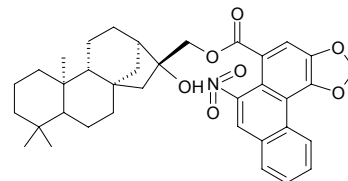
$C_{18}H_{13}NO_8$  (371.31). Source: GUAN MU TONG *Aristolochia manshuriensis* (stem: yield = 0.00080%). Ref: 4706.

**1721 Aristoloin I**

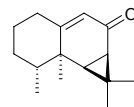
16 $\alpha$ -Hydroxy-*ent*-17-kauranyl aristolochate I  $C_{37}H_{43}NO_8$  (629.76). Amorphous yellow solid,  $[\alpha]_D^{25} = -42.1^\circ$  ( $c = 0.20$ ,  $CHCl_3$ ). Source: DUAN ROU MAO MA DOU LING *Aristolochia pubescens*. Ref: 3428.

**1722 Aristoloin II**

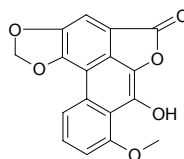
16 $\alpha$ -Hydroxy-*ent*-17-kauranyl aristolochate II  $C_{36}H_{41}NO_7$  (599.73). Amorphous yellow solid,  $[\alpha]_D^{25} = -53.4^\circ$  ( $c = 0.16$ ,  $CHCl_3$ ). Source: DUAN ROU MAO MA DOU LING *Aristolochia pubescens*. Ref: 3428.

**1723 Aristolone**

$C_{15}H_{22}O$  (218.34). Source: SHAN ZHU YU *Cornus officinalis* [Syn. *Macrocarpum officinale*]. Ref: 660.

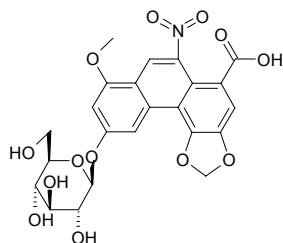
**1724 Aristolophenanlactone I**

9,10-Dihydroxy-8-methoxy-3,4-methylenedioxy-phenanthrene-1-carboxylic acid lactone  $C_{17}H_{10}O_6$  (310.27). Bright yellow solid, mp 278°C. Source: GUAN HUA MA DOU LING *Aristolochia tubiflora*. Ref: 332.

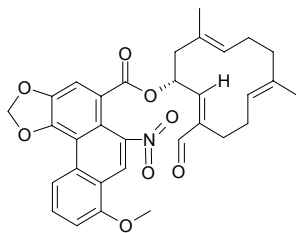


**1725 Aristoloides**

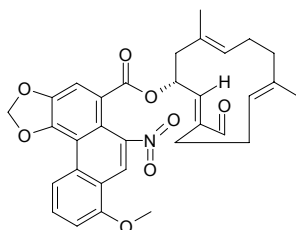
10-*O*-Glucopyranoside aristolochic acid D C<sub>23</sub>H<sub>21</sub>NO<sub>13</sub> (519.42). **Pharm:** Anti-HIV inactive (*in vitro*, acutely infected H-9 lymphocyte cells); cytotoxic inactive (*in vitro*, MCF7 and A549). **Source:** GUAN MU TONG *Aristolochia manshuriensis* (stem: yield = 0.00094%). **Ref:** 660, 4706.

**1726 Aristoloterpenate**

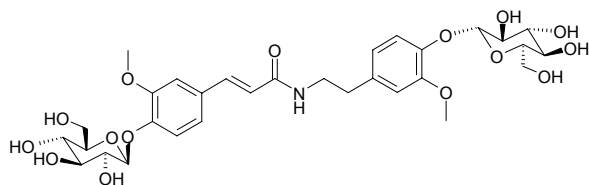
C<sub>32</sub>H<sub>31</sub>NO<sub>8</sub> (557.61). Thin yellow acicular crystals, mp 259°C (CHCl<sub>3</sub>-MeOH). **Source:** MIAN MAO MA DOU LING *Aristolochia mollissima* (dried root and stem: yield = 0.0019%dw)<sup>[3026]</sup>. **Ref:** 358, 3026.

**1727 Aristoloterpenate III**

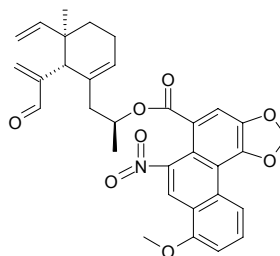
C<sub>32</sub>H<sub>31</sub>NO<sub>8</sub> (557.61). **Source:** MIAN MAO MA DOU LING *Aristolochia mollissima* (dried root and stem: yield = 0.00049%dw). **Ref:** 3026.

**1728 Aristomanoside**

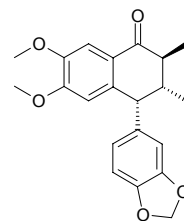
C<sub>31</sub>H<sub>41</sub>NO<sub>15</sub> (667.67). Yellow amorphous powder (CHCl<sub>3</sub>-CH<sub>3</sub>OH), mp 195-197°C. **Pharm:** Anti-HIV inactive (*in vitro*, acutely infected H-9 lymphocyte cells); cytotoxic inactive (*in vitro*, MCF7 and A549). **Source:** GUAN MU TONG *Aristolochia manshuriensis* (stem: yield = 0.00061%). **Ref:** 4706.

**1729 Aristophyllide A**

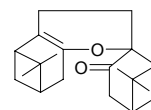
C<sub>32</sub>H<sub>31</sub>NO<sub>8</sub> (557.61). **Source:** HAN FANG JI *Aristolochia heterophylla*, MIAN MAO MA DOU LING *Aristolochia mollissima* (dried root and stem: yield = 0.00062%dw)<sup>[3026]</sup>. **Ref:** 1521, 3026.

**1730 (-)-Aristotetralone**

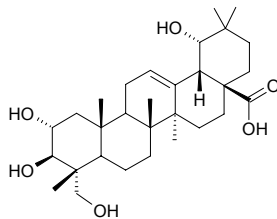
(7*R*,8*S*,8'*R*)-8,8'-Dimethyl-4,5-dimethoxy-3',4'-methylenedioxy-2,7'-cyclo lignan-7-one C<sub>21</sub>H<sub>22</sub>O<sub>5</sub> (354.41). Amorphous yellow solid, [α]<sub>D</sub><sup>25</sup> = -135.3° (*c* = 0.60, CHCl<sub>3</sub>). **Source:** *Aristolochia* sp, *Holostylis reniformis* (root). **Ref:** 3784.

**1731 Aritasone**

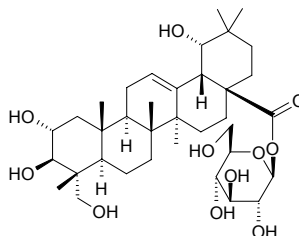
C<sub>20</sub>H<sub>28</sub>O<sub>2</sub> (300.44). mp 105-106°C. **Source:** TU JING JIE *Chenopodium ambrosioides*. **Ref:** 6.

**1732 Arjungenin**

C<sub>30</sub>H<sub>48</sub>O<sub>6</sub> (504.71). **Source:** HE ZI *Terminalia chebula*. **Ref:** 660.

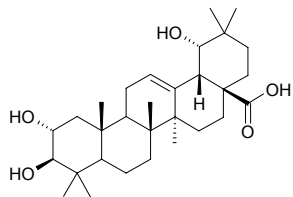
**1733 Arjunglucoside I**

Dotorioside I [62319-70-4] C<sub>36</sub>H<sub>58</sub>O<sub>11</sub> (666.86). **Source:** A JIANG LAN REN *Terminalia arjuna*, XIA KU CAO *Prunella vulgaris*. **Ref:** 1521, 2508.

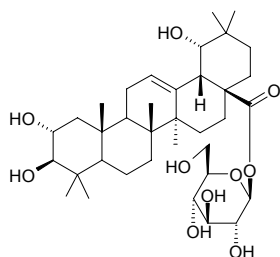


**1734 Arjunic acid**

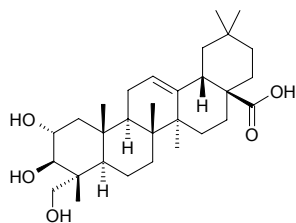
2 $\alpha$ ,3 $\beta$ ,19 $\alpha$ -Trihydroxy-12-oleanen-28-oic acid C<sub>30</sub>H<sub>48</sub>O<sub>5</sub> (488.71). Source: A JIANG LAN REN *Terminalia arjuna*, TAI WAN PI PA *Eriobotrya deflexa* (leaf). Ref: 1521, 3064.

**1735 Arjunic acid-28-O-glucoside**

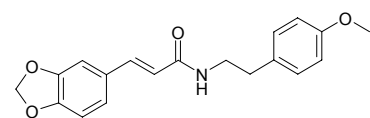
C<sub>36</sub>H<sub>58</sub>O<sub>10</sub> (650.86). Source: MEI GUI HUA *Rosa rugosa*. Ref: 660.

**1736 Arjunolic acid**

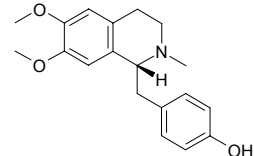
[465-00-9] C<sub>30</sub>H<sub>48</sub>O<sub>5</sub> (488.71). mp 337~340°C. Pharm: Antifungal (*Cryptococcus neoformans*, IC<sub>50</sub> = 20 $\mu$ g/mL, control Amphotericin B, IC<sub>50</sub> = 0.45 $\mu$ g/mL)<sup>[5411]</sup>. Source: FAN SHI LIU PI *Psidium guajava*, SHAN GAN CAO *Mussaenda pubescens*, *Leandra chaetodon* (whole herb). Ref: 6, 5411.

**1737 Armatamide**

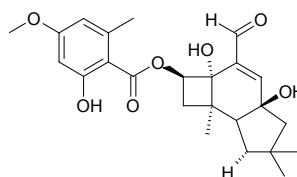
C<sub>19</sub>H<sub>19</sub>NO<sub>4</sub> (325.37). Pharm: Anti-PAF. Source: MAO ZHU YE HUA JIAO *Zanthoxylum armatum*, *Zanthoxylum* sp. Ref: 1521, 2176.

**1738 Arnepavine**

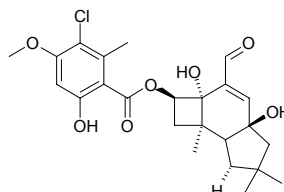
[524-20-9] C<sub>19</sub>H<sub>23</sub>NO<sub>3</sub> (313.40). mp 148~149°C. Pharm: Causes arrhythmia; eclampogenic; irritant. Source: GAO JIA SUO YING SU *Papaver caucasicum*, HE YE *Nelumbo nucifera*, LIAN ZI *Nelumbo nucifera*, OU SHU LI *Rhamnus frangula* [Syn. *Frangula alnus*], OU ZHOU WEI MAO *Euonymus europaeus*, BO SI YING SU *Papaver persicum*. Ref: 6, 658.

**1739 Armillarilin**

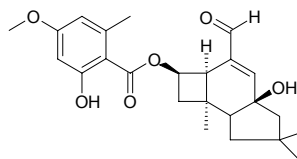
C<sub>24</sub>H<sub>30</sub>O<sub>7</sub> (430.50). White massive crystals, mp 179~180°C, [ $\alpha$ ]<sub>D</sub><sup>14</sup> = +162° (CHCl<sub>3</sub>). Source: MI HUAN JUN *Armillaria mellea*. Ref: 147.

**1740 Armillarinin**

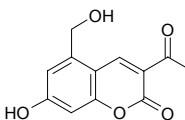
C<sub>24</sub>H<sub>29</sub>ClO<sub>7</sub> (464.95). White massive crystals, mp 152~155°C, [ $\alpha$ ]<sub>D</sub><sup>17</sup> = +153.6° (CHCl<sub>3</sub>). Source: MI HUAN JUN *Armillaria mellea*. Ref: 147.

**1741 Armillaripin**

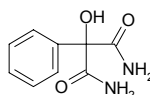
C<sub>24</sub>H<sub>30</sub>O<sub>6</sub> (414.50). Colorless acicular crystals, mp 202~204°C. Source: MI HUAN JUN *Armillaria mellea*. Ref: 154.

**1742 Armillarisin A**

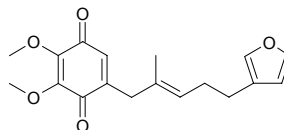
C<sub>12</sub>H<sub>10</sub>O<sub>5</sub> (234.21). mp 245~246°C. Pharm: Antispasmodic (Oddi's sphincter); choleric (bile secretion promotor); reduces duodenum tension. Source: LIANG JUN *Armillariella tabescens*. Ref: 6, 658.

**1743 Armillarisin B**

C<sub>9</sub>H<sub>10</sub>N<sub>2</sub>O<sub>3</sub> (194.19). Source: LIANG JUN *Armillariella tabescens*. Ref: 660.

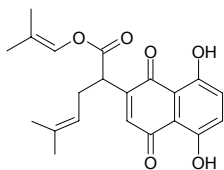
**1744 Arnebifuranone**

[94805-71-7] C<sub>18</sub>H<sub>20</sub>O<sub>5</sub> (316.36). Source: ZI CAO *Lithospermum erythrorhizon*, XIN ZANG JIA ZI CAO *Arnebia euchroma*. Ref: 660, 2193.

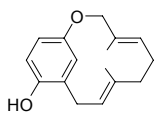


**1745 Arnebin**

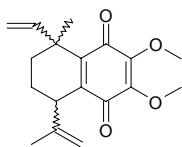
$C_{21}H_{22}O_6$  (370.41). Purplish red lamellar crystals, mp 113.5–114.0°C. **Pharm:** Antibacterial; antineoplastic (WM,  $ED_{50} = 6\text{mg/kg}$ ;  $P_{388}$ ,  $ED_{50} = 3\text{mg/kg}$ ); cytotoxic (KB,  $ED_{50} = 25\mu\text{g/mL}$ ). **Source:** GAO GUI JIA ZI CAO *Arnebia nobilis*, BAI GUO ZI CAO *Lithospermum officinale*. **Ref:** 658, 661.

**1746 Arnebinol**

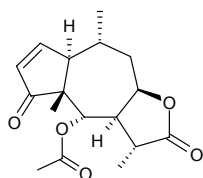
[87064-17-3]  $C_{16}H_{20}O_2$  (244.34). **Pharm:** Prostaglandin biosynthesis inhibitor ( $20\mu\text{g/mL}$ , InRt = 75.0%). **Source:** XIN ZANG JIA ZI CAO *Arnebia euchroma*. **Ref:** 658, 2193.

**1747 Arnebinone**

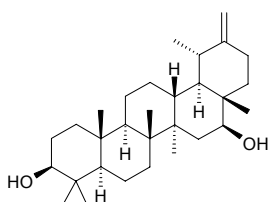
$C_{18}H_{22}O_4$  (302.34). **Pharm:** Prostaglandin biosynthesis inhibitor ( $20\mu\text{g/mL}$ , InRt = 24.2%). **Source:** XIN ZANG JIA ZI CAO *Arnebia euchroma*. **Ref:** 658, 2193.

**1748 Arnicolide A**

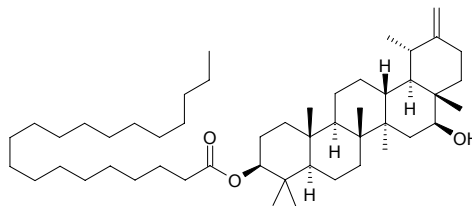
[36505-53-0]  $C_{17}H_{22}O_5$  (306.36). **Pharm:** Cytotoxic (hmn, animal, many kinds of cancer cell cultures). **Source:** SHAN JIN CHE *Arnica montana*. **Ref:** 658.

**1749 Arnidiol**

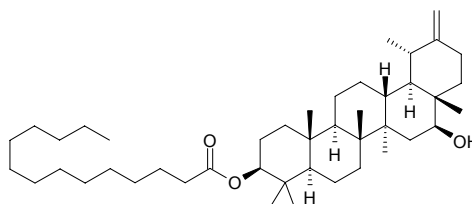
Arnidenediol [6750-30-7]  $C_{30}H_{50}O_2$  (442.73). mp 257°C. **Source:** E BU SHI CAO *Centipeda minima*, JIN ZHAN JU *Calendula officinalis*, YAO YONG PU GONG YING *Taraxacum officinale*. **Ref:** 6, 660.

**1750 Arnidiol 3-O-eicosanoate**

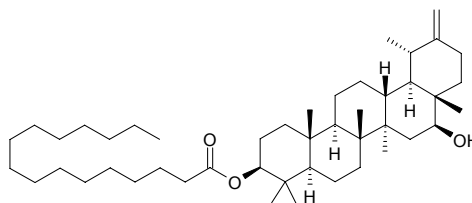
$C_{50}H_{88}O_3$  (737.26). mp 83–84°C,  $[\alpha]_D = +44.3^\circ$  ( $c = 0.1$ ,  $CHCl_3$ ). **Source:** SAI ER WEI YA SHI CAO *Achillea alexandri-regis* (dried aerial parts). **Ref:** 2545.

**1751 Arnidiol 3-O-myristate**

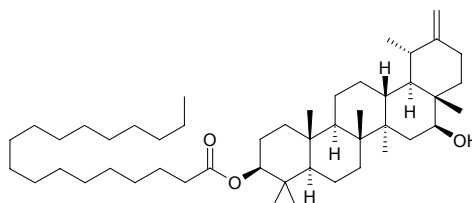
$C_{44}H_{76}O_3$  (653.09). **Source:** SAI ER WEI YA SHI CAO *Achillea alexandri-regis* (dried aerial parts). **Ref:** 2545.

**1752 Arnidiol 3-O-palmitate**

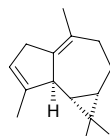
$C_{46}H_{80}O_3$  (681.15). Colorless powder. **Source:** SAI ER WEI YA SHI CAO *Achillea alexandri-regis* (dried aerial parts). **Ref:** 2545.

**1753 Arnidiol 3-O-stearate**

$C_{48}H_{84}O_3$  (709.20). mp 83–84°C,  $[\alpha]_D = +45.2^\circ$  ( $c = 0.1$ ,  $CHCl_3$ ). **Source:** SAI ER WEI YA SHI CAO *Achillea alexandri-regis* (dried aerial parts). **Ref:** 2545.

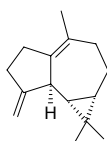
**1754 (-)-Aromadendra-1(10),3-diene**

$C_{15}H_{22}$  (202.34). Colorless oil. **Source:** TIE JIAO JUE YU TAI *Plagiochila asplenioides* (essential oil). **Ref:** 5257.

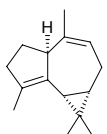


**1755 (+)-(5*S*\*,6*S*\*,7*S*\*)-Aromadendra-1(10),4(15)-diene**

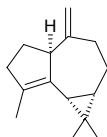
1,1,4-Trimethyl-7-methylene-1a,2,3,5,6,7,7a,7b-octahydro-1*H*-cyclopropa[*e*]azulene C<sub>15</sub>H<sub>22</sub> (202.34). Colorless oil. Source: XIAO E TAI *Mylia taylorii* (essential oil), LUO XIAO E TAI *Mylia nuda* (essential oil). Ref: 3840.

**1756 (1*S*,6*R*,7*S*)-Aromadendra-4,9-diene**

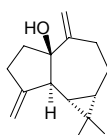
1,1,4,7-Tetramethyl-1a,2,4a,5,6,7b-hexahydro-1*H*-cyclopropa[*e*]azulene C<sub>15</sub>H<sub>22</sub> (202.34). Colorless oil. Source: XIAO E TAI *Mylia taylorii* (essential oil), LUO XIAO E TAI *Mylia nuda* (essential oil). Ref: 3840.

**1757 (+)-(1*S*,6*R*,7*S*)-Aromadendra-4,10(14)-diene**

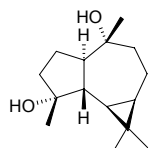
1,1,7-Trimethyl-4-methylene-1a,2,3,4,4a,5,6,7b-octahydro-1*H*-cyclopropa[*e*]azulene C<sub>15</sub>H<sub>22</sub> (202.34). Colorless oil. Source: XIAO E TAI *Mylia taylorii* (essential oil), LUO XIAO E TAI *Mylia nuda* (essential oil). Ref: 3840.

**1758 (+)-Aromadendra-4(15),10(14)-dien-1-ol**

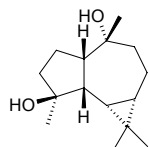
(+)-1,1-Dimethyl-4,7-dimethylene-decahydro-cyclopropa[*e*]azulen-4a-ol C<sub>15</sub>H<sub>22</sub>O (218.34). Colorless oil. Source: *Saccogyna viticulosa* (essential oil). Ref: 3839.

**1759 4α,10α-Aromadendranediol**

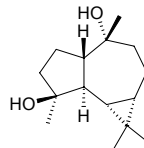
C<sub>15</sub>H<sub>26</sub>O<sub>2</sub> (238.37). White solid. Source: *Lobophytum* sp. Ref: 4565.

**1760 Aromadendrane-4β,10α-diol**

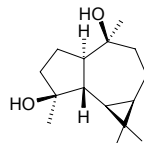
C<sub>15</sub>H<sub>26</sub>O<sub>2</sub> (238.37). White solid. Source: *Lobophytum* sp. Ref: 4565.

**1761 (+)-4β,10α-Aromadendranediol**

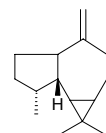
C<sub>15</sub>H<sub>26</sub>O<sub>2</sub> (238.37). White solid, [α]<sub>D</sub><sup>20</sup> = +13.05° (c = 0.05, CHCl<sub>3</sub>). Source: *Lobophytum* sp. Ref: 4565.

**1762 Aromadendrane-4β,10β-diol**

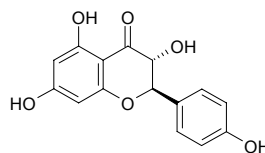
C<sub>15</sub>H<sub>26</sub>O<sub>2</sub> (238.37). Source: YI NIAN PENG *Erigeron annuus* (aerial parts), SU MEN BAI JIU CAO *Erigeron sumatrensis* (aerial parts). Ref: 4338.

**1763 Aromadendrene**

C<sub>15</sub>H<sub>24</sub> (204.36). Source: HONG CHAI HU *Bupleurum scorzonerifolium*, HOU PO *Magnolia officinalis*, JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*]. Ref: 2, 11, 660.

**1764 (2*R*,3*R*)-Aromadendrin**

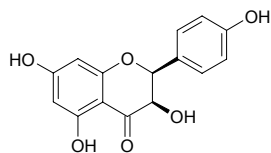
Aromadendrol; Dihydrokaempferol [480-20-6] C<sub>15</sub>H<sub>12</sub>O<sub>6</sub> (288.26). mp 247–249°C. Pharm: Cytotoxic (Bel7402, ED<sub>50</sub> = 1.47 μg/mL, control Camptothecin, ED<sub>50</sub> = 0.06 μg/mL; BGC823, ED<sub>50</sub> = 2.62 μg/mL, Camptothecin, ED<sub>50</sub> = 0.09 μg/mL; HCT8, ED<sub>50</sub> = 1.34 μg/mL, Camptothecin, ED<sub>50</sub> = 0.14 μg/mL; A549, ED<sub>50</sub> > 10 μg/mL, Camptothecin, ED<sub>50</sub> = 0.09 μg/mL; MCF7, ED<sub>50</sub> > 10 μg/mL, Camptothecin, ED<sub>50</sub> = 0.01 μg/mL)<sup>[5338]</sup>; cytotoxic inactive (*in vitro*, HeLa, Vero, K562, Raji, Wish, and Calu1 tumor cell lines, IC<sub>50</sub> > 100 μmol/L)<sup>[3057]</sup>; aromatase inhibitor inactive (*in vitro*, IC<sub>50</sub> > 40 μmol/L; control Aminoglutethimide, IC<sub>50</sub> = 6.4 μmol/L)<sup>[3090]</sup>; antifungal; antibacterial inactive (*Staphylococcus aureus*, MIC > 100 μg/mL; *Bacillus subtilis*, MIC > 100 μg/mL)<sup>[4144]</sup>. Source: BA DAN XING REN *Prunus amygdalus*, CE BAI YE *Thuja orientalis* [Syn. *Platyclusus orientalis*; *Biota orientalis*], GOU JI *Cudrania cochinchinensis* (root: yield = 0.00087%dw)<sup>[4713]</sup>, GOU SHU *Broussonetia papyrifera*<sup>[3090]</sup>, RI BEN HUA BAI *Chamaecyparis pisifera* (leaf), SANG ZHI *Morus alba*, SHAN TAO JING BAI PI *Prunus davidiana*, SHE PU TAO *Ampelopsis brevipedunculata*, TAI WAN HUANG BO *Phellodendron amurense* var. *wilsonii* (leaf: yield = 0.00033%dw)<sup>[4722]</sup>, TAO JING BAI PI *Prunus persica*, TAO ZHI *Prunus persica*, YI HE GUO *Ventilago leiocarpa* (stem)<sup>[3057]</sup>, YOU GAN YE *Phyllanthus emblica* (branch and leaf), ZHI JU ZI *Hovenia dulcis*. Ref: 6, 391, 552, 658, 660, 3057, 3090, 4144, 4205, 4713, 4722, 5338.



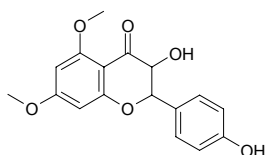


**1765 (2R,3S)-Aromadendrin**

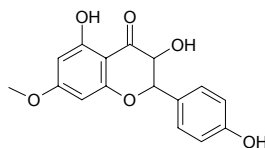
$C_{15}H_{12}O_6$  (288.26). **Pharm:** Cytotoxic (cyclooxygenase-1 inhibitor). **Source:** DA DA HE MIAN BAO GUO *Artocarpus dadah*. **Ref:** 5038.

**1766 Aromadendrin-5,7-dimethyl ether**

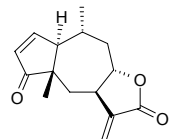
$C_{17}H_{16}O_6$  (316.31). mp 226–230°C. **Source:** NING MENG AN YE *Eucalyptus citriodora*. **Ref:** 6.

**1767 Aromadendrin-7-monomethyl ether**

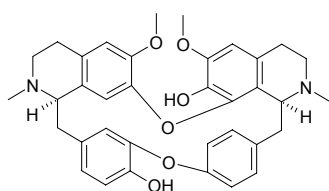
$C_{16}H_{14}O_6$  (302.29). mp 193°C. **Source:** NING MENG AN YE *Eucalyptus citriodora*. **Ref:** 6.

**1768 Aromaticin**

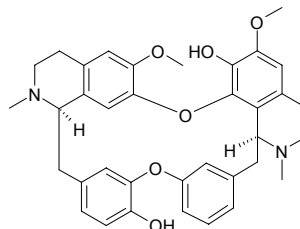
[5945-42-6]  $C_{15}H_{18}O_3$  (246.31). Colorless trapezoid crystals (chloroform–benzene), mp 223–225°C,  $[\alpha]_D^{25} = 21.2^\circ$  ( $c = 0.25$ , chloroform). **Pharm:** Anti-inflammatory (rat and mus, swollen foot model caused by carrageenan); cytotoxic (KB,  $ED_{50} = 2.0\mu\text{g/mL}$ ). **Source:** KU WEI DUI XIN JU *Helenium amarum*, FANG XIANG DUI XIN JU *Helenium aromaticum*. **Ref:** 658, 661.

**1769 Aromoline**

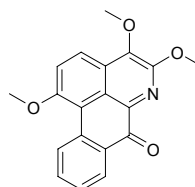
[519-53-9]  $C_{36}H_{38}N_2O_6$  (594.71). White crystals (ether), mp 178–180°C,  $[\alpha]_D^{25} = +318^\circ$  ( $c = 0.06$ , methanol); Colorless prismatic crystals (chloroform), mp 182–183°C,  $[\alpha]_D = +320^\circ$  ( $c = 0.05$ ). **Pharm:** Antibacterial (*Mycobacterium* sp., 1000 $\mu\text{g/mL}$ ); antihypertensive (dog); membrane stabilizer. **Source:** TOU MING TANG SONG CAO *Thalictrum lucidum*. **Ref:** 658, 661.

**1770 (+)-Aromoline**

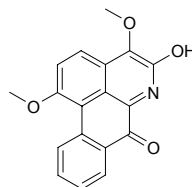
$C_{36}H_{38}N_2O_6$  (594.71). **Pharm:** Mitochondrial respiratory chain complex I inhibitor ( $IC_{50} = (1.41 \pm 0.08)\mu\text{mol/L}$ , Rolliniastatin-1,  $IC_{50} = (0.6 \pm 0.04)\text{nmol/L}$ , Rotenone,  $IC_{50} = (5.10 \pm 0.90)\text{nmol/L}$ ). **Source:** GE LUN BI YA MU BAN SHU *Xylopi colombiana* (fruit). **Ref:** 4954.

**1771 Artabonatine C**

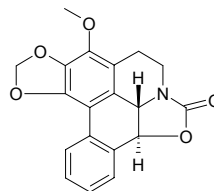
$C_{19}H_{15}NO_4$  (321.34). Green amorphous powder. **Source:** YOU GOU YING ZHAO *Artabotrys uncinatus* (stem). **Ref:** 3083.

**1772 Artabonatine D**

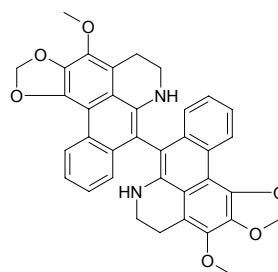
$C_{18}H_{13}NO_4$  (307.31). Red amorphous powder. **Source:** YOU GOU YING ZHAO *Artabotrys uncinatus* (stem). **Ref:** 3083.

**1773 Artabonatine E**

$C_{19}H_{15}NO_5$  (337.34). White amorphous powder,  $[\alpha]_D^{24} = -116.7^\circ$  ( $c = 0.8$ ,  $\text{CHCl}_3$ ). **Source:** YOU GOU YING ZHAO *Artabotrys uncinatus* (root). **Ref:** 3083.

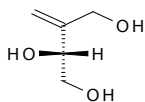
**1774 Artabonatine F**

$C_{36}H_{28}N_2O_6$  (584.63). White amorphous powder. **Source:** YOU GOU YING ZHAO *Artabotrys uncinatus* (root). **Ref:** 3083.

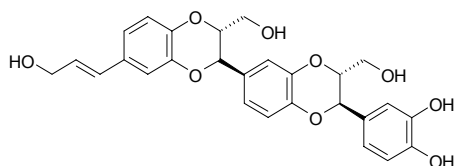


**1775 (R)-Artabotriol**

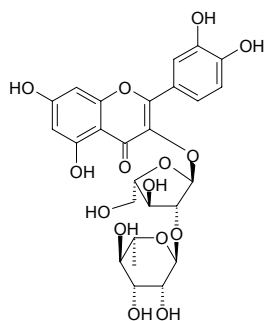
$C_5H_{10}O_3$  (118.13). Colorless oil liquid. Source: YING ZHAO *Artabotrys hexapetalus* [Syn. *Annona hexapetalus*]. Ref: 872.

**1776 Artabotrycinol**

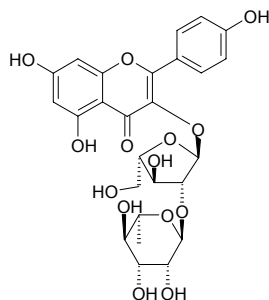
$C_{27}H_{26}O_9$  (494.50). White crystals, mp 194~196°C. Source: YING ZHAO *Artabotrys hexapetalus* [Syn. *Annona hexapetalus*]. Ref: 872.

**1777 Artabotryside A**

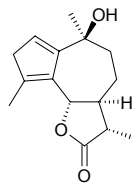
Quercetin-3-*O*- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -*L*-rabinofuranoside  $C_{26}H_{28}O_{15}$  (580.50). Yellowish powder, mp 175~177°C,  $[\alpha]_D^{30} = -113^\circ$  ( $c = 0.1$ , MeOH). Source: YING ZHAO *Artabotrys hexapetalus* [Syn. *Annona hexapetalus*]. Ref: 411.

**1778 Artabotryside B**

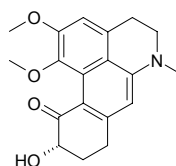
Kaempferol-3-*O*- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -*L*-rabinofuranoside  $C_{26}H_{28}O_{14}$  (564.50). mp 262~265°C,  $[\alpha]_D^{30} = -146^\circ$  ( $c = 0.12$ , MeOH). Source: YING ZHAO *Artabotrys hexapetalus* [Syn. *Annona hexapetalus*]. Ref: 411.

**1779 Artabsin**

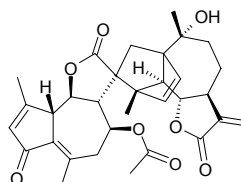
[24399-20-0]  $C_{15}H_{20}O_3$  (248.32). mp 133~135°C. Pharm: Anthelmintic; bitter principle. Source: BAI HAO *Artemisia sieversiana*, ZHONG YA KU HAO *Artemisia absinthium*. Ref: 6, 658.

**1780 Artacinatine**

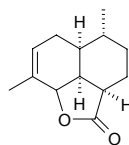
$C_{19}H_{21}NO_4$  (327.38). Source: YOU GOU YING ZHAO *Artabotrys uncinatus* (stem). Ref: 3083.

**1781 Artanomaloide**

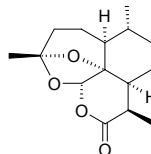
$C_{32}H_{36}O_8$  (548.64). Source: LIU JI NU *Artemisia anomala*. Ref: 660.

**1782 Arteamisinine I**

Qinghaosu I  $C_{13}H_{18}O_2$  (206.29). Source: HUANG HUA HAO *Artemisia annua*. Ref: 2, 660.

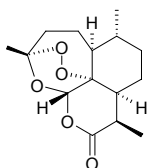
**1783 Arteamisinine III**

Qinghaosu III  $C_{15}H_{22}O_4$  (266.34). Source: HUANG HUA HAO *Artemisia annua*. Ref: 2, 660.

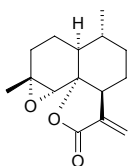


**1784 (+)-Arteannuin**

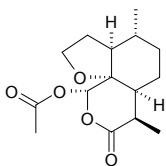
Qinghaosu; Artemisinin [63968-64-9]  $C_{15}H_{22}O_5$  (282.34). Colorless acicular crystals, mp 156~157°C,  $[\alpha]_D^{17} = +66.3^\circ$  (chloroform),  $[\alpha]_D^{23} = +68^\circ$  (ethanol), easily soluble in benzene, acetic ester, chloroform, acetone, soluble in ethanol, ether, hot petroleum ether, almost insoluble in water.<sup>[5507]</sup> **Pharm:** Antimalarial (*Plasmodium falciparum*, K1, multidrug resistant strain,  $EC_{50} = 1\text{--}3\text{ng/mL}$ )<sup>[2532]</sup>; antimalarial (*Plasmodium falciparum*,  $IC_{50} = (0.0011 \pm 0.0006)\mu\text{g/mL}$ )<sup>[5008]</sup>; antimalarial (*Plasmodium falciparum*,  $IC_{50} = 0.0022\mu\text{g/mL}$ )<sup>[5009]</sup>; cytotoxic (L6,  $IC_{50} > 90\mu\text{g/mL}$ )<sup>[5008]</sup>; antimalarial (*Plasmodium falciparum*,  $IC_{50} = 0.002\mu\text{g/mL}$ )<sup>[5251]</sup>; antimalarial (*Plasmodium falciparum* D6,  $IC_{50} = 0.006\mu\text{g/mL}$ ; *Plasmodium falciparum* W2,  $IC_{50} = 0.007\mu\text{g/mL}$ )<sup>[5465]</sup>; antiplasmodial ( $IC_{50} = 0.001\text{--}0.002\mu\text{g/mL}$ )<sup>[5062]</sup>; schistosomacide. **Source:** HUANG HUA HAO *Artemisia annua* (flower: content scope = 0.0725%~0.232%<sup>[5501]</sup>, leaf: content scope = 0.523%~1.54%<sup>[5501]</sup>); isolated from the plant by Chinese scientists in 1972<sup>[5507]</sup>. **Ref:** 2, 658, 660, 2532, 5008, 5009, 5062, 5251, 5465, 5501, 5507.

**1785 Arteannuin B**

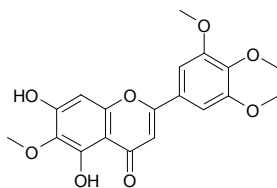
[50906-56-4]  $C_{15}H_{20}O_3$  (248.32). **Source:** HUANG HUA HAO *Artemisia annua*. **Ref:** 2, 660.

**1786 Arteannuin G**

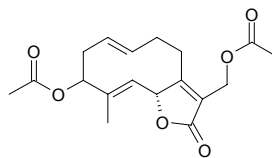
Artemisinin G  $C_{15}H_{22}O_5$  (282.34). **Source:** HUANG HUA HAO *Artemisia annua*, HUANG HUA HAO *Artemisia annua* (seed). **Ref:** 660, 3435.

**1787 Arteanoflavone**

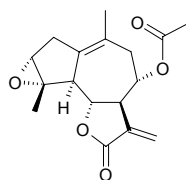
$C_{19}H_{18}O_8$  (374.35). **Source:** LIU JI NU *Artemisia anomala*. **Ref:** 660.

**1788 Arteanomalactone**

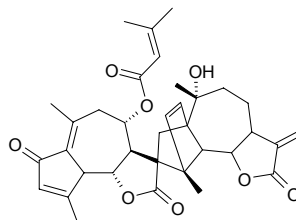
$C_{18}H_{22}O_6$  (334.37). **Source:** LIU JI NU *Artemisia anomala*. **Ref:** 660.

**1789 Arteglasin A**

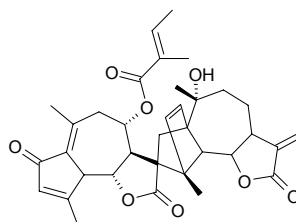
[33204-39-6]  $C_{17}H_{20}O_5$  (304.35). **Pharm:** Antineoplastic; cytotoxic; dermatitic (causes contact dermatitis). **Source:** DAO SHI HAO *Artemisia douglasiana*, YE JU *Chrysanthemum indicum*. **Ref:** 658.

**1790 Arteminide B**

$C_{35}H_{40}O_8$  (588.70). **Pharm:** Anti-inflammatory (RAW264.7 cells, LPS-induced: NF- $\kappa$ B inhibitor,  $IC_{50} = (0.49 \pm 0.03)\mu\text{mol/L}$ , control PTN,  $IC_{50} = (3.42 \pm 0.08)\mu\text{mol/L}$ ; NO production inhibitor,  $IC_{50} = (1.46 \pm 0.05)\mu\text{mol/L}$ , PTN,  $IC_{50} = (2.41 \pm 0.06)\mu\text{mol/L}$ , AG,  $IC_{50} = (34.18 \pm 0.98)\mu\text{mol/L}$ ; TNF- $\alpha$  production inhibitor,  $IC_{50} = (3.19 \pm 0.01)\mu\text{mol/L}$ , PTN,  $IC_{50} = (2.68 \pm 0.11)\mu\text{mol/L}$ ; suppresses expression of NF- $\kappa$ B target genes such as iNOS and COX-2. **Source:** LIN DI HAO *Artemisia sylvatica* (aerial parts). **Ref:** 3837.

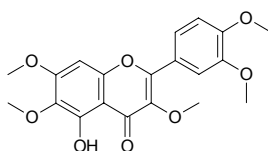
**1791 Arteminide D**

$C_{35}H_{40}O_8$  (588.70). **Pharm:** Anti-inflammatory (RAW264.7 cells, LPS-induced: NF- $\kappa$ B inhibitor,  $IC_{50} = (0.54 \pm 0.02)\mu\text{mol/L}$ , control PTN,  $IC_{50} = (3.42 \pm 0.08)\mu\text{mol/L}$ ; NO production inhibitor,  $IC_{50} = (1.64 \pm 0.02)\mu\text{mol/L}$ , PTN,  $IC_{50} = (2.41 \pm 0.06)\mu\text{mol/L}$ , AG,  $IC_{50} = (34.18 \pm 0.98)\mu\text{mol/L}$ ; TNF- $\alpha$  production inhibitor,  $IC_{50} = (3.47 \pm 0.53)\mu\text{mol/L}$ , PTN,  $IC_{50} = (2.68 \pm 0.11)\mu\text{mol/L}$ ). **Source:** LIN DI HAO *Artemisia sylvatica* (aerial parts). **Ref:** 3837.

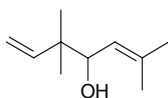


**1792 Artemisetin**

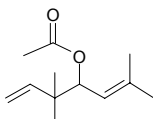
5-Hydroxy-3,6,7,3',4'-pentamethoxy-flavone [479-90-3]  $C_{20}H_{20}O_8$  (388.38). **Pharm:** Cytotoxic (Meth-A sarcoma cell line,  $ED_{50} = 4.3\mu\text{g/mL}$ , LLC cell line,  $ED_{50} > 10\mu\text{g/mL}$ )<sup>[3510]</sup>; cytotoxic (*in vitro*, PC12,  $GI_{50} = 2.27\mu\text{g/mL}$ , control Cisplatin,  $GI_{50} = 0.111\mu\text{g/mL}$ ; HCT116,  $GI_{50} = 2.20\mu\text{g/mL}$ , Cisplatin,  $GI_{50} = 0.794\mu\text{g/mL}$ )<sup>[4623]</sup>. **Source:** DAN YE MAN JING ZI *Vitex rotundifolia* [Syn. *Vitex trifolia* var. *simplicifolia*] (seed: yield = 0.0020%dw)<sup>[4623]</sup>, HUANG HUA HAO *Artemisia annua*, QING HAO *Artemisia apiacea* [Syn. *Artemisia carvifolia*; *Artemisia caruifolia*] (aerial parts), ZHI ZI *Gardenia jasminoides* [Syn. *Gardenia florida*], HUANG HAO *Artemisia scoparia* [Syn. *Artemisia capillaris* var. *scoparia*], MA BIAN CAO *Verbena officinalis*, YANG SHI CAO *Achillea millefolium*. **Ref:** 2, 626, 660, 3510, 4623.

**1793 Artemisia alcohol**

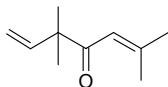
$C_{10}H_{18}O$  (154.25). bp  $71^{\circ}\text{C}/6\text{mmHg}$ . **Source:** MU HAO *Artemisia japonica*. **Ref:** 6.

**1794 L-β-Artemisia alcohol acetate**

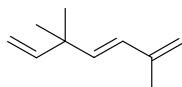
$C_{12}H_{20}O_2$  (196.29). bp  $74\sim 76^{\circ}\text{C}/6\text{mmHg}$ . **Source:** HUANG HUA HAO *Artemisia annua*. **Ref:** 6.

**1795 Artemisia ketone**

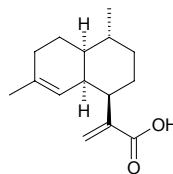
Isoartemisia ketone [546-49-6]  $C_{10}H_{16}O$  (152.24). bp  $182^{\circ}\text{C}$ . **Source:** HUANG HUA HAO *Artemisia annua*, MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*]. **Ref:** 2, 6, 660.

**1796 Artemisia triene**

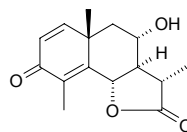
$C_{10}H_{16}$  (136.24). Colorless oil. **Source:** NIAN HAO *Artemisia cana* ssp. *viscidula*. **Ref:** 1980.

**1797 Artemisic acid**

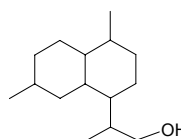
[80286-58-4]  $C_{15}H_{22}O_2$  (234.34). **Source:** HUANG HUA HAO *Artemisia annua*. **Ref:** 2, 660.

**1798 Artemisin**

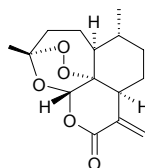
[481-05-0]  $C_{15}H_{18}O_4$  (262.31). mp  $(-)$   $203^{\circ}\text{C}$ ,  $(\pm)$   $190\sim 192^{\circ}\text{C}$ . **Pharm:** Anthelmintic. **Source:** HUI HAO *Seriphidium cinum* [Syn. *Artemisia cina*], BIN HAO *Artemisia maritima*. **Ref:** 6, 658.

**1799 Artemisinol**

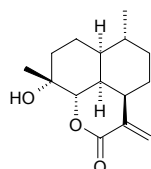
[82890-78-6]  $C_{15}H_{28}O$  (224.39). **Source:** HUANG HUA HAO *Artemisia annua*. **Ref:** 2, 660.

**1800 Artemisitene**

[101020-89-7]  $C_{15}H_{20}O_5$  (280.32). **Source:** HUANG HUA HAO *Artemisia annua*. **Ref:** 2, 660.

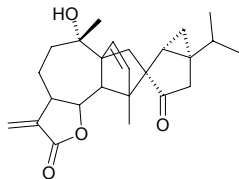
**1801 Artemislactone**

Qinghaosu V [92691-97-9]  $C_{15}H_{22}O_3$  (250.34). **Source:** HUANG HUA HAO *Artemisia annua*. **Ref:** 2, 660.

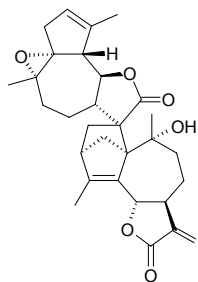


**1802 Artemisolide**

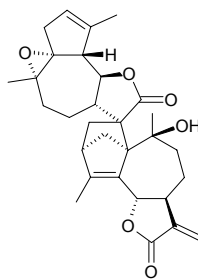
$C_{25}H_{32}O_4$  (396.53). **Pharm:** Anti-inflammatory (RAW264.7 cells, LPS-induced: NF- $\kappa$ B inhibitor,  $IC_{50} = (0.70 \pm 0.02) \mu\text{mol/L}$ , control PTN,  $IC_{50} = (3.42 \pm 0.08) \mu\text{mol/L}$ ; NO production inhibitor,  $IC_{50} = (1.96 \pm 0.06) \mu\text{mol/L}$ , PTN,  $IC_{50} = (2.41 \pm 0.06) \mu\text{mol/L}$ , AG,  $IC_{50} = (34.18 \pm 0.98) \mu\text{mol/L}$ ; TNF- $\alpha$  production inhibitor,  $IC_{50} = (7.42 \pm 0.11) \mu\text{mol/L}$ , PTN,  $IC_{50} = (2.68 \pm 0.11) \mu\text{mol/L}$ ). **Source:** LIN DI HAO *Artemisia sylvatica* (aerial parts). **Ref:** 3837.

**1803 Artemyriantholide A**

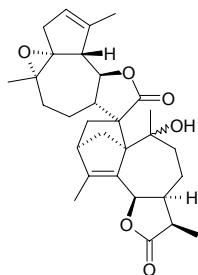
$C_{30}H_{36}O_6$  (492.62). Gum,  $[\alpha]_D = +37.2^\circ$  ( $c = 1.0$ ,  $\text{CHCl}_3$ ). **Source:** YI KUA *Artemisia myriantha* (aerial parts). **Ref:** 4618.

**1804 Artemyriantholide B**

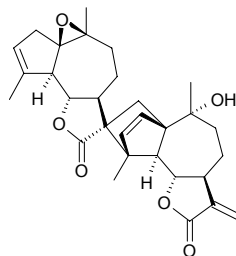
$C_{30}H_{36}O_6$  (492.62). Gum,  $[\alpha]_D = +51.0^\circ$  ( $c = 0.4$ ,  $\text{CHCl}_3$ ). **Source:** YI KUA *Artemisia myriantha* (aerial parts). **Ref:** 4618.

**1805 Artemyriantholide C**

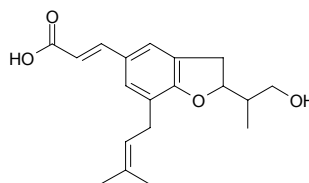
$C_{30}H_{38}O_6$  (494.63). Gum,  $[\alpha]_D = +34.5^\circ$  ( $c = 0.3$ ,  $\text{CHCl}_3$ ). **Source:** YI KUA *Artemisia myriantha* (aerial parts). **Ref:** 4618.

**1806 Artemyriantholide D**

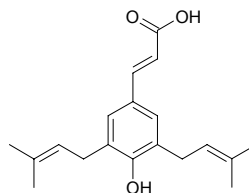
$C_{30}H_{36}O_6$  (492.62). Gum,  $[\alpha]_D = +17.2^\circ$  ( $c = 0.6$ ,  $\text{CHCl}_3$ ). **Source:** YI KUA *Artemisia myriantha* (aerial parts). **Ref:** 4618.

**1807 Artepillin A**

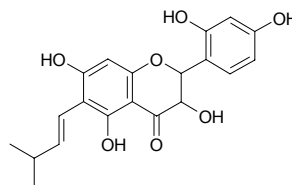
$C_{19}H_{24}O_4$  (316.40). **Source:** YIN CHEN HAO *Artemisia capillaris*. **Ref:** 660.

**1808 Artepillin C**

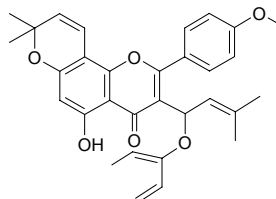
Deoxycapillartemisin  $C_{19}H_{24}O_3$  (300.40). **Source:** YIN CHEN HAO *Artemisia capillaris*. **Ref:** 2, 660.

**1809 Artocarpesin**

$C_{20}H_{20}O_7$  (372.38). **Source:** ZHE SHU *Cudrania tricuspidata* (stem and leaf). **Ref:** 660.

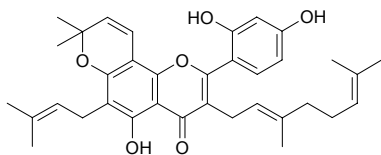
**1810 Artocommunol CA**

$C_{31}H_{32}O_6$  (500.60). Yellowish needles ( $\text{CHCl}_3$ ), mp  $190\sim 192^\circ\text{C}$ ,  $[\alpha]_D^{25} = +61.8^\circ$  ( $c = 0.1$ ,  $\text{CHCl}_3$ ). **Source:** MIAN BAO GUO *Artocarpus incisa* [Syn. *Artocarpus communis*] (root cortex: yield = 0.0017%). **Ref:** 4682.

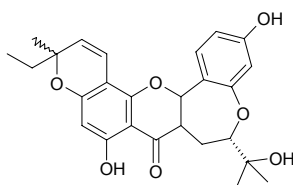


**1811 Artoccommunol CB**

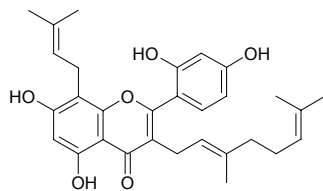
$C_{35}H_{40}O_6$  (556.71). Yellowish needles ( $CHCl_3$ ), mp 217–219°C. Source: MIAN BAO GUO *Artocarpus incisa* [Syn. *Artocarpus communis*] (root cortex: yield = 0.0022%). Ref: 4682.

**1812 Artoccommunol CC**

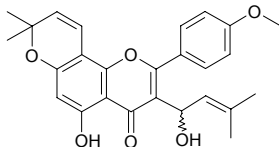
$C_{26}H_{28}O_7$  (452.51). Yellow amorphous powder,  $[\alpha]_D^{25} = +43.1^\circ$  ( $c = 0.1$ , MeOH). Source: MIAN BAO GUO *Artocarpus incisa* [Syn. *Artocarpus communis*] (root cortex: yield = 0.067%). Ref: 4682.

**1813 Artoccommunol CD**

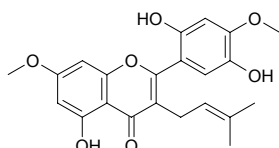
$C_{30}H_{34}O_6$  (490.60). Pale yellow needles (acetone), mp 183–185°C. Source: MIAN BAO GUO *Artocarpus incisa* [Syn. *Artocarpus communis*] (root cortex: yield = 0.0042%). Ref: 4682.

**1814 Artoccommunol CE**

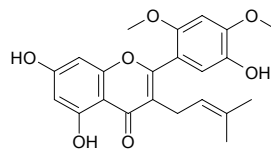
$C_{26}H_{26}O_6$  (434.49). Yellow amorphous powder,  $[\alpha]_D^{25} = +45.5^\circ$  ( $c = 0.1$ , MeOH). Source: MIAN BAO GUO *Artocarpus incisa* [Syn. *Artocarpus communis*] (root cortex: yield = 0.0033%). Ref: 4682.

**1815 Artoindonesianin Q**

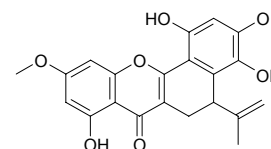
$C_{22}H_{22}O_7$  (398.42). Yellow powder. Source: YIN NI MIAN BAO GUO *Artocarpus champeden*. Ref: 1938.

**1816 Artoindonesianin R**

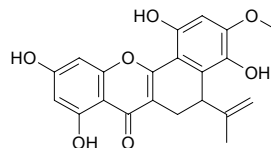
$C_{22}H_{22}O_7$  (398.42). Yellow powder. Source: YIN NI MIAN BAO GUO *Artocarpus champeden*. Ref: 1938.

**1817 Artoindonesianin S**

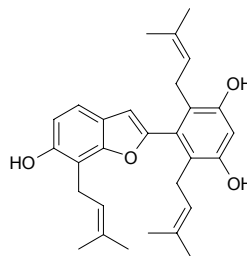
$C_{22}H_{20}O_7$  (396.40). Yellow powder. Source: YIN NI MIAN BAO GUO *Artocarpus champeden*. Ref: 1938.

**1818 Artoindonesianin T**

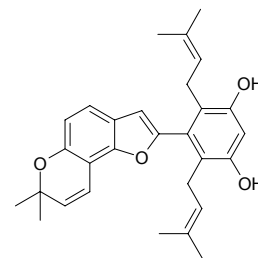
$C_{21}H_{18}O_7$  (382.37). Yellow powder. Source: YIN NI MIAN BAO GUO *Artocarpus champeden*. Ref: 1938.

**1819 Artoindonesianin X**

$C_{29}H_{34}O_4$  (446.59). Yellow powder. Pharm: Cytotoxic (brine shrimp *Artemia salina* assay,  $LC_{50} = 78.7 \mu g/mL$ ). Source: *Artocarpus fretessi* (bark). Ref: 3460.

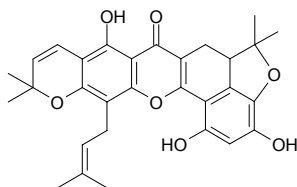
**1820 Artoindonesianin Y**

$C_{29}H_{32}O_4$  (444.58). Yellow powder. Pharm: Cytotoxic (brine shrimp *Artemia salina* assay,  $LC_{50} = 294.1 \mu g/mL$ ). Source: *Artocarpus fretessi* (bark). Ref: 3460.

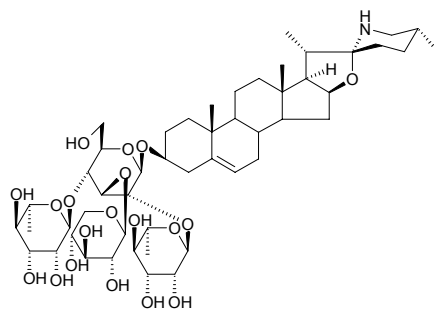


**1821 Artonin A**

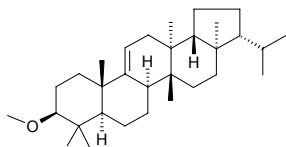
$C_{30}H_{30}O_7$  (502.57). Yellow prisms (MeOH), mp 239–240°C. **Pharm:** Cytotoxic (brine shrimp *Artemia salina* assay,  $LC_{50} = 100.6 \mu\text{g/mL}$ )<sup>[3460]</sup>. **Source:** BO LUO MI *Artocarpus heterophyllus*, *Artocarpus fretessi* (bark). **Ref:** 1521, 3460.

**1822 Arudonine**

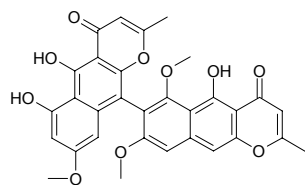
Solasodine *O*- $\alpha$ -*L*-rhamnopyranosyl-(1→2)-{[ $\beta$ -*D*-xylopyranosyl-(1→3)], [ $\alpha$ -*L*-rhamnopyranosyl-(1→4)]}- $\beta$ -*D*-glucopyranoside  $C_{50}H_{81}NO_{19}$  (1000.20). **Pharm:** Plant growth inhibitor (inhibits growth of lettuce seedlings). **Source:** A LUN DUO QIE *Solanum arundo* (root cortex). **Ref:** 3812.

**1823 Arundoin**

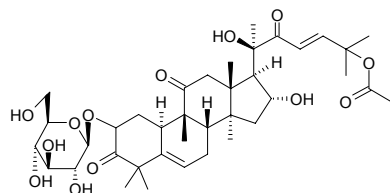
[4555-56-0]  $C_{31}H_{52}O$  (440.76). mp 235–237°C; 271–273°C. **Source:** BAI MAO GEN<sup>(1)</sup> *Imperata cylindrica* var. *major*, DAN ZHU YE *Lophatherum gracile*, DAN ZHU YE GEN *Lophatherum gracile*, LONG XU CAO *Poa sphondylodes*. **Ref:** 6.

**1824 Arurasperone D**

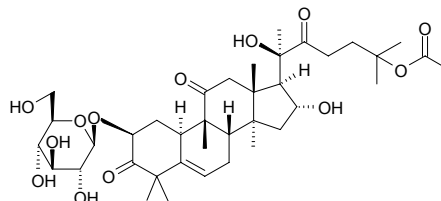
$C_{31}H_{24}O_{10}$  (556.53). **Pharm:** CNS depressant (animal model). **Source:** MANG GUO *Mangifera indica*. **Ref:** 658.

**1825 Arvenin I**

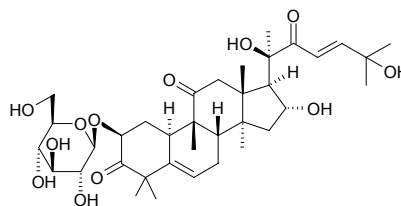
[65247-27-0]  $C_{38}H_{56}O_{13}$  (720.86). **Source:** LIU LI FAN LV *Anagallis arvensis*, NANG GAI SI GUA *Luffa operculata*. **Ref:** 1521, 2593.

**1826 Arvenin II**

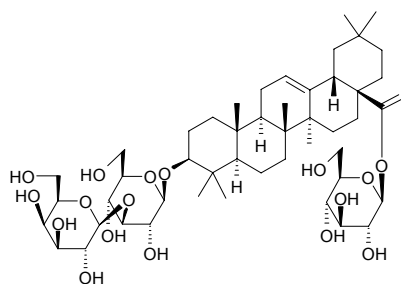
$C_{38}H_{58}O_{13}$  (722.88). **Source:** HU HUANG LIAN *Picrorhiza kurroa*, LIU LI FAN LV *Anagallis arvensis*. **Ref:** 660.

**1827 Arvenin III**

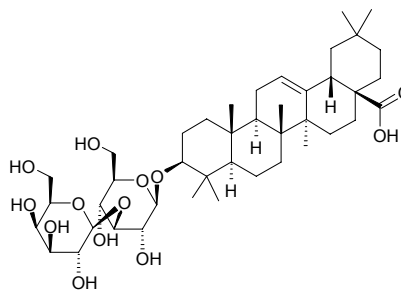
[65597-45-7]  $C_{36}H_{54}O_{12}$  (678.82). **Source:** HU HUANG LIAN *Picrorhiza kurroa*, LIU LI FAN LV *Anagallis arvensis*, NANG GAI SI GUA *Luffa operculata*. **Ref:** 660, 1521, 2593.

**1828 Arvenside A**

3-*O*-[ $\beta$ -*D*-Galactopyranosyl-(1→3)- $\beta$ -*D*-glucuronopyranosyl]-28-*O*- $\beta$ -*D*-glucopyranosylolean-12-en-28-oic acid  $C_{48}H_{78}O_{18}$  (943.15). **Pharm:** Anti-inflammatory. **Source:** XIAO JIN ZHAN HUA *Calendula arvensis*. **Ref:** 658.

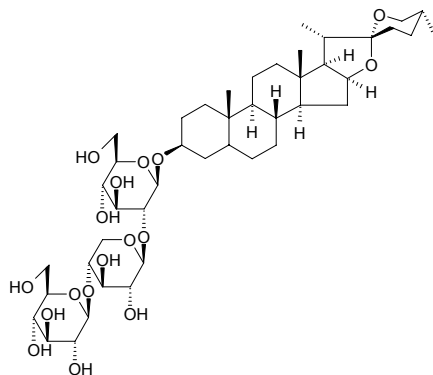
**1829 Arvenside A**

$C_{42}H_{68}O_{13}$  (781.00). **Source:** JIN ZHAN JU *Calendula officinalis* (flower). **Ref:** 3551.

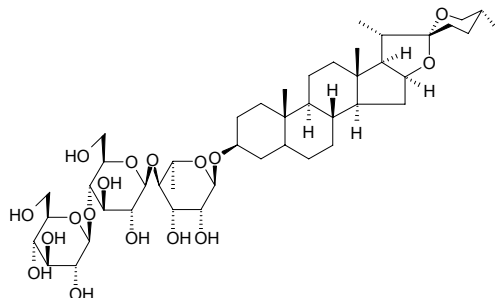


**1830 AS-1 A**

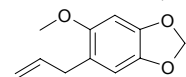
$C_{44}H_{72}O_{17}$  (873.05). **Source:** SHI DIAO BAI *Asparagus officinalis*. **Ref:** 697.

**1831 AS-1 B**

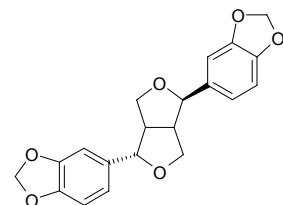
$C_{45}H_{74}O_{17}$  (887.08). **Source:** SHI DIAO BAI *Asparagus officinalis*. **Ref:** 697.

**1832 Asaricin**

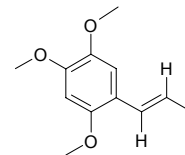
Sarisan  $C_{11}H_{12}O_3$  (192.22). **Pharm:** Antifungal. **Source:** DA HUA XI XIN *Asarum maximum*, DU HENG *Asarum forbesii*, JIA JU *Piper sarmentosum*, LIAO XI XIN *Asarum heterotropoides* var. *mandshuricum*, SHAN ZHU YU *Cornus officinalis* [Syn. *Macrocarpum officinale*], SHUANG YE XI XIN *Asarum caulescens*, XI XIN *Asarum sieboldii*. **Ref:** 658, 660.

**1833 Asarinin**

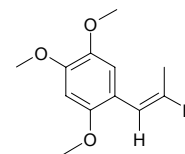
[133-03-9]  $C_{20}H_{18}O_6$  (354.36). mp (+) 121~122°C, (-) 22~24°C. **Pharm:** Synergist of pyrethrin; phytogrowth inhibitor (100µg/mL, *Amaranthus hypochondriacus*, InRt = (93.2±1.9)%; *E. crusgalli*, InRt = (89.5±0.6)%<sup>[5253]</sup>). **Source:** A NUO TI HUA JIAO *Zanthoxylum arnotianum*, DE KA RUI HUA JIAO *Zanthoxylum decaryi*, HU JIAO HUA JIAO *Zanthoxylum piperitum*, LIAO XI XIN *Asarum heterotropoides* var. *mandshuricum* (dried whole herb: mean content = 0.193%<sup>[5508]</sup>), MAO PAO TONG *Paulownia tomentosa*, RU DI JIN NIU *Zanthoxylum nitidum* (dried root: content = 0.093%<sup>[5508]</sup>), XI XIN *Asarum sieboldii* (dried whole herb: mean content = 0.136%<sup>[5508]</sup>), *Stauranthus perforatus* (root). **Ref:** 6, 658, 660, 5253, 5508.

**1834 α-Asarone**

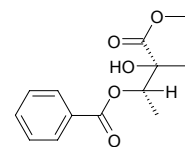
[2883-98-9]  $C_{12}H_{16}O_3$  (208.26). mp 67°C; 62°C, bp 296°C. **Pharm:** CYP3A4 inhibitor and CYP2D6 inhibitor (*in vitro*, CYP3A4, IC<sub>50</sub> = 92.3µmol/L; CYP2D6, IC<sub>50</sub> > 100µmol/L; control Ketoconazole, CYP3A4, IC<sub>50</sub> = 0.72µmol/L; control Quinidine, CYP2D6, IC<sub>50</sub> = 0.082µmol/L)<sup>[4797]</sup>. **Source:** BI CHENG QIE *Piper cubeba* (fruit: yield = 0.00028%dw<sup>[4797]</sup>), SHI CHANG PU *Acorus tatarinowii*, XI XIN *Asarum sieboldii* (whole herb: content = 0.24%<sup>[5501]</sup>), *Asarum* spp. **Ref:** 1521, 4797, 5501, 5508.

**1835 β-Asarone**

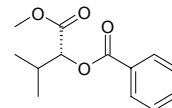
2,4,5-Trimethoxypropenyl benzene [5273-86-9]  $C_{12}H_{16}O_3$  (208.26). bp 162~163°C/12mmHg. **Pharm:** Carcinogen. **Source:** BAI CHANG *Acorus calamus*, JIN QIAN PU *Acorus gramineus*, JIN QIAN PU YE *Acorus gramineus*, OU XI XIN *Asarum europaeum*, RI BEN CHANG PU *Acorus calamus* var. *angustatus*, SHI CHANG PU *Acorus tatarinowii* (dried rhizome: content scope of 12 origins = 0.25%~3.68%, mean content = 1.13%<sup>[5508]</sup>), SHI JI NING *Mosla scabra* [Syn. *Mosla punctata*], XIA YE HU JIAO *Piper angustifolium*. **Ref:** 6, 658, 660, 5501, 5508.

**1836 Asarumin A**

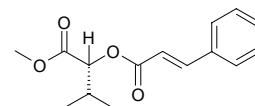
[126518-75-0]  $C_{15}H_{20}O_5$  (280.32). Colorless chunk (ethyl acetate), mp 89~91°C, [α]<sub>D</sub><sup>23</sup> = +4.10° (c = 0.9, methanol). **Pharm:** Antiallergic (rat, inhibits skin allergy, 300mg/kg orl, InRt = 44.4%). **Source:** DU HENG *Asarum forbesii*. **Ref:** 926, 1191.

**1837 Asarumin B**

[126518-76-1]  $C_{13}H_{16}O_4$  (236.27). Colorless oil-like substance, [α]<sub>D</sub><sup>23</sup> = +0.48° (c = 2.0, chloroform). **Pharm:** Antiallergic (rat, inhibits skin allergy, 300mg/kg orl, InRt = 25.1%). **Source:** DU HENG *Asarum forbesii*. **Ref:** 926, 1191.

**1838 Asarumin C**

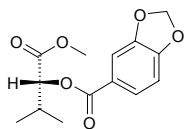
[126518-77-2]  $C_{15}H_{18}O_4$  (262.31). Colorless oil-like substance, [α]<sub>D</sub><sup>23</sup> = +30.5° (c = 0.2, chloroform). **Pharm:** Antiallergic (rat, inhibits skin allergy, 300mg/kg orl, InRt = 36.2%). **Source:** DU HENG *Asarum forbesii*. **Ref:** 926, 1191.



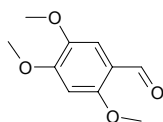


**1839 Asarumin D**

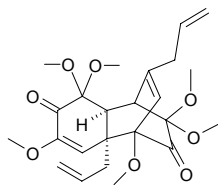
$C_{14}H_{16}O_6$  (280.28). **Source:** DU HENG *Asarum forbesii*. **Ref:** 660.

**1840 Asarylaldehyde**

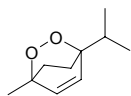
1,2,4-Trimethoxyphenyl-5-aldehyde [4460-86-0]  $C_{10}H_{12}O_4$  (196.20). White rhombic crystals (alcohol), mp 112~114°C; Needles ( $CHCl_3$  or  $H_2O$ ), mp 114°C; soluble in hot water, ether, benzene and petroleum ether. **Pharm:** Antiasthmatic; antihistamine (inhibits histamine release, rat megalocyte *in vitro*, caused by ConA, 1000  $\mu\text{mol/L}$ , InRt = 46%). **Source:** BAI CHANG *Acorus calamus*, BI CHENG QIE *Piper cubeba*, HAI FENG TENG *Piper kadsura* [Syn. *Piper futokadsura*], HE SHI FENG *Daucus carota*, NAN HE SHI *Daucus carota*, OU XI XIN *Asarum europaeum*. **Ref:** 6, 900, 1521, 2537.

**1841 Asatone**

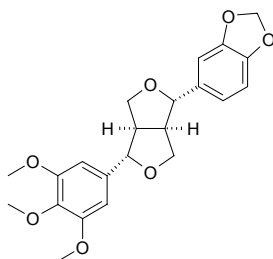
[38451-63-7]  $C_{24}H_{32}O_8$  (448.52). White crystals, mp 101~102°C (hexane),  $[\alpha]_D^{20} = 0^\circ$  (methanol). **Pharm:** Antineoplastic (mus *in vivo*, sarcoma) **Source:** TAI DONG XI XIN *Asarum taitoense*. **Ref:** 658, 661.

**1842 Ascaridole**

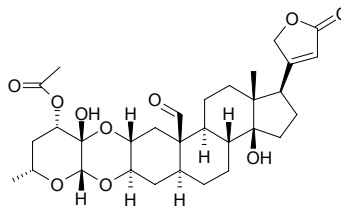
[512-85-6]  $C_{10}H_{16}O_2$  (168.24). Pale yellow oil, mp 2.5°C, bp 115°C/15mmHg,  $[\alpha]_D^{25} = 0^\circ$  ( $c = 3.0$ ,  $CHCl_3$ ). **Pharm:** Antibacterial; antimalarial; anthelmintic; toxin; antitrypanosomal (*in vitro*, epimastigotes of *Trypanosoma cruzi*, MLC = 23  $\mu\text{mol/L}$ )<sup>[4619]</sup>. **Source:** TU JING JIE *Chenopodium ambrosioides* (fresh aerial part including immature seed: yield = 0.0113%fw)<sup>[4619]</sup>, XIANG LI *Chenopodium botrys*. **Ref:** 6, 658, 4619.

**1843 Aschantin**

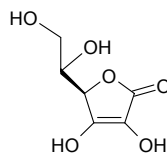
[13060-15-6]  $C_{22}H_{24}O_7$  (400.43). **Source:** WANG CHUN YU LAN *Magnolia biondii* [Syn. *Magnolia fargesii*]. **Ref:** 543.

**1844 Asclepin**

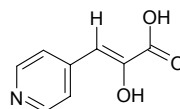
[36573-63-4]  $C_{31}H_{42}O_{10}$  (574.67). mp 308~309°C,  $[\alpha]_D = +10^\circ$  (chloroform). **Pharm:** Cardiotonic (increases normal or prostrate myocardial contractility);  $LD_{50}$  (cat, iv) = 0.236mg/kg. **Source:** LIAN SHENG GUI ZI HUA *Asclepias curassavica*. **Ref:** 658, 661.

**1845 Ascorbic acid**

Vitamin C  $C_6H_8O_6$  (176.13). Colorless crystals, mp 190~192°C (dec),  $[\alpha]_D^{25} = +20.5^\circ \sim +21.5^\circ$  (water), soluble in water, EtOH.<sup>[5507]</sup> **Pharm:** Antioxidant (DPPH scavenger,  $EC_{50} = (3.35 \pm 0.01) \mu\text{g/mL}$ )<sup>[2565]</sup>; antioxidant (SOD-like activity,  $EC_{50} = 34.6 \mu\text{mol/L}$ )<sup>[3408]</sup>; antioxidant (DPPH scavenger,  $EC_{50} = 6.25 \mu\text{mol/L}$ )<sup>[3408]</sup>; antioxidant (DPPH scavenger,  $IC_{50} = 16.5 \mu\text{mol/L}$ )<sup>[3771]</sup>; antioxidant (DPPH scavenger, TLC, MIA < 0.10  $\mu\text{g}$ ,  $IC_{50} = 18 \mu\text{g/mL}$ )<sup>[3785, 5247]</sup>; antioxidant (Takamatsu DCFH method, myelomonocytic HL-60 cells,  $IC_{50} = (1.9 \pm 0.7) \mu\text{g/mL}$ )<sup>[3850]</sup>; antioxidant (DPPH scavenger,  $EC_{50} = 1.6 \mu\text{g/mL} = 9.1 \mu\text{mol/L}$ )<sup>[4154]</sup>; antioxidant (DPPH scavenger,  $IC_{50} = 10.3 \mu\text{mol/L}$ )<sup>[4376]</sup>; antioxidant (DPPH scavenger,  $IC_{50} = 16.5 \mu\text{mol/L}$ )<sup>[4379]</sup>; antioxidant (DPPH scavenger,  $IC_{50} = (2.49 \pm 0.32) \mu\text{g/mL}$ )<sup>[5307]</sup>; antioxidant (DPPH scavenger,  $IC_{50} = 16.5 \mu\text{mol/L}$ )<sup>[5483]</sup>; antioxidant (hydroxyl radical scavenger,  $IC_{50} = 51.8 \mu\text{mol/L}$ , superoxide anion radical scavenger,  $IC_{50} = 86.2 \mu\text{mol/L}$ )<sup>[4289]</sup>; cytotoxic (XTT assay, HL-60 cells,  $IC_{50} > 10.0 \mu\text{g/mL}$ )<sup>[3850]</sup>; antibacterial; anti-infective; antidote; antihypercholesterolemic; inhibits production of carcinogen; induces tissue to produce collagen; hematopoietic. **Source:** BAI GUO *Ginkgo biloba*, CU LIU GUO *Hippophae rhamnoides* (dried ripe fruit: content = 0.95%<sup>[5508]</sup>) GOU QI ZI *Lycium chinense*, SHAN ZHA *Crataegus pinnatifida* (dried ripe fruit: mean content of 2 origins = 0.07%<sup>[5508]</sup>), YUN NAN SHAN ZHA *Crataegus scabrifolia* (dried ripe fruit: mean content of 2 origins = 0.18%<sup>[5508]</sup>). **Ref:** 2, 658, 660, 2565, 3408, 3771, 3785, 3850, 4154, 4289, 4376, 4379, 5247, 5307, 5483, 5507, 5508.

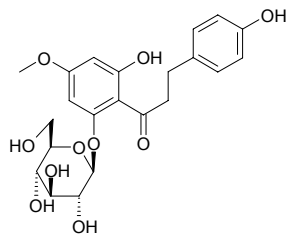
**1846 Ascocochine**

(Z)-2-Hydroxy-3-(4-pyridyl)-2-propenoic acid  $C_8H_7NO_3$  (165.15). **Pharm:** Herbicidal (selective herbicide)<sup>[3772]</sup>. **Source:** *Ascochyta sonchi*. **Ref:** 3772.

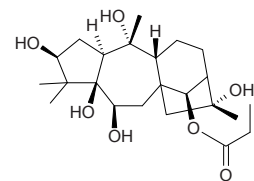


**1847 Asebotin**

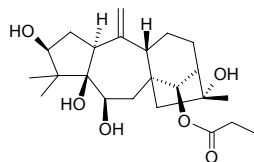
Asebotoside; Lyonotin C<sub>22</sub>H<sub>26</sub>O<sub>10</sub> (450.45). Source: MENG GU FENG MAO JU *Saussurea mongolica*. Ref: 4958.

**1848 Asebotoxin I**

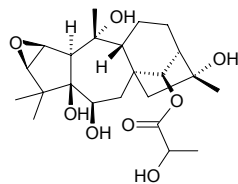
C<sub>23</sub>H<sub>38</sub>O<sub>7</sub> (426.56). Source: RI BEN MA ZUI MU *Pieris japonica* (the compound was separated from the plant in 1970). Ref: 5505.

**1849 Asebotoxin II**

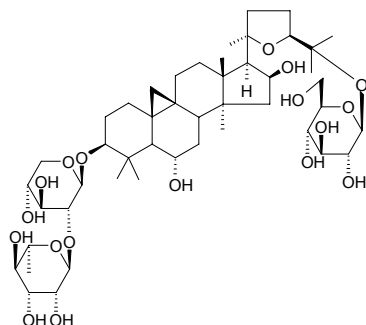
[23984-18-1] C<sub>23</sub>H<sub>36</sub>O<sub>6</sub> (408.54). Pharm: Supertoxic agent. Source: RI BEN MA ZUI MU *Pieris japonica* (the compound was isolated from the plant in 1970)<sup>[5505]</sup>. Ref: 658, 5505.

**1850 Asebotoxin III**

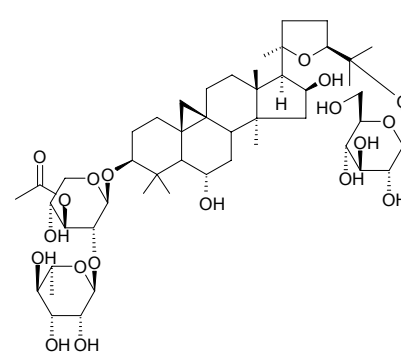
C<sub>23</sub>H<sub>36</sub>O<sub>8</sub> (440.54). White solid. Source: JIN YE ZI *Craibiodendron yunnanese* (leaf), RI BEN MA ZUI MU *Pieris japonica* (the compound was isolated from the plant in 1970)<sup>[5505]</sup>. Ref: 4575, 5505.

**1851 Asernestioside A**

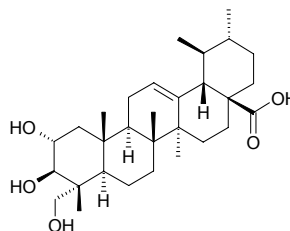
C<sub>47</sub>H<sub>78</sub>O<sub>18</sub> (931.13). Source: SUO GUO HUANG QI *Astragalus ernestii* (root). Ref: 660.

**1852 Asernestioside B**

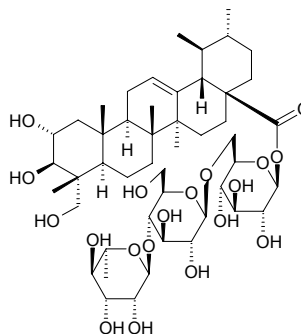
C<sub>49</sub>H<sub>80</sub>O<sub>19</sub> (973.17). Source: SUO GUO HUANG QI *Astragalus ernestii* (root). Ref: 660.

**1853 Asiatic acid**

[464-92-6] C<sub>30</sub>H<sub>48</sub>O<sub>5</sub> (488.71). Pharm: Aids in generation of neuroglia; promotes wound healing (external use); promotes cuticle cornification; stimulates granulation; induces gene expression changes (hmn fibroblast, IC<sub>50</sub> = (60±5)μg/mL)<sup>[5430]</sup>. Source: BING PIAN *Dryobalanops aromatica*, JI XUE CAO *Centella asiatica* (dried whole herb: content scope of 3 origins = 0.09%~0.14%, mean content = 0.114%<sup>[5508]</sup>). Ref: 2, 5430, 5508.

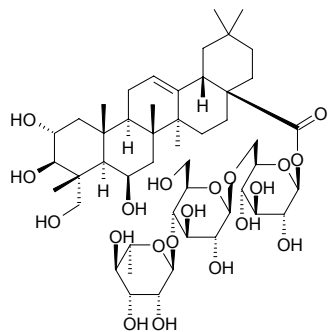
**1854 Asiaticoside**

2α,3β,23-Trihydroxyurs-12-en-28-oic acid *O*-α-*L*-rhamnopyranosyl-(1→4)-*O*-β-*D*-glucopyranosyl-(1→6)-β-*D*-glucopyranosyl ester; Centellasaponin A [16830-15-2] C<sub>48</sub>H<sub>78</sub>O<sub>19</sub> (959.15). mp 230~233°C, [α]<sub>D</sub><sup>20</sup> = -14° (EtOH). Pharm: Anti-inflammatory (iNOS inhibitor, rats, during gastric ulcer healing, Asiaticoside (5mg/kg and 10mg/kg) were orally administered to rats with acetic acid-induced gastric ulcers to reduce the size of the ulcers at 1d, 3d and 7d)<sup>[4089]</sup>; induces gene expression changes (hmn fibroblast, IC<sub>50</sub> > 400μg/mL)<sup>[5430]</sup>. Source: JI XUE CAO *Centella asiatica* (dried whole herb: content scope of 9 origins = trace~1.14%, mean content = 0.539%<sup>[5508]</sup>), SAN YE MU TONG *Akebia trifoliata* (stem). Ref: 6, 4089, 4135, 4545, 5430, 5508.

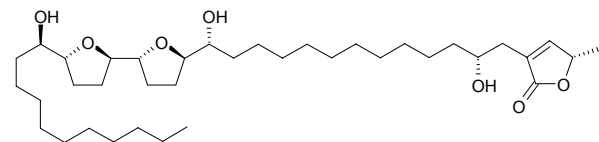


**1855 Asiaticoside B**

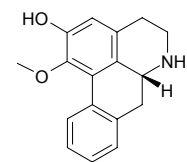
$C_{48}H_{78}O_{20}$  (975.14). Source: JI XUE CAO *Centella asiatica* (aerial parts). Ref: 4135.

**1856 Asimicin**

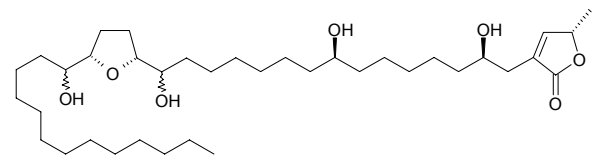
$C_{37}H_{66}O_7$  (622.93). Colorless oil,  $[\alpha]_D^{25} = +32.6^\circ$  ( $c = 0.09$ ,  $CHCl_3$ ). Pharm: Cytotoxic (hmn hepatoma cell lines HepG2,  $IC_{50} = 0.0628\text{ng/mL}$ , control Adriamycin,  $IC_{50} = 0.241\mu\text{g/mL}$ ; hmn hepatoma cells transfected with hepatitis B virus Hep2,2,15,  $IC_{50} = 0.066\text{ng/mL}$ , Adriamycin,  $IC_{50} = 0.450\mu\text{g/mL}$ ). Source: CI GUO FAN LI ZHI *Annona muricata*. Ref: 5377.

**1857 Asimilobine**

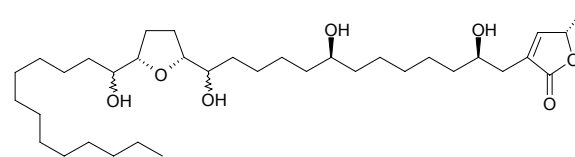
(-)-Asimilobine [6871-21-2]  $C_{17}H_{17}NO_2$  (267.33). mp 177~179°C. Pharm: Antimalarial (*Plasmodium falciparum*, chloroquine-sensitive strain D6,  $ED_{50} = 950\text{ng/mL}$ , chloroquine-endured strain W2,  $ED_{50} = 470\text{ng/mL}$ ); 5-HT receptor antagonist (rbt, *in vitro* aortal contraction induced by 5-HT). Source: DA ZAO *Ziziphus jujuba*, HOU PO *Magnolia officinalis*, YOU GOU YING ZHAO *Artabotrys uncinatus* (root,stem,leaf)<sup>[3083]</sup>. Ref: 2, 625, 1480, 3083.

**1858 Asitrilobin A**

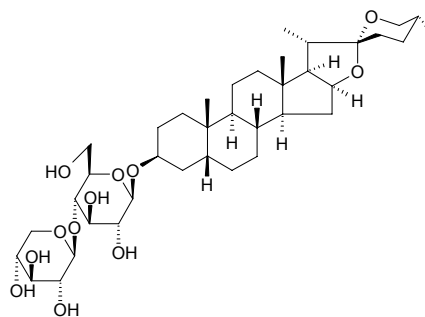
$C_{37}H_{68}O_7$  (624.95). White amorphous powder, mp 79.3~82.5°C,  $[\alpha]_D^{22} = -2.6^\circ$  ( $c = 0.03$ ,  $CH_2Cl_2$ ). Source: PAO PAO SHU *Asimina triloba*. Ref: 1857.

**1859 Asitrilobin B**

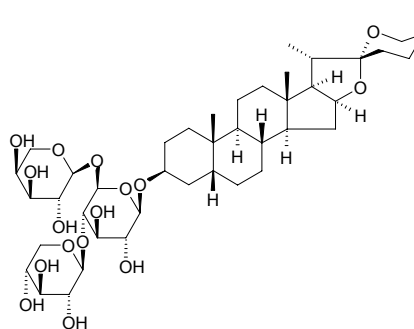
$C_{35}H_{64}O_7$  (596.90). White amorphous powder, mp 65.3~68.4°C,  $[\alpha]_D^{22} = +23.3^\circ$  ( $c = 0.03$ ,  $CH_2Cl_2$ ). Source: PAO PAO SHU *Asimina triloba*. Ref: 1857.

**1860 Aspafilioside A**

3-*O*-[ $\beta$ -*D*-Xylopyranosyl(1 $\rightarrow$ 4)]-[ $\beta$ -*D*-glucopyranosyl]--(25*S*)-5 $\beta$ -spirostan-3 $\beta$ -ol [72947-73-0]  $C_{38}H_{62}O_{12}$  (710.91). White acicular crystals (methanol), mp 210~212°C,  $[\alpha]_D^{14} = -36.5^\circ$  ( $c = 0.09$ , chloroform-methanol);  $[\alpha]_D^{21} = -70.2^\circ$  ( $c = 0.20$ ,  $C_5H_5N$ ). Pharm: Spermaticidal (inhibits activity of hmn sperm *in vitro*, 1mg/mL, activity down to 56%, 2mg/mL, activity down to 0%); cytotoxic (*in vitro*, HO-8910,  $IC_{50} = (24.6\pm 0.7)\mu\text{mol/L}$ , Vincristine,  $IC_{50} = (25.1\pm 1.9)\mu\text{mol/L}$ ; Bel-7405,  $IC_{50} = (30.8\pm 2.6)\mu\text{mol/L}$ , Vincristine,  $IC_{50} = (31.4\pm 3.4)\mu\text{mol/L}$ )<sup>[4975]</sup>. Source: SHI DIAO BAI *Asparagus officinalis*, TU BAI BU *Asparagus filicinus*, GE BI TIAN MEN *Asparagus gobicus* (root). Ref: 159, 1159, 4975.

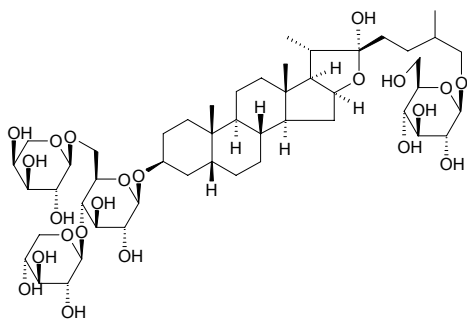
**1861 Aspafilioside B**

[131123-73-4]  $C_{43}H_{70}O_{16}$  (843.03). White acicular crystals, mp 180~182°C (methanol),  $[\alpha]_D^{14} = -47.3^\circ$  ( $c = 0.07$ ,  $CHCl_3$ -MeOH). Pharm: Spermaticidal (hmn, 1mg/mL, spermatid activity = 18%, 2mg/mL, spermatid activity = 0%). Source: SHI DIAO BAI *Asparagus officinalis*, TU BAI BU *Asparagus filicinus*. Ref: 159, 1159.

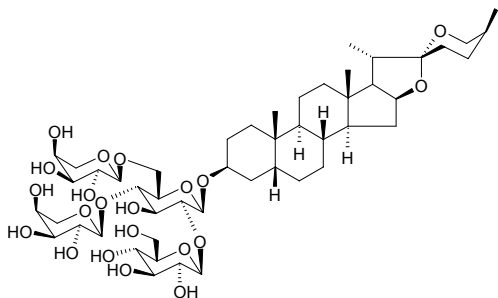


**1862 Aspafiloside C**

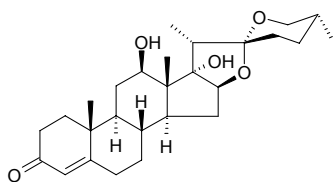
[131123-74-5]  $C_{49}H_{82}O_{22}$  (1023.19). White amorphous powder (MeOH), mp 178~180°C,  $[\alpha]_D^{20} = -36.5^\circ$  ( $c = 0.09$ ,  $CHCl_3$ -MeOH). **Pharm:** Spermaticidal (inhibits activity of hmn sperm *in vitro*, 1mg/mL, activity down to 14%, 2mg/mL, activity down to 0%). **Source:** XIAO BAI BU *Asparagus officinalis*, TU BAI BU *Asparagus filicinus*. **Ref:** 159, 1159.

**1863 Asparacoside**

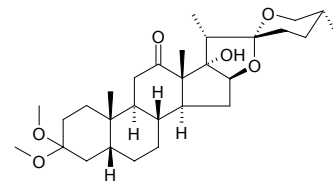
(25*S*)-5β-Spirostan-3β-ol-3-*O*-α-*L*-arabinopyranosyl-(1→6)-[α-*L*-arabinopyranosyl-(1→4)]-[β-*D*-glucopyranosyl-(1→2)]-β-*D*-glucopyranoside  $C_{49}H_{80}O_{21}$  (1005.17). White powder,  $[\alpha]_D^{20} = -35.2^\circ$  ( $c = 0.57$ , MeOH:CHCl<sub>3</sub> = 1:1). **Pharm:** Cytotoxic (*in vitro*, Lu1, IC<sub>50</sub> = 4.2μg/mL (4.2μmol/L), LNCaP, IC<sub>50</sub> = 10.1μg/mL (10.1μmol/L), Col2, IC<sub>50</sub> = 5.4μg/mL (5.4μmol/L), HUVEC, IC<sub>50</sub> = 4.1μg/mL (4.1μmol/L), KB, IC<sub>50</sub> = 4.8μg/mL (4.8μmol/L), HOG.R5, IC<sub>50</sub> < 10μg/mL (< 10μmol/L), control Ellipticine: Lu1, IC<sub>50</sub> = 0.02μg/mL (0.08μmol/L), LNCaP, IC<sub>50</sub> = 0.8μg/mL (3.25μmol/L), Col2, IC<sub>50</sub> = 0.3μg/mL (1.22μmol/L), HUVEC, IC<sub>50</sub> = 0.09μg/mL (0.37μmol/L), KB, IC<sub>50</sub> = 0.04μg/mL (0.16μmol/L), HOG.R5, IC<sub>50</sub> = 0.02μg/mL (0.08μmol/L)). **Source:** TIAN MEN DONG *Asparagus cochinchinensis* [Syn. *Asparagus lucidus*] (dried root: yield = 0.015%dw). **Ref:** 3009.

**1864 Asparacosin A**

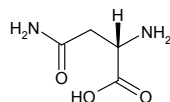
(25*R*)-12β,17α-Dihydroxyspirost-4-en-3-one  $C_{27}H_{40}O_5$  (444.62). Colorless flake,  $[\alpha]_D^{20} = -13.0^\circ$  ( $c = 0.53$ , MeOH). **Pharm:** Cytotoxic (*in vitro*, KB, IC<sub>50</sub> = 10.7μg/mL (24.1μmol/L), control Ellipticine, IC<sub>50</sub> = 0.04μg/mL (0.16μmol/L)), cytotoxic inactive (Lu1, LNCaP, Col2, HUVEC, IC<sub>50</sub> > 20μg/mL). **Source:** TIAN MEN DONG *Asparagus cochinchinensis* [Syn. *Asparagus lucidus*] (dried root: yield = 0.0074%dw). **Ref:** 3009.

**1865 Asparacosin B**

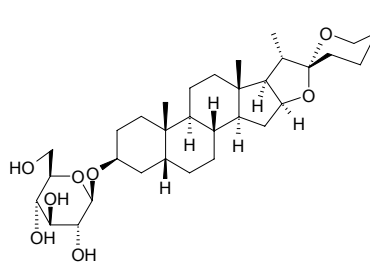
(25*R*)-3,3-Dimethoxy-17α-hydroxyspirostan-3-ol-12-one  $C_{29}H_{46}O_6$  (490.69). Colorless flake,  $[\alpha]_D^{20} = -21.7^\circ$  ( $c = 0.73$ , MeOH). **Pharm:** Cytotoxic inactive (KB, Col2, LNCaP, Lu1, HUVEC, IC<sub>50</sub> > 20μg/mL). **Source:** TIAN MEN DONG *Asparagus cochinchinensis* [Syn. *Asparagus lucidus*] (dried root: yield = 0.00036%dw). **Ref:** 3009.

**1866 L-Asparagine**

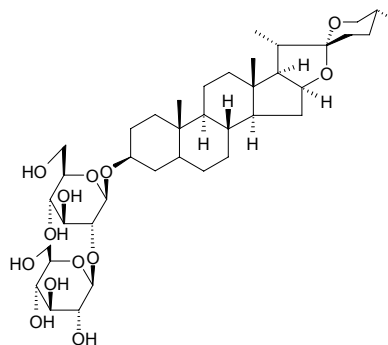
[7006-34-0]  $C_4H_8N_2O_3$  (132.32). Hydrate, trapezoidal half-plane crystals, mp 234~235°C,  $[\alpha]_D^{20} = -5.42^\circ$  ( $c = 1.3$ );  $[\alpha]_D^{20} = -9.3^\circ$  ( $c = 1\text{mol/L}$ , 1mol/L hydrochloric acid). **Pharm:** Antineoplastic; antitussive (animal model); enhances myocardial contractility with peripheral anapetia (iv); slows heart rate and enhances amount of urine (iv); antihypertensive; diuretic; nutrient. **Source:** CHANG GUAN XUAN CAO *Hemerocallis longituba*, LU DI MIAN *Gossypium hirsutum* [Syn. *Gossypium mexicanum*], TIAN MEN DONG *Asparagus cochinchinensis* [Syn. *Asparagus lucidus*], XIAO BAI BU *Asparagus officinalis*, XIAO GUO KA FEI *Coffea arabica*, XUAN SHEN *Scrophularia ningpoensis*, *Glycine* sp., *Vicia* sp. **Ref:** 658, 661.

**1867 Asparoside A**

[14835-43-9]  $C_{33}H_{54}O_8$  (578.79). **Source:** XIAO BAI BU *Asparagus officinalis*. **Ref:** 658.

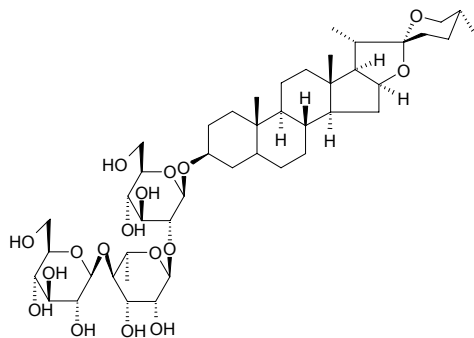
**1868 Asparanin A**

$C_{39}H_{64}O_{13}$  (740.94). **Source:** SHANG JU TIAN MEN DONG *Asparagus adscendens*. **Ref:** 697.

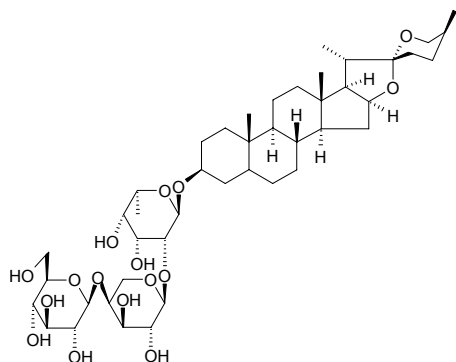


**1869 Asparanin B<sub>1</sub>**

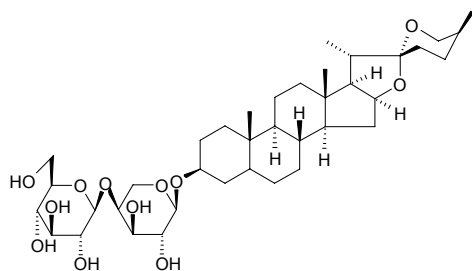
$C_{45}H_{74}O_{17}$  (887.08). Source: SHANG JU TIAN MEN DONG *Asparagus adscendens*. Ref: 697.

**1870 Asparanin B<sub>2</sub>**

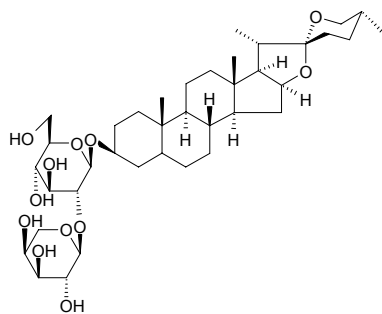
$C_{44}H_{72}O_{16}$  (857.05). Source: WAN QU TIAN MEN DONG *Asparagus curillus*. Ref: 697.

**1871 Asparanin B<sub>3</sub>**

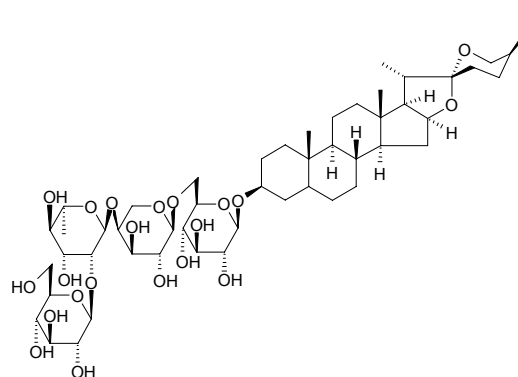
$C_{38}H_{62}O_{12}$  (710.91). Source: WAN QU TIAN MEN DONG *Asparagus curillus*. Ref: 697.

**1872 Asparanin B<sub>4</sub>**

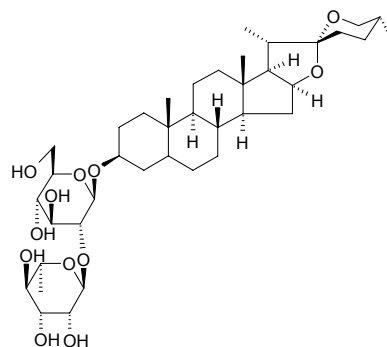
$C_{38}H_{62}O_{12}$  (710.91). Source: WAN QU TIAN MEN DONG *Asparagus curillus*. Ref: 697.

**1873 Asparanin B<sub>5</sub>**

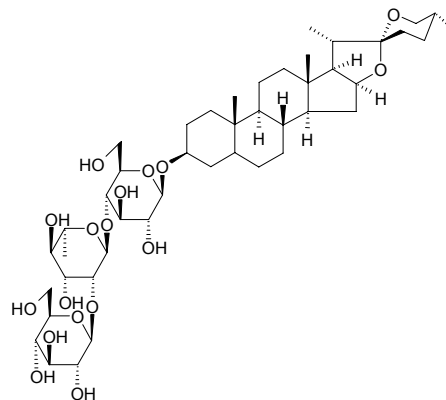
$C_{50}H_{82}O_{21}$  (1019.20). Source: WAN QU TIAN MEN DONG *Asparagus curillus*. Ref: 697.

**1874 Asparanin B<sub>6</sub>**

$C_{39}H_{64}O_{12}$  (724.94). Source: WAN QU TIAN MEN DONG *Asparagus curillus*. Ref: 697.

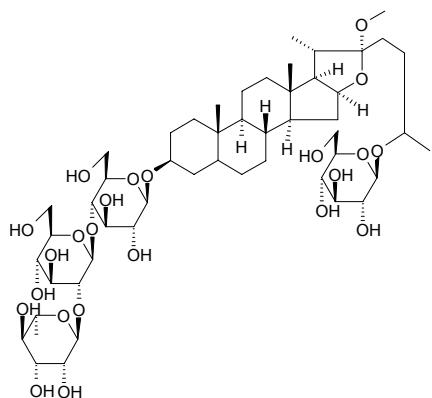
**1875 Asparanin B<sub>7</sub>**

$C_{45}H_{74}O_{17}$  (887.71). Source: WAN QU TIAN MEN DONG *Asparagus curillus*. Ref: 697.

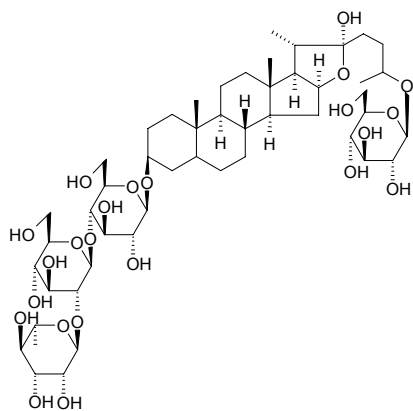


**1876 Asparanin B<sub>8</sub>**

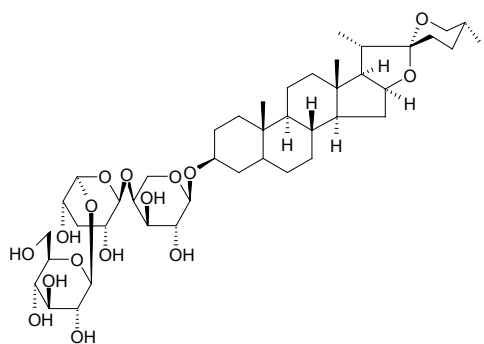
$C_{51}H_{86}O_{23}$  (1067.24). Source: WAN QU TIAN MEN DONG *Asparagus curillus*. Ref: 697.

**1877 Asparanin B<sub>9</sub>**

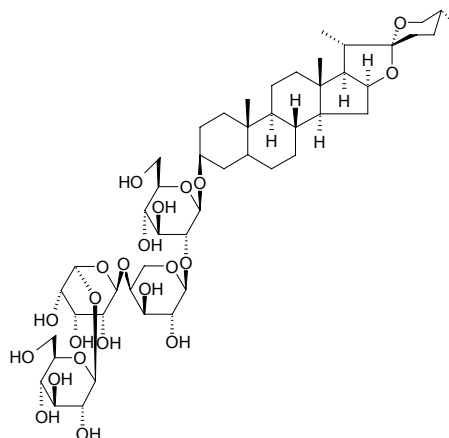
$C_{50}H_{84}O_{23}$  (1053.21). Source: WAN QU TIAN MEN DONG *Asparagus curillus*. Ref: 697.

**1878 Asparanin C**

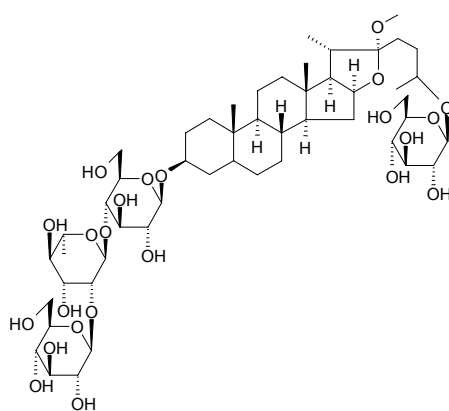
$C_{43}H_{70}O_{16}$  (843.03). Source: SHANG JU TIAN MEN DONG *Asparagus adscendens*. Ref: 697.

**1879 Asparanin D**

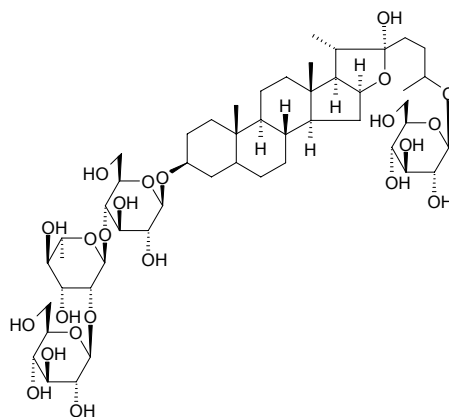
$C_{49}H_{80}O_{22}$  (1021.17). Source: SHANG JU TIAN MEN DONG *Asparagus adscendens*. Ref: 697.

**1880 Asparaside A**

$C_{51}H_{86}O_{23}$  (1067.24). Source: SHANG JU TIAN MEN DONG *Asparagus adscendens*. Ref: 697.

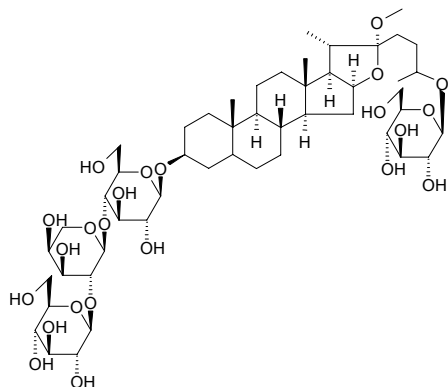
**1881 Asparaside B<sub>1</sub>**

$C_{50}H_{84}O_{23}$  (1053.21). Source: SHANG JU TIAN MEN DONG *Asparagus adscendens*. Ref: 697.

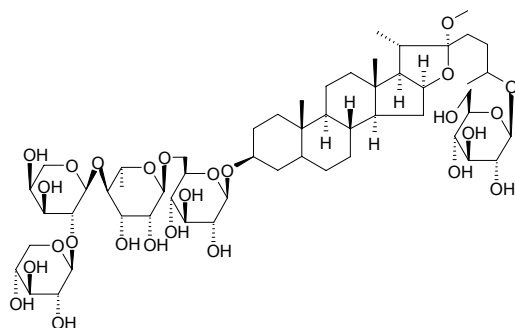


**1882 Asparaside B<sub>2</sub>**

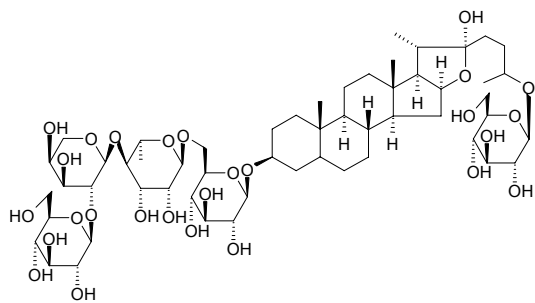
$C_{50}H_{84}O_{23}$  (1053.21). Source: WAN QU TIAN MEN DONG *Asparagus curillus*. Ref: 697.

**1883 Asparaside C**

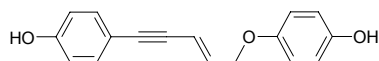
$C_{55}H_{92}O_{26}$  (1169.33). Source: SHANG JU TIAN MEN DONG *Asparagus adscendens*. Ref: 697.

**1884 Asparaside D**

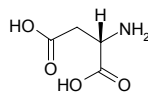
$C_{55}H_{92}O_{27}$  (1185.33). Source: SHANG JU TIAN MEN DONG *Asparagus adscendens*. Ref: 697.

**1885 Asparenydiol**

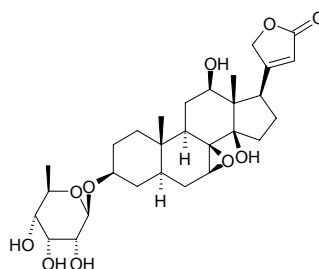
$C_{17}H_{16}O_3$  (268.32). Pharm: Cytotoxic (*in vitro*, KB,  $IC_{50}$  = 2.4  $\mu$ g/mL (8.5  $\mu$ mol/L), Lu1,  $IC_{50}$  = 19.8  $\mu$ g/mL), HOG.R5,  $IC_{50}$  < 5  $\mu$ g/mL (< 18  $\mu$ mol/L), control Ellipticine: KB,  $IC_{50}$  = 0.04  $\mu$ g/mL (0.16  $\mu$ mol/L), Lu1,  $IC_{50}$  = 0.02  $\mu$ g/mL (0.08  $\mu$ mol/L), HOG.R5,  $IC_{50}$  = 0.02  $\mu$ g/mL (0.08  $\mu$ mol/L)); cytotoxic inactive (Col2, LNCaP, HUVEC,  $IC_{50}$  > 20  $\mu$ g/mL). Source: TIAN MEN DONG *Asparagus cochinchinensis* [Syn. *Asparagus lucidus*] (dried root: yield = 0.00004% dw). Ref: 3009.

**1886 L-Aspartic acid**

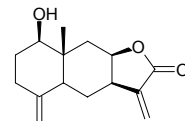
[56-84-8]  $C_4H_7NO_4$  (133.10). Pharm: CNS stimulant (high dose); nutrient. Source: GUANG GUO GAN CAO *Glycyrrhiza glabra*, BAN XIA *Pinellia ternata* (dried tuber: content scope of 4 origins = 1.65%~2.40%, mean content = 1.98%)<sup>[5521]</sup>, *Coffea* sp. Ref: 658, 5521.

**1887 Aspecioside**

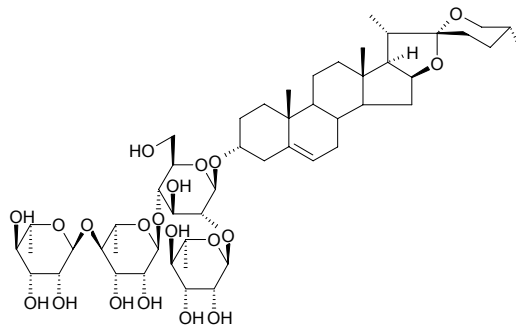
$C_{29}H_{42}O_{10}$  (550.65). Pharm: Toxin (vertebrate). Source: MEI LI MA LI JIN *Asclepias speciosa*, XU LI YA MA LI JIN *Asclepias syriaca*. Ref: 658.

**1888 Asperilin**

$C_{15}H_{20}O_3$  (248.32). Source: CAO YE YI WA JU *Iva asperifolia*, JIN FEI CAO *Inula japonica*, MEI LI TE LE JU *Telekia speciosa*. Ref: 1521, 5422.

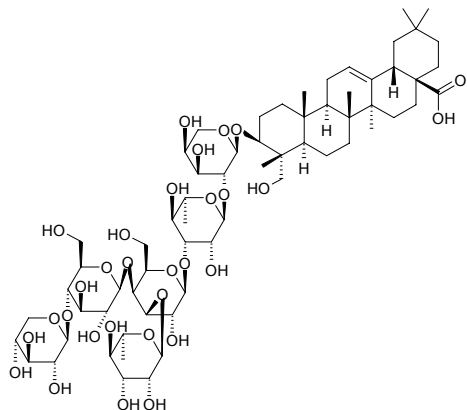
**1889 Asperin**

$C_{51}H_{82}O_{20}$  (1015.21). Source: CHUAN LONG SHU YU *Dioscorea nipponica*. Ref: 660.

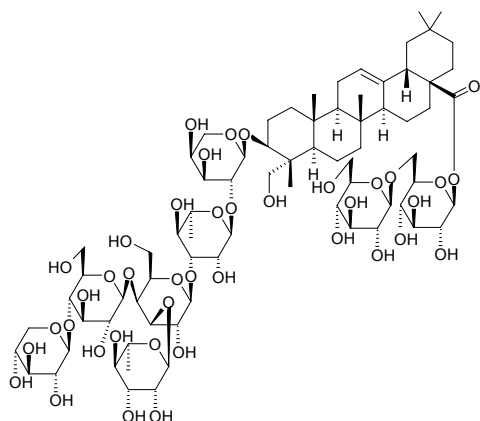


**1890 Asperosaponin F**

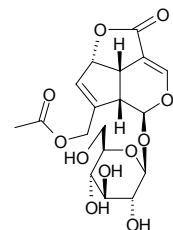
3-*O*-[ $\beta$ -*D*-Xylopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-(1 $\rightarrow$ 4)][ $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-galactopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl]-hederagenin C<sub>64</sub>H<sub>104</sub>O<sub>30</sub> (1353.52). White powder, mp 244~247°C, soluble in methanol, pyridine and water. Source: CHUAN XU DUAN *Dipsacus asperoides*. Ref: 307.

**1891 Asperosaponin H<sub>1</sub>**

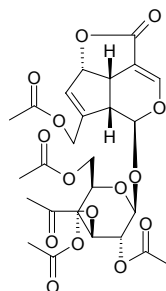
3-*O*-[ $\beta$ -*D*-Xylopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)][ $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-galactopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-rabinopyranosyl]-hederagenin-28-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside C<sub>76</sub>H<sub>124</sub>O<sub>40</sub> (1677.81). White powder, mp 233~236°C, soluble in methanol, pyridine and water. Source: CHUAN XU DUAN *Dipsacus asperoides*. Ref: 307.

**1892 Asperuloside**

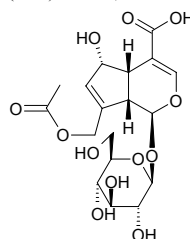
[14259-45-1] C<sub>18</sub>H<sub>22</sub>O<sub>11</sub> (414.37). mp 125~127°C. Pharm: Plant growth and germination inhibitor; laxative (mus, ED<sub>50</sub> = 0.24g/kg). Source: BA XIAN CAO *Galium aparine*, DA CHE QIAN *Plantago major*, JI SHI TENG *Paederia scandens*, JIAO RANG MU *Daphniphyllum macropodum*, PENG ZI CAI *Galium verum*, XIANG CHE YE CAO *Asperula odorata*, XIE JI CU YE MU *Lasianthus wallichii* (leaf), ZHI ZI *Gardenia jasminoides* [Syn. *Gardenia florida*], *Escallonia* sp. Ref: 6, 400, 626, 658, 660, 4238.

**1893 Asperuloside tetraacetate**

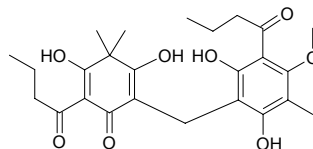
C<sub>26</sub>H<sub>30</sub>O<sub>15</sub> (582.52). Source: BA JI TIAN *Morinda officinalis*. Ref: 660.

**1894 Asperulosidic acid**

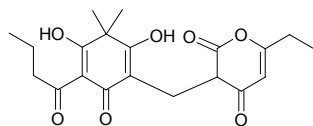
[25368-11-0] C<sub>18</sub>H<sub>24</sub>O<sub>12</sub> (432.38). Source: BAI HUA SHE SHE CAO *Oldenlandia diffusa* [Syn. *Hedyotis diffusa*], HAI BA JI *Morinda citrifolia* (fruit). Ref: 7, 4542.

**1895 Aspidin**

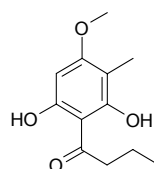
[584-28-1] C<sub>25</sub>H<sub>32</sub>O<sub>8</sub> (460.53). mp 125°C. Pharm: Anthelmintic (tapeworm and hookworm); toxin (smooth muscle of invertebrate). Source: AO DI LI LIN MAO JUE *Dryopteris austriaca*, GUAN ZHONG *Dryopteris crassirhizoma*, MAO GUAN ZHONG *Dryopteris championii*. Ref: 6, 658.

**1896 Aspidinin**

[19489-48-6] C<sub>21</sub>H<sub>26</sub>O<sub>7</sub> (390.44). mp 111~112°C. Source: GUAN ZHONG *Dryopteris crassirhizoma*. Ref: 6.

**1897 Aspidinol**

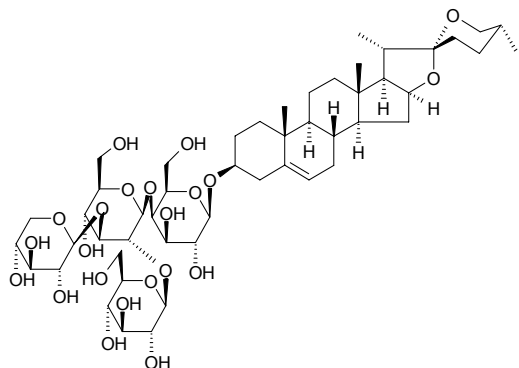
[519-40-4] C<sub>12</sub>H<sub>16</sub>O<sub>4</sub> (224.26). mp 156~161°C. Pharm: Anthelmintic; antibacterial. Source: AO DI LI LIN MAO JUE *Dryopteris austriaca*, GUAN ZHONG *Dryopteris crassirhizoma*, MIAN MA *Dryopteris filix-mas*, TI GAI JUE *Athyrium filix-femina*. Ref: 6, 658.



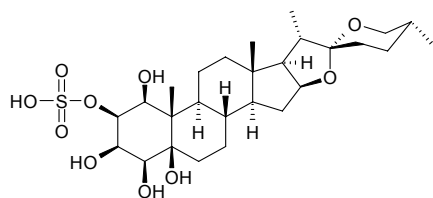


**1898 Aspidistrin**

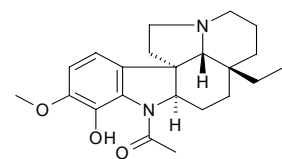
$C_{50}H_{80}O_{22}$  (1033.18). mp 265~267°C (dec). Source: BAI MAO TENG *Solanum lyratum*, ZHI ZHU BAO DAN *Aspidistra elatior*. Ref: 6, 660.

**1899 Aspidistrogenin A**

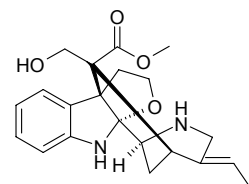
(25S)-Spirost-1 $\beta$ ,2 $\beta$ ,3 $\beta$ ,4 $\beta$ ,5 $\beta$ -pentol 2-sulfate  $C_{27}H_{44}O_{10}S$  (560.71). White crystals. Source: ZHI ZHU BAO DAN *Aspidistra elatior*. Ref: 891.

**1900 Aspidocarpine**

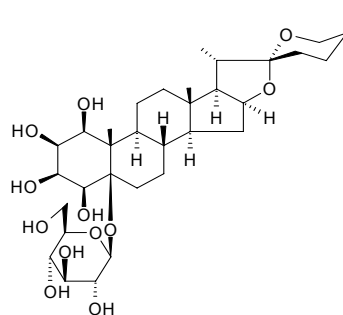
[466-45-5]  $C_{22}H_{30}N_2O_3$  (370.50). Prismatic crystals, mp 168.5~169.5°C,  $[\alpha]_D^{25} = +140^\circ$  (c = 2.2,  $CHCl_3$ ),  $pK_a = 6.55$ . Source: *Aspidosperma album*, *Aspidosperma meglacarbon*, *Aspidosperma formasanum*, *Aspidosperma marcgravianum*, *Aspidosperma neblinae*. Ref: 2099.

**1901 Aspidodasycarpine**

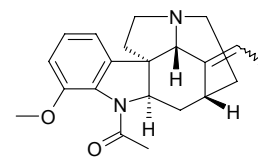
[2744-47-0]  $C_{21}H_{26}N_2O_4$  (370.45). Pharm: Antipyretic. Source: CU MAO GUO BAI JIAN MU *Aspidosperma dasycarbon*, JIAN BAI JIAN MU *Aspidosperma cuspa*. Ref: 658.

**1902 Aspidoside A**

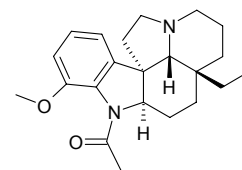
1 $\beta$ ,1 $\beta$ ,3 $\beta$ ,4 $\beta$ ,5 $\beta$ -Pentahydroxy-spirost-25(27)-ene5-O- $\beta$ -D-glucopyranoside  $C_{33}H_{52}O_{12}$  (640.78). White crystals. Source: ZHI ZHU BAO DAN *Aspidistra elatior*. Ref: 891, 2099.

**1903 Aspidospermatine**

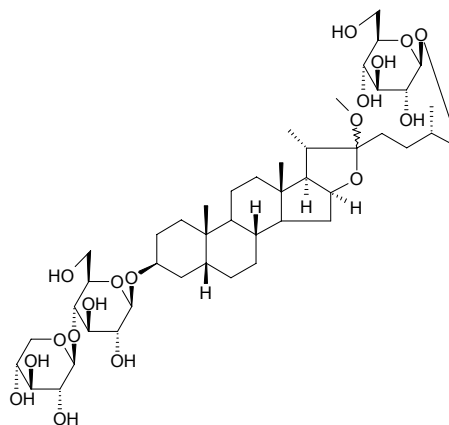
$C_{21}H_{26}N_2O_2$  (338.45). Pharm: Antiasthmatic. Source: PU TONG BAI JIAN MU *Aspidosperma quebracho-blanco*. Ref: 658.

**1904 Aspidospermine**

[466-49-9]  $C_{22}H_{30}N_2O_2$  (354.50). Pharm: Antibacterial; diuretic; respiratory stimulant; LD<sub>50</sub> (mus, ip) = 40mg/kg. Source: PU TONG BAI JIAN MU *Aspidosperma quebracho-blanco*, LENG ZHUANG BAI JIAN MU *Aspidosperma rhombeosignatum*. Ref: 658.

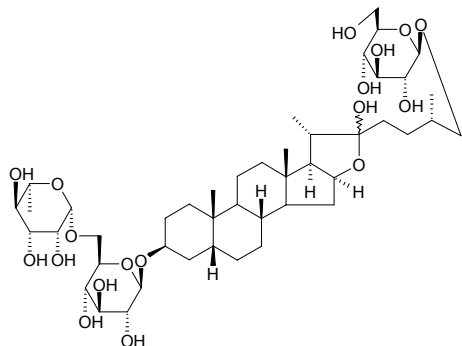
**1905 Asp-IV**

$C_{45}H_{76}O_{18}$  (905.10). Source: TIAN MEN DONG *Asparagus cochinchinensis* [Syn. *Asparagus lucidus*]. Ref: 660.

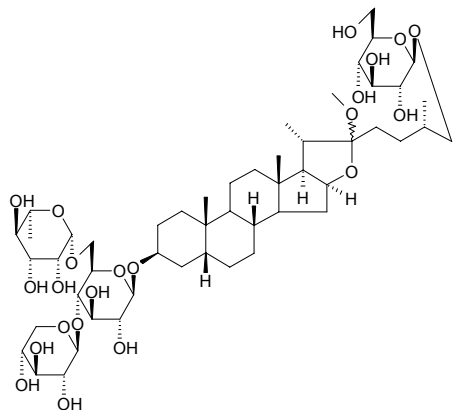


**1906 Asp-V**

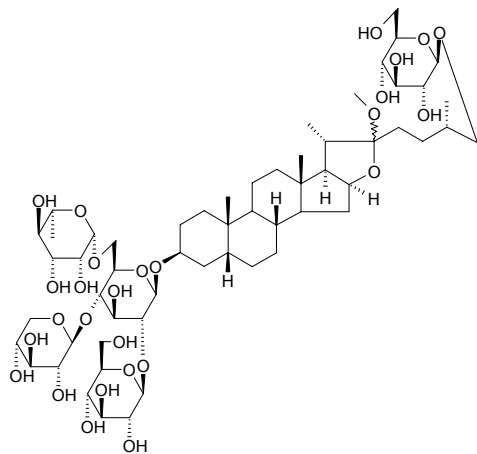
$C_{45}H_{76}O_{18}$  (905.10). Source: TIAN MEN DONG *Asparagus cochinchinensis* [Syn. *Asparagus lucidus*]. Ref: 660.

**1907 Asp-VI**

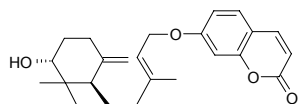
$C_{51}H_{86}O_{22}$  (1051.24). Source: TIAN MEN DONG *Asparagus cochinchinensis* [Syn. *Asparagus lucidus*]. Ref: 660.

**1908 Asp-VII**

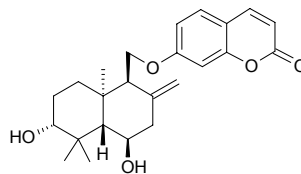
$C_{57}H_{96}O_{27}$  (1213.38). Source: TIAN MEN DONG *Asparagus cochinchinensis* [Syn. *Asparagus lucidus*]. Ref: 660.

**1909 Assafoetidin**

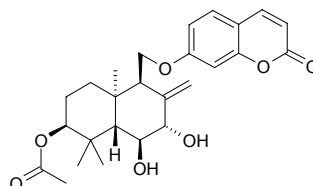
[115361-83-6]  $C_{24}H_{30}O_4$  (382.50). Source: A WEI *Ferula assafoetida*. Ref: 7.

**1910 Assafoetidol A**

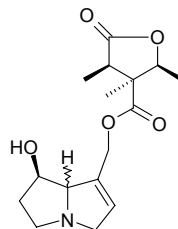
$C_{24}H_{30}O_5$  (398.50). Amorphous solid,  $[\alpha]_D = -80.0^\circ$  ( $c = 0.2$ , MeOH). Source: A WEI *Ferula assafoetida* (root). Ref: 5243.

**1911 Assafoetidol B**

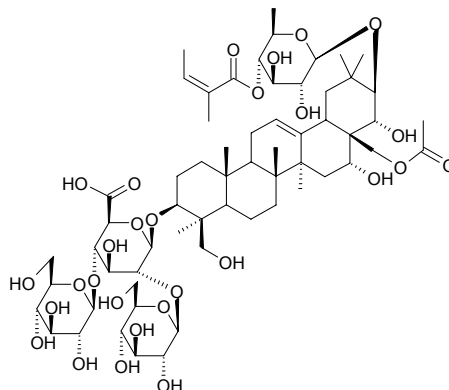
$C_{26}H_{32}O_7$  (456.54). Amorphous solid,  $[\alpha]_D = +29.4^\circ$  ( $c = 0.2$ , MeOH). Source: A WEI *Ferula assafoetida* (root). Ref: 5243.

**1912 Assamicadine**

$C_{16}H_{23}NO_5$  (309.37). Source: ZI XIAO RONG ZI *Crotalaria assamica*. Ref: 660.

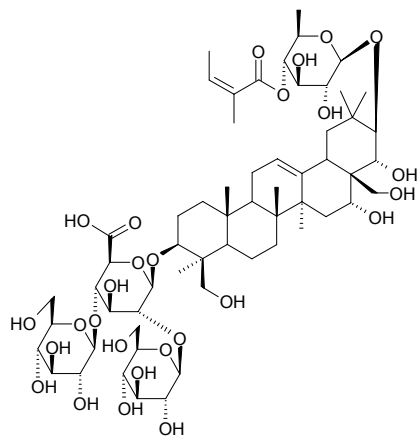
**1913 Assamicin III**

28-*O*-Acetyl-21-*O*-(4-*O*-angeloyl)-6-deoxy- $\beta$ -glucopyranosyl-3-*O*-[ $\beta$ -glucopyranosyl(1 $\rightarrow$ 2)-*O*-[ $\beta$ -glucopyranosyl(1 $\rightarrow$ 4)]- $\beta$ -glucuronopyranosyl]protoascigenin  $C_{61}H_{96}O_{28}$  (1277.43). Amorphous powder,  $[\alpha]_D^{24} = -47.8^\circ$  ( $c = 0.2$ , pyridine). Pharm: Antifungal (plant pathogenic fungus *Pyricularia oryzae*)<sup>[4517]</sup>; cytotoxic (*in vitro*, K562, HCT15)<sup>[4517]</sup>. Source: CHANG BING QI YE SHU *Aesculus assamica* (seed). Ref: 4517.

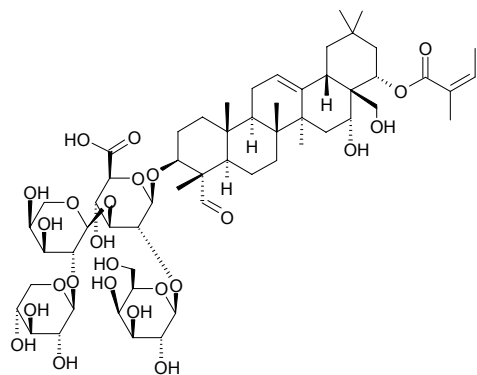


**1914 Assamicin IV**

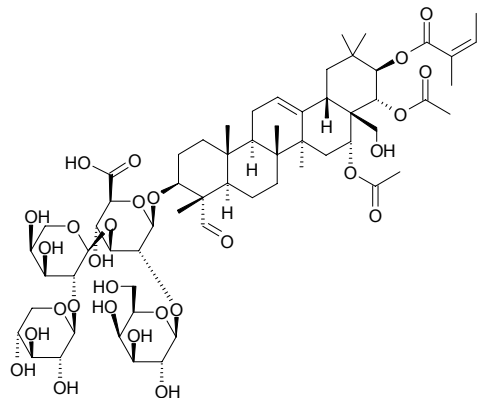
21-*O*-(4-*O*-Angeloyl)-6-deoxy- $\beta$ -glucopyranosyl-3-*O*-[ $\beta$ -glucopyranosyl(1 $\rightarrow$ 2)-*O*-[ $\beta$ -glucopyranosyl(1 $\rightarrow$ 4)]- $\beta$ -glucuronopyranosyl]protoaescigenin  
 $C_{59}H_{94}O_{27}$  (1235.39). Amorphous powder,  $[\alpha]_D^{24} = -40.5^\circ$  ( $c = 0.2$ , pyridine).  
**Pharm:** Antifungal (plant pathogenic fungus *Pyricularia oryzae*); cytotoxic (*in vitro*, K562, HCT15). **Source:** CHANG BING QI YE SHU *Aesculus assamica* (seed). **Ref:** 4517.

**1915 Assamsaponin A**

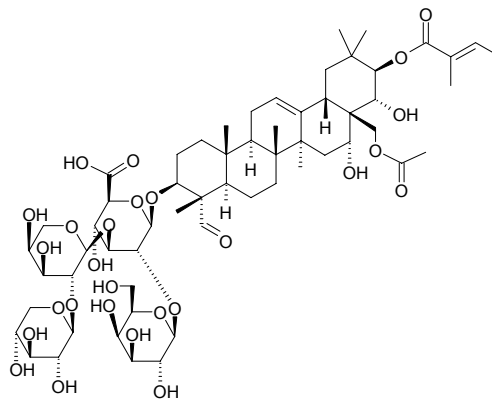
$C_{57}H_{88}O_{25}$  (1173.32). **Source:** PU ER CHA *Camellia sinensis* var. *assamica* (seed and leaf). **Ref:** 4537.

**1916 Assamsaponin B**

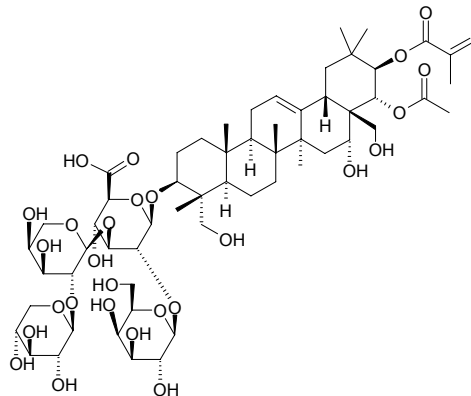
$C_{61}H_{92}O_{28}$  (1273.40). **Pharm:** Inhibits ethanol-induced gastric mucosal lesions (rat, 5.0mg/kg, orl). **Source:** PU ER CHA *Camellia sinensis* var. *assamica* (seed and leaf). **Ref:** 4537.

**1917 Assamsaponin C**

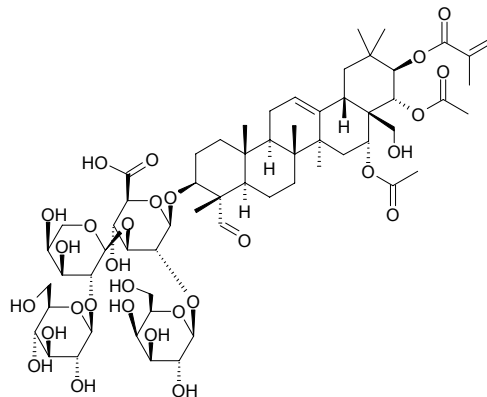
$C_{59}H_{90}O_{27}$  (1231.36). **Pharm:** Inhibits ethanol-induced gastric mucosal lesions (rat, 5.0mg/kg, orl). **Source:** PU ER CHA *Camellia sinensis* var. *assamica* (seed and leaf). **Ref:** 4537.

**1918 Assamsaponin D**

$C_{59}H_{92}O_{27}$  (1233.37). **Source:** PU ER CHA *Camellia sinensis* var. *assamica* (seed and leaf). **Ref:** 4537.

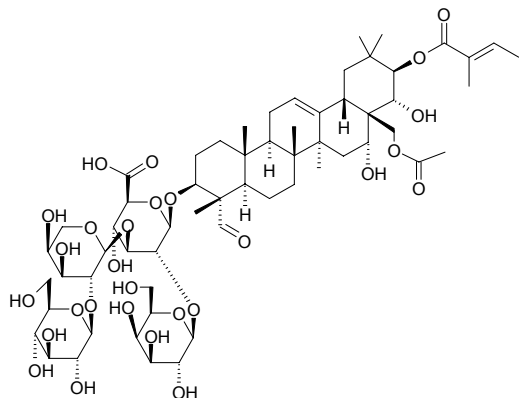
**1919 Assamsaponin F**

$C_{62}H_{94}O_{29}$  (1303.42). **Source:** PU ER CHA *Camellia sinensis* var. *assamica* (seed and leaf). **Ref:** 4537.

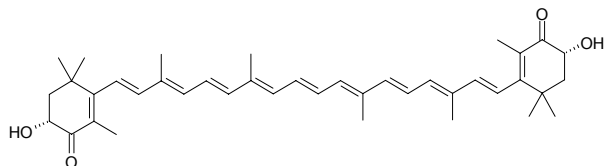


**1920 Assamsaponin I**

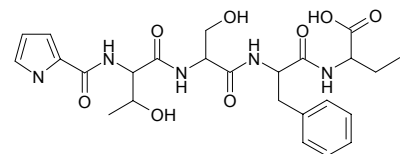
$C_{60}H_{92}O_{28}$  (1261.39). Source: PU ER CHA *Camellia sinensis* var. *assamica* (seed and leaf). Ref: 4537.

**1921 Astaxanthin**

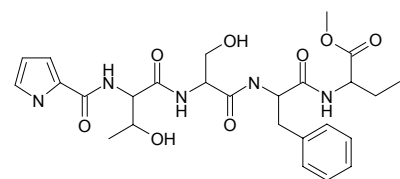
3,3'-Dihydroxy- $\beta$ -carotene-4,4'-dione [472-61-7]  $C_{40}H_{52}O_4$  (596.86). mp 215~216°C (dec). Source: JIN YU *Carassius auratus*, HAI XIA *Penaeus orientalis*, LI YU PI *Cyprinus carpio*. Ref: 6.

**1922 Asterin A**

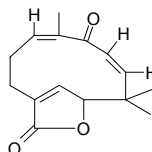
$C_{25}H_{33}N_5O_8$  (531.57). Source: ZI WAN *Aster tataricus*. Ref: 660.

**1923 Asterin B**

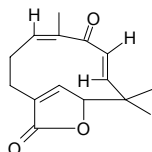
$C_{26}H_{35}N_5O_8$  (545.60). Source: ZI WAN *Aster tataricus*. Ref: 660.

**1924 Asteriscunolide A**

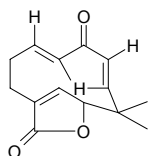
$C_{15}H_{18}O_3$  (246.31). Crystals, mp 155°C, mp 158°C. Pharm: Phytotoxin (6mg/mL: *S. acutus*, mortality = 75%, *L. paucicostata*, mortality = 90%); cytotoxic (P<sub>388</sub>, IC<sub>50</sub> = 4μmol/L, control *cis*-Platin, IC<sub>50</sub> = 8μmol/L; A549, IC<sub>50</sub> = 4μmol/L, *cis*-Platin, IC<sub>50</sub> = 8μmol/L; HT29, IC<sub>50</sub> = 10μmol/L, *cis*-Platin, IC<sub>50</sub> = 16μmol/L; MEL-28, IC<sub>50</sub> = 4μmol/L, *cis*-Platin, IC<sub>50</sub> = 8μmol/L). Source: *Asteriscus vogelii* (aerial parts). Ref: 5123.

**1925 Asteriscunolide C**

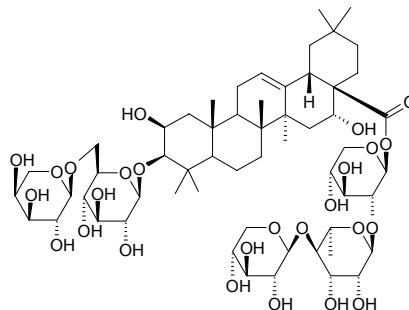
$C_{15}H_{18}O_3$  (246.31). Crystals, mp 165°C, mp 164°C. Pharm: Phytotoxin (6mg/mL: *S. acutus*, mortality = 62%, *L. paucicostata*, mortality = 94%); cytotoxic (P<sub>388</sub>, IC<sub>50</sub> = 4μmol/L, control *cis*-Platin, IC<sub>50</sub> = 8μmol/L; A549, IC<sub>50</sub> = 4μmol/L, *cis*-Platin, IC<sub>50</sub> = 8μmol/L; HT29, IC<sub>50</sub> = 10μmol/L, *cis*-Platin, IC<sub>50</sub> = 16μmol/L; MEL-28, IC<sub>50</sub> = 4μmol/L, *cis*-Platin, IC<sub>50</sub> = 8μmol/L). Source: *Asteriscus vogelii* (aerial parts). Ref: 5123.

**1926 Asteriscunolide D**

$C_{15}H_{18}O_3$  (246.31). Crystals, mp 148°C, mp 145°C. Pharm: Phytotoxin (6mg/mL: *S. acutus*, mortality = 49%, *L. paucicostata*, mortality = 100%); cytotoxic (P<sub>388</sub>, IC<sub>50</sub> = 1μmol/L, control *cis*-Platin, IC<sub>50</sub> = 8μmol/L; A549, IC<sub>50</sub> = 1μmol/L, *cis*-Platin, IC<sub>50</sub> = 8μmol/L; HT29, IC<sub>50</sub> = 2μmol/L, *cis*-Platin, IC<sub>50</sub> = 16μmol/L; MEL-28, IC<sub>50</sub> = 1μmol/L, *cis*-Platin, IC<sub>50</sub> = 8μmol/L). Source: *Asteriscus vogelii* (aerial parts). Ref: 5123.

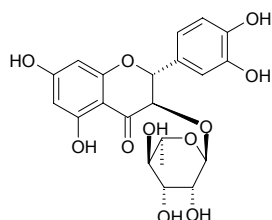
**1927 Astersaponin G**

$C_{57}H_{92}O_{26}$  (1193.35). Source: ZI WAN *Aster tataricus*. Ref: 660.

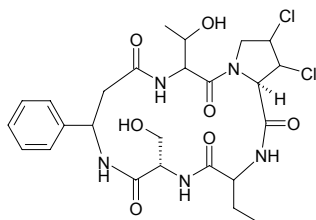


**1928 Astilbin**

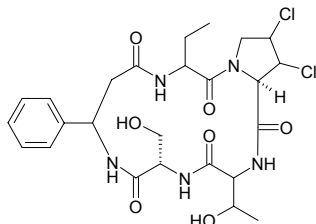
Taxifolin-3-*O*- $\alpha$ -L-rhamnoside [29838-67-3] C<sub>21</sub>H<sub>22</sub>O<sub>11</sub> (450.40). mp 180°C (dec). **Pharm:** Antioxidant (inhibits formation of active oxygen, IC<sub>50</sub> = 9.5nmol/L, used in treatment of rheumatic arthritis and atherosclerosis); antihemolytic (protects red blood cells against oxidation resulting in hemolysis); antineoplastic (B16 melanoma F-1, inhibits formation of melanin completely, inhibits TPA-induced activation of EBV-EA); anti-inflammatory (rat, swollen foot model caused by carrageenan); aldose reductase inhibitor (pig eye lens, 67 $\mu$ mol/L, InRt = 65%); antihepatotoxin; antimalarial (*Plasmodium falciparum* PoW, IC<sub>50</sub> = 50 $\mu$ g/mL, control Chloroquine diphosphate, IC<sub>50</sub> = (0.006 $\pm$ 0.002) $\mu$ g/mL; Dd2, IC<sub>50</sub> < 50 $\mu$ g/mL, Chloroquine diphosphate, IC<sub>50</sub> = (0.06 $\pm$ 0.01) $\mu$ g/mL)<sup>[5208]</sup>. **Source:** DAO NIAN ZI *Garcinia mangostana* (fruit hull)<sup>[3066]</sup>, LI MU *Lyonia ovalifolia*, TU FU LING *Smilax glabra* (rhizome: content = 0.756%<sup>[5508]</sup>), WU CI KE YA SHU *Andira inermis* (leaf). **Ref:** 6, 416, 568, 1798, 1799, 1800, 1801, 1802, 1803, 3066, 5208, 5508.

**1929 Astin A**

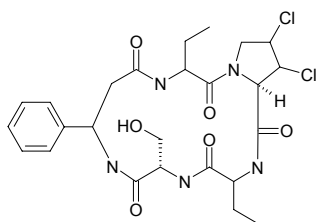
C<sub>25</sub>H<sub>33</sub>Cl<sub>2</sub>N<sub>5</sub>O<sub>7</sub> (586.48). **Source:** ZI WAN *Aster tataricus*. **Ref:** 660.

**1930 Astin B**

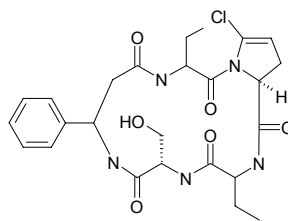
C<sub>25</sub>H<sub>33</sub>Cl<sub>2</sub>N<sub>5</sub>O<sub>7</sub> (586.48). **Source:** ZI WAN *Aster tataricus*. **Ref:** 660.

**1931 Astin C**

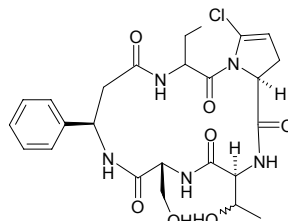
C<sub>25</sub>H<sub>33</sub>Cl<sub>2</sub>N<sub>5</sub>O<sub>6</sub> (570.48). **Source:** ZI WAN *Aster tataricus*. **Ref:** 660.

**1932 Astin D**

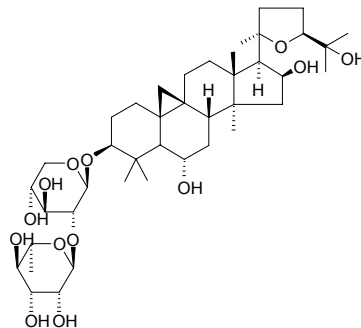
C<sub>25</sub>H<sub>32</sub>ClN<sub>5</sub>O<sub>6</sub> (534.02). **Source:** ZI WAN *Aster tataricus*. **Ref:** 660.

**1933 Astin E**

C<sub>25</sub>H<sub>32</sub>ClN<sub>5</sub>O<sub>7</sub> (550.02). **Source:** ZI WAN *Aster tataricus*. **Ref:** 660.

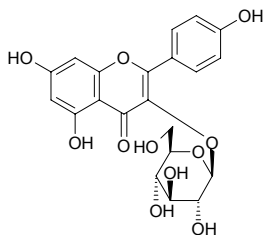
**1934 Astrachryoside**

C<sub>41</sub>H<sub>68</sub>O<sub>13</sub> (768.99). **Source:** JIN YI HUANG QI *Astragalus chrysopterus* (root). **Ref:** 660.

**1935 Astragalin**

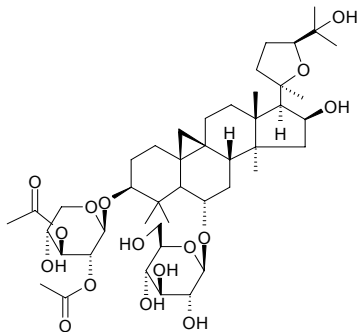
Kaempferol-3-*O*- $\beta$ -D-glucopyranoside [480-10-4] C<sub>21</sub>H<sub>20</sub>O<sub>11</sub> (448.39). Yellow acicular crystals (methanol), mp 163~165°C; mp 178°C. **Pharm:** Antispasmodic (rat small intestine and bladder *in vitro*); choleric (rat); antitussive (dispels phlegm); diuretic (dog, iv); antihypertensive (rat); antioxidant (DPPH scavenger, 250 $\mu$ mol/L, InRt = 5.7%; control Vitamin E, IC<sub>50</sub> = 8.3 $\mu$ mol/L)<sup>[4722]</sup>; antioxidant (DPPH scavenger, IC<sub>50</sub> > 100 $\mu$ g/mL, control Gallic acid, IC<sub>50</sub> = 3.6 $\mu$ g/mL; Cytochrome-C reduction, IC<sub>50</sub> > 50 $\mu$ g/mL, Gallic acid, IC<sub>50</sub> = 3.0 $\mu$ g/mL)<sup>[5239]</sup>. **Source:** BAI GUO YE *Ginkgo biloba*, CHOU LENG SHAN *Abies nephrolepis*, CU LIU GUO *Hippophae rhamnoides*, HUAI *Sophora japonica* (pericarp)<sup>[30801]</sup>, HUANG HUA HAO *Artemisia annua*, JIN ZHONG HUA *Forsythia viridissima*, LAO YA SHI *Diospyros rhombifolia* (leaf), LIU JIAO LIAN *Dysosma pleiantha* [Syn. *Podophyllum pleianthum*], LUO BU MA *Apocynum venetum* (dried leaf: content scope of 6 origins = 0.0132%~0.0334%, mean content = 0.0208%)<sup>[5529]</sup>, LUO DI SHENG GEN *Bryophyllum pinnatum*, LV BEI GUI HUA *Excoecaria cochinchinensis* var. *viridis*, MAO HUA SHI NAN *Photinia lactiflora*, MEI LI YE HUI MAO DOU *Tephrosia calophylla* (whole herb), NAN FANG TU SI ZI *Cuscuta australis*, PU TONG LU TI CAO *Pyrola decorata*, SANG YE *Morus alba* (leaf: content = 0.011%<sup>[5501]</sup>), SHAN TENG

*Anodendron affine*, SHI DI *Diospyros kaki*, TAI WAN HUANG BO  
*Phellodendron amurense* var. *wilsonii* (leaf: yield = 0.059%<sub>dw</sub>)<sup>[4722]</sup>, TU SI ZI  
*Cuscuta chinensis*, XI BO LI YA LENG SHAN *Abies sibirica*, XI SHU  
*Camptotheca acuminata*, YE YA CHUN *Euscaphis japonica*, YI ZHU QIAN  
 MA *Urtica dioica*, YUN SHI *Caesalpinia decapetala* (leaf), ZHANG GUO  
 GAN CAO *Glycyrrhiza inflata*, ZHAO SHAN BAI *Rhododendron*  
*micranthum* (leaf: content scope from Feb. to Nov. 0.09%–0.47%, mean  
 content = 0.22%)<sup>[5508]</sup>, ZHU ZONG CAO *Adiantum capillus-veneris*, ZI YUN  
 YING *Astragalus sinicus*, occurs in many plants. Ref: 2, 231, 468, 658, 660,  
 661, 3080, 3507, 4097, 4312, 4456, 4464, 4544, 5239, 5501, 5508, 5529.



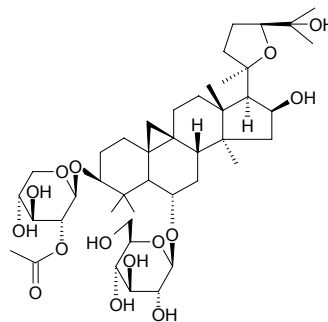
### 1936 Astragaloside I

[84680-75-1] C<sub>45</sub>H<sub>72</sub>O<sub>16</sub> (869.07). **Pharm:** Immunoenhancer (*in vitro*, stimulates proliferation of mouse T lymphocytes, 10 μmol/L, *p* < 0.05; stimulates proliferation of mouse B lymphocytes, 1.0 μmol/L, *p* < 0.05)<sup>[3084]</sup>. **Source:** HUANG QI *Astragalus membranaceus*, MENG GU HUANG QI *Astragalus mongholicus*. Ref: 2, 660, 3084.



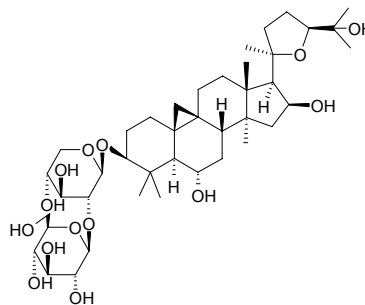
### 1937 Astragaloside II

Astrasieversianin VIII [84676-89-1] C<sub>43</sub>H<sub>70</sub>O<sub>15</sub> (827.03). Colorless crystals (methanol), mp 249–250°C, [α]<sub>D</sub><sup>31</sup> = +30.4° (*c* = 0.46, methanol). **Pharm:** Improves erythrocyte's ability to change shape; antioxidant (inhibits lipid peroxidation strongly, rat, ip, induced by adriamycin); antitrypanosomal (*Trypanosoma brucei rhodesiense*, IC<sub>50</sub> > 66.6 μg/mL, control Melarsoprol, IC<sub>50</sub> = 0.0032 μg/mL; *Trypanosoma cruzi*, IC<sub>50</sub> > 30 μg/mL, Benznidazole, IC<sub>50</sub> = 0.50 μg/mL)<sup>[5285]</sup>; antileishmanial (*Leishmania donovani*, IC<sub>50</sub> = 21.3 μg/mL, control Miltefosine, IC<sub>50</sub> = 0.087 μg/mL)<sup>[5285]</sup>; antimalarial (*Plasmodium falciparum*, IC<sub>50</sub> > 5 μg/mL, Chloroquine, IC<sub>50</sub> = 0.086 μg/mL)<sup>[5285]</sup>; cytotoxic (L6 cells, IC<sub>50</sub> > 90 μg/mL, control Podophyllotoxin, IC<sub>50</sub> = 0.008 μg/mL)<sup>[5285]</sup>. **Source:** HUANG QI *Astragalus membranaceus*, MENG GU HUANG QI *Astragalus mongholicus*, YOU YE HUANG QI *Astragalus oleifolius* (lower stem part). Ref: 2, 660, 965, 1030, 1080, 1109, 1112, 1117, 5285.



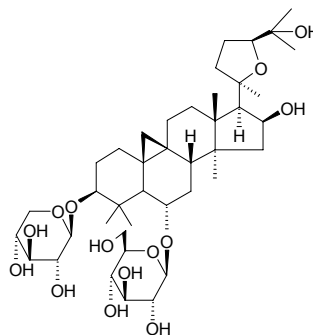
### 1938 Astragaloside III

[84687-42-3] C<sub>41</sub>H<sub>68</sub>O<sub>14</sub> (784.99). Colorless rhombic crystals (methanol), mp 245–247°C, [α]<sub>D</sub><sup>18</sup> = +21.4° (*c* = 0.83, methanol). **Pharm:** Antioxidant (inhibits lipid peroxidation strongly, rat, ip, induced by adriamycin); oxygen free radical scavenger; LD<sub>50</sub> (rat, ip) = 80 μg/mL. **Source:** HUANG QI *Astragalus membranaceus*, MENG GU HUANG QI *Astragalus mongholicus*. Ref: 658, 966, 1079.



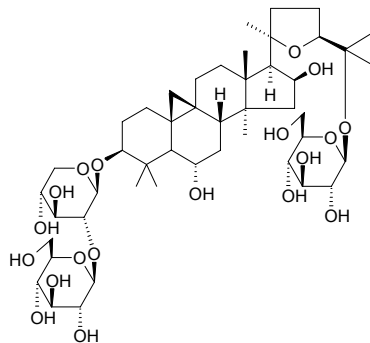
### 1939 Astragaloside IV

[84687-43-4] C<sub>41</sub>H<sub>68</sub>O<sub>14</sub> (784.99). **Pharm:** Antioxidant (superoxide anion scavenger, LC<sub>50</sub> = 50 μg/mL, inhibits lipid peroxidation caused by adriacin ip in rat); inhibits endotoxin, promotes dissolution of fibrin (prevention and cure of endotoxin shock, coronary heart disease, etc.); improves metamorphic ability of hatched red blood cells; antitrypanosomal (*Trypanosoma brucei rhodesiense*, IC<sub>50</sub> > 90 μg/mL, control Melarsoprol, IC<sub>50</sub> = 0.0032 μg/mL; *Trypanosoma cruzi*, IC<sub>50</sub> > 30 μg/mL, Benznidazole, IC<sub>50</sub> = 0.50 μg/mL)<sup>[5285]</sup>; antileishmanial (*Leishmania donovani*, IC<sub>50</sub> > 30 μg/mL, control Miltefosine, IC<sub>50</sub> = 0.087 μg/mL)<sup>[5285]</sup>; antimalarial (*Plasmodium falciparum*, IC<sub>50</sub> > 5 μg/mL, Chloroquine, IC<sub>50</sub> = 0.086 μg/mL)<sup>[5285]</sup>; cytotoxic (L6 cells, IC<sub>50</sub> > 90 μg/mL, control Podophyllotoxin, IC<sub>50</sub> = 0.008 μg/mL)<sup>[5285]</sup>. **Source:** HUANG QI *Astragalus membranaceus* (dried root: content scope = 0.056%–0.223%<sup>[5501]</sup>; mean content of 4 origins = 0.111%<sup>[5508]</sup>), MENG GU HUANG QI *Astragalus mongholicus* (dried root: mean content of 5 origins = 0.141%<sup>[5508]</sup>), YOU YE HUANG QI *Astragalus oleifolius* (lower stem part). Ref: 2, 660, 1079, 1080, 1585, 1586, 5285, 5501, 5508.

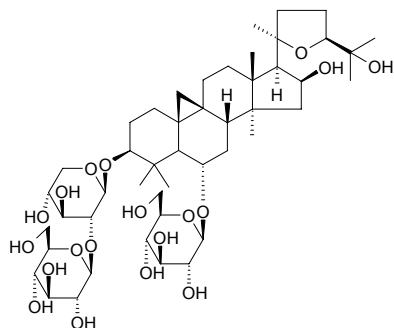


**1940 Astragaloside V**

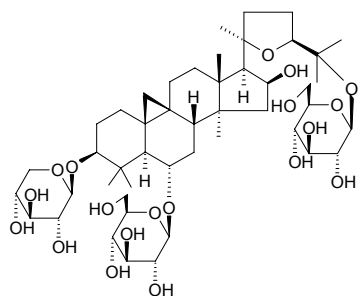
[84687-44-5]  $C_{47}H_{78}O_{19}$  (947.12). Colorless thin crystals (methanol), mp 202–204°C,  $[\alpha]_D^{14} = +7.2^\circ$  ( $c = 1.0$ , methanol). **Pharm:** Antioxidant (lipid peroxidation inhibitor, rat, ip, induced by adriamycin). **Source:** HUANG QI *Astragalus membranaceus*. **Ref:** 966.

**1941 Astragaloside VI**

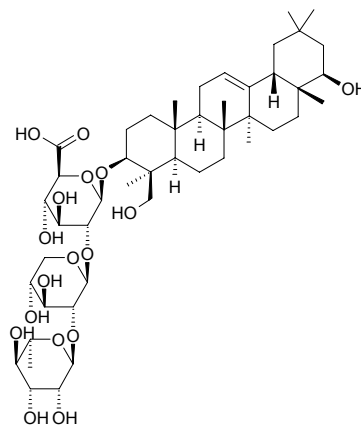
[84687-45-6]  $C_{47}H_{78}O_{19}$  (947.12). Colorless, thin crystals (methanol), mp 290–291°C,  $[\alpha]_D^{14} = +17.3^\circ$  ( $c = 1.0$ , methanol). **Pharm:** Antioxidant (inhibits lipid peroxidation, rat, ip, induced by adriamycin); antioxidant (superoxide anion scavenger). **Source:** HUANG QI *Astragalus membranaceus*. **Ref:** 966.

**1942 Astragaloside VII**

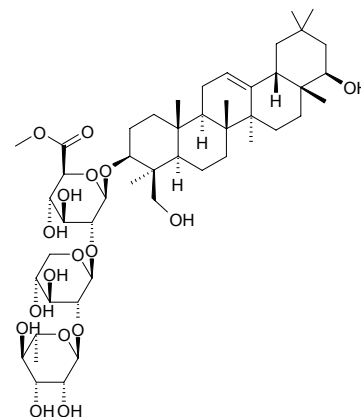
[84687-46-7]  $C_{47}H_{78}O_{19}$  (947.12). Colorless rhombic crystals (methanol), mp 292–293°C,  $[\alpha]_D^{18} = +10.3^\circ$  ( $c = 0.6$ , methanol). **Pharm:** Antioxidant (inhibits lipid peroxidation, rat, ip, induced by adriamycin). **Source:** HUANG QI *Astragalus membranaceus*. **Ref:** 966.

**1943 Astragaloside VIII**

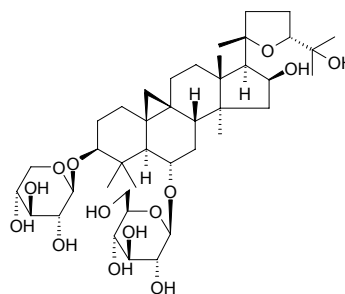
[86361-64-0]  $C_{47}H_{76}O_{17}$  (913.11). Colorless, thin crystals (methanol), mp 223–224°C,  $[\alpha]_D^{18} = -12.1^\circ$  ( $c = 1.0$ , methanol). **Pharm:** Antioxidant (inhibits lipid peroxidation, rat, ip, induced by adriamycin). **Source:** HUANG QI *Astragalus membranaceus*. **Ref:** 966, 967.

**1944 Astragaloside VIII methylester**

$C_{48}H_{78}O_{17}$  (927.15). **Source:** BIAN JING HUANG QI *Astragalus complanatus*. **Ref:** 660.

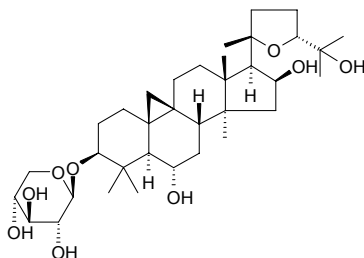
**1945 Astramembrannin I**

$C_{41}H_{68}O_{14}$  (784.99). **Source:** HUANG QI *Astragalus membranaceus*. **Ref:** 660.

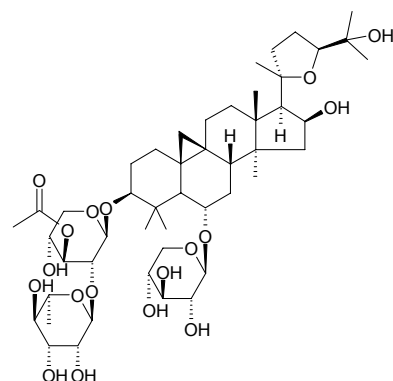


**1946 Astramembrannin II**

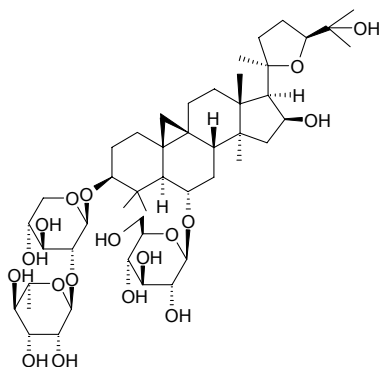
$C_{35}H_{58}O_9$  (622.85). Source: HUANG QI *Astragalus membranaceus*. Ref: 660.

**1947 Astrasieversianin IX**

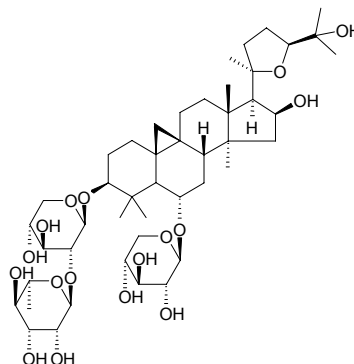
3-*O*-[ $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -(3'-*O*-november acetyl)-*D*-xylopyranosyl]-6-*O*- $\beta$ -*D*-xylopyranosyl-20(*R*),24(*S*)-epoxy-3 $\beta$ ,6 $\alpha$ ,16 $\beta$ ,25-tetrahydroxycycloartane  $C_{48}H_{78}O_{18}$  (943.15). Source: TE LUO YI HUANG QI *Astragalus trojanus* (aerial parts). Ref: 4145.

**1948 Astrasieversianin XIV**

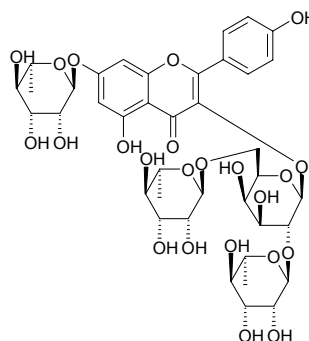
$C_{47}H_{78}O_{18}$  (931.13). Pharm: Antihypertensive. Source: MIAN MAO HUANG QI *Astragalus sieversianus*. Ref: 658.

**1949 Astrasieversianin XV**

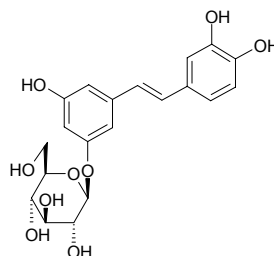
3-*O*-[ $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-xylopyranosyl]-6-*O*- $\beta$ -*D*-xylopyranosyl-20(*R*),24(*S*)-epoxy-3 $\beta$ ,6 $\alpha$ ,16 $\beta$ ,25-tetrahydroxycycloartane  $C_{46}H_{76}O_{17}$  (901.11). Source: MIAN MAO HUANG QI *Astragalus sieversianus*. Ref: 660, 4145.

**1950 Astrasikokioside I**

Kaempferol-3-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 6)-[ $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -*D*-galactopyranosyl-7-*O*- $\alpha$ -*L*-rhamnopyranoside  $C_{39}H_{50}O_{23}$  (886.82). Yellow powder,  $[\alpha]_D = -137.2^\circ$  ( $c = 0.57$ , pyridine). Source: SI GUO HUANG QI *Astragalus shikokianus* (aerial parts). Ref: 3922.

**1951 Astringin**

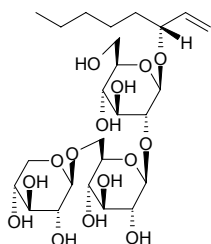
Piceatannol 3-*O*- $\beta$ -*D*-glucopyranoside [29884-49-9]  $C_{20}H_{22}O_9$  (406.39). Pharm: Antifungal (plant). Source: *Picea* sp., *Eucalyptus* sp., YU DA HUANG *Rheum* sp.<sup>[4064]</sup>. Ref: 658, 2834, 4064.



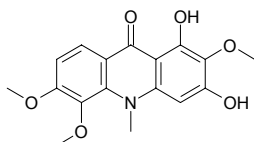


**1952 Asystoside**

(3*R*)-1-Octen-3-ol-3-*O*- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranoside C<sub>25</sub>H<sub>44</sub>O<sub>15</sub> (584.62). Amorphous powder,  $[\alpha]_D^{27} = +7.7^\circ$  ( $c = 1.56$ , MeOH). Source: CHA RU SHI WAN CUO *Asystasia intrusa*. Ref: 2589.

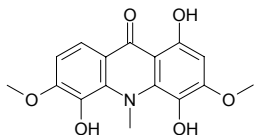
**1953 Atalafoline**

C<sub>17</sub>H<sub>17</sub>NO<sub>6</sub> (331.33). Yellow needles, mp 186–188°C. Source: DONG FENG JU GEN *Atalantia buxifolia* [Syn. *Severinia buxifolia*]. Ref: 63.

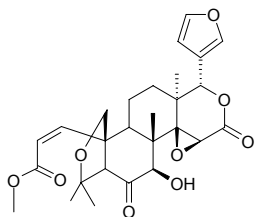
**1954 Atalafoline B**

*N*-Methyl-1,4,5-trihydroxy-3,6-dimethoxyacridine-9-one [114216-93-2]

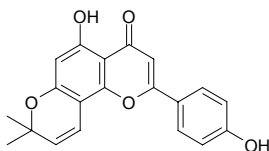
C<sub>16</sub>H<sub>15</sub>NO<sub>6</sub> (317.30). Yellow columnar crystals, mp 192–194°C. Source: DONG FENG JU YE *Atalantia buxifolia* [Syn. *Severinia buxifolia*]. Ref: 91.

**1955 Atalantin**

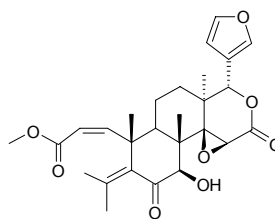
C<sub>27</sub>H<sub>32</sub>O<sub>9</sub> (500.55). Source: DAN YE DONG FENG JU *Atalantia monophylla*. Ref: 1521.

**1956 Atalantoflavone**

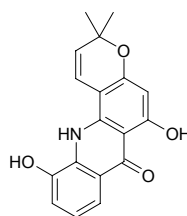
Limonianin C<sub>20</sub>H<sub>16</sub>O<sub>5</sub> (336.35). Source: MENG SANG *Morus mongolica* (root cortex: yield = 0.00014%semi-dw), NING MENG *Citrus limon* (root cortex), ZONG ZHUANG DONG FENG JU YE *Atalantia racemosa*, *Erythrina vogelii*. Ref: 1521,3034, 4421.

**1957 Atalantolide**

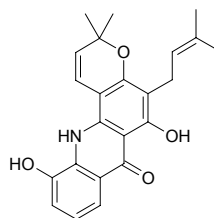
C<sub>27</sub>H<sub>32</sub>O<sub>8</sub> (484.55). Source: DONG FENG JU GEN *Atalantia buxifolia* [Syn. *Severinia buxifolia*] (root cortex). Ref: 3075.

**1958 Atalaphyllidine**

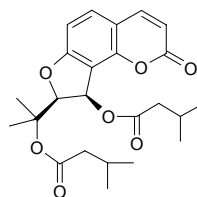
C<sub>18</sub>H<sub>15</sub>NO<sub>4</sub> (309.32). Source: DONG FENG JU GEN *Atalantia buxifolia* [Syn. *Severinia buxifolia*] (root cortex). Ref: 3075.

**1959 Atalaphyllinine**

C<sub>23</sub>H<sub>23</sub>NO<sub>4</sub> (377.44). Source: DONG FENG JU GEN *Atalantia buxifolia* [Syn. *Severinia buxifolia*] (root cortex). Ref: 3075.

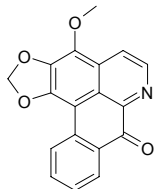
**1960 Athamantin**

[1892-56-4] C<sub>24</sub>H<sub>30</sub>O<sub>7</sub> (430.50). Pharm: Antispasmodic. Source: CHI A MI *Ammi visnaga*, LIN BAI ZHI *Angelica sylvestris*, LI BA NEN XIE HAO *Seseli libanotis*, *Peucedanum* sp. Ref: 658.

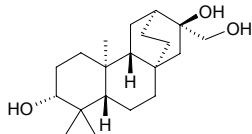


**1961 Atherospermidine**

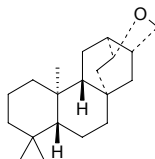
$C_{18}H_{11}NO_4$  (305.29). **Pharm:** Cytotoxic (*in vitro*, HepG2,  $IC_{50} = 0.8\mu\text{g/mL}$ ; Hep2,2,15,  $IC_{50} = 2.2\mu\text{g/mL}$ )<sup>[3083]</sup>, cytotoxic (Selective DNA-damaging activity, yeast assay: RS321NYCp50(gal),  $IC_{50} = 4.6\mu\text{g/mL}$ ; RS321NpRAD52(gal),  $IC_{50} > 100\mu\text{g/mL}$ , control Camptothecin,  $IC_{50} = 100\mu\text{g/mL}$ ; RS321NpRAD52(glu),  $IC_{50} = 55\mu\text{g/mL}$ , Camptothecin,  $IC_{50} = 0.6\mu\text{g/mL}$ )<sup>[5457]</sup>. **Source:** DING KE LA QIAN JIN TENG *Stephania dinklagei* (stem)<sup>[5457]</sup>, SHE XIANG MANG ZI *Atherosperma moschatum*<sup>[1521]</sup>, YOU GOU YING ZHAO *Artabotrys uncinatus* (root,stem)<sup>[3083]</sup>. **Ref:** 1521, 3083, 5457.

**1962 ent-Atisane-3β,16α,17-triol**

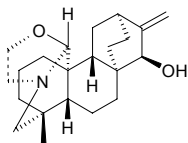
$C_{20}H_{34}O_3$  (322.49). White powder. **Source:** DA GUO DA JI *Euphorbia wallichii* (root). **Ref:** 4585.

**1963 ent-(16S)-Atisan-13,17-oxide**

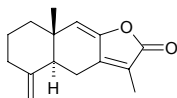
[84687-87-6]  $C_{20}H_{32}O$  (288.48). mp 124~125°C,  $[\alpha]_D^{20} = -71.0^\circ$  ( $c = 1.1$ ,  $CHCl_3$ ). **Source:** ZHE BEI MU *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*]. **Ref:** 2182.

**1964 Atisine**

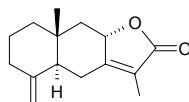
[466-43-3]  $C_{22}H_{33}NO_2$  (343.51). **Pharm:** Antipyretic. **Source:** HUANG WU TOU *Aconitum anthora*, YI YE WU TOU *Aconitum heterophyllum* WU TOU SHU *Aconitum* sp. (the compound was isolated from the plant by S.W.Pelletier, et al. in 1954)<sup>[5505]</sup>. **Ref:** 658, 5505.

**1965 Atractylenolide I**

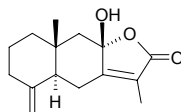
[73096-13-3]  $C_{15}H_{18}O_2$  (230.31). **Pharm:** Antineoplastic (mus lymphoma L<sub>5187</sub>Y cells,  $ID_{50} = 80\mu\text{g/mL}$ ); anti-inflammatory. **Source:** BAI ZHU *Atractyloides macrocephala* [Syn. *Atractylis macrocephala*] (dried rhizome: content scope = 0.030%~0.078%<sup>[5501]</sup>, mean content of 17 origins = 0.0324%<sup>[5508]</sup>), GUAN CANG ZHU *Atractyloides japonica*. **Ref:** 2, 658, 5501, 5508.

**1966 Atractylenolide II**

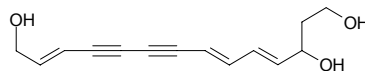
[73096-14-4]  $C_{15}H_{20}O_2$  (232.33). **Source:** BEI CANG ZHU *Atractyloides chinensis* (dried rhizome: mean content of 7 origins = 0.204%<sup>[5511]</sup>), CANG ZHU *Atractyloides lancea* (dried rhizome: content = 0.134%<sup>[5511]</sup>), CHAO XIAN CANG ZHU *Atractyloides koreana* (dried rhizome: content = 0.202%<sup>[5511]</sup>), DANG SHEN *Codonopsis pilosula*, GUAN CANG ZHU *Atractyloides japonica* (dried rhizome: mean content of 2 origins = 0.175%<sup>[5511]</sup>). **Ref:** 2, 632, 5511.

**1967 Atractylenolide III**

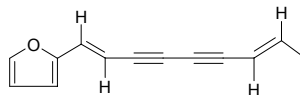
Codonolactone [73030-71-4]  $C_{15}H_{20}O_3$  (248.32). **Source:** BAI ZHU *Atractyloides macrocephala* [Syn. *Atractylis macrocephala*] (dried rhizome: mean content of 17 origins = 0.0339%<sup>[5508]</sup>), CHUAN DANG SHEN *Codonopsis tangshen*, DANG SHEN *Codonopsis pilosula* (dried root: mean content = 0.0060%<sup>[5508]</sup>), QIU HUA DANG SHEN *Codonopsis subglobosa*. **Ref:** 2, 632, 660, 5508.

**1968 Atractylenetriol**

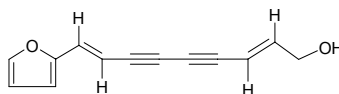
$C_{14}H_{16}O_3$  (232.28). **Source:** BAI ZHU *Atractyloides macrocephala* [Syn. *Atractylis macrocephala*]. **Ref:** 2.

**1969 Atractyloidin**

Atractylin [55290-63-6]  $C_{13}H_{10}O$  (182.23). mp 52°C. **Source:** BEI CANG ZHU *Atractyloides chinensis* (dried rhizome: mean content of 7 origins = 0.315%<sup>[5511]</sup>), CANG ZHU *Atractyloides lancea* (dried rhizome: content = 0.194%<sup>[5511]</sup>), CHAO XIAN CANG ZHU *Atractyloides koreana* (dried rhizome: content = 0.248%<sup>[5511]</sup>), GUAN CANG ZHU *Atractyloides japonica* (dried rhizome: mean content of 2 origins = 0.285%<sup>[5511]</sup>). **Ref:** 6, 660, 5511.

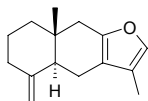
**1970 Atractyloidinol**

[61842-89-5]  $C_{13}H_{12}O_2$  (200.24). **Source:** BEI CANG ZHU *Atractyloides chinensis*. **Ref:** 2, 660.

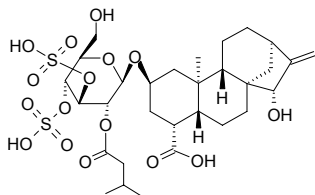


**1971 Atractylone**

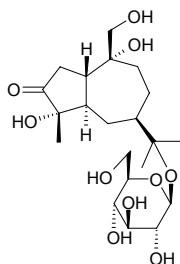
Atractylone [6989-21-5]  $C_{15}H_{20}O$  (216.33). mp 38°C,  $[\alpha]_D = +40.0^\circ$  ( $c = 10.0$ ). **Pharm:** Antineoplastic; anti-inflammatory (mus edema on ears, caused by TPA,  $ID_{50} = 0.9\text{mg/mL}$ ); cytotoxic; antihepatotoxin (mus and rat, liver toxicosis caused by  $CCl_4$  and galactosamine); antioxidant (lipid peroxidation inhibitor, caused by  $CCl_4$ ). **Source:** BAI ZHU *Atractylodes macrocephala* [Syn. *Atractylis macrocephala*] (dried rhizome: mean content from 3 methods = 0.71%<sup>[5508]</sup>), BEI CANG ZHU *Atractylodes chinensis*, CANG ZHU *Atractylodes lancea*. **Ref:** 2, 660, 957, 1160, 1203, 5501, 5508.

**1972 Atractylolide**

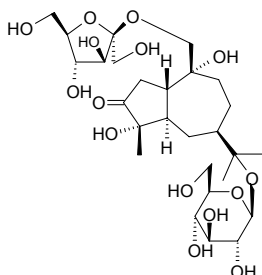
[17754-44-8]  $C_{30}H_{46}O_{16}S_2$  (726.82). mp 157~158°C (dec),  $[\alpha]_D = -53^\circ$  ( $c = 1.1$ , water). **Pharm:** Hypoglycemic (dog, rat, mus and rbt); increases amount of lactic acid (zoic blood); reduces consumption of oxygen (zoic blood);  $LD_{50}$  (rat, sc) = 431mg/kg. **Source:** OU CANG ZHU *Atractylodes gummifera*. **Ref:** 658, 661.

**1973 Atractylolide A**

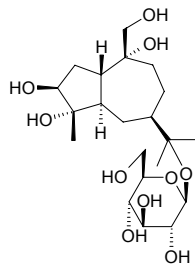
$C_{21}H_{36}O_{10}$  (448.52). **Source:** CANG ZHU *Atractylodes lancea*. **Ref:** 4348.

**1974 Atractylolide A 14-O-β-D-fructofuranoside**

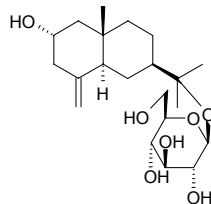
$C_{27}H_{46}O_{15}$  (610.66). Amorphous powder,  $[\alpha]_D^{22} = +2^\circ$  ( $c = 1.3$ , MeOH). **Source:** CANG ZHU *Atractylodes lancea*. **Ref:** 4348.

**1975 Atractylolide B**

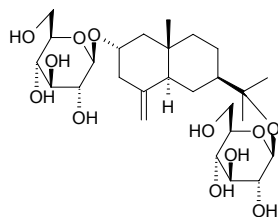
$C_{21}H_{38}O_{10}$  (450.53). **Source:** CANG ZHU *Atractylodes lancea*. **Ref:** 4348.

**1976 Atractylolide C**

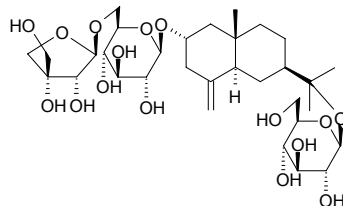
$C_{21}H_{36}O_7$  (400.52). **Source:** CANG ZHU *Atractylodes lancea*. **Ref:** 4348.

**1977 Atractylolide D**

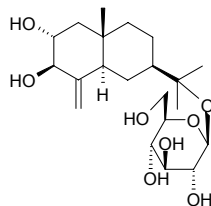
$C_{27}H_{46}O_{12}$  (562.66). **Source:** CANG ZHU *Atractylodes lancea*. **Ref:** 4348.

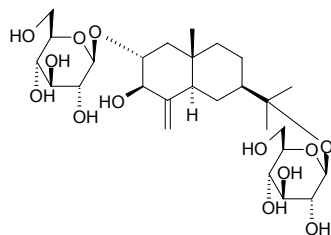
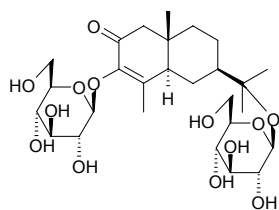
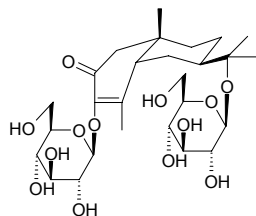
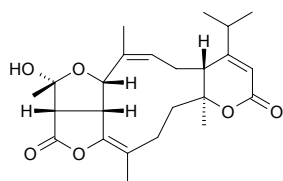
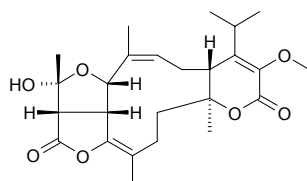
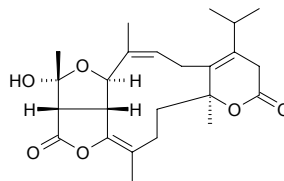
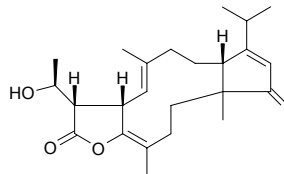
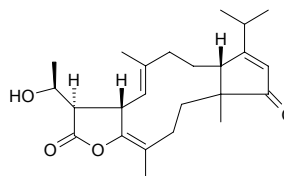
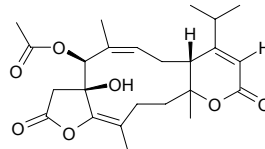
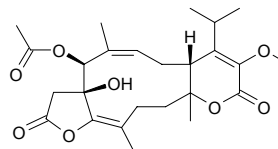
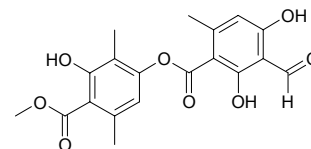
**1978 Atractylolide E**

$C_{32}H_{54}O_{16}$  (694.78). **Source:** CANG ZHU *Atractylodes lancea*. **Ref:** 4348.

**1979 Atractylolide G**

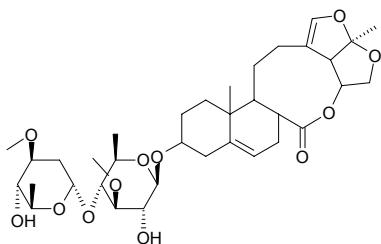
$C_{21}H_{36}O_8$  (416.52). **Source:** CANG ZHU *Atractylodes lancea*. **Ref:** 4348.



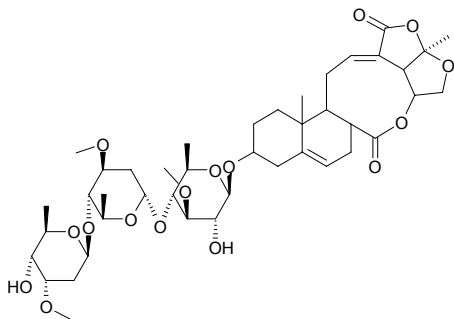
**1980 (2R,3R,5R,7R,10S)-Atractyloside G 2-O-β-D-glucopyranoside**C<sub>27</sub>H<sub>46</sub>O<sub>13</sub> (578.66). Amorphous powder,  $[\alpha]_D^{22} = -20^\circ$  ( $c = 1.5$ , MeOH).Source: CANG ZHU *Atractyloides lancea*. Ref: 4348.**1981 Atractyloside I**C<sub>27</sub>H<sub>44</sub>O<sub>13</sub> (576.64). Source: CANG ZHU *Atractyloides lancea*. Ref: 4348.**1982 cis-Atractyloside I**C<sub>27</sub>H<sub>44</sub>O<sub>13</sub> (576.64). Amorphous powder,  $[\alpha]_D^{22} = -23^\circ$  ( $c = 0.4$ , MeOH).Source: CANG ZHU *Atractyloides lancea*. Ref: 4348.**1983 Atranone A**C<sub>24</sub>H<sub>32</sub>O<sub>6</sub> (416.52). Source: fungus *Stachybotrys chartarum*, fungus*Stachybotrys atra*. Ref: 5104.**1984 Atranone B**C<sub>25</sub>H<sub>34</sub>O<sub>7</sub> (446.55). Source: fungus *Stachybotrys chartarum*. Ref: 5104.**1985 Atranone C**C<sub>24</sub>H<sub>32</sub>O<sub>6</sub> (416.52). Source: fungus *Stachybotrys chartarum*. Ref: 5104.**1986 Atranone D**C<sub>24</sub>H<sub>34</sub>O<sub>4</sub> (386.54). Clear film,  $[\alpha]_D^{20} = +21^\circ$  ( $c = 0.70$ , CHCl<sub>3</sub>). Source:fungus *Stachybotrys chartarum*. Ref: 5104.**1987 Atranone E**C<sub>24</sub>H<sub>34</sub>O<sub>4</sub> (386.54). Clear film,  $[\alpha]_D^{20} = -16^\circ$  ( $c = 0.75$ , CHCl<sub>3</sub>). Source:fungus *Stachybotrys chartarum*. Ref: 5104.**1988 Atranone F**C<sub>24</sub>H<sub>32</sub>O<sub>7</sub> (432.52). Pale yellow film,  $[\alpha]_D^{20} = +24^\circ$  ( $c = 0.16$ , CHCl<sub>3</sub>). Source:fungus *Stachybotrys chartarum*. Ref: 5104.**1989 Atranone G**C<sub>25</sub>H<sub>34</sub>O<sub>8</sub> (462.54). Pale yellow film,  $[\alpha]_D^{20} = +28^\circ$  ( $c = 0.2$ , CHCl<sub>3</sub>). Source:fungus *Stachybotrys chartarum*. Ref: 5104.**1990 Atranorin**[479-20-9] C<sub>19</sub>H<sub>18</sub>O<sub>8</sub> (374.35). mp 196–197°C. Pharm: Antibacterial; fishtoxin. Source: QI SHI HUA *Parmelia saxatilis* var. *omphalodes*, SHI RUI*Cladonia rangiferina*, SHI HUA *Parmelia saxatilis*, YE TAI *Trocholejeunea**sandvicensis*. Ref: 6, 658, 3909.

**1991 Atratoglaucoside A**

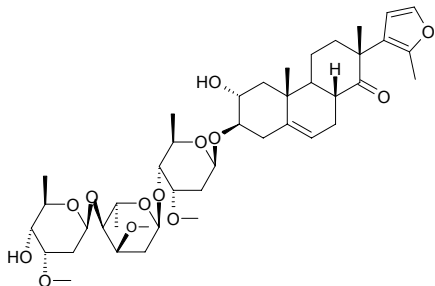
Glaucogenin C 3-*O*- $\alpha$ -*L*-diginopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-thevetopyranoside  
 $C_{35}H_{52}O_{12}$  (664.80). Colorless oil,  $[\alpha]_D^{25} = -21^\circ$  ( $c = 0.16$ ,  $CHCl_3$ ). Source:  
 BAI WEI *Cynanchum atratum* (root). Ref: 3054.

**1992 Atratoglaucoside B**

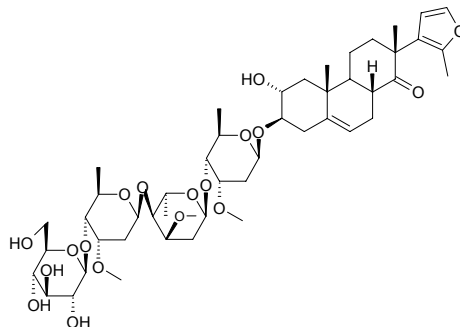
7-Desoxyneocynapanogenin A 3-*O*- $\beta$ -*D*-cymaropyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -*L*-diginopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-thevetopyranoside  $C_{42}H_{62}O_{16}$  (822.95). Colorless oil,  
 $[\alpha]_D^{25} = -60^\circ$  ( $c = 1.25$ ,  $CHCl_3$ ). Pharm: Cytotoxic (*in vitro*, T24, CaSki, SiHa,  
 HT3, PLC/PRF/5, and 212 cells,  $ED_{50} > 4\mu g/mL$ , no significant activity).  
Source: BAI WEI *Cynanchum atratum* (root). Ref: 3054.

**1993 Atratoside A**

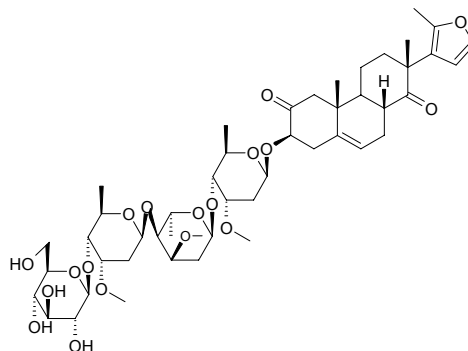
[118002-91-8]  $C_{42}H_{64}O_{13}$  (776.97). Pharm: Antineoplastic (mus, 20mg/kg orl,  
 U14 cancer, InRt = 53.0%; HepA cancer, InRt = 58.5%). Source: BAI WEI  
*Cynanchum atratum* (root). Ref: 660, 5501.

**1994 Atratoside B**

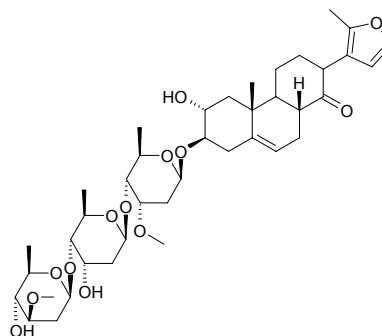
$C_{48}H_{74}O_{18}$  (939.11). Source: BAI WEI *Cynanchum atratum* (root). Ref: 660.

**1995 Atratoside C**

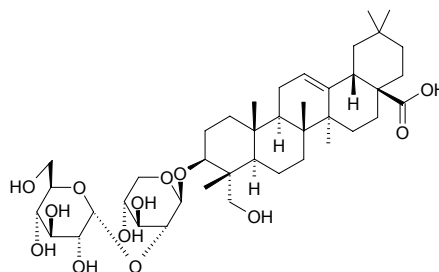
$C_{48}H_{72}O_{18}$  (937.10). Source: BAI WEI *Cynanchum atratum* (root). Ref: 660.

**1996 Atratoside D**

$C_{40}H_{60}O_{13}$  (748.92). Source: BAI WEI *Cynanchum atratum* (root). Ref: 660.

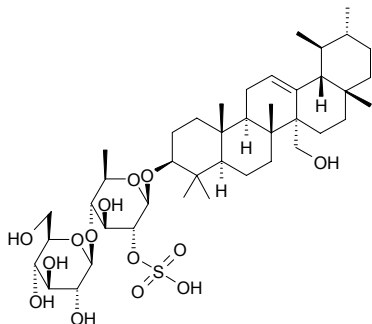
**1997 Atriplicosaponin A**

3-*O*-[ $\alpha$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-xylopyranosyl]-hederagenin  $C_{41}H_{66}O_{13}$   
 (766.98). Crystals, mp 215–217°C,  $[\alpha]_D^{25} = +40^\circ$  ( $c = 0.02$ , MeOH). Source:  
*Zygophyllum atriplicoides* (whole herb). Ref: 4504.

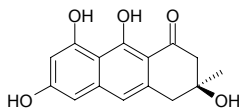


**1998 Atriplicosaponin B**

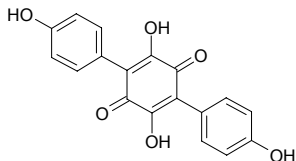
27 $\alpha$ -Hydroxyurs-12-ene-3-*O*-[ $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 4)(2-*O*-sulpho)- $\beta$ -*D*-quinoxyranoside C<sub>42</sub>H<sub>70</sub>O<sub>14</sub>S (831.08). Crystals, mp 215–217°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +10.26° (*c* = 0.02, MeOH). Source: *Zygophyllum atriplicoides* (whole herb). Ref: 4504.

**1999 Atrochryson**

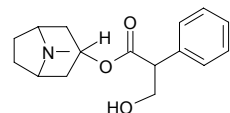
C<sub>15</sub>H<sub>14</sub>O<sub>5</sub> (274.28). Source: *Cortinarius* spp. Ref: 3799.

**2000 Atromentin**

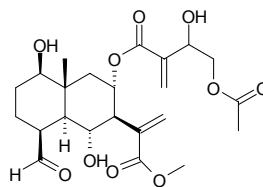
C<sub>18</sub>H<sub>12</sub>O<sub>6</sub> (324.29). Source: JIN HUANG GE JUN *Thelephora aurantiotincta*. Ref: 3423.

**2001 Atropine**

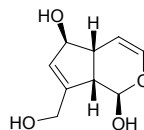
*dl*-Hyoscyamine [51-55-8] C<sub>17</sub>H<sub>23</sub>NO<sub>3</sub> (289.38). Colorless columnar crystals, mp 118–119°C, easily soluble in ethanol, chloroform, slightly soluble in ether, hot water.<sup>[5507]</sup> Pharm: Anticholinergic; antispasmodic (smooth muscle); glandular secretion inhibitor; mydriatic; releases inhibition of vagus nerve to the heart; respiratory stimulant; LD (hmn) = 100mg. Source: DIAN QIE *Atropa belladonna*, GOU QI ZI *Lycium chinense*, LANG DANG YE *Hyoscyamus niger* (leaf: content = 0.010%<sup>[5508]</sup>), LANG DANG ZI *Hyoscyamus niger* (dried ripe seed: mean content of 5 origins = 0.0596%<sup>[5508]</sup>), LOU DOU PAO NANG CAO *Physochlaina infundibularis*, MAN TUO LUO YE *Datura metel*, MAO MAN TUO LUO HUA *Datura innoxia* (flower: content = 0.095%<sup>[5508]</sup>), MAO MAN TUO LUO ZI *Datura innoxia*, NING XIA GOU QI ZI *Lycium barbarum*, OU MAN TUO LUO GEN *Datura stramonium*, SAI LANG DANG *Anisodus luridus*, TIAN PENG ZI *Scopolia sinensis*, XIA TIAN WU *Corydalis decumbens* [Syn. *Corydalis amabilis*], YANG JIN HUA *Datura metel* (flower: content = 0.088%<sup>[5508]</sup>). Ref: 2, 658, 660, 5501, 5507, 5508.

**2002 Atticin**

C<sub>23</sub>H<sub>32</sub>O<sub>10</sub> (468.51). Oil, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +21.7° (*c* = 0.18, CHCl<sub>3</sub>). Pharm: Antifungal (*Aspergillus niger*, MIC = 1  $\mu$ g/mL, control Miconazole, MIC = 1.5  $\mu$ g/mL; *Aspergillus ochraceus*, MIC = 2  $\mu$ g/mL, Miconazole, MIC = 1.5  $\mu$ g/mL; *Aspergillus versicolor*, MIC = 2  $\mu$ g/mL, Miconazole, MIC = 2  $\mu$ g/mL; *Aspergillus flavus*, MIC = 2  $\mu$ g/mL, Miconazole, MIC = 0.5  $\mu$ g/mL; *Penicillium ochrochloron*, MIC = 2  $\mu$ g/mL, Miconazole, MIC = 2  $\mu$ g/mL; *Penicillium funiculosum*, MIC = 2  $\mu$ g/mL, Miconazole, MIC = 2  $\mu$ g/mL; *Trichoderma viride*, MIC = 2  $\mu$ g/mL, Miconazole, MIC = 2  $\mu$ g/mL; *Cladosporium cladosporioides*, MIC = 2  $\mu$ g/mL, Miconazole, MIC = 0.03  $\mu$ g/mL; *Alternaria alternata*, MIC = 1  $\mu$ g/mL, Miconazole, MIC = 0.5  $\mu$ g/mL)<sup>[5115]</sup>. Source: *Centaurea attica* ssp. *attica* (aerial parts). Ref: 5115.

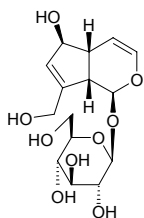
**2003 Aucubigenin**

[64274-28-8] C<sub>9</sub>H<sub>12</sub>O<sub>4</sub> (184.19). Source: TIAN JIAO BAN *Aucuba chinensis* ssp. *omeiensis*. Ref: 6.

**2004 Aucubin**

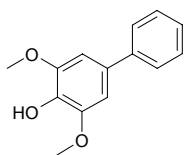
[479-98-1] C<sub>15</sub>H<sub>22</sub>O<sub>9</sub> (346.34). Pharm: Laxative (mus); uricosuric; anti-inflammatory (modulator of cytokine network: prevents TNF- $\alpha$  and IL-6 production in RBL-2H3 stimulated mast cells, IC<sub>50</sub> = 101 ng/mL and 190 ng/mL, respectively, through a mechanism involving the blockade of NF- $\kappa$ B activation)<sup>[4416]</sup>; antitrypanosomal (*Trypanosoma brucei rhodesiense*, IC<sub>50</sub> = 51.1  $\mu$ g/mL, control Melarsoprol, IC<sub>50</sub> = 0.0033  $\mu$ g/mL; *Trypanosoma cruzi*, IC<sub>50</sub> > 90  $\mu$ g/mL, control Benznidazole, IC<sub>50</sub> = 0.70  $\mu$ g/mL)<sup>[5251]</sup>; antileishmanial (*Leishmania donovani*, IC<sub>50</sub> = 10.9  $\mu$ g/mL, control Miltefosin, IC<sub>50</sub> = 0.32  $\mu$ g/mL)<sup>[5251]</sup>; antimalarial (*Plasmodium falciparum*, IC<sub>50</sub> > 50  $\mu$ g/mL, control Artemisinin, IC<sub>50</sub> = 0.002  $\mu$ g/mL)<sup>[5251]</sup>; cytotoxic (L6 cells, IC<sub>50</sub> > 90  $\mu$ g/mL, control Podophyllotoxin, IC<sub>50</sub> = 0.0075  $\mu$ g/mL)<sup>[5251]</sup>. Source: A LA BO PO PO NA *Veronica persica* (aerial parts), CHANG YE CHE QIAN *Plantago lanceolata* (whole herb: mean content = 0.586%<sup>[5508]</sup>), CHE QIAN *Plantago asiatica* (whole herb: mean content = 1.26%, aerial parts: content = 0.600%, root: content = 0.776%, dried ripe fruit: content = 0.055%<sup>[5508]</sup>), CHI YE CAO *Odontites serotina*, DA CHE QIAN *Plantago major* (aerial parts: content = 0.190%, root: content = 0.738%, dried ripe fruit: content = 0.027%<sup>[5508]</sup>), DONG YING SHAN HU MU *Aucuba japonica* (in 1960 the compound was isolated from the plant by S.Fujita et al.)<sup>[5505]</sup>, DU ZHONG *Eucommia ulmoides*, DU ZHONG YE *Eucommia ulmoides* (leaf: mean content of 3 batch samples = 1.892%<sup>[5508]</sup>), GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], LIN

PIAN XUAN SHEN *Scrophularia lepidota* (root), LONG TU ZHU *Clerodendrum thomsonae*, MAO RUI HUA *Verbascum thapsus*, PING CHE QIAN *Plantago depressa* (whole herb: mean content = 0.988%, aerial parts: content = 0.118%, root: content = 0.218%, dried ripe fruit: content = 0.086%<sup>[5508]</sup>), TIAN JIAO BAN *Aucuba chinensis* ssp. *omeiensis*, XI ZANG HU HUANG LIAN *Picrorhiza scrophulariiflora*, XIAO MI CAO *Euphrasia officinalis*, XIAO PO PO NA *Veronica serpyllifolia*, ZHI LI PO PO NA *Veronica arvensis*, ZI MU *Catalpa ovata* (stem bark). Ref: 2, 658, 660, 4211, 4416, 5251, 5501, 5505, 5508.



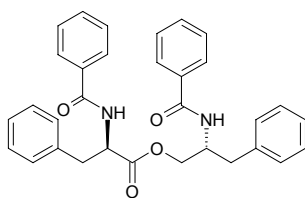
#### 2005 Aucuparin

$C_{14}H_{14}O_3$  (230.27). **Pharm:** Antifungal; cytotoxic ( $P_{388}$   $ED_{50} = 3.21\mu\text{g/mL}$ , control Mithramycin  $ED_{50} = 0.06\mu\text{g/mL}$ , HT29  $ED_{50} = 5.39\mu\text{g/mL}$ , Mithramycin  $ED_{50} = 0.08\mu\text{g/mL}$ )<sup>[4094]</sup>. **Source:** OU ZHOU HUA QIU *Sorbus aucuparia*, MEI LI HUA QIU *Sorbus decora*, TAI WAN LV DAO TENG HUANG *Garcinia linii*. Ref: 658, 4094.



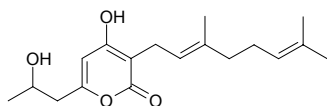
#### 2006 (-)-Auranamide

$C_{32}H_{30}N_2O_4$  (506.61). **Pharm:** Cytotoxic (hmn cancer lines NUGC-3,  $IC_{50} = 17.12\mu\text{g/mL}$ , hmn cancer lines HONE-1,  $IC_{50} = 8.68\mu\text{g/mL}$ , hmn cancer lines A549,  $EC_{50} < 2.5\mu\text{g/mL}$ , hmn cancer lines MCF7,  $EC_{50} < 2.5\mu\text{g/mL}$ ). **Source:** NAN TOU QIU HAI TANG *Begonia nantoensis* (rhizome). Ref: 4267.



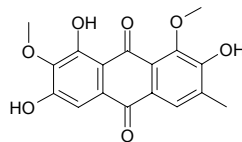
#### 2007 Aurantiacone

3-Geranyl-4-hydroxy-6-(2-hydroxypropyl)-2-pyrone  $C_{18}H_{26}O_4$  (306.41). **Source:** JU SE GOU SUAN JIANG *Mimulus aurantiacus*. Ref: 1988.



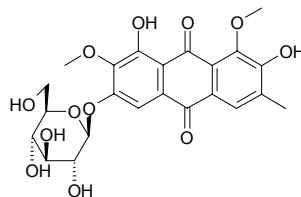
#### 2008 Aurantioobtusin

[67979-25-3]  $C_{17}H_{14}O_7$  (330.30). **Source:** JUE MING ZI *Cassia tora*. Ref: 2.



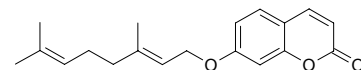
#### 2009 Aurantioobtusin $\beta$ -D-glucoside

$C_{23}H_{24}O_{12}$  (492.44). **Pharm:** Platelet aggregation inhibitor (rat). **Source:** DUN YE JUE MING *Cassia obtusifolia*. Ref: 658.



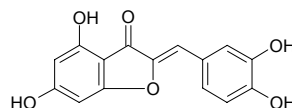
#### 2010 Auraptene

$C_{19}H_{22}O_3$  (298.39). mp 68°C. **Pharm:** Platelet aggregation inhibitor (high activity). **Source:** DONG FENG JU GEN *Atalantia buxifolia* [Syn. *Severinia buxifolia*] (root cortex)<sup>[3075]</sup>, GOU JU HE *Poncirus trifoliata*, QING JIAO *Zanthoxylum schinifolium*. Ref: 6, 2176, 3075.



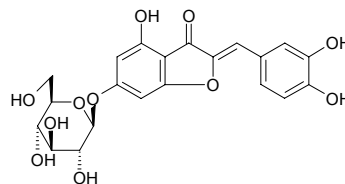
#### 2011 Aureusidin

[480-70-6]  $C_{15}H_{10}O_6$  (286.24). mp 270°C (decomposing under 295°C). **Pharm:** Iodinate thyronine deiodinase inhibitor (rat, membrane of microsome in liver cells). **Source:** NING MENG PI *Citrus limon*. Ref: 6, 658, 660.



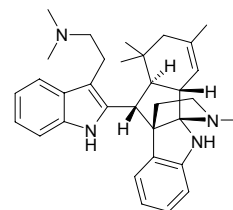
#### 2012 Aureusidin-6-glucoside

$C_{21}H_{20}O_{11}$  (448.39). mp 264.5~265.5°C. **Source:** NING MENG PI *Citrus limon*. Ref: 6, 660.



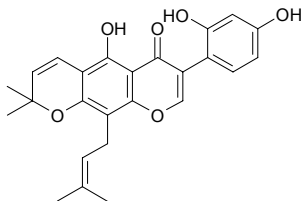
#### 2013 Auricularine

[73706-32-8]  $C_{33}H_{42}N_4$  (494.73). **Pharm:** Antibacterial; prevents enteritis; treatment of abdominalgia, cholera in early stage, colitis and dysentery. **Source:** ER CAO *Hedyotis auricularia*. Ref: 658.

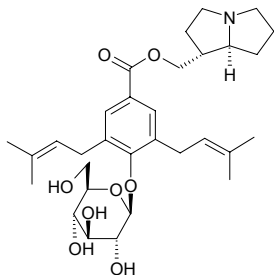


**2014 Auriculatin**

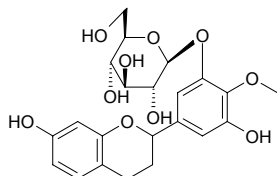
$C_{25}H_{24}O_6$  (420.47). Source: ER XING JI XUE TENG *Milletia auriculata*, *Erythrina vogelii*. Ref: 1521, 4421.

**2015 Auriculine**

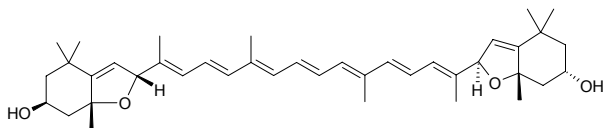
[22595-00-2]  $C_{31}H_{45}NO_8$  (559.71). Pharm: Hepatotoxin. Source: LUO XI YANG ER SUAN *Liparis loeselii*, ER XING YANG ER LAN *Liparis auriculata*. Ref: 658.

**2016 Auriculoside**

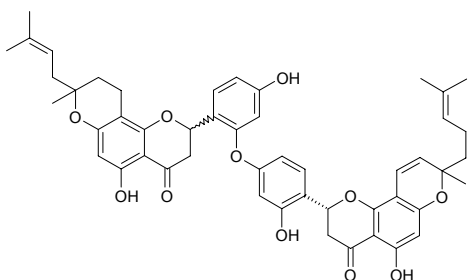
[75871-96-4]  $C_{22}H_{26}O_{10}$  (450.45). Pharm: Anxiolytic; CNS depressant. Source: ER XING JIN HE HUAN *Acacia auriculaeformis*. Ref: 658.

**2017 Auroxanthin**

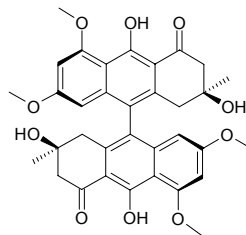
$C_{40}H_{56}O_4$  (600.89). Source: NAN GUA *Cucurbita moschata*, SAN SE JIN *Viola tricolor*, WAN SHOU JU *Tagetes erecta*, XIANG YUAN *Citrus wilsonii*, YE MU XU *Medicago falcata* (flower). Ref: 660.

**2018 Australone B**

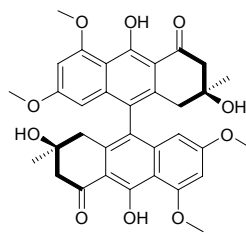
$C_{49}H_{50}O_{11}$  (814.94). Pharm: Platelet aggregation inhibitor (caused by adrenaline). Source: *Morus* sp. Ref: 2513.

**2019 Austrocolorin A<sub>1</sub>**

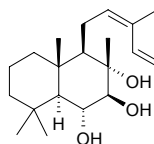
$C_{34}H_{34}O_{10}$  (602.64). Green prisms, mp 146–147°C (toluene-petrol),  $[\alpha]_D = +288^\circ$  ( $c = 0.05$ ,  $CHCl_3$ ). Source: *Dermocybe* sp. (fruit body). Ref: 3799.

**2020 Austrocolorin B<sub>1</sub>**

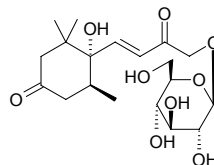
$C_{34}H_{34}O_{10}$  (602.64). Yellow-green powder, mp 139–141°C (MeOH),  $[\alpha]_D = -316^\circ$  ( $c = 0.045$ ,  $CHCl_3$ ). Source: *Dermocybe* sp. (fruit body). Ref: 3799.

**2021 Austroinulin**

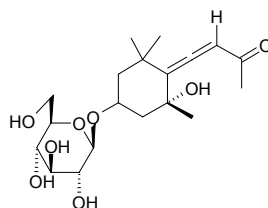
$C_{20}H_{34}O_3$  (322.49). Pharm: Cytotoxic (HeLa,  $IC_{50} = 22.3\mu g/mL$ , control Mitomycin C,  $IC_{50} = 1.7\mu g/mL$ ); cell cycle inhibitor (HeLa, at G1 stage,  $15.2\mu g/mL$  ( $47.2\mu mol/L$ )). Source: TUAN JI AI NA XIANG *Blumea glomerata*. Ref: 4092.

**2022 Austroside A**

$C_{19}H_{30}O_9$  (402.45). White powder,  $[\alpha]_D^{25} = -40.8^\circ$  ( $c = 1.3$ , MeOH). Source: HUA NAN WU ZHU YU *Evodia austrosinensis*. Ref: 5052.

**2023 Austroside B**

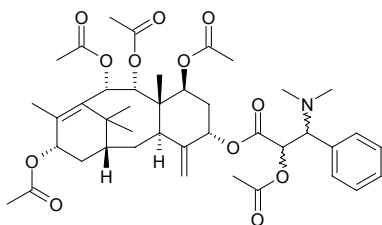
$C_{19}H_{30}O_8$  (386.45). White powder,  $[\alpha]_D^{25} = -33.8^\circ$  ( $c = 0.8$ , MeOH). Source: HUA NAN WU ZHU YU *Evodia austrosinensis*. Ref: 5052.



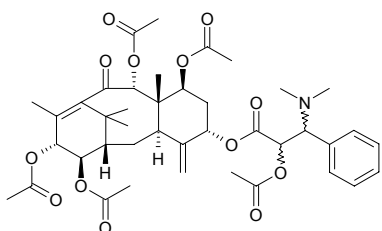


**2024 Austrospicatine**

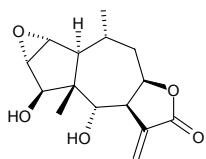
[119777-76-3]  $C_{41}H_{55}NO_{12}$  (753.89). Source: AO DA LI YA HONG DOU SHAN *Austrotaxus spicata*. Ref: 662.

**2025 Austrotaxine**

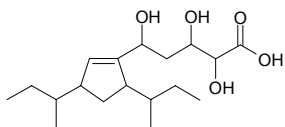
[119789-82-1]  $C_{41}H_{53}NO_{13}$  (767.88). Source: AO DA LI YA HONG DOU SHAN *Austrotaxus spicata*. Ref: 662.

**2026 Autumnolide**

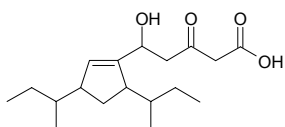
[20505-32-2]  $C_{15}H_{20}O_5$  (280.32). Colorless acicular crystals (acetone-motor naphtha), mp 199–201°C; 188–190°C,  $[\alpha]_D^{25} = +20.6^\circ$  ( $c = 1.84$ , chloroform). Pharm: Antineoplastic; cytotoxic (KB,  $ED_{50} = 3.1$  mg/mL). Source: SHAN DI DUI XIN JU *Helenium autumnale* var. *montanum*, DUI XIN JU *Helenium autumnale*. Ref: 658, 661.

**2027 Auxin A**

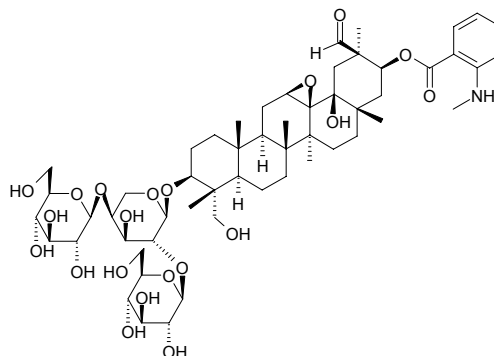
$C_{18}H_{32}O_5$  (328.45). Source: LV SUN PIAN *Sinocalamus oldhami*. Ref: 660.

**2028 Auxin B**

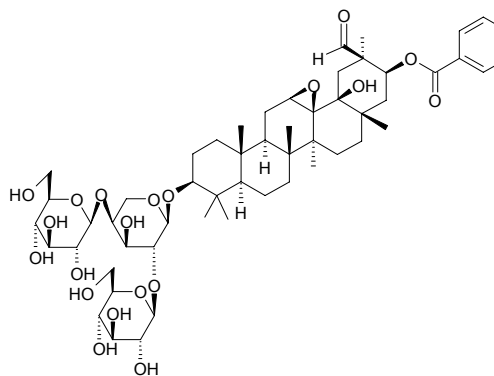
$C_{18}H_{30}O_4$  (310.44). Source: LV SUN PIAN *Sinocalamus oldhami*. Ref: 660.

**2029 Avenacin A<sub>1</sub>**

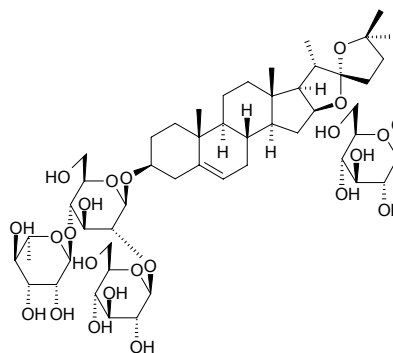
[90547-90-3]  $C_{55}H_{83}NO_{21}$  (1094.27). Pharm: Antifungal (pathogen fungi of plants); hemolytic. Source: YAN MAI *Avena sativa*. Ref: 658.

**2030 Avenacin B<sub>2</sub>**

[90547-93-6]  $C_{54}H_{80}O_{20}$  (1049.23). Pharm: Antifungal (pathogen fungi of plants); hemolytic. Source: YAN MAI *Avena sativa*. Ref: 658.

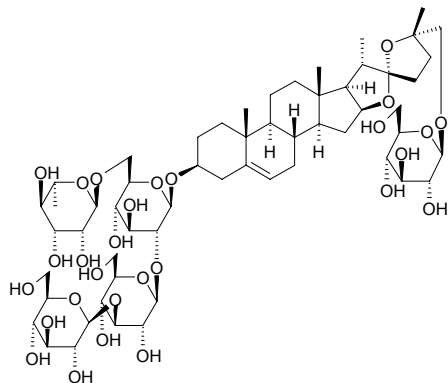
**2031 Avenacoside A**

[24915-65-9]  $C_{51}H_{82}O_{23}$  (1063.21). Pharm: Antifungal. Source: YAN MAI *Avena sativa*. Ref: 658.

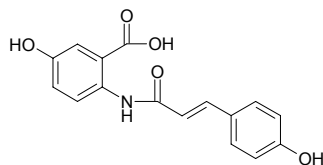


**2032 Avenacoside B**

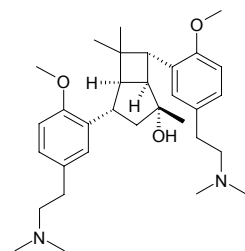
[35920-91-3]  $C_{57}H_{92}O_{28}$  (1225.35). Pharm: Antifungal. Source: YAN MAI *Avena sativa*. Ref: 658.

**2033 Avenalumin I**

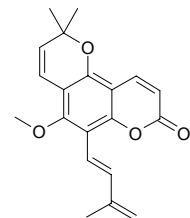
[108605-70-5]  $C_{16}H_{13}NO_5$  (299.28). Pharm: Antifungal. Source: YAN MAI *Avena sativa*. Ref: 658.

**2034 Avicennamine**

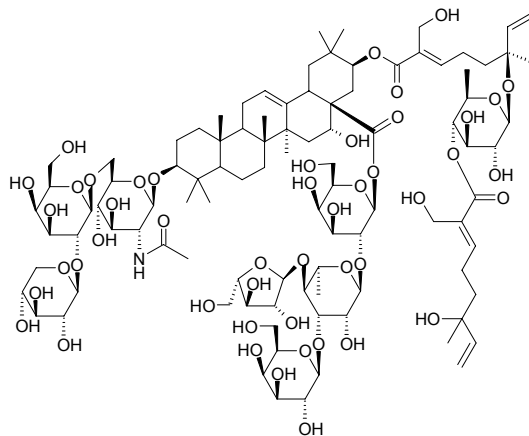
$C_{32}H_{48}N_2O_3$  (508.75). Pharm: Platelet aggregation inhibitor; DNA isomerase inhibitor; antibacterial; cytotoxic. Source: *Zanthoxylum* sp. Ref: 2176.

**2035 Avicennin**

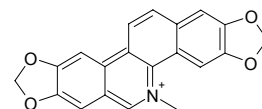
[53258-71-2]  $C_{20}H_{20}O_4$  (324.38). mp 141~142°C. Source: YING BU BO *Zanthoxylum avicennae*. Ref: 6.

**2036 Avicin D**

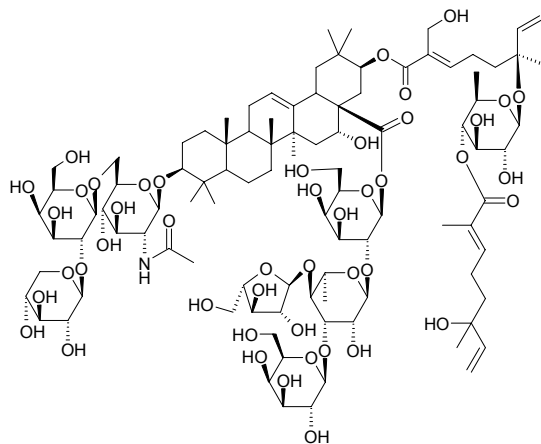
$C_{98}H_{155}NO_{47}$  (2099.31). Pharm: Anti-inflammatory (inhibits expression of COX-2 through inhibition of NF- $\kappa$ B); anti-inflammatory (NO production inhibitor). Source: WEI DUO LI YA JIN HE HUAN *Acacia Victoria*. Ref: 4415.

**2037 Avicine**

[24939-31-9]  $C_{20}H_{14}NO_4$  (332.34). Source: YING BU BO *Zanthoxylum avicennae*. Ref: 6.

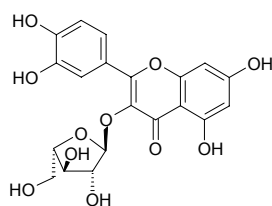
**2038 Avicin G**

$C_{98}H_{155}NO_{46}$  (2083.31). Pharm: Anti-inflammatory (inhibits expression of COX-2 through inhibition of NF- $\kappa$ B)<sup>[4415]</sup>; anti-inflammatory (NO production inhibitor)<sup>[4415]</sup>. Source: WEI DUO LI YA JIN HE HUAN *Acacia Victoria*. Ref: 4415.

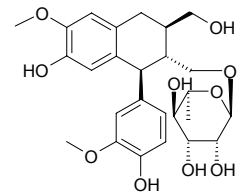


**2039 Avicularin**

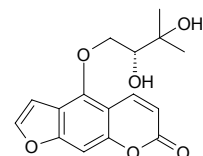
Polystachoside [5041-68-9]  $C_{20}H_{18}O_{11}$  (434.36). mp 217°C (hydrate); 222°C (anhydrous); mp 246~247°C. **Pharm:** Diuretic; antihypertensive; hepatoprotective (primary cultures of rat hepatocytes,  $H_2O_2$ -induced toxicity, 50  $\mu$ mol/L, relative protection = 20.2% ( $H_2O_2$ -treated, relative protection = 0.0%; control, relative protection = 100%), positive control Silibinin, Relative protection = 74.9%)<sup>[4996]</sup>; toxin. **Source:** BIAN XU *Polygonum aviculare* (dried aerial parts: content scope = 0.194%~0.200%)<sup>[5501]</sup>, CHI MA *Boehmeria platanifolia* [Syn. *Boehmeria tricuspis*], FAN SHI LIU GAN *Psidium guajava*, DUO SUI LIAO *Polygonum polystachyum*, FAN SHI LIU YE *Psidium guajava*, HU ZHANG YE *Polygonum cuspidatum*, LIANG QI LIAO *Polygonum amphibium*, MAN SHAN HONG *Rhododendron dauricum*, SAN BAI CAO *Saururus chinensis*, SAN SE JIN *Viola tricolor*, SANG JI SHENG *Loranthus parasiticus* [Syn. *Loranthus chinensis*; *Taxillus chinensis*] (stem and branch-leaf: content = 0.4%)<sup>[5501]</sup>, YUE JU YE *Vaccinium vitis-idaea*, RI BEN GUI DENG QING *Rodgersia podophylla* (aerial parts). **Ref:** 6, 658, 660, 1521, 4996, 5501.

**2040 Aviculin**

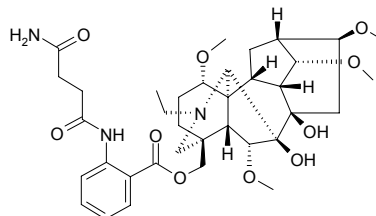
[156765-33-2]  $C_{26}H_{34}O_{10}$  (506.55). **Pharm:** Inhibits cancer cell invasion (MM1 cells, *in vitro*, 10  $\mu$ g/mL, InRt = 20.2%)<sup>[4329]</sup>. **Source:** BIAN XU *Polygonum aviculare*, HEI ZI LI GUO JI SHENG *Scurrura atropurpurea*. **Ref:** 1521, 4329.

**2041 Aviprin**

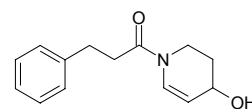
(R)-(+)-Oxypeucedanin hydrate; Hydroxypeucedanin hydrate [2643-85-8]  $C_{16}H_{16}O_6$  (304.30). Yellowish lamellar crystals (petroleum ether-EtOAc), mp 130~132°C,  $[\alpha]_D = +17^\circ$  ( $Me_2CO$ ); yellowish fluorescence crystals (chloroform), mp 131.5~132.0°C; 134,  $[\alpha]_D^{25} = +18^\circ$  ( $c = 1.5$ , acetone). **Pharm:** NO Production inhibitor (LPS-activated mouse peritoneal macrophages, 100  $\mu$ mol/L, InRt = (5.5 $\pm$ 3.4)%, control L-NMMA, 100  $\mu$ mol/L, InRt = (79.2 $\pm$ 0.9)%)<sup>[4454]</sup>; antifungal (*Cladosporium cucumerinum*, MIC = 10  $\mu$ g); calcium antagonist. **Source:** BAI ZHI *Angelica dahurica* [Syn. *Angelica porphyrocaulis*], FEN CHA DANG GUI *Angelica furcijuga* (flower), MO GUO QIN *Sphallerocarpus gracilis*. **Ref:** 2, 900, 2500, 4454.

**2042 Awadcharidine**

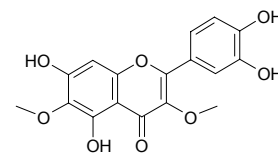
$C_{36}H_{51}N_3O_{10}$  (685.82). **Pharm:** Muscle relaxant (curariform action). **Source:** GAN WAN WU TOU *Aconitum finetianum*, GAO JIA SUO WU TOU *Aconitum orientale*, KE SHEN MI ER CUI QUE *Delphinium cashmerianum*. **Ref:** 658.

**2043 Awaine**

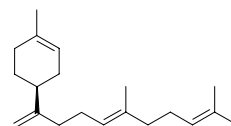
$C_{14}H_{17}NO_2$  (231.30). Colorless oil. **Source:** KA WA HU JIAO *Piper methysticum*. **Ref:** 3373.

**2044 Axillarin**

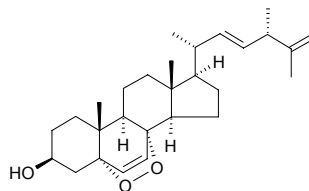
[5188-73-8]  $C_{17}H_{14}O_8$  (346.30). **Pharm:** Antiviral; aldose reductase inhibitor (eye lens). **Source:** MU<sup>(3)</sup> JU *Matricaria chamomilla* [Syn. *Matricaria recutita*], HUANG HUA HAO *Artemisia annua*, *Achillea* sp., *Artemisia* sp. **Ref:** 2, 658, 660.

**2045 (+)-Axinyssene**

(+)-1-Methyl-4-(5,9-dimethyl-1-methylene-deca-4,8-dienyl)cyclohexene  $C_{20}H_{32}$  (272.48). Colorless oil. **Source:** QUAN YUAN YE AO TUO SI TE CAO *Otostegia integrifolia* (leaf). **Ref:** 3823.

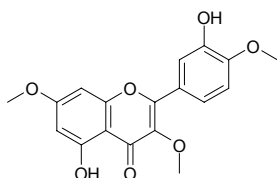
**2046 Axinysterol**

$C_{28}H_{42}O_3$  (426.65). **Source:** Sponge *Axinysa* sp. **Ref:** 4231.

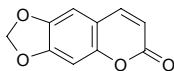


**2047 Ayanin**

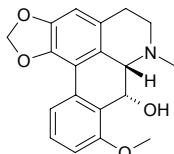
$C_{18}H_{16}O_7$  (344.32). **Pharm:** Cytotoxic (P<sub>388</sub> cell line, ED<sub>50</sub> = 0.22 μg/mL, control Mithramycin, ED<sub>50</sub> = 0.06 μg/mL; HT29, ED<sub>50</sub> = 11.2 μg/mL, Mithramycin, ED<sub>50</sub> = 0.07 μg/mL; A549, ED<sub>50</sub> = 6.9 μg/mL, Mithramycin, ED<sub>50</sub> = 0.08 μg/mL)<sup>[5405]</sup>. **Source:** BEI AI *Artemisia vulgaris*, SI ROU TUO GUO YE MI ZHU YU *Melicope semecarpifolia*. **Ref:** 660, 5405.

**2048 Ayapin**

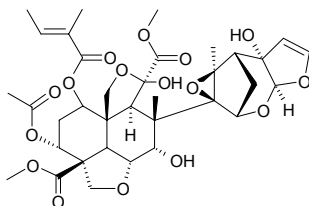
6,7-Methylenedioxy coumarin [494-56-4]  $C_{10}H_6O_4$  (190.15). Yellow crystals (MeOH), mp 222–223°C, mp 231–232°C. **Pharm:** Hemostatic (dog, ip, 500mg/kg, reduces time of coagulation by 18.4%, 350mg/kg, reduces time of coagulation by 96.1%); cytotoxic inactive (Lu1, 20 μg/mL, control Ellipticine, ED<sub>50</sub> = 0.02 μg/mL; Col2, 20 μg/mL, Ellipticine, ED<sub>50</sub> = 0.3 μg/mL; KB, 20 μg/mL, Ellipticine, ED<sub>50</sub> = 0.04 μg/mL; LN CaP, 20 μg/mL, Ellipticine, ED<sub>50</sub> = 0.8 μg/mL; KB in absence of 1 μg/mL vinblastine, 20 μg/mL, Ellipticine, ED<sub>50</sub> = 0.3 μg/mL; KB in presence of 1 μg/mL vinblastine, 20 μg/mL, Ellipticine, ED<sub>50</sub> = 0.2 μg/mL; BC1, 20 μg/mL, Ellipticine, ED<sub>50</sub> = 0.5 μg/mL)<sup>[3479]</sup>. **Source:** A YA PAN ZE LAN *Eupatorium ayapana*, *Alomia myriadenia* (aerial parts). **Ref:** 658, 661, 3479.

**2049 (-)-Ayuthianine**

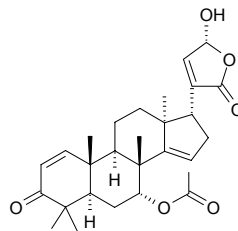
$C_{19}H_{19}NO_4$  (325.37).  $[\alpha]_D^{25} = -29.8^\circ$  (CHCl<sub>3</sub>). **Source:** *Stephania* sp. **Ref:** 3404.

**2050 Azadirachtin**

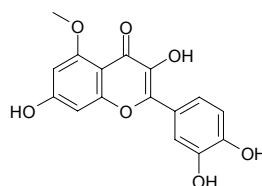
[11141-17-6]  $C_{35}H_{44}O_{16}$  (720.73). **Pharm:** Anthelmintic (effective component in seeds of *Melia azedarach*); insect antifeedant (including grasshoppers). **Source:** KU LIAN PI *Melia azedarach*. **Ref:** 658.

**2051 Azadironolide**

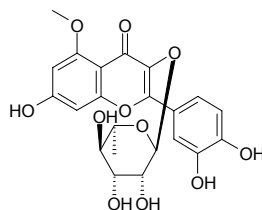
$C_{28}H_{36}O_6$  (468.60).  $[\alpha]_D^{28} = +8.9^\circ$  (c = 0.17, CHCl<sub>3</sub>) **Source:** YIN DU LIAN *Azadiractica indica*. **Ref:** 1521.

**2052 Azaleatin**

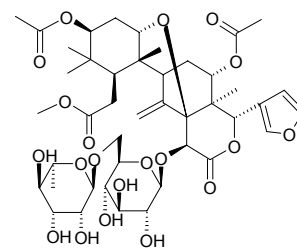
Quercetin-5-methyl ether [529-51-1]  $C_{16}H_{12}O_7$  (316.27). mp 322°C. **Source:** BAI HUA YING SHAN HONG *Rhododendron mucronatum*, GAO LIANG JIANG *Alpinia officinarum*, MAN SHAN HONG *Rhododendron dauricum*, XI YE TENG *Tetracera asiatica*, XUAN FU HUA *Inula britannica*, YING SHAN HONG *Rhododendron mucronulatum*, ZHONG GUO XUAN FU HUA *Inula britannica* var. *chinensis*. **Ref:** 6, 660.

**2053 Azalein**

[29028-02-2]  $C_{22}H_{22}O_{11}$  (462.41). mp 181–185°C. **Source:** BAI HUA YING SHAN HONG *Rhododendron mucronatum*. **Ref:** 6.

**2054 Azecin 1**

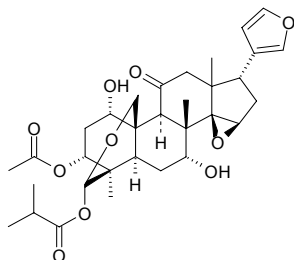
[182565-73-7]  $C_{43}H_{60}O_{20}$  (896.93). Colorless crystals solid, mp 180–182°C. **Pharm:** Insect antifeedant. **Source:** KU LIAN PI *Melia azedarach*. **Ref:** 1043.



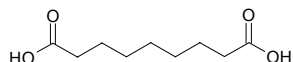
**2055 Azedarachin C**

[157653-66-2] C<sub>32</sub>H<sub>42</sub>O<sub>10</sub> (586.68). [ $\alpha$ ]<sub>D</sub><sup>22</sup> = -41° (c = 0.08, chloroform).

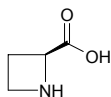
**Pharm:** Insect antifeedant. **Source:** KU LIAN PI *Melia azedarach*. **Ref:** 1118.

**2056 Azelaic acid**

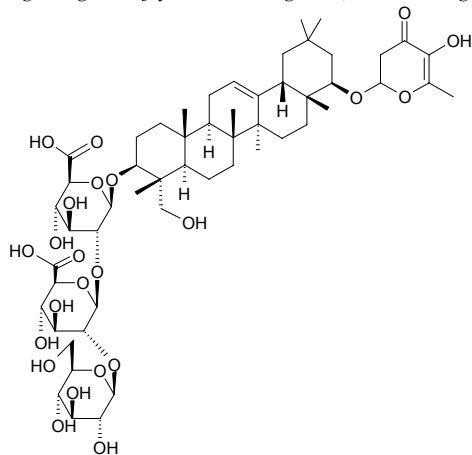
Anchoic acid [123-99-9] C<sub>9</sub>H<sub>16</sub>O<sub>4</sub> (188.23). **Pharm:** Anti-acne agent (used in treatment of acne and other pigment diseases instead of tetracycline). **Source:** DANG GUI *Angelica sinensis*, DANG SHEN *Codonopsis pilosula*, HUANG HAO *Artemisia scoparia* [Syn. *Artemisia capillaris* var. *scoparia*], MU JIN PI *Hibiscus syriacus*, SI CHI SI LENG CAO *Schnabelia tetradonta* (aerial parts: yield = 0.00031%dw)<sup>[4665]</sup>. **Ref:** 2, 519, 658, 4665.

**2057 Azetidine-2-carboxylic acid**

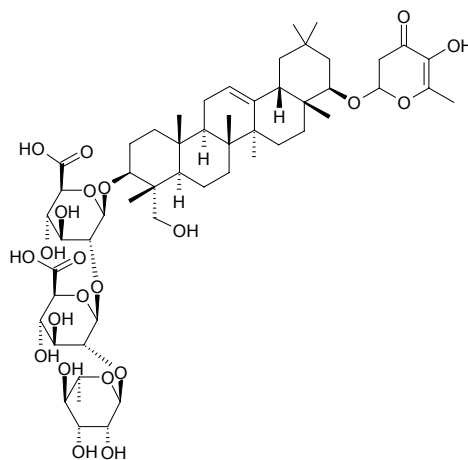
[2133-34-8] C<sub>4</sub>H<sub>7</sub>NO<sub>2</sub> (101.11). Does not melt, but turns black at 270°C. **Pharm:** Antimicrobial; larvacide. **Source:** DUO HUA HUANG JING *Polygonatum cyrtonema* [Syn. *Polygonatum multiflorum*], FENG HUANG MU *Delonix regia*, LING LAN *Convallaria keiskei* [Syn. *Convallaria majalis*], TIAN CAI *Beta vulgaris*, YU ZHU *Polygonatum odoratum* [Syn. *Polygonatum officinale*]. **Ref:** 6, 658, 660.

**2058 Az II**

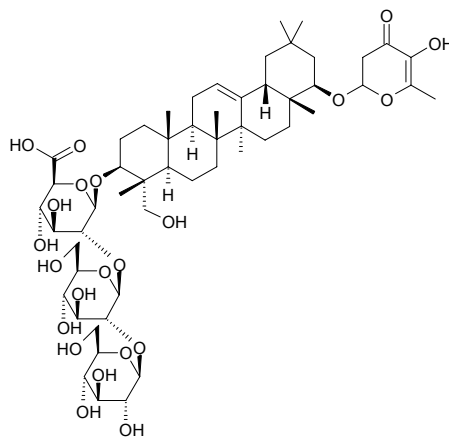
C<sub>54</sub>H<sub>82</sub>O<sub>23</sub> (1099.24). [ $\alpha$ ]<sub>D</sub><sup>23</sup> = -37.4° (c = 0.43, MeOH). **Source:** CHI DOU *Vigna angularis* [Syn. *Dolichus angularis*; *Phaseolus angularis*]. **Ref:** 2337.

**2059 Az III**

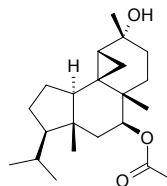
C<sub>54</sub>H<sub>82</sub>O<sub>22</sub> (1083.24). [ $\alpha$ ]<sub>D</sub><sup>23</sup> = -68.25° (c = 0.4, MeOH). **Source:** CHI DOU *Vigna angularis* [Syn. *Dolichus angularis*; *Phaseolus angularis*]. **Ref:** 2337.

**2060 Az IV**

[244776-47-4] C<sub>54</sub>H<sub>84</sub>O<sub>22</sub> (1085.26). [ $\alpha$ ]<sub>D</sub><sup>23</sup> = -80.75° (c = 0.4, MeOH). **Source:** CHI DOU *Vigna angularis* [Syn. *Dolichus angularis*; *Phaseolus angularis*]. **Ref:** 2337.

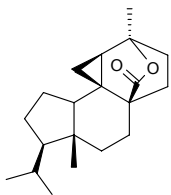
**2061 Azorellanol**

C<sub>22</sub>H<sub>36</sub>O<sub>3</sub> (348.53). **Pharm:** Trichomonocidal (*Trichomonas vaginalis*, LD<sub>50</sub> = 40.5 μmol/L)<sup>[5125]</sup>. **Source:** *Azorella yareta* (aerial parts). **Ref:** 5125.

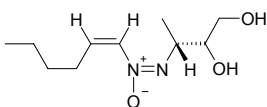


**2062 Azorellolide**

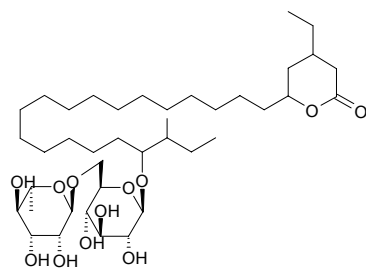
$C_{20}H_{30}O_2$  (302.46). Colorless needles (ethyl ether), mp 146–147°C,  $[\alpha]_D^{19.8} = -64.94^\circ$  ( $c = 0.56$ ,  $CHCl_3$ ). Source: YIN HUA YAO XIAO YING QIN *Azorella cryptantha* (aerial parts). Ref: 3825.

**2063 Azoxyalkene**

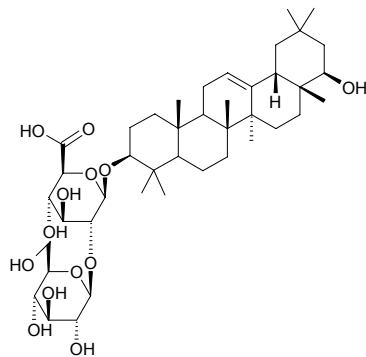
$C_{10}H_{20}N_2O_3$  (216.28). Yellow oil,  $[\alpha]_D^{25} = -30^\circ$  ( $c = 0.2$ , MeOH). Pharm: Antibiotic (*Rhodotorula* sp., weak). Source: XING SHU GEN *Prunus armeniaca*. Ref: 5402.

**2064 Azralidocide**

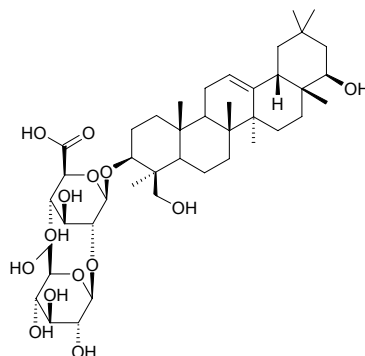
[37551-77-2]  $C_{40}H_{74}O_{12}$  (747.03). mp 108–110°C. Source: SHEN HUANG DOU *Cassia nodosa*. Ref: 6.

**2065 Azukisaponin I**

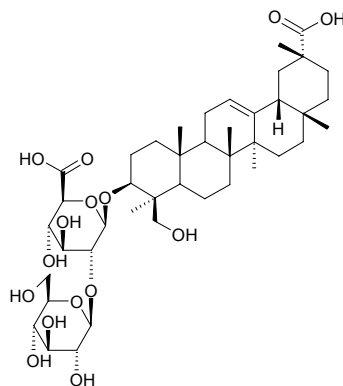
$C_{42}H_{68}O_{13}$  (781.00). Source: CHI DOU *Vigna angularis* [Syn. *Dolichus angularis*; *Phaseolus angularis*], HUAI *Sophora japonica*. Ref: 660.

**2066 Azukisaponin II**

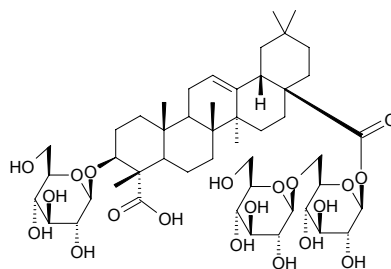
$C_{42}H_{68}O_{14}$  (797.00). Source: CHI DOU *Vigna angularis* [Syn. *Dolichus angularis*; *Phaseolus angularis*], HUAI *Sophora japonica*. Ref: 660.

**2067 Azukisaponin III**

$C_{42}H_{66}O_{15}$  (810.99). Source: CHI DOU *Vigna angularis* [Syn. *Dolichus angularis*; *Phaseolus angularis*]. Ref: 1521.

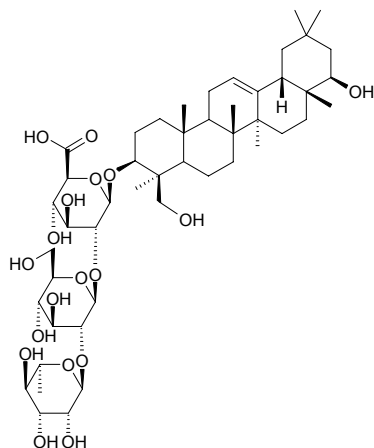
**2068 Azukisaponin IV**

$C_{48}H_{76}O_{20}$  (973.13). Source: CHI DOU *Vigna angularis* [Syn. *Dolichus angularis*; *Phaseolus angularis*], SHI ZHU *Dianthus chinensis*. Ref: 660.

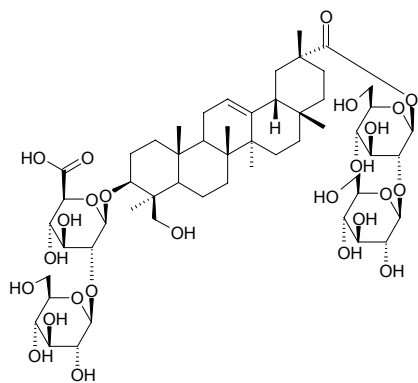


**2069 Azukisaponin V**

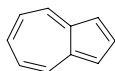
$C_{48}H_{78}O_{18}$  (943.15). Source: CHI DOU *Vigna angularis* [Syn. *Dolichus angularis*; *Phaseolus angularis*], HUAI *Sophora japonica*. Ref: 660.

**2070 Azukisaponin VI**

$C_{54}H_{86}O_{25}$  (1135.27). Source: CHI DOU *Vigna angularis* [Syn. *Dolichus angularis*; *Phaseolus angularis*]. Ref: 1521.

**2071 Azulene**

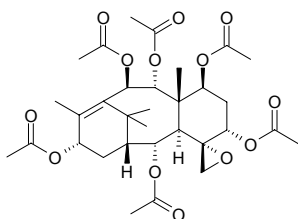
[275-51-4]  $C_{10}H_8$  (128.18). mp 98.5–99.0°C. Pharm: Antiulcerative (rat, gastric ulcer);  $5\alpha$ -reductase inhibitor inactive ( $IC_{50} > 1\text{mmol/L}$ ; control Finasteride,  $IC_{50} = (0.38 \pm 0.06)\mu\text{mol/L}$ ;  $\alpha$ -Linolenic acid,  $IC_{50} = (160.3 \pm 24.6)\mu\text{mol/L}$ )<sup>[5398]</sup>. Source: MU<sup>(3)</sup> JU *Matricaria chamomilla* [Syn. *Matricaria recutita*], YANG SHI CAO *Achillea millefolium*, ZHANG MU *Cinnamomum camphora*. Ref: 6, 658, 660, 5398.



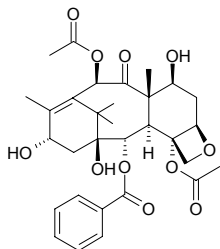
## B

**2072 Baccatin I**

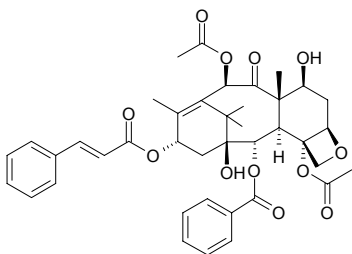
[30244-35-0] C<sub>32</sub>H<sub>44</sub>O<sub>13</sub> (636.70). mp 298°C, [α]<sub>D</sub> = +86°. Source: JIANG GUO ZI SHAN *Taxus baccata*. Ref: 662.

**2073 Baccatin III**

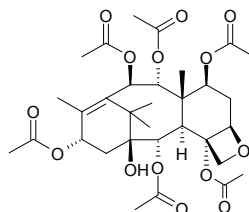
[27548-93-2] C<sub>31</sub>H<sub>38</sub>O<sub>11</sub> (586.64). White lump crystals (chloroform–diethyl ether), mp 230–234°C, mp 236–238°C, mp 229–231°C, [α]<sub>D</sub><sup>14</sup> = –87.9° (c = 0.10, chloroform), [α]<sub>D</sub> = –54° (MeOH), [α]<sub>D</sub> = –54° (MeOH). Pharm: Antineoplastic; cytotoxic; antioxidant (DPPH scavenger, IC<sub>50</sub> > 200 μmol/L, control Caffeic acid, IC<sub>50</sub> = 25.5 μmol/L)<sup>[5407]</sup>; NO production inhibitor (IC<sub>50</sub> = 120 μmol/L, control L-NMMA, IC<sub>50</sub> = 28.5 μmol/L)<sup>[5407]</sup>. Source: JIANG GUO ZI SHAN *Taxus baccata*, SU MEN DA LA HONG DOU SHAN *Taxus sumatrana* (twig and leaf)<sup>[4666]</sup>, YUN NAN HONG DOU SHAN *Taxus yunnanensis*, YUN NAN HONG DOU SHAN *Taxus yunnanensis* (wood), ZI SHAN *Taxus cuspidata*. Ref: 662, 900, 4666, 5407.

**2074 Baccatin III 13-cinnamate**

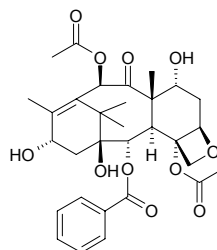
Taxuspinanane J; Deaminoacylcinnamoyltaxol C<sub>40</sub>H<sub>44</sub>O<sub>12</sub> (716.79). Gum, [α]<sub>D</sub><sup>25</sup> = –75.7° (c = 1.0, CHCl<sub>3</sub>); [α]<sub>D</sub> = –43.8° (CHCl<sub>3</sub>), [α]<sub>D</sub> = –75.7° (CHCl<sub>3</sub>). Source: JIE ZHI HONG DOU SHAN *Taxus media*, MEI LI HONG DOU SHAN *Taxus mairei*, ZI SHAN *Taxus cuspidata*. Ref: 662, 1873.

**2075 Baccatin IV**

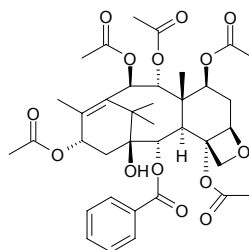
[57672-77-2] C<sub>32</sub>H<sub>44</sub>O<sub>14</sub> (652.70). mp 254–255°C, [α]<sub>D</sub> = +19°. Pharm: NO production inhibitor (IC<sub>50</sub> = 51.2 μmol/L, control L-NMMA, IC<sub>50</sub> = 28.5 μmol/L)<sup>[5407]</sup>. Source: YUN NAN HONG DOU SHAN *Taxus yunnanensis* (wood), *Taxus* sp. Ref: 662, 5407.

**2076 Baccatin V**

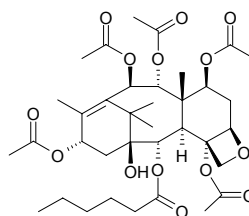
[31077-81-3] C<sub>31</sub>H<sub>38</sub>O<sub>11</sub> (586.64). mp 254–255°C, [α]<sub>D</sub> = –87°. Source: JIANG GUO ZI SHAN *Taxus baccata*. Ref: 662.

**2077 Baccatin VI**

C<sub>37</sub>H<sub>46</sub>O<sub>14</sub> (714.77). mp 239–241°C, mp 248–250°C, mp 244–245°C, [α]<sub>D</sub> = –5° (CHCl<sub>3</sub>), [α]<sub>D</sub> = –9° (CHCl<sub>3</sub>). Source: JIANG GUO ZI SHAN *Taxus baccata*, JIE ZHI HONG DOU SHAN *Taxus media*. Ref: 662, 1521.

**2078 Baccatin VII**

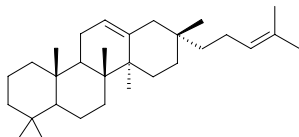
C<sub>36</sub>H<sub>52</sub>O<sub>14</sub> (708.81). mp 270°C, [α]<sub>D</sub> = +9°. Source: *Taxus* sp. Ref: 662, 1521.



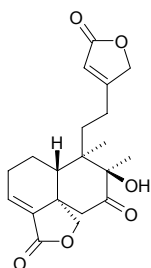


**2079 Bacchara-12,21-diene**

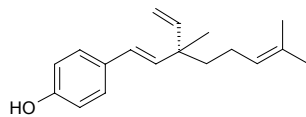
C<sub>30</sub>H<sub>50</sub> (410.73). **Source:** DAO LUAN YE FU SHI JUE *Lemnaphyllum microphyllum* var. *obovatum*. **Ref:** 660.

**2080 Bacchariol**

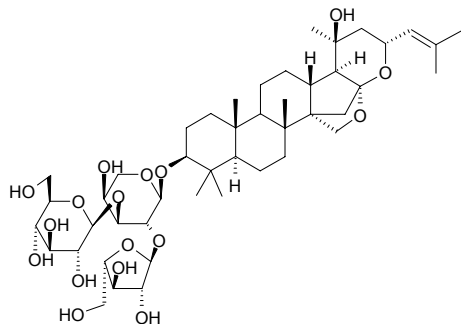
C<sub>20</sub>H<sub>24</sub>O<sub>6</sub> (360.41). White powder, mp 179~182°C,  $[\alpha]_D^{25} = -117^\circ$  ( $c = 0.7$ , CHCl<sub>3</sub>). **Source:** *Baccharis gaudichaudiana* (aerial parts). **Ref:** 4313.

**2081 Bakuchiol**

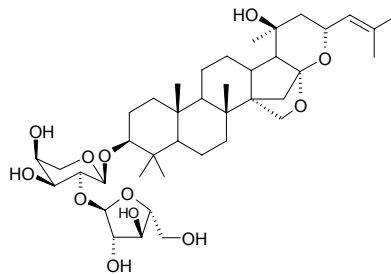
Bakuchiol [10309-37-2] C<sub>18</sub>H<sub>24</sub>O (256.37). Yellowish oily liquid, bp 145~147°C/0.7mmHg,  $[\alpha]_D = +37.2^\circ$ . **Pharm:** Antibacterial (*Staphylococcus aureus*, 10µg/mL, 2min; *trichophyton* sp., 10µg/mL, 8min; dog, *Microsporium* sp., 10µg/mL, 8min; *staphylococcus aureus* H114, 2~4µg/mL); antibacterial (*Staphylococcus aureus*, MIC = 20.0µg/mL; *Micrococcus luteus*, MIC = 10.0µg/mL)<sup>[4498]</sup>; antibacterial (*Staphylococcus aureus*, MIC = 25.0µmol/L; *Micrococcus epidermidis*, MIC = 15.0µmol/L)<sup>[5337]</sup>; protein tyrosine Phosphatase 1B (PTP1B) inhibitor (IC<sub>50</sub> = (20.8±1.9)µmol/L, control RK-682, IC<sub>50</sub> = 5.0µmol/L)<sup>[5049]</sup>. **Source:** BU GU ZHI *Psoralea corylifolia* (dried ripe fruit: mean content of 11 origins = 2.39%<sup>[5508]</sup>), HE GUO ZHUANG BU GU ZHI *Psoralea drupacea*, TAI WAN XIU XIAN JU *Spiraea formosana*. **Ref:** 1, 2, 4, 658, 661, 1521, 2575, 4498, 5049, 5337, 5508.

**2082 Bacopasaponin C**

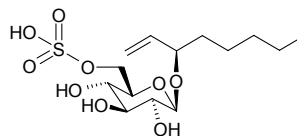
C<sub>46</sub>H<sub>74</sub>O<sub>17</sub> (899.09). **Pharm:** Cytotoxic (BST assay, IC<sub>50</sub> = 3.9µg/mL; control Podophyllotoxin, IC<sub>50</sub> = 4.5µg/mL). **Source:** JIA MA CHI XIAN *Bacopa monniera* (whole herb). **Ref:** 5332.

**2083 Bacopasaponin G**

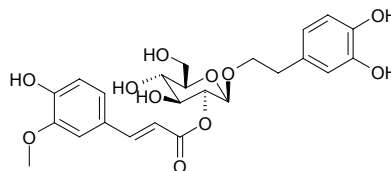
3-*O*-[ $\alpha$ -*L*-Arabinofuranosyl-(1→2)]- $\alpha$ -*L*-arabinopyranosyl-jujubogenin C<sub>40</sub>H<sub>64</sub>O<sub>12</sub> (736.95). White amorphous powder,  $[\alpha]_D^{25} = -54.5^\circ$  ( $c = 0.4$ , MeOH). **Source:** JIA MA CHI XIAN *Bacopa monniera* (whole herb: yield = 0.00080%fw). **Ref:** 4664.

**2084 Bacopaside A**

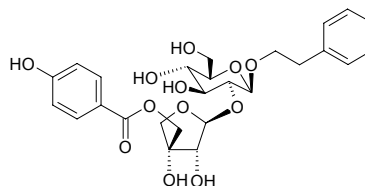
(3*R*)-1-Octan-3-yl-(6-*O*-sulfonyl)- $\beta$ -*D*-glucopyranoside C<sub>14</sub>H<sub>26</sub>O<sub>9</sub>S (370.42). Off-white amorphous powder,  $[\alpha]_D^{25} = +17.7^\circ$  ( $c = 0.4$ , MeOH). **Source:** JIA MA CHI XIAN *Bacopa monniera* (whole herb: yield = 0.00072%fw). **Ref:** 4664.

**2085 Bacopaside B**

3,4-Dihydroxyphenylethyl alcohol (2-*O*-feruloyl)- $\beta$ -*D*-glucopyranoside C<sub>24</sub>H<sub>28</sub>O<sub>11</sub> (492.48). Off-white amorphous powder,  $[\alpha]_D^{25} = -209.5^\circ$  ( $c = 0.2$ , MeOH). **Source:** JIA MA CHI XIAN *Bacopa monniera* (whole herb: yield = 0.00072%fw). **Ref:** 4664.

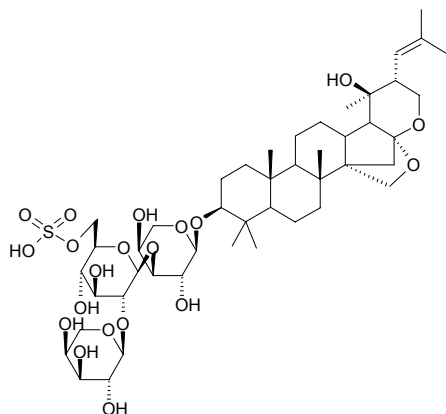
**2086 Bacopaside C**

Phenylethyl alcohol [5-*O*-*p*-hydroxybenzoyl- $\beta$ -*D*-apiofuranosyl-(1→2)]- $\beta$ -*D*-glucopyranoside C<sub>26</sub>H<sub>32</sub>O<sub>12</sub> (536.54). Off-white amorphous powder,  $[\alpha]_D^{25} = -13.8^\circ$  ( $c = 1.0$ , MeOH). **Source:** JIA MA CHI XIAN *Bacopa monniera* (whole herb: yield = 0.00048%fw). **Ref:** 4664.

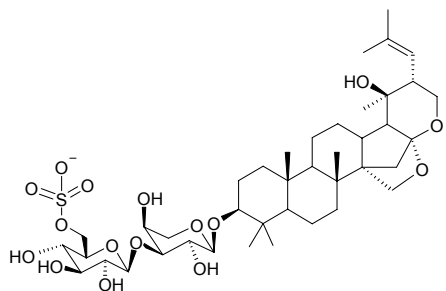


**2087 Bacopaside I**

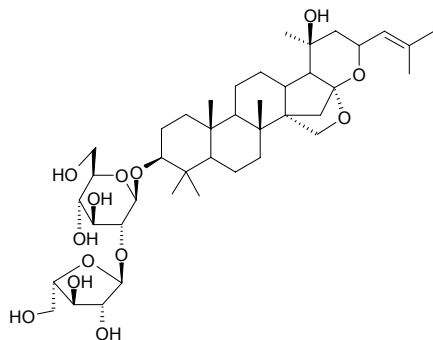
$C_{46}H_{74}O_{20}S$  (979.15). Source: JIA MA CHI XIAN *Bacopa monniera* (aerial parts). Ref: 4316.

**2088 Bacopaside III**

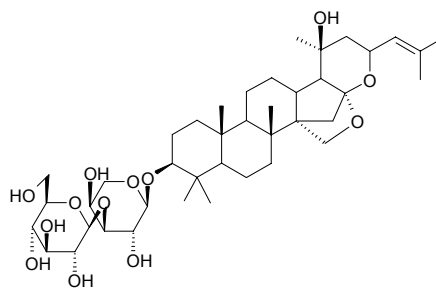
3-*O*-[6-*O*-Sulfonyl- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)]- $\alpha$ -*L*-arabinopyranosyl-pseudojujubogenin  $C_{41}H_{65}O_{16}S^-$  (846.03). White amorphous powder,  $[\alpha]_D^{25} = -17.4^\circ$  ( $c = 0.4$ , MeOH). Source: JIA MA CHI XIAN *Bacopa monniera* (aerial parts). Ref: 4664.

**2089 Bacopaside IIIb\***

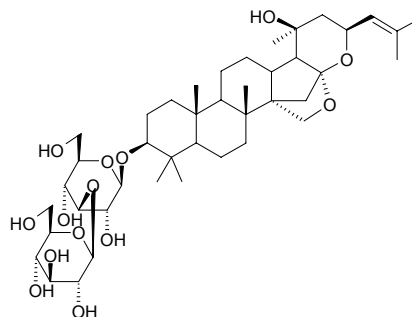
$C_{41}H_{66}O_{13}$  (766.98). Micro needles, mp 232–234°C (dec),  $[\alpha]_D^{23} = -44.8^\circ$  ( $c = 0.52$ , MeOH). Source: JIA MA CHI XIAN *Bacopa monniera* (whole herb: yield = 0.00082%fw). Ref: 4316.

**2090 Bacopaside IV**

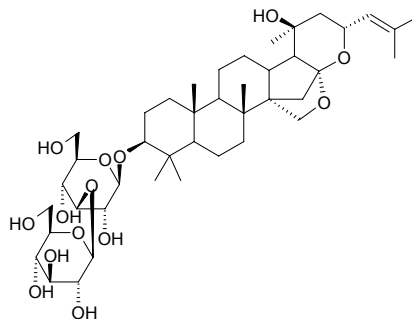
$C_{41}H_{66}O_{13}$  (766.98). Fine needles, mp 272–274°C (dec),  $[\alpha]_D^{23} = -5.2^\circ$  ( $c = 0.50$ , MeOH). Source: JIA MA CHI XIAN *Bacopa monniera* (aerial parts). Ref: 4316.

**2091 Bacopaside N<sub>1</sub>**

3-*O*-[ $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosyl]jujubogenin  $C_{42}H_{68}O_{14}$  (797.00). White amorphous powder, mp 256–260°C,  $[\alpha]_D = -25.3^\circ$  ( $c = 0.025$ , CH<sub>3</sub>OH). Pharm: Cytotoxic inactive (BST assay, IC<sub>50</sub> > 100 $\mu$ g/mL; control Podophyllotoxin, IC<sub>50</sub> = 4.5 $\mu$ g/mL). Source: JIA MA CHI XIAN *Bacopa monniera* (whole herb). Ref: 5332.

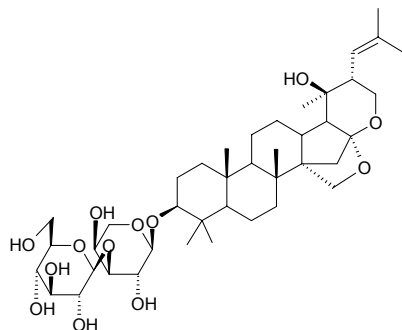
**2092 Bacopaside N<sub>2</sub>**

3-*O*-[ $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosyl]pseudojujubogenin  $C_{42}H_{68}O_{14}$  (797.00). White amorphous powder, mp 278–282°C,  $[\alpha]_D = -25.0^\circ$  ( $c = 0.0058$ , CH<sub>3</sub>OH). Pharm: Cytotoxic inactive (BST assay, IC<sub>50</sub> > 100 $\mu$ g/mL; control Podophyllotoxin, IC<sub>50</sub> = 4.5 $\mu$ g/mL). Source: JIA MA CHI XIAN *Bacopa monniera* (whole herb). Ref: 5332.

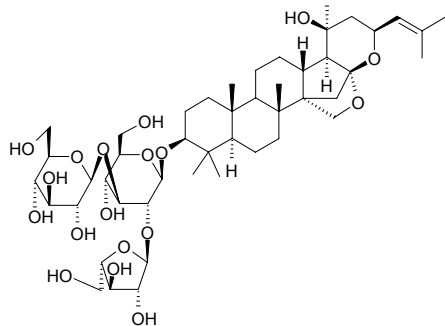


**2093 Bacopaside V**

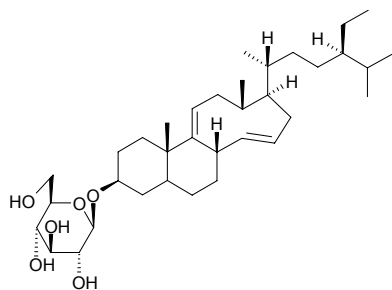
$C_{41}H_{66}O_{13}$  (766.98). Fine needles, mp 274~276°C (dec),  $[\alpha]_D^{23} = -24.9^\circ$  ( $c = 0.38$ , MeOH). Source: JIA MA CHI XIAN *Bacopa monniera* (aerial parts). Ref: 4316.

**2094 Bacoside A<sub>3</sub>**

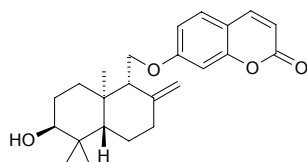
3-*O*-[ $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 3)-*O*-{ $\alpha$ -*L*-arabinofuranosyl-(1 $\rightarrow$ 2)}-*O*-( $\beta$ -*D*-glucopyranosyl)]juiubogenin  $C_{47}H_{76}O_{18}$  (929.12). mp 244~250°C. Source: JIA MA CHI XIAN *Bacopa monniera* (whole herb: yield = 0.012%fw). Ref: 4664, 5332.

**2095 Bacosterol-3-*O*- $\beta$ -*D*-glucopyranoside**

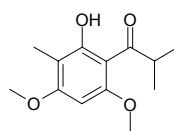
$C_{35}H_{60}O_6$  (576.86). White amorphous powder,  $[\alpha]_D^{25} = -30.2^\circ$  ( $c = 6.6 \times 10^{-4}$ , MeOH). Source: JIA MA CHI XIAN *Bacopa monniera* (aerial parts: yield = 0.0014%dw). Ref: 1541.

**2096 Badrakemin**

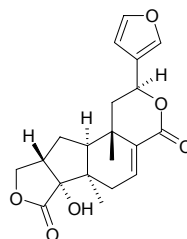
$C_{24}H_{30}O_4$  (382.50). Source: A WEI *Ferula assafoetida* (root), *Ferula badrakema*. Ref: 660, 5243.

**2097 Baeckeol**

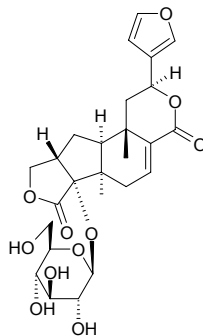
$C_{13}H_{18}O_4$  (238.29). mp 103~104°C. Source: GANG SONG *Baeckea frutescens*. Ref: 6.

**2098 Baenzigeride A**

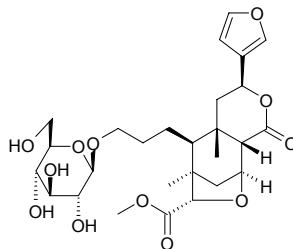
$C_{20}H_{22}O_6$  (258.39). Slightly green solid, colorless rhombs, mp 184~185°C,  $[\alpha]_D^{25} = +23.79^\circ$  ( $c = 0.14$ , MeOH). Source: *Tinospora baenzigeri*. Ref: 2394.

**2099 Baenzigeroside A**

$C_{26}H_{32}O_{11}$  (520.54). Light brown solid, Colorless powder, mp 210~212°C,  $[\alpha]_D^{25} = -7.92^\circ$  ( $c = 0.27$ , MeOH). Source: *Tinospora baenzigeri*. Ref: 2394.

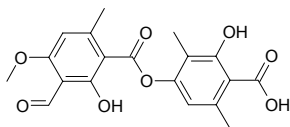
**2100 Baenzigeroside B**

$C_{27}H_{38}O_{12}$  (554.60). Colorless powder, mp 136~137°C,  $[\alpha]_D^{25} = +23.3^\circ$  ( $c = 0.33$ , MeOH). Source: *Tinospora baenzigeri* (stem). Ref: 3549.



### 2101 Baeomycesic acid

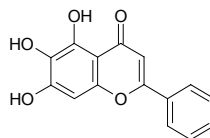
[644-66-6] C<sub>19</sub>H<sub>18</sub>O<sub>8</sub> (374.35). mp 233°C. **Pharm:** 5-LOX inhibitor (porcine leucocytes, *in vitro*, IC<sub>50</sub> = 8.3 μmol/L, control Zileuton, IC<sub>50</sub> = 0.4 μmol/L, LOX has been implicated in carcinogenesis in various types)<sup>[4082]</sup>; cytotoxic (acute promyelocytic leukemia (HL-60), EC<sub>50</sub> > 80 μg/mL, Zileuton, EC<sub>50</sub> = (38.8±12.3) μg/mL; colorectal adenocarcinoma (WiDr), EC<sub>50</sub> > 80 μg/mL, Zileuton, EC<sub>50</sub> > 80 μg/mL; erythro-leukemia (K562), EC<sub>50</sub> = (36.8±6.9) μg/mL, Zileuton, EC<sub>50</sub> = (38.5±5.4) μg/mL; gastric adenocarcinoma (AGS), EC<sub>50</sub> = (48.0±3.3) μg/mL, Zileuton, EC<sub>50</sub> = (70.5±3.1) μg/mL; mammary carcinoma (T47-D), EC<sub>50</sub> = (58.8±5.6) μg/mL, Zileuton, EC<sub>50</sub> = (23.9±4.1) μg/mL; ovarian adenocarcinoma (OVCAR-3), EC<sub>50</sub> > 80 μg/mL, Zileuton, EC<sub>50</sub> = (53.1±7.7) μg/mL; pancreas cancer (Capan1), EC<sub>50</sub> > 80 μg/mL, Zileuton, EC<sub>50</sub> = (12.9±11.7) μg/mL; pancreas cancer (Capan2), EC<sub>50</sub> = (53.8±12) μg/mL, Zileuton, EC<sub>50</sub> > 80 μg/mL; pancreas cancer (PANC1), EC<sub>50</sub> > 80 μg/mL, Zileuton, EC<sub>50</sub> = (46.6±5.4) μg/mL; prostatic cancer (PC3), EC<sub>50</sub> = (28.8±6.5) μg/mL, Zileuton, EC<sub>50</sub> = (49.9±9.0) μg/mL; small cell lung cancer (NCI-H1417), EC<sub>50</sub> = (62.2±12.2) μg/mL, Zileuton, EC<sub>50</sub> > 80 μg/mL; T-cell leukemia (Jurkat-T), EC<sub>50</sub> = (52.6±9.0) μg/mL, Zileuton, EC<sub>50</sub> = (78.3±5.0) μg/mL)<sup>[4082]</sup>. **Source:** BAN JIU *Streptopelia orientalis*, Lichen *Thamnomia vermicularis* var. *subuliformis*. **Ref:** 6, 4082.



### 2102 Baicalein

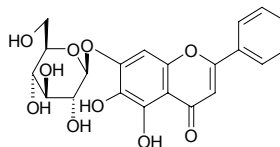
Noroxylin [491-67-8] C<sub>15</sub>H<sub>10</sub>O<sub>5</sub> (270.24). **Pharm:** Antiallergic; anti-inflammatory (modulator of cytokine network: increases TNF-α level in RAW264.7 cells)<sup>[4416]</sup>; anti-inflammatory (inhibits binding of several chemokines, such as CXC, CC to hmn leukocytes or cells transfected with chemokine receptors)<sup>[4416]</sup>; anti-inflammatory (prevents eotaxin production (IC<sub>50</sub> = 1.8 μg/mL) and mRNA eotaxin expression in hmn fibroblasts stimulated with IL-4 plus TNF-α)<sup>[4416]</sup>; anti-inflammatory (macrophages, IL-12 production inhibitor, LPS-activated, NF-κB binding inhibitor)<sup>[5437]</sup>; decreases accumulation of reactive oxygen intermediates (hmn neutrophils and monocytes, fMLP- or PMA-induced, IC<sub>50</sub> = 1.5~64.5 μmol/L)<sup>[4416]</sup>; integrin MAC-1 inhibitor (fMLP-induced, decreases increase in surface expression of MAC-1 (CD11b/CD18) and MAC-1 dependent neutrophil adhesion)<sup>[4416]</sup>; anti-inflammatory (hmn retinal pigment epithelial cell lines, IL-6 and IL-8 blocker, blocking production and expression of IL-6 and IL-8, IC<sub>50</sub> = 1~40 μmol/L)<sup>[4416]</sup>; choleric; diuretic; antithrombotic (extends clotting time of fibrinogen by thrombase in high concentration); aldoketomutase I inhibitor; lipoxygenase inhibitor (*in vitro*, IC<sub>50</sub> = (22.5±0.3) μmol/L)<sup>[2555]</sup>; lipoxygenase inhibitor (EC1.13.11.12, IC<sub>50</sub> = (22.4±1.3) μmol/L)<sup>[3802]</sup>; lipoxygenase inhibitor (*in vitro*, IC<sub>50</sub> = (22.4±1.3) μmol/L)<sup>[4319]</sup>; lipoxygenase inhibitor (type I-B EC1.13.11.12, IC<sub>50</sub> = (22.6±0.05) μmol/L)<sup>[4442]</sup>; lipoxygenase inhibitor (EC1.13.11.12, IC<sub>50</sub> = (22.0±0.05) μmol/L, mixed type, Ki = (18.0±0.02) μmol/L)<sup>[4490]</sup>; 12-lipoxygenase inhibitor (10 μg/mL, InRt = 56.23%)<sup>[5249]</sup>; antihypercholesterolemic; leukocyte elastase MMP-2/9 inhibitor<sup>[4416]</sup>; anti-inflammatory (5-lipoxygenase selective inhibitor in rat resident peritoneal macrophage; LTC<sub>4</sub> selective inhibitor in rat resident

peritoneal macrophage, IC<sub>50</sub> = 9.5 μmol/L; oral ameliorates several inflammatory symptoms of experimental colitis, such as body-weight loss, low blood haemoglobin content and rectal bleeding (baicalein only, but not baicalin and wogonin); inhibits TPA-induced ear oedema in mouse skin; ornithine decarboxylase inhibitor in mouse skin; myeloperoxidase inhibitor in mouse skin; anti-oedematogenic on rat; 15-lipoxygenase inhibitor<sup>[4415]</sup>; anti-inflammatory (NO production inhibitor)<sup>[4415]</sup>; cytotoxic (KU-1 hmn bladder cancer cell line, EJ-1 hmn bladder cancer cell line, MBT-2 murine bladder cancer cell line, inhibits cell proliferation *in vitro* in a dose-dependent manner, less active than baicalin)<sup>[5369]</sup>; cytotoxic (LXFL529L hmn large cell lung carcinoma cell line and HL-60, inhibits cell growth at a micromolar range)<sup>[5369]</sup>; cytotoxic (inhibits growth of MDA-MB-435 hmn breast carcinoma cell line, IC<sub>50</sub> = 6 μg/mL, more active than hesperetin and naringenin)<sup>[5369]</sup>; cytotoxic (inhibits proliferation of estrogen receptor-positive MCF7 hmn breast cancer cells, the inhibition was not reversible by an addition of estrogen)<sup>[5369]</sup>; cytotoxic (inhibits hmn T-lymphoid leukemia cell proliferation, IC<sub>50</sub> = 5 μmol/L)<sup>[5369]</sup>; cytotoxic (BxPC3 hmn pancreatic cancer cell line, IC<sub>50</sub> = 50 μg/mL, PLC/PRF/5 hmn hepatoma cell line, HepG2 hmn hepatoma cell line, inhibits cell growth)<sup>[5369]</sup>; cAMP phosphodiesterase inhibitor (inhibits cAMP-specific isoenzyme family PDE4, IC<sub>50</sub> = 10 μmol/L)<sup>[5369]</sup>; DNA topoisomerase II inhibitor (probably by stabilizing covalent enzyme-DNA intermediate in a ternary complex)<sup>[5369]</sup>; α-glucosidase inhibitor (mouse melanoma cells, suppresses *in vitro* invasion and *in vivo* metastasis)<sup>[5369]</sup>; xanthine oxidase inhibitor (strong action, indicating that it might be useful for the remission of brain tumors, since xanthine oxidase serum levels are increased in tissues of brain tumors)<sup>[5369]</sup>; tyrosine kinase inhibitor (tyrosine kinase of EGFR, IC<sub>50</sub> = 1.1 μmol/L, more active than Baicalin, wogonin, wogonoside and skullcapflavone II)<sup>[5369]</sup>; tyrosine kinase inhibitor (tyrosine kinase in hmn T-lymphoid leukemia cells)<sup>[5369]</sup>. **Source:** BING TOU HUANG QIN *Scutellaria scordifolia*, CHUAN HUANG QIN *Scutellaria hypericifolia*, DA CHE QIAN *Plantago major*, DIAN HUANG QIN *Scutellaria amoena*, GAN SU HUANG QIN *Scutellaria rehderiana*, HUANG QIN *Scutellaria baicalensis* (dried root: content scope of 20 samples = 0.17%~11.94%, mean content = 1.85%<sup>[5508]</sup>), LI JIANG HUANG QIN *Scutellaria likiangensis*, MU HU DIE *Oroxylum indicum*, NIAN MAO HUANG QIN *Scutellaria viscidula*. **Ref:** 2, 4, 658, 660, 2555, 3802, 4319, 4415, 4416, 4442, 4490, 5249, 5369, 5437, 5501, 5508.



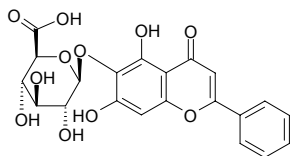
### 2103 Baicalein-7-O-β-D-glucopyranoside

Oroxin A [57396-78-8] C<sub>21</sub>H<sub>20</sub>O<sub>10</sub> (432.39). mp 178~180°C. **Source:** HUANG QIN *Scutellaria baicalensis*, MU HU DIE *Oroxylum indicum*. **Ref:** 2, 6, 660.

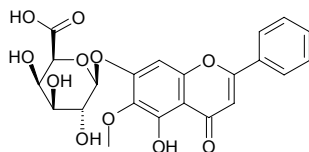


**2104 Baicalein-6-glucuronide**

$C_{21}H_{18}O_{11}$  (446.37). mp 114°C. Source: MU HU DIE *Oroxylum indicum*. Ref: 6.

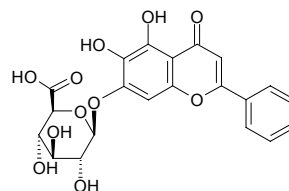
**2105 Baicalein 6-methylether-7-O-β-galactopyranuronoside**

$C_{22}H_{20}O_{11}$  (460.40). Yellowish amorphous powder Source: DONG AN NA TUO LI YA SHI CHE JU *Centaurea pseudoscabiosa* ssp. *Pseudoscabiosa*. Ref: 1947.

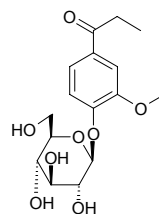
**2106 Baicalin**

Baicalein-7-glucuronide [21967-41-9]  $C_{21}H_{18}O_{11}$  (446.37). mp 223°C. Pharm: Antiallergic; antibacterial; anti-inflammatory (modulator of cytokine network: increases TNF- $\alpha$  level in RAW264.7 cells)<sup>[4416]</sup>; anti-inflammatory (significantly inhibits binding of several chemokines, such as CXC, CC to hmn leukocytes or cells transfected with chemokine receptors, IC<sub>50</sub> = 15~320 $\mu$ g/mL)<sup>[4416]</sup>; anti-inflammatory (inhibits expression and production of IL-1 $\beta$ , IL-6, TNF- $\alpha$ , IFN- $\gamma$ , MIP-1 $\alpha/\beta$  in hmn peripheral blood mononuclear cells under stimulation with superantigenic staphylococcal exotoxins)<sup>[4416]</sup>; decreases accumulation of reactive oxygen intermediates (hmn neutrophils and monocytes, fMLP- or PMA-induced, IC<sub>50</sub> = 1.5~64.5 $\mu$ mol/L)<sup>[4416]</sup>; integrin MAC-1 inhibitor (fMLP-induced, decreases increase in surface expression of MAC-1(CD11b/CD18) and MAC-1 dependent neutrophil adhesion)<sup>[4416]</sup>; antipyretic; choleric; diuretic; antihypertensive; antitoxin (reduces death rate of mus due to strychnine toxicosis); sedative; SP-A gene expression promoter (lung adenocarcinoma cell line H441, *in vitro*, in dose-dependent and time-course manners, maximal expression of SP-A gene of 1.7-fold greater than control, is induced at 150nmol/L of baicalin treated for 48h)<sup>[5388]</sup>; a detail study on pharmacokinetics<sup>[4076]</sup>; anti-inflammatory (anti-oedematogenic on rat; inhibits production of prostaglandin E2 in C6 rat glioma cells; inhibits LTB<sub>4</sub> biosynthesis; 12-LOX inhibitor in hmn platelets, without affecting the levels of cyclooxygenase)<sup>[4415]</sup>; anti-inflammatory (NO production inhibitor)<sup>[4415]</sup>; cytotoxic (BxPC3 hmn pancreatic cancer cell line, IC<sub>50</sub> = 20 $\mu$ g/mL, PLC/PRF/5 hmn hepatoma cell line, HepG2 hmn hepatoma cell line, inhibits cell growth)<sup>[5369]</sup>; cytotoxic (KU-1 hmn bladder cancer cell line, EJ-1 hmn bladder cancer cell line, MBT-2 murine bladder cancer cell line, inhibits cell proliferation *in vitro* in a dose-dependent manner, more active than baicalein and wogonin)<sup>[5369]</sup>; cytotoxic (LXFL529L hmn large cell lung carcinoma cell line and HL-60, inhibits cell growth at a micromolar range)<sup>[5369]</sup>; tyrosine kinase inhibitor (tyrosine kinase of EGFR, IC<sub>50</sub> > 60 $\mu$ mol/L)<sup>[5369]</sup>. Source: BING TOU HUANG QIN *Scutellaria scordifolia*, CHUAN HUANG QIN *Scutellaria hypericifolia*, DA CHE QIAN *Plantago major*, DAN SHEN *Salvia*

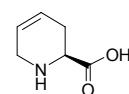
*miltiorrhiza*, DIAN HUANG QIN *Scutellaria amoena*, GAN SU HUANG QIN *Scutellaria rehderiana*, HUANG QIN *Scutellaria baicalensis* (dried root: content scope of 27 origins, 10 samples = 4.42%~23.31%, mean content = 13.06%<sup>[5508]</sup>), MU HU DIE *Oroxylum indicum*, MU HU DIE SHU PI *Oroxylum indicum*, NIAN MAO HUANG QIN *Scutellaria viscidula*. Ref: 2, 4, 5, 6, 658, 660, 4076, 4415, 4416, 5369, 5388, 5501, 5508.

**2107 Baihuaqianhuoside**

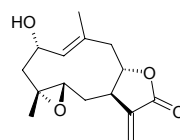
3-Methoxy-4-O- $\beta$ -D-glycopyranosylpropiophenone  $C_{16}H_{22}O_8$  (342.35). White crystalline powder, mp 165.5~167.5°C (chloroform-methanol). Pharm: Antioxidant (DPPH scavenger, EC<sub>50</sub> > 50 $\mu$ g/mL, 50 $\mu$ g/mL InRt = 18%, control Ascorbic acid, EC<sub>50</sub> = 1.6 $\mu$ g/mL = 9.1 $\mu$ mol/L)<sup>[4154]</sup>. Source: BAI HUA QIAN HU *Peucedanum praeruptorum*, BEI SHA SHEN *Glehnia littoralis* (underground part). Ref: 297, 4154.

**2108 L-Baikiaiin**

[498-98-6]  $C_6H_9NO_2$  (127.14). Pharm: Phytotoxin; plant growth inhibitor (roots of germinative lettuce). Source: SE ZE YUN SHI *Caesalpinia tinctoria*. Ref: 658.

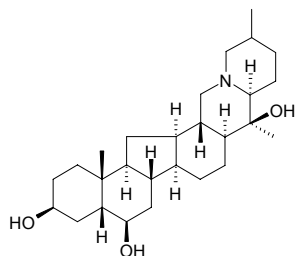
**2109 Baileyin**

[27875-37-2]  $C_{15}H_{20}O_4$  (264.32). mp 202~204°C (benzene-ethyl acetate). Pharm: Antineoplastic (P<sub>388</sub> *in vivo*, ID = 25mg/kg); cytotoxic (KB *in vitro*, ED<sub>50</sub> = 16 $\mu$ g/mL, P<sub>388</sub> *in vitro*, ED<sub>50</sub> = 2.9 $\mu$ g/mL). Source: BAI LAI SHI JU *Baileya multiradiata*, DUO BIAN HUA BAI LAI SHI JU *Baileya pleniradiata*. Ref: 658, 661.

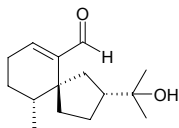


**2110 Baimonidine**

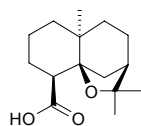
[73650-52-9]  $C_{27}H_{45}NO_3$  (431.66). mp 179.0~181.5°C,  $[\alpha]_D = -36.4^\circ$  ( $c = 1.0$ ,  $CHCl_3$ ). Source: ZHE BEI MU *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*]. Ref: 660, 2201.

**2111 Baimuxinal**

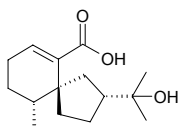
Oxoagarospirol  $C_{15}H_{24}O_2$  (236.36). Source: BAI MU XIANG *Aquilaria sinensis*, CHEN XIANG *Aquilaria agallocha*. Ref: 13, 660, 2792.

**2112 Baimuxinifuranic acid**

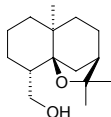
$C_{15}H_{24}O_3$  (252.36). Source: BAI MU XIANG *Aquilaria sinensis*. Ref: 13.

**2113 Baimuxinic acid**

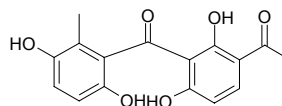
[84210-00-4]  $C_{15}H_{24}O_3$  (252.36). Colorless lump crystals (methanol), mp 192~194°C,  $[\alpha]_D^{30} = -23.1^\circ$  ( $c = 0.59$ , alcohol). Pharm: Anesthetic (mus); sedative; hypnotic. Source: BAI MU XIANG *Aquilaria sinensis*. Ref: 13, 908, 917, 5501.

**2114 Baimuxinol**

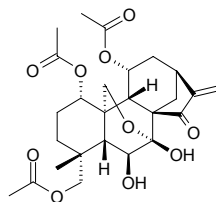
[105013-72-7]  $C_{15}H_{26}O_2$  (238.37). Colorless lump crystals (acetone), mp 128~130°C,  $[\alpha]_D^{30} = -83^\circ$  ( $c = 0.56$ , chloroform). Pharm: CNS depressant. Source: BAI MU XIANG *Aquilaria sinensis*, CHEN XIANG *Aquilaria agallocha*. Ref: 13, 57, 58, 660, 947, 1034.

**2115 Baishouwubenzophenone**

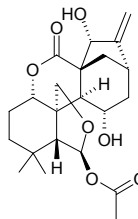
[115834-34-9]  $C_{16}H_{14}O_6$  (302.29). Yellowish acicular crystals, mp 198~200°C. Source: ER YE NIU PI XIAO *Cynanchum auriculatum*. Ref: 103.

**2116 Baiyecrystal A**

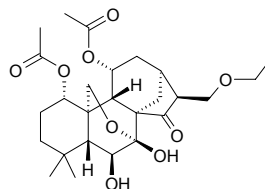
11 $\alpha$ -Acetoxyeffusanin D  $C_{26}H_{34}O_{10}$  (506.55). mp 217.5~220°C,  $[\alpha]_D^{21} = -1.68^\circ$  ( $c = 0.45$ , MeOH). Source: BAI YE XIANG CHA CAI *Isodon leucophyllus*. Ref: 4067.

**2117 Baiyecrystal B**

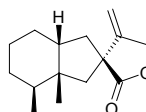
$C_{22}H_{30}O_7$  (406.48). mp 187.0~189.5°C,  $[\alpha]_D^{23} = -40.50^\circ$  ( $c = 0.50$ , MeOH). Source: BAI YE XIANG CHA CAI *Isodon leucophyllus*. Ref: 4067.

**2118 Baiyecrystal C**

$C_{26}H_{38}O_9$  (494.59). mp 212.5~215°C,  $[\alpha]_D^{21.2} = -15.04^\circ$  ( $c = 0.27$ , MeOH). Source: BAI YE XIANG CHA CAI *Isodon leucophyllus*. Ref: 4067.

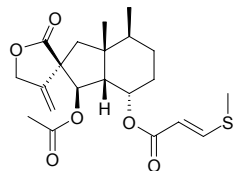
**2119 Bakkenolide A**

Fukinanolide [19906-72-0]  $C_{15}H_{22}O_2$  (234.34). Pharm: Antineoplastic; cytotoxic; insect antifeedant. Source: JIN ZI TA XING QIAN LI GUANG *Senecio pyramidatus*, LV TI CAO YE TUO WU *Ligularia thalictroides*, *Petasites* sp. Ref: 658.

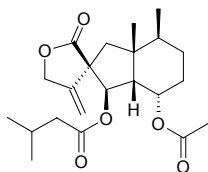


**2120 Bakkenolide D**

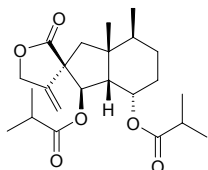
$C_{21}H_{28}O_6S$  (408.52). **Pharm:** Platelet aggregation inhibitor (100 $\mu$ mol/L AA-induced, 20 $\mu$ g/mL, InRt = (3.4 $\pm$ 1.6)%, control Aspirin, 50 $\mu$ g/mL, InRt = (100 $\pm$ 0.0)%; 10 $\mu$ g/mL collagen-induced, 100 $\mu$ g/mL, InRt = (20.6 $\pm$ 5.5)%,  $p < 0.001$ , Aspirin, 50 $\mu$ g/mL, InRt = (12.2 $\pm$ 1.7)%; 2nmol/L PAF-induced, 20 $\mu$ g/mL, InRt = (26.7 $\pm$ 13.2)%,  $p < 0.05$ , Aspirin, 50 $\mu$ g/mL, InRt = (9.6 $\pm$ 1.2)%; 0.1 $\mu$ g/mL thrombin-induced, 20 $\mu$ g/mL, InRt = (0.6 $\pm$ 1.7)%)<sup>[2377]</sup>. **Source:** TAI WAN FENG DOU CAI *Petasites formosanus*. **Ref:** 2377.

**2121 Bakkenolide G**

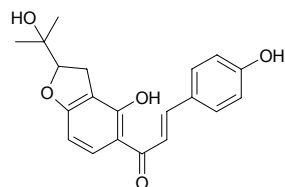
$C_{22}H_{32}O_6$  (392.50). Colorless plates (MeOH), mp 135–137°C,  $[\alpha]_D = -119^\circ$  ( $c = 0.13$ , MeOH). **Pharm:** Platelet aggregation inhibitor (100 $\mu$ mol/L AA-induced, 100 $\mu$ g/mL, InRt = (8.7 $\pm$ 1.7)%,  $p < 0.001$ , control Aspirin, 50 $\mu$ g/mL, InRt = (100 $\pm$ 0.0)%; 10 $\mu$ g/mL collagen-induced, 100 $\mu$ g/mL, InRt = (10.3 $\pm$ 3.0)%,  $p < 0.001$ , Aspirin, 50 $\mu$ g/mL, InRt = (12.2 $\pm$ 1.7)%; 2nmol/L PAF-induced, 5 $\mu$ g/mL, InRt = (97.6 $\pm$ 2.0)%,  $p < 0.001$ , Aspirin, 50 $\mu$ g/mL, InRt = (9.6 $\pm$ 1.2)%; 0.1 $\mu$ g/mL thrombin-induced, 100 $\mu$ g/mL, InRt = (10.9 $\pm$ 1.5)%,  $p < 0.001$ ). **Source:** TAI WAN FENG DOU CAI *Petasites formosanus*. **Ref:** 2377.

**2122 Bakkenolide H**

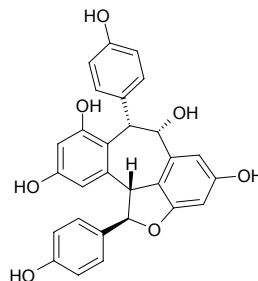
$C_{23}H_{34}O_6$  (406.52). Colorless needles (MeOH), mp 116–118°C,  $[\alpha]_D = -31.6^\circ$  ( $c = 0.0079$ , MeOH). **Pharm:** Platelet aggregation inhibitor (100 $\mu$ mol/L AA-induced, 100 $\mu$ g/mL, InRt = (12.2 $\pm$ 4.5)%,  $p < 0.05$ , control Aspirin, 50 $\mu$ g/mL, InRt = (100 $\pm$ 0.0)%; 10 $\mu$ g/mL collagen-induced, 100 $\mu$ g/mL, InRt = (10.1 $\pm$ 4.0)%,  $p < 0.05$ , Aspirin, 50 $\mu$ g/mL, InRt = (12.2 $\pm$ 1.7)%; 2nmol/L PAF-induced, 100 $\mu$ g/mL, InRt = (91.6 $\pm$ 6.8)%,  $p < 0.001$ , Aspirin, 50 $\mu$ g/mL, InRt = (9.6 $\pm$ 1.2)%; 0.1 $\mu$ g/mL thrombin-induced, 100 $\mu$ g/mL, InRt = (18.7 $\pm$ 4.5)%,  $p < 0.001$ ). **Source:** TAI WAN FENG DOU CAI *Petasites formosanus*. **Ref:** 2377.

**2123 Bakuchalcone**

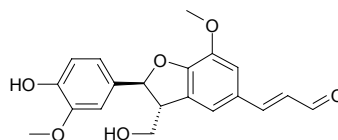
$C_{20}H_{20}O_5$  (340.38). **Source:** BU GU ZHI *Psoralea corylifolia*. **Ref:** 660.

**2124 (+)-Balanocarpol**

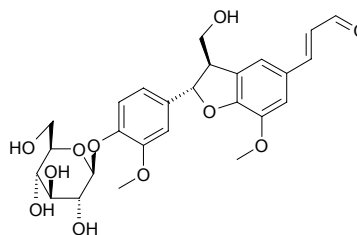
$C_{28}H_{22}O_7$  (470.48). Colorless solid.  $[\alpha]_D = +30^\circ$  ( $c = 0.03$ , MeOH). **Source:** XIAO HUA PO LEI *Hopea parviflora* (bark). **Ref:** 3936.

**2125 Balanophonin**

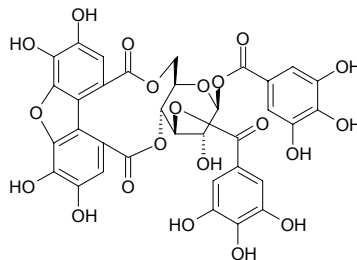
$C_{20}H_{20}O_6$  (356.38). **Source:** DA YE ZUI YU CAO *Buddleja davidii*, GE XUN *Balanophora japonica*, YUN NAN FEI SHU *Torreya yunnanensis* (leaf and twig: yield = 0.00087% dw)<sup>[4740]</sup>. **Ref:** 660, 4707.

**2126 Balanophonin-4-O-β-D-glucopyranoside**

$C_{26}H_{30}O_{11}$  (518.52). **Source:** GE XUN *Balanophora japonica* (fresh aerial parts). **Ref:** 4451.

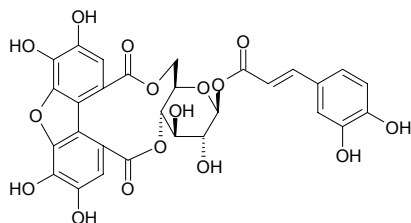
**2127 Balanophotannin A**

1,3-O-Di-galloyl-4,6-[1',1''-(3',3'',4',4''-tetrahydroxydibenzofurancarboxyl)]-β-D-glucopyranose  $C_{34}H_{24}O_{21}$  (768.56). Tan amorphous powder,  $[\alpha]_D^{20} = +12.2^\circ$  ( $c = 0.4$ , MeOH). **Source:** GE XUN *Balanophora japonica* (fresh aerial parts). **Ref:** 4451.

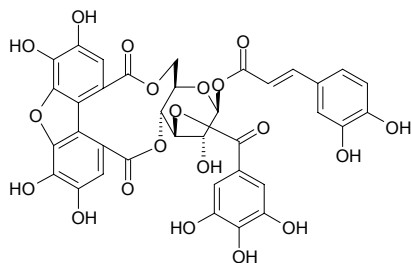


**2128 Balanophotannin B**

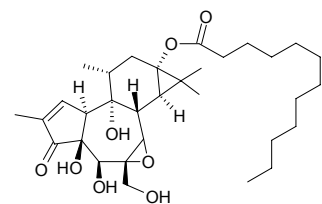
1-*O*-(*E*)-Caffeoyl-4,6-[1',1''-(3',3'',4',4''-tetrahydroxydibenzofurandicarboxyl)]- $\beta$ -*D*-glucopyranose C<sub>29</sub>H<sub>22</sub>O<sub>16</sub> (626.49). Tan amorphous powder,  $[\alpha]_D^{16} = +82.3^\circ$  ( $c = 0.2$ , MeOH). Source: GE XUN *Balanophora japonica* (fresh aerial parts). Ref: 4451.

**2129 Balanophotannin C**

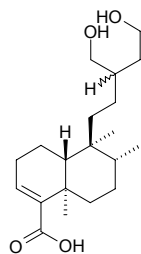
1-*O*-(*E*)-Caffeoyl-3-*O*-galloyl-4,6-[1',1''-(3',3'',4',4''-tetrahydroxydibenzofuran dicarboxyl)]- $\beta$ -*D*-glucopyranose C<sub>36</sub>H<sub>26</sub>O<sub>20</sub> (778.60). Tan amorphous powder,  $[\alpha]_D^{16} = +81.7^\circ$  ( $c = 0.5$ , MeOH). Source: GE XUN *Balanophora japonica* (fresh aerial parts). Ref: 4451.

**2130 Baliospermin**

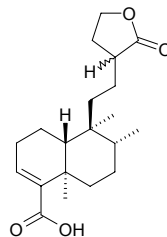
[66583-56-0] C<sub>32</sub>H<sub>50</sub>O<sub>8</sub> (562.75). Pharm: Cytotoxic. Source: BAN ZI MU *Baliospermum montanum*. Ref: 658.

**2131 Ballodiolic acid**

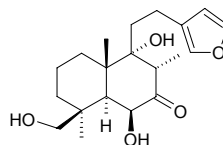
C<sub>20</sub>H<sub>34</sub>O<sub>4</sub> (338.49). Colorless oil,  $[\alpha]_D^{23} = -19.7^\circ$  ( $c = 0.172$ , CHCl<sub>3</sub>). Pharm: Lipoxygenase inhibitor (*in vitro*, IC<sub>50</sub> = (38.3±1.3) μmol/L)<sup>[4276]</sup>. Source: *Ballota limbata*. Ref: 4276.

**2132 Ballotenic acid**

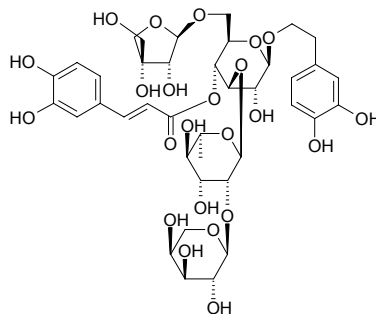
C<sub>20</sub>H<sub>30</sub>O<sub>4</sub> (334.46). Colorless oil,  $[\alpha]_D^{23} = -0.50^\circ$  ( $c = 0.104$ , CHCl<sub>3</sub>). Pharm: Lipoxygenase inhibitor (*in vitro*, IC<sub>50</sub> = (99.6±2.0) μmol/L)<sup>[4276]</sup>. Source: *Ballota limbata*. Ref: 4276.

**2133 Ballotenol**

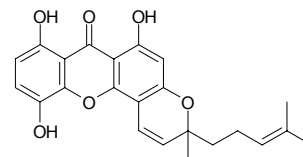
C<sub>20</sub>H<sub>30</sub>O<sub>5</sub> (350.46). White powder. Source: BO SI YI MU CAO *Leonurus persicus*, HEI BA LUO CAO *Ballota nigra*. Ref: 1521, 2499.

**2134 Ballotetroside**

C<sub>39</sub>H<sub>52</sub>O<sub>23</sub> (888.84). Pharm: Antioxidant (*in vitro* inhibits LDL peroxidation, Cu<sup>2+</sup>-induced and AAPH-induced)<sup>[5370]</sup>; inhibits minimally oxidized LDL-induced cellular toxicity (cultured bovine aortic endothelial cells, BAEC)<sup>[5370]</sup>. Source: OU XIA ZHI CAO *Marrubium vulgare* (aerial parts). Ref: 5370.

**2135 Bangangxanthone A**

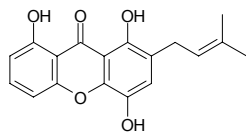
1,5,8-Trihydroxy-6'-methyl-6'-(4-methylpent-3-enyl)-pyrano[2',3':3,4]xanthone C<sub>23</sub>H<sub>22</sub>O<sub>6</sub> (394.43). Yellow needle crystals, mp 157–158°C,  $[\alpha]_D^{29} = +25^\circ$  ( $c = 0.032$ , C<sub>3</sub>H<sub>6</sub>O). Pharm: Antioxidant (DPPH scavenger, IC<sub>50</sub> = 87.0 μmol/L, control 3-*t*-Butyl-4-hydroxyanisole, IC<sub>50</sub> = 42.0 μmol/L)<sup>[5317]</sup>. Source: DUO HUA TENG HUANG *Garcinia polyantha* (stem bark). Ref: 5317.



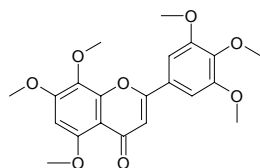


**2136 Bangangxanthone B**

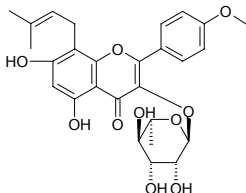
1,4,8-Trihydroxy-2-prenylxanthone C<sub>18</sub>H<sub>16</sub>O<sub>5</sub> (312.33). Yellow needle crystals, mp 199~201°C. Pharm: Antioxidant (DPPH scavenger, IC<sub>50</sub> = 482.0 μmol/L, control 3-*t*-Butyl-4-hydroxyanisole, IC<sub>50</sub> = 42.0 μmol/L)<sup>[5317]</sup>. Source: DUO HUA TENG HUANG *Garcinia polyantha* (stem bark). Ref: 5317.

**2137 Bannamurpanisin**

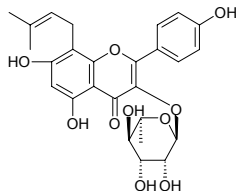
5,7,8,3',4',5'-Hexamethoxyflavone [80324-51-2] C<sub>21</sub>H<sub>22</sub>O<sub>8</sub> (402.40). Source: JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*]. Ref: 11, 660.

**2138 Baohuoside I**

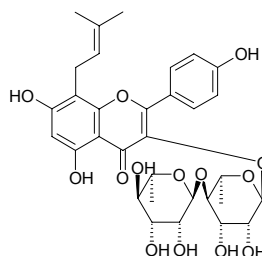
Anhydroicaritin-3-*O*- $\alpha$ -rhamnoside [113558-15-9] C<sub>27</sub>H<sub>30</sub>O<sub>10</sub> (514.53). Yellow crystalline powder, mp 208~210°C, easily soluble in methanol and ethanol, soluble in acetone. Source: CHAO XIAN YIN YANG HUO *Epimedium koreanum* (aerial parts: content = 1.043%<sup>[5508]</sup>), CHUAN DIAN YIN YANG HUO *Epimedium davidii*, JIAN YE YIN YANG HUO *Epimedium sagittatum* (aerial parts: mean content of 3 origins = 0.417%<sup>[5508]</sup>), ROU MAO YIN YANG HUO *Epimedium pubescens* (aerial parts: content = 0.654%<sup>[5508]</sup>), WU SHAN YIN YANG HUO *Epimedium wushanense* (aerial parts: mean content of 2 origins = 0.095%<sup>[5508]</sup>), YIN YANG HUO *Epimedium brevicornum* (aerial parts: mean content of 2 origins = 0.089%<sup>[5508]</sup>). Ref: 114, 540, 565, 635, 660, 5508.

**2139 Baohuoside II**

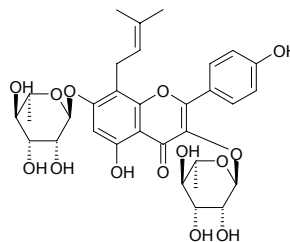
Ikariside A; 3,5,7,4'-Tetrahydroxy-8-prenylflavone-3-*O*- $\alpha$ -L-rhamnopyranoside [55395-07-8] C<sub>26</sub>H<sub>28</sub>O<sub>10</sub> (500.51). Yellow crystalline powder, mp 154~156°C, mp 132~134°C, easily soluble in ethanol and methanol. Source: CHAO XIAN YIN YANG HUO *Epimedium koreanum* (aerial parts: content = 0.790%<sup>[5508]</sup>), CHUAN DIAN YIN YANG HUO *Epimedium davidii*, CU MAO YIN YANG HUO *Epimedium acuminatum*, JIAN YE YIN YANG HUO *Epimedium sagittatum* (aerial parts: content = 0.055%<sup>[5508]</sup>), ROU MAO YIN YANG HUO *Epimedium pubescens* (aerial parts: content = 0.145%<sup>[5508]</sup>), YIN YANG HUO *Epimedium brevicornum* (aerial parts: content = 0.080%<sup>[5508]</sup>). Ref: 2, 112, 514, 565, 599, 660, 5508.

**2140 Baohuoside III**

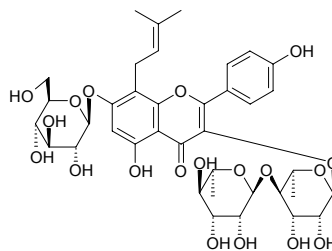
3,5,7,4'-Tetrahydroxy-8-prenylflavone-3-*O*- $\alpha$ -L-rhamnopyranosyl-(1→4)- $\alpha$ -L-rhamnopyranoside [119708-36-0] C<sub>32</sub>H<sub>38</sub>O<sub>14</sub> (646.65). Yellow powder, mp 215~220°C, easily soluble in methanol. Source: CHUAN DIAN YIN YANG HUO *Epimedium davidii*, CHUAN DIAN YIN YANG HUO *Epimedium davidii*. Ref: 112, 660.

**2141 Baohuoside IV**

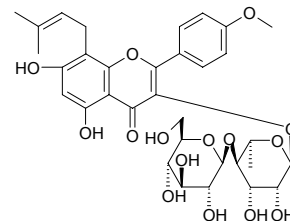
3,5,7,4'-Tetrahydroxy-8-prenylflavone-3,7-*O*- $\alpha$ -L-dirhamnopyranoside [119708-37-1] C<sub>32</sub>H<sub>38</sub>O<sub>14</sub> (646.65). Yellow powder, easily soluble in methanol. Source: CHUAN DIAN YIN YANG HUO *Epimedium davidii*, CHUAN DIAN YIN YANG HUO *Epimedium davidii*, ROU MAO YIN YANG HUO *Epimedium pubescens*. Ref: 112, 660.

**2142 Baohuoside V**

3,5,7,4'-Tetrahydroxy-8-prenylflavone-3-*O*- $\alpha$ -L-rhamnopyranosyl-(1→4)- $\alpha$ -L-rhamnopyranosyl-7-*O*- $\beta$ -D-glucopyranoside [119708-38-2] C<sub>38</sub>H<sub>48</sub>O<sub>19</sub> (808.79). Yellow powder, easily soluble in methanol. Source: CHUAN DIAN YIN YANG HUO *Epimedium davidii*. Ref: 112.

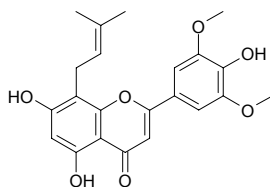
**2143 Baohuoside VII**

3,5,7-Trihydroxy-4'-methoxyl-8-prenylflavone-3-*O*- $\alpha$ -L-rhamnopyranosyl-(1→4)- $\beta$ -D-glucopyranoside [119730-89-1] C<sub>33</sub>H<sub>40</sub>O<sub>15</sub> (676.68). Yellow powder, easily soluble in methanol and ethanol. Source: CHUAN DIAN YIN YANG HUO *Epimedium davidii*. Ref: 114.

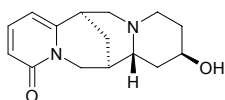


**2144 Baohuosu**

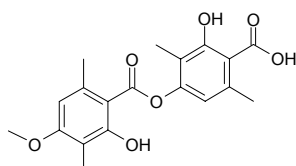
5,7,4'-Trihydroxy-3',5'-dimethoxy-8-prenylflavone [119730-90-4] C<sub>22</sub>H<sub>22</sub>O<sub>7</sub> (398.42). Yellow crystalline powder, mp 254~257°C. Source: CHUAN DIAN YIN YANG HUO *Epidemium davidii*. Ref: 114.

**2145 Baptifoline**

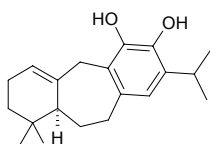
[732-50-3] C<sub>15</sub>H<sub>20</sub>N<sub>2</sub>O<sub>2</sub> (260.34). Source: KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. Ref: 2, 1521.

**2146 Barbatic acid**

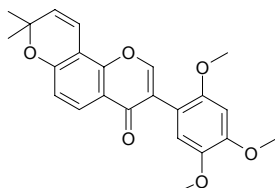
[17636-16-7] C<sub>19</sub>H<sub>20</sub>O<sub>7</sub> (360.37). mp 191°C, 186°C. Source: SONG LUO *Usnea longissima*, HUAN JIE SONG LUO *Usnea diffracta*. Ref: 6, 660.

**2147 Barbatusol**

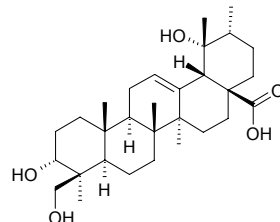
[88515-76-8] C<sub>20</sub>H<sub>28</sub>O<sub>2</sub> (300.44). Source: GAN XI SHU WEI CAO *Salvia przewalskii*, RAN MAO QIAO RUI HUA *Coleus barbatus*. Ref: 1521, 4538.

**2148 Barbigerone**

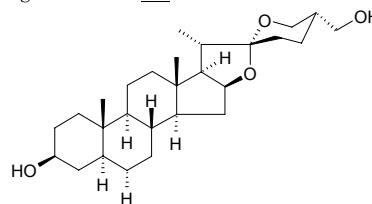
C<sub>23</sub>H<sub>22</sub>O<sub>6</sub> (394.43). Pharm: Antimalarial (antiplasmodial, chloroquine-resistant W2 strain of *Plasmodium falciparum*, IC<sub>50</sub> = 27.0 μmol/L, control Chloroquine, IC<sub>50</sub> = 0.094 μmol/L, control Quinine, IC<sub>50</sub> = 0.209 μmol/L; chloroquine-sensitive D6 strain of *Plasmodium falciparum*, IC<sub>50</sub> = 27.3 μmol/L, Chloroquine, IC<sub>50</sub> = 0.009 μmol/L, Quinine, IC<sub>50</sub> = 0.044 μmol/L)<sup>[3454]</sup>. Source: *Milletia usaramensis* ssp. *usaramensis*. Ref: 3454.

**2149 Barbinervic acid**

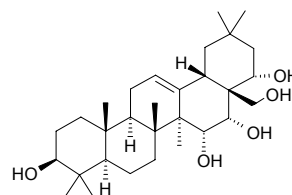
C<sub>30</sub>H<sub>48</sub>O<sub>5</sub> (488.71). Colorless needles (CHCl<sub>3</sub>:MeOH = 6:1), mp 278~280°C, [α]<sub>D</sub><sup>23</sup> = +32.5° (c = 0.25, pyridine), [α]<sub>D</sub><sup>23</sup> = +21.8° (c = 0.12, CHCl<sub>3</sub>), [α]<sub>D</sub><sup>20</sup> = +12° (c = 0.40, CHCl<sub>3</sub>). Pharm: Quinone reductase inducer inactive (mouse Hepalc7 hepatoma cells, CD > 10 μg/mL)<sup>[3434]</sup>. Source: *Coussarea brevicaulis*. Ref: 3434.

**2150 Barbourgenin**

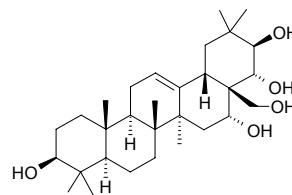
Spirostan-3,27-diol C<sub>27</sub>H<sub>44</sub>O<sub>4</sub> (432.65). mp 228~230°C. Source: JIAN MA *Agave sisalana*. Ref: 2503.

**2151 Barrigenol A<sub>1</sub>**

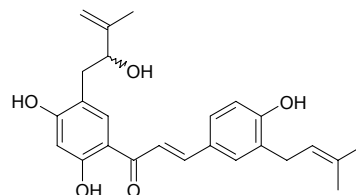
12-Oleanene-3,15,16,22,28-pentol [15448-03-0] C<sub>30</sub>H<sub>50</sub>O<sub>5</sub> (490.73). mp 300~302°C. Source: CHA ZI XIN *Camellia oleifera*. Ref: 6.

**2152 Barringtogenol C**

Theasapogenol B [13844-01-4] C<sub>30</sub>H<sub>50</sub>O<sub>5</sub> (490.73). mp 326~330°C (dec). Source: RI BEN QI YE SHU *Aesculus turbinata*. Ref: 6, 660.

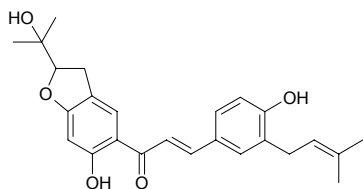
**2153 Bartericin A**

(-)-3-(3,3-Dimethylallyl)-5'-(2-hydroxy-3-methylbut-3-enyl)-4,2',4'-trihydroxychalcone C<sub>25</sub>H<sub>28</sub>O<sub>5</sub> (408.50). Yellow amorphous powder (Ether-EtOAc), mp 138~140°C, [α]<sub>D</sub><sup>25</sup> = -107° (c = 0.015, MeOH). Source: *Dorstenia barteri* var. *subtriangularis* (twig). Ref: 3765.

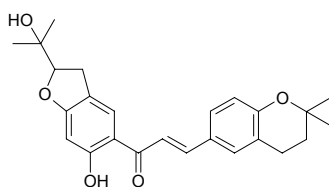


**2154 Bartericin B**

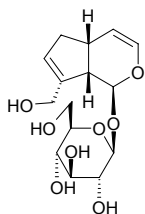
(+)-3-(3,3-Dimethylallyl)-4',5'-[2''-(1-hydroxy-1-methylethyl)-dihydrofurano]-4,2'-dihydroxychalcone  $C_{25}H_{28}O_5$  (408.50). Yellow amorphous powder (ether-EtOAc), mp 184~185°C,  $[\alpha]_D^{25} = +125^\circ$  ( $c = 0.015$ , MeOH). Source: *Dorstenia barteri* var. *subtriangularis* (twig). Ref: 3765.

**2155 Bartericin C**

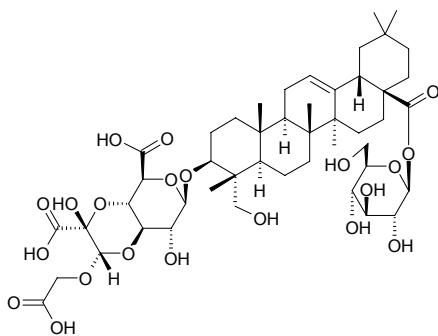
3,4-(6'',6''-Dimethyldihydropyrano)-4',5'-[2''-(1-hydroxy-1-methylethyl)-dihydrofurano]-2'-hydroxychalcone  $C_{25}H_{28}O_5$  (408.50). Yellow oil,  $[\alpha]_D^{25} = +301^\circ$  ( $c = 0.033$ , MeOH). Source: *Dorstenia barteri* var. *subtriangularis* (twig). Ref: 3765.

**2156 Bartsioside**

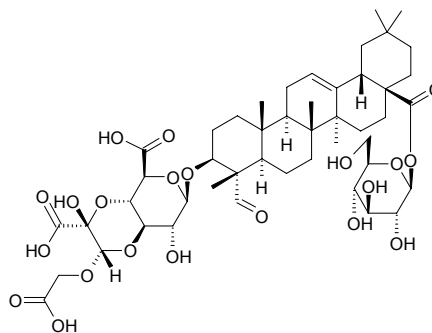
$C_{15}H_{22}O_8$  (330.34). Source: ROU CONG RONG *Cistanche deserticola*. Ref: 2448.

**2157 Basellasaponin A**

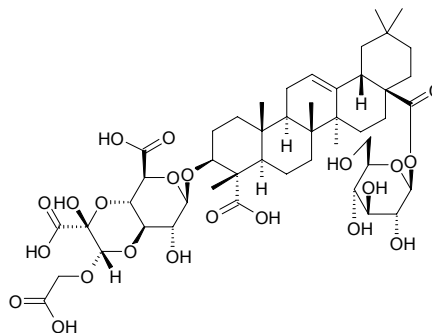
$C_{47}H_{70}O_{21}$  (971.07). Colorless fine crystals (MeOH-H<sub>2</sub>O), mp 228~230°C,  $[\alpha]_D^{24} = +30.1^\circ$  ( $c = 0.1$ , MeOH). Source: LUO KUI HUA *Basella rubra* (aerial parts). Ref: 3544.

**2158 Basellasaponin B**

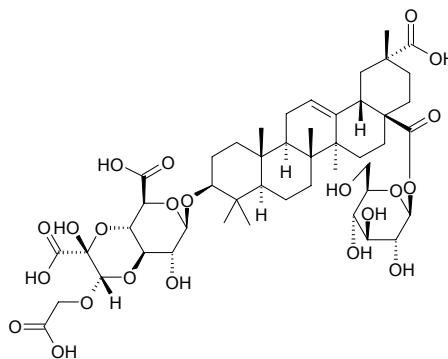
$C_{47}H_{68}O_{21}$  (969.05). Colorless fine crystals (MeOH-H<sub>2</sub>O), mp 226~228°C,  $[\alpha]_D^{26} = +57.4^\circ$  ( $c = 0.1$ , MeOH). Source: LUO KUI HUA *Basella rubra* (aerial parts). Ref: 3544.

**2159 Basellasaponin C**

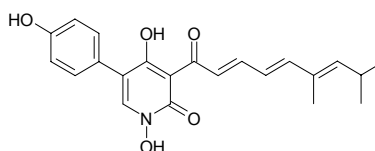
$C_{47}H_{68}O_{22}$  (985.05). Colorless fine crystals (MeOH-H<sub>2</sub>O), mp 230~232°C,  $[\alpha]_D^{25} = +42.1^\circ$  ( $c = 0.1$ , MeOH). Source: LUO KUI HUA *Basella rubra* (aerial parts). Ref: 3544.

**2160 Basellasaponin D**

$C_{47}H_{68}O_{22}$  (985.05). Colorless fine crystals (MeOH-H<sub>2</sub>O), mp 215~217°C,  $[\alpha]_D^{25} = +24.0^\circ$  ( $c = 0.1$ , MeOH). Source: LUO KUI HUA *Basella rubra* (aerial parts). Ref: 3544.

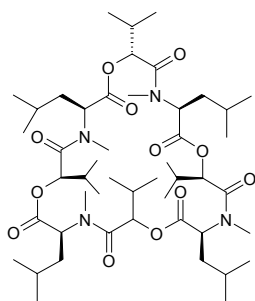
**2161 Bassianin**

[54278-73-8]  $C_{23}H_{25}NO_5$  (395.46). Source: BAI JIANG CAN *Bombyx mori*. Ref: 6.

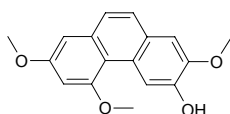


**2162 Bassianolide**

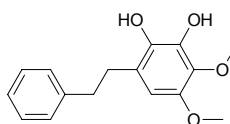
$C_{48}H_{84}N_4O_{12}$  (909.22). Source: BAI JIANG CAN *Bombyx mori*. Ref: 660.

**2163 Batatasin I**

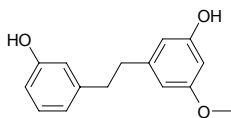
[51415-00-0]  $C_{17}H_{16}O_4$  (284.31). Pharm: Controls dormancy of common yam. Source: SHAN YAO *Dioscorea batatas* [Syn. *Dioscorea opposita*], JING JI SHU YU *Dioscorea dumetorum*. Ref: 658, 5501.

**2164 Batatasin II**

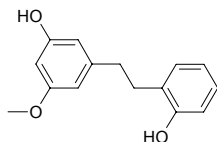
$C_{16}H_{18}O_4$  (274.32). Source: SHAN YAO *Dioscorea batatas* [Syn. *Dioscorea opposita*]. Ref: 660.

**2165 Batatasin III**

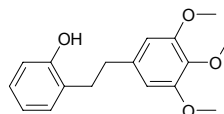
Batatacin III  $C_{15}H_{16}O_3$  (244.29). White powder. Pharm: Antiallergic  $\beta$ -Hexosaminidase inhibitor (rat basophilic RBL-2H3 cells, inhibits release of  $\beta$ -hexosaminidase,  $100\mu\text{mol/L}$ ,  $\text{InRt} = (65.5 \pm 2.7)\mu\text{mol/L}$ ,  $p < 0.01$ ;  $300\mu\text{mol/L}$  control Ketotifen fumarate,  $\text{InRt} = (72.5 \pm 0.9)\mu\text{mol/L}$ ,  $p < 0.01$ )<sup>[5022]</sup>. Source: BAI JI *Bletilla striata*, SHAN YAO *Dioscorea batatas* [Syn. *Dioscorea opposita*], SHOU ZHANG SHEN *Gymnadenia conopsea* (tuber). Ref: 660, 5022.

**2166 Batatasin IV**

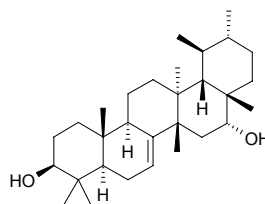
[60347-67-3]  $C_{15}H_{16}O_3$  (244.29). Pharm: Controls dormancy of common yam; antifungal (*Cladosporium cladosporioides*). Source: SHAN YAO *Dioscorea batatas* [Syn. *Dioscorea opposita*], YUAN SHU YU *Dioscorea rotundata* [Syn. *Dioscorea cayenensis*]. Ref: 658, 5501.

**2167 Batatasin V**

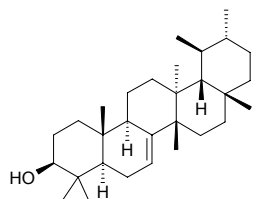
$C_{17}H_{20}O_4$  (288.35). Source: SHAN YAO *Dioscorea batatas* [Syn. *Dioscorea opposita*]. Ref: 660.

**2168 Bauer-7-ene-3 $\beta$ ,16 $\alpha$ -diol**

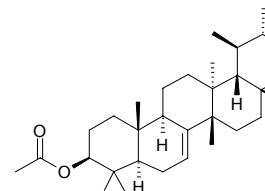
$C_{30}H_{50}O_2$  (442.73). Pharm: Antibacterial (*Escherichia coli*, IZD = 13~15mm, control Chloramphenicol, IZD = 16~20mm, DMSO (4%), IZD < 10mm; *Staphylococcus aureus*, IZD < 10mm, Chloramphenicol, IZD = 16~20mm, DMSO (4%), IZD < 10mm; *Bacillus subtilis*, IZD = 10~12mm; Chloramphenicol, IZD = 16~20mm, DMSO (4%), IZD < 10mm)<sup>[5315]</sup>. Source: MAO LIE FENG DOU CAI *Petasites tricholobus* (rhizome). Ref: 5315.

**2169 Bauerenol**

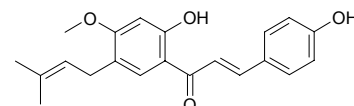
Ilexol [6466-94-0]  $C_{30}H_{50}O$  (426.73). mp 207~208°C. Source: KUAN DONG HUA *Tussilago farfara*, QIAO MU ZI ZHU *Callicarpa arborea*, SHA TANG MU *Acronychia pedunculata*, WU MU XIE *Diospyros ebenum*, ZI JIN NIU *Ardisia japonica*. Ref: 6.

**2170 Bauerenyl acetate**

$C_{32}H_{52}O_2$  (468.77). Colorless lumpish crystals. Source: HONG ZU HAO *Artemisia rubripes*, LIAN ZHU TENG *Alyxia sinensis*, ZHAI YE BAN FENG HE *Pterospermum lanceaeifolium*. Ref: 660, 2249.

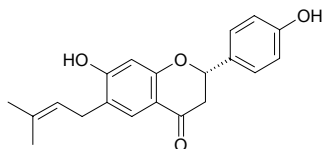
**2171 Bavachalcone**

$C_{21}H_{22}O_4$  (338.41). Source: BU GU ZHI *Psoralea corylifolia* (dried ripe fruit; mean content of 7 origins = 0.670%<sup>[5508]</sup>). Ref: 2, 545, 5508.

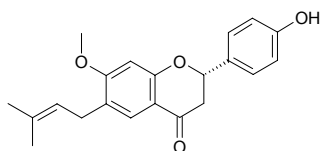


**2172 Bavachin**

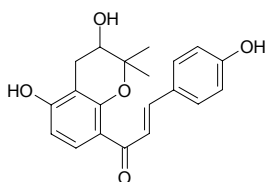
Corylifolin [19879-32-4] C<sub>20</sub>H<sub>20</sub>O<sub>4</sub> (324.38). **Pharm:** Cytotoxic (cyclooxygenase-1 inhibitor)<sup>[5038]</sup>; aromatase inhibitor inactive (*in vitro*, IC<sub>50</sub> > 40 μmol/L; control Aminoglutethimide, IC<sub>50</sub> = 6.4 μmol/L)<sup>[3090]</sup>. **Source:** BU GU ZHI *Psoralea corylifolia* (dried ripe fruit: mean content of 7 origins = 1.22%<sup>[5508]</sup>), GOU SHU *Broussonetia papyrifera*<sup>[3090]</sup>. **Ref:** 2, 545, 3090, 5038, 5508.

**2173 Bavachinin**

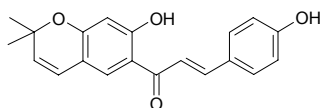
4'-Hydroxy-7-methoxy-6-prenylflavanone [19879-30-2] C<sub>21</sub>H<sub>22</sub>O<sub>4</sub> (338.41). **Source:** BU GU ZHI *Psoralea corylifolia*. **Ref:** 2, 545.

**2174 Bavachromanol**

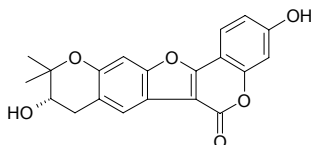
[74061-77-1] C<sub>20</sub>H<sub>20</sub>O<sub>5</sub> (340.38). **Source:** BU GU ZHI *Psoralea corylifolia*. **Ref:** 2, 545.

**2175 Bavachromene**

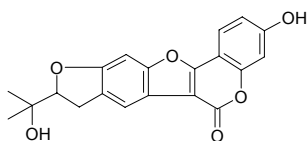
[41743-38-8] C<sub>20</sub>H<sub>18</sub>O<sub>4</sub> (322.36). **Source:** BU GU ZHI *Psoralea corylifolia*. **Ref:** 2, 545.

**2176 Bavacoumestan A**

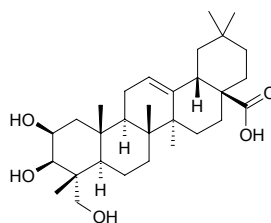
[129385-63-3] C<sub>20</sub>H<sub>16</sub>O<sub>6</sub> (352.35). **Source:** BU GU ZHI *Psoralea corylifolia*. **Ref:** 2, 545.

**2177 Bavacoumestan B**

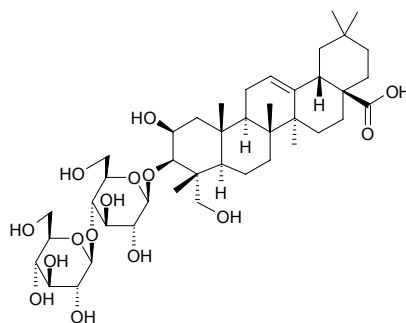
[129385-64-4] C<sub>20</sub>H<sub>16</sub>O<sub>6</sub> (352.35). **Source:** BU GU ZHI *Psoralea corylifolia*. **Ref:** 2, 545.

**2178 Bayogenin acid**

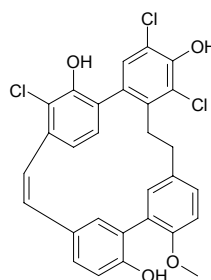
C<sub>30</sub>H<sub>48</sub>O<sub>5</sub> (488.71). White powder, mp 337~340°C. **Source:** *Drypetes molundana* (stem). **Ref:** 3989.

**2179 Bayogenin 3-O-cellobioside**

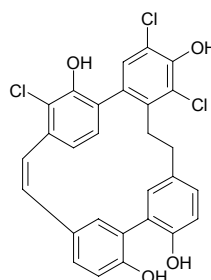
C<sub>42</sub>H<sub>68</sub>O<sub>15</sub> (813.00). **Pharm:** Molluscicide (snails, LD<sub>100</sub> = 0.012 mg/mL). **Source:** SHI ER RUI SHANG LU *Phytolacca dodecandra*. **Ref:** 658.

**2180 Bazzanin L**

1-Methyl ether of 10,12,10"-trichloroisoplagiochin C C<sub>29</sub>H<sub>21</sub>Cl<sub>3</sub>O<sub>4</sub> (539.85). [α]<sub>D</sub><sup>20</sup> = +126.5° (c = 0.2, MeOH). **Source:** WAN QU ZHI YE TAI *Lepidozia incurvata*. **Ref:** 3456.

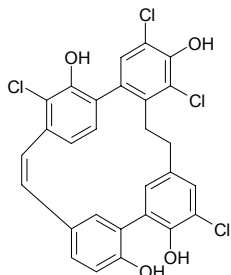
**2181 Bazzanin M**

10,12,10"-Trichloroisoplagiochin C C<sub>28</sub>H<sub>19</sub>Cl<sub>3</sub>O<sub>4</sub> (525.82). [α]<sub>D</sub><sup>20</sup> = +95° (c = 0.2, MeOH). **Source:** WAN QU ZHI YE TAI *Lepidozia incurvata*. **Ref:** 3456.

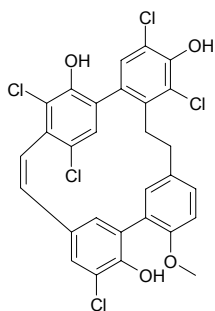


**2182 Bazzanin N**

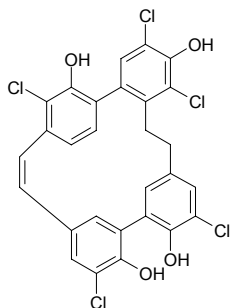
2,10,12,10'-Tetrachloroisoplogiochin C<sub>28</sub>H<sub>18</sub>Cl<sub>4</sub>O<sub>4</sub> (560.27).  $[\alpha]_D^{20} = +90^\circ$  ( $c = 0.1$ , MeOH). Source: WAN QU ZHI YE TAI *Lepidozia incurvata*. Ref: 3456.

**2183 Bazzanin O**

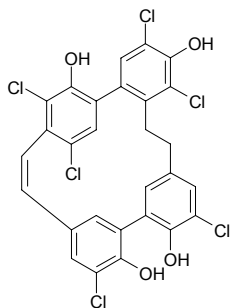
10,12,6',10',14'-Pentachloroisoplogiochin C<sub>29</sub>H<sub>19</sub>Cl<sub>5</sub>O<sub>4</sub> (608.74).  $[\alpha]_D^{20} = +54^\circ$  ( $c = 0.2$ , MeOH). Source: WAN QU ZHI YE TAI *Lepidozia incurvata*. Ref: 3456.

**2184 Bazzanin P**

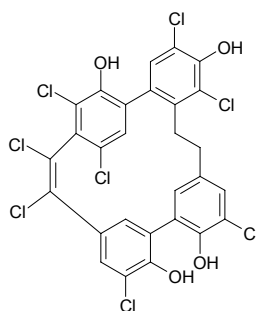
2,10,12,6',10'-Pentachloroisoplogiochin C<sub>28</sub>H<sub>17</sub>Cl<sub>5</sub>O<sub>4</sub> (594.71).  $[\alpha]_D^{20} = +225^\circ$  ( $c = 0.7$ , MeOH). Source: WAN QU ZHI YE TAI *Lepidozia incurvata*. Ref: 3456.

**2185 Bazzanin Q**

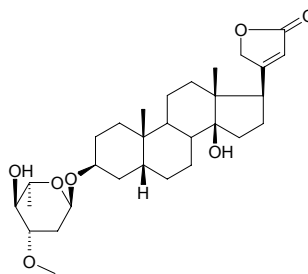
2,10,12,6',10',14'-Hexachloroisoplogiochin C<sub>28</sub>H<sub>16</sub>Cl<sub>6</sub>O<sub>4</sub> (629.16).  $[\alpha]_D^{20} = +120^\circ$  ( $c = 1.2$ , MeOH). Source: WAN QU ZHI YE TAI *Lepidozia incurvata*. Ref: 3456.

**2186 Bazzanin R**

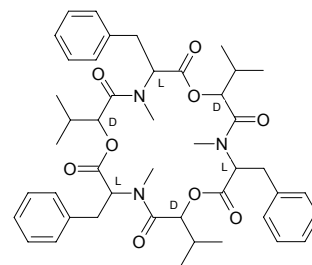
2,10,12,6',7',8',10',14'-Octachloroisoplogiochin C<sub>28</sub>H<sub>14</sub>Cl<sub>8</sub>O<sub>4</sub> (698.05). Source: WAN QU ZHI YE TAI *Lepidozia incurvata*. Ref: 3456.

**2187 Beaumontoside**

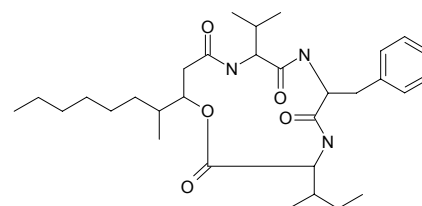
Digitoxigenin 3-O-oleandroside [31087-87-3] C<sub>30</sub>H<sub>46</sub>O<sub>7</sub> (518.70). mp 202–203°C. Pharm: Cardiotonic (anesthetic cat). Source: QING MING HUA *Beaumontia grandiflora*. Ref: 1, 6.

**2188 Beauvericin**

Beauvericin [26048-05-5] C<sub>45</sub>H<sub>57</sub>N<sub>3</sub>O<sub>9</sub> (783.97). mp 93–94°C. Source: BAI JIANG CAN *Bombyx mori*. Ref: 6.

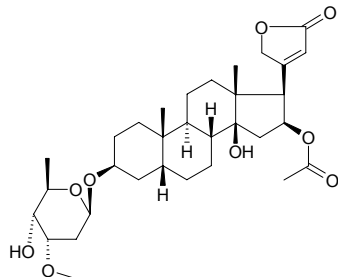
**2189 Beauverilide A**

C<sub>31</sub>H<sub>49</sub>N<sub>3</sub>O<sub>5</sub> (543.75). Source: BAI JIANG CAN *Bombyx mori*. Ref: 660.

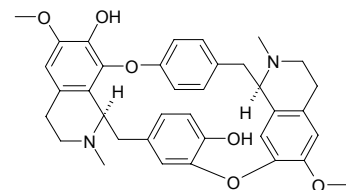


**2190 Beauwalloside**

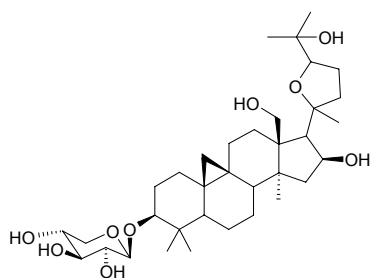
Oleandrigenin 3-*O*-*L*-cymaroside [31087-94-2] C<sub>32</sub>H<sub>48</sub>O<sub>9</sub> (576.73). mp 223–226°C. **Pharm:** Cardiotonic (anesthetic cat). **Source:** QING MING HUA *Beaumontia grandiflora*. **Ref:** 1, 6.

**2191 L-Bebeerine**

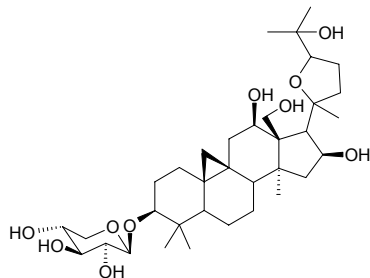
*L*-Curine C<sub>36</sub>H<sub>38</sub>N<sub>2</sub>O<sub>6</sub> (594.71). Flowery crystals (methanol), mp 213°C; mp 221°C (vacuum); rectangular prismatic crystals (benzene), including one molecule of benzene, mp 161°C, [α]<sub>D</sub> = –328° (pyridine); colorless acicular crystals (methanol), mp 213–214°C. **Pharm:** Antimalarial; cardiotonic; non-polarizing muscle relaxant (methyl iodide 0.07–0.20mg/kg, the action lasts 30–60min). **Source:** XI SHENG TENG *Cissampelos pareira*, JIN SHU HUANG YANG *Buxus sempervirens*. **Ref:** 6, 661.

**2192 Beesioside A**

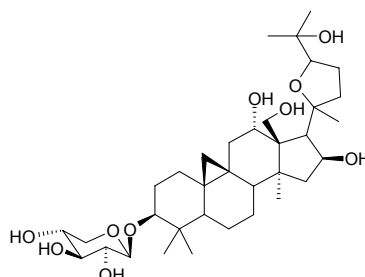
(20*S*\*,24*R*\*)-Epoxy-9,19-cyclolanostane-3β,16β,18,-25-tetraol-3-*O*-β-*D*-xylopyranoside C<sub>35</sub>H<sub>58</sub>O<sub>9</sub> (622.85). **Source:** TIE PO LUO *Beesia calthaeifolia* (whole herb). **Ref:** 3099.

**2193 Beesioside B**

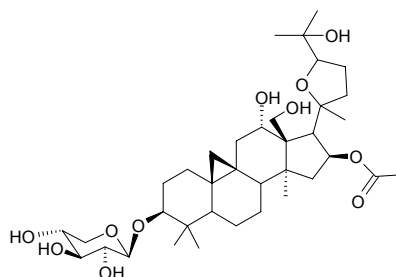
(20*S*\*,24*R*\*)-Epoxy-9,19-cyclolanostane-3β,12β,16β,18,25-pentaol-3-*O*-β-*D*-xylopyranoside C<sub>35</sub>H<sub>58</sub>O<sub>10</sub> (638.83). **Source:** TIE PO LUO *Beesia calthaeifolia* (whole herb). **Ref:** 3099.

**2194 Beesioside C**

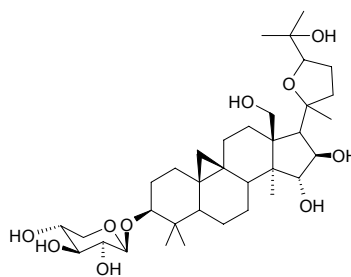
(20*S*\*,24*R*\*)-Epoxy-9,19-cyclolanostane-3β,12α,16β,18,25-pentaol-3-*O*-β-*D*-xylopyranoside C<sub>35</sub>H<sub>58</sub>O<sub>10</sub> (638.85). **Source:** TIE PO LUO *Beesia calthaeifolia* (whole herb). **Ref:** 3099.

**2195 Beesioside D**

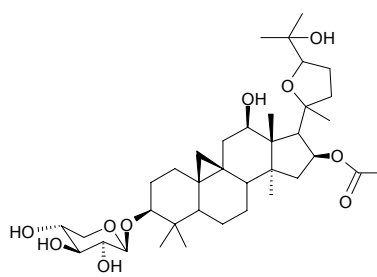
(20*S*\*,24*R*\*)-16β-Acetoxy-20,24-epoxy-9,19-cyclolanostane-3β,12α,18,25-tetraol-3-*O*-β-*D*-xylopyranoside C<sub>37</sub>H<sub>60</sub>O<sub>11</sub> (680.88). **Source:** TIE PO LUO *Beesia calthaeifolia* (whole herb). **Ref:** 3099.

**2196 Beesioside E**

(20*S*\*,24*R*\*)-Epoxy-9,19-cyclolanostane-3β,15α,16β,18,25-pentaol-3-*O*-β-*D*-xylopyranoside C<sub>35</sub>H<sub>58</sub>O<sub>10</sub> (638.85). **Source:** TIE PO LUO *Beesia calthaeifolia* (whole herb). **Ref:** 3099.

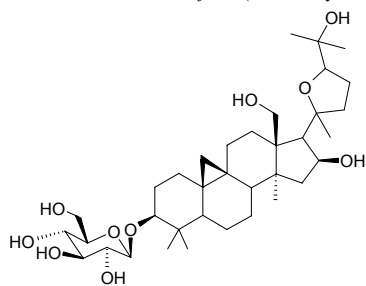
**2197 Beesioside F**

(20*S*\*,24*R*\*)-16β-Acetoxy-20,24-epoxy-9,19-cyclolanostane-3β,12β,25-triol-3-*O*-β-*D*-xylopyranoside C<sub>37</sub>H<sub>60</sub>O<sub>10</sub> (664.88). **Source:** TIE PO LUO *Beesia calthaeifolia* (whole herb). **Ref:** 3099.

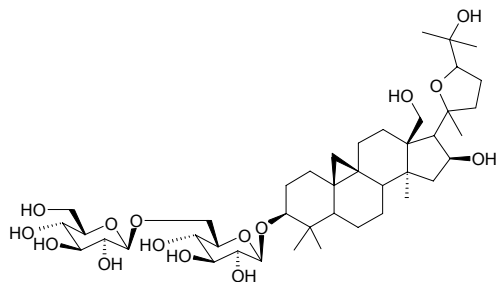


**2198 Beesioside G**

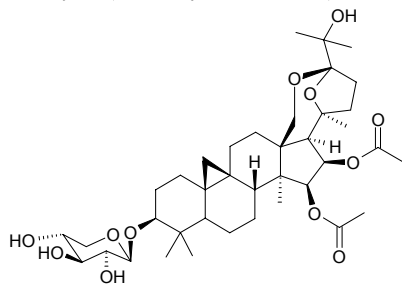
20 $\xi_1$ ,24 $\xi_2$ -Epoxy-9,19-cyclolanostane-3 $\beta$ ,16 $\beta$ ,18,25-tetraol-3-*O*- $\beta$ -D-glucopyranoside C<sub>36</sub>H<sub>60</sub>O<sub>10</sub> (652.87). Amorphous powder, mp 200–204°C (CHCl<sub>3</sub>-MeOH), [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +18.3° (*c* = 0.11, CHCl<sub>3</sub>:MeOH, 1:1). **Source:** TIE PO LUO *Beesia calthaeifolia* (rhizome: yield = 0.00071%dw). **Ref:** 4605.

**2199 Beesioside H**

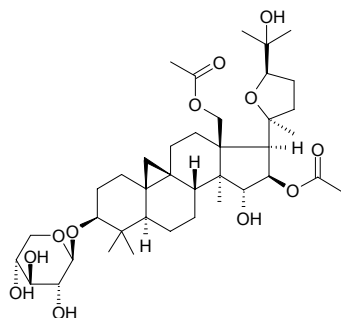
20 $\xi_1$ ,24 $\xi_2$ -Epoxy-9,19-cyclolanostane-3 $\beta$ ,16 $\beta$ ,18,25-tetraol-3-*O*-[ $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)]- $\beta$ -D-glucopyranoside C<sub>42</sub>H<sub>70</sub>O<sub>15</sub> (815.02). Amorphous powder, mp 190–194°C (CHCl<sub>3</sub>-MeOH), [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +23.8° (*c* = 0.08, MeOH). **Source:** TIE PO LUO *Beesia calthaeifolia* (rhizome: yield = 0.00071%dw). **Ref:** 4605.

**2200 Beesioside I**

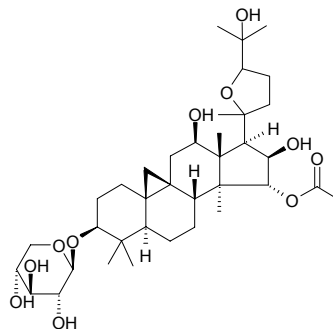
C<sub>39</sub>H<sub>60</sub>O<sub>12</sub> (720.91). Amorphous powder, mp 260–262°C (EtOAc-MeOH), [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -7.9° (*c* = 0.14, CHCl<sub>3</sub>:MeOH, 1:1). **Source:** TIE PO LUO *Beesia calthaeifolia* (rhizome: yield = 0.13%dw). **Ref:** 4605.

**2201 Beesioside II**

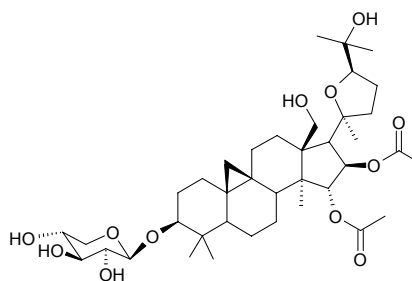
C<sub>39</sub>H<sub>62</sub>O<sub>12</sub> (722.92). **Source:** TIE PO LUO *Beesia calthaeifolia*. **Ref:** 660.

**2202 Beesioside III**

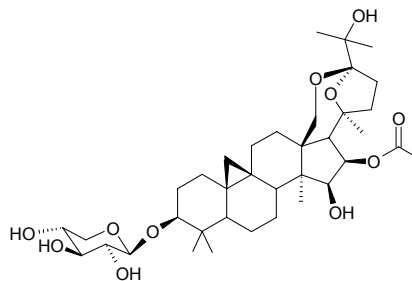
C<sub>37</sub>H<sub>60</sub>O<sub>11</sub> (680.88). **Source:** HUANG SAN QI *Souliea vaginata* (Rhizome), TIE PO LUO *Beesia calthaeifolia*. **Ref:** 660.

**2203 Beesioside J**

(20*S*,24*R*)-15 $\alpha$ ,16 $\beta$ -Diacetoxy-20,24-epoxy-9,19-cyclolanostane-3 $\beta$ ,18,25-triol-3-*O*- $\beta$ -D-xylopyranoside C<sub>39</sub>H<sub>62</sub>O<sub>12</sub> (722.92). Colorless prisms, mp 198–202°C (EtOAc-MeOH), [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +15.1° (*c* = 0.16, EtOAc:MeOH, 3:7). **Source:** TIE PO LUO *Beesia calthaeifolia* (rhizome: yield = 0.041%dw). **Ref:** 4605.

**2204 Beesioside K**

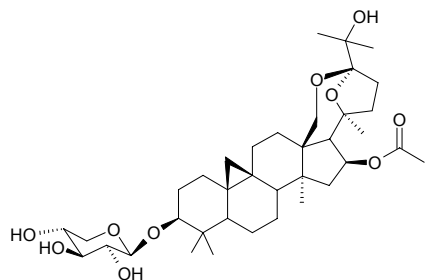
(20*S*,24*S*)-16 $\beta$ -Acetoxy-18,24;20,24-diepoxy-9,19-cyclanostane-3 $\beta$ ,15 $\beta$ ,25-triol-3-*O*- $\beta$ -D-xylopyranoside C<sub>37</sub>H<sub>58</sub>O<sub>11</sub> (678.87). Amorphous powder, mp 278–282°C (EtOAc-MeOH), [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -12.0° (*c* = 0.5, CHCl<sub>3</sub>:MeOH, 1:1). **Source:** TIE PO LUO *Beesia calthaeifolia* (rhizome: yield = 0.0043%dw). **Ref:** 4605.



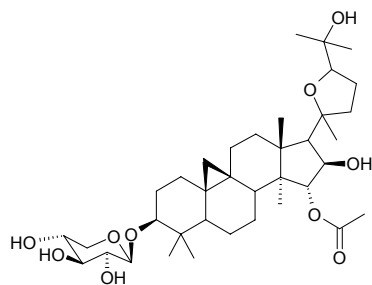


**2205 Beesioside L**

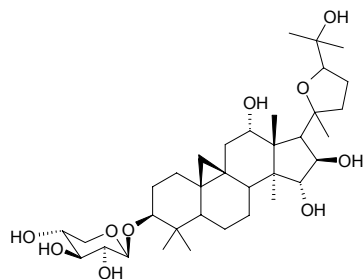
(20*S*,24*S*)-16β-Acetoxy-18,24;20,24-diepoxy-9,19-cyclanostane-3β,25-diol-3-*O*-β-*D*-xylopyranoside C<sub>37</sub>H<sub>58</sub>O<sub>10</sub> (662.87). Amorphous powder, mp 250~254°C (EtOAc-MeOH), [α]<sub>D</sub><sup>20</sup> = -2.1° (c = 0.09, CHCl<sub>3</sub>:MeOH, 1:1). Source: TIE PO LUO *Beesia calthaeifolia* (rhizome: yield = 0.00057%dw). Ref: 4605.

**2206 Beesioside M**

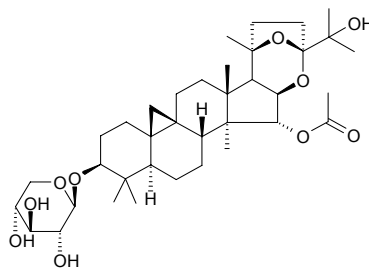
20ξ<sub>1</sub>,24ξ<sub>2</sub>-Epoxy-15*R*-acetoxy-9,19-cyclolanostane-3β,16β,25-triol-3-*O*-β-*D*-xylopyranoside C<sub>37</sub>H<sub>60</sub>O<sub>10</sub> (664.88). Amorphous powder, mp 158~164°C (CHCl<sub>3</sub>-MeOH), [α]<sub>D</sub><sup>20</sup> = -3.3° (c = 0.06, CHCl<sub>3</sub>:MeOH, 1:1). Source: TIE PO LUO *Beesia calthaeifolia* (rhizome: yield = 0.033%dw). Ref: 4605.

**2207 Beesioside N**

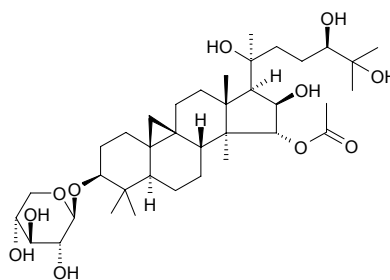
20ξ<sub>1</sub>,24ξ<sub>2</sub>-Epoxy-9,19-cyclolanostane-3β,12α,15α,16β,25-pentaol-3-*O*-β-*D*-xylopyranoside C<sub>35</sub>H<sub>58</sub>O<sub>10</sub> (638.85). Amorphous powder, mp 252~256°C (CHCl<sub>3</sub>-MeOH), [α]<sub>D</sub><sup>20</sup> = +14.2° (c = 0.19, CHCl<sub>3</sub>:MeOH, 1:1). Source: TIE PO LUO *Beesia calthaeifolia* (rhizome: yield = 0.0043%dw). Ref: 4605.

**2208 Beesioside O**

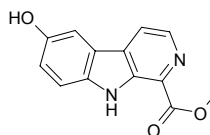
C<sub>37</sub>H<sub>58</sub>O<sub>10</sub> (662.87). White amorphous powder, mp 196~200°C (CHCl<sub>3</sub>-MeOH), [α]<sub>D</sub><sup>20</sup> = -11.3° (c = 0.12, CHCl<sub>3</sub>:MeOH = 1:1) Pharm: Immunosuppressant (mus T-cell, *in vivo*, inhibits cell proliferation induces by ConA); inhibits formation of micrangium (experiment by Chicken-embryo Allantoic bladder Membrane, CAM); inhibits skeletogenous cells (IC<sub>50</sub> = 32.78μg/mL); alkaline phosphatase inhibitor. Source: TIE PO LUO *Beesia calthaeifolia*. Ref: 2242.

**2209 Beesioside P**

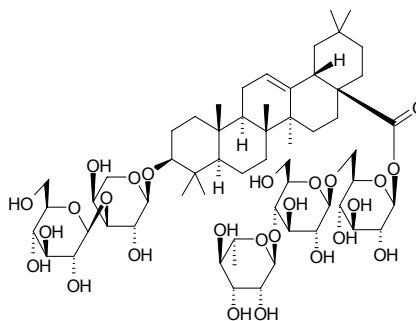
C<sub>37</sub>H<sub>62</sub>O<sub>11</sub> (682.90). White amorphous powder, mp 274~276°C (CHCl<sub>3</sub>-MeOH), [α]<sub>D</sub><sup>20</sup> = +2.6° (c = 0.12, MeOH) Pharm: Calcium channel receptor inhibitor (InRt = 79.55%). Source: TIE PO LUO *Beesia calthaeifolia*. Ref: 2242.

**2210 Begonanline**

C<sub>13</sub>H<sub>10</sub>N<sub>2</sub>O<sub>3</sub> (242.24). Yellow syrup. Source: NAN TOU QIU HAI TANG *Begonia nantoensis* (rhizome). Ref: 4267.

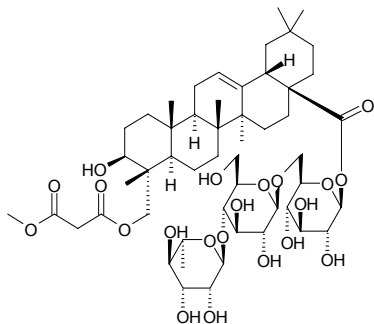
**2211 Begoniifolide A**

3-*O*-β-*D*-Glucopyranosyl(1→3)-α-*L*-arabinopyranosyl oleanolic acid 28-*O*-α-*L*-rhamnopyranosyl(1→4)-β-*D*-glucopyranosyl(1→6)-β-*D*-glucopyranoside C<sub>59</sub>H<sub>96</sub>O<sub>26</sub> (1121.41). white powder. Source: LUAN YE YIN LIAN HUA *Anemone begoniifolia*. Ref: 862.

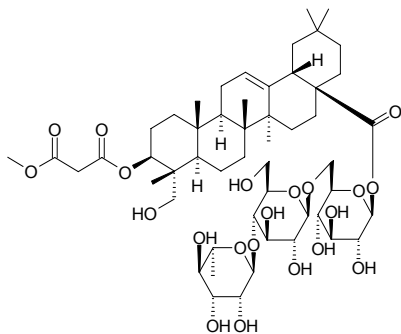


**2212 Begoniifolide B**

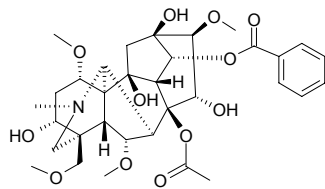
23-*O*-Methyl malonyl hederagenin 28-*O*- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside C<sub>52</sub>H<sub>82</sub>O<sub>21</sub> (1043.22). white powder, mp 175–178°C (dec). Source: LUAN YE YIN LIAN HUA *Anemone begoniifolia*. Ref: 862.

**2213 Begoniifolide C**

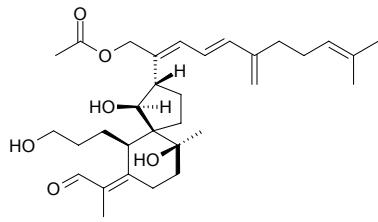
3-*O*-Methyl malonyl hederagenin 28-*O*- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside C<sub>52</sub>H<sub>82</sub>O<sub>21</sub> (1043.22). white powder, mp 168–170°C (dec). Source: LUAN YE YIN LIAN HUA *Anemone begoniifolia*. Ref: 862.

**2214 Beiwutine**

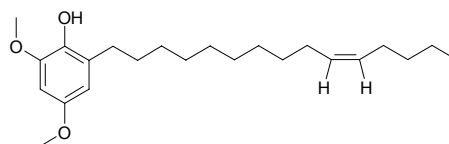
[76918-93-9] C<sub>33</sub>H<sub>45</sub>NO<sub>12</sub> (644.73). Pharm: Analgesic; LD<sub>50</sub> (mus, ip) = 0.42mg/kg. Source: BEI WU TOU *Aconitum kusnezoffii*. Ref: 1521, 5501.

**2215 Belamcandal**

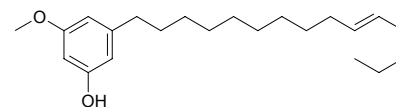
[138501-57-2] C<sub>32</sub>H<sub>48</sub>O<sub>6</sub> (528.73). Vitreous oil, [ $\alpha$ ]<sub>D</sub><sup>24</sup> = +146.8° (c = 1.0, methanol). Pharm: Irritant (throat mucosa). Source: SHE GAN *Belamcanda chinensis*, HU DIE HUA *Iris japonica*. Ref: 1090.

**2216 Belamcandol A**

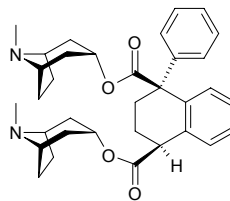
Belamcandaphenol [137786-93-7] C<sub>23</sub>H<sub>38</sub>O<sub>3</sub> (362.55). Oil. Pharm: 5-Lipoxygenase inhibitor (IC<sub>50</sub> = 0.6 $\mu$ mol/L). Source: SHE GAN *Belamcanda chinensis*. Ref: 1021.

**2217 Belamcandol B**

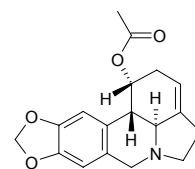
C<sub>22</sub>H<sub>36</sub>O<sub>2</sub> (332.53). Source: SHE GAN *Belamcanda chinensis*. Ref: 660.

**2218 Belladonnine**

C<sub>34</sub>H<sub>42</sub>N<sub>2</sub>O<sub>4</sub> (542.72). Pharm: Local anesthetic. Source: LANG DANG ZI *Hyoscyamus niger*, DIAN QIE *Atropa belladonna*, YI PAO NANG CAO *Physochlaina alaica*. Ref: 658.

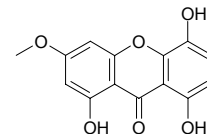
**2219 Bellamarine**

Belamarine [14383-07-4] C<sub>18</sub>H<sub>19</sub>NO<sub>4</sub> (313.36). Pharm: Cytotoxic (P<sub>388</sub> *in vitro*); uterine stimulant. Source: DA HUA YAO WEN SHU LAN *Crinum macrantherum*, GU TING HUA ZA JIAO ZHONG *Amaryllis belladonna* [hybrida]. Ref: 658.

**2220 Bellidifodin**

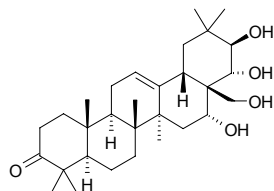
[2798-25-6] C<sub>14</sub>H<sub>10</sub>O<sub>6</sub> (274.23). Yellow acicular crystals, mp 254–256°C.

Pharm: Antihepatotoxin; monoamine oxidase A inhibitor; mutagen (*Salmonella typhimurium*); AChE inhibitor (MIC = 0.01 $\mu$ g = 0.03nmol, control Galanthamine MIC = 0.01 $\mu$ g = 0.03nmol, Physostigmine MIC = 0.005 $\mu$ g = 0.002nmol, Huperzine A MIC = 0.002 $\mu$ g = 0.0008nmol)<sup>[5039]</sup>. Source: RU BAI LONG DAN *Gentiana lactea*, QI RUI TA ZHANG YA CAI *Swertia chirata*, TIAN YE LONG DAN *Gentiana campestris* (leaf). Ref: 634, 658, 5039.

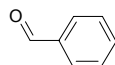


**2221 Bemeuxin**

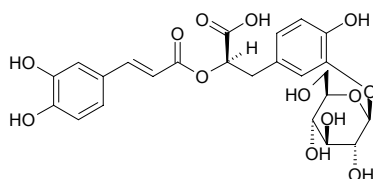
$C_{30}H_{48}O_5$  (488.71). Colorless columnar crystals (MeOH), mp 295–296°C,  $[\alpha]_D^{13} = +13.8^\circ$  ( $c = 0.52$ , pyridine). Source: YAN JIN CAI *Berneuxia tibetica*. Ref: 286.

**2222 Benzaldehyde**

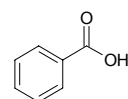
Phenylmethanal [100-52-7]  $C_7H_6O$  (106.13). mp  $-26^\circ\text{C}$ , bp  $179^\circ\text{C}/751\text{mmHg}$ . Source: AN XI XIANG *Styrax benzoin*, BA DAN XING REN *Prunus amygdalus*, BAI MEI HUA *Prunus mume*, DING XIANG *Syzygium aromaticum* [Syn. *Eugenia caryophyllata*], GUANG HUO XIANG *Pogostemon cablin* [Syn. *Mentha cablin*], JIAN ZI SU YE *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*], KONG SHI CHUN *Ulva pertusa*, SHUI SONG *Codium fragile*, SHUI XIAN HUA *Narcissus tazetta* var. *chinensis*. Ref: 6, 660.

**2223 Benzenepropanoic acid, 8-[(7'-(3',4'-dihydroxy-phenyl)-9'-oxo-7'-propenyl]oxy}-3-(1''-O-β-D-glucopyranosyl)-4-hydroxy-[R-(E)]**

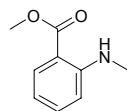
$C_{24}H_{26}O_{13}$  (522.47). Brown-yellow powder. Pharm: Anti-HIV<sup>[4586]</sup>. Source: GAN XI SHU WEI CAO *Salvia przewalskii* (root). Ref: 4586.

**2224 Benzoic acid**

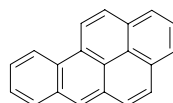
Phenylformic acid [65-85-0]  $C_7H_6O_2$  (122.12). Pharm: Antifungal; choleric; platelet aggregation inhibitor (washed rabbit platelets, 150μg/mL, 100μmol/L AA-induced, InRt = 4.5%, control 50μmol/L Aspirin, InRt = 100%; 10μg/mL collagen-induced, InRt = 6.2%, 100μmol/L Aspirin, InRt = 4.9%; 0.1U/mL thrombin-induced, InRt = 72.7%, 100μmol/L Aspirin, InRt = 1.7%; 2ng/mL PAF-induced, InRt = 35.0%, 100μmol/L Aspirin, InRt = 2.1%)<sup>[5427]</sup>. Source: BAI SHAO *Paeonia albiflora* [Syn. *Paeonia lactiflora*] (dried root: mean content = 0.048%<sup>[5508]</sup>), BAN LAN GEN *Isatis indigotica* (dried root: mean content of 5 origins = 0.00060%<sup>[5508]</sup>), CHI SHAO *Paeonia lactiflora* wild (dried root: mean content = 0.1778%<sup>[5508]</sup>), GUAN ZI YU PAN *Uvaria angolensis*, JIAO ZHI HUANG TAN *Dalbergia cochinchinensis*, QI LIN JIE *Daemonorops draco* (balsam: mean content = 2.54%<sup>[5508]</sup>), QIAO HUANG TAN *Dalbergia spruceana*, RI BEN HUANG BAI *Phellodendron japonicum* (leaf), SAN QI CAO *Gynura segetum* [Syn. *Gynura japonica*] (rhizome), TAI WAN FU RONG *Hibiscus taiwanensis*, TIAN LIAO MU *Homalium cochinchinensis* (root cortex: yield = 0.028%)<sup>[4742]</sup>, ZANG HONG HUA *Crocus sativus* (pollen). Ref: 2, 594, 658, 660, 2529, 4233, 4502, 4742, 5427, 5508.

**2225 Benzoic acid 2-methyl amino methyl ester**

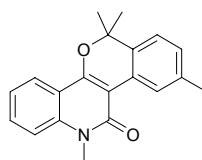
$C_9H_{11}NO_2$  (165.19). Source: JU PI *Citrus reticulata* Ref: 660.

**2226 3,4-Benzopyrene**

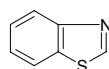
6,7-Benzopyrene [50-32-8]  $C_{20}H_{12}$  (252.32). mp 176.5–177.5°C, bp 310–312°C/10mmHg. Source: XIANG RI KUI ZI *Helianthus annuus*. Ref: 6.

**2227 Benzosimuline**

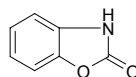
[198336-58-2]  $C_{20}H_{19}NO_2$  (305.38). Colorless oil. Pharm: Platelet aggregation inhibitor (rbt, caused by thrombin, arachidonic acid, collagen and PAF, EC = 100μg/mL); DNA isomerase inhibitor; cytotoxic (high activity). Source: YE HUA JIAO YE *Zanthoxylum simulans*. Ref: 1097, 2176.

**2228 Benzothiazole**

$C_7H_5NS$  (135.19). Source: HONG HUA *Carthamus tinctorius*. Ref: 660.

**2229 2-Benzoxazolinone**

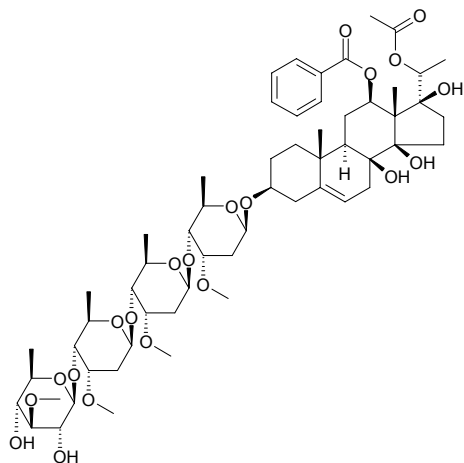
[59-49-4]  $C_7H_5NO_2$  (135.12). Pharm: Antileishmanial (*Leishmania* sp., *in vitro*, IC<sub>50</sub> = 40μg/mL); Source: LAO SHU LE *Acanthus ilicifolius*. Ref: 2080, 2107.



**2230 12-*O*-Benzoyl-20-*O*-acetylsarcostin-3-*O*- $\beta$ -*D*-thevetopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-cymaropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-cymaropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-cymaropyranoside**

C<sub>58</sub>H<sub>88</sub>O<sub>21</sub> (1121.34). Amorphous powder,  $[\alpha]_D^{24} = +28.6^\circ$  ( $c = 1.28$ , MeOH).

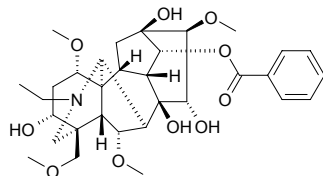
Source: *Araujia sericifera* (root). Ref: 4377.



**2231 Benzoylaconine**

C<sub>32</sub>H<sub>45</sub>NO<sub>10</sub> (603.72). Source: BEI WU TOU *Aconitum kusnezoffii*, DUO LIE WU TOU *Aconitum polyschistum*, TIE BANG CHUI *Aconitum pendulum*.

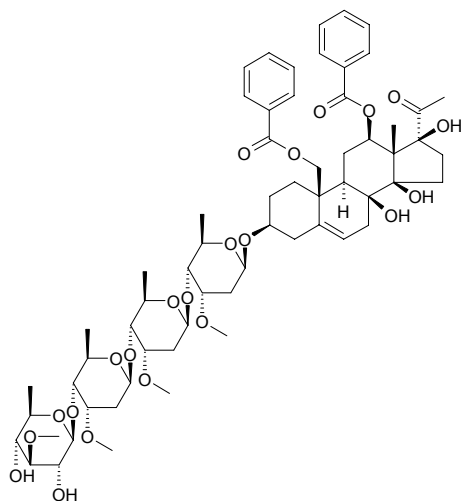
Ref: 660.



**2232 12-*O*-Benzoyl-19-benzoyloxydeacetylmetaplexigenin-3-*O*- $\beta$ -*D*-thevetopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-cymaropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-cymaropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-cymaropyranoside**

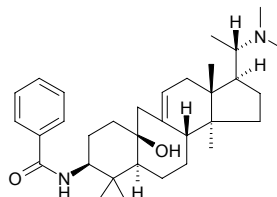
C<sub>63</sub>H<sub>88</sub>O<sub>22</sub> (1197.39). Amorphous powder,  $[\alpha]_D^{22} = +15.7^\circ$  ( $c = 1.44$ , MeOH).

Source: *Araujia sericifera* (root). Ref: 4377.



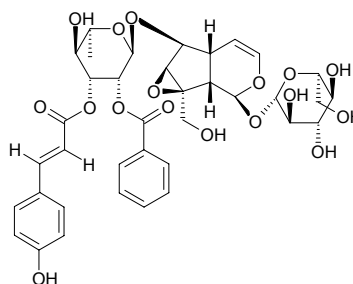
**2233 *N*-Benzoylbuxahyrcanine**

C<sub>33</sub>H<sub>50</sub>N<sub>2</sub>O<sub>2</sub> (506.78). Colorless amorphous powder, mp 239.7°C,  $[\alpha]_D^{29} = +15^\circ$  ( $c = 0.136$ , CHCl<sub>3</sub>). Pharm: AChE inhibitor (*in vitro*, IC<sub>50</sub> > 1000 μmol/L; control Eserine, IC<sub>50</sub> = 0.041 μmol/L)<sup>[4694]</sup>; BChE inhibitor (*in vitro*, IC<sub>50</sub> = 310.6 μmol/L; control Eserine, IC<sub>50</sub> = 0.0857 μmol/L)<sup>[4694]</sup>. Source: HE KA NI YA HUANG YANG *Buxus hyrcana* (leaf). Ref: 4694.



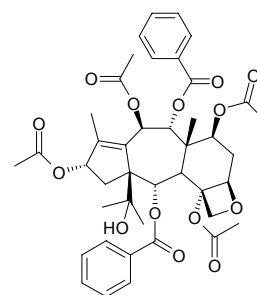
**2234 6-*O*- $\alpha$ -*L*-(2''-*O*-Benzoyl,3''-*O*-*trans*-*p*-coumaroyl)rhamnopyranosylcatalpol**

C<sub>37</sub>H<sub>42</sub>O<sub>17</sub> (758.74). Source: FEI LV BIN SHI ZI *Gmelina philippensis* (aerial parts). Ref: 3954.



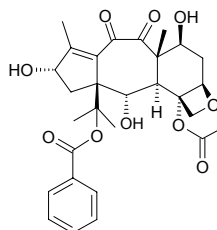
**2235 9-*O*-Benzoyl-9-*de*-*O*-acetyl-11(15 $\rightarrow$ 1)-abeo-baccatin VI**

C<sub>42</sub>H<sub>48</sub>O<sub>14</sub> (776.84).  $[\alpha]_D = -32.5^\circ$  (CHCl<sub>3</sub>). Source: ZA JIAO JIE ZHI HONG DOU SHAN *Taxus x media*. Ref: 662.



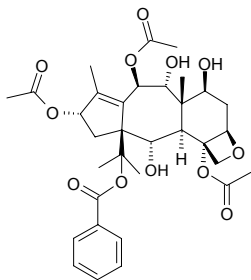
**2236 15-Benzoyl-10-deacetyl-2-debenzoyl-10-dehydro-abeo-baccatin III**

C<sub>29</sub>H<sub>34</sub>O<sub>10</sub> (542.59). Gum. Source: JIA NA DA HONG DOU SHAN *Taxus canadensis* (needle leaf). Ref: 3958.

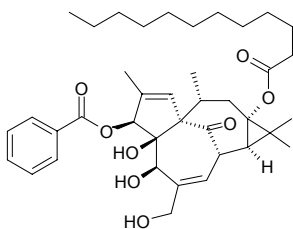


**2237 15-Benzoyl-2-debenzoyl-7,9-dideacetyl-abeo-baccatin VI**

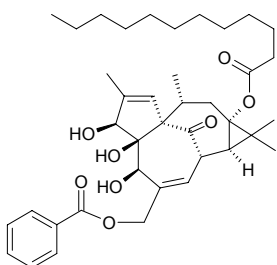
$C_{33}H_{42}O_{12}$  (630.70). Gum. Source: JIA NA DA HONG DOU SHAN *Taxus canadensis* (needle leaf). Ref: 3958.

**2238 3-O-Benzoyl-13-O-dodecanoateingenol**

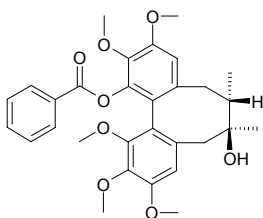
$C_{39}H_{54}O_8$  (650.86). Pharm: Induces cell cleavage arrest (*Xenopus laevis* embryo cells at the blastular stage, at 10 $\mu$ g/mL compound results in > 60% cell cleavage arrest)<sup>[4368]</sup>. Source: GAN SUI *Euphorbia kansui*. Ref: 4368.

**2239 20-O-Benzoyl-13-O-dodecanoateingenol**

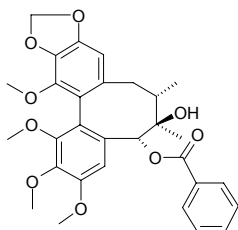
$C_{39}H_{54}O_8$  (650.86). Source: GAN SUI *Euphorbia kansui*. Ref: 4368.

**2240 Benzoylgomisins H**

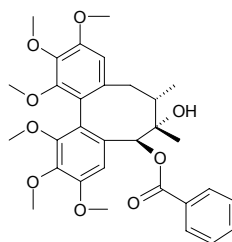
$C_{30}H_{34}O_8$  (522.60). Source: WU WEI ZI *Schisandra chinensis*. Ref: 2.

**2241 Benzoylgomisins P**

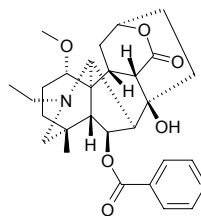
$C_{30}H_{32}O_9$  (536.58). Source: WU WEI ZI *Schisandra chinensis*. Ref: 2.

**2242 Benzoylgomisins Q**

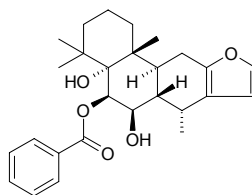
$C_{31}H_{36}O_9$  (552.63). Source: WU WEI ZI *Schisandra chinensis*. Ref: 2.

**2243 Benzoylheteratisine**

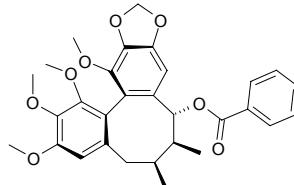
$C_{29}H_{37}NO_6$  (495.62). Source: GAN QING WU TOU *Aconitum tanguticum*. Ref: 660.

**2244 6 $\beta$ -Benzoyl-7 $\beta$ -hydroxyvouacapen-5 $\alpha$ -ol**

Isovouacapenol C  $C_{27}H_{34}O_5$  (438.57). Colorless needles, mp 193~195°C (CHCl<sub>3</sub>-MeOH),  $[\alpha]_D^{30} = +18.4$  ( $c = 0.977$ , CHCl<sub>3</sub>); Colorless crystals, mp 116~118°C (petroleum ether),  $[\alpha]_D^{20} = -18.4^\circ$  ( $c = 0.0044$ , CDCl<sub>3</sub>). Pharm: Antibacterial (*Staphylococcus aureus*, *Escherichia coli*, *Pseudomonas aeruginosa*, and *Bacillus subtilis*)<sup>[4639]</sup>; antifungal (*Candida albicans* and *Trichophyton mentagrophytes*)<sup>[4639]</sup>; antitubercular (*Mycobacterium tuberculosis* H37Ra, MIC = 25 $\mu$ g/mL, control Kanamycin sulfate, MIC = 2.5~5.0 $\mu$ g/mL)<sup>[5435]</sup>; cytotoxic (KB cells, IC<sub>50</sub> = (9.9 $\pm$ 1.3) $\mu$ g/mL, control Ellipticine, IC<sub>50</sub> = (0.3 $\pm$ 0.1) $\mu$ g/mL; BC, IC<sub>50</sub> = (3.6 $\pm$ 0.5) $\mu$ g/mL, Ellipticine, IC<sub>50</sub> = (0.3 $\pm$ 0.1) $\mu$ g/mL; NCI-H187, IC<sub>50</sub> = (2.9 $\pm$ 0.1) $\mu$ g/mL)<sup>[5435]</sup>. Source: JI MEI YUN SHI *Caesalpinia pulcherrima* (leaf: yield = 0.00022%dw). Ref: 4639, 5435.

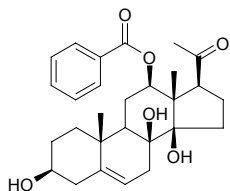
**2245 Benzoylisogomisins O**

$C_{30}H_{32}O_8$  (520.58).  $[\alpha]_D^{23} = -13.5^\circ$  ( $c = 1.23$ , CHCl<sub>3</sub>). Pharm: NFAT transcription inhibitor (IC<sub>50</sub> = (11.06 $\pm$ 1.02) $\mu$ mol/L, control Cyclosporin A, IC<sub>50</sub> = (1.20 $\pm$ 0.29) $\mu$ mol/L)<sup>[5343]</sup>. Source: LENG FAN TUAN *Kadsura coccinea* [syn. *Kadsura chenensis*; *Kadsura hainanensis*], WU WEI ZI *Schisandra chinensis*. Ref: 660, 5343.

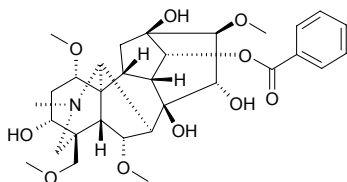


**2246 12-O-Benzoylisolineolone**

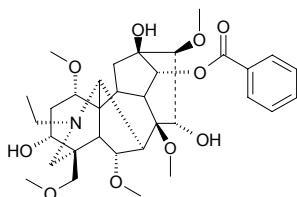
$C_{28}H_{36}O_6$  (468.60). mp 245~250°C. Source: FU SHOU CAO *Adonis amurensis*. Ref: 6.

**2247 Benzylmesaconine**

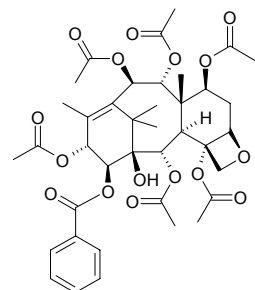
$C_{31}H_{43}NO_{10}$  (589.69). Pharm: Analgesic (mouse, tail pressure test,  $ED_{50}$  = 38.9mg/kg,  $LD_{50}/ED_{50}$  = 6.29)<sup>[5451]</sup>; acute toxicity (mouse,  $LD_{50}$  = 245mg/kg)<sup>[5451]</sup>. Source: WU TOU *Aconitum carmichaeli* (buds). Ref: 5451.

**2248 14-Benzoyl-8-O-methyl-aconine I**

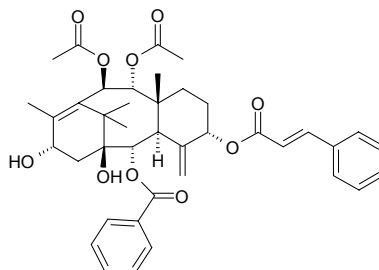
$C_{33}H_{47}NO_{10}$  (617.74). Amorphous powder,  $[\alpha]_D^{20}$  = -2.36° ( $c$  = 0.721,  $CHCl_3$ ). Source: NI YU LONG WU TOU *Aconitum pseudostapfianum*. Ref: 487.

**2249 14β-Benzoyloxybaccatin IV**

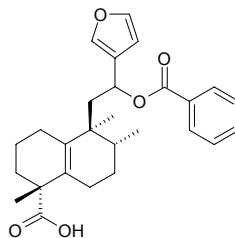
$C_{39}H_{48}O_{16}$  (772.81). Colorless prisms crystals (MeOH), mp 270~272°C,  $[\alpha]_D^{15}$  = +38.8° ( $c$  = 0.31,  $CHCl_3$ ). Source: HONG DOU SHAN *Taxus chinensis* (leaf and stem: yield = 0.000033%dw). Ref: 4750.

**2250 2α-Benzoyloxy-5α-cinnamoyloxy-9α,10β-diacetoxy-1β,13α-dihydroxy-4(20),11-taxadiene**

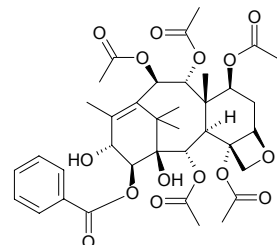
$C_{40}H_{46}O_{10}$  (686.81). mp 212~214°C,  $[\alpha]_D$  = +6.5° ( $CHCl_3$ ). Source: HONG DOU SHAN *Taxus chinensis*. Ref: 662.

**2251 12-Benzoyloxycrotohalimaneic acid**

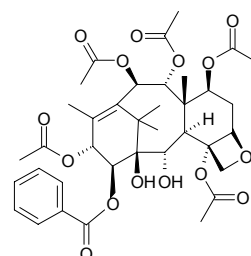
$C_{27}H_{32}O_5$  (436.55). Viscous transparent oil,  $[\alpha]_D^{25}$  = +54° ( $c$  = 1.0,  $CHCl_3$ ). Pharm: Cytotoxic inactive (*in vitro* hmn tumor cell cultures: BT474, > 10μg/mL; CHAGO, > 10μg/mL; HepG2, > 10μg/mL; Kato3, > 10μg/mL; SW620, > 10μg/mL)<sup>[4930]</sup>. Source: GUANG YE BA DOU *Croton oblongifolius* [Syn. *Croton laevigatus*] (stem bark). Ref: 4930.

**2252 14β-Benzoyloxy-13-deacetylbaaccatin IV**

$C_{37}H_{46}O_{15}$  (730.77). Colorless needle crystals (acetone-petroleum ether), mp 252~253°C,  $[\alpha]_D^{19}$  = +32.5° ( $c$  = 0.123,  $CH_3COCH_3$ ). Source: HONG DOU SHAN *Taxus chinensis* (leaf and stem: yield = 0.000067%dw). Ref: 4750.

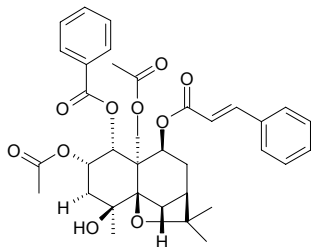
**2253 14β-Benzoyloxy-2-deacetylbaaccatin VI**

$C_{37}H_{46}O_{15}$  (730.77). Colorless lamellar crystals (acetone), mp 241~243°C,  $[\alpha]_D^{16}$  = +9.4° ( $c$  = 0.57, MeOH). Source: HONG DOU SHAN *Taxus chinensis* (leaf and stem: yield = 0.00011%dw). Ref: 4750.



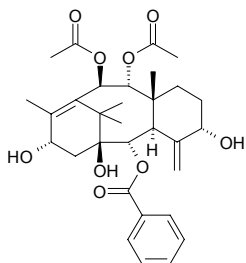
**2254 (1R,2S,4S,5R,7R,9S,10R)-1 $\alpha$ -Benzoyloxy-2 $\alpha$ ,15-diacetoxy-4 $\beta$ -hydroxy-9 $\beta$ -cinnamoyloxy- $\beta$ -dihydroagarofuran**

C<sub>35</sub>H<sub>40</sub>O<sub>10</sub> (620.70). Colorless needles (Me<sub>2</sub>CO), mp 193~194°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +153° (*c* = 1.68, CHCl<sub>3</sub>). **Pharm:** Cytotoxic (*in vitro*, Bel7402 liver carcinoma, IC<sub>50</sub> = 35.91  $\mu$ g/mL, control Etoposide, IC<sub>50</sub> = 7.00  $\mu$ g/mL). **Source:** *Euonymus nanoides* (seed). **Ref:** 4962.



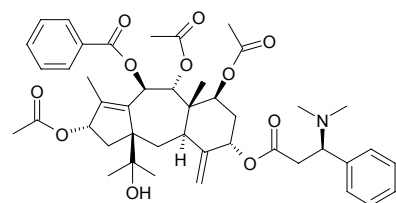
**2255 2 $\alpha$ -Benzoyloxy-9 $\alpha$ ,10 $\beta$ -diacetoxy-1 $\beta$ ,5 $\alpha$ ,13 $\alpha$ -trihydroxy-4(20),11-taxadiene**

C<sub>31</sub>H<sub>40</sub>O<sub>9</sub> (556.66). mp 196~197°C, [ $\alpha$ ]<sub>D</sub> = +5° (CHCl<sub>3</sub>). **Source:** HONG DOU SHAN *Taxus chinensis*. **Ref:** 662.



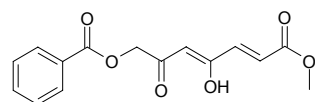
**2256 10 $\beta$ -Benzoyloxy-5 $\alpha$ -(3'-dimethylamino-3'-phenyl)propanoxy-1 $\beta$ -hydroxy-7 $\beta$ ,9 $\alpha$ ,13 $\alpha$ -triacetoxy-11(15→1)-abeo-taxa-4(20),11-dien**

C<sub>44</sub>H<sub>55</sub>NO<sub>11</sub> (773.93). **Source:** DUAN YE HONG DOU SHAN *Taxus brevifolia*. **Ref:** 662.



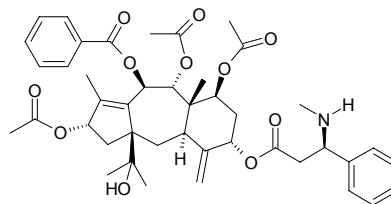
**2257 7-Benzoyloxy-4-hydroxy-1-methoxy-2E,4Z-heptadien-1,6-dione**

C<sub>15</sub>H<sub>14</sub>O<sub>6</sub> (290.28). White crystalline solid, mp 116~118°C. **Pharm:** Cytotoxic (BT474, IC<sub>50</sub> = 5.6  $\mu$ g/mL, control Doxorubicin hydrochloride, IC<sub>50</sub> = 0.1  $\mu$ g/mL; CHAGO, IC<sub>50</sub> > 10  $\mu$ g/mL, Doxorubicin hydrochloride, IC<sub>50</sub> = 2.3  $\mu$ g/mL; HepG2, IC<sub>50</sub> = 5.3  $\mu$ g/mL, Doxorubicin hydrochloride, IC<sub>50</sub> = 0.9  $\mu$ g/mL; KATO 3, IC<sub>50</sub> = 3.9  $\mu$ g/mL, Doxorubicin hydrochloride, IC<sub>50</sub> = 1.7  $\mu$ g/mL; SW620, IC<sub>50</sub> = 4.9  $\mu$ g/mL, Doxorubicin hydrochloride, IC<sub>50</sub> = 1.1  $\mu$ g/mL). **Source:** *Melodorum fruticosum* (flower). **Ref:** 5245.



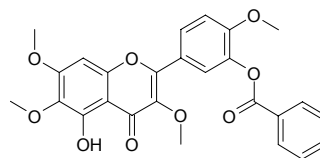
**2258 10 $\beta$ -Benzoyloxy-1 $\beta$ -hydroxy-5 $\alpha$ -(3'-methylamino-3'-phenyl)propanoxy-7 $\beta$ ,9 $\alpha$ ,13 $\alpha$ -triacetoxy-11(15→1)-abeo-taxa-4(20),11-diene**

C<sub>43</sub>H<sub>53</sub>NO<sub>11</sub> (759.90). **Source:** DUAN YE HONG DOU SHAN *Taxus brevifolia*. **Ref:** 662.



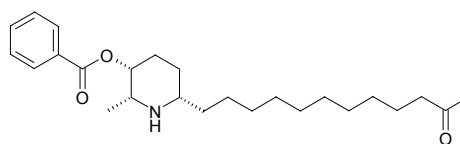
**2259 3'-Benzoyloxy-5-hydroxy-3,6,7,4'-tetramethoxyflavone**

C<sub>26</sub>H<sub>22</sub>O<sub>9</sub> (478.46). mp 210~211°C. **Pharm:** Cytotoxic (*in vitro*, Col2, ED<sub>50</sub> > 20  $\mu$ g/mL; hTERT-RPE1, ED<sub>50</sub> = 3.6  $\mu$ g/mL; HUVEC, ED<sub>50</sub> > 20  $\mu$ g/mL; KB, ED<sub>50</sub> > 20  $\mu$ g/mL; HUVEC, ED<sub>50</sub> > 20  $\mu$ g/mL; Lu1, ED<sub>50</sub> = 16.5  $\mu$ g/mL). **Source:** HUANG JING YE *Vitex negundo*. **Ref:** 4699.



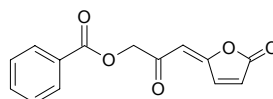
**2260 3(R)-Benzoyloxy-2(R)-methyl-6(R)-(11'-oxododecyl)-piperidine**

C<sub>23</sub>H<sub>39</sub>NO<sub>3</sub> (401.59). Pale yellow oil, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +2.64° (*c* = 0.46, EtOH). **Pharm:** Cytotoxic (P<sub>388</sub>, IC<sub>50</sub> = 10.5  $\mu$ g/mL, control 5-FU, IC<sub>50</sub> = 0.99  $\mu$ g/mL; KB, IC<sub>50</sub> = 3.7  $\mu$ g/mL, Doxorubicin, IC<sub>50</sub> = 0.57  $\mu$ g/mL; BC-1, IC<sub>50</sub> = 6.2  $\mu$ g/mL, Doxorubicin, IC<sub>50</sub> = 0.21  $\mu$ g/mL); cytotoxic (brine shrimp lethality, IC<sub>50</sub> > 100  $\mu$ g/mL, control Monocrotophos, IC<sub>50</sub> = 0.24  $\mu$ g/mL). **Source:** ZHUANG GUAN FAN XIE *Senna spectabilis* (flower). **Ref:** 5480.



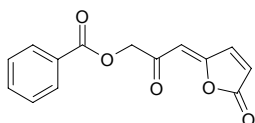
**2261 7-Benzoyloxy-6-oxo-2,4E-heptadiene-1,4-olide**

C<sub>14</sub>H<sub>10</sub>O<sub>5</sub> (258.23). Colorless bulky crystals, mp 139~140°C. **Pharm:** Cytotoxic (BT474, IC<sub>50</sub> > 10  $\mu$ g/mL, control Doxorubicin hydrochloride, IC<sub>50</sub> = 0.1  $\mu$ g/mL; CHAGO, IC<sub>50</sub> > 10  $\mu$ g/mL, Doxorubicin hydrochloride, IC<sub>50</sub> = 2.3  $\mu$ g/mL; HepG2, IC<sub>50</sub> > 10  $\mu$ g/mL, Doxorubicin hydrochloride, IC<sub>50</sub> = 0.9  $\mu$ g/mL; KATO 3, IC<sub>50</sub> > 10  $\mu$ g/mL, Doxorubicin hydrochloride, IC<sub>50</sub> = 1.7  $\mu$ g/mL; SW620, IC<sub>50</sub> > 10  $\mu$ g/mL, Doxorubicin hydrochloride, IC<sub>50</sub> = 1.1  $\mu$ g/mL). **Source:** *Melodorum fruticosum* (flower). **Ref:** 5245.

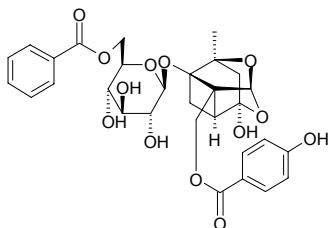


**2262 7-Benzoyloxy-6-oxo-2,4Z-heptadiene-1,4-olide**

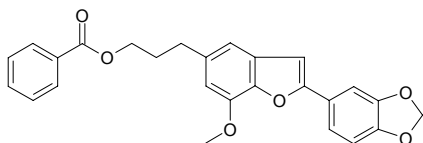
$C_{14}H_{10}O_5$  (258.23). Colorless bulky crystals, mp 136~138°C. **Pharm:** Cytotoxic (BT474,  $IC_{50} = 3.0\mu\text{g/mL}$ , control Doxorubicin hydrochloride,  $IC_{50} = 0.1\mu\text{g/mL}$ ; CHAGO,  $IC_{50} > 10\mu\text{g/mL}$ , Doxorubicin hydrochloride,  $IC_{50} = 2.3\mu\text{g/mL}$ ; HepG2,  $IC_{50} = 3.7\mu\text{g/mL}$ , Doxorubicin hydrochloride,  $IC_{50} = 0.9\mu\text{g/mL}$ ; KATO 3,  $IC_{50} = 3.3\mu\text{g/mL}$ , Doxorubicin hydrochloride,  $IC_{50} = 1.7\mu\text{g/mL}$ ; SW620,  $IC_{50} = 2.6\mu\text{g/mL}$ , Doxorubicin hydrochloride,  $IC_{50} = 1.1\mu\text{g/mL}$ ). **Source:** *Melodorum fruticosum* (flower). **Ref:** 5245.

**2263 Benzoyl-oxypaeoniflorin**

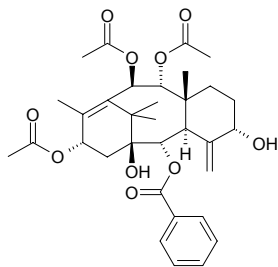
$C_{30}H_{32}O_{13}$  (600.58). **Pharm:** Platelet aggregation inhibitor. **Source:** MU DAN PI *Paeonia moutan* [Syn. *Paeonia suffruticosa*]. **Ref:** 1.

**2264 5-(3''-Benzoyloxypropyl)-7-methoxy-2-(3',4'-methylenedioxyphenyl)-benzofuran**

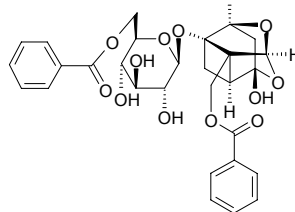
$C_{26}H_{22}O_6$  (430.46). **Source:** YAO YONG AN XI XIANG *Styrax officinalis*. **Ref:** 3426.

**2265 2a-Benzoyloxy-9a,10β,13α-triacetoxy-1β,5α-dihydroxy-4(20),11-taxadiene**

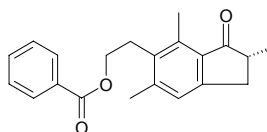
$C_{33}H_{42}O_{10}$  (598.70). mp 155~157°C,  $[\alpha]_D^{25} = +67.7^\circ$  ( $CHCl_3$ ). **Source:** HONG DOU SHAN *Taxus chinensis*. **Ref:** 662.

**2266 Benzoylpaeoniflorin**

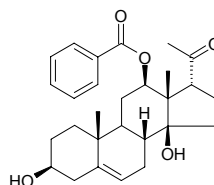
$C_{30}H_{32}O_{12}$  (584.58). **Pharm:** Antithrombotic (inhibits plasmin and plasminogen). **Source:** BAI SHAO *Paeonia albiflora* [Syn. *Paeonia lactiflora*] (root: content = 0.04%)<sup>[5501]</sup>, MU DAN PI *Paeonia moutan* [Syn. *Paeonia suffruticosa*]. **Ref:** 1, 660, 5501.

**2267 Benzoylpterosin B**

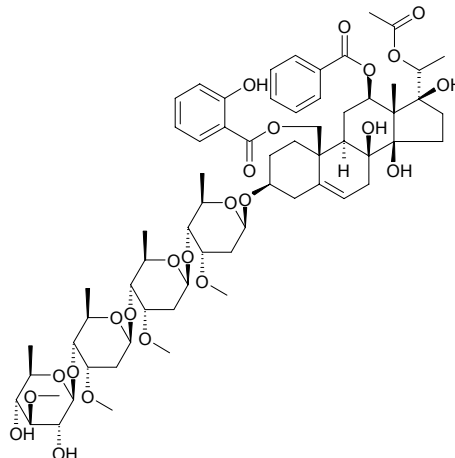
$C_{21}H_{22}O_5$  (322.41). mp 68~70°C. **Source:** JUE *Pteridium aquilinum* var. *latiusculum*. **Ref:** 6.

**2268 Benzoylramanone**

$C_{28}H_{36}O_5$  (452.60). mp 222~226°C. **Source:** LUO MO *Metaplexis japonica*. **Ref:** 6.

**2269 12-O-Benzoyl-19-salicyloyloxy-20-O-acetylsarcostin 3-O-β-D-thevetopyranosyl-(1→4)-β-D-cymaropyranosyl-(1→4)-β-D-cymaropyranosyl-(1→4)-β-D-cymaropyranoside**

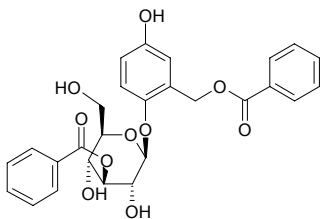
$C_{65}H_{92}O_{24}$  (1257.44). Amorphous powder,  $[\alpha]_D^{24} = +62^\circ$  ( $c = 0.32$ , MeOH). **Source:** *Araujia sericifera* (root). **Ref:** 4377.



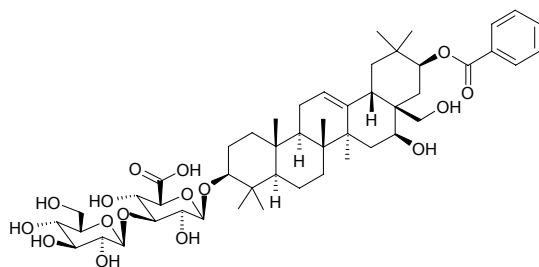


**2270 Benzoylsalireposide**

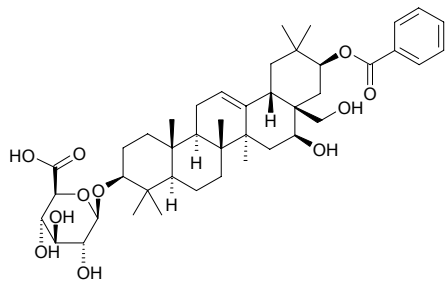
1-Benzoylmethyl-5-hydroxyphenyl- $\beta$ -D-(3'-benzoyl) glucopyranoside  
 $C_{27}H_{26}O_{10}$  (510.50). Amorphous powder,  $[\alpha]_D^{23} = -7.69^\circ$  ( $c = 0.182$ , MeOH).  
**Pharm:** Phosphodiesterase I inhibitor (*in vitro*,  $IC_{50} = (171 \pm 0.02) \mu\text{mol/L}$ ,  
 control Cysteine,  $IC_{50} = (274 \pm 0.07) \mu\text{mol/L}$ )<sup>[4093]</sup>; thymidine phosphorylase  
 inhibitor (*in vitro*,  $IC_{50} = (427.20 \pm 5.36) \mu\text{mol/L}$ , control 7-Deazaxanthine,  $IC_{50}$   
 $= (38.68 \pm 4.42) \mu\text{mol/L}$ )<sup>[4093]</sup>. **Source:** ZHU ZI SHU *Symplocos racemosa*. **Ref:**  
 3374, 4093.

**2271 21 $\beta$ -O-Benzoylsitakigenin 3-O- $\beta$ -D-glucopyranosyl(1 $\rightarrow$ 3)- $\beta$ -D-glucuronopyranoside**

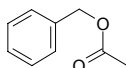
$C_{49}H_{72}O_{16}$  (917.11). Amorphous powder, mp 226~228°C,  $[\alpha]_D^{20} = +15.4^\circ$  ( $c = 0.16$ , MeOH). **Pharm:** Anti-sweetener<sup>[3037]</sup>. **Source:** CHI GENG TENG  
*Gymnema sylvestre* (leaf: yield = 0.0043%dw). **Ref:** 3037.

**2272 21 $\beta$ -Benzoylsitakigenin-3-O- $\beta$ -D-glucuronopyranoside**

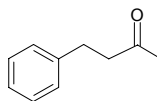
$C_{43}H_{62}O_{11}$  (754.97). Amorphous powder, mp 192~195°C,  $[\alpha]_D^{20} = 27.2^\circ$  ( $c = 0.15$ , MeOH). **Source:** CHI GENG TENG *Gymnema sylvestre*. **Ref:** 766.

**2273 Benzyl acetate**

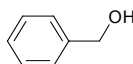
[140-11-4]  $C_9H_{10}O_2$  (150.18). bp 213.5°C/756mmHg. **Source:** DING XIANG  
*Syzygium aromaticum* [Syn. *Eugenia caryophyllata*], HUANG HUA HAO  
*Artemisia annua*, LA MEI HUA *Chimonanthus fragrans* [Syn. *Chimonanthus*  
*praecox*], SHUI XIAN HUA *Narcissus tazetta* var. *chinensis*. **Ref:** 6.

**2274 Benzyl acetone**

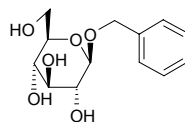
4-Phenylbutan-2-one [2550-26-7]  $C_{10}H_{12}O$  (148.21). bp 235°C. **Pharm:**  
 Antitussive. **Source:** CHEN XIANG *Aquilaria agallocha* (resinous wood:  
 mean content of 10 batch samples = 0.036%)<sup>[5508]</sup>, MAN SHAN HONG  
*Rhododendron dauricum*, XIAO YE PI PA *Rhododendron anthopogonoides*.  
**Ref:** 1, 6, 13, 660, 2984, 5508.

**2275 Benzyl alcohol**

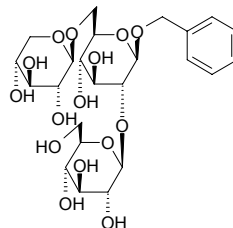
[100-51-6]  $C_7H_8O$  (108.14). **Source:** JIN YIN HUA *Lonicera japonica*, JU PI  
*Citrus reticulata*. **Ref:** 2.

**2276 Benzyl alcohol O- $\beta$ -D-glucopyranoside**

Phenylmethyl glucopyranoside [4304-12-5]  $C_{13}H_{18}O_6$  (270.28). Needles  
 (EtOAc/MeOH), mp 123~125°C,  $[\alpha]_D^{25} = -59.2^\circ$  ( $c = 0.67$ , MeOH); mp  
 120~121°C,  $[\alpha]_D^{21} = -53^\circ$ ;  $[\alpha]_D^{25} = -43^\circ$ , ( $c = 0.1$ , MeOH); **Source:** BAI MEI  
 HUA *Prunus mume* (flower: yield = 0.050%fw)<sup>[4641]</sup>, BEI SHA SHEN  
*Glehnia littoralis* (fruit), CHA RU SHI WAN CUO *Asystasia intrusa*, DA  
 HUA YIN YANG HUO BIAN ZHONG *Epimedium grandiflorum* var.  
*thumbergianum*, LIU CHUAN YU *Linaria vulgaris*, SANG YE *Morus alba*  
 (leaf: yield = 0.00075%), SHI LUO ZI *Anethum graveolens* (fruit), SUO SHA  
 MI *Amomum xanthioides* (seed), YUAN YE E ZHANG CHAI *Schefflera*  
*rotundifolia* (aerial parts). **Ref:** 2589, 2590, 3507, 3525, 4177, 4237, 4365,  
 4641, 5036.

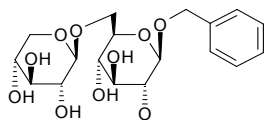
**2277 Benzyl alcohol  $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)-[ $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 6)]- $\beta$ -D-glucopyranoside**

$C_{24}H_{36}O_{15}$  (564.55).  $[\alpha]_D^{22} = -41^\circ$  ( $c = 0.6$ , MeOH). **Source:** BA JIAO FENG  
*Alangium chinense* (leaf). **Ref:** 4131.

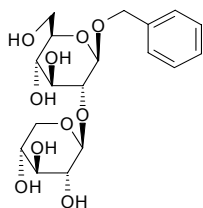


**2278 Benzyl alcohol *O*- $\beta$ -D-primveroside**

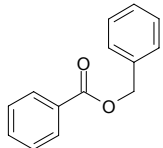
Benzyl alcohol xylopyranosyl(1 $\rightarrow$ 6)glucopyranoside C<sub>18</sub>H<sub>26</sub>O<sub>10</sub> (402.40). Source: BAI MEI HUA *Prunus mume* (flower: yield = 0.0005%fw), LIU CHUAN YU *Linaria vulgaris*. Ref: 4237, 4641.

**2279 Benzyl alcohol  $\beta$ -D-(2'-*O*- $\beta$ -xylopyranosyl)glucopyranoside**

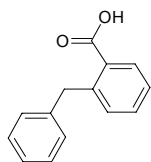
C<sub>18</sub>H<sub>26</sub>O<sub>10</sub> (402.40). Source: JIA HUI SE JIU LI XIANG PO PO NA *Veronica thymoides* ssp. *pseudocinerea*, JIN HUANG CAO SU *Phlomis aurea* (leaf), LIU CHUAN YU *Linaria vulgaris*. Ref: 3846, 4237, 5093.

**2280 Benzyl benzoate**

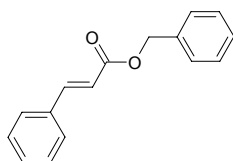
[120-51-4] C<sub>14</sub>H<sub>12</sub>O<sub>2</sub> (212.25). Oil, mp 21°C, bp 323~324°C. Source: BI LU XIANG JIAO *Myroxylon pereirae*, DU HUI MAO DOU *Tephrosia toxicaria* (stem: yield = 0.0018%dw)<sup>[4718]</sup>, JIAN ZI YU PAN *Uvaria acuminata* (root), JIN YIN HUA *Lonicera japonica*, QU MAI *Dianthus superbus*. Ref: 6, 660, 4261.

**2281 *o*-Benzyl benzoic acid**

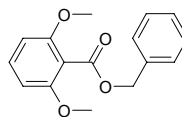
[612-35-1] C<sub>14</sub>H<sub>12</sub>O<sub>2</sub> (212.25). mp 117°C. Source: QI ZHOU YI ZHI HAO *Conyza canadensis* [Syn. *Erigeron canadensis*]. Ref: 6.

**2282 Benzyl cinnamate**

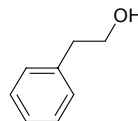
[103-41-3] C<sub>16</sub>H<sub>14</sub>O<sub>2</sub> (238.29). mp 39°C, bp 195~200°C/5mmHg. Source: BI LU XIANG JIAO *Myroxylon pereirae*, DU HUI MAO DOU *Tephrosia toxicaria* (stem: yield = 0.00093%dw)<sup>[4718]</sup>, SHAN ZHU YU *Cornus officinalis* [Syn. *Macrocarpum officinale*]. Ref: 2, 6, 4718.

**2283 Benzyl 2,6-dimethoxybenzoate**

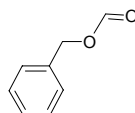
C<sub>16</sub>H<sub>16</sub>O<sub>4</sub> (272.30). Pharm: Antibacterial (*Staphylococcus aureus*, *Escherichia coli*, *Pseudomonas aeruginosa*, and *Bacillus subtilis*)<sup>[4639]</sup>; antifungal (*Candida albicans* and *Trichophyton mentagrophytes*)<sup>[4639]</sup>. Source: JI MEI YUN SHI *Caesalpinia pulcherrima* (leaf: yield = 0.00022%dw)<sup>[4639]</sup>, YI ZHI HUANG HUA *Solidago virgaurea* var. *leiocarpa* [Syn. *Solidago decurrens*]. Ref: 660, 4639.

**2284 Benzyl ethyl alcohol**

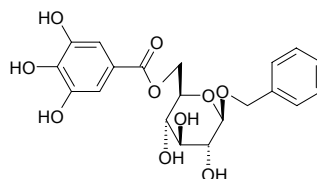
$\beta$ -Phenylethyl alcohol [60-12-8] C<sub>8</sub>H<sub>10</sub>O (122.17). Pharm: Antibacterial; antiseptic; inhibits contraction of auricular smooth muscle (*in vitro*, high concentration); inhibits smooth muscle (rat ad rbt, ileum and uterus, *in vitro*); antihypertensive (anesthetic rbt, iv, mild action); bronchodilator (gpg *in vitro*, high dose); LD<sub>50</sub> (rat, orl) = 1790mg/kg. Source: BI BA *Piper longum*, CHAN YANG *Populus tremuloides*, GAO DANG GUI *Ligusticum elatum*, GAO SHAN HUA JIAO *Zanthoxylum hamiltonianum*, HUI BAI DU HUO *Heraclium canescens*, JIN YIN HUA *Lonicera japonica*, MEI GUI HUA *Rosa rugosa*, MU TIAN LIAO *Actinidia polygama*, WEI XIAO WAN SHOU JU *Tagetes minuta*, ZHOU YE OU QIN *Petroselinum crispum*. Ref: 2, 6, 658.

**2285 Benzyl formate**

[104-57-4] C<sub>8</sub>H<sub>8</sub>O<sub>2</sub> (136.15). bp 202~203°C/747mmHg. Source: CHA YE *Camellia sinensis* [Syn. *Thea sinensis*]. Ref: 6.

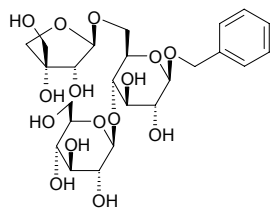
**2286 Benzyl 6'-*O*-galloyl- $\beta$ -D-glucopyranoside**

C<sub>20</sub>H<sub>22</sub>O<sub>10</sub> (422.98). White amorphous powder, [ $\alpha$ ]<sub>D</sub> = -29.4° (*c* = 1.7, MeOH); [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -30° (*c* = 1.5, MeOH). Pharm: Antifungal (*Candida albicans* ATCC2091, MIC = 50 $\mu$ g/mL, control Amphotericin B, MIC = 1 $\mu$ g/mL; *Candida albicans* 32, MIC = 50 $\mu$ g/mL, Amphotericin B, MIC = 4 $\mu$ g/mL; *Candida albicans* 19, MIC = 100 $\mu$ g/mL, Amphotericin B, MIC = 2 $\mu$ g/mL)<sup>[5021]</sup>, cytotoxic inactive (MIC > 200 $\mu$ g/mL)<sup>[5021]</sup>, antibacterial inactive<sup>[5021]</sup>. Source: *Baseonema acuminatum* (leaf), *Monochaetum multiflorum* (leaf). Ref: 5021, 5185.

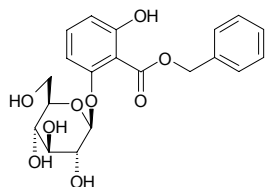


**2287 Benzyl  $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)-[ $\beta$ -D-apiofuranosyl-(1 $\rightarrow$ 6)]- $\beta$ -D-glucopyranoside**

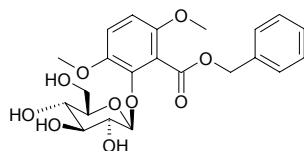
C<sub>24</sub>H<sub>36</sub>O<sub>15</sub> (564.55). Pale-yellow powder,  $[\alpha]_D^{25} = -58^\circ$ , ( $c = 0.1$ , MeOH).  
**Source:** YUAN YE E ZHANG CHAI *Schefflera rotundifolia* (aerial parts).  
**Ref:** 5036.

**2288 Benzyl 2-O- $\beta$ -D-glucopyranosyl-2,6-dihydroxybenzoate**

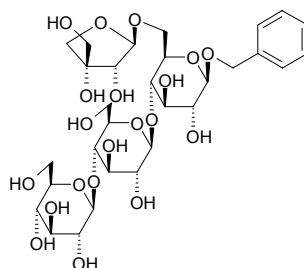
C<sub>20</sub>H<sub>22</sub>O<sub>9</sub> (406.39). Colorless oil. **Pharm:** Plant growth stimulatory or inhibitory activity (radicle length: *Lactuca sativa*, 1  $\mu$ mol/L, StRt < 10%, 10  $\mu$ mol/L, StRt = (10~30)%, 100  $\mu$ mol/L, StRt = (10~30)%, 1 mmol/L, StRt = (10~30)%; *Raphanus sativus*, 1  $\mu$ mol/L, StRt = (31~60)%, 10  $\mu$ mol/L, StRt = (31~60)%, 100  $\mu$ mol/L, InRt = (10~30)%, 1 mmol/L, InRt = (31~60)%; *Allium cepa*, 1  $\mu$ mol/L, StRt = (10~30)%, 10  $\mu$ mol/L, StRt = (31~60)%, 100  $\mu$ mol/L, StRt or InRt < 10%, 1 mmol/L, InRt = (10~30)%). **Source:** XI YANG JIE GU MU *Sambucus nigra*. **Ref:** 5217.

**2289 Benzyl 2 $\beta$ -O-D-glucopyranosyl-3,6-dimethoxybenzoate**

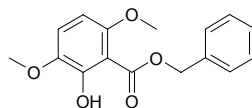
C<sub>22</sub>H<sub>26</sub>O<sub>10</sub> (450.45). Amorphous. **Source:** PO LUO MEN ZAO JIA *Cassia fistula* (seed: yield = 0.00046%). **Ref:** 4642.

**2290 Benzyl  $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)-[ $\beta$ -D-apiofuranosyl-(1 $\rightarrow$ 6)]- $\beta$ -D-glucopyranoside**

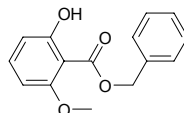
C<sub>30</sub>H<sub>46</sub>O<sub>20</sub> (726.69). Yellowish powder,  $[\alpha]_D^{25} = -26^\circ$ , ( $c = 0.1$ , MeOH).  
**Source:** YUAN YE E ZHANG CHAI *Schefflera rotundifolia* (aerial parts).  
**Ref:** 5036.

**2291 Benzyl 2-hydroxy-3,6-dimethoxybenzoate**

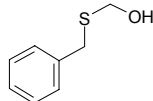
C<sub>16</sub>H<sub>16</sub>O<sub>5</sub> (288.3). mp 134~136°C. **Source:** PO LUO MEN ZAO JIA *Cassia fistula* (seed: yield = 0.00043%). **Ref:** 4642.

**2292 Benzyl 2-hydroxy-6-methoxybenzoate**

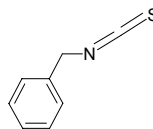
C<sub>15</sub>H<sub>14</sub>O<sub>4</sub> (258.28). **Source:** YI ZHI HUANG HUA *Solidago virgaurea* var. *leiocarpa* [Syn. *Solidago decurrens*]. **Ref:** 660.

**2293 Benzyl hydroxymethyl sulphide**

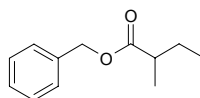
C<sub>8</sub>H<sub>10</sub>OS (154.23). Colorless oil. **Pharm:** Antifungal (plant pathogenic fungi *Cladosporium sphaerospermum*, MIC > 25  $\mu$ g, control Nystatin, MIC = 1.0  $\mu$ g; *Cladosporium cladosporioides*, MIC > 25  $\mu$ g, control Nystatin, MIC = 1.0  $\mu$ g)<sup>[5159]</sup>; antineoplastic (mechanism-based yeast bioassay for DNA-modifying agents, mutant yeast *Saccharomyces cerevisiae*: RS 188N (rad+), IC<sub>12</sub> = 67  $\mu$ g/mL; RS 321, IC<sub>12</sub> = 58  $\mu$ g/mL; RS 52YK (rad 52Y), IC<sub>12</sub> = 76  $\mu$ g/mL, control Camptothecin, RS52YK(rad52Y), IC<sub>12</sub> = 0.6  $\mu$ g/mL)<sup>[5159]</sup>. **Source:** SUAN CHOU MU JI CAO *Petiveria alliacea* (root, stem and leaf). **Ref:** 5159.

**2294 Benzyl isothiocyanate**

[622-78-6] C<sub>8</sub>H<sub>7</sub>NS (149.22). bp 243°C; 124~125°C/12mmHg. **Pharm:** Antibacterial (gram-positive and gram-negative bacteria, IC = 1:1000000~1:3000000); LD<sub>50</sub> (mus, ip) = 76~107mg/kg, (gpg, ip) = 68mg/kg, (rat, ip) = 72mg/kg, (mus, orl) = 134mg/kg, (gpg, orl) = 81mg/kg, (rat, orl) = 128mg/kg. **Source:** BO NIANG HAO *Descurainia sophia*, FAN MU GUA *Carica papaya*, HAN LIAN HUA *Tropaeolum majus*, JIE ZI *Brassica juncea*, TING LI ZI *Lepidium apetalum* [Syn. *Lepidium micranthum*]. **Ref:** 1, 6, 660, 661.

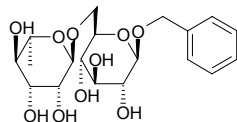
**2295 Benzyl D-2-methylbutyrate**

[56423-40-6] C<sub>12</sub>H<sub>16</sub>O<sub>2</sub> (192.26). **Source:** HUANG HUA HAO *Artemisia annua*. **Ref:** 6.

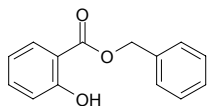


**2296 Benzyl 6-O- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 6) $\beta$ -D-glucopyranoside**

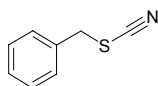
$C_{19}H_{28}O_{10}$  (416.43).  $[\alpha]_D^{25} = -50^\circ$  ( $c = 0.1$ , MeOH). **Pharm:** Antifungal inactive (*Candida albicans*, MIC > 200 $\mu$ g/mL; control Amphotericin B, MIC = 1–4 $\mu$ g/mL)<sup>[5021]</sup>; antibacterial inactive<sup>[5021]</sup>. **Source:** MAO GUO QI *Acer nikoense* (stem bark: yield = 0.0003%), XIE JI CU YE MU *Lasianthus wallichii* (leaf), *Baseonema acuminatum* (leaf). **Ref:** 4238, 4304, 5021.

**2297 Benzyl salicylate**

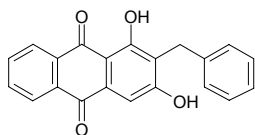
[1180-58-1]  $C_{14}H_{12}O_3$  (228.25). bp 208°C/26mmHg. **Source:** QU MAI *Dianthus superbus*, SHI ZHU *Dianthus chinensis*. **Ref:** 6, 660.

**2298 Benzyl thiocyanate**

Tropaeolin [3012-37-1]  $C_8H_7NS$  (149.22). Rhomboid, mp 43°C, 36–38°C, bp 235°C, 256°C. **Pharm:** Antispasmodic; coronary vasodilator (cat, iv, 1.5 $\mu$ L/kg, flow of coronary artery increases (70–118)% and the action continues 30–60min); anti-carcinogenic (rat, inhibits carcinogenic action of multiple-ring aromatic hydrocarbons); pesticide (beetles and cockroaches); synergist of buhach; LD<sub>50</sub> (mus, orl) = 16 $\mu$ g/kg, (rat, orl) = 250 $\mu$ g/kg, (cat, orl) = 22 $\mu$ g/kg. **Source:** HAN LIAN HUA *Tropaeolum majus*. **Ref:** 6, 661.

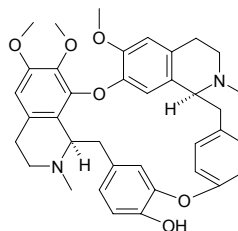
**2299 2-Benzylxanthopurpurin**

2-Benzyl-1,3-dihydroxy-anthraquinone [34425-61-1]  $C_{21}H_{14}O_4$  (330.34). mp 300°C. **Source:** TU LIAN QIAO *Hymenodictyon excelsum*, HU CI *Dammacanthus indicus*. **Ref:** 6.

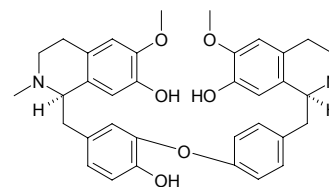
**2300 Berbamine**

[478-61-5]  $C_{37}H_{40}N_2O_6$  (608.74). **Pharm:** Antiarrhythmic; antineoplastic; anti-ischemia myocardial; antispasmodic; antitubercular (*Mycobacterium tuberculosis*); immunoenhancer; increases leucocyte; inhibits myocardial contractility; antihypertensive; regulates drug immunological injury (mus); vascular relaxant (relaxes strip of arteriae renalis, rbt, *in vitro*); vasodilator; slows heart rate. **Source:** BAI YAO ZI *Stephania cepharantha*, BAN RUI TANG SONG CAO *Thalictrum petaloideum* (root: content < 0.001%)<sup>[5508]</sup>, DA YE TANG SONG CAO *Thalictrum faberi* (root: content < 0.001%)<sup>[5508]</sup>, HUA NAN GONG LAO MU *Mahonia japonica*, JIN SI MA WEI LIAN *Thalictrum glandulosissimum* (root: content < 0.005%)<sup>[5508]</sup>, MA WEI LIAN *Thalictrum foliolosum* (root: content < 0.001%)<sup>[5508]</sup>, OU ZHOU XIAO BO *Berberis vulgaris*, RI BEN XIAO BO *Berberis thunbergii*, SHAO CHI XIAO BO *Berberis potaninii* (root, stem: mean content = 1.665%)<sup>[5508]</sup>, TAI WAN

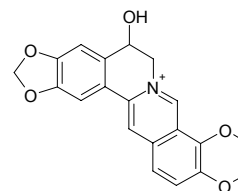
QIAN JIN TENG *Stephania sasakii*, XI YE GONG LAO MU *Mahonia fortunei*, XIA XU TANG SONG CAO *Thalictrum atriplex* (root: content < 0.001%)<sup>[5508]</sup>, XIAN HUANG XIAO BO *Berberis diaphana* (root, stem: mean content = 0.440%)<sup>[5508]</sup>, XIAO GUO TANG SONG CAO *Thalictrum microgynum* (root: content = 0.08%)<sup>[5508]</sup>, YAN GUO CAO *Thalictrum thunbergii* (root: content = 0.03%)<sup>[5508]</sup>, YING SHUI HUANG LIAN *Thalictrum simplex* [Syn. *Thalictrum simplex* var. *brevipes*] (root: content = 0.01%)<sup>[5508]</sup>, ZHI YI XIAO BO *Berberis dubia* (root, stem: mean content = 0.396%)<sup>[5508]</sup>. **Ref:** 1, 2, 4, 5, 660, 5501, 5508.

**2301 Berbamunine**

$C_{35}H_{38}N_2O_6$  (582.70). **Source:** XIAO BO *Berberis amurensis*. **Ref:** 660.

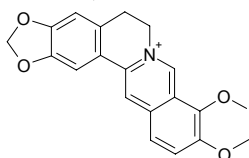
**2302 Berberastine**

$C_{20}H_{18}NO_5^+$  (352.37). **Pharm:** Similar action with berberine. **Source:** BAI MAO GEN<sup>(4)</sup> *Hydrastis canadensis*, RI BEN HUANG LIAN *Coptis japonica*, YUE GUI XIAO BO *Berberis laurina*. **Ref:** 658.

**2303 Berberine**

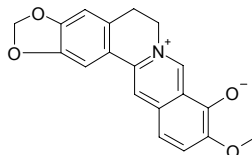
Umbellatine [2086-83-1]  $C_{20}H_{18}NO_4^+$  (336.37). Yellow acicular crystals, mp 145°C, soluble in hot water, ethanol, slightly soluble in ether, benzene, chloroform, acetone.<sup>[5507]</sup> **Pharm:** Adrenaline  $\alpha_1$ - and  $\alpha_2$ -receptor agonist; analgesic; antidiarrheal; anti-inflammatory; antihypertensive; antimicrobial; antiprotozoal; antipyretic; choleric; hypnotic (extends sleeping time due to pentobarbital); hypoglycemic; increases tolerance to anoxia; local anesthetic; reduces intra-ocular pressure in rbt; vasodilator, vascular smooth muscle relaxant; smooth muscle stimulant (uterus, bladder, gastrointestinal tract and bronchus); sedative; anti-HIV inactive (H9 lymphocytes, control AZT, IC<sub>50</sub> = 500 $\mu$ g/mL, EC<sub>50</sub> = 0.0317 $\mu$ g/mL, TI = 15,800)<sup>[5364]</sup>, antibacterial (oral pathogens: *Streptococcus mutans*, MIC = 125 $\mu$ g/mL, control Chlorhexidine gluconate, MIC = 1.25 $\mu$ g/mL; *Fusobacterium nucleatum*, MIC = 15.6 $\mu$ g/mL, Chlorhexidine gluconate, MIC = 2.5 $\mu$ g/mL)<sup>[5418]</sup>, cytotoxic (some hmn cancer cell lines, mouse P<sub>388</sub> leukemia cells, and rat 9L glioma cell line)<sup>[5369]</sup>; cytotoxic (*in vitro*, inhibits proliferation of six esophageal cancer cell lines in a concentration-dependent manner)<sup>[5369]</sup>. **Source:** BAI MAO GEN<sup>(4)</sup> *Hydrastis canadensis* (root), BAI QU CAI *Chelidonium majus*

(whole herb: mean content of 5 origins = 0.017%)<sup>[5508]</sup>, BAI YAO ZI *Stephania cepharantha*, BAN RUI TANG SONG CAO *Thalictrum petaloideum* (root: content = 0.07%)<sup>[5508]</sup>, CHANG JU YAN HU SUO *Corydalis longicalcarata* (rhizome: content = 0.122%)<sup>[5508]</sup>, CHENG KOU SHI DA GONG LAO *Mahonia shenii* (stem: content = 1.67%)<sup>[5510]</sup>, CHI BAN YAN HU SUO *Corydalis remota* [Syn. *Corydalis bulbosa* var. *typica*] (rhizome: content = 0.01%)<sup>[5508]</sup>, CHUAN DIAN SHI DA GONG LAO *Mahonia veitchiorum* (stem: content = 0.43%)<sup>[5510]</sup>, DA YE TANG SONG CAO *Thalictrum faberi* (root: content = 0.46%)<sup>[5508]</sup>, DA ZAO *Ziziphus jujuba*, DUAN E HUANG LIAN *Coptis chinensis* var. *brevise-pala* (rhizome: content = 5.31%)<sup>[5508]</sup>, DUI YE YUAN HU *Corydalis ledebouriana* (rhizome: content = 0.040%)<sup>[5508]</sup>, E MEI YE HUANG LIAN *Coptis omeiensis* (rhizome: content = 8.77%)<sup>[5508]</sup>, FANG JI *Stephania tetrandra* (dried root: mean content of 3 origins = 0.152%)<sup>[5508]</sup> GU LIN YE LIAN *Coptis gulinensis* (rhizome: content = 4.82%)<sup>[5508]</sup>, HU BEI SHI DA GONG LAO *Mahonia confusa* (stem: content = 0.19%)<sup>[5510]</sup>, HUA NAN GONG LAO MU *Mahonia japonica* (stem: content = 0.14%)<sup>[5510]</sup>, HUANG BAI *Phellodendron amurense* (bark: content scope = 0.63%~5.91%)<sup>[5501]</sup>, content scope = 0.68%~2.82%, mean content = 1.27%<sup>[5508]</sup> HUANG LIAN *Coptis chinensis* (rhizome: content scope = 3.1%~8.4%)<sup>[5501]</sup>, mean content = 5.92%<sup>[5508]</sup>, HUANG PI SHU *Phellodendron chinense* (bark: mean content of 7 origins = 3.65%)<sup>[5508]</sup>, HUI LV YAN HU SUO *Corydalis adunca* (rhizome: content = 0.156%)<sup>[5508]</sup>, JI YING SU *Argemone mexicana*, JIN HUA XIAO BO *Berberis wilsonae*, JIN SI MA WEI LIAN *Thalictrum glandulosissimum* (root: content = 1.16%)<sup>[5508]</sup>, KUAN BAO SHI DA GONG LAO *Mahonia eurybracteata* (stem: mean content of 3 origins = 0.30%)<sup>[5510]</sup>, MA WEI LIAN *Thalictrum foliolosum* (root: content = 1.25%)<sup>[5508]</sup>, RI BEN XIAO BO *Berberis thunbergii*, SAN JIAO YE HUANG LIAN *Coptis deltoidea* (rhizome: mean content = 4.39%)<sup>[5508]</sup>, SHAO CHI XIAO BO *Berberis potaninii* (root, stem: mean content = 0.315%)<sup>[5508]</sup>, SHI DA GONG LAO MU *Mahonia bealei* (stem: mean content of 4 origins 0.38%)<sup>[5510]</sup>, TU HUANG LIAN *Berberis julianae*, WANG CHUN YU LAN *Magnolia biondii* [Syn. *Magnolia fargesii*] (stem: mean content of 4 origins = 0.14%)<sup>[5510]</sup>, XI BING SHI DA GONG LAO *Mahonia gracilipes* (stem: mean content of 4 origins = 0.23%)<sup>[5510]</sup>, XI YE GONG LAO MU *Mahonia fortunei* (stem: mean content of 4 origins = 0.48%)<sup>[5510]</sup>, XIA XU TANG SONG CAO *Thalictrum atriplex* (root: content = 0.21%)<sup>[5508]</sup>, XIAN E HUANG LIAN *Coptis linearisepala* (rhizome: content = 8.39%)<sup>[5508]</sup>, XIAN HUANG XIAO BO *Berberis diaphana* (root, stem: mean content = 1.284%)<sup>[5508]</sup>, XIAO GUO SHI DA GONG LAO *Mahonia bodinieri* (stem: content = 0.48%)<sup>[5510]</sup>, XIAO GUO TANG SONG CAO *Thalictrum microgynum* (root: content < 0.001%)<sup>[5508]</sup>, YAN GUO CAO *Thalictrum thunbergii* (root: content = 0.11%)<sup>[5508]</sup>, YAN HU SUO *Corydalis yanhusuo* [Syn. *Corydalis turtshaninovii* f. *yanhusuo*] (rhizome: mean content of 3 origins = 0.007%)<sup>[5508]</sup>, YING SHUI HUANG LIAN *Thalictrum simplex* [Syn. *Thalictrum simplex* var. *brevipes*] (root: content = 0.28%)<sup>[5508]</sup>, YUN NAN HUANG LIAN *Coptis teetoides* [Syn. *Coptis teeta*] (rhizome: mean content = 8.10%)<sup>[5508]</sup>, ZHI YI XIAO BO *Berberis dubia* (root, stem: mean content = 0.595%)<sup>[5508]</sup>, Ref: 1, 2, 4, 538, 660, 5364, 5369, 5418, 5501, 5507, 5508, 5510.



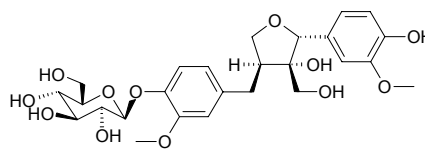
### 2304 Berberrubine

9-Berberoline C<sub>19</sub>H<sub>15</sub>NO<sub>4</sub> (321.34). **Pharm:** Antibacterial; hemostatic; increases blood pressure; cytotoxic (P<sub>388</sub> leukemia, L<sub>1210</sub> leukemia, B16 melanoma and some hmn cancer cell lines)<sup>[5369]</sup>; topoisomerase II inhibitor (*in vitro*)<sup>[5369]</sup>; Berberrubine induced DNA cleavage inducer (in a site-specific and concentration dependent manner)<sup>[5369]</sup>. **Source:** CU CI XIAO BO *Berberis actinacantha*, DA ER WEN XIAO BO *Berberis darwinii*, LV BAI TIAN XIAN TENG *Fibraurea chloroleuca*, OU ZHOU XIAO BO *Berberis vulgaris*, WA SHI XIAO BO *Berberis valdiviana*, ZA XING TANG SONG CAO *Thalictrum polygamum*. Ref: 1, 660, 1521, 5369.



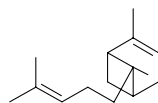
### 2305 Berchemol-4'-O-β-D-glucoside

C<sub>26</sub>H<sub>34</sub>O<sub>12</sub> (538.55). [α]<sub>D</sub><sup>21</sup> = -15° (c = 0.01, DMSO). **Source:** XIE CAO *Valeriana officinalis* (root: yield = 0.017%dw)<sup>[4656]</sup>. Ref: 4656.



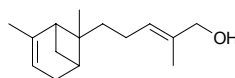
### 2306 α-Bergamotene

2,6-Dimethyl-6-(4-methyl-3-pentenyl)biscyclo[3,1,1]hept-2-ene C<sub>15</sub>H<sub>24</sub> (204.36). **Source:** DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*], HUA DONG LAN CI TOU *Echinops grijsii*, NAN HE SHI *Daucus carota*, SHENG JIANG *Zingiber officinale*, YIN CHEN HAO *Artemisia capillaris*, ZI SU YE *Perilla frutescens* var. *arguta*. Ref: 2, 660.



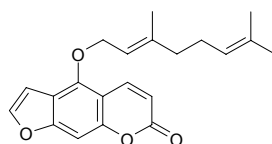
### 2307 9(10)Z,α-trans-Bergamotenol

C<sub>15</sub>H<sub>24</sub>O (220.36). Colorless oily liquid, [α]<sub>D</sub> = -55.64° (c = 0.39, CHCl<sub>3</sub>). **Source:** TAN XIANG *Santalum album*. Ref: 285.



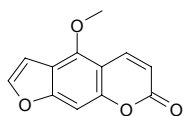
### 2308 Bergamotin

Bergamottin C<sub>21</sub>H<sub>22</sub>O<sub>4</sub> (338.41). **Source:** BEI SHA SHEN *Glehnia littoralis*, JU MAO LEI A WEI *Ferulago capillaris* (aerial parts), KUAN YE QIANG HUO *Notopterygium forbesii* [Syn. *Notopterygium franchetii*]. Ref: 660, 3938.

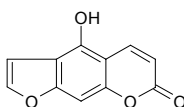


**2309 Bergapten**

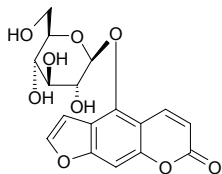
Psoraderm; 5-Methoxypsoralen [484-20-8] C<sub>12</sub>H<sub>8</sub>O<sub>4</sub> (216.20). mp 188~190°C. **Pharm:** Antihypertensive (rbt); antibacterial; molluscicide; photosensitizer (skin); cytotoxic (HSC-2 cells, CC<sub>50</sub> = 0.72mmol/L; HGF, CC<sub>50</sub> > 0.93mmol/L)<sup>[3025]</sup>; cytotoxic (24h, HL-60, IC<sub>50</sub> > 50µg/mL, control Adriamycin IC<sub>50</sub> < 0.10µg/mL; P<sub>388</sub>, IC<sub>50</sub> = 36.6µg/mL, Adriamycin IC<sub>50</sub> < 0.10µg/mL; CoLo 205, IC<sub>50</sub> = 40.8µg/mL, Adriamycin IC<sub>50</sub> = 0.63µg/mL; HeLa, IC<sub>50</sub> = 24.7µg/mL, Adriamycin IC<sub>50</sub> = 0.15µg/mL)<sup>[5486]</sup>; toxin (fish, toad and snail with fluke). **Source:** AO PA CAO *Oppopanax chironium* (root), BAI HUA QIAN HU *Peucedanum praeruptorum*, CHOU CAO *Ruta graveolens*, CHOU SHAN YANG *Orixa japonica* (stem: yield = 0.00068%dw)<sup>[4774]</sup>, DIAN QIN *Sinodielsia yunnanensis* (root), FAN QIE *Lycopersicon esculentum*, FANG FENG *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*], GOU JI *Cudrania cochinchinensis* (root: yield = 0.00056%dw)<sup>[3025]</sup>, HANG BAI ZHI *Angelica taiwaniana*, QING JIAO *Zanthoxylum schinifolium* (dried ripe pericarp: content = 0.472%<sup>[5508]</sup>), SAN YE FANG FENG *Seseli meirei*, SHE CHUANG ZI *Cnidium monnieri* (fruit), SHE CHUANG ZI *Cnidium monnieri* (ripe seed: mean content of 4 methods = 0.237%<sup>[5508]</sup>), WU HUA GUO *Ficus carica*, XIANG NING MENG *Citrus bergamia*, YAN JIAO CAO *Boeninghausenia albiflora*, *Heracleum* sp., *Ligusticum* sp., *Ammi* sp., *Seseli* sp., *Petroselinum* sp., occurs in many plants. **Ref:** 2, 5, 268, 344, 507, 542, 549, 551, 658, 660, 1454, 3025, 4071, 4305, 4774, 5486, 5501, 5508.

**2310 Bergaptol**

[486-60-2] C<sub>11</sub>H<sub>6</sub>O<sub>4</sub> (202.17). **Source:** QIANG HUO *Notopterygium incisum*. **Ref:** 2, 507.

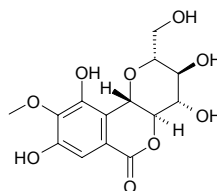
**2311 Bergaptol-O-β-D-glucopyranoside**

C<sub>17</sub>H<sub>16</sub>O<sub>9</sub> (364.31). **Pharm:** Antioxidant (DPPH scavenger, EC<sub>50</sub> > 50µg/mL, 50µg/mL InRt = 19%, control Ascorbic acid, EC<sub>50</sub> = 1.6µg/mL = 9.1µmol/L)<sup>[4154]</sup>. **Source:** BEI SHA SHEN *Glehnia littoralis* (underground part). **Ref:** 4154.

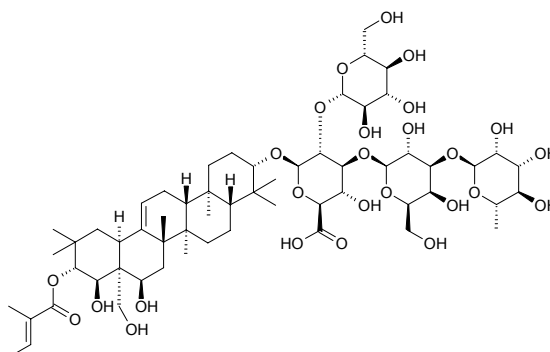
**2312 Bergenin**

Arolisic acid B [477-90-7] C<sub>14</sub>H<sub>16</sub>O<sub>9</sub> (328.28). **Pharm:** DPPH scavenger (IC<sub>50</sub> = 131µmol/L, control Trolox, IC<sub>50</sub> = (25.4±0.8)µmol/L)<sup>[4244]</sup>; cytotoxic (FM3A, IC<sub>50</sub> = 44µmol/L)<sup>[4244]</sup>; anti-inflammatory; antitussive; LD<sub>50</sub> (mus, ip) = 10g/kg. **Source:** BAI LIANG JIN *Ardisia crispa*, DA HUA LUO XIN FU

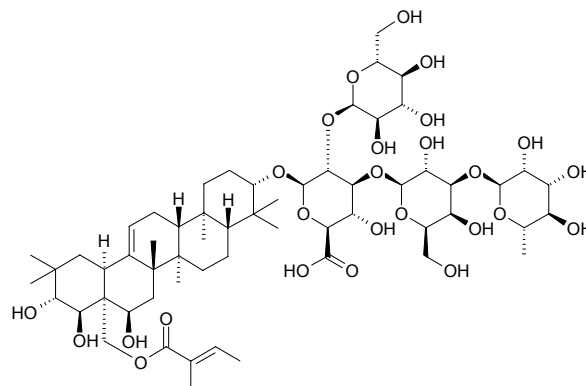
*Astilbe macroflora*, ER CI YUN SHI *Caesalpinia digyna*, HOU YE YAN BAI CAI *Bergenia crassifolia*, HU ER CAO *Saxifraga stolonifera* (dried whole herb: mean content of 3 origins = 0.46%<sup>[5508]</sup>), LUO XIN FU *Astilbe chinensis* (whole herb: content = 5.97%<sup>[5508]</sup>), LV SONG QIU MAO *Mallotus philippinensis*, MU HE *Rodgersia aesculifolia* (dried rhizome: mean content = 5.13%<sup>[5508]</sup>), TING YUAN ZI JIN NIU *Ardisia hortorum*, YAN BAI CAI *Bergenia purpurascens* (content scope = 2.1%~3.0%<sup>[5501]</sup>), YE WU TONG *Mallotus japonicus*, YOU SE ZI JIN NIU *Ardisia colorata* (fruit), ZI JIN NIU *Ardisia japonica* (whole herb: content scope from 5 lab's results = 0.42%~3.26%, mean content = 1.30%<sup>[5508]</sup>). **Ref:** 1, 4, 6, 660, 4244, 5501, 5508.

**2313 Berneuxia saponin A****21-Tigloylbarringtonol C**

3β-O-α-L-rhamnopyranosyl-(1→2)-β-D-galactopyranosyl-(1→3)[β-D-glucopyranosyl-(1→2)-β-D-glucuronopyranoside] [214350-98-8] C<sub>59</sub>H<sub>94</sub>O<sub>26</sub> (1219.39). [α]<sub>D</sub><sup>13</sup> = -12.2° (c = 1.1, MeOH). **Source:** YAN JIN CAI *Berneuxia thibetica*. **Ref:** 712.

**2314 Berneuxia saponin B**

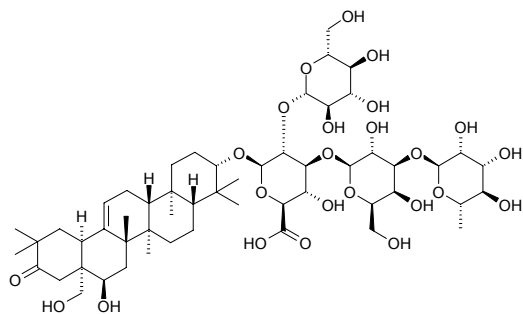
28-Tigloylbarringtonol C 3β-O-α-L-rhamnopyranosyl-(1→2)-β-D-galactopyranosyl-(1→3)[β-D-glucopyranosyl-(1→2)-β-D-glucuronopyranoside] [214359-08-7] C<sub>59</sub>H<sub>94</sub>O<sub>26</sub> (1219.39). [α]<sub>D</sub><sup>26</sup> = -15.6° (c = 1, MeOH). **Source:** YAN JIN CAI *Berneuxia thibetica*. **Ref:** 712.



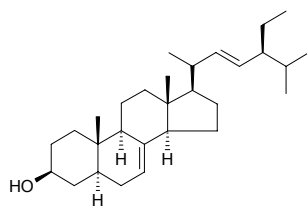
**2315 Berneuxia saponin C**

16 $\alpha$ -28-dihydroxyolean-12-en-21-one-3-*O*- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-galactopyranosyl-(1 $\rightarrow$ 3)[ $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucuronopyranoside] [214359-10-1] C<sub>54</sub>H<sub>86</sub>O<sub>24</sub> (1119.27). [ $\alpha$ ]<sub>D</sub><sup>13</sup> = -6.8° (c = 0.75, MeOH).

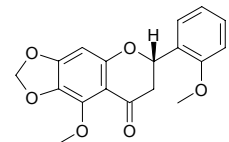
Source: YAN JIN CAI *Berneuxia thibetica*. Ref: 712.

**2316 Bessisterol**

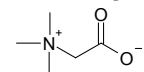
[481-18-5] C<sub>29</sub>H<sub>48</sub>O (412.71). mp 172–175°C. Source: MU ZEI *Equisetum hiemale*. Ref: 6.

**2317 Betagarin**

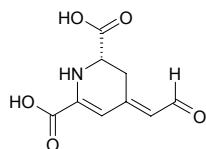
C<sub>18</sub>H<sub>16</sub>O<sub>6</sub> (328.32). Pharm: Antifungal. Source: TIAN CAI *Beta vulgaris*. Ref: 658.

**2318 Betaine**

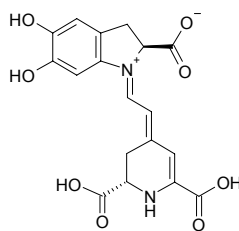
[107-43-7] C<sub>5</sub>H<sub>11</sub>NO<sub>2</sub> (117.15). mp 293°C. Pharm: Antineoplastic; antihepatotoxin (lipotropism); antihypertensive. Source: DA BO GU *Adhatoda vasica*, GOU QI ZI *Lycium chinense* (1%), HAI REN CAO *Digena simplex*, HUANG QI *Astragalus membranaceus*, MIAN HUA *Gossypium herbaceum*, ROU CONG RONG *Cistanche deserticola* (fleshy stem: mean content = 4.21%)<sup>[5508]</sup>, TIAN CAI *Beta vulgaris*, TU DING GUI *Evolvulus alsinoides*, WEI SUI XIAN *Amaranthus caudatus*, WU TONG ZI *Firmiana simplex*. Ref: 1, 2, 4, 15, 530, 658, 660, 5501, 5508.

**2319 Betalamic acid**

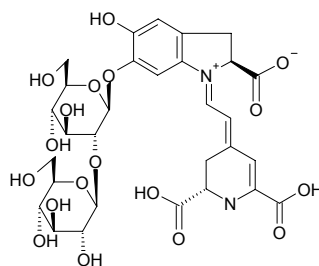
[18766-66-0] C<sub>9</sub>H<sub>9</sub>NO<sub>5</sub> (211.18). Pharm: Pigment. Source: DA HUA MA CHI XIAN *Portulaca grandiflora*, JI GUAN HUA *Celosia cristata*, TIAN CAI *Beta vulgaris*. Ref: 658.

**2320 Betanidin**

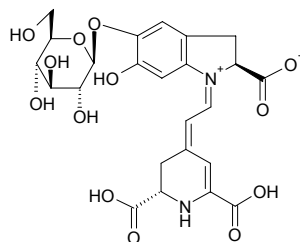
[2181-76-2] C<sub>18</sub>H<sub>16</sub>N<sub>2</sub>O<sub>8</sub> (388.34). Pharm: Purple phytochrome. Source: DA HUA MA CHI XIAN *Portulaca grandiflora*, SHI YONG RI ZHONG HUA *Mesembryanthemum edule*. Ref: 658.

**2321 Betanidin 6-*O*- $\beta$ -sophoroside**

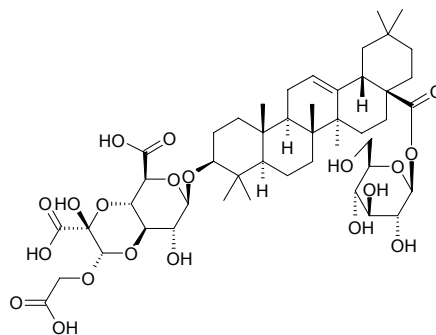
C<sub>30</sub>H<sub>36</sub>N<sub>2</sub>O<sub>18</sub> (712.62). Source: GUANG YE ZI HUA *Bougainvillea glabra*. Ref: 6.

**2322 Betanin**

Beetroot red [7659-95-2] C<sub>24</sub>H<sub>26</sub>N<sub>2</sub>O<sub>13</sub> (550.48). Pharm: Pigment. Source: MEI SHANG LU *Phytolacca americana* [Syn. *Phytolacca decandra*], DA HUA MA CHI XIAN *Portulaca grandiflora*. Ref: 6, 658.

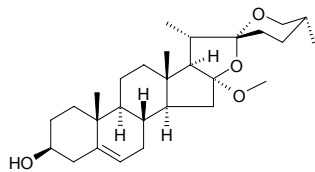
**2323 Betavulgaroside I**

C<sub>47</sub>H<sub>70</sub>O<sub>20</sub> (955.07). Source: LUO KUI HUA *Basella rubra* (aerial parts). Ref: 3544.

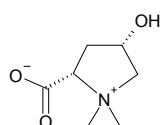


**2324 Bethogenin**

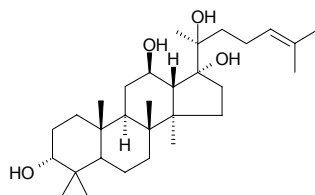
[471-55-6] C<sub>28</sub>H<sub>44</sub>O<sub>4</sub> (444.66). mp 193~194°C. Source: YU ER QI *Trillium camtschaticum*. Ref: 6.

**2325 Betonicine**

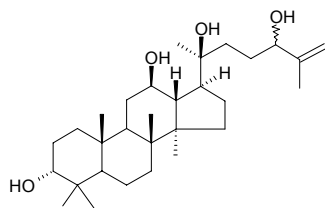
[515-25-3] C<sub>7</sub>H<sub>13</sub>NO<sub>3</sub> (159.19). mp 254~256°C. Pharm: Anti-inflammatory. Source: LIN DI SHUI SU *Stachys sylvatica*, OU XIA ZHI CAO *Marrubium vulgare*, SHE XIANG SHI CAO *Achillea moschata*, YANG SHI CAO *Achillea millefolium*, YAO SHUI SU *Betonica officinalis*. Ref: 6, 658.

**2326 Betulafolienetretol**

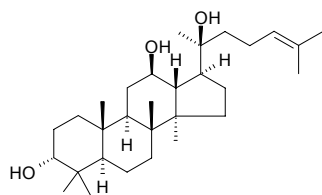
Dammar-24-ene-3,12,17,20-tetrol [58851-26-6] C<sub>30</sub>H<sub>52</sub>O<sub>4</sub> (476.75). mp 168~170°C. Source: HUA MU PI *Betula platyphylla*. Ref: 6.

**2327 Betulafolienetraol A**

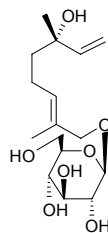
C<sub>30</sub>H<sub>52</sub>O<sub>4</sub> (476.75). Source: HUA MU PI *Betula platyphylla*. Ref: 660.

**2328 Betulafolientriol**

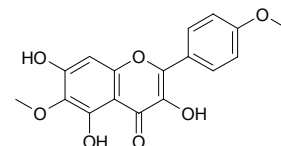
Dammar-24-ene-3,12,20-triol [7755-01-3] C<sub>30</sub>H<sub>52</sub>O<sub>3</sub> (460.75). mp 127~129°C. Source: HUA MU PI *Betula platyphylla*. Ref: 6.

**2329 Betulalbuside A**

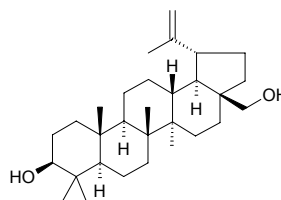
3,7-Dimethylocta-1,6-dien-3,8-diol 8-O-β-D-glucopyranoside [64776-96-1] C<sub>16</sub>H<sub>28</sub>O<sub>7</sub> (322.40). Amorphous powder. Source: YAO YONG HEI MIAN SHEN YE *Breynia officinalis* (leaf), *Betula alba*. Ref: 2583.

**2330 Betuletol**

6,4'-Dimethoxy-3,5,7-trihydroxyflavone C<sub>17</sub>H<sub>14</sub>O<sub>7</sub> (330.30). Source: CU YING MAO DIAN ZI CAO *Onosma hispidum* (whole herb), FENG JIAO *Apis mellifera ligustica*, YUE HUA *Betula ermanii*. Ref: 660, 4490.

**2331 Betulin**

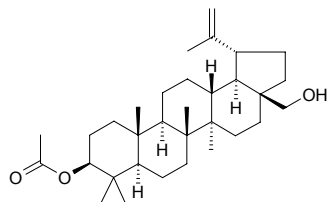
Betulinol [473-98-3] C<sub>30</sub>H<sub>50</sub>O<sub>2</sub> (442.73). mp 248~254°C; mp 251~253°C, [α]<sub>D</sub><sup>23</sup> = +21° (c = 0.18, CHCl<sub>3</sub>). Pharm: Antineoplastic (rat W<sub>256</sub> and SWA16, 400mg/kg); cytotoxic inactive (NSCLC-N6 cell line)<sup>[3806]</sup>; osteoblastic proliferation stimulator (UMR106 cell line, optimum concentration = 21.5μmol/L, at high concentration inhibits cellular growth; remarkably promotes activity of); alkaline phosphatase promoter (UMR106 cells); antitubercular (*Mycobacterium tuberculosis*, MIC = 30.0μg/mL, cytotoxic, Vero cells, IC<sub>50</sub> = 101μg/mL, SI (IC<sub>50</sub>/MIC) = 3.37, positive control Rifampin, MIC = 0.03μg/mL, IC<sub>50</sub> = 98.3μg/mL, SI = 3277)<sup>[4986]</sup>; mucin release stimulator (acts directly on airway mucin-secreting cells, increased mucin release (40~50)% above control at the highest concentrations (0.00001~0.001)mol/L, possible use to treatment of chronic airway diseases)<sup>[4084]</sup>; antineoplastic (EBV-EA induced by TPA, IC<sub>50</sub> = 378(mol ratio/32 pmol TPA), control Curcumin IC<sub>50</sub> = 343(mol ratio/32 pmol TPA))<sup>[4099]</sup>. Source: AO LEI TONG QI MU *Alnus oregana*, CAN DOU *Vicia faba*, DA ZAO *Ziziphus jujuba*, HONG HUA PI *Betula platyphylla* var. *japonica*, HU TAO REN *Juglans regia*, HUO YAN HUA *Phlogacanthus curviflorus* (root: yield = 0.0277%dw)<sup>[4799]</sup>, JIE GENG *Platycodon grandiflorum*, JIE GU MU *Sambucus williamsii* (stem branch), JU MI JIN HE HUAN *Acacia mellifera* (stem bark), JUN QIAN ZI *Diospyros lotus*, MI DIE XIANG *Rosmarinus officinalis*, MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*], QIAN JIN ZI *Euphorbia lathyris*, QIANG DAO YAO *Hypoestes purpurea* [Syn. *Justicia purpurea*; *Hypoestes sinica*] (aerial parts: yield = 0.000042%dw)<sup>[4783]</sup>, SHU HUA JIE CAO *Valeriana laxiflora* (aerial parts and root), WU MU XIE *Diospyros ebenum*, LUO E YE XIA ZHU *Phyllanthus flexuosus* (stem bark). Ref: 2, 5, 6, 658, 660, 3806, 4084, 4099, 4783, 4799, 4908, 4986.



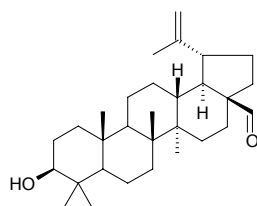


**2332 Betulin-3-acetate**

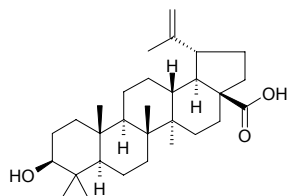
$C_{32}H_{52}O_3$  (484.77). mp 260°C. Source: LI MU *Lyonia ovalifolia*, SHAN REN YE *Rhodomyrtus tomentosa*. Ref: 6.

**2333 Betulinolaldehyde**

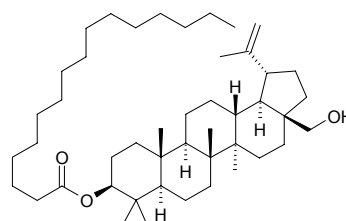
$C_{30}H_{48}O_2$  (440.72). Source: WU YA GUO *Dillenia indica*. Ref: 660.

**2334 Betulinic acid**

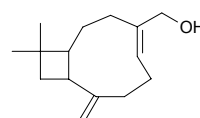
Betulinic acid [472-15-1]  $C_{30}H_{48}O_3$  (456.72). White solid, mp 285~287°C, easily soluble in chloroform, acetone, acetic ester, hardly soluble in water; white needles ( $CHCl_3$ -MeOH), mp 275~278°C,  $[\alpha]_D^{20} = +7.8^\circ$  ( $c = 0.9$ , pyridine). Pharm: Antineoplastic ( $W_{256}$ ); cytotoxic (cyclooxygenase-2 inhibitor)<sup>[5038]</sup>; antitubercular (*Mycobacterium tuberculosis*, MIC = 62.1  $\mu$ g/mL, cytotoxic, Vero cells,  $IC_{50} = 78.5 \mu$ g/mL, SI ( $IC_{50}/MIC$ ) = 1.26, positive control Rifampin, MIC = 0.03  $\mu$ g/mL,  $IC_{50} = 98.3 \mu$ g/mL, SI = 3277)<sup>[4986]</sup>; cytotoxic (K562,  $ED_{50} = (13 \pm 1.3) \mu$ mol/L, control Adriamycin,  $ED_{50} = (0.09 \pm 0.03) \mu$ mol/L; B-16 (F-10),  $ED_{50} = (14 \pm 2) \mu$ mol/L, Adriamycin,  $ED_{50} = (0.06 \pm 0.10) \mu$ mol/L; SK-MEL-2,  $ED_{50} = (7.2 \pm 0.6) \mu$ mol/L, Adriamycin,  $ED_{50} = (0.09 \pm 0.30) \mu$ mol/L; PC3,  $ED_{50} = (15 \pm 0.5) \mu$ mol/L, Adriamycin,  $ED_{50} = (0.83 \pm 0.18) \mu$ mol/L; LOX-IMVI,  $ED_{50} = (9.2 \pm 0.3) \mu$ mol/L, Adriamycin,  $ED_{50} = (0.38 \pm 0.33) \mu$ mol/L; A549,  $ED_{50} = (14 \pm 2) \mu$ mol/L, Adriamycin,  $ED_{50} = (0.67 \pm 0.21) \mu$ mol/L)<sup>[5479]</sup>; antimalarial inactive (*in vitro Plasmodium falciparum*)<sup>[2091]</sup>; antibacterial (*Mycobacterium tuberculosis*, MIC = 25  $\mu$ g/mL)<sup>[2091]</sup>. Source: DA ZAO *Ziziphus jujuba*, HU ZHANG CAO *Anemone rivularis* (root), JIAN PU ZHAI ZAO *Ziziphus cambodiana* (root cortex: yield = 0.054%<sub>dw</sub>)<sup>[2091]</sup>, JU MI JIN HE HUAN *Acacia mellifera* (stem bark), SHU HUA JIE CAO *Valeriana laxiflora* (aerial parts and root), SHU XING DU JUAN *Rhododendron arboreum*, SHUI LIU DOU *Pongamia pinnata* (stem bark: yield = 0.0033%)<sup>[4721]</sup>, SUAN ZAO REN *Ziziphus jujuba* var. *spinosa* (seed: content = 0.184%)<sup>[5508]</sup>, TIAN SHAN ZHU ZI *Garcinia dulcis* (fruit), XI SHU *Camptotheca acuminata*. Ref: 2, 453, 531, 591, 610, 658, 660, 2091, 3806, 4721, 4986, 5038, 5319, 5479, 5508.

**2335 Betulin 3-O-palmitate**

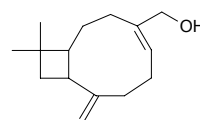
$C_{46}H_{80}O_3$  (681.15). Amorphous powder,  $[\alpha]_D^{23} = +34.9^\circ$  ( $c = 0.1$ ,  $CHCl_3$ ). Source: HUANG LONG DAN *Gentiana lutea* (rhizome and root). Ref: 4307.

**2336  $\alpha$ -Betulol**

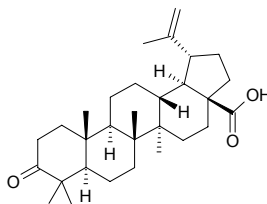
$C_{15}H_{24}O$  (220.36). bp 157~158°C/20mmHg. Source: LIANG YE HUA PI *Betula luminifera*. Ref: 6.

**2337  $\beta$ -Betulol**

$C_{15}H_{24}O$  (220.36). bp 157~158°C/20mmHg. Source: LIANG YE HUA PI *Betula luminifera*. Ref: 6.

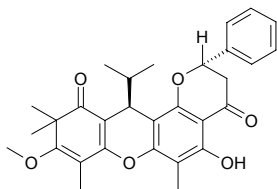
**2338 Betulonic acid**

Liquidambronic acid  $C_{30}H_{46}O_3$  (454.70). White powder, mp 253~255°C,  $[\alpha]_D^{20} = +7.0^\circ$  ( $c = 1.0$ , pyridine). Pharm: Cytotoxic (*in vitro*, HONE-1 cell,  $IC_{50} = (4.9 \pm 2.1) \mu$ mol/L, control Etoposide,  $IC_{50} = (0.5 \pm 0.2) \mu$ mol/L, *cis*-Platin,  $IC_{50} = (3.2 \pm 0.5) \mu$ mol/L; KB cell,  $IC_{50} = (8.2 \pm 1.8) \mu$ mol/L, Etoposide,  $IC_{50} = (0.9 \pm 0.3) \mu$ mol/L, *cis*-Platin,  $IC_{50} = (4.4 \pm 0.9) \mu$ mol/L; HT29 cell,  $IC_{50} > 10 \mu$ mol/L, Etoposide,  $IC_{50} = (2.4 \pm 0.5) \mu$ mol/L, *cis*-Platin,  $IC_{50} = (5.7 \pm 1.1) \mu$ mol/L)<sup>[5254]</sup>; cytotoxic (K562,  $ED_{50} = (13.4 \pm 1.5) \mu$ mol/L, control Adriamycin,  $ED_{50} = (0.09 \pm 0.03) \mu$ mol/L; B-16 (F-10),  $ED_{50} > 20 \mu$ mol/L, Adriamycin,  $ED_{50} = (0.06 \pm 0.10) \mu$ mol/L; SK-MEL-2,  $ED_{50} > 20 \mu$ mol/L, Adriamycin,  $ED_{50} = (0.09 \pm 0.30) \mu$ mol/L; PC3,  $ED_{50} = (19 \pm 0.8) \mu$ mol/L, Adriamycin,  $ED_{50} = (0.83 \pm 0.18) \mu$ mol/L; LOX-IMVI,  $ED_{50} = (16 \pm 0.6) \mu$ mol/L, Adriamycin,  $ED_{50} = (0.38 \pm 0.33) \mu$ mol/L; A549,  $ED_{50} = (8.9 \pm 2.1) \mu$ mol/L, Adriamycin,  $ED_{50} = (0.67 \pm 0.21) \mu$ mol/L)<sup>[5479]</sup>. Source: DA ZAO *Ziziphus jujuba*, JU MI JIN HE HUAN *Acacia mellifera* (stem bark), LU LU TONG *Liquidambar formosana* [Syn. *Liquidambar taiwaniana*], RONG SHU *Ficus microcarpa* (aerial root), SHAN REN YE *Rhodomyrtus tomentosa*. Ref: 660, 3806, 5254, 5479.

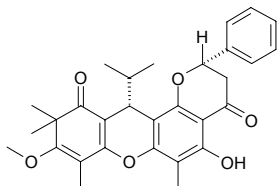


**2339 BF-4**

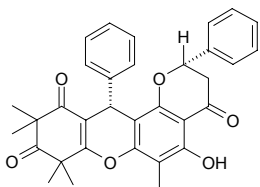
$C_{30}H_{32}O_6$  (488.59). Crystals (MeOH), mp 155~156°C,  $[\alpha]_D = 0^\circ$  Pharm:  
Cytotoxic (leukemia cell L<sub>1210</sub> in tissue culture, IC<sub>50</sub> = 0.2~0.5 µg/mL). Source:  
GANG SONG *Baeckea frutescens*. Ref: 1892.

**2340 BF-5**

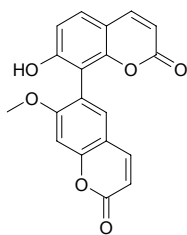
$C_{30}H_{32}O_6$  (488.59). Crystals (MeOH), mp 81~83°C,  $[\alpha]_D = 0^\circ$  Pharm:  
Cytotoxic (leukemia cell L<sub>1210</sub> in tissue culture, IC<sub>50</sub> = 0.2~0.5 µg/mL). Source:  
GANG SONG *Baeckea frutescens*. Ref: 1892.

**2341 BF-6**

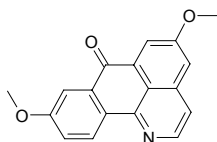
$C_{33}H_{30}O_6$  (522.60). Crystals (MeOH), mp 89~93°C,  $[\alpha]_D = 0^\circ$  Source: GANG  
SONG *Baeckea frutescens*. Ref: 1892.

**2342 Bhubaneswin**

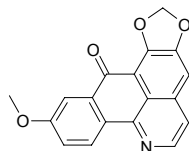
[89320-82-1]  $C_{19}H_{12}O_6$  (336.30). mp 320°C. Source: SHI JIAO CAO  
*Boenninghausenia sessilicarpa*, YAN JIAO CAO *Boenninghausenia albiflora*.  
Ref: 2495.

**2343 Bianfugecine**

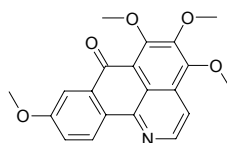
5,9-Dimethoxy-7*H*-dibenzo(de,h)quinolin-7-one [96681-50-4]  $C_{18}H_{13}NO_3$   
(291.31). Yellow brownish green powder, mp 160°C, sublimating at 160°C  
and changing into yellow acicular crystals, decomposing at 200~202°C.  
Source: BIAN FU GE *Menispermum dauricum*. Ref: 23.

**2344 Bianfugedine**

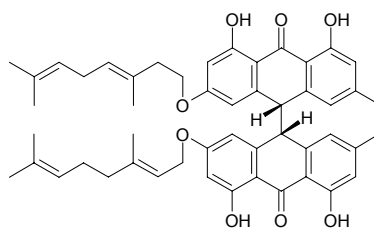
5,6-Methylenedioxy-9-methoxy-7*H*-dibenzo(de,h)quinolin-7-one [96681-51-5]  
 $C_{18}H_{11}NO_4$  (305.29). Yellow prismatic crystals, mp 292~296°C (dec). Source:  
BIAN FU GE *Menispermum dauricum*. Ref: 23.

**2345 Bianfugenine**

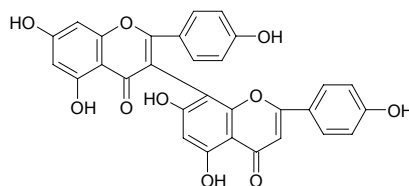
Dauriporphine [88142-60-3]  $C_{20}H_{17}NO_5$  (351.36). Yellowish green thin  
acicular crystals, mp 162~164°C, mp 167.0~167.5°C, producing a strong  
yellowish green fluorescence in solution with chloroform. Source: BIAN FU  
GE *Menispermum dauricum*. Ref: 23, 2402.

**2346 Bianthrone A<sub>1</sub>**

$C_{50}H_{54}O_8$  (782.98).  $[\alpha]_D^{25} = 0^\circ$  ( $c = 2.273$ ,  $CHCl_3$ ). Pharm: Antitrypanosomal  
(*Trypanosoma brucei*, IC<sub>50</sub> = (53.5±18.4) µg/mL, control Melarsoprol, IC<sub>50</sub> =  
(0.0015±0.0009) µg/mL; *Trypanosoma cruzi*, IC<sub>50</sub> > 90 µg/mL, control  
Benznidazole, IC<sub>50</sub> = (0.39±0.15) µg/mL)<sup>[5008]</sup>; antileishmanial (*Leishmania  
donovani*, IC<sub>50</sub> > 30 µg/mL, control Miltefosine, IC<sub>50</sub> = (0.23±0.03) µg/mL;  
*Plasmodium falciparum*, IC<sub>50</sub> = (41.1±6.6) µg/mL, control Chloroquine, IC<sub>50</sub>  
= (0.055±0.02) µg/mL, control Artemisinin, IC<sub>50</sub> =  
(0.0011±0.0006) µg/mL)<sup>[5008]</sup>; cytotoxic (L6, IC<sub>50</sub> > 90 µg/mL, control  
Podophyllotoxin, IC<sub>50</sub> = 0.0075 µg/mL; brine shrimp lethality, IC<sub>50</sub> >  
100 µg/mL, control Cyclophosphamide, IC<sub>50</sub> = 16.33 µg/mL)<sup>[5008]</sup>. Source:  
DONG FANG WEI SI MU *Vismia orientalis* (stem bark). Ref: 5008.

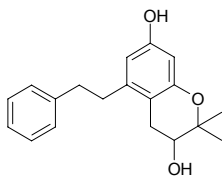
**2347 3,8''-Biapigenin**

5,7,4',5'',7'',4'''-Hexahydroxy-(3,8'')-biflavone  $C_{30}H_{18}O_{10}$  (538.47). Source:  
GUAN YE LIAN QIAO *Hypericum perforatum*, QIAO MAI *Fagopyrum  
esculentum*, *Hypericum* spp. Ref: 660.

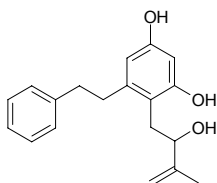


**2348 Bibenzyl CPB-2002-50-1390-3**

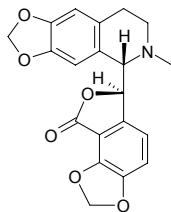
$C_{19}H_{22}O_3$  (298.39). Oil,  $[\alpha]_D^{22} = +8.4^\circ$  ( $c = 0.38$ ,  $CHCl_3$ ). Source: BIAN YUAN BIAN E TAI *Radula marginata*. Ref: 4236.

**2349 Bibenzyl CPB-2002-50-1390-4**

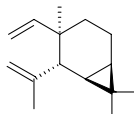
$C_{19}H_{22}O_3$  (298.39). Oil,  $[\alpha]_D^{22} = 0^\circ$  ( $c = 0.37$ ,  $CHCl_3$ ). Source: BIAN YUAN BIAN E TAI *Radula marginata*. Ref: 4236.

**2350 Bicuculline**

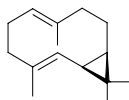
$C_{20}H_{17}NO_6$  (367.36). Source: BIAN BING HUANG JIN *Corydalis mucronifera*, DONG BEI YAN HU SUO *Corydalis ambigua* var. *amurensis* [Syn. *Corydalis ambigua*], JU ZI JIN *Corydalis gigantea*, KU DI DING *Corydalis bungeana*, WU WEI CAO *Corydalis taliensis*, XIA TIAN WU *Corydalis decumbens* [Syn. *Corydalis amabilis*], YAN HU SUO *Corydalis yanhusuo* [Syn. *Corydalis turtschaninovii* f. *yanhusuo*]. Ref: 660.

**2351 Bicycloelemene**

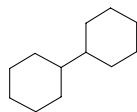
$C_{15}H_{24}$  (204.36). Source: DANG GUI *Angelica sinensis*, SHE TAI *Conocephalum conicum*. Ref: 660.

**2352 Bicyclogermacrene**

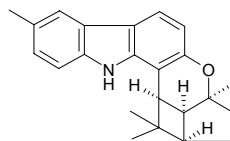
[24703-35-3]  $C_{15}H_{24}$  (204.36). Source: REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], SHANG ZUO JIAN YE GUANG E TAI *Porella acutifolia* ssp. *tosana*. Ref: 2, 3932.

**2353 1,1'-Bicyclohexyl**

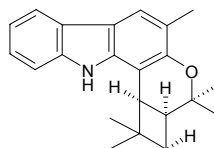
$C_{12}H_{22}$  (166.31). Source: JIN YIN HUA *Lonicera japonica*. Ref: 660.

**2354 Bicyclomahanimbicine**

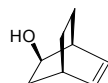
[28613-80-1]  $C_{23}H_{25}NO$  (331.46). Source: JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*]. Ref: 11, 1521.

**2355 Bicyclomahanimbine**

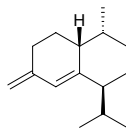
[31077-94-8]  $C_{23}H_{25}NO$  (331.46). Source: JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*]. Ref: 11.

**2356 Bicyclo[2,2,2]oct-5-en-2-ol**

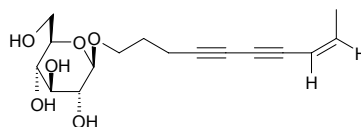
$C_8H_{12}O$  (124.18). Source: ROU CONG RONG *Cistanche deserticola*. Ref: 2.

**2357 Bicyclosesquiphellandrene**

$C_{15}H_{24}$  (204.36). Source: BI CHENG QIE *Piper cubeba*, LUO LE *Ocimum basilicum*. Ref: 660.

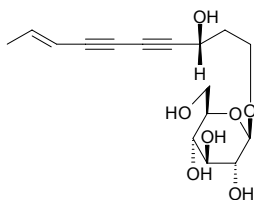
**2358 Bidenoside C**

8*Z*-Decaene-4,6-diyn-1-*O*- $\beta$ -*D*-glucopyranoside  $C_{16}H_{22}O_6$  (310.35). Colorless syrup,  $[\alpha]_D^{25} = -18^\circ$  ( $c = 0.10$ , MeOH). Source: GUI ZHEN CAO *Bidens bipinnata* (aerial parts). Ref: 4275.

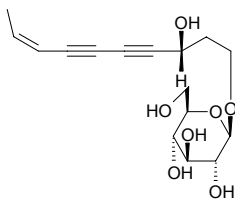


**2359 Bidensyneoside A<sub>1</sub>**

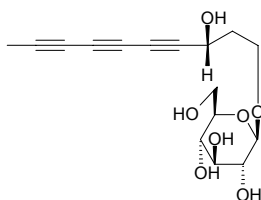
3(*R*),8(*E*)-8-Decene-4,6-diyne-1,3-diol 1-*O*- $\beta$ -*D*-glucopyranoside C<sub>16</sub>H<sub>22</sub>O<sub>7</sub> (326.35). Brown powder,  $[\alpha]_D^{23} = -146.4^\circ$  ( $c = 0.6$ , MeOH). **Pharm:** Antihistamine (mast cells, inhibits histamine release induced by antigen-antibody reaction, IC<sub>50</sub> = 0.074  $\mu$ mol/L, control Indumethacin, IC<sub>50</sub> = 0.625  $\mu$ mol/L)<sup>[4105]</sup>; NO production inhibitor (mus macrophages RAW264.7, activated by 100ng/mL LPS at 37°C, for 18h, IC<sub>50</sub> = 0.225  $\mu$ mol/L, activated by 100ng/mL LPS + 10U/mL IFN- $\gamma$  at 37°C, for 18h, IC<sub>50</sub> = 0.111  $\mu$ mol/L). **Source:** XIAO HUA GUI ZHEN *Bidens parviflora* (whole herb). **Ref:** 4105.

**2360 Bidensyneoside A<sub>2</sub>**

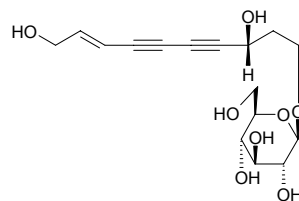
C<sub>16</sub>H<sub>22</sub>O<sub>7</sub> (326.35). Brown powder,  $[\alpha]_D^{23} = -157.5^\circ$  ( $c = 0.4$ , MeOH). **Pharm:** Antihistamine (mast cells, inhibits histamine release induced by antigen-antibody reaction, IC<sub>50</sub> = 0.119  $\mu$ mol/L, control Indumethacin, IC<sub>50</sub> = 0.625  $\mu$ mol/L)<sup>[4105]</sup>; NO production inhibitor (mus macrophages RAW264.7, activated by 100ng/mL LPS at 37°C, for 18h, IC<sub>50</sub> > 1.00  $\mu$ mol/L, activated by 100ng/mL LPS + 10U/mL IFN- $\gamma$  at 37°C, for 18h, IC<sub>50</sub> > 1.00  $\mu$ mol/L)<sup>[4105]</sup>. **Source:** XIAO HUA GUI ZHEN *Bidens parviflora* (whole herb). **Ref:** 4105.

**2361 Bidensyneoside B**

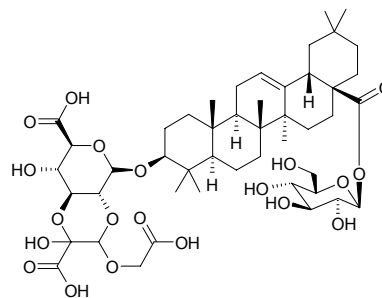
3(*R*)-Deca-4,6,8-tri-ene-1,3-diol 1-*O*- $\beta$ -*D*-glucopyranoside C<sub>16</sub>H<sub>20</sub>O<sub>7</sub> (324.33). Brown powder,  $[\alpha]_D^{23} = -52.2^\circ$  ( $c = 0.6$ , MeOH). **Pharm:** Antihistamine (mast cells, inhibits histamine release induced by antigen-antibody reaction, IC<sub>50</sub> = 0.186  $\mu$ mol/L, control Indumethacin, IC<sub>50</sub> = 0.625  $\mu$ mol/L)<sup>[4105]</sup>; NO production inhibitor (mus macrophages RAW264.7, activated by 100ng/mL LPS at 37°C, for 18h, IC<sub>50</sub> = 0.141  $\mu$ mol/L, activated by 100ng/mL LPS + 10U/mL IFN- $\gamma$  at 37°C, for 18h, IC<sub>50</sub> = 0.081  $\mu$ mol/L)<sup>[4105]</sup>. **Source:** XIAO HUA GUI ZHEN *Bidens parviflora* (whole herb). **Ref:** 4105.

**2362 Bidensyneoside C**

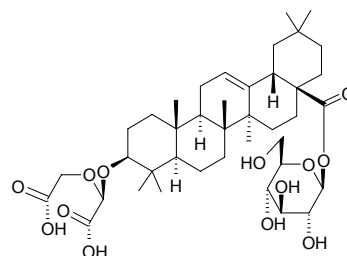
Deca-8(*E*)-en-4,6-diyne-1,3,10-triol 1-*O*- $\beta$ -*D*-glucopyranoside; Bidenside D C<sub>16</sub>H<sub>22</sub>O<sub>8</sub> (342.35). Brown powder,  $[\alpha]_D^{23} = -71.6^\circ$  ( $c = 0.5$ , MeOH). **Pharm:** Antihistamine (mast cells, inhibits histamine release induced by antigen-antibody reaction, IC<sub>50</sub> = 0.072  $\mu$ mol/L, control Indumethacin, IC<sub>50</sub> = 0.625  $\mu$ mol/L)<sup>[4105]</sup>; NO production inhibitor (mus macrophages RAW264.7, activated by 100ng/mL LPS at 37°C, for 18h, IC<sub>50</sub> = 0.193  $\mu$ mol/L, activated by 100ng/mL LPS + 10U/mL IFN- $\gamma$  at 37°C, for 18h, IC<sub>50</sub> = 0.126  $\mu$ mol/L)<sup>[4105]</sup>. **Source:** GUI ZHEN CAO *Bidens bipinnata* (aerial parts), XIAO HUA GUI ZHEN *Bidens parviflora* (whole herb). **Ref:** 4105, 4275.

**2363 Bidentatoside I**

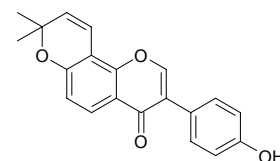
C<sub>47</sub>H<sub>70</sub>O<sub>20</sub> (955.07). Colorless amorphous powder,  $[\alpha]_D^{25} = +44.0^\circ$  ( $c = 0.05$ , MeOH). **Source:** NIU XI *Achyranthes bidentata* (root: yield = 0.0073%dw)<sup>[3038]</sup>. **Ref:** 3038.

**2364 Bidentatoside II**

3-*O*- $\beta$ -[29-(20-*O*-Glycolyl)-glyoxylyl]-oleanolic acid 28-*O*- $\beta$ -*D*-glucopyranoside C<sub>40</sub>H<sub>62</sub>O<sub>13</sub> (750.93). White amorphous powder,  $[\alpha]_D^{25} = +6^\circ$  ( $c = 0.1$ , MeOH). **Source:** NIU XI *Achyranthes bidentata*. **Ref:** 4147.

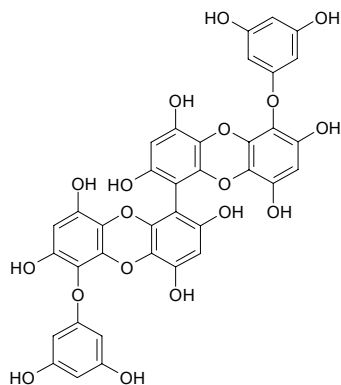
**2365 Bidwillon C**

C<sub>20</sub>H<sub>16</sub>O<sub>4</sub> (320.35). **Source:** *Bituminaria morisiana* (leaf). **Ref:** 5077.

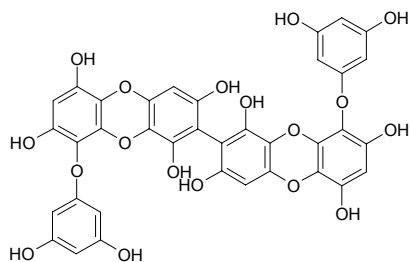


**2366 6,6'-Bieckol**

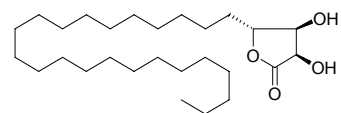
[88095-81-2] C<sub>36</sub>H<sub>22</sub>O<sub>18</sub> (742.55). Colorless rhombic crystals (water), mp > 300°C. **Pharm:** Antifibrinolysis ( $\alpha_2$ -macroglobulin *in vitro*, IC<sub>50</sub> = 2.0 $\mu$ g/mL;  $\alpha_2$ -fibrinolysin *in vitro*, IC<sub>50</sub> = 0.5 $\mu$ g/mL; fibrinolysin *in vitro*, IC<sub>50</sub> = 23 $\mu$ g/mL; thrombin *in vitro*, IC<sub>50</sub> = 11 $\mu$ g/mL; parenzyme *in vitro*, IC<sub>50</sub> = 56 $\mu$ g/mL). **Source:** HEI KUN BU *Ecklonia kurome*. **Ref:** 1020.

**2367 8,8'-Bieckol**

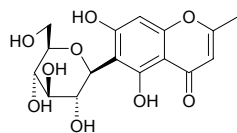
[89445-12-5] C<sub>36</sub>H<sub>22</sub>O<sub>18</sub> (742.55). Maple rhombic crystals (water), mp > 300°C. **Pharm:** Antifibrinolysis ( $\alpha_2$ -macroglobulin *in vitro*, IC<sub>50</sub> = 2.0 $\mu$ g/mL;  $\alpha_2$ -fibrinolysin *in vitro*, IC<sub>50</sub> = 0.7 $\mu$ g/mL; fibrinolysin *in vitro*, IC<sub>50</sub> = 32 $\mu$ g/mL; thrombin *in vitro*, IC<sub>50</sub> = 32 $\mu$ g/mL). **Source:** HEI KUN BU *Ecklonia kurome*. **Ref:** 1020.

**2368 Bifloride A**

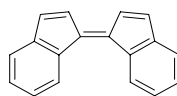
C<sub>27</sub>H<sub>52</sub>O<sub>4</sub> (440.71). **Source:** HONG SI XIAN *Lycianthes biflora*. **Ref:** 2230.

**2369 Biflorin**

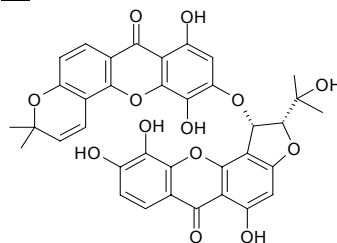
6 $\beta$ -C-Glucopyranosyl-5,7-dihydroxy-2-methylchromone [89701-85-9] C<sub>16</sub>H<sub>18</sub>O<sub>9</sub> (354.32). Colorless needles, mp 158~164°C, [ $\alpha$ ]<sub>D</sub><sup>21</sup> = +40.9° (c = 0.33, MeOH). **Pharm:** Phosphodiesterase inhibitor. **Source:** GANG SONG *Baekkea frutescens*, QUAN NENG HUA *Pancreatium biflorum*. **Ref:** 658, 1895.

**2370 (Z)-1,1'-Biindenyliden**

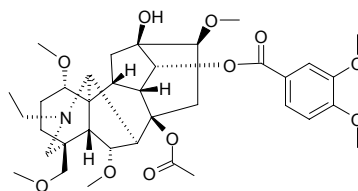
C<sub>18</sub>H<sub>12</sub> (228.30). White flakes solid mp > 300°C. **Source:** HUAI *Sophora japonica*. **Ref:** 2150.

**2371 Bijaponicaxanthone**

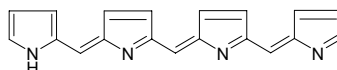
C<sub>36</sub>H<sub>28</sub>O<sub>13</sub> (668.62). Yellow amorphous powder, mp 248~250°C. **Source:** DI ER CAO *Hypericum japonicum*, HENG LI DI ER CAO *Hypericum henryi*. **Ref:** 775.

**2372 Bikhaconitine**

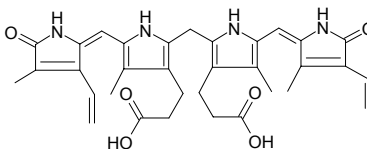
[6078-26-8] C<sub>36</sub>H<sub>51</sub>NO<sub>11</sub> (673.81). **Pharm:** Paralyzes respiration; antiarrhythmic (stops ventricular fibrillation); supertoxic agent. **Source:** NI BO ER WU TOU *Aconitum ferox*, SUI ZHUANG WU TOU *Aconitum spicatum*, ZI WU TOU *Aconitum violaceum*. **Ref:** 658.

**2373 Bilatriene**

C<sub>19</sub>H<sub>14</sub>N<sub>4</sub> (298.35). **Source:** JI NEI JIN *Gallus gallus domesticus*. **Ref:** 6.

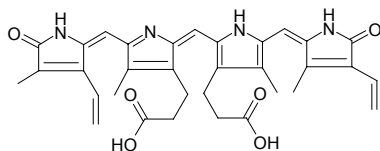
**2374 Bilirubin**

2,17-Diethenyl-1,10,19,22,23,24-hexahydro-3,7,13,17-tetramethyl-1,19-dioxo-21H-bilene-8,12-dipropanoic acid [635-65-4] C<sub>33</sub>H<sub>36</sub>N<sub>4</sub>O<sub>6</sub> (584.67). **Pharm:** A component of artificial calculus bovis (stones from the Bovidae gallbladder or biliary duct). **Source:** NIU HUANG *Bos taurus domesticus*; *Bubalus bubalis* (gallstone: content scope = 29.7%~59.2%, mean content = 40.9%<sup>[5508]</sup>). **Ref:** 2, 658, 5507, 5508.

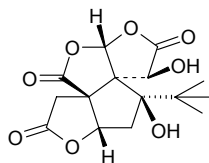


**2375 Biliverdin**

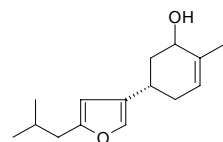
[114-25-0]  $C_{33}H_{34}N_4O_6$  (582.66). Source: NIU HUANG *Bos taurus domesticus*; *Bubalus bubalis*. Ref: 2.

**2376 Bilobalide A**

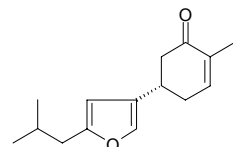
$C_{15}H_{18}O_8$  (326.31). Pharm: Neuroprotective and neurotrophic; antipneumocystis agent; antibacterial. Source: BAI GUO YE *Ginkgo biloba* (leaf: mean content of 12 samples = 1.18%<sup>[5508]</sup>). Ref: 660, 1521, 5508.

**2377 Bilobanol**

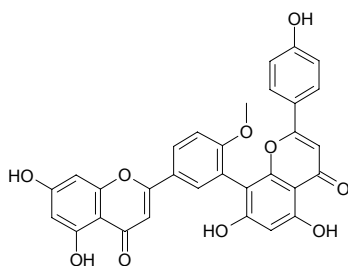
$C_{15}H_{22}O_2$  (234.34). Source: YIN YANG HUO *Epimedium brevicornum*. Ref: 2.

**2378 Bilobanone**

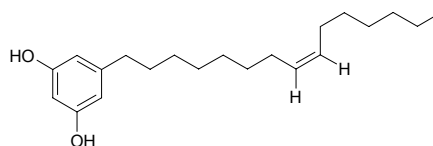
[17015-33-7]  $C_{15}H_{20}O_2$  (232.33). mp 118~122°C/0.09mmHg. Source: BAI GUO SHU PI *Ginkgo biloba*. Ref: 6.

**2379 Bilobetin**

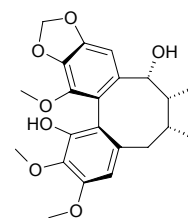
[521-32-4]  $C_{31}H_{20}O_{10}$  (552.50). Yellow powder. Pharm: Anti-inflammatory (NO production inhibitor)<sup>[4415]</sup>; normalizes the ratio between phosphatide and cholesterol; antihypercholesterolemic (reduces the level of cholesterol in serum). Source: BAI GUO *Ginkgo biloba* (in 1959, the compound was isolated from the plant by Kôichi Nakazawa)<sup>[5505]</sup>, BAI GUO YE *Ginkgo biloba* (leaf: mean content = 0.950%<sup>[5508]</sup>), HAO WANG JIAO LUO HAN SONG *Podocarpus elongatu*. Ref: 1, 2, 442, 4415, 5501, 5505, 5508.

**2380 Bilobol**

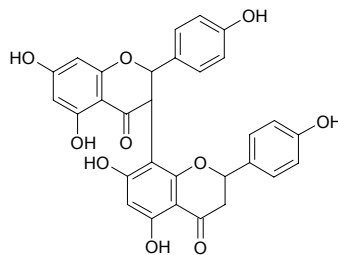
Cardol monoene; Alkylresorcinol B [22910-86-7]  $C_{21}H_{34}O_2$  (318.50). crystals (pentene), mp 36~37°C; colorless powder, mp 30~31°C (methanol–water). Pharm: Antibacterial (*Staphylococcus aureus*, MIC = 25µg/mL); antineoplastic (EAC, leukemia SN36 and S<sub>180</sub>); uterine stimulant (*in vitro*); 15-lipoxygenase inhibitor (*in vitro*, IC<sub>50</sub> = 250µmol/L); paralyzes small intestinal smooth muscle (rbt, *in vitro*); aldose reductase inhibitor; tyrosinase inhibitor (inhibits oxidation of L-dopa in mushroom, 0.8mmol/L, InRt = 85%, ID<sub>50</sub> = 0.08mmol/L); DPPH scavenger (IC<sub>50</sub> = 87µmol/L, control Trolox, IC<sub>50</sub> = (25.4±0.8)µmol/L)<sup>[4244]</sup>; cytotoxic (murine breast cancer cell line FM3A, IC<sub>50</sub> = 2.0µmol/L)<sup>[4244]</sup>; LD<sub>50</sub> (mus) = 761mg/kg. Source: BAI GUO *Ginkgo biloba* (in 1928, the compound was isolated from the plant by Sanehira Kawamura)<sup>[5505]</sup>, DU XIAN ZI *Anacardium occidentale*, XIAO RU XIANG *Schinus terebinthifolius*, YOU SE ZI JIN NIU *Ardisia colorata* (fruit). Ref: 900, 4244, 5501, 5505.

**2381 Binankadsurin A**

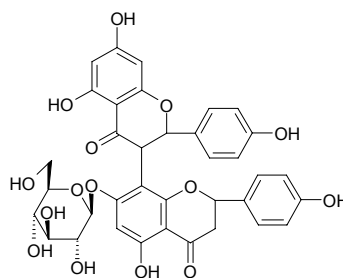
$C_{22}H_{26}O_7$  (402.45). Source: CHANG GENG NAN WU WEI ZI *Kadsura peltigera* [Syn. *Kadsura longipedunculata*]. Ref: 660.

**2382 3,8''-Binaringenin**

$C_{30}H_{22}O_{10}$  (542.50). Source: SHAN ZHU ZI *Garcinia multiflora*. Ref: 660.

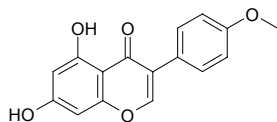
**2383 3,8''-Binaringenin-7''-O-β-glucoside**

$C_{36}H_{32}O_{15}$  (704.65). Source: SHAN ZHU ZI *Garcinia multiflora*. Ref: 6.

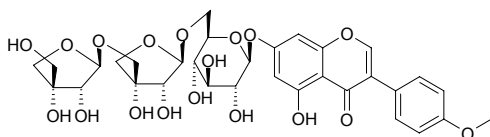


**2384 Biochanin A**

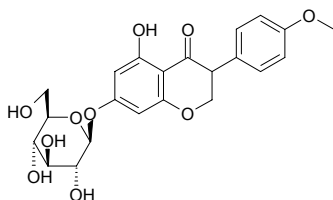
5,7-Dihydroxy-4'-methoxyisoflavone; Olmelin [491-80-5]  $C_{16}H_{12}O_5$  (284.27). mp 215~216°C. **Pharm:** Cytotoxic (KB,  $ED_{50} > 100\mu\text{g/mL}$ ); estrogenic activity; antihypercholesterolemic (reduces the level of cholesterol in serum). **Source:** CHAN RAO HUANG TAN *Dalbergia volubilis*, DI XIA CHE ZHOU CAO *Trifolium subterraneum*, DA DOU *Glycine max* (Soybean phytochemical concentrate: yield = 0.0018%dw)<sup>[4630]</sup>, HONG CHE ZHOU CAO *Trifolium pratense*, HUI HUI DOU *Cicer arietinum*, MENG MAI ROU DOU KOU *Myristica malabarica* (heartwod), ZHAN MAO XUN ZI *Cotoneaster pannosus*. **Ref:** 1, 6, 3906, 4630.

**2385 Biochanin A-7-O- $\beta$ -D-apiofuranosyl-(1 $\rightarrow$ 5)- $\beta$ -D-apiofuranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside]**

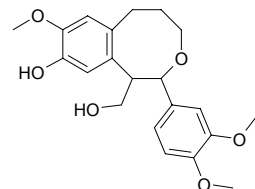
$C_{32}H_{38}O_{18}$  (710.65). Yellow amorphous powder,  $[\alpha]_D^{25} = -106.1^\circ$  ( $c = 0.26$ , MeOH). **Source:** YIN DU HUANG TAN *Dalbergia sissoo* (leaf and stem cortex). **Ref:** 5172.

**2386 Biochanin-7-glucoside**

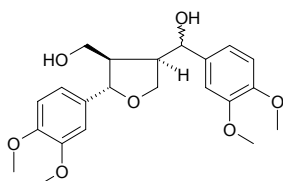
$C_{22}H_{24}O_{10}$  (448.43). mp 220°C. **Source:** HUI HUI DOU *Cicer arietinum*. **Ref:** 6.

**2387 Biondinin A**

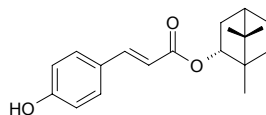
$C_{21}H_{26}O_6$  (374.44). Colorless oil. **Source:** WANG CHUN YU LAN *Magnolia biondii* [Syn. *Magnolia fargesii*]. **Ref:** 8, 660.

**2388 Biondinin B**

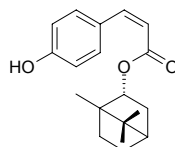
$C_{22}H_{28}O_7$  (404.46). Colorless oil. **Source:** WANG CHUN YU LAN *Magnolia biondii* [Syn. *Magnolia fargesii*]. **Ref:** 8.

**2389 Biondinin C**

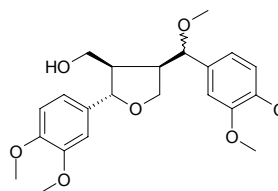
$C_{19}H_{24}O_3$  (300.40). Colorless cubical crystals, mp 153~155°C,  $[\alpha]_D^{15} = -20^\circ$  ( $c = 1.0$ ,  $CHCl_3$ ). **Source:** WANG CHUN YU LAN *Magnolia biondii* [Syn. *Magnolia fargesii*]. **Ref:** 8.

**2390 Biondinin D**

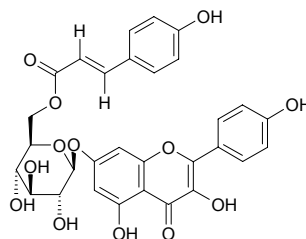
$C_{19}H_{24}O_3$  (300.40). Colorless oil. **Source:** WANG CHUN YU LAN *Magnolia biondii* [Syn. *Magnolia fargesii*]. **Ref:** 8.

**2391 Biondinin E**

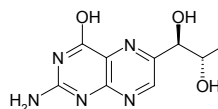
$C_{23}H_{30}O_7$  (418.49). Oil. **Source:** WANG CHUN YU LAN *Magnolia biondii* [Syn. *Magnolia fargesii*]. **Ref:** 8.

**2392 Biondoid I**

Kaempferol-7-O- $\beta$ -D-(6''-O-p-hydrocinnamoyl)-D-glucoside  $C_{30}H_{26}O_{13}$  (594.53). Yellow crystals, mp 220~221°C. **Source:** WANG CHUN YU LAN *Magnolia biondii* [Syn. *Magnolia fargesii*]. **Ref:** 306, 660.

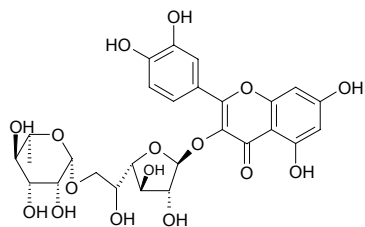
**2393 Biopterin**

Ranachrome 1 [22150-76-1]  $C_9H_{11}N_5O_3$  (237.22). Carbonization at 243~280°C. **Source:** FENG RU *Apis cerana*, HEI MA YI *Formica fusca*, JIN YU *Carassius auratus*, QING WA *Rana nigromaculata*; *Rana plancyi*. **Ref:** 6.

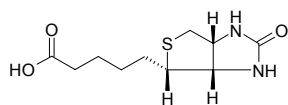


**2394 Bioquercetin**

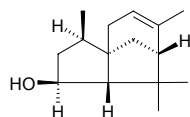
Quercetin-3-*O*-[ $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 6)]- $\beta$ -*D*-galactofuranoside  
 $C_{27}H_{30}O_{16}$  (610.53). Source: SHAN ZHA HUA *Crataegus pinnatifida*. Ref: 660.

**2395 Biotin**

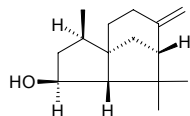
*D*(+)-Biotin; Vitamin B<sub>7</sub> [58-85-5]  $C_{10}H_{16}N_2O_3S$  (244.31). Pharm: Has carboxylation activity during metabolism of protein and carbohydrate. Source: REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. Ref: 2, 658.

**2396  $\alpha$ -Biotol**

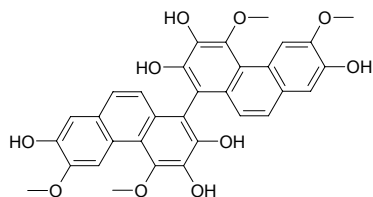
[19902-30-8]  $C_{15}H_{24}O$  (220.36). mp 78°C. Source: CE BAI ZHI JIE *Thuja orientalis* [Syn. *Platyclusus orientalis*; *Biota orientalis*]. Ref: 6.

**2397  $\beta$ -Biotol**

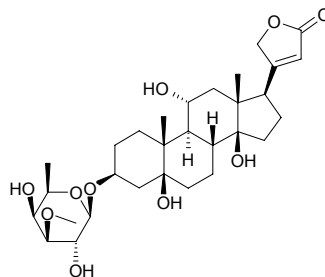
[19902-26-2]  $C_{15}H_{24}O$  (220.36). mp 84°C. Source: CE BAI ZHI JIE *Thuja orientalis* [Syn. *Platyclusus orientalis*; *Biota orientalis*]. Ref: 6.

**2398 Biphenanthrene**

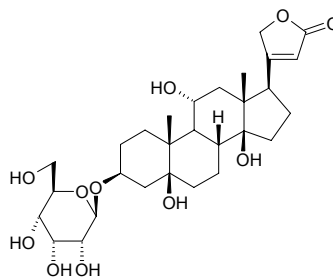
4,4',6,6'-Tetramethoxy-[1,1'-biphenanthrene]-2,2',3,3',7,7'-hexol  $C_{32}H_{26}O_{10}$  (570.56). Gum,  $[\alpha]_D^{27} = +5.8^\circ$  ( $c = 0.26$ ,  $CH_3OH$ ). Source: QIAO SHI DOU LAN *Bulbophyllum vaginatum* (whole herb). Ref: 4768.

**2399 Bipindaloside**

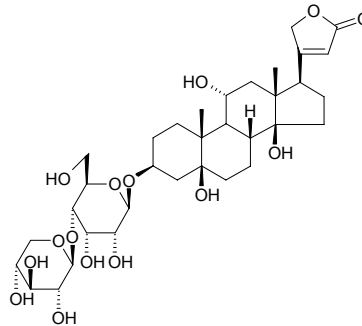
Bipindogenin 3-*O*- $\beta$ -*D*-digitaloside  $C_{30}H_{46}O_{10}$  (566.70). Pharm: Toxin (vertebrate). Source: SE LUN YANG JIAO AO *Strophanthus thollonii*, XI FEI YANG JIAO AO *Strophanthus sarmentosus* var. *senegambiae*. Ref: 658.

**2400 Bipindogenin-3-*O*- $\beta$ -*D*-allopyranoside**

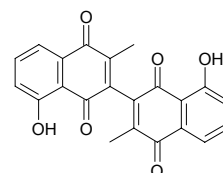
$C_{29}H_{44}O_{11}$  (568.67). Source: LING LAN *Convallaria keiskei* [Syn. *Convallaria majalis*]. Ref: 660.

**2401 Bipindogenin-3-*O*- $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 4)- $\beta$ -*D*-allopyranoside**

$C_{34}H_{52}O_{15}$  (700.78). Source: WAN NIAN QING GEN *Rohdea japonica* [Syn. *Orontium japonicum*]. Ref: 660.

**2402 3,3'-Biplumbagin**

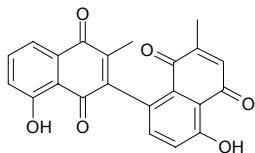
[34341-27-0]  $C_{22}H_{14}O_6$  (374.35). Orange plates ( $C_6H_6$ ), mp 214–217°C, mp 214–216°C. Pharm: Ichthyotoxin (MLC = 1.0mg/L, control Juglone, MLC = 0.2mg/L)<sup>[4185]</sup>. Source: BAI HUA DAN *Plumbago zeylanica* (root), HAI SHI *Diospyros maritima* (fruit). Ref: 6, 4185.



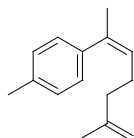


**2403 3,8'-Biplumbagin**

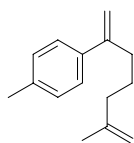
$C_{22}H_{14}O_6$  (374.35). Orange plates (hexane- $C_6H_6$ ), mp 204~205°C, mp 200~201°C. **Pharm:** Ichthyotoxin (MLC = 3.0mg/L, control Juglone, MLC = 0.2mg/L). **Source:** HAI SHI *Diospyros maritima* (fruit). **Ref:** 4185.

**2404 Bisabola-1,3,5,7,11-pentaene**

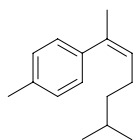
(2-Methyl-6-(4-methylphenyl)-1,5-heptadiene)  $C_{15}H_{20}$  (200.33). Colorless oil. **Source:** NING BIAN E TAI *Radula perrottetii* (essential oil). **Ref:** 5272.

**2405 Bisabola-1,3,5,7(14),11-pentaene**

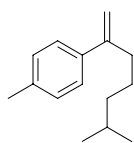
(2-Methyl-6-(4-methylphenyl)-1,6-heptadiene)  $C_{15}H_{20}$  (200.33). Colorless oil. **Source:** NING BIAN E TAI *Radula perrottetii* (essential oil). **Ref:** 5272.

**2406 Bisabola-1,3,5,7-tetraene**

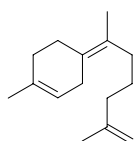
$C_{15}H_{22}$  (202.34). Colorless oil. **Source:** TIE JIAO JUE YU TAI *Plagiochila asplenioides* (essential oil). **Ref:** 5257.

**2407 Bisabola-1,3,5,7(14)-tetraene**

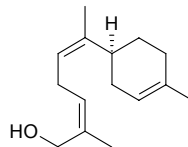
$C_{15}H_{22}$  (202.34). Colorless oil. **Source:** TIE JIAO JUE YU TAI *Plagiochila asplenioides* (essential oil). **Ref:** 5257.

**2408 Bisabola-2,6,11-triene**

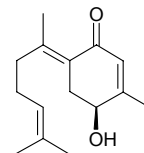
(4-(1,5-Dimethylhex-5-enylidene)-1-methylcyclohexene)  $C_{15}H_{24}$  (204.36). Colorless oil. **Source:** NING BIAN E TAI *Radula perrottetii* (essential oil). **Ref:** 5272.

**2409 2,(7Z,10Z)-Bisabolatrien-13-ol**

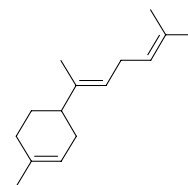
$C_{15}H_{24}O$  (220.36). Colorless oil. **Source:** XIAO HUA SHA ZHEN *Osyris tenuifolia* (essential oil). **Ref:** 3821.

**2410 (4S)-2,6,10-Bisabolatrien-4-ol-1-one**

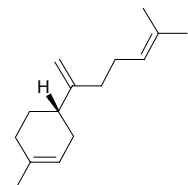
$C_{15}H_{22}O_2$  (234.34). Colorless oil,  $[\alpha]_D^{25} = -75.2^\circ$  ( $c = 0.59$ ,  $CHCl_3$ ). **Source:** RI BEN LIU SHAN *Cryptomeria japonica* (black heartwood). **Ref:** 4279.

**2411 α-Bisabolene**

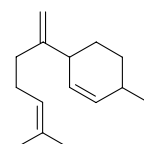
4-(1,5-Dimethyl-1,4-hexadienyl)-1-methyl-cyclohexene  $C_{15}H_{24}$  (204.36). **Source:** DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*], WU WEI ZI *Schisandra chinensis*. **Ref:** 2.

**2412 β-Bisabolene**

*L*-Bisabolene [495-61-4]  $C_{15}H_{24}$  (204.36). bp (-) 129~130°C/10.5mmHg. **Source:** DA YE XIANG RU *Mosla dianthera*, DANG GUI *Angelica sinensis*, DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*], DU SONG SHI *Juniperus rigida*, FANG FENG *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*], FENG DOU CAI *Petasites japonicus*, GAN JIANG *Zingiber officinale*, HOU PO *Magnolia officinalis*, JI NING *Mosla grosseserrata*, NAN HE SHI *Daucus carota*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], SHENG JIANG *Zingiber officinale*, WU WEI ZI *Schisandra chinensis*, XI YANG SHEN *Panax quinquefolium*, XIE CAO *Valeriana officinalis*. **Ref:** 2, 6, 660.

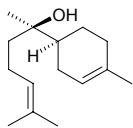
**2413 β<sub>2</sub>-Bisabolene**

$C_{15}H_{24}$  (204.36). **Source:** WU LING ZHI *Trogopterus xanthipes*; *Pteromys volans*. **Ref:** 6.

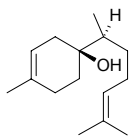


**2414  $\beta$ -Bisabolol**

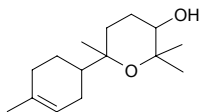
$\alpha$ -Bisabolol [515-69-5] C<sub>15</sub>H<sub>26</sub>O (222.37). bp 154.0~156.0°C/12mmHg.  
**Pharm:** Anti-inflammatory. **Source:** ZHI YANG *Populus balsamifera*, MU<sup>(3)</sup>  
 JU *Matricaria chamomilla* [Syn. *Matricaria recutita*]. **Ref:** 1, 2, 6, 658, 660.

**2415 Bisabolol**

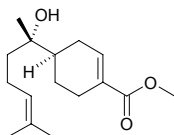
C<sub>15</sub>H<sub>26</sub>O (222.37). **Pharm:** Cytotoxic (*in vitro*, HONE-1 cell line, 50μmol/L, cell growth InRt = 0%; NUGC-3 cell line, 50μmol/L, cell growth InRt = 0%).  
**Source:** *Peperomia sui*. **Ref:** 3401.

**2416 Bisabolol oxide A**

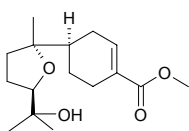
C<sub>15</sub>H<sub>26</sub>O<sub>2</sub> (238.37). bp 156~158°C. **Source:** MU<sup>(3)</sup> JU *Matricaria chamomilla*  
 [Syn. *Matricaria recutita*]. **Ref:** 6.

**2417 Bisaborosaol A**

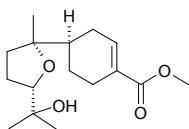
C<sub>16</sub>H<sub>26</sub>O<sub>3</sub> (266.38). **Source:** MEI GUI HUA *Rosa rugosa*. **Ref:** 660.

**2418 Bisaborosaol B<sub>1</sub>**

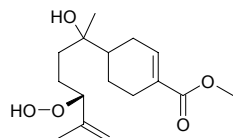
C<sub>16</sub>H<sub>26</sub>O<sub>4</sub> (282.38). **Source:** MEI GUI HUA *Rosa rugosa*. **Ref:** 660.

**2419 Bisaborosaol B<sub>2</sub>**

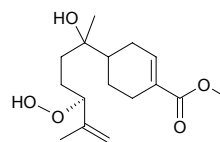
C<sub>16</sub>H<sub>26</sub>O<sub>4</sub> (282.38). **Source:** MEI GUI HUA *Rosa rugosa*. **Ref:** 660.

**2420 Bisaborosaol C<sub>1</sub>**

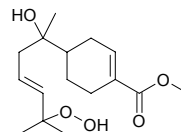
C<sub>16</sub>H<sub>26</sub>O<sub>5</sub> (298.38). **Source:** MEI GUI HUA *Rosa rugosa*. **Ref:** 660.

**2421 Bisaborosaol C<sub>2</sub>**

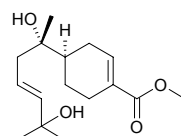
C<sub>16</sub>H<sub>26</sub>O<sub>5</sub> (298.38). **Source:** MEI GUI HUA *Rosa rugosa*. **Ref:** 660.

**2422 Bisaborosaol D**

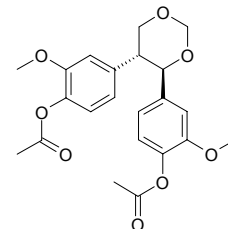
C<sub>16</sub>H<sub>26</sub>O<sub>5</sub> (298.38). **Source:** MEI GUI HUA *Rosa rugosa*. **Ref:** 660.

**2423 Bisaborosaol F**

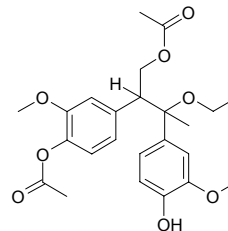
C<sub>16</sub>H<sub>26</sub>O<sub>4</sub> (282.38). **Source:** MEI GUI HUA *Rosa rugosa*. **Ref:** 660.

**2424 *trans*-4,5-Bis(4-acetoxy-3-methoxyphenyl)-1,3-dioxacyclohexane**

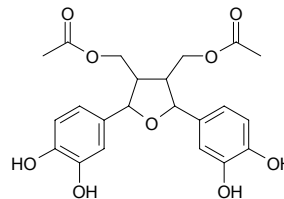
C<sub>22</sub>H<sub>24</sub>O<sub>8</sub> (416.43). Amorphous powder; [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -46° (*c* = 0.08, CHCl<sub>3</sub>).  
**Source:** TIAN XIAN GUO *Ficus beecheyana* [Syn. *Ficus erecta* var. *beecheyana*] (root: yield = 0.0025%dw). **Ref:** 4657.

**2425 *erythro*-2,3-Bis(4-acetoxy-3-methoxyphenyl)-3-ethoxypropan-1-ol acetate**

C<sub>23</sub>H<sub>28</sub>O<sub>8</sub> (432.47). Amorphous powder; [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -14° (*c* = 0.14, CHCl<sub>3</sub>).  
**Source:** TIAN XIAN GUO *Ficus beecheyana* [Syn. *Ficus erecta* var. *beecheyana*] (root: yield = 0.0037%dw). **Ref:** 4657.

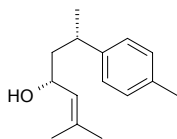
**2426 9,9-Bisacetylneoolivil**

C<sub>22</sub>H<sub>24</sub>O<sub>9</sub> (432.43). **Source:** YI ZHU QIAN MA *Urtica dioica*. **Ref:** 660.

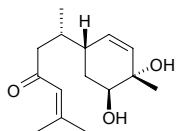


**2427 Bisacumol**

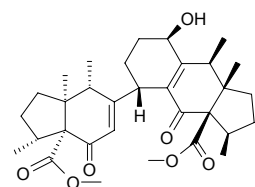
[120710-98-7]  $C_{15}H_{22}O$  (218.34). **Pharm:** NO production inhibitor (mus peritoneal macrophages, induced by LPS,  $100\mu\text{mol/L}$ ,  $\text{InRt} = (61.9 \pm 1.5)\%$ , control *L*-NMMA,  $100\mu\text{mol/L}$ ,  $\text{InRt} = (79.2 \pm 0.9)\%$ ,  $p < 0.01$ )<sup>[4150]</sup>. **Source:** JIANG HUANG *Curcuma longa*, PING E SHU *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*]. **Ref:** 3, 4150.

**2428 Bisacurone**

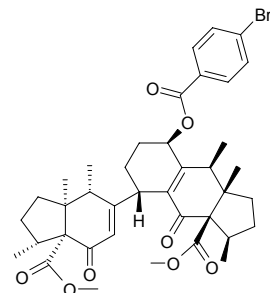
$C_{15}H_{24}O_3$  (252.36). **Pharm:** NO production inhibitor (mus peritoneal macrophages, induced by LPS,  $100\mu\text{mol/L}$ ,  $\text{InRt} = (54.3 \pm 4.0)\%$ , control *L*-NMMA,  $100\mu\text{mol/L}$ ,  $\text{InRt} = (79.2 \pm 0.9)\%$ ,  $p < 0.01$ )<sup>[4150]</sup>. **Source:** JIANG HUANG *Curcuma longa*, PING E SHU *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*]. **Ref:** 660, 4150.

**2429 Bisacutifolone A**

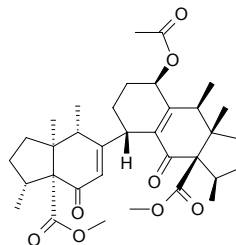
$C_{32}H_{44}O_7$  (540.70). Colorless prisms, mp  $204\text{--}206^\circ\text{C}$ ,  $[\alpha]_D^{21} = +59.0^\circ$  ( $c = 0.51$ ,  $\text{CHCl}_3$ ). **Source:** SHANG ZUO JIAN YE GUANG E TAI *Porella acutifolia* ssp. *tosana*. **Ref:** 3932.

**2430 Bisacutifolone A p-bromobenzoate**

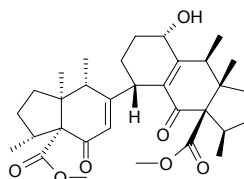
$C_{39}H_{47}BrO_8$  (723.71). Colorless oil,  $[\alpha]_D^{23} = +69.1^\circ$  ( $c = 0.55$ ,  $\text{CHCl}_3$ ). **Source:** SHANG ZUO JIAN YE GUANG E TAI *Porella acutifolia* ssp. *tosana*. **Ref:** 3932.

**2431 Bisacutifolone A mono acetate**

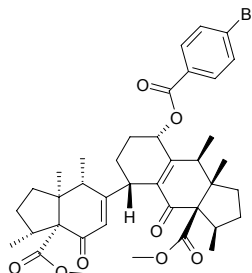
$C_{34}H_{46}O_8$  (582.74). Colorless oil,  $[\alpha]_D^{19} = +71.0^\circ$  ( $c = 0.65$ ,  $\text{CHCl}_3$ ). **Source:** SHANG ZUO JIAN YE GUANG E TAI *Porella acutifolia* ssp. *tosana*. **Ref:** 3932.

**2432 Bisacutifolone B**

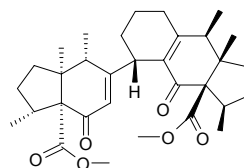
$C_{32}H_{44}O_7$  (540.70). Colorless oil,  $[\alpha]_D^{20} = +18.1^\circ$  ( $c = 0.74$ ,  $\text{CHCl}_3$ ). **Source:** SHANG ZUO JIAN YE GUANG E TAI *Porella acutifolia* ssp. *tosana*. **Ref:** 3932.

**2433 Bisacutifolone B p-bromobenzoate**

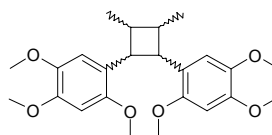
$C_{39}H_{47}BrO_8$  (723.71). Colorless amorphous powder,  $[\alpha]_D^{23} = -3.0^\circ$  ( $c = 0.10$ ,  $\text{CHCl}_3$ ). **Source:** SHANG ZUO JIAN YE GUANG E TAI *Porella acutifolia* ssp. *tosana*. **Ref:** 3932.

**2434 Bisacutifolone C**

$C_{32}H_{44}O_6$  (524.70). Colorless amorphous powder,  $[\alpha]_D^{21} = +69.5^\circ$  ( $c = 0.36$ ,  $\text{CHCl}_3$ ). **Source:** SHANG ZUO JIAN YE GUANG E TAI *Porella acutifolia* ssp. *tosana*. **Ref:** 3932.

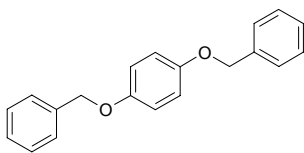
**2435 Bisasaricin**

Acorodin [73036-51-8]  $C_{24}H_{32}O_6$  (416.52). mp  $98.5\text{--}100.0^\circ\text{C}$ . **Pharm:** Antihypercholesterolemic. **Source:** JIN QIAN PU *Acorus gramineus*, BAI CHANG *Acorus calamus*. **Ref:** 1.

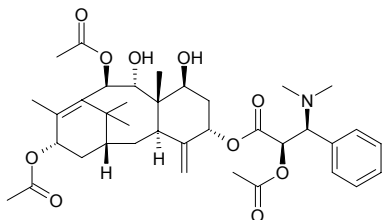


**2436 1,4-Bis-benzyloxy-benzene**

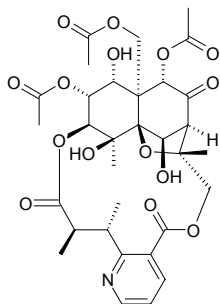
$C_{20}H_{18}O_2$  (290.37). Monoclinic crystals, mp 45.8–46.5°C. Source: BO YE WANG YI ZAO *Hydroclathrus tenuis*. Ref: 4889.

**2437 7β,9α-Bisdeacetylaustrospicatine**

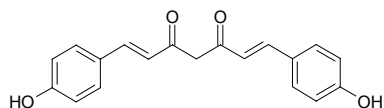
$C_{37}H_{51}NO_{10}$  (669.82).  $[\alpha]_D = +41^\circ$ . Source: AO DA LI YA HONG DOU SHAN *Austrotaxus spicata*. Ref: 662.

**2438 1,6-Bis-deacetyl evonine**

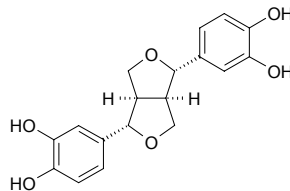
$C_{32}H_{39}NO_{15}$  (677.67). Colorless oil,  $[\alpha]_D^{25} = +20.0^\circ$  ( $c = 0.13$ ,  $CHCl_3$ ). Source: OU ZHOU WEI MAO *Euonymus europaeus* (seed). Ref: 4162.

**2439 Bisdemethoxycurcumin**

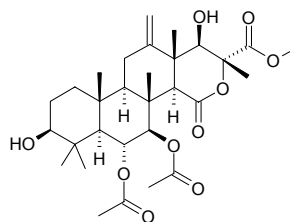
Demethoxycurcumin [22608-12-4]  $C_{19}H_{16}O_4$  (308.34). Yellow needles, mp 232–233°C, mp 218–222°C. Pharm: Neuroprotective (*in vitro* protects PC12 cells from  $\beta$ -Amyloid insult: anti- $\beta$ A(25-35),  $ED_{50} = (2.0 \pm 0.6) \mu\text{g/mL}$ ; anti- $\beta$ A(1-41),  $ED_{50} = (3.5 \pm 0.7) \mu\text{g/mL}$ ; control Congo red: anti- $\beta$ A(25-35),  $ED_{50} = (37.5 \pm 5.4) \mu\text{g/mL}$ ; anti- $\beta$ A(1-41),  $ED_{50} = (39.2 \pm 5.2) \mu\text{g/mL}$ )<sup>[4643]</sup>. Source: JIANG HUANG *Curcuma longa* (turmeric powder: yield = 0.0059%dw)<sup>[4643]</sup>, YU JIN *Curcuma aromatica*. Ref: 6, 660, 4643.

**2440 (±)-3',3''-Bisdemethylpinoresinol**

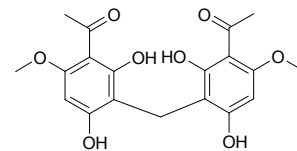
*rel*-(7 $\alpha$ ,7' $\alpha$ ,8 $\alpha$ ,8' $\alpha$ )-7,9':7',9'-Diepoxylignan-3,3',4,4'-tetraol)  $C_{18}H_{18}O_6$  (330.34). Brown crystals, mp 106–109°C (MeOH– $CHCl_3$ ). Source: BA XI QIAO AN MU *Joannesia princeps* (seed). Ref: 3369.

**2441 3,17-Bisdeoxo-3,17-dihydroxypenisimplicin A**

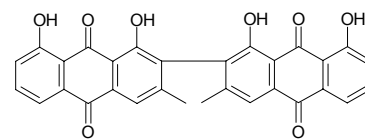
$C_{30}H_{44}O_{10}$  (564.68). Source: JI JIAN DAN QING MEI *Penicillium simplicissimum*. Ref: 4501.

**2442 1,1'-Bis(2,6-dihydroxy-3-acetyl-4-methoxyphenyl)methane**

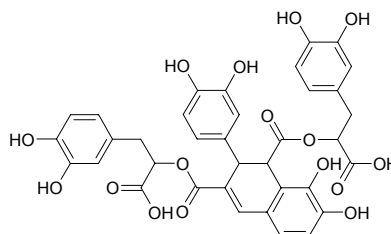
3,3'-Diacyl-4,4'-dimethoxy-2,2',6,6'-tetrahydroxy diphenyl methane  $C_{19}H_{20}O_8$  (376.37). Light yellow acicular crystals, mp 253°C. Source: GAN SUI *Euphorbia kansui*, YUE XIAN DA JI *Euphorbia ebracteolata*. Ref: 660, 678.

**2443 2,2'-Bis[(1,8-dihydroxy-3-methyl)anthraquinone]**

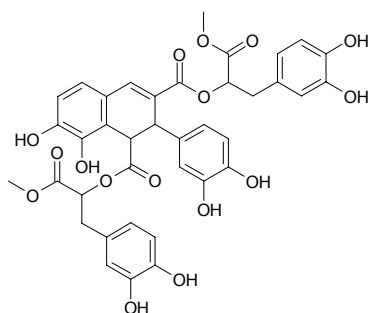
$C_{30}H_{18}O_8$  (506.47). Source: HONG SHI ER *Umbilicaria hypococcinea*. Ref: 660.

**2444 1,3-Bis-[2-(3,4-dihydroxyphenyl)-1-carboxy]ethoxycarbonyl-2-(3,4-dihydroxyphenyl)-7,8-dihydroxy-1,2-dihydronaphthalene**

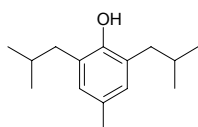
$C_{36}H_{30}O_{16}$  (718.63). Source: BO HE *Mentha haplocalyx* [Syn. *Mentha canadaensis*; *Mentha arvensis* var. *haplocalyx*; *Mentha arvensis*]. Ref: 660.



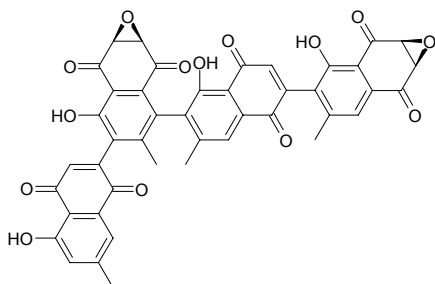
**2445 1,3-Bis-[2-(3,4-dihydroxyphenyl)-1-methoxycarbonyl]ethoxycarbonyl-2-(3,4-dihydroxyphenyl)-7,8-dihydroxy-1,2-dihydronaphthalene**  
 $C_{38}H_{34}O_{16}$  (746.69). Source: BO HE *Mentha haplocalyx* [Syn. *Mentha canadaensis*; *Mentha arvensis* var. *haplocalyx*; *Mentha arvensis*]. Ref: 660.



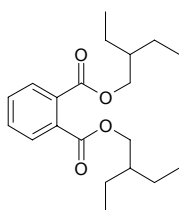
**2446 2,6-Bis(1,1-dimethylethyl)-4-methyl phenol**  
 $C_{15}H_{24}O$  (220.36). Source: ROU CONG RONG *Cistanche deserticola*. Ref: 2.



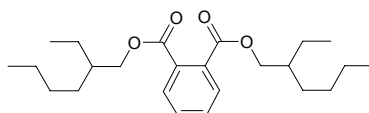
**2447 6'',8''-Bisdiosquinone**  
 $C_{44}H_{26}O_{14}$  (778.69). Brown red crystalline. Source: BA BU YA XIN JI NEI YA SHI *Diospyros mafensis*. Ref: 1882.



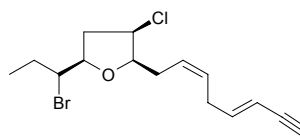
**2448 Bis(2-ethylbutyl)phthalate**  
 Di-(2-ethylbutyl)phthalate [7299-89-0]  $C_{20}H_{30}O_4$  (334.46). Source: SHUI QIN *Oenanthe javanica*. Ref: 6.



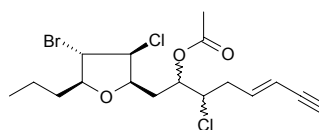
**2449 Bis(2-ethyl-hexyl)-phthalate**  
 Dioctyl 1,2-benzenedicarboxylate [117-81-7]  $C_{24}H_{38}O_4$  (390.57). Source: ROU CONG RONG *Cistanche deserticola*, JIAN YE LONG XUE SHU *Dracaena cochinchinensis*. Ref: 2, 616.



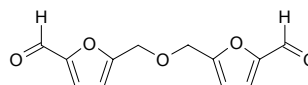
**2450 Bisezakyne A**  
 $C_{15}H_{20}BrClO$  (331.68). Oil,  $[\alpha]_D^{22} = -7.13^\circ$  ( $c = 0.33$ ,  $CHCl_3$ ). Source: *Laurencia* sp. Ref: 2306.



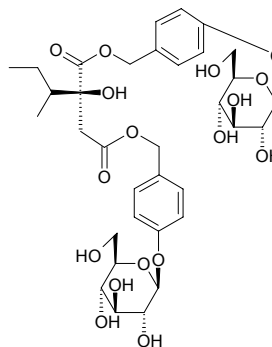
**2451 Bisezakyne B**  
 $C_{17}H_{22}BrCl_2O_3$  (426.18). mp 69~70°C,  $[\alpha]_D^{22} = -45.1^\circ$  ( $c = 0.27$ ,  $CHCl_3$ ). Source: *Laurencia* sp. Ref: 2306.



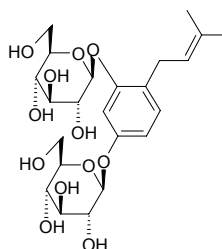
**2452 Bis(5-formylfurfuryl)ether**  
 Cirsiumaldehyde; 5,5'-Oxydimethylene-bis-(2-furaldehyde)  $C_{12}H_{10}O_5$  (234.21). White needles (pet. ether-acetone), mp 113.5~115.5°C. Source: BEI CANG ZHU *Atractylodes chinensis*, JU PI *Citrus reticulata*. Ref: 2510, 2867.



**2453 Bis[4-(β-D-glucopyranosyloxy) benzyl] (S)-2-butylmalate**  
 $C_{34}H_{46}O_{17}$  (726.74). White amorphous powder, mp 107~110°C,  $[\alpha]_D^{20} = -40.07^\circ$  ( $c = 2.25$ , MeOH). Source: SHAN HU LAN *Galeola faberi*. Ref: 280.

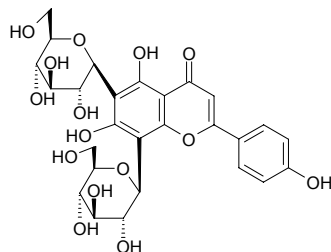


**2454 1,5-Bis(β-D-glucopyranosyloxy)-2-(3',3'-dimethylallyl) benzene**  
 $C_{23}H_{34}O_{12}$  (502.52). Amorphous powder,  $[\alpha]_D^{25} = -5.0^\circ$  ( $c = 0.1$ , MeOH). Source: CU MAO NIU SHE CAO *Anchusa strigosa*. Ref: 5441.

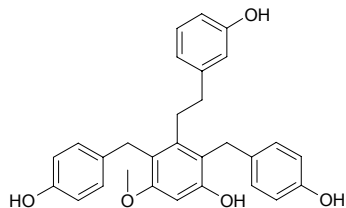


**2455 6,8-Bis(C- $\beta$ -glucosyl)-apigenin**

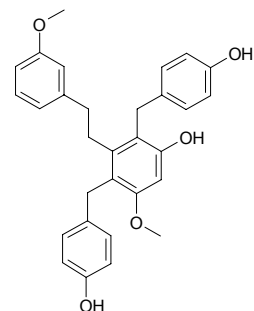
Vicenin 2 [23666-13-9]  $C_{27}H_{30}O_{15}$  (594.53). mp 220°C (dec). **Pharm:** Anti-inflammatory (*in vivo*, carrageenan-induced rat paw edema)<sup>[5040]</sup>; stimulates laying egg (*Papilo xuthus* on leaves in *Citrus* genus plants). **Source:** GAN CAO *Glycyrrhiza uralensis*, HUANG GAN CAO *Glycyrrhiza kansuensis*, JIAN ZI SU YE *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*], NING MENG PI *Citrus limon*, *Lychnophora ericoides* (fresh leaf), XIAO MAI *Triticum aestivum* [Syn. *Triticum vulgare*], XIN XI LAN MU JING *Vitex lucens*, *Tragopogon* sp., *Sophora* sp. **Ref:** 2, 6, 658, 660, 5040.

**2456 2',6'-Bis(*p*-hydroxybenzyl)-3,3'-dihydroxy-5-methoxybibenzyl**

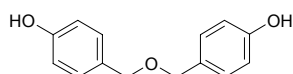
3,3'-Dihydroxy-2,6-bis(4-hydroxybenzyl)-5-methoxybibenzyl  $C_{29}H_{28}O_5$  (456.54). Colorless needles. **Pharm:** Antiallergic  $\beta$ -Hexosaminidase inhibitor (rat basophilic RBL-2H3 cells, inhibits release of  $\beta$ -hexosaminidase, 100  $\mu$ mol/L, InRt = (96.5 $\pm$ 3.3)  $\mu$ mol/L,  $p < 0.01$ ; 300  $\mu$ mol/L control Ketotifen fumarate, InRt = (72.5 $\pm$ 0.9)  $\mu$ mol/L,  $p < 0.01$ )<sup>[5022]</sup>. **Source:** LAN YU BAI JI *Bletilla formosana* (whole herb), SHOU ZHANG SHEN *Gymnadenia conopsea* (tuber). **Ref:** 4500, 5022.

**2457 2,6-Bis(*p*-hydroxybenzyl)-3',5-dimethoxy-3-hydroxybibenzyl**

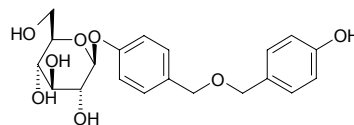
$C_{30}H_{30}O_5$  (470.57). **Source:** BAI JI *Bletilla striata*. **Ref:** 660.

**2458 Bis(4-hydroxybenzyl)ether**

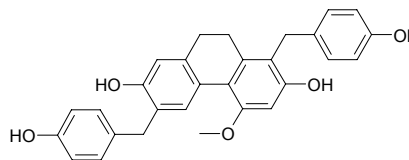
4,4'-Dihydroxybenzyl ether  $C_{14}H_{14}O_3$  (230.27). **Source:** BAN XIA *Pinellia ternata*, TIAN MA *Gastrodia elata*. **Ref:** 2.

**2459 Bis(4-hydroxybenzyl)ether mono- $\beta$ -D-glucopyranoside**

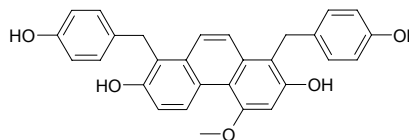
$C_{20}H_{24}O_8$  (392.41). **Source:** TIAN MA *Gastrodia elata*. **Ref:** 2.

**2460 1,6-Bis(4-hydroxybenzyl)-4-methoxy-9,10-dihydrophenanthrene-2,7-diol**

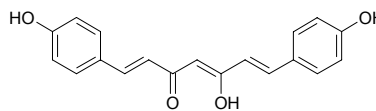
$C_{29}H_{26}O_5$  (454.53). **Source:** BAI JI *Bletilla striata*, LAN YU BAI JI *Bletilla formosana* (whole herb). **Ref:** 660, 4500.

**2461 1,8-Bis(4-hydroxybenzyl)-4-methoxyphenanthrene-2,7-diol**

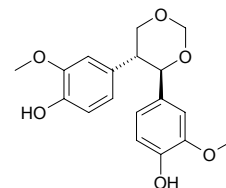
$C_{29}H_{24}O_5$  (452.51). **Source:** BAI JI *Bletilla striata*, LAN YU BAI JI *Bletilla formosana* (whole herb). **Ref:** 660, 4500.

**2462 Bis(4-hydroxycinnamoyl)methane**

$C_{19}H_{16}O_4$  (308.34). **Pharm:** NO production inhibitor (mus peritoneal macrophages, induced by LPS, 100  $\mu$ mol/L, InRt = (57.1 $\pm$ 3.4)%), control *L*-NMMA, 100  $\mu$ mol/L, InRt = (79.2 $\pm$ 0.9)%,  $p < 0.01$ )<sup>[4150]</sup>. **Source:** PING E SHU *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*]. **Ref:** 4150.

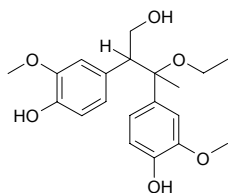
**2463 *trans*-4,5-Bis(4-hydroxy-3-methoxyphenyl)-1,3-dioxacyclohexane**

$C_{18}H_{20}O_6$  (332.36). **Source:** TIAN XIAN GUO *Ficus beecheyana* [Syn. *Ficus erecta* var. *beecheyana*] (root). **Ref:** 4657.

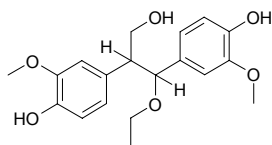


**2464 erythro-2,3-Bis(4-hydroxy-3-methoxyphenyl)-3-ethoxypropan-1-ol**

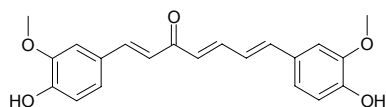
C<sub>19</sub>H<sub>24</sub>O<sub>6</sub> (348.4). **Source:** TIAN XIAN GUO *Ficus beecheyana* [Syn. *Ficus erecta* var. *beecheyana*] (root). **Ref:** 4657.

**2465 threo-2,3-Bis(4-hydroxy-3-methoxyphenyl)-3-ethoxypropan-1-ol**

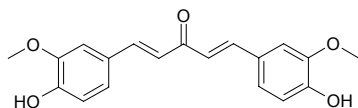
C<sub>19</sub>H<sub>24</sub>O<sub>6</sub> (348.4). Amorphous white powder,  $[\alpha]_D^{25} = +16^\circ$  ( $c = 0.13$ , CHCl<sub>3</sub>). **Source:** TIAN XIAN GUO *Ficus beecheyana* [Syn. *Ficus erecta* var. *beecheyana*] (root: yield = 0.032%dw). **Ref:** 4657.

**2466 1,7-Bis(4-hydroxy-3-methoxyphenyl)-1,4,6-heptatrien-3-one**

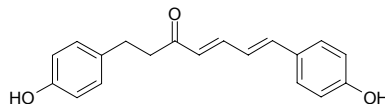
C<sub>21</sub>H<sub>20</sub>O<sub>5</sub> (352.39). Yellow powder, mp 128–129°C. **Pharm:** Neuroprotective inactive (*in vitro* protects PC12 cells from  $\beta$ -Amyloid insult: anti- $\beta$ A(25-35), ED<sub>50</sub> > 50 $\mu$ g/mL; anti- $\beta$ A(1-41), ED<sub>50</sub> > 50 $\mu$ g/mL; control Congo red: anti- $\beta$ A(25-35), ED<sub>50</sub> = (37.5 $\pm$ 5.4) $\mu$ g/mL; anti- $\beta$ A(1-41), ED<sub>50</sub> = (39.2 $\pm$ 5.2) $\mu$ g/mL). **Source:** JIANG HUANG *Curcuma longa* (turmeric powder: yield = 0.0001%dw). **Ref:** 4643.

**2467 1,5-Bis(4-hydroxy-3-methoxyphenyl)-1,4-pentadien-3-one**

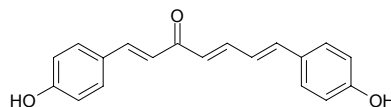
C<sub>19</sub>H<sub>18</sub>O<sub>5</sub> (326.35). Yellow powder, mp 85–86°C. **Pharm:** Neuroprotective inactive (*in vitro* protects PC12 cells from  $\beta$ -Amyloid insult: anti- $\beta$ A(25-35), ED<sub>50</sub> > 50 $\mu$ g/mL; anti- $\beta$ A(1-41), ED<sub>50</sub> > 50 $\mu$ g/mL; control Congo red: anti- $\beta$ A(25-35), ED<sub>50</sub> = (37.5 $\pm$ 5.4) $\mu$ g/mL; anti- $\beta$ A(1-41), ED<sub>50</sub> = (39.2 $\pm$ 5.2) $\mu$ g/mL). **Source:** JIANG HUANG *Curcuma longa* (turmeric powder: yield = 0.0004%dw). **Ref:** 4643.

**2468 1,7-Bis(4-hydroxyphenyl)hepta-4E,6E-dien-3-one**

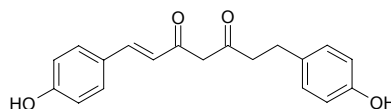
Anticancer Diarylheptanoid PMV70P691-72 C<sub>19</sub>H<sub>18</sub>O<sub>3</sub> (294.35). Yellow amorphous solid. **Pharm:** Cytotoxic (Colon26-L5, ED<sub>50</sub> = 57.7 $\mu$ mol/L; HT1080, ED<sub>50</sub> = 78.8 $\mu$ mol/L)<sup>[3042]</sup>; cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells)<sup>[5038]</sup>. **Source:** FEN BA JIAO ZA JIAO ZHONG ZHI BIAN ZHONG *Musa x paradisiaca* cultivar, YUN NAN CAO KOU *Alpinia blepharocalyx* (seed: yield = 0.00052%)<sup>[3042]</sup>. **Ref:** 3042, 5038.

**2469 1,7-Bis(4-hydroxyphenyl)-1,4,6-heptatrien-3-one**

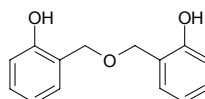
C<sub>19</sub>H<sub>16</sub>O<sub>3</sub> (292.34). Yellow powder, mp 147–148°C. **Pharm:** TNF- $\alpha$  production inhibitor (LPS-activated macrophages, mean IC<sub>50</sub> = 12.3 $\mu$ mol/L)<sup>[4416]</sup>; neuroprotective inactive (*in vitro* protects PC12 cells from  $\beta$ -Amyloid insult: anti- $\beta$ A(25-35), ED<sub>50</sub> > 50 $\mu$ g/mL; anti- $\beta$ A(1-41), ED<sub>50</sub> > 50 $\mu$ g/mL; control Congo red: anti- $\beta$ A(25-35), ED<sub>50</sub> = (37.5 $\pm$ 5.4) $\mu$ g/mL; anti- $\beta$ A(1-41), ED<sub>50</sub> = (39.2 $\pm$ 5.2) $\mu$ g/mL)<sup>[4643]</sup>. **Source:** JIANG HUANG *Curcuma longa* (turmeric powder: yield = 0.0001%dw)<sup>[4643]</sup>, PING E SHU *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*]. **Ref:** 4416, 4643.

**2470 1,7-Bis(4-hydroxyphenyl)-1-heptene-3,5-dione**

C<sub>19</sub>H<sub>18</sub>O<sub>4</sub> (310.35). Yellow needles, mp 145–146°C. **Pharm:** Neuroprotective (*in vitro* protects PC12 cells from  $\beta$ -Amyloid insult: anti- $\beta$ A(25-35), ED<sub>50</sub> = (0.5 $\pm$ 0.2) $\mu$ g/mL; anti- $\beta$ A(1-41), ED<sub>50</sub> = (1.0 $\pm$ 0.3) $\mu$ g/mL; control Congo red: anti- $\beta$ A(25-35), ED<sub>50</sub> = (37.5 $\pm$ 5.4) $\mu$ g/mL; anti- $\beta$ A(1-41), ED<sub>50</sub> = (39.2 $\pm$ 5.2) $\mu$ g/mL)<sup>[4643]</sup>. **Source:** JIANG HUANG *Curcuma longa* (turmeric powder: yield = 0.0004%dw)<sup>[4643]</sup>. **Ref:** 4643.

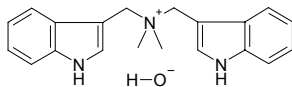
**2471 Bis(2-hydroxyphenyl)methyl ether**

C<sub>14</sub>H<sub>14</sub>O<sub>3</sub> (230.27). **Source:** *Milium balansae* (branch and leaf: yield = 0.00013%dw)<sup>[3016]</sup>. **Ref:** 3016.

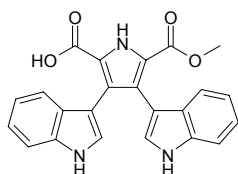


**2472 3,3'-Bis(indolylmethyl)dimethyl ammonium hydroxide**

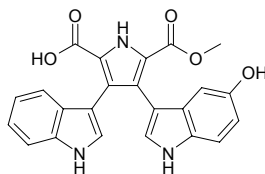
$C_{20}H_{23}N_3O$  (321.43). Source: LU ZHU GEN *Arundo donax*. Ref: 6.

**2473 Bisindolylpyrrole CPB-53-594-3**

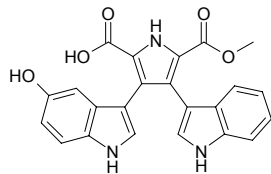
$C_{23}H_{17}N_3O_4$  (399.41). Brown amorphous powder. Pharm: Cytotoxic inactive (HeLa cells,  $IC_{50} = 93.3 \mu\text{g/mL}$ )<sup>[4465]</sup>. Source: FEN LIU JUN *Lycogala epidendrum* (wild sporocarp). Ref: 4465.

**2474 Bisindolylpyrrole CPB-53-594-4**

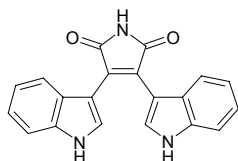
$C_{23}H_{17}N_3O_5$  (415.41). Pale yellow amorphous powder. Source: FEN LIU JUN *Lycogala epidendrum* (wild sporocarp). Ref: 4465.

**2475 Bisindolylpyrrole CPB-53-594-5**

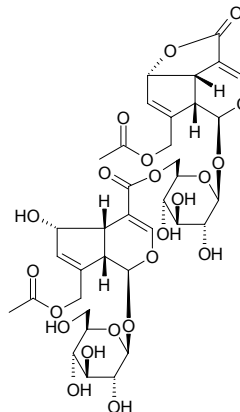
$C_{23}H_{17}N_3O_5$  (415.41). Pale yellow amorphous powder. Source: FEN LIU JUN *Lycogala epidendrum* (wild sporocarp). Ref: 4465.

**2476 Bisindolylpyrrole CPB-53-594-6**

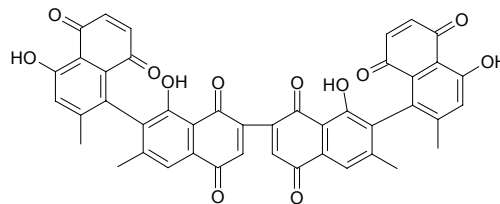
$C_{20}H_{13}N_3O_2$  (327.35). Source: FEN LIU JUN *Lycogala epidendrum* (wild sporocarp), HUI JIN SE TUAN WANG JUN *Arcyria cinerea* (wild sporocarp), AN HONG TUAN WANG JUN *Arcyria denudata*. Ref: 4465.

**2477 Bis-iridoid glucoside**

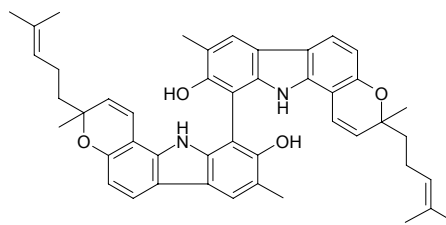
$C_{36}H_{44}O_{22}$  (828.74). Amorphous powder,  $[\alpha]_D^{27} = -58.4^\circ$  ( $c = 0.66$ , MeOH). Source: XIE JI CU YE MU *Lasianthus wallichii* (leaf). Ref: 4238.

**2478 Bisiodiospyrin**

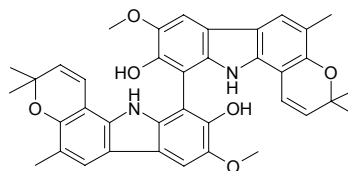
[30276-87-0]  $C_{44}H_{26}O_{12}$  (746.69). mp  $>320^\circ\text{C}$ . Source: JUN QIAN ZI *Diospyros lotus*. Ref: 6.

**2479 Bisisomahanine**

9,9''-Dihydroxy-3,3'',8,8''-tetramethyl-3,3''-bis-(4-methyl-3-pentenyl)-3,3'',11,11''-tetrahydro-10,10''-(bipyrano[3,2-a]carbazole)  $C_{46}H_{48}N_2O_4$  (696.91). Pale ivory powder, mp  $130\sim 140^\circ\text{C}$ ,  $[\alpha]_D^{20} = -13.1^\circ$  ( $c = 0.25$ ,  $\text{CHCl}_3$ ). Source: XIA GUO SHAN XIAO JU GEN *Glycosmis stenocarpa*. Ref: 2569.

**2480 8,8''-Biskoenigine**

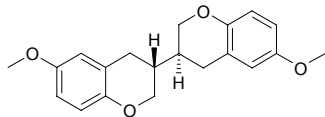
$C_{38}H_{36}N_2O_6$  (616.72). Brown gum,  $[\alpha]_D^{24} = +139.6^\circ$  ( $c = 1.00$ ,  $\text{CHCl}_3$ ). Pharm: Antiosteoporosis (cathepsin B model,  $IC_{50} = 1.3 \mu\text{g/mL}$ )<sup>[4681]</sup>. Source: YIN DU JIU LI XIANG *Murraya koenigii* (aerial parts). Ref: 4681.



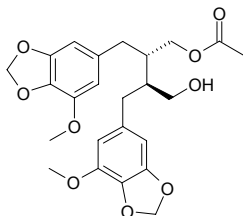


**2481 3,3'-Bis(6-methoxychroman)**

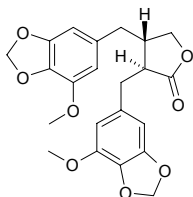
3,3'-Bis(3,4-dihydro-6-methoxy-2H-1-benzopyran); Bischroman C<sub>20</sub>H<sub>22</sub>O<sub>4</sub> (326.40). Colorless needles, mp 112~113°C,  $[\alpha]_D^{24} = -60.546^\circ$  ( $c = 0.331$ , MeOH). Source: XIAN GENG XI XIAN *Siegesbeckia orientalis* var. *pubescens* [Syn. *Siegesbeckia pubescens*]. Ref: 2197.

**2482 (2S,3S)-2,3-Bis(5-methoxy-3,4-methylenedioxybenzyl)-butane-1,4-diol monoacetate**

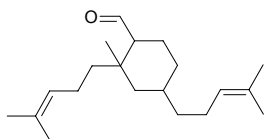
C<sub>24</sub>H<sub>28</sub>O<sub>9</sub> (460.49). Colorless gum,  $[\alpha]_D^{25} = +9.5^\circ$  ( $c = 0.153$ , CHCl<sub>3</sub>). Source: MENG ZI CAO HU JIAO *Peperomia duclouxii* (whole herb: yield = 0.00012%). Ref: 4733.

**2483 (2S,3S)-2,3-Bis(5-methoxy-3,4-methylenedioxybenzyl)-butyrolactone**

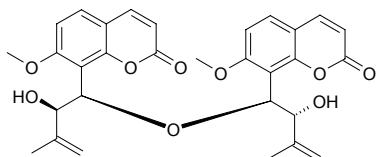
C<sub>22</sub>H<sub>22</sub>O<sub>8</sub> (414.42). Pale yellow gum,  $[\alpha]_D^{25} = +29.0^\circ$  ( $c = 0.547$ , CHCl<sub>3</sub>). Source: MENG ZI CAO HU JIAO *Peperomia duclouxii* (whole herb: yield = 0.0014%). Ref: 4733.

**2484 4,6-Bis(4-methylpent-3-en-1-yl)-6-methylcyclohexa-1,3-diene-carbaldehyde**

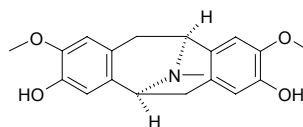
C<sub>20</sub>H<sub>34</sub>O (290.49). Pharm: Affinity to nAChR ( $\alpha 4\beta 2^*$  subtype,  $K_i > 50000$ nmol/L, control (-)-Nicotine,  $K_i = (0.838 \pm 0.132)$ nmol/L;  $\alpha 7^*$  subtype,  $K_i > 50000$ nmol/L, (-)-Nicotine,  $K_i = (127 \pm 5)$ nmol/L)<sup>[5029]</sup>. Source: BEI HAI XIAN TAI CHONG *Flustra foliacea* Ref: 5029.

**2485 Bismurrangatin**

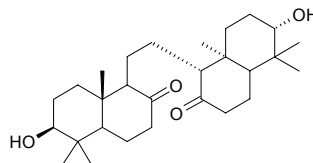
C<sub>30</sub>H<sub>30</sub>O<sub>9</sub> (534.57). Colorless oil,  $[\alpha]_D = +2.5^\circ$  ( $c = 0.14$ , MeOH). Source: ZHONG HUA JIU LI XIANG *Murraya exotica* (vegetative branches). Ref: 4510.

**2486 Bisnorargemonine**

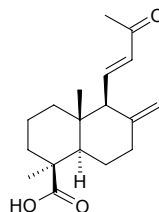
C<sub>19</sub>H<sub>21</sub>NO<sub>4</sub> (327.38). Source: HOU KE GUI *Cryptocarya chinensis* (leaf). Ref: 4129.

**2487 26,27-Bisnor-8,14-dioxo- $\alpha$ -onocerin**

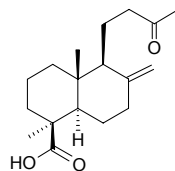
C<sub>28</sub>H<sub>46</sub>O<sub>4</sub> (446.68). Source: YU BAI SHI SONG *Lycopodium obscurum*. Ref: 660.

**2488 15,16-Bisnor-13-oxo-8(17),11E-labdadien-19-oic acid**

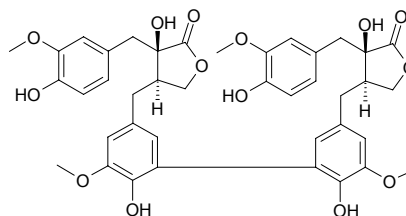
C<sub>18</sub>H<sub>26</sub>O<sub>3</sub> (290.41). Source: BAI ZI REN *Biota orientalis* [Syn. *Thuja orientalis*; *Platyclusus orientalis*]. Ref: 660.

**2489 15,16-Bisnor-13-oxo-8(17)-labden-19-oic acid**

C<sub>18</sub>H<sub>28</sub>O<sub>3</sub> (292.42). Source: BAI ZI REN *Biota orientalis* [Syn. *Thuja orientalis*; *Platyclusus orientalis*]. Ref: 660.

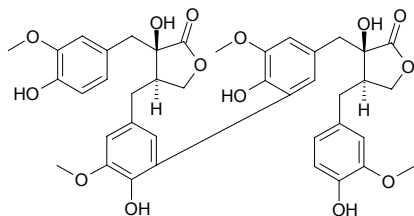
**2490 Bis-5,5-nortrachlogenin**

C<sub>40</sub>H<sub>42</sub>O<sub>14</sub> (746.77). Light yellow oil,  $[\alpha]_D^{23} = +55.0^\circ$  ( $c = 0.10$ , MeOH). Pharm: NO production inhibitor ( $IC_{50} = 48.6$ μmol/L)<sup>[4526]</sup>; DPPH scavenger ( $IC_{50} = 133.2$ μmol/L)<sup>[4526]</sup>. Source: LIAO GE WANG GEN *Wikstroemia indica*. Ref: 4526.

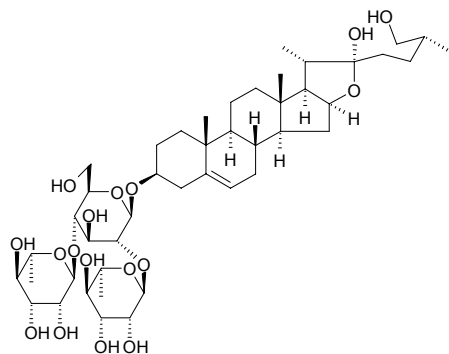


**2491 Bis-5,5'-nortrachegenin**

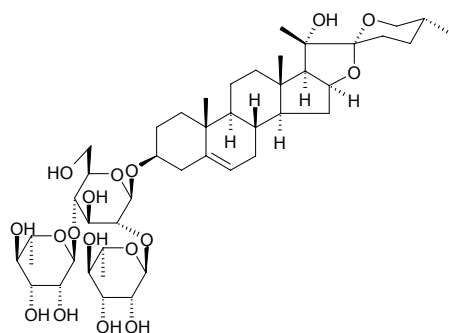
$C_{40}H_{42}O_{14}$  (746.77). Light yellow oil,  $[\alpha]_D^{23} = +68.0^\circ$  ( $c = 0.42$ , MeOH). **Pharm:** NO production inhibitor inactive ( $IC_{50} > 200\mu\text{mol/L}$ )<sup>[4526]</sup>; DPPH scavenger inactive ( $IC_{50} > 200\mu\text{mol/L}$ )<sup>[4526]</sup>. **Source:** LIAO GE WANG GEN *Wikstroemia indica*. **Ref:** 4526.

**2492 3-O-[Bis- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2 and 1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl]-25R-furost-5-ene-3 $\beta$ ,22 $\alpha$ ,26-triol**

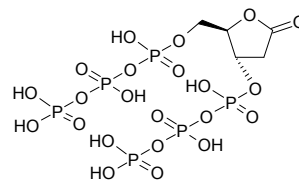
$C_{45}H_{74}O_{17}$  (887.08). White amorphous powder,  $[\alpha]_D^{25} = -61.8^\circ$  ( $c = 0.1$ , pyridine). **Pharm:** Cytotoxic (*in vitro* A375,  $IC_{50} = (17.88 \pm 1.12)\mu\text{mol/L}$ , control Mithramycin,  $IC_{50} = (0.37 \pm 0.05)\mu\text{mol/L}$ ; L-929,  $IC_{50} = (15.43 \pm 6.89)\mu\text{mol/L}$ , Mithramycin,  $IC_{50} = (0.31 \pm 0.03)\mu\text{mol/L}$ ; HeLa,  $IC_{50} = (9.87 \pm 5.48)\mu\text{mol/L}$ , Mithramycin,  $IC_{50} = (0.19 \pm 0.03)\mu\text{mol/L}$ ). **Source:** HUANG SHAN YAO *Dioscorea panthaica* (rhizome). **Ref:** 5000.

**2493 3-O-[Bis- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2 and 1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl]-22R,25R-spirost-5-ene-3 $\beta$ ,20 $\alpha$ -diol**

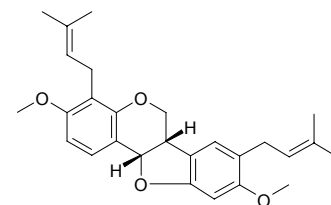
$C_{45}H_{72}O_{17}$  (885.07). White amorphous powder, mp 225–228°C,  $[\alpha]_D^{25} = -55.0^\circ$  ( $c = 0.1$ , pyridine). **Pharm:** Cytotoxic (*in vitro*: A375,  $IC_{50} = (1.23 \pm 0.82)\mu\text{mol/L}$ , control Mithramycin,  $IC_{50} = (0.37 \pm 0.05)\mu\text{mol/L}$ ; L-929,  $IC_{50} = (1.56 \pm 1.03)\mu\text{mol/L}$ , Mithramycin,  $IC_{50} = (0.31 \pm 0.03)\mu\text{mol/L}$ ; HeLa,  $IC_{50} = (1.18 \pm 0.81)\mu\text{mol/L}$ , Mithramycin,  $IC_{50} = (0.19 \pm 0.03)\mu\text{mol/L}$ ). **Source:** HUANG SHAN YAO *Dioscorea panthaica* (rhizome). **Ref:** 5000.

**2494 3,4-trans-(erythro)-3,5-Bis(tripolyphosphate)-4-pentanolide**

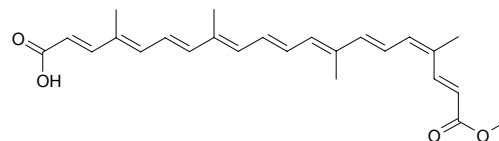
2-Deoxy-D-ribose-3,5-bis(tripolyphosphate)-1,4-lactone  $C_5H_{14}O_{22}P_6$  (612.00). Colorless solid, mp. 189–190°C (MeOH), IR[25, D] =  $-1.9^\circ$  ( $c = 1.65$ , H<sub>2</sub>O). **Source:** GONG XING MA DOU LING *Aristolochia arcuata*. **Ref:** 2037.

**2495 Bitucarpin A**

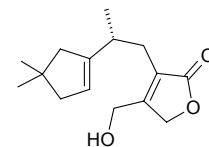
$C_{27}H_{32}O_4$  (420.55).  $[\alpha]_D^{25} = -98^\circ$  ( $c = 0.7$ , MeOH). **Pharm:** Cytotoxic (KB,  $IC_{50} > 75\mu\text{mol/L}$ , control Helenalin,  $IC_{50} = (0.64 \pm 0.08)\mu\text{mol/L}$ , Melphalan,  $IC_{50} = (6.0 \pm 0.5)\mu\text{mol/L}$ ; Mono-Mac-6,  $IC_{50} > 75\mu\text{mol/L}$ , Helenalin,  $IC_{50} = (3.1 \pm 0.3)\mu\text{mol/L}$ ; Jurkat-T,  $IC_{50} > 75\mu\text{mol/L}$ , Helenalin,  $IC_{50} = (1.14 \pm 0.08)\mu\text{mol/L}$ , Melphalan,  $IC_{50} = (9.1 \pm 0.8)\mu\text{mol/L}$ ). **Source:** *Bituminaria morisiana* (leaf). **Ref:** 5077.

**2496 Bixin**

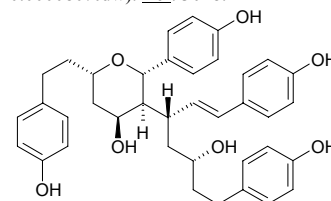
$\alpha$ -Bixin  $C_{25}H_{30}O_4$  (394.52). **Pharm:** Orange pigment. **Source:** HONG MU *Bixa orellana*. **Ref:** 658, 1521, 5507.

**2497 Blennin C**

$C_{15}H_{22}O_3$  (250.34). **Source:** MEI WEI HONG GU *Russula delica* (sporocarp). **Ref:** 4374.

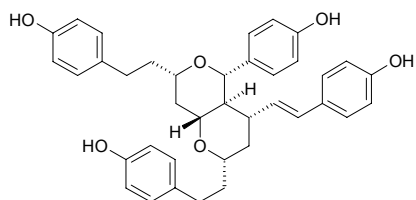
**2498 Blepharocalyxin C**

$C_{38}H_{42}O_7$  (610.75). Light yellow amorphous solid,  $[\alpha]_D^{25} = +63.5^\circ$  ( $c = 0.035$ , MeOH). **Pharm:** Cytotoxic (Colon26-L5,  $ED_{50} = 29.6\mu\text{mol/L}$ , control 5-FU,  $ED_{50} = 0.53\mu\text{mol/L}$ ; HT1080,  $ED_{50} = 54.3\mu\text{mol/L}$ , 5-FU,  $ED_{50} = 8.0\mu\text{mol/L}$ ). **Source:** YUN NAN CAO KOU *Alpinia blepharocalyx* (seed: yield = 0.000080%dw). **Ref:** 3048.

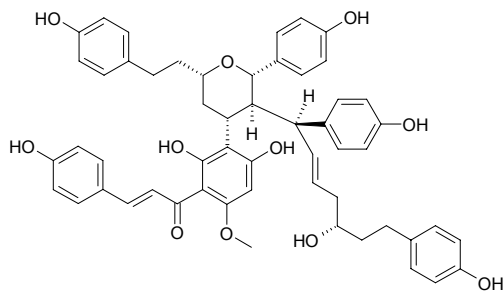


**2499 Blepharocalyxin D**

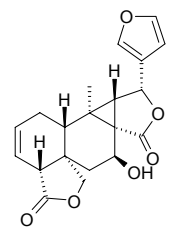
$C_{38}H_{40}O_6$  (592.74). Light yellow amorphous solid,  $[\alpha]_D^{25} = +18.5^\circ$  ( $c = 0.025$ , MeOH). **Pharm:** Cytotoxic (Colon26-L5,  $ED_{50} = 3.61 \mu\text{mol/L}$ , control 5-FU,  $ED_{50} = 0.53 \mu\text{mol/L}$ ; HT1080,  $ED_{50} = 25.7 \mu\text{mol/L}$ , 5-FU,  $ED_{50} = 8.0 \mu\text{mol/L}$ )<sup>[3048]</sup>. **Source:** YUN NAN CAO KOU *Alpinia blepharocalyx* (seed: yield = 0.000055%dw)<sup>[3048]</sup>. **Ref:** 3035, 3048.

**2500 Blepharocalyxin E**

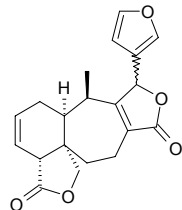
$C_{54}H_{54}O_{11}$  (879.03). Light yellow amorphous solid,  $[\alpha]_D^{25} = +145.5^\circ$  ( $c = 0.025$ , MeOH). **Pharm:** Cytotoxic (Colon26-L5,  $ED_{50} = 32.2 \mu\text{mol/L}$ , control 5-FU,  $ED_{50} = 0.53 \mu\text{mol/L}$ ; HT1080,  $ED_{50} = 9 \mu\text{mol/L}$ , 5-FU,  $ED_{50} = 8.0 \mu\text{mol/L}$ ). **Source:** YUN NAN CAO KOU *Alpinia blepharocalyx* (seed: yield = 0.000070%dw). **Ref:** 3048.

**2501 Blepharolide A**

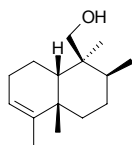
[260969-76-4]  $C_{20}H_{20}O_6$  (356.38). Colorless crystals, mp 252–254°C,  $[\alpha]_D^{20} = -13.7^\circ$  ( $c = 0.204$ ,  $\text{CHCl}_3$ ). **Source:** JIE MAO YE SHU WEI CAO *Salvia blepharophylla*. **Ref:** 2411.

**2502 Blepharolide B**

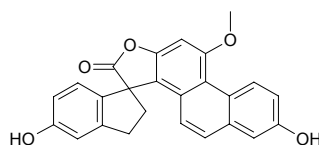
[260969-77-5]  $C_{20}H_{20}O_5$  (340.38). Colorless crystals, mp 260–262°C,  $[\alpha]_D^{20} = -98.1^\circ$  ( $c = 0.212$ ,  $\text{CHCl}_3$ ). **Source:** JIE MAO YE SHU WEI CAO *Salvia blepharophylla*. **Ref:** 2411.

**2503 Blepharostol**

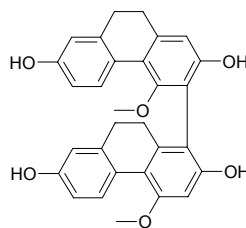
$C_{15}H_{26}O$  (222.37). Colorless oil,  $[\alpha]_D^{20} = +27.8^\circ$  ( $c = 0.19$ ,  $\text{CHCl}_3$ ). **Source:** JIE MAO TAI *Blepharostoma trichophyllum*. **Ref:** 3843.

**2504 Blespirol**

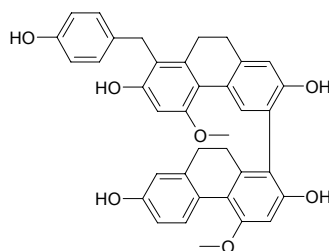
$C_{25}H_{18}O_5$  (398.42). **Source:** BAI JI *Bletilla striata*. **Ref:** 660.

**2505 Blestrianol A**

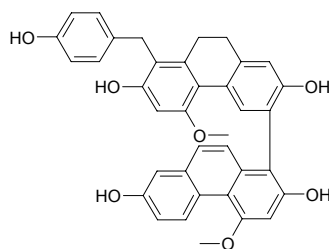
[136966-83-1]  $C_{30}H_{26}O_6$  (482.54). **Source:** BAI JI *Bletilla striata*. **Ref:** 660.

**2506 Blestrianol B**

[136966-84-2]  $C_{37}H_{32}O_7$  (588.66). **Source:** BAI JI *Bletilla striata*. **Ref:** 660.

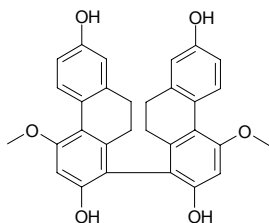
**2507 Blestrianol C**

[136966-85-3]  $C_{37}H_{30}O_7$  (586.65). **Source:** BAI JI *Bletilla striata*. **Ref:** 660.

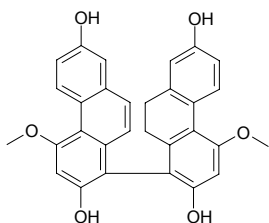


**2508 Blestriarene A**

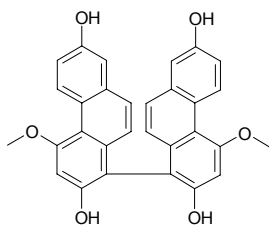
$C_{30}H_{26}O_6$  (482.54). Colorless crystals. **Pharm:** Antiallergic  $\beta$ -Hexosaminidase inhibitor (rat basophilic RBL-2H3 cells, inhibits release of  $\beta$ -hexosaminidase,  $100\mu\text{mol/L}$ ,  $\text{InRt} = (86.8 \pm 1.1)\mu\text{mol/L}$ ,  $p < 0.01$ ;  $300\mu\text{mol/L}$  control Ketotifen fumarate,  $\text{InRt} = (72.5 \pm 0.9)\mu\text{mol/L}$ ,  $p < 0.01$ )<sup>[5022]</sup>. **Source:** BAI JI *Bletilla striata*, SHOU ZHANG SHEN *Gymnadenia conopsea* (tuber). **Ref:** 660, 5022.

**2509 Blestriarene B**

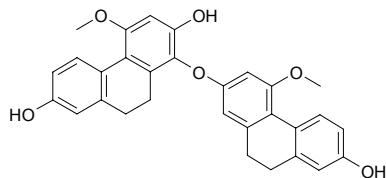
[127211-03-4]  $C_{30}H_{24}O_6$  (480.52). **Pharm:** Antibacterial (*Staphylococcus aureus* and *Streptococcus mutans*). **Source:** BAI JI *Bletilla striata*, LAN YU BAI JI *Bletilla formosana* (whole herb). **Ref:** 658, 4500.

**2510 Blestriarene C**

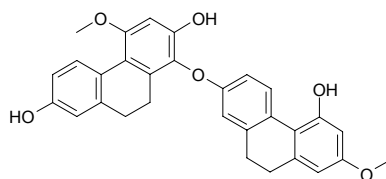
$C_{30}H_{22}O_6$  (478.51). **Source:** BAI JI *Bletilla striata*. **Ref:** 660.

**2511 Blestrin A**

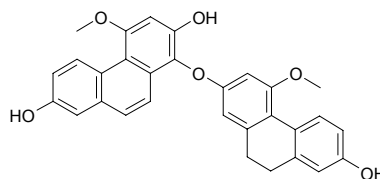
$C_{30}H_{26}O_6$  (482.54). **Source:** BAI JI *Bletilla striata*. **Ref:** 660.

**2512 Blestrin B**

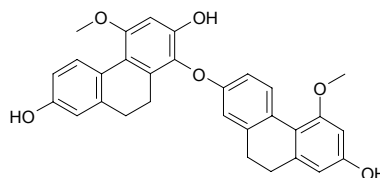
$C_{30}H_{26}O_6$  (482.54). **Source:** BAI JI *Bletilla striata*. **Ref:** 660.

**2513 Blestrin C**

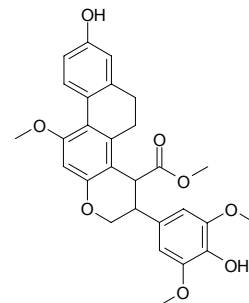
$C_{30}H_{24}O_6$  (480.52). **Source:** BAI JI *Bletilla striata*. **Ref:** 660.

**2514 Blestrin D**

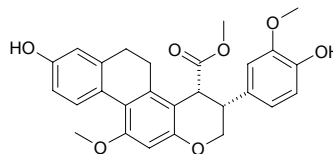
$C_{30}H_{26}O_6$  (482.54). **Source:** BAI JI *Bletilla striata*. **Ref:** 660.

**2515 Bletilol A**

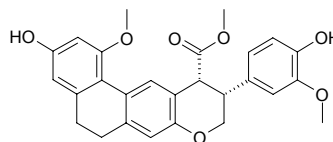
$C_{28}H_{28}O_8$  (492.53). **Source:** BAI JI *Bletilla striata*. **Ref:** 660.

**2516 Bletilol B**

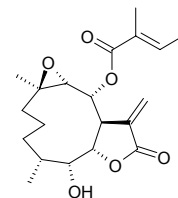
$C_{27}H_{26}O_7$  (462.50). **Source:** BAI JI *Bletilla striata*. **Ref:** 660.

**2517 Bletilol C**

$C_{27}H_{26}O_7$  (462.50). **Source:** BAI JI *Bletilla striata*. **Ref:** 660.

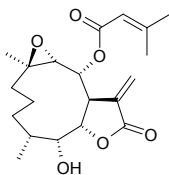
**2518 Blumealactone A**

$C_{20}H_{28}O_6$  (364.44). **Source:** AI NA XIANG *Blumea balsamifera*. **Ref:** 660.

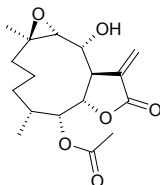


**2519 Blumealactone B**

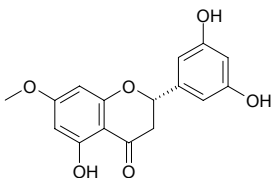
$C_{20}H_{28}O_6$  (364.44). Source: AI NA XIANG *Blumea balsamifera*. Ref: 660.

**2520 Blumealactone C**

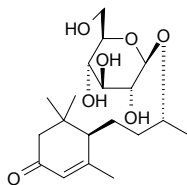
$C_{17}H_{24}O_6$  (324.38). Source: AI NA XIANG *Blumea balsamifera*. Ref: 660.

**2521 Blumeatin**

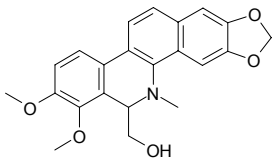
5,3',5'-Trihydroxy-7-methoxy dihydroflavone  $C_{16}H_{14}O_6$  (302.29). Source: AI NA XIANG *Blumea balsamifera*. Ref: 660.

**2522 Blumenol C glucoside**

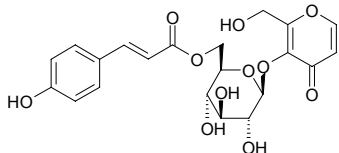
(6*S*,9*R*)-Megastigman-3-on-4-en-9-ol 9-*O*- $\beta$ -*D*-glucopyranoside  $C_{19}H_{32}O_7$  (372.46). Source: CHUI ZHU SUAN PAN ZI *Glochidion zeylanicum* (leaf). Ref: 4323.

**2523 Boconoline**

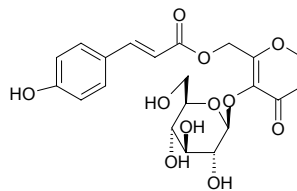
$C_{22}H_{21}NO_5$  (379.42). Source: BO LUO HUI *Macleaya cordata*, RU DI JIN NIU *Zanthoxylum nitidum*. Ref: 660.

**2524 Bockioside A**

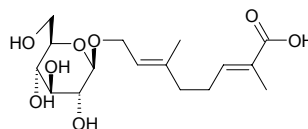
Hyxymaltol 3-*O*-(6-*O*-*p*-coumaryl)- $\beta$ -*D*-glucopyranoside  $C_{21}H_{22}O_{11}$  (450.40). Colorless amorphous solid,  $[\alpha]_D^{25} = -73.8^\circ$  ( $c = 1.3$ , MeOH). Source: XI NAN BA QIA *Smilax bockii* (tuber). Ref: 3773.

**2525 Bockioside B**

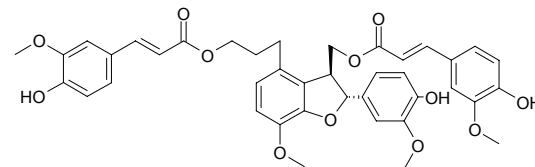
7-*O*-*p*-Coumaroylhydroxymaltol 3-*O*- $\beta$ -*D*-glucopyranoside  $C_{21}H_{22}O_{11}$  (450.40). Colorless amorphous solid,  $[\alpha]_D^{25} = -21.3^\circ$  ( $c = 0.3$ , MeOH). Source: XI NAN BA QIA *Smilax bockii* (tuber). Ref: 3773.

**2526 Bodinierin**

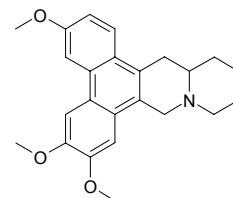
$C_{16}H_{26}O_8$  (346.38). White powder, mp 180°C (dec). Source: FENG WEI CHA *Elsholtzia bodinieri* (whole herb). Ref: 4590.

**2527 Boehmenan**

[57296-22-7]  $C_{40}H_{40}O_{12}$  (712.76). Powder. Pharm: Anti-HIV (H9 lymphocytic cells, inhibits replication,  $IC_{50}$  (concentration that inhibits uninfected H9 cell growth by 50%) = 19.42  $\mu$ g/mL)<sup>[2529]</sup>; cytotoxic (hmn, A549,  $EC_{50} = 18.4 \mu$ g/mL, MCF7,  $EC_{50} = 10.9 \mu$ g/mL)<sup>[2529]</sup>. Source: CHI MA *Boehmeria platanifolia* [Syn. *Boehmeria tricuspidis*], TAI WAN FU RONG *Hibiscus taiwanensis*. Ref: 660, 1521, 2529.

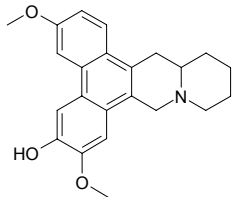
**2528 Boehmeriasin A**

$C_{24}H_{27}NO_3$  (377.49). White needles ( $CH_2Cl_2$ - $CH_3OH$ ), mp 216–218°C,  $[\alpha]_D^{20} = -80.4^\circ$  ( $c = 0.1$ , MeOH). Pharm: Cytotoxic (K562,  $GI_{50} = 100$  ng/mL; HL-60,  $GI_{50} = 5$  ng/mL; DU145,  $GI_{50} = 2$  ng/mL; PC3,  $GI_{50} = 5$  ng/mL; A549,  $GI_{50} = 0.3$  ng/mL; NCI-H460,  $GI_{50} = 0.3$  ng/mL; MCF7,  $GI_{50} = 5$  ng/mL; MDA-MB-231,  $GI_{50} = 3$  ng/mL; ACHN,  $GI_{50} = 0.3$  ng/mL; UO-31,  $GI_{50} = 0.4$  ng/mL; HT29,  $GI_{50} = 0.2$  ng/mL; Colon205,  $GI_{50} = 0.3$  ng/mL; control Taxol,  $GI_{50} = >100$  ng/mL, 77 ng/mL, 40 ng/mL, 44 ng/mL, 30 ng/mL, 20 ng/mL, 80 ng/mL, 40 ng/mL,  $>100$  ng/mL,  $>100$  ng/mL, 40 ng/mL, 40 ng/mL, respectively)<sup>[5450]</sup>. Source: SHU XU ZHU MA *Boehmeria siamensis*. Ref: 5450.

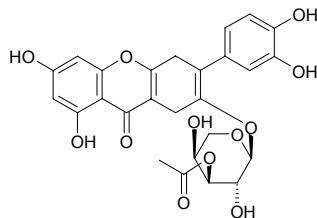


**2529 Boehmeriasin B**

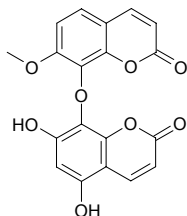
$C_{23}H_{25}NO_3$  (363.46). White powder ( $CH_2Cl_2$ - $CH_3OH$ ), mp 248–250°C,  $[\alpha]_D^{20} = -63.7^\circ$  ( $c = 0.2$ , MeOH). **Pharm:** Cytotoxic (lower activity than Boehmeriasin A). **Source:** SHU XU ZHU MA *Boehmeria siamensis*. **Ref:** 5450.

**2530 Boehmerin**

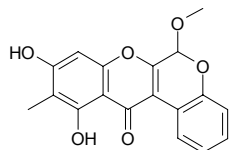
$C_{26}H_{24}O_{12}$  (528.47). **Source:** CHI MA *Boehmeria platanifolia* [Syn. *Boehmeria tricuspis*]. **Ref:** 660.

**2531 Boennin**

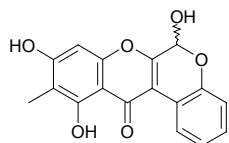
$C_{19}H_{12}O_8$  (368.30). **Source:** SHI JIAO CAO *Boenninghausenia sessilicarpa*, YAN JIAO CAO *Boenninghausenia albiflora*. **Ref:** 2495.

**2532 Boeravinone A**

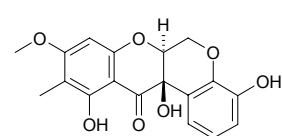
$C_{18}H_{14}O_6$  (326.31). **Source:** HUANG XI XIN *Boerhavia diffusa*. **Ref:** 660.

**2533 Boeravinone B**

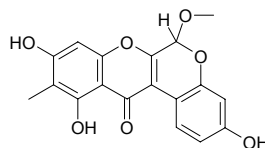
$C_{17}H_{12}O_6$  (312.28). **Source:** HUANG XI XIN *Boerhavia diffusa*. **Ref:** 660.

**2534 Boeravinone C**

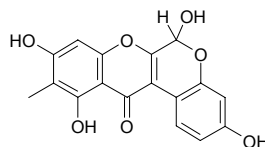
$C_{18}H_{16}O_7$  (344.32). **Source:** HUANG XI XIN *Boerhavia diffusa*. **Ref:** 660.

**2535 Boeravinone D**

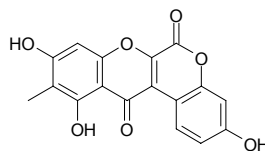
$C_{18}H_{14}O_7$  (342.31). **Source:** HUANG XI XIN *Boerhavia diffusa*. **Ref:** 660.

**2536 Boeravinone E**

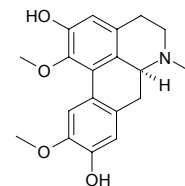
$C_{17}H_{12}O_7$  (328.28). **Source:** HUANG XI XIN *Boerhavia diffusa*. **Ref:** 660.

**2537 Boeravinone F**

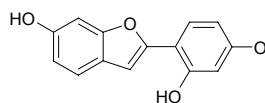
$C_{17}H_{10}O_7$  (326.27). **Source:** HUANG XI XIN *Boerhavia diffusa*. **Ref:** 660.

**2538 Boldine**

[476-70-0]  $C_{19}H_{21}NO_4$  (327.38). **Pharm:** Choleric (bile secretion promotor); laxative; antihypercholesterolemic; antihepatotoxic; treatment of hepatic insufficiency. **Source:** BO LU DU SHU *Peumus boldus*, CHAN GAO MU JIANG ZI *Litsea glutinosa*, LI FEI MU JIANG ZI *Litsea lefeana*, MEI ZHOU CHA MU *Sassafras albidum*, NI ZHAO MU JIANG ZI *Litsea turfosa*, YUE GUI SHU YE MU JIANG ZI *Litsea laurifolia*, ZHOU SHAN XIN MU JIANG ZI *Neolitsea sericea*. **Ref:** 658.

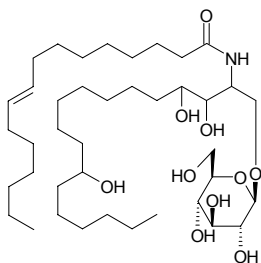
**2539 Bolusanthin IV**

6,6'-Dihydroxy-4'-methoxy-2-arylbenzofuran  $C_{15}H_{12}O_4$  (256.26). Brown solid, mp 178–180°C. **Pharm:** Antibacterial (*Escherichia coli*, MIA = 0.5µg, control Chloramphenicol, MIA = 0.001µg; *Bacillus subtilis*, MIA = 0.05µg, Chloramphenicol, MIA = 0.001µg; *Staphylococcus aureus*, MIA = 0.01µg, Chloramphenicol, MIA = 0.001µg); antifungal (*Candida mycoderma*, MIA = 0.05µg, Miconazole, MIA = 0.0001µg); antioxidant (DPPH scavenger, TLC detection limit = 0.1µg,  $IC_{50} = 29\mu g/mL$ ; control Quercetin, TLC detection limit < 0.05µg,  $IC_{50} = 7\mu g/mL$ ; Gallic acid, TLC detection limit < 0.05µg,  $IC_{50} = 4\mu g/mL$ ; Ascorbic acid, TLC detection limit < 0.10µg,  $IC_{50} = 18\mu g/mL$ ). **Source:** *Bolusanthus speciosus* (root wood). **Ref:** 3785.

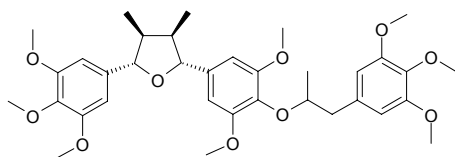


**2540 Bonaroside**

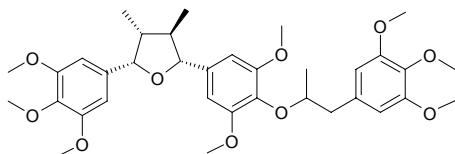
$C_{40}H_{77}NO_{10}$  (732.06). White powder, mp 172–174°C,  $[\alpha]_D^{25} = +178.6^\circ$  ( $c = 0.14$ , MeOH). Source: XIANG SI CAO *Conyza bonariensis* [Syn. *Erigeron bonariensis*; *Erigeron linifolius*; *Erigeron crispus*] (aerial parts). Ref: 5206.

**2541 Bonaspectin A**

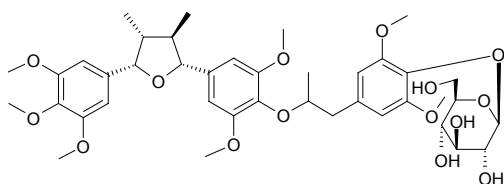
$C_{35}H_{46}O_{10}$  (626.75). Oil. Source: *Bonamia spectabilis* (aerial parts). Ref: 3904.

**2542 Bonaspectin B**

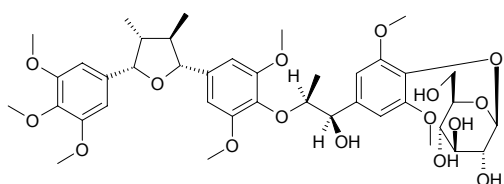
$C_{35}H_{46}O_{10}$  (626.75). Oil,  $[\alpha]_D^{20} = +11.5^\circ$  ( $c = 0.2$ ,  $CHCl_3$ ). Source: *Bonamia spectabilis* (aerial parts). Ref: 3904.

**2543 Bonaspectin C 4''-β-glucoside**

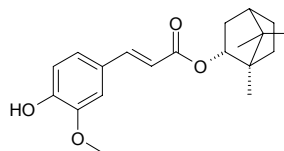
$C_{40}H_{54}O_{15}$  (774.87). Oil,  $[\alpha]_D^{20} = +12.4^\circ$  ( $c = 0.23$ ,  $CHCl_3$ ). Source: *Bonamia spectabilis* (aerial parts). Ref: 3904.

**2544 Bonaspectin D 4''-β-glucoside**

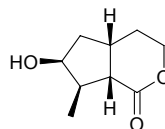
$C_{40}H_{54}O_{16}$  (790.87). Oil,  $[\alpha]_D^{20} = +15.3^\circ$  ( $c = 0.3$ ,  $CHCl_3$ ). Source: *Bonamia spectabilis* (aerial parts). Ref: 3904.

**2545 (-)-Bonyl ferulate**

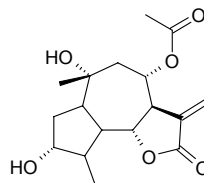
$C_{20}H_{26}O_4$  (330.43).  $[\alpha]_D^{22} = -31.7^\circ$  ( $c = 1$ , EtOH). Source: QIANG HUO *Notopterygium incisum*. Ref: 723.

**2546 Boonein**

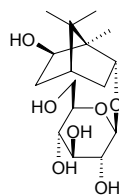
$C_9H_{14}O_3$  (170.21). Source: RI BEN ZHANG YA CAI *Swertia japonica*. Ref: 2528.

**2547 Borenoilide**

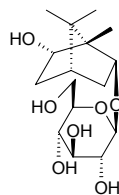
$C_{17}H_{24}O_6$  (34.38). Pharm: Anti-apoptosis (etoposide-induced,  $IC_{50} = (6.2 \pm 0.7) \mu\text{g/mL}$ ; control PDTC,  $IC_{50} = (8.0 \pm 0.5) \mu\text{g/mL}$ )<sup>[5455]</sup>. Source: BEI YE JU *Chrysanthemum boreale*. Ref: 5455.

**2548 (1R,2R,4S,6R)-Bornane-2,6-diol 2-O-β-D-glucopyranoside**

$C_{16}H_{28}O_7$  (332.40). Source: SUO SHA MI *Amomum xanthioides* (seed). Ref: 4365.

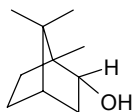
**2549 (1S,2S,4R,6S)-Bornane-2,6-diol 2-O-β-D-glucopyranoside**

$C_{16}H_{28}O_7$  (332.40). Colorless needles (MeOH), mp 114–116°C,  $[\alpha]_D^{23} = +9^\circ$  ( $c = 0.8$ , MeOH). Source: SUO SHA MI *Amomum xanthioides* (seed). Ref: 4365.

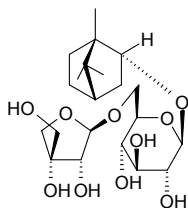


**2550 Borneol**

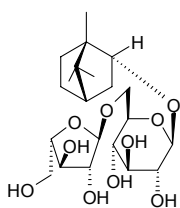
1,7,7-Trimethyl endo-bicyclo[2.2.1]heptan-2-ol  $C_{10}H_{18}O$  (154.25). mp 208°C, bp 212°C. **Pharm:** Antibacterial (D-isomer, 0.5%); anthelmintic; antispasmodic; stimulant (D-isomer); analgesic (D-isomer); induces sweating; LD<sub>50</sub> (mus, ip) = 907mg/kg. **Source:** AI NA XIANG *Blumea balsamifera*, BAI CHANG *Acorus calamus*, BAI DOU KOU *Amomum kravanh* [Syn. *Amomum cardamomum*], BING PIAN *Dryobalanops aromatica* (58.93%~59.78%), DA CAO KOU *Alpinia speciosa*, DU SONG SHI *Juniperus rigida*, GANG SONG *Baeckea frutescens*, JU HUA *Chrysanthemum morifolium* [Syn. *Dendranthema morifolium*] (dried capitulum: mean content of 3 origins = 0.911%<sup>[5508]</sup>), LA MEI HUA *Chimonanthus fragrans* [Syn. *Chimonanthus praecox*], MI DIE XIANG *Rosmarinus officinalis*, MIAN MAO MA DOU LING *Aristolochia mollissima* (dried root and stem: yield = 0.0019%<sup>[3026]</sup>), SHA REN *Amomum villosum* (dried ripe fruit: mean content = 0.031%<sup>[5524]</sup>), SHAN NAI *Kaempferia galanga*, SHE XIANG CAO *Thymus vulgaris*, SHENG JIANG *Zingiber officinale*, SHI XIANG RU *Mosla chinensis* [Syn. *Orthodon chinensis*], SHUANG YE XI XIN *Asarum caulescens*, SUO SHA MI *Amomum xanthioides*, XIE CAO *Valeriana officinalis*, YANG SHI CAO *Achillea millefolium*, ZHI ZHU XIANG *Valeriana jatamansii* [Syn. *Valeriana wallichii*], occurs in many plants. **Ref:** 1, 2, 660, 3026, 5501, 5508, 5524.

**2551 Borneol-2-O-β-D-apiofuranosyl(1→6)-β-D-glucopyranoside**

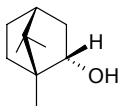
$C_{21}H_{36}O_{10}$  (448.52). **Source:** MAI DONG *Ophiopogon japonicus*. **Ref:** 660.

**2552 Borneol-2-O-α-L-arabinofuranosyl(1→6)-β-D-glucopyranoside**

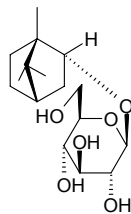
$C_{21}H_{36}O_{10}$  (448.52). **Source:** MAI DONG *Ophiopogon japonicus*. **Ref:** 660.

**2553 D-Borneol**

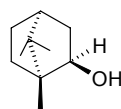
(+)-(1R,2S)-Borneol [464-43-7]  $C_{10}H_{18}O$  (154.25). **Source:** BING PIAN *Dryobalanops aromatica*. **Ref:** 2.

**2554 Borneol-2-O-β-D-glucopyranoside**

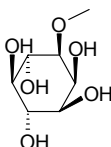
$C_{16}H_{28}O_6$  (316.40). **Source:** MAI DONG *Ophiopogon japonicus*. **Ref:** 660.

**2555 L-Borneol**

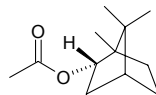
(-)-(1S,2R)-Borneol [464-45-9]  $C_{10}H_{18}O$  (154.25). mp 204°C, bp 210°C/779mmHg. **Source:** AI NA XIANG *Blumea balsamifera*, GANG SONG *Baeckea frutescens*, SHE XIANG CAO *Thymus vulgaris*, YANG SHI CAO *Achillea millefolium*, YE XIANG MAO *Cymbopogon goeringii*, ZHI ZHU XIANG *Valeriana jatamansii* [Syn. *Valeriana wallichii*], KUO YE XIE CAO *Valeriana officinalis* var. *latifolia*. **Ref:** 6, 660.

**2556 L(+)-Bornesitol**

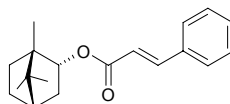
1-O-Methyl-myoinositol  $C_7H_{14}O_6$  (194.19). mp 201~203°C. **Source:** HUANG HUA JIA ZHU TAO *Thevetia nerifolia* [Syn. *Thevetia peruviana*], JIANG LI MU GEN *Rhamnus leptophylla*. **Ref:** 6.

**2557 Bornyl acetate**

$C_{12}H_{20}O_2$  (196.29). (+) Crystals, mp 29°C; bp 225~226°C. **Pharm:** Antitussive (dispels phlegm). **Source:** HAI NAN SHA REN *Amomum longiligulare* (dried ripe fruit: mean content = 1.40%<sup>[5508]</sup>), MI DIE XIANG *Rosmarinus officinalis*, SHA REN *Amomum villosum* (dried ripe fruit: mean content of 19 origins = 2.10%<sup>[5508]</sup>; mean content = 0.160%<sup>[5524]</sup>), SHAN HU JIAO *Lindera glauca*, SUO SHA MI *Amomum xanthioides* (dried ripe fruit: mean content = 1.53%<sup>[5508]</sup>), YANG SHI CAO *Achillea millefolium*. **Ref:** 658, 661, 5501, 5508, 5524.

**2558 Bornyl cinnamate**

$C_{20}H_{28}O_2$  (300.44). **Source:** LU LU TONG *Liquidambar formosana* [Syn. *Liquidambar taiwaniana*]. **Ref:** 660.



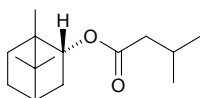


**2559 Bornylene**

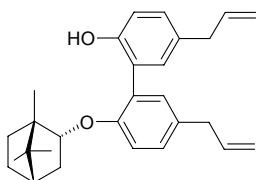
$C_{10}H_{16}$  (136.24). Source: CHENG GAN CAO *Eupatorium japonicum*, HUA ZE LAN *Eupatorium chinense*, QU CHONG BAN JIU JU *Vernonia anthelmintica*, ROU DOU KOU *Myristica fragrans*. Ref: 660.

**2560 Bornyl isovalerianate**

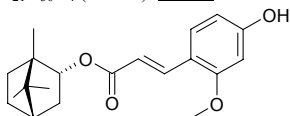
[76-50-6]  $C_{15}H_{26}O_2$  (238.37). Source: HUANG HUA HAO *Artemisia annua*. Ref: 2.

**2561 Bornylmagnolol**

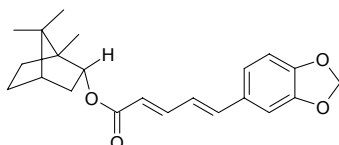
$C_{28}H_{34}O_2$  (402.58). Source: HOU PO *Magnolia officinalis*. Ref: 2, 660.

**2562 Bornyl-2-methoxy-4-hydroxycinnamate**

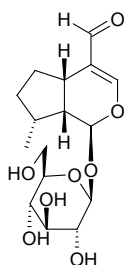
$C_{21}H_{30}O_4$  (346.47). Source: SHE TAI *Conocephalum conicum*. Ref: 660.

**2563 (+)-Bornyl piperate**

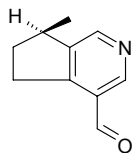
$C_{22}H_{26}O_4$  (354.45). Colorless needles, mp 93~95°C (hexane),  $[\alpha]_D^{27} = +7.80^\circ$  ( $c = 0.1$ ,  $CHCl_3$ ). Source: *Piper* aff. *pedicellatum* (underground root). Ref: 4296.

**2564 Boschnaloside**

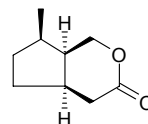
$C_{16}H_{24}O_8$  (344.36). Pharm: Enhances sex drive (male mouse with stress loading); antioxidant; anti-ischemia myocardial (coronary arteries-ligated rat, significant improvement in ECG parameters, reduces the area of cardiac muscle infarction, enhances SOD activity and CPK activity in cardiac muscles); SOD activity enhancer (mouse erythrocytes); reduces MDA content (mouse serum); antimutagenic (mouse). Source: ROU CONG RONG *Cistanche deserticola*. Ref: 5501.

**2565 Boschniakine**

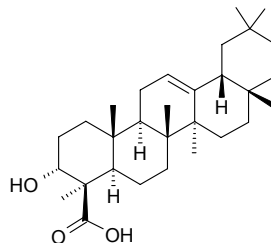
[18070-40-1]  $C_{10}H_{11}NO$  (161.21). bp 80~90°C/3mmHg. Source: CAO CONG RONG *Boschniakia rossica*. Ref: 6.

**2566 Boschnialactone**

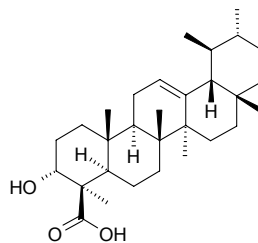
[17957-87-8]  $C_9H_{14}O_2$  (154.21). bp 105~112°C/6mmHg. Pharm: Stimulant (cat). Source: CAO CONG RONG *Boschniakia rossica*. Ref: 6, 658.

**2567  $\alpha$ -Boswellic acid**

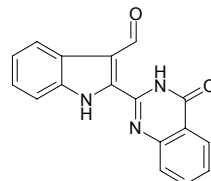
3 $\alpha$ -Hydroxy-12-oleanen-24-oic acid [471-66-9]  $C_{30}H_{48}O_3$  (456.72). mp 289°C. Source: RU XIANG *Boswellia carterii*. Ref: 6.

**2568  $\beta$ -Boswellic acid**

[631-69-6]  $C_{30}H_{48}O_3$  (456.72). mp 238~240°C. Source: RU XIANG *Boswellia carterii*. Ref: 6.

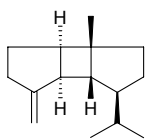
**2569 Bouchardatine**

2-(2-[3-Tormylindolyl])-(3H)-quinazolin-4-one  $C_{17}H_{11}N_3O_2$  (289.30). Yellow amorphous powder. Source: *Bouchardatia neurococca*. Ref: 3445.

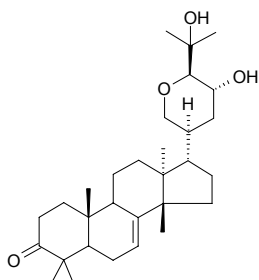


**2570  $\beta$ -Bourbonene**

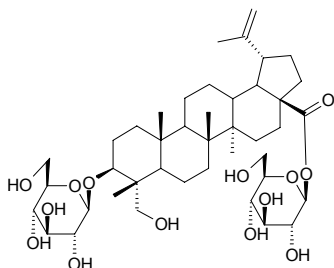
[5208-59-3] C<sub>15</sub>H<sub>24</sub> (204.36). Source: MU HAO *Artemisia japonica*, HUANG HUA HAO *Artemisia annua*. Ref: 6, 660.

**2571 Bourjotinolone A**

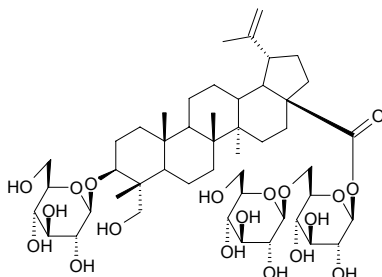
C<sub>30</sub>H<sub>48</sub>O<sub>4</sub> (472.71). Source: *Eurycoma* sp. Ref: 4556.

**2572 Bourneioside A**

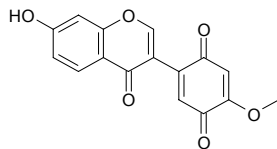
3-*O*- $\beta$ -*D*-Glucopyranosyl-23-hydroxy-lup-20(29)-en-28-oic acid-28-*O*- $\beta$ -*D*-glucopyranosyl ester C<sub>42</sub>H<sub>68</sub>O<sub>14</sub> (797.00). White crystals (MeOH), mp 205~207°C, [ $\alpha$ ]<sub>D</sub><sup>21</sup> = +55.0° (*c* = 0.1, MeOH). Source: XI NAN REN DONG *Lonicera bournei* (flower bud). Ref: 3986.

**2573 Bourneioside B**

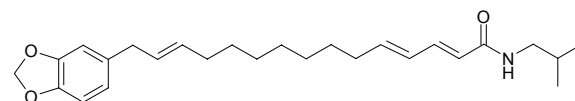
3-*O*- $\beta$ -*D*-Glucopyranosyl-23-hydroxy-lup-20(29)-en-28-oic acid-28-*O*-[ $\beta$ -*D*-glucopyranosyl-(1→6)- $\beta$ -*D*-glucopyranosyl]ester C<sub>48</sub>H<sub>78</sub>O<sub>19</sub> (959.15). White crystals (MeOH), mp 214~216°C, [ $\alpha$ ]<sub>D</sub><sup>21</sup> = +40.0° (*c* = 0.1, MeOH). Source: XI NAN REN DONG *Lonicera bournei* (flower bud). Ref: 3986.

**2574 Bowdichione**

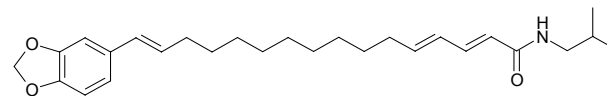
[53774-75-7] C<sub>16</sub>H<sub>10</sub>O<sub>6</sub> (298.25). Source: JIANG ZHEN XIANG *Dalbergia odorifera*. Ref: 716.

**2575 Brachystamide C**

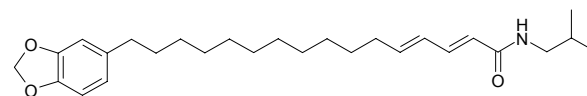
C<sub>26</sub>H<sub>37</sub>NO<sub>3</sub> (411.59). White amorphous solid, mp 90~95°C. Source: DUAN SUI HU JIAO *Piper brachystachyum*. Ref: 2013.

**2576 Brachystamide D**

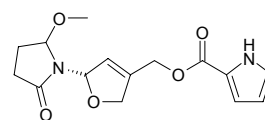
C<sub>27</sub>H<sub>39</sub>NO<sub>3</sub> (425.62). White amorphous solid, mp 88~90°C. Source: CHANG GUO BI BA *Piper retrofractum*, DUAN SUI HU JIAO *Piper brachystachyum*. Ref: 2013.

**2577 Brachystamide E**

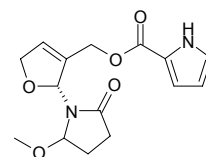
C<sub>27</sub>H<sub>41</sub>NO<sub>3</sub> (427.63). Source: DUAN SUI HU JIAO *Piper brachystachyum*. Ref: 2013.

**2578 Brachystemidine A**

C<sub>15</sub>H<sub>18</sub>N<sub>2</sub>O<sub>5</sub> (306.32). White solid, mp 210~211.5°C, [ $\alpha$ ]<sub>D</sub><sup>28</sup>: laevo but unstable (*c* = 0.24, MeOH). Source: DUAN BAN HUA *Brachystemma calycinum* (root: yield = 0.00004%dw). Ref: 4629.

**2579 Brachystemidine B**

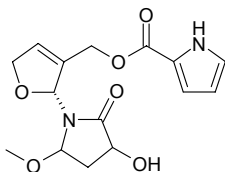
C<sub>15</sub>H<sub>18</sub>N<sub>2</sub>O<sub>5</sub> (306.32). White solid, mp 151~152°C, [ $\alpha$ ]<sub>D</sub><sup>27</sup> = -3.1° (*c* = 0.32, MeOH) Source: DUAN BAN HUA *Brachystemma calycinum* (root: yield = 0.000005%dw). Ref: 4629.



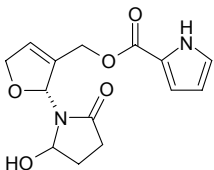
**2580 Brachystemidine C**

$C_{15}H_{18}N_2O_6$  (322.32). Colorless gum,  $[\alpha]_D^{21} = -21.0^\circ$  ( $c = 0.25$ ,  $CHCl_3$ ).

Source: DUAN BAN HUA *Brachystemma calycinum* (root: yield = 0.00002%dw). Ref: 4629.

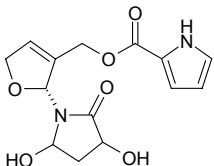
**2581 Brachystemidine D**

$C_{14}H_{16}N_2O_5$  (292.29). Colorless block, mp 147.5~149°C,  $[\alpha]_D^{25} = +3.52^\circ$  ( $c = 0.43$ , MeOH). Source: DUAN BAN HUA *Brachystemma calycinum* (root: yield = 0.000004%dw). Ref: 4629.

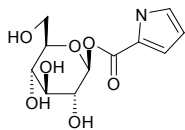
**2582 Brachystemidine E**

$C_{14}H_{16}N_2O_6$  (308.29). Colorless gum,  $[\alpha]_D^{28} = +0.76^\circ$  ( $c = 1.65$ , MeOH).

Source: DUAN BAN HUA *Brachystemma calycinum* (root: yield = 0.000008%dw). Ref: 4629.

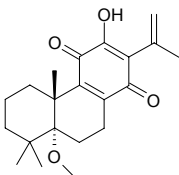
**2583 Brachystemoside A**

1'- $\beta$ -D-Glucopyranosyl-2-pyrrole-carboxylate  $C_{11}H_{15}NO_7$  (273.24). Colorless oil. Source: DUAN BAN HUA *Brachystemma calycinum*. Ref: 2146.

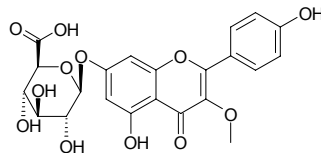
**2584 Bractealine**

5-Methoxy-12-hydroxy-11,14-dioxo-abieta-8,12,15-triene  $C_{21}H_{28}O_4$  (344.45).

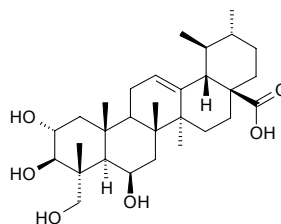
$[\alpha]_D = 0^\circ$  ( $c = 0.8$ ,  $CHCl_3$ ). Pharm: Antibacterial (*Bacillus subtilis*, MIC = 32.9  $\mu$ g/mL; *Staphylococcus epidermidis*, MIC = 16.80  $\mu$ g/mL)<sup>[2406]</sup>. Source: BAO PIAN SHU WEI CAO *Salvia bracteata* (root). Ref: 2406.

**2585 Bracteoside**

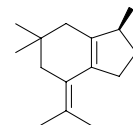
Isokaempferide 7-O- $\beta$ -D-glucopyranouronide  $C_{22}H_{20}O_{12}$  (476.40). Pale yellow solid,  $[\alpha]_D^{20} = -42.3^\circ$  ( $c = 0.10$ , MeOH). Source: BAO PIAN SHI CHE JU *Centaurea bracteata* (aerial parts). Ref: 5151.

**2586 Brahmic acid**

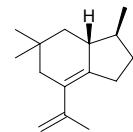
Madecassic acid [18449-41-7]  $C_{30}H_{48}O_6$  (504.71). mp 293°C. Source: JI XUE CAO *Centella asiatica*. Ref: 6.

**2587 Brasila-1(6),5(10)-diene**

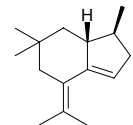
$C_{15}H_{24}$  (204.36). Source: SHE TAI *Conocephalum conicum*. Ref: 2299.

**2588 Brasila-5,10-diene**

$C_{15}H_{24}$  (204.36). Source: SHE TAI *Conocephalum conicum*. Ref: 2299.

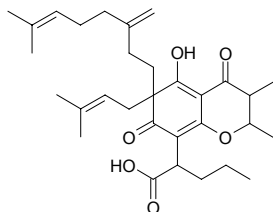
**2589 Brasila-5(10),6-diene**

$C_{15}H_{24}$  (204.36). Source: SHE TAI *Conocephalum conicum*. Ref: 2299.

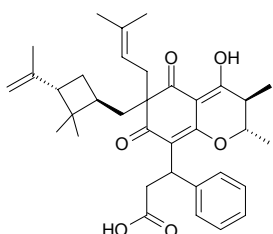


**2590 Brasiliensic acid**

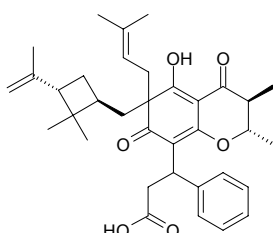
$C_{31}H_{44}O_6$  (512.69). **Pharm:** Cytotoxic (KB,  $IC_{50} = 11.0\mu\text{g/mL}$ ); antibacterial (*Staphylococcus aureus*,  $20\mu\text{g/disk}$ ,  $DIZ = 11.0\text{mm}$ ; *Escherichia coli*,  $20\mu\text{g/disk}$ , inactive; *Vibrio anguillarum*,  $20\mu\text{g/disk}$ , inactive); antifungal inactive (*Candida tropicalis*,  $20\mu\text{g/disk}$ ). **Source:** BA XI HU TONG *Calophyllum brasiliense*, HAI TANG GUO *Calophyllum inophyllum* (root cortex and nut). **Ref:** 1521, 3866.

**2591 Brasiliensophyllic acid A**

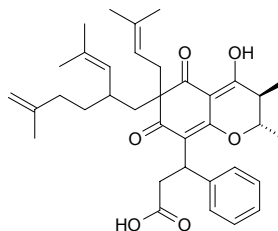
3-[*rel*-(2*R*,3*R*)-4-Hydroxy-6-(3*α*-isopropenyl-2,2-dimethylcyclobutyl- $\beta$ -methyl)-2,3-dimethyl-6-(3-methylbut-2-enyl)-5,7-dioxo-3,5,6,7-tetrahydro-2*H*-chromen-8-yl]-3-phenylpropionic acid  $C_{35}H_{44}O_6$  (560.74). Green gum,  $[\alpha]_D^{20} = -5^\circ$  ( $c = 0.1$ , MeOH). **Pharm:** Antibacterial (*Bacillus cereus*,  $MIC = 1\mu\text{g/mL}$ ; control Chloramphenicol,  $MIC = 4\mu\text{g/mL}$ ; *Staphylococcus epidermidis*,  $MIC = 16\mu\text{g/mL}$ , Chloramphenicol,  $MIC = 4\mu\text{g/mL}$ ); cytotoxic inactive (KB, Jurkat-T, and myosarcoma,  $20\mu\text{g/mL}$ ). **Source:** BA XI HU TONG *Calophyllum brasiliense* (bark: yield = 0.0030%dw). **Ref:** 3019.

**2592 Brasiliensophyllic acid B**

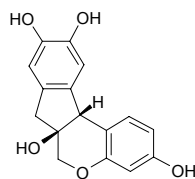
3-[*rel*-(2*R*,3*R*)-4-Hydroxy-6-(3*α*-isopropenyl-2,2-dimethylcyclobutyl- $\beta$ -methyl)-2,3-dimethyl-6-(3-methylbut-2-enyl)-5,7-dioxo-3,5,6,7-tetrahydro-2*H*-chromen-8-yl]-3-phenylpropionic acid  $C_{35}H_{44}O_6$  (560.74). Yellow gum,  $[\alpha]_D^{20} = -25^\circ$  ( $c = 0.1$ , MeOH). **Pharm:** Antibacterial (*Bacillus cereus*,  $MIC = 4\mu\text{g/mL}$ ; control Chloramphenicol,  $MIC = 4\mu\text{g/mL}$ ; *Staphylococcus epidermidis*,  $MIC = 16\mu\text{g/mL}$ , Chloramphenicol,  $MIC = 4\mu\text{g/mL}$ ); cytotoxic inactive (KB, Jurkat-T, and myosarcoma,  $20\mu\text{g/mL}$ ). **Source:** BA XI HU TONG *Calophyllum brasiliense* (bark: yield = 0.0005%dw). **Ref:** 3019.

**2593 Brasiliensophyllic acid C**

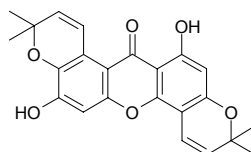
3-[*rel*-(2*R*,3*R*)-4-Hydroxy-2,3-dimethyl-6-(3-methylbut-2-enyl)-6-[5-methyl-2-(2-methylpropenyl)hex-5-enyl]-5,7-dioxo-3,5,6,7-tetrahydro-2*H*-chromen-8-yl]-3-phenylpropionic acid  $C_{36}H_{46}O_6$  (574.76). Green gum,  $[\alpha]_D^{20} = -30^\circ$  ( $c = 0.1$ , MeOH). **Pharm:** Antibacterial (*Bacillus cereus*,  $MIC = 16\mu\text{g/mL}$ ; control Chloramphenicol,  $MIC = 4\mu\text{g/mL}$ ; *Staphylococcus epidermidis*,  $MIC = 16\mu\text{g/mL}$ , Chloramphenicol,  $MIC = 4\mu\text{g/mL}$ ); cytotoxic inactive (KB, Jurkat-T, and myosarcoma,  $20\mu\text{g/mL}$ ). **Source:** BA XI HU TONG *Calophyllum brasiliense* (bark: yield = 0.001%dw). **Ref:** 3019.

**2594 Brasilin**

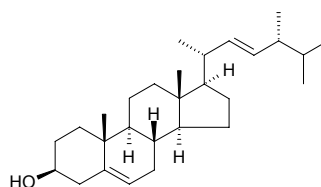
Brazilin [474-07-7]  $C_{16}H_{14}O_5$  (286.29). Amber yellow crystals, turning orange when exposed to air and sun.  $mp > 130^\circ\text{C}$  (dec); colorless acicular crystals,  $mp 191\text{--}192.5^\circ\text{C}$ . **Pharm:** Antibacterial; anti-inflammatory (rat, swollen foot model caused by carrageenan). **Source:** JI YUN SHI *Caesalpinia echinata*, SU MU *Caesalpinia sappan*. **Ref:** 1, 6, 660, 661, 4494.

**2595 Brasillixanthone A**

$C_{23}H_{20}O_6$  (392.41). **Source:** HEI XIAN TIAO TENG HUANG *Garcinia nigrolineata* (stam bark). **Ref:** 3482.

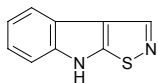
**2596 Brassicasterol**

24-Methylcholesta-5,22-dien-3 $\beta$ -ol [474-67-9]  $C_{28}H_{46}O$  (398.68).  $mp 157\text{--}158^\circ\text{C}$ ,  $mp 148^\circ\text{C}$ . **Pharm:** One of components in plant epicyte. **Source:** SHE TAI *Conocephalum conicum*, WU MAO JUE *Blechnum orientale*, WU QING *Brassica rapa*, OU ZHOU YOU CAI *Brassica napus*, YUN TAI ZI *Brassica campestris* [Syn. *Brassica campestris* var. *oleifera*]. **Ref:** 6, 658, 1408, 1472, 1521.

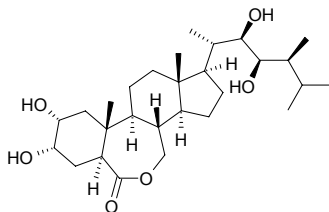


**2597 Brassilexin**

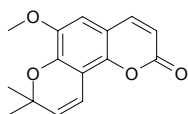
$C_9H_6N_2S$  (174.32). Source: JIE CAI *Brassica juncea*. Ref: 660.

**2598 Brassinolide**

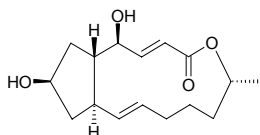
[72962-43-7]  $C_{28}H_{48}O_6$  (480.69). Pharm: Insecticidal (anti-ecdysone); promotes cell division and growth of plants. Source: OU ZHOU YOU CAI *Brassica napus*. Ref: 658.

**2599 Braylin**

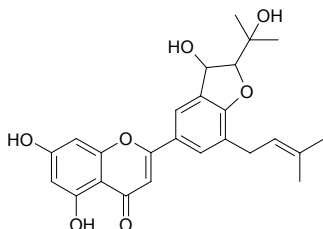
$C_{15}H_{14}O_4$  (258.28). Source: *Cedrelopsis grevei* (trunk bark). Ref: 5368.

**2600 Brefeldin A**

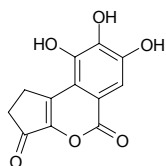
[20350-15-6]  $C_{16}H_{24}O_4$  (280.37). Source: DANG GUI *Angelica sinensis*. Ref: 1521.

**2601 Breviflavone B**

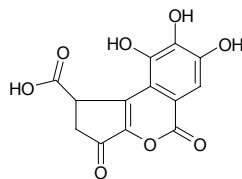
$C_{25}H_{26}O_7$  (438.48). Yellow powder,  $[\alpha]_D^{27} = -43.6^\circ$  ( $c = 0.003$ , EtOH). Pharm: Cytotoxic (inhibits the growth of breast cancer cells)<sup>[5053]</sup>. Source: YIN YANG HUO *Epimedium brevicornum* (leaf). Ref: 5053.

**2602 Brevifolin**

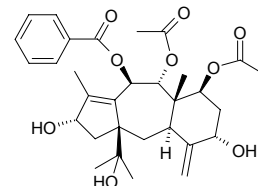
$C_{12}H_8O_6$  (248.19). Source: E BU SHI CAO *Centipeda minima*, QING GUO *Canarium album*. Ref: 660.

**2603 Brevifolincarboxylic acid**

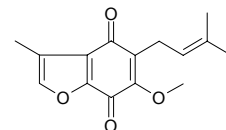
$C_{13}H_8O_8$  (292.20). Yellow amorphous powder,  $[\alpha]_D^{20} = -18.3^\circ$  ( $c = 0.9$ , acetone). Source: SHEN YE TIAN ZHU KUI *Pelargonium reniforme* (aerial parts). Ref: 3975.

**2604 Brevifoliol**

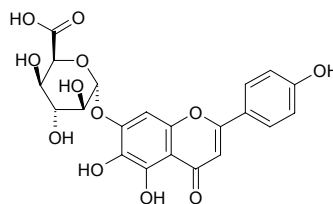
[134955-83-2]  $C_{31}H_{40}O_9$  (556.66). mp 200–203°C. Pharm: Cytotoxic (KB,  $IC_{50} = 0.4\mu\text{g/mL}$ ). Source: DUAN YE HONG DOU SHAN *Taxus brevifolia*. Ref: 662, 1775.

**2605 Breviquinone**

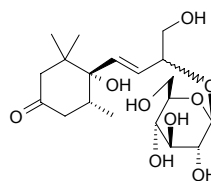
$C_{15}H_{16}O_4$  (260.29). Source: DUAN BAO YE SHA CAO *Cyperus brevibracteatus* (the compound was isolated from the plant by R.D.Allau, et al. in 1973). Ref: 5505.

**2606 Breviscapine**

$C_{21}H_{18}O_{12}$  (462.37). Purity > 98%. Pharm: Cardioprotective (*in vitro*, during hypoxia of cardiomyocytes)<sup>[4074]</sup>; cardioprotective (*in vivo*, during myocardial infarction)<sup>[4074]</sup>; Potassium channel activator; Calcium channel blocker. Source: DENG ZHAN XI XIN *Erigeron breviscapus*. Ref: 4074.

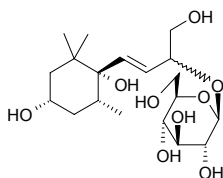
**2607 Breyniaionoside A**

(5*R*,6*S*,9*ξ*)-Megastigman-7-ene-6,9,10-triol-3-one 9-*O*-β-*D*-glucopyranoside  $C_{19}H_{32}O_9$  (404.46). Amorphous powder,  $[\alpha]_D^{27} = -48.8^\circ$  ( $c = 1.21$ , MeOH). Source: YAO YONG HEI MIAN SHEN YE *Breynia officinalis* (leaf). Ref: 2583.

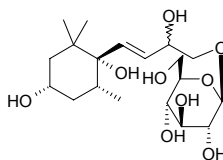


**2608 Breyniaionoside B**

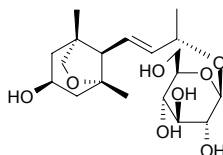
(3*S*\*,5*R*\*,6*S*\*,9*ξ*)-Megastigman-7-ene-3,6,9,10-tetrol 9-*O*- $\beta$ -*D*-glucopyranoside C<sub>19</sub>H<sub>34</sub>O<sub>9</sub> (406.48). Amorphous powder,  $[\alpha]_D = -66.5^\circ$ . Source: YAO YONG HEI MIAN SHEN YE *Breynia officinalis* (leaf). Ref: 2583.

**2609 Breyniaionoside C**

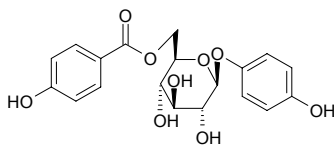
(3*S*\*,5*R*\*,6*S*\*,9*ξ*)-Megastigman-7-ene-3,6,9,10-tetrol 10-*O*- $\beta$ -*D*-glucopyranoside C<sub>19</sub>H<sub>34</sub>O<sub>9</sub> (406.48). Amorphous powder,  $[\alpha]_D = -24.3^\circ$ . Source: YAO YONG HEI MIAN SHEN YE *Breynia officinalis* (leaf). Ref: 2583.

**2610 Breyniaionoside D**

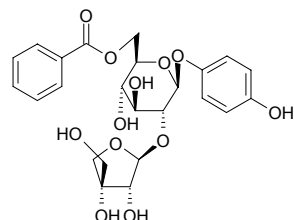
(1*S*,3*S*,5*R*,6*R*,9*R*)-Megastigman-7-ene-3,9-diol-5,12-epoxide 9-*O*- $\beta$ -*D*-glucopyranoside C<sub>19</sub>H<sub>32</sub>O<sub>8</sub> (388.46). Amorphous powder,  $[\alpha]_D = -1.50^\circ$ . Source: YAO YONG HEI MIAN SHEN YE *Breynia officinalis* (leaf). Ref: 2583.

**2611 Breynioside A**

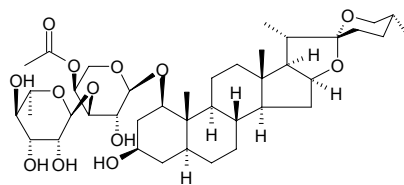
4'-Hydroxyximine C<sub>19</sub>H<sub>22</sub>O<sub>9</sub> (392.37). Colorless needles, mp 244~246°C,  $[\alpha]_D = -38.4^\circ$ . Source: YAO YONG HEI MIAN SHEN YE *Breynia officinalis* (leaf). Ref: 2583.

**2612 Breynioside B**

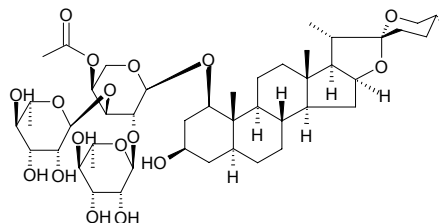
6'-Benzoylseguinoside A C<sub>24</sub>H<sub>28</sub>O<sub>12</sub> (508.48). Amorphous powder,  $[\alpha]_D = -67.1^\circ$ . In original paper, the structure of Api was wrong in Chart 2. Source: YAO YONG HEI MIAN SHEN YE *Breynia officinalis* (leaf). Ref: 2583.

**2613 Brisbagenin-1-*O*-[*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 3)-4-*O*-acetyl- $\alpha$ -*L*-arabinopyranoside]**

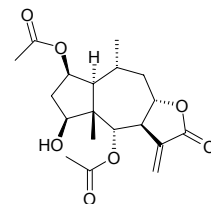
C<sub>40</sub>H<sub>64</sub>O<sub>13</sub> (752.95). Amorphous powder,  $[\alpha]_D^{28} = -36.7^\circ$  ( $c = 0.1$ , CHCl<sub>3</sub>:MeOH 1:1). Pharm: cAMP phosphodiesterase inhibitor (IC<sub>50</sub> = 206 $\mu$ g/mL). Source: *Dichelostemma multiflorum*. Ref: 738.

**2614 Brisbagenin 1-*O*-[*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)-*O*-[ $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 3)]-4-*O*-acetyl- $\alpha$ -*L*-arabinopyranoside]**

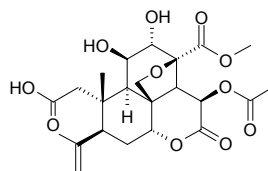
C<sub>46</sub>H<sub>74</sub>O<sub>17</sub> (899.09). Amorphous powder,  $[\alpha]_D^{28} = -51.3^\circ$  ( $c = 0.1$ , CHCl<sub>3</sub>:MeOH, 1:1). Pharm: cAMP phosphodiesterase inhibitor (IC<sub>50</sub> = 118 $\mu$ g/mL). Source: *Dichelostemma multiflorum*. Ref: 738.

**2615 Britanin**

Britanin [33627-28-0] C<sub>19</sub>H<sub>26</sub>O<sub>7</sub> (366.41). mp 189~191°C. Pharm: Antiprotozoal (*in vitro*, *Trichomonas vaginalis* and amoeba protozoon, 0.24~7.80 $\mu$ g/mL). Source: DA HUA XUAN FU HUA CAO *Imula britannica*, JIN FEI CAO *Imula japonica*, XIAN YE XUAN FU HUA *Imula linariaefolia*. Ref: 1, 6, 660, 5501.

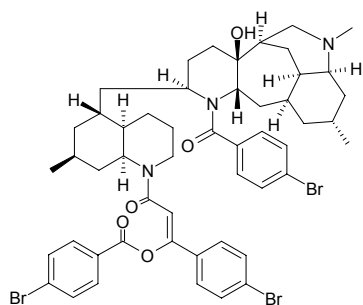
**2616 Broceaketolic acid**

C<sub>23</sub>H<sub>30</sub>O<sub>11</sub> (482.49). Source: YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*]. Ref: 660.

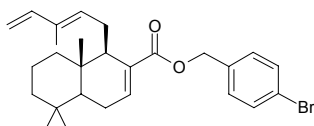


**2617 *p*-Bromobenzoyl derivative of tetrahydrodeoxyoxolucidine A**

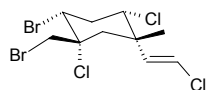
C<sub>51</sub>H<sub>60</sub>Br<sub>3</sub>N<sub>3</sub>O<sub>5</sub> (1034.78). Crystals, mp 228–232°C (MeOH), [α]<sub>D</sub><sup>21.5</sup> = +7.3° (*c* = 1.1, CHCl<sub>3</sub>). **Source:** GUANG LIANG SHI SONG *Lycopodium lucidulum*. **Ref:** 3927.

**2618 4-Bromobenzyl-labda-7,12(E),14-triene-17-oate**

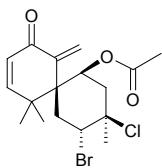
C<sub>27</sub>H<sub>35</sub>BrO<sub>2</sub> (471.48). Viscous liquid, [α]<sub>D</sub><sup>20</sup> = –13.36° (*c* = 1.16, CHCl<sub>3</sub>). **Pharm:** Cytotoxic inactive (*in vitro*, BT474, CHAGO, HepG2, Kato3, SW620: > 10 μg/mL)<sup>[5363]</sup>. **Source:** GUANG YE BA DOU *Croton oblongifolius* [Syn. *Croton laevigatus*]. **Ref:** 5363.

**2619 (1*R*\*,2*S*\*,4*S*\*,5*S*\*)-4-Bromo-5-bromomethyl-1*E*-chlorovinyl-2,5-dichloromethylcyclohexane**

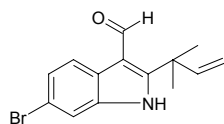
C<sub>10</sub>H<sub>13</sub>Br<sub>2</sub>Cl<sub>3</sub> (399.38). **Pharm:** Cytotoxic (*in vitro*, WHCO1, IC<sub>50</sub> = 34.8 μmol/L, KB cancer, IC<sub>50</sub> = 33.3 μmol/L, control *cis*-Platin, IC<sub>50</sub> = 13 μmol/L)<sup>[5277]</sup>, antitubercular (*Mycobacterium tuberculosis*, moderate activity)<sup>[5277]</sup>. **Source:** SHAN HU GEN HAI TOU HONG *Plocamium corallorrhiza*. **Ref:** 5277.

**2620 2-Bromo-3-chloro-5-acetoxy-chamigra-7(14),9-dien-8-one**

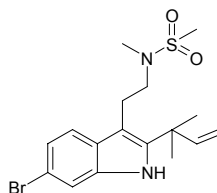
C<sub>17</sub>H<sub>22</sub>BrClO<sub>3</sub> (389.72). **Source:** *Laurencia mariannensis*. **Ref:** 5191.

**2621 6-Bromo-2-(1,1-dimethyl-2-propenyl)-1*H*-indole-3-carbaldehyde**

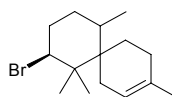
C<sub>14</sub>H<sub>14</sub>BrNO (292.18). **Pharm:** Affinity to nAChR (α4β2\* subtype, *Ki* > 50000 nmol/L, control (–)-Nicotine, *Ki* = (0.838±0.132) nmol/L; α7\* subtype, *Ki* > 50000 nmol/L, (–)-Nicotine, *Ki* = (127±5) nmol/L)<sup>[5029]</sup>. **Source:** BEI HAI XIAN TAI CHONG *Flustra foliacea*. **Ref:** 5029.

**2622 *N*-(2-[6-Bromo-2-(1,1-dimethyl-2-propenyl)-1*H*-indol-3-yl]ethyl)-*N*-methylmethanesulfonamide**

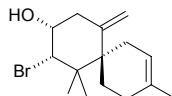
C<sub>17</sub>H<sub>23</sub>BrN<sub>2</sub>O<sub>2</sub>S (399.35). **Pharm:** Affinity to nAChR (α4β2\* subtype, *Ki* > 50000 nmol/L, control (–)-Nicotine, *Ki* = (0.838±0.132) nmol/L; α7\* subtype, *Ki* > 50000 nmol/L, (–)-Nicotine, *Ki* = (127±5) nmol/L)<sup>[5029]</sup>. **Source:** BEI HAI XIAN TAI CHONG *Flustra foliacea*. **Ref:** 5029.

**2623 8-Bromo-1-en-Chamigrene**

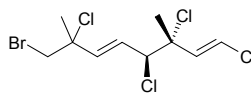
C<sub>15</sub>H<sub>23</sub>Br (285.27). Colorless acicular crystals, mp 124–125°C. **Source:** LUE DA AO DING ZAO *Laurencia majuscula*. **Ref:** 2152.

**2624 (6*R*,9*R*,10*S*)-10-Bromo-9-hydroxy-chamigra-2,7(14)-diene**

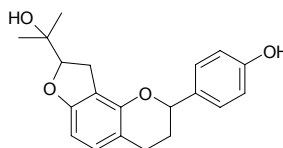
C<sub>15</sub>H<sub>23</sub>BrO (299.25). Oil, [α]<sub>D</sub><sup>25</sup> = –110° (*c* = 0.20, CHCl<sub>3</sub>). **Pharm:** Antibacterial (marine bacteria: *Alcaligenes aquamarinus*, MIC = 20 μg/disc; *Azomonas agilis*, MIC = 20 μg/disc; *Azotobacter beijerinckii*, MIC = 15 μg/disc; *Erwinia amylovora*, MIC = 15 μg/disc; *Escherichia coli*, MIC = 10 μg/disc; *Alteromonas* sp., *Halobacterium* sp., *Halococcus* sp., no inhibition). **Source:** LUE DA AO DING ZAO *Laurencia majuscula*. **Ref:** 5191.

**2625 8-Bromo-1,3,4,7-tetrachloro-3,7-dimethyl-1*E*,5*E*-octadiene**

C<sub>10</sub>H<sub>13</sub>BrCl<sub>4</sub> (354.93). **Pharm:** Cytotoxic (*in vitro*, WHCO1, IC<sub>50</sub> = 17.2 μmol/L, control *cis*-Platin, IC<sub>50</sub> = 13 μmol/L)<sup>[5277]</sup>. **Source:** SHAN HU GEN HAI TOU HONG *Plocamium corallorrhiza*. **Ref:** 5277.

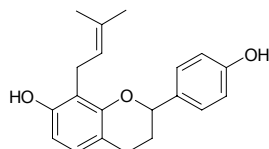
**2626 Brosimine A**

4'-Hydroxy-7,8-[2-(2-hydroxyisopropyl)dihydrofuran]flavan C<sub>20</sub>H<sub>22</sub>O<sub>4</sub> (326.40). [α]<sub>D</sub><sup>25</sup> = –7.06° (*c* = 0.35, CHCl<sub>3</sub>). **Source:** JIAN YE BAO SHI MU *Brosimum acutifolium* (trunk bark). **Ref:** 3942.

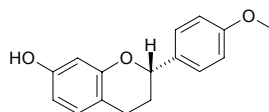


**2627 Brosimine B**

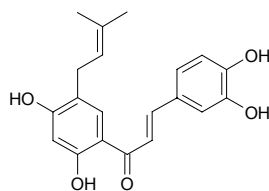
4',7-Dihydroxy-8-(3,3-dimethylallyl)flavan  $C_{20}H_{22}O_3$  (310.40).  $[\alpha]_D^{25} = -4.88^\circ$  ( $c = 0.5$ ,  $CHCl_3$ ). Source: JIAN YE BAO SHI MU *Brosimum acutifolium* (trunk bark). Ref: 3942.

**2628 Broussin**

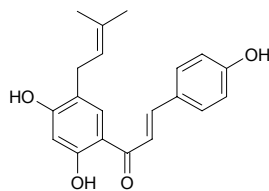
[76045-50-6]  $C_{16}H_{16}O_3$  (256.30). Pharm: Antimicrobial (*Bipolaris leersial*). Source: GOU SHU GUO *Broussonetia papyrifera*. Ref: 658.

**2629 Brousochalcone A**

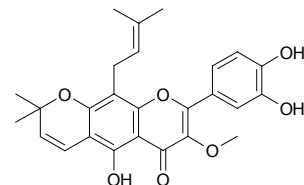
$C_{20}H_{20}O_5$  (340.38). Pharm: Aromatase inhibitor inactive (*in vitro*,  $IC_{50} > 40 \mu\text{mol/L}$ ; control Aminoglutethimide,  $IC_{50} = 6.4 \mu\text{mol/L}$ )<sup>[3090]</sup>; anti-inflammatory (NO production inhibitor)<sup>[4415]</sup>. Source: GOU SHU BAI PI *Broussonetia papyrifera*, GOU SHU *Broussonetia papyrifera*. Ref: 660, 1521, 3090, 4415.

**2630 Brousochalcone B**

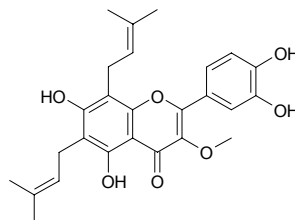
Anticancer Flavonoid PMV70P691-79  $C_{20}H_{20}O_4$  (324.38). Pharm: Aromatase inhibitor inactive (*in vitro*,  $IC_{50} > 40 \mu\text{mol/L}$ ; control Aminoglutethimide,  $IC_{50} = 6.4 \mu\text{mol/L}$ )<sup>[3090]</sup>; cytotoxic (estrogen  $\alpha$  receptor-binding assay)<sup>[5038]</sup>; cytotoxic (estrogen  $\beta$  receptor-binding assay)<sup>[5038]</sup>. Source: GOU SHU BAI PI *Broussonetia papyrifera*, GOU SHU *Broussonetia papyrifera*. Ref: 660, 3090, 5038.

**2631 Brousoflavonol A**

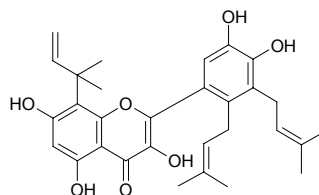
$C_{26}H_{26}O_7$  (450.49). Source: GOU SHU BAI PI *Broussonetia papyrifera*. Ref: 660.

**2632 Brousoflavonol B**

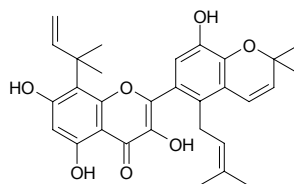
$C_{26}H_{28}O_7$  (452.51). Source: GOU SHU BAI PI *Broussonetia papyrifera*. Ref: 660.

**2633 Brousoflavonol C**

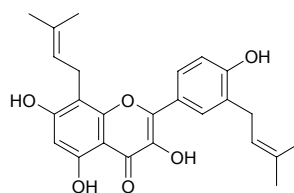
$C_{30}H_{34}O_7$  (506.60). Source: GOU SHU GEN *Broussonetia papyrifera*. Ref: 660.

**2634 Brousoflavonol D**

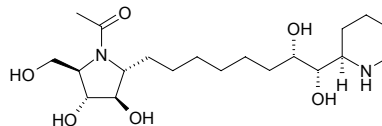
$C_{30}H_{32}O_7$  (504.59). Source: GOU SHU GEN *Broussonetia papyrifera*. Ref: 660.

**2635 Brousoflavonol F**

Anticancer Flavonoid PMV70P691-80  $C_{25}H_{26}O_6$  (422.48). Pharm: Cytotoxic (antiproliferative hmn breast cancer cells)<sup>[5038]</sup>; cytotoxic (cyclooxygenase-1 inhibitor)<sup>[5038]</sup>; cytotoxic (antioxidant assay)<sup>[5038]</sup>; cytotoxic (aromatase inhibitor)<sup>[5038]</sup>; aromatase inhibitor (*in vitro*,  $IC_{50} = 9.7 \mu\text{mol/L}$ , control Aminoglutethimide,  $IC_{50} = 6.4 \mu\text{mol/L}$ )<sup>[3090]</sup>. Source: GOU SHU *Broussonetia papyrifera*. Ref: 3090, 5038.

**2636 Broussonetine J<sub>1</sub>**

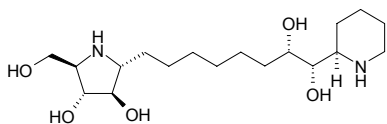
(2*R*)-2-[(1*S*,2*S*)-1,2-Dihydroxy-8-[(2*R*,3*R*,4*R*,5*R*)-5-(2-hydroxymethyl)-3,4-di-hydroxy-1-acetylpyrrolidinyl]octyl]piperidine  $C_{20}H_{28}N_2O_6$  (402.54). Colorless oil,  $[\alpha]_D = -17.5^\circ$  ( $c = 0.30$ , MeOH). Source: XIAO GOU SHU *Broussonetia kazinoki* (branch). Ref: 4146.



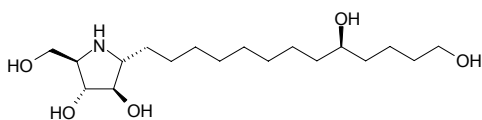


**2637 Broussonetine J<sub>2</sub>**

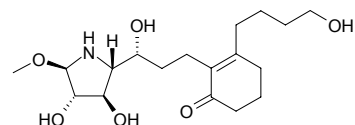
(2*R*,2-[(1*S*,2*S*)-1,2-Dihydroxy-8-[(2*R*,3*R*,4*R*,5*R*)-5-(2-hydroxymethyl-3,4-dihydroxypyrrolidinyl)]octyl]piperidine C<sub>18</sub>H<sub>36</sub>N<sub>2</sub>O<sub>5</sub> (380.50). Colorless oil, [ $\alpha$ ]<sub>D</sub> = +13.8° (*c* = 0.42, MeOH). Source: XIAO GOU SHU *Broussonetia kazinoki* (branch). Ref: 4146.

**2638 Broussonetine M<sub>1</sub>**

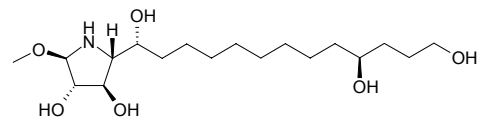
(2*R*,3*R*,4*R*,5*R*)-2-Hydroxymethyl-3,4-dihydroxy-5-[(9*R*)-9,13-dihydroxytridecyl]pyrrolidine C<sub>18</sub>H<sub>37</sub>NO<sub>5</sub> (347.50). Colorless powder, [ $\alpha$ ]<sub>D</sub> = +18.3° (*c* = 0.56, MeOH). Source: XIAO GOU SHU *Broussonetia kazinoki* (branch). Ref: 4146.

**2639 Broussonetine R**

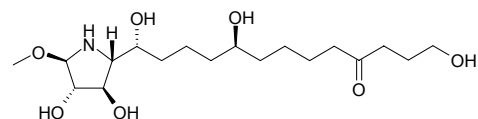
(2*R*,3*R*,4*R*,5*R*)-2-Hydroxymethyl-3,4-dihydroxy-5-[(1*R*)-1-hydroxy-3-[6-(4-hydroxybutyl)-cyclohexy-2-on-1(6)-enyl]propyl] pyrrolidine C<sub>18</sub>H<sub>31</sub>NO<sub>6</sub> (357.45). Colorless oil, [ $\alpha$ ]<sub>D</sub> = +21.8° (*c* = 0.27, MeOH). Source: XIAO GOU SHU *Broussonetia kazinoki* (branch). Ref: 3520.

**2640 Broussonetine S**

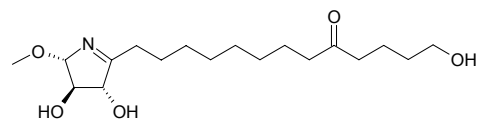
(2*R*,3*R*,4*R*,5*R*)-2-Hydroxymethyl-3,4-dihydroxy-5-[(1*R*,10*S*)-1,10,13-trihydroxytridecyl] pyrrolidine C<sub>18</sub>H<sub>37</sub>NO<sub>6</sub> (363.50). Colorless powder, [ $\alpha$ ]<sub>D</sub> = +25.1° (*c* = 0.18, MeOH). Source: XIAO GOU SHU *Broussonetia kazinoki* (branch). Ref: 3520.

**2641 Broussonetine T**

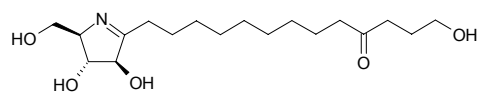
(2*R*,3*R*,4*R*,5*R*)-2-Hydroxymethyl-3,4-dihydroxy-5-[(1*R*,5*S*)-1,5,13-trihydroxy-10-oxo-tridecyl] pyrrolidine C<sub>18</sub>H<sub>35</sub>NO<sub>7</sub> (377.48). Colorless oil, [ $\alpha$ ]<sub>D</sub> = +11.0° (*c* = 0.49, MeOH). Source: XIAO GOU SHU *Broussonetia kazinoki* (branch). Ref: 3520.

**2642 Broussonetine U**

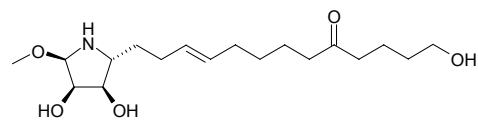
(2*S*,3*S*,4*S*)-2-Hydroxymethyl-3,4-dihydroxy-5-(9-oxo-13-hydroxytridecyl)-5-pyrrolidine C<sub>18</sub>H<sub>33</sub>NO<sub>5</sub> (343.47). Colorless oil, [ $\alpha$ ]<sub>D</sub> = -33.3° (*c* = 0.20, MeOH). Source: XIAO GOU SHU *Broussonetia kazinoki* (branch). Ref: 3520.

**2643 Broussonetine U<sub>1</sub>**

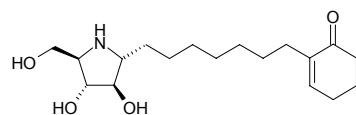
(2*S*,3*S*,4*S*)-2-Hydroxymethyl-3,4-dihydroxy-5-(10-oxo-13-hydroxytridecyl)-5-pyrrolidine C<sub>18</sub>H<sub>33</sub>NO<sub>5</sub> (343.47). Colorless powder, [ $\alpha$ ]<sub>D</sub> = -30.2° (*c* = 0.09, MeOH). Source: XIAO GOU SHU *Broussonetia kazinoki* (branch). Ref: 4146.

**2644 Broussonetine V**

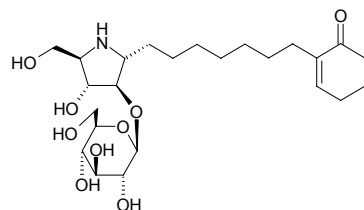
(2*R*,3*S*,4*R*,5*R*)-2-Hydroxymethyl-3,4-dihydroxy-5-[(*E*)-9-oxo-13-hydroxy-3-trideceny] pyrrolidine C<sub>18</sub>H<sub>33</sub>NO<sub>5</sub> (343.47). Colorless powder, [ $\alpha$ ]<sub>D</sub> = +10.9° (*c* = 0.09, MeOH). Source: XIAO GOU SHU *Broussonetia kazinoki* (branch). Ref: 3520.

**2645 Broussonetine W**

(2*R*,3*R*,4*R*,5*R*)-2-Hydroxymethyl-3,4-dihydroxy-5-[7-(cyclohexy-2-on-1(6)-enyl)heptyl]pyrrolidine C<sub>18</sub>H<sub>31</sub>NO<sub>4</sub> (325.45). Colorless oil, [ $\alpha$ ]<sub>D</sub> = +16.0° (*c* = 0.07, MeOH). Source: XIAO GOU SHU *Broussonetia kazinoki* (branch). Ref: 4146.

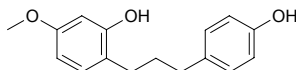
**2646 Broussonetine X**

(2*R*,3*S*,4*R*,5*R*)-2-Hydroxymethyl-3,4-dihydroxy-5-[7-(cyclohexy-2-on-1(6)-enyl)heptyl]pyrrolidine-4-*O*- $\beta$ -*D*-glucopyranoside C<sub>24</sub>H<sub>41</sub>NO<sub>9</sub> (487.60). Colorless oil, [ $\alpha$ ]<sub>D</sub> = +13.7° (*c* = 0.51, MeOH). Source: XIAO GOU SHU *Broussonetia kazinoki* (branch). Ref: 4146.

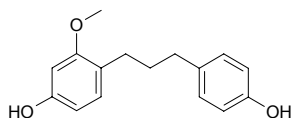


**2647 Broussonin A**

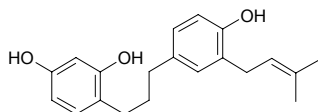
[73731-87-0] C<sub>16</sub>H<sub>18</sub>O<sub>3</sub> (258.32). mp 101.0~101.5°C (dichloromethane). **Pharm:** Cytotoxic (aromatase inhibitor)<sup>[5038]</sup>; aromatase inhibitor (*in vitro*, IC<sub>50</sub> = 30μmol/L; control Aminoglutethimide, IC<sub>50</sub> = 6.4μmol/L)<sup>[3090]</sup>; antifungal (*Fusarium*, *Sclerotinia*, MIC = 0.2~0.9mmol/L); antifungal. **Source:** GOU SHU GUO *Broussonetia papyrifera*. **Ref:** 658, 661, 3090, 5038.

**2648 Broussonin B**

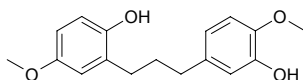
[73731-86-9] C<sub>16</sub>H<sub>18</sub>O<sub>3</sub> (258.32). mp 99.5~100°C (chloroform). **Pharm:** Cytotoxic (estrogen α receptor-binding assay)<sup>[5038]</sup>; cytotoxic (estrogen β receptor-binding assay)<sup>[5038]</sup>; antifungal (*Fusarium*, *Sclerotinia*, MIC = 0.05~0.9mmol/L); aromatase inhibitor inactive (*in vitro*, IC<sub>50</sub> > 40μmol/L; control Aminoglutethimide, IC<sub>50</sub> = 6.4μmol/L)<sup>[3090]</sup>. **Source:** GOU SHU GUO *Broussonetia papyrifera*. **Ref:** 658, 661, 3090, 5038.

**2649 Broussonin C**

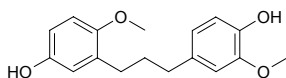
C<sub>20</sub>H<sub>24</sub>O<sub>3</sub> (312.41). **Pharm:** Antifungal. **Source:** GOU SHU GUO *Broussonetia papyrifera*. **Ref:** 658.

**2650 Broussonin E**

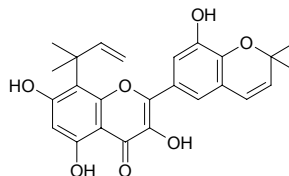
C<sub>17</sub>H<sub>20</sub>O<sub>4</sub> (288.35). **Pharm:** Aromatase inhibitor inactive (*in vitro*, IC<sub>50</sub> > 40μmol/L; control Aminoglutethimide, IC<sub>50</sub> = 6.4μmol/L). **Source:** GOU SHU *Broussonetia papyrifera*. **Ref:** 3090.

**2651 Broussonin F**

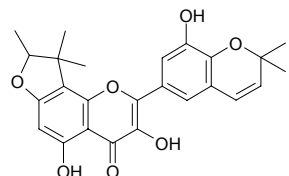
C<sub>17</sub>H<sub>20</sub>O<sub>4</sub> (288.35). **Pharm:** Aromatase inhibitor inactive (*in vitro*, IC<sub>50</sub> > 40μmol/L; control Aminoglutethimide, IC<sub>50</sub> = 6.4μmol/L)<sup>[3090]</sup>. **Source:** GOU SHU *Broussonetia papyrifera*. **Ref:** 3090.

**2652 Broussonol A**

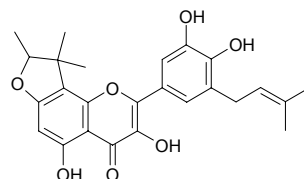
C<sub>25</sub>H<sub>24</sub>O<sub>7</sub> (436.47). Yellow powder, mp 162~164°C. **Pharm:** Cytotoxic (*in vitro*, MTT Method, A549, ED<sub>50</sub> = 8.74μg/mL; HCT8, ED<sub>50</sub> = 9.10μg/mL; KB, ED<sub>50</sub> > 10μg/mL). **Source:** XIAO GOU SHU *Broussonetia kazinoki* (leaf). **Ref:** 3085.

**2653 Broussonol B**

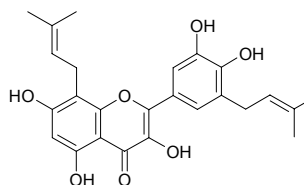
C<sub>25</sub>H<sub>24</sub>O<sub>7</sub> (436.47). Yellow powder, mp 210~212°C, [α]<sub>D</sub><sup>25</sup> = 0° (c = 0.20, MeOH). **Pharm:** Cytotoxic (*in vitro*, MTT Method, A549, ED<sub>50</sub> = 5.52μg/mL; HCT8, ED<sub>50</sub> = 8.80μg/mL; KB, ED<sub>50</sub> > 10μg/mL). **Source:** XIAO GOU SHU *Broussonetia kazinoki* (leaf). **Ref:** 3085.

**2654 Broussonol C**

C<sub>25</sub>H<sub>26</sub>O<sub>7</sub> (438.48). Yellow powder, mp 174~176°C, [α]<sub>D</sub><sup>25</sup> = 0° (c = 0.12, MeOH). **Pharm:** Cytotoxic (*in vitro*, MTT Method, A549, ED<sub>50</sub> = 7.77μg/mL; HCT8, ED<sub>50</sub> = 9.63μg/mL; KB, ED<sub>50</sub> > 10μg/mL). **Source:** XIAO GOU SHU *Broussonetia kazinoki* (leaf). **Ref:** 3085.

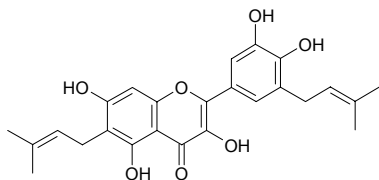
**2655 Broussonol D**

C<sub>25</sub>H<sub>26</sub>O<sub>7</sub> (438.48). Yellow powder, mp 187~189°C. **Pharm:** Cytotoxic (*in vitro*, MTT Method, A549, ED<sub>50</sub> > 10μg/mL; HCT8, ED<sub>50</sub> > 10μg/mL; KB, ED<sub>50</sub> = 4.15μg/mL). **Source:** XIAO GOU SHU *Broussonetia kazinoki* (leaf). **Ref:** 3085.

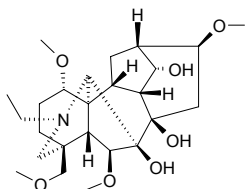


**2656 Broussonol E**

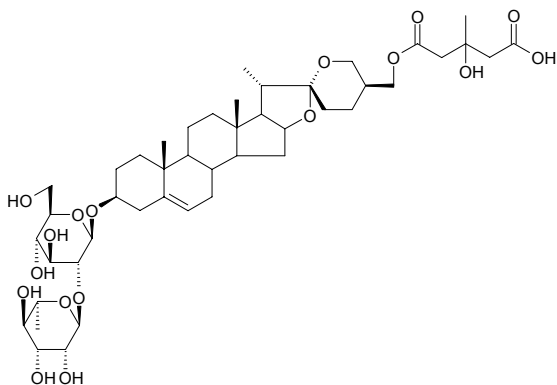
$C_{25}H_{26}O_7$  (438.48). Yellow powder, mp 192–193°C. **Pharm:** Cytotoxic (*in vitro*, MTT Method, A549,  $ED_{50} > 10\mu\text{g/mL}$ ; HCT8,  $ED_{50} > 10\mu\text{g/mL}$ ; KB,  $ED_{50} > 10\mu\text{g/mL}$ ). **Source:** XIAO GOU SHU *Broussonetia kazinoki* (leaf). **Ref:** 3085.

**2657 Browniine**

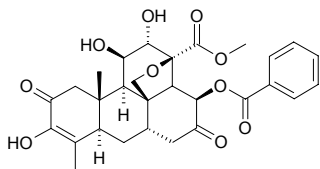
[5140-42-1]  $C_{25}H_{41}NO_7$  (467.61). **Pharm:** Antispasmodic (gpg, inhibits ileal contraction). **Source:** BAO SHI FEI YAN CAO *Delphinium brownii*. **Ref:** 658.

**2658 Brownioside**

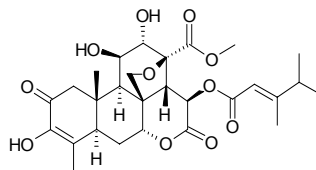
$C_{45}H_{70}O_{17}$  (883.05). **Source:** BAI HE *Lilium brownii* var. *viridulum* [Syn. *Lilium brownii* var. *colchesteri*]. **Ref:** 660.

**2659 Bruceantarin**

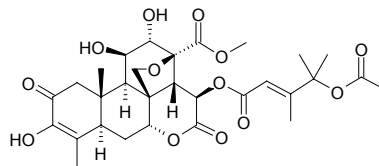
$C_{29}H_{32}O_{10}$  (540.57). **Source:** YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*] (root). **Ref:** 660.

**2660 Bruceantin**

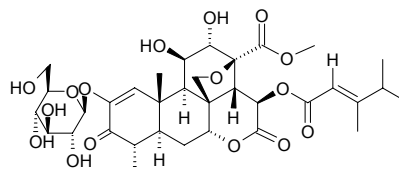
[41451-75-6]  $C_{28}H_{36}O_{11}$  (548.59).  $[\alpha]_D^{25} = -27.7^\circ$  ( $c = 3.0$ , pyridine). **Pharm:** Cytotoxic (leukemia, against a series of tumor cell lines but did not show significant effects in clinical studies against solid tumors, oil emulsion of fruits of *Brucea javanica* shows clinical efficacy)<sup>[5369]</sup>; antiamebic (*in vitro*); antineoplastic (P<sub>388</sub>, Lewis lung cancer, L<sub>1210</sub> and B16 melanoma, 0.5–1.0mg/(kg·d)); cytotoxic (KB,  $ED_{50} = 0.001\text{--}0.010\mu\text{g/mL}$ ); LD<sub>50</sub> (male mus, iv) = 1.95mg/kg, (female mus, iv) = 2.58mg/kg. **Source:** KANG LI YA DAN ZI *Brucea antidysenterica*, YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*]. **Ref:** 658, 661, 5369.

**2661 Bruceantanol**

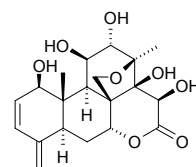
[53729-52-5]  $C_{30}H_{38}O_{13}$  (606.63).  $[\alpha]_D^{24} = -14.5^\circ$  ( $c = 0.44$ , pyridine). **Pharm:** Antineoplastic (P<sub>388</sub>, *in vivo*); cytotoxic (KB,  $ED_{50} = 0.001\text{--}0.010\mu\text{g/mL}$ ). **Source:** KANG LI YA DAN ZI *Brucea antidysenterica*, YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*]. **Ref:** 658, 661.

**2662 Bruceantinoside A**

[79439-85-3]  $C_{34}H_{46}O_{16}$  (710.74). Amorphous solid, mp 150°C (dec),  $[\alpha]_D^{25} = +7.8^\circ$  ( $c = 0.6$ , pyridine). **Pharm:** Antineoplastic (leukemia). **Source:** KANG LI YA DAN ZI *Brucea antidysenterica*, YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*] (seed: yield = 0.0025%dw)<sup>[4748]</sup>. **Ref:** 658, 661, 4748.

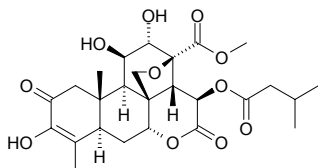
**2663 Bruceene**

$C_{20}H_{26}O_8$  (394.43). **Source:** YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*]. **Ref:** 660.

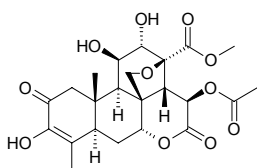


**2664 Bruceine A**

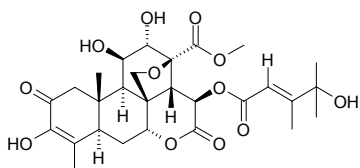
Brucein A [25514-31-2]  $C_{26}H_{34}O_{11}$  (522.55). mp 267~270°C. Pharm: Cytotoxic (mus, lymphocyte sarcoma,  $ID_{50} = 0.031 \mu\text{g}/\text{mL}$ , inhibits absorption of thymidine). Source: YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*], KU YA DAN ZI *Brucea amarissima*. Ref: 1, 2, 4, 6.

**2665 Bruceine B**

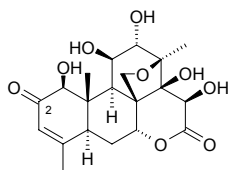
Brucein B [25514-29-8]  $C_{23}H_{28}O_{11}$  (480.47). mp 262~266°C. Pharm: Antiamebic. Source: YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*], KU YA DAN ZI *Brucea amarissima*. Ref: 1, 2, 4, 6.

**2666 Bruceine C**

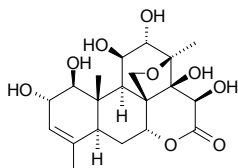
Brucein C [25514-30-1]  $C_{28}H_{36}O_{12}$  (564.59). mp 175~180°C. Pharm: Antiamebic; antineoplastic (mus,  $P_{388}$ ). Source: YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*]. Ref: 1, 2, 4, 6.

**2667 Bruceine D**

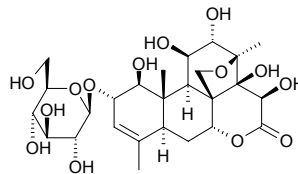
Brucein D [21499-66-1]  $C_{20}H_{26}O_9$  (410.42). mp 285~290°C. Pharm: Antiamebic; antineoplastic (mus,  $P_{388}$ ). Source: KU YA DAN ZI *Brucea amarissima*, YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*] (seed: yield = 0.0012%dw)<sup>[4748]</sup>. Ref: 1, 2, 4, 6, 4748.

**2668 Bruceine E**

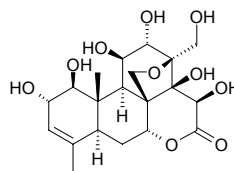
Brucein E [21586-90-3]  $C_{20}H_{28}O_9$  (412.44). mp 260~264°C. Pharm: Antiamebic. Source: YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*] (seed: yield = 0.0011%dw)<sup>[4748]</sup>. Ref: 1, 2, 4, 6, 4748.

**2669 Bruceine E 2-β-D-glucopyranoside**

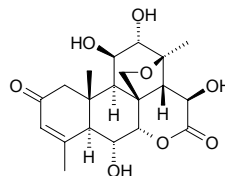
$C_{26}H_{38}O_{14}$  (574.58). Source: YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*]. Ref: 660.

**2670 Bruceine F**

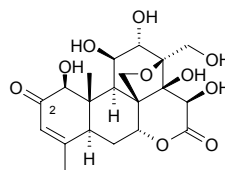
Brucein F [23112-07-4]  $C_{20}H_{28}O_{10}$  (428.44). mp 224~227°C. Pharm: Antiamebic. Source: YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*]. Ref: 1, 2, 4, 6.

**2671 Bruceine G**

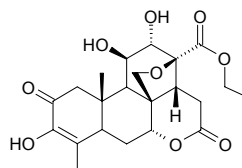
Brucein G [20797-65-3]  $C_{20}H_{26}O_8$  (394.43). Pharm: Antiamebic. Source: YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*]. Ref: 1, 2, 4.

**2672 Bruceine H**

Brucein H; Yadanzolide A [95258-14-3]  $C_{20}H_{26}O_{10}$  (426.42). Colorless rhombic crystals, mp 283~285°C (dec, methanol),  $[\alpha]_D^{28} = -10.5^\circ$  ( $c = 1.7$ , pyridine). Pharm: Antimalarial (inhibits *Plasmodium falciparum*, absorbing  $H^3$ -sarkin *in vitro*,  $IC_{50} = 0.031 \mu\text{g}/\text{mL}$ ). Source: YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*]. Ref: 2, 935, 1038, 1061, 1132.

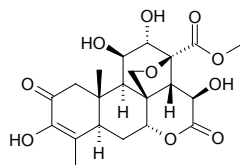
**2673 Bruceine I**

Brucein I  $C_{22}H_{28}O_9$  (436.46). Colorless prismatic crystals, mp 293~295°C. Source: YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*]. Ref: 2, 156.

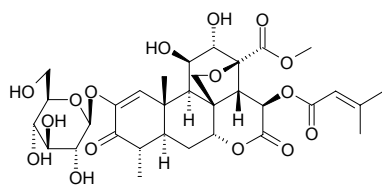


**2674 Bruceolide**

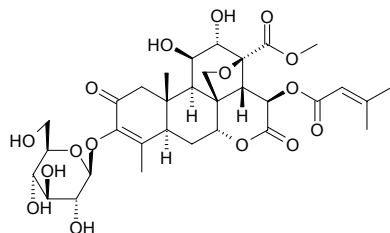
[25514-28-7] C<sub>21</sub>H<sub>26</sub>O<sub>10</sub> (438.44). **Pharm:** Antiamebic. **Source:** YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*]. **Ref:** 658.

**2675 Bruceoside A**

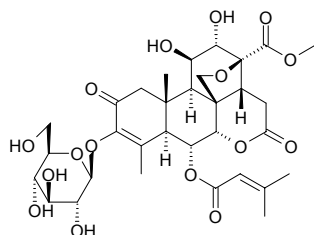
[63306-30-9] C<sub>32</sub>H<sub>42</sub>O<sub>16</sub> (682.66). **Pharm:** Antineoplastic (leukemia). **Source:** YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*] (seed: yield = 0.020%dw)<sup>[4748]</sup>. **Ref:** 2, 658, 4748.

**2676 Bruceoside B**

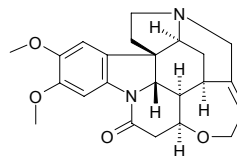
[69687-69-0] C<sub>32</sub>H<sub>42</sub>O<sub>16</sub> (682.66). White powder (methanol), mp 220.0–223.5°C (dec). **Pharm:** Antineoplastic (P<sub>388</sub> *in vivo*, 1.5mg/(kg·d), biotic prolonged rate = 132%); cytotoxic (differentiation of HL-60 cells)<sup>[5038]</sup>; antipyretic (reduces normal body temperature in mouse); pesticide; toxin (causes death to mus). **Source:** YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*] (seed: yield = 0.0025%dw)<sup>[4748]</sup>. **Ref:** 2, 900, 4748, 5038.

**2677 Bruceoside C**

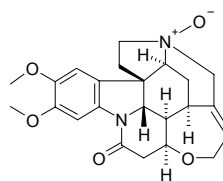
[141271-79-6] C<sub>32</sub>H<sub>42</sub>O<sub>16</sub> (682.66). **Pharm:** Cytotoxic (KB ED<sub>50</sub> < 0.1µg/mL; A549 ED<sub>50</sub> = 0.44µg/mL; HCT ED<sub>50</sub> = 4.51µg/mL; RPMI ED<sub>50</sub> < 0.1µg/mL; TE-671 ED<sub>50</sub> = 0.29µg/mL; P<sub>388</sub> ED<sub>50</sub> = 5.11µg/mL). **Source:** YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*] (seed: yield = 0.000042%dw)<sup>[4748]</sup>. **Ref:** 2, 1718, 4748.

**2678 Brucine**

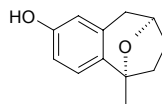
10,11-Dimethoxystrychnine; 2,3-Dimethoxystrychnidin-10-one [357-57-3] C<sub>23</sub>H<sub>26</sub>N<sub>2</sub>O<sub>4</sub> (394.47). Acicular crystals (acetone–water), mp 178°C, [α]<sub>D</sub> = –127° (chloroform), [α]<sub>D</sub> = –85° (absolute ethanol), easily soluble in methanol, ethanol, soluble in chloroform, slightly soluble in benzene, acetic ester, glycerol, very slightly soluble in ether, boiling water.<sup>[5507]</sup> **Pharm:** Antibacterial; antitussive (dispels phlegm); CNS stimulant; LD (hmn) = 200mg; LD<sub>50</sub> (dog, iv) = 8mg/kg. **Source:** CI MA QIAN ZI *Strychnos aculeata*, MA QIAN ZI *Strychnos nux-vomica* (dried ripe seed: content scope = 0.19%–2.12%<sup>[5501]</sup>, mean content = 1.20%<sup>[5508]</sup>), LV SONG GUO *Strychnos ignatii*. **Ref:** 1, 4, 543, 576, 5501, 5507, 5508.

**2679 Brucine N-oxide**

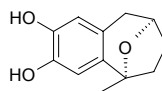
Brucineoxide [17301-81-4] C<sub>23</sub>H<sub>26</sub>N<sub>2</sub>O<sub>5</sub> (410.47). **Source:** MA QIAN ZI *Strychnos nux-vomica*. **Ref:** 2, 543, 1521.

**2680 Bruguerol A**

C<sub>12</sub>H<sub>14</sub>O<sub>2</sub> (190.24). White solid, [α]<sub>D</sub><sup>20</sup> = +14.4° (c = 0.30, MeOH). **Pharm:** Antibacterial (*Staphylococcus aureus* SG 511, MIC > 100µg/mL, Ciprofloxacin, MIC = 0.2µg/mL; *Micrococcus luteus* ATCC 10240, MIC > 100µg/mL, Ciprofloxacin, MIC = 12.5µg/mL; *Enterococcus faecalis* 1528(vanA), MIC > 100µg/mL, Ciprofloxacin, MIC = 1.6µg/mL; *Escherichia coli* SG 458, MIC > 100µg/mL, Ciprofloxacin, MIC < 0.05µg/mL; *Mycobacterium vaccae* IMET 10670 MIC = 25µg/mL, Ciprofloxacin, MIC = 0.4µg/mL); antifungal (*Candida albicans*, MIC = 50µg/mL; control Amphotericin B, MIC < 0.05µg/mL). **Source:** MU LAN<sup>(3)</sup> *Bruguiera gymnorrhiza* (stem). **Ref:** 5057.

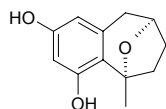
**2681 Bruguerol B**

C<sub>12</sub>H<sub>14</sub>O<sub>3</sub> (206.24). White solid, [α]<sub>D</sub><sup>20</sup> = +8.9° (c = 0.27, MeOH). **Pharm:** Antibacterial (*Staphylococcus aureus* SG 511, MIC > 100µg/mL, Ciprofloxacin, MIC = 0.2µg/mL; *Micrococcus luteus* ATCC 10240, MIC > 100µg/mL, Ciprofloxacin, MIC = 12.5µg/mL; *Enterococcus faecalis* 1528(vanA), MIC > 100µg/mL, Ciprofloxacin, MIC = 1.6µg/mL; *Escherichia coli* SG 458, MIC > 100µg/mL, Ciprofloxacin, MIC < 0.05µg/mL; *Mycobacterium vaccae* IMET 10670 MIC = 25µg/mL, Ciprofloxacin, MIC = 0.4µg/mL); antifungal (*Candida albicans*, MIC = 50µg/mL; control Amphotericin B, MIC < 0.05µg/mL). **Source:** MU LAN<sup>(3)</sup> *Bruguiera gymnorrhiza* (stem). **Ref:** 5057.

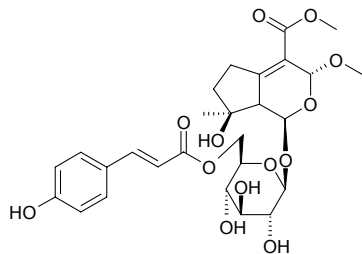


**2682 Brugierol C**

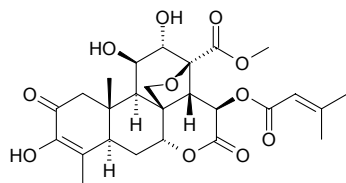
$C_{12}H_{14}O_3$  (206.24). White solid,  $[\alpha]_D^{20} = +4.0^\circ$  ( $c = 0.50$ , MeOH). **Pharm:** Antibacterial (*Staphylococcus aureus* SG 511, MIC = 12.5  $\mu\text{g/mL}$ , Ciprofloxacin, MIC = 0.2  $\mu\text{g/mL}$ ; *Micrococcus luteus* ATCC 10240, MIC = 12.5  $\mu\text{g/mL}$ , Ciprofloxacin, MIC = 12.5  $\mu\text{g/mL}$ ; *Enterococcus faecalis* 1528(vanA), MIC = 12.5  $\mu\text{g/mL}$ , Ciprofloxacin, MIC = 1.6  $\mu\text{g/mL}$ ; *Escherichia coli* SG 458, MIC = 12.5  $\mu\text{g/mL}$ , Ciprofloxacin, MIC < 0.05  $\mu\text{g/mL}$ ; *Mycobacterium vaccae* IMET 10670 MIC = 12.5  $\mu\text{g/mL}$ , Ciprofloxacin, MIC = 0.4  $\mu\text{g/mL}$ ); antifungal (*Candida albicans*, MIC = 50  $\mu\text{g/mL}$ ; control Amphotericin B, MIC < 0.05  $\mu\text{g/mL}$ ). **Source:** MU LAN<sup>(3)</sup> *Bruguiera gymnorhiza* (stem). **Ref:** 5057.

**2683 Brunneogaleatoside**

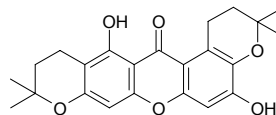
$C_{27}H_{34}O_{13}$  (566.56). Amorphous powder,  $[\alpha]_D^{20} = -75.9^\circ$  ( $c = 0.1$ , MeOH). **Pharm:** Antitrypanosomal (*Trypanosoma b. rhodesiense*,  $IC_{50} = 18.1 \mu\text{g/mL}$ , control Melarsoprol,  $IC_{50} = 0.00098 \mu\text{g/mL}$ ; *Trypanosoma cruzi*,  $IC_{50} > 90 \mu\text{g/mL}$ , control Benznidazole,  $IC_{50} = 1.06 \mu\text{g/mL}$ ); antileishmanial (*Leishmania donovani*,  $IC_{50} = 4.7 \mu\text{g/mL}$ , control Miltefosine,  $IC_{50} = 0.102 \mu\text{g/mL}$ ); antimalarial (*Plasmodium falciparum*,  $IC_{50} = 38.9 \mu\text{g/mL}$ , control Artemisinin,  $IC_{50} = 0.0022 \mu\text{g/mL}$ ); cytotoxic (L6,  $IC_{50} > 90 \mu\text{g/mL}$ , control Podophyllotoxin,  $IC_{50} = 0.008 \mu\text{g/mL}$ ). **Source:** ZONG KUI CAO SU *Phlomis brunneogaleata*. **Ref:** 5009.

**2684 Brusatol**

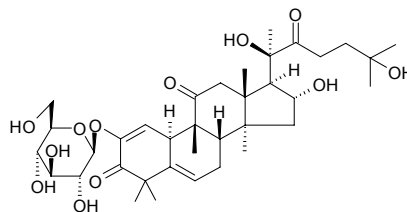
Yatansin [14907-98-3]  $C_{26}H_{32}O_{11}$  (520.54). mp 276–278°C. **Pharm:** cytotoxic (leukemia)<sup>[5369]</sup>; Antineoplastic ( $P_{388}$ , inhibits biosynthesis of RNA and protein); cytotoxic (differentiation of HL-60 cells)<sup>[5038]</sup>; antiamebic; hexokinase inhibitor (strong). **Source:** YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*] (seed: yield = 0.0085%dw)<sup>[4748]</sup>. **Ref:** 1, 2, 4, 4748, 5038, 5369, 5501.

**2685 BR-Xanthone A**

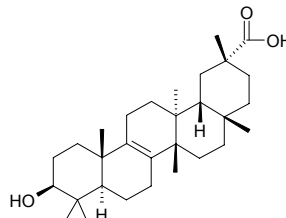
$C_{23}H_{24}O_6$  (396.44). **Pharm:** Antioxidant (DPPH scavenger, 10  $\mu\text{mol/L}$ , ScRt = 15%, control BHT, 10  $\mu\text{mol/L}$ , ScRt = 43%)<sup>[5319]</sup>; antibacterial (*Staphylococcus aureus* ATCC 25923, MIC > 128  $\mu\text{g/mL}$ , control Vancomycin, MIC = 2  $\mu\text{g/mL}$ ; *Staphylococcus aureus* MRSA SK1, MIC > 128  $\mu\text{g/mL}$ , Vancomycin, MIC = 2  $\mu\text{g/mL}$ )<sup>[5319]</sup>. **Source:** DAO NIAN ZI *Garcinia mangostana*, TIAN SHAN ZHU ZI *Garcinia dulcis* (fruit), TIAN SHAN ZHU ZI *Garcinia dulcis* (flower). **Ref:** 1521, 4422, 5319.

**2686 Bryoamaride**

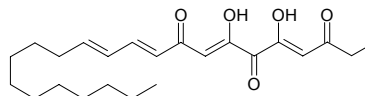
$C_{36}H_{54}O_{12}$  (678.82). Yellow amorphous solid,  $[\alpha]_D = -47.8^\circ$  ( $c = 1.2$ , EtOH). **Source:** FENG GUA *Gymnopetalum integrifolium* (fruit). **Ref:** 4189.

**2687 Bryonolic acid**

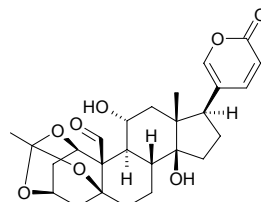
[24480-45-3]  $C_{30}H_{48}O_3$  (456.72). Colorless rhombic crystals (methanol), mp 299–302°C,  $[\alpha]_D^{20} = +25.0^\circ$  ( $c = 1.0$ , pyridine). **Pharm:** Antiallergic (mouse and rat); antineoplastic ( $L_{1210}$ ,  $IC_{50} = 0.024 \mu\text{g/mL}$ ); anti-inflammatory. **Source:** BAI LIAN *Ampelopsis japonica* [Syn. *Paullinia japonica*], GUA LOU *Trichosanthes kirilowii*, HU BEI GUA LOU *Trichosanthes hupehensis*, SI GUA *Luffa cylindrica*, TIAN HUA FEN *Trichosanthes kirilowii*. **Ref:** 2, 900.

**2688 Bryophollenone**

$C_{23}H_{34}O_5$  (390.52). **Source:** LUO DI SHENG GEN *Bryophyllum pinnatum*. **Ref:** 660.

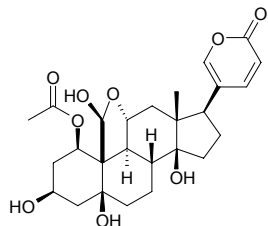
**2689 Bryophyllin A**

$C_{26}H_{32}O_8$  (472.54). **Source:** LUO DI SHENG GEN *Bryophyllum pinnatum*. **Ref:** 660.

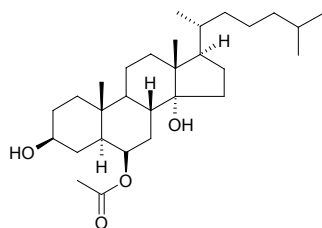


**2690 Bryophyllin B**

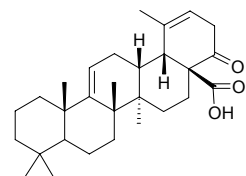
$C_{26}H_{34}O_9$  (490.56). Source: LUO DI SHENG GEN *Bryophyllum pinnatum*.  
Ref: 660.

**2691 Bryophyllol**

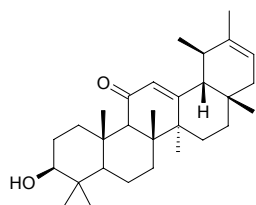
$C_{29}H_{50}O_4$  (462.72). Source: LUO DI SHENG GEN *Bryophyllum pinnatum*.  
Ref: 660.

**2692 Bryophyllone**

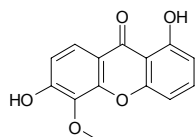
$C_{29}H_{42}O_3$  (438.66). Source: LUO DI SHENG GEN *Bryophyllum pinnatum*.  
Ref: 660.

**2693 Bryophynol**

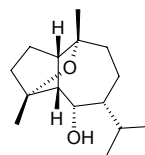
$C_{30}H_{46}O_2$  (438.70). Source: LUO DI SHENG GEN *Bryophyllum pinnatum*.  
Ref: 660.

**2694 Buchanaxanthone**

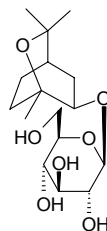
1,6-Dihydroxy-5-methoxyxanthone  $C_{14}H_{10}O_5$  (258.23). Pharm: Cytotoxic (P<sub>388</sub> ED<sub>50</sub> = 0.27 μg/mL, control Mithramycin ED<sub>50</sub> = 0.06 μg/mL, HT29 ED<sub>50</sub> = 0.84 μg/mL, Mithramycin ED<sub>50</sub> = 0.08 μg/mL)<sup>[4094]</sup>. Source: HAI TANG GUO *Calophyllum inophyllum*, TAI WAN LV DAO TENG HUANG *Garcinia linii*. Ref: 660, 4094.

**2695 Buchariol**

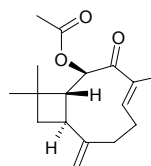
4,10-Epoxy-6 $\alpha$ -hydroxyguaiane  $C_{15}H_{26}O_2$  (238.37). Source: *Salvia bucharica*.  
Ref: 2391.

**2696 Bucharioside**

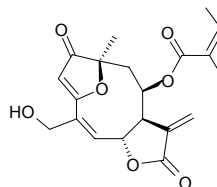
2-*exo*- $\beta$ -D-Glucopyranosyl-1,8-cineol  $C_{16}H_{28}O_7$  (332.40). [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -25.48° (c = 2.29, MeOH). Source: *Salvia bucharica*. Ref: 2391.

**2697 Buddlein A**

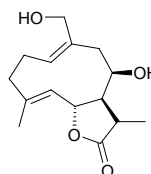
[62346-20-7]  $C_{17}H_{24}O_3$  (276.38). Pharm: Fish toxin. Source: DA YE ZUI YU CAO *Buddleja davidii*. Ref: 658.

**2698 Budlein A**

$C_{20}H_{22}O_7$  (374.39). Source: *Viguiera eriophora* ssp. *eriphora* (aerial parts).  
Ref: 5090.

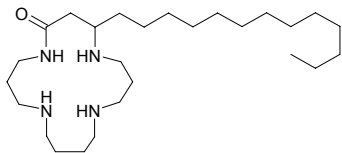
**2699 Budlein B**

$C_{15}H_{22}O_4$  (266.34). Source: HUA ZE LAN *Eupatorium chinense* (whole herb; yield = 0.00027%). Ref: 4739.

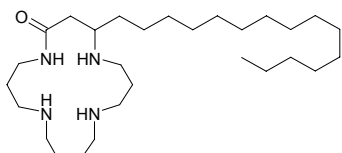


**2700 Budmunchiamine L<sub>4</sub>**

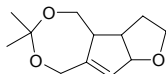
C<sub>26</sub>H<sub>54</sub>N<sub>4</sub>O (438.75). Colorless oil.  $[\alpha]_D = -13^\circ$  ( $c = 0.65$ , MeOH). Source: BA NA MA HE HUAN *Albizzia adinocephala*. Ref: 1950.

**2701 Budmunchiamine L<sub>5</sub>**

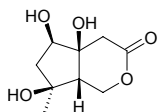
C<sub>28</sub>H<sub>58</sub>N<sub>4</sub>O (466.80). Colorless oil.  $[\alpha]_D = -20^\circ$  ( $c = 0.21$ , MeOH). Source: BA NA MA HE HUAN *Albizzia adinocephala*. Ref: 1950.

**2702 Buergerinin A**

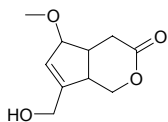
C<sub>9</sub>H<sub>14</sub>O<sub>6</sub> (210.28). Yellowish oil,  $[\alpha]_D^{23.5} = +5.65^\circ$  ( $c = 0.064$ , CHCl<sub>3</sub>). Source: BEI XUAN SHEN *Scrophularia buergeriana*, XUAN SHEN *Scrophularia ningpoensis*. Ref: 8.

**2703 Buergerinin B**

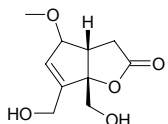
C<sub>9</sub>H<sub>14</sub>O<sub>5</sub> (202.21). Colorless needles, mp 159–160°C,  $[\alpha]_D^{23} = -23.14^\circ$  ( $c = 0.945$ , MeOH). Source: XUAN SHEN *Scrophularia ningpoensis*. Ref: 8.

**2704 Buergerinin C**

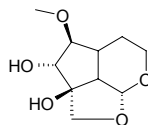
C<sub>10</sub>H<sub>14</sub>O<sub>4</sub> (198.22). Yellowish oil,  $[\alpha]_D^{23} = -6.78^\circ$  ( $c = 1.894$ , MeOH). Source: XUAN SHEN *Scrophularia ningpoensis*. Ref: 8.

**2705 Buergerinin D**

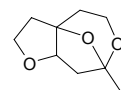
C<sub>10</sub>H<sub>14</sub>O<sub>5</sub> (214.22). Yellowish oil,  $[\alpha]_D^{17} = -28.13^\circ$  ( $c = 0.615$ , Me<sub>2</sub>CO). Source: XUAN SHEN *Scrophularia ningpoensis*. Ref: 8.

**2706 Buergerinin E**

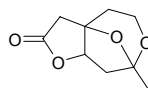
C<sub>10</sub>H<sub>16</sub>O<sub>5</sub> (216.24). Oil,  $[\alpha]_D^{17} = +21.21^\circ$  ( $c = 0.617$ , Me<sub>2</sub>CO). Source: XUAN SHEN *Scrophularia ningpoensis*. Ref: 8.

**2707 Buergerinin F**

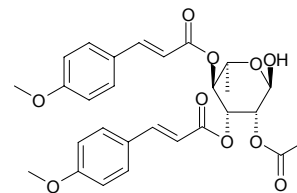
C<sub>9</sub>H<sub>14</sub>O<sub>3</sub> (170.21). Yellowish oil,  $[\alpha]_D^{18} = +40.67^\circ$  ( $c = 0.431$ , CHCl<sub>3</sub>). Source: XUAN SHEN *Scrophularia ningpoensis*. Ref: 8.

**2708 Buergerinin G**

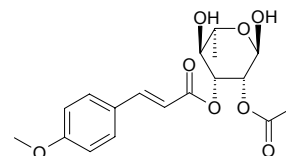
C<sub>9</sub>H<sub>12</sub>O<sub>4</sub> (184.19). Yellowish flake crystals, mp 152–154°C,  $[\alpha]_D^{18} = +47.71^\circ$  ( $c = 0.509$ , CHCl<sub>3</sub>). Source: XUAN SHEN *Scrophularia ningpoensis*. Ref: 8.

**2709 Buergeriside A<sub>1</sub>**

2-*O*-Acetyl-3,4-di-*O*-(*E*)-*p*-methoxycinnamoyl- $\alpha$ -*L*-rhamnopyranoside C<sub>28</sub>H<sub>30</sub>O<sub>10</sub> (526.55). Yellowish needle. Pharm: Neuroprotectant (primary cultures of rat cortical cells injured by glutamate, 0.1  $\mu$ mol/L, cell viability = (71.6 $\pm$ 3.9)%,  $p < 0.001$ , control MK-801, 0.1  $\mu$ mol/L, cell viability = (31.8 $\pm$ 7.1)%, APV, 0.1  $\mu$ mol/L, cell viability = (5.7 $\pm$ 1.9)%, XNQX, 0.1  $\mu$ mol/L, cell viability = (28.1 $\pm$ 5.6)%). Source: BEI XUAN SHEN *Scrophularia buergeriana* (root). Ref: 3967.

**2710 Buergeriside B<sub>1</sub>**

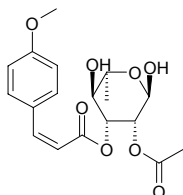
2-*O*-Acetyl-3-*O*-(*E*)-*p*-methoxycinnamoyl- $\alpha$ -*L*-rhamnopyranoside C<sub>18</sub>H<sub>22</sub>O<sub>8</sub> (366.37). White amorphous powder. Pharm: Neuroprotectant (primary cultures of rat cortical cells injured by glutamate, 0.1  $\mu$ mol/L, cell viability = (65.2 $\pm$ 2.9)%,  $p < 0.01$ , control MK-801, 0.1  $\mu$ mol/L, cell viability = (31.8 $\pm$ 7.1)%, APV, 0.1  $\mu$ mol/L, cell viability = (5.7 $\pm$ 1.9)%, XNQX, 0.1  $\mu$ mol/L, cell viability = (28.1 $\pm$ 5.6)%). Source: BEI XUAN SHEN *Scrophularia buergeriana* (root). Ref: 3967.



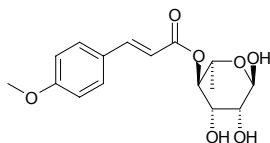


**2711 Buergeriside B<sub>2</sub>**

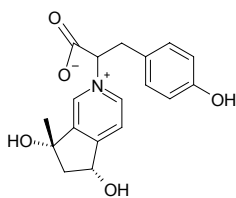
2-*O*-Acetyl-3-*O*-(*Z*)-*p*-methoxycinnamoyl- $\alpha$ -*L*-rhamnopyranoside C<sub>18</sub>H<sub>22</sub>O<sub>8</sub> (366.37). White amorphous powder. **Pharm:** Neuroprotectant (primary cultures of rat cortical cells injured by glutamate, 0.1  $\mu$ mol/L, cell viability = (35.9 $\pm$ 2.3)%,  $p$ <0.05, control MK-801, 0.1  $\mu$ mol/L, cell viability = (31.8 $\pm$ 7.1)%, APV, 0.1  $\mu$ mol/L, cell viability = (5.7 $\pm$ 1.9)%, XNQX, 0.1  $\mu$ mol/L, cell viability = (28.1 $\pm$ 5.6)%). **Source:** BEI XUAN SHEN *Scrophularia buergeriana* (root). **Ref:** 3967.

**2712 Buergeriside C<sub>1</sub>**

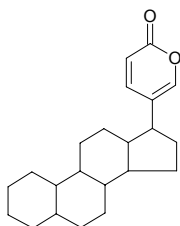
4-*O*-(*E*)-*p*-Methoxycinnamoyl- $\alpha$ -*L*-rhamnopyranoside C<sub>16</sub>H<sub>20</sub>O<sub>7</sub> (324.33). Pale yellow powder. **Pharm:** Neuroprotectant (primary cultures of rat cortical cells injured by glutamate, 0.1  $\mu$ mol/L, cell viability = (48.3 $\pm$ 3.3)%,  $p$ <0.01, control MK-801, 0.1  $\mu$ mol/L, cell viability = (31.8 $\pm$ 7.1)%, APV, 0.1  $\mu$ mol/L, cell viability = (5.7 $\pm$ 1.9)%, XNQX, 0.1  $\mu$ mol/L, cell viability = (28.1 $\pm$ 5.6)%). **Source:** BEI XUAN SHEN *Scrophularia buergeriana* (root). **Ref:** 3967.

**2713 Bueropyridinium A**

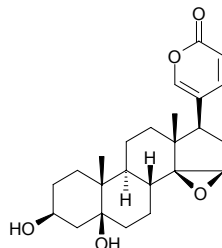
C<sub>18</sub>H<sub>19</sub>NO<sub>5</sub> (329.36). Colorless hyaloid oil. **Source:** XUAN SHEN *Scrophularia ningpoensis*. **Ref:** 8.

**2714 Bufadienolide**

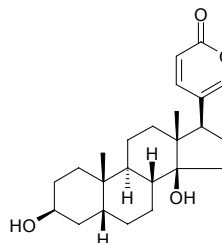
C<sub>22</sub>H<sub>30</sub>O<sub>2</sub> (326.48). **Source:** CHAN SU *Bufo bufo gargarizans*; *Bufo melanostictus*. **Ref:** 2.

**2715 Bufagin**

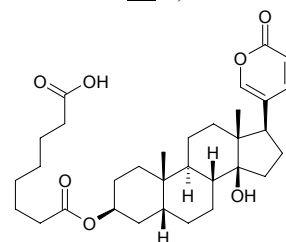
Morinobufagin [470-42-8] C<sub>24</sub>H<sub>32</sub>O<sub>5</sub> (400.52). Crystals (Me<sub>2</sub>CO-Et<sub>2</sub>O), mp 224–225°C, [ $\alpha$ ]<sub>D</sub><sup>16</sup> = +10° ( $c$  = 2.6, CHCl<sub>3</sub>). **Source:** CHAN CHU *Bufo bufo gargarizans*; *Bufo melanostictus*, CHAN SU *Bufo bufo gargarizans*; *Bufo melanostictus*. **Ref:** 6, 660, 1521.

**2716 Bufalin**

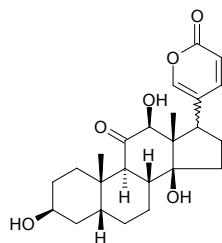
[465-21-4] C<sub>24</sub>H<sub>34</sub>O<sub>4</sub> (386.54). **Pharm:** Cytotoxic (*in vitro*, KB, IC<sub>50</sub> = 0.67  $\mu$ g/mL; HL-60, IC<sub>50</sub> < 0.01  $\mu$ g/mL; MH-60, IC<sub>50</sub> > 25  $\mu$ g/mL)<sup>[3082]</sup>, cardiotoxic (cardiac glycoside); respiratory stimulant (narcosis rbt, iv); increases blood pressure (narcosis rbt, iv); eclamptogenic (rat, iv, 0.8 mg/kg, tetanic convulsion); anesthetic; LD<sub>50</sub> (mus, iv) = 2.2 mg/kg. **Source:** CHAN CHU *Bufo bufo gargarizans*; *Bufo melanostictus*, CHAN SU *Bufo bufo gargarizans* (dried secretion: content = 0.34%)<sup>[5508]</sup>; *Bufo melanostictus* (dried secretion: content = 0.73%)<sup>[5508]</sup>. **Ref:** 2, 618, 658, 3082, 5501, 5508.

**2717 Bufalin-3-hydrogen suberate**

C<sub>32</sub>H<sub>46</sub>O<sub>7</sub> (542.72). **Source:** CHAN SU *Bufo bufo gargarizans*; *Bufo melanostictus*. **Ref:** 6, 660.

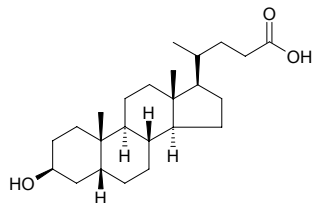
**2718 Bufarenogin**

Bufarenogin [17008-65-0] C<sub>24</sub>H<sub>32</sub>O<sub>6</sub> (416.52). mp 230–233°C. **Source:** CHAN SU *Bufo bufo gargarizans*; *Bufo melanostictus*. **Ref:** 6, 1521.

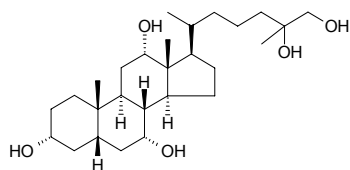


**2719 Bufodihydroxycholanolic acid**

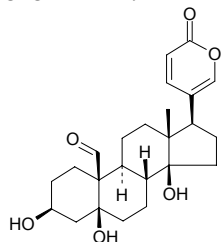
$C_{24}H_{40}O_3$  (376.58). mp 230°C. Source: CHAN CHU DAN *Bufo bufo gargarizans*; *Bufo melanostictus*. Ref: 6.

**2720 5β-Bufol sulfate**

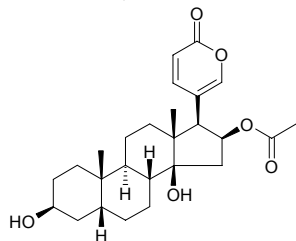
$C_{27}H_{48}O_5$  (452.68). Source: XIA MA DAN *Rana limnocharis*. Ref: 6.

**2721 Bufotalidin**

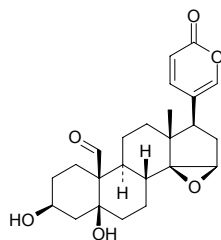
Hellebrigenin [465-90-7]  $C_{24}H_{32}O_6$  (416.52). Source: CHAN SU *Bufo bufo gargarizans*; *Bufo melanostictus*. Ref: 2.

**2722 Bufotalin**

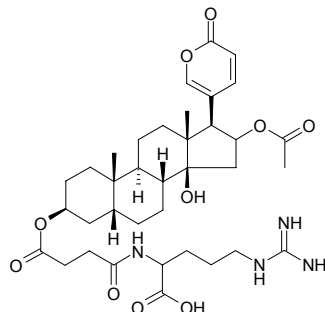
[471-95-4]  $C_{26}H_{36}O_6$  (444.57). Pharm: Cytotoxic (*in vitro*, KB,  $IC_{50}$  = 0.19 μg/mL; HL-60,  $IC_{50}$  < 0.01 μg/mL; MH-60,  $IC_{50}$  > 25 μg/mL)<sup>[3082]</sup>. Source: CHAN SU *Bufo bufo gargarizans* (dried secretion: content = 0.72%<sup>[5508]</sup>); *Bufo melanostictus* (dried secretion: content = 0.01%<sup>[5508]</sup>). Ref: 1521, 3082, 5508.

**2723 Bufotalinin**

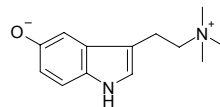
[562-21-0]  $C_{24}H_{30}O_6$  (414.50). Source: CHAN SU *Bufo bufo gargarizans*; *Bufo melanostictus*. Ref: 2.

**2724 Bufotalin 3-succinoylarginine ester**

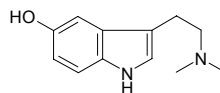
$C_{36}H_{52}N_4O_{10}$  (700.84). Colorless amorphous powder, mp 213–215°C. Source: CHAN PI *Bufo bufo gargarizans*; *Bufo melanostictus*. Ref: 241.

**2725 Bufotenidine**

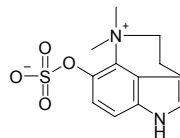
[487-91-2]  $C_{13}H_{18}N_2O$  (218.30). Pharm: Anticholinergic; uterine stimulant (gpg uterus *in vitro*). Source: LU ZHU GEN *Arundo donax*. Ref: 1, 2.

**2726 Bufotenine**

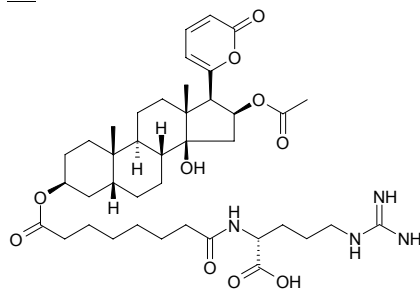
Cinobufotenine [487-93-4]  $C_{12}H_{16}N_2O$  (204.27). Pharm: Contracts blood vessels (local); hallucinogen; increases blood pressure; uterine stimulant. Source: CHAN SU *Bufo bufo gargarizans*; *Bufo melanostictus*, LU ZHU GEN *Arundo donax*, CHAN CHU *Bufo bufo gargarizans*; *Bufo melanostictus*. Ref: 2, 658.

**2727 Bufothionine**

$C_{12}H_{14}N_2O_4S$  (282.32). Source: CHAN SU *Bufo bufo gargarizans*; *Bufo melanostictus*. Ref: 1521.

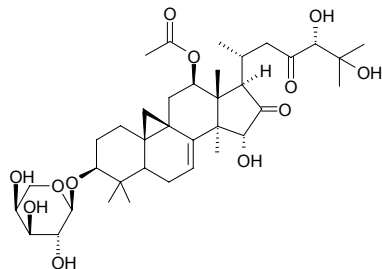
**2728 Bufotoxin**

[464-81-3]  $C_{40}H_{60}N_4O_{10}$  (756.95). Pharm: Cardiotonic;  $LD_{50}$  (cat, iv) = 0.27 mg/kg. Source: CHAN CHU *Bufo bufo gargarizans*; *Bufo melanostictus*. Ref: 658.

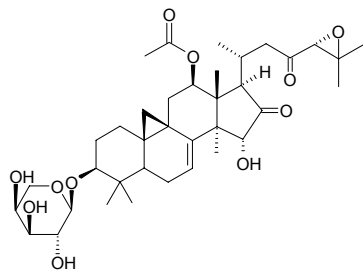


**2729 Bugbanoside C**

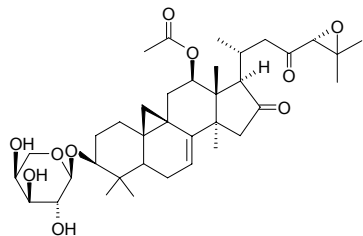
12 $\beta$ -Acetoxy-3 $\beta$ ,15 $\alpha$ ,-24R,25-tetrahydroxy-16,23-dione-cycloart-7-ene  
3-O- $\alpha$ -L-arabinopyranoside C<sub>37</sub>H<sub>56</sub>O<sub>12</sub> (692.85). Colorless powder  
(MeOH-isopropyl ether), mp 157–158°C, [ $\alpha$ ]<sub>D</sub> = –57.5° (*c* = 0.98, MeOH).  
Source: YE SHENG MA *Cimicifuga simplex* (underground part). Ref: 3516.

**2730 Bugbanoside D**

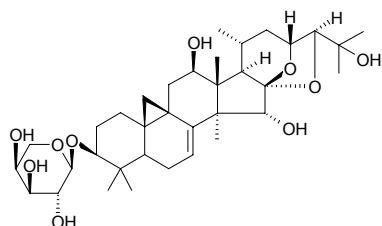
12 $\beta$ -Acetoxy-24R,25-epoxy-3 $\beta$ ,15 $\alpha$ -dihydroxy-16,23-dione-cycloart-7-ene  
3-O- $\alpha$ -L-arabinopyranoside C<sub>37</sub>H<sub>54</sub>O<sub>11</sub> (674.84). Colorless powder  
(MeOH-isopropyl ether), mp 171–172°C, [ $\alpha$ ]<sub>D</sub> = –58.1° (*c* = 0.33, MeOH).  
Source: YE SHENG MA *Cimicifuga simplex* (underground part). Ref: 3516.

**2731 Bugbanoside E**

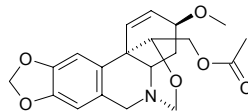
12 $\beta$ -Acetoxy-24R,25-epoxy-3 $\beta$ -hydroxy-16,23-dione-cycloart-7-ene  
3-O- $\alpha$ -L-arabinopyranoside C<sub>37</sub>H<sub>54</sub>O<sub>10</sub> (658.84). colorless powder  
(MeOH-isopropyl ether), mp 125–126°C, [ $\alpha$ ]<sub>D</sub> = –54.2° (*c* = 0.52, MeOH).  
Source: YE SHENG MA *Cimicifuga simplex* (underground part). Ref: 3516.

**2732 Bugbanoside F**

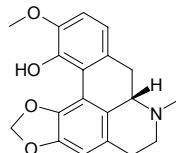
16,23R: 16,24S-Diepoxy-3 $\beta$ ,12 $\beta$ ,15 $\alpha$ ,25-tetrahydroxy-cycloart-7-ene  
3-O- $\alpha$ -L-arabinopyranoside C<sub>35</sub>H<sub>54</sub>O<sub>10</sub> (634.81). colorless powder  
(MeOH-isopropyl ether), mp 255–256°C, [ $\alpha$ ]<sub>D</sub> = –18.5° (*c* = 0.36, MeOH).  
Source: YE SHENG MA *Cimicifuga simplex* (underground part). Ref: 3516.

**2733 Bujeine**

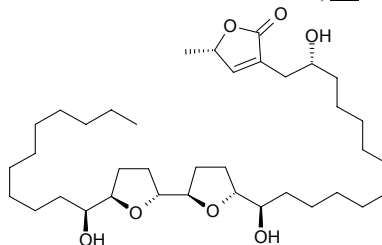
C<sub>20</sub>H<sub>23</sub>NO<sub>6</sub> (373.41). mp. 140–142°C, [ $\alpha$ ]<sub>D</sub><sup>22</sup> = 129.4° (*c* = 0.11, MeOH)  
Source: YI BI LI YA SHUI XIAN *Narcissus bujei*. Ref: 1887.

**2734 Bulbocapnine**

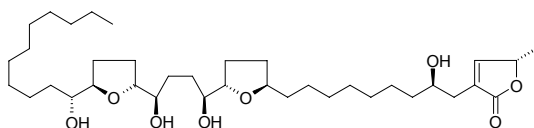
[298-45-3] C<sub>19</sub>H<sub>19</sub>NO<sub>4</sub> (325.37). Pharm: Anticholinergic; anti-gastrin; dopamine receptor antagonist (in CNS); causes tetanic coma; inhibits excitation of striatum adenylyl cyclase caused by dopamine; inhibits small intestinal movement (*in vitro*); sedative; uterine stimulant (gpg and rbt); hypnotic (synergist of hypnotics); vasodilator; LD<sub>50</sub> (mus, giving drug in rib) = 195mg/kg. Source: AO XIAN ZI JIN *Corydalis cava*, GAO JIA SUO ZI JIN *Corydalis caucasica*, HUANG HAI YING SU *Glauicum flavum*, JU HUA HUANG LIAN *Corydalis pallida*, MA CHANG LI ZI JIN *Corydalis marschalliana*, MEI LI HAI YING SU *Glauicum pulchrum*, SHAN YAN HU SUO *Corydalis bulbosa* [Syn. *Corydalis solida*], XIA TIAN WU *Corydalis decumbens* [Syn. *Corydalis amabilis*], YAO YONG QIU GUO ZI JIN *Fumaria officinalis*. Ref: 1, 6.

**2735 Bullatacin**

C<sub>37</sub>H<sub>66</sub>O<sub>7</sub> (622.93). Colorless oil, [ $\alpha$ ]<sub>D</sub><sup>24</sup> = +17.5° (*c* = 0.13, CHCl<sub>3</sub>). Pharm: Cytotoxic (hmn hepatoma cell lines HepG2, IC<sub>50</sub> = 0.063ng/mL, control Adriamycin, IC<sub>50</sub> = 0.241 $\mu$ g/mL; hmn hepatoma cells transfected with hepatitis B virus Hep2,2,15, IC<sub>50</sub> = 0.069ng/mL, Adriamycin, IC<sub>50</sub> = 0.450 $\mu$ g/mL)<sup>[5377]</sup>; cytotoxic (*in vitro*, 9PS ED<sub>50</sub> = 1 $\times$ 10<sup>-15</sup>  $\mu$ g/mL, 9KB ED<sub>50</sub> = 6.2 $\times$ 10<sup>-14</sup>  $\mu$ g/mL, A549 ED<sub>50</sub> = 1.3 $\times$ 10<sup>-13</sup>  $\mu$ g/mL, HT29 ED<sub>50</sub> = 1 $\times$ 10<sup>-12</sup>  $\mu$ g/mL, MCF7 ED<sub>50</sub> < 1 $\times$ 10<sup>-12</sup>  $\mu$ g/mL)<sup>[2167]</sup>; antineoplastic (*in vivo*: rat, L<sub>1210</sub>, 0.05mg/kg, T/C = 138%; hmn, A2780, 0.1mg/kg, InRt = 68%)<sup>[2167]</sup>. Source: FAN LI ZHI *Annona squamosa*, PAO ZHUANG FAN LI ZHI *Annona bullata*, CI GUO FAN LI ZHI *Annona muricata*, Ref: 2167, 5377.

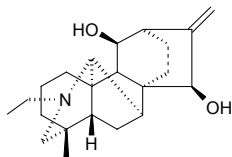
**2736 Bullatanocin**

Squamosatin C C<sub>37</sub>H<sub>66</sub>O<sub>8</sub> (638.93). White powder (hexane-chloroform) or white wax (chloroform), [ $\alpha$ ]<sub>D</sub><sup>22</sup> = +14.4° (*c* = 0.55, chloroform). Pharm: Cytotoxic (BST, LC<sub>50</sub> = 0.43 $\mu$ g/mL, A549 *in vitro*, ED<sub>50</sub> = 5.15 $\times$ 10<sup>-10</sup>  $\mu$ g/mL, MCF7 *in vitro*, ED<sub>50</sub> = 0.0242 $\mu$ g/mL, HT29 *in vitro*, ED<sub>50</sub> = 1.66 $\times$ 10<sup>-11</sup>  $\mu$ g/mL)<sup>[1077]</sup>. Source: FAN LI ZHI *Annona squamosa*. Ref: 1018, 1077, 1171.

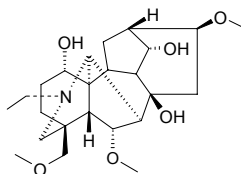


**2737 Bullatine A**

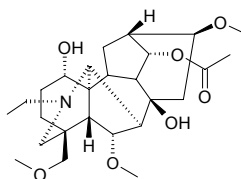
$C_{22}H_{33}NO_2$  (343.51). mp 251~253°C. **Pharm:** Analgesic (mus, chloride 1mg/kg); LD<sub>50</sub> (mus, sc, chloride) = 21.96mg/kg. **Source:** BAO SHAN WU TOU *Aconitum bullatifolium* var. *homotrichum* [Syn. *Aconitum nazarum*]. **Ref:** 1, 6.

**2738 Bullatine B**

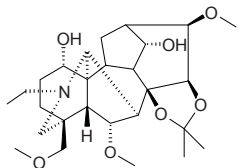
Neoline [466-26-2]  $C_{24}H_{39}NO_6$  (437.58). Colorless powder, mp 158~159°C,  $[\alpha]_D^{26} = +19.2^\circ$  ( $c = 0.826$ , EtOH). **Pharm:** Analgesic (mus, chloride 1mg/kg); LD<sub>50</sub> (mus, sc, chloride) = (2.99±0.08)mg/kg. **Source:** BAO SHAN WU TOU *Aconitum bullatifolium* var. *homotrichum* [Syn. *Aconitum nazarum*], GUA YE WU TOU *Aconitum hemsleyanum*, WU TOU *Aconitum carmichaeli*, FU ZI *Aconitum carmichaeli* (tuber). **Ref:** 1, 6, 239, 461, 2208, 4373.

**2739 Bullatine C**

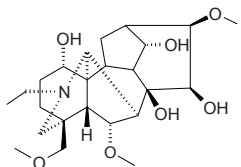
14-*O*-Acetylneoline [1354-86-5]  $C_{26}H_{41}NO_7$  (479.62). mp 220°C. **Pharm:** Analgesic (mus, chloride 1mg/kg). **Source:** BAO SHAN WU TOU *Aconitum bullatifolium* var. *homotrichum* [Syn. *Aconitum nazarum*], FU ZI *Aconitum carmichaeli* (tuber). **Ref:** 1, 6, 4373.

**2740 Bullatine E**

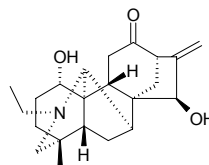
$C_{27}H_{43}NO_7$  (493.65). **Source:** BAO SHAN WU TOU *Aconitum bullatifolium* var. *homotrichum* [Syn. *Aconitum nazarum*]. **Ref:** 1, 6.

**2741 Bullatine F**

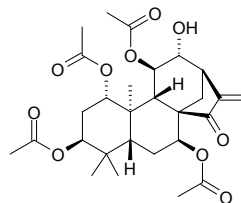
Nagarine [80665-73-2]  $C_{24}H_{39}NO_7$  (453.58). mp 186°C. **Source:** XUE SHANG YI ZHI HAO *Aconitum brachypodum*. **Ref:** 6.

**2742 Bullatine G**

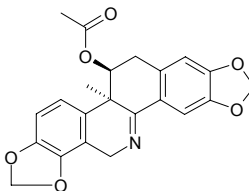
Napellonine [509-24-0]  $C_{22}H_{31}NO_3$  (357.50). mp 210~212°C. **Source:** WU TOU *Aconitum carmichaeli*, XUE SHANG YI ZHI HAO *Aconitum brachypodum*. **Ref:** 4, 6, 239, 461, 660.

**2743 Bulleyanin**

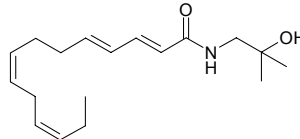
$C_{28}H_{38}O_{10}$  (534.61). mp 240~244°C. **Source:** CANG SHAN XIANG CHA CAI *Isodon bulleyana*. **Ref:** 4067.

**2744 Bungeanine**

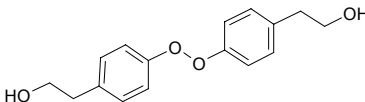
$C_{22}H_{19}NO_6$  (393.40). **Source:** KU DI DING *Corydalis bungeana*. **Ref:** 660.

**2745 Bungeanool**

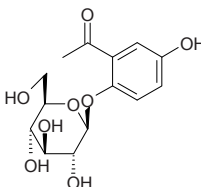
[117568-40-8]  $C_{18}H_{29}NO_2$  (291.44). **Source:** HUA JIAO *Zanthoxylum bungeanum*. **Ref:** 1521.

**2746 Bungein A**

$C_{16}H_{18}O_4$  (274.32). Colorless wax. **Source:** CHOU MU DAN *Clerodendrum bungei*. **Ref:** 897.

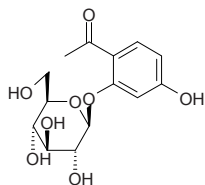
**2747 Bungeiside A**

$C_{14}H_{18}O_8$  (314.29). **Source:** BAI SHOU WU *Cynanchum bungei*. **Ref:** 660.

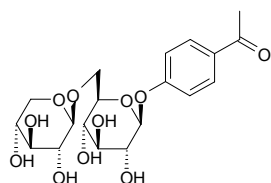


**2748 Bungeiside B**

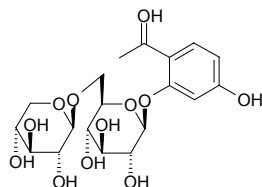
$C_{14}H_{18}O_8$  (314.29). Source: BAI SHOU WU *Cynanchum bungei*. Ref: 660.

**2749 Bungeiside C**

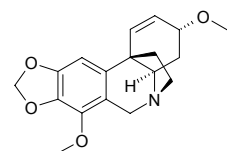
$C_{19}H_{26}O_{11}$  (430.41). Source: BAI SHOU WU *Cynanchum bungei*. Ref: 660.

**2750 Bungeiside D**

$C_{19}H_{26}O_{12}$  (446.41). Source: BAI SHOU WU *Cynanchum bungei*. Ref: 660.

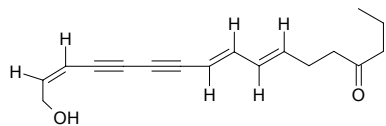
**2751 Buphanidrine**

$C_{18}H_{21}NO_4$  (315.37). Source: GUAN MU WEN SHU LAN *Crinum macowanii* (bulb). Ref: 4000.

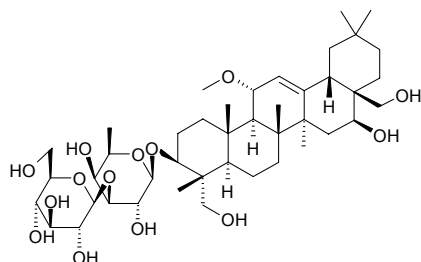
**2752 Bupleuronol**

[111128-28-0]  $C_{17}H_{20}O_2$  (256.35). Colorless lamellar crystals, mp 22°C.

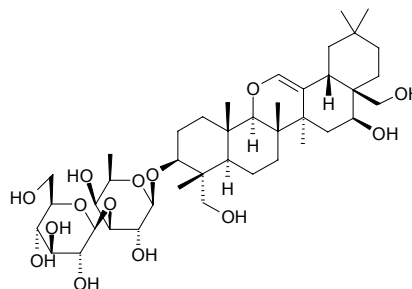
Source: DA YE CHAI HU *Bupleurum longiradiatum*. Ref: 81, 1521.

**2753 Bupleuroside III**

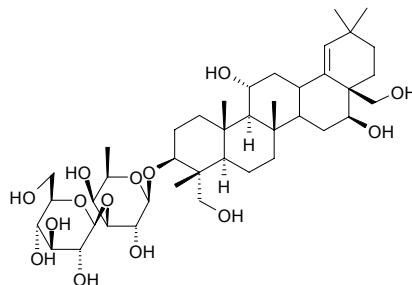
$C_{43}H_{72}O_{14}$  (813.04). Source: ZI HU *Bupleurum falcatum*. Ref: 2247.

**2754 Bupleuroside VI**

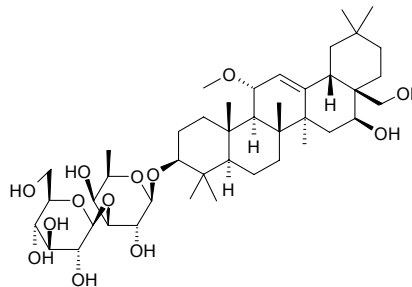
$C_{41}H_{68}O_{14}$  (789.99). Source: ZI HU *Bupleurum falcatum*. Ref: 2247.

**2755 Bupleuroside XIII**

$C_{41}H_{68}O_{14}$  (784.99). Source: ZI HU *Bupleurum falcatum*. Ref: 2247.

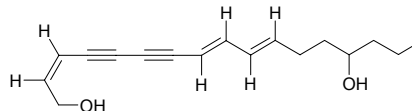
**2756 Bupleuroside IX**

$C_{43}H_{72}O_{13}$  (797.05). Source: ZI HU *Bupleurum falcatum*. Ref: 2247.

**2757 Bupleurotoxin**

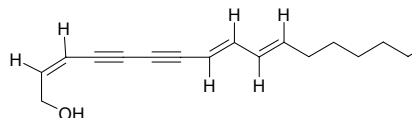
14-Hydroxy-bupleurynol [111128-27-9]  $C_{17}H_{22}O_2$  (258.36). Colorless lamellar crystals, mp 54°C (methanol),  $[\alpha]_D^{18} = +20^\circ$  ( $c = 0.021$ , methanol).

Pharm: LD<sub>50</sub> (mus, ip) = 3.03mg/kg. Source: DA YE CHAI HU *Bupleurum longiradiatum*. Ref: 81, 1521.

**2758 Bupleurynol**

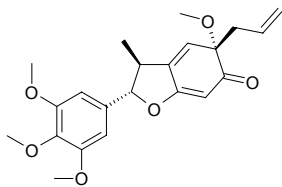
[111128-29-1]  $C_{17}H_{22}O$  (242.36). Colorless lamellar crystals, mp 36°C.

Source: DA YE CHAI HU *Bupleurum longiradiatum*. Ref: 81, 1521.

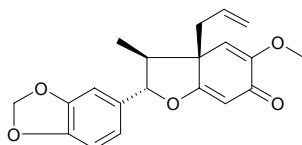


**2759 Burcellin**

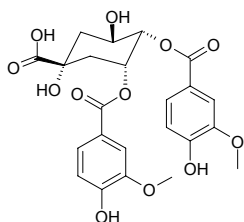
$C_{22}H_{26}O_6$  (386.45). Source: YU LAN *Magnolia denudata* [Syn. *Magnolia heptapata*]. Ref: 4439.

**2760 Burchellin**

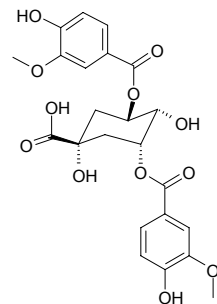
[38276-59-4]  $C_{20}H_{20}O_5$  (340.38). White amorphous powder,  $[\alpha]_D^{33} = +42.0^\circ$  ( $c = 0.006$ , chloroform). Source: SHAN JU *Piper hancei*. Ref: 75.

**2761 Burkinabin A**

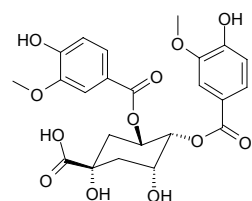
3,4-*O*-Divanillylquinic acid  $C_{23}H_{24}O_{12}$  (492.44). Source: *Fagara xanthoxyloides* (root cortex). Ref: 3804.

**2762 Burkinabin B**

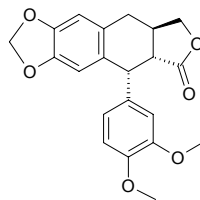
3,5-*O*-Divanillylquinic acid  $C_{23}H_{24}O_{12}$  (492.44). Source: *Fagara xanthoxyloides* (root cortex). Ref: 3804.

**2763 Burkinabin C**

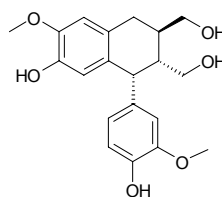
4,5-*O*-Divanillylquinic acid  $C_{23}H_{24}O_{12}$  (492.44). Source: *Fagara xanthoxyloides* (root cortex). Ref: 3804.

**2764 Bursehemim**

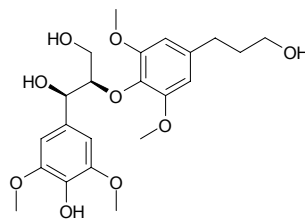
$C_{21}H_{20}O_6$  (368.39). Source: E SHEN *Anthriscus sylvestris*. Ref: 5499.

**2765 Burselignan**

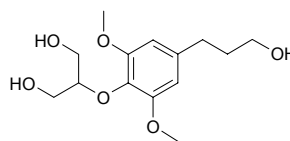
8 $\alpha$ -(4-Hydroxy-3-methoxy-phenyl)-6 $\beta$ ,7 $\alpha$ -bis-hydroxymethyl-3-methoxy-5,6,7,8-tetrahydro-naphthalen-2-ol  $C_{20}H_{24}O_6$  (360.41). White powder,  $[\alpha]_D^{20} = -64.2^\circ$  ( $c = 0.01$ , MeOH). Pharm: Cytotoxic inactive (100 $\mu$ g/mL: KB, LNCaP, and Col2 cells). Source: YUE NAN LIE LAN *Bursera tonkinensis* (root). Ref: 5336.

**2766 Burseneolignan**

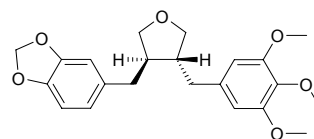
1*R*\*-(4-Hydroxy-3,5-dimethoxy-phenyl)-2*R*\*-[4-(3-hydroxy-propyl)-2,6-dimethoxy-phenoxy]-propane-1,3-diol  $C_{22}H_{30}O_9$  (438.48). Colorless syrup,  $[\alpha]_D^{20} = +14.0^\circ$  ( $c = 0.1$ , MeOH). Pharm: Cytotoxic inactive (100 $\mu$ g/mL: KB, LNCaP, and Col2 cells). Source: YUE NAN LIE LAN *Bursera tonkinensis* (root). Ref: 5336.

**2767 Bursephenylpropane**

2-[4-(3-Hydroxy-propyl)-2,6-dimethoxyphenoxy]-propane-1,3-diol  $C_{14}H_{22}O_6$  (286.33). Colorless syrup. Pharm: Cytotoxic inactive (100 $\mu$ g/mL: KB, LNCaP, and Col2 cells). Source: YUE NAN LIE LAN *Bursera tonkinensis* (root). Ref: 5336.

**2768 Burseran**

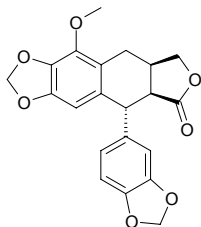
[23284-23-3]  $C_{22}H_{26}O_6$  (386.45). Oil,  $[\alpha]_D^{20} = +37.5^\circ$ . Pharm: Antineoplastic (hmn epidermatoid nasopharyngeal carcinoma 9KB, EC = 0.026 $\mu$ g/mL). Source: XIAO YE LIE LAN *Bursera microphylla*. Ref: 658, 661.



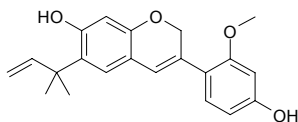
**2769 Burseranin**

$C_{21}H_{18}O_7$  (382.37). Colorless waxy solid,  $[\alpha]_D = +32^\circ$  ( $c = 0.27$ , MeOH).

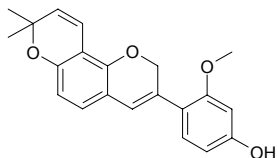
**Pharm:** Cytotoxic (hmn fibrosarcoma cells HT1080,  $ED_{50} = 5.5 \mu\text{g/mL}$ , control Adriamycin,  $ED_{50} = 0.1 \mu\text{g/mL}$ ). **Source:** LIE WEI LIE LAN *Bursera graveolens* (stem). **Ref:** 4437.

**2770 Burttinol A**

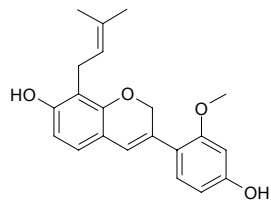
$C_{21}H_{22}O_4$  (338.41). Oil. **Source:** KEN NI YA CI TONG *Erythrina burtii*. **Ref:** 1986.

**2771 Burttinol B**

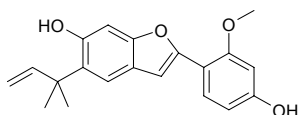
Erypoegin B  $C_{21}H_{20}O_4$  (336.39). Colorless oil. **Source:** KEN NI YA CI TONG *Erythrina burtii*, SHAN DI CI TONG *Erythrina poeppigiana*. **Ref:** 1972, 1986.

**2772 Burttinol C**

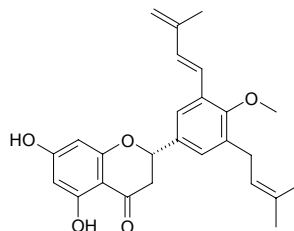
Erypoegin A  $C_{21}H_{22}O_4$  (338.41). Colorless oil. **Source:** KEN NI YA CI TONG *Erythrina burtii*, SHAN DI CI TONG *Erythrina poeppigiana*. **Ref:** 1972, 1986.

**2773 Burttinol D**

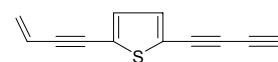
$C_{20}H_{20}O_4$  (324.38). Oil. **Source:** KEN NI YA CI TONG *Erythrina burtii*. **Ref:** 1986.

**2774 Burttinonedehydrate**

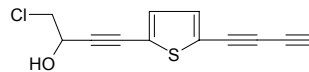
5,7-Dihydroxy-4'-methoxy-3'-(3-methylbutadienyl)-5'-(3-methylbut-2-enyl)-a vanone  $C_{26}H_{28}O_6$  (420.51). Oil,  $[\alpha]_D = -66^\circ$  ( $c = 0.01$ , MeOH). **Source:** KEN NI YA CI TONG *Erythrina burtii* (stem bark). **Ref:** 3387.

**2775 2-(Buta-1,3-diyanyl)-5-(but-3-en-1-ynyl) thiophene**

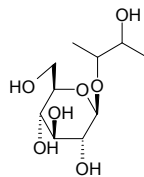
$C_{12}H_6S$  (182.25). **Source:** MO HAN LIAN *Eclipta prostrata* [Syn. *Eclipta alba*]. **Ref:** 6.

**2776 2-(Buta-1,3-diyanyl)-5-(4-chloro-3-hydroxybut-1-ynyl) thiophene**

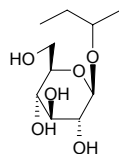
$C_{12}H_7ClOS$  (234.71). **Source:** MO HAN LIAN *Eclipta prostrata* [Syn. *Eclipta alba*]. **Ref:** 6.

**2777 Butane-2,3-diol 2-O-β-D-glucopyranoside**

$C_{10}H_{20}O_7$  (252.27). Amorphous powder,  $[\alpha]_D^{23} = -32^\circ$ . **Source:** BEI SHA SHEN *Glehnia littoralis* (fruit). **Ref:** 3525.

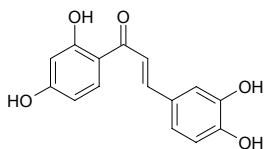
**2778 Butan-2-O-β-D-glucopyranoside**

$C_{10}H_{20}O_6$  (232.627). White gum;  $[\alpha]_D^{20} = -89.49^\circ$  ( $c = 0.3$ ,  $CHCl_3$ ). **Pharm:** Inhibitory activity against NFAT transcription ( $IC_{50} > 100 \mu\text{mol/L}$ , control Cyclosporin A,  $IC_{50} = (0.29 \pm 0.01) \mu\text{mol/L}$ )<sup>[2536]</sup>. **Source:** HUA CHA BIAO *Ribes fasciculatum* var. *chinense*. **Ref:** 2536.

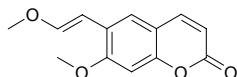


**2779 Butein**

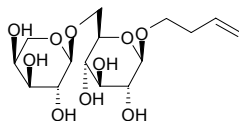
3,4,2',4'-Tetrahydroxychalcone [21849-70-7] C<sub>15</sub>H<sub>12</sub>O<sub>5</sub> (272.26). Yellow powder, mp 243–247°C; mp 213–215°C. **Pharm:** Reduced coenzyme I (NADH) oxidase inhibitor; succinic oxidase inhibitor; antifibrogenic (rats, 10mg/(kg·d) or 25mg/(kg·d), significant reduces concentrations of hydroxyproline and malondialdehyde). **Source:** CI HUI HUA *Robinia pseudoacacia*, LU CAO *Rhaponticum carthamoides*, MI HUA DOU *Spatholobus suberectus*, QI ZI *Rhus verniciflua* [Syn. *Toxicadendron verniciflum*]. **Ref:** 6, 658, 698, 2205, 5473.

**2780 6-(trans-1-Buten-3-oxy)-7-methoxycoumarin**

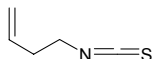
C<sub>13</sub>H<sub>12</sub>O<sub>4</sub> (232.24). mp 225°C. **Source:** YAN JIAO CAO *Boenninghausenia albiflora*. **Ref:** 2495.

**2781 3-Butenyl-6'-O-α-L-arabinopyranosyl-β-D-glucopyranoside**

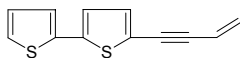
C<sub>15</sub>H<sub>26</sub>O<sub>10</sub> (366.37). Amorphous powder, [α]<sub>D</sub><sup>27</sup> = -31.5° (c = 0.677, MeOH). **Source:** RI BEN ZHANG YA CAI *Swertia japonica*. **Ref:** 2528.

**2782 3-Butenyl isothiocyanate**

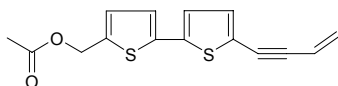
[3386-97-8] C<sub>3</sub>H<sub>7</sub>NS (113.18). bp 78.5°C/26mmHg. **Source:** GAN LAN *Brassica oleracea* var. *capitata*, JIE ZI *Brassica juncea*. **Ref:** 6.

**2783 5-(3-Buten-1-ynyl)-2,2'-bithienyl**

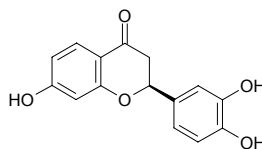
C<sub>12</sub>H<sub>8</sub>S<sub>2</sub> (216.33). **Pharm:** Antifungal; nematocide. **Source:** WAN SHOU JU *Tagetes erecta*, WEI XIAO WAN SHOU JU *Tagetes minuta*. **Ref:** 6, 658, 660.

**2784 5-(3-Buten-1-ynyl)-2,2'-bithienyl-5'-methylacetate**

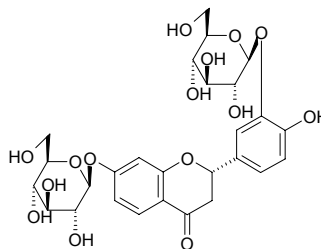
C<sub>15</sub>H<sub>12</sub>O<sub>2</sub>S<sub>2</sub> (288.39). **Source:** MO HAN LIAN *Eclipta prostrata* [Syn. *Eclipta alba*]. **Ref:** 6.

**2785 Butin**

7,3',4'-Trihydroxyflavanone [21913-99-5] C<sub>15</sub>H<sub>12</sub>O<sub>5</sub> (272.26). mp 224–226°C. **Source:** CI HUI HUA *Robinia pseudoacacia*. **Ref:** 6.

**2786 Butrin**

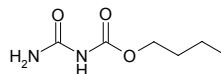
[492-13-7] C<sub>27</sub>H<sub>32</sub>O<sub>15</sub> (596.55). **Pharm:** Antihepatotoxin. **Source:** DAN ZI ZI MAO *Butea monosperma*. **Ref:** 658.

**2787 n-Butylaldehyde**

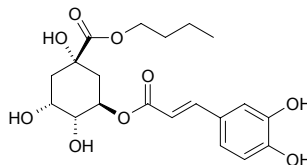
Propanecarbaldehyde [123-72-8] C<sub>4</sub>H<sub>8</sub>O (72.11). **Source:** SHENG JIANG *Zingiber officinale*, HUANG HAO *Artemisia scoparia* [Syn. *Artemisia capillaris* var. *scoparia*]. **Ref:** 2.

**2788 n-Butyl allophanate**

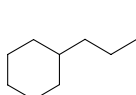
C<sub>6</sub>H<sub>12</sub>N<sub>2</sub>O<sub>3</sub> (160.17). **Source:** DANG SHEN *Codonopsis pilosula*. **Ref:** 2.

**2789 Butyl chlorogenate**

C<sub>20</sub>H<sub>26</sub>O<sub>9</sub> (410.42). **Source:** JI ZI MU *Sinoadina Racemosa* [Syn. *Adina racemosa*] (leaf, flower and twig: yield = 0.0072%dw)<sup>[4723]</sup>. **Ref:** 4723.

**2790 Butyl-cyclohexane**

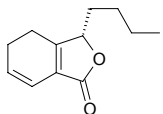
[1678-93-9] C<sub>10</sub>H<sub>20</sub> (140.27). **Source:** SHAN ZHA *Crataegus pinnatifida*. **Ref:** 2.



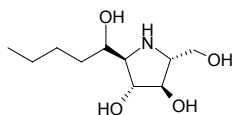


**2791 3(S)-3-Butyl-4,5-dihydrophthalide**

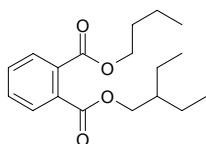
Senkyunolide A [63038-10-8] C<sub>12</sub>H<sub>16</sub>O<sub>2</sub> (192.26). **Pharm:** Anticonvulsant; central muscle relaxant; anti-arteriosclerosis (inhibits proliferation of cell in smooth muscle, 5μg/mL InRt = 76.8%); LD<sub>50</sub> (mus, orl) > 500mg/kg. **Source:** CHA XIONG *Ligusticum sinense* cv. *chaxiong*, CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*], DANG GUI *Angelica sinensis*, HAN QIN *Apium graveolens*, OU DANG GUI *Levisticum officinale*. **Ref:** 531, 660, 929, 1206, 1265, 1521.

**2792 6-C-Butyl-DMDP**

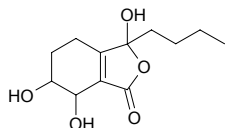
6-C-Butyl derivative of 2*R*,5*R*-bis(hydroxymethyl)-3*R*,4*R*-dihydroxypyrridoline C<sub>10</sub>H<sub>21</sub>NO<sub>4</sub> (219.28). [α]<sub>D</sub> = +174.3° (c = 0.32, H<sub>2</sub>O). **Pharm:** Enzymes inhibitor (α-glucosidase: rice, IC<sub>50</sub> > 1000μmol/L, control DMDP, IC<sub>50</sub> = 300μmol/L; yeast, IC<sub>50</sub> > 1000μmol/L, control DMDP, IC<sub>50</sub> = 3.6μmol/L; rat intestinal maltase, IC<sub>50</sub> > 1000μmol/L, control DMDP, IC<sub>50</sub> = 290μmol/L; β-glucosidase, almond, IC<sub>50</sub> = 68μmol/L, control DMDP, IC<sub>50</sub> = 13μmol/L; β-galactosidase, bovine liver, IC<sub>50</sub> = 390μmol/L, control DMDP, IC<sub>50</sub> = 2.2μmol/L; Trehalase, porcine kidney, IC<sub>50</sub> > 1000μmol/L, control DMDP, IC<sub>50</sub> = 200μmol/L; amyloglucosidase, *Aspergillus niger*, IC<sub>50</sub> = 40μmol/L, control DMDP, IC<sub>50</sub> = 19μmol/L). **Source:** RI BEN SAN YE SHA SEN *Adenophora triphylla* var. *japonica* (fresh whole herbs). **Ref:** 3915.

**2793 n-Butyl-2-ethylbutylphthalate**

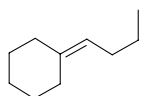
C<sub>18</sub>H<sub>26</sub>O<sub>4</sub> (306.41). **Source:** SHUI QIN *Oenanthe javanica*. **Ref:** 6.

**2794 3-n-Butyl-3-hydroxy-4,5,6,7-tetrahydro-6,7-dihydroxy phthalide**

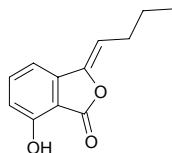
3,6,7-Trihydroxy-4,5,6,7-tetrahydro-3-butyl-phthalide C<sub>12</sub>H<sub>18</sub>O<sub>5</sub> (242.27). **Source:** CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*]. **Ref:** 2.

**2795 Butylidenecyclohexane**

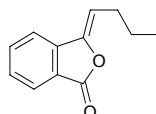
[2272-03-9] C<sub>10</sub>H<sub>18</sub> (138.25). **Source:** HOU PO *Magnolia officinalis*. **Ref:** 2.

**2796 3-Butylidene-7-hydroxyphthalide**

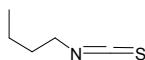
7-Hydroxy-3-butylidene-phthalide C<sub>12</sub>H<sub>12</sub>O<sub>3</sub> (204.23). **Pharm:** Coronary vasodilator (dog, enhances blood flow through coronary arteries). **Source:** CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*]. **Ref:** 2, 658.

**2797 3-Butylidene-phalide**

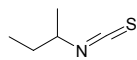
n-Butylidene-phthalide [551-08-6] C<sub>12</sub>H<sub>12</sub>O<sub>2</sub> (188.23). **Pharm:** Antiasthmatic; anticholinergic; uterine relaxant. **Source:** CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*], DANG GUI *Angelica sinensis*, DONG DANG GUI *Angelica acutiloba* [Syn. *Ligusticum acutilobum*], YAO YONG SHE CHUANG *Cnidium officinale* [Syn. *Ligusticum officinale*], ZHI GEN DANG GUI *Angelica radix*. **Ref:** 1, 2, 601.

**2798 Butyl isothiocyanate**

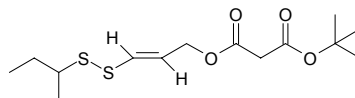
[592-82-5] C<sub>5</sub>H<sub>9</sub>NS (115.20). bp 167°C. **Source:** JIE ZI *Brassica juncea*. **Ref:** 6.

**2799 sec-Butyl isothiocyanate**

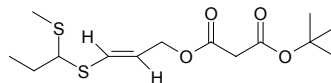
2-Isothiocyanato-butane [4426-79-3] C<sub>5</sub>H<sub>9</sub>NS (115.20). bp 159°C. **Source:** JIE ZI *Brassica juncea*. **Ref:** 6.

**2800 t-Butyl 3-[(1-methylpropyl)dithio]-2-propenyl malonate**

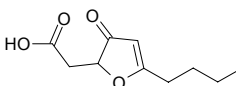
C<sub>14</sub>H<sub>24</sub>O<sub>4</sub>S<sub>2</sub> (320.47). Yellow oil, [α]<sub>D</sub><sup>25</sup> = -24.3° (c = 2.2, CHCl<sub>3</sub>). **Source:** BO SI A WEI BIAN ZHONG *Ferula persica* var. *latisecta*. **Ref:** 3430.

**2801 t-Butyl 3-[(1-methylthiopropyl)thio]-2-propenyl malonate**

C<sub>14</sub>H<sub>24</sub>O<sub>4</sub>S<sub>2</sub> (320.47). Yellow oil, [α]<sub>D</sub><sup>25</sup> = +27° (c = 1.3, CHCl<sub>3</sub>). **Source:** BO SI A WEI BIAN ZHONG *Ferula persica* var. *latisecta*. **Ref:** 3430.

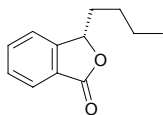
**2802 (5-Butyl-3-oxo-2,3-dihydrofuran-2-yl)-acetic acid**

C<sub>10</sub>H<sub>15</sub>O<sub>4</sub> (198.22). White oily gum, [α]<sub>D</sub><sup>25</sup> = +29° (c = 0.07, MeOH) **Pharm:** Inhibits germination (lettuce seed, IC<sub>50</sub> = (2.13±0.03)mmol/L, positive control 4-Hydroxybenzoic acid, IC<sub>50</sub> = (4.02±0.39)mmol/L). **Source:** YI NIAN PENG *Erigeron annuus*. **Ref:** 2028.

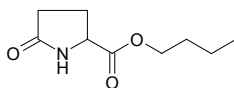


**2803 3-Butyl-phthalide**

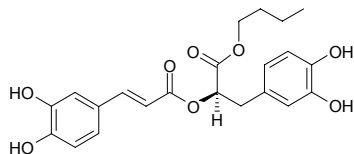
*n*-Butyl-phthalide [6066-49-5] C<sub>12</sub>H<sub>14</sub>O<sub>2</sub> (190.24). bp 140~141°C/2.4mmHg, 177~178°C/15mmHg. **Pharm:** Antispasmodic; uterine relaxant. **Source:** CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*] (root and rhizome: content = 1.78%<sup>[5508]</sup>), DONG DANG GUI *Angelica acutiloba* [Syn. *Ligusticum acutilobum*], DUAN PIAN GAO BEN *Ligusticum brachylobum* (root and rhizome: content = trace)<sup>[5508]</sup>, GAO BEN *Ligusticum sinense* (root and rhizome: content = trace)<sup>[5508]</sup>, HAN QIN BIAN ZHONG *Apium graveolens* var. *dulce*, LIAO GAO BEN *Ligusticum jeholense* (root and rhizome: content = trace)<sup>[5508]</sup>, XIN JIANG GAO BEN *Contioselinum vaginatum* (root and rhizome: content = trace)<sup>[5508]</sup>. **Ref:** 1, 2, 5508.

**2804 *n*-Butyl pyroglutamate**

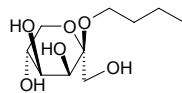
C<sub>9</sub>H<sub>15</sub>NO<sub>3</sub> (185.22). **Source:** SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. **Ref:** 2487.

**2805 Butyl rosmarinate**

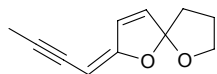
C<sub>22</sub>H<sub>24</sub>O<sub>8</sub> (416.43). **Pharm:** Antioxidant (DPPH scavenger, IC<sub>50</sub> = 0.2706mmol/L, control Propyl gallate, IC<sub>50</sub> = 0.03mol/L; superoxide radical inhibitor, inactive, Propyl gallate, IC<sub>50</sub> = 0.106mmol/L; iron chelating assay, inactive, Propyl gallate, IC<sub>50</sub> = 0.064mmol/L). **Source:** MING XIAN HUA ZHU CHANG ZHU LIU LI CAO *Lindelofia stylosa* (aerial parts). **Ref:** 4533.

**2806 β-*n*-Butyl-*D*-tagatopyranoside**

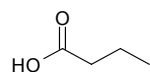
C<sub>10</sub>H<sub>20</sub>O<sub>6</sub> (236.27). Colorless needles, mp 145~147°C. **Source:** BAN LAN GEN *Isatis indigotica*. **Ref:** 4587.

**2807 2-(Butyn-2-ylidene)-Δ<sup>3</sup>-dihydrofuran[5-spiro-2']tetrahydrofuran**

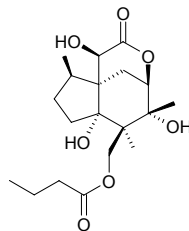
C<sub>11</sub>H<sub>12</sub>O<sub>2</sub> (176.22). **Source:** MU<sup>(3)</sup> JU *Matricaria chamomilla* [Syn. *Matricaria recutita*]. **Ref:** 6.

**2808 Butyric acid**

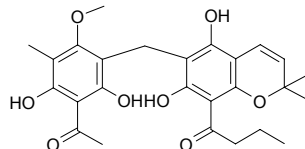
Butanoic acid [107-92-6] C<sub>4</sub>H<sub>8</sub>O<sub>2</sub> (88.11). **Pharm:** Flavorant. **Source:** PU<sup>(2)</sup> TAO *Vitis vinifera*. **Ref:** 2, 658, 660.

**2809 14-*O*-*n*-Butyrylfloridanolide**

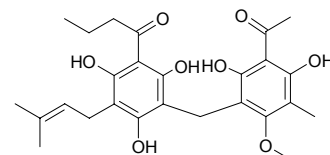
C<sub>19</sub>H<sub>30</sub>O<sub>7</sub> (370.45). Colorless amorphous, [α]<sub>D</sub><sup>20</sup> = -14° (c = 0.65, CHCl<sub>3</sub>). **Source:** *Illicium merrillianum* (pericarp). **Ref:** 5113.

**2810 Butyrylma iltochromene**

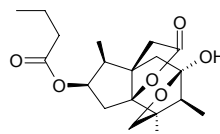
C<sub>26</sub>H<sub>30</sub>O<sub>8</sub> (470.52). **Pharm:** Cytotoxic (KB). **Source:** YE WU TONG *Mallotus japonicus*. **Ref:** 658.

**2811 Butyrylmallotojaponin**

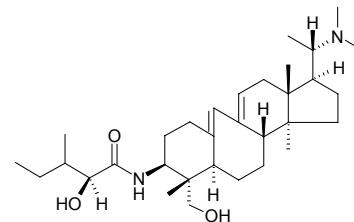
[96853-73-5] C<sub>26</sub>H<sub>32</sub>O<sub>8</sub> (472.54). Yellow acicular crystals, mp 170~171°C (methanol). **Pharm:** Cytotoxic (*in vitro*: HeLa, ID<sub>50</sub> = 362ng/mL; KB, ED<sub>50</sub> = 0.72μg/mL; Hep2, IC<sub>50</sub> = 0.41μg/mL; PC13, IC<sub>50</sub> = 0.91μg/mL; B16, IC<sub>50</sub> = 0.60μg/mL; L5178Y, IC<sub>50</sub> = 1.08μg/mL; P<sub>388</sub>, IC<sub>50</sub> = 2.85μg/mL); Antiviral (inhibits replication of HSV-1, ED<sub>50</sub> = 165ng/mL). **Source:** YE WU TONG *Mallotus japonicus*. **Ref:** 974, 1059, 1145, 1190.

**2812 2-*O*-*n*-Butyrylpseudomajucin**

C<sub>19</sub>H<sub>28</sub>O<sub>6</sub> (352.43). Colorless powder, [α]<sub>D</sub><sup>20</sup> = -61.9° (c = 0.65, CH<sub>3</sub>OH). **Source:** *Illicium merrillianum* (pericarp). **Ref:** 5113.

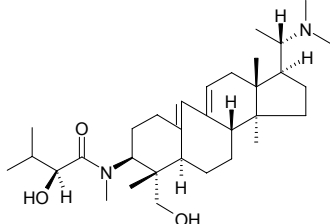
**2813 (-)-Buxahejramine**

(2*S*)-20-Dimethylamino-20-hydroxy-3β-methyl-3'-methyl-pentanoylamino-9,10-seco-buxa-9(11),10(19)-dien-31-ol C<sub>32</sub>H<sub>54</sub>N<sub>2</sub>O<sub>3</sub> (514.80). [α]<sub>D</sub><sup>25</sup> = -7° (c = 0.14, CHCl<sub>3</sub>). **Pharm:** AChE inhibitor (IC<sub>50</sub> = (162±5)μmol/L, control Physostigmine, IC<sub>50</sub> = (0.041±0.001)μmol/L). **Source:** DUO RU TOU HUANG YANG *Buxus papillosa* (leaf). **Ref:** 5216.

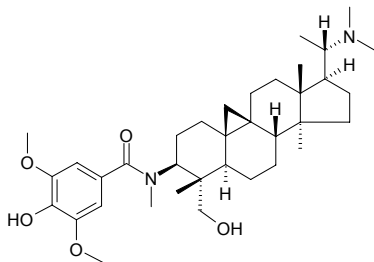


**2814 (-)-Buxakarachiamine**

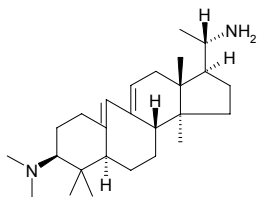
(20*S*)-20-Dimethylamino-2'-hydroxy-3 $\beta$ -methyl-3'-methyl-butanoylamino-9,10-seco-buxa-9(11),10(19)-dien-31-ol C<sub>32</sub>H<sub>54</sub>N<sub>2</sub>O<sub>3</sub> (514.80). [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -9° (*c* = 0.22, CHCl<sub>3</sub>). **Pharm:** AChE inhibitor (IC<sub>50</sub> = (143±1.3)μmol/L, control Physostigmine, IC<sub>50</sub> = (0.041±0.001)μmol/L). **Source:** DUO RU TOU HUANG YANG *Buxus papillosa* (leaf). **Ref:** 5216.

**2815 (-)-Buxakashmiramine**

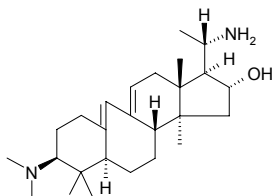
(20*S*)-20-Dimethylamino-4',6'-dimethoxy-5'-hydroxybenzoylamino-3 $\beta$ -methylbuxan-31-ol C<sub>36</sub>H<sub>56</sub>N<sub>2</sub>O<sub>5</sub> (596.86). [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -3° (*c* = 0.62, CHCl<sub>3</sub>). **Pharm:** AChE inhibitor (IC<sub>50</sub> = (25.4±1.1)μmol/L, control Physostigmine, IC<sub>50</sub> = (0.041±0.001)μmol/L); BChE inhibitor (IC<sub>50</sub> = (0.74±0.03)μmol/L, control Physostigmine, IC<sub>50</sub> = (0.875±0.008)μmol/L). **Source:** DUO RU TOU HUANG YANG *Buxus papillosa* (leaf). **Ref:** 5216.

**2816 Buxamine E**

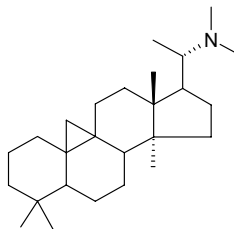
[14317-17-0] C<sub>26</sub>H<sub>44</sub>N<sub>2</sub> (384.65). **Pharm:** Laxative. **Source:** JIN SHU HUANG YANG *Buxus sempervirens* (the compound was separated from the plant by D. Stanfächer, et al. in 1964)<sup>[5505]</sup>. **Ref:** 6, 658, 5505.

**2817 Buxaminol E**

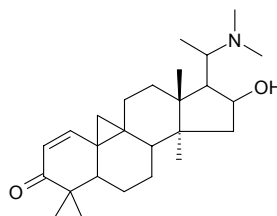
[14155-76-1] C<sub>26</sub>H<sub>44</sub>N<sub>2</sub>O (400.65). mp 199~200°C. **Source:** HUANG YANG MU YE *Buxus microphylla* var. *sinica*. **Ref:** 6.

**2818 Buxbodine A**

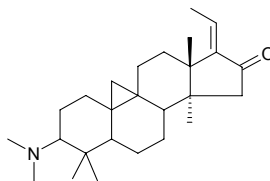
20 $\alpha$ -Dimethylamino-9 $\beta$ ,19-cyclo-4,4,14 $\alpha$ -trimethyl-5 $\alpha$ -pregnane C<sub>26</sub>H<sub>45</sub>N (371.66). Colorless crystals mp 191~193°C. **Source:** QUE SHE HUANG YANG *Buxus bodinieri*. **Ref:** 2138.

**2819 Buxbodine B**

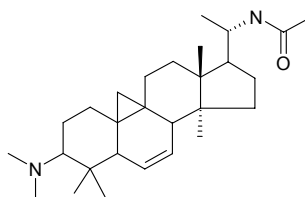
16 $\beta$ -Hydroxy-20 $\alpha$ -dimethylamino-9 $\beta$ ,19-cyclo-4,4,14 $\alpha$ -trimethyl-5 $\alpha$ -pregnane C<sub>26</sub>H<sub>41</sub>NO<sub>2</sub> (399.62). Colorless crystals mp 202~205°C. **Source:** QUE SHE HUANG YANG *Buxus bodinieri*. **Ref:** 2138.

**2820 Buxbodine C**

3 $\beta$ -Dimethylamino-9 $\beta$ ,19-cyclo-4,4,14 $\alpha$ -trimethyl-5 $\alpha$ -pregn-6(7),17(20)-dien-16-one C<sub>26</sub>H<sub>41</sub>NO (383.62). Colorless crystals mp 150~154°C. **Source:** QUE SHE HUANG YANG *Buxus bodinieri*. **Ref:** 2138.

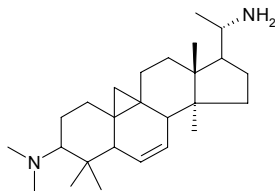
**2821 Buxbodine D**

3 $\beta$ -Dimethylamino-20 $\alpha$ -acetoxylamino-9 $\beta$ ,19-cyclo-4,4,14 $\alpha$ -trimethyl-5 $\alpha$ -pregn-6(7)-ene C<sub>28</sub>H<sub>46</sub>N<sub>2</sub>O (426.69). Colorless crystals mp 212~215°C. **Source:** QUE SHE HUANG YANG *Buxus bodinieri*. **Ref:** 2138.

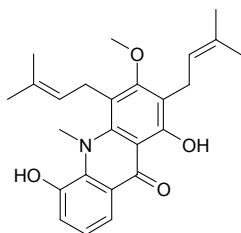


**2822 Buxbodine E**

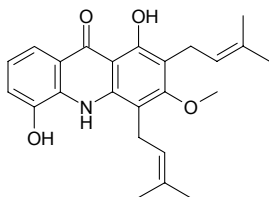
3-(Dimethylamino-20 $\alpha$ -amino-9 $\beta$ ,19-cyclo-4,4,14 $\alpha$ -trimethyl-5 $\alpha$ -pregn-6(7)-ene C<sub>26</sub>H<sub>44</sub>N<sub>2</sub> (384.65). Colorless crystals mp 194~197°C. Source: QUE SHE HUANG YANG *Buxus bodinieri*. Ref: 2138.

**2823 Buxifoliadine A**

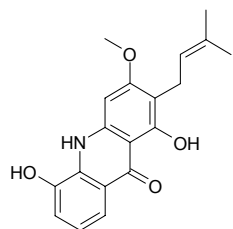
C<sub>25</sub>H<sub>29</sub>NO<sub>4</sub> (407.51). Source: DONG FENG JU GEN *Atalantia buxifolia* [Syn. *Severinia buxifolia*] (root cortex). Ref: 3075.

**2824 Buxifoliadine B**

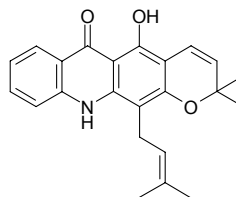
C<sub>24</sub>H<sub>27</sub>NO<sub>4</sub> (393.49). Pharm: Cytotoxic (*in vitro*: Colon205, ED<sub>50</sub> = 1.2 $\mu$ g/mL; hep-3B, ED<sub>50</sub> > 25 $\mu$ g/mL, inactive; KB, ED<sub>50</sub> > 25 $\mu$ g/mL, inactive)<sup>[3075]</sup>. Source: DONG FENG JU GEN *Atalantia buxifolia* [Syn. *Severinia buxifolia*] (root cortex). Ref: 3075.

**2825 Buxifoliadine C**

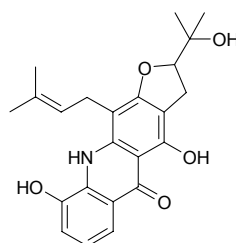
C<sub>19</sub>H<sub>19</sub>NO<sub>4</sub> (325.37). Source: DONG FENG JU GEN *Atalantia buxifolia* [Syn. *Severinia buxifolia*] (root cortex). Ref: 3075.

**2826 Buxifoliadine D**

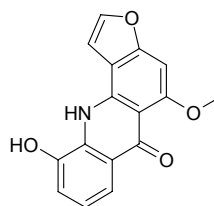
C<sub>23</sub>H<sub>23</sub>NO<sub>3</sub> (361.44). Pharm: Cytotoxic (*in vitro*: Colon205, ED<sub>50</sub> = 0.58 $\mu$ g/mL; hep-3B, ED<sub>50</sub> > 25 $\mu$ g/mL, inactive; KB, ED<sub>50</sub> > 25 $\mu$ g/mL, inactive)<sup>[3075]</sup>. Source: DONG FENG JU GEN *Atalantia buxifolia* [Syn. *Severinia buxifolia*] (root cortex). Ref: 3075.

**2827 Buxifoliadine E**

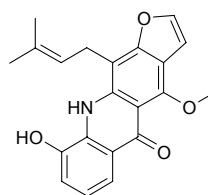
C<sub>23</sub>H<sub>25</sub>NO<sub>5</sub> (395.46). Source: DONG FENG JU GEN *Atalantia buxifolia* [Syn. *Severinia buxifolia*] (root cortex). Ref: 3075.

**2828 Buxifoliadine F**

C<sub>16</sub>H<sub>11</sub>NO<sub>4</sub> (281.27). Source: DONG FENG JU GEN *Atalantia buxifolia* [Syn. *Severinia buxifolia*] (root cortex). Ref: 3075.

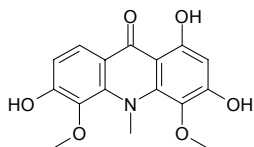
**2829 Buxifoliadine G**

C<sub>21</sub>H<sub>19</sub>NO<sub>4</sub> (349.39). Source: DONG FENG JU GEN *Atalantia buxifolia* [Syn. *Severinia buxifolia*] (root cortex). Ref: 3075.

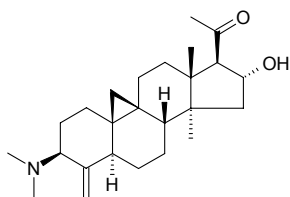


**2830 Buxifoliadine H**

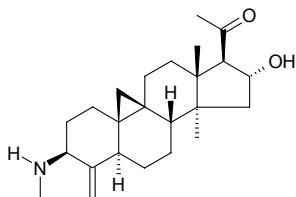
$C_{16}H_{15}NO_6$  (317.3). **Pharm:** Cytotoxic (*in vitro*: Colon205,  $ED_{50} > 25\mu\text{g/mL}$ , inactive; hep-3B,  $ED_{50} = 5.3\mu\text{g/mL}$ ; KB,  $ED_{50} = 0.22\mu\text{g/mL}$ )<sup>[3075]</sup>. **Source:** DONG FENG JU GEN *Atalantia buxifolia* [Syn. *Severinia buxifolia*] (root cortex). **Ref:** 3075.

**2831 Buxpiine**

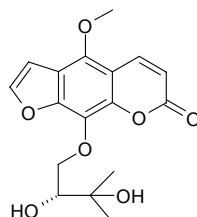
Buxpiine K [3296-11-5]  $C_{25}H_{39}NO_2$  (385.60). mp 178–180°C, mp 173°C. **Source:** HUANG YANG MU YE *Buxus microphylla* var. *sinica*. **Ref:** 6.

**2832 Buxtauine**

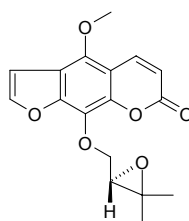
Buxtauine M [4236-73-1]  $C_{24}H_{37}NO_2$  (371.57). mp 178–181°C. **Source:** HUANG YANG MU YE *Buxus microphylla* var. *sinica*. **Ref:** 6, 660.

**2833 Byakangelicin**

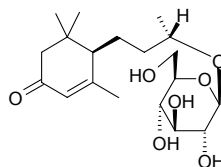
[482-25-7]  $C_{17}H_{18}O_7$  (334.33). Yellow amorphous powder,  $[\alpha]_D = -13.3^\circ$  ( $c = 0.1$ , MeOH). **Pharm:** Cytotoxic (HeLa,  $ID_{50} = 100\mu\text{g/mL}$ ); inhibits chorionic gonadotrophin (hmn); antileishmanial (*Leishmania major* promastigote, 10  $\mu\text{mol/L}$ , survival = (90.7±1.4)%, 1  $\mu\text{mol/L}$ , survival = (98.8±4.6)%, control Amphotericin B, 10  $\mu\text{mol/L}$ , survival = (0.2±0.04)%, 1  $\mu\text{mol/L}$ , survival = (71.9±4.4)%)<sup>[3797]</sup>; antifungal inactive (silica gel TLC, *Cladosporium cucumerinum*; control Nystatin, MIA = 0.2  $\mu\text{g}$ )<sup>[3797]</sup>. **Source:** BAI ZHI *Angelica dahurica* [Syn. *Angelica porphyrocaulis*], CHOU CAO *Ruta graveolens*, DA QIAN HU *Peucedanum grande*, GUANG HUA DANG GUI *Angelica glabra*, HONG DU HUO *Heracleum granatense*, OU ZHOU DU HUO *Heracleum pyrenaicum*, XIA GUO QIAN HU *Peucedanum stenocarpum*, YU ZHUANG YUN XIANG *Ruta pinnata*, *Thamnosma rhodesica* (root), *Citrus* sp. **Ref:** 2, 5, 658, 3797, 5392.

**2834 Byakangelicol**

[55173-98-3]  $C_{17}H_{16}O_6$  (316.31). **Source:** HANG BAI ZHI *Angelica taiwaniana*. **Ref:** 2, 660.

**2835 Byzantionoside B**

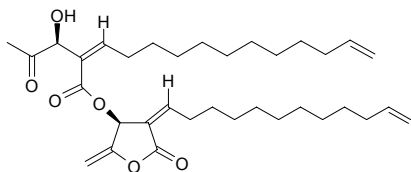
$C_{19}H_{32}O_7$  (372.46). Syrup,  $[\alpha]_D^{19} = +21.1^\circ$  ( $c = 0.7$ , MeOH). **Source:** CHANG HU JIAO *Piper elongatum* (aerial parts). **Ref:** 4239.



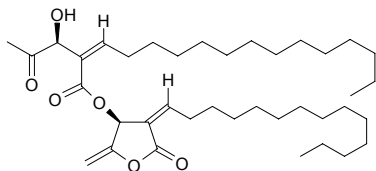
## C

**2836 C<sub>17</sub>-Obtusilactone dimer**

C<sub>34</sub>H<sub>52</sub>O<sub>6</sub> (556.79). Source: SAN ZUAN FENG *Lindera obtusiloba*. Ref: 2881.

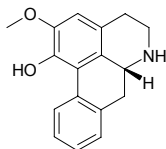
**2837 C<sub>19</sub>-Obtusilactone dimer**

C<sub>38</sub>H<sub>64</sub>O<sub>6</sub> (616.93). Source: SAN ZUAN FENG *Lindera obtusiloba*. Ref: 2890.

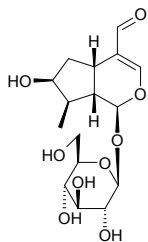
**2838 (-)-Caaverine**

1-Hydroxy-2-methoxy noraporphine [6899-64-5] C<sub>17</sub>H<sub>17</sub>NO<sub>2</sub> (267.33). Pharm:

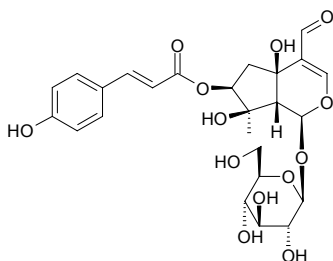
Toxin (animal model). Source: BEI MEI E ZHANG QIU *Liriodendron tulipifera*, SUAN ZAO REN *Ziziphus jujuba* var. *spinosa*. Ref: 658, 660.

**2839 Cachinaside I**

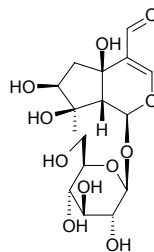
C<sub>16</sub>H<sub>24</sub>O<sub>9</sub> (360.36). Source: ZI WEI JING YE *Campsis grandiflora*. Ref: 660.

**2840 Cachinaside III**

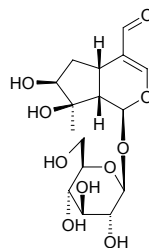
C<sub>25</sub>H<sub>30</sub>O<sub>13</sub> (538.51). Source: ZI WEI JING YE *Campsis grandiflora*. Ref: 660.

**2841 Cachinaside IV**

C<sub>16</sub>H<sub>24</sub>O<sub>11</sub> (392.36). Source: ZI WEI JING YE *Campsis grandiflora*. Ref: 660.

**2842 Cachinaside V**

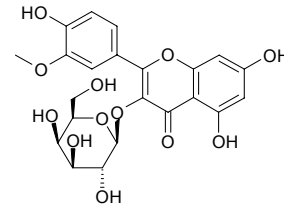
C<sub>16</sub>H<sub>24</sub>O<sub>10</sub> (376.36). Source: ZI WEI JING YE *Campsis grandiflora*. Ref: 660.

**2843 Cacticin**

Isorhamnetin-3-O-β-D-galactopyranoside C<sub>22</sub>H<sub>22</sub>O<sub>12</sub> (478.41). mp 267–269°C.

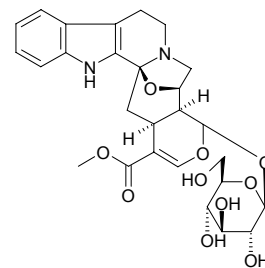
Source: DA LI HUA *Dahlia pinnata* [Syn. *Dahlia variabilis*], GUI JIAN JIN JI ER *Caragana jubata*, JU HUA *Chrysanthemum morifolium* [Syn.

*Dendranthema morifolium*], SHA ZAO *Elaeagnus angustifolia*, TIAN CONG *Philydrum lanuginosum*, YIN CHEN HAO *Artemisia capillaris*. Ref: 6, 660.

**2844 Cadambine**

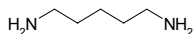
[54422-49-0] C<sub>27</sub>H<sub>32</sub>N<sub>2</sub>O<sub>10</sub> (544.56). Pharm: Antibacterial (*in vitro*:

*Staphylococcus aureus*, *Bacillus subtilis*, *Bacillus coli*, *Bacillus diphtheriae*, *Streptococcus* sp., *Salmonella* sp., *Bacillus proteus*, *Aspergillus niger*, *Bacillus lactis*, *Klebsiella* sp.); antileishmanial. Source: GOU TENG *Uncaria rhynchophylla* [Syn. *Nauclea rhynchophylla*]. Ref: 2, 2178.

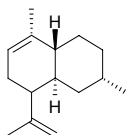


**2845 Cadaverine**

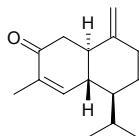
1,5-Diaminopentane [462-94-2] C<sub>5</sub>H<sub>14</sub>N<sub>2</sub> (102.18). bp 178~180°C. **Pharm:** Irritant (to skin); plant growth stimulant (low concentration). **Source:** CAO XIANG WAN *Lathyrus sativus*, CHONG CHUN YU *Hemibarbus labeo*, DI XIA CHE ZHOU CAO *Trifolium subterraneum*, HEI DA DOU *Glycine max*, JIANG *Glycine max*, TAI JING TIAN *Sedum acre*, WAN DOU *Pisum sativum*. **Ref:** 6, 658.

**2846 Cadina-9,11(12)-diene**

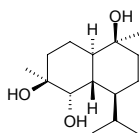
C<sub>15</sub>H<sub>24</sub> (204.36). bp 94°C/2mmHg. **Source:** ZHANG MU *Cinnamomum camphora*. **Ref:** 6.

**2847 Cadina-4,10(15)-dien-3-one**

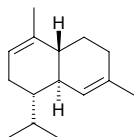
C<sub>15</sub>H<sub>22</sub>O (218.34). **Pharm:** Phytogrowth inhibitor (*Raphanus sativus* seeds, IC<sub>50</sub> = 0.10µg/mL, control Colchicine, IC<sub>50</sub> = 0.40µg/mL); insecticidal (adult *Cylas formicarius elegantulus*, 0.18mg/insect, 24h, mortality = 55%, 48h, mortality = 85%, control Farnesyl methyl ether, 0.18mg/insect, 24h, mortality = 65%, 48h mortality = 95%). **Source:** LUN SHENG SHAN XIANG *Hyptis verticillata*, BAI JIANG JUN *Beauveria bassiana*. **Ref:** 3949.

**2848 Cadinane-4β,5α,10β-triol**

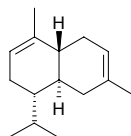
C<sub>15</sub>H<sub>28</sub>O<sub>3</sub> (256.39). mp 186~188°C, [α]<sub>D</sub><sup>27</sup> = -6.0° (c = 0.26, CHCl<sub>3</sub>). **Source:** TAI WAN SHAN *Taiwania cryptomerioides* (root). **Ref:** 4371.

**2849 α-Cadinene**

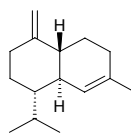
[24406-05-1] C<sub>15</sub>H<sub>24</sub> (204.36). **Source:** PI PA YE *Eriobotrya japonica*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], SHI JI NING *Mosla scabra* [Syn. *Mosla punctata*]. **Ref:** 6, 660.

**2850 β-Cadinene**

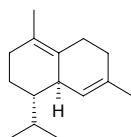
C<sub>15</sub>H<sub>24</sub> (204.36). **Pharm:** Flavorant. **Source:** AI YE *Artemisia argyi*, DUAN YE LUO HAN SONG SHI *Podocarpus macrophyllus* var. *maki*, GAO LIANG JIANG *Alpinia officinarum*, HUANG HUA HAO *Artemisia annua*, JU JIANG YE *Piper betle*, LUO HAN SONG SHI *Podocarpus macrophyllus*, OU ZHOU CI BAI *Juniperus communis*, SHUI CAI *Menyanthes trifoliata*, TIAN MING JING *Carpesium abrotanoides*, XIE CAO *Valeriana officinalis*, YIN CHEN HAO *Artemisia capillaris*, ZHANG MU *Cinnamomum camphora*. **Ref:** 6, 658.

**2851 γ-Cadinene**

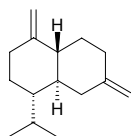
[1460-97-5] C<sub>15</sub>H<sub>24</sub> (204.36). **Source:** HUO XIANG *Agastache rugosus*, HUANG HUA HAO *Artemisia annua*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. **Ref:** 2, 660.

**2852 δ-Cadinene**

[483-76-1] C<sub>15</sub>H<sub>24</sub> (204.36). mp (+) 133~134°C/10mmHg, (±) 133°C/10mmHg. **Source:** HUANG HUA HAO *Artemisia annua*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*], WU WEI ZI *Schisandra chinensis*, XI XIAN *Siegesbeckia orientalis*. **Ref:** 2, 6, 660.

**2853 ε-Cadinene**

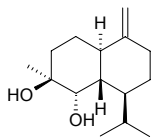
[25548-04-3] C<sub>15</sub>H<sub>24</sub> (204.36). **Source:** MU HAO *Artemisia japonica*, HUANG HUA HAO *Artemisia annua*. **Ref:** 6, 660.



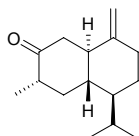
**2854 Cadin-10(14)-ene-4 $\beta$ ,5 $\alpha$ -diol**

$C_{15}H_{26}O_2$  (238.37). Amorphous solid,  $[\alpha]_D^{27} = -5.9^\circ$  ( $c = 0.26$ ,  $CHCl_3$ ).

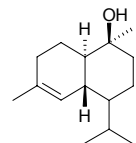
Source: TAI WAN SHAN *Taiwania cryptomerioides* (root). Ref: 4371.

**2855 (4S)-Cadin-10(15)-en-3-one**

$C_{15}H_{24}O$  (220.36). Pale brown oil. Pharm: Phytogrowth inhibitor (*Raphanus sativus* seeds,  $IC_{50} = 22.00\mu g/mL$ , control Colchicine,  $IC_{50} = 0.40\mu g/mL$ ); insecticidal (adult *Cylas formicarius elegantulus*, 0.27mg/insect, 24h, mortality = 90%, 48h mortality = 100%, control Farnesyl methyl ether, 0.27mg/insect, 24h, mortality = 85%, 48h mortality = 100%). Source: BAI JIANG JUN *Beauveria bassiana*. Ref: 3949.

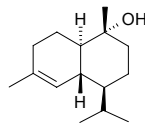
**2856 T-Cadinol**

$C_{15}H_{26}O$  (222.37). Colorless gum. Pharm: Cytotoxic (A549,  $ED_{50} = 5.4\mu mol/L$ ,  $ED_{50} = 24.5\mu g/mL$ , control Adriamycin,  $ED_{50} = 0.01\mu mol/L$ ,  $ED_{50} = 0.02\mu g/mL$ ; MCF7,  $ED_{50} = 2.5\mu mol/L$ ,  $ED_{50} = 11.2\mu g/mL$ , Adriamycin,  $ED_{50} = 0.1\mu mol/L$ ,  $ED_{50} = 0.2\mu g/mL$ ; HT29,  $ED_{50} = 7.9\mu mol/L$ ,  $ED_{50} = 35.7\mu g/mL$ , Adriamycin,  $ED_{50} = 0.1\mu mol/L$ ,  $ED_{50} = 0.2\mu g/mL$ )<sup>[5088]</sup>. Source: GAO SHAN HUO RONG CAO *Leontopodium alpinum* (root), TAI WAN SHAN *Taiwania cryptomerioides* (root, heartwood). Ref: 4371, 5037, 5088.

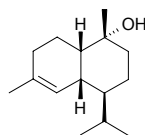
**2857  $\alpha$ -Cadinol**

[481-34-5]  $C_{15}H_{26}O$  (222.37). mp 74.8~75.4°C. Pharm: Cytotoxic (*in vitro*, Hepa1c1c7 mouse hepatoma cells,  $IC_{50} > 5\mu g/mL$ ,  $CD = 2.3\mu g/mL$ ,  $CI > 2.2$ ; control Sulforaphane,  $IC_{50} = 2.1\mu g/mL$ ,  $CD = 0.087\mu g/mL$ ,  $CI = 24.1$ )<sup>[4721]</sup>, cytotoxic (A549,  $ED_{50} = 3.1\mu mol/L$ ,  $ED_{50} = 14.4\mu g/mL$ , control Adriamycin,  $ED_{50} = 0.01\mu mol/L$ ,  $ED_{50} = 0.02\mu g/mL$ ; MCF7,  $ED_{50} = 2.5\mu mol/L$ ,  $ED_{50} = 11.1\mu g/mL$ , Adriamycin,  $ED_{50} = 0.1\mu mol/L$ ,  $ED_{50} = 0.1\mu g/mL$ ; HT29,  $ED_{50} = 0.7\mu mol/L$ ,  $ED_{50} = 3.0\mu g/mL$ , Adriamycin,  $ED_{50} = 0.1\mu mol/L$ ,  $ED_{50} = 0.1\mu g/mL$ )<sup>[5088]</sup>, cytotoxic (quinone reductase induction assay in cultured

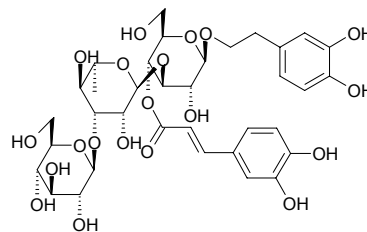
Hepa1c1c7 mouse hepatoma cells)<sup>[5038]</sup>. Source: PI PA YE *Eriobotrya japonica*, SHUI LIU DOU *Pongamia pinnata* (stem cortex: yield = 0.0023%)<sup>[4721]</sup>, TAI WAN SHAN *Taiwania cryptomerioides* (root), TAI WAN SHAN *Taiwania cryptomerioides* (heartwood). Ref: 6, 4371, 4721, 5038, 5088.

**2858  $\delta$ -Cadinol**

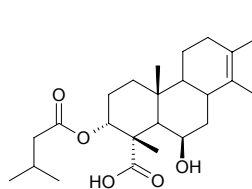
Torreyol [36564-42-8]  $C_{15}H_{26}O$  (222.37). mp (+) 137~138°C, (–) 139~140°C. Source: DONG BEI CI REN SHEN *Oplopanax elatus*, GOU GU SHU PI *Ilex cornuta*, TAI WAN SHAN *Taiwania cryptomerioides* (root), WANG CHUN YU LAN *Magnolia biondii* [Syn. *Magnolia Fargesii*], WU DANG MU LAN *Magnolia sprengeri*. Ref: 6, 660, 4371.

**2859 Caerulescenside**

$C_{35}H_{46}O_{20}$  (786.74). Amorphous powder,  $[\alpha]_D^{26} = -98^\circ$  ( $c = 0.49$ , MeOH). Pharm: Antioxidant (relative potency = 4.4, compared with resveratrol, relative potency = 1). Source: LIE DANG *Orobanche coerulescens* (whole herb). Ref: 4920.

**2860 Caesaldecane**

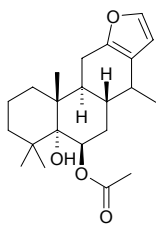
$C_{25}H_{38}O_5$  (418.58). White crystals, mp 150~153°C,  $[\alpha]_D^{25} = +75^\circ$  ( $c = 1.0$ ,  $CHCl_3$ ). Source: YUN SHI *Caesalpinia decapetala* (leaf). Ref: 4456.



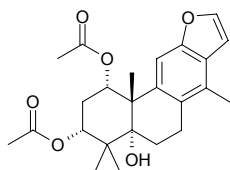


**2861 Caesaldekarin A**

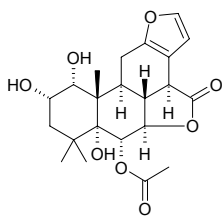
$C_{22}H_{32}O_4$  (360.50). Colorless gum. Source: JI MEI YUN SHI *Caesalpinia pulcherrima* (leaf). Ref: 4394.

**2862 Caesaldekarin E**

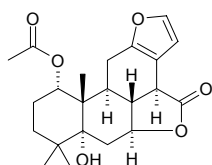
$C_{24}H_{30}O_6$  (414.50). Source: CI GUO SU MU *Caesalpinia crista* (seed kernel), DA YUN SHI *Caesalpinia major*. Ref: 1521, 4434.

**2863 Caesalmin A**

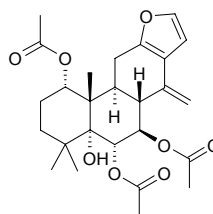
$C_{22}H_{28}O_8$  (420.46). Colorless block-like crystals (methanol), mp 179~180°C,  $[\alpha]_D^{20} = -6.5^\circ$  ( $c = 0.1$ , MeOH). Source: KU SHI LIAN *Caesalpinia minax*. Ref: 734.

**2864 Caesalmin B**

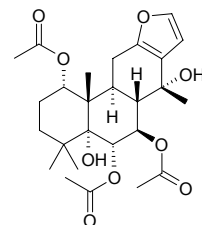
$C_{22}H_{28}O_6$  (388.46). Colorless crystals (hexane-acetone), mp 148~149°C,  $[\alpha]_D^{20} = -52.5^\circ$  ( $c = 0.4$ , MeOH). Source: KU SHI LIAN *Caesalpinia minax*. Ref: 734.

**2865 Caesalmin C**

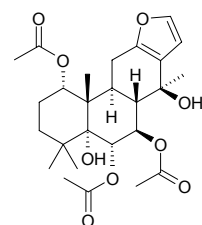
$C_{26}H_{34}O_8$  (474.56). Colorless crystals, mp 129~130°C (anhydrous), 121~122°C (monohydrate),  $[\alpha]_D^{20} = +51.2^\circ$  ( $c = 0.25$ , MeOH). Pharm: Antiviral (*in vitro*, Para3 Virus,  $IC_{50} = 8.2\mu\text{g/mL}$ ,  $TC_{50} = 196.3\mu\text{g/mL}$ ,  $TI = 23.9$ ; control Ribavirin,  $IC_{50} = 2.6\mu\text{g/mL}$ ,  $TC_{50} = 62.5\mu\text{g/mL}$ ,  $TI = 24.0$ )<sup>[3089]</sup>. Source: CI GUO SU MU *Caesalpinia crista* (seed kernel), KU SHI LIAN *Caesalpinia minax* (seed). Ref: 3089, 4434.

**2866 Caesalmin D**

$C_{26}H_{36}O_9$  (492.57). Colorless crystals, mp 192~193°C (methanol), 178~180°C ( $H_2O$ ),  $[\alpha]_D^{20} = +65.9^\circ$  ( $c = 0.2$ ,  $CH_3OH$ ). Pharm: Antiviral (*in vitro*, Para3 Virus,  $IC_{50} = 9.6\mu\text{g/mL}$ ,  $TC_{50} = 182.4\mu\text{g/mL}$ ,  $TI = 19.1$ ; control Ribavirin,  $IC_{50} = 2.6\mu\text{g/mL}$ ,  $TC_{50} = 62.5\mu\text{g/mL}$ ,  $TI = 24.0$ ). Source: KU SHI LIAN *Caesalpinia minax* (seed). Ref: 3089.

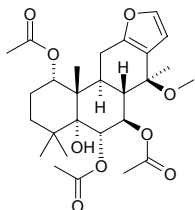
**2867 Caesalmin E**

$C_{26}H_{36}O_9$  (492.57). Colorless crystals, mp 135~136°C,  $[\alpha]_D^{20} = +22.3^\circ$  ( $c = 0.2$ , MeOH). Pharm: Antiviral (*in vitro*, Para3 Virus,  $IC_{50} = 10.3\mu\text{g/mL}$ ,  $TC_{50} = 165\mu\text{g/mL}$ ,  $TI = 16.0$ ; control Ribavirin,  $IC_{50} = 2.6\mu\text{g/mL}$ ,  $TC_{50} = 62.5\mu\text{g/mL}$ ,  $TI = 24.0$ ). Source: KU SHI LIAN *Caesalpinia minax* (seed). Ref: 3089.

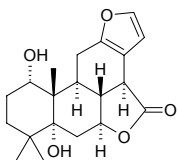


**2868 Caesalmin F**

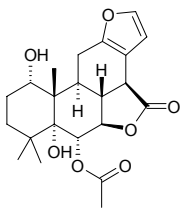
$C_{27}H_{38}O_9$  (506.6). Colorless crystals, mp 173–174°C,  $[\alpha]_D^{20} = +27.6^\circ$  ( $c = 0.25$ , MeOH). **Pharm:** Antiviral (*in vitro*, Para3 Virus,  $IC_{50} = 10.3\mu\text{g/mL}$ ,  $TC_{50} = 165\mu\text{g/mL}$ ,  $TI = 17.5$ ; control Ribavirin,  $IC_{50} = 2.6\mu\text{g/mL}$ ,  $TC_{50} = 62.5\mu\text{g/mL}$ ,  $TI = 24.0$ ). **Source:** KU SHI LIAN *Caesalpinia minax* (seed). **Ref:** 3089.

**2869 Caesalmin G**

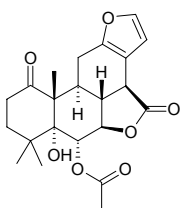
$C_{20}H_{26}O_5$  (346.43). Colorless needlelike crystals, mp 168–170°C,  $[\alpha]_D^{20} = +50.5^\circ$  ( $c = 0.2$ ,  $CH_3OH$ ). **Pharm:** Antiviral (*in vitro*, Para3 Virus,  $IC_{50} = 10.3\mu\text{g/mL}$ ,  $TC_{50} = 165\mu\text{g/mL}$ ,  $TI = 3.0$ ; control Ribavirin,  $IC_{50} = 2.6\mu\text{g/mL}$ ,  $TC_{50} = 62.5\mu\text{g/mL}$ ,  $TI = 24.0$ ). **Source:** KU SHI LIAN *Caesalpinia minax* (seed). **Ref:** 3089.

**2870 Caesalpinin H**

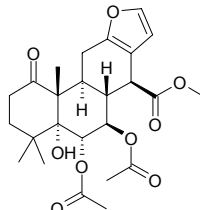
$C_{22}H_{28}O_7$  (404.46). Colorless amorphous solid,  $[\alpha]_D^{25} = +67.5^\circ$  ( $c = 0.057$ ,  $CHCl_3$ ). **Pharm:** Antimalarial (antiplasmodial *Plasmodium falciparum* FCR-3/A2 clone,  $IC_{50} = 5.2\mu\text{mol/L}$ ). **Source:** CI GUO SU MU *Caesalpinia crista* (seed kernel: yield = 0.0017%dw). **Ref:** 1126.

**2871 Caesalpinin I**

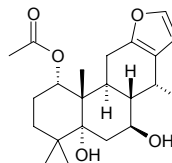
$C_{22}H_{26}O_7$  (402.45). Colorless amorphous solid,  $[\alpha]_D^{22} = +59.7^\circ$  ( $c = 0.053$ ,  $CHCl_3$ ). **Pharm:** Antimalarial (antiplasmodial *Plasmodium falciparum* FCR-3/A2 clone,  $IC_{50} > 10\mu\text{mol/L}$ ). **Source:** CI GUO SU MU *Caesalpinia crista* (seed kernel: yield = 0.0017%dw). **Ref:** 1126.

**2872 Caesalpinin J**

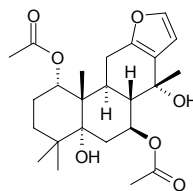
$C_{23}H_{32}O_9$  (476.53). Colorless amorphous solid,  $[\alpha]_D^{22} = +42.0^\circ$  ( $c = 0.088$ ,  $CHCl_3$ ). **Pharm:** Antimalarial (antiplasmodial *Plasmodium falciparum* FCR-3/A2 clone,  $IC_{50} = 1.0\mu\text{mol/L}$ ). **Source:** CI GUO SU MU *Caesalpinia crista* (seed kernel: yield = 0.0029%dw). **Ref:** 1126.

**2873 Caesalpinin K**

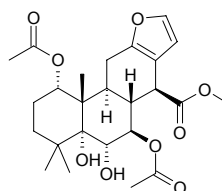
$C_{22}H_{32}O_5$  (376.50). Colorless amorphous solid,  $[\alpha]_D^{22} = +51.5^\circ$  ( $c = 0.151$ ,  $CHCl_3$ ). **Pharm:** Antimalarial (antiplasmodial *Plasmodium falciparum* FCR-3/A2 clone,  $IC_{50} = 0.4\mu\text{mol/L}$ ). **Source:** CI GUO SU MU *Caesalpinia crista* (seed kernel: yield = 0.0077%dw). **Ref:** 1126.

**2874 Caesalpinin L**

$C_{24}H_{34}O_7$  (434.53). Colorless amorphous solid,  $[\alpha]_D^{22} = +37.8^\circ$  ( $c = 0.171$ ,  $CHCl_3$ ). **Source:** CI GUO SU MU *Caesalpinia crista* (seed kernel: yield = 0.0025%dw). **Ref:** 1126.

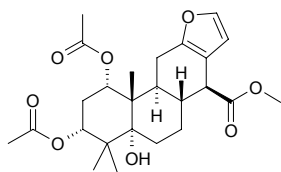
**2875 Caesalpinin M**

$C_{25}H_{34}O_9$  (478.54). Colorless amorphous solid,  $[\alpha]_D^{22} = +47.1^\circ$  ( $c = 0.074$ ,  $CHCl_3$ ). **Pharm:** Antimalarial (antiplasmodial *Plasmodium falciparum* FCR-3/A2 clone,  $IC_{50} > 10\mu\text{mol/L}$ ). **Source:** CI GUO SU MU *Caesalpinia crista* (seed kernel: yield = 0.0021%dw). **Ref:** 1126.

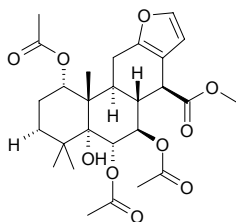


**2876 Caesalpinin MF**

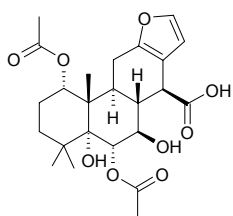
C<sub>25</sub>H<sub>34</sub>O<sub>8</sub> (462.54). Colorless amorphous solid,  $[\alpha]_D^{25} = +22.4^\circ$  ( $c = 0.15$ , CHCl<sub>3</sub>). Source: CI GUO SU MU *Caesalpinia crista* (seed kernel). Ref: 4434.

**2877 Caesalpinin MG**

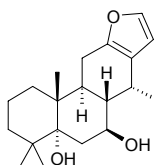
C<sub>27</sub>H<sub>36</sub>O<sub>10</sub> (520.58). Colorless amorphous solid,  $[\alpha]_D^{25} = +78.4^\circ$  ( $c = 0.039$ , CHCl<sub>3</sub>). Source: CI GUO SU MU *Caesalpinia crista* (seed kernel). Ref: 4434.

**2878 Caesalpinin MH**

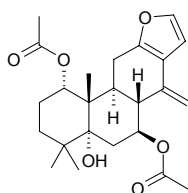
C<sub>24</sub>H<sub>32</sub>O<sub>9</sub> (464.52). Colorless amorphous solid,  $[\alpha]_D^{25} = +11.3^\circ$  ( $c = 0.3$ , CHCl<sub>3</sub>). Source: CI GUO SU MU *Caesalpinia crista* (seed kernel). Ref: 4434.

**2879 Caesalpinin MI**

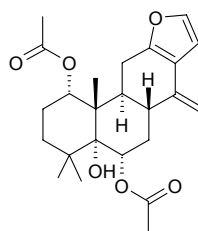
C<sub>20</sub>H<sub>30</sub>O<sub>3</sub> (318.46). Colorless amorphous solid,  $[\alpha]_D^{25} = +214.3^\circ$  ( $c = 0.2$ , CHCl<sub>3</sub>). Source: CI GUO SU MU *Caesalpinia crista* (seed kernel). Ref: 4434.

**2880 Caesalpinin MJ**

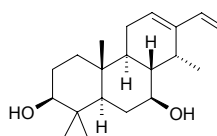
C<sub>24</sub>H<sub>32</sub>O<sub>6</sub> (416.52). Colorless amorphous solid,  $[\alpha]_D^{25} = +164.9^\circ$  ( $c = 0.25$ , CHCl<sub>3</sub>). Source: CI GUO SU MU *Caesalpinia crista* (seed kernel). Ref: 4434.

**2881 Caesalpinin MK**

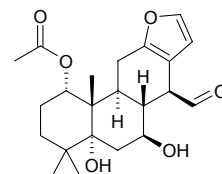
C<sub>24</sub>H<sub>32</sub>O<sub>6</sub> (416.52). Colorless amorphous solid,  $[\alpha]_D^{25} = +99.1^\circ$  ( $c = 0.1$ , CHCl<sub>3</sub>). Source: CI GUO SU MU *Caesalpinia crista* (seed kernel). Ref: 4434.

**2882 Caesalpinin ML**

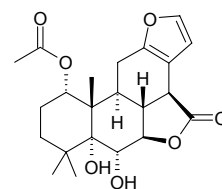
C<sub>20</sub>H<sub>32</sub>O<sub>2</sub> (304.48). Colorless amorphous solid,  $[\alpha]_D^{25} = +114.4^\circ$  ( $c = 0.1$ , CHCl<sub>3</sub>). Source: CI GUO SU MU *Caesalpinia crista* (seed kernel). Ref: 4434.

**2883 Caesalpinin N**

C<sub>22</sub>H<sub>30</sub>O<sub>6</sub> (390.48). Colorless amorphous solid,  $[\alpha]_D^{22} = +28.8^\circ$  ( $c = 0.195$ , CHCl<sub>3</sub>). Pharm: Antimalarial (antiplasmodial *Plasmodium falciparum* FCR-3/A2 clone, IC<sub>50</sub> = 0.12 μmol/L). Source: CI GUO SU MU *Caesalpinia crista* (seed kernel: yield = 0.0022%dw). Ref: 1126.

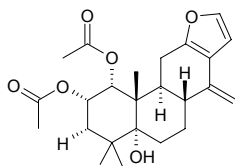
**2884 Caesalpinin O**

C<sub>22</sub>H<sub>28</sub>O<sub>7</sub> (404.46). Colorless amorphous solid,  $[\alpha]_D^{22} = +56.8^\circ$  ( $c = 0.078$ , CHCl<sub>3</sub>). Pharm: Antimalarial (antiplasmodial *Plasmodium falciparum* FCR-3/A2 clone, IC<sub>50</sub> > 10 μmol/L). Source: CI GUO SU MU *Caesalpinia crista* (seed kernel: yield = 0.0006%dw). Ref: 1126.

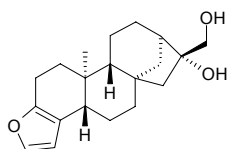


**2885 Caesalpinin P**

$C_{24}H_{32}O_6$  (416.52). Colorless amorphous solid,  $[\alpha]_D^{22} = +11.6^\circ$  ( $c = 0.074$ ,  $CHCl_3$ ). **Pharm:** Antimalarial (antiplasmodial *Plasmodium falciparum* FCR-3/A2 clone,  $IC_{50} = 1.7\mu\text{mol/L}$ ). **Source:** CI GUO SU MU *Caesalpinia crista* (seed kernel: yield = 0.0010%dw). **Ref:** 1126.

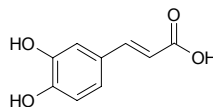
**2886 Cafestol**

[469-83-0]  $C_{20}H_{28}O_3$  (316.44). **Pharm:** Anti-inflammatory. **Source:** *Coffea* sp. **Ref:** 658.

**2887 Caffeic acid**

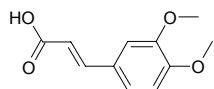
*trans*-3,4-Dihydroxycinnamic acid [501-16-6]  $C_9H_8O_4$  (180.16). **Pharm:** Analgesic; antibacterial; antifungal; antihepatotoxin; anti-inflammatory (COX-2 inhibitor,  $100\mu\text{mol/L}$ ,  $\text{InRt} = (32\pm 16)\%$ ); antioxidant (inhibits free-radical induced lysis of rat red blood cells and exhibits strong and dose-dependent protection of cell membrane)<sup>[5341]</sup>; antioxidant (rat plasma, protects against RBC lysis)<sup>[5341]</sup>; antioxidant (Chemiluminescence Method,  $IC_{50} = (0.66\pm 0.07)\mu\text{mol/L}$ )<sup>[3764]</sup>; antioxidant (DPPH scavenger,  $EC_{50} = 1.4\mu\text{g/mL} = 7.8\mu\text{mol/L}$ , control Ascorbic acid,  $EC_{50} = 1.6\mu\text{g/mL} = 9.1\mu\text{mol/L}$ )<sup>[4154]</sup>; antioxidant (DPPH scavenger,  $IC_{50} = (0.39\pm 0.01)\mu\text{mol/L}$ )<sup>[3764]</sup>,  $IC_{50} = (1.78\pm 0.03)\mu\text{g/mL}$ <sup>[5307]</sup>,  $IC_{50} = 25.5\mu\text{mol/L}$ )<sup>[5407]</sup>; antiulcerative; anti-venom; antiviral; hemostatic; choleric (rat, bile secretion promotor); gastric secretion promotor; leukopoietic; CNS stimulant (rat); elastase inhibitor (hmn leukocyte *in vitro*,  $IC_{50} = 86\mu\text{g/mL} = 475\mu\text{mol/L}$ )<sup>[5458]</sup>; neuroprotectant (primary cultures of rat cortical cells injured by glutamate,  $10.0\mu\text{mol/L}$ , cell viability =  $(33.1\pm 0.5)\%$ ,  $p < 0.05$ , control MK-801,  $10.0\mu\text{mol/L}$ , cell viability =  $(83.6\pm 4.2)\%$ , APV,  $10.0\mu\text{mol/L}$ , cell viability =  $(43.6\pm 3.2)\%$ , XNQX,  $10.0\mu\text{mol/L}$ , cell viability =  $(61.6\pm 2.7)\%$ )<sup>[3967]</sup>.  $LD_{50}$  (mus, ip) = 1583mg/kg. **Source:** BEI SHA SHEN *Glehnia littoralis* (underground part), BEI XUAN SHEN *Scrophularia buergeriana* (root), BIAN XU *Polygonum aviculare*, BO HE *Mentha haplocalyx* [Syn. *Mentha canadensis*; *Mentha arvensis* var. *haplocalyx*; *Mentha arvensis*], CHE SANG ZI YE *Dodonaea viscosa*, CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*], DAN SHEN *Salvia miltiorrhiza* (dried root: content = 0.027%)<sup>[5508]</sup>, DU SHEN *Conium maculatum*, DU ZHONG *Eucommia ulmoides*, GAO GUI CHUN HUANG JU *Anthemis nobilis*, GE YE MI HOU TAO *Actinidia rubricaulis* var. *coriacea* (ripe fruit: content = 0.17%)<sup>[5508]</sup>, HUA GOU TENG *Uncaria sinensis*, HUA NAN MI

HOU TAO *Actinidia glaucophylla* (ripe fruit: content = 0.31%)<sup>[5508]</sup>, HUANG HE MAO REN DONG *Lonicera fulvotomentosa*, JIAN ZI SU YE *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*], JIN HUA MI HOU TAO *Actinidia chrysantha* (ripe fruit: content = 0.08%)<sup>[5508]</sup>, JIN MAO GOU *Cibotium barometz* [Syn. *Polypodium barometz*] (rhizome: mean content of 4 origins = 0.0346%)<sup>[5508]</sup>, JIN YIN HUA *Lonicera japonica* (flower bud: mean content = 0.0088%)<sup>[5508]</sup>, JING LI MI HOU TAO *Actinidia callosa* var. *henryi* (ripe fruit: content = 0.13%)<sup>[5508]</sup>, KU HAO *Conyza blinii*, KUAI JING CAO SU *Phlomis tuberosa*, KUO YE MI HOU TAO *Actinidia latifolia* (ripe fruit: content = 0.27%)<sup>[5508]</sup>, LU SHAN SHI WEI *Pyrrhosia sheareri*, LUO YE SONG YE JIN SI TAO *Hypericum laricifolium* (aerial parts), MAO DI HUANG *Digitalis purpurea*, MAO HUA MI HOU TAO *Actinidia eriantha* (ripe fruit: content = 0.29%)<sup>[5508]</sup>, MAO MAN TUO LUO YE *Datura innoxia*, MEI WEI MI HOU TAO *Actinidia deliciosa* (ripe fruit: content = 0.27%)<sup>[5508]</sup>, MI HOU LI *Actinidia arguta* (ripe fruit: content = 0.23%)<sup>[5508]</sup>, MI HOU TAO *Actinidia chinensis* (ripe fruit: content = 0.21%)<sup>[5508]</sup>, MU TIAN LIAO *Actinidia polygama* (ripe fruit: content = 0.22%)<sup>[5508]</sup>, MU ZEI *Equisetum hiemale*, NAN FANG TU SI ZI *Cuscuta australis*, NAN FEI GOU MA *Harpagophytum procumbens*, NING MENG *Citrus limon*, NING MENG PI *Citrus limon*, PU GONG YING *Taraxacum mongolicum* (dried whole herb: content = 0.0345%)<sup>[5508]</sup>, RI BEN HUANG BAI *Phellodendron japonicum* (leaf), SANG HUANG *Phellinus igniarius* (sporocarp: yield = 0.0013%dw)<sup>[4747]</sup>, SHAN ZHA *Crataegus pinnatifida*, SHE XIANG CAO *Thymus vulgaris*, SHENG DI HONG JING TIAN *Rhodiola sacra*, SHENG MA *Cimicifuga foetida*, SI JI QING *Ilex chinensis* [Syn. *Ilex purpurea*], TAI WAN FU RONG *Hibiscus taiwanensis*, TAI WAN PU GONG YING *Taraxacum formosanum* (dried whole herb: content = 0.0126%)<sup>[5508]</sup>, TONG SE JI NA SHU *Cinchona cuprea*, XI ZHAN MAO REN DONG *Lonicera similis* (flower bud: mean content = 0.039%)<sup>[5508]</sup>, XIAN HE CAO *Agrimonia pilosa* var. *japonica*, XIAO GUO KA FEI *Coffea arabica*, XIE CAO *Valeriana officinalis*, XING AN SHENG MA *Cimicifuga dahurica*, XUAN FU HUA *Inula britannica*, YANG SHI CAO *Achillea millefolium*, YAO YONG PU GONG YING *Taraxacum officinale* (dried whole herb: content = 0.0392%)<sup>[5508]</sup>, YI ZHI HUANG HUA *Solidago virgaurea* var. *leiocarpa* [Syn. *Solidago decurrens*], YI ZHU QIAN MA *Urtica dioica*, YIN CHEN HAO *Artemisia capillaris*, YING SU *Papaver somniferum*, ZHI ZHU XIANG *Valeriana jatamansii* [Syn. *Valeriana wallichii*], ZI CAO *Lithospermum erythrorhizon*, occurs in many plants (widespread in plants as free and glycosides. found by Bate-Smith in 66% of investigated dicotyledonous plants and 50% of investigated monocotyledonous plants). **Ref:** 1, 2, 4, 527, 589, 602, 604, 660, 2529, 3967, 4154, 4413, 4502, 4747, 5341, 5501, 3764, 5307, 5407, 5458, 5508.

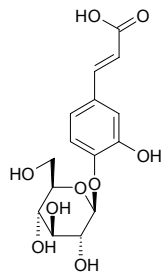


**2888 Caffeic acid dimethyl ether**

3,4-Dimethoxy-cinnamic acid [2316-26-9] C<sub>11</sub>H<sub>12</sub>O<sub>4</sub> (208.22). mp 179.5~180.5°C. Source: YE SHENG MA *Cimicifuga simplex*. Ref: 6.

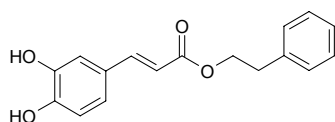
**2889 Caffeic acid-4-O-β-D-glucopyranoside**

C<sub>15</sub>H<sub>18</sub>O<sub>9</sub> (342.31). Source: HAI ZHOU GU SUI BU *Davallia mariesii*. Ref: 660.

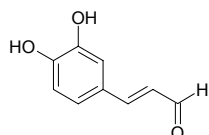
**2890 Caffeic acid phenethyl ester**

Phenethyl caffeate [104594-70-9] C<sub>17</sub>H<sub>16</sub>O<sub>4</sub> (284.31). Pharm:

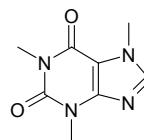
Anti-inflammatory (COX-1 inhibitor, IC<sub>50</sub> = 58 μmol/L, COX-2 inhibitor)<sup>[4415]</sup>; anti-inflammatory (NF-κB pathway)<sup>[4415]</sup>; anti-carcinogenic<sup>[4415]</sup>; antimutagenic<sup>[4415]</sup>; immunomodulant<sup>[4415]</sup>; allergenic; dermatitic (causes contact dermatitis). Source: FENG JIAO *Apis mellifera ligustica*, *Populus* spp. Ref: 658, 4415.

**2891 trans-Caffeic aldehyde**

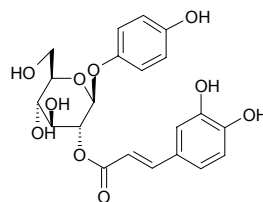
C<sub>9</sub>H<sub>8</sub>O<sub>3</sub> (164.16). Pharm: Platelet aggregation inhibitor (rbt platelets induced by thrombin, 100 μg/mL, add thrombin 0.1 u/mL, AggRt = (92.5±0.7)%, control AggRt = (92.6±0.4)%); add AA, 100 μmol/L, 100 μg/mL, AggRt = (0.0±0.0)%, 10 μg/mL, AggRt = (78.8±1.2)%, control AggRt = (87.8±0.3)%, Aspirin 50 μg/mL, AggRt = (11.7±10.1)%); add collagen 10 μg/mL, 100 μg/mL, AggRt = (51.4±1.0)%, 10 μg/mL, AggRt = (83.1±0.4)%, control AggRt = (89.3±0.5)%, Aspirin 100 μg/mL, AggRt = (81.3±0.5)%); add PAF 2 ng/mL, 100 μg/mL, AggRt = (92.0±0.2)%, control AggRt = (93.0±0.6)%). Source: TAI WAN HU JIAO *Piper taiwanense* (stem). Ref: 4938.

**2892 Caffeine**

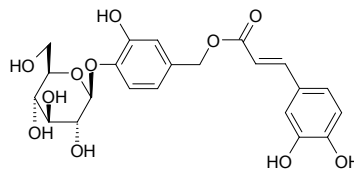
Coffeine; 1,3,7-Trimethyl-2,6-dioxopurine; Methyltheobromine [58-08-2] C<sub>8</sub>H<sub>10</sub>N<sub>4</sub>O<sub>2</sub> (194.19). mp 235~238°C; soluble in acetic ester, chloroform, acetone, ethanol, water, insoluble in petroleum ether.<sup>[5507]</sup> Pharm: Antineoplastic (mus pulmonary adenoma caused by nitroso compound, lung cancer, essential or caused by urethan); antiviral; CNS stimulant; inhibits cancer cell invasion inactive (MM1 cells, *in vitro*, 10 μg/mL)<sup>[4329]</sup>. Source: BA LA GUI CHA *Ilex paraguariensis*, BA XI XIANG WU HUAN ZI *Paullinia cupana*, CHA SHU GEN *Camellia sinensis* [Syn. *Thea sinensis*], CHA YE *Camellia sinensis* [Syn. *Thea sinensis*] (content = 1%~5%<sup>[5507]</sup>), DA GUO KA FEI *Coffea liberica*, GAO KA FEI *Coffea excelsa*, GOU GU SHU PI *Ilex cornuta*, HEI ZI LI GUO JI SHENG *Scurrula atropurpurea*, SU DAN KE LE GUO *Cola acuminata*, WU TONG ZI *Firmiana simplex*, XIAO GUO KA FEI *Coffea arabica*. Ref: 1, 4, 6, 660, 4329, 5507.

**2893 2-O-Caffeoyl arbutin**

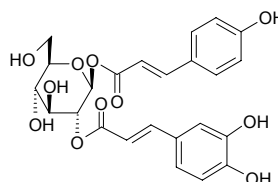
[14477-53-5] C<sub>21</sub>H<sub>22</sub>O<sub>10</sub> (434.40). mp 165°C. Source: YUE JU YE *Vaccinium vitis-idaea*. Ref: 6.

**2894 Caffeoyl calleryanin**

C<sub>22</sub>H<sub>24</sub>O<sub>11</sub> (464.43). Source: YE LI ZHI YE *Pyrus calleryana*. Ref: 6.

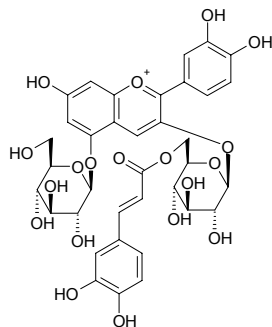
**2895 2-O-(E)-Caffeoyl-1-O-p-(E)-coumaroyl-β-D-glucopyranose**

C<sub>24</sub>H<sub>24</sub>O<sub>11</sub> (488.45). Yellow amorphous powder, [α]<sub>D</sub><sup>15</sup> = -268.6° (c = 0.8, MeOH). Source: GE XUN *Balanophora japonica* (underground part: yield = 0.0032%). Ref: 4101.

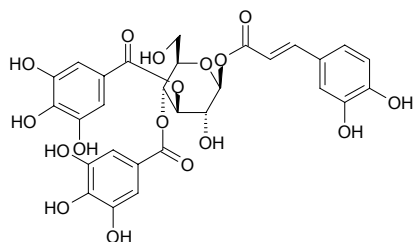


**2896 Caffeoylcyanin**

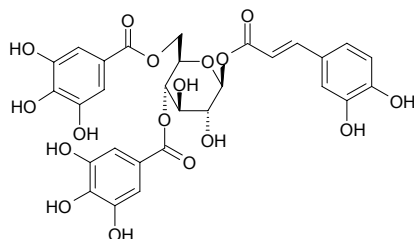
$C_{36}H_{37}O_{19}^+$  (773.68). Source: HUI HUI SU GENG *Perilla frutescens* var. *crispa*. Ref: 660.

**2897 1-O-(E)-Caffeoyl-3,4-di-O-galloyl-β-D-glucopyranose**

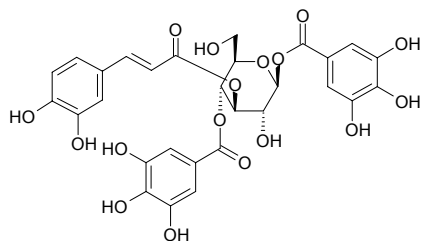
$C_{29}H_{26}O_{17}$  (646.52). Yellow amorphous powder,  $[\alpha]_D^{15} = -74.9^\circ$  ( $c = 0.4$ , MeOH). Source: GE XUN *Balanophora japonica* (aerial parts: yield = 0.0035%). Ref: 4101.

**2898 1-O-(E)-Caffeoyl-4,6-di-O-galloyl-β-D-glucopyranose**

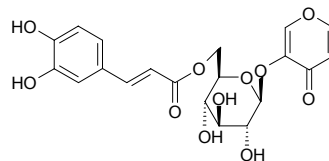
$C_{29}H_{26}O_{17}$  (646.52). Yellow amorphous powder,  $[\alpha]_D^{15} = -177.8^\circ$  ( $c = 0.2$ , MeOH). Source: GE XUN *Balanophora japonica* (aerial parts: yield = 0.0421%). Ref: 4101.

**2899 3-O-(E)-Caffeoyl-1,4-di-O-galloyl-β-D-glucopyranose**

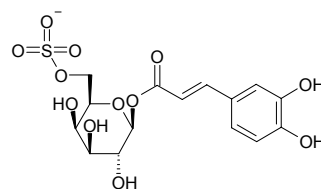
$C_{29}H_{26}O_{17}$  (646.52). Yellow amorphous powder,  $[\alpha]_D^{15} = -123.7^\circ$  ( $c = 0.7$ , MeOH). Source: GE XUN *Balanophora japonica* (aerial parts: yield = 0.0294%). Ref: 4101.

**2900 6'-O-Caffeoylerigeroside**

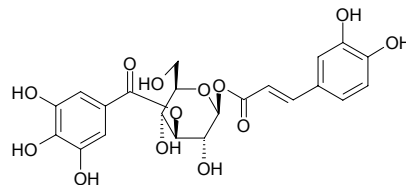
$C_{20}H_{20}O_{11}$  (436.38). Yellowish amorphous, mp 154–156°C. Source: DUO SHE FEI PENG *Erigeron multiradiatus*. Ref: 415.

**2901 1-Caffeoyl galactose-6-sulphate**

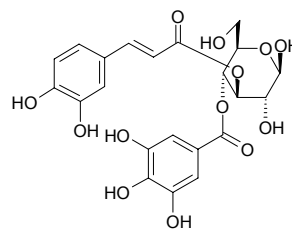
$C_{15}H_{17}O_{12}S^-$  (421.36). Source: ZHU ZONG CAO *Adiantum capillus-veneris*. Ref: 660.

**2902 1-O-(E)-Caffeoyl-3-O-galloyl-β-D-glucopyranose**

$C_{22}H_{22}O_{13}$  (494.41). Yellow amorphous powder,  $[\alpha]_D^{15} = -48.9^\circ$  ( $c = 0.8$ , MeOH). Source: GE XUN *Balanophora japonica* (aerial parts: yield = 0.0304%). Ref: 4101.

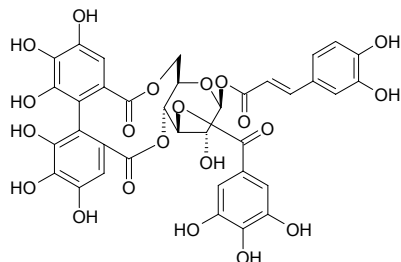
**2903 3-O-(E)-Caffeoyl-4-O-galloyl-β-D-glucopyranose**

$C_{22}H_{22}O_{13}$  (494.41). Yellow amorphous powder,  $[\alpha]_D^{15} = -144.2^\circ$  ( $c = 0.7$ , MeOH). Source: GE XUN *Balanophora japonica* (aerial parts: yield = 0.0039%). Ref: 4101.

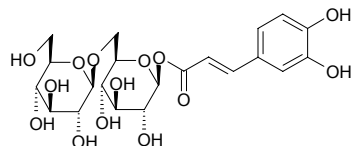


**2904 1-O-(E)-Caffeoyl-3-O-galloyl-4,6-(S)-HHDP-β-D-glucopyranose**

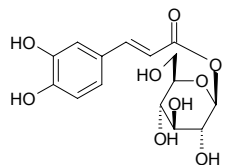
C<sub>36</sub>H<sub>28</sub>O<sub>21</sub> (796.61). Yellow amorphous powder,  $[\alpha]_D^{15} = -5.5^\circ$  ( $c = 0.6$ , MeOH). Source: GE XUN *Balanophora japonica* (aerial parts: yield = 0.1245%). Ref: 4101.

**2905 1-O-(E)-Caffeoyl-β-gentiobiose**

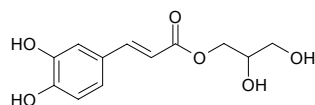
C<sub>21</sub>H<sub>28</sub>O<sub>14</sub> (504.45). Yellow amorphous powder,  $[\alpha]_D^{15} = -26.0^\circ$  ( $c = 0.3$ , MeOH). Source: GE XUN *Balanophora japonica* (underground part: yield = 0.0012%)<sup>[4101]</sup>, OU ZHOU YOU CAI *Brassica napus* (seed). Ref: 4101, 5289.

**2906 1-Caffeoylglucose**

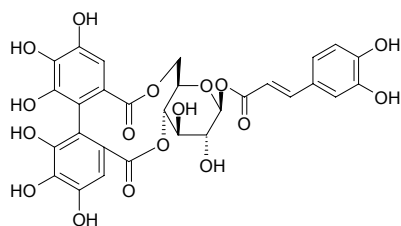
[143640-08-0] C<sub>15</sub>H<sub>18</sub>O<sub>9</sub> (342.31). mp > 300°C. Source: NAN FANG TU SI *Zi Cuscuta australis*, KUAI JING CAO SU *Phlomis tuberosa*. Ref: 589, 660.

**2907 1-O-Caffeoylglycerol**

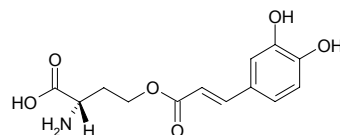
C<sub>12</sub>H<sub>14</sub>O<sub>6</sub> (254.24). Colorless acicular crystals, mp 144~146°C. Source: JIA BAI HE *Notholirion hyacinthinum* [Syn. *Notholirion bulbiferum*]. Ref: 663.

**2908 1-O-(E)-Caffeoyl-4,6-(S)-HHDP-β-D-glucopyranose**

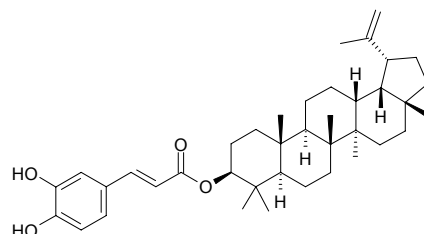
C<sub>29</sub>H<sub>24</sub>O<sub>17</sub> (644.50). Yellow amorphous powder,  $[\alpha]_D^{15} = -19.0^\circ$  ( $c = 0.3$ , MeOH). Source: GE XUN *Balanophora japonica* (aerial parts: yield = 0.2231%). Ref: 4101.

**2909 L-O-Caffeoylhomoserine**

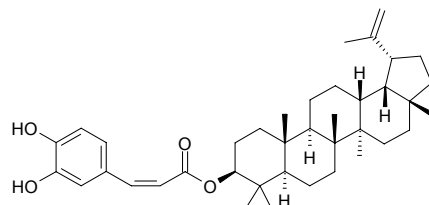
C<sub>13</sub>H<sub>15</sub>NO<sub>6</sub> (281.27). Colorless prisms, mp 224.0~225.0°C,  $[\alpha]_D^{20} = -38.24^\circ$  ( $c = 0.09$ , 80%MeOH). Pharm: Antioxidant (Chemiluminescence Method, IC<sub>50</sub> = (0.45±0.05)μmol/L, control Rutin, IC<sub>50</sub> = (0.11±0.01)μmol/L, Quercetin, IC<sub>50</sub> = (0.53±0.01)μmol/L, Caffeic acid, IC<sub>50</sub> = (0.66±0.07)μmol/L, Gallic acid, IC<sub>50</sub> = (0.74±0.06)μmol/L); Antioxidant (DPPH scavenger, IC<sub>50</sub> = (0.30±0.00)μmol/L, Rutin, IC<sub>50</sub> = (0.15±0.00)μmol/L, Quercetin, IC<sub>50</sub> = (0.26±0.02)μmol/L, Caffeic acid, IC<sub>50</sub> = (0.39±0.01)μmol/L, Gallic acid, IC<sub>50</sub> = (0.36±0.02)μmol/L). Source: XIAO YE GUAN ZHONG *Matteuccia struthiopteris*. Ref: 3764.

**2910 3-(E)-Caffeoyllupeol**

Lupeol caffeate C<sub>39</sub>H<sub>56</sub>O<sub>4</sub> (588.88). Pharm: Antimalarial inactive (*Plasmodium falciparum*, K1, multidrug resistant strain). Source: XIAO HUA MU LAN GUO *Bruguiera parviflora*. Ref: 2532.

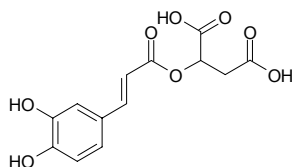
**2911 3-(Z)-Caffeoyllupeol**

C<sub>39</sub>H<sub>56</sub>O<sub>4</sub> (588.88). Yellow amorphous powder,  $[\alpha]_D^{25} = +10^\circ$  ( $c = 0.014$ , CHCl<sub>3</sub>). Pharm: Antimalarial (*Plasmodium falciparum*, K1, multidrug resistant strain, EC<sub>50</sub> = 8.6μg/mL, control Artemisinin, EC<sub>50</sub> = 1~3ng/mL). Source: XIAO HUA MU LAN GUO *Bruguiera parviflora*. Ref: 2532.

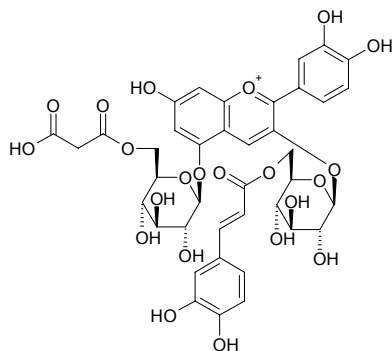


**2912 Caffeoyl malic acid**

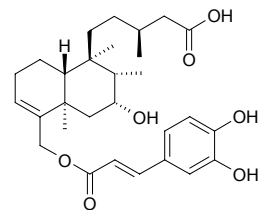
$C_{13}H_{12}O_8$  (296.24). **Pharm:** Antioxidant (*in vitro* inhibits LDL peroxidation,  $Cu^{2+}$ -induced and AAPH-induced)<sup>[5370]</sup>; inhibits minimally oxidized LDL-induced cellular toxicity (cultured bovine aortic endothelial cells, BAEC)<sup>[5370]</sup>. **Source:** OU XIA ZHI CAO *Marrubium vulgare* (aerial parts), YI ZHU QIAN MA *Urtica dioica*. **Ref:** 660, 5370.

**2913 Caffeoyl malonyl cyanin**

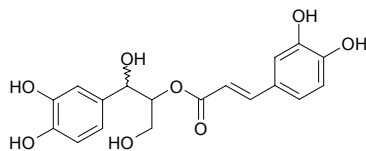
$C_{39}H_{39}O_{22}^+$  (859.73). **Source:** HUI HUI SU GENG *Perilla frutescens* var. *crispa*. **Ref:** 660.

**2914 ent-18-(E)-Caffeoyloxy-7β-hydroxy-3-cleroden-15-oic acid**

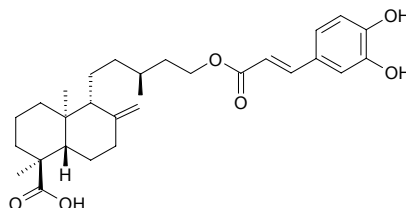
$C_{29}H_{40}O_7$  (500.64). Colorless oil,  $[\alpha]_D^{20} = -29^\circ$  ( $c = 0.165$ , MeOH). **Pharm:** Antimalarial (*Plasmodium falciparum* FcB1,  $IC_{50} = (7.3 \pm 0.8) \mu\text{g/mL}$ , control Chloroquine,  $IC_{50} = (0.05 \pm 0.002) \mu\text{g/mL}$ ). **Source:** *Nuxia sphaerocephala* (leaf). **Ref:** 4419.

**2915 2-Caffeoyloxy-3-hydroxy-3-(3,4-dihydroxyphenyl)propyl alcohol**

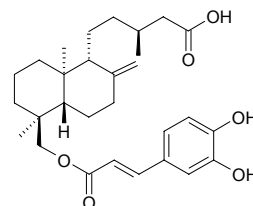
$C_{18}H_{18}O_8$  (362.34). colorless amorphous powder,  $[\alpha]_D^{25} = +35^\circ$  ( $c = 1.0$ , MeOH). **Source:** YUAN BAO CAO *Hypericum sampsonii* (whole herb). **Ref:** 4055.

**2916 ent-15-(E)-Caffeoyloxy-8(17)-labden-18-oic acid**

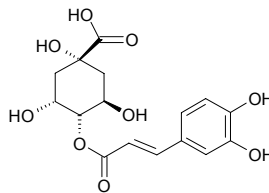
$C_{29}H_{40}O_6$  (484.64). Colorless oil,  $[\alpha]_D^{20} = -21^\circ$  ( $c = 0.21$ , MeOH). **Pharm:** Antimalarial (*Plasmodium falciparum* FcB1,  $IC_{50} = (16.0 \pm 0.87) \mu\text{g/mL}$ , control Chloroquine,  $IC_{50} = (0.05 \pm 0.002) \mu\text{g/mL}$ ). **Source:** *Nuxia sphaerocephala* (leaf). **Ref:** 4419.

**2917 ent-18-(E)-Caffeoyloxy-8(17)-labden-15-oic acid**

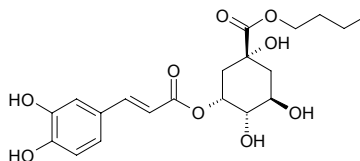
$C_{29}H_{40}O_6$  (484.64). Colorless oil,  $[\alpha]_D^{20} = -8.9^\circ$  ( $c = 0.373$ , MeOH). **Pharm:** Antimalarial (*Plasmodium falciparum* FcB1,  $IC_{50} = (21.0 \pm 1.9) \mu\text{g/mL}$ , control Chloroquine,  $IC_{50} = (0.05 \pm 0.002) \mu\text{g/mL}$ ). **Source:** *Nuxia sphaerocephala* (leaf). **Ref:** 4419.

**2918 4-O-Caffeoylquinic acid**

[905-99-7]  $C_{16}H_{18}O_9$  (354.32). **Source:** GUANG YE SHUI SU *Stachys palustris*, XIANG RI KUI YE *Helianthus annuus*, XIANG RI KUI JING SUI *Helianthus annuus*, KUAI JING CAO SU *Phlomis tuberosa*. **Ref:** 6.

**2919 5-O-Caffeoyl quinic acid butyl ester**

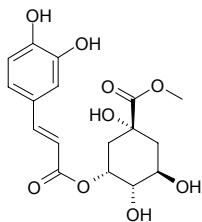
$C_{20}H_{26}O_9$  (410.42). Yellowish amorphous powder mp 121~122°C. **Source:** DENG ZHAN XI XIN *Erigeron breviscapus*. **Ref:** 875.



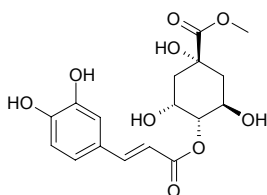


**2920 3-O-Caffeoylquinic acid methyl ester**

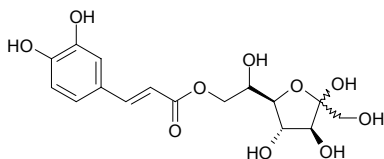
$C_{17}H_{20}O_9$  (368.34). **Pharm:** Aldose reductase inhibitor ( $IC_{50} = 13\mu\text{mol/L}$ , control Epalrestat,  $IC_{50} = 0.072\mu\text{mol/L}$ )<sup>[4530]</sup>; antitrypanosomal (*Trypanosoma b. rhodesiense*,  $IC_{50} = 16.8\mu\text{g/mL}$ , control Melarsoprol,  $IC_{50} = 0.00098\mu\text{g/mL}$ ; *Trypanosoma cruzi*,  $IC_{50} > 90\mu\text{g/mL}$ , control Benznidazole,  $IC_{50} = 1.06\mu\text{g/mL}$ )<sup>[5009]</sup>; antileishmanial (*Leishmania donovani*,  $IC_{50} = 8.8\mu\text{g/mL}$ , control Miltefosine,  $IC_{50} = 0.102\mu\text{g/mL}$ )<sup>[5009]</sup>; antimalarial (*Plasmodium falciparum*,  $IC_{50} = 42.8\mu\text{g/mL}$ , control Artemisinin,  $IC_{50} = 0.0022\mu\text{g/mL}$ )<sup>[5009]</sup>; cytotoxic (L6,  $IC_{50} = 84.1\mu\text{g/mL}$ , control Podophyllotoxin,  $IC_{50} = 0.008\mu\text{g/mL}$ )<sup>[5009]</sup>. **Source:** SHUI MU XUE LIAN HUA *Saussurea medusa* (whole herb), ZONG KUI CAO SU *Phlomis brunneogaleata*. **Ref:** 4530, 5009.

**2921 4-O-Caffeoylquinic acid methyl ester**

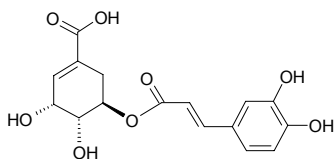
$C_{17}H_{20}O_9$  (368.34). **Pharm:** Aldose reductase inhibitor ( $IC_{50} = 16\mu\text{mol/L}$ , control Epalrestat,  $IC_{50} = 0.072\mu\text{mol/L}$ ). **Source:** SHUI MU XUE LIAN HUA *Saussurea medusa* (whole herb). **Ref:** 4530.

**2922 7-Caffeoylsedoheptulose**

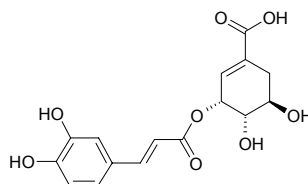
$C_{16}H_{20}O_{10}$  (372.33). White powder,  $[\alpha]_D^{25} = +13.9^\circ$  ( $c = 0.42$ , MeOH). **Source:** DUO HUA LAN GUO SHU *Nyssa sylvatica* (wood). **Ref:** 3939.

**2923 3-O-Caffeoylshikimic acid**

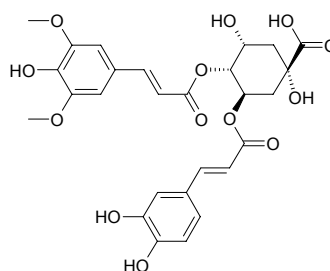
[6082-44-6]  $C_{16}H_{16}O_8$  (336.30). mp 224–225°C (dec). **Source:** WU LOU ZI *Phoenix dactylifera*. **Ref:** 6.

**2924 5-O-Caffeoylshikimic acid**

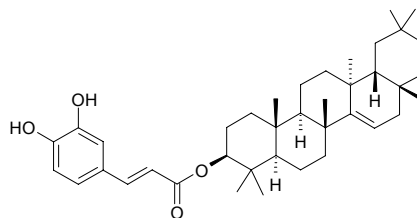
$C_{16}H_{16}O_8$  (336.3). **Pharm:** Antitrypanosomal (*Trypanosoma b. rhodesiense*,  $IC_{50} = 21.4\mu\text{g/mL}$ , control Melarsoprol,  $IC_{50} = 0.00098\mu\text{g/mL}$ ; *Trypanosoma cruzi*,  $IC_{50} > 90\mu\text{g/mL}$ , control Benznidazole,  $IC_{50} = 1.06\mu\text{g/mL}$ )<sup>[5009]</sup>; antileishmanial (*Leishmania donovani*,  $IC_{50} = 7.3\mu\text{g/mL}$ , control Miltefosine,  $IC_{50} = 0.102\mu\text{g/mL}$ )<sup>[5009]</sup>; antimalarial (*Plasmodium falciparum*,  $IC_{50} > 50\mu\text{g/mL}$ , control Artemisinin,  $IC_{50} = 0.0022\mu\text{g/mL}$ )<sup>[5009]</sup>; cytotoxic (L6,  $IC_{50} > 90\mu\text{g/mL}$ , control Podophyllotoxin,  $IC_{50} = 0.008\mu\text{g/mL}$ )<sup>[5009]</sup>. **Source:** TU FU LING *Smilax glabra*, ZONG KUI CAO SU *Phlomis brunneogaleata*. **Ref:** 714, 5009.

**2925 3-O-Caffeoyl-4-O-sinapoylquinic acid**

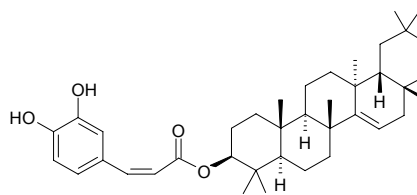
[110241-35-5]  $C_{27}H_{28}O_{13}$  (560.52). **Source:** ZHI ZI *Gardenia jasminoides* [Syn. *Gardenia florida*]. **Ref:** 2, 626.

**2926 3β-(E)-Caffeoyltaraxerol**

$C_{39}H_{56}O_4$  (588.88). White solid, mp 246–248°C,  $[\alpha]_D^{27} = +28.84^\circ$  ( $c = 0.052$ ,  $\text{CHCl}_3$ ). **Source:** HONG QIE DONG GUO *Rhizophora mucronata* (fruit). **Ref:** 4058.

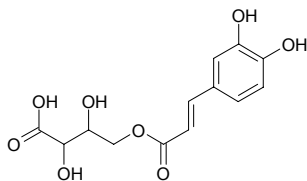
**2927 3β-(Z)-Caffeoyltaraxerol**

$C_{39}H_{56}O_4$  (588.88). White solid, mp 246°C,  $[\alpha]_D^{27} = -100^\circ$  ( $c = 0.04$ ,  $\text{CHCl}_3$ ). **Source:** HONG QIE DONG GUO *Rhizophora mucronata* (fruit). **Ref:** 4058.

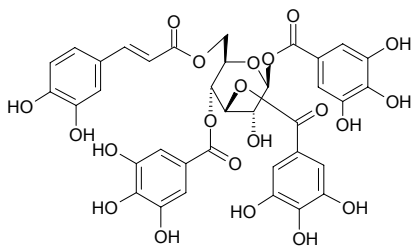


**2928 (-)-4-(E)-Caffeoyl-L-threonic acid**

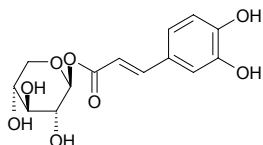
$C_{13}H_{14}O_8$  (298.25). Bright yellow amorphous powder, mp 195~198°C,  $[\alpha]_D^{20} = -17^\circ$  ( $c = 0.05$ , MeOH),  $[\alpha]_D^{20} = -23^\circ$  ( $c = 1.27$ , H<sub>2</sub>O). Source: DENG TAI SHU *Cornus controversa* [Syn. *Bothrocaryum controversum*] (leaf). Ref: 3918.

**2929 6-O-(E)-Caffeoyl-1,3,4-tri-O-galloyl-β-D-glucopyranose**

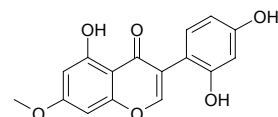
$C_{36}H_{30}O_{21}$  (798.63). Yellow amorphous powder,  $[\alpha]_D^{15} = +14.9^\circ$  ( $c = 0.6$ , MeOH). Source: GE XUN *Balanophora japonica* (aerial parts: yield = 0.0283%). Ref: 4101.

**2930 1-O-Caffeoyl-β-xylose**

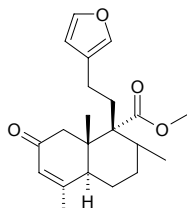
$C_{14}H_{16}O_8$  (312.28). Source: SHEN SHENG XUAN GOU ZI *Rubus sanctus*. Ref: 3421.

**2931 Cajinin**

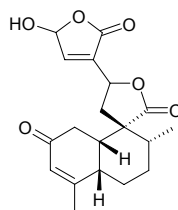
$C_{16}H_{12}O_6$  (300.27). Colorless needles, mp 254~256°C. Source: MI HUA DOU *Spatholobus suberectus*. Ref: 2205.

**2932 t-Cajucarin B**

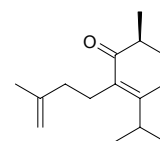
$C_{21}H_{28}O_4$  (344.45). Source: KA ZHU BA DOU *Croton cajucara*. Ref: 4552.

**2933 Cajucarinolide**

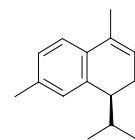
$C_{19}H_{22}O_6$  (346.38). Source: ZAN BI XI BA DOU *Croton zambesicus*. Ref: 4552.

**2934 Calacone**

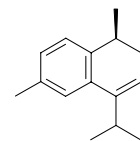
$C_{15}H_{24}O$  (220.36). Source: BAI CHANG *Acorus calamus*. Ref: 6.

**2935 α-Calacorene**

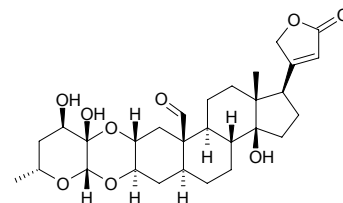
[21391-99-1]  $C_{15}H_{20}$  (200.33). Source: DU SONG SHI *Juniperus rigida*, ZHANG MU *Cinnamomum camphora*. Ref: 6.

**2936 γ-Calacorene**

[24048-45-1]  $C_{15}H_{20}$  (200.33). Source: DU SONG SHI *Juniperus rigida*, PI JIU HUA *Humulus lupulus*. Ref: 6.

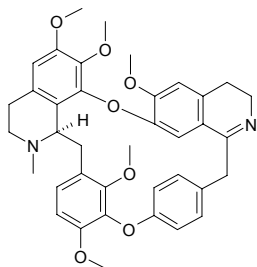
**2937 Calactin**

Calotropin [20304-47-6]  $C_{29}H_{40}O_9$  (532.64). mp 221°C (dec). Pharm: Toxin (vertebrate); LD<sub>50</sub> (cat, iv) = 0.11 mg/kg, (mus, ip) = 9.8 mg/kg. Source: LIAN SHENG GUI ZI HUA *Asclepias curassavica*. Ref: 1, 5, 6, 658.

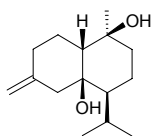


**2938 Calafatimine**

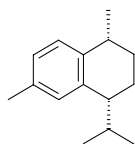
[77793-42-1] C<sub>38</sub>H<sub>40</sub>N<sub>2</sub>O<sub>7</sub> (636.75). Pharm: Antineoplastic (weak). Source: HUANG YANG XIAO BO *Berberis buxifolia*. Ref: 658.

**2939 Calamendiol**

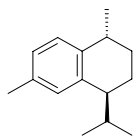
[30167-28-3] C<sub>15</sub>H<sub>26</sub>O<sub>2</sub> (238.37). mp 168°C. Source: BAI CHANG *Acorus calamus*. Ref: 6.

**2940 cis-Calamenene**

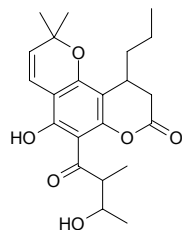
[22339-23-7] C<sub>15</sub>H<sub>22</sub> (202.34). Source: HUO XIANG *Agastache rugosus*, ZHANG MU *Cinnamomum camphora*. Ref: 2, 6.

**2941 trans-Calamenene**

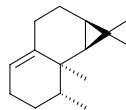
C<sub>15</sub>H<sub>22</sub> (202.34). Source: HUO XIANG *Agastache rugosus*, ZHANG MU *Cinnamomum camphora*. Ref: 2, 6.

**2942 Calanolide E<sub>2</sub>**

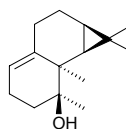
C<sub>22</sub>H<sub>28</sub>O<sub>6</sub> (388.46). Pale yellow oil, [α]<sub>D</sub><sup>20</sup> = -77.6° (c = 0.248, CHCl<sub>3</sub>). Source: DIAN NAN HONG HOU KE *Calophyllum polyanthum* (seed: yield = 0.0053%dw). Ref: 4767.

**2943 Calarene**

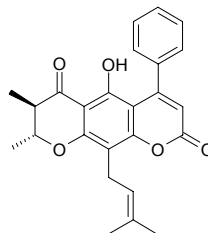
β-Guriunene; 1(10)-Aristolene [17334-55-3] C<sub>15</sub>H<sub>24</sub> (204.36). bp 120~123°C/13mmHg. Source: GAN SONG *Nardostachys chinensis*, GUANG HUO XIANG *Pogostemon cablin* [Syn. *Mentha cablin*], HUO XIANG *Agastache rugosus*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], XI YANG SHEN *Panax quinquefolium*. Ref: 2, 6, 660.

**2944 Calarenol**

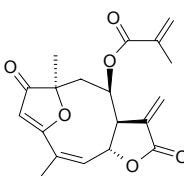
C<sub>15</sub>H<sub>24</sub>O (220.36). bp 120~125°C/0.1mmHg. Source: GAN SONG *Nardostachys chinensis*. Ref: 6.

**2945 Calaustralin**

C<sub>25</sub>H<sub>24</sub>O<sub>5</sub> (404.47). White crystals (*n*-hexane-EtOAc), mp 193~195°C. Pharm: Cytotoxic inactive (KB, IC<sub>50</sub> = 42.0μg/mL); antibacterial (*Staphylococcus aureus*, 20μg/disk, DIZ = 11.0mm; *Escherichia coli*, 20μg/disk, inactive; *Vibrio anguillarum*, 20μg/disk, inactive); antifungal inactive (*Candida tropicalis*, 20μg/disk). Source: HAI TANG GUO *Calophyllum inophyllum* (root cortex and nut). Ref: 3866.

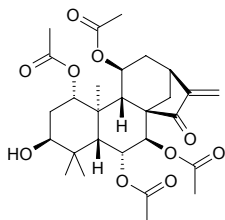
**2946 Calaxin**

[30412-86-3] C<sub>19</sub>H<sub>20</sub>O<sub>6</sub> (344.37). Pharm: Antineoplastic; cytotoxic. Source: YUAN MAO XIANG RI KUI *Helianthus ciliaris*, *Viguiera eriophora* ssp. *eriophora* (aerial parts). Ref: 658, 5090.



**2947 Calcicolin A**

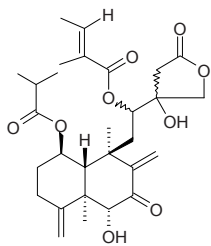
$C_{28}H_{38}O_{10}$  (534.61). mp 265~268°C,  $[\alpha]_D^{23} = -59.3^\circ$  ( $c = 0.53$ , MeOH). Source: JIN WU MAO HUI YAN XIANG CHA CAI *Isodon calcicola* Ref: 650, 4067.

**2948 Calcicolin A†**

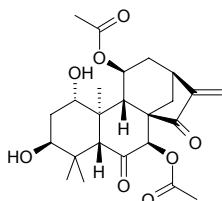
*rel*-10 $\beta$ H-*trans*-12 $\zeta$ -(2-methylbut-2(*E*)-enoyl)-1 $\beta$ -(isobutanoyl)-6 $\alpha$ ,13 $\zeta$ -dihydroxycyclorodan-4(20),8(18)-dien-7,15-dione-15,16-oxide  $C_{29}H_{40}O_9$  (532.64).

Amorphous solid,  $[\alpha]_D^{24} = +4.3^\circ$  ( $c = 0.01$ , MeOH). Pharm: Cytotoxic (D.mel-II,  $IC_{50} = (2.06 \pm 0.20) \mu\text{g/mL}$ ; HepG2,  $IC_{50} = (9.04 \pm 0.13) \mu\text{g/mL}$ ).

Source: *Glossocarya calcicola* (leaf). Ref: 5340.

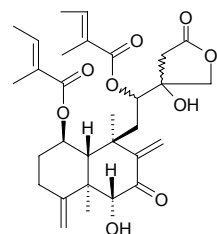
**2949 Calcicolin B**

$C_{24}H_{32}O_8$  (448.52). mp 114~116°C,  $[\alpha]_D^{20.8} = -34.36^\circ$  ( $c = 0.29$ , MeOH). Source: JIN WU MAO HUI YAN XIANG CHA CAI *Isodon calcicola*, XIAN HUA XIANG CHA CAI *Rabdosia adenantha* (leaf: yield = 0.00058%<sub>dw</sub>)<sup>[4640]</sup>. Ref: 4067, 4640.

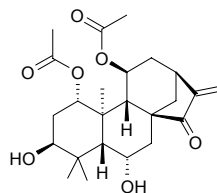
**2950 Calcicolin B†**

*rel*-10 $\beta$ H-*trans*-1 $\beta$ ,12 $\zeta$ -Di(2-methylbut-2(*E*)-enoyl)-6 $\alpha$ ,13 $\zeta$ -dihydroxycyclorodan-4(20),8(18)-dien-7,15-dione-15,16-oxide  $C_{30}H_{40}O_9$  (544.65). Amorphous solid,  $[\alpha]_D^{24} =$

$-8.98^\circ$  ( $c = 0.01$ , MeOH). Pharm: Cytotoxic (D.mel-II,  $IC_{50} = (3.09 \pm 0.24) \mu\text{g/mL}$ ; HepG2,  $IC_{50} = (16.16 \pm 0.27) \mu\text{g/mL}$ ). Source: *Glossocarya calcicola* (leaf). Ref: 5340.

**2951 Calcicolin C**

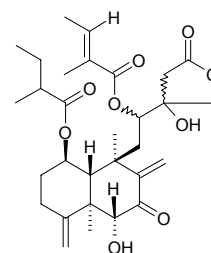
$C_{24}H_{34}O_7$  (434.53). mp 248.5~250.0°C,  $[\alpha]_D^{21.9} = -39.94^\circ$  ( $c = 0.31$ , MeOH). Source: JIN WU MAO HUI YAN XIANG CHA CAI *Isodon calcicola* Ref: 4067.

**2952 Calcicolin C†**

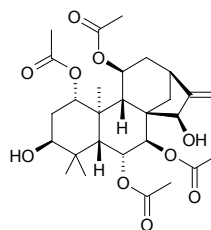
*rel*-10 $\beta$ H-*trans*-12 $\zeta$ -(2-Methylbut-2(*E*)-enoyl)-1 $\beta$ -(2-methylbutanoyl)-6 $\alpha$ ,13 $\zeta$ -dihydroxycyclorodan-4(20),8(18)-dien-7,15-dione-15,16-oxide  $C_{30}H_{42}O_9$

(546.66). Amorphous solid,  $[\alpha]_D^{24} = +2.31^\circ$  ( $c = 0.01$ , MeOH). Pharm:

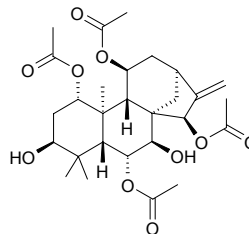
Cytotoxic (D.mel-II,  $IC_{50} = (2.10 \pm 0.26) \mu\text{g/mL}$ ; HepG2,  $IC_{50} = (8.30 \pm 0.12) \mu\text{g/mL}$ ). *Glossocarya calcicola* (leaf). Ref: 5340.

**2953 Calcicolin D**

$C_{28}H_{40}O_{10}$  (536.63). mp 196~197.5°C,  $[\alpha]_D^{20.6} = -43.62^\circ$  ( $c = 0.30$ , MeOH). Source: JIN WU MAO HUI YAN XIANG CHA CAI *Isodon calcicola* Ref: 4067.

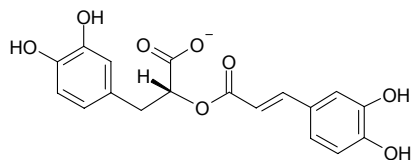
**2954 Calcicolin E**

$C_{28}H_{40}O_{10}$  (536.63). mp 117~119.5°C,  $[\alpha]_D^{22.6} = -46.25^\circ$  ( $c = 0.40$ , MeOH). Source: JIN WU MAO HUI YAN XIANG CHA CAI *Isodon calcicola* Ref: 4067.



**2955 Calcium rosmarinate**

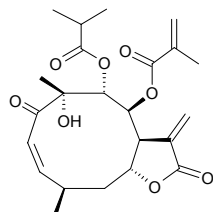
$C_{18}H_{15}O_8^-$  (359.32). Source: YOU CI PO BU MU *Cordia spinescens*. Ref: 2268.

**2956 Calealactone A**

$C_{23}H_{30}O_8$  (434.49). Colorless needles, mp 98~100°C,  $[\alpha]_D^{20} = +195.4^\circ$  ( $c =$

0.001,  $CHCl_3$ ). Pharm: Cytotoxic (U937,  $IC_{50} = 3.5\mu mol/L$ ; control

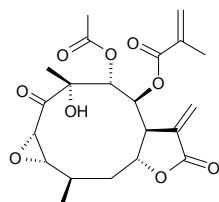
Parthenolide,  $IC_{50} = 1.9\mu mol/L$ ). Source: YOU KA MEI JU *Calea urticifolia* (leaf). Ref: 3887.

**2957 Calealactone B**

$C_{21}H_{26}O_9$  (422.44). White powder,  $[\alpha]_D^{20} = +184.2^\circ$  ( $c = 0.001$ ,  $CHCl_3$ ).

Pharm: Cytotoxic (U937,  $IC_{50} > 5\mu mol/L$ ; control Parthenolide,  $IC_{50} =$

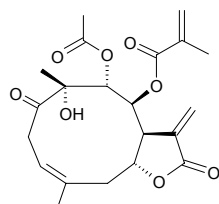
$1.9\mu mol/L$ ). Source: YOU KA MEI JU *Calea urticifolia* (leaf). Ref: 3887.

**2958 Calealactone C**

$C_{21}H_{26}O_8$  (406.44). Colorless needles, mp 170~172°C,  $[\alpha]_D^{20} = +92.1^\circ$  ( $c =$

0.001,  $CHCl_3$ ). Pharm: Cytotoxic (U937,  $IC_{50} = 1.0\mu mol/L$ ; control

Parthenolide,  $IC_{50} = 1.9\mu mol/L$ ). Source: YOU KA MEI JU *Calea urticifolia* (leaf). Ref: 3887.

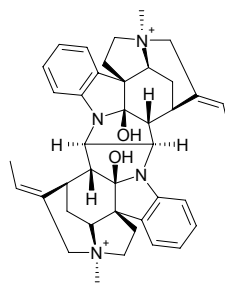
**2959 Calebassine**

[7257-29-6]  $C_{40}H_{48}N_4O_2^{2+}$  (616.85). Pharm: Neuromuscular blocker (curare

component in cucurbit); toxin. Source: SAN YE MAI MA QIAN *Strychnos*

*trinervis*, MI SHI MA QIAN ZI *Strychnos mitschlichii*, FEN CHA MA

QIAN ZI *Strychnos divaricans*. Ref: 658.

**2960 Calebin A**

4''-(3'''-Methoxy-4'''-hydroxyphenyl)-2''-oxo-3''-enebutanyl 3-(3'-methoxy-4'-

hydroxyphenyl)propenoate  $C_{21}H_{20}O_7$  (384.39). Light yellow powder, mp

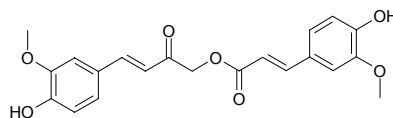
138~139°C. Pharm: Neuroprotective (*in vitro* protects PC12 cells from

$\beta$ -Amyloid insult: anti- $\beta A(25-35)$ ,  $ED_{50} = (1.0\pm 0.3)\mu g/mL$ ; anti- $\beta A(1-41)$ ,

$ED_{50} = (2.0\pm 0.4)\mu g/mL$ ; control Congo red: anti- $\beta A(25-35)$ ,  $ED_{50} =$

$(37.5\pm 5.4)\mu g/mL$ ; anti- $\beta A(1-41)$ ,  $ED_{50} = (39.2\pm 5.2)\mu g/mL$ ). Source: JIANG

HUANG *Curcuma longa* (turmeric powder: yield = 0.0010%dw). Ref: 4643.

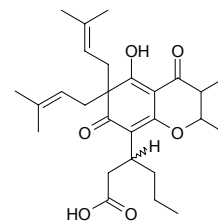
**2961 Caledonic acid**

$C_{27}H_{38}O_6$  (458.60). Amorphous solid,  $[\alpha]_D^{25} = -15.0^\circ$  ( $c = 0.13$ ,  $CHCl_3$ ).

Pharm: Antifungal (*Aspergillus fumigatus*,  $MIC_{80} = 16\mu g/mL$ , control

Amphotericin B,  $MIC_{80} = 8\mu g/mL$ ). Source: SU GE LAN HU TONG

*Calophyllum caledonicum* (seed). Ref: 5489.

**2962 Caledonixanthone E**

$C_{19}H_{16}O_6$  (340.34). Pharm: Antifungal (*Aspergillus fumigatus* CBS113.26,

$MIC_{80} = 8\mu g/mL$ , control Amphotericin B,  $MIC_{80} = 8\mu g/mL$ ; *Aspergillus*

*flavus* IHEM37.19,  $MIC_{80} = 16\mu g/mL$ , Amphotericin B,  $MIC_{80} = 8\mu g/mL$ ;

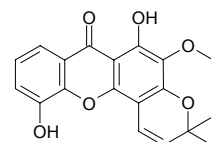
*Aspergillus niger* IHEM2951,  $MIC_{80} > 250\mu g/mL$ , Amphotericin B,  $MIC_{80} =$

$16\mu g/mL$ ; *Aspergillus terreus* 5029.2000,  $MIC_{80} > 250\mu g/mL$ ; Amphotericin

B,  $MIC_{80} = 16\mu g/mL$ ; *Candida albicans* ATCC663.90,  $MIC_{80} > 250\mu g/mL$ ;

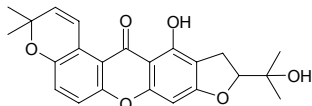
Amphotericin B,  $MIC_{80} = 1\mu g/mL$ ). Source: SU GE LAN HU TONG

*Calophyllum caledonicum* (stem cortex). Ref: 4995.



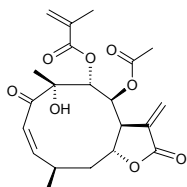
**2963 Caledonixanthone M**

$C_{23}H_{22}O_6$  (394.43). Amorphous solid,  $[\alpha]_D^{25} = -33.3^\circ$  ( $c = 0.06$ ,  $CHCl_3$ ). Source: SU GE LAN HU TONG *Calophyllum caledonicum* (seed). Ref: 5489.

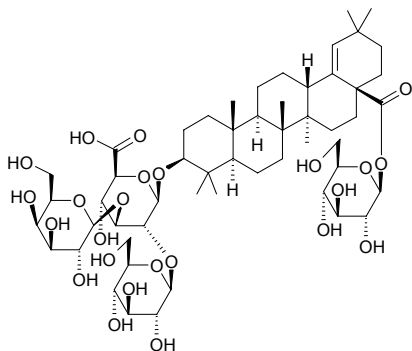
**2964 Calein D**

$C_{21}H_{26}O_8$  (406.44). White powder,  $[\alpha]_D^{20} = +192.2^\circ$  ( $c = 0.001$ ,  $CHCl_3$ ).

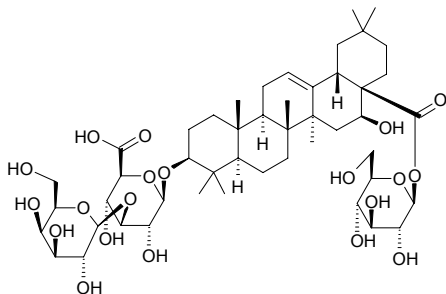
Pharm: Cytotoxic (U937,  $IC_{50} > 5 \mu\text{mol/L}$ ; control Parthenolide,  $IC_{50} = 1.9 \mu\text{mol/L}$ ). Source: YOU KA MEI JU *Calea urticifolia* (leaf). Ref: 3887.

**2965 Calendasaponin A**

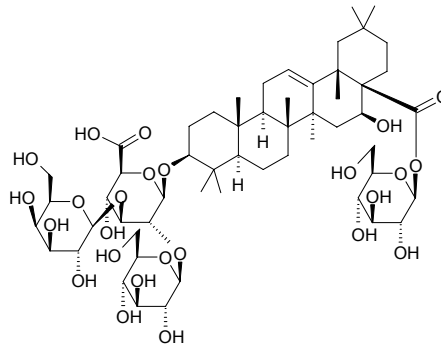
28-*O*- $\beta$ -*D*-Glucopyranosyl moronic acid 3-*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-galactopyranosyl(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucopyranosiduronic acid  $C_{54}H_{86}O_{24}$  (1119.27). Colorless fine crystals (MeOH-H<sub>2</sub>O), mp 226.5~228.6°C,  $[\alpha]_D^{27} = +8.6^\circ$  ( $c = 0.1$ , MeOH). Source: JIN ZHAN JU *Calendula officinalis* (flower). Ref: 3551.

**2966 Calendasaponin B**

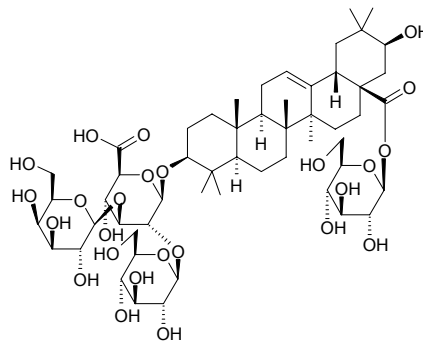
28-*O*- $\beta$ -*D*-Glucopyranosyl cochalic acid 3-*O*- $\beta$ -*D*-galactopyranosyl(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosiduronic acid  $C_{48}H_{76}O_{20}$  (973.13). Colorless fine crystals (MeOH-H<sub>2</sub>O), mp 245.6~247.0°C,  $[\alpha]_D^{27} = +6.4^\circ$  ( $c = 0.1$ , MeOH). Source: JIN ZHAN JU *Calendula officinalis* (flower). Ref: 3551.

**2967 Calendasaponin C**

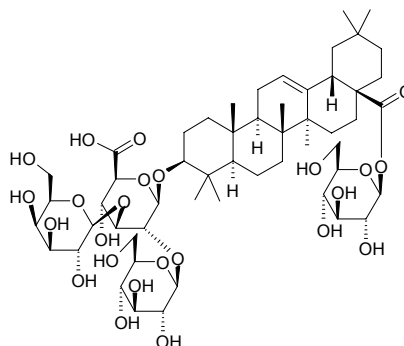
28-*O*- $\beta$ -*D*-Glucopyranosyl cochalic acid 3-*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-galactopyranosyl(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucopyranosiduronic acid  $C_{55}H_{88}O_{25}$  (1149.30). Colorless fine crystals (MeOH-H<sub>2</sub>O), mp 228.5~230.2°C,  $[\alpha]_D^{27} = +8.1^\circ$  ( $c = 1.0$ , MeOH). Source: JIN ZHAN JU *Calendula officinalis* (flower). Ref: 3551.

**2968 Calendasaponin D**

28-*O*- $\beta$ -*D*-Glucopyranosyl machaerinic acid 3-*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-galactopyranosyl(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucopyranosiduronic acid  $C_{54}H_{86}O_{25}$  (1135.27). Colorless fine crystals (MeOH-H<sub>2</sub>O), mp 226.9~229.0°C,  $[\alpha]_D^{27} = +33.0^\circ$  ( $c = 1.1$ , MeOH). Source: JIN ZHAN JU *Calendula officinalis* (flower). Ref: 3551.

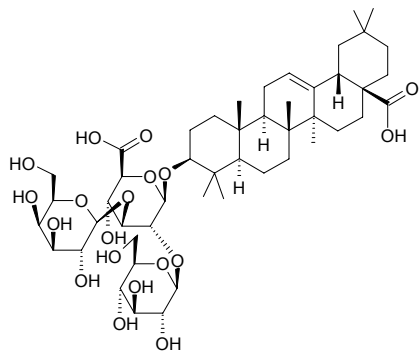
**2969 Calendula officinalis Glycoside A**

$C_{54}H_{86}O_{24}$  (1119.27). Pharm: Hypoglycemic (inhibits the increase in serum glucose levels in glucose-loaded rats); gastroprotective (mouse, inhibits gastric emptying; rats, inhibits ethanol- and indomethacin-induced gastric lesions). Source: JIN ZHAN JU *Calendula officinalis* (flower). Ref: 3551.

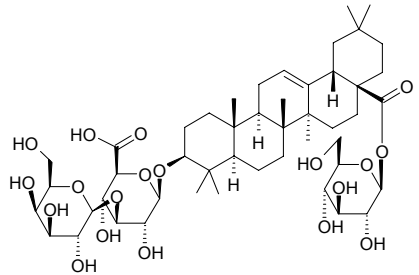


**2970 *Calendula officinalis* Glycoside B**

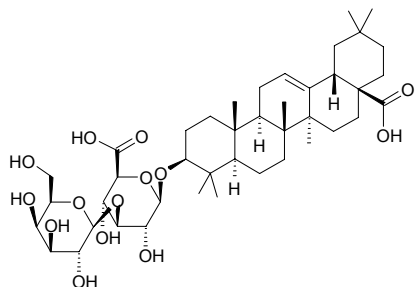
$C_{48}H_{76}O_{19}$  (957.13). **Pharm:** Hypoglycemic (inhibits the increase in serum glucose levels in glucose-loaded rats); gastroprotective (mouse, inhibits gastric emptying; rats, inhibits ethanol- and indomethacin-induced gastric lesions). **Source:** JIN ZHAN JU *Calendula officinalis* (flower). **Ref:** 3551.

**2971 *Calendula officinalis* Glycoside C**

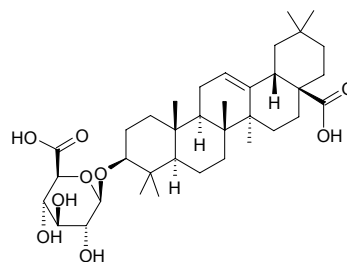
$C_{48}H_{76}O_{19}$  (957.13). **Pharm:** Hypoglycemic (inhibits the increase in serum glucose levels in glucose-loaded rats); gastroprotective (mouse, inhibits gastric emptying; rats, inhibits ethanol- and indomethacin-induced gastric lesions). **Source:** JIN ZHAN JU *Calendula officinalis* (flower). **Ref:** 3551.

**2972 *Calendula officinalis* Glycoside D**

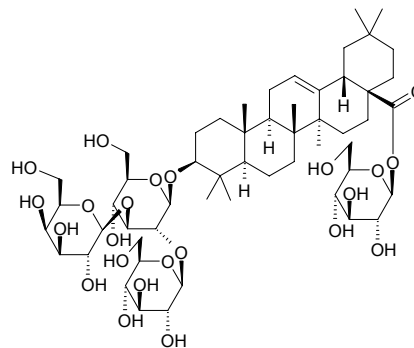
$C_{42}H_{66}O_{14}$  (794.99). **Pharm:** Hypoglycemic (inhibits the increase in serum glucose levels in glucose-loaded rats); gastroprotective (mouse, inhibits gastric emptying; rats, inhibits ethanol- and indomethacin-induced gastric lesions). **Source:** JIN ZHAN JU *Calendula officinalis* (flower). **Ref:** 3551.

**2973 *Calendula officinalis* Glycoside F**

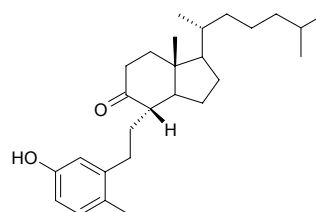
Hollow alternanthera saponin B; Oleanolic acid 3-O-glucuronide [26020-14-4]  $C_{36}H_{56}O_9$  (632.84). White amorphous powder, mp 226~228°C. **Pharm:** Hypoglycemic (inhibits the increase in serum glucose levels in glucose-loaded rats)<sup>[3551]</sup>; gastroprotective (mouse, inhibits gastric emptying; rats, inhibits ethanol- and indomethacin-induced gastric lesions)<sup>[3551]</sup>; molluscicide (*Oncomelania*); molluscicide (*Biomphalaria glabrata*, LD<sub>100</sub> = 2mg/L). **Source:** HEI REN DONG *Lonicera nigra*, HU CI CONG MU *Aralia armata*, JIN ZHAN JU *Calendula officinalis* (flower), KONG XIN XIAN *Alternanthera philoxeroides*, MU BIE GEN *Momordica cochinchinensis*, CHANG CHUN TENG *Hedera nepalensis* var. *sinensis*, TIAN CAI *Beta vulgaris*. **Ref:** 658, 700, 1521, 3551.

**2974 Calendulose D**

$C_{54}H_{88}O_{23}$  (1105.29). **Source:** JIN ZHAN JU *Calendula officinalis* (flower). **Ref:** 3551.

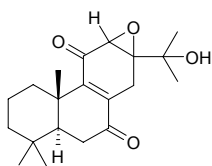
**2975 Calicoferol E**

$C_{27}H_{42}O_2$  (398.63). White powder,  $[\alpha]_D^{25} = +21^\circ$  ( $c = 0.22$ ,  $CHCl_3$ ). **Pharm:** PTP1B inhibitor (IC<sub>50</sub> = 27.28 μmol/L). **Source:** ZHONG HUA XIAO JIAN LIU SHAN HU *Muricella sinensis*. **Ref:** 4563.

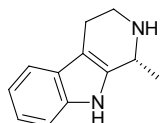


**2976 Callicarpone**

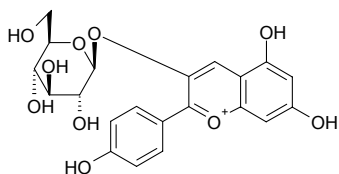
[5938-11-4] C<sub>20</sub>H<sub>28</sub>O<sub>4</sub> (332.44). Pharm: Fish toxin. Source: BAI MAO ZI ZHU *Callicarpa candidans*. Ref: 658.

**2977 Calligonine**

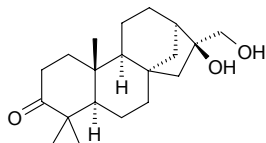
[2254-36-6] C<sub>12</sub>H<sub>14</sub>N<sub>2</sub> (186.26). Pharm: Antihypertensive. Source: SHA ZAO *Elaeagnus angustifolia*. Ref: 658.

**2978 Callistephin**

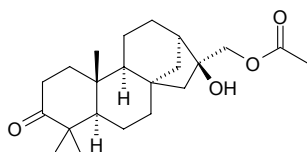
[18466-51-8] C<sub>21</sub>H<sub>21</sub>O<sub>10</sub><sup>+</sup> (433.40). Source: NAN TIAN ZHU ZI *Nandina domestica*, QIU MU GUA *Chaenomeles lagenaria* [Syn. *Chaenomeles speciosa*]. Ref: 6.

**2979 Calliterpenone**

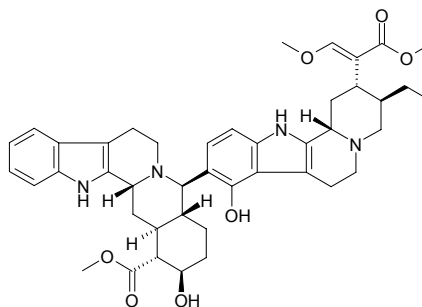
[38602-53-8] C<sub>20</sub>H<sub>32</sub>O<sub>3</sub> (320.48). mp 153~155°C. Source: DA YE ZI ZHU *Callicarpa macrophylla*. Ref: 6.

**2980 Calliterpenone monoacetate**

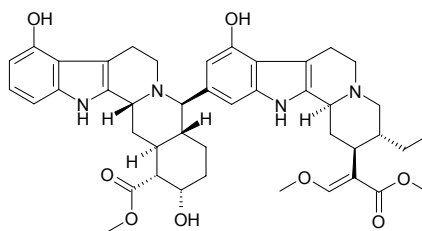
C<sub>22</sub>H<sub>34</sub>O<sub>4</sub> (362.51). mp 124°C. Source: DA YE ZI ZHU *Callicarpa macrophylla*. Ref: 6.

**2981 Callophylline A**

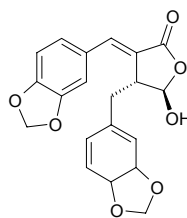
C<sub>43</sub>H<sub>52</sub>N<sub>4</sub>O<sub>7</sub> (736.92). Source: HOU YE GOU TENG *Uncaria callophylla*. Ref: 5341.

**2982 Callophylline B**

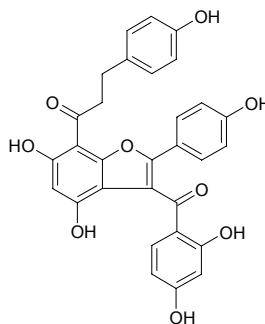
C<sub>43</sub>H<sub>52</sub>N<sub>4</sub>O<sub>8</sub> (752.92). Source: HOU YE GOU TENG *Uncaria callophylla*. Ref: 5341.

**2983 Calocedrin**

C<sub>20</sub>H<sub>18</sub>O<sub>7</sub> (370.36). Pharm: Anti-inflammatory (modulator of cytokine network: inhibits LPS-activated production of TNF- $\alpha$  in RAW264.7 cells, IC<sub>50</sub> > 150  $\mu$ mol/L). Source: SI ZI TAN *Pterocarpus santalinus* (heartwood). Ref: 4416.

**2984 Calodenin A**

C<sub>30</sub>H<sub>22</sub>O<sub>9</sub> (526.50). Source: *Ochna afzelii*. Ref: 3449.

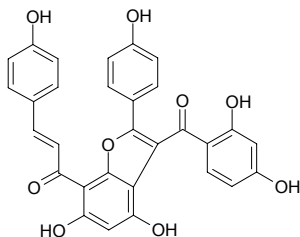




**2985 Calodenin B**

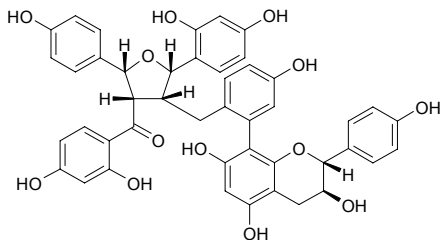
$C_{30}H_{20}O_9$  (524.49). **Pharm:** Antibacterial (MDR *Staphylococcus aureus*: RN4220 strain, MIC = 64 $\mu$ g/mL, control Erythromycin, MIC = 128 $\mu$ g/mL; XU212 strain, MIC = 8 $\mu$ g/mL, control Tetracycline, MIC = 128 $\mu$ g/mL; SA-1199-B strain, MIC = 16 $\mu$ g/mL, control Norfloxacin, MIC = 32 $\mu$ g/mL)<sup>[5372]</sup>; cytotoxic (MCF7 breast cancer cells, MTT method, IC<sub>50</sub> = (7 $\pm$ 0.5) $\mu$ mol/L, control Doxorubicin, IC<sub>50</sub> = (0.1 $\pm$ 0.001) $\mu$ mol/L)<sup>[5372]</sup>.

**Source:** CHANG E JIN LIAN MU PI *Ochna macrocalyx*, SANG DAO BU SHI MU *Brackenridgea zanguebarica*, *Ochna afzelii*. **Ref:** 3449, 5372.

**2986 Caloflavan A**

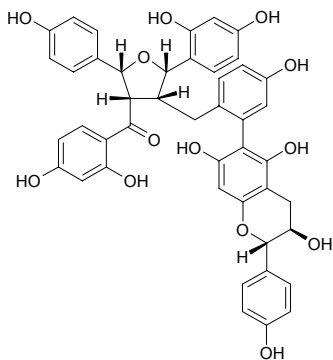
$C_{45}H_{38}O_{13}$  (786.80). Amorphous solid,  $[\alpha]_D^{28} = +31^\circ$  ( $c = 0.015$ , MeOH).

**Source:** KA MAI LONG JIN LIAN MU *Ochna calodendron*. **Ref:** 1996.

**2987 Caloflavan B**

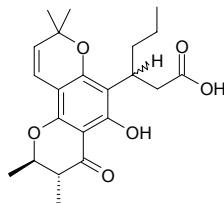
$C_{45}H_{38}O_{13}$  (786.80). Amorphous solid,  $[\alpha]_D^{28} = +28^\circ$  ( $c = 0.037$ , MeOH).

**Source:** KA MAI LONG JIN LIAN MU *Ochna calodendron*. **Ref:** 1996.

**2988 Calolongic acid**

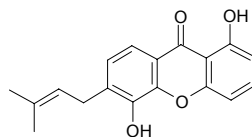
$C_{22}H_{28}O_6$  (388.46). Amorphous solid,  $[\alpha]_D^{25} = -13.1^\circ$  ( $c = 0.15$ ,  $CHCl_3$ ).

**Pharm:** Antifungal (*Aspergillus fumigatus*, MIC<sub>80</sub> = 4 $\mu$ g/mL, control Amphotericin B, MIC<sub>80</sub> = 8 $\mu$ g/mL)<sup>[5489]</sup>. **Source:** SU GE LAN HU TONG *Calophyllum caledonicum* (seed). **Ref:** 5489.

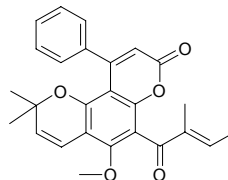
**2989 Calophyllin B**

Guanandin; 6-(3-Methyl-2-butenyl)-1,5-dihydroxyxanthone [17623-60-8]

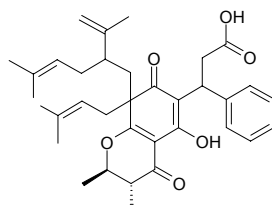
$C_{18}H_{16}O_4$  (296.33). **Pharm:** Anti-inflammatory; anti-hypotension (PAF-induced, ID<sub>50</sub> = (15.1 $\pm$ 3.3) $\mu$ mol/kg, control Ginkgolide B, ID<sub>50</sub> = (38.5 $\pm$ 2.7) $\mu$ mol/kg, CV-3988, ID<sub>50</sub> = (2.4 $\pm$ 1.2) $\mu$ mol/kg)<sup>[5050]</sup>. **Source:** HAI TANG GUO *Calophyllum inophyllum*, *Calophyllum austroindium* (stem wood). **Ref:** 658, 1319, 5050.

**2990 Calophyllolide**

[548-27-6]  $C_{26}H_{24}O_5$  (416.48). mp 160°C. **Pharm:** Antiarthritic; anti-inflammatory (rat, ip, swollen foot model caused by carrageenan, 40mg/kg, InRt = 60.7%, rat, orl, swell-foot model caused by carrageenan, ED<sub>50</sub> = 140mg/kg); cytotoxic (KB, IC<sub>50</sub> = 3.5 $\mu$ g/mL)<sup>[3866]</sup>; antibacterial (*Staphylococcus aureus*, 20 $\mu$ g/disk, DIZ = 16.0mm; *Escherichia coli*, 20 $\mu$ g/disk, inactive; *Vibrio anguillarum*, 20 $\mu$ g/disk, inactive)<sup>[3866]</sup>; antifungal inactive (*Candida tropicalis*, 20 $\mu$ g/disk)<sup>[3866]</sup>. **Source:** HAI TANG GUO *Calophyllum inophyllum* (root cortex and nut). **Ref:** 658, 661, 3866.

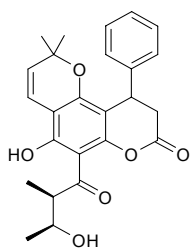
**2991 Calophynic acid**

Inocalophyllin A  $C_{35}H_{44}O_6$  (560.74). Amorphous solid,  $[\alpha]_D^{25} = -169^\circ$  ( $c = 0.05$ ,  $CH_2Cl_2$ ). **Pharm:** Cytotoxic (KB, IC<sub>50</sub> = 10.5 $\mu$ g/mL)<sup>[3866]</sup>; antibacterial (*Staphylococcus aureus*, 20 $\mu$ g/disk, DIZ = 10.0mm; *Escherichia coli*, 20 $\mu$ g/disk, inactive; *Vibrio anguillarum*, 20 $\mu$ g/disk, inactive)<sup>[3866]</sup>; antifungal inactive (*Candida tropicalis*, 20 $\mu$ g/disk)<sup>[3866]</sup>. **Source:** HAI TANG GUO *Calophyllum inophyllum* (root cortex and nut). **Ref:** 3866, 4354.

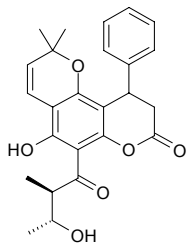


**2992 Calopolyanolid A**

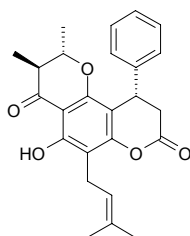
6,6-Dimethyl-12 $\alpha$ -(2 $\alpha$ ,3 $\alpha$ -H)-12 $\alpha$ -(2-methyl-3-hydroxybutanoyl)-8b-hydroxy-4-phenyl-pyranodihydrocoumarin C<sub>25</sub>H<sub>26</sub>O<sub>6</sub> (422.48). Yellow oil,  $[\alpha]_D^{26} = -176.54^\circ$  ( $c = 0.21$ , CHCl<sub>3</sub>);  $[\alpha]_D^{20} = -170.2^\circ$  ( $c = 0.213$ , CHCl<sub>3</sub>). Source: DIAN NAN HONG HOU KE *Calophyllum polyanthum* (seed: yield =0.0044%dw)<sup>[4767]</sup>. Ref: 2145, 4767.

**2993 Calopolyanolid B**

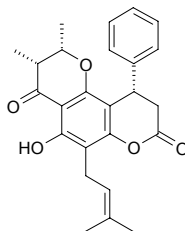
6,6-Dimethyl-12 $\alpha$ -(2 $\alpha$ ,3 $\beta$ -H)-12 $\alpha$ -(2-methyl-3-hydroxybutanoyl)-8b-hydroxy-4-phenyl-pyranodihydrocoumarin C<sub>25</sub>H<sub>26</sub>O<sub>6</sub> (422.48). Yellow oil,  $[\alpha]_D^{26} = -9.960^\circ$  ( $c = 0.23$ , CHCl<sub>3</sub>);  $[\alpha]_D^{20} = -105.5^\circ$  ( $c = 0.241$ , CHCl<sub>3</sub>). Source: DIAN NAN HONG HOU KE *Calophyllum polyanthum* (seed: yield =0.0040%dw)<sup>[4767]</sup>. Ref: 2145, 4767.

**2994 Calopolyanolid C**

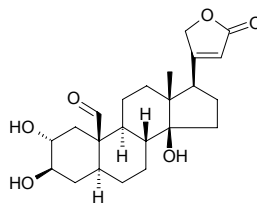
C<sub>25</sub>H<sub>26</sub>O<sub>5</sub> (406.48). Pale yellow needles (CHCl<sub>3</sub>), mp 127~128°C,  $[\alpha]_D^{20} = -193.2^\circ$  ( $c = 0.132$ , CHCl<sub>3</sub>). Pharm: Antiviral inactive (*in vitro*, vero cell line, HSV-2 virus, GI<sub>50</sub> > 250μg/mL; control Acyclovir)<sup>[4767]</sup>. Source: DIAN NAN HONG HOU KE *Calophyllum polyanthum* (seed: yield =0.0062%dw). Ref: 4767.

**2995 Calopolyanolid D**

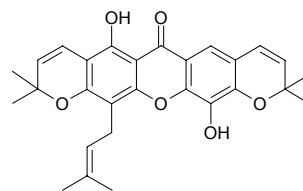
C<sub>25</sub>H<sub>26</sub>O<sub>5</sub> (406.48). Pale yellow needles (CHCl<sub>3</sub>), mp 157~158°C,  $[\alpha]_D^{20} = -34.1^\circ$  ( $c = 0.132$ , CHCl<sub>3</sub>). Pharm: Antiviral inactive (*in vitro*, vero cell line, HSV-2 virus, GI<sub>50</sub> > 250μg/mL; control Acyclovir)<sup>[4767]</sup>. Source: DIAN NAN HONG HOU KE *Calophyllum polyanthum* (seed: yield =0.0056%dw). Ref: 4767.

**2996 Calotropagenin**

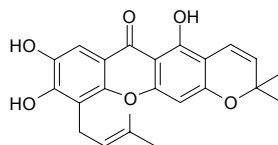
[24211-64-1] C<sub>23</sub>H<sub>32</sub>O<sub>6</sub> (404.51). mp 238~250°C. Source: LIAN SHENG GUI ZI HUA *Asclepias curassavica*. Ref: 6.

**2997 Caloxanthone**

C<sub>28</sub>H<sub>28</sub>O<sub>6</sub> (460.53). Source: *Calophyllum blancoi* (root). Ref: 4441.

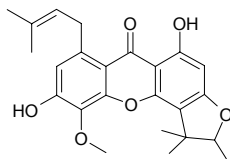
**2998 Caloxanthone A**

C<sub>23</sub>H<sub>22</sub>O<sub>6</sub> (394.43). Pharm: Cytotoxic (KB, IC<sub>50</sub> = 7.4μg/mL)<sup>[3866]</sup>; antibacterial (*Staphylococcus aureus*, 20μg/disk, DIZ = 9.0mm; *Escherichia coli*, 20μg/disk, inactive; *Vibrio anguillarum*, 20μg/disk, inactive)<sup>[3866]</sup>; antifungal inactive (*Candida tropicalis*, 20μg/disk)<sup>[3866]</sup>. Source: HAI TANG GUO *Calophyllum inophyllum* (root cortex and nut). Ref: 3866.

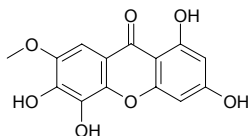


**2999 Caloxanthone B**

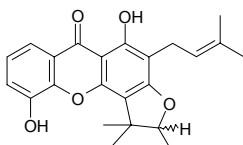
$C_{24}H_{26}O_6$  (410.47). Source: HAI TANG GUO *Calophyllum inophyllum* (root cortex and nut). Ref: 3866.

**3000 Caloxanthone E**

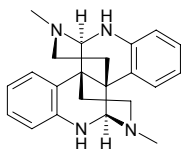
$C_{14}H_{10}O_7$  (290.23). Pharm: Anti-hypotension (PAF-induced,  $ID_{50}$  =  $(26.4 \pm 9.0) \mu\text{mol/kg}$ , control Ginkgolide B,  $ID_{50}$  =  $(38.5 \pm 2.7) \mu\text{mol/kg}$ , CV-3988,  $ID_{50}$  =  $(2.4 \pm 1.2) \mu\text{mol/kg}$ ). Source: HAI TANG GUO *Calophyllum inophyllum* (root). Ref: 5050.

**3001 Caloxanthone L**

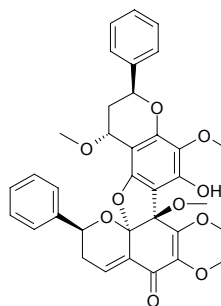
$C_{23}H_{24}O_5$  (380.44). Amorphous solid,  $[\alpha]_D^{25}$  =  $+6.6^\circ$  ( $c$  = 0.15, MeOH). Source: SU GE LAN HU TONG *Calophyllum caledonicum* (seed). Ref: 5489.

**3002 Calycanthine**

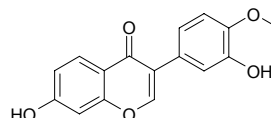
[595-05-1]  $C_{22}H_{26}N_4$  (346.48). mp (+) 250~251°C, ( $\pm$ ) 253~258°C. Pharm: Causes strong convulsion (mammal); inhibits heart (anesthetic cat and dog); antihypertensive (narcosis cat and dog); uterine and intestinal smooth muscle stimulant (rbt, *in vitro*);  $LD_{50}$  (mus, iv) =  $(43.79 \pm 1.89) \text{mg/kg}$ , (rat, iv) =  $(17.16 \pm 0.82) \text{mg/kg}$ . Source: MEI GUO XIA LA MEI *Calycanthus floridus*, LA MEI HUA *Chimonanthus fragrans* [Syn. *Chimonanthus praecox*], JIA ZHOU XIA LA MEI *Calycanthus occidentalis*. Ref: 1, 6.

**3003 Calycopterone**

$C_{35}H_{34}O_{10}$  (614.66). Colorless prisms, mp 117°C. Source: E CHI TENG *Calycopteris floribunda* (green part). Ref: 3779.

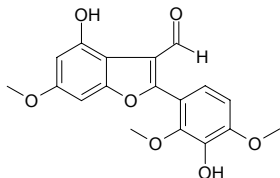
**3004 Calycosin**

7,3'-Dihydroxy-4'-methoxyisoflavone [20575-57-9]  $C_{16}H_{12}O_5$  (284.27). Colorless needles, mp 245~247°C. Pharm: Antibacterial (*Escherichia coli*, inactive, control Chloramphenicol, MIA = 0.001  $\mu\text{g}$ ; *Bacillus subtilis*, inactive, Chloramphenicol, MIA = 0.001  $\mu\text{g}$ ; *Staphylococcus aureus*, inactive, Chloramphenicol, MIA = 0.001  $\mu\text{g}$ ); antifungal (*Candida mycoderma*, MIA = 0.1  $\mu\text{g}$ , Miconazole = MIA = 0.0001  $\mu\text{g}$ )<sup>[3785]</sup>; antioxidant (DPPH free radical scavenger, TLC detection limit = 0.5  $\mu\text{g}$ ,  $IC_{50}$  = 150  $\mu\text{g/mL}$ ; control Quercetin, TLC detection limit < 0.05  $\mu\text{g}$ ,  $IC_{50}$  = 7  $\mu\text{g/mL}$ ; Gallic acid, TLC detection limit < 0.05  $\mu\text{g}$ ,  $IC_{50}$  = 4  $\mu\text{g/mL}$ ; Ascorbic acid, TLC detection limit < 0.10  $\mu\text{g}$ ,  $IC_{50}$  = 18  $\mu\text{g/mL}$ )<sup>[3785]</sup>; antimalarial (*Plasmodium falciparum* PoW,  $IC_{50}$  =  $(4.3 \pm 0.9) \mu\text{g/mL}$ , control Chloroquine diphosphate,  $IC_{50}$  =  $(0.006 \pm 0.002) \mu\text{g/mL}$ ; Dd2,  $IC_{50}$  =  $(9.9 \pm 1.5) \mu\text{g/mL}$ , Chloroquine diphosphate,  $IC_{50}$  =  $(0.063 \pm 0.01) \mu\text{g/mL}$ )<sup>[5208]</sup>; antibacterial (*Staphylococcus aureus*, MIA = 50.0  $\mu\text{g}$ , Chloramphenicol, MIA = 0.0001  $\mu\text{g}$ ; *Bacillus subtilis*, MIA = 50.0  $\mu\text{g}$ , Chloramphenicol, MIA = 0.0001  $\mu\text{g}$ )<sup>[5247]</sup>; antifungal (*Candida mycoderma*, MIA = 0.05  $\mu\text{g}$ , control Miconazole, MIA = 0.0001  $\mu\text{g}$ )<sup>[5247]</sup>; hepatoprotective (mus primary cultured hepatocytes, antihepatotoxin induced by *D*-galactosamine (GalN), 100  $\mu\text{mol/L}$ , InRt =  $(6.3 \pm 1.1)\%$ , inactive, control Silybin, 100  $\mu\text{mol/L}$ , InRt =  $(77.0 \pm 5.5)\%$ )<sup>[4095]</sup>. Source: GUANG BU DING GONG TENG *Erycibe expansa*, HUANG QI *Astragalus membranaceus* (dried root: mean content of 2 origins = 0.0061%)<sup>[5508]</sup>, JI KUAN CI TONG *Erythrina latissima* (stem wood), KUN MING JI XUE TENG *Milletia dielsiana*, MENG GU HUANG QI *Astragalus mongholicus* (dried root: mean content of 4 origins = 0.0153%)<sup>[5508]</sup>, WU CI KE YA SHU *Andira inermis* (leaf), *Bolusanthus speciosus* (root wood), *Baptisia* spp., *Bowdichia* spp., *Cadia* spp., *Cladrastis* spp., *Dalbergia* spp., *Pterocarpus* spp., *Sophora* spp., *Thermopsis* spp., *Trifolium* spp., *Myroxylon* spp., *Cyclobium* spp., *Machaerium* spp., occurs in many plants. Ref: 2205, 1521, 3785, 4095, 5208, 5247, 5508.

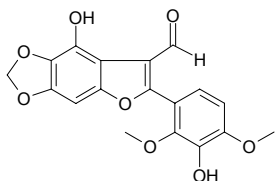


**3005 Calycosin A**

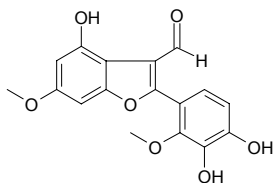
2-[2',4'-Dimethoxy-3'-hydroxyphenyl]-4-hydroxy-6-methoxy-benzofuran-3-carbaldehyde C<sub>18</sub>H<sub>16</sub>O<sub>7</sub> (344.32). **Pharm:** Antimalarial (*Plasmodium falciparum* PoW, IC<sub>50</sub> = (2.3±0.4)μg/mL, control Chloroquine diphosphate, IC<sub>50</sub> = (0.006±0.002)μg/mL; Dd2, IC<sub>50</sub> = (3.9±0.2)μg/mL, Chloroquine diphosphate, IC<sub>50</sub> = (0.063±0.010)μg/mL). **Source:** WU CI KE YA SHU *Andira inermis* (leaf). **Ref:** 5208.

**3006 Calycosin B**

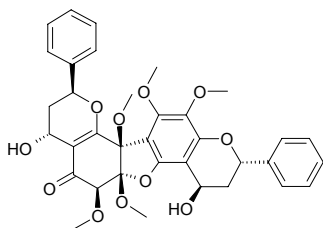
2-[2',4'-Dimethoxy-3'-hydroxyphenyl]-4-hydroxy-5,6-methylenedioxybenzofuran-3-carbaldehyde C<sub>18</sub>H<sub>14</sub>O<sub>8</sub> (358.31). **Source:** WU CI KE YA SHU *Andira inermis* (leaf). **Ref:** 5208.

**3007 Calycosin C**

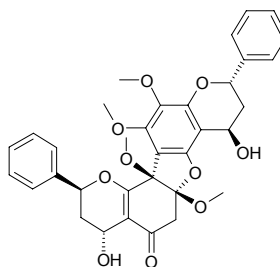
2-[3',4'-Dihydroxy-2'-methoxyphenyl]-4-hydroxy-6-methoxy-benzofuran-3-carbaldehyde C<sub>17</sub>H<sub>14</sub>O<sub>7</sub> (330.30). **Pharm:** Antimalarial (*Plasmodium falciparum* PoW, IC<sub>50</sub> = (5.9±0.5)μg/mL, control Chloroquine diphosphate, IC<sub>50</sub> = (0.006±0.002)μg/mL; Dd2, IC<sub>50</sub> = (6.3±1.0)μg/mL, Chloroquine diphosphate, IC<sub>50</sub> = (0.063±0.010)μg/mL). **Source:** WU CI KE YA SHU *Andira inermis* (leaf). **Ref:** 5208.

**3008 Calyflorenone C**

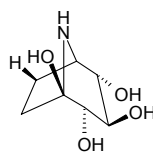
C<sub>35</sub>H<sub>36</sub>O<sub>11</sub> (632.67). Pale amorphous solid, mp 185°C (Et<sub>2</sub>O-petrol), [α]<sub>D</sub><sup>20</sup> = -17.09° (c = 0.158). **Source:** E CHI TENG *Calycopteris floribunda* (green part). **Ref:** 3779.

**3009 Calyflorenone D**

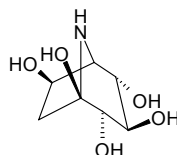
C<sub>34</sub>H<sub>34</sub>O<sub>10</sub> (602.64). Pale amorphous solid, mp 108-114°C (Et<sub>2</sub>O-petrol), [α]<sub>D</sub><sup>20</sup> = -27.47° (c = 0.142). **Source:** E CHI TENG *Calycopteris floribunda* (green part). **Ref:** 3779.

**3010 Calystegine B<sub>2</sub>**

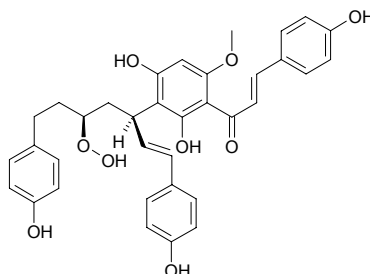
Nortropanoline C<sub>7</sub>H<sub>13</sub>NO<sub>4</sub> (175.19). **Pharm:** Lactase inhibitor (trehalase inhibitor)<sup>[2513]</sup>. **Source:** SANG ZHI *Morus alba*, *Morus* sp. **Ref:** 2170, 2513.

**3011 Calystegine C<sub>1</sub>**

C<sub>7</sub>H<sub>13</sub>NO<sub>5</sub> (191.19). **Pharm:** Lactase inhibitor (trehalase inhibitor)<sup>[2513]</sup>. **Source:** *Morus* sp. **Ref:** 2513.

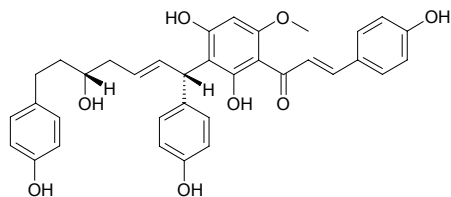
**3012 Calyxin A**

C<sub>35</sub>H<sub>34</sub>O<sub>9</sub> (598.66). **Pharm:** Cytotoxic (Colon26-L5, ED<sub>50</sub> = 13.1 μmol/L; HT1080, ED<sub>50</sub> = 10.7 μmol/L; control Curcumin, Colon26-L5, ED<sub>50</sub> = 23.2 μmol/L; HT1080, ED<sub>50</sub> = 23.4 μmol/L). **Source:** YUN NAN CAO KOU *Alpinia blepharocalyx* (seed: yield = 0.00033%). **Ref:** 3035.

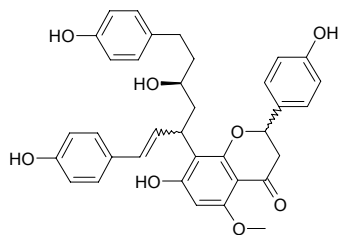


**3013 Calyxin B**

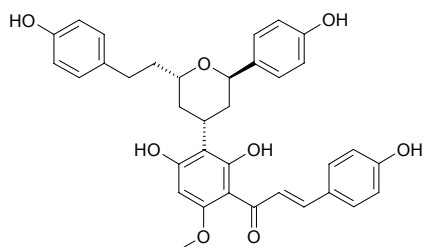
$C_{35}H_{34}O_8$  (582.66). Source: ZHU SUI SHAN JIANG *Alpinia pinnanensis* (rhizome). Ref: 4522.

**3014 Calyxin E**

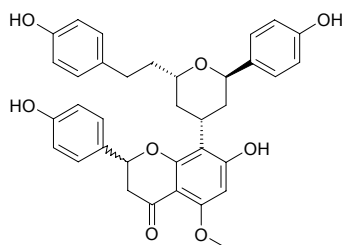
$C_{35}H_{34}O_8$  (582.66). Pharm: Cytotoxic (Colon26-L5,  $ED_{50} = 98.1\mu\text{mol/L}$ ; HT1080,  $ED_{50} = 21.7\mu\text{mol/L}$ ; control Curcumin, Colon26-L5,  $ED_{50} = 23.2\mu\text{mol/L}$ ; HT1080,  $ED_{50} = 23.4\mu\text{mol/L}$ ). Source: YUN NAN CAO KOU *Alpinia blepharocalyx* (seed: yield = 0.00019%). Ref: 3035.

**3015 Calyxin F**

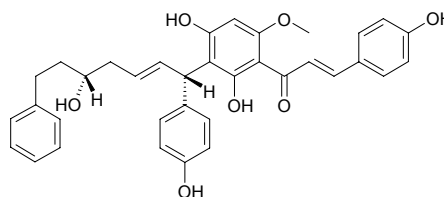
$C_{35}H_{34}O_8$  (582.66). Pharm: Cytotoxic (Colon26-L5,  $ED_{50} = 10.4\mu\text{mol/L}$ ; HT1080,  $ED_{50} = 10.4\mu\text{mol/L}$ ; control Curcumin, Colon26-L5,  $ED_{50} = 23.2\mu\text{mol/L}$ ; HT1080,  $ED_{50} = 23.4\mu\text{mol/L}$ ). Source: YUN NAN CAO KOU *Alpinia blepharocalyx* (seed: yield = 0.000024%). Ref: 3035.

**3016 Calyxin G**

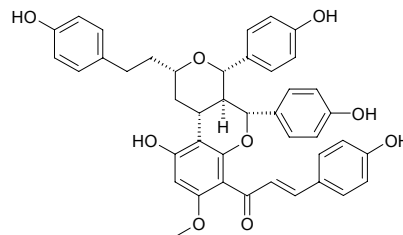
$C_{35}H_{34}O_8$  (582.66). Pharm: Cytotoxic (Colon26-L5,  $ED_{50} = 42.2\mu\text{mol/L}$ ; HT1080,  $ED_{50} = 25.9\mu\text{mol/L}$ ; control Curcumin, Colon26-L5,  $ED_{50} = 23.2\mu\text{mol/L}$ ; HT1080,  $ED_{50} = 23.4\mu\text{mol/L}$ ). Source: YUN NAN CAO KOU *Alpinia blepharocalyx* (seed: yield = 0.000012%). Ref: 3035.

**3017 Calyxin H**

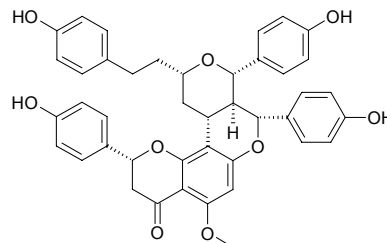
$C_{33}H_{34}O_7$  (566.66). Source: ZHU SUI SHAN JIANG *Alpinia pinnanensis* (rhizome). Ref: 4522.

**3018 Calyxin I**

$C_{42}H_{38}O_9$  (686.77). Light yellow amorphous solid,  $[\alpha]_D^{25} = -16.4^\circ$  ( $c = 0.05$ , MeOH). Pharm: Cytotoxic (Colon26-L5,  $ED_{50} = 8.39\mu\text{mol/L}$ ; HT1080,  $ED_{50} = 9.08\mu\text{mol/L}$ ; control Curcumin, Colon26-L5,  $ED_{50} = 23.2\mu\text{mol/L}$ ; HT1080,  $ED_{50} = 23.4\mu\text{mol/L}$ )<sup>[3035]</sup>. Source: YUN NAN CAO KOU *Alpinia blepharocalyx* (seed: yield = 0.00026%<sup>[3035]</sup>; yield = 0.00021%<sup>[3042]</sup>; yield = 0.00019%<sup>[3048]</sup>). Ref: 3035, 3042, 3048.

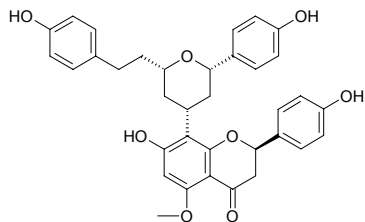
**3019 Calyxin J**

$C_{42}H_{38}O_9$  (686.77). Light yellow amorphous solid,  $[\alpha]_D^{25} = +99.2^\circ$  ( $c = 0.185$ , MeOH). Pharm: Cytotoxic (Colon26-L5,  $ED_{50} = 23.2\mu\text{mol/L}$ ; HT1080,  $ED_{50} = 8.19\mu\text{mol/L}$ ; control Curcumin, Colon26-L5,  $ED_{50} = 23.2\mu\text{mol/L}$ ; HT1080,  $ED_{50} = 23.4\mu\text{mol/L}$ )<sup>[3035]</sup>. Source: YUN NAN CAO KOU *Alpinia blepharocalyx* (seed: yield = 0.00018%<sup>[3035]</sup>; yield = 0.00085%<sup>[3042]</sup>; yield = 0.00018%<sup>[3048]</sup>). Ref: 3035, 3042, 3048.

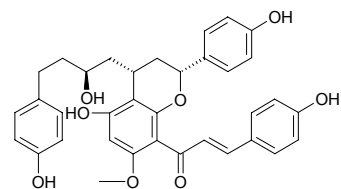


**3020 Calyxin K**

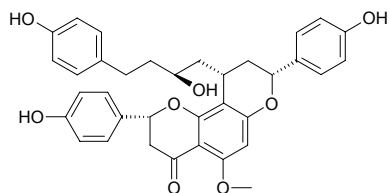
$C_{35}H_{34}O_8$  (582.66). Pale yellow amorphous solid,  $[\alpha]_D^{25} = +35.5^\circ$  ( $c = 0.06$ , MeOH). **Pharm:** Cytotoxic (Colon26-L5,  $ED_{50} = 7.73\mu\text{mol/L}$ ; HT1080,  $ED_{50} = 5.09\mu\text{mol/L}$ ; control Curcumin, Colon26-L5,  $ED_{50} = 23.2\mu\text{mol/L}$ ; HT1080,  $ED_{50} = 23.4\mu\text{mol/L}$ ). **Source:** YUN NAN CAO KOU *Alpinia blepharocalyx* (seed: yield = 0.000012%). **Ref:** 3035.

**3021 Calyxin L**

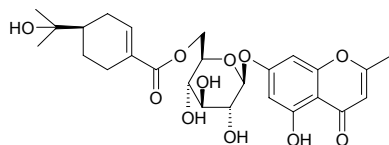
$C_{35}H_{34}O_8$  (582.66). Light yellow amorphous solid,  $[\alpha]_D^{25} = +77.1^\circ$  ( $c = 0.05$ , MeOH). **Pharm:** Cytotoxic (Colon26-L5,  $ED_{50} = 28.2\mu\text{mol/L}$ ; HT1080,  $ED_{50} = 44.3\mu\text{mol/L}$ ; control Curcumin, Colon26-L5,  $ED_{50} = 23.2\mu\text{mol/L}$ ; HT1080,  $ED_{50} = 23.4\mu\text{mol/L}$ )<sup>[3035]</sup>. **Source:** YUN NAN CAO KOU *Alpinia blepharocalyx* (seed: yield = 0.00011%<sup>[3035]</sup>; yield = 0.00029%<sup>[3042]</sup>; yield = 0.00011%dw<sup>[3048]</sup>). **Ref:** 3035, 3042, 3048.

**3022 Calyxin M**

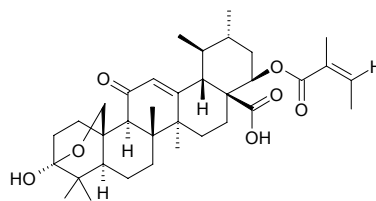
$C_{35}H_{34}O_8$  (582.66). Yellow amorphous solid (An epimeric mixture of calyxin M and epicalyxin M). **Pharm:** Cytotoxic (mixture of calyxin M and epicalyxin M (3:2): Colon26-L5,  $ED_{50} = 42.1\mu\text{mol/L}$ ; HT1080,  $ED_{50} = 10.1\mu\text{mol/L}$ ; control Curcumin, Colon26-L5,  $ED_{50} = 23.2\mu\text{mol/L}$ ; HT1080,  $ED_{50} = 23.4\mu\text{mol/L}$ ). **Source:** YUN NAN CAO KOU *Alpinia blepharocalyx* (seed). **Ref:** 3035.

**3023 Camaldulenside**

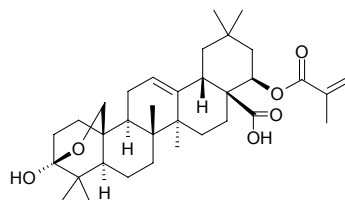
$C_{26}H_{32}O_{11}$  (520.54). White acicular crystals mp 208–209.5°C. **Source:** CHUI ZHI CHIAN YE *Eucalyptus camaldulensis* var. *pendula*. **Ref:** 856.

**3024 Camangeloyl acid**

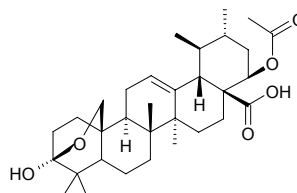
3,25-epoxy-3 $\alpha$ -hydroxy-22 $\beta$ -[(Z)-29-methyl-29-butenoyloxy]-11-oxoolean-12-en-28-oic acid  $C_{35}H_{50}O_7$  (582.78). Amorphous powder,  $[\alpha]_D = +165^\circ$  ( $c = 0.15$ ,  $CHCl_3$ ). **Source:** WU SE MEI *Lantana camara* (aerial parts). **Ref:** 4309.

**3025 Camaric acid**

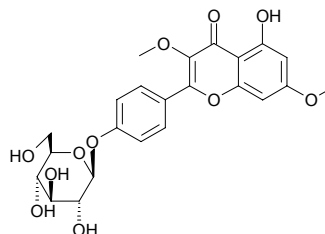
$C_{35}H_{52}O_6$  (568.80). **Source:** WU SE MEI *Lantana camara* (aerial parts). **Ref:** 4309.

**3026 Camarinic acid**

22 $\beta$ -Acetoxylantic acid [163565-67-1]  $C_{32}H_{48}O_6$  (528.74). Crystals, mp 204–205°C (methanol). **Pharm:** Antibacterial (*Staphylococcus aureus* and *Salmonella typhimurium*); antimutagenic. **Source:** WU SE MEI *Lantana camara*. **Ref:** 1084, 1100.

**3027 Camaroside**

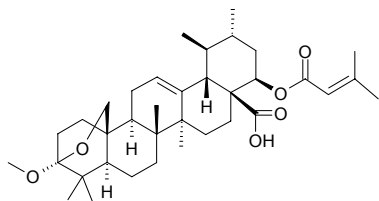
4',5-Dihydroxy-3,7-dimethoxyflavone-4'-O- $\beta$ -D-glucopyranoside  $C_{23}H_{24}O_{11}$  (476.44). Yellowish rabdiod crystals, mp 252–254°C. **Source:** WU SE MEI *Lantana camara*. **Ref:** 253.



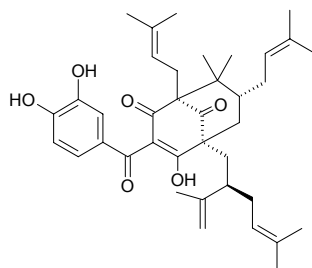
**3028 Camaryolic acid**

3,25-Epoxy-3 $\alpha$ -methoxy-22 $\beta$ -[ $\beta$ , $\beta$ -dimethylacryloyloxy]-urs-12-en-28-oic acid C<sub>36</sub>H<sub>54</sub>O<sub>6</sub> (582.83). Amorphous powder, [ $\alpha$ ]<sub>D</sub> = +169° (*c* = 0.1, CHCl<sub>3</sub>).

Source: WU SE MEI *Lantana camara* (aerial parts). Ref: 4309.

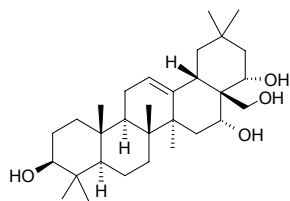
**3029 Cambogin**

C<sub>38</sub>H<sub>50</sub>O<sub>6</sub> (606.82). Pharm: Antioxidant (DPPH scavenger, 10 $\mu$ mol/L, ScRt = 69%, control BHT, 10 $\mu$ mol/L, ScRt = 43%); antibacterial (*Staphylococcus aureus* ATCC 25923, MIC = 128 $\mu$ g/mL, control Vancomycin, MIC = 2 $\mu$ g/mL; *Staphylococcus aureus* MRSA SK1, MIC = 64 $\mu$ g/mL, Vancomycin, MIC = 2 $\mu$ g/mL). Source: TIAN SHAN ZHU ZI *Garcinia dulcis* (fruit). Ref: 5319.

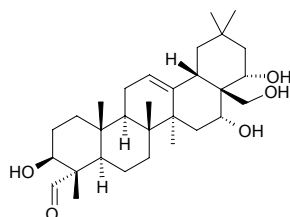
**3030 Camelliagenin A**

Theasapogenol D [53227-91-1] C<sub>30</sub>H<sub>50</sub>O<sub>4</sub> (474.73). mp 282–283°C, 290–293°C. Source: CHA ZI XIN *Camellia oleifera*, ZHEN ZHU CAI

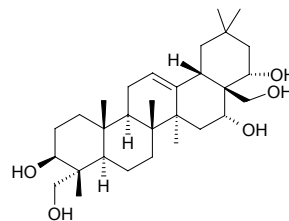
*Lysimachia clethroides*. Ref: 6.

**3031 Camelliagenin B**

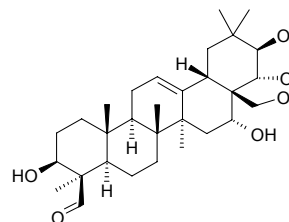
[14511-74-1] C<sub>30</sub>H<sub>48</sub>O<sub>5</sub> (488.71). mp 200–205°C, 195–204°C. Source: CHA ZI XIN *Camellia oleifera*. Ref: 6.

**3032 Camelliagenin C**

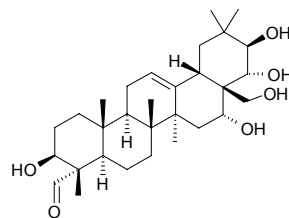
Theasapogenol C [14440-27-8] C<sub>30</sub>H<sub>50</sub>O<sub>5</sub> (490.73). mp 262–263°C, 280–283°C. Source: CHA ZI XIN *Camellia oleifera*, ZHEN ZHU CAI *Lysimachia clethroides*. Ref: 6.

**3033 Camelliagenin D**

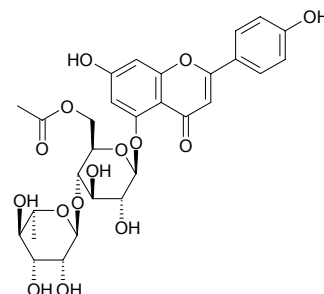
[25122-87-6] C<sub>30</sub>H<sub>48</sub>O<sub>6</sub> (504.71). mp 250–258°C. Source: CHA ZI XIN *Camellia oleifera*, ZHEN ZHU CAI *Lysimachia clethroides*. Ref: 6.

**3034 Camelliagenin E**

Theasapogenol E [15399-41-4] C<sub>30</sub>H<sub>48</sub>O<sub>6</sub> (504.71). mp 237.5–239°C. Source: CHA ZI XIN *Camellia oleifera*, ZHEN ZHU CAI *Lysimachia clethroides*. Ref: 6.

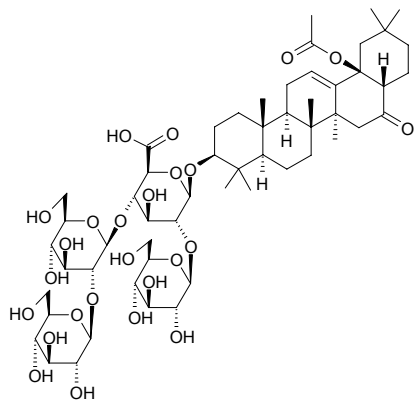
**3035 Camellianin A**

Apigenin-5-*O*- $\alpha$ -L-rhamnosyl-(1 $\rightarrow$ 4)-6''-acetyl- $\beta$ -D-glucoside C<sub>29</sub>H<sub>32</sub>O<sub>15</sub> (620.57). Colorless acicular crystals (methanol), mp 196–197°C. Source: CHA YE *Camellia sinensis* [Syn. *Thea sinensis*]. Ref: 636.

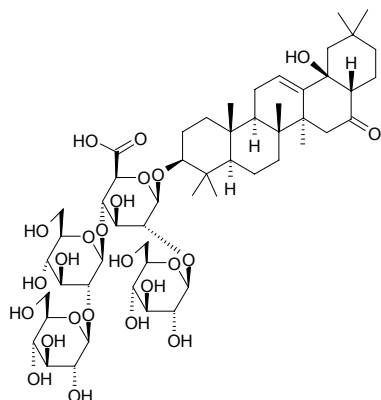


**3036 Camellidin I**

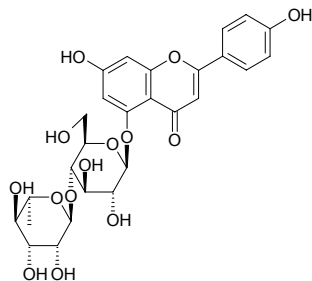
[96827-22-4] C<sub>55</sub>H<sub>86</sub>O<sub>25</sub> (1147.28). **Pharm:** Antifungal. **Source:** SHAN CHA *Camellia japonica*. **Ref:** 658.

**3037 Camellidin II**

[96827-23-5] C<sub>53</sub>H<sub>84</sub>O<sub>24</sub> (1105.25). **Pharm:** Antifungal; insect antifeedant (larva of *Eurema hecabe manarina*). **Source:** SHAN CHA *Camellia japonica*. **Ref:** 658.

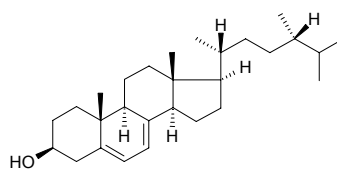
**3038 Camellinanin B**

C<sub>27</sub>H<sub>30</sub>O<sub>14</sub> (578.53). **Source:** CHA YE *Camellia sinensis* [Syn. *Thea sinensis*]. **Ref:** 660, 1521.

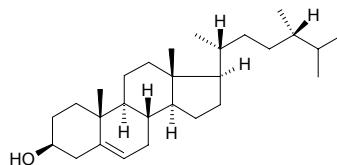
**3039 4<sup>7</sup>-Campesterol‡**

22,23-Dihydroergosterol [516-79-0] C<sub>28</sub>H<sub>46</sub>O (398.68). mp 152–153°C.

**Source:** CHA YE *Camellia sinensis* [Syn. *Thea sinensis*], GUA LOU *Trichosanthes kirilowii*, MU ER *Auricularia auricula*. **Ref:** 2, 6. ‡Note: See compound 14229.

**3040 Campesterol**

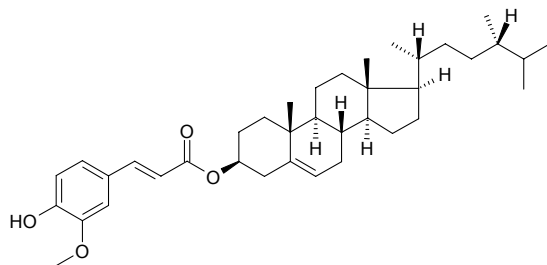
(24*S*)-Methylcholest-5-en-3β-ol [474-62-4] C<sub>28</sub>H<sub>48</sub>O (400.69). Needles (Me<sub>2</sub>CO), mp 157–158°C, [α]<sub>D</sub><sup>24</sup> = –46.3° (c = 1.2, CHCl<sub>3</sub>). **Pharm:** One of components of plant epicyte. **Source:** BAI FAN DOU *Phaseolus vulgaris*, BAI XIAN PI *Dictamnus dasycarpus*, CHAN SU *Bufo bufo gargarizans*; *Bufo melanostictus*, CU LIU GUO *Hippophae rhamnoides*, DA CHE QIAN *Plantago major*, DONG FANG GOU JI *Woodwardia orientalis*, GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *Huechingensis*], GAN ZHE *Saccharum sinensis*, GOU QI ZI *Lycium chinense*, GU SUI BU *Drynaria fortunei*, GUA LOU *Trichosanthes kirilowii*, HEI DA DOU *Glycine max*, HUANG BAI *Phellodendron amurense*, HUANG QIN *Scutellaria baicalensis*, JIAN ZI SU YE *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*], JING MI *Oryza sativa*, LU HUI *Aloe vera* [Syn. *Aloe barbadensis*], LU ZHU GEN *Arundo donax*, LUO HUA SHENG *Arachis hypogaea*, MU MA HUANG *Casuarina equisetifolia*, PU DI WU GONG *Lycopodium cernuum*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], SAN ZUAN FENG *Lindera obtusiloba*, SANG YE *Morus alba*, SHAN YAO *Dioscorea batatas* [Syn. *Dioscorea opposita*], WU GENG WU JIA PI *Acanthopanax sessiliflorus*, XIANG PI MU *Alstonia scholaris*, XIANG SI ZI *Abrus precatorius*, YUN TAI ZI *Brassica campestris* [Syn. *Brassica campestris* var. *oleifera*], OU ZHOU YOU CAI *Brassica napus*, ZHU YE LAN *Arundina chinensis*, occurs in many plants. **Ref:** 2, 658, 660, 1399, 1419.



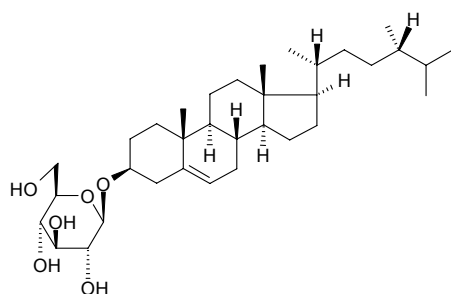


**3041 Campesteryl ferulate**

$C_{38}H_{56}O_4$  (576.87). Source: MI PI KANG *Oryza sativa*. Ref: 6.

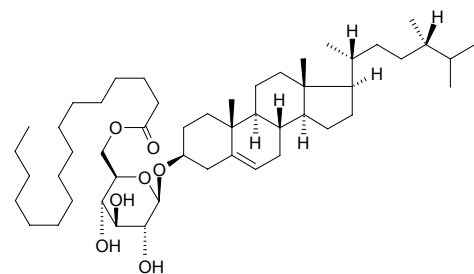
**3042 Campesteryl-D-glucoside**

$C_{34}H_{58}O_6$  (562.84). Source: DONG FANG GOU JI *Woodwardia orientalis*, HUANG HUA BAI JIANG *Patrinia scabiosaefolia*. Ref: 6, 660.

**3043 Campesteryl-D-glucoside-6'-palmitate**

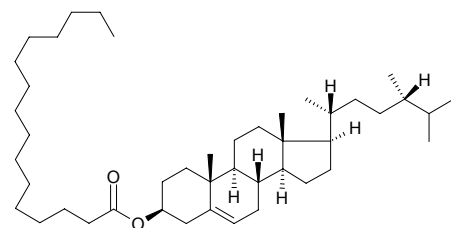
$C_{50}H_{88}O_7$  (801.25). Source: DONG FANG GOU JI *Woodwardia orientalis*.

Ref: 6.

**3044 Campesteryl palmitate**

$C_{44}H_{78}O_2$  (639.11). Source: DONG FANG GOU JI *Woodwardia orientalis*.

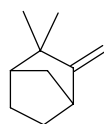
Ref: 6.

**3045 Camphene**

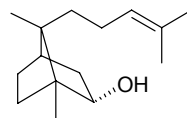
2,2-Dimethyl-3-methylenebicyclo[2,2,1]heptane [79-92-5]  $C_{10}H_{16}$  (136.24).

mp (+) 51°C, bp (+) 160~162°C, mp (-) 51~52°C, bp (-) 158~160°C.

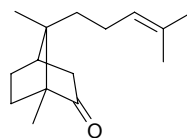
Pharm: Antihypercholesterolemic (reduces saturation indices of cholesterol in curing calculus). Source: BO HE *Mentha haplocalyx* [Syn. *Mentha canadaensis*; *Mentha arvensis* var. *haplocalyx*; *Mentha arvensis*], DAN YE MAN JING ZI *Vitex rotundifolia* [Syn. *Vitex trifolia* var. *simplicifolia*], DANG GUI *Angelica sinensis*, GAN JIANG *Zingiber officinale*, HONG CHAI HU *Bupleurum scorzonerifolium*, HUANG HUA HAO *Artemisia annua*, HUI HUI SU GENG *Perilla frutescens* var. *crispa*, JIAN ZI SU YE *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*], JING JIE *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*], KUAN YE QIANG HUO *Notopterygium forbesii* [Syn. *Notopterygium franchetii*], KUO YE XIE CAO *Valeriana officinalis* var. *latifolia*, LIAN QIAO *Forsythia suspensa*, LIAO XI XIN *Asarum heterotropoides* var. *mandshuricum*, MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*], NAN HE SHI *Daucus carota*, PING E SHU *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*], SHENG JIANG *Zingiber officinale*, WU WEI ZI *Schisandra chinensis*, XI XIN *Asarum sieboldii*, XIE CAO *Valeriana officinalis* (the compound was isolated from the plant by Bertram, et al. in 1890)<sup>[5505]</sup>, YU JIN *Curcuma aromatica*, YU XING CAO *Houttuynia cordata*, ZI SU YE *Perilla frutescens* var. *arguta*, occurs in many plants. Ref: 2, 6, 658, 660, 5505.

**3046 Camphenenol**

$C_{15}H_{26}O$  (222.37). Source: LU HUI *Aloe vera* [Syn. *Aloe barbadensis*]. Ref: 2.

**3047 Camphenone**

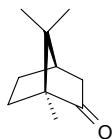
$C_{15}H_{24}O$  (220.36). Source: ZHANG MU *Cinnamomum camphora*. Ref: 6.



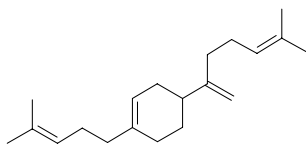
**3048 Camphor**

2-Bornanone [76-22-2] C<sub>10</sub>H<sub>16</sub>O (152.24). Rhomboid crystals (ethanol), mp (+) 179.75°C, (-) 178.6°C, bp (+) 204°C, (-) 204°C, [α]<sub>D</sub><sup>25</sup> = 41–43° (ethanol).

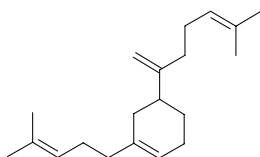
**Pharm:** Cardiotonic; irritant (local); antifungal (*Aspergillus niger* KCCM11239, MFC = 0.78mg/mL; *Aspergillus flavus* KCCM11453, MFC = 1.56mg/mL; *Candida albicans* KCCM11282, MFC > 6.25mg/mL; *Candida utilis* KCCM11356, MFC > 6.25mg/mL; *Cryptococcus neoformans* KCCM0564, MFC = 1.56mg/mL; *Trichosporon mucoides* KCCM50570, MFC = 1.56mg/mL; *Trichophyton rubrum* ATCC6345, MFC = 0.39mg/mL; *Blastoschyzomyces capitatus* KCCM50270, MFC = 0.78mg/mL)<sup>[4079]</sup>. **Source:** AI JU *Chrysanthemum vulgare*, BAI CHANG *Acorus calamus*, BING PIAN *Dryobalanops aromatica* (2.09%–2.70%), CHAO XIAN DA BAI LI XIANG *Thymus magnus*, DA LIANG JIANG *Alpinia galanga*, HU SUI ZI *Coriandrum sativum*, HUANG HUA HAO *Artemisia annua*, LIAN QIAO *Forsythia suspensa*, PI PA *Eriobotrya japonica*, SHA REN *Amomum villosum* (dried ripe fruit: content scope = 0.51%–0.59%<sup>[5501]</sup>, mean content = 0.047%<sup>[5524]</sup>), SHENG JIANG *Zingiber officinale*, TU SHA REN *Alpinia japonica*, WU MAI BAI LI XIANG *Thymus quinquecostatus*, YI ZHI HAO *Achillea alpina* [Syn. *Achillea sibirica*], YU JIN *Curcuma aromatica*, YUN XIANG YE HAO *Artemisia sativum*, ZHANG MU *Cinnamomum camphora* (content = 0.25%<sup>[5501]</sup>). **Ref:** 1, 2, 658, 660, 4079, 5501, 5524.

**3049 α-Camphorene**

[532-87-6] C<sub>20</sub>H<sub>32</sub> (272.48). bp 190–192°C/12mmHg. **Source:** ZHANG MU *Cinnamomum camphora*. **Ref:** 6.

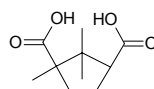
**3050 γ-Camphorene**

C<sub>20</sub>H<sub>32</sub> (272.48). bp 176–178°C/4.5mmHg. **Source:** ZHANG MU *Cinnamomum camphora*. **Ref:** 6.

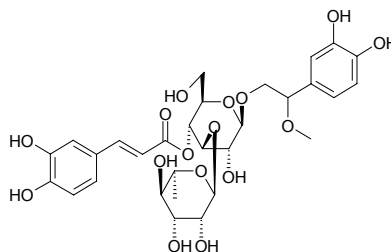
**3051 Camphoric acid**

cis-1,2,2-Trimethyl-1,3-cyclopentanedicarboxylic acid C<sub>10</sub>H<sub>16</sub>O<sub>4</sub> (200.24).

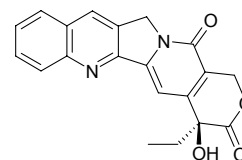
**Source:** DANG GUI *Angelica sinensis*. **Ref:** 2.

**3052 Campneoside I**

[95519-12-3] C<sub>30</sub>H<sub>38</sub>O<sub>16</sub> (654.63). Amorphous powder, [α]<sub>D</sub> = -68.2° (c = 0.43, methanol). **Pharm:** Antibacterial (*Streptococcus* sp. and *Staphylococcus* sp., MIC = 150μg/mL). **Source:** BAI ZHI MA *Sesamum indicum* (white seed) [Syn. *Sesamum orientale* (white seed)], HEI ZHI MA *Sesamum indicum* (black seed) [Syn. *Sesamum orientale* (black seed)], HU MA YE *Sesamum indicum*, MAO PAO TONG *Paulownia tomentosa*, PING CHE QIAN *Plantago depressa*. **Ref:** 949, 1116, 1122, 1130, 1137, 1193.

**3053 Camptothecin**

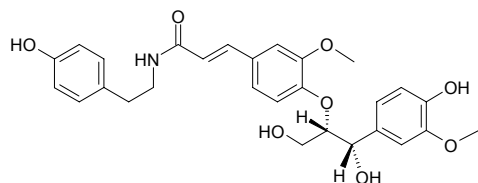
Camptothecin [7689-03-4] C<sub>20</sub>H<sub>16</sub>N<sub>2</sub>O<sub>4</sub> (348.36). mp 264–267°C (dec), [α]<sub>D</sub><sup>25</sup> = +31.3° (CHCl<sub>3</sub>-MeOH, 8:2), insoluble in water, soluble in chloroform, ethanol.<sup>[5507]</sup> **Pharm:** Cytotoxic (HeLa, IC<sub>50</sub> = 0.5μmol/mL; HL-60, IC<sub>50</sub> = 0.1μmol/mL; WI-38, IC<sub>50</sub> = 0.6μmol/mL)<sup>[3807]</sup>; cytotoxic (Bel7402, ED<sub>50</sub> = 0.06μg/mL; BGC823, ED<sub>50</sub> = 0.09μg/mL; HCT8, ED<sub>50</sub> = 0.14μg/mL; A549, ED<sub>50</sub> = 0.09μg/mL; MCF7, ED<sub>50</sub> = 0.01μg/mL)<sup>[5338]</sup>; cytotoxic (Selective DNA-damaging activity, yeast assay: RS321NpRAD52(gal), IC<sub>50</sub> = 100μg/mL; RS321NpRAD52(glu), IC<sub>50</sub> = 0.6μg/mL)<sup>[5457]</sup>; antineoplastic (mechanism-based yeast bioassay for DNA-modifying agents, mutant yeast *Saccharomyces cerevisiae* RS52YK(rad52Y), IC<sub>12</sub> = 0.6μg/mL)<sup>[5159]</sup>; antineoplastic (animal model). **Source:** LIU QIU SHE GEN CAO *Ophiorrhiza liukuensis* (whole herb), MA BI MU *Nothapodytes pittosporoides*<sup>[5507]</sup>, SHE GEN CAO *Ophiorrhiza mungos*, XI SHU *Camptotheca acuminata* (fruit: mean content collected from Sep. to Dec. = 0.137%<sup>[5508]</sup>; leaf: mean content of 5 origins = 0.072%<sup>[5508]</sup>). **Ref:** 1, 5, 6, 3807, 4527, 5159, 5338, 5457, 5507, 5508.



**3054 erythro-Canabisine H**

erythro-1-(4-Hydroxy-3-methoxyphenyl)-2-[4-{2-[N-(2-(4-hydroxyphenyl)ethyl)carbamoyl]ethenyl-2-methoxyphenoxy}] -1,3-propanodiol C<sub>28</sub>H<sub>31</sub>NO<sub>8</sub> (509.56).

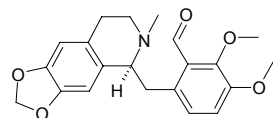
Yellowish oil. Source: DA MA JIN *Hibiscus cannabinus* (bark). Ref: 5233.

**3055 Canadoline**

C<sub>21</sub>H<sub>23</sub>NO<sub>5</sub> (369.42). mp 117~118°C, [α]<sub>D</sub><sup>20</sup> = +45.0° (c = 0.1, CHCl<sub>3</sub>). Pharm:

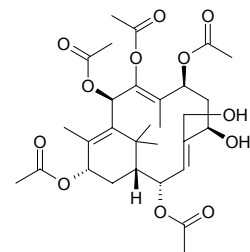
Antibacterial (oral pathogens: *Streptococcus mutans*, MIC > 250 μg/mL, control Chlorhexidine gluconate, MIC = 1.25 μg/mL; *Fusobacterium nucleatum*, MIC > 250 μg/mL, Chlorhexidine gluconate, MIC = 2.5 μg/mL).

Source: BAI MAO GEN<sup>(4)</sup> *Hydrastis canadensis* (root). Ref: 5418.

**3056 Canadensene**

[163597-19-1] C<sub>30</sub>H<sub>42</sub>O<sub>12</sub> (594.66). Source: JIA NA DA HONG DOU SHAN

*Taxus canadensis*. Ref: 662.

**3057 Canadine**

[522-97-4] C<sub>20</sub>H<sub>21</sub>NO<sub>4</sub> (339.39). mp (+) 132°C, (-) 134°C; mp 135~136°C,

[α]<sub>D</sub><sup>20</sup> = -290.0° (c = 0.2, CHCl<sub>3</sub>). Pharm: Antibacterial (oral pathogens:

*Streptococcus mutans*, MIC > 500 μg/mL, control Chlorhexidine gluconate, MIC = 1.25 μg/mL; *Fusobacterium nucleatum*, MIC > 500 μg/mL,

Chlorhexidine gluconate, MIC = 2.5 μg/mL)<sup>[5418]</sup>; antihypertensive. Source:

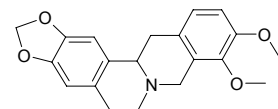
AO XIAN ZI JIN *Corydalis cava*, BAI MAO GEN<sup>(4)</sup> *Hydrastis canadensis*,

DU HUA JIAO *Zanthoxylum veneficium*, DUAN CI HUA JIAO *Zanthoxylum*

*brachyacanthum*, HUA ZI JIN *Corydalis cheilanthifolia*, YAN HU SUO

*Corydalis yanhusuo* [Syn. *Corydalis turtchaninovii* f. *Yanhusuo*], YUAN YE

SHAN WU GUI *Corydalis rotundatour*. Ref: 1, 6, 5418.

**3058 Canadinic acid**

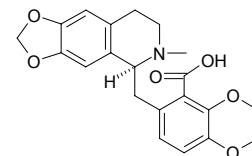
C<sub>21</sub>H<sub>23</sub>NO<sub>6</sub> (385.42). mp 134~135°C, [α]<sub>D</sub><sup>20</sup> = -150.0° (c = 0.1, CHCl<sub>3</sub>).

Pharm: Antibacterial (oral pathogens: *Streptococcus mutans*, MIC > 300 μg/mL, control Chlorhexidine gluconate, MIC = 1.25 μg/mL;

*Fusobacterium nucleatum*, MIC > 300 μg/mL, Chlorhexidine gluconate,

MIC = 2.5 μg/mL). Source: BAI MAO GEN<sup>(4)</sup> *Hydrastis canadensis* (root).

Ref: 5418.

**3059 Canaline**

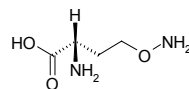
[496-93-5] C<sub>4</sub>H<sub>10</sub>N<sub>2</sub>O<sub>3</sub> (134.14). mp 214°C. Pharm: Anti-metabolism;

influences CNS in insects; pyridoxal phosphate enzyme inhibitor. Source: CI

HUAI HUA *Robinia pseudoacacia*, DAO DOU *Canavalia gladiata*, DI

YANG QUE *Lotus corniculatus*, MU XU *Medicago sativa*, YANG DAO

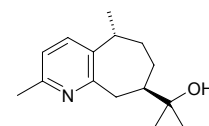
DOU *Canavalia ensiformis*. Ref: 6, 658.

**3060 Cananodine**

C<sub>15</sub>H<sub>23</sub>NO (233.36). Yellow oil, [α]<sub>D</sub><sup>25</sup> = -76.2° (c = 0.06, CHCl<sub>3</sub>). Pharm:

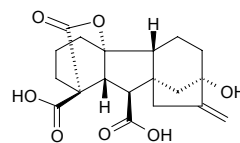
Cytotoxic (*in vitro*, HepG<sub>2</sub>, IC<sub>50</sub> = 0.22 μg/mL, Hep2,2,15, IC<sub>50</sub> = 3.8 μg/mL).

Source: YI LAN *Cananga odorata* (fruit). Ref: 3055.

**3061 Canavalia gibberellin I**

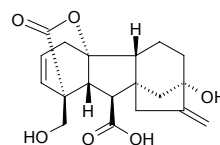
[18450-93-6] C<sub>19</sub>H<sub>22</sub>O<sub>7</sub> (362.38). mp 244~246°C. Source: DAO DOU

*Canavalia gladiata*. Ref: 6.

**3062 Canavalia gibberellin II**

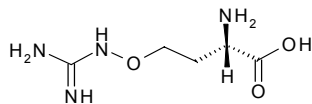
[18450-94-7] C<sub>19</sub>H<sub>22</sub>O<sub>6</sub> (346.38). mp 213~214°C. Source: DAO DOU

*Canavalia gladiata*. Ref: 6.

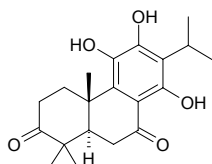


**3063 Canavanine**

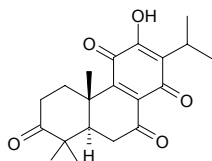
[543-38-4]  $C_5H_{12}N_4O_3$  (176.18). **Pharm:** Cytotoxic (hmn and animal, tissular culture cells); plant growth and germination inhibitor; alkaline phosphatase inhibitor (hmn placenta); supertoxic agent. **Source:** HUANG QI *Astragalus membranaceus*, YANG DAO DOU *Canavalia ensiformis*, ZI YUN YING *Astragalus sinicus*. **Ref:** 2, 658, 660.

**3064 Candelabrone**

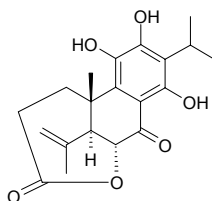
$C_{20}H_{26}O_5$  (346.43). Yellow solid,  $[\alpha]_D^{24.5} = +120^\circ$  ( $c = 0.2$ ,  $CHCl_3$ ). **Pharm:** Antioxidant (enzyme-independent lipid peroxidation,  $IC_{50} = 1.56\mu\text{mol/L}$ , Rosmarinic acid,  $IC_{50} = 4.40\mu\text{mol/L}$ ; enzyme-dependent lipid peroxidation,  $IC_{50} = 5.22\mu\text{mol/L}$ , Rosmarinic acid,  $IC_{50} = 0.39\mu\text{mol/L}$ )<sup>[5494]</sup>. **Source:** ZHU TAI SHU WEI CAO *Salvia candelabrum* (aerial parts). **Ref:** 5376, 5494.

**3065 Candelabroquinone**

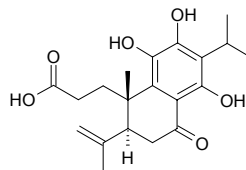
$C_{20}H_{24}O_5$  (344.41). Orange solid,  $[\alpha]_D^{24.5} = +28^\circ$  ( $c = 0.2$ ,  $CHCl_3$ ). **Pharm:** Antioxidant (enzyme-independent lipid peroxidation,  $IC_{50} = 3.49\mu\text{mol/L}$ , Rosmarinic acid,  $IC_{50} = 4.40\mu\text{mol/L}$ ; enzyme-dependent lipid peroxidation,  $IC_{50} = 3.49\mu\text{mol/L}$ , Rosmarinic acid,  $IC_{50} = 0.39\mu\text{mol/L}$ )<sup>[5494]</sup>. **Source:** ZHU TAI SHU WEI CAO *Salvia candelabrum* (aerial parts). **Ref:** 5376, 5494.

**3066 Candesalvolactone**

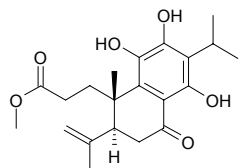
$C_{20}H_{24}O_6$  (360.41). Yellow amorphous solid,  $[\alpha]_D^{38} = +85^\circ$  ( $c = 0.1$ , MeOH). **Pharm:** Antioxidant (enzyme-independent lipid peroxidation,  $IC_{50} = 4.64\mu\text{mol/L}$ , Rosmarinic acid,  $IC_{50} = 4.40\mu\text{mol/L}$ ; enzyme-dependent lipid peroxidation,  $IC_{50} = 5.91\mu\text{mol/L}$ , Rosmarinic acid,  $IC_{50} = 0.39\mu\text{mol/L}$ ). **Source:** ZHU TAI SHU WEI CAO *Salvia candelabrum* (aerial parts). **Ref:** 5494.

**3067 Candesalvone B**

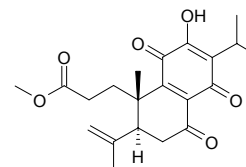
$C_{20}H_{26}O_6$  (362.43). Yellow amorphous solid,  $[\alpha]_D^{38} = +130^\circ$  ( $c = 0.1$ , MeOH). **Pharm:** Antioxidant (enzyme-independent lipid peroxidation,  $IC_{50} = 4.76\mu\text{mol/L}$ , Rosmarinic acid,  $IC_{50} = 4.40\mu\text{mol/L}$ ; enzyme-dependent lipid peroxidation,  $IC_{50} = 4.55\mu\text{mol/L}$ , Rosmarinic acid,  $IC_{50} = 0.39\mu\text{mol/L}$ ). **Source:** ZHU TAI SHU WEI CAO *Salvia candelabrum* (aerial parts). **Ref:** 5494.

**3068 Candesalvone B methyl ester**

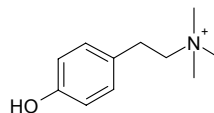
$C_{21}H_{28}O_6$  (376.45). Yellow solid,  $[\alpha]_D^{24.5} = +47^\circ$  ( $c = 0.2$ ,  $CHCl_3$ ). **Pharm:** Antioxidant (enzyme-independent lipid peroxidation,  $IC_{50} = 1.40\mu\text{mol/L}$ , Rosmarinic acid,  $IC_{50} = 4.40\mu\text{mol/L}$ ; enzyme-dependent lipid peroxidation,  $IC_{50} = 6.17\mu\text{mol/L}$ , Rosmarinic acid,  $IC_{50} = 0.39\mu\text{mol/L}$ )<sup>[5494]</sup>. **Source:** ZHU TAI SHU WEI CAO *Salvia candelabrum* (aerial parts). **Ref:** 5376, 5494.

**3069 Candesalvoquinone**

$C_{21}H_{26}O_6$  (374.44). Brownish oil,  $[\alpha]_D^{24.5} = -2^\circ$  ( $c = 0.05$ ,  $CHCl_3$ ). **Pharm:** Antioxidant (enzyme-independent lipid peroxidation,  $IC_{50} = 3.66\mu\text{mol/L}$ , Rosmarinic acid,  $IC_{50} = 4.40\mu\text{mol/L}$ ; enzyme-dependent lipid peroxidation,  $IC_{50} = 3.52\mu\text{mol/L}$ , Rosmarinic acid,  $IC_{50} = 0.39\mu\text{mol/L}$ )<sup>[5494]</sup>. **Source:** ZHU TAI SHU WEI CAO *Salvia candelabrum* (aerial parts). **Ref:** 5376, 5494.

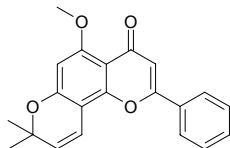
**3070 N-Candicine**

[6656-13-9]  $C_{11}H_{18}NO^+$  (180.27). mp 279~280°C. **Pharm:** Increases blood pressure (animal model); ganglionic stimulant (similar action with nicotine). **Source:** HUANG BAI *Phellodendron amurense*, HOU PI HUA JIAO *Zanthoxylum elephantiasis*, MAI YA *Hordeum vulgare*. **Ref:** 1, 2.

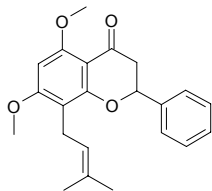


**3071 Candidin**

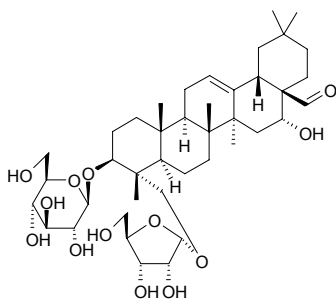
Anticancer Flavonoid PMV70P691-81  $C_{21}H_{18}O_4$  (334.38). **Pharm:** Cytotoxic (*in vitro*, Hepa 1c1c7 mouse hepatoma cells,  $IC_{50} = 4.5\mu\text{g/mL}$ ,  $CD = 4.5\mu\text{g/mL}$ ,  $CI = 1$ ; control Sulforaphane,  $IC_{50} = 2.1\mu\text{g/mL}$ ,  $CD = 0.087\mu\text{g/mL}$ ,  $CI = 24.1$ )<sup>[4721, 5038]</sup>. **Source:** SHUI LIU DOU *Pongamia pinnata* (stem cortex: yield = 0.0012%)<sup>[4721]</sup>. **Ref:** 4721, 5038.

**3072 Candidone**

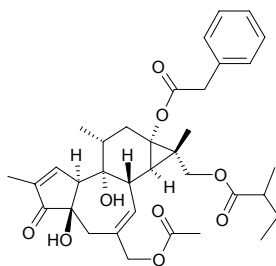
$C_{22}H_{24}O_4$  (352.43). **Pharm:** Cytotoxic (*in vitro*, Hepa 1c1c7 mouse hepatoma cells,  $IC_{50} = 4.1\mu\text{g/mL}$ ,  $CD = 4.7\mu\text{g/mL}$ ,  $CI = 0.9$ ; control Sulforaphane,  $IC_{50} = 2.1\mu\text{g/mL}$ ,  $CD = 0.087\mu\text{g/mL}$ ,  $CI = 24.1$ ). **Source:** SHUI LIU DOU *Pongamia pinnata* (stem cortex: yield = 0.0020%). **Ref:** 4721.

**3073 Candidoside A**

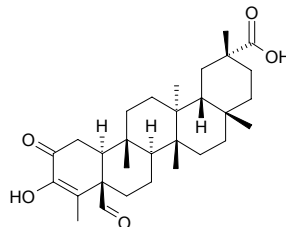
$3\beta,16\alpha$ -Dihydroxy-olean-12-en-28-al-3-*O*- $\beta$ -*D*-glucopyranosyl-23-*O*- $\alpha$ -*D*-ribofuranoside  $C_{41}H_{66}O_{13}$  (766.98). Amorphous powder. **Source:** DAN TIAO CAO *Lysimachia candida*. **Ref:** 2171.

**3074 Candletoxin A**

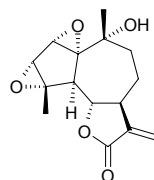
[64854-99-5]  $C_{35}H_{44}O_9$  (608.74). **Source:** PO SEN DA JI *Euphorbia poissonii*. **Ref:** 658.

**3075 Cangoronine**

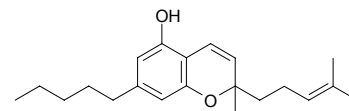
3-Hydroxy-2,24-dioxo-3-friedelen-29-oic acid  $C_{30}H_{44}O_5$  (484.68). Colorless acicular crystals, mp 270°C (MeOH). **Pharm:** Supertoxic agent. **Source:** LEI GONG TENG *Tripterygium wilfordii*. **Ref:** 670.

**3076 Canin**

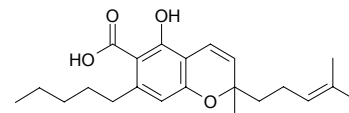
Chrysartemin A [24959-84-0]  $C_{15}H_{18}O_5$  (278.31). **Pharm:** Antineoplastic; cytotoxic; insect antifeedant; plant growth regulator. **Source:** CHU AI JU *Tanacetum parthenium*, TIAN SHAN SHI *Handelia trichophylla*, *Artemisia* sp. **Ref:** 658.

**3077 Cannabichromene**

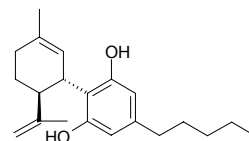
[20675-51-8]  $C_{21}H_{30}O_2$  (314.47). **Pharm:** Anti-inflammatory; protects red blood cells from decomposition due to low osmotic pressure. **Source:** HUO MA REN *Cannabis sativa*. **Ref:** 658.

**3078 Cannabichromenic acid**

[20408-52-0]  $C_{22}H_{30}O_4$  (358.48). **Source:** MA YE *Cannabis sativa*. **Ref:** 6.

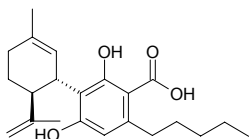
**3079 Cannabidiol**

[13956-29-1]  $C_{21}H_{30}O_2$  (314.47). mp 66–67°C. **Pharm:** Anesthetic antagonist; anticonvulsant; antimicrobial. **Source:** HUO MA REN *Cannabis sativa* (seed oil: content = 0.0015%<sup>[5508]</sup>), YIN DU DA MA *Cannabis sativa* var. *indica*, MA HUA *Cannabis sativa*. **Ref:** 1, 6, 661, 5508.

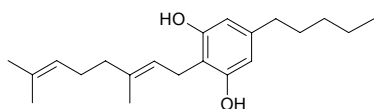


**3080 Cannabidiolic acid**

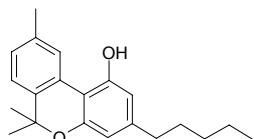
[1244-58-2]  $C_{22}H_{30}O_4$  (358.48). mp 43~47°C (dec). **Pharm:** Sedative. **Source:** YIN DU DA MA *Cannabis sativa* var. *indica*, MA YE *Cannabis sativa*, MA HUA *Cannabis sativa*. **Ref:** 6, 658.

**3081 Cannabigerol**

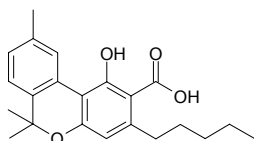
[25654-31-3]  $C_{21}H_{32}O_2$  (316.49). mp 51~53°C. **Source:** MA HUA *Cannabis sativa*. **Ref:** 6.

**3082 Cannabinol**

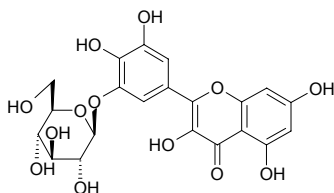
[521-35-7]  $C_{21}H_{26}O_2$  (310.44). Leaflike crystals (petroleum ether), mp 76~77°C, sublimation temperature 180~190°C (bath). **Pharm:** Antineoplastic (mus, Lewis lung cancer, orl). **Source:** HUO MA REN *Cannabis sativa* (seed oil: content = 0.0018%<sup>[5508]</sup>), MA HUA *Cannabis sativa*. **Ref:** 1, 5, 6, 661, 5508.

**3083 Cannabinolic acid**

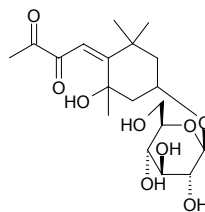
[2808-39-1]  $C_{22}H_{26}O_4$  (354.45). **Source:** MA YE *Cannabis sativa*. **Ref:** 6.

**3084 Cannabicitrin**

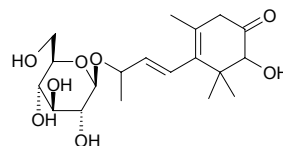
[520-14-9]  $C_{21}H_{20}O_{13}$  (480.39). mp 220°C (210°C soften). **Source:** YANG MEI SHU PI *Myrica rubra*. **Ref:** 6.

**3085 Cannabiside D**

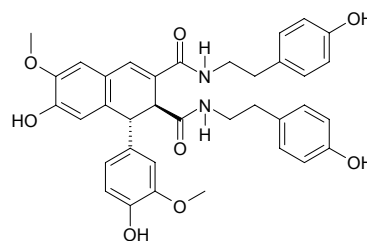
1-(2-Hydroxy-2,6,6-trimethyl-4-β-D-glucosyloxycyclohexylidene)-butane-2,3-dione  $C_{19}H_{30}O_9$  (402.45). Yellow liquid. **Source:** MA YE QIAN LI GUANG *Senecio cannabifolius* (whole herb). **Ref:** 4898.

**3086 Cannabiside E**

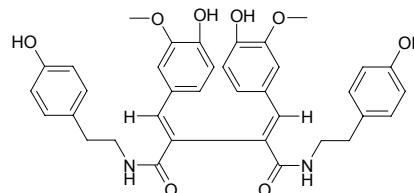
6-Hydroxy-3-(3-O-β-D-glucopyranosyl-but-1-enyl)-2,4,4-trimethyl-cyclohex-2-enone  $C_{19}H_{30}O_8$  (386.45). Yellowish oil. **Source:** MA YE QIAN LI GUANG *Senecio cannabifolius* (whole herb). **Ref:** 4898.

**3087 Cannabisin D**

$C_{36}H_{36}N_2O_8$  (624.70). **Pharm:** Cytotoxic (*in vitro*, LNCaP,  $IC_{50} = 81\mu\text{mol/L}$ ); feeding deterrent. **Source:** LANG DANG ZI *Hyoscyamus niger* (seed: yield = 0.00008%dw). **Ref:** 4607.

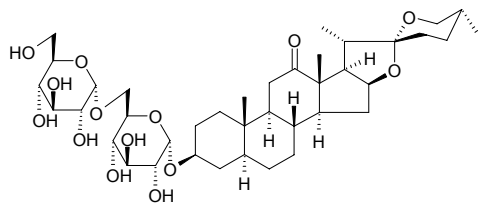
**3088 Cannabisin G**

$C_{36}H_{36}N_2O_8$  (624.7). **Pharm:** Cytotoxic (*in vitro*, LNCaP,  $IC_{50} = 76\mu\text{mol/L}$ ). **Source:** LANG DANG ZI *Hyoscyamus niger* (seed: yield = 0.0007%dw). **Ref:** 4607.

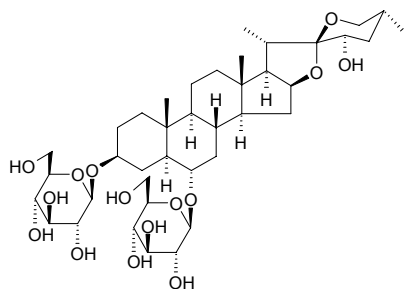


**3089 Cantalanin A**

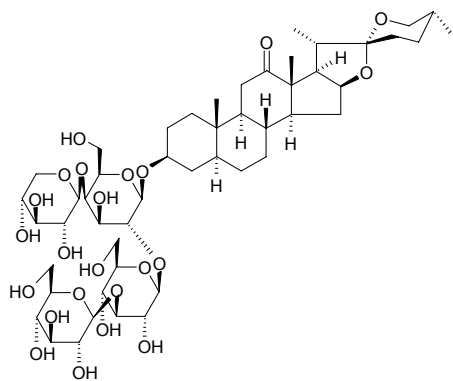
$C_{39}H_{62}O_{14}$  (754.92). mp 210–213°C,  $[\alpha]_D = +75.2^\circ$ . Source: XIA YE LONG SHE LAN *Agave cantala*. Ref: 2503.

**3090 Cantalasaponin 1**

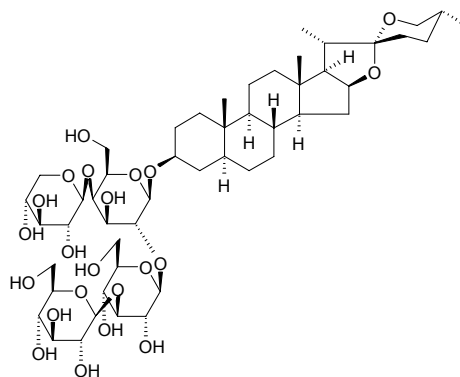
$C_{39}H_{64}O_{15}$  (772.94). mp 243–245°C,  $[\alpha]_D = -51.5^\circ$ . Source: XIA YE LONG SHE LAN *Agave cantala*. Ref: 2503.

**3091 Cantalasaponin 2**

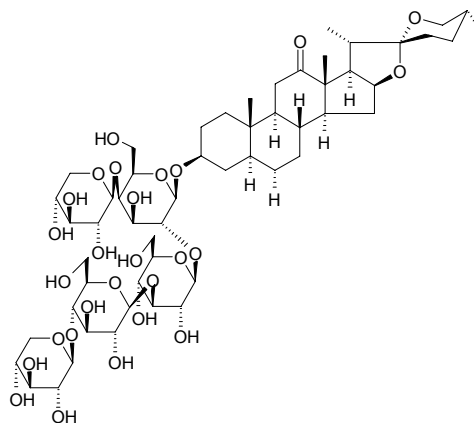
$C_{50}H_{80}O_{23}$  (1049.18). mp 287–293°C,  $[\alpha]_D = -30^\circ$ . Source: XIA YE LONG SHE LAN *Agave cantala*. Ref: 2503.

**3092 Cantalasaponin 3**

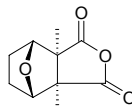
$C_{50}H_{82}O_{22}$  (1035.20). mp 298–302°C,  $[\alpha]_D = -54.8^\circ$ . Source: XIA YE LONG SHE LAN *Agave cantala*. Ref: 2503.

**3093 Cantalasaponin 4**

$C_{53}H_{88}O_{27}$  (1181.30). mp 268–271°C,  $[\alpha]_D = -31.7^\circ$ . Source: XIA YE LONG SHE LAN *Agave cantala*. Ref: 2503.

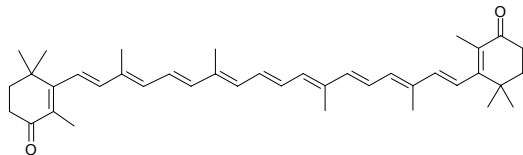
**3094 Cantharidin**

Cantharides camphor; Hexahydro-3 $\alpha$ ,7 $\alpha$ -dimethyl-4,7-epoxyisobenzofuran-1,3-dione [56-25-7]  $C_{10}H_{12}O_4$  (196.20). mp 218°C, insoluble in water, very slightly soluble in acetone, chloroform, slightly soluble in ether, ethanol, soluble in acetic acid.<sup>[5507]</sup> Pharm: Antibacterial; antineoplastic; antiprotozoal; antiviral; leukopoietic; local stimulant; LD (hmn) = 30mg; LD<sub>50</sub> (mus, acute toxicity test) = 1.71mg/kg. Source: BAN MAO *Mylabris phalerata* (dried body: content = 0.97%<sup>[5508]</sup>); *Mylabris cichorii* (dried body: content = 1.42%<sup>[5508]</sup>), GE SHANG TING CHANG *Epicauta gorhami*, HONG NIANG *Zi Huechys sanguinea*, QING NIANG *Zi Lytta caraganae*. Ref: 4, 6, 658, 5507, 5508.

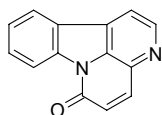


**3095 Canthaxanthin**

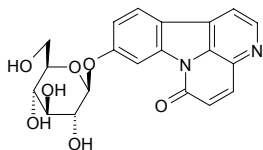
$\beta,\beta$ -Carotene-4,4'-dione [514-78-3]  $C_{40}H_{52}O_2$  (564.86). mp 218°C. **Pharm:** Antineoplastic (skin cancer, mammary cancer and colon cancer induced by chemical carcinogen). **Source:** HAI XIA *Penaeus orientalis*, JIN YU *Carassius auratus*. **Ref:** 6, 1582.

**3096 Canthin-6-one**

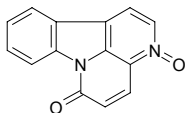
[479-43-6]  $C_{14}H_8N_2O$  (220.23). mp 159–160°C. **Pharm:** Antibacterial (*Staphylococcus aureus* and other two bacteria, MIC = 12.5–100.0  $\mu\text{g}/\text{kg}$ ); cytotoxic (gpg horn cells); cytotoxic (*in vitro*, A549,  $ED_{50}$  = 3.6  $\mu\text{g}/\text{mL}$ ; MCF7,  $ED_{50}$  = 7.3  $\mu\text{g}/\text{mL}$ ; HIV, no significant effect)<sup>[4728]</sup>; antimalarial (*Plasmodium falciparum* clone W2,  $IC_{50}$  = 2.2  $\mu\text{g}/\text{mL}$ )<sup>[4728]</sup>. **Source:** BO LI ZI HUA JIAO *Zanthoxylum belizense*, CHANG YE KUAN MU *Eurycoma longifolia* (root: yield = 0.0017%dw)<sup>[4728]</sup>, CHU BAI PI *Ailanthus altissima*, ER DUN ZHUANG HUA JIAO *Zanthoxylum dipetalum*, HOU PI HUA JIAO *Zanthoxylum elephantiasis*, KU MU *Picrasma quassioides* [Syn. *Picrasma ailanthoides*] (total powder: content = 0.008%)<sup>[5508]</sup>, KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*], TUO YUAN YE HUA JIAO *Zanthoxylum ovalifolium*, YUAN CHI KU MU *Picrasma crenata*. **Ref:** 1, 12, 4728, 5508.

**3097 Canthin-6-one 9-O- $\beta$ -glucopyranoside**

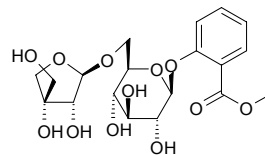
$C_{20}H_{18}N_2O_7$  (398.38). Yellow amorphous powder. **Pharm:** Cytotoxic (*in vitro*, A549,  $ED_{50}$  = 4.2  $\mu\text{g}/\text{mL}$ ; MCF7,  $ED_{50}$  = 16.1  $\mu\text{g}/\text{mL}$ ; HIV, no significant effect)<sup>[4728]</sup>; antimalarial inactive (*Plasmodium falciparum* clones W2, D6, and TM91C235)<sup>[4728]</sup>. **Source:** CHANG YE KUAN MU *Eurycoma longifolia* (root: yield = 0.0002%dw), *Eurycoma harmandiana* (root). **Ref:** 4728, 5137.

**3098 Canthin-6-one 3-N-oxide**

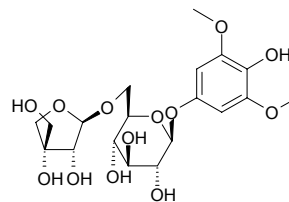
$C_{14}H_8N_2O_2$  (236.23). **Source:** CHANG YE KUAN MU *Eurycoma longifolia* (root: yield = 0.000011%dw), *Eurycoma harmandiana* (root). **Ref:** 4728, 5137.

**3099 Canthoside A**

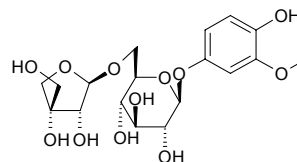
$C_{19}H_{26}O_{12}$  (446.41). Amorphous powder,  $[\alpha]_D = -61.1^\circ$  ( $c = 0.18$ , MeOH). **Source:** SI XIAO BO SHUANG YE YU GU MU *Canthium berberidifolium*. **Ref:** 1925.

**3100 Canthoside B**

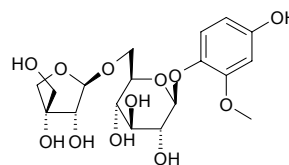
$C_{19}H_{28}O_{13}$  (464.43). Amorphous powder,  $[\alpha]_D = -72.4^\circ$  ( $c = 3.13$ , MeOH). **Source:** SI XIAO BO SHUANG YE YU GU MU *Canthium berberidifolium*. **Ref:** 1925.

**3101 Canthoside C**

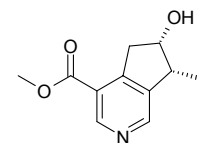
$C_{18}H_{26}O_{12}$  (434.40). Amorphous powder,  $[\alpha]_D = -84.1^\circ$  ( $c = 3.18$ , MeOH). **Source:** SI XIAO BO SHUANG YE YU GU MU *Canthium berberidifolium*. **Ref:** 1925.

**3102 Canthoside D**

$C_{18}H_{26}O_{12}$  (434.40). Amorphous powder,  $[\alpha]_D = -73.7^\circ$  ( $c = 1.53$ , MeOH). **Source:** SI XIAO BO SHUANG YE YU GU MU *Canthium berberidifolium*. **Ref:** 1925.

**3103 Cantleyine**

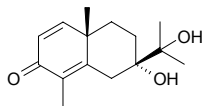
[30333-81-4]  $C_{11}H_{13}NO_3$  (207.23). **Source:** MAO ZHU MA QIAN *Strychnos nitida*. **Ref:** 576.



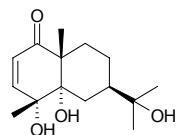


**3104 Canusesnol A**

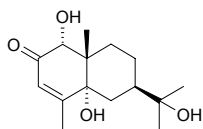
$C_{15}H_{22}O_3$  (250.34). Colorless oil,  $[\alpha]_D = -37.5^\circ$  ( $c = 0.1$ , MeOH). Pharm: Cytotoxic inactive (negligible activity to inhibits hmn tumor cell replication); anti-HIV inactive (negligible activity). Source: HONG HAI JIAO *Capsicum annuum* (stem and root: yield = 0.00016%dw). Ref: 4779.

**3105 Canusesnol B**

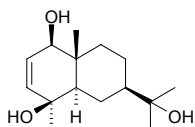
$C_{15}H_{24}O_4$  (268.36). Colorless needles, mp  $>160^\circ C$ ,  $[\alpha]_D = +3.6^\circ$  ( $c = 0.9$ , MeOH). Pharm: Cytotoxic inactive (negligible activity to inhibits hmn tumor cell replication); anti-HIV inactive (negligible activity). Source: HONG HAI JIAO *Capsicum annuum* (stem and root: yield = 0.00054%dw). Ref: 4779.

**3106 Canusesnol C**

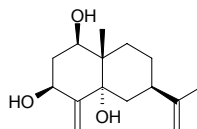
$C_{15}H_{24}O_4$  (268.36). Colorless oil,  $[\alpha]_D = +33.6^\circ$  ( $c = 1.0$ , MeOH). Pharm: Cytotoxic inactive (negligible activity to inhibits hmn tumor cell replication); anti-HIV inactive (negligible activity). Source: HONG HAI JIAO *Capsicum annuum* (stem and root: yield = 0.00048%dw). Ref: 4779.

**3107 Canusesnol D**

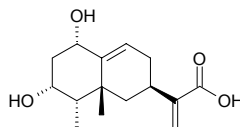
$C_{15}H_{26}O_3$  (254.37). Colorless oil,  $[\alpha]_D = +165.0^\circ$  ( $c = 0.5$ , MeOH). Pharm: Cytotoxic inactive (negligible activity to inhibits hmn tumor cell replication); anti-HIV inactive (negligible activity). Source: HONG HAI JIAO *Capsicum annuum* (stem and root: yield = 0.00028%dw). Ref: 4779.

**3108 Canusesnol E**

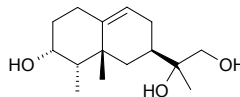
$C_{15}H_{24}O_3$  (252.36). Colorless needles, mp  $143\sim 146^\circ C$ ,  $[\alpha]_D = +62.7^\circ$  ( $c = 0.5$ , MeOH). Pharm: Cytotoxic inactive (negligible activity to inhibits hmn tumor cell replication); anti-HIV inactive (negligible activity). Source: HONG HAI JIAO *Capsicum annuum* (stem and root: yield = 0.00065%dw). Ref: 4779.

**3109 Canusesnol F**

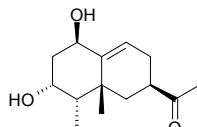
$C_{15}H_{22}O_4$  (266.34). Colorless oil,  $[\alpha]_D = +35.6^\circ$  ( $c = 1.1$ , MeOH). Pharm: Cytotoxic inactive (negligible activity to inhibits hmn tumor cell replication); anti-HIV inactive (negligible activity). Source: HONG HAI JIAO *Capsicum annuum* (stem and root: yield = 0.00013%dw). Ref: 4779.

**3110 Canusesnol G**

$C_{15}H_{26}O_3$  (254.37). Colorless oil,  $[\alpha]_D = +6.2^\circ$  ( $c = 0.3$ , MeOH). Pharm: Cytotoxic inactive (negligible activity to inhibits hmn tumor cell replication); anti-HIV inactive (negligible activity). Source: HONG HAI JIAO *Capsicum annuum* (stem and root: yield = 0.00021%dw). Ref: 4779.

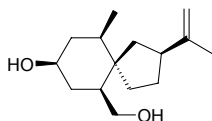
**3111 Canusesnol H**

$C_{14}H_{22}O_3$  (238.33). Colorless needles, mp  $>160^\circ C$ ,  $[\alpha]_D = +1.4^\circ$  ( $c = 0.3$ , MeOH). Pharm: Cytotoxic inactive (negligible activity to inhibits hmn tumor cell replication); anti-HIV inactive (negligible activity). Source: HONG HAI JIAO *Capsicum annuum* (stem and root: yield = 0.00015%dw). Ref: 4779.

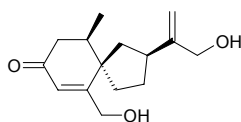


**3112 Canusesnol I**

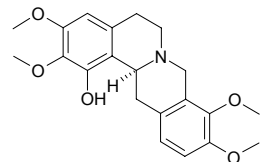
$C_{15}H_{26}O_2$  (238.37). Colorless needles, mp 119–121°C,  $[\alpha]_D = +43.4^\circ$  ( $c = 0.4$ , MeOH). **Pharm:** Cytotoxic inactive (negligible activity to inhibits hmn tumor cell replication); anti-HIV inactive (negligible activity). **Source:** HONG HAI JIAO *Capsicum annuum* (stem and root: yield = 0.00026%dw). **Ref:** 4779.

**3113 Canusesnol J**

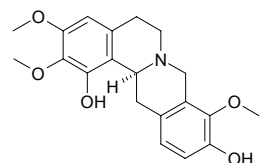
$C_{15}H_{22}O_3$  (250.34). Colorless oil,  $[\alpha]_D = -25.3^\circ$  ( $c = 0.4$ , MeOH). **Pharm:** Cytotoxic inactive (negligible activity to inhibits hmn tumor cell replication); anti-HIV inactive (negligible activity). **Source:** HONG HAI JIAO *Capsicum annuum* (stem and root: yield = 0.00022%dw). **Ref:** 4779.

**3114 Capauridine**

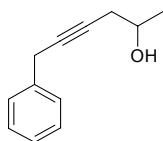
Capaurine [478-14-8]  $C_{21}H_{25}NO_5$  (371.44). mp ( $\pm$ ) 208°C, mp (S) 164°C. **Pharm:** Uterine stimulant. **Source:** JU HUA HUANG LIAN *Corydalis pallida*, XI SHEN SHAN ZI JIN *Corydalis pallida* var. *tenuis*, JIN HUANG JIN *Corydalis aurea*, MENG DA NA ZI JIN *Corydalis montana*, XIAO HUA ZI JIN *Corydalis micrantha*. **Ref:** 1, 6, 658.

**3115 Capaurimine**

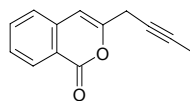
[30758-81-7]  $C_{20}H_{23}NO_5$  (357.41). mp 212°C. **Source:** JU HUA HUANG LIAN *Corydalis pallida*. **Ref:** 6.

**3116 Capillanol**

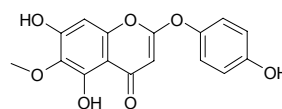
[57576-57-5]  $C_{12}H_{14}O$  (174.24). **Source:** YIN CHEN HAO *Artemisia capillaris*. **Ref:** 2.

**3117 Capillarin**

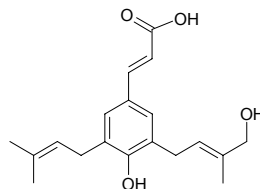
[3570-28-3]  $C_{13}H_{10}O_2$  (198.22). **Source:** YIN CHEN HAO *Artemisia capillaris*, HUANG HAO *Artemisia scoparia* [Syn. *Artemisia capillaris* var. *scoparia*]. **Ref:** 2, 660.

**3118 Capillarisin**

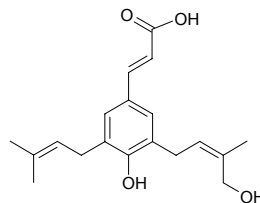
[56365-38-9]  $C_{16}H_{12}O_7$  (316.27). mp 226–228°C. **Pharm:** Choleric; antagonizes antibacterial action of paraxin. **Source:** YIN CHEN HAO *Artemisia capillaris*. **Ref:** 1, 2, 5501.

**3119 Capillartemisin A**

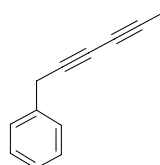
[85819-52-9]  $C_{19}H_{24}O_4$  (316.40). **Source:** YIN CHEN HAO *Artemisia capillaris*. **Ref:** 1521.

**3120 Capillartemisin B**

[85819-51-8]  $C_{19}H_{24}O_4$  (316.40). White needles, mp 146–148°C. **Source:** HUANG HAO *Artemisia scoparia* [Syn. *Artemisia capillaris* var. *scoparia*] (bud), YIN CHEN HAO *Artemisia capillaris*. **Ref:** 1521, 4815.

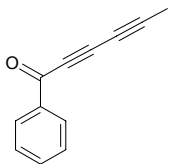
**3121 Capillene**

[520-74-1]  $C_{12}H_{10}$  (154.21). bp 124°C/4mmHg. **Source:** YIN CHEN HAO *Artemisia capillaris*, HUANG HAO *Artemisia scoparia* [Syn. *Artemisia capillaris* var. *scoparia*]. **Ref:** 2, 6, 660.

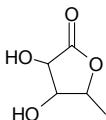


**3122 Capillin**

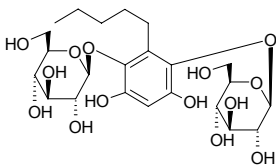
[495-74-9] C<sub>12</sub>H<sub>8</sub>O (168.20). mp 81°C. Pharm: Antibacterial (original hyphomycete of skin diseases, blood red trichophyta, CIC = 0.25µg/mL). Source: MU TONG HAON *Chrysanthemum frutescens*, YIN CHEN HAO *Artemisia capillaris* (the compound was isolated from the plant by Junzô Arima, et al. in 1930)<sup>[5505]</sup>, HUANG HAO *Artemisia scoparia* [Syn. *Artemisia capillaris* var. *scoparia*]. Ref: 1, 2, 4, 660, 5505.

**3123 Capilliplactone**

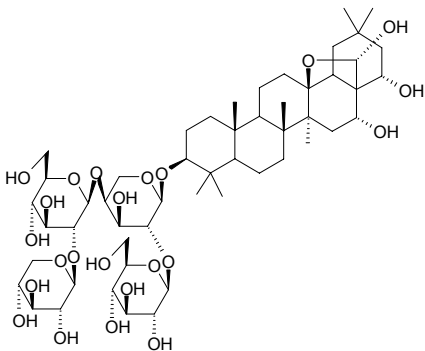
C<sub>5</sub>H<sub>8</sub>O<sub>4</sub> (132.12). Acicular crystals, mp 110–112°C. Source: XI GENG XIANG CAO *Lysimachia capillipes*. Ref: 778.

**3124 Capillipnin**

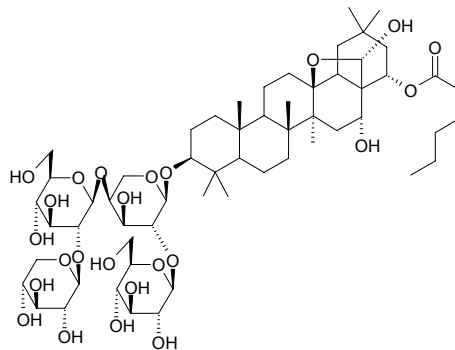
C<sub>23</sub>H<sub>36</sub>O<sub>14</sub> (536.53). White crystals, mp 128–130°C. Source: XI GENG XIANG CAO *Lysimachia capillipes*. Ref: 778.

**3125 Capillipside A**

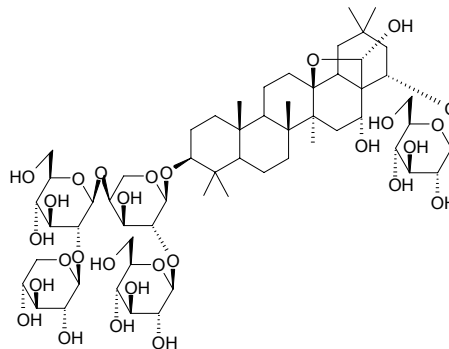
C<sub>52</sub>H<sub>86</sub>O<sub>23</sub> (1079.25). White amorphous powder, [α]<sub>D</sub><sup>20</sup> = –26.7° (c = 0.50, MeOH). Pharm: Cytotoxic inactive (hmn A-2780, IC<sub>50</sub> > 10µg/mL). Source: XI GENG XIANG CAO *Lysimachia capillipes* (whole herb: yield = 0.00023%dw). Ref: 2175.

**3126 Capillipside B**

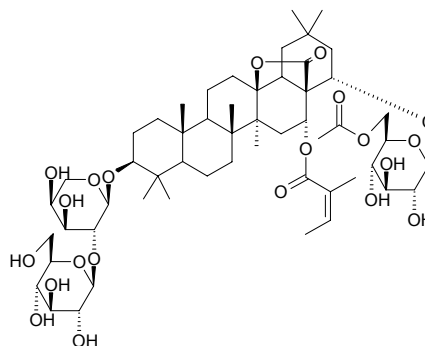
C<sub>58</sub>H<sub>96</sub>O<sub>24</sub> (1177.40). White amorphous powder, [α]<sub>D</sub><sup>20</sup> = –23.4° (c = 0.55, MeOH). Pharm: Cytotoxic (hmn A-2780, IC<sub>50</sub> = 0.1µg/mL). Source: XI GENG XIANG CAO *Lysimachia capillipes* (whole herb: yield = 0.00060%dw). Ref: 2175.

**3127 Capillipside C**

C<sub>58</sub>H<sub>96</sub>O<sub>28</sub> (1241.40). White amorphous powder, [α]<sub>D</sub><sup>20</sup> = –5.0° (c = 0.50, MeOH). Pharm: Cytotoxic inactive (hmn A-2780, IC<sub>50</sub> > 10µg/mL). Source: XI GENG XIANG CAO *Lysimachia capillipes* (whole herb: yield = 0.00038%dw). Ref: 2175.

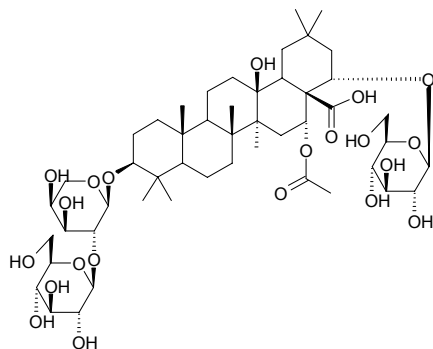
**3128 Capillipside I**

3β,22α-Dihydroxy-16α-angeloyloxy-28→13-lactone-oleanane-3-O-[β-D-glucopyranosyl-(1→2)-α-L-Arabinopyraosyl]-22-O-(6-acetyl)-β-D-glucopyranoside C<sub>54</sub>H<sub>84</sub>O<sub>21</sub> (1069.26). White amorphous powder, mp 216–218°C (MeOH), [α]<sub>D</sub><sup>20</sup> = –25.5° (c = 0.010, pyridine). Source: XI GENG XIANG CAO *Lysimachia capillipes* (whole herb). Ref: 4851.

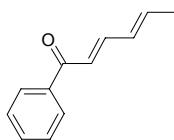


**3129 Capilliposide J**

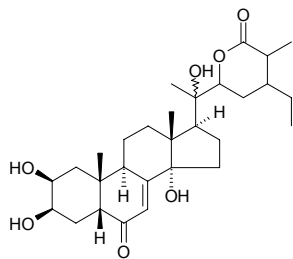
3β,13β,22α-Trihydroxy-16α-acetyloxy-oleanane-28-oic acid  
3-*O*-[β-*D*-glucopyranosyl-(1→2)-α-*L*-arabinopyraosyl]-22-*O*-β-*D*-glucopyranoside C<sub>49</sub>H<sub>79</sub>O<sub>21</sub> (1004.16). White amorphous powder, mp 240~242°C (MeOH:H<sub>2</sub>O = 9:1), [α]<sub>D</sub><sup>20</sup> = -22.8° (*c* = 0.050, pyridine). Source: XI GENG XIANG CAO *Lysimachia capillipes* (whole herb). Ref: 4851.

**3130 Capillon**

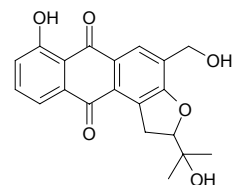
C<sub>12</sub>H<sub>12</sub>O (172.23). mp 69~70°C. Source: YIN CHEN HAO *Artemisia capillaris*. Ref: 2, 6.

**3131 Capitasterone**

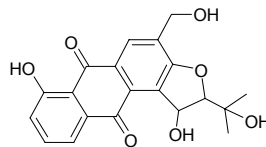
[20835-65-8] C<sub>29</sub>H<sub>44</sub>O<sub>7</sub> (504.67). mp 234~235°C. Source: MA NIU XI *Cyathula capitata*. Ref: 6, 660.

**3132 Capitellataquinone A**

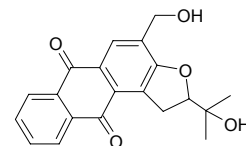
2-Hydroxymethyl-3,4-[2'-(1-hydroxy-1-methylethyl)-dihydrofurano]-8-hydroxyanthraquinone C<sub>20</sub>H<sub>18</sub>O<sub>6</sub> (354.36). Orange amorphous solid (CHCl<sub>3</sub>), mp 203~204°C, [α]<sub>D</sub><sup>25</sup> = -277° (*c* = 1.3, MeOH). Source: XIAO TOU LIANG HOU CHA *Hedyotis capitellata* (stem). Ref: 5280.

**3133 Capitellataquinone B**

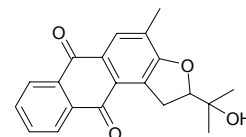
2-Hydroxymethyl-3,4-[1'-hydroxy-2'-(1-hydroxy-1-methylethyl)-dihydrofuran o]-8-hydroxyanthraquinone C<sub>20</sub>H<sub>18</sub>O<sub>7</sub> (370.36). Yellow amorphous solid (CHCl<sub>3</sub>), mp 165~166°C, [α]<sub>D</sub><sup>25</sup> = +77.7° (*c* = 1.8, MeOH). Source: XIAO TOU LIANG HOU CHA *Hedyotis capitellata* (stem). Ref: 5280.

**3134 Capitellataquinone C**

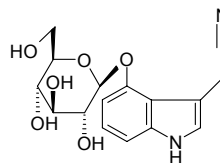
2-Hydroxymethyl-3,4-[2'-(1-hydroxy-1-methylethyl)-dihydrofurano]anthraquinone C<sub>20</sub>H<sub>18</sub>O<sub>5</sub> (338.36). Yellow oil, [α]<sub>D</sub><sup>25</sup> = -91.8° (*c* = 1.6, MeOH). Source: XIAO TOU LIANG HOU CHA *Hedyotis capitellata* (stem). Ref: 5280.

**3135 Capitellataquinone D**

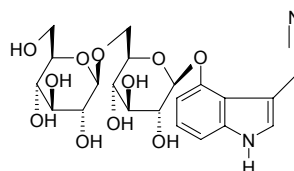
2-Methyl-3,4-[2'-(1-hydroxy-1-methylethyl)-dihydrofurano]anthraquinone C<sub>20</sub>H<sub>18</sub>O<sub>4</sub> (322.36). Yellow oil, [α]<sub>D</sub><sup>25</sup> = +128.6° (*c* = 1.4, MeOH). Source: XIAO TOU LIANG HOU CHA *Hedyotis capitellata* (stem). Ref: 5280.

**3136 Cappariloside A**

1*H*-Indole-3-acetonitrile 4-*O*-β-glucopyranoside C<sub>16</sub>H<sub>18</sub>N<sub>2</sub>O<sub>6</sub> (334.33). Amorphous solid, [α]<sub>D</sub><sup>20</sup> = -58.8° (*c* = 0.4, MeOH). Source: LAO SHU GUA *Capparis spinosa*. Ref: 1865.

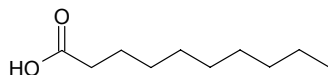
**3137 Cappariloside B**

1*H*-Indole-3-acetonitrile 4-*O*-β-(6'-*O*-β-glucopyranosyl)-glucopyranoside C<sub>22</sub>H<sub>28</sub>N<sub>2</sub>O<sub>11</sub> (496.48). Amorphous solid, [α]<sub>D</sub><sup>20</sup> = -23.7° (*c* = 0.3, MeOH). Source: LAO SHU GUA *Capparis spinosa*. Ref: 1865.

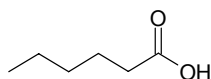


**3138 Capric acid**

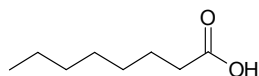
Decanoic acid [334-48-5]  $C_{10}H_{20}O_2$  (172.27). **Pharm:** Raw material for synthesis. **Source:** BING LANG *Areca catechu*, CU LIU GUO *Hippophae rhamnoides*, GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *Huechingensis*], GUA LOU *Trichosanthes kirilowii*, LU HUI *Aloe vera* [Syn. *Aloe barbadensis*], SHUANG BIAN GUA LOU *Trichosanthes rosthornii* [Syn. *Trichosanthes uniflora*], YE ZI RANG *Cocos nucifera*, YIN CHEN HAO *Artemisia capillaris*, YU XING CAO *Houttuynia cordata*, *Cuphea* sp. **Ref:** 2, 658, 660.

**3139 Caproic acid**

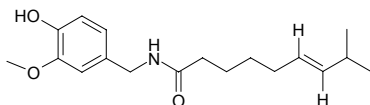
*n*-Hexanoic acid [142-62-1]  $C_6H_{12}O_2$  (116.16). **Pharm:** Food additive. **Source:** CHAI HU *Bupleurum chinense*, CU LIU GUO *Hippophae rhamnoides*, DANG SHEN *Codonopsis pilosula*, XI YANG SHEN *Panax quinquefolium*, YE ZI RANG *Cocos nucifera*, YIN CHEN HAO *Artemisia capillaris*. **Ref:** 2, 660.

**3140 Caprylic acid**

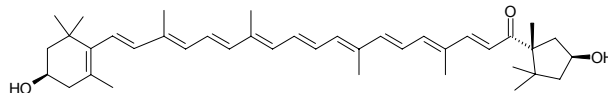
Octanoic acid [124-07-2]  $C_8H_{16}O_2$  (144.22). **Pharm:** Antifungal (dermophytosis, candidiasis). **Source:** BAI GUO *Ginkgo biloba*, CHAI HU *Bupleurum chinense*, CU LIU GUO *Hippophae rhamnoides*, DANG SHEN *Codonopsis pilosula*, FU LING *Poria cocos*, GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], XI YANG SHEN *Panax quinquefolium*, YE ZI RANG *Cocos nucifera*. **Ref:** 2, 658.

**3141 Capsaicin**

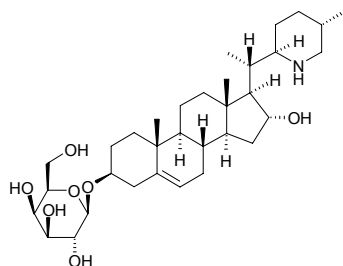
Styptysat; Mioton; Zostrix [404-86-4]  $C_{18}H_{27}NO_3$  (305.42). mp 64~65°C, insoluble in cold water, easily soluble in ethanol, ether, benzene, chloroform.<sup>[5507]</sup> **Pharm:** Anti-inflammatory (NF-κB pathway)<sup>[4415]</sup>; antioxidant (ADP/Fe<sup>2+</sup>-induced liposomal lipid peroxidation, IC<sub>50</sub> = 10μmol/L)<sup>[4710]</sup>; analgesic (has both stimulatory and desensitizing effects on sensory nerves)<sup>[5394]</sup>. **Source:** LA JIAO *Capsicum frutescens*, HONG HAI JIAO *Capsicum annuum* (fruit: content = 2%; the compound was isolated from the plant in 1961)<sup>[5505]</sup>. **Ref:** 4, 15, 4415, 4710, 5394, 5505, 5507.

**3142 Capsanthin**

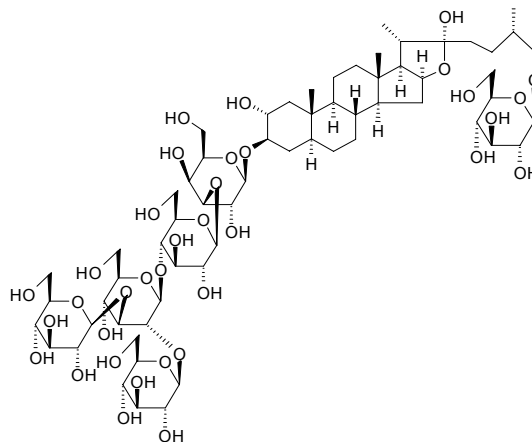
[465-42-9]  $C_{40}H_{56}O_3$  (584.89). mp 175~176°C. **Pharm:** Food additive. **Source:** HONG HAI JIAO *Capsicum annuum*, JUAN DAN *Lilium tigrinum* [Syn. *Lilium lancifolium*], LA JIAO *Capsicum frutescens*, XI YE BAI HE *Lilium pumilum* [Syn. *Lilium tenuifolium*], XIAO BAI BU *Asparagus officinalis*, *Berberis* sp. **Ref:** 15.

**3143 Capsicastrine**

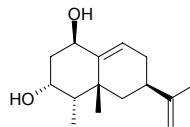
[107585-56-8]  $C_{33}H_{55}NO_7$  (577.80). Colorless acicular crystals (acetone), mp 220~221°C,  $[\alpha]_D^{21} = -25.5^\circ$  ( $c = 0.1$ , chloroform). **Pharm:** Cytotoxic (liver-cancer PLC/PRF/5 *in vitro*, ED<sub>50</sub> = 1.78μg/mL); antihepatotoxin (mus, liver damage caused by CCl<sub>4</sub>, 0.1~3.0mg/kg). **Source:** YE HAI JIAO *Solanum capsicastrum*. **Ref:** 1056, 1088, 1136.

**3144 Capsicosin**

$C_{63}H_{106}O_{35}$  (1423.53). **Source:** LA JIAO *Capsicum frutescens*. **Ref:** 15.

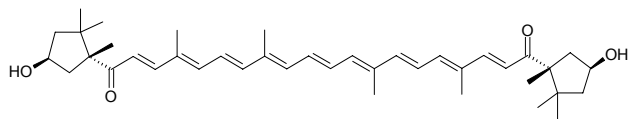
**3145 Capsidiol**

[37208-05-2]  $C_{15}H_{24}O_2$  (236.36). **Pharm:** Antifungal. **Source:** HONG HAI JIAO *Capsicum annuum* (stem and root: yield = 0.00068%dw)<sup>[4779]</sup>, LA JIAO *Capsicum frutescens*, YAN CAO *Nicotiana tabacum*. **Ref:** 658, 4779.

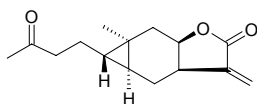


**3146 Capsorubin**

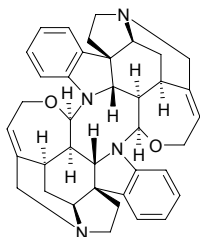
[470-38-2] C<sub>40</sub>H<sub>56</sub>O<sub>4</sub> (600.89). Pharm: Pigment. Source: HONG HAI JIAO *Capsicum annuum*, XI YE BAI HE *Lilium pumilum* [Syn. *Lilium tenuifolium*]. Ref: 658.

**3147 Carabrone**

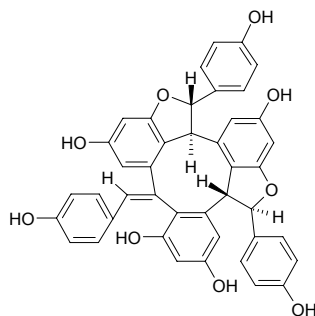
[1748-81-8] C<sub>15</sub>H<sub>20</sub>O<sub>3</sub> (248.32). mp (+) 90–91°C, (±) 89–91°C. Pharm: CNS activity (causes convulsion and death in mus in large dose). Source: DA HUA JIN WA ER *Carpesium eximum*, TIAN MING JING *Carpesium abrotanoides*, TIAN MING JING GUO *Carpesium abrotanoides*. Ref: 1, 6, 660.

**3148 Caracurine V**

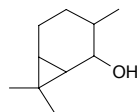
[630-87-5] C<sub>38</sub>H<sub>40</sub>N<sub>4</sub>O<sub>2</sub> (584.77). Hydrochloride crystals, mp > 300°C (dec). Pharm: Antibacterial (*Bacillus coli* and *Bacillus pyocyaneus*); muscle relaxant; neuromuscular blocker; toxin. Source: CHANG HUA XU MA QIAN ZI *Strychnos dolichothyrsa*, A FU ZE ER MA QIAN ZI *Strychnos afzelii*. Ref: 661.

**3149 Caragaphenol A**

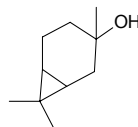
C<sub>42</sub>H<sub>30</sub>O<sub>9</sub> (678.70). Reddish amorphous powder, [α]<sub>D</sub><sup>20</sup> = +786.54° (c = 0.104, MeOH). Source: XIA YE JIN JI ER *Caragana stenophylla*. (root). Ref: 2557.

**3150 2-Caraneol**

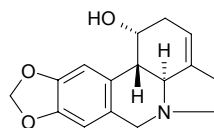
C<sub>10</sub>H<sub>18</sub>O (154.25). Source: SHENG JIANG *Zingiber officinale*. Ref: 2.

**3151 3-Caraneol**

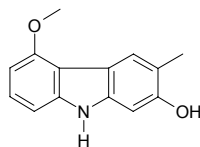
C<sub>10</sub>H<sub>18</sub>O (154.25). Source: SHENG JIANG *Zingiber officinale*. Ref: 2.

**3152 Caranine**

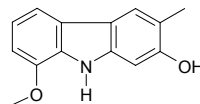
[477-12-3] C<sub>16</sub>H<sub>17</sub>NO<sub>3</sub> (271.32). Pharm: Analgesic; toxin (animal model). Source: GU TING HUA *Amaryllis belladonna*. Ref: 658.

**3153 Carbalexin A**

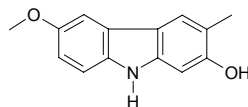
2-Hydroxy-5-methoxy-3-methylcarbazole C<sub>14</sub>H<sub>13</sub>NO<sub>2</sub> (227.27). Colorless crystals (CHCl<sub>3</sub>), mp 178–180°C. Pharm: Antibacterial (*Staphylococcus aureus*, TCL assay, 3μg, strong activity)<sup>[5179]</sup>; cytotoxic (BST, LC<sub>50</sub> = 36mg/L, LC<sub>90</sub> = 108mg/L)<sup>[5179]</sup>. Source: SHAN XIAO JU *Glycosmis citrifolia* (leaf), JIU BING YE *Glycosmis pentaphylla*. Ref: 5179.

**3154 Carbalexin B**

2-Hydroxy-8-methoxy-3-methylcarbazole C<sub>14</sub>H<sub>13</sub>NO<sub>2</sub> (227.27). Colorless crystals (CHCl<sub>3</sub>), mp 196–198°C. Source: SHAN XIAO JU *Glycosmis citrifolia* (leaf), JIU BING YE *Glycosmis pentaphylla*. Ref: 5179.

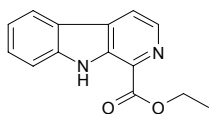
**3155 Carbalexin C**

2-Hydroxy-6-methoxy-3-methylcarbazole C<sub>14</sub>H<sub>13</sub>NO<sub>2</sub> (227.27). Colorless oil. Source: SHAN XIAO JU *Glycosmis citrifolia* (leaf), JIU BING YE *Glycosmis pentaphylla*. Ref: 5179.

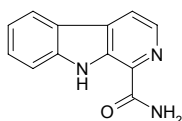


**3156 1-Carboethoxy- $\beta$ -carboline**

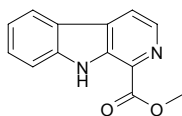
Kumujian A C<sub>14</sub>H<sub>12</sub>N<sub>2</sub>O<sub>2</sub> (240.26). mp 123°C. Source: KU MU *Picrasma quassioides* [Syn. *Picrasma ailanthoides*] (total powder: content = 0.011%<sup>[5508]</sup>), KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*], YUAN ZHI *Polygala tenuifolia*. Ref: 12, 538, 5508.

**3157 Carboline-1-carboxylic acid, amide**

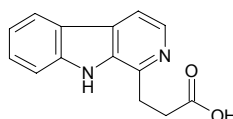
[38940-60-2] C<sub>12</sub>H<sub>9</sub>N<sub>3</sub>O (211.23). Pharm: Antibacterial (*in vitro*: *Staphylococcus aureus*, *Bacillus subtilis*, *Bacillus coli*, *Bacillus diphtheriae*, *Streptococcus* sp., *Streptobacillus* sp., *Salmonella* sp., *Bacillus proteus*, *Bacillus lactis*, *Klebsiella pneumoniae*); antileishmanial; antifungal (*Aspergillus niger*). Source: DI SHI WU TAN *Nauclea diderrichii*. Ref: 2178.

**3158  $\beta$ -Carboline-1-carboxylic acid, methyl ester**

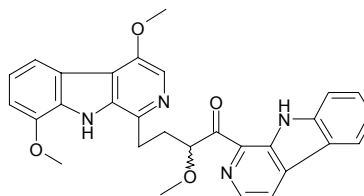
Kumujian B C<sub>13</sub>H<sub>10</sub>N<sub>2</sub>O<sub>2</sub> (226.24). White acicular crystals (0.05mmHg, 130°C sublimation), mp 166°C; yellow acicular crystals (methanol), mp 168–169°C. Pharm: Antibacterial (*in vitro*: *Staphylococcus aureus* 209P, *Bacillus subtilis* 6633, *Bacillus coli*, *Bacillus diphtheriae*, *Streptococcus* sp., *Streptobacillus* sp., *Salmonella* sp., *Bacillus proteus*, *Bacillus lactis*, *Klebsiella pneumoniae*, *Diplococcus pneumoniae*, hemolytic  $\beta$ -Streptococcus); antileishmanial; antifungal (*Aspergillus niger*). Source: CHANG YE KUAN MU *Eurycoma longifolia* (root: yield = 0.000019%dw), KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*], YUAN ZHI *Polygala tenuifolia*, KU MU *Picrasma quassioides* [Syn. *Picrasma ailanthoides*] (powder: content scope of 5 origins = 0.002%–0.234%, mean content = 0.080%<sup>[5508]</sup>), YUAN CHI KU MU *Picrasma crenata*, MA LA BA CHU *Ailanthus malabarica*, DI SHI WU TAN *Nauclea diderrichii*. Ref: 12, 538, 661, 2178, 4728, 5501, 5508.

**3159  $\beta$ -Carboline-1-propionic acid**

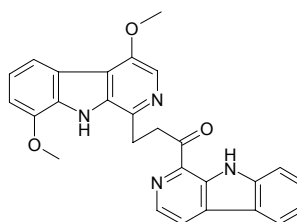
[89915-39-9] C<sub>14</sub>H<sub>12</sub>N<sub>2</sub>O<sub>2</sub> (240.26). Pharm: Cytotoxic (*in vitro*, MCF7, ED<sub>50</sub> > 20 $\mu$ g/mL; HIV, no significant effect)<sup>[4728]</sup>; antimalarial inactive (*Plasmodium falciparum* clones W2, D6, and TM91C235)<sup>[4728]</sup>. Source: CHANG YE KUAN MU *Eurycoma longifolia* (root: yield = 0.0001%dw), KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. Ref: 12, 4728.

**3160 1-( $\beta$ -Carbolin-1-yl)-4-(4,8-dimethoxy- $\beta$ -carbolin-1-yl)-2-methoxybutan-1-one**

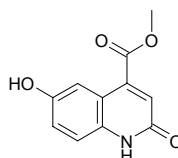
Picrasidine C [88142-61-4] C<sub>29</sub>H<sub>26</sub>N<sub>4</sub>O<sub>4</sub> (494.55). Yellowish granular crystals (methanol). Pharm: cAMP phosphodiesterase inhibitor (*in vitro*, IC<sub>50</sub> = 51 $\mu$ mol/L). Source: KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. Ref: 12, 1008, 1025, 1198, 1521.

**3161 1-( $\beta$ -Carbolin-1-yl)-3-(4,8-dimethoxy- $\beta$ -carbolin-1-yl)propan-1-one**

C<sub>27</sub>H<sub>22</sub>N<sub>4</sub>O<sub>3</sub> (450.50). Source: KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. Ref: 12.

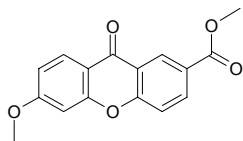
**3162 4-Carbomethoxy-6-hydroxy-2-quinolone**

C<sub>11</sub>H<sub>9</sub>NO<sub>4</sub> (219.2). Pale yellow needles (MeOH), mp >320°C. Pharm: Antioxidant (*in vitro*, DPPH radical scavenger, IC<sub>50</sub> = 28.9 $\mu$ g/mL, moderate activity). Source: DAO CAO *Oryza sativa* (aleurone layer). Ref: 3098.

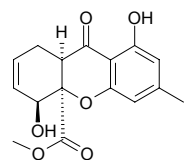


**3163 2-Carbomethoxy-6-methoxyxanthone**

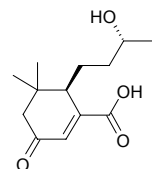
$C_{16}H_{12}O_5$  (284.27). Colorless crystals, mp 154–156°C. Source: TE SI MAN NI HU TONG BIAN ZHONG *Calophyllum teysmannii* var. *inophylloide* (wood). Ref: 5112.

**3164 (4S,4aR,9aR)-4a-Carbomethoxy-1,4,4a,9a-tetrahydro-4,8-dihydroxy-6-methylxanthone**

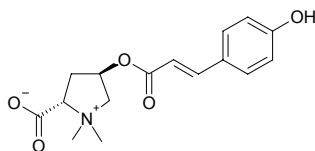
EQ-7  $C_{16}H_{16}O_6$  (304.30). White powder,  $[\alpha]_D^{25} = +31.4^\circ$  ( $c = 0.087$ , MeOH). Source: *Gelasinospora santi-florii*. Ref: 2103.

**3165 13-Carboxy-blumenol C**

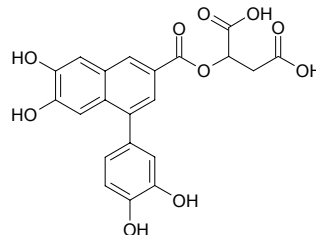
$C_{13}H_{20}O_4$  (240.30). Colorless gum,  $[\alpha]_D^{25} = +57.76^\circ$  ( $c = 0.29$ , MeOH). Source: BAI YE XIANG CHA CAI *Isodon leucophyllus*. Ref: 2489.

**3166 (2S,4R)-2-Carboxy-4-(E)-p-coumaroyloxy-1,1-dimethylpyrrolidinium inner salt**

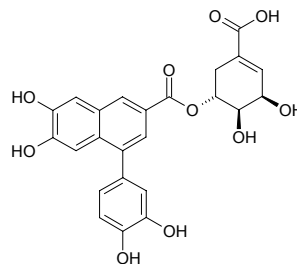
$C_{16}H_{19}NO_5$  (305.33). Colorless plates (MeOH:MeCN = 1:2), mp 239–241°C,  $[\alpha]_D^{20} = +3.9^\circ$  ( $c = 0.1$ , MeOH). Pharm: Antitrypanosomal (*Trypanosoma b. rhodesiense*,  $IC_{50} = 64.4\mu\text{g/mL}$ , control Melarsoprol,  $IC_{50} = 0.00098\mu\text{g/mL}$ ; *Trypanosoma cruzi*,  $IC_{50} > 90\mu\text{g/mL}$ , control Benznidazole,  $IC_{50} = 1.06\mu\text{g/mL}$ ); antileishmanial (*Leishmania donovani*,  $IC_{50} = 9.1\mu\text{g/mL}$ , control Miltefosine,  $IC_{50} = 0.102\mu\text{g/mL}$ ); antimalarial (*Plasmodium falciparum*,  $IC_{50} > 50\mu\text{g/mL}$ , control Artemisinin,  $IC_{50} = 0.0022\mu\text{g/mL}$ ); cytotoxic (L6,  $IC_{50} > 90\mu\text{g/mL}$ , control Podophyllotoxin,  $IC_{50} = 0.008\mu\text{g/mL}$ ). Source: ZONG KUI CAO SU *Phlomis brunneogaleata*. Ref: 5009.

**3167 3-Carboxy-6,7-dihydroxy-1-(3',4'-dihydroxyphenyl)-naphthalene-9,2''-O-malic acid ester**

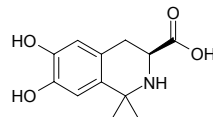
$C_{21}H_{16}O_{10}$  (428.36).  $[\alpha]_D^{20} = -7.5^\circ$  ( $c = 0.28$ ). Source: LIE E TAI *Chiloscyphus polyanthus*, WAN QU ZHI YE TAI *Lepidozia incurvata*, XIN XING SHEN YE YE TAI *Jungermannia exsertifolia* ssp. *cordifolia*. Ref: 2420.

**3168 3-Carboxy-6,7-dihydroxy-1-(3',4'-dihydroxyphenyl)-naphthalene-9,5''-O-shikimic acid ester**

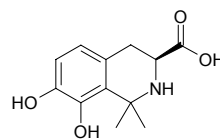
$C_{24}H_{20}O_{10}$  (468.36).  $[\alpha]_D^{20} = -14.0^\circ$  ( $c = 0.88$ ). Source: LIE E TAI *Chiloscyphus polyanthus*, WAN QU ZHI YE TAI *Lepidozia incurvata*, XIN XING SHEN YE YE TAI *Jungermannia exsertifolia* ssp. *cordifolia*. Ref: 2420.

**3169 (-)-3-Carboxy-1,1-dimethyl-6,7-dihydroxy-1,2,3,4-tetrahydroisoquinoline**

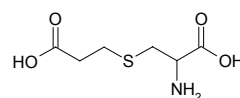
$C_{12}H_{15}NO_4$  (237.26). Viscous mass,  $[\alpha]_D^{35} = -155.3^\circ$  ( $c = 0.07$ , MeOH). Source: CI YANG LI DOU *Mucuna pruriens* (seed). Ref: 3857.

**3170 (-)-3-Carboxy-1,1-dimethyl-7,8-dihydroxy-1,2,3,4-tetrahydroisoquinoline**

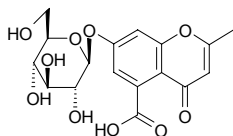
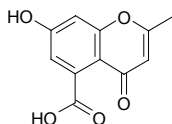
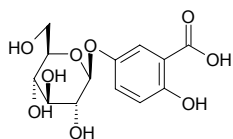
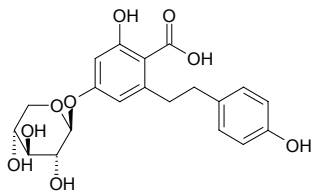
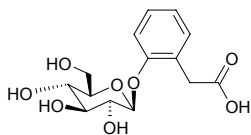
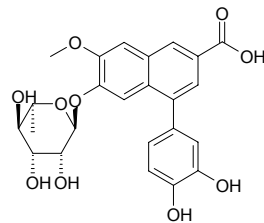
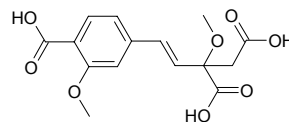
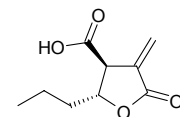
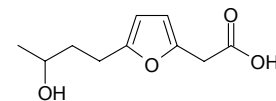
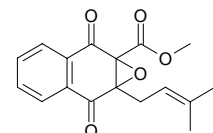
$C_{12}H_{15}NO_4$  (237.26). Viscous mass,  $[\alpha]_D^{35} = -144.2^\circ$  ( $c = 0.01$ , MeOH). Source: CI YANG LI DOU *Mucuna pruriens* (seed). Ref: 3857.

**3171 S-(2-Carboxyethyl)-L-cysteine**

$C_6H_{11}NO_4S$  (193.22). mp 218°C. Source: HE HUAN PI *Albizia julibrissin*. Ref: 6.

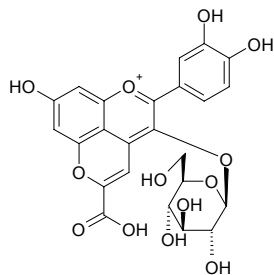




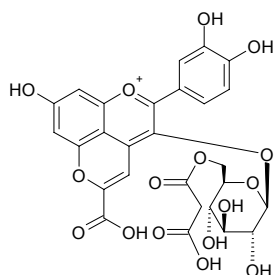
**3172 5-Carboxy-7-glucosyloxy-2-methyl-benzopyran- $\gamma$ -one**C<sub>17</sub>H<sub>18</sub>O<sub>10</sub> (382.33). Source: DA HUANG *Rheum officinale*. Ref: 2.**3173 5-Carboxy-7-hydroxy-2-methyl-benzopyran- $\gamma$ -one**C<sub>11</sub>H<sub>8</sub>O<sub>5</sub> (220.18). Source: DA HUANG *Rheum officinale*. Ref: 2.**3174 3-Carboxy-4-hydroxy-phenoxy glucoside**C<sub>13</sub>H<sub>16</sub>O<sub>9</sub> (316.27). Source: HUANG LIAN *Coptis chinensis*. Ref: 2.**3175 2-Carboxyl-3,4'-dihydroxy-5- $\beta$ -D-xylopyranosyloxybibenzyl**C<sub>20</sub>H<sub>22</sub>O<sub>9</sub> (406.39). Amorphous yellowish color, >205°C (glass transition),  $[\alpha]_D^{20} = -22^\circ$  ( $c = 1.32$ , MeOH). Pharm: Antioxidant inactive (DPPH scavenger, IC<sub>50</sub> > 200 $\mu$ g/mL; control Ascorbic acid, IC<sub>50</sub> = (2.49 $\pm$ 0.32) $\mu$ g/mL; Caffeic acid, IC<sub>50</sub> = (1.78 $\pm$ 0.03) $\mu$ g/mL; Chlorogenic acid, IC<sub>50</sub> = (1.28 $\pm$ 0.38) $\mu$ g/mL). Source: SUAN YE PO LUO MEN SHEN *Tragopogon porrifolius* (subaerial parts). Ref: 5307.**3176 2-Carboxymethylphenol 1-O- $\beta$ -D-glucopyranoside**C<sub>14</sub>H<sub>18</sub>O<sub>8</sub> (314.29). Tan amorphous powder,  $[\alpha]_D^{20} = -30.5^\circ$  ( $c = 0.7$ , MeOH). Source: AN MO LE *Phyllanthus emblica* (root). Ref: 3065.**3177 3-Carboxy-6-methoxy-1-(3',4'-dihydroxyphenyl)-naphthalene-7-O- $\alpha$ -L-rhamnopyranoside**C<sub>24</sub>H<sub>24</sub>O<sub>10</sub> (472.45).  $[\alpha]_D^{20} = -72.0^\circ$  ( $c = 0.18$ ). Source: LIE E TAI *Chiloscyphus polyanthus*, WAN QU ZHI YE TAI *Lepidozia incurvata*, XIN XING SHEN YE YE TAI *Jungermannia exsertifolia* ssp. *cordifolia*. Ref: 2420.**3178 2-(4-Carboxy-3-methoxystyryl)-2-methoxysuccinic acid**5-(4-Carboxy-3-methoxyphenyl)-3-methoxy-3-carboxy-4-pentenoic acid  
C<sub>15</sub>H<sub>16</sub>O<sub>8</sub> (324.29). Source: XIAO DI YU *Sanguisorba minor*. Ref: 3385.**3179 (3S,4R)-3-Carboxy-2-methylene-heptan-4-olide**C<sub>9</sub>H<sub>12</sub>O<sub>4</sub> (184.19). mp 77–80°C,  $[\alpha]_D^{25} = +18.2^\circ$  ( $c = 0.22$ , CHCl<sub>3</sub>). Source: *Lasiodiplodia theobromae* (fruit). Ref: 3867.**3180 2-Carboxymethyl-4-(3'-hydroxybutyl)furan**C<sub>10</sub>H<sub>14</sub>O<sub>4</sub> (198.22). Source: YONG CHONG CAO *Cordyceps militaris*. Ref: 4784.**3181 2-Carboxymethyl-3-phenyl-2,3-epoxy-1,4-naphthoquinone**[133361-29-2] C<sub>17</sub>H<sub>16</sub>O<sub>5</sub> (300.31). Oil,  $[\alpha]_D = 0^\circ$  ( $c = 0.3$ , methanol). Pharm: Antineoplastic (S<sub>180</sub> *in vivo*, EC = 5mg/(kg·d)); cytotoxic (mus, V-79 *in vitro* and *in vivo*, IC<sub>50</sub> = 1.7 $\mu$ g/mL, P<sub>388</sub> *in vitro* and *in vivo*, IC<sub>50</sub> = 0.12 $\mu$ g/mL, KB *in vitro* and *in vivo*, IC<sub>50</sub> = 0.7 $\mu$ g/mL). Source: QIAN CAO GEN *Rubia cordifolia*. Ref: 958, 1094.

**3182 5-Carboxypyranocyanidin-3-O- $\beta$ -glucopyranoside**

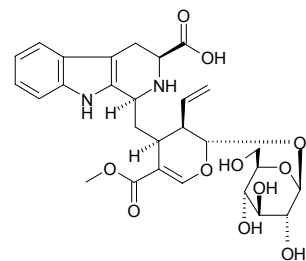
$C_{24}H_{21}O_{13}$  (517.43). Source: YANG CONG *Allium cepa*. Ref: 2042.

**3183 5-Carboxypyranocyanidin-3-O-(6''-O-malonyl- $\beta$ -glucopyranoside)**

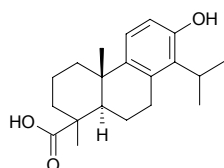
$C_{27}H_{23}O_{16}$  (603.47). Source: YANG CONG *Allium cepa*. Ref: 2042.

**3184 (5S)-5-Carboxystrictosidine**

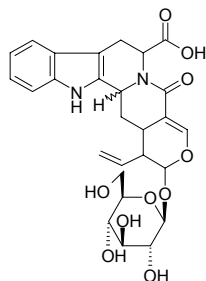
Tetrahydrodesoxycordifoline  $C_{28}H_{34}N_2O_{11}$  (574.59). Source: JI ZI MU *Sinoadina Racemosa* [Syn. *Adina racemosa*] (dried leaf, flower and twig: yield = 0.0085%dw), KUAN YE WU TAN *Nauclea latifolia* (bark and wood: yield = 0.004%). Ref: 3014, 4303.

**3185 16-Carboxytotarol**

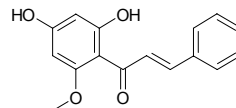
$C_{20}H_{28}O_3$  (316.44). Source: LUO HAN SONG YE *Podocarpus macrophyllus*. Ref: 6.

**3186 3 $\alpha$ ,3 $\beta$ -Carboxyvincoside lactam**

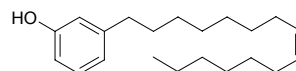
$C_{27}H_{30}N_2O_{10}$  (542.55). Pharm: Antibacterial (*in vitro*: *Staphylococcus aureus*, *Bacillus subtilis*, *Bacillus coli*, *Bacillus diphtheriae*, *Streptococcus* sp., *Streptobacillus* sp., *Salmonella* sp., *Bacillus proteus*, *Bacillus lactis*, *Klebsiella pneumoniae*); antileishmanial; antifungal (*Aspergillus niger*). Source: DONG FANG WU TAN *Nauclea orientalis*. Ref: 2178.

**3187 Cardamonin**

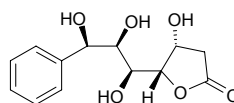
[19309-14-9]  $C_{16}H_{14}O_4$  (270.29). mp 207°C. Source: CAO DOU KOU *Alpinia katsumadai* (dried closing-ripe seed: mean content = 0.48%<sup>[5508]</sup>), DA CAO KOU *Alpinia speciosa*. Ref: 6, 5508.

**3188 Cardanol**

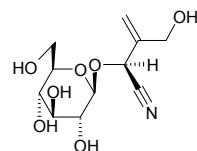
Anacanol [501-26-8]  $C_{21}H_{34}O$  (302.50). Pharm: Antineoplastic (S<sub>180</sub>); 5-lipoxygenase inhibitor; cyclooxygenase inhibitor; irritant. Source: BAI GUO *Ginkgo biloba*, XIAO RU XIANG *Schinus terebinthifolius*, DU XIAN ZI *Anacardium occidentale*. Ref: 6, 658.

**3189 Cardiobutanolide**

$C_{13}H_{16}O_6$  (268.27). White crystals (acetone), mp 189–190°C,  $[\alpha]_D^{24} = +6.4^\circ$  (c = 0.28, MeOH). Source: XIN XING BAN GE NA XIANG *Goniothalamus cardiopetalus*. Ref: 2056.

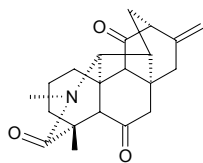
**3190 Cardiospermin**

[54525-10-9]  $C_{11}H_{17}NO_7$  (275.26). Pharm: Toxin. Source: DA HUA DAO DI LING *Cardiospermum grandiflorum*, MAO DAO DI LING *Cardiospermum hirsutum*. Ref: 658.

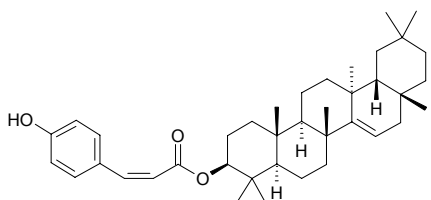


**3191 Carduchorone**

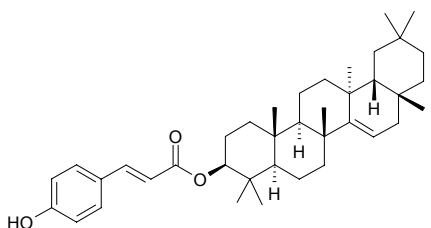
$C_{21}H_{25}NO_3$  (339.44). Source: *Delphinium carduchorum*. Ref: 2288.

**3192 cis-Careaborin**

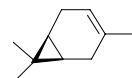
$C_{39}H_{56}O_3$  (572.88). White amorphous powder. Source: HONG HAI LAN  
*Rhizophora stylosa* (twig), HONG SHU *Rhizophora apiculata*. Ref: 1521, 4425.

**3193 trans-Careaborin**

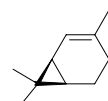
$C_{39}H_{56}O_3$  (572.88). White amorphous powder. Source: HONG HAI LAN  
*Rhizophora stylosa* (twig), KA LI YU RUI *Careya arborea*. Ref: 1521, 4425.

**3194 Carene-3**

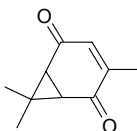
[13466-78-9]  $C_{10}H_{16}$  (136.24). bp (+) 170°C, (-) 166~167°C/685mmHg.  
Pharm: irritant (local). Source: DU SONG SHI *Juniperus rigida*, FENG DOU  
CAI *Petasites japonicus*, GAN SONG *Nardostachys chinensis*, HAI SONG  
ZI *Pinus koraiensis*, HOU PO *Magnolia officinalis*, JIU LI XIANG *Murraya  
paniculata* [Syn. *Chalcas paniculata*], LIAN QIAO *Forsythia suspensa*, LUO  
LE *Ocimum basilicum*, SHAN NAI *Kaempferia galanga*, SHENG JIANG  
*Zingiber officinale*, *Picea* sp., *Abies* sp. Ref: 2, 11, 658.

**3195 Carene-4**

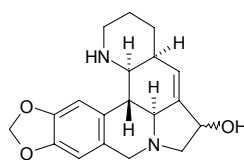
[554-61-0]  $C_{10}H_{16}$  (136.24). Source: JU PI *Citrus reticulata*, KUAN YE  
QIANG HUO *Notopterygium forbesii* [Syn. *Notopterygium franchetii*],  
HUANG HUA HAO *Artemisia annua*. Ref: 2, 660.

**3196 (±)-Car-3-ene-2,5-dione**

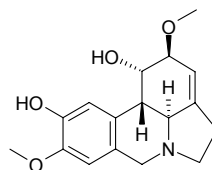
$C_{10}H_{12}O_2$  (164.21). Source: XI XIN *Asarum sieboldii*. Ref: 2.

**3197 Caribine**

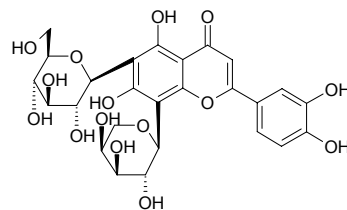
$C_{19}H_{22}N_2O_3$  (326.40). Pharm: Antineoplastic; antiviral. Source: SHA SHENG  
SHUI GUI JIAO *Hymenocallis arenicola*. Ref: 658.

**3198 Carinatine**

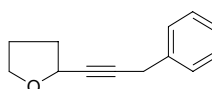
[64937-89-9]  $C_{17}H_{21}NO_4$  (303.36). Pharm: Antineoplastic; antiviral. Source:  
FENG YU HUA *Zephyranthes grandiflora* [Syn. *Zephyranthes carinata*]. Ref:  
658.

**3199 Carlinoside**

[59952-97-5]  $C_{26}H_{28}O_{15}$  (580.50). Pharm: Phagostimulant (order Hemiptera  
insect). Source: JING MI *Oryza sativa*. Ref: 658.

**3200 Carlinoxide**

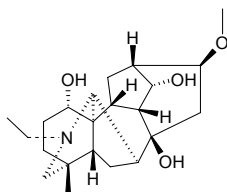
$C_{13}H_{14}O$  (186.26). Source: CHAO XIAN JI *Carlina acaulis* (the compound  
was isolated from the plant by Semmer Ascher in 1909)<sup>[5505]</sup>. Ref: 5505.



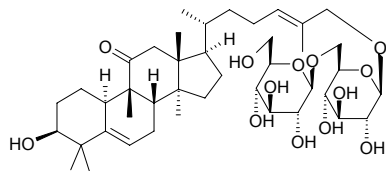
**3201 Carmichaeline**

Chuan-Wu-base B [39089-30-0]  $C_{22}H_{35}NO_4$  (377.53). **Pharm:**

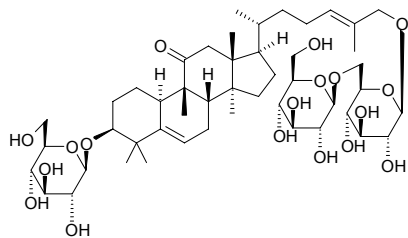
Antihypertensive (cat or dog, iv, action lasting 10–20min); similar action with talatizamine; toxin. **Source:** DUO GEN WU TOU *Aconitum karakolicum*, WU TOU *Aconitum carmichaeli*, WU ZHU FEI YAN CAO *Delphinium pentagynum*, FU ZI *Aconitum carmichaeli*. **Ref:** 2, 658.

**3202 Carnosifloside I**

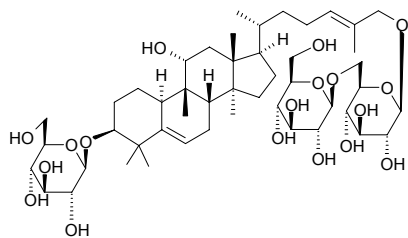
[109985-90-2]  $C_{42}H_{68}O_{13}$  (781.00). **Pharm:** Anti-infective (treatment of gastrois, ulcer, upper-respiratory tract infection, urethral infection, bronchitis, pneumonia, enteritis, bacillary dysentery and sepsis). **Source:** ROU HUA XUE DAN *Hemsleya carnosiflora*. **Ref:** 658.

**3203 Carnosifloside III**

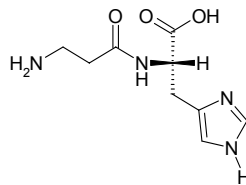
[109985-92-4]  $C_{48}H_{78}O_{18}$  (943.15). **Pharm:** Anti-infective (treatment of bacillary dysentery, duodenal ulcer, enteritis, gastrois and trachitis). **Source:** ROU HUA XUE DAN *Hemsleya carnosiflora*. **Ref:** 658.

**3204 Carnosifloside VI**

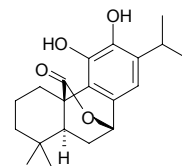
[109985-95-7]  $C_{48}H_{80}O_{18}$  (945.16). **Pharm:** Analgesic. **Source:** ROU HUA XUE DAN *Hemsleya carnosiflora*. **Ref:** 658.

**3205 Carnosine**

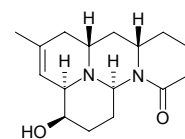
$\beta$ -Alanyl-L-histidine [305-84-0]  $C_9H_{14}N_4O_3$  (226.24). mp *L* (+) 246–250°C, *D* (–) 260°C (dec). **Source:** GOU ROU *Canis familiaris*, XIA TIAN GAO *Bos taurus domesticus*, MO GU *Agaricus campestris*, MAN LI YU *Anguilla japonica*, QING WA *Rana nigromaculata*; *Rana plancyi*, XIA TIAN GAO *Bos taurus domesticus*. **Ref:** 6.

**3206 Carnosol**

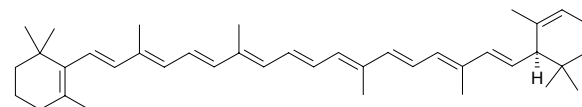
[5957-80-2]  $C_{20}H_{26}O_4$  (330.43). mp 221–226°C. **Pharm:** Bitter principle. **Source:** GAN XI SHU WEI CAO *Salvia przewalskii*, MI DIE XIANG *Rosmarinus officinalis*. **Ref:** 6, 4538.

**3207 Carolinianine**

$C_{16}H_{24}N_2O_2$  (276.38). **Pharm:** Toxin. **Source:** SI KA LUO LAI NA SHI SONG *Lycopodium carolinianum* var. *affine*. **Ref:** 658.

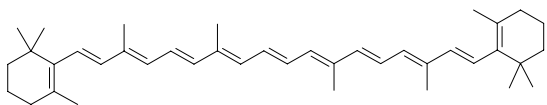
**3208  $\alpha$ -Carotene**

[7488-99-5]  $C_{40}H_{56}$  (536.89). mp 187.5°C.<sup>[5507]</sup> **Pharm:** Precursor of biosynthesis of vitamin A. **Source:** HU LUO BO *Daucus carota* var. *sativa*, NAN HE SHI *Daucus carota*, YU SHU SHU *Zea mays*, YOU ZONG *Elaeis guineensis*, FAN QIE *Lycopersicon esculentum*, SHI DI *Diospyros kaki*, HONG TOU CAO *Blumea lacera*, BIAN DOU *Dolichos lablab*. **Ref:** 6, 658, 5507.

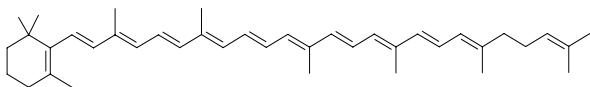


**3209  $\beta$ -Carotene**

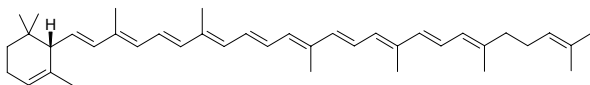
*trans*- $\beta$ -Carotene [7235-40-7] C<sub>40</sub>H<sub>56</sub> (536.89). mp 184°C.<sup>[5507]</sup> **Pharm:** EBV-EA activation inhibitor (Raji cells *in vitro*, TPA-induced, IC<sub>50</sub> = 400mol ratio/32pmol TPA)<sup>[3483, 4737, 5048, 5255]</sup>; anti-tumor promotor (*in vivo*, mouse skin tumor, inhibits TPA-induced EBV-EA activation, 100mol ratio/32pmol TPA, EBV-EA positive cells = 82.7% viability)<sup>[4982]</sup>; ultraviolet screen; precursor in the biosynthesis to vitamin A); pigment; food additive. **Source:** BAI GUO *Ginkgo biloba* (dried ripe seed: content = 0.0002%)<sup>[5508]</sup>, BAN WEN LU HUI *Aloe vera* var. *chinensis*, FAN MU GUA *Carica papaya*, GAN SHU *Ipomoea batatas* [Syn. *Convolvulus batatas*], GOU QI ZI *Lycium chinense*, HONG HAI JIAO *Capsicum annuum*, LA JIAO *Capsicum frutescens*, MU XU *Medicago sativa*, NAN HE SHI *Daucus carota*, YI ZHU QIAN MA *Urtica dioica*, *Ulex* sp., *Dioscorea* sp., *Rosa* sp. **Ref:** 2, 15, 658, 660, 3483, 4737, 4982, 5048, 5255, 5507, 5508.

**3210  $\gamma$ -Carotene**

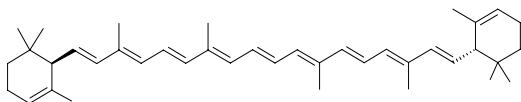
[472-93-5] C<sub>40</sub>H<sub>56</sub> (536.89). mp 178°C.<sup>[5507]</sup> **Pharm:** Precursor of biosynthesis of vitamin A); yellow pigment. **Source:** FAN MU GUA *Carica papaya*, FAN QIE *Lycopersicon esculentum*, HONG HAI JIAO *Capsicum annuum*, NAN HE SHI *Daucus carota*, SHI DI *Diospyros kaki*, YU SHU SHU *Zea mays*, *Cuscuta* sp. **Ref:** 6, 658, 5507.

**3211  $\delta$ -Carotene**

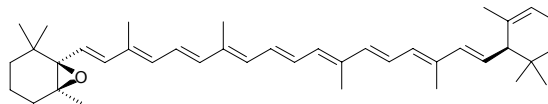
[472-92-4] C<sub>40</sub>H<sub>56</sub> (536.89). **Source:** CU LIU GUO *Hippophae rhamnoides*, XIAO JIN ZHAN HUA *Calendula arvensis*, HAN LIAN HUA *Tropaeolum majus*, NAN HE SHI *Daucus carota*. **Ref:** 658.

**3212  $\epsilon$ -Carotene**

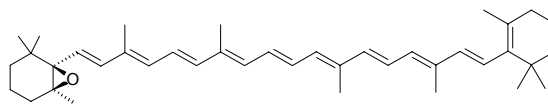
[472-89-9] C<sub>40</sub>H<sub>56</sub> (536.89). mp 199~201°C. **Source:** HU LUO BO *Daucus carota* var. *sativa*. **Ref:** 6.

**3213  $\alpha$ -Carotene-5,6-epoxide**

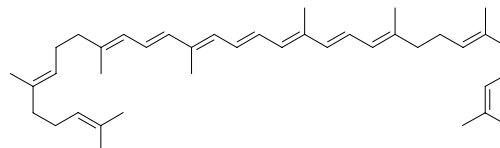
[37721-41-8] C<sub>40</sub>H<sub>56</sub>O (552.89). **Source:** NAN FANG TU SI ZI *Cuscuta australis*. **Ref:** 6, 660.

**3214  $\beta$ -Carotene-5,6-epoxide**

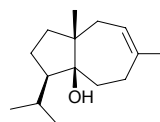
[1923-89-3] C<sub>40</sub>H<sub>56</sub>O (552.89). **Pharm:** Precursor to biosynthesis of vitamin A. **Source:** FAN MU GUA *Carica papaya*, TIAN CHENG *Citrus sinensis*, KUAN DONG HUA *Tussilago farfara*, MANG GUO *Mangifera indica*, *Malus* sp., *Forsythia* sp. **Ref:** 658.

**3215  $\zeta$ -Carotene**

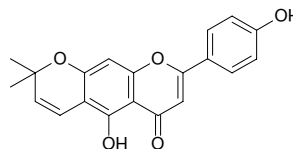
[13587-06-9] C<sub>40</sub>H<sub>60</sub> (540.92). mp 38~42°C. **Pharm:** Yellow pigment. **Source:** FAN MU GUA *Carica papaya*, FAN QIE *Lycopersicon esculentum*, HU LUO BO *Daucus carota* var. *sativa*, JIN QUE ER *Cytisus scoparius* [Syn. *Spartium scoparium*], MEI ZHOU SUAN GUO LUO *Vaccinium macrocarpon*, YU SHU SHU *Zea mays*. **Ref:** 6.

**3216 Carotol**

[465-28-1] C<sub>15</sub>H<sub>26</sub>O (222.37). bp (+) 126°C/2.5mmHg. **Source:** HU LUO BO ZI *Daucus carota* var. *sativa*, HE SHI FENG *Daucus carota*, NAN HE SHI *Daucus carota*. **Ref:** 6, 660.

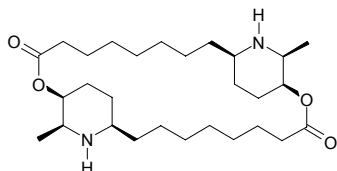
**3217 Carpachromene**

C<sub>20</sub>H<sub>16</sub>O<sub>5</sub> (336.35). **Source:** *Erythrina vogelii*. **Ref:** 4421.

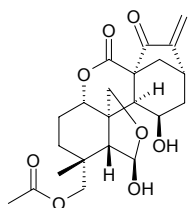


**3218 Carpine**

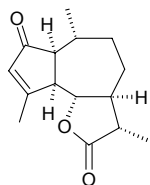
[3463-92-1]  $C_{28}H_{50}N_2O_4$  (478.72). mp 119~120°C. **Pharm:** Analgesic (anaesthetic to skeletal muscle, skeletal muscle relaxant); antineoplastic (L<sub>1210</sub>); antiprotozoal (amoeba, protozoan); antihypertensive (rbt); makes heart stop in period of relaxation (frog and rbt, *in vitro*); toxin (paralyses CNS). **Source:** HU LU BA *Trigonella foenum-graecum*, FAN MU GUA *Carica papaya*. **Ref:** 1, 5, 6.

**3219 Carpalasionin**

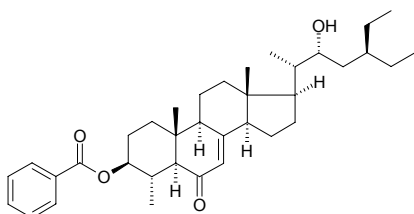
[83150-97-4]  $C_{22}H_{28}O_8$  (420.46). mp 287~288°C,  $[\alpha]_D^{27} = -122.3^\circ$  ( $c = 0.19$ , MeOH). **Source:** CU GUO XIANG CHA CAI *Isodon lasiocarpa*. **Ref:** 4067.

**3220 Carpesia lactone**

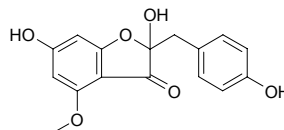
[82460-83-1]  $C_{15}H_{20}O_3$  (248.32). bp 195°C/4mmHg. **Pharm:** Bidirectional action to CNS (mus, first excitation then inhibition, causes paroxysm convulsion and death in high dose, inhibits respiration of cerebral tissue); antipyretic (rbt); hypnotic (marked synergistic effect with barbitone medicines); LD<sub>50</sub> (mus, ip) = 100mg/kg. **Source:** TIAN MING JING *Carpesium abrotanoides*, TIAN MING JING GUO *Carpesium abrotanoides*. **Ref:** 1, 6, 660.

**3221 Carpesterol**

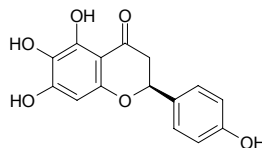
[31077-78-8]  $C_{37}H_{54}O_4$  (562.84). mp 248°C. **Pharm:** Antihepatotoxin (mus, 10mg/kg, due to carbon tetrachloride); anti-inflammatory. **Source:** HUANG GUO QIE *Solanum xanthocarpum*. **Ref:** 6, 1521, 1830.

**3222 Carpusin**

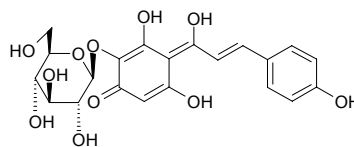
Marsupin  $C_{16}H_{14}O_6$  (302.29). Whitish crystals. **Pharm:** Antioxidant (DPPH radical scavenger, IC<sub>50</sub> = 4.7μg/mL; control Ascorbic acid, IC<sub>50</sub> = 3.9μg/mL). **Source:** ZANG BIAN DA HUANG *Rheum emodi* [Syn. *Rheum australe*] (root: yield = 0.028%dw). **Ref:** 4711.

**3223 Carthamidin**

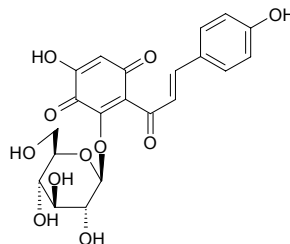
[479-54-9]  $C_{15}H_{12}O_6$  (288.26). **Source:** BAN ZHI LIAN *Scutellaria barbata* [Syn. *Scutellaria rivularis*], HONG HUA *Carthamus tinctorius*. **Ref:** 2, 5501.

**3224 Carthamin**

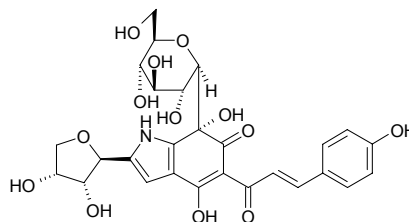
[36338-96-2]  $C_{21}H_{22}O_{11}$  (450.40). **Source:** HONG HUA *Carthamus tinctorius*. **Ref:** 2.

**3225 Carthamone**

[86579-00-2]  $C_{21}H_{20}O_{11}$  (448.39). **Pharm:** Pigment. **Source:** HONG HUA *Carthamus tinctorius*. **Ref:** 2, 658.

**3226 Cartormin**

$C_{27}H_{29}NO_{13}$  (575.53). mp > 230°C. **Source:** HONG HUA *Carthamus tinctorius*. **Ref:** 9.

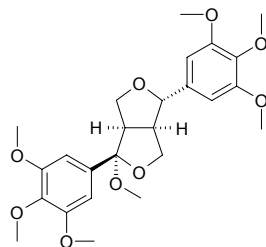


**3227 Caruilignan A**

$C_{25}H_{32}O_9$  (476.53). Amorphous powder,  $[\alpha]_D^{24} = +61.6^\circ$  ( $c = 0.83$ ,  $CHCl_3$ ).

**Pharm:** Cytotoxic (Meth-A,  $ED_{50} = 6.5\mu g/mL$ , LLC,  $ED_{50} > 10\mu g/mL$ ).

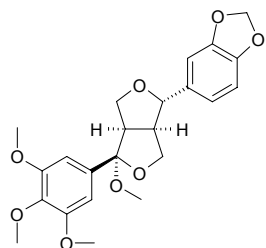
**Source:** QING HAO *Artemisia apiacea* [Syn. *Artemisia carvifolia*; *Artemisia caruifolia*] (aerial parts). **Ref:** 3510.

**3228 Caruilignan B**

$C_{25}H_{26}O_8$  (430.46). Amorphous powder,  $[\alpha]_D^{24} = +78.8^\circ$  ( $c = 0.51$ ,  $CHCl_3$ ).

**Pharm:** Cytotoxic (Meth-A,  $ED_{50} = 4.9\mu g/mL$ , LLC,  $ED_{50} > 10\mu g/mL$ ).

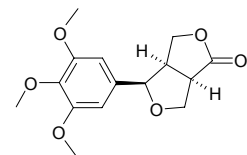
**Source:** QING HAO *Artemisia apiacea* [Syn. *Artemisia carvifolia*; *Artemisia caruifolia*] (aerial parts). **Ref:** 3510.

**3229 Caruilignan C**

$C_{15}H_{18}O_6$  (294.31). Amorphous powder,  $[\alpha]_D^{24} = +144.1^\circ$  ( $c = 0.18$ ,  $CHCl_3$ ).

**Pharm:** Cytotoxic (Meth-A,  $ED_{50} = 10\mu g/mL$ , LLC,  $ED_{50} > 10\mu g/mL$ ). **Source:**

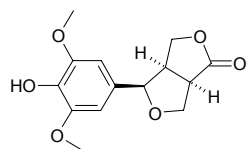
QING HAO *Artemisia apiacea* [Syn. *Artemisia carvifolia*; *Artemisia caruifolia*] (aerial parts). **Ref:** 3510.

**3230 Caruilignan D**

$C_{14}H_{16}O_6$  (280.28). Amorphous powder,  $[\alpha]_D^{24} = +126.0^\circ$  ( $c = 0.13$ ,  $CHCl_3$ ).

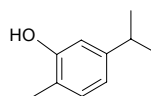
**Pharm:** Cytotoxic (Meth-A,  $ED_{50} > 10\mu g/mL$ , LLC,  $ED_{50} > 10\mu g/mL$ ). **Source:**

QING HAO *Artemisia apiacea* [Syn. *Artemisia carvifolia*; *Artemisia caruifolia*] (aerial parts). **Ref:** 3510.

**3231 Carvacrol**

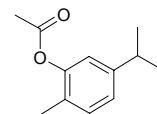
2-*p*-Cymenol [499-75-2]  $C_{10}H_{14}O$  (150.22). bp 237–238°C. **Pharm:**

Anthelmintic; antibacterial; antifungal; antispasmodic (gpg ileum and rat duodenum convulsion caused by histamine, barium chloride and acetylcholine); enhances trypsin activity; irritant; antifungal (*Aspergillus niger* KCCM11239, MFC = 0.78mg/mL; *Aspergillus flavus* KCCM11453, MFC = 0.39mg/mL; *Candida albicans* KCCM11282, MFC = 0.39mg/mL; *Candida utilis* KCCM11356, MFC = 0.39mg/mL; *Cryptococcus neoformans* KCCM0564, MFC = 0.39mg/mL; *Trichosporon mucoides* KCCM50570, MFC = 0.19mg/mL; *Trichophyton rubrum* ATCC6345, MFC = 0.09mg/mL; *Blastoschyzomyces capitatus* KCCM50270, MFC = 0.39mg/mL)<sup>[4079]</sup>. **Source:** DANG GUI *Angelica sinensis*, HA DA SHI JI NING *Orthodon hadai*, JIN YIN HUA *Lonicera japonica*, JU JIANG YE *Piper betle*, JU PI *Citrus reticulata*, QING GUO *Canarium album*, SHE XIANG CAO *Thymus vulgaris*, SHI XIANG RU *Mosla chinensis* [Syn. *Orthodon chinensis*] (dried aerial parts: content scope of 10 origins = 0.00%–0.50%, mean content = 0.19%<sup>[5508]</sup>), TU XIANG RU *Origanum vulgare*, XI XIN *Asarum sieboldii*, ZHANG MU *Cinnamomum camphora*, CHAO XIAN DA BAI LI XIANG *Thymus magnus*, WU MAI BAI LI XIANG *Thymus quinquecostatus*. **Ref:** 1, 2, 4079, 5508.

**3232 Carvacrol acetate**

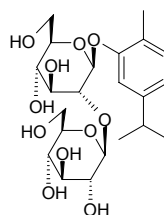
[4395-82-8]  $C_{12}H_{16}O_2$  (192.26). bp 245–248°C. **Source:** SHI XIANG RU

*Mosla chinensis* [Syn. *Orthodon chinensis*]. **Ref:** 6.

**3233 Carvacrol 2-O-β-glucopyranosyl-(1→2)-β-glucopyranoside**

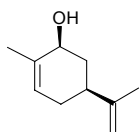
$C_{22}H_{34}O_{11}$  (474.51).  $[\alpha]_D^{25} = -25.1^\circ$  ( $c = 1.60$ , MeOH). **Source:** XU LI YA

NIU ZHI *Origanum syriacum* (aerial parts). **Ref:** 5223.

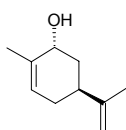


**3234 cis-Carveol**

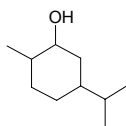
[7632-16-8] C<sub>10</sub>H<sub>16</sub>O (152.24). Source: HUANG HUA HAO *Artemisia annua*.  
Ref: 1, 2, 660.

**3235 trans-Carveol**

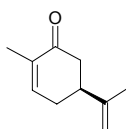
[2102-58-1] C<sub>10</sub>H<sub>16</sub>O (152.24). Pharm: Antiasthmatic. Source: AI YE  
*Artemisia argyi*, HUANG HUA HAO *Artemisia annua*. Ref: 1, 660.

**3236 Carvomenthol**

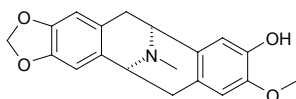
(1 $\alpha$ ,2 $\beta$ ,5 $\alpha$ )-2-Methyl-5-(1-methylethyl)cyclohexanol [499-69-4] C<sub>10</sub>H<sub>20</sub>O  
(156.27). bp (+) 101.8°C/14mmHg. Source: CHOU SHAN YANG *Orixa japonica*. Ref: 6.

**3237 Carvone**

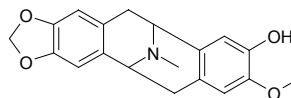
2-Methyl-5-(1-methylethenyl)-2-cyclohexen-1-one [99-49-0] C<sub>10</sub>H<sub>14</sub>O (150.22). bp  
230°C/755mmHg, 91°C/5-6mmHg. Pharm: Antiseptic; antitussive (suppresses  
cough and calms asthma); carminative (expels wind and settles pain); flavorant.  
Source: BAI DOU KOU *Amomum kravanh* [Syn. *Amomum cardamomum*], CHAI  
HU *Bupleurum chinense*, GE LU ZI *Carum carvi*, HUANG HAO *Artemisia scoparia* [Syn. *Artemisia capillaris* var. *scoparia*], KUAN YE QIANG HUO  
*Notopterygium forbesii* [Syn. *Notopterygium franchetii*], LIU LAN XIANG  
*Mentha spicata*, SHI LUO ZI *Anethum graveolens*, YE JU *Chrysanthemum indicum*, YIN CHEN HAO *Artemisia capillaris*, YU JIN *Curcuma aromatica*, YU  
XIANG CAO *Mentha rotundifolia*, ZI CAI *Porphyra tenera*. Ref: 1, 2, 660.

**3238 (-)-Caryachine**

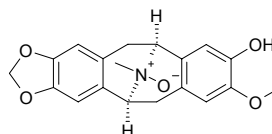
C<sub>19</sub>H<sub>19</sub>NO<sub>4</sub> (325.37). Source: HOU KE GUI *Cryptocarya chinensis* (leaf). Ref: 4129.

**3239 dl-Caryachine**

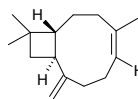
C<sub>19</sub>H<sub>19</sub>NO<sub>4</sub> (325.37). Source: HOU KE GUI *Cryptocarya chinensis* (wood). Ref: 3092.

**3240 (-)-Caryachine-N-oxide**

C<sub>19</sub>H<sub>19</sub>NO<sub>5</sub> (341.37). Colorless needles (acetone), mp >280°C, [ $\alpha$ ]<sub>D</sub> = -86.87°  
(c = 0.099, MeOH). Source: HOU KE GUI *Cryptocarya chinensis* (stem  
cortex). Ref: 4160.

**3241  $\gamma$ -Caryophyllene**

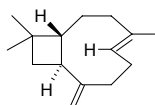
Isocaryophyllene [118-65-0] C<sub>15</sub>H<sub>24</sub> (204.36). Oil, bp 125°C/14.5mmHg, [ $\alpha$ ]<sub>D</sub><sup>24</sup> =  
-27°. Pharm: Cytotoxic (cancer cell: MCF7, GI<sub>50</sub> = (84±6) $\mu$ mol/L, PC3, GI<sub>50</sub> =  
(87±8) $\mu$ mol/L, A549, GI<sub>50</sub> = (59±4) $\mu$ mol/L, DLD-1, GI<sub>50</sub> = (102±12) $\mu$ mol/L,  
M4BEU hmn melanoma cell, GI<sub>50</sub> = (43±3) $\mu$ mol/L, L-929, GI<sub>50</sub> = (34±1) $\mu$ mol/L,  
CT-26, GI<sub>50</sub> = (46±1) $\mu$ mol/L; normal hmn cell: fibroblasts, GI<sub>50</sub> = (124±15) $\mu$ mol/L;  
control Etoposide, GI<sub>50</sub> < 1.5 $\mu$ mol/L, Chlorambucil, GI<sub>50</sub> < 50 $\mu$ mol/L)<sup>[5391]</sup>;  
flavorant. Source: BAI CHANG *Acorus calamus*, BAI DOU KOU *Amomum kravanh* [Syn. *Amomum cardamomum*], BING PIAN *Dryobalanops aromatica*,  
CE BAI YE *Thuja orientalis* [Syn. *Platyclusus orientalis*; *Biota orientalis*], DING  
XIANG *Syzygium aromaticum* [Syn. *Eugenia caryophyllata*], DU SONG SHI  
*Juniperus rigida*, FENG DOU CAI *Petasites japonicus*, FU JU *Citrus tangemna*,  
GOU JU *Poncirus trifoliata*, GUANG HUO XIANG *Pogostemon cablin* [Syn.  
*Mentha cablin*], HU LUO BO *Daucus carota* var. *sativa*, HUANG GUO QIE  
*Solanum xanthocarpum*, HUANG HUA HAO *Artemisia annua*, HUO XIANG  
*Agastache rugosus*, JIA JING JIE *Nepeta cataria*, JIN QIAN PU *Acorus gramineus*,  
JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*], MAN SHAN  
HONG *Rhododendron dauricum*, MU HAO *Artemisia japonica*, PI JIU HUA  
*Humulus lupulus*, QING HAO *Artemisia apiacea* [Syn. *Artemisia carvifolia*;  
*Artemisia caruifolia*], SHAN HU JIAO *Lindera glauca*, SHE XIANG CAO  
*Thymus vulgaris*, TIAN MING JING *Carpesium abrotanoides*, TU DANG GUI  
*Aralia cordata*, WU SE MEI *Lantana camara*, WU YAO *Lindera strychnifolia*  
[Syn. *Lindera aggregata*], XIANG ZHI LENG SHAN *Abies balsamea* (essential  
oil extracted from leaves), YANG SHI CAO *Achillea millefolium*, YE XIANG  
MAO *Cymbopogon goeringii*, ZHANG MU *Cinnamomum camphora*, ZHU JU  
*Citrus erythrosa*, occurs in many plants. Ref: 658, 5391.





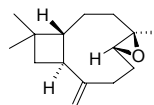
**3242  $\beta$ -Caryophyllene**

(-)-*trans*-Caryophyllene [87-44-5] C<sub>15</sub>H<sub>24</sub> (204.36). bp 129–130°C/14mmHg, bp (-) 118–119°C/9.7mmHg. **Pharm:** Flavorant. **Source:** AI YE *Artemisia argyi* (leaf: content = 0.0015%)<sup>[5501]</sup>, BAI CHANG *Acorus calamus*, BAI DOU KOU *Amomum kravanh* [Syn. *Amomum cardamomum*], BING PIAN *Dryobalanops aromatica*, CANG ZHU *Atractylodes lancea*, CE BAI YE *Thuja orientalis* [Syn. *Platycladus orientalis*; *Biota orientalis*] (leaf: content = 0.015%–0.020%)<sup>[5501]</sup>, DU SONG SHI *Juniperus rigida*, FENG DOU CAI *Petasites japonicus*, GOU JU *Poncirus trifoliata*, GUANG HUO XIANG *Pogostemon cablin* [Syn. *Mentha cablin*], HOU PO *Magnolia officinalis*, HU LUO BO *Daucus carota* var. *sativa*, HUANG GUO QIE *Solanum xanthocarpum*, HUANG HUA HAO *Artemisia annua*, HUI HUI SU GENG *Perilla frutescens* var. *crispa*, HUO XIANG *Agastache rugosus*, JIA JING JIE *Nepeta cataria*, JIAN ZI SU YE *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*], JING JIE *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*], JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*], KAN MAI NIANG ZHUANG SHA CAO *Cyperus alopecuroides* (essential oil), MAN SHAN HONG *Rhododendron dauricum*, MU HAO *Artemisia japonica*, PI JIU HUA *Humulus lupulus*, QING HAO *Artemisia apiacea* [Syn. *Artemisia carvifolia*; *Artemisia caruifolia*], REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*], SHAN HU JIAO *Lindera glauca*, SHE XIANG CAO *Thymus vulgaris*, SHENG JIANG *Zingiber officinale*, JIN QIAN PU *Acorus gramineus*, TIAN MING JING *Carpesium abrotanoides*, WU SE MEI *Lantana camara*, WU WEI ZI *Schisandra chinensis*, XI YANG SHEN *Panax quinquefolium*, XIANG ZHI LENG SHAN *Abies balsamea* (essential oil extracted from leaves), YANG SHI CAO *Achillea millefolium*, YE XIANG MAO *Cymbopogon goeringii*, YIN CHEN HAO *Artemisia capillaris*, YU XING CAO *Houttuynia cordata*, ZHANG MU *Cinnamomum camphora*, ZI SU YE *Perilla frutescens* var. *arguta*, occurs in many plants. **Ref:** 1, 2, 11, 658, 660, 5129, 5391, 5501.

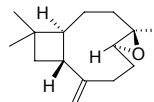
**3243 (6*R*,7*R*)-Caryophyllene oxide**

4,5-Epoxy-8(14)-caryophyllene;  $\beta$ -Caryophyllene epoxide [1139-30-6] C<sub>15</sub>H<sub>24</sub>O (220.36). [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -65° (*c* = 0.1, CHCl<sub>3</sub>). **Pharm:** Promotor of glutathione S-transferase (mus, liver and small intestine, prevents cancer); antifungal; antispasmodic (gpg, ileal contraction caused by histamine, IC<sub>50</sub> = 24µg/mL); antimalarial (*Plasmodium falciparum*, EC<sub>50</sub> = 345µmol/L); antibacterial (*Staphylococcus aureus*, MIC = 13.75µg/mL). **Source:** HUANG HAO *Artemisia scoparia* [Syn. *Artemisia capillaris* var. *scoparia*], XIANG

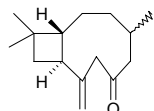
ZHI LENG SHAN *Abies balsamea* (essential oil extracted from leaves), XIONG RUI ZHUANG SHU WEI CAO *Salvia staminea*, YUN SHI *Caesalpinia decapetala* (leaf). **Ref:** 2, 660, 1089, 1808, 1809, 1810, 4456, 5391, 5400.

**3244 Caryophyllene oxide**

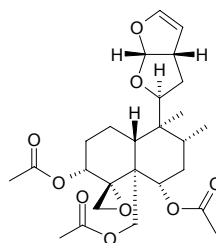
C<sub>15</sub>H<sub>24</sub>O (220.36). Colorless oil, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = ±0° (*c* = 0.93, CHCl<sub>3</sub>). **Pharm:** Platelet aggregation inhibitor (washed rabbit platelets, 50µg/mL, 100µmol/L AA-induced, InRt = 0.4%, control 50µmol/L Aspirin, InRt = 100%; 10µg/mL collagen-induced, InRt = 1.0%, 100µmol/L Aspirin, InRt = 4.9%; 0.1U/mL thrombin-induced, InRt = 4.6%, 100µmol/L Aspirin, InRt = 1.7%; 2ng/mL PAF-induced, InRt = 6.5%, 100µmol/L Aspirin, InRt = 2.1%)<sup>[5427]</sup>. **Source:** JI MEI YUN SHI *Caesalpinia pulcherrima* (leaf). **Ref:** 4394, 5427.

**3245 3(15)-Caryophyllen-5-one**

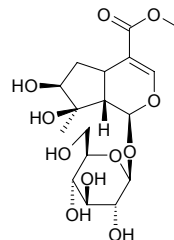
Buddledin E [68373-70-6] C<sub>15</sub>H<sub>24</sub>O (220.36). **Source:** DA YE ZUI YU CAO *Buddleja davidii*. **Ref:** 1521.

**3246 Caryoptin**

[50645-63-1] C<sub>26</sub>H<sub>36</sub>O<sub>9</sub> (492.57). **Pharm:** Insect antifeedant. **Source:** YOU<sup>(2)</sup> *Caryopteris divaricata*. **Ref:** 658.

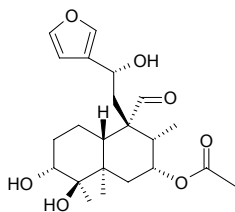
**3247 Caryoptoside**

C<sub>17</sub>H<sub>26</sub>O<sub>11</sub> (406.39). **Source:** XIAN SHENG MA XIAN HAO *Pedicularis muscicola*. **Ref:** 579.

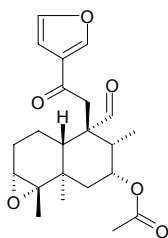


**3248 Cascarillin**

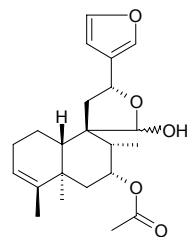
[10118-56-6]  $C_{22}H_{32}O_7$  (408.50). Pharm: Aromatic bitter. Source: KU XIANG SHU *Croton eluteria*. Ref: 658.

**3249 Cascarillin B**

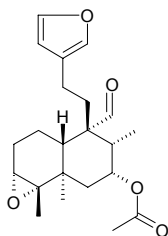
7 $\alpha$ -Acetoxy-3,4,15,16-diepoxy-12-oxo-cleroda-13(16),14-dien-20-al  $C_{22}H_{28}O_6$  (388.46). Yellow resin, mp 68–70°C,  $[\alpha]_D^{20} = -29.1^\circ$  ( $c = 1.65$ ,  $CHCl_3$ ). Source: KU XIANG SHU *Croton eluteria* (stem cortex). Ref: 5165.

**3250 Cascarillin C**

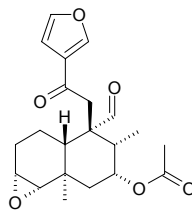
7 $\alpha$ -Acetoxy-15,16,12,20-diepoxy-20-hydroxy-cleroda-3,4,13(16),14-triene  $C_{22}H_{30}O_5$  (374.48). Clear yellowish resin, mp 60–62°C,  $[\alpha]_D^{20} = -47.6^\circ$  ( $c = 0.227$ ,  $CHCl_3$ ). Source: KU XIANG SHU *Croton eluteria* (stem cortex). Ref: 5165.

**3251 Cascarillin D**

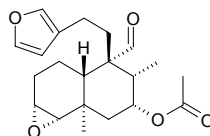
7 $\alpha$ -Acetoxy-3,4,15,16-diepoxy-cleroda-13(16),14-dien-20-al  $C_{22}H_{30}O_5$  (374.48). Clear yellowish resin, mp 64–66°C,  $[\alpha]_D^{20} = -23.6^\circ$  ( $c = 0.356$ ,  $CHCl_3$ ). Source: KU XIANG SHU *Croton eluteria* (stem cortex). Ref: 5165.

**3252 Cascarinin B**

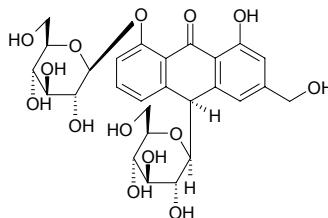
$C_{21}H_{26}O_6$  (374.44). Source: KU XIANG SHU *Croton eluteria*. Ref: 4552.

**3253 Cascarinin C**

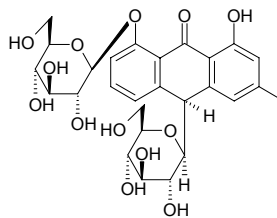
$C_{21}H_{28}O_5$  (360.45). Source: KU XIANG SHU *Croton eluteria*. Ref: 4552.

**3254 Cascaroside A**

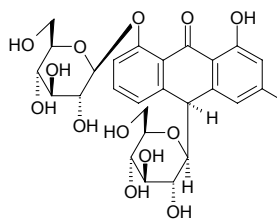
[53823-08-8]  $C_{27}H_{32}O_{14}$  (580.55). Pharm: Laxative. Source: BO XI SHU LI *Rhamnus purshiana*. Ref: 658.

**3255 Cascaroside C**

[52823-09-9]  $C_{27}H_{32}O_{13}$  (564.55). Source: ZANG BIAN DA HUANG *Rheum emodi* [Syn. *Rheum australe*] (root). Ref: 4273.

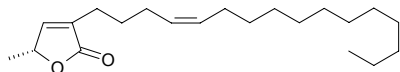
**3256 Cascaroside D**

$C_{27}H_{32}O_{13}$  (564.55). Source: ZANG BIAN DA HUANG *Rheum emodi* [Syn. *Rheum australe*] (root). Ref: 4273.

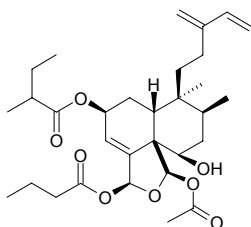


**3257 Casealactone**

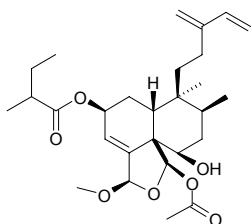
$C_{21}H_{36}O_2$  (320.52). Colorless oil,  $[\alpha]_D^{25} = +20.1^\circ$  ( $c = 0.15$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (P388,  $ED_{50} = 1.10\mu g/mL$ , control Mithramycin,  $ED_{50} = 0.58\mu g/mL$ ; A549,  $ED_{50} = 6.69\mu g/mL$ , Mithramycin,  $ED_{50} = 0.073\mu g/mL$ ; HT29,  $ED_{50} = 1.04\mu g/mL$ , Mithramycin,  $ED_{50} = 0.076\mu g/mL$ )<sup>[5421]</sup>. **Source:** MO ZHI JIAO GU CUI *Casearia membranacea* (stem). **Ref:** 5421.

**3258 Caseamembrin A**

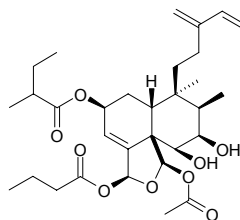
*rel*-(2*S*,5*R*,6*R*,8*S*,9*S*,10*R*,18*S*,19*R*)-19-Acetoxy-18-butanoyloxy-18,19-epoxy-6-hydroxy-2-(2-methylbutanoyloxy)cleroda-3,13(16),14-triene  $C_{31}H_{46}O_8$  (546.71). Yellowish oil,  $[\alpha]_D^{25} = +24.6^\circ$  ( $c = 0.07$ , MeOH); colorless viscous liquid,  $[\alpha]_D^{20} = +26^\circ$  ( $c = 0.135$ ,  $CH_2Cl_2$ ). **Pharm:** Cytotoxic (*in vitro*, PC3,  $IC_{50} = 1.5\mu mol/L$ , control Paclitaxel,  $IC_{50} = 0.016\mu mol/L$ ; Hep3B,  $IC_{50} = 2.3\mu mol/L$ , Paclitaxel,  $IC_{50} = 0.031\mu mol/L$ )<sup>[3010]</sup>; antitrypanosomal (Flagellate protozoan *Trypanosoma cruzi* causing Chagas' disease, MIC =  $0.59\mu g/mL$ )<sup>[4080]</sup>. **Source:** SHE XING LIN SHENG JIAO GU CUI *Casearia sylvestris* var. *lingua* (root cortex), MO ZHI JIAO GU CUI *Casearia membranacea* (leaf and twig: yield =  $0.0021\%dw$ )<sup>[3010]</sup>. **Ref:** 3010, 4080.

**3259 Caseamembrin B**

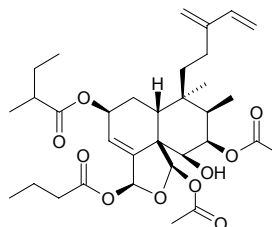
*rel*-(2*S*,5*R*,6*R*,8*S*,9*S*,10*R*,18*S*,19*R*)-19-Acetoxy-18,19-epoxy-6-hydroxy-18-methoxy-2-(2-methylbutanoyloxy)cleroda-3,13(16),14-triene  $C_{28}H_{42}O_7$  (490.64). Yellowish oil,  $[\alpha]_D^{25} = +62^\circ$  ( $c = 3.82$ , MeOH). **Pharm:** Cytotoxic (*in vitro*, PC3,  $IC_{50} = 22.2\mu mol/L$ , control Paclitaxel,  $IC_{50} = 0.016\mu mol/L$ ; Hep3B,  $IC_{50} = 18\mu mol/L$ , Paclitaxel,  $IC_{50} = 0.031\mu mol/L$ )<sup>[3010]</sup>. **Source:** MO ZHI JIAO GU CUI *Casearia membranacea* (leaf and twig: yield =  $0.0004\%dw$ ). **Ref:** 3010.

**3260 Caseamembrin C**

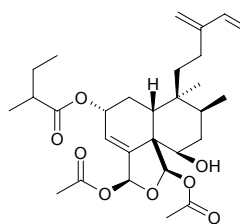
*rel*-(2*S*,5*R*,6*S*,7*R*,8*S*,9*S*,10*R*,18*S*,19*R*)-19-Acetoxy-18-butanoyloxy-18,19-epoxy-6,7-dihydroxy-2-(2-methylbutanoyloxy)cleroda-3,13(16),14-triene  $C_{31}H_{46}O_9$  (562.71). Yellowish oil,  $[\alpha]_D^{25} = +196^\circ$  ( $c = 6.6$ , MeOH). **Pharm:** Cytotoxic (*in vitro*, PC3,  $IC_{50} = 0.6\mu mol/L$ , control Paclitaxel,  $IC_{50} = 0.016\mu mol/L$ ; Hep3B,  $IC_{50} = 0.8\mu mol/L$ , Paclitaxel,  $IC_{50} = 0.031\mu mol/L$ )<sup>[3010]</sup>. **Source:** MO ZHI JIAO GU CUI *Casearia membranacea* (leaf and twig: yield =  $0.00035\%dw$ ). **Ref:** 3010.

**3261 Caseamembrin D**

*rel*-(2*S*,5*R*,6*S*,7*R*,8*S*,9*S*,10*R*,18*S*,19*R*)-7,19-Diacetoxy-18-butanoyloxy-18,19-epoxy-6-hydroxy-2-(2-methylbutanoyloxy)cleroda-3,13(16),14-triene  $C_{33}H_{48}O_{10}$  (604.74). Yellowish oil,  $[\alpha]_D^{25} = +268.5^\circ$  ( $c = 0.07$ , MeOH). **Pharm:** Cytotoxic (*in vitro*, PC3,  $IC_{50} = 2.4\mu mol/L$ , control Paclitaxel,  $IC_{50} = 0.016\mu mol/L$ ; Hep3B,  $IC_{50} = 1.9\mu mol/L$ , Paclitaxel,  $IC_{50} = 0.031\mu mol/L$ )<sup>[3010]</sup>. **Source:** MO ZHI JIAO GU CUI *Casearia membranacea* (leaf and twig: yield =  $0.0013\%dw$ ). **Ref:** 3010.

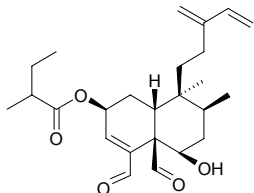
**3262 Caseamembrin E**

*rel*-(2*R*,5*R*,6*R*,8*S*,9*S*,10*R*,18*S*,19*R*)-18,19-Diacetoxy-18,19-epoxy-6-hydroxy-2-(2-methylbutanoyloxy)cleroda-3,13(16),14-triene  $C_{29}H_{42}O_8$  (518.65). Yellowish oil,  $[\alpha]_D^{25} = -131.3^\circ$  ( $c = 3.5$ , MeOH). **Pharm:** Cytotoxic (*in vitro*, PC3,  $IC_{50} = 2.9\mu mol/L$ , control Paclitaxel,  $IC_{50} = 0.016\mu mol/L$ ; Hep3B,  $IC_{50} = 2.6\mu mol/L$ , Paclitaxel,  $IC_{50} = 0.031\mu mol/L$ )<sup>[3010]</sup>. **Source:** MO ZHI JIAO GU CUI *Casearia membranacea* (leaf and twig: yield =  $0.0018\%dw$ ). **Ref:** 3010.

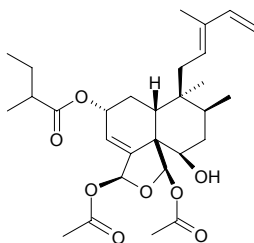


**3263 Caseamembrin F**

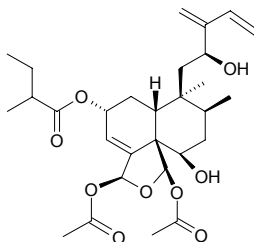
*rel*-(2*S*,5*R*,6*R*,8*S*,9*S*,10*R*,18*S*,19*R*)-6-Hydroxy-2-(2-methylbutanoyloxy)cleroda-3,13(16),14-triene-18,19-dicarboxaldehyde C<sub>25</sub>H<sub>36</sub>O<sub>5</sub> (416.56). Yellowish oil,  $[\alpha]_D^{25} = +29.1^\circ$  ( $c = 0.17$ , MeOH). **Pharm:** Cytotoxic (*in vitro*, PC3, IC<sub>50</sub> = 3.0 μmol/L, control Paclitaxel, IC<sub>50</sub> = 0.016 μmol/L; Hep3B, IC<sub>50</sub> = 14.7 μmol/L, Paclitaxel, IC<sub>50</sub> = 0.031 μmol/L). **Source:** MO ZHI JIAO GU CUI *Casearia membranacea* (leaf and twig: yield = 0.0022%dw). **Ref:** 3010.

**3264 Caseamembrol A**

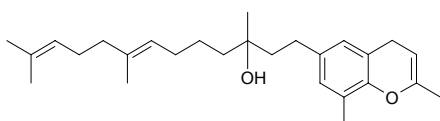
C<sub>29</sub>H<sub>42</sub>O<sub>8</sub> (518.65). Amorphous solid,  $[\alpha]_D^{25} = -8.3^\circ$  ( $c = 0.38$ , MeOH). **Pharm:** Cytotoxic (hmn PC3 tumor cells, IC<sub>50</sub> = 2.45 μmol/L, control Taxol, IC<sub>50</sub> = 0.16 μmol/L). **Source:** MO ZHI JIAO GU CUI *Casearia membranacea*. **Ref:** 4258.

**3265 Caseamembrol B**

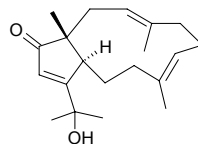
C<sub>29</sub>H<sub>42</sub>O<sub>9</sub> (534.65). Amorphous solid,  $[\alpha]_D^{25} = -11^\circ$  ( $c = 0.38$ , MeOH). **Pharm:** Cytotoxic (hmn PC3 tumor cells, IC<sub>50</sub> = 5.66 μmol/L, control Taxol, IC<sub>50</sub> = 0.16 μmol/L). **Source:** MO ZHI JIAO GU CUI *Casearia membranacea*. **Ref:** 4258.

**3266 Caseamemin**

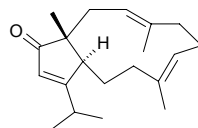
C<sub>27</sub>H<sub>40</sub>O<sub>2</sub> (396.62). Brownish oil,  $[\alpha]_D^{25} = +13.8^\circ$  ( $c = 0.28$ , CHCl<sub>3</sub>). **Pharm:** Cytotoxic (P<sub>388</sub>, ED<sub>50</sub> = 5.55 μg/mL, control Mithramycin, ED<sub>50</sub> = 0.58 μg/mL; A549, ED<sub>50</sub> > 50 μg/mL, Mithramycin, ED<sub>50</sub> = 0.073 μg/mL; HT29, ED<sub>50</sub> = 27.92 μg/mL, Mithramycin, ED<sub>50</sub> = 0.076 μg/mL). **Source:** MO ZHI JIAO GU CUI *Casearia membranacea* (stem). **Ref:** 5421.

**3267 Casearimene A**

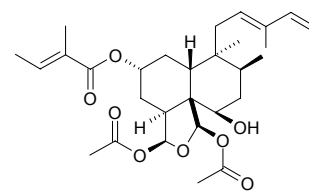
C<sub>20</sub>H<sub>30</sub>O<sub>2</sub> (302.46). Colorless needles (MeOH), mp 176–178°C,  $[\alpha]_D^{25} = +257.9^\circ$  ( $c = 0.48$ , CHCl<sub>3</sub>). **Pharm:** Cytotoxic (P<sub>388</sub>, ED<sub>50</sub> > 50 μg/mL, control Mithramycin, ED<sub>50</sub> = 0.58 μg/mL; A549, ED<sub>50</sub> > 50 μg/mL, Mithramycin, ED<sub>50</sub> = 0.073 μg/mL; HT29, ED<sub>50</sub> > 50 μg/mL, Mithramycin, ED<sub>50</sub> = 0.076 μg/mL). **Source:** MO ZHI JIAO GU CUI *Casearia membranacea* (stem). **Ref:** 5421.

**3268 Casearimene B**

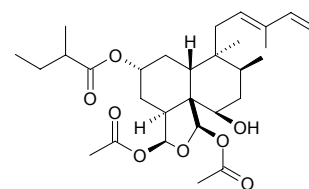
C<sub>20</sub>H<sub>30</sub>O (286.46). Colorless needles (MeOH), mp 108–109°C,  $[\alpha]_D^{25} = +144.9^\circ$  ( $c = 0.05$ , CHCl<sub>3</sub>). **Pharm:** Cytotoxic (P<sub>388</sub>, ED<sub>50</sub> > 50 μg/mL, control Mithramycin, ED<sub>50</sub> = 0.58 μg/mL; A549, ED<sub>50</sub> > 50 μg/mL, Mithramycin, ED<sub>50</sub> = 0.073 μg/mL; HT29, ED<sub>50</sub> > 50 μg/mL, Mithramycin, ED<sub>50</sub> = 0.076 μg/mL). **Source:** MO ZHI JIAO GU CUI *Casearia membranacea* (stem). **Ref:** 5421.

**3269 Casearinol A**

C<sub>29</sub>H<sub>42</sub>O<sub>8</sub> (518.65). **Pharm:** Anti-inflammatory (modulator of cytokine network: reduces expression of ICAM-1 and VCAM-1 in THP-1 hmn monocytes). **Source:** *Casearia guianensis*. **Ref:** 4416.

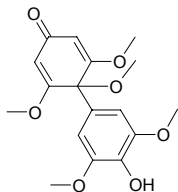
**3270 Casearinol B**

C<sub>29</sub>H<sub>44</sub>O<sub>8</sub> (520.67). **Pharm:** Anti-inflammatory (modulator of cytokine network: reduces expression of ICAM-1 and VCAM-1 in THP-1 hmn monocytes). **Source:** *Casearia guianensis*. **Ref:** 4416.

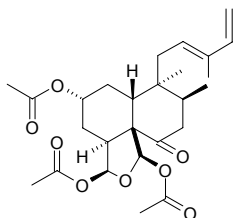


**3271 Casearinone**

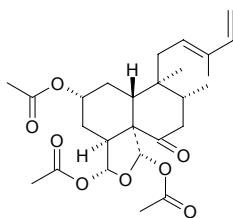
$C_{17}H_{20}O_7$  (336.34). Colorless needles (MeOH), mp 188–190°C,  $[\alpha]_D^{25} = 0^\circ$  ( $c = 0.22$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (P<sub>388</sub>, ED<sub>50</sub> = 10.00µg/mL, control Mithramycin, ED<sub>50</sub> = 0.58µg/mL; A549, ED<sub>50</sub> > 50µg/mL, Mithramycin, ED<sub>50</sub> = 0.073µg/mL; HT29, ED<sub>50</sub> > 50µg/mL, Mithramycin, ED<sub>50</sub> = 0.076µg/mL). **Source:** MO ZHI JIAO GU CUI *Casearia membranacea* (stem). **Ref:** 5421.

**3272 Casearinone A**

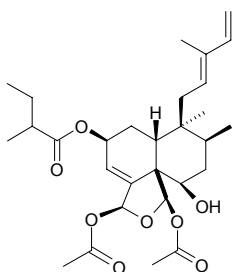
$C_{26}H_{36}O_8$  (476.57). **Pharm:** Anti-inflammatory (modulator of cytokine network: reduces expression of ICAM-1 and VCAM-1 in THP-1 hmn monocytes). **Source:** *Casearia guianensis*. **Ref:** 4416.

**3273 Casearinone B**

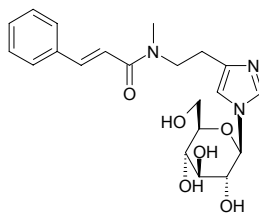
$C_{26}H_{36}O_8$  (476.57). **Pharm:** Anti-inflammatory (modulator of cytokine network: reduces expression of ICAM-1 and VCAM-1 in THP-1 hmn monocytes). **Source:** *Casearia guianensis*. **Ref:** 4416.

**3274 Casearlucin A**

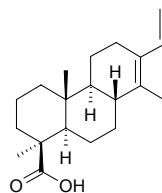
$C_{29}H_{42}O_8$  (518.65). **Pharm:** Cytotoxic (hmn PC3 tumor cells, IC<sub>50</sub> = 6.65µmol/L, control Taxol, IC<sub>50</sub> = 0.16µmol/L). **Source:** MO ZHI JIAO GU CUI *Casearia membranacea*. **Ref:** 4258.

**3275 Casimiroedine**

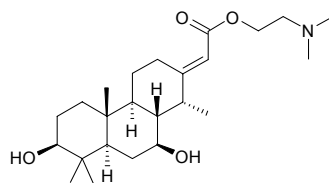
[5853-02-1]  $C_{21}H_{27}N_3O_6$  (417.47). **Pharm:** Cell growth regulator. **Source:** XIANG ROU GUO *Casimiroa edulis*. **Ref:** 658.

**3276 Cassa-13(14),15-dien-19-oic acid**

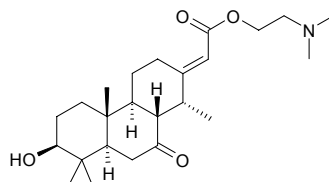
$C_{20}H_{30}O_2$  (302.46). Colorless needles, mp 175–177°C,  $[\alpha]_D^{23} = -95.5^\circ$  (EtOH). **Source:** MEI GUO KE YA SHU *Vouacapoua Americana* (wood). **Ref:** 4315.

**3277 Cassaidine**

[26296-41-3]  $C_{24}H_{41}NO_4$  (407.60). Prismatic crystals (acetone-ether), mp 139.5°C,  $[\alpha]_D^{20} = -98^\circ$  (ethanol),  $[\alpha]_D^{20} = -104^\circ$  (0.1mol/L HCl). **Pharm:** Cardiotonic; local anesthetic; LD<sub>50</sub> (anesthetic gpg iv) = (1.73±0.12)mg/kg. **Source:** JI NEI YA GE MU *Erythrophleum guineense*, XIANG YA HAI AN GE MU *Erythrophleum ivorense*, YE XIANG GE MU *Erythrophleum suaveolens*. **Ref:** 661.

**3278 Cassaine**

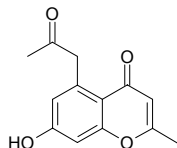
[468-76-8]  $C_{24}H_{39}NO_4$  (405.58). Lustering flocculus crystals (ether), mp 142.5°C,  $[\alpha]_D^{23} = -110.5^\circ$  ( $c = 1$ , ethanol). **Pharm:** Anesthetic; cardiotonic; LD<sub>50</sub> (anesthetic gpg iv) = (2.63±0.21)mg/kg. **Source:** JI NEI YA GE MU *Erythrophleum guineense*, XIANG YA HAI AN GE MU *Erythrophleum ivorense*. **Ref:** 661.



**3279 Cassiachromone**

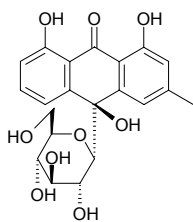
2-Methyl-5-acetyl-7-hydroxychromone [28955-30-8]  $C_{13}H_{12}O_4$  (232.24).

Colorless needles (MeOH), mp 209–210°C,  $[\alpha]_D = -113^\circ$ . Source: DA HUANG *Rheum officinale*, DA PENG TENG *Prana discifera*. Ref: 1437, 1521, 2504.

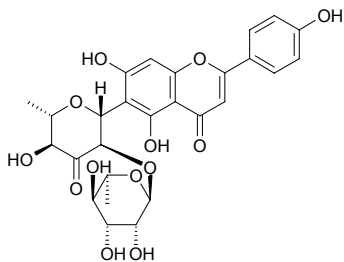
**3280 Cassialoin**

$C_{21}H_{22}O_9$  (418.40). Source: ZANG BIAN DA HUANG *Rheum emodi* [Syn.

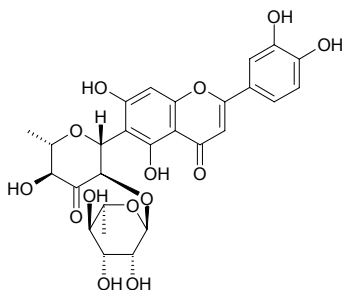
*Rheum australe*] (root). Ref: 4273.

**3281 Cassiaoccidentalin A**

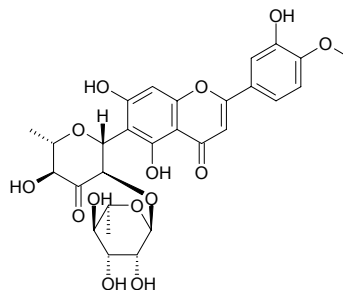
$C_{27}H_{28}O_{13}$  (560.52). Pale-yellow needles, mp 175°C (MeOH-H<sub>2</sub>O),  $[\alpha]_D = -80.1^\circ$  ( $c = 1$ , MeOH). Source: WANG JIANG NAN *Cassia occidentalis*. Ref: 2400.

**3282 Cassiaoccidentalin B**

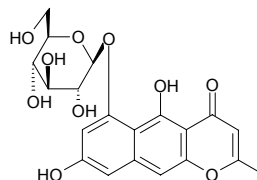
$C_{27}H_{28}O_{14}$  (576.52). Pale-yellow needles, mp 194°C (MeOH-H<sub>2</sub>O),  $[\alpha]_D = -63.6^\circ$  ( $c = 1$ , MeOH). Source: WANG JIANG NAN *Cassia occidentalis*. Ref: 2400.

**3283 Cassiaoccidentalin C**

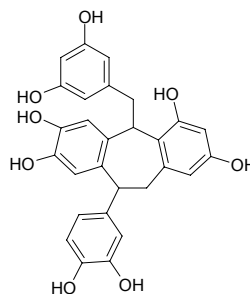
$C_{28}H_{30}O_{14}$  (590.54). Pale-yellow needles, mp 193°C (MeOH-H<sub>2</sub>O),  $[\alpha]_D = -55.6^\circ$  ( $c = 1$ , MeOH). Source: WANG JIANG NAN *Cassia occidentalis*. Ref: 2400.

**3284 Cassiaside**

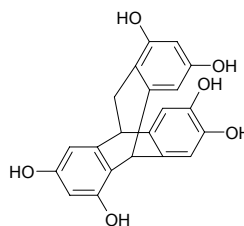
$C_{20}H_{20}O_{10}$  (420.38). Source: JUE MING ZI *Cassia tora*. Ref: 1521.

**3285 Cassigarol A**

10,11-Dihydro-2,4,7,8-tetrahydroxy-10-(3,4-dihydroxyphenyl)-5-[(3,5-dihydroxyphenyl)methyl]-5H-dibenzo[a,d]cycloheptene [106387-02-4]  $C_{28}H_{24}O_8$  (488.50). Pale-brown oil. Source: JIA LEI JUE MING *Cassia garrettiana* (heartwood). Ref: 4068.

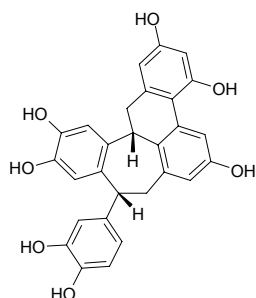
**3286 Cassigarol B**

10,11-Dihydro-5,10[1',2']benzeno-5H-dibenzo[a,d]cycloheptene-2,4,7,8,15,17-hexol [119117-76-9]  $C_{21}H_{16}O_6$  (364.36). Pale-brown oil. Source: JIA LEI JUE MING *Cassia garrettiana* (heartwood). Ref: 4069.

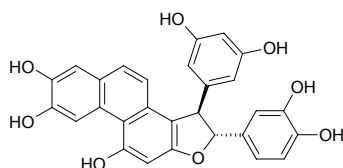


**3287 Cassigarol C**

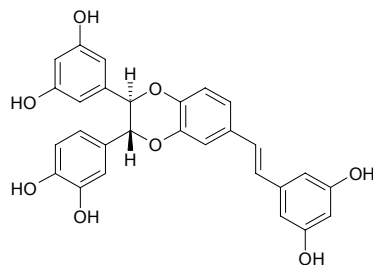
[144506-20-7] C<sub>28</sub>H<sub>22</sub>O<sub>7</sub> (470.48). Off-white powder, mp 240°C (dec). Source: JIA LEI JUE MING *Cassia garrettiana* (heartwood). Ref: 4070.

**3288 Cassigarol D**

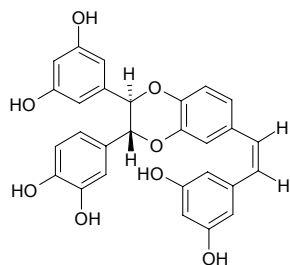
[144506-21-8] C<sub>28</sub>H<sub>20</sub>O<sub>8</sub> (484.47). Pale-brown oil. Source: JIA LEI JUE MING *Cassia garrettiana* (heartwood). Ref: 4070.

**3289 Cassigarol E**

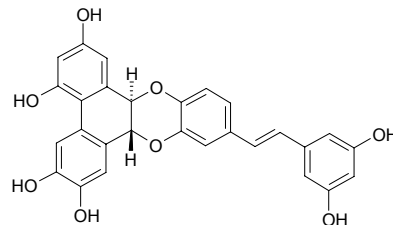
C<sub>28</sub>H<sub>22</sub>O<sub>8</sub> (486.48). Pharm: Antioxidant (superoxide anion scavenger (IC<sub>50</sub> = (11.49±0.18)μmol/L, control (+)-Catechin IC<sub>50</sub> = (3.67±0.14)μmol/L)<sup>[4514]</sup>. Source: MAO CI JIN JI ER *Caragana tibetica* (stem), JIA LEI JUE MING *Cassia garrettiana* (heartwood). Ref: 2234, 4514.

**3290 Cassigarol F**

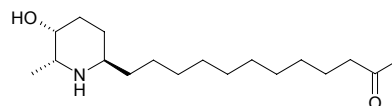
C<sub>28</sub>H<sub>22</sub>O<sub>8</sub> (486.48). Source: JIA LEI JUE MING *Cassia garrettiana* (heartwood). Ref: 2233, 2234.

**3291 Cassigarol G**

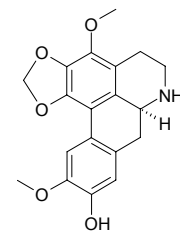
C<sub>28</sub>H<sub>20</sub>O<sub>8</sub> (484.47). Pharm: Antioxidant (superoxide anion scavenger (IC<sub>50</sub> = (4.89±0.13)μmol/L, control (+)-Catechin, IC<sub>50</sub> = (3.67±0.14)μmol/L)<sup>[4514]</sup>. Source: MAO CI JIN JI ER *Caragana tibetica* (stem), JIA LEI JUE MING *Cassia garrettiana* (heartwood). Ref: 2234, 4514.

**3292 (-)-Cassine**

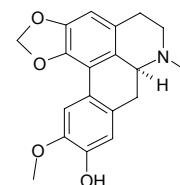
C<sub>18</sub>H<sub>35</sub>NO<sub>2</sub> (297.49). Pharm: Cytotoxic inactive (P<sub>388</sub>, IC<sub>50</sub> > 20μg/mL, control 5-FU, IC<sub>50</sub> = 0.99μg/mL; KB, IC<sub>50</sub> > 20μg/mL, Doxorubicin, IC<sub>50</sub> = 0.57μg/mL; BC-1, IC<sub>50</sub> > 20μg/mL, Doxorubicin, IC<sub>50</sub> = 0.21μg/mL); cytotoxic (brine shrimp lethality, IC<sub>50</sub> = 0.2μg/mL, control Monocrotophos, IC<sub>50</sub> = 0.24μg/mL). Source: ZHUANG GUAN FAN XIE *Senna spectabilis* (flower). Ref: 5480.

**3293 Cassyfiline**

Cassythine [4030-51-7] C<sub>19</sub>H<sub>19</sub>NO<sub>5</sub> (341.37). mp 217–219°C (dec). Pharm: Antitrypanosomal and cytotoxic (*Trypanosoma brucei brucei*, IC<sub>50</sub> = 6.0μmol/L, Suramin, IC<sub>50</sub> = 0.06μmol/L; hmn cervixcarcinoma cell HeLa, IC<sub>50</sub> = 15.2μmol/L)<sup>[4969]</sup>; tetanicum (animal model); Source: WU YE TENG *Cassytha filiformis*. Ref: 6, 658, 4969.

**3294 (+)-Cassythicine**

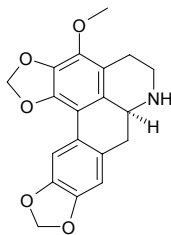
[5890-28-8] C<sub>19</sub>H<sub>19</sub>NO<sub>4</sub> (325.37). Pharm: Antibacterial; cytotoxic. Source: HEI HUA WU GEN TENG *Cassytha melantha*, WU MAO WU GEN TENG *Cassytha glabella*, YUAN HUA FAN LI ZHI *Annona glabra*. Ref: 658.



**3295 Cassythidine**

[6081-07-8] C<sub>19</sub>H<sub>17</sub>NO<sub>5</sub> (339.35). mp 206–207°C. Source: WU YE TENG

*Cassytha filiformis*. Ref: 6.

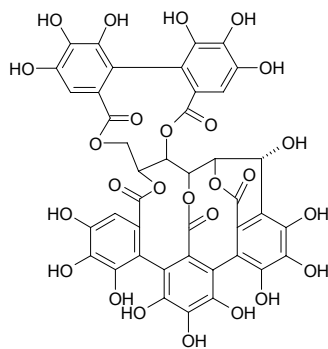
**3296 Castalagin**

[24312-00-3] C<sub>41</sub>H<sub>26</sub>O<sub>26</sub> (934.65). Yellowish amorphous powder, easily soluble in MeOH, Me<sub>2</sub>CO and H<sub>2</sub>O; colorless acicular crystals (water), mp 230°C, [α]<sub>D</sub> = –126.9° (c = 0.9, methanol:water = 3:7). Pharm:

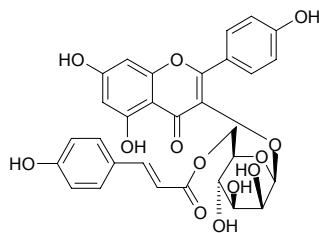
Antihypertensive (rat, iv, spontaneous hypertension); cytotoxic (malanotic carcinoma RPMI-7951, ED<sub>50</sub> = 0.79 μg/mL). Source: CU LIU GUO

*Hippophae rhamnoides*, FAN SHI LIU PI *Psidium guajava*, NING MENG AN YE *Eucalyptus citriodora*, TAO JIN NIANG *Rhodomyrtus tomentosa*.

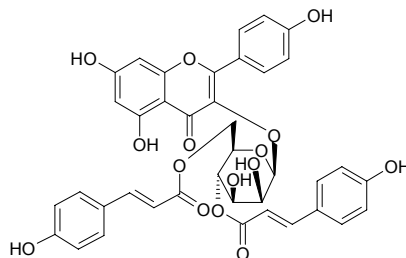
Ref: 429, 900.

**3297 Castanoside A**

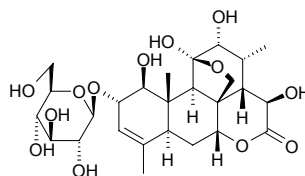
Kaempferol-3-*O*-[6"-(*E*)-*p*-coumaroyl]- $\alpha$ -*D*-mannopyranoside C<sub>30</sub>H<sub>26</sub>O<sub>13</sub> (594.53). Yellow grained powder, mp 247–249°C. Source: BAN LI *Castanea mollissima* (flower). Ref: 4842.

**3298 Castanoside B**

Kaempferol-3-*O*-[6",4"-di-(*E*)-*p*-coumaroyl]- $\alpha$ -*D*-mannopyranoside C<sub>39</sub>H<sub>32</sub>O<sub>15</sub> (740.68). Yellow powder, mp 235–238°C. Source: BAN LI *Castanea mollissima* (flower). Ref: 4842.

**3299 Casteloside B**

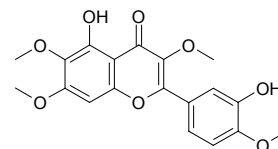
C<sub>26</sub>H<sub>38</sub>O<sub>13</sub> (558.58). Source: *Eurycoma harmandiana* (root). Ref: 5164.

**3300 Casticin**

Vitexicarpin [479-91-4] C<sub>19</sub>H<sub>18</sub>O<sub>8</sub> (374.35). Orange crystals (CHCl<sub>3</sub>–MeOH), mp 188–190°C, mp 188–189°C, mp 186–187°C, mp 183–184°C. Pharm:

Cytotoxic (*in vitro*, PC12, GI<sub>50</sub> = 0.114 μg/mL, control Cisplatin, GI<sub>50</sub> = 0.111 μg/mL; HCT116, GI<sub>50</sub> = 0.119 μg/mL, control Cisplatin, GI<sub>50</sub> = 0.794 μg/mL)<sup>[4623]</sup>; cytotoxic (*in vitro*, Col2, ED<sub>50</sub> = 12.7 μg/mL; hTERT-RPE1, ED<sub>50</sub> = 0.2 μg/mL; HUVEC, ED<sub>50</sub> = 0.6 μg/mL; KB, ED<sub>50</sub> = 0.2 μg/mL; HUVEC, ED<sub>50</sub> = 0.5 μg/mL; Lu1, ED<sub>50</sub> = 0.8 μg/mL)<sup>[4699]</sup>;

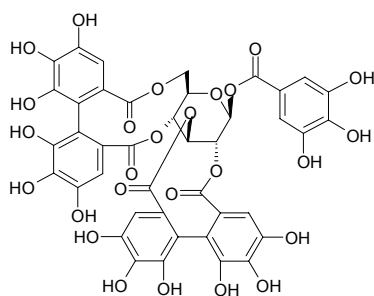
antineoplastic inactive (*in vivo* hollow fiber assay, 40 mg/kg; Lu1, KB, and LNCaP cells; *in vivo* P<sub>388</sub> leukemia model, 135 mg/kg)<sup>[4699]</sup>; antiviral. Source: DAN YE MAN JING ZI *Vitex rotundifolia* [Syn. *Vitex trifolia* var. *simplicifolia*] (dried ripe fruit: yield = 0.011% dw)<sup>[4623]</sup>, HUANG HAO *Artemisia scoparia* [Syn. *Artemisia capillaris* var. *scoparia*], HUANG HUA HAO *Artemisia annua*, HUANG HUA HAO *Artemisia annua* (seed), HUANG JING YE *Vitex negundo* (leaf: yield = 0.035% dw)<sup>[4699]</sup>, MAN JING ZI *Vitex trifolia* (dried ripe fruit: mean content of 5 origins = 0.126%)<sup>[5508]</sup>, MU<sup>(3)</sup> JU *Matricaria chamomilla* [Syn. *Matricaria recutita*], RI BEN JIN YAO *Chrysosplenium japonicum*, SHANG ZUO ZHOU JIN YAO *Chrysosplenium tosaense*, SA SHI MAO DI HUANG *Digitalis thapsii*. Ref: 2, 6, 562, 658, 660, 3435, 4623, 4699, 5508.



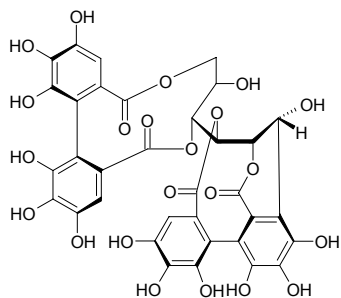


**3301 Casuarictin**

1-*O*-Galloylpedunculagin [79786-00-8] C<sub>41</sub>H<sub>28</sub>O<sub>26</sub> (936.66). **Pharm:** Antihepatotoxin (*in vitro*); antioxidant (SOD-like activity, EC<sub>50</sub> = 77.9 μmol/L, control Gallic acid, EC<sub>50</sub> = 31.7 μmol/L, *L*-Ascorbic acid, EC<sub>50</sub> = 34.6 μmol/L)<sup>[3408]</sup>; antioxidant (DPPH scavenger, EC<sub>50</sub> = 0.40 μmol/L, control Gallic acid, EC<sub>50</sub> = 5.88 μmol/L, *L*-Ascorbic acid, EC<sub>50</sub> = 6.25 μmol/L)<sup>[3408]</sup>. **Source:** BAI SHAO *Paeonia albiflora* [Syn. *Paeonia lactiflora*] (fresh fruit: yield = 0.047%fw)<sup>[4695]</sup>, DING XIANG *Syzygium aromaticum* [Syn. *Eugenia caryophyllata*], DUO ZHI AN *Eucalyptus viminalis*, FAN SHI LIU GAN *Psidium guajava*, HU TAO REN *Juglans regia*, *Quercus* sp., *Rubus* sp. **Ref:** 2, 658, 3408, 4695.

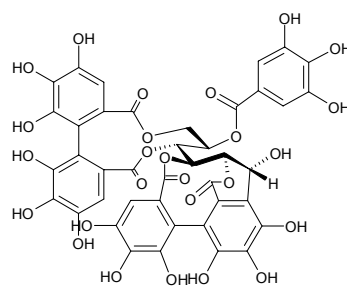
**3302 Casuariin**

5-Desgalloyl stachyurin [79786-04-2] C<sub>34</sub>H<sub>24</sub>O<sub>22</sub> (784.56). Brownish amorphous powder, easily soluble in MeOH and Me<sub>2</sub>CO. **Source:** BAI SHAO *Paeonia albiflora* [Syn. *Paeonia lactiflora*] (fresh fruit: yield = 0.010%fw)<sup>[4695]</sup>, TAO JIN NIANG *Rhodomyrtus tomentosa*. **Ref:** 429, 4695.

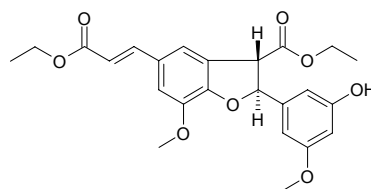
**3303 Casuarinin**

[79786-01-9] C<sub>41</sub>H<sub>28</sub>O<sub>26</sub> (936.66). Purity > 98%, [α]<sub>D</sub><sup>28</sup> = +40.2°. **Pharm:** Antioxidant (rbt, erythrocyte membrane ghost system); antioxidant (macrosome of liver cells in rat, inhibits lipid peroxidation); antioxidant (SOD-like activity, EC<sub>50</sub> = 57.7 μmol/L, control Gallic acid, EC<sub>50</sub> =

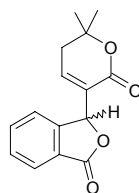
31.7 μmol/L, *L*-Ascorbic acid, EC<sub>50</sub> = 34.6 μmol/L)<sup>[3408]</sup>; antioxidant (DPPH free radical scavenger, EC<sub>50</sub> = 0.78 μmol/L, control Gallic acid, EC<sub>50</sub> = 5.88 μmol/L, *L*-Ascorbic acid, EC<sub>50</sub> = 6.25 μmol/L)<sup>[3408]</sup>; cytotoxic (antiproliferative, *in vitro*, MCF7, 10 μmol/L, InRt = 72.3%; IC<sub>50</sub> = 6.04 μmol/L)<sup>[5070]</sup>; antioxidant (Protects cultured MDCK Cells from H<sub>2</sub>O<sub>2</sub>-Induced oxidative stress and DNA oxidative damage)<sup>[4072]</sup>. **Source:** A JIANG LAN REN *Terminalia arjuna* (bark), DUO ZHI AN *Eucalyptus viminalis*, FAN SHI LIU GAN *Psidium guajava*, FEI YUE GUO *Feijoa sellowiana*, HU TAO REN *Juglans regia*, LU LU TONG *Liquidambar formosana* [Syn. *Liquidambar taiwaniana*], PU<sup>(3)</sup> TAO *Syzygium jambos*. **Ref:** 658, 3408, 4072, 5070.

**3304 Catalpafurxin**

2(*S*)-(3'-Hydroxy-5'-methoxy)-benz-3(*S*)-ethoxycarbonyl-6-*trans*-ethyl acrylate-8-methoxy-benzofuran C<sub>24</sub>H<sub>26</sub>O<sub>8</sub> (442.47). White needles (CHCl<sub>3</sub>), mp 145~147°C. **Source:** ZI SHI *Catalpa ovata*. **Ref:** 4597.

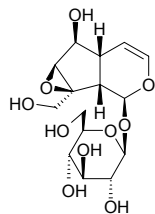
**3305 Catalpalactone**

[1585-69-9] C<sub>15</sub>H<sub>14</sub>O<sub>4</sub> (258.28). mp 105~106°C, 110~111°C. **Source:** ZI MU *Catalpa ovata* (the compound was isolated from the plant by M.Pailer, et al. in 1956)<sup>[5505]</sup>. **Ref:** 6, 5505.



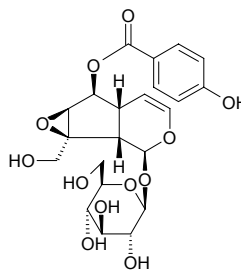
### 3306 Catalpol

Catalpinoside [2415-24-9]  $C_{15}H_{22}O_{10}$  (362.34). mp 207–209°C (dec). **Pharm:** Antitrypanosomal (*Trypanosoma brucei rhodesiense*,  $IC_{50} = 54.8\mu\text{g/mL}$ , control Melarsoprol,  $IC_{50} = 0.0033\mu\text{g/mL}$ ; *Trypanosoma cruzi*,  $IC_{50} > 90\mu\text{g/mL}$ , control Benznidazole,  $IC_{50} = 0.70\mu\text{g/mL}$ )<sup>[5251]</sup>; antileishmanial (*Leishmania donovani*,  $IC_{50} = 10.4\mu\text{g/mL}$ , control Miltefosine,  $IC_{50} = 0.32\mu\text{g/mL}$ )<sup>[5251]</sup>; antimalarial (*Plasmodium falciparum*,  $IC_{50} > 50\mu\text{g/mL}$ , control Artemisinin,  $IC_{50} = 0.002\mu\text{g/mL}$ )<sup>[5251]</sup>; cytotoxic (L6 cells,  $IC_{50} > 90\mu\text{g/mL}$ , control Podophyllotoxin,  $IC_{50} = 0.0075\mu\text{g/mL}$ )<sup>[5251]</sup>; diuretic; laxative (mus,  $ED_{50} = 0.32\sim 0.39\text{g/kg}$ ). **Source:** CHA RU SHI WAN CUO *Asystasia intrusa*, FEI LV BIN SHI ZI *Gmelina philippensis* (aerial parts), GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *Huechingensis*] (tuberoid: content scope of 3 origins = 0.02%–1.74%, mean content = 0.80%<sup>[5508]</sup>), JIAN QIU LUO MAO RUI HUA *Verbascum lychnites*, LIN PIAN XUAN SHEN *Scrophularia lepidota* (root), MAO PAO TONG *Paulownia tomentosa*, MAO RUI HUA *Verbascum thapsus*, SHU CE JIN ZHAN HUA *Adonis sutchuenensis*, SHU DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*] (tuberoid: content scope of 2 origins = <0.01%–0.04%, mean content = 0.02%)<sup>[5508]</sup>, XIAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*] (tuberoid: content scope of 18 origins = 0.774%–4.920%, mean content = 2.135%)<sup>[5508]</sup>, XI ZANG HU HUANG LIAN *Picrorhiza scrophulariiflora*, ZI MU *Catalpa ovata* (stem cortex). **Ref:** 1, 2, 660, 2589, 3954, 4416, 5251, 5501, 5508.



### 3307 Catalposide

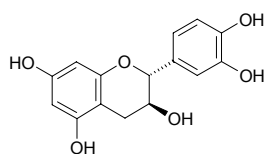
Catalpin [6736-85-2]  $C_{22}H_{26}O_{12}$  (482.45). **Pharm:** Diuretic; insect antifeedant (*Lymantria disper*); pesticide (lepidopteran *Ceratomia catalpae*); laxative (mus,  $ED_{50} > 0.32\sim 0.39\text{g/kg}$ ); anti-inflammatory (modulator of cytokine network: prevents production of TNF- $\alpha$ , IL-1b and IL-6 in LPS-activated macrophages ( $IC_{50} \approx 50\text{ng/mL}$ ), possibly via NF- $\kappa$ B inhibition)<sup>[4416]</sup>. **Source:** A LA BO PO PO NA *Veronica persica* (aerial parts), HUANG JIN SHU *Catalpa speciosa*, JIAN QIU LUO MAO RUI HUA *Verbascum lychnites*, MEI GUO ZI *Catalpa bignonioides*, ZI BAI PI *Catalpa ovata*, ZI SHI *Catalpa ovata*, ZI YE *Catalpa ovata*. **Ref:** 1, 6, 4211, 4416.



### 3308 (+)-Catechin

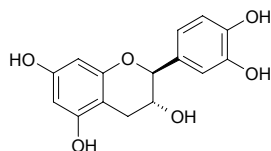
Catechic acid; Catechuic acid; Cyanidol [154-23-4]  $C_{15}H_{14}O_6$  (290.28). Pale-yellow powder, mp 95–98°C,  $[\alpha]_D^{20} = 17.5^\circ$  ( $c = 0.3$ ,  $\text{CHCl}_3$ ). **Pharm:** Antineoplastic; cytotoxic (cyclooxygenase-1 inhibitor)<sup>[5038]</sup>; antiviral; antibacterial; antiarrhythmic (blocks production of indole in large intestine); antiulcerative (rat, gastric ulcer); antihepatotoxin; hemostatic; similar action with vitamin P; inhibitory activity against NFAT transcription ( $IC_{50} = (22.4\pm 0.50)\mu\text{mol/L}$ , positive control Cyclosporin A,  $IC_{50} = (0.29\pm 0.01)\mu\text{mol/L}$ )<sup>[2536]</sup>; antioxidant (DPPH scavenger, for  $40\mu\text{mol/L}$  DPPH radical,  $SC_{50} = 5.9\mu\text{mol/L}$ )<sup>[4378]</sup>; antioxidant (inhibits free-radical induced lysis of rat red blood cells and exhibits strong and dose-dependent protection of cell membrane)<sup>[5341]</sup>; antioxidant (superoxide anion scavenger  $IC_{50} = (3.67\pm 0.14)\mu\text{mol/L}$ )<sup>[4514]</sup>;  $\beta$ -hexosaminidase inhibitor inactive (RBL-2H3 cells, inhibits release of  $\beta$ -hexosaminidase,  $100\mu\text{mol/L}$ ,  $\text{InRt} = (2.1\pm 2.5)\%$ )<sup>[4304]</sup>; inhibits cancer cell invasion (MM1 cells, *in vitro*,  $10\mu\text{g/mL}$ ,  $\text{InRt} = 34.0\%$ )<sup>[4329]</sup>; bone marrow cell proliferation promotor ( $1\sim 100\text{mg/mL}$ , promotes proliferation of cultured bone marrow cells, stimulates formation of myeloid colonies and enhances the effect of IL-3 to increase the number of colony forming-units in culture (CFU-c))<sup>[5390]</sup>; bone marrow cell proliferation promoter (*ex vivo*, model mouse of decreasing bone marrow functions, orally  $100\text{mg}/(\text{kg}\cdot\text{d})$ , stimulates IL-3-induced CFU-c formation of bone marrow cells)<sup>[5390]</sup>; antioxidant (DPPH scavenger, potent activity)<sup>[5232]</sup>; cytotoxic inactive (MCF, HM02, HEPG2)<sup>[5232]</sup>. **Source:** A LA BO JIAO JIN HE HUAN *Acacia nilotica*, BAI GUO *Ginkgo biloba*, BING LANG *Areca catechu*, CHA YE *Camellia sinensis* [Syn. *Thea sinensis*], CU LIU GUO *Hippophae rhamnoides*, DA ZAO *Ziziphus jujuba*, ER CHA GOU TENG *Uncaria gambir* (dried decocted extract of trunk: content scope of 10 origins = 22.4%–33.0%; mean content = 25.9%)<sup>[5508]</sup>, HAI ER CHA *Acacia catechu* (dried decocted extract of trunk: content scope of 8 origins = 11.6%–21.0%; mean content = 17.2%)<sup>[5508]</sup>, HEI ZI LI GUO JI SHENG *Scurrula atropurpurea*, HONG NAN PI *Machilus thunbergii*, HU ZHANG *Polygonum cuspidatum*, HUA CHA BIAO *Ribes fasciculatum* var. *chinense*, HUANG HUA ER LIU *Salix caprea*, JIAN PU ZHAI GU KE *Erythroxylum cambodianum* (aerial parts), KUN MING SHAN HAI TANG *Tripterygium hypoglaucom*, LUO BU MA *Apocynum venetum*, MAO GUO QI *Acer*

*nikoense* (stem cortex), MI HOU LI *Actinidia arguta*, MIAN MAO GOU TENG *Uncaria lanosa*, NIU XI XI *Rumex patientia*, PU<sup>(2)</sup> TAO *Vitis vinifera* (cell culture), RI BEN KU LIAN *Melia azedarach* var. *japonica*, SHA ZAO *Elaeagnus angustifolia*, SHAN YING TAO *Prunus tomentosa*, SUO LA MU *Salacia prinooides* [Syn. *Salacia chinensis*] (stem), TANG GU TE DA HUANG *Rheum tanguticum* (stem and rhizome: content = 0.79%)<sup>[5508]</sup>, TAO REN *Prunus persica*, XIAN HE CAO *Agrimonia pilosa* var. *japonica*, ZANG BIAN DA HUANG *Rheum emodi* [Syn. *Rheum australe*] (stem and rhizome: content = 0.22%)<sup>[5508]</sup>, ZHANG YE DA HUANG *Rheum palmatum* (stem and rhizome: content = 2.01%)<sup>[5508]</sup>, ZONG LV PI *Trachycarpus fortunei* (petiole and fibre of sheath, roasted petiole: mean content of 5 origins = 0.334%)<sup>[5508]</sup>, occurs in many plants. Ref: 1, 2, 6, 612, 2536, 4186, 4304, 4329, 4378, 4461, 4514, 5038, 5232, 5375, 5390, 5341, 5501, 5508.



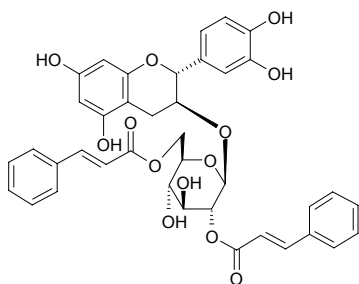
### 3309 (-)-Catechin

C<sub>15</sub>H<sub>14</sub>O<sub>6</sub> (290.28). **Pharm:** Anti-HIV (inhibits HIV replication, H9 Lymphocytic Cells, IC<sub>50</sub> (concentration that inhibits uninfected H9 cell growth by 50%) > 25µg/mL, EC<sub>50</sub> = 14.32µg/mL, TI = 1.75µg/mL, control AZT, IC<sub>50</sub> = 500µg/mL, EC<sub>50</sub> = 0.0007µg/mL, TI = 737000)<sup>[4267]</sup>. **Source:** NAN TOU QIU HAI TANG *Begonia nantoensis* (rhizome). Ref: 4267.



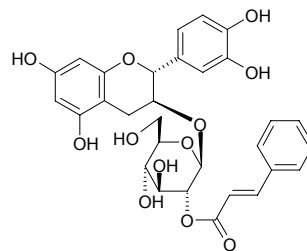
### 3310 (+)-Catechin-3-O-β-D-gluc(2,6-bis-cinnamoyl)-pyranoside

C<sub>39</sub>H<sub>36</sub>O<sub>13</sub> (712.71). Yellowish powder, [α]<sub>D</sub><sup>22</sup> = +34.5° (c = 0.035, MeOH). **Source:** SAN XING HUA XU YIN JIA *Inga umbellifera* (young leaf). Ref: 3757.



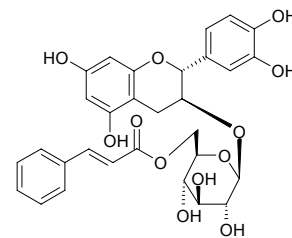
### 3311 (+)-Catechin-3-O-β-D-gluc(2-cinnamoyl)-pyranoside

C<sub>30</sub>H<sub>30</sub>O<sub>12</sub> (582.57). Yellowish powder, [α]<sub>D</sub><sup>22</sup> = -39.0° (c = 0.013, MeOH). **Source:** SAN XING HUA XU YIN JIA *Inga umbellifera* (young leaf). Ref: 3757.



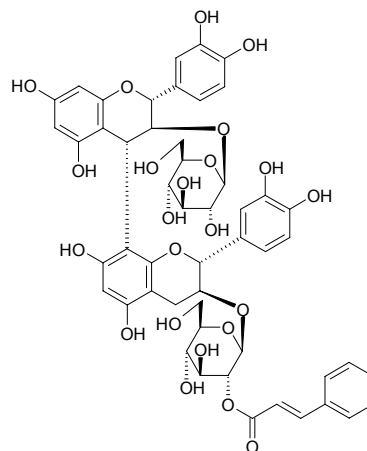
### 3312 (+)-Catechin-3-O-β-D-gluc(6-cinnamoyl)-pyranoside

C<sub>30</sub>H<sub>30</sub>O<sub>12</sub> (582.57). Pinkish powder, [α]<sub>D</sub><sup>22</sup> = +44.1° (c = 0.012, MeOH). **Source:** SAN XING HUA XU YIN JIA *Inga umbellifera* (young leaf). Ref: 3757.



### 3313 Catechin-3-O-β-D-glucopyranosyl-(4α→8)-catechin-3-O-β-D-gluc(2-cinnamoyl)pyranoside

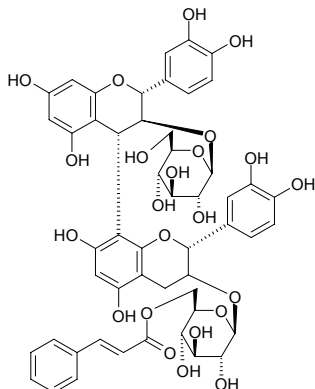
C<sub>51</sub>H<sub>52</sub>O<sub>23</sub> (1032.97). White powder, [α]<sub>D</sub><sup>22</sup> = -56.3° (c = 0.0103, MeOH). **Source:** SAN XING HUA XU YIN JIA *Inga umbellifera* (young leaf). Ref: 3757.



**3314 Catechin-3-O-β-D-glucopyranosyl-(4α→8)-epicatechin-3-O-β-D-gluco(6-cinnamoyl)pyranoside**

$C_{51}H_{52}O_{23}$  (1032.97). White powder,  $[\alpha]_D^{22} = -76.7^\circ$  ( $c = 0.0113$ , MeOH).

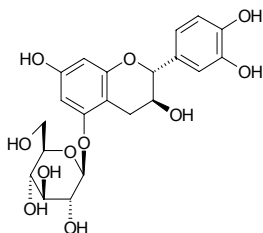
Source: SAN XING HUA XU YIN JIA *Inga umbellifera* (young leaf). Ref: 3757.



**3315 (+)-Catechin-5-O-glucoside**

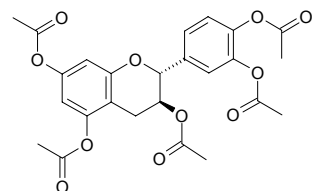
[88126-53-8]  $C_{21}H_{24}O_{11}$  (452.42). Source: DA HUANG *Rheum officinale*, HU

ZHANG *Polygonum cuspidatum*, TANG GU TE DA HUANG *Rheum tanguticum*, ZHANG YE DA HUANG *Rheum palmatum*. Ref: 2, 660, 4186.



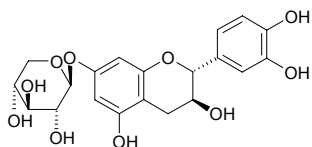
**3316 (+)-Catechin-pentaacetate**

$C_{25}H_{24}O_{11}$  (500.46). Source: BAI GUO *Ginkgo biloba*. Ref: 2.



**3317 Catechin 7-O-β-D-xyloside**

[42830-48-8]  $C_{20}H_{22}O_{10}$  (422.39). Pharm: Feeding irritant (*Scolytus multisetatus*). Source: MEI ZHOU YU *Ulmus americana*. Ref: 658.



**3318 Catechol**

1,2-Benzenediol [120-80-9]  $C_6H_6O_2$  (110.11). mp 105°C, bp 240°C. Pharm:

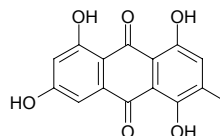
Anticonvulsant; antifungal (dermatophyte, *Candida albicans*); antiseptic; uterine stimulant; intestinal smooth muscle stimulant. Source: DA ZAO *Ziziphus jujuba*, DENG ZHAN XI XIN *Erigeron breviscapus*, ER CHA GOU TENG *Uncaria gambir*, HE ZI *Terminalia chebula*, LIAN XIANG SHU *Cercidiphyllum japonicum* var. *sinense*, LIAN ZI *Nelumbo nucifera*, LIANG YE HUA PI *Betula luminifera*, PU<sup>(2)</sup> TAO *Vitis vinifera*, SI GUA ZI *Luffa cylindrica*, TAO *Prunus persica*, XI FAN LIAN *Passiflora caerulea*, XIANG SI CAO *Conyza bonariensis* [Syn. *Erigeron bonariensis*; *Erigeron linifolius*; *Erigeron crispus*]. Ref: 1, 2, 6.



**3319 Catenarin**

$C_{15}H_{10}O_6$  (286.24). Pharm: Cytotoxic inactive (*in vitro*, HeLa, Vero, K562,

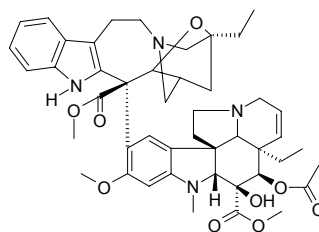
Raji, Wish, and Calu1 tumor cell lines,  $IC_{50} > 100\mu\text{mol/L}$ )<sup>[3057]</sup>. Source: YI HE GUO *Ventilago leiocarpa* (stem). Ref: 3057.



**3320 Catharanthamine**

[78779-58-5]  $C_{46}H_{56}N_4O_9$  (808.98). Source: CHANG CHUN HUA

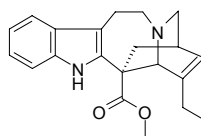
*Catharanthus roseus* [Syn. *Vinca rosea*; *Lochnera rosea*]. Ref: 2.

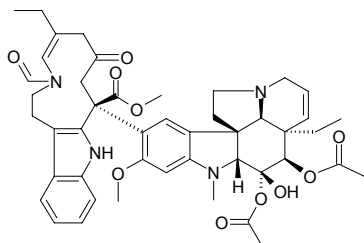
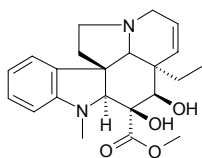
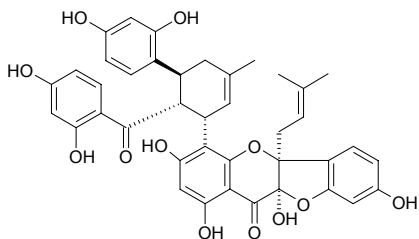
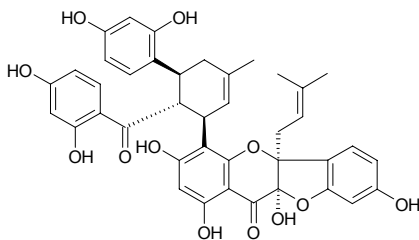
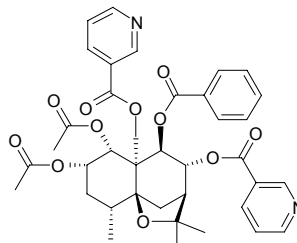
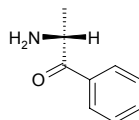
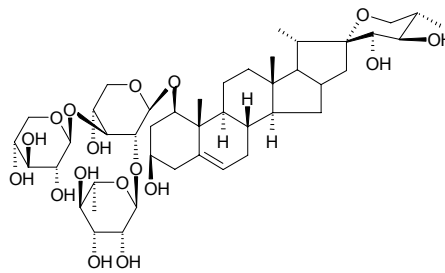
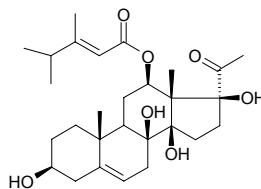


**3321 Catharanthine**

(+)-Catharanthine [2468-21-5]  $C_{21}H_{24}N_2O_2$  (336.44). mp (+) 126~128°C.

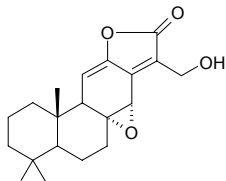
Pharm: Hypoglycemic. Source: CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochnera rosea*], CHANG YE CHANG CHUN HUA *Catharanthus longifolius* (whole herb: content = 0.0914%<sup>[5508]</sup>), LUAN YUAN CHANG CHUN HUA *Catharanthus ovalis*. Ref: 1, 2, 5, 5508.



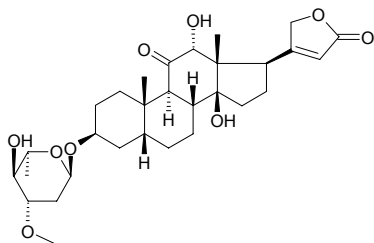
**3322 Catharine**[1355-31-3] C<sub>46</sub>H<sub>54</sub>N<sub>4</sub>O<sub>10</sub> (822.96). Source: CHANG CHUN HUA*Catharanthus roseus* [Syn. *Vinca rosea*; *Lochera rosea*]. Ref: 2.**3323 Catharosine**[2564-23-0] C<sub>22</sub>H<sub>28</sub>N<sub>2</sub>O<sub>4</sub> (384.48). Source: CHANG CHUN HUA*Catharanthus roseus* [Syn. *Vinca rosea*; *Lochera rosea*]. Ref: 2.**3324 Cathayanon A**C<sub>40</sub>H<sub>36</sub>O<sub>12</sub> (708.73). Pale yellow crystals (CH<sub>3</sub>OH), mp 180–181°C (dec),[α]<sub>D</sub><sup>19</sup> = –193.9° (c = 0.12, MeOH). Pharm: Cytotoxic (cell adhesion inhibitor, adhesion of HL-60 cell to BAEC, 10 μmol/L, InRt = 44.72%). Source: HUA SANG *Morus cathayana* (root cortex). Ref: 5169.**3325 Cathayanon B**C<sub>40</sub>H<sub>36</sub>O<sub>12</sub> (708.73). Yellow powder, [α]<sub>D</sub><sup>19</sup> = –733.7° (c = 0.18, MeOH).Pharm: Cytotoxic (cell adhesion inhibitor, adhesion of HL-60 cell to BAEC, 10 μmol/L, InRt = 39.02%). Source: HUA SANG *Morus cathayana* (root cortex). Ref: 5169.**3326 Catheduline E<sub>2</sub>**Cathedulin E<sub>2</sub> [61231-06-9] C<sub>38</sub>H<sub>40</sub>N<sub>2</sub>O<sub>11</sub> (700.75). Source: QIAO CHA*Catha edulis*. Ref: 658.**3327 D-Cathinone**[80096-54-4] C<sub>9</sub>H<sub>11</sub>NO (149.11). Pharm: Anorexic; CNS stimulant. Source:QIAO CHA *Catha edulis*, KE SHI MEI DENG MU *Maytenus krukovii*. Ref: 658.**3328 Caudaside A**C<sub>44</sub>H<sub>70</sub>O<sub>17</sub> (871.04). White powder, mp 156–157°C. Source: HU YAN WAN NIAN QING *Ornithogalum caudatum*. Ref: 839.**3329 Caudatin**C<sub>28</sub>H<sub>42</sub>O<sub>7</sub> (490.64). mp 158–160°C, 190–195°C. Source: BAI SHOU WU *Cynanchum bungei*. Ref: 6.

**3330 Caudicifolin**

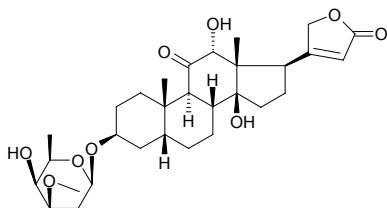
[65388-16-1] C<sub>20</sub>H<sub>26</sub>O<sub>4</sub> (330.43). Colorless needles. Source: DA GUO DA JI *Euphorbia wallichii* (root). Ref: 4585.

**3331 Caudoside**

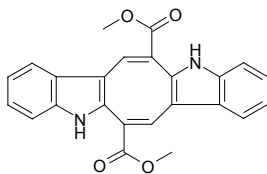
[464-76-6] C<sub>30</sub>H<sub>44</sub>O<sub>9</sub> (548.68). mp 249~252°C. Source: YANG JIAO AO ZI *Strophanthus divaricatus*. Ref: 6.

**3332 Caudostroside**

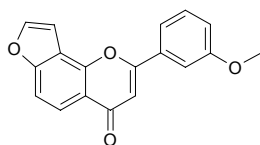
C<sub>30</sub>H<sub>44</sub>O<sub>9</sub> (548.68). Source: YANG JIAO AO ZI *Strophanthus divaricatus*. Ref: 6.

**3333 Caulerpin**

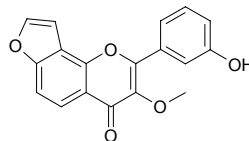
C<sub>24</sub>H<sub>18</sub>N<sub>2</sub>O<sub>4</sub> (398.42). Orange red solid, mp 316~318°C. Source: RUAN GU ZAO *Chondria armata* [Syn. *Lophura armata*]. Ref: 5080.

**3334 Cauliflorin A**

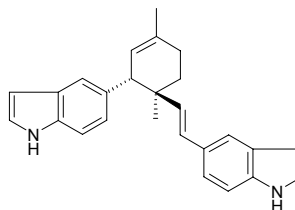
Pongol methyl ether C<sub>18</sub>H<sub>12</sub>O<sub>4</sub> (292.29). Colorless needles, mp 170~171°C; yellow powder. Source: GAN HUA DOU *Fordia cauliflora*, HONG E JI XUE TENG *Millettia erythrocalyx* (stem cortex: yield = 0.00075%dw). Ref: 2456, 4624.

**3335 Cauliflorin B**

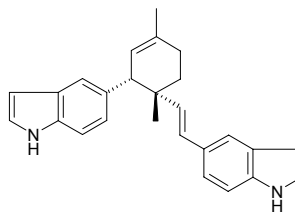
3'-Hydroxy,3-methoxy furo[8,7:4'',5'']flavone C<sub>18</sub>H<sub>12</sub>O<sub>5</sub> (308.29). Yellow needles, mp 182~183°C; white crystals (DMSO), mp 188°C. Source: GAN HUA DOU *Fordia cauliflora*, SHUI LIU DOU *Pongamia pinnata* (fruit). Ref: 2456, 3767.

**3336 Caulindole A**

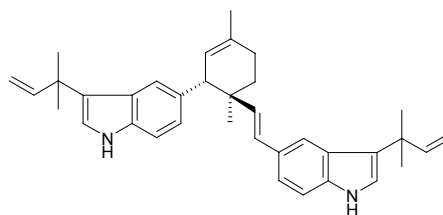
(3,4-*trans*)-3-(5'-Indolyl)-1,4-dimethyl-4-[ethyl-2-(5''-indolyl)enyl]-cyclohex-1-ene C<sub>26</sub>H<sub>26</sub>N<sub>2</sub> (366.51). Yellow oil, [ $\alpha$ ]<sub>D</sub> = +13.95° (c = 0.17, CHCl<sub>3</sub>). Source: JING SHENG HUA AI SUO LUO NA *Isolona cauliflora* (root cortex). Ref: 3755.

**3337 Caulindole B**

(3,4-*cis*)-3-(5'-Indolyl)-1,4-dimethyl-4-[ethyl-2-(5''-indolyl)enyl]-cyclohex-1-ene C<sub>26</sub>H<sub>26</sub>N<sub>2</sub> (366.51). Yellow oil. Source: JING SHENG HUA AI SUO LUO NA *Isolona cauliflora* (root cortex). Ref: 3755.

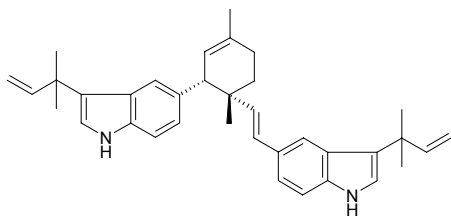
**3338 Caulindole C**

(3,4-*trans*)-3-[3'-(1''',1'''-Dimethyl-2'''-propenyl)-5'-indolyl]-1,4-dimethyl-4-[2-[3''-(1''',1'''-dimethyl-2'''-propenyl)-5''-indolyl]-ethyl-2-enyl]-cyclohex-1-ene C<sub>36</sub>H<sub>42</sub>N<sub>2</sub> (502.75). Yellow gum. Source: JING SHENG HUA AI SUO LUO NA *Isolona cauliflora* (root cortex). Ref: 3755.

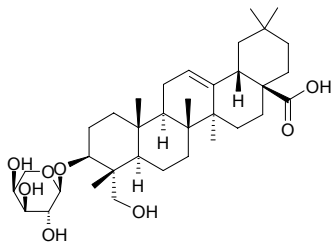


**3339 Caulindole D**

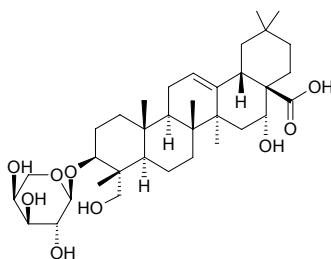
(3,4-*cis*)-3-[3'-(1''',1'''-Dimethyl-2'''-propenyl)-5'-indolyl]-1,4-dimethyl-4-{2-[3''-(1''''',1''''-dimethyl-2''''-propenyl)-5''-indolyl]-ethyl-2-enyl}-cyclohex-1-ene  
 $C_{36}H_{42}N_2$  (502.75). Yellow gum. Source: JING SHENG HUA AI SUO LUO  
 NA *Isolona cauliflora* (root cortex). Ref: 3755.

**3340 Cauloside A**

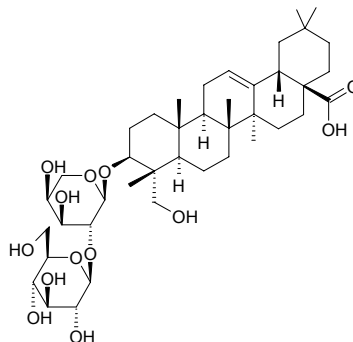
Koelreuteriasaponin A; Hederagenin 3-*O*-arabinoside [17184-21-3]  $C_{35}H_{56}O_8$   
 (604.83). mp 228°C (dec), mp 224~226°C (dec). Pharm: Molluscicide (snails  
*Biomphalaria glabrata*, 24h, LD<sub>100</sub> = 3mg/L). Source: BAI TOU WENG  
*Pulsatilla chinensis*, GUAN MU TONG *Aristolochia manshuriensis*, HONG  
 MAO QI *Leontice robustum*, LUAN HUA *Koelreuteria paniculata*, WEI  
 LING XIAN *Clematis chinensis*, YANG CHANG CHUN TENG *Hedera helix*,  
*Patrinia* sp. Ref: 6, 658.

**3341 Cauloside B**

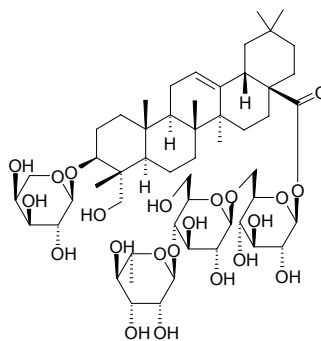
[12672-43-4]  $C_{35}H_{56}O_9$  (620.83). Source: HONG MAO QI *Leontice robustum*.  
Ref: 6.

**3342 Cauloside C**

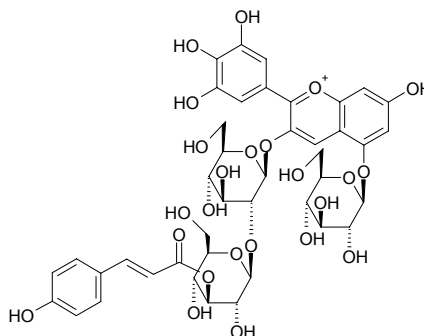
Hederagenin-3-*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranoside  
 [20853-58-1]  $C_{41}H_{66}O_{13}$  (766.98). mp 252~255°C (dec). Source: HONG  
 MAO QI *Leontice robustum*, HONG MAO WU JIA PI *Acanthopanax giraldii*  
 [Syn. *Acanthopanax giraldii* var. *inermis*; *Eleutherococcus giraldii*], REN  
 DONG TENG *Lonicera japonica*. Ref: 6, 660.

**3343 Cauloside D**

Kizutasaponin K<sub>10</sub> [12672-45-6]  $C_{53}H_{86}O_{22}$  (1075.26). Source: HONG MAO  
 QI *Leontice robustum*, XI ZANG TIE XIAN LIAN *Clematis tibetana* (aerial  
 parts). Ref: 6, 3530.

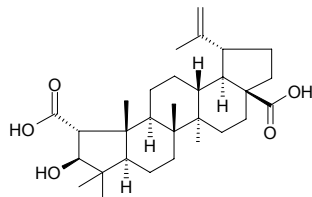
**3344 Cayratinin**

[33062-96-3]  $C_{42}H_{47}O_{24}^+$  (935.83). Source: WU LIAN MEI *Cayratia*  
*japonica*. Ref: 6.

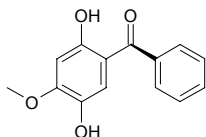


**3345 Ceanothic acid**

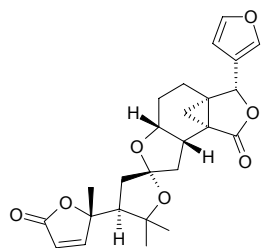
[121302-79-4] C<sub>30</sub>H<sub>46</sub>O<sub>5</sub> (486.70). Source: SUAN ZAO REN *Ziziphus jujuba* var. *spinosa*. Ref: 2.

**3346 Cearoin**

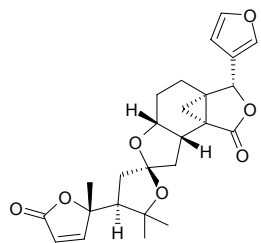
2,5-Dihydroxy-4-methoxybenzophenone [52811-37-7] C<sub>14</sub>H<sub>12</sub>O<sub>4</sub> (244.25).  
Source: JIANG ZHEN XIANG *Dalbergia odorifera*. Ref: 716.

**3347 Cedkathryn A**

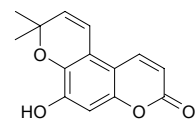
C<sub>25</sub>H<sub>28</sub>O<sub>7</sub> (440.50). Fine white crystals, mp 176–179°C, [α]<sub>D</sub> = –31° (c = 0.124, CHCl<sub>3</sub>). Source: *Cedrelopsis gracilis* (stem cortex). Ref: 3876.

**3348 Cedkathryn B**

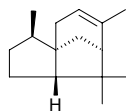
C<sub>25</sub>H<sub>28</sub>O<sub>7</sub> (440.50). Fine white crystals, mp 119–122°C, [α]<sub>D</sub> = +12° (c = 0.09, CHCl<sub>3</sub>). Source: *Cedrelopsis gracilis* (stem cortex). Ref: 3876.

**3349 Cedrecoumarin A**

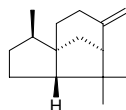
C<sub>14</sub>H<sub>12</sub>O<sub>4</sub> (244.25). Source: *Cedrelopsis grevei* (trunk bark). Ref: 5368.

**3350 α-Cedrene**

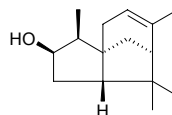
[469-61-4] C<sub>15</sub>H<sub>24</sub> (204.36). Pharm: Food additive. Source: BEI MEI YUAN BAI *Juniperus virginiana*, DANG GUI *Angelica sinensis*. Ref: 2, 658.

**3351 β-Cedrene**

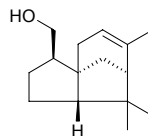
[546-28-1] C<sub>15</sub>H<sub>24</sub> (204.36). Source: DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*], SHENG JIANG *Zingiber officinale*. Ref: 2.

**3352 α-Cedren-3β-ol**

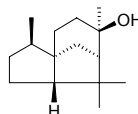
C<sub>15</sub>H<sub>24</sub>O (220.36). Colorless oil, [α]<sub>D</sub><sup>25</sup> = –53.4° (c = 1.0, CHCl<sub>3</sub>). Source: RU XIANG BAI *Juniperus thurifera* (wood). Ref: 5044.

**3353 α-Cedren-12-ol**

C<sub>15</sub>H<sub>24</sub>O (220.36). Colorless oil, [α]<sub>D</sub><sup>25</sup> = –50.1° (c = 1.0, CHCl<sub>3</sub>). Source: RU XIANG BAI *Juniperus thurifera* (wood). Ref: 5044.

**3354 α-Cedrol**

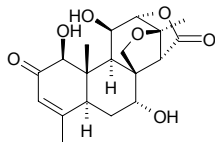
[77-53-2] C<sub>15</sub>H<sub>26</sub>O (222.37). Pharm: Sedative (cedrol-exposed Wistar rats, accumulative spontaneous motor activity was significantly decreased, prolonged pentobarbital-induced sleeping time)<sup>[5497]</sup>; food additive; 12(S)-LOX inhibitor inactive (hmn Platelets, 100μg/mL, 12(S)-HETE Production inhibitor inactive)<sup>[4980]</sup>. Source: BEI MEI YUAN BAI *Juniperus virginiana*, DI ZHONG HAI BAI MU *Cupressus sempervirens*, MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*], OU ZHOU CI BAI *Juniperus communis* (wood), REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. Ref: 2, 658, 660, 4980, 5497.



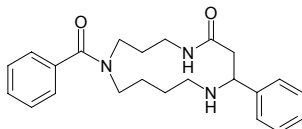


**3355 Cedronin**

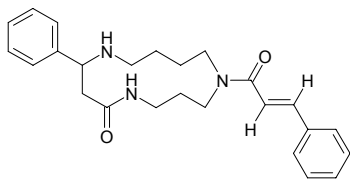
$C_{19}H_{24}O_7$  (364.40). **Pharm:** Cytotoxic (leukemia SR,  $LC_{50} = 44.2\mu\text{g/mL}$ ; non-small cell lung cancer NCI-H23,  $LC_{50} = 61.1\mu\text{g/mL}$ ; melanoma LOX IMVI,  $LC_{50} = 33.7\mu\text{g/mL}$ , MI4,  $LC_{50} = 50.7\mu\text{g/mL}$ ; renal cancer ACHN,  $LC_{50} = 69.4\mu\text{g/mL}$ , RXF 393,  $LC_{50} = 66.1\mu\text{g/mL}$ ). **Source:** MA DAO HUANG LIAN SHU *Samadera madagascariensis* (leaf). **Ref:** 5334.

**3356 Celabenzine**

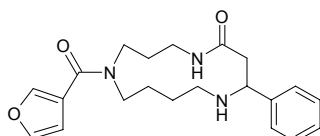
[53938-08-2]  $C_{23}H_{29}N_3O_2$  (379.51). **Pharm:** Insecticidal. **Source:** LEI GONG TENG *Tripterygium wilfordii*, MO SANG BI KE MEI DENG MU *Maytenus mossambicensis*. **Ref:** 2.

**3357 Celacinnine**

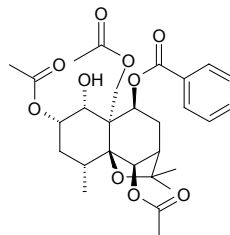
[53938-05-9]  $C_{25}H_{31}N_3O_2$  (405.54). **Source:** LEI GONG TENG *Tripterygium wilfordii*. **Ref:** 2.

**3358 Celafurine**

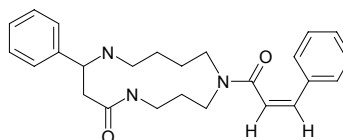
[53938-09-3]  $C_{21}H_{27}N_3O_3$  (369.47). **Source:** LEI GONG TENG *Tripterygium wilfordii*. **Ref:** 2.

**3359 Celahin C**

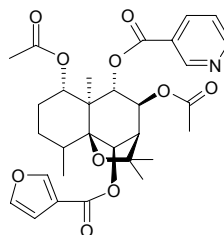
$C_{28}H_{36}O_{10}$  (532.59). **Pharm:** DPPH scavenger inactive (for  $40\mu\text{mol/L}$  DPPH radical,  $SC_{50} > 40\mu\text{mol/L}$ ). **Source:** SUO LA MU *Salacia prinoides* [Syn. *Salacia chinensis*] (stem). **Ref:** 4378.

**3360 Celaloccinnine**

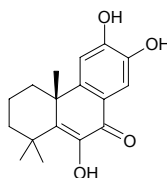
Caesalpinine C [53990-48-0]  $C_{25}H_{31}N_3O_2$  (405.54). **Source:** LEI GONG TENG *Tripterygium wilfordii*. **Ref:** 2.

**3361 Celapanine**

[52658-32-9]  $C_{30}H_{35}NO_{10}$  (569.61). **Pharm:** Irritant (strong); reduces toxicity of opium; antiarthritic (treatment of rheumatism and paralysis). **Source:** DENG YOU TENG ZI *Celastrus paniculatus*. **Ref:** 658.

**3362 Celaphanol A**

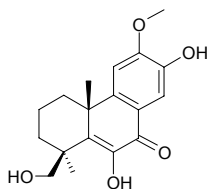
$C_{17}H_{20}O_4$  (288.35). Red amorphous powder,  $[\alpha]_D^{25} = +13^\circ$  ( $c = 0.9$ ,  $CDCl_3$ ). **Pharm:** Anti-inflammatory (*in vitro*, NF- $\kappa$ B inhibitor,  $IC_{50} = (18.2 \pm 1.0)\mu\text{mol/L}$ ; NO production inhibitor,  $IC_{50} = (32.6 \pm 1.4)\mu\text{mol/L}$ ; control Aminoguanidine,  $IC_{50} = (16.3 \pm 0.4)\mu\text{mol/L}$ )<sup>[4604]</sup>. **Source:** NAN SHE TENG GEN *Celastrus orbiculatus* [Syn. *Celastrus articulatus*] (root: yield = 0.0047%dw)<sup>[4604]</sup>, *Celastrus stephanotifolius*. **Ref:** 2310, 2511, 4604.



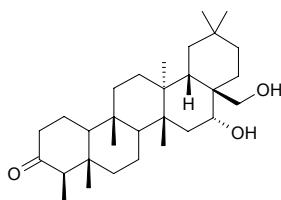
**3363 Celaphanol B**

$C_{18}H_{22}O_5$  (318.37). Brown amorphous powder,  $[\alpha]_D^{25} = +15^\circ$  ( $c = 0.6$ , MeOH).

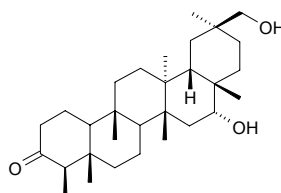
Source: NAN SHE TENG GEN *Celastrus orbiculatus* [Syn. *Celastrus articulatus*], *Celastrus stephanotifolius*. Ref: 2310, 2511.

**3364 Celasdin A**

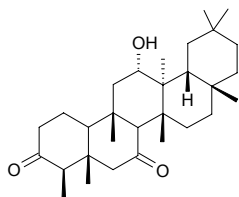
$C_{30}H_{50}O_3$  (458.73). Source: NAN SHE TENG GEN *Celastrus orbiculatus* [Syn. *Celastrus articulatus*]. Ref: 2511.

**3365 Celasdin B**

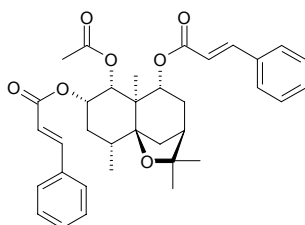
$C_{30}H_{50}O_3$  (458.73). Source: NAN SHE TENG GEN *Celastrus orbiculatus* [Syn. *Celastrus articulatus*]. Ref: 2511.

**3366 Celasdin C**

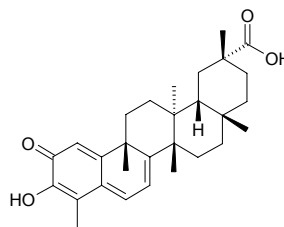
$C_{30}H_{48}O_3$  (456.72). Source: NAN SHE TENG GEN *Celastrus orbiculatus* [Syn. *Celastrus articulatus*]. Ref: 2511.

**3367 Celastrine B**

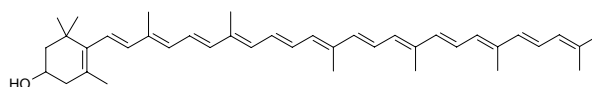
$C_{35}H_{40}O_7$  (572.70). Amorphous powder, mp 69~70°C. Source: CI NAN SHE TENG *Celastrus flagellaris*. Ref: 384.

**3368 Celastrol**

Tripterine [34157-83-0]  $C_{29}H_{38}O_4$  (450.62). Red crystals, mp 205°C (dec); amorphous solid, mp 198~200°C. Pharm: Anti-inflammatory (rat, 0.5mg/kg, strongly inhibits cotton ball granuloma, 0.1~1.0μg/mL, inhibits PGE<sub>2</sub> induced by zymosan, 1.0μg/mL, inhibits macrophage phagocytic function); antiarthritic (inhibits activity of interleukin-1 in mus enterocelia macrophages, inhibits production of interleukin-2 in mus splenocyte, reduces synovioblasts to release PGE<sub>2</sub> in rbt); antioxidant (IC<sub>50</sub> = 7μmol/L); immunomodulator (strongly inhibits formation of platelet cell in mus spleen, significantly inhibits mus delayed hypersensitive reaction); immunosuppressant (inhibits reproduction of mus spleen cells caused by PHA, ConA and LPS, inhibits reproduction of lymphocytes); Spermicidal (gpg, *in vitro*); hypnotic (extends mus sleeping time induced by pentobarbital); anti-inflammatory (modulator of cytokine network: inhibits LPS-stimulated IL-1β production on hmn monocytes, mean IC<sub>50</sub> = 56nmol/L)<sup>[4416]</sup>; anti-inflammatory (modulator of cytokine network: decreases production of pro-inflammatory cytokines, TNF-α and IL-1β in hmn monocytes and macrophages, IC<sub>50</sub> = 30~100nmol/L)<sup>[4416]</sup>; anti-inflammatory (NO production inhibitor)<sup>[4415]</sup>; anti-inflammatory (*in vitro*, NF-κB inhibitor, IC<sub>50</sub> = (0.27±0.01)μmol/L; NO production inhibitor, IC<sub>50</sub> = (0.23±0.02)μmol/L; control Aminoguanidine, IC<sub>50</sub> = (16.3±0.4)μmol/L)<sup>[4604]</sup>; cytotoxic (KB, IC<sub>50</sub> = (1.6±0.1)μmol/L, control Podophyllotoxin, IC<sub>50</sub> = 0.014μmol/L)<sup>[3969]</sup>; antibacterial (*Bacillus cereus*, MIC = 4.44μmol/L, control Chloramphenicol, MIC = 6.19μmol/L; *Staphylococcus epidermidis*, MIC = 1.11μmol/L, Chloramphenicol, MIC = 12.38μmol/L; *Micrococcus luteus*, MIC = 4.44μmol/L, Chloramphenicol, MIC = 6.19μmol/L)<sup>[3969]</sup>. Source: CU MAO NAN SHE TENG *Celastrus strigillosus*, GAO MEI YING BAN *Crossopetalum gaumeri* (root), HEI MAN *Tripterygium regelii*, LEI GONG TENG *Tripterygium wilfordii*, MEI ZHOU NAN SHE TENG *Celastrus scandens*, NAN SHE TENG GEN *Celastrus orbiculatus* [Syn. *Celastrus articulatus*] (root: yield = 0.13%<sub>dw</sub>)<sup>[4604]</sup>. Ref: 1, 6, 900, 3969, 4416, 4415, 4604.

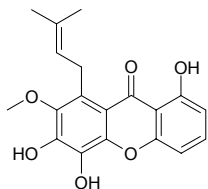
**3369 Celaxanthin**

[472-74-2]  $C_{40}H_{54}O$  (550.88). mp 209~210°C. Source: CI NAN SHE TENG *Celastrus flagellaris*. Ref: 6.

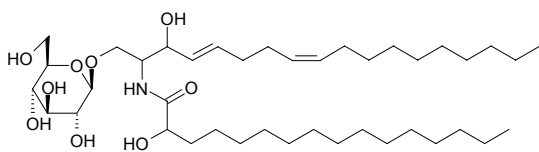


**3370 Celebixanthone**

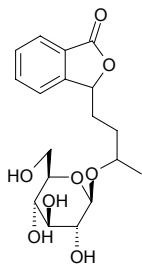
$C_{19}H_{18}O_6$  (342.35). **Pharm:** Antioxidant (DPPH scavenger,  $50\mu\text{mol/L}$ ,  $\text{ScRt} = 79.3\%$ ,  $\text{IC}_{50} = 12.3\mu\text{mol/L}$ ; control BHT,  $50\mu\text{mol/L}$ ,  $\text{ScRt} = 51.7\%$ ,  $\text{IC}_{50} = 28.9\mu\text{mol/L}$ )<sup>[4423]</sup>. **Source:** HUANG NIU MU *Cratoxylum cochinchinense* (root). **Ref:** 4423.

**3371 Celebroside**

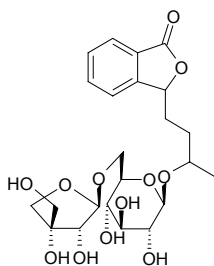
$C_{40}H_{75}NO_9$  (714.05). **Source:** GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*]. **Ref:** 2.

**3372 Celephtalide A**

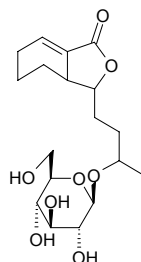
(3'S)-3'-Hydroxy-3-butyl phthalide  $\beta$ -D-glucopyranoside  $C_{18}H_{24}O_8$  (368.39). Amorphous powder,  $[\alpha]_D^{23} = -43^\circ$  ( $c = 3.0$ , MeOH). **Source:** HAN QIN *Apium graveolens* (fruit). **Ref:** 3477.

**3373 Celephtalide B**

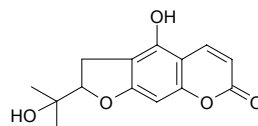
(3'S)-3'-Hydroxy-3-butyl phthalide  $\beta$ -D-apiofuranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside  $C_{23}H_{32}O_{12}$  (500.50). Amorphous powder,  $[\alpha]_D^{23} = -76^\circ$  ( $c = 0.5$ , MeOH). **Source:** HAN QIN *Apium graveolens* (fruit). **Ref:** 3477.

**3374 Celephtalide C**

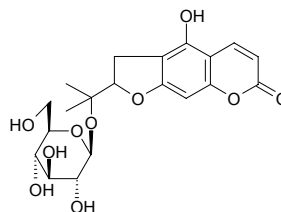
(3S)-3'-Hydroxysedanolid  $\beta$ -D-glucopyranoside  $C_{18}H_{28}O_8$  (372.42). Amorphous powder,  $[\alpha]_D^{23} = -56^\circ$  ( $c = 1.1$ , MeOH). **Source:** HAN QIN *Apium graveolens* (fruit). **Ref:** 3477.

**3375 Celereoin**

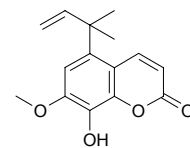
[74560-02-4]  $C_{14}H_{14}O_5$  (262.26). **Source:** HAN QIN *Apium graveolens*. **Ref:** 19.

**3376 Celereoside**

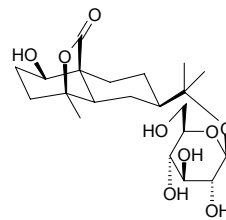
$C_{20}H_{24}O_{10}$  (424.41). **Source:** HAN QIN *Apium graveolens*. **Ref:** 19.

**3377 Celerin**

[73815-20-2]  $C_{15}H_{16}O_4$  (260.29). **Source:** HAN QIN *Apium graveolens*. **Ref:** 19.

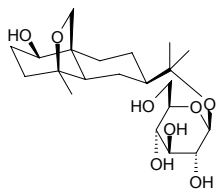
**3378 Celerioside A**

(1R,4S,5R,7R,10S)-1,11-Dihydroxy-eudesman-14,4-olide 11-O- $\beta$ -D-glucopyranoside  $C_{21}H_{34}O_9$  (430.50). Colorless needles (MeOH), mp  $223\text{--}225^\circ\text{C}$ ,  $[\alpha]_D^{23} = +19^\circ$  ( $c = 2.3$ , MeOH). **Source:** HAN QIN *Apium graveolens* (fruit). **Ref:** 3477.

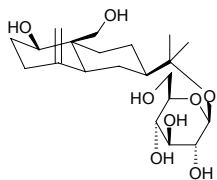


**3379 Celerioside B**

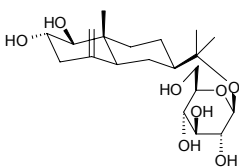
1 $\beta$ ,11-Dihydroxy-eudesman-4,14-oxide 11-*O*- $\beta$ -*D*-glucopyranoside C<sub>21</sub>H<sub>36</sub>O<sub>8</sub> (416.52). Amorphous powder,  $[\alpha]_D^{23} = -9^\circ$  ( $c = 0.8$ , MeOH). Source: HAN QIN *Apium graveolens* (fruit). Ref: 3477.

**3380 Celerioside C**

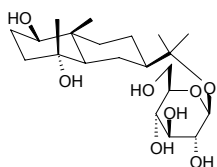
Eudesman-4(15)-ene-1 $\beta$ ,11,14-triol 11-*O*- $\beta$ -*D*-glucopyranoside C<sub>21</sub>H<sub>36</sub>O<sub>8</sub> (416.52). Amorphous powder,  $[\alpha]_D^{23} = +20^\circ$  ( $c = 2.4$ , MeOH). Source: HAN QIN *Apium graveolens* (fruit). Ref: 3477.

**3381 Celerioside D**

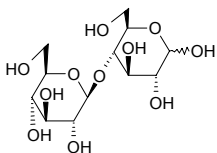
Eudesman-4(15)-ene-1 $\beta$ ,2 $\alpha$ ,11-triol 11-*O*- $\beta$ -*D*-glucopyranoside C<sub>21</sub>H<sub>36</sub>O<sub>8</sub> (416.52). Amorphous powder,  $[\alpha]_D^{23} = +13^\circ$  ( $c = 0.3$ , MeOH). Source: HAN QIN *Apium graveolens* (fruit). Ref: 3477.

**3382 Celerioside E**

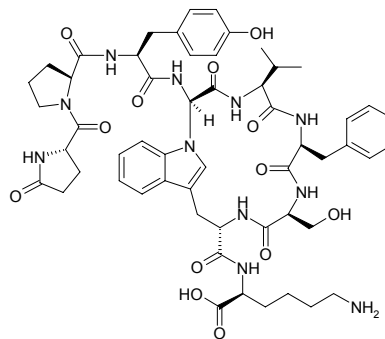
Eudesman-1 $\beta$ ,4 $\alpha$ ,11-triol 11-*O*- $\beta$ -*D*-glucopyranoside C<sub>21</sub>H<sub>38</sub>O<sub>8</sub> (418.53). Amorphous powder,  $[\alpha]_D^{25} = +9^\circ$  ( $c = 2.4$ , MeOH). Source: HAN QIN *Apium graveolens* (fruit). Ref: 3477.

**3383 Cellobiose**

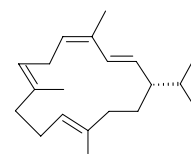
4-*O*- $\beta$ -*D*-Glucopyranosyl-*D*-glucose [528-50-7] C<sub>12</sub>H<sub>22</sub>O<sub>11</sub> (342.30). mp 225°C (dec). Source: PI HAN CAO *Melilotus suaveolens*. Ref: 6.

**3384 Celogenamide A**

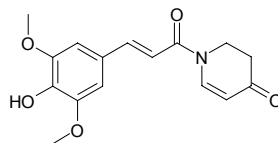
C<sub>53</sub>H<sub>69</sub>N<sub>11</sub>O<sub>13</sub> (1092.23). Colorless solid,  $[\alpha]_D^{22} = +3^\circ$  ( $c = 0.3$ , DMSO). Source: QIANG XIANG *Celosia argentea* (seed: yield = 0.0002%). Ref: 4771.

**3385 Cembrene**

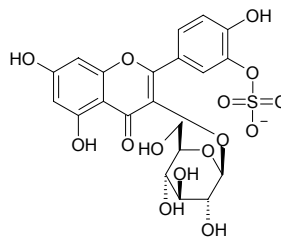
Thunbergene [1898-13-1] C<sub>20</sub>H<sub>32</sub> (272.48). mp 58–59°C. Source: HAI SONG ZI *Pinus koraiensis*. Ref: 6.

**3386 Cenocladamide**

*N*-(4'-Hydroxy-3',5'-dimethoxycinnamoyl)-*d*<sup>2</sup>-pyridin-4-one C<sub>16</sub>H<sub>17</sub>NO<sub>5</sub> (303.32). Pale yellow oil. Source: *Piper cenocladum* (leaf). Ref: 3896.

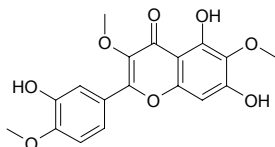
**3387 Centabracein**

Quercetin 3-*O*- $\beta$ -*D*-glucopyranoside 3'-sulphate C<sub>21</sub>H<sub>19</sub>O<sub>15</sub>S<sup>-</sup> (543.44). Yellowish amorphous solid,  $[\alpha]_D^{20} = -60.0^\circ$  ( $c = 0.13$ , MeOH). Source: BAO PIAN SHI CHE JU *Centaurea bracteata* (aerial parts). Ref: 5151.

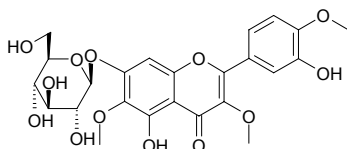


**3388 Centaureidin**

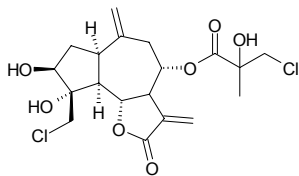
[17313-52-9] C<sub>18</sub>H<sub>16</sub>O<sub>8</sub> (360.32). mp 203°C. **Pharm:** Cytotoxic (2.7mg/mL); NO production inhibitor (LPS-induced, concentration-dependent manner, IC<sub>50</sub> = 31.9 or 7.1 μmol/L)<sup>[4918]</sup>; PGE<sub>2</sub> production inhibitor (LPS-induced, concentration-dependent manner, IC<sub>50</sub> = 21.7 or 28.7 μmol/L)<sup>[4918]</sup>. **Source:** CHU CHONG JU *Chrysanthemum cinerariaefolium*, OU ZHOU QI MU *Alnus glutinosa*, XIAO YE JU HAO *Tanacetum microphyllum* (aerial parts), YI WA JU *Iva frutescens*. **Ref:** 661, 4918.

**3389 Centaurein**

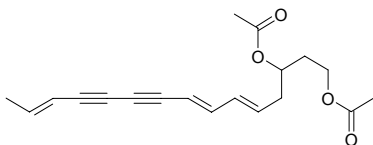
3,6,4'-Tri-*O*-methylquercetaletin-7-*O*-β-*D*-glucopyranoside C<sub>24</sub>H<sub>26</sub>O<sub>13</sub> (522.47). **Pharm:** Antioxidant (DPPH scavenger, IC<sub>50</sub> = (115.30±6.18) μmol/L, control Quercetin, IC<sub>50</sub> = (6.11±0.53) μg/mL)<sup>[5318]</sup>. **Source:** ZUI DA WAN SHOU JU *Tagetes maxima* (aerial parts). **Ref:** 5318.

**3390 Centaurepensin**

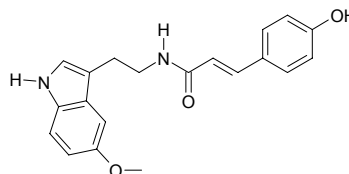
C<sub>19</sub>H<sub>24</sub>Cl<sub>2</sub>O<sub>7</sub> (435.30). **Source:** YI BAO MA HUA TOU *Serratula strangulata* (root stem). **Ref:** 5244.

**3391 Centaur X2**

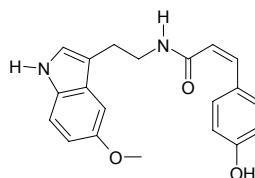
C<sub>19</sub>H<sub>22</sub>O<sub>4</sub> (314.38). mp 54–56°C. **Source:** QI ZHOU YI ZHI HAO *Conyza canadensis* [Syn. *Erigeron canadensis*]. **Ref:** 6.

**3392 Centeyamine**

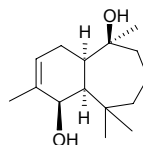
(*E*)-*N*-(4-Hydroxycinnamoyl)-5-methoxytryptamine C<sub>20</sub>H<sub>20</sub>N<sub>2</sub>O<sub>3</sub> (336.39). Amorphous. **Source:** SHI CHE JU *Centaurea cyanus* (seed). **Ref:** 5174.

**3393 cis-Centeyamine**

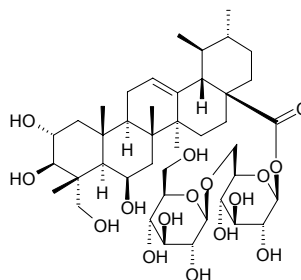
(*Z*)-*N*-(4-Hydroxycinnamoyl)-5-methoxytryptamine C<sub>20</sub>H<sub>20</sub>N<sub>2</sub>O<sub>3</sub> (336.39). Amorphous. **Source:** SHI CHE JU *Centaurea cyanus* (seed). **Ref:** 5174.

**3394 Centdarol**

[57308-24-4] C<sub>15</sub>H<sub>26</sub>O<sub>2</sub> (238.37). **Pharm:** Antispasmodic. **Source:** XUE SONG *Cedrus deodara*. **Ref:** 658.

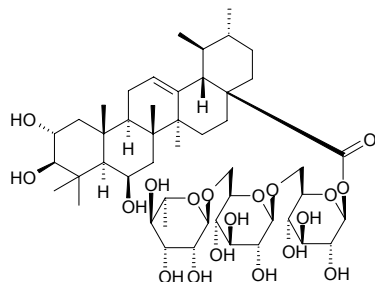
**3395 Centellasaponin B**

Madecassic acid 28-*O*-β-*D*-glucopyranosyl(1→6)-β-*D*-glucopyranoside C<sub>42</sub>H<sub>68</sub>O<sub>16</sub> (829.00). Colorless fine crystals (CHCl<sub>3</sub>-MeOH), mp 223–224°C, [α]<sub>D</sub><sup>25</sup> = +13.2° (c = 0.3, MeOH). **Source:** JI XUE CAO *Centella asiatica* (aerial parts). **Ref:** 4135.

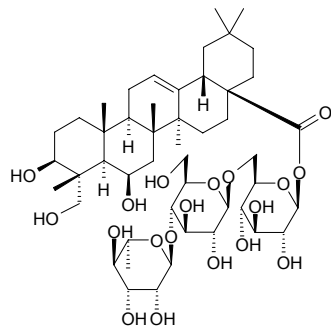


**3396 Centellasaponin C**

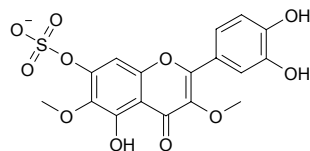
Madasiatic acid 28-*O*- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl (1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside C<sub>48</sub>H<sub>78</sub>O<sub>19</sub> (959.15). Colorless fine crystals (CHCl<sub>3</sub>-MeOH), mp 209~210°C,  $[\alpha]_D^{25} = -9.0^\circ$  ( $c = 0.6$ , MeOH). Source: JI XUE CAO *Centella asiatica* (aerial parts). Ref: 4135.

**3397 Centellasaponin D**

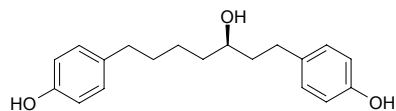
3 $\beta$ ,6 $\beta$ ,23-Trihydroxyolean-12-en-28-oic acid 28-*O*- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside C<sub>48</sub>H<sub>78</sub>O<sub>19</sub> (959.15). Colorless fine crystals (CHCl<sub>3</sub>-MeOH), mp 202~203°C,  $[\alpha]_D^{25} = -12.4^\circ$  ( $c = 0.3$ , MeOH). Source: JI XUE CAO *Centella asiatica* (aerial parts). Ref: 4135.

**3398 Centradixin**

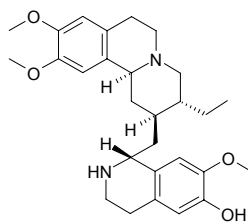
C<sub>17</sub>H<sub>13</sub>O<sub>11</sub>S<sup>-</sup> (425.35). Yellowish amorphous solid. Source: BAO PIAN SHI CHE JU *Centaurea bracteata* (root). Ref: 5235.

**3399 (-)-Centrololol**

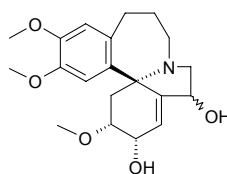
C<sub>19</sub>H<sub>24</sub>O<sub>3</sub> (300.40). Pharm:  $\beta$ -Hexosaminidase inhibitor inactive (RBL-2H3 cells, inhibits release of  $\beta$ -hexosaminidase, 100 $\mu$ mol/L, InRt = (-17.2 $\pm$ 3.8%)<sup>[4304]</sup>. Source: MAO GUO QI *Acer nikoense* (stem cortex). Ref: 4304.

**3400 Cephaeline**

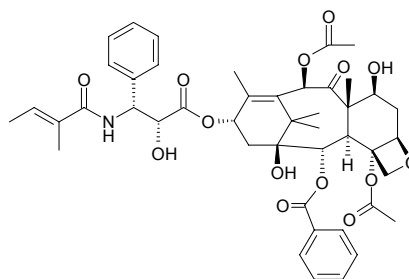
[483-17-0] C<sub>28</sub>H<sub>38</sub>N<sub>2</sub>O<sub>4</sub> (466.63). Pharm: Antiamebic; antitussive (dispels phlegm); emetic. Source: TU GEN *Cephaelis ipecacuanha*, AN GE LA BA JIAO FENG *Alangium lamarckii*. Ref: 658.

**3401 Cephalofortuneine**

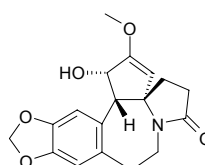
2-Epicephalofortuneine [68156-55-8] C<sub>20</sub>H<sub>27</sub>NO<sub>5</sub> (361.44). White crystals, mp 80~83°C,  $[\alpha]_D^{32} = +12.1^\circ$  ( $c = 0.15$ , chloroform). Source: SAN JIAN SHAN *Cephalotaxus fortunei*. Ref: 2, 27.

**3402 Cephalomannine**

Taxol B [71610-00-9] C<sub>45</sub>H<sub>53</sub>NO<sub>14</sub> (831.92). Acicular crystals (solution of methanol in water), mp 184~186°C,  $[\alpha]_D = -41^\circ$  (methanol). Pharm: Antineoplastic (P<sub>388</sub>); cytotoxic (KB, ED<sub>50</sub> = 0.0038 $\mu$ g/mL). Source: HAI NAN CU FEI *Cephalotaxus hainanensis* [Syn. *Cephalotaxus manni*], JIANG GUO ZI SHAN *Taxus baccata*, SU MEN DA LA HONG DOU SHAN *Taxus sumatrana* (twig and leaf: yield = 0.00045%dw)<sup>[4666]</sup>. Ref: 661, 4666.

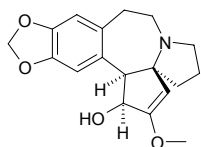
**3403 Cephalotaxinamide**

[80797-04-2] C<sub>18</sub>H<sub>19</sub>NO<sub>5</sub> (329.36). Source: SAN JIAN SHAN *Cephalotaxus fortunei*. Ref: 20.

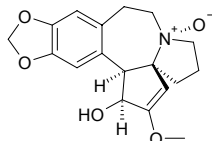


**3404 Cephalotaxine**

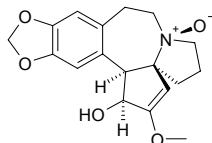
[24316-19-6]  $C_{18}H_{21}NO_4$  (315.37). White crystals, mp 132~133°C,  $[\alpha]_D^{25} = -204^\circ$  ( $c = 1.8$ , chloroform).<sup>[5507]</sup> **Pharm:** Antineoplastic (S<sub>180</sub> and malignant lymphoma); muscle stimulant; toxin (inhibits bone marrow). **Source:** HAI NAN CU FEI *Cephalotaxus hainanensis* [Syn. *Cephalotaxus manni*] (branchlet and bark: mean content of 2 samples = 0.054%<sup>[5508]</sup>), RI BEN CU FEI *Cephalotaxus harringtonia* (in 1963, isolated from the plant by Paudler for the first time<sup>[5507]</sup>), SAN JIAN SHAN *Cephalotaxus fortunei* (drupe: yield = 0.104%<sup>[4675]</sup>; branchlet and bark: mean content of 2 origins = 0.070%<sup>[5508]</sup>), TAI WAN CU FEI *Cephalotaxus wilsoniana*, ZHONG GUO CU FEI ZHI YE *Cephalotaxus sinensis* [Syn. *Cephalotaxus harringtonia* var. *sinensis*]. **Ref:** 1, 4, 5, 20, 660, 4675, 5507, 5508.

**3405 Cephalotaxine  $\alpha$ -N-oxide**

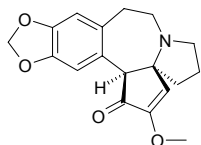
$C_{18}H_{21}NO_5$  (331.37). Amorphous solid,  $[\alpha]_D^{21} = -131^\circ$  ( $c = 0.5$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (*in vitro*, nasopharynx KB cells,  $IC_{50} = 30\mu g/mL$ , weak activity). **Source:** SAN JIAN SHAN *Cephalotaxus fortunei* (drupe: yield = 0.0010%). **Ref:** 4675.

**3406 Cephalotaxine  $\beta$ -N-oxide**

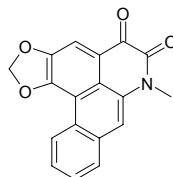
$C_{18}H_{21}NO_5$  (331.37). Amorphous solid,  $[\alpha]_D^{21} = -221^\circ$  ( $c = 0.5$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (*in vitro*, nasopharynx KB cells,  $IC_{50} = 14\mu g/mL$ , weak activity). **Source:** SAN JIAN SHAN *Cephalotaxus fortunei* (drupe: yield = 0.0026%). **Ref:** 4675.

**3407 Cephalotaxinone**

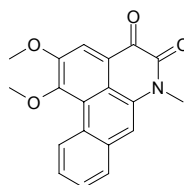
[38750-57-1]  $C_{18}H_{19}NO_4$  (313.36). **Source:** SAN JIAN SHAN *Cephalotaxus fortunei* (drupe: yield = 0.0020%)<sup>[4675]</sup>. **Ref:** 20, 4675.

**3408 Cephadione A**

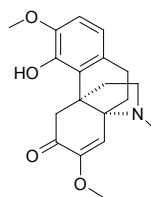
$C_{18}H_{11}NO_4$  (305.29). **Pharm:** Platelet aggregation inhibitor (rbt platelets induced by thrombin, 100 $\mu g/mL$ , add thrombin 0.1u/mL, AggRt = (90.6 $\pm$ 1.4)%, control AggRt = (92.6 $\pm$ 0.4)%); add AA, 100 $\mu mol/L$ , 50 $\mu g/mL$ , AggRt = (84.7 $\pm$ 2.2)%, control AggRt = (87.8 $\pm$ 0.3)%, Aspirin 50 $\mu g/mL$ , AggRt = (11.7 $\pm$ 10.1)%); add collagen 10 $\mu g/mL$ , 50 $\mu g/mL$ , AggRt = (84.7 $\pm$ 1.3)%, control AggRt = (89.3 $\pm$ 0.5)%, Aspirin 100 $\mu g/mL$ , AggRt = (81.3 $\pm$ 0.5)%); add PAF 2ng/mL, 50 $\mu g/mL$ , AggRt = (92.5 $\pm$ 1.2)%, control AggRt = (93.0 $\pm$ 0.6)%<sup>[4938]</sup>. **Source:** MIAN MAO MA DOU LING *Aristolochia mollissima* (dried root and stem: yield = 0.00031%dw), TAI WAN HU JIAO *Piper taiwanense* (stem). **Ref:** 3026, 4938.

**3409 Cephadione B**

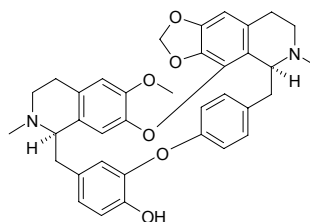
$C_{19}H_{15}NO_4$  (321.34). **Source:** YU XING CAO *Houttuynia cordata*. **Ref:** 2428.

**3410 Cepharamine**

[15444-26-5]  $C_{19}H_{23}NO_4$  (329.40). mp 186~187°C. **Source:** BAI YAO ZI *Stephania cepharantha*. **Ref:** 6.

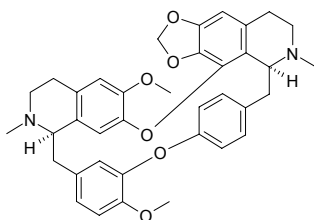
**3411 Cepharanoline**

[27686-34-6]  $C_{36}H_{36}N_2O_6$  (592.70). mp 270°C (dec). **Source:** BAI YAO ZI *Stephania cepharantha*. **Ref:** 6.

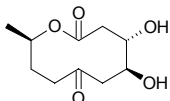


**3412 Cepharanthine**

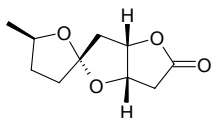
[481-49-2]  $C_{37}H_{38}N_2O_6$  (606.73). Yellow acicular crystals, (acetone–benzene), mp 145–155°C,  $[\alpha]_D^{20} = +277^\circ$  ( $c = 2$ , chloroform), soluble in common organic solvents, insoluble in petroleum spirit.<sup>[5507]</sup> **Pharm:** Activates lymph node; antibacterial (*Mycobacterium tuberculosis*); antineoplastic (HeLa, *in vitro*, ED<sub>50</sub> = 5.5 µg/kg; hmn, HeLa-S3, *in vitro*, ED<sub>50</sub> = 7.0 µg/kg; EAC *in vivo*; S<sub>180</sub> *in vivo*; inhibits DNA synthesis); antidote (effective detoxification for alcohol and venom); inhibits akaryocyte K<sup>+</sup> effusion caused by lysolecithin; platelet aggregation inhibitor (caused by collagen); antiallergic (inhibits some allergic shock). **Source:** BAI YAO ZI *Stephania cepharantha*, DI BU RONG *Stephania delavayi* [Syn. *Stephania epigaea*], TAI WAN QIAN JIN TENG *Stephania sasakii*. **Ref:** 1, 4, 5, 6, 5507.

**3413 Cepharosporolide C**

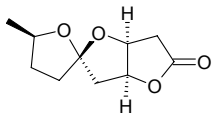
$C_{10}H_{16}O_5$  (216.24). **Pharm:** Antimalarial inactive (*Plasmodium falciparum* K1, 20 µg/mL; control Dihydroartemisinin, IC<sub>50</sub> = 1.2 ng/mL)<sup>[4784]</sup>. **Source:** YONG CHONG CAO *Cordyceps militaris*. **Ref:** 4784.

**3414 Cepharosporolide E**

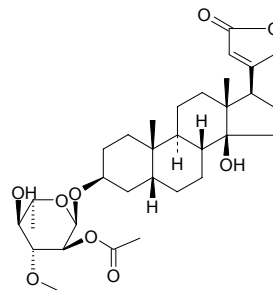
$C_{10}H_{14}O_4$  (198.22). **Source:** YONG CHONG CAO *Cordyceps militaris*. **Ref:** 4784.

**3415 Cepharosporolide F**

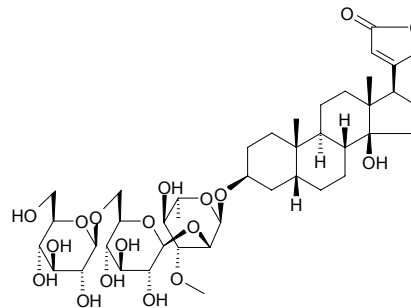
$C_{10}H_{14}O_4$  (198.22). **Source:** YONG CHONG CAO *Cordyceps militaris*. **Ref:** 4784.

**3416 Cerberin**

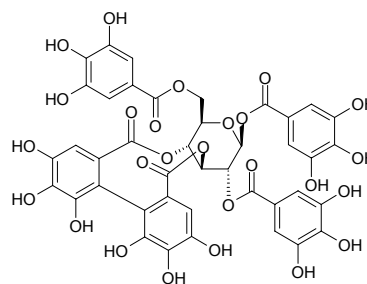
Veneniferin  $C_{32}H_{48}O_9$  (576.73). mp 212–215°C. **Pharm:** Cytotoxic (KB, ED<sub>50</sub> = 1.92 µg/mL; BC, ED<sub>50</sub> = 1.63 µg/mL; NCI-H187, ED<sub>50</sub> = 1.24 µg/mL; control Ellipticine, ED<sub>50</sub> = 0.3–0.6 µg/mL)<sup>[3777]</sup>. **Source:** AO DAO LA MU HAI MANG GUO *Cerbera odollam* (seed), HUANG HUA JIA ZHU TAO *Thevetia nerifolia* [Syn. *Thevetia peruviana*] (seed: mean content = 0.60%<sup>[5508]</sup>), NIU XIN QIE ZI *Cerbera manghas*. **Ref:** 1, 2594, 3777, 5508.

**3417 Cerberoside**

$C_{42}H_{66}O_{18}$  (858.99). mp 187.5–188.5°C, 197–201°C. **Source:** HUANG HUA JIA ZHU TAO *Thevetia nerifolia* [Syn. *Thevetia peruviana*], NIU XIN QIE ZI *Cerbera manghas*. **Ref:** 6.

**3418 Cercidin A**

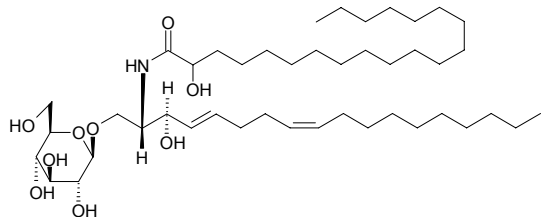
1,2,6-Tri-*O*-galloyl-3,4-(*R*)-hexahydroxydiphenoyl-β-*D*-glucose  $C_{41}H_{30}O_{26}$  (938.68). Off-white amorphous powder,  $[\alpha]_D = -71.6^\circ$  ( $c = 1.0$ , acetone) **Source:** RI BEN LIAN XIANG SHU *Cercidiphyllum japonicum* (bark). **Ref:** 3519.



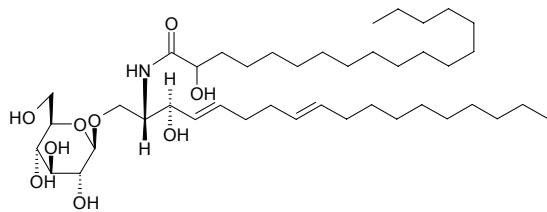


**3419 Cerebroside 1**

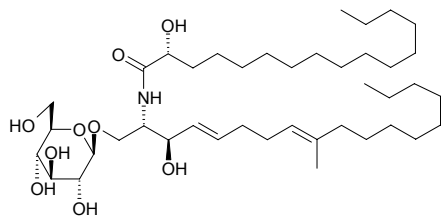
[174176-91-1] C<sub>44</sub>H<sub>83</sub>NO<sub>9</sub> (770.15). Colorless amorphous powder,  $[\alpha]_D^{25} = +17^\circ$  ( $c = 0.085$ , methanol). Pharm: Antihepatotoxin (rat, CCl<sub>4</sub>). Source: DONG BEI TIAN NAN XING *Arisaema amurense*. Ref: 1054.

**3420 Cerebroside 5**

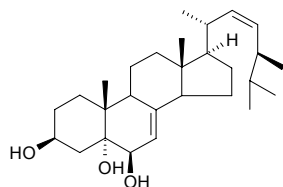
[174176-93-3] C<sub>42</sub>H<sub>79</sub>NO<sub>9</sub> (742.09). Colorless amorphous powder. Pharm: Antihepatotoxin (rat, CCl<sub>4</sub>). Source: DONG BEI TIAN NAN XING *Arisaema amurense*. Ref: 1054.

**3421 Cerebroside B**

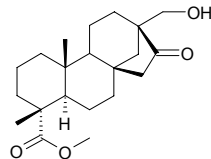
[88642-46-0] C<sub>41</sub>H<sub>77</sub>NO<sub>9</sub> (728.07). White amorphous powder,  $[\alpha]_D^{27} = +5.1^\circ$  ( $c = 0.3$ , MeOH). Source: AI LI SI DUO KONG JUN *Polyporus ellisii*. Ref: 2435.

**3422 (22Z,24S)-Cerevisterol**

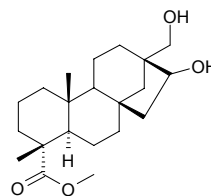
C<sub>28</sub>H<sub>46</sub>O<sub>3</sub> (430.68). White lamellar crystals (Me<sub>2</sub>CO) mp 240–242°C. Source: YA RONG GAI RU GU *Lactarius subvellereus*. Ref: 801.

**3423 Ceriopsin A**

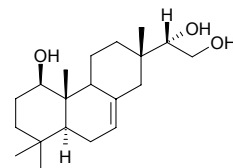
C<sub>21</sub>H<sub>32</sub>O<sub>4</sub> (348.49). Colorless needles (MeOH). mp 135–139°C,  $[\alpha]_D^{25} = -47.0^\circ$  ( $c = 0.6$ , CHCl<sub>3</sub>). Source: SHI XIONG RUI JIAO GUO MU *Ceriops decandra*. Ref: 1970.

**3424 Ceriopsin B**

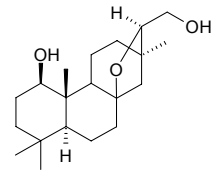
C<sub>21</sub>H<sub>34</sub>O<sub>4</sub> (350.50). Colorless needles (MeOH), mp 164–166°C,  $[\alpha]_D^{25} = -37.5^\circ$  ( $c = 0.80$ , CHCl<sub>3</sub>). Source: SHI XIONG RUI JIAO GUO MU *Ceriops decandra*. Ref: 1970.

**3425 Ceriopsin C**

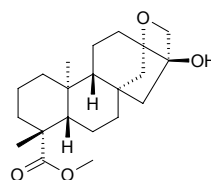
C<sub>20</sub>H<sub>34</sub>O<sub>3</sub> (322.49). Colorless oil,  $[\alpha]_D^{25} = +3.0^\circ$  ( $c = 0.4$ , CHCl<sub>3</sub>). Source: SHI XIONG RUI JIAO GUO MU *Ceriops decandra*. Ref: 1970.

**3426 Ceriopsin D**

C<sub>20</sub>H<sub>34</sub>O<sub>3</sub> (322.49). Colorless oil,  $[\alpha]_D^{25} = +50.6^\circ$  ( $c = 1.5$ , CHCl<sub>3</sub>). Source: SHI XIONG RUI JIAO GUO MU *Ceriops decandra*. Ref: 1970.

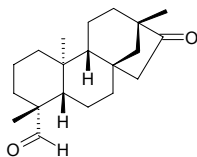
**3427 Ceriopsin F**

Methyl *ent*-13,17-epoxy-16-hydroxykauran-19-oate C<sub>21</sub>H<sub>32</sub>O<sub>4</sub> (348.49). Colorless needles (MeOH), mp 130–133°C,  $[\alpha]_D^{25} = +40.2^\circ$  ( $c = 0.4$ , CHCl<sub>3</sub>). Source: SHI XIONG RUI JIAO GUO MU *Ceriops decandra*. Ref: 2053.

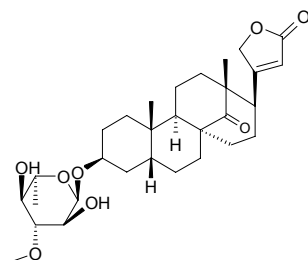


**3428 Ceriopsin G**

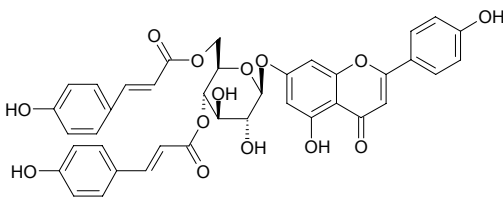
*ent*-16-Oxobeyeran-19-al C<sub>20</sub>H<sub>30</sub>O<sub>2</sub> (302.46). Colorless oil,  $[\alpha]_D^{25} = -49.0^\circ$  ( $c = 0.25$ , CHCl<sub>3</sub>). Source: SHI XIONG RUI JIAO GUO MU *Ceriops decandra*. Ref: 2053.

**3429 Cerleaside A**

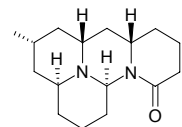
C<sub>30</sub>H<sub>44</sub>O<sub>8</sub> (532.68). Pharm: Cytotoxic (KB, inactive, ED<sub>50</sub> > 50 μg/mL; BC, ED<sub>50</sub> = 9.12 μg/mL; NCI-H187, inactive, ED<sub>50</sub> > 50 μg/mL; control Ellipticine, ED<sub>50</sub> = 0.3–0.6 μg/mL). Source: AO DAO LA MU HAI MANG GUO *Cerbera odollam* (seed). Ref: 3777.

**3430 Cernoside**

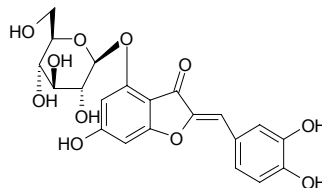
C<sub>39</sub>H<sub>32</sub>O<sub>14</sub> (724.68). mp 225–230°C (dec). Source: PU DI WU GONG *Lycopodium cernuum*. Ref: 6.

**3431 Cernuine**

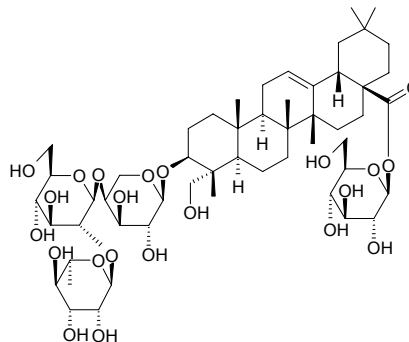
[6880-84-8] C<sub>16</sub>H<sub>26</sub>N<sub>2</sub>O (262.40). mp 106°C. Pharm: Low toxin. Source: PU DI WU GONG *Lycopodium cernuum*, KA LUO LAI NA SHI SONG *Lycopodium carolinianum*. Ref: 6, 658.

**3432 Cernuoside**

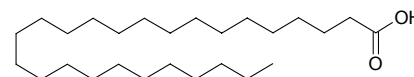
[480-69-3] C<sub>21</sub>H<sub>20</sub>O<sub>11</sub> (448.39). Yellow crystals (ethanol solution), mp 250–258°C,  $[\alpha]_D^{30} = -13^\circ$  (pyridine). Pharm: Pigment. Source: CHUN ZHU JU TAI *Chirita micronusa*, A ER JI LI YA BU XUE CAO *Limonium bonduellii*, SHI HU DIE *Petrocosmea kerrii*, YU YE JIN HUA *Mussaenda hirsutissima*, *Oxalis cernua*. Ref: 2109.

**3433 Cernuoside C**

3-*O*- $\alpha$ -L-Rhamnopyranosyl-(1→2)[ $\beta$ -D-glucopyranosyl(1→4)]- $\alpha$ -L-arabinopyranosyl hederagenin 28-*O*-D-glucopyranosyl ester C<sub>53</sub>H<sub>86</sub>O<sub>22</sub> (1075.26). White powder, mp 234–236°C,  $[\alpha]_D^{20} = +1.9^\circ$  ( $c = 0.26$ , CH<sub>3</sub>OH). Source: CHAO XIAN BAI TOU WENG *Pulsatilla cernua*. Ref: 860.

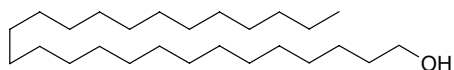
**3434 Cerotic acid**

Hexacosanoic acid [506-46-7] C<sub>26</sub>H<sub>52</sub>O<sub>2</sub> (396.70). Colorless acicular crystals, mp 87.7–87.9°C. Pharm: Platelet aggregation inhibitor (washed rabbit platelets, 50 μg/mL, 100 μmol/L AA-induced, AggRt = 18.4%, control 50 μmol/L Aspirin, AggRt = 100%; 10 μg/mL collagen-induced, AggRt = 4.2%, 100 μmol/L Aspirin, AggRt = 4.9%; 0.1 U/mL thrombin-induced, AggRt = 3.0%, 100 μmol/L Aspirin, AggRt = 1.7%; 2 ng/mL PAF-induced, AggRt = 5.0%, 100 μmol/L Aspirin, AggRt = 2.1%)<sup>[5427]</sup>. Source: CHONG BAI LA *Ericerus pela*, JIN QUE GEN *Caragana sinica*, SAN QI CAO *Gynura segetum* [Syn. *Gynura japonica*] (rhizome), SHUANG BIAN GUA LOU *Trichosanthes rosthornii* [Syn. *Trichosanthes uniflora*], YAO YONG PU GONG YING *Taraxacum officinale*. Ref: 2, 6, 455, 660, 5427.

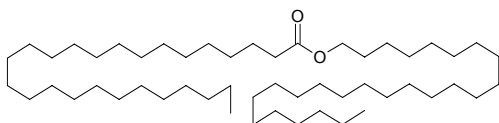


**3435 Ceryl alcohol**

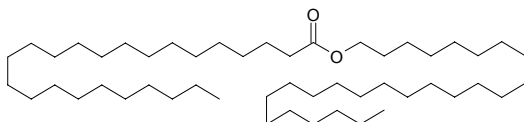
Hexacosanol-1 [506-52-5]  $C_{26}H_{54}O$  (382.72). Source: JIAN YE YIN YANG HUO *Epimedium sagittatum*, BAI GUO *Ginkgo biloba*. Ref: 2, 660.

**3436 Ceryl cerotate**

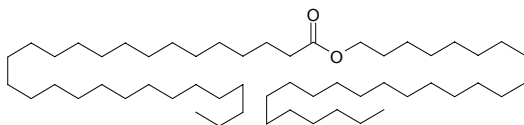
$C_{52}H_{104}O_2$  (761.41). mp 82~84°C. Source: CHONG BAI LA *Ericerus pela*. Ref: 6.

**3437 Ceryl lignocerate**

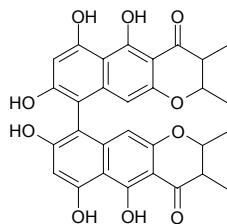
$C_{50}H_{100}O_2$  (733.35). Source: CHONG BAI LA *Ericerus pela*. Ref: 6.

**3438 Ceryl montanate**

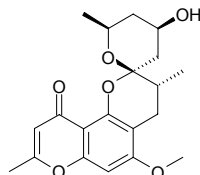
$C_{54}H_{108}O_2$  (789.46). Source: CHONG BAI LA *Ericerus pela*. Ref: 6.

**3439 Chaetochromin A**

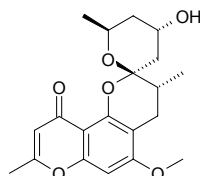
[75514-37-3]  $C_{30}H_{62}O_{10}$  (546.54). Source: *Chaetomium thielavioideum*. Ref: 1521.

**3440 Chaetoquadrin A**

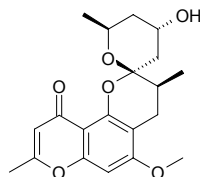
CQ-1  $C_{20}H_{24}O_6$  (360.41). Colorless amorphous. Pharm: MAO inhibitor (mus liver, 25µg/mL, InRt = 7.7%, control Luteusin A,  $IC_{50}$  = 6.6µmol/L, GP-A,  $IC_{50}$  = 2.7µmol/L, Monankarin,  $IC_{50}$  = 16µmol/L, Coniochaetone A,  $IC_{50}$  = 29µmol/L). Source: SI LENG JIAO MAO KE JUN *Chaetomium quadrangulatum*. Ref: 4167.

**3441 Chaetoquadrin B**

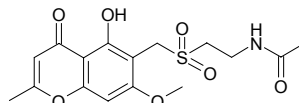
CQ-2  $C_{20}H_{24}O_6$  (360.41). Colorless amorphous. Pharm: MAO inhibitor (mus liver, 25µg/mL, InRt = 17.5%, control Luteusin A,  $IC_{50}$  = 6.6µmol/L, GP-A,  $IC_{50}$  = 2.7µmol/L, Monankarin,  $IC_{50}$  = 16µmol/L, Coniochaetone A,  $IC_{50}$  = 29µmol/L). Source: SI LENG JIAO MAO KE JUN *Chaetomium quadrangulatum*. Ref: 4167.

**3442 Chaetoquadrin C**

CQ-3  $C_{20}H_{24}O_6$  (360.41). Colorless amorphous. Pharm: MAO inhibitor (mus liver, 25µg/mL, InRt = 31.9%, control Luteusin A,  $IC_{50}$  = 6.6µmol/L, GP-A,  $IC_{50}$  = 2.7µmol/L, Monankarin,  $IC_{50}$  = 16µmol/L, Coniochaetone A,  $IC_{50}$  = 29µmol/L). Source: SI LENG JIAO MAO KE JUN *Chaetomium quadrangulatum*. Ref: 4167.

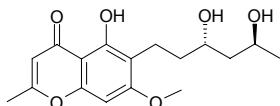
**3443 Chaetoquadrin D**

CQ-4  $C_{16}H_{19}NO_7S$  (369.40). White powder (aqueous  $CH_3CN$ ), mp 216~219°C. Pharm: MAO inhibitor (mus liver,  $IC_{50}$  = 0.038mmol/L = 0.014mg/mL, control Luteusin A,  $IC_{50}$  = 6.6µmol/L, GP-A,  $IC_{50}$  = 2.7µmol/L, Monankarin,  $IC_{50}$  = 16µmol/L, Coniochaetone A,  $IC_{50}$  = 29µmol/L). Source: SI LENG JIAO MAO KE JUN *Chaetomium quadrangulatum*. Ref: 4167.

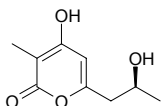


**3444 Chaetoquadrin E**

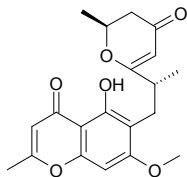
CQ-5 C<sub>17</sub>H<sub>22</sub>O<sub>6</sub> (322.36). White powder (aqueous CH<sub>3</sub>CN), mp 100~102°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +11.5° (c = 0.20, MeOH). **Pharm:** MAO inhibitor (mus liver, 25µg/mL, InRt = 8.8%, control Luteusin A, IC<sub>50</sub> = 6.6µmol/L, GP-A, IC<sub>50</sub> = 2.7µmol/L, Monankarin, IC<sub>50</sub> = 16µmol/L, Coniochaetone A, IC<sub>50</sub> = 29µmol/L). **Source:** SI LENG JIAO MAO KE JUN *Chaetomium quadrangulatum*. **Ref:** 4167.

**3445 Chaetoquadrin F**

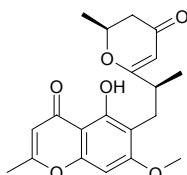
C<sub>9</sub>H<sub>12</sub>O<sub>4</sub> (184.19). White powder (CHCl<sub>3</sub>), mp 139~141°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +35.0° (c = 0.2, MeOH). **Pharm:** MAO inhibitor (mouse liver MAO, 100µg/mL, InRt = 0.5%, 25µg/mL, InRt = 3.8%, 10µg/mL, InRt = -1.7%). **Source:** SI LENG JIAO MAO KE JUN *Chaetomium quadrangulatum*. **Ref:** 4318.

**3446 Chaetoquadrin G**

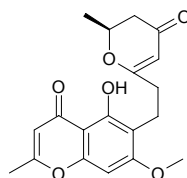
C<sub>20</sub>H<sub>22</sub>O<sub>6</sub> (358.39). White powder (CH<sub>3</sub>CN), mp 108~110°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -131.4° (c = 0.2, CHCl<sub>3</sub>). **Pharm:** MAO inhibitor (mouse liver MAO, 100µg/mL, InRt = 48.0%, 25µg/mL, InRt = 23.5%, 10µg/mL, InRt = 12.1%, IC<sub>50</sub> = 450µmol). **Source:** SI LENG JIAO MAO KE JUN *Chaetomium quadrangulatum*. **Ref:** 4318.

**3447 Chaetoquadrin H**

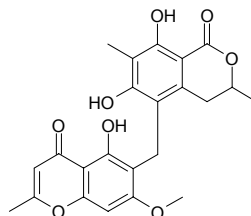
C<sub>20</sub>H<sub>22</sub>O<sub>6</sub> (358.39). White powder (CH<sub>3</sub>CN), mp 108~110°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -57.2° (c = 0.2, CHCl<sub>3</sub>). **Pharm:** MAO inhibitor (mouse liver MAO, 100µg/mL, InRt = 56.0%, 25µg/mL, InRt = 28.0%, 10µg/mL, InRt = 13.7%, IC<sub>50</sub> = 230µmol). **Source:** SI LENG JIAO MAO KE JUN *Chaetomium quadrangulatum*. **Ref:** 4318.

**3448 Chaetoquadrin I**

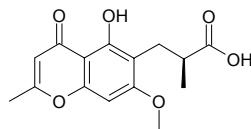
C<sub>19</sub>H<sub>20</sub>O<sub>6</sub> (344.37). Colorless amorphous, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -40.8° (c = 0.05, CHCl<sub>3</sub>). **Source:** SI LENG JIAO MAO KE JUN *Chaetomium quadrangulatum*. **Ref:** 4318.

**3449 Chaetoquadrin J**

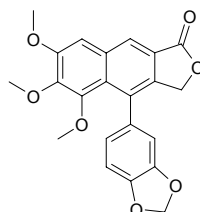
C<sub>23</sub>H<sub>22</sub>O<sub>8</sub> (426.43). White powder (MeOH), mp 253~255°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -30.9° (c = 0.2, CHCl<sub>3</sub>). **Pharm:** MAO inhibitor (mouse liver MAO, 100µg/mL, InRt = 4.5%, 25µg/mL, InRt = 1.9%, 10µg/mL, InRt = 3.6%). **Source:** SI LENG JIAO MAO KE JUN *Chaetomium quadrangulatum*. **Ref:** 4318.

**3450 Chaetoquadrin K**

C<sub>13</sub>H<sub>16</sub>O<sub>6</sub> (292.29). White powder (CH<sub>3</sub>CN), mp 166~169°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -2.5° (c = 0.3, CHCl<sub>3</sub>). **Pharm:** MAO inhibitor (mouse liver MAO, 100µg/mL, InRt = 8.6%, 25µg/mL, InRt = 5.3%, 10µg/mL, InRt = 4.8%). **Source:** SI LENG JIAO MAO KE JUN *Chaetomium quadrangulatum*. **Ref:** 4318.

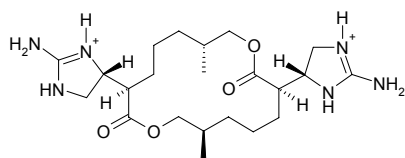
**3451 Chaihunaphthone**

C<sub>22</sub>H<sub>18</sub>O<sub>7</sub> (394.38). White needle crystals, mp 164~166°C. **Source:** HONG CHAI HU *Bupleurum scorzonerifolium* (root). **Ref:** 3498.

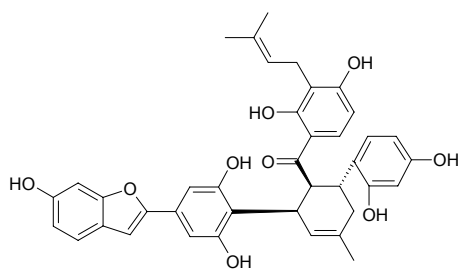


**3452 Chaksine**

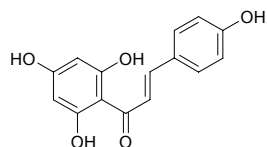
[486-53-3]  $C_{22}H_{40}N_6O_4^{+2}$  (452.60). **Pharm:** Antibacterial (*Staphylococcus aureus*, *Bacillus coli*, *B. typhosus* and hemolytic streptococcus); uterine stimulant; inhibits intestine and other smooth muscle movement; MLD (rbt) = 80mg/kg. **Source:** A SU JUE MING *Cassia absus*. **Ref:** 658.

**3453 Chalcomoracin**

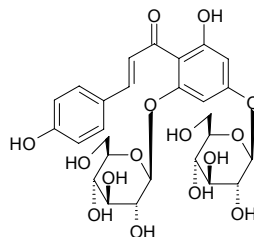
$C_{39}H_{36}O_9$  (648.72). **Pharm:** Antibacterial (*Enterococcus faecalis* JCM7783 (VSE) (= ATCC19434), MIC = 3.13µg/mL, control Linezolid, MIC = 1.56µg/mL; *Enterococcus faecalis* JU1856(VRE, VanA), MIC = 3.13µg/mL, Linezolid, MIC = 0.78µg/mL; *Enterococcus faecalis* JU1782(VRE, VanB), MIC = 3.13µg/mL, Linezolid, MIC = 0.78µg/mL; *Enterococcus faecium* JCM5804 (VSE) (= ATCC 29212), MIC = 6.25µg/mL, Linezolid, MIC = 1.56µg/mL; *Enterococcus faecium* JU1858 (VRE, VanA), MIC = 3.13µg/mL, Linezolid, MIC = 0.78µg/mL; *Enterococcus faecium* JU1777 (VRE, VanB), MIC = 3.13µg/mL, Linezolid, MIC = 1.56µg/mL; *Enterococcus gallinarum* JU2786 (VRE, VanC), MIC = 3.13µg/mL, Linezolid, MIC = 0.78µg/mL; *Staphylococcus aureus* JCM2874 (MSSA) (=ATCC29213), MIC = 3.13µg/mL, Linezolid, MIC = 1.56µg/mL; *Staphylococcus aureus* (MRSA, 10 strains), MIC = 3.13µg/mL, Linezolid, MIC = 0.78µg/mL; *Staphylococcus aureus* (MRSA, 8 strains), mean MIC<sub>80</sub> = 3.13µg/mL, Linezolid, mean MIC<sub>80</sub> = 0.78µg/mL)<sup>[5007]</sup>. **Source:** CAN SANG *Morus bombycis*. **Ref:** 5007.

**3454 Chalconaringenin**

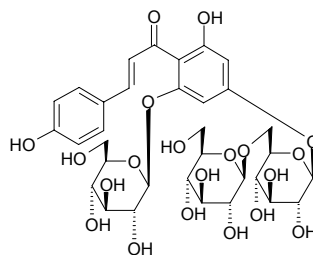
[5071-40-9]  $C_{15}H_{12}O_5$  (272.26). **Pharm:** Iodinate thyronine deiodinase inhibitor (rat liver cells). **Source:** SHUI YANG ZHI YE *Salix purpurea*, *Dianthus* sp., *Helichrysum* sp., *Paeonia* sp. **Ref:** 658.

**3455 Chalconaringenin 2',4'-di-O-β-D-glucoside**

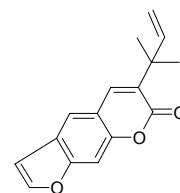
$C_{27}H_{32}O_{15}$  (596.55). Yellow powder. **Source:** JIA NA DA XI XIN *Asarum canadense* (leaf). **Ref:** 5120.

**3456 Chalconaringenin 2'-O-β-D-glucoside-4'-O-β-gentiobioside**

$C_{23}H_{42}O_{20}$  (758.69). Yellow powder. **Source:** JIA NA DA XI XIN *Asarum canadense* (leaf). **Ref:** 5120.

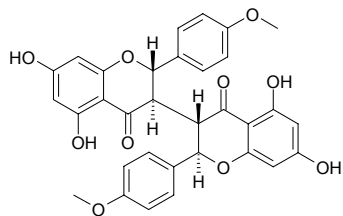
**3457 Chalepensin**

[13164-03-9]  $C_{16}H_{14}O_3$  (254.29). mp 80~90°C. **Pharm:** Phytogrowth inhibitor (100µg/mL, *Amaranthus hypochondriacus*, InRt = (22.0±0.6)%,  $P < 0.05$ ; *E. crusgalli*, InRt = (108±2)%)<sup>[5253]</sup>, cytotoxic (*in vitro*, A549, ED<sub>50</sub> = 7.7µg/mL, control Adriamycin, ED<sub>50</sub> = 0.0322µg/mL; MCF7, ED<sub>50</sub> = 5.7µg/mL, Adriamycin, ED<sub>50</sub> = 0.0204µg/mL; HT29, ED<sub>50</sub> = 3.5µg/mL, Adriamycin, ED<sub>50</sub> = 0.0421µg/mL; A498, ED<sub>50</sub> = 9.5µg/mL, Adriamycin, ED<sub>50</sub> = 0.00348µg/mL; PC3, ED<sub>50</sub> = 17.8µg/mL, Adriamycin, ED<sub>50</sub> = 0.241µg/mL; PACA-2, ED<sub>50</sub> = 5.2µg/mL, Adriamycin, ED<sub>50</sub> = 0.0120µg/mL)<sup>[5253]</sup>; contraceptive (rat, anti-fecundation in innocuous dose). **Source:** CHOU CAO *Ruta graveolens*, *Boenninghausenia* sp., *Stauranthus perforatus* (root). **Ref:** 6, 658, 5253.

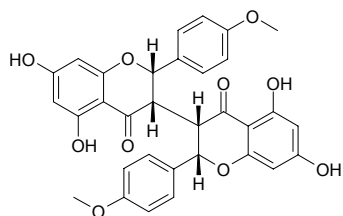


**3458 Chamaejasmenin A**

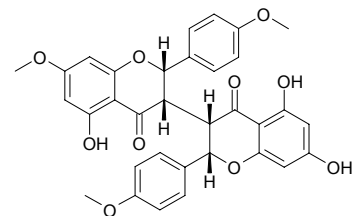
$C_{32}H_{26}O_{10}$  (570.56). **Pharm:** Antimitotic and antifungal (*Pyricularia oryzae*, 25 $\mu$ g/mL, middle inhibition, 50 $\mu$ g/mL, complete inhibition). **Source:** LANG DU *Stellera chamaejasme*. **Ref:** 4476.

**3459 Chamaejasmenin B**

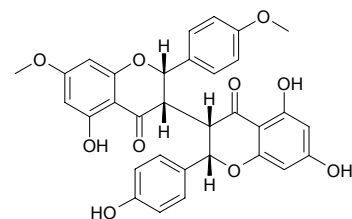
$C_{32}H_{26}O_{10}$  (570.56). **Pharm:** Antimitotic and antifungal (*Pyricularia oryzae*, 100 $\mu$ g/mL, middle inhibition). **Source:** LANG DU *Stellera chamaejasme*. **Ref:** 4476.

**3460 Chamaejasmenin C**

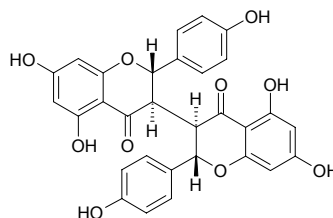
$C_{33}H_{28}O_{10}$  (584.59). **Pharm:** Antimitotic and antifungal inactive (*Pyricularia oryzae*, 400 $\mu$ g/mL). **Source:** LANG DU *Stellera chamaejasme*. **Ref:** 4476.

**3461 Chamaejasmenin D**

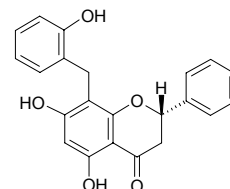
$C_{32}H_{26}O_{10}$  (570.56). White amorphous powder,  $[\alpha]_D^{20} = 0^\circ$  ( $c = 0.01$ , MeOH). **Pharm:** Antimitotic and antifungal (*Pyricularia oryzae*, 25 $\mu$ g/mL, strong inhibition, 100 $\mu$ g/mL, complete inhibition). **Source:** LANG DU *Stellera chamaejasme*. **Ref:** 4476.

**3462 (+)-Chamaejasmin**

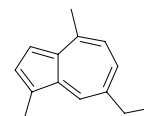
$C_{30}H_{22}O_{10}$  (542.50). Yellowish powder, mp > 300°C (MeOH),  $[\alpha]_D^{20} = +50^\circ$  ( $c = 0.46$ , MeOH);  $[\alpha]_D^{25} = -39.4^\circ$  ( $c = 0.7$ ,  $CHCl_3$ ). **Pharm:** Anti-inflammatory (acute inflammation model, carrageenan-induced mouse paw oedema, 3h after 50mg/kg challenge, oedema inhibition = 46%)<sup>[5459]</sup>; anti-inflammatory (chronic inflammation model, in the form of eczema, provoked by repeated administration of TPA to the ears of mouse, swelling reduction = 26%, control Dexamethasone, swelling reduction = 85%)<sup>[5459]</sup>; LTB<sub>4</sub> production inhibitor (rat peritoneal polymorphonuclear leukocytes, IC<sub>50</sub> = 29.8 $\mu$ mol/L)<sup>[4577]</sup>. **Source:** LANG DU *Stellera chamaejasme*, ROU MAO XIAO RU XIANG *Schinus molle* (fruit). **Ref:** 4577, 5459.

**3463 Chamaneetin**

[58801-43-7]  $C_{22}H_{18}O_5$  (362.39). mp 210–211°C (benzene). **Pharm:** Antibacterial (*Staphylococcus aureus*, MIC = 6.3 $\mu$ g/mL; *Bacillus subtilis*, MIC = 6.3 $\mu$ g/mL; *Mycobacterium smegmatis*, MIC = 25 $\mu$ g/mL). **Source:** AN ZI YU PAN *Uvaria chamae*. **Ref:** 661.

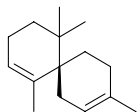
**3464 Chamazulene**

Dimethylene [529-05-5]  $C_{14}H_{16}$  (184.28). bp 161°C/12mmHg. **Pharm:** Antifungal; anti-inflammatory. **Source:** BAI YE JING JIE *Nepeta leucophylla*, GUANG RONG YIN YU *Skimmia laureola*, MU<sup>(3)</sup> JU *Matricaria chamomilla* [Syn. *Matricaria recutita*], SHE XIANG SHI CAO *Achillea moschata*, WU YAO *Lindera strychnifolia* [Syn. *Lindera aggregata*], YI ZHI HAO *Achillea alpina* [Syn. *Achillea sibirica*], ZHONG YA KU HAO *Artemisia absinthium*. **Ref:** 1, 6.

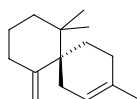


**3465  $\alpha$ -Chamigrene**

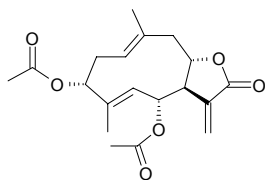
[19912-83-5] C<sub>15</sub>H<sub>24</sub> (204.36). Source: WU WEI ZI *Schisandra chinensis*. Ref: 2.

**3466  $\beta$ -Chamigrene**

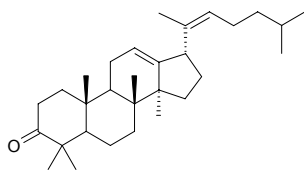
[18431-82-8] C<sub>15</sub>H<sub>24</sub> (204.36). bp 110~113°C/13mmHg. Source: CANG ZHU *Atractylodes lancea*, CE BAI ZHI JIE *Thuja orientalis* [Syn. *Platycladus orientalis*; *Biota orientalis*], DANG GUI *Angelica sinensis*, WU WEI ZI *Schisandra chinensis*. Ref: 2, 6, 660.

**3467 Chamissonin diacetate**

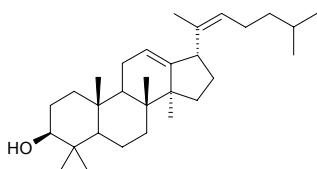
C<sub>19</sub>H<sub>24</sub>O<sub>6</sub> (348.40). Pharm: Antineoplastic; cytotoxic. Source: CI GUO TUN CAO *Ambrosia acanthicarpa*. Ref: 658.

**3468 Champalin A**

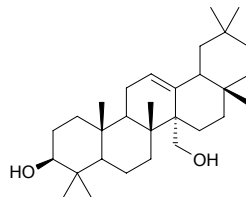
Damma-12,20(22)Z-dien-3-one C<sub>30</sub>H<sub>48</sub>O (424.72). Amorphous powder,  $[\alpha]_D^{27} = +43.1^\circ$  ( $c = 0.58$ , CHCl<sub>3</sub>). Source: DUN XING JI DAN HUA *Plumeria obtusa* (leaf and stem cortex). Ref: 3824.

**3469 Champalin B**

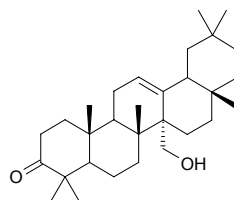
Damma-12,20(22)Z-dien-3 $\beta$ -ol C<sub>30</sub>H<sub>50</sub>O (426.73). Colorless oil,  $[\alpha]_D^{27} = +44.2^\circ$  ( $c = 0.04$ , CHCl<sub>3</sub>). Source: DUN XING JI DAN HUA *Plumeria obtusa* (leaf and stem cortex). Ref: 3824.

**3470 Champalinol**

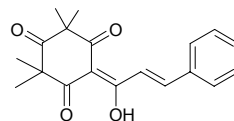
Olean-12-en-3 $\beta$ ,27-diol C<sub>30</sub>H<sub>50</sub>O<sub>2</sub> (442.73). Amorphous powder,  $[\alpha]_D^{27} = +42.1^\circ$  ( $c = 0.80$ , CHCl<sub>3</sub>). Source: DUN XING JI DAN HUA *Plumeria obtusa* (leaf and stem cortex). Ref: 3824.

**3471 Champalinone**

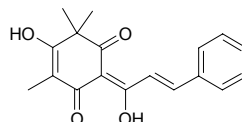
27-Hydroxyolean-12-en-3-one C<sub>30</sub>H<sub>48</sub>O<sub>2</sub> (440.72). Colorless amorphous powder. Source: DUN XING JI DAN HUA *Plumeria obtusa* (leaf and stem cortex). Ref: 3824.

**3472 Champanone A**

2,2,4,4-Tetramethyl-6-(1-oxo-3-phenylprop-2-enyl)cyclohexane-1,3,5-trione C<sub>19</sub>H<sub>20</sub>O<sub>4</sub> (312.37). Yellow needles, mp 92~93°C. Pharm: Antibacterial (*Micrococcus luteus*, MIC = 30 $\mu$ g/mL; *Staphylococcus aureus*, MIC = 30 $\mu$ g/mL; *Bacillus subtilis*, MIC = 30 $\mu$ g/mL; *Pseudomonas aeruginosa*, MIC = 30 $\mu$ g/mL; *Streptococcus faecalis*, MIC = 15 $\mu$ g/mL)<sup>[5313]</sup>. Source: *Campomanesia lineatifolia* (seed). Ref: 5313.

**3473 Champanone B**

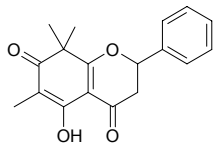
2,2,4-Trimethyl-6-(1-oxo-3-phenylprop-2-enyl)cyclohexane-1,3,5-trione C<sub>18</sub>H<sub>18</sub>O<sub>4</sub> (298.34). Yellow needles, mp 134~135°C. Pharm: Antibacterial (*Micrococcus luteus*, MIC = 30 $\mu$ g/mL)<sup>[5313]</sup>. Source: *Campomanesia lineatifolia* (seed). Ref: 5313.



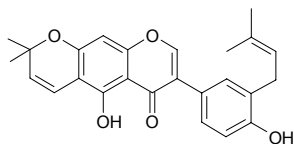
**3474 Champanone C**

2,3-Dihydro-5-hydroxy-6,8,8-trimethyl-2-phenyl-4*H*-1-benzopyran-4,7(8*H*)-dione C<sub>18</sub>H<sub>18</sub>O<sub>4</sub> (298.34). Yellow needles, mp 147~148°C. **Pharm:**

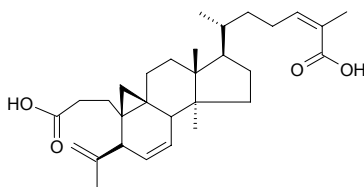
Antibacterial (*Bacillus subtilis*, MIC = 30µg/mL; *Streptococcus faecalis*, MIC = 30µg/mL). **Source:** *Campomanesia lineatifolia* (seed). **Ref:** 5313.

**3475 Chandalone**

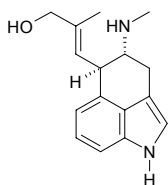
C<sub>25</sub>H<sub>24</sub>O<sub>5</sub> (404.47). **Pharm:** Antioxidant (DPPH scavenger, ScRt = 18.42%, control BHT, ScRt = 71.5%)<sup>[3810]</sup>; antioxidant (DPPH scavenger, 10µmol/L, ScRt = 20%, control BHT, 10µmol/L, ScRt = 43%)<sup>[5319]</sup>; antibacterial (*Staphylococcus aureus* ATCC 25923, MIC = 128µg/mL, Vancomycin, MIC = 0.5µg/mL; MRSA SK1, MIC = 16µg/mL, Vancomycin, MIC = 1.0µg/mL)<sup>[3810]</sup>; increases blood pressure (anesthetized rats, increases in mean arterial blood pressure, 4.0mg/kg, 11.67mmHg)<sup>[3810]</sup>. **Source:** PAN YUAN YU TENG *Derris scandens* (stem), TIAN SHAN ZHU ZI *Garcinia dulcis* (fruit). **Ref:** 1521, 3810, 5319.

**3476 Changnanic acid**

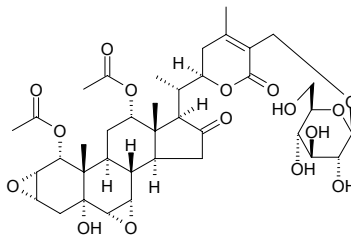
[136040-44-3] C<sub>30</sub>H<sub>44</sub>O<sub>4</sub> (468.68). **Pharm:** Cytotoxic (P<sub>388</sub> *in vitro*, ED<sub>50</sub> = 1.0µg/mL)<sup>[2436]</sup>. **Source:** CHANG GENG NAN WU WEI ZI *Kadsura peltigera* [Syn. *Kadsura longipedunculata*]. **Ref:** 2436, 2523.

**3477 Chanoclavine**

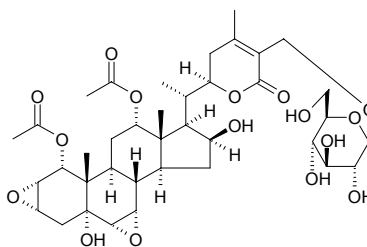
[2390-99-0] C<sub>16</sub>H<sub>20</sub>N<sub>2</sub>O (256.35). mp 220~222°C (dec). **Pharm:** Hallucinogen. **Source:** MAI JIAO *Claviceps purpurea*, QIAN NIU ZI *Pharbitis nil*, QING ZI QIAN NIU *Ipomoea violacea*, SAN SE QIAN NIU *Ipomoea tricolor*, YIN YE SHU *Ipomoea argyrophylla*. **Ref:** 6, 658.

**3478 Chantriolide A**

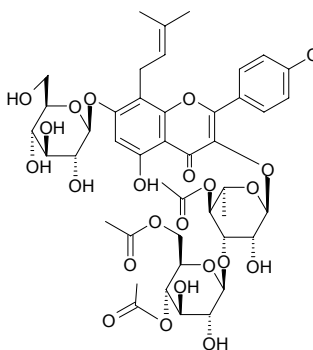
(22*R*)-1*α*,12*α*-Diacetoxy-2*α*,3*α*,6*α*,7*α*-diepoxy-27-[(β-*D*-glucopyranosyl)oxy]-5*α*-hydroxy-16-oxowith-24-enolide C<sub>38</sub>H<sub>52</sub>O<sub>16</sub> (764.83). Amorphous solid, [α]<sub>D</sub><sup>25</sup> = -4.0° (c = 0.10, MeOH). **Source:** JIAN GEN SHU *Tacca chantrieri* [Syn. *Tacca minor*; *Tacca esquirolii*] (rhizome: yield = 0.00045%dw). **Ref:** 4700.

**3479 Chantriolide B**

(22*R*)-1*α*,12*α*-Diacetoxy-2*α*,3*α*,6*α*,7*α*-diepoxy-27-[(β-*D*-glucopyranosyl)oxy]-5*α*,-16β-dihydroxywith-24-enolide C<sub>38</sub>H<sub>54</sub>O<sub>16</sub> (766.84). Amorphous solid, [α]<sub>D</sub><sup>25</sup> = +54.0° (c = 0.10, MeOH). **Source:** JIAN GEN SHU *Tacca chantrieri* [Syn. *Tacca minor*; *Tacca esquirolii*] (rhizome: yield = 0.00059%dw). **Ref:** 4700.

**3480 Chaohuocide A**

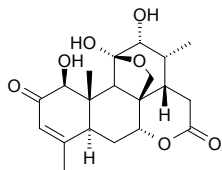
7-*O*-β-*D*-Glucopyranosyl-anhydroicaritin-3-*O*-β-*D*-(3,6-*O*-diacetyl)-glucopyranosyl-(1→3)-*α*-*L*-(4-*O*-acetyl)-rhamnopyranoside C<sub>45</sub>H<sub>56</sub>O<sub>23</sub> (964.93). Yellow powder, mp 144~155.5°C, [α]<sub>D</sub><sup>18</sup> = -86° (c = 0.01, methanol). **Source:** CHAO XIAN YIN YANG HUO *Epimedium koreanum*. **Ref:** 357.



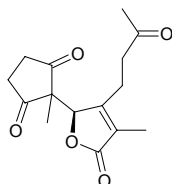


**3481 Chaparrinone**

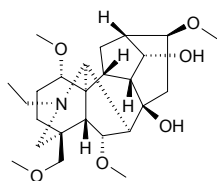
[22611-34-3]  $C_{20}H_{26}O_7$  (378.43). mp 236~248°C. Pharm: Antineoplastic (P<sub>388</sub>, 40mg/kg, biotic prolonged rate = 145%); cytotoxic (KB, ED<sub>50</sub> = 0.142μg/mL, Rous sarcoma virus *in vitro*). Source: CHU BAI PI *Ailanthus altissima*, QUAN YUAN CHU *Ailanthus integrifolia* ssp. *calycina*. Ref: 1, 5, 6.

**3482 Charminarone**

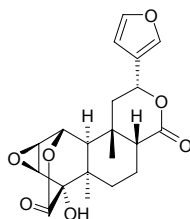
1,10-Seco-dihydroisoparthenin-1,10-dione  $C_{15}H_{18}O_5$  (278.31). Viscous mass,  $[\alpha]_D^{25} = -17.2^\circ$  ( $c = 0.25$ ,  $CHCl_3$ ). Source: YIN JIAO JU *Parthenium hysterophorus*. Ref: 3377.

**3483 Chasmanine**

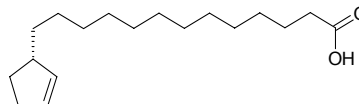
[5066-78-4]  $C_{25}H_{41}NO_6$  (451.61). mp 90~91°C. Source: CU JING WU TOU *Aconitum crassicaule*, GUA YE WU TOU *Aconitum hemsleyanum*, HUANG MAO WU TOU *Aconitum chrysotrichum*, LI JIANG WU TOU *Aconitum forrestii* [Syn. *Aconitum likiangense*], XIE XING WU TOU *Aconitum subcuneatum*, ZHAN HUA WU TOU *Aconitum chasmanthum*, ZHUA KUI GUA YE WU TOU *Aconitum hemsleyanum* var. *leueanthus* (root: yield = 0.00097%dw)<sup>[4678]</sup>. Ref: 513, 1521, 3171, 4678.

**3484 Chasmanthin**

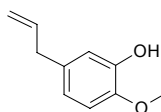
[20379-19-5]  $C_{20}H_{22}O_7$  (374.39). Source: FEI ZHOU FANG JI *Jateorhiza palmata*. Ref: 658.

**3485 Chaulmoogric acid**

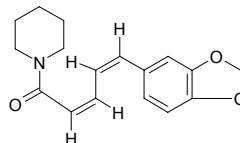
13-(2-Cyclopenten-1-yl)tridecanoic acid [29106-32-9]  $C_{18}H_{32}O_2$  (280.45). mp (+) 68.5°C, (±) 68.5°C, bp (+) 247~248°C/20mmHg. Pharm: Antileprotic (inhibits *Mycobacterium leprae*, treatment of leprosy using its ethyl ester). Source: DA FENG ZI *Hydnocarpus anthelminticus* (seed: content scope = 8.55%~14.30%<sup>[5501]</sup>). Ref: 6, 658, 5501.

**3486 Chavibetol**

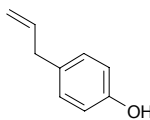
[501-19-9]  $C_{10}H_{12}O_2$  (164.21). mp 8.5°C, bp 254~255°C. Source: JU JIANG YE *Piper betle*. Ref: 6.

**3487 Chavicine**

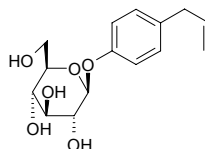
[495-91-0]  $C_{17}H_{19}NO_3$  (285.35). bp 245~260°C/0.25mmHg. Source: HU JIAO *Piper nigrum*. Ref: 6.

**3488 Chavicol**

4-Allylphenol [501-92-8]  $C_9H_{10}O$  (134.18). mp 16°C, bp 237°C. Source: DING XIANG *Syzygium aromaticum* [Syn. *Eugenia caryophyllata*], JU JIANG YE *Piper betle*. Ref: 6.

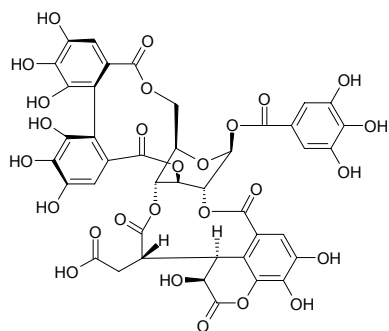
**3489 Chavicol β-D-glucoside**

$C_{15}H_{20}O_6$  (296.32). Source: BAI MEI HUA *Prunus mume* (flower: yield = 0.0014%fw). Ref: 4641.

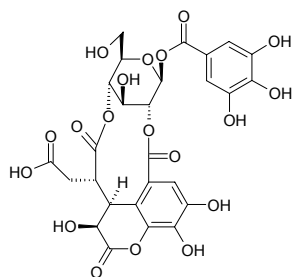


**3490 Chebulagic acid**

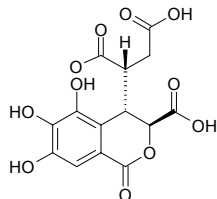
[23094-71-5] C<sub>41</sub>H<sub>30</sub>O<sub>27</sub> (954.68). mp > 240°C. **Pharm:** Antioxidant (lipid peroxidation inhibitor, mitochondria of hepatocyte in rat); promotes lipolysis (fat cells in rat, induced by ACTH); antibacterial (*Erwinia carotovora*, IZD = 19mm/100µg, control Quercetin sulfate, IZD = 21mm/10µg; *Staphylococcus aureus*, IZD = 11mm/100µg, Quercetin sulfate, IZD = 14mm/10µg; *Corynebacterium accolens*, IZD = 10mm/100µg, Quercetin sulfate, IZD = 28mm/10µg)<sup>[5250]</sup>; antifungal (*Candida albicans*, IZD = 12mm/100µg, control Nystatin, IZD = 11mm/20µg)<sup>[5250]</sup>; xanthine oxidase inhibitor (IC<sub>50</sub> = 46.3µg/mL, IC<sub>50</sub> = 48µmol/L; control Quercetin, IC<sub>50</sub> = 3.4µg/mL, IC<sub>50</sub> = 10µmol/L)<sup>[5250]</sup>. **Source:** AN MO LE *Phyllanthus emblica* (fruit juice, branch and leaf)<sup>[3094]</sup>, CAO YUAN LAO GUAN CAO *Geranium pratense*, DA YE KU NUO NI *Cunonia macrophylla* (leaf), HE ZI *Terminalia chebula*, YOU GAN MU PI *Phyllanthus emblica*, YOU GAN YE *Phyllanthus emblica*. **Ref:** 6, 658, 3094, 5250.

**3491 Chebulanin**

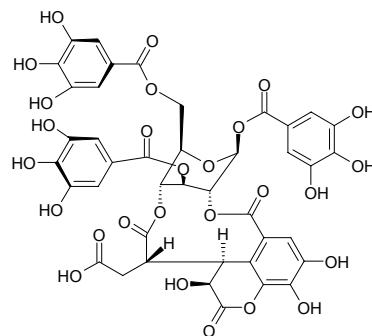
C<sub>27</sub>H<sub>24</sub>O<sub>19</sub> (652.48). **Source:** AN MO LE *Phyllanthus emblica* (fruit juice, branch and leaf). **Ref:** 3094.

**3492 Chebulic acid**

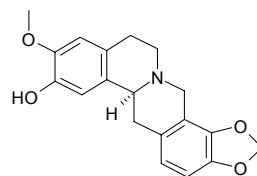
C<sub>14</sub>H<sub>12</sub>O<sub>11</sub> (356.25). **Source:** AN MO LE *Phyllanthus emblica*, *Schinopsis* spp. **Ref:** 1558, 3094.

**3493 Chebulinic acid**

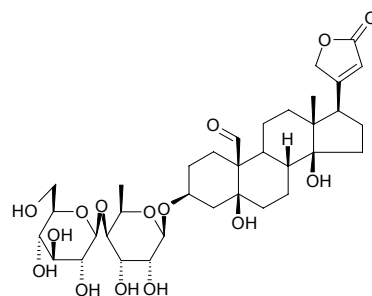
[18942-26-2] C<sub>41</sub>H<sub>32</sub>O<sub>27</sub> (956.70). mp 234°C. **Pharm:** Antioxidant (lipid peroxidation inhibitor, microsomes of hepatocyte in rat); promotes lipolysis (induced by ACTH). **Source:** AN MO LE *Phyllanthus emblica*, HE ZI *Terminalia chebula*, YOU GAN MU PI *Phyllanthus emblica*, YOU GAN YE *Phyllanthus emblica*. **Ref:** 6, 658.

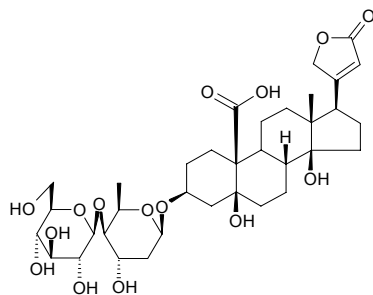
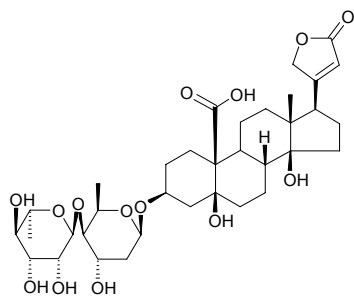
**3494 Cheilanthifoline**

[483-44-3] C<sub>19</sub>H<sub>19</sub>NO<sub>4</sub> (325.37). mp (-) 178~180°C. **Source:** BIAN FU GE GEN *Menispermum dauricum*, HE BAO MU DAN GEN *Dicentra spectabilis*, ZI HUA YU DENG CAO *Corydalis incisa*. **Ref:** 6.

**3495 Cheiranthoside VIII**

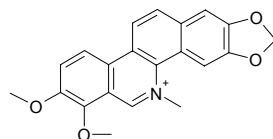
Strophanthidin 3-O-β-D-glucopyranosyl-(1→4)-β-D-antiaropyranoside C<sub>35</sub>H<sub>52</sub>O<sub>15</sub> (712.80). White powder, [α]<sub>D</sub><sup>31</sup> = -5.2° (c = 0.42, MeOH). **Source:** GUI ZHU TANG JIE *Erysimum cheiranthoides* (seed). **Ref:** 4209.



**3496 Cheiranthoside IX**Cheiranthidin 3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-boivopyranosideC<sub>35</sub>H<sub>52</sub>O<sub>15</sub> (712.80). White powder,  $[\alpha]_D^{18} = +1.8^\circ$  ( $c = 0.45$ , MeOH). Source:GUI ZHU TANG JIE *Erysimum cheiranthoides* (seed). Ref: 4209.**3497 Cheiranthoside X**Cheiranthidin 3-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranosideC<sub>35</sub>H<sub>52</sub>O<sub>14</sub> (696.80). White powder,  $[\alpha]_D^{18} = +16.3^\circ$  ( $c = 0.53$ , MeOH). Source:GUI ZHU TANG JIE *Erysimum cheiranthoides* (seed). Ref: 4209.**3498 Chelerythrine**

Toddaline [34316-15-9] C<sub>21</sub>H<sub>18</sub>NO<sub>4</sub><sup>+</sup> (348.38). Pharm: Antibacterial; antifungal; antiviral; causes abortion (gpg, in low dose, causes paralysis and death in high dose); toxin (neuromuscular poison, inhibits heart); anti-HIV inactive (H9 lymphocytes, control AZT, IC<sub>50</sub> = 500 $\mu$ g/mL, EC<sub>50</sub> = 0.0317 $\mu$ g/mL, TI = 15800)<sup>[5364]</sup>; cytotoxic (DNA intercalation and uncoupling of oxidative phosphorylation)<sup>[1521]</sup>; aminotransferase inhibitor (rat liver)<sup>[1521]</sup>; antimicrobial and anti-inflammatory (recommended for use against oral infections)<sup>[1521]</sup>; antihypertensive (mouse, rabbit and cat)<sup>[1521]</sup>; analgesic<sup>[1521]</sup>; sedative (lengthens sleeping time)<sup>[1521]</sup>; protein kinase C inhibitor<sup>[5369]</sup>; cytotoxic (completely suppresses the growth of GI-101A breast tumor cells stimulated by hydroxychloroquine and prednisone, blocks expression of vascular endothelial growth factor (VEGF)mRNA in GI-101A and HL-60 cells stimulated by 12-O-tetradecanoylphorbol 13-acetate (TPA) or diethylstilbestrol; inhibits increased proliferation of MCF7 cells stimulated by thymeleatoxin)<sup>[5369]</sup>; cytotoxic (inhibits proliferation of PC3 hmn prostate cancer cell line, AGS gastric cancer cell line)<sup>[5369]</sup>; cytotoxic (series of radioresistant and chemoresistant hmn squamous cell carcinoma

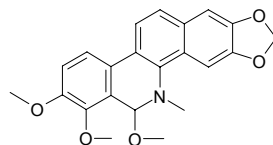
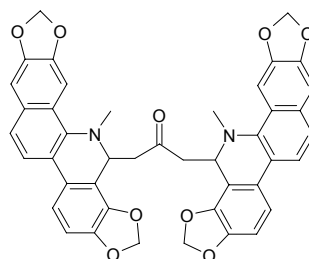
lines, causes rapidly apoptosis of carcinoma cells)<sup>[5369]</sup>; antineoplastic (nude mouse, radioresistant, chemoresistant and p53-deficient hmn head and neck squamous cell carcinoma line SQ-20B with significant tumor growth delay and minimal toxicity)<sup>[5369]</sup>. Source: BAI QU CAI *Chelidonium majus*, BO LUO HUI *Macleaya cordata* (whole herb: content = 8.97%<sup>[5508]</sup>), FEI LONG ZHANG XUE *Toddalia asiatica* [Syn. *Toddalia aculeata*; *Paullinia asiatica*], HE BAO MU DAN GEN *Dicentra spectabilis*, HE QING HUA *Hylomecon japonica*, JI YING SU *Argemone mexicana*, LI CHUN HUA *Papaver commutatum* [Syn. *Papaver rhoeas*], XI GUO JIAO HUI XIANG *Hypecoum leptocarpum*, occurs in many plants (family Papaveraceae spp. (*Argemone* spp.; *Bocconia* spp.; *Chelidonium* spp.; *Dicranostigma* spp.; *Eschscholzia* spp.; *Glaucium* spp.; *Hunnemannia* spp.; *Hylomecon* spp.; *Macleaya* spp.; *Papaver* spp.; *Sanguinaria* spp.; *Stylophorum* spp.; *Platystemon* spp.; *Stylomecon* spp.); family Rutaceae spp. (*Fagara* spp.; *Toddalia* spp.; *Zanthoxylum* spp.); family Fumariaceae spp. (*Corydalis* spp.; *Dicentra* spp.); family Sapindaceae spp. (*Pteridophyllum* spp.)). Ref: 6, 658, 1521, 5364, 5369, 5508.

**3499 Chelerythrine methanolate**

6-Methoxy-5,6-dihydrochelerythrine; 6-Methoxydihydrochelerythrine

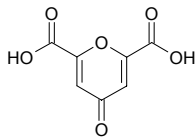
C<sub>22</sub>H<sub>21</sub>NO<sub>5</sub> (379.42). Pink prismatic crystals (methanol), mp 190°C, mp 226°C.

Pharm: Antineoplastic (EAC); antimicrobial; cytotoxic (KB, *in vitro*, 4–5 $\mu$ g/mL). Source: BAI QU CAI *Chelidonium majus* (whole herb: mean content of 5 origins = 0.142%<sup>[5508]</sup>), RU DI JIN NIU *Zanthoxylum nitidum*, FEI LONG ZHANG XUE *Toddalia asiatica* [Syn. *Toddalia aculeata*; *Paullinia asiatica*]. Ref: 661, 1290, 5508.

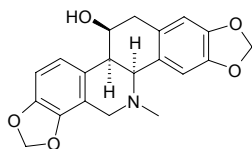
**3500 meso-Chelidimerine**[39110-99-1] C<sub>43</sub>H<sub>32</sub>N<sub>2</sub>O<sub>9</sub> (720.74). mp 258–260°C. Source: BAI QU CAI *Chelidonium majus*. Ref: 6.

**3501 Chelidonic acid**

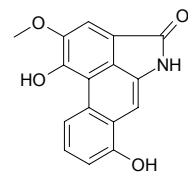
[99-32-1]  $C_7H_4O_6$  (184.11). mp 262°C. Source: BAI QU CAI *Chelidonium majus*, LING LAN *Convallaria keiskei* [Syn. *Convallaria majalis*], XIAO BAI BU *Asparagus officinalis*. Ref: 6.

**3502 Chelidonine**

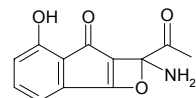
Diphyline; Stylophorin [476-32-4]  $C_{20}H_{19}NO_5$  (353.38). mp 136–140°C, bp 220°C. Pharm: Antibacterial; antispasmodic (smooth muscle); antiviral; cytotoxic (HeLa,  $ED_{50} = 0.27\mu\text{g/mL}$ ,  $S_{180}$  and EAC); inhibits cardiac muscles (slows heart rate and stops beating in period of expansion in high dose); CNS depressant (sedative and hypnotic); inhibits mitosis (fibrocyte *in vitro*,  $2.5\mu\text{mol/L}$ ); inhibits skeletal muscles; acaricide; paralyzes sensory and motor nerve;  $LD_{50}$  (mus, iv) =  $(34.6\pm 2.4)\text{mg/kg}$ . Source: BAI QU CAI *Chelidonium majus* (whole herb: mean content of 5 origins = 0.669%)<sup>[5508]</sup>, ER YE BAO YING SU *Stylophorum diphyllum*, HE QING HUA *Hylomecon japonica*, TU CHUANG HUA *Dicranostigma franchetianum* [Syn. *Dicranostigma leptopodum*], YE YING SU *Papaver nudicaule*. Ref: 4, 6, 590, 658, 5507, 5508.

**3503 Cheliensisam B**

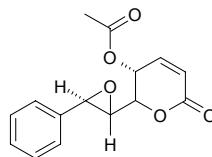
$C_{16}H_{11}NO_4$  (281.27). Source: *Goniothalamus* sp. Ref: 2447.

**3504 Cheliensisamine**

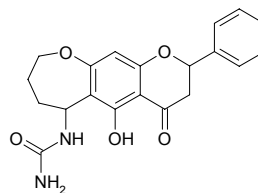
$C_{12}H_9NO_4$  (231.21). Yellow micro-acicular crystals, mp 178–180°C. Source: GE NA XIANG *Goniothalamus cheliensis*. Ref: 791.

**3505 Cheliensisin A**

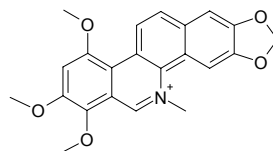
5 $\alpha$ -acetoxy-goniothalamine oxide  $C_{15}H_{14}O_5$  (274.28). White prismatic crystals, mp 152–153°C,  $[\alpha]_D^{24} = +293.45^\circ$  ( $c = 1.31$ ,  $CHCl_3$ ). Source: GE NA XIANG *Goniothalamus cheliensis*. Ref: 419, 660.

**3506 Cheliensisine**

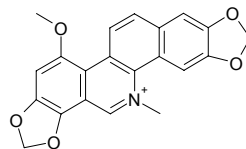
$C_{20}H_{20}N_2O_5$  (368.39). White powder, mp 224–226°C. Pharm: Antineoplastic<sup>[2446]</sup>. Source: GE NA XIANG *Goniothalamus cheliensis*. Ref: 2446.

**3507 Chelilutine**

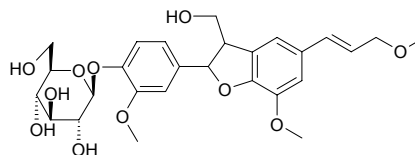
[55950-32-8]  $C_{22}H_{20}NO_5^+$  (378.41). Source: BAI QU CAI *Chelidonium majus*, HE BAO MU DAN GEN *Dicentra spectabilis*, HE QING HUA *Hylomecon japonica*. Ref: 6.

**3508 Chelirubine**

[182093-11-7]  $C_{21}H_{16}NO_5^+$  (362.37). Pharm: Local anesthetic; nematocide. Source: BAI QU CAI *Chelidonium majus*, HE BAO MU DAN GEN *Dicentra spectabilis*, HE QING HUA *Hylomecon japonica*. Ref: 6.

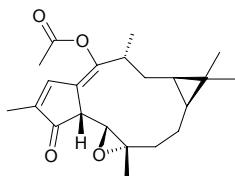
**3509 CPB-2001-49-282-32**

$C_{27}H_{34}O_{11}$  (534.57). Amorphous powder,  $[\alpha]_D^{28} = -54.8^\circ$  ( $c = 0.67$ , MeOH). Source: HAI CONG *Urginea maritima* (bulb). Ref: 3513.

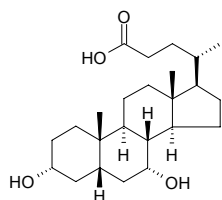


**3510 CPB-2004-52-608-2**

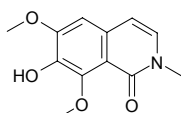
$C_{22}H_{30}O_4$  (358.48). Semi solid,  $[\alpha]_D^{25} = +68.2^\circ$  ( $c = 0.5$ ,  $CHCl_3$ ). Source: MA FENG SHU *Jatropha curcas* (aerial parts). Ref: 4287.

**3511 Chenodeoxycholic acid**

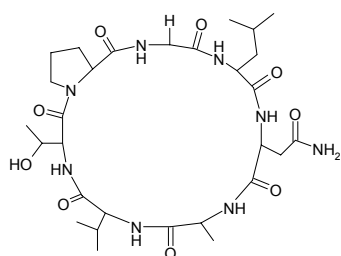
3 $\alpha$ ,7 $\alpha$ -dihydroxy-5 $\beta$ -cholanic acid [474-25-9]  $C_{24}H_{40}O_4$  (392.58). Pharm: Antibacterial (*Staphylococcus tetragenus*, *Staphylococcus aureus* and *Streptococcus* sp.); antihypercholesterolemic; LD<sub>50</sub> (sodium salt) = 961 mg/kg. Source: BAI E GAO *Anser cygnoides domestica*, JI NEI JIN *Gallus gallus domesticus*, NIU HUANG *Bos taurus domesticus*; *Bubalus bubalis* (gallstone: mean content = 1.71%<sup>[5508]</sup>), XIONG DAN *Selenarctos thibetanus*; *Ursus arctos*. Ref: 2, 658, 5508.

**3512 Cherianoine**

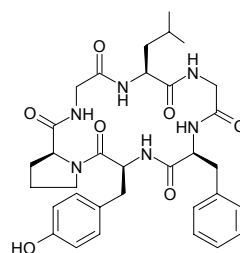
$C_{12}H_{13}NO_4$  (235.24). White acicular crystals, mp 122~124°C. Source: MAO YE FAN LI ZHI *Annona cherimolia*. Ref: 751.

**3513 Cherimolacyclopeptide D**

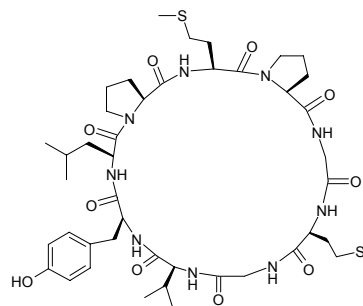
$C_{29}H_{48}N_8O_9$  (652.75). Colorless solid, mp 220~221°C,  $[\alpha]_D^{22} = -64^\circ$  ( $c = 0.1$ , MeOH). Pharm: Cytotoxic (*in vitro* KB cell culture system, IC<sub>50</sub> = 0.97 μmol/L; control Doxorubicin, IC<sub>50</sub> = 0.02 μmol/L). Source: MAO YE FAN LI ZHI *Annona cherimolia*. Ref: 5265.

**3514 Cherimolacyclopeptide E**

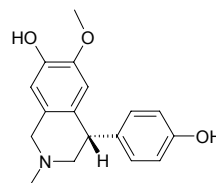
$C_{33}H_{42}N_6O_7$  (634.74). Colorless powder, mp 213~214°C (MeOH),  $[\alpha]_D^{22} = -56^\circ$  ( $c = 0.3$ , MeOH). Pharm: Cytotoxic (KB, IC<sub>50</sub> = 0.017 μmol/L, control Doxorubicin, IC<sub>50</sub> = 0.02 μmol/L). Source: MAO YE FAN LI ZHI *Annona cherimolia* (seed). Ref: 5320.

**3515 Cherimolacyclopeptide F**

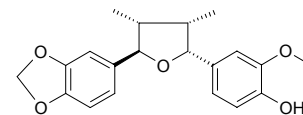
$C_{45}H_{69}N_9O_{10}S_2$  (960.23). Colorless solid, mp 139~140°C (MeOH),  $[\alpha]_D^{22} = -68^\circ$  ( $c = 0.1$ , MeOH). Pharm: Cytotoxic (KB, IC<sub>50</sub> = 0.06 μmol/L, control Doxorubicin, IC<sub>50</sub> = 0.02 μmol/L). Source: MAO YE FAN LI ZHI *Annona cherimolia* (seed). Ref: 5320.

**3516 Cherylline**

$C_{17}H_{19}NO_3$  (285.35). Pharm: AChE inhibitor (IC<sub>50</sub> = (211±10) μmol/L, control Galanthamine, IC<sub>50</sub> = (1.9±0.2) μmol/L). Source: GUAN MU WEN SHU LAN *Crinum macowanii* (bulb), *Crinum moorei*. Ref: 4000, 4952.

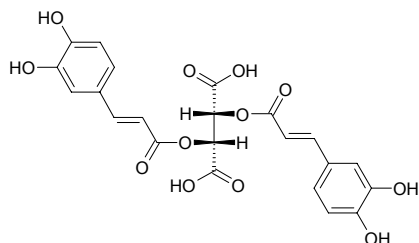
**3517 (-)-Chicanine**

$C_{20}H_{22}O_5$  (342.40). Colorless amorphous. Pharm: NO production inhibitor (mus, macrophage-like cell line RAW264.7 activated by LPS/IFN, IC<sub>50</sub> = 44.1 μmol/L, control Quercetin, IC<sub>50</sub> = 26.8 μmol/L)<sup>[2537]</sup>; antioxidant (DPPH scavenger)<sup>[4344]</sup>. Source: FENG CHAO CAO *Leucas aspera* (whole herb), HAI FENG TENG *Piper kadsura* [Syn. *Piper futokadsura*]. Ref: 2537, 4344.

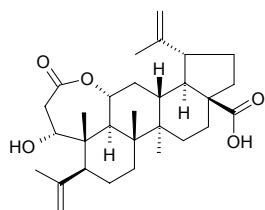


**3518 Chicoric acid**

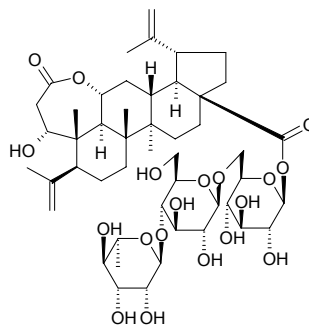
Chicoric acid [6357-80-0]  $C_{22}H_{18}O_{12}$  (474.38). mp 206°C. **Pharm:** Anti-HIV-1 (HIV-1 integrase inhibitor,  $IC_{50}$  (7.4±3.3)μg/mL)<sup>[5444]</sup>; anti-HIV (HIV-1<sub>III</sub>B-induced MT-4 cells,  $EC_{50}$  = (54.33±7.60)μg/mL;  $CC_{50}$  > 150μg/mL,  $SI$  > (2.81±0.39))<sup>[5444]</sup>. **Source:** JU QU *Cichorium intybus*. **Ref:** 6, 5444.

**3519 Chiisanogenin**

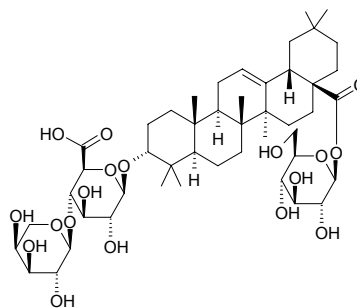
$C_{30}H_{44}O_5$  (484.68). **Pharm:** Platelet aggregation inhibitor (2~5mg/mL collagen-induced,  $IC_{50}$  = (574±13)μmol/L, control ASA,  $IC_{50}$  = (420±3)μmol/L; 1~4μmol/L epinephrine-induced with 0.8~1.0mg/mL collagen,  $IC_{50}$  = (2.5±0.2)μmol/L, ASA,  $IC_{50}$  = (53.0±4.5)μmol/L; 10~40μmol/L Sodium arachidonate-induced with 0.8~1.0mg/mL collagen,  $IC_{50}$  = (4.81±0.32)μmol/L, ASA,  $IC_{50}$  = (66.0±2.1)μmol/L; 1~5μmol/L  $PGH_2/TXA_2$  receptor agonist U46619-induced with 0.8~1.0mg/mL collagen,  $IC_{50}$  = (6.21±0.12)μmol/L, ASA,  $IC_{50}$  = (340±12)μmol/L). **Source:** CI WU JIA YE *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*], WU GENG WU JIA PI *Acanthopanax sessiliflorus* (fruit). **Ref:** 4994.

**3520 Chiisanoside**

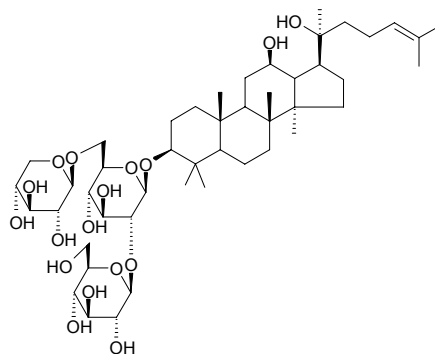
$C_{48}H_{74}O_{19}$  (955.11). **Pharm:** Platelet aggregation inhibitor (2~5mg/mL collagen-induced,  $IC_{50}$  = (574±11)μmol/L, control ASA,  $IC_{50}$  = (420±3)μmol/L; 1~4μmol/L epinephrine-induced with 0.8~1.0mg/mL collagen,  $IC_{50}$  = (367±13)μmol/L, ASA,  $IC_{50}$  = (53.0±4.5)μmol/L; 10~40μmol/L Sodium arachidonate-induced with 0.8~1.0mg/mL collagen,  $IC_{50}$  = (985±11)μmol/L, ASA,  $IC_{50}$  = (66.0±2.1)μmol/L; 1~5μmol/L  $PGH_2/TXA_2$  receptor agonist U46619-induced with 0.8~1.0mg/mL collagen,  $IC_{50}$  > 1000μmol/L, ASA,  $IC_{50}$  = (340±12)μmol/L). **Source:** CI WU JIA YE *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*], WU GENG WU JIA PI *Acanthopanax sessiliflorus* (fruit). **Ref:** 4994.

**3521 Chikusetsu saponin Ib**

[59252-87-8]  $C_{47}H_{74}O_{18}$  (927.10). White crystalline powder, mp 233~235°C,  $[\alpha]_D^{20}$  = -21.7° (c = 0.1, MeOH). **Source:** TAI BAI CONG MU *Aralia taibaiensis*. **Ref:** 462.

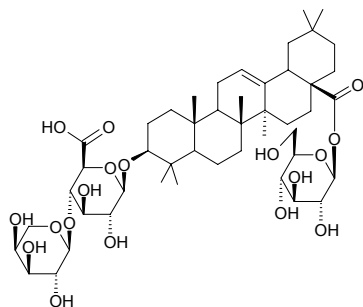
**3522 Chikusetsusaponin III**

$C_{47}H_{80}O_{17}$  (917.15). **Source:** REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. **Ref:** 5004.

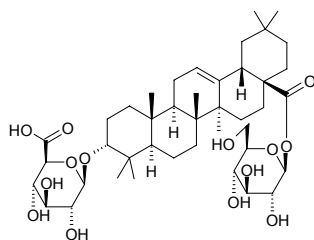


**3523 Chikusetsusaponin IV**

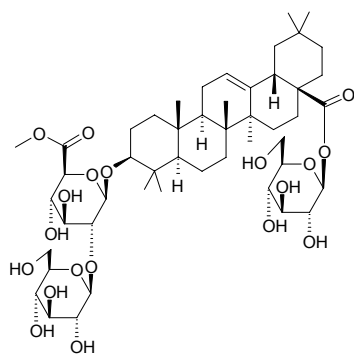
$C_{47}H_{74}O_{18}$  (927.10). Source: REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. Ref: 5004.

**3524 Chikusetsu saponin Iva**

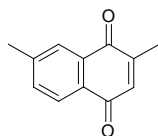
[51415-02-2]  $C_{42}H_{66}O_{14}$  (794.99). mp 214–216°C. Source: PENG XIAN XUE DAN *Hemsleya pengxianensis*. Ref: 554.

**3525 Chikusetsu saponin V methyl ester**

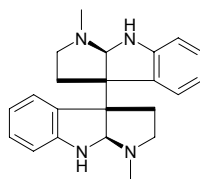
$C_{49}H_{78}O_{19}$  (971.16). White amorphous powder,  $[\alpha]_D^{25} = +6^\circ$  ( $c = 0.07$ , MeOH). Source: NIU XI *Achyranthes bidentata*. Ref: 4147.

**3526 Chimaphyllin**

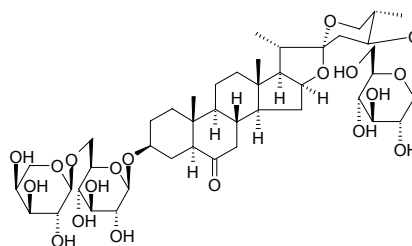
[482-70-2]  $C_{12}H_{10}O_2$  (186.21). mp 113.5–114.5°C. Pharm: Inhibits phagocytosis of hmn granular cells and stimulates the activity in low dose. Source: HONG HUA LU TI CAO *Pyrola incarnata*, LU XIAN CAO *Pyrola calliantha* [Syn. *Pyrola rotundifolia* ssp. *chinensis*], RI BEN LU TI CAO *Pyrola japonica*. Ref: 6, 658, 660.

**3527 Chimonanthine**

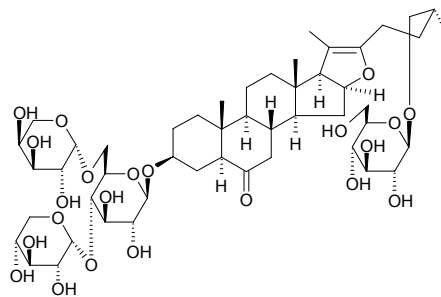
[5545-89-1]  $C_{22}H_{26}N_4$  (346.48). mp 188–189°C. Source: LA MEI HUA *Chimonanthus fragrans* [Syn. *Chimonanthus praecox*]. Ref: 6.

**3528 Chinenoside VI**

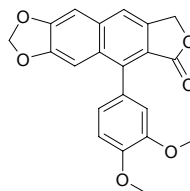
(25S)-24-O-β-D-Glucopyranosyl-3β,24β-dihydroxy-5α-spirost-3-O-α-arabino pyranosyl-(1→6)-β-D-glucopyranoside  $C_{44}H_{70}O_{19}$  (903.04). White amorphous powder, mp 219–221°C. Source: XIE BAI *Allium macrostemon*. Ref: 409.

**3529 Chinenoside II**

$C_{49}H_{78}O_{22}$  (1019.15). Pharm: Antineoplastic (strong). Source: QIAO TOU *Allium chinense*. Ref: 2165.

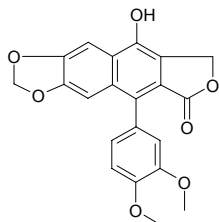
**3530 Chinensin**

[31888-76-3]  $C_{21}H_{16}O_6$  (364.36). mp 220–221°C. Source: DA JIN NIU CAO *Polygala chinensis* [Syn. *Polygala glomerata*]. Ref: 6.

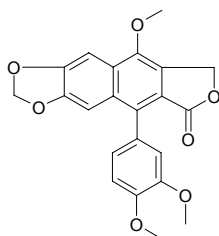


**3531 Chinensinaphthol**

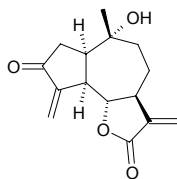
[53965-06-3]  $C_{21}H_{16}O_7$  (380.36). mp 285~286°C. Source: DA JIN NIU CAO *Polygala chinensis* [Syn. *Polygala glomerata*], HONG CHAI HU *Bupleurum scorzonerifolium* (root). Ref: 6, 3498.

**3532 Chinensinaphthol methyl ether**

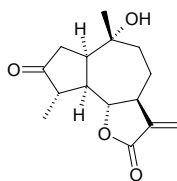
$C_{22}H_{18}O_7$  (394.38). mp 257~258°C. Source: DA JIN NIU CAO *Polygala chinensis* [Syn. *Polygala glomerata*]. Ref: 6.

**3533 Chinensiolide A**

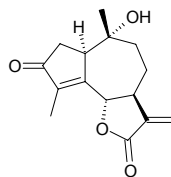
$C_{15}H_{18}O_4$  (262.31). Colorless plates, mp 110.5~112°C,  $[\alpha]_D^{20} +13.3^\circ$  ( $c = 0.015$ ,  $CHCl_3$ ). Source: SHAN KU MAI *Ixeris chinensis* (whole herb: yield = 0.0002%fw). Ref: 4670.

**3534 Chinensiolide B**

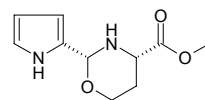
$C_{15}H_{20}O_4$  (264.32). Colorless plates, mp 195~199.5°C,  $[\alpha]_D^{20} +2.6^\circ$  ( $c = 0.469$ ,  $CHCl_3$ ). Source: SHAN KU MAI *Ixeris chinensis* (whole herb: yield = 0.0007%fw). Ref: 4670.

**3535 Chinensiolide C**

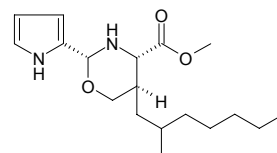
$C_{15}H_{18}O_4$  (262.31). Colorless microcrystals, 185.5~186.5°C,  $[\alpha]_D^{20} +73.2^\circ$  ( $c = 1.07$ , MeOH). Source: SHAN KU MAI *Ixeris chinensis* (whole herb: yield = 0.0010%fw). Ref: 4670.

**3536 Chinese bittersweet alkaloid I**

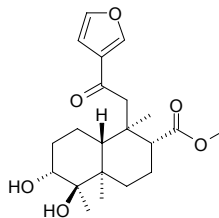
$C_{10}H_{14}N_2O_3$  (210.23). Colorless oil,  $[\alpha]_D^{20} = -0.12^\circ$  ( $c = 0.45$ ,  $CHCl_3$ ). Source: DIAO GAN MA *Celastrus angulatus*. Ref: 2425.

**3537 Chinese bittersweet alkaloid II**

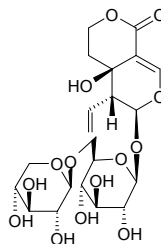
$C_{18}H_{30}N_2O_3$  (322.45). Yellowish liquid. Source: DIAO GAN MA *Celastrus angulatus*. Ref: 2425.

**3538 Chiromodine**

[125107-28-0]  $C_{20}H_{30}O_6$  (378.47). Source: *Croton hovarum*. Ref: 4552.

**3539 Chironiside**

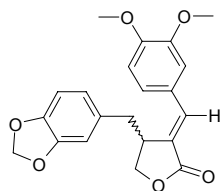
6'-*O*- $\beta$ -*D*-Xylopyranosylswertiamarin  $C_{21}H_{30}O_{14}$  (506.46). Source: RI BEN ZHANG YA CAI *Swertia japonica*. Ref: 2573.



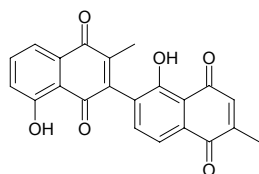


**3540 Chisulactone**

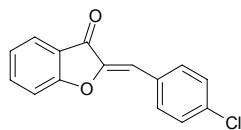
[50924-59-9] C<sub>21</sub>H<sub>20</sub>O<sub>6</sub> (368.39). mp 108–110°C. Source: DA JIN NIU CAO *Polygala chinensis* [Syn. *Polygala glomerata*]. Ref: 6.

**3541 Chitranone**

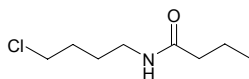
3,6'-Biplumbagin C<sub>22</sub>H<sub>14</sub>O<sub>6</sub> (374.35). Orange plates (MeOH), mp 174–177°C, 116–118°C. Pharm: Ichthyotoxin (MLC = 0.5mg/L, control Juglone, MLC = 0.2mg/L)<sup>[4185]</sup>. Source: BAI HUA DAN *Plumbago zeylanica*, HAI SHI *Diospyros maritima* (fruit). Ref: 1521, 4185.

**3542 4'-Chloroaurone**

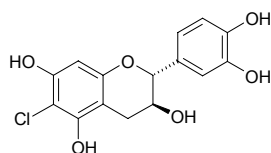
C<sub>15</sub>H<sub>9</sub>ClO<sub>2</sub> (256.69). Colorless solid, mp 206°C Source: YI BIAN HE SHE *ZAO Spatoglossum variable* (residue of methanolic extract: yield = 0.0033%). Ref: 3505.

**3543 N-4'-Chlorobutylbutyramide**

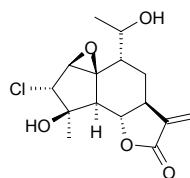
C<sub>8</sub>H<sub>16</sub>ClNO (177.68). Source: SA BA LU HUI *Aloe sabaee*. Ref: 728.

**3544 6-Chlorocatechin**

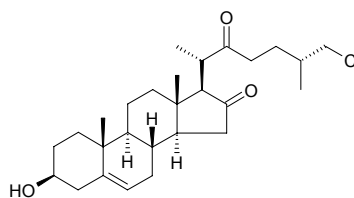
C<sub>15</sub>H<sub>13</sub>ClO<sub>6</sub> (324.72). Amorphous, [α]<sub>D</sub><sup>20</sup> = +50° (c = 0.16, DMSO), Pharm: Antioxidant (DPPH scavenger, potent activity)<sup>[5232]</sup>; cytotoxic inactive (MCF, HM02, HEPG2)<sup>[5232]</sup>. Source: NIU XI XI *Rumex patientia*. Ref: 5232.

**3545 Chlorochrymorin**

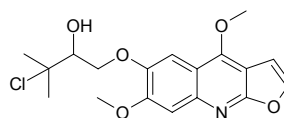
[52525-23-2] C<sub>15</sub>H<sub>19</sub>ClO<sub>5</sub> (314.77). Pharm: Plant growth regulator. Source: JU HUA *Chrysanthemum morifolium* [Syn. *Dendranthema morifolium*]. Ref: 658.

**3546 26-Chloro-26-deoxycryptogenin**

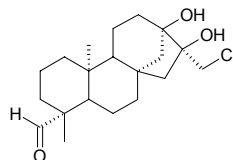
[53356-56-2] C<sub>27</sub>H<sub>41</sub>ClO<sub>3</sub> (449.08). mp 149–151°C. Source: YAN LING CAO *Trillium tschonoskii*. Ref: 6, 660.

**3547 Chlorodesnkolbisine**

C<sub>18</sub>H<sub>20</sub>ClNO<sub>5</sub> (365.82). Needles, mp 181–182°C, [α]<sub>D</sub> = +40° (c = 0.02, MeOH). Source: GAO GUI YOU MU YUN XIANG *Teclea nobilis* (aerial parts). Ref: 3503.

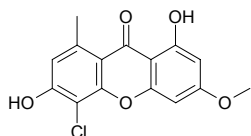
**3548 17-Chloro-13,16β-dihydroxy-ent-kauran-19-al**

C<sub>20</sub>H<sub>31</sub>ClO<sub>3</sub> (354.92). White amorphous solid, [α]<sub>D</sub><sup>20</sup> = –45.0° (c = 0.3, CHCl<sub>3</sub>). Pharm: Antiproliferative and cytotoxic (*in vitro*, L-929, GI<sub>50</sub> = 50μg/mL; K562, GI<sub>50</sub> = 29.2μg/mL; HeLa, CC<sub>50</sub> = 38.2μg/mL; control Paclitaxel, L-929, GI<sub>50</sub> = 0.1μg/mL; K562, GI<sub>50</sub> = 0.01μg/mL; HeLa, CC<sub>50</sub> = 0.01μg/mL). Source: MU LAN<sup>(3)</sup> *Bruguiera gymnorrhiza* (stem: yield = 0.000164%). Ref: 4770.

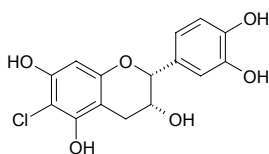


**3549 5-Chloro-1,6-dihydroxy-3-methoxy-8-methylxanthone**

$C_{15}H_{11}ClO_5$  (306.70). Yellow powder, mp 243–244°C (dec). Source: HUANG HAI TANG *Hypericum ascyron*. Ref: 2398.

**3550 (–)-6-Chloroepicatechin**

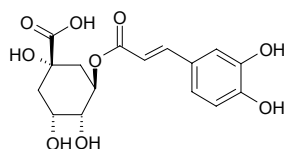
$C_{15}H_{13}ClO_6$  (324.72).  $[\alpha]_D^{25} = -84^\circ$  ( $c = 0.18$ , MeOH). Source: QU YU CAO DI LAO GUAN CAO *Geranium pratense* ssp. *funitimum* (aerial parts). Ref: 5126.

**3551 Chlorogenic acid**

3-Caffeoylquinid acid [327-97-9]  $C_{16}H_{18}O_9$  (354.32). Yellowish powder, mp 208–209°C. Pharm: Antioxidant (chemiluminescence Method,  $IC_{50} = (0.31 \pm 0.01) \mu\text{mol/L}$ , control Rutin,  $IC_{50} = (0.11 \pm 0.01) \mu\text{mol/L}$ , Quercetin,  $IC_{50} = (0.53 \pm 0.01) \mu\text{mol/L}$ , Caffeic acid,  $IC_{50} = (0.66 \pm 0.07) \mu\text{mol/L}$ , Gallic acid,  $IC_{50} = (0.74 \pm 0.06) \mu\text{mol/L}$ ; DPPH scavenger,  $IC_{50} = (0.13 \pm 0.01) \mu\text{mol/L}$ , Rutin,  $IC_{50} = (0.15 \pm 0.00) \mu\text{mol/L}$ , Quercetin,  $IC_{50} = (0.26 \pm 0.02) \mu\text{mol/L}$ , Caffeic acid,  $IC_{50} = (0.39 \pm 0.01) \mu\text{mol/L}$ , Gallic acid,  $IC_{50} = (0.36 \pm 0.02) \mu\text{mol/L}$ )<sup>[3764]</sup>, antioxidant (DPPH scavenger,  $EC_{50} = 4.2 \mu\text{g/mL} = 11.9 \mu\text{mol/L}$ , control Ascorbic acid,  $EC_{50} = 1.6 \mu\text{g/mL} = 9.1 \mu\text{mol/L}$ )<sup>[4154]</sup>, antioxidant (DPPH scavenger,  $IC_{50} = (1.28 \pm 0.38) \mu\text{g/mL}$ )<sup>[5307]</sup>; antineoplastic; cytotoxic (hmn myelocytic leukemia cells K562, inhibits cell proliferation,  $IC_{50} = 97.2 \mu\text{g/mL}$ ); antibacterial (*in vivo*); antimutagenic; antiviral; choleric (rat); curtails the time of blood clotting and bleeding; promotes intestinal motion (mus and rat); uterine stimulant (rat, enhances hystera tension); hemostatic; leukopoietic; sensitizer (hmn); CNS stimulant (rat, orl or ip); antitrypanosomal (*Trypanosoma b. rhodesiense*,  $IC_{50} = 18.9 \mu\text{g/mL}$ , control Melarsoprol,  $IC_{50} = 0.00098 \mu\text{g/mL}$ ; *Trypanosoma cruzi*,  $IC_{50} > 90 \mu\text{g/mL}$ , control Benzimidazole,  $IC_{50} = 1.06 \mu\text{g/mL}$ )<sup>[5009]</sup>; antileishmanial (*Leishmania donovani*,  $IC_{50} = 7.0 \mu\text{g/mL}$ , control Miltefosine,  $IC_{50} = 0.102 \mu\text{g/mL}$ )<sup>[5009]</sup>; antimalarial (*Plasmodium falciparum*,  $IC_{50} > 50 \mu\text{g/mL}$ , control Artemisinin,  $IC_{50} = 0.0022 \mu\text{g/mL}$ )<sup>[5009]</sup>; cytotoxic (L6,  $IC_{50} > 90 \mu\text{g/mL}$ , control Podophyllotoxin,  $IC_{50} = 0.008 \mu\text{g/mL}$ )<sup>[5009]</sup>;  $LD_{50}$  (young rat, orl)  $\geq 1 \text{g/kg}$ , (young rat, ip)  $\geq$

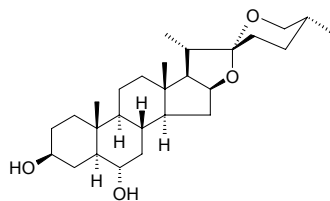
0.25g/kg. Source: A LA BO JIAO JIN HE HUAN *Acacia nilotica*, BAI MEI HUA *Prunus mume* (flower: yield = 0.0006%fw)<sup>[4641]</sup>, BEI JING SHI WEI *Pyrrosia davidii* (dried leaf: content = 1.64%)<sup>[5508]</sup>, BEI SHA SHEN *Glehnia littoralis* (underground part), BIAN XU *Polygonum aviculare*, CHA YE *Camellia sinensis* [Syn. *Thea sinensis*], CHAO XIAN YIN YANG HUO *Epimedium koreanum* (aerial parts: content = 0.251%)<sup>[5508]</sup>, CHE SANG ZI YE *Dodonaea viscosa*, CU LIU GUO *Hippophae rhamnoides*, DA CHE QIAN *Plantago major*, DA XUE TENG *Sargentodoxa cuneata* (stem), DU ZHONG *Eucommia ulmoides* (bark: content scope of 32 origins = 0.0043%–0.286%, mean content = 0.0654%)<sup>[5508]</sup>, DU ZHONG YE *Eucommia ulmoides* (leaf in spring: mean content of 17 origins = 3.42%, leaf in autumn: mean content of 17 origins = 0.65%)<sup>[5508]</sup>, DUO ZU JUE *Polypodium vulgare*, GAN LAN *Brassica oleracea* var. *capitata*, GUANG YE DING GONG TENG *Erycibe schmidtii*, HUA NAN REN DONG *Lonicera confusa* (flower bud: content = 3.97%)<sup>[5508]</sup>, HUANG HAO *Artemisia scoparia* [Syn. *Artemisia capillaris* var. *scoparia*], HUANG HE MAO REN DONG *Lonicera fulvotomentosa*, JI MU *Loropetalum chinense* (root, leaf and flower: mean content = 2.05%)<sup>[5508]</sup>, JI ZI MU *Sinoadina Racemosa* [Syn. *Adina racemosa*] (leaf, flower and twig: yield = 0.38%dw)<sup>[4723]</sup>, JIA MA BIAN *Stachytarpheta jamaicensis*, JIN YIN HUA *Lonicera japonica* (flower bud: content scope of 5 origins = 1.84%–5.13%, mean content = 3.21%)<sup>[5508]</sup>, JU HUA *Chrysanthemum morifolium* [Syn. *Dendranthema morifolium*] (dried capitulum: content scope of 41 origins = 0.08%–0.72%, mean content = 0.305%)<sup>[5508]</sup>, KE KE *Theobroma cacao*, LIU QIU SHE GEN CAO *Ophiorrhiza liukuensis* (whole herb), LU SHAN SHI WEI *Pyrrosia shearerii* (dried leaf: content = 0.605%)<sup>[5508]</sup>, MA QIAN ZI *Strychnos nux-vomica*, NI GUANG SHI WEI *Pyrrosia pseudocalvata* (dried leaf: content = 0.44%)<sup>[5508]</sup>, PENG ZI CAI *Galium verum*, PU GONG YING *Taraxacum mongolicum* (dried whole herb: content = 0.913%)<sup>[5508]</sup>, QIAN QU CAI *Lythrum salicaria*, REN DONG TENG *Lonicera japonica* (stem-branch: content = 1.73%)<sup>[5508]</sup>, SANG YE *Morus alba* (leaf: content scope of 6 origins = 0.69%–2.46%, mean content = 1.38%)<sup>[5508]</sup>, SHAN LI HONG *Crataegus pinnatifida* var. *major*, SHAN WO JU *Lactuca indica* (fresh whole herb: yield = 0.0033%fw)<sup>[4689]</sup>, SHAN ZHA *Crataegus pinnatifida*, SHI WEI *Pyrrosia lingua* (dried leaf: content scope of 5 origins = 0.048%–0.344%, mean content = 0.154%)<sup>[5508]</sup>, TAI WAN PU GONG YING *Taraxacum formosanum* (dried whole herb: content = 0.275%)<sup>[5508]</sup>, WU MAO JUE *Blechnum orientale*, XI NAN SHI WEI *Pyrrosia gralla* (dried leaf: content = 0.711%)<sup>[5508]</sup>, XI ZHAN MAO REN DONG *Lonicera similis* (flower bud: mean content = 4.80%)<sup>[5508]</sup>, XIAN YE REN DONG *Lonicera hypoglauca* (flower bud: content = 2.40%)<sup>[5508]</sup>, XIAO GUO KA FEI *Coffea arabica*, XIAO JI *Cirsium setosum* [Syn. *Cerratala setosa*; *Cirsium segetum*; *Cephalanoplos segetum*] (whole herb or

root: mean content = 0.0372%)<sup>[5508]</sup>, XIAO YE GUAN ZHONG *Matteuccia struthiopteris*<sup>[3764]</sup>, XUAN FU HUA *Inula britannica*, YAO YONG PU GONG YING *Taraxacum officinale* (dried whole herb: content = 0.291%<sup>[5508]</sup>), YE JU HUA *Chrysanthemum indicum* (capitulum: content scope of 14 origins = 0.053%~0.358%, mean content = 0.230%)<sup>[5508]</sup>, YE SHAN ZHA *Crataegus cuneata*, YI ZHU QIAN MA *Urtica dioica*, YING GUO SHAN ZHA *Crataegus oxyacantha*, YOU BING SHI WEI *Pyrrosia petiolosa* (dried leaf: content scope of 12 origins = 0.085%~1.463%, mean content = 0.658%)<sup>[5508]</sup>, YU XING CAO *Houttuynia cordata*, ZHAN MAO SHI WEI *Pyrrosia drakeana* (dried leaf: content = 0.595%)<sup>[5508]</sup>, ZHI ZHU XIANG *Valeriana jatamansii* [Syn. *Valeriana wallichii*], ZHI ZI *Gardenia jasminoides* [Syn. *Gardenia florida*] (dried ripe fruit: mean content = 0.096%)<sup>[5508]</sup>, ZONG KUI CAO SU *Phlomis brunneogaleata*, occurs in many plants (including *Chrozophora* spp., *Cinchona* spp., *Scabiosa* spp., *Valeriana* spp., *Senecio* spp., *Baccharis* spp. and *Hypericum* spp., originally from Liberian coffee). Ref: 2, 4, 585, 602, 638, 658, 660, 3764, 4154, 4527, 4641, 4689, 4723, 4895, 5009, 5307, 5375, 5501, 5508.



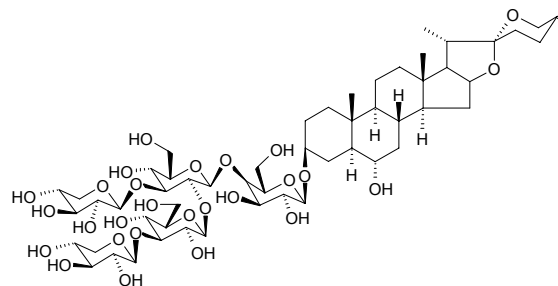
### 3552 Chlorogenin

[562-34-5] C<sub>27</sub>H<sub>44</sub>O<sub>4</sub> (432.65). mp 273~276°C. Source: DONG YI HAO JIAN MA *Agave east-one*, DUAN YE LONG SHE LAN *Agave angustifolia*, FAN MA *Agave americana*, JI LI GEN *Tribulus terrestris*, JIAN MA *Agave sisalana*, WU CI FAN MA *Agave americana* var. *marginata* [Syn. *Agave americana* var. *variegata*], XIA YE LONG SHE LAN *Agave cantala*, YIN BIAN LONG SHE LAN *Agave angustifolia* var. *marginata*. Ref: 6, 10.



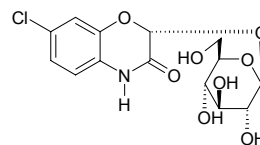
### 3553 Chlorogenin-3-O-β-D-xylopyranosyl-(1→3)-β-D-glucopyranosyl-(1→2)-[β-D-xylopyranosyl-(1→3)]-β-D-glucopyranosyl-(1→4)-β-D-galactopyranoside

C<sub>55</sub>H<sub>90</sub>O<sub>27</sub> (1183.31). Pharm: Cytotoxic (*in vitro*, HeLa, IC<sub>50</sub> = 7.5 μg/mL; control *cis*-Platin, IC<sub>50</sub> = 0.75 μg/mL). Source: WAN XIANG YU *Polianthes tuberosa* (tuber: yield = 0.0025%fw). Ref: 3002.



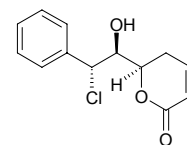
### 3554 7-Chloro-(2R)-2-O-β-D-glucopyranosyl-2H-1,4-benzoxazin-3(4H)-one

C<sub>14</sub>H<sub>16</sub>ClNO<sub>8</sub> (361.74). White amorphous powder, [α]<sub>D</sub><sup>26</sup> = +198.0° (c = 0.33, DMSO). Source: LAO SHU LE *Acanthus ilicifolius* (aerial parts). Ref: 5204.



### 3555 8-Chlorogoniodiol

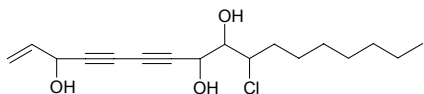
(6R,7R,8R)-8-Chlorogoniodiol; 6R-(7R-Hydroxy-8R-chloro-8-phenyl)-5,6-dihydro-2-pyrone C<sub>13</sub>H<sub>13</sub>ClO<sub>3</sub> (252.70). Colorless plate crystals, mp 126~128°C, [α]<sub>D</sub><sup>25</sup> = +13.7° (c = 0.3, CHCl<sub>3</sub>). Pharm: Cytotoxic (HepG2, IC<sub>50</sub> = 0.64 μg/mL, control Doxorubicin, IC<sub>50</sub> = 0.38 μg/mL; Hep3B, IC<sub>50</sub> = 3.64 μg/mL, Doxorubicin, IC<sub>50</sub> = 0.36 μg/mL; MDA-MB-231, IC<sub>50</sub> = 1.47 μg/mL, Doxorubicin, IC<sub>50</sub> = 1.20 μg/mL; MCF7, IC<sub>50</sub> = 2.32 μg/mL, Doxorubicin, IC<sub>50</sub> = 2.51 μg/mL)<sup>[5056]</sup>; cytotoxic (*in vitro*, NUGC, IC<sub>50</sub> = 31 μg/mL; HONE-1, IC<sub>50</sub> = 4.87 μg/mL, significant selective cytotoxicity; control Actinomycin, NUGC, IC<sub>50</sub> = 6.61 μg/mL; HONE-1, IC<sub>50</sub> = 4.53 μg/mL)<sup>[4686]</sup>. Source: TAI WAN GE NA XIANG *Goniothalamus amuyon* (fresh leaf: yield = 0.00041%fw; stem: yield = 0.00067%fw). Ref: 4686, 5056.



**3556 10-Chloro-1-heptadecene-4,6-diyne-3,8,9-triol**

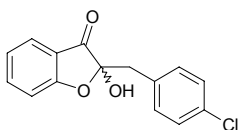
$C_{17}H_{25}ClO_3$  (312.84). Amorphous powder,  $[\alpha]_D^{25} = +47.5^\circ$  ( $c = 0.1$ , MeOH).

Source: *Niphogeton ternata*. Ref: 4156.

**3557 4'-Chloro-2-hydroxyaurone**

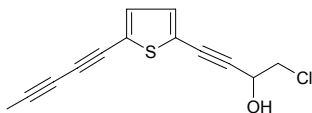
$C_{15}H_{11}ClO_3$  (274.71). Colorless solid, mp  $225^\circ C$ ,  $[\alpha]_D^{25} = 50^\circ$  ( $CHCl_3$ ). Source:

YI BIAN HE SHE ZAO *Spatoglossum variabile* (residue of methanolic extract: yield = 0.0028%). Ref: 3505.

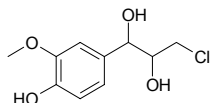
**3558 2-(4-Chloro-3-hydroxybut-1-ynyl)-5-(penta-1,3-diyanyl) thiophene**

[26905-70-4]  $C_{13}H_9ClOS$  (248.73). Source: MO HAN LIAN *Eclipta prostrata*

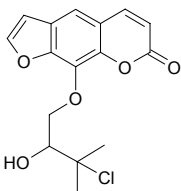
[Syn. *Eclipta alba*]. Ref: 6.

**3559 threo-3-Chloro-1-(4-hydroxy-3-methoxyphenyl)propane-1,2-diol**

$C_{10}H_{13}ClO_4$  (232.67). Colorless needles, mp  $121^\circ C$  ( $CHCl_3$ ),  $[\alpha]_D^{25} = -2^\circ$  ( $c = 0.52$ , EtOH). Pharm: Inhibits autoxidation of linoleic acid (in a water-alcohol system)<sup>[2390]</sup>. Source: DUO XIANG GUO *Pimenta dioica*. Ref: 2390.

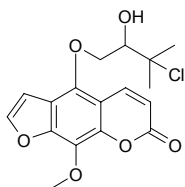
**3560 8-(3-Chloro-2-hydroxy-3-methylbutoxy)psoralen**

$C_{16}H_{15}ClO_5$  (322.75). Source: *Niphogeton ternata*. Ref: 4156.

**3561 5-O-(3-Chloro-2-hydroxy-3-methylbutyl)-8-methoxypsoralen**

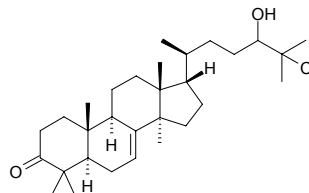
$C_{17}H_{17}ClO_6$  (352.77). Amorphous powder,  $[\alpha]_D^{25} = +1.4^\circ$  ( $c = 0.8$ , MeOH).

Source: *Niphogeton ternata*. Ref: 4156.

**3562 25-Chloro-24-hydroxytirucall-7-en-3-one**

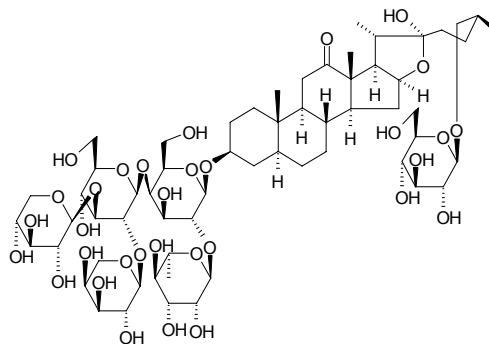
$C_{30}H_{49}ClO_2$  (477.18). Amorphous powder,  $[\alpha]_D^{25} = -15.8^\circ$  ( $c = 0.6$ , MeOH).

Source: NAN RI BEN LEI GONG TENG *Tripterygium doianum*. Ref: 1916.

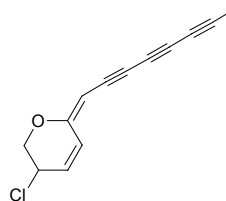
**3563 Chloromaloside E**

26-O-β-D-Glucopyranosyl-22-hydroxy-25(S)-5α-furostan-12-oxo-3β,26-diol-3-O-β-D-xylopyranosyl(1→3)[α-L-arabinopyranosyl(1→2)]-β-D-glucopyranosyl(1→4)-[α-L-rhamnopyranosyl(1→2)]-β-D-galactopyranoside

$C_{61}H_{100}O_{32}$  (1345.46). Colorless acicular crystals (methanol). Source: DA YE DIAO LAN *Chlorophytum malayense*. Ref: 893.

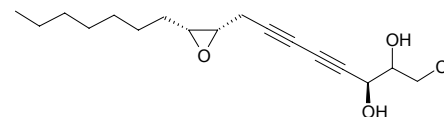
**3564 5-Chloro-2-(octa-2,4,6-triynylidene)-5,6-dihydro-2H-pyran**

$C_{13}H_9ClO$  (216.67). mp  $73^\circ C$ . Source: DA YE BAI TOU WENG *Anaphalis margaritacea*. Ref: 6.

**3565 Chloropanaxydiol**

[114687-51-3]  $C_{17}H_{25}ClO_3$  (312.84).  $[\alpha]_D = -37.2^\circ C$  ( $c = 0.2$ , MeOH). Pharm:

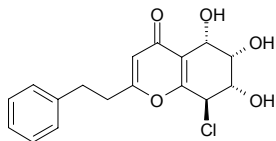
Cytotoxic. Source: REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. Ref: 3118.



**3566 8-Chloro-2-(2-phenylethyl)-5,6,7-trihydroxy-5,6,7,8-tetrahydrochromone**

$C_{17}H_{17}ClO_5$  (336.78). White amorphous solid,  $[\alpha]_D^{25} = +7.4^\circ$  ( $c = 1.0$ , MeOH).

Source: BAI MU XIANG *Aquilaria sinensis* (Withered wood). Ref: 4339.

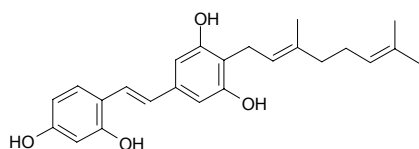


**3567 Chlorophorin**

4-Geranyl-2',3,4',5-tetrahydroxy-*trans*-stilbene [537-41-7]  $C_{24}H_{28}O_4$  (380.49).

Pharm: Tyrosinase inhibitor ( $IC_{50} = 1.3 \mu\text{mol/L}$ )<sup>[4326]</sup>. Source: GAO HUANG

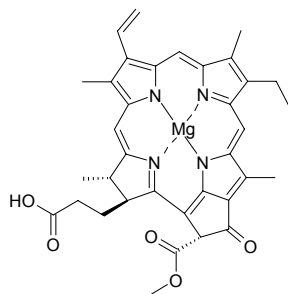
LU SANG *Chlorophora excelsa* (heartwood). Ref: 658, 4326.



**3568 Chlorophyllide a**

$C_{35}H_{34}MgN_4O_5$  (615.00). Pharm: Cytotoxic (soft agar transformation assay with JB6 cells,  $IC_{50} = 0.30 \mu\text{g/mL}$ )<sup>[5038]</sup>; cytotoxic (mouse mammary organ culture assay, 58% at  $10 \mu\text{g/mL}$ )<sup>[5038]</sup>. Source: FEI CHENG SUAN JIANG

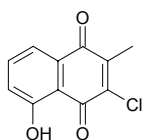
*Physalis philadelphica*. Ref: 5038.



**3569 3-Chloroplumbagin**

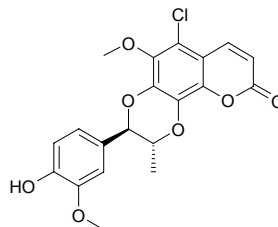
[21890-57-3]  $C_{11}H_7ClO_3$  (222.63). Source: BAI HUA DAN *Plumbago*

*zeylanica*. Ref: 6.



**3570 5-Chloropropacin**

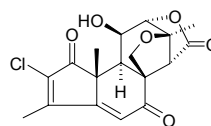
$C_{20}H_{17}ClO_7$  (404.81). Amorphous solid. Source: MENG DI TENG *Mondia whitei* (root). Ref: 5264.



**3571 2-Chlorosamaderine A**

$C_{18}H_{17}ClO_6$  (364.79). Pale yellow amorphous solid,  $[\alpha]_D = -13^\circ$  ( $c = 0.016$ ,  $CHCl_3$ ). Pharm: Cytotoxic (colon cancer HCT15,  $LC_{50} = 85.4 \mu\text{g/mL}$ ; renal cancer A498,  $LC_{50} = 70.0 \mu\text{g/mL}$ ). Source: MA DAO HUANG LIAN SHU

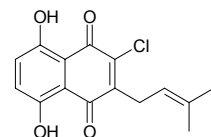
*Samadera madagascariensis* (leaf). Ref: 5334.



**3572 Chlorosesamone**

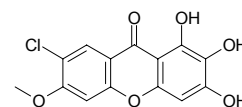
$C_{15}H_{13}ClO_4$  (292.72). Pharm: Antifungal (*Cladosporium fulvum*,  $0.1 \mu\text{g/spot}$ ).

Source: HU MA GEN *Sesamum indicum*. Ref: 5234.



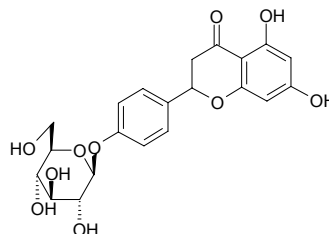
**3573 7-Chloro-1,2,3-trihydroxy-6-methoxyxanthone**

$C_{14}H_9ClO_6$  (308.68). Yellow solid. Pharm: Cytotoxic (*in vitro* antiproliferative activity,  $LoVo$ ,  $IC_{50} = (8.30 \pm 0.09) \mu\text{mol/L}$ , control Doxorubicin,  $IC_{50} = (0.04 \pm 0.01) \mu\text{mol/L}$ ;  $LoVo/Doxo$ ,  $IC_{50} = (6.70 \pm 0.40) \mu\text{mol/L}$ , control Doxorubicin,  $IC_{50} = (10.2 \pm 0.1) \mu\text{mol/L}$ ). Source: PU TONG YUAN ZHI *Polygala vulgaris*. Ref: 4246.



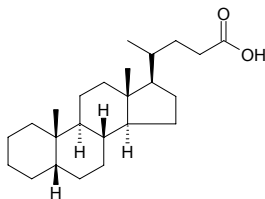
**3574 Choerospondin**

$C_{21}H_{22}O_{10}$  (434.40). Source: *Glycyrrhiza* sp. Ref: 2431.



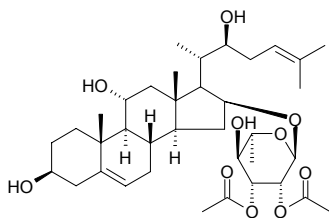
**3575 5 $\beta$ -Cholanic acid**

[546-18-9] C<sub>24</sub>H<sub>40</sub>O<sub>2</sub> (360.59). mp 164°C. Source: XIANG SI ZI *Abrus precatorius*. Ref: 6.

**3576 (22S)-Cholesta-5,24-diene-3 $\beta$ ,11 $\alpha$ ,16 $\beta$ ,22-tetrol 16-O-(2,3-di-O-acetyl- $\alpha$ -L-rhamnopyranoside)**

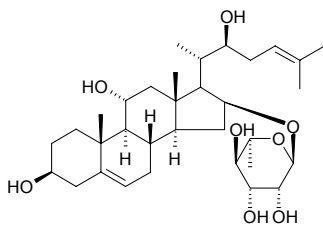
C<sub>37</sub>H<sub>58</sub>O<sub>10</sub> (662.87). Amorphous solid,  $[\alpha]_D^{30} = -24.0^\circ$  ( $c = 0.10$ , MeOH).

Pharm: Cytotoxic (cytostatic, HL-60 cells, GI<sub>50</sub> = 0.80  $\mu$ mol/L). Source: *Ornithogalum saundersiae*. Ref: 2364.

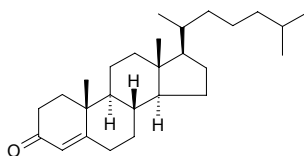
**3577 (22S)-Cholesta-5,24-diene-3 $\beta$ ,11 $\alpha$ ,16 $\beta$ ,22-tetrol 16-O- $\alpha$ -L-rhamnopyranoside**

C<sub>33</sub>H<sub>54</sub>O<sub>8</sub> (578.79). Amorphous solid,  $[\alpha]_D^{28} = -42.0^\circ$  ( $c = 0.54$ , MeOH).

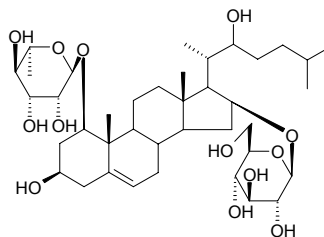
Source: *Ornithogalum saundersiae*. Ref: 2364.

**3578 Cholest-4-ene-3-one**

[601-57-0] C<sub>27</sub>H<sub>44</sub>O (384.65). Source: SHE XIANG *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*. Ref: 2.

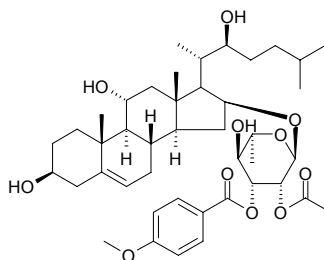
**3579 (22S)-Cholest-5-ene-1 $\beta$ ,3 $\beta$ ,16 $\beta$ ,22-tetraol-1-O- $\alpha$ -L-rhamnopyranosyl-16-O- $\beta$ -D-glucopyranoside**

C<sub>39</sub>H<sub>66</sub>O<sub>13</sub> (742.95). White needles (MeOH), mp 201.5~202.5°C. Source: XIE BAI *Allium macrostemon*. Ref: 4897.

**3580 (22S)-Cholest-5-ene-3 $\beta$ ,11 $\alpha$ ,16 $\beta$ ,22-tetrol 16-O-{2-O-acetyl-3-O-(p-methoxybenzoyl)- $\alpha$ -L-rhamnopyranoside}**

C<sub>43</sub>H<sub>64</sub>O<sub>11</sub> (756.98). Amorphous solid,  $[\alpha]_D^{30} = -12.0^\circ$  ( $c = 0.10$ , MeOH).

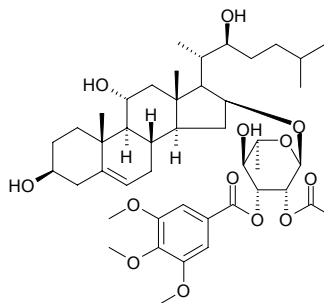
Pharm: Cytotoxic (cytostatic, HL-60 cells, GI<sub>50</sub> = 0.022  $\mu$ mol/L). Source: *Ornithogalum saundersiae*. Ref: 2364.

**3581 (22S)-Cholest-5-ene-3 $\beta$ ,11 $\alpha$ ,16 $\beta$ ,22-tetrol**

16-O-{2-O-acetyl-3-O-(3,4,5-trimethoxybenzoyl)- $\alpha$ -L-rhamnopyranoside}

C<sub>45</sub>H<sub>69</sub>O<sub>13</sub> (817.04). Amorphous solid,  $[\alpha]_D^{27} = +6.0^\circ$  ( $c = 0.10$ , MeOH).

Pharm: Cytotoxic (cytostatic, HL-60 cells, GI<sub>50</sub> = 1.8  $\mu$ mol/L). Source: *Ornithogalum saundersiae*. Ref: 2364.

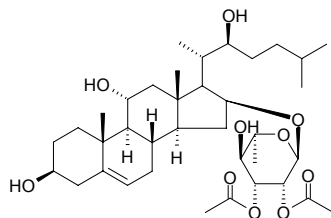


**3582 (22S)-Cholest-5-ene-3 $\beta$ ,11 $\alpha$ ,16 $\beta$ ,22-tetrol 16-O-(2,3-di-O-acetyl- $\alpha$ -L-rhamnopyranoside)**

C<sub>37</sub>H<sub>60</sub>O<sub>10</sub> (664.88). Amorphous solid,  $[\alpha]_D^{30} = -28.0^\circ$  ( $c = 0.10$ , MeOH).

**Pharm:** Cytotoxic (cytostatic, HL-60 cells, GI<sub>50</sub> = 6.9  $\mu$ mol/L). **Source:**

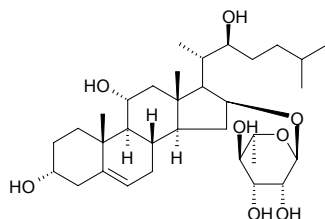
*Ornithogalum saundersiae*. **Ref:** 2364.



**3583 (22S)-Cholest-5-ene-3 $\alpha$ ,11 $\alpha$ ,16 $\beta$ ,22-tetrol 16-O- $\alpha$ -L-rhamnopyranoside**

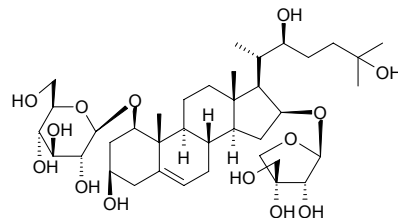
C<sub>33</sub>H<sub>56</sub>O<sub>8</sub> (580.81). Amorphous solid,  $[\alpha]_D^{26} = -39.0^\circ$  ( $c = 0.50$ , MeOH).

**Pharm:** Cytotoxic (cytostatic, HL-60 cells, GI<sub>50</sub> = 0.19  $\mu$ mol/L); cytotoxic (NCI 60 cell lines, Leukemia: K562, GI<sub>50</sub> = 0.12  $\mu$ mol/L, Molt-4, GI<sub>50</sub> = 0.028  $\mu$ mol/L, RPMI-8226, GI<sub>50</sub> = 0.016  $\mu$ mol/L, SR leukemia, GI<sub>50</sub> = 0.042  $\mu$ mol/L; Non-small cell lung cancer: A549/ATCC, GI<sub>50</sub> = 1.5  $\mu$ mol/L, HOP-62, GI<sub>50</sub> = 0.032  $\mu$ mol/L, NCI-H23, GI<sub>50</sub> = 27  $\mu$ mol/L, NCI-H522, GI<sub>50</sub> = 5.3  $\mu$ mol/L; Colon cancer: Colon205, GI<sub>50</sub> = 1.3  $\mu$ mol/L, HCT116, GI<sub>50</sub> = 0.18  $\mu$ mol/L, HT29, GI<sub>50</sub> = 1.8  $\mu$ mol/L, KM12, GI<sub>50</sub> = 0.41  $\mu$ mol/L, SW620, GI<sub>50</sub> = 0.14  $\mu$ mol/L; CNS cancer: SF268, GI<sub>50</sub> = 1.2  $\mu$ mol/L, SF295, GI<sub>50</sub> = 0.021  $\mu$ mol/L, SF539, GI<sub>50</sub> = 0.015  $\mu$ mol/L, U251, GI<sub>50</sub> = 0.010  $\mu$ mol/L; Melanoma: MALME-3M, GI<sub>50</sub> = 2.5  $\mu$ mol/L, M14, GI<sub>50</sub> = 1.2  $\mu$ mol/L, SK-MEL-2, GI<sub>50</sub> = 7.2  $\mu$ mol/L, SK-MEL-28, GI<sub>50</sub> = 0.22  $\mu$ mol/L, SK-MEL-5, GI<sub>50</sub> = 0.74  $\mu$ mol/L, UACC62, GI<sub>50</sub> = 0.50  $\mu$ mol/L; Ovarian cancer: OVCAR-5, GI<sub>50</sub> = 6.2  $\mu$ mol/L; Renal cancer: 780-6, GI<sub>50</sub> = 0.11  $\mu$ mol/L, A498, GI<sub>50</sub> = 0.46  $\mu$ mol/L, CAKI-1, GI<sub>50</sub> = 0.63  $\mu$ mol/L, RXF-393, GI<sub>50</sub> = 0.025  $\mu$ mol/L, UO-31, GI<sub>50</sub> = 3.1  $\mu$ mol/L; Prostate cancer: PC3, GI<sub>50</sub> = 0.34  $\mu$ mol/L; Breast cancer: MCF7, GI<sub>50</sub> = 0.022  $\mu$ mol/L, MCF7/ADR-RES, GI<sub>50</sub> = 87  $\mu$ mol/L, MDA-MB-231/ATCC, GI<sub>50</sub> = 1.0  $\mu$ mol/L, MDA-MB-435, GI<sub>50</sub> = 0.98  $\mu$ mol/L, MDA-N, GI<sub>50</sub> = 1.2  $\mu$ mol/L; mean GI<sub>50</sub> = 1.5  $\mu$ mol/L; mean TGI = 20  $\mu$ mol/L; mean LC<sub>50</sub> = 69  $\mu$ mol/L). **Source:** *Ornithogalum saundersiae*. **Ref:** 2364.



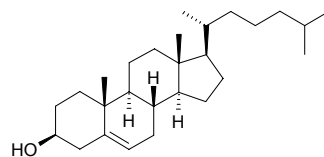
**3584 (22S)-Cholest-5-en-1 $\beta$ ,3 $\beta$ ,16 $\beta$ ,22,25-pentaol 1-O- $\beta$ -D-glucopyranosyl-16-O- $\beta$ -D-apiofuranoside**

C<sub>38</sub>H<sub>64</sub>O<sub>14</sub> (744.93). White amorphous powder,  $[\alpha]_D^{17.1} = 38.76^\circ$  ( $c = 0.0387$ , pyridine). **Source:** WAN XIANG YU *Polianthes tuberosa*. **Ref:** 2483.



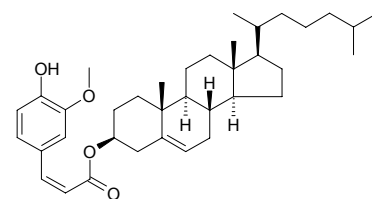
**3585 Cholesterol**

5-Cholesten-3 $\beta$ -ol [57-88-5] C<sub>27</sub>H<sub>46</sub>O (386.67). **Pharm:** Raw material for synthesis of vitamin D and hormones. **Source:** BAI JIANG CAN *Bombyx mori*, BO CAI *Spinacia oleracea*, CHAN SU *Bufo bufo gargarizans*; *Bufo melanostictus*, GOU QI ZI *Lycium chinense*, GUA DI *Cucumis melo*, JING MI *Oryza sativa*, LU HUI *Aloe vera* [Syn. *Aloe barbadensis*], LU RONG *Cervus nippon*; *Cervus elaphus*, LUO HUA SHENG *Arachis hypogaea*, NIU HUANG *Bos taurus domesticus*; *Bubalus bubalis* (gallstone: mean content = 0.165%)<sup>[5508]</sup>, QIU YIN *Pheretima aspergillum*; *Allolobophora caliginosa trapezoides*, QUAN XIE *Buthus martensi*, SHAN YAO *Dioscorea batatas* [Syn. *Dioscorea opposita*], SHE XIANG *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*, SHUI HU MAN *Clerodendron inerme*, WU GONG *Scolopendra subspinipes mutilans*, WU LOU ZI *Phoenix dactylifera*, YE MING SHA *Vespertilio superans*, YUN TAI ZI *Brassica campestris* [Syn. *Brassica campestris* var. *oleifera*], ZHE GU CAI *Caloglossa leprieurii*, *Panulirus* sp. **Ref:** 2, 658, 660, 5508.



**3586 Cholesteryl ferulate**

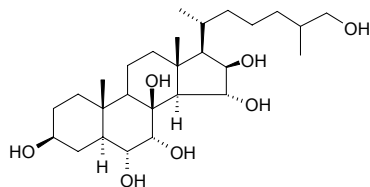
C<sub>37</sub>H<sub>54</sub>O<sub>4</sub> (562.84). **Source:** MI PI KANG *Oryza sativa*. **Ref:** 6.



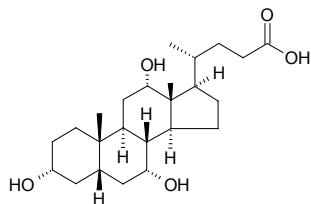
**3587 5 $\alpha$ -Cholest-3 $\beta$ ,6 $\alpha$ ,7 $\alpha$ ,8 $\beta$ ,15 $\alpha$ ,16 $\beta$ ,26-sevol**

C<sub>27</sub>H<sub>48</sub>O<sub>7</sub> (484.68). White powder. Source: HAI YAN *Asterina pectinifera*.

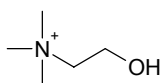
Ref: 4887.

**3588 Cholic acid**

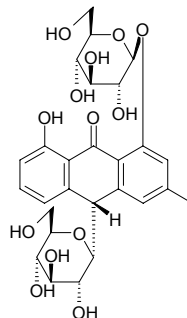
5 $\beta$ -Cholic acid; 3 $\alpha$ ,7 $\alpha$ ,12 $\alpha$ -Trihydroxy-5 $\beta$ -cholan-3-ic acid [81-25-4] C<sub>24</sub>H<sub>40</sub>O<sub>5</sub> (408.58). mp 195°C (anhydrous), [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +37° (c = 0.6, ethanol), very slightly soluble in water, slightly soluble in ether, chloroform, soluble in ethanol, acetone, easily soluble in ice vinegar.<sup>[5507]</sup> Pharm: Sedative (mouse, orl, calcium salt); anticonvulsant (induced by corazol); antipyretic (induced by dinitrophenol); stimulates heart (toad heart, 1.0mmol/L); Vasodilator (rbt ear, calcium salt); anti-inflammatory (mouse, acetic acid-induced, ip, inhibits increase of vaso-permeability); antitussive (mouse, fog-ammonia method); antibacterial (gram-positive bacteria); antiviral (jockos, inactivator to hepatitis B virus HBV, non-A non-B hepatitis virus NANB, hmn T-lymphocytes-phil virus III HTLV-III in blood products); LD<sub>50</sub> (mouse, orl) = 1.52g/kg. Source: NIU HUANG *Bos taurus domesticus*; *Bubalus bubalis* (gallstone: content scope = 3.08%~15.67%<sup>[5501]</sup>, mean content = 5.70%<sup>[5508]</sup>), XIONG DAN *Selenarctos thibetanus*; *Ursus arctos*. Ref: 5501, 5507, 5508.

**3589 Choline**

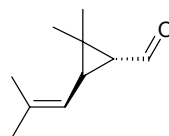
Bilinearine [62-49-7] C<sub>5</sub>H<sub>14</sub>NO<sup>+</sup> (104.17). Easily soluble in water, ethanol, insoluble in ether, petroleum ether.<sup>[5507]</sup> Source: BAN XIA *Pinellia ternata*, CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*], DANG GUI *Angelica sinensis*, DANG SHEN *Codonopsis pilosula*, FU LING *Poria cocos*, HUANG HAO *Artemisia scoparia* [Syn. *Artemisia capillaris* var. *scoparia*], HUANG QI *Astragalus membranaceus*, PU GONG YING *Taraxacum mongolicum*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], YAO YONG PU GONG YING *Taraxacum officinale*, ZHI MU *Anemarrhena asphodeloides*. Ref: 2, 660, 5507.

**3590 10R-Chrysaloin 1-O- $\beta$ -D-glucopyranoside**

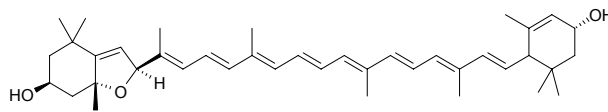
C<sub>27</sub>H<sub>32</sub>O<sub>13</sub> (564.55). Pale yellow amorphous, [ $\alpha$ ]<sub>D</sub><sup>21</sup> = -56.6° (c = 0.049, MeOH). Source: ZANG BIAN DA HUANG *Rheum emodi* [Syn. *Rheum australe*] (root). Ref: 4273.

**3591 Chrysanthemal**

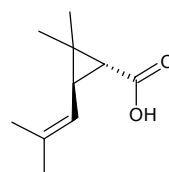
C<sub>10</sub>H<sub>16</sub>O (152.24). colorless oil. Source: NIAN HAO *Artemisia cana* ssp. *viscidula*. Ref: 1980.

**3592 Chrysanthemaxanthin**

[27780-11-6] C<sub>40</sub>H<sub>56</sub>O<sub>3</sub> (584.89). mp 184~185°C. Source: QIAN LI GUANG *Senecio scandens* [Syn. *Senecio chinensis*], YE JU *Chrysanthemum indicum*. Ref: 6.

**3593 Chrysanthemic acid**

[827-90-7] C<sub>10</sub>H<sub>16</sub>O<sub>2</sub> (168.24). Pharm: Irritant (eyes and mucous membranes). Source: CHU CHONG JU *Chrysanthemum cinerariaefolium*. Ref: 658.

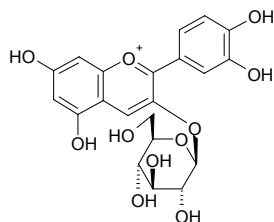




**3594 Chrysanthemim**

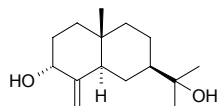
Cyanidin 3-O-glucoside [7084-24-4]  $C_{21}H_{21}O_{11}^+$  (449.39). mp 205°C (dec).

**Pharm:** Antihypertensive; larvacide (*Heliothis virescens*). **Source:** BAI FAN DOU *Phaseolus vulgaris*, DI YU *Sanguisorba officinalis*, DU JUAN HUA *Rhododendron simsii*, FU PEN ZI *Rubus idaeus*, HEI DA DOU PI *Glycine max*, JU HUA *Chrysanthemum morifolium* [Syn. *Dendranthema morifolium*], LING MU *Eurya japonica*, MAO SHU *Dioscorea alata*, QIU MU GUA *Chaenomeles lagenaria* [Syn. *Chaenomeles speciosa*], TOU GU CAO *Speranskia tuberculata*, YE JU *Chrysanthemum indicum*, YE JU HUA *Chrysanthemum indicum*, ZAI PEI ZI WAN *Aster cultivars*. **Ref:** 6, 658, 5501.

**3595 Chrysanthemol**

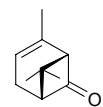
Chrysanthemyl alcohol [113773-90-3]  $C_{15}H_{26}O_2$  (238.37). White shortness rhombic crystals, mp 146–148°C,  $[\alpha]_D^{19} = +5.8^\circ$  ( $c = 0.51$ , chloroform).

**Pharm:** Anti-inflammatory (mus). **Source:** YE JU *Chrysanthemum indicum*. **Ref:** 90.

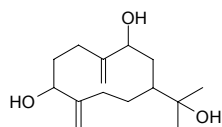
**3596 Chrysanthenone**

$C_{10}H_{14}O$  (150.22). bp 105–114°C/44mmHg. **Source:** JU HUA

*Chrysanthemum morifolium* [Syn. *Dendranthema morifolium*]. **Ref:** 6.

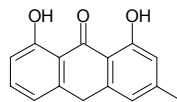
**3597 Chrysanthetriol**

$C_{15}H_{26}O_3$  (254.37). Colorless, oleaginous, viscous liquid,  $[\alpha]_D^{20} = -31.8^\circ$  ( $c = 0.3$ , chloroform). **Source:** YE JU HUA *Chrysanthemum indicum*. **Ref:** 222.

**3598 Chrysarobin**

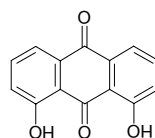
1,8-Dihydroxy-3-methyl-9-anthrone [491-58-7]  $C_{15}H_{12}O_3$  (240.26). mp

206–208°C. **Pharm:** Antibacterial; antifungal; anthelmintic; laxative. **Source:** BO XI SHU LI *Rhamnus purshiana*, HE SHOU WU *Polygonum multiflorum*, JUE MING ZI *Cassia tora*, LI LA GEN *Rhamnus crenata*, NIU ER DA HUANG *Rumex crispus*, TIE DAO MU *Cassia siamea*. **Ref:** 2, 6, 555, 658.

**3599 Chrysazin**

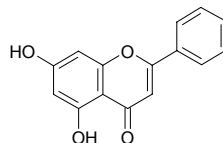
1,8-Dihydroxy-anthraquinone [117-10-2]  $C_{14}H_8O_4$  (240.22). mp 193°C.

**Pharm:** Immunosuppressant (macrophage and lymphocyte, high dose); laxative. **Source:** WANG JIANG NAN *Cassia occidentalis*, ZHANG YE DA HUANG *Rheum palmatum*, JIN JI LE *Cinchona ledgeriana*. **Ref:** 6, 658.

**3600 Chrysin**

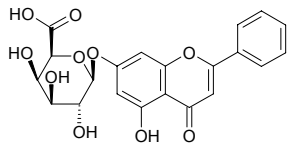
5,7-Dihydroxyflavone [480-40-0]  $C_{15}H_{10}O_4$  (254.24). Yellow granular crystals

(MeOH), mp 266–268°C. **Pharm:** Anti-HIV (inhibits HIV replication,  $EC_{50} = 5\mu\text{mol/L}$ ); anti-inflammatory; antimicrobial; cytotoxic (KB,  $ED_{50} = 13\mu\text{g/mL}$ ); induces production of estrin synthetase and cruarin; antihistamine (inhibits histamine release, rat peritoneum mastocyte); aldose reductase inhibitor (eye lens); iodinate thyronine deiodinase inhibitor; anti-inflammatory (COX-2 inhibitor, prevents COX-2 expression)<sup>[4415]</sup>; platelet aggregation inhibitor<sup>[4415]</sup>. **Source:** BEI JING YANG *Populus beijingensis* (bark: content = 0.10%)<sup>[5508]</sup>, CI GUO SONG *Pinus aristata*, DIAN HUANG QIN *Scutellaria amoena*, FENG JIAO *Apis mellifera ligustica*, HUANG QIN *Scutellaria baicalensis*, JIA YANG *Populus canadensis* (bark: content = 0.10%)<sup>[5508]</sup>, JIA ZHOU SHAN SONG *Pinus monticola*, MAO BAI YANG *Populus tomentosa* (bark: content = 0.03%)<sup>[5508]</sup>, MU HU DIE *Oroxylum indicum*, QIAO GUI *Pinus excelsa*, SHAN YANG *Populus davidiana* (bark: content = 0.04%)<sup>[5508]</sup>, XIAO HEI YANG *Populus xiaohei* (bark: content = 0.02%)<sup>[5508]</sup>, XIAO QING YANG *Populus pseudo-simonii* (bark: content = 0.08%)<sup>[5508]</sup>, XIN JIANG YANG *Populus alba* var. *pyramidalis* (bark: content = 0.01%)<sup>[5508]</sup>, YIN BAI YANG *Populus alba* (bark: content = 0.01%)<sup>[5508]</sup>, *Populus* sp., *Escallonia* sp. **Ref:** 2, 5, 463, 660, 1553, 4415, 5501, 5508.

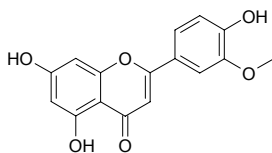


**3601 Chrysin 7-O- $\beta$ -galactopyranuronoside**

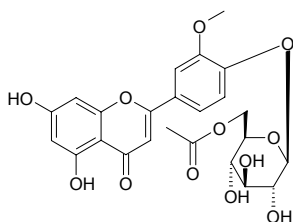
$C_{21}H_{18}O_{10}$  (430.37). Pale yellowish amorphous powder. Source: DONG AN NA TUO LI YA SHI CHE JU *Centaurea pseudoscabiosa* ssp. *pseudoscabiosa*. Ref: 1947.

**3602 Chrysoeriol**

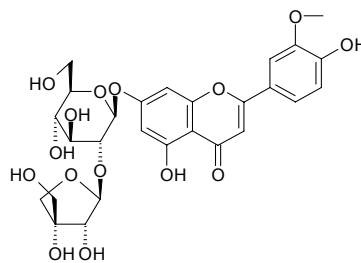
Chrysoeriol; 3'-Methoxy-4',5,7-trihydroxyflavone [491-71-4]  $C_{16}H_{12}O_6$  (300.27). Pharm: Antineoplastic (Inhibition of DMBA-induced preneoplastic lesions *in vitro*, MMOC assay,  $IC_{50} = 36\mu\text{mol/L}$ ; control Sulforaphane,  $IC_{50} = 11\mu\text{mol/L}$ )<sup>[4718]</sup>; antineoplastic (inhibits carcinogenesis of 3,4-benzopyrene, inhibits its metabolism); cytotoxic ( $P_{388}$ ,  $ED_{50} = 1.9\mu\text{g/mL}$ ); cAMP phosphodiesterase inhibitor (*in vitro*,  $IC_{50} = 269\mu\text{mol/L}$ ); cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells)<sup>[5038]</sup>; anti-allergic and anti-inflammatory (inhibits basophile to release histamine and inhibits neutrophil cells to release  $\beta$ -glucuronidase); aldose reductase inhibitor ( $50\mu\text{g/mL}$  InRt = 61.5%,  $IC_{50} = 14.0\mu\text{mol/L}$ ); xanthinoxidase inhibitor ( $50\mu\text{g/mL}$  InRt = 61.5%,  $IC_{50} = 14.0\mu\text{mol/L}$ ); anti-coagulant (hum, inhibits expression of tissue factor in monocyte induced by interleukin I,  $IC_{50} = 2.6\mu\text{mol/L}$ ); anticomplement activity. Source: DU HUI MAO DOU *Tephrosia toxicaria* (stem: yield = 0.00017%dw)<sup>[4718]</sup>, HUANG HUA HAO *Artemisia annua*, JIN YIN HUA *Lonicera japonica*, PAN YUAN YU TENG *Derris scandens* (stem), SAN JIAN SHAN *Cephalotaxus fortunei*, XIANG DOU *Dipteryx odorata* (callus and root). Ref: 2, 660, 1627, 1628, 1629, 1630, 1631, 1632, 1633, 1634, 3810, 4718, 5038.

**3603 Chrysoeriol 4'-O-(6''-O-acetyl)- $\beta$ -D-glucopyranoside**

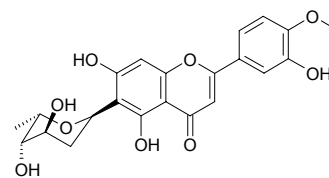
$C_{24}H_{24}O_{12}$  (504.45). Source: LV DOU *Onobrychis vicifolia* (leaf). Ref: 5084.

**3604 Chrysoeriol-7-apio-glucoside**

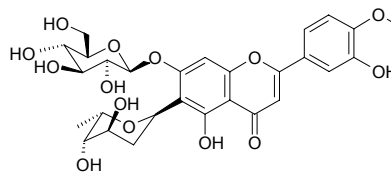
Graveobioside B  $C_{27}H_{30}O_{15}$  (594.53). mp 214~216°C. Source: HAN QIN *Apium graveolens*. Ref: 6.

**3605 Chrysoeriol 6-C-beta-L-boivinopyranoside**

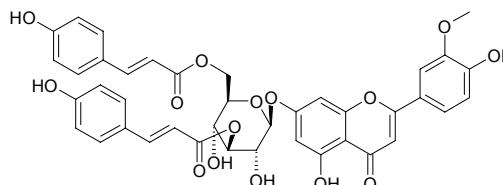
$C_{22}H_{22}O_9$  (430.42). Yellow amorphous solid, mp 212~216°C,  $[\alpha]_D^{20} = +27.1^\circ$  ( $c = 1.18$ , MeOH). Pharm: Glycation inhibitor (similar to that of aminoguanidine). Source: YU SHU SHU *Zea mays* (style: yield = 0.0012%dw). Ref: 4687.

**3606 Chrysoeriol 6-C-beta-boivinopyranosyl-7-O-beta-glucopyranoside**

$C_{28}H_{32}O_{14}$  (592.56). Yellow amorphous solid, mp 196~198°C,  $[\alpha]_D^{20} = -24.9^\circ$  ( $c = 0.61$ , MeOH). Pharm: Glycation inhibitor (similar to that of aminoguanidine). Source: YU SHU SHU *Zea mays* (style: yield = 0.00081%dw). Ref: 4687.

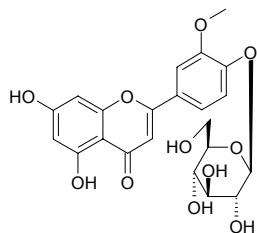
**3607 Chrysoeriol 7-O-(3'',6''-Di-O-E-p-coumaroyl)-beta-D-glucopyranoside**

$C_{40}H_{34}O_{15}$  (754.71). Amorphous yellow powder,  $[\alpha]_D^{20} = -13.2^\circ$  ( $c = 0.05$ , MeOH). Source: DUAN RONG MAO OU XIA ZHI CAO *Marrubium velutinum* (aerial parts). Ref: 3448.



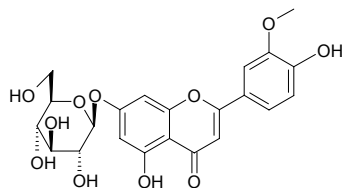
**3608 Chrysoeriol 4'-O-β-D-glucopyranoside**

$C_{22}H_{22}O_{11}$  (462.41). Source: LV DOU *Onobrychis vicifolia* (leaf). Ref: 5084.

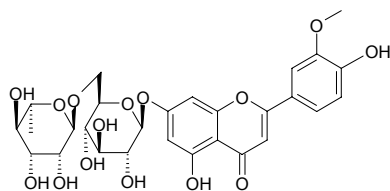
**3609 Chrysoeriol 7-O-β-D-glucopyranoside**

$C_{22}H_{22}O_{11}$  (462.41). Pharm: Aldose reductase inhibitor ( $IC_{50} = 26\mu\text{mol/L}$ , control Epalrestat,  $IC_{50} = 0.072\mu\text{mol/L}$ )<sup>[4530]</sup>; antitrypanosomal (*Trypanosoma b. rhodesiense*,  $IC_{50} = 88.7\mu\text{g/mL}$ , control Melarsoprol,  $IC_{50} = 0.00098\mu\text{g/mL}$ ; *Trypanosoma cruzi*,  $IC_{50} > 90\mu\text{g/mL}$ , control Benznidazole,  $IC_{50} = 1.06\mu\text{g/mL}$ )<sup>[5009]</sup>; antileishmanial (*Leishmania donovani*,  $IC_{50} = 4.1\mu\text{g/mL}$ , control Miltefosine,  $IC_{50} = 0.102\mu\text{g/mL}$ )<sup>[5009]</sup>; antimalarial (*Plasmodium falciparum*,  $IC_{50} = 5.9\mu\text{g/mL}$ , control Artemisinin,  $IC_{50} = 0.0022\mu\text{g/mL}$ )<sup>[5009]</sup>; cytotoxic (L6,  $IC_{50} > 90\mu\text{g/mL}$ , control Podophyllotoxin,  $IC_{50} = 0.008\mu\text{g/mL}$ )<sup>[5009]</sup>.

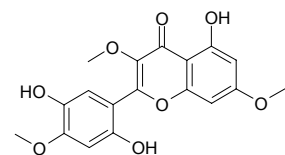
Source: SHUI MU XUE LIAN HUA *Saussurea medusa* (whole herb), ZONG KUI CAO SU *Phlomis brunneogaleata*. Ref: 4530, 5009.

**3610 Chrysoeriol 7-O-rutinoside**

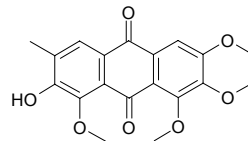
$C_{28}H_{32}O_{15}$  (608.56). Pharm: Aldose reductase inhibitor ( $IC_{50} = 14\mu\text{mol/L}$ ; control Epalrestat,  $IC_{50} = 0.072\mu\text{mol/L}$ ). Source: SHUI MU XUE LIAN HUA *Saussurea medusa* (whole herb). Ref: 4530.

**3611 Chrysograyanin**

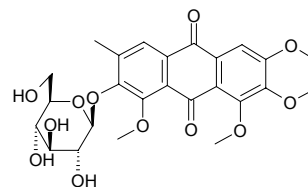
Oxyayanin A  $C_{18}H_{16}O_8$  (360.32). mp 245–247°C. Pharm: Allergenic. Source: JIN QIAN KU YE CAO *Chrysosplenium grayanum*, NI RI LI YA LIANG RUI SU MU *Distemonanthus benthamianus*. Ref: 6, 658.

**3612 Chrysoobtusin**

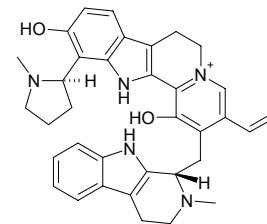
2-Hydroxy-1,6,7,8-tetramethoxy-3-methyl-9,10-anthracenedione [70588-06-6]  $C_{19}H_{18}O_7$  (358.37). Source: JUE MING ZI *Cassia tora*. Ref: 725.

**3613 Chrysoobtusin glucoside**

$C_{25}H_{28}O_{12}$  (520.49). Pharm: Platelet aggregation inhibitor (rat). Source: JUE MING ZI *Cassia tora*, DUN YE JUE MING *Cassia obtusifolia*. Ref: 658.

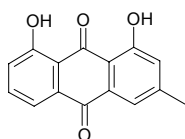
**3614 Chrysopentamine**

$C_{35}H_{38}N_5O_2$  (560.73). Orange amorphous powder. Pharm: Antiplasmodial (chloroquine-sensitive line,  $IC_{50} = (579\pm 376)\text{nmol/L}$ ,  $IC_{90} = 1918\text{nmol/L}$ , control Quinine,  $IC_{50} = (269\pm 6)\text{nmol/L}$ ,  $IC_{90} = 1910\text{nmol/L}$ ; chloroquine-resistant line,  $IC_{50} = (550\pm 149)\text{nmol/L}$ ,  $IC_{90} = 1980\text{nmol/L}$ , Quinine,  $IC_{50} = (200\pm 33)\text{nmol/L}$ ,  $IC_{90} = 2740\text{nmol/L}$ ; moderately chloroquine-resistant line,  $IC_{50} = (507\pm 227)\text{nmol/L}$ ,  $IC_{90} = 1774\text{nmol/L}$ , Quinine,  $IC_{50} = (413\pm 11)\text{nmol/L}$ ,  $IC_{90} = 1720\text{nmol/L}$ )<sup>[4925]</sup>. Source: DONG FEI MA QIAN *Strychnos usambarensis* (leaf). Ref: 4925.

**3615 Chrysophanol**

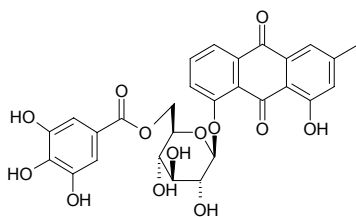
3-Methylchrysazin [481-74-3]  $C_{15}H_{10}O_4$  (254.24). Hexagon or oblique crystals (ethanol or benzene), mp 196°C (sub); orange lamellar crystals, mp 198°C. Pharm: Antibacterial ( $\alpha$ -Streptococcus, *Diplococcus pneumoniae*, *Bacillus influenzae*, *Coccus catarrhalis*); antitussive; coagulant (oral or sc, cuts clotting time); diuretic (rat); paralyzes muscle; promotes intestinal motion; stimulates nerve; cytotoxic (K562 cells,  $IC_{50} = 52.50\mu\text{g/mL}$ )<sup>[4600]</sup>; cytotoxic inactive (MCF, HM02, HEPG2)<sup>[5232]</sup>; cytotoxic inactive (*in vitro*, HeLa, Vero, K562, Raji, Wish, and Calu1 tumor cell lines,  $IC_{50} > 100\mu\text{mol/L}$ )<sup>[3057]</sup>; antioxidant inactive (DPPH radical scavenger,  $IC_{50} > 100\mu\text{g/mL}$ ; control Ascorbic acid,  $IC_{50} = 3.9\mu\text{g/mL}$ )<sup>[4711]</sup>; antioxidant inactive (DPPH radical scavenger assay)<sup>[5232]</sup>. Source: BEI HUANG HUA CAI *Hemerocallis*

*lilio-asphodelus* (root: content = 0.0031%)<sup>[5508]</sup>, BO XI SHU LI *Rhamnus purshiana*, CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*], DA HUANG *Rheum officinale*, DUN YE JUE MING *Cassia obtusifolia* (ripe seed: mean content = 0.0036%)<sup>[5508]</sup>, FAN XIE YE *Cassia angustifolia*, HE SHOU WU *Polygonum multiflorum*, HU ZHANG *Polygonum cuspidatum*, HUANG HUA CAI *Hemerocallis citrina* (root: content = 0.0035%)<sup>[5508]</sup>, JIAN YE FAN XIE YE *Cassia acutifolia*, JUE MING ZI *Cassia tora* (ripe seed: content = 0.0129%<sup>[5501]</sup> := 0.0033%<sup>[5508]</sup>), LU HUI *Aloe vera* [Syn. *Aloe barbadensis*], MI MAI E ZHANG CHAI *Schefflera venulosa* (stem cortex), NI BO ER YANG TI *Rumex nepalensis*, NIU SHE CAO *Rumex dentatus* (root: mean content = 0.0945%<sup>[5508]</sup>), NIU XI *Achyranthes bidentata*, NIU XI XI *Rumex patientia* (root: mean content = 0.1543%<sup>[5508]</sup>), PO LUO MEN ZAO JIA *Cassia fistula* (seed: yield = 0.00086%)<sup>[4642]</sup>, SHAN BIAN DOU ZI *Cassia mimosoides*, SHU LI *Rhamnus davurica*, SUAN MO *Rumex acetosa* (root: mean content = 0.1187%<sup>[5508]</sup>), TANG GU TE DA HUANG *Rheum tanguticum*, TIAN SHAN DA HUANG *Rheum wittrockii*, TIE DAO MU *Cassia siamea*, WANG JIANG NAN *Cassia occidentalis*, XUAN CAO GEN *Hemerocallis fulva* (root: content = 0.00044%)<sup>[5508]</sup>, YANG TI *Rumex japonicus* (root: mean content = 0.1565%<sup>[5508]</sup>), YI HE GUO *Ventilago leiocarpa* (stem)<sup>[3057]</sup>, YOU MU *Tectona grandis*, ZANG BIAN DA HUANG *Rheum emodi* [Syn. *Rheum australe*] (root: yield = 0.25%dw)<sup>[4711]</sup>, ZHANG YE DA HUANG *Rheum palmatum*, occurs in many plants (very widely distributed: including *Cassia* spp., *Rumex* spp., *Rheum* spp., *Asphodelus* spp. and *Muehlenbeckia* spp.). **Ref:** 2, 4, 555, 582, 608, 660, 661, 3057, 4600, 4642, 4711, 5232, 5501, 5508.



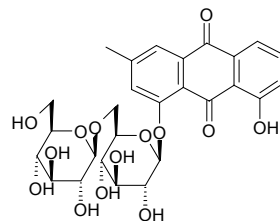
### 3616 Chrysophanol-8-O-β-D-(6'-O-galloyl)-glucopyranoside

C<sub>28</sub>H<sub>24</sub>O<sub>13</sub> (568.50). Aurantium acicular crystals (acetone) mp 213~216°C. **Source:** HE TAO DA HUANG *Rheum hotaoense*. **Ref:** 783.



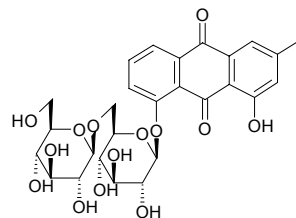
### 3617 Chrysophanol-1-β-gentiobioside

C<sub>27</sub>H<sub>30</sub>O<sub>14</sub> (578.53). **Source:** JUE MING ZI *Cassia tora*. **Ref:** 2.



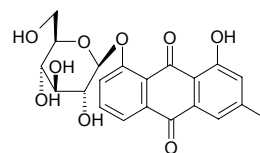
### 3618 Chrysophanol-8-O-gentiobioside

C<sub>27</sub>H<sub>30</sub>O<sub>14</sub> (578.53). **Source:** ZANG BIAN DA HUANG *Rheum emodi* [Syn. *Rheum australe*] (root: yield = 0.067%dw). **Ref:** 4711.



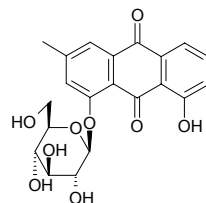
### 3619 Chrysophanol-8-O-β-D-glucopyranoside

C<sub>21</sub>H<sub>20</sub>O<sub>9</sub> (416.39). **Pharm:** Spermicidal (hmn); antioxidant inactive (DPPH radical scavenger assay)<sup>[5232]</sup>; antioxidant inactive (DPPH radical scavenger, IC<sub>50</sub> > 100μg/mL; control Ascorbic acid, IC<sub>50</sub> = 3.9μg/mL)<sup>[4711]</sup>; cytotoxic inactive (MCF, HM02, HEPG2)<sup>[5232]</sup>. **Source:** DA HUANG *Rheum officinale*, NIU XI XI *Rumex patientia*, TANG GU TE DA HUANG *Rheum tanguticum*, TIAN SHAN DA HUANG *Rheum wittrockii*, ZANG BIAN DA HUANG *Rheum emodi* [Syn. *Rheum australe*] (root: yield = 0.52%dw), ZHANG YE DA HUANG *Rheum palmatum*. **Ref:** 2, 608, 658, 660, 4711, 5232.



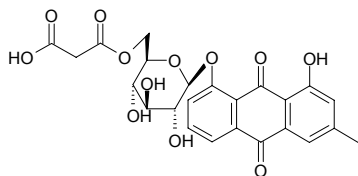
### 3620 Chrysophanol-1-O-β-D-glucoside

Chrysophanein; Chrysophanol-1-O-β-D-glucopyranoside [4839-60-5] C<sub>21</sub>H<sub>20</sub>O<sub>9</sub> (416.39). mp 245°C. **Source:** DA HUANG *Rheum officinale*, NIU ER DA HUANG *Rumex crispus*, PO LUO MEN ZAO JIA *Cassia fistula* (seed: yield = 0.0002%)<sup>[4642]</sup>, SUAN MO *Rumex acetosa*, TANG GU TE DA HUANG *Rheum tanguticum*, ZHANG YE DA HUANG *Rheum palmatum*. **Ref:** 2, 6, 660, 4642.

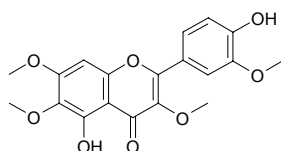


**3621 Chrysophanol 8-O-β-D-(6'-O-malonyl) glucopyranoside**

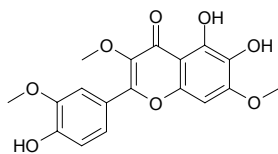
$C_{24}H_{22}O_{12}$  (502.44). Yellow powder. Source: QIN LING DA HUANG *Rheum qinlingense*. Ref: 811.

**3622 Chrysosplenetin**

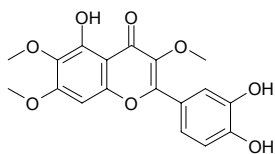
[603-56-5]  $C_{19}H_{18}O_8$  (375.35). Pharm: Antiviral. Source: MU<sup>(3)</sup> JU *Matricaria chamomilla* [Syn. *Matricaria recutita*], RI BEN JIN YAO *Chrysosplenium japonicum*, SHANG ZUO ZHOU JIN YAO *Chrysosplenium tosaense*, SA SHI MAO DI HUANG *Digitalis thapsii*. Ref: 658.

**3623 Chrysosplenol**

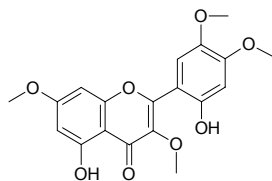
Chrysosplenol C  $C_{18}H_{16}O_8$  (360.32). Pharm: Antiviral (rhinovirus II). Source: DUI YE JIN YAO *Chrysosplenium oppositifolium*, JIN YAO *Chrysosplenium alternifolium*, MA SHI JIN YAO *Chrysosplenium maximowiczii*, *Milisia balansae* (branch and leaf: yield = 0.109%dw)<sup>[3016]</sup>. Ref: 658, 3016.

**3624 Chrysosplenol D**

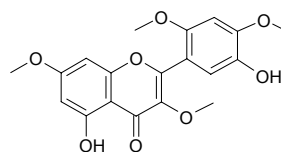
3,6,7-Trimethylquercetagenin  $C_{18}H_{16}O_8$  (360.22). Source: HUANG HUA HAO *Artemisia annua* (seed), MAN JING ZI *Vitex trifolia* (dried ripe fruit: mean content of 5 origins = 0.0147%)<sup>[5508]</sup>. Ref: 562, 3435, 5508.

**3625 Chrysosplenol E**

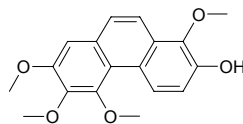
[23289-81-8]  $C_{19}H_{18}O_8$  (374.35). mp 190–192°C (dil. methanol), branched yellowish crystals (acetone–ethanol), mp 147–149°C. Pharm: Inhibits promotor of cancer (TPA, IC<sub>50</sub> = 9.0 μg/mL). Source: JIN QIAN KU YE CAO *Chrysosplenium grayanum*. Ref: 900.

**3626 Chrysosplenol G**

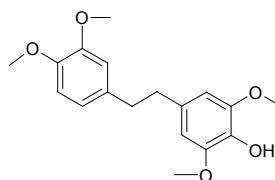
[130252-52-7]  $C_{19}H_{18}O_8$  (374.35). Yellowish rhombic crystals (methanol), mp 153–155°C. Pharm: Cytotoxic (KB, ED<sub>50</sub> = (8.61±0.43) μg/mL). Source: JIN QIAN KU YE CAO *Chrysosplenium grayanum*. Ref: 1060.

**3627 Chrysotoxene**

2-Hydroxy-1,5,6,7-tetramethoxyphenanthrene  $C_{18}H_{18}O_5$  (314.34). Colorless lamellar crystals, mp 177–178°C (petroleum spirit–chloroform). Source<sup>[5508]</sup>: BAO CHUN SHI HU *Dendrobium primulinum* (stem: content = 0.129%), BEI QIAO SHI HU *Dendrobium gratiosissimum* (stem: content = 0.013%), GU CHUI SHI HU *Dendrobium chrysotoxum* (stem: content = 0.030%), HEI MAO SHI HU *Dendrobium williamsonii* (stem: content = 0.035%), LIU SU SHI HU *Dendrobium fimbriatum* var. *oculatum* (stem: content = trace), SHU HUA SHI HU *Dendrobium chrysanthum* (stem: content = 0.020%), TIE PI SHI HU *Dendrobium officinale* (stem: content = 0.020%), XI JING SHI HU *Dendrobium moniliforme* (stem: content = trace). Ref: 318, 5508.

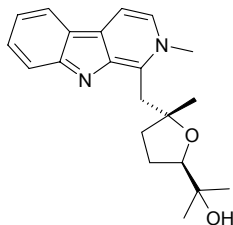
**3628 Chrysotoxin**

4-Hydroxy-3,5,3',4'-tetramethoxybibenzyl  $C_{18}H_{22}O_5$  (318.37). Colorless needle (*n*-hexane–chloroform), mp 97–98°C. Source: GU CHUI SHI HU *Dendrobium chrysotoxum*. Ref: 351.

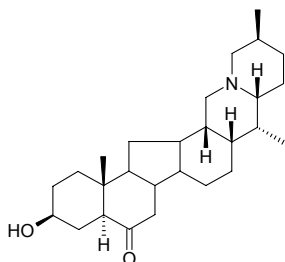


**3629 Chrysotricine**

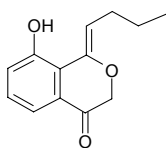
$C_{21}H_{26}N_2O_2$  (338.45). Yellow amorphous solids,  $[\alpha]_D = +10^\circ$  ( $c = 0.50$ , MeOH). Source: JIN MAO ER CAO *Hedyotis chrysotricha* [Syn. *Oldenlandia chrysotricha*], XIAO TOU LIANG HOU CHA *Hedyotis capitellata*. Ref: 1521, 2424.

**3630 Chuanbeinone**

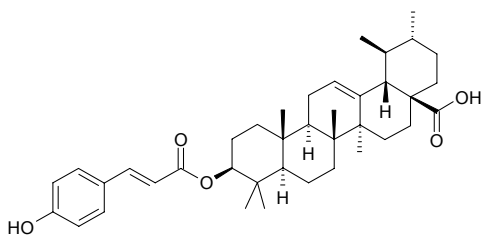
[103530-47-8]  $C_{27}H_{43}NO_2$  (413.65). Source: LENG SHA BEI MU *Fritillaria delavayi*, NING XIA BEI MU *Fritillaria taipaiensis* var. *ningxiaensis*, GAN SU BEI MU *Fritillaria przewalskii*. Ref: 2, 271, 660.

**3631 Chuanxiongol**

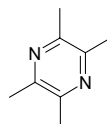
$C_{13}H_{14}O_3$  (218.25). Source: CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*]. Ref: 2.

**3632 Chuanxiongterpene**

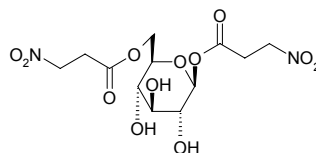
$C_{39}H_{54}O_5$  (602.86). Source: CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*]. Ref: 2251.

**3633 Chuanxiongine**

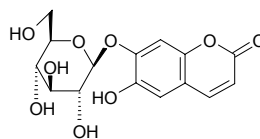
2,3,5,6-Tetramethylpyrazine [1124-11-4]  $C_8H_{12}N_2$  (136.20). Pharm: Antibacterial (gram-positive bacteria); antispasmodic (rbt aorta *in vitro*); ganglionic blocker; improves acute myocardial ischemia (rbt); coronary vasodilator; increases coronary flow (dog); platelet aggregation inhibitor (induced by ADP, collagen and thrombase); antihypertensive; increases tolerance to anoxia (mus); cardioprotective agent (isolated rat hearts, protective effects on ischemia reperfusion and DPPH-induced myocardial injury; related with reduction of TNF- $\alpha$  content by inhibition of free radical production)<sup>[5017]</sup>; LD<sub>50</sub> (mus, iv) = 239mg/kg. Source: CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*] (rhizome: content = 6.24%<sup>[5501]</sup>; = 0.0168%<sup>[5508]</sup>), MA HUANG *Ephedra sinica* (herbaceous twigs: content = 0.0624%<sup>[5508]</sup>), MU ZEI MA HUANG *Ephedra equisetina* (herbaceous twigs: content = 0.0172%<sup>[5508]</sup>), YU JIN *Curcuma aromatica*. Ref: 2, 4, 658, 660, 5017, 5501, 5508.

**3634 Cibarian**

[39797-90-5]  $C_{12}H_{18}N_2O_{12}$  (382.28). Pharm: Toxin. Source: DUAN CHI HUANG QI *Astragalus canadensis* var. *brevidens*, JIA NA DA HUANG QI *Astragalus canadensis* var. *mortonii*, LIAN XING HUANG QI *Astragalus falcatus*, SHI YONG HUANG QI *Astragalus cibarius*, WAN YAN HUANG QI *Astragalus flexuosus*. Ref: 658.

**3635 Cichoriin**

[531-58-8]  $C_{15}H_{16}O_9$  (340.29). mp 215~220°C. Pharm: Insect antifeedant (grasshopper). Source: JU QU *Cichorium intybus*, *Artemisia* sp., *Centaurea* sp., *Launaea* sp., *Sonchus* sp. Ref: 6, 658.

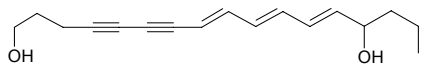
**3636 Cicutol**

$C_{17}H_{22}O$  (242.36). mp 66°C. Source: DU QIN GEN *Cicuta virosa*. Ref: 6.

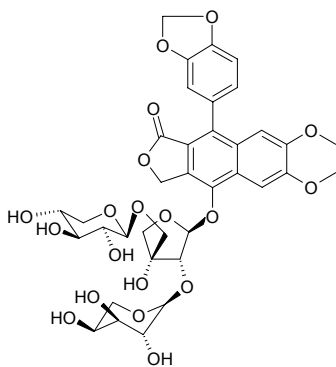


**3637 Cicutoxin**

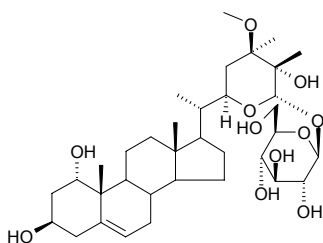
[505-75-9]  $C_{17}H_{22}O_2$  (258.37). mp 54°C. Pharm: Antineoplastic (leukemia); eclamptogenic (increases blood pressure, accelerating breathing and leading ultimately to death at high dose); CNS depressant (at low dose, sedative, antihypertensive, and slightly increases urine quantity); LD<sub>50</sub> (cat, iv) = 48.3mg/kg. Source: DU QIN GEN *Cicuta virosa*. Ref: 6, 658.

**3638 Ciliatoside A**

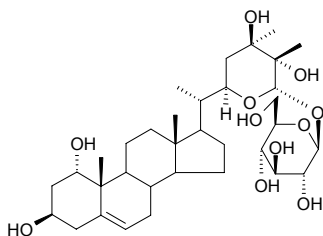
$C_{36}H_{40}O_{19}$  (776.71). Source: JUE CHUANG *Rostellularia procumbens* [Syn. *Justicia procumbens*] (whole herb: yield = 0.0001%dw). Ref: 4612.

**3639 Cilistol I**

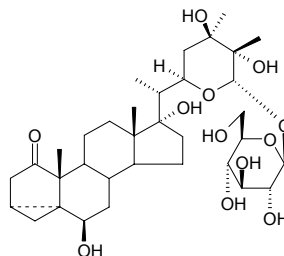
(22*R*,24*R*,25*R*,26*S*)-22,26-Epoxy-24-*O*-methyl-1*α*,3*β*,24,25,26-pentahydroxyergost-5-ene 26-*O*-*β*-*D*-glucopyranoside  $C_{35}H_{58}O_{11}$  (654.85). Amorphous powder,  $[\alpha]_D^{23} = -56.5^\circ$  ( $c = 0.46$ , MeOH). Source: DING QIE *Solanum aculeatissimum* (leaf). Ref: 3509.

**3640 Cilistol J**

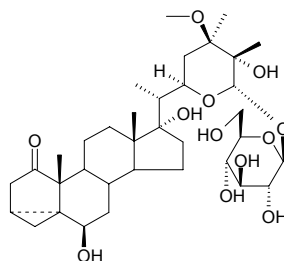
$C_{34}H_{56}O_{11}$  (640.82). Amorphous powder,  $[\alpha]_D^{23} = -63.7^\circ$  ( $c = 0.19$ , MeOH). Source: DING QIE *Solanum aculeatissimum* (leaf). Ref: 3509.

**3641 Cilistol p**

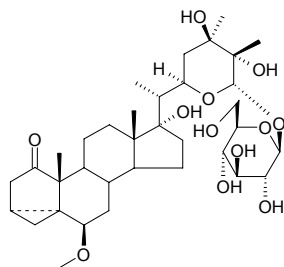
(22*R*,24*R*,25*R*,26*S*)-1-Oxo-22,26-epoxy-3*α*,5*α*-cycloergostane-6*β*,17*α*,24,25,26-pentaol 26-*O*-*β*-*D*-glucopyranoside  $C_{34}H_{54}O_{12}$  (654.80). Amorphous powder,  $[\alpha]_D^{23} = -77.8^\circ$  ( $c = 0.23$ , MeOH). Source: DING QIE *Solanum aculeatissimum* (leaf). Ref: 4138.

**3642 Cilistol pl**

(22*R*,24*R*,25*R*,26*S*)-1-Oxo-22,26-epoxy-3*α*,5*α*-cycloergostane-6*β*,17*α*,24,25,26-pentaol 26-*O*-*β*-*D*-glucopyranoside 24-*O*-methyl ether  $C_{35}H_{56}O_{12}$  (668.83). Amorphous powder,  $[\alpha]_D^{23} = -125.0^\circ$  ( $c = 0.26$ , MeOH). Source: DING QIE *Solanum aculeatissimum* (leaf). Ref: 4138.

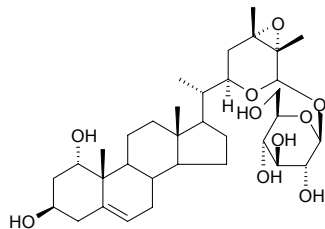
**3643 Cilistol pm**

(22*R*,24*R*,25*R*,26*S*)-1-Oxo-22,26-epoxy-3*α*,5*α*-cycloergostane-6*β*,17*α*,24,25,26-pentaol 26-*O*-*β*-*D*-glucopyranoside 6-*O*-methyl ether  $C_{35}H_{56}O_{12}$  (668.83). Amorphous powder,  $[\alpha]_D^{23} = -65.2^\circ$  ( $c = 0.36$ , MeOH). Source: DING QIE *Solanum aculeatissimum* (leaf). Ref: 4138.

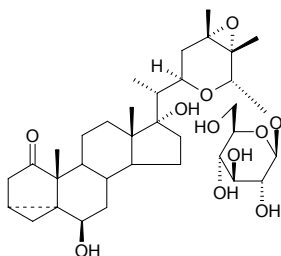


**3644 Cilistol T**

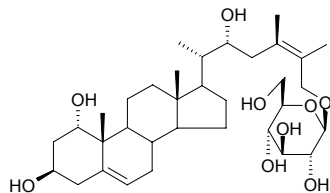
(22*R*,24*S*,25*R*,26*S*)-24,25,22,26-diepoxy-1 $\alpha$ ,3 $\delta$ ,26-trihydroxyergost-5-ene 26-*O*- $\beta$ -*D*-glucopyranoside C<sub>34</sub>H<sub>54</sub>O<sub>10</sub> (622.80). Amorphous powder,  $[\alpha]_D^{23} = -54.4^\circ$  ( $c = 0.62$ , MeOH). Source: DING QIE *Solanum aculeatissimum* (leaf). Ref: 3509.

**3645 Cilistol U**

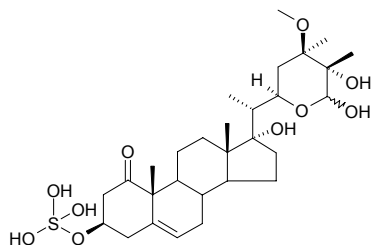
C<sub>34</sub>H<sub>52</sub>O<sub>11</sub> (636.79). Amorphous powder,  $[\alpha]_D^{23} = -102.0^\circ$  ( $c = 0.15$ , MeOH). Source: DING QIE *Solanum aculeatissimum* (leaf). Ref: 4138.

**3646 Cilistol V**

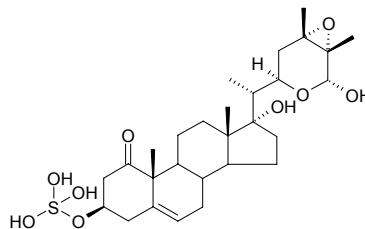
(22*R*,24*Z*)-1 $\alpha$ ,3 $\beta$ ,22,26-tetrahydroxyergost-5,24-diene 26-*O*- $\beta$ -*D*-glucopyranoside. C<sub>34</sub>H<sub>56</sub>O<sub>9</sub> (608.82). Amorphous powder,  $[\alpha]_D^{23} = -23.4^\circ$  ( $c = 0.23$ , MeOH). Source: DING QIE *Solanum aculeatissimum* (leaf). Ref: 3509.

**3647 Cilistol W**

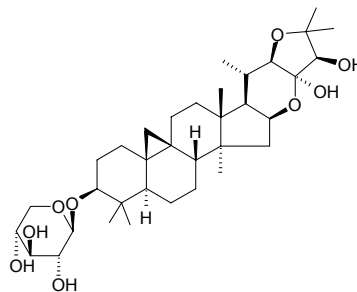
(22*R*,24*R*,25*R*,26 $\Phi$ )-1-oxo-22,26-epoxy-24-*O*-methyl-3 $\beta$ ,17 $\alpha$ ,24,25,26-penta-hydroxyergost-5-ene 3-*O*-sulfate C<sub>29</sub>H<sub>48</sub>O<sub>10</sub>S (588.76). Amorphous powder,  $[\alpha]_D^{23} = +12.6^\circ$  ( $c = 0.71$ , MeOH). Source: DING QIE *Solanum aculeatissimum* (leaf). Ref: 3509.

**3648 Cilistol Y**

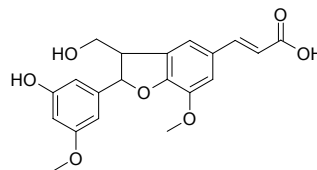
(22*R*,24*S*,25*R*,26*R*)-1-Oxo-22,26;24,25-diepoxy-3 $\beta$ ,17 $\alpha$ ,26-trihydroxyergost-5-ene 3-*O*-sulfate C<sub>28</sub>H<sub>44</sub>O<sub>9</sub>S (556.72). Amorphous powder,  $[\alpha]_D^{23} = +8.6^\circ$  ( $c = 0.21$ , MeOH). Source: DING QIE *Solanum aculeatissimum* (leaf). Ref: 3509.

**3649 Cimiaceroside B**

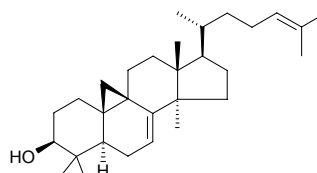
[210643-84-8] C<sub>35</sub>H<sub>56</sub>O<sub>9</sub> (620.83). White amorphous powder, mp 239~241°C (MeOH). Pharm: Immunosuppressant (mouse allogeneic mixed lymphocyte reaction, suppresses the proliferation of lymphocytes, IC<sub>50</sub> = 103 μmol/L)<sup>[4330]</sup>. Source: HUANG SAN QI *Souliea vaginata* (Rhizome), SAN MIAN DAO *Cimicifuga acerina*, YE SHENG MA *Cimicifuga simplex*, *Cimicifuga* sp. (rhizome). Ref: 1521, 4291, 4330.

**3650 Cimicifugic acid**

C<sub>20</sub>H<sub>20</sub>O<sub>7</sub> (372.38). White crystals, mp 233~235°C,  $[\alpha]_D^{20} = +5.19^\circ$  ( $c = 0.48$ , MeOH). Source: SHENG MA *Cimicifuga foetida*. Ref: 2232.

**3651 Cimicifugenol**

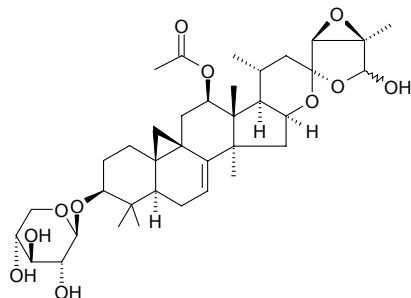
[28282-48-6] C<sub>30</sub>H<sub>48</sub>O (424.72). mp 112~113°C. Source: SAN MIAN DAO *Cimicifuga acerina*, YE SHENG MA *Cimicifuga simplex*. Ref: 6.



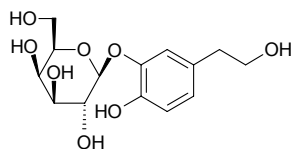


**3652 Cimicifugoside**

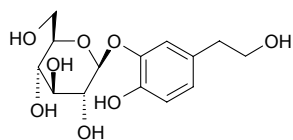
[66176-93-0] C<sub>37</sub>H<sub>54</sub>O<sub>11</sub> (674.84). mp 237~238°C. **Pharm:** Selectively inhibits nucleoside transport across cellular chorion (mammal). **Source:** FANG FENG *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*] (dried root: mean content of 15 origins = 0.277%)<sup>[5508]</sup>, XING AN SHENG MA *Cimicifuga dahurica*, YE SHENG MA *Cimicifuga simplex*, *Cimicifuga* sp. **Ref:** 6, 658, 660, 5508.

**3653 Cimidahurine**

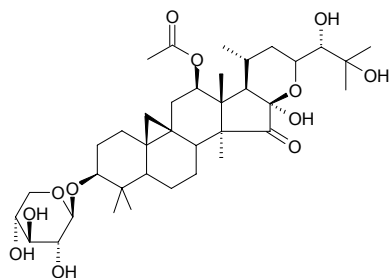
3,4-Dihydroxy- $\beta$ -phenethanol-3-*O*- $\beta$ -D-galactopyranoside C<sub>14</sub>H<sub>20</sub>O<sub>8</sub> (316.31). White amorphous powder, mp 78~80°C,  $[\alpha]_D^{17} = -51.2^\circ$  ( $c = 0.15$ , methanol). **Source:** XING AN SHENG MA *Cimicifuga dahurica*. **Ref:** 294.

**3654 Cimidahurinine**

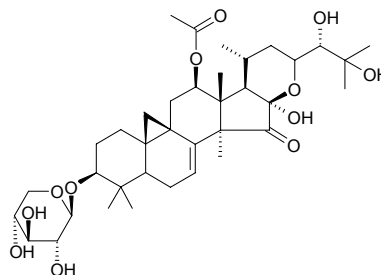
3,4-Dihydroxy- $\beta$ -phenethanol-3-*O*- $\beta$ -D-glucopyranoside C<sub>14</sub>H<sub>20</sub>O<sub>8</sub> (316.31). White amorphous powder, mp 86~90°C,  $[\alpha]_D^{17} = -45.6^\circ$  ( $c = 0.07$ , methanol). **Source:** XING AN SHENG MA *Cimicifuga dahurica*. **Ref:** 294.

**3655 Cimidahuside C**

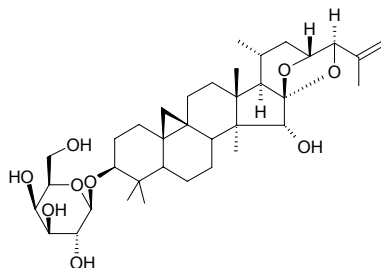
C<sub>37</sub>H<sub>58</sub>O<sub>12</sub> (694.87). White amorphous powder, mp 172~173°C,  $[\alpha]_D^{20} = -48.0^\circ$  ( $c = 0.25$ , CHCl<sub>3</sub>/MeOH). **Source:** XING AN SHENG MA *Cimicifuga dahurica*. **Ref:** 2476.

**3656 Cimidahuside D**

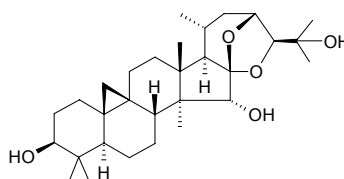
C<sub>37</sub>H<sub>56</sub>O<sub>12</sub> (692.85). White amorphous powder, mp 160~162°C,  $[\alpha]_D^{20} = -56.3^\circ$  ( $c = 0.36$ , CHCl<sub>3</sub>-MeOH). **Source:** XING AN SHENG MA *Cimicifuga dahurica*. **Ref:** 2476.

**3657 Cimifoetiside III**

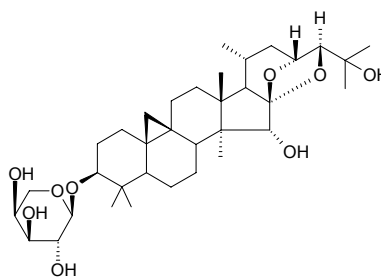
C<sub>36</sub>H<sub>56</sub>O<sub>9</sub> (632.84). White powder, mp 174~176°C,  $[\alpha]_D^{20} = -57.2^\circ$  ( $c = 0.21$ , CHCl<sub>3</sub>). **Source:** SHENG MA *Cimicifuga foetida*. **Ref:** 2429.

**3658 Cimigenol**

[3779-59-7] C<sub>30</sub>H<sub>48</sub>O<sub>5</sub> (488.71). **Source:** SHENG MA *Cimicifuga foetida*, YE SHENG MA *Cimicifuga simplex*, XING AN SHENG MA *Cimicifuga dahurica*, ZONG ZHUANG SHENG MA *Cimicifuga racemosa*. **Ref:** 2215, 4140.

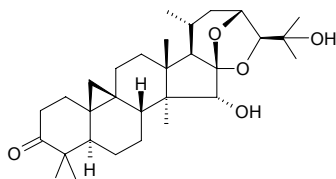
**3659 Cimigenol 3-*O*- $\alpha$ -L-arabinopyranoside**

C<sub>35</sub>H<sub>56</sub>O<sub>9</sub> (620.83). **Pharm:** Cytotoxic (HSC-2 cells, IC<sub>50</sub> > 400 $\mu$ mol/L, control Etoposide, IC<sub>50</sub> = 24 $\mu$ mol/L; HGF cells, IC<sub>50</sub> > 400 $\mu$ mol/L). **Source:** ZONG ZHUANG SHENG MA *Cimicifuga racemosa* (rhizome). **Ref:** 4158.

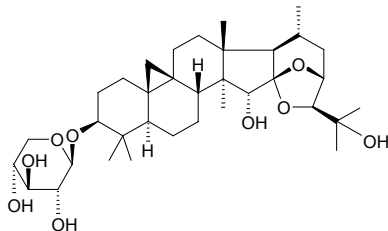


**3660 Cimigenol-3-one**

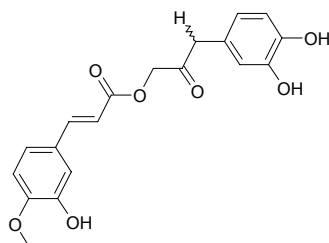
$C_{30}H_{46}O_5$  (486.70). Source: RI BEN SHENG MA *Cimicifuga japonica*. Ref: 2215.

**3661 Cimigenoside**

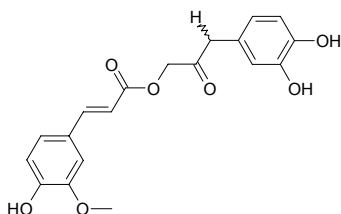
[27994-11-2]  $C_{35}H_{56}O_9$  (620.83). mp 261~264°C. Source: YE SHENG MA *Cimicifuga simplex*. Ref: 6.

**3662 Cimiracemate A**

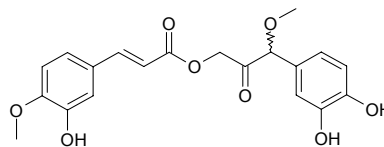
$C_{19}H_{18}O_7$  (358.35). Light brown powder, mp 94~96°C. Source: YE SHENG MA *Cimicifuga simplex*. Ref: 1924.

**3663 Cimiracemate B**

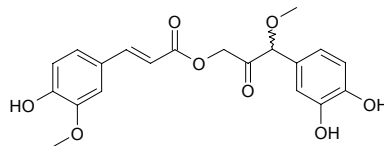
$C_{19}H_{18}O_7$  (358.35). Light brown powder, mp 86.0~88.5°C. Source: YE SHENG MA *Cimicifuga simplex*. Ref: 1924.

**3664 Cimiracemate C**

$C_{20}H_{20}O_8$  (388.38). Light brown powder, mp 88~90°C,  $[\alpha]_D^{20} = -6.82^\circ$  ( $c = 0.147$ , MeOH). Source: YE SHENG MA *Cimicifuga simplex*. Ref: 1924.

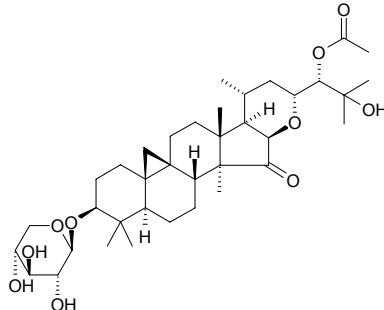
**3665 Cimiracemate D**

$C_{20}H_{20}O_8$  (388.38). Light brown powder, mp 100~102°C,  $[\alpha]_D^{20} = -6.25^\circ$  ( $c = 0.147$ , MeOH). Source: YE SHENG MA *Cimicifuga simplex*. Ref: 1924.

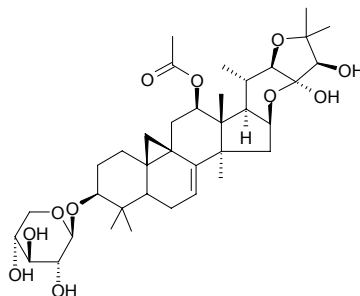
**3666 Cimiracemoside E**

24-*O*-Acetylisdahurinol-3-*O*- $\beta$ -*D*-xylopyranoside  $C_{37}H_{58}O_{10}$  (622.87).

Colorless needle, mp 223~224°C (MeOH). Source: HUANG SAN QI *Souliea vaginata* (Rhizome), ZONG ZHUANG SHENG MA *Cimicifuga racemosa*. Ref: 1521, 4291.

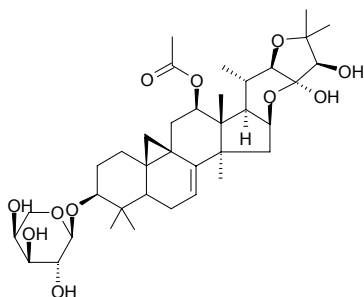
**3667 Cimiracemoside F**

$C_{37}H_{56}O_{11}$  (676.85). Pharm: Cytotoxic (HSC-2 cells,  $IC_{50} = 80\mu\text{mol/L}$ , control Etoposide,  $IC_{50} = 24\mu\text{mol/L}$ ; HGF cells,  $IC_{50} = 275\mu\text{mol/L}$ ). Source: ZONG ZHUANG SHENG MA *Cimicifuga racemosa* (rhizome). Ref: 4158.

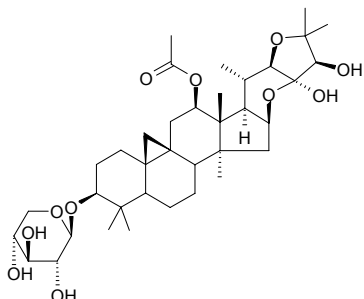


**3668 Cimracemoside G**

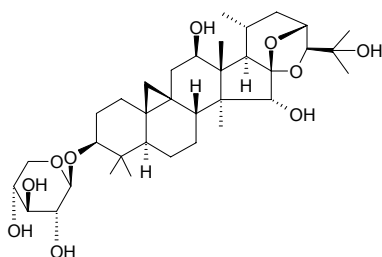
$C_{37}H_{56}O_{11}$  (676.85). **Pharm:** Cytotoxic (HSC-2 cells,  $IC_{50}$  = 18  $\mu$ mol/L, control Etoposide,  $IC_{50}$  = 24  $\mu$ mol/L; HGF cells,  $IC_{50}$  = 280  $\mu$ mol/L). **Source:** ZONG ZHUANG SHENG MA *Cimicifuga racemosa* (rhizome). **Ref:** 4158.

**3669 Cimracemoside H**

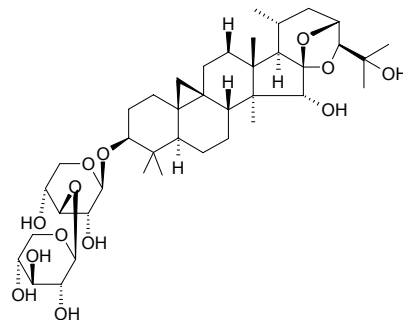
$C_{37}H_{58}O_{11}$  (678.87). **Pharm:** Cytotoxic (HSC-2 cells,  $IC_{50}$  = 171  $\mu$ mol/L, control Etoposide,  $IC_{50}$  = 24  $\mu$ mol/L; HGF cells,  $IC_{50}$  = 294  $\mu$ mol/L). **Source:** ZONG ZHUANG SHENG MA *Cimicifuga racemosa* (rhizome). **Ref:** 4158.

**3670 Cimside A**

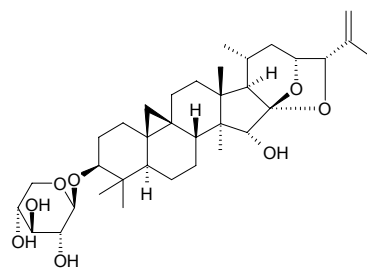
$C_{35}H_{56}O_{10}$  (636.83). Colorless acicular crystals, mp 262–264°C,  $[\alpha]_D^{15}$  = -36.8° ( $c$  = 0.063,  $CHCl_3:CH_3OH$  = 1:1). **Source:** XING AN SHENG MA *Cimicifuga dahurica*. **Ref:** 282.

**3671 Cimside B**

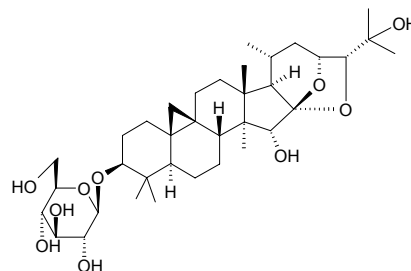
$C_{40}H_{64}O_{13}$  (752.95). White amorphous powder,  $[\alpha]_D^{15}$  = -15.3° ( $c$  = 0.072,  $CHCl_3:CH_3OH$  = 1:1). **Source:** XING AN SHENG MA *Cimicifuga dahurica*. **Ref:** 282.

**3672 Cimside E**

25-Anhydrocimicigenol-3-*O*- $\beta$ -D-xylopyranoside-(23*R*,24*S*) [154822-57-8]  $C_{35}H_{54}O_8$  (602.82). Colorless acicular crystals, mp > 300°C,  $[\alpha]_D^{19}$  = +31.4° ( $c$  = 0.058, chloroform:methanol = 1:1). **Source:** XING AN SHENG MA *Cimicifuga dahurica*. **Ref:** 304, 660.

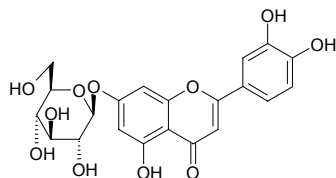
**3673 Cimside F**

$C_{36}H_{58}O_{10}$  (650.86). White powder, mp 107–110°C,  $[\alpha]_D^{29}$  = 0° ( $c$  = 0.075, methanol). **Source:** XING AN SHENG MA *Cimicifuga dahurica*. **Ref:** 320, 660.

**3674 Cinaroside**

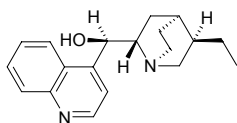
Luteolin-7-*O*-glucoside; Cymaroside [5373-11-5]  $C_{21}H_{20}O_{11}$  (448.39). Yellow granular crystals, mp 255–260°C;  $[\alpha]_D^{20}$  = -48° ( $c$  = 0.15, EtOH). **Pharm:** Aldose reductase inhibitor ( $IC_{50}$  = 0.99  $\mu$ mol/L, control Epalrestat,  $IC_{50}$  = 0.072  $\mu$ mol/L)<sup>[4214, 4530]</sup>; phagostimulant (*Chrysomela vigintipunctata*); antitrypanosomal (*Trypanosoma brucei rhodesiense*,  $IC_{50}$  = 60.6  $\mu$ g/mL, control Melarsoprol,  $IC_{50}$  = 0.00098  $\mu$ g/mL; *Trypanosoma cruzi*,  $IC_{50}$  > 90  $\mu$ g/mL, control Benznidazole,  $IC_{50}$  = 1.06  $\mu$ g/mL)<sup>[5009]</sup>; antileishmanial

(*Leishmania donovani*,  $IC_{50} = 1.1 \mu\text{g/mL}$ , control Miltefosine,  $IC_{50} = 0.102 \mu\text{g/mL}$ )<sup>[5009]</sup>, antimalarial (*Plasmodium falciparum*,  $IC_{50} = 2.4 \mu\text{g/mL}$ , control Artemisinin,  $IC_{50} = 0.0022 \mu\text{g/mL}$ )<sup>[5009]</sup>; cytotoxic (L6,  $IC_{50} > 90 \mu\text{g/mL}$ , control Podophyllotoxin,  $IC_{50} = 0.008 \mu\text{g/mL}$ )<sup>[5009]</sup>; anti-inflammatory (modulator of cytokine network: inhibits LPS-stimulated TNF- $\alpha$  and IL-6 release in RAW264.7 macrophages,  $IC_{50} = 50 \mu\text{mol/L}$ )<sup>[4416]</sup>; antioxidant (DPPH scavenger, DPPH radical  $15 \mu\text{mol/L}$ :  $10 \mu\text{mol/L}$ , ScRt = 38.0%; control BHA,  $10 \mu\text{mol/L}$ , ScRt = 23.0%; Vitamin E,  $10 \mu\text{mol/L}$ , ScRt = 41.1%)<sup>[3846]</sup>. **Source:** DA CHE QIAN *Plantago major*, HU ZHANG *Polygonum cuspidatum*, HUANG HUA HAO *Artemisia annua*, JIA HUI SE JIU LI XIANG PO PO NA *Veronica thymoides* ssp. *pseudocinerea*<sup>[3846]</sup>, JING JIE *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*], JU HUA *Chrysanthemum morifolium* [Syn. *Dendranthema morifolium*] (dried capitulum: content scope of 20 origins = 0.009%~0.472%, mean content = 0.154%)<sup>[5508]</sup>, LV CAO *Humulus japonicus* [Syn. *Humulus scandens*], SHUI MU XUE LIAN HUA *Saussurea medusa* (whole herb), XIA KU CAO *Prunella vulgaris*, XIAN HE CAO *Agrimonia pilosa* var. *japonica*, YANG QING LAN *Dracocephalum rupestre* (whole herb: mean content = 0.33%)<sup>[5508]</sup>, YAO YONG PU GONG YING *Taraxacum officinale*, YE JU HUA *Chrysanthemum indicum*, ZHAN LONG JIAN *Veronicastrum sibiricum*, ZONG KUI CAO SU *Phlomis brunneogaleata*, *Salix* sp. **Ref:** 2, 4, 440, 475, 658, 660, 2508, 3846, 4214, 4416, 4530, 5009, 5508.



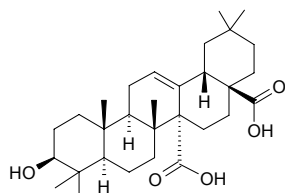
### 3675 Cinchamide

Hydrocinchonidine [485-64-3]  $C_{19}H_{24}N_2O$  (296.42). **Source:** JIN JI LE *Cinchona ledgeriana*. **Ref:** 6.



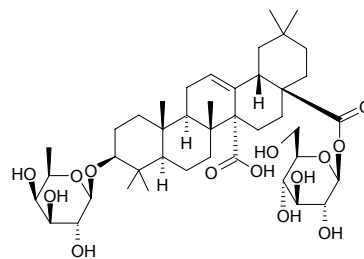
### 3676 Cincholic acid

[5948-32-3]  $C_{30}H_{46}O_5$  (486.70). mp 265~268°C (dec). **Source:** SHUI TUAN HUA *Adina pilulifera* [Syn. *Cephalanthus pilulifera*]. **Ref:** 6.



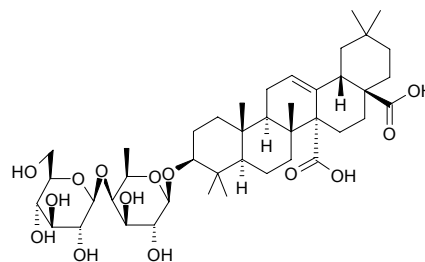
### 3677 Cincholic acid 3β-O-β-D-fucopyranosyl-28-O-β-D-glucopyranosyl ester

$C_{42}H_{66}O_{14}$  (794.99). Colorless amorphous powder,  $[\alpha]_D^{25} = +36.0^\circ$  ( $c = 1.21$ , MeOH). **Source:** BI LU GOU TENG *Uncaria tomentosa*. **Ref:** 2581.



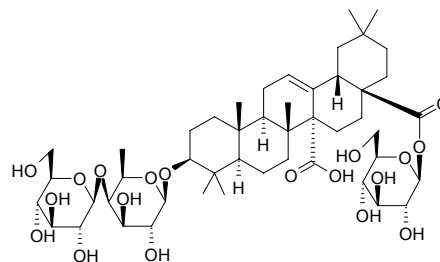
### 3678 Cincholic acid 3β-O-β-D-glucopyranosyl-(1→4)-β-D-fucopyranoside

$C_{42}H_{66}O_{14}$  (794.99). Colorless amorphous powder,  $[\alpha]_D^{25} = +31.2^\circ$  ( $c = 0.82$ , MeOH). **Source:** BI LU GOU TENG *Uncaria tomentosa*. **Ref:** 2581.



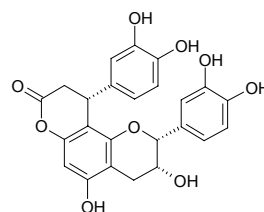
### 3679 Cincholic acid 3β-O-β-D-glucopyranosyl-(1→4)-β-D-fucopyranosyl-28-O-β-D-glucopyranosyl ester

$C_{48}H_{76}O_{19}$  (957.13). Colorless amorphous powder,  $[\alpha]_D^{25} = +26.0^\circ$  ( $c = 1.11$ , MeOH). **Source:** BI LU GOU TENG *Uncaria tomentosa*. **Ref:** 2581.



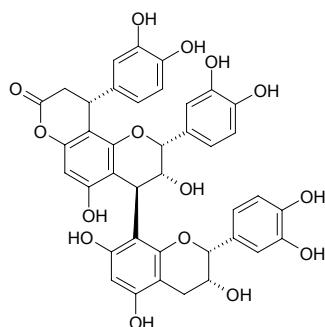
### 3680 Cinchonain Ia

$C_{24}H_{20}O_9$  (452.42). **Pharm:** Antioxidant. **Source:** BI LU GOU TENG *Uncaria tomentosa*, GOU TENG *Uncaria rhynchophylla* [Syn. *Nauclea rhynchophylla*]. **Ref:** 5341.

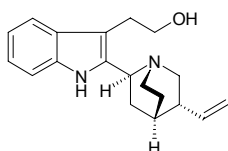


**3681 Cinchonain Ib**

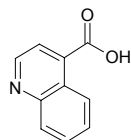
$C_{39}H_{32}O_{15}$  (740.68). Pharm: Antioxidant. Source: BI LU GOU TENG *Uncaria tomentosa*, GOU TENG *Uncaria rhynchophylla* [Syn. *Nauclea rhynchophylla*]. Ref: 5341.

**3682 Cinchonamine**

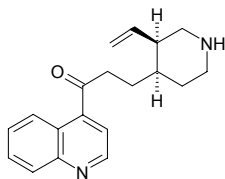
[482-28-0]  $C_{19}H_{24}N_2O$  (296.42). mp 186°C. Source: JIN JI LE *Cinchona ledgeriana*. Ref: 6.

**3683 Cinchonic acid**

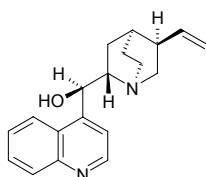
[486-74-8]  $C_{10}H_7NO_2$  (173.17). mp 253–254°C. Source: SHE XIANG CAO *Thymus vulgaris*. Ref: 6.

**3684 Cinchonidine**

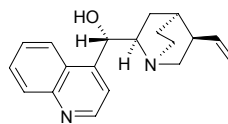
[69-24-9]  $C_{19}H_{22}N_2O$  (294.40). mp 58–60°C. Source: JIN JI LE *Cinchona ledgeriana*. Ref: 6.

**3685 Cinchonidine**

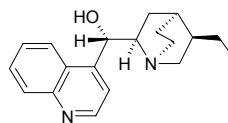
(8 $\alpha$ ,9*R*)-Cinchonan-9-ol [485-71-2]  $C_{19}H_{22}N_2O$  (294.40). mp 210.5°C. Source: JIN JI LE *Cinchona ledgeriana*. Ref: 6.

**3686 Cinchonine**

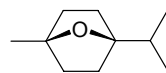
9-Cinchonan-9-ol [118-10-5]  $C_{19}H_{22}N_2O$  (294.40). Colorless acicular crystals, mp 255°C,  $[\alpha]_D^{17} = +229^\circ$  (ethanol), slightly soluble in ethanol, hot water, chloroform, ether, almost insoluble in cold water.<sup>[5507]</sup> Pharm: Antimalarial (slimicide). Source: YOU GAN LAN *Olea europaea*, OU ZHOU NV ZHEN *Ligustrum vulgare*, JIN JI LE *Cinchona ledgeriana*. Ref: 6, 658, 5507.

**3687 Cinchotine**

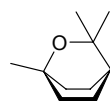
[485-65-4]  $C_{19}H_{24}N_2O$  (296.42). mp 268–269°C. Source: JIN JI LE *Cinchona ledgeriana*. Ref: 6.

**3688 1,4-Cineole**

[470-67-7]  $C_{10}H_{18}O$  (154.25). Source: HOU PO *Magnolia officinalis*, HUANG HAO *Artemisia scoparia* [Syn. *Artemisia capillaris* var. *scoparia*]. Ref: 2.

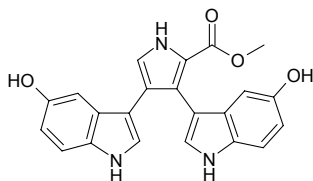
**3689 1,8-Cineole**

1,3,3-Trimethyl-2-oxabicyclo[2.2.2]octane [470-82-6]  $C_{10}H_{18}O$  (154.25). Pharm: Antibacterial (gram-positive: *Staphylococcus aureus* ATCC25923, MIC = 6.4mg/mL; *Staphylococcus epidermidis* ATCC12228, MIC = 6.4mg/mL; *Streptococcus pyogenes* ATCC19615, MIC = 3.2mg/mL; *Streptococcus mutans* ATCC25175, MIC = 6.4mg/mL; *Enterococcus faecalis* ATCC33186, MIC = 6.4mg/mL; *Enterococcus gallinarum* CDC-42, MIC = 6.4mg/mL; gram-negative: *Salmonella typhimurium* ATCC14028, MIC, 6.4mg/mL; *Escherichia coli* ATCC25922, MIC = 3.2mg/mL; *Escherichia coli* O157:H7 ATCC43894, MIC = 6.4mg/mL; *Enterobacter cloacae* ATCC23350, MIC = 6.4mg/mL; *Klebsiella pneumoniae* ATCC13883, MIC = 6.4mg/mL; *Pseudomonas aeruginosa* ATCC27853, MIC > 12.8mg/mL; *Vibrio vulnificus* ATCC29307, MIC = 3.2mg/mL; *Citrobacter freundii* ATCC8090, MIC = 6.4mg/mL)<sup>[5373]</sup>; antipyretic; anti-inflammatory; antiasthmatic; analgesic. Source: BEI YE JU *Chrysanthemum boreale*, DONG LING CAO *Rabdosia rubescens*, GAN JIANG *Zingiber officinale*, HUA JIAO *Zanthoxylum bungeanum*, HUANG HUA HAO *Artemisia annua*, LIAO XI XIN *Asarum heterotropoides* var. *mandshuricum*, MAN JING ZI *Vitex trifolia*, SHENG JIANG *Zingiber officinale*, XI XIN *Asarum sieboldii*. Ref: 2, 660, 5373, 5501.

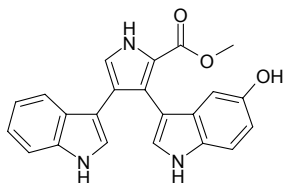


**3690 Cinereapyrrole A**

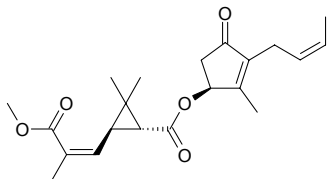
$C_{22}H_{17}N_3O_4$  (387.40). Dark brown amorphous powder. Source: HUI JIN SE TUAN WANG JUN *Arcyria cinerea* (wild sporocarp). Ref: 4465.

**3691 Cinereapyrrole B**

$C_{22}H_{17}N_3O_3$  (371.40). Dark brown amorphous powder. Source: HUI JIN SE TUAN WANG JUN *Arcyria cinerea* (wild sporocarp). Ref: 4465.

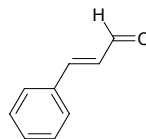
**3692 CinerinII**

[121-20-0]  $C_{21}H_{28}O_5$  (360.45). Pharm: Causes involuntary repetitive movement (hmn); damages function of liver and kidney (hmn); laxative (hmn); paralyses respiration (hmn); pesticide. Source: CHU CHONG JU *Chrysanthemum cinerariaefolium*. Ref: 658.

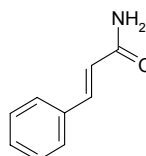
**3693 Cinnamaldehyde**

Cinnamic aldehyde [104-55-2]  $C_9H_8O$  (132.16). Yellowish oily liquid, strong Chinese cinnamon odor, mp  $-7.5^\circ\text{C}$ , bp  $246.0^\circ\text{C}/760\text{mmHg}$ ,  $76.1^\circ\text{C}/1\text{mmHg}$ . Pharm: Analgesic (mus); antineoplastic (mus tumor due to SV40 virus,  $50\mu\text{g}/\text{mL}$  iv, InRt = 100%); antifungal; antipyretic (mus); NF- $\kappa\text{B}$  inhibitor (LPS-induced NF- $\kappa\text{B}$  transcriptional activity,  $\text{IC}_{50} = 43\mu\text{mol}/\text{L}$ , positive control Caffeic acid phenethyl ester (CAPE),  $\text{IC}_{50} = 2\mu\text{mol}/\text{L}$ ; NF- $\kappa\text{B}$  is a transcription factor regulating expression of inflammatory and immune genes)<sup>[5018]</sup>;  $\text{LD}_{50}$  (mus, iv) =  $132\text{mg}/\text{kg}$ , (mus, ip) =  $610\text{mg}/\text{kg}$ , (mus, orl) =  $2225\text{mg}/\text{kg}$ . Source: GUANG HUO XIANG *Pogostemon cablin* [Syn. *Mentha cablin*], GUI PI *Cinnamomum japonicum* (bark: content =  $2.19\%$ )<sup>[5508]</sup>, GUI ZHI *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*] (twig: content scope =  $0.15\% \sim 0.70\%$ )<sup>[5501]</sup>, content scope of 40 origins =  $0.198\% \sim 1.17\%$ , mean content =  $0.68\%$ )<sup>[5508]</sup>, KONG SHI CHUN *Ulva pertusa*, MO YAO *Commiphora myrrha* [Syn. *Commiphora molmol*], ROU GUI *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*] (bark: content

scope =  $0.9\% \sim 3.5\%$ )<sup>[5501]</sup>, content scope of 6 origins =  $0.76\% \sim 3.37\%$ , mean content =  $2.56\%$ )<sup>[5508]</sup>, SAN TIAO JIN *Cinnamomum tamala*, XI LAN ROU GUI *Cinnamomum zeylanicum*, *Hyacinthus* sp., *Lavandula* sp., *Narcissus* sp. Ref: 2, 658, 660, 661, 5018, 5501, 5508.

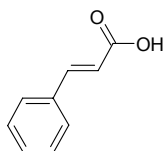
**3694 trans-Cinnamamide**

$C_9H_9NO$  (147.18). Pharm: Platelet aggregation inhibitor (rbt platelets induced by thrombin,  $100\mu\text{g}/\text{mL}$ , add thrombin  $0.1\text{u}/\text{mL}$ , AggRt =  $(90.4 \pm 0.8)\%$ , control AggRt =  $(92.6 \pm 0.4)\%$ ; add AA,  $100\mu\text{mol}/\text{L}$ ,  $50\mu\text{g}/\text{mL}$ , AggRt =  $(85.8 \pm 0.8)\%$ , control AggRt =  $(87.8 \pm 0.3)\%$ , Aspirin  $50\mu\text{g}/\text{mL}$ , AggRt =  $(11.7 \pm 10.1)\%$ ; add collagen  $10\mu\text{g}/\text{mL}$ ,  $50\mu\text{g}/\text{mL}$ , AggRt =  $(91.0 \pm 0.4)\%$ , control AggRt =  $(89.3 \pm 0.5)\%$ , Aspirin  $100\mu\text{g}/\text{mL}$ , AggRt =  $(81.3 \pm 0.5)\%$ ; add PAF  $2\text{ng}/\text{mL}$ ,  $50\mu\text{g}/\text{mL}$ , AggRt =  $(90.1 \pm 1.1)\%$ , control AggRt =  $(93.0 \pm 0.6)\%$ ). Source: TAI WAN HU JIAO *Piper taiwanense* (stem). Ref: 4938.

**3695 Cinnamic acid**

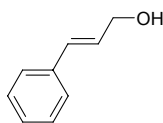
3-Phenylacrylic acid [140-10-3]  $C_9H_8O_2$  (148.16). mp  $132 \sim 134^\circ\text{C}$ . Pharm: Antibacterial; antifungal; antispasmodic; choleric (dog); laxative (rat); leukopoietic; dermatitic (causes contact dermatitis); neuroprotectant (primary cultures of rat cortical cells injured by glutamate,  $0.1\mu\text{mol}/\text{L}$ , cell viability =  $(28.2 \pm 2.9)\%$ , control MK-801,  $0.1\mu\text{mol}/\text{L}$ , cell viability =  $(31.8 \pm 7.1)\%$ , APV,  $0.1\mu\text{mol}/\text{L}$ , cell viability =  $(5.7 \pm 1.9)\%$ , XNXX,  $0.1\mu\text{mol}/\text{L}$ , cell viability =  $(28.1 \pm 5.6)\%$ )<sup>[3967]</sup>; elastase inhibitor (hmn leukocyte *in vitro*,  $\text{IC}_{50} > 500\mu\text{g}/\text{mL}$  ( $800\mu\text{mol}/\text{L}$ ); control Caffeic acid,  $\text{IC}_{50} = 86\mu\text{g}/\text{mL} = 475\mu\text{mol}/\text{L}$ )<sup>[5458]</sup>; cytotoxic inactive (MCF7,  $\text{IC}_{50} > 100\mu\text{mol}/\text{L}$ , control Adriamycin,  $\text{IC}_{50} = (1.5 \pm 0.2)\mu\text{mol}/\text{L}$ ; K562,  $\text{IC}_{50} > 100\mu\text{mol}/\text{L}$ , Adriamycin,  $\text{IC}_{50} = (0.07 \pm 0.01)\mu\text{mol}/\text{L}$ ; Bowes,  $\text{IC}_{50} > 100\mu\text{mol}/\text{L}$ , Adriamycin,  $\text{IC}_{50} = (0.45 \pm 0.01)\mu\text{mol}/\text{L}$ ; T24S,  $\text{IC}_{50} > 100\mu\text{mol}/\text{L}$ , Adriamycin,  $\text{IC}_{50} = (5.8 \pm 0.6)\mu\text{mol}/\text{L}$ ; A549,  $\text{IC}_{50} > 100\mu\text{mol}/\text{L}$ , Adriamycin,  $\text{IC}_{50} = (15.8 \pm 6.7)\mu\text{mol}/\text{L}$ )<sup>[5288]</sup>. Source: AN XI XIANG *Styrax benzoin* (balsam: content =  $16.9\%$ )<sup>[5508]</sup>, BEI XUAN SHEN *Scrophularia buergeriana* (root), BI LU XIANG JIAO *Myroxylon pereirae*, DA CHE QIAN *Plantago major*, GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *Huechingensis*], GOU QI GEN PI *Lycium chinense*, GOU QI ZI *Lycium chinense*, GU KE *Erythroxylum coca*, GUI PI *Cinnamomum japonicum* (bark: content =  $0.037\%$ )<sup>[5508]</sup>, GUI ZHI *Cinnamomum cassia* [Syn. *Cinnamomum*

*aromaticum*] (twig: content scope of 40 origins = 0.015%–0.087%, mean content = 0.040%<sup>[5508]</sup>), HU HUANG LIAN *Picrorhiza kurrooa* (dried rhizome: content scope = 0.53%–1.13%<sup>[5508]</sup>), HUI XIANG *Foeniculum vulgare*, LIN SHENG XUAN SHEN *Scrophularia nodosa*, MU ZEI MA HUANG *Ephedra equisetina*, NAN FEI GOU MA *Harpagophytum procumbens*, QING LIANG BAI HE *Lilium candidum*, ROU GUI *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*] (bark: mean content of 3 origins = 0.024%<sup>[5508]</sup>), SAI ER WEI YA SHI CAO *Achillea alexandri-regis*, SU HE XIANG *Liquidambar orientalis* (balsam: content = 7.03%<sup>[5508]</sup>), TAI WAN GE NA XIANG *Goniothalamus amuyon* (fresh leaf: yield = 0.00010%fw)<sup>[4686]</sup>, XI ZANG HU HUANG LIAN *Picrorhiza scrophulariiflora* (dried rhizome: content scope = 0.53%–1.13%<sup>[5508]</sup>), XUAN SHEN *Scrophularia ningpoensis* (root: mean content of 22 origins = 0.032%<sup>[5508]</sup>), *Alpinia* sp., *Styrax* sp., *Populus* sp., *Globularia* sp., occurs in many plants. Ref: 2, 4, 658, 660, 2545, 3967, 4686, 5288, 5458, 5501, 5508.



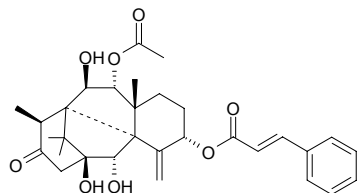
### 3696 Cinnamic alcohol

2-Phenyl-2-propen-1-ol [104-54-1] C<sub>9</sub>H<sub>10</sub>O (134.18). mp 33°C, bp 258°C. Source: GUI ZHI *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*] (twig: content scope of 40 origins = 0.0%–0.217%, mean content = 0.030%<sup>[5508]</sup>; bark: content scope of 3 origins = 0.002%–0.068%, mean content = 0.033%<sup>[5508]</sup>), LANG DU *Stellera chamaejasme*, SHUI XIAN HUA *Narcissus tazetta* var. *chinensis*. Ref: 6, 660, 5508.



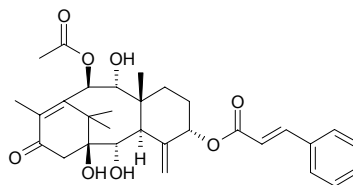
### 3697 5-Cinnamoyl-9-O-acetylphototaxicin I

C<sub>31</sub>H<sub>38</sub>O<sub>8</sub> (538.64). mp 78–80°C, [α]<sub>D</sub> = +3.2° (CH<sub>2</sub>Cl<sub>2</sub>). Source: JIANG GUO ZI SHAN *Taxus baccata*. Ref: 662.



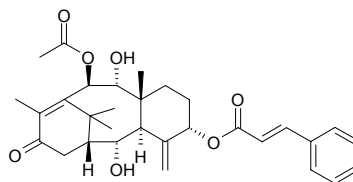
### 3698 5-Cinnamoyl-10-aceyltaxicin I

C<sub>31</sub>H<sub>38</sub>O<sub>8</sub> (538.64). mp 145°C, [α]<sub>D</sub> = +185° (CHCl<sub>3</sub>). Source: JIANG GUO ZI SHAN *Taxus baccata*. Ref: 662.



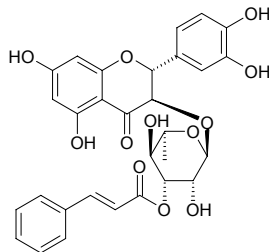
### 3699 5-Cinnamoyl-10-aceyltaxicin II

C<sub>31</sub>H<sub>38</sub>O<sub>7</sub> (522.64). mp 204–205°C, [α]<sub>D</sub> = +128° (CHCl<sub>3</sub>). Source: JIANG GUO ZI SHAN *Taxus baccata*. Ref: 662.



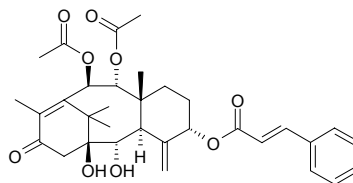
### 3700 3'-O-trans-Cinnamoyl-astilbin

C<sub>30</sub>H<sub>28</sub>O<sub>12</sub> (580.55). [α]<sub>D</sub><sup>20</sup> = +1.29° (c = 0.22, acetone). Pharm: Antimalarial (*Plasmodium falciparum* PoW, IC<sub>50</sub> = (10.4±1.3)μg/mL, control Chloroquine diphosphate, IC<sub>50</sub> = (0.006±0.002)μg/mL; Dd2, IC<sub>50</sub> = (4.2±1.3)μg/mL, Chloroquine diphosphate, IC<sub>50</sub> = (0.06±0.01)μg/mL). Source: WU CI KE YA SHU *Andira inermis* (leaf). Ref: 5208.



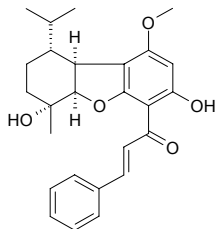
### 3701 5-Cinnamoyl-9,10-diacetyltaxicin I

C<sub>33</sub>H<sub>40</sub>O<sub>9</sub> (580.68). mp 185°C. Source: JIANG GUO ZI SHAN *Taxus baccata*. Ref: 662.



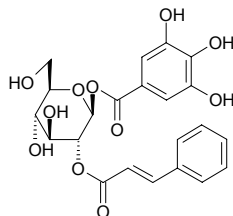
**3702 (5*A*,6*R*,9*R*,9*A*)-4-Cinnamoyl-3,6-dihydroxy-1-methoxy-6-methyl-9-(1-methylethyl)-5a,6,7,8,9a-hexahydro-dibenzofuran**

[166983-85-3] C<sub>26</sub>H<sub>30</sub>O<sub>5</sub> (422.52). Yellow solid, [ $\alpha$ ]<sub>D</sub> = -22.7° (*c* = 0.86, chloroform). **Pharm:** Antineoplastic (inhibits melanin production). **Source:** DIAO ZHANG GEN PI *Lindera umbellata* [Syn. *Lindera erythrocarpa*]. **Ref:** 1024.



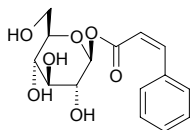
**3703 2-*O*-Cinnamoyl-glucogallin**

1-Galloyl-2-cinnamoyl-glucose C<sub>22</sub>H<sub>22</sub>O<sub>11</sub> (462.41). **Source:** DA HUANG *Rheum officinale*, ZHANG YE DA HUANG *Rheum palmatum*, TANG GU TE DA HUANG *Rheum tanguticum*. **Ref:** 2, 660.



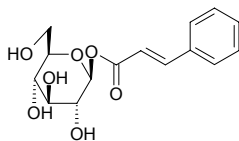
**3704 1-*O*-cis-Cinnamoyl- $\beta$ -D-glucopyranose**

C<sub>15</sub>H<sub>18</sub>O<sub>7</sub> (310.31). **Source:** ZHEN ZHU XIU XIAN JU *Spiraea thunbergii*. **Ref:** 3782.



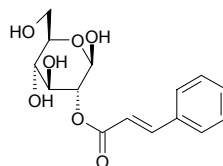
**3705 1-*O*-trans-Cinnamoyl- $\beta$ -D-glucopyranose**

C<sub>15</sub>H<sub>18</sub>O<sub>7</sub> (310.31). **Source:** ZHEN ZHU XIU XIAN JU *Spiraea thunbergii*. **Ref:** 3782.



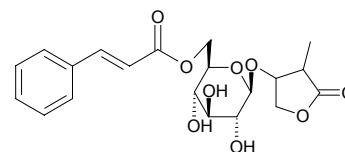
**3706 2-Cinnamoyl-glucose**

C<sub>15</sub>H<sub>18</sub>O<sub>7</sub> (310.31). **Source:** DA HUANG *Rheum officinale*, TANG GU TE DA HUANG *Rheum tanguticum*, ZHANG YE DA HUANG *Rheum palmatum*. **Ref:** 2, 660.



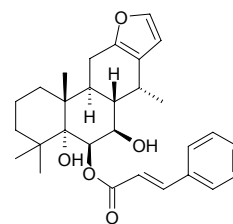
**3707 6-*O*-(trans-Cinnamoyl)-1-*O*-(4''-hydroxy-3''-methylfuran-2''-one)- $\beta$ -D-glucopyranose**

C<sub>20</sub>H<sub>24</sub>O<sub>9</sub> (408.41). **Source:** ZHEN ZHU XIU XIAN JU *Spiraea thunbergii*. **Ref:** 3782.



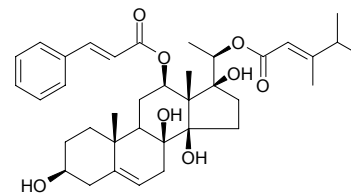
**3708 6 $\beta$ -Cinnamoyl-7 $\beta$ -hydroxyvouacapen-5 $\alpha$ -ol**

C<sub>29</sub>H<sub>36</sub>O<sub>5</sub> (464.61). Colorless needles, mp 213~215°C (CHCl<sub>3</sub>-MeOH), [ $\alpha$ ]<sub>D</sub><sup>30</sup> = +53.4 (*c* = 1.104, CHCl<sub>3</sub>). **Pharm:** Antitubercular (*Mycobacterium tuberculosis* H37Ra, MIC = 6.25 $\mu$ g/mL, control Kanamycin sulfate, MIC = 2.5~5.0 $\mu$ g/mL)<sup>[5435]</sup>; cytotoxic (KB cells, IC<sub>50</sub> = (3.2 $\pm$ 0.4) $\mu$ g/mL, control Ellipticine, IC<sub>50</sub> = (0.3 $\pm$ 0.1) $\mu$ g/mL; BC, IC<sub>50</sub> = (1.4 $\pm$ 0.2) $\mu$ g/mL, Ellipticine, IC<sub>50</sub> = (0.3 $\pm$ 0.1) $\mu$ g/mL; NCI-H187, IC<sub>50</sub> = (6.2 $\pm$ 0.9) $\mu$ g/mL)<sup>[5435]</sup>. **Source:** JI MEI YUN SHI *Caesalpinia pulcherrima*. **Ref:** 5435.



**3709 12-*O*-Cinnamoyl-20-*O*-ikemaoyl sarcostin**

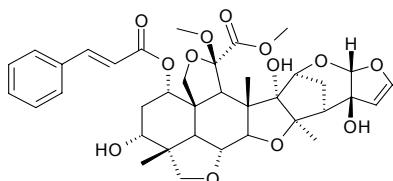
C<sub>37</sub>H<sub>50</sub>O<sub>8</sub> (622.81). mp 158~163°C. **Source:** BAI SHOU WU *Cynanchum bungei*. **Ref:** 6.



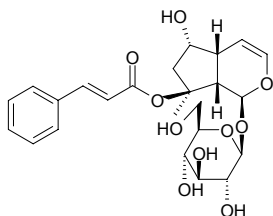


**3710 1-Cinnamoyl-11-methoxymeliacarpinin**

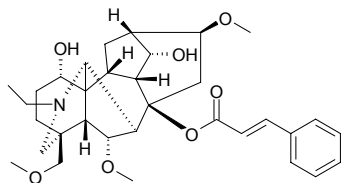
1-Cinnamoyl-3-hydroxy-11-methoxymeliacarpinin [177795-22-1]  $C_{37}H_{44}O_{13}$  (696.75). Colorless powder, mp 124–126°C (chloroform),  $[\alpha]_D = -2.39^\circ$  ( $c = 0.2$ , chloroform). **Pharm:** Cytotoxic ( $P_{388}$ ,  $IC_{50} = 1.5\mu\text{g/mL}$ ). **Source:** KU LIAN PI *Melia azedarach*. **Ref:** 1104.

**3711 8-Cinnamoylmyoporoside**

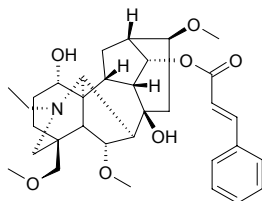
$C_{24}H_{30}O_{10}$  (478.50). **Source:** NAN FEI GOU MA *Harpagophytum procumbens*. **Ref:** 5458.

**3712 8-O-Cinnamoylneoline**

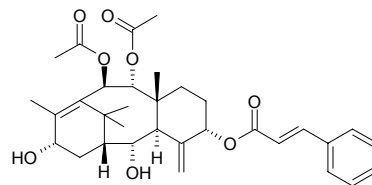
$C_{33}H_{45}NO_7$  (567.73). Amorphous powder,  $[\alpha]_D^{20} = +24.0^\circ$  ( $c = 0.98$ , EtOH). **Pharm:** Analgesic (mouse, tail pressure test, = 0.86mg/kg,  $LD_{50}/ED_{50} = 13.8$ ); acute toxicity (mouse, = 11.9mg/kg). **Source:** WU TOU *Aconitum carmichaeli* (buds). **Ref:** 5451.

**3713 14-O-Cinnamoylneoline**

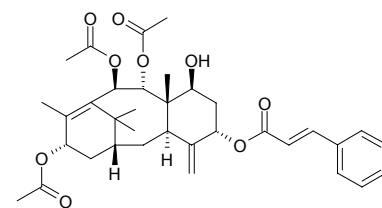
$C_{33}H_{45}NO_7$  (567.73). Amorphous powder (MeOH),  $[\alpha]_D^{23} = +9.7^\circ$  ( $c = 0.35$ ,  $CHCl_3$ ). **Source:** FU ZI *Aconitum carmichaeli* (tuber). **Ref:** 4373.

**3714 5α-Cinnamoyloxy-2α,13α-dihydroxy-9α,10β-diacetoxy-4(20),11-taxadiene**

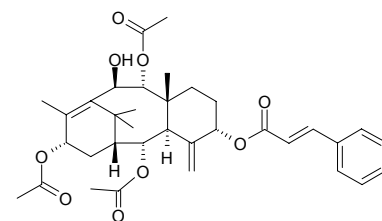
$C_{33}H_{42}O_8$  (566.70). mp 104–106°C,  $[\alpha]_D = +4^\circ$  ( $CHCl_3$ ). **Source:** HONG DOU SHAN *Taxus chinensis*. **Ref:** 662.

**3715 5α-Cinnamoyloxy-7β-hydroxy-9α,10β,13α-triacetoxytaxa-4(20),11-diene**

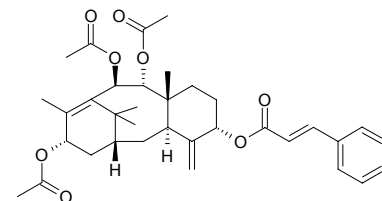
$C_{35}H_{44}O_9$  (608.74).  $[\alpha]_D = +20^\circ$  ( $CHCl_3$ ). **Source:** MEI LI HONG DOU SHAN *Taxus mairei*. **Ref:** 662.

**3716 5α-Cinnamoyloxy-10β-hydroxy-2α,9α,13α-triacetoxytaxa-4(20),11-diene**

$C_{33}H_{44}O_9$  (608.74). mp 110–112°C,  $[\alpha]_D = +29.6^\circ$  ( $CHCl_3$ ). **Source:** HONG DOU SHAN *Taxus chinensis*. **Ref:** 662.

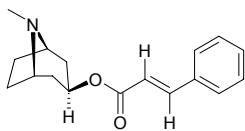
**3717 5α-Cinnamoyloxy-9α,10β,13α-triacetoxytaxa-4(20),11-diene**

$C_{35}H_{44}O_8$  (592.74). mp 165–166°C, mp 175–177°C,  $[\alpha]_D = +118.5^\circ$  ( $CHCl_3$ ). **Source:** MEI LI HONG DOU SHAN *Taxus mairei*, HONG DOU SHAN *Taxus chinensis*. **Ref:** 662.

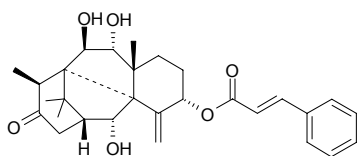


**3718 trans-3 $\beta$ -Cinnamoyloxytropane**

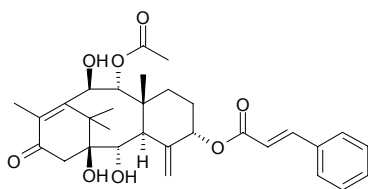
C<sub>17</sub>H<sub>21</sub>NO<sub>2</sub> (271.36). Source: XI LAN GU KE *Erythroxylum zeylanicum* (root). Ref: 3919.

**3719 5-Cinnamoylphototaxin II**

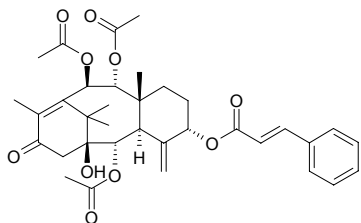
C<sub>29</sub>H<sub>36</sub>O<sub>6</sub> (480.61). Source: JIANG GUO ZI SHAN *Taxus baccata*. Ref: 662.

**3720 O-Cinnamoyltaxicin I**

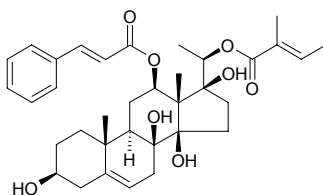
C<sub>31</sub>H<sub>38</sub>O<sub>8</sub> (496.61). mp 233–234°C, [ $\alpha$ ]<sub>D</sub> = +285° (CHCl<sub>3</sub>). Source: JIANG GUO ZI SHAN *Taxus baccata*. Ref: 662.

**3721 O-Cinnamoyltaxicin I triacetate**

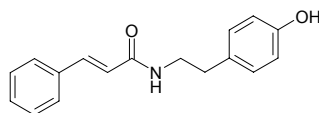
C<sub>35</sub>H<sub>42</sub>O<sub>10</sub> (622.72). mp 237–239°C, [ $\alpha$ ]<sub>D</sub> = +218° (CHCl<sub>3</sub>). Source: JIANG GUO ZI SHAN *Taxus baccata*, ZI SHAN *Taxus cuspidata*. Ref: 662.

**3722 12-O-Cinnamoyl-20-O-tigloyl sarcostin**

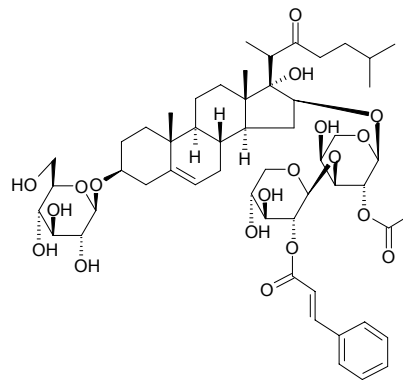
C<sub>35</sub>H<sub>46</sub>O<sub>8</sub> (594.75). Source: BAI SHOU WU *Cynanchum bungei*. Ref: 6.

**3723 N-trans-Cinnamoyltyramine**

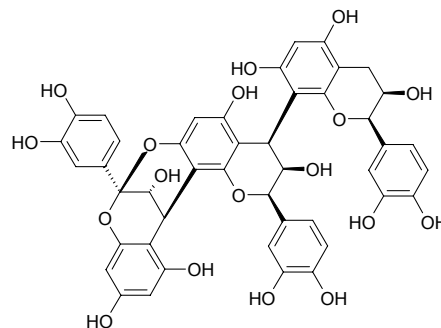
C<sub>17</sub>H<sub>17</sub>NO<sub>2</sub> (267.33). White powder. Pharm: Platelet aggregation inhibitor (rbt platelets induced by thrombin, 100 $\mu$ g/mL, add thrombin 0.1u/mL, AggRt = (91.1 $\pm$ 0.4)%, control AggRt = (92.6 $\pm$ 0.4)%; add AA, 100 $\mu$ mol/L, 100 $\mu$ g/mL, AggRt = (87.4 $\pm$ 1.7)%, control AggRt = (87.8 $\pm$ 0.3)%, Aspirin 50 $\mu$ g/mL, AggRt = (11.7 $\pm$ 10.1)%; add collagen 10 $\mu$ g/mL, 100 $\mu$ g/mL, AggRt = (60.7 $\pm$ 1.7)%, control AggRt = (89.3 $\pm$ 0.5)%, Aspirin 100 $\mu$ g/mL, AggRt = (81.3 $\pm$ 0.5)%; add PAF 2ng/mL, 100 $\mu$ g/mL, AggRt = (91.4 $\pm$ 0.2)%, control AggRt = (93.0 $\pm$ 0.6%))<sup>[4938]</sup>. Source: HONG SI XIAN *Lycianthes biflora*, MIAN MAO MA DOU LING *Aristolochia mollissima* (dried root and stem: yield = 0.00062%dw), RI BEN HUANG BAI *Phellodendron japonicum* (leaf), TAI WAN HU JIAO *Piper taiwanense* (stem). Ref: 2230, 3026, 4502, 4938.

**3724 16 $\beta$ -[(O-(2-O-(E)-Cinnamoyl- $\beta$ -D-xylopyranosyl)-(1 $\rightarrow$ 2)-2-O-acetyl- $\alpha$ -L-arabinopyranosyl)oxy]-3 $\beta$ -[( $\beta$ -D-glucopyranosyl)oxy]-17 $\alpha$ -hydroxy cholest-5-en-22-one**

C<sub>54</sub>H<sub>78</sub>O<sub>19</sub> (1031.21). Amorphous solid, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -16.0° (c = 0.10, MeOH). Pharm: Cytotoxic (HL-60 cells, IC<sub>50</sub> = 0.00012 $\mu$ mol/L, control Etoposide, IC<sub>50</sub> = 0.025 $\mu$ mol/L). Source: XIA FENG XIN ZI *Galtonia candicans* (bulb). Ref: 4116.

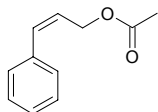
**3725 Cinnamtannin B<sub>1</sub>**

C<sub>45</sub>H<sub>36</sub>O<sub>18</sub> (864.78). Pale yellow amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>21</sup> = +69.2° (c = 0.99, MeOH). Source: CHANG JIE ZHU *Parameria laevigata* (bark). Ref: 3523.

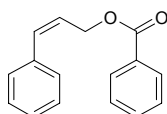


**3726 Cinnamyl acetate**

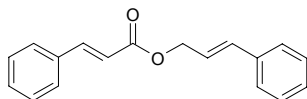
Phenylallyl acetate [103-54-8]  $C_{11}H_{12}O_2$  (176.22). bp 141°C/18mmHg. Source: ROU GUI *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*]. Ref: 6.

**3727 Cinnamyl benzoate**

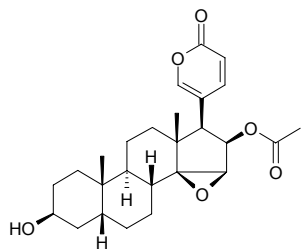
[5320-75-2]  $C_{16}H_{14}O_2$  (238.29). bp 209°C/12mmHg. Source: YUE NAN AN XI XIANG *Styrax tonkinensis*. Ref: 6.

**3728 Cinnamyl cinnamate**

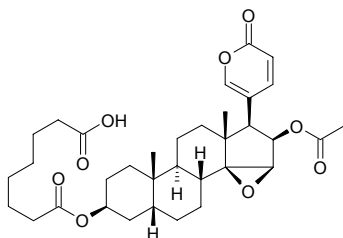
[122-69-0]  $C_{18}H_{16}O_2$  (264.33). mp 44°C. Source: AN XI XIANG *Styrax benzoin*. Ref: 6.

**3729 Cinobufagin**

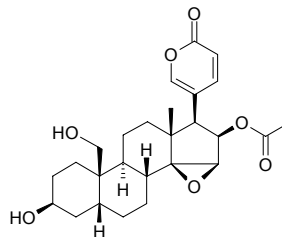
[470-37-1]  $C_{26}H_{34}O_6$  (442.56). Pharm: Cytotoxic (*in vitro*, KB,  $IC_{50}$  = 0.21  $\mu$ g/mL; HL-60,  $IC_{50}$  < 0.01  $\mu$ g/mL; MH-60,  $IC_{50}$  > 25  $\mu$ g/mL)<sup>[3082]</sup>; cardiotoxic; increases blood pressure; LD<sub>50</sub> (cat) = 0.23mg/kg. Source: CHAN CHU *Bufo bufo gargarizans*; *Bufo melanostictus*, CHAN SU *Bufo bufo gargarizans*; *Bufo melanostictus* (dried secretion: content = 7.2%<sup>[5501]</sup>; content = 0.91%<sup>[5508]</sup>). Ref: 2, 617, 658, 3082, 5501, 5508.

**3730 Cinobufagin-3-hydrogen suberate**

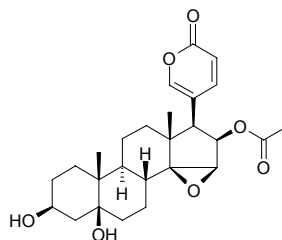
$C_{34}H_{46}O_9$  (598.74). Source: CHAN SU *Bufo bufo gargarizans*; *Bufo melanostictus*. Ref: 2, 6.

**3731 Cinobufaginol**

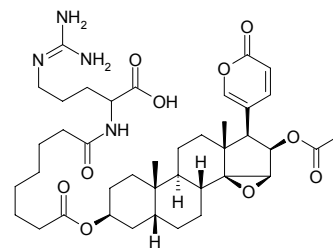
[6691-83-4]  $C_{26}H_{34}O_7$  (458.56). Source: CHAN SU *Bufo bufo gargarizans*; *Bufo melanostictus*. Ref: 2, 6.

**3732 Cinobufotalin**

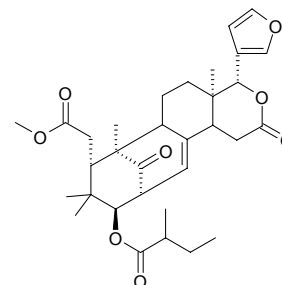
[1108-68-5]  $C_{26}H_{34}O_7$  (458.56). Pharm: Cytotoxic (*in vitro*, KB,  $IC_{50}$  = 0.37  $\mu$ g/mL; HL-60,  $IC_{50}$  = 0.047  $\mu$ g/mL; MH-60,  $IC_{50}$  > 25  $\mu$ g/mL)<sup>[3082]</sup>; cardiotoxic; increases blood pressure. Source: CHAN SU *Bufo bufo gargarizans*; *Bufo melanostictus*. Ref: 2, 3082, 5501.

**3733 Cinobufotoxin**

[60113-07-7]  $C_{40}H_{58}N_4O_{10}$  (754.93). Source: CHAN SU *Bufo bufo gargarizans*; *Bufo melanostictus*. Ref: 2.

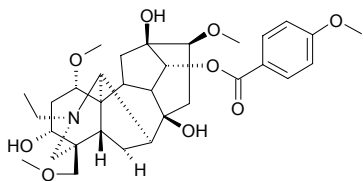
**3734 Cipadesin**

$C_{32}H_{42}O_8$  (554.69). Colorless acicular crystals (MeOH), mp 112~114°C,  $[\alpha]_D^{26}$  = -145.4° ( $c$  = 0.17,  $CHCl_3$ ). Source: YA LUO CHUN *Cipadessa baccifera*. Ref: 745.

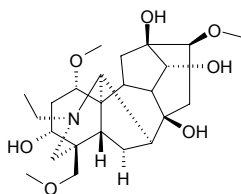


**3735 Circinadine A**

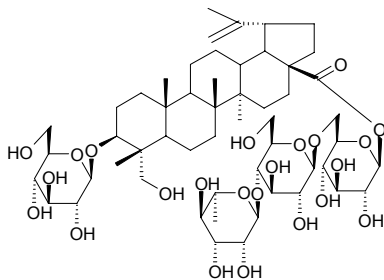
$C_{32}H_{45}NO_9$  (587.72). Amorphous powder, mp 102~103°C. Source: QUAN JU GUA YE WU TOU *Aconitum hemsleyanum* var. *circinacum* (root: yield = 0.0033%dw). Ref: 914.

**3736 Circinadine B**

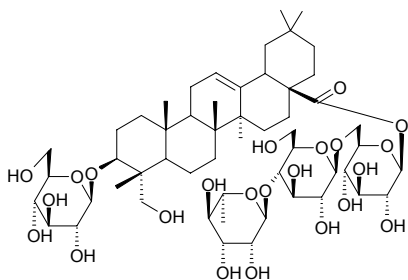
$C_{24}H_{39}NO_7$  (453.58). Amorphous powder, mp 92~93°C. Source: QUAN JU GUA YE WU TOU *Aconitum hemsleyanum* var. *circinacum* (root: yield = 0.0005%dw). Ref: 914.

**3737 Cirensenoside S**

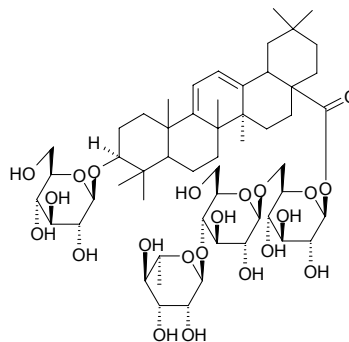
3-*O*- $\beta$ -*D*-Glucopyranosyl 3 $\beta$ ,23-dihydroxylup-20(29)-en-28-oic acid 28-*O*- $\alpha$ -*L*-rhamnopyranosyl (1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside  $C_{54}H_{88}O_{23}$  (1105.29). White powder, mp 220~222°C,  $[\alpha]_D^{20} = -23.5^\circ$  ( $c = 0.5$ , MeOH). Source: DONG BEI CI REN SHEN *Oplopanax elatus* (leaf). Ref: 4840.

**3738 Cirensenoside T**

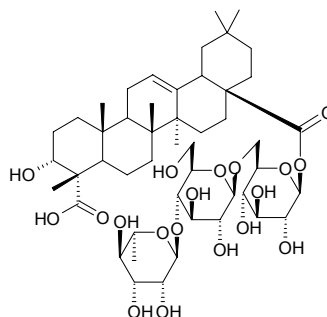
3-*O*- $\beta$ -*D*-Glucopyranosyl hederagenin 28-*O*- $\alpha$ -*L*-rhamnopyranosyl (1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside  $C_{54}H_{88}O_{23}$  (1105.29). White powder, mp 240~242°C,  $[\alpha]_D^{20} = +0.7^\circ$  ( $c = 0.2$ , MeOH). Source: DONG BEI CI REN SHEN *Oplopanax elatus* (leaf). Ref: 4840.

**3739 Cirensenoside U**

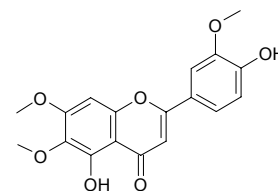
3-*O*- $\beta$ -*D*-Glucopyranosyl 3 $\beta$ -hydroxylean-9(11),12-dien-28-oic acid 28-*O*- $\alpha$ -*L*-rhamnopyranosyl (1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside  $C_{54}H_{86}O_{22}$  (1087.27). White powder, mp 224~226°C,  $[\alpha]_D^{20} = +78.6^\circ$  ( $c = 0.5$ , MeOH). Source: DONG BEI CI REN SHEN *Oplopanax elatus* (leaf). Ref: 4840.

**3740 Cirensenoside V**

3 $\alpha$ -Hydroxyolean-12-en-23,28-dioic acid 28-*O*- $\alpha$ -*L*-rhamnopyranosyl (1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside  $C_{48}H_{76}O_{19}$  (957.13). White powder, mp 230~232°C,  $[\alpha]_D^{20} = -5.5^\circ$  ( $c = 0.5$ , MeOH). Source: DONG BEI CI REN SHEN *Oplopanax elatus* (leaf). Ref: 4840.

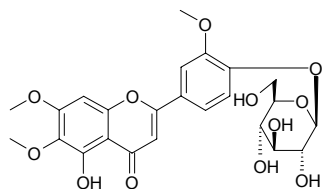
**3741 Cirsilineol**

5,4'-Dihydroxy-6,7,3'-trimethoxyflavone [41365-32-6]  $C_{18}H_{16}O_7$  (344.32). Pharm: Antispasmodic. Source: HUANG HUA HAO *Artemisia annua*, RONG MAO DAN SHEN *Salvia tomentosa*, SHE XIANG CAO *Thymus vulgaris*, YIN CHEN HAO *Artemisia capillaris*, *Sideritis* sp. Ref: 2, 658, 660.

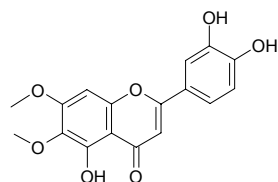


**3742 Cirsilineol-4'-monoglucoside**

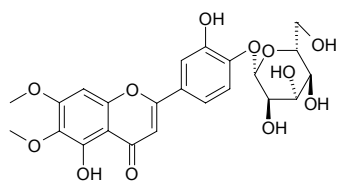
[41087-97-2] C<sub>24</sub>H<sub>26</sub>O<sub>12</sub> (506.47). mp 158–159°C. **Pharm:** Aldose reductase inhibitor (rat eye lens, 10µmol/L InRt = 42%, ox eye lens, 10µmol/L InRt = 59%). **Source:** KU AO *Cirsium chinense*. **Ref:** 6, 1771.

**3743 Cirsiliol**

[34334-69-5] C<sub>17</sub>H<sub>14</sub>O<sub>7</sub> (330.30). **Pharm:** Selective arachidonic acid 5-lipoxygenase inhibitor<sup>[658]</sup>; anti-inflammatory (oral, inhibits mouse paw oedema induced by carrageenan)<sup>[4415]</sup>; 5-LOX inhibitor (rat basophilic leukaemia cells and guinea pig peritoneal polymorphonuclear leukocytes, IC<sub>50</sub> = 0.1µmol/L)<sup>[4415]</sup>. **Source:** HUANG HUA HAO *Artemisia annua*, TIAO YE JI *Cirsium lineare*, YAO YONG DAN SHEN *Salvia officinalis*, JI XIANG SHI CAO *Achillea fragrantissima*. **Ref:** 2, 658, 660, 4415.

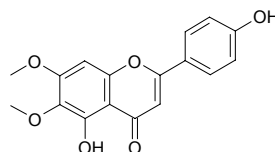
**3744 Cirsiliol-4'-monoglucoside**

[41087-98-3] C<sub>23</sub>H<sub>24</sub>O<sub>12</sub> (492.44). mp 215–217°C. **Pharm:** Aldose reductase inhibitor (rat eye lens, 10µmol/L InRt = 53%, 1µmol/L InRt = 25%; ox eye lens, 10µmol/L InRt = 61%, 1µmol/L InRt = 24%). **Source:** KU AO *Cirsium chinense*. **Ref:** 6, 1771.

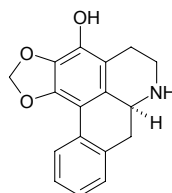
**3745 Cirsimaritin**

[6601-62-3] C<sub>17</sub>H<sub>14</sub>O<sub>6</sub> (314.30). **Pharm:** Antibacterial (gram-positive and gram-negative bacteria); antispasmodic (gpg, ileal spasm caused by histamine, barium chloride and acetylcholine); cAMP phosphodiesterase inhibitor (IC<sub>50</sub> = 118µmol/L); aldose reductase inhibitor; cytotoxic (HeLa *in vitro*, IC<sub>50</sub> = 3.2µg/mL, EAC *in vitro*, IC<sub>50</sub> = 0.54µg/mL); antineoplastic (mus, myelocytic leukemia M1, inducing cell differentiation activity, 50µmol/L growth rate = 28%, phago-activity >10%); binding activity to benzodiazepine receptor (IC<sub>50</sub> = (350±37)µmol/L, control Diazepam, IC<sub>50</sub> = (0.05±0.01)µmol/L)<sup>[5366]</sup>; antioxidant (ferric thiocyanate method, 0.5mmol/L, peroxidation value =

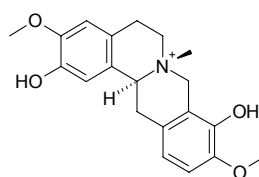
14.3%, control BHA, 0.5mmol/L, peroxidation value = 4.5%, control Vitamin E, 0.5mmol/L, peroxidation value = 14.7%)<sup>[4508]</sup>. **Source:** HUANG HUA HAO *Artemisia annua*, HUANG HAO *Artemisia scoparia* [Syn. *Artemisia capillaris* var. *scoparia*], TIAN SHE CAO *Lippia dulcis* (aerial parts), YIN CHEN HAO *Artemisia capillaris*, YAO YONG DAN SHEN YE *Salvia officinalis*. **Ref:** 2, 660, 1652, 1739, 1740, 1741, 1742, 4508, 5366.

**3746 (-)-Cissaglaberrimine**

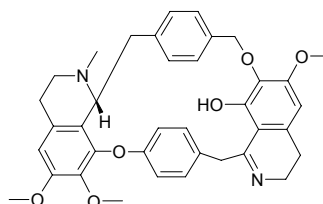
C<sub>17</sub>H<sub>15</sub>NO<sub>3</sub> (281.31). **Source:** YOU GOU YING ZHAO *Artabotrys uncinatus* (stem and leaf). **Ref:** 3083.

**3747 Cissamine**

(*S*)-*trans*-Cyclanoline [63527-13-9] C<sub>20</sub>H<sub>24</sub>NO<sub>4</sub><sup>+</sup> (342.42). Iodide: crystals, mp 242–243°C (dec), [α]<sub>D</sub><sup>24</sup> = -95.2° (c = 0.7, CHCl<sub>3</sub>). **Pharm:** striated muscle relaxant (rat, sciatic nerve-gastrocnemius specimen, action intensity = 1/20 that of Asiatic Moonseed, used as muscle relaxant in surgical operation). **Source:** FANG JI *Stephania tetrandra* (root: content scope = 0.32%–0.54%)<sup>[5501]</sup>, HAI NAN QING NIU DAN *Tinospora hainanensis*, XI SHENG TENG *Cissampelos pareira*, ZHU SHA LIAN *Aristolochia kaempferi*. **Ref:** 2, 4, 6, 687, 5501.

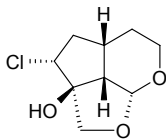
**3748 Cissampareine**

Methylwarifteine [32728-54-4] C<sub>37</sub>H<sub>38</sub>N<sub>2</sub>O<sub>6</sub> (606.73). mp 239–240°C (dec). **Pharm:** Cytotoxic (KB, ED<sub>50</sub> = 1.1–3.8µg/mL). **Source:** XI SHENG TENG *Cissampelos pareira*. **Ref:** 5, 6, 658.

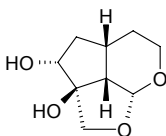


**3749 Cistachlorin**

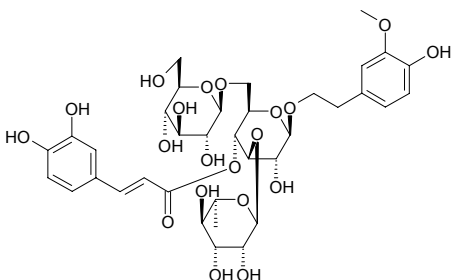
[91431-88-8] C<sub>9</sub>H<sub>13</sub>ClO<sub>3</sub> (204.66). Source: ROU CONG RONG *Cistanche deserticola*. Ref: 628.

**3750 Cistanin**

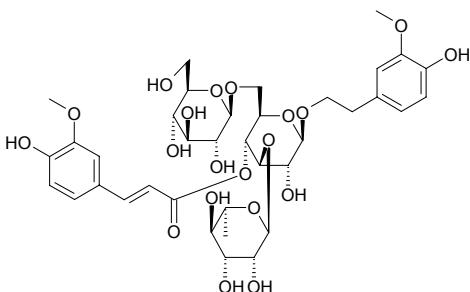
[91431-89-9] C<sub>9</sub>H<sub>14</sub>O<sub>4</sub> (186.21). Source: ROU CONG RONG *Cistanche deserticola*. Ref: 628.

**3751 Cistanoside A**

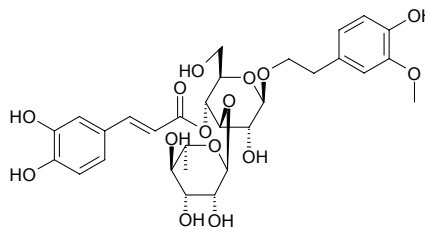
[93236-42-1] C<sub>36</sub>H<sub>48</sub>O<sub>20</sub> (800.77). Pharm: Anti-stress (stress mus, protection to avoid sexual immaturity and learning disability). Source: GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *Huechingensis*]. Ref: 2, 628, 1199.

**3752 Cistanoside B**

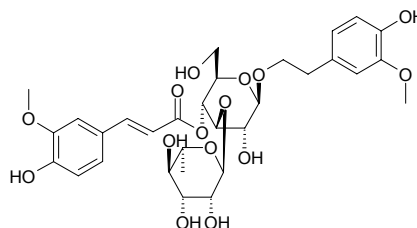
[93236-4-0] C<sub>37</sub>H<sub>50</sub>O<sub>20</sub> (814.80). Source: ROU CONG RONG *Cistanche deserticola*. Ref: 628.

**3753 Cistanoside C**

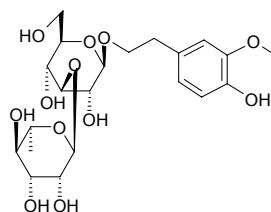
[94492-22-5] C<sub>30</sub>H<sub>38</sub>O<sub>15</sub> (638.63). Amorphous powder, [α]<sub>D</sub><sup>19</sup> = -88.4° (c = 0.86, methanol). Pharm: Used in treatment of sexual immaturity and learning disability (mus, orl, 10mg/kg). Source: ROU CONG RONG *Cistanche deserticola*, YAN SHENG ROU CONG RONG *Cistanche salsa*. Ref: 628, 960, 1032, 1199.

**3754 Cistanoside D**

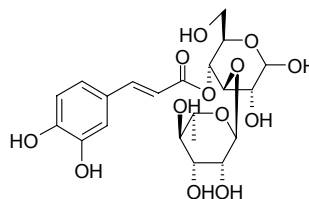
[94492-21-4] C<sub>31</sub>H<sub>40</sub>O<sub>15</sub> (652.66). Amorphous powder, [α]<sub>D</sub><sup>20</sup> = -71.0° (c = 1.0, methanol). Pharm: Antineoplastic (SMMC-7721, IC<sub>50</sub> = (267.8±12.6)μg/mL, L342, IC<sub>50</sub> = (289.4±14.6)μg/mL, MGc803, IC<sub>50</sub> = (256.7±11.2)μg/mL); antioxidant (microsome, 32.5μmol/L, InRt of lipid peroxidation = 12.9%, InRt of producing superoxide anion = 27.8%). Source: ROU CONG RONG *Cistanche deserticola*, YAN SHENG ROU CONG RONG *Cistanche salsa*. Ref: 628, 900.

**3755 Cistanoside E**

[97400-08-3] C<sub>21</sub>H<sub>32</sub>O<sub>12</sub> (476.48). Amorphous powder, [α]<sub>D</sub><sup>25</sup> = -51.5° (c = 0.7, methanol). Pharm: Sympatholytic (mus, inhibits stress reaction). Source: ROU CONG RONG *Cistanche deserticola*, YAN SHENG ROU CONG RONG *Cistanche salsa*. Ref: 628, 959, 1033.

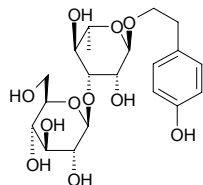
**3756 Cistanoside F**

C<sub>21</sub>H<sub>28</sub>O<sub>13</sub> (488.45). Pharm: Immunosuppressant (mus, 100mg/kg orl, inhibits formation of hemolytic patch formative cell HPFC in spleen, InRt = 15.2%); antioxidant (mitochondria, lipid peroxidation inhibitor, reduces glutathione). Source: GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *Huechingensis*]. Ref: 2, 1785, 1786.

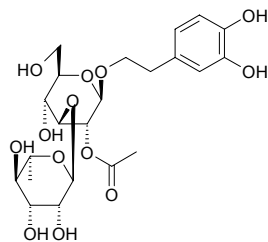


**3757 Cistanoside G**

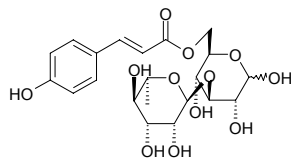
[105214-52-6] C<sub>20</sub>H<sub>30</sub>O<sub>11</sub> (446.46). Amorphous powder,  $[\alpha]_D^{19} = -62.9^\circ$  ( $c = 1.59$ , methanol). **Pharm:** Sympatholytic (mus, inhibits stress reaction). **Source:** ROU CONG RONG *Cistanche deserticola*, YAN SHENG ROU CONG RONG *Cistanche salsa*. **Ref:** 628, 1195.

**3758 Cistanoside H**

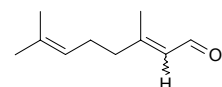
[104806-92-0] C<sub>22</sub>H<sub>32</sub>O<sub>13</sub> (504.49). Amorphous powder,  $[\alpha]_D^{18} = -58.9^\circ$  ( $c = 1.6$ , methanol). **Pharm:** Sympatholytic (mus, inhibits stress reaction). **Source:** ROU CONG RONG *Cistanche deserticola*, YAN SHENG ROU CONG RONG *Cistanche salsa*. **Ref:** 1032, 1194.

**3759 Cistanoside I**

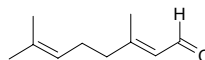
C<sub>21</sub>H<sub>28</sub>O<sub>12</sub> (472.45). **Source:** ROU CONG RONG *Cistanche deserticola*. **Ref:** 2448.

**3760 Citral**

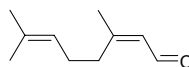
[5392-40-5] C<sub>10</sub>H<sub>16</sub>O (152.24). **Pharm:** Antitoxin (anti-aflatoxin); antifungal; anthelmintic; antiseptic; raw material for synthesis of ionone and vitamin A. **Source:** DA SUAN *Allium sativum*, GAN JIANG *Zingiber officinale*, HU LUO BO *Daucus carota* var. *sativa*, HUI HAO *Seriphidium cinum* [Syn. *Artemisia cina*], HUI HUI SU GENG *Perilla frutescens* var. *crispa*, JU YUAN *Citrus medica*, LI MENG *Citrus limonia*, NING MENG *Citrus limon*, SAN YE MA BIAN CAO *Verbena triphylla* [Syn. *Lippia citriodora*], SHENG JIANG *Zingiber officinale*, TIAN CHENG *Citrus sinensis*, WAN YAN XIANG MAO *Cymbopogon flexuosus*, WU WEI ZI *Schisandra chinensis*, XIANG MAO *Cymbopogon citratus*, XIANG PI MU *Alstonia scholaris*, XIANG QING LAN *Dracocephalum moldavicum*, XIN YI *Magnolia liliflora*, XING REN *Prunus armeniaca*. **Ref:** 2, 658, 660.

**3761 (E)-Citral**

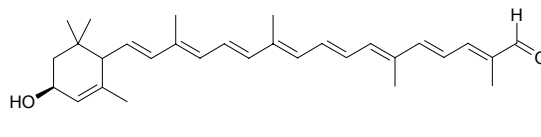
Geranial [141-27-5] C<sub>10</sub>H<sub>16</sub>O (152.24). bp 226~228°C. **Pharm:** Anti-ischemia myocardial (rbt, enhances blood flow through coronary arteries, ischemia myocardial induced by hypophysin; mouse, reduces oxygen consumption in cardiac muscle; isolated pig heart, relaxes normal coronary arteries and coronary arteries contracted by adrenaline); antiseptic (stronger than phenol); antifungal; insecticidal; antitrypanosomal (epimastigotes of *Trypanosoma cruzi*, MLC = 3.1 μmol/L, control Gentian violet, MLC = 6.2 μmol/L)<sup>[2579]</sup>. **Source:** BI CHENG QIE *Piper cubeba* (fruit: content scope = 1.14%~1.51%)<sup>[5501]</sup>, CHA YE *Camellia sinensis* [Syn. *Thea sinensis*], GAN JIANG *Zingiber officinale*, CHENG ZI *Citrus junos*, CHENG ZI PI *Citrus junos*, LIAN QIAO *Forsythia suspensa*, SHENG JIANG *Zingiber officinale*, XING ZI *Prunus armeniaca*, YI LANG QING LAN *Dracocephalum kotschyi*, YUN XIANG CAO *Cymbopogon distans*. **Ref:** 2, 6, 2579, 5501.

**3762 (Z)-Citral**

Neral [106-26-3] C<sub>10</sub>H<sub>16</sub>O (152.24). bp 103°C/12mmHg. **Pharm:** Anti-ischemia myocardial (rbt, enhances blood flow through coronary arteries, ischemia myocardial induced by hypophysin; mouse, reduces oxygen consumption in cardiac muscle; isolated pig heart, relaxes normal coronary arteries and coronary arteries contracted by adrenaline); antiseptic (stronger than phenol); antifungal; insecticidal; antitrypanosomal (epimastigotes of *Trypanosoma cruzi*, MLC = 3.1 μmol/L, control Gentian violet, MLC = 6.2 μmol/L)<sup>[2579]</sup>. **Source:** BI CHENG QIE *Piper cubeba* (fruit: content scope = 0.77%~1.02%)<sup>[5501]</sup>, GAN JIANG *Zingiber officinale*, JU PI *Citrus reticulata*, SHENG JIANG *Zingiber officinale*, YI LANG QING LAN *Dracocephalum kotschyi*. **Ref:** 2, 2579, 5501.

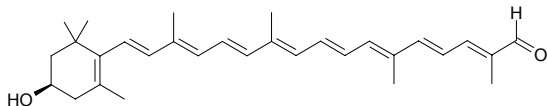
**3763 α-Citraurin**

C<sub>30</sub>H<sub>40</sub>O<sub>2</sub> (432.65). mp 153°C. **Source:** DAI DAI HUA *Citrus aurantium* var. *amara*. **Ref:** 6.

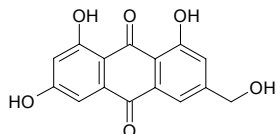


**3764  $\beta$ -Citraurin**

[650-69-1] C<sub>30</sub>H<sub>40</sub>O<sub>2</sub> (432.65). mp 146~147°C. Source: DAI DAI HUA *Citrus aurantium* var. *amara*. Ref: 6.

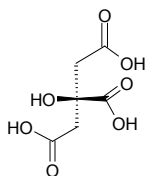
**3765 Citreoreosin**

$\omega$ -Hydroxyemodin [481-73-2] C<sub>15</sub>H<sub>10</sub>O<sub>6</sub> (286.24). Source: HU ZHANG *Polygonum cuspidatum*, MI HOU TAO *Actinidia chinensis*. Ref: 2, 660.

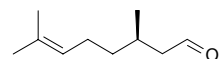
**3766 Citric acid**

2-Hydroxy-1,2,3-propanetricarboxylic acid [77-92-9] C<sub>6</sub>H<sub>8</sub>O<sub>7</sub> (192.13).

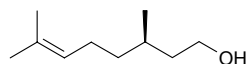
Pharm: Flavorant. Source: BAI BU *Stemona tuberosa*, CU LIU GUO *Hippophae rhamnoides*, HU ZHANG YE *Polygonum cuspidatum*, JU YUAN *Citrus medica*, KUAN YE XIANG PU *Typha latifolia*, MU ZEI MA HUANG *Ephedra equisetina*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], SHAN LI HONG *Crataegus pinnatifida* var. *major*, SHAN ZHA *Crataegus pinnatifida* (dried ripe fruit: mean content of 2 origins = 1.88%<sup>[5508]</sup>), TIAN MA *Gastrodia elata*, WU MEI *Prunus mume* (closing-ripe fruit: content = 54.72%<sup>[5508]</sup>), YE SHAN ZHA *Crataegus cuneata*, YI ZHU QIAN MA *Urtica dioica*, YUN NAN SHAN ZHA *Crataegus scabrifolia* (dried ripe fruit: mean content of 2 origins = 0.86%<sup>[5508]</sup>). Ref: 2, 658, 660, 5508.

**3767 Citronellal**

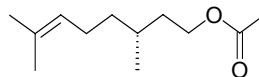
3,7-Dimethyl-6-octen-1-al [106-23-0] C<sub>10</sub>H<sub>18</sub>O (154.25). Pharm: Antibacterial (*Staphylococcus aureus* and *Bacillus typhia*); antifungal; anthelmintic; Flavorant. Source: CHENG QIE ZI *Litsea cubeba*, FU SHE SONG *Pinus radiata*, JING XIANG MAO *Cymbopogon nardus*, JU PI *Citrus reticulata*, KONG SHI CHUN *Uva pertusa*, LI MENG *Citrus limonia*, MI HUA XIANG MAO *Cymbopogon densiflorus*, NING MENG *Citrus limon*, NING MENG AN YE *Eucalyptus citriodora*, SHI LA HONG *Pelargonium hortorum*, WEN TE XIANG MAO *Cymbopogon winterianus*, XIANG FENG HUA *Melissa officinalis*, XIANG MAO *Cymbopogon citratus*. Ref: 2, 658.

**3768 Citronellol**

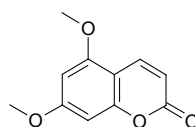
2,3-Dihydrogeraniol [106-22-9] C<sub>10</sub>H<sub>20</sub>O (156.27). bp 222°C. Pharm: Antibacterial (*Staphylococcus aureus*, *Bacillus typhosus*); Flavorant. Source: JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*], FEI LONG ZHANG XUE *Toddalia asiatica* [Syn. *Toddalia aculeata*; *Paullinia asiatica*], DAI DAI HUA *Citrus aurantium* var. *amara*, SHUI XIAN HUA *Narcissus tazetta* var. *chinensis*, SHI LA HONG *Pelargonium hortorum*, DU SONG SHI *Juniperus rigida*, MEI GUI HUA *Rosa rugosa* (oil: content = 44.46%<sup>[5501]</sup>), NING MENG AN YE *Eucalyptus citriodora*, HU LUO BO *Daucus carota* var. *sativa*, XIANG YE *Pelargonium graveolens*, JIN YIN HUA *Lonicera japonica*, JU PI *Citrus reticulata*, SHENG JIANG *Zingiber officinale*, WU WEI ZI *Schisandra chinensis*. Ref: 6, 11, 658, 5501.

**3769 Citronellyl acetate**

3,7-Dimethyl-6-octen-1-yl acetate [150-84-5] C<sub>12</sub>H<sub>22</sub>O<sub>2</sub> (198.31). Source: SHENG JIANG *Zingiber officinale*, WU WEI ZI *Schisandra chinensis*. Ref: 2.

**3770 Citropten**

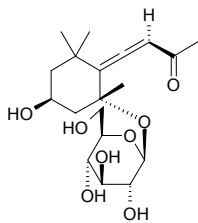
Limettin; 5,7-Dimethoxycoumarin [487-06-9] C<sub>11</sub>H<sub>10</sub>O<sub>4</sub> (206.20). Acicular crystals (methanol), mp 147~148°C. Pharm: Antihistamine (anesthetic cat, pulmonary overflow test, iv 5~10mg/kg; against gpg isolated trachea contraction induced by histamine)<sup>[5501]</sup>; antihypertensive (anesthetic dog, iv 10mg/kg, blood pressure being reduced by (53.5±15)% , action lasts 20min)<sup>[5501]</sup>; LD<sub>50</sub> (mouse, orl) = 3.95g/kg<sup>[5501]</sup>. Source: BO LI ZI HUA *Jiao Zanthoxylum belizense*, FO SHOU *Citrus medica* var. *sarcodactylis* (fruit: content = 0.007%<sup>[5501]</sup>), NING MENG *Citrus limon*, JU YUAN YE *Citrus medica*, JU YUAN *Citrus medica*, XIANG YUAN *Citrus wilsonii*. Ref: 5, 6, 660, 661, 5501.



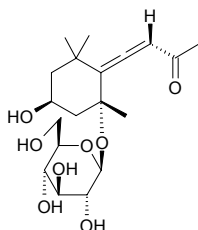


**3771 Citroside A**

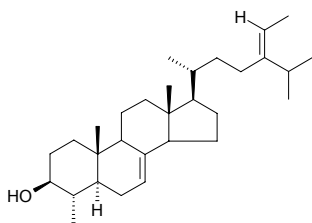
$C_{19}H_{30}O_8$  (386.45). Amorphous powder,  $[\alpha]_D^{23} = -117^\circ$ . Source: HU SUI ZI *Coriandrum sativum*, JIAN PU ZHAI GU KE *Erythroxylum cambodianum* (aerial parts), PI PA YE *Eriobotrya japonica* (stem and leaf). Ref: 3061, 4302, 4461.

**3772 Citroside B**

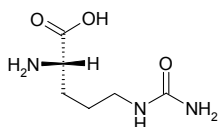
$C_{19}H_{30}O_8$  (386.45). Amorphous powder,  $[\alpha]_D^{23} = -51^\circ$ . Source: HU SUI ZI *Coriandrum sativum*. Ref: 4302.

**3773 Citrostadienol**

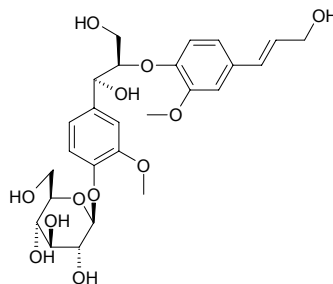
[474-40-8]  $C_{30}H_{50}O$  (426.73). mp 162–164°C. Source: GOU QI ZI *Lycium chinense*, MAN TUO LUO ZI *Datura metel*, SHUI LONG GU *Polypodium niponicum*. Ref: 6, 660.

**3774 Citrulline**

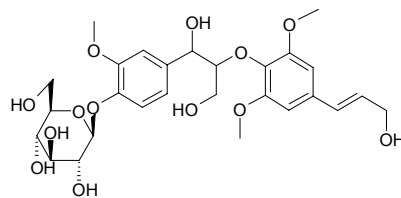
2-Amino-5-ureidovaleric acid [372-75-8]  $C_6H_{13}N_3O_3$  (175.19). mp 222°C. Pharm: Antitoxin. Source: DONG GUA ZI *Benincasa hispida*, HEI ZHI MA *Sesamum indicum* (black seed) [Syn. *Sesamum orientale* (black seed)], HU TAO REN *Juglans regia*, KU GUA *Momordica charantia*, MO GU *Agaricus campestris*, MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*], MU XU *Medicago sativa*, NAN GUA *Cucurbita moschata*, SHI ZI *Diospyros kaki*, SI GUA *Luffa cylindrica*, TIAN HUA FEN *Trichosanthes kirilowii*, XI GUA *Citrullus vulgaris* [Syn. *Citrullus lanatus*]. Ref: 2, 6, 658, 660.

**3775 Citrusin A**

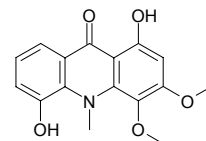
$C_{26}H_{34}O_{12}$  (538.55). Pharm: Antioxidant (DPPH scavenger,  $EC_{50} > 50\mu\text{g/mL}$ ,  $50\mu\text{g/mL}$  InRt = 23%, control Ascorbic acid,  $EC_{50} = 1.6\mu\text{g/mL} = 9.1\mu\text{mol/L}$ ). Source: BEI SHA SHEN *Glehnia littoralis* (underground part). Ref: 4154.

**3776 Citrusin B**

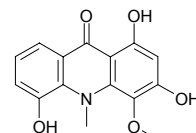
[105279-10-5]  $C_{27}H_{36}O_{13}$  (568.58). Source: DU ZHONG *Eucommia ulmoides*. Ref: 2.

**3777 Citrusinine I**

$C_{16}H_{15}NO_5$  (301.3). Pharm: Cytotoxic (*in vitro*, Colon205,  $ED_{50} = 6.3\mu\text{g/mL}$ ; hep-3B,  $ED_{50} = 6.6\mu\text{g/mL}$ ; KB,  $ED_{50} = 0.09\mu\text{g/mL}$ ). Source: DONG FENG JU GEN *Atalantia buxifolia* [Syn. *Severinia buxifolia*] (root cortex). Ref: 3075.

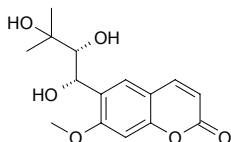
**3778 Citrusinine II**

$C_{15}H_{13}NO_5$  (287.27). Pharm: Cytotoxic (*in vitro*, Colon205,  $ED_{50} > 25\mu\text{g/mL}$ , inactive; hep-3B,  $ED_{50} > 25\mu\text{g/mL}$ , inactive; KB,  $ED_{50} = 0.82\mu\text{g/mL}$ ). Source: DONG FENG JU GEN *Atalantia buxifolia* [Syn. *Severinia buxifolia*] (root cortex). Ref: 3075.

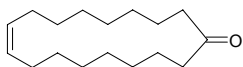


**3779 Citrusol**

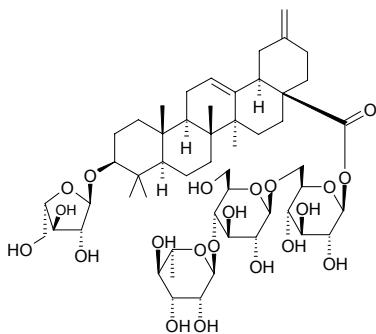
$C_{15}H_{18}O_6$  (294.31). **Pharm:** Antineoplastic (Raji cells, antitumor promotor, *in vivo*, inhibits TPA-induced EBV-EA activation, compound concentration = 500(mol ratio/32 pmol TPA): EBV-EA-positive cells = (15.3±1.5)% (viability > 80%),  $\beta$ -Carotene, EBV-EA-positive cells = (34.3±1.1)% (viability >80), Curcumin, EBV-EA-positive cells = (22.8±1.8)% (viability > 80%), compound  $IC_{50}$  = 180(mol ratio/32 pmol TPA),  $\beta$ -Carotene,  $IC_{50}$  = 400(mol ratio/32 pmol TPA), Curcumin,  $IC_{50}$  = 341(mol ratio/32 pmol TPA)). **Source:** PU TAO YOU DA HONG JU ZA JIAO ZHONG *Citrus paradisi* x *Citrus tangerina*. **Ref:** 5048.

**3780 Civetone**

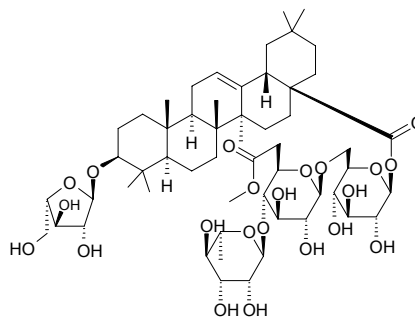
*cis*-Civetone [542-46-1]  $C_{17}H_{30}O$  (250.43). mp 32.5°C, bp 342°C/742mmHg. **Source:** LING MAO XIANG *Viverra zibetha*. **Ref:** 6.

**3781 Ciwujianoside C<sub>1</sub>**

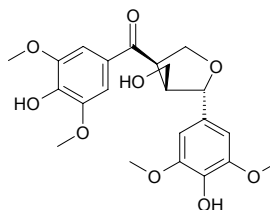
Yemuoside YM14 [114906-73-9]  $C_{52}H_{82}O_{21}$  (1043.21). White powder,  $[\alpha]_D^{18} = +14.6^\circ$  ( $c = 1.03$ , methanol). **Pharm:** Antihistamine (inhibits histamine release, rat peritoneum giant cells, caused by anti-Ig-E). **Source:** CI WU JIA *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*]. **Ref:** 945, 1026.

**3782 Ciwujianoside D<sub>1</sub>**

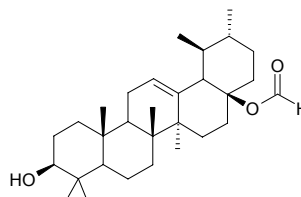
[114912-35-5]  $C_{55}H_{88}O_{22}$  (1101.29). White powder,  $[\alpha]_D^{18} = -9.8^\circ$  ( $c = 0.41$ , methanol). **Pharm:** Antihistamine (inhibits histamine release, rat peritoneum giant cells, caused by anti-Ig-E). **Source:** CI WU JIA *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*]. **Ref:** 945, 1026.

**3783 Ciwujiatone**

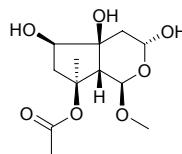
$C_{22}H_{26}O_9$  (434.45). White acicular crystals, mp 112~114°C. **Source:** CI WU JIA *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*]. **Ref:** 671.

**3784 Cladocalol**

17 $\beta$ -Formyloxy-28-nor-urs-12-en-3 $\beta$ -ol  $C_{30}H_{48}O_3$  (456.72). Amorphous solid,  $[\alpha]_D^{20} = +58^\circ$  ( $c = 0.2$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (HL-60 cells,  $IC_{50} = (42\pm 4)\mu\text{mol/L}$ ). **Source:** ZHI ZHUANG E AN *Eucalyptus cladocalyx* (leaf). **Ref:** 5259.

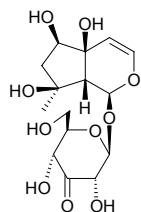
**3785 Clandonensine**

1- $\beta$ -Methoxy-3,4-dihydro-3 $\alpha$ -hydroxy-8-*O*-acetylharpagide aglucone  $C_{12}H_{20}O_7$  (276.29). White amorphous powder. **Source:** ZA JIAO YOU<sup>(2)</sup> *Caryopteris clandonensis*. **Ref:** 3988.

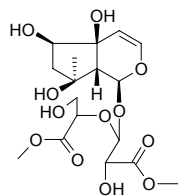


**3786 Clandonoside**

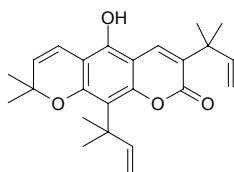
Harpagide-aglucone-1-*O*- $\beta$ -*D*-ribohexo-3-uloipyranoside [239467-35-7]  
 $C_{15}H_{22}O_{10}$  (362.34). White amorphous powder. Source: ZA JIAO YOU<sup>(2)</sup>  
*Caryopteris clandonensis*. Ref: 2312.

**3787 Clandonoside II**

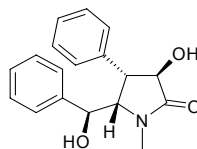
Harpagide-aglucone-1-*O*-3',4'-seco-glycopyranoside  $C_{17}H_{26}O_{12}$  (422.39).  
 White amorphous powder. Source: ZA JIAO YOU<sup>(2)</sup> *Caryopteris*  
*clandonensis*. Ref: 3988.

**3788 Clausarin**

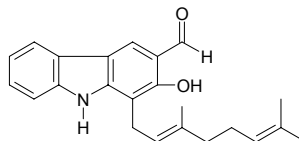
3,10-Bis(1,1-dimethyl-2-propenyl)-5-hydroxy-8,8-dimethyl-2*H*,8*H*-benzo[1,2-*b*:5,4-*b'*]dipyran-2-one [62770-67-6]  $C_{24}H_{28}O_4$  (380.49). Pharm:  
 Antineoplastic (Raji cells, antitumor promotor, *in vivo*, inhibits TPA-induced  
 EBV-EA activation, compound concentration = 500(mol ratio/32 pmol  
 TPA), EBV-EA-positive cells = (41.9 $\pm$ 1.5)% (viability > 80%),  $\beta$ -Carotene,  
 EBV-EA-positive cells = (34.3 $\pm$ 1.1)% (viability > 80), Curcumin,  
 EBV-EA-positive cells = (22.8 $\pm$ 1.8)% (viability > 80%);  $IC_{50}$  = 343(mol  
 ratio/32 pmol TPA),  $\beta$ -Carotene,  $IC_{50}$  = 400(mol ratio/32 pmol TPA),  
 Curcumin,  $IC_{50}$  = 341(mol ratio/32 pmol TPA)<sup>[5048]</sup>. Source: SHAN  
 HUANG PI *Clausena excavata*, CHENG ZI *Citrus junos*, *Citrus medica* var.  
*etrog*, *Citrus jambhiri*, *Citrus tamurana*. Ref: 703, 5048.

**3789 Clausenamide**

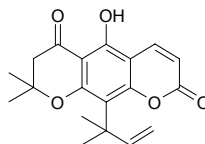
[103541-15-7]  $C_{18}H_{19}NO_3$  (297.36). White acicular crystals (methanol), mp  
 239–240°C. Source: HUANG PI YE *Clausena lansium*. Ref: 72.

**3790 Clausenatine A**

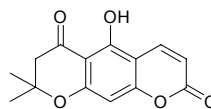
Mukoeneine B  $C_{23}H_{25}NO_2$  (347.46). Yellowish powder, mp >280°C (acetone).  
Source: SHAN HUANG PI *Clausena excavata*. Ref: 2368.

**3791 Clausenidin**

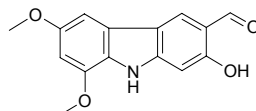
[28384-44-3]  $C_{19}H_{20}O_5$  (328.37). mp 135–136°C. Pharm: Antibacterial  
 (*Mycobacterium tuberculosis*, MIC = 200 $\mu$ g/mL, control Isoniazide, MIC =  
 0.040–0.090 $\mu$ g/mL, kanamycin sulfate, MIC = 2.0–5.0 $\mu$ g/mL)<sup>[5367]</sup>; antifungal  
 inactive (*Candida albicans*, control Amphotericin,  $IC_{50}$  = 0.01 $\mu$ g/mL)<sup>[5367]</sup>.  
Source: SHAN HUANG PI *Clausena excavata*. Ref: 6, 5367.

**3792 Clausenin**

[17276-27-6]  $C_{14}H_{12}O_5$  (260.25). mp 156–157°C. Source: SHAN HUANG PI  
*Clausena excavata*. Ref: 1521.

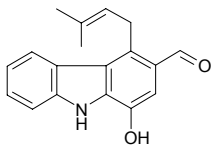
**3793 Clausine B**

[182261-81-0]  $C_{15}H_{13}NO_4$  (271.28). mp 228–229°C. Pharm: Platelet  
 aggregation inhibitor (rbt, 100 $\mu$ g/mL, due to arachidonic acid, InRt = 23%,  
 due to collagen, InRt = 16%, due to PAF, InRt = 19%). Source: SHAN  
 HUANG PI *Clausena excavata*. Ref: 703.

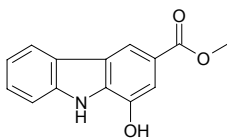


**3794 Clausine D**

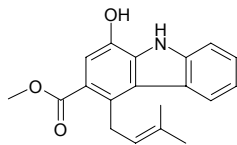
1-Hydroxy-4-(3-methyl-2-butenyl)-9*H*-carbazole-3-carboxaldehyde  
[142846-95-5] C<sub>18</sub>H<sub>17</sub>NO<sub>2</sub> (279.34). **Pharm:** Platelet aggregation inhibitor (rbt, due to arachidonic acid, 1μg/mL, InRt = 53%, IC<sub>50</sub> = 9.0μmol/L, due to collagen, 10μg/mL InRt = 66%, IC<sub>50</sub> = 58.9μmol/L); inhibits formation of thromboxane A<sub>2</sub>; antispasmodic (rat, inhibits aortal contraction induced by KCl+CaCl<sub>2</sub>, InRt = 21.5%). **Source:** SHAN HUANG PI *Clausena excavata*. **Ref:** 703, 1650, 1651.

**3795 Clausine E**

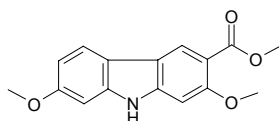
Clauszoline I [182261-83-2] C<sub>14</sub>H<sub>11</sub>NO<sub>3</sub> (241.25). mp 218~220°C. **Pharm:** Platelet aggregation inhibitor (rbt, 100μg/mL, due to arachidonic acid, InRt = 90%, due to collagen, InRt = 92%, due to PAF, InRt = 60%); vascular relaxant (rat, aorta, contraction by KCl+CaCl<sub>2</sub>, InRt = 87.0%, due to 3μmol/L arterenol, InRt for step-by-step contraction = 58.3%, InRt for tonic contraction = 89.3%). **Source:** SHAN HUANG PI *Clausena excavata*. **Ref:** 703.

**3796 Clausine F**

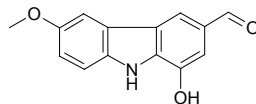
[142846-96-6] C<sub>19</sub>H<sub>19</sub>NO<sub>3</sub> (309.37). **Pharm:** Platelet aggregation inhibitor (rbt, due to arachidonic acid, 1μg/mL, InRt = 37%, due to collagen, 1μg/mL InRt = 48%). **Source:** SHAN HUANG PI *Clausena excavata*. **Ref:** 703, 1650.

**3797 Clausine H**

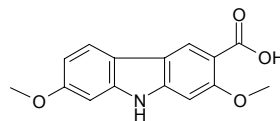
Clauszoline C [182261-90-1] C<sub>16</sub>H<sub>15</sub>NO<sub>4</sub> (285.31). mp 192~194°C. **Pharm:** Platelet aggregation inhibitor (rbt, 100μg/mL, due to arachidonic acid, InRt = 100%, due to collagen, InRt = 100%, due to PAF, InRt = 100%). **Source:** SHAN HUANG PI *Clausena excavata*. **Ref:** 703.

**3798 Clausine I**

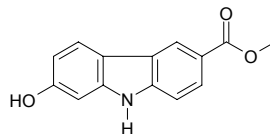
C<sub>14</sub>H<sub>11</sub>NO<sub>3</sub> (241.25). mp 222~224°C. **Pharm:** Platelet aggregation inhibitor (rbt, 100μg/mL, due to arachidonic acid, InRt = 94%, due to collagen, InRt = 87%, due to PAF, InRt = 17%). **Source:** SHAN HUANG PI *Clausena excavata*. **Ref:** 703.

**3799 Clausine K**

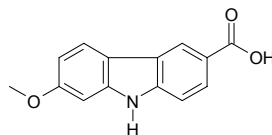
Clauszoline J [182261-96-7] C<sub>15</sub>H<sub>13</sub>NO<sub>4</sub> (271.28). mp 250~256°C. **Pharm:** Antibacterial (*Mycobacterium tuberculosis*, MIC = 100μg/mL, control Isoniazide, MIC = 0.040~0.090μg/mL, kanamycin sulfate, MIC = 2.0~5.0μg/mL)<sup>[5367]</sup>; antifungal inactive (*Candida albicans*, control Amphotericin, IC<sub>50</sub> = 0.01μg/mL)<sup>[5367]</sup>. **Source:** SHAN HUANG PI *Clausena excavata*. **Ref:** 703, 5367.

**3800 Clausine M**

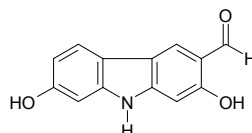
C<sub>14</sub>H<sub>11</sub>NO<sub>3</sub> (241.25). Yellowish needles, mp 200~203°C (EtOAc). **Source:** SHAN HUANG PI *Clausena excavata*. **Ref:** 2368.

**3801 Clausine N**

C<sub>14</sub>H<sub>11</sub>NO<sub>3</sub> (241.25). Yellowish powder, mp 215~218°C (acetone). **Source:** SHAN HUANG PI *Clausena excavata*. **Ref:** 2368.

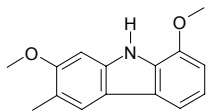
**3802 Clausine O**

C<sub>13</sub>H<sub>9</sub>NO<sub>3</sub> (227.22). Yellowish needles, mp > 280°C (acetone). **Source:** SHAN HUANG PI *Clausena excavata*. **Ref:** 2368.

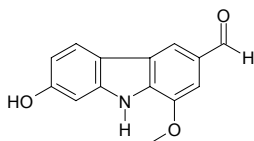


**3803 Clausine P**

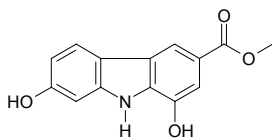
$C_{15}H_{15}NO_2$  (241.29). Yellow oil. Source: SHAN HUANG PI *Clausena excavata*. Ref: 2368.

**3804 Clausine Q**

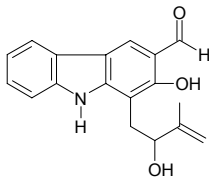
$C_{14}H_{11}NO_3$  (241.25). Brown powder, mp 85–87°C (acetone). Source: SHAN HUANG PI *Clausena excavata*. Ref: 2368.

**3805 Clausine R**

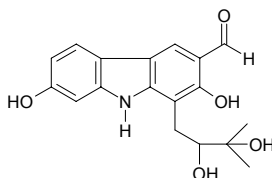
$C_{14}H_{11}NO_4$  (257.25). Yellowish needles, mp 178–181°C (acetone). Source: SHAN HUANG PI *Clausena excavata*. Ref: 2368.

**3806 Clausine S**

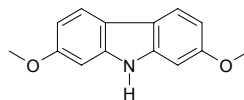
$C_{18}H_{17}NO_3$  (295.34). Yellowish oil,  $[\alpha]_D = +159.09^\circ$  ( $c = 0.0022$ , MeOH). Source: SHAN HUANG PI *Clausena excavata*. Ref: 2368.

**3807 Clausine U**

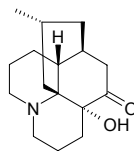
$C_{18}H_{19}NO_5$  (329.36). Yellowish powder, mp 255–257°C (acetone),  $[\alpha]_D = -159.09^\circ$  ( $c = 0.0151$ , MeOH). Source: SHAN HUANG PI *Clausena excavata*. Ref: 2368.

**3808 Clausine V**

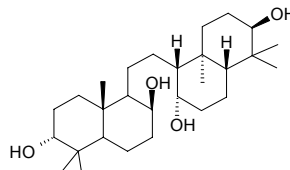
$C_{14}H_{13}NO_2$  (227.27). Colorless powder, mp 228–230°C (acetone). Source: SHAN HUANG PI *Clausena excavata*. Ref: 2368.

**3809 Clavatine**

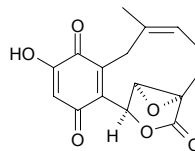
$C_{16}H_{25}NO_2$  (263.38). mp 212–213°C. Pharm: Antipyretic (rht, sc, fever caused by hay-infusion). Source: SHEN JIN CAO *Lycopodium japonicum* [Syn. *Lycopodium clavatum*]. Ref: 6, 658.

**3810 Clavatul**

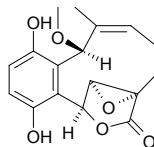
Lyclavatul; 26,27-Dinor-3,8,14,21-onoceranetetrol [33044-79-0]  $C_{28}H_{50}O_4$  (450.71). mp 277–279°C. Source: SHEN JIN CAO *Lycopodium japonicum* [Syn. *Lycopodium clavatum*]. Ref: 6.

**3811 Clavilactone D**

$C_{16}H_{14}O_6$  (302.29). Red powder, mp 172–175°C,  $[\alpha]_D = +376^\circ$  ( $c = 0.05$ , MeOH). Pharm: Tyrosine kinase inhibitor (EGFR autophosphorylation assay, A431 cell membranes,  $IC_{50} = 5\mu\text{mol/L}$ ). Source: BANG BING BEI SAN *Clitocybe clavipes*. Ref: 3940.

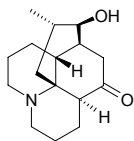
**3812 Clavilactone E**

$C_{17}H_{18}O_6$  (318.33). Yellow powder, mp 150–152°C,  $[\alpha]_D = +90^\circ$  ( $c = 0.1$ , MeOH). Source: BANG BING BEI SAN *Clitocybe clavipes*. Ref: 3940.

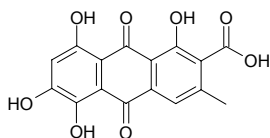


**3813 Clavolonine**

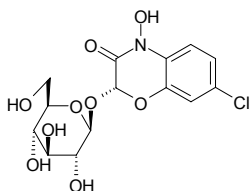
[466-62-6]  $C_{16}H_{25}NO_2$  (263.38). mp 238°C;  $[\alpha]_D^{25} = -11^\circ$  (MeOH). Source: DONG BEI SHI SHAN *Huperzia miyoshiana*, SHEN JIN CAO *Lycopodium japonicum* [Syn. *Lycopodium clavatum*]. Ref: 6, 5412.

**3814 Clavorubin**

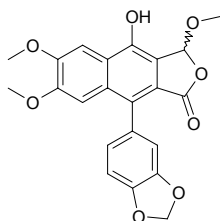
[2960-94-3]  $C_{16}H_{10}O_8$  (330.25). Source: MAI JIAO *Claviceps purpurea*. Ref: 6.

**3815 7-Cl-DIBOA-Glc**

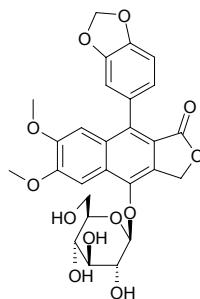
7-Chloro-(2*R*)-2-*O*-β-*D*-glucopyranosyl-4-hydroxy-2*H*-1,4-benzoxazin-3(4*H*)-one  $C_{14}H_{16}ClNO_9$  (377.74). Amorphous powder,  $[\alpha]_D^{22} = +18.6^\circ$  ( $c = 0.86$ , DMSO). Source: XIAO HUA LAO SHU LE *Acanthus ebracteatus* (aerial parts). Ref: 5211.

**3816 Cleistanone**

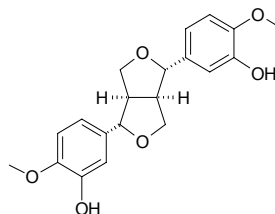
$C_{22}H_{18}O_8$  (410.38). Pale yellow crystals, mp 217~218°C (MeOH),  $[\alpha]_D^{25} = +4^\circ$  ( $c = 1.5$ , MeOH). Pharm: Cytotoxic (MT2 cell line, anti-proliferative activity using MTT colorimetric assay,  $LD_{50} = 38.1 \mu\text{mol/L}$ , control Etoposide,  $LD_{50} = 22.1 \mu\text{mol/L}$ ). Source: QIU SHENG BI HUA MU *Cleistanthus collinus* (aerial parts). Ref: 4399.

**3817 Cleistanhin B**

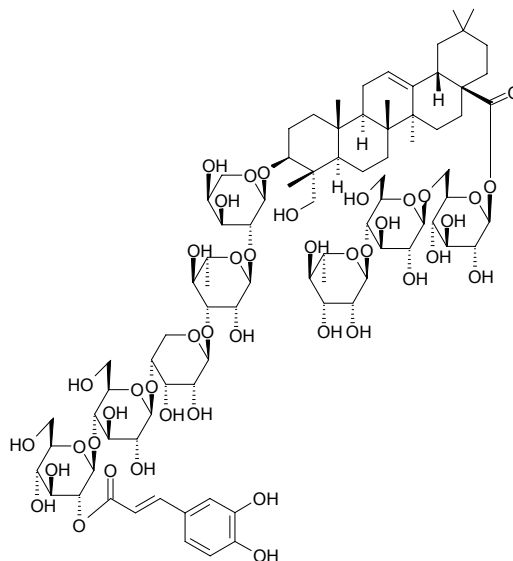
$C_{27}H_{26}O_{12}$  (542.50). Source: QIANG DAO YAO *Hypoestes purpurea* [Syn. *Justicia purpurea*; *Hypoestes sinica*] (whole herb: yield = 0.00055%dw). Ref: 4712.

**3818 Clemaphenol A**

Clemaphenol A  $C_{20}H_{22}O_6$  (358.39). Colorless oily liquid. Source: WEI LING XIAN *Clematis chinensis*. Ref: 871.

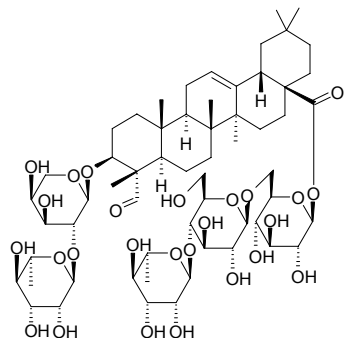
**3819 Clematibetoside A**

3-*O*-(2-*O*-Caffeoyl)-β-*D*-glucopyranosyl-(1→4)-β-*D*-glucopyranosyl-(1→4)-β-*D*-ribosepyranosyl-(1→3)-α-*L*-rhamnopyranosyl-(1→2)-α-*L*-arabinopyranosyl-1 hederagenin 28-*O*-α-*L*-rhamnopyranosyl-(1→4)-β-*D*-glucopyranosyl-(1→6)-β-*D*-glucopyranoside  $C_{85}H_{130}O_{43}$  (1839.96). Yellowish amorphous powder,  $[\alpha]_D^{28} = -59.2^\circ$  ( $c = 0.33$ , MeOH). Source: XI ZANG TIE XIAN LIAN *Clematis tibetana* (aerial parts). Ref: 3530.

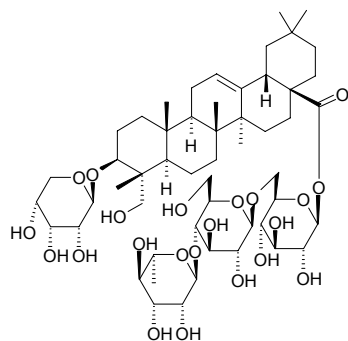


**3820 Clematibetoside B**

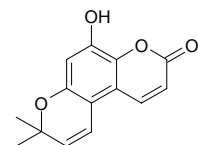
3-*O*- $\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranosyl gypsogenin 28-*O*- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside  
 $C_{59}H_{94}O_{26}$  (1219.39). White amorphous powder,  $[\alpha]_D^{28} = -13.0^\circ$  ( $c = 0.51$ , MeOH). Source: XI ZANG TIE XIAN LIAN *Clematis tibetana* (aerial parts). Ref: 3530.

**3821 Clematibetoside C**

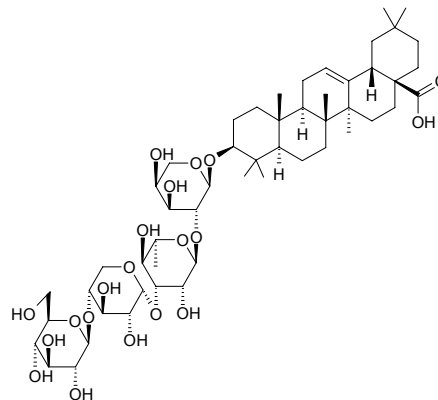
3-*O*- $\beta$ -D-Ribopyranosyl hederagenin 28-*O*- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside  $C_{53}H_{86}O_{22}$  (1075.26). White amorphous powder,  $[\alpha]_D^{28} = -25.7^\circ$  ( $c = 0.67$ , MeOH). Pharm: Cytotoxic (antiproliferative *in vitro*: J774.A1 cell line,  $IC_{50} = 0.85\mu\text{mol/L}$ , HEK-293 cell line,  $IC_{50} = 1.1\mu\text{mol/L}$ , WEHI-164 cell line,  $IC_{50} = 1.2\mu\text{mol/L}$ ; control 6-Mercaptopurine, J774.A1 cell line,  $IC_{50} = 0.003\mu\text{mol/L}$ , HEK-293 cell line,  $IC_{50} = 0.007\mu\text{mol/L}$ , WEHI-164 cell line,  $IC_{50} = 0.015\mu\text{mol/L}$ )<sup>[5036]</sup>. Source: XI ZANG TIE XIAN LIAN *Clematis tibetana* (aerial parts). Ref: 3530, 5036.

**3822 Clematichinenol**

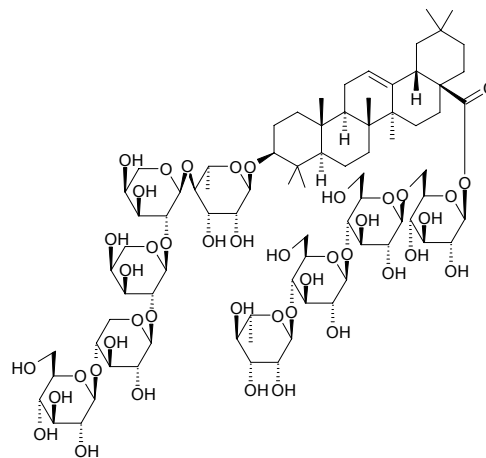
$C_{14}H_{12}O_4$  (244.25). mp 186–188°C. Source: WEI LING XIAN *Clematis chinensis*. Ref: 9.

**3823 Clematis prosapogenin, Cp7a**

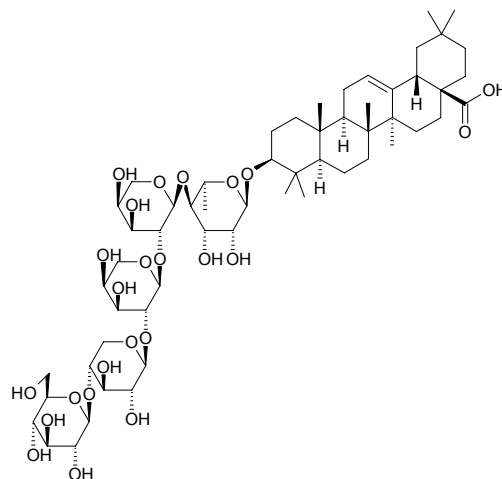
$C_{52}H_{84}O_{20}$  (1029.24). White powder,  $[\alpha]_D^{20} = -18^\circ$  ( $c = 0.8$ , methanol). Source: CI QIU SHU PI *Kalopanax septemlobus*. Ref: 457.

**3824 Clematoside A**

$C_{81}H_{132}O_{43}$  (1793.93). Source: WEI LING XIAN *Clematis chinensis*. Ref: 6.

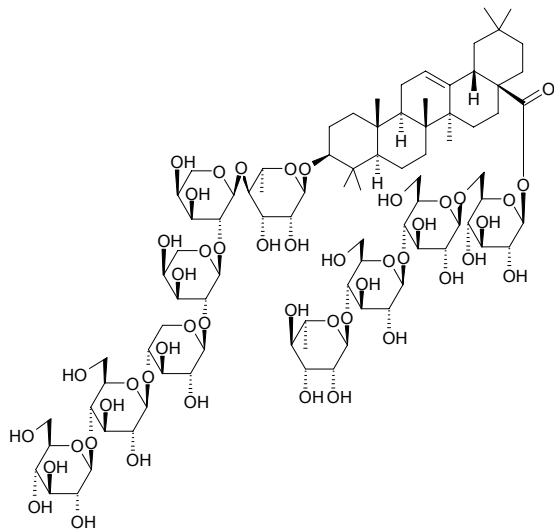
**3825 Clematoside A'**

$C_{57}H_{92}O_{24}$  (1161.35). mp 176–179°C. Source: WEI LING XIAN *Clematis chinensis*. Ref: 6.

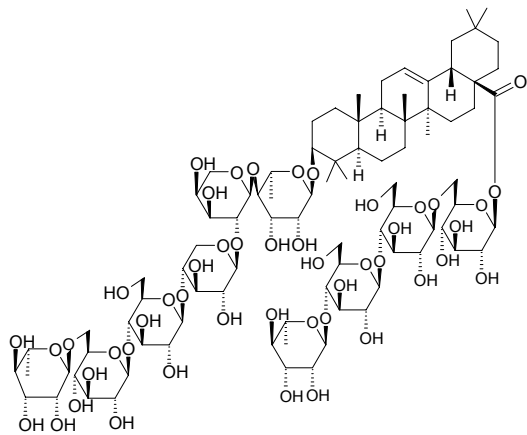


**3826 Clematocide B**

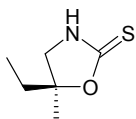
$C_{87}H_{142}O_{48}$  (1956.07). mp 200–202°C. Source: WEI LING XIAN *Clematis chinensis*. Ref: 6.

**3827 Clematocide C**

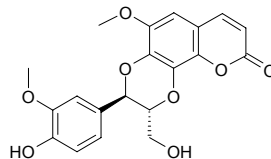
[18463-37-1]  $C_{88}H_{144}O_{48}$  (1970.11). mp 213–215°C. Source: WEI LING XIAN *Clematis chinensis*. Ref: 6.

**3828 Cleomin**

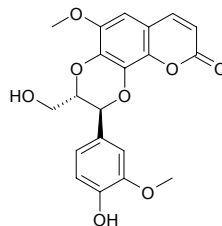
[75272-94-5]  $C_6H_{11}NOS$  (145.22). mp 52°C. Source: BAI HUA CAI ZI *Cleome gynandra* [Syn. *Gynandropsis gynandra*]. Ref: 6.

**3829 Cleomiscosin A**

Cleosandrin [76948-72-6]  $C_{20}H_{18}O_8$  (386.36). Nearly colorless rhombic crystals (methanol), mp 250–251°C; 250–252°C; 247–249°C,  $[\alpha]_D^{25} = 0^\circ$  ( $c = 0.5$ , methanol). Pharm: Cytotoxic ( $P_{388}$ ,  $ED_{50} = 0.4$  or  $2.8\mu\text{g/mL}$ , KB,  $ED_{50} = 4.9\mu\text{g/mL}$ )<sup>[900]</sup>; cytotoxic (hmn, A549  $EC_{50} > 20\mu\text{g/mL}$ , MCF7  $EC_{50} > 20\mu\text{g/mL}$ )<sup>[2529]</sup>. antihepatotoxin (rat liver cells, *in vitro*,  $0.1\text{mg/mL}$ , liver damage caused by *D*-galactosamine, GPT reduced from 100% of control to 68%,  $P < 0.001$ )<sup>[900]</sup>; tyrosinase inhibitor ( $IC_{50} = (18.69 \pm 0.68)\mu\text{mol/L}$ , control Kojic acid,  $IC_{50} = (16.67 \pm 0.52)\mu\text{mol/L}$ , *L*-Mimosine  $IC_{50} = (3.68 \pm 0.02)\mu\text{mol/L}$ )<sup>[2544]</sup>; antioxidant (*in vitro*, rat liver microsomes lipid peroxidation,  $IC_{50} = 9.0\mu\text{g/mL}$ )<sup>[3088]</sup>; MAO inhibitor inactive ( $70\mu\text{g/mL}$ )<sup>[3088]</sup>; anti-HIV (H9 lymphocytic cells, inhibits replication,  $IC_{50}$  (concentration that inhibits uninfected H9 cell growth by 50%) =  $18.63\mu\text{g/mL}$ )<sup>[2529]</sup>. Source: A FU HAN DU JUAN HUA *Rhododendron collettianum*, CHE SANG ZI YE *Dodonaea viscosa*, DUO RUI BAI HUA CAI *Cleome icosandra*, HUANG HUA CAO *Cleome viscosa*, LANG DANG ZI *Hyoscyamus niger* (seed: yield =  $0.024\%dw$ )<sup>[2096]</sup>, MU JIN HUA *Hibiscus syriacus*<sup>[3088]</sup>, RI BEN QI YE SHU *Aesculus turbinata*, TAI WAN FU RONG *Hibiscus taiwanensis*, YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*], *Matayba arborescens*, *Soulamea soulameoides*. Ref: 658, 900, 1521, 2096, 2529, 2544, 3088.

**3830 Cleomiscosin B**

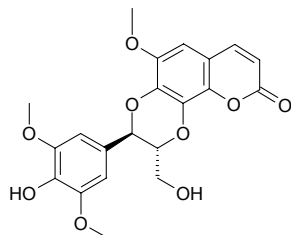
[76985-93-8]  $C_{20}H_{18}O_8$  (386.36). Colorless thin rhombic crystals (methanol–ethyl acetate), mp 274°C,  $[\alpha]_D = 0^\circ$  ( $c = 0.12$ , methanol). Pharm: Antihepatotoxin (rat liver cells, *in vitro*,  $1.0\text{mg/mL}$ , liver damage caused by  $CCl_4$  and *D*-galactosamine, GPT reduced from 100% of control to 82% and 49% respectively,  $P < 0.001$ ). Source: LANG DANG ZI *Hyoscyamus niger* (seed: yield =  $0.010\%dw$ ), RI BEN QI YE SHU *Aesculus turbinata*. Ref: 900, 2096.



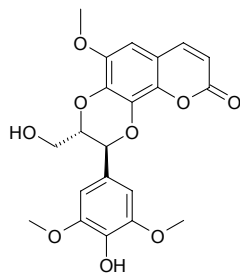


**3831 Cleomiscosin C**

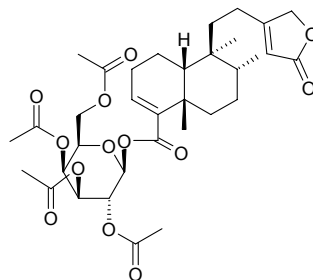
5'-Methoxy-cleomiscosin A; Aquillochin [84575-10-0] C<sub>21</sub>H<sub>20</sub>O<sub>9</sub> (416.39). Colorless rhombic crystals (methanol–ethyl acetate), mp 255°C, [ $\alpha$ ]<sub>D</sub> = 0° (*c* = 0.08, methanol). **Pharm:** Antihepatotoxin (rat liver cells, *in vitro*, 1.0mg/mL, liver damage caused by *D*-galactosamine, GPT reduced from 100% of control to 55%, *P* < 0.001); anti-HIV (H9 lymphocytic cells, inhibits HIV replication, IC<sub>50</sub> (concentration that inhibits uninfected H9 cell growth by 50%) > 25µg/mL)<sup>[2529]</sup>; cytotoxic (hmn, A549 EC<sub>50</sub> > 20µg/mL, MCF7 EC<sub>50</sub> > 20µg/mL)<sup>[2529]</sup>;  $\beta$ -hexosaminidase inhibitor inactive (RBL-2H3 cells, inhibits release of  $\beta$ -hexosaminidase, 100µmol/L, InRt = (-1.7±3.3)%)<sup>[4304]</sup>; antioxidant (*in vitro*, rat liver microsomes lipid peroxidation, IC<sub>50</sub> = 0.7µg/mL)<sup>[3088]</sup>; MAO inhibitor inactive (70µg/mL)<sup>[3088]</sup>; tyrosinase inhibitor (IC<sub>50</sub> = (15.69±0.69)µmol/L, control Kojic acid, IC<sub>50</sub> = (16.67±0.52)µmol/L, *L*-Mimosine IC<sub>50</sub> = (3.68±0.02)µmol/L)<sup>[2544]</sup>. **Source:** A FU HAN DU JUAN HUA *Rhododendron collettianum*, CHEN XIANG *Aquilaria agallocha*, CHE SANG ZI YE *Dodonaea viscosa*, MAO GUO QI *Acer nikoense* (stem cortex), MU JIN HUA *Hibiscus syriacus*<sup>[3088]</sup>, TAI WAN FU RONG *Hibiscus taiwanensis*. **Ref:** 660, 900, 2529, 2544, 3088, 4304.

**3832 Cleomiscosin D**

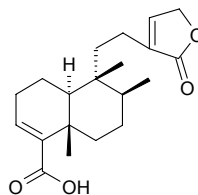
C<sub>21</sub>H<sub>20</sub>O<sub>9</sub> (416.39). **Pharm:** Antioxidant (*in vitro*, rat liver microsomes lipid peroxidation, IC<sub>50</sub> = 5.5µg/mL)<sup>[3088]</sup>; MAO inhibitor inactive (70µg/mL)<sup>[3088]</sup>;  $\beta$ -hexosaminidase inhibitor inactive (RBL-2H3 cells, inhibits release of  $\beta$ -hexosaminidase, 100µmol/L, InRt = (1.1±3.5)%)<sup>[4304]</sup>. **Source:** MAO GUO QI *Acer nikoense* (stem cortex), MU JIN HUA *Hibiscus syriacus*. **Ref:** 3088, 4304.

**3833 cis-Cleroda-3,13(14)-dien-15,16-olide-18-O-[\beta-D-galactopyranosyl]-peracetyler**

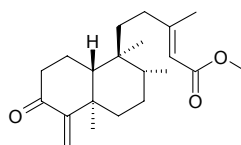
C<sub>34</sub>H<sub>46</sub>O<sub>13</sub> (662.74). Amorphous solid, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -31.6° (*c* = 0.88, CHCl<sub>3</sub>). **Source:** RI BEN LIU SHAN *Cryptomeria japonica*. **Ref:** 1933.

**3834 (+)-3,13-Clerodadien-16,15-olid-18-oic acid**

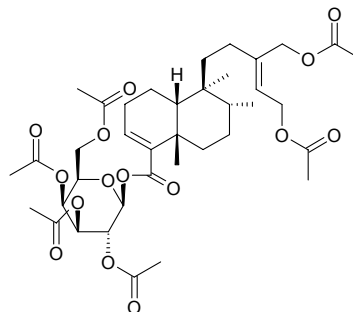
C<sub>20</sub>H<sub>28</sub>O<sub>4</sub> (332.44). **Source:** JIA LIAN QIAO YE *Duranta repens*. **Ref:** 4050.

**3835 4(18),13-Clerodadien-3-oxo-15-oic acid methyl ester**

C<sub>21</sub>H<sub>32</sub>O<sub>3</sub> (332.49). **Source:** GAO YI ZHI HUANG HUA *Solidago altissima*. **Ref:** 2366.

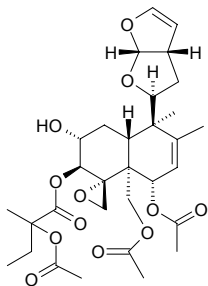
**3836 cis-Cleroda-15,16-dihydroxy-3,13(Z)-dien-18-O-[\beta-D-galactopyranosyl]-peracetyler**

C<sub>38</sub>H<sub>54</sub>O<sub>15</sub> (750.85). Amorphous solid, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -27.8° (*c* = 0.28, CHCl<sub>3</sub>). **Source:** RI BEN LIU SHAN *Cryptomeria japonica*. **Ref:** 1933.

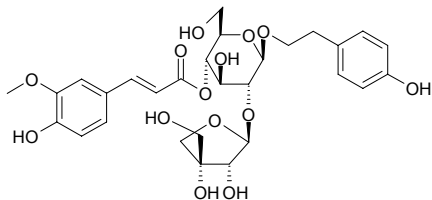


**3837 Clerodendrin A**

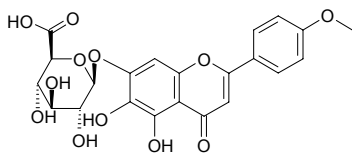
[35481-70-0] C<sub>31</sub>H<sub>42</sub>O<sub>12</sub> (606.67). **Pharm:** Insect antifeedant (*Spodoptera littoralis* larva). **Source:** CHOU WU TONG *Clerodendron trichotomum*. **Ref:** 6, 658.

**3838 Clerodendronoside**

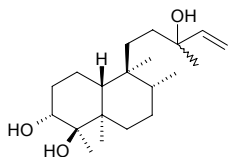
$\beta$ -(4-Hydroxyphenyl)ethyl-*O*- $\beta$ -D-apiofuranosyl-(1 $\rightarrow$ 2)-4-*O*-*trans*-feruloyl- $\beta$ -D-glucopyranoside C<sub>29</sub>H<sub>36</sub>O<sub>14</sub> (608.60). Yellow amorphous powder, mp 125~126°C,  $[\alpha]_D^{20} = +11^\circ$  ( $c = 0.02$ , MeOH). **Source:** CHOU MU DAN *Clerodendrum bungei* (aerial parts). **Ref:** 4873.

**3839 Clerodendroside A**

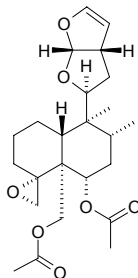
[64924-06-7] C<sub>22</sub>H<sub>20</sub>O<sub>12</sub> (476.40). Dihydrate: yellowish tiny acicular crystals (water-methanol), mp 208~211°C,  $[\alpha]_D^{20} = -142^\circ$  ( $c = 0.6$ , pyridine). **Pharm:** Antihypertensive (anesthetic rat, iv). **Source:** AI TONG ZI *Clerodendron trichotomum* var. *fargesii*. **Ref:** 661.

**3840 Clerod-14-ene-3 $\alpha$ ,4 $\beta$ ,13 $\xi$ -triol**

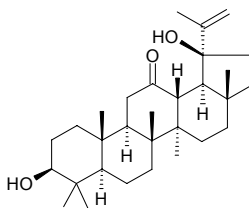
C<sub>20</sub>H<sub>36</sub>O<sub>3</sub> (324.51).  $[\alpha]_D^{25} = -9.9^\circ$  ( $c = 0.71$ , CHCl<sub>3</sub>). **Pharm:** Plant growth inhibitor (the strongest). **Source:** *Viguiera tucumanensis*. **Ref:** 1889.

**3841 Clerodin**

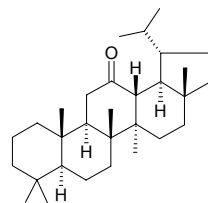
[464-71-1] C<sub>24</sub>H<sub>34</sub>O<sub>7</sub> (434.53). mp 161~162°C (dec). **Pharm:** Anthelmintic. **Source:** QIAN YU DA QING *Clerodendron infortunatum*, GUI DENG LONG *Clerodendron fortunatum*. **Ref:** 6, 658.

**3842 Clerodolone**

3,19-Dihydroxy-20(29)-lupen-12-one [10070-36-7] C<sub>30</sub>H<sub>48</sub>O<sub>3</sub> (456.72). mp 282~284°C. **Source:** CHOU WU TONG GEN *Clerodendron trichotomum*, GUI DENG LONG *Clerodendron fortunatum*, LU BIAN QING *Clerodendron cyrtophyllum*. **Ref:** 6, 660.

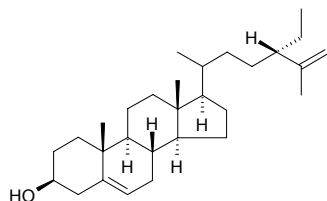
**3843 Clerodone**

12-Lupanone [10070-37-8] C<sub>30</sub>H<sub>50</sub>O (426.73). mp 260°C. **Source:** GUI DENG LONG *Clerodendron fortunatum*, CHOU WU TONG GEN *Clerodendron trichotomum*. **Ref:** 6.

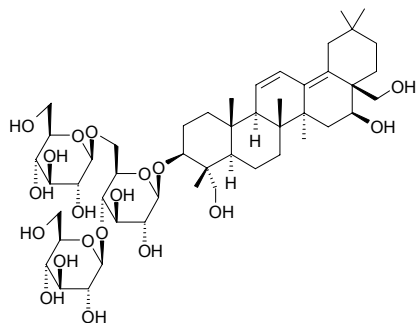


**3844 Clerosterol**

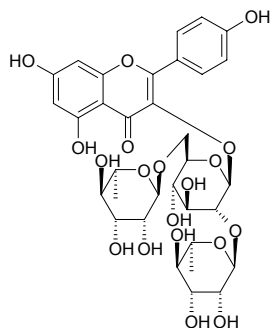
$\Delta^5,^{25}$ -Stigmastadienol [2364-23-0]  $C_{29}H_{48}O$  (412.70). White scale crystals (ethanol), mp 137.6~138.4°C, 147°C. **Pharm:** Promotes growth of white blood cells strongly (2.9mg/mL and 12.0mg/kg). **Source:** CHOU WU TONG GEN *Clerodendron trichotomum*, GUI DENG LONG *Clerodendron fortunatum*, HONG HUA *Carthamus tinctorius*, LU BIAN QING *Clerodendron cyrtophyllum*, SHUI SONG *Codium fragile*. **Ref:** 6, 660, 900.

**3845 Clinodiside A**

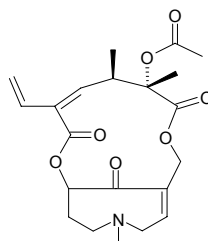
3-*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 6)-[ $\beta$ -*D*-glucopyranosyl (1 $\rightarrow$ 4)] ( $\beta$ -*D*-glucopyranosyl-olean-11,13(18)-diene-3 $\beta$ ,16 $\beta$ ,23,28-tetrol  $C_{48}H_{78}O_{19}$  (959.15). White granular crystals, mp 249~251°C,  $[\alpha]_D^{25} = +10.7^\circ$  (ethanol). **Source:** FENG LUN CAI *Clinopodium chinense*. **Ref:** 224.

**3846 Clitorin**

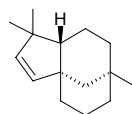
Kaempferol 3-*O*-(2'',6''-di-*O*- $\alpha$ -*L*-rhamnopyranosyl)- $\beta$ -*D*-glucopyranoside  $C_{33}H_{40}O_{19}$  (740.68). **Source:** LAO YA SHI *Diospyros rhombifolia* (leaf), LV DOU *Onobrychis viciifolia* (leaf). **Ref:** 4464, 5084.

**3847 Clivorine**

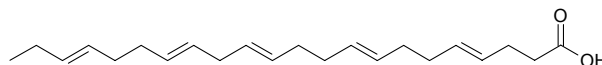
[33979-15-6]  $C_{21}H_{27}NO_7$  (405.45). mp 148~150°C. **Pharm:** Mutagen; carcinogen (causes liver cancer). **Source:** CHI YE TUO WU *Ligularia dentata*, HU LU QI *Ligularia fischeri*, SHAN GANG TUO WU *Ligularia clivorum*, YA ZHI TUO WU *Ligularia elegans*, YAO YONG NIU SHE CAO *Anchusa officinalis*. **Ref:** 6, 658.

**3848 Clovene**

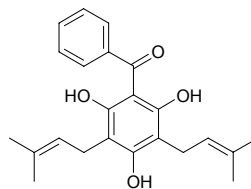
[469-92-1]  $C_{15}H_{24}$  (204.36). **Source:** WU WEI ZI *Schisandra chinensis*. **Ref:** 2.

**3849 Clupanodonic acid**

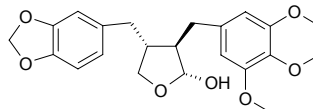
Docosapentenoic acid [2548-85-8]  $C_{22}H_{34}O_2$  (330.52). bp 174~175°C /0.018~0.02mmHg. **Source:** HAI REN CAO *Digenea simplex*, SHI CHUN *Ulva lactuca*. **Ref:** 6.

**3850 Clusiaphenone B**

[70219-84-0]  $C_{23}H_{26}O_4$  (366.46). **Pharm:** Antioxidant (DPPH scavenger, 10 $\mu$ mol/L, ScRt = 11%, control BHT, 10 $\mu$ mol/L, ScRt = 43%). **Source:** TIAN SHAN ZHU ZI *Garcinia dulcis* (fruit). **Ref:** 5319.

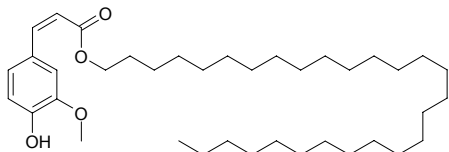
**3851 (-)-Clusin**

$C_{22}H_{26}O_7$  (402.45). **Pharm:** CYP3A4 inhibitor and CYP2D6 inhibitor (*in vitro*, CYP3A4,  $IC_{50} = 0.83\mu$ mol/L; CYP2D6,  $IC_{50} > 100\mu$ mol/L; control Ketoconazole, CYP3A4,  $IC_{50} = 0.72\mu$ mol/L; control Quinidine, CYP2D6,  $IC_{50} = 0.082\mu$ mol/L). **Source:** BI CHENG QIE *Piper cubeba* (fruit: yield = 0.0028%dw). **Ref:** 4797.

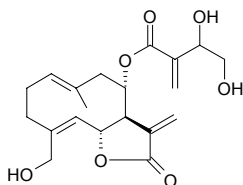


**3852 Cluytyl ferulate**

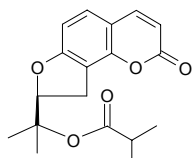
Octacosyl ferulate  $C_{38}H_{66}O_4$  (586.95). **Pharm:** Antimalarial inactive (antiplasmodial *in vitro*, *Plasmodium falciparum*, W2 strain,  $IC_{50} > 50 \mu\text{mol/L}$ , control Quinine,  $IC_{50} = (0.21 \pm 0.01) \mu\text{mol/L}$ ; D6 strain,  $IC_{50} > 50 \mu\text{mol/L}$ , Quinine,  $IC_{50} = (0.042 \pm 0.002) \mu\text{mol/L}$ ). **Source:** A BI XI NI YA CI TONG *Erythrina abyssinica* (root cortex), HOU PI SHU *Lannea grandis* [Syn. *Lannea coromandelica*]. **Ref:** 6, 5420.

**3853 Cnicin**

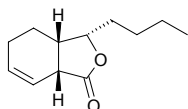
$C_{20}H_{26}O_7$  (378.43). **Pharm:** Antifungal (*Aspergillus niger*, MIC = 0.125  $\mu\text{g/mL}$ , control Miconazole, MIC = 1.5  $\mu\text{g/mL}$ ; *Aspergillus ochraceus*, MIC = 0.06  $\mu\text{g/mL}$ , Miconazole, MIC = 1.5  $\mu\text{g/mL}$ ; *Aspergillus versicolor*, MIC = 0.125  $\mu\text{g/mL}$ , Miconazole, MIC = 2  $\mu\text{g/mL}$ ; *Aspergillus flavus*, MIC = 0.5  $\mu\text{g/mL}$ , Miconazole, MIC = 0.5  $\mu\text{g/mL}$ ; *Penicillium ochrochloron*, MIC = 0.25  $\mu\text{g/mL}$ , Miconazole, MIC = 2  $\mu\text{g/mL}$ ; *Penicillium funiculosum*, MIC = 0.5  $\mu\text{g/mL}$ , Miconazole, MIC = 2  $\mu\text{g/mL}$ ; *Trichoderma viride*, MIC = 0.5  $\mu\text{g/mL}$ , Miconazole, MIC = 2  $\mu\text{g/mL}$ ; *Cladosporium cladosporioides*, MIC = 0.125  $\mu\text{g/mL}$ , Miconazole, MIC = 0.03  $\mu\text{g/mL}$ ; *Alternaria alternata*, MIC = 0.25  $\mu\text{g/mL}$ , Miconazole, MIC = 0.5  $\mu\text{g/mL}$ ). **Source:** *Centaurea thessala* ssp. *drakensis* (aerial parts), *Centaurea attica* ssp. *attica* (aerial parts). **Ref:** 5115.

**3854 Cnidiadin**

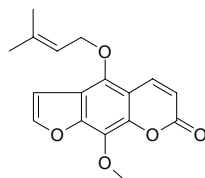
[41137-88-6]  $C_{18}H_{20}O_5$  (316.36). mp 144~145°C. **Source:** SHE CHUANG ZI *Cnidium monnieri*. **Ref:** 6.

**3855 Cnidilide**

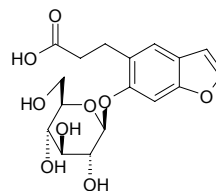
$C_{12}H_{18}O_2$  (194.28). bp 145~146°C/2.5mmHg. **Source:** DANG GUI *Angelica sinensis*, GAO BEN *Ligusticum sinense*, HAN QIN *Apium graveolens*. **Ref:** 6, 18, 19.

**3856 Cnidilin**

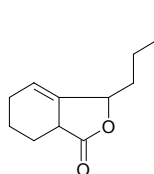
[14348-22-2]  $C_{17}H_{16}O_5$  (300.31). Yellow amorphous powder. **Pharm:** Antileishmanial (*Leishmania major* promastigote, 10  $\mu\text{mol/L}$ , survival = (74.6 $\pm$ 5.5)%, 1  $\mu\text{mol/L}$ , survival = (92.7 $\pm$ 5.2)%, control Amphotericin B, 10  $\mu\text{mol/L}$ , survival = (0.2 $\pm$ 0.04)%, 1  $\mu\text{mol/L}$ , survival = (71.9 $\pm$ 4.4)%)<sup>[3797]</sup>; antifungal inactive (silica gel TLC, *Cladosporium cucumerinum*, control Nystatin, MIA = 0.2  $\mu\text{g}$ )<sup>[3797]</sup>. **Source:** HANG BAI ZHI *Angelica taiwaniana*, *Niphogeton ternata*, *Thamnosma rhodesica* (root)<sup>[3797]</sup>. **Ref:** 2, 3797, 4156.

**3857 Cnidioside A**

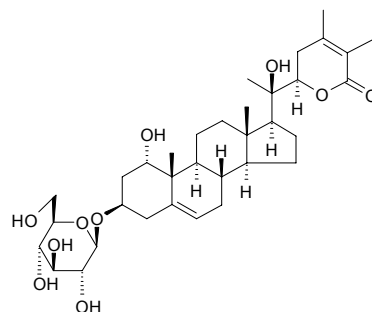
[141896-53-9]  $C_{17}H_{20}O_9$  (368.34). Amorphous powder. **Source:** CHOU CAO *Ruta graveolens* (dried aerial part), FEN CHA DANG GUI *Angelica furcijuga* (flower), SHE CHUANG ZI *Cnidium monnieri*. **Ref:** 1521, 3073, 4454.

**3858 Cnidium lactone**

$C_{12}H_{18}O_2$  (194.28). **Source:** CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*]. **Ref:** 2.

**3859 Coagulin Q**

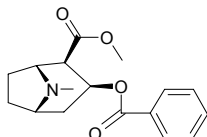
$C_{34}H_{52}O_{10}$  (620.79). **Pharm:** Neurite outgrowth activity (hmn neuroblastoma SH-SY5Y cell line, 1  $\mu\text{mol/L}$ )<sup>[4198]</sup>. **Source:** CUI MIAN SHUI QIE *Withania somnifera* (root), NING GU SHUI QIE *Withania coagulans*. **Ref:** 1521, 4198.



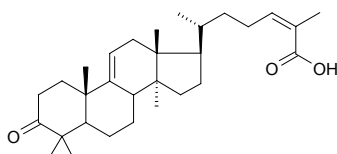
**3860 Cocaine**

Benzoyl methylecgonine [50-36-2]  $C_{17}H_{21}NO_4$  (303.36). Colorless plates, mp 98°C, bp 187~188°C (13.33Pa),  $[\alpha]_D^{20} = -16.3^\circ$  (chloroform), soluble in chloroform, ether, acetone, ethanol, acetic ester, slightly soluble in water.<sup>[5507]</sup>

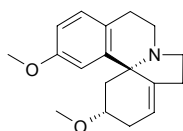
**Pharm:** Mydriatic; CNS activity (stimulates and focuses CNS). **Source:** GU KE *Erythroxylum coca*, BI LU GU KE *Erythroxylum novogranatense* (in 1858, isolated from the plant for the first time<sup>[5507]</sup>). **Ref:** 658, 5507.

**3861 Coccinic acid**

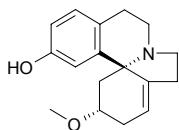
3-Oxolanosta-9(11),24-dien-26-oic acid  $C_{30}H_{46}O_3$  (454.70). **Pharm:** Antineoplastic<sup>[2523]</sup>, anti-HIV<sup>[2523]</sup>. **Source:** LENG FAN TUAN *Kadsura coccinea* [syn. *Kadsura chenensis*; *Kadsura hainanensis*]. **Ref:** 2436, 2523.

**3862 Cocculidine**

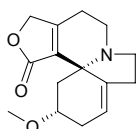
[25675-40-7]  $C_{18}H_{23}NO_2$  (285.39). mp 86~87°C. **Source:** HENG ZHOU WU YAO *Cocculus laurifolius*. **Ref:** 6.

**3863 Cocculine**

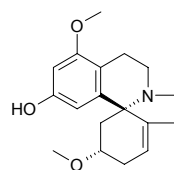
[25675-39-4]  $C_{17}H_{21}NO_2$  (271.36). mp 217~218°C. **Source:** HENG ZHOU WU YAO *Cocculus laurifolius*. **Ref:** 6.

**3864 Cocculolidine**

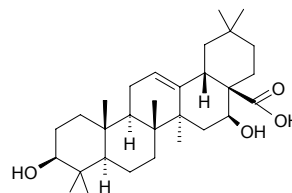
[13497-04-6]  $C_{15}H_{19}NO_3$  (261.32). mp 144~146°C. **Pharm:** Insecticidal; antihypertensive (dog). **Source:** MU FANG JI *Cocculus trilobus* [Syn. *Cocculus sarmentosus*], MEI GUO QING TENG *Cocculus carolinus*, QING TENG XIANG *Cocculus trilobus* [Syn. *Cocculus sarmentosus*]. **Ref:** 6, 658, 660.

**3865 Coccutrine**

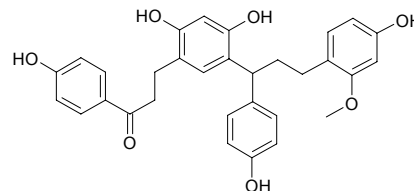
[59553-89-8]  $C_{18}H_{23}NO_3$  (301.39). Acicular crystals, mp 263~265°C,  $[\alpha]_D = +232^\circ$  **Source:** MU FANG JI *Cocculus trilobus* [Syn. *Cocculus sarmentosus*]. **Ref:** 2078.

**3866 Cochalic acid**

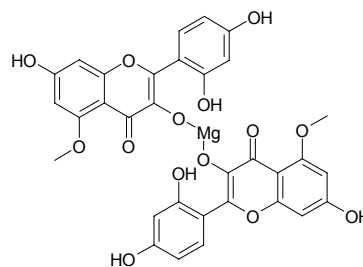
$C_{30}H_{48}O_4$  (472.71). **Source:** JIN ZHAN JU *Calendula officinalis* (flower). **Ref:** 3551.

**3867 Cochinchinenin**

$C_{31}H_{30}O_7$  (514.58). Yellow-brown amorphous powder. **Source:** JIAN YE LONG XUE SHU *Dracaena cochinchinensis*. **Ref:** 870.

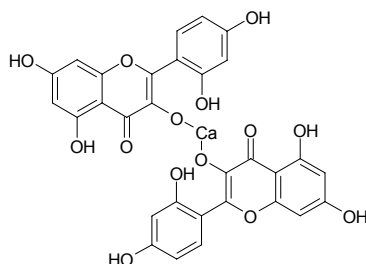
**3868 Cochinchinol A**

$C_{32}H_{22}MgO_{14}$  (654.84). Bright yellow powder. **Pharm:** Cytotoxic (Bel7402, ED<sub>50</sub> > 10µg/mL, control Camptothecin, ED<sub>50</sub> = 0.06µg/mL; BGC823, ED<sub>50</sub> > 10µg/mL, Camptothecin, ED<sub>50</sub> = 0.09µg/mL; HCT8, ED<sub>50</sub> > 10µg/mL, Camptothecin, ED<sub>50</sub> = 0.14µg/mL; A549, ED<sub>50</sub> > 10µg/mL, Camptothecin, ED<sub>50</sub> = 0.09µg/mL; MCF7, ED<sub>50</sub> > 10µg/mL, Camptothecin, ED<sub>50</sub> = 0.01µg/mL). **Source:** GOU JI *Cudrania cochinchinensis* (root). **Ref:** 5338.

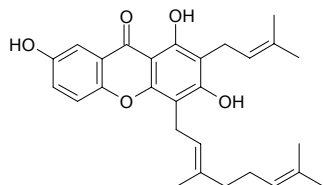


**3869 Cochinchinol B**

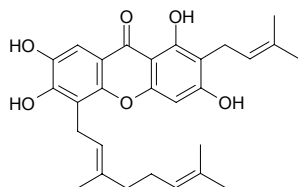
$C_{30}H_{18}CaO_{14}$  (642.55). Bright yellow powder. **Pharm:** Cytotoxic (Bel7402,  $ED_{50} > 10\mu\text{g/mL}$ , control Camptothecin,  $ED_{50} = 0.06\mu\text{g/mL}$ ; BGC823,  $ED_{50} > 10\mu\text{g/mL}$ , Camptothecin,  $ED_{50} = 0.09\mu\text{g/mL}$ ; HCT8,  $ED_{50} > 10\mu\text{g/mL}$ , Camptothecin,  $ED_{50} = 0.14\mu\text{g/mL}$ ; A549,  $ED_{50} > 10\mu\text{g/mL}$ , Camptothecin,  $ED_{50} = 0.09\mu\text{g/mL}$ ; MCF7,  $ED_{50} > 10\mu\text{g/mL}$ , Camptothecin,  $ED_{50} = 0.01\mu\text{g/mL}$ ). **Source:** GOU JI *Cudrania cochinchinensis* (root). **Ref:** 5338.

**3870 Cochinchinone A**

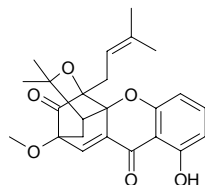
$C_{28}H_{32}O_5$  (448.56). Yellow solid, mp 119–120°C. **Pharm:** Antioxidant (DPPH scavenger,  $50\mu\text{mol/L}$ ,  $ScRt = 20.7\%$ ; control BHT,  $50\mu\text{mol/L}$ ,  $ScRt = 51.7\%$ ,  $IC_{50} = 28.9\mu\text{mol/L}$ ). **Source:** HUANG NIU MU *Cratoxylum cochinchinense* (root). **Ref:** 4423.

**3871 Cochinchinone B**

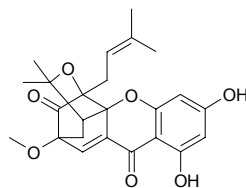
$C_{28}H_{32}O_6$  (464.56). Yellow solid, mp 221–222°C. **Pharm:** Antioxidant (DPPH scavenger,  $50\mu\text{mol/L}$ ,  $ScRt = 79.3\%$ ,  $IC_{50} = 9.4\mu\text{mol/L}$ ; control BHT,  $50\mu\text{mol/L}$ ,  $ScRt = 51.7\%$ ,  $IC_{50} = 28.9\mu\text{mol/L}$ ). **Source:** HUANG NIU MU *Cratoxylum cochinchinense* (root). **Ref:** 4423.

**3872 Cochinchinone C**

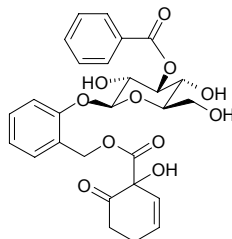
$C_{24}H_{26}O_6$  (410.47). Yellow solid, mp 147–148°C,  $[\alpha]_D^{29} = +50^\circ$  ( $c = 0.089$ ,  $CHCl_3$ ). **Pharm:** Antioxidant inactive (DPPH scavenger,  $50\mu\text{mol/L}$ ,  $ScRt = 1.7\%$ ; control BHT,  $50\mu\text{mol/L}$ ,  $ScRt = 51.7\%$ ,  $IC_{50} = 28.9\mu\text{mol/L}$ ). **Source:** HUANG NIU MU *Cratoxylum cochinchinense* (root). **Ref:** 4423.

**3873 Cochinchinone D**

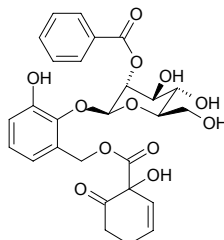
$C_{24}H_{26}O_7$  (426.47). Yellow solid, mp 218–219°C,  $[\alpha]_D^{29} = -58^\circ$  ( $c = 0.069$ ,  $CHCl_3$ ). **Pharm:** Antioxidant inactive (DPPH scavenger,  $50\mu\text{mol/L}$ ,  $ScRt = 5.2\%$ ; control BHT,  $50\mu\text{mol/L}$ ,  $ScRt = 51.7\%$ ,  $IC_{50} = 28.9\mu\text{mol/L}$ ). **Source:** HUANG NIU MU *Cratoxylum cochinchinense* (root). **Ref:** 4423.

**3874 Cochinchiside A**

$C_{27}H_{28}O_{11}$  (528.52). Pale yellow amorphous mass. **Source:** TIAN LIAO MU *Homalium cochinchinensis* (root cortex: yield = 0.009%). **Ref:** 4742.

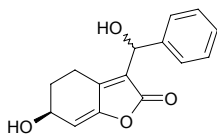
**3875 Cochinchiside B**

$C_{27}H_{28}O_{12}$  (544.52). Colorless amorphous mass. **Pharm:** Antiviral (HSV-1,  $EC_{50} = 76\mu\text{mol/L}$ ; HSV-2,  $EC_{50} = 76\mu\text{mol/L}$ ; HIV-1,  $EC_{50} > 18\mu\text{mol/L}$ ; control Acyclovir, HSV-1,  $EC_{50} = 1.1\mu\text{mol/L}$ ; HSV-2,  $EC_{50} = 1\mu\text{mol/L}$ ; control Azidothymidine, HIV-1,  $EC_{50} = 0.02\mu\text{mol/L}$ ). **Source:** TIAN LIAO MU *Homalium cochinchinensis* (leaf: yield = 0.0919%). **Ref:** 4742.

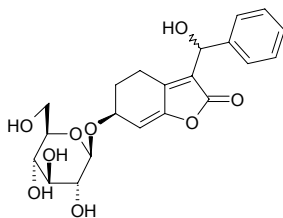


**3876 Cochinelide**

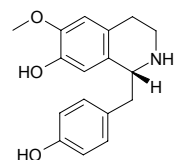
$C_{15}H_{14}O_4$  (258.28). Source: TIAN LIAO MU *Homalium cochinchinensis* (root cortex: yield = 0.038%). Ref: 4742.

**3877 Cochinelide  $\beta$ -glucopyranoside**

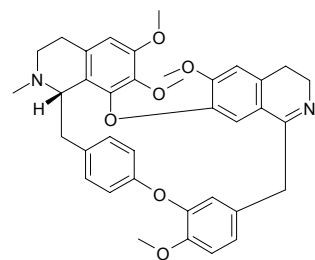
$C_{21}H_{24}O_9$  (420.42). Source: TIAN LIAO MU *Homalium cochinchinensis* (root cortex: yield = 0.327%). Ref: 4742.

**3878 D-Coclaurine**

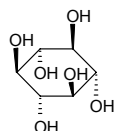
(+)-Coclaurine [486-39-5]  $C_{17}H_{19}NO_3$  (285.35). Foam form, mp 220.0–222.5°C (acetone),  $[\alpha]_D^{25} = +45.7^\circ$  ( $c = 0.44$ , ethanol). Pharm: Neuromuscular blocker (frog, MIC = 10  $\mu$ g/mL); sedative. Source: HENG ZHOU WU YAO *Cocculus laurifolius*, YIN BU HUAN *Cyclea barbata*. Ref: 6, 900.

**3879 Coclobine**

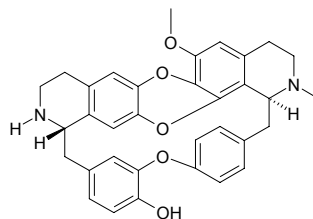
[24306-65-8]  $C_{37}H_{38}N_2O_6$  (606.73). Source: MU FANG JI *Cocculus trilobus* [Syn. *Cocculus sarmentosus*]. Ref: 6, 660.

**3880 Cocositol**

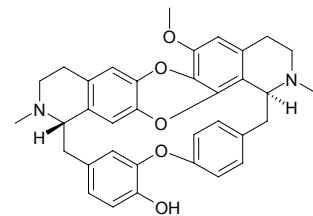
[488-59-5]  $C_6H_{12}O_6$  (180.16). mp 353°C (dec). Source: YE ZI PI *Cocos nucifera*. Ref: 6.

**3881 Cocsoline**

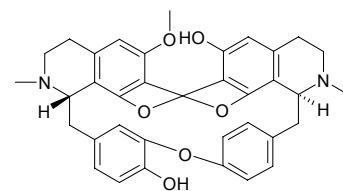
$C_{34}H_{32}N_2O_5$  (548.64). White amorphous powder,  $[\alpha]_D^{25} = +205^\circ$  ( $c = 0.15$ , MeOH). Pharm: AChE inhibitor (*in vitro*,  $IC_{50} = (47.5 \pm 1.5) \mu$ mol/L, control Galanthamine,  $IC_{50} = (0.5 \pm 0.001) \mu$ mol/L). Source: CHUI MU FANG JI *Cocculus pendulus*. Ref: 4051.

**3882 Cocsuline**

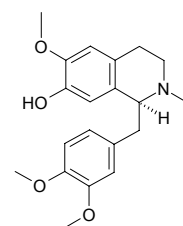
$C_{35}H_{34}N_2O_5$  (562.67). Yellow amorphous powder,  $[\alpha]_D^{25} = +275^\circ$  ( $c = 0.30$ , MeOH). Pharm: AChE inhibitor (*in vitro*,  $IC_{50} = (100.0 \pm 1.2) \mu$ mol/L, control Galanthamine,  $IC_{50} = (0.5 \pm 0.001) \mu$ mol/L). Source: CHUI MU FANG JI *Cocculus pendulus*. Ref: 4051.

**3883 Cocsulinine**

[54370-90-0]  $C_{35}H_{34}N_2O_6$  (578.67). mp 260–263°C (chloroform–methanol),  $[\alpha]_D^{25} = +312^\circ$  ( $c = 0.5$ ). Pharm: Antineoplastic (KB, IC = 4.7  $\mu$ g/mL). Source: CHUI MU FANG JI *Cocculus pendulus*. Ref: 661.

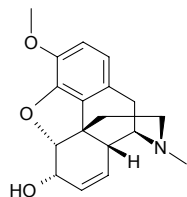
**3884 Codamine**

[21040-59-5]  $C_{20}H_{25}NO_4$  (343.43). mp (+) 126–127°C, (–) 127–128°C, ( $\pm$ ) 106–108°C. Source: YA PIAN *Papaver somniferum*. Ref: 6.

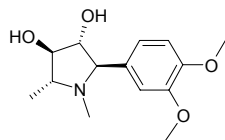


**3885 Codeine**

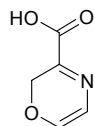
Methylmorphine;Paveral; Codicept; Morphine monomethyl ether [76-57-3]  $C_{18}H_{21}NO_3$  (299.37). mp 155°C; easily soluble in ethanol, acetone, chloroform<sup>[5507]</sup>. **Pharm:** Analgesic; antitussive (strongly inhibits medullary cough center). **Source:** BAI YAO ZI *Stephania cepharantha*, DA HONG YING SU *Papaver bracteatum*, YA PIAN *Papaver somniferum*, YING SU *Papaver somniferum* (seed: content scope = 0.7%~2.5%; in 1832, isolated from the plant for the first time)<sup>[5507]</sup>, YING SU KE *Papaver somniferum* (dried capsule: content = 0.070%(phosphate)<sup>[5508]</sup>). **Ref:** 6, 658, 5507, 5508.

**3886 Codonopsine**

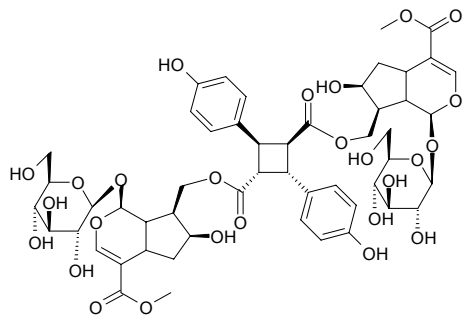
[26989-20-2]  $C_{14}H_{21}NO_4$  (267.33). **Pharm:** Antihypertensive (cat, iv, >20mg/kg); LD<sub>50</sub> (mus) = 666~778mg/kg. **Source:** XIN JIANG DANG SHEN *Codonopsis clematidea*. **Ref:** 658.

**3887 Codopiloic acid**

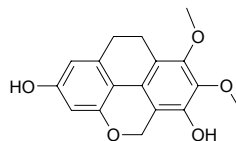
$C_5H_5NO_3$  (127.10). **Source:** DANG SHEN *Codonopsis pilosula*, CHUAN DANG SHEN *Codonopsis tangshen*. **Ref:** 2, 660.

**3888 Coelobillardin**

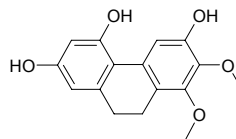
$C_{52}H_{64}O_{26}$  (1105.07). White amorphous solid,  $[\alpha]_D = -55.7^\circ$  ( $c = 1$ , MeOH). **Source:** XIN SU GE LAN XUE GUO MU *Coelospermum billardieri*. **Ref:** 1961.

**3889 Coelogin**

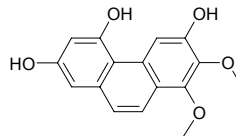
[82358-34-7]  $C_{17}H_{16}O_5$  (300.31). **Pharm:** Antispasmodic. **Source:** BEI MU LAN *Coelogyne ovalis*, MAO CHUN BEI MU LAN *Coelogyne cristata*. **Ref:** 658.

**3890 Coeloginanthridin**

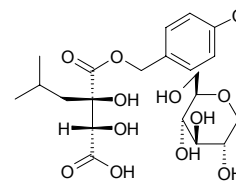
3,5,7-Trihydroxy-1,2-dimethoxy-9,10-dihydrophenanthrene  $C_{16}H_{16}O_5$  (288.30). **Source:** MAO CHUN BEI MU LAN *Coelogyne cristata* (whole herb). **Ref:** 5198.

**3891 Coeloginanthrin**

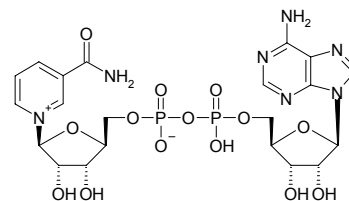
3,5,7-Trihydroxy-1,2-dimethoxyphenanthrene  $C_{16}H_{14}O_5$  (286.29). **Source:** MAO CHUN BEI MU LAN *Coelogyne cristata* (whole herb). **Ref:** 5198.

**3892 Coelovirin A**

$C_{21}H_{30}O_{12}$  (474.47). White amorphous powder,  $[\alpha]_D^{25} = -27.8^\circ$  ( $c = 0.115$ , MeOH). **Source:** AO SHE LAN *Coeloglossum viride* [Syn. *Coeloglossum viride* var. *bracteatum*]. **Ref:** 2225.

**3893 Coenzyme I**

[53-84-9]  $C_{21}H_{27}N_7O_{14}P_2$  (663.44). **Source:** YUAN CAN ZI *Bombyx mori*. **Ref:** 6.

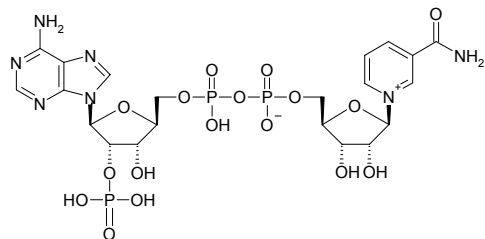




**3894 Coenzyme II**

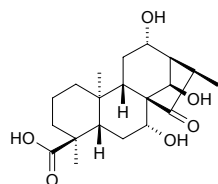
[53-59-8] C<sub>21</sub>H<sub>27</sub>N<sub>7</sub>O<sub>17</sub>P<sub>3</sub> (742.41). Source: YUAN CAN ZI *Bombyx mori*.

Ref: 6.

**3895 Coetsanoic acid**

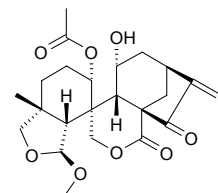
C<sub>20</sub>H<sub>30</sub>O<sub>6</sub> (366.46). mp > 300°C. Source: XI ZHUI XIANG CHA CAI

*Rabdosia coetsa*. Ref: 4067.

**3896 Coetsin A**

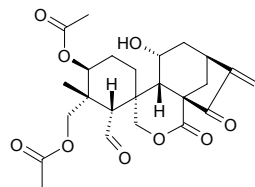
C<sub>23</sub>H<sub>30</sub>O<sub>8</sub> (434.49). mp 304~306°C, [α]<sub>D</sub><sup>10</sup> = -125° (c = 0.2, C<sub>5</sub>H<sub>5</sub>N). Source:

XI ZHUI XIANG CHA CAI *Rabdosia coetsa*. Ref: 4067.

**3897 Coetsin B**

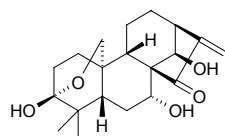
C<sub>24</sub>H<sub>30</sub>O<sub>9</sub> (462.50). mp 165~166°C, [α]<sub>D</sub><sup>17</sup> = -129° (c = 0.2, CHCl<sub>3</sub>). Source:

XI ZHUI XIANG CHA CAI *Rabdosia coetsa*. Ref: 4067.

**3898 Coetsoidin A(Huang)**

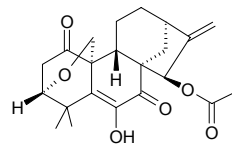
C<sub>20</sub>H<sub>28</sub>O<sub>5</sub> (348.44). mp 230~232°C, [α]<sub>D</sub><sup>21</sup> = -150.1° (c = 0.543, MeOH).

Source: JIA XI ZHUI XIANG CHA CAI *Rabdosia coetsoides*. Ref: 4067.

**3899 Coetsoidin A(Wang)**

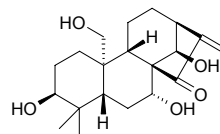
C<sub>22</sub>H<sub>26</sub>O<sub>6</sub> (386.45). Colorless columnar crystals, mp 180~181°C. Source: JIA

XI ZHUI XIANG CHA CAI *Rabdosia coetsoides*. Ref: 132, 4067.

**3900 Coetsoidin B**

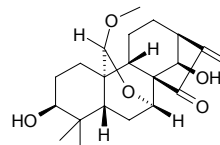
C<sub>20</sub>H<sub>30</sub>O<sub>5</sub> (350.46). mp 147~149°C, [α]<sub>D</sub><sup>21</sup> = -104.2° (c = 0.523, MeOH).

Source: JIA XI ZHUI XIANG CHA CAI *Rabdosia coetsoides*. Ref: 4067.

**3901 Coetsoidin C**

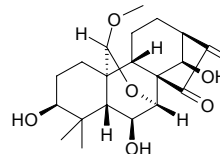
C<sub>21</sub>H<sub>30</sub>O<sub>5</sub> (362.47). mp 198~201°C, [α]<sub>D</sub><sup>24</sup> = -35.5° (c = 0.507, MeOH).

Source: JIA XI ZHUI XIANG CHA CAI *Rabdosia coetsoides*. Ref: 4067.

**3902 Coetsoidin D**

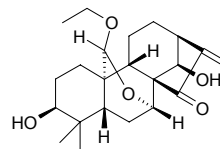
C<sub>21</sub>H<sub>30</sub>O<sub>6</sub> (378.47). mp 153~155°C, [α]<sub>D</sub><sup>24</sup> = -27.3° (c = 0.513, MeOH).

Source: JIA XI ZHUI XIANG CHA CAI *Rabdosia coetsoides*. Ref: 4067.

**3903 Coetsoidin E**

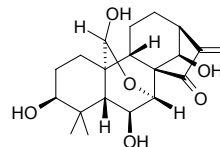
C<sub>22</sub>H<sub>32</sub>O<sub>5</sub> (376.50). mp 166~168°C, [α]<sub>D</sub><sup>24</sup> = -36.8° (c = 0.502, MeOH).

Source: JIA XI ZHUI XIANG CHA CAI *Rabdosia coetsoides*. Ref: 4067.

**3904 Coetsoidin F**

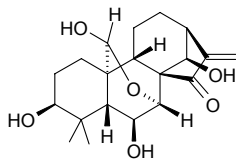
C<sub>20</sub>H<sub>28</sub>O<sub>6</sub> (364.44). Source: JIA XI ZHUI XIANG CHA CAI *Rabdosia*

*coetsoides*. Ref: 4067.

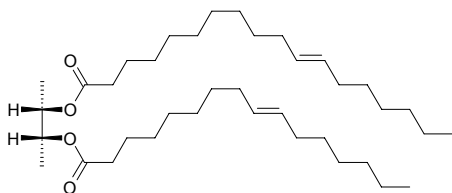


**3905 Coetsoidin G**

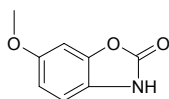
$C_{20}H_{28}O_6$  (364.44). Source: JIA XI ZHUI XIANG CHA CAI *Rabdosia coetsoides*. Ref: 4067.

**3906 Coixenolide**

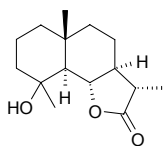
[29066-43-1]  $C_{38}H_{70}O_4$  (590.98). Pharm: Cytotoxic (mus, EAC); immunoenhancer (erythrocyte of mus with cancer, reduces activity of  $Na^+, K^+$ -ATPase in erythrocyte membrane). Source: YI YI REN *Coix lacryma-jobi* var. *ma-yuen*. Ref: 5, 6, 5501.

**3907 Coixol**

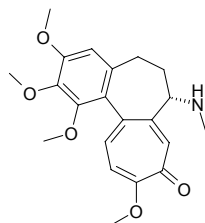
[53-91-2]  $C_8H_7NO_3$  (165.15). mp 151~153°C. Pharm: Antihypertensive (rbt, iv, in short time); analgesic; antipyretic; hypoglycemic (rbt, sc); inhibits intestinal movement (rbt, *in vitro*); CNS depressant (weak); inhibits heart (toad, *in vitro*); inhibits reaction of actomyosin-adenosine triphosphate system; inhibits skeletal muscles; low toxin. Source: BAI MAO GEN<sup>(1)</sup> *Imperata cylindrica* var. *major*, LU GEN *Phragmites communis*, YE GAN CAO *Scoparia dulcis*, YI MI *Coix lacryma-jobi*, YI YI REN *Coix lacryma-jobi* var. *ma-yuen*. Ref: 4, 6, 658, 5501.

**3908 Colartin**

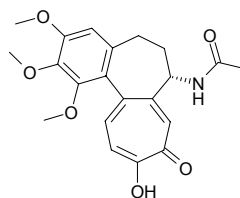
$C_{15}H_{24}O_3$  (252.36). Pharm: Cytotoxic (*in vitro*, HepG<sub>2</sub>, CD<sub>50</sub> > 100µg/mL; HeLa, CD<sub>50</sub> > 100µg/mL; OVCAR-3, CD<sub>50</sub> > 100µg/mL; control Cisplatin, HepG<sub>2</sub>, CD<sub>50</sub> = 2.8µg/mL; HeLa, CD<sub>50</sub> = 5.2µg/mL; OVCAR-3, CD<sub>50</sub> = 3µg/mL; without significant antibacterial effect)<sup>[4720]</sup>. Source: MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*] (root: yield = 0.0013%dw). Ref: 4720.

**3909 Colchamine**

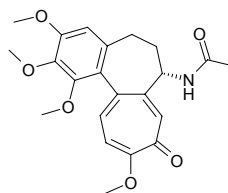
Demecolcine [477-30-5]  $C_{21}H_{25}NO_5$  (371.44). Pharm: Antiatherosclerotic; antineoplastic; antimitotic (inhibits granular cells selectively); anti-fertility agent; antiviral (Influenza virus); toxin. Source: QIU SHUI XIAN *Colchicum autumnale*. Ref: 658.

**3910 Colchicine**

[477-27-0]  $C_{21}H_{23}NO_6$  (385.42). Pharm: Antigout; LD<sub>50</sub> (mus, ip) = 84mg/kg. Source: QIU SHUI XIAN *Colchicum autumnale*. Ref: 658.

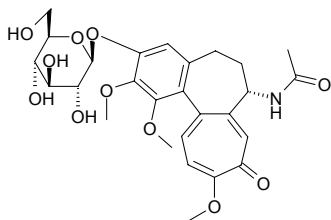
**3911 Colchicine**

[64-86-8]  $C_{22}H_{25}NO_6$  (399.45). mp 155~157°C,  $[\alpha]_D^{17} = -429^\circ$  ( $c = 1.72$ , water),  $[\alpha]_D^{17} = -121^\circ$  ( $c = 0.9$ , chloroform), easily soluble in cold water, ethanol, chloroform, slightly soluble in hot water, ether, very slightly soluble in benzene, insoluble in absolute ether, petroleum ether.<sup>[5507]</sup> Pharm: Anti-inflammatory (modulator of cytokine network: inhibits induction of VCAM-1 in both TNF- $\alpha$ - and IL-1 $\beta$ -stimulated HUVECs)<sup>[4416]</sup>; cytotoxic (*in vitro*, HL-60, IC<sub>50</sub> = 1.6µg/mL; Bel7402, IC<sub>50</sub> = 0.4µg/mL; HeLa, IC<sub>50</sub> = 0.1µg/mL; U937, IC<sub>50</sub> = 0.1µg/mL)<sup>[4746]</sup>; antineoplastic; estrogenic activity; toxin (inhibits bone marrow); phyto-growth inhibitor (*Raphanus sativus* seeds, IC<sub>50</sub> = 0.40µg/mL)<sup>[3949]</sup>, LD (hmn) = 10mg. Source: BAI HE *Lilium brownii* var. *viridulum* [Syn. *Lilium brownii* var. *colchesteri*], CAO BEI MU *Iphigenia indica*, GUANG CI GU *Tulipa edulis*, JIA DU XING CAI *Lepidium sativum*, JIA LAN *Gloriosa superba*, LI LU *Veratrum nigrum*, QIU SHUI XIAN *Colchicum autumnale* (corm: content scope = 0.3%~0.5%)<sup>[5507]</sup>, SHAN CI GU *Asarum sagittarioides*<sup>[5507]</sup>, WAN QU TIAN NAN XING *Arisaema curvatum*, XIAO XUAN CAO GEN *Hemerocallis minor*. Ref: 4, 5, 6, 658, 660, 3949, 4416, 4746, 5507.

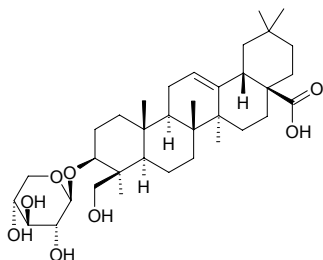


**3912 Colchicoside**

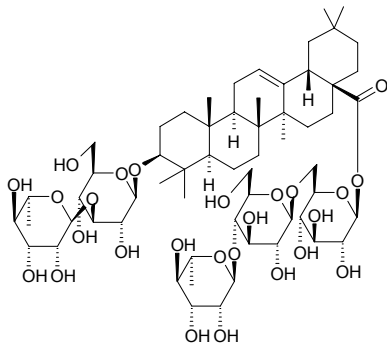
[477-29-2]  $C_{27}H_{33}NO_{11}$  (547.56). Long square prismatic or lamellar crystals (ethanol), mp 216–218°C, 192–195°C,  $[\alpha]_D^{15} = -360^\circ$  (water). Pharm: Low toxin; similar action with colchicine. Source: QIU SHUI XIAN *Colchicum autumnale*. Ref: 661.

**3913 Colchiside A**

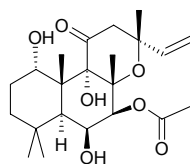
3-*O*-( $\beta$ -*D*-Xylopyranosyl)-hederagenin  $C_{38}H_{56}O_8$  (604.83). White powder,  $[\alpha]_D^{25} = +12.6^\circ$  (MeOH). Source: QIU SHUI XIAN CHANG CHUN TENG *Hedera colchica* (berry). Ref: 3538.

**3914 Colchiside B**

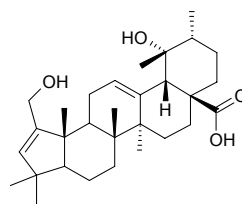
3-*O*-[ $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-glucuronopyranosyl]-28-*O*-[ $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl]-oleanolate  $C_{60}H_{98}O_{26}$  (1235.43). White powder, mp 180°C,  $[\alpha]_D^{25} = +15^\circ$  (MeOH). Source: QIU SHUI XIAN CHANG CHUN TENG *Hedera colchica* (berry). Ref: 3538.

**3915 Coleonol**

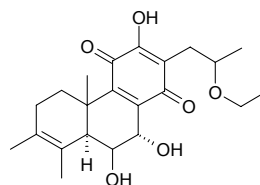
Forskolin [66575-29-9]  $C_{22}H_{34}O_7$  (410.51). mp 230–232°C,  $[\alpha]_D^{25} = -26.19^\circ$  ( $c = 1.68$ , chloroform). Pharm: Antispasmodic (gpg, gastrointestinal tract, nonspecific); CNS depressant (high dose); antihypertensive (cat, iv, 0.5mg/kg, the action lasts 80min). Source: MAO HOU QIAO RUI HUA *Coleus forskahlii*. Ref: 658, 661.

**3916 Coleonic acid**

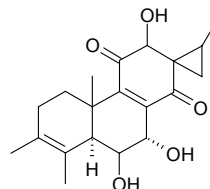
[128397-09-1]  $C_{30}H_{46}O_4$  (470.70). Source: SAN YE SHU WEI CAO *Salvia trijuga*. Ref: 570.

**3917 Coleon S**

$C_{22}H_{30}O_6$  (390.48). Yellow needles (petrol ether–acetone), mp 117–119°C,  $[\alpha]_D^{25} = +58.75^\circ$  (MeOH). Source: MAO HOU QIAO RUI HUA *Coleus forskahlii*. Ref: 2196.

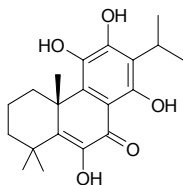
**3918 Coleon T**

$C_{20}H_{26}O_5$  (346.43). White needles (petrol ether–acetone), mp 171–173°C,  $[\alpha]_D^{25} = +225.56^\circ$  (MeOH). Source: MAO HOU QIAO RUI HUA *Coleus forskahlii*. Ref: 2196.

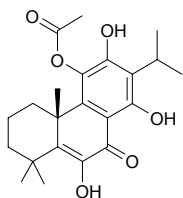


**3919 Coleon U**

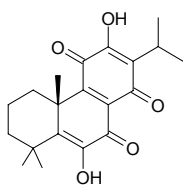
$C_{20}H_{26}O_5$  (346.43). Source: HUANG QIAO RUI HUA *Coleus xanthanthus* (aerial parts: yield = 0.00070%dw). Ref: 4625.

**3920 Coleon U 11-acetate**

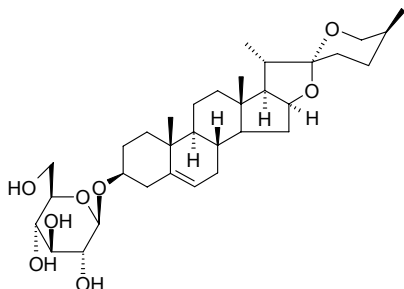
11-Acetoxy-6,12,14-trihydroxyabieta-5,8,11,13-tetraen-7-one  $C_{22}H_{28}O_6$  (388.46). Yellow cubic crystals (hexane– $Me_2CO$ ), mp 190.5–192°C,  $[\alpha]_D^{13.5} = +20.5^\circ$  ( $c = 0.88$ ,  $CHCl_3$ ). Pharm: Cytotoxic (*in vitro*, K562,  $IC_{50} = 2.2\mu g/mL$ ; control Mitoxantrone,  $IC_{50} = 2\mu g/mL$ ). Source: HUANG QIAO RUI HUA *Coleus xanthanthus* (aerial parts: yield = 0.031%dw). Ref: 4625.

**3921 Coleon U quinone**

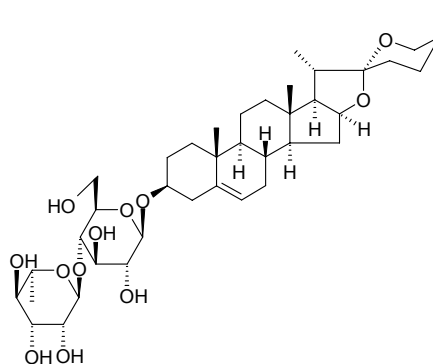
$C_{20}H_{24}O_5$  (344.41). Pharm: Cytotoxic (*in vitro*, K562,  $IC_{50} = 3\mu g/mL$ ; control Mitoxantrone,  $IC_{50} = 2\mu g/mL$ ). Source: HUANG QIAO RUI HUA *Coleus xanthanthus* (aerial parts: yield = 0.00058%dw). Ref: 4625.

**3922 Collettinside I**

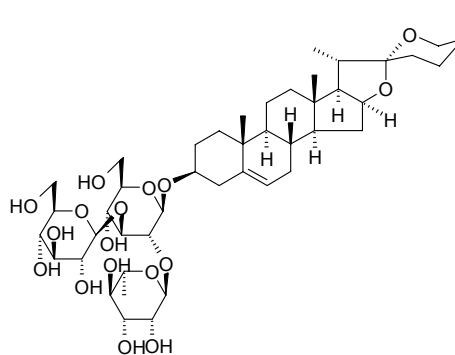
[14144-06-0]  $C_{33}H_{52}O_8$  (576.78). Source: CHA RUI SHU YU *Dioscorea collettii*. Ref: 10.

**3923 Collettinside II**

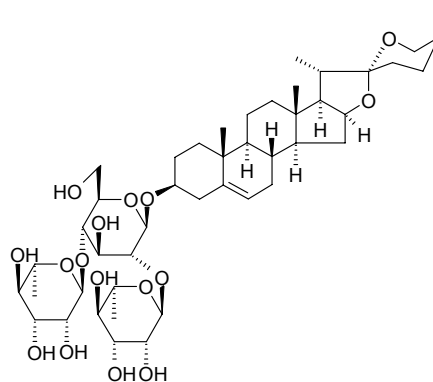
[88668-52-4]  $C_{39}H_{62}O_{12}$  (722.92). White acicular crystals, mp 214–216°C,  $[\alpha]_D^{20} = -97.9^\circ$  ( $c = 0.48$ , pyridine). Pharm: Anti-inflammatory; hypoglycemic. Source: CHA RUI SHU YU *Dioscorea collettii*. Ref: 10, 907.

**3924 Collettinside IV**

Zingiberenin B [88668-53-5]  $C_{45}H_{72}O_{17}$  (885.07). White powder crystals, mp 284–285°C,  $[\alpha]_D^{20} = -91.5^\circ$  ( $c = 0.40$ , pyridine). Pharm: Anti-inflammatory; hypoglycemic. Source: CHA RUI SHU YU *Dioscorea collettii*, DUN YE SHU YU *Dioscorea zingiberensis*. Ref: 10, 907, 1204.

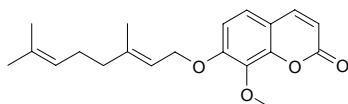
**3925 Collettinside III**

$C_{45}H_{72}O_{16}$  (869.07). Pharm: Antifungal (*Candida albicans*,  $1\mu g/mL$ ). Source: CHA RUI SHU YU *Dioscorea collettii*, LU GEN *Phragmites communis*. Ref: 10, 2165.

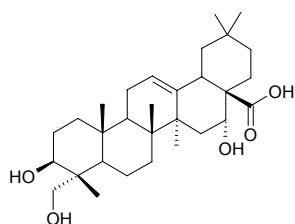


**3926 Collinin**

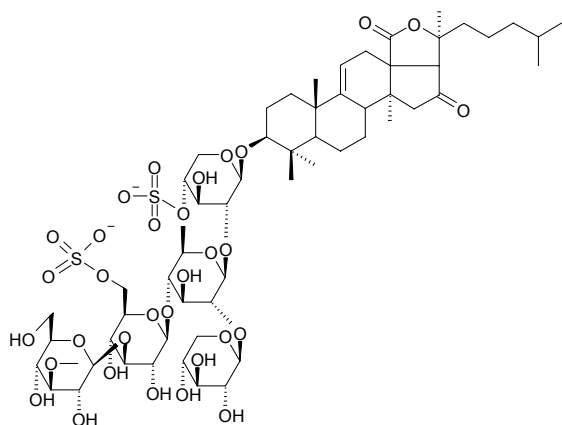
7-Geranyloxy-8-methoxycoumarin [34465-83-3]  $C_{20}H_{24}O_4$  (328.41). mp 67–68°C, 66.5–67.0°C. **Pharm:** Platelet aggregation inhibitor (rbt, *in vitro*, platelet aggregation caused by arachidonic acid, collagen, and PAF, 50µg/mL or 100µg/mL InRt = 100%). **Source:** QING JIAO *Zanthoxylum schinifolium*, SHAN QIU JU PAN MU *Flindersia collina*. **Ref:** 1098, 1521.

**3927 Collinsogenin**

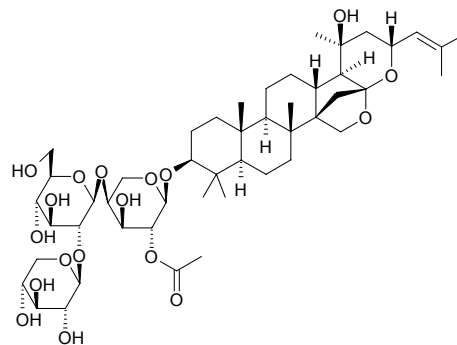
[52936-64-8]  $C_{30}H_{48}O_5$  (488.71). White powder (acetone), mp 312–315°C. **Source:** ER RUI ZI SU *Collinsonia Canadensis*, XIA CAO *Gypsophila oldhamiana* (root). **Ref:** 1521, 4803.

**3928 Colochiroside A**

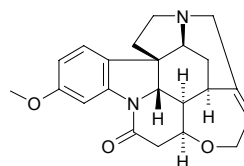
$C_{59}H_{92}O_{32}S_2$  (1377.50). White amorphous powder, mp 218–220°C,  $[\alpha]_D^{23} = -10.5^\circ$  ( $c = 0.5$ , pyridine). **Source:** KE YI YI SHOU SHEN *Colochirus anceps*. **Ref:** 4890.

**3929 Colubrin**

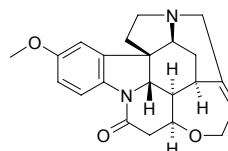
$C_{48}H_{76}O_{18}$  (941.13). **Pharm:** Sedative (mus). **Source:** SHE TENG *Colubrina asiatica*. **Ref:** 658.

**3930 α-Colubrine**

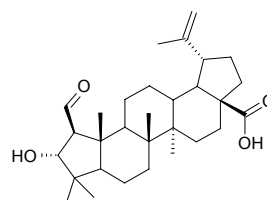
[509-44-4]  $C_{22}H_{24}N_2O_3$  (364.45). **Source:** MA QIAN ZI *Strychnos nux-vomica*. **Ref:** 2.

**3931 β-Colubrine**

[509-36-4]  $C_{22}H_{24}N_2O_3$  (364.45). **Source:** MA QIAN ZI *Strychnos nux-vomica*. **Ref:** 2, 542.

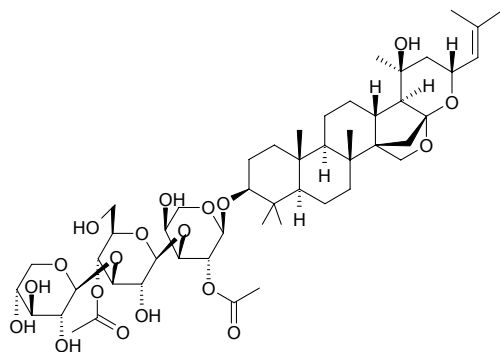
**3932 Colubrinic acid**

$C_{30}H_{46}O_4$  (470.70). White needles (MeOH), mp 262–264°C,  $[\alpha]_D^{18} = -17.0^\circ$  ( $c = 0.5$ , pyridine). **Pharm:** Cytotoxic inactive (K562,  $ED_{50} > 20\mu\text{mol/L}$ , control Adriamycin,  $ED_{50} = (0.09 \pm 0.03)\mu\text{mol/L}$ ; B-16 (F-10),  $ED_{50} > 20\mu\text{mol/L}$ , Adriamycin,  $ED_{50} = (0.06 \pm 0.10)\mu\text{mol/L}$ ; SK-MEL-2,  $ED_{50} > 20\mu\text{mol/L}$ , Adriamycin,  $ED_{50} = (0.09 \pm 0.3)\mu\text{mol/L}$ ; PC3,  $ED_{50} > 20\mu\text{mol/L}$ , Adriamycin,  $ED_{50} = (0.83 \pm 0.18)\mu\text{mol/L}$ ; LOX-IMVI,  $ED_{50} > 20\mu\text{mol/L}$ , Adriamycin,  $ED_{50} = (0.38 \pm 0.33)\mu\text{mol/L}$ ; A549,  $ED_{50} > 20\mu\text{mol/L}$ , Adriamycin,  $ED_{50} = (0.67 \pm 0.21)\mu\text{mol/L}$ ). **Source:** DA ZAO *Ziziphus jujuba*. **Ref:** 5479.

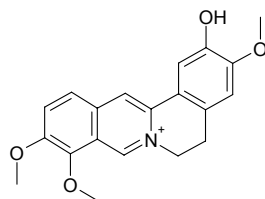


**3933 Colubrinoside**

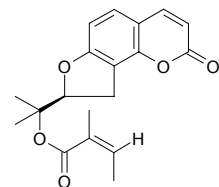
$C_{50}H_{78}O_{19}$  (983.17). **Pharm:** Sedative (mus). **Source:** SHE TENG *Colubrina asiatica*. **Ref:** 658.

**3934 Columbamine**

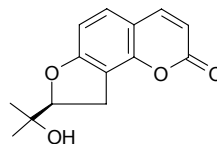
[3621-36-1]  $C_{20}H_{20}NO_4^+$  (338.39). **Pharm:** Uterine stimulant. **Source:** HUA NAN GONG LAO MU *Mahonia japonica*, HUA NAN GONG LAO YE *Mahonia japonica*, HUANG LIAN *Coptis chinensis*, JIN GUO LAN *Tinospora capillipes*, MA WEI LIAN *Thalictrum foliolosum*, RI BEN XIAO BO *Berberis thunbergii*, XIAO BO *Berberis amurensis*, YAN HU SUO *Corydalis yanhusuo* [Syn. *Corydalis turtschaninovii* f. *Yanhusuo*] (rhizome: mean content of 4 origins = 0.026%<sup>[5508]</sup>). **Ref:** 2, 658, 660, 5501, 5508.

**3935 Columbianadin**

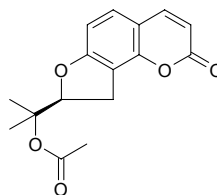
[5058-13-9]  $C_{19}H_{20}O_5$  (328.37). **Pharm:** Platelet aggregation inhibitor (rat, *in vitro*, due to ADP, final concentration 1mg/mL, InRt = (24.5±11.3)%); DNA topoisomerase II inhibitor (EC < 10μmol/L, ID<sub>50</sub> < 10μmol/L); calcium antagonist (rat hypophysial GH<sub>3</sub> cell, inhibits calcium absorption induced by depolarization with intension not lower than verapamil); anti-inflammatory (10mg/kg); analgesic (10mg/kg); inhibits release of galactin (rat hypophysial GH<sub>3</sub> cell). **Source:** DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*], SHE CHUANG ZI *Cnidium monnieri* (ripe seed: mean content of 6 origins = 0.118%<sup>[5508]</sup>). **Ref:** 2, 344, 1454, 1589, 1591, 1592, 1593, 5508.

**3936 Columbianetin**

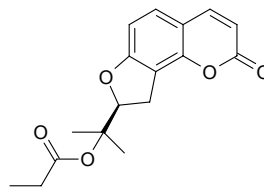
Dihydrooroselol [3804-70-4]  $C_{14}H_{14}O_4$  (246.27). mp 164–166°C. **Pharm:** Platelet aggregation inhibitor (rat, *in vitro*, due to ADP, final concentration 1mg/mL, InRt = (42.2±11.3)%); antifungal (pathogenic bacteria of celery); cytotoxic (P<sub>388</sub>). **Source:** DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*] (root: content scope of 10 origins = 0.018%–0.168%, mean content = 0.094%<sup>[5508]</sup>), KUAN YE QIANG HUO *Notopterygium forbesii* [Syn. *Notopterygium franchetii*], QIANG HUO *Notopterygium incisum*, RI BEN HUANG BAI *Phellodendron japonicum* (leaf), SHE CHUANG ZI *Cnidium monnieri*. **Ref:** 2, 6, 500, 660, 1589, 1594, 1595, 4502, 5508.

**3937 Columbianetin acetate**

*O*-Acetyl columbianetin [23180-65-6]  $C_{16}H_{16}O_5$  (288.30). mp 127.5–128.5°C. **Pharm:** Platelet aggregation inhibitor (rat, *in vitro*, due to ADP, final concentration 1mg/mL, InRt = (46.6±2.2)%); anti-inflammatory (10mg/kg); analgesic (10mg/kg); EBV-EA inhibitor (TPA-induced, IC<sub>50</sub> = 504 Mol ratio/32 pmol TPA, control β-Carotene, IC<sub>50</sub> = 400 Mol ratio/32 pmol TPA)<sup>[5255]</sup>. **Source:** DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*] (root: content scope of 10 origins = 0.038%–0.183%, mean content = 0.121%<sup>[5508]</sup>), SHE CHUANG ZI *Cnidium monnieri* (ripe seed: mean content of 6 origins = 0.415%<sup>[5508]</sup>), YUAN DONG JIU LI XIANG *Murraya siamensis* (leaf). **Ref:** 2, 6, 1589, 1592, 5255, 5508.

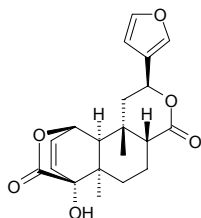
**3938 Columbianetin propionate**

$C_{17}H_{18}O_5$  (302.33). Colorless needles. **Source:** DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*]. **Ref:** 8.

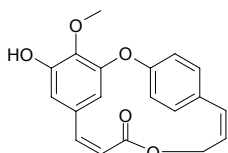


**3939 Columbin**

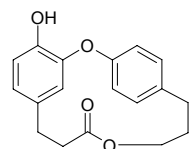
Tinosporin [546-97-4]  $C_{20}H_{22}O_6$  (358.39). Acicular crystals (methanol), mp 192–195°C (dec),  $[\alpha]_D = +52.5^\circ$  (pyridine). **Pharm:** Antifungal; hemolytic (rat red cells). **Source:** BAI MAO TENG *Solanum lyratum*, JIN GUO LAN *Tinospora capillipes*, MIAN GEN TENG *Calystegia hederacea*, QIAN NIAN BU LAN XIN *Solanum dulcamara*, QING NIU DAN *Tinospora sagittata*. **Ref:** 6, 661.

**3940 Combretastatin D<sub>3</sub>**

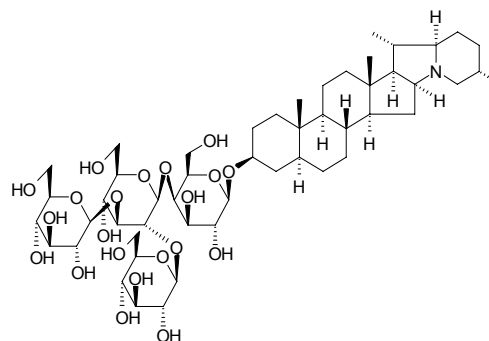
$C_{19}H_{16}O_5$  (324.34). Colorless needles, mp 212.6–213.1°C. **Pharm:** Antitubercular (MIC = 100.0  $\mu\text{g}/\text{mL}$ , control Isoniazide, MIC = 0.040–0.090  $\mu\text{g}/\text{mL}$ , control Kanamycin sulfate, MIC = 2.0–5.0  $\mu\text{g}/\text{mL}$ ); antiplasmodial ( $IC_{50} > 20 \mu\text{g}/\text{mL}$ , control Artemisinin,  $IC_{50} = 0.001\text{--}0.002 \mu\text{g}/\text{mL}$ ); cytotoxic (NCI-H187,  $IC_{50} = (13.0 \pm 0.2) \mu\text{g}/\text{mL}$ , control Ellipticine,  $IC_{50} = 0.2\text{--}0.3 \mu\text{g}/\text{mL}$ ; KB,  $IC_{50} > 20 \mu\text{g}/\text{mL}$ , Ellipticine,  $IC_{50} = 0.2\text{--}0.3 \mu\text{g}/\text{mL}$ ; BC-1,  $IC_{50} > 20 \mu\text{g}/\text{mL}$ , Ellipticine,  $IC_{50} = 0.2\text{--}0.3 \mu\text{g}/\text{mL}$ ; Vero cell,  $IC_{50} > 50 \mu\text{g}/\text{mL}$ , Ellipticine,  $IC_{50} = 0.2\text{--}0.3 \mu\text{g}/\text{mL}$ ). **Source:** *Getonia floribunda*. **Ref:** 5062.

**3941 Combretastatin D<sub>4</sub>**

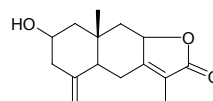
$C_{18}H_{18}O_4$  (298.34). White solid, mp 155.4–156.3°C. **Pharm:** Antitubercular (MIC > 200.0  $\mu\text{g}/\text{mL}$ , control Isoniazide, MIC = 0.040–0.090  $\mu\text{g}/\text{mL}$ , control Kanamycin sulfate, MIC = 2.0–5.0  $\mu\text{g}/\text{mL}$ ); antiplasmodial ( $IC_{50} > 20 \mu\text{g}/\text{mL}$ , control Artemisinin,  $IC_{50} = 0.001\text{--}0.002 \mu\text{g}/\text{mL}$ ); cytotoxic (NCI-H187,  $IC_{50} > 20 \mu\text{g}/\text{mL}$ , control Ellipticine,  $IC_{50} = 0.2\text{--}0.3 \mu\text{g}/\text{mL}$ ; KB,  $IC_{50} > 20 \mu\text{g}/\text{mL}$ , Ellipticine,  $IC_{50} = 0.2\text{--}0.3 \mu\text{g}/\text{mL}$ ; BC-1,  $IC_{50} > 20 \mu\text{g}/\text{mL}$ , Ellipticine,  $IC_{50} = 0.2\text{--}0.3 \mu\text{g}/\text{mL}$ ; Vero cell,  $IC_{50} > 50 \mu\text{g}/\text{mL}$ , Ellipticine,  $IC_{50} = 0.2\text{--}0.3 \mu\text{g}/\text{mL}$ ). **Source:** *Getonia floribunda*. **Ref:** 5062.

**3942 Commersonine**

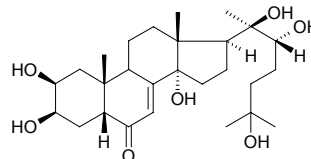
[60776-42-3]  $C_{51}H_{85}NO_{21}$  (1048.24). **Pharm:** Cardiotonic (frog heart, *in vitro*). **Source:** CHA QIE *Solanum chacoense*, KE MO SEN QIE *Solanum commersonii*. **Ref:** 658.

**3943 Commiferin**

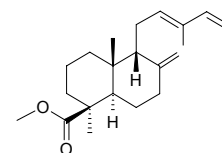
[39007-92-6]  $C_{15}H_{20}O_3$  (248.32). mp 170°C. **Source:** MO YAO *Commiphora myrrha* [Syn. *Commiphora molmol*]. **Ref:** 6.

**3944 Commisterone**

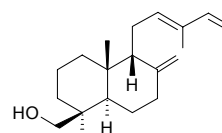
[5289-74-7]  $C_{27}H_{44}O_7$  (480.65). mp 146–151°C. **Source:** LU SHUI CAO *Cyanotis vaga*. **Ref:** 6.

**3945 trans-Communic acid methyl ester**

$C_{21}H_{32}O_2$  (316.49). mp 104–105°C,  $[\alpha]_D^{19} = -48.0^\circ$  ( $c = 1.0$ ,  $\text{CHCl}_3$ ). **Source:** ZHE BEI MU *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*]. **Ref:** 2182.

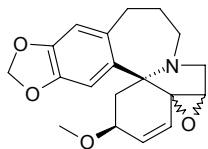
**3946 trans-Communol**

$C_{20}H_{32}O$  (288.48). mp 136–137°C,  $[\alpha]_D^{19.1} = +14.5^\circ$  ( $c = 0.18$ ,  $\text{CHCl}_3$ ). **Source:** ZHE BEI MU *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*]. **Ref:** 2182.

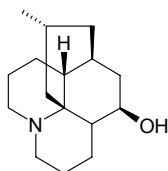


**3947 Comosimine**

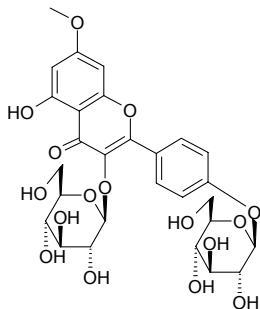
[31690-01-4] C<sub>19</sub>H<sub>21</sub>NO<sub>4</sub> (327.38). Source: SAN JIAN SHAN *Cephalotaxus fortunei*. Ref: 2.

**3948 Complanatine**

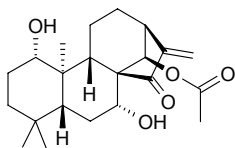
C<sub>16</sub>H<sub>27</sub>NO (249.40). mp 169°C. Source: GUO JIANG LONG *Lycopodium complanatum*. Ref: 6.

**3949 Complanatuside**

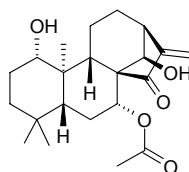
Rhamnocitrin-3,4'-O-β-D-diglycoside [116183-66-5] C<sub>28</sub>H<sub>32</sub>O<sub>16</sub> (624.56). Yellowish acicular crystals, mp 279~280°C, easily soluble in 50% ethanol, hardly soluble in water, insoluble in ether, chloroform and acetic ester, [α]<sub>D</sub><sup>19</sup> = -50.83° (c = 0.02, DMSO). Source: BIAN JING HUANG QI *Astragalus complanatus* (dried ripe seed: content scope of 11 origins = 0.0143%~0.0918%, mean content = 0.0525%<sup>[5508]</sup>). Ref: 99, 5508.

**3950 Compound 1 (Isodon umbrosa)**

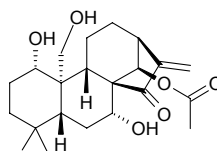
14-Acetyl kamebanin C<sub>22</sub>H<sub>32</sub>O<sub>5</sub> (376.50). Amorphous powder, [α]<sub>D</sub><sup>22</sup> = -94.0° (c = 0.47, MeOH). Source: YIN DI XIANG CHA CAI *Isodon umbrosa*. Ref: 4067.

**3951 Compound 2 (Isodon umbrosa)**

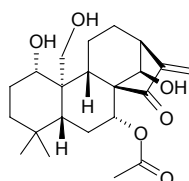
7-Acetyl kamebanin C<sub>22</sub>H<sub>32</sub>O<sub>5</sub> (376.50). mp 201~202°C, [α]<sub>D</sub><sup>22</sup> = -121.8° (c = 0.63, MeOH). Source: XIANG JIA PI *Periploca sepium*. Ref: 4067.

**3952 Compound 3 (Isodon umbrosa)**

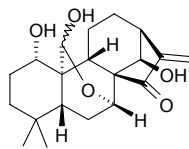
14-Acetyl kamebakaurin C<sub>22</sub>H<sub>32</sub>O<sub>6</sub> (392.50). Amorphous powder, [α]<sub>D</sub><sup>22</sup> = -109.7° (c = 0.52, MeOH). Source: YIN DI XIANG CHA CAI *Isodon umbrosa*. Ref: 4067.

**3953 Compound 4 (Isodon umbrosa)**

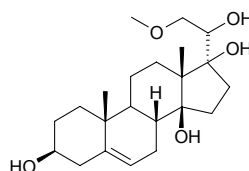
7-Acetyl kamebakaurin C<sub>22</sub>H<sub>32</sub>O<sub>6</sub> (392.50). Amorphous powder, [α]<sub>D</sub><sup>22</sup> = -110.9° (c = 0.83, MeOH). Source: XIANG JIA PI *Periploca sepium*. Ref: 4067.

**3954 Compound 9 (Isodon umbrosa)**

C<sub>20</sub>H<sub>28</sub>O<sub>5</sub> (348.44). Amorphous powder, [α]<sub>D</sub><sup>22</sup> = -55.8° (c = 1.54, MeOH). Source: YIN DI XIANG CHA CAI *Isodon umbrosa*. Ref: 4067.

**3955 Compound 1 (Periploca sepium)**

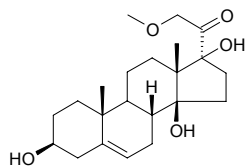
C<sub>22</sub>H<sub>36</sub>O<sub>5</sub> (380.53). mp 254~257°C, [α]<sub>D</sub> = -26.88°. Source: YIN DI XIANG CHA CAI *Isodon umbrosa*. Ref: 2498.



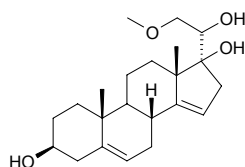


**3956 Compound 1a (*Periploca sepium*)**

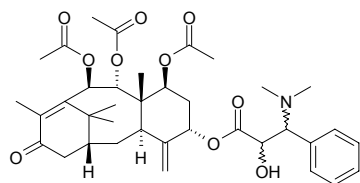
$C_{22}H_{34}O_5$  (378.51). mp 239°C,  $[\alpha]_D = -46.5^\circ$ . Source: XIANG JIA PI *Periploca sepium*. Ref: 2498.

**3957 Compound 2 (*Periploca sepium*)**

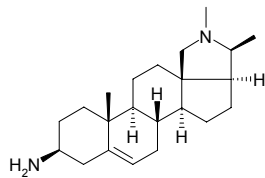
$C_{22}H_{34}O_4$  (362.51). mp 157~159°C,  $[\alpha]_D = +66.1^\circ$ . Source: YIN DI XIANG CHA CAI *Isodon umbrosa*. Ref: 2498.

**3958 Comptonine**

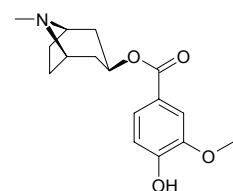
[126585-69-1]  $C_{37}H_{49}NO_{10}$  (667.80).  $[\alpha]_D = +85^\circ$  ( $c = 0.082$ ,  $CHCl_3$ ). Source: AO DA LI YA HONG DOU SHAN *Austrotaxus spicata*. Ref: 662.

**3959 Conamine**

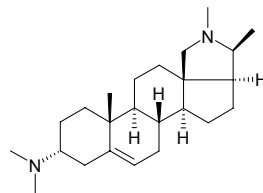
Con-5-enin-3β-amine [468-34-8]  $C_{22}H_{36}N_2$  (328.55). mp 130°C. Source: ZHI XIE MU PI *Holarhena antidysenterica*. Ref: 6.

**3960 Concneorine**

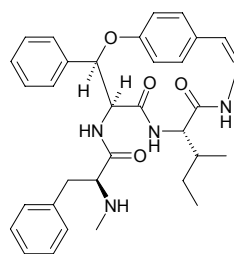
3β-Acyloxytropane  $C_{16}H_{21}NO_4$  (291.35). Oil. Source: *Convolvulus cneorum*. Ref: 5292.

**3961 Concuressine**

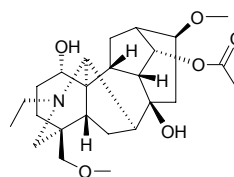
$C_{24}H_{40}N_2$  (356.60). mp 86.5~87.5°C. Source: ZHI XIE MU PI *Holarhena antidysenterica*. Ref: 6.

**3962 Condaline A**

$C_{33}H_{38}N_4O_4$  (554.70). Pharm: Antibacterial (gram-positive: *Staphylococcus aureus*, MIA = 12.5μg, control Chloramphenicol, MIA = 0.7μg; *Staphylococcus epidermidis*, MIA = 3.12μg, Chloramphenicol, MIA = 0.7μg; *Micrococcus luteus*, MIA = 12.5μg, Chloramphenicol, MIA = 0.7μg; gram-negative: *Salmonella setubal*, MIA = 6.25μg, Chloramphenicol, MIA = 0.7μg; *Escherichia coli*, MIA = 6.25μg, Chloramphenicol, MIA = 0.5μg; *Klebsiella pneumoniae*, MIA = 3.12μg, Chloramphenicol, MIA = 0.5μg); antifungal inactive (*Candida albicans* and *Saccharomyces cerevisiae*, 100μg). Source: HUANG YANG YE DUI CI TENG *Scutia buxifolia* (root cortex). Ref: 5323.

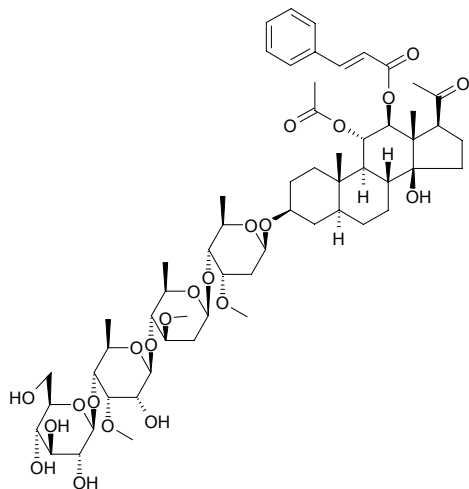
**3963 Condelphine**

$C_{25}H_{39}NO_6$  (449.59). Pharm: Antihypertensive; neuromuscular blocker; similar action with methyllycaconitine. Source: YI SI CUI QUE *Delphinium confusum*, LU CUI QUE *Delphinium denudatum*. Ref: 658.

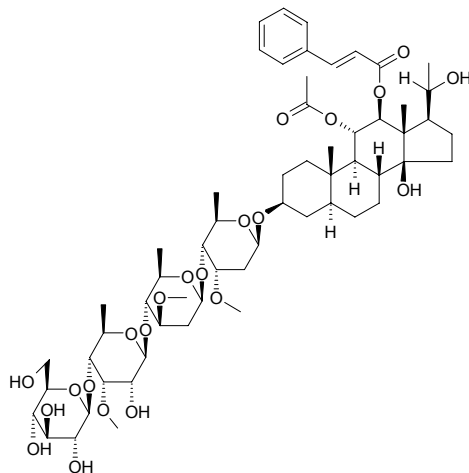


**3964 Conduranglycoside A<sub>0</sub>**

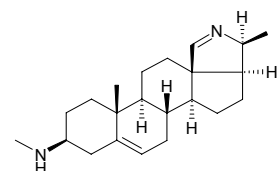
C<sub>59</sub>H<sub>88</sub>O<sub>22</sub> (1149.35). Amorphous white powder, mp 170~174°C, [ $\alpha$ ]<sub>D</sub>+43.9 (*c* = 0.62, methanol). **Pharm:** Antineoplastic (S<sub>180</sub>, ICR mus Ehrlich's cancer); LD<sub>50</sub> (mus) = 75mg/kg. **Source:** NAN MEI NIU NAI CAI *Marsdenia condurango*. **Ref:** 661.

**3965 Conduranglycoside C<sub>0</sub>**

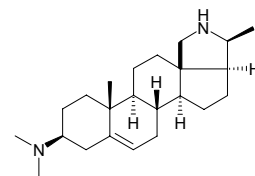
C<sub>59</sub>H<sub>90</sub>O<sub>22</sub> (1151.36). Amorphous powder, mp 160~170°C, [ $\alpha$ ]<sub>D</sub> = +25.9° (*c* = 1.28, methanol). **Pharm:** Antineoplastic (S<sub>180</sub>, ICR mus, Ehrlich's cancer); LD<sub>50</sub> (mus) = 375mg/kg. **Source:** NAN MEI NIU NAI CAI *Marsdenia condurango*. **Ref:** 661.

**3966 Conessidine**

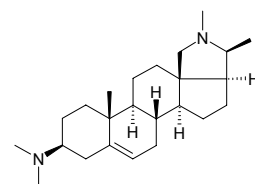
[6877-20-9] C<sub>22</sub>H<sub>34</sub>N<sub>2</sub> (326.53). mp 123°C. **Source:** ZHI XIE MU PI *Holarrhena antidysenterica*. **Ref:** 6.

**3967 Conessimine**

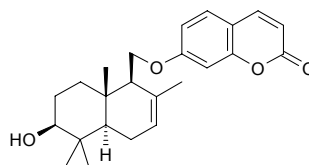
[631-05-0] C<sub>23</sub>H<sub>38</sub>N<sub>2</sub> (342.57). mp 100°C, bp 230°C/1.8mmHg. **Source:** ZHI XIE MU PI *Holarrhena antidysenterica*. **Ref:** 6.

**3968 Conessine**

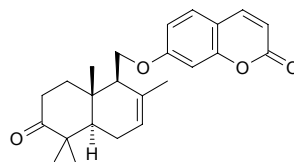
Neriine [546-06-5] C<sub>24</sub>H<sub>40</sub>N<sub>2</sub> (356.60). mp 123~128°C. **Pharm:** Antiprotozoal; digestive enzymes inhibitor; local anesthetic (gpg, rbt, sc); paralysis (frog CNS). **Source:** DUAN ROU MAO ZHI XIE MU *Holarrhena pubescens*, FAN HUA ZHI XIE MU *Holarrhena floribunda*, FEI ZHOU ZHI XIE MU *Holarrhena africana*, GANG GUO HE ZHI XIE MU *Holarrhena congolensis*, TUI RE ZHI XIE MU *Holarrhena febrifuga*, WEN ROU ZHI XIE MU *Holarrhena mitis*, WO SHI ZHI XIE MU *Holarrhena waltsbergii*, ZHI XIE MU PI *Holarrhena antidysenterica*. **Ref:** 4, 6, 658.

**3969 Conferol**

[41743-46-8] C<sub>24</sub>H<sub>30</sub>O<sub>4</sub> (382.50). **Source:** A WEI *Ferula assafoetida*. **Ref:** 6.

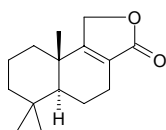
**3970 Conferone**

[41743-47-9] C<sub>24</sub>H<sub>28</sub>O<sub>4</sub> (380.49). mp 142.0~142.5°C. **Source:** A WEI *Ferula assafoetida*. **Ref:** 6.

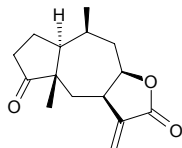


**3971 Confertifolin**

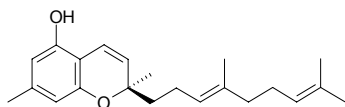
[1811-23-0] C<sub>15</sub>H<sub>22</sub>O<sub>2</sub> (234.34). mp 152°C. Source: SHUI LIAO *Polygonum hydropiper*. Ref: 6.

**3972 Confertin**

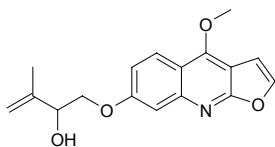
[19908-69-1] C<sub>15</sub>H<sub>20</sub>O<sub>3</sub> (248.32). Pharm: Insect growth inhibitor. Source: MI HUA TUN CAO *Ambrosia confertiflora*, BAI CI GUO TUN CAO *Ambrosia dumosa*. Ref: 658.

**3973 Confluentin**

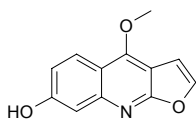
C<sub>22</sub>H<sub>30</sub>O<sub>2</sub> (326.5). Pharm: Antihistamine (inhibits histamine release, rat peritoneal mast cells, compound 48/80-induced). Source: MAN SHAN HONG *Rhododendron dauricum* (twig and leaf: yield = 0.040%) Ref: 4755.

**3974 Confusadine**

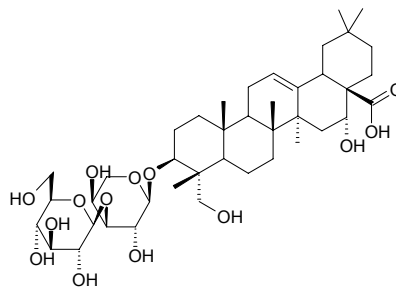
C<sub>17</sub>H<sub>17</sub>NO<sub>4</sub> (299.33). Pharm: Cytotoxic (P<sub>388</sub> cell line, ED<sub>50</sub> = 12.9 μg/mL, control Mithramycin, ED<sub>50</sub> = 0.06 μg/mL; HT29, ED<sub>50</sub> = 18.6 μg/mL, Mithramycin, ED<sub>50</sub> = 0.07 μg/mL; A549, ED<sub>50</sub> = 4.3 μg/mL, Mithramycin, ED<sub>50</sub> = 0.08 μg/mL). Source: SI ROU TUO GUO YE MI ZHU YU *Melicope semecarpifolia*. Ref: 5405.

**3975 Confusameline**

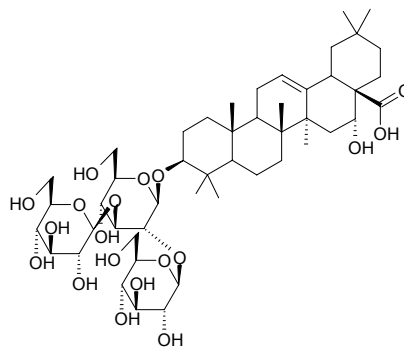
C<sub>12</sub>H<sub>9</sub>NO<sub>3</sub> (259.21). Pharm: Cytotoxic (P<sub>388</sub> cell line, ED<sub>50</sub> = 0.03 μg/mL, control Mithramycin, ED<sub>50</sub> = 0.06 μg/mL; HT29, ED<sub>50</sub> = 2.3 μg/mL, Mithramycin, ED<sub>50</sub> = 0.07 μg/mL; A549, ED<sub>50</sub> = 0.24 μg/mL, Mithramycin, ED<sub>50</sub> = 0.08 μg/mL). Source: SI ROU TUO GUO YE MI ZHU YU *Melicope semecarpifolia*. Ref: 5405.

**3976 Congmuyanoside A**

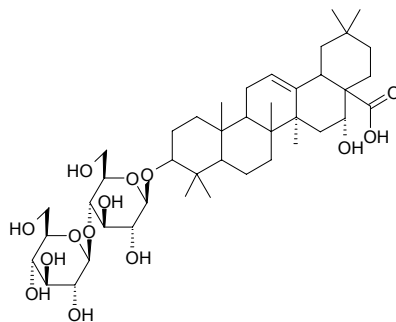
Elatoside J; 3-*O*-[β-*D*-Glucopyranosyl-(1→3)]-α-*L*-arabinopyranosyl]caulophyllogenin C<sub>41</sub>H<sub>66</sub>O<sub>14</sub> (782.97). White amorphous powder, [α]<sub>D</sub><sup>25</sup> = +0.024° (*c* = 1.06g/L, MeOH). Source: LIAO DONG CONG MU *Aralia elata* (bud). Ref: 4892.

**3977 Congmuyanoside B**

3-*O*-[β-*D*-Glucopyranosyl-(1→2)]-[β-*D*-glucopyranosyl-(1→3)] β-*D*-glucopyranosyl echinostic acid C<sub>48</sub>H<sub>78</sub>O<sub>19</sub> (959.15). White amorphous powder, [α]<sub>D</sub><sup>25</sup> = +0.008° (*c* = 0.64g/L, MeOH). Source: LIAO DONG CONG MU *Aralia elata* (bud). Ref: 4892.

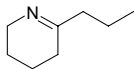
**3978 Congmuyanoside C**

3-*O*-β-*D*-Glucopyranosyl (1→4)-β-*D*-glucopyranosyl echinocystic acid C<sub>42</sub>H<sub>68</sub>O<sub>14</sub> (797.00). White amorphous powder. Source: LIAO DONG CONG MU *Aralia elata* (bud). Ref: 4901.

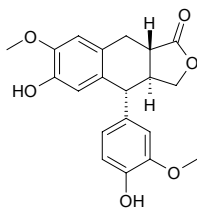


**3979  $\gamma$ -Coniceine**

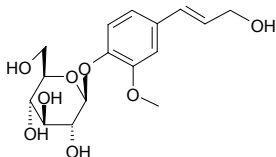
[1604-01-9] C<sub>8</sub>H<sub>15</sub>N (125.22). **Pharm:** Teratogen; supertoxic agent. **Source:** DU SHEN *Conium maculatum*, JI SHI LU HUI *Aloe gililandii*, BEI LI LU HUI *Aloe ballyi*, LA SHI LU HUI *Aloe ruspoliana*, SA BA LU HUI *Aloe sabaea*. **Ref:** 658, 728.

**3980  $\alpha$ -Conidendrin**

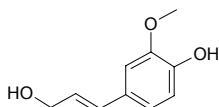
[85699-62-3] C<sub>20</sub>H<sub>20</sub>O<sub>6</sub> (356.38). **Pharm:** Cytotoxic (*in vitro*, 26-L5, EC<sub>50</sub> > 100  $\mu$ g/mL; HT1080, EC<sub>50</sub> > 100  $\mu$ g/mL; control 5-FU, Colon26-L5, EC<sub>50</sub> = 0.29  $\mu$ g/mL; HT1080, EC<sub>50</sub> = 0.07  $\mu$ g/mL)<sup>[4661]</sup>; antioxidant (DPPH scavenger, IC<sub>50</sub> = 65.8  $\mu$ mol/L, control Caffeic acid, IC<sub>50</sub> = 25.5  $\mu$ mol/L)<sup>[5407]</sup>; NO production inhibitor (IC<sub>50</sub> = 161  $\mu$ mol/L, control *L*-NMMA, IC<sub>50</sub> = 28.5  $\mu$ mol/L)<sup>[5407]</sup>. **Source:** YUN NAN HONG DOU SHAN *Taxus yunnanensis* (wood; yield = 0.0044%dw). **Ref:** 4661, 5407.

**3981 Coniferin**

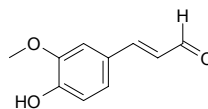
[531-29-3] C<sub>16</sub>H<sub>22</sub>O<sub>8</sub> (342.35). **Pharm:** Precursor to biosynthesis of lignin; anti-inflammatory (calcium-stimulated mouse peritoneal macrophages and hmn platelets, inhibits COX metabolite PGE<sub>2</sub>, IC<sub>50</sub> = 75.2  $\mu$ mol/L; inhibits COX metabolite TXB<sub>2</sub>, IC<sub>50</sub> = 619  $\mu$ mol/L); inhibits 5-LOX metabolites especially LTC<sub>4</sub>, IC<sub>50</sub> = 63.6  $\mu$ mol/L)<sup>[4415]</sup>. **Source:** XI JUAN YA CONG *Scorzonera hispanica*, SI LENG LA SHU *Fraxinus quadrangulata*, DU ZHONG *Eucommia ulmoides*, MAO PAO TONG *Paulownia tomentosa*, *Larix* sp., *Abies* sp., *Asparagus* sp., *Lonicera* sp. **Ref:** 2, 658, 660, 4415.

**3982 *trans*-Coniferyl alcohol**

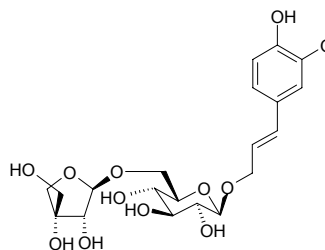
3-(4-Hydroxy-3-methoxyphenyl)-prop-2-enol C<sub>10</sub>H<sub>12</sub>O<sub>3</sub> (180.21). **Pharm:** Cytotoxic inactive (KB, Col2, LNCaP, Lu1, HUVEC, IC<sub>50</sub> > 20  $\mu$ g/mL)<sup>[3009]</sup>. **Source:** TIAN MEN DONG *Asparagus cochinchinensis* [Syn. *Asparagus lucidus*] (dried root; yield = 0.00007%dw)<sup>[3009]</sup>, YI ZHU QIAN MA *Urtica dioica*. **Ref:** 660, 3009.

**3983 Coniferyl aldehyde**

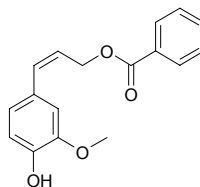
4-Hydroxy-3-methoxy-*trans*-cinnamaldehyde [458-36-6] C<sub>10</sub>H<sub>10</sub>O<sub>3</sub> (178.39). **Pharm:** Antifungal; prostaglandin biosynthesis inhibitor; detumescent (rat ears); antioxidant (DPPH free radical scavenger, IC<sub>50</sub> = 195  $\mu$ mol/L, control Caffeic acid, IC<sub>50</sub> = 25.5  $\mu$ mol/L)<sup>[5407]</sup>; NO production inhibitor (IC<sub>50</sub> = 18.0  $\mu$ mol/L, control *L*-NMMA, IC<sub>50</sub> = 28.5  $\mu$ mol/L)<sup>[5407]</sup>. **Source:** HUI HUI TAO *Juglans cinerea*, TAI WAN PU GONG YING *Taraxacum formosanum* (fresh root), YIN BAI QI *Acer saccharinum*, YUN NAN HONG DOU SHAN *Taxus yunnanensis* (wood), *Quercus* sp., *Sequoia* sp. **Ref:** 658, 4488, 5407.

**3984 Coniferyl 9-O-[ $\beta$ -D-apiofuranosyl(1 $\rightarrow$ 6)]-O- $\beta$ -D-glucopyranoside**

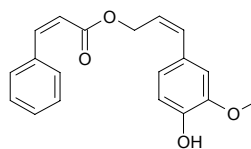
C<sub>21</sub>H<sub>30</sub>O<sub>12</sub> (474.47). White powder, mp 276–278°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +8.7° (c = 0.50, H<sub>2</sub>O). **Pharm:** Antioxidant (*in vitro*, effect on conjugated diene formation of LDL or MDA level in rat brain)<sup>[4792]</sup>. **Source:** SHI LIU ZHONG ZI *Punica granatum* (seed; yield = 0.00093%). **Ref:** 4792.

**3985 Coniferyl benzoate**

C<sub>17</sub>H<sub>16</sub>O<sub>4</sub> (281.31). mp 158–159°C. **Source:** YUE NAN AN XI XIANG *Styrax tonkinensis*. **Ref:** 6, 660.

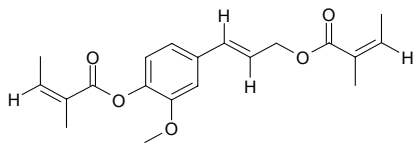
**3986 Coniferyl cinnamate**

C<sub>19</sub>H<sub>18</sub>O<sub>4</sub> (310.35). **Source:** AN XI XIANG *Styrax benzoin*. **Ref:** 6.

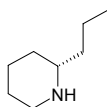


**3987 Coniferyl diangelate**

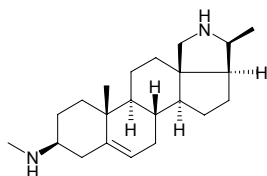
$C_{20}H_{24}O_5$  (344.41). bp 130°C/0.01mmHg. Source: HONG TOU CAO *Blumea lacera*. Ref: 6.

**3988 Coniine**

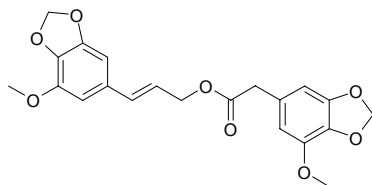
[458-88-8]  $C_8H_{17}N$  (127.23). bp 166~167°C,  $[\alpha]_D^{19} = +16^\circ$ , slightly soluble in hot water, chloroform, soluble in ethanol, ether, acetone, benzene.<sup>[5507]</sup> Pharm: Teratogen (cattle and pig in gestational period); Toxin (paralyzes motor nerve ending). Source: DU SHEN *Conium maculatum*, DU QIN GEN *Cicuta virosa*<sup>[5507]</sup>, HUANG PING ZI CAO *Sarracenia flava*, BAN XIA *Pinellia ternata*. Ref: 2, 658, 5507.

**3989 Conimine**

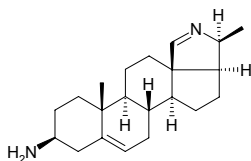
$C_{22}H_{36}N_2$  (328.55). mp 134°C. Source: ZHI XIE MU PI *Holarrhena antidysenterica*. Ref: 6.

**3990 Coniselin**

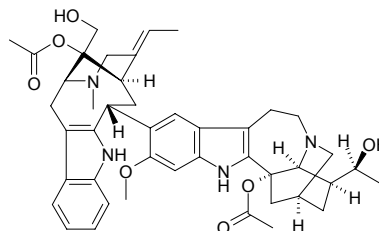
Conioselin  $C_{21}H_{20}O_8$  (400.39). White acicular crystals, mp 119~120°C. Source: GAO BEN *Ligusticum sinense*, XIN JIANG GAO BEN *Conioselinum vaginatum*. Ref: 9, 333.

**3991 Konkurchine**

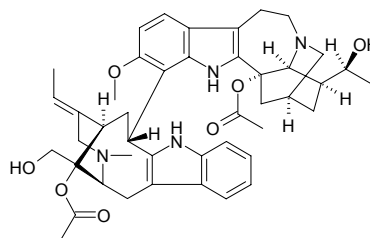
[3792-62-9]  $C_{21}H_{32}N_2$  (312.50). mp 153°C. Source: ZHI XIE MU PI *Holarrhena antidysenterica*. Ref: 6.

**3992 Conodiparine A**

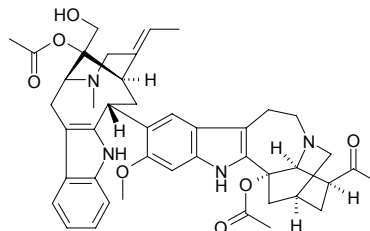
$C_{44}H_{54}N_4O_7$  (750.94). Light yellow amorphous powder,  $[\alpha]_D = -34^\circ$  ( $c = 0.71$ ,  $CHCl_3$ ). Source: SAN FANG HUA XU HONG YUE GUI *Tabernaemontana corymbosa* (leaf: yield = 0.0581%). Ref: 4673.

**3993 Conodiparine B**

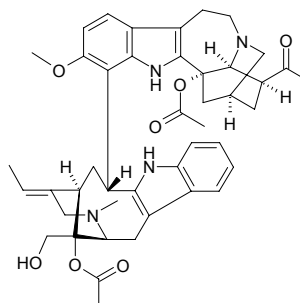
$C_{44}H_{54}N_4O_7$  (750.94). Light yellow amorphous powder,  $[\alpha]_D = -64^\circ$  ( $c = 0.93$ ,  $CHCl_3$ ). Source: SAN FANG HUA XU HONG YUE GUI *Tabernaemontana corymbosa* (leaf: yield = 0.168%). Ref: 4673.

**3994 Conodiparine C**

$C_{44}H_{52}N_4O_7$  (748.93). Light yellow amorphous powder,  $[\alpha]_D = -27^\circ$  ( $c = 0.50$ ,  $CHCl_3$ ). Source: SAN FANG HUA XU HONG YUE GUI *Tabernaemontana corymbosa* (leaf: yield = 0.0012%). Ref: 4673.

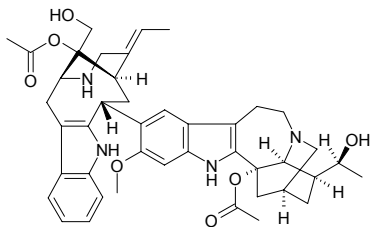
**3995 Conodiparine D**

$C_{44}H_{52}N_4O_7$  (748.93). Light yellow amorphous powder,  $[\alpha]_D = -42^\circ$  ( $c = 0.90$ ,  $CHCl_3$ ). Source: SAN FANG HUA XU HONG YUE GUI *Tabernaemontana corymbosa* (leaf: yield = 0.0028%). Ref: 4673.

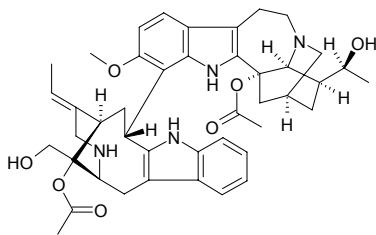


**3996 Conodiparine E**

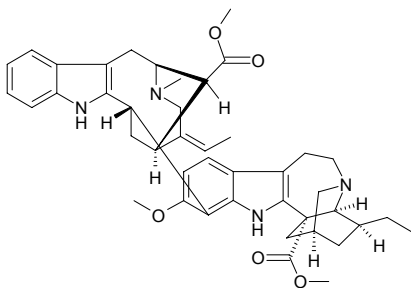
$C_{43}H_{52}N_4O_7$  (736.92). Light yellow amorphous powder,  $[\alpha]_D = -101^\circ$  ( $c = 0.07$ ,  $CHCl_3$ ). Source: SAN FANG HUA XU HONG YUE GUI *Tabernaemontana corymbosa* (leaf: yield = 0.0022%). Ref: 4673.

**3997 Conodiparine F**

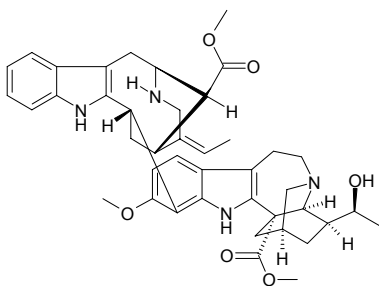
$C_{43}H_{52}N_4O_7$  (736.92). Light yellow amorphous powder,  $[\alpha]_D = -73^\circ$  ( $c = 0.32$ ,  $CHCl_3$ ). Source: SAN FANG HUA XU HONG YUE GUI *Tabernaemontana corymbosa* (leaf: yield = 0.0089%). Ref: 4673.

**3998 Conodurine**

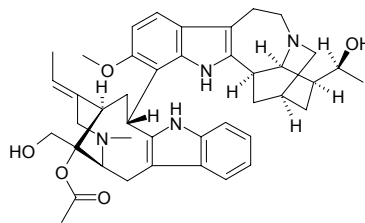
$C_{43}H_{52}N_4O_5$  (704.92). Source: SAN FANG HUA XU HONG YUE GUI *Tabernaemontana corymbosa*. Ref: 3403.

**3999 Conodurinine**

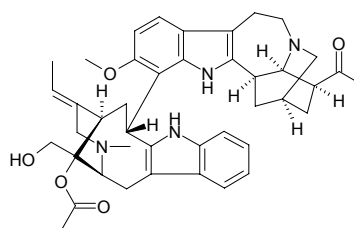
$C_{42}H_{50}N_4O_6$  (706.89). Light yellowish oil,  $[\alpha]_D = -55^\circ$  ( $c = 0.47$ ,  $CHCl_3$ ). Source: SAN FANG HUA XU HONG YUE GUI *Tabernaemontana corymbosa*. Ref: 3403.

**4000 Conodutarine A**

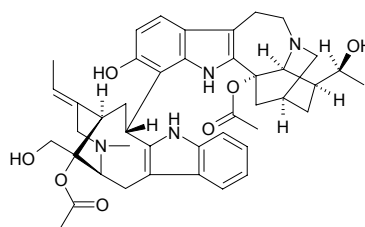
$C_{42}H_{52}N_4O_5$  (692.91). Light yellowish oil,  $[\alpha]_D = -51^\circ$  ( $c = 0.18$ ,  $CHCl_3$ ). Source: SAN FANG HUA XU HONG YUE GUI *Tabernaemontana corymbosa* (leaf: yield = 0.0007%). Ref: 4673.

**4001 Conodutarine B**

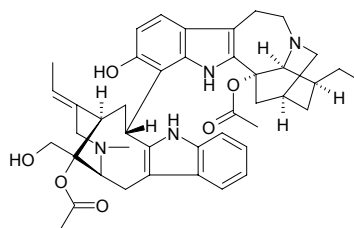
$C_{42}H_{50}N_4O_5$  (690.89). Light yellowish oil,  $[\alpha]_D = -45^\circ$  ( $c = 0.14$ ,  $CHCl_3$ ). Source: SAN FANG HUA XU HONG YUE GUI *Tabernaemontana corymbosa* (leaf: yield = 0.0008%). Ref: 4673.

**4002 Cononitarine A**

$C_{43}H_{52}N_4O_7$  (736.92). Light yellowish oil,  $[\alpha]_D = -52^\circ$  ( $c = 0.11$ ,  $CHCl_3$ ). Source: SAN FANG HUA XU HONG YUE GUI *Tabernaemontana corymbosa* (leaf: yield = 0.0002%). Ref: 4673.

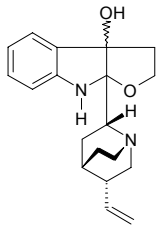
**4003 Cononitarine B**

$C_{43}H_{52}N_4O_6$  (720.92). Light yellowish oil,  $[\alpha]_D = -43^\circ$  ( $c = 0.10$ ,  $CHCl_3$ ). Source: SAN FANG HUA XU HONG YUE GUI *Tabernaemontana corymbosa* (leaf: yield = 0.0001%). Ref: 4673.

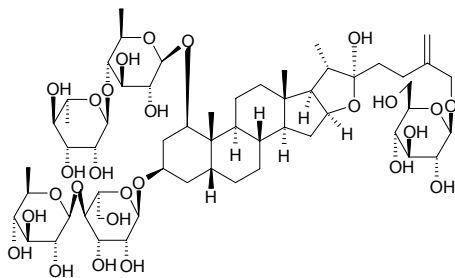


**4004 Conquinamine**

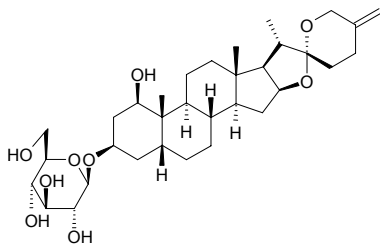
Epiquinamine [464-86-8]  $C_{19}H_{24}N_2O_2$  (312.42). mp 121°C. Source: JIN JI LE *Cinchona ledgeriana*. Ref: 6.

**4005 Convallamarin**

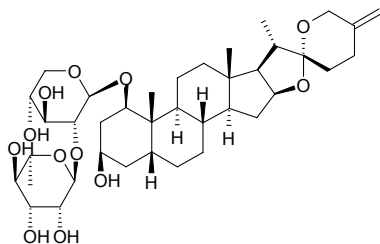
[52591-05-6]  $C_{57}H_{94}O_{27}$  (1211.37). Pharm: Antibacterial; antifungal; cardiogenic (cardiac glycoside); hemolytic. Source: LING LAN *Convallaria keiskei* [Syn. *Convallaria majalis*], YU ZHU *Polygonatum odoratum* [Syn. *Polygonatum officinale*]. Ref: 6, 658.

**4006 Convallamarogen-3-O-β-D-glucopyranoside**

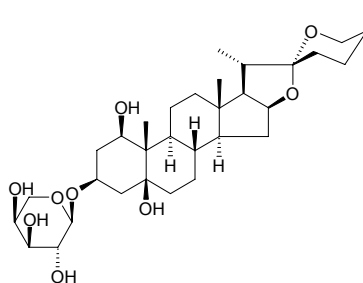
$C_{33}H_{52}O_9$  (592.78). Source: WAN NIAN QING GEN *Rohdea japonica* [Syn. *Orontium japonicum*]. Ref: 660.

**4007 Convallamarogen-1-O-α-L-rhamnopyranosyl(1→2)-β-D-xylopyranoside**

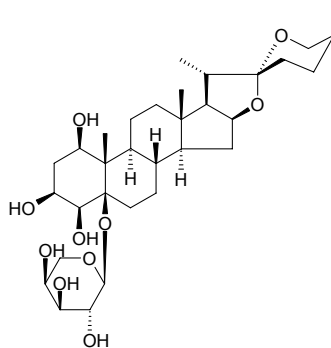
$C_{38}H_{60}O_{12}$  (708.89). Source: WAN NIAN QING GEN *Rohdea japonica* [Syn. *Orontium japonicum*]. Ref: 660.

**4008 Convallasaponin A**

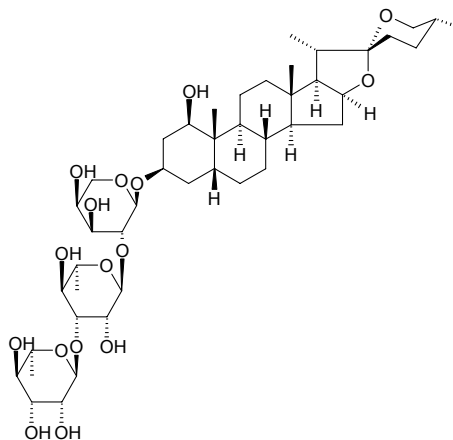
[19316-94-0]  $C_{32}H_{52}O_9$  (580.77). mp 238–240°C. Source: LING LAN *Convallaria keiskei* [Syn. *Convallaria majalis*]. Ref: 6.

**4009 Convallasaponin B**

[19317-00-1]  $C_{32}H_{52}O_{10}$  (596.77). mp 273–274°C. Source: LING LAN *Convallaria keiskei* [Syn. *Convallaria majalis*]. Ref: 6.

**4010 Convallasaponin C**

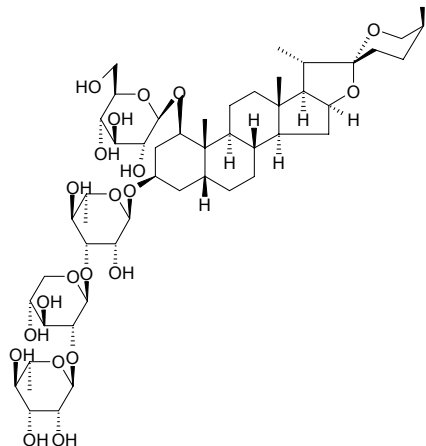
$C_{44}H_{72}O_{16}$  (857.05). Source: LING LAN *Convallaria keiskei* [Syn. *Convallaria majalis*]. Ref: 6.



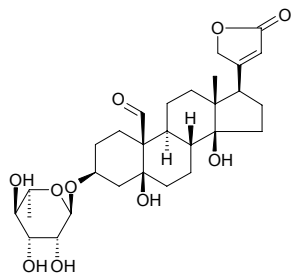
**4011 Convallasaponin D**

[16962-99-5] C<sub>50</sub>H<sub>82</sub>O<sub>21</sub> (1019.20). mp 264–265°C. Source: LING LAN

*Convallaria keiskei* [Syn. *Convallaria majalis*]. Ref: 6.

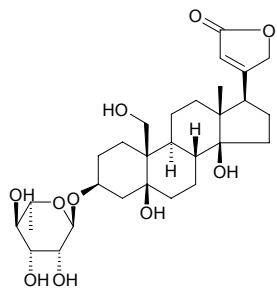
**4012 Convallatoxin**

Convallaton; Corglykon [508-75-8] C<sub>29</sub>H<sub>42</sub>O<sub>10</sub> (550.65). mp 235–242°C(dec), [α]<sub>D</sub><sup>22</sup> = -1.7°±3° (MeOH), [α]<sub>D</sub><sup>25</sup> = -9.4°±3° (dioxane), soluble in ethanol, acetone, slightly soluble in chloroform, acetic ester, water, almost insoluble in ether, petroleum ether.<sup>[5507]</sup> Source: FU SHOU CAO *Adonis amurensis* (root: content = 0.094%<sup>[5508]</sup>), HEI GANG LIU *Periploca nigrescens*, LING LAN *Convallaria keiskei* [Syn. *Convallaria majalis*]. Ref: 4, 6, 2498, 5507, 5508.

**4013 Convallatoxol**

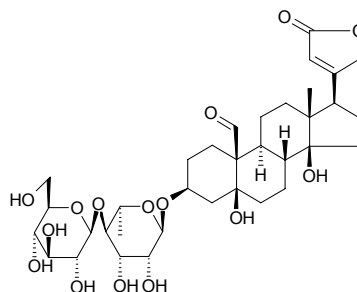
Perconval [3253-62-1] C<sub>29</sub>H<sub>44</sub>O<sub>10</sub> (552.67). mp 171–175°C. Source: LING

LAN *Convallaria keiskei* [Syn. *Convallaria majalis*]. Ref: 4, 6.

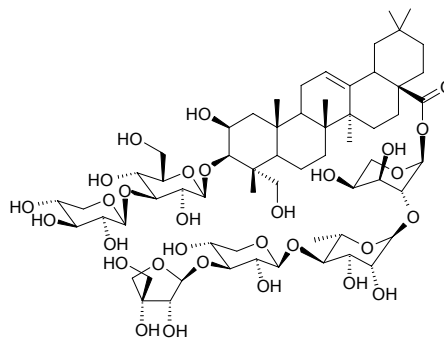
**4014 Convallaside**

Bogoroside [13473-51-3] C<sub>35</sub>H<sub>52</sub>O<sub>15</sub> (712.80). mp 201–204°C. Source: LING

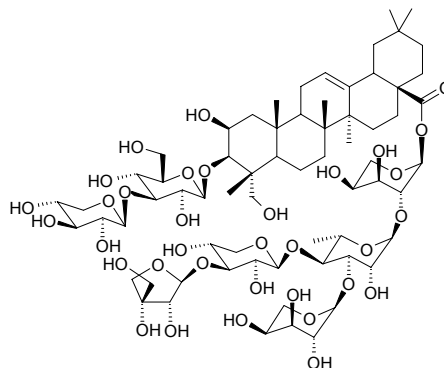
LAN *Convallaria keiskei* [Syn. *Convallaria majalis*]. Ref: 4, 6.

**4015 Conyzasaponin A**

3-*O*-β-*D*-Xylopyranosyl-(1→3)-β-*D*-glucopyranosyl bayogenin 28-*O*-β-*D*-apiofuranosyl-(1→3)-β-*D*-xylopyranosyl-(1→4)-α-*L*-rhamnopyranosyl-(1→2)-α-*L*-arabinopyranosylester C<sub>62</sub>H<sub>100</sub>O<sub>30</sub> (1325.47). White amorphous powder (MeOH), mp 219–220°C, [α]<sub>D</sub><sup>25</sup> = -13° (c = 0.94, MeOH). Source: KU HAO *Conyza blinii* (aerial parts: yield = 0.0025%dw). Ref: 3024.

**4016 Conyzasaponin B**

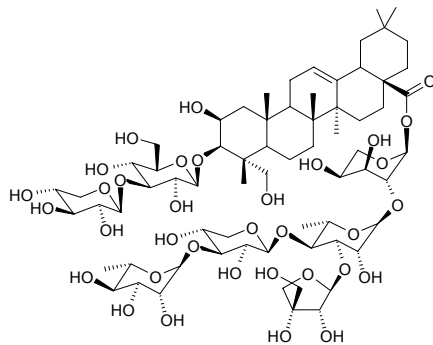
3-*O*-β-*D*-Xylopyranosyl-(1→3)-β-*D*-glucopyranosyl bayogenin 28-*O*-β-*D*-apiofuranosyl-(→3)-β-*D*-xylopyranosyl-(1→4)-[α-*L*-arabinopyranosyl-(1→3)]-α-*L*-rhamnopyranosyl-(1→2)-α-*L*-arabinopyranosylester C<sub>67</sub>H<sub>108</sub>O<sub>34</sub> (1457.59). White needles (MeOH), mp 233–234°C, [α]<sub>D</sub><sup>25</sup> = +6° (c = 0.63, MeOH). Source: KU HAO *Conyza blinii* (aerial parts: yield = 0.00020%dw). Ref: 3024.



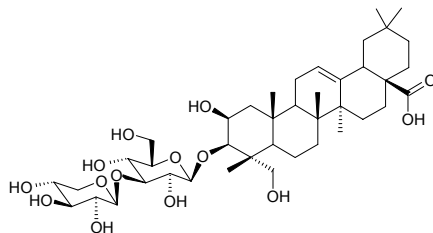


**4017 Conyzasaponin C**

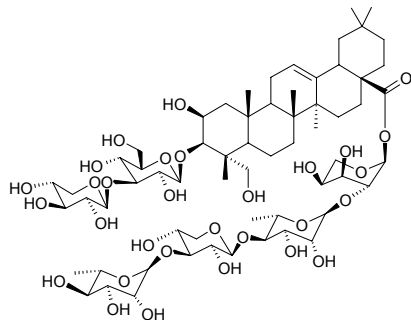
3-*O*- $\beta$ -*D*-Xylopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosyl bayogenin 28-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 4)-[ $\beta$ -*D*-apiofuranosyl-(1 $\rightarrow$ 3)]- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl ester C<sub>68</sub>H<sub>110</sub>O<sub>34</sub> (1471.61). White needles (MeOH), mp 225–226°C,  $[\alpha]_D^{25} = -20^\circ$  ( $c = 0.59$ , MeOH). Source: KU HAO *Conyza blinii* (aerial parts: yield = 0.00018%dw). Ref: 3024.

**4018 Conyzasaponin G**

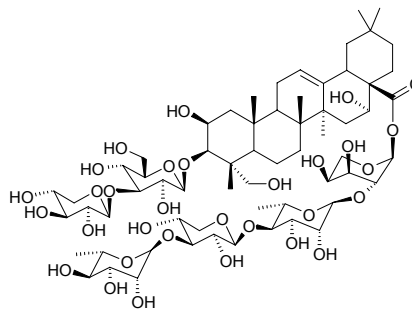
Bayogenin 3-*O*- $\beta$ -*D*-xylopyranosyl- (1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranoside C<sub>41</sub>H<sub>66</sub>O<sub>14</sub> (782.97). White amorphous powder (MeOH), mp 214–216°C. Source: KU HAO *Conyza blinii* (aerial parts: yield = 0.00008%dw). Ref: 3024.

**4019 Conyzasaponin I**

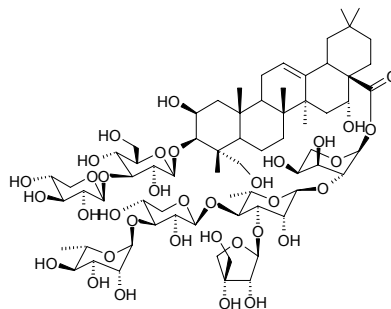
3-*O*- $\beta$ -*D*-Xylopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosylbayogenin 28-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl ester C<sub>65</sub>H<sub>102</sub>O<sub>30</sub> (1339.5). White amorphous solid, mp 240–242,  $[\alpha]_D^{23} = -26.7^\circ$  ( $c = 1.14$ , methanol). Source: KU HAO *Conyza blinii* (aerial parts). Ref: 4738.

**4020 Conyzasaponin J**

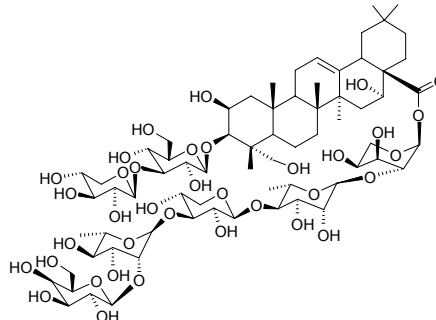
3-*O*- $\beta$ -*D*-Xylopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosylpolygalacic acid 28-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl ester C<sub>63</sub>H<sub>102</sub>O<sub>31</sub> (1355.5). White amorphous solid, mp 236–238,  $[\alpha]_D^{20} = -41.4^\circ$  ( $c = 0.86$ , methanol). Source: KU HAO *Conyza blinii* (aerial parts). Ref: 4738.

**4021 Conyzasaponin K**

3-*O*- $\beta$ -*D*-Xylopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosylpolygalacic acid 28-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 4)-[ $\beta$ -*D*-apiofuranosyl-(1 $\rightarrow$ 3)]- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl ester C<sub>68</sub>H<sub>110</sub>O<sub>35</sub> (1487.61). White amorphous solid, mp 237–239,  $[\alpha]_D^{20} = -56.5^\circ$  ( $c = 0.76$ , methanol). Source: KU HAO *Conyza blinii* (aerial parts). Ref: 4738.

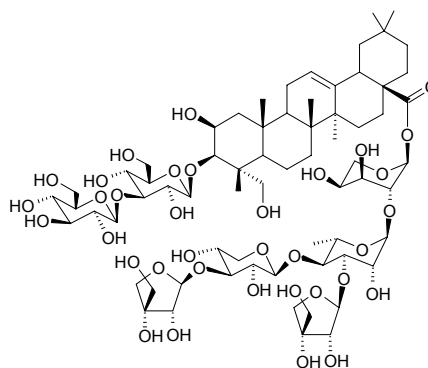
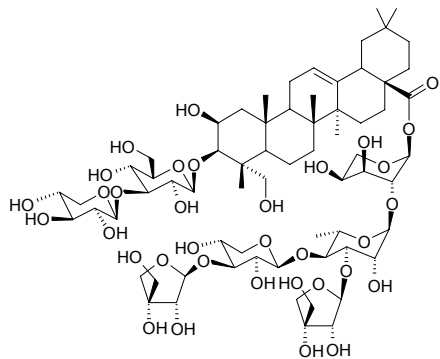
**4022 Conyzasaponin L**

3-*O*- $\beta$ -*D*-Xylopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosylpolygalacic acid 28-*O*- $\beta$ -*D*-galactopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl ester C<sub>69</sub>H<sub>112</sub>O<sub>36</sub> (1517.64). White amorphous solid, mp 236–238,  $[\alpha]_D^{20} = -33.6^\circ$  ( $c = 1.08$ , methanol). Source: KU HAO *Conyza blinii* (aerial parts). Ref: 4738.



**4023 Conyzasaponin M**

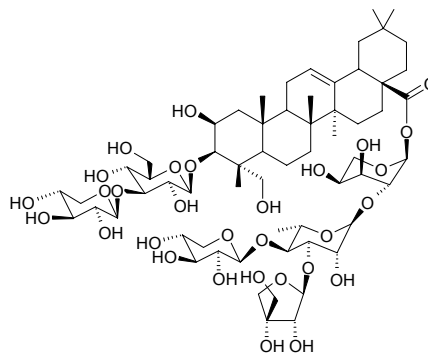
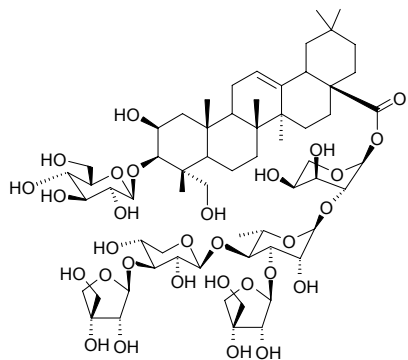
3-*O*- $\beta$ -*D*-Xylopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosylbayogenin 28-*O*- $\beta$ -*D*-apiofuranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 4)-[ $\beta$ -*D*-apiofuranosyl-(1 $\rightarrow$ 3)]- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl ester C<sub>67</sub>H<sub>108</sub>O<sub>34</sub> (1457.59). White needles (MeOH), mp 236–238, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = –42.5° (*c* = 0.36, methanol). Source: KU HAO *Conyza blinii* (aerial parts). Ref: 4738.

**4026 Conyzasaponin P**

3-*O*- $\beta$ -*D*-Xylopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosylbayogenin 28-*O*- $\beta$ -*D*-apiofuranosyl-(1 $\rightarrow$ 3)-[ $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 4)]- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl ester C<sub>62</sub>H<sub>100</sub>O<sub>30</sub> (1325.47). White amorphous solid, mp 243–245, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = –30.4° (*c* = 0.51, methanol). Source: KU HAO *Conyza blinii* (aerial parts). Ref: 4738.

**4024 Conyzasaponin N**

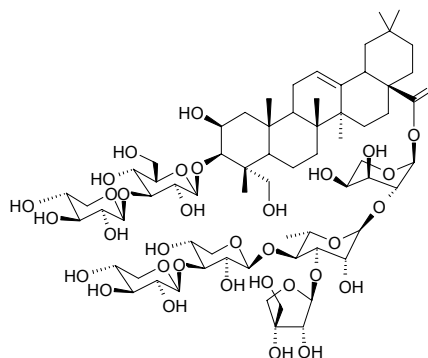
3-*O*- $\beta$ -*D*-Glucopyranosylbayogenin 28-*O*- $\beta$ -*D*-apiofuranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 4)-[ $\beta$ -*D*-apiofuranosyl-(1 $\rightarrow$ 3)]- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl ester C<sub>62</sub>H<sub>100</sub>O<sub>30</sub> (1325.47). White needles (MeOH), mp 231–233, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = –42.3° (*c* = 0.36, methanol). Source: KU HAO *Conyza blinii* (aerial parts). Ref: 4738.

**4027 Conyzasaponin Q**

3-*O*- $\beta$ -*D*-Xylopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosylbayogenin 28-*O*- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 4)-[ $\beta$ -*D*-apiofuranosyl-(1 $\rightarrow$ 3)]- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl ester C<sub>67</sub>H<sub>108</sub>O<sub>34</sub> (1457.59). White needles (MeOH), mp 242–244, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = –34.2° (*c* = 1.26, methanol). Source: KU HAO *Conyza blinii* (aerial parts). Ref: 4738.

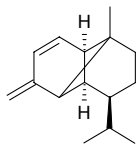
**4025 Conyzasaponin O**

3-*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosylbayogenin 28-*O*- $\beta$ -*D*-apiofuranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 4)-[ $\beta$ -*D*-apiofuranosyl-(1 $\rightarrow$ 3)]- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl ester C<sub>68</sub>H<sub>110</sub>O<sub>35</sub> (1487.61). White needles (MeOH), mp 245–247, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = –38.6° (*c* = 0.17, methanol). Source: KU HAO *Conyza blinii* (aerial parts). Ref: 4738.

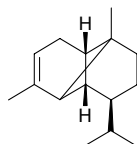


**4028 Copadiene**

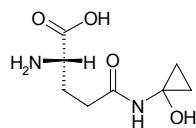
[27597-38-2] C<sub>15</sub>H<sub>22</sub> (202.34). bp (+) 130–140°C/1mmHg. Source: XIANG FU *Cyperus rotundus*. Ref: 6.

**4029 α-Copaene**

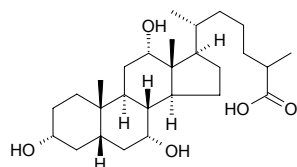
[3856-25-5] C<sub>15</sub>H<sub>24</sub> (204.36). Pharm: Antibacterial; antifungal; cardiotoxic (cardiac glycoside); diuretic (rat, amount of urine up to 300%); hemolytic (strongest); sedative (rat, inhibits spontaneous movement); MLD (frog iv) = 0.3mg/kg. Source: DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*], FU JU *Citrus tangemna*, HONG CHAI HU *Bupleurum scorzonerifolium*, HOU PO *Magnolia officinalis*, HUANG HUA HAO *Artemisia annua*, LV CAO *Humulus japonicus* [Syn. *Humulus scandens*], MU HAO *Artemisia japonica*, QING HAO *Artemisia apiacea* [Syn. *Artemisia carvifolia*; *Artemisia caruifolia*], SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*], SHENG JIANG *Zingiber officinale*, ZHU JU *Citrus erythrosa*. Ref: 2, 658, 660.

**4030 Coprine**

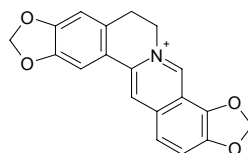
[58919-61-2] C<sub>8</sub>H<sub>14</sub>N<sub>2</sub>O<sub>4</sub> (202.21). Pharm: Interferes in metabolism of alcohol. Source: GUI GAI *Coprinus atramentarius*. Ref: 658.

**4031 Coprocholic acid**

3α,7α,12α-Trihydroxy coprostanic acid [23740-14-9] C<sub>27</sub>H<sub>46</sub>O<sub>5</sub> (450.66). mp 180–182°C, mp 174–176°C. Source: CHEN DONG CAI LU ZHI *Brassica chinensis*, QING WA DAN *Rana nigromaculata*; *Rana plancyi*. Ref: 6.

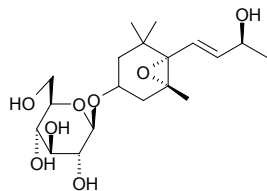
**4032 Coptisine**

[3486-66-6] C<sub>19</sub>H<sub>14</sub>NO<sub>4</sub><sup>+</sup> (320.33). Pharm: Antimicrobial. Source: BAI QU CAI *Chelidonium majus* (whole herb: mean content of 5 origins = 0.332%)<sup>[5508]</sup>, BAN RUI TANG SONG CAO *Thalictrum petaloideum* (root: content < 0.001%)<sup>[5508]</sup>, CHANG JU YAN HU SUO *Corydalis longicalcarata* (rhizome: content = 0.057%)<sup>[5508]</sup>, CHI BAN YAN HU SUO *Corydalis remota* [Syn. *Corydalis bulbosa* var. *typica*] (rhizome: content = 0.01%)<sup>[5508]</sup>, DA YE TANG SONG CAO *Thalictrum faberi* (root: content < 0.001%)<sup>[5508]</sup>, DI TANG CAO *Hypecoum japonicum*, DONG BEI YAN HU SUO *Corydalis ambigua* var. *amurensis* [Syn. *Corydalis ambigua*] (rhizome: content = 0.02%)<sup>[5508]</sup>, DUAN E HUANG LIAN *Coptis chinensis* var. *brevisepala* (rhizome: content = 1.31%)<sup>[5508]</sup>, DUI YE YUAN HU *Corydalis ledebouriana* (rhizome: content = 0.013%)<sup>[5508]</sup>, E MEI YE HUANG LIAN *Coptis omeiensis* (rhizome: content = 1.97%)<sup>[5508]</sup>, GU LIN YE LIAN *Coptis gulinensis* (rhizome: content = 1.11%)<sup>[5508]</sup>, HE BAO MU DAN GEN *Dicentra spectabilis*, HUA NAN GONG LAO MU *Mahonia japonica*, HUA NAN GONG LAO YE *Mahonia japonica*, HUANG LIAN *Coptis chinensis* (rhizome: content scope = 1.5%–2.2%)<sup>[5501]</sup>, mean content = 2.06%<sup>[5508]</sup>, HUI LV YAN HU SUO *Corydalis adunca* (rhizome: content = 0.031%)<sup>[5508]</sup>, JIN SI MA WEI LIAN *Thalictrum glandulosissimum* (root: content = 0.10%)<sup>[5508]</sup>, JU HUA HUANG LIAN *Corydalis pallida*, MA WEI LIAN *Thalictrum foliolosum* (root: content < 0.001%)<sup>[5508]</sup>, QUAN YE YAN HU SUO *Corydalis repens* (rhizome: content = 0.02%)<sup>[5508]</sup>, RI BEN HUANG LIAN *Coptis japonica*, SAN JIAO YE HUANG LIAN *Coptis deltoidea* (rhizome: mean content = 1.60%)<sup>[5508]</sup>, XI GUO JIAO HUI XIANG *Hypecoum leptocarpum*, XIA TIAN WU *Corydalis decumbens* [Syn. *Corydalis amabilis*] (rhizome: content = 0.01%)<sup>[5508]</sup>, XIA XU TANG SONG CAO *Thalictrum atriplex* (root: content < 0.001%)<sup>[5508]</sup>, XIAN E HUANG LIAN *Coptis linearisepala* (rhizome: content = 1.73%)<sup>[5508]</sup>, XIAO GUO TANG SONG CAO *Thalictrum microgynum* (root: content < 0.001%)<sup>[5508]</sup>, YAN GUO CAO *Thalictrum thunbergii* (root: content < 0.001%)<sup>[5508]</sup>, YAN HU SUO *Corydalis yanhusuo* [Syn. *Corydalis turtschaninovii* f. *yanhusuo*] (rhizome: mean content of 2 origins = 0.044%)<sup>[5508]</sup>, YING SHUI HUANG LIAN *Thalictrum simplex* [Syn. *Thalictrum simplex* var. *brevipes*] (root: content < 0.001%)<sup>[5508]</sup>, YUN NAN HUANG LIAN *Coptis teetoides* [Syn. *Coptis teeta*] (rhizome: mean content = 1.54%)<sup>[5508]</sup>, ZI HUA YU DENG CAO *Corydalis incisa*. Ref: 2, 658, 660, 5501, 5508.

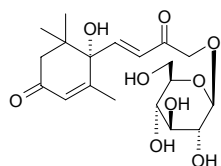


**4033 Corchoionoside A**

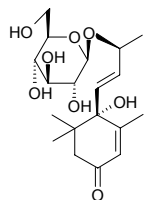
$C_{19}H_{32}O_8$  (388.46). Amorphous powder,  $[\alpha]_D^{24} = -55^\circ$ . Source: BEI SHA SHEN *Glehnia littoralis* (fruit). Ref: 3525.

**4034 Corchoionoside B**

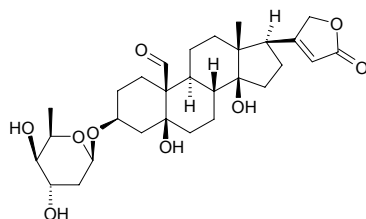
$C_{19}H_{28}O_9$  (400.43). Source: HUANAN WU ZHU YU *Evodia austrosinensis*. Ref: 5052.

**4035 Corchoionoside C**

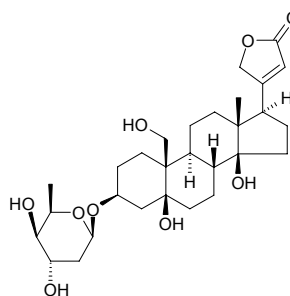
$C_{19}H_{30}O_8$  (386.45). Amorphous substance,  $[\alpha]_D^{20} = +31.2^\circ$  ( $c = 2.0$ , MeOH). Pharm: Antibacterial inactive (*Helicobacter pylori* NCTC11637, MIC > 200  $\mu\text{g/mL}$ ; NCTC11916, MIC > 200  $\mu\text{g/mL}$ ; OCO1, MIC > 200  $\mu\text{g/mL}$ ; control Hinokitiol (Nat. or Syn.), MIC = 100, 100, 50  $\mu\text{g/mL}$ , respectively) [4477]. Source: LAO SHU GUA *Capparis spinosa*, OU ZHOU CI BAI BIAN ZHONG *Juniperus communis* var. *depressa* (twig with leaf). Ref: 1998, 4477.

**4036 Corchoroside A**

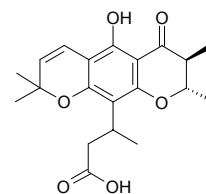
[508-76-9]  $C_{29}H_{42}O_9$  (534.65). mp 188~190°C. Pharm: Cardiotonic (cardiac glycoside); bidirectional action to blood vessel (rbt ear, dilates at low concentration and contracts at high concentration); diuretic (rbt); low toxin; reduces symptoms of myocarditis (rbt) and prevents development of cardiac muscle sclerosis; sedative. Source: FU SHOU CAO *Adonis amurensis*, GUI ZHU TANG JIE *Erysimum cheiranthoides*, HUANG MA YE *Corchorus capsularis*, HUANG MA ZI *Corchorus capsularis*, MENG GU CE JIN ZHAN HUA *Adonis mongolica*. Ref: 4, 6, 658.

**4037 Corchorosol A**

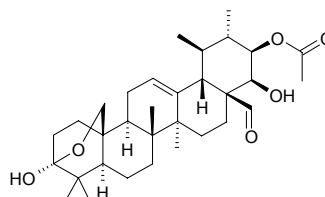
$C_{29}H_{44}O_9$  (536.67). mp 199~201°C. Source: HUANG MA YE *Corchorus capsularis*. Ref: 6.

**4038 Cordato-oblongic acid**

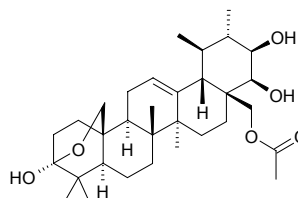
$C_{20}H_{24}O_6$  (360.41). Source: CHANG YUAN XIN XING HU TONG *Calophyllum cordato-oblongum*. Ref: 2280.

**4039 Cordiaketal A**

3 $\beta$ ,25-Epoxy-21 $\beta$ -acetoxo-3 $\alpha$ ,22 $\beta$ -dihydroxyurs-12-en-28-al  $C_{32}H_{48}O_6$  (528.74). Colorless needles, mp 204~208°C,  $[\alpha]_D = +181.7^\circ$  ( $c = 0.5$ , MeOH). Pharm: Anti-androgenic (testosterone 5 $\alpha$ -reductase inhibitor, 50  $\mu\text{g/mL}$ , InRt = 70.57%, control Glabridine, 50  $\mu\text{g/mL}$ , InRt = 48.20%) [4106]. Source: DUO SUI PO BU MU *Cordia multispicata* (leaf). Ref: 4106.

**4040 Cordiaketal B**

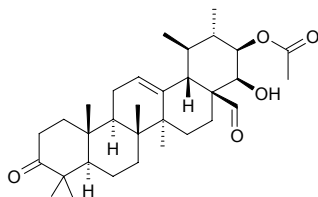
3 $\beta$ ,25-Epoxy-28-acetoxo-3 $\alpha$ ,21 $\beta$ ,22 $\beta$ -trihydroxyurs-12-ene  $C_{32}H_{50}O_6$  (530.75). Amorphous powder,  $[\alpha]_D = +120.0^\circ$  ( $c = 0.8$ , MeOH). Pharm: Anti-androgenic (testosterone 5 $\alpha$ -reductase inhibitor, 50  $\mu\text{g/mL}$ , InRt = 70.75%, control Glabridine, 50  $\mu\text{g/mL}$ , InRt = 48.20%) [4106]. Source: DUO SUI PO BU MU *Cordia multispicata* (leaf). Ref: 4106.



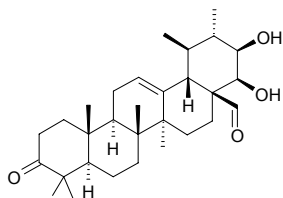
**4041 Cordianal A**

21 $\beta$ -Acetoxy-22 $\beta$ -hydroxy-3-oxours-12-en-28-al C<sub>32</sub>H<sub>48</sub>O<sub>5</sub> (512.74).

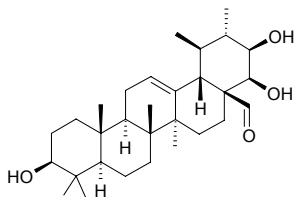
Amorphous powder. **Pharm:** Anti-androgenic (testosterone 5 $\alpha$ -reductase inhibitor, 100 $\mu$ g/mL, InRt = 67.57%, control Glabridine, 100 $\mu$ g/mL, InRt = 90.50%). **Source:** DUO SUI PO BU MU *Cordia multispicata* (leaf). **Ref:** 4106.

**4042 Cordianal B**

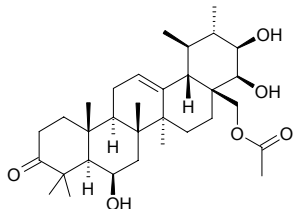
21 $\beta$ ,22 $\beta$ -Dihydroxy-3-oxours-12-en-28-al C<sub>30</sub>H<sub>46</sub>O<sub>4</sub> (470.70). Colorless needles, mp 251–254°C (MeOH). **Pharm:** Anti-androgenic (testosterone 5 $\alpha$ -reductase inhibitor, 100 $\mu$ g/mL, InRt = 18.87%, control Glabridine, 100 $\mu$ g/mL, InRt = 90.50%). **Source:** DUO SUI PO BU MU *Cordia multispicata* (leaf). **Ref:** 4106.

**4043 Cordianal C**

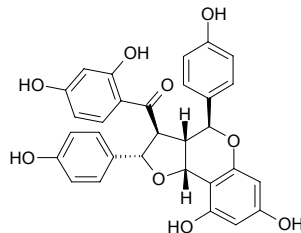
3 $\beta$ ,21 $\beta$ ,22 $\beta$ -Trihydroxyurs-12-en-28-al C<sub>30</sub>H<sub>48</sub>O<sub>4</sub> (472.71). Amorphous powder. **Source:** DUO SUI PO BU MU *Cordia multispicata* (leaf). **Ref:** 4106.

**4044 Cordianone**

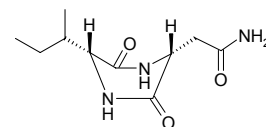
28-Acetoxy-6 $\beta$ ,21 $\beta$ ,22 $\beta$ -trihydroxy-3-oxours-12-ene C<sub>32</sub>H<sub>50</sub>O<sub>6</sub> (530.75). Amorphous powder. **Source:** DUO SUI PO BU MU *Cordia multispicata* (leaf). **Ref:** 4106.

**4045 Cordigol**

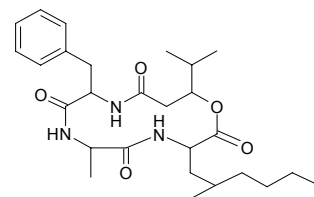
[117458-38-5] C<sub>30</sub>H<sub>24</sub>O<sub>9</sub> (528.52). **Source:** CHANG E JIN LIAN MU PI *Ochna macrocalyx*, SANG DAO BU SHI MU *Brackenridgea zanguebarica*. **Ref:** 5372.

**4046 Cordycedipeptide A**

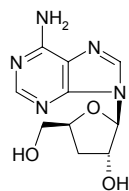
3-Acetamino-6-isobutyl-2,5-dioxopiperazine C<sub>10</sub>H<sub>17</sub>N<sub>3</sub>O<sub>3</sub> (227.27). White amorphous powder (MeOH), mp 126°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -70.25° (c = 0.8, MeOH). **Pharm:** Cytotoxic (L-929, IC<sub>50</sub> = 6.30 $\mu$ g/mL, A375, IC<sub>50</sub> = 9.16 $\mu$ g/mL, HeLa, IC<sub>50</sub> = 61.10 $\mu$ g/mL, control 5-FU, IC<sub>50</sub> = 6.37 $\mu$ g/mL, 4.69 $\mu$ g/mL, 12.71 $\mu$ g/mL, respectively). **Source:** DONG CHONG XIA CAO *Cordyceps sinensis* (whole herb). **Ref:** 4462.

**4047 Cordyceptide A**

C<sub>27</sub>H<sub>41</sub>N<sub>3</sub>O<sub>5</sub> (487.64). White acicular crystals mp 273–274°C. **Source:** REN GONG YONG CHONG CAO *Cordyceps militaris* cv. **Ref:** 858.

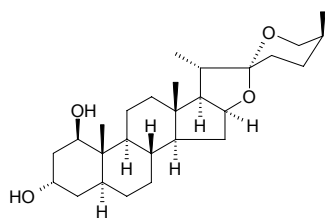
**4048 Cordycepin**

[73-03-0] C<sub>10</sub>H<sub>13</sub>N<sub>5</sub>O<sub>3</sub> (251.25). mp 225–226°C. **Pharm:** Antineoplastic (mus, EAC, 15–20mg/kg ip, extends survival time); cytotoxic (KB, L<sub>1210</sub>); antimalarial (*Plasmodium falciparum* K1, IC<sub>50</sub> = 4.5 $\mu$ g/mL; control Dihydroartemisinin, IC<sub>50</sub> = 1.2ng/mL)<sup>[4784]</sup>; antibacterial (*Bacillus subtilis* and *Mycobacterium tuberculosis*); antiviral (inhibits biosynthesis of RNA). **Source:** DONG CHONG XIA CAO *Cordyceps sinensis*, YANG CONG *Allium cepa*, REN GONG YONG CHONG CAO *Cordyceps militaris* cv. (sclerotium and stroma: content = 0.458%)<sup>[5512]</sup>, YONG CHONG CAO *Cordyceps militaris*. **Ref:** 6, 658, 4784, 5512.

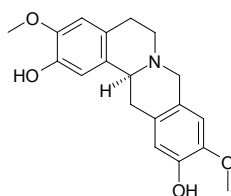


**4049 Cordylagenin**

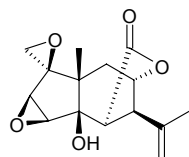
[54165-35-4] C<sub>27</sub>H<sub>44</sub>O<sub>4</sub> (432.65). mp (-) 216°C. Source: JIAN YE TIE SHU YE *Cordyline stricta*. Ref: 6.

**4050 Coreximine**

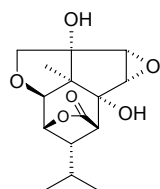
[483-45-4] C<sub>19</sub>H<sub>21</sub>NO<sub>4</sub> (327.38). mp (-) 262°C, (±) 233–240°C. Source: ZI HUA YU DENG CAO *Corydalis incisa*, YA PIAN *Papaver somniferum*. Ref: 6.

**4051 Coriamyrtin**

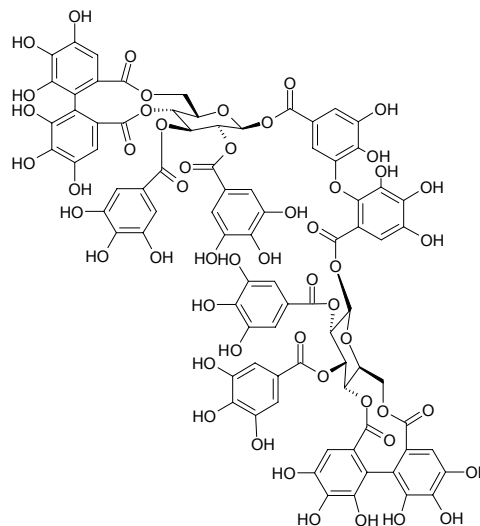
[2571-86-0] C<sub>15</sub>H<sub>18</sub>O<sub>5</sub> (278.31). mp 229–230°C. Pharm: Causes epilepsy (rat, 1mg/kg, im for 5.5–6.5 months, epilepsy persistent); eclamptogenic (rbt or rat, 3mg/kg im). Source: BAI LI XIANG YE MA SANG *Coriaria thymifolia*, DI ZHONG HAI MA SANG *Coriaria myrtifolia* (the compound was first isolated from the plant by Riban in 1863)<sup>[5505]</sup>, MA SANG *Coriaria sinica* [Syn. *Coriaria nepalensis*], MA SANG YE *Coriaria sinica* [Syn. *Coriaria nepalensis*], RI BEN MA SANG *Coriaria japonica*. Ref: 4, 6, 413, 658, 5505.

**4052 Corianin**

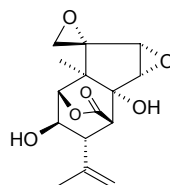
C<sub>15</sub>H<sub>20</sub>O<sub>6</sub> (296.32). Source: RI BEN MA SANG *Coriaria japonica* (seed). Ref: 4497.

**4053 Coriariin A**

[89871-78-3] C<sub>82</sub>H<sub>58</sub>O<sub>52</sub> (1875.35). Pharm: Antineoplastic. Source: RI BEN MA SANG *Coriaria japonica*. Ref: 658.

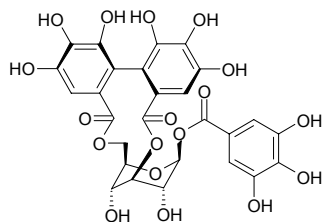
**4054 Coriarin**

C<sub>15</sub>H<sub>18</sub>O<sub>6</sub> (294.31). Colorless prisms (MeOH), mp 203–204°C, [α]<sub>D</sub><sup>22</sup> = -34.5° (c = 0.116, MeOH). Source: RI BEN MA SANG *Coriaria japonica* (seed). Ref: 4497.

**4055 Corilagin**

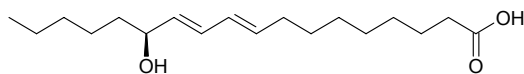
[23094-69-1] C<sub>27</sub>H<sub>22</sub>O<sub>18</sub> (634.47). Yellow, mp 211°C, mp 204–205°C. Pharm: Antihepatotoxin (*in vitro*); inhibits lipolysis (rat, fat cells, induced by adrenalin, hepatic cell microsome); TNF-α release inhibitor (BALB/3T3 cells, okadaic acid-stimulated, mean IC<sub>50</sub> = 76μmol/L)<sup>[4416]</sup>; thrombolytic (rats, dose-dependent manner, 5mg/kg corilagin produces a nearly similar reperfusion rate to that of 20000U/kg of urokinase, whereas it produces a lower reocclusion rate than urokinase, inhibits PAI-1 activity and increases tPA activity)<sup>[5500]</sup>; antibacterial (*Erwinia carotovora*, IZD = 20mm/100μg, control Quercetin sulfate, IZD = 21mm/10μg; *Staphylococcus aureus*, IZD = 12mm/100μg, Quercetin sulfate, IZD = 14mm/10μg; *Corynebacterium accolens*, IZD = 12mm/100μg, Quercetin sulfate, IZD = 28mm/10μg)<sup>[5250]</sup>; antifungal (*Candida albicans*, IZD = 12mm/100μg, control Nystatin, IZD = 11mm/20μg)<sup>[5250]</sup>; xanthine oxidase inhibitor (IC<sub>50</sub> = 72.9μg/mL, IC<sub>50</sub> > 100μmol/L; control Quercetin, IC<sub>50</sub> = 3.4μg/mL, IC<sub>50</sub> = 10μmol/L)<sup>[5250]</sup>. Source: AN MO LE *Phyllanthus emblica* (fruit juice, branch and leaf)<sup>[3094]</sup>, BAI MU WU JIU *Sapium japonicum*, BI MA ZI *Ricinus communis*, DA YE

KU NUO NI *Cunonia macrophylla* (leaf), HE ZI *Terminalia chebula*, TONG YOU *Aleurites cordata* [Syn. *Aleurites fordii*], WU JIU MU GEN PI *Sapium sebiferum*, YOU GAN MU PI *Phyllanthus emblica*, YOU GAN YE *Phyllanthus emblica*, MAO GUO QI *Acer nikoense*, YE XIA ZHU *Phyllanthus urinaria*, *Acer* sp. Ref: 6, 658, 4416, 5250, 5500.



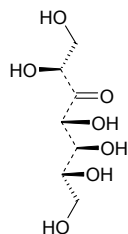
#### 4056 (S)-Coriolic acid

$C_{18}H_{32}O_3$  (296.45).  $[\alpha]_D^{20} = +4.7^\circ$  ( $c = 0.1$ ,  $CHCl_3$ ). Pharm: COX-1 inhibitor ( $IC_{50} = 2.1 \mu g/mL$ , control *trans*-Resveratrol,  $IC_{50} = 0.25 \mu g/mL$ )<sup>[5030]</sup>; COX-2 inhibitor ( $IC_{50} = 0.14 \mu g/mL$ , control *trans*-Resveratrol,  $IC_{50} = 0.30 \mu g/mL$ )<sup>[5030]</sup>. Source: LIAN YE TONG *Hernandia Sonora* [Syn. *Hernandia ovigera*] (seed). Ref: 5030.



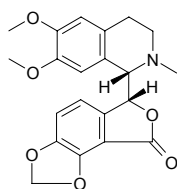
#### 4057 Corioste

[13059-96-6]  $C_7H_{14}O_7$  (210.19). mp 169~171°C. Source: MA SANG YE *Coriaria sinica* [Syn. *Coriaria nepalensis*]. Ref: 6.



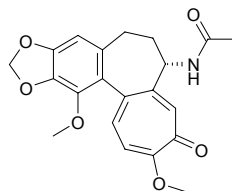
#### 4058 Corlumine

[485-51-5]  $C_{21}H_{21}NO_6$  (383.40). mp 159°C,  $[\alpha]_D = +77^\circ$  (chloroform). Pharm: Uterine stimulant. Source: BEI ZI JIN *Corydalis sibirica*, XIE SHI ZI JIN *Corydalis sewerzowi*. Ref: 661.



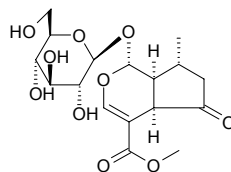
#### 4059 Cornigerine

[6877-25-4]  $C_{21}H_{21}NO_6$  (383.40). mp 268~270°C. Source: CAO BEI MU *Iphigenia indica*. Ref: 6.



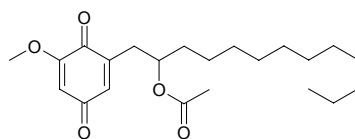
#### 4060 Cornin

Verbenalin [548-37-8]  $C_{17}H_{24}O_{10}$  (388.37). mp 182.2~182.8°C. Source: MA BIAN CAO *Verbena officinalis*, SHAN ZHU YU *Cornus officinalis* [Syn. *Macrocarpium officinale*]. Ref: 2, 6.



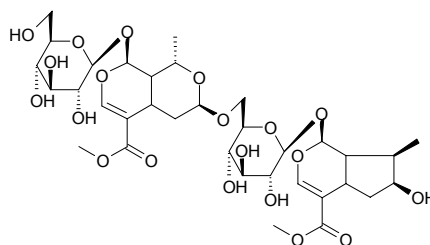
#### 4061 Cornudentanone

$C_{22}H_{34}O_5$  (378.51). Pharm: Inhibits combination of leucocyte and its receptor. Source: XIAN CHI ZI JIN NIU *Ardisia cornudentata*. Ref: 658.



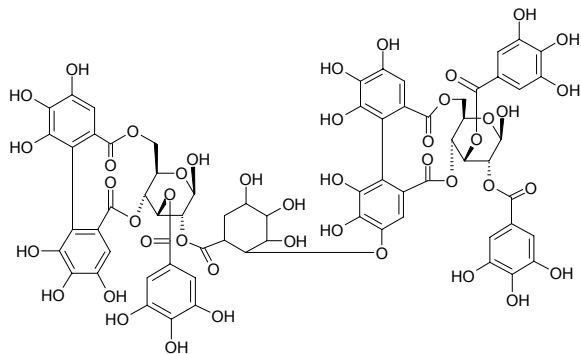
#### 4062 Cornuside

$C_{34}H_{50}O_{20}$  (778.77). White amorphous powder, mp 135~138°C,  $[\alpha]_D^{16.5} = -83.7^\circ$  ( $c = 0.2$ , methanol). Source: SHAN ZHU YU *Cornus officinalis* [Syn. *Macrocarpium officinale*]. Ref: 247.

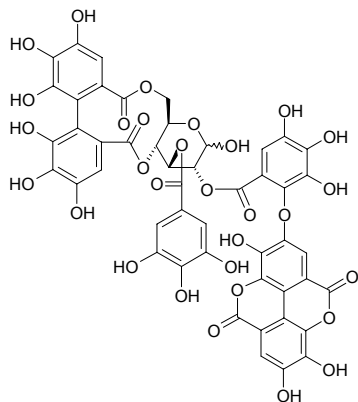


**4063 Cornusiin A**

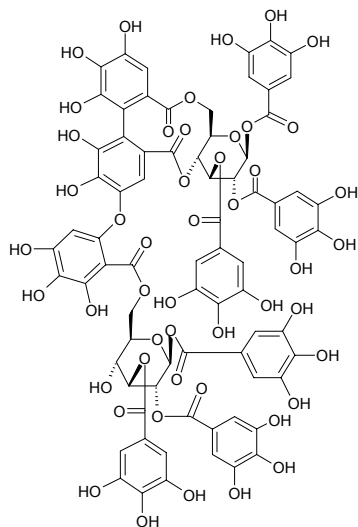
[95263-69-7] C<sub>68</sub>H<sub>56</sub>O<sub>44</sub> (1577.18). Source: SHAN ZHU YU *Cornus officinalis* [Syn. *Macrocarpum officinale*]. Ref: 2.

**4064 Cornusiin B**

[95263-70-0] C<sub>48</sub>H<sub>30</sub>O<sub>30</sub> (1086.76). Source: SHAN ZHU YU *Cornus officinalis* [Syn. *Macrocarpum officinale*]. Ref: 2.

**4065 Cornusiin G**

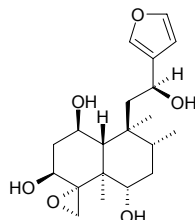
[131189-58-7] C<sub>75</sub>H<sub>56</sub>O<sub>48</sub> (1725.25). Source: SHAN ZHU YU *Cornus officinalis* [Syn. *Macrocarpum officinale*]. Ref: 2.

**4066 Cornutin C**

C<sub>20</sub>H<sub>30</sub>O<sub>6</sub> (366.46). Amorphous white solid,  $[\alpha]_D^{20} = -4^\circ$  ( $c = 0.12$ , MeOH).

Pharm: Antimalarial (antiplasmodial, poW strain of *Plasmodium falciparum*, IC<sub>50</sub> = 36.9 μmol/L, Dd2 strain of *Plasmodium falciparum*, IC<sub>50</sub> = 58.7 μmol/L).

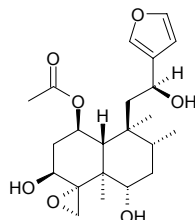
Source: ZHONG JIAN DA YE KE NU CAO *Cornutia grandifolia* var. *intermedia*. Ref: 3457.

**4067 Cornutin D**

C<sub>22</sub>H<sub>32</sub>O<sub>7</sub> (408.50). Colorless oil,  $[\alpha]_D^{20} = -5^\circ$  ( $c = 0.08$ , MeOH). Pharm:

Antimalarial (antiplasmodial, poW strain of *Plasmodium falciparum*, IC<sub>50</sub> = 56.6 μmol/L, Dd2 strain of *Plasmodium falciparum*, IC<sub>50</sub> = 96.8 μmol/L).

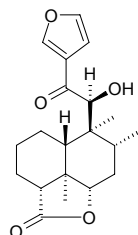
Source: ZHONG JIAN DA YE KE NU CAO *Cornutia grandifolia* var. *intermedia*. Ref: 3457.

**4068 Cornutin E**

C<sub>20</sub>H<sub>26</sub>O<sub>5</sub> (346.43). Colorless crystals,  $[\alpha]_D^{20} = -75^\circ$  ( $c = 0.30$ , CHCl<sub>3</sub>). Pharm:

Antimalarial inactive (antiplasmodial, poW strain of *Plasmodium falciparum*, Dd2 strain of *Plasmodium falciparum*). Source: ZHONG JIAN DA YE KE

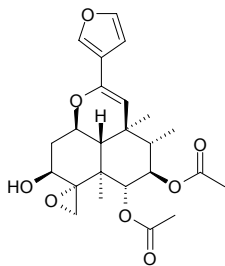
NU CAO *Cornutia grandifolia* var. *intermedia*. Ref: 3457.



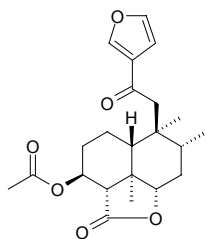


**4069 Cornutin F**

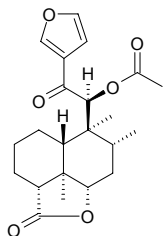
$C_{24}H_{30}O_8$  (446.50). Colorless crystals,  $[\alpha]_D^{20} = +17^\circ$  ( $c = 0.34$ ,  $CHCl_3$ ). **Pharm:** Antimalarial inactive (antiplasmodial, poW strain of *Plasmodium falciparum*, Dd2 strain of *Plasmodium falciparum*). **Source:** ZHONG JIAN DA YE KE NU CAO *Cornutia grandifolia* var. *intermedia*. **Ref:** 3457.

**4070 Cornutin G**

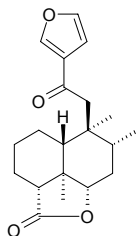
$C_{22}H_{28}O_6$  (388.46). Colorless oil,  $[\alpha]_D^{20} = -2^\circ$  ( $c = 0.29$ ,  $CHCl_3$ ). **Source:** ZHONG JIAN DA YE KE NU CAO *Cornutia grandifolia* var. *intermedia*. **Ref:** 3457.

**4071 Cornutin H**

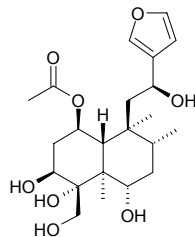
$C_{22}H_{28}O_6$  (388.46). Yellow crystals,  $[\alpha]_D^{20} = -10^\circ$  ( $c = 0.73$ ,  $CHCl_3$ ). **Source:** ZHONG JIAN DA YE KE NU CAO *Cornutia grandifolia* var. *intermedia*. **Ref:** 3457.

**4072 Cornutin I**

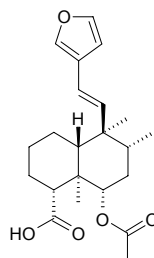
$C_{20}H_{26}O_4$  (330.43). Colorless crystals,  $[\alpha]_D^{20} = +4^\circ$  ( $c = 0.31$ ,  $CHCl_3$ ). **Source:** ZHONG JIAN DA YE KE NU CAO *Cornutia grandifolia* var. *intermedia*. **Ref:** 3457.

**4073 Cornutin J**

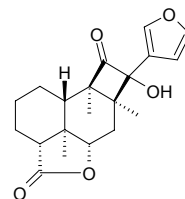
$C_{22}H_{30}O_8$  (426.51). White amorphous solid,  $[\alpha]_D^{20} = +13^\circ$  ( $c = 0.35$ ,  $CHCl_3$ ). **Source:** ZHONG JIAN DA YE KE NU CAO *Cornutia grandifolia* var. *intermedia*. **Ref:** 3457.

**4074 Cornutin K**

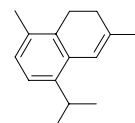
$C_{22}H_{30}O_5$  (374.48). Colorless oil. **Source:** ZHONG JIAN DA YE KE NU CAO *Cornutia grandifolia* var. *intermedia*. **Ref:** 3457.

**4075 Cornutin L**

$C_{20}H_{24}O_5$  (344.41). White amorphous solid,  $[\alpha]_D^{20} = +35^\circ$  ( $c = 0.39$ ,  $CHCl_3$ ). **Source:** ZHONG JIAN DA YE KE NU CAO *Cornutia grandifolia* var. *intermedia*. **Ref:** 3457.

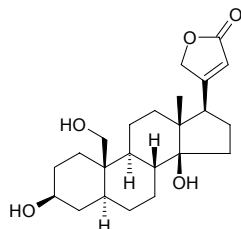
**4076  $\alpha$ -Corocalene**

1,6-Dimethyl-4-isopropyl-7,8-dihydro-naphthalene [20129-39-9]  $C_{15}H_{20}$  (200.33). **Source:** PI JIU HUA *Humulus lupulus*, ZHANG MU *Cinnamomum camphora*. **Ref:** 6.

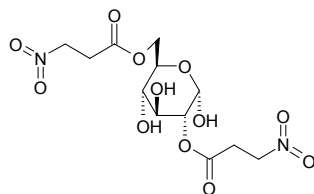


**4077 Coroglaucigenin**

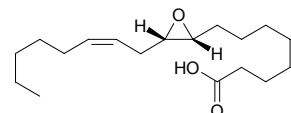
[468-19-9]  $C_{23}H_{34}O_5$  (390.52). mp 249°C. Source: LIAN SHENG GUI ZI HUA *Asclepias curassavica*. Ref: 6.

**4078 Coronarin**

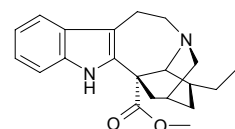
[63505-68-0]  $C_{12}H_{18}N_2O_{12}$  (382.28). Pharm: Toxin. Source: SHI YONG HUANG QI *Astragalus cibarius*, LIAN XING HUANG QI *Astragalus falcatus*, WAN YAN HUANG QI *Astragalus flexuosus*. Ref: 658.

**4079 Coronaric acid**

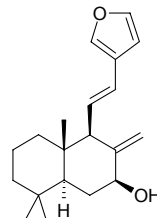
[16833-56-0]  $C_{18}H_{32}O_3$  (296.45). Source: TONG HAO *Chrysanthemum coronarium*. Ref: 1521.

**4080 Coronaridine**

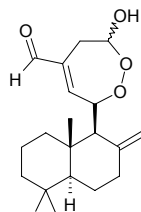
[467-77-6]  $C_{21}H_{26}N_2O_2$  (338.45). Pharm: Analgesic; diuretic; estrogenic activity (very strong); inhibits flap and quiver (mus, caused by stress); anti-addictive (with side effects: tremor, cerebellar neurotoxicity and bradycardia; its congener 18-Methoxycoronaridine has anti-HIV-1 activity and anti-retroviral activity)<sup>[4417]</sup>; antileishmanial (*Leishmania amazonensis*)<sup>[4417]</sup>. Source: CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochera rosea*], DAN BAN GOU YA HUA *Ervatamia divaricata*, ER QI GOU YA HUA *Ervatamia dichotoma*, GUAN ZHUANG GOU YA HUA *Ervatamia coronaria*. Ref: 2, 658, 4417.

**4081 Coronarin A**

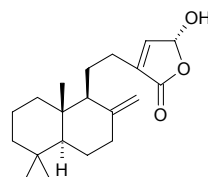
[119188-33-9]  $C_{20}H_{28}O_2$  (300.44). Colorless acicular crystals, mp 100~101°C,  $[\alpha]_D = +25.4^\circ$  ( $c = 0.28$ , chloroform). Pharm: Cytotoxic (V-79,  $IC_{50} = 1.65\mu\text{g/mL}$ ). Source: TU QIANG HUO *Hedychium coronarium*, YUAN BAN JIANG HUA *Hedychium forrestii*. Ref: 322, 1133.

**4082 Coronarin B**

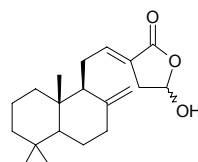
[119188-38-4]  $C_{20}H_{30}O_4$  (334.46). Colorless oil,  $[\alpha]_D = -43.1^\circ$  ( $c = 0.14$ , chloroform). Pharm: Cytotoxic (V-79,  $IC_{50} = 2.70\mu\text{g/mL}$ ). Source: TU QIANG HUO *Hedychium coronarium*. Ref: 1133.

**4083 Coronarin C**

[119188-35-1]  $C_{20}H_{30}O_3$  (318.46). Colorless oil,  $[\alpha]_D = +34.9^\circ$  ( $c = 0.13$ , chloroform). Pharm: Cytotoxic (V-79,  $IC_{50} = 17.5\mu\text{g/mL}$ ). Source: TU QIANG HUO *Hedychium coronarium*. Ref: 1133.

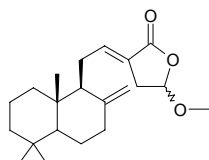
**4084 Coronarin D**

[119188-37-3]  $C_{20}H_{30}O_3$  (318.46). Colorless solid,  $[\alpha]_D = +10^\circ$  ( $c = 0.83$ , chloroform). Pharm: Cytotoxic (V-79,  $IC_{50} = 17.0\mu\text{g/mL}$ );  $\beta$ -hexosaminidase inhibitor (RBL-2H3 cells,  $100\mu\text{mol/L}$ ,  $\text{InRt} = (93.5 \pm 0.4)\%$ ,  $p < 0.01$ )<sup>[4221]</sup>. Source: TU QIANG HUO *Hedychium coronarium*. Ref: 931, 1133, 4221.

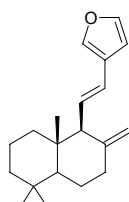


**4085 Coronarin D methyl ether**

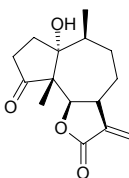
$C_{21}H_{32}O_3$  (332.49). Source: TU QIANG HUO *Hedychium coronarium* (rhizome). Ref: 4221.

**4086 Coronarin E**

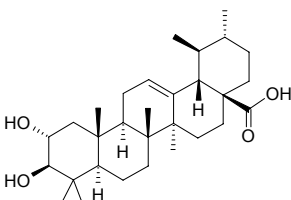
$C_{20}H_{28}O$  (284.45). Source: TU QIANG HUO *Hedychium coronarium* (rhizome). Ref: 4221.

**4087 Coronopilin**

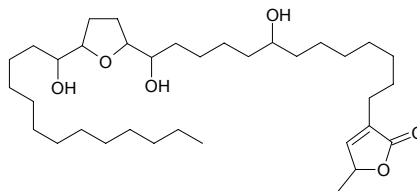
[2571-81-5]  $C_{15}H_{20}O_4$  (264.32). Pharm: Dermatitis (causes contact dermatitis); insect antifeedant. Source: GUAN LUO SUI TUN CAO *Ambrosia psilostachya* var. *coronopifolia*, MEI GUO HAI MO JU *Hymenoclea salsola*, YIN JIAO JU *Parthenium hysterophorus* (flower), *Iva* sp. Ref: 658, 4489.

**4088 Corosolic acid**

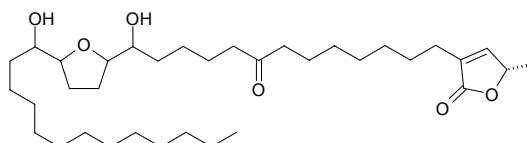
2 $\alpha$ -Hydroxyursolic acid [4547-24-4]  $C_{30}H_{48}O_4$  (472.71). mp 242~245°C. Pharm: Antitrypanosomal (epimastigotes of *Trypanosoma cruzi*, MLC = 6.2  $\mu$ mol/L, control Gentian violet, MLC = 6.2  $\mu$ mol/L)<sup>[2579]</sup>. Source: CU YE XUAN GOU ZI *Rubus alceaefolius*, HONG KUAI ZI *Chamaenerion angustifolium* [Syn. *Epilobium angustifolium*], SAN YE SHU WEI CAO *Salvia trijuga*, YI LANG QING LAN *Dracocephalum kotschyi*. Ref: 6, 420, 570, 2579.

**4089 Corossoline**

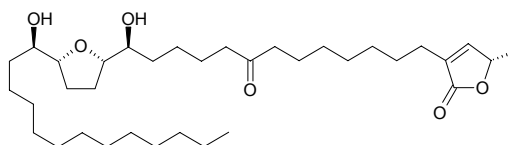
$C_{35}H_{64}O_6$  (580.90). Waxy solid,  $[\alpha]_D^{25} = +82.8^\circ$  ( $c = 0.34$ ,  $CHCl_3$ ); white amorphous solid,  $[\alpha]_D^{25} = +19^\circ$  ( $c = 0.2$ , MeOH). Pharm: Cytotoxic (*in vitro*, HepG<sub>2</sub>, IC<sub>50</sub> = 0.353  $\mu$ g/mL, Hep2,2,15, IC<sub>50</sub> = 0.234  $\mu$ g/mL; control Adriamycin, HepG<sub>2</sub>, IC<sub>50</sub> = 0.241  $\mu$ g/mL, Hep2,2,15, IC<sub>50</sub> = 0.45  $\mu$ g/mL)<sup>[3067]</sup>. Source: CI GUO FAN LI ZHI *Annona muricata* (seed)<sup>[3067]</sup>, JIN PING GE NA XIANG *Goniothalamus leiocarpus*. Ref: 420, 3067.

**4090 Corosolone**

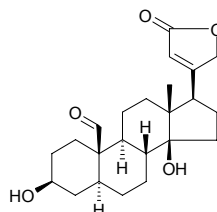
$C_{35}H_{62}O_6$  (578.88). Waxy solid,  $[\alpha]_D^{25} = +11.7^\circ$  ( $c = 0.19$ ,  $CHCl_3$ ). Pharm: Cytotoxic (*in vitro*, Hep = G<sub>2</sub>, IC<sub>50</sub> = 0.48  $\mu$ g/mL, Hep2,2,15, IC<sub>50</sub> = 0.284  $\mu$ g/mL; control Adriamycin, HepG<sub>2</sub>, IC<sub>50</sub> = 0.241  $\mu$ g/mL, Hep2,2,15, IC<sub>50</sub> = 0.45  $\mu$ g/mL)<sup>[3067]</sup>. Source: CI GUO FAN LI ZHI *Annona muricata* (leaf; yield = 0.00015%dw)<sup>[4617]</sup>, CI GUO FAN LI ZHI *Annona muricata* (seed). Ref: 3067, 4617.

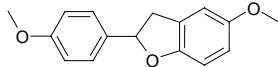
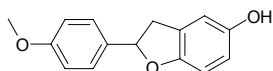
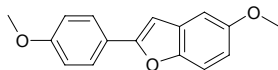
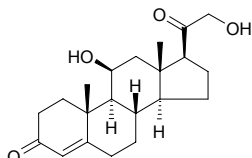
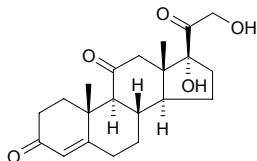
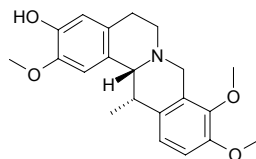
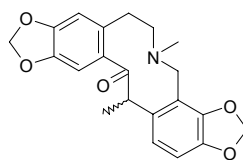
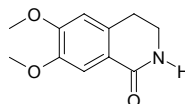
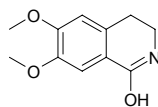
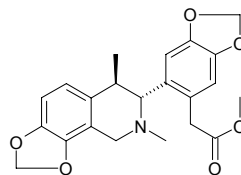
**4091 cis-Corosolone**

$C_{35}H_{62}O_6$  (578.88). White waxy solid,  $[\alpha]_D^{25} = +13.6^\circ$  ( $c = 0.10$ , MeOH). Pharm: Cytotoxic (*in vitro*, HepG<sub>2</sub>, IC<sub>50</sub> = 0.165  $\mu$ g/mL, control Adriamycin, IC<sub>50</sub> = 0.241  $\mu$ g/mL; Hep2,2,15, IC<sub>50</sub> = 0.0476  $\mu$ g/mL, Adriamycin, IC<sub>50</sub> = 0.45  $\mu$ g/mL). Source: CI GUO FAN LI ZHI *Annona muricata* (leaf; yield = 0.00013%dw). Ref: 4617.

**4092 Corotoxigenin**

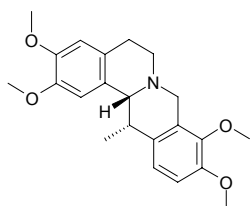
[468-20-2]  $C_{23}H_{32}O_5$  (388.51). mp 221°C. Source: LIAN SHENG GUI ZI HUA *Asclepias curassavica*. Ref: 6.



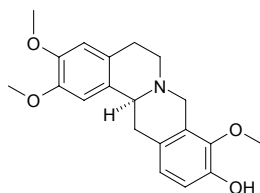
**4093 Corsifuran A**5-Methoxy-2-(4-methoxyphenyl)-2,3-dihydrobenzofuran C<sub>16</sub>H<sub>16</sub>O<sub>3</sub> (256.30).White solid. Source: GE ZHI HUA DI QIAN *Corsinia coriandrina*. Ref: 3888.**4094 Corsifuran B**5-Hydroxy-2-(4-methoxyphenyl)-2,3-dihydrobenzofuran C<sub>15</sub>H<sub>14</sub>O<sub>3</sub> (242.28).White solid. Source: GE ZHI HUA DI QIAN *Corsinia coriandrina*. Ref: 3888.**4095 Corsifuran C**5-Methoxy-2-(4-methoxyphenyl)-benzofuran C<sub>16</sub>H<sub>14</sub>O<sub>3</sub> (254.29). Off-whitesolid. Source: GE ZHI HUA DI QIAN *Corsinia coriandrina*. Ref: 3888.**4096 Corticosterone**11β,21-Dihydroxypregn-4-ene-3,20-dione [50-22-6] C<sub>21</sub>H<sub>30</sub>O<sub>4</sub> (346.47). mp177~179°C. Source: NIU SHEN *Bos taurus domesticus*; *Bubalus bubalis*.Ref: 6.**4097 Cortisone**11-Dehydro-17-hydroxycorticosterone [53-06-5] C<sub>22</sub>H<sub>30</sub>O<sub>5</sub> (374.48). mp230~231°C. Pharm: Antiallergic; anti-inflammatory (reduces permeability of capillary and blood cell walls); inhibits proliferation of neuroglia; promotes decomposition of protein to be converted to sugar; gastric secretion promotor.Source: NIU SHEN *Bos taurus domesticus*; *Bubalus bubalis*, ZI HE CHE*Homo sapiens*. Ref: 6, 658.**4098 (+)-Corybulbine**[518-77-4] C<sub>21</sub>H<sub>25</sub>NO<sub>4</sub> (355.44). Source: YAN HU SUO *Corydalis yanhusuo*[Syn. *Corydalis turtschaninovii* f. *Yanhusuo*]. Ref: 2.**4099 Corycavine**[521-87-9] C<sub>21</sub>H<sub>21</sub>NO<sub>5</sub> (367.41). mp (±) 218~219°C. Source: ZI HUA YUDENG CAO *Corydalis incisa*. Ref: 6.**4100 Corydaldine (tautomeric structure 1)**C<sub>11</sub>H<sub>13</sub>NO<sub>3</sub> (207.23). Source: BIAN FU GE GEN *Menispermum dauricum*, BILU ZHI XIAO BO *Berberis baluchistanica*, DUO GUO YI NAN MU*Enantia polycarpa*. Ref: 1521, 3792.**4101 Corydaldine (tautomeric structure 2)**C<sub>11</sub>H<sub>13</sub>NO<sub>3</sub> (207.23). Source: BIAN FU GE GEN *Menispermum dauricum*, BILU ZHI XIAO BO *Berberis baluchistanica*, DUO GUO YI NAN MU*Enantia polycarpa*. Ref: 1521, 3792.**4102 Corydalic acid methyl ester**C<sub>22</sub>H<sub>23</sub>NO<sub>6</sub> (397.43). mp 140~141°C. Source: ZI HUA YU DENG CAO*Corydalis incisa*. Ref: 6.

**4103 (+)-Corydaline**

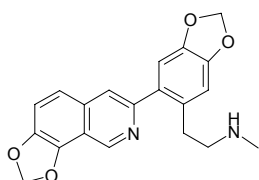
[518-69-4]  $C_{22}H_{27}NO_4$  (369.46). mp (+) 135°C,  $[\alpha]_D^{20} = +311^\circ$  ( $c = 0.8$ , ethanol), soluble in chloroform, moderate soluble in ether, slightly soluble in methanol, ethanol, insoluble in water.<sup>[5507]</sup> **Pharm:** Analgesic (mus, hot plate model); uterine stimulant (rat, *in vitro*, *in vivo*); LD<sub>50</sub> (mus, iv) = 146mg/kg. **Source:** CHANG JU YAN HU SUO *Corydalis longicalcarata* (rhizome: content = 0.06%<sup>[5508]</sup>), CHI BAN YAN HU SUO *Corydalis remota* [Syn. *Corydalis bulbosa* var. *typica*] (rhizome: content = 0.06%<sup>[5508]</sup>), DONG BEI YAN HU SUO *Corydalis ambigua* var. *amurensis* [Syn. *Corydalis ambigua*] (rhizome: content = 0.02%<sup>[5508]</sup>), DUI YE YUAN HU SUO *Corydalis ledebouriana* (rhizome: content = 0.07%<sup>[5508]</sup>), HUI LV YAN HU SUO *Corydalis adunca* (rhizome: content = 0.06%<sup>[5508]</sup>), XIA TIAN WU *Corydalis decumbens* [Syn. *Corydalis amabilis*] (rhizome: content = 0.01%<sup>[5508]</sup>), YAN HU SUO *Corydalis yanhusuo* [Syn. *Corydalis turtschaninovii* f. *Yanhusuo*] (rhizome: mean content of 8 origins = 0.103%<sup>[5508]</sup>; content 0.049%<sup>[5507]</sup>). **Ref:** 2, 4, 5501, 5507, 5508.

**4104 Corydalmine**

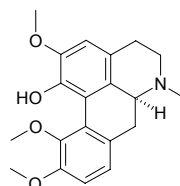
Kikemanine [30413-84-4]  $C_{20}H_{23}NO_4$  (341.41). mp 177~178°C. **Pharm:** Antimalarial (*Plasmodium falciparum*, chloroquine-sensitive strain D6, ED<sub>50</sub> = 2840ng/mL, ED<sub>50</sub> of chloroquine control = 1.3ng/mL, chloroquine-endured strain W2, ED<sub>50</sub> = 840ng/mL, ED<sub>50</sub> of chloroquine control = 11.2ng/mL). **Source:** JU HUA HUANG LIAN *Corydalis pallida*, YAN HU SUO *Corydalis yanhusuo* [Syn. *Corydalis turtschaninovii* f. *Yanhusuo*]. **Ref:** 6, 1756.

**4105 Corydamine**

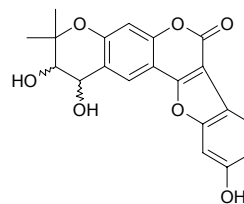
[49870-84-0]  $C_{20}H_{18}N_2O_4$  (350.38). **Source:** ZI HUA YU DENG CAO *Corydalis incisa*. **Ref:** 6.

**4106 Corydine**

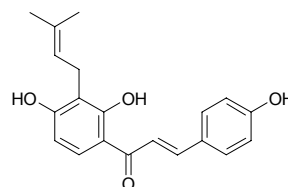
[476-69-7]  $C_{20}H_{23}NO_4$  (341.41). mp (+) 149°C, (-) 149°C, (±) 165~167°C. **Pharm:** Antineoplastic; selective DNA-damaging activity (yeast assay: RS321NYCp50(gal), IC<sub>50</sub> = 27.5μg/mL; RS321NpRAD52(gal), IC<sub>50</sub> = 73.9μg/mL, control Camptothecin, IC<sub>50</sub> = 100μg/mL; RS321NpRAD52(glu), IC<sub>50</sub> = 22.5μg/mL, Camptothecin, IC<sub>50</sub> = 0.6μg/mL)<sup>[5457]</sup>. **Source:** CHI BAN YAN HU SUO *Corydalis remota* [Syn. *Corydalis bulbosa* var. *typica*], DING KE LA QIAN JIN TENG *Stephania dinklagei*, HAI YING SU *Glaucium fimbrilligerum*, LUO BO HUA LING CAO *Eschscholzia lobbii*, MA CHANG LI ZI JIN *Corydalis marschalliana*, XIAO JIAO HAI YING SU *Glaucium corniculatum*, YAN HU SUO *Corydalis yanhusuo* [Syn. *Corydalis turtschaninovii* f. *Yanhusuo*]. **Ref:** 5, 6, 658, 5457.

**4107 Corylidin**

[63109-31-9]  $C_{20}H_{16}O_7$  (368.35). **Source:** BU GU ZHI *Psoralea corylifolia*. **Ref:** 2.

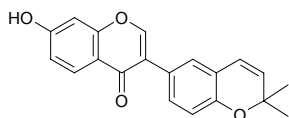
**4108 Corylifolinin**

[20784-50-3]  $C_{20}H_{20}O_4$  (324.38). mp 154~156°C; 166~167°C. **Pharm:** Against heart failure (frog heart, caused by lactic acid); coronary vasodilator (gpg, rbt, cat and rat, *in vitro*, with high selectivity); stimulates heart (frog); enhances myocardial contractility (gpg, rat); cytotoxic (estrogen  $\alpha$  receptor-binding assay)<sup>[5038]</sup>; cytotoxic (estrogen  $\beta$  receptor-binding assay)<sup>[5038]</sup>; aromatase inhibitor inactive (*in vitro*, IC<sub>50</sub> > 40μmol/L; control Aminoglutethimide, IC<sub>50</sub> = 6.4μmol/L)<sup>[3090]</sup>. **Source:** BU GU ZHI *Psoralea corylifolia*, GAN CAO *Glycyrrhiza uralensis*, GOU SHU *Broussonetia papyrifera*<sup>[3090]</sup>. **Ref:** 4, 660, 2431, 3090, 5038.

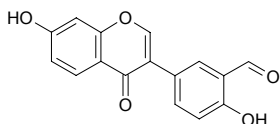


**4109 Corylin**

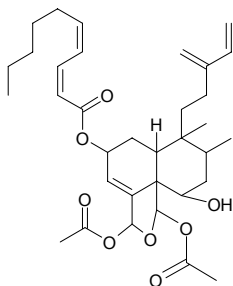
[53947-92-5] C<sub>20</sub>H<sub>16</sub>O<sub>4</sub> (320.35). Source: BU GU ZHI *Psoralea corylifolia* (dried ripe fruit: mean content of 7 origins = 1.032%<sup>[5508]</sup>). Ref: 2, 5508.

**4110 Corylinal**

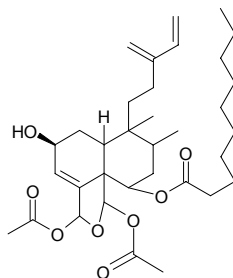
[65615-46-5] C<sub>16</sub>H<sub>10</sub>O<sub>5</sub> (282.26). Source: BU GU ZHI *Psoralea corylifolia*. Ref: 2, 545.

**4111 Corymbulosin A**

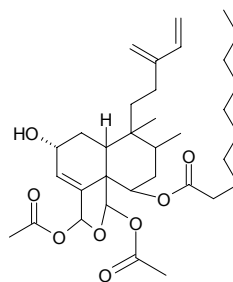
C<sub>34</sub>H<sub>48</sub>O<sub>8</sub> (584.76). Oily solid, [α]<sub>D</sub> = -111° (c = 1.0, CHCl<sub>3</sub>). Pharm: Cytotoxic (SF539, IC<sub>50</sub> = 0.6 μmol/L, LOX melanoma, IC<sub>50</sub> = 8 μmol/L). Source: *Laetia corymbulosa* (fruit). Ref: 5089.

**4112 Corymbulosin B**

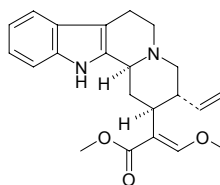
C<sub>34</sub>H<sub>52</sub>O<sub>8</sub> (588.79). [α]<sub>D</sub> = +0.7° (c = 1.0, CHCl<sub>3</sub>). Pharm: Cytotoxic (SF539, LOX melanoma). Source: *Laetia corymbulosa* (fruit). Ref: 5089.

**4113 Corymbulosin C**

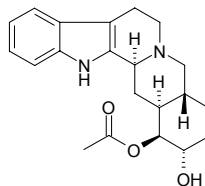
C<sub>34</sub>H<sub>52</sub>O<sub>8</sub> (588.79). [α]<sub>D</sub> = -51° (c = 1.0, CHCl<sub>3</sub>). Pharm: Cytotoxic (SF539, LOX melanoma). Source: *Laetia corymbulosa* (fruit). Ref: 5089.

**4114 Corynantheine**

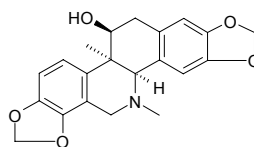
[18904-54-6] C<sub>22</sub>H<sub>26</sub>N<sub>2</sub>O<sub>3</sub> (366.46). [α]<sub>D</sub><sup>20</sup> = +28.8° (MeOH). Source: GOU TENG *Uncaria rhynchophylla* [Syn. *Nauclea rhynchophylla*]. Ref: 2, 1521.

**4115 Corynanthine**

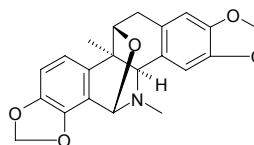
[483-10-3] C<sub>21</sub>H<sub>26</sub>N<sub>2</sub>O<sub>3</sub> (354.45). Thick prismatic crystals (acetone), 225–226°C (dec), [α]<sub>D</sub><sup>19</sup> = -85° (c = 0.5, pyridine). Pharm: Uterine stimulant. Source: YIN DU LUO FU MU *Rauwolfia serpentina*. Ref: 661.

**4116 Corynoline**

[18797-79-0] C<sub>21</sub>H<sub>21</sub>NO<sub>5</sub> (367.41). mp 216–217°C. Pharm: Antispirochetic; sedative (remarkable, using sulfate). Source: JIAN JU ZI JIN *Corydalis suaveolens* [Syn. *Corydalis sheareri*], KU DI DING *Corydalis bungeana* (whole herb with root: content scope of 8 origins = 0.051%–0.261%, mean content = 0.150%<sup>[5508]</sup>), ZI HUA YU DENG CAO *Corydalis incisa*. Ref: 6, 658, 5501, 5508.

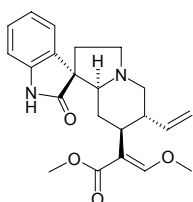
**4117 Corynoloxine**

[31470-65-2] C<sub>21</sub>H<sub>19</sub>NO<sub>5</sub> (365.39). mp 209–210°C. Source: ZI HUA YU DENG CAO *Corydalis incisa*. Ref: 6.

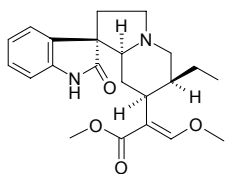


**4118 Corynoxine**

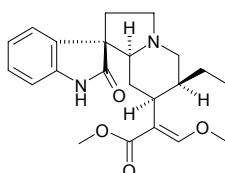
[630-94-4]  $C_{22}H_{26}N_2O_4$  (382.46). mp 212~214°C. **Pharm:** CNS activity (significantly depresses locomotion response)<sup>[5341]</sup>. **Source:** CHANG HUA GOU TENG *Uncaria longiflora*, GOU TENG *Uncaria rhynchophylla* [Syn. *Nauclea rhynchophylla*], HUA GOU TENG *Uncaria sinensis*, PO LUO ZHOU GOU TENG *Uncaria borneensis*, SUAN GOU TENG *Uncaria acida*, XIA GOU TENG *Uncaria attenuata*. **Ref:** 2, 6, 5341.

**4119 Corynoxine**

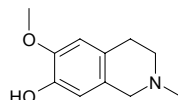
[6877-32-3]  $C_{22}H_{28}N_2O_4$  (384.48). mp 166~168°C. **Pharm:** Hypnosis (100mg/kg, prolongation of thiopental-induced hypnosis)<sup>[5341]</sup>. **Source:** BAI GOU TENG *Uncaria sessilifructus* [Syn. *Nauclea sessilifructus*], DA YE GOU TENG *Uncaria macrophylla*, XIA GOU TENG *Uncaria attenuata*, XIN XING GOU TENG *Uncaria cordata*, *Uncaria kunstleri*, *Uncaria sterrophylla*. **Ref:** 2, 6, 660, 5341.

**4120 Corynoxine B**

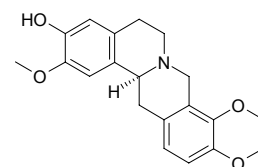
[17391-18-3]  $C_{22}H_{28}N_2O_4$  (384.48). **Pharm:** Hypnosis (100mg/kg, prolongation of thiopental-induced hypnosis)<sup>[5341]</sup>; CNS activity (significantly depresses locomotion response, may be central dopaminergic receptor antagonist)<sup>[5341]</sup>. **Source:** BAI GOU TENG *Uncaria sessilifructus* [Syn. *Nauclea sessilifructus*], DA YE GOU TENG *Uncaria macrophylla*, XIA GOU TENG *Uncaria attenuata*, XIN XING GOU TENG *Uncaria cordata*, *Uncaria kunstleri*, *Uncaria sterrophylla*. **Ref:** 2, 6, 660, 5341.

**4121 Corypalline**

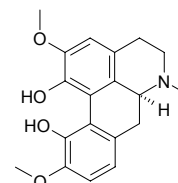
1,2,3,4-Tetrahydro-6-methoxy-7-hydroxy-2-methylisoquinoline [450-14-6]  $C_{11}H_{15}NO_2$  (193.25). **Source:** CU GUO TANG SONG CAO *Thalictrum dasycarpum*, DA HONG YING SU *Papaver bracteatum*, JIN HUANG JIN *Corydalis aurea*, JU HUA HUANG LIAN *Corydalis pallida*, SHE GUO HUANG JIN *Corydalis ophiocarpa*, ZOU WEN TANG SONG CAO *Thalictrum rugosum*. **Ref:** 1521.

**4122 Corypalmine**

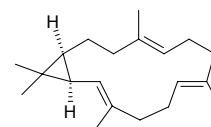
Tetrahydrojatrorrhizine [6018-40-2]  $C_{20}H_{23}NO_4$  (341.41). mp (+) 235~236°C, (-) 230°C, (±) 215~217°C. **Source:** TU HUANG LIAN *Berberis julianae*, TU YE HUANG PI SHU *Phellodendron chinense* var. *glabriusculum*, YAN HU SUO *Corydalis yanhusuo* [Syn. *Corydalis turtschaninovii* f. *Yanhusuo*], ZI HUA YU DENG CAO *Corydalis incisa*. **Ref:** 6, 660.

**4123 Corytuberine**

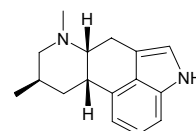
[517-56-6]  $C_{19}H_{21}NO_4$  (327.38). mp (+) 240°C, (±) 242°C. **Source:** YA PIAN *Papaver somniferum*, MA TI YE *Caltha palustris*. **Ref:** 6, 660.

**4124 Cosbene**

$C_{20}H_{32}$  (272.48). **Pharm:** Antifungal. **Source:** BI MA ZI *Ricinus communis*. **Ref:** 658.

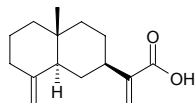
**4125 Costaclavine**

[436-41-9]  $C_{16}H_{20}N_2$  (240.35). mp 182~184°C. **Source:** MAI JIAO *Claviceps purpurea*. **Ref:** 6.

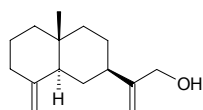


**4126 Costic acid**

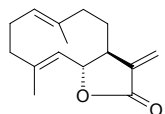
[3650-43-9] C<sub>15</sub>H<sub>22</sub>O<sub>2</sub> (234.34). Source: LIU LENG JU *Laggera alata* (aerial parts: yield = 0.0006%dw)<sup>[4709]</sup>, MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*], XIN JIANG LAN CI TOU *Echinops ritro*. Ref: 2, 660, 4709.

**4127 Costol**

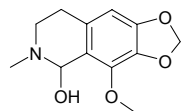
[65018-15-7] C<sub>15</sub>H<sub>24</sub>O (220.36). bp (+) 145°C/0.5mm (±) 90°C/0.2mmHg. Source: MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*], MU BIE GEN *Momordica cochinchinensis*. Ref: 6.

**4128 Costunolide**

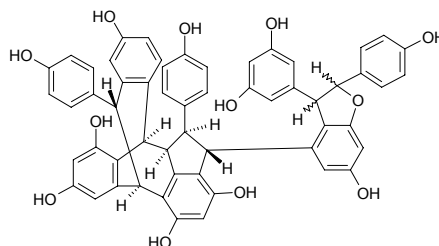
[553-21-9] C<sub>15</sub>H<sub>20</sub>O<sub>2</sub> (232.33). bp (+) 105–106°C. Pharm: Cytotoxic (*in vitro*, HepG<sub>2</sub>, CD<sub>50</sub> = 1.6μg/mL; HeLa, CD<sub>50</sub> = 2μg/mL; OVCAR-3, CD<sub>50</sub> = 2μg/mL; control Cisplatin, HepG<sub>2</sub>, CD<sub>50</sub> = 2.8μg/mL; HeLa, CD<sub>50</sub> = 5.2μg/mL; OVCAR-3, CD<sub>50</sub> = 3μg/mL; without significant antibacterial effect)<sup>[4720]</sup>; antineoplastic; dermatitic (causes contact dermatitis); schistosomacide (against *martensite* schistosome); anti-inflammatory (NO production inhibitor)<sup>[4415]</sup>. Source: CHUAN MU XIANG *Vladimiria souliei* [Syn. *Jurinea souliei*] (root: content scope of 4 origins = 0.158%~1.344%, mean content of = 0.864%<sup>[5508]</sup>), MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*] (root: mean content of 13 origins = 0.92%<sup>[5508]</sup>; 0.017%dw<sup>[4720]</sup>), YUE GUI ZI *Laurus nobilis*, YUE XI MU XIANG *Vladimiria denticulata*. Ref: 2, 5, 658, 4415, 4720, 5501, 5508.

**4129 Cotarnine**

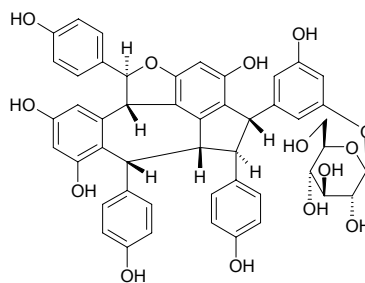
[82-54-2] C<sub>12</sub>H<sub>15</sub>NO<sub>4</sub> (237.26). mp 132–133°C. Source: YA PIAN *Papaver somniferum*. Ref: 6.

**4130 Cotylephenol C**

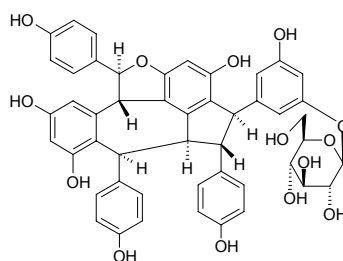
C<sub>56</sub>H<sub>42</sub>O<sub>12</sub> (906.95). Pale yellow solid, [α]<sub>D</sub> = +78° (c = 0.1, MeOH). Source: *Cotylelobium lanceolatum* (stem: yield = 0.003%dw). Ref: 1819.

**4131 Cotyleloside A**

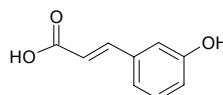
C<sub>48</sub>H<sub>42</sub>O<sub>14</sub> (842.86). Yellow solid, [α]<sub>D</sub> = +106° (c = 0.1, MeOH). Source: *Cotylelobium lanceolatum* (stem: yield = 0.0008%dw). Ref: 1819.

**4132 Cotyleloside B**

C<sub>48</sub>H<sub>42</sub>O<sub>14</sub> (842.86). Yellow solid, [α]<sub>D</sub> = -21° (c = 0.1, MeOH). Source: *Cotylelobium lanceolatum* (stem: yield = 0.0006%dw). Ref: 1819.

**4133 m-Coumaric acid**

*m*-Hydroxycinnamic acid [14755-02-3] C<sub>9</sub>H<sub>8</sub>O<sub>3</sub> (164.16). mp 193°C. Source: LI MENG GEN *Citrus limonia*. Ref: 6.

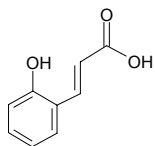




**4134 *o*-Coumaric acid**

*trans-o*-Hydroxycinnamic acid [614-60-8] C<sub>9</sub>H<sub>8</sub>O<sub>3</sub> (164.16). mp 217°C (dec).

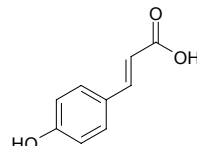
**Source:** HUI XIANG JING YE *Foeniculum vulgare*, NING MENG GEN *Citrus limon*, NING MENG YE *Citrus limon*, PEI LAN *Eupatorium fortunei*, PI HAN CAO *Melilotus suaveolens*, PI HAN CAO GEN *Melilotus suaveolens*, YANG CONG *Allium cepa*. **Ref:** 6.

**4135 *p*-Coumaric acid**

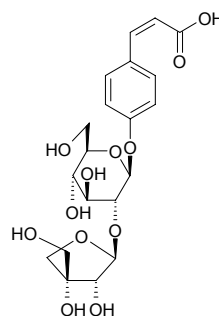
4-Hydroxycinnamic acid [501-98-4] C<sub>9</sub>H<sub>8</sub>O<sub>3</sub> (164.16). mp 171°C (dec).

**Pharm:** Antibacterial (gram-positive: *Staphylococcus aureus* ATCC25923, MIC = 6.4mg/mL; *Staphylococcus epidermidis* ATCC12228, MIC = 3.2mg/mL; *Streptococcus pyogenes* ATCC19615, MIC = 1.6mg/mL; *Streptococcus mutans* ATCC25175, MIC = 6.4mg/mL; *Enterococcus faecalis* ATCC33186, MIC = 6.4mg/mL; *Enterococcus gallinarum* CDC-42, MIC > 12.8mg/mL; gram-negative: *Salmonella typhimurium* ATCC14028, MIC > 12.8mg/mL; *Escherichia coli* ATCC25922, MIC = 6.4mg/mL; *Escherichia coli* O157:H7 ATCC43894, MIC = 1.6mg/mL; *Enterobacter cloacae* ATCC23350, MIC > 12.8mg/mL; *Klebsiella pneumoniae* ATCC13883, MIC > 12.8mg/mL; *Pseudomonas aeruginosa* ATCC27853, MIC > 12.8mg/mL; *Vibrio vulnificus* ATCC29307, MIC = 0.4mg/mL; *Citrobacter freundii* ATCC8090, MIC > 12.8mg/mL)<sup>[5373]</sup>; antifungal; antihepatotoxin; cytotoxic (*in vitro*, P<sub>815</sub> and P<sub>388</sub>); cytotoxic inactive (Colon26-L5, HT1080, 100μmol/L)<sup>[3042]</sup>; antihypercholesterolemic; neuroprotectant (primary cultures of rat cortical cells injured by glutamate, 10.0μmol/L, cell viability = (48.5±3.3)%, *p*<0.01, control MK-801, 10.0μmol/L, cell viability = (83.6±4.2)%, APV, 10.0μmol/L, cell viability = (43.6±3.2)%, XNQX, 10.0μmol/L, cell viability = (61.6±2.7)%)<sup>[3967]</sup>; choleric (bile secretion promotor); phytoalexin<sup>[4727]</sup>; LD<sub>50</sub> (mus, orl) = (1.1±0.3)g/kg. **Source:** BEI XUAN SHEN *Scrophularia buergeriana* (root), BEI YE JU *Chrysanthemum boreale*, BAN WEN AN *Eucalyptus maculata*, CI GUO FAN LI ZHI *Annona muricata*, DA CHE QIAN *Plantago major*, GUAN MU TONG *Aristolochia manshuriensis* (stem: yield = 0.00056%)<sup>[4706]</sup>, HAI JIN SHA *Lygodium japonicum*, HONG CHE ZHOU CAO *Trifolium pratense*, HUANG GUA *Cucumis sativus* (leaf)<sup>[4727]</sup>, JIA BAI HE *Notholirion hyacinthinum* [Syn. *Notholirion bulbuliferum*], LU HUI *Aloe vera* [Syn. *Aloe barbadensis*], MA LING SHU *Solanum tuberosum*, DUAN CHI HUANG QI *Ephedra equisetina*, NAN FANG TU SI ZI *Cuscuta australis*, NING MENG *Citrus limon*, RI BEN HUANG BAI *Phellodendron japonicum* (leaf), TAI WAN FU RONG *Hibiscus taiwanensis*, XUAN FU HUA *Inula britannica*,

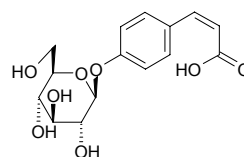
YE HEI YING *Prunus serotina* (peel), YUN NAN CAO KOU *Alpinia blepharocalyx* (seed: yield = 0.00124%)<sup>[3042]</sup>, ZI BAI PI *Catalpa ovata*, ZI DING XIANG *Syringa oblata*, occurs in many plants (as many glycosides. found by Bate-Smith in 48% of investigated dicotyledonous and 55% of monocotyledonous plants). **Ref:** 2, 589, 658, 660, 2529, 3042, 3967, 4502, 4706, 4727, 5373, 5501.

**4136 (Z)-4-Coumaric acid 4-O-β-D-apiofuranosyl-(1'→2')-O-β-D-glucopyranoside**

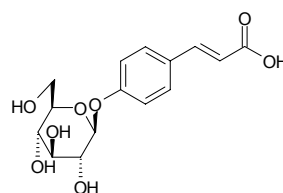
C<sub>20</sub>H<sub>26</sub>O<sub>12</sub> (458.42). Amorphous powder, [α]<sub>D</sub><sup>25</sup> = -68° (*c* = 0.8, H<sub>2</sub>O). **Source:** LAO SHU LE *Acanthus ilicifolius* (aerial parts). **Ref:** 4392.

**4137 *cis-p*-Coumaric acid 4-O-β-D-glucopyranoside**

C<sub>15</sub>H<sub>18</sub>O<sub>8</sub> (326.31). Amorphous powder, [α]<sub>D</sub><sup>25</sup> = -52° (*c* = 0.7, H<sub>2</sub>O). **Source:** LAO SHU LE *Acanthus ilicifolius* (aerial parts), SAN XIAO CAO *Trifolium repens* (flower). **Ref:** 3970, 4392.

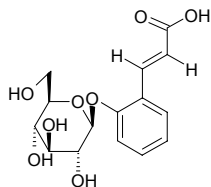
**4138 *trans-p*-Coumaric acid 4-O-β-D-glucopyranoside**

C<sub>15</sub>H<sub>18</sub>O<sub>8</sub> (326.31). **Source:** LV DOU *Onobrychis viciifolia* (leaf), SAN XIAO CAO *Trifolium repens* (flower). **Ref:** 3970, 5084.

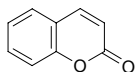


**4139 *o*-Coumaric acid- $\beta$ -D-glucoside**

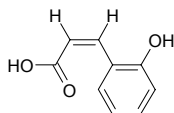
$C_{15}H_{18}O_8$  (326.31). mp 241°C. Source: PI HAN CAO *Melilotus suaveolens*. Ref: 6.

**4140 Coumarin**

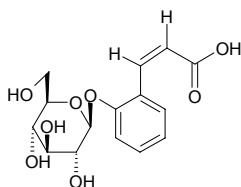
1,2-Benzopyrone [91-64-5]  $C_9H_6O_2$  (146.15). Pharm: Antibacterial (*Bacillus coli*); antineoplastic; antifungal; causes bleeding and liver injury (rat and dog); hypoglycemic (rat); larvicide (housefly larva). Source: CU YE RONG *Ficus simplicissima*, DI ER CAO *Hypericum japonicum*, FEI JI CAO *Eupatorium odoratum*, GUI ZHI *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*] (twig: content scope of 40 origins = 0.0103%~0.130%, mean content = 0.039%<sup>[5508]</sup>), HUANG HUA HAO *Artemisia annua*, HUANG JIN FENG *Impatiens sicutifer*, MAO RUI HUA *Verbascum thapsus*, MU GUI *Cinnamomum loureirii*, NAN HE SHI *Daucus carota*, OU ZHOU YUN SHAN *Picea abies*, ROU GUI *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*] (bark: content scope of 6 origins = 0.14%~0.70%, mean content = 0.45%<sup>[5508]</sup>), TIAN HU SUI *Hydrocotyle sibthorpioides*, XIAO BAI BU *Asparagus officinalis*. Ref: 2, 548, 658, 660, 5508.

**4141 Coumarinic acid**

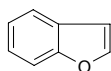
[495-79-4]  $C_9H_8O_3$  (164.16). Source: PI HAN CAO *Melilotus suaveolens*. Ref: 6.

**4142 Coumarinic acid- $\beta$ -D-glucoside**

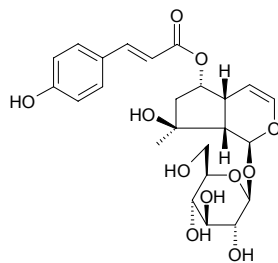
$C_{15}H_{18}O_8$  (326.31). mp 216°C. Source: MAO XIANG HUA *Hierochloe odorata*, PI HAN CAO *Melilotus suaveolens*. Ref: 6.

**4143 Coumarone**

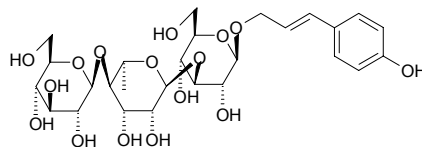
2,3-Benzofuran [271-89-6]  $C_8H_6O$  (118.14). bp 174°C. Source: JIU JIE CHA *Sarcandra glabra* [Syn. *Chloranthus glaber*], SHUI HUANG YANG MU *Polygala caudata*. Ref: 6.

**4144 6-*O*-*p*-Coumaroylajugol**

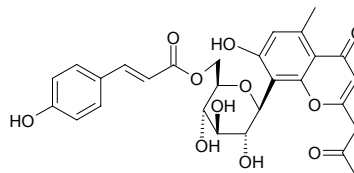
$C_{24}H_{30}O_{11}$  (494.50). Source: GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *Huechingensis*]. Ref: 2.

**4145 *trans*-*p*-Coumaroyl alcohol 1-*O*- $\beta$ -D-glucopyranosyl(1 $\rightarrow$ 4)- $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 3)- $\beta$ -D-glucopyranoside**

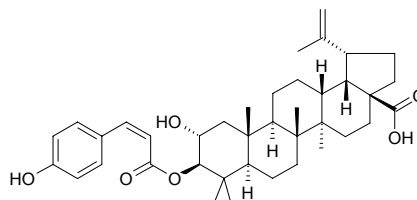
$C_{27}H_{40}O_{16}$  (620.61). Brown syrup. Source: CAO CONG RONG *Boschniakia rossica* (whole herb: yield = 0.0020%). Ref: 1559.

**4146 6'-*O*-*p*-Coumaroylaloetin**

$C_{28}H_{28}O_{11}$  (540.53). Source: LU HUI *Aloe vera* [Syn. *Aloe barbadensis*]. Ref: 2.

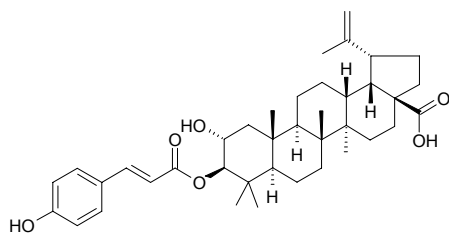
**4147 3-*O*-(*cis*-*p*-Coumaroyl)-alphitolic acid**

$C_{39}H_{54}O_6$  (618.86). White powder, mp 208~210°C,  $[\alpha]_D^{20} = +0.9^\circ$  ( $c = 1.0$ , pyridine). Pharm: Cytotoxic (K562,  $ED_{50} = (10.7 \pm 0.1) \mu\text{mol/L}$ , control Adriamycin,  $ED_{50} = (0.09 \pm 0.03) \mu\text{mol/L}$ ; B-16 (F-10),  $ED_{50} = (10.2 \pm 0.2) \mu\text{mol/L}$ , Adriamycin,  $ED_{50} = (0.06 \pm 0.10) \mu\text{mol/L}$ ; SK-MEL-2,  $ED_{50} = (8.9 \pm 1.4) \mu\text{mol/L}$ , Adriamycin,  $ED_{50} = (0.09 \pm 0.30) \mu\text{mol/L}$ ; PC3,  $ED_{50} = (7.3 \pm 0.2) \mu\text{mol/L}$ , Adriamycin,  $ED_{50} = (0.83 \pm 0.18) \mu\text{mol/L}$ ; LOX-IMVI,  $ED_{50} = (5.5 \pm 0.4) \mu\text{mol/L}$ , Adriamycin,  $ED_{50} = (0.38 \pm 0.33) \mu\text{mol/L}$ ; A549,  $ED_{50} = (4.7 \pm 1.8) \mu\text{mol/L}$ , Adriamycin,  $ED_{50} = (0.67 \pm 0.21) \mu\text{mol/L}$ )<sup>[5479]</sup>. Source: DA ZAO *Ziziphus jujuba*. Ref: 2, 5479.

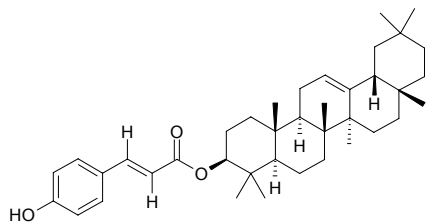


**4148 3-O-(trans-p-Coumaroyl)-alphitolic acid**

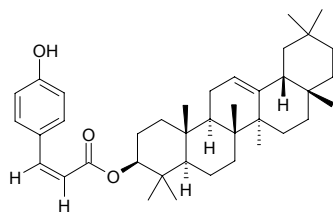
$C_{39}H_{54}O_6$  (618.86). White powder, mp 279~280°C,  $[\alpha]_D^{25} = +44.1^\circ$  ( $c = 0.8$ , pyridine). **Pharm:** Cytotoxic (K562,  $ED_{50} = (9.4 \pm 1.0)\mu\text{mol/L}$ , control Adriamycin,  $ED_{50} = (0.09 \pm 0.03)\mu\text{mol/L}$ ; B-16 (F-10),  $ED_{50} = (7.3 \pm 2.0)\mu\text{mol/L}$ , Adriamycin,  $ED_{50} = (0.06 \pm 0.10)\mu\text{mol/L}$ ; SK-MEL-2,  $ED_{50} = (6.9 \pm 0.9)\mu\text{mol/L}$ , Adriamycin,  $ED_{50} = (0.09 \pm 0.30)\mu\text{mol/L}$ ; PC3,  $ED_{50} = (4.0 \pm 0.4)\mu\text{mol/L}$ , Adriamycin,  $ED_{50} = (0.83 \pm 0.18)\mu\text{mol/L}$ ; LOX-IMVI,  $ED_{50} = (4.3 \pm 1.3)\mu\text{mol/L}$ , Adriamycin,  $ED_{50} = (0.38 \pm 0.33)\mu\text{mol/L}$ ; A549,  $ED_{50} = (12 \pm 1.7)\mu\text{mol/L}$ , Adriamycin,  $ED_{50} = (0.67 \pm 0.21)\mu\text{mol/L}$ ). **Source:** DA ZAO *Ziziphus jujuba*. **Ref:** 5479.

**4149 3-O-(E)-Coumaroyl-β-amyirin**

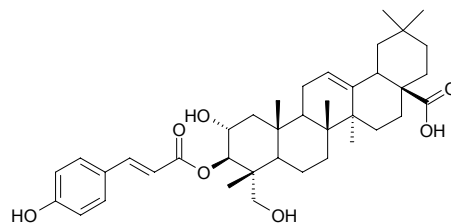
$C_{39}H_{56}O_3$  (572.88). Colorless prisms, mp 188.5~190.0°C,  $[\alpha]_D^{25.9} = +60.8^\circ$  ( $c = 1.42$ ,  $\text{CHCl}_3$ ). **Source:** MU MA HUANG *Casuarina equisetifolia*. **Ref:** 2300.

**4150 3-O-(Z)-Coumaroyl-β-amyirin**

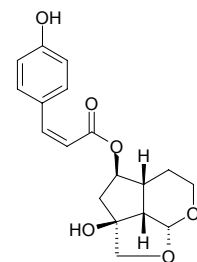
$C_{39}H_{56}O_3$  (572.88). Colorless prisms, mp 106.0~109.0°C,  $[\alpha]_D^{25.9} = +38.6^\circ$  ( $c = 0.89$ ,  $\text{CHCl}_3$ ). **Source:** MU MA HUANG *Casuarina equisetifolia*. **Ref:** 2300.

**4151 (3E)-Coumaroylarjunolic acid**

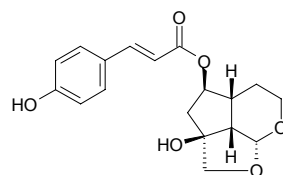
$C_{39}H_{54}O_7$  (634.86). Pale yellowish amorphous powder ( $\text{CHCl}_3$ -MeOH), mp 252°C (dec),  $[\alpha]_D^{20} = +25.5^\circ$  ( $c = 0.047$ , MeOH). **Pharm:** Cytotoxic (mouse mammary organ culture assay, 79% at  $10\mu\text{g/mL}$ )<sup>[5038]</sup>; cytotoxic (mouse mammary gland organ culture, DMBA-induced preneoplastic lesion,  $4\mu\text{g/mL}$ , InRt = 79.2%)<sup>[5178]</sup>. **Source:** SAN WEI ZHI FAN YING TAO *Eugenia sandwicensis*(stem). **Ref:** 5038, 5178.

**4152 6-O-cis-p-Coumaroyl-7-deoxyrehmaglutin A**

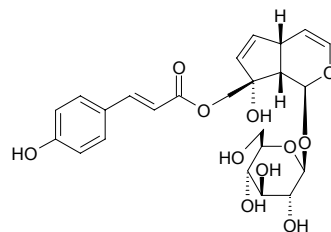
$C_{18}H_{20}O_6$  (332.36). Amorphous powder,  $[\alpha]_D^{26} = -15.4^\circ$  ( $c = 0.2$ , MeOH). **Source:** ZI YE *Catalpa ovata* (fallen leaf). **Ref:** 4290.

**4153 6-O-trans-p-Coumaroyl-7-deoxyrehmaglutin A**

$C_{18}H_{20}O_6$  (332.36). Amorphous powder,  $[\alpha]_D^{26} = -17.7^\circ$  ( $c = 0.2$ , MeOH). **Source:** ZI YE *Catalpa ovata* (fallen leaf). **Ref:** 4290.

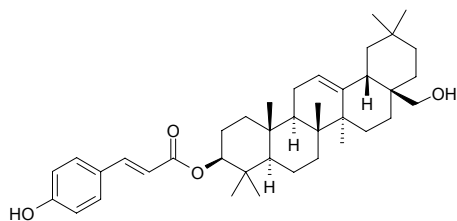
**4154 10-O-trans-Coumaroyl-eranthemoside**

$C_{24}H_{28}O_{11}$  (492.48). Amorphous powder,  $[\alpha]_D^{27} = -33.3^\circ$  ( $c = 1.35$ , MeOH). **Source:** CAO MAO JIA DU JUAN *Barleria strigosa*. **Ref:** 4288.

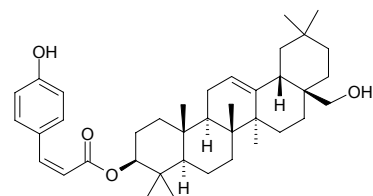


**4155 3-O-(E)-Coumaroylerythrodiol**

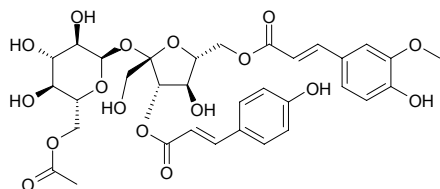
$C_{39}H_{56}O_4$  (588.88). Colorless prisms, mp 241~244°C,  $[\alpha]_D^{20.2} = +64.7^\circ$  ( $c = 1.75$ , dioxane). Source: MU MA HUANG *Casuarina equisetifolia*. Ref: 2300.

**4156 3-O-(Z)-Coumaroylerythrodiol**

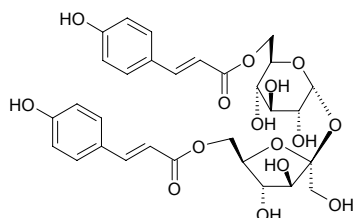
$C_{39}H_{56}O_4$  (588.88). Colorless prisms, mp 106.0~109.0°C,  $[\alpha]_D^{20.2} = +41.9^\circ$  ( $c = 2.44$ , acetone). Source: MU MA HUANG *Casuarina equisetifolia*. Ref: 2300.

**4157 3-O-p-Coumaroyl-6-O-feruloyl-β-D-fructofuranosyl 6-O-acetyl-α-D-glucopyranoside**

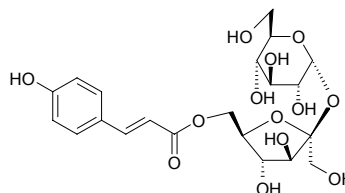
$C_{33}H_{38}O_{17}$  (706.66). Light yellow amorphous solid,  $[\alpha]_D^{23} = +23.8^\circ$  ( $c = 0.3$ , MeOH). Source: JIAO YU *Canna edulis* (rhizome). Ref: 3836.

**4158 (6-O-(E)-p-Coumaroyl)-β-D-fructofuranosyl-(2→1)-(6-O-(E)-p-coumaroyl)-α-D-glucopyranoside**

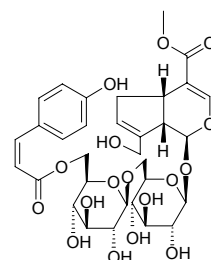
$C_{30}H_{34}O_{15}$  (634.60). White powder. Pharm: Antihistamine (inhibits histamine release, rat mast cell, induced by antigen-antibody reaction,  $IC_{50} = 23.5\mu\text{g/mL}$ , control Indomethacin,  $IC_{50} = 89.5\mu\text{g/mL}$ )<sup>[3364]</sup>;  $PGE_2$  production inhibitor inactive ( $30\mu\text{g/mL}$ ,  $\text{InRt} = -0.10\%$ )<sup>[3364]</sup>. Source: XIAO HUA GUI ZHEN *Bidens parviflora* Ref: 3364.

**4159 (6-O-(E)-p-Coumaroyl)-β-D-fructofuranosyl-(2→1)-α-D-glucopyranoside**

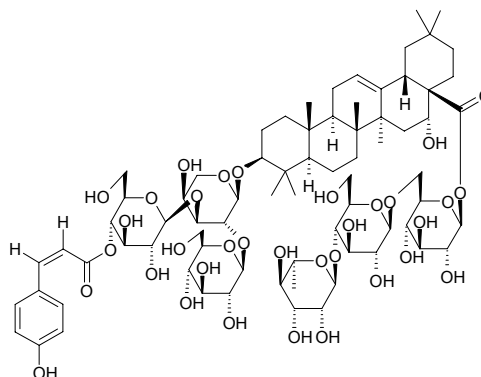
$C_{21}H_{28}O_{13}$  (488.45). Amorphous powder. Pharm: Antihistamine (inhibits histamine release, rat mast cell, induced by antigen-antibody reaction,  $IC_{50} = 21.7\mu\text{g/mL}$ , control Indomethacin,  $IC_{50} = 89.5\mu\text{g/mL}$ );  $PGE_2$  production inhibitor ( $30\mu\text{g/mL}$ ,  $\text{InRt} = 58.1\%$ ). Source: XIAO HUA GUI ZHEN *Bidens parviflora* Ref: 3364.

**4160 6''-O-p-Coumaroylgenipeningentiobioside**

$C_{32}H_{40}O_{17}$  (696.67). Source: ZHI ZI *Gardenia jasminoides* [Syn. *Gardenia florida*]. Ref: 2, 626.

**4161 3-O-[β-D-3-O-cis-p-Coumaroyl-glucofuranosyl-(1→3)]-[β-D-glucopyranosyl-(1→2)]-α-L-arabinopyranosyl echinocystic acid 28-O-[α-L-rhamnopyranosyl-(1→4)-β-D-glucopyranosyl-(1→6)-β-D-glucopyranosyl] ester**

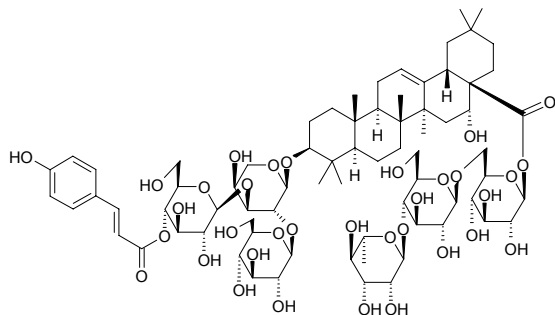
$C_{74}H_{112}O_{34}$  (1545.70). Amorphous powder,  $[\alpha]_D^{23} = -14.9^\circ$  ( $c = 0.84$ , MeOH). Source: *Dizygotheca kerchoviana* (leaf and stem of branch). Ref: 3885.



**4162 3-O-[ $\beta$ -D-3-O-*trans*-*p*-Coumaroyl-glucopyranosyl-(1 $\rightarrow$ 3)]-[ $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)]- $\alpha$ -L-arabinopyranosyl echinocystic acid 28-O-[ $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl] ester**

C<sub>74</sub>H<sub>112</sub>O<sub>34</sub> (1545.70). Amorphous powder,  $[\alpha]_D^{23} = +4.9^\circ$  ( $c = 0.96$ , MeOH).

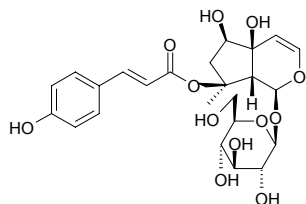
Source: *Dizygotheca kerchoveana* (leaf and stem of branch). Ref: 3885.



**4163 8-*p*-Coumaroylharpagide**

C<sub>24</sub>H<sub>30</sub>O<sub>12</sub> (510.50). Pharm: Elastase inhibitor (hmn leukocyte *in vitro*, IC<sub>50</sub> = 179  $\mu$ g/mL = 331  $\mu$ mol/L; control Caffeic acid, IC<sub>50</sub> = 86  $\mu$ g/mL =

475  $\mu$ mol/L). Source: NAN FEI GOU MA *Harpagophytum procumbens*. Ref: 5458.



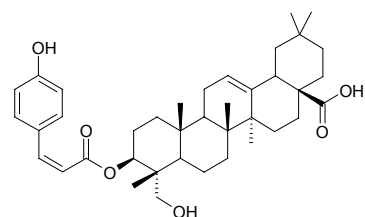
**4164 (3Z)-Coumaroylhederagenin**

C<sub>39</sub>H<sub>54</sub>O<sub>6</sub> (618.86). White amorphous powder,  $[\alpha]_D^{25} = +9.6^\circ$  ( $c = 0.3$ , CHCl<sub>3</sub>).

Pharm: Cytotoxic (*in vitro*, oral epidermoid carcinoma KB IC<sub>50</sub> =

(1.2 $\pm$ 0.01)  $\mu$ mol/L, control VP-16, IC<sub>50</sub> = (1.1 $\pm$ 0.02)  $\mu$ mol/L; colorectal carcinoma HT29, IC<sub>50</sub> = (2.1 $\pm$ 0.04)  $\mu$ mol/L, VP-16, IC<sub>50</sub> = (2.3 $\pm$ 0.08)  $\mu$ mol/L).

Source: MAO CAO LONG *Ludwigia octovalvis* (whole herb: yield = 0.00024%dw). Ref: 3005.



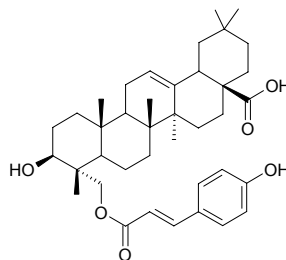
**4165 (23E)-Coumaroylhederagenin**

C<sub>39</sub>H<sub>54</sub>O<sub>6</sub> (618.86). White amorphous powder,  $[\alpha]_D^{25} = +6.8^\circ$  ( $c = 0.2$ , CHCl<sub>3</sub>).

Pharm: Cytotoxic (*in vitro*, oral epidermoid carcinoma KB IC<sub>50</sub> =

(1.3 $\pm$ 0.05)  $\mu$ mol/L, control VP-16, IC<sub>50</sub> = (1.1 $\pm$ 0.02)  $\mu$ mol/L; colorectal carcinoma HT29, IC<sub>50</sub> = (2.4 $\pm$ 0.08)  $\mu$ mol/L, VP-16, IC<sub>50</sub> = (2.3 $\pm$ 0.08)  $\mu$ mol/L).

Source: MAO CAO LONG *Ludwigia octovalvis* (whole herb: yield = 0.00024%dw). Ref: 3005.



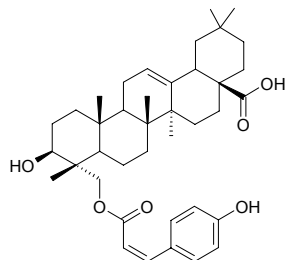
**4166 (23Z)-Coumaroylhederagenin**

C<sub>39</sub>H<sub>54</sub>O<sub>6</sub> (618.86). White amorphous powder,  $[\alpha]_D^{25} = +14.6^\circ$  ( $c = 0.2$ ,

CHCl<sub>3</sub>). Pharm: Cytotoxic (*in vitro*, oral epidermoid carcinoma KB, IC<sub>50</sub> =

(1.6 $\pm$ 0.10)  $\mu$ mol/L, control VP-16, IC<sub>50</sub> = (1.1 $\pm$ 0.02)  $\mu$ mol/L; colorectal carcinoma HT29, IC<sub>50</sub> = (3.6 $\pm$ 0.08)  $\mu$ mol/L, VP-16, IC<sub>50</sub> = (2.3 $\pm$ 0.08)  $\mu$ mol/L).

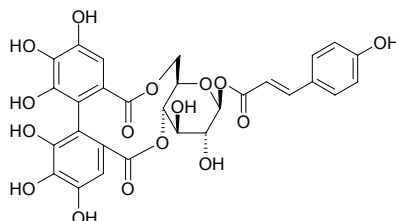
Source: MAO CAO LONG *Ludwigia octovalvis* (whole herb: yield = 0.00018%dw). Ref: 3005.



**4167 1-O-*p*-(E)-Coumaroyl-4,6-(S)-HHDP- $\beta$ -D-glucopyranose**

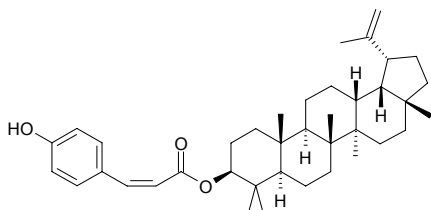
C<sub>29</sub>H<sub>24</sub>O<sub>16</sub> (628.51). Yellow amorphous powder,  $[\alpha]_D^{15} = -33.2^\circ$  ( $c = 0.3$ ,

MeOH). Source: GE XUN *Balanophora japonica* (aerial parts: yield = 0.0008%). Ref: 4101.

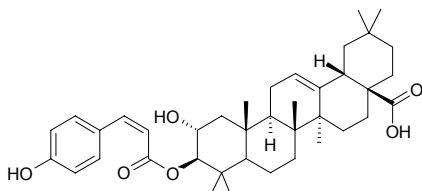


**4168 3-(Z)-Coumaroyllupeol**

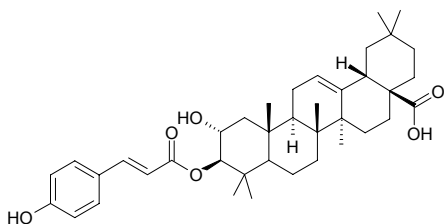
$C_{39}H_{56}O_3$  (572.88). Source: XIAO HUA MU LAN GUO *Bruguiera parviflora*.  
Ref: 2532.

**4169 3-O-(cis-p-Coumaroyl)-maslinic acid**

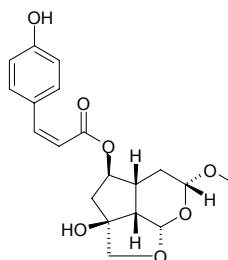
$C_{39}H_{54}O_6$  (618.86). White powder, mp 278~282°C,  $[\alpha]_D^{24} = +9.1^\circ$  ( $c = 1.1$ , pyridine). Pharm: Cytotoxic inactive (K562,  $ED_{50} > 20\mu\text{mol/L}$ , control Adriamycin,  $ED_{50} = (0.09\pm 0.03)\mu\text{mol/L}$ ; B-16 (F-10),  $ED_{50} > 20\mu\text{mol/L}$ , Adriamycin,  $ED_{50} = (0.06\pm 0.10)\mu\text{mol/L}$ ; SK-MEL-2,  $ED_{50} > 20\mu\text{mol/L}$ , Adriamycin,  $ED_{50} = (0.09\pm 0.30)\mu\text{mol/L}$ ; PC3,  $ED_{50} > 20\mu\text{mol/L}$ , Adriamycin,  $ED_{50} = (0.83\pm 0.18)\mu\text{mol/L}$ ; LOX-IMVI,  $ED_{50} > 20\mu\text{mol/L}$ , Adriamycin,  $ED_{50} = (0.38\pm 0.33)\mu\text{mol/L}$ ; A549,  $ED_{50} > 20\mu\text{mol/L}$ , Adriamycin,  $ED_{50} = (0.67\pm 0.21)\mu\text{mol/L}$ )<sup>[5479]</sup>. Source: DA ZAO *Ziziphus jujuba*. Ref: 2, 5479.

**4170 3-O-(trans-p-Coumaroyl)-maslinic acid**

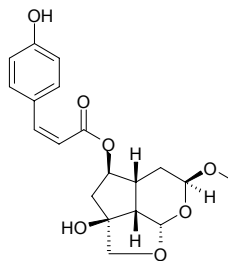
$C_{39}H_{54}O_6$  (618.86). White powder, mp 190~194°C,  $[\alpha]_D^{20} = +0.9^\circ$  ( $c = 1.0$ , pyridine). Pharm: Cytotoxic inactive (K562,  $ED_{50} > 20\mu\text{mol/L}$ , control Adriamycin,  $ED_{50} = (0.09\pm 0.03)\mu\text{mol/L}$ ; B-16 (F-10),  $ED_{50} > 20\mu\text{mol/L}$ , Adriamycin,  $ED_{50} = (0.06\pm 0.10)\mu\text{mol/L}$ ; SK-MEL-2,  $ED_{50} > 20\mu\text{mol/L}$ , Adriamycin,  $ED_{50} = (0.09\pm 0.30)\mu\text{mol/L}$ ; PC3,  $ED_{50} > 20\mu\text{mol/L}$ , Adriamycin,  $ED_{50} = (0.83\pm 0.18)\mu\text{mol/L}$ ; LOX-IMVI,  $ED_{50} > 20\mu\text{mol/L}$ , Adriamycin,  $ED_{50} = (0.38\pm 0.33)\mu\text{mol/L}$ ; A549,  $ED_{50} > 20\mu\text{mol/L}$ , Adriamycin,  $ED_{50} = (0.67\pm 0.21)\mu\text{mol/L}$ )<sup>[5479]</sup>. Source: DA ZAO *Ziziphus jujuba*. Ref: 5479.

**4171 6-O-cis-p-Coumaroyl-3α-O-methyl-7-deoxyrehmaglutin A**

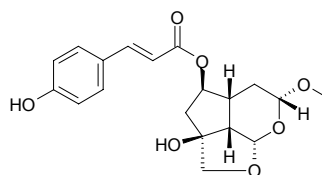
$C_{19}H_{22}O_7$  (362.38). Amorphous powder,  $[\alpha]_D^{26} = -47.6^\circ$  ( $c = 0.1$ , MeOH).  
Source: ZI YE *Catalpa ovata* (fallen leaf). Ref: 4290.

**4172 6-O-cis-p-Coumaroyl-3β-O-methyl-7-deoxyrehmaglutin A**

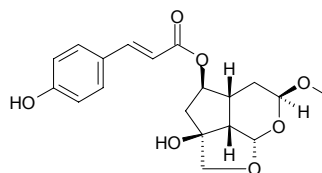
$C_{19}H_{22}O_7$  (362.38). Amorphous powder,  $[\alpha]_D^{26} = +20.0^\circ$  ( $c = 0.3$ , MeOH).  
Source: ZI YE *Catalpa ovata* (fallen leaf). Ref: 4290.

**4173 6-O-trans-p-Coumaroyl-3α-O-methyl-7-deoxyrehmaglutin A**

$C_{19}H_{22}O_7$  (362.38). Amorphous powder,  $[\alpha]_D^{26} = -90.9^\circ$  ( $c = 0.1$ , MeOH).  
Source: ZI YE *Catalpa ovata* (fallen leaf). Ref: 4290.

**4174 6-O-trans-p-Coumaroyl-3β-O-methyl-7-deoxyrehmaglutin A**

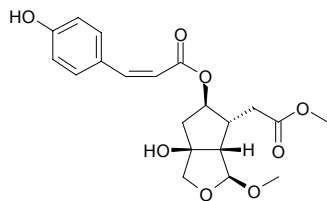
$C_{19}H_{22}O_7$  (362.38). Amorphous powder,  $[\alpha]_D^{26} = -16.1^\circ$  ( $c = 0.3$ , MeOH).  
Source: ZI YE *Catalpa ovata* (fallen leaf). Ref: 4290.



**4175 6-*O*-cis-*p*-Coumaroyl-1 $\beta$ -*O*-methylovatofuranic acid methyl ester**

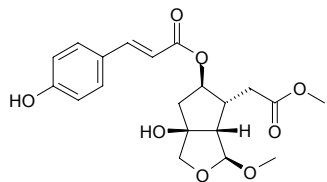
$C_{20}H_{24}O_8$  (392.41). Amorphous powder,  $[\alpha]_D^{26} = +27.4^\circ$  ( $c = 0.1$ , MeOH).

Source: ZI YE *Catalpa ovata* (fallen leaf). Ref: 4290.

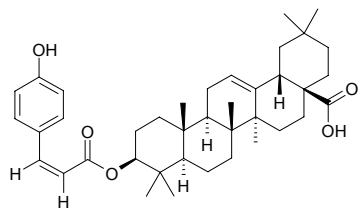
**4176 6-*O*-trans-*p*-Coumaroyl-1 $\beta$ -*O*-methylovatofuranic acid methyl ester**

$C_{20}H_{24}O_8$  (392.41). Amorphous powder,  $[\alpha]_D^{26} = -12.5^\circ$  ( $c = 0.1$ , MeOH).

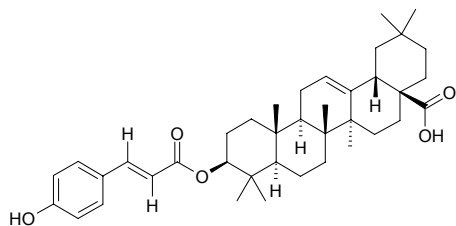
Source: ZI YE *Catalpa ovata* (fallen leaf). Ref: 4290.

**4177 3-*O*-(*E*)-Coumaroyloleanolic acid**

$C_{39}H_{54}O_5$  (602.86). Colorless prisms, mp 141~142°C,  $[\alpha]_D^{19.6} = +23.6^\circ$  ( $c = 0.36$ , acetone). Source: MU MA HUANG *Casuarina equisetifolia*. Ref: 2300.

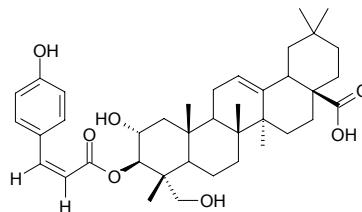
**4178 3-*O*-(*Z*)-Coumaroyloleanolic acid**

$C_{39}H_{54}O_5$  (602.86). Colorless prisms, mp 245~247°C,  $[\alpha]_D^{20.3} = +89.5^\circ$  ( $c = 0.21$ , acetone). Source: MU MA HUANG *Casuarina equisetifolia*. Ref: 2300.

**4179 3 $\beta$ -cis-*p*-Coumaroyloxy-2 $\alpha$ ,23-dihydroxyolean-12-en-28-oic acid**

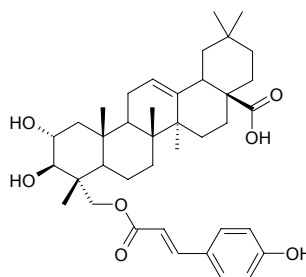
$C_{39}H_{54}O_7$  (634.86). White amorphous powder (CHCl<sub>3</sub>-MeOH), mp 252°C

(dec),  $[\alpha]_D^{20} = +34.9^\circ$  ( $c = 0.032$ , MeOH). Pharm: Cytotoxic (mouse mammary gland organ culture, DMBA-induced preneoplastic lesion, 10 $\mu$ g/mL, InRt = 36.6%). Source: SAN WEI ZHI FAN YING TAO *Eugenia sandwicensis* (stem). Ref: 5178.

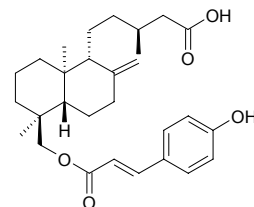
**4180 23-*trans*-*p*-Coumaroyloxy-2 $\alpha$ ,3 $\beta$ -dihydroxyolean-12-en-28-oic acid**

$C_{39}H_{54}O_7$  (634.86). White amorphous powder (CHCl<sub>3</sub>-MeOH), mp

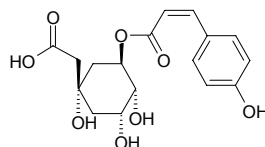
210~214°C,  $[\alpha]_D^{20} = +21.8^\circ$  ( $c = 0.055$ , MeOH). Pharm: Cytotoxic (mouse mammary gland organ culture, DMBA-induced preneoplastic lesion, 10 $\mu$ g/mL, InRt = 48.1%). Source: SAN WEI ZHI FAN YING TAO *Eugenia sandwicensis* (stem). Ref: 5178.

**4181 (13*S*)-ent-18-(*E*)-Coumaroyloxy-8(17)-labden-15-oic acid**

$C_{29}H_{40}O_5$  (468.64). Colorless oil,  $[\alpha]_D^{20} = -2.4^\circ$  ( $c = 0.365$ , MeOH). Pharm: Antimalarial (*Plasmodium falciparum* FcB1, IC<sub>50</sub> = (11.4±1.1) $\mu$ g/mL, control Chloroquine, IC<sub>50</sub> = (0.05±0.002) $\mu$ g/mL). Source: *Nuxia sphaerocephala* (leaf). Ref: 4419.

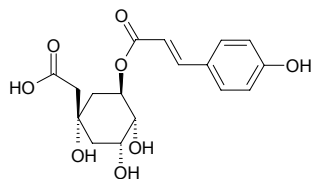
**4182 5-*p*-cis-Coumaroylquinic acid**

$C_{16}H_{18}O_8$  (338.32). Source: LV DOU *Onobrychis vicifolia* (leaf). Ref: 5084.

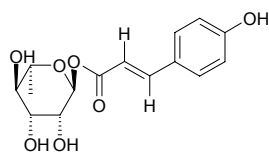


**4183 5-*p*-trans-Coumaroylquinic acid**

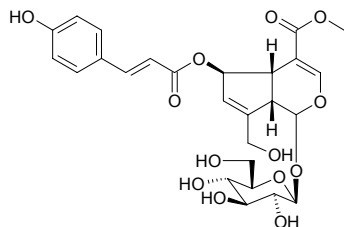
$C_{16}H_{18}O_8$  (338.32). Source: LV DOU *Onobrychis viciifolia* (leaf). Ref: 5084.

**4184 1-(*p*-Coumaroyl)- $\alpha$ -L-rhamnopyranose**

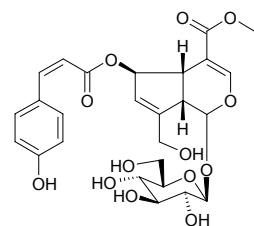
$C_{15}H_{18}O_7$  (310.31). Colorless prismatic crystals, mp 81–83°C; 188–190°C (chloroform-methanol-acetone), white crystals, mp 248–251°C,  $[\alpha]_D^{20} = -21.5^\circ$  ( $c = 0.5$ ,  $CHCl_3$ ). Pharm: Inhibitory activity against NFAT Transcription ( $IC_{50} > 100 \mu\text{mol/L}$ , positive control Cyclosporin A,  $IC_{50} = (0.29 \pm 0.01) \mu\text{mol/L}$ ). Source: DONG BEI HE SHI *Lappula echinata*, HUA CHA BIAO *Ribes fasciculatum* var. *chinense*. Ref: 48, 2536.

**4185 6-*O*-*E*-*p*-Coumaroyl scandoside methyl ester**

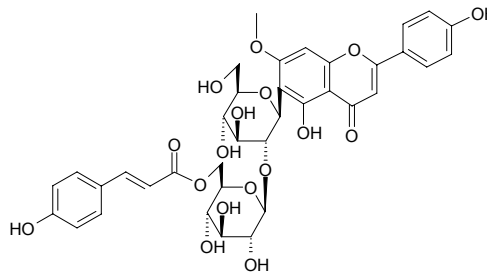
$C_{26}H_{30}O_{13}$  (550.52). Pharm: Neuroprotective (primary cultures of rat cortical cells, induced by *L*-glutamate, 0.1  $\mu\text{mol/L}$ , cell viability =  $(14.5 \pm 1.0)\%$ , 1.0  $\mu\text{mol/L}$ , cell viability =  $(62.2 \pm 4.0)\%$ ,  $p < 0.001$ , 10  $\mu\text{mol/L}$ , cell viability =  $(26.8 \pm 3.5)\%$ ,  $p < 0.05$ ). Source: BAI HUA SHE SHE CAO *Oldenlandia diffusa* [Syn. *Hedyotis diffusa*] (whole herb: yield = 0.00154%). Ref: 3027.

**4186 6-*O*-*Z*-*p*-Coumaroyl scandoside methyl ester**

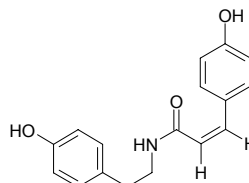
$C_{26}H_{30}O_{13}$  (550.52). Pharm: Neuroprotective (primary cultures of rat cortical cells, induced by *L*-glutamate, 0.1  $\mu\text{mol/L}$ , cell viability =  $(6.9 \pm 0.9)\%$ , 1.0  $\mu\text{mol/L}$ , cell viability =  $(25.7 \pm 2.0)\%$ ,  $p < 0.05$ , 10  $\mu\text{mol/L}$ , cell viability =  $(6.3 \pm 3.5)\%$ ). Source: BAI HUA SHE SHE CAO *Oldenlandia diffusa* [Syn. *Hedyotis diffusa*] (whole herb: yield = 0.00048%). Ref: 3027.

**4187 6'''-*p*-Coumaroylspinosin**

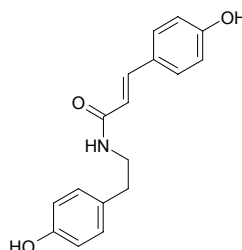
Apigenin-6-*C*-[(6-*O*-*p*-hydroxybenzoyl)- $\beta$ -D-glucopyranosyl(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranoside  $C_{37}H_{38}O_{17}$  (754.71). Source: DA ZAO *Ziziphus jujuba*, SUAN ZAO REN *Ziziphus jujuba* var. *spinosa*. Ref: 2, 660.

**4188 *N*-*p*-cis-Coumaroyltyramine**

$C_{17}H_{17}NO_3$  (283.33). Source: DUAN TING SHAN MAI DONG *Liriope muscari* (tuber: yield = 0.00086%), HONG HAI JIAO *Capsicum annuum* (stem and root: yield = 0.00071%dw), MIAN MAO MA DOU LING *Aristolochia mollissima* (dried root and stem: yield = 0.00062%dw). Ref: 3026, 4772, 4779.

**4189 *N*-(*trans*-*p*-Coumaroyl) tyramine**

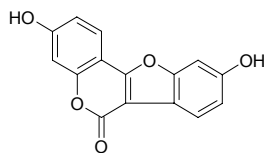
$C_{17}H_{17}NO_3$  (283.33). Pharm: Anti-HIV inactive (*in vitro*, acutely infected H-9 lymphocyte cells)<sup>[4706]</sup>; cytotoxic inactive (*in vitro*, MCF7 and A549)<sup>[4706]</sup>. Source: GUAN MU TONG *Aristolochia manshuriensis* (stem: yield = 0.00043%), HONG HAI JIAO *Capsicum annuum* (stem and root: yield = 0.0014%dw), MAI DONG *Ophiopogon japonicus* (tuber: yield = 0.0001%), RI BEN HUANG BAI *Phellodendron japonicum* (leaf), TIAN QIE ZI *Solanum indicum* (root). Ref: 3087, 4502, 4706, 4772, 4779.



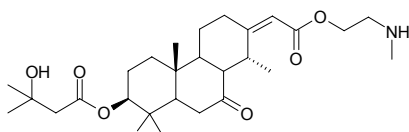


**4190 Coumestrol**

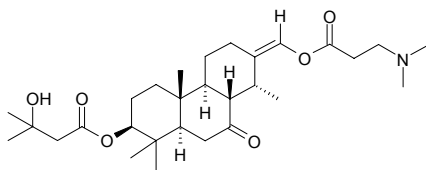
[479-13-0]  $C_{15}H_8O_5$  (268.23). **Pharm:** Anti-fertility agent; antifungal; estrogenic activity; peroxidase inhibitor (non-competitive); cytotoxic (KB,  $IC_{50} > 75\mu\text{mol/L}$ , control Helenalin,  $IC_{50} = (0.64 \pm 0.08)\mu\text{mol/L}$ , Melphalan,  $IC_{50} = (6.0 \pm 0.5)\mu\text{mol/L}$ ; Mono-Mac-6,  $IC_{50} > 75\mu\text{mol/L}$ , Helenalin,  $IC_{50} = (3.1 \pm 0.3)\mu\text{mol/L}$ ; Jurkat-T,  $IC_{50} = (53.3 \pm 4.2)\mu\text{mol/L}$ , Helenalin,  $IC_{50} = (1.14 \pm 0.08)\mu\text{mol/L}$ , Melphalan,  $IC_{50} = (9.1 \pm 0.8)\mu\text{mol/L}$ )<sup>[5077]</sup>. **Source:** BO CAI *Spinacia oleracea*, CAO MEI CHE ZHOU CAO *Trifolium fragiferum*, GE GEN *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*], MU XU *Medicago sativa*, SAN XIAO CAO *Trifolium repens*, YAO YONG PU GONG YING *Taraxacum officinale*, *Bituminaria morisiana* (leaf). **Ref:** 2, 658, 660, 5077.

**4191 Coumingidine**

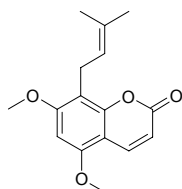
$C_{28}H_{45}NO_6$  (491.67). mp 160~161°C. **Pharm:** Uterine stimulant. **Source:** KAO MING GE MU *Erythrophleum couminga*, TIE XIU SE HUANG TAN *Dalbergia ferruginea*. **Ref:** 661.

**4192 Coumingine**

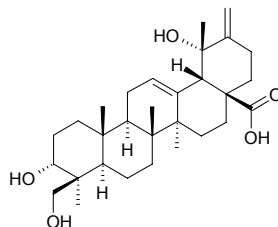
$C_{29}H_{47}NO_6$  (505.70). Lustrous, tiny acicular crystals (ether), mp 142°C,  $[\alpha]_D^{20} = -70^\circ$ . **Pharm:** Cardiotonic; uterine stimulant. **Source:** KAO MING GE MU *Erythrophleum couminga*, TIE XIU SE HUANG TAN *Dalbergia ferruginea*. **Ref:** 661.

**4193 Coumurrayin**

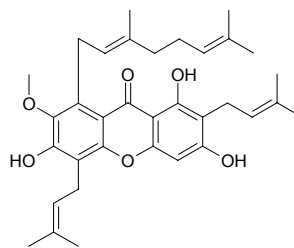
8-Isopentenylmettin [17245-25-9]  $C_{16}H_{18}O_4$  (274.32). mp 157°C. **Source:** JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*], YUN QIAN HU *Peucedanum rubricaula*. **Ref:** 6, 11, 177.

**4194 Coussaric acid**

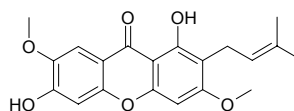
$C_{30}H_{46}O_5$  (486.70). Colorless needles ( $CHCl_3$ :MeOH = 5:1), mp 232~233°C,  $[\alpha]_D^{23} = +51.5^\circ$  ( $c = 1.0$ , pyridine). **Pharm:** Quinone reductase inducer (mouse Hepa lc7 hepatoma cells, CD =  $17.9\mu\text{mol/L} = 8.7\mu\text{g/mL}$ ). **Source:** *Coussarea brevicaulis*. **Ref:** 3434.

**4195 Cowagarcinone A**

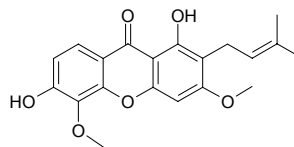
1,3,6-Trihydroxy-7-methoxy-2,5-bis(3-methyl-2-butenyl)-8-(3,7-dimethyl-2,6-octadienyl)xanthone  $C_{34}H_{42}O_6$  (546.71). Yellow gum. **Pharm:** Antioxidant (DPPH scavenger,  $IC_{50} > 200\mu\text{mol/L}$ , control BHT,  $IC_{50} = 5.10\mu\text{g/mL}$ ; crude latex of *Garcinia cowa*,  $IC_{50} = 13.20\mu\text{g/mL}$ ). **Source:** YUN NAN SHAN ZHU ZI *Garcinia cowa* (latex). **Ref:** 5281.

**4196 Cowagarcinone B**

1,6-Dihydroxy-3,7-dimethoxy-2-(3-methylbut-2-enyl)-xanthone  $C_{20}H_{20}O_6$  (356.38). Pale yellow solid, mp 252~253°C. **Pharm:** Antioxidant (DPPH scavenger,  $10\mu\text{mol/L}$ , ScRt = 15%, control BHT,  $10\mu\text{mol/L}$ , ScRt = 43%)<sup>[5319]</sup>. **Source:** DAO NIAN ZI *Garcinia mangostana*, TIAN SHAN ZHU ZI *Garcinia dulcis* (fruit), YUN NAN SHAN ZHU ZI *Garcinia cowa* (latex). **Ref:** 1964, 5281, 5319.

**4197 Cowagarcinone C**

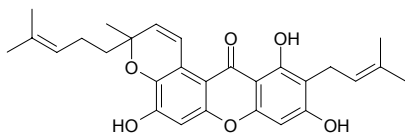
1,6-Dihydroxy-3,5-dimethoxy-2-(3-methylbut-2-enyl)xanthone  $C_{20}H_{20}O_6$  (356.38). Pale yellow solid, mp 152~153°C. **Source:** YUN NAN SHAN ZHU ZI *Garcinia cowa* (latex). **Ref:** 5281.



**4198 Cowagarcinone D**

6,8,12-Trihydroxy-7-(3-methyl-2-butenyl)-2-methyl-2-(4-methyl-3-pentenyl)pyrano-(2',3':7,8)xanthone C<sub>28</sub>H<sub>30</sub>O<sub>6</sub> (462.55). Yellow solid, mp 92–94°C.

Source: YUN NAN SHAN ZHU ZI *Garcinia cowa* (latex). Ref: 5281.

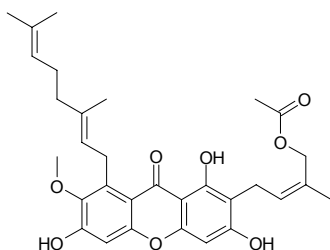
**4199 Cowagarcinone E**

1,3,6-Trihydroxy-7-methoxy-2-(4-acetoxy-3-methyl-2-butenyl)-8-(3,7-dimethyl-2,6-octadienyl)xanthone C<sub>31</sub>H<sub>36</sub>O<sub>8</sub> (536.63). Yellow gum. Pharm:

Antioxidant (DPPH scavenger, IC<sub>50</sub> > 200 μmol/L, control BHT, IC<sub>50</sub> =

5.10 μg/mL; crude latex of *Garcinia cowa*, IC<sub>50</sub> = 13.20 μg/mL). Source: YUN

NAN SHAN ZHU ZI *Garcinia cowa* (latex). Ref: 5281.

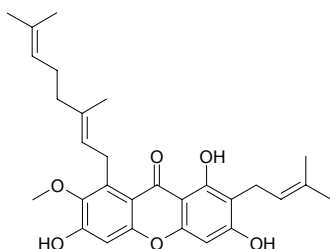
**4200 Cowanin**

C<sub>29</sub>H<sub>34</sub>O<sub>6</sub> (478.59). Pharm: Antioxidant (DPPH scavenger, IC<sub>50</sub> > 200 μmol/L, control BHT, IC<sub>50</sub> = 5.10 μg/mL; crude latex of *Garcinia cowa*, IC<sub>50</sub> =

13.20 μg/mL)<sup>[5281]</sup>; antioxidant (DPPH scavenger, 10 μmol/L, ScRt = 15%, control BHT, 10 μmol/L, ScRt = 43%)<sup>[5319]</sup>; antibacterial (*Staphylococcus*

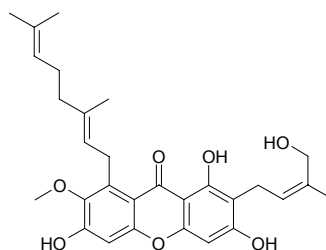
*aureus* ATCC 25923, MIC = 32 μg/mL, control Vancomycin, MIC = 2 μg/mL; *Staphylococcus aureus* MRSA SK1, MIC = 8 μg/mL, Vancomycin, MIC =

2 μg/mL)<sup>[5319]</sup>. Source: TIAN SHAN ZHU ZI *Garcinia dulcis* (fruit), YUN NAN SHAN ZHU ZI *Garcinia cowa* (latex). Ref: 5281, 5319.

**4201 Cowanol**

C<sub>29</sub>H<sub>34</sub>O<sub>7</sub> (494.59). Pharm: Antioxidant (DPPH scavenger, IC<sub>50</sub> > 200 μmol/L, control BHT, IC<sub>50</sub> = 5.10 μg/mL; crude latex of *Garcinia cowa*, IC<sub>50</sub> =

13.20 μg/mL). Source: YUN NAN SHAN ZHU ZI *Garcinia cowa* (latex). Ref: 5281.

**4202 Cowaxanthone**

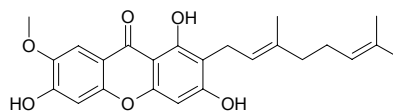
C<sub>24</sub>H<sub>26</sub>O<sub>6</sub> (410.47). Pharm: Antioxidant (DPPH scavenger, IC<sub>50</sub> > 200 μmol/L, control BHT, IC<sub>50</sub> = 5.10 μg/mL; crude latex of *Garcinia cowa*, IC<sub>50</sub> =

13.20 μg/mL)<sup>[5281]</sup>; antioxidant (DPPH scavenger, 10 μmol/L, ScRt = 16%, control BHT, 10 μmol/L, ScRt = 43%)<sup>[5319]</sup>; antibacterial (*Staphylococcus*

*aureus* ATCC 25923, MIC = 16 μg/mL, control Vancomycin, MIC = 2 μg/mL; *Staphylococcus aureus* MRSA SK1, MIC = 16 μg/mL, Vancomycin, MIC =

2 μg/mL)<sup>[5319]</sup>. Source: TIAN SHAN ZHU ZI *Garcinia dulcis* (fruit), TIAN SHAN ZHU ZI *Garcinia dulcis* (flower), YUN NAN SHAN ZHU ZI

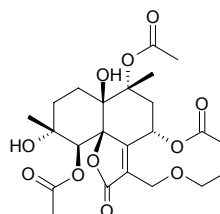
*Garcinia cowa* (latex). Ref: 4422, 5281, 5319.

**4203 CPB-2001-49-1359-1**

C<sub>23</sub>H<sub>32</sub>O<sub>11</sub> (484.50). Colorless oil, [α]<sub>D</sub> = -32° (c = 0.7, CHCl<sub>3</sub>). Pharm:

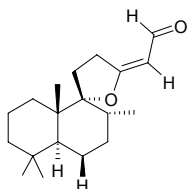
Antifungal (*Candida albicans* and *Aspergillus niger*, moderate activity; *Trichophyton mentagrophytes*, low activity); antibacterial (*Staphylococcus*

*aureus*, *Escherichia coli* and *Pseudomonas aeruginosa*, low activity). Source: JIA DI DAN CAO *Pseudoelephantopus spicatus* (leaf). Ref: 4133.

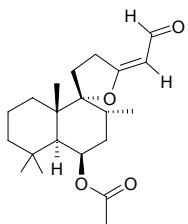


**4204 CPB5212-1492-1**

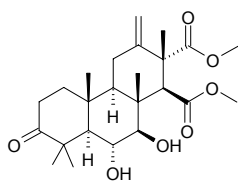
$C_{19}H_{30}O_2$  (290.45). Colorless oil,  $[\alpha]_D = -3.4^\circ$  ( $c = 0.64$ , MeOH). Pharm: Antitrypanosomal (epimastigotes of *Trypanosoma cruzi*, *in vitro*, MLC =  $11\mu\text{mol/L}$ ). Source: MAN JING ZI *Vitex trifolia*. Ref: 2550.

**4205 CPB5212-1492-2**

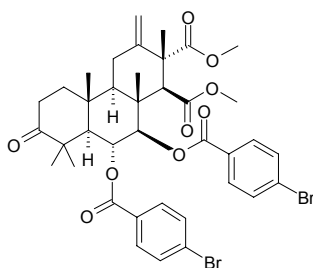
$C_{21}H_{32}O_4$  (348.49). Colorless oil,  $[\alpha]_D = -1.4^\circ$  ( $c = 0.50$ , MeOH). Pharm: Antitrypanosomal (epimastigotes of *Trypanosoma cruzi*, *in vitro*, MLC =  $36\mu\text{mol/L}$ ). Source: MAN JING ZI *Vitex trifolia*. Ref: 2550.

**4206 CPB-53-1114-4**

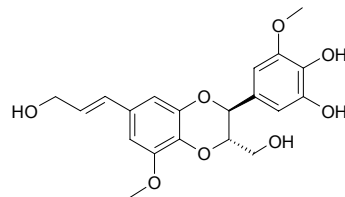
$C_{24}H_{36}O_7$  (436.55). Source: JI JIAN DAN QING MEI *Penicillium simplicissimum*. Ref: 4501.

**4207 CPB-53-1114-4 6,7-di-*p*-bromobenzoate**

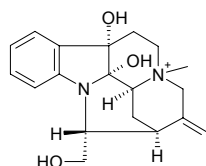
$C_{38}H_{42}Br_2O_9$  (802.56). Source: JI JIAN DAN QING MEI *Penicillium simplicissimum*. Ref: 4501.

**4208 CPB-53-641-1**

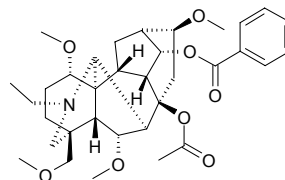
$C_{20}H_{22}O_8$  (390.39). Colorless oil,  $[\alpha]_D^{20} = +8.0^\circ$  ( $c = 1.0$ , MeOH). Source: TAN XIANG *Santalum album* (heartwood). Ref: 4468.

**4209 C-profluorocurine**

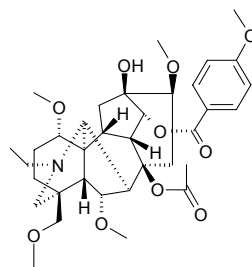
$C_{20}H_{27}N_2O_3$  (343.45). Source: *Strychnos guianensis* (stem cortex). Ref: 3943.

**4210 Crassicaudine**

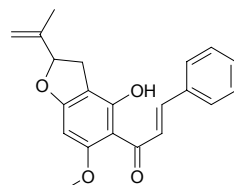
$C_{34}H_{47}NO_8$  (597.76). Source: CU JING WU TOU *Aconitum crassicaule*<sup>[1521]</sup>, ZHUA KUI GUA YE WU TOU *Aconitum hemisleyanum* var. *leueanthus* (root; yield = 0.00040%dw)<sup>[4678]</sup>. Ref: 1521, 4678.

**4211 Crassicauline A**

[79592-91-9]  $C_{35}H_{49}NO_{10}$  (643.78). Source: DIAN XI WU TOU *Aconitum bulleyanum*, FU ZI *Aconitum carmichaeli* (tuber). Ref: 618, 4373.

**4212 Crassichalcone**

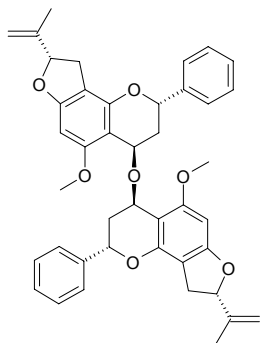
$C_{21}H_{20}O_4$  (336.39). Yellow oil. Source: HOU YE HUI MAO DOU *Tephrosia crassifolia*. Ref: 2389.



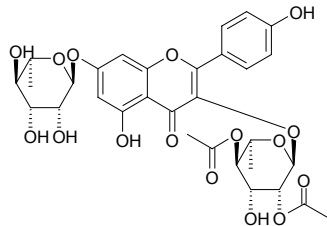
**4213 Crassifolin**

$C_{42}H_{42}O_7$  (658.80). Colorless crystals, mp 249–250°C,  $[\alpha]_D = +4.24^\circ$  (CHCl<sub>3</sub>).

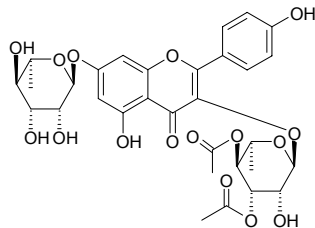
Source: HOU YE HUI MAO DOU *Tephrosia crassifolia*. Ref: 2389.

**4214 Crassirhizomide A**

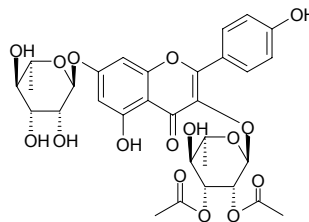
Kaempferol 3-*α*-L-(2,4-di-*O*-acetyl)rhamnopyranoside-7-*α*-L-rhamnopyranoside  $C_{31}H_{34}O_{16}$  (662.61). Pale yellow amorphous powder,  $[\alpha]_D = -152^\circ$  (*c* = 0.1, MeOH). Pharm: Anti-HIV-1 (RT (RDDP) inhibitor,  $IC_{50} = 215\mu\text{mol/L}$ , positive control Adriamycin,  $IC_{50} = 46\mu\text{mol/L}$ ; DDDP inhibitor,  $IC_{50} = 25\mu\text{mol/L}$ , positive control Adriamycin,  $IC_{50} = 6\mu\text{mol/L}$ ; RnaseH inhibitor,  $IC_{50} > 500\mu\text{mol/L}$ , positive control Illimaquinone,  $IC_{50} = 50\mu\text{mol/L}$ ). Source: GUAN ZHONG *Dryopteris crassirhizoma*. Ref: 3522.

**4215 Crassirhizomide B**

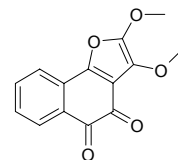
Kaempferol 3-*α*-L-(3,4-di-*O*-acetyl)rhamnopyranoside-7-*α*-L-rhamnopyranoside  $C_{31}H_{34}O_{16}$  (662.61). Pale yellow amorphous powder,  $[\alpha]_D = -219^\circ$  (*c* = 0.1, MeOH). Pharm: Anti-HIV-1 (RT (RDDP) inhibitor,  $IC_{50} > 500\mu\text{mol/L}$ , positive control Adriamycin,  $IC_{50} = 46\mu\text{mol/L}$ ; DDDP inhibitor,  $IC_{50} > 100\mu\text{mol/L}$ , positive control Adriamycin,  $IC_{50} = 6\mu\text{mol/L}$ ; RnaseH inhibitor,  $IC_{50} > 500\mu\text{mol/L}$ , positive control Illimaquinone,  $IC_{50} = 50\mu\text{mol/L}$ ). Source: GUAN ZHONG *Dryopteris crassirhizoma*. Ref: 3522.

**4216 Crassirhizomide C**

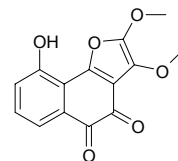
Kaempferol 3-*α*-L-(2,3-di-*O*-acetyl)rhamnopyranoside-7-*α*-L-rhamnopyranoside  $C_{31}H_{34}O_{16}$  (662.61). Pale yellow amorphous powder,  $[\alpha]_D = -161^\circ$  (*c* = 0.1, MeOH). Pharm: Anti-HIV-1 (RT (RDDP) inhibitor,  $IC_{50} = 240\mu\text{mol/L}$ , positive control Adriamycin,  $IC_{50} = 46\mu\text{mol/L}$ ; DDDP inhibitor,  $IC_{50} = 28\mu\text{mol/L}$ , positive control Adriamycin,  $IC_{50} = 6\mu\text{mol/L}$ ; RnaseH inhibitor,  $IC_{50} > 500\mu\text{mol/L}$ , positive control Illimaquinone,  $IC_{50} = 50\mu\text{mol/L}$ ). Source: GUAN ZHONG *Dryopteris crassirhizoma*. Ref: 3522.

**4217 Crataequinone A**

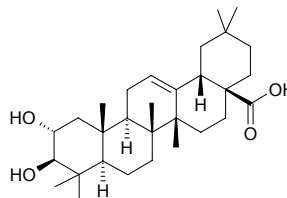
11,12-Dimethoxy-3,4-furo-1,2-naphthoquinone  $C_{14}H_{10}O_5$  (258.23). Red-purple needles (hexane-EtOAc), mp 157–158°C. Pharm: Intercellular adhesion molecule-1 (ICAM-1) expression inhibitor ( $IC_{50} = 33\mu\text{mol/L}$ ). Source: SHAN ZHA *Crataegus pinnatifida*. Ref: 4091.

**4218 Crataequinone B**

11,12-Dimethoxy-5-hydroxy-3,4-furo-1,2-naphthoquinone  $C_{14}H_{10}O_6$  (274.23). Red-purple needles (MeOH-H<sub>2</sub>O), mp 123–125°C. Pharm: Intercellular adhesion molecule-1 (ICAM-1) expression inhibitor ( $IC_{50} = 90\mu\text{mol/L}$ ). Source: SHAN ZHA *Crataegus pinnatifida*. Ref: 4091.

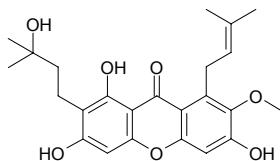
**4219 Crategolic acid**

2,3-Dihydroxy-12-oleanen-28-oic acid [4373-41-5]  $C_{30}H_{48}O_4$  (472.71). mp 263–265°C. Source: SHAN ZHA *Crataegus pinnatifida*, SHAN ZHA YE *Crataegus pinnatifida*, HUO XIANG *Agastache rugosus*. Ref: 6, 660.

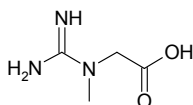


**4220 Cratoxylone**

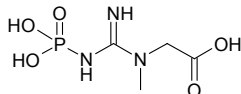
[149155-01-1] C<sub>24</sub>H<sub>28</sub>O<sub>7</sub> (428.49). Source: TIAN SHAN ZHU ZI *Garcinia dulcis* (fruit). Ref: 5319.

**4221 Creatine**

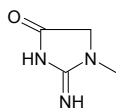
*N*-Amidinosarcosine [57-00-1] C<sub>4</sub>H<sub>9</sub>N<sub>3</sub>O<sub>2</sub> (131.14). mp 303°C. Source: GOU ROU *Canis familiaris*, GOU XIN *Canis familiaris*, LI YU *Cyprinus carpio*, NIU XUE *Bos taurus domesticus*; *Bubalus bubalis*, QING WA *Rana nigromaculata*; *Rana plancyi*, XIA TIAN GAO *Bos taurus domesticus*, XIANG ROU *Elephas maximus*. Ref: 6.

**4222 Creatine phosphoric acid**

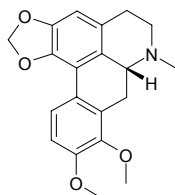
Phosphocreatine [6190-45-0] C<sub>4</sub>H<sub>10</sub>N<sub>3</sub>O<sub>5</sub>P (211.12). Source: QING WA *Rana nigromaculata*; *Rana plancyi*, LI YU *Cyprinus carpio*. Ref: 6.

**4223 Creatinine**

C<sub>4</sub>H<sub>7</sub>N<sub>3</sub>O (113.12). mp 260°C (dec). Source: MO GU *Agaricus campestris*, NIU XUE *Bos taurus domesticus*; *Bubalus bubalis*, REN NIAO *Homo sapiens*. Ref: 6.

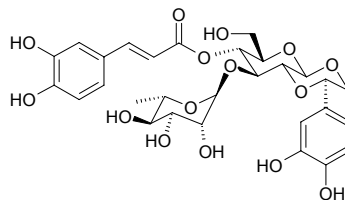
**4224 (-)-Crebanine**

C<sub>20</sub>H<sub>21</sub>NO<sub>4</sub> (339.39). [α]<sub>D</sub><sup>25</sup> = -55.2° (CHCl<sub>3</sub>). Source: *Stephania* sp. Ref: 3404.

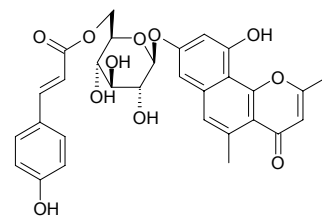
**4225 Crenatoside‡**

Oraposide; Orobanchoside [61276-16-2] C<sub>29</sub>H<sub>34</sub>O<sub>15</sub> (622.59). Amorphous powder, [α]<sub>D</sub><sup>26</sup> = -23° (c = 0.44, MeOH). Pharm: Antiviral inactive (Vero cell lines infected with HSV-2 strain 333, 250μg/mL)<sup>[4752]</sup>; ACE inhibitor (1.0mg/mL, InRt = 99.7%; 0.1mg/mL, InRt = 75.5%; 0.01mg/mL, InRt = 34.6%; control Captopril, 0.01mg/mL, InRt = 97.7%)<sup>[4752]</sup>; antioxidant (relative potency = 1.4, compared with Resveratrol, relative potency = 1)<sup>[4920]</sup>. Source: GUAN HUA ROU CONG RONG *Cistanche tubulosa*, LIE DANG *Orobanche coerulescens* (whole herb), NAN CHUAN GUAN CHUN HUA *Microtoena prainiana* (stem: yield = 0.0036%dw). Ref: 2448, 4752, 4920.

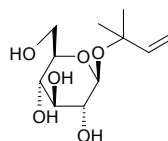
‡Note: See compound 16161.

**4226 Crenatoside**

C<sub>30</sub>H<sub>28</sub>O<sub>11</sub> (564.55). Colorless needles (MeOH), mp > 300°C, [α]<sub>D</sub><sup>20</sup> = -44.5° (c = 1.00, DMSO). Source: HUANG YAO *Rhamnus crenatus* (aerial parts). Ref: 4878.

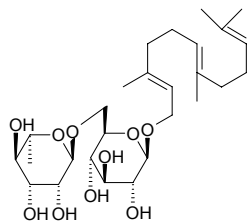
**4227 Crenulatin**

2-Methyl-3-buten-2-ol β-D-glucopyranoside C<sub>11</sub>H<sub>20</sub>O<sub>6</sub> (248.28). Colorless, small prismatic crystals, mp 118~120°C (acetone), [α]<sub>D</sub><sup>20</sup> = -26.76° (c = 1.1, ethanol); amorphous powder, [α]<sub>D</sub><sup>24</sup> = -19°. Source: BEI SHA SHEN *Glehnia littoralis* (fruit), DA HUA HONG JING TIAN *Rhodiola crenulata* [Syn. *Rhodiola euryphylla*]. Ref: 218, 3525.

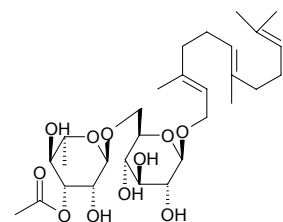


**4228 Crenulatoside A**

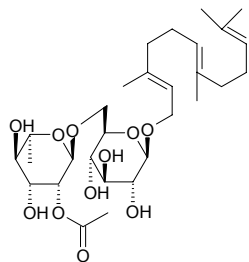
1-*O*-[ $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl]-(2*E*,6*E*)-farnesol  
 $C_{27}H_{46}O_{10}$  (530.66).  $[\alpha]_D^{20} = -44^\circ$  ( $c = 1$ , MeOH). Source: *Guioa crenulata*  
 (leaf). Ref: 5331.

**4229 Crenulatoside B**

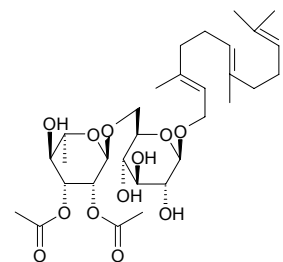
1-*O*-[3-*O*-Acetyl- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl]-(2*E*,6*E*)-  
 farnesol  $C_{29}H_{48}O_{11}$  (572.70).  $[\alpha]_D^{20} = -28^\circ$  ( $c = 1$ , MeOH). Source: *Guioa*  
*crenulata* (leaf). Ref: 5331.

**4230 Crenulatoside C**

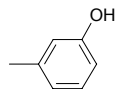
1-*O*-[2-*O*-Acetyl- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl]-(2*E*,6*E*)-  
 farnesol  $C_{29}H_{48}O_{11}$  (572.70).  $[\alpha]_D^{20} = -24^\circ$  ( $c = 0.58$ , MeOH). Source: *Guioa*  
*crenulata* (leaf). Ref: 5331.

**4231 Crenulatoside D**

1-*O*-[2,3-*O*-acetyl- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl]-(2*E*,  
 6*E*)-farnesol  $C_{31}H_{50}O_{12}$  (614.74).  $[\alpha]_D^{20} = -31^\circ$  ( $c = 0.33$ , MeOH). Source:  
*Guioa crenulata* (leaf). Ref: 5331.

**4232 *m*-Cresol**

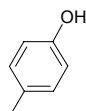
3-Methylphenol [108-39-4]  $C_7H_8O$  (108.14). mp 11~12°C, bp 202°C. Source:  
 CHUAN XU DUAN *Dipsacus asperoides*, MO YAO *Commiphora myrrha*  
 [Syn. *Commiphora molmol*], SANG YE *Morus alba*, YIN CHEN HAO  
*Artemisia capillaris*. Ref: 6, 660, 1379.

**4233 *o*-Cresol**

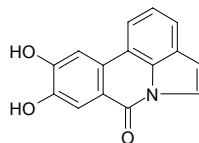
2-Methylphenol [95-48-7]  $C_7H_8O$  (108.14). Source: DANG GUI *Angelica*  
*sinensis*, YIN CHEN HAO *Artemisia capillaris*. Ref: 2, 660.

**4234 *p*-Cresol**

4-Methylphenol [106-44-5]  $C_7H_8O$  (108.14). mp 34°C. Pharm: Anthelmintic;  
 disinfectant; local anticorrosion. Source: CHUAN XU DUAN *Dipsacus*  
*asperoides*, DANG GUI *Angelica sinensis*, DU HUO *Angelica pubescens* f.  
*biserrata* [Syn. *Angelica pubescens*], HONG GUI *Chamaecyparis formosensis*,  
 HUI QIN *Pimpinella anisum*, YIN CHEN HAO *Artemisia capillaris*, *Morus*  
 sp. Ref: 2, 660, 1379.

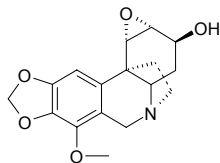
**4235 Criasiaticidine A**

4,5-Etheno-9,10-dihydroxy-6-phenanthridone; Hippacine  $C_{15}H_9NO_3$  (251.24).  
 Pale brown needles ( $CH_3CN-H_2O$ ), mp 277~279°C; amorphous powder.  
Pharm: Cytotoxic (Meth-A cell,  $ED_{50} = 3.2\mu g/mL$ , control Adriamycin,  $ED_{50}$   
 $< 0.09\mu g/mL$ ; LLC cell,  $ED_{50} = 4.2\mu g/mL$ , Adriamycin,  $ED_{50} =$   
 $0.1\mu g/mL$ )<sup>[4125]</sup>. Source: LIN JING ZHONG ZI WEN SHU LAN *Crinum*  
*bulbispermum* (bulb), RI BEN WEN SHU LAN *Crinum asiaticum* var.  
*japonicum* (bulb). Ref: 3997, 4125.

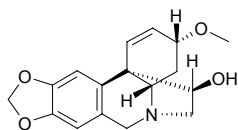


**4236 Crinamidine**

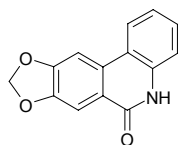
$C_{17}H_{19}NO_5$  (317.34). **Pharm:** AChE inhibitor ( $IC_{50} = (300 \pm 27) \mu\text{mol/L}$ , control Galanthamine,  $IC_{50} = (1.9 \pm 0.2) \mu\text{mol/L}$ ). **Source:** *Crinum moorei*. **Ref:** 4952.

**4237 Crinamine**

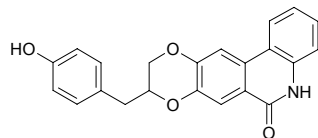
[639-41-8]  $C_{17}H_{19}NO_4$  (301.35). **Pharm:** AChE inhibitor ( $IC_{50} = (697 \pm 12) \mu\text{mol/L}$ , control Galanthamine,  $IC_{50} = (1.9 \pm 0.2) \mu\text{mol/L}$ )<sup>[4952]</sup>; inhibits respiration; antihypertensive (dog, short time); antiplasmodial (strain D10,  $IC_{50} = 2.8 \mu\text{g/mL}$ , control Hamayne,  $IC_{50} = 15.6 \mu\text{g/mL}$ , Chloroquine,  $IC_{50} = 0.002 \mu\text{g/mL}$ ; strain FAC8,  $IC_{50} = 3.4 \mu\text{g/mL}$ , Hamayne,  $IC_{50} = 18.2 \mu\text{g/mL}$ , Chloroquine,  $IC_{50} = 0.01 \mu\text{g/mL}$ ; cytotoxic, BL6,  $IC_{50} = 1.8 \mu\text{g/mL}$ , Hamayne,  $IC_{50} = 9.4 \mu\text{g/mL}$ , Chloroquine,  $IC_{50} = 20.9 \mu\text{g/mL}$ , Daunomycin,  $IC_{50} = 0.43 \mu\text{g/mL}$ )<sup>[3931]</sup>;  $LD_{50}$  (dog, orl) = 10 mg/kg. **Source:** LIN JING ZHONG ZI WEN SHU LAN *Crinum bulbispermum*, YA ZHOU WEN SHU LAN *Crinum asiaticum*, *Ammocharis coranica* (bulb). **Ref:** 658, 3931, 3952, 4952.

**4238 Crinasiadine**

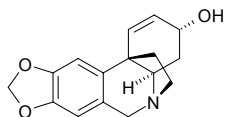
[40141-86-4]  $C_{14}H_9NO_3$  (239.13). **Pharm:** Antineoplastic. **Source:** YA ZHOU WEN SHU LAN *Crinum asiaticum*. **Ref:** 658.

**4239 Crinasiatine**

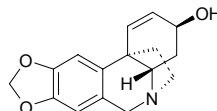
$C_{22}H_{17}NO_4$  (359.39). **Pharm:** Antineoplastic. **Source:** YA ZHOU WEN SHU LAN *Crinum asiaticum*. **Ref:** 658.

**4240 Crinine**

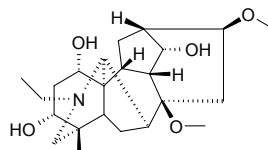
$C_{16}H_{17}NO_3$  (271.32). **Source:** GUAN MU WEN SHU LAN *Crinum macowanii* (bulb). **Ref:** 4000.

**4241 (+)-Crinine**

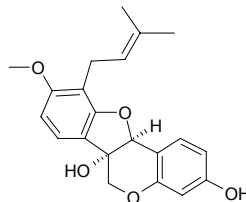
(+)-Vittatine  $C_{16}H_{17}NO_3$  (271.32). mp 207~208°C (sub). **Pharm:** AChE inhibitor ( $IC_{50} = (461 \pm 14) \mu\text{mol/L}$ , control Galanthamine,  $IC_{50} = (1.9 \pm 0.2) \mu\text{mol/L}$ )<sup>[4952]</sup>; antibacterial (*Staphylococcus aureus*, IZD = 19 mm, MIC = 63  $\mu\text{g/mL}$ ; *Escherichia coli*, IZD = 22 mm)<sup>[3829]</sup>; antifungal (*Candida albicans*, IZD = 17 mm, MIC = 31  $\mu\text{g/mL}$ )<sup>[3829]</sup>. **Source:** GU TING HUA *Amaryllis belladonna* (bulb), SHI SUAN *Lycoris radiata* [Syn. *Amaryllis radiata*], *Crinum moorei*. **Ref:** 6, 3829, 4952.

**4242 Crispulidine**

$C_{23}H_{37}NO_5$  (407.56).  $[\alpha]_D^{20} = 0^\circ$  ( $c = 0.9$ ,  $\text{CHCl}_3$ ). **Source:** TU ER QI CUI QUE HUA *Delphinium crispulum*. **Ref:** 1913.

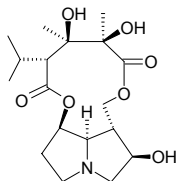
**4243 Cristacarpin**

3,6a-Dihydroxy-9-methoxy-10- $\gamma,\gamma$ -dimethylallylpterocarpan [74515-47-2]  $C_{21}H_{22}O_5$  (354.41). **Pharm:** Antibacterial (*Staphylococcus aureus*, *Bacillus subtilis*, *Micrococcus lysodeikticus*, all *in vitro*); antibacterial (*Escherichia coli*, MIA = 0.10  $\mu\text{g}$ , control Chloramphenicol, MIA = 0.001  $\mu\text{g}$ ; *Staphylococcus aureus*, MIA = 0.01  $\mu\text{g}$ , Chloramphenicol, MIA = 0.0001  $\mu\text{g}$ ; *Bacillus subtilis*, MIA = 0.01  $\mu\text{g}$ , Chloramphenicol, MIA = 0.0001  $\mu\text{g}$ )<sup>[5247]</sup>; antifungal (*Candida mycoderma*, MIA = 0.05  $\mu\text{g}$ , control Miconazole, MIA = 0.0001  $\mu\text{g}$ )<sup>[5247]</sup>; antioxidant (DPPH free radical scavenger, TLC, MIA = 1.0  $\mu\text{g}$ ,  $IC_{50} > 1000 \mu\text{g/mL}$ ; control Quercetin, MIA < 0.05  $\mu\text{g}$ ,  $IC_{50} = 7 \mu\text{g/mL}$ , Gallic acid, MIA < 0.05  $\mu\text{g}$ ,  $IC_{50} = 4 \mu\text{g/mL}$ ; Ascorbic acid, MIA < 0.10  $\mu\text{g}$ ,  $IC_{50} = 18 \mu\text{g/mL}$ )<sup>[5247]</sup>. **Source:** A BI XI NI YA CI TONG *Erythrina abyssinica*, JI KUAN CI TONG *Erythrina latissima* (stem wood), SHAN DI CI TONG *Erythrina poeppigiana* (root). **Ref:** 658, 3400, 5247.

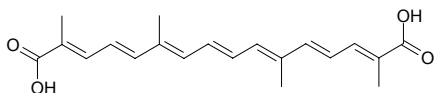


**4244 Croalbidine**

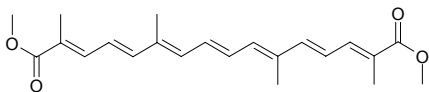
[41714-30-1]  $C_{18}H_{29}NO_7$  (371.43). mp 208–209°C. Source: HUANG HUA DI DING *Crotalaria albida*. Ref: 6.

**4245  $\alpha$ -Croceetin**

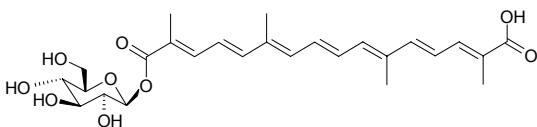
[27876-94-4]  $C_{20}H_{24}O_4$  (328.41). mp (*trans*) 285°C. Pharm: Choleric (rft with ligated common bile duct, inhibits present of bilirubin in blood); reduces scleratheroma incidence (rft fed with cholesterol); LD<sub>50</sub> (mus, sc, sodium salt) = 5g/kg. Source: ZANG HONG HUA *Crocus sativus*, ZANG HONG HUA *Crocus sativus* (stigma: yield = 0.0048%dw)<sup>[4653]</sup>, ZHI ZI *Gardenia jasminoides* [Syn. *Gardenia florida*]. Ref: 2, 4, 658, 4653, 5501.

**4246 Croceetin dimethyl ester**

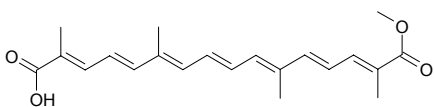
$C_{22}H_{28}O_4$  (356.47). mp (*cis*) 141°C, (*trans*) 222.5°C. Source: JIU BI YING *Ilex rotunda*, ZANG HONG HUA *Crocus sativus*. Ref: 6.

**4247 Croceetin mono( $\beta$ -D-glucosyl) ester**

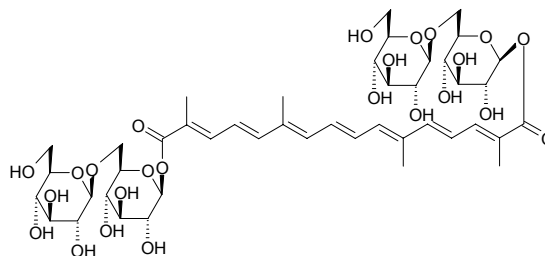
$C_{26}H_{34}O_9$  (490.56). Source: ZANG HONG HUA *Crocus sativus* (stigma: yield = 0.0017%dw). Ref: 4653.

**4248 Croceetin monomethyl ester**

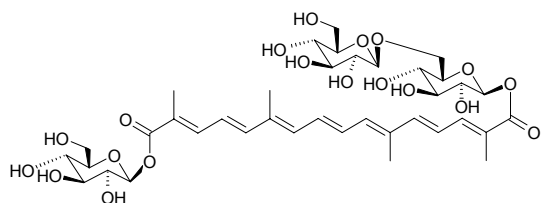
$C_{21}H_{26}O_4$  (342.44). Source: ZANG HONG HUA *Crocus sativus* (stigma: yield = 0.0014%dw). Ref: 4653.

**4249 Crocin**

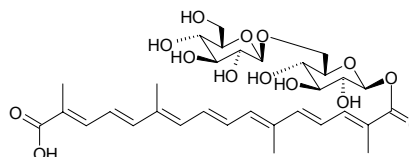
Crocin-1 [42553-65-1]  $C_{44}H_{64}O_{24}$  (976.99). Pharm: Choleric (rft with ligated common bile duct, inhibits presence of bilirubin in blood and increases choleresis); tyrosinase inhibitor (mushroom tyrosinase, spectrophotometry method of Mason and Peterson, IC<sub>50</sub> = 140 $\mu$ mol/L, control Kojic acid, IC<sub>50</sub> = 235 $\mu$ mol/L)<sup>[4653]</sup>. Source: JU SE MAO RUI HUA *Verbascum phlomoides*, MEI LI FAN HONG HUA *Crocus speciosus* (in 1960, the compound was isolated from the plant by R.Entsche, et al.)<sup>[5505]</sup>, SHUI ZHI *Gardenia jasminoides* var. *grandiflora*, ZHI ZI *Gardenia jasminoides* [Syn. *Gardenia florida*] (dried ripe fruit: content scope = 0.105%–1.101%<sup>[5501]</sup>, mean content = 0.202%<sup>[5508]</sup>), YE HUA *Nyctanthes arbor-tristis*. Ref: 2, 658, 4653, 5501, 5505, 5508.

**4250 Crocin 2**

$C_{38}H_{54}O_{19}$  (814.84). Source: ZANG HONG HUA *Crocus sativus* (stigma, yield = 1.45%dw). Ref: 4653.

**4251 Crocin 3**

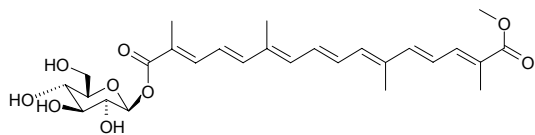
$C_{32}H_{44}O_{14}$  (652.70). Pharm: Tyrosinase inhibitor (mushroom tyrosinase, spectrophotometry method of Mason and Peterson, IC<sub>50</sub> = 0.96mmol/L, control Arbutin, IC<sub>50</sub> = 24mmol/L, Hydroquinone, IC<sub>50</sub> = 4.5mmol/L, Kojic acid, IC<sub>50</sub> = 235 $\mu$ mol/L)<sup>[4653]</sup>. Source: ZANG HONG HUA *Crocus sativus* (stigma: yield = 0.174%dw). Ref: 4653.



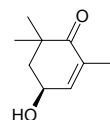


**4252 Crocin 4**

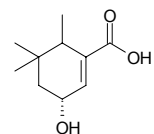
$C_{27}H_{36}O_9$  (504.58). Source: ZANG HONG HUA *Crocus sativus* (stigma: yield = 0.282%dw). Ref: 4653.

**4253 Crocusatin A**

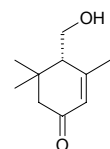
$C_9H_{14}O_2$  (154.21). Colorless oil,  $[\alpha]_D = -45^\circ$  ( $c = 0.06$ , MeOH). Source: ZANG HONG HUA *Crocus sativus* (pollen). Ref: 4233.

**4254 Crocusatin B**

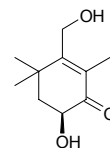
$C_{10}H_{16}O_3$  (184.24). Colorless powder,  $[\alpha]_D = +71^\circ$  ( $c = 0.07$ , MeOH). Pharm: Tyrosinase inhibitor (333.3  $\mu\text{mol/L}$ , InRt = 11.5%; control Kojic acid, 333.3  $\mu\text{mol/L}$ , InRt = 59.8%). Source: ZANG HONG HUA *Crocus sativus* (pollen). Ref: 4233.

**4255 Crocusatin C**

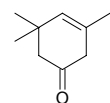
$C_{10}H_{16}O_2$  (168.24). Colorless oil,  $[\alpha]_D = -63^\circ$  ( $c = 0.06$ , MeOH). Source: ZANG HONG HUA *Crocus sativus* (pollen). Ref: 4233.

**4256 Crocusatin D**

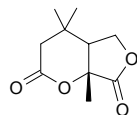
$C_{10}H_{16}O_3$  (184.24). Colorless oil,  $[\alpha]_D = -42^\circ$  ( $c = 0.07$ , MeOH). Source: ZANG HONG HUA *Crocus sativus* (pollen). Ref: 4233.

**4257 Crocusatin E**

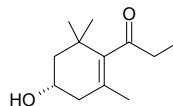
$C_9H_{14}O$  (138.21). Colorless oil. Source: ZANG HONG HUA *Crocus sativus* (pollen). Ref: 4233.

**4258 Crocusatin F**

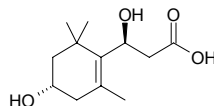
$C_{10}H_{14}O_4$  (198.22). Colorless oil,  $[\alpha]_D^{25} = -58^\circ$  ( $c = 0.012$ , MeOH). Source: ZANG HONG HUA *Crocus sativus* (stigma: yield = 0.00022%dw). Ref: 4653.

**4259 Crocusatin G**

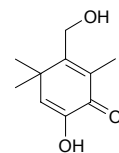
$C_{12}H_{20}O_2$  (196.29). Colorless oil,  $[\alpha]_D^{25} = +54^\circ$  ( $c = 0.05$ ,  $C_3H_5N$ );  $[\alpha]_D^{25} = +72^\circ$  ( $c = 0.03$ , MeOH). Source: ZANG HONG HUA *Crocus sativus* (stigma: yield = 0.00031%dw). Ref: 4653.

**4260 Crocusatin H**

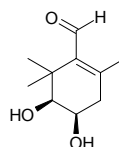
$C_{12}H_{20}O_4$  (228.29). Colorless needles,  $[\alpha]_D^{25} = +43^\circ$  ( $c = 0.02$ , MeOH). Pharm: Tyrosinase inhibitor (mushroom tyrosinase, spectrophotometry method of Mason and Peterson,  $IC_{50} = 0.87\text{mmol/L}$ , control Arbutin,  $IC_{50} = 24\text{mmol/L}$ , Hydroquinone,  $IC_{50} = 4.5\text{mmol/L}$ , Kojic acid,  $IC_{50} = 235\mu\text{mol/L}$ ). Source: ZANG HONG HUA *Crocus sativus* (stigma: yield = 0.00035%dw). Ref: 4653.

**4261 Crocusatin I**

$C_{10}H_{14}O_3$  (182.22). Colorless oil. Source: ZANG HONG HUA *Crocus sativus* (stigma: yield = 0.00006%dw). Ref: 4653.

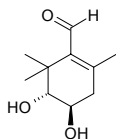
**4262 Crocusatin J**

$C_{10}H_{16}O_3$  (184.24). Colorless oil,  $[\alpha]_D^{25} = +68^\circ$  ( $c = 0.02$ , MeOH). Pharm: Tyrosinase inhibitor (*in vitro*, very weak). Source: ZANG HONG HUA *Crocus sativus* (petal: yield = 0.00053%). Ref: 3015.

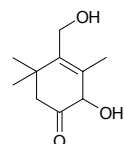


**4263 Crocusatin K**

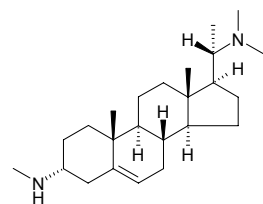
$C_{10}H_{16}O_3$  (184.24). Colorless oil,  $[\alpha]_D^{25} = +18^\circ$  ( $c = 0.02$ , MeOH). **Pharm:** Tyrosinase inhibitor (*in vitro*,  $IC_{50} = 260\mu\text{mol/L}$ ). **Source:** ZANG HONG HUA *Crocus sativus* (petal: yield = 0.00078%). **Ref:** 3015.

**4264 Crocusatin L**

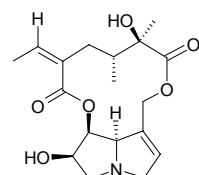
$C_{10}H_{16}O_3$  (184.24). Colorless oil,  $[\alpha]_D^{25} = +54^\circ$  ( $c = 0.02$ , MeOH). **Pharm:** Tyrosinase inhibitor (*in vitro*,  $IC_{50} = 1.0\text{mmol/L}$ ). **Source:** ZANG HONG HUA *Crocus sativus* (petal: yield = 0.00053%). **Ref:** 3015.

**4265 Croomionidine**

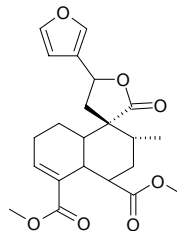
$C_{24}H_{42}N_2$  (358.62). crystals, mp 150~152°C,  $[\alpha]_D^{25} = -120^\circ$  ( $c = 0.15$ , MeOH). **Source:** JIN GANG DA *Croomia japonica*. **Ref:** 261.

**4266 Crotalaburnine**

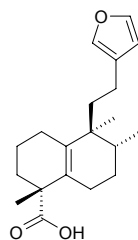
Anacrotine [5096-49-1]  $C_{18}H_{25}NO_6$  (351.40). Hydrate: brown acicular crystals (methanol), mp 180°C (blistering). **Pharm:** Anti-inflammatory (rat, tampon granuloma caused by carrageenan or hyaluronidase, 20mg/(kg·d) sc, 6d). **Source:** JIN LIAN HUA ZHU SHI DOU *Crotalaria laburnifolia*, GUANG YE ZHU SHI DOU *Crotalaria incana*, MEI ZHOU YE BAI HE *Crotalaria anagyroides*. **Ref:** 661.

**4267 Crotoacorylifuran**

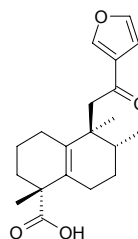
[61661-32-3]  $C_{22}H_{26}O_7$  (402.45). **Source:** ZAN BI XI BA DOU *Croton zambesicus*. **Ref:** 4552.

**4268 Crotohalimaneic acid**

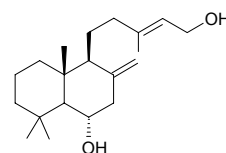
$C_{20}H_{28}O_3$  (316.44). Viscous transparent oil,  $[\alpha]_D^{25} = +36^\circ$  ( $c = 0.94$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (*in vitro*, hmn tumor cell cultures: BT474, 7.5 $\mu\text{g/mL}$ ; CHAGO, 0.1 $\mu\text{g/mL}$ ; HepG2, 0.2 $\mu\text{g/mL}$ ; Kato3, 0.4 $\mu\text{g/mL}$ ; SW620, 0.2 $\mu\text{g/mL}$ ). **Source:** GUANG YE BA DOU *Croton oblongifolius* [Syn. *Croton laevigatus*] (stem cortex). **Ref:** 4930.

**4269 Crotohalimoneic acid**

$C_{20}H_{26}O_4$  (330.43). White crystal solid, mp 168~170°C,  $[\alpha]_D^{25} = +86.5^\circ$  ( $c = 1.0$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (*in vitro*, hmn tumor cell cultures: BT474, 0.1 $\mu\text{g/mL}$ ; CHAGO, 0.1 $\mu\text{g/mL}$ ; HepG2, 5.2 $\mu\text{g/mL}$ ; Kato3, 8.2 $\mu\text{g/mL}$ ; SW620, 0.1 $\mu\text{g/mL}$ ). **Source:** GUANG YE BA DOU *Croton oblongifolius* [Syn. *Croton laevigatus*] (stem cortex). **Ref:** 4930.

**4270 Crotonadiol**

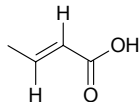
8(17),13-Labdadiene-6 $\alpha$ ,15-diol  $C_{20}H_{34}O_2$  (306.49). Colorless oil,  $[\alpha]_D^{25} = -28^\circ$  ( $c = 0.12$ ,  $CHCl_3$ ). **Source:** ZAN BI XI BA DOU *Croton zambesicus*. **Ref:** 2282.



**4271 Crotonic acid**

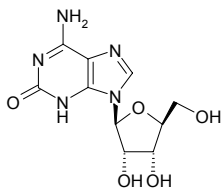
Butenoic acid [3724-65-0] C<sub>4</sub>H<sub>6</sub>O<sub>2</sub> (86.09). Source: BA DOU *Croton tiglium*.

Ref: 2.

**4272 Crotonoside**

2-Hydroxy-6-aminopurine-9-β-D-ribofuranoside [1818-71-9] C<sub>10</sub>H<sub>13</sub>N<sub>5</sub>O<sub>5</sub>

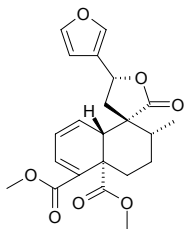
(283.25). Source: BA DOU *Croton tiglium*. Ref: 2.

**4273 Crotozambefuran A**

15,16-Epoxy-1,3,13(16),14-clerodetraen-20,12-olide-18,19-dioic acid dimethylester C<sub>22</sub>H<sub>24</sub>O<sub>7</sub> (400.43). White solid, mp 143~146°C, [α]<sub>D</sub><sup>25</sup> = -6.7°

(c = 0.6, MeOH). Source: ZAN BI XI BA DOU *Croton zambesicus*. Ref:

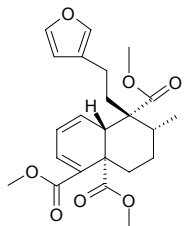
1953.

**4274 Crotozambefuran B**

15,16-Epoxy-1,3,13(16),14-clerodetraen-18,19,20-trioic acid trimethylester C<sub>23</sub>H<sub>28</sub>O<sub>7</sub> (416.48). White needles (hexane-EtOAc), mp 108~109°C, [α]<sub>D</sub><sup>25</sup> =

-46.7° (c = 0.09, MeOH). Source: ZAN BI XI BA DOU *Croton zambesicus*.

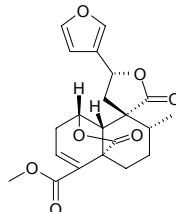
Ref: 1953.

**4275 Crotozambefuran C**

15,16-Epoxy-3,13(16),14-clerodatrien-19,1α:20,12-diolide-18-oic acid methylester C<sub>21</sub>H<sub>22</sub>O<sub>7</sub> (386.41). White powder (hexane-EtOAc), mp 242°C,

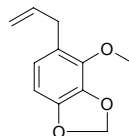
[α]<sub>D</sub><sup>25</sup> = -25.0° (c = 0.11, MeOH). Source: ZAN BI XI BA DOU *Croton*

*zambesicus*. Ref: 1953.

**4276 Croweacin**

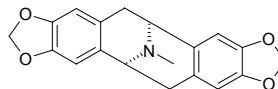
[484-34-4] C<sub>11</sub>H<sub>12</sub>O<sub>3</sub> (192.22). Source: XI XIN *Asarum sieboldii*, LIAO XI

XIN *Asarum heterotropoides* var. *mandshuricum*. Ref: 2, 660.

**4277 Crychine**

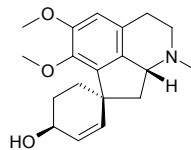
C<sub>19</sub>H<sub>17</sub>NO<sub>4</sub> (323.35). Source: HOU KE GUI *Cryptocarya chinensis* (wood).

Ref: 3092.

**4278 Cryprochine**

[147127-62-6] C<sub>19</sub>H<sub>25</sub>NO<sub>3</sub> (315.42). Source: HOU KE GUI *Cryptocarya*

*chinensis* (wood). Ref: 3092.

**4279 (S)-Cryptodorine**

C<sub>18</sub>H<sub>15</sub>NO<sub>4</sub> (309.32). [α]<sub>D</sub><sup>22</sup> = +19.67° (c = 0.001, CHCl<sub>3</sub>). Pharm: Antileish-

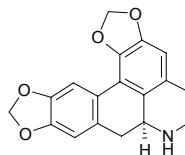
manial (*Leishmania panamensis*, IC<sub>50</sub> = (6±0.08)μmol/L, control

Amphotericin B, IC<sub>50</sub> = (0.1±0.004)μmol/L; *Leishmania mexicana*, IC<sub>50</sub> =

(3±0.65)μmol/L, Amphotericin B, IC<sub>50</sub> = (0.1±0.004)μmol/L; macrophage,

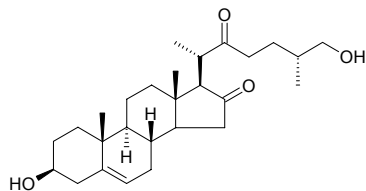
IC<sub>50</sub> = (64±0.03)μmol/L, SI = 21.3; HFF, IC<sub>50</sub> = (58±0.07)μmol/L, SI =

19.3). Source: JING JI GUA TAI MU *Gutteria dumetorum*. Ref: 5424.

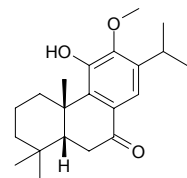


**4280 Cryptogenin**

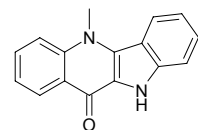
[16755-52-5] C<sub>27</sub>H<sub>42</sub>O<sub>4</sub> (430.63). mp 187~189°C. Source: YU ER QI *Trillium camtschaticum*. Ref: 6.

**4281 Cryptojaponol**

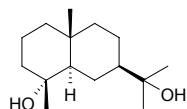
[16755-52-5] C<sub>21</sub>H<sub>30</sub>O<sub>3</sub> (330.47). mp 204~205°C, [α]<sub>D</sub><sup>25</sup> = +49° (c = 1.0, CHCl<sub>3</sub>). Pharm: Cytotoxic (A2780, IC<sub>50</sub> = 34.2 μg/mL, control Actinomycin D, IC<sub>50</sub> = 0.001 μg/mL; P388, IC<sub>50</sub> > 20 μg/mL; LNCaP, IC<sub>50</sub> > 20 μg/mL; KB, IC<sub>50</sub> > 20 μg/mL; Col2, IC<sub>50</sub> > 20 μg/mL; LU1, IC<sub>50</sub> > 20 μg/mL)<sup>[5400]</sup>; 12(S)-LOX inhibitor (hmn Platelets, 12(S)-HETE Production inhibitor, IC<sub>50</sub> = 85.08 μmol/L, control Baicalein, IC<sub>50</sub> = 24.6 μmol/L)<sup>[4980]</sup>. Source: DU SONG SHI *Juniperus rigida*, LIU SHAN *Cryptomeria fortunei*, OU ZHOU CI BAI *Juniperus communis* (wood), XIONG RUI ZHUANG SHU WEI CAO *Salvia staminea*. Ref: 6, 4980, 5400.

**4282 Cryptolepinone**

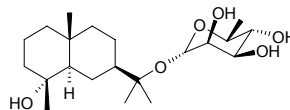
C<sub>16</sub>H<sub>12</sub>N<sub>2</sub>O (248.29). Pharm: Cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells, CD = 0.02 μg/mL)<sup>[5038]</sup>; cytotoxic (mouse mammary organ culture assay, 83% at 10 μg/mL)<sup>[5038]</sup>. Source: HUANG HUA REN *Sida acuta*. Ref: 5038.

**4283 Cryptomeridiol**

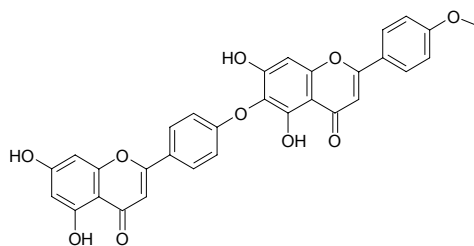
C<sub>15</sub>H<sub>28</sub>O<sub>2</sub> (240.39). Pharm: Cytotoxic inactive (HeLa, IC<sub>50</sub> > 200 μg/mL, control Mitomycin C, IC<sub>50</sub> = 1.7 μg/mL)<sup>[4092]</sup>. Source: TUAN JI AI NA XIANG *Blumea glomerata*. Ref: 4092.

**4284 Cryptomeridiol 11-α-L-rhamnoside**

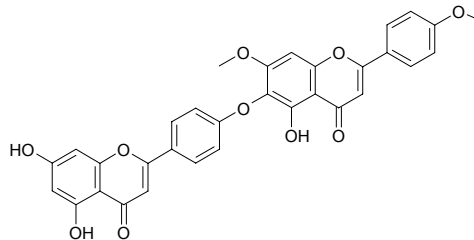
C<sub>21</sub>H<sub>38</sub>O<sub>6</sub> (386.53). Transparent rectangular crystals (EtOAc), mp 189~190°C, [α]<sub>D</sub><sup>25</sup> = -13.3° (c = 0.03, CHCl<sub>3</sub>). Pharm: Cytotoxic (*in vitro*, HepG<sub>2</sub>, IC<sub>50</sub> = 0.01 μg/mL, Hep2,2,15, IC<sub>50</sub> = 0.36 μg/mL). Source: YI LAN *Cananga odorata* (fruit). Ref: 3055.

**4285 Cryptomerin A**

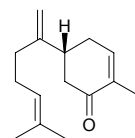
Hinokiflavone 4'''-methylether [22012-97-1] C<sub>31</sub>H<sub>20</sub>O<sub>10</sub> (552.50). mp 308~310°C. Source: LIU SHAN *Cryptomeria fortunei*. Ref: 6.

**4286 Cryptomerin B**

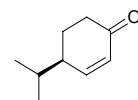
Hinokiflavone 4'''',7'''-dimethylether [22012-98-2] C<sub>32</sub>H<sub>22</sub>O<sub>10</sub> (566.53). mp 302~303°C (dec). Source: LIU SHAN *Cryptomeria fortunei*. Ref: 6.

**4287 Cryptomerion**

[5988-72-7] C<sub>15</sub>H<sub>22</sub>O (218.34). Colorless oil, [α]<sub>D</sub><sup>23</sup> = -31.4° (c = 0.1, CHCl<sub>3</sub>). Source: KUAN DONG HUA *Tussilago farfara* (flower bud), LIU SHAN *Cryptomeria fortunei*. Ref: 6, 3531.

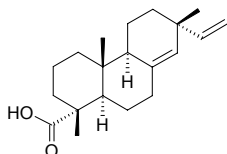
**4288 Cryptone**

[500-02-7] C<sub>9</sub>H<sub>14</sub>O (138.21). bp (-) 98~100°C/10mmHg, (±) 103°C/17mmHg. Source: HU JIAO *Piper nigrum*. Ref: 6.

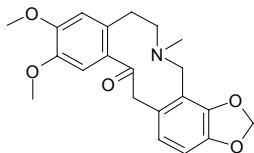


**4289 Cryptopimaric acid**

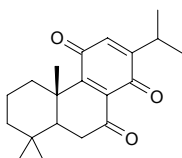
[471-74-9] C<sub>20</sub>H<sub>30</sub>O<sub>2</sub> (302.46). Colorless acicular crystals (mineral ether), mp 166~168°C,  $[\alpha]_D^{24} = -16^\circ$  ( $c = 0.43$ , ethanol). **Pharm:** Antineoplastic (P<sub>388</sub>, IC<sub>50</sub> = 12.5µg/mL); 15-lipoxygenase inhibitor (soy, IC<sub>50</sub> = 0.65mmol/L). **Source:** CI GU *Sagittaria sagittifolia*, CHOU BAI *Sabina vulgaris*, JI MAO SONG *Podocarpus imbricatus*, LIU SHAN *Cryptomeria fortunei*. **Ref:** 6, 520, 544, 658.

**4290 Cryptopine**

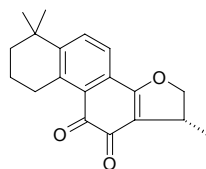
Cryptocavine [482-74-6] C<sub>21</sub>H<sub>23</sub>NO<sub>5</sub> (369.42). Hexapristmatic or lamellar crystals (benzene), mp 220~221°C, 221~223°C. **Pharm:** Similar action with narceine; LD<sub>50</sub> (mus, ip) = 0.2mg/kg. **Source:** BAI QU CAI *Chelidonium majus*, BAN RUI TANG SONG CAO *Thalictrum petaloideum* (root: content = 0.02%)<sup>[5508]</sup>, DA YE TANG SONG CAO *Thalictrum faberi* (root: content < 0.001%)<sup>[5508]</sup>, HE BAO MU DAN GEN *Dicentra spectabilis*, HE QING HUA *Hylomecon japonica*, JI YING SU *Argemone mexicana*, JIN SI MA WEI LIAN *Thalictrum glandulosissimum* (root: content < 0.005%)<sup>[5508]</sup>, JU HUA HUANG LIAN *Corydalis pallida*, MA WEI LIAN *Thalictrum foliolosum* (root: content < 0.001%)<sup>[5508]</sup>, XIA XU TANG SONG CAO *Thalictrum atriplex* (root: content = 0.03%)<sup>[5508]</sup>, XIAO GUO TANG SONG CAO *Thalictrum microgynum* (root: content = 0.04%)<sup>[5508]</sup>, XIAO HUA QIU GUO ZI JIN *Fumaria parviflora*, YA PIAN *Papaver somniferum*, YAN GUO CAO *Thalictrum thunbergii* (root: content < 0.001%)<sup>[5508]</sup>, YAO YONG QIU GUO ZI JIN *Fumaria officinalis*, YING SHUI HUANG LIAN *Thalictrum simplex* [Syn. *Thalictrum simplex* var. *brevipes*] (root: content < 0.001%)<sup>[5508]</sup>, YING SU *Papaver somniferum*, YING SU KE *Papaver somniferum*. **Ref:** 6, 661, 5508.

**4291 Cryptoquinone**

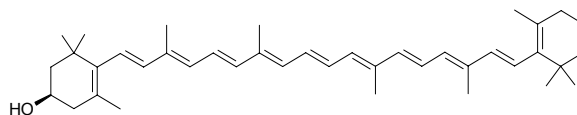
C<sub>20</sub>H<sub>26</sub>O<sub>3</sub> (314.43). Red needles, mp 105~106°C,  $[\alpha]_D^{25} = -680^\circ$  ( $c = 0.1$ , CHCl<sub>3</sub>). **Pharm:** Antifungal (*Pyricularia oryzae* and *Alternaria alternata*); cytotoxic (lymphoid neoplasm P<sub>388</sub> cells, IC<sub>50</sub> = 0.26µg/mL). **Source:** RI BEN LIU SHAN *Cryptomeria japonica*. **Ref:** 2015.

**4292 Cryptotanshinone**

15,17-Dihydropantanshinone IIa [35825-57-1] C<sub>19</sub>H<sub>20</sub>O<sub>3</sub> (296.37). mp 191°C. **Pharm:** Antibacterial (*Staphylococcus aureus* and its drug-resistant strains, hmn *Mycobacterium tuberculosis* H37Rv, *in vitro*); acetylcholinesterase (AChE) inhibitor (IC<sub>50</sub> = 7.0µmol/L, Argentatin A, IC<sub>50</sub> = 42.8µmol/L)<sup>[4944]</sup>; MAO A inhibitor (hmn recombinant MAO A, IC<sub>50</sub> = 80µmol/L)<sup>[5032]</sup>; iNOS inhibitor (RAW267.4 cells, LPS-induced, IC<sub>50</sub> = 8.4µmol/L)<sup>[5032]</sup>; immunosuppressant (lymphocyte transformation assay control group concanavalin A, 5µg/mL, InRt = 17%, 20µg/mL, InRt = 36%, 80µg/mL, InRt = 42%, control Dexamethasone, 50µg/mL, InRt = 63%)<sup>[4260]</sup>. **Source:** DAN SHEN *Salvia miltiorrhiza* (dried root: content scope = 0.040%~1.141%, mean content = 0.399%)<sup>[5508]</sup>, GAN XI SHU WEI CAO *Salvia przewalskii* (dried root: mean content = 0.33%)<sup>[5508]</sup>, HONG GEN CAO *Salvia prionitis* (dried root: content = 0.034%)<sup>[5508]</sup>, HUANG HUA SHU WEI CAO *Salvia flava* (dried root: content = 0.004%)<sup>[5508]</sup>, JI YE SHU WEI CAO *Salvia bulleyana* (dried root: content = 0.002%)<sup>[5508]</sup>, LI SE SHU WEI CAO *Salvia castanea* (dried root: content = 0.126%)<sup>[5508]</sup>, MAO DI HUANG SHU WEI CAO *Salvia digitaloides* (dried root: content = trace)<sup>[5508]</sup>, NAN DAN SHEN *Salvia bowleyana* (dried root: content = 0.015%)<sup>[5508]</sup>, NI DAN SHEN *Salvia sinica* (dried root: content = 0.006%)<sup>[5508]</sup>, SAN YE SHU WEI CAO *Salvia trijuga* (dried root: content = 0.145%)<sup>[5508]</sup>, YUN NAN SHU WEI CAO *Salvia yunnanensis* (dried root: content scope = 0.026%~0.36%, mean content = 0.193%)<sup>[5508]</sup>, ZHAN LONG JIAN *Veronicastrum sibiricum* (aerial parts), ZI DAN SHEN *Salvia przewalskii* var. *mandarinorum* (dried root: content = 0.498%)<sup>[5508]</sup>. **Ref:** 2, 658, 4260, 4944, 5032, 5508.

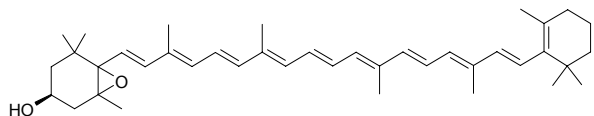
**4293 β-Cryptoxanthin**

[472-70-8] C<sub>40</sub>H<sub>56</sub>O (552.89). mp 169°C. **Pharm:** Yellow pigment. **Source:** FAN MU GUA *Carica papaya*, GOU QI ZI *Lycium chinense*, HONG HAI JIAO *Capsicum annuum*, HUANG BAI HE *Lilium hansonii*, MA TI YE *Caltha palustris*, NING XIA GOU QI ZI *Lycium barbarum*, SUAN JIANG *Physalis alkekengi*, YU SHU SHU *Zea mays*. **Ref:** 2, 658, 660.

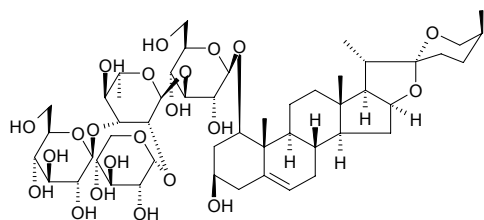


**4294 Cryptoxanthin epoxide**

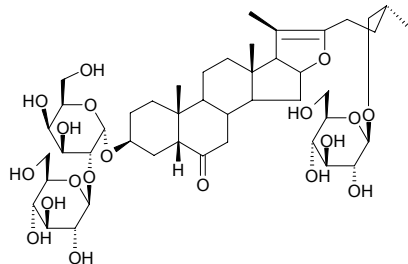
$C_{40}H_{56}O_2$  (568.89). mp 154°C. Source: FAN MU GUA *Carica papaya*. Ref: 6.

**4295 C<sup>THD</sup>0233276-10**

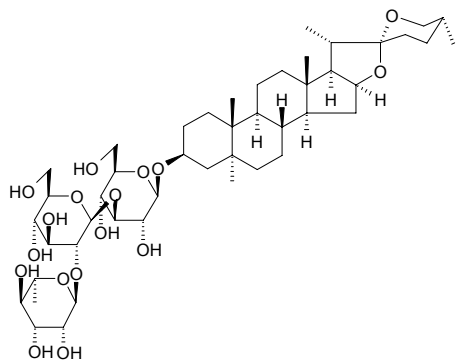
$C_{50}H_{80}O_{22}$  (1033.18). Pharm: Antineoplastic. Source: *Brodiaea californica*. Ref: 2165.

**4296 C<sup>THD</sup>0233276-15**

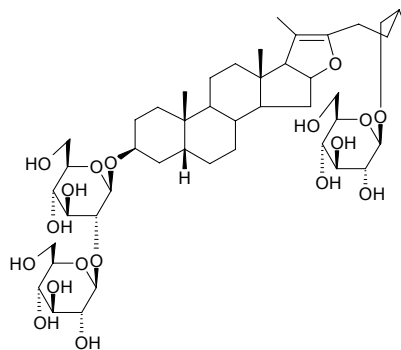
$C_{45}H_{72}O_{19}$  (917.06). Pharm: Platelet aggregation inhibitor (induced by ADP,  $IC_{50} = 0.020\mu\text{mol/L}$ ). Source: XIE BAI *Allium macrostemon*, JIU CONG *Allium porrum*, DA SUAN *Allium sativum*. Ref: 2165.

**4297 C<sup>THD</sup>0233276-2**

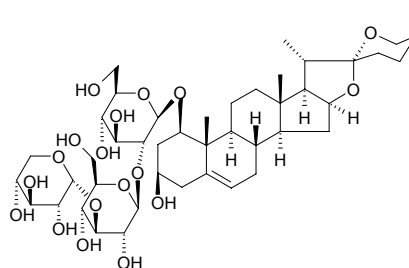
$C_{46}H_{76}O_{17}$  (901.11). Pharm: Phosphatase inhibitor (HeLa cell stimulated by TPA and joined by  $^{32}\text{P}$ ). Source: MAI KE LIN JIU *Allium macleanii*, SHAN JIU *Allium senescens*. Ref: 2165.

**4298 C<sup>THD</sup>0233276-21**

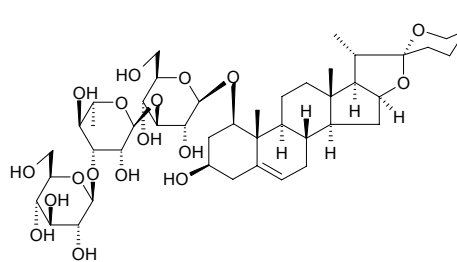
$C_{43}H_{74}O_{18}$  (903.08). Pharm: Free radical scavenger ( $\cdot\text{OH}$  free radical). Source: ZHI MU *Anemarrhena asphodeloides*. Ref: 2165.

**4299 C<sup>THD</sup>0233276-4**

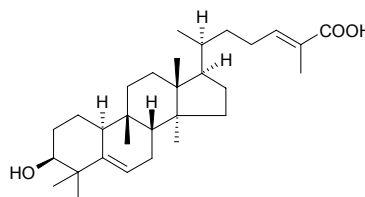
$C_{44}H_{70}O_{18}$  (887.04). Pharm: Antineoplastic ( $S_{180}$  Sarcoma, EAC). Source: DUAN TING SHAN MAI DONG *Liriope muscari*. Ref: 2165.

**4300 C<sup>THD</sup>0233276-9**

$C_{45}H_{72}O_{18}$  (901.06). Pharm: Antineoplastic. Source: *Brodiaea californica*. Ref: 2165.

**4301 C<sup>THD</sup>0384-2**

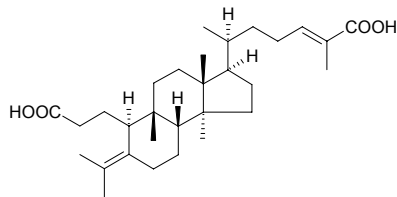
$C_{30}H_{48}O_3$  (456.72). Pharm: Antifungal (YNG-CA,  $IC_{50} = 2.9\mu\text{g/mL}$ ; YNG-CG,  $IC_{50} = 2.3\mu\text{g/mL}$ ). Source: DA HONG GU *Russula lepida*. Ref: 2075.



**4302 C<sup>1</sup>THD0384-3**

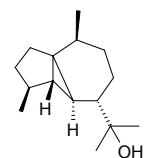
$C_{30}H_{48}O_4$  (472.71). **Pharm:** Farnesyl transferase inhibitor ( $IC_{50} = 24\mu\text{g/mL}$ ).

**Source:** DA HONG GU *Russula lepida*. **Ref:** 2075.

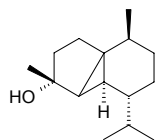
**4303 ent-Cubeban-11-ol**

$C_{15}H_{26}O$  (222.37). Amorphous,  $[\alpha]_D^{20} = -60.1^\circ$  ( $c = 0.29$ ). **Source:** ZHAO WA

JIA KE TAI *Jackiella javanica*. **Ref:** 5303.

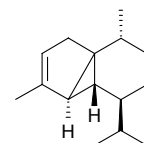
**4304 Cubeben camphor**

Cubebol  $C_{15}H_{26}O$  (222.37). mp 61–62°C. **Source:** BI CHENG QIE *Piper cubeba*. **Ref:** 6.

**4305 α-Cubebene**

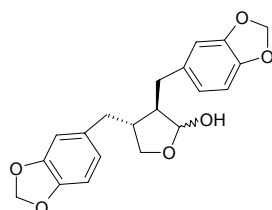
[17699-14-8]  $C_{15}H_{24}$  (204.36). **Pharm:** Flavorant. **Source:** BI CHENG QIE

*Piper cubeba*, CHAI HU *Bupleurum chinense*, SHENG JIANG *Zingiber officinale*. **Ref:** 2, 658.

**4306 Cubebin**

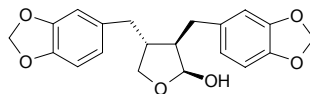
[18423-69-3]  $C_{20}H_{20}O_6$  (356.38). mp 131–132°C. **Pharm:** Disinfectant

(bladder). **Source:** BI CHENG QIE *Piper cubeba*, SAN JIAO MA DOU LING *Aristolochia triangularis*. **Ref:** 6, 658.

**4307 (–)-Cubebin**

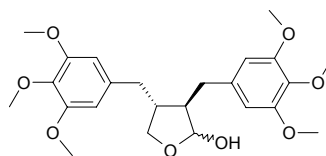
$C_{20}H_{20}O_6$  (356.38). **Pharm:** CYP3A4 inhibitor and CYP2D6 inhibitor (*in vitro*, CYP3A4,  $IC_{50} = 9.1\mu\text{mol/L}$ ; CYP2D6,  $IC_{50} = 35.5\mu\text{mol/L}$ ; control Ketoconazole, CYP3A4,  $IC_{50} = 0.72\mu\text{mol/L}$ ; control Quinidine, CYP2D6,  $IC_{50} = 0.082\mu\text{mol/L}$ ).

**Source:** BI CHENG QIE *Piper cubeba* (fruit: yield = 0.00074%dw). **Ref:** 4797.

**4308 (–)-Cubebinin**

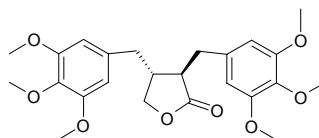
$C_{24}H_{32}O_8$  (448.52). **Pharm:** CYP3A4 inhibitor and CYP2D6 inhibitor (*in vitro*, CYP3A4,  $IC_{50} = 15\mu\text{mol/L}$ ; CYP2D6,  $IC_{50} > 100\mu\text{mol/L}$ ; control Ketoconazole, CYP3A4,  $IC_{50} = 0.72\mu\text{mol/L}$ ; control Quinidine, CYP2D6,  $IC_{50} = 0.082\mu\text{mol/L}$ ).

**Source:** BI CHENG QIE *Piper cubeba* (fruit: yield = 0.0002%dw). **Ref:** 4797.

**4309 (–)-Cubebinolide**

$C_{24}H_{30}O_8$  (446.50). **Pharm:** CYP3A4 inhibitor and CYP2D6 inhibitor (*in vitro*, CYP3A4,  $IC_{50} = 14.9\mu\text{mol/L}$ ; CYP2D6,  $IC_{50} > 100\mu\text{mol/L}$ ; control Ketoconazole, CYP3A4,  $IC_{50} = 0.72\mu\text{mol/L}$ ; control Quinidine, CYP2D6,  $IC_{50} = 0.082\mu\text{mol/L}$ ).

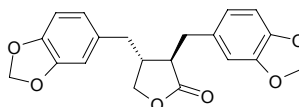
**Source:** BI CHENG QIE *Piper cubeba* (fruit: yield = 0.00074%dw). **Ref:** 4797.

**4310 Cubebinolide**

(–)-Hinokinin [26543-89-5]  $C_{20}H_{18}O_6$  (354.36). mp (+) 64–65°C, (–) 64–65°C, (±)

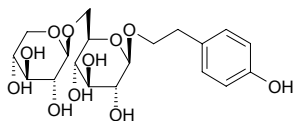
108°C. **Pharm:** Cytotoxic (A549,  $ED_{50} = 9.2\mu\text{mol/L}$ ,  $ED_{50} = 26.1\mu\text{g/mL}$ , control Adriamycin,  $ED_{50} = 0.01\mu\text{mol/L}$ ,  $ED_{50} = 0.02\mu\text{g/mL}$ ; MCF7,  $ED_{50} = 4.9\mu\text{mol/L}$ ,  $ED_{50} = 13.8\mu\text{g/mL}$ , Adriamycin,  $ED_{50} = 0.1\mu\text{mol/L}$ ,  $ED_{50} = 0.1\mu\text{g/mL}$ ; HT29,  $ED_{50} = 4.0\mu\text{mol/L}$ ,  $ED_{50} = 11.4\mu\text{g/mL}$ , Adriamycin,  $ED_{50} = 0.1\mu\text{mol/L}$ ,  $ED_{50} = 0.1\mu\text{g/mL}$ )<sup>[5088]</sup>; CYP3A4 inhibitor and CYP2D6 inhibitor (*in vitro*, CYP3A4,  $IC_{50} = 8\mu\text{mol/L}$ ; CYP2D6,  $IC_{50} = 26.5\mu\text{mol/L}$ ; control Ketoconazole, CYP3A4,  $IC_{50} = 0.72\mu\text{mol/L}$ ; control Quinidine, CYP2D6,  $IC_{50} = 0.082\mu\text{mol/L}$ )<sup>[4797]</sup>;

synergist of pesticides. **Source:** BI CHENG QIE *Piper cubeba* (fruit: yield = 0.00083%dw), RI BEN BIAN BAI *Chamaecyparis obtusa*, TAI WAN SHAN *Taiwania cryptomerioides* (heartwood). **Ref:** 6, 658, 4797, 5088.

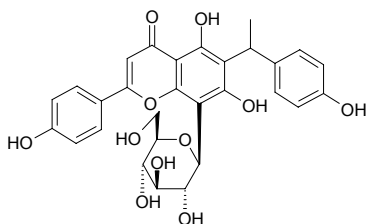


**4311 Cuculoside**

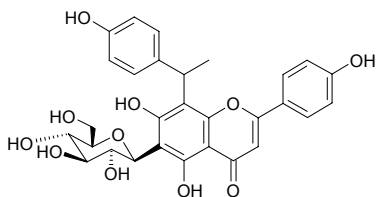
[123442-38-6]  $C_{19}H_{28}O_{11}$  (432.43). Source: MA QIAN ZI *Strychnos nux-vomica*. Ref: 2.

**4312 Cucumerin A**

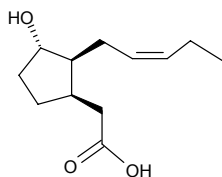
$C_{29}H_{28}O_{11}$  (552.54). Yellowish amorphous solid, mp 81–82°C,  $[\alpha]_D^{22} = -224.3^\circ$  ( $c = 0.01$ , DMSO). Pharm: Phytoalexin. Source: HUANG GUA *Cucumis sativus* (leaf: yield = 0.0007%fw). Ref: 4727.

**4313 Cucumerin B**

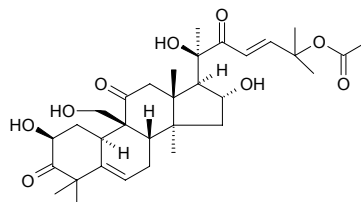
$C_{29}H_{28}O_{11}$  (552.54). Yellowish amorphous solid, mp 88–89°C,  $[\alpha]_D^{22} = -181.1^\circ$  ( $c = 0.01$ , DMSO). Pharm: Phytoalexin. Source: HUANG GUA *Cucumis sativus* (leaf: yield = 0.0008%fw). Ref: 4727.

**4314 Cucurbit acid**

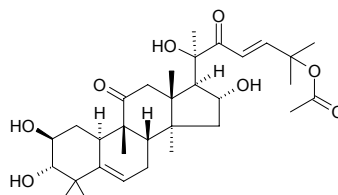
[58240-50-9]  $C_{12}H_{20}O_3$  (212.29). Pharm: Plant growth regulator (inhibits growth of rice leaves). Source: XI HU LU *Cucurbita pepo*. Ref: 658.

**4315 Cucurbitacin A**

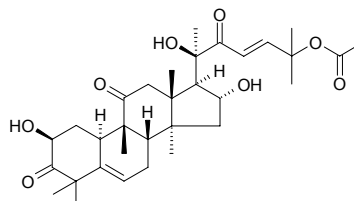
[6040-19-3]  $C_{32}H_{46}O_9$  (574.72). mp 207–208°C. Pharm: Extremely bitter; LD<sub>50</sub> (rbt, iv) = 0.7mg/kg. Source: HU KE HUANG GUA *Cucumis hookeri*, HUANG GUA *Cucumis sativus*, MI GUO HUANG GUA *Cucumis myriocarpus*, BO PI HUANG GUA *Cucumis leptodermis*. Ref: 6, 658.

**4316 Cucurbitacin F 25-acetate**

$C_{32}H_{48}O_8$  (560.73). Colorless acicular crystals, mp 208–210°C. Source: XI HUA XUE DAN *Hemsleya graciliflora* [Syn. *Alsomitra graciliflora*]. Ref: 33.

**4317 Cucurbitacin B**

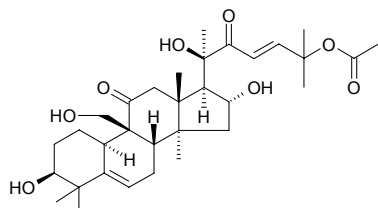
Amarin; Fabacei II [6199-67-3]  $C_{32}H_{46}O_8$  (558.72). mp 178–186°C. Pharm: Antineoplastic; cytotoxic (hmn cancer line NUGC-3, IC<sub>50</sub> = 0.22μg/mL, hmn cancer line HONE-1, IC<sub>50</sub> = 0.05μg/mL hmn cancer line A549, EC<sub>50</sub> < 2.5μg/mL, hmn cancer line MCF7, EC<sub>50</sub> < 2.5μg/mL)<sup>[4267]</sup>; anti-hepatitis; anthelmintic; LD<sub>50</sub> (rbt, iv) = 0.5mg/kg, (mus, orl) = (1.0±0.07)mg/kg, (rat, sc) = 0.5mg/kg. Source: HU GUA *Lagenaria siceraria* var. *depressa*, GUA DI *Cucumis melo*, SI GUA *Luffa cylindrica*, HUANG GUA *Cucumis sativus*, YAO XI GUA *Citrullus colocynthis*, PEN GUA *Ecballium elaterium*, BAI XIE GEN *Bryonia alba*, FEI ZHOU HUANG GUA *Cucumis africanus*, SAN XING QU QU HUA *Iberis umbellata*, GUA LOU *Trichosanthes kirilowii*, YANG JIAO AO ZI *Strophanthus divaricatus*, NAN TOU QIU HAI TANG *Begonia nantoensis* (rhizome). Ref: 4, 5, 6, 532, 658, 4267.



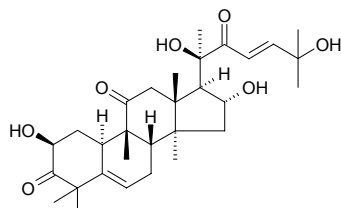


**4318 Cucurbitacin C**

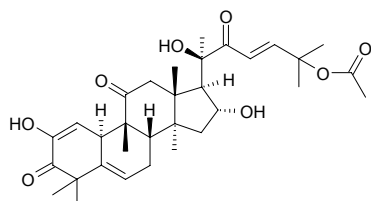
[5988-76-1] C<sub>32</sub>H<sub>48</sub>O<sub>8</sub> (560.73). mp 207.0–207.5°C. **Pharm:** Bitter principle. **Source:** HUANG GUA *Cucumis sativus*, KU HUANG GUA *Cucumis sativus* var. *hansil*. **Ref:** 6, 658.

**4319 Cucurbitacin D**

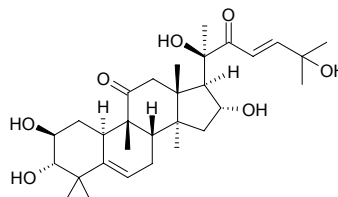
Elatericin [3877-86-9] C<sub>30</sub>H<sub>44</sub>O<sub>7</sub> (516.68). mp 149–153°C (dec). **Pharm:** Antineoplastic; antihypertensive; markedly enhances capillary permeability; laxative (animal model); LD<sub>50</sub> (mus, iv) = 0.96mg/kg, (cat, iv) = 0.9mg/kg, (dog, iv) = 1.0mg/kg. **Source:** BAI XIE GEN *Bryonia alba*, HONG BAI HE MU *Crinodendron hookerianum*, HUANG GUA *Cucumis sativus*, SAN XING QU QU HUA *Iberis umbellata*, *Gratiola* sp. **Ref:** 5, 6, 658.

**4320 Cucurbitacin E**

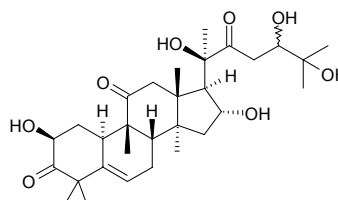
[18444-66-1] C<sub>32</sub>H<sub>44</sub>O<sub>8</sub> (556.70). mp 234°C (chloroform-methanol), [α]<sub>D</sub><sup>20</sup> = –64.3° (c = 1.64, chloroform). **Pharm:** Antineoplastic (S<sub>180</sub> *in vivo*, 5–15mg/kg, InRt = 40%–42%, EAC *in vivo*, 2.5–7.5mg/kg, InRt = 29%–73%); anti-gibberellin activity; anti-hepatitis; cytotoxic (KB *in vitro*, ED<sub>50</sub> = 0.01μg/mL, HeLa *in vitro*, ED<sub>50</sub> = 0.01–0.05μg/mL), cytotoxic (hmn cancer line NUGC-3, IC<sub>50</sub> = 0.34μg/mL; hmn cancer line HONE-1, IC<sub>50</sub> = 0.08μg/mL, hmn cancer line A549, EC<sub>50</sub> < 2.5μg/mL, hmn cancer line MCF7, EC<sub>50</sub> < 2.5μg/mL)<sup>[4267]</sup>; LD<sub>50</sub> (mus, orl) = 340mg/kg. **Source:** BAI XIE GEN *Bryonia alba*, GUA DI *Cucumis melo*, PEN GUA *Ecballium elaterium*, SAN XING QU QU HUA *Iberis umbellata*, YAO SHUI BA JIAO *Gratiola officinalis*, NAN TOU QIU HAI TANG *Begonia nantoensis* (rhizome). **Ref:** 658, 4267.

**4321 Cucurbitacin F**

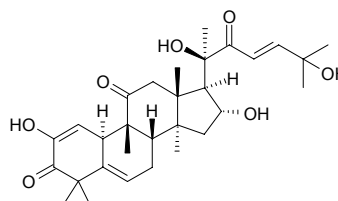
[5939-57-1] C<sub>30</sub>H<sub>46</sub>O<sub>7</sub> (518.70). **Pharm:** Antineoplastic. **Source:** AN GE LA HUANG GUA *Cucumis angolensis* HONG BAI HE MU *Crinodendron hookerianum*. **Ref:** 658.

**4322 Cucurbitacin H**

[751-69-2] C<sub>30</sub>H<sub>46</sub>O<sub>8</sub> (534.70). **Pharm:** Antineoplastic. **Source:** HONG BAI HE MU *Crinodendron hookerianum*, *Citrullus* sp. **Ref:** 658.

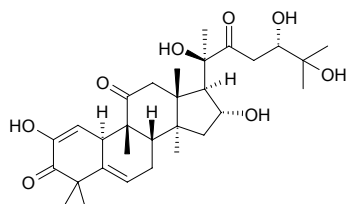
**4323 Cucurbitacin I**

[2222-07-3] C<sub>30</sub>H<sub>42</sub>O<sub>7</sub> (514.67). Acicular crystals (ethyl acetate–benzene), mp 148–149°C (dec), [α]<sub>D</sub> = –52° (c = 1.56, chloroform); white crystals (ethyl acetate–benzene), mp 146–148°C, [α]<sub>D</sub><sup>22</sup> = –56° (c = 1.0, ethanol). **Pharm:** Antineoplastic (S<sub>180</sub>, *in vivo*, 0.25–1.00mg/kg, InRt = (5–44)%, EAC, *in vivo*, 0.25–1.00mg/kg, InRt = (0–30)%, EAC, 0.25–0.50mg/kg, biotic prolonged rate = (36–61)%; anti-gibberellin activity; cytotoxic (KB, *in vitro*, ED<sub>50</sub> = 0.005–0.010μg/mL, HeLa, *in vitro*, ED<sub>50</sub> = 0.01μg/mL); cytotoxic (hmn cancer line NUGC-3, IC<sub>50</sub> = 2.14μg/mL, hmn cancer line HONE-1, IC<sub>50</sub> = 0.89μg/mL, hmn cancer line A549, EC<sub>50</sub> < 2.5μg/mL, hmn cancer line MCF7, EC<sub>50</sub> < 2.5μg/mL)<sup>[4267]</sup>. **Source:** PEN GUA *Ecballium elaterium*, BAI XIE GEN *Bryonia alba*, QU QU HUA *Iberis amara*, YAO SHUI BA JIAO *Gratiola officinalis*, NAN TOU QIU HAI TANG *Begonia nantoensis* (rhizome). **Ref:** 661, 4267.

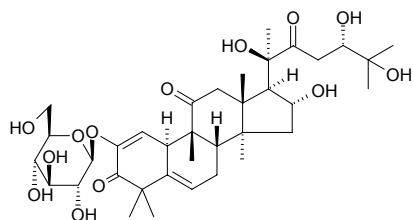


**4324 Cucurbitacin J**

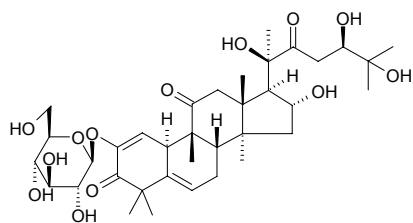
[5979-41-9] C<sub>30</sub>H<sub>44</sub>O<sub>8</sub> (532.68). Crystals (ethyl acetate), mp 200~202°C, [α]<sub>D</sub><sup>22</sup> = -36° (chloroform); white crystals (50% methanol), mp 198°C (dec), [α]<sub>D</sub><sup>22</sup> = -30.4° (c = 1.0, chloroform). **Pharm:** Antineoplastic; anti-gibberellin activity; cytotoxic (KB, *in vitro*, ED<sub>50</sub> = 0.1~1.0 μg/mL, HeLa, *in vitro*, ED<sub>50</sub> = 1 μg/mL). **Source:** WU JUAN XU XI GUA *Citrullus ecirrhosus*, NA SHI XI GUA *Citrullus naudinianus*, BAI XIE GEN *Bryonia alba*. **Ref:** 661.

**4325 Cucurbitacin J 2-O-β-glucopyranoside**

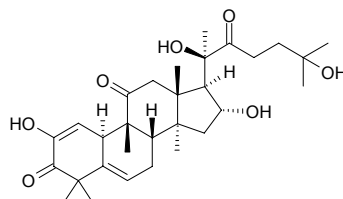
C<sub>36</sub>H<sub>54</sub>O<sub>13</sub> (694.82). Amorphous powder, [α]<sub>D</sub><sup>23</sup> = -55.8° (c = 2.3, MeOH). **Source:** SAN YING JIAN GUA LOU *Trichosanthes tricuspidata*. **Ref:** 1982.

**4326 Cucurbitacin K 2-O-β-glucopyranoside**

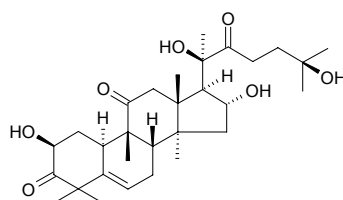
C<sub>36</sub>H<sub>54</sub>O<sub>13</sub> (694.82). Amorphous powder, [α]<sub>D</sub><sup>23</sup> = -64.4° (c = 0.8, MeOH). **Source:** SAN YING JIAN GUA LOU *Trichosanthes tricuspidata*. **Ref:** 1982.

**4327 Cucurbitacin L**

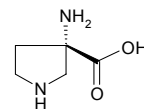
[1110-02-7] C<sub>30</sub>H<sub>44</sub>O<sub>7</sub> (516.68). Acicular crystals (dil. methanol), mp 140°C, [α]<sub>D</sub> = -49° (chloroform); white crystals (50% methanol), mp 124~127°C, [α]<sub>D</sub><sup>22</sup> = -48° (c = 1.0, ethanol). **Pharm:** Antineoplastic (animal Ehrlich ascites carcinoma *in vivo*, biotic prolonged rate = (38~42)%); cytotoxic (KB *in vitro*, ED<sub>50</sub> = 0.01~0.1 μg/mL, HeLa *in vitro*, ED<sub>50</sub> = 0.1 μg/mL). **Source:** BAI XIE GEN *Bryonia alba*, PEN GUA *Ecballium elaterium*, WU JUAN XU XI GUA *Citrullus ecirrhosus*, YAO XI GUA *Citrullus colocynthis*. **Ref:** 661.

**4328 Cucurbitacin R**

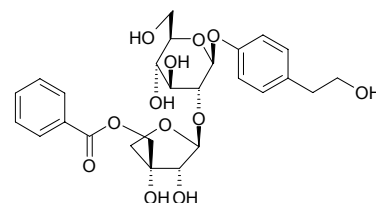
C<sub>30</sub>H<sub>46</sub>O<sub>7</sub> (518.70). **Pharm:** Anti-inflammatory (carrageenan-induced mouse paw edema, 4mg/kg, InRt = 27% at 5h)<sup>[4970]</sup>. **Source:** TA YOU XIE GUA *Cayaponia tayuya* (root). **Ref:** 4970.

**4329 Cucurbitine**

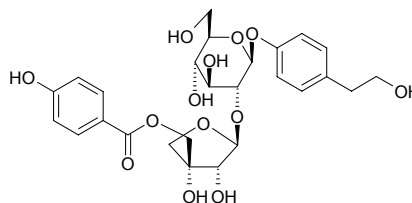
[6807-92-7] C<sub>5</sub>H<sub>10</sub>N<sub>2</sub>O<sub>2</sub> (130.15). mp 260°C (dec). **Pharm:** Anthelmintic; causes slight shrinkage of liver (mus). **Source:** NAN GUA *Cucurbita moschata*, XI HU LU *Cucurbita pepo*, NAN GUA ZI *Cucurbita moschata*, TAO NAN GUA *Cucurbita pepo* var. *akoda*. **Ref:** 6, 658.

**4330 Cucurbitoside A**

C<sub>26</sub>H<sub>32</sub>O<sub>12</sub> (536.54). Amorphous powder, [α]<sub>D</sub><sup>25</sup> = -76.1° (c = 1.1, MeOH). **Source:** NAN GUA ZI *Cucurbita moschata* (seed). **Ref:** 4436.

**4331 Cucurbitoside B**

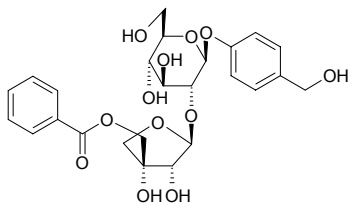
C<sub>26</sub>H<sub>32</sub>O<sub>13</sub> (552.54). Amorphous powder, [α]<sub>D</sub><sup>25</sup> = -65.9° (c = 0.4, MeOH). **Source:** NAN GUA ZI *Cucurbita moschata* (seed). **Ref:** 4436.



**4332 Cucurbitoside C**

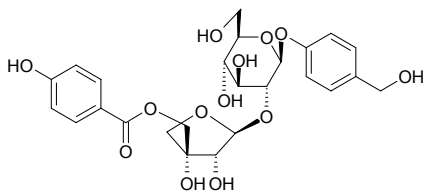
$C_{25}H_{30}O_{12}$  (522.51). Amorphous powder,  $[\alpha]_D^{25} = -81.5^\circ$  ( $c = 1.1$ , MeOH).

Source: NAN GUA ZI *Cucurbita moschata* (seed). Ref: 4436.

**4333 Cucurbitoside D**

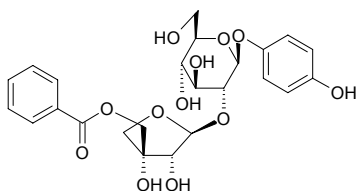
$C_{25}H_{30}O_{13}$  (538.51). Amorphous powder,  $[\alpha]_D^{25} = -76.9^\circ$  ( $c = 0.9$ , MeOH).

Source: NAN GUA ZI *Cucurbita moschata* (seed). Ref: 4436.

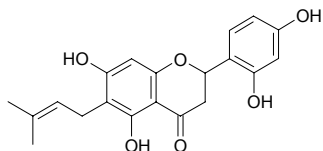
**4334 Cucurbitoside E**

$C_{24}H_{28}O_{12}$  (508.48). Amorphous powder,  $[\alpha]_D^{25} = -77.0^\circ$  ( $c = 0.3$ , MeOH).

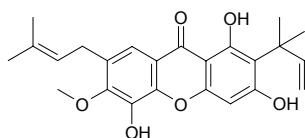
Source: NAN GUA ZI *Cucurbita moschata* (seed). Ref: 4436.

**4335 Cudraflavanone B**

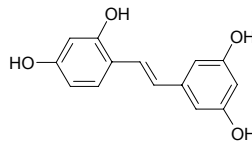
2',4',5,7-Tetrahydroxy-6-prenylflavanone  $C_{20}H_{20}O_6$  (356.38). Resin (acetone-*n*-hexane),  $[\alpha]_D^{24} = 0^\circ$  ( $c = 0.20$ , MeOH). Pharm: Antifungal (*Candida glabrata*, *Cryptococcus neoformans* and *Aspergillus fumigatus*, weak activity). Source: GOU JI *Cudrania cochinchinensis* (root: yield = 0.00013%dw). Ref: 4713.

**4336 Cudrafrutixanthone**

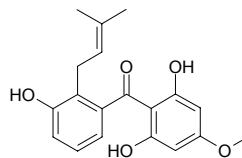
$C_{24}H_{26}O_6$  (410.47). Yellow amorphous powder. Source: ZHE TENG *Cudrania fruticosa* (root). Ref: 5074.

**4337 Cudranin**

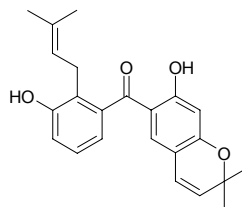
Oxyresveratrol; Tetrahydroxystilbene [4721-07-7]  $C_{14}H_{12}O_4$  (244.25). mp 202°C. Pharm: Cytotoxic (cyclooxygenase-1 inhibitor)<sup>[5038]</sup>; antifungal (skin fungi in humans); inhibits respiration of cytoblast (rat, hepatic cells, in low concentration). Source: DA DA HE MIAN BAO GUO *Artocarpus dadah*, LA KOU SHA MIAN BAO GUO *Artocarpus lakoocha*, MAO YE LI LU *Veratrum grandiflorum*, SANG ZHI *Morus alba*, SANG CHENG *Machura pomifera*, SANG YE *Morus alba*, WEI JING BAI HE *Schoenocaulon officinale* (rhizome), *Cudrania* sp. Ref: 6, 658, 4210, 5038.

**4338 Cudranone**

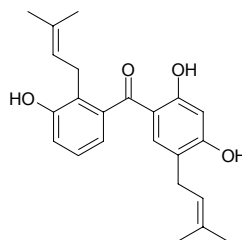
4-Methoxy-9-prenyl-2,6,10-trihydroxybenzophenone  $C_{19}H_{20}O_5$  (328.37). Pharm: Cytotoxic (HSC-2 cells,  $CC_{50} = 0.40$ mmol/L; HGF,  $CC_{50} > 0.61$ mmol/L). Source: GOU JI *Cudrania cochinchinensis* (root: yield = 0.00020%dw). Ref: 3025.

**4339 Cudraphenone A**

$C_{23}H_{24}O_4$  (364.45). Yellow oil. Pharm: Cytotoxic (HSC-2 cells,  $CC_{50} = 0.17$ mmol/L; HGF,  $CC_{50} = 0.43$ mmol/L). Source: GOU JI *Cudrania cochinchinensis* (root: yield = 0.00011%dw). Ref: 3025.

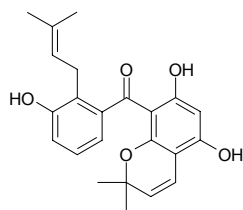
**4340 Cudraphenone B**

$C_{23}H_{26}O_4$  (366.46). Yellow oil. Pharm: Cytotoxic (HSC-2 cells,  $CC_{50} = 0.036$ mmol/L; HGF,  $CC_{50} = 0.09$ mmol/L). Source: GOU JI *Cudrania cochinchinensis* (root: yield = 0.00018%dw). Ref: 3025.

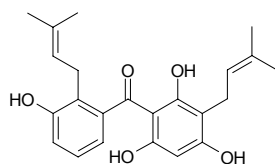


**4341 Cudraphenone C**

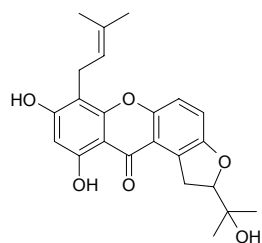
$C_{23}H_{24}O_5$  (380.44). Yellow oil. **Pharm:** Cytotoxic (HSC-2 cells,  $CC_{50}$  = 0.092mmol/L; HGF,  $CC_{50}$  = 0.19mmol/L). **Source:** GOU JI *Cudrania cochinchinensis* (root: yield = 0.00010%dw). **Ref:** 3025.

**4342 Cudraphenone D**

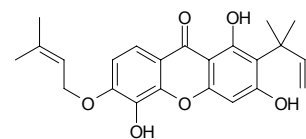
$C_{23}H_{26}O_5$  (382.46). Yellow oil. **Pharm:** Cytotoxic (HSC-2 cells,  $CC_{50}$  = 0.052mmol/L; HGF,  $CC_{50}$  = 0.19mmol/L). **Source:** GOU JI *Cudrania cochinchinensis* (root: yield = 0.00046%dw). **Ref:** 3025.

**4343 Cudraxanthone J**

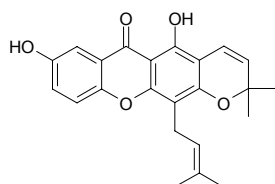
$C_{23}H_{24}O_6$  (396.44). **Source:** ZHE SHU *Cudrania tricuspidata*, *Morus* sp. **Ref:** 2513.

**4344 Cudraxanthone P**

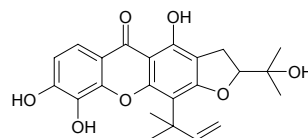
$C_{23}H_{24}O_6$  (396.44). Yellow prisms (MeOH), mp 166°C. **Source:** GOU JI *Cudrania cochinchinensis* (root: yield = 0.00003%dw). **Ref:** 3025.

**4345 Cudraxanthone Q**

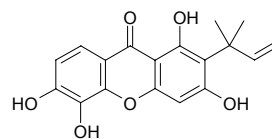
$C_{23}H_{22}O_5$  (378.43). Yellow needles (MeOH), mp 205°C. **Source:** GOU JI *Cudrania cochinchinensis* (root: yield = 0.00003%dw). **Ref:** 3025.

**4346 Cudraxanthone R**

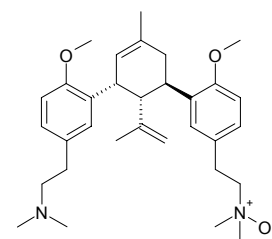
$C_{23}H_{24}O_7$  (412.44). Yellow prisms (MeOH), mp 237°C,  $[\alpha]_D^{22}$  = +6.1° ( $c$  = 0.10, acetone). **Source:** GOU JI *Cudrania cochinchinensis* (root: yield = 0.00003%dw). **Ref:** 3025.

**4347 Cudraxanthone S**

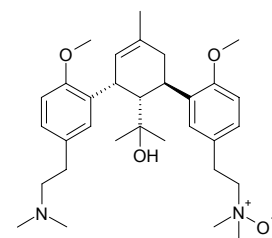
1,3,5,6-Tetrahydroxy-2-(1,1-dimethyl-2-propenyl)xanthone  $C_{18}H_{16}O_6$  (328.32). Granule (acetone), mp 162°C (dec). **Pharm:** Antifungal (*Candida glabrata*, *Cryptococcus neoformans* and *Aspergillus fumigatus*, MIC = 2-4µg/mL). **Source:** GOU JI *Cudrania cochinchinensis* (root: yield = 0.00055%dw). **Ref:** 4713.

**4348 (-)-Culantramine N-oxide**

$C_{32}H_{46}N_2O_3$  (506.74). **Pharm:** Platelet aggregation inhibitor; DNA isomerase inhibitor; antibacterial; cytotoxic. **Source:** *Zanthoxylum* sp. **Ref:** 2176.

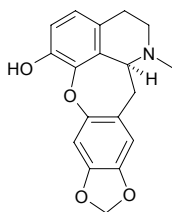
**4349 (-)-Culantraminol N-oxide**

$C_{32}H_{48}N_2O_4$  (524.75). **Pharm:** Platelet aggregation inhibitor; DNA isomerase inhibitor; antibacterial; cytotoxic. **Source:** *Zanthoxylum* sp. **Ref:** 2176.

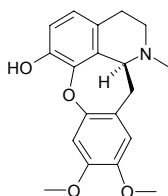


**4350 Cularicine**

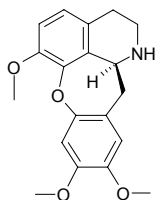
[2271-08-1] C<sub>18</sub>H<sub>17</sub>NO<sub>4</sub> (311.34). Pharm: Cytotoxic. Source: BANG ZHUANG ZI JIN *Corydalis claviculata*. Ref: 658.

**4351 Cularidine**

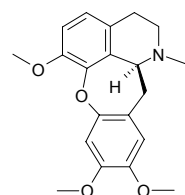
C<sub>19</sub>H<sub>21</sub>NO<sub>4</sub> (327.38). Pharm: Cytotoxic. Source: DOU ZHUANG HE BAO MU DAN *Dicentra cucullaria*, BANG ZHUANG ZI JIN *Corydalis claviculata*. Ref: 658.

**4352 Cularimine**

[479-42-5] C<sub>19</sub>H<sub>21</sub>NO<sub>4</sub> (327.38). Pharm: Antineoplastic. Source: SUI MAO HE BAO MU DAN *Dicentra eximia*. Ref: 658.

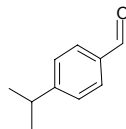
**4353 Cularine**

[479-39-0] C<sub>20</sub>H<sub>23</sub>NO<sub>4</sub> (341.41). Pharm: Anesthetic (rbt cornea); cytotoxic; enhances myocardial contractility; antihypertensive (rbt); uterine stimulant. Source: BANG ZHUANG ZI JIN *Corydalis claviculata*, DOU ZHUANG HE BAO MU DAN *Dicentra cucullaria*, E LE GANG HE BAO MU DAN *Dicentra oregana*, MEI LI HE BAO MU DAN *Dicentra formosa*, SUI MAO HE BAO MU DAN *Dicentra eximia*, WA SHI XIAO BO *Berberis valdiviana*. Ref: 658.

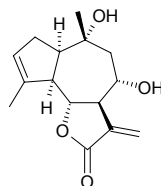
**4354 Cumaldehyde**

*p*-Isopropyl-benzaldehyde [122-03-2] C<sub>10</sub>H<sub>12</sub>O (148.21). bp 235~236°C.

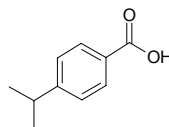
Pharm: Antiviral. Source: AN YE *Eucalyptus globulus*, DU QIN GEN *Cicuta virosa*, HUANG HUA HAO *Artemisia annua*, MO YAO *Commiphora myrrha* [Syn. *Commiphora molmo*], XI YE AN YE *Eucalyptus tereticornis*. Ref: 6, 658.

**4355 Cumambrin B**

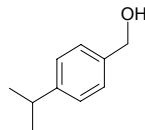
C<sub>15</sub>H<sub>20</sub>O<sub>4</sub> (264.32). Source: *Anthemis carpatica* (aerial parts). Ref: 3974.

**4356 Cumic acid**

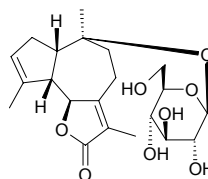
4-(1-Methylethyl)benzoic acid [536-66-3] C<sub>10</sub>H<sub>12</sub>O<sub>2</sub> (164.21). Source: ZI SU YE *Perilla frutescens* var. *arguta*. Ref: 2, 660.

**4357 Cumic alcohol**

4-Isopropylbenzyl alcohol [536-60-7] C<sub>10</sub>H<sub>14</sub>O (150.22). bp 246°C. Source: HUA JIAO *Zanthoxylum bungeanum*. Ref: 6.

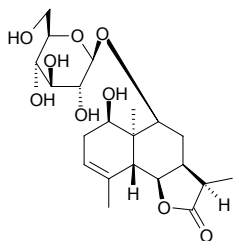
**4358 Cuminoside A**

(1*S*,5*S*,6*S*,10*S*)-10-Hydroxyguaia-3,7(11)-dien-12,6-olide  
β-*D*-glucopyranoside C<sub>21</sub>H<sub>30</sub>O<sub>8</sub> (410.47). Amorphous powder, [α]<sub>D</sub><sup>24</sup> = -35°  
(*c* = 2.3, MeOH). Source: ZI RAN QIN *Cuminum cyminum* (fruit). Ref: 3395.

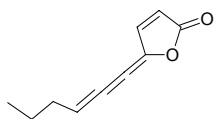


**4359 Cuminoside B**

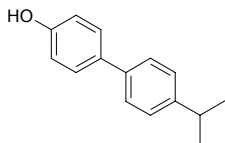
(1*R*,5*R*,6*S*,7*S*,9*S*,10*S*,11*R*)-1,9-Dihydroxyeudesm-3-en-12,6-olide  
9-*O*- $\beta$ -*D*-glucopyranoside] C<sub>21</sub>H<sub>32</sub>O<sub>9</sub> (428.48). Amorphous powder,  $[\alpha]_D^{21} = -14^\circ$  ( $c = 1.1$ , MeOH). Source: ZI RAN QIN *Cuminum cyminum* (fruit). Ref: 3395.

**4360 Cumulene**

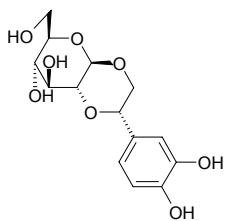
C<sub>10</sub>H<sub>10</sub>O<sub>2</sub> (162.19). Source: QI ZHOU YI ZHI HAO *Conyza canadensis* [Syn. *Erigeron canadensis*]. Ref: 6.

**4361 4-Cumylphenol**

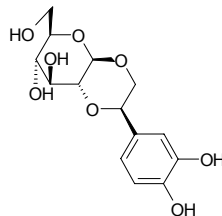
C<sub>15</sub>H<sub>16</sub>O (212.29). Colorless needles, mp 73~74°C. Source: LV ZAO JI GEN YING MAO ZAO *Chaetomorpha basiretorsa*. Ref: 4822.

**4362 Cuneataside A**

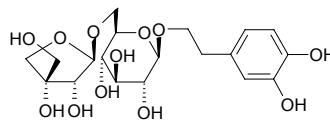
7 $\beta$ -(3,4-Dihydroxyphenyl)-ethane 7,8-(2',1'-*O*- $\beta$ -*D*-glucopyranosyl)-7,8-diol  
C<sub>14</sub>H<sub>18</sub>O<sub>8</sub> (314.29). White amorphous powder,  $[\alpha]_D^{20} = +45.0^\circ$  ( $c = 0.10$ , H<sub>2</sub>O). Pharm: Antibacterial (*Staphylococcus aureus*, MIC = 30.0 $\mu$ mol/L, control Bakuchiol, MIC = 25.0 $\mu$ mol/L; *Micrococcus epidermidis*, MIC = 20.0 $\mu$ mol/L, Bakuchiol, MIC = 15.0 $\mu$ mol/L). Source: DA XUE TENG *Sargentodoxa cuneata* (stem). Ref: 5337.

**4363 Cuneataside B**

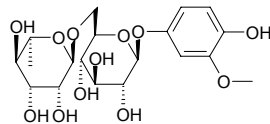
7 $\alpha$ -(3,4-Dihydroxyphenyl)-ethane 7,8-(2',1'-*O*- $\beta$ -*D*-glucopyranosyl)-7,8-diol  
C<sub>14</sub>H<sub>18</sub>O<sub>8</sub> (314.29). White amorphous powder,  $[\alpha]_D^{20} = +65.8^\circ$  ( $c = 0.10$ , H<sub>2</sub>O). Pharm: Antibacterial (*Staphylococcus aureus*, MIC = 20.0 $\mu$ mol/L, control Bakuchiol, MIC = 25.0 $\mu$ mol/L; *Micrococcus epidermidis*, MIC = 20.0 $\mu$ mol/L, Bakuchiol, MIC = 15.0 $\mu$ mol/L). Source: DA XUE TENG *Sargentodoxa cuneata* (stem). Ref: 5337.

**4364 Cuneataside C**

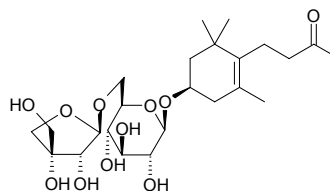
2-(3,4-Dihydroxyphenyl)  
ethyl-*O*- $\beta$ -*D*-apiofuranosyl-(1" $\rightarrow$ 6')- $\beta$ -*D*-glucopyranoside C<sub>19</sub>H<sub>28</sub>O<sub>12</sub> (448.43).  
White amorphous powder,  $[\alpha]_D^{20} = -70.1^\circ$  ( $c = 0.10$ , H<sub>2</sub>O). Source: DA XUE TENG *Sargentodoxa cuneata* (stem). Ref: 5337.

**4365 Cuneataside D**

3-Methoxy-4-hydroxyphenyl-1-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1" $\rightarrow$ 6')- $\beta$ -*D*-glucopyranoside C<sub>19</sub>H<sub>28</sub>O<sub>12</sub> (448.43). White amorphous powder,  $[\alpha]_D^{20} = -60.3^\circ$  ( $c = 0.10$ , H<sub>2</sub>O). Source: DA XUE TENG *Sargentodoxa cuneata* (stem). Ref: 5337.

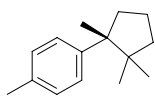
**4366 Cuneataside E**

4-[4 $\beta$ -*O*- $\beta$ -*D*-Apiofuranosyl-(1" $\rightarrow$ 6')- $\beta$ -*D*-glucopyranosyl-2,6,6-trimethyl-1-cyclohexen-1-yl]-butan-2-one C<sub>24</sub>H<sub>40</sub>O<sub>11</sub> (504.58). White amorphous powder,  $[\alpha]_D^{20} = -81.7^\circ$  ( $c = 0.10$ , H<sub>2</sub>O). Source: DA XUE TENG *Sargentodoxa cuneata* (stem). Ref: 5337.

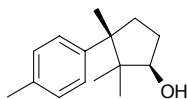


**4367 Cuparene**

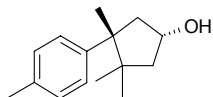
$C_{15}H_{22}$  (202.34). Source: FANG FENG *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*], SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*], WU WEI ZI *Schisandra chinensis*. Ref: 2.

**4368  $\alpha$ -Cuparenol**

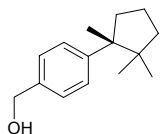
[21730-88-1]  $C_{15}H_{22}O$  (218.34). mp 73°C. Source: CE BAI ZHI JIE *Thuja orientalis* [Syn. *Platycladus orientalis*; *Biota orientalis*]. Ref: 6.

**4369  $\beta$ -Cuparenol**

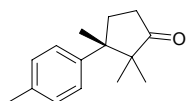
$C_{15}H_{22}O$  (218.34). Source: CE BAI ZHI JIE *Thuja orientalis* [Syn. *Platycladus orientalis*; *Biota orientalis*]. Ref: 6.

**4370  $\gamma$ -Cuparenol**

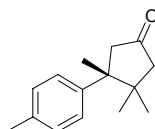
[4584-25-2]  $C_{15}H_{22}O$  (218.34). bp 110°C/0.5mmHg. Source: CE BAI ZHI JIE *Thuja orientalis* [Syn. *Platycladus orientalis*; *Biota orientalis*]. Ref: 6.

**4371  $\alpha$ -Cuparenone**

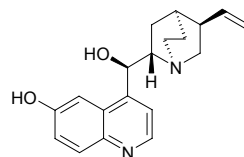
[16169-32-0]  $C_{15}H_{20}O$  (216.33). mp (+) 52~53°C. Source: CE BAI ZHI JIE *Thuja orientalis* [Syn. *Platycladus orientalis*; *Biota orientalis*]. Ref: 6.

**4372  $\beta$ -Cuparenone**

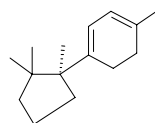
[28152-91-2]  $C_{15}H_{20}O$  (216.33). bp 114~115°C/0.8mmHg. Source: CE BAI ZHI JIE *Thuja orientalis* [Syn. *Platycladus orientalis*; *Biota orientalis*]. Ref: 6.

**4373 Cupreine**

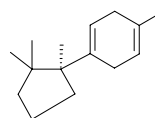
Hydroxycinchonine [524-63-0]  $C_{19}H_{22}N_2O_2$  (310.40). mp 198°C. Source: JIN JI LE *Cinchona ledgeriana*. Ref: 6.

**4374  $\alpha$ -Cuprenene**

$C_{15}H_{24}$  (204.36). bp 140~141°C. Source: CE BAI ZHI JIE *Thuja orientalis* [Syn. *Platycladus orientalis*; *Biota orientalis*]. Ref: 6.

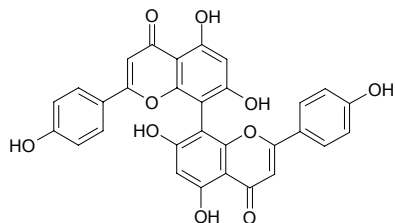
**4375  $\gamma$ -Cuprenene**

$C_{15}H_{24}$  (204.36). bp 140~141°C. Source: CE BAI ZHI JIE *Thuja orientalis* [Syn. *Platycladus orientalis*; *Biota orientalis*]. Ref: 6.

**4376 Cupressiflavone**

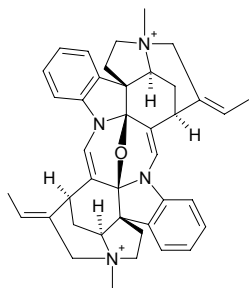
Cupressiflavone  $C_{30}H_{18}O_{10}$  (538.47). mp > 360°C. Pharm: Cyclo nucleotide phosphodiesterase inhibitor; anti-HIV-1 inactive (*in vitro*)<sup>[4234]</sup>. Source: CE BAI YE *Thuja orientalis* [Syn. *Platycladus orientalis*; *Biota orientalis*], CUI YUN CAO *Selaginella uncinata* (dried whole herb: content = 0.213%)<sup>[5508]</sup>, DA YE NAN YANG SHAN *Araucaria bidwillii*, DIAN ZHUANG JUAN BAI *Selaginella pulvinata* (dried whole herb: mean content = 0.113%)<sup>[5508]</sup>, E MEI JUAN BAI *Selaginella omeiensis* (dried whole herb: content = 0.042%)<sup>[5508]</sup>, HAN SHENG JUAN BAI *Selaginella stauntoniana* (dried whole herb: content = 0.470%)<sup>[5508]</sup>, JIANG NAN JUAN BAI *Selaginella moellendorffii* (dried whole herb: mean content = 0.119%)<sup>[5508]</sup>, JUAN BAI *Selaginella tamariscina* (dried whole herb: mean content = 0.131%)<sup>[5508]</sup>, LV GAN BAI *Cupressus arizonica*, MAN SHENG JUAN BAI *Selaginella davidii* (dried whole herb: content = 0.100%)<sup>[5508]</sup>, MAO ZHI JUAN BAI *Selaginella braunii* (dried whole herb: mean content = 0.279%)<sup>[5508]</sup>, PA SHI BEI KE SHAN *Agathis palmerstoni*, PING PU YUAN BAI *Juniperus horizontalis*, XI FANG CI BAI *Juniperus occidentalis* (leaf), YAN ZHOU JUAN BAI *Selaginella involvens* (dried whole herb: content = 0.094%)<sup>[5508]</sup>, ZHONG

HUA JUAN BAI *Selaginella sinensis* (dried whole herb: content = 0.438%)<sup>[5508]</sup>. Ref: 6, 658, 4234, 5508.



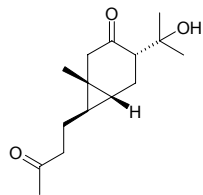
#### 4377 C-Curarine

[7168-64-1]  $C_{40}H_{44}N_4O^{2+}$  (596.82). Pharm: Causes paralysis; supertoxic agent (neuromuscular blocker, one of main component of Calabash curare). Source: FEN CHA MA QIAN ZI *Strychnos divaricans*, FU SHI MA QIAN ZI *Strychnos froesii*, MI SHI MA QIAN ZI *Strychnos mitschelichii*. Ref: 658.



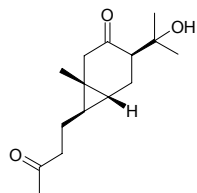
#### 4378 Curcarabranol A

$C_{15}H_{24}O_3$  (252.36). Pharm: NO production inhibitor (mus peritoneal macrophages, induced by LPS, 100 $\mu$ mol/L, InRt = (28.8 $\pm$ 2.1)%), control L-NMMA, 100 $\mu$ mol/L, InRt = (79.2 $\pm$ 0.9)%,  $p < 0.01$ )<sup>[4150]</sup>. Source: PING E SHU *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*]. Ref: 4150.



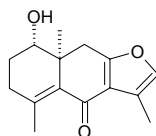
#### 4379 Curcarabranol B

$C_{15}H_{24}O_3$  (252.36). Pharm: NO production inhibitor (mus peritoneal macrophages, induced by LPS, 100 $\mu$ mol/L, InRt = (35.1 $\pm$ 1.0)%), control L-NMMA, 100 $\mu$ mol/L, InRt = (79.2 $\pm$ 0.9)%,  $p < 0.01$ )<sup>[4150]</sup>. Source: PING E SHU *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*]. Ref: 4150.



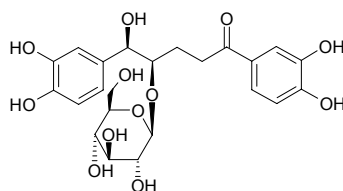
#### 4380 Curcolone

Nehipetol [17015-43-9]  $C_{15}H_{18}O_3$  (246.31). Source: PING E SHU *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*]. Ref: 6, 4150.



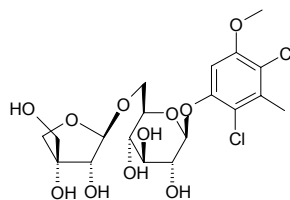
#### 4381 Curculigin

Curculigine  $C_{23}H_{28}O_{12}$  (496.47). Pharm: Contracts blood vessels (*in vitro*, rabbit aorta, facilitating effect on adrenaline evoked contractions, 1~30 $\mu$ mol/L). Source: XIAN MAO *Curculigo orchoides*. Ref: 5095.



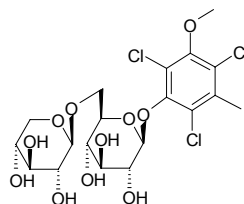
#### 4382 Curculigin B

$C_{19}H_{26}Cl_2O_{11}$  (501.32). Colorless acicular crystals ( $CH_3COCH_3$ ), mp 202~205 $^{\circ}C$ ,  $[\alpha]_D^{18} = -33.6^{\circ}$  ( $c = 0.15$ , methanol). Source: XIAN MAO *Curculigo orchoides*. Ref: 227.



#### 4383 Curculigin C

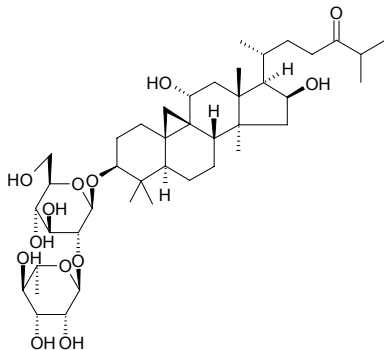
$C_{19}H_{25}Cl_3O_{11}$  (535.76). Colorless acicular crystals, mp 178~181 $^{\circ}C$ ,  $[\alpha]_D^{18} = -38.94^{\circ}$  ( $c = 0.94$ , methanol). Source: MAO XIAN MAO *Curculigo pilosa* (rhizome). Ref: 227.



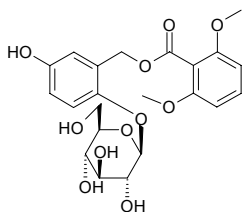


**4384 Curculigosaponin G**

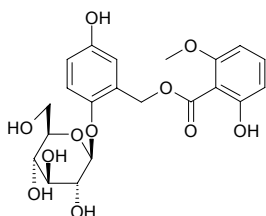
[142998-33-2]  $C_{42}H_{70}O_{13}$  (783.01). White powder, mp 154~157°C,  $[\alpha]_D = +4.23^\circ$  ( $c = 0.10$ , methanol). **Pharm:** Improves hyperplasia of spleen lymphocyte (increases the weight of mus thymus gland). **Source:** XIAN MAO *Curculigo orchioides*. **Ref:** 1144.

**4385 Curculigoside**

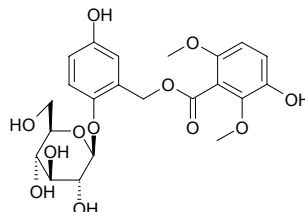
[85643-19-2]  $C_{22}H_{26}O_{11}$  (466.44). Colorless rhombic crystals (water), mp 158~159°C,  $[\alpha]_D^{25} = -28.7^\circ$  ( $c = 1$ , methanol). **Pharm:** Promotes macrophage phagocytic function; antioxidant (hydroxyl radical scavenger,  $IC_{50} = 0.54\mu\text{mol/L}$ , control EGCG,  $IC_{50} = 0.43\mu\text{mol/L}$ , superoxide anion radical scavenger,  $IC_{50} = 1.35\mu\text{mol/L}$ , control EGCG,  $IC_{50} = 0.53\mu\text{mol/L}$ )<sup>[4499]</sup>. **Source:** MAO XIAN MAO *Curculigo pilosa* (rhizome), XIAN MAO *Curculigo orchioides* (rhizome: mean content of 14 origins = 0.160%<sup>[5508]</sup>). **Ref:** 1031, 1146, 4499, 5095, 5508.

**4386 Curculigoside B**

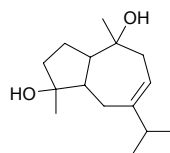
$C_{21}H_{24}O_{11}$  (452.42). Colorless acicular crystals, mp 219~222°C,  $[\alpha]_D^{18} = -47.2^\circ$  ( $c = 0.18$ , methanol). **Pharm:** Antioxidant (hydroxyl radical scavenger,  $IC_{50} = 1.11\mu\text{mol/L}$ , control EGCG,  $IC_{50} = 0.43\mu\text{mol/L}$ , superoxide anion radical scavenger,  $IC_{50} = 1.48\mu\text{mol/L}$ , control EGCG,  $IC_{50} = 0.53\mu\text{mol/L}$ ). **Source:** XIAN MAO *Curculigo orchioides* (rhizome). **Ref:** 227, 4499.

**4387 Curculigoside C**

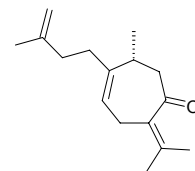
$C_{22}H_{26}O_{12}$  (482.45). **Pharm:** Antioxidant (hydroxyl radical scavenger,  $IC_{50} = 0.25\mu\text{mol/L}$ , control EGCG,  $IC_{50} = 0.43\mu\text{mol/L}$ , superoxide anion radical scavenger,  $IC_{50} = 0.88\mu\text{mol/L}$ , control EGCG,  $IC_{50} = 0.53\mu\text{mol/L}$ ). **Source:** XIAN MAO *Curculigo orchioides* (rhizome). **Ref:** 4499.

**4388 Curcumadiol**

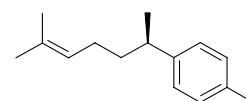
[31946-48-2]  $C_{15}H_{26}O_2$  (238.37). mp 145~155°C. **Source:** PING E SHU *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*]. **Ref:** 6.

**4389 Curcumadione**

$C_{16}H_{24}O$  (232.37). **Pharm:** NO production inhibitor (mus peritoneal macrophages, induced by LPS, 100 $\mu\text{mol/L}$ , InRt = (27.2 $\pm$ 2.2)%), control *L*-NMMA, 100 $\mu\text{mol/L}$ , InRt = (79.2 $\pm$ 0.9)%,  $p < 0.01$ )<sup>[4150]</sup>. **Source:** PING E SHU *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*]. **Ref:** 4150.

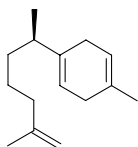
**4390  $\alpha$ -Curcumene**

[4176-17-4]  $C_{15}H_{22}$  (202.34). **Source:** DANG SHEN *Codonopsis pilosula*, GAN JIANG *Zingiber officinale*, HUANG HAO *Artemisia scoparia* [Syn. *Artemisia capillaris* var. *scoparia*], NAN HE SHI *Daucus carota*, SHENG JIANG *Zingiber officinale*, XI YANG SHEN *Panax quinquefolium*. **Ref:** 2, 660.

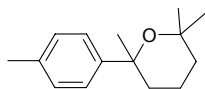


**4391  $\beta$ -Curcumene**

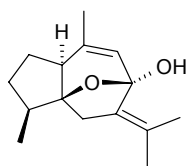
[28976-67-2] C<sub>15</sub>H<sub>24</sub> (204.36). bp (+) 98~100°C/2.2mmHg, (-) 142°C/19mmHg. Source: JIANG HUANG *Curcuma longa*, YU JIN *Curcuma aromatica*. Ref: 6, 660.

**4392 Curcumenether**

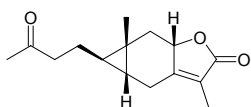
C<sub>15</sub>H<sub>22</sub>O (218.34). Source: CE BAI ZHI JIE *Thuja orientalis* [Syn. *Platyclusus orientalis*; *Biota orientalis*]. Ref: 6.

**4393 Curcumenol**

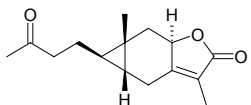
[19431-84-6] C<sub>15</sub>H<sub>22</sub>O<sub>2</sub> (234.34). mp 118.5~119.5°C. Pharm: NO production inhibitor (mus peritoneal macrophages, induced by LPS, 100μmol/L, InRt = (71.3±2.1)%, control *L*-NMMA, 100μmol/L, InRt = (79.2±0.9)%,  $p < 0.01$ )<sup>[4150]</sup>. Source: PING E SHU *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*]. Ref: 6, 4150.

**4394 Curcumenolactone A**

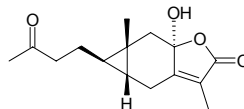
C<sub>15</sub>H<sub>20</sub>O<sub>3</sub> (248.32). Pharm: NO production inhibitor (mus peritoneal macrophages, induced by LPS, 100μmol/L, InRt = (40.2±3.2)%, control *L*-NMMA, 100μmol/L, InRt = (79.2±0.9)%,  $p < 0.01$ ). Source: PING E SHU *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*]. Ref: 4150.

**4395 Curcumenolactone B**

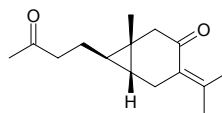
C<sub>15</sub>H<sub>20</sub>O<sub>3</sub> (248.32). Pharm: NO production inhibitor (mus peritoneal macrophages, induced by LPS, 100μmol/L, InRt = (30.6±4.7)%, control *L*-NMMA, 100μmol/L, InRt = (79.2±0.9)%,  $p < 0.01$ ). Source: PING E SHU *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*]. Ref: 4150.

**4396 Curcumenolactone C**

C<sub>15</sub>H<sub>20</sub>O<sub>4</sub> (264.32). Pharm: NO production inhibitor inactive (mus peritoneal macrophages, induced by LPS, 100μmol/L, InRt = (-1.4±4.3)%, control *L*-NMMA, 100μmol/L, InRt = (79.2±0.9)%). Source: PING E SHU *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*]. Ref: 4150.

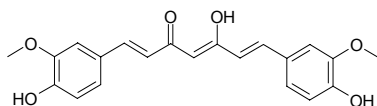
**4397 Curcumenone**

C<sub>15</sub>H<sub>22</sub>O<sub>2</sub> (234.34). Pharm: NO production inhibitor (mus peritoneal macrophages, induced by LPS, 100μmol/L, InRt = (54.8±1.4)%, control *L*-NMMA, 100μmol/L, InRt = (79.2±0.9)%,  $p < 0.01$ ). Source: PING E SHU *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*]. Ref: 4150.

**4398 Curcumin**

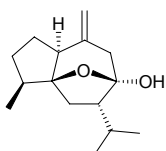
1,7-Bis(4-hydroxy-3-methoxyphenyl)-1,6-heptadiene-3,5-dione; Turmeric yellow [458-37-7] C<sub>21</sub>H<sub>20</sub>O<sub>6</sub> (368.39). Yellow needles, mp 183~184°C; soluble in ethanol, ice vinegar, insoluble in water, ether<sup>[5507]</sup>. Pharm: Antibacterial; choleric; pigment; inhibits gastric injury (caused by injecting 20mg/kg enteramine); NO production inhibitor (mus peritoneal macrophages, induced by LPS, 100μmol/L, InRt = (103.0±0.7)%, control *L*-NMMA, 100μmol/L, InRt = (79.2±0.9)%,  $p < 0.01$ , cytotoxic effect was observed with viability = 4%)<sup>[4150]</sup>; anti-inflammatory (modulator of cytokine network, a lead compound to develop new clinically relevant anti-inflammatory drugs)<sup>[4416]</sup>; anti-inflammatory (preclinical reports suggest that curcumin exerts an anti-inflammatory action in models of atherosclerosis, Alzheimer's disease, arthritis and pancreatitis; proposed mechanisms include macrophage activation inhibitor, lipoxygenase inhibitor, cyclooxygenase 2 inhibitor, and metabolite production via arachidonic acid pathways)<sup>[4415]</sup>; anti-inflammatory (NF-κB pathway)<sup>[4415]</sup>; anti-inflammatory (rat macrophages and pancreatitis tissue, blocks NO production and NOS activity and expression)<sup>[4415]</sup>; antioxidant<sup>[4415]</sup>; hepatoprotective<sup>[4415]</sup>; antihepatotoxin (injury caused by paracetamol); cytotoxic (Colon26-L5, ED<sub>50</sub> = 23.2μmol/L; HT1080, ED<sub>50</sub> = 23.4μmol/L)<sup>[3035]</sup>; antineoplastic (EBV-EA induced by TPA, IC<sub>50</sub> = 343mol ratio/32pmol TPA<sup>[4099]</sup>, IC<sub>50</sub> = 341mol ratio/32pmol TPA<sup>[5028,5048]</sup>); β-hexosaminidase release inhibitor (inhibits degranulation and release, RBL-2H3 Cells, 100μmol/L, InRt = 62.6%<sup>[4655]</sup>, IC<sub>50</sub> = 82μmol/L<sup>[4163]</sup>,  $p < 0.01$ ); 5α-reductase inhibitor (rat prostate 5α-Reductase, IC<sub>50</sub> > 1000μmol/L)<sup>[5343]</sup>; neuroprotective (*in vitro* protects PC12 cells from β-Amyloid insult: anti-βA(25-35), ED<sub>50</sub> = (7.0±1.1)μg/mL;

anti- $\beta$ A(1-41),  $ED_{50} = (10.0 \pm 0.9) \mu\text{g/mL}$ ; control Congo red: anti- $\beta$ A(25-35),  $ED_{50} = (37.5 \pm 5.4) \mu\text{g/mL}$ ; anti- $\beta$ A(1-41),  $ED_{50} = (39.2 \pm 5.2) \mu\text{g/mL}$ <sup>[4653]</sup>.  
**Source:** BAI CHANG *Acorus calamus*, GUANG XI E SHU *Curcuma kwangsiensis* (dried rhizome: mean content of 3 origins = 0.156%)<sup>[5508]</sup>, HUANG GEN JIANG HUANG *Curcuma xanthorrhiza*, JIANG HUANG *Curcuma longa* (dried rhizome: content scope = 0.556%~2.03%)<sup>[5501]</sup>, mean content of 10 origins = 1.87%<sup>[5508]</sup>, JIANG HUANG *Curcuma longa* (turmeric powder: recovery 0.00115%dw)<sup>[4643]</sup>, PING E SHU *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*], YU JIN *Curcuma aromatica* (dried rhizome: mean content of 3 origins = 0.057%)<sup>[5508]</sup>. **Ref:** 6, 658, 3035, 4099, 4150, 4163, 4416, 4415, 4643, 4655, 5028, 5048, 5345, 5501, 5507, 5508.



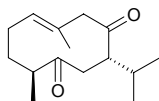
#### 4399 Curcumol

[4871-97-0]  $C_{15}H_{24}O_2$  (236.36). mp 141~144°C. **Pharm:** Cytotoxic (H.L. staining method, 1.25mg/mL, effectively damaging cancer cells); antineoplastic (mouse sarcoma S37, 75mg/kg sc, InRt = (53.7~62.0)%; mouse cervical carcinoma U4, 75mg/kg sc, InRt = (45.1~77.1)%; mouse Ehrlich ascites cancer EAC, biotic prolonged rate = (65.8~78.9)%);  $LD_{50}$  (mouse, acute toxicity test, ip) = 250mg/kg;  $LD_{50}$  (mouse, subacute toxicity test, ip) = 163.4mg/kg. **Source:** JIANG HUANG *Curcuma longa*, PING E SHU *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*], WEN YU JIN *Curcuma wengujin* (dried rhizome: content scope = 0.10%~0.16%)<sup>[5501]</sup>; content = 0.0408%<sup>[5508]</sup>. **Ref:** 4, 5, 6, 660, 5501, 5508.



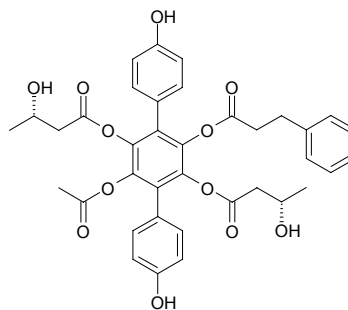
#### 4400 Curdione

[13657-68-6]  $C_{15}H_{24}O_2$  (236.36). Colorless prismatic crystals (absolute ethanol), mp 61~62°C,  $[\alpha]_D^{25} = +26^\circ$  ( $c = 1$ , chloroform). **Pharm:** Antineoplastic (mus sarcoma 37, mus cervical carcinoma U14, mus Ehrlich ascites carcinoma, initiative immunity); used in treatment of cervical cancer; NO production inhibitor (mus peritoneal macrophages, induced by LPS, 100 $\mu\text{mol/L}$ , InRt = (32.0 $\pm$ 1.6)%; control *L*-NMMA, 100 $\mu\text{mol/L}$ , InRt = (79.2 $\pm$ 0.9)%;  $p < 0.01$ )<sup>[4150]</sup>. **Source:** PING E SHU *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*], YU JIN *Curcuma aromatica*, WEN YU JIN *Curcuma wengujin* (dried rhizome: content scope = 0.35%~0.67%)<sup>[5501]</sup>. **Ref:** 4, 5, 6, 661, 4150, 5501.



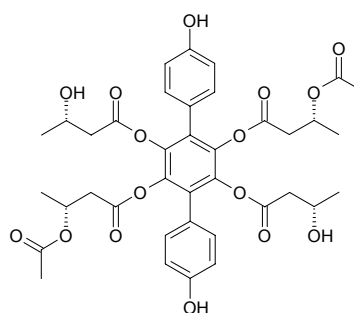
#### 4401 Curtisian E

$C_{37}H_{36}O_{12}$  (672.69). Grayish solid,  $[\alpha]_D^{20} = -5.4^\circ$  ( $c = 1.1$ ,  $\text{CH}_3\text{OH}$ ). **Source:** KE DI SI WANG ZHE JUN *Paxillus curtisii*. **Ref:** 3447.



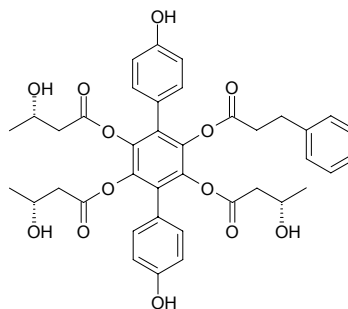
#### 4402 Curtisian F

$C_{38}H_{42}O_{16}$  (754.75). Grayish solid,  $[\alpha]_D^{20} = -6.4^\circ$  ( $c = 0.8$ ,  $\text{CH}_3\text{OH}$ ). **Source:** KE DI SI WANG ZHE JUN *Paxillus curtisii*. **Ref:** 3447.



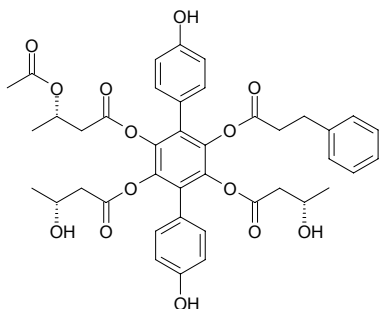
#### 4403 Curtisian G

$C_{39}H_{40}O_{13}$  (716.75). Grayish solid,  $[\alpha]_D^{20} = -3.1^\circ$  ( $c = 0.5$ ,  $\text{CH}_3\text{OH}$ ). **Source:** KE DI SI WANG ZHE JUN *Paxillus curtisii*. **Ref:** 3447.

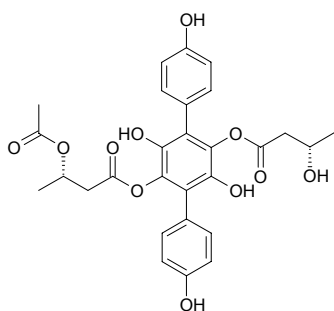


**4404 Curtisian H**

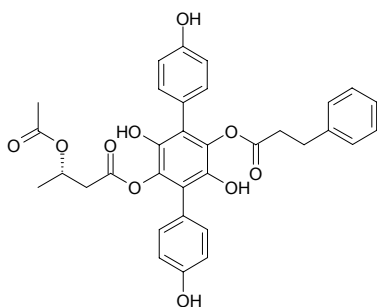
$C_{41}H_{42}O_{14}$  (758.78). Grayish solid,  $[\alpha]_D^{20} = -3.9^\circ$  ( $c = 1.0$ ,  $CH_3OH$ ). Source: KE DI SI WANG ZHE JUN *Paxillus curtisii*. Ref: 3447.

**4405 Curtisian I**

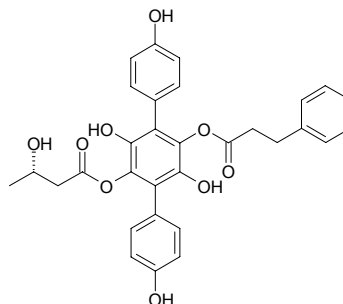
$C_{28}H_{28}O_{11}$  (540.53). Grayish solid,  $[\alpha]_D^{20} = -1.8^\circ$  ( $c = 1.0$ ,  $MeOH$ ). Pharm: Antioxidant (DPPH scavenger,  $IC_{50} = 19.1 \mu mol/L$ ; control *L*-Ascorbic acid,  $IC_{50} = 16.5 \mu mol/L$ ; Vitamin E,  $IC_{50} = 22.8 \mu mol/L$ ; BHA,  $IC_{50} = 31.6 \mu mol/L$ ). Source: KE DI SI WANG ZHE JUN *Paxillus curtisii*. Ref: 5483.

**4406 Curtisian J**

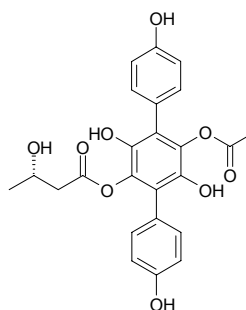
$C_{33}H_{30}O_{10}$  (586.60). Grayish solid,  $[\alpha]_D^{20} = -3.54^\circ$  ( $c = 0.85$ ,  $MeOH$ ). Pharm: Antioxidant (DPPH scavenger,  $IC_{50} = 117.8 \mu mol/L$ ; control *L*-Ascorbic acid,  $IC_{50} = 16.5 \mu mol/L$ ; Vitamin E,  $IC_{50} = 22.8 \mu mol/L$ ; BHA,  $IC_{50} = 31.6 \mu mol/L$ ). Source: KE DI SI WANG ZHE JUN *Paxillus curtisii*. Ref: 5483.

**4407 Curtisian K**

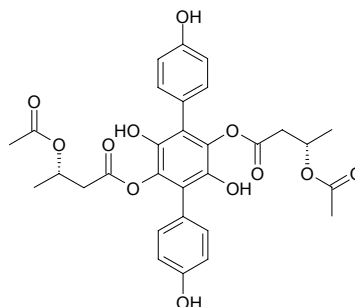
$C_{31}H_{28}O_9$  (544.56). Grayish solid,  $[\alpha]_D^{20} = -1.48^\circ$  ( $c = 0.95$ ,  $MeOH$ ). Pharm: Antioxidant (DPPH scavenger,  $IC_{50} = 31.3 \mu mol/L$ ; control *L*-Ascorbic acid,  $IC_{50} = 16.5 \mu mol/L$ ; Vitamin E,  $IC_{50} = 22.8 \mu mol/L$ ; BHA,  $IC_{50} = 31.6 \mu mol/L$ ). Source: KE DI SI WANG ZHE JUN *Paxillus curtisii*. Ref: 5483.

**4408 Curtisian L**

$C_{24}H_{22}O_9$  (454.44). Grayish solid,  $[\alpha]_D^{20} = +0.86^\circ$  ( $c = 1.17$ ,  $MeOH$ ). Pharm: Antioxidant (DPPH scavenger,  $IC_{50} = 24.0 \mu mol/L$ ; control *L*-Ascorbic acid,  $IC_{50} = 16.5 \mu mol/L$ ; Vitamin E,  $IC_{50} = 22.8 \mu mol/L$ ; BHA,  $IC_{50} = 31.6 \mu mol/L$ ). Source: KE DI SI WANG ZHE JUN *Paxillus curtisii*. Ref: 5483.

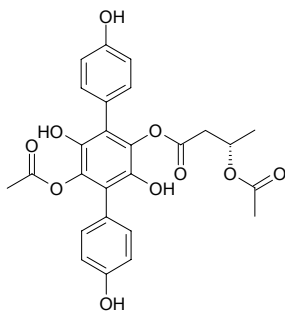
**4409 Curtisian M**

$C_{30}H_{30}O_{12}$  (582.57). Grayish solid,  $[\alpha]_D^{20} = -8.7^\circ$  ( $c = 0.75$ ,  $MeOH$ ). Pharm: antioxidant (DPPH scavenger,  $IC_{50} = 45.9 \mu mol/L$ , control Ascorbic acid,  $IC_{50} = 16.5 \mu mol/L$ ). Source: KE DI SI WANG ZHE JUN *Paxillus curtisii* (sporocarp). Ref: 4379.

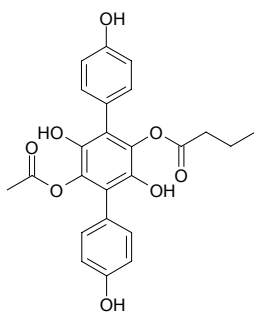


**4410 Curtisian N**

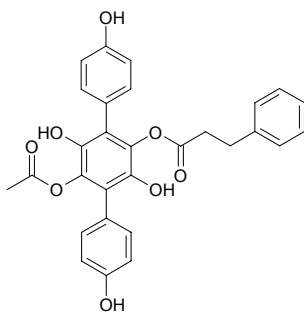
$C_{26}H_{24}O_{10}$  (496.48). Grayish solid,  $[\alpha]_D^{20} = -16.2^\circ$  ( $c = 0.51$ , MeOH). **Pharm:** antioxidant (DPPH scavenger,  $IC_{50} = 48.8\mu\text{mol/L}$ , control Ascorbic acid,  $IC_{50} = 16.5\mu\text{mol/L}$ ). **Source:** KE DI SI WANG ZHE JUN *Paxillus curtisii* (sporocarp). **Ref:** 4379.

**4411 Curtisian O**

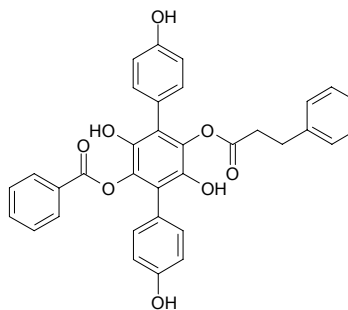
$C_{24}H_{22}O_8$  (438.44). Grayish solid. **Pharm:** antioxidant (DPPH scavenger,  $IC_{50} = 58.7\mu\text{mol/L}$ , control Ascorbic acid,  $IC_{50} = 16.5\mu\text{mol/L}$ ). **Source:** KE DI SI WANG ZHE JUN *Paxillus curtisii* (sporocarp). **Ref:** 4379.

**4412 Curtisian P**

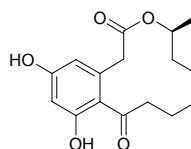
$C_{29}H_{24}O_8$  (500.51). Light red-brown solid. **Pharm:** antioxidant (DPPH scavenger,  $IC_{50} = 44.0\mu\text{mol/L}$ , control Ascorbic acid,  $IC_{50} = 16.5\mu\text{mol/L}$ ). **Source:** KE DI SI WANG ZHE JUN *Paxillus curtisii* (sporocarp). **Ref:** 4379.

**4413 Curtisian Q**

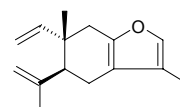
$C_{34}H_{26}O_8$  (562.58). Light red-brown solid. **Pharm:** antioxidant (DPPH scavenger,  $IC_{50} = 43.4\mu\text{mol/L}$ , control Ascorbic acid,  $IC_{50} = 16.5\mu\text{mol/L}$ ). **Source:** KE DI SI WANG ZHE JUN *Paxillus curtisii* (sporocarp). **Ref:** 4379.

**4414 Curvularin**

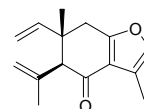
[10140-70-2]  $C_{16}H_{20}O_5$  (292.33). White square crystals, mp 206.5~208.0°C. **Pharm:** Cytotoxic. **Source:** CAO YE BAI JIANG *Patrinia scabra*. **Ref:** 2181.

**4415 Curzerene**

Isofuranogermacrene [17910-09-7]  $C_{15}H_{20}O$  (216.33). **Source:** PING E SHU *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*], SHUI CAI *Menyanthes trifoliata*. **Ref:** 6.

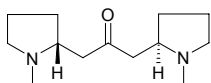
**4416 Curzerenone**

Zedoarone [20493-56-5]  $C_{15}H_{18}O_2$  (230.31). bp 104°C/3mmHg,  $[\alpha]_D = 0.7^\circ$  ( $c = 0.3$ ,  $CHCl_3$ ). **Pharm:** NO production inhibitor (mus peritoneal macrophages, induced by LPS, 100 $\mu\text{mol/L}$ , InRt = (39.7 $\pm$ 2.4)%), control *L*-NMMA, 100 $\mu\text{mol/L}$ , InRt = (79.2 $\pm$ 0.9)%,  $p < 0.01$ )<sup>[4150]</sup>; cytotoxic inactive (*in vitro*, MCF7)<sup>[3093]</sup>. **Source:** MO YAO *Commiphora myrrha* [Syn. *Commiphora molmo*]<sup>[3093]</sup>, PING E SHU *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*], SHUI CAI *Menyanthes trifoliata*. **Ref:** 6, 3093, 4150.

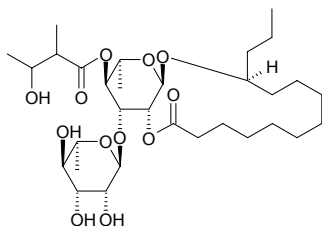


**4417 Cuscohygrine**

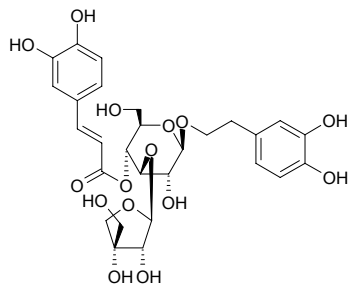
Bellaradine; Cuskygrine [454-14-8]  $C_{13}H_{24}N_2O$  (224.35). bp 169–170°C/23mmHg, soluble in ethanol, ether, benzene.<sup>[5507]</sup> **Pharm:** Antiallergic (mus, caused by 2,4-dinitrofluorobenzene). **Source:** LANG DANG *Zi Hyoscyamus niger*, MAO MAN TUO LUO YE *Datura innoxia*, OU MAN TUO LUO GEN *Datura stramonium*, PAO NANG CAO *Physochlaina physaloides*, SAI LANG DANG *Anisodus luridus*, SAN FEN SAN *Scopolia acutangula* [Syn. *Anisodus acutangulus*], ZANG QIE *Anisodus tanguticus* [Syn. *Scopolia tangutica*], DIAN QIE *Atropa belladonna*, GU KE *Erythroxylum coca*, JI XUAN HUA *Convolvulus erinaceus*. **Ref:** 6, 658, 660, 5507.

**4418 Cuscutic resinoid A**

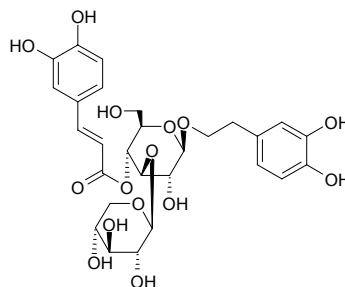
$C_{31}H_{54}O_{12}$  (618.77). Colorless amorphous powder,  $[\alpha]_D^{23} = -24.0^\circ$  ( $c = 0.7$ , MeOH). **Pharm:** Cancer cell stimulator (10  $\mu\text{mol/L}$ , MCF7 cell and T47D breast cancer cell proliferation). **Source:** TU SI ZI *Cuscuta chinensis* (seed). **Ref:** 4959.

**4419 Cusianoside A**

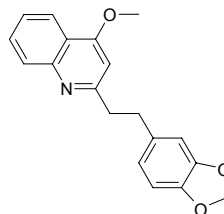
[2-(3,4-Dihydroxyphenylethyl)]-3-*O*- $\alpha$ -D-apiofuranosyl-(1 $\rightarrow$ 4)-(4-*O*-caffeoyl)- $\beta$ -D-glucopyranoside  $C_{28}H_{34}O_{15}$  (610.57).  $[\alpha]_D = -67.5^\circ$  (MeOH). **Source:** MA LAN GEN *Baphicacanthus cusia* [Syn. *Strobilanthes cusia*]. **Ref:** 2577.

**4420 Cusianoside B**

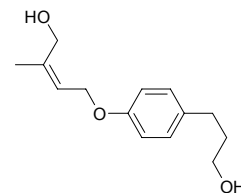
[2-(3,4-Dihydroxyphenylethyl)]-3-*O*- $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 3)-(4-*O*-caffeoyl)- $\beta$ -D-glucopyranoside  $C_{28}H_{34}O_{15}$  (610.57).  $[\alpha]_D = -41.9^\circ$  (MeOH). **Source:** MA LAN GEN *Baphicacanthus cusia* [Syn. *Strobilanthes cusia*]. **Ref:** 2577.

**4421 Cusparine**

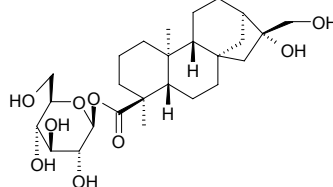
[529-92-0]  $C_{19}H_{17}NO_3$  (307.35). **Pharm:** Antidiarrheal; antimalarial; antipyretic; antispasmodic. **Source:** AN GU SI TU LA SHU *Galipea officinalis*. **Ref:** 658.

**4422 Cuspidiol**

$C_{14}H_{20}O_3$  (236.31). **Pharm:** Antifungal (TLC-based assay, *Cladosporium cucumerinum*, MIQ = 0.1  $\mu\text{g}$ , control Miconazole, MIQ = 1  $\mu\text{g}$ ; *Candida albicans*, MIQ = 10  $\mu\text{g}$ , Miconazole, MIQ = 0.1  $\mu\text{g}$ ); antibacterial (TLC-based assay, *Bacillus subtilis*, MIQ = 10  $\mu\text{g}$ ; control Chloramphenicol, MIQ = 1  $\mu\text{g}$ ). **Source:** *Fagara xanthoxyloides*. **Ref:** 5385.

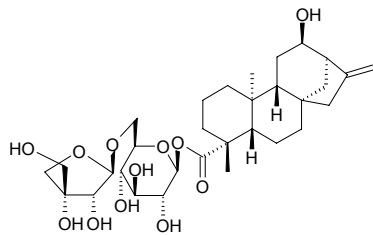
**4423 Cussoracoside A**

$C_{26}H_{42}O_9$  (498.62).  $[\alpha]_D^{19} = -37.6^\circ$  ( $c = 0.1$ , MeOH). **Source:** *Cussonia racemosa* (leaf). **Ref:** 4164.

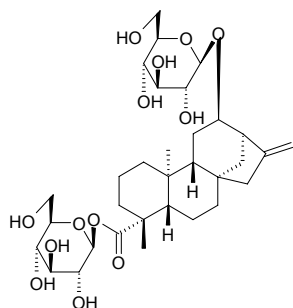


**4424 Cussoracoside B**

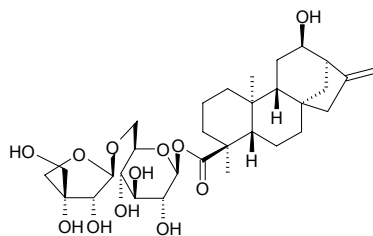
$C_{31}H_{48}O_{12}$  (612.72).  $[\alpha]_D^{19} = -27.2^\circ$  ( $c = 0.5$ , MeOH). Source: *Cussonia racemosa* (leaf). Ref: 4164.

**4425 Cussoracoside C**

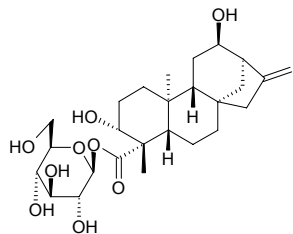
$C_{32}H_{50}O_{13}$  (642.75). Amorphous powder,  $[\alpha]_D^{19} = -30.0^\circ$  ( $c = 0.5$ , MeOH). Source: *Cussonia racemosa* (leaf). Ref: 4164.

**4426 Cussoracoside D**

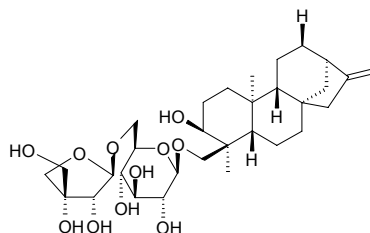
$C_{31}H_{48}O_{12}$  (612.72).  $[\alpha]_D^{19} = -19.5^\circ$  ( $c = 0.5$ , MeOH). Source: *Cussonia racemosa* (leaf). Ref: 4164.

**4427 Cussoracoside E**

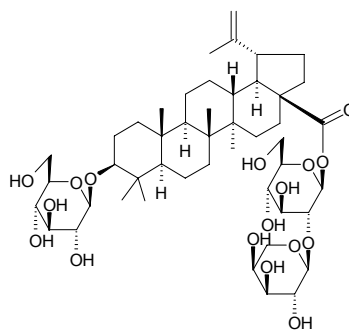
$C_{26}H_{40}O_9$  (496.60).  $[\alpha]_D^{19} = -30.5^\circ$  ( $c = 1.6$ , MeOH). Source: *Cussonia racemosa* (leaf). Ref: 4164.

**4428 Cussoracoside F**

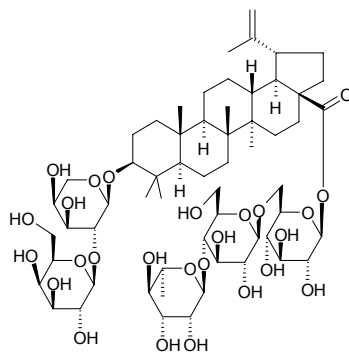
$C_{31}H_{50}O_{11}$  (598.74).  $[\alpha]_D^{19} = -35.7^\circ$  ( $c = 0.4$ , MeOH). Source: *Cussonia racemosa* (leaf). Ref: 4164.

**4429 Cussosaponin A**

3-O-beta-D-Glucopyranosyl betulinic acid 28-O-alpha-L-arabinopyranosyl(1->6)-beta-D-glucopyranosyl ester  $C_{47}H_{76}O_{17}$  (913.12). Amorphous powder,  $[\alpha]_D^{30} = -14.7^\circ$  ( $c = 0.3$ , pyridine). Source: *Cussonia racemosa* (leaf). Ref: 4232.

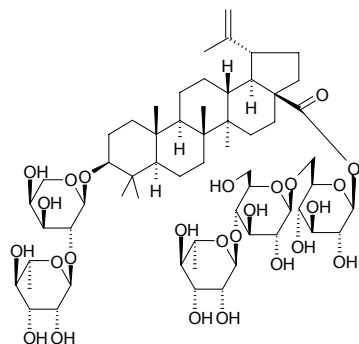
**4430 Cussosaponin B**

3-O-alpha-D-Galactopyranosyl(1->2)-alpha-L-arabinopyranosyl betulinic acid 28-O-alpha-L-rhamnopyranosyl(1->4)-beta-D-glucopyranosyl(1->6)-beta-D-glucopyranosyl ester  $C_{59}H_{96}O_{26}$  (1221.41). Amorphous powder,  $[\alpha]_D^{30} = -34^\circ$  ( $c = 0.8$ , pyridine). Source: *Cussonia racemosa* (leaf). Ref: 4232.

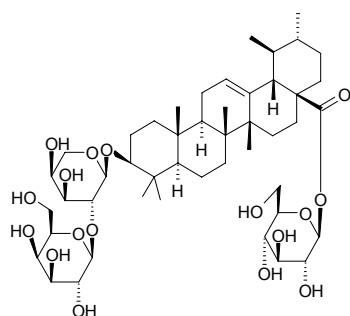


**4431 Cusosaponin C**

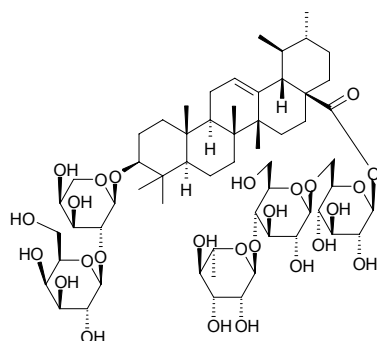
3 $\beta$ -[(*O*- $\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranosyl)oxy]lup-20-(29)-en-28-oic acid 28-*O*- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl ester C<sub>59</sub>H<sub>96</sub>O<sub>25</sub> (1205.41). Amorphous powder,  $[\alpha]_D^{30} = -6.5^\circ$  ( $c = 0.4$ , pyridine); amorphous solid,  $[\alpha]_D^{26} = -34.0^\circ$  ( $c = 0.10$ , MeOH). **Source:** BAI TOU WENG *Pulsatilla chinensis*, *Cussonia racemosa* (leaf). **Ref:** 3086, 4232.

**4432 Cusosaponin D**

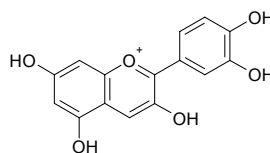
3-*O*- $\beta$ -D-Galactopyranosyl(1 $\rightarrow$ 2)  $\alpha$ -L-arabinopyranosyl ursolic acid 28-*O*- $\beta$ -D-glucopyranosyl ester C<sub>47</sub>H<sub>76</sub>O<sub>17</sub> (913.12). Amorphous powder,  $[\alpha]_D^{30} = -50^\circ$  ( $c = 1.2$ , pyridine). **Source:** *Cussonia racemosa* (leaf). **Ref:** 4232.

**4433 Cusosaponin E**

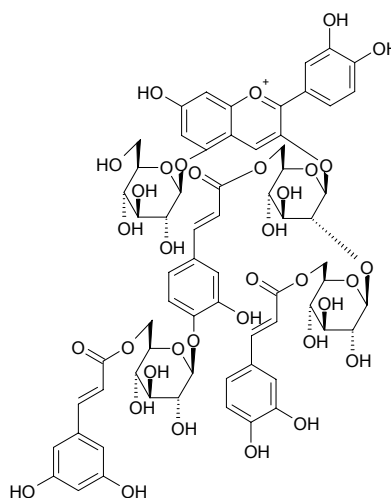
3-*O*- $\alpha$ -D-Galactopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranosyl ursolic acid 28-*O*- $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl ester C<sub>59</sub>H<sub>96</sub>O<sub>26</sub> (1221.41).  $[\alpha]_D^{30} = -14.8^\circ$  ( $c = 1.6$ , pyridine). **Source:** *Cussonia racemosa* (leaf). **Ref:** 4232.

**4434 Cyanidin**

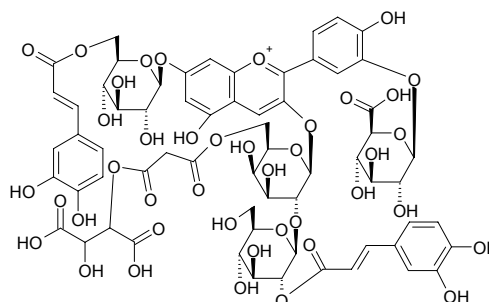
[13306-05-3] C<sub>15</sub>H<sub>11</sub>O<sub>6</sub><sup>+</sup> (287.25). **Pharm:** Red pigment. **Source:** CHOU MO LI *Clerodendron fragrans*. **Ref:** 6, 658.

**4435 Cyanidin-3-*O*-[2-*O*-(6-*O*-*E*-caffeoyl- $\beta$ -D-glucopyranosyl)]-[6-*O*-[4-*O*-(6-*O*-*E*-3,5-dihydroxycinnamoyl- $\beta$ -D-glucopyranosyl)-*E*-caffeoyl]- $\beta$ -D-glucopyranosyl]-5-*O*- $\beta$ -D-glucopyranoside**

C<sub>66</sub>H<sub>69</sub>O<sub>35</sub><sup>+</sup> (1422.26). **Source:** XI XIN YE QIAN NIU *Ipomoea asarifolia* (flower). **Ref:** 3501.

**4436 Cyanidin-3-*O*-[2-*O*-(2-*O*-(*trans*-caffeoyl)- $\beta$ -D-glucopyranosyl)-6-*O*-(2-*O*-(tartaryl)malonyl)- $\beta$ -D-galactopyranosyl]-7-*O*-[6-*O*-(*trans*-caffeoyl)- $\beta$ -D-glucopyranoside]-3'-*O*-[ $\beta$ -D-glucuronopyranoside]**

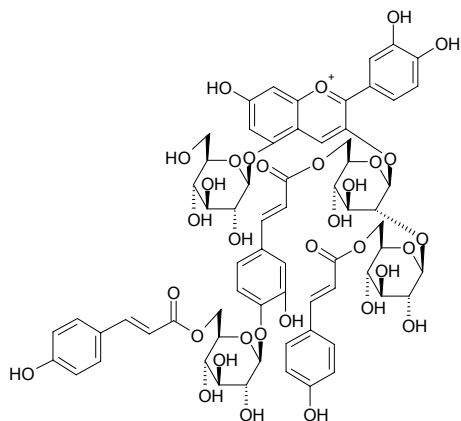
C<sub>64</sub>H<sub>67</sub>O<sub>41</sub><sup>+</sup> (1492.22). **Source:** HUA GUAN YIN LIAN HUA *Anemone coronaria*. **Ref:** 1956.





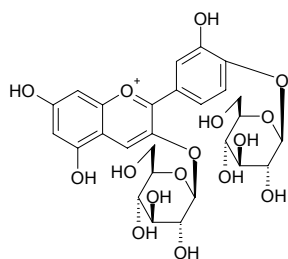
**4437 Cyanidin-3-O-[2-O-(6-O-E-p-coumaroyl-β-D-glucopyranosyl)]-  
{6-O-[4-O-(6-O-E-p-coumaroyl-β-D-glucopyranosyl)-E-caffeoyl]-β-D-glucopyranosyl}-5-O-β-D-glucopyranoside**

$C_{66}H_{69}O_{33}^+$  (1390.27). Source: XI XIN YE QIAN NIU *Ipomoea asarifolia* (flower). Ref: 3501.



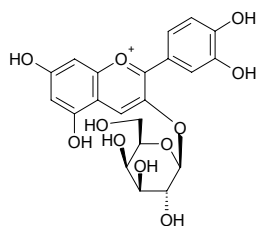
**4438 Cyanidin-3,4'-di-O-β-glucopyranoside**

$C_{27}H_{31}O_{16}^+$  (611.54). Source: YANG CONG *Allium cepa*. Ref: 3497.



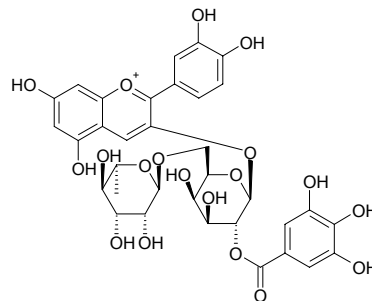
**4439 Cyanidin-3-O-β-D-galactoside**

Idaein [60562-64-3]  $C_{21}H_{21}O_{11}^+$  (449.39). mp 210°C (dec). Pharm: Anti-inflammatory; prevents brittle rupture of blood capillary. Source: HUANG LU ZHI YE *Cotinus coggygria* var. *cinerea*, QIAN QU CAI *Lythrum salicaria*, QIU MU GUA *Chaenomeles lagenaria* [Syn. *Chaenomeles speciosa*], A YUE HUN ZI *Pistacia vera*, CHA YE *Camellia sinensis* [Syn. *Thea sinensis*], OU ZHOU SHUI QING GANG *Fagus sylvatica*, *Vaccinium* sp. Ref: 6, 658, 759.



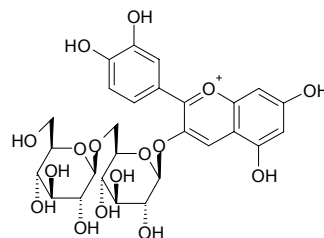
**4440 Cyanidin-3-O-(2''-O-galloyl-6''-O-α-rhamnopyranosyl-β-galactopyranoside)**

$C_{34}H_{35}O_{19}$  (747.65). Source: CU YING MAO TIE XIAN CAI *Acalypha hispida* (flower). Ref: 3466.



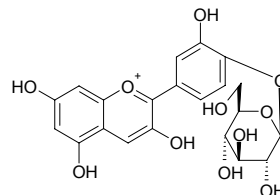
**4441 Cyanidin-3-gentiobioside**

$C_{27}H_{31}O_{16}^+$  (611.54). Source: YI ZHI HUANG HUA *Solidago virgaurea* var. *leiocarpa* [Syn. *Solidago decurrens*]. Ref: 6.



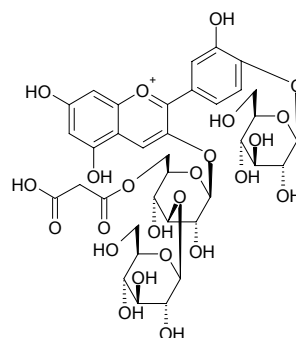
**4442 Cyanidin-4'-O-β-D-glucopyranoside**

[27459-77-4]  $C_{21}H_{21}O_{11}^+$  (449.39). Source: YANG CONG *Allium cepa*, KA FEI HUANG KUI *Hibiscus esculentus*. Ref: 1521, 3497.



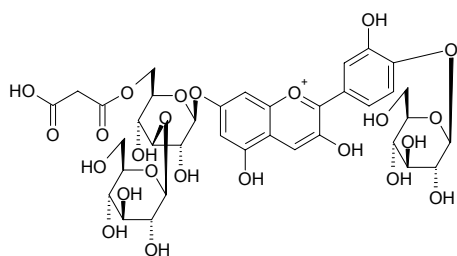
**4443 Cyanidin-3-O-(3''-O-β-glucopyranosyl-6''-O-malonyl-β-glucopyranoside)-4'-O-β-glucopyranoside**

$C_{36}H_{43}O_{24}^+$  (859.73). Source: YANG CONG *Allium cepa*. Ref: 3497.



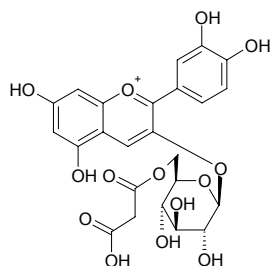
**4444 Cyanidin-7-O-(3''-O-β-glucopyranosyl-6''-O-malonyl-β-glucopyranoside)-4'-O-β-glucopyranoside**

$C_{36}H_{43}O_{24}^+$  (895.73). Source: YANG CONG *Allium cepa*. Ref: 3497.



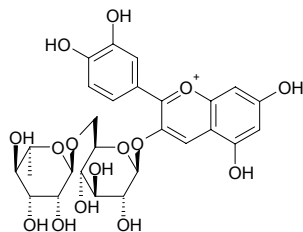
**4445 Cyanidin-3-O-(6''-O-malonyl-β-glucopyranoside)**

$C_{24}H_{23}O_{14}^+$  (535.44). Source: *Dracula chimaera*, *Dracula cordobae*. Ref: 3406.



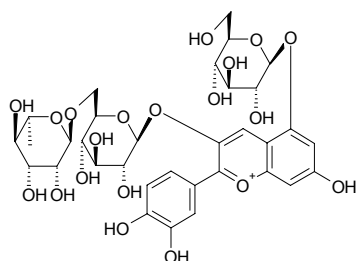
**4446 Cyanidin-3-rutinoside**

Cyanidin rhamnoglucoside; Keracyanin  $C_{27}H_{31}O_{15}^+$  (595.54). Pharm: Red pigment. Source: AN HONG WEI LING CAI *Potentilla atrosanguinea*, JIN YU CAO *Antirrhinum majus*, MO PAN CAO *Abutilon indicum*, SHUI MA TIAO *Polygonum thunbergii*, YANG SHI GUO *Syzygium cumini*, *Dracula chimaera*, *Dracula cordobae*. Ref: 6, 658, 660, 3406.



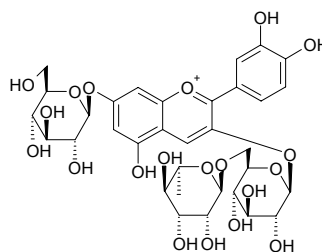
**4447 Cyanidin-3-rutinoside-5-glucoside**

$C_{33}H_{41}O_{20}^+$  (757.68). Source: MU FU RONG HUA *Hibiscus mutabilis*. Ref: 6.



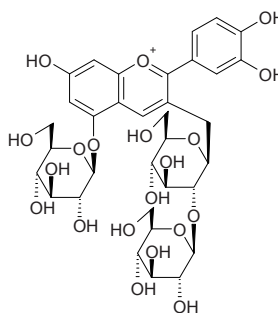
**4448 Cyanidin-3-O-β-rutinoside-7-O-β-glucoside**

$C_{33}H_{41}O_{20}^+$  (757.68). Source: *Lilium* sp. Ref: 1862.



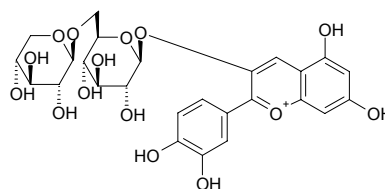
**4449 Cyanidin-3-sophoroside-5-glucoside**

$C_{34}H_{43}O_{20}^+$  (771.71). Source: FU SANG HUA *Hibiscus rosa-sinensis*. Ref: 6.



**4450 Cyanidin-3-xylosyl-glucoside**

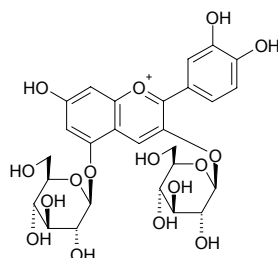
$C_{26}H_{29}O_{15}^+$  (581.51). Source: BU XUE CAO *Limonium gmelinii*, MU TONG *Akebia quinata*. Ref: 6.



**4451 Cyanin**

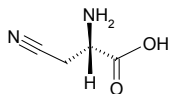
Cyanidin diglucoside [2611-67-8]  $C_{27}H_{31}O_{16}^+$  (611.54). mp 205°C (dec).

Pharm: Pigment. Source: BAI FAN DOU *Phaseolus vulgaris*, DI YU *Sanguisorba officinalis*, DU JUAN HUA *Rhododendron simsii*, FENG LI *Ananas comosus*, MAO SHU *Dioscorea alata*, MEI GUI HUA *Rosa rugosa*, MU FU RONG HUA *Hibiscus mutabilis*, SHI CHE JU *Centaurea cyanus*, YU JIN XIANG *Tulipa gesneriana*, *Sambucus* sp. Ref: 6, 658.

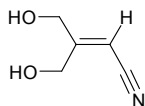


**4452 L-β-Cyanoalanine**

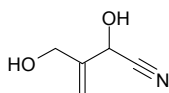
[923-01-3] C<sub>4</sub>H<sub>6</sub>N<sub>2</sub>O<sub>2</sub> (114.10). **Pharm:** Neurotoxin. **Source:** DA CHAO CAI *Vicia sativa*. **Ref:** 658.

**4453 1-Cyano-2-hydroxymethylprop-1-ene-3-ol**

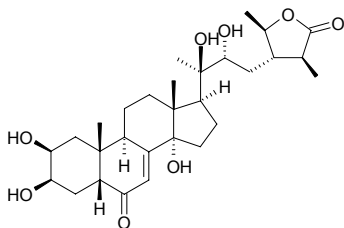
C<sub>5</sub>H<sub>7</sub>NO<sub>2</sub> (113.12). **Source:** JIA KU GUA *Cardiospermum halicacabum*. **Ref:** 6.

**4454 1-Cyano-2-hydroxymethylprop-2-ene-1-ol**

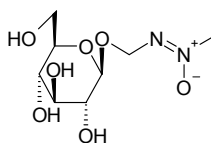
C<sub>5</sub>H<sub>7</sub>NO<sub>2</sub> (113.12). **Source:** JIA KU GUA *Cardiospermum halicacabum*. **Ref:** 6.

**4455 Cyasterone**

C<sub>29</sub>H<sub>44</sub>O<sub>8</sub> (520.67). mp 164~166°C. **Pharm:** Antineoplastic (mus-skin *in vivo*, inhibits EBV-EA induction); insect ecdysone. **Source:** BAI MAO XIA KU CAO *Ajuga decumbens*, CHUAN NIU XI *Cyathula officinalis* (root: content scope = 1.5%~7.6%<sup>[5501]</sup>; mean content of 22 batch samples = 0.064%<sup>[5508]</sup>), HUANG JIN GU CAO *Ajuga chamaepitys*, JIN GU CAO *Ajuga ciliata* (dried whole herb: mean content = 0.044%<sup>[5508]</sup>), MA NIU XI *Cyathula capitata*, PU FU JIN GU CAO *Ajuga reptans*, TAI WAN JIN GU CAO *Ajuga taiwanensis* (whole herb), YAN LING CAO *Trillium tschonoskii*, YU ER QI *Trillium camtschaticum*. **Ref:** 6, 658, 660, 693, 4483, 5501, 5508.

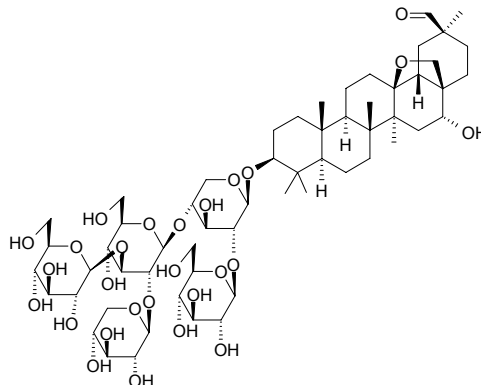
**4456 Cycasin**

[14901-08-7] C<sub>8</sub>H<sub>16</sub>N<sub>2</sub>O<sub>7</sub> (252.23). mp 154°C (dec). **Pharm:** Antineoplastic (mus EAC, sc); carcinogen (causes cancer by *Cycas revoluta* aglycone, orl); LD<sub>50</sub> (mus, orl) = 1.67mg/kg, (gpg, orl) = 1000mg/kg. **Source:** QUAN YE SU TIE *Cycas circinalis*, SU TIE SHU GUO *Cycas revoluta*, SU TIE YE *Cycas revoluta*. **Ref:** 5, 6, 658.

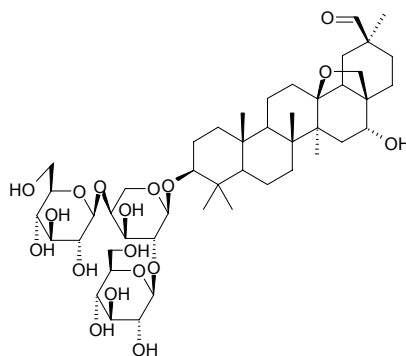
**4457 Cyclamin**

[23643-76-7] C<sub>58</sub>H<sub>94</sub>O<sub>27</sub> (1223.38). Colorless acicular or clustered crystals, mp 280~281°C, [α]<sub>D</sub><sup>21</sup> = -10.1° (c = 1.48, water); [α]<sub>D</sub><sup>20</sup> = -22.4° (c = 1.52, pyridine).

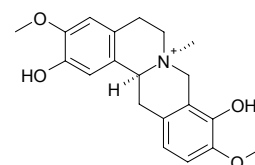
**Pharm:** Antineoplastic; antifungal; hemolytic; toxin. **Source:** XIAN KE LAI *Cyclamen persicum*, OU ZHOU XIAN KE LAI *Cyclamen europaeum*. **Ref:** 658.

**4458 Cyclaminorin**

C<sub>47</sub>H<sub>76</sub>O<sub>18</sub> (929.12). **Source:** HU SHE HONG *Ardisia mamillata* [Syn. *Tinus mamillata*] (root). **Ref:** 3990.

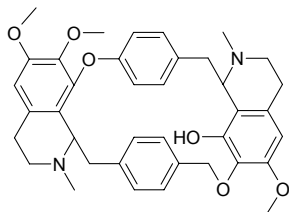
**4459 Cyclanoline**

C<sub>20</sub>H<sub>24</sub>NO<sub>4</sub><sup>+</sup> (342.42). Chloride: mp 214°C, [α]<sub>D</sub> = -116° (methanol); hydrated chloride: colorless octahedral crystals, recrystallizing in methanol or ethanol becoming acicular crystals, mp 211~212°C (dec), [α]<sub>D</sub><sup>30</sup> = -120° (c = 0.67, methanol); white acicular crystals, mp 214~215°C (dec), [α]<sub>D</sub><sup>17</sup> = -112.4° (c = 0.310, methanol). **Pharm:** Ganglionic blocker; inhibits gastric contraction (animal model); muscle relaxant (striated muscle). **Source:** FANG JI *Stephania tetrandra*, KUO GUO JI YING SU *Argemone platyceras*, NAN LUN HUAN TENG *Cyclea tonkinensis*, QIAN JIN TENG *Stephania japonica*, ZHU SHA LIAN *Aristolochia kaempferi*. **Ref:** 658, 661.

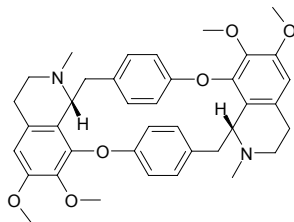


**4460 Cycleanonine**

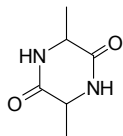
[116520-07-1] C<sub>38</sub>H<sub>42</sub>N<sub>2</sub>O<sub>6</sub> (622.77). Yellowish crystal powder, mp 96~97°C, [ $\alpha$ ]<sub>D</sub><sup>16</sup> = +376.8° ( $c$  = 0.501, chloroform). Pharm: Antibacterial (broad spectrum); cytotoxic (hmn, carcinoma of gastric glands Sca7901). Source: LUN HUAN TENG *Cyclea racemosa*. Ref: 104, 1604.

**4461 Cycleanine**

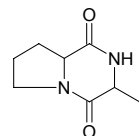
[518-94-5] C<sub>38</sub>H<sub>42</sub>N<sub>2</sub>O<sub>6</sub> (622.77). mp 268~273°C. Pharm: Cytotoxic (HeLa, ED<sub>50</sub> = 12μg/mL). Source: BAI YAO ZI *Stephania cepharantha*, DI BU RONG *Stephania delavayi* [Syn. *Stephania epigaea*], GUANG YE DI BU RONG *Stephania glabra*, NAN LUN HUAN TENG *Cyclea tonkinensis*, SI CHUAN LUN HUAN TENG *Cyclea sutchuenensis*, WA SHI DU HUO *Heracleum wallichii*, XI SHENG TENG *Cissampelos pareira*. Ref: 5, 6, 274, 658.

**4462 Cyclo-(Ala-Ala)**

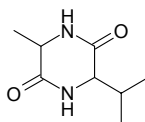
C<sub>6</sub>H<sub>10</sub>N<sub>2</sub>O<sub>2</sub> (142.16). Colorless acicular crystals (CH<sub>3</sub>OH), mp 206~208°C. Source: JIN TIE SUO *Psammosilene tunicoides*. Ref: 790, 898, 2106.

**4463 Cyclo-(Ala-Pro)**

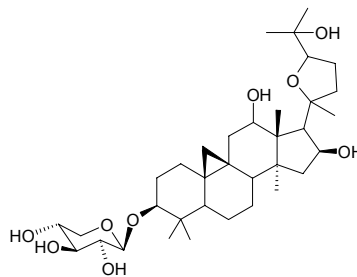
Cyclo-(Pro-Ala) C<sub>8</sub>H<sub>12</sub>N<sub>2</sub>O<sub>2</sub> (168.20). Needles (MeOH), mp 170~172°C; White crystals (MeOH), mp 178~181°C. Source: JIN TIE SUO *Psammosilene tunicoides*, SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*], ZHANG YE BAN XIA *Pinellia pedatisecta*. Ref: 477, 2430, 2487, 4551.

**4464 Cyclo-(Ala-Val)**

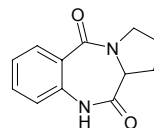
C<sub>8</sub>H<sub>14</sub>N<sub>2</sub>O<sub>2</sub> (170.21). Colorless acicular crystals (CH<sub>3</sub>OH) mp 177~179°C. Source: JIN TIE SUO *Psammosilene tunicoides*, SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*], ZHANG YE BAN XIA *Pinellia pedatisecta*. Ref: 660, 790, 898, 2106, 2487.

**4465 Cycloalpioside C**

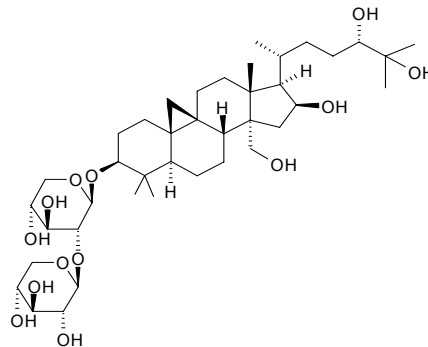
(20*S*\*,24*R*\*)-Epoxy-9,19-cyclolanostane-3β,12β,16β,25-tetraol-3-*O*-β-*D*-xylopyranoside C<sub>35</sub>H<sub>58</sub>O<sub>9</sub> (622.85). Source: TIE PO LUO *Beesia calthaefolia* (whole herb). Ref: 3099.

**4466 Cycloanthranilyproline**

C<sub>12</sub>H<sub>12</sub>N<sub>2</sub>O<sub>2</sub> (216.24). Pale yellow powder, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = 505° ( $c$  = 0.1, MeOH). Source: LIANG BAI MEI RONG JUN *Fuligo candida* (sporocarp). Ref: 4271.

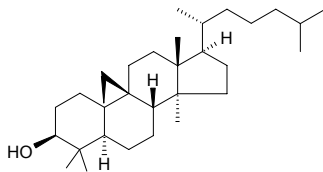
**4467 24*S*-Cycloartane-3β,16β,24,25,30-pentaol-3-*O*-(2-*O*-β-*D*-xylosyl)-β-*D*-xyloside**

C<sub>40</sub>H<sub>68</sub>O<sub>13</sub> (756.98). White acicular crystals, mp 211~213°C. Source: BIAN ZHU TANG SONG CAO *Thalictrum smithii*. Ref: 826.

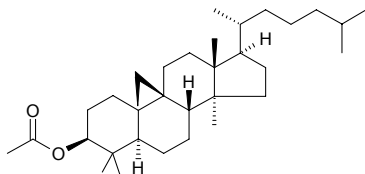


**4468 Cycloartanol**

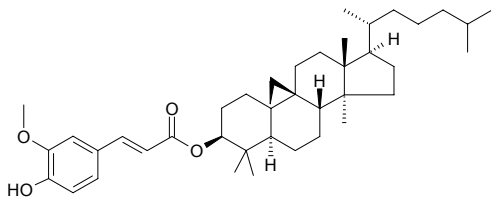
$C_{31}H_{56}O$  (444.79). mp 101~102°C. Source: DOU YOU *Glycine max*, GOU QI ZI *Lycium chinense*, HUO YANG LE *Euphorbia antiquorum*, SHUI LONG GU *Polypodium niponicum*. Ref: 6, 660.

**4469 Cycloartanol acetate**

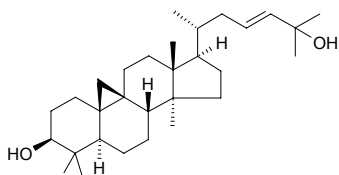
$C_{33}H_{58}O_2$  (486.83). mp 132~133°C. Source: MANG GUO SHU PI *Mangifera indica*. Ref: 6.

**4470 Cycloartanol ferulate**

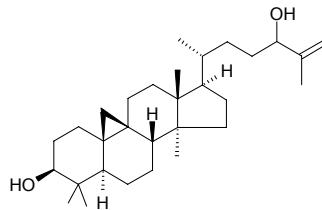
$C_{41}H_{64}O_4$  (620.96). Source: MI PI KANG *Oryza sativa*. Ref: 6.

**4471 9,19-Cycloart-23-ene-3β,25-diol**

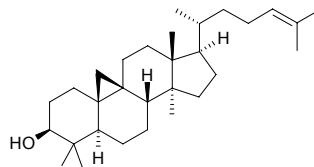
Cycloart-23-ene-3β,25-diol [14599-48-5]  $C_{30}H_{50}O_2$  (442.73). Colorless rhombic crystals (chloroform-petroleum ether), mp 198~199°C,  $[\alpha]_D^{23} = +41.6^\circ$  ( $c = 0.09$ , chloroform). Pharm: Cytotoxic (Ehrlich ascites carcinoma). Source: AI YE *Artemisia argyi*. Ref: 900.

**4472 9,19-Cycloart-25-ene-3β,24-diol**

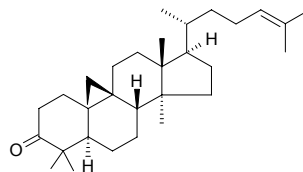
[10388-48-4]  $C_{30}H_{50}O_2$  (442.73). Acicular crystals (chloroform-methanol), mp 174~176°C,  $[\alpha]_D^{30} = +42^\circ$ . Pharm: Antibacterial (*Staphylococcus aureus* and *Escherichia coli*); cytotoxic (Ehrlich ascites carcinoma,  $IC_{50} = 7.5 \mu\text{mol/L}$ ,  $IC_{90} = 13.5 \mu\text{mol/L}$ ,  $P_{388}$ ,  $ED_{50} = 2.4 \mu\text{g/mL}$ ). Source: HUO YANG LE *Euphorbia antiquorum*. Ref: 900.

**4473 Cycloartenol**

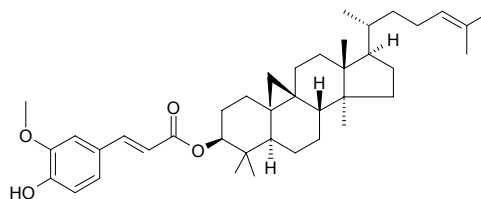
9β,19-Cyclo-24-lanosten-3β-ol [469-38-5]  $C_{30}H_{50}O$  (426.73). mp 115°C. Pharm: Precursor to biosynthesis of sterol. Source: DOU YOU *Glycine max*, GAN PI *Citrus chachiensis*, HEI DA DOU *Glycine max*, HUO YANG LE *Euphorbia antiquorum*, KONG SHI CHUN *Ulva pertusa*, SHI CHUN *Ulva lactuca*, XIANG SI ZI *Abrus precatorius*, YA PIAN *Papaver somniferum*, YAN CAO *Nicotiana tabacum*, YING SU *Papaver somniferum*. Ref: 6, 658.

**4474 Cycloartenone**

$C_{31}H_{52}O$  (440.76). mp 109°C. Source: YA PIAN *Papaver somniferum*. Ref: 6.

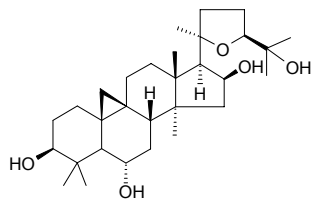
**4475 Cycloartenyl ferulate**

Oryzanol A  $C_{41}H_{62}O_4$  (618.95). Source: MI PI KANG *Oryza sativa*. Ref: 6.

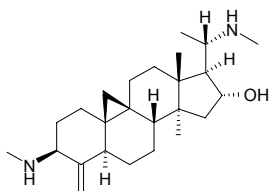


**4476 Cycloastragenol**

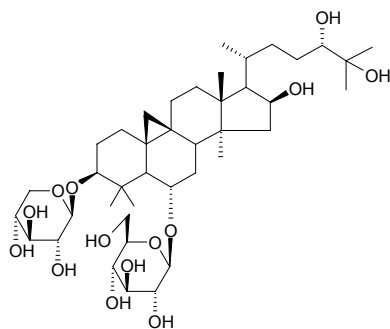
$C_{30}H_{50}O_5$  (490.73). Source: HUANG QI *Astragalus membranaceus*. Ref: 2.

**4477 Cyclobuxine D**

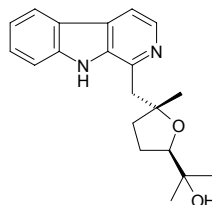
$C_{25}H_{42}N_2O$  (386.63). Pharm: Anti-inflammatory; increases blood pressure; laxative. Source: HE KAN NI YA HUANG YANG *Buxus hyrcana*, JIN SHU HUANG YANG *Buxus sempervirens* (the compound was isolated from the plant by D.Stanfacher, et al. in 1964)<sup>[5505]</sup>, WA LI XI HUANG YANG *Buxus wallichiana*, XI YE HUANG YANG *Buxus harlandii*, XIAO YE HUANG YANG *Buxus microphylla*. Ref: 658, 5505.

**4478 Cyclocanthoside E**

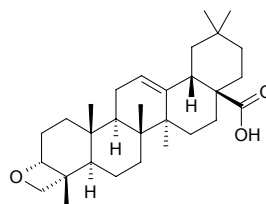
$C_{41}H_{70}O_{14}$  (787.01). Pharm: Antitrypanosomal (*Trypanosoma brucei rhodesiense*,  $IC_{50} = 85.2\mu\text{g/mL}$ , control Melarsoprol,  $IC_{50} = 0.0032\mu\text{g/mL}$ ; *Trypanosoma cruzi*,  $IC_{50} > 30\mu\text{g/mL}$ , Benznidazole,  $IC_{50} = 0.50\mu\text{g/mL}$ ); antileishmanial (*Leishmania donovani*,  $IC_{50} = 14.1\mu\text{g/mL}$ , control Miltefosine,  $IC_{50} = 0.087\mu\text{g/mL}$ ); antimalarial (*Plasmodium falciparum*,  $IC_{50} > 5\mu\text{g/mL}$ , Chloroquine,  $IC_{50} = 0.086\mu\text{g/mL}$ ); cytotoxic (L6 cells,  $IC_{50} > 90\mu\text{g/mL}$ , control Podophyllotoxin,  $IC_{50} = 0.008\mu\text{g/mL}$ ). Source: YOU YE HUANG QI *Astragalus oleifolius* (lower stem part). Ref: 5285.

**4479 Cyclocapitelline**

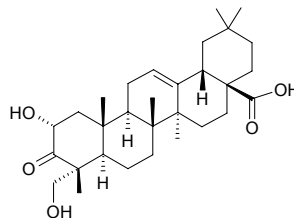
$C_{20}H_{24}N_2O_2$  (324.43). Yellow amorphous solids,  $[\alpha]_D = +43^\circ$  ( $c = 0.50$ ,  $CHCl_3$ ). Source: XIAO TOU LIANG HOU CHA *Hedyotis capitellata*. Ref: 2424.

**4480 Cyclocaric acid A**

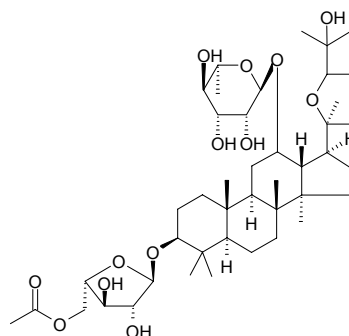
3,23- $\beta$ -Epoxy-olean-12-en-28-oic acid  $C_{30}H_{46}O_3$  (454.70). Pharm: Antihypertensive (alcohol extract of source plant QING QIAN LIU); increases coronary flow (alcohol extract of source plant QING QIAN LIU). Source: QING QIAN LIU *Cyclocarya paliurus*. Ref: 658.

**4481 Cyclocaric acid B**

3-Oxo-2 $\alpha$ ,23-dihydroxyolean-12-en-28-oic acid  $C_{30}H_{46}O_5$  (486.70). White granular crystals, mp 258–260°C (MeOH). Source: QING QIAN LIU *Cyclocarya paliurus*. Ref: 493.

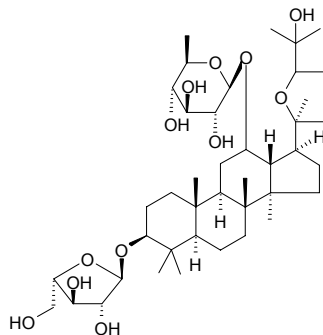
**4482 Cyclocarioside A**

$C_{43}H_{72}O_{13}$  (797.05). White powder,  $[\alpha]_D^{20} = -25.1^\circ$  ( $c = 0.3$ , EtOH). Source: QING QIAN LIU *Cyclocarya paliurus*. Ref: 246.

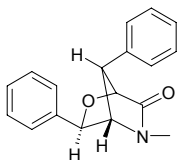


**4483 Cyclocarioside I**

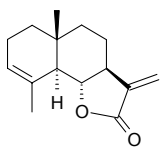
20,24-Epoxy-dammarane-(3 $\beta$ ,12 $\beta$ ,20S,24R)-12-O- $\beta$ -D-quinovopyranosyl-25-hydroxy-3-O- $\alpha$ -L-arabinofuranoside C<sub>41</sub>H<sub>70</sub>O<sub>12</sub> (755.01). White powdery crystals, mp 143~144°C. **Pharm:** Sweetener. **Source:** QING QIAN LIU *Cyclocarya paliurus*. **Ref:** 338, 658.

**4484 Cycloclausenamide**

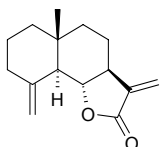
[103541-16-8] C<sub>18</sub>H<sub>17</sub>NO<sub>2</sub> (279.34). Colorless clavate crystals (methanol), mp 164~166°C, [ $\alpha$ ]<sub>D</sub><sup>24.5</sup> = -40° (c = 0.23, methanol). **Pharm:** Antihepatotoxin, (mus, caused by CCl<sub>4</sub>, reduces GPT). **Source:** HUANG PI YE *Clausena lansium*. **Ref:** 1182.

**4485  $\alpha$ -Cyclocostunolide**

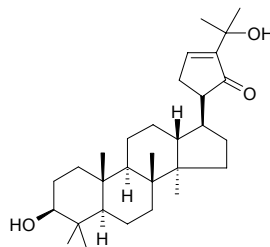
[2221-81-0] C<sub>15</sub>H<sub>20</sub>O<sub>2</sub> (232.33). **Pharm:** Schistosomacide (prevents infection of *Schistosoma mansoni*). **Source:** MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*]. **Ref:** 2, 658.

**4486  $\beta$ -Cyclocostunolide**

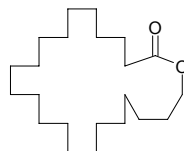
[2221-82-1] C<sub>15</sub>H<sub>20</sub>O<sub>2</sub> (232.33). **Source:** MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*]. **Ref:** 2.

**4487 20(R)-21,24-Cyclo-3 $\beta$ ,25-dihydroxydammar-23(24)-en-21-one**

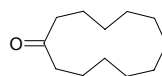
C<sub>30</sub>H<sub>48</sub>O<sub>3</sub> (456.72). **Source:** JIAO GU LAN *Gynostemma pentaphyllum*. **Ref:** 2.

**4488 Cyclodocosalactone**

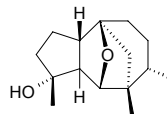
C<sub>22</sub>H<sub>42</sub>O<sub>2</sub> (338.58). White powder. **Source:** JIANG HUANG *Curcuma longa*. **Ref:** 2497.

**4489 Cyclododecanone**

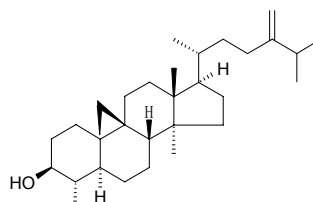
[830-13-7] C<sub>12</sub>H<sub>22</sub>O (182.31). **Source:** SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. **Ref:** 2.

**4490 7,12-Cyclo-6,11-epoxy-4-dumortanol**

[240417-21-4] C<sub>15</sub>H<sub>24</sub>O<sub>2</sub> (236.36). Oil. **Source:** MAO DI QIAN *Dumortiera hirsuta*. **Ref:** 2283.

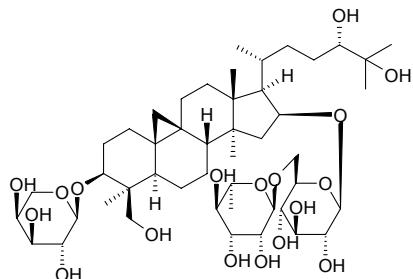
**4491 Cycloeucaleanol**

[469-39-6] C<sub>31</sub>H<sub>54</sub>O (442.78). mp 138~139°C. **Source:** BA WANG BIAN *Euphorbia royleana*, GOU QI ZI *Lycium chinense*, MAN TUO LUO ZI *Datura metel*. **Ref:** 6, 660.

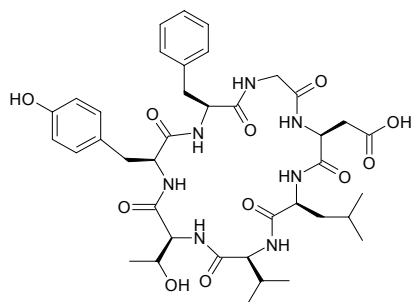


**4492 Cyclofoetoside B**

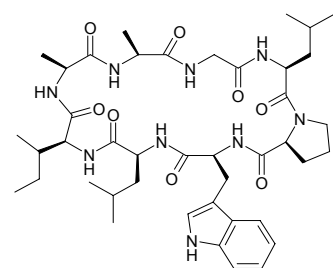
$C_{47}H_{80}O_{18}$  (933.15). Pharm: Antineoplastic (rat, ip, 50mg/kg). Source: XIANG TANG SONG CAO *Thalictrum foetidum*. Ref: 658.

**4493 Cyclo-(Gly-Asp-Leu-Thr-Val-Tyr-Phe)**

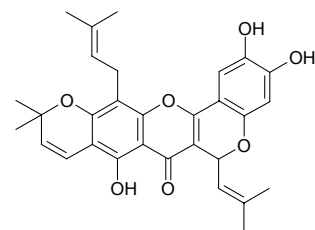
$C_{39}H_{53}N_7O_{11}$  (795.90). Colorless powder,  $[\alpha]_D^{24} = -22.3^\circ$  ( $c = 0.25$ , MeOH). Source: FO SHOU *Citrus medica* var. *sarcodactylis* (fruit peel). Ref: 4208.

**4494 Cyclo-(Gly-Leu-Pro-Trp-Leu-Ile-Ala-Ala)**

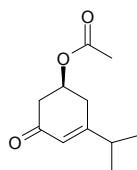
$C_{42}H_{63}N_9O_8$  (822.03). Colorless powder,  $[\alpha]_D^{24} = -81.1^\circ$  ( $c = 0.15$ , MeOH). Source: FO SHOU *Citrus medica* var. *sarcodactylis* (fruit peel). Ref: 4208.

**4495 Cycloheterophyllin**

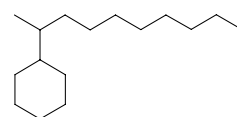
[36545-53-6]  $C_{30}H_{30}O_7$  (502.57). Source: BO LUO MI *Artocarpus heterophyllus*. Ref: 6.

**4496 3-Isopropyl-5-acetoxycyclohexene-2-one-1**

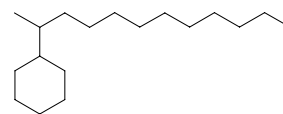
$C_{11}H_{16}O_3$  (196.25). White crystals, mp 135-137°C,  $[\alpha]_D^{20} = -55.6^\circ$  ( $c = 0.009$ ,  $CHCl_3$ ). Source: DAO CAO *Oryza sativa*. Ref: 3801.

**4497 2-Cyclohexyldecane**

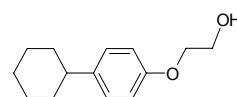
$C_{16}H_{32}$  (224.43). Source: DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*]. Ref: 2.

**4498 3-Cyclohexyldodecane**

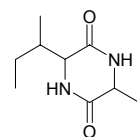
$C_{18}H_{36}$  (252.49). Source: XI YANG SHEN *Panax quinquefolium*. Ref: 2.

**4499 2-(p-Cyclohexyl-phenoxy)ethanol**

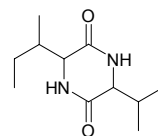
$C_{14}H_{20}O_2$  (220.31). Source: WU WEI ZI *Schisandra chinensis*. Ref: 2.

**4500 Cyclo-(Ile-Ala)**

$C_9H_{16}N_2O_2$  (184.24). Source: SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. Ref: 2487.

**4501 Cyclo-(Ile-Val)**

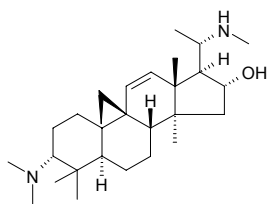
$C_{11}H_{20}N_2O_2$  (212.29). Source: SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. Ref: 2487, 4551.



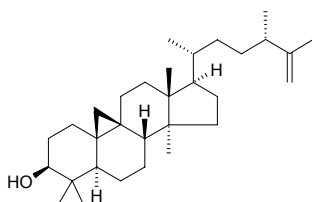


**4502 Cyclokoreanine B**

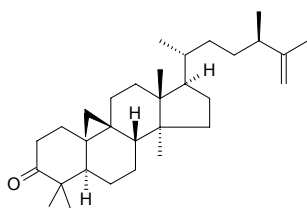
[10413-97-5]  $C_{28}H_{50}N_2O$  (430.72). mp 235–236°C. Source: HUANG YANG MU YE *Buxus microphylla* var. *sinica*. Ref: 6.

**4503 Cyclolaudenol**

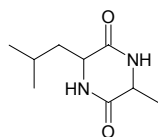
[511-61-5]  $C_{31}H_{52}O$  (440.76). mp 125°C. Source: SHUI LONG GU *Polypodium niponicum*, YA PIAN *Papaver somniferum*. Ref: 6.

**4504 Cyclolaudenone**

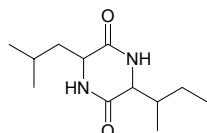
[2315-13-1]  $C_{32}H_{54}O$  (454.79). Source: YA PIAN *Papaver somniferum*. Ref: 6.

**4505 Cyclo-(Leu-Ala)**

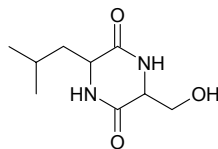
$C_9H_{16}N_2O_2$  (184.24). Source: SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. Ref: 2487.

**4506 Cyclo-(Leu-Ile)**

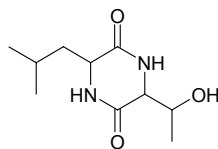
$C_{12}H_{22}N_2O_2$  (226.32). Source: SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. Ref: 2487.

**4507 Cyclo-(Leu-Ser)**

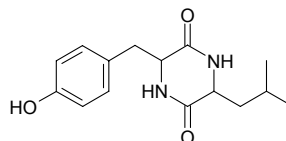
$C_9H_{16}N_2O_3$  (200.24). Needles (MeOH), mp 240–242°C. Source: SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. Ref: 2487, 4551.

**4508 Cyclo-(Leu-Thr)**

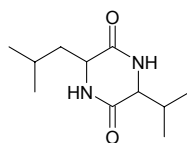
$C_{10}H_{18}N_2O_3$  (214.27). Needles (MeOH), mp 280–282°C. Source: SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. Ref: 2487, 4551.

**4509 Cyclo-(Leu-Tyr)**

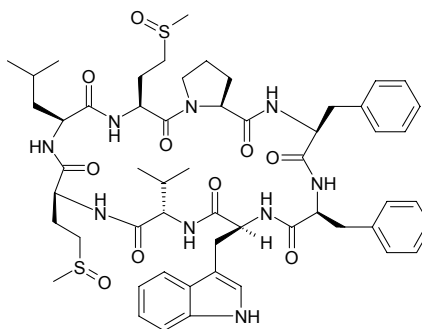
$C_{15}H_{20}N_2O_3$  (276.34). Needles (MeOH), mp 260–222°C. Source: SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. Ref: 2487, 4551.

**4510 Cyclo-(Leu-Val)**

$C_{11}H_{20}N_2O_2$  (212.29). Source: SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*], ZHANG YE BAN XIA *Pinellia pedatisecta*. Ref: 660, 2487.

**4511 Cyclolinopeptide F**

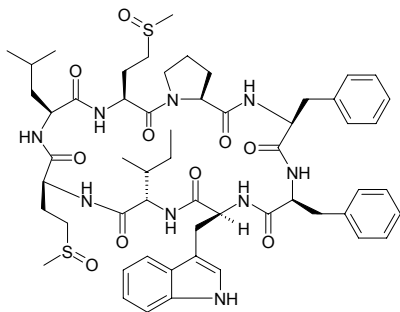
$C_{55}H_{73}N_9O_{10}S_2$  (1084.38). Colorless powder,  $[\alpha]_D = -71.4^\circ$  ( $c = 0.21$ , MeOH). Source: YA MA ZI *Linum usitatissimum*. Ref: 754.



**4512 Cyclolinopeptide G**

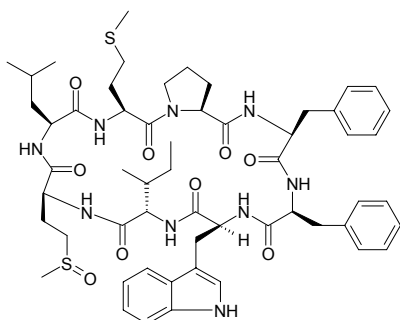
$C_{56}H_{75}N_9O_{10}S_2$  (1098.4). Colorless powder,  $[\alpha]_D = -66.6^\circ$  ( $c = 0.2$ , MeOH).

Source: YA MA ZI *Linum usitatissimum*. Ref: 754.

**4513 Cyclolinopeptide H**

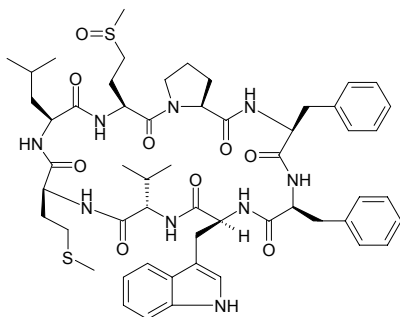
$C_{56}H_{75}N_9O_9S_2$  (1082.41). Colorless powder,  $[\alpha]_D = -87.7^\circ$  ( $c = 0.15$ , MeOH).

Source: YA MA ZI *Linum usitatissimum*. Ref: 754.

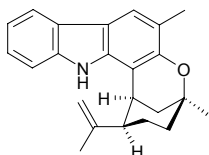
**4514 Cyclolinopeptide I**

$C_{55}H_{73}N_9O_9S_2$  (1068.38). Colorless powder,  $[\alpha]_D = -60.6^\circ$  ( $c = 0.2$ , MeOH).

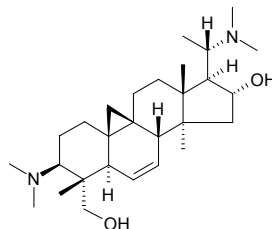
Source: YA MA ZI *Linum usitatissimum*. Ref: 754.

**4515 Cyclomahanimbine**

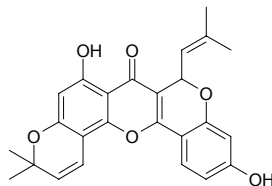
[25488-33-9]  $C_{23}H_{25}NO$  (331.46). Source: JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*]. Ref: 11.

**4516 Cyclomicrophylline A**

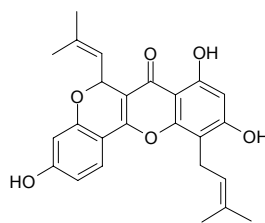
$C_{28}H_{48}N_2O_2$  (444.71). Pharm: AChE inhibitor ( $IC_{50} = (235 \pm 3) \mu\text{mol/L}$ , control Physostigmine,  $IC_{50} = (0.041 \pm 0.001) \mu\text{mol/L}$ ); BChE inhibitor ( $IC_{50} = (2.43 \pm 0.05) \mu\text{mol/L}$ , control Physostigmine,  $IC_{50} = (0.875 \pm 0.008) \mu\text{mol/L}$ ). Source: DUO RU TOU HUANG YANG *Buxus papillosa* (leaf). Ref: 5216.

**4517 Cyclomorusin**

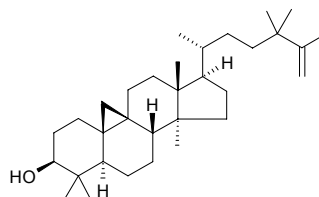
Cyclomulberochromene [62596-34-3]  $C_{25}H_{22}O_6$  (418.45). Pale yellow prisms (MeOH), mp 256–257°C, mp 233–234°C,  $[\alpha]_D^{20} = +20^\circ$  ( $c = 0.15$ , MeOH). Source: FEI HOU MIAN BAO GUO *Artocarpus altilis*, MIAN BAO GUO *Artocarpus incisa* [Syn. *Artocarpus communis*] (root cortex: yield = 0.52%), SANG BAI PI *Morus alba*, SANG ZHI *Morus alba*. Ref: 6, 1521, 2513, 4682.

**4518 Cyclomulberrin**

[19275-51-5]  $C_{25}H_{24}O_6$  (420.47). mp 231–232°C. Source: SANG BAI PI *Morus alba*, SANG ZHI *Morus alba*. Ref: 6.

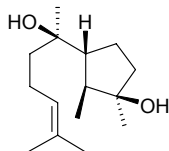
**4519 Cycloneolitsol**

[28840-92-8]  $C_{32}H_{54}O$  (454.79). White needles (petroleum ether-EtOAc), mp 176–178°C. Source: YUN NAN SHI XIAN TAO *Pholidota yunnanensis* (whole herb). Ref: 4814.



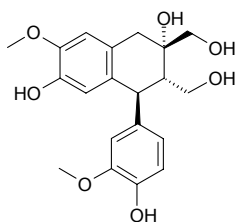
**4520 Cyclonerodiol**

[28834-06-2] C<sub>15</sub>H<sub>28</sub>O<sub>2</sub> (240.39). Source: *Myrothecium* sp. Ref: 4457.

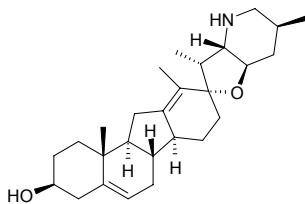
**4521 (+)-Cycloolivil**

[3064-05-9] C<sub>20</sub>H<sub>24</sub>O<sub>7</sub> (376.41). Source: DU ZHONG *Eucommia ulmoides*.

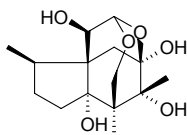
Ref: 2.

**4522 Cyclopamine**

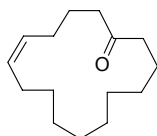
11-Deoxojervine [4449-51-8] C<sub>27</sub>H<sub>41</sub>NO<sub>2</sub> (411.63). mp 237~238°C. Pharm: Teratogen. Source: BAI LI LU *Veratrum album*, JIA ZHOU LI LU *Veratrum californicum*, LI LU *Veratrum nigrum*. Ref: 6, 658, 1521.

**4523 Cycloparvifloralone**

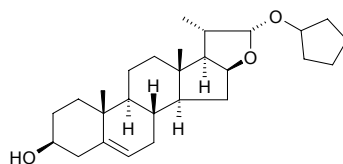
C<sub>15</sub>H<sub>24</sub>O<sub>6</sub> (300.35). Pharm: Neurotrophic bioassay inactive (primary culture of rat cortical neurons, 0.1-10 μmol/L)<sup>[3046]</sup>. Source: *Illicium merrillianum* (pericarp: yield = 0.010%dw). Ref: 3046.

**4524 5-cis-Cyclopentadecen-1-one**

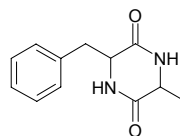
C<sub>15</sub>H<sub>26</sub>O (222.37). Source: SHE XIANG *Moschus moschiferus*, *Moschus berezovskii*, *Moschus sifanicus*. Ref: 2.

**4525 22-Cyclopentyl-22-deisopenty-3β-hydroxyl-furostanol**

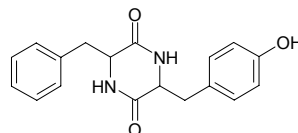
C<sub>27</sub>H<sub>42</sub>O<sub>3</sub> (414.63). Colorless mass crystals, mp 262~264°C. Source: WU HUA GUO *Ficus carica*. Ref: 814.

**4526 Cyclo-(Phe-Ala)**

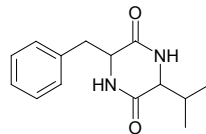
C<sub>12</sub>H<sub>14</sub>N<sub>2</sub>O<sub>2</sub> (218.26). Source: SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*], ZHANG YE BAN XIA *Pinellia pedatisecta*. Ref: 2487, 3195, 4551.

**4527 Cyclo-(Phe-Tyr)**

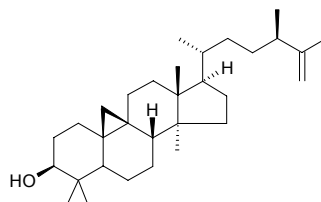
C<sub>18</sub>H<sub>18</sub>N<sub>2</sub>O<sub>3</sub> (310.36). Needles (MeOH), mp 291~293°C. Source: SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. Ref: 2487, 4551.

**4528 Cyclo-(Phe-Val)**

C<sub>14</sub>H<sub>18</sub>N<sub>2</sub>O<sub>2</sub> (246.31). Source: SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. Ref: 2487.

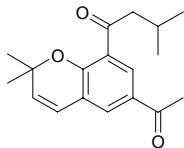
**4529 Cyclopholidonol**

C<sub>31</sub>H<sub>52</sub>O (440.76). White needles (petroleum ether-EtOAc), mp 169~171°C. Source: YUN NAN SHI XIAN TAO *Pholidota yunnanensis* (whole herb). Ref: 4814.

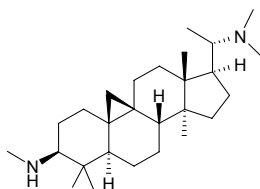


**4530 Cyclophiloselloidone**

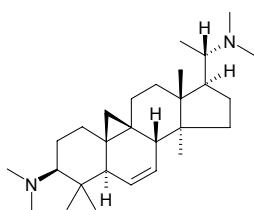
$C_{18}H_{22}O_3$  (286.37). Source: MAO DA DING CAO *Gerbera piloselloides*. Ref: 6.

**4531 Cycloprotobuxine C**

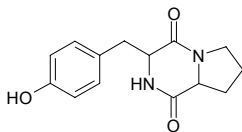
[1936-70-5]  $C_{27}H_{48}N_2$  (400.70). Pharm: Laxative. Source: JIN SHU HUANG YANG *Buxus sempervirens*, MA LAI XI YA HUANG YANG *Buxus malaiana*, XI BAN YA HUANG YANG *Buxus balearica*. Ref: 658.

**4532 Cycloprotobuxine C<sub>1</sub>**

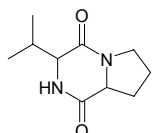
$C_{28}H_{48}N_2$  (412.71). Pharm: AChE inhibitor ( $IC_{50} = (38.8 \pm 2.2) \mu\text{mol/L}$ , control Physostigmine,  $IC_{50} = (0.041 \pm 0.001) \mu\text{mol/L}$ )<sup>[5216]</sup>; BChE inhibitor ( $IC_{50} = (2.73 \pm 0.07) \mu\text{mol/L}$ , control Physostigmine,  $IC_{50} = (0.875 \pm 0.008) \mu\text{mol/L}$ )<sup>[5216]</sup>. Source: DUO RU TOU HUANG YANG *Buxus papillosa* (leaf). Ref: 5216.

**4533 Cyclo-(Pro-Tyr-)**

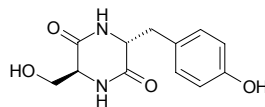
$C_{14}H_{16}N_2O_3$  (260.30). White powder. Source: DUO XIONG RUI SHANG LU *Phytolacca polyandra*. Ref: 2255.

**4534 Cyclo-(Pro-Val)**

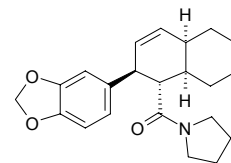
Cyclo-(Val-Pro)  $C_{10}H_{16}N_2O_2$  (196.25). White crystals (MeOH), mp 186~188°C; needles (MeOH), mp 145~147°C. Source: JIN TIE SUO *Psammosilene tunicoides*, SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. Ref: 2430, 2487, 4551.

**4535 Cyclo-(D-seryl-L-tyrosyl)**

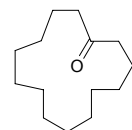
$C_{12}H_{14}N_2O_4$  (250.26). White acicular crystals, mp 256~259°C,  $[\alpha]_D^{19} = +18.4^\circ$  ( $c = 1.09$ ). Source: CHUAN SHAN JIA *Manis pentadactyla*. Ref: 110.

**4536 Cyclostachine A**

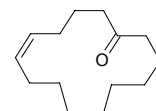
$C_{22}H_{27}NO_3$  (355.47). Pharm: Antibacterial; anticonvulsant; antifungal; sedative. Source: MAO SUI HU JIAO *Piper trichostachyon*. Ref: 661.

**4537 Cyclotetradecan-1-one**

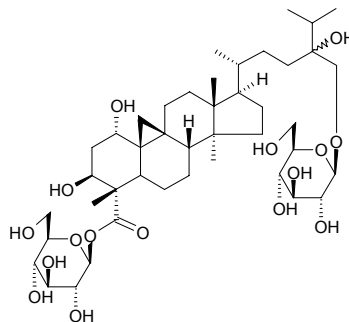
[3603-99-4]  $C_{14}H_{26}O$  (210.36). Source: SHE XIANG *Moschus moschiferus*, *Moschus berezovskii*, *Moschus sifanicus*. Ref: 2.

**4538 5-cis-Cyclotetradecen-1-one**

$C_{14}H_{24}O$  (208.35). Source: SHE XIANG *Moschus moschiferus*, *Moschus berezovskii*, *Moschus sifanicus*. Ref: 2.

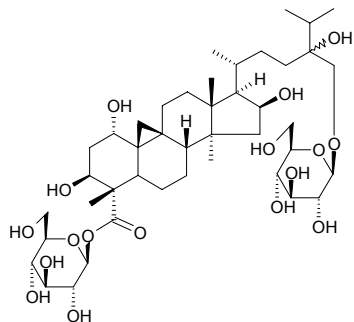
**4539 Cyclotricuspidoside A**

28,31-Di-O-β-D-glucopyranosides of 1α,3β,24ζ,31-tetrahydroxy-24ζ-methyl-cycloartan-28-oic acid [239794-21-9]  $C_{43}H_{72}O_{16}$  (845.04).  $[\alpha]_D^{23} = +24.5^\circ$  ( $c = 1.0$ , MeOH). Source: SAN YING JIAN GUA LOU *Trichosanthes tricuspidata*. Ref: 2316.

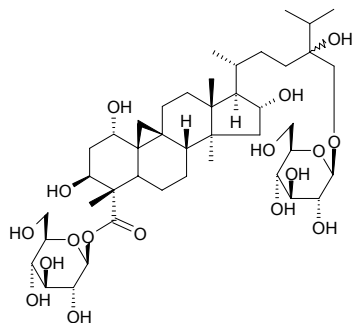


**4540 Cyclotricuspidoside B**

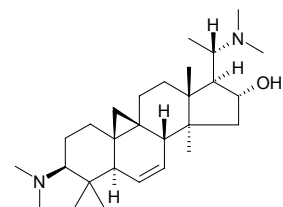
1 $\alpha$ ,3 $\beta$ ,16 $\beta$ ,24 $\zeta$ ,31-Pentahydroxy-24 $\zeta$ -methylcycloartan-28-oic acid  
 [239794-22-0] C<sub>43</sub>H<sub>72</sub>O<sub>17</sub> (861.04). [ $\alpha$ ]<sub>D</sub><sup>23</sup> = +35.9° (c = 1.0, MeOH). Source:  
 SAN YING JIAN GUA LOU *Trichosanthes tricuspidata*. Ref: 2316.

**4541 Cyclotricuspidoside C**

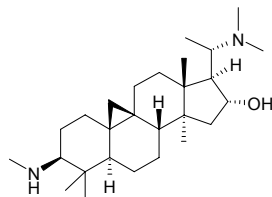
1 $\alpha$ ,3 $\beta$ ,16 $\alpha$ ,24 $\zeta$ ,31-Pentahydroxy-24 $\zeta$ -methylcycloartan-28-oic C<sub>43</sub>H<sub>72</sub>O<sub>17</sub>  
 (861.04). [ $\alpha$ ]<sub>D</sub><sup>23</sup> = +12.1° (c = 1.0, MeOH). Source: SAN YING JIAN GUA  
 LOU *Trichosanthes tricuspidata*. Ref: 2316.

**4542 Cyclovirobuxine A**

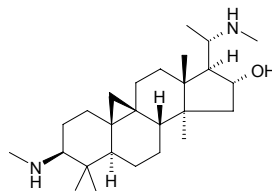
C<sub>28</sub>H<sub>48</sub>N<sub>2</sub>O (428.71). Pharm: AChE inhibitor (IC<sub>50</sub> = (105.7±5.6)μmol/L, control Physostigmine, IC<sub>50</sub> = (0.041±0.001)μmol/L)<sup>[5216]</sup>; BChE inhibitor (IC<sub>50</sub> = (2.05±0.05)μmol/L, control Physostigmine, IC<sub>50</sub> = (0.875±0.008)μmol/L). Source: DUO RU TOU HUANG YANG *Buxus papillosa* (leaf). Ref: 5216.

**4543 Cyclovirobuxine**

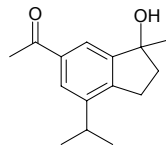
C<sub>27</sub>H<sub>48</sub>N<sub>2</sub>O (416.70). Pharm: Antiarrhythmic; increases coronary flow; laxative; used in treatment of rheumatic heart disease and coronary heart disease; vasodilator (peripheral). Source: JIN SHU HUANG YANG *Buxus sempervirens*, MA LAI XI YA HUANG YANG *Buxus malaiana*, WA LI XI HUANG YANG *Buxus wallichiana*, XIAO YE HUANG YANG *Buxus microphylla*, YIN BAI HUANG YANG *Buxus argentea*. Ref: 658.

**4544 Cyclovirobuxine D**

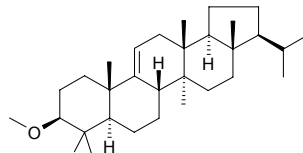
[860-29-7] C<sub>26</sub>H<sub>46</sub>N<sub>2</sub>O (402.67). mp 221~224°C. Pharm: Antiarrhythmic; cardiotonic; increases coronary flow; against acute ischemia myocardial; vasodilator (peripheral). Source: HUANG YANG MU YE *Buxus microphylla* var. *sinica*. Ref: 6, 658.

**4545 Cyllindrene**

C<sub>15</sub>H<sub>20</sub>O<sub>2</sub> (232.33). Pharm: Vasoconstriction inhibitor (rbt, *in vitro*, strip of artery sample, contraction caused by noradrenaline, 0.3mmol/L, InRt = 40%) Source: BAI MAO GEN<sup>(1)</sup> *Imperata cylindrica* var. *major*. Ref: 5501.

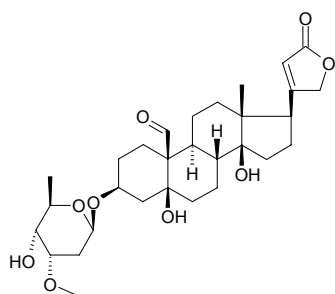
**4546 Cyllindrin**

[17904-55-1] C<sub>31</sub>H<sub>52</sub>O (440.76). mp 269~270°C. Source: BAI MAO GEN<sup>(1)</sup> *Imperata cylindrica* var. *major*, DAN ZHU YE *Lophatherum gracile*, MAO CAO YE *Imperata cylindrica* var. *major*, DAN ZHU YE GEN *Lophatherum gracile*. Ref: 6.

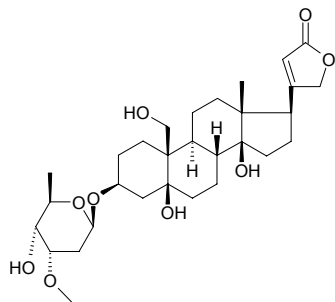


**4547 Cymarín**

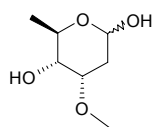
[508-77-0] C<sub>30</sub>H<sub>44</sub>O<sub>9</sub> (548.68). mp 148°C, 185–187°C. **Pharm:** Antineoplastic; antimitotic; cardiotoxic (dog, cures experimental cardiovascular insufficiency); cytotoxic (KB, ED<sub>50</sub> < 0.1 µg/mL); diuretic (rat); increases blood pressure; prevents hardening of cardiac muscle and vasa coronaria (rbt); promotes resynthesis of heart glycogen; reduces symptom of acute dysemia in myocarditis (rbt); LD<sub>50</sub> (cat, iv) = 0.095 mg/kg. **Source:** CHUN FU SHOU CAO *Adonis vernalis*, FU SHOU CAO *Adonis amurensis*, HEI GANG LIU *Periploca nigrescens*, HUANG WAN *Senecio nemorensis*, JIN HUANG CE JIN ZHAN HUA *Adonis chrysocyatha*, KANG PI DU MAO XUAN HUA *Strophanthus kombe*, LUO BU MA *Apocynum venetum*. **Ref:** 4, 5, 6, 658, 2498.

**4548 Cymarol**

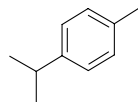
[465-84-9] C<sub>30</sub>H<sub>46</sub>O<sub>9</sub> (550.70). mp 240–243°C. **Source:** FU SHOU CAO *Adonis amurensis*. **Ref:** 6.

**4549 Cymarose**

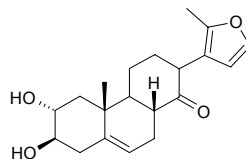
[579-04-4] C<sub>7</sub>H<sub>14</sub>O<sub>4</sub> (162.19). **Source:** DIAN DI MEI YE CHA YE HUA *Apocynum androsaemifolium*, JIA ZHU TAO MA *Apocynum cannabinum*, KANG PI DU MAO XUAN HUA *Strophanthus kombe*, LUO BU MA *Apocynum venetum*, XI LA GANG LIU *Periploca graeca*. **Ref:** 658.

**4550 p-Cymene**

4-Isopropyltoluene [99-87-6] C<sub>10</sub>H<sub>14</sub> (134.22). **Pharm:** Antifungal; antitussive (dispels phlegm); insecticidal; analgesic (local, pain due to rheumatism); antifungal (*Aspergillus niger* KCCM11239, MFC = 0.78 mg/mL; *Aspergillus flavus* KCCM11453, MFC = 1.56 mg/mL; *Candida albicans* KCCM11282, MFC > 6.25 mg/mL; *Candida utilis* KCCM11356, MFC > 6.25 mg/mL; *Cryptococcus neoformans* KCCM0564, MFC = 6.25 mg/mL; *Trichosporon mucoides* KCCM50570, MFC = 1.56 mg/mL; *Trichophyton rubrum* ATCC6345, MFC = 0.39 mg/mL; *Blastoschyzomyces capitatus* KCCM50270, MFC = 3.12 mg/mL)<sup>[4079]</sup>; LD<sub>50</sub> (rat, orl) = 4.75 g/kg. **Source:** BEI HAI DANG GUI *Angelica acutiloba* var. *sugiyamae*, DA YE XIANG RU *Mosla dianthera*, DONG DANG GUI *Angelica acutiloba* [Syn. *Ligusticum acutilobum*], DONG LING CAO *Rabdosia rubescens*, DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*], DU SONG SHI *Juniperus rigida*, GAN JIANG *Zingiber officinale*, GANG SONG *Baeckea frutescens*, HOU PO *Magnolia officinalis*, HUANG HAO *Artemisia scoparia* [Syn. *Artemisia capillaris* var. *scoparia*], HUO XIANG *Agastache rugosus*, JIAN ZI SU YE *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*], JING JIE *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*], JU PI *Citrus reticulata*, KONG SHI CHUN *Ulva pertusa*, KUAN YE QIANG HUO *Notopterygium forbesii* [Syn. *Notopterygium franchetii*], KUO YE XIE CAO *Valeriana officinalis* var. *latifolia*, LIAN QIAO *Forsythia suspensa*, LIAO XI XIN *Asarum heterotropoides* var. *mandshuricum*, MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*], PEI LAN *Eupatorium fortunei* (volatile oil: content = 3.33%), SHENG JIANG *Zingiber officinale*, TU JING JIE *Chenopodium ambrosioides*, WU SE MEI *Lantana camara*, WU WEI ZI *Schisandra chinensis*, XI XIN *Asarum sieboldii*, XING REN *Prunus armeniaca*, YANG SHI CAO *Achillea millefolium*, YIN CHEN HAO *Artemisia capillaris*, ZHI ZHU XIANG *Valeriana jatamansii* [Syn. *Valeriana wallichii*], CHAO XIAN DA BAI LI XIANG *Thymus magnus*, WU MAI BAI LI XIANG *Thymus quinquecostatus*, occurs in many plants (very widely distributed in plant oils). **Ref:** 2, 658, 660, 4079, 5501.

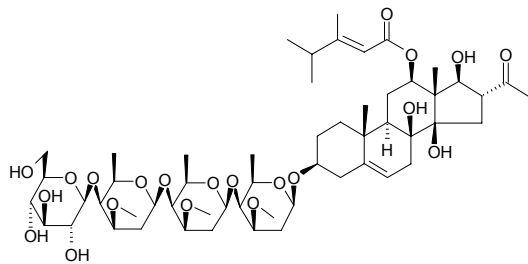
**4551 Cynajapogenin A**

C<sub>20</sub>H<sub>26</sub>O<sub>4</sub> (330.43). **Source:** BAI WEI *Cynanchum atratum*, RI BEN NIU PI XIAO *Cynanchum japonicum* **Ref:** 1521.

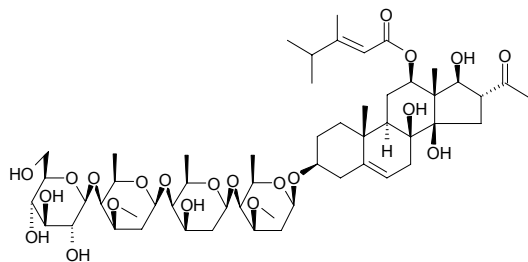


**4552 Cynanauricoside A**

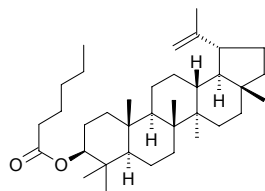
Cauda-3-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-cymaropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-ol  
eandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-cymaropyranoside C<sub>55</sub>H<sub>88</sub>O<sub>21</sub> (1085.30). White  
amorphous powder, mp 172~176°C. Source: ER YE NIU PI XIAO  
*Cynanchum auriculatum*. Ref: 852.

**4553 Cynanauricoside B**

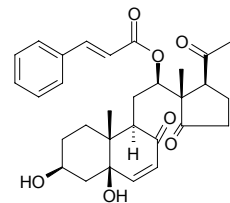
Cauda-3-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-  
digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-cymaropyranoside C<sub>54</sub>H<sub>86</sub>O<sub>21</sub> (1071.27).  
White amorphous powder. Source: ER YE NIU PI XIAO *Cynanchum*  
*auriculatum*. Ref: 852.

**4554 Cynanester A**

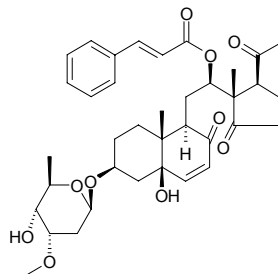
C<sub>36</sub>H<sub>60</sub>O<sub>2</sub> (524.88). mp 156~158°C (acetone). Source: E RONG TENG  
*Cynanchum chinense*. Ref: 212.

**4555 Cynaphylloside**

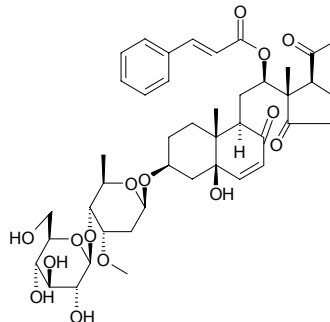
12(*R*)-*O*-Cinnamoyloxy-3 $\beta$ ,5 $\beta$ -dihydroxy-8,14-seco-17 $\beta$ -pregn-6-ene-8,14,  
20-trione C<sub>30</sub>H<sub>36</sub>O<sub>7</sub> (508.62). White amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>21</sup> = -115.8° (*c* =  
0.61, MeOH). Source: WU YE BAI QIAN *Cynanchum aphyllum* (aerial  
parts). Ref: 4218.

**4556 Cynaphylloside A**

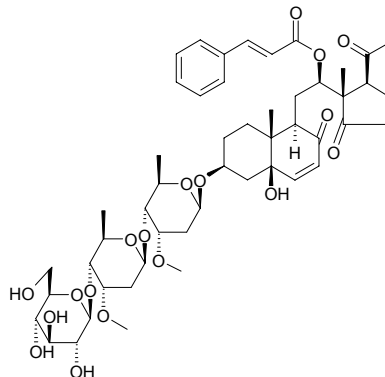
C<sub>37</sub>H<sub>48</sub>O<sub>10</sub> (652.79). White amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>21</sup> = -63.9° (*c* = 0.81,  
MeOH). Source: WU YE BAI QIAN *Cynanchum aphyllum* (aerial parts). Ref:  
4218.

**4557 Cynaphylloside B**

C<sub>43</sub>H<sub>58</sub>O<sub>15</sub> (814.93). White amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>21</sup> = -63.8° (*c* = 0.89,  
MeOH). Source: WU YE BAI QIAN *Cynanchum aphyllum* (aerial parts). Ref:  
4218.

**4558 Cynaphylloside C**

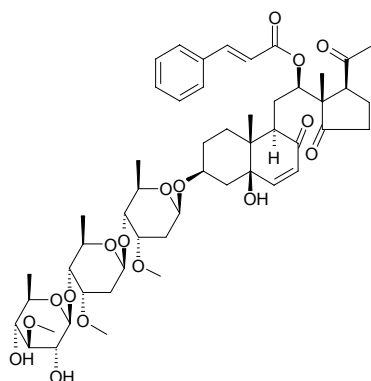
C<sub>50</sub>H<sub>70</sub>O<sub>18</sub> (959.10). White amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>21</sup> = -42.4° (*c* = 0.96,  
MeOH). Source: WU YE BAI QIAN *Cynanchum aphyllum* (aerial parts). Ref:  
4218.



**4559 Cynaphylloside D**

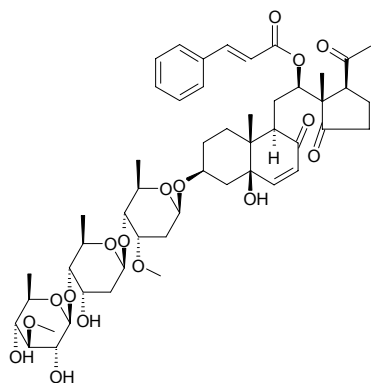
$C_{51}H_{72}O_{17}$  (957.13). White amorphous powder,  $[\alpha]_D^{21} = -38.2^\circ$  ( $c = 1.10$ , MeOH).

Source: WU YE BAI QIAN *Cynanchum aphyllum* (aerial parts). Ref: 4218.

**4560 Cynaphylloside E**

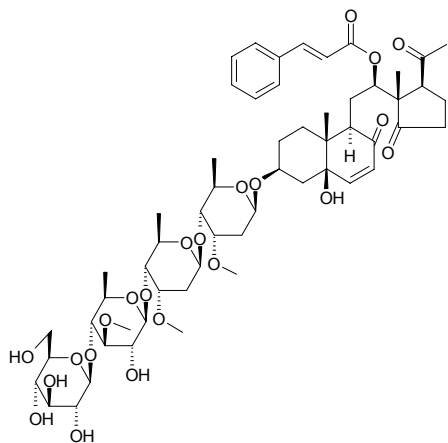
$C_{50}H_{70}O_{17}$  (943.11). White amorphous powder,  $[\alpha]_D^{21} = -61.2^\circ$  ( $c = 0.50$ , MeOH).

Source: WU YE BAI QIAN *Cynanchum aphyllum* (aerial parts). Ref: 4218.

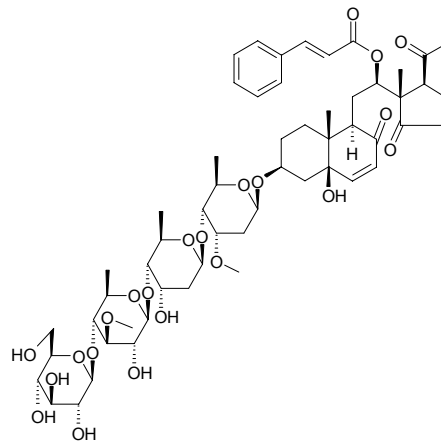
**4561 Cynaphylloside F**

$C_{57}H_{82}O_{22}$  (1119.28). White amorphous powder,  $[\alpha]_D^{21} = -53.9^\circ$  ( $c = 0.59$ , MeOH).

Source: WU YE BAI QIAN *Cynanchum aphyllum* (aerial parts). Ref: 4218.

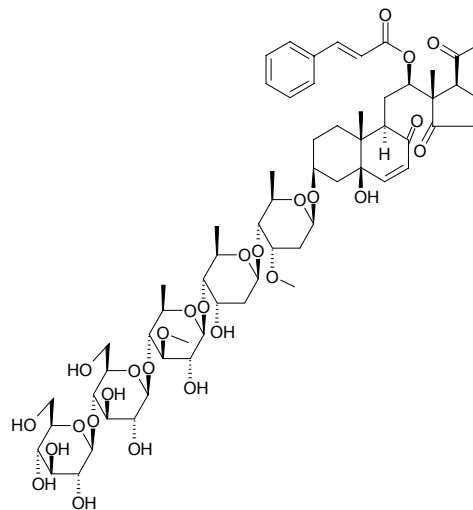
**4562 Cynaphylloside G**

12(*R*)-*O*-Cinnamoyloxy-3 $\beta$ ,5 $\beta$ -dihydroxy-8,14-seco-17 $\alpha$ -pregn-6-ene-8,14,20-trione  $C_{56}H_{80}O_{22}$  (1105.25). White amorphous powder,  $[\alpha]_D^{21} = -52.6^\circ$  ( $c = 0.91$ , MeOH). Source: WU YE BAI QIAN *Cynanchum aphyllum* (aerial parts). Ref: 4218.

**4563 Cynaphylloside H**

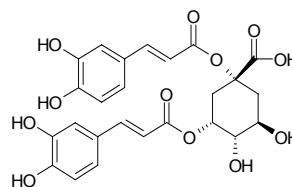
$C_{62}H_{90}O_{27}$  (1267.39). White amorphous powder,  $[\alpha]_D^{21} = -56.1^\circ$  ( $c = 0.71$ , MeOH).

Source: WU YE BAI QIAN *Cynanchum aphyllum* (aerial parts). Ref: 4218.

**4564 Cynarin**

1,5-Di-*O*-caffeoylquinic acid [1182-34-9]  $C_{25}H_{24}O_{12}$  (516.46). mp 227~228°C.

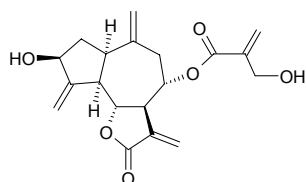
Pharm: Antihepatotoxin; choloretic; antihypercholesterolemic (cholesterol in serum). Source: CAI JI *Cynara scolymus*, CI CAI JI *Cynara cardunculus*, HUANG WAN *Senecio nemorensis*. Ref: 6, 658.



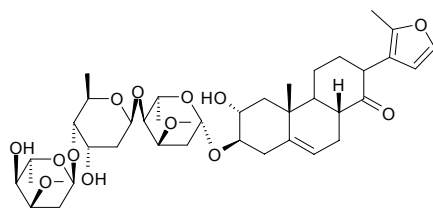


**4565 Cynaropicrin**

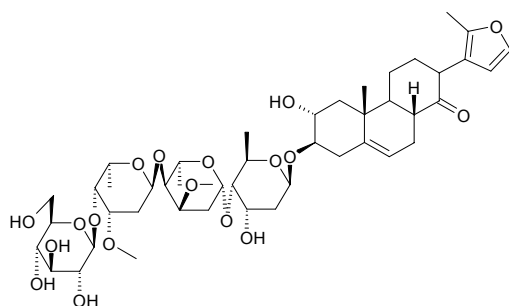
[35730-78-0] C<sub>19</sub>H<sub>22</sub>O<sub>6</sub> (346.38). Noncrystal, [α]<sub>D</sub><sup>20</sup> = +108.6°. **Pharm:** Anti-inflammatory (modulator of cytokine network: inhibits TNF-α production in LPS-activated RAW264.7 cells, IC<sub>50</sub> = 8.2 μmol/L, sulphydryl (thiol, -SH) compounds such as L-cysteine, abrogated the inhibitory effect of cynaropicrin)<sup>[4416]</sup>; cytotoxic (HeLa, ED<sub>50</sub> = 5 μg/mL)<sup>[661]</sup>. **Source:** CAI JI *Cynara scolymus*, CI CAI JI *Cynara cardunculus*, AN BEI JU *Amberboa muricata*, MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*]. **Ref:** 661, 4416.

**4566 Cynascyroside D**

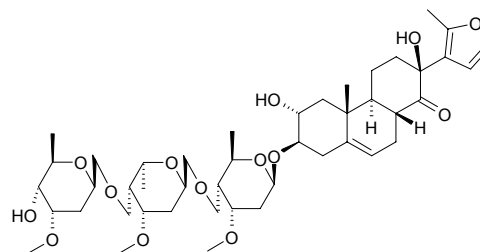
Cynajapogenin A 3-*O*-*L*-cymaropyranosyl-(1→4)-*β*-*D*-digitoxopyranosyl-(1→4)-*β*-*L*-cymaropyranoside C<sub>40</sub>H<sub>60</sub>O<sub>13</sub> (748.92). Pale yellow powder, mp 102~104°C, [α]<sub>D</sub><sup>23</sup> = -54.3° (*c* = 0.1, MeOH). **Source:** CHAO FENG CAO *Cynanchum ascyrifolium* (root). **Ref:** 4207.

**4567 Cynascyroside E**

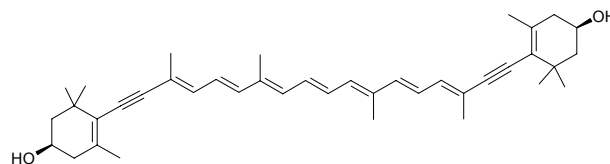
Cynajapogenin A 3-*O*-*β*-*D*-glucopyranosyl-(1→4)-*α*-*L*-diginopyranosyl-(1→4)-*β*-*L*-cymaropyranosyl-(1→4)-*β*-*D*-digitoxopyranoside C<sub>46</sub>H<sub>70</sub>O<sub>18</sub> (911.06). Pale yellow powder, mp 135~137°C, [α]<sub>D</sub><sup>23</sup> = -65.0° (*c* = 0.1, MeOH). **Source:** CHAO FENG CAO *Cynanchum ascyrifolium* (root). **Ref:** 4207.

**4568 Cynatroside B**

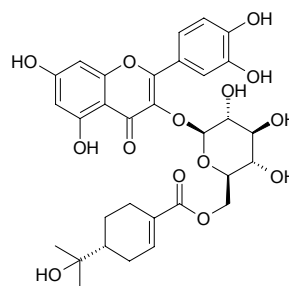
C<sub>43</sub>H<sub>70</sub>O<sub>14</sub> (835.05). **Pharm:** AChE inhibitor (dose-dependent manner, reversible and non-competitive, IC<sub>50</sub> = 3.6 μmol/L); anti-amnesic (mouse, 1.0 mg/kg orl, ameliorates memory impairments induced by scopolamine (1.0 mg/kg body weight sc) as measured in the passive avoidance and the Morris water maze tests, Cynatroside B may hold significant therapeutic value in alleviating certain memory impairments observed in Alzheimer's disease.). **Source:** BAI WEI *Cynanchum atratum* (root). **Ref:** 3365.

**4569 Cynthiaxanthin**

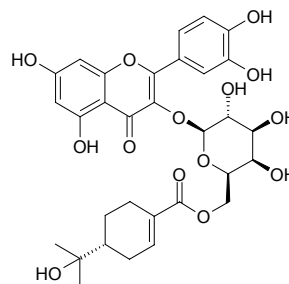
[28380-31-6] C<sub>40</sub>H<sub>52</sub>O<sub>2</sub> (564.86). mp 188~190°C. **Source:** HAI XIA *Panaeus orientalis*. **Ref:** 6.

**4570 Cypellogin A**

C<sub>31</sub>H<sub>34</sub>O<sub>14</sub> (630.61). Light yellow amorphous powder, [α]<sub>D</sub> = -7° (*c* = 0.1, MeOH). **Source:** *Eucalyptus cypellocarpa* (leaf). **Ref:** 4525.

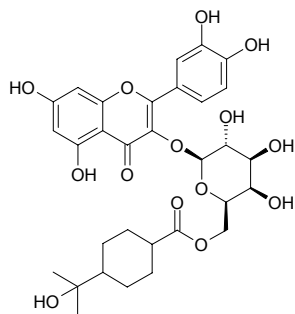
**4571 Cypellogin B**

C<sub>31</sub>H<sub>34</sub>O<sub>14</sub> (630.61). Light yellow amorphous powder, [α]<sub>D</sub> = +47° (*c* = 0.1, MeOH). **Source:** *Eucalyptus cypellocarpa* (leaf). **Ref:** 4525.

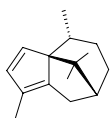


**4572 Cypellogin C**

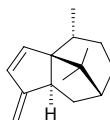
$C_{31}H_{32}O_{14}$  (632.62). Light yellow amorphous powder,  $[\alpha]_D^{20} = +10^\circ$  ( $c = 0.1$ , MeOH). Source: *Eucalyptus cypellocarpa* (leaf). Ref: 4525.

**4573 Cypera-2,4-diene**

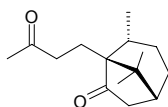
$C_{15}H_{22}$  (202.34). Source: KAN MAI NIANG ZHUANG SHA CAO *Cyperus alopecuroides* (essential oil). Ref: 5129.

**4574 (-)-Cypera-2,4(15)-diene**

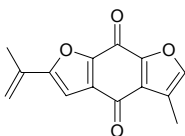
$C_{15}H_{22}$  (202.34). Source: XIANG FU *Cyperus rotundus* (essential oil). Ref: 5210.

**4575 (+)-Cyperadione**

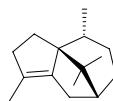
$C_{15}H_{24}O_2$  (236.36). Source: XIANG FU *Cyperus rotundus* (essential oil). Ref: 5210.

**4576 Cyperaquinone**

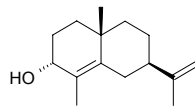
[26962-40-3]  $C_{14}H_{10}O_4$  (242.23). Source: QI PAN SHA CAO *Cyperus haspan*, *Cyperus* sp. Ref: 658.

**4577 Cyperene**

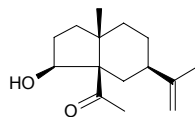
[2387-78-2]  $C_{15}H_{24}$  (204.36). bp 104°C/5mmHg. Source: SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*], XIANG FU *Cyperus rotundus*. Ref: 2, 6.

**4578 Cyperol**

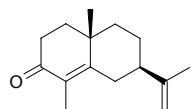
[20084-99-5]  $C_{15}H_{24}O$  (220.36). bp 147~150°C/8mmHg. Source: XIANG FU *Cyperus rotundus*. Ref: 6.

**4579 Cyperolone**

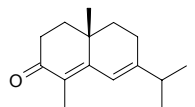
[13741-46-3]  $C_{15}H_{24}O_2$  (236.36). mp 41~42°C, bp 120°C/0.1mmHg. Source: XIANG FU *Cyperus rotundus*. Ref: 6.

**4580 α-Cyperone**

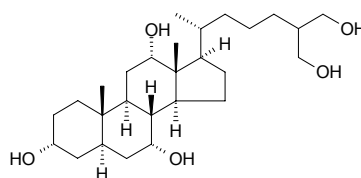
[473-08-5]  $C_{15}H_{22}O$  (218.34). bp (+) 177°C, (±) 128~129°C/2.8mmHg. Pharm: Platelet aggregation inhibitor (10μmol/L, InRt = 100%, antagonist of arachidonic acid). Source: XIANG FU *Cyperus rotundus* (dried rhizome: content = 0.23%<sup>[5501]</sup>; content = 0.19%<sup>[5508]</sup>). Ref: 6, 5501, 5508.

**4581 β-Cyperone**

$C_{15}H_{22}O$  (218.34). bp 175~176°C. Source: XIANG FU *Cyperus rotundus*. Ref: 6.

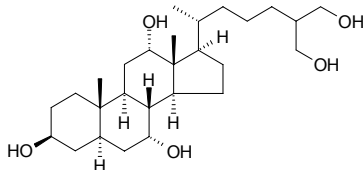
**4582 5α-Cyprinol**

[2952-70-7]  $C_{27}H_{48}O_5$  (452.68). mp 242~244°C. Source: LI YU DAN *Cyprinus carpio*. Ref: 6.

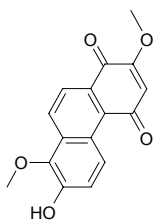


**4583 5 $\beta$ -Cyprinol**

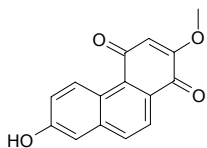
[2486-18-2] C<sub>27</sub>H<sub>48</sub>O<sub>5</sub> (452.68). Source: QING WA DAN *Rana nigromaculata*; *Rana plancyi*. Ref: 6.

**4584 Cypripedin**

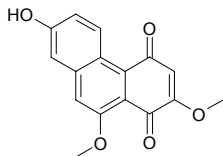
[8031-72-9] C<sub>16</sub>H<sub>12</sub>O<sub>5</sub> (284.27). Pharm: Dermatitic (causes contact dermatitis). Source: SHAO LAN *Cypripedium calceolus*. Ref: 658.

**4585 Cypritolbetquinone A**

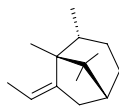
Densiflorol B; 7-Hydroxy-2-methoxy-1,4-phenanthraquinone C<sub>15</sub>H<sub>10</sub>O<sub>4</sub> (254.24). Red powder, mp 260~262°C. Source: DA HUA SHAO LAN *Cypripedium macranthum* [Syn. *Cypripedium tibeticum*] (rhizome), MI HUA SHI HU *Dendrobium densiflorum* (stem). Ref: 4863, 5171.

**4586 Cypritolbetquinone B**

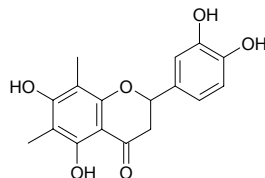
7-Hydroxy-2,10-dimethoxy-1,4-phenanthraquinone C<sub>16</sub>H<sub>12</sub>O<sub>5</sub> (284.27). Red powder, mp 260~262°C. Source: DA HUA SHAO LAN *Cypripedium macranthum* [Syn. *Cypripedium tibeticum*] (rhizome). Ref: 4863.

**4587 Cyprotene**

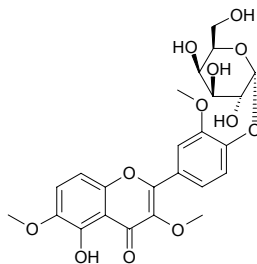
C<sub>14</sub>H<sub>24</sub> (192.35). Source: KAN MAI NIANG ZHUANG SHA CAO *Cyperus alopecuroides* (essential oil). Ref: 5129.

**4588 Cyrtominetin**

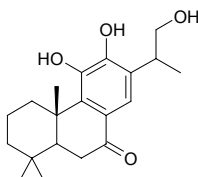
C<sub>17</sub>H<sub>16</sub>O<sub>6</sub> (316.31). Source: HUN TOU JI *Cyrtomium fortunei*. Ref: 6.

**4589 Cyrtophyllin**

C<sub>24</sub>H<sub>26</sub>O<sub>12</sub> (506.47). Gray yellow amorphous powder, mp 152~154°C. Pharm: Anti-inflammatory (rat, arthritis induced by egg white or glucosan); diuretic (rat, orl, 400mg/kg); LD<sub>50</sub> (mus, orl) ≥ 8g/kg, (mus, ip) = 5g/kg. Source: LU BIAN QING *Clerodendron cyrtophyllum*. Ref: 661.

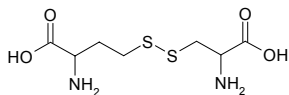
**4590 Cyrtophyllone B**

C<sub>20</sub>H<sub>28</sub>O<sub>4</sub> (332.44). mp 241.8°C, [α]<sub>D</sub><sup>20</sup> = -4.0° (c = 1.4, MeOH). Pharm: Antiproliferative (*in vitro*, MTT assay, CEM, IC<sub>50</sub> = 19.9μmol/L, control Doxorubicin, IC<sub>50</sub> = 0.036μmol/L, HeLa, IC<sub>50</sub> = 20.5μmol/L, Doxorubicin, IC<sub>50</sub> = 0.027μmol/L, HCT8, IC<sub>50</sub> = 59.3μmol/L, Doxorubicin, IC<sub>50</sub> = 0.024μmol/L, MCF7, IC<sub>50</sub> = 70.2μmol/L, Doxorubicin, IC<sub>50</sub> = 0.183μmol/L, B-16, IC<sub>50</sub> = 28.6μmol/L, Doxorubicin, IC<sub>50</sub> = 0.056μmol/L)<sup>[4940]</sup>. Source: *Aegiphila lhotzkyana* (root). Ref: 4940.

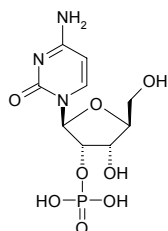


**4591 Cystathionine**

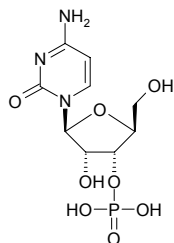
[6899-07-6]  $C_7H_{14}N_2O_4S_2$  (254.33). mp L (+) 312°C (dec). Source: MO GU *Agaricus campestris*. Ref: 6.

**4592 Cytidylic acid A**

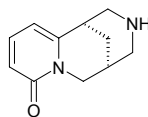
[85-94-9]  $C_9H_{14}N_3O_8P$  (323.20). mp 238~239°C. Source: GOU QI YE *Lycium chinense*. Ref: 6.

**4593 Cytidylic acid B**

[84-52-6]  $C_9H_{14}N_3O_8P$  (323.20). mp 233~234°C. Source: GOU QI YE *Lycium chinense*. Ref: 6.

**4594 Cytisine**

Baptitoxine; Sophorine [485-35-8]  $C_{11}H_{14}N_2O$  (190.25). mp (+) 155°C, ( $\pm$ ) 147°C;  $[\alpha]_D^{17} = -119^\circ$ , soluble in water, acetone, methanol, ethanol, chloroform, acetic ester, moderate soluble in benzene, insoluble in ether, petroleum ether.<sup>[5507]</sup> Pharm: Hallucinogen (causes illusion); respiratory stimulant (reflexive); supercharging for cerebral circulation; teratogen (rbt); LD<sub>50</sub> (mus, ip) = 18mg/kg. Source: AO MA JIN QUE HUA *Cytisus osmariensis*<sup>[5507]</sup>, DU DOU *Laburnum anagyroides*, GAO SHAN HUANG HUA *Thermopsis alpina*, HU SHENG YE YE JUE MING *Thermopsis alternifolia*, JING DOU *Ulex europaeus*<sup>[5507]</sup>, KU DOU ZI *Sophora alopecuroides*, KU SHEN SHI *Sophora flavescens* [Syn. *Sophora angustifolia*], KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*], MU MA DOU *Thermopsis lanceolata*, XIAO YE YE JUE MING *Thermopsis chinensis*, YE JUE MING *Thermopsis lupinoides*, YING ZHAO DOU *Spartium junceum*, ZI TENG *Wisteria sinensis*, ZI TENG ZI *Wisteria sinensis*. Ref: 4, 6, 593, 658, 5507.



Jiaju Zhou · Guirong Xie · Xinjian Yan

# Encyclopedia of Traditional Chinese Medicines

Molecular Structures, Pharmacological Activities,  
Natural Sources and Applications

## Vol.2

Isolated Compounds D-G

 Springer

Encyclopedia of Traditional Chinese Medicines  
Molecular Structures, Pharmacological Activities,  
Natural Sources and Applications



Jiaju Zhou • Guirong Xie • Xinjian Yan

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Traditional Chinese Medicines  
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Activities, Natural Sources and Applications

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# Preface

A significant preoccupation of modern traditional Chinese medicine (TCM) research has been the characterization of TCM components, such as pertain to their isolation, purification, structural determination, and pharmacological activity. As a reference tool, this *Encyclopedia of Traditional Chinese Medicines* presents a comprehensive and integrative work on surveying TCM plant sources, chemistry, pharmacology and medicinal effects and indications in a systematic manner.

This encyclopedia is an integrated achievement of a long-term TCM research project by the authors at the Chinese Academy of Sciences<sup>[1-4]</sup>, involving three parts and now organized in six volumes:

Part I (Volumes 1 to 4 and part of Volume 5) provides structural, physical, pharmacological and natural source information on 23,033 isolated chemicals captured from 5,535 references, basically up to year 2005. A great deal of effort has been paid on overlapping or contradictory data in order to provide readers with an accurate and reliable resource.

Part II (last part of Volume 5) describes 6,926 TCM plants and congeners, together with their medicinal effects and indications. The contents of Part I and Part II are all organized in alphabetical order.

Part III (Volume 6) includes seven indexes produced by a computer program. Based on the indexes, users can readily find concerned contents in multiple ways.

With this encyclopedia, the authors attempt to provide a bridge for the communication between the TCM system and Western medicinal systems, and a platform with multiple-subjects in support of research and development of the health sciences.

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Sep, 2010, Beijing

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# Introduction

This encyclopedia mainly consists two parts - compound and plant. Its core content is the structural and pharmacological information of 23,033 phytochemicals, as well as medical effects and indications of 6,926 plant species from which the phytochemicals were isolated. The compounds, i.e. phytochemicals, are ordered alphabetically, and their ordinal numbers are used as compound unique codes. The plant species are coded from T0001 to T6926. With this code system, the complicated “many to many” relationship between compounds and plants can be clearly expressed, and any individual compound or plant could be located easily in this 6 volumes book.

## 1. Compound Entry

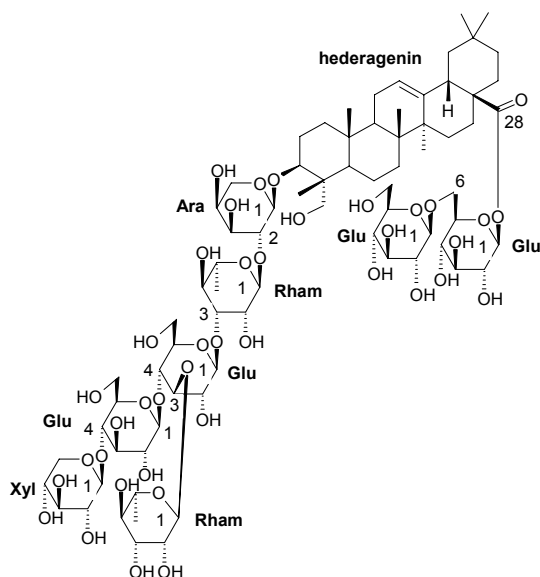
**Format of Compound Entry.** A compound entry starts with a title line, in which there are two items: the compound’s unique code and main name. Following the title line is the compound physical, pharmacological and source information, which may include 8 items:

**Title line (code number, main name)**

- A. Synonyms of the compound (if any);
- B. CASRN number (if any);
- C. Formula (relative molecular mass);
- D. Physicochemical properties;
- E. Pharmacological data (if any);
- F. Source(s);
- G. Reference(s);
- H. Graphic structure.

**Chemical Names and Synonyms.** Generally, a compound may have one scientific name and several trivial names. In the encyclopedia, based on original articles, we select one name as the “main name” (appeared at the title line of each compound entry), and use it to alphabetically order the 23,033 compounds in the first 5 volumes. The main name is either a scientific name or a trivial name. All of other names of each compound, if any, are presented after the title line.

**Stereochemistry of Chemical Structure.** We protracted all compound structures down to atom-bond level including complicated glycosides, with stereo-chemical information based on the data in the original papers. For example, the structure with full stereochemistry of compound 22,834 (isolated from CHUAN XU DUAN *Dipsacus asperoides*) is:



3-*O*-[ $\beta$ -*D*-Xylopyranosyl(1 $\rightarrow$ 4)]- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 4)]  
 [ $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 3)-  
 $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl hederagenin-  
 28-*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside

**Normalization of Pharmacological Data.** More than 8,000 TCM components in this encyclopedia have a variety of pharmacological data, which are valuable not only for the study of TCM, but also for the development of Western medicine. Because different expressions are used for the same kind of data in different articles, we have to define and normalize thousands pharmacological terms, so that the data could be expressed by a unified way, and be easily understood by readers.

The pharmacological terms in the encyclopedia are presented by a multi-layered structure. In the top layer, there are around 20 types of pharmacological activity terms, they are cytotoxic (*in vitro* anticancer), antineoplastic (*in vivo* anticancer), antibacterial, antifungal, antiviral, anti-HIV, anti-inflammatory, antioxidant, antimalarial, enzyme inhibitors, NO production inhibitors, cardiovascular activity, smooth muscle relaxant and stimulant, toxin and medium lethal dose LD<sub>50</sub>, and so forth. For each term there is a regulation about how to describe related pharmacological data. The following is an example:

**Term name** (*in vitro/in vivo*,  
 target cell **1**, quantitative data,  
 control Compound, control's data;  
 target cell **2**, quantitative data,  
 control Compound, control's data;  
 target cell **3**, quantitative data,  
 control Compound, control's data;  
 terse description of related mechanism if any).

Under the subtitle “Pharm:” of compound entry 248 (17-Acetoxyabda-7,12(*E*),14-triene), a set of bio-data is presented as follows:

Pharm: **Cytotoxic** (*in vitro*,  
 BT474 human galactophore cancer cell,  $IC_{50} = 4.7\mu\text{g/mL}$ ,  
 control Doxorubicin hydrochloride,  $IC_{50} = 0.08\mu\text{g/mL}$ ;  
 CHAGO human undifferentiated lung cancer cell,  $IC_{50} = 5.7\mu\text{g/mL}$ ,  
 control Doxorubicin hydrochloride,  $IC_{50} = 2.3\mu\text{g/mL}$ ;  
 HepG2 human liver cancer cell,  $IC_{50} = 6.5\mu\text{g/mL}$ ,  
 control Doxorubicin hydrochloride,  $IC_{50} = 0.9\mu\text{g/mL}$ ;  
 Kato3 human gastric cancer cell,  $IC_{50} = 5.3\mu\text{g/mL}$ ,  
 control Doxorubicin hydrochloride,  $IC_{50} = 1.7\mu\text{g/mL}$ ;  
 SW620 human colorectal adenocarcinoma cell,  $IC_{50} = 5.6\mu\text{g/mL}$ ,  
 control Doxorubicin hydrochloride,  $IC_{50} = 1.1\mu\text{g/mL}$ ).

In order to standardize abbreviations of cancer cells, such as BT474, CHAGO, etc., we defined and used 270 cancer cell codes (CCC) in the encyclopedia. For explanations of these codes, please see “Cancer Cell Codes in the Pharmacological Models” in Volume 1 of the encyclopedia.

By means of the formatted and structuralized methods, we normalized expressions of most pharmacological data appeared in the encyclopedia. For complete information of all 3367 normalized pharmacological activity terms, please see “Compound Pharmacological Activities Index” in Volume 6.

## 2. Plant Entry

**One Species One Entry.** Conventionally, a TCM name may include more than one plant species that have the same medical functions; therefore, a plant may not have an independent TCM entry and may be described under a TCM name. In this book, modern botany classification regulation is adopted and each plant species has an independent entry.

For example, traditional Chinese medicine DAN SHEN includes three species. They are equivalent in both effects and indications in TCM practice. In this encyclopedia, we defined three plant entries for each one of them.

T5680 *Salvia miltiorrhiza* (Lamiaceae); DAN SHEN; Danshen;  
 T5681 *Salvia miltiorrhiza* f. *alba* (Lamiaceae); BAI HUA DAN SHEN; Whiteflower Danshen;  
 T5688 *Salvia przewalskii* (Lamiaceae); GAN XI SHU WEI CAO; Przewalsk Sage.

With this method, we are able to smoothly link TCM information with that of modern botany.

**Simplified Latin Name.** For each TCM plant or TCM congener, four names are used in the encyclopedia. They are Latin name, English name, PIN-YIN name and Chinese



name, while the Chinese name only appears in TCM Plants PIN-YIN/Chinese Names Index” not in the main part of the book. For plant Latin name (e.g. scientific name), we use a simplified nomenclature, in which the nomenclator(s) information is not included. For example the Latin name of Chinese Angelica (DANG GUI) in the encyclopedia is “*Angelica sinensis*”, not “*Angelica sinensis* (Oliv.) Diels”.

**Family Name.** According to the “International Code of Botanical Nomenclature” (2007), the following eight authoritative family names are used in the encyclopedia. The family names of long usage, which are not used in are the encyclopedia, indicated in parentheses:

Apiaceae (Umbelliferae);  
 Arecaceae (Palmae);  
 Asteraceae (Compositae);  
 Brassicaceae (Cruciferae);  
 Clusiaceae (Guttiferae);  
 Fabaceae (Leguminosae);  
 Lamiaceae (Labiatae) and  
 Poaceae (Gramineae).

**PIN-YIN Name and Chinese Name.** A simplified PIN-YIN name system is used in the encyclopedia. That is not to include the four-tone mark. However, there are exceptions. Among the thousand PIN-YIN names in the book, there are seven confusing cases. For each mistakable name, a superscript is attached to the name for indicating its four-tone in order to distinguish it from other plant species. For example: BAI MAO GEN<sup>(1)</sup> and BAI MAO GEN<sup>(4)</sup> are two different TCM plants:

T3416 *Imperata cylindrica* var. *major* (Poaceae); BAI MAO GEN<sup>(1)</sup>; Lalang Grass Rhizome.  
 T3309 *Hydrastis canadensis* (Ranunculaceae); BAI MAO GEN<sup>(4)</sup>; Golden-seal.

Other six cases are:

T1449 *Cirsium japonicum* (Asteraceae); DA JI<sup>(4)</sup>; Japanese Thistle.  
 T2608 *Euphorbia pekinensis* (Euphorbiaceae); DA JI<sup>(3)</sup>; Peking Euphorbia.  
 T4124 *Matricaria chamomilla* [Syn. *Matricaria recutita*] (Asteraceae); MU<sup>(3)</sup> JU; Mayweed.  
 T0197 *Aegle marmelos* (Rutaceae); MU<sup>(4)</sup> JU; Sepiaria.  
 T1039 *Bruguiera gymnorrhiza* (Rhizophoraceae); MU LAN<sup>(3)</sup>; Common Bruguiera.  
 T3423 *Indigofera tinctoria* (Fabaceae); MU LAN<sup>(2)</sup>; True Indigo.  
 T6798 *Vitis vinifera* (Vitaceae); PU<sup>(2)</sup> TAO; European Grape.  
 T6267 *Syzygium jambos* (Myrtaceae); PU<sup>(3)</sup> TAO; Roseapple.  
 T2107 *Dendrobium nobile* (Orchidaceae); SHI HU<sup>(4)</sup>; Noble Dendrobium.  
 T2646 *Evodia rutaecarpa* var. *officinalis* (Rutaceae); SHI HU<sup>(3)</sup>; Official Evodia.  
 T1221 *Caryopteris divaricata* (Verbenaceae); YOU<sup>(2)</sup>; Divaricate Bluebeard.  
 T1478 *Citrus grandis* (Rutaceae); YOU<sup>(4)</sup>; Pummelo.

**Translation of TCM Effects Terms.** In the Volume 5 of the encyclopedia, 6,926 TCM Plant entries list in alphabetical order of *Latin names*, including 2,923 original TCM plants (including few of animals)<sup>[R01-R04]</sup> and 4,003 congeners (including a few of non-TCM medicinal plants). For each TCM plant, two most important features are traditional TCM effects and indications.

For preparing this encyclopedia, one of the greatest challenges is how to correctly translate each TCM term into correspondent English, so that Western readers are able to understand the true meaning of the content in the book. After comparing several translation systems, we decided to use Wiseman's terminological system<sup>[R05-R07]</sup> for this book.

Wiseman's system obeys two most important principles: (1). The English-language terms should be faithful to the original concepts in traditional Chinese medicine. (2). The English-language TCM terminology should be flexible enough to allow modifications and extensions so that derivative effects can be described by a structuralized manner. For instance, the term "quicken blood" describes a general effect meaning "activating blood flow" or "promoting blood circulation". Elaboration of this term produces "quicken blood and transform stasis", "quicken blood and relieve pain", "quicken blood and regulate menstruation", and so on. The following illustrations are an example of the structuralized expressions related to the term "quicken blood":

quicken blood and disinhibit water  
 quicken blood and dispel stasis  
 quicken blood and dispel wind  
 quicken blood and disperse swelling  
 quicken blood and disperse welling abscess  
 quicken blood and dissipate binds  
 quicken blood and dissipate stasis  
 quicken blood and free menstruation  
 quicken blood and free network vessels  
 quicken blood and free vessels  
 quicken blood and joint bones  
 quicken blood and move *qi*  
 quicken blood and move stasis  
 quicken blood and nourish heart  
 quicken blood and promote milk  
 quicken blood and quiet spirit  
 quicken blood and regulate menstruation  
 quicken blood and relieve pain  
 quicken blood and resolve toxin  
 quicken blood and settle pain  
 quicken blood and soothe sinews  
 quicken blood and stanch bleeding  
 quicken blood and strengthen sinews  
 quicken blood and transform stasis  
 quicken blood and vessels

**Translation of TCM Indications Terms.** Based on Wiseman's terminological system, "Chinese-English Dictionary of Traditional Chinese Medicine" compiled by Guangzhen Gao *et al.*<sup>[R08]</sup>, "An English-Chinese Medical Dictionary, Second Edition" compiled by Weiyi Chen *et al.*<sup>[R09]</sup>, and other reference dictionaries, we defined over 3,800 standard indication terms for translating TCM indications terms from Chinese to English. Among the 3,800 terms, 2,526 terms are actually used in the encyclopedia, in which 85% terms are traditional TCM terms and the rest 15% are common modern medicinal terms. Some typical examples of traditional TCM indication terms are as follows:

*yin* vacuity internal heat  
*yin* vacuity lung dryness  
*yin* vacuity tidal fever  
 chest impediment  
 chest impediment and heart pain  
 chest impediment and heart pain over back  
 chest oppression and pain  
 chest oppression with breathe hard  
 distention pain in rib-side  
 distention pain in stomach duct  
 distention pain in stomach duct and abdomen  
 externally contracted summer heat-damp  
 externally contracted wind evil  
 externally contracted wind-cold  
 externally contracted wind-heat  
 knocks and falls  
 sores  
 sores clove boil  
 swelling of sores and boils  
 sore scab and lichen  
 toxin swelling of sores

In summary, this encyclopedia provides a collection of more than 23,000 TCM chemical components isolated from natural resources and a large number of pharmacological activity data of these components. It may be used not only as a handbook to look for structures and pharmacological activities of TCM chemical components and source plant information, but also a fundamental platform for studying TCM with a systematic and integrative approach.

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# How to Use the Books

## 1. Three Kinds of “Many to Many” Relationships

To help readers effectively search and use of the books, authors strongly suggest readers being familiar with the structure of the encyclopedia and certain important linkers or pointers between different data sets.

Firstly, in order to avoid confusing cases, please keep in mind the following three features of the book:

(a) In the encyclopedia, all of pharmacological data belong to compounds, not to plants. In other words, the encyclopedia doesn't include plants' pharmacological data.

(b) All effect and indication terms belong to TCM plants, not to compounds. And almost all of effect terms as well as 85% indication terms are pure Chinese traditional concepts.

(c) In the encyclopedia, there are three kinds of “many to many” relationships: (i), compounds to plants, which is the most important relationship. (ii), pharmacological data to compounds in the molecular level only. (iii), plants to effects/indications in the species level.

Pharm. data ↔ Compound 1		Plant T0001 ↔ effects, indications
Pharm. data ↔ Compound 2		Plant T0002 ↔ effects, indications
Pharm. data ↔ Compound 3	↔	Plant T0003 ↔ effects, indications
.....		.....
Pharm. data ↔ Compound 23032		Plant T6925 ↔ effects, indications
Pharm. data ↔ Compound 23033		Plant T6926 ↔ effects, indications
(Molecular level)		(Species level)

### Sketch Map of Three Important “Many to Many” Relationships

## 2. Seven Useful Indexes

In Volume 6, there are seven indexes for data searching.

The indexes 1-3 are tools to search compounds from different starting-points:

**Index 1** (Compound Pharmacological Activity Index) links pharmacological terms



with related compound codes. For example, if there is a question as:

“Which compounds have *in vitro* cytotoxic activity against human breast cancer cells?”

From the index 1, the answer can easily be obtained as follows:

Cytotoxic, BC hmn breast cancer cells 24, 349, 526, 2244, 3416, 3429, 3708, 4775, 5095, 6759, 6759, 6759, 12453, 12454, 15494, 15495, 18515, 20671.

Cytotoxic, BC-1 hmn breast cancer cells 1277, 2260, 5064, 5327, 6759, 6759, 8220, 8221, 8222, 8235, 10250, 10297, 10511, 11353, 13489, 13490, 13491, 13492, 13493, 13494, 13495, 15919, 17008, 18866, 20809.

Cytotoxic, BCA-1 hmn breast cancer cells 6759, 13468, 13469, 13470, 15739.

Cytotoxic, Bcap37 hmn breast cancer cells 843, 11392, 13123, 16183, 17717, 18499.

Then, from compounds code numbers, one can get detailed data for each compound.

**Index 2** (Compound Molecular Formula Index) connects a molecular formula to its all isomers. For example, there are five isomers with formula  $C_{45}H_{76}O_{18}$ :

$C_{45}H_{76}O_{18}$

Abutiloside F, 40

Asp-IV, 1905

Asp-V, 1906

Trigoneoside IIIa, 21669

Trigoneoside IIIb, 21670

**Index 3** (Compound Synonym Index) is useful for searching a compound from a known name. A strong suggestion to readers is that when searching a compound from a known name, to search twice probably is necessary: firstly from entry title in the encyclopedia text and then from the index 3.

The indexes 4–7 are tools to search TCM plants:

**Index 4** (TCM Plant English Name Index) links a Plant English Name to other names of the plant, for example:

Chinese Angelica = T0495 *Angelica sinensis* = DANG GUI

Siberian Phlojodicarpus = T4804 *Phlojodicarpus sibiricus* = ZHANG GUO QIN

Dahurian Angelica = T0478 *Angelica dahurica* [Syn. *Angelica porphyrocaulis*] = BAI ZHI

Gigantic Angelica = T0483 *Angelica gigas* = CHAO XIAN DANG GUI

Narrowleaf Angelica = T0476 *Angelica anomala* = XIA YE DANG GUI

**Index 5** (TCM Plant PIN-YIN and Chinese Name Index) links PIN-YIN name to Latin name and/or English name, for example:

BAI HUA QIAN HU = T4768 *Peucedanum praeruptorum* = Whiteflower Hogfennel

BAI HUA SHE GAN = T3457 *Iris dichotoma* = Vesper Iris

BAI HUA SHE SHE CAO = T4485 *Oldenlandia diffusa* [Syn. *Hedyotis diffusa*] = Spreading Hedyitis

**Index 6** (TCM Plant Traditional Effects Index) and **Index 7** (TCM Plant Traditional Indications Index) connect specific effect and/or indication to related plants.

For example, to search all plants with effect “nourish heart and quiet spirit”, the result is:

**nourish heart and quiet spirit:**

T0944 *Biota orientalis* [Syn. *Thuja orientalis*; *Platycladus orientalis*],  
 T1292 *Celastrus orbiculatus* [Syn. *Celastrus articulatus*],  
 T1381 *Choerospondias axillaris*,  
 T4194 *Menyanthes trifoliata*,  
 T4400 *Nelumbo nucifera*,  
 T4902 *Pimpinella thelungiana*,  
 T5108 *Polygonum multiflorum*,  
 T5497 *Rhodiola kirilowii*,  
 T5701 *Salvia yunnanensis*.

If searching all plants with indication “angina pectoris” (a modern medicinal term), “externally contracted wind-cold” (a TCM term), and “externally contracted wind-heat” (a TCM term), you will obtain the following results:

**angina pectoris:** T1215 *Carthamus tinctorius*, T1395 *Chrysanthemum morifolium* [Syn. *Dendranthema morifolium*], T1775 *Crataegus pinnatifida*, T1778 *Crataegus pinnatifida* var. *major*, T2274 *Dryobalanops aromatica*, T2389 *Epimedium acuminatum*, T2390 *Epimedium brevicornum*, T2392 *Epimedium davidii*, T2394 *Epimedium elongatum*, T2398 *Epimedium koreanum*, T2401 *Epimedium pubescens*, T2402 *Epimedium sagittatum*, T2404 *Epimedium sutchuenense*, T2406 *Epimedium wushanense*, T2846 *Ganoderma japonicum* [Syn. *Ganoderma sinense*], T2848 *Ganoderma lucidum*, T2964 *Ginkgo biloba*, T3388 *Ilex chinensis* [Syn. *Ilex purpurea*], T3396 *Ilex pubescens*, T3397 *Ilex pubescens* var. *glaber*, T3875 *Liriope spicata* var. *prolifera*, T3925 *Loranthus parasiticus* [Syn. *Loranthus chinensis*; *Taxillus chinensis*], T3926 *Loropetalum chinense*, T4303 *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*, T4507 *Ophiopogon japonicus*, T4608 *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*], T4953 *Piper longum*, T5312 *Pueraria edulis*, T5313 *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*], T5316 *Pueraria omeiensis*, T5318 *Pueraria phaseoloides*, T5320 *Pueraria thomsonii*, T5680 *Salvia miltiorrhiza*, T5681 *Salvia miltiorrhiza* f. *alba*, T5688 *Salvia przewalskii*, T6510 *Trichosanthes kirilowii*, T6513 *Trichosanthes rosthornii* [Syn. *Trichosanthes uniflora*], T6584 *Typha angustata*, T6585 *Typha angustifolia*, T6587 *Typha latifolia*.

**externally contracted wind-cold:** T4039 *Magnolia grandiflora*, T4445 *Notopterygium forbesii* [Syn. *Notopterygium franchetii*], T4446 *Notopterygium incisum*, T4956 *Piper mullesua*, T5727 *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*].

**externally contracted wind-heat:** T0480 *Angelica decursiva* [Syn. *Peucedanum decursivum*], T1395 *Chrysanthemum morifolium* [Syn. *Dendranthema morifolium*], T1933 *Cyclea sutchuenensis*, T2798 *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*], T3819 *Ligusticum brachylobum*, T4413 *Nepeta cataria*, T4761 *Peucedanum longshengens*, T4768 *Peucedanum praeruptorum*, T4769 *Peucedanum rubricaulis*, T6791 *Vitex rotundifolia* [Syn. *Vitex trifolia* var. *simplicifolia*], T6793 *Vitex trifolia*.

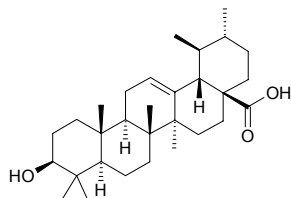
### 3. Data Survey Example of Compound Entry

At last, we would like to take Ursolic acid (compound code 22270 in the books) as a data survey example. Under this compound there are a quite number of data as follows:

**22270 Ursolic acid**

$\beta$ -Ursolic acid [77-52-1] C<sub>30</sub>H<sub>48</sub>O<sub>3</sub> (456.72).

White solid powder (chloroform–methanol), mp 298~294°C, 265~267°C.

**Pharm: (27 items)**

- Cytotoxic** (KB, ED<sub>50</sub> > 25µg/mL, control Doxorubicin, ED<sub>50</sub> = 0.12µg/mL; Hep3B, ED<sub>50</sub> > 25µg/mL, control Doxorubicin, ED<sub>50</sub> = 0.14µg/mL; Colon205, ED<sub>50</sub> > 25µg/mL, control Doxorubicin, ED<sub>50</sub> = 0.10µg/mL; HeLa, ED<sub>50</sub> > 25µg/mL, control Doxorubicin, ED<sub>50</sub> = 0.11µg/mL)<sup>[4369]</sup>;
- cytotoxic** (*in vitro*, HONE-1 cell, IC<sub>50</sub> = (8.8±1.5)µmol/L, control Etoposide, IC<sub>50</sub> = (0.5±0.2)µmol/L, *cis*-Platin, IC<sub>50</sub> = (3.2±0.5)µmol/L; KB cell, IC<sub>50</sub> = (8.2±2.7)µmol/L, Etoposide, IC<sub>50</sub> = (0.9±0.3)µmol/L, *cis*-Platin, IC<sub>50</sub> = (4.4±0.9)µmol/L; HT29 cell, IC<sub>50</sub> = (4.7±1.5)µmol/L, Etoposide, IC<sub>50</sub> = (2.4±0.5)µmol/L, *cis*-Platin, IC<sub>50</sub> = (5.7±1.1)µmol/L)<sup>[5254]</sup>;
- antineoplastic** (liver cancer cells *in vitro*, mus ascites carcinoma *in vivo*, life was prolonged);
- antibacterial** (*Escherichia coli*, IZD = 13~15mm, control Chloramphenicol, IZD = 16~20mm, control DMSO (4%), IZD < 10mm; *Staphylococcus aureus*, IZD = 10~12mm, control Chloramphenicol, IZD = 16~20mm, control DMSO (4%), IZD < 10mm; *Bacillus subtilis*, IZD = 13~15mm; control Chloramphenicol, IZD = 16~20mm, control DMSO (4%), IZD < 10mm)<sup>[5315]</sup>;
- antibacterial** (*Staphylococcus* spp. *in vitro*, MIC = 300µg/mL, gram-positive bacteria *in vitro*, MIC = 50~400µg/mL, gram-negative bacteria *in vitro*, MIC = 200~800µg/mL, microzyme *in vitro*, MIC = 100~700µg/mL);
- antitubercular** (*Mycobacterium tuberculosis*, MIC = 41.9µg/mL, cytotoxic, Vero cells, IC<sub>50</sub> = 46.5µg/mL, SI (IC<sub>50</sub>/MIC) = 1.11, positive control Rifampin, MIC = 0.03µg/mL, IC<sub>50</sub> = 98.3µg/mL, SI = 3277)<sup>[4986]</sup>;
- anticonvulsant** (induced by corazol);
- anti-inflammatory** (rat, induced by embedding woolball, 12.5mg/(kg·d) ip, 7 days, effective);
- anti-inflammatory** (*in vitro*, murine macrophage RAW264.7 Cells, inhibits LPS-induced NO and PGE<sub>2</sub> release)<sup>[5016]</sup>;
- COX-2 enzyme selective inhibitor** (mean IC<sub>50</sub> of isomers = 130µmol/L)<sup>[4415]</sup>;
- COX-2 enzyme inhibitor** (PMA-treated hmn mammary and oral epithelial cells, molecular mechanisms is mediated by a cAMP response element in the COX-2 promoter, associated with inhibition of protein kinases)<sup>[4415]</sup>;
- antipyretic** (clearly reduces normal body temperature of rat);
- reduces serum transaminase** (animal, 100mg/kg);
- antitrypanosomal** (epimastigotes of *Trypanosoma cruzi*, MLC = 6.2µmol/L, control Gentian violet, MLC = 6.2µmol/L)<sup>[2579]</sup>;
- mucin release stimulator** (acts directly on airway mucin-secreting cells, increased mucin release (40~50)% above control at the highest concentrations 0.00001~0.001mol/L, possible use to treatment of chronic airway diseases)<sup>[4084]</sup>;
- platelet aggregation inhibitor** (2~5mg/mL collagen-induced, IC<sub>50</sub> = (511±4)µmol/L, control ASA, IC<sub>50</sub> = (420±3)µmol/L; 1~4µmol/L epinephrine-induced with 0.8~1.0mg/mL collagen, IC<sub>50</sub> = (82.6±2.8)µmol/L, ASA, IC<sub>50</sub> = (53.0±4.5)µmol/L; 10~40µmol/L Sodium arachidonate-induced with 0.8~1.0mg/mL collagen, IC<sub>50</sub> =

(669±12)μmol/L, ASA, IC<sub>50</sub> = (66.0±2.1)μmol/L; 1~5μmol/L PGH<sub>2</sub>/TXA<sub>2</sub> receptor agonist U46619-induced with 0.8~1.0mg/mL collagen, IC<sub>50</sub> > 1000μmol/L, ASA, IC<sub>50</sub> = (340±12)μmol/L)<sup>[4994]</sup>;

**tissue factor inhibitor inactive**<sup>[5387]</sup>;

**antirheumatic**<sup>[5341]</sup>;

**anti-diabetic**<sup>[5341]</sup>;

**antiulcer**<sup>[5341]</sup>;

**hypolipidemic**<sup>[5341]</sup>;

**anti-atherosclerotic**<sup>[5341]</sup>;

**anti-HIV**<sup>[5341]</sup>;

**TGF-β1 antagonist** (inhibits the binding of <sup>125</sup>I-TGF-β1 to its receptor in Balb/c 3T3 cell, IC<sub>50</sub> = (6.9±0.8)μmol/L, suggests TGF-β1 antagonistic activity is responsible, at least in part, for therapeutic efficacy of *Clerodendranthus spicatus* to treat humans with renal disease)<sup>[5496]</sup>;

**glucocorticoid** (enhances glycogen in liver, reduces glycogen in heart and striated muscles);

**LD<sub>50</sub>** (mus, ip) = 680mg/kg.

### Sources: (52 species)

BAI HUA SHE SHE CAO *Oldenlandia diffusa* [Syn. *Hedyotis diffusa*] (whole herb: mean content of 16 origins = 0.211%)<sup>[5508]</sup>;

BI LU GOU TENG *Uncaria tomentosa*,

CHE QIAN *Plantago asiatica* (whole herb: content scope = 0.28%~2.32%, mean content = 0.97%)<sup>[5508]</sup>;

CHI NAN *Syzygium buxifolium*,

CHONG YA YAO *Isodon ternifolius*,

CI WU JIA YE *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*],

DA CHE QIAN *Plantago major*,

DA ZAO *Ziziphus jujuba* (ripe fruit: mean content = 0.016%)<sup>[5508]</sup>,

DAN SHEN *Salvia miltiorrhiza*,

DIAN NAN HONG HOU KE *Calophyllum polyanthum* (seed: yield = 0.0064%dw),

DONG LING CAO *Rabdosia rubescens* (whole herb: mean content = 0.414%)<sup>[5508]</sup>; leaf: mean content = 0.573%)<sup>[5508]</sup>;

DU ZHONG *Eucommia ulmoides*,

DUAN TING SHAN MAI DONG *Liriope muscari* (tuber),

GOU GU YE *Ilex cornuta* (leaf: mean content = 0.96%)<sup>[5508]</sup>,

GUANG JING QIAN CAO *Rubia wallichiana* (stem),

HONG HUA LU TI CAO *Pyrola incarnata* (whole herb: content = 2.06%)<sup>[5508]</sup>,

HU BEI SHAN ZHA *Crataegus hupehensis* (dried ripe fruit: mean content = 0.455%),

JIAN YE TOU WU GEN *Ligularia sagitta*,

LIAN QIAN CAO *Glechoma lungituba*,

LIAN QIAO *Forsythia suspensa*,

LIU QIU SHE GEN CAO *Ophiorrhiza liukiensis* (whole herb),

MA BIAN CAO *Verbena officinalis* (whole herb: mean content of 5 batch samples = 0.227%)<sup>[5508]</sup>,

MAO CAO LONG *Ludwigia octovalvis* (whole herb: yield = 0.00012%dw),

MAO PAO TONG *Paulownia tomentosa*,

MAO XU CAO *Clerodendranthus spicatus*,

MU GUA *Chaenomeles sinensis*,

NV ZHEN ZI *Ligustrum lucidum*,

PI PA YE *Eriobotrya japonica* (dried leaf: mean content = 0.677%)<sup>[5508]</sup>,

PI PA YE *Eriobotrya japonica* (stem and leaf),

PING CHE QIAN *Plantago depressa* (whole herb: mean content = 0.276%)<sup>[5508]</sup>,

RI BEN LU TI CAO *Pyrola japonica*,

RONG SHU *Ficus microcarpa* (aerial root),  
 SHAN DI XIANG CHA CAI *Isodon oresbia*,  
 SHAN LI HONG *Crataegus pinnatifida* var. *major*,  
 SHAN ZHA *Crataegus pinnatifida* (fruit: content scope = 0.31%~0.56%)<sup>[5501]</sup>,  
 SHAN ZHU YU *Cornus officinalis* [Syn. *Macrocarpium officinale*] (dried ripe fruit: content  
 scope = 0.24%~0.32%)<sup>[5501]</sup>, mean content = 0.263%)<sup>[5508]</sup>,  
 SHI NAN *Photinia serrulata* (leaf: mean content = 1.50%)<sup>[5508]</sup>,  
 SHI SHENG BIAN LEI *Gentianopsis paludosa*,  
 SHI YE *Diospyros kaki* (dried leaf: mean content = 0.784%)<sup>[5508]</sup>,  
 SHU HUA JIE CAO *Valeriana laxiflora* (aerial parts and root),  
 SUAN ZAO *Ziziphus jujuba* var. *spinosa* (ripe fruit: content = 0.030%)<sup>[5508]</sup>,  
 SUO YANG *Cynomorium songaricum* (fleshy stem: content = 0.78%)<sup>[5508]</sup>,  
 WEI LING CAI *Potentilla chinensis*,  
 WU GENG WU JIA PI *Acanthopanax sessiliflorus* (fruit),  
 XIA KU CAO *Prunella vulgaris* (dried spike: content = 0.780%)<sup>[5508]</sup>,  
 YANG MEI SHU PI *Myrica rubra* (bark: content = 0.027%),  
 YE SHAN ZHA *Crataegus cuneata* (dried ripe fruit: mean content of 3 origins =  
 0.399%)<sup>[5508]</sup>,  
 YI LANG QING LAN *Dracocephalum kotschyi*,  
 ZHI ZI *Gardenia jasminoides* [Syn. *Gardenia florida*] (dried ripe fruit: mean content =  
 0.041%)<sup>[5508]</sup>,  
 ZHOU YE LU TI CAO *Pyrola rugosa* (whole herb: content = 3.00%)<sup>[5508]</sup>,  
*Cussonia bancoensis*,  
 Occurs in many plants.

**Ref:** 4, 367, 428, 454, 501, 592, 595, 600, 658, 660, 2579, 3005, 3061, 4084, 4163, 4369,  
 4415, 4527, 4767, 4772, 4986, 4994, 5016, 5254, 5315, 5382, 5387, 5341, 5496, 5501,  
 5508.

# Abbreviations and Symbols

12(S)-HETE	12(S)-Hydroxy-5,8,10,14-EicosaTetraEnoic acid	cAMP-PDE	cAMP-phosphodiesterase
<sup>125</sup> I-TGF- $\beta$ 1	<sup>125</sup> I-Transforming Growth Factor- $\beta$ 1	CAPE	Caffeic Acid Phenethyl Ester
5-FU	5-FluoroUracil	CB	cytochalasin B
5-HT	5-HydroxyTryptamine (serotonin)	CC	macrophage inflammatory protein (MIP-1 $\beta$ ), monocyte chemotactic protein (MCP-2), and C lymphotactin (ltn) (a chemokine family)
95%FL (=CI <sub>95</sub> )	95% Fiducial Limits (=95% Confidence Interval)	CC <sub>0</sub>	Minimum cytotoxic concentration
AA	Arachidonic Acid	CC <sub>50</sub>	IC <sub>50</sub> of cytotoxicity (concentration of the 50% cytotoxic effect)
AAPH	2,2'-Azo-bis-(2-AmidinoPropane)-diHydrochloride	CCR1	chemokine receptor 1
ABTS <sup>+</sup>	2,2'-Azino-Bis-(3-ethylbenzThiazoline 6-Sulphonic acid), radical	CD	concentration required to double enzyme (induction) activity
ACAT	Acyl-CoA Cholesterol acyltransferase	CD	Concentration required to double quinone reductase (induction) activity
ACE	Angiotensin Converting Enzyme	CD <sub>50</sub>	medium Convulsive Dose
Ach	Acetylcholine	cGMP	cyclic guanosine monophosphate
AChE	Acetylcholinesterase	cGMP-PDE	cGMP-phosphodiesterase
ACTH	AdrenoCorticoTropic Hormone	CGN	<i>cis</i> -Golgi network
AD	Alzheimer's disease	CGRP	Calcitonin gene-related peptide
ADM	adriamycin	CHO	Chinese hamster ovarian
ADP	adenosine diphosphate	CI	Chemopreventive index (=IC <sub>50</sub> /CD)
AG	aminoguanidine	CI <sub>95</sub> (=95%FL)	95% Confidence Interval (=95% Fiducial Limits)
AggRt	aggregation rate	CIC	complete inhibiting concentration
AIDS	acquired immunodeficiency syndrome	CIMC	complete inhibiting minimum concentration
ALS	amyotrophic lateral sclerosis	CINC-1	cytokine-induced neutrophil chemoattractant 1
ALT	alanine aminotransferase	CMV	Cytomegalovirus
AMP	adenosine monophosphate	CNQX	6-Cyano-7-nitroquinoxaline-2,3-dione (non-NMDA receptor antagonist)
AMV	avian myeloblastosis virus	CNS	central nervous system
AP	angina pectoris	ConA	concanavalin A
AP-1	activator protein-1	COX	cyclooxygenase
APN	Aminopeptidase N	COX-1	cyclooxygenase-1
APV	<i>dl</i> -2-Amino-5-phosphonovaleric acid (a competitive antagonist of the NMDA receptor)	COX-2	cyclooxygenase-2
aq.	aqueous solution	CPT	camptothecin
ASA	AcetylSalicylic Acid	CRF	corticotrophin releasing factor
AST	aspartate transaminase; aspartate aminotransferase	CRH-1	corticotrophin releasing hormone-1
AT-III	Antithrombase-III	CRP	C-reactive protein
ATPase	Adenosine triphosphatase	CV-3988	<i>rac</i> -3-( <i>N</i> -octadecylcarbomoyloxy)-2-methoxypropyl 2-thiazoliethyl phosphate
AZT	3'-azido-3'-deoxythymidine	CVS	cardiac vascular system
BACE1	$\beta$ -Secretase	CXC	Stromal cell-derived factor (SDF)-1 $\alpha$ and IL-8 (a chemokine)
BChE	Butyrylcholinesterase	CYP1A	Cytochrome P450 1A
bFGF	basic Fibroblast Growth Factor	CYP2D6	Cytochrome P450 2D6
BHA	Butylated HydroxyAnisole; 3- <i>tert</i> -Butyl-4-HydroxyAnisole	CYP3A4	Cytochrome P450 3A4
BHT	Butylated HydroxyToluene	d	day
bid	bis in die (Latin)	DCFH	2',7'-dichlorodihydrofluorescein dye
BLM	bleomycin	DDDP	DNA-dependent DNA polymerase
bp	boiling point	dec	decomposition
BST	Brine Shrimp lethality bioassay = Brine Shrimp Test	D-GalN	D-galactosamine
c	concentration		
C5a	complement 5a		
cAMP	cyclic adenosine monophosphate		

DGAT	Diacylglycerol acyltransferase	GSH	Glutathione; <i>N</i> -( <i>N</i> - <i>L</i> - $\gamma$ -Glutamyl- <i>L</i> -cysteinyl)glycine
dil.	dilute	GTP	Guanosine TriPhosphate
DIZ	Diameter of Inhibitory Zone	GVHR	Graft-Versus-HostReaction
DMBA	9,10-dimethyl-1,2-benzanthracene (carcinogen); 7,12-dimethylbenz[a]anthracene (carcinogen)	h	hour
DMDP	(2 <i>R</i> ,3 <i>R</i> ,4 <i>R</i> ,5 <i>R</i> )-2,5-DihydroxyMethyl-3,4-Dihydroxy-Pyrrolidine	HAD	hmn immunodeficiency virus associated dementia
DMSO	DiMethyl SulphOxide	HBeAg	hmn type B Hepatitis, e Antigen
DNA	deoxyribonucleic acid	HBsAg	hmn type B Hepatitis, Surface Antigen
DNJ	1-Deoxynojirimucin (one kind of polyhydroxy alkaloid, glucosidase inhibitor)	HBV	Hepatitis B Virus
DOX	doxorubicin	HC <sub>50</sub>	medium Hemolytic Concentration
DPI	Diphenyleneiodonium	HCoV-229E	hmn coronavirus strain 229E
DPPH	1,1-DiPhenyl-2-PicrylHydrazyl free radical	HD	Huntington's disease
DS8000	Dextran sulphate, prepared from average Mr 8000	HER rat	Hypertensive Essential Rat
DSCG	DiSodium ChromoGlycate (anti-allergic agent)	HIV	hmn immunodeficiency virus
dw	dried weight	HIV-1	hmn immunodeficiency virus type 1
E.A.	Enzyme Activity	HIV-1 IN	hmn immunodeficiency virus type 1 integrase
EBV-EA	Epstein-Barr Virus Early Antigen	HIV-1 RT	hmn immunodeficiency virus type 1 reverse transcriptase
EC	Effective Concentration	HIV-RT	hmn immunodeficiency virus reverse transcriptase
EC <sub>50</sub>	medium Effective Concentration	hmn	human
ED	Effective Dose	HSV-1	herpes simplex virus 1
ED <sub>25</sub>	Effective Dose for 25%	HSV-2	herpes simplex virus 2
ED <sub>50</sub>	medium Effective Dose (in some cases for the medium Effective Concentration)	HVA	homovanillic acid
EGCG (EGCg)	(-)-Epigallocatechin gallate	hydroxyl radical	OH <sup>•</sup>
EGF	Epidermal Growth Factor (it protects MPP <sup>+</sup> -induced cell death)	ia	intra-arterial injection
EGFR	Epidermal Growth Factor Receptor	IAA	indole-3-acetic acid
ELAM-1	Endothelial-Leukocyte Adhesion Molecule-1	IC	Inhibiting Concentration
ELISA	Enzyme-Linked ImmunoSorbent Assay	IC <sub>50</sub>	median Inhibiting Concentration
eotaxin	eosinophilous cytotoxin	IC <sub>100</sub>	Absolute Inhibiting Concentration
ERK	Extracellular signal-Regulated Kinase	ICAM-1	Intercellular Cell Adhesion Molecule-1
ET	experimental times	ICR	Imprinting Control Region mouse
FAG	Fagomine (one kind of polyhydroxy alkaloid, glucosidase inhibitor)	id	intradermal injection
FCA	Freund's complete adjuvant	ID	Inhibiting Dose
FI	Feeding Index (= ((C-T)/(C+T)×100)	ID <sub>50</sub>	Median Inhibiting Dose
Flu-A	influenza virus type A	IFN	interferon
fMLP	<i>N</i> -formyl- <i>L</i> -Methionyl- <i>L</i> -Leucyl- <i>L</i> -Phenylalanine	IFN- $\gamma$	Interferon- $\gamma$
fp	freezing point	IgE	Immunoglobulin E
FR <sub>50</sub>	Feeding ratio when the consumed area of control disc (CCD) is 50% [FR = CTD(consumed area of treated disc)/CCD]	IgG	Immunoglobulin G
fw	fresh weight	IL	interleukin
G6PD	Glucose-6-Phosphate Dehydrogenase	IL-1	Interleukin-1
GABA	$\gamma$ -aminobutyric acid	IL-1 $\alpha$	interleukin-1 $\alpha$
GaIN	galactosamine	IL-1 $\beta$	interleukin-1 $\beta$
GI	growth inhibition	IL-2	Interleukin-2
GI <sub>50</sub>	the concentration of sample necessary to inhibit the growth to 50% of the control	IL-4	Interleukin-4
Glu	glutamate	IL-6	Interleukin-6
GOT	Glutamate-Oxaloacetate Transaminase	IL-8	Interleukin-8
Gp	Gastro protective effect	IL-10	Interleukin-10
gpg	guinea pig	IL-12	Interleukin-12
GPT	GlutamicPyruvic Transaminase	im	intramuscular injection
GRO	Growth-Related Oncogene	<i>in vitro</i>	<i>in vitro</i>
		<i>in vivo</i>	<i>in vivo</i>
		Indo	indomethacin
		iNOS	inducible Nitric Oxide Synthase
		InRt	inhibitive rate
		ip	intraperitoneal injection

i.t.	intrathecal injection	MMP	Matrix MetalloProteinases
iv	intravenous injection	MMP-2	Matrix MetalloProteinase-2
IZA	Inhibition Zone Area (mm <sup>2</sup> )	mp	melting point
IZD	Inhibition Zone Diameter (mm)	mPGES	microsomal ProstaGlandin E Synthase
J774.A1	murine monocyte/macrophage cell J774.A1	MPP+	1-methyl-4-phenylpyridinium ion (neurotoxin)
JNK	c-Jun NH <sub>2</sub> -terminal kinase	MRSA	Methicillin-Resistant <i>Staphylococcus aureus</i>
KD <sub>50</sub>	Dose required to Knock down 50% of the population of insects	MSSA	Methicillin-Sensitive <i>Staphylococcus aureus</i>
LC <sub>50</sub>	concentration at which only 50% of the cell are viable	MTC	Minimal Toxic Concentration
LC <sub>50</sub>	concentration of inhibiting luminous intensity 50%	MTT	A Cytotoxicity measurement method (tetrazolium-based colorimetric assay used for cytotoxicity bioassay, see Rubinstein L. V., et al., <i>Nat. Cancer Inst.</i> , 82, 1113-1118, 1990)
LCIC	Lowest Complete Inhibition Concentration	mus	mouse
LD	Lethal Dose	<i>n</i>	number of parallel experiments
LD <sub>100</sub>	100% Lethal Dose	nAChR	neuronal nicotinic AcetylCholine Receptor
LD <sub>50</sub>	medium Lethal Dose	NADH	reduced nicotinamide adenine dinucleotide
LDH	lactate dehydrogenase	NADPH	cytochrome C reductase
LDL	Low Density Lipoprotein	NCCLS	A standard antibacterial activity test method (see Wayne P. A., "National Committee for Clinical Laboratory Standards Performance Standards for Antimicrobial Disk Susceptibility Tests," 6th ed., Approved standards M2-A6. NCCLS, 1997)
L-NA	N <sup>o</sup> -L-nitroarginine	NDGA	Nordihydroguaiaretic acid
L-NMMA	N <sup>G</sup> -monomethyl-L-arginine	NEP	Neutral EndoPeptidase
LOX	Lipoxygenase	NF	Nuclear Factor
LPO	lipid peroxidation	NF-κB	Nuclear Factor κB
LPS	lipopolysaccharide	NFAT	Nuclear Factor of Activated T cell
LTB <sub>4</sub>	Leukotriene B <sub>4</sub>	NGF	Nerve Growth Factor
LTC <sub>4</sub>	Leukotriene C <sub>4</sub>	NMDA	N-methyl-D-aspartate
LTD <sub>4</sub>	Leukotriene D <sub>4</sub>	NO	nitric oxide
MA	maytenfolic acid	non-oral	paraoral
MA	maslinic acid	NOR1	(+/-)-(E)-4-methyl-2-[(E)-hydroxyimino]-5-nitro-6-methoxy-3-hexenamid
MA	minimal amount	NOS-2	Nitric oxide synthase type-2
MABA	Microplate Alamar Blue Assay	OCIF	OsteoClastogenesis-Inhibitory Factor
MAC-1	integrin MAC-1	oral	oral
MAO-A	Monoamine oxidase A	OVA	ovalbumin
MAO-B	Monoamine oxidase B	oxazolone	oxazolone
MAPK	Mitogen-Activated Protein Kinase	OZ	opsonized zymosan
MCC	Minimum Cytocidal Concentration	P450	Cytochrome P450
MCP	Monocyte Chemotactic Protein	PAF	Platelet Activating Factor
MCTHBE	Minimum Concentration for Total Haemolysis of Bovine Erythrocytes (µg/mL)	PAF	Platelet Aggregation Factor
MDA	Methylene Dihydroxy Amphetamine	PAI-1	Plasminogen Activator Inhibitor type 1
MDA	Malondialdehyde	Para-3 (=PIV3)	Parainfluenza type 3 virus
MDR	MultiDrug Resistance	PBMC	hmN Peripheral Blood Mononuclear Cell
MED	Minimal Effective Dose	PCA reaction	Passive Cutaneous Anaphylaxis reaction
MFC	Minimal Fungicidal Concentration	PD	Parkinson's Disease
MIA	Minimal Inhibitory Amounts (µg/disc)	PD	a cytotoxic model
MIC	Minimum Inhibitory Concentration	pD2 (=pEC <sub>50</sub> )	negative logarithm (-logM) of the concentration required to produce 50% of the maximum response (EC <sub>50</sub> )
MIC <sub>80</sub>	Minimal Inhibitive Concentration for 80%	PDE	phosphodiesterase
MIC <sub>90</sub>	Minimal Inhibitive Concentration for 90%	PDTC	pyrrolidine dithiocarbamate
min	minute	PEBP2αA	polyoma enhancer binding protein 2αA
MIP-1α/β	macrophage inflammatory protein	pEC <sub>50</sub>	negative logarithm (-logM) of the concentration required to produce 50% of the maximum response (EC <sub>50</sub> )
MIQ	Minimum inhibitory quantity (µg)		
MK-801	dizocipline maleate (a non-competitive antagonist of the NMDA receptor)		
MLC	Minimum Lethal Concentration		
MLD	Minimum Lethal Dose		
MMDC	Minimal Morphological Deformation Concentration		
MMOC	Mouse Mammary Organ Culture model		



PEG	PolyEthylene Glycol	Singlet oxygen	$^1\text{O}_2$
PEP	Prolyl endopeptidase (a serine protease)	SIZ	sulfisoxazole
pet. ether	petroleum ether	SNP	sodium nitroprusside
PFTase	farnesylprenyltransferase	SOD	Superoxide dismutase
PGD <sub>2</sub>	prostaglandin D <sub>2</sub>	sp.	species
PGE <sub>2</sub>	prostaglandin E <sub>2</sub>	SP-A	pulmonary surfactant Protein A
PGF <sub>2<math>\alpha</math></sub>	prostaglandin F <sub>2<math>\alpha</math></sub>	spp.	species (plural)
PGH <sub>2</sub>	prostaglandin H <sub>2</sub>	SRSA	Slow-Reacting Substance of Anaphylaxis
PGI <sub>2</sub>	prostacyclin (prostaglandin I <sub>2</sub> )	StRt	Stimulatory Rate
PHA	phytohemagglutinin	STZ	streptozotocin
Phe	Phenylephrine	superoxide anion	$\text{O}_2^{\bullet-}$
pIC <sub>50</sub>	negative logarithm (-logM) of IC <sub>50</sub>	SuRt	survival rate
PK	protein kinase	Syn.(= ‡)	Synonym
PKC	protein kinase C	T/C	survival ratio
PLA <sub>2</sub>	phospholipase A <sub>2</sub>	TACE	$\alpha$ -Secretase (a serine protease)
PMA (=TPA)	Phorbol-12-Myristate-13-Acetate	TBARS	ThioBarbituric Acid Reactive Substance assay
PMNs	polymorphonuclear cell	TC <sub>50</sub>	50% cytoToxic Concentration
pNPPase	<i>p</i> -nitrophenylphosphate enzyme	TCM	Traditional Chinese Medicines
POA	pentacyclic oxindole alkaloids	TFP	Trifluoperazine (calmodulin antagonist)
PPase1	Protein serine/threonine Phosphatase	TGF- $\beta_1$	Transforming Growth Factor- $\beta_1$
PRA	Plaque Reduction Assay	TGI	Total Growth Inhibition, concentration at which no growth was observed
PTH	parathyroid hormone	TI	Therapeutic Index (=IC <sub>50</sub> /EC <sub>50</sub> )
PTN	parthenolide	TNF- $\alpha$	Tumor Necrosis Factor- $\alpha$
PTP1B	Protein Tyrosine Phosphatase 1B	TOA	tetracyclic oxindole alkaloids
QR	quinone reductase	topo II	DNA topoisomerase II
RA	rheumatoid arthritis	TP	Thymidine phosphorylase
Raji	EBV-transformed B cell line	tPA	tissue Plasminogen Activator
rat	white rat	TPA (=PMA)	12- <i>O</i> -tetradecanoyl phorbol 13-acetate
rbt	rabbit	TrkA	proto-oncogene TrkA
RDDP	RNA-dependent DNA polymerase	TXA <sub>2</sub>	thromboxane A <sub>2</sub>
RDS	Respiratory Distress Syndrome	TXB <sub>2</sub>	thromboxane B <sub>2</sub>
rel-InRt	relative inhibitive rate (taking the control compound as 100%)	UDP-MurNac	UDP- <i>N</i> -acetylmuramic acid
RM	Relative Mobility	VCAM-1	Vascular Cell Adhesion Molecule-1
RNA	ribonucleic acid	VCR	vincristine
RNase H	inherent ribonuclease H	VEGF	Vascular Endothelial Growth Factor
ROS	reactive oxygen species (they are involved in the genesis of various cancers, arteriosclerosis, rheumatism and ageing)	Veraguensin	veraguensin
RSV	Respiratory Syncytial Virus	VHR DS-PTPase	VHR Dual-Specificity Protein Tyrosine Phosphatase
RT	Reverse Transcriptase	VHR protein	Vaccinia open reading-frame H1-Related protein phosphatase
RT-PCR	reverse-transcribed polymerase chain reaction	VP-16	A positive control for cytotoxic assay (Sigma product)
sALT	serum alanine transaminase	VRE	Vancomycin-Resistant <i>Enterococci</i> sp
sAST	serum aspartate transaminase	VSE	Vancomycin-Sensitive <i>Enterococci</i> sp
sc	subcutaneous injection	VSV	Vesicular Stomatitis Virus
SC <sub>50</sub>	Half-maximal radical Scavenging Concentration	ww	wet weight
SC <sub>50</sub>	50% Scavenging Concentration	XTT	sodium 3'-[1-(phenylaminocarbonyl)-3,4-tetrazolium] bis(4-methoxy-6-nitrobenzene)sulfonic acid
ScRt	scavenging rate	†	homonym mark
SDF	Stromal cell-Derived Factor	‡ (=Syn.)	synonym mark
SGOT	serum Glutamic Oxalacetic Transaminase	*	the name is given by the authors of the books
SGPT	serum Glutamic Pyruvic Transaminase		
SHR rat	Spontaneously Hypertensive Rats		
SI	Selective index = cytotoxic CC <sub>50</sub> /target EC <sub>50</sub>		
SI	Selective index = cytotoxic IC <sub>50</sub> /target IC <sub>50</sub>		
SI	Selective index = cytotoxic IC <sub>50</sub> /target MIC		

# Cancer Cell Codes

This set of codes for 270 cancer cells, named as **CCC code**, are defined and tried out in the books for the first time by the authors.

<b>1A9</b>	hmn ovarian cancer (cell).	<b>CaEs-17</b>	hmn esophageal cancer (cell).
<b>212</b>	inducible <i>Ha-ras</i> oncogene transformed from the NIH/3T3 cell line.	<b>CAKI</b>	hmn renal cancer (cell).
<b>308</b>	cultured mouse epidermal cells.	<b>CAKI-1</b>	hmn renal cancer (cell).
<b>3LL</b>	mus Lewis lung cancer (cell).	<b>Calu1</b>	hmn lung cancer (cell).
<b>3PS</b>	mouse leukemia (cell).	<b>Capan1</b>	pancreas cancer (cell).
<b>780-6</b>	renal cancer (cell).	<b>Capan2</b>	pancreas cancer (cell).
<b>9KB</b>	hmn epidermatoid nasopharyngeal carcinoma (cell).	<b>CaSki</b>	hmn cervical carcinoma (cell).
<b>9L</b>	rat glioma (cell).	<b>CEM</b>	leukemia (cell).
<b>9PS</b>	mouse lymphocytic leukemia (cell).	<b>CHAGO</b>	hmn undifferentiated lung cancer (cell).
<b>A2780</b>	hmn ovarian cancer (cell).	<b>CNE</b>	hmn nasopharyngeal carcinoma (cell).
<b>A375</b>	hmn melanoma (cell).	<b>Col1</b>	hmn colorectal cancer (cell).
<b>A431</b>	hmn epidermic cancer (cell).	<b>Col2</b>	hmn colorectal cancer (cell).
<b>A498</b>	hmn renal cancer (cell).	<b>COLO320DM</b>	hmn colorectal cancer (cell).
<b>A549</b>	hmn non-small cell lung cancer (cell).	<b>Colon205</b>	colorectal cancer (cell).
<b>ACHN</b>	hmn renal cancer (cell).	<b>Colon26-L5</b>	mus colorectal cancer (cell).
<b>AGS</b>	gastric adenocarcinoma (cell).	<b>COS-7</b>	monkey kidney cells.
<b>APM1840</b>	hmn leukemia (cell).	<b>CPAE</b>	calf pulmonary arterial endothelial cells.
<b>B16</b>	mouse melanoma (cell).	<b>CT-26</b>	mus colorectal cancer (cell).
<b>B16(F-10)</b>	mouse melanoma (cell).	<b>CTV1</b>	hmn leukemia (cell).
<b>BAEC</b>	bovine aortic endothelial cells.	<b>CXF94L</b>	hmn tumor (cell).
<b>BC</b>	hmn breast cancer (cell).	<b>DLD</b>	hmn colorectal adenocarcinoma (cell).
<b>BC-1</b>	hmn breast cancer (cell).	<b>DLD-1</b>	hmn colorectal adenocarcinoma (cell).
<b>BCA-1</b>	hmn breast cancer (cell).	<b>DMS114</b>	hmn lung cancer (cell).
<b>Bcap37</b>	hmn breast cancer (cell).	<b>DMS273</b>	hmn lung cancer (cell).
<b>Bel7402</b>	hmn liver cancer (cell).	<b>DU145</b>	prostatic cancer (cell).
<b>Bel7405</b>	hmn liver cancer (cell).	<b>EAC</b>	Ehrlich ascites cancer (cell).
<b>BGC823</b>	hmn gastric cancer (cell).	<b>EJ-1</b>	hmn bladder cancer (cell).
<b>BIU87</b>	bladder cancer (cell).	<b>FM3A</b>	mus breast cancer (cell).
<b>BL6</b>	mouse melanoma (cell).	<b>H.Ep.-2</b>	hmn cutis cancer cells in throat.
<b>Bowes</b>	skin cancer cells.	<b>H116</b>	hmn colorectal cancer (cell).
<b>Bre04</b>	hmn breast cancer (cell).	<b>H9</b>	lymphocytes.
<b>BSY1</b>	breast cancer (cell).	<b>HBC4</b>	breast cancer (cell).
<b>BT474</b>	hmn galactophore cancer (cell).	<b>HBC5</b>	breast cancer (cell).
<b>BT549</b>	hmn galactophore cancer (cell).	<b>HCC2998</b>	hmn colorectal cancer (cell).
<b>BXPC3</b>	pancreas cancer (cell).	<b>HCT</b>	hmn colorectal cancer (cell).
<b>C6</b>	rat glioma (cell).	<b>HCT116</b>	hmn colorectal cancer (cell).
<b>CA</b>	hmn liver cancer (cell).	<b>HCT15</b>	hmn colorectal cancer (cell).

**HCT8** hmn colorectal cancer (cell).  
**HEK-293** hmn epithelial kidney cell.  
**HEL** hmn embryonic lung fibrocytes.  
**HeLa** culture cervical epithelial cancer (cell) from Henrietta Lack.  
**HeLa ATCC-17** hmn cervical epithelial cancer (cell).  
**HeLa-S3** hmn cervical epithelial cancer (cell).  
**HELF** normal hmn embryo lung fibroblasts.  
**Hep2** hmn liver cancer (cell).  
**Hep2,2,15** hmn liver cancer (cell) transfected with hepatitis B virus.  
**Hep3B** hmn liver cancer (cell).  
**Hepa** hmn liver cancer (cell).  
**Hepa1c1c7** mus liver cancer (cell).  
**Hepa59T/VGH** hmn liver cancer (cell).  
**HepG2** hmn liver cancer (cell).  
**HEPZ** hmn epithelial cancer (cell).  
**HFF** hmn foreskin fibroblasts.  
**HGF** normal hmn gingival fibroblast cells.  
**HL-60** hmn acute promyelocytic leukemia (cell).  
**HM02** hmn melanoma (cell).  
**HMC-1** hmn leukemic mast cells.  
**HMEC** hmn microvascular endothelial cells.  
**HO-8910** hmn ovarian cancer (cell).  
**HOG.R5** green fluorescent protein (GFP)-based reporter cell.  
**HONE-1** hmn nasopharyngeal carcinoma (cell).  
**HOP-62** non-small cell lung cancer (cell).  
**Hs578T** hmn breast cancer (cell).  
**Hs740T** hmn gastric cancer (cell).  
**Hs742T** hmn breast cancer (cell).  
**Hs756T** hmn gastric cancer (cell).  
**HSC-2** hmn oral squamous cell carcinoma cells.  
**HSG** hmn salivary gland tumor (cell).  
**HT** sarcoma (cell).  
**HT1080** hmn fibrosarcoma (cell).  
**HT29** hmn colorectal cancer (cell).  
**HT3** hmn cervical carcinoma (cell).  
**hTERT-RPE1** hmn telomerase reverse transcriptase-retinal pigment epithelial cells.  
**Huh7** hmn hepatoma (cell).  
**HUVEC** hmn umbilical vein endothelial cell.  
**Jurkat-T** hmn T-cell leukemia (cell).  
**K562** hmn leukemia (cell).  
**K562/ADM** hmn leukemia (cell) of adriamycin-resistant.  
**Kato3** hmn gastric cancer (cell).  
**KB** hmn nasopharyngeal carcinoma (cell).  
**KB15** hmn nasopharyngeal carcinoma (cell).  
**KB16** hmn nasopharyngeal carcinoma (cell).  
**KB3** hmn nasopharyngeal carcinoma (cell).  
**KBV200** MDR nasopharyngeal carcinoma (cell).  
**KB-VIN** vincristine-resistant nasopharyngeal carcinoma (cell).  
**Ketr3** hmn renal cancer (cell).  
**KG-1** hmn leukemia (cell).  
**KM12** hmn colorectal cancer (cell).  
**KM20L2** hmn colorectal cancer (cell).  
**KU-1** hmn bladder cancer (cell).  
**L<sub>1210</sub>** Lymphocytic leukemia (cell).  
**L5178Y** lymphosarcoma (cell).  
**L-6** rat skeletal myoblasts.  
**L<sub>615</sub>** mouse spleen leukemia (cell).  
**L<sub>7212</sub>** mouse leukemia (cell).  
**L-929** fibrosarcoma (cell).  
**LLC** mouse Lewis lung cancer (cell).  
**LMTK** mouse fiber cells.  
**LNCaP** hmn prostatic cancer (cell).  
**LNCaP-FGC** hmn prostatic cancer (cell).  
**LO2** hmn liver cell.  
**LoVo** hmn colorectal cancer (cell).  
**LoVo/Doxo** hmn colorectal cancer cell, drug-resistant subclone.  
**LOX** melanoma (cell).  
**LOX-IMVI** melanoma (cell).  
**LS174T** colorectal cancer (cell).  
**Lu04** hmn lung cancer (cell).  
**Lu1** hmn lung cancer (cell).  
**LXFL529L** hmn large cell lung cancer (cell).  
**M1** mus myelocytic leukemia (cell).  
**M14** melanoma (cell).  
**M4BEU** hmn melanoma (cell).  
**M5076** ovarian sarcoma (cell).  
**Ma7373** mus breast cancer (cell).  
**MALME-3M** melanoma (cell).  
**MBT-2** mus bladder cancer (cell).  
**MCF7** hmn breast cancer (cell).  
**MCF7/6** hmn breast cancer (cell).  
**MCF7/ADR-RES** hmn breast cancer (cell).  
**MCF7-ras** hmn breast cancer (cell).  
**MDA231** hmn breast cancer (cell).  
**MDA-MB-231** hmn breast cancer (cell).  
**MDA-MB-435** hmn breast cancer (cell).  
**MDCK** Madin-Darby Canine.  
**MEL-28** hmn melanoma cell.  
**Meth-A** Meth-A sarcoma (cell).  
**MGc803** hmn gastric adenocarcinoma (cell).  
**MH-60** mus leukemia (cell).  
**MI4** melanoma (cell).  
**MIA-PaCa-2** hmn pancreas cancer (cell).  
**MK1** hmn gastric cancer (cell).  
**MKN1** hmn gastric cancer (cell).  
**MKN28** hmn gastric cancer (cell).  
**MKN45** hmn gastric cancer (cell).  
**MKN7** hmn gastric cancer (cell).  
**MKN74** hmn gastric cancer (cell).  
**MM1** highly invasive clone isolated from parental rat ascites hepatoma AH130 cells.  
**Molt4** hmn lymphoma (cell).  
**Mono-Mac-6** mononuclear cells.  
**MQc80-3** gastric adenocarcinoma (cell).  
**MRC-5** hmn diploid embryonic cells.

**MS301** mus breast cancer (cell).  
**MS310** mus breast cancer (cell).  
**N04** hmn neuroma (cell).  
**NCI-H1417** hmn small cell lung cancer (cell).  
**NCI-H187** hmn small cell lung cancer (cell).  
**NCI-H226** hmn non-small cell lung cancer (cell).  
**NCI-H23** hmn lung cancer (cell).  
**NCI-H460** hmn lung cancer (cell).  
**NCI-H522** hmn lung cancer (cell).  
**NK/LY** ascites cancer (cell).  
**NSCLC-N6** hmn non-small cell lung cancer (cell).  
**NUGC** hmn gastric cancer (cell).  
**NUGC-3** hmn gastric cancer (cell).  
**NUGC-4** hmn gastric cancer (cell).  
**OVCAR-2780** ovarian adenocarcinoma (cell).  
**OVCAR-3** ovarian adenocarcinoma (cell).  
**OVCAR-4** ovarian adenocarcinoma (cell).  
**OVCAR-5** ovarian adenocarcinoma (cell).  
**OVCAR-8** ovarian adenocarcinoma (cell).  
**P1534** mus, transplanted leukemia (cell).  
**P<sub>388</sub>** mouse lymphocytic leukemia (cell).  
**P<sub>388</sub>/ADM** mouse lymphocytic leukemia (cell) of adriamycin-resistant.  
**PACA-2** hmn pancreas cancer (cell) .  
**PANC1** pancreas cancer (cell).  
**PBMC** peripheral blood mononuclear cells.  
**PC12** hmn lung cancer (cell).  
**PC3** hmn prostatic cancer (cell).  
**PC-6** hmn lung cancer (cell).  
**PLC/PRF/5** hmn liver cancer (cell).  
**PSN1** hmn pancreas cancer (cell).  
**PTX10** ovarian cancer cells with  $\beta$ -tubulin mutation.  
**QGY-7703** hmn liver cancer (cell).  
**RAW264.7** mouse macrophages.  
**RBL-2H3** rat basophilic cells.  
**RL33** rbt lung cancer (cell).  
**RPMI-7951** melanoma (cell).  
**RPMI-8226** leukemia (cell).  
**RXF-393** renal cancer (cell).  
**RXF-631L** renal cancer (cell).  
**S<sub>180</sub>** mouse sarcoma (cell).  
**S37** mouse sarcoma (cell).  
**Sca7901** hmn gastric adenocarcinoma (cell).  
**SCL** hmn gastric cancer (cell).  
**SCL-37\*6** hmn gastric cancer (cell).  
**SCL-6** hmn gastric cancer (cell).  
**SCL-9** hmn gastric cancer (cell).  
**SF268** hmn brain tumor (cell).  
**SF295** hmn brain tumor (cell).  
**SF539** hmn brain tumor (cell).  
**SGC** hmn gastric cancer (cell).  
**SGC7901** hmn gastric cancer (cell).  
**SiHa** hmn cervical carcinoma (cell).  
**SKBR3** hmn breast cancer (cell).  
**SKCO1** colorectal cancer (cell).  
**SK-MEL** hmn caucasian melanoma (cell).  
**SK-MEL-2** hmn melanoma (cell).  
**SK-MEL-28** hmn melanoma (cell).  
**SK-MEL-5** hmn melanoma (cell).  
**SK-MES-1** bronchogenic carcinoma cell.  
**SK-OV-3** ovarian adenocarcinoma (cell).  
**SMMC-7721** hmn liver cancer (cell).  
**SNB75** hmn brain tumor (cell).  
**SNB78** hmn brain tumor (cell).  
**SNU638** hmn gastric adenocarcinoma (cell).  
**SR** leukemia (cell).  
**St4** gastric cancer (cell).  
**SVR** mouse endothelial cells.  
**SW620** hmn colorectal adenocarcinoma (cell).  
**T24** hmn liver cancer (cell).  
**T24S** hmn bladder cancer (cell).  
**T47D** hmn breast cancer (cell).  
**T98G** hmn caucasian glioblastoma (cell).  
**TK10** renal cancer (cell).  
**Tmolt3** hmn leukemia (cell).  
**U14** mouse cervical carcinoma (cell).  
**U251** brain tumor (cell).  
**U373** caucasian glioblastoma (cell).  
**U4** mouse cervical carcinoma (cell).  
**U-87-MG** caucasian glioblastoma (cell).  
**U937** hmn monocytic leukemia (cell).  
**UACC62** melanoma (cell).  
**UO-31** renal cancer (cell).  
**Vero** green monkey kidney tumour (cell).  
**W<sub>256</sub>** rat Walker sarcoma (cell).  
**WEHI-164** mus fibrosarcoma (cell).  
**WHCO1** hmn esophageal cancer (cell).  
**WI-38** hmn lung fibrocyte (normal hmn diploid fibrocyte).  
**WiDr** colorectal adenocarcinoma (cell).  
**Wish** transformed epithelial tumour (cell).  
**XF-498** hmn tumor (cell).  
**ZR-75-1** hmn breast cancer (cell).



## **Volume 2 Isolated Compounds (D-G)**

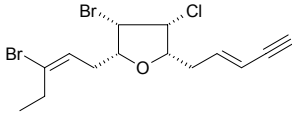


# D

## 4595 Dactylyne

$C_{14}H_{17}Br_2ClO$  (396.55). mp 62–63°C,  $[\alpha]_D^{25} = -38.2^\circ$  ( $c = 0.19$ ,  $CHCl_3$ ).

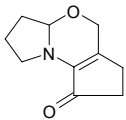
Source: *Laurencia* sp., *Aplysia dactylomela*. Ref: 2306.



## 4596 Daechu alkaloid A

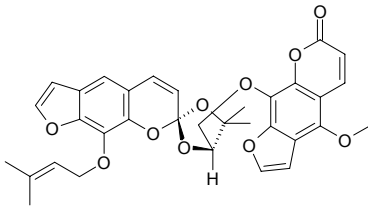
$C_{10}H_{13}NO_2$  (179.22). Source: WU CI ZAO *Ziziphus jujuba* var. *inermis*.

Ref: 660.



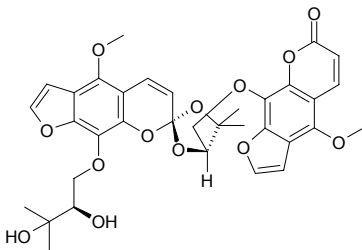
## 4597 Dahuribirin A

$C_{33}H_{30}O_{10}$  (586.60). Colorless viscous oil,  $[\alpha]_D^{28} = -3.6^\circ$  ( $c = 0.48$ , dioxane). Source: BAI ZHI *Angelica dahurica* [Syn. *Angelica porphyrocaulis*]. Ref: 4118.



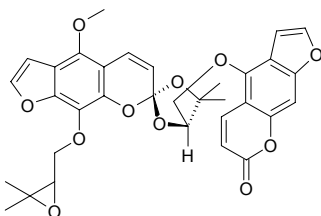
## 4598 Dahuribirin B

$C_{34}H_{34}O_{13}$  (650.64). Colorless viscous oil,  $[\alpha]_D^{30} = -4.6^\circ$  ( $c = 0.59$ , dioxane). Source: BAI ZHI *Angelica dahurica* [Syn. *Angelica porphyrocaulis*]. Ref: 4118.



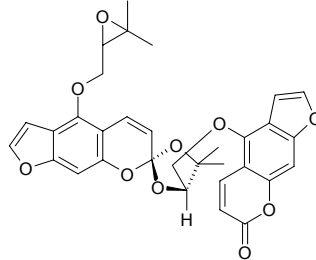
## 4599 Dahuribirin C

$C_{33}H_{30}O_{11}$  (602.60). Colorless viscous oil,  $[\alpha]_D^{31} = +20.0^\circ$  ( $c = 0.48$ , dioxane). Source: BAI ZHI *Angelica dahurica* [Syn. *Angelica porphyrocaulis*]. Ref: 4118.



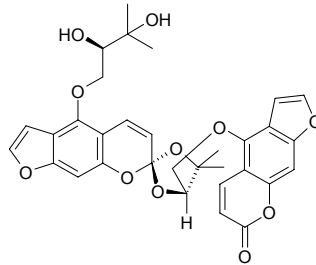
## 4600 Dahuribirin D

$C_{32}H_{28}O_{10}$  (572.57). Colorless viscous oil,  $[\alpha]_D^{24} = -0.22^\circ$  ( $c = 0.65$ , dioxane). Source: BAI ZHI *Angelica dahurica* [Syn. *Angelica porphyrocaulis*]. Ref: 4118.



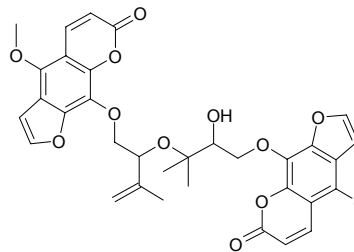
## 4601 Dahuribirin E

$C_{32}H_{30}O_{11}$  (590.59). Colorless viscous oil,  $[\alpha]_D^{24} = +4.6^\circ$  ( $c = 0.62$ , dioxane). Source: BAI ZHI *Angelica dahurica* [Syn. *Angelica porphyrocaulis*]. Ref: 4118.



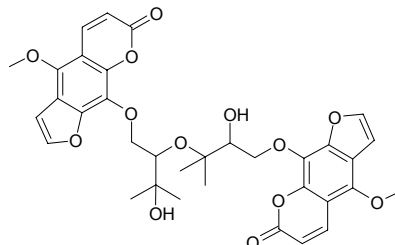
## 4602 Dahuribirin F

$C_{34}H_{32}O_{12}$  (632.63). Colorless viscous oil,  $[\alpha]_D^{24} = -1.1^\circ$  ( $c = 0.49$ , dioxane). Source: BAI ZHI *Angelica dahurica* [Syn. *Angelica porphyrocaulis*]. Ref: 4118.



## 4603 Dahuribirin G

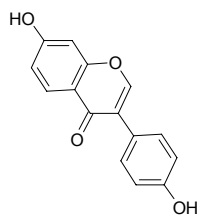
$C_{34}H_{34}O_{13}$  (650.64). Colorless viscous oil,  $[\alpha]_D^{24} = +5.2^\circ$  ( $c = 0.54$ , dioxane). Source: BAI ZHI *Angelica dahurica* [Syn. *Angelica porphyrocaulis*]. Ref: 4118.



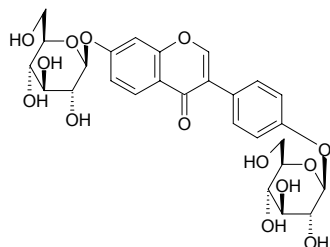


**4604 Daidzein**

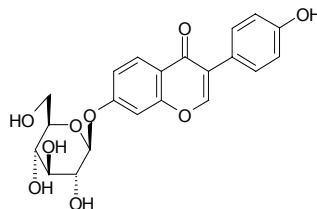
4',7-Dihydroxyisoflavone [486-66-8] C<sub>15</sub>H<sub>10</sub>O<sub>4</sub> (254.24). **Pharm:** Antifungal; antispasmodic (mus small intestine); CVS activity (enhances collateral circulation and oxygen consumption upon lack of blood in myocardium); estrogenic activity ; increases coronary flow (narcois dog); lipase inhibitor; anti-inflammatory (NO production inhibitor)<sup>[4415]</sup>; cytotoxic (KB, IC<sub>50</sub> > 75μmol/L, Helenalin, IC<sub>50</sub> = (0.64±0.08)μmol/L, Melphalan, IC<sub>50</sub> = (6.0±0.5)μmol/L; Mono-Mac-6, IC<sub>50</sub> > 75μmol/L, Helenalin, IC<sub>50</sub> = (3.1±0.3)μmol/L; Jurkat-T, IC<sub>50</sub> > 75μmol/L, Helenalin, IC<sub>50</sub> = (1.14±0.08)μmol/L, Melphalan, IC<sub>50</sub> = (9.1±0.8)μmol/L)<sup>[5077]</sup>; antibacterial (*Staphylococcus aureus*, MIA = 1.00μg, Chloramphenicol, MIA = 0.0001μg; *Bacillus subtilis*, MIA = 5.00μg, Chloramphenicol, MIA = 0.0001μg)<sup>[5247]</sup>; antifungal (*Candida mycoderma*, MIA = 0.05μg, control Miconazole, MIA = 0.0001μg)<sup>[5247]</sup>; antioxidant (DPPH scavenger, TLC, MIA = 0.1μg, IC<sub>50</sub> = 380μg/mL; control Quercetin, MIA < 0.05μg, IC<sub>50</sub> = 7μg/mL, Gallic acid, MIA < 0.05μg, IC<sub>50</sub> = 4μg/mL; Ascorbic acid, MIA < 0.10μg, IC<sub>50</sub> = 18μg/mL)<sup>[5247]</sup>. **Source:** DA DOU *Glycine max* (Soybean phytochemical concentrate: yield = 0.0058%dw)<sup>[4630]</sup>, E MEI GE *Pueraria omeiensis* (root: content = 0.055%)<sup>[5508]</sup>, FEN GE *Pueraria lobata* var. *thomsonii* (root: mean content of 2 origins = 0.035%)<sup>[5508]</sup>, GE GEN *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*] (root: mean content of 10 origins = 0.137%)<sup>[5508]</sup>, HEI DA DOU *Glycine max*, HONG CHE ZHOU CAO *Trifolium pratense*, HUANG HUA MU *Piptanthus nepalensis*, HUANG MAO GE *Pueraria calycina* (root: content = 0.030%)<sup>[5508]</sup>, JI KUAN CI TONG *Erythrina latissima* (stem wood), MU XU *Medicago sativa*, SAN LIE YE GE *Pueraria phaseoloides* (root: content = 0.090%)<sup>[5508]</sup>, SAN XIAO CAO *Trifolium repens*, SHAN DOU GEN *Sophora subprostrata* [Syn. *Sophora tonkinensis*], SHI YONG GE *Pueraria edulis* (root: content = 0.063%)<sup>[5508]</sup>, SI TE WEN HUANG TAN *Dalbergia stevensonii*, YUN NAN GE TENG *Pueraria peduncularis* (root: content = 0.053%)<sup>[5508]</sup>, *Bituminaria morisiana* (leaf). **Ref:** 2, 4, 658, 660, 4415, 4630, 5077, 5247, 5508.

**4605 Daidzein 4',7-diglucoside**

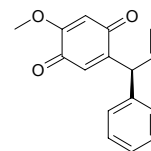
C<sub>27</sub>H<sub>30</sub>O<sub>14</sub> (578.53). **Source:** GE GEN *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*] (root: mean content of 7 origins = 0.453%)<sup>[5508]</sup>, GAN GE TENG GEN *Pueraria thomsonii*. **Ref:** 2, 660, 5508.

**4606 Daidzin**

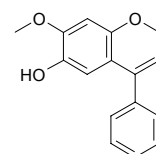
Daidzoside [552-66-9] C<sub>21</sub>H<sub>20</sub>O<sub>9</sub> (416.39). **Source:** DA DOU *Glycine max* (Soybean phytochemical concentrate: yield = 0.0074%dw)<sup>[4630]</sup>, E MEI GE *Pueraria omeiensis* (root: content = 1.0–5%)<sup>[5508]</sup>, FEN GE *Pueraria lobata* var. *thomsonii* (root: content = 1.51%)<sup>[5508]</sup>, GAN GE TENG GEN *Pueraria thomsonii* (root: content = 0.158%)<sup>[5508]</sup>, GE GEN *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*] (root: content = 0.78%)<sup>[5508]</sup>, SAN LIE YE GE *Pueraria phaseoloides* (root: content = 0.72%)<sup>[5508]</sup>, SHI YONG GE *Pueraria edulis* (root: content = 0.44%)<sup>[5508]</sup>. **Ref:** 2, 660, 4630, 5508.

**4607 Dalbergenone**

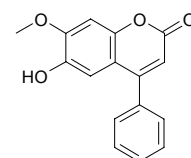
[2543-95-5] C<sub>16</sub>H<sub>14</sub>O<sub>3</sub> (254.29). mp 114–116°C. **Source:** JIANG ZHEN XIANG *Dalbergia odorifera*. **Ref:** 6.

**4608 Dalbergichromene**

7-Methoxy-4-phenyl-2H-1-benzopyran-6-ol [32066-31-2] C<sub>16</sub>H<sub>14</sub>O<sub>3</sub> (254.29). mp 99–100°C. **Source:** JIANG ZHEN XIANG *Dalbergia odorifera*. **Ref:** 6.

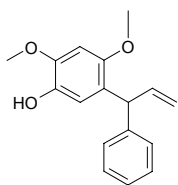
**4609 Dalbergin**

6-Hydroxy-7-Methoxy-4-phenylcoumarin [482-83-7] C<sub>16</sub>H<sub>12</sub>O<sub>4</sub> (268.27). mp 210°C. **Pharm:** CVS activity (increases coronary flow and slows heart rate, perfused heart of rbt *in vitro*). **Source:** FEI ZHOU HUANG TAN *Dalbergia melanoxydon*, HE AN HUANG TAN *Dalbergia riparia*, JIANG ZHEN XIANG *Dalbergia odorifera*, JIAO ZHI HUANG TAN *Dalbergia cochinchinensis* (stem: yield = 0.0024%dw)<sup>[4716]</sup>, SI TE WEN HUANG TAN *Dalbergia stevensonii*, XI A LA HUANG TAN *Dalbergia cearensis*, XIAO DAO XING HUANG TAN *Dalbergia cultrata*, YIN DU HUANG TAN *Dalbergia sissoo*. **Ref:** 6, 658, 4716.

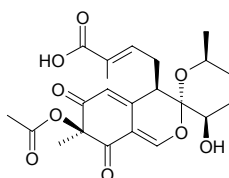


**4610 Dalbergiphenol**

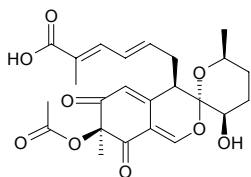
$C_{17}H_{18}O_3$  (270.33). **Pharm:** Testosterone 5 $\alpha$ -reductase inhibitor (25 $\mu$ g/mL, InRt = 8.2%, 50 $\mu$ g/mL, InRt = 18.9%, 100 $\mu$ g/mL, InRt = 51.8%; control Glycyrrhetic acid, 25 $\mu$ g/mL, InRt = 31.7%, 50 $\mu$ g/mL, InRt = 64.7%, 100 $\mu$ g/mL, InRt = 87.1%). **Source:** JIAO ZHI HUANG TAN *Dalbergia cochinchinensis* (stem: yield = 0.0074%dw). **Ref:** 4716.

**4611 Daldinin C**

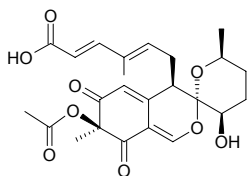
$C_{22}H_{26}O_9$  (434.45). **Pharm:** Antioxidant (DPPH scavenger,  $IC_{50}$  = 412.0 $\mu$ mol/L, control Ascorbic acid,  $IC_{50}$  = 16.5 $\mu$ mol/L). **Source:** AN ZONG TAN TUAN JUN *Hypoxyton fuscum*. **Ref:** 3771.

**4612 Daldinin E**

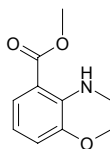
(2*E*,4*E*)-Hexa-2,4-dienoic acid,2-methyl-7*S*-(acetyloxy)-3',4,4',5',6,6',7,8-octahydro-3'-hydroxy-6',7-dimethyl-6,8-dioxospiro[3*H*-2-benzopyran-3,2'-[2*H*]pyran]-4-yl ester  $C_{24}H_{28}O_9$  (460.49). Oil,  $[\alpha]_D^{20}$  = +87.7° ( $c$  = 0.3,  $CHCl_3$ ). **Pharm:** Antioxidant (DPPH scavenger,  $IC_{50}$  = 178.9 $\mu$ mol/L, control Ascorbic acid,  $IC_{50}$  = 16.5 $\mu$ mol/L). **Source:** AN ZONG TAN TUAN JUN *Hypoxyton fuscum*. **Ref:** 3771.

**4613 Daldinin F**

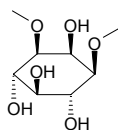
(2*E*,4*E*)-Hexa-2,4-dienoic acid,4-methyl-7*S*-(acetyloxy)-3',4,4',5',6,6',7,8-octahydro-3'-hydroxy-6',7-dimethyl-6,8-dioxospiro[3*H*-2-benzopyran-3,2'-[2*H*]pyran]-4-yl ester  $C_{24}H_{28}O_9$  (460.49). Oil,  $[\alpha]_D^{20}$  = +28.9° ( $c$  = 0.4,  $CHCl_3$ ). **Pharm:** Antioxidant (DPPH scavenger,  $IC_{50}$  = 212.3 $\mu$ mol/L, control Ascorbic acid,  $IC_{50}$  = 16.5 $\mu$ mol/L). **Source:** AN ZONG TAN TUAN JUN *Hypoxyton fuscum*. **Ref:** 3771.

**4614 Damascenine**

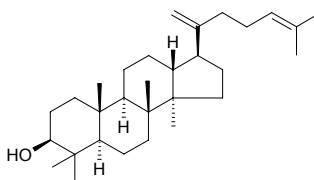
[483-64-7]  $C_{10}H_{13}NO_3$  (195.22). **Pharm:** Anti-inflammatory (rat, swollen foot model); antipyretic. **Source:** YE HEI ZHONG CAO *Nigella arvensis*, HEI ZHONG CAO *Nigella damascena*. **Ref:** 658.

**4615 Dambonitol**

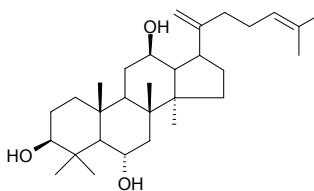
[532-94-4]  $C_8H_{16}O_6$  (208.21). mp 210°C. **Source:** JIA ZHU TAO *Nerium indicum*, LUO SHI TENG *Trachelospermum jasminoides*. **Ref:** 6.

**4616 Dammar-20,24-dien-3 $\beta$ -ol**

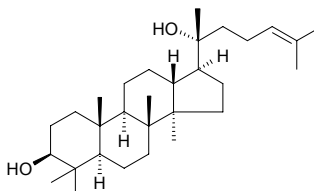
[20460-34-8]  $C_{30}H_{50}O$  (426.73). mp 136~138°C. **Source:** WU YUE CHA *Antidesma bunius*. **Ref:** 6.

**4617 Dammar-20(21),24-diene-3 $\beta$ ,6 $\alpha$ ,12 $\beta$ -triol**

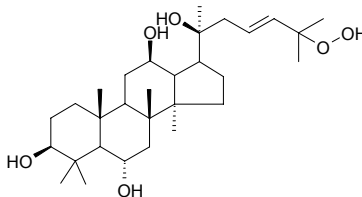
$C_{30}H_{50}O_3$  (458.73). Colorless fascicular crystals (MeOH), mp 145~148°C. **Source:** XI YANG SHEN JING YE *Panax quinquefolium*. **Ref:** 4874.

**4618 Dammar-24-ene-3 $\beta$ ,20-diol I**

[19132-83-3]  $C_{30}H_{52}O_2$  (444.75). mp 142~144°C. **Source:** MANG GUO SHU PI *Mangifera indica*. **Ref:** 6.

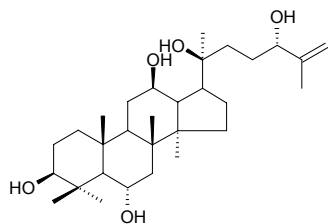
**4619 20(S)-Dammar-23-ene-25-hydroperoxyl-3 $\beta$ ,6 $\alpha$ ,12 $\beta$ ,20-tetrol**

$C_{30}H_{52}O_6$  (508.75). White crystalline powder, mp 142~145°C. **Source:** XI YANG SHEN JING YE *Panax quinquefolium*. **Ref:** 4874.

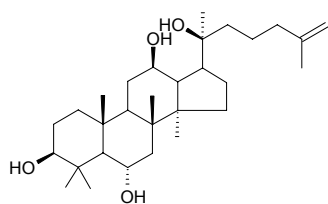


**4620 20(S),24(S)-Dammar-25(26)-ene-3 $\beta$ ,6 $\alpha$ ,12 $\beta$ ,20,24-pentanol**

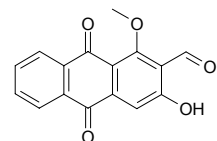
C<sub>30</sub>H<sub>52</sub>O<sub>5</sub> (492.75). White crystalline powder, mp 142–144°C. Source: XI YANG SHEN JING YE *Panax quinquefolium*. Ref: 4874.

**4621 20(S)-Dammar-25(26)-ene-3 $\beta$ ,6 $\alpha$ ,12 $\beta$ ,20-tetrol**

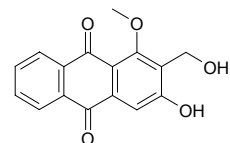
C<sub>30</sub>H<sub>52</sub>O<sub>4</sub> (476.75). Colorless fascicular crystals (MeOH), mp 259–260°C. Source: XI YANG SHEN JING YE *Panax quinquefolium*. Ref: 4874.

**4622 Damnacanthal**

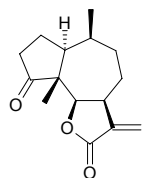
[477-84-9] C<sub>16</sub>H<sub>10</sub>O<sub>5</sub> (282.26). mp 208°C. Source: HU CI *Damnacanthus indicus*, TU LIAN QIAO *Hymenodictyon excelsum*. Ref: 6.

**4623 Damnacanthol**

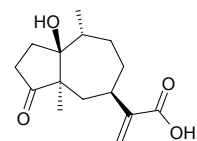
[477-83-8] C<sub>16</sub>H<sub>12</sub>O<sub>5</sub> (284.27). mp 288°C. Source: HU CI *Damnacanthus indicus*. Ref: 6.

**4624 Damsin**

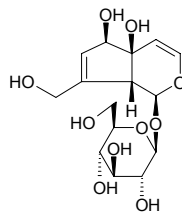
2,3-Dihydroambrosin [1216-42-8] C<sub>15</sub>H<sub>20</sub>O<sub>3</sub> (248.32). mp 109–111°C; 124–125°C. Pharm: Schistosomacide; cytotoxic (KB, ED<sub>50</sub> > 100µg/mL); molluscicide. Source: PU TONG TUN CAO *Ambrosia ambrosioides*, TUN CAO *Ambrosia artemisiifolia*. Ref: 4, 658.

**4625 Damsinic acid**

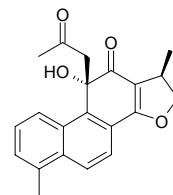
[22844-19-5] C<sub>15</sub>H<sub>22</sub>O<sub>4</sub> (266.34). mp 112–113°C. Source: TUN CAO *Ambrosia artemisiifolia*. Ref: 1521.

**4626 Danmelittoside**

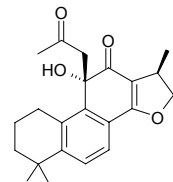
Monomelittoside C<sub>15</sub>H<sub>22</sub>O<sub>10</sub> (362.34). Source: GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], OU ZHOU MI FENG HUA *Melittis melissophyllum*. Ref: 2, 1521.

**4627 Danshenol A**

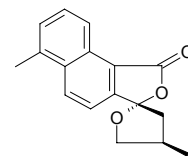
[189308-08-5] C<sub>21</sub>H<sub>20</sub>O<sub>4</sub> (336.39). Taupe acicular crystals, mp 182°C (methanol), [α]<sub>D</sub><sup>25</sup> = –136.4° (c = 0.07, chloroform). Pharm: Aldose reductase inhibitor (rat eye lens, IC<sub>50</sub> = 0.1µmol/L). Source: DAN SHEN *Salvia miltiorrhiza*. Ref: 993.

**4628 Danshenol B**

[189308-09-6] C<sub>22</sub>H<sub>26</sub>O<sub>4</sub> (354.45). Yellow acicular crystals, mp 176°C (methanol), [α]<sub>D</sub><sup>25</sup> = –131.6° (c = 0.10, chloroform). Pharm: Aldose reductase inhibitor (rat eye lens, IC<sub>50</sub> = 1.75µmol/L). Source: DAN SHEN *Salvia miltiorrhiza*. Ref: 993.

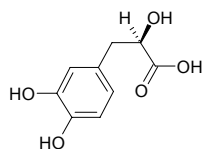
**4629 Danshenspiroketalactone**

[100414-80-0] C<sub>17</sub>H<sub>16</sub>O<sub>3</sub> (268.32). White acicular crystals, mp 203–205°C. Source: DAN SHEN *Salvia miltiorrhiza*, GAN XI SHU WEI CAO *Salvia przewalskii*. Ref: 38, 4538.

**4630 Danshensu**

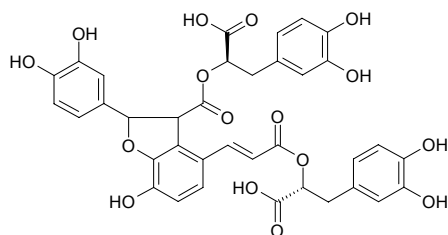
[76822-21-4] C<sub>9</sub>H<sub>10</sub>O<sub>5</sub> (198.18). White, long acicular crystals, mp 84–86°C; sodium salt: white acicular crystals, mp 255–258°C, [α]<sub>D</sub><sup>20.5</sup> = +35° (water); [α]<sub>D</sub><sup>27.5</sup> = +14.8° (1N HCl). Pharm: Coronary vasodilator (pig isolated coronary artery, 1.0µg/mL, also against coronary contraction induced by morphine or propranolol)<sup>[5501]</sup>; increases tolerance to anoxia (mouse ip300mg/kg or 50mg/kg, clearly extends survival time)<sup>[5501]</sup>; anti-ischemia myocardial (rat im 20mg/kg, ischemia myocardial induced by hypophysin)<sup>[5501]</sup>; anti-myocardial infarction (dog im 8mg/kg, rbt im 10mg/kg)<sup>[5501]</sup>; antioxidant (strong O<sub>2</sub><sup>-</sup> superoxide anion scavenger, protects myocardial ischemia-reperfusion injury in rat myocardium mitochondrial membrane)<sup>[5501]</sup>; improves barrier of microcirculation (rbt iv in ear 4–6mg/kg, induced by macromolecular dextran; mouse drop iv

1mg/0.1mL, induced by arterenol in mesentery)<sup>[5501]</sup>, platelet aggregation inhibitor (rbt iv in ear 20mg/kg; rat iv 100mg/kg; *in vitro* 5~600µg/mL, distinctly inhibits platelet aggregation induced by ADP or thrombin)<sup>[5501]</sup>.  
**Source:** DAN SHEN *Salvia miltiorrhiza* (dried root: mean content = 0.664%)<sup>[5508]</sup> **Ref:** 661, 5501, 5508.



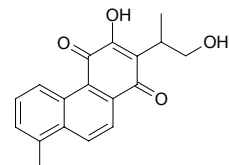
#### 4631 Danshensuan B

Salvianolic acid B [115939-25-8] C<sub>36</sub>H<sub>30</sub>O<sub>16</sub> (718.63). Amorphous yellowish powder, [α]<sub>D</sub><sup>18</sup> = +92° (c = 0.07, ethanol). **Pharm:** Free radical scavenger; fibrinolytic function; increases coronary flow; antioxidant (inhibits lipid peroxidation strongly, induced by vitamin C-nicotinamide ADP and Fe<sup>2+</sup>-cysteine in microsomes of murine cerebral, hepatic and renal cells); main component of phenol character acid in *Salvia miltiorrhiza*. **Source:** DAN SHEN *Salvia miltiorrhiza*. **Ref:** 2, 900.



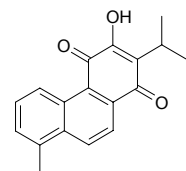
#### 4632 Danshenxinkun A

Neotanshinone A; Tanshiquinone A C<sub>18</sub>H<sub>16</sub>O<sub>4</sub> (296.33). **Pharm:** Antibacterial (*Mycobacterium tuberculosis* H37Rv, MIC = 0.78µg/mL). **Source:** DAN SHEN *Salvia miltiorrhiza*. **Ref:** 658, 1285.



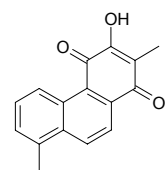
#### 4633 Danshenxinkun B

Neotanshinone B; Tanshiquinone B C<sub>18</sub>H<sub>16</sub>O<sub>3</sub> (280.33). **Pharm:** Antibacterial (*Mycobacterium tuberculosis* H37Rv, MIC = 3.1µg/mL). **Source:** DAN SHEN *Salvia miltiorrhiza*. **Ref:** 658, 1285.



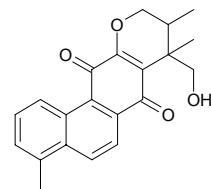
#### 4634 Danshenxinkun C

Neotanshinone C; Tanshiquinone C C<sub>16</sub>H<sub>12</sub>O<sub>3</sub> (252.27). **Pharm:** Antibacterial (*Mycobacterium tuberculosis* H37Rv, MIC = 6.3µg/mL). **Source:** DAN SHEN *Salvia miltiorrhiza*. **Ref:** 658, 1285.



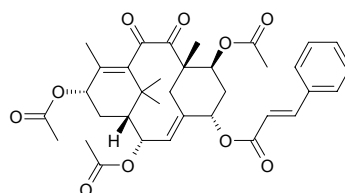
#### 4635 Danshenxinkun D

C<sub>21</sub>H<sub>20</sub>O<sub>4</sub> (336.39). Pink acicular crystals, mp 178~180°C. **Source:** DAN SHEN *Salvia miltiorrhiza*. **Ref:** 34.



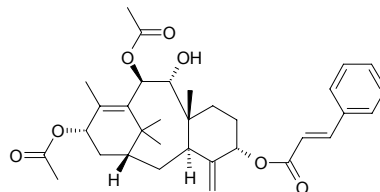
#### 4636 Dantaxusin A

5α-Cinnamoyloxy-2α,7β,13α-triacetoxy-2(3→20)abeo-taxa-4(20),11-diene e-9,10-dione C<sub>35</sub>H<sub>40</sub>O<sub>10</sub> (620.7). Colorless amorphous powder, mp 114~116°C, [α]<sub>D</sub><sup>27</sup> = +12° (c = 0.33, MeOH). **Source:** YUN NAN HONG DOU SHAN *Taxus yunnanensis* (aerial parts). **Ref:** 3079.



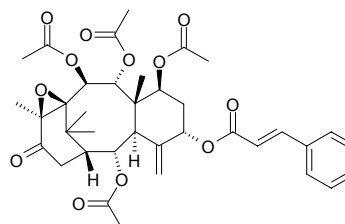
#### 4637 Dantaxusin B

5α-Cinnamoyloxy-9α-hydroxy-10β,13α-diacetoxytaxa-4(20),11-diene C<sub>33</sub>H<sub>42</sub>O<sub>7</sub> (550.7). Colorless amorphous powder, mp 245~246°C, [α]<sub>D</sub><sup>27</sup> = -8° (c = 0.33, MeOH). **Source:** YUN NAN HONG DOU SHAN *Taxus yunnanensis* (aerial parts). **Ref:** 3079.



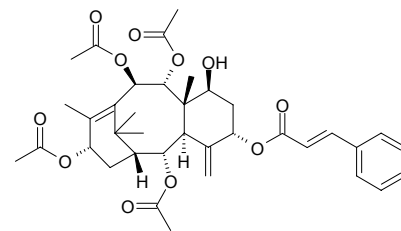
#### 4638 Dantaxusin C

C<sub>37</sub>H<sub>44</sub>O<sub>12</sub> (680.76). Colorless amorphous powder, mp 122~123°C, [α]<sub>D</sub><sup>24</sup> = +1.25° (c = 0.33, MeOH). **Source:** YUN NAN HONG DOU SHAN *Taxus yunnanensis* (aerial parts). **Ref:** 4611.



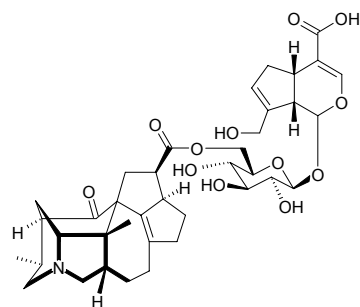
#### 4639 Dantaxusin D

C<sub>37</sub>H<sub>46</sub>O<sub>11</sub> (666.77). Colorless amorphous powder, mp 111~112 °C, [α]<sub>D</sub><sup>24</sup> = +6.88° (c = 0.33, MeOH). **Source:** YUN NAN HONG DOU SHAN *Taxus yunnanensis* (aerial parts). **Ref:** 4611.

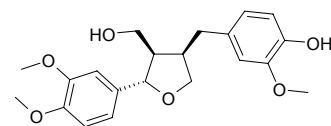


**4640 Daphcalycinoidine C**

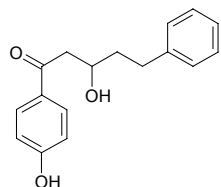
$C_{38}H_{49}NO_{12}$  (711.81). Colorless amorphous solid,  $[\alpha]_D^{22} = -15^\circ$  ( $c = 0.6$ , MeOH). Source: NIU ER FENG ZI *Daphniphyllum calycinum* (fruit: yield = 0.00042%). Ref: 4754.

**4641 Daphneligin**

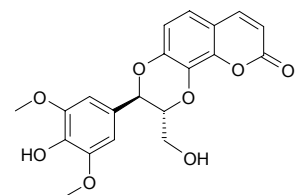
$C_{21}H_{26}O_6$  (374.44). Amorphous powder, mp 136~138°C,  $[\alpha]_D = +11.5^\circ$  ( $c = 0.10$ ,  $CHCl_3$ ) Source: YOU RUI XIANG *Daphne oleoides*. Ref: 1883.

**4642 Daphneolone**

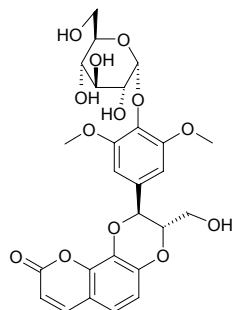
[54835-64-2]  $C_{17}H_{18}O_3$  (270.33). Source: RUI XIANG GEN *Daphne odora*. Ref: 6.

**4643 Daphneticin**

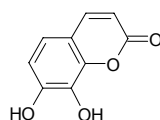
[83327-22-4]  $C_{20}H_{18}O_8$  (386.36). Pharm: Cytotoxic ( $W_{256}$ ). Source: SHAN GAN RUI XIANG *Daphne tangutica*, AO YE RUI XIANG *Daphne retusa*. Ref: 658.

**4644 Daphneticin-4''-O- $\alpha$ -D-glucopyranoside**

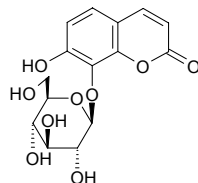
$C_{26}H_{28}O_{13}$  (548.51). mp 254~255°C,  $[\alpha]_D = +23.5^\circ$  ( $c = 0.10$ , DMSO). Source: YOU RUI XIANG *Daphne oleoides*. Ref: 2279.

**4645 Daphnetin**

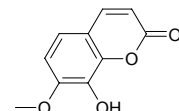
7,8-Dihydroxycoumarin [486-35-1]  $C_9H_6O_4$  (178.15). mp 257~258°C; 263~264°C. Pharm: Analgesic; antibacterial (*Staphylococcus aureus*, *Bacillus coli*, *Shigella flexneri* and *Bacillus pyocyaneus*); anti-inflammatory; anti-ischemia, myocardial; immunomodulator (inhibits immune response of specific cells and that of body fluid, but enhances phagocytotic function of enterocelia  $M_{phi}$  macrophage); improves myocardium metabolism and promotes restoration of myocardial function; increases coronary flow; reduces consumption of oxygen in myocardium; sedative;  $LD_{50}$  (mus, ip) = 429mg/kg, (mus, iv) = 375mg/kg, (mus, orl) = 5.37g/kg. Source: HUI HUI DOU *Cicer arietinum*, LANG DU *Stellera chamaejasme*, QIAN JIN ZI *Euphorbia lathyris*, RUI XIANG HUA *Daphne odora*. Ref: 4, 6, 556, 658, 5501, 5507.

**4646 Daphnetin-8-glucoside**

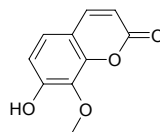
[20853-56-9]  $C_{15}H_{16}O_9$  (340.29). mp 223~224°C. Source: RUI XIANG HUA *Daphne odora*. Ref: 6.

**4647 Daphnetin-7-methyl ether**

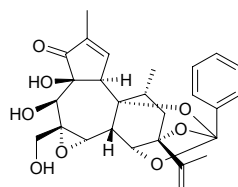
[19492-03-6]  $C_{10}H_8O_4$  (192.17). mp 175.5°C. Source: BA XIAN HUA *Hydrangea macrophylla*. Ref: 6.

**4648 Daphnetin-8-methyl ether**

Hydrangetin [485-90-5]  $C_{10}H_8O_4$  (192.17). Needles ( $C_6H_6$ ), mp 152°C, mp 157~157.5°C, mp 185°C. Pharm: Cytotoxic inactive (*in vitro*, HONE-1 and NUGC cancer cell lines, no significant activity)<sup>[3069]</sup>. Source: BA XIAN HUA *Hydrangea macrophylla*, QING HAO *Artemisia apiacea* [Syn. *Artemisia carvifolia*; *Artemisia caruifolia*], QUAN YUAN YE HUA *Zanthoxylum integrifolium*, ZHONG GUO XIU QIU *Hydrangea chinensis* (root)<sup>[3069]</sup>. Ref: 6, 2176, 3069.

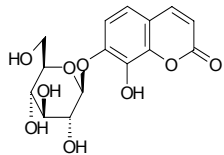
**4649 Daphnetoxin**

[28164-88-7]  $C_{27}H_{30}O_8$  (482.54). Pharm:  $LD_{50}$  (mus, orl) = 0.25mg/kg. Source: OU YA RUI XIANG *Daphne mezereum*. Ref: 658.

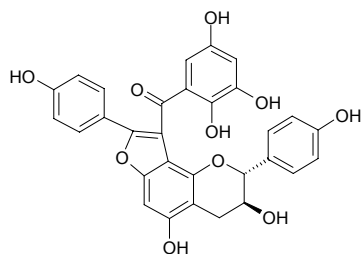


**4650 Daphnin**

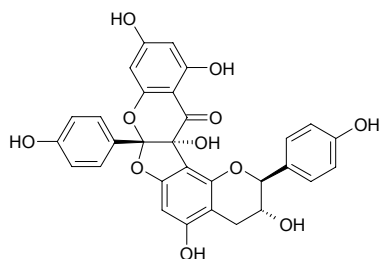
Daphnetin-7-glucoside [486-55-5]  $C_{15}H_{16}O_9$  (340.29). mp 215°C (dec).  
 Source: RUI XIANG HUA *Daphne odora*, SU MI *Setaria italica*. Ref: 6.

**4651 Daphnodorin B**

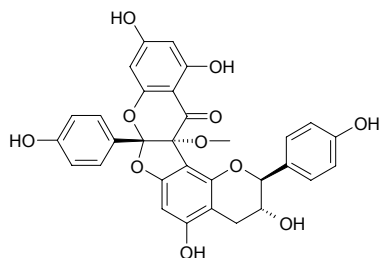
[95733-02-1]  $C_{30}H_{22}O_{10}$  (542.50). Source: LIAO GE WANG GEN  
*Wikstroemia indica*, RUI XIANG GEN *Daphne odora*. Ref: 2268, 1521.

**4652 Daphnodorin G**

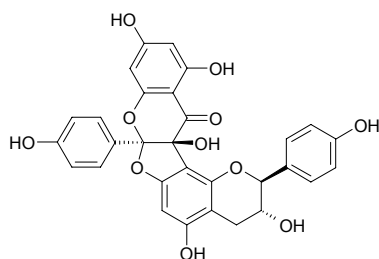
$C_{30}H_{22}O_{11}$  (558.50). Source: YUAN HUA GEN *Daphne genkwa*. Ref:  
 4868.

**4653 Daphnodorin G-3''-methyl ether**

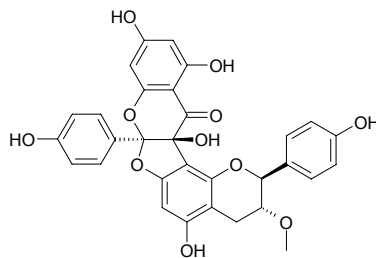
$C_{31}H_{24}O_{11}$  (572.33). Yellow amorphous powder. Source: YUAN HUA  
 GEN *Daphne genkwa*. Ref: 4868.

**4654 Daphnodorin H**

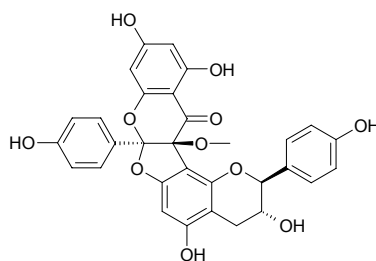
$C_{30}H_{22}O_{11}$  (558.50). Source: YUAN HUA GEN *Daphne genkwa*. Ref:  
 4868.

**4655 Daphnodorin H 3-methyl ether**

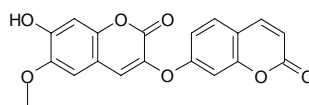
$C_{31}H_{24}O_{11}$  (572.53). Yellow amorphous powder. Source: YUAN HUA  
 GEN *Daphne genkwa*. Ref: 4868.

**4656 Daphnodorin H 3''-methyl ether**

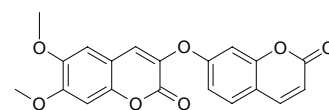
$C_{31}H_{24}O_{11}$  (572.53). Pale yellowish powder. Source: YUAN HUA GEN  
*Daphne genkwa*. Ref: 4868.

**4657 Daphnoretin**

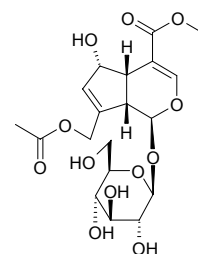
[2034-69-7]  $C_{19}H_{12}O_7$  (352.30). Yellow flossy, tiny acicular crystals  
 (ethanol) or yellow short, thick acicular crystals (acetone-pyridine), mp  
 250–252°C, 244–247°C; yellow acicular crystals (tetrahydrofuran-  
 methanol). Pharm: Antineoplastic. Source: LIAO GE WANG GEN  
*Wikstroemia indica*, JING YA MA YE RUI XIANG *Daphne gnidium*. Ref:  
 661.

**4658 Daphnoretin methyl ether**

7-Methoxydaphnoritin  $C_{20}H_{14}O_7$  (366.33). Fine acicular crystals, mp  
 238–240°C, soluble in methanol, ethanol, and insoluble in chloroform,  
 ether, and acetone. Source: LANG DU *Stellera chamaejasme*. Ref: 488.

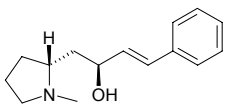
**4659 Daphylloside**

[14260-99-2]  $C_{19}H_{26}O_{12}$  (446.41). Source: JI SHI TENG *Paederia*  
*scandens*, JIAO RANG MU *Daphniphyllum macropodum*, XIE JI CU YE  
 MU *Lasianthus wallichii* (leaf). Ref: 1521, 2561, 4238.

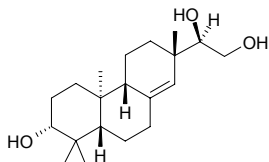


**4660 Darlinine**

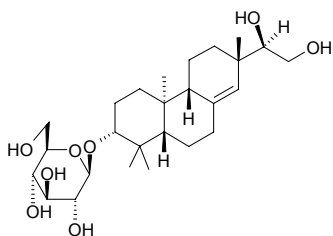
[73069-56-4]  $C_{15}H_{21}NO$  (231.34). Straw-coloured crystals (EtOH), mp 59–61°C,  $[\alpha]_D^{19} = +75^\circ$  (CHCl<sub>3</sub>). Source: *Darlingia darlingiana*. Ref: 1521.

**4661 Darutigenol**

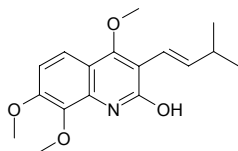
$C_{20}H_{34}O_3$  (322.49). Source: XI XIAN *Siegesbeckia orientalis* (aerial parts). Ref: 4438.

**4662 Darutoside**

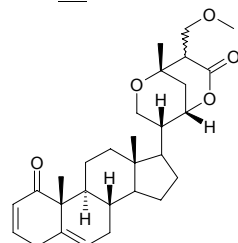
Darutin  $C_{26}H_{44}O_8$  (484.64). Source: XI XIAN *Siegesbeckia orientalis* (aerial parts). Ref: 4438.

**4663 Dasycarpamine**

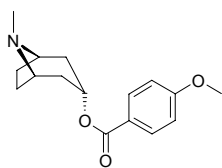
$C_{17}H_{21}NO_4$  (303.36). mp 149°C. Source: BAI XIAN PI *Dictamnus dasycarpus*. Ref: 6.

**4664 Datumetelin**

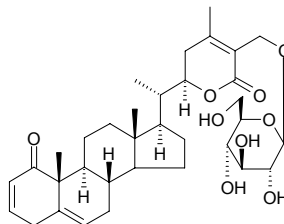
[117259-11-7]  $C_{29}H_{40}O_5$  (468.64). Source: MAN TUO LUO YE *Datura metel*. Ref: 2.

**4665 Datumetine**

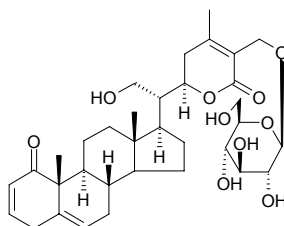
[67078-20-0]  $C_{16}H_{21}NO_3$  (275.35). Source: MAN TUO LUO YE *Datura metel*. Ref: 2.

**4666 Daturametelin A**

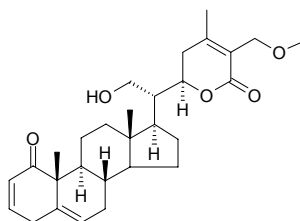
$C_{34}H_{48}O_9$  (600.76). Source: MAN TUO LUO YE *Datura metel*. Ref: 2, 660.

**4667 Daturametelin B**

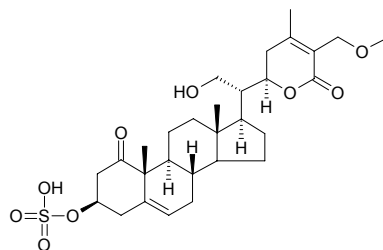
$C_{34}H_{48}O_{10}$  (616.76). Source: MAN TUO LUO YE *Datura metel*. Ref: 2, 660.

**4668 Daturametelin C**

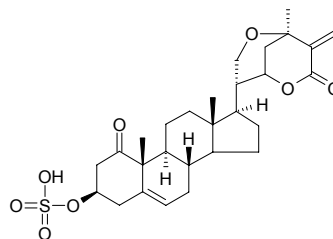
[123297-25-6]  $C_{29}H_{40}O_5$  (468.64). Source: MAN TUO LUO YE *Datura metel*. Ref: 2, 660.

**4669 Daturametelin E**

$C_{29}H_{42}O_9S$  (566.72). Source: MAN TUO LUO YE *Datura metel*. Ref: 2, 660.

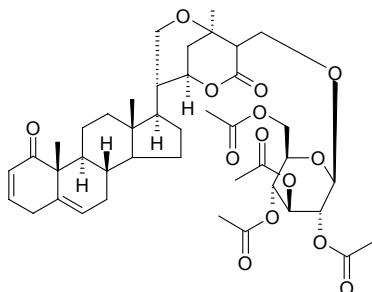
**4670 Daturametelin F**

$C_{28}H_{38}O_8S$  (534.67). Source: MAN TUO LUO YE *Datura metel*. Ref: 2, 660.

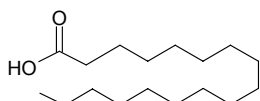


**4671 Daturametelin G-AC**

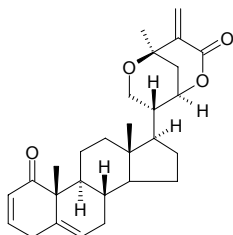
$C_{42}H_{56}O_{14}$  (784.91). Source: MAN TUO LUO YE *Datura metel*. Ref: 2, 660.

**4672 Daturic acid**

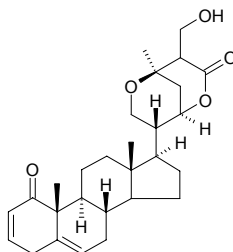
Margaric acid [506-12-7]  $C_{17}H_{34}O_2$  (270.46). mp 60~61°C. Source: DANG SHEN *Codonopsis pilosula*, LU HUI *Aloe vera* [Syn. *Aloe barbadensis*], GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], XI YANG SHEN *Panax quinquefolium*, SHU MI *Panicum miliaceum*. Ref: 2, 6.

**4673 Daturilin**

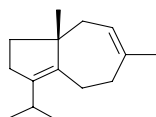
Withametelin [113430-43-6]  $C_{28}H_{36}O_4$  (436.60). Source: MAN TUO LUO YE *Datura metel*. Ref: 2, 660, 1521.

**4674 Daturilinol**

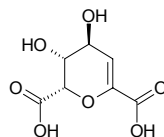
[113706-20-0]  $C_{28}H_{38}O_5$  (454.61). Source: MAN TUO LUO YE *Datura metel*. Ref: 2, 660.

**4675 Daucene**

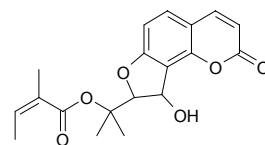
4,8-Daucadiene [16661-00-0]  $C_{15}H_{24}$  (204.36). bp 96°C/4mmHg. Source: NAN HE SHI *Daucus carota*. Ref: 6, 660.

**4676 Daucic acid**

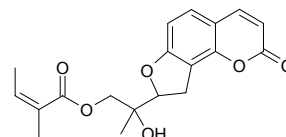
[34098-52-7]  $C_7H_8O_7$  (204.14). Source: HE SHI FENG *Daucus carota*. Ref: 6.

**4677 Daucoidin A**

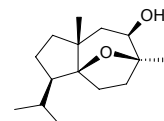
$C_{19}H_{20}O_6$  (344.37). Yellowish glasses,  $[\alpha]_D^{20} = +46^\circ$  (c = 0.30, MeOH). Source: QIAN HU *Angelica decursiva* [Syn. *Peucedanum decursivum*]. Ref: 9.

**4678 Daucoidin B**

$C_{19}H_{20}O_6$  (344.37). Colorless massive crystals, mp 140~141°C,  $[\alpha]_D^{20} = +48.2^\circ$  (c = 0.15,  $CHCl_3$ ). Source: QIAN HU *Angelica decursiva* [Syn. *Peucedanum decursivum*]. Ref: 9.

**4679 Daucol**

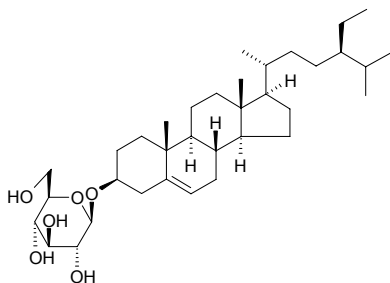
[887-08-1]  $C_{15}H_{26}O_2$  (238.37). mp 113~115°C, bp 124~132°C/2mmHg. Source: HU LUO BO ZI *Daucus carota* var. *sativa*, NAN HE SHI *Daucus carota*, HE SHI FENG *Daucus carota*. Ref: 6, 660.

**4680 Daucosterol**

$\beta$ -Daucosterol [474-58-8]  $C_{35}H_{60}O_6$  (576.86). White powder, mp 295°C. Pharm: Platelet aggregation inhibitor (2~5mg/mL collagen-induced,  $IC_{50} = (114 \pm 3)\mu\text{mol/L}$ , control ASA,  $IC_{50} = (420 \pm 3)\mu\text{mol/L}$ ; 1~4 $\mu\text{mol/L}$  epinephrine-induced with 0.8~1.0mg/mL collagen,  $IC_{50} = (53.2 \pm 2.3)\mu\text{mol/L}$ , ASA,  $IC_{50} = (53.0 \pm 4.5)\mu\text{mol/L}$ ; 10~40 $\mu\text{mol/L}$  Sodium arachidonate-induced with 0.8~1.0mg/mL collagen,  $IC_{50} = (66.5 \pm 4.0)\mu\text{mol/L}$ , ASA,  $IC_{50} = (66.0 \pm 2.1)\mu\text{mol/L}$ ; 1~5 $\mu\text{mol/L}$  PGH<sub>2</sub>/TXA<sub>2</sub> receptor agonist U46619-induced with 0.8~1.0mg/mL collagen,  $IC_{50} = (56.1 \pm 4.3)\mu\text{mol/L}$ , ASA,  $IC_{50} = (340 \pm 12)\mu\text{mol/L}$ )<sup>[4994]</sup>; cytotoxic (P<sub>388</sub>, marginal activity); cytotoxic inactive (*in vitro*, LNCaP,  $IC_{50} > 100\mu\text{mol/L}$ )<sup>[4607]</sup>. Source: BAI MU TONG GEN *Akebia trifoliata* var. *australis*, BAI TOU WENG *Pulsatilla chinensis*, BAN XIA *Pinellia ternata*, BEI MA DOU LING GEN *Aristolochia contorta*, BU GU ZHI *Psoralea corylifolia*, CAO CONG RONG *Boschniakia rossica*, CHI SHAO *Paeonia lactiflora* wild, CHUAN XIN LIAN *Andrographis paniculata* [Syn. *Justicia paniculata*], CHUAN XU DUAN *Dipsacus asperoides*, CI WU JIA *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*], DAN SHEN *Salvia*

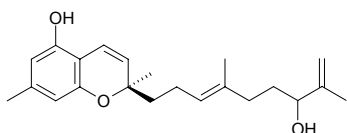


*multiorrhiza*, DIAN NAN HONG HOU KE *Calophyllum polyanthum* (seed: yield = 0.0027%dw)<sup>[4767]</sup>, DONG BEI CI REN SHEN *Oplopanax elatus*, FANG FENG *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*], FANG XIANG JIANG *Zingiber aromaticum* (rhizome), GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingsensis*], GE GEN *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*], HAI JIN BI XIE *Dioscorea spongiosa* (rhizome: yield = 0.00012%<sup>[4692]</sup>), HUA DONG LAN CI TOU *Echinops grijsii*, HUANG HUA BAI JIANG *Patrinia scabiosaefolia*, HUO XIANG *Agastache rugosus*, HUO YAN HUA *Phlogacanthus curviflorus* (root: yield = 0.0385%dw)<sup>[4799]</sup>, JIN QUE GEN *Caragana sinica*, JU YUAN *Citrus medica*, LANG DANG ZI *Hyoscyamus niger* (seed: yield = 0.0004%dw)<sup>[4607]</sup>, LIU QIU SHE GEN CAO *Ophiorrhiza liukuensis* (whole herb), MA TI YE *Caltha palustris*, MAO LIAN HAO *Artemisia vestita*, MU TONG *Akebia quinata*, MU TONG GEN *Akebia quinata*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], ROU CONG RONG *Cistanche deserticola*, SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*], SAN YE MU TONG GEN *Akebia trifoliata*, SHAN FAN GEN *Symplocos caudata*, SHENG DI HONG JING TIAN *Rhodiola sacra*, SHI LIU ZHONG ZI *Punica granatum* (seed: yield = 0.0051%<sup>[4792]</sup>), SI CHI SI LENG CAO *Schnabelia tetradonta* (aerial parts: yield = 0.00058%dw)<sup>[4665]</sup>, SUAN ZAO REN *Ziziphus jujuba* var. *spinosa*, TIAN MA *Gastrodia elata*, TUN XING GUO *Pygeum topengii*, WU GENG WU JIA PI *Acanthopanax sessiliflorus* (fruit), XIA KU CAO *Prunella vulgaris*, XIAN GENG XI XIAN *Siegesbeckia orientalis* var. *pubescens* [Syn. *Siegesbeckia pubescens*], XIANG TANG SONG CAO *Thalictrum foetidum*, XIAO QIAO MU ZI JIN NIU *Ardisia arborescens* (whole herb)<sup>[4769]</sup>, XIN JIANG LAN CI TOU *Echinops ritro*, YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*], YAO YONG PU GONG YING *Taraxacum officinale*, YI ZHU QIAN MA *Urtica dioica*, ZHONG GUO XUAN FU HUA *Inula britannica* var. *chinensis*, occurs in many plants. Ref: 2, 440, 447, 450, 454, 455, 471, 474, 502, 556, 580, 582, 585, 594, 596, 614, 622, 660, 1521, 2508, 2535, 4449, 4527, 4607, 4665, 4692, 4767, 4769, 4792, 4799, 4994, 5501.



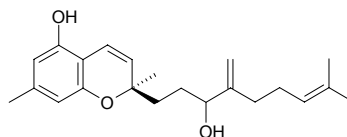
#### 4681 Daurichromene A

2*R*-(7'-Hydroxy-4',8'-dimethyl-3'*E*,8'-nonadienyl)-5-hydroxy-2,7-dimethyl-2*H*-chromene C<sub>22</sub>H<sub>30</sub>O<sub>3</sub> (342.48). Light yellow oil, [α]<sub>D</sub><sup>26</sup> = -30.4° (c = 0.20, CH<sub>3</sub>OH). **Pharm:** Antihistamine (inhibits histamine release, rat peritoneal mast cells, compound 48/80-induced)<sup>[4755]</sup>. **Source:** MAN SHAN HONG *Rhododendron dauricum* (twig and leaf: yield = 0.00091%) **Ref:** 4755.



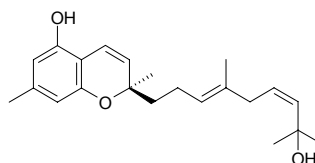
#### 4682 Daurichromene B

2*R*-(3'-Hydroxy-8'-methyl-4'-methyliden-7'-nonaenyl)-5-hydroxy-2,7-dimethyl-2*H*-chromene C<sub>22</sub>H<sub>30</sub>O<sub>3</sub> (342.48). Light yellow oil, [α]<sub>D</sub><sup>26</sup> = -27.7° (c = 0.13, CH<sub>3</sub>OH). **Pharm:** Antihistamine (inhibits histamine release, rat peritoneal mast cells, compound 48/80-induced)<sup>[4755]</sup>. **Source:** MAN SHAN HONG *Rhododendron dauricum* (twig and leaf: yield = 0.0001%) **Ref:** 4755.



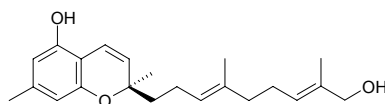
#### 4683 Daurichromene C

2*R*-(8'-Hydroxy-4',8'-dimethyl-3'*E*,6'*Z*-nonadienyl)-5-hydroxy-2,7-dimethyl-2*H*-chromene C<sub>22</sub>H<sub>30</sub>O<sub>3</sub> (342.48). Light yellow oil, [α]<sub>D</sub><sup>26</sup> = -32.0° (c = 0.10, CH<sub>3</sub>OH). **Pharm:** Antihistamine (inhibits histamine release, rat peritoneal mast cells, compound 48/80-induced)<sup>[4755]</sup>. **Source:** MAN SHAN HONG *Rhododendron dauricum* (twig and leaf: yield = 0.0002%) **Ref:** 4755.



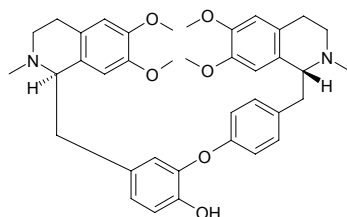
#### 4684 Daurichromene D

2*R*-(9'-Hydroxy-4',8'-dimethyl-3'*E*,7'*E*-nonadienyl)-5-hydroxy-2,7-dimethyl-2*H*-chromene C<sub>22</sub>H<sub>30</sub>O<sub>3</sub> (342.48). Light yellow oil, [α]<sub>D</sub><sup>26</sup> = -26.0° (c = 0.10, CH<sub>3</sub>OH). **Pharm:** Antihistamine (inhibits histamine release, rat peritoneal mast cells, compound 48/80-induced)<sup>[4755]</sup>. **Source:** MAN SHAN HONG *Rhododendron dauricum* (twig and leaf: yield = 0.00017%) **Ref:** 4755.



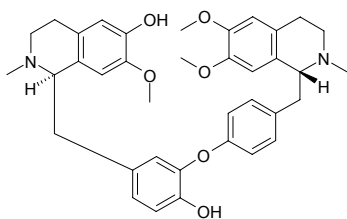
#### 4685 Dauricine

[524-17-4] C<sub>38</sub>H<sub>44</sub>N<sub>2</sub>O<sub>6</sub> (624.78). mp 115°C. **Pharm:** Analgesic; antiarrhythmic; anti-inflammatory; antihypertensive; platelet aggregation inhibitor (caused by ADP, adrenalin, collagen and arachidonic acid, *in vitro* and *in vivo*); inhibits small intestinal contraction (rbt, *in vitro*) and reduces alvine tension (*in vivo*); antihypercholesterolemic (reduces the level of cholesterol in serum); LD (cat, iv) = 30mg/kg; LD<sub>50</sub> (mus, ip) = 6mg/kg. **Source:** BIAN FU GE GEN *Menispermum dauricum*, MEI GUO BIAN FU GE *Menispermum canadense*. **Ref:** 4, 6, 658, 5501.

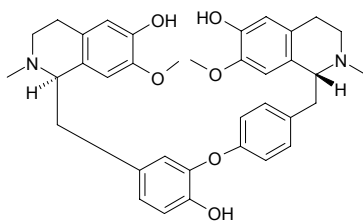


**4686 Dauricinoline**

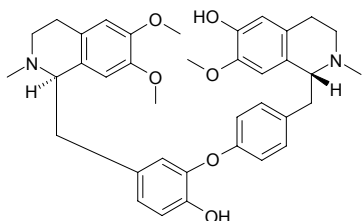
[30984-80-6] C<sub>37</sub>H<sub>42</sub>N<sub>2</sub>O<sub>6</sub> (610.76). Source: BIAN FU GE GEN *Menispermum dauricum*. Ref: 6.

**4687 Dauricoline**

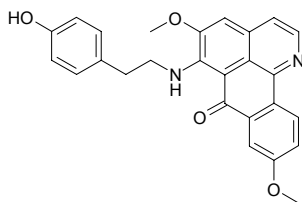
[29550-42-3] C<sub>36</sub>H<sub>40</sub>N<sub>2</sub>O<sub>6</sub> (596.73). Source: BIAN FU GE GEN *Menispermum dauricum*. Ref: 6.

**4688 Daurinoline**

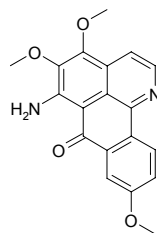
[2831-75-6] C<sub>37</sub>H<sub>42</sub>N<sub>2</sub>O<sub>6</sub> (610.76). Source: BIAN FU GE GEN *Menispermum dauricum*. Ref: 6.

**4689 Daurioxoisoporphine A**

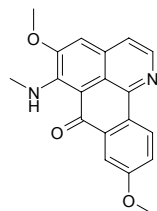
4-Demethoxytyraminoporphine C<sub>26</sub>H<sub>22</sub>N<sub>2</sub>O<sub>4</sub> (426.48). Yellow crystals (CHCl<sub>3</sub>), mp 234~235°C. Pharm: Cytotoxic (*in vitro*, A549, IC<sub>50</sub> = 8.8 μmol/L, HL-60, IC<sub>50</sub> > 50 μmol/L, MCF7, IC<sub>50</sub> = 3 μmol/L, P<sub>388</sub>, IC<sub>50</sub> = 30.5 μmol/L; control VP-16: A549, IC<sub>50</sub> = 0.5 μmol/L, HL-60, IC<sub>50</sub> = 5.4 μmol/L, MCF7, IC<sub>50</sub> = 12.33 μmol/L, P<sub>388</sub>, IC<sub>50</sub> = 0.1 μmol/L). Source: BIAN FU GE GEN *Menispermum dauricum*. Ref: 3071.

**4690 Daurioxoisoporphine B**

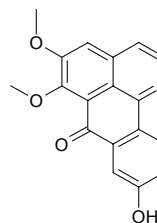
6-Amino-4,5,9-trimethoxyoxoisoporphine C<sub>19</sub>H<sub>16</sub>N<sub>2</sub>O<sub>4</sub> (336.35). Yellow amorphous powder. Pharm: Cytotoxic (*in vitro*, A549, IC<sub>50</sub> > 50 μmol/L, HL-60, IC<sub>50</sub> > 50 μmol/L, MCF7, IC<sub>50</sub> = 6.2 μmol/L, P<sub>388</sub>, IC<sub>50</sub> = 9.6 μmol/L; control VP-16: A549, IC<sub>50</sub> = 0.5 μmol/L, HL-60, IC<sub>50</sub> = 5.4 μmol/L, MCF7, IC<sub>50</sub> = 12.33 μmol/L, P<sub>388</sub>, IC<sub>50</sub> = 0.1 μmol/L). Source: BIAN FU GE GEN *Menispermum dauricum*. Ref: 3071.

**4691 Daurioxoisoporphine C**

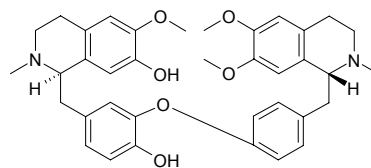
6-Methylamino-5,9-dimethoxyoxoisoporphine C<sub>19</sub>H<sub>16</sub>N<sub>2</sub>O<sub>3</sub> (320.35). Yellow amorphous powder. Source: BIAN FU GE GEN *Menispermum dauricum*. Ref: 3071.

**4692 Daurioxoisoporphine D**

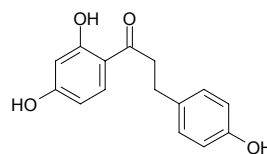
5,6-Dimethoxyl-9-hydroxyoxoisoporphine C<sub>18</sub>H<sub>13</sub>NO<sub>4</sub> (307.31). Yellow amorphous powder. Source: BIAN FU GE GEN *Menispermum dauricum*. Ref: 3071.

**4693 Daurisoline**

[70553-76-3] C<sub>37</sub>H<sub>42</sub>N<sub>2</sub>O<sub>6</sub> (610.76). Cream powder (cyclohexane), mp 96~102°C, [α]<sub>D</sub><sup>20</sup> = -129° (c = 0.65, methanol). Pharm: Muscle relaxant; LD<sub>50</sub> (mus, iv) = (1.25 ± 0.16) mg/kg. Source: BIAN FU GE GEN *Menispermum dauricum* (rhizome: mean content of 8 origins = 0.594%<sup>[5508]</sup>) Ref: 661, 5501, 5508.

**4694 Davidigenin**

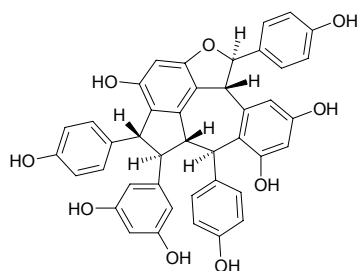
C<sub>15</sub>H<sub>14</sub>O<sub>4</sub> (258.28). Source: BO TE LAN DA JI *Euphorbia portlandica* (whole herb). Ref: 5019.



**4695 Davidiol A**

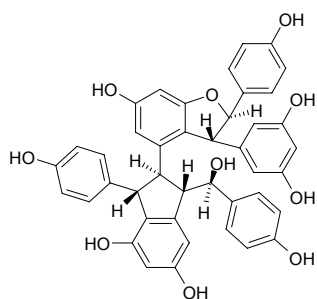
$C_{42}H_{32}O_9$  (680.72). Colorless powder,  $[\alpha]_D^{29} = -272^\circ$  ( $c = 0.18$ , MeOH).

Source: BAI CI HUA GEN *Sophora viciifolia*. Ref: 3935.

**4696 Davidiol B**

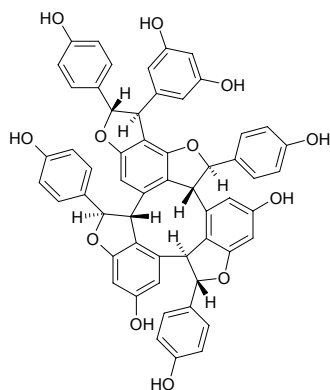
$C_{42}H_{34}O_{10}$  (698.73). Brown solid,  $[\alpha]_D^{29} = -82^\circ$  ( $c = 0.04$ , MeOH). Source:

BAI CI HUA GEN *Sophora viciifolia*. Ref: 3935.

**4697 Davidiol C**

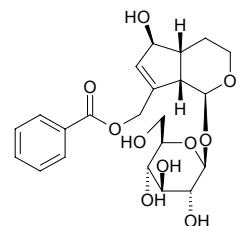
$C_{56}H_{40}O_{12}$  (904.94). Brown powder,  $[\alpha]_D^{29} = -124^\circ$  ( $c = 0.11$ , MeOH).

Source: BAI CI HUA GEN *Sophora viciifolia*. Ref: 3935.

**4698 Davisioside**

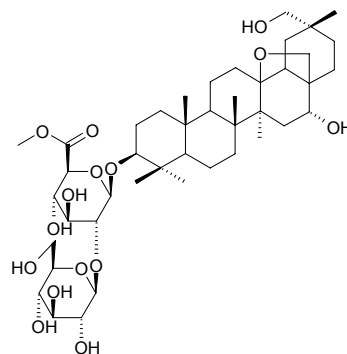
$C_{22}H_{28}O_{10}$  (452.46). White amorphous powder,  $[\alpha]_D = -69^\circ$  ( $c = 0.48$ ,

MeOH). Source: *Globularia davisiana* (aerial parts). Ref: 4194.

**4699 Davuricoside D**

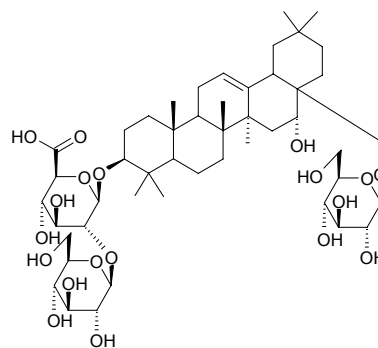
$3\beta,16\alpha,29$ -Trihydroxy-13,28-epoxy-oleanane-3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)-(6-methyl ester)- $\beta$ -*D*-glucuronopyranoside  $C_{43}H_{70}O_{15}$  (827.03).

White amorphous powder, mp 184~186°C (MeOH),  $[\alpha]_D^{20} = -16.00^\circ$  ( $c = 0.01$ , pyridine). Source: HUANG LIAN HUA *Lysimachia davurica* (whole herb). Ref: 4834.

**4700 Davuricoside J**

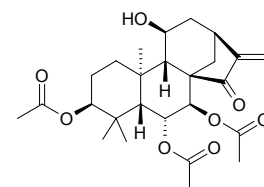
$3\beta,16\alpha,28$ -Trihydroxy-olean-12-en-3-*O*-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucuronopyranosyl]-28-*O*- $\beta$ -*D*-glucuronopyranoside  $C_{48}H_{78}O_{19}$  (959.15).

White amorphous powder, mp 229~232°C (MeOH:H<sub>2</sub>O = 9:1),  $[\alpha]_D^{20} = -20.79^\circ$  ( $c = 0.04$ , pyridine). Source: HUANG LIAN HUA *Lysimachia davurica* (whole herb). Ref: 4834.

**4701 Dawoensin A**

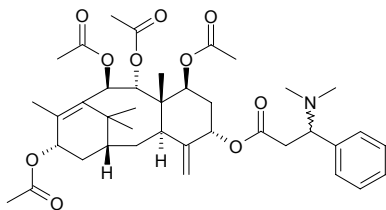
$C_{26}H_{36}O_8$  (476.57). mp 240~242°C,  $[\alpha]_D^{26} = -34.3^\circ$  ( $c = 1.40$ , MeOH);  $[\alpha]_D^{25.6} = -37.8^\circ$  ( $c = 0.332$ , MeOH). Pharm: Cytotoxic (*in vitro*, BGC823

hmn tumor cells,  $IC_{50} = 3.54\mu\text{g/mL}$ , control VCR,  $IC_{50} = 0.066\mu\text{g/mL}$ )<sup>[4760]</sup>, cytotoxic (hmn tumor K562 cells,  $IC_{50} = 2.0\mu\text{g/mL}$ , control *cis*-Platin  $IC_{50} = 1.1\mu\text{g/mL}$ )<sup>[4955]</sup>. Source: BAO YE XIANG CHA CAI *Isodon melissoides* (aerial parts: yield = 0.00031%dw), DAO FU XIANG CHA CAI *Isodon dawoensis*, DONG LING CAO *Rabdosia rubescens* (leaf). Ref: 4067, 4299, 4760, 4955.

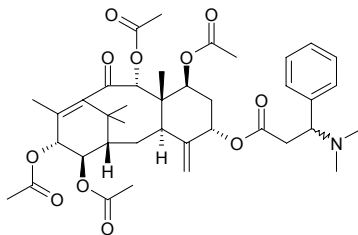


**4702 2'-Deacetoxyaustrospicatine**

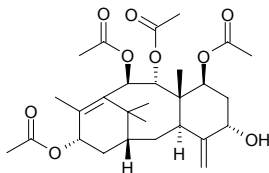
[119777-80-9] C<sub>39</sub>H<sub>53</sub>NO<sub>10</sub> (695.86). Source: AO DA LI YA HONG DOU SHAN *Austrotaxus spicata*, XI MA LA YA HONG DOU SHAN *Taxus wallichiana*. Ref: 662.

**4703 2'-Deacetoxyaustrotaxine**

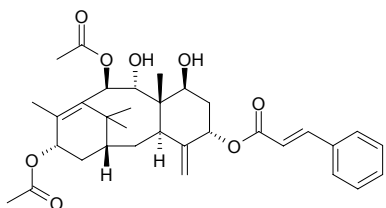
[119777-74-1] C<sub>39</sub>H<sub>51</sub>NO<sub>11</sub> (709.84). Source: AO DA LI YA HONG DOU SHAN *Austrotaxus spicata*. Ref: 662.

**4704 2-Deacetoxy-5-decinnamoyl taxinine J**

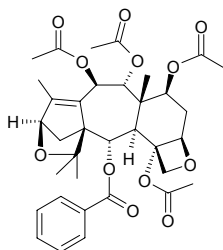
C<sub>28</sub>H<sub>40</sub>O<sub>9</sub> (520.63). White massive crystals, mp 178–180°C, [α]<sub>D</sub><sup>12</sup> = +112.93° (c = 0.058, chloroform). Source: JIANG GUO ZI SHAN *Taxus baccata*, XI MA LA YA HONG DOU SHAN *Taxus wallichiana*, YUN NAN HONG DOU SHAN *Taxus yunnanensis*. Ref: 296, 662.

**4705 2-Deacetoxy-7,9-dideacetyltaxinine J**

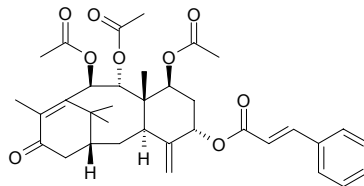
C<sub>33</sub>H<sub>42</sub>O<sub>8</sub> (566.70). Source: HONG DOU SHAN *Taxus chinensis*, YUN NAN HONG DOU SHAN *Taxus yunnanensis* (aerial parts)<sup>[4611]</sup>. Ref: 662, 4611.

**4706 13-Deacetoxy-13,15-epoxy-11(15→1)-abeo-13-epi-baccatin VI**

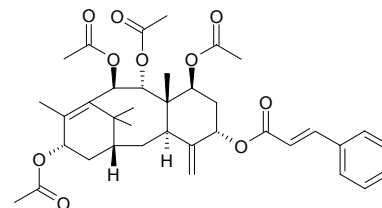
C<sub>35</sub>H<sub>42</sub>O<sub>12</sub> (654.72). [α]<sub>D</sub> = +23.9° (CHCl<sub>3</sub>), mp 150°C. Source: ZA JIAO JIE ZHI HONG DOU SHAN *Taxus x media*. Ref: 662.

**4707 2-Deacetoxytaxinine B**

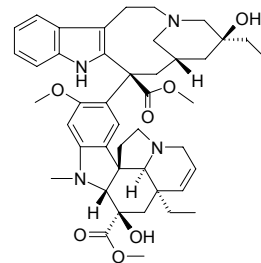
C<sub>35</sub>H<sub>42</sub>O<sub>9</sub> (606.72). Source: XI MA LA YA HONG DOU SHAN *Taxus wallichiana*. Ref: 662.

**4708 2-Deacetoxytaxinine J**

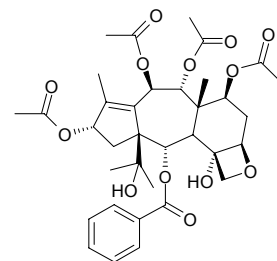
[119347-14-7] C<sub>37</sub>H<sub>46</sub>O<sub>10</sub> (650.77). Colorless crystals, mp 171–172°C (ethanol), [α]<sub>D</sub><sup>14</sup> = +50° (c = 1.2, acetone). Pharm: Cytotoxic (P<sub>388</sub> *in vitro*, IC<sub>50</sub> = 15.2 μg/mL, L<sub>1210</sub> *in vitro*, IC<sub>50</sub> = 4.9 μg/mL, 10 μg/mL InRt = 79.5%, KB *in vitro*, 10 μg/mL InRt = 27.6%). Source: MEI LI HONG DOU SHAN *Taxus mairei*, YUN NAN HONG DOU SHAN *Taxus yunnanensis* (aerial parts)<sup>[3079, 4611]</sup>, ZI SHAN *Taxus cuspidata*. Ref: 662, 900, 3079, 4611.

**4709 Deacetoxyvinblastine**

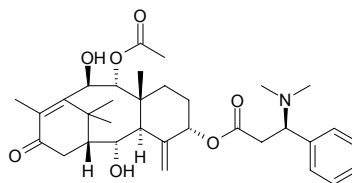
C<sub>44</sub>H<sub>56</sub>N<sub>4</sub>O<sub>7</sub> (752.96). Source: CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochera rosea*]. Ref: 2.

**4710 4-Deacetyl-11(15→1)-abeo-baccatin VI**

C<sub>35</sub>H<sub>44</sub>O<sub>13</sub> (672.73). mp 222°C, [α]<sub>D</sub> = -73.1° (CHCl<sub>3</sub>). Source: ZA JIAO JIE ZHI HONG DOU SHAN *Taxus x media*. Ref: 662.

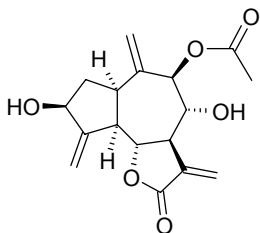
**4711 2-Deacetyl-9-acetoxytaxinine B**

C<sub>33</sub>H<sub>45</sub>NO<sub>7</sub> (567.73). Source: JIANG GUO ZI SHAN *Taxus baccata*. Ref: 662.

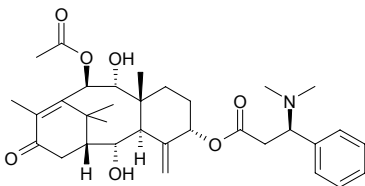


**4712 3-O-Deacetyl-9-O-acetylsalograviolide A**

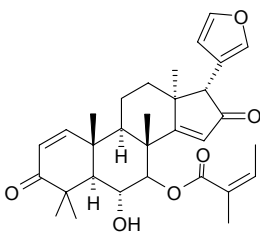
$C_{17}H_{20}O_6$  (320.35). Colorless solid,  $[\alpha]_D^{22} = +29.80^\circ$  ( $c = 0.0436$ , MeOH). **Pharm:** Antifungal (*Aspergillus niger*, MIC = 6.25  $\mu\text{g/mL}$ ; *Aspergillus ochraceus*, MIC = 3.13  $\mu\text{g/mL}$ ; *Penicillium ochrocloron*, MIC = 25  $\mu\text{g/mL}$ ; *Cladosporium cladosporioides*, MIC = 3.13  $\mu\text{g/mL}$ ; *Fusarium tricinctum*, MIC = 12.5  $\mu\text{g/mL}$ ; *Phomopsis helianthi*, MIC = 1.56  $\mu\text{g/mL}$ , *Trichoderma viride*, inactive). **Source:** NI GU LA SHI CHE JU *Centaurea nicolai*. **Ref:** 2361.

**4713 2-Deacetyl-10-acetyltaxine B**

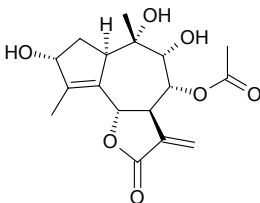
$C_{33}H_{45}NO_7$  (567.73). **Source:** JIANG GUO ZI SHAN *Taxus baccata*. **Ref:** 662.

**4714 7-Deacetyl-7-angeloyl-6 $\alpha$ -hydroxyazadiradione**

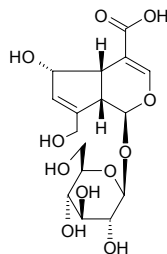
$C_{31}H_{38}O_6$  (506.64). Pale yellow solid, mp 91~94°C,  $[\alpha]_D = +69^\circ$  ( $c = 0.658$ ,  $\text{CHCl}_3$ ). **Source:** *Quivisia papinae* (seed). **Ref:** 3759.

**4715 9-O-Deacetylanthemolide D**

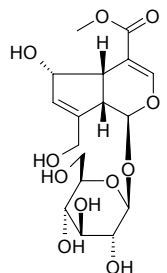
$C_{17}H_{22}O_7$  (338.36). Pale yellow oil. **Source:** *Anthemis carpatica* (aerial parts). **Ref:** 3974.

**4716 Deacetyl asperulosidic acid**

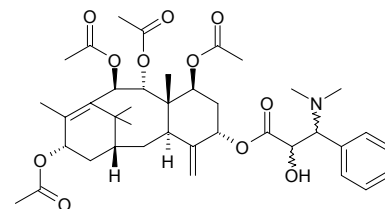
Citroside A [14259-55-3]  $C_{16}H_{22}O_{11}$  (390.35). Colorless acicular crystals, mp 146°C,  $[\alpha]_D^{34} = +11.1^\circ$  ( $c = 0.36$ , water). **Pharm:** TNF- $\alpha$  release inhibitor (cultured mouse peritoneal macrophages,  $IC_{50} = 1 \mu\text{g/mL}$ )<sup>[1605]</sup>; Laxative. **Source:** CHANG WEI CU YE MU *Lasianthus acuminatissimus* (root: yield = 0.0046% dw)<sup>[1605]</sup>, HAI BA JI *Morinda citrifolia* (fruit), JIAO RANG MU *Daphniphyllum macropodum*, XIE JI CU YE MU *Lasianthus wallichii* (leaf), ZHI ZI *Gardenia jasminoides* [Syn. *Gardenia florida*]. **Ref:** 661, 1605, 4238, 4542.

**4717 Deacetyl asperulosidic acid methyl ester**

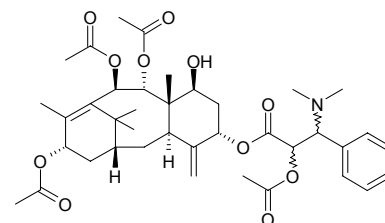
Methyldeacetylasperulosidate  $C_{17}H_{24}O_{11}$  (404.37). **Pharm:** Laxative (mus,  $ED_{50} = 0.53 \text{ g/kg}$ ). **Source:** SHUI ZHI *Gardenia jasminoides* var. *grandiflora*, ZHI ZI *Gardenia jasminoides* [Syn. *Gardenia florida*]. **Ref:** 2, 6, 626, 658.

**4718 2'-Deacetylaustrospicatine**

[119777-78-5]  $C_{39}H_{53}NO_{11}$  (711.86). **Source:** AO DA LI YA HONG DOU SHAN *Austrotaxus spicata*. **Ref:** 662.

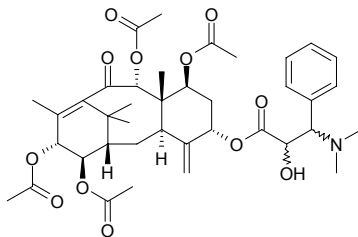
**4719 7-Deacetylaustrospicatine**

[119777-79-6]  $C_{39}H_{53}NO_{11}$  (711.86). **Source:** AO DA LI YA HONG DOU SHAN *Austrotaxus spicata*. **Ref:** 662.

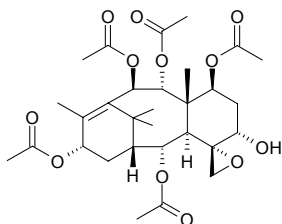


**4720 2'-Deacetylaustrotaxine**

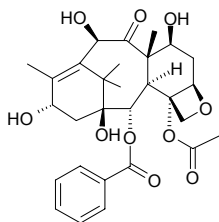
[119777-74-1] C<sub>39</sub>H<sub>51</sub>NO<sub>12</sub> (725.84). Source: AO DA LI YA HONG DOU SHAN *Austrotaxus spicata*. Ref: 662.

**4721 5 $\alpha$ -Deacetylbaaccatin I**

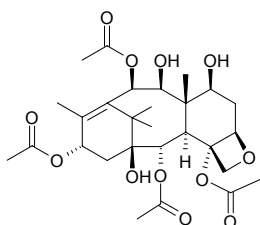
[30244-36-1] C<sub>30</sub>H<sub>42</sub>O<sub>12</sub> (594.66). Source: JIANG GUO ZI SHAN *Taxus baccata*. Ref: 662.

**4722 10-Deacetylbaaccatin III**

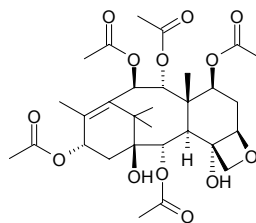
C<sub>29</sub>H<sub>36</sub>O<sub>10</sub> (544.62). Pharm: Cytotoxic (*in vitro*, 30 μg/mL: A498, InRt = 27.0%; NCI-H226, InRt = 5.7%; A549, InRt = 12.2%; PC3, InRt = 1.6%; control Taxol, 30 μg/mL: A498, InRt = 98.2%; NCI-H226, InRt = 71.2%; A549, InRt = 79.7%; PC3, InRt = 91.7%)<sup>[4800]</sup>. Source: DUAN YE HONG DOU SHAN *Taxus brevifolia*, JIANG GUO ZI SHAN *Taxus baccata*, SU MEN DA LA HONG DOU SHAN *Taxus sumatrana* (twig and leaf: yield = 0.0082% dw<sup>[4666]</sup>), YUN NAN HONG DOU SHAN *Taxus yunnanensis*. Ref: 316, 563, 662, 4666, 4800.

**4723 7,9-Deacetylbaaccatin IV**

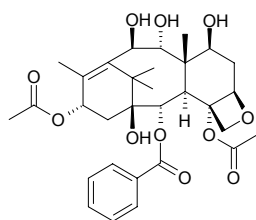
C<sub>28</sub>H<sub>40</sub>O<sub>12</sub> (568.62). Source: JIANG GUO ZI SHAN *Taxus baccata*, DUAN YE HONG DOU SHAN *Taxus brevifolia*. Ref: 662.

**4724 4-Deacetylbaaccatin IV**

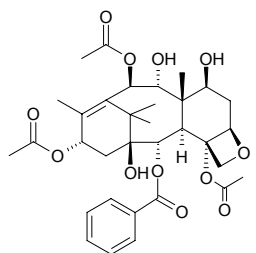
C<sub>30</sub>H<sub>42</sub>O<sub>13</sub> (610.66). Source: ZA JIAO JIE ZHI HONG DOU SHAN *Taxus x media*. Ref: 662.

**4725 7,9,10-Deacetylbaaccatin VI**

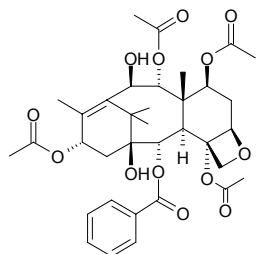
C<sub>31</sub>H<sub>40</sub>O<sub>11</sub> (588.66). Source: JIA NA DA HONG DOU SHAN *Taxus canadensis*. Ref: 662.

**4726 7,9-Deacetylbaaccatin VI**

9-Dihydro-13-acetylbaaccatin III C<sub>33</sub>H<sub>42</sub>O<sub>12</sub> (630.70). mp 221°C. Pharm: NO production inhibitor (IC<sub>50</sub> = 78.8 μmol/L, control L-NMMA, IC<sub>50</sub> = 28.5 μmol/L)<sup>[5407]</sup>. Source: JIA NA DA HONG DOU SHAN *Taxus Canadensis*, YUN NAN HONG DOU SHAN *Taxus yunnanensis* (wood). Ref: 662, 5407.

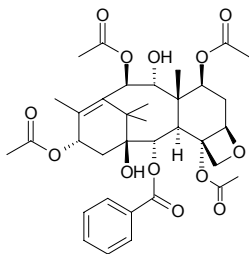
**4727 10-Deacetylbaaccatin VI**

C<sub>35</sub>H<sub>44</sub>O<sub>13</sub> (672.73). Source: YUN NAN HONG DOU SHAN *Taxus yunnanensis*. Ref: 662.

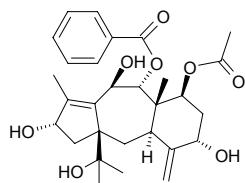


**4728 9-Deacetyl-9-baccatin VI**

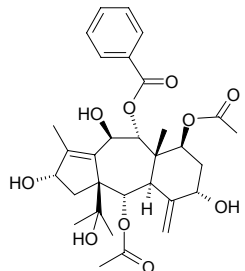
$C_{35}H_{44}O_{13}$  (672.73). Source: YUN NAN HONG DOU SHAN *Taxus yunnanensis*. Ref: 662.

**4729 9-Deacetyl-9-benzoyl-10-debenzoylbrevifoliol**

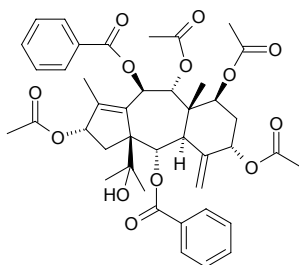
$C_{29}H_{38}O_8$  (514.62). mp 152°C,  $[\alpha]_D = +18^\circ$  (CHCl<sub>3</sub>). Source: DUAN YE HONG DOU SHAN *Taxus brevifolia*. Ref: 662.

**4730 9-Deacetyl-9-benzoyl-10-debenzoyltaxchinin A**

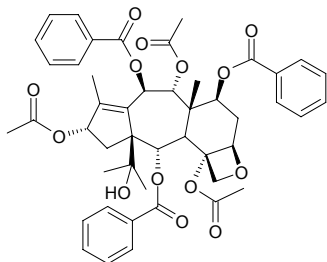
$C_{31}H_{40}O_{10}$  (572.66).  $[\alpha]_D = +19.4^\circ$  (MeOH). Source: JIANG GUO ZI SHAN *Taxus baccata*. Ref: 662.

**4731 2-Deacetyl-2α-benzoyl-5,13-diacetyltaxchinin A**

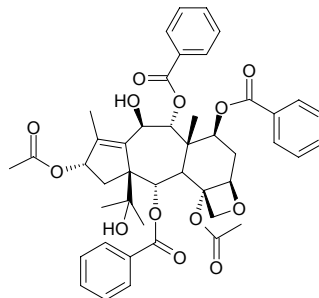
$C_{42}H_{48}O_{13}$  (760.84). mp 200–203°C,  $[\alpha]_D = -21.5^\circ$ . Source: DUAN YE HONG DOU SHAN *Taxus brevifolia*. Ref: 662.

**4732 7-Deacetyl-7-benzoyltaxayuntin C**

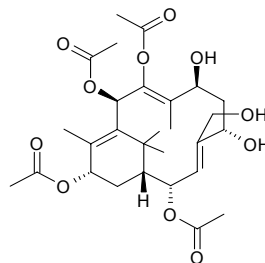
$C_{47}H_{50}O_{14}$  (838.91). mp 234–236°C. Source: DUAN YE HONG DOU SHAN *Taxus brevifolia*. Ref: 662.

**4733 7-Deacetyl-7-benzoyltaxchinin I**

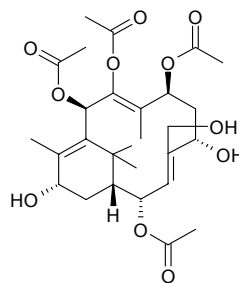
$C_{45}H_{48}O_{13}$  (796.88). mp 255°C. Source: DUAN YE HONG DOU SHAN *Taxus brevifolia*. Ref: 662.

**4734 7-Deacetylcanadensene**

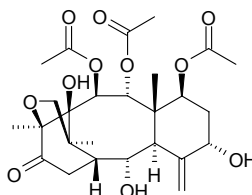
$C_{28}H_{40}O_{11}$  (552.62). White amorphous solid, mp 95–96°C,  $[\alpha]_D^{25} = +5.33^\circ$  ( $c = 0.003$ , CHCl<sub>3</sub>). Source: MEI LI HONG DOU SHAN *Taxus mairei*. Ref: 662, 1914.

**4735 13-Deacetylcanadensene**

$C_{28}H_{40}O_{11}$  (552.62). White amorphous solid, mp 98–99°C,  $[\alpha]_D^{24} = +4.52^\circ$  ( $c = 0.003$ , CHCl<sub>3</sub>). Source: MEI LI HONG DOU SHAN *Taxus mairei*. Ref: 662, 1914.

**4736 2α-Deacetyl-5α-decinnamoyltaxagifine**

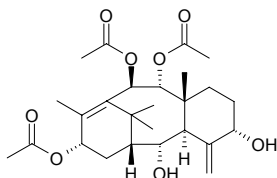
$C_{26}H_{36}O_{11}$  (524.57). Source: HONG DOU SHAN *Taxus chinensis*, SU MEN DA LA HONG DOU SHAN *Taxus sumatrana* (twig and leaf)<sup>[4800]</sup>. Ref: 662, 4800.



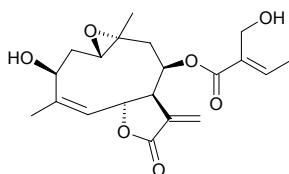
**4737 2-Deacetyldecinnamoyltaxinine E**

Deacetyldecinnamoyltaxinine E  $C_{26}H_{38}O_8$  (478.59).  $[\alpha]_D^{25} = +72^\circ$  ( $CHCl_3$ ).

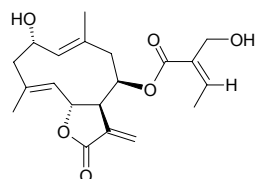
Source: JIANG GUO ZI SHAN *Taxus baccata*, HONG DOU SHAN *Taxus chinensis*. Ref: 662.

**4738 3-Deacetylupalinin A**

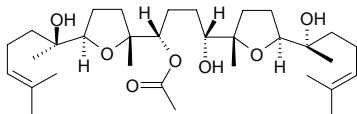
$C_{20}H_{26}O_7$  (378.43). Source: CHENG GAN SHENG MA *Eupatorium lindleyanum* (whole herb: yield = 0.0023%dw). Ref: 4762.

**4739 Deacetylupaserrin**

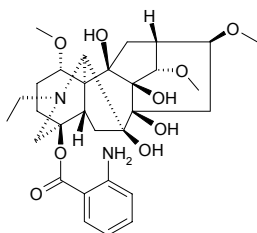
Desacetylupaserrin [38456-39-2]  $C_{20}H_{26}O_6$  (362.43).  $[\alpha]_D^{25} = +75.0^\circ$  ( $c = 0.92$ , methanol). Pharm: Antineoplastic ( $P_{388}$ , 18mg/kg); cytotoxic (KB,  $ED_{50} = 0.29\mu g/mL$ ); larvicide (insect larva growth inhibitor). Source: AI XIANG RI KUI *Helianthus pumilus*, BAN JU CHI ZHUANG ZE LAN *Eupatorium semiserratum*, WEI GAN JU ZE LAN *Eupatorium mikanioides*, *Helianthus* sp. Ref: 658, 661.

**4740 14-Deacetylerylene**

$C_{32}H_{56}O_7$  (552.80). Pharm: Cytotoxic (KB cells,  $IC_{50} = 0.52\mu g/mL$ )<sup>[4556]</sup>. Source: *Eurycoma* sp. Ref: 4556.

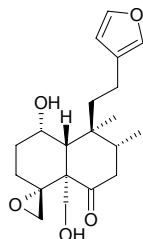
**4741 N-Deacetylfinaconitine**

[82872-81-9]  $C_{30}H_{42}N_2O_9$  (574.68). Pharm: Analgesic; toxin. Source: GAN WAN WU TOU *Aconitum finetianum*. Ref: 658.

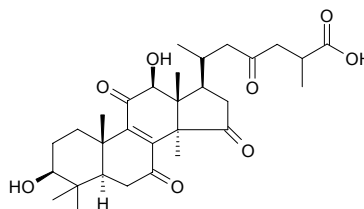
**4742 Deacetylfruticolone**

$C_{20}H_{28}O_5$  (348.44). Colorless oil,  $[\alpha]_D^{25} = +5.4^\circ$  ( $c = 0.22$ ,  $CHCl_3$ ).

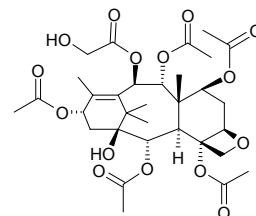
Pharm: Insect antifeedant (fifth instar larvae of *Spodoptera littoralis*, dual-choice feeding assays, dose =  $10\mu g/cm^2$ ,  $FR_{50} = 1.03\pm 0.07$ ). Source: GUAN CONG XIANG KE KE *Teucrium fruticans*. Ref: 3761.

**4743 12-Deacetylganoderic acid H**

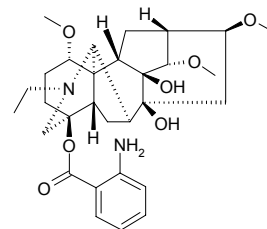
$C_{30}H_{44}O_8$  (530.66). Source: LING ZHI *Ganoderma lucidum* (dried sporocarp: yield = 0.0021%). Ref: 4603.

**4744 10-Deacetyl-10-glycolylbaccatin IV**

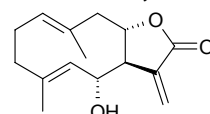
$C_{32}H_{44}O_{15}$  (668.70). Gum. Source: JIA NA DA HONG DOU SHAN *Taxus canadensis* (needle leaf). Ref: 3958.

**4745 N-Deacetylappaconitine**

Puberanidine [11033-64-0]  $C_{30}H_{42}N_2O_7$  (542.68). Pharm: Analgesic; toxin. Source: GAN WAN WU TOU *Aconitum finetianum*. Ref: 658.

**4746 Deacetylarenobiolide**

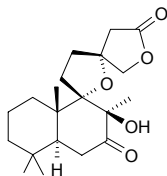
$C_{15}H_{20}O_3$  (248.32). Pharm: Anti-inflammatory (RAW264.7 cells, LPS-induced: NF- $\kappa$ B inhibitor,  $IC_{50} = (7.17\pm 0.16)\mu mol/L$ , control PTN,  $IC_{50} = (3.42\pm 0.08)\mu mol/L$ ; NO production inhibitor,  $IC_{50} = (5.76\pm 0.28)\mu mol/L$ , PTN,  $IC_{50} = (2.41\pm 0.06)\mu mol/L$ , AG,  $IC_{50} = (34.18\pm 0.98)\mu mol/L$ ; TNF- $\alpha$  production inhibitor,  $IC_{50} = (27.76\pm 1.76)\mu mol/L$ , PTN,  $IC_{50} = (2.68\pm 0.11)\mu mol/L$ ). Source: LIN DI HAO *Artemisia sylvatica* (aerial parts). Ref: 3837.



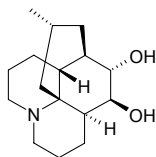


**4747 8-Deacetylpepersin A**

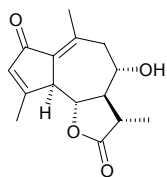
$C_{20}H_{30}O_5$  (350.46). White powder. Source: BO SI YI MU CAO *Leonurus persicus*. Ref: 2499.

**4748 Deacetyllycochlorine**

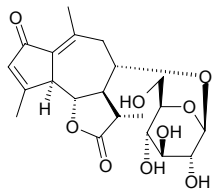
$C_{16}H_{27}NO_2$  (265.40). Source: QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*]. Ref: 4388.

**4749 Deacetylmatricarin**

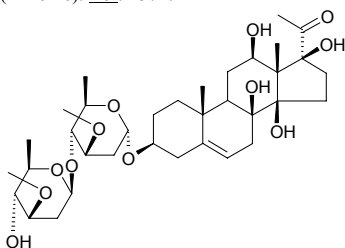
$C_{15}H_{18}O_4$  (262.31). mp 123~125°C; 143~146°C. Source: DAO LUAN YE PU GONG YING GEN *Taraxacum obovatum*, YANG SHI CAO *Achillea millefolium*, YI KUA *Artemisia myriantha* (aerial parts), YI ZHI HAO *Achillea alpina* [Syn. *Achillea sibirica*]. Ref: 6, 4618, 5357.

**4750 Deacetylmatricarin 8-O-β-glucopyronoside**

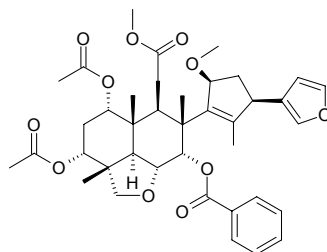
$C_{21}H_{28}O_9$  (424.45). Colorless gum,  $[\alpha]_D^{26} = -52.4^\circ$  ( $c = 0.82$ , MeOH). Source: DAO LUAN YE PU GONG YING GEN *Taraxacum obovatum*. Ref: 5357.

**4751 Deacetylmetaplexigenin 3-O-β-D-oleandropyranosyl-(1→4)-α-D-oleandropyranoside**

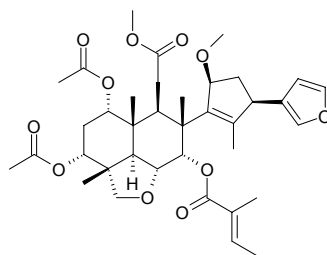
$C_{35}H_{56}O_{12}$  (668.83). White powder, mp 118~121°C,  $[\alpha]_D^{20} = +4.8^\circ$  ( $c = 0.21$ , EtOH). Source: QING YANG SHEN *Cynanchum otophyllum* (rhizome). Ref: 4574.

**4752 15-O-Deacetyl-15-O-methylnimbolidin A**

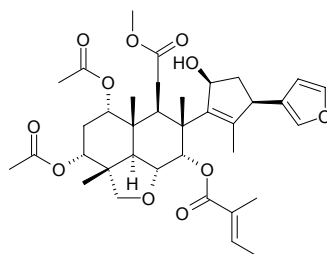
$C_{39}H_{48}O_{11}$  (692.81). Colorless amorphous solid,  $[\alpha]_D^{21} = -5.8^\circ$  ( $c = 1.26$ ,  $CHCl_3$ ). Pharm: Cytotoxic (HeLa-S3,  $IC_{50} = 37.4\mu\text{mol/L}$ , control 5-FU,  $IC_{50} = 5.40\mu\text{mol/L}$ , Cisplatin,  $IC_{50} = 2.46\mu\text{mol/L}$ ). Source: KU LIAN SHI *Melia azedarach* (ripe fruit). Ref: 4528.

**4753 15-O-Deacetyl-15-O-methylnimbolidin B**

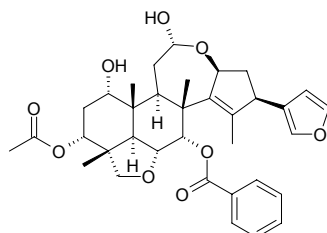
$C_{37}H_{50}O_{11}$  (670.80). Colorless amorphous solid,  $[\alpha]_D^{21} = -6.7^\circ$  ( $c = 1.28$ ,  $CHCl_3$ ). Pharm: Cytotoxic (HeLa-S3,  $IC_{50} = 28.3\mu\text{mol/L}$ , control 5-FU,  $IC_{50} = 5.40\mu\text{mol/L}$ , Cisplatin,  $IC_{50} = 2.46\mu\text{mol/L}$ ). Source: KU LIAN SHI *Melia azedarach* (ripe fruit). Ref: 4528.

**4754 15-O-Deacetylnimbolidin B**

$C_{36}H_{48}O_{11}$  (656.78). Colorless amorphous solid,  $[\alpha]_D^{21} = -6.7^\circ$  ( $c = 1.28$ ,  $CHCl_3$ ). Pharm: Cytotoxic (HeLa-S3,  $IC_{50} = 0.10\mu\text{mol/L}$ , control 5-FU,  $IC_{50} = 5.40\mu\text{mol/L}$ , Cisplatin,  $IC_{50} = 2.46\mu\text{mol/L}$ ). Source: KU LIAN SHI *Melia azedarach* (ripe fruit). Ref: 4528.

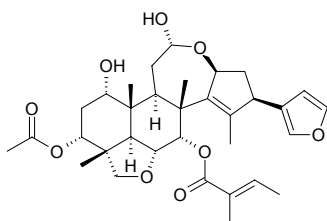
**4755 1-Deacetylnimbolidin A**

$C_{33}H_{42}O_9$  (606.72). Amorphous powder,  $[\alpha]_D = -7^\circ$  ( $c = 0.15$ ). Source: CHUAN LIAN PI *Melia toosendan*. Ref: 2374.

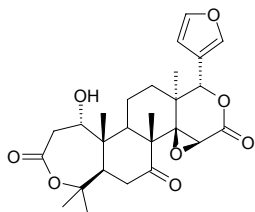


**4756 1-Deacetylnimbolin B**

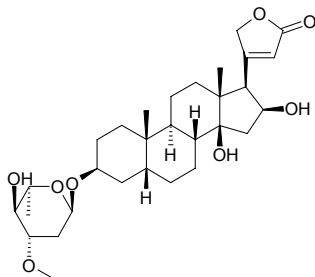
$C_{33}H_{44}O_9$  (584.71). Amorphous powder. Source: CHUAN LIAN PI *Melia toosendan*. Ref: 2374.

**4757 Deacetylnomilin**

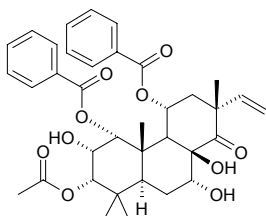
$C_{26}H_{32}O_8$  (472.54). Source: YOU HE *Citrus grandis*. Ref: 6.

**4758 Deacetyloleandrin**

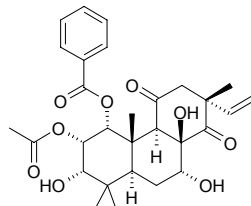
$C_{30}H_{46}O_8$  (534.70). mp 235~238°C. Source: JIA ZHU TAO *Nerium indicum*. Ref: 6.

**4759 7-O-Deacetylorthosiphol B**

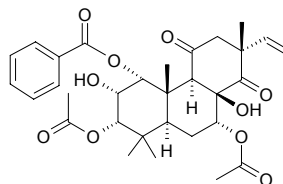
$C_{36}H_{42}O_{10}$  (634.73). Colorless amorphous solid,  $[\alpha]_D^{25} = -94.4^\circ$  ( $c = 0.033$ ,  $CHCl_3$ ). Pharm: NO production inhibitor (LPS-activated macrophage-like J774.1 cells,  $IC_{50} = 102\mu mol/L$ ; control *L*-NMMA,  $IC_{50} = 26.0\mu mol/L$ , Polymixin B,  $IC_{50} = 27.8\mu g/mL$ , Dexamethasone  $IC_{50} = 170\mu mol/L$ ). Source: XIONG RUI ZHUANG ZHI GUAN CAO *Orthosiphon stamineus* [Syn: *Orthosiphon aristatus*; *Orthosiphon grandiflorus*; *Orthosiphon spicatus*] (aerial parts). Ref: 4322.

**4760 3-O-Deacetylorthosiphol I**

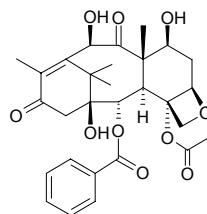
$C_{29}H_{36}O_9$  (528.60). Colorless amorphous solid,  $[\alpha]_D^{25} = -47.8^\circ$  ( $c = 0.04$ ,  $CHCl_3$ ). Pharm: NO production inhibitor (LPS-activated macrophage-like J774.1 cells,  $IC_{50} = 66.3\mu mol/L$ ; control *L*-NMMA,  $IC_{50} = 26.0\mu mol/L$ , Polymixin B,  $IC_{50} = 27.8\mu g/mL$ , Dexamethasone  $IC_{50} = 170\mu mol/L$ ). Source: XIONG RUI ZHUANG ZHI GUAN CAO *Orthosiphon stamineus* [Syn: *Orthosiphon aristatus*; *Orthosiphon grandiflorus*; *Orthosiphon spicatus*] (aerial parts: yield = 0.000045%dw). Ref: 4322, 4741.

**4761 2-O-Deacetylorthosiphol J**

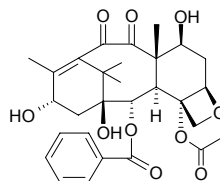
$C_{31}H_{38}O_{10}$  (570.64). Colorless amorphous solid,  $[\alpha]_D^{25} = -48.6^\circ$  ( $c = 0.044$ ,  $CHCl_3$ ). Pharm: NO production inhibitor (LPS-activated macrophage-like J774.1 cells,  $IC_{50} = 24.1\mu mol/L$ ; control *L*-NMMA,  $IC_{50} = 26.0\mu mol/L$ , Polymixin B,  $IC_{50} = 27.8\mu g/mL$ , Dexamethasone  $IC_{50} = 170\mu mol/L$ ). Source: XIONG RUI ZHUANG ZHI GUAN CAO *Orthosiphon stamineus* [Syn: *Orthosiphon aristatus*; *Orthosiphon grandiflorus*; *Orthosiphon spicatus*] (aerial parts). Ref: 4322.

**4762 10-Deacetyl-13-oxobaccatin III**

$C_{29}H_{34}O_{10}$  (542.59). Pharm: Cytotoxic (*in vitro*, 30 $\mu g/mL$ : A498, InRt = 29.7%; NCI-H226, InRt = 49.2%; A549, InRt = 43.9%; PC3, InRt = 65.3%; control Taxol, 30 $\mu g/mL$ : A498, InRt = 98.2%; NCI-H226, InRt = 71.2%; A549, InRt = 79.7%; PC3, InRt = 91.7%). Source: SU MEN DA LA HONG DOU SHAN *Taxus sumatrana* (leaf and twig). Ref: 4800.

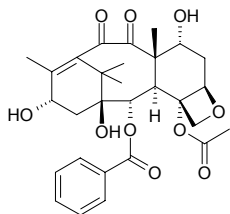
**4763 10-Deacetyl-10-oxobaccatin III**

$C_{29}H_{34}O_{10}$  (542.59). Pharm: Cytotoxic (*in vitro*, 30 $\mu g/mL$ : A498, InRt = 79.1%; NCI-H226, InRt = 97.3%; A549, InRt = 54.7%; PC3, InRt = 100%; control Taxol, 30 $\mu g/mL$ : A498, InRt = 98.2%; NCI-H226, InRt = 71.2%; A549, InRt = 79.7%; PC3, InRt = 91.7%). Source: SU MEN DA LA HONG DOU SHAN *Taxus sumatrana* (leaf and twig). Ref: 4800.

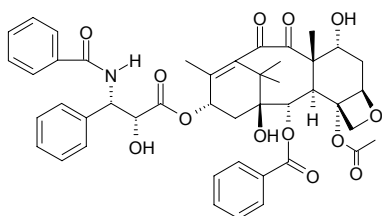


**4764 10-Deacetyl-10-oxobaccatin V**

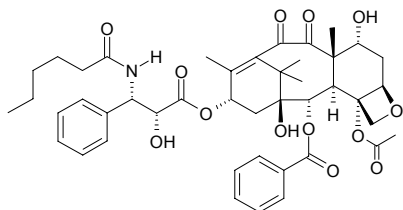
$C_{29}H_{34}O_{10}$  (542.59). Source: HONG DOU SHAN *Taxus chinensis*. Ref: 662.

**4765 10-Deacetyl-10-oxo-7-epitaxol**

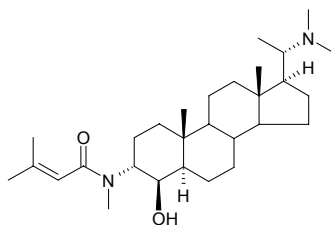
$C_{45}H_{47}NO_{13}$  (809.88).  $[\alpha]_D^{25} = -60.4$  (MeOH). Source: DUAN YE HONG DOU SHAN *Taxus brevifolia*, SU MEN DA LA HONG DOU SHAN *Taxus sumatrana* (twig and leaf: yield = 0.000026%dw)<sup>[4666]</sup>. Ref: 662, 4666.

**4766 10-Deacetyl-10-oxo-7-epitaxuyunnanine A**

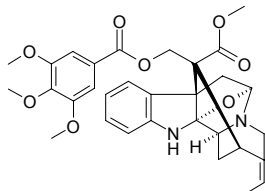
$C_{44}H_{53}NO_{13}$  (803.91).  $[\alpha]_D^{25} = -70.8^\circ$  (CHCl<sub>3</sub>). Source: YUN NAN HONG DOU SHAN *Taxus yunnanensis*. Ref: 662.

**4767 O-Deacetylpachysandrine B**

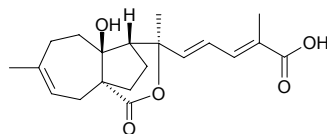
$C_{29}H_{50}N_2O_2$  (458.73). mp 184~185°C. Source: XUE SHAN LIN *Pachysandra terminalis*. Ref: 6.

**4768 Deacetylpicaline-3,4,5-trimethoxybenzoate**

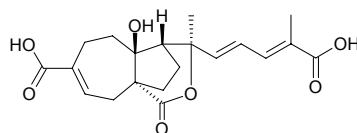
$C_{31}H_{34}N_2O_8$  (562.63). White acicular crystals, mp 222°C,  $[\alpha]_D^{17} = -185^\circ$  ( $c = 0.052$ , chloroform). Source: DIAN JI GU CHANG SHAN *Alstonia yunnanensis*. Ref: 42.

**4769 Deacetylpsudolaric acid A**

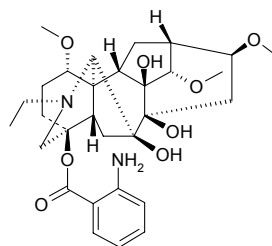
$C_{20}H_{26}O_5$  (346.43). Source: TU JING PI *Pseudolarix amabilis* [Syn. *Larix amabilis*; *Pseudolarix kaempferi*] (root cortex: yield = 0.00003%dw). Ref: 4637.

**4770 Deacetylpsudolaric acid C<sub>2</sub>**

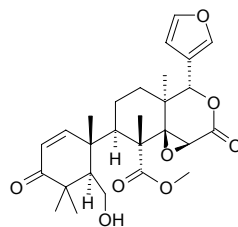
$C_{20}H_{24}O_7$  (376.41). Source: TU JING PI *Pseudolarix amabilis* [Syn. *Larix amabilis*; *Pseudolarix kaempferi*] (root cortex: yield = 0.00025%dw). Ref: 4637.

**4771 N-Deacetylraconitine**

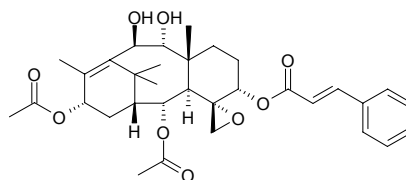
[82872-80-8]  $C_{30}H_{42}N_2O_8$  (558.68). Pharm: Analgesic; toxin. Source: GAN WAN WU TOU *Aconitum finetianum*. Ref: 658.

**4772 Deacetylsecmahoganin**

$C_{27}H_{34}O_8$  (486.57). White amorphous powder. Source: TAO HUA XIN MU *Swietenia mahogany* (leaf). Ref: 4420.

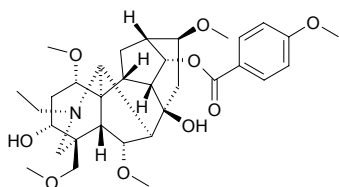
**4773 10β-Deacetylpicatinine**

$C_{33}H_{42}O_9$  (582.70). Source: AO DA LI YA HONG DOU SHAN *Austrotaxus spicata*. Ref: 662.

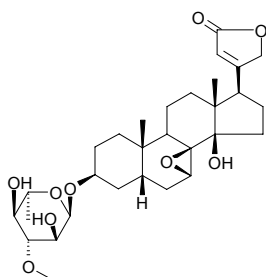


**4774 8-Deacetylsungpanconitine**

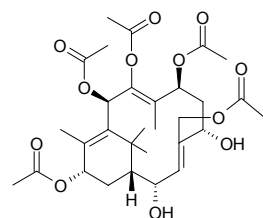
$C_{33}H_{47}NO_9$  (601.74). Source: ZHUA KUI GUA YE WU TOU *Aconitum hemsleyanum* var. *leueanthus* (root: yield = 0.0027%dw). Ref: 4678.

**4775 Deacetyltanghinin**

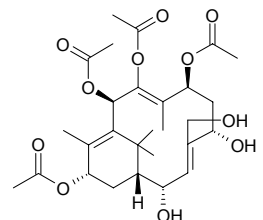
$C_{30}H_{44}O_9$  (548.68). Pharm: Cytotoxic (KB,  $ED_{50}$  = 0.05  $\mu$ g/mL, BC,  $ED_{50}$  = 1.48  $\mu$ g/mL, NCI-H187,  $ED_{50}$  = 0.1  $\mu$ g/mL)<sup>[2594]</sup>. Source: NIU XIN QIE *ZI Cerbera manghas*. Ref: 2594.

**4776 2-Deacetyltaxachitriene A**

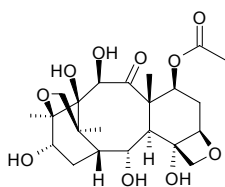
$C_{30}H_{42}O_{12}$  (594.66). mp 82~83°C,  $[\alpha]_D = -51^\circ$  ( $CHCl_3$ ). Source: HONG DOU SHAN *Taxus chinensis*. Ref: 662.

**4777 5-Deacetyltaxachitriene B**

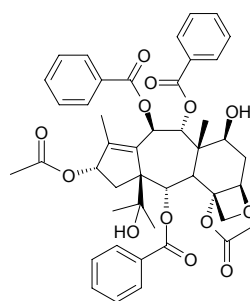
$C_{28}H_{40}O_{11}$  (552.62). mp 96~98°C,  $[\alpha]_D = +67.7^\circ$  (MeOH). Source: HONG DOU SHAN *Taxus chinensis*. Ref: 662.

**4778 4-Deacetyltaxagifine III**

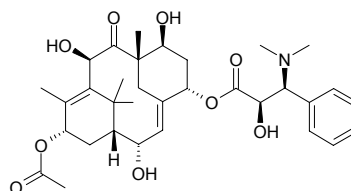
[135962-71-9]  $C_{22}H_{32}O_{10}$  (456.49). mp 221~223°C,  $[\alpha]_D = +38.1^\circ$  (MeOH). Source: HONG DOU SHAN *Taxus chinensis*. Ref: 662.

**4779 7-Deacetyltaxayuntin D**

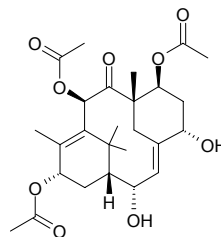
$C_{45}H_{48}O_{13}$  (796.88). mp 164~166°C. Source: DUAN YE HONG DOU SHAN *Taxus brevifolia*. Ref: 662.

**4780 2-Deacetyltaxine A**

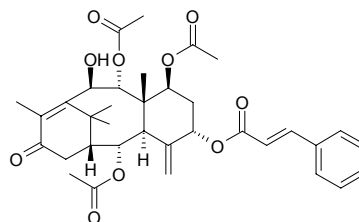
Taxine C  $C_{33}H_{45}NO_9$  (599.73). mp 220~221°C,  $[\alpha]_D = -106^\circ$  ( $CHCl_3$ ),  $[\alpha]_D = -73^\circ$  ( $CHCl_3$ ). Source: JIANG GUO ZI SHAN *Taxus baccata*. Ref: 662, 1498.

**4781 2-Deacetyltaxine B**

2-Deacetyl-7,10-diacetyl-5-deaminoacyl taxine A  $C_{26}H_{36}O_9$  (492.57). mp 178~179°C,  $[\alpha]_D = -218.2^\circ$  ( $CHCl_3$ ). Source: JIA NA DA HONG DOU SHAN *Taxus canadensis* (needle leaf), YUN NAN HONG DOU SHAN *Taxus yunnanensis*. Ref: 662, 3958.

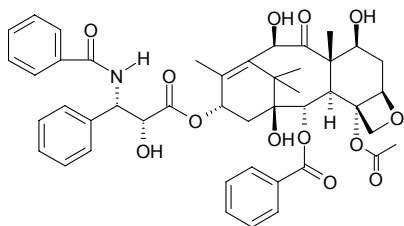
**4782 10-Deacetyl taxinine B**

$C_{35}H_{42}O_{10}$  (622.72). Colorless thin acicular crystals, mp 245~248°C. Source: ZI SHAN *Taxus cuspidata*. Ref: 291, 662.

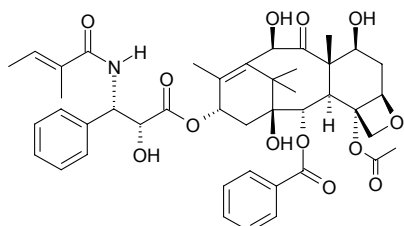


**4783 10-Deacetyltaxol**

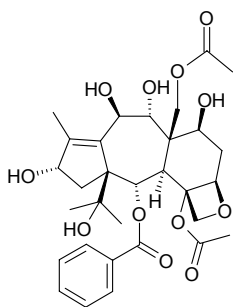
$C_{45}H_{49}NO_{13}$  (811.89).  $[\alpha]_D = -3^\circ$  (pyridine). Source: XI MA LA YA HONG DOU SHAN *Taxus wallichiana*, JIANG GUO ZI SHAN *Taxus baccata*. Ref: 662.

**4784 10-Deacetyltaxol B**

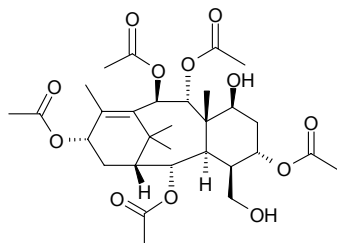
10-Deacetylcephalomannine  $C_{43}H_{51}NO_{13}$  (789.88).  $[\alpha]_D = -2^\circ$  (pyridine). Source: XI MA LA YA HONG DOU SHAN *Taxus wallichiana*, JIANG GUO ZI SHAN *Taxus baccata*. Ref: 662.

**4785 13-O-Deacetyltaxumairol Z**

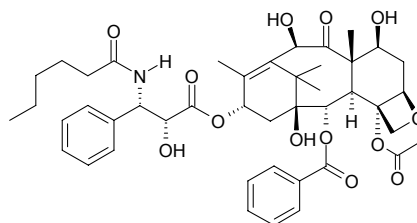
$C_{31}H_{40}O_{12}$  (604.66). Amorphous powder,  $[\alpha]_D^{25} = -42^\circ$  ( $c = 0.5$ ,  $CHCl_3$ ). Source: MEI LI HONG DOU SHAN *Taxus mairei* (root). Ref: 4250.

**4786 7-Deacetyltaxuspine L**

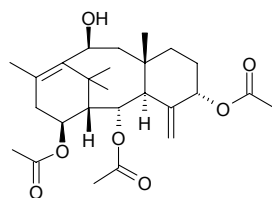
$C_{30}H_{44}O_{12}$  (596.68). Gum. Source: JIA NA DA HONG DOU SHAN *Taxus canadensis* (needle leaf). Ref: 3958.

**4787 10-Deacetyltaxuyunnanine A**

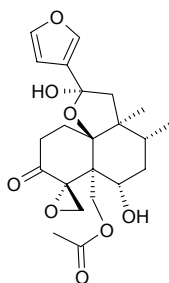
10-Deacetyltaxol C  $C_{44}H_{55}NO_{13}$  (805.93).  $[\alpha]_D = -50.9^\circ$  ( $CHCl_3$ ). Source: SU MEN DA LA HONG DOU SHAN *Taxus sumatrana* (twig and leaf: yield = 0.000026%dw)<sup>[4666]</sup>, YUN NAN HONG DOU SHAN *Taxus yunnanensis*. Ref: 662, 4666.

**4788 10-Deacetyltaxuyunnanine C**

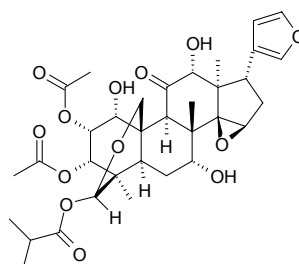
$C_{26}H_{38}O_7$  (462.59). Pharm: Cytotoxic (*in vitro*, Colon26-L5,  $EC_{50} = 76.1 \mu g/mL$ ; HT1080,  $EC_{50} = 53.8 \mu g/mL$ ; control 5-FU, 26-L5,  $EC_{50} = 0.29 \mu g/mL$ ; HT1080,  $EC_{50} = 0.07 \mu g/mL$ )<sup>[4661]</sup>; NO production inhibitor ( $IC_{50} = 28.5 \mu mol/L$ , control *L*-NMMA,  $IC_{50} = 28.5 \mu mol/L$ )<sup>[5407]</sup>. Source: YUN NAN HONG DOU SHAN *Taxus yunnanensis* (wood: yield = 0.0031%dw). Ref: 4661, 5407.

**4789 6-Deacetyl-teucrolivin A**

$C_{22}H_{28}O_8$  (420.46). Amorphous solid,  $[\alpha]_D^{25} = +39.60^\circ$  ( $c = 1.0$ ,  $CHCl_3$ ). Source: DONG FANG XIANG KE KE *Teucrium orientale*. Ref: 2552.

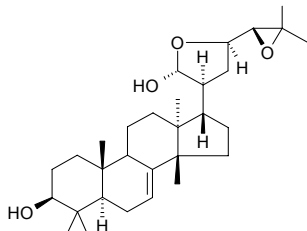
**4790 12-O-Deacetylrichilin H**

$C_{34}H_{44}O_{13}$  (660.72). Colorless amorphous solid,  $[\alpha]_D^{21} = -47.5^\circ$  ( $c = 1.06$ ,  $CHCl_3$ ). Pharm: Cytotoxic (HeLa-S3,  $IC_{50} = 0.48 \mu mol/L$ , control 5-FU,  $IC_{50} = 5.40 \mu mol/L$ , Cisplatin,  $IC_{50} = 2.46 \mu mol/L$ ). Source: KU LIAN SHI *Melia azedarach* (ripe fruit). Ref: 4528.

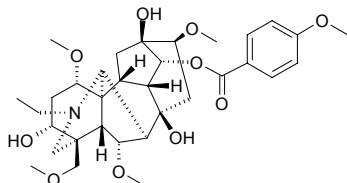


**4791 Deacetylurraeanthin**

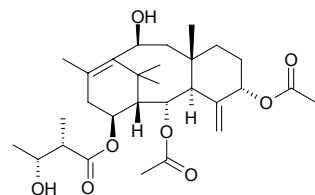
$C_{30}H_{48}O_4$  (472.71). mp 202–206°C. Source: RI BEN KU LIAN *Melia azedarach* var. *japonica*. Ref: 6, 660.

**4792 8-Deacetylynaconitine**

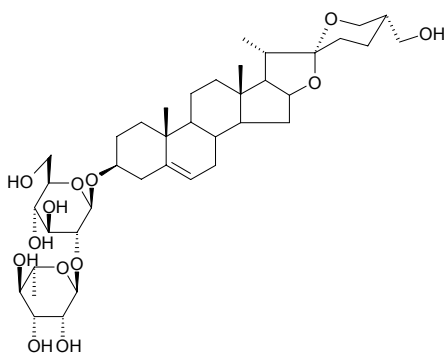
[93460-55-0]  $C_{33}H_{47}NO_{10}$  (617.74). White amorphous powder. Source: GONG GA SHAN WU TOU *Aconitum liljestrandii*, GUAY YE WU TOU *Aconitum hemsleyanum*. Ref: 2191.

**4793 10-Deacetylyunnanaxane**

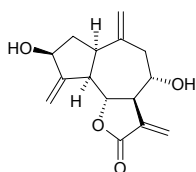
$C_{29}H_{44}O_8$  (520.67). Source: JIE ZHI HONG DOU SHAN *Taxus media*. Ref: 662.

**4794 Deacylbrownioside**

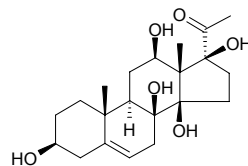
$C_{39}H_{62}O_{13}$  (738.92). Colorless needles (CHCl<sub>3</sub>-MeOH), mp 258–260°C (dec),  $[\alpha]_D^{23.9} = -100^\circ$  ( $c = 0.175$ , pyridine). Source: XIAO HUA DUN YE SHU YU *Dioscorea parviflora* (fresh rhizome). Ref: 4858.

**4795 Deacylnaropicrin**

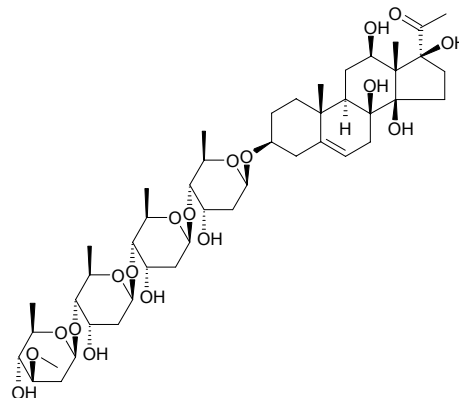
$C_{15}H_{18}O_4$  (262.31). mp 152°C,  $[\alpha]_D^{20} = +120^\circ$  ( $c = 0.5$ , methanol). Pharm: Cytotoxic (HeLa, ID<sub>50</sub> = 5 μg/mL). Source: YAN DI FENG MAO JU *Saussurea salsa*. Ref: 661.

**4796 Deacetylmetaplexigenin**

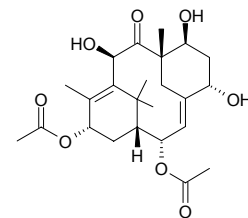
$C_{21}H_{32}O_6$  (380.48). Source: LUO MO *Metaplexis japonica*, BAI SHOU WU *Cynanchum bungei*, ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 6, 3925.

**4797 Deacetylmetaplexigenin 3-O-β-D-oleandropyranosyl-(1→4)-β-D-digitoxopyranosyl-(1→4)-β-D-digitoxopyranosyl-(1→4)-β-D-digitoxopyranoside**

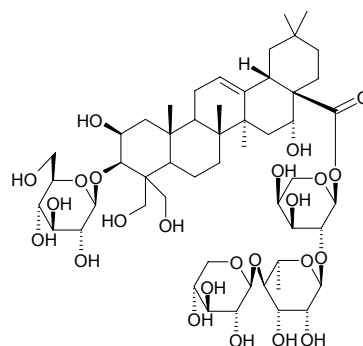
$C_{46}H_{74}O_{18}$  (915.09). Amorphous powder,  $[\alpha]_D^{27} = +18.6^\circ$  ( $c = 1.17$ , MeOH). Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.

**4798 Deaminoacyltaxine A**

$C_{24}H_{34}O_8$  (450.53). Source: JIANG GUO ZI SHAN *Taxus baccata*. Ref: 662.

**4799 Deapio platycodin D**

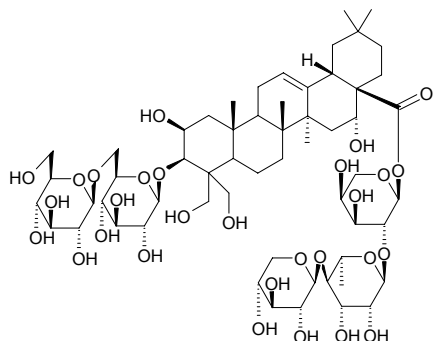
3-O-β-D-Glucopyranosyl-2β,3β,16α,23,24-pentahydroxyolean-12-ene-28-oic acid 28-O-β-D-xylopyranosyl-(1→4)-α-L-rhamnopyranosyl-(1→2)-α-L-arabinopyranoside  $C_{52}H_{84}O_{24}$  (1093.23). Source: JIE GENG *Platycodon grandiflorum*. Ref: 4900.



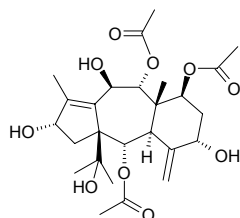
**4800 Deapio platycodin D<sub>3</sub>**

3-*O*-β-*D*-Glucopyranosyl-(1→6)-β-*D*-glucopyranosyl 2β,3β,16α,23,24-pentahydroxyolean-12-ene-28-oic acid 28-*O*-β-*D*-xylopyranosyl-(1→4)-α-*L*-rhamnopyranosyl-(1→2)-α-*L*-arabinopyranoside C<sub>58</sub>H<sub>94</sub>O<sub>29</sub> (1255.38).

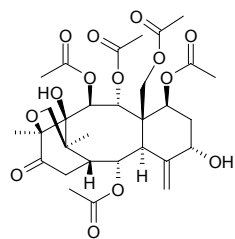
Source: JIE GENG *Platycodon grandiflorum*. Ref: 4900.

**4801 10-Debenzoyl-2α-acetoxy-brevifoliol**

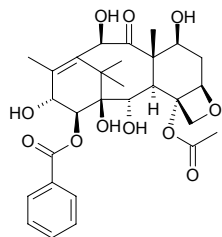
C<sub>26</sub>H<sub>38</sub>O<sub>10</sub> (510.59). mp 180°C, [α]<sub>D</sub> = +32.6° (MeOH). Source: XI MA LA YA HONG DOU SHAN *Taxus wallichiana*. Ref: 662.

**4802 19-Debenzoyl-19-acetyltaxinine M**

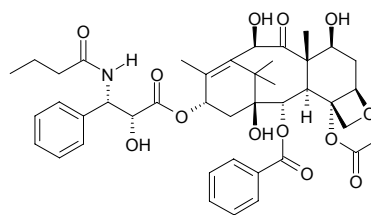
C<sub>30</sub>H<sub>40</sub>O<sub>14</sub> (624.64). Source: XI MA LA YA HONG DOU SHAN *Taxus wallichiana*. Ref: 662.

**4803 2-Debenzoyl-14β-benzoyloxy-10-deacetylbaaccatin III**

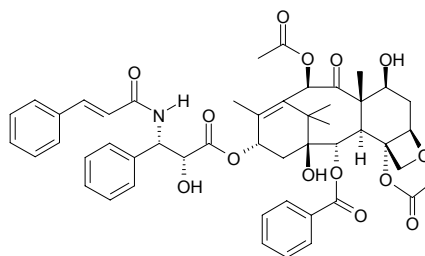
C<sub>29</sub>H<sub>36</sub>O<sub>11</sub> (560.60). Source: XI MA LA YA HONG DOU SHAN *Taxus wallichiana*. Ref: 662.

**4804 N-Debenzoyl-N-butanoyl-10-deacetylpaclitaxel**

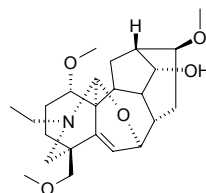
C<sub>42</sub>H<sub>51</sub>NO<sub>13</sub> (777.87). mp 244°C. Source: JIANG GUO ZI SHAN *Taxus baccata*. Ref: 662.

**4805 N-Debenzoyl-N-cinnamoyltaxol**

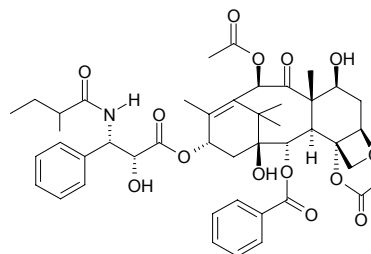
C<sub>49</sub>H<sub>53</sub>NO<sub>14</sub> (879.97). mp 180°C, [α]<sub>D</sub> = -16.6° (MeOH). Source: ZA JIAO JIE ZHI HONG DOU SHAN *Taxus x media*. Ref: 662.

**4806 14-Debenzoylfranchetine**

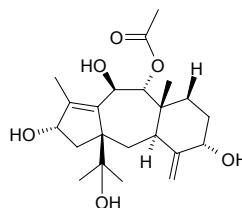
C<sub>24</sub>H<sub>37</sub>NO<sub>5</sub> (419.57). White amorphous powder. Source: GONG GA SHAN WU TOU *Aconitum liljestrandii*. Ref: 2191.

**4807 N-Debenzoyl-N-(2-methylbutyryl)taxol**

C<sub>45</sub>H<sub>55</sub>NO<sub>14</sub> (833.94). mp 226°C, [α]<sub>D</sub> = -48° (MeOH). Source: ZA JIAO JIE ZHI HONG DOU SHAN *Taxus x media*. Ref: 662.

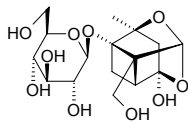
**4808 7-Debenzoyloxy-10-deacetyl-brevifoliol**

C<sub>22</sub>H<sub>34</sub>O<sub>6</sub> (394.51). mp 160–162°C, [α]<sub>D</sub> = -24° (MeOH). Source: XI MA LA YA HONG DOU SHAN *Taxus wallichiana*. Ref: 662.

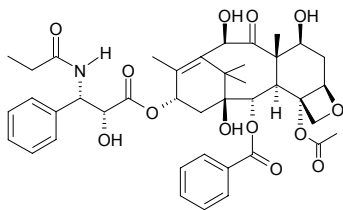


**4809 8-O-Debenzoylpaconiflorin**

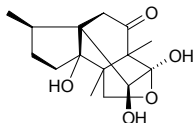
$C_{16}H_{24}O_{10}$  (376.36). Colorless amorphous solid,  $[\alpha]_D^{23} = -12.8^\circ$  ( $c = 0.195$ , MeOH). Source: *Ducrosia anethifolia* (aerial parts). Ref: 5469.

**4810 N-Debenzoyl-N-propanoyl-10-deacetyl paclitaxel**

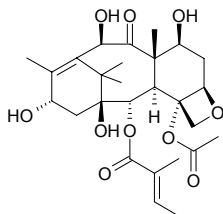
$C_{41}H_{49}NO_{13}$  (763.85). mp 245°C. Source: JIANG GUO ZI SHAN *Taxus baccata*. Ref: 662.

**4811 11-O-Debenzoyltashironin**

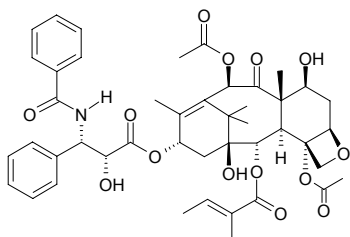
$C_{15}H_{22}O_5$  (282.34). Colorless solid,  $[\alpha]_D^{22} = -65^\circ$  ( $c = 0.72$ ,  $CHCl_3$ ). Pharm: Neurotrophic activity (primary culture of rat cortical neurons, 0.1-10  $\mu\text{mol/L}$ ). Source: *Illicium merrillianum* (pericarp; yield = 0.00019% dw). Ref: 3046.

**4812 2-Debenzoyl-2-tigloyl-10-deacetyl baccatin III**

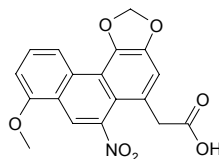
$C_{27}H_{38}O_{10}$  (522.60). Source: JIANG GUO ZI SHAN *Taxus baccata*. Ref: 662.

**4813 2-Debenzoyl-2-tigloyltaxol**

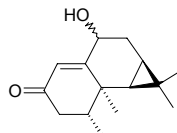
Isocephalomannine  $C_{45}H_{53}NO_{14}$  (831.92). mp 232°C,  $[\alpha]_D = -44^\circ$  (MeOH). Source: ZA JIAO JIE ZHI HONG DOU SHAN *Taxus x media*. Ref: 662.

**4814 Debilic acid**

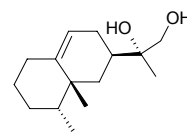
[475-85-4]  $C_{18}H_{13}NO_7$  (355.31). mp > 350°C (dec). Source: JI SHI TENG GUO *Paederia scandens*, QING MU XIANG *Aristolochia debilis* [*Syn. Aristolochia longa*]. Ref: 6, 660.

**4815 Debilone**

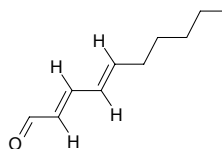
9-Hydroxy- $\Delta^{1(10)}$ -aristolone-2-one [26808-51-5]  $C_{15}H_{22}O_2$  (234.34). mp 135°C. Source: GAN SONG *Nardostachys chinensis*. Ref: 6.

**4816 Debneyol**

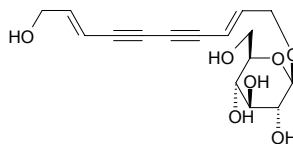
[99694-82-3]  $C_{15}H_{26}O_2$  (238.37). Pharm: Antifungal (*in vitro*, *Cladosporium cucumerinum*,  $ED_{50} = 50\text{--}70\mu\text{g/mL}$ ) Source: YAN CAO *Nicotiana tabacum*. Ref: 1087, 1114.

**4817 (E,E)-2,4-Decadienal**

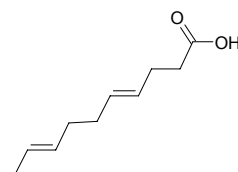
[25152-84-5]  $C_{10}H_{16}O$  (152.24). Source: XING REN *Prunus armeniaca*. Ref: 2.

**4818 (2E,8E)-2,8-Decadiene-4,6-diyne-1,10-diol 1-O-β-D-glucopyranoside**

$C_{16}H_{20}O_7$  (324.33). Amorphous powder,  $[\alpha]_D^{21} = -77^\circ$  ( $c = 0.2$ , MeOH). Source: CANG ZHU *Atractylodes lancea*. Ref: 4348.

**4819 Decadienoic acid**

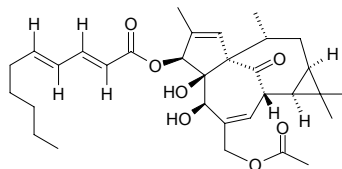
[13159-49-4]  $C_{10}H_{16}O_2$  (168.24). Source: PI JIU HUA *Humulus lupulus*. Ref: 1521.



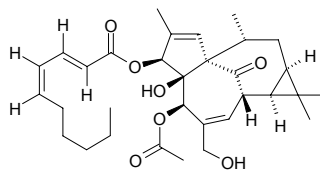


**4820 3-O-(2'E,4'E-Decadienoyl)-20-O-acetyligenol**

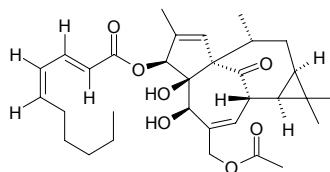
Ingenol-3-(2,4-decadienoate)-20-acetate  $C_{32}H_{44}O_7$  (540.70). Colorless oil,  $[\alpha]_D^{23} = +84.1^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Cytotoxic (*in vitro* animal cap assay to screen for inhibitors of cell division, treatment of cultured individual *Xenopus* cells from the early *Xenopus laevis* embryo at the blastular stage,  $0.5\mu\text{g/mL}$ , cleavage arrest  $> 75\%$ )<sup>[4645]</sup>. **Source:** GAN SUI *Euphorbia kansui* (root: yield =  $0.00006\%$ dw)<sup>[4645]</sup>. **Ref:** 660, 4645.

**4821 3-O-(2'E,4'Z-Decadienoyl)-5-O-acetyligenol**

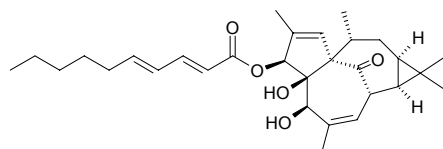
$C_{32}H_{44}O_7$  (540.7). Colorless oil,  $[\alpha]_D^{23} = +61.73^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Cytotoxic (*in vitro* animal cap assay to screen for inhibitors of cell division, treatment of cultured individual *Xenopus* cells from the early *Xenopus laevis* embryo at the blastular stage,  $0.5\mu\text{g/mL}$ , cleavage arrest  $> 75\%$ ). **Source:** GAN SUI *Euphorbia kansui* (root: yield =  $0.00005\%$ dw). **Ref:** 4645.

**4822 3-O-(2'E,4'Z-Decadienoyl)-20-O-acetyligenol**

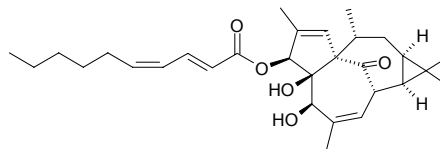
$C_{32}H_{44}O_7$  (540.70). Colorless oil. **Pharm:** Cytotoxic (*in vitro* animal cap assay to screen for inhibitors of cell division, treatment of cultured individual *Xenopus* cells from the early *Xenopus laevis* embryo at the blastular stage,  $0.5\mu\text{g/mL}$ , cleavage arrest  $> 75\%$ ). **Source:** GAN SUI *Euphorbia kansui* (root: yield =  $0.00007\%$ dw). **Ref:** 4645.

**4823 3-O-(2E,4E-Decadienoyl)-20-deoxyingenol**

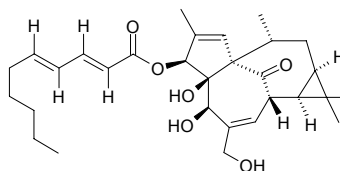
$C_{30}H_{42}O_5$  (482.67). Colorless gum,  $[\alpha]_D^{23} = +57.5^\circ$  ( $c = 0.16$ , MeOH). **Pharm:** Induces cell cleavage arrest (*Xenopus laevis* embryo cells at the blastular stage, at  $0.5\mu\text{g/mL}$  compound results in  $> 75\%$  cell cleavage arrest). **Source:** GAN SUI *Euphorbia kansui*. **Ref:** 4368.

**4824 3-O-(2E,4Z-Decadienoyl)-20-deoxyingenol**

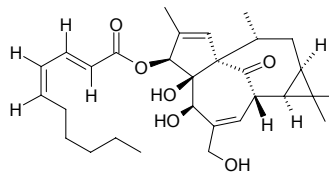
$C_{30}H_{42}O_5$  (482.67). Colorless gum,  $[\alpha]_D^{23} = +42.1^\circ$  ( $c = 0.28$ , MeOH). **Pharm:** Induces cell cleavage arrest (*Xenopus laevis* embryo cells at the blastular stage, at  $0.5\mu\text{g/mL}$  compound results in  $> 75\%$  cell cleavage arrest). **Source:** GAN SUI *Euphorbia kansui*. **Ref:** 4368.

**4825 3-O-(2'E,4'E-Decadienoyl)ingenol**

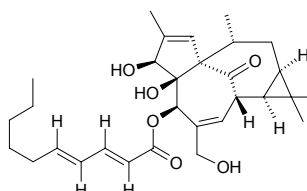
$C_{30}H_{42}O_6$  (498.67). Colorless oil,  $[\alpha]_D^{23} = +89.09^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Cytotoxic (*in vitro* animal cap assay to screen for inhibitors of cell division, treatment of cultured individual *Xenopus* cells from the early *Xenopus laevis* embryo at the blastular stage,  $0.5\mu\text{g/mL}$ , cleavage arrest  $> 75\%$ ). **Source:** GAN SUI *Euphorbia kansui* (root: yield =  $0.00009\%$ dw). **Ref:** 4645.

**4826 3-O-(2'E,4'Z-Decadienoyl)ingenol**

$C_{30}H_{42}O_6$  (498.67). **Pharm:** Cytotoxic (*in vitro* animal cap assay to screen for inhibitors of cell division, treatment of cultured individual *Xenopus* cells from the early *Xenopus laevis* embryo at the blastular stage,  $0.5\mu\text{g/mL}$ , cleavage arrest  $> 75\%$ ). **Source:** GAN SUI *Euphorbia kansui* (root: yield =  $0.00011\%$ dw). **Ref:** 4645.

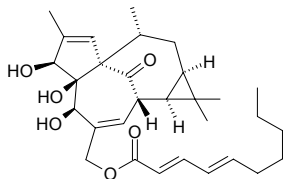
**4827 5-O-(2'E,4'E-Decadienoyl)ingenol**

$C_{30}H_{42}O_6$  (498.67). Colorless oil,  $[\alpha]_D^{23} = -7.69^\circ$  ( $c = 0.13$ , MeOH). **Pharm:** Cytotoxic (*in vitro* animal cap assay to screen for inhibitors of cell division, treatment of cultured individual *Xenopus* cells from the early *Xenopus laevis* embryo at the blastular stage,  $0.5\mu\text{g/mL}$ , cleavage arrest  $> 75\%$ ). **Source:** GAN SUI *Euphorbia kansui* (root: yield =  $0.0015\%$ dw). **Ref:** 4645.

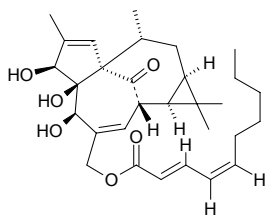


**4828 20-O-(2'E,4'E-Decadienoyl)ingenol**

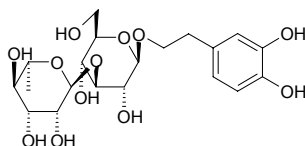
$C_{30}H_{42}O_6$  (498.67). Colorless oil,  $[\alpha]_D^{23} = +3.15^\circ$  ( $c = 0.19$ , MeOH).  
**Pharm:** Cytotoxic (*in vitro* animal cap assay to screen for inhibitors of cell division, treatment of cultured individual *Xenopus* cells from the early *Xenopus laevis* embryo at the blastular stage, 0.5  $\mu\text{g}/\text{mL}$ , cleavage arrest > 75%). **Source:** GAN SUI *Euphorbia kansui* (root: yield = 0.00008%dw).  
**Ref:** 4645.

**4829 20-O-(2'E,4'Z-Decadienoyl)ingenol**

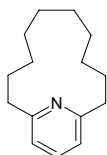
$C_{30}H_{42}O_6$  (498.67). Colorless oil,  $[\alpha]_D^{23} = +2.50^\circ$  ( $c = 0.16$ , MeOH).  
**Pharm:** Cytotoxic (*in vitro* animal cap assay to screen for inhibitors of cell division, treatment of cultured individual *Xenopus* cells from the early *Xenopus laevis* embryo at the blastular stage, 0.5  $\mu\text{g}/\text{mL}$ , cleavage arrest > 75%). **Source:** GAN SUI *Euphorbia kansui* (root: yield = 0.00009%dw).  
**Ref:** 4645.

**4830 Decaffeoylverbascoide**

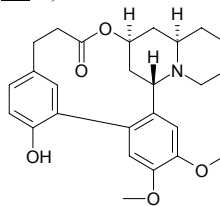
Decaffeoylverbascoide  $C_{20}H_{30}O_{12}$  (462.45). **Pharm:** Antioxidant (ferric thiocyanate method, 0.5mmol/L, peroxidation value = 6.6%, control BHA, 0.5mmol/L, peroxidation value = 4.5%, control Vitamin E, 0.5mmol/L, peroxidation value = 14.7%)<sup>[4508]</sup>. **Source:** ROU CONG RONG *Cistanche deserticola*, TIAN SHE CAO *Lippia dulcis* (aerial parts). **Ref:** 2448, 4508.

**4831 2,6-Decamethylene pyridine**

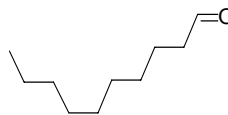
$C_{15}H_{23}N$  (217.36). **Source:** SHE XIANG *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*. **Ref:** 2.

**4832 Decamine**

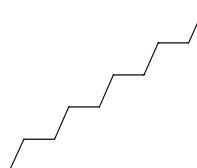
Weedone [17349-05-2]  $C_{26}H_{31}NO_5$  (437.54). mp 223~224°C. **Pharm:** Antibacterial (*Bacillus diphtheriae in vitro*, 4  $\mu\text{g}/\text{mL}$ ); antifungal (*Candida albicans in vitro*, 8  $\mu\text{g}/\text{mL}$ ). **Source:** ZI WEI HUA *Lagerstroemia indica*, DI KE DONG *Decodon verticillatus*, ZI WEI YE *Lagerstroemia indica*.  
**Ref:** 6, 658.

**4833 Decanal**

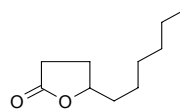
Capric aldehyde [112-31-2]  $C_{10}H_{20}O$  (156.27). **Source:** DONG LING CAO *Rabdosia rubescens*, GAN JIANG *Zingiber officinale*, JU PI *Citrus reticulata*, YU XING CAO *Houttuynia cordata*. **Ref:** 2.

**4834 Decane**

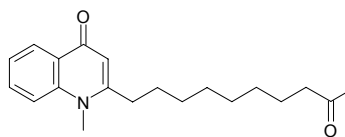
*n*-Decane [124-18-5]  $C_{10}H_{22}$  (142.29). **Source:** SHAN ZHA *Crataegus pinnatifida*. **Ref:** 2.

**4835  $\gamma$ -Decanolactone**

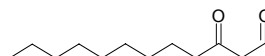
[706-14-9]  $C_{10}H_{18}O_2$  (170.25). **Source:** XING REN *Prunus armeniaca*, NAN HE SHI *Daucus carota*. **Ref:** 2, 660.

**4836 2-(Decan-9-one)-N-methyl-4-quinolone**

$C_{20}H_{27}NO_2$  (313.44). **Source:** MENG DA NA YUN XIANG *Ruta Montana* (whole herb). **Ref:** 3910.

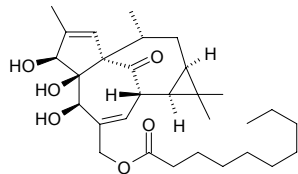
**4837 Decanoylactaldehyde**

Houttuynin  $C_{12}H_{22}O_2$  (198.31). **Pharm:** Antibacterial (*in vitro*, gram-positive bacteria, gram-negative bacteria; *in vitro* and *in vivo*, houttuynin isoniazone inhibits *Mycobacterium tuberculosis* strongly, MIC = 0.78~3.10mg/mL); immunoenhancer (chronic bronchitis patient, orl 90mg, 3 times daily, after seven days the level of properdin in blood has ascending tendency). **Source:** YU XING CAO *Houttuynia cordata* (aerial parts: content = 0.05%)<sup>[5501]</sup>. **Ref:** 2, 4, 1974, 2056, 5501.

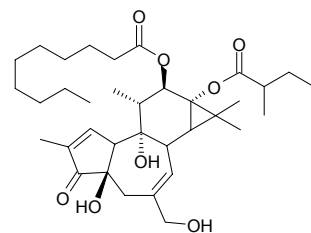


**4838 20-O-(Decanoyl)ingenol**

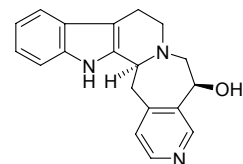
$C_{30}H_{46}O_6$  (502.7). **Pharm:** Cytotoxic (*in vitro* animal cap assay to screen for inhibitors of cell division, treatment of cultured individual *Xenopus* cells from the early *Xenopus laevis* embryo at the blastular stage, 0.5  $\mu\text{g}/\text{mL}$ , cleavage arrest > 75%). **Source:** GAN SUI *Euphorbia kansui* (root: yield = 0.00007%dw). **Ref:** 4645.

**4839 12-O-Decanoylphorbol-13-(2-methylbutyrate)**

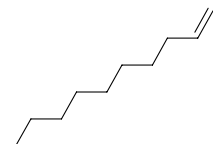
$C_{35}H_{54}O_8$  (602.82). Oil,  $[\alpha]_D^{25} = +56^\circ$  ( $c = 0.05$ ,  $\text{CHCl}_3$ ). **Pharm:** Anti-HIV-1 (MT-4 cells, HIV-1-induced cytopathic effect inhibitor,  $\text{IC}_{100} = 7.81 \mu\text{g}/\text{mL}$ ,  $\text{CC}_0 = 31.3 \mu\text{g}/\text{mL}$ , control DS8000,  $\text{IC}_{100} = 3.9 \mu\text{g}/\text{mL}$ ,  $\text{CC}_0 > 1000 \mu\text{g}/\text{mL}$ ); PKC activator inactive (10ng/mL, activity rate = 0%)<sup>[3921]</sup>. **Source:** BA DOU *Croton tiglium*. **Ref:** 3921.

**4840 Decarbomethoxy naucl echine**

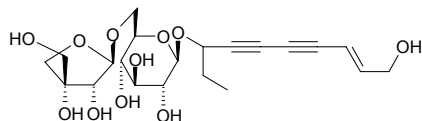
$C_{19}H_{19}N_3O$  (305.38). **Pharm:** Antibacterial (*in vitro*: *Staphylococcus aureus*, *Bacillus subtilis*, *Bacillus coli*, *Bacillus diphtheriae*, *Streptococcus* sp., *Streptobacillus* sp., *Salmonella* sp., *Bacillus proteus*, *Bacillus lactis*, *Klebsiella pneumoniae*); antileishmanial; antifungal (*Aspergillus niger*). **Source:** KUAN YE WU TAN *Nauclea latifolia*. **Ref:** 2178.

**4841 1-Decene**

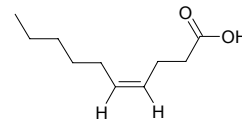
$C_{10}H_{20}$  (140.27). **Source:** KUAN DONG HUA *Tussilago farfara*. **Ref:** 660.

**4842 (2E)-2-Decene-4,6-diyne-1,8-diol 8-O-β-apiofuranosyl-(1→6)-β-D-glucopyranoside**

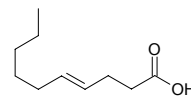
$C_{21}H_{30}O_{11}$  (458.47). Amorphous powder,  $[\alpha]_D^{23} = -144^\circ$  ( $c = 0.1$ , MeOH). **Source:** CANG ZHU *Atractylodes lancea* (rhizome). **Ref:** 4384.

**4843 cis-4-Decenoic acid**

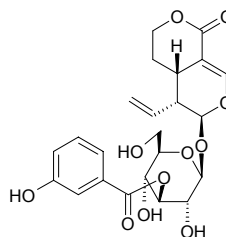
Obtusilic acid [505-90-8]  $C_{10}H_{18}O_2$  (170.25). bp 148~150°C/13mmHg. **Source:** CHENG QIE ZI *Litsea cubeba*, SAN ZUAN FENG *Lindera obtusiloba*, ZHEN CAI *Litsea pungens*. **Ref:** 6, 1521, 2825, 2956.

**4844 trans-4-Decenoic acid**

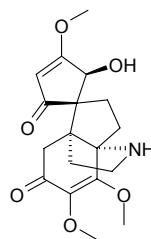
[26303-90-2]  $C_{10}H_{18}O_2$  (170.25). bp 148~150°C/13mmHg. **Source:** SAN ZUAN FENG *Lindera obtusiloba*. **Ref:** 6.

**4845 Decentapicrin A**

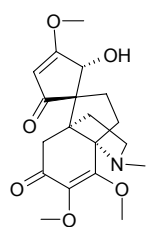
$C_{23}H_{26}O_{11}$  (478.46). **Source:** GUANG LIANG JIA LONG DAN *Gentiana nitida* (whole herb). **Ref:** 3542.

**4846 Dechloroacutumidine**

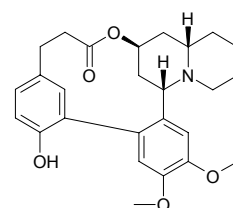
$C_{18}H_{23}NO_6$  (349.39).  $[\alpha]_D^{25} = -68^\circ$  ( $c = 0.2$ , MeOH) **Source:** BIAN FU GE *Menispermum dauricum*. **Ref:** 1946.

**4847 Dechlorodauricumine**

$C_{19}H_{25}NO_6$  (363.41). Amorphous powder,  $[\alpha]_D^{25} = +20.7^\circ$  ( $c = 0.10$ , MeOH). **Source:** BIAN FU GE GEN *Menispermum dauricum*. **Ref:** 5326.

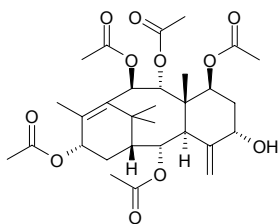
**4848 Decinine**

[10183-64-9]  $C_{26}H_{31}NO_5$  (437.54). mp 222~224°C. **Source:** ZI WEI YE *Lagerstroemia indica*. **Ref:** 6.

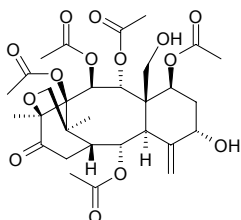


**4849 Decinnamol taxinine J**

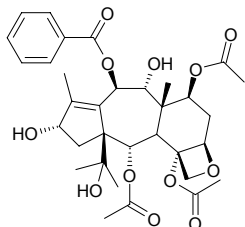
5 $\alpha$ -Hydroxy-2 $\alpha$ ,7 $\beta$ ,9 $\alpha$ ,10 $\beta$ ,13 $\alpha$ -Pentaacetoxy-4(20),11-taxadiene  
 $C_{30}H_{42}O_{11}$  (578.66). Colorless prisms. Source: AO DA LI YA HONG  
 DOU SHAN *Austrotaxus spicata*, DUAN YE HONG DOU SHAN *Taxus*  
*brevifolia*, HONG DOU SHAN *Taxus chinensis*. Ref: 662, 2488.

**4850 5-Decinnamoyl-11-acetyl-19-hydroxyl taxagifine**

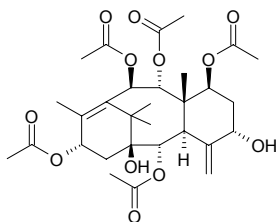
$C_{30}H_{40}O_{14}$  (624.64). White massive crystals, mp 209~210°C,  $[\alpha]_D^{14} = -12.1^\circ$  (chloroform). Source: YUN NAN HONG DOU SHAN *Taxus*  
*yunnanensis*. Ref: 296, 662.

**4851 13-Decinnamoyl-9-deacetyl taxichin B**

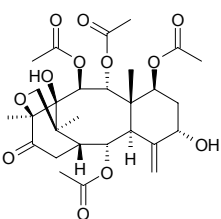
$C_{33}H_{42}O_{12}$  (630.70). Source: XI MA LA YA HONG DOU SHAN *Taxus*  
*wallichiana*. Ref: 662.

**4852 Decinnamoyl-1-hydroxy-taxinine J**

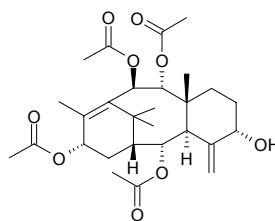
$C_{30}H_{42}O_{12}$  (594.66). Source: JIANG GUO ZI SHAN *Taxus baccata*. Ref:  
 662.

**4853 5 $\alpha$ -Decinnamoyltaxagifine**

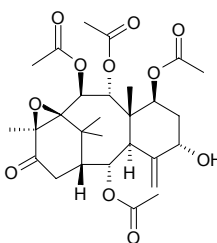
$C_{28}H_{38}O_{12}$  (566.61). Source: HONG DOU SHAN *Taxus chinensis*. Ref:  
 662.

**4854 Decinnamoyltaxinine E**

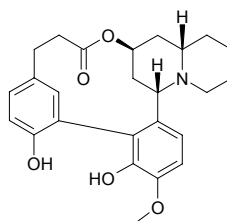
$C_{28}H_{40}O_9$  (520.63). Source: HONG DOU SHAN *Taxus chinensis*. Ref:  
 662.

**4855 Decinnamoyltaxinine B 11,12-oxide**

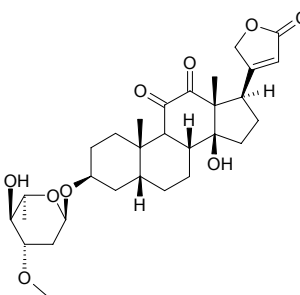
$C_{28}H_{38}O_{11}$  (550.61). Source: YUN NAN HONG DOU SHAN *Taxus*  
*yunnanensis*. Ref: 662.

**4856 Decodine**

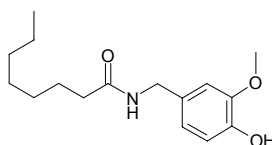
[26996-01-1]  $C_{25}H_{29}NO_5$  (423.51). mp 193~197°C. Source: ZI WEI YE  
*Lagerstroemia indica*. Ref: 6.

**4857 Decoside**

$C_{30}H_{42}O_9$  (546.66). Pharm: Toxin (vertebrate). Source: YANG JIAO AO  
*Strophanthus divaricatus*. Ref: 658.

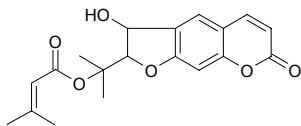
**4858 Decoyl vanillylamide**

$C_{16}H_{25}NO_3$  (279.38). Source: LA JIAO *Capsicum frutescens*. Ref: 6.

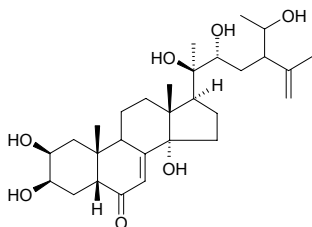


**4859 Decumbensol**

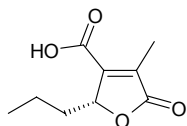
C<sub>19</sub>H<sub>20</sub>O<sub>6</sub> (344.37). Colorless massive crystals, mp 183~183.5°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +202° (c = 0.53, CHCl<sub>3</sub>). Source: QIAN HU *Angelica decursiva* [Syn. *Peucedanum decursivum*]. Ref: 9.

**4860 Decumbesterone A**

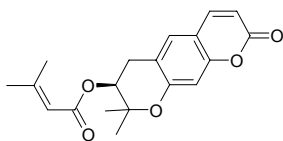
C<sub>29</sub>H<sub>46</sub>O<sub>7</sub> (506.69). Pharm: Antineoplastic (inhibits EBV-EA induction strongly). Source: BAI MAO XIA KU CAO *Ajuga decumbens*. Ref: 693.

**4861 Decubic acid**

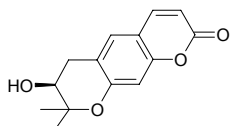
C<sub>9</sub>H<sub>12</sub>O<sub>4</sub> (184.19). mp 125~127°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +44.3° (c = 0.47, CHCl<sub>3</sub>). Source: *Lasiodiplodia theobromae* (fruit). Ref: 3867.

**4862 Decursin**

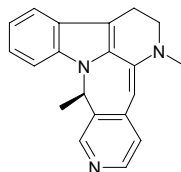
[5928-25-6] C<sub>19</sub>H<sub>20</sub>O<sub>5</sub> (328.37). mp 110~111°C. Pharm: AChE inhibitor (*in vitro*, IC<sub>50</sub> = 390 μmol/L)<sup>[3058]</sup>; reduces muscular twitching (cultured myocardial cells line). Source: QIAN HU *Angelica decursiva* [Syn. *Peucedanum decursivum*], CHAO XIAN DANG GUI *Angelica gigas* (underground part)<sup>[3058]</sup>. Ref: 6, 658, 3058.

**4863 Decursinol**

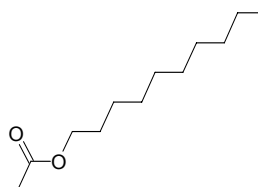
[23458-02-8] C<sub>14</sub>H<sub>14</sub>O<sub>4</sub> (246.27). mp 176~177°C. Pharm: AChE inhibitor (*in vitro*, IC<sub>50</sub> = 28 μmol/L)<sup>[3058]</sup>; reduces muscular twitching (cultured myocardial cells line). Source: DA TIAO WEN XIE HAO *Seseli grandivittatum*, MU<sup>(4)</sup> JU *Aegle marmelos*, QIAN HU *Angelica decursiva* [Syn. *Peucedanum decursivum*], CHAO XIAN DANG GUI *Angelica gigas* (underground part)<sup>[3058]</sup>. Ref: 6, 658, 3058.

**4864 Decussine**

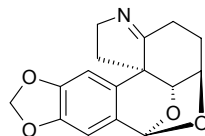
[75375-52-9] C<sub>20</sub>H<sub>19</sub>N<sub>3</sub> (301.39). Yellow rhomboid crystals (methanol), mp 203~205°C. Pharm: Neuromuscular blocker. Source: DUI SHENG MA QIAN *Strychnos decussata*. Ref: 661.

**4865 n-Decyl acetate**

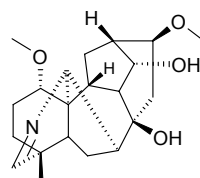
[112-17-4] C<sub>12</sub>H<sub>24</sub>O<sub>2</sub> (200.32). mp -15.05°C, bp 244°C. Source: HEI MA YI *Formica fusca*. Ref: 6.

**4866 4a,N-Dedihydronoraugustamine**

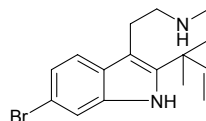
C<sub>16</sub>H<sub>15</sub>NO<sub>4</sub> (285.30). mp 127~130°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -242.6° (c = 0.27, MeOH). Pharm: Antiprotozoal inactive (*Plasmodium falciparum*, *Leishmania donovani*, *Trypanosoma brucei*, *Trypanosoma cruzi*). Source: KEN NI YA WEN SHU LAN *Crinum kirkii* (bulb). Ref: 3892.

**4867 N-Deethyl-N-19-didehydrosachaconitine**

C<sub>21</sub>H<sub>31</sub>NO<sub>4</sub> (361.49). Amorphous solid, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +181.8° (c = 0.11, CHCl<sub>3</sub>). Source: BAN HUA WU TOU *Aconitum variegatum* (aerial parts). Ref: 5270.

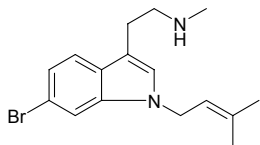
**4868 Deformylflustrabromine**

C<sub>16</sub>H<sub>21</sub>BrN<sub>2</sub> (321.26). Pharm: Affinity to nAChR ( $\alpha 4\beta 2^*$  subtype,  $K_i$  = (3400±500)nmol/L, control (-)-Nicotine,  $K_i$  = (0.838±0.132)nmol/L;  $\alpha 7^*$  subtype,  $K_i$  > 50000nmol/L, (-)-Nicotine,  $K_i$  = (127±5)nmol/L). Source: BEI HAI XIAN TAI CHONG *Flustra foliacea*. Ref: 5029.



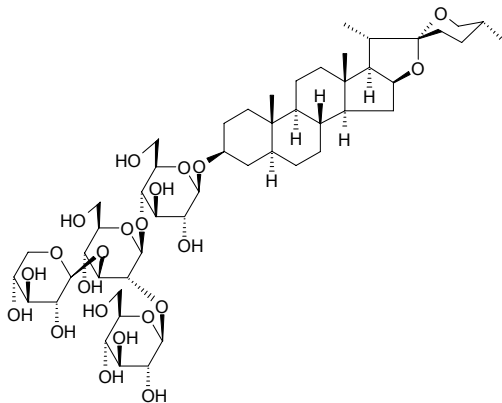
**4869 Deformylflustrabromine B**

$C_{16}H_{21}BrN_2$  (321.26). **Pharm:** Affinity to nAChR ( $\alpha 4\beta 2^*$  subtype,  $K_i > 50000$ nmol/L, control (-)-Nicotine,  $K_i = (0.838 \pm 0.132)$ nmol/L;  $\alpha 7^*$  subtype,  $K_i = (17000 \pm 2200)$ nmol/L, (-)-Nicotine,  $K_i = (127 \pm 5)$ nmol/L). **Source:** BEI HAI XIAN TAI CHONG *Flustra foliacea*. **Ref:** 5029.

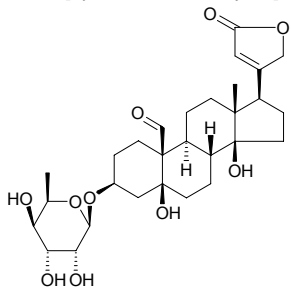
**4870 Degalactotigonin**

[39941-51-0]  $C_{50}H_{82}O_{22}$  (1035.20). **Pharm:** Antineoplastic (inhibits  $^{32}P$  combines with phospholipid in HeLa cells,  $50 \mu\text{g/mL}$ , InRt = 57.8%).

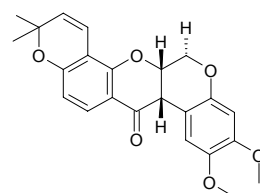
**Source:** ZHI MU *Anemarrhena asphodeloides*. **Ref:** 2, 1636.

**4871 Deglucocheirotxin**

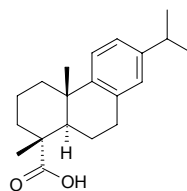
$C_{29}H_{42}O_{10}$  (550.65). mp 188–191°C. **Source:** LING LAN *Convallaria keiskei* [Syn. *Convallaria majalis*]. **Ref:** 6.

**4872 Deguelin**

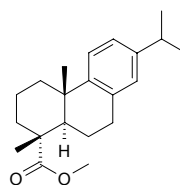
Degueline [522-17-8]  $C_{23}H_{22}O_6$  (394.43). Yellow crystals, mp 180–182°C (methanol); 171°C,  $[\alpha]_D^{20} = -107^\circ$  ( $c = 0.2$ , benzene). **Pharm:** Ornithine decarboxylase inhibitor (induced by ester phorbol,  $IC_{50} = 0.0003 \mu\text{g/mL}$ ); larvacide (larva of mosquito); nematocide (MLD =  $1 \mu\text{mol/L}$ ); anti-tumor promoter (*in vivo*, mouse skin tumor, inhibits TPA-induced EBV-EA activation, 100(mol ratio)/32 pmol TPA), EBV-EA positive cells = 72.3% viability, positive control  $\beta$ -Carotene, EBV-EA positive cells = 82.7% viability)<sup>[4982]</sup>. **Source:** MU LAN<sup>(2)</sup> *Indigofera tinctoria*, HUI YE GEN *Tephrosia purpurea*, MAO YU TENG *Derris elliptica*, YU TENG *Derris trifoliata* (stem), *Tephrosia* sp., *Lonchocarpus* sp. **Ref:** 6, 900, 4982.

**4873 Dehydroabietic acid**

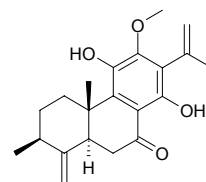
8,11,13-Abietatrien-18-oic acid [1740-19-8]  $C_{20}H_{28}O_2$  (300.44). Colorless acicular crystals, mp 174°C,  $[\alpha]_D^{20} = +66^\circ$  ( $c = 0.60$ , diethyl ether). **Pharm:** Activates nerve (stimulates release of neurotransmitter inhibitor ( $\gamma$ -aminobutyric acid) and neurotransmitter stimulant); antifungal (*in vitro*, *Pyricularia oryzae*, InRt = 100%); antiulcerative; used in treatment of hypertension and tachycardia caused by smoking; vasodilator. **Source:** XIAN MAI XIANG CHA CAI *Rabdosia nervosa*, LEI GONG TENG *Tripterygium wilfordii*. **Ref:** 900.

**4874 Dehydroabietic acid methyl ester**

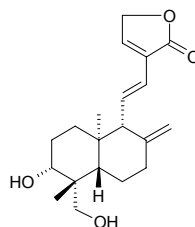
$C_{21}H_{30}O_2$  (314.47). **Pharm:** Antineoplastic (EBV-EA induced by TPA, mol ratio/TPA = 1000, relative percentage of EBV-EA = 0% (positive control value 32pmol, 20ng TPA = 100%), viability of Raji cells = 60%; reference compound  $\beta$ -Carotene, relative percentage = 8.6%). **Source:** FU LING *Poria cocos* (sclerotium: yield = 0.0013%dw). **Ref:** 4616.

**4875 Dehydroagastol**

19(4→3)-Abeo-11,14-dihydroxy-12-methoxy-abieta-8,11,13,15-tetraen-7-one  $C_{21}H_{26}O_4$  (342.44). Yellow green acicular crystals, mp 159–161°C, soluble in hexane, chloroform and methanol. **Source:** GUANG HUO XIANG *Pogostemon cablin* [Syn. *Mentha cablin*]. **Ref:** 210, 660.

**4876 Dehydroandrographolide**

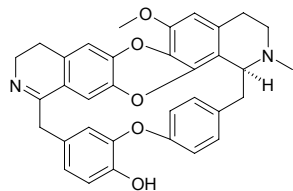
$C_{20}H_{28}O_4$  (332.44). Colorless acicular crystals (recrystallization in 30 and 50% ethanol), mp 204°C. **Pharm:** Anti-inflammatory; antipyretic; used in treatment of infectious diseases of respiratory tract and intestinal tract. **Source:** CHUAN XIN LIAN *Andrographis paniculata* [Syn. *Justicia paniculata*] (dried aerial parts: content = 1.19%<sup>[5508]</sup>) **Ref:** 661, 5508.



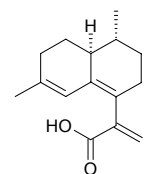
**4877 1,2-Dehydroapateline**

$C_{34}H_{30}N_2O_5$  (546.63). Yellow amorphous powder,  $[\alpha]_D^{25} = +128^\circ$  ( $c = 0.42$ , MeOH). **Pharm:** Exhibited *in vitro* anticholinesterase activities,  $IC_{50} = (116.5 \pm 2.5) \mu\text{mol/L}$ , control Galanthamine,  $IC_{50} = (0.5 \pm 0.0) \mu\text{mol/L}$ .

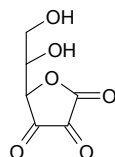
**Source:** CHUI MU FANG JI *Cocculus pendulus*. **Ref:** 4051.

**4878 6,7-Dehydroartemisinic acid**

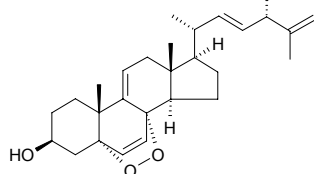
$C_{15}H_{20}O_2$  (232.33). **Source:** HUANG HUA HAO *Artemisia annua*. **Ref:** 2, 660.

**4879 Dehydroascorbic acid**

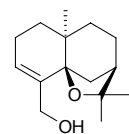
[490-83-5]  $C_6H_6O_6$  (174.11). mp  $196^\circ\text{C}$  (dec). **Source:** HUI XIANG JING YE *Foeniculum vulgare*, JIANG MANG *Cassia sophera*, MA BO *Lasiosphaera fenzlii*. **Ref:** 6.

**4880 9(11)-Dehydroaxinysterol**

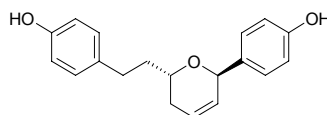
$C_{28}H_{40}O_3$  (424.63). White amorphous solid,  $[\alpha]_D^{25} = +78.9^\circ$  ( $c = 0.89$ ,  $\text{CHCl}_3$ ). **Pharm:** Cytotoxic (Breast: HBC4  $IC_{50} = 0.85 \mu\text{g/mL}$ ; BSY1  $IC_{50} = 0.60 \mu\text{g/mL}$ ; HBC5  $IC_{50} = 0.96 \mu\text{g/mL}$ ; MCF7  $IC_{50} = 0.36 \mu\text{g/mL}$ ; MDA-MB-231  $IC_{50} = 1.26 \mu\text{g/mL}$ ; Lung: NCI-H23  $IC_{50} = 0.54 \mu\text{g/mL}$ ; NCI-H226  $IC_{50} = 0.63 \mu\text{g/mL}$ ; NCI-H522  $IC_{50} = 0.57 \mu\text{g/mL}$ ; NCI-H460  $IC_{50} = 0.81 \mu\text{g/mL}$ ; A549  $IC_{50} = 0.96 \mu\text{g/mL}$ ; DMS273  $IC_{50} = 0.54 \mu\text{g/mL}$ ; DMS114  $IC_{50} = 0.48 \mu\text{g/mL}$ ; Stomach: St4  $IC_{50} = 0.69 \mu\text{g/mL}$ ; MKN1  $IC_{50} = 0.42 \mu\text{g/mL}$ ; MKN7  $IC_{50} = 0.48 \mu\text{g/mL}$ ; MKN28  $IC_{50} = 0.84 \mu\text{g/mL}$ ; MKN45  $IC_{50} = 0.54 \mu\text{g/mL}$ ; MKN74  $IC_{50} = 0.54 \mu\text{g/mL}$ ; Kidney: RXF-631L  $IC_{50} = 0.72 \mu\text{g/mL}$ ; ACHN  $IC_{50} = 0.51 \mu\text{g/mL}$ ; Colon: HCC2998  $IC_{50} = 0.57 \mu\text{g/mL}$ ; KM12  $IC_{50} = 0.60 \mu\text{g/mL}$ ; HT29  $IC_{50} = 0.57 \mu\text{g/mL}$ ; HCT15  $IC_{50} = 0.75 \mu\text{g/mL}$ ; HCT116  $IC_{50} = 0.48 \mu\text{g/mL}$ ; Ovary: OVCAR-3  $IC_{50} = 0.19 \mu\text{g/mL}$ ; OVCAR-4  $IC_{50} = 0.60 \mu\text{g/mL}$ ; OVCAR-5  $IC_{50} = 0.54 \mu\text{g/mL}$ ; OVCAR-8  $IC_{50} = 0.22 \mu\text{g/mL}$ ; SK-OV-3  $IC_{50} = 0.81 \mu\text{g/mL}$ ; CNS: U251  $IC_{50} = 0.63 \mu\text{g/mL}$ ; SF268  $IC_{50} = 1.02 \mu\text{g/mL}$ ; SF295  $IC_{50} = 0.75 \mu\text{g/mL}$ ; SF539  $IC_{50} = 0.84 \mu\text{g/mL}$ ; SNB75  $IC_{50} = 2.16 \mu\text{g/mL}$ ; SNB78  $IC_{50} = 1.17 \mu\text{g/mL}$ ; Prostate: DU145  $IC_{50} = 0.54 \mu\text{g/mL}$ ; PC3  $IC_{50} = 0.57 \mu\text{g/mL}$ ; Melanoma: LOX-IMVI  $IC_{50} = 0.60 \mu\text{g/mL}$ ). **Source:** Sponge *Axinysa* sp. **Ref:** 4231.

**4881 Dehydrobaimuxinol**

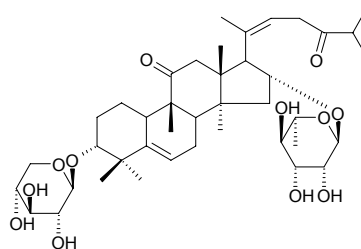
[105013-74-9]  $C_{15}H_{24}O_2$  (236.36). Colorless acicular crystals, mp  $136\text{--}138^\circ\text{C}$ ,  $[\alpha]_D^{26} = +25^\circ$  ( $c = 1.6$ , chloroform). **Source:** BAI MU XIANG *Aquilaria sinensis*. **Ref:** 13, 58.

**4882 (3S,7R)-5,6-Dehydro-1,7-bis(4-hydroxyphenyl)-4'-de-O-methylcentrolobine**

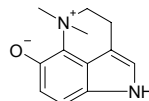
$C_{19}H_{20}O_3$  (286.37). Colorless amorphous solid,  $[\alpha]_D^{25} = -12.3^\circ$  ( $c = 0.335$ , MeOH). **Pharm:** Cytotoxic (Colon26-L5,  $ED_{50} = 71.2 \mu\text{mol/L}$ , control 5-FU,  $ED_{50} = 0.53 \mu\text{mol/L}$ ; HT1080,  $ED_{50} = 45.3 \mu\text{mol/L}$ , 5-FU,  $ED_{50} = 8.0 \mu\text{mol/L}$ ). **Source:** YUN NAN CAO KOU *Alpinia blepharocalyx* (seed: yield = 0.000071%dw). **Ref:** 3048.

**4883 Dehydrobryogenin glycoside**

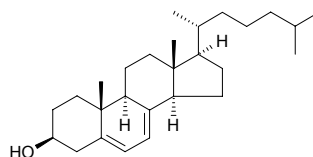
11,24-Dioxo-5,21-dien-cucuebit-3 $\alpha$ -O- $\beta$ -D-xylopyranosyl-16 $\alpha$ -O- $\alpha$ -L-rhamnopyranoside  $C_{41}H_{64}O_{12}$  (748.96). White amorphous powder,  $[\alpha]_D^{28} = 0^\circ$  ( $c = 0.176$ , MeOH). **Source:** KU XUAN SHEN *Picria feltrrae* (whole herb). **Ref:** 4853.

**4884 Dehydrobufotenine**

[17232-69-8]  $C_{12}H_{14}N_2O$  (202.26). **Source:** CHAN SU *Bufo bufo* gargarizans; *Bufo melanostictus*. **Ref:** 2.

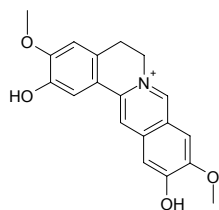
**4885 7-Dehydrocholesterol**

[434-16-2]  $C_{27}H_{44}O$  (384.65). mp  $142\text{--}143^\circ\text{C}$ ;  $150^\circ\text{C}$ . **Source:** SHUI LONG GU *Polypodium niponicum*. **Ref:** 6.

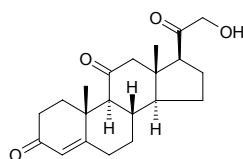


**4886 Dehydrocoreximine (perchlorate)**

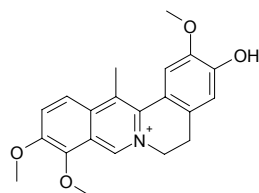
2,3,10,11-Substituted pseudoprotoberberine alkaloid  $C_{19}H_{18}NO_4^+$  (324.36). Pale yellow crystalline solid, mp 243~247°C. Source: XIAO HUA MU BAN SHU *Xylopiya parviflora* (bark and root). Ref: 3794.

**4887 11-Dehydrocorticosterone**

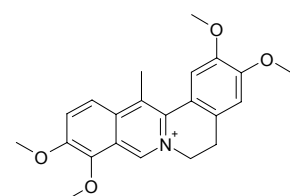
[72-23-1]  $C_{21}H_{28}O_4$  (344.45). mp 183.0~183.5°C. Source: NIU SHEN *Bos taurus domesticus*; *Bubalus bubalis*, ZI HE CHE *Homo sapiens*. Ref: 6.

**4888 Dehydrocorybulbine**

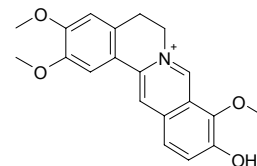
$C_{21}H_{22}NO_4^+$  (352.41). Source: YAN HU SUO *Corydalis yanhusuo* [Syn. *Corydalis turtschaninovii* f. *yanhusuo*]. Ref: 2.

**4889 Dehydrocorydaline**

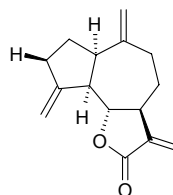
[30045-16-0]  $C_{22}H_{24}NO_4^+$  (366.44). Pharm: Antiulcerative (rat, sc, gastric ulcer); coronary vasodilator; increases coronary flow; inhibits gastric secretion; increases tolerance to anoxia (mus); used in treatment of coronary heart disease (main effective component in *Corydalis yanhusuo* YAN HU SUO). Source: CHANG JU YAN HU SUO *Corydalis longicalcarata* (rhizome: content = 0.025%<sup>[5508]</sup>), DONG BEI YAN HU SUO *Corydalis ambigua* var. *amurensis* [Syn. *Corydalis ambigua*], DUI YE YUAN HU *Corydalis ledebouriana* (rhizome: content = 0.032%<sup>[5508]</sup>), HUI LV YAN HU SUO *Corydalis adunca* (rhizome: content = 0.069%<sup>[5508]</sup>), XI SHEN SHAN ZI JIN *Corydalis pallida* var. *tenuis*, YAN HU SUO *Corydalis yanhusuo* [Syn. *Corydalis turtschaninovii* f. *yanhusuo*] (rhizome: mean content of 5 origins = 0.152%<sup>[5508]</sup>). Ref: 2, 658, 5508.

**4890 Dehydrocorydalmine**

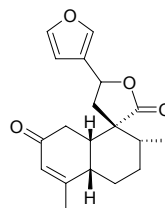
[6877-27-6]  $C_{20}H_{20}NO_4^+$  (338.39). Source: CHANG JU YAN HU SUO *Corydalis longicalcarata* (rhizome: content = 0.208%<sup>[5508]</sup>), HUI LV YAN HU SUO *Corydalis adunca* (rhizome: content = 0.122%<sup>[5508]</sup>), YAN HU SUO *Corydalis yanhusuo* [Syn. *Corydalis turtschaninovii* f. *yanhusuo*]. Ref: 6, 5508.

**4891 Dehydrocostuslactone**

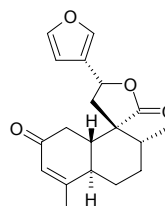
$C_{15}H_{18}O_2$  (230.31). mp 60.5°C. Pharm: Plant growth regulator; antitrypanosomal (epimastigotes of *Trypanosoma cruzi*, MLC = 6.3μmol/L); anti-inflammatory (NO production inhibitor)<sup>[4415]</sup>; cytotoxic (*in vitro*, HepG<sub>2</sub>, CD<sub>50</sub> = 3.5μg/mL; HeLa, CD<sub>50</sub> = 3.5μg/mL; OVCAR-3, CD<sub>50</sub> = 2.5μg/mL; control Cisplatin, HepG<sub>2</sub>, CD<sub>50</sub> = 2.8μg/mL; HeLa, CD<sub>50</sub> = 5.2μg/mL; OVCAR-3, CD<sub>50</sub> = 3μg/mL; without significant antibacterial effect)<sup>[4720]</sup>. Source: CHUAN MU XIANG *Vladimiria souliei* [Syn. *Jurinea souliei*] (root: content scope of 4 origins = 0.482%~1.620%, mean content of = 1.29%<sup>[5508]</sup>), MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*] (root: mean content of 10 origins = 1.83%<sup>[5508]</sup>, yield = 0.019%<sup>[4720]</sup>), YUE GUI YE *Laurus nobilis*, YUE XI MU XIANG *Vladimiria denticulata*. Ref: 2, 6, 658, 660, 4248, 4415, 4720, 5508.

**4892 cis-Dehydrocrotonin**

$C_{19}H_{22}O_4$  (314.38). Source: GE LUN BI YA BA DOU *Croton schiedeanus*. Ref: 4552.

**4893 trans-Dehydrocrotonin**

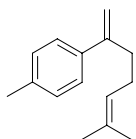
$C_{19}H_{22}O_4$  (314.38). Pharm: Antiulcerogenic<sup>[5351]</sup>; cytotoxic (HL-60 cells, MTT assay, 24h, IC<sub>50</sub> = 300μmol/L, 96h, IC<sub>50</sub> = 180μmol/L, control Myricetin, 24h, IC<sub>50</sub> = 192μmol/L; protein quantification, 24h, IC<sub>50</sub> = 500μmol/L, 96h, IC<sub>50</sub> = 150μmol/L, control Myricetin, 24h, IC<sub>50</sub> = 300μmol/L). Source: KA ZHU BA DOU *Croton cajucara*. Ref: 5351.



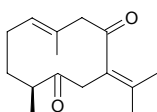


**4894 Dehydro- $\alpha$ -curcumene**

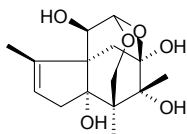
[4999-58-0] C<sub>15</sub>H<sub>20</sub> (200.33). Source: CE BAI ZHI JIE *Thuja orientalis* [Syn. *Platyclusus orientalis*; *Biota orientalis*]. Ref: 6.

**4895 Dehydrocurdione**

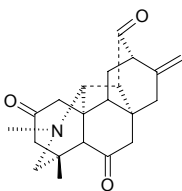
[38230-32-9] C<sub>15</sub>H<sub>22</sub>O<sub>2</sub> (234.34). Pharm: NO production inhibitor (mus peritoneal macrophages, induced by LPS, 100 $\mu$ mol/L, InRt = (12.8 $\pm$ 3.1)%, control *L*-NMMA, 100 $\mu$ mol/L, InRt = (79.2 $\pm$ 0.9)%,  $p < 0.01$ )<sup>[4150]</sup>. Source: PING E SHU *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*], JIANG HUANG *Curcuma longa*. Ref: 6, 640, 4150.

**4896 1,2-Dehydrocycloparvifloralone**

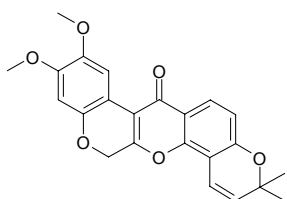
C<sub>15</sub>H<sub>22</sub>O<sub>6</sub> (298.34). Colorless amorphous powder,  $[\alpha]_D^{22} = +14^\circ$  ( $c = 1.77$ , CH<sub>3</sub>OH). Pharm: Neurotrophic bioassay inactive (primary culture of rat cortical neurons, 0.1-10 $\mu$ mol/L). Source: *Illicium merrillianum* (pericarp; yield = 0.00038%dw). Ref: 3046.

**4897 Dehydrodeacetylheterophylloidine**

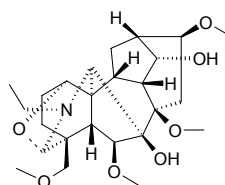
C<sub>21</sub>H<sub>25</sub>NO<sub>3</sub> (339.44). Amorphous,  $[\alpha]_D^{25} = -73.3^\circ$  ( $c = 0.17$ , CHCl<sub>3</sub>). Source: WU ZHU FEI YAN CAO *Delphinium pentagynum* (aerial parts). Ref: 3831.

**4898 Dehydrodeguelin**

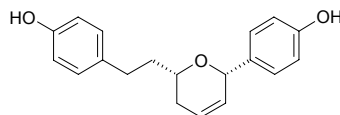
6 $\alpha$ ,12 $\alpha$ -Dehydrodeguelin [3466-23-7] C<sub>23</sub>H<sub>20</sub>O<sub>6</sub> (392.41). Straw yellow solid, mp 215~225°C. Pharm: cAMP phosphodiesterase inhibitor (rat heart, IC<sub>50</sub> = 6.2 $\mu$ mol/L); larvacide (larva of mosquito); nematocide (*in vitro*, 0.1 $\mu$ g/mL, larva of *Toxocara canis*, after 6 hours cultivation, RM = 30, after 24 hours, RM = 0). Source: MU LAN<sup>(2)</sup> *Indigofera tinctoria*, HUI YE GEN *Tephrosia purpurea*. Ref: 946, 1138, 1188.

**4899 Dehydrodeltatsine**

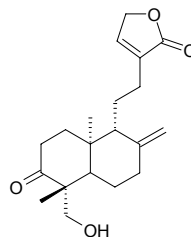
C<sub>25</sub>H<sub>39</sub>NO<sub>7</sub> (465.59). Amorphous solid,  $[\alpha]_D^{25} = +20^\circ$  ( $c = 0.1$ , CHCl<sub>3</sub>). Source: DONG FANG FEI YAN CAO *Consolida orientalis* (aerial parts). Ref: 4283.

**4900 (3*S*,7*S*)-5,6-Dehydro-4''-de-*O*-methylcentrolobine**

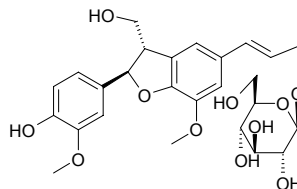
C<sub>19</sub>H<sub>20</sub>O<sub>3</sub> (286.37). Pharm: Cytotoxic (Colon26-L5, ED<sub>50</sub> > 100 $\mu$ mol/L, control 5-FU, ED<sub>50</sub> = 0.53 $\mu$ mol/L; HT1080, ED<sub>50</sub> = 79.4 $\mu$ mol/L, 5-FU, ED<sub>50</sub> = 8.0 $\mu$ mol/L). Source: YUN NAN CAO KOU *Alpinia blepharocalyx* (seed; yield = 0.000014%dw). Ref: 3048.

**4901 3-Dehydrodeoxyandrographolide**

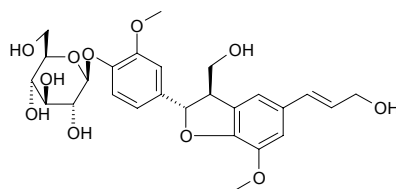
C<sub>20</sub>H<sub>28</sub>O<sub>4</sub> (332.44). Colorless lamellar crystals (MeOH), mp 140~142°C. Source: CHUAN XIN LIAN *Andrographis paniculata* [Syn. *Justicia paniculata*] (leaf). Ref: 4913.

**4902 (7*R*,8*S*)Dehydrodiconifery alcohol-9'-*O*- $\beta$ -*D*-glucoside**

C<sub>26</sub>H<sub>32</sub>O<sub>11</sub> (520.54). Source: GUAN HUA ROU CONG RONG *Cistanche tubulosa*. Ref: 2448.

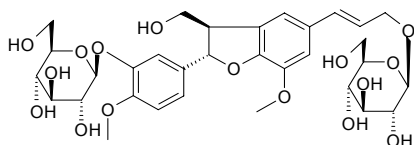
**4903 (7*S*,8*R*)Dehydrodiconifery alcohol-4-*O*- $\beta$ -*D*-glucoside**

[107870-88-2] C<sub>26</sub>H<sub>32</sub>O<sub>11</sub> (520.54). White powder,  $[\alpha]_D^{21} = -45.8^\circ$  ( $c = 0.9$ , MeOH). Source: GUAN HUA ROU CONG RONG *Cistanche tubulosa*, MAO JIAN QIU LUO *Lychnis coronaria*. Ref: 2189, 2448.

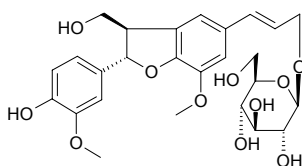


**4904 Dehydrodiconiferyl alcohol 4,γ'-di-O-β-D-glucopyranoside**

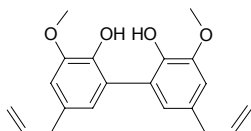
[109792-90-7] C<sub>32</sub>H<sub>42</sub>O<sub>16</sub> (682.68). Source: DU ZHONG *Eucommia ulmoides*. Ref: 2.

**4905 (7S,8R) Dehydrodiconiferyl alcohol 9'-β-glucopyranoside**

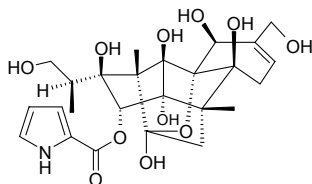
C<sub>26</sub>H<sub>32</sub>O<sub>11</sub> (520.54). Pale yellow amorphous powder, [α]<sub>D</sub><sup>15</sup> = -19.5° (c = 0.4, CHCl<sub>3</sub>). Source: SUO YANG *Cynomorium songaricum* (stem). Ref: 4114.

**4906 Dehydrodieugenol**

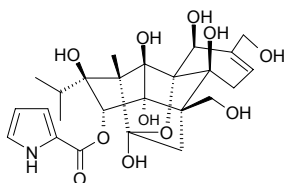
[4433-08-3] C<sub>20</sub>H<sub>22</sub>O<sub>4</sub> (326.40). Pharm: Antifungal (using extract of bark of *Litsea turfosa*). Source: NI ZHAO MU JIANG ZI *Litsea turfosa*. Ref: 658.

**4907 (13S)-8,9-Dehydro-18,21-dihydroxy-10-epi-ryanodine**

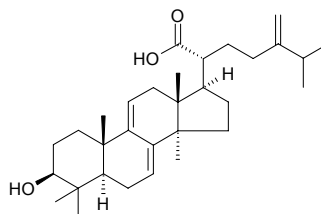
C<sub>25</sub>H<sub>33</sub>NO<sub>11</sub> (523.54). Crystals (CHCl<sub>3</sub>:MeOH = 1:1), mp 162°C, [α]<sub>D</sub> = +7° (c = 0.2). Source: QU CHONG CAO *Spigelia anthelmia* (aerial parts). Ref: 5139.

**4908 8,9-Dehydro-20,21-dihydroxy-10-epi-ryanodine**

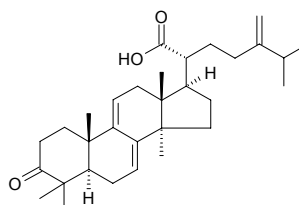
C<sub>25</sub>H<sub>33</sub>NO<sub>11</sub> (523.54). Crystals (CHCl<sub>3</sub>:MeOH = 1:1), mp 173°C, [α]<sub>D</sub> = +6° (c = 0.2). Source: QU CHONG CAO *Spigelia anthelmia* (aerial parts). Ref: 5139.

**4909 Dehydroeburicoic acid**

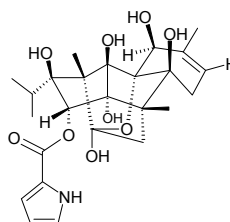
3β-Hydroxy-24-methylene-lanosta-7,9(11)-dien-21-oic acid [6879-05-6] C<sub>31</sub>H<sub>48</sub>O<sub>3</sub> (468.73). mp 286–288°C. Source: A LI HONG *Fomes officinalis*, FU LING *Poria cocos*. Ref: 6, 660.

**4910 Dehydroeburicoic acid**

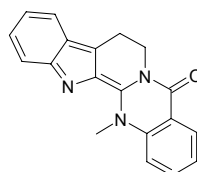
[18449-25-7] C<sub>31</sub>H<sub>46</sub>O<sub>3</sub> (466.71). mp 240–242°C. Source: A LI HONG *Fomes officinalis*. Ref: 6.

**4911 8,9-Dehydro-10-epi-ryanodine**

C<sub>25</sub>H<sub>33</sub>NO<sub>9</sub> (491.54). Crystals (CHCl<sub>3</sub>:Me<sub>2</sub>CO = 1:1), mp 165°C, [α]<sub>D</sub> = +20° (c = 0.1). Pharm: Cardiac contraction inhibitor (guinea-pig papillary muscle, causes a prolongation of the latency time and decrease of contraction force, EC<sub>50</sub> = 17nmol/L)<sup>[5139]</sup>. Source: QU CHONG CAO *Spigelia anthelmia* (aerial parts). Ref: 5139.

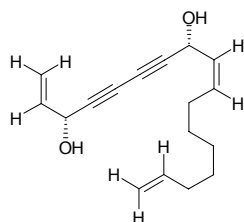
**4912 Dehydroevodiamine**

C<sub>19</sub>H<sub>15</sub>N<sub>3</sub>O (301.35). Pharm: Uterine stimulant (rat, *in vitro*); slows heart rate (anesthetic rat); antihypertensive (anesthetic rat). Source: WU ZHU YU *Evodia rutaecarpa* (dried unripe fruit). Ref: 5031, 5501.

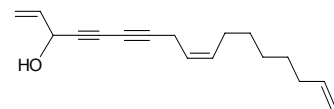


**4913 3R,8R-Dehydrofalcariindiol**

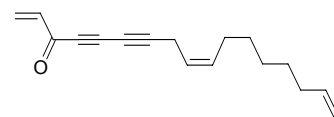
$C_{17}H_{22}O_2$  (258.36). Pale yellow oil,  $[\alpha]_D^{25} = +39.8^\circ$  ( $c = 2.66$ ,  $CHCl_3$ ). **Pharm:** 12-Lipoxygenase inhibitor inactive (10 $\mu$ g/mL, InRt = 0%; 30 $\mu$ g/mL, InRt = 0%; control Baicalein, 10 $\mu$ g/mL, InRt = 56.23%); cytotoxic (*in vitro*, MTT assay: LS174T colorectal cancer,  $IC_{50} = (14.8 \pm 7.2)\mu$ g/mL, control Doxorubicin,  $IC_{50} = (324 \pm 100)$ ng/mL; SKCO1 colorectal cancer,  $IC_{50} = (13.3 \pm 5.4)\mu$ g/mL, Doxorubicin,  $IC_{50} = (28.5 \pm 10)$ ng/mL; COLO320DM colorectal cancer,  $IC_{50} = 9.6\mu$ g/mL, Doxorubicin  $IC_{50} = (1163 \pm 168)$ ng/mL; WIDr colorectal cancer,  $IC_{50} = 10.9\mu$ g/mL; MDA231 breast cancer,  $IC_{50} = 37.6\mu$ g/mL; MCF7 breast cancer,  $IC_{50} = 5.8\mu$ g/mL). **Source:** DAN ZI HAO *Artemisia monosperma*. **Ref:** 5249.

**4914 Dehydrofalcarinol**

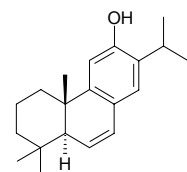
[36150-08-0]  $C_{17}H_{22}O$  (242.36). **Source:** YIN CHEN HAO *Artemisia capillaris*. **Ref:** 2.

**4915 Dehydrofalcarinone**

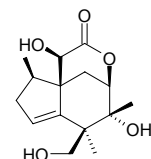
[4117-05-9]  $C_{17}H_{20}O$  (240.35). **Source:** YIN CHEN HAO *Artemisia capillaris*. **Ref:** 2.

**4916  $\Delta^6$ -Dehydroferruginol**

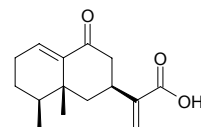
$C_{20}H_{28}O$  (284.45). **Pharm:** 12(S)-LOX inhibitor inactive (hmn Platelets, 100 $\mu$ g/mL, 12(S)-HETE Production inhibitor inactive)<sup>[4980]</sup>. **Source:** DU SONG SHI *Juniperus rigida*, OU ZHOU CI BAI *Juniperus communis* (wood). **Ref:** 6, 4980.

**4917 3,4-Dehydrofloridanolide**

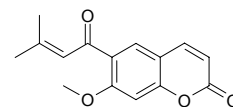
$C_{15}H_{22}O_5$  (282.34). Colorless amorphous,  $[\alpha]_D^{20} = +44^\circ$  ( $c = 1.90$ ,  $CHCl_3$ ). **Source:** *Illicium merrillianum* (pericarp). **Ref:** 5113.

**4918 Dehydroflourensic acid**

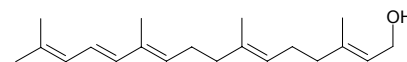
$C_{15}H_{20}O_3$  (248.32). Oil. **Pharm:** Phytotoxin (inhibits radicle growth, *Amaranthus hypochondriacus*,  $IC_{50} = 196\mu$ mol/L, control 2,4-D,  $IC_{50} = 180\mu$ mol/L; *Echinochloa crusgalli*,  $IC_{50} = 620\mu$ mol/L, control 2,4-D,  $IC_{50} = 230\mu$ mol/L); CaM interactor (cAMP phosphodiesterase inhibitor,  $IC_{50} = 23.2\mu$ mol/L, control Chlorpromazine,  $IC_{50} = 10.2\mu$ mol/L, interacted with bovine-brain calmodulin and inhibited the activation of the calmodulin-dependent enzyme cAMP phosphodiesterase). **Source:** FU CHUI FE LAO JU *Flourensia cernua*. **Ref:** 3433.

**4919 Dehydrogeijerin**

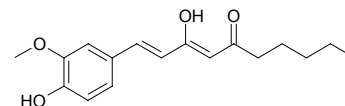
[16850-91-2]  $C_{15}H_{14}O_4$  (258.28). mp 132°C. **Source:** YAN JIAO CAO *Boenninghausenia albiflora*. **Ref:** 2495.

**4920 12,13-Dehydrogeranylgeraniol**

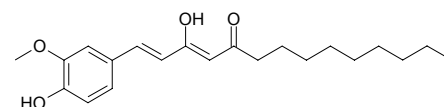
$C_{20}H_{32}O$  (288.48). Clear oil. **Pharm:** Antioxidant (HL-60, PMA-induced peroxide-catalyzed oxidation of 2',7'-dichlorodihydrofluorescein dye (DCFH) by reactive oxygen species (ROS), 5 $\mu$ g/mL (17.4 $\mu$ mol/L), InRt = 28%)<sup>[3060]</sup>. **Source:** MEI ZHOU SAN BAI CAO *Saururus cernuus* (stem and leaf), SHUANG CHA ZAO *Bifurcaria bifurcata*. **Ref:** 3060, 5146.

**4921 6-Dehydrogingerdione**

[76060-35-0]  $C_{17}H_{22}O_4$  (290.36). **Pharm:** Anti-inflammatory (prostaglandin biosynthesis inhibitor,  $IC_{50} = 2.3\mu$ mol/L); anti-diarrheal (mus, orl, 10mg/kg, inhibits 5-HT-induced diarrhea and loss of body temperature); antihepatotoxin (rat liver cells, *in vitro*, 1.0mg/mL, liver toxicosis induced by  $CCl_4$ , GPT = (70 $\pm$ 2)% of that of control,  $p < 0.001$ ); prostaglandin synthetase inhibitor ( $IC_{50} = 1.0\mu$ mol/L). **Source:** SHENG JIANG *Zingiber officinale*. **Ref:** 2, 1815, 1816, 1817, 1820.

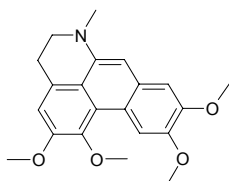
**4922 10-Dehydrogingerdione**

[82206-04-0]  $C_{21}H_{30}O_4$  (346.47). **Pharm:** Anti-inflammatory (prostaglandin biosynthesis inhibitor,  $IC_{50} = 1.0\mu$ mol/L); antihepatotoxin (rat liver cells, *in vitro*, 1.0mg/mL, liver toxicosis induced by  $CCl_4$ , GPT = (80 $\pm$ 1)% of that of control,  $p < 0.01$ ). **Source:** SHENG JIANG *Zingiber officinale*. **Ref:** 2, 1815, 1817.

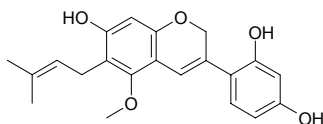


**4923 Dehydroglaucine**

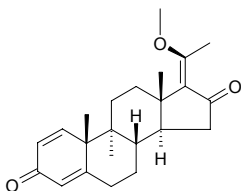
[22212-26-6]  $C_{21}H_{23}NO_4$  (353.42). Yellow lamellar crystals, mp 121~122°C. **Pharm:** Antibacterial (*Staphylococcus aureus*, *Bacillus subtilis*, and *Mycobacterium smegmatis*, MIC = 25µg/mL); antifungal (*Candida albicans*, MIC = 25µg/mL; *Saccharomyces cerevisiae*, MIC = 50µg/mL). **Source:** BEI MEI E ZHANG QIU *Liriodendron tulipifera*, HUANG HAI YING SU *Glaucium flavum*. **Ref:** 661.

**4924 Dehydroglyasperin C**

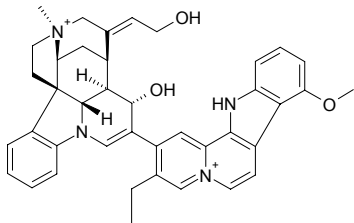
$C_{21}H_{22}O_5$  (354.41). **Source:** CU MAO GAN CAO *Glycyrrhiza aspera*. **Ref:** 2431.

**4925 Dehydroguggulsterone M**

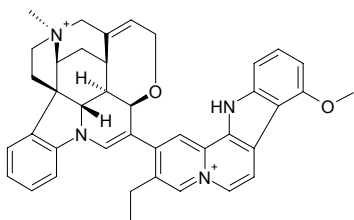
$C_{22}H_{28}O_3$  (340.47). Amorphous powder,  $[\alpha]_D^{25} = +36.5^\circ$  ( $c = 0.76$ , MeOH). **Source:** A MAN SU DAN MO YAO *Commiphora wightii*. **Ref:** 2062.

**4926 5',6'-Dehydroguaiachrysin**

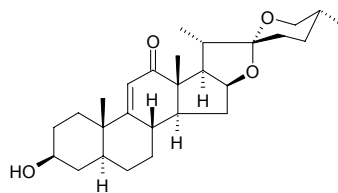
$C_{40}H_{42}N_4O_3^{+2}$  (626.81). Orange-brown colored amorphous powder. **Pharm:** Neuromuscular toxicity (neuromuscular transmission inhibitor,  $IC_{50} = 21.5\mu\text{mol/L}$ ; Venezuelan calabash curare,  $IC_{50} = 6.5\mu\text{mol/L}$ ). **Source:** *Strychnos guianensis* (stem cortex). **Ref:** 5202.

**4927 5',6'-Dehydroguiaflavine**

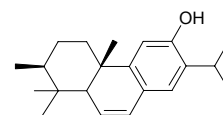
$C_{40}H_{40}N_4O_2^{+2}$  (608.79). Orange-brown colored amorphous powder. **Pharm:** Neuromuscular toxicity (neuromuscular transmission inhibitor,  $IC_{50} = 24\mu\text{mol/L}$ ; Venezuelan calabash curare,  $IC_{50} = 6.5\mu\text{mol/L}$ ). **Source:** *Strychnos guianensis* (stem cortex). **Ref:** 5202.

**4928 9(11)-Dehydrohecogenin**

$C_{27}H_{40}O_4$  (428.62). mp 230~232°C. **Source:** FAN MA *Agave americana*, WU CI FAN MA *Agave americana* var. *marginata* [Syn. *Agave americana* var. *variegata*], *Agave deserti*. **Ref:** 2503.

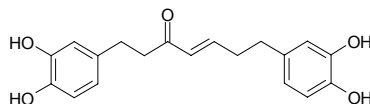
**4929 6-Dehydrohinokiol**

$C_{21}H_{30}O$  (298.47). **Source:** TAI WAN SHAN *Taiwania cryptomerioides*. **Ref:** 2526.

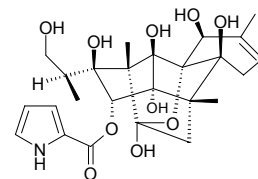
**4930 Dehydrohirsutanonol**

1,7-Di-(3',4'-dihydroxyphenyl)-4-hepten-3-one  $C_{19}H_{20}O_5$  (328.37).

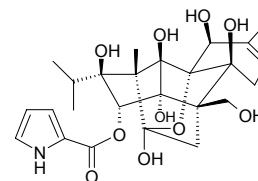
Syrupy solid. **Pharm:** Antioxidant (superoxide radical scavenger,  $IC_{50} = 1.2\mu\text{mol/L}$ ; DPPH scavenger,  $IC_{50} = 2.4\mu\text{mol/L}$ )<sup>[4535]</sup>; cytotoxic (TK10,  $GI_{50} = 6.8\mu\text{g/mL}$ , control Etoposide,  $GI_{50} = 8.1\mu\text{g/mL}$ ; MCF7,  $GI_{50} = 1.9\mu\text{g/mL}$ , Etoposide,  $GI_{50} = 0.33\mu\text{g/mL}$ ; UACC62,  $GI_{50} = 4.8\mu\text{g/mL}$ , Etoposide,  $GI_{50} = 0.97\mu\text{g/mL}$ )<sup>[5195]</sup>. **Source:** CHI YANG *Alnus japonica* (leaf), SHI ZI XING HU JI SHENG *Viscum cruciatum* (aerial parts). **Ref:** 4535, 5195.

**4931 (13S)-8,9-Dehydro-18-hydroxy-10-epi-ryanodine**

$C_{25}H_{33}NO_{10}$  (507.54). Crystals ( $CHCl_3$ : $Me_2CO = 3:1$ ), mp 168°C,  $[\alpha]_D^{25} = +11^\circ$  ( $c = 0.2$ ). **Pharm:** Cardiac contraction inhibitor (guinea-pig papillary muscle, causes a prolongation of the latency time and decrease of contraction force,  $EC_{50} = 1500\text{nmol/L}$ ). **Source:** QU CHONG CAO *Spigelia anthelmia* (aerial parts). **Ref:** 5139.

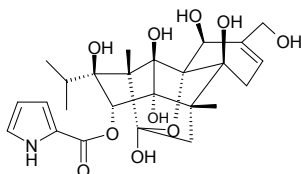
**4932 8,9-Dehydro-20-hydroxy-10-epi-ryanodine**

$C_{25}H_{33}NO_{10}$  (507.54). Crystals ( $CHCl_3$ : $Me_2CO = 3:1$ ), mp 148°C,  $[\alpha]_D^{25} = +14^\circ$  ( $c = 0.2$ ). **Pharm:** Cardiac contraction inhibitor (guinea-pig papillary muscle, causes a prolongation of the latency time and decrease of contraction force,  $EC_{50} = 440\text{nmol/L}$ ). **Source:** QU CHONG CAO *Spigelia anthelmia* (aerial parts). **Ref:** 5139.

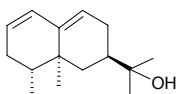


**4933 8,9-Dehydro-21-hydroxy-10-epi-ryanodine**

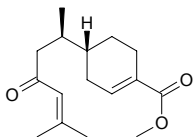
$C_{25}H_{33}NO_{10}$  (507.54). Crystals ( $CHCl_3:Me_2CO = 3:1$ ), mp 178°C,  $[\alpha]_D = +25^\circ$  ( $c = 1.0$ ). **Pharm:** Cardiac contraction inhibitor (guinea-pig papillary muscle, causes a prolongation of the latency time and decrease of contraction force,  $EC_{50} = 1900\text{nmol/L}$ )<sup>[5139]</sup>. **Source:** QU CHONG CAO *Spigelia anthelmia* (aerial parts). **Ref:** 5139.

**4934 Dehydrojinkohereol**

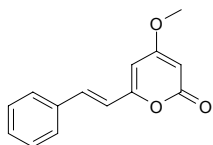
$C_{15}H_{24}O$  (220.36). **Source:** CHEN XIANG *Aquilaria agallocha*. **Ref:** 13.

**4935 Dehydrojuvabione**

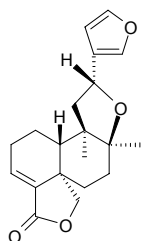
$C_{16}H_{24}O_3$  (264.37). **Pharm:** Insect juvenile hormone. **Source:** XIANG ZHI LENG SHAN *Abies balsamea*. **Ref:** 658.

**4936 5,6-Dehydrokawain**

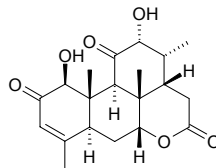
[15345-89-8]  $C_{14}H_{12}O_3$  (228.25). **Pharm:** Anticonvulsant; local anesthetic; cytotoxic inactive (Colon26-L5, HT1080, 100 $\mu\text{mol/L}$ )<sup>[3042]</sup>. **Source:** DA CAO KOU *Alpinia speciosa*, DIAO ZHANG GEN PI *Lindera umbellata* [Syn. *Lindera erythrocarpa*], KA WA HU JIAO *Piper methysticum*, YUN NAN CAO KOU *Alpinia blepharocalyx* (seed: yield = 0.00390%)<sup>[3042]</sup>. **Ref:** 658, 3042.

**4937 Dehydrokerlin**

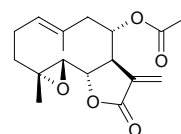
$C_{20}H_{24}O_4$  (328.41). **Source:** DUO SUI SHU WEI CAO *Salvia polystachya* (aerial parts). **Ref:** 3901.

**4938 11-Dehydroklaineone**

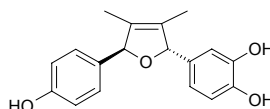
$C_{20}H_{26}O_6$  (362.43). **Pharm:** Plant growth inhibitor (Cucumber seedling, root growth,  $IC_{50} = (55.6 \pm 1.0)\mu\text{mol/L}$ , shoot growth,  $IC_{50} = (77.3 \pm 1.0)\mu\text{mol/L}$ ; Rice seedling, root growth,  $IC_{50} > 200\mu\text{mol/L}$ , shoot growth,  $IC_{50} > 200\mu\text{mol/L}$ ). **Source:** CHANG YE KUAN MU *Eurycoma longifolia* (leaf). **Ref:** 5215.

**4939 11,13-Dehydrolanuginolide**

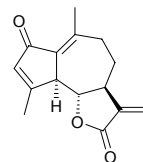
$C_{17}H_{22}O_5$  (306.36). Colorless acicular crystals (ether), mp 167°C (dec),  $[\alpha]_D = -96.5^\circ$  ( $c = 0.74$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (KB,  $ED_{50} = 1.8\mu\text{g/mL}$ ). **Source:** NAN YA HAN XIAO *Michelia doltsopa*. **Ref:** 661.

**4940 3,4-Dehydrolarreatricin**

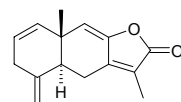
Dehydrolarreatricin  $C_{18}H_{18}O_4$  (298.34). **Pharm:** Antioxidant (Takamatsu DCFH method, myelomonocytic HL-60 cells,  $IC_{50} > 62.5\mu\text{g/mL}$ ; control NDGA,  $IC_{50} = (0.7 \pm 0.3)\mu\text{g/mL}$ , Vitamin C,  $IC_{50} = (1.9 \pm 0.7)\mu\text{g/mL}$ , Trolox,  $IC_{50} = (1.4 \pm 0.5)\mu\text{g/mL}$ )<sup>[3850]</sup>; cytotoxic (XTT assay, HL-60 cells,  $IC_{50} = (27.6 \pm 0.4)\mu\text{g/mL}$ ; control NDGA,  $IC_{50} = (2.6 \pm 0.2)\mu\text{g/mL}$ , Vitamin C,  $IC_{50} > 10.0\mu\text{g/mL}$ , Trolox,  $IC_{50} > 10.0\mu\text{g/mL}$ )<sup>[3850]</sup>. **Source:** SAN CHI LA RUI A *Larrea tridentata* (leaf). **Ref:** 1521, 3850.

**4941 Dehydroleucodin**

Mesatlantin E [36150-07-9]  $C_{15}H_{16}O_3$  (244.29). mp 131°C (diethyl ether-petroleum ether),  $[\alpha]_{589\text{nm}}^{22} = +77^\circ$ ,  $[\alpha]_{578\text{nm}}^{22} = +81^\circ$ ,  $[\alpha]_{546\text{nm}}^{22} = +92^\circ$ ,  $[\alpha]_{430\text{nm}}^{22} = +155^\circ$  ( $c = 2.5$ , chloroform). **Pharm:** Antilucerative (rat and mus, stomach/duodenum mucous membrane damage caused by EtOH); cytotoxic (KB ATCC CCL17,  $IC_{50} = 1.3\mu\text{g/mL}$ )<sup>[5399]</sup>. **Source:** YAN XIANG JU *Chrysanthemum lavandulifolium*, YI KUA *Artemisia myriantha* (aerial parts)<sup>[4618]</sup>, *Warionia saharae*. **Ref:** 900, 4618, 5399.

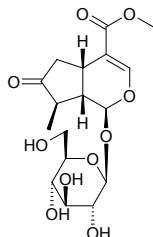
**4942 Dehydrolindestrenolide**

[32810-35-8]  $C_{15}H_{16}O_2$  (228.29). mp 111~113°C. **Source:** WU YAO *Lindera strychnifolia* [Syn. *Lindera aggregata*]. **Ref:** 6.

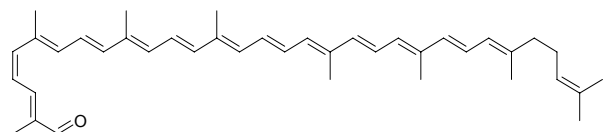


**4943 Dehydrologanin**

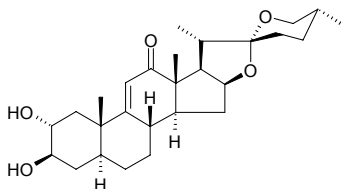
Ketologanin [152-91-0] C<sub>17</sub>H<sub>24</sub>O<sub>10</sub> (388.37). Source: CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochnera rosea*], MA QIAN ZI *Strychnos nux-vomica*, SHAN ZHU YU *Cornus officinalis* [Syn. *Macrocarpium officinale*] (fruit: yield = 0.00022%dw)<sup>[9]</sup>. Ref: 2, 9, 639, 660.

**4944 3,4-Dehydrolycopen-16-al**

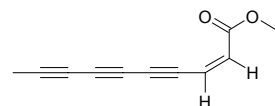
C<sub>40</sub>H<sub>52</sub>O (548.86). Source: QIAN NIAN BU LAN XIN *Solanum dulcamara*. Ref: 6.

**4945 9(11)-Dehydromanogenin**

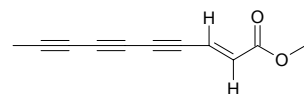
C<sub>27</sub>H<sub>40</sub>O<sub>5</sub> (444.62). mp 240°C. Source: FAN MA *Agave americana*, WU CI FAN MA *Agave americana* var. *marginata* [Syn. *Agave americana* var. *variegata*], *Agave deserti*. Ref: 2503.

**4946 Dehydromatricaria ester**

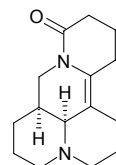
Methyl-*cis*-2-decen-4,6,8-trienoate [2739-57-3] C<sub>11</sub>H<sub>18</sub>O<sub>2</sub> (172.19). mp 114~115°C. Source: AI YE *Artemisia argyi*, QI ZHOU YI ZHI HAO *Conyza canadensis* [Syn. *Erigeron canadensis*]. Ref: 6.

**4947 trans-Dehydromatricaria ester**

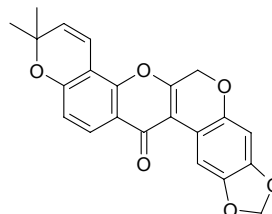
Methyl-*trans*-2-decene-4,6,8-trienoate [692-94-4] C<sub>11</sub>H<sub>18</sub>O<sub>2</sub> (172.19). mp 105°C. Source: BI MA GEN *Ricinus communis*, DA YE BAI TOU WENG *Anaphalis margaritacea*. Ref: 6.

**4948 7,11-Dehydromatrine**

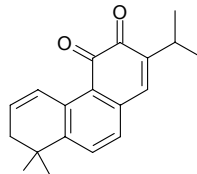
[46862-63-9] C<sub>15</sub>H<sub>22</sub>N<sub>2</sub>O (246.36). Source: KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. Ref: 2.

**4949 6α,12α-Dehydromillettone**

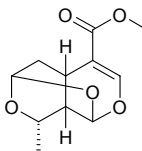
C<sub>22</sub>H<sub>16</sub>O<sub>6</sub> (376.37). Yellow crystals, mp>300°C. Pharm: Antimalarial (antiplasmodial, chloroquine-resistant W2 strain of *Plasmodium falciparum*, IC<sub>50</sub> = 33.3μmol/L, control Chloroquine, IC<sub>50</sub> = 0.094μmol/L, control Quinine, IC<sub>50</sub> = 0.209μmol/L; chloroquine-sensitive D6 strain of *Plasmodium falciparum*, IC<sub>50</sub> = 39.1μmol/L, control Chloroquine, IC<sub>50</sub> = 0.009μmol/L, control Quinine, IC<sub>50</sub> = 0.044μmol/L). Source: *Millettia usaramensis* ssp. *usaramensis*. Ref: 3454.

**4950 Dehydromiltirone**

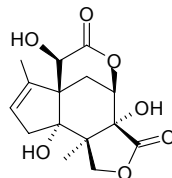
Δ<sup>1</sup>-Dehydromiltirone C<sub>19</sub>H<sub>20</sub>O<sub>2</sub> (280.37). Red acicular crystals, mp 45~46°C; red oleaginous substance. Source: HONG GEN CAO *Salvia prionitis*, DAN SHEN *Salvia miltiorrhiza*. Ref: 102, 116.

**4951 Dehydromorroniaglicone**

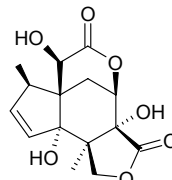
C<sub>11</sub>H<sub>14</sub>O<sub>5</sub> (226.23). White crystals, mp 119~120°C, [α]<sub>D</sub><sup>21</sup> = -47.17° (c = 0.053, EtOH). Source: SHAN ZHU YU *Cornus officinalis* [Syn. *Macrocarpium officinale*] (fruit: yield = 0.00044%dw)<sup>[9]</sup>. Ref: 9, 479, 5502.

**4952 1,2-Dehydreneomajucin**

C<sub>15</sub>H<sub>18</sub>O<sub>7</sub> (310.31). Amorphous solid, [α]<sub>D</sub><sup>20</sup> = -7.8° (c = 0.16, EtOH). Source: JIA DI FENG PI *Illicium jiadifengpi* (pericarp: yield = 0.00013%dw). Ref: 4621.

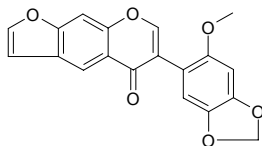
**4953 2,3-Dehydreneomajucin**

C<sub>15</sub>H<sub>18</sub>O<sub>7</sub> (310.31). Source: JIA DI FENG PI *Illicium jiadifengpi* (pericarp). Ref: 4621.

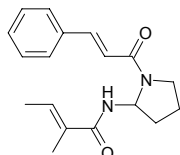


**4954 Dehydronootenone**

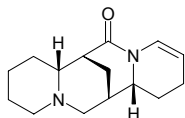
C<sub>19</sub>H<sub>12</sub>O<sub>6</sub> (336.30). Source: DI GUA ZI *Pachyrhizus erosus*. Ref: 4180.

**4955 Dehydrodorine**

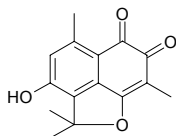
C<sub>18</sub>H<sub>22</sub>N<sub>2</sub>O<sub>2</sub> (298.39). Source: DA YE SHU LAN *Aglaia elliptifolia* (leaf): yield = 0.00104%dw. Ref: 3031.

**4956 (+)-2,3-Dehydro-10-oxo-α-isosparteine**

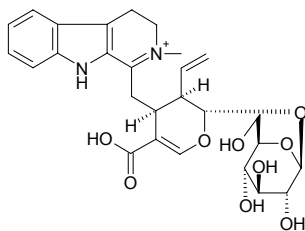
C<sub>15</sub>H<sub>22</sub>N<sub>2</sub>O (246.36). Colorless needles, mp 98~103°, [α]<sub>D</sub><sup>26</sup> = +132° (c = 0.6, EtOH). Source: FA GUO JIN QUE ER *Cytisus monspessulanus*. Ref: 1943.

**4957 Dehydrooxoperezinone**

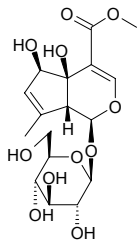
C<sub>15</sub>H<sub>14</sub>O<sub>4</sub> (258.28). Orange needles (CHCl<sub>3</sub>/CH<sub>3</sub>OH), mp > 280°C. Pharm: Anti-HIV (*in vitro*, acutely infected H-9 lymphocyte cells, IC<sub>50</sub> = 25.1μg/mL, EC<sub>50</sub> = 17.5μg/mL, TI = 1.43); cytotoxic inactive (*in vitro*, MCF7 and A549). Source: GUAN MU TONG *Aristolochia manshuriensis* (stem): yield = 0.00069%. Ref: 4706.

**4958 3,4-Dehydropalicoside**

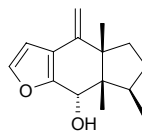
C<sub>27</sub>H<sub>33</sub>N<sub>2</sub>O<sub>9</sub><sup>+</sup> (529.57). Amorphous powder, [α]<sub>D</sub><sup>25</sup> = -27° (c = 0.175, MeOH). Source: *Strychnos vanprukii* (stem). Ref: 3471.

**4959 7,8-Dehydropenstemoside**

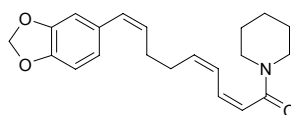
C<sub>17</sub>H<sub>24</sub>O<sub>11</sub> (404.37). Colorless powder, mp 119~120°C. Source: DU YI WEI *Lamiophlomis rotata* [Syn. *Phlomis rotata*]. Ref: 381.

**4960 Dehydropinguisenol**

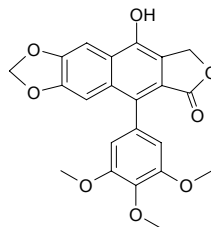
C<sub>15</sub>H<sub>20</sub>O<sub>2</sub> (232.33). Source: YE TAI *Trocholejeunea sandvicensis*. Ref: 3909.

**4961 Dehydropiperonaline**

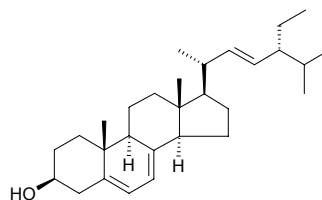
C<sub>21</sub>H<sub>25</sub>NO<sub>3</sub> (339.44). Colorless crystals. Pharm: Protective gastric lesions (rat, ethanol-induced, 25mg/kg orl, length = (50.6±14.2)mm, control, length = (118.6±16.2)mm, InRt = 57.3%; indomethacin-induced in rats, dose, 25mg/kg orl, length = (34.1±11.0)mm, control, length = (89.5±9.8)mm, InRt = 61.9%). Source: *Piper chaba* (fruit). Ref: 4935.

**4962 Dehydropodophyllotoxin**

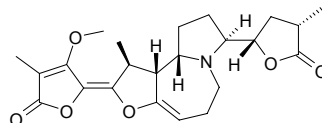
C<sub>22</sub>H<sub>18</sub>O<sub>8</sub> (410.38). mp 275~276°C. Source: GUI JIU *Dysosma versipellis* [Syn. *Podophyllum versipelle*], LIU JIAO LIAN *Dysosma pleiantha* [Syn. *Podophyllum pleianthum*] (rhizome: content = 0.019%)<sup>[5508]</sup>, SHAN HE YE *Diphylleia grayi*, TAO ER QI *Podophyllum emodii* [Syn. *Podophyllum emodii* var. *chinense*; *Podophyllum sikkimense*; *Sinopodophyllum emodii*] (rhizome: mean content of 2 origins = 0.037%)<sup>[5508]</sup>, WO ER QI *Diphylleia sinensis* (rhizome: mean content of 4 origins = 0.072%)<sup>[5508]</sup>. Ref: 6, 279, 5508.

**4963 7-Dehydroporiferasterol**

Corbisterol [19432-13-4] C<sub>29</sub>H<sub>46</sub>O (410.69). Pharm: Anti-inflammatory (inflammation caused by TPA in mus, 1mg/ear, InRt = 85%, ID<sub>50</sub> = 0.5mg/ear). Source: YAN CAO *Nicotiana tabacum*. Ref: 900.

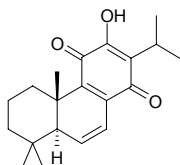
**4964 Dehydroprotostemonine**

C<sub>23</sub>H<sub>29</sub>NO<sub>6</sub> (415.49). Amorphous, [α]<sub>D</sub><sup>20</sup> = +72° (c = 0.3, MeOH). Pharm: Insecticidal (neonate larvae of *Spodoptera littoralis*, LC<sub>50</sub> = 6.1mg/L, EC<sub>50</sub> = 0.8mg/L). Source: DI TANG BAI BU *Stemona kerrii*, *Stemona curtisii*. Ref: 3409.

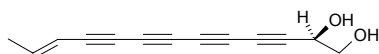


**4965 6,7-Dehydroroyleanone**

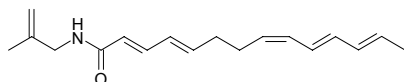
$C_{20}H_{26}O_3$  (314.43). Red crystals, mp 160~164°C. Source: XIU QIU SHU WEI CAO *Salvia hydrangea* (root). Ref: 5447.

**4966 Dehydrosafynol**

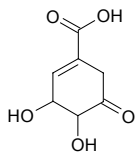
$C_{13}H_{10}O_2$  (198.22). Pharm: Plant antitoxin. Source: HONG HUA *Carthamus tinctorius*. Ref: 658.

**4967 Dehydro-γ-sanshool**

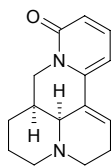
$C_{18}H_{25}NO$  (271.41). Pharm: Anti-PAF. Source: *Zanthoxylum* sp. Ref: 2176.

**4968 Dehydroshikimic acid**

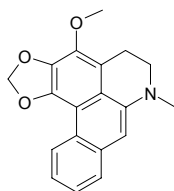
$C_7H_8O_5$  (172.14). mp 150~152°C; 201~202°C. Source: HE ZI *Terminalia chebula*, HE ZI YE *Terminalia chebula*. Ref: 6.

**4969 Δ<sup>7</sup>-Dehydrosophoramine**

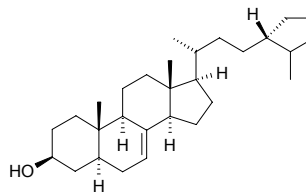
[67767-18-4]  $C_{15}H_{18}N_2O$  (242.32). Source: HUANG BAI *Phellodendron amurense*. Ref: 2.

**4970 Dehydrostephalagine**

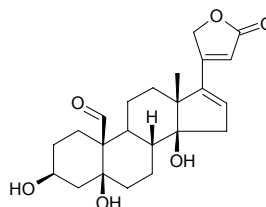
$C_{19}H_{17}NO_3$  (307.35). Pharm: Cytotoxic inactive (yeast assay: RS321NYCp50(gal), RS321NpRAD52(gal), RS321NpRAD52(glu)). Source: DING KE LA QIAN JIN TENG *Stephania dinklagei* (stem). Ref: 5457.

**4971 7-Dehydrostigmasterol**

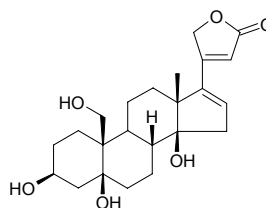
$C_{29}H_{50}O$  (414.72). Source: HUANG BAI *Phellodendron amurense*. Ref: 2.

**4972 16-Dehydrostrophanthidin**

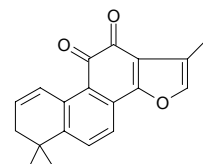
$C_{23}H_{30}O_6$  (402.49). mp 226°C; 253~262°C,  $[\alpha]_D = +82.3^\circ$ . Source: HEI GANG LIU *Periploca nigrescens*. Ref: 1521, 2498.

**4973 16-Dehydrostrophanthidol**

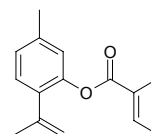
$C_{23}H_{32}O_6$  (404.51). mp 242~247°C,  $[\alpha]_D = 68.9^\circ$ . Source: HEI GANG LIU *Periploca nigrescens*. Ref: 1521, 2498.

**4974 Δ<sup>1</sup>-Dehydrotanshinone**

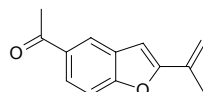
$C_{19}H_{16}O_3$  (292.34). Dark red acicular crystals, mp 147~148°C. Source: DAN SHEN *Salvia miltiorrhiza*. Ref: 116.

**4975 8,9-Dehydrothymol 3-O-tiglate**

$C_{15}H_{18}O_2$  (230.31). Source: PEI LAN *Eupatorium fortunei* (aerial parts). Ref: 3077.

**4976 Dehydrotremetone**

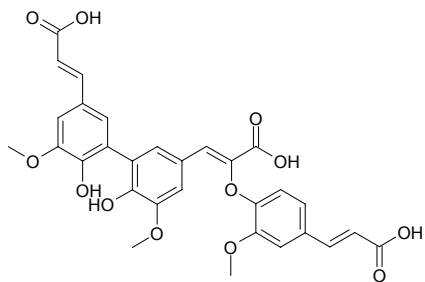
[3015-20-1]  $C_{13}H_{12}O_2$  (200.24). Pharm: Antibacterial; fish toxin (goldfish). Source: QIAN MA YE ZE LAN *Eupatorium urticaefolium*. Ref: 658.



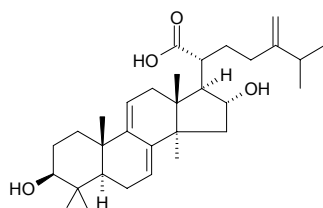


**4977 4-O-8',5'-5''-Dehydrotriferulic acid**

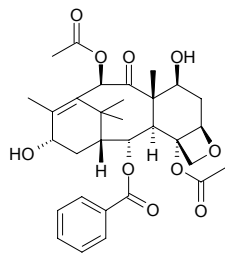
$C_{30}H_{26}O_{12}$  (578.53). Source: YU MI FU *Zea mays* (bran). Ref: 3420.

**4978 Dehydrotumulolic acid**

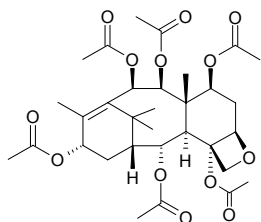
$C_{31}H_{48}O_4$  (484.73). Pharm: Antineoplastic (EBV-EA induced by TPA, mol ratio/TPA = 1000, relative percentage of EBV-EA = 0% (positive control value 32pmol, 20ng TPA = 100%), viability of Raji cells = 70%; reference compound  $\beta$ -Carotene, relative percentage = 8.6%). Source: FU LING *Poria cocos* (sclerotium: yield = 0.00084%dw). Ref: 4616.

**4979 1-Dehydroxybaccatin III**

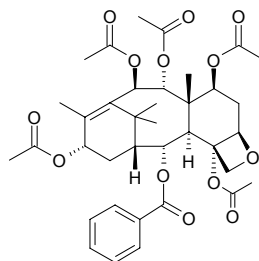
$C_{31}H_{38}O_{10}$  (570.64). Source: YUN NAN HONG DOU SHAN *Taxus yunnanensis*. Ref: 662.

**4980 1 $\beta$ -Dehydroxybaccatin IV**

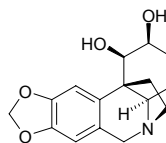
$C_{32}H_{44}O_{13}$  (636.70). Colorless prisms,  $[\alpha]_D = +5^\circ$  ( $CHCl_3$ ), mp 286°C, mp 259–260°C,  $[\alpha]_D = +99^\circ$  ( $CHCl_3$ ). Pharm: NO production inhibitor ( $IC_{50} = 32.2\mu mol/L$ , control *L*-NMMA,  $IC_{50} = 28.5\mu mol/L$ )<sup>[5407]</sup>. Source: HONG DOU SHAN *Taxus chinensis*, JIE ZHI HONG DOU SHAN *Taxus media*, YUN NAN HONG DOU SHAN *Taxus yunnanensis* (wood). Ref: 662, 2488, 5407.

**4981 1 $\beta$ -Dehydroxybaccatin VI**

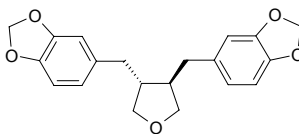
$C_{37}H_{46}O_{13}$  (698.77). Colorless crystals, mp 220–221°C,  $[\alpha]_D = -21.2^\circ$  ( $CHCl_3$ ). Source: JIE ZHI HONG DOU SHAN *Taxus media*, MEI LI HONG DOU SHAN *Taxus mairei*. Ref: 139, 662.

**4982 4 $\alpha$ -Dehydroxycrinamabine**

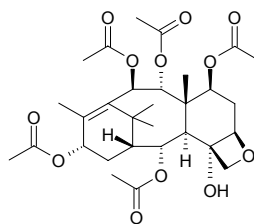
$C_{16}H_{19}NO_4$  (289.33). Pharm: Antitrypanosomal (*Trypanosoma brucei rhodesiense* strain STIB-900, stage trypomastigotes,  $IC_{50} = 11.07\mu g/mL$ ); antimalarial inactive (*Plasmodium falciparum* strain NF-54, stage IEF). Source: GUAN MU WEN SHU LAN *Crinum macowanii* (bulb). Ref: 4000.

**4983 Dehydroxycubebin**

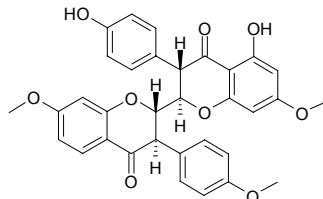
$C_{20}H_{30}O_5$  (340.38). Source: QIANG DAO YAO *Hypoestes purpurea* [Syn. *Justicia purpurea*; *Hypoestes sinica*] (aerial parts: yield = 0.000034%dw). Ref: 4783.

**4984 1 $\beta$ -Dehydroxy-4 $\alpha$ -deacetylbaaccatin IV**

$C_{30}H_{42}O_{12}$  (594.66). Source: MEI LI HONG DOU SHAN *Taxus mairei*. Ref: 662.

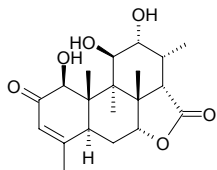
**4985 Dehydroxyhexaspermone C**

*rel*-4',7-Dimethoxy-4-oxo-2,3-*trans*-isoflavanyl-(2→2'')-4'',5''-dihydroxy-7''-methoxy-2'',3''-*trans*-isoflavanone  $C_{33}H_{28}O_9$  (568.59). White or colorless solid, mp 133–135°C,  $[\alpha]_D^{23.7} = -117.0^\circ$  ( $c = 0.05$ , MeOH). Pharm: Antibacterial inactive (MDR *Staphylococcus aureus*: RN4220 strain, 64 $\mu g/mL$ , control Erythromycin, MIC = 128 $\mu g/mL$ ; XU212 strain, 64 $\mu g/mL$ , control Tetracycline, MIC = 128 $\mu g/mL$ ; SA-1199-B strain, 64 $\mu g/mL$ , control Norfloxacin, MIC = 32 $\mu g/mL$ ). Source: CHANG E JIN LIAN MU PI *Ochna macrocalyx*. Ref: 5372.

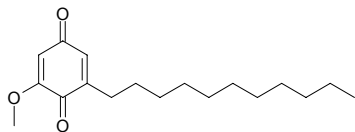


**4986 6-Dehydroxylongilactone**

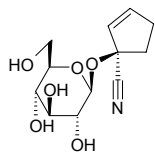
6-Dehydroxylongilactone C<sub>19</sub>H<sub>26</sub>O<sub>6</sub> (350.42). **Pharm:** Cytotoxic (P<sub>388</sub>, IC<sub>50</sub> = 0.66 μg/mL, A549 cells, remarkable activity, MCF7 cells, IC<sub>50</sub> < 2.5 μg/mL)<sup>[4556]</sup>; plant growth inhibitor (Cucumber seedling, root growth, IC<sub>50</sub> = (25.7±0.5) μmol/L, shoot growth, IC<sub>50</sub> = (48.6±0.5) μmol/L; Rice seedling, root growth, IC<sub>50</sub> > 200 μmol/L, shoot growth, IC<sub>50</sub> > 200 μmol/L)<sup>[5215]</sup>. **Source:** CHANG YE KUAN MU *Eurycoma longifolia* (leaf), *Eurycoma* sp. **Ref:** 4556, 5215.

**4987 2-Dehydroxy-5-O-methylembelin**

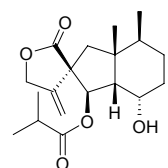
C<sub>18</sub>H<sub>28</sub>O<sub>3</sub> (292.42). **Pharm:** Cytotoxic inactive (*in vitro*, HL-60, IC<sub>50</sub> > 100 μg/mL; Bel7402, IC<sub>50</sub> > 100 μg/mL; HeLa, IC<sub>50</sub> > 100 μg/mL; U937, IC<sub>50</sub> > 100 μg/mL; control Colchicine, HL-60, IC<sub>50</sub> = 1.6 μg/mL; Bel7402, IC<sub>50</sub> = 0.4 μg/mL; HeLa, IC<sub>50</sub> = 0.1 μg/mL; U937, IC<sub>50</sub> = 0.1 μg/mL)<sup>[4746]</sup>. **Source:** LA ZHU GUO *Aegiceras corniculatum* (stem and twig: yield = 0.00005%). **Ref:** 4746.

**4988 Deidaclin**

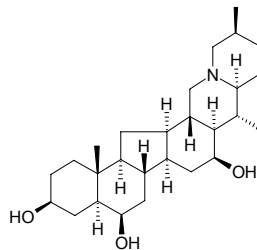
C<sub>12</sub>H<sub>17</sub>NO<sub>6</sub> (198.22). **Pharm:** Toxin. **Source:** GE YANG XI FAN LIAN *Passiflora coriacea*. **Ref:** 658.

**4989 Deisobutyryl bakkenolide H**

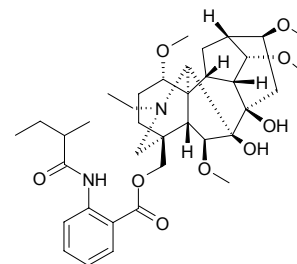
C<sub>19</sub>H<sub>28</sub>O<sub>5</sub> (336.45). Colorless needles (MeOH), mp 178–180°C, [α]<sub>D</sub> = -93.0° (c = 0.365, MeOH). **Pharm:** Platelet aggregation inhibitor (100 μmol/L AA-induced, 100 μg/mL, InRt = (91.7±6.8)%), p < 0.001, control Aspirin, 50 μg/mL, InRt = (100±0.0)%; 10 μg/mL collagen-induced, 100 μg/mL, InRt = (85.5±13.0)%), p < 0.001, Aspirin, 50 μg/mL, InRt = (12.2±1.7)%; 2 nmol/L PAF-induced, 100 μg/mL, InRt = (21.0±1.7)%), p < 0.001, Aspirin, 50 μg/mL, InRt = (9.6±1.2)%; 0.1 μg/mL thrombin-induced, 100 μg/mL, InRt = (-1.1±1.1)%). **Source:** TAI WAN FENG DOU CAI *Petasites formosanus*. **Ref:** 2377.

**4990 Delafrine**

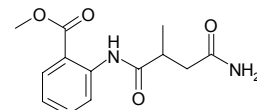
C<sub>27</sub>H<sub>45</sub>N<sub>2</sub>O<sub>3</sub> (431.66). **Source:** XI BEI MU *Fritillaria imperialis* (bulb). **Ref:** 4217.

**4991 Delajacine**

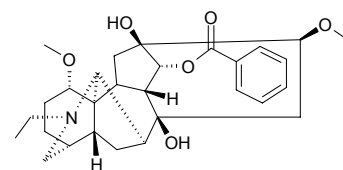
C<sub>37</sub>H<sub>54</sub>N<sub>2</sub>O<sub>9</sub> (670.85). White amorphous powder. **Source:** QIN LING CUI QUE HUA *Delphinium giraldii*. **Ref:** 2506.

**4992 Delamide**

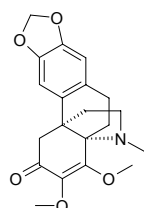
C<sub>13</sub>H<sub>16</sub>N<sub>2</sub>O<sub>4</sub> (274.28). **Source:** FU ZI *Aconitum carmichaeli*. **Ref:** 16.

**4993 Delavaconitine**

[1356-52-1] C<sub>29</sub>H<sub>39</sub>NO<sub>6</sub> (497.64). mp 59–64°C, [α]<sub>D</sub><sup>17</sup> = -9.56°; nitrate: mp 154°C; perchlorate: mp 241°C; picrolonate: mp 241°C; chloraurate: mp 215°C. **Pharm:** Analgesic; local anesthetic; LD (rbt, iv) = 5–10 mg/kg, (dog, iv) = 10–12 mg/kg; LD<sub>50</sub> (mus, sc) = 106 mg/kg, (mus, iv) = 28 mg/kg. **Source:** MA ER SHAN WU TOU *Aconitum delavayi*. **Ref:** 661.

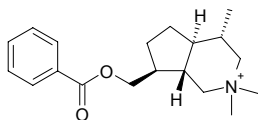
**4994 Delavaine**

[27989-72-6] C<sub>20</sub>H<sub>23</sub>NO<sub>5</sub> (357.41). mp 140–150°C. **Source:** DI BU RONG *Stephania delavayi* [Syn. *Stephania epigaea*]. **Ref:** 1521.

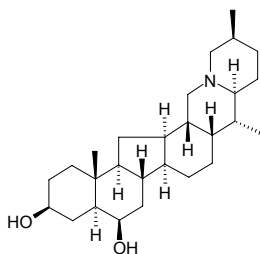


**4995 Delavayine A**

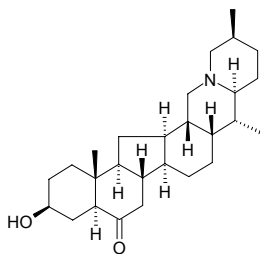
$C_{19}H_{28}NO_2$  (302.44). Yellow powder,  $[\alpha]_D^{22} = -5.1^\circ$  ( $c = 0.90$ ,  $C_5H_5N$ ). **Pharm:** Antinociceptive (acetic acid-induced, 50mg/kg, sc, inhibitive percent = 45%; control Aminopyrine, 50mg/kg, orl, inhibitive percent = 87%, 50mg/kg, sc, inhibitive percent = 94%). **Source:** MA TONG HUA *Incarvillea arguta*. **Ref:** 3908.

**4996 Delavine**

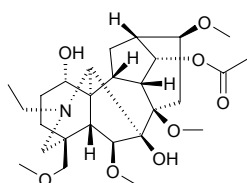
[98243-57-3]  $C_{27}H_{45}NO_2$  (415.67). Colorless needles (EtOH), mp 179~182°C (dec),  $[\alpha]_D^{25} = -17.2^\circ$  ( $c = 0.5$ ,  $CHCl_3$ ). **Pharm:** cAMP phosphodiesterase inhibitor ( $IC_{50} = 88\mu\text{mol/L}$ ); AChE inhibitor ( $IC_{50} = (105.5 \pm 1.5)\mu\text{mol/L}$ , control Eserine,  $IC_{50} = (0.41 \pm 0.01)\mu\text{mol/L}$ )<sup>[4217]</sup>, butyrylcholinesterase (BChE) inhibitor ( $IC_{50} = (1.71 \pm 0.11)\mu\text{mol/L}$ , control Eserine,  $IC_{50} = (0.857 \pm 0.008)\mu\text{mol/L}$ )<sup>[4217]</sup>. **Source:** LENG SHA BEI MU *Fritillaria delavayi*, XI BEI MU *Fritillaria imperialis* (bulb). **Ref:** 2, 660, 1755, 4217.

**4997 Delavinone**

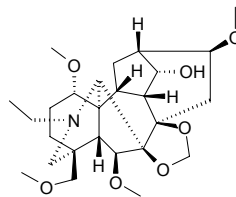
[96997-98-7]  $C_{27}H_{43}NO_2$  (413.65). **Source:** LENG SHA BEI MU *Fritillaria delavayi*, GAN SU BEI MU *Fritillaria przewalskii*. **Ref:** 2, 660.

**4998 Delbonine**

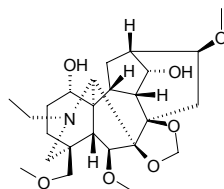
[95066-33-4]  $C_{27}H_{43}NO_8$  (509.65). Amorphous solid,  $[\alpha]_D^{25} = +35.3^\circ$  ( $c = 0.8$ ,  $CHCl_3$ ). **Source:** CHUAN QIAN CUI QUE HUA *Delphinium bonvalotii*, DONG FANG FEI YAN CAO *Consolida orientalis* (aerial parts). **Ref:** 1521, 4283.

**4999 Delbruline**

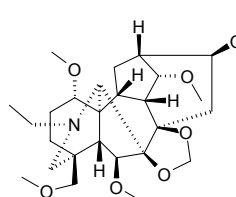
[106982-82-5]  $C_{26}H_{41}NO_7$  (479.62). **Source:** FU ZI *Aconitum carmichaeli*. **Ref:** 16.

**5000 Delbrunine**

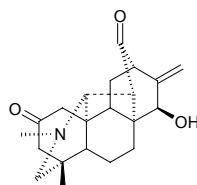
[106982-83-6]  $C_{25}H_{39}NO_7$  (465.59). **Source:** FU ZI *Aconitum carmichaeli*. **Ref:** 16.

**5001 Delbrusine**

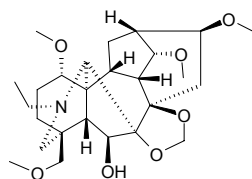
[76971-31-8]  $C_{27}H_{43}NO_7$  (493.65). **Source:** FU ZI *Aconitum carmichaeli*. **Ref:** 16.

**5002 Delcarduchol**

$C_{21}H_{27}NO_3$  (341.45). **Source:** *Delphinium carduchorum*. **Ref:** 2288.

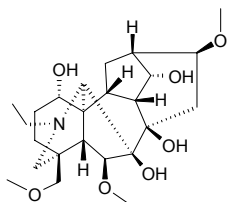
**5003 Delcorine**

[52358-55-1]  $C_{26}H_{41}NO_7$  (479.62). **Pharm:** Inhibits intestinal contraction (rat and rbt, *in vitro*); inhibits respiration; uterine relaxant (gpg); antihypertensive. **Source:** GUANG FEI YAN CAO *Delphinium corumbosum*. **Ref:** 658.

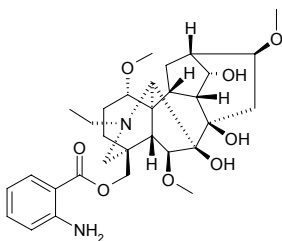


**5004 Delcosine**

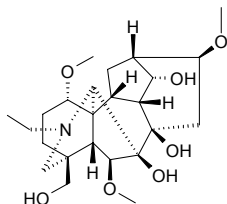
Delphamine [545-56-2]  $C_{24}H_{39}NO_7$  (453.58). mp 203~204°C. **Pharm:** Antihypertensive (anesthetic, cat, 10mg/kg); toxin (poikilotherms). **Source:** FEI YAN CAO *Consolida ajacis* [Syn. *Delphinium ajacis*], QIANG GU FEI YAN CAO *Delphinium consolida*, XIAO CAO WU *Delphinium yunnanense*. **Ref:** 6, 16, 658.

**5005 Delectine**

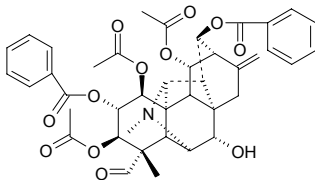
[58485-71-5]  $C_{31}H_{44}N_2O_8$  (572.70). White amorphous powder. **Source:** E MEI CUI QUE HUA *Delphinium omeiense*. **Ref:** 2190.

**5006 Delectinine**

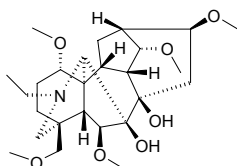
[58480-82-3]  $C_{24}H_{39}NO_7$  (453.58). White amorphous powder. **Source:** E MEI CUI QUE HUA *Delphinium omeiense*. **Ref:** 2190.

**5007 Delgrandine**

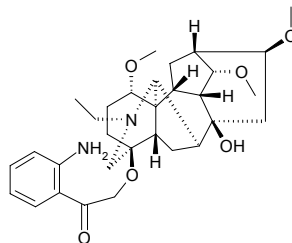
$C_{41}H_{43}NO_{12}$  (741.80). **Source:** FU ZI *Aconitum carmichaeli*. **Ref:** 16.

**5008 Delphatine**

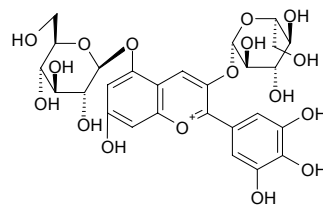
[25488-62-4]  $C_{26}H_{43}NO_7$  (481.64). **Pharm:** Anti-inflammatory (modified assay of Berridge, 100µg/mL, InRt = 17.39%<sup>[5271]</sup>); tyrosinase inhibitor inactive (control Kojic acid,  $IC_{50}$  = (16.67±0.52)µmol/L, *L*-Mimosine,  $IC_{50}$  = (3.68±0.02)µmol/L<sup>[5271]</sup>); antioxidant (DPPH scavenger, 1µmol/L, ScRt = 55.4%; control 3-*t*-Butyl-4-hydroxyanisole, 1µmol/L, ScRt = 92.5%<sup>[5271]</sup>). **Source:** FU ZI *Aconitum carmichaeli*, *Aconitum leave* (aerial parts). **Ref:** 16, 5271.

**5009 Delphicrispuline**

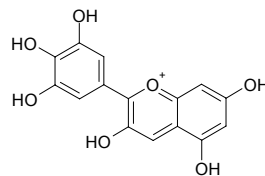
Neofinaconitine  $C_{30}H_{42}N_2O_6$  (526.68).  $[\alpha]_D^{20} = +23.8^\circ$  ( $c = 0.8$ ,  $CHCl_3$ ) **Source:** GAN WAN WU TOU *Aconitum finetianum*, TU ER QI CUI QUE HUA *Delphinium crispulum*. **Ref:** 1913, 2690.

**5010 Delphin**

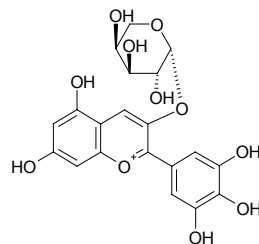
Delphinidin-3,5-diglucoside [17670-06-3]  $C_{27}H_{31}O_{17}^+$  (627.54). **Source:** BAI FAN DOU *Phaseolus vulgaris*, FEI YAN CAO *Consolida ajacis* [Syn. *Delphinium ajacis*], MU XU *Medicago sativa*, QIE ZI *Solanum melongena*, YA ZHI CAO *Commelina communis*. **Ref:** 6.

**5011 Delphinidin**

Delphinidol  $C_{15}H_{11}O_7^+$  (303.25). **Pharm:** Pigment; leukocyte elastase MMP-2/9 inhibitor<sup>[4416]</sup>. **Source:** BU XUE CAO *Limonium gmelinii*, FENG XIAN HUA *Impatiens balsamina*, PU<sup>(3)</sup> TAO *Syzygium jambos*, TAO ER QI *Podophyllum emodii* [Syn. *Podophyllum emodii* var. *chinense*; *Podophyllum sikkimensis*; *Sinopodophyllum emodii*]. **Ref:** 6, 658, 4416.

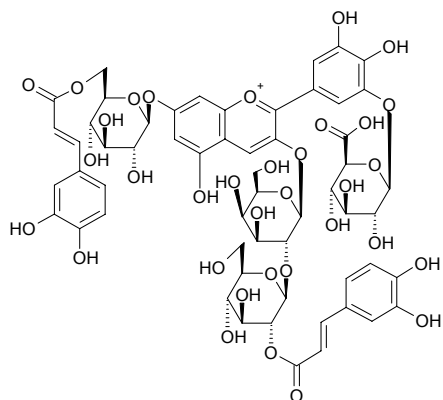
**5012 Delphinidin-3-arabinoside**

[28500-01-8]  $C_{20}H_{19}O_{11}^+$  (435.37). **Source:** ZI WEI HUA *Lagerstroemia indica*. **Ref:** 6.



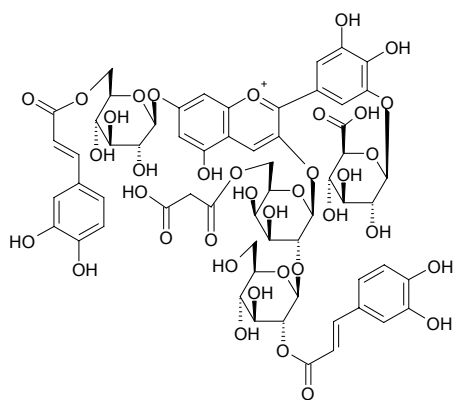
**5013 Delphinidin-3-O-[2-O-(2-O-(trans-caffeoyl)-β-D-glucopyranosyl)-β-D-galactopyranoside]-7-O-[6-O-(trans-caffeoyl)-β-D-glucopyranoside]-3'-O-[β-D-glucuronopyranoside]**

C<sub>57</sub>H<sub>61</sub>O<sub>34</sub><sup>+</sup> (1290.10). Source: HUA GUAN YIN LIAN HUA *Anemone coronaria*. Ref: 1956.



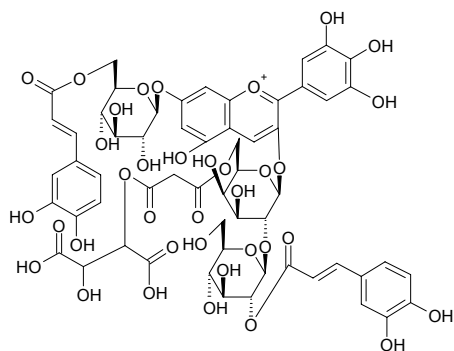
**5014 Delphinidin-3-O-[2-O-(2-O-(trans-caffeoyl)-β-D-glucopyranosyl)-6-O-(malonyl)-β-D-galactopyranoside]-7-O-[6-O-(trans-caffeoyl)-β-D-glucopyranoside]-3'-O-[β-D-glucuronopyranoside]**

C<sub>60</sub>H<sub>63</sub>O<sub>37</sub><sup>+</sup> (1376.15). Source: HUA GUAN YIN LIAN HUA *Anemone coronaria*. Ref: 1956.



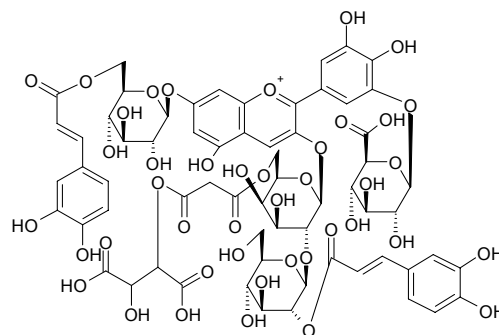
**5015 Delphinidin-3-O-[2-O-(2-O-(trans-caffeoyl)-β-D-glucopyranosyl)-6-O-(2-O-(tartaryl)malonyl)-β-D-galactopyranoside]-7-O-[6-O-(trans-caffeoyl)-β-D-glucopyranoside]**

C<sub>58</sub>H<sub>59</sub>O<sub>36</sub><sup>+</sup> (1332.10). Source: HUA GUAN YIN LIAN HUA *Anemone coronaria*. Ref: 1956.



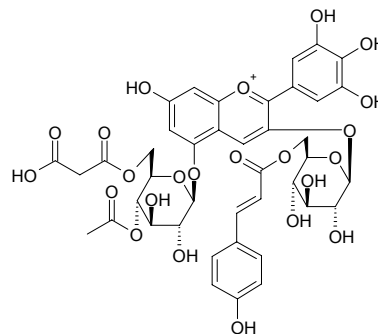
**5016 Delphinidin-3-O-[2-O-(2-O-(trans-caffeoyl)-β-D-glucopyranosyl)-6-O-(2-O-(tartaryl)malonyl)-β-D-galactopyranoside]-7-O-[6-O-(trans-caffeoyl)-β-D-glucopyranoside]-3'-O-[β-D-glucuronopyranoside]**

C<sub>64</sub>H<sub>67</sub>O<sub>42</sub><sup>+</sup> (1508.22). Source: HUA GUAN YIN LIAN HUA *Anemone coronaria*. Ref: 1956.



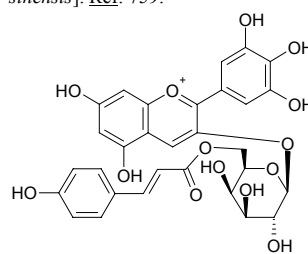
**5017 Delphinidin-3-O-[6-O-(p-coumaroyl)-β-D-glucopyranoside]-5-O-[4-O-acetyl-6-O-malonyl-β-D-glucopyranoside]**

C<sub>41</sub>H<sub>41</sub>O<sub>23</sub><sup>+</sup> (901.77). Source: *Salvia uliginosa*. Ref: 2367.



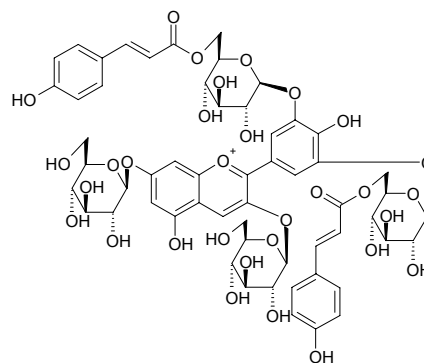
**5018 Delphinidin-3-O-β-D-(6-(E)-p-coumaroyl) galactopyranoside**

C<sub>30</sub>H<sub>27</sub>O<sub>14</sub><sup>+</sup> (611.54). Source: CHA YE *Camellia sinensis* [Syn. *Thea sinensis*]. Ref: 759.



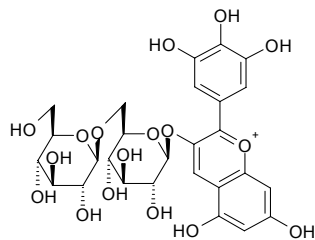
**5019 Delphinidin-3,7-di-O-β-glucopyranoside-3',5'-di-O-(6-O-p-coumaroyl)-β-glucopyranoside**

C<sub>57</sub>H<sub>63</sub>O<sub>31</sub><sup>+</sup> (1244.12). Source: TA SI MA NI YA JIE GENG LAN *Dianella tasmanica* (berry), HEI JIE GENG LAN *Dianella nigra* (berry). Ref: 5214.

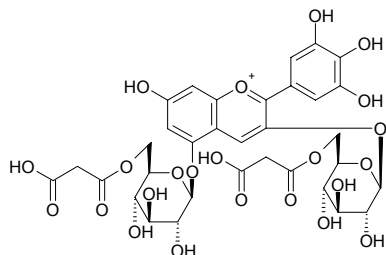


**5020 Delphinidin-3-diglucoside**

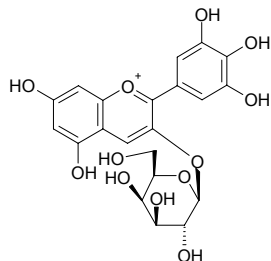
$C_{27}H_{31}O_{17}^+$  (627.54). Source: SHUI HU LU *Eichhornia crassipes*. Ref: 6.

**5021 Delphinidin-3,5-di-O-(6-O-malonyl-β-D-glucoside)**

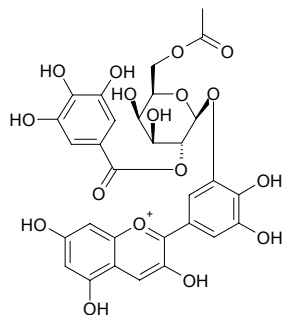
$C_{33}H_{35}O_{23}^+$  (799.63). Source: JU QU *Cichorium intybus*. Ref: 1955.

**5022 Delphinidin-3-O-β-D-galactopyranoside**

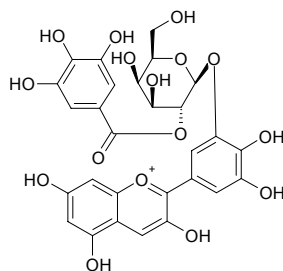
Empetrin [68852-84-6]  $C_{21}H_{21}O_{12}^+$  (465.39). Source: CHA YE *Camellia sinensis* [Syn. *Thea sinensis*]. Ref: 759.

**5023 Delphinidin-3'-O-(2''-O-galloyl-6''-O-acetyl-β-galactopyranoside)**

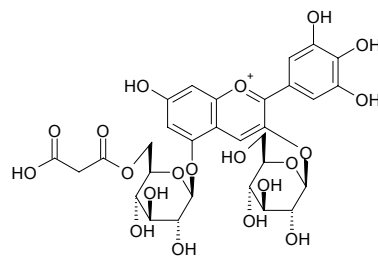
$C_{30}H_{27}O_{17}^+$  (659.54). Source: LAN SHUI LIAN *Nymphaea caerulea*. Ref: 1863.

**5024 Delphinidin-3'-O-(2''-O-galloyl-β-galactopyranoside)**

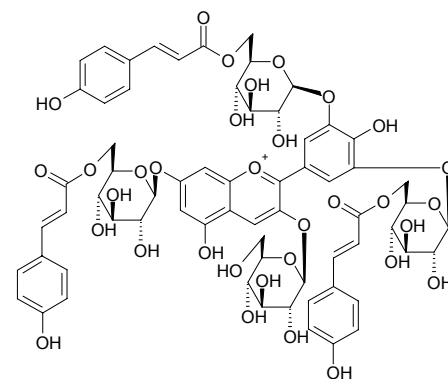
$C_{28}H_{25}O_{16}^+$  (617.50). Source: LAN SHUI LIAN *Nymphaea caerulea*. Ref: 1863.

**5025 Delphinidin-3-O-(β-D-glucopyranoside)-5-O-(6-O-malonyl-β-D-glucopyranoside)**

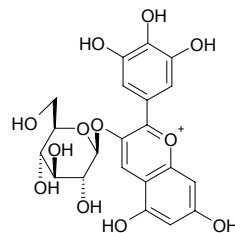
$C_{30}H_{33}O_{20}^+$  (713.59). Source: HE LAN ZHONG ZHI FAN HONG HUA *Crocus antalyensis* cv. Ref: 1897.

**5026 Delphinidin-3-O-β-D-glucopyranoside-7,3',5'-tri-O-(6-O-p-coumaroyl-β-glucopyranoside)**

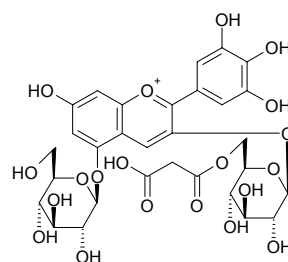
$C_{66}H_{69}O_{33}^+$  (1390.27). Source: TA SI MA NI YA JIE GENG LAN *Dianella tasmanica* (berry), HEI JIE GENG LAN *Dianella nigra* (berry). Ref: 5214.

**5027 Delphinidin-3-glucoside**

[6906-38-3]  $C_{21}H_{21}O_{12}^+$  (465.39). Source: BAI FAN DOU *Phaseolus vulgaris*, HEI DA DOU PI *Glycine max*, QIE ZI *Solanum melongena*. Ref: 6.

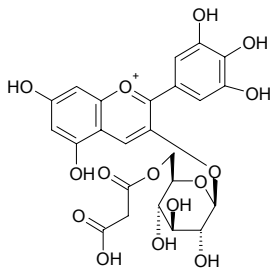
**5028 Delphinidin-3-O-(6-O-malonyl-β-D-glucoside)-5-O-β-D-glucoside**

$C_{30}H_{33}O_{20}^+$  (713.59). Source: JU QU *Cichorium intybus*. Ref: 1955.

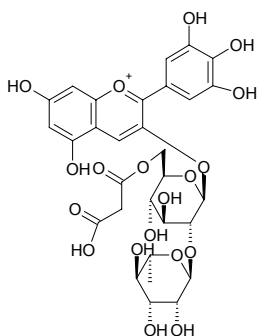


**5029 Delphinidin-3-neohesperidoside**

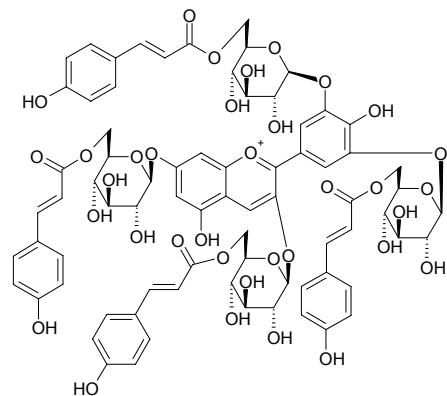
$C_{24}H_{23}O_{15}$  (551.44). Dark red amorphous powder. Source: HU DIE HUA DOU *Clitoria ternatea* (petal). Ref: 3480.

**5030****Delphinidin-3-O-(2''-O- $\alpha$ -rhamnosyl-6''-O-malonyl)- $\beta$ -glucoside**

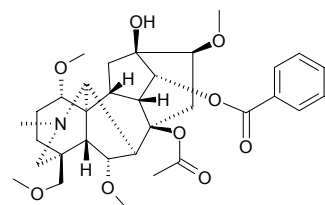
$C_{30}H_{33}O_{19}$  (697.59). Dark red amorphous powder. Source: HU DIE HUA DOU *Clitoria ternatea* (petal). Ref: 3480.

**5031****Delphinidin-3,7,3',5'-tetra-O-(6-O-*p*-coumaroyl)- $\beta$ -glucopyranoside**

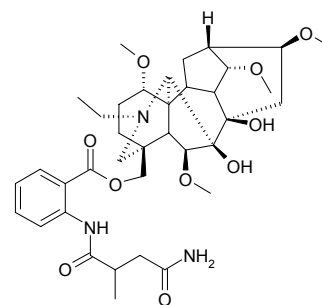
$C_{75}H_{75}O_{35}$  (1536.41). Source: TA SI MA NI YA JIE GENG LAN *Dianella tasmanica* (berry), HEI JIE GENG LAN *Dianella nigra* (berry). Ref: 5214.

**5032 Delphinine**

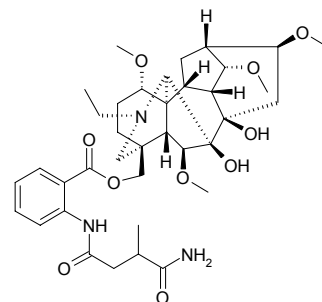
[561-07-9]  $C_{33}H_{45}NO_9$  (599.73). Pharm: Inhibits respiration; similar action with aconitine. Source: SI TA WEI CUI QUE HUA *Delphinium staphisagria*. Ref: 658.

**5033 Delsemine A**

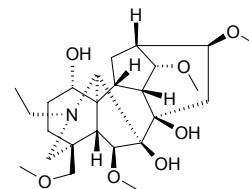
$C_{37}H_{53}N_3O_{10}$  (699.85).  $[\alpha]_D^{30} = +368^\circ$  ( $c = 0.7$ ,  $CHCl_3$ ). Source: E MEI CUI QUE HUA *Delphinium omeiense*, FU ZI *Aconitum carmichaeli*. Ref: 16, 2190.

**5034 Delsemine B**

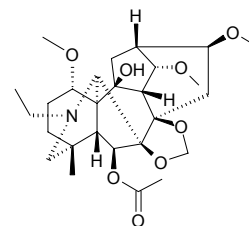
$C_{37}H_{53}N_3O_{10}$  (699.85).  $[\alpha]_D^{30} = +28.2^\circ$  ( $c = 0.6$ ,  $CHCl_3$ ). Source: E MEI CUI QUE HUA *Delphinium omeiense*, FU ZI *Aconitum carmichaeli*. Ref: 16, 2190.

**5035 Delsoline**

[509-18-2]  $C_{25}H_{41}NO_7$  (467.61). mp 213.0~216.5°C. Pharm: Causes paroxysm convulsion and breath inhibition (mus, administration by non-intestinal tract); insecticidal; antihypertensive (anesthetic cat and dog, 5~15mg/kg); smooth muscle relaxant. Source: E MEI CUI QUE HUA *Delphinium omeiense*, FEI YAN CAO *Consolida ajacis* [Syn. *Delphinium ajacis*], GAN WAN WU TOU *Aconitum finetianum*, QIANG GU FEI YAN CAO *Delphinium consolida*, SHAN DI WU TOU *Aconitum monticola*. Ref: 6, 658, 2190.

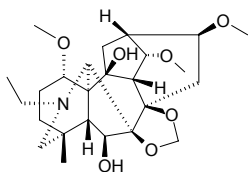
**5036 Deltaline**

[6836-11-9]  $C_{27}H_{41}NO_8$  (507.63). Pharm: Antispasmodic; antihypertensive (rat, iv, 20mg/kg). Source: FU ZI *Aconitum carmichaeli*, GAO FEI YAN CAO *Delphinium elatum*, WANG GUO CUI QUE HUA *Delphinium dictyocarpum*, XI FANG CUI QUE HUA *Delphinium occidentale*, YI LI CUI QUE HUA *Delphinium iliense*. Ref: 16, 658.

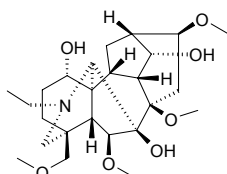


**5037 Deltamine**

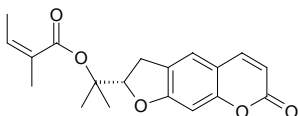
[6836-10-8] C<sub>25</sub>H<sub>39</sub>NO<sub>7</sub> (465.59). Source: FU ZI *Aconitum carmichaeli*.  
Ref: 16.

**5038 Deltatsine**

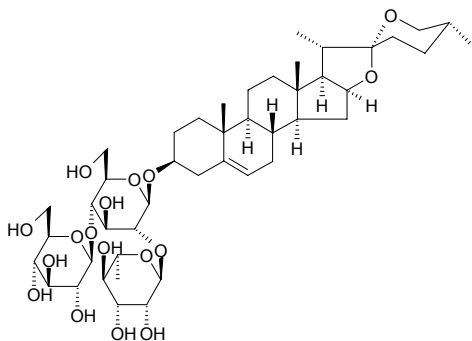
[92631-66-8] C<sub>25</sub>H<sub>41</sub>NO<sub>7</sub> (467.61). Amorphous powder, +1H<sub>2</sub>O, [α]<sub>D</sub><sup>20</sup> = +28.6° (c = 2.4, EtOH). Source: E MEI CUI QUE HUA *Delphinium omeiense*, KANG DING CUI QUE HUA *Delphinium tatsienense*. Ref: 1521, 2190.

**5039 Deltoin**

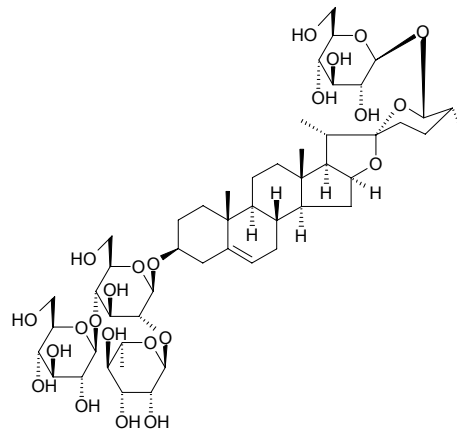
[19662-71-6] C<sub>19</sub>H<sub>20</sub>O<sub>5</sub> (328.37). Source: FANG FENG *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*], YUN QIAN HU *Peucedanum rubricaulis*. Ref: 2, 177.

**5040 Deltonin**

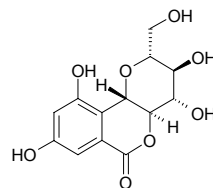
Trilloside A [55659-75-1] C<sub>45</sub>H<sub>72</sub>O<sub>17</sub> (885.07). mp 290~292°C. Pharm: Raw material for partial synthesis of steroid hormone (its aglucon is used); phosphatase inhibitor (HeLa cell stimulated by TPA and joined by <sup>32</sup>P)<sup>[2165]</sup>. Source: SAN JIAO YE SHU YU *Dioscorea deltoidea*, SHAN YAO *Dioscorea batatas* [Syn. *Dioscorea opposita*], XIAO HUA DUN YE SHU YU *Dioscorea parviflora*, YU ER QI *Trillium camtschaticum*, ZA JIAO BAI HE *Lilium speciosum* x *L. nobilissimum*. Ref: 6, 10, 658, 2165.

**5041 Deltoside**

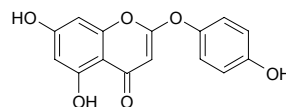
C<sub>51</sub>H<sub>82</sub>O<sub>23</sub> (1063.21). Pharm: Raw material for partial synthesis of steroid hormone (its diosgenin is used). Source: SAN JIAO YE SHU YU *Dioscorea deltoidea*, XIAO HUA DUN YE SHU YU *Dioscorea parviflora*. Ref: 10.

**5042 Demethoxybergenin**

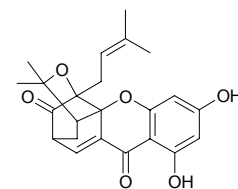
C<sub>13</sub>H<sub>15</sub>O<sub>8</sub> (298.25). Colorless needles, mp 305°C (dec., MeOH), [α]<sub>D</sub><sup>20</sup> = -22.7° (c = 0.08, MeOH). Pharm: Cytotoxic inactive (murine breast cancer cell line FM3A, 100μmol/L). Source: YOU SE ZI JIN NIU *Ardisia colorata* (fruit). Ref: 4244.

**5043 6-Demethoxycapillarisin**

C<sub>15</sub>H<sub>10</sub>O<sub>6</sub> (286.24). Source: YIN CHEN HAO *Artemisia capillaris*. Ref: 2.

**5044 Demethoxy-cochinchinone D**

C<sub>23</sub>H<sub>24</sub>O<sub>6</sub> (396.44). Pharm: Antioxidant inactive (DPPH scavenger, 50μmol/L, ScRt = 5.2%; control BHT, 50μmol/L, ScRt = 51.7%, IC<sub>50</sub> = 28.9μmol/L)<sup>[4423]</sup>. Source: HUANG NIU MU *Cratoxylum cochinchinense* (root). Ref: 4423.

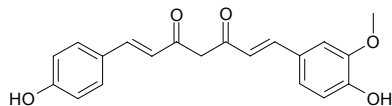




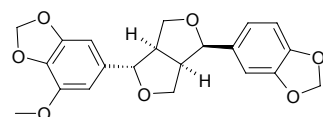
**5045 Demethoxycurcumin**

1-(4-Hydroxy-3-methoxyphenyl)-7-(4-hydroxyphenyl)-1,6-heptadiene-3,5-dione C<sub>20</sub>H<sub>18</sub>O<sub>5</sub> (338.36). Yellow needles, mp 180–181°C. **Pharm:**

Neuroprotective (*in vitro* protects PC12 cells from  $\beta$ -Amyloid insult: anti- $\beta$ A(25-35), ED<sub>50</sub> = (4.0±0.5)μg/mL; anti- $\beta$ A(1-41), ED<sub>50</sub> = (5.0±0.5)μg/mL; control Congo red: anti- $\beta$ A(25-35), ED<sub>50</sub> = (37.5±5.4)μg/mL; anti- $\beta$ A(1-41), ED<sub>50</sub> = (39.2±5.2)μg/mL). **Source:** JIANG HUANG *Curcuma longa* (turmeric powder: yield = 0.0012%dw). **Ref:** 4643.

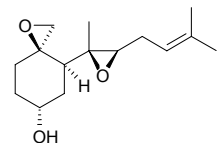
**5046 (+)-5'-Demethoxyepiexcelsin**

C<sub>21</sub>H<sub>20</sub>O<sub>7</sub> (384.39). Colorless crystals (Me<sub>2</sub>CO), [α]<sub>D</sub><sup>20</sup> = +116.3° (c = 1.35, CHCl<sub>3</sub>) **Source:** DIE DA LAO *Litsea verticillata*. **Ref:** 1984.

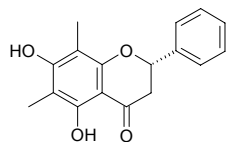
**5047 5-Demethoxyfumagillol**

(3*R*,4*R*,6*R*)-4-[(2*R*,3*R*)-2-Methyl-3-(3-methyl-but-2-enyl)-oxiranyl]-1-oxa-spiro[2,5]octan-6-ol C<sub>15</sub>H<sub>24</sub>O<sub>5</sub> (252.36). Colorless oil. **Pharm:**

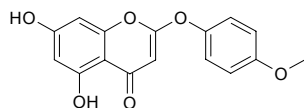
Anti-angiogenic (angiogenesis inhibitor, calf CPAE cell, IC<sub>50</sub> = 7.06μmol/L, control TNP-470, IC<sub>50</sub> = 0.0011μmol/L, mus L5178Y cell, IC<sub>50</sub> > 39.6μmol/L, control TNP-470, IC<sub>50</sub> > 24.5μmol/L). **Source:** YAN QU MEI *Aspergillus fumigatus*. **Ref:** 4061.

**5048 Demethoxymatteucinol**

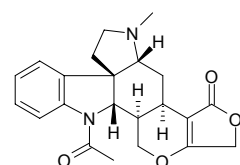
C<sub>17</sub>H<sub>16</sub>O<sub>4</sub> (284.31). [α]<sub>D</sub><sup>25</sup> = -48.1° (c = 0.52, acetone). **Source:** YANG PU TAO YE *Syzygium samarangense*. **Ref:** 4100.

**5049 6-Demethoxy-4'-methoxycapillarisin**

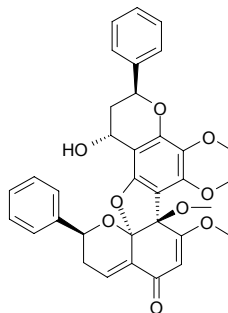
C<sub>16</sub>H<sub>12</sub>O<sub>6</sub> (300.27). **Source:** YIN CHEN HAO *Artemisia capillaris*. **Ref:** 2.

**5050 11-Demethoxymyrtoidine**

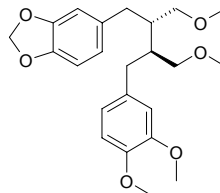
C<sub>22</sub>H<sub>24</sub>N<sub>2</sub>O<sub>4</sub> (380.45). Crystals (EtOAc-*n*-hexane), mp 237–240°C, [α]<sub>D</sub><sup>20</sup> = -28.9° (c = 0.4, CH<sub>2</sub>Cl<sub>2</sub>). **Source:** *Strychnos myrtoides*. **Ref:** 2297.

**5051 6''-Demethoxyneocalyopteron**

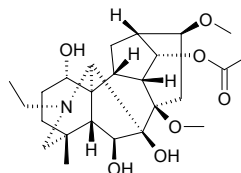
C<sub>34</sub>H<sub>32</sub>O<sub>9</sub> (584.63). Pale amorphous solid, mp 157–159°C (Et<sub>2</sub>O-petrol), [α]<sub>D</sub><sup>20</sup> = -199.14° (c = 0.350). **Source:** E CHI TENG *Calycopteris floribunda* (green part). **Ref:** 3779.

**5052 5-Demethoxyniranthin**

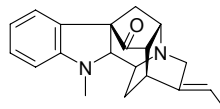
C<sub>23</sub>H<sub>30</sub>O<sub>6</sub> (402.49). White amorphous solid, [α]<sub>D</sub><sup>25</sup> = +15.4° (c = 0.19). **Source:** YE XIA ZHU *Phyllanthus urinaria*. **Ref:** 3410.

**5053 18-Demethoxypubescenine**

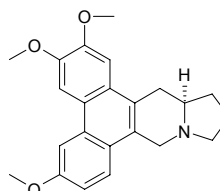
C<sub>23</sub>H<sub>30</sub>NO<sub>7</sub> (465.59). Amorphous solid, [α]<sub>D</sub><sup>25</sup> = +1.1° (c = 0.4, CHCl<sub>3</sub>). **Source:** DONG FANG FEI YAN CAO *Consolida orientalis* (aerial parts). **Ref:** 4283.

**5054 Demethoxypurpeline**

C<sub>20</sub>H<sub>22</sub>N<sub>2</sub>O (306.41). Yellow amorphous solid **Source:** BA XI LUO FU MU *Rauwolfia bahiensis*. **Ref:** 1952.

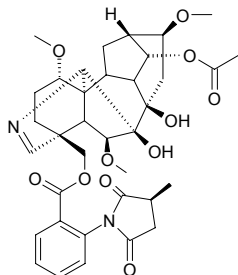
**5055 7-Demethoxytylophorine**

Antofine C<sub>23</sub>H<sub>25</sub>NO<sub>3</sub> (363.46). Yellow needles (MeOH-CHCl<sub>3</sub>), [α]<sub>D</sub><sup>26</sup> = -115.30° (c = 0.477, CHCl<sub>3</sub>); colorless gum, [α]<sub>D</sub><sup>21</sup> = -58.3° (c = 0.11, CHCl<sub>3</sub>). **Pharm:** Cytotoxic (inhibits growth of hmn cancer cells, hmn lung cancer cells A549, IC<sub>50</sub> = (7.0±0.2)ng/mL, control Ellipticine, IC<sub>50</sub> = (500±25)ng/mL; hmn colon cancer cells Col2, IC<sub>50</sub> = (8.6±0.3)ng/mL, Ellipticine, IC<sub>50</sub> = (340±35)ng/mL; action mechanism is to arrest in the G2/M phase of cell cycle)<sup>[5342]</sup>. **Source:** NIU XIN PIAO ZI *Cynanchum komarovii*, XU CHANG QING *Cynanchum paniculatum* (root). **Ref:** 2206, 5342.

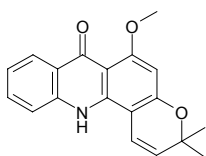


**5056 14-Demethyl-14-acetylanhweidelphinine**

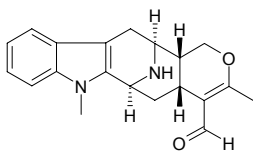
$C_{36}H_{44}N_2O_{11}$  (680.76). Amorphous,  $[\alpha]_D^{25} = +67.1^\circ$  ( $c = 0.16$ ,  $CHCl_3$ ).  
 Source: WU ZHU FEI YAN CAO *Delphinium pentagynum* (aerial parts).  
 Ref: 3831.

**5057 N-Demethyl-acronycine**

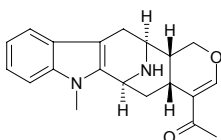
[13255-08-8]  $C_{19}H_{17}NO_3$  (307.35). Source: JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*]. Ref: 11.

**5058 N(4)-Demethylalstonerinal**

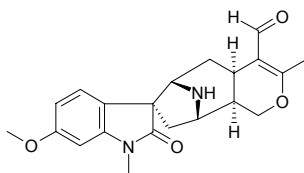
$C_{20}H_{22}N_2O_2$  (322.41). Source: XIA YE JI GU CHANG SHAN *Alstonia angustifolia* (leaf). Ref: 3780.

**5059 N(4)-Demethylalstonerine**

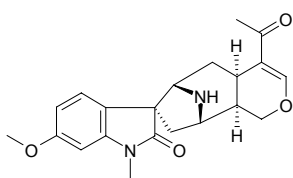
$C_{20}H_{22}N_2O_2$  (322.41). Source: XIA YE JI GU CHANG SHAN *Alstonia angustifolia* (leaf). Ref: 3780.

**5060 N(4)-Demethylalstophyllal oxindole**

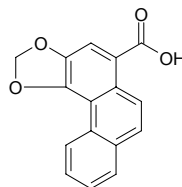
$C_{21}H_{24}N_2O_4$  (368.44). Source: DA YE TANG JIAO SHU *Alstonia macrophylla* (leaf: yield = 0.00001%). Ref: 3020.

**5061 N(4)-Demethylalstophylline oxindole**

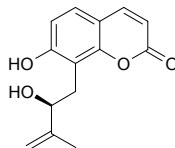
$C_{21}H_{24}N_2O_4$  (368.44). Source: DA YE TANG JIAO SHU *Alstonia macrophylla* (leaf: yield = 0.00003%). Ref: 3020.

**5062 Demethylaristofolin E**

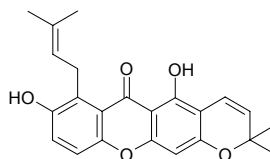
3,4-Methylenedioxyphenanthrene-1-carboxylic acid  $C_{16}H_{10}O_4$  (266.26). Yellow crystalline solid ( $CHCl_3/(CH_3)_2CO$ ), mp 256~258°C. Pharm: Anti-HIV inactive (*in vitro*, acutely infected H-9 lymphocyte cells)<sup>[4706]</sup>; cytotoxic inactive (*in vitro*, MCF7 and A549). Source: GUAN MU TONG *Aristolochia manshuriensis* (stem: yield = 0.00083%). Ref: 4706.

**5063 Demethylaurapteneol**

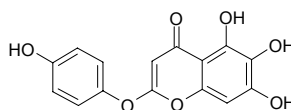
(S)-(-)-7-Hydroxy-8-(2-hydroxy-3-methyl-but-3-enyl)-2H-1-benzopyran-2-one  $C_{14}H_{14}O_4$  (246.27). Pharm: Antineoplastic (Raji cells, antitumor promotor, *in vivo*, inhibits TPA-induced EBV-EA activation, compound concentration = 500(mol ratio/32 pmol TPA): EBV-EA-positive cells = (15.3±1.6)% (viability > 80%),  $\beta$ -Carotene, EBV-EA-positive cells = (34.3±1.1)% (viability >80), Curcumin, EBV-EA-positive cells = (22.8±1.8)% (viability > 80%), compound  $IC_{50} = 207$ (mol ratio/32 pmol TPA),  $\beta$ -Carotene,  $IC_{50} = 400$ (mol ratio/32 pmol TPA), Curcumin,  $IC_{50} = 341$ (mol ratio/32 pmol TPA))<sup>[5048]</sup>. Source: TAI WAN HUANG BO *Phellodendron amurense* var. *wilsonii* (leaf: yield = 0.00016%dw), *Citrus hassaku*. Ref: 4722, 5048.

**5064 Demethylcalabaxanthone**

1,7-Dihydroxy-8-(3-methylbut-2-enyl)-6',6'-dimethylpyrano(2',3':3,2)-xanthone  $C_{23}H_{22}O_5$  (378.43). Pharm: Cytotoxic (KB cancer cell lines,  $IC_{50} = 10.9\mu g/mL$ , control Ellipticine,  $IC_{50} = 1.33\mu g/mL$ ; BC-1,  $IC_{50} = 2.85\mu g/mL$ , Ellipticine,  $IC_{50} = 1.46\mu g/mL$ ; NCI-H187,  $IC_{50} = 3.13\mu g/mL$  Ellipticine,  $IC_{50} = 0.39\mu g/mL$ )<sup>[1619]</sup>; antitubercular (*Mycobacterium tuberculosis*, MIC = 12.5 $\mu g/mL$ )<sup>[4358]</sup>. Source: DAO NIAN ZI *Garcinia mangostana* (unripe fruit: yield = 0.0068%dw)<sup>[1619]</sup>. Ref: 1619, 4358.

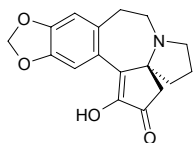
**5065 6-Demethylcapillaridin**

$C_{15}H_{10}O_7$  (302.24). Yellow needles, mp 272~274°C. Source: HUANG HAO *Artemisia scoparia* [Syn. *Artemisia capillaris* var. *scoparia*] (bud). Ref: 4815.

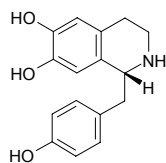


**5066 Demethylcephalotaxinone**

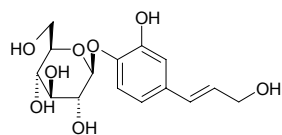
$C_{17}H_{17}NO_4$  (299.33). Source: HAI NAN CU FEI *Cephalotaxus hainanensis* [Syn. *Cephalotaxus manii*], SAN JIAN SHAN *Cephalotaxus fortunei* (drupe: yield = 0.00020%)<sup>[4675]</sup>, ZHONG GUO CU FEI ZHI YE *Cephalotaxus sinensis* [Syn. *Cephalotaxus harringtonia* var. *sinensis*]. Ref: 2, 660, 4675.

**5067 Demethylcoclaurine**

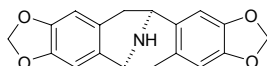
Higenamine [5843-65-2]  $C_{16}H_{17}NO_3$  (271.32). mp 260~262°C. Pharm: Enhances cardiac motility; raises heart rate; antiasthmatic (gpg, asthma caused by histamine, bronchial smooth muscle relaxant); treatment of chronic arrhythmia; coronary, cerebral and peripheral vasodilator. Source: FU ZI *Aconitum carmichaeli*, LIAN ZI *Nelumbo nucifera*, XIAO YE MAI MA TENG *Gnetum parvifolium* [Syn. *Gnetum indicum*], RI BEN WU TOU *Aconitum japonicum*, WU TOU *Aconitum carmichaeli*. Ref: 2, 4, 658, 1521, 5501.

**5068 Demethyl coniferin**

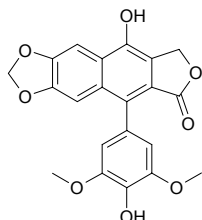
$C_{15}H_{20}O_8$  (328.32). White powder. Source: SHAN TONG ZI *Idesia polycarpa*. Ref: 2494.

**5069 (-)-N-Demethylerychine**

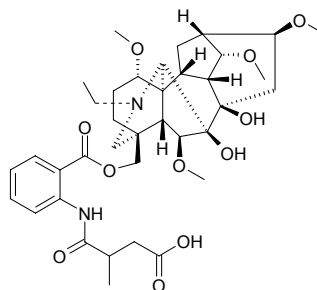
$C_{18}H_{15}NO_4$  (309.32). Yellow powder (acetone),  $[\alpha]_D^{20} = -74.3^\circ$  ( $c = 0.02$ , MeOH). Source: HOU KE GUI *Cryptocarya chinensis* (wood). Ref: 3092.

**5070 4'-Demethyldehydropodophyllotoxin**

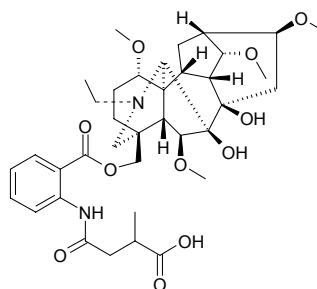
$C_{21}H_{16}O_8$  (396.36). White needles, mp > 320°C. Source: LIU JIAO LIAN *Dysosma pleiantha* [Syn. *Podophyllum pleianthum*]. Ref: 4801.

**5071 Demethyldelavaine A**

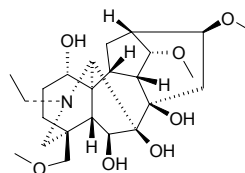
$C_{37}H_{52}N_2O_{11}$  (700.83). Source: FU ZI *Aconitum carmichaeli*. Ref: 16.

**5072 Demethyldelavaine B**

$C_{37}H_{52}N_2O_{11}$  (700.83). Source: FU ZI *Aconitum carmichaeli*. Ref: 16.

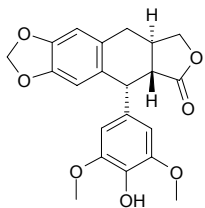
**5073 6-Demethyldeisoline**

$C_{24}H_{39}NO_7$  (453.58). Colorless massive crystals, mp 202~204°C. Source: ZI HUA GAO WU TOU *Aconitum excelsum*. Ref: 689.

**5074 4'-Demethyldeoxypodophyllotoxin**

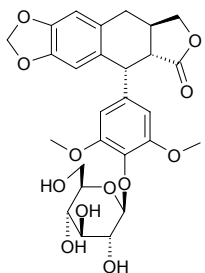
4-Demethyl-deoxypodophyllotoxin  $C_{21}H_{20}O_7$  (384.39). Colorless lamellar crystals, mp 246~248°C,  $[\alpha]_D^{20} = -127.3^\circ$  ( $c = 0.11$ ,  $CHCl_3$ ). Pharm: Antineoplastic (P<sub>388</sub>); antimitotic; cytotoxic (KB, ED<sub>50</sub> = 0.0012μg/mL); cytotoxic (KB, IC<sub>50</sub> = 17.7ng/mL, control Vinblastine, IC<sub>50</sub> = 9.7ng/mL; LNCaP, IC<sub>50</sub> = 10.0ng/mL, Vinblastine, IC<sub>50</sub> = 10.5ng/mL; Col2, IC<sub>50</sub> = 23.1ng/mL, Vinblastine, IC<sub>50</sub> = 8.1ng/mL)<sup>[5336]</sup>. Source: BAI BA JIAO LIAN *Dysosma majorensis* [Syn. *Podophyllum majorensis*; *Dysosma lichuanensis*] (rhizome: content = 0.0089%)<sup>[5508]</sup>, BI LIN BA JIAO LIAN *Dysosma furfuracea* (rhizome: mean content in different seasons = 0.75%)<sup>[5508]</sup>, CHONG MING BA JIAO LIAN *Dysosma subrosea* (rhizome: content = 0.020%)<sup>[5508]</sup>, CHUAN BA JIAO LIAN *Dysosma veitchii* (rhizome: content = 0.0092%)<sup>[5508]</sup>, DA XIAN YUAN ZHI *Polygala macradenia*, GUANG XI BA JIAO LIAN *Dysosma guangxiensis* (rhizome: content = 0.0042%)<sup>[5508]</sup>, GUI JIU *Dysosma versipellis* [Syn. *Podophyllum versipelle*] (rhizome: content = 0.15%)<sup>[5508]</sup>, LIU JIAO LIAN *Dysosma pleiantha* [Syn. *Podophyllum pleianthum*] (rhizome: content = 0.076%)<sup>[5508]</sup>, LUN SHENG SHAN XIANG *Hyptis verticillata*, PEI NI YUAN ZHI *Polygala paenea*, TAO ER QI *Podophyllum emodii* [Syn. *Podophyllum emodii* var. *chinense*; *Podophyllum sikkimensis*; *Sinopodophyllum emodii*] (rhizome: mean

content of 3 origins = 0.46%<sup>[5508]</sup>), WO ER QI *Diphylleia sinensis* (rhizome: content = 0.56%<sup>[5508]</sup>), XI MA LA YA YUAN ZHI *Polygala emodi*, XIAO BA JIAO LIAN *Dysosma difformis* (rhizome: content = 0.0031%<sup>[5508]</sup>), YUE NAN LIE LAN *Bursera tonkinensis* (root), ZU YE CAO *Polygala peltatum*. Ref: 661, 3543, 5336, 5508.



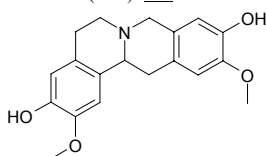
**5075 4'-Demethyldeoxypodophyllotoxin-4-O-β-D-glucoside**

C<sub>27</sub>H<sub>30</sub>O<sub>12</sub> (546.53). [α]<sub>D</sub><sup>20</sup> = +20.6° (c = 0.14, CHCl<sub>3</sub>). Pharm: Cytotoxic inactive (100 μg/mL: KB, LNCaP, and Col2 cells). Source: YUE NAN LIE LAN *Bursera tonkinensis* (root). Ref: 5336.



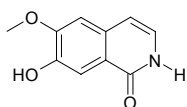
**5076 (-)-10-O-Demethyldiscretine**

C<sub>19</sub>H<sub>21</sub>NO<sub>4</sub> (327.38). Source: YOU GOU YING ZHAO *Artabotrys uncinatus* (root). Ref: 3083.



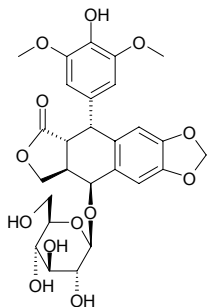
**5077 N-Demethyldoryphornine**

7-Hydroxy-6-methoxy-1(2H)-isoquinolinone C<sub>10</sub>H<sub>9</sub>NO<sub>3</sub> (191.19). Colorless rods (MeOH), mp 257–259°C. Source: BIAN FU GE GEN *Menispermum dauricum*. Ref: 3792.



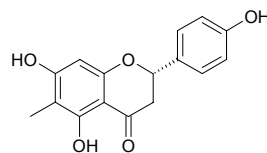
**5078 4-Demethylepipodophyllotoxin 7'-O-β-D-glucopyranoside**

C<sub>27</sub>H<sub>30</sub>O<sub>13</sub> (562.53). White needles, [α]<sub>D</sub><sup>15</sup> = -29.3° (c = 0.63, MeOH). Source: TAO ER QI *Podophyllum emodii* [Syn. *Podophyllum emodii* var. *chinense*; *Podophyllum sikkimensis*; *Sinopodophyllum emodii*] (root and rhizome). Ref: 4142.



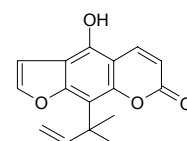
**5079 8-Demethylfarrerol**

C<sub>16</sub>H<sub>14</sub>O<sub>5</sub> (286.29). mp 267–270°C. Source: MAN SHAN HONG *Rhododendron dauricum*. Ref: 6, 507.



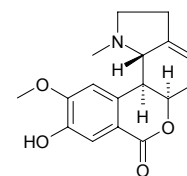
**5080 Demethylfuropinnarin**

C<sub>16</sub>H<sub>14</sub>O<sub>4</sub> (270.29). Source: JU MAO LEI A WEI *Ferulago capillaries* (aerial parts), QIANG HUO *Notopterygium incisum*, KUAN YE QIANG HUO *Notopterygium forbesii* [Syn. *Notopterygium franchetii*]. Ref: 2, 325, 660, 3938.



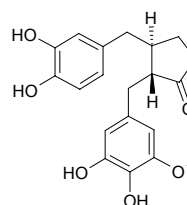
**5081 9-Demethylhomolycorine**

[6879-81-8] C<sub>17</sub>H<sub>19</sub>NO<sub>4</sub> (301.35). mp 213–214°C. Pharm: Cytotoxic (hmn lymphoma Molt4, ED<sub>50</sub> = 18.5 μg/mL, mouse fiber cell LMTK, ED<sub>50</sub> = 0.8 μg/mL). Source: SHI SUAN *Lycoris radiata* [Syn. *Amaryllis radiata*]. Ref: 6, 1847.



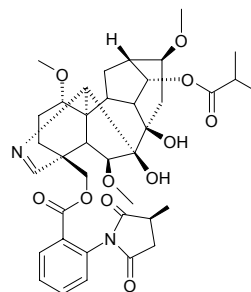
**5082 (-)-3'-O-Demethyl-5-hydroxymatairesinol**

(8*R*,8'*R*)-3'-*O*-Demethyl-5-hydroxymatairesinol C<sub>19</sub>H<sub>20</sub>O<sub>7</sub> (360.37). [α]<sub>D</sub><sup>23</sup> = -27.5° (c = 0.10, MeOH). Source: *Macrocculus pomiferus* (stem). Ref: 3869.



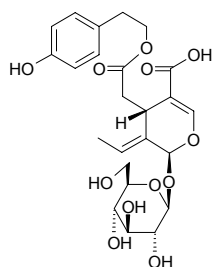
**5083 14-Demethyl-14-isobutyrylanhweidelphinine**

C<sub>38</sub>H<sub>48</sub>N<sub>2</sub>O<sub>11</sub> (708.81). Amorphous substance, [α]<sub>D</sub><sup>25</sup> = +65.2° (c = 0.14, CHCl<sub>3</sub>). Source: WU ZHU FEI YAN CAO *Delphinium pentagynum* (aerial parts). Ref: 3831.

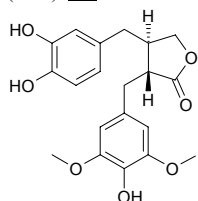


**5084 Demethyligstroside**

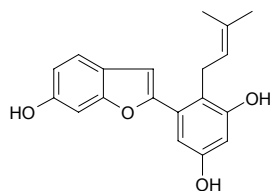
$C_{24}H_{30}O_{12}$  (510.50). Colorless amorphous powder,  $[\alpha]_D^{26} = -110^\circ$  ( $c = 0.32$ , MeOH). Source: MEI GUO BAI CEN *Fraxinus americana* (leaf). Ref: 5091.

**5085 (-)-3'-O-Demethyl-5-methoxymatairesinol**

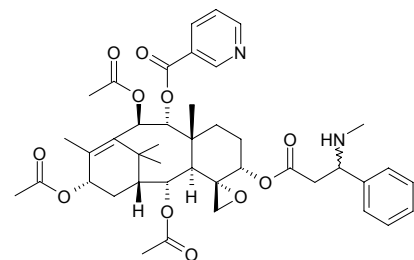
(8*R*,8'*R*)-3'-*O*-Demethyl-5-methoxymatairesinol  $C_{20}H_{22}O_7$  (374.39).  $[\alpha]_D^{23} = -6.0^\circ$  ( $c = 0.12$ , MeOH). Source: *Macrococculus pomiferus* (stem). Ref: 3869.

**5086 Demethylmoracin I**

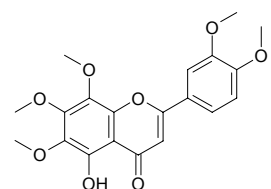
Anticancer Benzofuran PMV70P691-006  $C_{19}H_{18}O_4$  (310.35). Brown powder, mp 82~83°C. Pharm: Aromatase inhibitor (*in vitro*,  $IC_{50} = 31 \mu\text{mol/L}$ ; control Aminoglutethimide,  $IC_{50} = 6.4 \mu\text{mol/L}$ )<sup>[3090,5038]</sup>. Source: GOU SHU *Broussonetia papyrifera*. Ref: 3090, 5038.

**5087 N-Demethylnicaustrine**

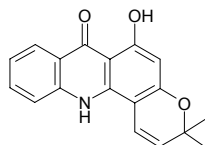
[126617-16-1]  $C_{42}H_{52}N_2O_{11}$  (760.89). Source: AO DA LI YA HONG DOU SHAN *Austrotaxus spicata*. Ref: 662.

**5088 Demethylnobiletin**

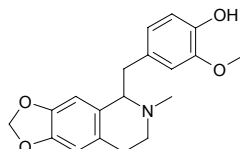
5-Hydroxy-6,7,8,3',4'-pentamethoxyflavone [2174-59-6]  $C_{20}H_{20}O_8$  (388.38). mp 144°C. Source: A ER TAI ZI WAN *Heteropappus altaicus*, JU PI *Citrus reticulata*. Ref: 2, 6.

**5089 N-Demethylnoracronycine**

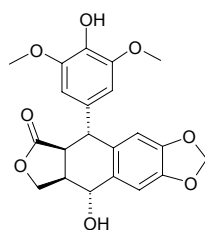
[13396-93-5]  $C_{18}H_{15}NO_3$  (293.33). Source: JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*]. Ref: 11.

**5090 N-Demethylphylocryptine**

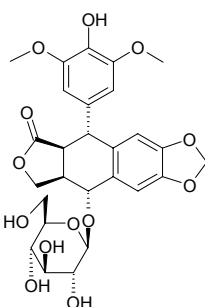
$C_{19}H_{21}NO_4$  (327.38). Source: HOU KE GUI *Cryptocarya chinensis* (wood). Ref: 3092.

**5091 4-Demethyl-picropodophyllotoxin**

$C_{21}H_{20}O_8$  (400.39). Source: TAO ER QI *Podophyllum emodii* [Syn. *Podophyllum emodii* var. *chinense*; *Podophyllum sikkimense*; *Sinopodophyllum emodii*] (root and rhizome). Ref: 3543.

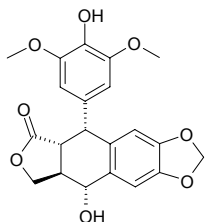
**5092 4-Demethyl-picropodophyllotoxin 7'-O-beta-D-glucopyranoside**

$C_{27}H_{30}O_{13}$  (562.53). White powder,  $[\alpha]_D^{29} = -5.18^\circ$  ( $c = 0.6$ , MeOH). Source: TAO ER QI *Podophyllum emodii* [Syn. *Podophyllum emodii* var. *chinense*; *Podophyllum sikkimense*; *Sinopodophyllum emodii*] (root and rhizome). Ref: 3543.

**5093 4-Demethyl-podophyllotoxin**

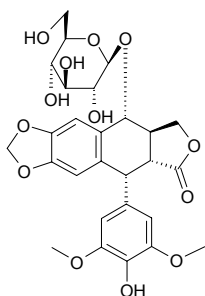
4'-Demethylpodophyllotoxin [40505-27-9]  $C_{21}H_{20}O_8$  (400.39). Pharm: Antineoplastic; antimitotic; antiviral; laxative; used in treatment of skin cancer; supertoxic agent. Source: BAI BA JIAO LIAN *Dysosma majorensis* [Syn. *Podophyllum majorensis*; *Dysosma lichuanensis*] (rhizome: content = 0.013%)<sup>[5508]</sup>, BAI YA MA *Linum album*, BI LIN BA JIAO LIAN *Dysosma furfuracea* (rhizome: mean content in different seasons = 0.47%)<sup>[5508]</sup>, CHONG MING BA JIAO LIAN *Dysosma subrosea* (rhizome: content = 0.48%)<sup>[5508]</sup>, CHUAN BA JIAO LIAN *Dysosma veitchii* (rhizome: content = 0.022%)<sup>[5508]</sup>, GUANG XI BA JIAO LIAN *Dysosma guangxiensis* (rhizome: content = 0.0071%)<sup>[5508]</sup>, GUI JIU *Dysosma versipellis* [Syn. *Podophyllum versipelle*] (rhizome: content = 0.0053%)<sup>[5508]</sup>, KU YUAN ZHI *Polygala polygama*, LIU JIAO

LIAN *Dysosma pleiantha* [Syn. *Podophyllum pleianthum*] (rhizome: mean content = 0.11%)<sup>[5508]</sup>, TAO ER QI *Podophyllum emodii* [Syn. *Podophyllum emodii* var. *chinense*; *Podophyllum sikkimense*; *Sinopodophyllum emodii*] (rhizome: mean content of 5 origins = 0.63%)<sup>[5508]</sup>, WO ER QI *Diphylleia sinensis* (rhizome: mean content of 4 origins = 0.78%)<sup>[5508]</sup>, XIAO BA JIAO LIAN *Dysosma difformis* (rhizome: content = 0.22%)<sup>[5508]</sup>. Ref: 658, 3543, 5508.



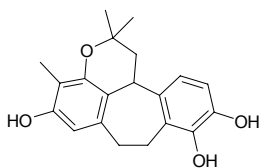
#### 5094 4-Demethyl-podophyllotoxin 7'-O-β-D-glucopyranoside

C<sub>27</sub>H<sub>30</sub>O<sub>13</sub> (562.53). Source: TAO ER QI *Podophyllum emodii* [Syn. *Podophyllum emodii* var. *chinense*; *Podophyllum sikkimense*; *Sinopodophyllum emodii*] (root and rhizome). Ref: 3543.



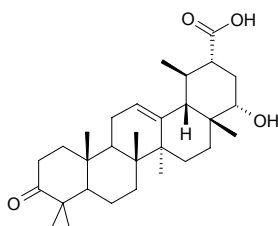
#### 5095 Demethylracemosol

C<sub>20</sub>H<sub>22</sub>O<sub>4</sub> (326.40). Pharm: Cytotoxic (KB, EC<sub>50</sub> = 5.6 μg/mL, control Ellipticine, EC<sub>50</sub> = 0.3 μg/mL; BC, EC<sub>50</sub> = 3.6 μg/mL, Ellipticine, EC<sub>50</sub> = 0.3 μg/mL)<sup>[5092]</sup>; antimalarial (*Plasmodium falciparum*, EC<sub>50</sub> = 2.0 μg/mL, control Chloroquine diphosphate, EC<sub>50</sub> = 0.16 μg/mL). Source: MA LA BA YANG TI JIA *Bauhinia malabarica* (root). Ref: 5092.



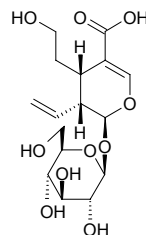
#### 5096 Demethylregelin

C<sub>30</sub>H<sub>46</sub>O<sub>4</sub> (470.70). Pharm: DPPH scavenger inactive (for 40 μmol/L DPPH radical, SC<sub>50</sub> > 40 μmol/L). Source: SUO LA MU *Salacia prinoides* [Syn. *Salacia chinensis*] (stem). Ref: 4378.



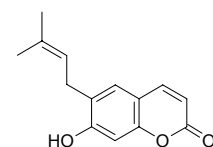
#### 5097 Demethylsecologanol

C<sub>16</sub>H<sub>24</sub>O<sub>10</sub> (376.36). Amorphous, [α]<sub>D</sub><sup>23</sup> = -108.3° (c = 0.06, MeOH). Source: LIU QIU SHE GEN CAO *Ophiorrhiza liukiensis* (whole herb). Ref: 4527.



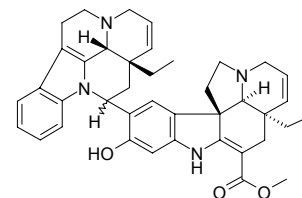
#### 5098 7-Demethylsuberosin

[12422-04-8] C<sub>14</sub>H<sub>14</sub>O<sub>3</sub> (230.27). Pharm: AChE inhibitor (*in vitro*, IC<sub>50</sub> = 2.4 mmol/L)<sup>[3058]</sup>; antineoplastic (Raji cells, antitumor promotor, *in vivo*, inhibits TPA-induced EBV-EA activation, compound concentration = 500 (mol ratio/32 pmol TPA), EBV-EA-positive cells = (15.4 ± 1.7)% (viability = 60%), β-Carotene, EBV-EA-positive cells = (34.3 ± 1.1)% (viability > 80%), Curcumin, EBV-EA-positive cells = (22.8 ± 1.8)% (viability > 80%); IC<sub>50</sub> = 172 (mol ratio/32 pmol TPA), β-Carotene, IC<sub>50</sub> = 400 (mol ratio/32 pmol TPA), Curcumin IC<sub>50</sub> = 341 (mol ratio/32 pmol TPA)<sup>[5048]</sup>. Source: BAI ZHI *Angelica dahurica* [Syn. *Angelica porphyrocaulis*], CHAO XIAN DANG GUI *Angelica gigas* (underground part)<sup>[3058]</sup>, LI HUA JU *Citrus tachibana*, *Citrus rugulosa*, *Citrus jambhiri*, *Citrus sulcata*, *Citrus tamurana*. Ref: 2, 3058, 5048.



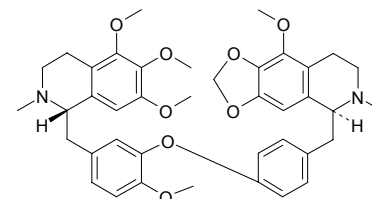
#### 5099 De-O-methyltenucausine

[221640-45-5] C<sub>40</sub>H<sub>44</sub>N<sub>4</sub>O<sub>3</sub> (628.82). White amorphous powder, mp 190°C, [α]<sub>D</sub><sup>13</sup> = -198.5° (c = 0.047, CHCl<sub>3</sub>). Source: CHUAN SHAN CHENG *Melodinus hemsleyanus*. Ref: 412.



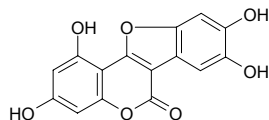
#### 5100 N-Demethylthalistyline

[62251-51-8] C<sub>40</sub>H<sub>48</sub>N<sub>2</sub>O<sub>8</sub> (682.82). Yellow amorphous powder, [α]<sub>D</sub><sup>25</sup> = +151° (c = 0.2, methanol). Pharm: Antibacterial (*Mycobacterium smegmatis*, MIC ≤ 100 μg/mL); antihypertensive (dog, rbt). Source: CHANG ZHU TANG SONG CAO *Thalictrum longistylum*, BING GUO TANG SONG CAO *Thalictrum podocarpum*. Ref: 661.

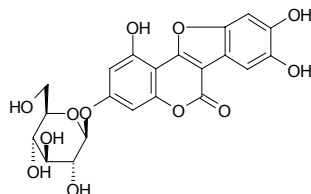


**5101 Demethylwedelolactone**

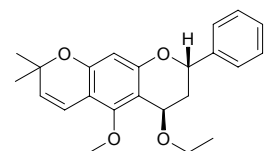
Norwedelolactone [6468-55-9]  $C_{15}H_8O_7$  (300.23). Green needles (MeOH), mp 360°C. **Pharm:** Antihepatotoxin (rat, liver toxicosis induced by  $CCl_4$ ,  $GaIn$  and phalloidin, 67.6 $\mu$ g/mL for liver toxicosis induced by phalloidin, InRt = 98%,  $CD_{50}$  = 22.3 $\mu$ g/mL, promotes regeneration of liver cells obviously); hemostatic ( $ED_{50}$  = 0.3mg/kg, 0.5mg/kg reduces bleeding time by 4.2min); antifungal (*Aspergillus niger*, 100mg/L InRt = 50%). **Source:** MO HAN LIAN *Eclipta prostrata* [Syn. *Eclipta alba*], PENG QI JU *Wedelia chinensis* [Syn. *Solidago chinensis*; *Wedelia calendulacea*], XIAO LIAN QIAO *Hypericum erectum*. **Ref:** 6, 2754, 2755, 2756, 2757, 2758, 2759, 2760.

**5102 Demethylwedelolactone-7-glucoside**

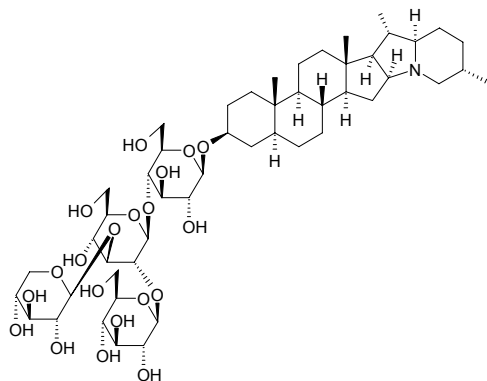
$C_{21}H_{18}O_{12}$  (462.37). **Source:** MO HAN LIAN *Eclipta prostrata* [Syn. *Eclipta alba*]. **Ref:** 6.

**5103 4β-Demethylxuanlanin-4β-ethyl ether**

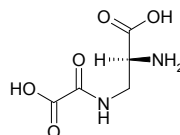
4β-Ethoxy-5-methoxy-6'',6''-dimethyl-2H-pyrano-(2'',3'':7,6)-flavan  $C_{23}H_{26}O_4$  (366.46). Yellow oil. **Source:** *Lonchocarpus xuul* (stem cortex). **Ref:** 3973.

**5104 Demissine**

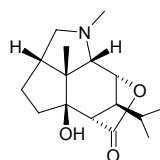
[6077-69-6]  $C_{50}H_{83}NO_{20}$  (1018.21). **Pharm:** Antifungal; cardiotonic. **Source:** CHA QIE *Solanum chacoense*, KE MO SEN QIE *Solanum commersonii*, AI QIE *Solanum demissum*, SHI XIAN QIE *Solanum decemlineata*, JU SHI QIE *Solanum juzepczukii*. **Ref:** 658, 661.

**5105 (S)-Dencichine**

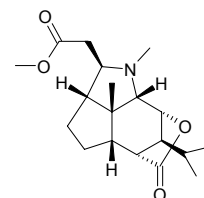
[5302-45-4]  $C_5H_8N_2O_5$  (176.13). **Pharm:** Hemostatic (mouse, perfusion in stomach, 1mg/kg, platelets increase = (24~30)%<sup>[5501]</sup>;  $LD_{50}$  (mouse, perfusion in stomach) = (836±17)mg/kg<sup>[5501]</sup>. **Source:** SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*] (root: mean content in different standards = 0.350%<sup>[5508]</sup>; 0.87%<sup>[5501]</sup>). **Ref:** 1521, 5501, 5508.

**5106 Dendramine**

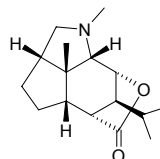
[7668-75-9]  $C_{16}H_{25}NO_3$  (279.38). mp 186~188°C. **Source:** SHI HU<sup>(4)</sup> *Dendrobium nobile*. **Ref:** 6.

**5107 Dendrine**

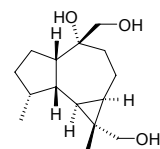
[2651-57-2]  $C_{19}H_{29}NO_4$  (335.45). mp 191~192°C. **Source:** SHI HU<sup>(4)</sup> *Dendrobium nobile*. **Ref:** 6.

**5108 Dendrobine**

[2115-91-5]  $C_{16}H_{25}NO_2$  (263.38). mp 135~136°C. **Pharm:** Antipyretic; causes hyperspasmia in toxic doses; inhibits respiration; antihypertensive; analgesic; uterine stimulant. **Source:** SHI HU<sup>(4)</sup> *Dendrobium nobile* (the compound was isolated from the plant by Y.Inubushi, et al. in 1965)<sup>[5505]</sup>, FEN LAI SHI HU *Dendrobium findleyanum*. **Ref:** 6, 658, 5501, 5505.

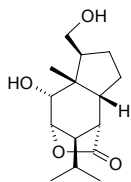
**5109 Dendrobiumane A**

$C_{13}H_{26}O_3$  (254.37). Colorless gum,  $[\alpha]_D^{24} = +2.3^\circ$  ( $c = 0.35$ , EtOH). **Source:** XI JING SHI HU *Dendrobium moniliforme* (fresh stem). **Ref:** 5490.

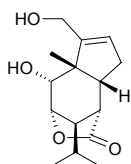


**5110 Dendrobiumane B**

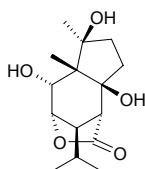
$C_{15}H_{24}O_4$  (268.36). Colorless gum,  $[\alpha]_D^{23} = -7.0^\circ$  ( $c = 0.80$ , EtOH). Source: XI JING SHI HU *Dendrobium moniliforme* (fresh stem). Ref: 5490.

**5111 Dendrobiumane C**

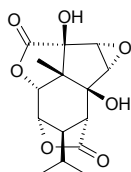
$C_{15}H_{22}O_4$  (266.34). Colorless gum,  $[\alpha]_D^{24} = +122.7^\circ$  ( $c = 0.05$ , EtOH). Source: XI JING SHI HU *Dendrobium moniliforme* (fresh stem). Ref: 5490.

**5112 Dendrobiumane D**

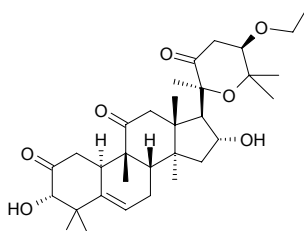
$C_{15}H_{24}O_5$  (284.36). Colorless gum,  $[\alpha]_D^{23} = +5.7^\circ$  ( $c = 0.31$ , EtOH). Source: XI JING SHI HU *Dendrobium moniliforme* (fresh stem). Ref: 5490.

**5113 Dendrobiumane E**

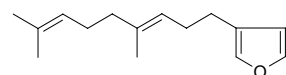
$C_{15}H_{18}O_7$  (310.31). Colorless gum,  $[\alpha]_D^{24} = +4.1^\circ$  ( $c = 0.21$ , EtOH). Source: XI JING SHI HU *Dendrobium moniliforme* (fresh stem). Ref: 5490.

**5114 Dendrocycin**

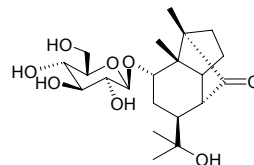
Isocucurbitacin; 24 $\beta$ -Ethoxy-20-25-epoxy-3 $\alpha$ ,16 $\alpha$ -dihydroxy-9-methyl-19-norlanost-5(6) ene-2,11,22-trione  $C_{32}H_{48}O_7$  (544.74). White prisms (methanol), mp 195–198°C. Source: *Dendrosicyos socotrana* (stem). Ref: 3855.

**5115 Dendrolasin**

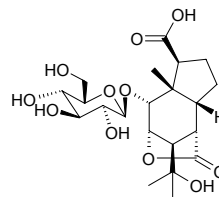
[23262-34-2]  $C_{15}H_{22}O$  (218.34). bp 148–150°C/16mmHg. Source: TAN XIANG *Santalum album*. Ref: 6.

**5116 Dendromoniliside A**

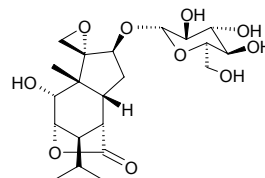
2 $\alpha$ ,12-Dihydroxycopacamphan-15-one 2-*O*- $\beta$ -*D*-glucopyranoside  $C_{21}H_{34}O_8$  (414.5). White amorphous powder, mp 215–216°C (dec),  $[\alpha]_D^{20} = 0.6^\circ$  ( $c = 0.4$ , H<sub>2</sub>O). Pharm: Proliferation stimulator (B cells *in vitro*, 0.00001 mol/L,  $p < 0.05$ ); proliferation inhibitor (T cells *in vitro*, 0.0000001 mol/L,  $p < 0.05$ , without any obvious cytotoxic effects). Source: XI JING SHI HU *Dendrobium moniliforme* (stem: yield = 0.0007%dw). Ref: 4717.

**5117 Dendromoniliside B**

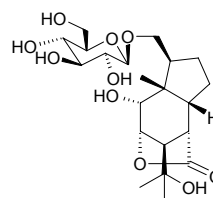
2 $\alpha$ ,3 $\alpha$ ,12-Trihydroxypicrotoxane-3(15 $\alpha$ )-olid-11-oic acid 2-*O*- $\beta$ -*D*-glucopyranoside  $C_{21}H_{32}O_{11}$  (460.48). Colorless prism crystals (MeOH:H<sub>2</sub>O = 1:1), mp 225–227°C,  $[\alpha]_D^{20} = -18.3^\circ$  ( $c = 0.5$ , MeOH). Source: XI JING SHI HU *Dendrobium moniliforme* (stem: yield = 0.0003%dw). Ref: 4717.

**5118 Dendromoniliside C**

2 $\alpha$ ,3 $\alpha$ ,8 $\beta$ -Trihydroxy-9 $\alpha$ -(11)-epoxypicrotoxan-3(15 $\alpha$ )-olide 8-*O*- $\beta$ -*D*-glucopyranoside  $C_{21}H_{32}O_{10}$  (444.48). White amorphous powder, mp 170–172°C,  $[\alpha]_D^{20} = 0.5^\circ$  ( $c = 0.4$ , H<sub>2</sub>O). Pharm: Proliferation stimulator (B cells *in vitro*, 0.00001 mol/L,  $p < 0.05$ ); proliferation inhibitor (T cells *in vitro*, 0.0000001 mol/L,  $p < 0.05$ , without any obvious cytotoxic effects). Source: XI JING SHI HU *Dendrobium moniliforme* (stem: yield = 0.0007%dw). Ref: 4717.

**5119 Dendromoniliside D**

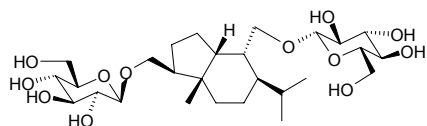
2 $\alpha$ ,3 $\alpha$ ,11,12-Tetrahydroxypicrotoxan-3(15 $\alpha$ )-olide 11-*O*- $\beta$ -*D*-glucopyranoside  $C_{21}H_{34}O_{10}$  (446.5). White amorphous powder, mp 205–207°C,  $[\alpha]_D^{20} = -0.4^\circ$  ( $c = 1.2$ , H<sub>2</sub>O). Source: XI JING SHI HU *Dendrobium moniliforme* (stem: yield = 0.0003%dw). Ref: 4717.



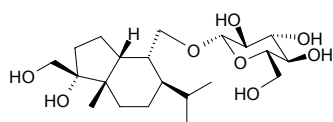


**5120 Dendronobiloside A**

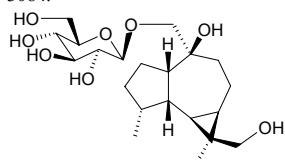
10,12-Dihydroxypicrotoxane 10,12-di-*O*- $\beta$ -*D*-glucopyranoside C<sub>27</sub>H<sub>48</sub>O<sub>12</sub> (564.68). White amorphous powder,  $[\alpha]_D^{20} = -62.9^\circ$  ( $c = 0.6$ , MeOH). **Pharm:** Immunoenhancer (*in vitro*, stimulates significantly proliferation of mouse B lymphocytes, 1.0 $\mu$ mol/L,  $p < 0.01$ , control Astragaloside I, 1.0 $\mu$ mol/L,  $p < 0.05$ ). **Source:** SHI HU<sup>(4)</sup> *Dendrobium nobile* (stem). **Ref:** 3084.

**5121 Dendronobiloside B**

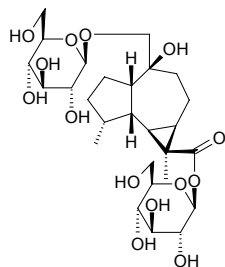
6 $\alpha$ ,10,12-Trihydroxypicrotoxane 10-*O*- $\beta$ -*D*-glucopyranoside C<sub>21</sub>H<sub>38</sub>O<sub>8</sub> (418.53). White amorphous powder,  $[\alpha]_D^{20} = -63.6^\circ$  ( $c = 0.5$ , MeOH). **Pharm:** Immunosuppressant (*in vitro*, inhibits proliferation of mouse T lymphocytes, 0.1-10.0 $\mu$ mol/L,  $p < 0.05$ ). **Source:** SHI HU<sup>(4)</sup> *Dendrobium nobile* (stem). **Ref:** 3084.

**5122 Dendroside A**

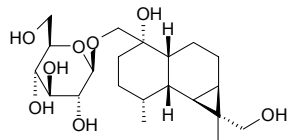
10 $\beta$ ,12,14-Trihydroxyalloaromadendrane 14-*O*- $\beta$ -*D*-glucopyranoside C<sub>21</sub>H<sub>36</sub>O<sub>8</sub> (416.52). White amorphous powder; mp 145~147°C,  $[\alpha]_D^{14} = -48.6^\circ$  ( $c = 0.1$ , MeOH). **Pharm:** Immunoenhancer (*in vitro*, stimulates significantly proliferation of mouse T lymphocytes, 0.1 $\mu$ mol/L,  $p < 0.01$ , control Astragaloside I, 10 $\mu$ mol/L,  $p < 0.05$ ; stimulates significantly proliferation of mouse B lymphocytes, 10 $\mu$ mol/L,  $p < 0.01$ , Astragaloside I, 1.0 $\mu$ mol/L,  $p < 0.05$ ). **Source:** SHI HU<sup>(4)</sup> *Dendrobium nobile* (stem). **Ref:** 3084.

**5123 Dendroside D**

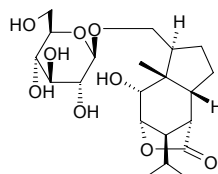
C<sub>27</sub>H<sub>44</sub>O<sub>14</sub> (592.64). White amorphous powder,  $[\alpha]_D^{20} = -31.3^\circ$  ( $c = 0.5$ , MeOH). **Source:** SHI HU<sup>(4)</sup> *Dendrobium nobile*. **Ref:** 1931.

**5124 Dendroside E**

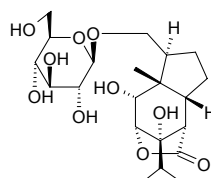
C<sub>21</sub>H<sub>36</sub>O<sub>8</sub> (416.52). White amorphous powder,  $[\alpha]_D^{20} = -38.3^\circ$  ( $c = 0.4$ , MeOH). **Source:** SHI HU<sup>(4)</sup> *Dendrobium nobile*. **Ref:** 1931.

**5125 Dendroside F**

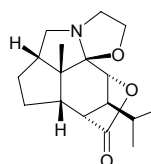
C<sub>21</sub>H<sub>34</sub>O<sub>9</sub> (430.50). White amorphous powder,  $[\alpha]_D^{20} = -30.6^\circ$  ( $c = 0.5$ , MeOH). **Source:** SHI HU<sup>(4)</sup> *Dendrobium nobile*, XI JING SHI HU *Dendrobium moniliforme* (stem: yield = 0.00016%dw)<sup>[4717]</sup>. **Ref:** 1931, 4717.

**5126 Dendroside G**

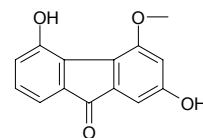
C<sub>21</sub>H<sub>34</sub>O<sub>10</sub> (446.50). White amorphous powder,  $[\alpha]_D^{20} = -24.9^\circ$  ( $c = 0.6$ , MeOH) **Source:** SHI HU<sup>(4)</sup> *Dendrobium nobile*. **Ref:** 1931.

**5127 Dendroxine**

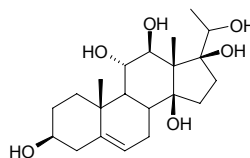
[7668-77-1] C<sub>17</sub>H<sub>25</sub>NO<sub>3</sub> (291.39). mp 114~115°C. **Source:** SHI HU<sup>(4)</sup> *Dendrobium nobile*. **Ref:** 6.

**5128 Dengibsin**

C<sub>14</sub>H<sub>10</sub>O<sub>4</sub> (242.23). **Source:** MI HUA SHI HU *Dendrobium densiflorum* (stem). **Ref:** 5171.

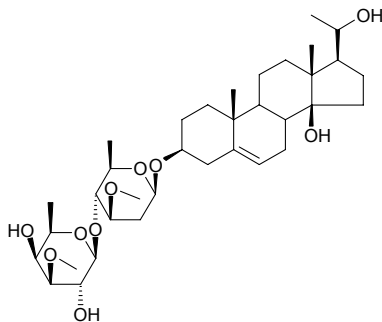
**5129 Deniagenin**

3 $\beta$ ,11 $\alpha$ ,12 $\beta$ ,14 $\beta$ ,17 $\beta$ ,20-Hexahydroxy pregn-5-ene C<sub>21</sub>H<sub>34</sub>O<sub>6</sub> (382.50). White amorphous powder, mp 110°C,  $[\alpha]_D = -66.7^\circ$  ( $c = 0.3$ , CHCl<sub>3</sub>). **Source:** ROU LEI NIU NAI CAI *Marsdenia roylei* (aerial parts). **Ref:** 3490.

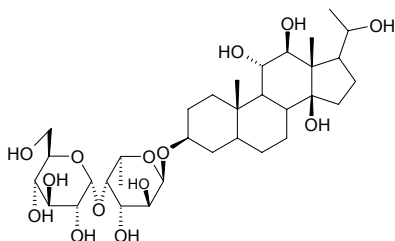


**5130 Denicunine**

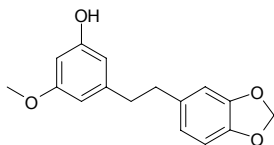
Calogenin 3-*O*-3-*O*-methyl- $\beta$ -*D*-fucopyranosyl-(1 $\rightarrow$ 4)-*O*- $\beta$ -*D*-oleandro-pyranoside C<sub>33</sub>H<sub>58</sub>O<sub>10</sub> (638.85). mp 148°C,  $[\alpha]_D = +20^\circ$  ( $c = 0.11$ , MeOH). Source: YIN DU BA QIA *Hemidesmus indicus* (stem). Ref: 5081.

**5131 Denin**

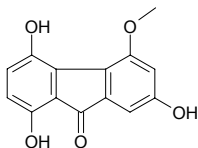
Desacylkundurangenin C-3-*O*- $\alpha$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)-*O*- $\alpha$ -*L*-fucopyranoside C<sub>33</sub>H<sub>56</sub>O<sub>14</sub> (676.81). White amorphous powder, mp 232°C,  $[\alpha]_D = +12.5^\circ$  ( $c = 0.016$ , CHCl<sub>3</sub>). Source: ROU LEI NIU NAI CAI *Marsdenia roylei* (aerial parts). Ref: 3490.

**5132 Densiflorol A**

C<sub>16</sub>H<sub>16</sub>O<sub>4</sub> (272.30). White amorphous powder. Source: MI HUA SHI HU *Dendrobium densiflorum* (stem). Ref: 5171.

**5133 Densiflorolorin**

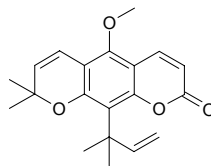
C<sub>14</sub>H<sub>10</sub>O<sub>5</sub> (258.23). Red amorphous powder. Source: MI HUA SHI HU *Dendrobium densiflorum* (stem). Ref: 5171.

**5134 Dentatin**

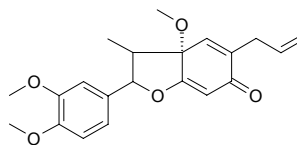
Poncitrin [22980-57-0] C<sub>20</sub>H<sub>22</sub>O<sub>4</sub> (326.40). mp 95–96°C; mp 93–94°C. Pharm: Antibacterial (*Mycobacterium tuberculosis*, MIC = 50  $\mu$ g/mL, control Isoniazide, MIC = 0.040–0.090  $\mu$ g/mL, Kanamycin sulfate, MIC = 2.0–5.0  $\mu$ g/mL)<sup>[5367]</sup>; antifungal inactive (*Candida albicans*, control Amphotericin, IC<sub>50</sub> = 0.01  $\mu$ g/mL)<sup>[5367]</sup>; antineoplastic (Raji cells, antitumor promotor, *in vivo*, inhibits TPA-induced EBV-EA activation, compound concentration = 500 (mol ratio/32 pmol TPA), EBV-EA-positive cells = (47.9 $\pm$ 1.4)% (viability > 80%),  $\beta$ -Carotene, EBV-EA-positive cells = (34.3 $\pm$ 1.1)% (viability > 80), Curcumin,

EBV-EA-positive cells = (22.8 $\pm$ 1.8)% (viability > 80%); IC<sub>50</sub> = 496 (mol ratio/32 pmol TPA),  $\beta$ -Carotene, IC<sub>50</sub> = 400 (mol ratio/32 pmol TPA), Curcumin IC<sub>50</sub> = 341 (mol ratio/32 pmol TPA))<sup>[5048]</sup>.

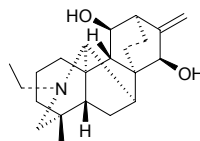
Source: CHENG ZI *Citrus junos*, SHAN HUANG PI *Clausena excavata*, YE HUANG PI *Clausena dentata*, ZHI GEN PI *Poncirus trifoliata*. Ref: 6, 1521, 5367, 5048.

**5135 (-)-Denudatin B**

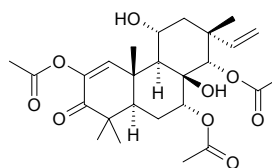
C<sub>21</sub>H<sub>24</sub>O<sub>5</sub> (356.42). Colorless oleaginous substance,  $[\alpha]_D^{15} = -76.4^\circ$  ( $c = 0.11$ , CHCl<sub>3</sub>). Pharm: PAF antagonist (IC<sub>50</sub> = 7.5  $\mu$ mol/L); PAF receptor antagonist (5  $\mu$ g/mL, InRt = 80.1%, 10  $\mu$ g/mL, InRt = 100%); used in treatment of rheumatic arthritis and asthma; calcium antagonist (28  $\mu$ mol/L, activity = 100%); calcium antagonist (gpg, colon bands); vascular relaxant (inhibits inward flow of calcium, increase cGMP); anti-platelet (nonspecific). Source: WANG CHUN YU LAN *Magnolia biondii* [Syn. *Magnolia fargesii*], HAI FENG TENG *Piper kadsura* [Syn. *Piper futokadsura*]. Ref: 267, 658, 1578, 1609, 1610, 1611.

**5136 Denudatine**

[26166-37-0] C<sub>22</sub>H<sub>33</sub>NO<sub>2</sub> (343.51). Pharm: Antiarrhythmic (rat, aconitine induced arrhythmia, inhibits rapid inward flow of sodium ion; CaCl<sub>2</sub> induced arrhythmia, reduces heart rate); antihypertensive (rat, iv, 25–50 mg/kg, slightly blood pressure goes down); eclamptogenic (mus, iv, ED<sub>50</sub> = 55.6 mg/kg); Intestinal smooth muscle relaxant (dog intestine, reduces tension and creep); antineoplastic (leukemia); cytotoxic; LD<sub>50</sub> (mus, iv) = 128 mg/kg, (mus, orl) = 290 mg/kg. Source: LU CUI QUE *Delphinium denudatum*, FU ZI *Aconitum carmichaeli*. Ref: 16, 1621, 1622, 1623, 1624.

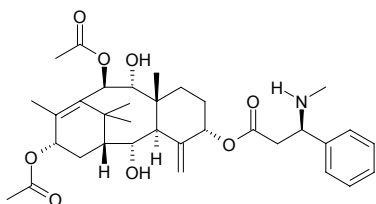
**5137 14-Deoxy-14-O-acetylorthosiphol Y**

C<sub>26</sub>H<sub>36</sub>O<sub>9</sub> (492.57). Colorless amorphous solid,  $[\alpha]_D^{25} = -29.1^\circ$  ( $c = 0.340$ , CHCl<sub>3</sub>). Pharm: NO production inhibitor (LPS-activated macrophage-like J774.1 cells, IC<sub>50</sub> = 118.7  $\mu$ mol/L; control L-NMMA, IC<sub>50</sub> = 35.7  $\mu$ mol/L). Source: XIONG RUI ZHUANG ZHI GUAN CAO *Orthosiphon stamineus* [Syn: *Orthosiphon aristatus*; *Orthosiphon grandiflorus*; *Orthosiphon spicatus*] (aerial parts: yield = 0.00038% dw). Ref: 4741.

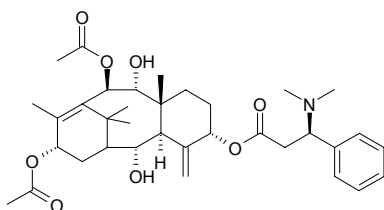


**5138 13-Deoxo-13 $\alpha$ -acetyloxy-1-deoxynortaxine B**

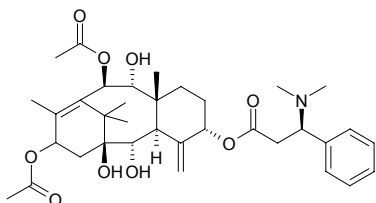
2 $\alpha$ ,9 $\alpha$ -Dihydroxy-10 $\beta$ ,13 $\alpha$ -diacetoxy-5 $\alpha$ -(3'-N-methylamino-3'-phenyl)-propionyloxytaxa-4(20),11-diene C<sub>34</sub>H<sub>47</sub>NO<sub>8</sub> (597.76). Gum, [ $\alpha$ ]<sub>D</sub><sup>22</sup> = +47° (c = 0.21, CHCl<sub>3</sub>). Source: JIA NA DA HONG DOU SHAN *Taxus canadensis* (needle leaf), JIANG GUO ZI SHAN *Taxus baccata*. Ref: 662, 3886.

**5139 13-Deoxo-13 $\alpha$ -acetyloxy-1-deoxytaxine B**

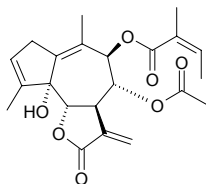
C<sub>35</sub>H<sub>49</sub>NO<sub>8</sub> (611.78). Source: JIANG GUO ZI SHAN *Taxus baccata*. Ref: 662.

**5140 13-Deoxo-3 $\alpha$ -acetyloxytaxine B**

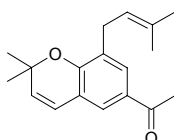
C<sub>35</sub>H<sub>49</sub>NO<sub>9</sub> (627.78). Source: JIANG GUO ZI SHAN *Taxus baccata*. Ref: 662.

**5141 2-Deoxo-8-O-acetyl pumilin**

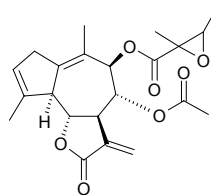
C<sub>22</sub>H<sub>26</sub>O<sub>7</sub> (402.45). Yellow oil, [ $\alpha$ ]<sub>D</sub><sup>22</sup> = 0.024° (c = 2.75, CH<sub>2</sub>Cl<sub>2</sub>). Source: *Balsamorhiza sagittata* (aerial parts), *Balsamorhiza macrophylla* (aerial parts). Ref: 991.

**5142 Deoxodehydrocyclopiloselloidone**

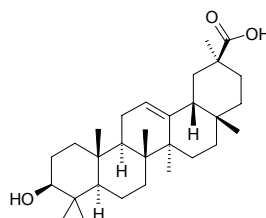
Desoxodehydrocyclopiloselloidone C<sub>18</sub>H<sub>22</sub>O<sub>2</sub> (270.37). Source: MAO DA DING CAO *Gerbera piloselloides*. Ref: 6.

**5143 2-Deoxo-5-deoxy-8-O-acetyl-17,18-epoxy pumilin**

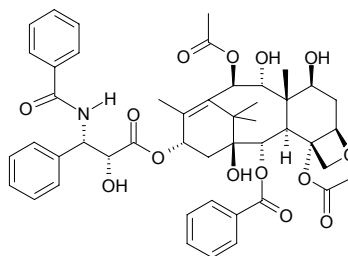
C<sub>22</sub>H<sub>26</sub>O<sub>7</sub> (402.45). Yellow oil, [ $\alpha$ ]<sub>D</sub><sup>22</sup> = 0.03° (c = 3.88, CH<sub>2</sub>Cl<sub>2</sub>). Source: *Balsamorhiza sagittata* (aerial parts), *Balsamorhiza macrophylla* (aerial parts). Ref: 991.

**5144 11-Deoxoglycyrrhetic acid**

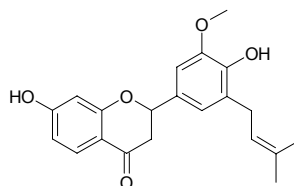
11-Deoxoglycyrrhetic acid C<sub>30</sub>H<sub>48</sub>O<sub>3</sub> (456.72). Source: GUANG GUO GAN CAO *Glycyrrhiza glabra*, LEI GONG TENG *Tripterygium wilfordii*, ZHANG GUO GAN CAO *Glycyrrhiza inflata*. Ref: 2, 660, 670.

**5145 9-Deoxo-9 $\alpha$ -hydroxytaxol**

C<sub>47</sub>H<sub>53</sub>NO<sub>14</sub> (855.94). mp 174~176°C, [ $\alpha$ ]<sub>D</sub> = -13.1° (MeOH). Source: YUN NAN HONG DOU SHAN *Taxus yunnanensis*. Ref: 662.

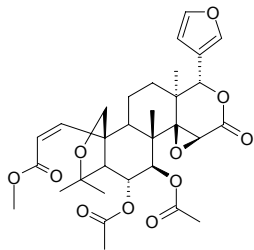
**5146 5-Deoxyabyssinin II**

4',7-Dihydroxy-3'-methoxy-5'-prenylflavanone C<sub>21</sub>H<sub>22</sub>O<sub>5</sub> (354.41). Amorphous powder, [ $\alpha$ ]<sub>D</sub> = 0° (c = 0.01, MeOH). Pharm: Antimalarial (*Plasmodium falciparum* D6, IC<sub>50</sub> = (13.6±0.9)μg/mL, control Chloroquine, IC<sub>50</sub> = (0.009±0.002)μg/mL, Quinine, IC<sub>50</sub> = (0.04±0.01)μg/mL; *Plasmodium falciparum* W2, IC<sub>50</sub> = (13.3±1.5)μg/mL, Chloroquine, IC<sub>50</sub> = (0.08±0.003)μg/mL, Quinine, IC<sub>50</sub> = (0.21±0.01)μg/mL)<sup>[3879]</sup>. Source: A BI XI NI YA CI TONG *Erythrina abyssinica* (stem cortex). Ref: 3879.

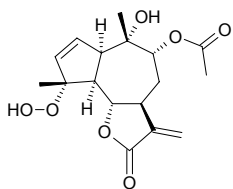


**5147 6-Deoxy-6 $\alpha$ -acetoxyatalantini acetate**

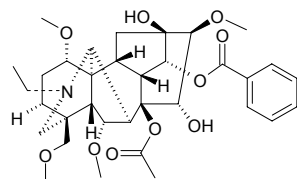
Limonoid C<sub>31</sub>H<sub>38</sub>O<sub>11</sub> (586.64). White lamellar prismatic crystals, mp 208–209°C. Source: DONG FENG JU YE *Atalantia buxifolia* [Syn. *Severinia buxifolia*]. Ref: 402.

**5148 8-Deoxy-9-O-acetylanthemolide B**

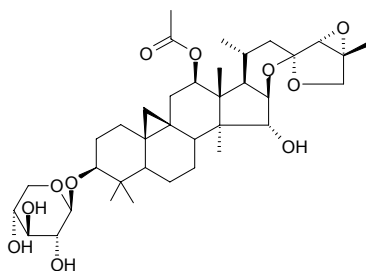
C<sub>17</sub>H<sub>22</sub>O<sub>7</sub> (338.36). Amorphous solid,  $[\alpha]_D^{25} = -54^\circ$  ( $c = 0.32$ , MeOH). Source: *Anthemis carpatica* (aerial parts). Ref: 3974.

**5149 Deoxyaconitine**

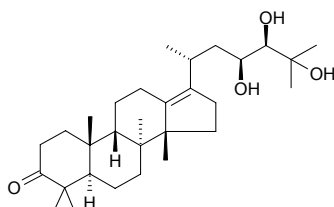
[3175-95-9] C<sub>34</sub>H<sub>47</sub>NO<sub>10</sub> (629.75). Source: FU ZI *Aconitum carmichaeli*. Ref: 16, 1521.

**5150 27-Deoxyactein**

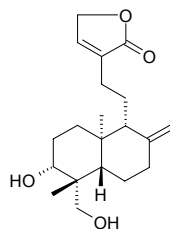
C<sub>37</sub>H<sub>56</sub>O<sub>11</sub> (676.85). Pharm: Cytotoxic (HSC-2 cells, IC<sub>50</sub> = 211 μmol/L, control Etoposide, IC<sub>50</sub> = 24 μmol/L; HGF cells, IC<sub>50</sub> = 276 μmol/L)<sup>[4158]</sup>. Source: ZONG ZHUANG SHENG MA *Cimicifuga racemosa* (rhizome). Ref: 4158.

**5151 11-Deoxyalisol A**

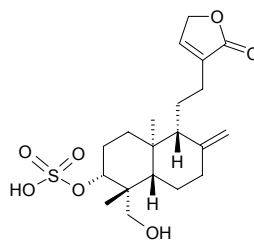
C<sub>30</sub>H<sub>50</sub>O<sub>4</sub> (474.73). Colorless powder. Source: ZE XIE *Alisma orientale* [Syn. *Alisma plantago-aquatica* var. *orientale*]. Ref: 2213.

**5152 Deoxyandrographolide**

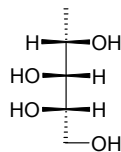
C<sub>20</sub>H<sub>30</sub>O<sub>4</sub> (334.46). Pharm: Antibacterial; antispasmodic; anti-inflammatory (rat, edema on ears caused by oleum crotonis); reduces effusion of Evan's blue from blood capillary (caused by xylene or acetic acid); stimulates function of adrenal cortex; LD<sub>50</sub> (mus, orl) > 20mg/kg. Source: CHUAN XIN LIAN *Andrographis paniculata* [Syn. *Justicia paniculata*]. Ref: 2, 658, 1521, 5501.

**5153 14-Deoxyandrographolide-3-O-sulfate**

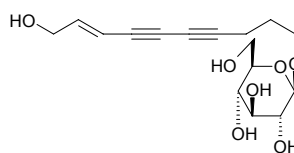
C<sub>20</sub>H<sub>30</sub>O<sub>7</sub>S (414.52). White amorphous powder. Source: REN NIAO *Homo sapiens*. Ref: 4300.

**5154 1-Deoxy-L-arabinitol**

C<sub>5</sub>H<sub>12</sub>O<sub>4</sub> (136.15). Amorphous powder,  $[\alpha]_D^{24} = -3^\circ$  ( $c = 0.5$ , MeOH). Source: YIN DU ZANG HUI XIANG *Carum ajowan* (fruit). Ref: 3547.

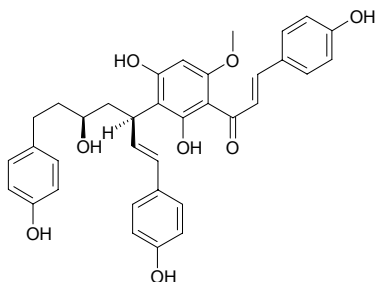
**5155 3-Deoxybidensynoeside B**

(*E*)-8-Decene-4,6-diyne-1,10-diol 1-*O*- $\beta$ -*D*-glucopyranoside C<sub>16</sub>H<sub>22</sub>O<sub>7</sub> (326.35). Colorless crystals, mp 164°C,  $[\alpha]_D^{23} = -67.7^\circ$  ( $c = 0.5$ , MeOH). Pharm: Antihistamine (mast cells, inhibits histamine release induced by antigen-antibody reaction, IC<sub>50</sub> = 0.085 μmol/L, control Indumethacin, IC<sub>50</sub> = 0.625 μmol/L)<sup>[4105]</sup>, NO production inhibitor (mus macrophages RAW264.7, activated by 100ng/mL LPS at 37°C, for 18h, IC<sub>50</sub> = 0.116 μmol/L, activated by 100ng/mL LPS + 10U/mL IFN- $\gamma$  at 37°C, for 18h, IC<sub>50</sub> = 0.078 μmol/L)<sup>[4105]</sup>. Source: XIAO HUA GUI ZHEN *Bidens parviflora* (whole herb). Ref: 4105.

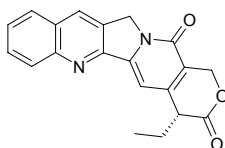


**5156 Deoxycalyxin A**

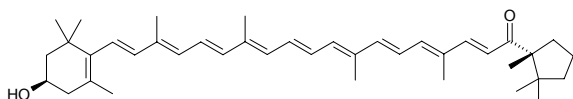
$C_{35}H_{34}O_8$  (582.66). Light yellow amorphous solid,  $[\alpha]_D^{25} = +147.9^\circ$  ( $c = 0.035$ , MeOH). **Pharm:** Cytotoxic (Colon26-L5,  $ED_{50} = 27.4\mu\text{mol/L}$ ; HT1080,  $ED_{50} = 26.5\mu\text{mol/L}$ ; control Curcumin, Colon26-L5,  $ED_{50} = 23.2\mu\text{mol/L}$ ; HT1080,  $ED_{50} = 23.4\mu\text{mol/L}$ ). **Source:** YUN NAN CAO KOU *Alpinia blepharocalyx* (seed: yield = 0.000056%). **Ref:** 3035.

**5157 Deoxycamptothecin**

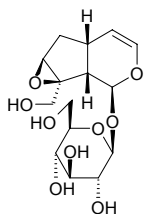
[34141-35-0]  $C_{20}H_{16}N_2O_3$  (332.36). mp 171~172°C. **Source:** XI SHU *Camptotheca acuminata*. **Ref:** 6, 1521.

**5158 3'-Deoxycapsanthin**

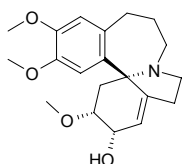
(3*R*,5'*R*)-3-Hydroxy- $\beta,\kappa$ -caroten-6'-one  $C_{40}H_{56}O_2$  (568.89). **Source:** HONG HAI JIAO *Capsicum annuum* (fruit: yield = 0.00005%). **Ref:** 3007.

**5159 6-Deoxycatalpol**

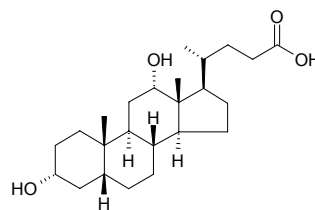
$C_{15}H_{22}O_9$  (346.34). **Source:** ROU CONG RONG *Cistanche deserticola*, GUAN HUA ROU CONG RONG *Cistanche tubulosa*. **Ref:** 2448.

**5160 7-Deoxycephalofortuneine**

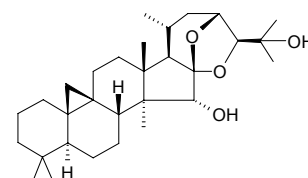
[128508-20-3]  $C_{20}H_{27}NO_4$  (345.44). **Source:** SAN JIAN SHAN *Cephalotaxus fortunei*. **Ref:** 2, 1521.

**5161 Deoxycholic acid**

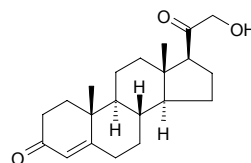
7-Deoxycholic acid [83-44-3]  $C_{24}H_{40}O_4$  (392.58). **Pharm:** Antispasmodic (main antispasmodic component in *Bos taurus domesticus*; *Bubalus bubalis* NIU HUANG)<sup>[5501]</sup>; choleric (bile secretion promoter)<sup>[5501]</sup>; anti-inflammatory (mouse, acetic acid-induced, ip, inhibits increase of vaso-permeability)<sup>[5501]</sup>; antibacterial (*Vibrio cholerae*, *Bacillus coli*, *Staphylococcus tetragenus*, *Staphylococcus aureus*, *Streptococcus* sp.)<sup>[5501]</sup>; antiviral (mouse, encephalitis B virus)<sup>[5501]</sup>; LD<sub>50</sub> (mouse, perfusion in stomach) = 1.06g/kg, (mouse, iv) = 0.15g/kg<sup>[5501]</sup>. **Source:** NIU HUANG *Bos taurus domesticus*; *Bubalus bubalis* (gallstone: mean content = 1.65%<sup>[5508]</sup>), XIONG DAN *Selenarctos thibetanus*; *Ursus arctos*. **Ref:** 2, 658, 5501, 5508.

**5162 3-Deoxycimigenol**

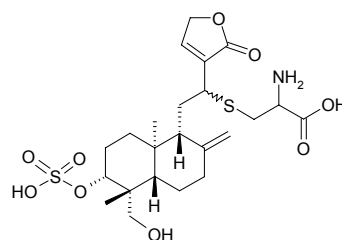
$C_{30}H_{48}O_4$  (472.71). mp 202~203°C. **Source:** RI BEN SHENG MA *Cimicifuga japonica*. **Ref:** 2215.

**5163 Deoxycorticosterone**

21-Hydroxypregn-4-ene-3,20-dione [64-85-7]  $C_{21}H_{30}O_3$  (330.47). mp 141~142°C. **Source:** NIU SHEN *Bos taurus domesticus*; *Bubalus bubalis*, ZI HE CHE *Homo sapiens*. **Ref:** 6.

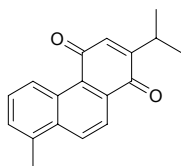
**5164 14-Deoxy-12-(cysteine-S-yl)-andrographolide-3-O-sulfate**

$C_{23}H_{39}NO_9S_2$  (533.66). White amorphous powder. **Source:** REN NIAO *Homo sapiens*. **Ref:** 4300.

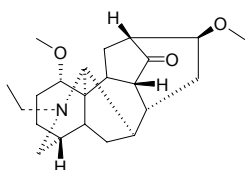


**5165 12-Deoxydanshenxinkun B**

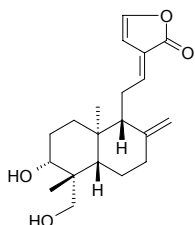
18,20-Dinor-1,3,5(10),6,8,12-abietahexaene-11,14-dione C<sub>18</sub>H<sub>16</sub>O<sub>2</sub> (264.33). Red needles (CHCl<sub>3</sub>-*n*-hexane), mp 187~197°C. Source: JIAO ZHI SHU WEI CAO *Salvia glutinosa* (dried root). Ref: 2384.

**5166 8-Deoxy-14-dehydro-aconosine**

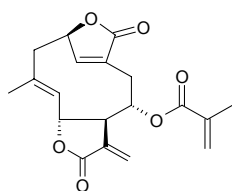
C<sub>22</sub>H<sub>33</sub>NO<sub>3</sub> (359.51). Source: FU ZI *Aconitum carmichaeli*. Ref: 16.

**5167 14-Deoxy-11,12-didehydroandrographolide**

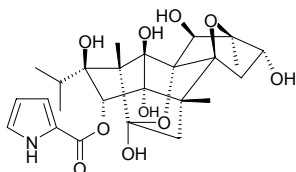
C<sub>20</sub>H<sub>28</sub>O<sub>4</sub> (332.44). Source: CHUAN XIN LIAN *Andrographis paniculata* [Syn. *Justicia paniculata*]. Ref: 2, 1521.

**5168 Deoxyelephantopin**

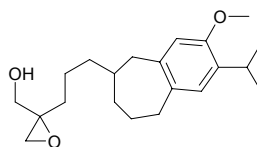
[29307-03-7] C<sub>19</sub>H<sub>20</sub>O<sub>6</sub> (344.37). mp > 320°C. Pharm: Antineoplastic (mus, *in vivo*, Walker cancer); cytotoxic. Source: KU DI DAN *Elephantopus scaber*, KA LUO LAI NA DI DAN CAO *Elephantopus carolinianus*. Ref: 5, 6, 658.

**5169 6-Deoxy-6β,9β-epoxy-8α-hydroxy-10-epi-ryanodine**

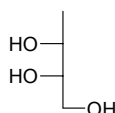
C<sub>25</sub>H<sub>33</sub>NO<sub>10</sub> (507.54). Crystals (CHCl<sub>3</sub>:Me<sub>2</sub>CO = 3:1), mp 172°C, [α]<sub>D</sub> = -8° (c = 0.2). Source: QU CHONG CAO *Spigelia anthelmia* (aerial parts). Ref: 5139.

**5170 10-Deoxy-4,18-epoxy-12-methoxy-4,5-seco-pisiferan-19-ol**

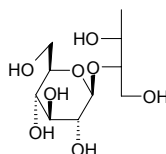
[245110-74-1] C<sub>21</sub>H<sub>32</sub>O<sub>3</sub> (332.49). Gum, [α]<sub>D</sub><sup>25</sup> = +25.8° (c = 0.03, CHCl<sub>3</sub>). Source: HONG GUI *Chamaecyparis formosensis*. Ref: 2315.

**5171 1-Deoxy-L-erythritol**

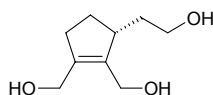
C<sub>4</sub>H<sub>10</sub>O<sub>3</sub> (106.12). Amorphous powder, [α]<sub>D</sub><sup>23</sup> = -30° (c = 0.3, MeOH). Source: YIN DU ZANG HUI XIANG *Carum ajowan* (fruit). Ref: 3547.

**5172 1-Deoxy-L-erythritol 3-O-β-D-glucopyranoside**

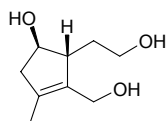
C<sub>10</sub>H<sub>20</sub>O<sub>8</sub> (268.27). Amorphous powder, [α]<sub>D</sub><sup>21</sup> = -29° (c = 0.1, MeOH). Source: HUI QIN *Pimpinella anisum* (fruit). Ref: 3402.

**5173 1-Deoxyeucommiol**

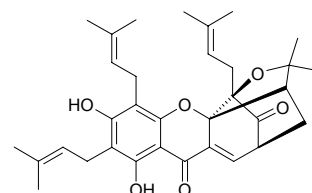
C<sub>9</sub>H<sub>16</sub>O<sub>3</sub> (172.23). Source: DU ZHONG *Eucommia ulmoides*. Ref: 2.

**5174 10-Deoxyeucommiol**

C<sub>9</sub>H<sub>16</sub>O<sub>3</sub> (172.23). Yellow oil, [α]<sub>D</sub><sup>17</sup> = -33.77° (c = 3.61, MeOH). Source: DIAO DENG SHU *Kigelia pinnata*. Ref: 3418.

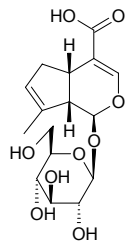
**5175 Deoxygaudichaudione A**

C<sub>33</sub>H<sub>40</sub>O<sub>6</sub> (532.68). Pharm: Cytotoxic (hmn leukemia); doxorubicin-resistant K562, IC<sub>50</sub> = (3.04±0.18)μg/mL, control Adriamycin, IC<sub>50</sub> = (1.79±0.17)μg/mL; drug-sensitive K562, IC<sub>50</sub> = (1.74±0.22)μg/mL, Adriamycin, IC<sub>50</sub> = (0.11±0.01)μg/mL. Source: TENG HUANG SHU *Garcinia hanburyi* (resin). Ref: 1583.

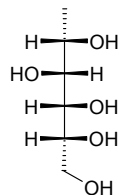


**5176 10-Deoxygeniposidic acid**

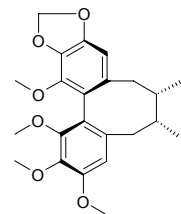
$C_{16}H_{22}O_9$  (358.35). White powder. Source: BO SI YI MU CAO *Leonurus persicus*. Ref: 2499.

**5177 1-Deoxy-D-glucitol**

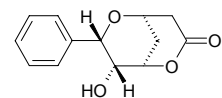
$C_6H_{14}O_5$  (166.18). Source: SHI LUO ZI *Anethum graveolens* (fruit). Ref: 4177.

**5178 Deoxygomisin A**

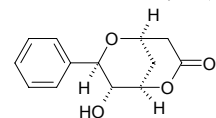
Schizandrin B; Schisandrin B; Wuweizisu B;  $\gamma$ -Schisandrin [61281-37-6]  $C_{23}H_{28}O_6$  (400.48). Rhombic crystals (methanol), mp 117–119°C,  $[\alpha]_D^{17} = -32^\circ$  (ethanol). Pharm: Antihepatotoxin; antitussive. Source: HONG HUA WU WEI ZI *Schisandra rubriflora*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], WU WEI ZI *Schisandra chinensis* (dried ripe fruit: content scope of 6 origins = 0.80%~5.00%, mean content = 2.68%<sup>[5508]</sup>). Ref: 2, 4, 39, 658, 1521, 5501, 5508.

**5179 (+)-9-Deoxygoniopyrone**

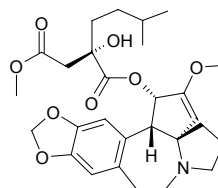
$C_{13}H_{14}O_4$  (234.25). Pharm: Cytotoxic inactive (HepG2, Hep3B, MDA-MB-231, MCF7)<sup>[5056]</sup>. Source: TAI WAN GE NA XIANG *Goniothalamus amuyon* (stem: yield = 0.00067%fw), TAI WAN GE NA XIANG *Goniothalamus amuyon* (leaf and stem). Ref: 4686, 5056.

**5180 Deoxygoniopyrone A**

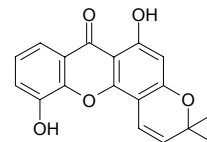
$C_{13}H_{14}O_4$  (234.25). Colorless needles, mp 170–172°C,  $[\alpha]_D^{23} = -35.5^\circ$  ( $c = 0.07$ , MeOH). Pharm: Cytotoxic inactive (HepG2, Hep3B, MDA-MB-231, MCF7). Source: TAI WAN GE NA XIANG *Goniothalamus amuyon* (leaf and stem). Ref: 5056.

**5181 Deoxyharringtonine**

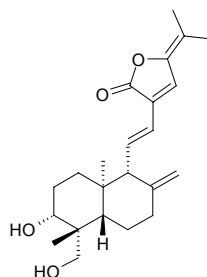
[36804-95-2]  $C_{28}H_{37}NO_8$  (515.61). Pharm: Antineoplastic (mouse P<sub>388</sub>, mouse spleen leukemic L<sub>615</sub>). Source: HAI NAN CU FEI *Cephalotaxus hainanensis* [Syn. *Cephalotaxus mannii*], RI BEN CU FEI *Cephalotaxus harringtonia*, SAN JIAN SHAN *Cephalotaxus fortunei* (drupe: yield = 0.00060%)<sup>[4675]</sup>, ZHONG GUO CU FEI ZHI YE *Cephalotaxus sinensis* [Syn. *Cephalotaxus harringtonia* var. *sinensis*]. Ref: 2, 5, 660, 4675.

**5182 6-Deoxyisojacareubin**

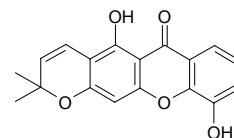
$C_{18}H_{14}O_5$  (310.31). Yellow needles, mp 218–220°C. Source: BIAN DI JIN *Hypericum wightianum* (whole herb). Ref: 4426.

**5183 14-Deoxy-15-isopropylidene-11,12-didehydroandrographolide**

$C_{23}H_{32}O_4$  (372.51). Colorless needles (MeOH), mp 207–209°C,  $[\alpha]_D^{28} = -21.8^\circ$  ( $c = 0.002$ , MeOH). Source: CHUAN XIN LIAN *Andrographis paniculata* [Syn. *Justicia paniculata*]. Ref: 2036.

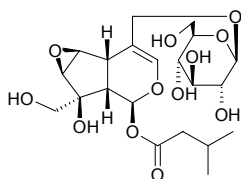
**5184 6-Deoxyjacareubin**

1,5-Dihydroxy-6',6'-dimethylpyrano(2',3':3,2)xanthone  $C_{18}H_{14}O_5$  (310.31). Pharm: Cytotoxic (HSC-2 cells,  $CC_{50} = 0.48$ mmol/L; HGF,  $CC_{50} > 0.65$ mmol/L)<sup>[3025]</sup>; anti-hypotension (PAF-induced,  $ID_{50} = (14.5 \pm 3.2)$   $\mu$ mol/kg, control Ginkgolide B,  $ID_{50} = (38.5 \pm 2.7)$   $\mu$ mol/kg, CV-3988,  $ID_{50} = (2.4 \pm 1.2)$   $\mu$ mol/kg)<sup>[5050]</sup>. Source: GOU JI *Cudrania cochinchinensis* (root: yield = 0.00013%dw)<sup>[3025]</sup>, HAI TANG GUO *Calophyllum inophyllum* (the compound was isolated from the plant by F.S.AL-Jeboury, et al. in 1971)<sup>[5505]</sup>, HAI TANG GUO *Calophyllum inophyllum* (root)<sup>[5050]</sup>, HEI XIAN TIAO TENG HUANG *Garcinia nigrolineata* (stam bark)<sup>[3482]</sup>. Ref: 3025, 3482, 5050, 5505.

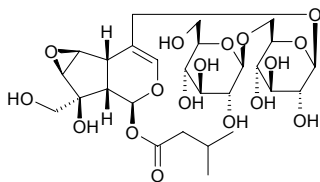


**5185 4'-Deoxykanokoside A**

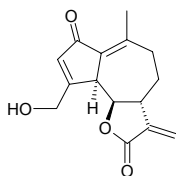
$C_{21}H_{32}O_{12}$  (476.48). Amorphous,  $[\alpha]_D^{20} = -122^\circ$  ( $c = 0.1$ , MeOH). **Pharm:** Cytostatic/cytotoxic ( $GI_{50} = 1\text{--}9\mu\text{g/mL}$ ). **Source:** CHANG HUA XIE CAO *Centranthus longiflorus* ssp. *longiflorus*. **Ref:** 2035.

**5186 4'-Deoxykanokoside C**

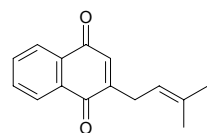
$C_{27}H_{42}O_{17}$  (638.63). Amorphous,  $[\alpha]_D^{20} = -107^\circ$  ( $c = 0.1$ , MeOH). **Pharm:** Cytostatic/cytotoxic ( $GI_{50} = 1\text{--}9\mu\text{g/mL}$ ). **Source:** CHANG HUA XIE CAO *Centranthus longiflorus* ssp. *longiflorus*. **Ref:** 2035.

**5187 8-Deoxylactucin**

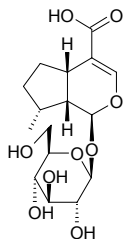
$C_{15}H_{16}O_4$  (260.29). **Pharm:** Antineoplastic; cytotoxic. **Source:** YE WO JU *Lactuca serriola*, JU QU *Cichorium intybus*. **Ref:** 658.

**5188 Deoxylapachol**

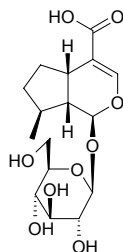
[3568-90-9]  $C_{15}H_{14}O_2$  (226.28). **Pharm:** Anthelmintic (termites); irritant (to skin). **Source:** ZI BAI PI *Catalpa ovata*, YOU MU *Tectona grandis*. **Ref:** 658.

**5189 7-Deoxy-8-epi-loganic acid**

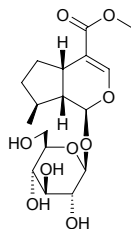
$C_{16}H_{24}O_9$  (360.36). Yellow powder,  $[\alpha]_D^{23} = -22.5^\circ$  ( $c = 0.50$ ,  $C_5H_5N$ ). **Pharm:** Antinociceptive (acetic acid-induced, 50mg/kg, orl, inhibitive percent = -5%, 100mg/kg, orl, inhibitive percent = 49%, 50mg/kg, sc, inhibitive percent = 0%, 100mg/kg, sc, inhibitive percent = 6%; control Aminopyrine, 50mg/kg, orl, inhibitive percent = 87%, 50mg/kg, sc, inhibitive percent = 94%)<sup>[3908]</sup>. **Source:** BO SI YI MU CAO *Leonurus persicus*, MA TONG HUA *Incarvillea arguta*, ROU CONG RONG *Cistanche deserticola*. **Ref:** 2448, 2499, 3908.

**5190 C-8-(S)-7-Deoxyloganic acid**

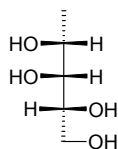
$C_{16}H_{24}O_9$  (360.36). **Source:** BI LU GOU TENG *Uncaria tomentosa* (inner bark). **Ref:** 5161.

**5191 Deoxyloganin**

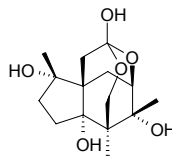
[26660-57-1]  $C_{17}H_{26}O_9$  (374.39). **Pharm:** Laxative. **Source:** *Strychnos* sp., *Vinca* sp., *Menyanthes* sp. **Ref:** 658.

**5192 1-Deoxy-D-lyxitol**

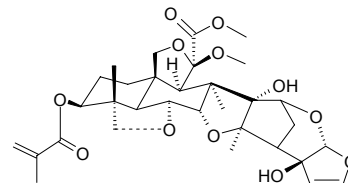
$C_5H_{12}O_4$  (136.15). Amorphous powder,  $[\alpha]_D^{24} = -23^\circ$  ( $c = 1.1$ , MeOH). **Source:** BEI SHA SHEN *Glehnia littoralis* (fruit). **Ref:** 3525.

**5193 8-Deoxymerrilliotholactone**

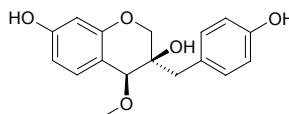
$C_{15}H_{24}O_6$  (300.35). **Source:** *Illicium merrillianum* (pericarp). **Ref:** 4257.

**5194 1-Deoxy-3-methacrylyl-11-methoxymeliacarpinin**

[177795-23-2]  $C_{32}H_{42}O_{12}$  (618.68). Colorless powder, mp 274~276°C (chloroform),  $[\alpha]_D = -16.3^\circ$  ( $c = 0.2$ , chloroform). **Pharm:** Cytotoxic ( $P_{388}$ ,  $IC_{50} = 47.0\mu\text{g/mL}$ ). **Source:** KU LIAN PI *Melia azedarach*. **Ref:** 1104.

**5195 3'-Deoxy-4-O-methylsappanol**

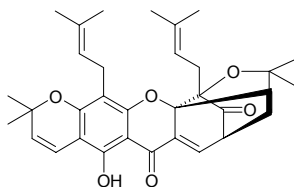
$C_{17}H_{18}O_5$  (302.33). **Source:** SU MU *Caesalpinia sappan* (heartwood). **Ref:** 4494.



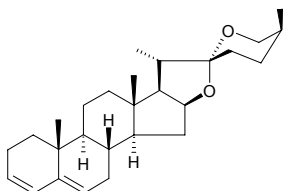


**5196 Deoxymorellin**

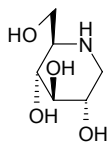
Deoxymorellin C<sub>33</sub>H<sub>38</sub>O<sub>6</sub> (530.67). mp 126°C. **Pharm:** Cytotoxic (HeLa and HEL, MIC = 0.39µg/mL). **Source:** TENG HUANG *Garcinia morella*. **Ref:** 1081, 1099, 1172.

**5197 Δ<sup>3,5</sup>-Deoxyneotigogenin**

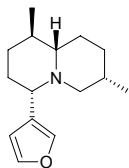
C<sub>27</sub>H<sub>40</sub>O<sub>2</sub> (396.62). **Source:** CHA RUI SHU YU *Dioscorea collettii*, BI XIE *Dioscorea hypoglauca* [Syn. *Dioscorea collettii* var. *hypoglauca*]. **Ref:** 10.

**5198 1-Deoxynojirimycin**

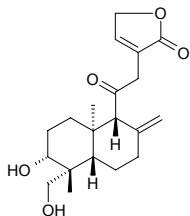
Moranoline [19130-96-2] C<sub>6</sub>H<sub>13</sub>NO<sub>4</sub> (163.17). **Pharm:** α-Glucosidase inhibitor (IC<sub>50</sub> = 0.3mmol/L)<sup>[4155]</sup>. **Source:** SANG ZHI *Morus alba*. **Ref:** 2170, 4155.

**5199 Deoxynupharidine**

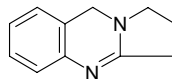
[1143-54-0] C<sub>15</sub>H<sub>23</sub>NO (233.36). **Pharm:** Anesthetic (rhizoma of source plant RI BEN PING PENG CAO *Nuphar japonicum*); sedative (rhizoma of source plant RI BEN PING PENG CAO *Nuphar japonicum*). **Source:** RI BEN PING PENG CAO *Nuphar japonicum*, OU ZHOU PING PENG CAO *Nuphar luteum*. **Ref:** 658.

**5200 14-Deoxy-11-oxoandrographolide**

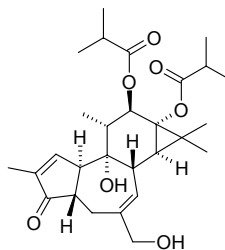
[42895-57-8] C<sub>20</sub>H<sub>28</sub>O<sub>5</sub> (348.44). mp 98–100°C. **Source:** CHUAN XIN LIAN *Andrographis paniculata* [Syn. *Justicia paniculata*], JI XING ZI *Impatiens balsamina*. **Ref:** 2, 6.

**5201 Deoxypeganine**

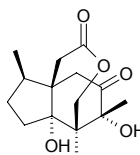
[495-59-0] C<sub>11</sub>H<sub>12</sub>N<sub>2</sub> (172.23). mp 87–88°C. **Pharm:** Cholinergic. **Source:** LUO TUO PENG *Peganum harmala*. **Ref:** 6, 658.

**5202 4-Deoxyphorbol 12,13-bis(isobutyrate)**

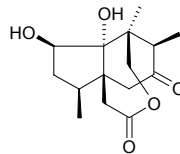
[250258-02-7] C<sub>28</sub>H<sub>40</sub>O<sub>7</sub> (488.63). Oil, [α]<sub>D</sub> = +47° (c = 0.64, CHCl<sub>3</sub>). **Source:** DUN YE DA JI *Euphorbia obtusifolia* var. *obtusifolia*. **Ref:** 2365.

**5203 3-Deoxypseudoanisatin**

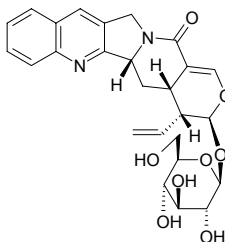
C<sub>15</sub>H<sub>22</sub>O<sub>5</sub> (282.34). [α]<sub>D</sub><sup>18</sup> = –40.2° (c = 0.44, MeOH). **Source:** *Illicium merrillianum* (pericarp). **Ref:** 4257.

**5204 6-Deoxypseudoanisatin**

7-Deoxypseudoanisatin C<sub>15</sub>H<sub>22</sub>O<sub>5</sub> (282.34). White acicular crystals (acetic ester), mp 235–237°C, [α]<sub>D</sub><sup>25</sup> = +15.5° (c = 1.406, ethanol). **Source:** HONG HUI XIANG *Illicium henryi*, MIN WAN BA JIAO *Illicium minwanense* (pericarp: yield = 0.0054%<sub>dw</sub>)<sup>[4697]</sup>. **Ref:** 100, 315, 1521, 4697.

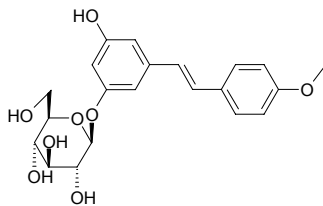
**5205 (3R)-Deoxypumiloside**

C<sub>26</sub>H<sub>28</sub>N<sub>2</sub>O<sub>8</sub> (496.52). **Source:** LIU QIU SHE GEN CAO *Ophiorrhiza liukuensis* (whole herb). **Ref:** 4527.

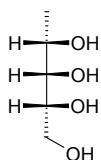


**5206 Deoxyrhaponticin**

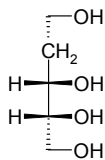
4'-*O*-Methyl piceid [36469-58-6] C<sub>21</sub>H<sub>24</sub>O<sub>8</sub> (404.42). **Pharm:** α-Glucosidase inhibitor (IC<sub>50</sub> = 280 μg/mL). **Source:** TIAN SHAN DA HUANG *Rheum wittrockii*, ZHANG YE DA HUANG *Rheum palmatum*. **Ref:** 2, 609, 660, 1438, 1780.

**5207 1-Deoxy-D-ribitol**

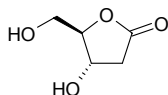
C<sub>5</sub>H<sub>12</sub>O<sub>4</sub> (136.15). **Source:** SHI LUO ZI *Anethum graveolens* (fruit). **Ref:** 4177.

**5208 2-Deoxy-D-ribitol**

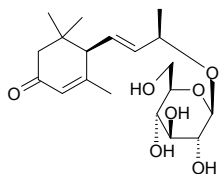
C<sub>5</sub>H<sub>12</sub>O<sub>4</sub> (136.15). Colorless syrup, [α]<sub>D</sub><sup>22</sup> = -17°. **Source:** BEI SHA SHEN *Glehnia littoralis* (fruit). **Ref:** 3525.

**5209 2-Deoxy-D-ribo-1,4-lactone**

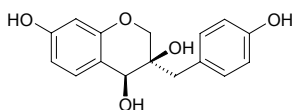
Dihydro-4-hydroxy-5-hydroxymethyl-2(3*H*)-furanone C<sub>5</sub>H<sub>8</sub>O<sub>4</sub> (132.12). Colorless oil liquid. **Source:** SHI LUO ZI *Anethum graveolens* (fruit), WEI LING XIAN *Clematis chinensis*. **Ref:** 871, 2079, 4177.

**5210 (6*S*,9*R*)-Deoxyroseoside**

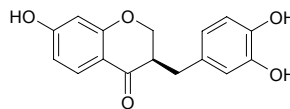
C<sub>19</sub>H<sub>30</sub>O<sub>7</sub> (370.45). **Source:** LIU QIU SHE GEN CAO *Ophiorrhiza liukuensis* (whole herb). **Ref:** 4527.

**5211 3'-Deoxysappanol**

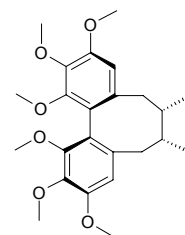
C<sub>16</sub>H<sub>16</sub>O<sub>5</sub> (288.30). **Source:** SU MU *Caesalpinia sappan* (heartwood). **Ref:** 4494.

**5212 3-Deoxysappanone B**

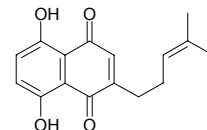
C<sub>16</sub>H<sub>14</sub>O<sub>5</sub> (286.29). **Pharm:** Xanthine oxidase inhibitor (noncompetitive inhibitory activity in concentration-dependent manner, IC<sub>50</sub> = 36.8 μmol/L, K<sub>i</sub> = 27.4 μmol/L, control Allopurinol, competitive type, IC<sub>50</sub> = 2.5 μmol/L, K<sub>i</sub> = 1.80 μmol/L). **Source:** SU MU *Caesalpinia sappan* (heartwood). **Ref:** 4494.

**5213 Deoxyschizandrin**

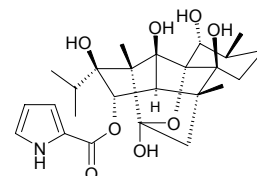
Wuweizisu A; Schizandrin A [61281-38-7] C<sub>24</sub>H<sub>32</sub>O<sub>6</sub> (416.52). [α]<sub>D</sub><sup>23</sup> = +86.7° (c = 0.30, CHCl<sub>3</sub>). **Pharm:** Antihepatotoxin (mus, due to carbon tetrachloride, promotes markedly glycogenic in liver); NFAT transcription inhibitor (IC<sub>50</sub> = (7.23±0.21) μmol/L, control Cyclosporin A, IC<sub>50</sub> = (1.20±0.29) nmol/L)<sup>[5343]</sup>. **Source:** HONG HUA WU WEI ZI *Schisandra rubriflora*, HUA ZHONG WU WEI ZI *Schisandra sphenanthera* (dried ripe fruit: content scope of 12 origins = 0.07%~5.65%, mean content = 1.65%<sup>[5508]</sup>), WU WEI ZI *Schisandra chinensis* (dried ripe fruit: content scope of 6 origins = 0.17%~1.10%, mean content = 0.52%<sup>[5508]</sup>). **Ref:** 2, 658, 5343, 5508.

**5214 Deoxyshikonin**

[43043-74-9] C<sub>16</sub>H<sub>16</sub>O<sub>4</sub> (272.30). **Pharm:** Antibacterial (*Staphylococcus aureus* 209P, MIC = 40 μg/kg; *Staphylococcus aureus* TPR27, MIC = 20 μg/kg; *Staphylococcus epidermidis* TPR25, MIC = 80 μg/kg; *Sarcina lutea* NIHJ, MIC = 40 μg/kg; *Bacillus subtilis*, MIC = 40 μg/kg). **Source:** JIA ZI CAO *Arnebia guttata*, XIN ZANG JIA ZI CAO *Arnebia euchroma* (root: mean content of 3 origins = 0.174%<sup>[5508]</sup>), ZI CAO *Lithospermum erythrorhizon*. **Ref:** 2, 658, 660, 5501, 5508.

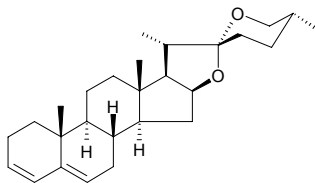
**5215 20-Deoxyspiganthine**

C<sub>25</sub>H<sub>35</sub>NO<sub>8</sub> (477.56). Crystals (CHCl<sub>3</sub>:Me<sub>2</sub>CO = 1:1), mp 144~147°C, [α]<sub>D</sub> = +12° (c = 0.1). **Pharm:** Cardiac contraction inhibitor (guinea-pig papillary muscle, causes a prolongation of the latency time and decrease of contraction force, EC<sub>50</sub> = 54 nmol/L). **Source:** QU CHONG CAO *Spigelia anthelmia* (aerial parts). **Ref:** 5139.

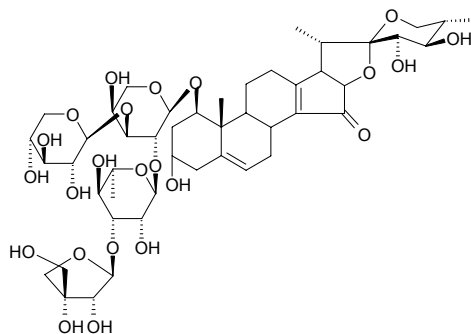


**5216 4<sup>3,5</sup>-Deoxytigogenin**

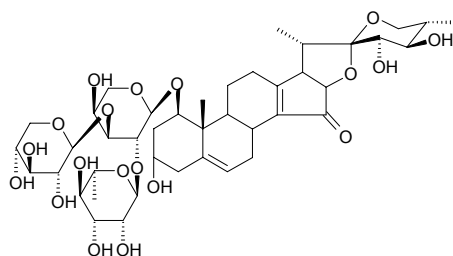
$C_{27}H_{40}O_2$  (396.62). Source: CHA RUI SHU YU *Dioscorea collettii*, CHAI HUANG JIANG *Dioscorea nipponica* ssp. *rosthornii*, CHUAN LONG SHU YU *Dioscorea nipponica*, DUN YE SHU YU *Dioscorea zingiberensis*, BI XIE *Dioscorea hypoglauca* [Syn. *Dioscorea collettii* var. *hypoglauca*], FU ZHOU SHU YU *Dioscorea futschauensis*, HUANG SHAN YAO *Dioscorea panthaica*, MIAN BI XIE *Dioscorea septemloba*, SHU KUI YE SHU YU *Dioscorea althaeoides*, XIAN XI SHU YU *Dioscorea gracillima*, XIAO HUA DUN YE SHU YU *Dioscorea parviflora*. Ref: 6, 10, 660.

**5217 Deoxytrillenoid A**

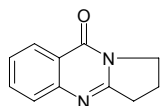
$C_{47}H_{70}O_{23}$  (1003.07). Amorphous powder,  $[\alpha]_D^{25} = -113.2^\circ$  ( $c = 0.8$ , MeOH). Source: JI LIN YAN LING CAO *Trillium kamschaticum* (underground part). Ref: 4403.

**5218 Deoxytrillenoid B**

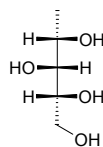
$C_{42}H_{62}O_{19}$  (870.95). Source: JI LIN YAN LING CAO *Trillium kamschaticum* (underground part). Ref: 4403.

**5219 Deoxyvasicinone**

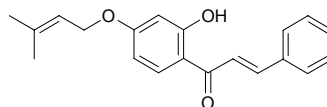
[530-53-0]  $C_{11}H_{10}N_2O$  (186.22). mp 109~110°C. Pharm: Cholinergic. Source: LUO TUO HAO *Peganum nigellastrum*, LUO TUO PENG *Peganum harmala*, LUO TUO PENG ZI *Peganum harmala*. Ref: 6, 658.

**5220 1-Deoxy-D-xylitol**

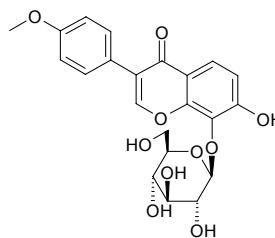
$C_5H_{12}O_4$  (136.15). Source: SHI LUO ZI *Anethum graveolens* (fruit). Ref: 4177.

**5221 Derricidin**

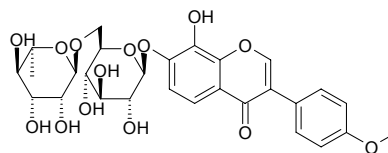
$C_{20}H_{20}O_3$  (308.38). Source: HONG E JI XUE TENG *Milletia erythrocalyx* (stem cortex; yield = 0.0013%dw). Ref: 4624.

**5222 Derriscandenoid A**

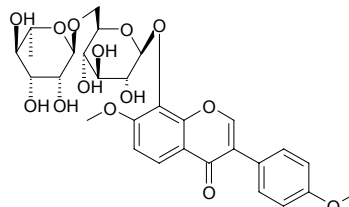
7,8-Dihydroxy-4'-methoxyisoflavone-8-O-β-glucopyranoside  $C_{22}H_{22}O_{10}$  (446.41). Colorless viscous gum,  $[\alpha]_D^{29} = -55.56^\circ$  ( $c = 0.36$ ,  $CHCl_3$ ). Source: PAN YUAN YU TENG *Derris scandens*. Ref: 1976.

**5223 Derriscandenoid B**

7,8-Dihydroxy-4'-methoxyisoflavone 7-O-[α-rhamnopyranosyl-(1→6)]-β-glucopyranoside  $C_{28}H_{32}O_{14}$  (592.56). Colorless viscous gum,  $[\alpha]_D^{29} = -51.47^\circ$  ( $c = 1.36$ ,  $CHCl_3$ ). Source: PAN YUAN YU TENG *Derris scandens*. Ref: 1976.

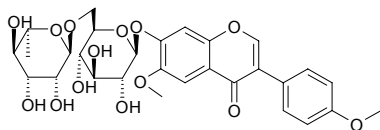
**5224 Derriscandenoid C**

8-Hydroxy-4',7-dimethoxyisoflavone 8-O-[α-rhamnopyranosyl-(1→6)]-β-glucopyranoside  $C_{29}H_{34}O_{14}$  (606.59). Colorless viscous gum,  $[\alpha]_D^{29} = -40.54^\circ$  ( $c = 0.74$ ,  $CHCl_3$ ). Source: PAN YUAN YU TENG *Derris scandens*. Ref: 1976.

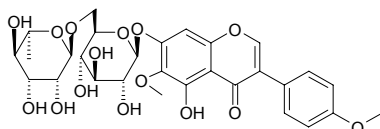


**5225 Derriscandenoside D**

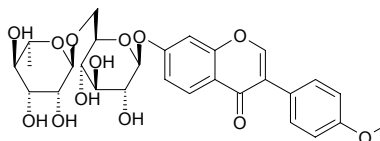
Afrosomin 7-*O*-[ $\alpha$ -rhamnopyranosyl-(1 $\rightarrow$ 6)]- $\beta$ -glucopyranoside  
 $C_{29}H_{34}O_{14}$  (606.59). Colorless viscous gum,  $[\alpha]_D^{29} = -68.18^\circ$  ( $c = 0.44$ ,  $CHCl_3$ ). Source: PAN YUAN YU TENG *Derris scandens*. Ref: 1976.

**5226 Derriscandenoside E**

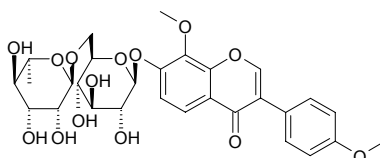
$C_{29}H_{34}O_{15}$  (622.59). Colorless viscous gum,  $[\alpha]_D^{29} = -90.90^\circ$  ( $c = 0.11$ ,  $CHCl_3$ ). Source: PAN YUAN YU TENG *Derris scandens*. Ref: 1976.

**5227 Derriscandenoside A**

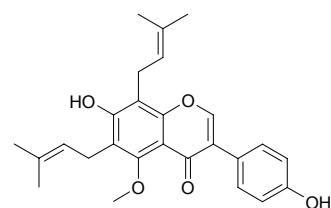
$C_{28}H_{32}O_{13}$  (576.56). Light yellow powder, mp 115–117°C. Pharm: Antioxidant (DPPH scavenger, 10  $\mu$ mol/L, ScRt = 18%, control BHT, 10  $\mu$ mol/L, ScRt = 43%)<sup>[5319]</sup>. Source: PAN YUAN YU TENG *Derris scandens*, TIAN SHAN ZHU ZI *Garcinia dulcis* (fruit). Ref: 664, 5319.

**5228 Derriscandenoside B**

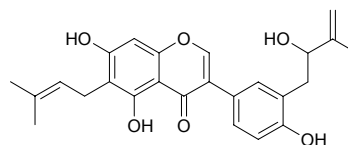
$C_{29}H_{34}O_{14}$  (606.59). Light yellow powder, mp 145–147°C. Source: PAN YUAN YU TENG *Derris scandens*. Ref: 664.

**5229 Derrisoflavone A**

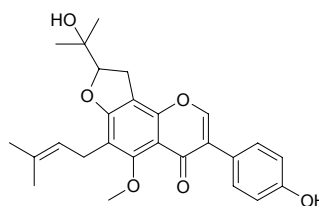
$C_{26}H_{28}O_5$  (420.51). Pale yellow amorphous, with yellow fluorescence. Pharm: Antifungal (dermatophyte *Trichophyton mentagrophytes*, 500–1000  $\mu$ g/mL)<sup>[2347]</sup>; antioxidant (DPPH scavenger, ScRt = 81.58%, control BHT, ScRt = 71.5%)<sup>[3810]</sup>; antibacterial (*Staphylococcus aureus* ATCC 25923, MIC = 16  $\mu$ g/mL, Vancomycin, MIC = 0.5  $\mu$ g/mL; MRSA SK1, MIC = 4  $\mu$ g/mL, Vancomycin, MIC = 1.0  $\mu$ g/mL)<sup>[3810]</sup>; increases blood pressure (anesthetized rats, increases in mean arterial blood pressure, 4.0 mg/kg, 7.5 mmHg)<sup>[3810]</sup>. Source: PAN YUAN YU TENG *Derris scandens*. Ref: 2347, 3810.

**5230 Derrisoflavone B**

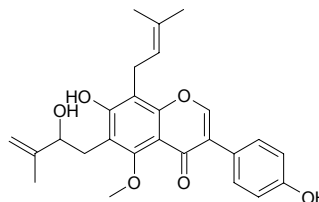
$C_{25}H_{26}O_6$  (422.48). Pale brown amorphous,  $[\alpha]_D = +3.0^\circ$  ( $c = 0.054$ , EtOH). Pharm: Antifungal (dermatophyte *Trichophyton mentagrophytes*, 500–1000  $\mu$ g/mL). Source: PAN YUAN YU TENG *Derris scandens*. Ref: 2347.

**5231 Derrisoflavone C**

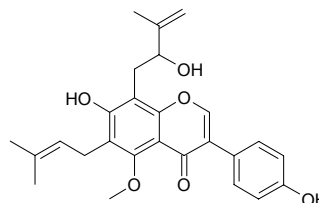
$C_{26}H_{28}O_6$  (436.51). Colorless amorphous,  $[\alpha]_D = -63.8^\circ$  ( $c = 0.043$ , EtOH). Pharm: Antifungal (dermatophyte *Trichophyton mentagrophytes*, 250  $\mu$ g/mL). Source: PAN YUAN YU TENG *Derris scandens*. Ref: 2347.

**5232 Derrisoflavone D**

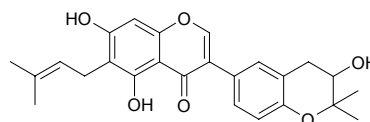
$C_{26}H_{28}O_6$  (436.51). Colorless amorphous,  $[\alpha]_D = -10.8^\circ$  ( $c = 0.088$ , EtOH). Pharm: Antifungal (dermatophyte *Trichophyton mentagrophytes*, 500–1000  $\mu$ g/mL). Source: PAN YUAN YU TENG *Derris scandens*. Ref: 2347.

**5233 Derrisoflavone E**

$C_{26}H_{28}O_6$  (436.51). Pale brown amorphous,  $[\alpha]_D = +2.0^\circ$  ( $c = 0.089$ , EtOH). Pharm: Antifungal (dermatophyte *Trichophyton mentagrophytes*, 500–1000  $\mu$ g/mL). Source: PAN YUAN YU TENG *Derris scandens*. Ref: 2347.

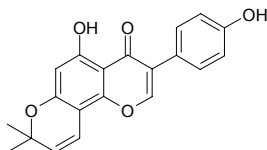
**5234 Derrisoflavone F**

$C_{25}H_{26}O_6$  (422.48). Colorless amorphous,  $[\alpha]_D = +20.6^\circ$  ( $c = 0.12$ , EtOH). Pharm: Antifungal (dermatophyte *Trichophyton mentagrophytes*, 500–1000  $\mu$ g/mL). Source: PAN YUAN YU TENG *Derris scandens*. Ref: 2347.

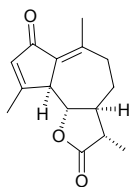


**5235 Derrone**

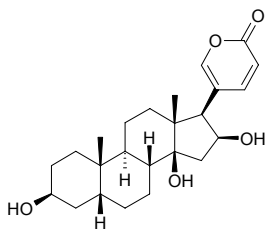
5-Hydroxy-3-(4-hydroxyphenyl)-8,8-dimethyl-4*H*,8*H*-benzo[1,2-*b*:3,4-*b'*]dipyran-4-one [76166-59-1] C<sub>20</sub>H<sub>16</sub>O<sub>5</sub> (336.35). **Pharm:** Antibacterial (*Escherichia coli*, MIA = 100.0µg, control Chloramphenicol, MIA = 0.001µg; *Bacillus subtilis*, MIA = 20.0µg, Chloramphenicol, MIA = 0.001µg; *Staphylococcus aureus*, MIA = 0.1µg, Chloramphenicol, MIA = 0.001µg)<sup>[3785]</sup>; antifungal (*Candida mycoderma*, MIA = 1.00µg, Miconazole, MIA = 0.0001µg)<sup>[3785]</sup>; hepatoprotective (mus primary cultured hepatocytes, antihepatotoxin induced by *D*-galactosamine (GalN), 100µmol/L, InRt = (4.0±1.0)%, inactive, control Silybin, 100µmol/L, InRt = (77.0±5.5)%<sup>[4095]</sup>). **Source:** CU ZHUANG YU TENG *Derris robusta* (seed), GUANG BU DING GONG TENG *Erycibe expansa*, *Bolusanthus speciosus* (root wood). **Ref:** 3785, 4095.

**5236 Desacetoxymatricarin**

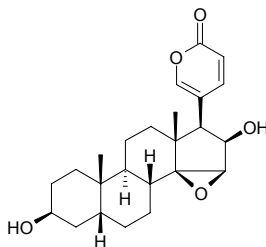
[17946-87-1] C<sub>15</sub>H<sub>18</sub>O<sub>3</sub> (246.31). **Pharm:** Antineoplastic; cytotoxic; plant growth inhibitor. **Source:** BAN GUAN MU MU JU *Matricaria suffruticosa*, *Achillea* sp., *Artemisia* sp. **Ref:** 658.

**5237 Desacetylbufotalin**

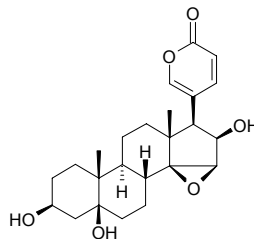
C<sub>24</sub>H<sub>34</sub>O<sub>5</sub> (402.54). **Pharm:** Cytotoxic (*in vitro*, KB, IC<sub>50</sub> = 0.79µg/mL; HL-60, IC<sub>50</sub> = 0.025µg/mL; MH-60, IC<sub>50</sub> > 25µg/mL)<sup>[3082]</sup>. **Source:** CHAN SU *Bufo bufo gargarizans*; *Bufo melanostictus*. **Ref:** 2, 6, 3082.

**5238 Desacetylcinobufagin**

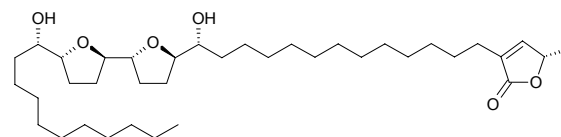
C<sub>24</sub>H<sub>32</sub>O<sub>5</sub> (400.52). **Pharm:** Cytotoxic (*in vitro*, KB, IC<sub>50</sub> = 0.44µg/mL; HL-60, IC<sub>50</sub> = 1µg/mL; MH-60, IC<sub>50</sub> > 25µg/mL)<sup>[3082]</sup>. **Source:** CHAN SU *Bufo bufo gargarizans*; *Bufo melanostictus*. **Ref:** 2, 6, 3082.

**5239 Desacetylcinobufotalin**

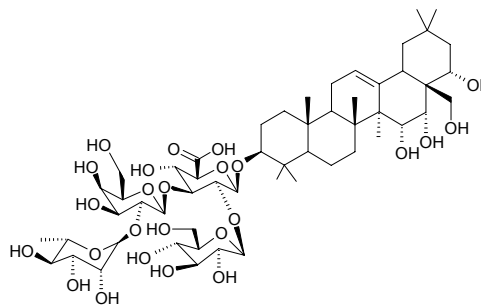
C<sub>24</sub>H<sub>32</sub>O<sub>6</sub> (416.52). **Pharm:** Cytotoxic (*in vitro*, KB, IC<sub>50</sub> = 10µg/mL; HL-60, IC<sub>50</sub> = 4.3µg/mL; MH-60, IC<sub>50</sub> > 25µg/mL)<sup>[3082]</sup>. **Source:** CHAN SU *Bufo bufo gargarizans*; *Bufo melanostictus*. **Ref:** 2, 6, 3082.

**5240 Desacetylvaricin**

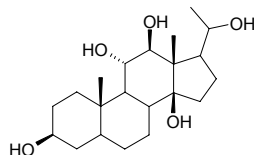
[98767-45-4] C<sub>37</sub>H<sub>66</sub>O<sub>6</sub> (606.93). Colorless oil, [α]<sub>D</sub><sup>25</sup> = +30.3° (c = 0.26, CHCl<sub>3</sub>). **Pharm:** Cytotoxic (hmn hepatoma cell lines HepG2, IC<sub>50</sub> = 0.062ng/mL, control Adriamycin, IC<sub>50</sub> = 0.241µg/mL; hmn hepatoma cells transfected with hepatitis B virus Hep2,2,15, IC<sub>50</sub> = 0.071ng/mL, Adriamycin, IC<sub>50</sub> = 0.450µg/mL). **Source:** CI GUO FAN LI ZHI *Annona muricata*. **Ref:** 5377.

**5241 Desacyl-boninsaponin A**

C<sub>54</sub>H<sub>88</sub>O<sub>25</sub> (1137.29). **Source:** RI BEN HOU PI XIANG *Ternstroemia japonica* (fresh fruit: yield = 0.00066%fw). **Ref:** 4730.

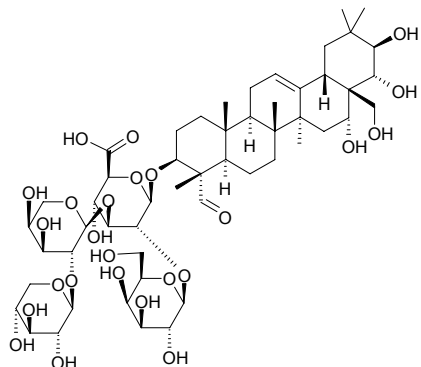
**5242 Desacylkondurangogenin C**

C<sub>21</sub>H<sub>36</sub>O<sub>5</sub> (368.52). White amorphous powder, mp 127°C, [α]<sub>D</sub> = +135.6° (c = 0.14, CHCl<sub>3</sub>). **Source:** ROU LEI NIU NAI CAI *Marsdenia roylei* (aerial parts). **Ref:** 3490.

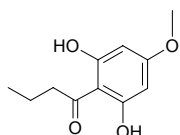


**5243 Desacyl-theasaponin E**

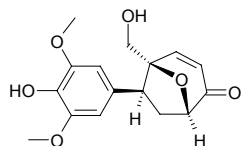
$C_{52}H_{82}O_{25}$  (1107.22). Source: PU ER CHA *Camellia sinensis* var. *assamica* (seed and leaf). Ref: 4537.

**5244 Desaspidinol**

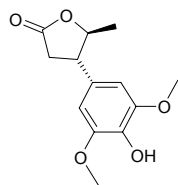
[437-72-9]  $C_{11}H_{14}O_4$  (210.23). Source: GUAN ZHONG *Dryopteris crassirhizoma*. Ref: 6, 1521.

**5245 Descurainin**

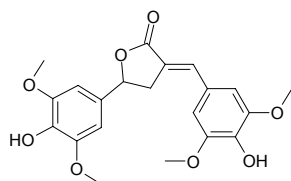
5-Hydroxymethyl-6-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxa-bicyclo[3,2,1]oct-3-en-2-one  $C_{16}H_{18}O_6$  (306.32). Colorless needles, mp 193~195°C,  $[\alpha]_D^{20} = +1.7^\circ$  ( $c = 0.23$ , MeOH). Source: BO NIANG HAO *Descurainia Sophia* (seeds). Ref: 2548.

**5246 Descurainolide A**

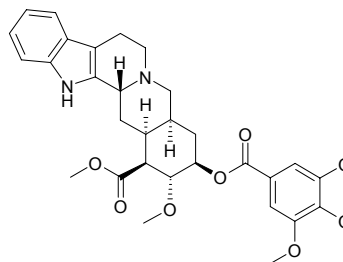
4-(4-Hydroxy-3,5-dimethoxy-phenyl)-5-methyl-dihydro-furan-2-one  $C_{13}H_{16}O_5$  (252.27). Colorless needles, mp 117~118°C,  $[\alpha]_D^{20} = +0.3^\circ$  ( $c = 0.19$ , Me<sub>2</sub>CO). Source: BO NIANG HAO *Descurainia Sophia* (seeds). Ref: 2548.

**5247 Descurainolide B**

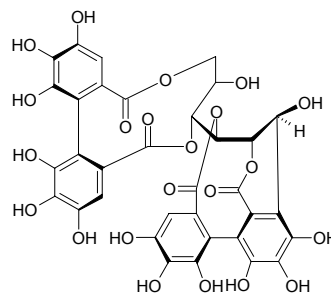
*trans*-3-(4-Hydroxy-3,5-dimethoxy-benzylidene)-5-(4-hydroxy-3,5-dimethoxy-phenyl)-dihydrofuran-2-one  $C_{21}H_{22}O_8$  (402.40). Colorless needles, mp 201~203°C,  $[\alpha]_D^{20} = +2.3^\circ$  ( $c = 0.37$ , MeOH). Source: BO NIANG HAO *Descurainia Sophia* (seeds). Ref: 2548.

**5248 Deserpidine**

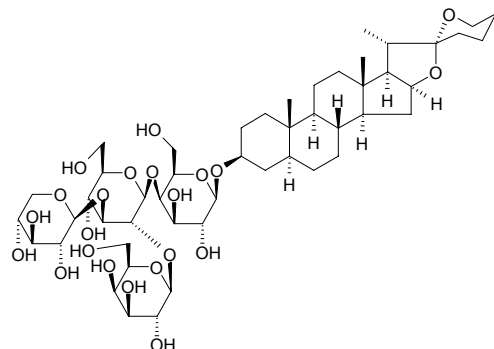
[131-01-1]  $C_{32}H_{38}N_2O_8$  (578.67). Three crystals types (methanol):  $\alpha$ -, mp 228~232°C;  $\beta$ -, mp 230~232°C;  $\gamma$ -, mp 138°C and 226~232°C (two-melting points, 173 solidifying),  $[\alpha]_D^{20} = -163^\circ$  ( $c = 0.5$ , pyridine). Pharm: CNS depressant; antihypertensive. Source: CUI TU LUO FU MU *Rauwolfia vomitoria*, GU BA LUO FU MU *Rauwolfia cubana*, HAI BIN LUO FU MU *Rauwolfia littoralis*, HUI BAI MAO LUO FU MU *Rauwolfia canescens*, YIN DU LUO FU MU *Rauwolfia serpentina*. Ref: 661.

**5249 5-Desgalloylstachyurin**

$C_{34}H_{24}O_{22}$  (784.56). Source: BAI SHAO *Paeonia albiflora* [Syn. *Paeonia lactiflora*] (fresh fruit: yield = 0.015%fw). Ref: 4695.

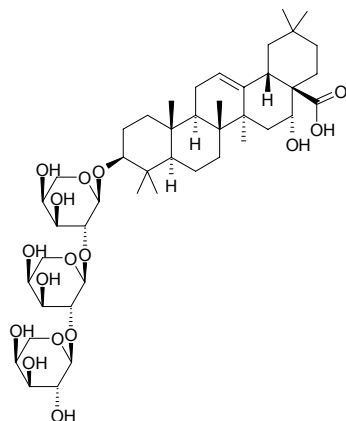
**5250 Desglucolanatigonin II**

[40043-49-0]  $C_{50}H_{82}O_{22}$  (1035.20). Amorphous powder,  $[\alpha]_D^{28} = -38.7^\circ$  ( $c = 0.10$ , chloroform : methanol = 1:1). Pharm: cAMP phosphodiesterase inhibitor ( $IC_{50} = 123\mu\text{mol/L}$ ). Source: CI JI LI *Tribulus terrestris*. Ref: 706, 738, 951.

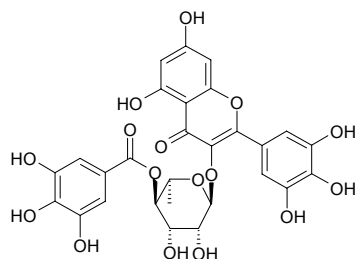


**5251 Desglucosusennin**

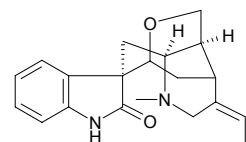
C<sub>45</sub>H<sub>72</sub>O<sub>16</sub> (869.07). **Pharm:** Anthelmintic. **Source:** QU CHONG HE HUAN *Albizzia anthelmintica*. **Ref:** 658.

**5252 Desmanthin 2**

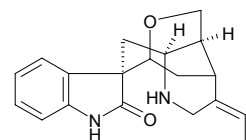
[85541-03-3] C<sub>28</sub>H<sub>24</sub>O<sub>16</sub> (616.49). Yellow powder, mp 196°C. **Source:** YI LI NUO HE HUAN CAO *Desmanthus illinoensis*. **Ref:** 1521.

**5253 N-Desmethoxyhumantenine**

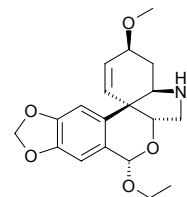
C<sub>20</sub>H<sub>24</sub>N<sub>2</sub>O<sub>2</sub> (324.43). mp 238–240°C, [α]<sub>D</sub> = -188.5°. **Source:** GOU WEN *Gelsemium elegans*. **Ref:** 14.

**5254 N-Desmethoxyrankinidine**

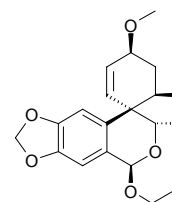
[122590-02-7] C<sub>19</sub>H<sub>22</sub>N<sub>2</sub>O<sub>2</sub> (310.40). mp 258–260°C, [α]<sub>D</sub> = -169.2°. **Source:** GOU WEN *Gelsemium elegans*. **Ref:** 14.

**5255 N-Desmethyl-8α-ethoxy pretazettine**

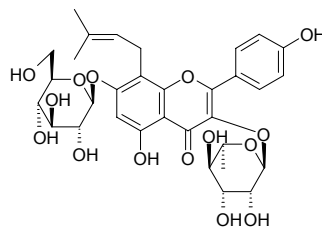
C<sub>19</sub>H<sub>23</sub>NO<sub>5</sub> (345.40). Amorphous, [α]<sub>D</sub><sup>28</sup> = +160.63° (c = 0.09, CHCl<sub>3</sub>). **Pharm:** AChE inhibitor (IC<sub>50</sub> = (234±13)μmol/L, control Galanthamine, IC<sub>50</sub> = (1.9±0.2)μmol/L)<sup>[4952]</sup>. **Source:** LIN JING ZHONG ZI WEN SHU LAN *Crinum bulbispermum*. **Ref:** 2369, 4952.

**5256 N-Desmethyl-8β-ethoxy pretazettine**

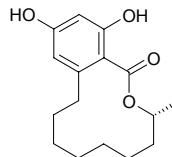
C<sub>19</sub>H<sub>23</sub>NO<sub>5</sub> (345.40). Amorphous, [α]<sub>D</sub><sup>28</sup> = +34° (c = 0.14, CHCl<sub>3</sub>). **Pharm:** AChE inhibitor (IC<sub>50</sub> = (419±8)μmol/L, control Galanthamine, IC<sub>50</sub> = (1.9±0.2)μmol/L)<sup>[4952]</sup>. **Source:** LIN JING ZHONG ZI WEN SHU LAN *Crinum bulbispermum*. **Ref:** 2369, 4952.

**5257 Des-O-methylcariin**

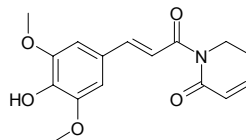
Epimesoside A [39012-04-9] C<sub>32</sub>H<sub>38</sub>O<sub>15</sub> (662.65). mp 235–237°C. **Source:** CU MAO YIN YANG HUO *Epimedium acuminatum*, CHUAN E YIN YANG HUO *Epimedium fargesii*, YIN YANG HUO *Epimedium brevicornum*, YIN YANG HUO GEN *Epimedium brevicornum*. **Ref:** 2, 6, 112, 514, 567, 624.

**5258 Des-O-methylsiodiplodin**

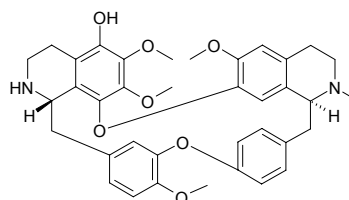
C<sub>16</sub>H<sub>22</sub>O<sub>4</sub> (278.35). **Pharm:** Prostaglandin biosynthesis inhibitor (20μg/mL, InRt = 62.5%). **Source:** ZI CAO *Lithospermum erythrorhizon*, XIN ZANG JIA ZI CAO *Arnebia euchroma*. **Ref:** 2193.

**5259 4'-Desmethylpiplartine**

*N*-(4'-Hydroxy-3',5'-dimethoxycinnamoyl)-2'-pyridin-2-one C<sub>16</sub>H<sub>17</sub>NO<sub>5</sub> (303.32). Yellow oil. **Source:** *Piper cenocladum* (leaf). **Ref:** 3896.

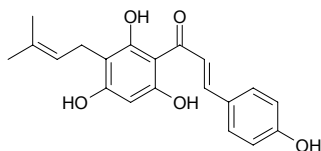
**5260 N-Desmethylthalidezine**

[65230-06-0] C<sub>37</sub>H<sub>40</sub>N<sub>2</sub>O<sub>7</sub> (624.74). Colorless acicular crystals (methanol), mp 173–174°C, [α]<sub>D</sub><sup>25</sup> = +280° (c = 0.14, methanol). **Pharm:** Antihypertensive (dog, rat). **Source:** BING GUO TANG SONG CAO *Thalictrum podocarpum*. **Ref:** 661.

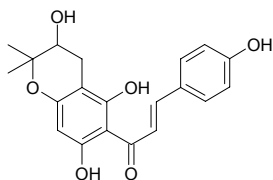


**5261 Desmethylxanthohumol**

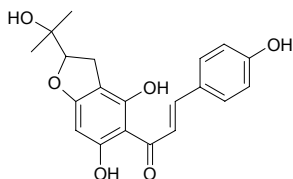
$C_{20}H_{20}O_5$  (340.38). Source: PI JIU HUA *Humulus lupulus* (strobile). Ref: 4789.

**5262 Desmethylxanthohumol B**

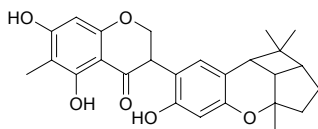
(±)-{(2*E*)-1-(3,4-Dihydro-3,5,7-trihydroxy-2,2-dimethyl-2*H*-1-benzopyran-6-yl)-3-(4-hydroxyphenyl)-2-propen-1-one}; DMX-B  $C_{20}H_{20}O_6$  (356.38). Yellow orange solid. Source: PI JIU HUA *Humulus lupulus* (strobile). Ref: 4789.

**5263 Desmethylxanthohumol J**

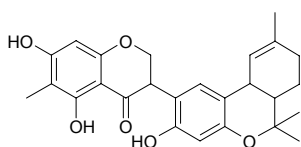
(2*E*)-1-[2,3-Dihydro-4,6-dihydroxy-2-(1-hydroxy-1-methylethyl)-7-benzofuranyl]-3-(4-hydroxyphenyl)-2-propen-1-one; DMX-J  $C_{20}H_{20}O_6$  (356.38). Yellow orange solid. Source: PI JIU HUA *Humulus lupulus* (strobile). Ref: 4789.

**5264 Desmodianone D**

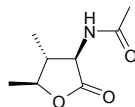
2,3-Dihydro-5,7-dihydroxy-6-methyl-3-(1*a*,2,3,3*a*,8*b*,8*c*-hexahydro-6-hydroxy-1,1,3*a*-trimethyl-1*H*-4-oxabenzof[*f*]cyclobut[*c,d*]inden-7-yl)-4*H*-1-benzopyran-4-one  $C_{26}H_{28}O_6$  (436.51). Source: DAN HUI BAI SHAN MA HUANG *Desmodium canum*. Ref: 3444.

**5265 Desmodianone E**

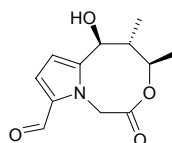
2,3-Dihydro-5,7-dihydroxy-6-methyl-3-(6*a*,7,8,10*a*-tetrahydro-3-hydroxy-6,6,9-trimethyl-6*H*-dibenzo[*b,d*]pyran-2-yl)-4*H*-1-benzopyran-4-one  $C_{26}H_{28}O_6$  (436.51). Source: DAN HUI BAI SHAN MA HUANG *Desmodium canum*. Ref: 3444.

**5266 Desmodilactone**

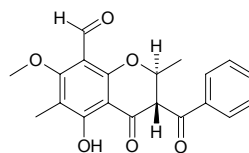
$C_8H_{13}NO_3$  (171.20). Colorless massive crystals, mp 84~85°C,  $[\alpha]_D^{18} = -16.4^\circ$  ( $c = 0.11$ , MeOH). Source: GUANG JIN QIAN CAO *Desmodium styracifolium*. Ref: 260.

**5267 Desmodimine**

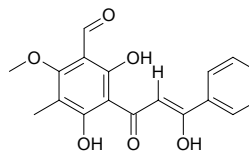
[150036-83-2]  $C_{12}H_{15}NO_4$  (237.26). Colorless gummy substance. Source: GUANG JIN QIAN CAO *Desmodium styracifolium*. Ref: 260.

**5268 Desmosdumotin A**

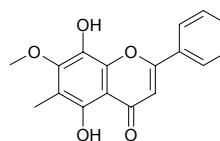
5-Hydroxy-7-methoxy-8-formyl-3-benzoyl-2,6-dimethyl-2*S*,3*R*-dihydrochromone  $C_{20}H_{18}O_6$  (354.36). Yellow massive crystals (CHCl<sub>3</sub>-MeOH), mp 124~125°C. Source: MAO YE JIA YING ZHAO GEN *Desmos dumosus*. Ref: 685.

**5269 Desmosdumotin D**

2-Methoxy-3-methyl-4,6-dihydroxy-5(3'-hydroxyl)cinnamoylbenzaldehyde  $C_{18}H_{16}O_6$  (328.32). Yellow acicular crystals (CHCl<sub>3</sub>-MeOH), mp 147~148°C. Pharm: Anti-HIV (a lead candidate)<sup>[4881]</sup>. Source: MAO YE JIA YING ZHAO GEN *Desmos dumosus*. Ref: 685, 4881.

**5270 Desmosflavone**

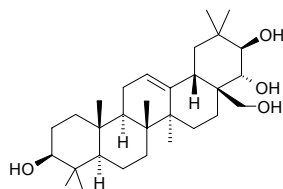
5-Hydroxy-7-methoxy-6,8-dimethylflavone  $C_{17}H_{14}O_5$  (298.30). Orange sandy crystals (chloroform), mp 197~198°C. Source: JIA YING ZHAO *Desmos cochinchinensis* [Syn. *Desmos chinensis*]. Ref: 312.



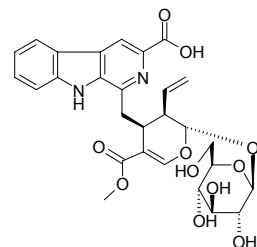


**5271 16-Desoxybarringtonol C**

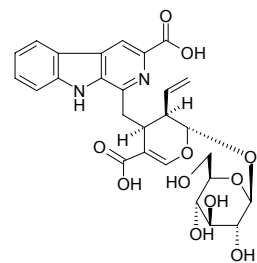
$C_{30}H_{50}O_4$  (474.73). mp 288.0~290.5°C. Source: RI BEN QI YE SHU *Aesculus turbinata*. Ref: 6.

**5272 Desoxycordifoline**

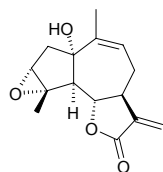
$C_{28}H_{30}N_2O_{11}$  (570.56). mp 144~146°C. Pharm: Antibacterial (*in vitro*: *Staphylococcus aureus*, *Bacillus subtilis*, *Bacillus coli*, *Bacillus diphtheriae*, *Streptococcus* sp., *Streptobacillus* sp., *Salmonella* sp., *Bacillus proteus*, *Bacillus lactis*, *Klebsiella pneumoniae*); antileishmanial; antifungal (*Aspergillus niger*). Source: DI SHI WU TAN *Nauclea diderrichii*. Ref: 2178.

**5273 Desoxycordifolinic acid**

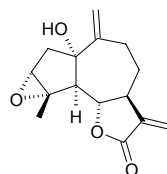
[88839-94-5]  $C_{27}H_{28}N_2O_{11}$  (556.53). mp 206~208°C,  $[\alpha]_D = -45.7^\circ$  ( $c = 0.126$ , MeOH). Pharm: Antibacterial (*in vitro*: *Staphylococcus aureus*, *Bacillus subtilis*, *Bacillus coli*, *Bacillus diphtheriae*, *Streptococcus* sp., *Streptobacillus* sp., *Salmonella* sp., *Bacillus proteus*, *Bacillus lactis*, *Klebsiella pneumoniae*); antileishmanial; antifungal (*Aspergillus niger*). Source: DI SHI WU TAN *Nauclea diderrichii*. Ref: 2178.

**5274 8-Desoxy-3 $\alpha$ ,4 $\alpha$ -epoxyrupiculin-A**

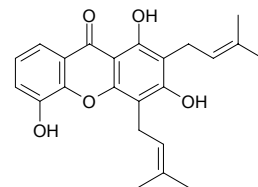
$C_{15}H_{18}O_4$  (262.31). Colorless gum,  $[\alpha]_D^{22} = -22^\circ$  ( $c = 0.1$ , EtOH). Pharm: Cytotoxic (*in vitro*, KB,  $IC_{50} = 1.7\mu\text{g/mL}$ ). Source: *Warionia saharae* (leaf: yield = 0.0004%dw). Ref: 4620.

**5275 8-Desoxy-3 $\alpha$ ,4 $\alpha$ -epoxyrupiculin-B**

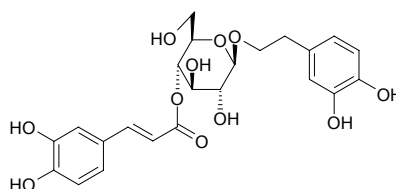
$C_{15}H_{18}O_4$  (262.31). Colorless gum,  $[\alpha]_D^{22} = +46^\circ$  ( $c = 0.1$ , EtOH). Pharm: Cytotoxic (*in vitro*, KB,  $IC_{50} = 2.0\mu\text{g/mL}$ ). Source: *Warionia saharae* (leaf: yield = 0.0008%dw). Ref: 4620.

**5276 8-Desoxygartanin**

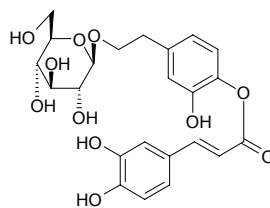
$C_{23}H_{24}O_5$  (380.44). Pharm: Antioxidant (DPPH scavenger,  $10\mu\text{mol/L}$ , ScRt = 8%, control BHT,  $10\mu\text{mol/L}$ , ScRt = 43%)<sup>[5319]</sup>, cytotoxic (KB cancer cell lines, inactive; BC-1, inactive; NCI-H187,  $IC_{50} = 16.88\mu\text{g/mL}$  Ellipticine,  $IC_{50} = 0.39\mu\text{g/mL}$ )<sup>[1619]</sup>; antibacterial (MRSA, MIC =  $16\mu\text{g/mL}$ ; control Vancomycin, MIC =  $2\mu\text{g/mL}$ )<sup>[4735]</sup>. Source: DAO NIAN ZI *Garcinia mangostana* (young fruit: yield = 0.0060%dw)<sup>[1619]</sup>, DAO NIAN ZI *Garcinia mangostana* (fruit hull), HEI XIAN TIAO TENG HUANG *Garcinia nigrolineata* (leaf: yield = 0.00047%dw)<sup>[4735]</sup>, MEI LI TENG HUANG *Garcinia speciosa* (trunk bark and stems), TIAN SHAN ZHU ZI *Garcinia dulcis* (fruit). Ref: 1619, 3066, 4735, 5319, 5491.

**5277 Desrhamnosylacteoside**

$C_{23}H_{26}O_{11}$  (478.46). Source: CHANG YE CHE QIAN *Plantago lanceolata*. Ref: 5020.

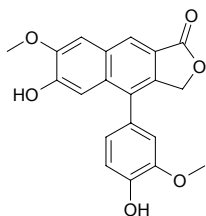
**5278 Desrhamnosylisoacteoside**

$C_{23}H_{26}O_{11}$  (478.46). Source: CHANG YE CHE QIAN *Plantago lanceolata*. Ref: 5020.

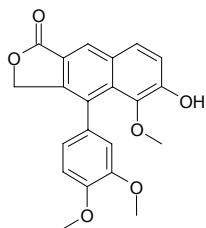


**5279 Detetrahydroconidendrin**

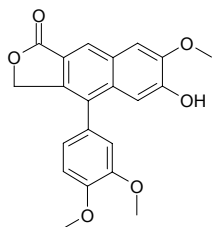
$C_{20}H_{16}O_6$  (352.35). **Pharm:** Antibacterial (18 methicillin-resistant *Staphylococcus aureus* MRSA, MIC = 4, 8, 16, or  $>64\mu\text{g/mL}$ )<sup>[3052]</sup>, antioxidant (ferric thiocyanate method, 0.5mmol/L, stronger than control Vitamin E; DPPH radical scavenger, DPPH 0.1mmol/L, 0.02mmol/L, stronger than control *L*-Cysteine)<sup>[4791]</sup>. **Source:** DAN YE MAN JING *Vitex rotundifolia* [Syn. *Vitex trifolia* var. *simplicifolia*] (underground part: yield = 0.00017%dw)<sup>[3052]</sup>, HUANG JING ZHONG ZI *Vitex negundo* (seed: yield = 0.0051%)<sup>[4791]</sup>. **Ref:** 3052, 4791.

**5280 Detetrahydroconidendrin B**

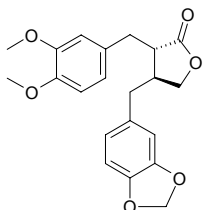
$C_{21}H_{18}O_6$  (366.37). Brown amorphous solid. **Source:** DAN YE MAN JING *Vitex rotundifolia* [Syn. *Vitex trifolia* var. *simplicifolia*] (underground part: yield = 0.000057%dw). **Ref:** 3052.

**5281 Detetrahydroconidendrin C**

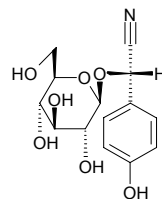
$C_{21}H_{18}O_6$  (366.37). Yellowish oil. **Source:** DAN YE MAN JING *Vitex rotundifolia* [Syn. *Vitex trifolia* var. *simplicifolia*] (underground part: yield = 0.000042%dw). **Ref:** 3052.

**5282 Dextrobursehernin**

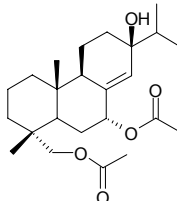
$C_{21}H_{22}O_6$  (370.41). Colorless liquid,  $[\alpha]_D^{25} = +36.0^\circ$  ( $c = 1.0$ ). **Source:** YE XIA ZHU *Phyllanthus urinaria*. **Ref:** 3410.

**5283 Dhuririn**

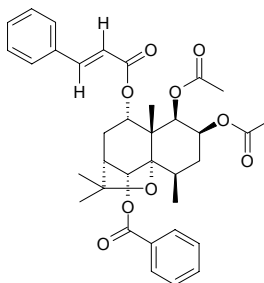
*p*-Hydroxymandelonitril-glucoside [21401-21-8]  $C_{14}H_{17}NO_7$  (311.29). **Pharm:** Toxin. **Source:** AO ZHOU JIAN GUO *Macadamia ternifolia*, GAO LIANG *Sorghum vulgare*, KUN LAN SHU *Trochodendron aralioides*, LIU LI JU *Borago officinalis*, YE YING SU *Papaver nudicaule*, *Platanus* sp. **Ref:** 6, 658, 1521.

**5284 7 $\alpha$ ,18-Diacetoxybiet-8(14)-en-13 $\beta$ -ol**

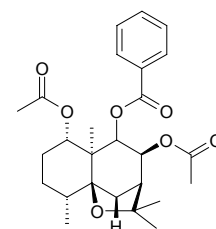
$C_{24}H_{38}O_5$  (406.57). Colorless oil,  $[\alpha]_D = +14.7^\circ$  ( $c = 1.0$ ,  $\text{CHCl}_3$ ). **Pharm:** Cytotoxic (A549,  $\text{IC}_{50} > 5\mu\text{g/mL}$ ; H116,  $\text{IC}_{50} > 5\mu\text{g/mL}$ ; PSN1,  $\text{IC}_{50} > 5\mu\text{g/mL}$ ; T98G,  $\text{IC}_{50} > 5\mu\text{g/mL}$ ; SKBR3,  $\text{IC}_{50} > 5\mu\text{g/mL}$ ). **Source:** BEI FEI XUE SONG *Cedrus atlantica* (cone). **Ref:** 5248.

**5285 1 $\beta$ ,2 $\beta$ -Diacetoxy-6 $\alpha$ -benzoyloxy-9 $\alpha$ -cinnamoyloxy- $\beta$ -dihydro-agarofuran**

$C_{35}H_{40}O_9$  (604.70). **Pharm:** NO production inhibitor (mus, macrophage RAW264.7 cells, activated by LPS,  $\text{IC}_{50} = 43.7\mu\text{mol/L}$ , control Aminoquanidine  $\text{IC}_{50} = 18.2\mu\text{mol/L}$ ). **Source:** NAN SHE TENG GUO *Celastrus orbiculatus* [Syn. *Celastrus articulatus*]. **Ref:** 2584.

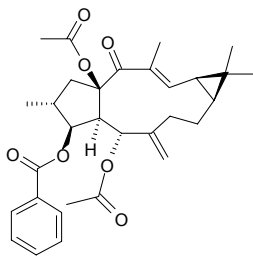
**5286 1 $\alpha$ ,8 $\beta$ -Diacetoxy-9 $\beta$ -benzoyloxydihydro- $\beta$ -agarofuran**

$C_{26}H_{34}O_7$  (458.56). White amorphous powder,  $[\alpha]_D^{25} = -8.68^\circ$  ( $c = 0.12$ , MeOH). **Pharm:** Intestinal smooth muscle relaxant (*in vitro*, rat ileum,  $1\mu\text{g/mL}$ , relaxant effect =  $(7.3 \pm 1.7)\%$ , control Papaverine, relaxant effect =  $(28.6 \pm 7.3)\%$ ). **Source:** DENG YOU TENG ZI *Celastrus paniculatus*. **Ref:** 5002.



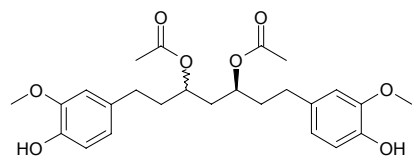
**5287 (2*R*\*,3*S*\*,4*R*\*,5*R*\*,9*S*\*,11*S*\*,15*R*\*)-5,15-Diacetoxy-3-benzoyloxy-14-oxolathyrin-6(17),12*E*-diene**

Euphorbia factor L<sub>3</sub> C<sub>31</sub>H<sub>38</sub>O<sub>7</sub> (522.64). Colorless oil. Source: HAI BO NA DA JI *Euphorbia hyberna*. Ref: 1521, 2153.



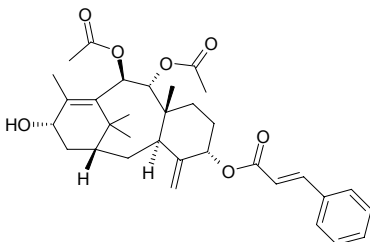
**5288 (3*S*,5*S*)-3,5-Diacetoxy-1,7-bis(4-hydroxy-3-methoxyphenyl)heptane**

C<sub>25</sub>H<sub>32</sub>O<sub>8</sub> (460.53). Colorless oil,  $[\alpha]_D^{26} = +7.0^\circ$  ( $c = 0.68$ , CHCl<sub>3</sub>). Source: SHENG JIANG *Zingiber officinale*. Ref: 3803.



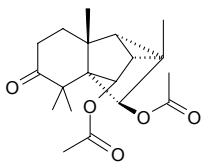
**5289 9*α*,10*β*-Diacetoxy-5*α*-cinnamoyltaxa-4(20),11-dien-13*α*-ol**

C<sub>33</sub>H<sub>42</sub>O<sub>7</sub> (550.70). Colorless gum,  $[\alpha]_D^{24} = -13^\circ$  ( $c = 0.03$ , CHCl<sub>3</sub>). Source: YUN NAN HONG DOU SHAN *Taxus yunnanensis* (seed). Ref: 3991.



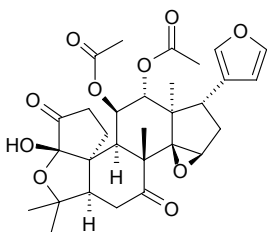
**5290 1*R*,5*R*-Diacetoxycyclomyltayan-10-one**

C<sub>19</sub>H<sub>26</sub>O<sub>5</sub> (334.42). Amorphous powder,  $[\alpha]_D^{20} = -23.2^\circ$  ( $c = 0.9$ , MeOH). Source: *Bazzania madagassa*. Ref: 4458.



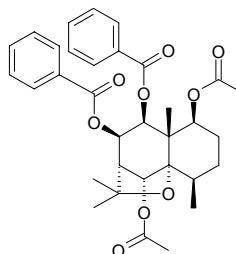
**5291 11*β*,12*α*-Diacetoxy-1-deoxy-14*β*,15*β*-epoxy-3*β*-hydroxy-2-oxoneotecleanin**

C<sub>30</sub>H<sub>36</sub>O<sub>10</sub> (556.62). Colorless needle-like crystals (MeCN-H<sub>2</sub>O), mp 179~180°C. Source: *Turraea wakefieldii* (root cortex). Ref: 3459.



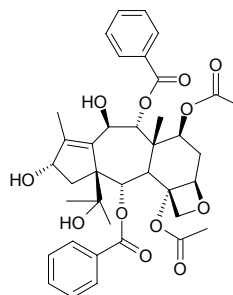
**5292 1*β*,6*α*-Diacetoxy-8*β*,9*β*-dibenzoyloxy-*β*-dihydroagarofuran**

C<sub>33</sub>H<sub>38</sub>O<sub>9</sub> (578.67). Pharm: NO production inhibitor (mus, macrophage RAW264.7 cells activated by LPS, very weak activity). Source: NAN SHE TENG GUO *Celastrus orbiculatus* [Syn. *Celastrus articulatus*]. Ref: 2584.



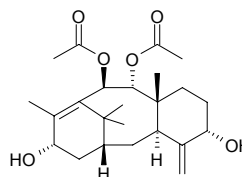
**5293 4*α*,7*β*-Diacetoxy-2*α*,9*α*-dibenzoyloxy-5*β*,20-epoxy-10*β*,13*α*,15-trihydroxy-11(15→1)-abeo-taxene**

C<sub>38</sub>H<sub>44</sub>O<sub>12</sub> (692.77).  $[\alpha]_D = -8^\circ$  (CHCl<sub>3</sub>). Source: JIANG GUO ZI SHAN *Taxus baccata*. Ref: 662.



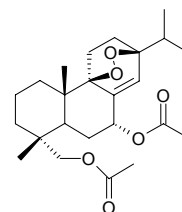
**5294 9*α*,10*β*-Diacetoxy-5*α*,13*α*-dihydroxy-4(20),11-taxadiene**

Diacetoxydihydroxytaxadiene C<sub>24</sub>H<sub>36</sub>O<sub>6</sub> (420.55). mp 235°C,  $[\alpha]_D = +146^\circ$  (from *Taxus baccata*), mp 234~236°C,  $[\alpha]_D = +144.2^\circ$  (CHCl<sub>3</sub>) (from *Taxus mairei*). Source: HONG DOU SHAN *Taxus chinensis*, JIANG GUO ZI SHAN *Taxus baccata*, MEI LI HONG DOU SHAN *Taxus mairei*. Ref: 662.



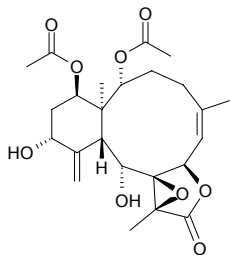
**5295 7*α*,18-Diacetoxy,9*β*,13*β*-epi-dioxiabiet-8(14)-ene**

C<sub>24</sub>H<sub>36</sub>O<sub>6</sub> (420.55). Colorless oil,  $[\alpha]_D = +6.2^\circ$  ( $c = 0.13$ , CHCl<sub>3</sub>). Pharm: Cytotoxic (A549, IC<sub>50</sub> > 5μg/mL; H116, IC<sub>50</sub> > 5μg/mL; PSN1, IC<sub>50</sub> > 5μg/mL; T98G, IC<sub>50</sub> > 5μg/mL; SKBR3, IC<sub>50</sub> > 5μg/mL). Source: BEI FEI XUE SONG *Cedrus atlantica* (cone). Ref: 5248.



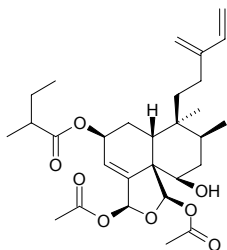
**5296 (1R,2R,5Z,7R,8S,9R,10R,12R,14R,17S)-2,14-Diacetoxy-8,17-epoxy-9,12-dihydroxybriara-5,11(20)-dien-19-one**

$C_{24}H_{32}O_9$  (464.52). Colorless oil,  $[\alpha]_D^{25} = +113^\circ$  ( $c = 0.1$ ,  $CHCl_3$ );  $[\alpha]_D^{25} = +115.1^\circ$  ( $c = 0.08$ ). Source: CUI DENG XIN LIU SHAN HU *Junceella fragilis*, LEI DENG XIN LIU SHAN HU *Junceella gemmacea*. Ref: 2554.



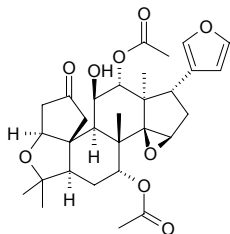
**5297 rel-(2S,5R,6R,8S,9S,10R,18S,19R)-diacetoxy-18,19-epoxy-6-hydroxy-2-(2-methylbutanoyloxy)cleroda-3,13(16),14-triene**

$C_{29}H_{42}O_8$  (518.65). Pharm: Cytotoxic (*in vitro*, PC3,  $IC_{50} = 1.8\mu\text{mol/L}$ , control Paclitaxel,  $IC_{50} = 0.016\mu\text{mol/L}$ ; Hep3B,  $IC_{50} = 2.4\mu\text{mol/L}$ , Paclitaxel,  $IC_{50} = 0.031\mu\text{mol/L}$ ). Source: MO ZHI JIAO GU CUI *Casearia membranacea* (leaf and twig: yield = 0.023%dw). Ref: 3010.



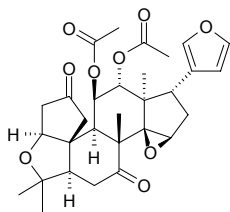
**5298 7 $\alpha$ ,12 $\alpha$ -Diacetoxy-14 $\beta$ ,15 $\beta$ -epoxy-11 $\beta$ -hydroxynoteecleanin**

$C_{30}H_{38}O_9$  (542.63). White amorphous solid, mp 180–182°C. Source: *Turraea wakefieldii* (root cortex). Ref: 3459.



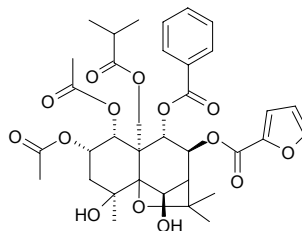
**5299 11 $\beta$ ,12 $\alpha$ -Diacetoxy-14 $\beta$ ,15 $\beta$ -epoxynoteecleanin**

$C_{30}H_{36}O_9$  (540.62). White amorphous solid, mp 161–162°C. Pharm: Larvicidal (mosquito late third or early fourth-instar larvae of *Anopheles gambiae* s.s.,  $LD_{50} = 7.07\text{mg/L}$ ). Source: *Turraea wakefieldii* (root cortex). Ref: 3459.



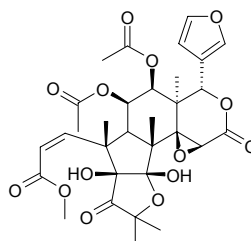
**5300 1 $\alpha$ ,2 $\alpha$ -Diacetoxy-8 $\beta$ -( $\beta$ -furancarboxyloxy)-9 $\alpha$ -benzoyloxy-13-isobutanoyloxy-4 $\beta$ ,6 $\beta$ -dihydroxy- $\beta$ -dihydroagarofuran**

$C_{35}H_{42}O_{14}$  (686.72). Amorphous white powder, mp 248–249°C,  $[\alpha]_D^{24} = +7.6^\circ$  ( $c = 0.66$ ,  $CHCl_3$ ). Pharm: Insecticidal (*Mythimna separata*,  $KD_{50} = 73.3\mu\text{g/g}$ ). Source: DIAO GAN MA *Celastrus angulatus* (root cortex). Ref: 5228.



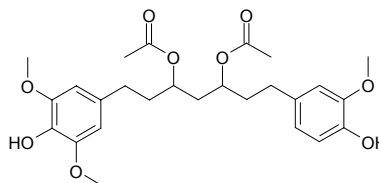
**5301 11,12-Diacetoxyharrisonin**

$C_{31}H_{36}O_{14}$  (362.62). Colorless crystals (acetone), mp.249–250°C. Source: A BI XI NI YA NIU JIN GUO *Harrisonia abyssinica*. Ref: 2351.



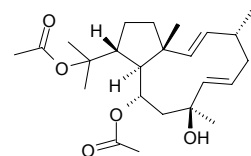
**5302 3,5-Diacetoxy-1-(4-hydroxy-3,5-dimethoxyphenyl)-7-(4-hydroxy-3-methoxyphenyl) heptane**

$C_{26}H_{34}O_9$  (490.56). Source: GAN JIANG *Zingiber officinale*, SHENG JIANG *Zingiber officinale*. Ref: 2.



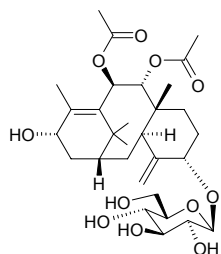
**5303 10,18-Diacetoxy-8-hydroxy-2,6-dolabelladiene**

$C_{24}H_{38}O_5$  (406.57). Colorless needles, mp 136–138°C,  $[\alpha]_D^{25} = -115^\circ$  ( $c = 0.0016$ ,  $CHCl_3$ ). Pharm: Anti-HSV-1 (Vero cells infected by HSV-1,  $50\mu\text{mol/L}$ , (89±5)% of cytopathic effect inhibition of herpes virus); cytotoxic inactive ( $200\mu\text{mol/L}$ ); HIV-1 RT inhibitor ( $40\mu\text{mol/L}$ , InRt = 20%, positive control AZT,  $0.01\mu\text{mol/L}$ , InRt = 85%). Source: BA XI ZONG ZAO *Dictyota paffii*. Ref: 5023.



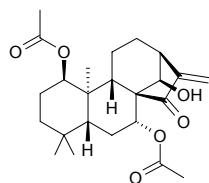
**5304 9 $\alpha$ ,10 $\beta$ -Diacetoxy-13 $\alpha$ -hydroxy-5 $\alpha$ -O-( $\beta$ -D-glucopyranosyl)taxa-4(20),11-diene**

C<sub>30</sub>H<sub>46</sub>O<sub>11</sub> (582.69). Amorphous solid,  $[\alpha]_D^{22} = +33^\circ$  ( $c = 0.3$ , CHCl<sub>3</sub>). Source: JIA NA DA HONG DOU SHAN *Taxus canadensis* (needle; yield = 0.000075%dw). Ref: 4734.



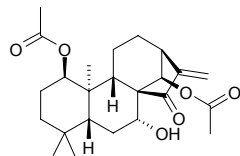
**5305 ent-1 $\alpha$ ,7 $\beta$ -Diacetoxy-14 $\alpha$ -hydroxykaur-16-en-15-one**

C<sub>24</sub>H<sub>34</sub>O<sub>6</sub> (418.53). White amorphous powder,  $[\alpha]_D^{15} = -22^\circ$  ( $c = 0.10$ , MeOH). Source: DONG JIN BA DOU *Croton tonkinensis* (leaf). Ref: 4057.



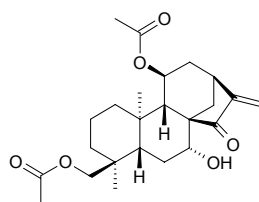
**5306 ent-1 $\alpha$ ,14 $\alpha$ -Diacetoxy-7 $\beta$ -hydroxykaur-16-en-15-one**

C<sub>24</sub>H<sub>34</sub>O<sub>6</sub> (418.53). White amorphous powder,  $[\alpha]_D^{15} = -16^\circ$  ( $c = 0.10$ , MeOH). Source: DONG JIN BA DOU *Croton tonkinensis* (leaf). Ref: 4057.



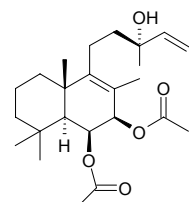
**5307 ent-11 $\alpha$ ,18-Diacetoxy-7 $\beta$ -hydroxykaur-16-en-15-one**

C<sub>24</sub>H<sub>34</sub>O<sub>6</sub> (418.54). White amorphous powder,  $[\alpha]_D^{25} = -135.7^\circ$  ( $c = 2.24$ , CHCl<sub>3</sub>). Source: DONG JIN BA DOU *Croton tonkinensis* (leaf). Ref: 4444.



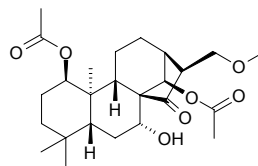
**5308 6 $\beta$ ,7 $\beta$ -Diacetoxy-13-hydroxy-labda-8,14-diene**

C<sub>24</sub>H<sub>38</sub>O<sub>5</sub> (406.57). Pharm: Affinity to dopamine-D<sub>2</sub>-receptor<sup>[2413]</sup>. Source: SUI HUA MU JING *Vitex agnuscastus*. Ref: 2413.



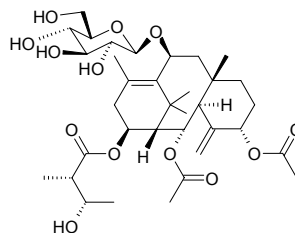
**5309 ent-(16S)-1 $\alpha$ ,14 $\alpha$ -Diacetoxy-7 $\beta$ -hydroxy-17-methoxykauran-15-one**

C<sub>25</sub>H<sub>38</sub>O<sub>7</sub> (450.58). White amorphous powder,  $[\alpha]_D^{25} = -225.0^\circ$  ( $c = 0.16$ , CHCl<sub>3</sub>). Source: DONG JIN BA DOU *Croton tonkinensis* (leaf). Ref: 4444.



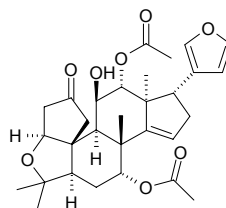
**5310 2 $\alpha$ ,5 $\alpha$ -Diacetoxy-14 $\beta$ -(2'S,3'R)-3'-hydroxy-2' $\alpha$ -methylbutanoate-10 $\beta$ -O-( $\beta$ -D-glucopyranosyl)taxa-4(20),11-diene**

C<sub>35</sub>H<sub>54</sub>O<sub>13</sub> (682.81). Source: JIA NA DA HONG DOU SHAN *Taxus canadensis* (needle; yield = 0.00013%dw). Ref: 4734.



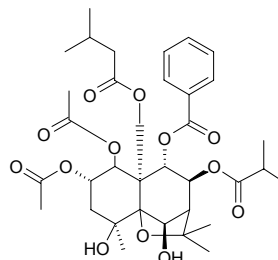
**5311 7 $\alpha$ ,12 $\alpha$ -Diacetoxy-11 $\beta$ -hydroxynotecleanin**

C<sub>30</sub>H<sub>38</sub>O<sub>8</sub> (526.63). White amorphous solid, mp 186–187°C. Pharm: Larvicidal (mosquito late third or early fourth-instar larvae of *Anopheles gambiae* s.s., LD<sub>50</sub> = 7.05mg/L). Source: *Turraea wakefieldii* (root cortex). Ref: 3459.



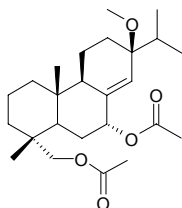
**5312 1 $\alpha$ ,2 $\alpha$ -Diacetoxy-8 $\beta$ -isobutanoyloxy-9 $\alpha$ -benzoyloxy-13-( $\alpha$ -methyl)butanoyloxy-4 $\beta$ ,6 $\beta$ -dihydroxy- $\beta$ -dihydroagarofuran**

C<sub>35</sub>H<sub>48</sub>O<sub>13</sub> (676.77). Amorphous white powder, mp 95–96°C,  $[\alpha]_D^{24} = -12.8^\circ$  ( $c = 0.60$ , CHCl<sub>3</sub>). Pharm: Insecticidal (*Mythimna separata*, KD<sub>50</sub> = 135.3 $\mu$ g/g). Source: DIAO GAN MA *Celastrus angulatus* (root cortex). Ref: 5228.

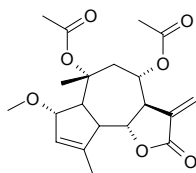


**5313 7 $\alpha$ ,18-Diacetoxy-13 $\beta$ -methoxyabiet-8(14)-ene**

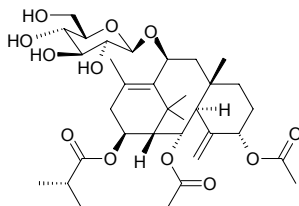
C<sub>25</sub>H<sub>40</sub>O<sub>5</sub> (420.59). Colorless oil, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +43.7° (*c* = 0.1, CHCl<sub>3</sub>). Source: BEI FEI XUE SONG *Cedrus atlantica* (cone). Ref: 5248.

**5314 8,10-Diacetoxy-2-methoxy-3,11(13)-guaidiene-12,6-olide**

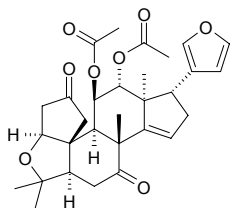
C<sub>20</sub>H<sub>26</sub>O<sub>7</sub> (378.43). [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -32.4° (*c* = 0.75, CHCl<sub>3</sub>). Pharm: Cytotoxic (*in vitro*, ACHN cell, IC<sub>50</sub> = (3.26±0.28)μg/mL, control Adriamycin, IC<sub>50</sub> = (0.09±0.03)μg/mL; LOX-IMVI, IC<sub>50</sub> = (3.78±0.31)μg/mL, Adriamycin, IC<sub>50</sub> = (0.05±0.02)μg/mL; SW620, IC<sub>50</sub> = (4.75±0.18)μg/mL, Adriamycin, IC<sub>50</sub> = (0.19±0.07)μg/mL; PC3, IC<sub>50</sub> = (3.82±0.26)μg/mL, Adriamycin, IC<sub>50</sub> = (0.76±0.12)μg/mL; A549, IC<sub>50</sub> = (3.67±0.29)μg/mL, Adriamycin, IC<sub>50</sub> = (0.28±0.09)μg/mL)<sup>[5455]</sup>; anti-apoptosis (etoposide-induced, IC<sub>50</sub> = (13.7±0.9)μg/mL; control PDTIC, IC<sub>50</sub> = (8.0±0.5)μg/mL). Source: BEI YE JU *Chrysanthemum boreale*. Ref: 5455.

**5315 2 $\alpha$ ,5 $\alpha$ -Diacetoxy-14 $\beta$ -2'- $\alpha$ -methylbutanoate-10 $\beta$ -O-( $\beta$ -D-glucopyranosyl)taxa-4(20),11-diene**

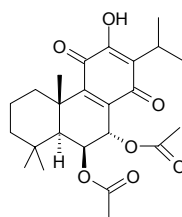
C<sub>35</sub>H<sub>54</sub>O<sub>12</sub> (666.81). Amorphous solid, [ $\alpha$ ]<sub>D</sub><sup>22</sup> = +32° (*c* = 0.15, CHCl<sub>3</sub>). Source: JIA NA DA HONG DOU SHAN *Taxus canadensis* (needle: yield = 0.00014%dw). Ref: 4734.

**5316 11 $\beta$ ,12 $\alpha$ -Diacetoxyneotecleanin**

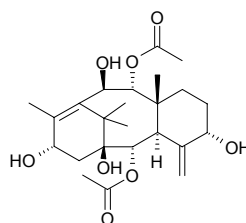
C<sub>30</sub>H<sub>36</sub>O<sub>8</sub> (524.62). White amorphous solid, mp 154–156°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -34.0° (*c* = 1.59, CHCl<sub>3</sub>). Pharm: Larvicidal (mosquito late third or early fourth-instar larvae of *Anopheles gambiae* s.s., LD<sub>50</sub> = 7.83mg/L). Source: TURRAEA WAKEFIELDII (root cortex). Ref: 3459.

**5317 6 $\beta$ ,7 $\alpha$ -Diacetoxyroyleanone**

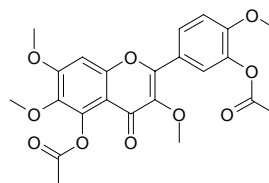
C<sub>24</sub>H<sub>32</sub>O<sub>7</sub> (432.52). Yellowish solid, [ $\alpha$ ]<sub>D</sub><sup>23</sup> = -56.7° (*c* = 0.3, CHCl<sub>3</sub>). Source: TAI WAN SHAN *Taiwania cryptomerioides* (bark). Ref: 4443.

**5318 Diacetyxytetrahydroxytaxadiene**

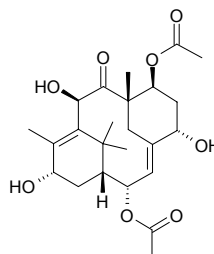
2 $\alpha$ ,9 $\alpha$ -Diacetoxy-1 $\beta$ ,5 $\alpha$ ,10 $\beta$ ,13 $\alpha$ -tetrahydroxytaxa-4(20),11-diene C<sub>24</sub>H<sub>36</sub>O<sub>8</sub> (452.55). mp 154°C, [ $\alpha$ ]<sub>D</sub> = -22° (CHCl<sub>3</sub>). Source: JIANG GUO ZI SHAN *Taxus baccata*, HONG DOU SHAN *Taxus chinensis*. Ref: 662.

**5319 5,3'-Diacetoxy-3,6,7,4'-tetramethoxyflavone**

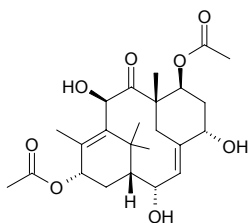
C<sub>23</sub>H<sub>22</sub>O<sub>10</sub> (458.43). mp 140–142°C. Pharm: Cytotoxic (*in vitro*, Col2, ED<sub>50</sub> = 15.9μg/mL; hTERT-RPE1, ED<sub>50</sub> = 0.4μg/mL; HUVEC, ED<sub>50</sub> = 0.1μg/mL; KB, ED<sub>50</sub> = 0.2μg/mL; HUVEC, ED<sub>50</sub> = 0.1μg/mL; Lu1, ED<sub>50</sub> = 0.7μg/mL). Source: HUANG JING YE *Vitex negundo*. Ref: 4699.

**5320 2 $\alpha$ ,7 $\beta$ -Diacetoxy-5 $\alpha$ ,10 $\beta$ ,13 $\alpha$ -trihydroxy-2(3→20)abeotaxane-9-one**

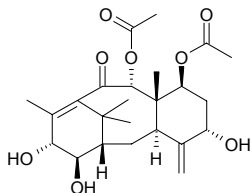
[260367-32-6] C<sub>24</sub>H<sub>34</sub>O<sub>8</sub> (450.53). Source: MEI LI HONG DOU SHAN *Taxus mairei*. Ref: 2414.



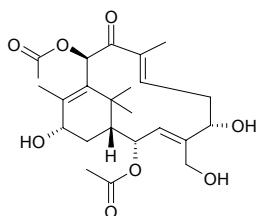
**5321 7 $\beta$ ,13 $\alpha$ -Diacetoxy-2 $\alpha$ ,5 $\alpha$ ,10 $\beta$ -trihydroxy-2(3 $\rightarrow$ 20)abeotaxane-9-one**  
2,10-Dideacetylaxin B' [219999-48-1] C<sub>24</sub>H<sub>34</sub>O<sub>8</sub> (450.53). Colorless crystals, mp 220–222°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = –11.2° (c = 0.002, CHCl<sub>3</sub>). Source: MEI LI HONG DOU SHAN *Taxus mairei*. Ref: 2414.



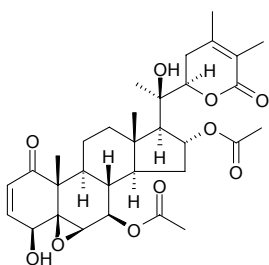
**5322 7 $\beta$ ,9 $\alpha$ -Diacetoxy-5 $\alpha$ ,13 $\alpha$ ,14 $\beta$ -trihydroxy-10-oxotaxa-4(20),11-diene**  
C<sub>24</sub>H<sub>34</sub>O<sub>8</sub> (450.53). Source: AO DA LI YA HONG DOU SHAN *Austrotaxus spicata*. Ref: 662.



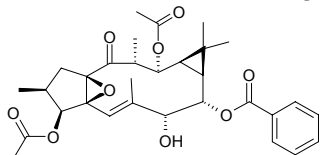
**5323 (3E,7E)-2 $\alpha$ ,10 $\beta$ -Diacetoxy-5 $\alpha$ ,13 $\alpha$ ,20-trihydroxy-3,8-secotaxa-3,7,11-trien-9-one**  
C<sub>24</sub>H<sub>34</sub>O<sub>8</sub> (450.53). [ $\alpha$ ]<sub>D</sub> = –15.5° (CHCl<sub>3</sub>). Source: HONG DOU SHAN *Taxus chinensis*. Ref: 662.



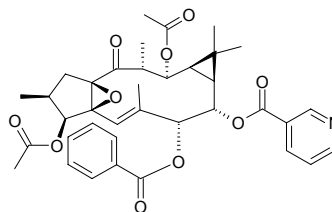
**5324 7 $\beta$ ,16 $\alpha$ -Diacetoxy withanolide D**  
7 $\beta$ ,16 $\alpha$ -Diacetoxy-4 $\beta$ ,20R-dihydroxy-5 $\beta$ ,6 $\beta$ -epoxy-1-oxowitha-2,24-dienolide C<sub>33</sub>H<sub>42</sub>O<sub>10</sub> (586.69). mp 163–166° (EtOAc) Source: BA XI YE YAN *Acnistus arborescens*. Ref: 2003.



**5325 3,12-Diacetyl-8-benzoylingol**  
C<sub>31</sub>H<sub>38</sub>O<sub>9</sub> (554.64). White powder, mp 95–97°, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = –27° (c = 0.5, CHCl<sub>3</sub>). Source: YIN DU DUO ZHI DA JI *Euphorbia nivulia*. Ref: 1985.

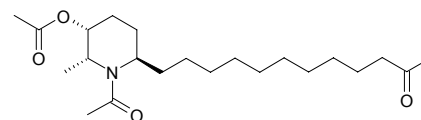


**5326 3,12-Diacetyl-7-benzoyl-8-nicotinoylingol**  
C<sub>37</sub>H<sub>41</sub>NO<sub>10</sub> (659.74). White powder, mp 90–92°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = –61° (c = 0.5, CHCl<sub>3</sub>). Source: YIN DU DUO ZHI DA JI *Euphorbia nivulia*. Ref: 1985.

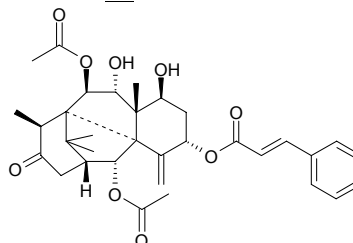


**5327 N,O-Diacetylcassine**

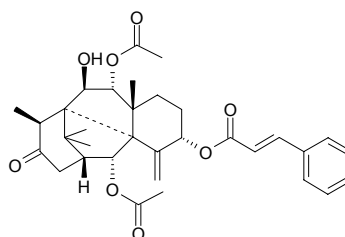
C<sub>22</sub>H<sub>39</sub>NO<sub>4</sub> (381.56). Pharm: Cytotoxic (P<sub>388</sub> IC<sub>50</sub> = 5.2 μg/mL, control 5-FU, IC<sub>50</sub> = 0.99 μg/mL; KB, IC<sub>50</sub> = 5.2 μg/mL, Doxorubicin, IC<sub>50</sub> = 0.57 μg/mL; BC-1, IC<sub>50</sub> = 7.1 μg/mL, Doxorubicin, IC<sub>50</sub> = 0.21 μg/mL); cytotoxic (brine shrimp lethality, IC<sub>50</sub> = 17.0 μg/mL, control Monocrotophos, IC<sub>50</sub> = 0.24 μg/mL). Source: ZHUANG GUAN FAN XIE *Senna spectabilis* (flower). Ref: 5480.



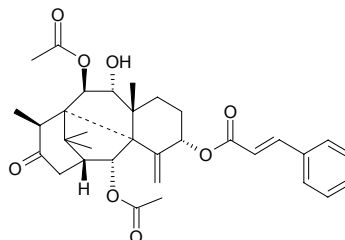
**5328 2,10-Diacetyl-5-cinnamoyl-7 $\beta$ -hydroxy phototaxicin II**  
C<sub>33</sub>H<sub>40</sub>O<sub>8</sub> (580.68). Source: JIA NA DA HONG DOU SHAN *Taxus canadensis*. Ref: 662.



**5329 2,9-Diacetyl-5-cinnamoylphototaxicin II**  
C<sub>33</sub>H<sub>40</sub>O<sub>8</sub> (564.68). Source: JIA NA DA HONG DOU SHAN *Taxus canadensis*. Ref: 662.

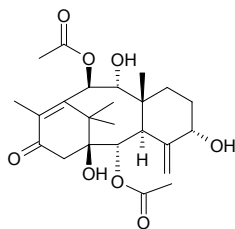


**5330 2,10-Diacetyl-5-cinnamoylphototaxicin II**  
C<sub>33</sub>H<sub>40</sub>O<sub>8</sub> (564.68). Source: JIA NA DA HONG DOU SHAN *Taxus canadensis*. Ref: 662.

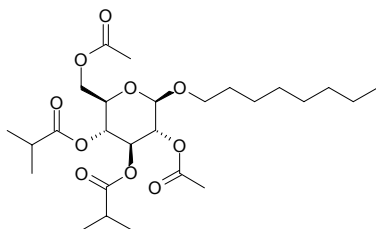


**5331 Diacetyldecinnamoyltaxicin I**

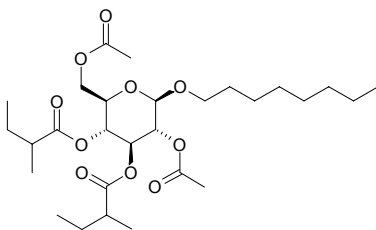
2,10-Di-*O*-acetyl-5-decinnamoyl-taxicin I C<sub>24</sub>H<sub>34</sub>O<sub>8</sub> (450.53). mp 165°C, [α]<sub>D</sub> = +30° (CHCl<sub>3</sub>). Source: JIANG GUO ZI SHAN *Taxus baccata*, HONG DOU SHAN *Taxus chinensis*. Ref: 662.

**5332 2,6-Diacetyl-3,4-diisobutyryl-1-*O*-octylglucopyranoside**

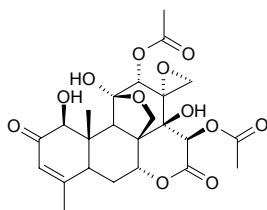
C<sub>26</sub>H<sub>44</sub>O<sub>10</sub> (516.63). Pharm: Antibacterial (gram-positive methicillin-resistant *Staphylococcus aureus* ATCC33591, MIC = 128µg/mL, control Gentamicin, MIC = 2µg/mL). Source: AI SHENG XIONG GUO *Arctostaphylos pumila* (stem). Ref: 5060.

**5333 2,6-Diacetyl-3,4-dimethylbutyryl-1-*O*-octylglucopyranoside**

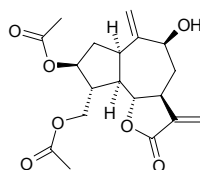
C<sub>28</sub>H<sub>48</sub>O<sub>10</sub> (544.69). Pharm: Antibacterial (gram-positive methicillin-resistant *Staphylococcus aureus* ATCC33591, MIC = 64µg/mL; control Gentamicin, MIC = 2µg/mL). Source: AI SHENG XIONG GUO *Arctostaphylos pumila* (stem). Ref: 5060.

**5334 12,15-Diacetyl-13α(21)-epoxyeurycomanone**

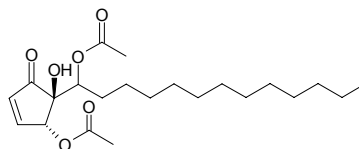
C<sub>24</sub>H<sub>28</sub>O<sub>12</sub> (508.48). Source: *Eurycoma* sp. Ref: 4556.

**5335 3,15-Di-*O*-acetyl-9β-hydroxyamphoricarpolide**

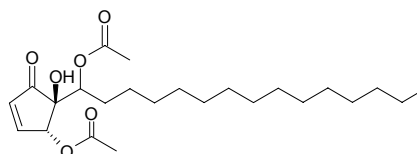
C<sub>19</sub>H<sub>24</sub>O<sub>7</sub> (364.40). Colorless gum, [α]<sub>D</sub><sup>25</sup> = +3.4° (c = 0.25, CHCl<sub>3</sub>). Source: *Amphoricarpos neumayeri* ssp. *neumayeri* (aerial parts), *Amphoricarpos neumayeri* ssp. *murbeckii* (aerial parts). Ref: 3842.

**5336 4,6-Di-*O*-acetyl hygrophorone A<sup>12</sup>**

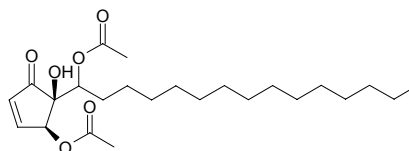
4,5-*trans*-4-Acetoxy-5-hydroxy-5-(1-hydroxytridecyl)-2-cyclopenten-1-one C<sub>22</sub>H<sub>36</sub>O<sub>6</sub> (396.53). Colorless oil, [α]<sub>D</sub><sup>23</sup> = +53.0° (c = 0.940, MeOH). Pharm: Antifungal (*Cladosporium cucumerinum*, 20µg, IZA = 23mm<sup>2</sup>, 40µg, IZA = 40mm<sup>2</sup>). Source: *Hygrophorus persoonii*. Ref: 3800.

**5337 4,5-Di-*O*-acetyl hygrophorone A<sup>14</sup>**

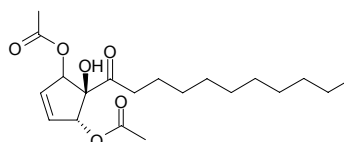
4,5-*trans*-4-Acetoxy-5-hydroxy-5-(1-acetoxypentadecyl)-2-cyclopenten-1-one C<sub>24</sub>H<sub>40</sub>O<sub>6</sub> (424.58). Colorless oil. Pharm: Antifungal (*Cladosporium cucumerinum*, 20µg, IZA = 2mm<sup>2</sup>, 40µg, IZA = 6mm<sup>2</sup>). Source: *Hygrophorus persoonii*. Ref: 3800.

**5338 4,6-Di-*O*-acetyl hygrophorone B<sup>14</sup>**

4,5-*cis*-4-Acetoxy-5-hydroxy-5-(1-acetoxypentadecyl)-2-cyclopenten-1-one C<sub>24</sub>H<sub>40</sub>O<sub>6</sub> (424.58). Colorless oil. Source: *Hygrophorus olivaceoalbus*. Ref: 3800.

**5339 1,4-Di-*O*-acetyl hygrophorone E<sup>10</sup>**

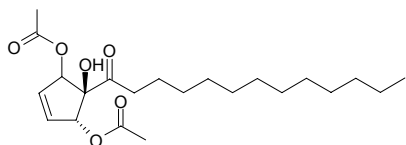
1-(2,5-Diacetoxy-1-hydroxy-cyclopent-3-enyl)-undecan-1-one C<sub>20</sub>H<sub>32</sub>O<sub>6</sub> (368.47). Colorless oil. Source: *Hygrophorus latitabundus*. Ref: 3800.



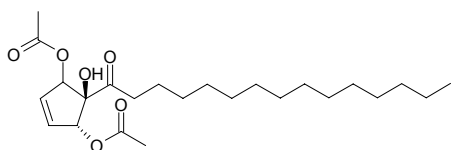


**5340 1,4-Di-*O*-acetyl hygrophorone E<sup>12</sup>**

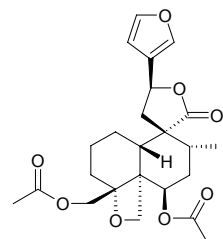
1-(2,5-Diacetoxy-1-hydroxy-cyclopent-3-enyl)-tridecan-1-one C<sub>22</sub>H<sub>36</sub>O<sub>6</sub>  
(396.53). Colorless oil, [ $\alpha$ ]<sub>D</sub><sup>23</sup> = +80.3° (*c* = 0.395, MeOH). Source:  
*Hygrophorus latitabundus*. Ref: 3800.

**5341 1,4-Di-*O*-acetyl hygrophorone E<sup>14</sup>**

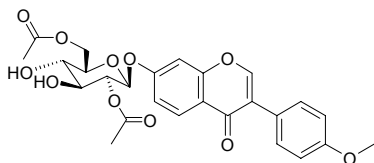
1-(2,5-Diacetoxy-1-hydroxy-cyclopent-3-enyl)-pentadecan-1-one C<sub>24</sub>H<sub>40</sub>O<sub>6</sub>  
(424.58). Colorless oil. Source: *Hygrophorus latitabundus*. Ref: 3800.

**5342 Diacetyl montanin D**

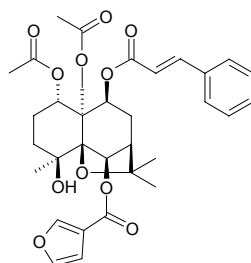
C<sub>24</sub>H<sub>30</sub>O<sub>8</sub> (446.50). Pharm: Insect antifeedant (*Spodoptera litura*, 10μg/cm<sup>2</sup>, antifeedant activity = (67±2)%, control Azadirachtin A, 0.5μg/cm<sup>2</sup>, antifeedant activity = (79±2)%; *Plutella xylostella*, 10μg/cm<sup>2</sup>, antifeedant activity = (62±2)%, control Azadirachtin A, 0.5μg/cm<sup>2</sup>, antifeedant activity = (71±2)%). Source: RONG MAO XIANG KE KE *Teucrium tomentosum* (aerial parts). Ref: 3478.

**5343 2'',6''-*O*-Diacetyloninin**

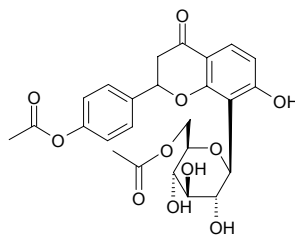
Formononetin-7-*O*-(2'',6''-*O*-diacetyl)glucopyranoside C<sub>26</sub>H<sub>26</sub>O<sub>11</sub> (514.49).  
Yellow amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +9.3° (*c* = 0.55, MeOH). Pharm:  
Cytotoxic (*in vitro*, Hs740T, ED<sub>50</sub> = 7.61μg/mL; Hs756T, ED<sub>50</sub> =  
8.89μg/mL; Hs578T, ED<sub>50</sub> = 5.44μg/mL; Hs742T, ED<sub>50</sub> = 25.53μg/mL;  
DU145, ED<sub>50</sub> = 4.18μg/mL; LNCaP-FGC, ED<sub>50</sub> = 22.12μg/mL). Source:  
DA DOU *Glycine max* (Soybean phytochemical concentrate: yield =  
0.0039%dw). Ref: 4630.

**5344 1*S*,13-Diacetyloxy-4*S*-hydroxy-6*R*-(3-furancarboxyloxy-9*S*-cinna-  
moyloxy-β-dihydroagarofuran**

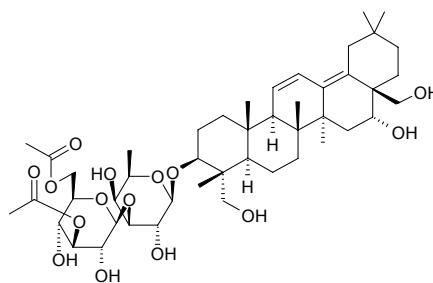
C<sub>33</sub>H<sub>38</sub>O<sub>11</sub> (610.66). Yellow oil, [ $\alpha$ ]<sub>D</sub> = +87.5° (*c* = 4.20, CHCl<sub>3</sub>). Pharm:  
Cytotoxic inactive (hmn Bel7402, HL-60, A549 and mouse P<sub>388</sub>, all IC<sub>50</sub> >  
100μmol/L). Source: *Euonymus nanoides* (seed: yield = 0.0035%dw). Ref:  
1129.

**5345 4',6''-Diacetyl puerarin**

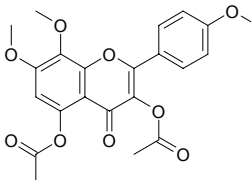
C<sub>25</sub>H<sub>26</sub>O<sub>11</sub> (502.48). Source: GE GEN *Pueraria lobata* [Syn. *Pueraria  
thunbergiana*; *Pueraria pseudohirsuta*]. Ref: 2.

**5346 3'',6''-*O*,*O*-diacetylsaikosaponin b<sub>2</sub>**

C<sub>46</sub>H<sub>72</sub>O<sub>15</sub> (865.08). Source: WEN CHUAN CHAI HU *Bupleurum  
wenchuanense*. Ref: 2247.

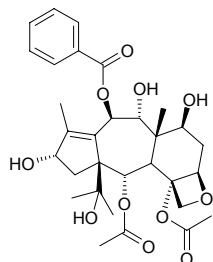
**5347 3,5-Diacetyltambulin**

C<sub>22</sub>H<sub>20</sub>O<sub>9</sub> (428.40). Pharm: Platelet aggregation inhibitor. Source: QUAN  
YUAN YE HUA JIAO *Zanthoxylum integrifolium*. Ref: 2176.

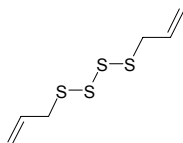


**5348 7,9-Diacetyltaxayuntin**

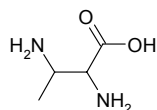
10 $\beta$ -Benzyloxy-2 $\alpha$ ,4 $\alpha$ -diacetoxy-5 $\beta$ ,20-epoxy-1 $\beta$ ,7 $\beta$ ,9 $\alpha$ ,13 $\alpha$ -tetrahydrox-11(15 $\rightarrow$ 1)-abeo-taxene C<sub>31</sub>H<sub>40</sub>O<sub>11</sub> (588.66). mp 242~243°C; 266~268°C. Source: DUAN YE HONG DOU SHAN *Taxus brevifolia*, YUN NAN HONG DOU SHAN *Taxus yunnanensis*. Ref: 662.

**5349 Diallyl tetrasulfide**

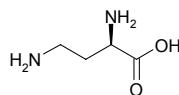
[2444-49-7] C<sub>6</sub>H<sub>10</sub>S<sub>4</sub> (210.40). Source: DA SUAN *Allium sativum*. Ref: 2.

**5350 2,3-Diaminobutyric acid**

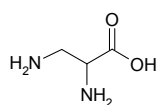
C<sub>4</sub>H<sub>10</sub>N<sub>2</sub>O<sub>2</sub> (118.14). Source: DUO HUA HUANG JING *Polygonatum cyrtonema* [Syn. *Polygonatum multiflorum*], MO GU *Agaricus campestris*. Ref: 6, 660.

**5351 L- $\alpha$ , $\gamma$ -Diaminobutyric acid**

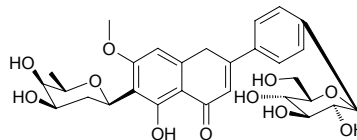
2,4-Diaminobutyric acid C<sub>4</sub>H<sub>10</sub>N<sub>2</sub>O<sub>2</sub> (118.14). mp 205°C (dec). Pharm: Causes chronic ammonia toxicosis (liver damage, tingle and tic, blocks displace of carbamoyl of ornithine). Source: DUO HUA HUANG JING *Polygonatum cyrtonema* [Syn. *Polygonatum multiflorum*], LIN SHENG SHAN LI DOU *Lathyrus sylvestris*, MO GU *Agaricus campestris*, SU GEN XIANG WAN DOU *Lathyrus latifolius*, *Acacia* sp. Ref: 6, 658, 660.

**5352  $\alpha$ , $\beta$ -Diaminopropionic acid**

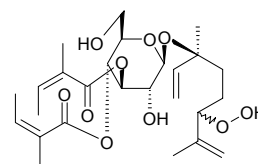
C<sub>3</sub>H<sub>8</sub>N<sub>2</sub>O<sub>2</sub> (104.11). mp (-) 193°C, ( $\pm$ ) 110~120°C. Source: WANG GUA ZI *Trichosanthes cucumeroides*. Ref: 6.

**5353 Diandraflavone**

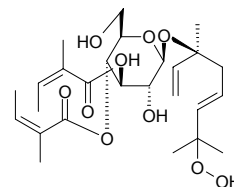
C<sub>29</sub>H<sub>34</sub>O<sub>11</sub> (558.59). Pharm: Antioxidant (selectively inhibits superoxide anion generation, hmn neutrophils, stimulated by fMLP/CB, IC<sub>50</sub> = 10 $\mu$ g/mL). Source: ER RUI HE LIAN DOU *Drymaria diandra* [Syn. *Drymaria cordata* ssp. *diandra*] (whole herb: yield = 0.00003%). Ref: 4758.

**5354 (3S)-3-O-(3',4'-Diangeloyl- $\beta$ -D-glucopyranosyloxy)-6-hydroperoxy-3,7-dimethylocta-1,7-diene**

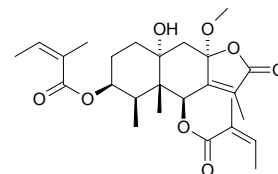
C<sub>26</sub>H<sub>40</sub>O<sub>10</sub> (512.60). Colorless oil. [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -5.1° (c = 0.15, CHCl<sub>3</sub>). Source: DONG FENG CAI *Doellingeria scaber* [Syn. *Aster scaber*] (aerial parts). Ref: 4102.

**5355 (3S)-3-O-(3',4'-Diangeloyl- $\beta$ -D-glucopyranosyloxy)-7-hydroperoxy-3,7-dimethylocta-1,5-diene**

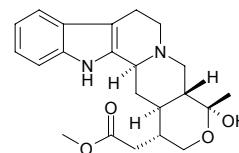
C<sub>26</sub>H<sub>40</sub>O<sub>10</sub> (512.60). Colorless oil. [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -13.1° (c = 0.48, CHCl<sub>3</sub>). Source: DONG FENG CAI *Doellingeria scaber* [Syn. *Aster scaber*] (aerial parts). Ref: 4102.

**5356 3 $\beta$ ,6 $\beta$ -Diangeloyloxy-10 $\alpha$ -hydroxy-8 $\alpha$ -methoxyeremophilinide**

C<sub>26</sub>H<sub>36</sub>O<sub>8</sub> (476.57). Colorless gum, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -109.8° (c = 0.56, CHCl<sub>3</sub>). Source: TU ER FENG XIE JIA CAO *Cacalia ainsliaeflora*. Ref: 5428.

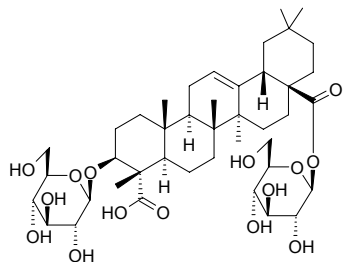
**5357 Diangoutengjian I**

C<sub>22</sub>H<sub>28</sub>N<sub>2</sub>O<sub>4</sub> (384.48). Colorless block crystals, mp 190~191°C. Source: DIAN GOU TENG *Uncaria yunnanensis*. Ref: 869.

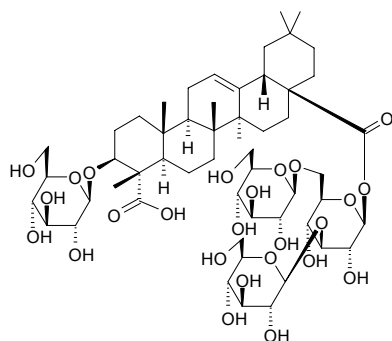


**5358 Dianoside A**

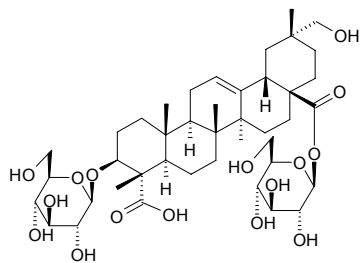
[91652-87-8]  $C_{42}H_{66}O_{15}$  (810.99). Pharm: Analgesic. Source: CHANG E QU MAI *Dianthus superbus* var. *longicalycinus*, BIAN SE SHI ZHU *Dianthus versicolor*, QU MAI *Dianthus superbus*. Ref: 658, 1530, 1531, 1532, 1533, 4450, 5501.

**5359 Dianoside B**

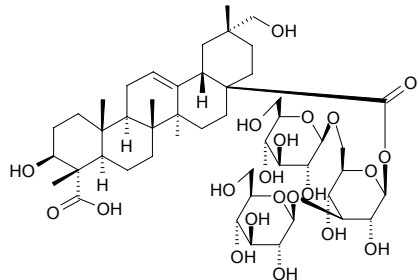
$C_{54}H_{86}O_{25}$  (1135.27). Pharm: Antihepatotoxin (aglucon is active component, liver damage caused by  $CCl_4$ ); analgesic (mus, acetic acid-induced writhing model,  $InRt = 68\%$ ). Source: BIAN SE SHI ZHU *Dianthus versicolor*, QU MAI *Dianthus superbus*. Ref: 1530, 1531, 1532, 1533, 5501.

**5360 Dianoside C**

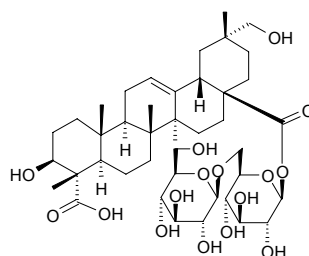
[91652-89-0]  $C_{42}H_{66}O_{16}$  (826.98). Source: BIAN SE SHI ZHU *Dianthus versicolor*. Ref: 1530, 1531, 1532, 1533.

**5361 Dianoside D**

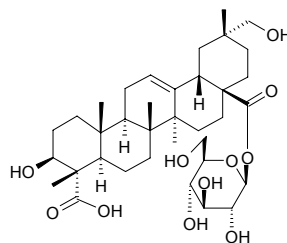
[91652-90-3]  $C_{48}H_{76}O_{21}$  (989.13). Source: BIAN SE SHI ZHU *Dianthus versicolor*. Ref: 1530, 1531, 1532, 1533.

**5362 Dianoside E**

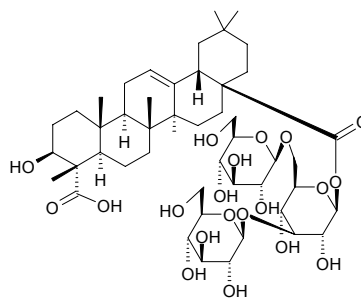
[91652-23-2]  $C_{42}H_{66}O_{16}$  (826.98). Source: BIAN SE SHI ZHU *Dianthus versicolor*. Ref: 1530, 1531, 1532, 1533.

**5363 Dianoside F**

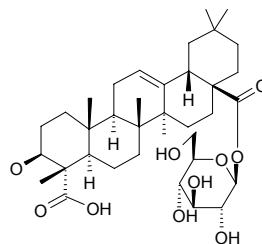
[91652-25-4]  $C_{36}H_{56}O_{11}$  (664.84). Source: BIAN SE SHI ZHU *Dianthus versicolor*. Ref: 1530, 1531, 1532, 1533.

**5364 Dianoside G**

[96333-09-4]  $C_{48}H_{76}O_{20}$  (973.13). Source: CHANG E QU MAI *Dianthus superbus* var. *longicalycinus*, BIAN SE SHI ZHU *Dianthus versicolor*. Ref: 1530, 1531, 1532, 1533, 4450.

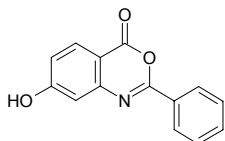
**5365 Dianoside H**

[96333-10-7]  $C_{36}H_{56}O_{10}$  (648.84). Source: BIAN SE SHI ZHU *Dianthus versicolor*. Ref: 1530, 1531, 1532, 1533.

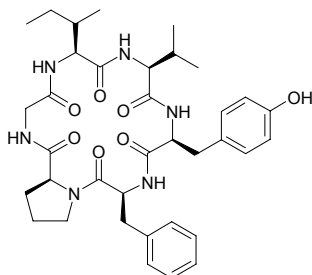


**5366 Dianthalexine**

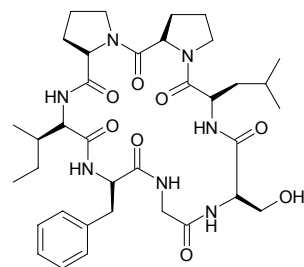
[85914-62-4] C<sub>14</sub>H<sub>9</sub>NO<sub>3</sub> (239.23). **Pharm:** Antifungal. **Source:** SHE XIANG SHI ZHU *Dianthus caryophyllus*. **Ref:** 658, 1521.

**5367 Dianthin C**

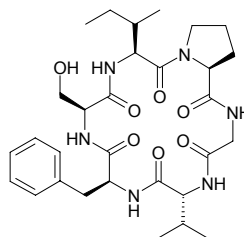
C<sub>36</sub>H<sub>48</sub>N<sub>6</sub>O<sub>7</sub> (676.82). Pale yellow powder,  $[\alpha]_D^{21} = -50^\circ$  ( $c = 0.17$ , MeOH). **Pharm:** Cytotoxic (*in vitro*, HepG<sub>2</sub>, IC<sub>50</sub> = 17.17 μg/mL; Hep3B, IC<sub>50</sub> > 20 μg/mL; MCF7, IC<sub>50</sub> > 20 μg/mL; A549, IC<sub>50</sub> > 20 μg/mL; MDA-MB-231, IC<sub>50</sub> > 20 μg/mL; control Doxorubicin, HepG<sub>2</sub>, IC<sub>50</sub> = 0.19 μg/mL; Hep3B, IC<sub>50</sub> = 0.31 μg/mL; MCF7, IC<sub>50</sub> = 1.21 μg/mL; A549, IC<sub>50</sub> = 0.19 μg/mL; MDA-MB-231, IC<sub>50</sub> = 0.73 μg/mL). **Source:** QU MAI *Dianthus superbus* (aerial parts: yield = 0.0033%dw). **Ref:** 4765.

**5368 Dianthin D**

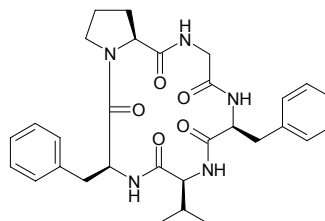
C<sub>36</sub>H<sub>53</sub>N<sub>7</sub>O<sub>8</sub> (711.87). Pale yellow powder,  $[\alpha]_D^{21} = -19.6^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Cytotoxic (*in vitro*, HepG<sub>2</sub>, IC<sub>50</sub> > 20 μg/mL; Hep3B, IC<sub>50</sub> > 20 μg/mL; MCF7, IC<sub>50</sub> > 20 μg/mL; A549, IC<sub>50</sub> > 20 μg/mL; MDA-MB-231, IC<sub>50</sub> > 20 μg/mL; control Doxorubicin, HepG<sub>2</sub>, IC<sub>50</sub> = 0.19 μg/mL; Hep3B, IC<sub>50</sub> = 0.31 μg/mL; MCF7, IC<sub>50</sub> = 1.21 μg/mL; A549, IC<sub>50</sub> = 0.19 μg/mL; MDA-MB-231, IC<sub>50</sub> = 0.73 μg/mL). **Source:** QU MAI *Dianthus superbus* (aerial parts: yield = 0.0005%dw). **Ref:** 4765.

**5369 Dianthin E**

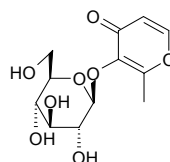
C<sub>30</sub>H<sub>44</sub>N<sub>6</sub>O<sub>7</sub> (600.72). Pale yellow powder,  $[\alpha]_D^{21} = -30.5^\circ$  ( $c = 0.02$ , MeOH). **Pharm:** Cytotoxic (*in vitro*, HepG<sub>2</sub>, IC<sub>50</sub> = 2.37 μg/mL; Hep3B, IC<sub>50</sub> > 20 μg/mL; MCF7, IC<sub>50</sub> > 20 μg/mL; A549, IC<sub>50</sub> > 20 μg/mL; MDA-MB-231, IC<sub>50</sub> > 20 μg/mL; control Doxorubicin, HepG<sub>2</sub>, IC<sub>50</sub> = 0.19 μg/mL; Hep3B, IC<sub>50</sub> = 0.31 μg/mL; MCF7, IC<sub>50</sub> = 1.21 μg/mL; A549, IC<sub>50</sub> = 0.19 μg/mL; MDA-MB-231, IC<sub>50</sub> = 0.73 μg/mL). **Source:** QU MAI *Dianthus superbus* (aerial parts: yield = 0.0022%dw). **Ref:** 4765.

**5370 Dianthin F**

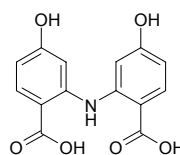
C<sub>30</sub>H<sub>37</sub>N<sub>5</sub>O<sub>5</sub> (547.66). Pale yellow powder,  $[\alpha]_D^{21} = -16.0^\circ$  ( $c = 0.03$ , MeOH). **Source:** QU MAI *Dianthus superbus* (aerial parts: yield = 0.0005%dw). **Ref:** 4765.

**5371 Dianthoside**

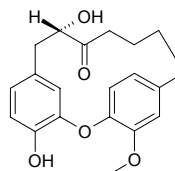
Maltol-3-*O*-β-*D*-glucopyranoside [20847-13-6] C<sub>12</sub>H<sub>16</sub>O<sub>8</sub> (288.26). **Source:** SHI ZHU *Dianthus chinensis*, JIN JI WEI BA CAO GEN *Macrothelypteris oligophlebia*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. **Ref:** 1238, 1488, 1529.

**5372 Dianthramine**

[136945-65-8] C<sub>14</sub>H<sub>11</sub>NO<sub>6</sub> (289.25). **Pharm:** Antifungal. **Source:** SHE XIANG SHI ZHU *Dianthus caryophyllus*. **Ref:** 522, 658.

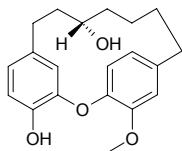
**5373 Diarylheptanoid CPB-51-262-1**

C<sub>20</sub>H<sub>22</sub>O<sub>5</sub> (342.40). Brown solid,  $[\alpha]_D^{25} = -81.13^\circ$  ( $c = 0.03$ , MeOH). **Pharm:** Cytotoxic inactive (MTT assay, HT29 cell line, MCF7 cell line). **Source:** HU TAO QIU *Juglans mandshurica* (root). **Ref:** 4321.

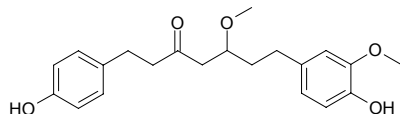


**5374 Diarylheptanoid CPB-51-262-2**

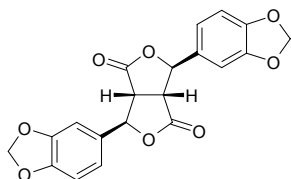
$C_{20}H_{24}O_4$  (328.41). Yellow oil,  $[\alpha]_D^{25} = -39.07^\circ$  ( $c = 0.21$ , MeOH). **Pharm:** Cytotoxic inactive (MTT assay, HT29 cell line, MCF7 cell line). **Source:** HU TAO QIU *Juglans mandshurica* (root). **Ref:** 4321.

**5375 Diarylheptanoid CPB-51-262-4**

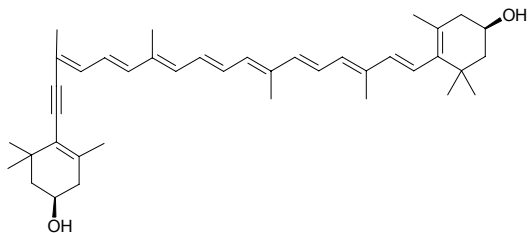
$C_{21}H_{26}O_5$  (358.44). Brown oil,  $[\alpha]_D^{21} = -7.1^\circ$  ( $c = 0.42$ , MeOH). **Pharm:** Cytotoxic (MTT assay, HT29 cell line,  $IC_{50} = 41.3 \mu\text{g/mL}$ ; MCF7 cell line,  $IC_{50} = 50 \mu\text{g/mL}$ )<sup>[4321]</sup>. **Source:** HU TAO QIU *Juglans mandshurica* (root). **Ref:** 4321.

**5376 (-)-Diasamin-di- $\gamma$ -lactone**

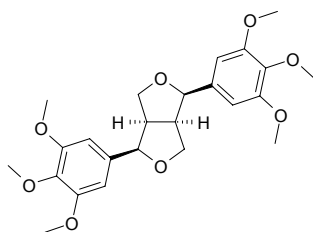
$C_{20}H_{14}O_8$  (382.33). Colorless needles (Me<sub>2</sub>CO), mp 188~189°C,  $[\alpha]_D^{26} = -47.4^\circ$  ( $c = 0.1$ , CHCl<sub>3</sub>). **Source:** PI ZHEN XING YAO HUA *Wikstroemia lanceolata* (stem and root). **Ref:** 4947.

**5377 Diatoxanthin**

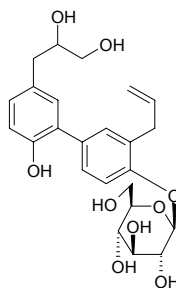
$C_{40}H_{54}O_2$  (566.88). **Pharm:** Anti-carcinogenic (inhibits 50nmol/L 12-*O*-tetradecanoyl phorbol 13-acetate (TPA)-stimulated <sup>32</sup>P-incorporation into the phospholipids of HeLa cells, 25 $\mu\text{g/mL}$ , InRt = 48.2%)<sup>[4256]</sup>. **Source:** ER JIAO DUO JIA ZAO *Peridinium bipes*. **Ref:** 4256.

**5378 Diyangambin**

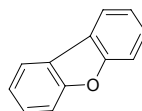
Lirioresinol dimethyl ether [21453-68-9]  $C_{24}H_{30}O_8$  (446.50). **Pharm:** Cytotoxic (Meth-A sarcoma cell line,  $ED_{50} > 10 \mu\text{g/mL}$ , LLC cell line,  $ED_{50} > 10 \mu\text{g/mL}$ )<sup>[3510]</sup>. **Source:** QING HAO *Artemisia apiacea* [Syn. *Artemisia carvifolia*; *Artemisia caruifolia*] (aerial parts). **Ref:** 3510.

**5379 1,1'-Dibenzene-6',8',9'-trihydroxy-3-allyl-4-*O*- $\beta$ -D-glucopyranoside**

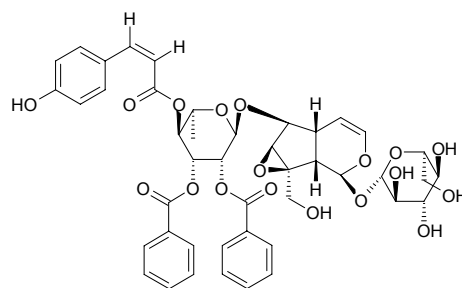
$C_{24}H_{30}O_9$  (462.50). Colorless glue. **Source:** DA YE HOU PO *Magnolia rostrata*. **Ref:** 2030.

**5380 Dibenzofuran**

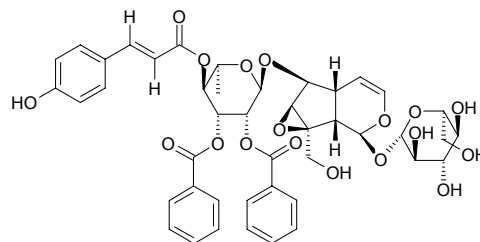
$C_{12}H_8O$  (168.20). **Source:** CHUAN XU DUAN *Dipsacus asperoides*. **Ref:** 660.

**5381 6-*O*- $\alpha$ -L-(2''-*O*-,3''-*O*-Dibenzoyl,4''-*O*-*cis*-*p*-coumaroyl)rhamno-pyranosylcatalpol**

$C_{44}H_{46}O_{18}$  (862.85). **Source:** FEI LV BIN SHI ZI *Gmelina philippensis* (aerial parts). **Ref:** 3954.

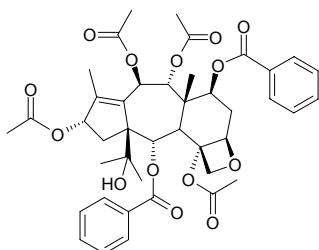
**5382 6-*O*- $\alpha$ -L-(2''-*O*-,3''-*O*-Dibenzoyl,4''-*O*-*trans*-*p*-coumaroyl)rhamno-pyranosylcatalpol**

$C_{44}H_{46}O_{18}$  (862.85). **Source:** FEI LV BIN SHI ZI *Gmelina philippensis* (aerial parts). **Ref:** 3954.



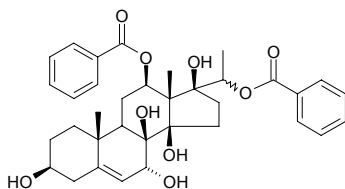
**5383 2 $\alpha$ ,7 $\beta$ -Dibenzoyl-5 $\beta$ ,20-epoxy-1 $\beta$ -hydroxy-4 $\alpha$ ,9 $\alpha$ ,10 $\beta$ ,13 $\alpha$ -tetra-acetoxytax-11-ene**

C<sub>42</sub>H<sub>48</sub>O<sub>14</sub> (776.84). Source: DUAN YE HONG DOU SHAN *Taxus brevifolia*. Ref: 662.



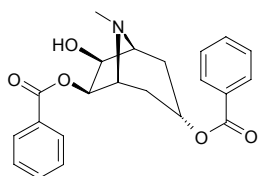
**5384 Dibenzoylgagaimol**

[38753-71-8] C<sub>35</sub>H<sub>42</sub>O<sub>9</sub> (606.72). mp 192~197°C. Source: LUO MO *Metaplexis japonica*. Ref: 6.



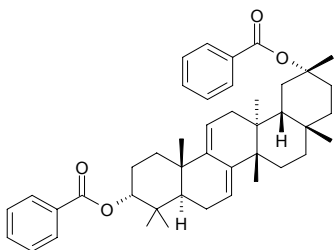
**5385 3 $\alpha$ ,7 $\beta$ -Dibenzoyloxy-6 $\beta$ -hydroxy-tropane**

C<sub>22</sub>H<sub>23</sub>NO<sub>5</sub> (381.43). mp 220°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +10° (*c* = 0.1, EtOH). Source: *Erythroxyton alaternifolium* (leaf). Ref: 3999.



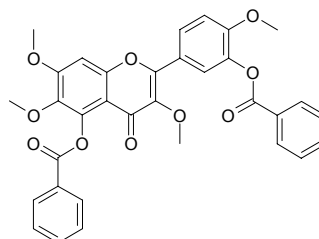
**5386 3,29-*O*-Dibenzoyloxykaroundiol**

C<sub>43</sub>H<sub>54</sub>O<sub>4</sub> (634.91). Colorless needles, mp 149~152°C (*n*-hexane), [ $\alpha$ ]<sub>D</sub> = +9.1° (*c* = 0.17, CHCl<sub>3</sub>). Source: FENG GUA *Gymnopetalum integrifolium* (fruit). Ref: 4189.



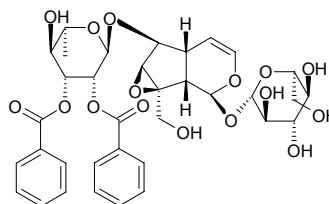
**5387 5,3'-Dibenzoyloxy-3,6,7,4'-tetramethoxyflavone**

C<sub>33</sub>H<sub>26</sub>O<sub>10</sub> (582.57). mp 220~222°C. Pharm: Cytotoxic (*in vitro*, Col2, ED<sub>50</sub> > 20 $\mu$ g/mL; hTERT-RPE1, ED<sub>50</sub> = 4.3 $\mu$ g/mL; HUVEC, ED<sub>50</sub> > 20 $\mu$ g/mL; KB, ED<sub>50</sub> > 20 $\mu$ g/mL; HUVEC, ED<sub>50</sub> > 20 $\mu$ g/mL; Lu1, ED<sub>50</sub> = 6.5 $\mu$ g/mL). Source: HUANG JING YE *Vitex negundo*. Ref: 4699.



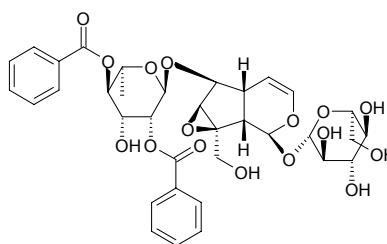
**5388 6-*O*- $\alpha$ -L-(2''-*O*-,3''-*O*-Dibenzoyl)rhamnopyranosylcatalpol**

C<sub>35</sub>H<sub>40</sub>O<sub>16</sub> (716.70). Source: FEI LV BIN SHI ZI *Gmelina philippensis* (aerial parts). Ref: 3954.



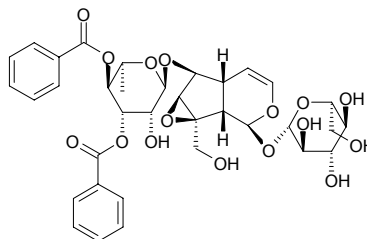
**5389 6-*O*- $\alpha$ -L-(2''-*O*-,4''-*O*-Dibenzoyl)rhamnopyranosylcatalpol**

C<sub>35</sub>H<sub>40</sub>O<sub>16</sub> (716.70). Pale yellow powder. Source: FEI LV BIN SHI ZI *Gmelina philippensis* (aerial parts). Ref: 3954.



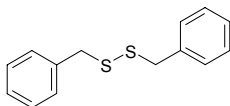
**5390 6-*O*- $\alpha$ -L-(3''-*O*-,4''-*O*-Dibenzoyl)rhamnopyranosylcatalpol**

C<sub>35</sub>H<sub>40</sub>O<sub>16</sub> (716.70). Pale yellow powder. Source: FEI LV BIN SHI ZI *Gmelina philippensis* (aerial parts). Ref: 3954.

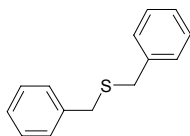


**5391 Dibenzyl disulphide**

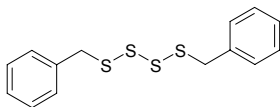
$C_{14}H_{14}S_2$  (246.40). Yellow amorphous solid. **Pharm:** Antifungal (plant pathogenic fungi *Cladosporium sphaerospermum*, MIC = 0.1  $\mu$ g, control Nystatin, MIC = 1.0  $\mu$ g; *Cladosporium cladosporioides*, MIC = 1.0  $\mu$ g, Nystatin, MIC = 1.0  $\mu$ g); antineoplastic (mechanism-based yeast bioassay for DNA-modifying agents, mutant yeast *Saccharomyces cerevisiae*: RS 188N (rad+),  $IC_{12}$  = 332  $\mu$ g/mL; RS 321,  $IC_{12}$  = 66  $\mu$ g/mL; RS 52YK (rad 52Y),  $IC_{12}$  = 16  $\mu$ g/mL, control Camptothecin, RS 52YK (rad 52Y),  $IC_{12}$  = 0.6  $\mu$ g/mL). **Source:** SUAN CHOU MU JI CAO *Petiveria alliacea* (root, stem and leaf). **Ref:** 5159.

**5392 Dibenzyl sulphide**

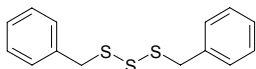
$C_{14}H_{14}S$  (214.33). Yellow oil. **Pharm:** Antifungal (plant pathogenic fungi *Cladosporium sphaerospermum*, MIC = 1.0  $\mu$ g, control Nystatin, MIC = 1.0  $\mu$ g; *Cladosporium cladosporioides*, MIC = 1.0  $\mu$ g, Nystatin, MIC = 1.0  $\mu$ g); antineoplastic (mechanism-based yeast bioassay for DNA-modifying agents, mutant yeast *Saccharomyces cerevisiae*: RS 188N (rad+),  $IC_{12}$  = 402  $\mu$ g/mL; RS 321,  $IC_{12}$  = 381  $\mu$ g/mL; RS 52YK (rad 52Y),  $IC_{12}$  = 412  $\mu$ g/mL, control Camptothecin, RS 52YK (rad 52Y),  $IC_{12}$  = 0.6  $\mu$ g/mL). **Source:** SUAN CHOU MU JI CAO *Petiveria alliacea* (root, stem and leaf). **Ref:** 5159.

**5393 Dibenzyl tetrasulphide**

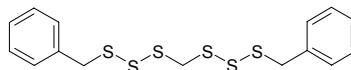
$C_{14}H_{14}S_4$  (310.52). Orange amorphous solid. **Pharm:** Antifungal (plant pathogenic fungi *Cladosporium sphaerospermum*, MIC = 10.0  $\mu$ g, control Nystatin, MIC = 1.0  $\mu$ g; *Cladosporium cladosporioides*, MIC = 10.0  $\mu$ g, Nystatin, MIC = 1.0  $\mu$ g); antineoplastic (mechanism-based yeast bioassay for DNA-modifying agents, mutant yeast *Saccharomyces cerevisiae*: RS 188N (rad+),  $IC_{12}$  = 328  $\mu$ g/mL; RS 321,  $IC_{12}$  = 53  $\mu$ g/mL; RS 52YK (rad 52Y),  $IC_{12}$  = 104  $\mu$ g/mL, control Camptothecin, RS 52YK (rad 52Y),  $IC_{12}$  = 0.6  $\mu$ g/mL). **Source:** SUAN CHOU MU JI CAO *Petiveria alliacea* (root, stem and leaf). **Ref:** 5159.

**5394 Dibenzyl trisulphide**

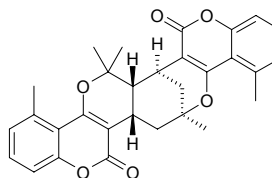
$C_{14}H_{14}S_3$  (278.46). Yellow amorphous solid. **Pharm:** Antifungal (plant pathogenic fungi *Cladosporium sphaerospermum*, MIC = 1.0  $\mu$ g, control Nystatin, MIC = 1.0  $\mu$ g; *Cladosporium cladosporioides*, MIC = 1.0  $\mu$ g, Nystatin, MIC = 1.0  $\mu$ g); antineoplastic (mechanism-based yeast bioassay for DNA-modifying agents, mutant yeast *Saccharomyces cerevisiae*: RS 188N (rad+),  $IC_{12}$  = 73  $\mu$ g/mL; RS 321,  $IC_{12}$  = 64  $\mu$ g/mL; RS 52YK (rad 52Y),  $IC_{12}$  = 62  $\mu$ g/mL, control Camptothecin, RS 52YK (rad 52Y),  $IC_{12}$  = 0.6  $\mu$ g/mL). **Source:** SUAN CHOU MU JI CAO *Petiveria alliacea* (root, stem and leaf). **Ref:** 5159.

**5395 Di(benzyltrithio)methane**

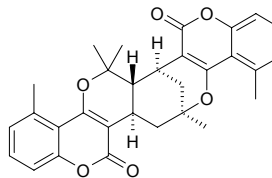
$C_{15}H_{16}S_6$  (388.68). Orange amorphous solid. **Pharm:** Antifungal (plant pathogenic fungi *Cladosporium sphaerospermum*, MIC = 5.0  $\mu$ g, control Nystatin, MIC = 1.0  $\mu$ g; *Cladosporium cladosporioides*, MIC = 5.0  $\mu$ g, Nystatin, MIC = 1.0  $\mu$ g); antineoplastic (mechanism-based yeast bioassay for DNA-modifying agents, mutant yeast *Saccharomyces cerevisiae*: RS 188N (rad+),  $IC_{12}$  = 76  $\mu$ g/mL; RS 321,  $IC_{12}$  = 58  $\mu$ g/mL; RS 52YK (rad 52Y),  $IC_{12}$  = 67  $\mu$ g/mL, control Camptothecin, RS 52YK (rad 52Y),  $IC_{12}$  = 0.6  $\mu$ g/mL). **Source:** SUAN CHOU MU JI CAO *Petiveria alliacea* (root, stem and leaf). **Ref:** 5159.

**5396 Dibothrioclinin I**

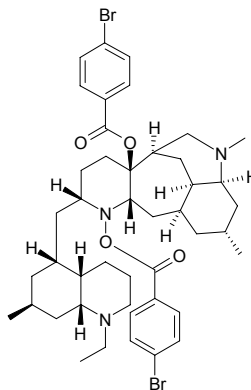
$C_{30}H_{28}O_6$  (484.55). Colorless block crystals, mp > 300°C,  $[\alpha]_D^{19}$  = +24° ( $c$  = 0.05,  $CHCl_3$ ). **Source:** MAO DA DING CAO *Gerbera piloselloides*. **Ref:** 2564.

**5397 Dibothrioclinin II**

$C_{30}H_{28}O_6$  (484.55). Colorless plate crystals, mp > 300°C,  $[\alpha]_D^{19}$  = 0° ( $c$  = 0.045,  $CHCl_3$ ). **Source:** MAO DA DING CAO *Gerbera piloselloides*. **Ref:** 2564.

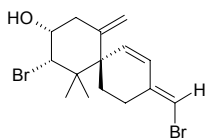
**5398 Di-p-bromobenzoate of tetrahydrodeoxyoxolucidine B**

$C_{44}H_{50}Br_2N_3O_4$  (853.79).  $[\alpha]_D^{21.5}$  = -30.5° ( $c$  = 0.89,  $CHCl_3$ ). **Source:** GUANG LIANG SHI SONG *Lycopodium lucidulum*. **Ref:** 3927.

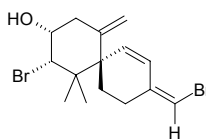


**5399 (E)-10,15-Dibromo-9-hydroxy-chamigra-1,3(15),7(14)-triene**

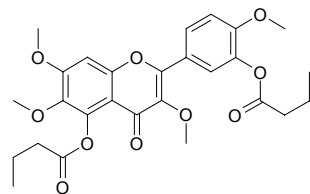
$C_{15}H_{20}Br_2O$  (376.13). Source: LUE DA AO DING ZAO *Laurencia majuscula*.  
Ref: 5191.

**5400 (Z)-10,15-Dibromo-9-hydroxy-chamigra-1,3(15),7(14)-triene**

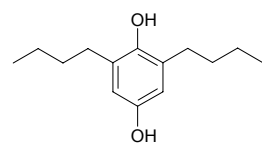
$C_{15}H_{20}Br_2O$  (376.13). Source: LUE DA AO DING ZAO *Laurencia majuscula*.  
Ref: 5191.

**5401 5,3'-Dibutanoyloxy-3,6,7,4'-tetramethoxyflavone**

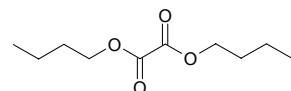
$C_{27}H_{30}O_{10}$  (514.53). mp 108–109°C. Pharm: Cytotoxic (*in vitro*, Col2,  $ED_{50}$  = 11.7  $\mu$ g/mL; hTERT-RPE1,  $ED_{50}$  = 0.6  $\mu$ g/mL; HUVEC,  $ED_{50}$  > 20  $\mu$ g/mL; KB,  $ED_{50}$  = 0.5  $\mu$ g/mL; HUVEC,  $ED_{50}$  = 0.8  $\mu$ g/mL; Lu1,  $ED_{50}$  = 1.7  $\mu$ g/mL)<sup>[4699]</sup>.  
Source: HUANG JING YE *Vitex negundo*. Ref: 4699.

**5402 2,6-Dibutyl-p-cresol**

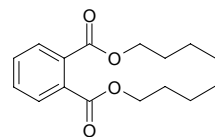
$C_{14}H_{22}O_2$  (222.33). Source: MIAN MA *Dryopteris filix-mas*. Ref: 1534.

**5403 Dibutyl oxalate**

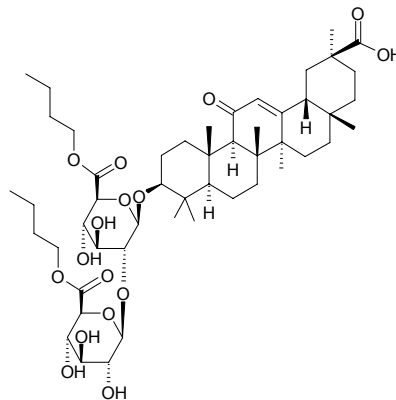
[2050-60-4]  $C_{10}H_{18}O_4$  (202.25). Source: REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. Ref: 2.

**5404 Dibutyl phthalate**

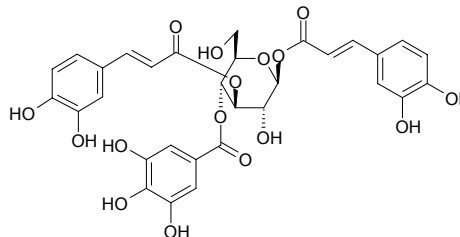
[84-74-2]  $C_{16}H_{22}O_4$  (278.35). Source: NIU XI *Achyranthes bidentata*, HUA DONG LAN CI TOU *Echinops grijsii*. Ref: 582, 660.

**5405 Dibutyl uralsaponin A ester**

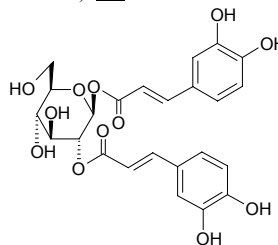
Inflasaponin IV; Glycyrrhetic acid-3-O- $\beta$ -D-6'-n-butyl-glucuronopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-6'-n-butyl-glucuronopyranoside  $C_{50}H_{78}O_{16}$  (935.17). Colorless powder, mp 234–236°C. Source: GAN CAO *Glycyrrhiza uralensis*, ZHANG GUO GAN CAO *Glycyrrhiza inflata*. Ref: 301, 880.

**5406 1,3-Di-O-(E)-caffeoyl-4-O-galloyl- $\beta$ -D-glucopyranose**

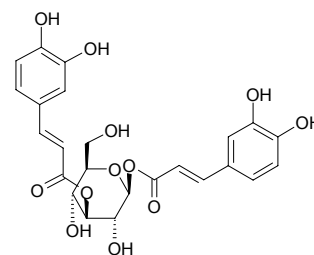
$C_{31}H_{28}O_{16}$  (656.56). Yellow amorphous powder,  $[\alpha]_D^{15}$  =  $-100.4^\circ$  ( $c$  = 0.7, MeOH). Source: GE XUN *Balanophora japonica* (aerial parts: yield = 0.1069%, underground part: yield = 0.0859%). Ref: 4101.

**5407 1,2-Di-O-(E)-caffeoyl- $\beta$ -D-glucopyranose**

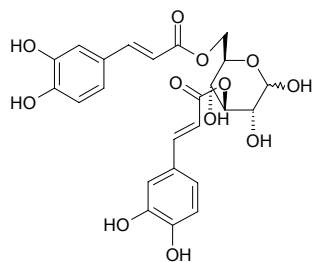
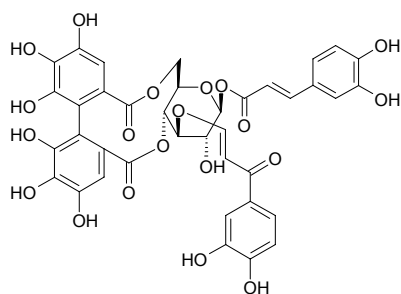
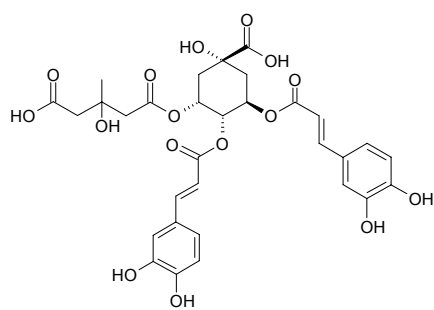
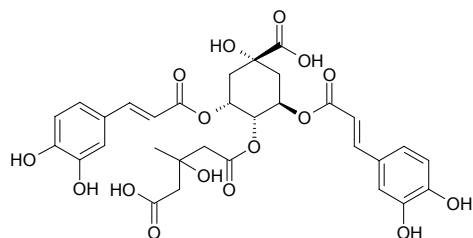
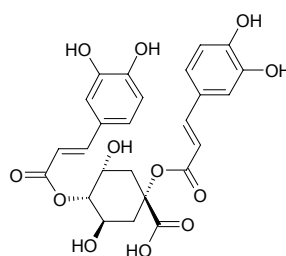
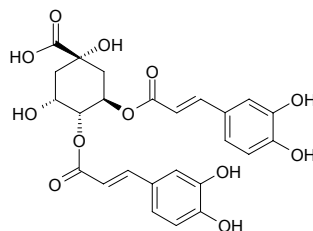
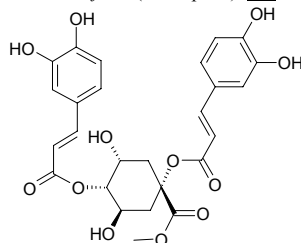
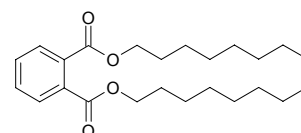
$C_{24}H_{24}O_{12}$  (504.45). Yellow amorphous powder,  $[\alpha]_D^{15}$  =  $-11.7^\circ$  ( $c$  = 0.8, MeOH). Source: GE XUN *Balanophora japonica* (underground part: yield = 0.0287%). Ref: 4101.

**5408 1,3-Di-O-(E)-caffeoyl- $\beta$ -D-glucopyranose**

$C_{24}H_{24}O_{12}$  (504.45). Yellow amorphous powder,  $[\alpha]_D^{15}$  =  $-33.4^\circ$  ( $c$  = 0.6, MeOH). Source: GE XUN *Balanophora japonica* (aerial parts: yield = 0.0014%). Ref: 4101.

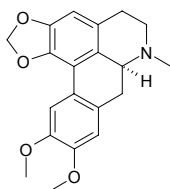




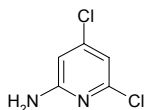
**5409 3,6-Di-*O*-caffeoyl- $\alpha/\beta$ -glucose**C<sub>24</sub>H<sub>24</sub>O<sub>12</sub> (504.45). Source: SHEN SHENG XUAN GOU ZI *Rubus sanctus*.Ref: 3421.**5410 1,3-Di-*O*-(*E*)-caffeoyl-4,6-(*S*)-HHDP- $\beta$ -*D*-glucopyranose**C<sub>38</sub>H<sub>30</sub>O<sub>20</sub> (806.65). Yellow amorphous powder,  $[\alpha]_D^{15} = -4.2^\circ$  ( $c = 0.6$ , MeOH). Source: GE XUN *Balanophora japonica* (aerial parts: yield = 0.0092%). Ref: 4101.**5411 3,4-Di-*O*-caffeoyl-5-*O*-(3-hydroxy-3-methyl) glutaroyl quinic acid**C<sub>31</sub>H<sub>32</sub>O<sub>16</sub> (660.59). Source: ZHI ZI *Gardenia jasminoides* [Syn. *Gardenia florida*]. Ref: 2, 626.**5412 3,5-Di-*O*-caffeoyl-4-*O*-(3-hydroxy-3-methyl)glutaroylquinic acid**C<sub>31</sub>H<sub>32</sub>O<sub>16</sub> (660.59). Source: ZHI ZI *Gardenia jasminoides* [Syn. *Gardenia florida*]. Ref: 2, 626.**5413 1,4-Di-*O*-caffeoylquinic acid**C<sub>25</sub>H<sub>24</sub>O<sub>12</sub> (516.46). mp 229~230°C. Source: CANG ER *Xanthium sibiricum* [Syn. *Xanthium strumarium*]. Ref: 6.**5414 3,4-Di-*O*-caffeoylquinic acid**Isochlorogenic acid B [14534-61-3] C<sub>25</sub>H<sub>24</sub>O<sub>12</sub> (516.46). Pharm: Platelet aggregation inhibitor (rat, 500μg/mL, induced by ADP, InRt = 75%, induced by collagen, InRt = 42%); promotes release of prostacyclin PGI<sub>2</sub> (rat, 10μmol/L, 190.6%); increases coronary flow; Increases spread and mobility of macrophage (mus); anti-HIV (HIV-1 integrase inhibitor, inhibits replication of HIV); antineoplastic (mus, melanotic carcinoma B16, inhibits formation of melanin); antioxidant (cytoblast and microsome in hepatic cells, inhibits lipid peroxidization). Source: CU ZHUANG KA FEI *Coffea robusta*, SAI ER WEI YA SHI CAO *Achillea alexandri-regis*, XIAO GUO KA FEI *Coffea arabica*, ZHI ZI *Gardenia jasminoides* [Syn. *Gardenia florida*], *Artemisia* sp. Ref: 2, 626, 658, 1034, 1573, 1574, 1575, 1576, 2545.**5415 3,4-Di-*O*-caffeoylquinic acid methyl ester**C<sub>26</sub>H<sub>26</sub>O<sub>12</sub> (530.49). Pharm: Antiallergic (hyaluronidase inhibitor (activated hyaluronidase by compound 48/80, 0.2mmol/L, InRt = 31%, 76% inhibition of control DSCG)<sup>[3924]</sup>). Source: QUAN YUAN YE TE SA JU *Tessaria integrifolia* (aerial parts), XIAO LONG YE KUO BAO JU *Baccharis dracunculifolia* (aerial parts). Ref: 3924, 4184.**5416 Dicapryl phthalate**[117-84-0] C<sub>24</sub>H<sub>38</sub>O<sub>4</sub> (390.57). Source: SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. Ref: 2.

**5417 (-)-Dicentrine**

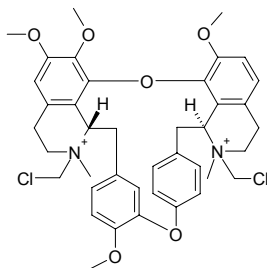
[517-66-8] C<sub>20</sub>H<sub>21</sub>NO<sub>4</sub> (339.39). **Pharm:** Analgesic; sedative; antitrypanosomal and cytotoxic (*Trypanosoma brucei brucei*, IC<sub>50</sub> = 14.6 μmol/L, Suramin, IC<sub>50</sub> = 0.06 μmol/L; hmn cervixcarcinoma cell HeLa, IC<sub>50</sub> = 35 μmol/L)<sup>[4969]</sup>. **Source:** HE BAO DI BU RONG *Stephania dicentrinifera*, WU YE TENG *Cassytha filiformis*, XI XIAO HE BAO MU DAN *Dicentra pusilla*. **Ref:** 658, 4969.

**5418 2,4-Dichloro-6-aminopyridine**

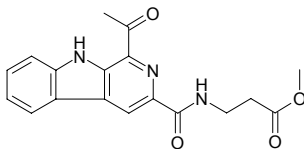
C<sub>5</sub>H<sub>4</sub>Cl<sub>2</sub>N<sub>2</sub> (163.01). mp 271°C. **Source:** KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. **Ref:** 6.

**5419 2',2'-N,N-Dichloromethyltetrandrine**

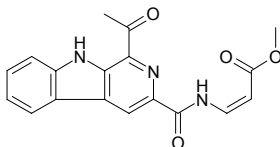
C<sub>40</sub>H<sub>46</sub>Cl<sub>2</sub>N<sub>2</sub>O<sub>6</sub><sup>2+</sup> (721.73). **Source:** FANG JI *Stephania tetrandra*. **Ref:** 2.

**5420 Dichotomide I**

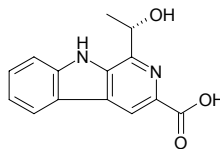
C<sub>18</sub>H<sub>17</sub>N<sub>3</sub>O<sub>4</sub> (339.35). Yellow powder. **Pharm:** β-Hexosaminidase release inhibitor inactive (RBL-2H3 cells); TNF-α release inhibitor inactive (RBL-2H3 cells, antigen-IgE-mediated); IL-4 release inhibitor inactive (RBL-2H3 cells, antigen-IgE-mediated). **Source:** YIN CHAI HU *Stellaria dichotoma* var. *lanceolata* (root). **Ref:** 4761.

**5421 Dichotomide II**

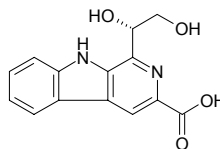
C<sub>18</sub>H<sub>15</sub>N<sub>3</sub>O<sub>4</sub> (337.34). Yellow powder, [α]<sub>D</sub><sup>19</sup> = +7.2° (c = 0.30, CHCl<sub>3</sub>). **Pharm:** β-Hexosaminidase release inhibitor inactive (RBL-2H3 cells); TNF-α release inhibitor inactive (RBL-2H3 cells, antigen-IgE-mediated); IL-4 release inhibitor inactive (RBL-2H3 cells, antigen-IgE-mediated). **Source:** YIN CHAI HU *Stellaria dichotoma* var. *lanceolata* (root; yield = 0.0001%dw). **Ref:** 4761.

**5422 Dichotomine A**

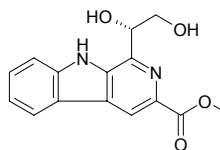
C<sub>14</sub>H<sub>12</sub>N<sub>2</sub>O<sub>3</sub> (256.26). Yellow powder, [α]<sub>D</sub><sup>27</sup> = -9.7° (c = 0.85, MeOH). **Pharm:** β-Hexosaminidase release inhibitor inactive (RBL-2H3 cells); TNF-α release inhibitor inactive (RBL-2H3 cells, antigen-IgE-mediated); IL-4 release inhibitor inactive (RBL-2H3 cells, antigen-IgE-mediated). **Source:** YIN CHAI HU *Stellaria dichotoma* var. *lanceolata* (root; yield = 0.0014%dw). **Ref:** 4761.

**5423 Dichotomine B**

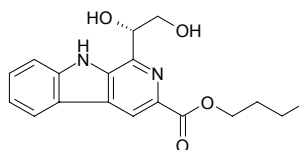
C<sub>14</sub>H<sub>12</sub>N<sub>2</sub>O<sub>4</sub> (272.26). Yellow powder, [α]<sub>D</sub><sup>27</sup> = -19.0° (c = 1.00, MeOH). **Pharm:** β-Hexosaminidase release inhibitor inactive (RBL-2H3 cells); TNF-α release inhibitor inactive (RBL-2H3 cells, antigen-IgE-mediated); IL-4 release inhibitor inactive (RBL-2H3 cells, antigen-IgE-mediated). **Source:** YIN CHAI HU *Stellaria dichotoma* var. *lanceolata* (root; yield = 0.0009%dw). **Ref:** 4761.

**5424 Dichotomine C**

C<sub>15</sub>H<sub>14</sub>N<sub>2</sub>O<sub>4</sub> (286.29). Yellow powder, [α]<sub>D</sub><sup>27</sup> = -16.6° (c = 0.50, MeOH). **Pharm:** β-Hexosaminidase release inhibitor (RBL-2H3 cells, IC<sub>50</sub> = 62 μmol/L); TNF-α release inhibitor (RBL-2H3 cells, antigen-IgE-mediated, IC<sub>50</sub> = 19 μmol/L); IL-4 release inhibitor (RBL-2H3 cells, antigen-IgE-mediated, IC<sub>50</sub> = 15 μmol/L). **Source:** YIN CHAI HU *Stellaria dichotoma* var. *lanceolata* (root; yield = 0.0016%dw). **Ref:** 4761.

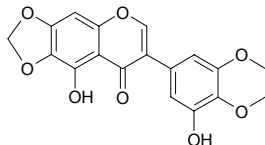
**5425 Dichotomine D**

C<sub>18</sub>H<sub>20</sub>N<sub>2</sub>O<sub>4</sub> (328.37). Yellow powder, [α]<sub>D</sub><sup>27</sup> = -1.8° (c = 0.75, CHCl<sub>3</sub>). **Pharm:** β-Hexosaminidase release inhibitor inactive (RBL-2H3 cells); TNF-α release inhibitor inactive (RBL-2H3 cells, antigen-IgE-mediated); IL-4 release inhibitor inactive (RBL-2H3 cells, antigen-IgE-mediated). **Source:** YIN CHAI HU *Stellaria dichotoma* var. *lanceolata* (root; yield = 0.0004%dw). **Ref:** 4761.

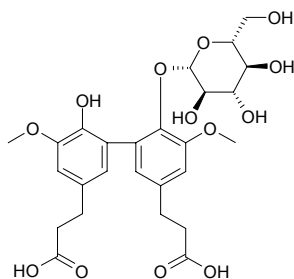


**5426 Dichotomitin**

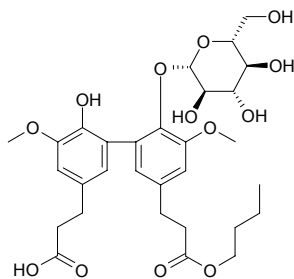
$C_{18}H_{14}O_8$  (358.31). Yellowish rhomboid crystals, mp 249~251°C. Source: BAI HUA SHE GAN *Iris dichotoma*, JUAN QIAO YUAN WEI *Iris potaninii* (underground part). Ref: 69, 4235.

**5427 Dichotomosite A**

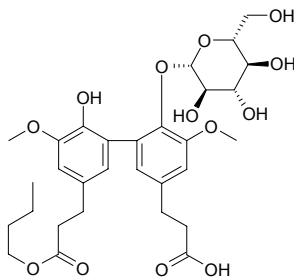
$C_{26}H_{32}O_{13}$  (552.54). White powder,  $[\alpha]_D^{27} = -2.3^\circ$  ( $c = 0.30$ , MeOH). Pharm:  $\beta$ -Hexosaminidase inhibitor inactive (RBL-2H3 cells, 100 $\mu$ mol/L, InRt = (1.0 $\pm$ 0.7)%), control Ketotifen fumarate, InRt = (19.1 $\pm$ 1.3)%. Source: YIN CHAI HU *Stellaria dichotoma* var. *lanceolata* (root: yield = 0.0013%). Ref: 2571.

**5428 Dichotomosite B**

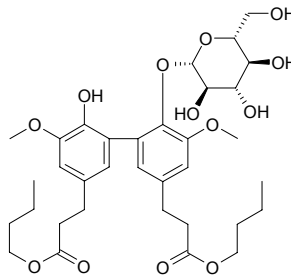
$C_{30}H_{40}O_{13}$  (608.65). White powder,  $[\alpha]_D^{27} = +8.4^\circ$  ( $c = 0.5$ , MeOH). Pharm:  $\beta$ -Hexosaminidase inhibitor inactive (RBL-2H3 cells, 100 $\mu$ mol/L, InRt = (8.2 $\pm$ 2.3)%), control Ketotifen fumarate, InRt = (19.1 $\pm$ 1.3)%. Source: YIN CHAI HU *Stellaria dichotoma* var. *lanceolata* (root: yield = 0.0004%). Ref: 2571.

**5429 Dichotomosite C**

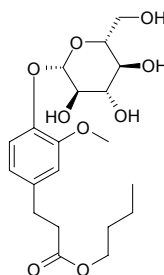
$C_{30}H_{40}O_{13}$  (608.65). White powder,  $[\alpha]_D^{27} = +5.5^\circ$  ( $c = 0.20$ , MeOH). Source: YIN CHAI HU *Stellaria dichotoma* var. *lanceolata* (root: yield = 0.0009%). Ref: 2571.

**5430 Dichotomosite D**

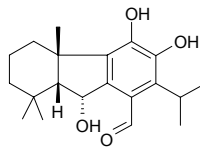
$C_{34}H_{48}O_{13}$  (664.75). White powder,  $[\alpha]_D^{27} = +7.4^\circ$  ( $c = 0.30$ , MeOH). Pharm:  $\beta$ -Hexosaminidase inhibitor (RBL-2H3 cells,  $IC_{50} = 64\mu$ mol/L, control Ketotifen fumarate  $IC_{50} = 216\mu$ mol/L); tumor necrosis factor- $\alpha$  inhibitor (TNF- $\alpha$ ) (RBL-2H3 cells,  $IC_{50} = 16\mu$ mol/L); interleukin-4 inhibitor (RBL-2H3 cells,  $IC_{50} = 34\mu$ mol/L); antiallergic (effective against the late-phase reactions in type I allergy than in the immediate phase). Source: YIN CHAI HU *Stellaria dichotoma* var. *lanceolata* (root: yield = 0.0002%). Ref: 2571.

**5431 Dichotomosite E**

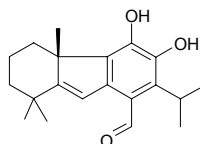
$C_{20}H_{30}O_9$  (414.46). White powder,  $[\alpha]_D^{27} = -29.5^\circ$  ( $c = 1.63$ , MeOH). Pharm:  $\beta$ -Hexosaminidase inhibitor inactive (RBL-2H3 cells, 100 $\mu$ mol/L, InRt = (5.7 $\pm$ 3.1)%), control Ketotifen fumarate, InRt = (19.1 $\pm$ 1.3)%. Source: YIN CHAI HU *Stellaria dichotoma* var. *lanceolata* (root: yield = 0.0009%). Ref: 2571.

**5432 Dichroanal A**

*rel*-(4a*S*,9*R*,9a*S*)-8-formyl-1,2,3,4,4a,9a-hexahydro-5,6,9-trihydroxy-7-isopropyl-1,1,4a-trimethylfluorene  $C_{20}H_{28}O_4$  (332.44). Source: ER SE HUA SHU WEI CAO *Salvia dichroantha*. Ref: 1909.

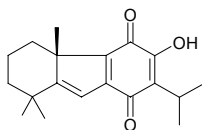
**5433 Dichroanal B**

4a*S*\*-8-formyl-2,3,4,4a-tetrahydro-5,6-dihydroxy-7-isopropyl-1,1,4a-trimethyl-1*H*-fluorene  $C_{20}H_{26}O_3$  (314.43). Source: ER SE HUA SHU WEI CAO *Salvia dichroantha*. Ref: 1909.

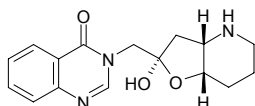


**5434 Dichroanone**

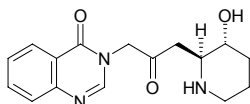
4a*S*\*-2,3,4,4a-tetrahydro-6-hydroxy-7-isopropyl-1,1,4a-trimethyl-5,8(1*H*)-fluorene-dione C<sub>19</sub>H<sub>24</sub>O<sub>3</sub> (300.40). Source: ER SE HUA SHU WEI CAO *Salvia dichroantha*. Ref: 1909.

**5435 α-Dichroine**

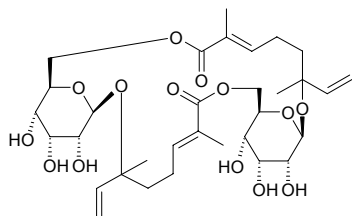
Isofebrifugine C<sub>16</sub>H<sub>19</sub>N<sub>3</sub>O<sub>3</sub> (301.35). mp 129~130°C. Pharm: Antimalarial; inhibits heart (rbt, iv, *in vitro*); antihypertensive (anesthetic cat, iv); uterine stimulant (anesthetic dog *in vivo*, pregnant rbt *in vitro*, rat *in vitro*). Source: CHANG SHAN *Dichroa febrifuga*, SAN XING XIU QIU *Hydrangea umbellata*. Ref: 4, 6, 658.

**5436 β-Dichroine**

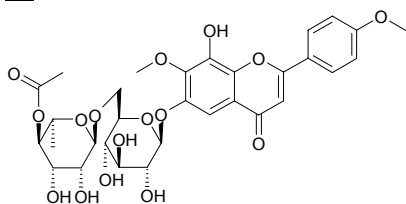
Febrivugine [24159-07-7] C<sub>16</sub>H<sub>19</sub>N<sub>3</sub>O<sub>3</sub> (301.35). mp 139~140°C. Pharm: Antimalarial (amoeba); antipyretic; uterine stimulant (anesthetic dog *in vivo*, pregnant rbt or rat, *in vitro*); emetic; LD<sub>50</sub> (mus, orl) = 2.5~3.0mg/kg. Source: CHANG SHAN *Dichroa febrifuga*. Ref: 658.

**5437 Dicliripariside A**

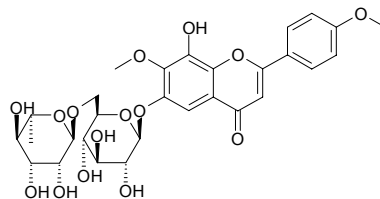
C<sub>32</sub>H<sub>48</sub>O<sub>14</sub> (656.73). Yellowish powder, mp 104~106°, [α]<sub>D</sub><sup>10</sup> = +0.127° (c = 0.11, MeOH). Source: HE AN GOU GAN CAI *Dicliptera riparia*. Ref: 1945.

**5438 Dicliripariside B**

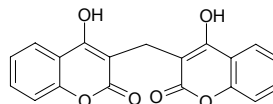
C<sub>31</sub>H<sub>36</sub>O<sub>16</sub> (664.62). Yellow powder, mp 210~212°C, [α]<sub>D</sub><sup>10</sup> = -0.9° (c = 0.01, MeOH:pyridine = 1:1). Source: HE AN GOU GAN CAI *Dicliptera riparia*. Ref: 1945.

**5439 Dicliripariside C**

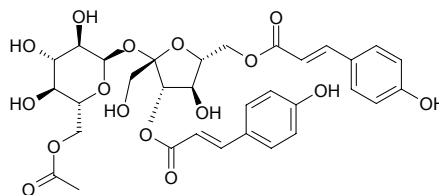
C<sub>29</sub>H<sub>34</sub>O<sub>15</sub> (622.59). Yellowish powder, mp 238~240°C, [α]<sub>D</sub><sup>10</sup> = -1.3° (c = 0.016, MeOH:pyridine = 1:1). Source: HE AN GOU GAN CAI *Dicliptera riparia*. Ref: 1945.

**5440 Dicoumarin**

Dicoumarol [66-76-2] C<sub>19</sub>H<sub>12</sub>O<sub>6</sub> (336.30). mp 288~289°C. Pharm: Antineoplastic (inhibits cellular proliferation of EAC, ID<sub>50</sub> of synthesis of nucleic acid = 11.5μg/mL); platelet aggregation inhibitor; rodenticide; antithrombotic (intravenous thrombus, pulmonary embolism, heart infarction and infarction caused by atrial fibrillation); toxin (bleeding). Source: BAI XIANG CAO MU XI *Melilotus albus*, HONG CHE ZHOU CAO *Trifolium pratense*, MU XU *Medicago sativa*, PI HAN CAO *Melilotus suaveolens*, *Anthoxanthum* sp. Ref: 4, 5, 6, 658.

**5441 3,6-Di-O-p-coumaroyl-β-D-fructofuranosyl 6-O-acetyl-α-D-glucopyranoside**

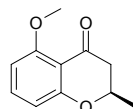
C<sub>32</sub>H<sub>36</sub>O<sub>16</sub> (676.63). Light yellow amorphous solid, [α]<sub>D</sub><sup>23</sup> = +23.4° (c = 0.25, MeOH). Source: JIAO YU *Canna edulis* (rhizome). Ref: 3836.

**5442 2,3-Dicresol**

[526-75-0] C<sub>8</sub>H<sub>10</sub>O (122.17). Source: DANG GUI *Angelica sinensis*. Ref: 2.

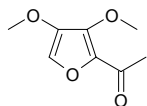
**5443 Dictafofin A**

C<sub>11</sub>H<sub>12</sub>O<sub>3</sub> (192.22). Colorless oil, [α]<sub>D</sub> = +62.3° (c = 0.015, Me<sub>2</sub>CO), [α]<sub>D</sub> = +30.08° (c = 0.02, CHCl<sub>3</sub>). Source: XIA YE BAI XIAN *Dictamnus angustifolius*. Ref: 1912.

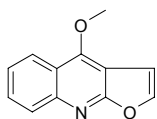


**5444 Dictafolin B**

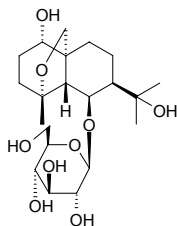
$C_8H_{10}O_4$  (170.17). Yellowish oil. Source: XIA YE BAI XIAN *Dictamnus angustifolius*. Ref: 1912.

**5445 Dictamnine**

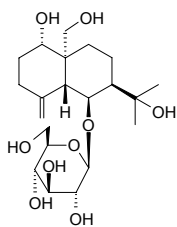
$C_{12}H_9NO_2$  (199.21). mp 132°C. Pharm: Antibacterial; antifungal; contracts blood vessels (blood vessel of rbt ear, *in vitro*); uterine stimulant (rbt and gpg); stimulates heart (frog heart *in vitro*, in low dose). Source: A NUO TI HUA JIAO *Zanthoxylum arnotianum*, BAI XIAN PI *Dictamnus dasycarpus* (root cortex: content = 0.12%)<sup>[5501]</sup>, CHU YE HUA JIAO *Zanthoxylum ailanthoides*, CHU YE HUA JIAO PI *Zanthoxylum ailanthoides*, DE KA RUI HUA JIAO *Zanthoxylum decaryi*, RI BEN BAI SONG FENG CAO *Boenninghausenia albiflora* var. *japonica*, YAN JIAO CAO *Boenninghausenia albiflora*, ZHU YE JIAO *Zanthoxylum planispinum*, ZHU YE JIAO GEN *Zanthoxylum planispinum*. Ref: 6, 658, 5501.

**5446 Dictamnoid A**

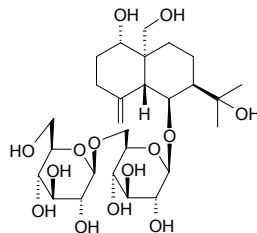
$C_{21}H_{36}O_9$  (432.52). Pharm: Immunoenhancer (*in vitro*, stimulates proliferation of T-cells, 0.00001 mol/L,  $P < 0.001$ ). Source: BAI XIAN PI *Dictamnus dasycarpus* (root cortex). Ref: 3068.

**5447 Dictamnoid B**

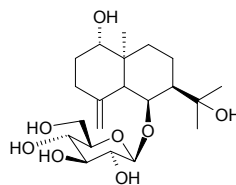
$C_{21}H_{36}O_9$  (432.52). Source: BAI XIAN PI *Dictamnus dasycarpus* (root cortex). Ref: 3068.

**5448 Dictamnoid G**

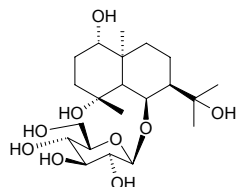
$C_{27}H_{46}O_{14}$  (594.66). Source: BAI XIAN PI *Dictamnus dasycarpus* (root cortex). Ref: 3068.

**5449 Dictamnoid H**

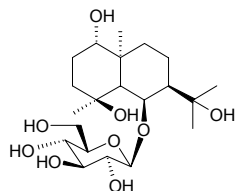
$C_{21}H_{36}O_8$  (416.52). White amorphous powder,  $[\alpha]_D^{24} = -13.2^\circ$  ( $c = 0.10$  MeOH). Source: BAI XIAN PI *Dictamnus dasycarpus* (root cortex). Ref: 3068.

**5450 Dictamnoid I**

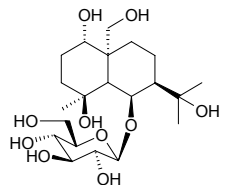
$C_{21}H_{38}O_9$  (434.53). White amorphous powder,  $[\alpha]_D^{24} = -21.4^\circ$  ( $c = 0.10$  MeOH). Source: BAI XIAN PI *Dictamnus dasycarpus* (root cortex). Ref: 3068.

**5451 Dictamnoid J**

$C_{21}H_{38}O_9$  (434.53). White amorphous powder,  $[\alpha]_D^{24} = -15.7^\circ$  ( $c = 0.10$  MeOH). Source: BAI XIAN PI *Dictamnus dasycarpus* (root cortex). Ref: 3068.

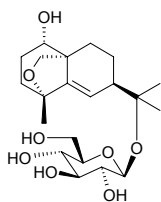
**5452 Dictamnoid K**

$C_{21}H_{38}O_{10}$  (450.53). White amorphous powder,  $[\alpha]_D^{24} = -24.2^\circ$  ( $c = 0.10$  MeOH). Source: BAI XIAN PI *Dictamnus dasycarpus* (root cortex). Ref: 3068.

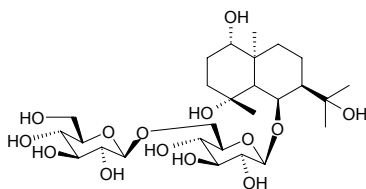


**5453 Dictamnaside L**

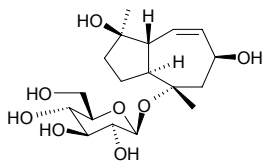
$C_{21}H_{34}O_8$  (414.5). White amorphous powder,  $[\alpha]_D^{24} = -12.7^\circ$  ( $c = 0.10$  MeOH). Source: BAI XIAN PI *Dictamnus dasycarpus* (root cortex). Ref: 3068.

**5454 Dictamnaside M**

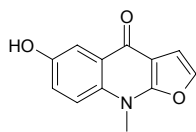
$C_{27}H_{48}O_{14}$  (596.68). White amorphous powder,  $[\alpha]_D^{24} = -24.0^\circ$  ( $c = 0.10$  MeOH). Source: BAI XIAN PI *Dictamnus dasycarpus* (root cortex). Ref: 3068.

**5455 Dictamnaside N**

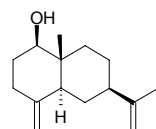
$C_{18}H_{30}O_8$  (374.44). White amorphous powder,  $[\alpha]_D^{24} = -34.3^\circ$  ( $c = 0.10$  MeOH). Source: BAI XIAN PI *Dictamnus dasycarpus* (root cortex). Ref: 3068.

**5456 Dictangustine A**

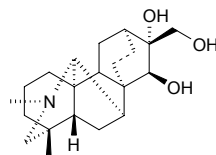
$C_{12}H_9NO_3$  (215.21). Yellowish powders ( $Me_2CO$ ), mp  $> 280^\circ C$ . Source: XIA YE BAI XIAN *Dictamnus angustifolius*. Ref: 1912.

**5457  $\beta$ -Dictyopterol**

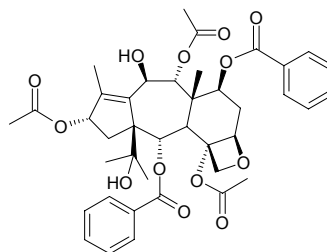
$C_{15}H_{24}O$  (220.36). Pharm: NO production inhibitor (mus peritoneal macrophages, induced by LPS,  $100\mu mol/L$ , InRt =  $(51.5 \pm 3.5)\%$ , control *L*-NMMA,  $100\mu mol/L$ , InRt =  $(79.2 \pm 0.9)\%$ ,  $p < 0.01$ ). Source: PING E SHU *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*]. Ref: 4150.

**5458 Dictysine**

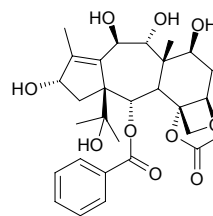
[67256-05-7]  $C_{21}H_{33}NO_3$  (347.50). Source: FU ZI *Aconitum carmichaeli*. Ref: 16.

**5459 2,7-Dideacetyl-2,7-dibenzoyl-taxayunnanine F**

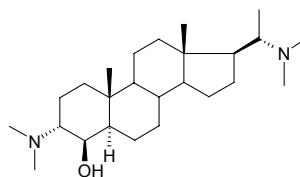
$C_{40}H_{46}O_{13}$  (734.80). mp  $203\sim 205^\circ C$ . Source: DUAN YE HONG DOU SHAN *Taxus brevifolia*. Ref: 662.

**5460 7,13-Dideacetyl-9,10-debenzoyltaxchinin C**

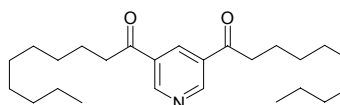
$C_{29}H_{38}O_{10}$  (546.62). mp  $162^\circ C$ ,  $[\alpha]_D = -15^\circ$  ( $CHCl_3$ ). Source: DUAN YE HONG DOU SHAN *Taxus brevifolia*. Ref: 662.

**5461 N,O-Dideacetyl-N-methylpachysandrine A**

$C_{25}H_{46}N_2O$  (390.66). mp  $126\sim 150^\circ C$ . Source: XUE SHAN LIN *Pachysandra terminalis*. Ref: 6.

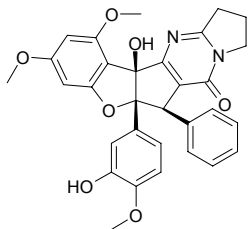
**5462 3,5-Didecanoylpyridine**

$C_{25}H_{41}NO_2$  (387.61). Source: YU XING CAO *Houttuynia cordata*. Ref: 2428.

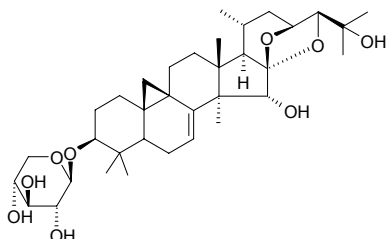


**5463 Didehydro-3'-hydroxyaglaistatin**

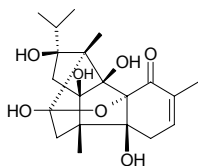
[259143-58-3]  $C_{31}H_{28}N_2O_7$  (540.58). **Pharm:** Insecticidal (neonate larvae of *Spodoptera littoralis*,  $LC_{50} = 5.70\text{mg/L}$ ,  $EC_{50} = 0.31\text{mg/L}$ ; control Azadirachtin,  $LC_{50} = 0.9\text{mg/L}$ ,  $EC_{50} = 0.04\text{mg/L}$ ). **Source:** *Aglaia duperreana*. **Ref:** 2376.

**5464 7,8-Didehydrocimigenol 3-O-β-D-xylopyranoside**

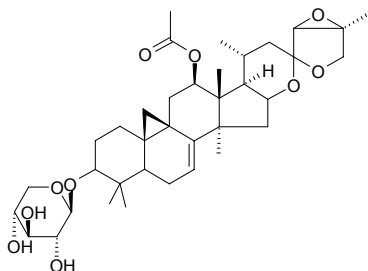
$C_{35}H_{54}O_9$  (618.82). **Source:** XING AN SHENG MA *Cimicifuga dahurica* (rhizome). **Ref:** 4140.

**5465 2,3-Didehydrocinnzeylanone**

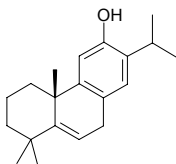
$C_{20}H_{28}O_7$  (380.44). **Source:** YIN DU E LI *Persea indica* (aerial parts). **Ref:** 5128.

**5466 7,8-Didehydro-27-deoxyactein**

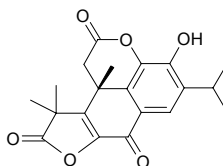
$C_{37}H_{54}O_{10}$  (658.84). White crystals, mp 260–262°C ( $CH_3CN/H_2O$ ). **Source:** SHENG MA *Cimicifuga foetida*. **Ref:** 2427.

**5467 5,6-Didehydroferruginol**

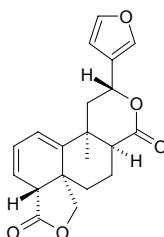
$C_{20}H_{28}O$  (284.45). Amorphous solid, mp 145°C,  $[\alpha]_D^{25} = +35.3^\circ$  ( $c = 1.0$ ,  $CHCl_3$ ). **Source:** CHANG GENG CU FEI *Cephalotaxus harringtonia* var. *drupacea*. **Ref:** 5401.

**5468 5,6-Didehydropygmaecocin A**

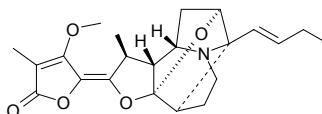
[122590-06-1]  $C_{20}H_{20}O_6$  (356.38). Yellow crystals (MeOH), mp 211–213°C. **Source:** QIAN JIE CAO *Pygmaeopremna herbacea* [Syn. *Premna herbacea*]. **Ref:** 3119.

**5469 1,10-Didehydrosalviarin**

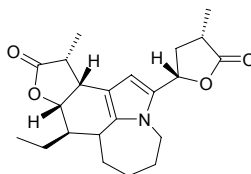
$C_{20}H_{20}O_5$  (340.38). Crystals (*n*-hexane- $CHCl_3$ ), mp 186–188°C,  $[\alpha]_D^{25} = -200.2^\circ$  ( $c = 1.0$ ,  $CHCl_3$ ). **Source:** *Salvia wagneriana* (aerial parts). **Ref:** 4976.

**5470 Didehydrostemofoline**

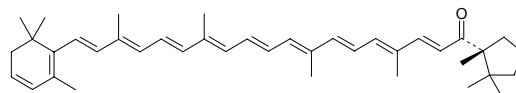
Asparagamine A  $C_{22}H_{27}NO_5$  (385.46). **Pharm:** Insecticidal (neonate larvae of *Spodoptera littoralis*,  $LC_{50} = 0.8\text{mg/L}$ ,  $EC_{50} = 0.5\text{mg/L}$ ). **Source:** XIAO QIU BAI BU *Stemona collinsae*. **Ref:** 3409.

**5471 Didehydrotuberostemonine**

$C_{22}H_{29}NO_4$  (371.48). Colorless acicular crystals, mp 176–177°C. **Source:** BAI BU *Stemona tuberosa*. **Ref:** 673.

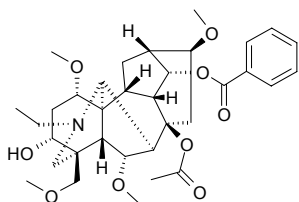
**5472 3,4-Didehydroxy-3'-deoxycapsanthin**

(5'*R*)-3,4-Didehydro-β,κ-caroten-6'-one  $C_{40}H_{54}O$  (550.88). **Source:** HONG HAI JIAO *Capsicum annuum* (fruit: yield = 0.000013%). **Ref:** 3007.

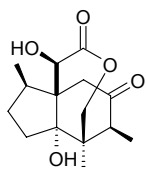


**5473 13,15-Dideoxyaconitine**

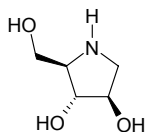
[77757-14-3]  $C_{34}H_{47}NO_9$  (613.75). Colorless rhomboid crystals, mp 167~169°C,  $[\alpha]_D^{25} = +16.4^\circ$  ( $c = 0.07$ , ethanol). Source: SONG PAN WU TOU *Aconitum sungpanense*, ZHUA KUI GUA YE WU TOU *Aconitum hemsleyanum* var. *leueanthus* (root: yield = 0.0022%dw)<sup>[4678]</sup>. Ref: 107, 4678.

**5474 3,6-Dideoxy-10-hydroxypseudoanisatin**

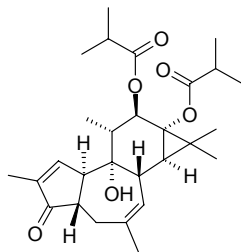
$C_{15}H_{22}O_5$  (282.34). Colorless amorphous. Source: *Illicium merrillianum* (pericarp). Ref: 5113.

**5475 1,4-Dideoxy-1,4-imino-arabinitol**

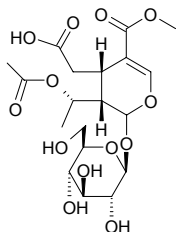
$C_5H_{11}NO_3$  (133.15). Source: SANG ZHI *Morus alba*. Ref: 2170.

**5476 4,20-Dideoxyphorbol 12,13-bis(isobutyrate)**

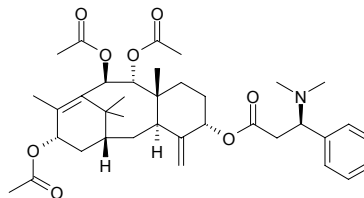
[250258-01-6]  $C_{28}H_{40}O_6$  (472.63). Oil,  $[\alpha]_D = +54^\circ$  ( $c = 0.74$ ,  $CHCl_3$ ). Source: DUN YE DA JI *Euphorbia obtusifolia* var. *obtusifolia*. Ref: 2365.

**5477 Diderroside**

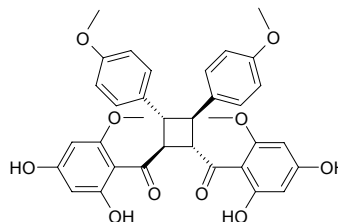
[86989-19-7]  $C_{19}H_{28}O_{13}$  (464.43). Pharm: Antitrypanosomal (trypomastigotes of *Trypanosoma cruzi*, *in vitro*,  $IC_{50} = 84.9\mu g/mL$ , control Gentian violet,  $IC_{50} = 7.5\mu g/mL$ ). Source: *Calycophyllum spruceanum*. Ref: 3439.

**5478 7,2'-Didesacetoxy austrospicatine**

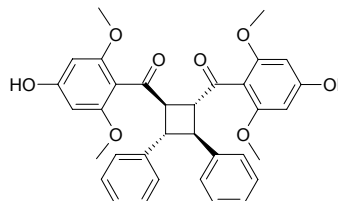
$C_{37}H_{51}NO_8$  (637.82). Source: XI MA LA YA HONG DOU SHAN *Taxus wallichiana*. Ref: 662.

**5479 (rel)-1β,2α-Di-(2,4-dihydroxy-6-methoxybenzoyl)-3β,4α-di-(4-methoxyphenyl)-cyclobutane**

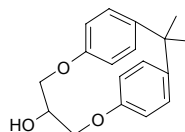
$C_{34}H_{32}O_{10}$  (600.63). Pale amorphous solid,  $[\alpha]_D^{23.5} = +17.2^\circ$  ( $c = 0.29$ ,  $CHCl_3$ ). Source: CHANG YE GE NA XIANG *Goniothalamus gardneri* (aerial parts). Ref: 5096.

**5480 rel-(1α,2β)-Di-(2,6-dimethoxy-4-hydroxy)-benzoyl-rel-(3α,4β)-di-phenylcyclobutane**

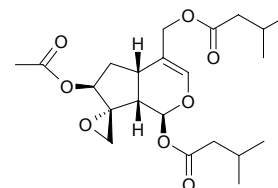
$C_{34}H_{32}O_8$  (568.53). White crystalline solid, mp 213°C,  $[\alpha]_D^{21} = +17.5^\circ$  ( $c = 0.5$ , MeOH). Source: BAI DIAN FENG CHE ZI *Combretum albopunctatum* (aerial parts). Ref: 3766.

**5481 1,3-Di-O-[2',2'-di-(p-phenylene) isopropylidene] glycerol**

$C_{18}H_{20}O_3$  (284.36). White powder. Source: XI NANG MA WEI ZAO *Sargassum parvivesiculosum*. Ref: 2591.

**5482 Didrovaltratum**

Dihydrovaltrate [18296-45-2]  $C_{22}H_{32}O_8$  (424.50). Pharm: Sedative. Source: ZHI ZHU XIANG *Valeriana jatamansii* [Syn. *Valeriana wallichii*] (rhizome and root: yield = 0.000013%dw)<sup>[4672]</sup>, *Valeriana* sp. Ref: 658, 4672.

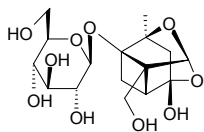




**5483 8-Diebenzoylpaeoniflorin**

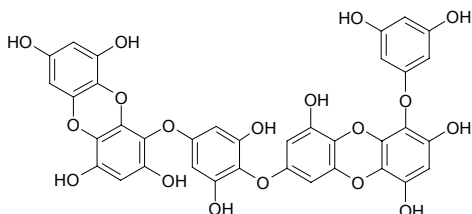
$C_{16}H_{24}O_{10}$  (376.36). Amorphous white powder,  $[\alpha]_D = -9.6^\circ$  ( $c = 1.0$ , MeOH).

Source: CHI SHAO *Paeonia lactiflora* wild. Ref: 722.

**5484 Dieckol**

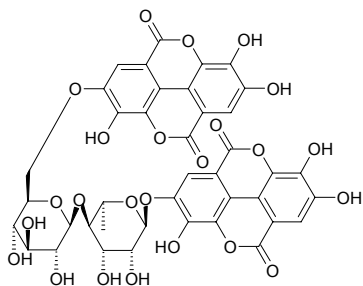
[88095-77-6]  $C_{36}H_{22}O_{18}$  (742.57). Amorphous powder, mp > 300°C. Pharm:

Antifibrinolysis ( $\alpha_2$ -macroglobulin,  $IC_{50} = 5.0\mu g/mL$ ,  $\alpha_2$ -fibrinolysin,  $IC_{50} = 0.8\mu g/mL$ )<sup>[955]</sup>; antioxidant (DPPH scavenger,  $IC_{50} = 6.2\mu mol/L$ , control Ascorbic acid,  $IC_{50} = 10.3\mu mol/L$ )<sup>[4376]</sup>. Source: HEI KUN BU *Ecklonia kurome*, Brown alga *Ecklonia stolonifera*. Ref: 955, 4376.

**5485 Diellagic acid rhamnoside (1→4) glucopyranoside**

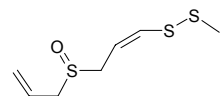
$C_{40}H_{30}O_{24}$  (894.67). Yellowish amorphous powder. Source: SHI LIU XIN

CAI *Punica granatum*. Ref: 1942.

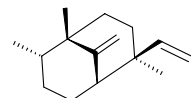
**5486 Z-4,9-Diene-2,3,7-trithiadeca-7-oxide**

$C_7H_{12}OS_3$  (208.37). Colorless oil liquid. Source: DA SUAN *Allium sativum*.

Ref: 2118.

**5487 (-)-3,4-Di-epi-3,7-trifara-9,14-diene**

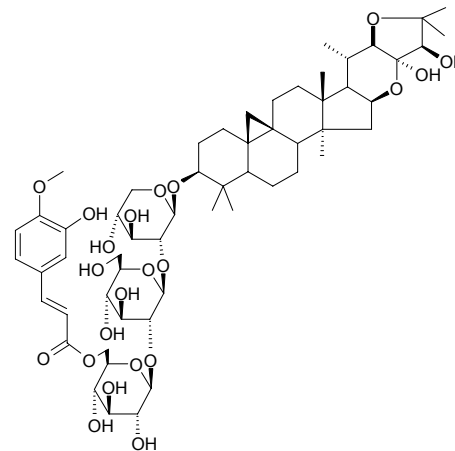
$C_{15}H_{24}$  (204.36). Source: YE TAI *Trocholejeunea sandvicensis*. Ref: 735.

**5488 20S,22R,23S,24R-16β,23;22,25-Diepoxy-cycloartane-3β,23,24-triol 3-O-(6-O-trans-isoferuloyl-β-D-glucopyranosyl)-(1→2)-β-D-glucopyranosyl-(1→2)-β-D-xylopyranoside**

$C_{57}H_{84}O_{22}$  (1121.29). White powder,  $[\alpha]_D^{25} = -35.4^\circ$  ( $c = 0.3$ , MeOH). Pharm:

Immunosuppressant (mouse allogeneic mixed lymphocyte reaction, suppresses the proliferation of lymphocytes,  $IC_{50} = 99.6\mu mol/L$ ). Source:

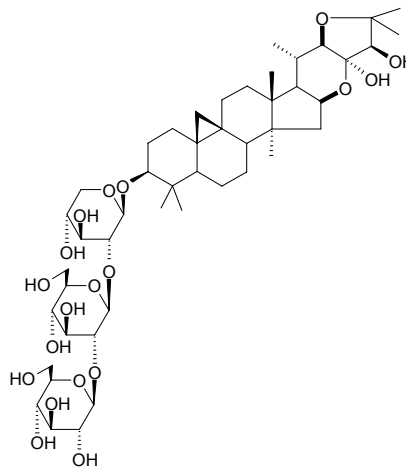
*Cimicifuga* sp. (rhizome). Ref: 4330.

**5489 20S,22R,23S,24R-16β,23;22,25-Diepoxy-cycloartane-3β,23,24-triol 3-O-β-D-glucopyranosyl-(1→2)-β-D-glucopyranosyl-(1→2)-β-D-xylopyranoside**

$C_{47}H_{76}O_{19}$  (945.12). White powder,  $[\alpha]_D^{25} = -8.5^\circ$  ( $c = 0.3$ , MeOH). Pharm:

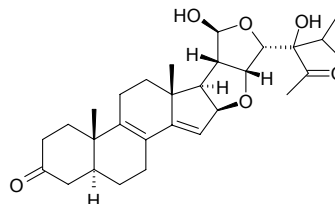
Immunosuppressant (mouse allogeneic mixed lymphocyte reaction, suppresses the proliferation of lymphocytes,  $IC_{50} = 55.6\mu mol/L$ ). Source:

*Cimicifuga* sp. (rhizome). Ref: 4330.

**5490 16β,22R;21,23S-Diepoxy-21S,24-dihydroxy-5α-stigmasta-8,14-diene-3,28-dione**

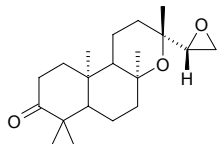
$C_{29}H_{40}O_6$  (484.64). Colorless oil,  $[\alpha]_D = +26.6^\circ$  ( $c = 0.3$ ,  $CH_2Cl_2$ ). Source: JI

NEI YA BAN JIU JU *Vernonia guineensis*. Ref: 3412.

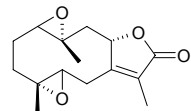


**5491 (13R,14S)-ent-8 $\alpha$ ,13;14,15-Diepoxy-13-epi-labdan-3-one**

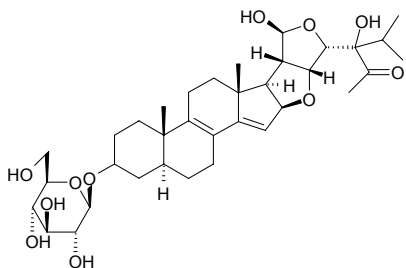
C<sub>20</sub>H<sub>32</sub>O<sub>3</sub> (320.48). Colorless needles (MeOH), mp 145–146°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = –26.0° (*c* = 0.5, CHCl<sub>3</sub>). Source: HAI QI *Excoecaria agallocha* (root). Ref: 5114.

**5492 1 $\beta$ ,10 $\alpha$ ,4 $\alpha$ ,5 $\beta$ -Diepoxyglechoman-8 $\alpha$ ,12-olide**

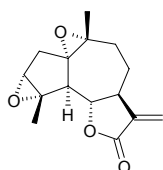
C<sub>15</sub>H<sub>20</sub>O<sub>4</sub> (264.32). Pharm: Cytotoxic (*in vitro*, P<sub>388</sub>, IC<sub>50</sub> = 94 $\mu$ g/mL)<sup>[5162]</sup>. Source: XIAO MEI WEI QIN *Smyrniun olusatrum* (fruit). Ref: 5162.

**5493 16 $\beta$ ,22R;21,23S-Diepoxy-3 $\beta$ -O- $\beta$ -D-glucopyranosyloxy-21S,24-dihydroxy-5 $\alpha$ -stigmasta-8,14-dien-28-one**

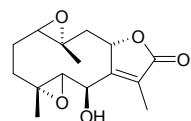
C<sub>35</sub>H<sub>52</sub>O<sub>11</sub> (648.80). Yellowish powder (acetone), mp 187–188°C, [ $\alpha$ ]<sub>D</sub> = –80° (*c* = 0.7, MeOH). Source: JI NEI YA BAN JIU JU *Vernonia guineensis*. Ref: 3412.

**5494 5 $\alpha$ H-1 $\alpha$ ,10 $\alpha$ :3 $\alpha$ ,4 $\alpha$ -Diepoxyguaia-11(13)-en-6 $\alpha$ ,12-olide**

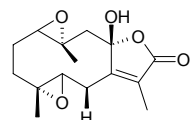
C<sub>15</sub>H<sub>18</sub>O<sub>4</sub> (262.31). Pharm: Cytotoxic (KB ATCC CCL17, IC<sub>50</sub> = 4.3 $\mu$ g/mL). Source: *Warionia saharae*. Ref: 5399.

**5495 1 $\beta$ ,10 $\alpha$ ,4 $\alpha$ ,5 $\beta$ -Diepoxy-6 $\beta$ -hydroxyglechoman-8 $\alpha$ ,12-olide**

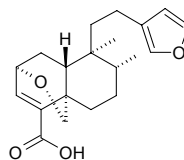
C<sub>15</sub>H<sub>20</sub>O<sub>5</sub> (280.32). White needle crystals (MeOH), mp 165–168°C. Source: XIAO MEI WEI QIN *Smyrniun olusatrum* (fruit). Ref: 5162.

**5496 1 $\beta$ ,10 $\alpha$ ,4 $\alpha$ ,5 $\beta$ -Diepoxy-8 $\alpha$ -hydroxyglechoman-8 $\alpha$ ,12-olide**

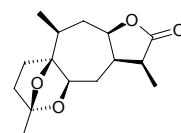
C<sub>15</sub>H<sub>20</sub>O<sub>5</sub> (280.32). Pharm: Cytotoxic (*in vitro*, P<sub>388</sub>, IC<sub>50</sub> = 88 $\mu$ g/mL). Source: XIAO MEI WEI QIN *Smyrniun olusatrum* (fruit). Ref: 5162.

**5497 2,19;15,16-Diepoxy-neo-clerodan-3,13(16),14-trien-18-oic acid**

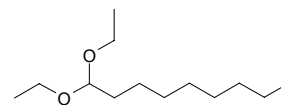
C<sub>20</sub>H<sub>26</sub>O<sub>4</sub> (330.43). Colorless oil, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +6.1° (*c* = 0.26, CHCl<sub>3</sub>). Source: SHAN XING KUO BAO JU *Baccharis flabellata*. Ref: 1921.

**5498 1 $\beta$ ,4 $\beta$ ,4 $\alpha$ ,5 $\beta$ -Diepoxy-10 $\alpha$ ,11 $\alpha$ H-xantha-12,8 $\beta$ -olide**

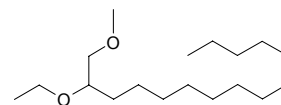
C<sub>15</sub>H<sub>22</sub>O<sub>4</sub> (266.34). Colorless gum, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = –16.0° (*c* = 0.22, CHCl<sub>3</sub>). Source: CHANG YE TIAN MING JING *Carpesium longifolium* (aerial parts: yield = 0.0003%dw). Ref: 4736.

**5499 1,1-Diethoxy-*n*-nonane**

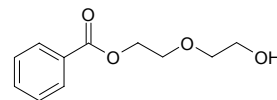
C<sub>13</sub>H<sub>28</sub>O<sub>2</sub> (216.37). Source: CU LIU GUO *Hippophae rhamnoides*. Ref: 2.

**5500 1,1-Diethoxy-*n*-tetradecane**

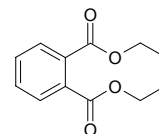
C<sub>18</sub>H<sub>38</sub>O<sub>2</sub> (286.50). Source: CU LIU GUO *Hippophae rhamnoides*. Ref: 2.

**5501 Diethylene glycol monobenzoate**

C<sub>11</sub>H<sub>14</sub>O<sub>4</sub> (210.23). Colorless oil. Source: TAN XIANG *Santalum album* (heartwood). Ref: 4468.

**5502 Diethylphthalate**

[84-66-2] C<sub>12</sub>H<sub>14</sub>O<sub>4</sub> (222.24). bp 295°C. Pharm: Anthelmintic; detumescent; LD<sub>50</sub> (rbt, orl) = 1.0g/kg. Source: SHUI QIN *Oenanthe javanica*. Ref: 6, 658.

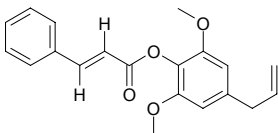


**5503 Diethyl sulfide**

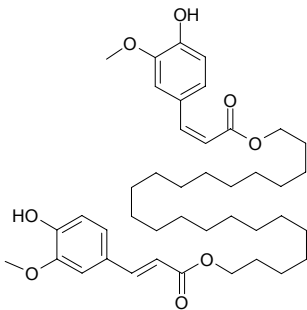
3-Thiapentane; Ethyl sulfide [352-93-2] C<sub>4</sub>H<sub>10</sub>S (90.19). Source: SHENG JIANG *Zingiber officinale*. Ref: 2.

**5504 Difengpin**

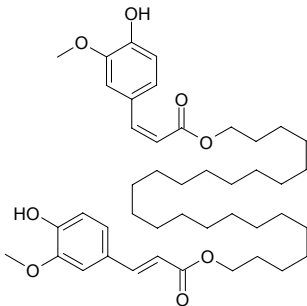
4-Allyl-2,6-dimethoxyphenyl cinnamate C<sub>20</sub>H<sub>20</sub>O<sub>4</sub> (324.38). Colorless granular crystals, mp 153~155°C (petroleum spirit-acetic acid). Source: DI FENG PI *Illicium difengpi*. Ref: 354.

**5505 (1E,22Z)-1,22-Diferuloyloxydocosane**

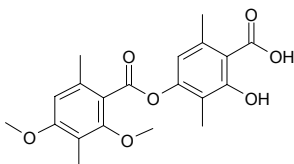
C<sub>42</sub>H<sub>62</sub>O<sub>8</sub> (694.96). Inseparable mixture with (1E,24Z)-1,24-Diferuloyloxy-tetracosane, yellow oil. Source: SHAN ZHU ZI *Garcinia multiflora* (stem). Ref: 4708.

**5506 (1E,24Z)-1,24-Diferuloyloxytetracosane**

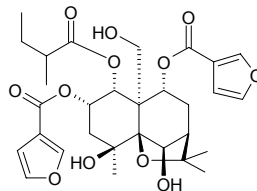
C<sub>44</sub>H<sub>66</sub>O<sub>8</sub> (723.01). Inseparable mixture with (1E,22Z)-1,22-Diferuloyloxydocosane, yellow oil. Source: SHAN ZHU ZI *Garcinia multiflora* (stem). Ref: 4708.

**5507 Diffractaic acid**

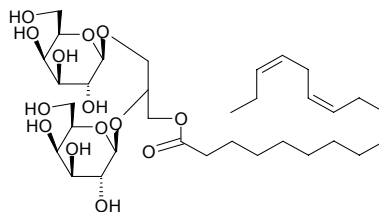
[436-32-8] C<sub>20</sub>H<sub>22</sub>O<sub>7</sub> (374.39). mp 189~190°C. Pharm: Antineoplastic (inhibits a tumor which induces Epstein-Barr virus activation). Source: SONG LUO *Usnea longissima*, HUAN JIE SONG LUO *Usnea diffracta*. Ref: 6, 658, 660.

**5508 2α,9β-Di-(β-furancarboxyloxy)-4β,6β,15-trihydroxy-1α-(2)-methylbutanoyloxy-dihydro-β-agarofuran**

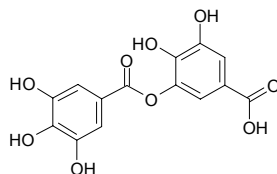
C<sub>30</sub>H<sub>38</sub>O<sub>12</sub> (590.63). Colorless oil, [α]<sub>D</sub><sup>25</sup> = +30.0° (c = 0.13, CHCl<sub>3</sub>) Source: OU ZHOU WEI MAO *Euonymus europaeus* (seed). Ref: 4162.

**5509 α,β-Digalactosyl-α'-linolenic-glyceride**

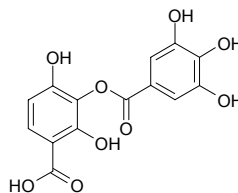
C<sub>33</sub>H<sub>56</sub>O<sub>14</sub> (676.81). Red oil liquid. Source: SU MI *Setaria italica*. Ref: 2112.

**5510 m-Digallic acid**

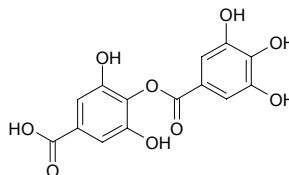
[536-08-3] C<sub>14</sub>H<sub>10</sub>O<sub>9</sub> (322.23). mp 268~270°C (dec). Source: A LA BO JIAO JIN HE HUAN *Acacia nilotica*, MANG GUO *Mangifera indica*. Ref: 6, 5375.

**5511 m-Digalloyl acid**

C<sub>14</sub>H<sub>10</sub>O<sub>9</sub> (322.23). Colorless colloid. Source: LUAN SHU *Koelreuteria paniculata*. Ref: 677.

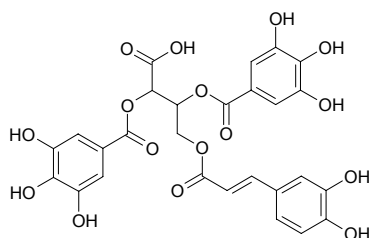
**5512 p-Digalloyl acid**

C<sub>14</sub>H<sub>10</sub>O<sub>9</sub> (322.23). Source: LUAN SHU *Koelreuteria paniculata*. Ref: 677.

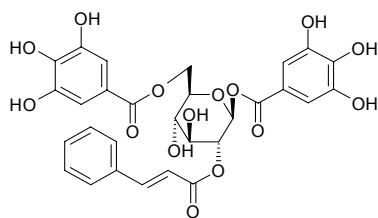


**5513 (-)-2,3-Digalloyl-4-(E)-caffeoyl-L-threonic acid**

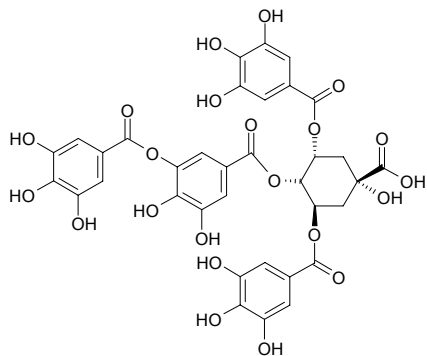
$C_{27}H_{22}O_{16}$  (602.47). Dark brown amorphous powder, mp 215–217°C,  $[\alpha]_D^{20} = -38^\circ$  ( $c = 0.05$ , MeOH). Source: DENG TAI SHU *Cornus controversa* [Syn. *Bothrocaryum controversum*] (leaf). Ref: 3918.

**5514 1,6-Digalloyl-2-cinnamoyl-glucose**

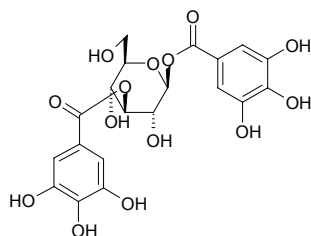
$C_{29}H_{26}O_{15}$  (614.52). Source: DA HUANG *Rheum officinale*, TANG GU TE DA HUANG *Rheum tanguticum*, ZHANG YE DA HUANG *Rheum palmatum*. Ref: 2, 660.

**5515 3,5-Di-O-galloyl-4-O-digalloylquinic acid**

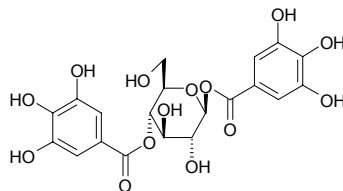
$C_{35}H_{28}O_{22}$  (800.60). Pharm: Anti-AIDS; reverse transcriptase inhibitor (hmn immunodeficiency virus). Source: YAN FU ZI *Rhus chinensis* [Syn. *Rhus semialata*]. Ref: 658.

**5516 1,3-Di-O-galloyl-β-D-glucopyranose**

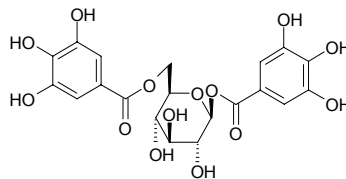
$C_{20}H_{20}O_{14}$  (484.37). Yellow amorphous powder,  $[\alpha]_D^{15} = +17.3^\circ$  ( $c = 0.7$ , MeOH). Source: GE XUN *Balanophora japonica* (aerial parts: yield = 0.0353%). Ref: 4101.

**5517 1,4-Di-O-galloylglucose**

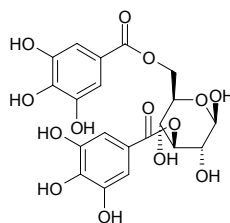
$C_{20}H_{20}O_{14}$  (484.37). Source: AN MO LE *Phyllanthus emblica* (branch and leaf). Ref: 3094.

**5518 1,6-Di-O-galloyl-β-glucose**

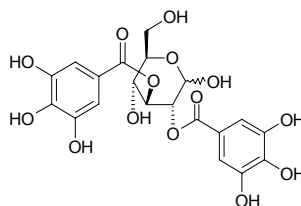
$C_{20}H_{20}O_{14}$  (484.37).  $[\alpha]_D^{25} = -22^\circ$  ( $c = 0.1$ , MeOH). Pharm: Antifungal (*Candida albicans* ATCC2091, MIC > 200µg/mL, control Amphotericin B, MIC = 1µg/mL; *Candida albicans* 32, MIC = 25µg/mL, Amphotericin B, MIC = 4µg/mL; *Candida albicans* 19, MIC = 12.5µg/mL, Amphotericin B, MIC = 2µg/mL)<sup>[5021]</sup>; cytotoxic inactive (MIC > 200µg/mL)<sup>[5021]</sup>. Source: AN MO LE *Phyllanthus emblica* (fruit juice)<sup>[3094]</sup>, DA HUANG *Rheum officinale*, ZHANG YE DA HUANG *Rheum palmatum*, TANG GU TE DA HUANG *Rheum tanguticum*, *Baseonema acuminatum* (leaf). Ref: 2, 660, 3094, 5021.

**5519 3,6-Di-O-galloylglucose**

$C_{20}H_{20}O_{14}$  (484.37). mp 185°C (dec). Source: AN MO LE *Phyllanthus emblica* (leaf, branch)<sup>[3094]</sup>, CAO YUAN LAO GUAN CAO *Geranium pratense*, QUAN SHEN *Polygonum bistorta*, YOU GAN YE *Phyllanthus emblica*, YOU GAN MU PI *Phyllanthus emblica*. Ref: 6, 3094.

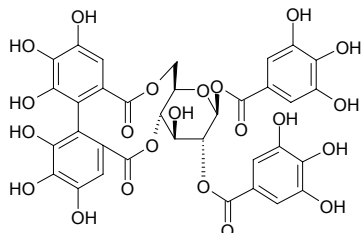
**5520 2,3-Di-O-galloyl-D-glucose**

Nicotin  $C_{20}H_{20}O_{14}$  (484.37). Source: SHAN ZHU YU *Cornus officinalis* [Syn. *Macrocarpum officinale*]. Ref: 2.



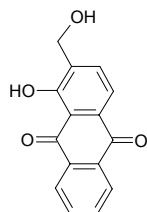
**5521 1,2-Di-O-galloyl-4,6-O-(S)-hexahydroxydiphenoyl-β-D-glucopyranose**

$C_{34}H_{26}O_{22}$  (786.57). **Pharm:** Antioxidant (SOD-like activity,  $EC_{50}$  = 76.3 μmol/L, control Gallic acid,  $EC_{50}$  = 31.7 μmol/L, *L*-Ascorbic acid,  $EC_{50}$  = 34.6 μmol/L); antioxidant (DPPH free radical scavenger,  $EC_{50}$  = 1.27 μmol/L, control Gallic acid,  $EC_{50}$  = 5.88 μmol/L, *L*-Ascorbic acid,  $EC_{50}$  = 6.25 μmol/L). **Source:** HU TAO REN *Juglans regia*. **Ref:** 3408.



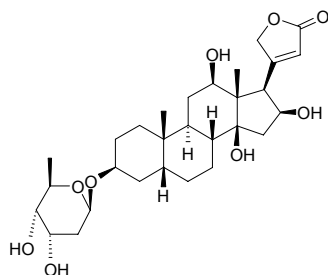
**5522 Digiferrugineol**

1-Hydroxy-2-hydroxymethyl anthraquinone  $C_{15}H_{10}O_4$  (254.24). **Pharm:** Cytotoxic (KB,  $ED_{50}$  > 25 μg/mL, control Doxorubicin,  $ED_{50}$  = 0.12 μg/mL; Hep3B,  $ED_{50}$  = 3.85 μg/mL, Doxorubicin,  $ED_{50}$  = 0.14 μg/mL; Colon205,  $ED_{50}$  > 25 μg/mL, Doxorubicin,  $ED_{50}$  = 0.10 μg/mL; HeLa,  $ED_{50}$  = 24.5 μg/mL, Doxorubicin,  $ED_{50}$  = 0.11 μg/mL)<sup>[4369]</sup>; cytotoxic (hmn nasopharyngeal epidermoid carcinoma cells, *in vitro*); antibacterial (*Bacillus subtilis*, *Escherichia coli*). **Source:** BAI YAN TENG *Morinda parvifolia*, GUANG JING QIAN CAO *Rubia wallichiana* (stem), HU CI *Damnacanthus indicus*, JIN JI LE *Cinchona ledgeriana*, QIAN CAO GEN *Rubia cordifolia*, XIU MAO DI HUANG *Digitalis ferruginea*, *Cinchona* sp. **Ref:** 658, 660, 4369.



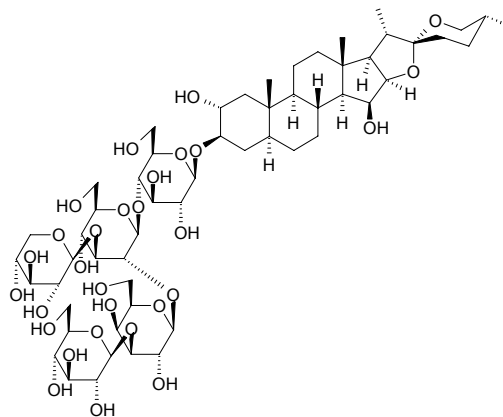
**5523 Diginatin**

[52589-12-5]  $C_{29}H_{44}O_9$  (536.67). **Pharm:** Cardiotoxic; toxin (vertebrate). **Source:** MAO HUA MAO DI HUANG *Digitalis lanata*. **Ref:** 1521.



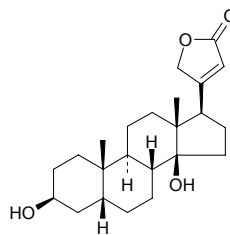
**5524 Digitonin**

[11024-24-1]  $C_{56}H_{92}O_{29}$  (1229.34). **Pharm:** Antibacterial; antifungal. **Source:** MAO DI HUANG *Digitalis purpurea*. **Ref:** 658.



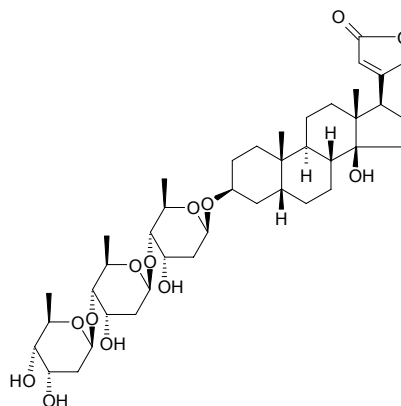
**5525 Digitoxigenin**

(17β)-Card-20(22)-enolide [143-62-4]  $C_{23}H_{34}O_4$  (374.53). Mp 253°C. **Source:** FU SHOU CAO *Adonis amurensis*. **Ref:** 6.



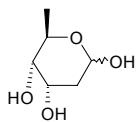
**5526 Digitoxin**

[71-63-6]  $C_{41}H_{64}O_{13}$  (764.96). Long and thin rectangular lamellar crystals (ethanol), containing 0.5 or 1 H<sub>2</sub>O. pure crystals, mp 256–257°C,  $[\alpha]_D^{20}$  = +48° (*c* = 1.2, dioxane). **Pharm:** Cardiotoxic; LD<sub>50</sub> (gpg, orl) = 600mg/kg, (cat, orl) = 0.18mg/kg, (cat, iv) = 0.4mg/kg. **Source:** MAO DI HUANG *Digitalis purpurea* (dried leaf: content = 0.0226%<sup>[5508]</sup>), MAO HUA MAO DI HUANG *Digitalis lanata*. **Ref:** 658, 5508.

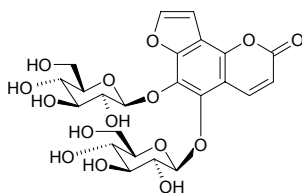


**5527 Digitoxose**

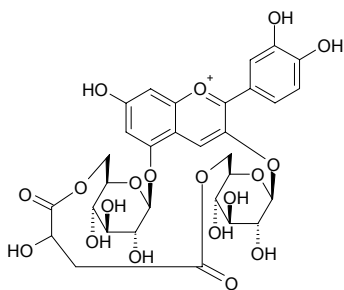
$C_6H_{12}O_4$  (148.16). mp 110–112°C. Source: LUO MO ZI *Metaplexis japonica*. Ref: 6.

**5528 5,6-O-β-D-Diglucoopyranosylangelicin**

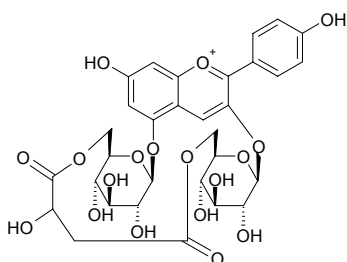
$C_{23}H_{26}O_{15}$  (542.45). White amorphous powder,  $[\alpha]_D^{20} = -30.0^\circ$  ( $c = 0.01$ , pyridine). Pharm: Antiproliferation inactive (hmn mononuclear cells involving T lymphocytes, B lymphocytes, and macrophages isolated from peripheral blood, 100μmol/L; control Cyclosporine,  $IC_{50} = 12\text{nmol/L}$ ). Source: LAN YU LUO YE RONG *Ficus ruficaulis* var. *antaoensis* (leaf; yield = 0.00023%fw). Ref: 4794.

**5529 3,5-Di-O-(β-glucopyranosyl)cyanidin 6''-O-4,6'''-O-1-cyclic malate**

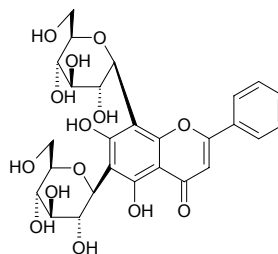
$C_{31}H_{33}O_{19}^+$  (709.60). Source: SHE XIANG SHI ZHU *Dianthus caryophyllus* (petal). Ref: 5118.

**5530 3,5-Di-O-(β-glucopyranosyl)pelargonidin 6''-O-4,6'''-O-1-cyclic malate**

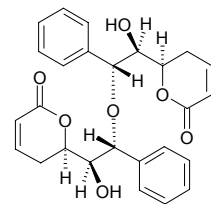
$C_{31}H_{33}O_{18}^+$  (693.60). Source: SHE XIANG SHI ZHU *Dianthus caryophyllus* (petal). Ref: 5118.

**5531 6,8-Di-C-β-glucosylchrysin**

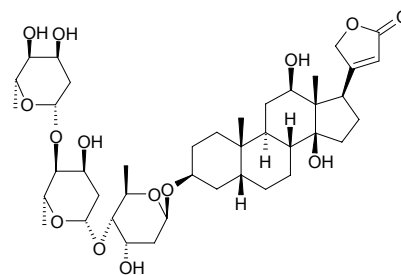
6,8-Di-β-glucopyranosyl-5,7-dihydroxy-2-phenyl-4H-1-benzopyran-4-one  $C_{27}H_{30}O_{14}$  (578.53). Amorphous powder. Pharm: Anti-inflammatory inactive (*in vivo*, carrageenan-induced rat paw edema). Source: *Lychophora ericoides* (fresh leaf). Ref: 5040.

**5532 Digonidiol**

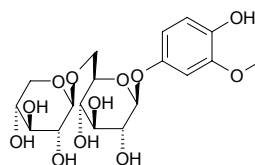
$C_{26}H_{26}O_7$  (450.49). Colorless prisms, mp 166–168°C,  $[\alpha]_D^{23} = -35.5^\circ$  ( $c = 0.11$ , MeOH). Pharm: Cytotoxic (HepG2,  $IC_{50} = 6.83\mu\text{g/mL}$ , control Doxorubicin,  $IC_{50} = 0.38\mu\text{g/mL}$ ; Hep3B,  $IC_{50} = 20.15\mu\text{g/mL}$ , Doxorubicin,  $IC_{50} = 0.36\mu\text{g/mL}$ ; MDA-MB-231,  $IC_{50} = 6.80\mu\text{g/mL}$ , Doxorubicin,  $IC_{50} = 1.20\mu\text{g/mL}$ ; NCF-7, inactive). Source: TAI WAN GE NA XIANG *Goniiothalamus amuyon* (stem and leaf). Ref: 5056.

**5533 Digoxin**

[20830-75-5]  $C_{41}H_{64}O_{14}$  (780.96). Scattering tetrahedral or pentahedral trioblique lamellar crystals (diluting ethanol or diluting pyridine), mp 260–265°C (some dec). Pharm: Cardiotonic. Source: MAO HUA MAO DI HUANG *Digitalis lanata*. Ref: 658.

**5534 Digupigan A**

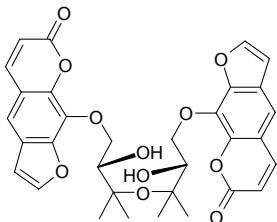
4-Hydroxy-3-methoxyphenyl-β-D-xylopyranosyl(1→6)-β-D-glucopyranoside  $C_{18}H_{26}O_{12}$  (434.40). Amorphous powder,  $[\alpha]_D^{22} = -67^\circ$  ( $c = 0.3$ , MeOH). Source: GOU QI GEN PI *Lycium chinense*, GUAN CANG ZHU *Atractylodes japonica* (fresh rhizome). Ref: 2451, 4310.



**5535 (12*R*,12''*R*)-Diheraclenol**

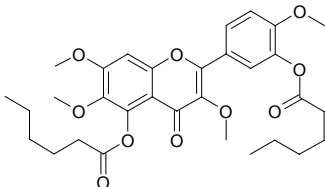
$C_{32}H_{30}O_{11}$  (590.59). Pale-yellow amorphous solid,  $[\alpha]_D^{19.1} = +28.31^\circ$  ( $c = 0.36$ ,  $CHCl_3$ ). **Pharm:** Platelet aggregation inhibitor inactive (rbt platelets, 4.5nmol/L PAF-induced, 350 $\mu$ mol/L AA-induced, 5 $\mu$ mol/L ADP-induced, 240 $\mu$ mol/L).

**Source:** BAI YUN HUA *Heracleum rapula* (fresh root). **Ref:** 4997.

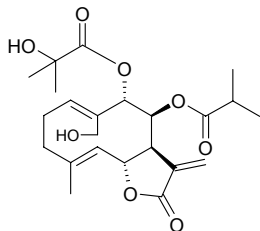
**5536 5,3'-Dihexanoyloxy-3,6,7,4'-tetramethoxyflavone**

$C_{31}H_{38}O_{10}$  (570.64). mp 100–101°C. **Pharm:** Cytotoxic (*in vitro*, Col2,  $ED_{50} > 20\mu$ g/mL; hTERT-RPE1,  $ED_{50} = 0.4\mu$ g/mL; HUVEC,  $ED_{50} = 11.1\mu$ g/mL; KB,  $ED_{50} = 0.5\mu$ g/mL; HUVEC,  $ED_{50} = 0.5\mu$ g/mL; Lu1,  $ED_{50} = 0.7\mu$ g/mL).

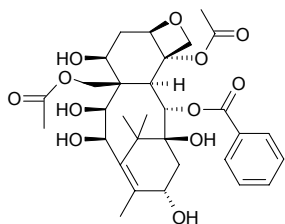
**Source:** HUANG JING YE *Vitex negundo*. **Ref:** 4699.

**5537 Dihydroacanthospermal A**

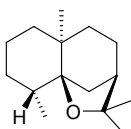
$C_{23}H_{32}O_8$  (436.51). Amorphous gum. **Pharm:** Antineoplastic (mus,  $P_{388}$ , *in vivo*); cytotoxic (KB *in vitro*,  $ED_{50} = 2.6\mu$ g/mL). **Source:** GUANG CI BAO JU *Acanthospermum glabratum*. **Ref:** 661.

**5538 9( $\beta$ H)-9-Dihydro-19-acetoxy-10-deacetylbaccatin III**

$C_{31}H_{40}O_{12}$  (604.66). **Source:** JIANG GUO ZI SHAN *Taxus baccata*. **Ref:** 662.

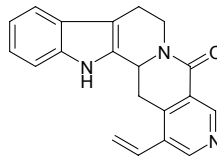
**5539 Dihydroagarofuran**

[5956-09-2]  $C_{15}H_{26}O$  (222.37). Bp 135°C/8mmHg. **Source:** CHEN XIANG *Aquilaria agallocha*. **Ref:** 6, 13.

**5540 3,14-Dihydroangustine**

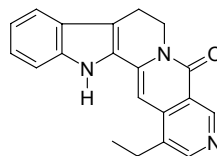
$C_{20}H_{17}N_3O$  (315.38). **Pharm:** Antibacterial (*in vitro*: *Staphylococcus aureus*, *Bacillus subtilis*, *Bacillus coli*, *Bacillus diphtheriae*, *Streptococcus* sp., *Streptobacillus* sp., *Salmonella* sp., *Bacillus proteus*, *Bacillus lactis*, *Klebsiella pneumoniae*); antileishmanial; antifungal (*Aspergillus niger*).

**Source:** KUAN YE WU TAN *Nauclea latifolia*. **Ref:** 2178.

**5541 18,19-Dihydroangustine**

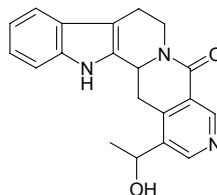
$C_{20}H_{17}N_3O$  (315.38). **Pharm:** Antibacterial (*in vitro*: *Staphylococcus aureus*, *Bacillus subtilis*, *Bacillus coli*, *Bacillus diphtheriae*, *Streptococcus* sp., *Streptobacillus* sp., *Salmonella* sp., *Bacillus proteus*, *Bacillus lactis*, *Klebsiella pneumoniae*); antileishmanial; antifungal (*Aspergillus niger*).

**Source:** KUAN YE WU TAN *Nauclea latifolia*. **Ref:** 2178.

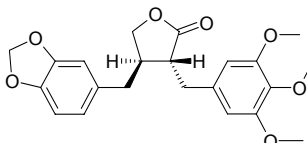
**5542 3,14-Dihydroangustoline**

$C_{20}H_{19}N_3O_2$  (333.39). **Pharm:** Antibacterial (*in vitro*: *Staphylococcus aureus*, *Bacillus subtilis*, *Bacillus coli*, *Bacillus diphtheriae*, *Streptococcus* sp., *Streptobacillus* sp., *Salmonella* sp., *Bacillus proteus*, *Bacillus lactis*, *Klebsiella pneumoniae*); antileishmanial; antifungal (*Aspergillus niger*).

**Source:** KUAN YE WU TAN *Nauclea latifolia*. **Ref:** 2178.

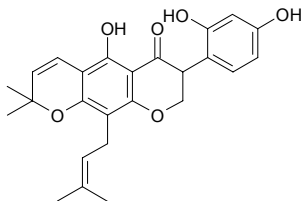
**5543 Dihydroanhydropodorhizol**

Dehydroypodorhizol; (-)-Yatein  $C_{22}H_{24}O_7$  (400.43).  $[\alpha]_D^{20} = -26.8^\circ$  ( $c = 1$ ,  $CHCl_3$ ). **Pharm:** Antineoplastic; cytotoxic (inhibition of TPA-induced ornithine decarboxylase activity with cultured mouse epidermal 308 cells)<sup>[5038]</sup>; CYP3A4 inhibitor and CYP2D6 inhibitor (*in vitro*, CYP3A4,  $IC_{50} = 1\mu$ mol/L; CYP2D6,  $IC_{50} = 95.7\mu$ mol/L; control Ketoconazole, CYP3A4,  $IC_{50} = 0.72\mu$ mol/L; control Quinidine, CYP2D6,  $IC_{50} = 0.082\mu$ mol/L)<sup>[4797]</sup>. **Source:** BEI MEI YA BAI *Thuja occidentalis*, BI CHENG QIE *Piper cubeba* (fruit: yield = 0.00017%dw), E SHEN *Anthriscus sylvestris*, HONG CHAI HU *Bupleurum scorzonrifolium* (root), LIAN YE TONG *Hernandia Sonora* [Syn. *Hernandia ovigera*] (seed), *Juniperus* sp. **Ref:** 658, 3498, 4797, 5030, 5038, 5499.

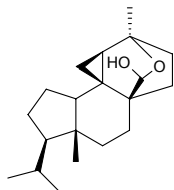


**5544 2,3-Dihydroauriculatin**

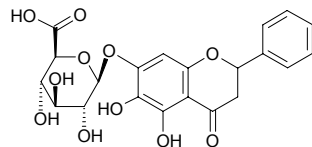
$C_{25}H_{26}O_6$  (422.48). Source: SAI NEI JIA ER CI TONG *Erythrina senegalensis*, *Erythrina vogelii*. Ref: 1521, 4421.

**5545 Dihydroazorellolide**

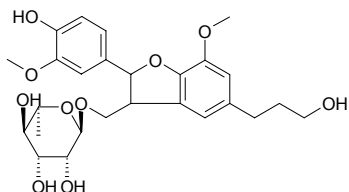
$C_{20}H_{32}O_2$  (304.48). Colorless needles, mp 121~122°C,  $[\alpha]_D^{19.8} = +27.84^\circ$  ( $c = 0.58$ ,  $CHCl_3$ ). Source: YIN HUA YAO XIAO YING QIN *Azorella cryptantha* (aerial parts). Ref: 3825.

**5546 Dihydrobaicalin**

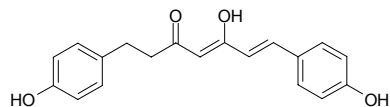
$C_{21}H_{20}O_{11}$  (448.39). Source: HUANG QIN *Scutellaria baicalensis*. Ref: 2.

**5547 2,3-Dihydrobenzofuran-2-(4'-hydroxy-3'-methoxyphenyl)-3- $\alpha$ -L-rhamnopyranosyloxymethyl-7-methoxy-5-propanol**

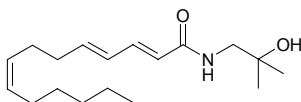
$C_{26}H_{34}O_{10}$  (506.55). Brownish amorphous powder,  $[\alpha]_D^{25} = -10^\circ$  ( $c = 0.1$ , MeOH). Pharm: Antifungal inactive (*Candida albicans*, MIC > 200  $\mu$ g/mL; control Amphotericin B, MIC = 1~4  $\mu$ g/mL); antibacterial inactive. Source: *Baseonema acuminatum* (leaf). Ref: 5021.

**5548 1,2-Dihydrobis(de-O-methyl)-curcumin**

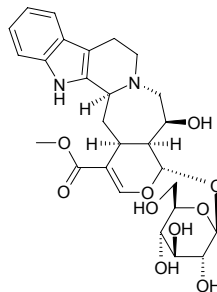
$C_{19}H_{18}O_4$  (310.35). Pharm: Cytotoxic (Colon26-L5,  $ED_{50} = 62.6 \mu$ mol/L; HT1080,  $ED_{50} > 100 \mu$ mol/L). Source: YUN NAN CAO KOU *Alpinia blepharocalyx* (seed; yield = 0.00070%). Ref: 3042.

**5549 Dihydrobungeanol**

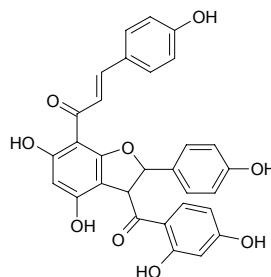
$C_{18}H_{31}NO_2$  (293.45). Pharm: Anti-PAF. Source: *Zanthoxylum* sp. Ref: 2176.

**5550 3 $\alpha$ -Dihydrocadambine**

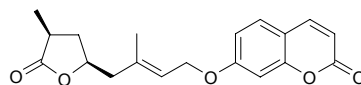
3 $\alpha$ -19-(S)-Dihydrocadambine [54483-84-0]  $C_{27}H_{34}N_2O_{10}$  (546.58). White amorphous powder, mp 144~145°C (dec),  $[\alpha]_D = -91^\circ$  ( $c = 0.097$ , methanol). Pharm: Antihypertensive (strong and enduring, rat, iv 0.1mg/kg, arterial blood pressure is lowered by 20mmHg); antihypertensive (anesthetized and conscious spontaneously hypertensive rats)<sup>[5341]</sup>; antibacterial (*in vitro*: *Staphylococcus aureus*, *Bacillus subtilis*, *Bacillus coli*, *Bacillus diphtheriae*, *Streptococcus* sp., *Salmonella* sp., *Bacillus proteus*, *Aspergillus niger*, *Bacillus lactis*, *Klebsiella pneumoniae*); antileishmanial. Source: GOU TENG *Uncaria rhynchophylla* [Syn. *Nauclea rhynchophylla*], HUA GOU TENG *Uncaria sinensis*. Ref: 2, 902, 961, 2178, 5341.

**5551 Dihydrocalodenin B**

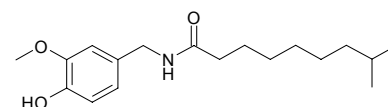
$C_{30}H_{22}O_9$  (526.50). Pharm: Antibacterial (MDR *Staphylococcus aureus*: RN4220 strain, MIC = 8  $\mu$ g/mL = 15  $\mu$ mol/L, control Erythromycin, MIC = 128  $\mu$ g/mL; XU212 strain, MIC = 8  $\mu$ g/mL = 15  $\mu$ mol/L, control Tetracycline, MIC = 128  $\mu$ g/mL; SA-1199-B strain, MIC = 8  $\mu$ g/mL = 15  $\mu$ mol/L, control Norfloxacin, MIC = 32  $\mu$ g/mL); cytotoxic (MCF7 breast cancer cells, MTT method,  $IC_{50} = (35 \pm 7) \mu$ mol/L, control Doxorubicin,  $IC_{50} = (0.1 \pm 0.001) \mu$ mol/L). Source: CHANG E JIN LIAN MU PI *Ochna macrocalyx*, SANG DAO BU SHI MU *Brackenridgea zanguebarica*. Ref: 5372.

**5552 3'',4''-Dihydrocapnolactone**

$C_{19}H_{20}O_5$  (328.37). White needles, mp 59~62°C. Source: JI XIAO XIAO YUN XIANG MU *Micromelum minutum* (leaf). Ref: 3467.

**5553 Dihydrocapsaicin**

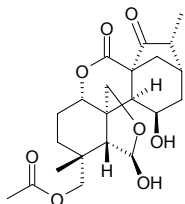
$C_{18}H_{29}NO_3$  (307.44). Source: LA JIAO *Capsicum frutescens* (fruit; mean content of 3 batch samples = 29.9%<sup>[5508]</sup>) Ref: 6, 15, 1521, 5508.



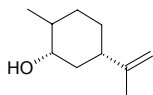


**5554 Dihydrocarpalasionin**

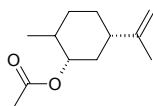
$C_{22}H_{30}O_8$  (422.48). mp 258~265°C. Source: ZHOU YE XIANG CHA CAI *Isodon rugosus* [Syn. *Rabdosia rugosa*]. Ref: 4067.

**5555 Dihydrocarveol**

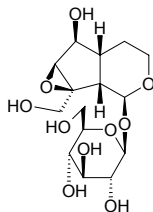
$C_{10}H_{18}O$  (154.25). Source: GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*]. Ref: 2.

**5556 Dihydrocarveol acetate**

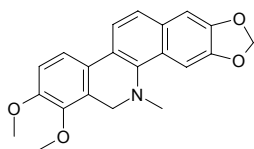
$C_{12}H_{20}O_2$  (196.29). Source: JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*]. Ref: 11.

**5557 Dihydrocatalpol**

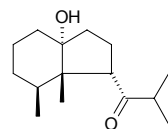
$C_{15}H_{24}O_{10}$  (364.35). Source: GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*]. Ref: 2.

**5558 Dihydrochelerythrine**

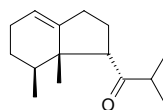
[6880-91-7]  $C_{21}H_{19}NO_4$  (349.39). mp 160~165°C. Source: FEI LONG ZHANG XUE *Toddalia asiatica* [Syn. *Toddalia aculeata*; *Paullinia asiatica*]. Ref: 6.

**5559 11,12-Dihydrochiloscypholone**

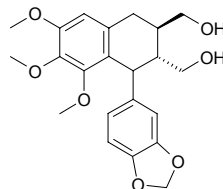
(+)-(1*S*,3*aR*,7*S*,7*aS*)-2,3,3*a*,4,5,6,7,7*a*-Octahydro-3*a*-hydroxyl-7,7*a*-dimethyl-1-(2-methylpropanonyl)-1*H*-indene  $C_{15}H_{26}O_2$  (238.37). Colorless oil. Source: DONG YA ZHI YE TAI *Lepidozia fauriana* (essential oil). Ref: 5209.

**5560 11,12-Dihydrochiloscyphone**

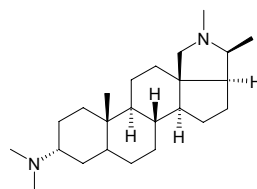
(+)-(1*S*,7*S*,7*aS*)-2,3,5,6,7,7*a*-Hexahydro-7,7*a*-dimethyl-1-(2-methylpropanonyl)-1*H*-indene  $C_{15}H_{24}O$  (220.36). Colorless oil. Source: DONG YA ZHI YE TAI *Lepidozia fauriana* (essential oil). Ref: 5209.

**5561 (-)-Dihydroclusin**

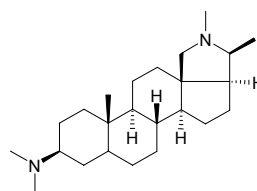
$C_{22}H_{26}O_7$  (402.45). Pharm: CYP3A4 inhibitor and CYP2D6 inhibitor (*in vitro*, CYP3A4,  $IC_{50}$  = 0.8  $\mu$ mol/L; CYP2D6,  $IC_{50}$  > 100  $\mu$ mol/L; control Ketoconazole, CYP3A4,  $IC_{50}$  = 0.72  $\mu$ mol/L; control Quinidine, CYP2D6,  $IC_{50}$  = 0.082  $\mu$ mol/L). Source: BI CHENG QIE *Piper cubeba* (fruit: yield = 0.00017%dw). Ref: 4797.

**5562 Dihydroconcuressine**

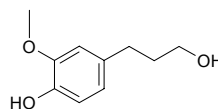
$C_{24}H_{42}N_2$  (358.62). mp 93~94°C. Source: ZHI XIE MU PI *Holarrhena antidysenterica*. Ref: 6.

**5563 Dihydroconessine**

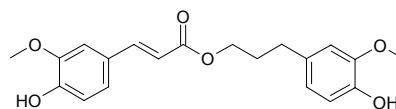
$C_{24}H_{42}N_2$  (358.62). mp 190~191°C. Source: ZHI XIE MU PI *Holarrhena antidysenterica*. Ref: 6.

**5564 Dihydroconiferyl alcohol**

4-Hydroxy-3-methoxyphenylpropanol [2305-13-7]  $C_{10}H_{14}O_3$  (182.22). Pharm: Lettuce cotyledon factor. Source: WO JU *Lactuca sativa*, YI ZHU QIAN MA *Urtica dioica*. Ref: 658, 660.

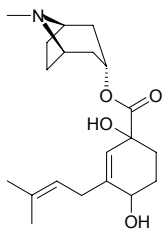
**5565 Dihydroconiferyl ferulate**

$C_{20}H_{22}O_6$  (358.39). Pale yellow semi-solid. Source: LUO TUO HAO *Peganum nigellastrum* (aerial parts). Ref: 3945.

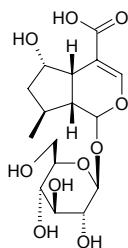


**5566 4'-Dihydroconsabatine**

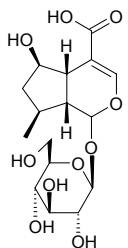
$C_{20}H_{31}NO_4$  (349.47). Oil. Source: *Convolvulus sabatius* ssp. *sabatius* (ground root and rhizome). Ref: 5292.

**5567 6 $\alpha$ -Dihydrocornic acid**

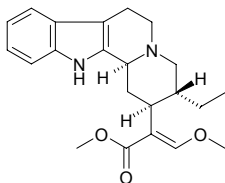
$C_{16}H_{24}O_{10}$  (376.36). Yellow amorphous powder,  $[\alpha]_D^{28} = -67.9^\circ$  ( $c = 1.34$ , MeOH). Source: JI SU ZI *Cornus capitata* [Syn. *Dendrobenthamia capitata*] (root). Ref: 5177.

**5568 6 $\beta$ -Dihydrocornic acid**

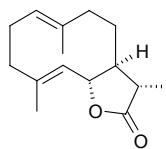
$C_{16}H_{24}O_{10}$  (376.36). Yellow amorphous powder,  $[\alpha]_D^{28} = -271.6^\circ$  ( $c = 0.18$ , MeOH). Source: JI SU ZI *Cornus capitata* [Syn. *Dendrobenthamia capitata*] (root). Ref: 5177.

**5569 Dihydrocorynantheine**

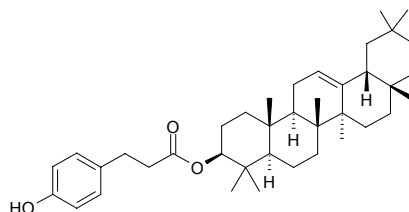
$C_{22}H_{28}N_2O_3$  (368.48). Pharm: CVS activity (tested in both conscious and anaesthetized normotensive rats, arterial pressure in both types of rats fell substantially, while heart rate of only anaesthetized rats also decreased). Source: CHANG HUA GOU TENG *Uncaria longiflora*, DUO MAI GOU TENG *Uncaria nervosa*, FEI ZHOU GOU TENG *Uncaria africana*, GOU TENG *Uncaria rhynchophylla* [Syn. *Nauclea rhynchophylla*], GUI YA NA GOU TENG *Uncaria guianensis*, HOU YE GOU TENG *Uncaria callophylla*, TUO YUAN GOU TENG *Uncaria elliptica*, XIA GOU TENG *Uncaria attenuata*, XIN XING GOU TENG *Uncaria cordata*. Ref: 2, 5341.

**5570 11 $\beta$ ,13-Dihydrocostunolide**

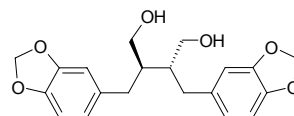
$C_{15}H_{22}O_2$  (234.34). Pharm: Cytotoxic (*in vitro*, HepG<sub>2</sub>,  $CD_{50} = 75\mu\text{g/mL}$ ; HeLa,  $CD_{50} = 85\mu\text{g/mL}$ ; OVCAR-3,  $CD_{50} = 75\mu\text{g/mL}$ ; control Cisplatin, HepG<sub>2</sub>,  $CD_{50} = 2.8\mu\text{g/mL}$ ; HeLa,  $CD_{50} = 5.2\mu\text{g/mL}$ ; OVCAR-3,  $CD_{50} = 3\mu\text{g/mL}$ ). Source: MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*] (root: yield = 0.024%dw). Ref: 4720.

**5571 3-O-Dihydrocoumaroyl- $\beta$ -amyrin**

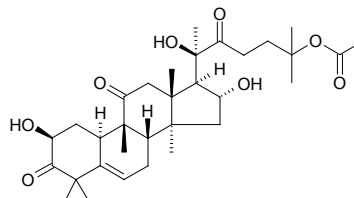
$C_{39}H_{58}O_3$  (574.90). Oil,  $[\alpha]_D^{25.9} = +49.5^\circ$  ( $c = 0.65$ ,  $CHCl_3$ ). Source: MU MA HUANG *Casuarina equisetifolia*. Ref: 2300.

**5572 Dihydrocubebin**

(-)-Dihydrocubebin [24563-03-9]  $C_{20}H_{22}O_6$  (358.39). Pharm: CYP3A4 inhibitor and CYP2D6 inhibitor (*in vitro*, CYP3A4,  $IC_{50} = 9.5\mu\text{mol/L}$ ; CYP2D6,  $IC_{50} = 17.5\mu\text{mol/L}$ ; control Ketoconazole, CYP3A4,  $IC_{50} = 0.72\mu\text{mol/L}$ ; control Quinidine, CYP2D6,  $IC_{50} = 0.082\mu\text{mol/L}$ )<sup>[4797]</sup>; antibacterial (*Mycobacterium smegmatis*). Source: BI CHENG QIE *Piper cubeba* (fruit: yield = 0.001%dw)<sup>[4797]</sup>, JI NEI YA HU JIAO *Piper guineense*. Ref: 658, 4797.

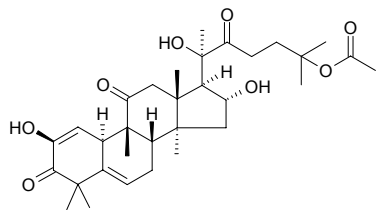
**5573 Dihydrocucurbitacin B**

23,24-Dihydrocucurbitacin B  $C_{32}H_{48}O_8$  (560.73). Pharm: Cytotoxic (hmn cancer lines NUGC-3,  $IC_{50} = 3.26\mu\text{g/mL}$ , hmn cancer lines HONE-1,  $IC_{50} = 1.55\mu\text{g/mL}$ )<sup>[4267]</sup>; anti-inflammatory (carrageenan-induced mouse paw edema, 4mg/kg, InRt = 46% at 3h and InRt = 36% at 5h)<sup>[4970]</sup>. Source: TA YOU XIE GUA *Cayaponia tayuya* (root), NAN TOU QIU HAI TANG *Begonia nantoensis* (rhizome). Ref: 4267, 4970.

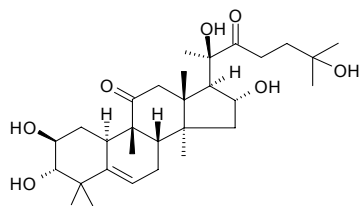


**5574 Dihydrocurbitacin E**

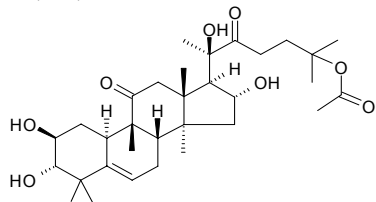
$C_{32}H_{46}O_8$  (558.72). **Pharm:** Cytotoxic (hmn cancer lines NUGC-3,  $IC_{50}$  = 8.60  $\mu\text{g}/\text{mL}$ , hmn cancer lines HONE-1,  $IC_{50}$  = 2.68  $\mu\text{g}/\text{mL}$ ). **Source:** NAN TOU QIU HAI TANG *Begonia nantoensis* (rhizome). **Ref:** 4267.

**5575 Dihydrocurbitacin F**

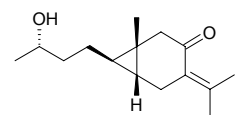
$C_{30}H_{48}O_7$  (520.71). mp 155~157°C. **Source:** DA ZI XUE DAN *Hemsleya macrosperma*, LUO GUO DI *Hemsleya amabilis*, PENG XIAN XUE DAN *Hemsleya pengxianensis*. **Ref:** 6, 554, 660, 1521.

**5576 Dihydrocurbitacin F-25-acetate**

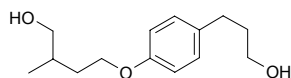
$C_{32}H_{50}O_8$  (562.75). mp 266~268°C. **Source:** CHANG GUO XUE DAN *Hemsleya dolichocarpa* (tuberoid: mean content collected in Aug. to Nov. = 3.46%<sup>[5508]</sup>), DA ZI XUE DAN *Hemsleya macrosperma*, LUO GUO DI *Hemsleya amabilis*, PENG XIAN XUE DAN *Hemsleya pengxianensis*. **Ref:** 6, 554, 660, 5508.

**5577 4S-Dihydrocurcumenone**

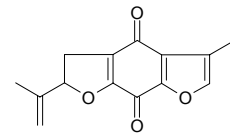
$C_{15}H_{24}O_2$  (236.36). **Pharm:** NO production inhibitor inactive (mus peritoneal macrophages, induced by LPS, 100  $\mu\text{mol}/\text{L}$ , InRt = (13.0 $\pm$ 2.0)%), control L-NMMA, 100  $\mu\text{mol}/\text{L}$ , InRt = (79.2 $\pm$ 0.9)%,  $p < 0.01$ ). **Source:** PING E SHU *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*]. **Ref:** 4150.

**5578 Dihydrocupidiol**

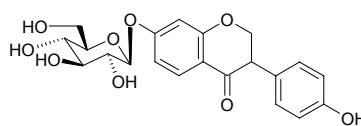
$C_{14}H_{22}O_3$  (238.33). Colorless oil,  $[\alpha]_D^{23} = -11^\circ$  ( $c = 0.1$ ,  $\text{CHCl}_3$ ). **Pharm:** Antifungal (TLC-based assay, *Cladosporium cucumerinum*, MIQ = 0.01  $\mu\text{g}$ ; control Miconazole, MIQ = 1  $\mu\text{g}$ ). **Source:** *Fagara xanthoxyloides*. **Ref:** 5385.

**5579 Dihydrocypaquinone**

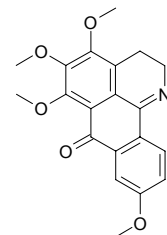
[41555-17-3]  $C_{14}H_{12}O_4$  (244.25). mp 113~114°C. **Source:** PIAO FU CAO *Fimbristylis dichotoma*. **Ref:** 6.

**5580 Dihydrodaidzin**

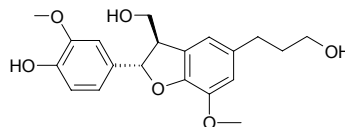
(-)-Dihydrodaidzin; 7-*O*- $\beta$ -D-Glucopyranosyl-4'-hydroxyisoflavanone  $C_{21}H_{22}O_9$  (418.4). Yellow amorphous powder,  $[\alpha]_D^{25} = -12.9^\circ$  ( $c = 1.00$ , MeOH). **Pharm:** Cytotoxic (*in vitro*, Hs740T,  $ED_{50}$  = 17.37  $\mu\text{g}/\text{mL}$ ; Hs756T,  $ED_{50}$  = 14.92  $\mu\text{g}/\text{mL}$ ; Hs578T,  $ED_{50}$  = 28.23  $\mu\text{g}/\text{mL}$ ; Hs742T,  $ED_{50}$  = 33.57  $\mu\text{g}/\text{mL}$ ; DU145,  $ED_{50}$  = 9.16  $\mu\text{g}/\text{mL}$ ; LNCaP-FGC,  $ED_{50}$  = 32.45  $\mu\text{g}/\text{mL}$ ). **Source:** DA DOU *Glycine max* (Soybean phytochemical concentrate: yield = 0.0080%dw). **Ref:** 4630.

**5581 2,3-Dihydroauriporphine**

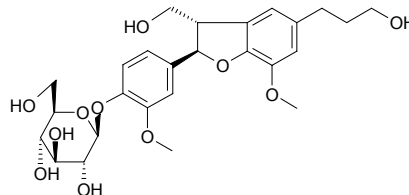
$C_{20}H_{19}NO_5$  (353.38). mp 141.0~142.0°C. **Source:** BIAN FU GE GEN *Menispermum dauricum*. **Ref:** 2402.

**5582 Dihydrodehydrodiconiferyl alcohol**

2 $\alpha$ ,3 $\beta$ -7-*O*-Methylcedrusin  $C_{20}H_{24}O_6$  (360.41).  $[\alpha]_D^{20} = +0.0^\circ$  ( $c = 0.10$ , MeOH). **Source:** HUANG JING ZHONG ZI *Vitex negundo* (seed: yield = 0.0012%), YUE NAN LIE LAN *Bursera tonkinensis* (root). **Ref:** 4791, 5336.

**5583 Dihydrodehydrodiconiferyl alcohol 4'-*O*- $\beta$ -D-glucoside**

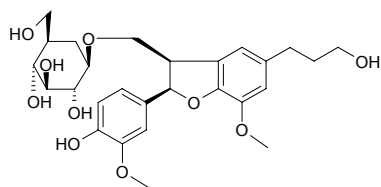
(2*R*,3*S*)-2,3-Dihydro-2-(4'-hydroxy-3'-methoxyphenyl)-3-hydroxymethyl-7-methoxy-5-benzofuranpropanol 4'-*O*- $\beta$ -D-glucopyranoside  $C_{26}H_{34}O_{11}$  (522.55). Amorphous powder,  $[\alpha]_D^{26} = -15.0^\circ$  ( $c = 0.20$ , MeOH);  $[\alpha]_D^{25} = -20.7^\circ$  ( $c = 0.10$ , MeOH). **Source:** LAN SHAI PIAO *Sambucus sieboldiana* (leaf), SHAN FAN GEN *Symplocos caudata*. **Ref:** 2535, 4192.



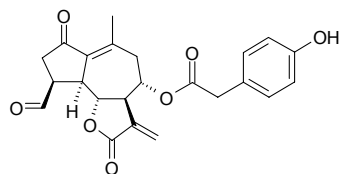
**5584 Dihydrodehydrodiconiferyl alcohol 9'-O-glucoside**

$C_{27}H_{36}O_{10}$  (520.58). Colorless crystals,  $[\alpha]_D^{25} = -15.5^\circ$  ( $c = 2.0$ , MeOH).

Source: RI BEN AN XI XIANG JING PI *Styrax japonica*. Ref: 2546.

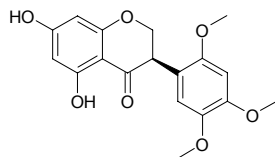
**5585 3,4β-Dihydro-15-dehydrolactucopicrin**

$C_{23}H_{22}O_7$  (410.43). Source: JU QU *Cichorium intybus*. Ref: 736.

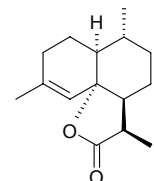
**5586 (R)-2,3-Dihydro-7-demethylrobustigenin**

(R)-5,7-Dihydroxy-2',4',5'-trimethoxyisoflavanone  $C_{18}H_{18}O_7$  (346.34).

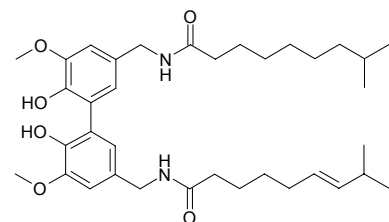
Amorphous powder,  $[\alpha]_D = -28^\circ$  ( $c = 0.1$ , MeOH). Source: *Erythrina saclauxii* (stem cortex). Ref: 5097.

**5587 Dihydro-deoxyarteannuin B**

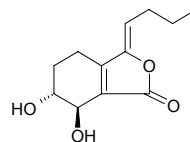
$C_{15}H_{22}O_2$  (234.34). Oil. Source: HUANG HUA HAO *Artemisia annua* (aerial parts). Ref: 5224.

**5588 6'',7''-Dihydro-5',5'''-dicapsaicin**

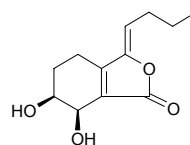
$C_{36}H_{54}N_2O_6$  (610.84). Light yellow oil. Pharm: Antioxidant (ADP/ $Fe^{2+}$ -induced liposomal lipid peroxidation,  $IC_{50} = 10\mu\text{mol/L}$ ; control Capsaicin,  $IC_{50} = 10\mu\text{mol/L}$ ; Vitamin E,  $IC_{50} = 250\mu\text{mol/L}$ )<sup>[4710]</sup>. Source: HONG HAI JIAO *Capsicum annuum* (fruit: yield = 0.00024%). Ref: 4710.

**5589 (Z)-4,5-Dihydro-6,7-trans-dihydroxy-3-butylidene phthalide**

$C_{12}H_{16}O_4$  (224.26). Source: CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*]. Ref: 2.

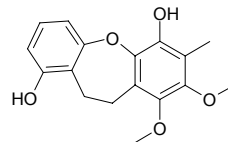
**5590 (Z)-4,5-Dihydro-6,7-cis-dihydroxy-3-butylidene phthalide**

Senkyunolide I [94596-28-8]  $C_{12}H_{16}O_4$  (224.26). Source: CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*], GAO BEN *Ligusticum sinense*. Ref: 2, 660.

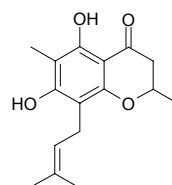
**5591 5,6-Dihydro-1,7-dihydroxy-3,4-dimethoxy-2-methylbenz[b,f]oxepin**

$C_{17}H_{18}O_5$  (302.33). Colorless crystalline solid ( $CHCl_3$ ), mp 215–217°C

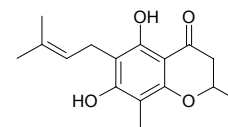
Source: CAI BAN YANG TI JIA *Bauhinia variegata* (root cortex). Ref: 3468.

**5592 2,3-Dihydro-5,7-dihydroxy-2,6-dimethyl-8-(3-methyl-2-butenyl)-4H-1-benzopyran-4-one**

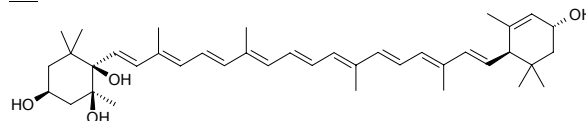
$C_{16}H_{20}O_4$  (276.34). Pale-yellow acicular crystals, mp 122–124°C,  $[\alpha]_D^{25} = -92.8^\circ$  ( $c = 0.13$ ,  $CHCl_3$ ). Source: BAI BEI YE *Mallotus apelta*. Ref: 755.

**5593 2,3-Dihydro-5,7-dihydroxy-2,8-dimethyl-6-(3-methyl-2-butenyl)-4H-1-benzopyran-4-one**

$C_{16}H_{20}O_4$  (276.34). Pale-yellow acicular crystals, mp 160–162°C,  $[\alpha]_D^{25} = -45.4^\circ$  ( $c = 0.11$ ,  $CHCl_3$ ). Source: BAI BEI YE *Mallotus apelta*. Ref: 755.

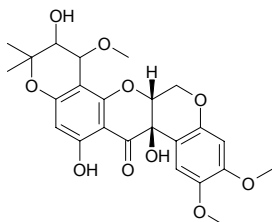
**5594 (3S,5S,6R,3'R,6'R)-5,6-Dihydro-5,6-dihydroxylutein**

$C_{40}H_{58}O_4$  (602.91). Source: DA HUA JU *Dendranthema grandiflorum* (petal). Ref: 3865.

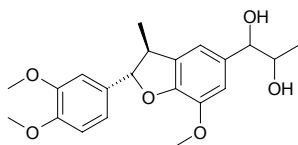


**5595 4',5'-Dihydro-11,5'-dihydroxy-4'-methoxytephrosin**

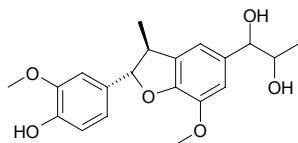
$C_{24}H_{26}O_{10}$  (474.47). Colorless solid,  $[\alpha]_D^{20} = +1.7^\circ$  ( $c = 0.1$ , acetone). **Pharm:** Antineoplastic (Inhibition of DMBA-induced preneoplastic lesions *in vitro*, MMOC assay,  $IC_{50} = 9.1 \mu\text{mol/L}$ ; control Sulforaphane,  $IC_{50} = 11 \mu\text{mol/L}$ ). **Source:** DU HUI MAO DOU *Tephrosia toxicaria* (stem: yield = 0.00016%dw). **Ref:** 4718.

**5596 (2S,3S,1'S,2'R)-and(2S,3S,1'R,2'R)-2,3-Dihydro-5-(1',2'-dihydroxypropyl)-2-(3,4-dimethoxyphenyl)-7-methoxy-3-methylbenzofuran**

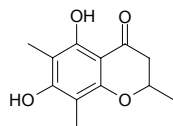
$C_{21}H_{26}O_6$  (374.44). Yellow oil,  $[\alpha]_D^{25} = +3.5^\circ$  ( $c = 1.036$ ,  $\text{CHCl}_3$ ). **Source:** DUAN ROU MAO MA DOU LING *Aristolochia pubescens*. **Ref:** 2359.

**5597 (2S,3S,1'S,2'R)-and(2S,3S,1'R,2'R)-2,3-Dihydro-5-(1',2'-dihydroxypropyl)-2-(4-hydroxy-3-methoxyphenyl)-7-methoxy-3-methylbenzofuran**

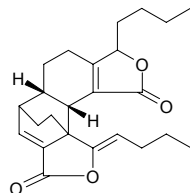
$C_{20}H_{24}O_6$  (360.41). Yellow oil,  $[\alpha]_D^{25} = +3.6^\circ$  ( $c = 1.024$ ,  $\text{CHCl}_3$ ). **Source:** DUAN ROU MAO MA DOU LING *Aristolochia pubescens*. **Ref:** 2359.

**5598 2,3-Dihydro-5,7-dihydroxy-2,6,8-trimethyl-4H-1-benzopyran-4-one**

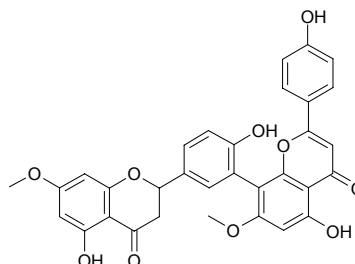
$C_{12}H_{14}O_4$  (222.24). Pale-yellow acicular crystals, mp 200–202°C,  $[\alpha]_D^{25} = -44.1^\circ$  ( $c = 0.14$ ,  $\text{CHCl}_3$ ). **Source:** BAI BEI YE *Mallotus apelta*. **Ref:** 755.

**5599 (Z)-3,8-Dihydro-6,6';7,3'-a-diligustilide**

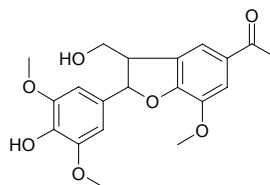
[106533-38-4]  $C_{24}H_{30}O_4$  (382.50). **Source:** CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*]. **Ref:** 2.

**5600 2,3-Dihydro-7,7''-dimethoxyamentoflavone**

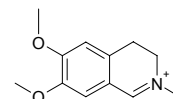
$C_{32}H_{24}O_{10}$  (568.54). Yellow powder, mp > 290°C,  $[\alpha]_D^{24.5} = +5.10^\circ$  ( $c = 0.29$ ,  $\text{C}_5\text{H}_5\text{N}$ ). **Source:** YUN NAN SUI HUA SHAN *Amentotaxus yunnanensis* (leaf and twig: yield = 0.00178%dw). **Ref:** 4707.

**5601 (2R,3S)-Dihydro-2-(3',5'-dimethoxy-4'-hydroxyphenyl)-7-methoxy-5-acetyl-benzofuran**

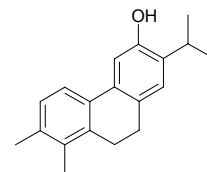
$C_{20}H_{22}O_7$  (374.39). Yellowish resin,  $[\alpha]_D^{25} = -9.6^\circ$  ( $c = 1.80$ , MeOH). **Source:** JUAN BAI *Selaginella tamariscina* (whole herb). **Ref:** 4828.

**5602 3,4-Dihydro-6,7-dimethoxy-2-methyl-isoquinoline**

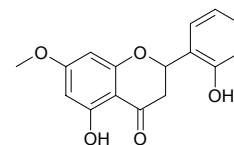
$C_{12}H_{16}NO_2^+$  (206.27). Colorless crystalline, mp 184.5–187.5°C. **Source:** XIAO HUA MU BAN SHU *Xylopiya parviflora* (bark and root). **Ref:** 3794.

**5603 9,10-Dihydro-7,8-dimethyl-2-(1-methylethyl)phenanthren-3-ol**

$C_{19}H_{22}O$  (266.39). Yellowish gum. **Source:** XIU QIU SHU WEI CAO *Salvia hydrangea* (root). **Ref:** 5447.

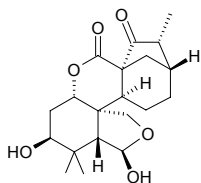
**5604 Dihydroechioidinin**

$C_{16}H_{14}O_5$  (286.29). Colorless needles ( $\text{CHCl}_3$ ), mp 200–201°C,  $[\alpha]_D^{28} = -19.7^\circ$  ( $c = 0.13$ , MeOH). **Source:** LAN JI CHUAN XIN LIAN *Andrographis echioides*. **Ref:** 2379.

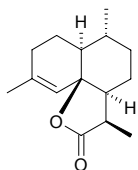


**5605 Dihydroenmein**

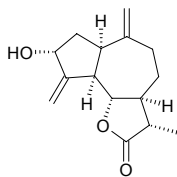
$C_{20}H_{28}O_6$  (364.44). mp 282 (dec), 240–242°C,  $[\alpha]_D = -114^\circ$  ( $C_5H_5N$ ). Source: MAO GUO XIANG CHA CAI *Isodon trichocarpa*. Ref: 4067.

**5606 Dihydro-epi-deoxyarteannuin B**

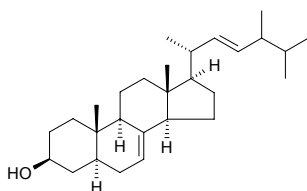
$C_{15}H_{22}O_2$  (234.34). Source: HUANG HUA HAO *Artemisia annua* (aerial parts). Ref: 5224.

**5607 11β,13-Dihydro-3-epizaluzanin C**

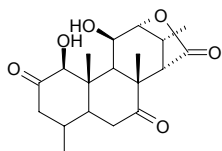
$C_{15}H_{20}O_3$  (248.32). Pharm: Cytotoxic (*in vitro*, HepG<sub>2</sub>, CD<sub>50</sub> = 75 μg/mL; HeLa, CD<sub>50</sub> = 65 μg/mL; OVCAR-3, CD<sub>50</sub> = 65 μg/mL; control Cisplatin, HepG<sub>2</sub>, CD<sub>50</sub> = 2.8 μg/mL; HeLa, CD<sub>50</sub> = 5.2 μg/mL; OVCAR-3, CD<sub>50</sub> = 3 μg/mL). Source: MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*] (root: yield = 0.00034%dw). Ref: 4720.

**5608 5,6-Dihydroergosterol**

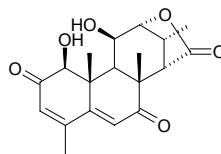
Ergosta-7,22-dien-3β-ol  $C_{28}H_{46}O$  (398.68). mp 176–177°C. Source: CHA YE *Camellia sinensis* [Syn. *Thea sinensis*], LING ZHI *Ganoderma lucidum* (dried sporocarp: yield = 0.00075%). Ref: 6, 4603.

**5609 3,4-Dihydroeurycomalactone**

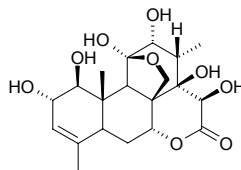
$C_{19}H_{26}O_6$  (350.42). Source: *Eurycoma* sp. Ref: 4556.

**5610 5,6-Dihydroeurycomalactone**

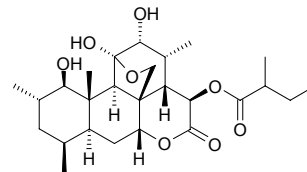
$C_{19}H_{22}O_6$  (346.38). Source: *Eurycoma* sp. Ref: 4556.

**5611 13β,18-Dihydroeurycomanol**

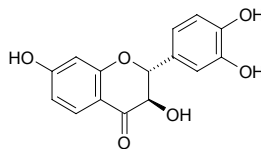
$C_{20}H_{28}O_9$  (412.44). Source: *Eurycoma* sp. Ref: 4556.

**5612 3,4-Dihydro-excelsin**

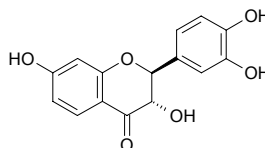
$C_{26}H_{40}O_8$  (480.60). Source: GAO CHU *Ailanthus excelsa*. Ref: 2051.

**5613 (+)Dihydrofisetin**

(+)-Fustin [20725-03-5]  $C_{15}H_{12}O_6$  (288.26). White needles (MeOH), mp 228–229°C,  $[\alpha]_D^{25} = +28.3^\circ$  ( $c = 0.9$ , 50% acetoc). Pharm: Antibacterial (*Pseudomonas maltophilia*, *Enterobacter cloacae*); antiviral (HSV-1); NADH oxidase inhibitor; succinic oxidase inhibitor; anti-rheumatoid arthritis (oral administration 30mg/kg, significantly decreased rheumatoid arthritis (RA) and C-reactive protein (CRP) factors in Freund's complete adjuvant)<sup>[5460]</sup>. Source: JI CAI *Capsella bursa-pastoris*, HUANG LIAN YA *Pistacia chinensis*, LIN BEI ZI *Toxicodendron succedaneum* [Syn. *Rhus succedanea*], QI ZI *Rhus verniciflua* [Syn. *Toxicadendron verniciflum*], YE QI SHU YE *Rhus sylvestris*, *Rhus* sp., *Schinopsis* sp., *Platanus* sp., *Tilia* sp. Ref: 6, 658, 5460

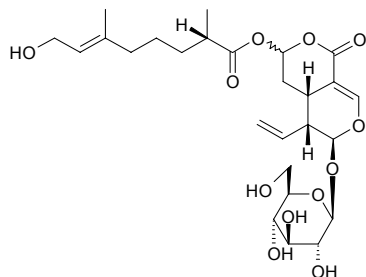
**5614 (–)Dihydrofisetin**

(–)-Fustin  $C_{15}H_{12}O_6$  (288.26). mp 228°C. Source: HUANG LIAN YA *Pistacia chinensis*, LIN BEI ZI *Toxicodendron succedaneum* [Syn. *Rhus succedanea*], JI CAI *Capsella bursa-pastoris*, YE QI SHU YE *Rhus sylvestris*. Ref: 6.

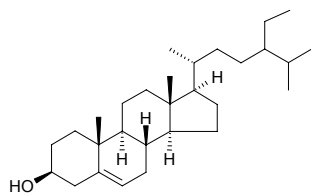


**5615 Dihydrofoliamenthin**

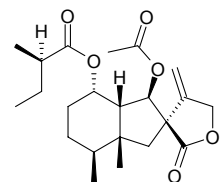
[22314-48-3] C<sub>26</sub>H<sub>38</sub>O<sub>12</sub> (542.59). Source: SHUI CAI *Menyanthes trifoliata*, SHUI CAI GEN *Menyanthes trifoliata*. Ref: 6.

**5616 β-Dihydrofucosterol**

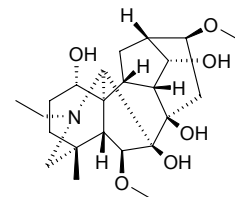
C<sub>29</sub>H<sub>50</sub>O (414.72). Source: ZE QI *Euphorbia helioscopia*. Ref: 6.

**5617 Dihydrofukinolide**

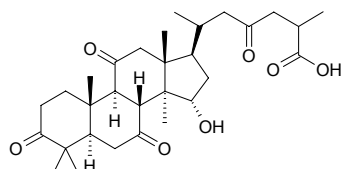
[41059-95-4] C<sub>22</sub>H<sub>32</sub>O<sub>6</sub> (392.50). Source: FENG DOU CAI *Petasites japonicus*. Ref: 6.

**5618 Dihydrogadesine**

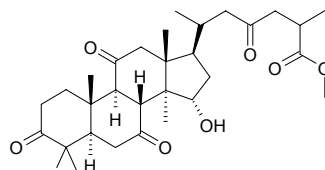
C<sub>23</sub>H<sub>37</sub>NO<sub>6</sub> (423.55). White amorphous powder. Source: QIN LING CUI QUE HUA *Delphinium giraldii*. Ref: 2506.

**5619 8β,9α-Dihydroganoderic acid J**

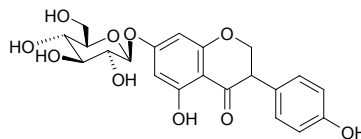
C<sub>30</sub>H<sub>44</sub>O<sub>7</sub> (516.68). Colorless prisms (MeOH-H<sub>2</sub>O), mp 205–208°C, [α]<sub>D</sub><sup>25</sup> = +24° (c = 0.04, MeOH). Source: LING ZHI *Ganoderma lucidum* (dried sporocarp: yield = 0.0005%). Ref: 4603.

**5620 8β,9α-Dihydroganoderic acid J methyl ester**

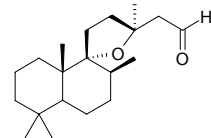
C<sub>31</sub>H<sub>46</sub>O<sub>7</sub> (530.71). Colorless prisms (MeOH-H<sub>2</sub>O), mp 202–205°C, [α]<sub>D</sub><sup>25</sup> = +52° (c = 0.22, MeOH). Source: LING ZHI *Ganoderma lucidum* (dried sporocarp: yield = 0.0003%). Ref: 4603.

**5621 Dihydrogenistin**

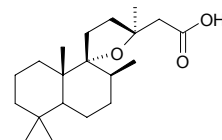
(-)-Dihydrogenistin; 7-O-β-D-Glucopyranosyl-5,7,4'-trihydroxyisoflavanone C<sub>21</sub>H<sub>22</sub>O<sub>10</sub> (434.4). Yellow amorphous powder, [α]<sub>D</sub><sup>25</sup> = -23.7° (c = 0.50, MeOH). Pharm: Cytotoxic (*in vitro*, Hs740T, ED<sub>50</sub> = 15.12 μg/mL; Hs756T, ED<sub>50</sub> = 12.24 μg/mL; Hs578T, ED<sub>50</sub> = 15.36 μg/mL; Hs742T, ED<sub>50</sub> = 30.8 μg/mL; DU145, ED<sub>50</sub> = 10.25 μg/mL; LNCaP-FGC, ED<sub>50</sub> = 41.58 μg/mL). Source: DA DOU *Glycine max* (Soybean phytochemical concentrate: yield = 0.013% dw). Ref: 4630.

**5622 Dihydrogrindelaldehyde**

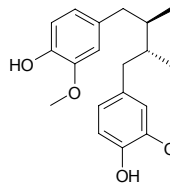
C<sub>20</sub>H<sub>34</sub>O<sub>2</sub> (306.49). Colorless gum. Pharm: Cytotoxic (MCF7, ED<sub>50</sub> = 3.5 μg/mL). Source: *Colophospermum mopane* (bark and seed). Ref: 5147.

**5623 Dihydrogrindelic acid**

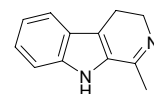
C<sub>20</sub>H<sub>34</sub>O<sub>3</sub> (322.49). Colorless gum. Source: *Colophospermum mopane* (bark and seed). Ref: 5147.

**5624 (-)-Dihydroguaiaretic acid**

C<sub>20</sub>H<sub>26</sub>O<sub>4</sub> (330.43). Source: MEI ZHOU SAN BAI CAO *Saururus cernuus*. Ref: 3959.

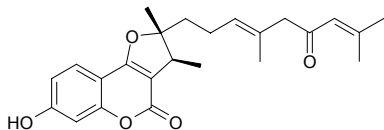
**5625 Dihydroharman**

[525-41-7] C<sub>12</sub>H<sub>12</sub>N<sub>2</sub> (184.24). Source: SHA ZAO SHU PI *Elaeagnus angustifolia*. Ref: 6.



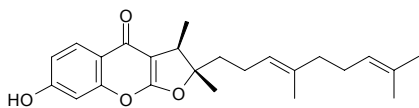
**5626 2,3-Dihydro-7-hydroxy-2*S*\*,3*R*\*-dimethyl-2-[4,8-dimethyl-3(*E*),7-nonadien-6-onyl]-furo[3,2-*c*]coumarin**

C<sub>24</sub>H<sub>28</sub>O<sub>5</sub> (396.49). Oil, [α]<sub>D</sub><sup>21</sup> = 0° (*c* = 0.7, CHCl<sub>3</sub>). Source: DUO SAN A WEI *Ferula ferulaeoides* (root). Ref: 4117.



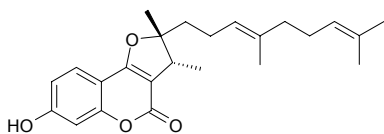
**5627 2,3-Dihydro-7-hydroxy-2*S*\*,3*R*\*-dimethyl-2-[4,8-dimethyl-3(*E*),7-nonadienyl]-furo[2,3-*b*]chromone**

C<sub>24</sub>H<sub>30</sub>O<sub>4</sub> (382.50). Colorless oil, [α]<sub>D</sub><sup>22</sup> = 0° (*c* = 0.2, CHCl<sub>3</sub>). Source: DUO SAN A WEI *Ferula ferulaeoides* (root; yield = 0.05%). Ref: 4193.



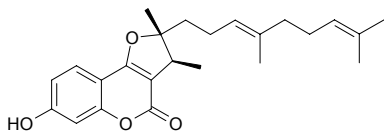
**5628 2,3-Dihydro-7-hydroxy-2*R*\*,3*R*\*-dimethyl-2-[4,8-dimethyl-3(*E*),7-nonadienyl]-furo[3,2-*c*]coumarin**

C<sub>24</sub>H<sub>30</sub>O<sub>4</sub> (382.50). Oil, [α]<sub>D</sub><sup>22</sup> = 0° (*c* = 0.8, CHCl<sub>3</sub>). Source: DUO SAN A WEI *Ferula ferulaeoides* (root). Ref: 4117.



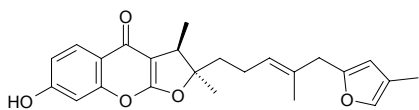
**5629 2,3-Dihydro-7-hydroxy-2*S*\*,3*R*\*-dimethyl-2-[4,8-dimethyl-3(*E*),7-nonadienyl]-furo[3,2-*c*]coumarin**

C<sub>24</sub>H<sub>30</sub>O<sub>4</sub> (382.50). Oil, [α]<sub>D</sub><sup>23</sup> = 0° (*c* = 0.6, CHCl<sub>3</sub>). Source: DUO SAN A WEI *Ferula ferulaeoides* (root). Ref: 4117.



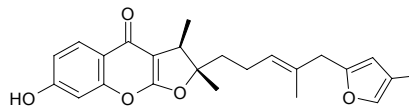
**5630 2,3-Dihydro-7-hydroxy-2*R*\*,3*R*\*-dimethyl-2-[4-methyl-5-(4-methyl-2-furyl)-3(*E*),7-pentenyl]-furo[2,3-*b*]chromone**

C<sub>24</sub>H<sub>26</sub>O<sub>5</sub> (394.47). Colorless oil, [α]<sub>D</sub><sup>22</sup> = 0° (*c* = 0.7, CHCl<sub>3</sub>). Source: DUO SAN A WEI *Ferula ferulaeoides* (root; yield = 0.02%). Ref: 4193.



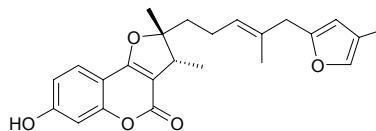
**5631 2,3-Dihydro-7-hydroxy-2*S*\*,3*R*\*-dimethyl-2-[4-methyl-5-(4-methyl-2-furyl)-3(*E*),7-pentenyl]-furo[2,3-*b*]chromone**

C<sub>24</sub>H<sub>26</sub>O<sub>5</sub> (394.47). Colorless oil, [α]<sub>D</sub><sup>22</sup> = 0° (*c* = 0.7, CHCl<sub>3</sub>). Source: DUO SAN A WEI *Ferula ferulaeoides* (root; yield = 0.06%). Ref: 4193.



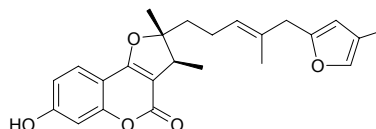
**5632 2,3-Dihydro-7-hydroxy-2*R*\*,3*R*\*-dimethyl-2-[4-methyl-5-(4-methyl-2-furyl)-3(*E*)-pentenyl]-furo[3,2-*c*]coumarin**

C<sub>24</sub>H<sub>26</sub>O<sub>5</sub> (394.47). Oil, [α]<sub>D</sub><sup>23</sup> = 0° (*c* = 0.7, CHCl<sub>3</sub>). Source: DUO SAN A WEI *Ferula ferulaeoides* (root). Ref: 4117.



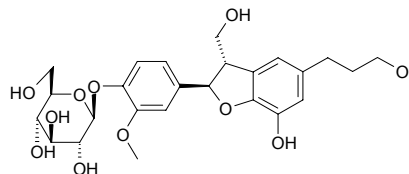
**5633 2,3-Dihydro-7-hydroxy-2*S*\*,3*R*\*-dimethyl-2-[4-methyl-5-(4-methyl-2-furyl)-3(*E*)-pentenyl]-furo[3,2-*c*]coumarin**

C<sub>24</sub>H<sub>26</sub>O<sub>5</sub> (394.47). Oil, [α]<sub>D</sub><sup>23</sup> = 0° (*c* = 0.6, CHCl<sub>3</sub>). Pharm: NO production inhibitor (macrophage-like cell line RAW264.7 activated by LPS/IFN-γ, IC<sub>50</sub> = (87.5±11.7)μmol/L)<sup>[2574]</sup>; cytotoxic inactive (MTT assay, 3~100μmol/L, did not demonstrate any significant cytotoxicity upon LPS/IFN-γ treatment for 24h.)<sup>[2574]</sup>. Source: DUO SAN A WEI *Ferula ferulaeoides* (root), FU KANG A WEI GEN *Ferula fukanensis*. Ref: 2574, 4117.



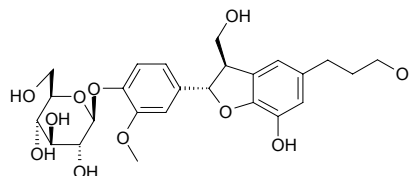
**5634 (2*R*,3*S*)-2,3-Dihydro-7-hydroxy-2-(4'-hydroxy-3'-methoxyphenyl)-3-hydroxymethyl-5-benzofuranpropanol 4'-*O*-β-*D*-glucopyranoside**

C<sub>25</sub>H<sub>32</sub>O<sub>11</sub> (508.53). Amorphous powder, [α]<sub>D</sub><sup>26</sup> = -20.0° (*c* = 0.05, MeOH). Source: LAN SHAI PIAO *Sambucus sieboldiana* (leaf). Ref: 4192.



**5635 (2*S*,3*R*)-2,3-Dihydro-7-hydroxy-2-(4'-hydroxy-3'-methoxyphenyl)-3-hydroxymethyl-5-benzofuranpropanol 4'-*O*-β-*D*-glucopyranoside**

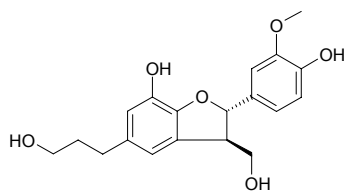
C<sub>25</sub>H<sub>32</sub>O<sub>11</sub> (508.53). Amorphous powder, [α]<sub>D</sub><sup>26</sup> = -35.7° (*c* = 0.14, MeOH). Source: LAN SHAI PIAO *Sambucus sieboldiana* (leaf). Ref: 4192.





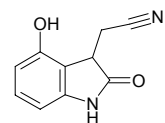
**5636 (7S,8R)-Dihydro-3'-hydroxy-8-hydroxy-methyl-7-(4-hydroxy-3-methoxyphenyl)-1'-benzofuranpropanol**

C<sub>19</sub>H<sub>22</sub>O<sub>6</sub> (346.38). Yellowish oil,  $[\alpha]_D^{20} = -5.3^\circ$  ( $c = 1.0$ , MeOH). Source: TAN XIANG *Santalum album* (heartwood). Ref: 4468.



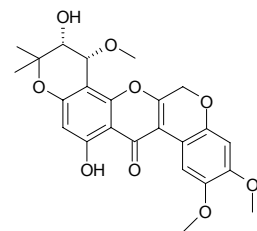
**5637 2,3-Dihydro-4-hydroxy-2-indole-3-acetonitrile**

C<sub>10</sub>H<sub>8</sub>N<sub>2</sub>O<sub>2</sub> (188.19). Orange yellow crystals, mp 150~152°C. Source: BAN LAN GEN *Isatis indigotica*. Ref: 855.



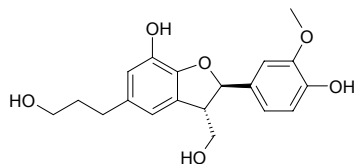
**5638 4,5-Dihydro-5'-α-hydroxy-4'-α-methoxy-6α,12α-dehydro-α-toxicarol**

C<sub>24</sub>H<sub>24</sub>O<sub>9</sub> (456.45). Yellow needles, mp 215~218°C,  $[\alpha]_D^{20} = +0.1^\circ$  ( $c = 0.1$ , CHCl<sub>3</sub>:MeOH = 1:1). Source: SAN LIE XUE TONG *Macaranga triloba* (leaf). Ref: 3756.



**5639 (2R-trans)-2,3-Dihydro-2-(4-hydroxy-3-methoxyphenyl)-3-(hydroxymethyl)-7-hydroxy-5-benzofuran-propanol**

C<sub>19</sub>H<sub>22</sub>O<sub>6</sub> (346.38). Pharm: Plant growth stimulatory or inhibitory activity (radicle length: *Lactuca sativa*, 1 μmol/L, StRt = (31~60)%, 10 μmol/L, StRt = (10~30)%, 100 μmol/L, StRt = (31~60)%, 1 mmol/L, StRt = (10~30)%; *Raphanus sativus*, 1 μmol/L, StRt = (31~60)%, 10 μmol/L, StRt = (31~60)%, 100 μmol/L, StRt = (10~30)%, 1 mmol/L, InRt = (10~30)%); *Allium cepa*, 1 μmol/L, StRt = (31~60)%, 10 μmol/L, StRt or InRt < 10%, 100 μmol/L, StRt = (10~30)%, 1 mmol/L, InRt > 61%). Source: XI YANG JIE GU MU *Sambucus nigra*. Ref: 5217.

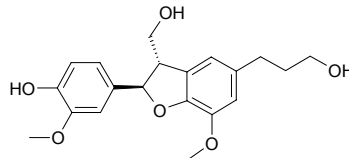


**5640 (2R-trans)-2,3-Dihydro-2-(4-hydroxy-3-methoxyphenyl)-3-(hydroxymethyl)-7-methoxy-5-benzofuran-propanol**

C<sub>20</sub>H<sub>24</sub>O<sub>6</sub> (360.41). Pharm: Plant growth stimulatory or inhibitory activity (radicle length: *Lactuca sativa*, 1 μmol/L, StRt = (31~60)%, 10 μmol/L, StRt = (31~60)%, 100 μmol/L, StRt or InRt < 10%, 1 mmol/L, InRt > 61%; *Raphanus sativus*, 1 μmol/L, StRt > 61%, 10 μmol/L, StRt = (31~60)%, 100 μmol/L, StRt = (31~60)%).

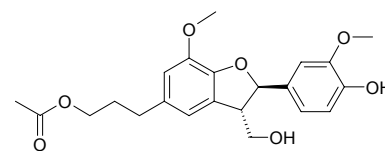
1 mmol/L, StRt = (31~60)%; *Allium cepa*, 1 μmol/L, StRt = (31~60)%, 10 μmol/L, StRt = (10~30)%, 100 μmol/L, StRt = (10~30)%, 1 mmol/L, InRt = (31~60)%).

Source: XI YANG JIE GU MU *Sambucus nigra*. Ref: 5217.



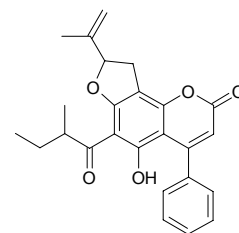
**5641 (2R-trans) 2,3-Dihydro-2-(4-hydroxy-3-methoxyphenyl)-3-(hydroxymethyl)-7-methoxy-5-benzofuranpropanol acetate**

C<sub>22</sub>H<sub>26</sub>O<sub>7</sub> (402.45). Pharm: Plant growth stimulatory or inhibitory activity (radicle length: *Lactuca sativa*, 1 μmol/L, StRt = (10~30)%, 10 μmol/L, StRt = (31~60)%, 100 μmol/L, StRt = (31~60)%, 1 mmol/L, StRt > 61%; *Raphanus sativus*, 1 μmol/L, StRt = (31~60)%, 10 μmol/L, StRt > 61%, 100 μmol/L, StRt = (10~30)%, 1 mmol/L, InRt = (10~30)%); *Allium cepa*, 1 μmol/L, StRt = (10~30)%, 10 μmol/L, StRt = (31~60)%, 100 μmol/L, StRt = (10~30)%, 1 mmol/L, StRt = (10~30)%). Source: XI YANG JIE GU MU *Sambucus nigra*. Ref: 5217.



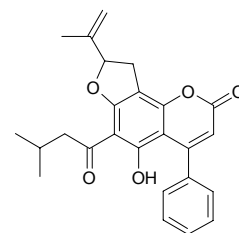
**5642 8,9-Dihydro-5-hydroxy-6-(2-methylbutanoyl)-4-phenyl-8-(prop-1-en-2-yl)furo[2,3-h]chromen-2-one**

C<sub>25</sub>H<sub>24</sub>O<sub>5</sub> (404.47). Source: TIE LI MU *Mesua ferrea* (blossom). Ref: 3870.



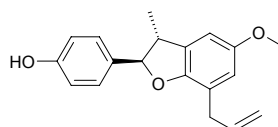
**5643 8,9-Dihydro-5-hydroxy-6-(3-methylbutanoyl)-4-phenyl-8-(prop-1-en-2-yl)furo[2,3-h]chromen-2-one**

C<sub>25</sub>H<sub>24</sub>O<sub>5</sub> (404.47). Source: TIE LI MU *Mesua ferrea* (blossom). Ref: 3870.



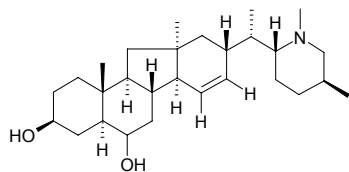
**5644 (2R,3R)-2,3-Dihydro-2-(4-hydroxyphenyl)-5-methoxy-3-methyl-7-propenylbenzofuran**

C<sub>19</sub>H<sub>20</sub>O<sub>3</sub> (296.37). Colorless oil,  $[\alpha]_D^{25} = +358^\circ$  ( $c = 1.91$ , MeOH). Source: TE LI NI DA HU JIAO *Piper aequale*. Ref: 1910.

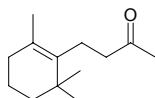


**5645 Dihydroimpranine**

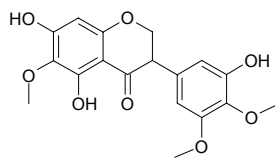
(17*R*,20*S*,22*R*)-5*α*-Impra-15,16-ene-3*β*,6*β*-diol C<sub>28</sub>H<sub>47</sub>NO<sub>2</sub> (429.69). Amorphous powder,  $[\alpha]_D^{25} = -32^\circ$  ( $c = 0.08$ , MeOH). Source: XI BEI MU *Fritillaria imperialis*. Ref: 3372.

**5646 Dihydro- $\beta$ -ionone**

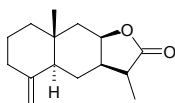
C<sub>13</sub>H<sub>22</sub>O (194.32). bp 126–129°C/12mmHg. Source: GUI HUA *Osmanthus fragrans*. Ref: 6.

**5647 2,3-Dihydroirigenin**

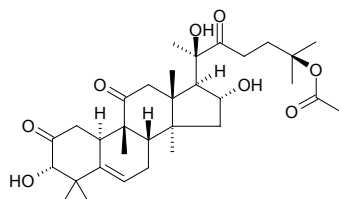
C<sub>18</sub>H<sub>18</sub>O<sub>8</sub> (362.34). Pale yellow amorphous powder,  $[\alpha]_D = 0^\circ$  ( $c = 0.5$ , MeOH). Source: SHE GAN *Belamcanda chinensis* (rhizome). Ref: 4128.

**5648 Dihydroisoalantolactone**

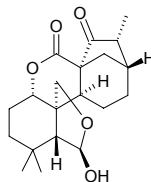
11*α*,13-Dihydroisoalantolactone C<sub>15</sub>H<sub>22</sub>O<sub>2</sub> (234.34). mp 171–172°C. Pharm: Anthelmintic (effect and toxicity similar to santonin); cytotoxic inactive (SMMC-7721 IC<sub>50</sub> = (174.5±20.2)μg/mL, Vincristine IC<sub>50</sub> = (30.35±2.23)μg/mL; HO-8910 IC<sub>50</sub> = (169.2±16.3)μg/mL, Vincristine IC<sub>50</sub> = (20.74±1.91)μg/mL; LO2 hmn hepatocytes cell IC<sub>50</sub> = (713.3±23.1)μg/mL, Vincristine IC<sub>50</sub> = (17.25±0.91)μg/mL)<sup>[5422]</sup>. Source: CHANG YE TIAN MING JING *Carpesium longifolium* (aerial parts: yield = 0.001%dw)<sup>[4736]</sup>, JIN FEI CAO *Inula japonica*, TU MU XIANG *Inula helenium*. Ref: 6, 658, 1521, 4736, 5422.

**5649 Dihydroisocurbitacin B**

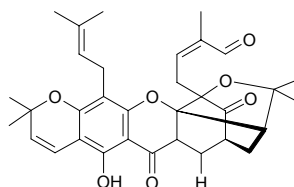
C<sub>32</sub>H<sub>48</sub>O<sub>8</sub> (560.73). Colorless acicular crystals, mp 235–237°C. Source: XIN YE CHI BO *Thladiantha cordifolia*. Ref: 425.

**5650 Dihydroisodocarpin**

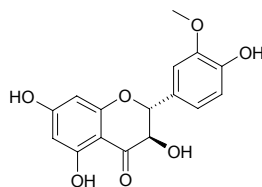
C<sub>20</sub>H<sub>28</sub>O<sub>5</sub> (348.44). mp 220–226°C. Source: ZHOU YE XIANG CHA CAI *Isodon rugosus* [Syn. *Rabdosia rugosa*]. Ref: 4067.

**5651 Dihydroisomorellin**

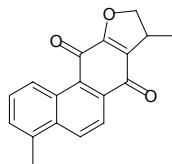
[1064-70-6] C<sub>33</sub>H<sub>38</sub>O<sub>7</sub> (546.67). mp 167°C. Source: TENG HUANG *Garcinia morella*. Ref: 6.

**5652 (+)-Dihydroisorhamnetin**

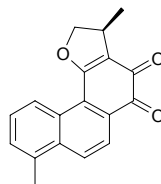
C<sub>16</sub>H<sub>14</sub>O<sub>7</sub> (318.29). Pharm: Antioxidant inactive (Takamatsu DCFH method, myelomonocytic HL-60 cells, control NDGA, IC<sub>50</sub> = (0.7±0.3)μg/mL, Vitamin C, IC<sub>50</sub> = (1.9±0.7)μg/mL, Trolox, IC<sub>50</sub> = (1.4±0.5)μg/mL)<sup>[3850]</sup>; cytotoxic (XTT assay, HL-60 cells, IC<sub>50</sub> > 50.0μg/mL; control NDGA, IC<sub>50</sub> = (2.6±0.2)μg/mL, Vitamin C, IC<sub>50</sub> > 10.0μg/mL, Trolox, IC<sub>50</sub> > 10.0μg/mL)<sup>[3850]</sup>. Source: SAN CHI LA RUI A *Larrea tridentata* (leaf), WU YA GUO *Dillenia indica*. Ref: 1521, 3850.

**5653 Dihydroisotanshinone I**

C<sub>18</sub>H<sub>14</sub>O<sub>3</sub> (278.31). Source: DAN SHEN *Salvia miltiorrhiza*. Ref: 2.

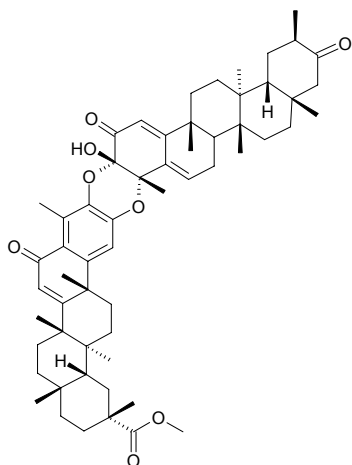
**5654 Dihydroisotanshinone II**

11,16-Oxy-18,20-dinor-1,3,5(10),6,8,11-abietahexaene-13,14-dione C<sub>18</sub>H<sub>14</sub>O<sub>3</sub> (278.31). Red crystals (MeOH), mp 247–249°C. Source: JIAO ZHI SHU WEI CAO *Salvia glutinosa* (root). Ref: 2384.

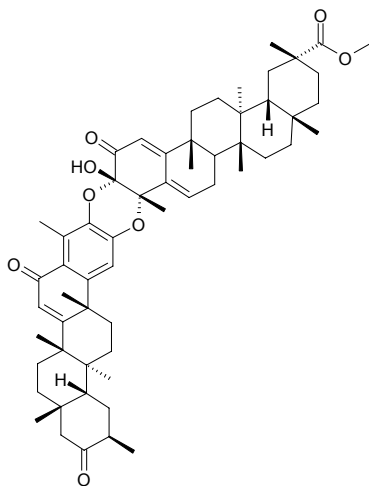


**5655 7,8-Dihydroisoxuxuarine Fa**

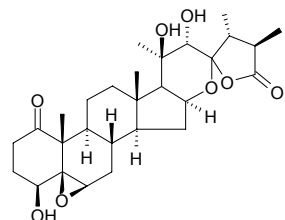
Cangorosin B C<sub>38</sub>H<sub>76</sub>O<sub>8</sub> (901.25). Yellow amorphous solid. Source: QIU SHI MEI DENG MU *Maytenus chuchuhuasca*(bark). Ref: 4295.

**5656 7,8-Dihydroisoxuxuarine Ga**

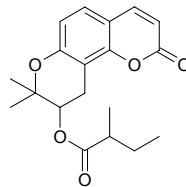
C<sub>58</sub>H<sub>76</sub>O<sub>8</sub> (901.25). Yellow amorphous solid. Source: QIU SHI MEI DENG MU *Maytenus chuchuhuasca*(bark). Ref: 4295.

**5657 2,3-Dihydroisoxocarplactone B**

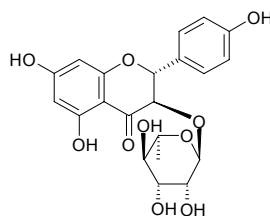
C<sub>28</sub>H<sub>40</sub>O<sub>8</sub> (504.63). White amorphous powder, mp 178~180°C,  $[\alpha]_D^{20} = -93^\circ$  ( $c = 0.089$ , CH<sub>3</sub>CN). Pharm: Quinone reductase inducer (mus Hepa 1c1c7 cells, CD = (3.81±1.47)μmol/L, IC<sub>50</sub> = (96.9±2.4)μmol/L, CI = 20, positive control Sulforaphane, CD = (0.36±0.17)μmol/L, IC<sub>50</sub> = (9.9±2.1)μmol/L, CI = 28). Source: FEI CHENG SUAN JIANG *Physalis philadelphica* (stem and leaf). Ref: 4337.

**5658 2',3'-Dihydro-jatamansin**

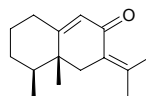
C<sub>19</sub>H<sub>22</sub>O<sub>5</sub> (330.38). Amorphous powder,  $[\alpha]_D^{25} = +53.6^\circ$  ( $c = 0.8$ , MeOH). Source: *Niphogeton ternata*. Ref: 4156.

**5659 Dihydrokaempferol-3-O-α-L-rhamnopyranoside**

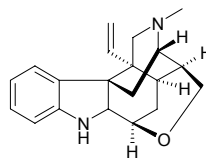
Engeletin; Engelitin [572-31-6] C<sub>21</sub>H<sub>22</sub>O<sub>10</sub> (434.40). Colorless massive crystals, mp 169~171°C. Pharm: Antimalarial (*Plasmodium falciparum* PoW, IC<sub>50</sub> > 50μg/mL, control Chloroquine diphosphate, IC<sub>50</sub> = (0.006±0.002)μg/mL; Dd2, IC<sub>50</sub> < 50μg/mL, Chloroquine diphosphate, IC<sub>50</sub> = (0.063±0.01)μg/mL)<sup>[5208]</sup>. Source: BA QIA *Smilax china* [Syn. *Smilax japonica*], TU FU LING *Smilax glabra*, WU CI KE YA SHU *Andira inermis* (leaf). Ref: 714, 2192, 5208.

**5660 Dihydrokaranone**

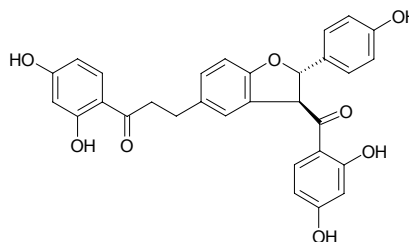
C<sub>15</sub>H<sub>22</sub>O (218.34). Source: BAI MU XIANG *Aquilaria sinensis*, CHEN XIANG *Aquilaria agallocha*. Ref: 13.

**5661 Dihydrokoumine**

C<sub>20</sub>H<sub>24</sub>N<sub>2</sub>O (308.43). Source: GOU WEN *Gelsemium elegans*. Ref: 14.

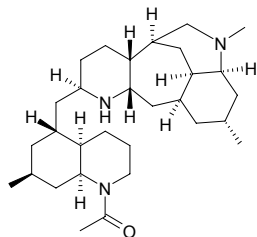
**5662 Dihydrolophirone C**

C<sub>30</sub>H<sub>24</sub>O<sub>8</sub> (512.52). Yellow crystals, mp 187~188°C (Me<sub>2</sub>CO),  $[\alpha]_D^{25} = -18^\circ$  ( $c = 0.6$ , Me<sub>2</sub>CO). Source: *Ochna afzelii* (stem cortex). Ref: 5153.

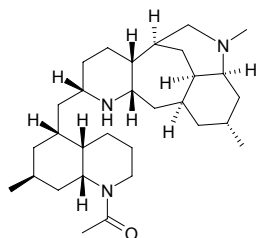


**5663 DihydroLucidine A**

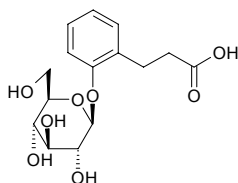
$C_{30}H_{51}N_3O$  (469.76). Source: GUANG LIANG SHI SONG *Lycopodium lucidulum*. Ref: 3927.

**5664 DihydroLucidine B**

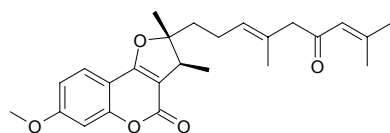
$C_{30}H_{51}N_3O$  (469.76). Source: GUANG LIANG SHI SONG *Lycopodium lucidulum*. Ref: 3927.

**5665 Dihydromelilotoside**

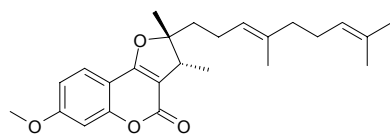
3-(2-*O*- $\beta$ -D-Glucosylphenyl)propanoic acid [24696-05-7]  $C_{15}H_{20}O_8$  (328.32). Colorless thin lamellar (ethyl acetate), mp 144–145°C. Pharm: Antiulcerative (rat, ip, 8 $\mu$ g/kg, inhibits 5-HT induced ulcer, InRt = 40%). Source: GUI ZHI *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*], PI HAN CAO *Melilotus suaveolens*. Ref: 6, 1155.

**5666 2,3-Dihydro-7-methoxy-2*S*\*,3*R*\*-dimethyl-2-[4,8-dimethyl-3(*E*),7-nonadien-6-onyl]-furo[3,2-*c*]coumarin**

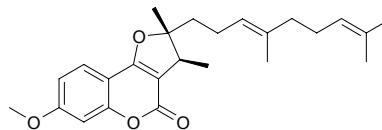
$C_{25}H_{30}O_5$  (410.51). Oil,  $[\alpha]_D^{23} = 0^\circ$  ( $c = 0.7$ ,  $CHCl_3$ ). Source: DUO SAN A WEI *Ferula ferulaeoides* (root). Ref: 4117.

**5667 2,3-Dihydro-7-methoxy-2*R*\*,3*R*\*-dimethyl-2-[4,8-dimethyl-3(*E*),7-nonadienyl]-furo[3,2-*c*]coumarin**

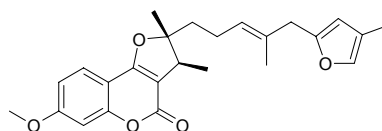
$C_{25}H_{32}O_4$  (396.53). Oil,  $[\alpha]_D^{24} = 0^\circ$  ( $c = 0.4$ ,  $CHCl_3$ ). Source: DUO SAN A WEI *Ferula ferulaeoides* (root). Ref: 4117.

**5668 2,3-Dihydro-7-methoxy-2*S*\*,3*R*\*-dimethyl-2-[4,8-dimethyl-3(*E*),7-nonadienyl]-furo[3,2-*c*]coumarin**

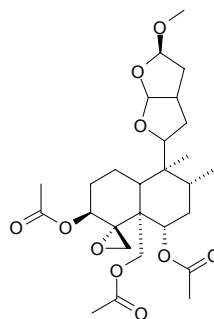
$C_{25}H_{32}O_4$  (396.53). Oil,  $[\alpha]_D^{24} = 0^\circ$  ( $c = 0.5$ ,  $CHCl_3$ ). Source: DUO SAN A WEI *Ferula ferulaeoides* (root). Ref: 4117.

**5669 2,3-Dihydro-7-methoxy-2*S*\*,3*R*\*-dimethyl-2-[4-methyl-5-(4-methyl-2-furyl)-3(*E*)-pentenyl]-furo[3,2-*c*]coumarin**

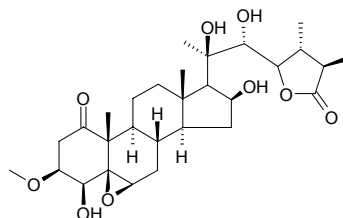
$C_{25}H_{28}O_5$  (408.50). Oil,  $[\alpha]_D^{23} = 0^\circ$  ( $c = 0.6$ ,  $CHCl_3$ ). Pharm: NO production inhibitor (macrophage-like cell line RAW264.7 activated by LPS/IFN- $\gamma$ ,  $IC_{50} = (27.8 \pm 4.6) \mu\text{mol/L}$ )<sup>[2574]</sup>; inhibits the inducible nitric oxide synthase (iNOS) gene expression (LPS/IFN- $\gamma$  treatment increased the level of iNOS mRNA expression, and the compound inhibits this increase, dose-dependent manner)<sup>[2574]</sup>; cytotoxic inactive (MTT assay, 3–100 $\mu\text{mol/L}$ , did not demonstrate any significant cytotoxicity upon LPS/IFN- $\gamma$  treatment for 24h.)<sup>[2574]</sup>. Source: DUO SAN A WEI *Ferula ferulaeoides* (root), FU KANG A WEI GEN *Ferula fukanensis*. Ref: 2574, 4117.

**5670 14,15-Dihydro-15 $\beta$ -methoxy-3-epicaryoptin**

$C_{27}H_{40}O_{10}$  (524.61). Viscous mass,  $[\alpha]_D = -57.4^\circ$  ( $CHCl_3$ ). Source: KU LANG SHU *Clerodendrum inerme* (leaf). Ref: 5261.

**5671 2,3-Dihydro-3 $\beta$ -methoxyxycarpalactone A**

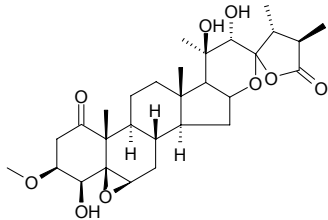
$C_{29}H_{44}O_9$  (536.67). White amorphous powder, mp 240–243°C,  $[\alpha]_D^{20} = -39^\circ$  ( $c = 0.088$ ,  $CH_3CN$ ), artifact generated during the extraction and isolation procedure. Pharm: Quinone reductase inducer (mus Hepa 1c1c7 cells, CD =  $(18.63 \pm 4.29) \mu\text{mol/L}$ ,  $IC_{50} > 20 \mu\text{mol/L}$ , positive control Sulforaphane, CD =  $(0.36 \pm 0.17) \mu\text{mol/L}$ ,  $IC_{50} = (9.9 \pm 2.1) \mu\text{mol/L}$ , CI = 28). Source: FEI CHENG SUAN JIANG *Physalis philadelphica* (stem and leaf). Ref: 4337.



**5672 2,3-Dihydro-3 $\beta$ -methoxyoxycarpalactone B**

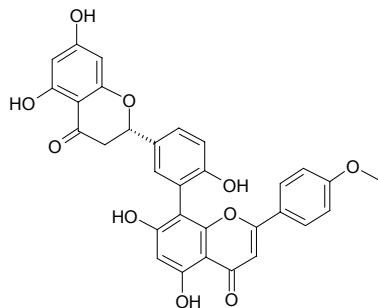
C<sub>29</sub>H<sub>42</sub>O<sub>9</sub> (534.65). White amorphous powder, mp 190–192°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = –117° (*c* = 0.076, CH<sub>3</sub>CN), artifact generated during the extraction and isolation procedure.

**Pharm:** Quinone reductase inducer (mus Hepa 1c1c7 cells, CD = (10.15±4.18) $\mu$ mol/L, IC<sub>50</sub> = (106.6±0.2) $\mu$ mol/L, CI = 10, positive control Sulforaphane, CD = (0.36±0.17) $\mu$ mol/L, IC<sub>50</sub> = (9.9±2.1) $\mu$ mol/L, CI = 28). **Source:** FEI CHENG SUAN JIANG *Physalis philadelphica* (stem and leaf). **Ref:** 4337.

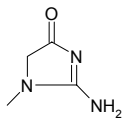
**5673 2,3-Dihydro-4'''-O-methyl amentoflavone**

C<sub>31</sub>H<sub>22</sub>O<sub>10</sub> (554.51). Yellow crystals, mp 231–232°C (dec), [ $\alpha$ ]<sub>D</sub><sup>25</sup> = –0.53° (*c* = 1.33, MeOH). **Source:** NAN YIN DU SU TIE SHU GUO *Cycas beddomei*.

**Ref:** 2540.

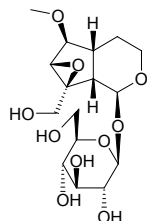
**5674 1,5-Dihydro-1-methyl-2-amino-imidazol-4-one**

C<sub>4</sub>H<sub>7</sub>N<sub>3</sub>O (113.12). Yellowish crystalline powder, mp > 300°C (H<sub>2</sub>O). **Source:** CU WEN HAI LONG *Trachyrhampus serratus*. **Ref:** 4583.

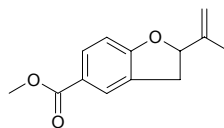
**5675 3,4-Dihydro-methylcatalpol**

C<sub>16</sub>H<sub>26</sub>O<sub>10</sub> (378.38). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>22</sup> = –77° (*c* = 0.3, MeOH).

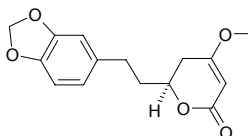
**Pharm:** Antitrypanosomal (*Trypanosoma brucei rhodesiense*, IC<sub>50</sub> = 73.0 $\mu$ g/mL, control Melarsoprol, IC<sub>50</sub> = 0.0033 $\mu$ g/mL; *Trypanosoma cruzi*, IC<sub>50</sub> > 90 $\mu$ g/mL, control Benznidazole, IC<sub>50</sub> = 0.70 $\mu$ g/mL); antileishmanial (*Leishmania donovani*, IC<sub>50</sub> = 12.7 $\mu$ g/mL, control Miltefosine, IC<sub>50</sub> = 0.32 $\mu$ g/mL); antimalarial (*Plasmodium falciparum*, IC<sub>50</sub> > 50 $\mu$ g/mL, control Artemisinin, IC<sub>50</sub> = 0.002 $\mu$ g/mL); cytotoxic (L6 cells, IC<sub>50</sub> > 90 $\mu$ g/mL, control Podophyllotoxin, IC<sub>50</sub> = 0.0075 $\mu$ g/mL). **Source:** LIN PIAN XUAN SHEN *Scrophularia lepidota* (root). **Ref:** 5251.

**5676 (±)-2,3-Dihydro-2-(1-methylethenyl)-5-benzofurancarboxylic acid methyl ester**

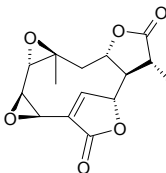
[69703-22-6] C<sub>13</sub>H<sub>14</sub>O<sub>3</sub> (218.25). **Source:** BAI HUA LONG DAN *Gentiana algida*. **Ref:** 704.

**5677 Dihyromethysticin**

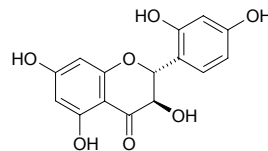
[19902-91-1] C<sub>15</sub>H<sub>16</sub>O<sub>5</sub> (276.29). **Pharm:** Antispasmodic. **Source:** KA WA HU JIAO *Piper methysticum*. **Ref:** 658.

**5678 Dihyromikanolide**

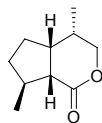
[23758-04-5] C<sub>15</sub>H<sub>16</sub>O<sub>6</sub> (292.29). **Pharm:** Antifungal (*Candida albicans*). **Source:** WEI GAN JU *Mikania scandens*. **Ref:** 658.

**5679 Dihyromorin**

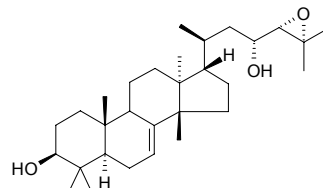
[18422-83-8] C<sub>15</sub>H<sub>12</sub>O<sub>7</sub> (304.26). mp 226–228°C. **Pharm:** Cytotoxic (cyclooxygenase-1 inhibitor, IC<sub>50</sub> = 20.4 $\mu$ g/mL); cytotoxic (mouse mammary organ culture assay, 82% at 10 $\mu$ g/mL). **Source:** DA DA HE MIAN BAO GUO *Artocarpus dadah*, SANG ZHI *Morus alba*. **Ref:** 6, 5038.

**5680 Dihydronepetalactone**

[17672-81-0] C<sub>10</sub>H<sub>16</sub>O<sub>2</sub> (168.24). **Source:** JIA JING JIE *Nepeta cataria*, MU TIAN LIAO *Actinidia polygama*. **Ref:** 6.

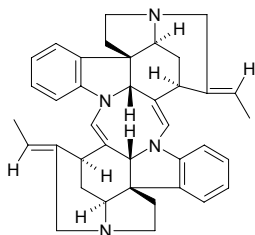
**5681 Dihydroniloticin**

C<sub>30</sub>H<sub>50</sub>O<sub>3</sub> (458.73). **Source:** *Eurycoma* sp. **Ref:** 4556.

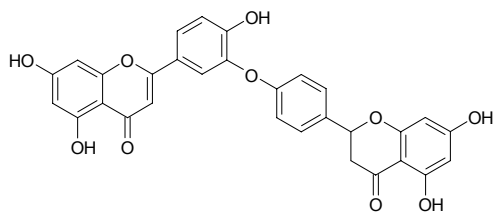


**5682 Dihydrortonoxiferine I**

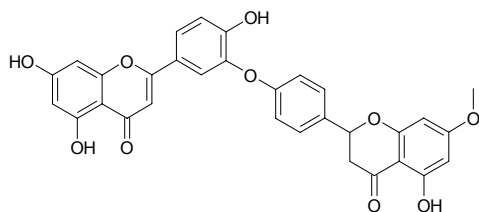
$C_{38}H_{40}N_4$  (552.77). Free alkali: amorphous powder, bitter acid salt (acetone–water): mp 300°C (dec). **Pharm:** Antibacterial (*Bacillus coli*, *Bacillus pyocyaneus*, and *Staphylococcus aureus*, 0.8–3.0mg/mL); antifungal (*Candida albicans*, 0.8–3.0mg/mL). **Source:** A FU ZE ER MA QIAN ZI *Strychnos afzelii*, CHANG HUA XU MA QIAN ZI *Strychnos dolichothyrsa*, YA MA XUN MA QIAN ZI *Strychnos amazonica*. **Ref:** 661.

**5683 2'',3''-Dihydroochnaflavone**

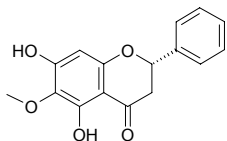
$C_{30}H_{20}O_{10}$  (540.48). mp > 300°C,  $[\alpha]_D^{20} = +6.8^\circ$  ( $c = 0.2$ , MeOH). **Source:** JIN LIAN MU *Ochna integerrima* (leaf). **Ref:** 5133.

**5684 2'',3''-Dihydroochnaflavone 7''-O-methyl ether**

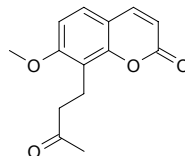
$C_{31}H_{22}O_{10}$  (554.51). mp 180–182°C,  $[\alpha]_D^{20} = +7.7^\circ$  ( $c = 0.2$ , MeOH). **Source:** JIN LIAN MU *Ochna integerrima* (leaf). **Ref:** 5133.

**5685 Dihydrooxylin A**

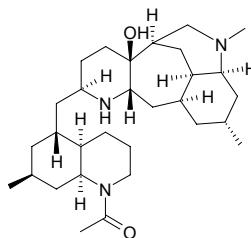
Dihydrooxylin [18956-18-8]  $C_{16}H_{14}O_5$  (286.29). **Source:** HUANG QIN *Scutellaria baicalensis*. **Ref:** 2.

**5686 Dihydroosthenon**

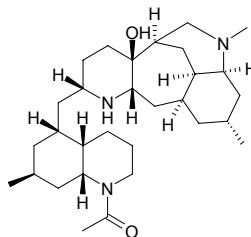
$C_{14}H_{14}O_4$  (246.27). **Pharm:** Antineoplastic (Raji cells, antitumor promotor, *in vivo*, inhibits TPA-induced EBV-EA activation, compound concentration = 500mol ratio/32 pmol TPA: EBV-EA-positive cells = (14.7±1.2)% (viability > 80%),  $\beta$ -Carotene, EBV-EA-positive cells = (34.3±1.1)% (viability > 80), Curcumin, EBV-EA-positive cells = (22.8±1.8)% (viability > 80%), compound  $IC_{50} = 176$ mol ratio/32 pmol TPA,  $\beta$ -Carotene,  $IC_{50} = 400$ mol ratio/32 pmol TPA, Curcumin,  $IC_{50} = 341$ mol ratio/32 pmol TPA). **Source:** *Citrus hassaku*. **Ref:** 5048.

**5687 Dihydrooxolucidine A**

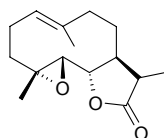
$C_{30}H_{51}N_3O_2$  (485.76).  $[\alpha]_D^{21.5} = +3.9^\circ$  ( $c = 0.79$ ,  $CHCl_3$ ). **Source:** GUANG LIANG SHI SONG *Lycopodium lucidulum*. **Ref:** 3927.

**5688 Dihydrooxolucidine B**

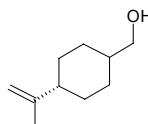
$C_{30}H_{51}N_3O_2$  (485.76). **Source:** GUANG LIANG SHI SONG *Lycopodium lucidulum*. **Ref:** 3927.

**5689 11 $\beta$ ,13-Dihydroparthenolide**

$C_{15}H_{22}O_3$  (250.34). **Pharm:** Cytotoxic (*in vitro*, SMMC-7721,  $IC_{50} > 200$ μg/mL; HO-8910,  $IC_{50} = 158$ μg/mL; control Vincristine, SMMC-7721,  $IC_{50} = 30.35$ μg/mL; HO-8910,  $IC_{50} = 20.74$ μg/mL)<sup>[4736]</sup>. **Source:** CHANG YE TIAN MING JING *Carpesium longifolium* (aerial parts: yield = 0.0007%dw). **Ref:** 4736.

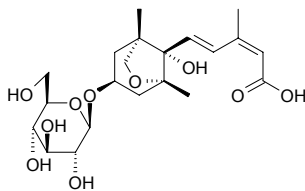
**5690 Dihydroperilla alcohol**

$C_{10}H_{18}O$  (154.25). **Source:** ZI SU YE *Perilla frutescens* var. *arguta*. **Ref:** 2.

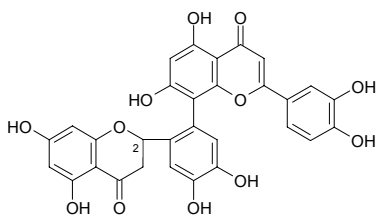


**5691 Dihydrophaseic acid 4'-O-β-D-glucopyranoside**

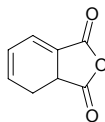
(1'R,3'R,5'R,8'S)-Epi-dihydrophaseic acid β-D-glucoside C<sub>21</sub>H<sub>32</sub>O<sub>10</sub> (444.48). Brown transparent gum, [α]<sub>D</sub> = -5.0° (c = 0.16, MeOH). Source: E LI *Persea americana* [Syn. *Persea gratissima*] (seed), HUA NAN WU ZHU YU *Evodia austrosinensis*. Ref: 3796, 5052.

**5692 2,3-Dihydrophilonotisflavone**

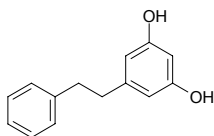
[124615-13-0] C<sub>30</sub>H<sub>20</sub>O<sub>12</sub> (572.49). Source: ZE XIAN *Philonotis fontana*. Ref: 3120.

**5693 4<sup>2,4</sup>-Dihydrophthalic anhydride**

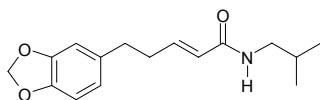
C<sub>8</sub>H<sub>6</sub>O<sub>3</sub> (150.14). Source: DANG GUI *Angelica sinensis*. Ref: 2.

**5694 Dihydropinosylvin**

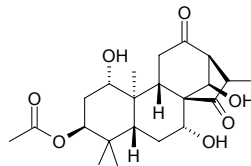
[14531-52-3] C<sub>14</sub>H<sub>14</sub>O<sub>2</sub> (214.27). Pharm: Antifungal (*Pyricularia grisea*, EC<sub>50</sub> = 44 μg/mL, EC<sub>90</sub> = 55 μg/mL; *Cladosporium herbarum*, EC<sub>50</sub> = 32 μg/mL, EC<sub>90</sub> = 209 μg/mL; *Fusarium avenaceum*, EC<sub>50</sub> = 56 μg/mL, EC<sub>90</sub> = 131 μg/mL; *Alternaria citri*, EC<sub>50</sub> = 89 μg/mL, EC<sub>90</sub> > 200 μg/mL; *Botrytis cinerea*, EC<sub>50</sub> = 69 μg/mL, EC<sub>90</sub> = 77 μg/mL)<sup>[3751]</sup>; antibacterial. Source: SHAN YAO *Dioscorea batatas* [Syn. *Dioscorea opposita*], *Stemona* cf. *pierrei* (underground parts), *Pinus* sp. Ref: 658, 3751.

**5695 5,6-Dihydropiperlonguminine**

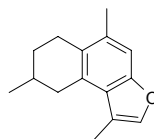
C<sub>16</sub>H<sub>21</sub>NO<sub>3</sub> (275.35). Pharm: Antifungal (*Cladosporium sphaerospermum*, MIA = 5.0 μg, control Nystatin, MIA = 0.5 μg). Source: LIU TU HU JIAO *Piper tuberculatum* (seed). Ref: 5102.

**5696 Dihydropseurata F**

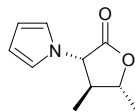
C<sub>22</sub>H<sub>32</sub>O<sub>7</sub> (408.50). mp 268–273°C. Source: CHUAN ZANG XIANG CHA CAI *Isodon pharicus*. Ref: 4067.

**5697 4,5-Dihydropyrocurzerenone**

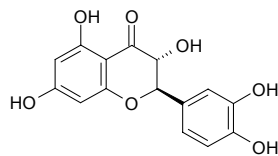
[59462-26-9] C<sub>15</sub>H<sub>18</sub>O (214.31). Crystals (pet. ether), mp 65–66°C, [α]<sub>D</sub><sup>17</sup> = -28° (c = 0.84, CHCl<sub>3</sub>). Source: JI JI *Chloranthus serratus*. Ref: 3122.

**5698 (3α,4β,5α)-4,5-Dihydro-3-(1-pyrryl)-4,5-dimethyl-2(3H)-furanone**

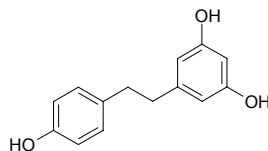
C<sub>10</sub>H<sub>13</sub>NO<sub>2</sub> (179.22). Yellowish needles. Source: GUANG JIN QIAN CAO *Desmodium styracifolium* (stem and leaf). Ref: 4907.

**5699 Dihydroquercetin**

Distylin; Taxifolin [480-18-2] C<sub>15</sub>H<sub>12</sub>O<sub>7</sub> (304.26). Yellow powder, mp 240–242°C, mp 221–222°C, [α]<sub>D</sub> = +44.1° (c = 1.0, Me<sub>2</sub>CO). Pharm: Anti-inflammatory (modulator of cytokine network: reduces IFN-γ-induced ICAM-1 protein, as well as mRNA expression in hmn keratinocytes)<sup>[4416]</sup>. Source: BA DAN XING REN *Prunus amygdalus*, BAI HUA YING SHAN HONG *Rhododendron mucronatum*, MAN SHAN HONG *Rhododendron dauricum*, YING SHAN HONG *Rhododendron mucronulatum*, XIAN HE CAO GEN *Agrimonia pilosa* var. *japonica*, HUANG LIAN YA *Pistacia chinensis*, TU FU LING *Smilax glabra*, XIAO YE HONG GUANG SHU *Knema globularia*, *Pinus maritime* (bark). Ref: 4, 6, 336, 411, 416, 2209, 4416.

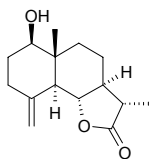
**5700 Dihydroresveratrol**

C<sub>14</sub>H<sub>14</sub>O<sub>3</sub> (230.47). Pharm: Antibacterial (*Escherichia coli* and *Staphylococcus aureus*); antifungal (*Cladosporium cladosporioides* and *Trichophyton mentagrophytes*). Source: *Morus* sp. Ref: 658.

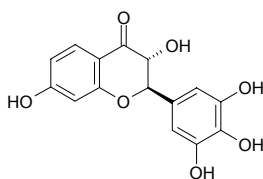


**5701 11 $\beta$ ,13-Dihydroreynosin**

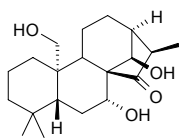
$C_{15}H_{22}O_3$  (250.34). **Pharm:** Cytotoxic (*in vitro*, HepG<sub>2</sub>, CD<sub>50</sub> > 100 $\mu$ g/mL; HeLa, CD<sub>50</sub> > 100 $\mu$ g/mL; OVCAR-3, CD<sub>50</sub> = 95 $\mu$ g/mL; control Cisplatin, HepG<sub>2</sub>, CD<sub>50</sub> = 2.8 $\mu$ g/mL; HeLa, CD<sub>50</sub> = 5.2 $\mu$ g/mL; OVCAR-3, CD<sub>50</sub> = 3 $\mu$ g/mL). **Source:** MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*] (root: yield = 0.0015%dw). **Ref:** 4720.

**5702 Dihydrorobinetin**

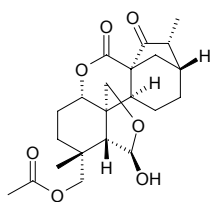
[70460-55-8]  $C_{15}H_{12}O_7$  (304.26). mp 246°C; 225~226°C. **Source:** CI HUAI HUA *Robinia pseudoacacia*. **Ref:** 6.

**5703 16,17-Dihydrorostronol F**

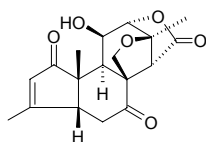
$C_{20}H_{32}O_4$  (336.48). **Pharm:** Cytotoxic inactive (hmn leukemia cell HL-60, 10 $\mu$ mol/L). **Source:** JIE XING YE TAI *Jungermannia truncata*. **Ref:** 4201.

**5704 Dihydrorugosanin**

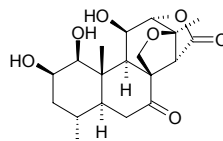
$C_{22}H_{30}O_7$  (406.48). mp 234~239°C,  $[\alpha]_D^{20} = -197.6^\circ$  ( $c = 0.21$ ,  $C_5H_5N$ ). **Source:** ZHOU YE XIANG CHA CAI *Isodon rugosus* [Syn. *Rabdosia rugosa*]. **Ref:** 4067.

**5705 5 $\beta$ ,6-Dihydrosamaderine A**

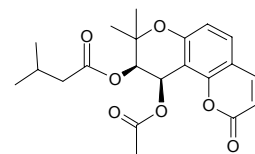
$C_{18}H_{20}O_6$  (332.36). White amorphous solid,  $[\alpha]_D = +75^\circ$  ( $c = 0.032$ ,  $CHCl_3$ ). **Source:** MA DAO HUANG LIAN SHU *Samadera madagascariensis* (leaf). **Ref:** 5334.

**5706 3,4 $\beta$ -Dihydrosamaderine C**

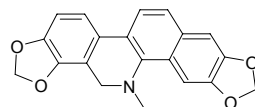
$C_{19}H_{26}O_7$  (366.41). Pale yellow amorphous solid,  $[\alpha]_D = -18^\circ$  ( $c = 0.022$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (non-small cell lung cancer NCI-H266, LC<sub>50</sub> = 20.9 $\mu$ g/mL; colon cancer HCC-2998, LC<sub>50</sub> = 26.1 $\mu$ g/mL, HCT116, LC<sub>50</sub> = 35.9 $\mu$ g/mL; HCT15, LC<sub>50</sub> = 8.55 $\mu$ g/mL; CNS cancer SF539, LC<sub>50</sub> = 21.8 $\mu$ g/mL, U251, LC<sub>50</sub> = 9.42 $\mu$ g/mL; melanoma LOX IMVI, LC<sub>50</sub> = 7.09 $\mu$ g/mL, M14, LC<sub>50</sub> = 11.0 $\mu$ g/mL, SK-MEL-5, LC<sub>50</sub> = 8.42 $\mu$ g/mL; renal cancer A498, LC<sub>50</sub> = 18.1 $\mu$ g/mL, ACHN, LC<sub>50</sub> = 10.9 $\mu$ g/mL; prostate cancer DU-145, LC<sub>50</sub> = 50.8 $\mu$ g/mL). **Source:** MA DAO HUANG LIAN SHU *Samadera madagascariensis* (leaf). **Ref:** 5334.

**5707 Dihydrosamidin**

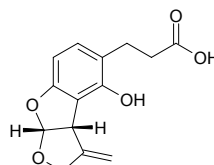
Dimidin [10182-81-7]  $C_{21}H_{24}O_7$  (388.42). mp 117~119°C (methanol),  $[\alpha]_D = +19^\circ$  ( $c = 1.0$ );  $[\alpha]_D = +63^\circ$  ( $c = 1.0$ , dioxane). **Pharm:** Anti-adrenaline; antihypercholesterolemic (rbt, inhibits rise of cholesterol and lecithin); vasodilator. **Source:** CHI A MI *Ammi visnaga*, ZHANG GUO QIN *Phlojodicarpus sibiricus*. **Ref:** 658, 661.

**5708 Dihydrosanguinarine**

[3606-45-9]  $C_{20}H_{15}NO_4$  (333.35). mp 191°C. **Pharm:** Antibacterial (antiphlogosis, using source plant XIAO HUA ZI JING, *Fumaria parviflora*); similar action with sanguinarin. **Source:** BAI QU CAI *Chelidonium majus* (whole herb: mean content of 5 origins = 0.049%)<sup>[5508]</sup>, DUI YE YUAN HU *Corydalis ledebouriana*, HUA LING CAO *Eschscholzia californica*, JU HUA HUANG LIAN *Corydalis pallida*, JU ZI JIN *Corydalis gigatea*, WEI LAN QIU GUO ZI JIN *Fumaria vaillantii*, XIAO HUA QIU GUO ZI JIN *Fumaria parviflora*, YING SU KE *Papaver somniferum*. **Ref:** 6, 658, 5508.

**5709 3,4-Dihydro-1,2-secomicrominutinin**

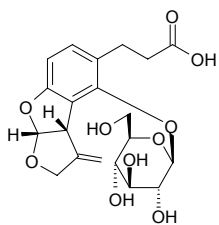
$C_{14}H_{14}O_5$  (262.26). Amorphous,  $[\alpha]_D^{26} = +6.0^\circ$  ( $c = 1.0$ , MeOH). **Source:** XIAO GAN *Micromelum falcatum*. **Ref:** 2421.



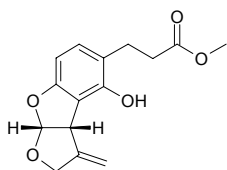


**5710 3,4-Dihydro-1,2-secomicrominin-9-O-glucoside**

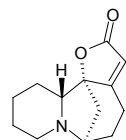
$C_{20}H_{24}O_{10}$  (424.41). Amorphous,  $[\alpha]_D^{26} = +11.5^\circ$  ( $c = 1.0$ , MeOH). Source: XIAO GAN *Micromelum falcatum*. Ref: 2421.

**5711 3,4-Dihydro-1,2-secomicrominin methyl ester**

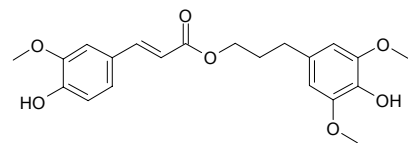
$C_{15}H_{16}O_5$  (276.29). Amorphous,  $[\alpha]_D^{26} = -3.6^\circ$  ( $c = 0.5$ ,  $CHCl_3$ ). Source: XIAO GAN *Micromelum falcatum*. Ref: 2421.

**5712 Dihydrosecurinine**

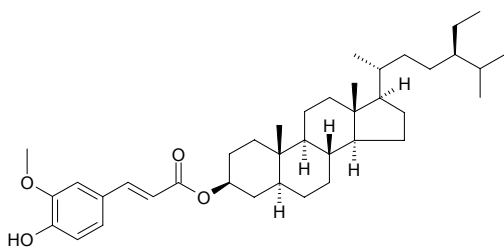
[1878-04-2]  $C_{13}H_{17}NO_2$  (219.29). mp 58~60°C. Source: YI YE QIU *Securinea suffruticosa*. Ref: 6.

**5713 Dihydrosinapyl ferulate**

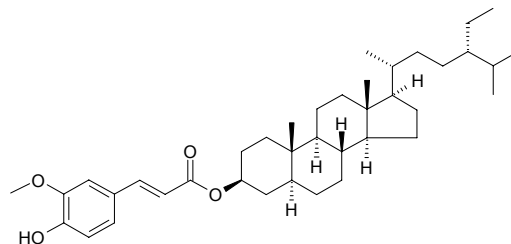
$C_{21}H_{24}O_7$  (388.42). Pale yellow semi-solid. Source: LUO TUO HAO *Peganum nigellastrum* (aerial parts). Ref: 3945.

**5714 Dihydro-β-sitosteryl ferulate**

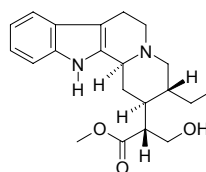
[83-45-4]  $C_{39}H_{60}O_4$  (592.91). mp 156~157°C. Source: MI PI KANG *Oryza sativa*. Ref: 6.

**5715 Dihydro-γ-sitosteryl ferulate**

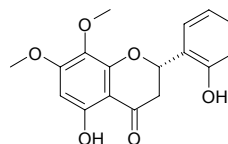
$C_{39}H_{60}O_4$  (592.91). mp 155~156°C. Source: MI PI KANG *Oryza sativa*. Ref: 6.

**5716 Dihydrositsirikine**

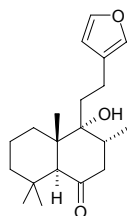
[6519-26-2]  $C_{21}H_{28}N_2O_3$  (356.47). Source: CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochera rosea*]. Ref: 2.

**5717 Dihydroskullcapflavone I**

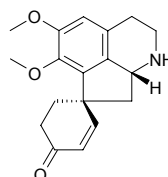
$C_{17}H_{16}O_6$  (316.31). Colorless needles ( $CHCl_3$ ), mp 151~153°C,  $[\alpha]_D^{28} = -21.7^\circ$  ( $c = 0.15$ , MeOH). Source: TIAO WEN CHUAN XIN LIAN *Andrographis lineata*. Ref: 3390.

**5718 Dihydroolidagenone**

$C_{20}H_{30}O_3$  (318.46). Source: MAN JING ZI *Vitex trifolia*. Ref: 746.

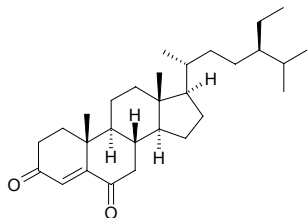
**5719 (+)-8,9-Dihydrostepharine**

$C_{18}H_{21}NO_3$  (299.37). Colorless needles (MeOH),  $[\alpha]_D = +141.4^\circ$  ( $c = 0.0055$ , MeOH). Source: HOU KE GUI *Cryptocarya chinensis* (wood). Ref: 3092.

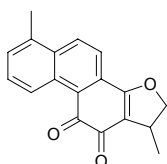


**5720 22-Dihydrostigmast-4-en-3,6-dione**

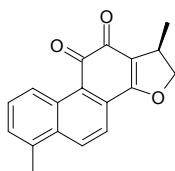
$C_{29}H_{46}O_2$  (426.69). mp 170–171°C. Source: LING *Trapa bispinosa*. Ref: 6.

**5721 15,17-Dihydrotanshinone I**

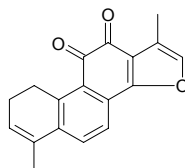
$C_{18}H_{14}O_3$  (278.31). Pharm: immunosuppressant (lymphocyte transformation assay control group concanavalin A, 5µg/mL, InRt = -28%; 20µg/mL, InRt = 28%; 80µg/mL, InRt = 49%, control Dexamethasone, 50µg/mL, InRt = 63%). Source: ZHAN LONG JIAN *Veronicastrum sibiricum* (aerial parts). Ref: 4260.

**5722 Dihydrotanshinone I**

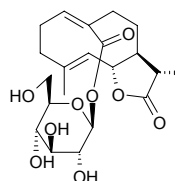
15,16-Dihydrotanshinone I  $C_{18}H_{14}O_3$  (278.31). Pharm: Antibacterial (*Staphylococcus aureus*, hmn *Mycobacterium tuberculosis* H37Rv, MIC = 1.5µg/mL); anti-allergic (inhibits degranulation of mast cell RBL-2H3, dose-dependent,  $IC_{50} = (14.3 \pm 2.1) \mu\text{mol/L}$ )<sup>[4939]</sup>, MAO A inhibitor (hmn recombinant MAO A,  $IC_{50} = 23 \mu\text{mol/L}$ ); iNOS inhibitor (RAW267.4 cells, LPS-induced,  $IC_{50} = 2.4 \mu\text{mol/L}$ )<sup>[5032]</sup>; acetylcholinesterase (AChE) inhibitor ( $IC_{50} = 1.0 \mu\text{mol/L}$ , Argentin A,  $IC_{50} = 42.8 \mu\text{mol/L}$ )<sup>[4944]</sup>. Source: DAN SHEN *Salvia miltiorrhiza* (dried root: mean content = 0.079%)<sup>[5508]</sup>, GAN XI SHU WEI CAO *Salvia przewalskii* (dried root: content = 0.067%)<sup>[5508]</sup>, HONG GEN CAO *Salvia prionitis* (dried root: content = 0.067%)<sup>[5508]</sup>, HUANG HUA SHU WEI CAO *Salvia flava* (dried root: content = 0.001%)<sup>[5508]</sup>, JI YE SHU WEI CAO *Salvia bulleyana* (dried root: content = 0.002%)<sup>[5508]</sup>, LI SE SHU WEI CAO *Salvia castanea* (dried root: content = 0.031%)<sup>[5508]</sup>, MAO DI HUANG SHU WEI CAO *Salvia digitaloides* (dried root: content = 0.001%)<sup>[5508]</sup>, NAN DAN SHEN *Salvia bowleyana* (dried root: content = 0.004%)<sup>[5508]</sup>, NI DAN SHEN *Salvia sinica* (dried root: content = 0.006%)<sup>[5508]</sup>, SAN YE SHU WEI CAO *Salvia trijuga* (dried root: content = 0.031%)<sup>[5508]</sup>, YUN NAN SHU WEI CAO *Salvia yunnanensis* (dried root: content = 0.019%)<sup>[5508]</sup>, ZI DAN SHEN *Salvia przewalskii* var. *mandarinorum* (dried root: content = 0.120%)<sup>[5508]</sup>. Ref: 2, 658, 4939, 4944, 5032, 5508.

**5723 1,2-Dihydrotanshinone**

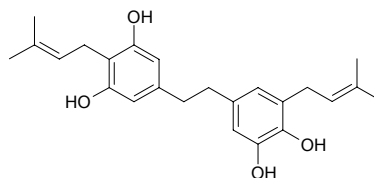
1,2-Dihydrotanshinone  $C_{18}H_{14}O_3$  (278.31). Red acicular crystals (benzene), mp 169°C. Source: DAN SHEN *Salvia miltiorrhiza*, GAN XI SHU WEI CAO *Salvia przewalskii*. Ref: 721, 4538.

**5724 11β,13-Dihydro-taraxinic acid-1'-O-β-D-glucopyranoside**

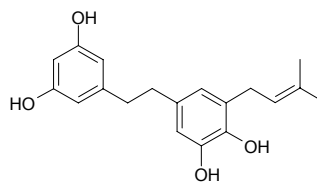
$C_{21}H_{30}O_9$  (426.47). Colorless needle crystals (EtOH–Et<sub>2</sub>O), mp 175–177°C,  $[\alpha]_D^{21} = -52.0^\circ$  (CH<sub>3</sub>OH,  $c = 0.450$ ). Source: DAO LUAN YE PU GONG YING GEN *Taraxacum obovatum*, YUAN JING HUAN YANG SHEN *Crepis napifera*. Ref: 2216, 5357.

**5725 α,α'-Dihydro-3,5,3',4'-tetrahydroxy-4,5'-diisopentenylstilbene**

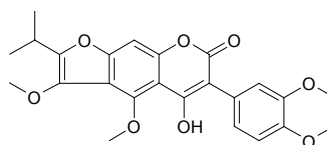
$C_{24}H_{30}O_4$  (382.5). Amorphous solid. Pharm: Antioxidant (linoleic acid solution, inhibition rate constant  $K_{inh} = 110000 \text{L}/(\text{mol}\cdot\text{s})$ ). Source: GUANG GUO GAN CAO *Glycyrrhiza glabra* (leaf: yield = 0.06%fw). Ref: 4685.

**5726 α,α'-Dihydro-3,5,3',4'-tetrahydroxy-5'-isopentenyl stilbene**

$C_{19}H_{22}O_4$  (314.38). Yellow oil. Pharm: Antioxidant (linoleic acid solution, inhibition rate constant  $K_{inh} = 90000 \text{L}/(\text{mol}\cdot\text{s})$ ). Source: GUANG GUO GAN CAO *Glycyrrhiza glabra* (leaf: yield = 0.25%fw). Ref: 4685.

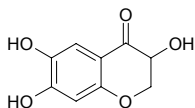
**5727 3'',4''-DihydrothoningineC**

$C_{24}H_{24}O_8$  (440.45). Colorless oil. Source: *Milletia thonningii*. Ref: 2326.

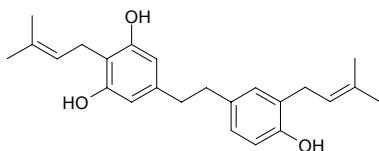


**5728 2,3-Dihydro-3,6,7-trihydroxy-1-H-benzo[b]pyran-4-one**

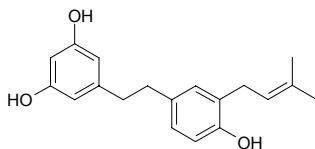
$C_9H_8O_5$  (196.16). Yellow powder,  $[\alpha]_D^{23} = -8.0^\circ$  ( $c = 0.50$ , MeOH). Source: HUA TAO SHU *Trewin nudiflora* (seed crust). Ref: 4894.

**5729  $\alpha,\alpha'$ -Dihydro-3,5,4'-trihydroxy-4,5'-diisopentenylstilbene**

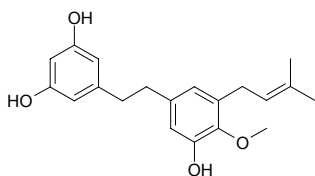
$C_{24}H_{30}O_3$  (366.5). Orange-yellow oil. Pharm: Antioxidant (linoleic acid solution, inhibition rate constant  $K_{inh} = 70000L/(mol \cdot s)$ ). Source: GUANG GUO GAN CAO *Glycyrrhiza glabra* (leaf: yield = 0.16%fw). Ref: 4685.

**5730  $\alpha,\alpha'$ -Dihydro-3,5,4'-trihydroxy-5'-isopentenylstilbene**

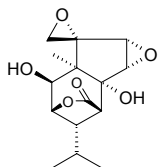
$C_{19}H_{22}O_3$  (298.39). Amorphous solid. Pharm: Antioxidant (linoleic acid solution, inhibition rate constant  $K_{inh} = 60000L/(mol \cdot s)$ ). Source: GUANG GUO GAN CAO *Glycyrrhiza glabra* (leaf: yield = 0.08%fw). Ref: 4685.

**5731  $\alpha,\alpha'$ -Dihydro-3,5,3'-trihydroxy-4'-methoxy-5'-isopentenylstilbene**

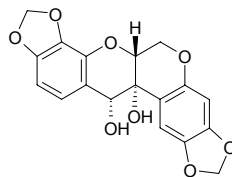
$C_{20}H_{24}O_4$  (328.41). Colorless oil. Pharm: Antioxidant (linoleic acid solution, inhibition rate constant  $K_{inh} = 80000L/(mol \cdot s)$ ). Source: GUANG GUO GAN CAO *Glycyrrhiza glabra* (leaf: yield = 0.35%fw). Ref: 4685.

**5732 Dihydrotutin**

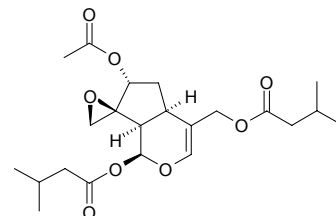
$C_{15}H_{20}O_6$  (296.32). Source: RI BEN MA SANG *Coriaria japonica* (seed). Ref: 4497.

**5733 12-Dihydrousarotenoid A**

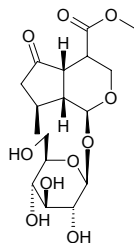
$C_{18}H_{14}O_8$  (358.31). Pharm: Antimalarial inactive (antiplasmodial, chloroquine-resistant W2 strain of *Plasmodium falciparum*,  $IC_{50} > 100\mu mol/L$ , control Chloroquine,  $IC_{50} = 0.094\mu mol/L$ , control Quinine,  $IC_{50} = 0.209\mu mol/L$ ; chloroquine-sensitive D6 strain of *Plasmodium falciparum*,  $IC_{50} > 100\mu mol/L$ , control Chloroquine,  $IC_{50} = 0.009\mu mol/L$ , control Quinine,  $IC_{50} = 0.044\mu mol/L$ ). Source: *Milletia usaramensis* ssp. *usaramensis*. Ref: 3454.

**5734 Dihydrovalepotriate**

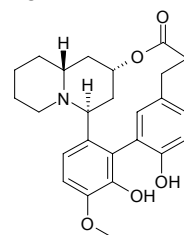
$C_{22}H_{32}O_8$  (424.50). mp 62~63°C. Source: ZHI ZHU XIANG *Valeriana jatamansii* [Syn. *Valeriana wallichii*]. Ref: 6.

**5735 3,4-Dihydroverbenalin**

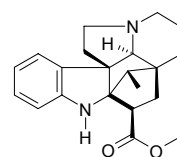
$C_{17}H_{26}O_{10}$  (390.39). Amorphous powder (CH<sub>3</sub>OH), mp 209~211°C. Source: MA BIAN CAO *Verbena officinalis*. Ref: 787.

**5736 Dihydroverticillatine**

[10215-02-8]  $C_{25}H_{29}NO_5$  (423.51). mp 258~259°C. Source: ZI WEI YE *Lagerstroemia indica*. Ref: 6.

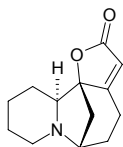
**5737 Dihydrovindolinine**

[17172-16-6]  $C_{21}H_{26}N_2O_2$  (338.45). Source: CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochera rosea*]. Ref: 2.

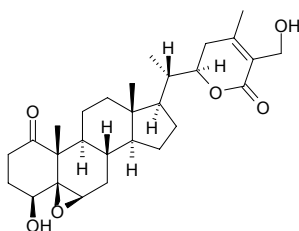


**5738 14,15-Dihydrovirosecurinine**

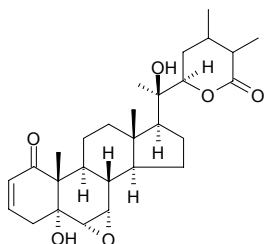
$C_{13}H_{17}NO_2$  (219.29). Yellow oil,  $[\alpha]_D^{20} = +280^\circ$  ( $c = 0.1$ , EtOH). Source: YI YE QIU *Securinega suffruticosa* (branch leaf). Ref: 4818.

**5739 2,3-Dihydrowithaferin A**

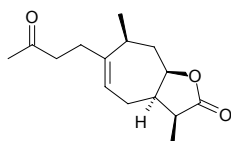
$C_{28}H_{40}O_6$  (472.63). Pharm: Acetylcholinesterase (AChE) inhibitor ( $IC_{50} = (500 \pm 3) \mu\text{mol/L}$ , control Galanthamine  $IC_{50} = (8.2 \pm 0.0) \mu\text{mol/L}$ , Eserine  $IC_{50} = (0.85 \pm 0.00) \mu\text{mol/L}$ ); BChE inhibitor inactive. Source: CUI MIAN SHUI QIE *Withania somnifera*. Ref: 2563.

**5740 24,25-Dihydrowithanolide A**

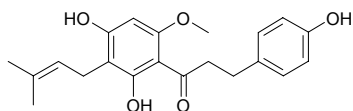
$C_{28}H_{40}O_6$  (472.63). Source: CUI MIAN SHUI QIE *Withania somnifera* (leaf). Ref: 5329.

**5741 11 $\alpha$ ,13-Dihydroxanthalongin**

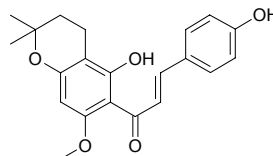
$C_{15}H_{22}O_3$  (250.34). Source: JIN FEI CAO *Inula japonica*. Ref: 5422.

**5742 Dihydroxanthohumol**

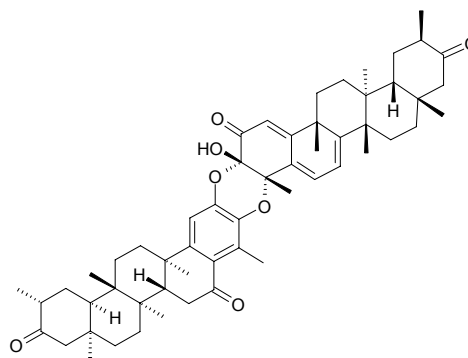
$\alpha,\beta$ -Dihydroxanthohumol  $C_{21}H_{24}O_5$  (356.42). Pharm: Anti-inflammatory (NO production inhibitor, *in vitro*, macrophage RAW264.7 cells, induced by LPS/IFN- $\gamma$ ,  $IC_{50} = 23 \mu\text{mol/L}$ , without showing cytotoxicity at concentrations lower than  $10 \mu\text{mol/L}$ , cell viability > 95%)<sup>[4795]</sup>. Source: PI JIU HUA *Humulus lupulus* (strobile). Ref: 4789, 4795.

**5743 1'',2''-Dihydroxanthohumol C**

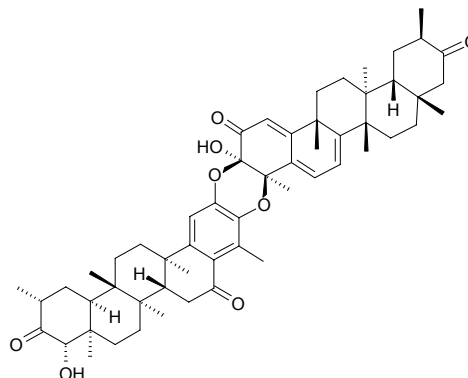
(2*E*)-1-(3,4-Dihydro-5-hydroxy-7-methoxy-2,2-dimethyl-2*H*-1-benzopyran-6-yl)-3-(4-hydroxyphenyl)-2-propen-1-one  $C_{21}H_{22}O_5$  (354.41). Orange solid. Source: PI JIU HUA *Humulus lupulus* (strobile). Ref: 4789.

**5744 7',8'-Dihydroxuarine A $\alpha$** 

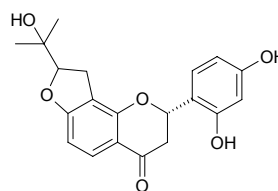
$C_{56}H_{72}O_7$  (857.19). Yellow amorphous solid. Source: QIU SHI MEI DENG MU *Maytenus chuchuhuasca* (bark). Ref: 4295.

**5745 7',8'-Dihydroxuarine D $\beta$** 

$C_{56}H_{72}O_8$  (873.19). Yellow amorphous solid. Source: QIU SHI MEI DENG MU *Maytenus chuchuhuasca* (bark). Ref: 4295.

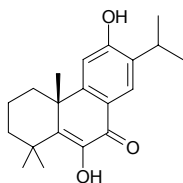
**5746 (2*S*)-2',4'-Dihydroxy-2''-(1-hydroxy-1-methylethyl)dihydrofuro [2,3-*h*]-flavanone**

$C_{20}H_{20}O_6$  (356.38). Yellow powder. Pharm: Cytotoxic (aromatase inhibitor, a promising lead as potential cancer chemopreventive agents)<sup>[5038]</sup>; aromatase inhibitor (*in vitro*,  $IC_{50} = 0.1 \mu\text{mol/L}$ ; control Aminoglutethimide,  $IC_{50} = 6.4 \mu\text{mol/L}$ )<sup>[3090]</sup>. Source: GOU SHU *Broussonetia papyrifera*. Ref: 3090, 5038.

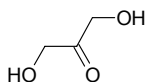


**5747 6,12-Dihydroxy-5,8,11,13-abietetraen-7-one**

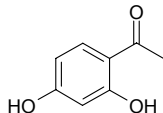
6,12-Dihydroxyabieta-5,8,11,13-tetraen-7-one [140923-35-9] C<sub>20</sub>H<sub>26</sub>O<sub>3</sub> (314.43). [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -9.0° (c = 1.0, CHCl<sub>3</sub>). **Pharm:** Antibacterial (*Staphylococcus aureus*, MIC = 7.8 μg/mL (MCC > 250 μg/mL), control Tetracycline, MIC = 1.56 μg/mL; *Bacillus subtilis*, MIC > 250 μg/mL, Tetracycline, MIC = 1.56 μg/mL; *Enterococcus faecalis*, MIC = 7.8 μg/mL (MCC > 250 μg/mL), Tetracycline, MIC = 1.56 μg/mL; *Listeria monocytogenes*, MIC = 7.8 μg/mL (MCC > 250 μg/mL), Tetracycline, MIC < 0.39 μg/mL; *Salmonella enteritidis*, MIC > 250 μg/mL, Tetracycline, MIC = 1.56 μg/mL; *Escherichia coli*, MIC > 250 μg/mL, Tetracycline, MIC = 1.56 μg/mL; *Shigella sonnei*, MIC > 250 μg/mL, Tetracycline, MIC = 6.25 μg/mL)<sup>[5401]</sup>; antifungal (*Candida albicans*, MIC > 250 μg/mL, Miconazole, MIC = 8 μg/mL; *Candida krusei*, MIC > 250 μg/mL, Miconazole, MIC = 2 μg/mL)<sup>[5401]</sup>. **Source:** CHANG GENG CU FEI *Cephalotaxus harringtonia* var. *drupacea*, DU SONG SHI *Juniperus rigida*. **Ref:** 6, 5401.

**5748 Dihydroxyacetone**

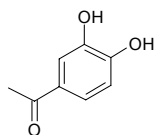
[96-26-4] C<sub>3</sub>H<sub>6</sub>O<sub>3</sub> (90.08). **Source:** CU vinegar. **Ref:** 6.

**5749 2',4'-Dihydroxyacetophenone**

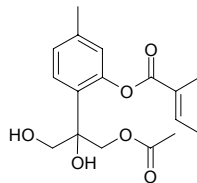
[89-84-9] C<sub>8</sub>H<sub>8</sub>O<sub>3</sub> (152.15). **Source:** DANG GUI *Angelica sinensis*. **Ref:** 2.

**5750 3',4'-Dihydroxyacetophenone**

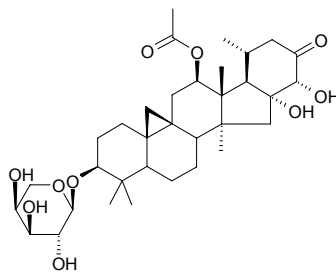
[1197-09-7] C<sub>8</sub>H<sub>8</sub>O<sub>3</sub> (152.14). White tiny cluster acicular crystals, mp 119–121°C. **Pharm:** Platelet aggregation inhibitor (induced by ADP, 0.5 mg/mL); CVS activity (anesthetic dog iv, 40 mg/kg, increases coronary flow, reduces consumption of oxygen in myocardium, increases cerebral blood flow, lowers blood pressure, and slows heart rate); inhibits vasomotion (induced by KCl, 1.0 mg/kg); anti-inflammatory inactive (no significant inhibitory effects on mast cells and neutrophils stimulated with various inducers; no significant inhibitory effects on TNF- $\alpha$  formation from RAW264.7 stimulated with LPS and N9 microglial cells stimulated with LPS/INF- $\gamma$ )<sup>[3054]</sup>. **Source:** BAI WEI *Cynanchum atratum* (root)<sup>[3054]</sup>, JU HUA *Chrysanthemum morifolium* [Syn. *Dendranthema morifolium*], TU MAO DONG QING *Ilex pubescens* var. *glaber*. **Ref:** 661, 3054.

**5751 8,10-Dihydroxy-9-acetoxythymol 3-O-tiglate**

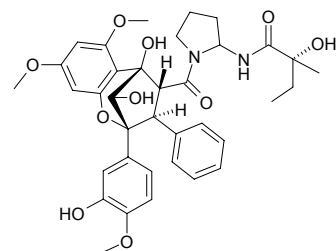
C<sub>17</sub>H<sub>22</sub>O<sub>6</sub> (322.36). [ $\alpha$ ]<sub>D</sub><sup>21</sup> = -1.6° (c = 1.5, CHCl<sub>3</sub>). **Source:** PEI LAN *Eupatorium fortunei* (aerial parts). **Ref:** 3077.

**5752 16 $\alpha$ ,24 $\alpha$ -Dihydroxy-12 $\beta$ -acetoxy-25,26,27-trinor-16,24-cycloartan-23-one 3 $\beta$ -O- $\alpha$ -L-arabinopyranoside**

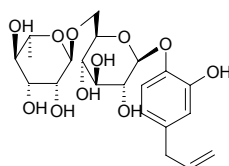
C<sub>34</sub>H<sub>52</sub>O<sub>10</sub> (620.79). White powder (MeOH), mp 257–259°C, [ $\alpha$ ]<sub>D</sub> = -102.1° (c = 0.18, MeOH). **Source:** XING AN SHENG MA *Cimicifuga dahurica* (rhizome). **Ref:** 4140.

**5753 3',19-Dihydroxyaglaine C**

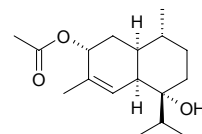
C<sub>36</sub>H<sub>42</sub>N<sub>2</sub>O<sub>10</sub> (662.74). [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -103.4° (c = 0.43, CHCl<sub>3</sub>). **Source:** MI ZI LAN *Aglaia odorata*. **Ref:** 2289.

**5754 3,4-Dihydroxyallylbenzene 4-O-[ $\alpha$ -L-rhamnopyranosyl-(1→6)]- $\beta$ -D-glucopyranoside**

C<sub>21</sub>H<sub>30</sub>O<sub>11</sub> (458.47). White amorphous powder. **Source:** JIAN YE LONG XUE SHU *Dracaena cochinchinensis*. **Ref:** 832.

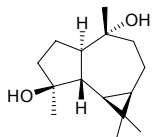
**5755 3 $\alpha$ ,7 $\alpha$ -Dihydroxy amorph-4-ene 3-acetate**

C<sub>17</sub>H<sub>28</sub>O<sub>3</sub> (280.41). Colorless oil, [ $\alpha$ ]<sub>D</sub> = -9.4° (c = 0.1, CHCl<sub>3</sub>). **Source:** HUANG HUA HAO *Artemisia annua* (seed). **Ref:** 3435.

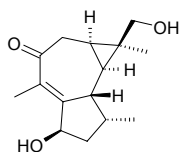


**5756 4 $\beta$ ,10 $\alpha$ -Dihydroxyaromadendrane**

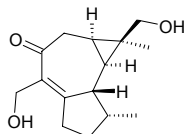
C<sub>15</sub>H<sub>26</sub>O<sub>2</sub> (238.37). Source: JU DA MI ZI LAN *Aglaia grandis* (leaf). Ref: 3947.

**5757 2 $\beta$ ,13-Dihydroxyaromadendr-1(10)-en-9-one**

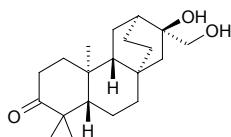
C<sub>15</sub>H<sub>22</sub>O<sub>3</sub> (250.34). Needles (acetone), mp 145~146°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -128° (*c* = 0.6, CHCl<sub>3</sub>). Pharm: Insecticidal (adult *Cylas formicarius elegantulus*, 0.04mg/insect, 24h mortality = 10%, 48h mortality = 20%, 72h mortality = 70%)<sup>[5140]</sup>. Source: *Curvularia lunata*. Ref: 5140.

**5758 13,14-Dihydroxyaromadendr-1(10)-en-9-one**

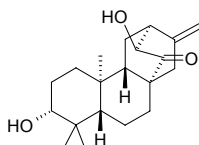
C<sub>15</sub>H<sub>22</sub>O<sub>3</sub> (250.34). Oil, [ $\alpha$ ]<sub>D</sub> = -160° (*c* = 1.0, CHCl<sub>3</sub>). Pharm: Insecticidal (adult *Cylas formicarius elegantulus*, 0.04mg/insect, 24h mortality = 10%, 48h mortality = 40%, 72h mortality = 80%)<sup>[5140]</sup>. Source: *Curvularia lunata*. Ref: 5140.

**5759 ent-16 $\alpha$ ,17-Dihydroxyatisan-3-one**

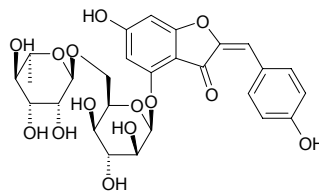
C<sub>20</sub>H<sub>32</sub>O<sub>3</sub> (320.48). Colorless needles. Source: DA GUO DA JI *Euphorbia wallichii* (root). Ref: 4585.

**5760 ent-3 $\beta$ , (13S)-Dihydroxyatis-16-en-14-one**

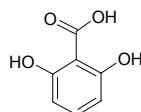
C<sub>20</sub>H<sub>30</sub>O<sub>3</sub> (318.46). White powder. Source: DA GUO DA JI *Euphorbia wallichii* (root). Ref: 4585.

**5761 6,4'-Dihydroxy aurone 4-O-rutinoside**

C<sub>27</sub>H<sub>30</sub>O<sub>14</sub> (578.53). mp 228°C. Source: SI ZI TAN *Pterocarpus santalinus* (wood). Ref: 3889.

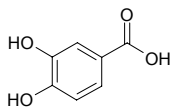
**5762 2,6-Dihydroxybenzoic acid**

C<sub>7</sub>H<sub>6</sub>O<sub>4</sub> (154.12). Source: HU ZHANG *Polygonum cuspidatum*. Ref: 4186.

**5763 3,4-Dihydroxybenzoic acid**

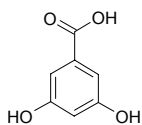
Protocatechuic acid [99-50-3] C<sub>7</sub>H<sub>6</sub>O<sub>4</sub> (154.12). mp 199~200°C, 195~196°C. Pharm: DPPH scavenger (SC<sub>50</sub> = 11μmol/L)<sup>[4247]</sup>; antioxidant (*in vitro*, DPPH scavenger, 0.1mg/mL, ScRt = 86.5%)<sup>[3015]</sup>; antioxidant (superoxide anion radical scavenger, superoxide dismutase method, IC<sub>50</sub> for Formazan formation activity = 7.2μmol/L)<sup>[4247]</sup>; prostaglandin synthetase activator; antiasthmatic (gpg, asthma induced by histamine); antibacterial (*Staphylococcus albus*, *Staphylococcus aureus*, *Diplococcus pneumoniae*,  $\alpha$ -*Streptococcus*, *Bacillus coli*, *Bacillus pyocyaneus*, *Bacillus proteus* and *Hemophilus influenzae*); antifungal (ash fungi); antihepatotoxin; anti-inflammatory; anti-venom; antitussive (dispels phlegm, mus, orl, 4.86mg); reduces consumption of oxygen in myocardium; LD<sub>50</sub> (mus, ip) = 896.4mg/kg. Source: AI NA XIANG *Blumea balsamifera* (leaf and twig: mean content = 0.0077%)<sup>[5508]</sup>, BAI YE TENG *Cryptolepis sinensis*, BAN XIA *Pinellia ternata*, CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*], DAN SHEN *Salvia miltiorrhiza* (dried root: content = 0.047%)<sup>[5508]</sup>, DIAN NAN HONG HOU KE *Calophyllum polyanthum* (seed: yield = 0.0056%dw)<sup>[4767]</sup>, GAN XI SHU WEI CAO *Salvia przewalskii* (dried root: content = 0.340%)<sup>[5508]</sup>, GE YE MI HOU TAO *Actinidia rubricaulis* var. *coriacea* (ripe fruit: content = 0.34%)<sup>[5508]</sup>, GUI ZHI *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*] (twig: content scope of 41 origins = 0.0015%~0.0164%, mean content = 0.0069%)<sup>[5508]</sup>, HONG GEN CAO *Salvia prionitis* (dried root: content = 0.038%)<sup>[5508]</sup>, HONG PI YUN SHAN *Picea koraiensis*, HU HUANG LIAN *Picrorhiza kurroa*, HU ZHANG *Polygonum cuspidatum*, HUA NAN MI HOU TAO *Actinidia glaucophylla* (ripe fruit: content = 0.40%)<sup>[5508]</sup>, HUANG HUA SHU WEI CAO *Salvia flava* (dried root: content = 0.464%)<sup>[5508]</sup>, JI YE SHU WEI CAO *Salvia bulleyana* (dried root: content = 0.296%)<sup>[5508]</sup>, JIN HUA MI HOU TAO *Actinidia chrysantha* (ripe fruit: content = 0.17%)<sup>[5508]</sup>, JIN MAO GOU *Cibotium barometz* [Syn. *Polypodium barometz*] (rhizome: mean content of 4 origins = 0.0284%)<sup>[5508]</sup>, JING LI MI HOU TAO *Actinidia callosa* var. *henryi* (ripe fruit: content = 0.32%)<sup>[5508]</sup>, JU AN *Eucalyptus grandis*, KUO YE MI HOU TAO *Actinidia latifolia* (ripe fruit: content = 0.18%)<sup>[5508]</sup>, LAN YU BAI JI *Bletilla formosana* (whole herb), LI SE SHU WEI CAO *Salvia castanea* (dried root: content = 0.336%)<sup>[5508]</sup>, LI ZHI CAO *Salvia plebeia*, LU SHAN SHI WEI *Pyrrhosia sheareri*, LU XIAN CAO

*Pyrola calliantha* [Syn. *Pyrola rotundifolia* ssp. *chinensis*], MANG QI GU *Dicranopteris pedata* [Syn. *Polypodium pedatum*; *Dicranopteris dichotoma*], MAO DI HUANG SHU WEI CAO *Salvia digitaloides* (dried root: content = 0.140%)<sup>[5508]</sup>, MAO HUA MI HOU TAO *Actinidia eriantha* (ripe fruit: content = 0.14%)<sup>[5508]</sup>, MEI WEI MI HOU TAO *Actinidia deliciosa* (ripe fruit: content = 0.16%)<sup>[5508]</sup>, MI HOU LI *Actinidia arguta* (ripe fruit: content = 0.26%)<sup>[5508]</sup>, MI HOU TAO *Actinidia chinensis* (ripe fruit: content = 0.11%)<sup>[5508]</sup>, MU TIAN LIAO *Actinidia polygama* (ripe fruit: content = 0.31%)<sup>[5508]</sup>, MU ZEI MA HUANG *Ephedra equisetina*, NAN DAN SHEN *Salvia bowleyana* (dried root: content = 0.217%)<sup>[5508]</sup>, NAN FANG OU SHI *Erica australis*, NI DAN SHEN *Salvia sinica* (dried root: content = 0.088%)<sup>[5508]</sup>, PU HUANG *Typha angustata*, QUAN CHI QIANG WEI *Rosa canina*, SAN YE SHU WEI CAO *Salvia trijuga* (dried root: content = 0.147%)<sup>[5508]</sup>, SANG HUANG *Phellinus igniarius* (sporocarp: yield = 0.0008%dw)<sup>[4747]</sup>, SI JI QING *Ilex chinensis* [Syn. *Ilex purpurea*], XIAN REN ZHANG *Opuntia dillenii* (fresh stem: yield = 0.00041%), XIU MAO JI SHENG *Taxillus levinei*, XUAN FU HUA *Inula britannica*, YUN NAN SHU WEI CAO *Salvia yunnanensis* (dried root: content = 0.059%)<sup>[5508]</sup>, ZANG HONG HUA *Crocus sativus* (petal: yield = 0.00016%), ZI HUA JING TIAN *Hylotelephium mingjinianum*, ZONG LV PI *Trachycarpus fortunei* (petiole and fibre of sheath, roasted petiole: mean content of 5 origins = 0.033%)<sup>[5508]</sup>, occurs in many plants (various higher plants: e.g. *Fagopyrum* spp. and *Alnus* spp. etc). Ref: 2, 4, 6, 308, 527, 559, 658, 660, 1521, 3015, 4247, 4500, 4747, 4767, 5501, 5508.



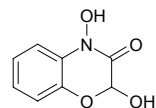
**5764 3,5-Dihydroxybenzoic acid**

[99-10-5] C<sub>7</sub>H<sub>6</sub>O<sub>4</sub> (154.12). Light-yellow crystals, mp 232–233°C, mp 176–178°C. Source: SHAN ZHU YU *Cornus officinalis* [Syn. *Macrocarpum officinale*] (fruit: yield = 0.0028%dw)<sup>[9]</sup>, ZE QI *Euphorbia helioscopia*. Ref: 6, 9.



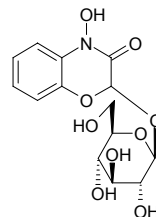
**5765 2,4-Dihydroxy-1,4-benzoxazin-3-one**

C<sub>8</sub>H<sub>7</sub>NO<sub>4</sub> (181.15). Source: LAO SHU LE *Acanthus ilicifolius*. Ref: 2080.



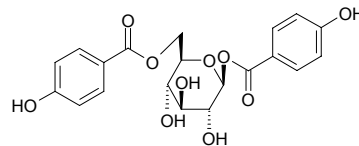
**5766 2,4-Dihydroxy-1,4-benzoxazin-3-one-2-O-beta-D-glucopyranoside**

C<sub>14</sub>H<sub>17</sub>NO<sub>9</sub> (343.29). Source: LAO SHU LE *Acanthus ilicifolius*. Ref: 2080.



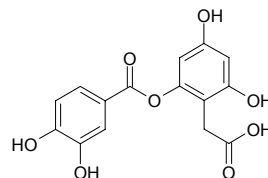
**5767 1,6-Di-O-p-hydroxybenzoyl-beta-D-glucopyranoside**

C<sub>20</sub>H<sub>20</sub>O<sub>10</sub> (420.38). Source: ZI YE *Catalpa ovata* (fallen leaf). Ref: 4290.



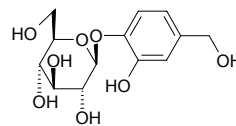
**5768 2-O-(3,4-Dihydroxybenzoyl)-2,4,6-trihydroxyphenylacetic acid**

C<sub>13</sub>H<sub>12</sub>O<sub>8</sub> (320.26). Solid. Source: LI CHUN HUA *Papaver commutatum* [Syn. *Papaver rhoeas*] (petal). Ref: 4965.



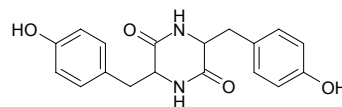
**5769 3,4-Dihydroxybenzyl alcohol-4-glucoside**

C<sub>13</sub>H<sub>18</sub>O<sub>8</sub> (302.28). Source: YE LI ZHI YE *Pyrus calleryana*. Ref: 6.



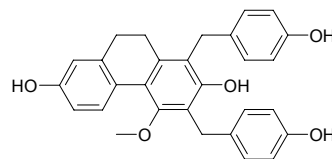
**5770 3,6-Di(4-hydroxy)benzyl-2,5-dioxopiperazine**

C<sub>18</sub>H<sub>18</sub>N<sub>2</sub>O<sub>4</sub> (326.36). Source: DONG CHONG XIA CAO *Cordyceps sinensis* (whole herb). Ref: 4462.



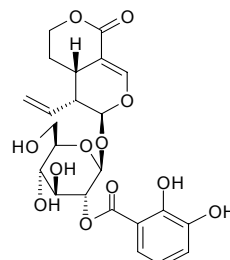
**5771 1,3-Di(4-hydroxybenzyl)-4-methoxy-9,10-dihydrophenanthrene-2,7-diol**

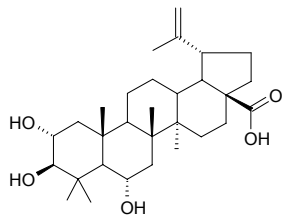
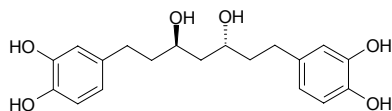
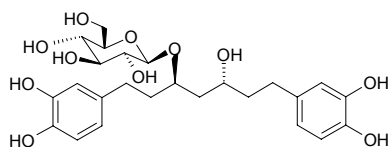
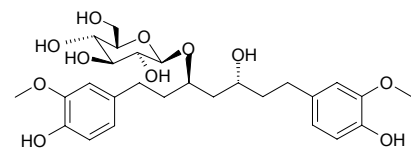
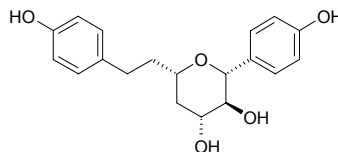
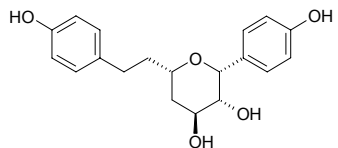
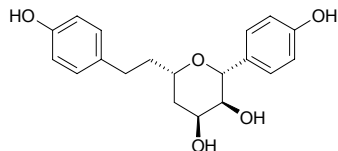
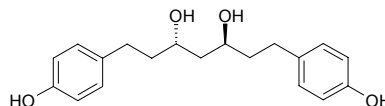
C<sub>29</sub>H<sub>26</sub>O<sub>5</sub> (454.53). Source: LAN YU BAI JI *Bleilla formosana* (whole herb). Ref: 4500.



**5772 2'-(o,m-Dihydroxybenzyl) sweroside**

[201598-65-4] C<sub>23</sub>H<sub>26</sub>O<sub>12</sub> (494.46). Yellow amorphous powder, mp 101–103°C, [α]<sub>D</sub><sup>20</sup> = –86° (c = 6.349, MeOH). Source: BAI HUA LONG DAN *Gentiana algida*. Ref: 704.

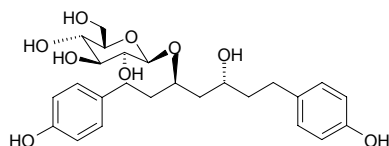


**5773 2 $\alpha$ ,6 $\alpha$ -Dihydroxybetulinic acid**C<sub>30</sub>H<sub>48</sub>O<sub>5</sub> (488.71). Colorless amorphous solid, mp 223~225°C (MeOH).Source: *Leandra chaetodon* (whole herb). Ref: 5411.**5774 (3R,5R)-3,5-Dihydroxy-1,7-bis-(3,4-dihydroxyphenyl)heptane**C<sub>19</sub>H<sub>24</sub>O<sub>6</sub> (348.4). Viscous syrup,  $[\alpha]_D^{23} = +4.0^\circ$  ( $c = 0.10$ , MeOH). Pharm: Cytotoxic (*in vitro*, HL-60, IC<sub>50</sub> = 1.8 $\mu$ g/mL; HSC-2, IC<sub>50</sub> = 54 $\mu$ g/mL; HGF, IC<sub>50</sub> > 250 $\mu$ g/mL; control Etoposide: HL-60, IC<sub>50</sub> = 0.2 $\mu$ g/mL; HSC-2, IC<sub>50</sub> = 24 $\mu$ g/mL; HGF, IC<sub>50</sub> > 200 $\mu$ g/mL). Source: JIAN GEN SHU *Tacca chantrieri* [Syn. *Tacca minor*; *Tacca esquirolii*] (rhizome: yield = 0.02%dw). Ref: 4609.**5775 (3R,5R)-3,5-Dihydroxy-1,7-bis(3,4-dihydroxyphenyl)heptane 3-O- $\beta$ -D-glucopyranoside**C<sub>25</sub>H<sub>34</sub>O<sub>11</sub> (510.54). Amorphous solid,  $[\alpha]_D^{23} = -8.0^\circ$  ( $c = 0.10$ , MeOH). Pharm: Cytotoxic (*in vitro*, HL-60, IC<sub>50</sub> = 3 $\mu$ g/mL; HSC-2, IC<sub>50</sub> = 92 $\mu$ g/mL; HGF, IC<sub>50</sub> = 189 $\mu$ g/mL; control Etoposide: HL-60, IC<sub>50</sub> = 0.2 $\mu$ g/mL; HSC-2, IC<sub>50</sub> = 24 $\mu$ g/mL; HGF, IC<sub>50</sub> > 200 $\mu$ g/mL). Source: JIAN GEN SHU *Tacca chantrieri* [Syn. *Tacca minor*; *Tacca esquirolii*] (rhizome: yield = 0.0022%dw). Ref: 4609.**5776 (3R,5R)-3,5-Dihydroxy-1,7-bis(4-hydroxy-3-methoxyphenyl)heptane 3-O- $\beta$ -D-glucopyranoside**C<sub>27</sub>H<sub>38</sub>O<sub>11</sub> (538.6). Amorphous solid,  $[\alpha]_D^{23} = -18.0^\circ$  ( $c = 0.10$ , MeOH). Pharm: Cytotoxic (*in vitro*, HL-60, IC<sub>50</sub> > 10 $\mu$ g/mL; HSC-2, IC<sub>50</sub> = 198 $\mu$ g/mL; HGF, IC<sub>50</sub> > 250 $\mu$ g/mL; control Etoposide: HL-60, IC<sub>50</sub> = 0.2 $\mu$ g/mL; HSC-2, IC<sub>50</sub> = 24 $\mu$ g/mL; HGF, IC<sub>50</sub> > 200 $\mu$ g/mL). Source: JIAN GEN SHU *Tacca chantrieri* [Syn. *Tacca minor*; *Tacca esquirolii*] (rhizome: yield = 0.00072%dw). Ref: 4609.**5777 (3S,5R,6S,7R)-5,6-Dihydroxy-1,7-bis(4-hydroxyphenyl)-de-O-methylcentrolbine**C<sub>19</sub>H<sub>22</sub>O<sub>5</sub> (330.38). Yellow amorphous solid. Pharm: Cytotoxic (mixture with (3S,5S,6R,7R)-5,6-Dihydroxy-1,7-bis(4-hydroxyphenyl)-de-O-methylcentrolbine: Colon26-L5, ED<sub>50</sub> = 49.4 $\mu$ mol/L, control 5-FU, ED<sub>50</sub> = 0.53 $\mu$ mol/L; HT1080, ED<sub>50</sub> = 83.7 $\mu$ mol/L, 5-FU, ED<sub>50</sub> = 8.0 $\mu$ mol/L). Source: YUN NAN CAO KOU *Alpinia blepharocalyx* (seed). Ref: 3048.**5778 (3S,5S,6R,7R)-5,6-Dihydroxy-1,7-bis(4-hydroxyphenyl)-de-O-methylcentrolbine**C<sub>19</sub>H<sub>22</sub>O<sub>5</sub> (330.38). Yellow amorphous solid. Pharm: Cytotoxic (mixture with (3S,5R,6S,7R)-5,6-Dihydroxy-1,7-bis(4-hydroxyphenyl)-de-O-methylcentrolbine: Colon26-L5, ED<sub>50</sub> = 49.4 $\mu$ mol/L, control 5-FU, ED<sub>50</sub> = 0.53 $\mu$ mol/L; HT1080, ED<sub>50</sub> = 83.7 $\mu$ mol/L, 5-FU, ED<sub>50</sub> = 8.0 $\mu$ mol/L). Source: YUN NAN CAO KOU *Alpinia blepharocalyx* (seed). Ref: 3048.**5779 (3S,5S,6S,7R)-5,6-Dihydroxy-1,7-bis(4-hydroxyphenyl)-4''-de-O-methylcentrolbine**C<sub>19</sub>H<sub>22</sub>O<sub>5</sub> (330.38). Yellow amorphous solid,  $[\alpha]_D^{25} = +28.5^\circ$  ( $c = 0.040$ , MeOH). Pharm: Cytotoxic (Colon26-L5, ED<sub>50</sub> = 44.2 $\mu$ mol/L, control 5-FU, ED<sub>50</sub> = 0.53 $\mu$ mol/L; HT1080, ED<sub>50</sub> > 100 $\mu$ mol/L, 5-FU, ED<sub>50</sub> = 8.0 $\mu$ mol/L). Source: YUN NAN CAO KOU *Alpinia blepharocalyx* (seed: yield = 0.00025%dw). Ref: 3048.**5780 (3S,5S)-3,5-Dihydroxy-1,7-bis(4-hydroxyphenyl)heptane**C<sub>19</sub>H<sub>24</sub>O<sub>4</sub> (316.4). Pharm: Cytotoxic (Colon26-L5, ED<sub>50</sub> = 12.8 $\mu$ mol/L; HT1080, ED<sub>50</sub> = 94.4 $\mu$ mol/L). Source: YUN NAN CAO KOU *Alpinia blepharocalyx* (seed: yield = 0.00174%). Ref: 3042.

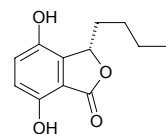


**5781 (3R,5R)-3,5-Dihydroxy-1,7-bis(4-hydroxyphenyl)heptane 3-O-β-D-glucopyranoside**

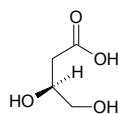
$C_{25}H_{34}O_9$  (478.54). Amorphous solid,  $[\alpha]_D^{23} = -8.0^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Cytotoxic (*in vitro*, HL-60,  $IC_{50} > 10\mu\text{g/mL}$ ; HSC-2,  $IC_{50} = 157\mu\text{g/mL}$ ; HGF,  $IC_{50} = 213\mu\text{g/mL}$ ; control Etoposide: HL-60,  $IC_{50} = 0.2\mu\text{g/mL}$ ; HSC-2,  $IC_{50} = 24\mu\text{g/mL}$ ; HGF,  $IC_{50} > 200\mu\text{g/mL}$ ). **Source:** JIAN GEN SHU *Tacca chantrieri* [Syn. *Tacca minor*; *Tacca esquirolii*] (rhizome: yield = 0.0026%dw). **Ref:** 4609.

**5782 4,7-Dihydroxy-3-butylphthalide**

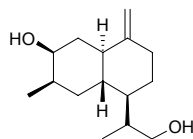
$C_{12}H_{14}O_4$  (222.24). White plate crystals, mp 211°C. **Source:** CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*]. **Ref:** 2156.

**5783 (3S),4-Dihydroxybutyric acid**

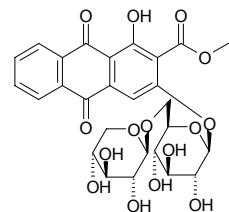
$C_4H_8O_4$  (120.11). Colorless oil,  $[\alpha]_D^{25} = -12.3^\circ$  ( $c = 0.02$ , H<sub>2</sub>O). **Pharm:** Tyrosinase inhibitor inactive (*in vitro*). **Source:** ZANG HONG HUA *Crocus sativus* (petal: yield = 0.0023%). **Ref:** 3015.

**5784 (4R)-3β,14-Dihydroxycadin-10(15)-ene**

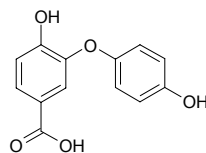
$C_{15}H_{26}O_2$  (238.37). Gum. **Pharm:** Insecticidal (adult *Cylas formicarius elegantulus*, 0.27mg/insect, 24h, mortality = 85%, 48h mortality = 100%, control Farnesyl methyl ether, 0.27mg/insect, 24h, mortality = 85%, 48h mortality = 100%). **Source:** BAI JIANG JUN *Beauveria bassiana*. **Ref:** 3949.

**5785 1,3-Dihydroxy-2-carbomethoxy-9,10-anthraquinone 3-O-β-primeveroside**

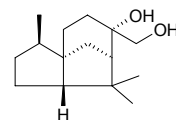
$C_{27}H_{28}O_{15}$  (592.52). Yellow powder,  $[\alpha]_D^{24} = -184.9^\circ$  ( $c = 0.08$ , MeOH). **Source:** MA LAI BAN DAO RAN MU SHU *Saprosma scortechinii* (stem and leaf). **Ref:** 4219.

**5786 2,4'-Dihydroxy-5-carboxy-dibenzyl ether**

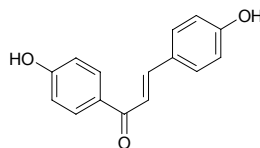
$C_{13}H_{10}O_5$  (246.22). **Source:** MAO GUO QI *Acer nikoense* (stem cortex). **Ref:** 4304.

**5787 3α,15-Dihydroxy cedrane**

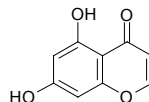
$C_{15}H_{26}O_2$  (238.37). Colorless oil,  $[\alpha]_D = -7.4^\circ$  ( $c = 1.4$ , CHCl<sub>3</sub>). **Source:** HUANG HUA HAO *Artemisia annua* (seed). **Ref:** 3435.

**5788 4,4'-Dihydroxychalcone**

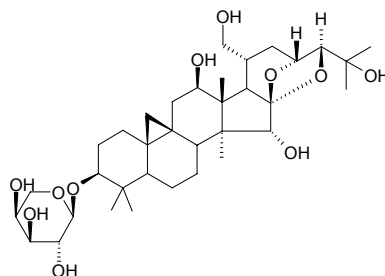
$C_{15}H_{12}O_3$  (240.26). **Pharm:** Cytotoxic inactive (Colon26-L5, HT1080, 100μmol/L)<sup>[3042]</sup>. **Source:** YUN NAN CAO KOU *Alpinia blepharocalyx* (seed: yield = 0.00013%). **Ref:** 3042.

**5789 5,7-Dihydroxychromone**

[31721-94-5]  $C_9H_6O_4$  (178.15). **Pharm:** Antibacterial (gram-positive bacteria); Anti-HIV (inhibits HIV replication, H9 Lymphocytic Cells,  $IC_{50}$  (concentration that inhibits uninfected H9 cell growth by 50%)  $> 25\mu\text{g/mL}$ ,  $EC_{50} = 18.65\mu\text{g/mL}$ , TI = 1.34, control AZT  $IC_{50} = 500\mu\text{g/mL}$ ,  $EC_{50} = 0.0007\mu\text{g/mL}$ , TI = 710000)<sup>[4267]</sup>. **Source:** SANG YE *Morus alba*, SHUI FEI JI *Silybum marianum*, LUO HUA SHENG *Arachis hypogaea*, NAN TOU QIU HAI TANG *Begonia nantoensis* (rhizome). **Ref:** 658, 4267.

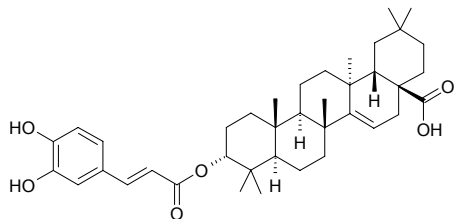
**5790 12β,21-Dihydroxycimigenol 3-O-α-L-arabinopyranoside**

$C_{35}H_{56}O_{11}$  (652.83). Amorphous solid,  $[\alpha]_D^{27} = +10.0^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Cytotoxic (HSC-2 cells,  $IC_{50} = 222\mu\text{mol/L}$ , control Etoposide,  $IC_{50} = 24\mu\text{mol/L}$ ; HGF cells,  $IC_{50} = 265\mu\text{mol/L}$ )<sup>[4158]</sup>. **Source:** ZONG ZHUANG SHENG MA *Cimicifuga racemosa* (rhizome). **Ref:** 4158.



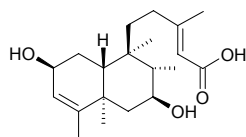
**5791 3 $\alpha$ -(3'',4''-Dihydroxy-*trans*-cinnamoyloxy)-*D*-friedo-olean-14-en-28-oic acid**

C<sub>39</sub>H<sub>54</sub>O<sub>6</sub> (618.86). Amorphous solid, mp 196–198°C, [ $\alpha$ ]<sub>D</sub><sup>27</sup> = -22° (*c* = 0.04, MeOH). **Pharm:** Antioxidant (*in vitro*: DPPH free radical scavenger, IC<sub>50</sub> = (29±1)μmol/L, control BHA, IC<sub>50</sub> = (44±2)μmol/L; superoxide scavenger, IC<sub>50</sub> = (306±1)μmol/L, control PG IC<sub>50</sub> = (106±2)μmol/L; PEP inhibitor, IC<sub>50</sub> = (0.250±0.021)μmol/L, control Bacitracin, IC<sub>50</sub> = (129.3±3.3)μmol/L). **Source:** GANG MAO CHENG LIU *Tamarix hispida* (aerial parts). **Ref:** 4923.



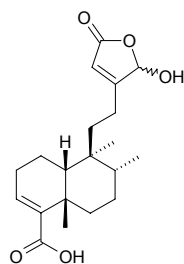
**5792 (*ent*-2 $\alpha$ ,7 $\beta$ ,13*E*) 2,7-Dihydroxy-3,13-clerodadien-15-oic acid**

C<sub>20</sub>H<sub>32</sub>O<sub>4</sub> (336.48). **Source:** GAO YI ZHI HUANG HUA *Solidago altissima*. **Ref:** 1521.



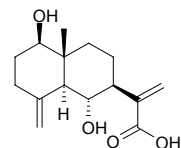
**5793 (-)-12,16-Dihydroxy-*cis*-cleroda-3,13-dien-15-oic acid-15,16-olide**

C<sub>20</sub>H<sub>28</sub>O<sub>5</sub> (348.44). **Source:** GE LUN BI YA BA DOU *Croton schiedeanus* (aerial parts). **Ref:** 4447.



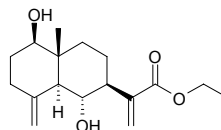
**5794 1 $\beta$ -6 $\alpha$ -Dihydroxycostic acid**

C<sub>15</sub>H<sub>22</sub>O<sub>4</sub> (266.34). Colorless gum, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +12.0° (*c* = 0.1, MeOH). **Pharm:** Cytotoxic inactive (KB ATCC CCL17, 20μg/mL). **Source:** *Warionia saharae*. **Ref:** 5399.



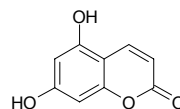
**5795 1 $\beta$ ,6 $\alpha$ -Dihydroxycostic acid ethyl ester**

C<sub>17</sub>H<sub>26</sub>O<sub>4</sub> (294.39). **Pharm:** Cytotoxic (*in vitro*, HepG<sub>2</sub>, CD<sub>50</sub> = 50μg/mL; HeLa, CD<sub>50</sub> = 75μg/mL; OVCAR-3, CD<sub>50</sub> = 75μg/mL; control Cisplatin, HepG<sub>2</sub>, CD<sub>50</sub> = 2.8μg/mL; HeLa, CD<sub>50</sub> = 5.2μg/mL; OVCAR-3, CD<sub>50</sub> = 3μg/mL). **Source:** MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*] (root: yield = 0.0015%dw). **Ref:** 4720.



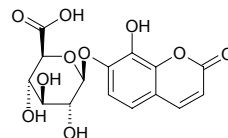
**5796 5,7-Dihydroxycoumarin**

C<sub>9</sub>H<sub>6</sub>O<sub>4</sub> (178.15). **Pharm:** EBV-EA inhibitor (TPA-induced, IC<sub>50</sub> = 477 Mol ratio/32 pmol TPA, control β-Carotene, IC<sub>50</sub> = 400 Mol ratio/32 pmol TPA). **Source:** YUAN DONG JIU LI XIANG *Murraya siamensis* (leaf). **Ref:** 5255.



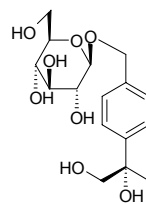
**5797 7,8-Dihydroxycoumarin-7-*O*- $\beta$ -*D*-glucuronide**

C<sub>15</sub>H<sub>14</sub>O<sub>10</sub> (354.27). Brown solid, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -75.11° (*c* = 1.35, MeOH). **Source:** BIAN TAI *Bazzania trilobata*. **Ref:** 3860.



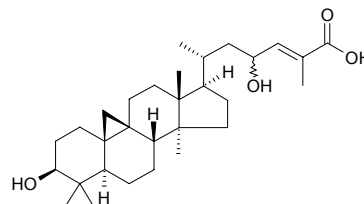
**5798 (8*S*)-8,9-Dihydroxycuminyl  $\beta$ -*D*-glucopyranoside**

C<sub>16</sub>H<sub>24</sub>O<sub>8</sub> (344.36). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>22</sup> = -31° (*c* = 0.4, MeOH). **Source:** ZI RAN QIN *Cuminum cyminum* (fruit). **Ref:** 4243.



**5799 3 $\beta$ ,23(*R* or *S*)-dihydroxycycloart-24-en-26-oic acid**

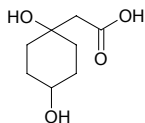
C<sub>30</sub>H<sub>48</sub>O<sub>4</sub> (472.71). Shining crystals (CHCl<sub>3</sub>-MeOH), mp 279–281° [ $\alpha$ ]<sub>D</sub><sup>30</sup> = +49° (*c* = 0.52, CHCl<sub>3</sub>). **Source:** MANG GUO *Mangifera indica*. **Ref:** 1868.



**5800 2-(1,4-Dihydroxycyclohexanyl)-acetic acid**

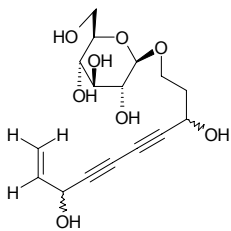
$C_8H_{14}O_4$  (174.20). Colorless snow-like crystals (MeOH-H<sub>2</sub>O), mp 163–165°C.

Source: MA YE QIAN LI GUANG *Senecio cannabinifolius*. Ref: 4809.

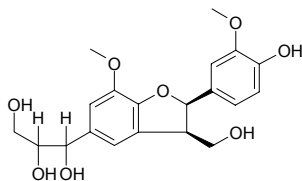
**5801 3(ζ),8(ζ)-Dihydroxydec-9-en-4,6-yne-1-O-β-D-glucopyranoside**

$C_{16}H_{22}O_8$  (342.35). Pale yellow oil,  $[\alpha]_D^{25} = -45.3^\circ$  ( $c = 0.75$ , CH<sub>3</sub>OH). Pharm:

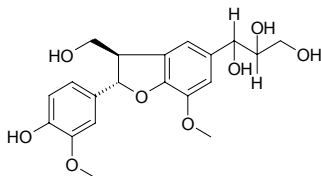
12-Lipoxygenase inhibitor (10 μg/mL, InRt = 8.11%; 30 μg/mL, InRt = 25.81%; control Baicalein, 10 μg/mL, InRt = 56.23%). Source: DAN ZI HAO *Artemisia monosperma*. Ref: 5249.

**5802 erythro-Dihydroxydehydrodiconiferyl alcohol**

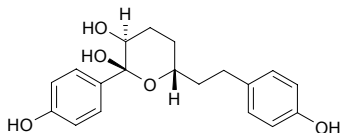
$C_{20}H_{24}O_8$  (392.41). Source: DU ZHONG *Eucommia ulmoides*. Ref: 2.

**5803 threo-Dihydroxydehydrodiconiferyl alcohol**

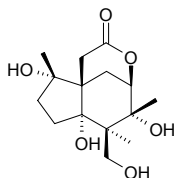
$C_{20}H_{24}O_8$  (392.41). Source: DU ZHONG *Eucommia ulmoides*. Ref: 2.

**5804 (5S,6S)-5,6-Dihydroxy-4''-de-O-methylcentrolobine**

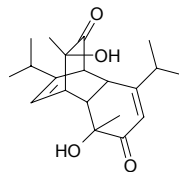
$C_{19}H_{22}O_5$  (330.38). Source: YUN NAN CAO KOU *Alpinia blepharocalyx* (seed: yield = 0.00025%<sup>[3035]</sup>; yield = 0.00118%<sup>[3042]</sup>). Ref: 3035, 3042.

**5805 1,6-Dihydroxy-3-deoxymynwanensin**

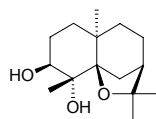
$C_{15}H_{24}O_6$  (300.35). Source: *Illicium merrillianum* (pericarp). Ref: 4257.

**5806 8,12-Dihydroxydielmentha-5,9-diene-7,11-dione**

$C_{20}H_{28}O_4$  (332.44). Source: TAI WAN CUI BAI *Calocedrus macrolepis* var. *formosana* (leaf). Ref: 4298.

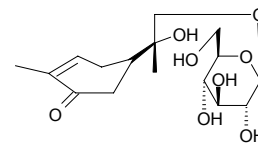
**5807 3,4-Dihydroxydihydroagarofuran**

$C_{15}H_{26}O_3$  (254.37). mp 176°C. Source: CHEN XIANG *Aquilaria agallocha*. Ref: 6, 13.

**5808 (4S,8S)-8,9-Dihydroxy-8,9-dihydrocarvone 9-O-β-D-glucopyranoside**

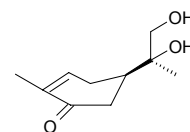
$C_{16}H_{26}O_8$  (346.38). Amorphous powder,  $[\alpha]_D^{24} = -17^\circ$  ( $c = 1.4$ , MeOH).

Source: SHI LUO ZI *Anethum graveolens* (fruit). Ref: 4177.

**5809 (4S,8R)-8,9-Dihydroxy-8,9-dihydrocarvone**

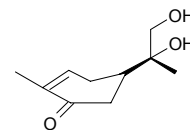
$C_{10}H_{16}O_3$  (184.24). Amorphous powder,  $[\alpha]_D^{25} = -26^\circ$  ( $c = 0.1$ , MeOH).

Source: GE LU ZI *Carum carvi* (fruit). Ref: 4153.

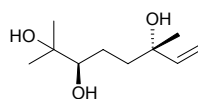
**5810 (4S,8S)-8,9-Dihydroxy-8,9-dihydrocarvone**

$C_{10}H_{16}O_3$  (184.24). Amorphous powder,  $[\alpha]_D^{25} = -7^\circ$  ( $c = 0.2$ , MeOH). Source:

GE LU ZI *Carum carvi* (fruit), SHI LUO ZI *Anethum graveolens* (fruit). Ref: 4153, 4177.

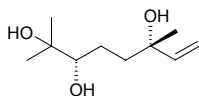
**5811 (3S,6R)-6,7-Dihydroxy-6,7-dihydrolinalool**

$C_{10}H_{20}O_3$  (188.27). Amorphous powder,  $[\alpha]_D^{21} = +22^\circ$  ( $c = 0.1$ , CHCl<sub>3</sub>),  $[\alpha]_D^{21} = +24^\circ$  ( $c = 0.2$ , MeOH). Source: HU SUI ZI *Coriandrum sativum*. Ref: 4302.

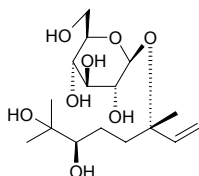


**5812 (3S,6S)-6,7-Dihydroxy-6,7-dihydrolinalool**

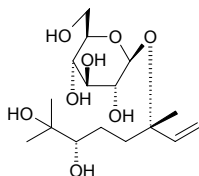
$C_{10}H_{20}O_3$  (188.27). Amorphous powder,  $[\alpha]_D^{21} = -29^\circ$  ( $c = 0.3$ ,  $CHCl_3$ ),  $[\alpha]_D^{21} = -15^\circ$  ( $c = 0.3$ , MeOH). Source: HU SUI ZI *Coriandrum sativum*. Ref: 4302.

**5813 (3S,6R)-6,7-Dihydroxy-6,7-dihydrolinalool-3-O-β-D-glucopyranoside**

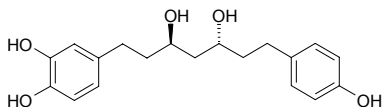
$C_{16}H_{30}O_8$  (350.41). Amorphous powder,  $[\alpha]_D^{21} = +6^\circ$  ( $c = 0.1$ , MeOH). Source: HU SUI ZI *Coriandrum sativum*. Ref: 4302.

**5814 (3S,6S)-6,7-Dihydroxy-6,7-dihydrolinalool-3-O-β-D-glucopyranoside**

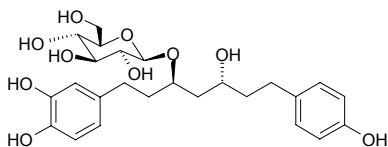
$C_{16}H_{30}O_8$  (350.41). Amorphous powder,  $[\alpha]_D^{21} = -27^\circ$  ( $c = 1.0$ , MeOH). Source: HU SUI ZI *Coriandrum sativum*. Ref: 4302.

**5815 3,5-Dihydroxy-1-(3,4-dihydroxyphenyl)-7-(4-hydroxyphenyl)heptane**

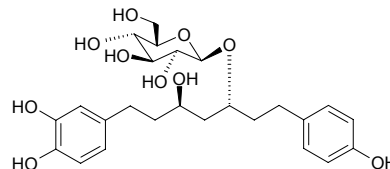
$C_{19}H_{24}O_5$  (332.4). Viscous syrup,  $[\alpha]_D^{23} = +1.7^\circ$  ( $c = 0.12$ , MeOH). Pharm: Cytotoxic (*in vitro*, HL-60,  $IC_{50} = 2.1 \mu\text{g/mL}$ ; HSC-2,  $IC_{50} = 54 \mu\text{g/mL}$ ; HGF,  $IC_{50} = 162 \mu\text{g/mL}$ ; control Etoposide: HL-60,  $IC_{50} = 0.2 \mu\text{g/mL}$ ; HSC-2,  $IC_{50} = 24 \mu\text{g/mL}$ ; HGF,  $IC_{50} > 200 \mu\text{g/mL}$ ). Source: JIAN GEN SHU *Tacca chantrieri* [Syn. *Tacca minor*; *Tacca esquirolii*] (rhizome: yield = 0.0052%dw). Ref: 4609.

**5816 (3R,5R)-3,5-Dihydroxy-1-(3,4-dihydroxyphenyl)-7-(4-hydroxyphenyl)heptane 3-O-β-D-glucopyranoside**

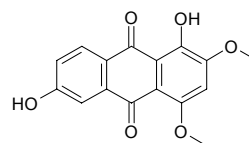
$C_{25}H_{34}O_{10}$  (494.54). Amorphous solid,  $[\alpha]_D^{25} = -12.0^\circ$  ( $c = 0.10$ , MeOH). Pharm: Cytotoxic (*in vitro*, HL-60,  $IC_{50} = 6.2 \mu\text{g/mL}$ ; HSC-2,  $IC_{50} = 158 \mu\text{g/mL}$ ; HGF,  $IC_{50} = 220 \mu\text{g/mL}$ ; control Etoposide: HL-60,  $IC_{50} = 0.2 \mu\text{g/mL}$ ; HSC-2,  $IC_{50} = 24 \mu\text{g/mL}$ ; HGF,  $IC_{50} > 200 \mu\text{g/mL}$ ). Source: JIAN GEN SHU *Tacca chantrieri* [Syn. *Tacca minor*; *Tacca esquirolii*] (rhizome: yield = 0.0014%dw). Ref: 4609.

**5817 (3R,5R)-3,5-Dihydroxy-1-(3,4-dihydroxyphenyl)-7-(4-hydroxyphenyl)heptane 5-O-β-D-glucopyranoside**

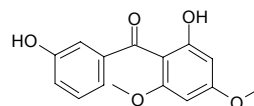
$C_{25}H_{34}O_{10}$  (494.54). Amorphous solid,  $[\alpha]_D^{25} = -12.0^\circ$  ( $c = 0.10$ , MeOH). Pharm: Cytotoxic (*in vitro*, HL-60,  $IC_{50} = 5.5 \mu\text{g/mL}$ ; HSC-2,  $IC_{50} = 155 \mu\text{g/mL}$ ; HGF,  $IC_{50} > 250 \mu\text{g/mL}$ ; control Etoposide: HL-60,  $IC_{50} = 0.2 \mu\text{g/mL}$ ; HSC-2,  $IC_{50} = 24 \mu\text{g/mL}$ ; HGF,  $IC_{50} > 200 \mu\text{g/mL}$ ). Source: JIAN GEN SHU *Tacca chantrieri* [Syn. *Tacca minor*; *Tacca esquirolii*] (rhizome: yield = 0.00027%dw). Ref: 4609.

**5818 1,6-Dihydroxy-2,4-dimethoxyanthraquinone V**

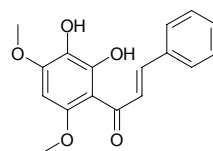
$C_{16}H_{12}O_6$  (300.27). Yellow acicular crystals, mp 205–207°C. Source: BA JI TIAN *Morinda officinalis*. Ref: 228, 8.

**5819 6,3'-Dihydroxy-2,4-dimethoxybenzophenone**

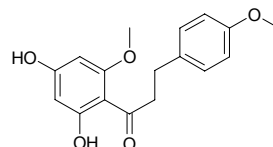
$C_{15}H_{14}O_5$  (274.28). Source: SHAN ZHU ZI *Garcinia multiflora* (stem: yield = 0.0022%dw). Ref: 4708.

**5820 2',3'-Dihydroxy-4',6'-dimethoxychalcone**

$C_{17}H_{16}O_5$  (300.31). Red crystals, mp 124–126°C. Source: TIAN ZI YU PAN *Uvaria dulcis* (leaf). Ref: 3928.

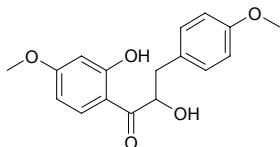
**5821 2',4'-Dihydroxy-4,6'-dimethoxychalcone**

$C_{17}H_{16}O_5$  (302.33). Colorless needles (MeOH), mp 171°C, mp 175–176°C. Source: CHANG YE GE NA XIANG *Goniothalamus gardneri* (aerial parts). Ref: 5096.

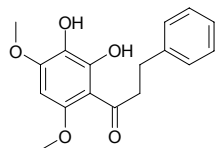


**5822 *α*-2'-Dihydroxy-4,4'-dimethoxydihydrochalcone**

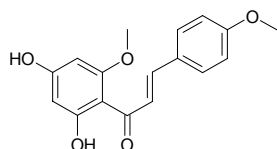
C<sub>17</sub>H<sub>18</sub>O<sub>5</sub> (302.33). Colorless needles (C<sub>6</sub>H<sub>6</sub>-EtOAc), mp 94°C, [α]<sub>D</sub><sup>25</sup> = -76.84° (c = 0.001015, MeOH). Source: MENG MAI ROU DOU KOU *Myristica malabarica* (heartwood). Ref: 3906.

**5823 2',3'-Dihydroxy-4',6'-dimethoxydihydrochalcone**

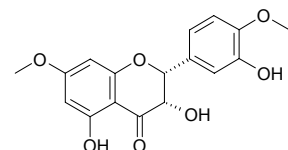
C<sub>17</sub>H<sub>18</sub>O<sub>5</sub> (302.33). Light yellow crystals, mp 141~142°C. Source: TIAN ZI YU PAN *Uvaria dulcis* (leaf). Ref: 3928.

**5824 2',4'-Dihydroxy-4,6'-dimethoxydihydrochalcone**

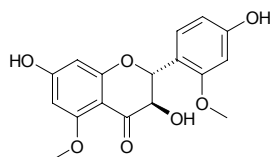
C<sub>17</sub>H<sub>16</sub>O<sub>5</sub> (300.31). Yellow plates (MeOH), mp 161~163°C, mp 158~159°C. Source: CHANG YE GE NA XIANG *Goniothalamus gardneri* (aerial parts). Ref: 5096.

**5825 (2*R*,3*S*)-(+)-3',5-Dihydroxy-4',7-dimethoxydihydroflavonol**

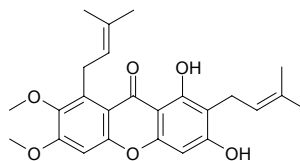
C<sub>17</sub>H<sub>16</sub>O<sub>7</sub> (332.31). Colorless powder from MeOH, mp 183.5~184.0°C, [α]<sub>D</sub><sup>24</sup> = 156° (c = 0.2, MeOH). Source: HOU PI SHU *Lannea grandis* [Syn. *Lannea coromandelica*]. Ref: 739.

**5826 (2*R*,3*R*)-4',7-Dihydroxy-2',5-dimethoxydihydroflavonol**

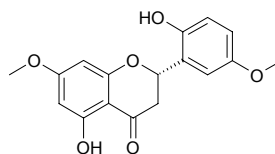
C<sub>17</sub>H<sub>16</sub>O<sub>7</sub> (332.31). White powder, [α]<sub>D</sub><sup>25</sup> = +82.7° (c = 0.12, MeOH). Pharm: Cytotoxic (Bel7402, ED<sub>50</sub> > 10 μg/mL, control Camptothecin, ED<sub>50</sub> = 0.06 μg/mL; BGC823, ED<sub>50</sub> > 10 μg/mL, Camptothecin, ED<sub>50</sub> = 0.09 μg/mL; HCT8, ED<sub>50</sub> > 10 μg/mL, Camptothecin, ED<sub>50</sub> = 0.14 μg/mL; A549, ED<sub>50</sub> > 10 μg/mL, Camptothecin, ED<sub>50</sub> = 0.09 μg/mL; MCF7, ED<sub>50</sub> > 10 μg/mL, Camptothecin, ED<sub>50</sub> = 0.01 μg/mL). Source: GOU JI *Cudrania cochinchinensis* (root). Ref: 5338.

**5827 1,3-Dihydroxy-6,7-dimethoxy-2,8-diprenylxanthone**

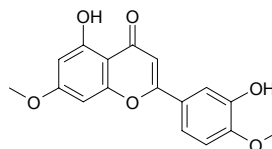
C<sub>25</sub>H<sub>28</sub>O<sub>6</sub> (424.50). Yellow powder, mp 91~92°C. Pharm: Cytotoxic (hmn small cell lung cancer NCI-H187 cell line, IC<sub>50</sub> = (3.69±1.27) μg/mL, control Ellipticine, IC<sub>50</sub> = (0.35±0.15) μg/mL). Source: QIAO MU ZHUANG HUANG NIU MU *Cratogeomys arborescens* (stem cortex). Ref: 5061.

**5828 (2*S*)-5,2'-Dihydroxy-7,5'-dimethoxyflavanone**

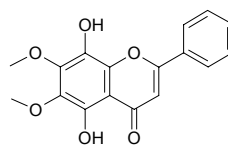
C<sub>17</sub>H<sub>16</sub>O<sub>6</sub> (316.31). Pharm: AChE inhibitor (*in vitro*, IC<sub>50</sub> = (28.0±5.0) μmol/L, control Galanthamine, IC<sub>50</sub> = (32.2±2.5) μmol/L)<sup>[4333]</sup>; BChE inhibitor (*in vitro*, IC<sub>50</sub> = (7.9±5.0) μmol/L, control Galanthamine, IC<sub>50</sub> = (163.0±5.0) μmol/L). Source: CU YING MAO DIAN ZI CAO *Onosma hispida* (whole herb). Ref: 4333.

**5829 5,3'-Dihydroxy-7,4'-dimethoxyflavone**

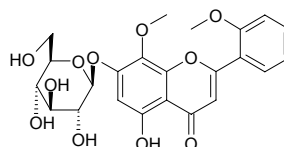
[32174-62-2] C<sub>17</sub>H<sub>14</sub>O<sub>6</sub> (314.30). Source: CHI YANG *Alnus japonica*. Ref: 1521.

**5830 5,8-Dihydroxy-6,7-dimethoxyflavone**

C<sub>17</sub>H<sub>14</sub>O<sub>6</sub> (314.30). Source: HUANG QIN *Scutellaria baicalensis*. Ref: 2.

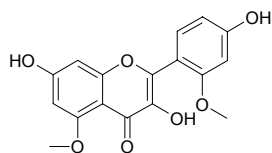
**5831 5,7-Dihydroxy-8,2'-dimethoxyflavone-7-O-β-D-glucopyranoside**

C<sub>23</sub>H<sub>24</sub>O<sub>11</sub> (476.44). Yellow needles (MeOH), mp 248~249°C (dec), [α]<sub>D</sub><sup>25</sup> = -252.5° (c = 0.075, MeOH). Source: KE AI HUANG QIN *Scutellaria amabilis* (root; yield = 0.0027% dw). Ref: 2072.

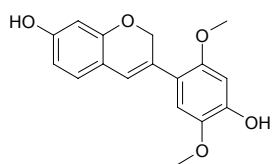


**5832 4',7-Dihydroxy-2',5-dimethoxyflavonol**

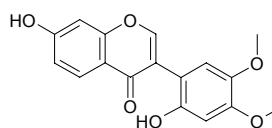
$C_{17}H_{14}O_7$  (330.30). Yellow powder. **Pharm:** Cytotoxic (Bel7402,  $ED_{50} > 10 \mu\text{g/mL}$ , control Camptothecin,  $ED_{50} = 0.06 \mu\text{g/mL}$ ; BGC823,  $ED_{50} > 10 \mu\text{g/mL}$ , Camptothecin,  $ED_{50} = 0.09 \mu\text{g/mL}$ ; HCT8,  $ED_{50} > 10 \mu\text{g/mL}$ , Camptothecin,  $ED_{50} = 0.14 \mu\text{g/mL}$ ; A549,  $ED_{50} > 10 \mu\text{g/mL}$ , Camptothecin,  $ED_{50} = 0.09 \mu\text{g/mL}$ ; MCF7,  $ED_{50} > 10 \mu\text{g/mL}$ , Camptothecin,  $ED_{50} = 0.01 \mu\text{g/mL}$ ). **Source:** GOU JI *Cudrania cochinchinensis* (root). **Ref:** 5338.

**5833 7,4'-Dihydroxy-2',5'-dimethoxyisoflav-3-ene**

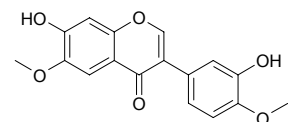
$C_{17}H_{16}O_5$  (300.31). Amorphous powder. **Pharm:** Antimalarial (antiplasmodial *in vitro*, *Plasmodium falciparum*, W2 strain,  $IC_{50} = (27.7 \pm 1.8) \mu\text{mol/L}$ , control Quinine,  $IC_{50} = (0.21 \pm 0.01) \mu\text{mol/L}$ ; D6 strain,  $IC_{50} = (18.2 \pm 1.1) \mu\text{mol/L}$ , Quinine,  $IC_{50} = (0.042 \pm 0.002) \mu\text{mol/L}$ ). **Source:** A BI XI NI YA CI TONG *Erythrina abyssinica* (root cortex). **Ref:** 5420.

**5834 2',7-Dihydroxy-4',5'-dimethoxyisoflavone**

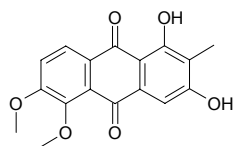
$C_{17}H_{14}O_6$  (314.30). Yellow crystals from methanol, mp 238–240°C. **Pharm:** Hepatoprotective (mus primary cultured hepatocytes, antihepatotoxin induced by *D*-galactosamine (GalN),  $100 \mu\text{mol/L}$ , InRt =  $(25.9 \pm 1.6)\%$ , weak, control Silybin,  $100 \mu\text{mol/L}$ , InRt =  $(77.0 \pm 5.5)\%$ )<sup>[4095]</sup>. **Source:** GUANG BU DING GONG TENG *Erycibe expansa*, JIANG ZHEN XIANG *Dalbergia odorifera*. **Ref:** 716, 4095.

**5835 3',7-Dihydroxy-4',6-dimethoxyisoflavone**

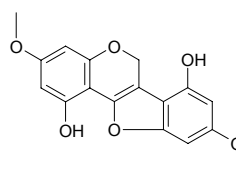
$C_{17}H_{14}O_6$  (314.30). **Source:** XIANG DOU *Dipteryx odorata* (callus and root), *Glycyrrhiza* sp. **Ref:** 2431, 4475.

**5836 1,3-Dihydroxy-5,6-dimethoxy-2-methyl-9,10-anthraquinone**

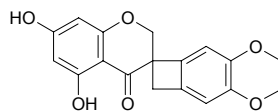
$C_{17}H_{14}O_6$  (314.30). Yellow powder (acetone), mp  $> 228^\circ\text{C}$ . **Source:** NAN SHAN HUA *Prismatomeris tetrandra* (root). **Ref:** 4521.

**5837 1,7-Dihydroxy-3,9-dimethoxy pterocarpene**

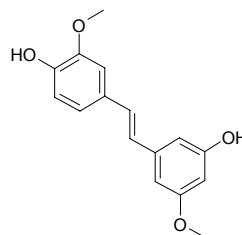
$C_{17}H_{14}O_6$  (314.30). Colorless acicular crystals, mp 210–214°C. **Source:** HONG HUA YAN HUANG QI *Hedysarum multijugum*. **Ref:** 2224.

**5838 5,7-Dihydroxy-3',4'-dimethoxyspiro{2H-1-benzopyran-7'-bicyclo[4.2.0]octa[1,3,5]-trien}-4-one**

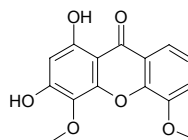
$C_{18}H_{16}O_6$  (328.32). Yellow gum,  $[\alpha]_D^{25} = +56.0^\circ$  ( $c = 0.035$ , MeOH). **Source:** HE CAO YE JIA BEI FANG FENG *Ledebouria graminifolia* (tuber). **Ref:** 3368.

**5839 3',4-Dihydroxy-3,5'-dimethoxystilbene**

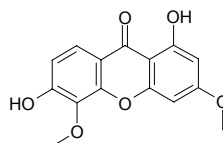
$C_{16}H_{16}O_4$  (272.30). Brown oil. **Source:** *Scilla nervosa* (bulb). **Ref:** 2381.

**5840 1,3-Dihydroxy-4,5-dimethoxyxanthone**

[22804-53-1]  $C_{15}H_{12}O_6$  (288.26). mp 274–275°C. **Source:** ZHANG YA CAI *Swertia pseudochinensis*. **Ref:** 6.

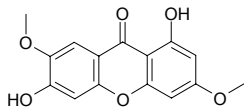
**5841 1,6-Dihydroxy-3,5-dimethoxyxanthone**

$C_{15}H_{12}O_6$  (288.26). **Pharm:** Cytotoxic ( $P_{388}$   $ED_{50} = 4.74 \mu\text{g/mL}$ , control Mithramycin  $ED_{50} = 0.06 \mu\text{g/mL}$ , HT29  $ED_{50} = 7.28 \mu\text{g/mL}$ , Mithramycin  $ED_{50} = 0.08 \mu\text{g/mL}$ ). **Source:** TAI WAN LV DAO TENG HUANG *Garcinia linnii*. **Ref:** 4094.

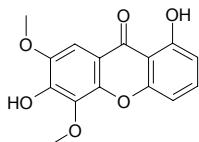


**5842 1,6-Dihydroxy-3,7-dimethoxyxanthone**

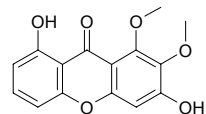
$C_{15}H_{12}O_6$  (288.26). Source: YUAN ZHI *Polygala tenuifolia*. Ref: 2.

**5843 1,6-Dihydroxy-5,7-dimethoxyxanthone**

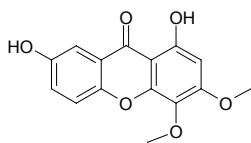
$C_{15}H_{12}O_6$  (288.26). Pharm: Cytotoxic ( $P_{388}$   $ED_{50}$  = 3.25  $\mu\text{g/mL}$ , control Mithramycin  $ED_{50}$  = 0.06  $\mu\text{g/mL}$ , HT29  $ED_{50}$  = 5.48  $\mu\text{g/mL}$ , Mithramycin  $ED_{50}$  = 0.08  $\mu\text{g/mL}$ ). Source: TAI WAN LV DAO TENG HUANG *Garcinia linii*. Ref: 4094.

**5844 1,6-Dihydroxy-7,8-dimethoxyxanthone**

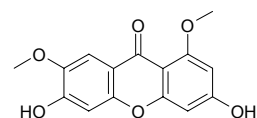
$C_{15}H_{12}O_6$  (288.26). Pharm: Antifungal (*Aspergillus fumigatus* CBS113.26,  $MIC_{80}$  = 16  $\mu\text{g/mL}$ , control Amphotericin B,  $MIC_{80}$  = 8  $\mu\text{g/mL}$ ; *Aspergillus flavus* IHEM37.19,  $MIC_{80}$  = 8  $\mu\text{g/mL}$ , Amphotericin B,  $MIC_{80}$  = 8  $\mu\text{g/mL}$ ; *Aspergillus niger* IHEM2951,  $MIC_{80}$  = 31  $\mu\text{g/mL}$ , Amphotericin B,  $MIC_{80}$  = 16  $\mu\text{g/mL}$ ; *Aspergillus terreus* 5029.2000,  $MIC_{80}$  = 62  $\mu\text{g/mL}$ ; Amphotericin B,  $MIC_{80}$  = 16  $\mu\text{g/mL}$ ; *Candida albicans* ATCC663.90,  $MIC_{80}$  = 62  $\mu\text{g/mL}$ ; Amphotericin B,  $MIC_{80}$  = 1  $\mu\text{g/mL}$ ). Source: SU GE LAN HU TONG *Calophyllum caledonicum* (stem cortex). Ref: 4995.

**5845 1,7-Dihydroxy-3,4-dimethoxyxanthone**

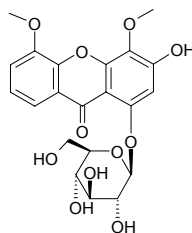
$C_{15}H_{12}O_6$  (288.26). Source: CHAN YI TENG *Securidaca inappendiculata* (stem). Ref: 5238.

**5846 3,6-Dihydroxy-1,7-dimethoxyxanthone**

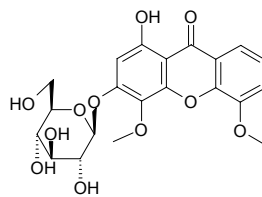
$C_{15}H_{12}O_6$  (288.26). Yellow powder, mp 251–252°C (dec). Source: HUANG HAI TANG *Hypericum ascyron*. Ref: 2398.

**5847 1,3-Dihydroxy-4,5-dimethoxyxanthone-1-O-β-D-glucopyranoside**

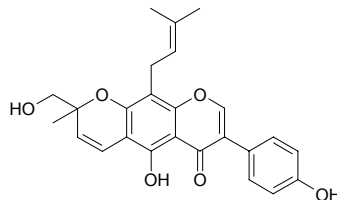
$C_{21}H_{22}O_{11}$  (450.40). mp 269–274°C (dec). Source: ZHANG YA CAI *Swertia pseudochinensis*. Ref: 6.

**5848 1,3-Dihydroxy-4,5-dimethoxyxanthone-3-O-β-D-glucopyranoside**

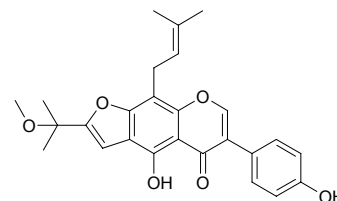
$C_{21}H_{22}O_{11}$  (450.40). mp 264–266°C. Source: ZHANG YA CAI *Swertia pseudochinensis*. Ref: 6.

**5849 5,4'-Dihydroxy-8-(3,3-dimethylallyl)-2''-hydroxymethyl-2''-methylpyrano[5,6:6,7]isoflavone**

$C_{25}H_{24}O_6$  (420.47). Yellow amorphous powder, mp 205–207°C,  $[\alpha]_D^{20}$  = -7.8° ( $c$  = 0.1, MeOH). Source: CI TONG *Erythrina variegata* [Syn. *Erythrina indica*] (stem cortex: yield = 0.000024%fw). Ref: 2269.

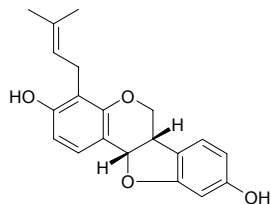
**5850 5,4'-Dihydroxy-8-(3,3-dimethylallyl)-2''-methoxyisopropylfurano[4,5:6,7]isoflavone**

$C_{26}H_{26}O_6$  (434.49). Yellow amorphous powder, mp 101–102°C. Source: CI TONG *Erythrina variegata* [Syn. *Erythrina indica*] (stem cortex: yield = 0.000012%fw). Ref: 2269.

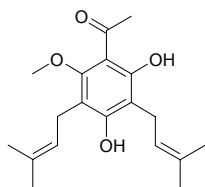


**5851 3,9-Dihydroxy-4-(3,3-dimethylallyl)[6aR,11aR]-pterocarpane**

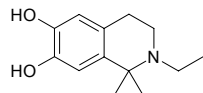
$C_{20}H_{20}O_4$  (324.38). Yellow gum,  $[\alpha]_D^{25} = -41^\circ$  ( $c = 0.3$ , MeOH). **Pharm:** Cytotoxic (KB,  $IC_{50} = (60.8 \pm 8.0) \mu\text{mol/L}$ , control Helenalin,  $IC_{50} = (0.64 \pm 0.08) \mu\text{mol/L}$ , Melphalan,  $IC_{50} = (6.0 \pm 0.5) \mu\text{mol/L}$ ; Mono-Mac-6,  $IC_{50} > 75 \mu\text{mol/L}$ , Helenalin,  $IC_{50} = (3.1 \pm 0.3) \mu\text{mol/L}$ ; Jurkat-T,  $IC_{50} = (61.1 \pm 7.7) \mu\text{mol/L}$ , Helenalin,  $IC_{50} = (1.14 \pm 0.08) \mu\text{mol/L}$ , Melphalan,  $IC_{50} = (9.1 \pm 0.8) \mu\text{mol/L}$ ). **Source:** *Bituminaria morisiana* (leaf). **Ref:** 5077.

**5852 1-[2',4'-Dihydroxy-3',5'-di-(3''-methylbut-2''-enyl)-6'-methoxy]-phenylethanone**

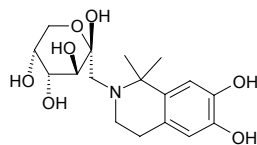
$C_{19}H_{26}O_4$  (318.42). **Source:** SHA TANG MU *Acronychia pedunculata*. **Ref:** 2373.

**5853 6,7-Dihydroxy-1,1-dimethyl-N-ethyl-1,2,3,4-tetrahydroisoquinoline**

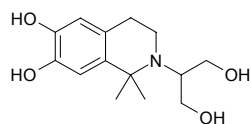
$C_{13}H_{19}NO_2$  (221.30). Amorphous brownish solid,  $184^\circ$  dec (MeOH),  $[\alpha]_D^{25} = +13^\circ$  ( $c = 0.70$ , MeOH). **Source:** GONG XING MA DOU LING *Aristolochia arcuata*. **Ref:** 2037.

**5854 6,7-Dihydroxy-1,1-dimethyl-N-(6'-fructopyranosyl)-1,2,3,4-tetrahydroisoquinoline**

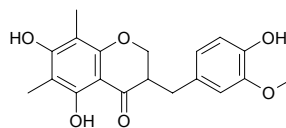
$C_{17}H_{25}NO_7$  (355.39). Amorphous brownish solid,  $105^\circ$  dec (MeOH),  $[\alpha]_D^{25} = -44^\circ$  ( $c = 0.26$ , MeOH). **Source:** GONG XING MA DOU LING *Aristolochia arcuata*. **Ref:** 2037.

**5855 6,7-Dihydroxy-1,1-dimethyl-N-(2'-glyceryl)-1,2,3,4-tetrahydroisoquinoline**

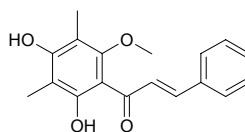
$C_{14}H_{21}NO_4$  (267.33). Amorphous brownish solid,  $174^\circ$  dec. (MeOH),  $[\alpha]_D^{25} = -11^\circ$  ( $c = 0.72$ , MeOH). **Source:** GONG XING MA DOU LING *Aristolochia arcuata*. **Ref:** 2037.

**5856 5,7-Dihydroxy-6,8-dimethyl-3-(4'-hydroxy-3'-methoxybenzyl)chroman-4-one**

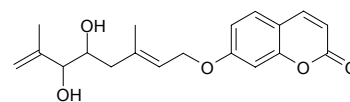
$C_{19}H_{20}O_6$  (344.37). **Source:** MAI DONG *Ophiopogon japonicus*. **Ref:** 2044.

**5857 4',6'-Dihydroxy-3',5'-dimethyl-2'-methoxychalcone**

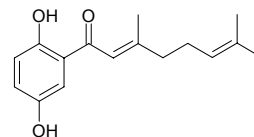
$C_{18}H_{18}O_4$  (298.34). **Source:** YANG PU TAO YE *Syzygium samarangense*. **Ref:** 4100.

**5858 7-(5',6'-Dihydroxy-3',7'-dimethylocta-2',7'-dienyloxy)-coumarin**

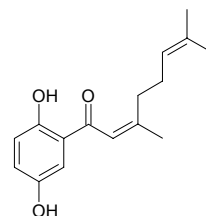
$C_{19}H_{22}O_5$  (330.38). **Pharm:** Antibacterial; smooth muscle relaxant; anticoagulant; photosensitive agent; ichthyotoxin; toxin. **Source:** *Zanthoxylum* sp. **Ref:** 2176.

**5859 1,4-Dihydroxy-2-(3',7'-dimethyl-1'-oxo-2'-E,6'-octadienyl)benzene**

$C_{16}H_{20}O_3$  (260.34). White amorphous powder. **Pharm:** Antifungal (TLC bioautographic assay, *Cladosporium cladosporioides*, MA = 1.0 $\mu\text{g}$ , control Miconazole, MA = 1.0 $\mu\text{g}$ ; *Cladosporium sphaerospermum*, MA = 1.0 $\mu\text{g}$ , Miconazole, MA = 1.0 $\mu\text{g}$ ). **Source:** CU YE MAI HU JIAO *Piper crassinervium*. **Ref:** 3440.

**5860 1,4-Dihydroxy-2-(3',7'-dimethyl-1'-oxo-2'-Z,6'-octadienyl)benzene**

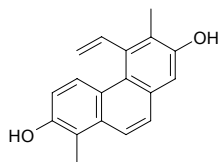
$C_{16}H_{20}O_3$  (260.34). White amorphous powder. **Pharm:** Antifungal (TLC bioautographic assay, *Cladosporium cladosporioides*, MA = 5.0 $\mu\text{g}$ , control Miconazole, MA = 1.0 $\mu\text{g}$ ; *Cladosporium sphaerospermum*, MA = 10.0 $\mu\text{g}$ , Miconazole, MA = 1.0 $\mu\text{g}$ ). **Source:** CU YE MAI HU JIAO *Piper crassinervium*. **Ref:** 3440.



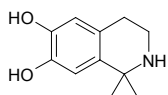


**5861 2,7-Dihydroxy-1,6-dimethylpyrene**

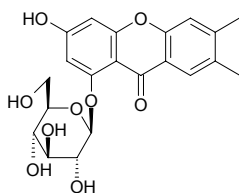
$C_{18}H_{16}O_2$  (264.33). Source: JIAN DENG XIN CAO *Juncus acutus*. Ref: 1965.

**5862 6,7-Dihydroxy-1,1-dimethyl-1,2,3,4-tetrahydroisoquinoline**

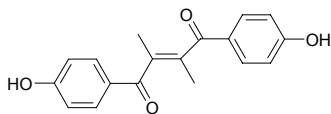
$C_{11}H_{15}NO_2$  (193.25). Amorphous brownish solid, 250° dec (MeOH),  $[\alpha]_D^{25} = +13^\circ$  ( $c = 0.61$ , Me<sub>2</sub>CO). Source: GONG XING MA DOU LING *Aristolochia arcuata*. Ref: 2037.

**5863 1,3-Dihydroxy-6,7-dimethylxanthone-1-O-β-D-glucoside**

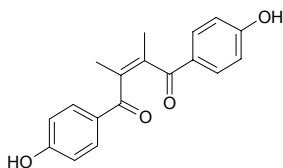
$C_{21}H_{22}O_9$  (418.40). Yellowish massive crystals, mp 262–265°C. Source: HE SHOU WU *Polygonum multiflorum*. Ref: 292.

**5864 (E)-4,4'-Dihydroxy-7,7'-dioxolign-8(8')-ene**

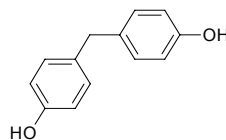
$C_{18}H_{16}O_4$  (296.33). Off-white powder. Pharm: Antioxidant inactive (Takamatsu DCFH method, myelomonocytic HL-60 cells, control NDGA,  $IC_{50} = (0.7 \pm 0.3) \mu\text{g/mL}$ , Vitamin C,  $IC_{50} = (1.9 \pm 0.7) \mu\text{g/mL}$ , Trolox,  $IC_{50} = (1.4 \pm 0.5) \mu\text{g/mL}$ ); cytotoxic (XTT assay, HL-60 cells,  $IC_{50} > 50.0 \mu\text{g/mL}$ ; control NDGA,  $IC_{50} = (2.6 \pm 0.2) \mu\text{g/mL}$ , Vitamin C,  $IC_{50} > 10.0 \mu\text{g/mL}$ , Trolox,  $IC_{50} > 10.0 \mu\text{g/mL}$ ). Source: SAN CHI LA RUI A *Larrea tridentata* (leaf). Ref: 3850.

**5865 (Z)-4,4'-Dihydroxy-7,7'-dioxolign-8(8')-ene**

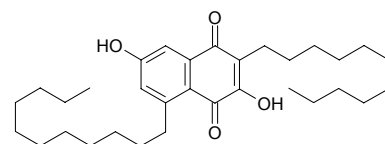
$C_{18}H_{16}O_4$  (296.33). Pharm: Antioxidant inactive (Takamatsu DCFH method, myelomonocytic HL-60 cells, control NDGA,  $IC_{50} = (0.7 \pm 0.3) \mu\text{g/mL}$ , Vitamin C,  $IC_{50} = (1.9 \pm 0.7) \mu\text{g/mL}$ , Trolox,  $IC_{50} = (1.4 \pm 0.5) \mu\text{g/mL}$ ); cytotoxic (XTT assay, HL-60 cells,  $IC_{50} > 50.0 \mu\text{g/mL}$ ; control NDGA,  $IC_{50} = (2.6 \pm 0.2) \mu\text{g/mL}$ , Vitamin C,  $IC_{50} > 10.0 \mu\text{g/mL}$ , Trolox,  $IC_{50} > 10.0 \mu\text{g/mL}$ ). Source: SAN CHI LA RUI A *Larrea tridentata* (leaf). Ref: 3850.

**5866 4,4'-Dihydroxydiphenyl methane**

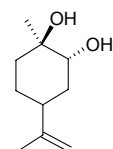
[620-92-8]  $C_{13}H_{12}O_2$  (200.24). Source: TIAN MA *Gastrodia elata*. Ref: 2.

**5867 3,7-Dihydroxy-2,5-diundecylnaphthoquinone**

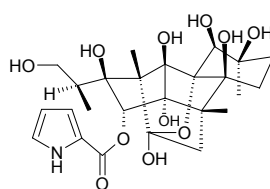
$C_{32}H_{50}O_4$  (498.75). Yellow powder, mp 75–77°C. Pharm: Cytotoxic inactive (*in vitro*, HL-60,  $IC_{50} > 100 \mu\text{g/mL}$ ; Bel7402,  $IC_{50} > 100 \mu\text{g/mL}$ ; HeLa,  $IC_{50} > 100 \mu\text{g/mL}$ ; U937,  $IC_{50} > 100 \mu\text{g/mL}$ ; control Colchicine, HL-60,  $IC_{50} = 1.6 \mu\text{g/mL}$ ; Bel7402,  $IC_{50} = 0.4 \mu\text{g/mL}$ ; HeLa,  $IC_{50} = 0.1 \mu\text{g/mL}$ ; U937,  $IC_{50} = 0.1 \mu\text{g/mL}$ ). Source: LA ZHU GUO *Aegiceras corniculatum* (stem and twig; yield = 0.000025%). Ref: 4746.

**5868 1,2-Dihydroxy-8(9)-ene-p-menthane**

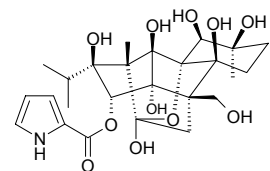
$C_{10}H_{18}O_2$  (170.25). Yellowish oil. Source: JING JIE *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*]. Ref: 2158.

**5869 (13S)-9,18-Dihydroxy-9-epi-10-epi-ryanodine**

$C_{25}H_{35}NO_{11}$  (525.56). Crystals (CHCl<sub>3</sub>:Me<sub>2</sub>CO = 3:1), mp 190°C,  $[\alpha]_D = +10^\circ$  ( $c = 0.35$ ). Pharm: Cardiac contraction inhibitor (guinea-pig papillary muscle, causes a prolongation of the latency time and decrease of contraction force,  $EC_{50} = 390 \text{ nmol/L}$ ). Source: QU CHONG CAO *Spigelia anthelmia* (aerial parts). Ref: 5139.

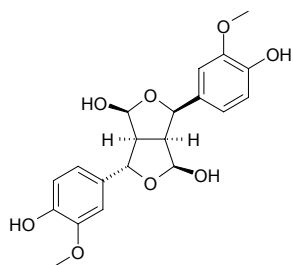
**5870 9,20-Dihydroxy-9-epi-10-epi-ryanodine**

$C_{25}H_{35}NO_{11}$  (525.56). Crystals (CHCl<sub>3</sub>:MeOH = 3:1), mp 178°C,  $[\alpha]_D = +4^\circ$  ( $c = 0.1$ ). Source: QU CHONG CAO *Spigelia anthelmia* (aerial parts). Ref: 5139.

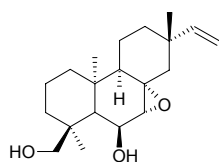


**5871 4,8-Dihydroxyepipinoresinol**

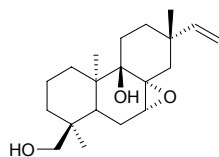
$C_{20}H_{22}O_8$  (390.39). Amorphous powder, mp 128–130°C,  $[\alpha]_D^{27} = +36.8^\circ$  ( $c = 0.29$ , MeOH). Source: YUN NAN TIE SHAN *Tsuga dumosa* (heartwood). Ref: 4568.

**5872 6β,18-Dihydroxy-7α,8α-epoxy-9-epi-ent-pimara-15-ene**

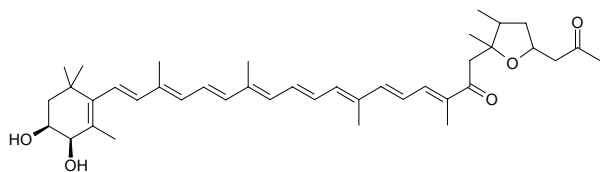
$C_{20}H_{32}O_3$  (320.48). Source: TENG CANG CHI MEI *Gibberella fujikuroi*. Ref: 3916.

**5873 9β,18-Dihydroxy-7α,8α-epoxy-9-epi-ent-pimara-15-ene**

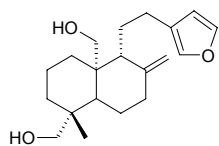
$C_{20}H_{32}O_3$  (320.48). Source: TENG CANG CHI MEI *Gibberella fujikuroi*. Ref: 3916.

**5874 3,4-Dihydroxy-3',6'-epoxy-1',2',5',6'7',8'-hexahydro-6'-methyl-16'-nor-β,φ-carotene-1',8'-dione**

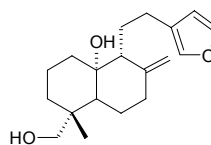
$C_{40}H_{56}O_5$  (616.89). Reddish solid. Source: MU LI (Oyster) *Crassostrea gigas*. Ref: 4515.

**5875 19,20-Dihydroxy-15,16-epoxy-8(17),13(16),14-ent-labdatriene**

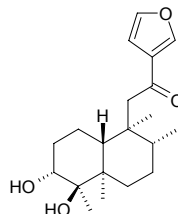
$C_{20}H_{30}O_3$  (318.46). Colorless oil,  $[\alpha]_D^{25} = -20.4^\circ$  ( $c = 0.38$ ,  $CHCl_3$ ). Pharm: Phytotoxin (*Raphidocelis subcapitata*,  $IC_{50} = 18.45\mu\text{mol/L}$ ). Source: FU YE YAN ZI CAI *Potamogeton natans*. Ref: 5184.

**5876 10α,19-Dihydroxy-15,16-epoxy-8(17),13(16),14-nor-ent-labdatriene**

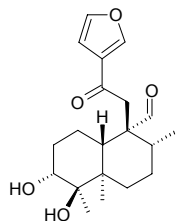
$C_{19}H_{28}O_3$  (304.43). Colorless oil,  $[\alpha]_D^{25} = -4.1^\circ$  ( $c = 0.21$ ,  $CHCl_3$ ). Pharm: Phytotoxin (*Raphidocelis subcapitata*,  $IC_{50} = 2.84\mu\text{mol/L}$ ). Source: FU YE YAN ZI CAI *Potamogeton natans*. Ref: 5184.

**5877 3α,4β-Dihydroxy-15,16-epoxy-12-oxo-cleroda-13(16),14-dien**

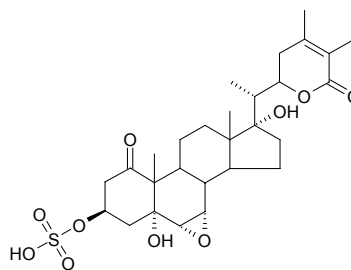
$C_{20}H_{30}O_4$  (334.46). Source: *Croton hovarum*. Ref: 4552.

**5878 3α,4β-Dihydroxy-15,16-epoxy-12-oxo-cleroda-13(16),14-dien-9-ol**

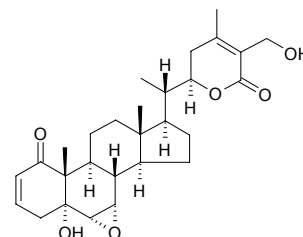
$C_{20}H_{28}O_5$  (348.44). Source: *Croton hovarum*. Ref: 4552.

**5879 5α,17α-Dihydroxy-6α,7α-epoxy-1-oxo-3β-O-sulfate-witha-24-enolide**

$C_{28}H_{40}O_{10}S$  (568.69). mp 158°C,  $[\alpha]_D^{30} = +59.40^\circ$  ( $c = 0.25$ , MeOH). Source: CUI MIAN SHUI QIE *Withania somnifera* (leaf). Ref: 5329.

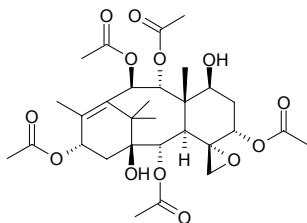
**5880 (20S,22R)-5α,27-Dihydroxy-6α,7α-epoxy-1-oxowitha-2,24-dienolide**

$C_{28}H_{38}O_6$  (470.61). Source: CUI MIAN SHUI QIE *Withania somnifera* (root). Ref: 4198.

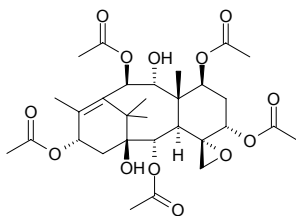


**5881 1 $\beta$ ,7 $\beta$ -Dihydroxy-4 $\beta$ ,20-epoxy-2 $\alpha$ ,5 $\alpha$ ,9 $\alpha$ ,10 $\beta$ ,13 $\alpha$ -pentaacetoxytax-11-ene**

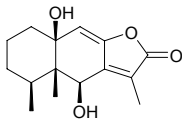
C<sub>30</sub>H<sub>42</sub>O<sub>13</sub> (610.66). Source: DUAN YE HONG DOU SHAN *Taxus brevifolia*. Ref: 662.

**5882 1 $\beta$ ,9 $\alpha$ -Dihydroxy-4 $\beta$ ,20-epoxy-2 $\alpha$ ,5 $\alpha$ ,7 $\beta$ ,10 $\beta$ ,13 $\alpha$ -penta-acetoxytax-11-ene**

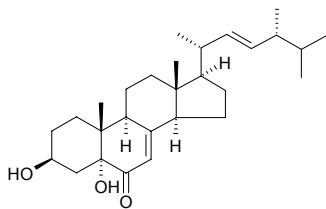
C<sub>30</sub>H<sub>42</sub>O<sub>13</sub> (610.66). Source: DUAN YE HONG DOU SHAN *Taxus brevifolia*. Ref: 662.

**5883 6 $\beta$ ,10 $\beta$ -Dihydroxyeremophila-7(11),8(9)-dien-12,8-olide**

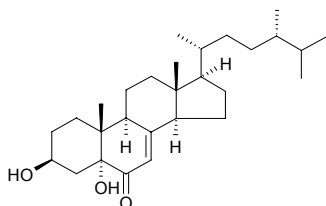
C<sub>15</sub>H<sub>20</sub>O<sub>4</sub> (264.32). Source: *Ligularia virgaurea* ssp. *oligocephala* (whole herb). Ref: 4981.

**5884 3 $\beta$ ,5 $\alpha$ -Dihydroxy-(22E)-ergosta-7,22-dien-6-one**

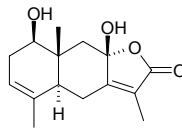
C<sub>28</sub>H<sub>44</sub>O<sub>3</sub> (428.66). Source: *Pleurotus eryngii*. Ref: 4183.

**5885 3 $\beta$ ,5 $\alpha$ -Dihydroxyergost-7-en-6-one**

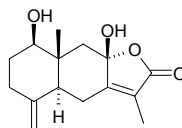
C<sub>28</sub>H<sub>46</sub>O<sub>3</sub> (430.68). Colorless amorphous solid, [ $\alpha$ ]<sub>D</sub><sup>30</sup> = +28.6° (c = 0.04, MeOH). Source: *Pleurotus eryngii*. Ref: 4183.

**5886 1 $\beta$ ,8 $\beta$ -Dihydroxyeudesman-3,7(11)-dien-8 $\alpha$ ,12-olide**

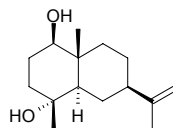
C<sub>15</sub>H<sub>20</sub>O<sub>4</sub> (264.32). White needle crystals (MeOH), mp 193–195°C. Pharm: Cytotoxic (*in vitro*, P<sub>388</sub>, IC<sub>50</sub> = 60 μg/mL). Source: XIAO MEI WEI QIN *Smyrniolum olusatrum* (fruit). Ref: 5162.

**5887 1 $\beta$ ,8 $\beta$ -Dihydroxyeudesman-4(15),7(11)-dien-8 $\alpha$ ,12-olide**

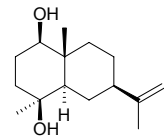
C<sub>15</sub>H<sub>20</sub>O<sub>4</sub> (264.32). White prism crystals (MeOH), mp 178–180°C. Pharm: Cytotoxic (*in vitro*, P<sub>388</sub>, IC<sub>50</sub> = 65 μg/mL). Source: XIAO MEI WEI QIN *Smyrniolum olusatrum* (fruit). Ref: 5162.

**5888 1 $\beta$ ,4 $\alpha$ -Dihydroxyeudesman-11-ene**

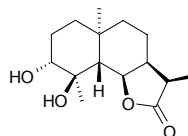
C<sub>15</sub>H<sub>26</sub>O<sub>2</sub> (238.37). [ $\alpha$ ]<sub>D</sub><sup>17</sup> = -25° (c = 0.13, CHCl<sub>3</sub>). Pharm: Cytotoxic (inhibits growth of Bel7402 cell, 0.0001 mol/L, InRt = 34.4%, control Etoposide, InRt = 96.0%). Source: YI NIAN PENG *Erigeron annuus* (aerial parts). Ref: 5073.

**5889 1 $\beta$ ,4 $\beta$ -Dihydroxyeudesman-11-ene**

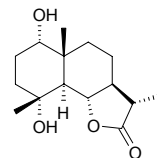
C<sub>15</sub>H<sub>26</sub>O<sub>2</sub> (238.37). Colorless oil, [ $\alpha$ ]<sub>D</sub><sup>17</sup> = -29° (c = 0.13, CHCl<sub>3</sub>). Source: YI NIAN PENG *Erigeron annuus* (aerial parts). Ref: 5073.

**5890 3 $\alpha$ ,4 $\beta$ -Dihydroxy-5 $\beta$ H,11 $\alpha$ H-eudesman-6,12-olide**

C<sub>15</sub>H<sub>24</sub>O<sub>4</sub> (268.36). Source: *Ferula sinaica* (leaf). Ref: 5145.

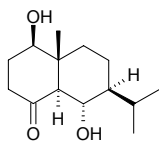
**5891 1 $\alpha$ ,4 $\alpha$ -Dihydroxyeudesman-5 $\alpha$ ,6 $\beta$ ,7 $\alpha$ ,11 $\beta$ H-12,6-olide**

C<sub>15</sub>H<sub>24</sub>O<sub>4</sub> (268.36). Colorless oil, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +31° (c = 0.5, CHCl<sub>3</sub>). Source: JIA NA LI HAO *Artemisia canariensis*. Ref: 2332.

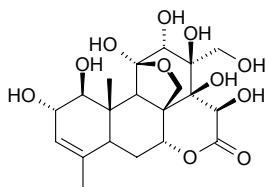


**5892 (1R,5S,6S,7S,10R)-1 $\beta$ ,6 $\alpha$ -Dihydroxyeudesman-4-one**

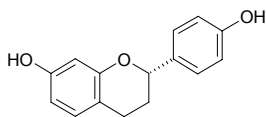
C<sub>14</sub>H<sub>24</sub>O<sub>3</sub> (240.35). Colorless oil, [ $\alpha$ ]<sub>D</sub><sup>17</sup> = +25° (c = 0.13, CHCl<sub>3</sub>). Source: YI NIAN PENG *Erigeron annuus* (aerial parts). Ref: 5073.

**5893 13 $\beta$ ,21-Dihydroxyeurycomanol**

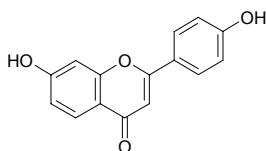
C<sub>20</sub>H<sub>28</sub>O<sub>11</sub> (444.44). Source: *Eurycoma* sp. Ref: 4556.

**5894 7,4'-Dihydroxyflavan**

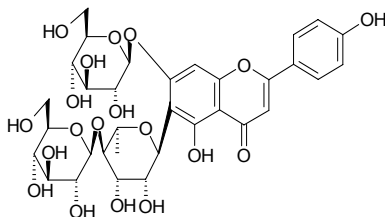
(2S)-7,4'-Dihydroxyflavan [82925-54-0] C<sub>15</sub>H<sub>14</sub>O<sub>3</sub> (242.28). Pharm: Antibacterial (phytopathogenic bacteria, *Corynebacterium betae* and *Corynebacterium fascians*); antifungal (*Botrytis cinerea*, ED<sub>50</sub> = 65 μg/mL); aromatase inhibitor inactive (*in vitro*, IC<sub>50</sub> > 40 μmol/L; control Aminoglutethimide, IC<sub>50</sub> = 6.4 μmol/L)<sup>[3090]</sup>. Source: GOU SHU *Broussonetia papyrifera*<sup>[3090]</sup>. Ref: 658, 3090.

**5895 4',7-Dihydroxyflavone**

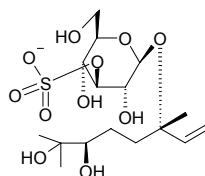
[2196-14-7] C<sub>15</sub>H<sub>10</sub>O<sub>4</sub> (254.24). Source: BAI CI HUA ZI *Sophora vicifolia*, ZHANG GUO GAN CAO *Glycyrrhiza inflata*, YUN NAN GAN CAO *Glycyrrhiza yunnanensis*. Ref: 2, 561, 660.

**5896 5,4'-Dihydroxyflavone-6-C- $\beta$ -D-glycosylrhamnoside-7-O-glycoside**

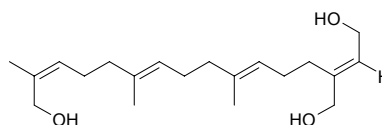
C<sub>33</sub>H<sub>40</sub>O<sub>19</sub> (740.68). mp 194–196°C. Source: HUANG JING *Polygonatum sibiricum*. Ref: 6.

**5897 (3S,6R)-6,7-Dihydroxy-6,7-dihydrolinalool-3-O- $\beta$ -D-(3-O-Potassium sulfo)-glucopyranoside**

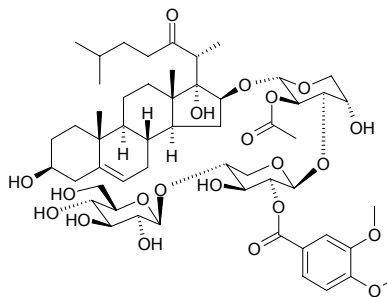
C<sub>16</sub>H<sub>29</sub>O<sub>11</sub>S<sup>-</sup> (429.47). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>21</sup> = -14° (c = 0.3, MeOH). Source: HU SUI ZI *Coriandrum sativum*. Ref: 4302.

**5898 (2E,6E,10E,14Z)-17,20-Dihydroxygeranylnerol**

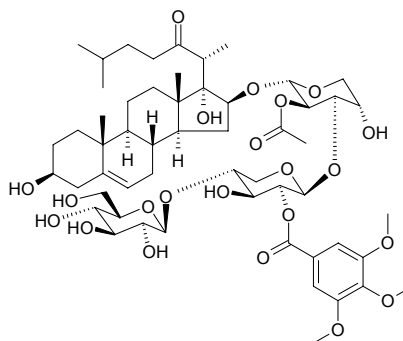
C<sub>20</sub>H<sub>34</sub>O<sub>3</sub> (322.49). Source: ZHONG BIN JU *Tithonia diversifolia* (aerial parts). Ref: 4622.

**5899 3 $\beta$ ,17 $\alpha$ -Dihydroxy-16 $\beta$ -[(O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)-O-(2-O-3,4-dimethoxybenzoyl- $\beta$ -D-xylopyranosyl)-(1 $\rightarrow$ 3)-2-O-acetyl- $\alpha$ -L-arabinopyranosyl)oxy]cholest-5-en-22-one**

C<sub>54</sub>H<sub>80</sub>O<sub>21</sub> (1065.23). Pharm: Cytotoxic (HL-60 cells, IC<sub>50</sub> = 0.016 μmol/L). Source: *Ornithogalum saundersiae* (bulb: yield = 0.00007%). Ref: 3030.

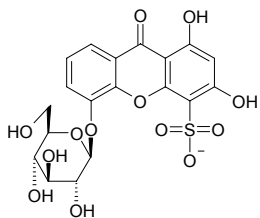
**5900 3 $\beta$ ,-17 $\alpha$ -Dihydroxy-16 $\beta$ -[(O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)-O-(2-O-3,4,5-trimethoxybenzoyl- $\beta$ -D-xylopyranosyl)-(1 $\rightarrow$ 3)-2-O-acetyl- $\alpha$ -L-arabinopyranosyl)oxy]cholest-5-en-22-one**

C<sub>55</sub>H<sub>82</sub>O<sub>22</sub> (1095.25). Pharm: Cytotoxic (HL-60 cells, IC<sub>50</sub> = 0.014 μmol/L). Source: *Ornithogalum saundersiae* (bulb: yield = 0.00011%). Ref: 3030.

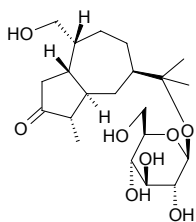


**5901 1,3-Dihydroxy-5-O-β-D-glucopyranosylxanthone-4-sulfonate**

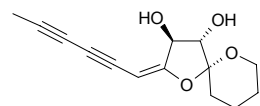
C<sub>19</sub>H<sub>17</sub>O<sub>13</sub>S (485.40). Yellow powder, mp > 360°C, [α]<sub>D</sub><sup>31.2</sup> = +38.10° (c = 0.033, MeOH). **Pharm:** Cytotoxic (P<sub>388</sub> cell line, ED<sub>50</sub> = 15.69 μmol/L; control VP-16, ED<sub>50</sub> = 0.064 μmol/L). **Source:** YUAN BAO CAO *Hypericum sampsonii* (whole herb). **Ref:** 3861.

**5902 (1S,4S,5R,7R,10R)-11,14-Dihydroxyguai-3-one 11-O-β-D-glucopyranoside**

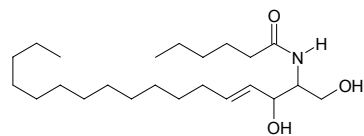
C<sub>21</sub>H<sub>36</sub>O<sub>8</sub> (416.52). Colorless needles (MeOH), mp 98–100°C, [α]<sub>D</sub><sup>22</sup> = +34° (c = 0.5, MeOH). **Source:** CANG ZHU *Atractylodes lancea*, GUAN CANG ZHU *Atractylodes japonica* (fresh rhizome). **Ref:** 4310, 4348.

**5903 (3S\*,4S\*,5R\*)-(E)-3,4-Dihydroxy-2-(hexa-2,4-dienyliden)-1,6-dioxaspiro-(4,5)decane**

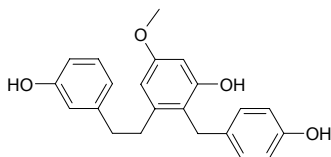
C<sub>14</sub>H<sub>16</sub>O<sub>4</sub> (248.28). [α]<sub>D</sub><sup>24</sup> = -19.8° (c = 0.22, EtOH). **Source:** JIN SE MU JU *Matricaria aurea*. **Ref:** 2301.

**5904 1,3-Dihydroxy-2-hexanoylamino-(4E)-heptadecene**

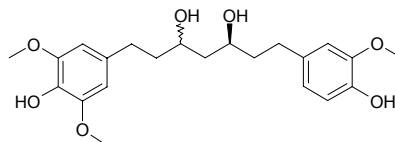
C<sub>23</sub>H<sub>46</sub>NO<sub>3</sub> (383.62). Colorless gummy solid, [α]<sub>D</sub><sup>25</sup> = -19.1° (c = 0.021, pyridine). **Source:** QI ZHOU YI ZHI HAO *Conyza canadensis* [Syn. *Erigeron canadensis*]. **Ref:** 4249.

**5905 3,3'-Dihydroxy-2-(4-hydroxybenzyl)-5-methoxybibenzyl**

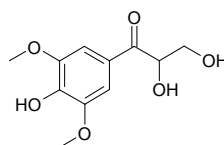
C<sub>22</sub>H<sub>22</sub>O<sub>4</sub> (350.42). Colorless needles. **Pharm:** Antiallergic β-Hexosaminidase inhibitor (rat basophilic RBL-2H3 cells, inhibits release of β-hexosaminidase, 100 μmol/L, InRt = (98.4 ± 1.6) μmol/L, p < 0.01; 300 μmol/L control Ketotifen fumarate, InRt = (72.5 ± 0.9) μmol/L, p < 0.01). **Source:** SHOU ZHANG SHEN *Gymnadenia conopsea* (tuber). **Ref:** 5022.

**5906 (3R,5S)-3,5-Dihydroxy-1-(4-hydroxy-3,5-dimethoxyphenyl)-7-(4-hydroxy-3-methoxyphenyl)heptane**

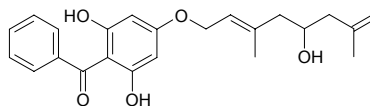
C<sub>22</sub>H<sub>30</sub>O<sub>7</sub> (406.48). Colorless oil, [α]<sub>D</sub><sup>24</sup> = 0° (c = 0.55, CHCl<sub>3</sub>). **Source:** SHENG JIANG *Zingiber officinale*. **Ref:** 3803.

**5907 2,3-Dihydroxy-1-(4-hydroxy-3,5-dimethoxyphenyl)-1-propanone**

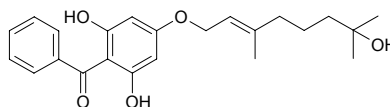
C<sub>11</sub>H<sub>14</sub>O<sub>6</sub> (242.23). Amorphous white powder, [α]<sub>D</sub><sup>25</sup> = 0° (c = 0.5, CHCl<sub>3</sub>). **Source:** TIAN XIAN GUO *Ficus beecheyana* [Syn. *Ficus erecta* var. *beecheyana*] (root: yield = 0.012% dw). **Ref:** 4657.

**5908 2,6-Dihydroxy-4-[(E)-5-hydroxy-3,7-dimethylocta-2,7-dienyloxy]benzophenone**

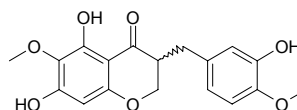
C<sub>23</sub>H<sub>26</sub>O<sub>5</sub> (382.46). Yellow amorphous powder, [α]<sub>D</sub><sup>25</sup> = -20° (c = 0.2, MeOH). **Source:** YUAN BAO CAO *Hypericum sampsonii* (whole herb). **Ref:** 4055.

**5909 2,6-Dihydroxy-4-[(E)-7-hydroxy-3,7-dimethylocta-2-enyloxy]benzophenone**

C<sub>23</sub>H<sub>28</sub>O<sub>5</sub> (384.48). Yellow amorphous powder, [α]<sub>D</sub><sup>25</sup> = +30° (c = 0.3, MeOH). **Source:** YUAN BAO CAO *Hypericum sampsonii* (whole herb). **Ref:** 4055.

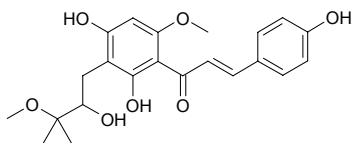
**5910 5,7-Dihydroxy-3-(3-hydroxy-4-methoxybenzyl)-6-methoxychroman-4-one**

C<sub>18</sub>H<sub>18</sub>O<sub>7</sub> (346.34). [α]<sub>D</sub><sup>20</sup> = -16.0° (c = 0.20, MeOH). **Pharm:** Angiogenesis inhibitor (IC<sub>50</sub> = 0.5 μg/mL, control Retinoic acid, IC<sub>50</sub> = 0.3 μg/mL). **Source:** DU JUAN LAN *Cremastra appendiculata* (bulb). **Ref:** 4937.



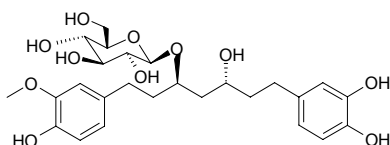
**5911 1-[2,4-Dihydroxy-3-(3-hydroxy-2-methoxy-3-methylbutyl)-6-methoxyphenyl]-3-(4-hydroxyphenyl)propenone**

$C_{22}H_{26}O_7$  (402.45). Yellow powder. **Pharm:** Anti-inflammatory (NO production inhibitor, *in vitro*, macrophage RAW264.7 cells, induced by LPS/IFN- $\gamma$ ,  $IC_{50} = 6.5\mu\text{mol/L}$ , without showing cytotoxicity at concentrations lower than  $10\mu\text{mol/L}$ , cell viability > 95%). **Source:** PI JIU HUA *Humulus lupulus* (strobile). **Ref:** 4795.



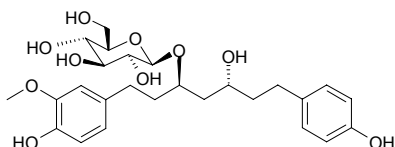
**5912 (3R,5R)-3,5-Dihydroxy-1-(4-hydroxy-3-methoxyphenyl)-7-(3,4-dihydroxyphenyl)heptane 3-O- $\beta$ -D-glucopyranoside**

$C_{26}H_{36}O_{11}$  (524.57). Amorphous solid,  $[\alpha]_D^{25} = -16.0^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Cytotoxic (*in vitro*, HL-60,  $IC_{50} = 4.5\mu\text{g/mL}$ ; HSC-2,  $IC_{50} = 209\mu\text{g/mL}$ ; HGF,  $IC_{50} > 250\mu\text{g/mL}$ ; control Etoposide: HL-60,  $IC_{50} = 0.2\mu\text{g/mL}$ ; HSC-2,  $IC_{50} = 24\mu\text{g/mL}$ ; HGF,  $IC_{50} > 200\mu\text{g/mL}$ ). **Source:** JIAN GEN SHU *Tacca chantrieri* [Syn. *Tacca minor*; *Tacca esquirolii*] (rhizome: yield = 0.0013%dw). **Ref:** 4609.



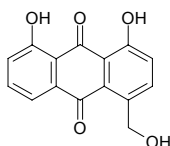
**5913 (3R,5R)-3,5-Dihydroxy-1-(4-hydroxy-3-methoxyphenyl)-7-(4-hydroxyphenyl)heptane 3-O- $\beta$ -D-glucopyranoside**

$C_{26}H_{36}O_{10}$  (508.57). Amorphous solid,  $[\alpha]_D^{25} = -2.0^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Cytotoxic (*in vitro*, HL-60,  $IC_{50} > 10\mu\text{g/mL}$ ; HSC-2,  $IC_{50} = 160\mu\text{g/mL}$ ; HGF,  $IC_{50} > 250\mu\text{g/mL}$ ; control Etoposide: HL-60,  $IC_{50} = 0.2\mu\text{g/mL}$ ; HSC-2,  $IC_{50} = 24\mu\text{g/mL}$ ; HGF,  $IC_{50} > 200\mu\text{g/mL}$ ). **Source:** JIAN GEN SHU *Tacca chantrieri* [Syn. *Tacca minor*; *Tacca esquirolii*] (rhizome: yield = 0.0020%dw). **Ref:** 4609.



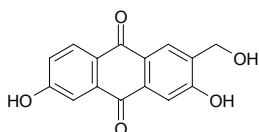
**5914 1,8-Dihydroxy-4-hydroxymethyl anthraquinone**

$C_{15}H_{10}O_5$  (270.24). **Source:** LEI GONG TENG *Tripterygium wilfordii*. **Ref:** 2.



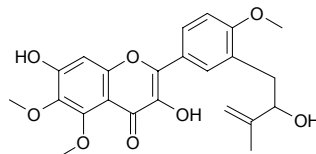
**5915 3,6-Dihydroxy-2-hydroxymethyl-9,10-anthraquinone**

$C_{15}H_{10}O_5$  (270.24). Yellow powder. **Source:** MA LAI BAN DAO RAN MU SHU *Saprosma scortechinii* (stem and leaf). **Ref:** 4219.



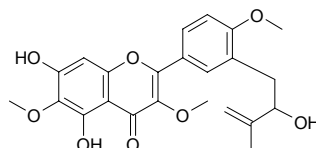
**5916 3,7-Dihydroxy-3'-(2-hydroxy-3-methyl-3-butenyl)-5,6,4'-trimethoxyflavone**

$C_{23}H_{24}O_8$  (428.44). Yellow gummy solid,  $[\alpha]_D^{25} = +33.3^\circ$  ( $c = 0.03$ , MeOH). **Pharm:** Prolyl endopeptidase inhibitor (flavobacterium origin,  $IC_{50} = (233 \pm 0.003)\mu\text{mol/L}$ , control Z-pro-prolinal,  $IC_{50} = (0.884 \pm 0.025)\mu\text{mol/L}$ )<sup>[4179]</sup>; thrombin inhibitor inactive (bovine source, control Leupeptin,  $IC_{50} = (45.4 \pm 0.03)\mu\text{mol/L}$ ). **Source:** JIA LIAN QIAO *Duranta repens* (whole herb). **Ref:** 4179.



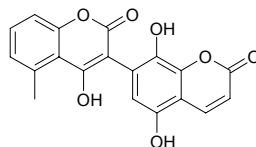
**5917 5,7-Dihydroxy-3'-(2-hydroxy-3-methyl-3-butenyl)-3,6,4'-trimethoxyflavone**

$C_{23}H_{24}O_8$  (428.44). Yellow gummy solid,  $[\alpha]_D^{25} = +18.5^\circ$  ( $c = 0.05$ , MeOH). **Pharm:** Prolyl endopeptidase inhibitor (flavobacterium origin,  $IC_{50} = (450 \pm 0.02)\mu\text{mol/L}$ , control Z-pro-prolinal,  $IC_{50} = (0.884 \pm 0.025)\mu\text{mol/L}$ ); thrombin inhibitor inactive (bovine source, control Leupeptin,  $IC_{50} = (45.4 \pm 0.03)\mu\text{mol/L}$ ). **Source:** JIA LIAN QIAO *Duranta repens* (whole herb). **Ref:** 4179.



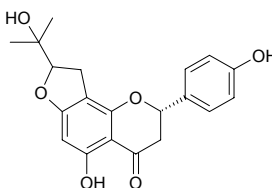
**5918 5,8-Dihydroxy-7-(4-hydroxy-5-methyl-coumarin-3)-coumarin**

$C_{19}H_{12}O_7$  (352.30). Light pink granular crystals, mp > 300°C. **Source:** DA DING CAO *Gerbera anandria* [Syn. *Leibnitzia anandria*]. **Ref:** 141.



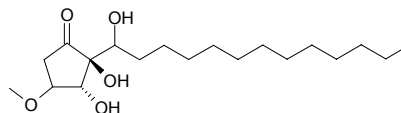
**5919 5,4'-Dihydroxy-[2''-(1-hydroxy-1-methylethyl)dihydrofurano]-(7,8:5'',4'')flavanone**

$C_{20}H_{20}O_6$  (356.38). Pale yellow solid,  $[\alpha]_D^{20} = -99^\circ$  ( $c = 0.1$ , MeOH). **Source:** ZHEN YE XUE TONG *Macaranga conifera*. **Ref:** 1929.



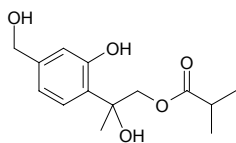
**5920 2,3-Dihydroxy-2-(1-hydroxytridecyl)-4-methoxycyclopentanone**

$C_{19}H_{36}O_5$  (344.50). **Source:** *Hygrophorus personii*. **Ref:** 3800.

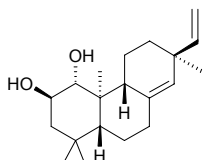


**5921 7,8-Dihydroxy-isobutyryl-thymol**

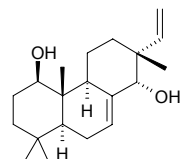
$C_{14}H_{20}O_5$  (268.31). Straw yellow oil. Source: XIAN MAI XUAN FU HUA *Inula nervosa*. Ref: 795.

**5922 (1R,2R)-ent-1,2-Dihydroxyisopimara-8(14),15-diene**

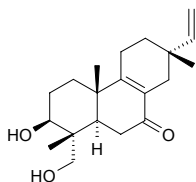
$C_{20}H_{32}O_2$  (304.48). Crystals, mp 132~133°C,  $[\alpha]_D^{20} = -16.5^\circ$  ( $c = 2.51$ ). Source: JI RUAN RONG TAI *Trichocolea mollissima*. Ref: 3489.

**5923 1β,14α-Dihydroxyisopimara-7,15-diene**

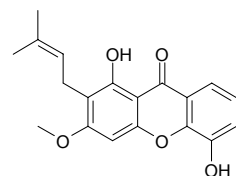
$C_{20}H_{32}O_2$  (304.48). Amorphous powder,  $[\alpha]_D = -16.0^\circ$  ( $c = 0.6$ ,  $CHCl_3$ ). Pharm: Antifungal (TLC bioautographic assay, plant pathogenic fungus *Cladosporium cucumerinum*, MA = 25-50 μg, yeast *Candida albicans*, MA = 25-50 μg). Source: PU FU QIANG DAO YAO *Hypoestes serpens*. Ref: 3438.

**5924 3β,19-Dihydroxy-8(9),15-isopimaradien-7-one**

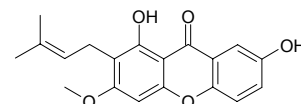
$C_{20}H_{30}O_3$  (318.46). Colorless oil,  $[\alpha]_D^{25} = +52^\circ$  ( $c = 0.06$ ,  $CHCl_3$ ). Source: CE BAI ZHI JIE *Thuja orientalis* [Syn. *Platyclusus orientalis*; *Biota orientalis*] (branch). Ref: 3022.

**5925 1,5-Dihydroxy-2-isoprenyl-3-methoxyxanthone**

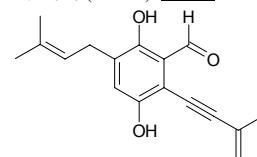
1,5-Dihydroxy-3-methoxy-2-(3-methylbut-2-enyl)-xanthone  $C_{19}H_{18}O_5$  (326.35). Pharm: Antibacterial inactive (MRSA). Source: DAO NIAN ZI *Garcinia mangostana* (fruit hull), HEI XIAN TIAO TENG HUANG *Garcinia nigrolineata* (leaf: yield = 0.0008%dw). Ref: 3066, 4735.

**5926 1,7-Dihydroxy-2-isoprenyl-3-methoxyxanthone**

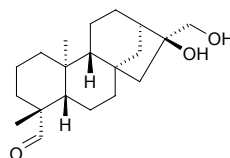
1,7-Dihydroxy-3-methoxy-2-(3-methylbut-2-enyl)xanthone  $C_{19}H_{18}O_5$  (326.35). Pharm: Antioxidant (DPPH scavenger, 10 μmol/L, ScRt = 15%, control BHT, 10 μmol/L, ScRt = 43%)<sup>[5319]</sup>; antibacterial inactive (MRSA)<sup>[4735]</sup>; cytotoxic (*in vitro*, HL-60, IC<sub>50</sub> = 23.6 μmol/L)<sup>[4715]</sup>; antitubercular (*Mycobacterium tuberculosis*, MIC > 200 μg/mL, inactive)<sup>[4358]</sup>. Source: DAO NIAN ZI *Garcinia mangostana* (fruit), DAO NIAN ZI *Garcinia mangostana* (fruit hull), HEI XIAN TIAO TENG HUANG *Garcinia nigrolineata* (leaf: yield = 0.0001%dw), TIAN SHAN ZHU ZI *Garcinia dulcis* (fruit), TIAN SHAN ZHU ZI *Garcinia dulcis* (flower). Ref: 3066, 4422, 4358, 4715, 4735, 5319.

**5927 2,5-Dihydroxy-3-isoprenyl-6-(3-methylbut-3-en-1-ynyl)benzaldehyde**

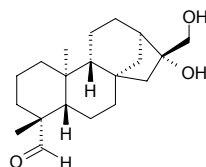
$C_{17}H_{18}O_3$  (270.33). Source: MAO REN GE JUN *Stereum hirsutum*. Ref: 3930.

**5928 16β,17-Dihydroxy-ent-kauran-19-al**

$C_{20}H_{32}O_3$  (320.48). Pharm: Antioxidant (inhibits superoxide anion generation, fMLP/CB, IC<sub>50</sub> = (2.77±1.71) μg/mL, control DPI, IC<sub>50</sub> = (0.13±0.06) μg/mL,  $p < 0.001$ )<sup>[4950]</sup>; platelet aggregation selected inhibitor (washed rabbit platelets, 200 μmol/L: 100 μmol/L AA induced, InRt = 9.6%; 10 μg/mL collagen induced, InRt = 17.6%; 1 ng/mL PAF induced, InRt = 5.5%; 0.05 U/mL thrombin induced, InRt = 0.0%)<sup>[4654]</sup>. Source: FAN LI ZHI *Annona squamosa* (stem: yield = 0.0010%fw). Ref: 4950, 4654.

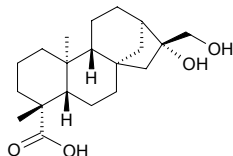
**5929 16α,17-Dihydroxy-ent-kauran-19-al**

$C_{20}H_{32}O_3$  (320.48). Pharm: Platelet aggregation inhibitor inactive (washed rabbit platelets, 200 μmol/L: 100 μmol/L AA induced, InRt = 0.5%; 10 μg/mL collagen induced, InRt = 4.9%; 1 ng/mL PAF induced, InRt = 10.3%; 0.05 U/mL thrombin induced, InRt = 3.2%)<sup>[4654]</sup>; antioxidant (inhibits superoxide anion generation, fMLP/CB, IC<sub>50</sub> = (6.49±3.31) μg/mL, control DPI, IC<sub>50</sub> = (0.13±0.06) μg/mL,  $p < 0.001$ )<sup>[4950]</sup>; antiproliferative and cytotoxic (*in vitro*, L-929, GI<sub>50</sub> = 50 μg/mL; K562, GI<sub>50</sub> = 50 μg/mL; HeLa, CC<sub>50</sub> = 50 μg/mL; control Paclitaxel, L-929, GI<sub>50</sub> = 0.1 μg/mL; K562, GI<sub>50</sub> = 0.01 μg/mL; HeLa, CC<sub>50</sub> = 0.01 μg/mL)<sup>[4770]</sup>. Source: FAN LI ZHI *Annona squamosa* (stem: yield = 0.0012%fw), MU LAN<sup>(3)</sup> *Bruguiera gymnorrhiza* (stem: yield = 0.00011%). Ref: 4654, 4770, 4950.

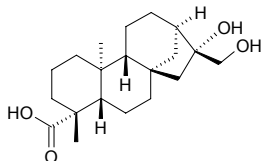


**5930 (-)-16,17-Dihydroxy-16 $\beta$ -kauran-19-oic acid**

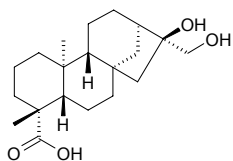
Diterpenoid SP II C<sub>20</sub>H<sub>32</sub>O<sub>4</sub> (336.48). mp 260~262°C. **Pharm:** Antihypertensive (rat, orl, 50mg/(kg·d)); anti-inflammatory (caused by formalin, 300mg/kg orl, regression of edema 38%, caused by protein, 300mg/kg orl, regression of edema 53%); antioxidant (inhibits superoxide anion generation, fMLP/CB, IC<sub>50</sub> = (3.07±0.33)μg/mL, *p*<0.001, control DPI, IC<sub>50</sub> = (0.13±0.06)μg/mL, *p*<0.001)<sup>[4950]</sup>; platelet aggregation inhibitor inactive (washed rabbit platelets, 200μmol/L: 100μmol/L AA induced, InRt = 7.2%; 10μg/mL collagen induced, InRt = 2.3%; 1ng/mL PAF induced, InRt = 8.9%; 0.05U/mL thrombin induced, InRt = 0.4%)<sup>[4654]</sup>. **Source:** JIAO XI XIAN *Siegesbeckia gummifer*, TU DANG GUI *Aralia cordata*, XIAN GENG XI XIAN *Siegesbeckia orientalis* var. *pubescens* [Syn. *Siegesbeckia pubescens*], FAN LI ZHI *Annona squamosa* (stem: yield = 0.00047%fw)<sup>[4654]</sup>. **Ref:** 2, 6, 658, 660, 661, 4654, 4950.

**5931 16 $\alpha$ ,17-Dihydroxy-ent-kauran-19-oic acid**

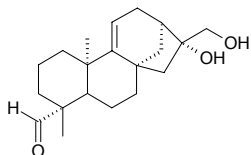
C<sub>20</sub>H<sub>32</sub>O<sub>4</sub> (336.48). **Pharm:** Cytotoxic inactive (Lu1, Col2, KB, LNCaP, hTERT-RPE1, HUVEC; control Taxol, ED<sub>50</sub> = 0.002μg/mL, 0.003μg/mL, 0.0005μg/mL, 0.001μg/mL, 0.004μg/mL, 0.008μg/mL, respectively). **Source:** *Parinari sprucei* (leaf). **Ref:** 4991.

**5932 16 $\beta$ ,17-Dihydroxy-ent-kauran-19-oic acid**

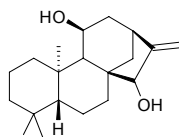
C<sub>20</sub>H<sub>32</sub>O<sub>4</sub> (336.48). **Pharm:** Antioxidant (inhibits superoxide anion generation, fMLP/CB, IC<sub>50</sub> = (0.79±0.14)μg/mL, *p*<0.001, control DPI, IC<sub>50</sub> = (0.13±0.06)μg/mL, *p*<0.001)<sup>[4950]</sup>; platelet aggregation inhibitor inactive (washed rabbit platelets, 200μmol/L: 100μmol/L AA induced, InRt = 14.9%; 10μg/mL collagen induced, InRt = 8.6%; 1ng/mL PAF induced, InRt = 14.4%; 0.05U/mL thrombin induced, InRt = 6.8%)<sup>[4654]</sup>. **Source:** FAN LI ZHI *Annona squamosa* (stem: yield = 0.0013%fw). **Ref:** 4950, 4654.

**5933 16 $\alpha$ ,17-Dihydroxy-ent-9(11)-kauren-19-al**

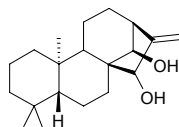
C<sub>20</sub>H<sub>30</sub>O<sub>3</sub> (318.46). White amorphous solid, [α]<sub>D</sub><sup>20</sup> = +4.8° (*c* = 0.3, CHCl<sub>3</sub>). **Source:** MU LAN<sup>(3)</sup> *Bruguiera gymnorhiza* (stem: yield = 0.00028%) **Ref:** 4770.

**5934 ent-11 $\alpha$ ,15 $\alpha$ -Dihydroxy-16-kaurene**

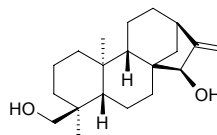
C<sub>20</sub>H<sub>32</sub>O<sub>2</sub> (304.48). **Pharm:** Cytotoxic inactive (hmn leukemia cell HL-60, 10μmol/L). **Source:** JIE XING YE TAI *Jungermannia truncata*. **Ref:** 4201.

**5935 ent-14 $\alpha$ ,15 $\alpha$ -Dihydroxy-16-kaurene**

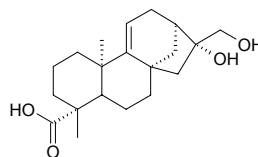
C<sub>20</sub>H<sub>32</sub>O<sub>2</sub> (304.48). Amorphous, [α]<sub>D</sub><sup>22</sup> = -48.5° (*c* = 2.89). **Source:** JIE XING YE TAI *Jungermannia truncata*. **Ref:** 4201.

**5936 ent-15 $\alpha$ ,18-Dihydroxy-16-kaurene**

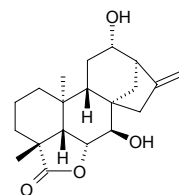
C<sub>20</sub>H<sub>32</sub>O<sub>2</sub> (304.48). White amorphous powder, [α]<sub>D</sub><sup>25</sup> = -76.7° (*c* = 0.20, CHCl<sub>3</sub>). **Pharm:** Cytotoxic (BST test, weak active). **Source:** DONG JIN BA DOU *Croton tonkinensis* (leaf). **Ref:** 4444.

**5937 16 $\alpha$ ,17-Dihydroxy-ent-9(11)-kauren-19-oic acid**

C<sub>20</sub>H<sub>30</sub>O<sub>4</sub> (334.46). **Source:** MU LAN<sup>(3)</sup> *Bruguiera gymnorhiza* (stem: yield = 0.00075%) **Ref:** 4770.

**5938 7 $\beta$ ,12 $\alpha$ -Dihydroxykaurenolide**

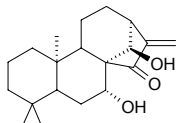
C<sub>20</sub>H<sub>28</sub>O<sub>4</sub> (332.44). **Pharm:** Plant growth regulator. **Source:** XI HU LU *Cucurbita pepo*. **Ref:** 658.



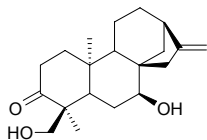


**5939 7 $\alpha$ ,14 $\beta$ -Dihydroxykaur-16-en-15-one**

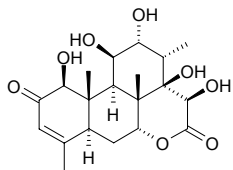
$C_{20}H_{30}O_3$  (318.46). White amorphous powder, mp 200–201°C,  $[\alpha]_D^{18} = -10^\circ$  ( $c = 0.3$ ,  $CHCl_3$ ). **Pharm:** Anti-inflammatory (inhibits LPS-induced NF- $\kappa$ B activation in murine macrophage RAW264.7 cells,  $IC_{50} = 0.11 \mu\text{mol/L}$ ; control Parthenolide,  $IC_{50} = 2.34 \mu\text{mol/L}$ ); NO production inhibitor ( $IC_{50} = 0.26 \mu\text{mol/L}$ ; control Parthenolide,  $IC_{50} = 2.01 \mu\text{mol/L}$ ). **Source:** DONG JIN BA DOU *Croton tonkinensis* (leaf; yield = 0.00054%dw). **Ref:** 4724.

**5940 ent-7 $\alpha$ ,18-Dihydroxykaur-16-en-3-one**

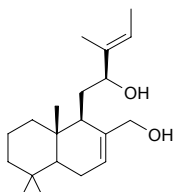
$C_{20}H_{30}O_3$  (318.46). Syrup,  $[\alpha]_D = -45.8^\circ$  ( $c = 0.5$ ,  $CHCl_3$ ). **Source:** MU ER DU MA CAO *Sideritis moorei* (aerial parts). **Ref:** 5295.

**5941 14 $\beta$ ,15 $\beta$ -Dihydroxyklaineanon**

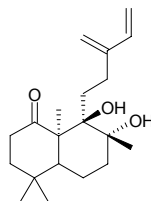
$C_{20}H_{28}O_8$  (396.44). **Pharm:** Cytotoxic (KB cells,  $IC_{50} = 0.38 \mu\text{g/mL}$ , P<sub>388</sub> cells,  $IC_{50} = 0.29 \mu\text{g/mL}$ )<sup>[4556]</sup>; plant growth inhibitor (Cucumber seedling, root growth,  $IC_{50} = (2.5 \pm 0.5) \mu\text{mol/L}$ , shoot growth,  $IC_{50} = (22.7 \pm 0.5) \mu\text{mol/L}$ ; Rice seedling, root growth,  $IC_{50} > 200 \mu\text{mol/L}$ , shoot growth,  $IC_{50} > 200 \mu\text{mol/L}$ )<sup>[5215]</sup>. **Source:** CHANG YE KUAN MU *Eurycoma longifolia* (leaf), *Eurycoma* sp. **Ref:** 4556, 5215.

**5942 12,17-Dihydroxyabda-7,13(E)-diene**

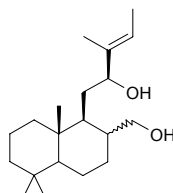
$C_{20}H_{34}O_2$  (306.49). mp 109–111°C,  $[\alpha]_D^{20} = -7.55^\circ$  ( $c = 1.06$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (*in vitro*, BT474,  $IC_{50} = 2.5 \mu\text{g/mL}$ , control Doxorubicin hydrochloride,  $IC_{50} = 0.08 \mu\text{g/mL}$ ; CHAGO,  $IC_{50} = 6.1 \mu\text{g/mL}$ , Doxorubicin hydrochloride,  $IC_{50} = 2.3 \mu\text{g/mL}$ ; HepG2,  $IC_{50} = 5.3 \mu\text{g/mL}$ , Doxorubicin hydrochloride,  $IC_{50} = 0.9 \mu\text{g/mL}$ ; Kato3,  $IC_{50} = 0.6 \mu\text{g/mL}$ , Doxorubicin hydrochloride,  $IC_{50} = 1.7 \mu\text{g/mL}$ ; SW620,  $IC_{50} = 6.1 \mu\text{g/mL}$ , Doxorubicin hydrochloride,  $IC_{50} = 1.1 \mu\text{g/mL}$ ). **Source:** GUANG YE BA DOU *Croton oblongifolius* [Syn. *Croton laevigatus*]. **Ref:** 5363.

**5943 ent-8 $\alpha$ ,9 $\beta$ -Dihydroxyabda-13(16),14-dien-1-one**

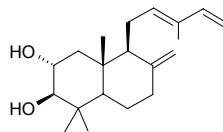
$C_{20}H_{32}O_3$  (320.48). Colorless oil,  $[\alpha]_D^{20} = +13.6^\circ$  ( $c = 0.21$ ,  $CHCl_3$ ). **Source:** JIE MAO TAI *Blepharostoma trichophyllum*. **Ref:** 3843.

**5944 12,17-Dihydroxyabda-13(E)-ene**

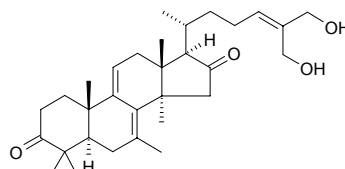
$C_{20}H_{36}O_2$  (308.51). mp 161–163°C,  $[\alpha]_D^{20} = -15.42^\circ$  ( $c = 1.18$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic inactive (*in vitro*, BT474, CHAGO, HepG2, Kato3, SW620:  $> 10 \mu\text{g/mL}$ ). **Source:** GUANG YE BA DOU *Croton oblongifolius* [Syn. *Croton laevigatus*]. **Ref:** 5363.

**5945 2,3-Dihydroxy-labda-8(17),12(E),14-triene**

$C_{20}H_{32}O_2$  (304.48). White solid, mp 69–70°C,  $[\alpha]_D^{20} = -6.96^\circ$  ( $c = 1.0$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (Kato3,  $IC_{50} = 2.2 \mu\text{g/mL}$ , control Doxorubicin hydrochloride,  $IC_{50} = 1.7 \mu\text{g/mL}$ ; SW620,  $IC_{50} = 2.7 \mu\text{g/mL}$ , Doxorubicin hydrochloride,  $IC_{50} = 1.1 \mu\text{g/mL}$ ; BT474,  $IC_{50} = 4.6 \mu\text{g/mL}$ , Doxorubicin hydrochloride,  $IC_{50} = 0.08 \mu\text{g/mL}$ ; HepG2,  $IC_{50} = 3.7 \mu\text{g/mL}$ , Doxorubicin hydrochloride,  $IC_{50} = 0.9 \mu\text{g/mL}$ ; CHAGO,  $IC_{50} = 3.3 \mu\text{g/mL}$ , Doxorubicin hydrochloride,  $IC_{50} = 2.3 \mu\text{g/mL}$ ). **Source:** GUANG YE BA DOU *Croton oblongifolius* [Syn. *Croton laevigatus*] (stem cortex). **Ref:** 5121.

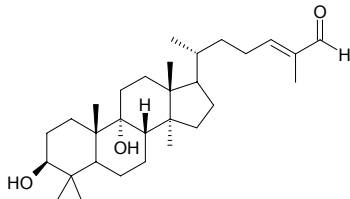
**5946 26,27-Dihydroxy-lanosta-7,9(11),24-trien-3,16-dione**

$C_{31}H_{46}O_4$  (482.71). mp 136–139°C. **Source:** LING ZHI *Ganoderma lucidum*. **Ref:** 2235.

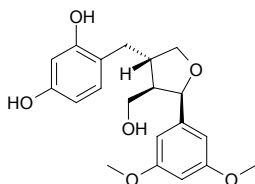


**5947 3 $\beta$ ,9 $\alpha$ -Dihydroxylanost-24-en-26-ol**

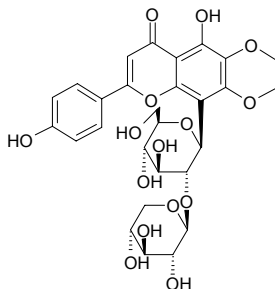
C<sub>30</sub>H<sub>50</sub>O<sub>3</sub> (458.73). White amorphous powder,  $[\alpha]_D^{27} = +5.0^\circ$  ( $c = 0.003$ , CHCl<sub>3</sub>). Source: MEI LI TENG HUANG *Garcinia speciosa* (bark). Ref: 3762.

**5948 (7,8-cis-8,8'-trans)-2',4'-Dihydroxyl-3,5-dimethoxyl-lariciresinol**

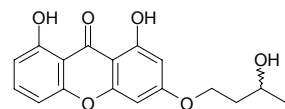
C<sub>20</sub>H<sub>24</sub>O<sub>6</sub> (360.41). Light-brown powder, mp 220~223°C (dec). Source: FEI SHU *Torreya grandis* (aril). Ref: 4836.

**5949 5,4'-Dihydroxyl-6,7-dimethoxyl-8-C-[ $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -D-glucopyranosyl flavone**

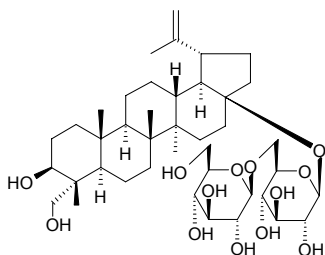
C<sub>28</sub>H<sub>32</sub>O<sub>15</sub> (608.56). Yellow amorphous powder, mp 173~175°C,  $[\alpha]_D^{25} = -44.9^\circ$  ( $c = 0.60$ , MeOH). Source: SHI DAN CAO *Corallodiscus flabellatus* [Syn. *Didissandra flabellat*] (whole herb). Ref: 4830.

**5950 1,8-Dihydroxy-3-(3'-hydroxy-butoxy) xanthone**

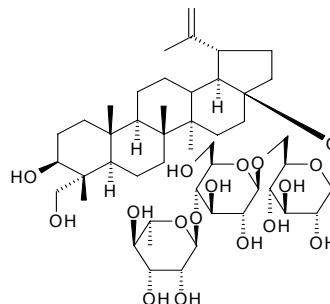
C<sub>17</sub>H<sub>16</sub>O<sub>6</sub> (316.31). Yellow columnar crystals (CHCl<sub>3</sub>-MeOH), mp 269~270°C. Source: CHUAN DONG ZHANG YA CAI *Swertia davidii*. Ref: 2480.

**5951 3 $\beta$ ,23-Dihydroxy-lup-20(29)-ene-28-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside**

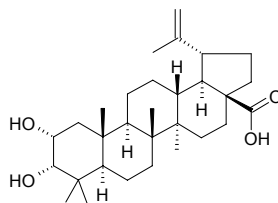
C<sub>41</sub>H<sub>68</sub>O<sub>13</sub> (768.99). Source: BAI TOU WENG *Pulsatilla chinensis*. Ref: 2.

**5952 3 $\beta$ ,23-Dihydroxy-lup-20(29)-ene-28-O- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside**

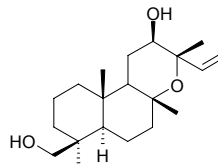
C<sub>47</sub>H<sub>78</sub>O<sub>17</sub> (915.14). Source: BAI TOU WENG *Pulsatilla chinensis*. Ref: 2.

**5953 2 $\alpha$ ,3 $\alpha$ -Dihydroxylup-20(29)-en-28-oic acid**

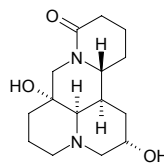
C<sub>30</sub>H<sub>48</sub>O<sub>4</sub> (472.71). Source: SAN YE MU TONG *Akebia trifoliata* (stem). Ref: 4545.

**5954 12 $\beta$ ,19-Dihydroxymanoyl oxide**

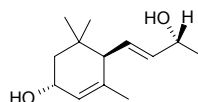
8,13-Epoxy-14-labdene C<sub>20</sub>H<sub>34</sub>O<sub>3</sub> (322.49). Amorphous,  $[\alpha]_D^{26} = +13.1^\circ$  ( $c = 0.21$ , CHCl<sub>3</sub>). Source: TAI WAN SHAN MU *Cunninghamia konishii* (wood). Ref: 4176.

**5955 5 $\alpha$ ,9 $\alpha$ -Dihydroxymatrine**

[72362-00-6] C<sub>15</sub>H<sub>24</sub>N<sub>2</sub>O<sub>3</sub> (280.37). Source: XI XIAN *Siegesbeckia orientalis*. Ref: 2.

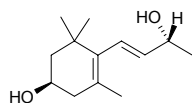
**5956 (3R,6R,7E,9R)-3,9-Dihydroxy-4,7-megastigmadiene**

C<sub>13</sub>H<sub>22</sub>O<sub>2</sub> (210.32). Colorless oil,  $[\alpha]_D^{25} = +25.9^\circ$  ( $c = 0.53$ , CH<sub>2</sub>Cl<sub>2</sub>). Pharm: Phytotoxin (inhibits germination and growth of *Lactuca sativa*)<sup>[3776]</sup>. Source: PA KE YE XIANG SHU *Cestrum parqui* (leaf). Ref: 3776.

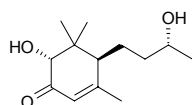


**5957 (3S,7E,9R)-3,9-Dihydroxy-5,7-megastigmadiene**

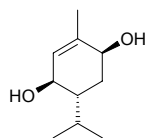
$C_{13}H_{22}O_2$  (210.32). Colorless oil,  $[\alpha]_D^{25} = -97.9^\circ$  ( $c = 0.48$ ,  $CH_2Cl_2$ ). **Pharm:** Phytotoxin (inhibits germination and growth of *Lactuca sativa*). **Source:** PA KE YE XIANG SHU *Cestrum parqui* (leaf). **Ref:** 3776.

**5958 (2R,6R,9R)-2,9-Dihydroxy-4-megastigmen-3-one**

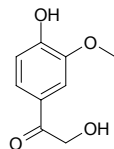
$C_{13}H_{22}O_3$  (226.32). Colorless oil,  $[\alpha]_D^{25} = +102.7^\circ$  ( $c = 0.56$ ,  $CH_2Cl_2$ ). **Pharm:** Phytotoxin (inhibits germination and growth of *Lactuca sativa*). **Source:** PA KE YE XIANG SHU *Cestrum parqui* (leaf). **Ref:** 3776.

**5959 (3R,4R,6S)-3,6-Dihydroxy-1-menthene**

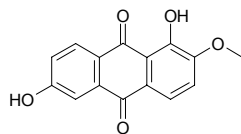
$C_{10}H_{18}O_2$  (170.25). Colorless needles, mp 166–168°C ( $CH_3OH$ ). **Pharm:** Antibacterial (*Staphylococcus aureus*, antibacterial circle < 12mm; *Bacillus subtilis*, antibacterial circle = 13–16mm; *Escherichia coli*, antibacterial circle > 17mm). **Source:** JIAN YE TOU WU GEN *Ligularia sagitta*. **Ref:** 5382.

**5960 2,4'-Dihydroxy-3'-methoxyacetophenone**

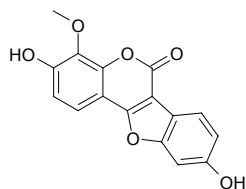
$C_9H_{10}O_4$  (182.18). **Source:** *Eurycoma* sp. **Ref:** 4556.

**5961 1,6-Dihydroxy-2-methoxyanthraquinone**

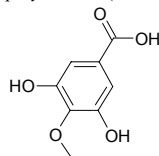
$C_{15}H_{10}O_5$  (270.24). Orange-red needles, mp 178–180°C. **Source:** BA JI TIAN *Morinda officinalis*. **Ref:** 8.

**5962 3,9-Dihydroxy-4-methoxy-benzo[4,5]furo[3,2-c]chromen-6-one**

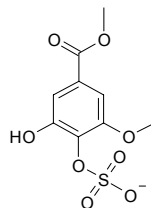
$C_{16}H_{10}O_6$  (298.25). Brown amorphous solid. **Source:** SHUI LIU DOU *Pongamia pinnata* (fruit). **Ref:** 3767.

**5963 3,5-Dihydroxy-4-methoxybenzoic acid**

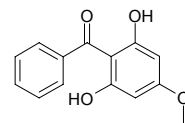
$C_8H_8O_5$  (184.15). **Source:** DIAN NAN HONG HOU KE *Calophyllum polyanthum* (seed: yield = 0.0022%dw). **Ref:** 4767.

**5964 3,4-Dihydroxy-5-methoxybenzoic acid methyl ester-4-sulfate**

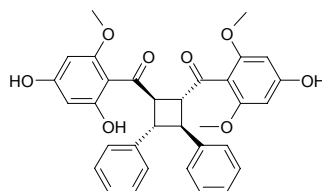
$C_9H_9O_8S$  (277.23). Amorphous powder. **Source:** HU ZHANG *Polygonum cuspidatum*. **Ref:** 4186.

**5965 2,6-Dihydroxy-4-methoxybenzophenone**

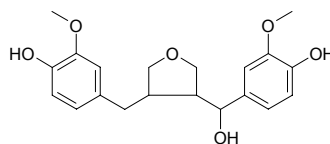
Cotoin  $C_{14}H_{12}O_4$  (244.25). **Source:** DUO ZHI ZHI TENG HUANG *Garcinia virgata* (stem cortex). **Ref:** 3874.

**5966 rel-1β-(4,6-Dihydroxy-2-methoxy)-benzoyl-rel-2α-(2,6-dimethoxy-4-hydroxy)-benzoyl-rel-(3β,4α)-diphenylcyclobutane**

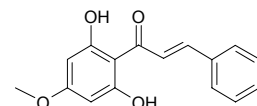
$C_{33}H_{30}O_8$  (554.60). Yellowish amorphous solid, mp 210°C,  $[\alpha]_D^{21} = +19.3^\circ$  ( $c = 0.1$ , MeOH). **Source:** BAI DIAN FENG CHE ZI *Combretum albopunctatum* (aerial parts). **Ref:** 3766.

**5967 3-(α,4-Dihydroxy-3-methoxybenzyl)-4-(hydroxy-3-methoxybenzyl) tetrahydrofuran**

$C_{20}H_{24}O_6$  (360.41). Yellow colloid. **Source:** YUN NAN HAN XIAO *Michelia yunnanensis*. **Ref:** 426.

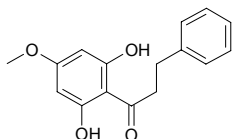
**5968 2',6'-Dihydroxy-4'-methoxychalcone**

$C_{16}H_{14}O_4$  (270.29). mp 161–162°C. **Source:** ZHEN CAI *Litsea pungens*. **Ref:** 6.

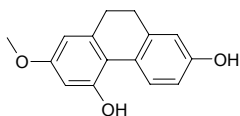


**5969 2',6'-Dihydroxy-4'-methoxydihydrochalcone**

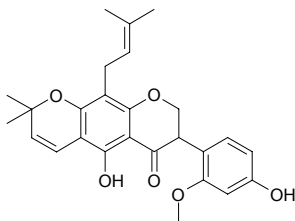
$C_{16}H_{16}O_4$  (272.30). **Pharm:** Germination inhibitor (spores of *Pityrogramma calomelanos*, 50 $\mu$ mol/L). **Source:** DIAO ZHANG GEN PI *Lindera umbellata* [Syn. *Lindera erythrocarpa*], LIU HUANG TIE XIAN JUE *Adiantum sulphureum*, *Notholaena* sp. **Ref:** 658.

**5970 4,7-Dihydroxy-2-methoxy-9,10-dihydro-phenanthrene**

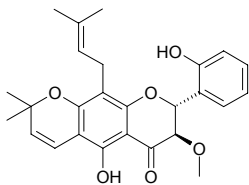
$C_{15}H_{14}O_3$  (242.28). **Source:** MI HUA SHI HU *Dendrobium densiflorum* (stem). **Ref:** 5171.

**5971 5,4'-Dihydroxy-2'-methoxy-8-(3,3-dimethylallyl)-2'',2''-dimethylpyrano[5,6:6,7]isoflavanone**

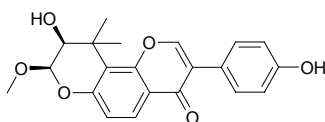
$C_{26}H_{28}O_6$  (436.51). Yellow oil,  $[\alpha]_D^{20} = 7.6^\circ$  ( $c = 0.1$ , MeOH). **Source:** CI TONG *Erythrina variegata* [Syn. *Erythrina indica*] (stem cortex: yield = 0.00001%fw). **Ref:** 2269.

**5972 5,2'-Dihydroxy-3-methoxy-6,7-(2'',2''-dimethylchromene)-8-(3''',3'''-dimethylallyl)-flavanone**

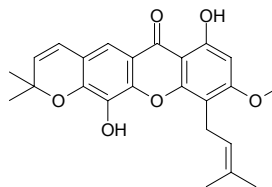
Jayacanol 3-methyl ether  $C_{26}H_{28}O_6$  (436.51). Pale yellow crystals (methanol), mp 128.8–129.2°C,  $[\alpha]_D^{20} = -12.69^\circ$  ( $c = 0.670$ ,  $CH_2Cl_2$ ). **Source:** *Lonchocarpus atropurpureus*. **Ref:** 2423.

**5973 4',5''-Dihydroxy-6''-methoxy-4'',4''-dimethyl-4'',5''-dihydro-6''H-pyrano[2'',3'':7,8]-isoflavone**

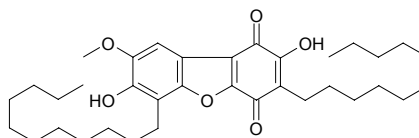
$C_{21}H_{20}O_6$  (368.39). White amorphous powder, mp 226–228°C,  $[\alpha]_D^{25} = -12^\circ$  ( $c = 0.05$ , MeOH). **Pharm:** Cytotoxic (KB,  $IC_{50} > 75\mu$ mol/L, control Helenalin,  $IC_{50} = (0.64 \pm 0.08)\mu$ mol/L, Melphalan,  $IC_{50} = (6.0 \pm 0.5)\mu$ mol/L; Mono-Mac-6,  $IC_{50} > 75\mu$ mol/L, Helenalin,  $IC_{50} = (3.1 \pm 0.3)\mu$ mol/L; Jurkat-T,  $IC_{50} > 75\mu$ mol/L, Helenalin,  $IC_{50} = (1.14 \pm 0.08)\mu$ mol/L, Melphalan,  $IC_{50} = (9.1 \pm 0.8)\mu$ mol/L). **Source:** *Bituminaria morisiana* (leaf). **Ref:** 5077.

**5974 1,5-Dihydroxy-3-methoxy-6',6'-dimethyl-2H-pyrano(2',3':6,7)-4-(3-methylbut-2-enyl)xanthone**

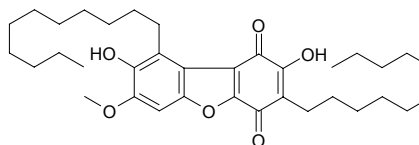
$C_{24}H_{24}O_6$  (408.46). Yellow needles, mp 217–218°C. **Source:** YUN NAN SHAN ZHU ZI *Garcinia cowa* (stem: yield = 0.0008%dw). **Ref:** 916.

**5975 2,7-Dihydroxy-8-methoxy-3,6-diundecyldibenzofuran-1,4-dione**

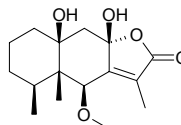
$C_{35}H_{52}O_6$  (568.8). Dark red solid ( $CHCl_3$ ), mp 65–66°C. **Pharm:** Cytotoxic inactive (*in vitro*, HL-60,  $IC_{50} > 100\mu$ g/mL; Bel7402,  $IC_{50} > 100\mu$ g/mL; HeLa,  $IC_{50} > 100\mu$ g/mL; U937,  $IC_{50} > 100\mu$ g/mL; control Colchicine, HL-60,  $IC_{50} = 1.6\mu$ g/mL; Bel7402,  $IC_{50} = 0.4\mu$ g/mL; HeLa,  $IC_{50} = 0.1\mu$ g/mL; U937,  $IC_{50} = 0.1\mu$ g/mL). **Source:** LA ZHU GUO *Aegicerias corniculatum* (stem and twig: yield = 0.000058%). **Ref:** 4746.

**5976 2,8-Dihydroxy-7-methoxy-3,9-diundecyldibenzofuran-1,4-dione**

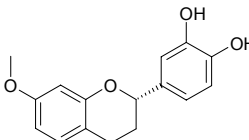
$C_{35}H_{52}O_6$  (568.8). Dark red solid ( $CHCl_3$ ), mp 88–89°C. **Pharm:** Cytotoxic inactive (*in vitro*, HL-60,  $IC_{50} > 100\mu$ g/mL; Bel7402,  $IC_{50} > 100\mu$ g/mL; HeLa,  $IC_{50} > 100\mu$ g/mL; U937,  $IC_{50} > 100\mu$ g/mL; control Colchicine, HL-60,  $IC_{50} = 1.6\mu$ g/mL; Bel7402,  $IC_{50} = 0.4\mu$ g/mL; HeLa,  $IC_{50} = 0.1\mu$ g/mL; U937,  $IC_{50} = 0.1\mu$ g/mL). **Source:** LA ZHU GUO *Aegicerias corniculatum* (stem and twig: yield = 0.000058%). **Ref:** 4746.

**5977 8β,10β-Dihydroxy-6β-methoxyeremophil-7(11)-en-12,8α-olide**

$C_{16}H_{24}O_5$  (296.37). Colorless plates, mp 181–182°C ( $Me_2CO$ ). **Source:** JIAN YE TOU WU GEN *Ligularia sagitta*. **Ref:** 5382.

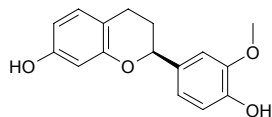
**5978 (2S,3',4'-Dihydroxy-7-methoxy flavan**

$C_{16}H_{16}O_4$  (272.30). Amorphous powder. **Source:** LIN JING ZHONG ZI WEN SHU LAN *Crinum bulbispermum* (bulb). **Ref:** 3997.

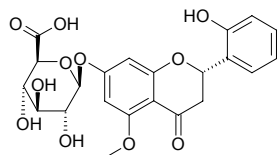


**5979 (2S)-4',7-Dihydroxy-3'-methoxyflavan**

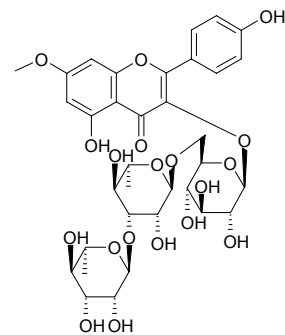
$C_{16}H_{16}O_4$  (272.30). Source: LONG XUE SHU *Dracaena draco* (stem cortex). Ref: 4696.

**5980 (2S)-7,2'-Dihydroxy-5-methoxyflavanone 7-O-β-D-glucuronopyranoside**

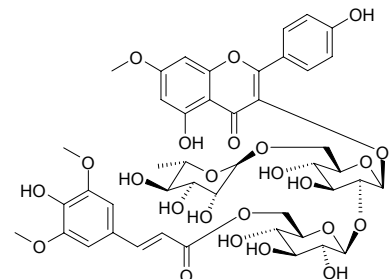
$C_{22}H_{22}O_{11}$  (462.41). Colorless needles (MeOH), mp 190–191°C (dec),  $[\alpha]_D^{25} = -116.8^\circ$  ( $c = 0.052$ , MeOH). Source: KE AI HUANG QIN *Scutellaria amabilis* (root: yield = 0.0052%dw). Ref: 2072.

**5981 5,4'-Dihydroxy-7-methoxyflavone-3-O-[α-L-rhamnopyranosyl(1→3)-O-α-L-rhamnopyranosyl(1→6)-O-β-D-glucopyranoside]**

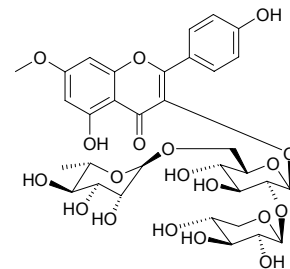
$C_{34}H_{42}O_{19}$  (754.70). Yellow powder, mp 210–212°C,  $[\alpha]_D^{20} = -41.99^\circ$  ( $c = 0.5$ , MeOH). Pharm: Inhibitory activity against NFAT transcription ( $IC_{50} > 100\mu\text{mol/L}$ , control Cyclosporin A,  $IC_{50} = (0.29 \pm 0.01)\mu\text{mol/L}$ ). Source: HUA CHA BIAO *Ribes fasciculatum* var. *chinense*. Ref: 2536.

**5982 4',5-Dihydroxy-7-methoxyflavonol 3-O-[6-O-(E)-3,5-dimethoxy-4-hydroxycinnamoyl-β-D-glucopyranosyl]- (1→2)-O-[α-L-rhamnopyranosyl-(1→6)]-β-D-glucopyranoside**

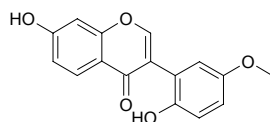
$C_{45}H_{52}O_{24}$  (976.9). Pale-yellow amorphous powder,  $[\alpha]_D^{24} = -29.2^\circ$  ( $c = 0.26$ ,  $\text{CHCl}_3\text{-MeOH}$ , 1:1). Pharm: Cytotoxic inactive (HSC-2, HGF). Source: YE XIANG SHU *Cestrum nocturnum* (leaf: yield = 0.0062%fw). Ref: 3023.

**5983 4',5-Dihydroxy-7-methoxyflavonol 3-O-β-D-xylopyranosyl-(1→2)-O-[α-L-rhamnopyranosyl-(1→6)]-β-D-glucopyranoside**

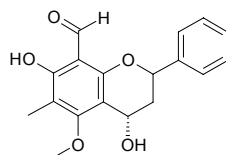
$C_{33}H_{40}O_{19}$  (740.68). Pale-yellow amorphous powder,  $[\alpha]_D^{24} = -47.6^\circ$  ( $c = 0.21$ ,  $\text{CHCl}_3\text{-MeOH}$ , 1:1). Pharm: Cytotoxic inactive (HSC-2, HGF). Source: YE XIANG SHU *Cestrum nocturnum* (leaf: yield = 0.0044%fw). Ref: 3023.

**5984 7,6'-Dihydroxy-3'-methoxyisoflavone**

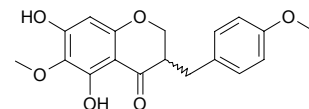
$C_{16}H_{12}O_5$  (284.27). Yellowish crystals ( $\text{Me}_2\text{CO}$ ), mp 250–252°C. Source: TU FU LING *Smilax glabra*. Ref: 416.

**5985 4,7-Dihydroxy-5-methoxyl-6-methyl-8-formyl-flavan**

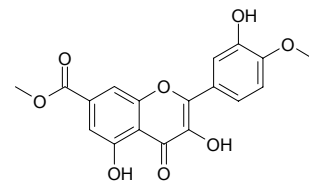
$C_{18}H_{18}O_5$  (314.34). Yellowish rhomboid crystals, mp 137–139°C. Source: JIA YING ZHAO *Desmos cochinchinensis* [Syn. *Desmos chinensis*]. Ref: 121.

**5986 5,7-Dihydroxy-6-methoxy-3-(4-methoxybenzyl)chroman-4-one**

$C_{18}H_{18}O_6$  (330.34). Yellow vitreous solid,  $[\alpha]_D = -100^\circ$  ( $c = 0.025$ , MeOH). Source: *Scilla dracomontana*. Ref: 2327.

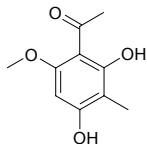
**5987 5,3'-Dihydroxy-4'-methoxy-7-methoxycarbonylflavonol**

$C_{18}H_{14}O_8$  (358.31). Pharm: NO production inhibitor (LPS-induced, concentration-dependent manner,  $IC_{50} = 61.6\mu\text{mol/L}$  or  $40.4\mu\text{mol/L}$ );  $\text{PGE}_2$  production inhibitor (LPS-induced, concentration-dependent manner,  $IC_{50} = 32.8\mu\text{mol/L}$  or  $30.3\mu\text{mol/L}$ ). Source: XIAO YE JU HAO *Tanacetum microphyllum* (aerial parts). Ref: 4918.

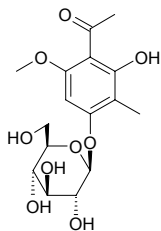


**5988 2,4-Dihydroxy-6-methoxy-3-methylacetophenone**

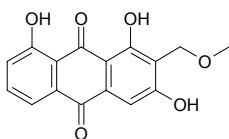
$C_{10}H_{12}O_4$  (196.20). Light brown acicular crystals, mp 190°C. Source: YUE XIAN DA JI *Euphorbia ebracteolata*. Ref: 678.

**5989 2,4-Dihydroxy-6-methoxy-3-methylacetophenone-4-O-β-D-glucopyranoside**

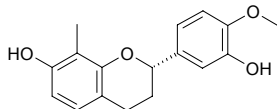
$C_{16}H_{22}O_9$  (358.35). Hoar acicular crystals, mp 198°C. Source: YUE XIAN DA JI *Euphorbia ebracteolata*. Ref: 678.

**5990 1,3-Dihydroxy-2-methoxymethylanthraquinone**

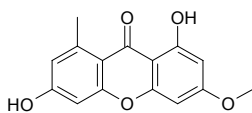
$C_{16}H_{12}O_6$  (300.27). Source: GUANG JING QIAN CAO *Rubia wallichiana* (stem). Ref: 4369.

**5991 7,3'-Dihydroxy-4'-methoxy-8-methylflavan**

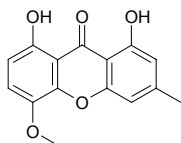
[87733-81-1]  $C_{17}H_{18}O_4$  (286.33). Pharm: Larvacide (larva of *Eurema hecabe mandarina*, antifeedant). Source: LONG XUE SHU *Dracaena draco* (stem cortex)<sup>[4696]</sup>, SHI SUAN *Lycoris radiata* [Syn. *Amaryllis radiata*]. Ref: 658, 4696.

**5992 1,6-Dihydroxy-3-methoxy-8-methylxanthone**

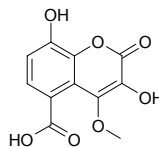
$C_{15}H_{12}O_5$  (272.26). Yellow powder, mp 210–212°C (dec). Source: HE CAO YE JIA BEI FANG FENG *Ledebouria graminifolia* (tuber). Ref: 3368.

**5993 1,8-Dihydroxy-5-methoxy-3-methylxanthone**

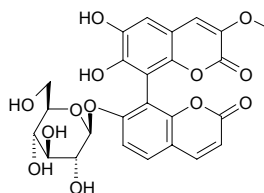
$C_{15}H_{12}O_5$  (272.26). Yellow needles (CHCl<sub>3</sub>), mp.214–215°C. Source: RI BEN XIAO HE YI *Pyrenula japonica*. Ref: 2362.

**5994 3,8-Dihydroxy-4-methoxy-2-oxo-2H-1-benzopyran-5-carboxylic acid**

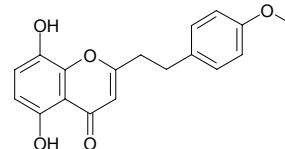
$C_{11}H_8O_7$  (252.18). Yellowish acicular crystals, mp 277–279°C. Source: DA DING CAO *Gerbera anandria* [Syn. *Leibnitzia anandria*]. Ref: 141.

**5995 6,7-Dihydroxy-3-methoxy-8-[2-oxo-2H-1-benzopyran-7-(O-β-D-glucopyranosyl)-8-yl]-2H-1-benzopyran-2-one**

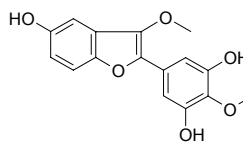
Gulsamanin  $C_{25}H_{22}O_{13}$  (530.45). mp 192–193°C. Source: YOU RUI XIANG *Daphne oleoides*. Ref: 2278.

**5996 5,8-Dihydroxy-2-[2-(4'-methoxyphenyl) ethyl]chromone**

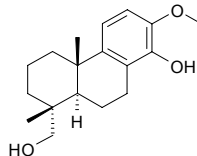
$C_{18}H_{16}O_5$  (312.33). Colorless acicular crystals, mp 172–180°C. Source: BAI MU XIANG *Aquilaria sinensis*. Ref: 13.

**5997 2-(3',5'-Dihydroxy-4'-methoxyphenyl)-3-methoxy-5-hydroxy benzofuran**

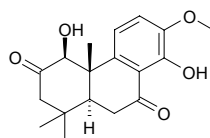
$C_{16}H_{14}O_6$  (302.29). Colorless acicular, mp 219–221°C. Source: XIAO YE MAI MA TENG *Gnetum parvifolium* [Syn. *Gnetum indicum*]. Ref: 193.

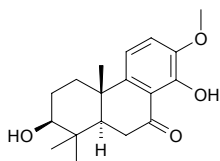
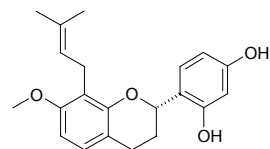
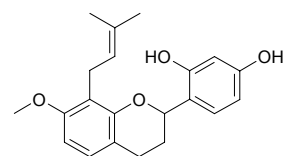
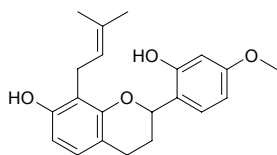
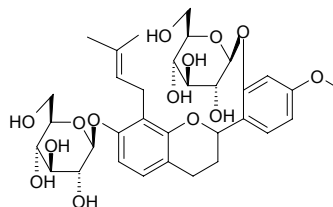
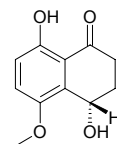
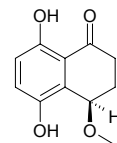
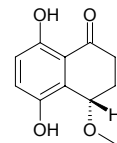
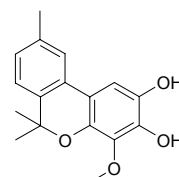
**5998 14,18-Dihydroxy-13-methoxy-8,11,13-podocarpatriene**

$C_{18}H_{26}O_3$  (290.41). Yellow amorphous solid,  $[\alpha]_D^{18} = +5.3^\circ$  ( $c = 0.42$ , CHCl<sub>3</sub>). Source: TAI WAN SHAN *Taiwania cryptomerioides* (bark). Ref: 4182.

**5999 1β,14-Dihydroxy-13-methoxy-8,11,13-podocarpatriene-2,7-dione**

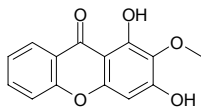
$C_{18}H_{22}O_5$  (318.37). Yellow amorphous solid,  $[\alpha]_D^{24} = -35.0^\circ$  ( $c = 0.17$ , CHCl<sub>3</sub>). Source: TAI WAN SHAN *Taiwania cryptomerioides* (bark). Ref: 4182.



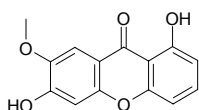
**6000 3 $\beta$ ,14-Dihydroxy-13-methoxy-8,11,13-podocarpatrien-7-one**C<sub>18</sub>H<sub>24</sub>O<sub>4</sub> (304.39). Yellow amorphous solid, [ $\alpha$ ]<sub>D</sub><sup>24</sup> = -9.4° (c = 0.35, CHCl<sub>3</sub>).Source: TAI WAN SHAN *Taiwania cryptomerioides* (bark). Ref: 4182.**6001 (2S)-2',4'-Dihydroxy-7-methoxy-8-prenylflavan**C<sub>21</sub>H<sub>24</sub>O<sub>4</sub> (340.42). Pharm: Aromatase inhibitor inactive (*in vitro*, IC<sub>50</sub> > 40 μmol/L; control Aminoglutethimide, IC<sub>50</sub> = 6.4 μmol/L). Source: GOU SHU *Broussonetia papyrifera*. Ref: 3090.**6002 2',4'-Dihydroxy-7-methoxy-8-prenylflavan**C<sub>21</sub>H<sub>24</sub>O<sub>4</sub> (340.42). Amorphous powder, [ $\alpha$ ]<sub>D</sub> = -1.6° (c = 1.0, MeOH). Pharm: Antioxidant (hmn LDL, inhibits CuSO<sub>4</sub>-induced oxidation of hmn LDL, 0.5 nmol/mL, relative lag time = 0.81 ± 0.10, positive control Quercetin, 0.5 nmol/mL, assigned relative lag time = 1.0)<sup>[3507]</sup>; DPPH scavenger (IC<sub>50</sub> = 603 nmol/mL, positive control Quercetin, IC<sub>50</sub> = 3.7 nmol/mL)<sup>[3507]</sup>. Source: SANG BAI PI *Morus alba*, SANG YE *Morus alba* (leaf: yield = 0.0003%). Ref: 2513, 3507.**6003 2',7-Dihydroxy-4'-methoxy-8-prenylflavan**C<sub>21</sub>H<sub>24</sub>O<sub>4</sub> (340.42). Amorphous powder, [ $\alpha$ ]<sub>D</sub> = -5.5° (c = 1.0, MeOH). Pharm: Antioxidant (hmn LDL, inhibits CuSO<sub>4</sub>-induced oxidation of hmn LDL, 0.5 nmol/mL, relative lag time = 1.70 ± 0.25, positive control Quercetin, 0.5 nmol/mL, assigned relative lag time = 1.0)<sup>[3507]</sup>; DPPH scavenger (IC<sub>50</sub> = 137 nmol/mL, positive control Quercetin, IC<sub>50</sub> = 3.7 nmol/mL)<sup>[3507]</sup>. Source: SANG YE *Morus alba* (leaf: yield = 0.0018%), SANG BAI PI *Morus alba*. Ref: 2513, 3507.**6004 2',7-Dihydroxy-4'-methoxy-8-prenylflavan 2',7-di-O-β-D-glucopyranoside**C<sub>33</sub>H<sub>44</sub>O<sub>14</sub> (664.71). Amorphous powder, [ $\alpha$ ]<sub>D</sub> = -91.1° (c = 0.25, MeOH). Pharm: Antioxidant (hmn LDL, inhibits CuSO<sub>4</sub>-induced oxidation of hmn LDL, 10.0 nmol/mL, relative lag time = 0.85 ± 0.07, positive control Quercetin, 0.5 nmol/mL, assigned relative lag time = 1.0)<sup>[3507]</sup>; DPPH scavenger (IC<sub>50</sub> = 505 nmol/mL, positive control Quercetin, IC<sub>50</sub> = 3.7 nmol/mL)<sup>[3507]</sup>. Source: SANG YE *Morus alba* (leaf: yield = 0.0013%), SANG BAI PI *Morus alba*. Ref: 3507, 2513.**6005 (4S)-4,8-Dihydroxy-5-methoxy-α-tetralone**C<sub>11</sub>H<sub>12</sub>O<sub>4</sub> (208.22). Source: DONG BEI HU TAO *Juglans mandshurica* var. *sieboldiana* (fruit). Ref: 4492.**6006 (4R)-5,8-Dihydroxy-4-methoxy-α-tetralone**C<sub>11</sub>H<sub>12</sub>O<sub>4</sub> (208.22). Amorphous powder, [ $\alpha$ ]<sub>D</sub> = 0° (CHCl<sub>3</sub>). Source: DONG BEI HU TAO *Juglans mandshurica* var. *sieboldiana* (fruit). Ref: 4492.**6007 (4S)-5,8-Dihydroxy-4-methoxy-α-tetralone**C<sub>11</sub>H<sub>12</sub>O<sub>4</sub> (208.22). Amorphous powder, [ $\alpha$ ]<sub>D</sub> = 0° (CHCl<sub>3</sub>). Source: DONG BEI HU TAO *Juglans mandshurica* var. *sieboldiana* (fruit). Ref: 4492.**6008 2,3-Dihydroxy-4-methoxy-6,6,9-trimethyl-6H-dibenzo[b,d]pyran**C<sub>17</sub>H<sub>17</sub>O<sub>4</sub> (286.33). Oil. Pharm: Anti-HIV-1 (binds to chemokine receptor CCR5, IC<sub>50</sub> = 33 μmol/L). Source: *Wigandia urens* (stem). Ref: 3474.

**6009 1,3-Dihydroxy-2-methoxy xanthone**

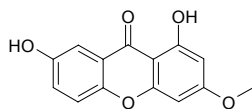
$C_{14}H_{10}O_5$  (258.23). Colorless acicular crystals (chloroform–methanol), mp 162–164°C, mp 174–176°C, mp 176–178°C. Source: HUANG HUA YUAN ZHI *Polygala arillata*, JIA HUANG HUA YUAN ZHI *Polygala fallax* [Syn. *Polygala aureocauda*] (root and stem: yield = 0.00043%)<sup>[4683]</sup>. Ref: 382, 4683.

**6010 1,6-Dihydroxy-7-methoxyxanthone**

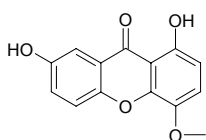
$C_{14}H_{10}O_5$  (258.23). Pharm: Cytotoxic ( $P_{388}$   $ED_{50}$  = 3.02  $\mu$ g/mL, control Mithramycin  $ED_{50}$  = 0.06  $\mu$ g/mL, HT29  $ED_{50}$  = 5.32  $\mu$ g/mL, Mithramycin  $ED_{50}$  = 0.08  $\mu$ g/mL). Source: TAI WAN LV DAO TENG HUANG *Garcinia linnii*. Ref: 4094.

**6011 1,7-Dihydroxy-3-methoxy xanthone**

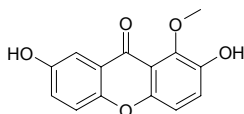
Gentisin [437-50-3]  $C_{14}H_{10}O_5$  (258.23). mp 266–267°C. Pharm: Mutagen (*Salmonella typhimurium*). Source: BA XI HU TONG *Calophyllum brasiliense*, HUANG LONG DAN *Gentiana lutea*, TIE LI MU *Mesua ferrea*, YUAN ZHI *Polygala tenuifolia*, ZHANG YA CAI *Swertia pseudochinensis*, ZHEN YE TENG HUANG *Garcinia eugenifolia*. Ref: 2, 6, 658.

**6012 1,7-Dihydroxy-4-methoxyxanthone**

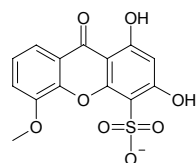
$C_{14}H_{10}O_5$  (258.23). Source: CHAN YI TENG *Securidaca inappendiculata* (stem). Ref: 5238.

**6013 2,7-Dihydroxy-1-methoxyxanthone**

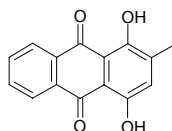
$C_{14}H_{10}O_5$  (258.23). Source: CHAN YI TENG *Securidaca inappendiculata* (stem). Ref: 5238.

**6014 1,3-Dihydroxy-5-methoxyxanthone-4-sulfonate**

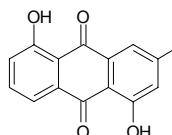
$C_{14}H_9O_8S^-$  (337.29). Yellow needles, mp > 360°C. Pharm: Cytotoxic ( $P_{388}$  cell line,  $ED_{50}$  = 3.46  $\mu$ mol/L; control VP-16,  $ED_{50}$  = 0.064  $\mu$ mol/L). Source: YUAN BAO CAO *Hypericum sampsonii* (whole herb). Ref: 3861.

**6015 1,4-Dihydroxy-2-methylantraquinone**

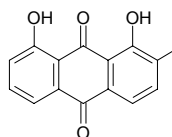
[2589-39-1]  $C_{15}H_{10}O_4$  (254.24). Pharm: Anthelmintic (termites). Source: YOU MU *Tectona grandis*. Ref: 658.

**6016 1,5-Dihydroxy-3-methylantraquinone**

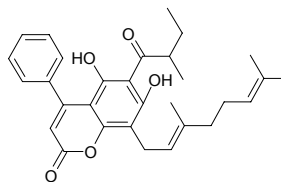
[21891-63-4]  $C_{15}H_{14}O_4$  (254.24). Orange red crystals. Source: CANG BAI CHENG GOU FENG *Diploclisia glaucescens*, SI SHI MAO DI HUANG *Digitalis schischkini*, DONG FANG YANG DI HUANG *Digitalis orientalis*, GAN XI SHU WEI CAO *Salvia przewalskii*, YI DA LI JUE MING ZI *Cassia italika*. Ref: 2100, 2102, 2104, 2105, 2270.

**6017 1,8-Dihydroxy-2-methylantraquinone**

$C_{15}H_{10}O_4$  (254.24). Pharm: Cytotoxic (KB,  $ED_{50}$  > 25  $\mu$ g/mL, control Doxorubicin,  $ED_{50}$  = 0.12  $\mu$ g/mL; Hep3B,  $ED_{50}$  > 25  $\mu$ g/mL, Doxorubicin,  $ED_{50}$  = 0.14  $\mu$ g/mL; Colon205,  $ED_{50}$  > 25  $\mu$ g/mL, Doxorubicin,  $ED_{50}$  = 0.10  $\mu$ g/mL; HeLa,  $ED_{50}$  > 25  $\mu$ g/mL, Doxorubicin,  $ED_{50}$  = 0.11  $\mu$ g/mL). Source: GUANG JING QIAN CAO *Rubia wallichiana* (stem). Ref: 4369.

**6018 5,7-Dihydroxy-6-(2-methylbutanoyl)-8-[(E)-3,7-dimethylocta-2,6-dienyl]-4-phenyl-2H-chromen-2-one**

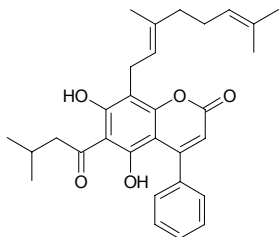
$C_{30}H_{34}O_5$  (474.60). Yellow crystals, mp 89–90°C. Pharm: Antibacterial (*Enterococcus faecalis* 18292, MIC = 8  $\mu$ g/mL; *Enterococcus faecalis* 19250, MIC = 8  $\mu$ g/mL); antibacterial (*Staphylococcus aureus* 18268, MIC = 32  $\mu$ g/mL; *Staphylococcus aureus* 17380, MIC = 8  $\mu$ g/mL; *Staphylococcus aureus* 17592, MIC = 64  $\mu$ g/mL; *Staphylococcus aureus* 18110, MIC = 64  $\mu$ g/mL; *Staphylococcus aureus* 17547, MIC = 32  $\mu$ g/mL; *Staphylococcus aureus* 17728, MIC = 16  $\mu$ g/mL; *Staphylococcus aureus* 3012, MIC = 16  $\mu$ g/mL; *Staphylococcus aureus* 414, MIC = 16  $\mu$ g/mL; *Staphylococcus epidermidis* 3112, MIC = 4  $\mu$ g/mL; *Staphylococcus epidermidis* 2515, MIC = 8  $\mu$ g/mL; *Staphylococcus saprophyticus* 3010, MIC = 32  $\mu$ g/mL; *Staphylococcus simulans* 214, MIC = 4  $\mu$ g/mL); antimalarial (*Plasmodium falciparum* D10 (CQ-S),  $IC_{50}$  = (2.75  $\pm$  0.45)  $\mu$ g/mL, control Chloroquine,  $IC_{50}$  = (0.011  $\pm$  0.004)  $\mu$ g/mL; W2 (CQ-R),  $IC_{50}$  = (1.17  $\pm$  0.61)  $\mu$ g/mL, control Chloroquine,  $IC_{50}$  = (0.229  $\pm$  0.090)  $\mu$ g/mL). Source: TIE LI MU *Mesua ferrea* (blossom). Ref: 3870.





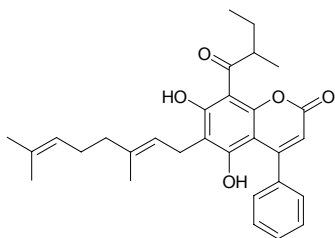
**6019 5,7-Dihydroxy-6-(3-methylbutanoyl)-8-[(E)-3,7-dimethylocta-2,6-dienyl]-4-phenyl-2H-chromen-2-one**

C<sub>30</sub>H<sub>34</sub>O<sub>5</sub> (474.60). Source: TIE LI MU *Mesua ferrea* (blossom). Ref: 3870.



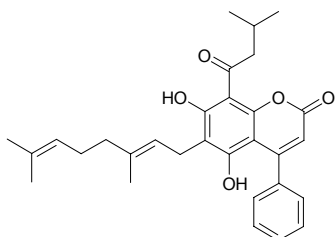
**6020 5,7-Dihydroxy-8-(2-methylbutanoyl)-6-[(E)-3,7-dimethylocta-2,6-dienyl]-4-phenyl-2H-chromen-2-one**

C<sub>30</sub>H<sub>34</sub>O<sub>5</sub> (474.60). Colorless crystals, mp 90–92°C. Pharm: Antibacterial (*Enterococcus faecalis* 18292, MIC = 8 µg/mL; *Enterococcus faecalis* 19250, MIC = 8 µg/mL); antibacterial (*Staphylococcus aureus* 18268, MIC = 4 µg/mL; *Staphylococcus aureus* 17380, MIC = 64 µg/mL; *Staphylococcus aureus* 17592, MIC = 2 µg/mL; *Staphylococcus aureus* 18110, MIC = 4 µg/mL; *Staphylococcus aureus* 17547, MIC = 2 µg/mL; *Staphylococcus aureus* 17728, MIC = 2 µg/mL; *Staphylococcus aureus* 3012, MIC = 2 µg/mL; *Staphylococcus aureus* 414, MIC = 16 µg/mL; *Staphylococcus epidermidis* 3112, MIC = 2 µg/mL; *Staphylococcus epidermidis* 2515, MIC = 2 µg/mL; *Staphylococcus saprophyticus* 3010, MIC > 128 µg/mL; *Staphylococcus simulans* 214, MIC = 2 µg/mL); antimalarial (*Plasmodium falciparum* D10 (CQ-S), IC<sub>50</sub> = (11.21±5.40) µg/mL, control Chloroquine, IC<sub>50</sub> = (0.011±0.004) µg/mL; W2 (CQ-R), IC<sub>50</sub> = (8.38±2.52) µg/mL, control Chloroquine, IC<sub>50</sub> = (0.229±0.090) µg/mL). Source: TIE LI MU *Mesua ferrea* (blossom). Ref: 3870.



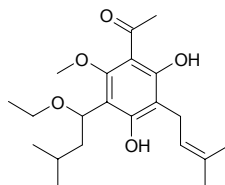
**6021 5,7-Dihydroxy-8-(3-methylbutanoyl)-6-[(E)-3,7-dimethylocta-2,6-dienyl]-4-phenyl-2H-chromen-2-one**

C<sub>30</sub>H<sub>34</sub>O<sub>5</sub> (474.60). Source: TIE LI MU *Mesua ferrea* (blossom). Ref: 3870.



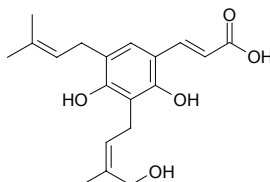
**6022 1-[2',4'-Dihydroxy-3'-(3''-methylbut-2''-enyl)-5'-(1'''-ethoxy-3'''-methylbutyl)-6'-methoxy]phenylethanone**

C<sub>21</sub>H<sub>32</sub>O<sub>5</sub> (364.49). Source: SHA TANG MU *Acronychia pedunculata*. Ref: 2373.



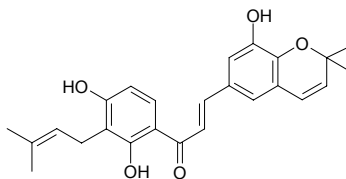
**6023 4,6-Dihydroxy-3-[3'-methyl-2'-butenyl]-5-[4''-hydroxy-3''-methyl-2''-butenyl]-cinnamic acid**

C<sub>19</sub>H<sub>24</sub>O<sub>5</sub> (332.40). Colorless oil. Source: DAN ZI HAO *Artemisia monosperma*. Ref: 5249.



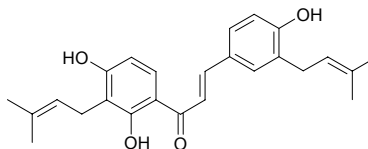
**6024 (E)-1-[2,4-Dihydroxy-3-(3-methyl-2-butenyl)phenyl]-3-(2,2-dimethyl-8-hydroxy-2H-benzopyran-6-yl)-2-propen-1-one**

6'',6''-Dimethylpyrano(2'',3'':4,5)-3'-γ,γ-dimethylallyl-2',3,4'-trihydroxychalcone [151135-83-0] C<sub>25</sub>H<sub>26</sub>O<sub>5</sub> (406.48). Yellow acicular crystals (chloroform or hexane), mp 153–156°C. Pharm: Antileishmanial (*Leishmania* sp., 20 µg/mL, InRt = 32%). Source: GUANG GUO GAN CAO *Glycyrrhiza glabra*, ZHANG GUO GAN CAO *Glycyrrhiza inflata*, GAN CAO *Glycyrrhiza uralensis*. Ref: 1002, 1154.

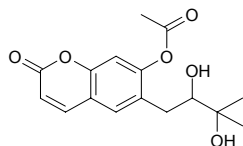


**6025 (E)-1-[2,4-Dihydroxy-3-(3-methyl-2-butenyl)phenyl]-3-(4-hydroxy-3-[3-methyl-2-butenyl]phenyl)-2-propen-1-one**

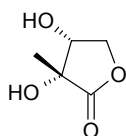
3,3'-Di-(γ,γ-dimethylallyl)-2',4,4'-trihydroxychalcone [151135-82-9] C<sub>25</sub>H<sub>28</sub>O<sub>4</sub> (392.50). Yellow acicular crystals (methanol–water), mp 134–137°C. Pharm: Antileishmanial (*Leishmania* sp., 20 µg/mL, InRt = 90%). Source: GUANG GUO GAN CAO *Glycyrrhiza glabra*, ZHANG GUO GAN CAO *Glycyrrhiza inflata*, GAN CAO *Glycyrrhiza uralensis*. Ref: 1002, 1154.



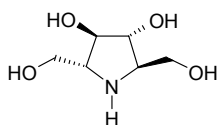
**6026 6-(2',3'-Dihydroxy-3'-methylbutyl)-7-acetoxy-2H-1-benzopyran-2-one**  
 $C_{16}H_{18}O_6$  (306.32). White clustered crystals (MeOH), mp 171~172°C. Source: CI YI YE HUA JIAO *Zanthoxylum dimorphophyllum* var. *spinifolium*. Ref: 2121.



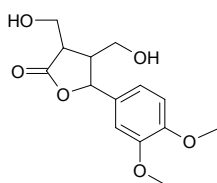
**6027 2,3-Dihydroxy-2-methyl-butylolactone**  
 $C_5H_8O_4$  (132.12). White granular crystals (acetone). Pharm: Cytotoxic (stronger). Source: DA YE BAI TOU WENG *Anaphalis margaritacea*, GUAN GUANG MU *Tsoongiodendron odorum*. Ref: 2177, 3853.



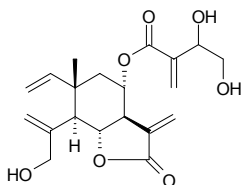
**6028 2,5-Dihydroxymethyl-3,4-dihydropyrrrolidine**  
 $C_6H_{13}NO_4$  (163.17). Pharm: Glucosidase I and  $\alpha$ -,  $\beta$ -glucosidase inhibitor (insect); insect antifeedant (armyworms). Source: MAO YU TENG *Derris elliptica*. Ref: 658.



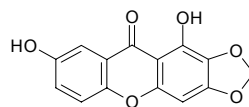
**6029 2,3-Dihydroxymethyl-4-(3',4'-dimethoxyphenyl)- $\gamma$ -butyrolactone**  
 $C_{14}H_{18}O_6$  (282.30). Colorless needles. Source: LIAN QIAO *Forsythia suspensa*. Ref: 2520.



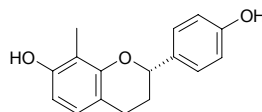
**6030 8 $\alpha$ -(3,4-Dihydroxy-2-methylene-butanoyloxy)-dehydro-melitensin**  
 $C_{20}H_{26}O_7$  (378.43). Pharm: Antifungal (*Aspergillus niger*, MIC = 0.25 $\mu$ g/mL, control Miconazole, MIC = 1.5 $\mu$ g/mL; *Aspergillus ochraceus*, MIC = 0.125 $\mu$ g/mL, Miconazole, MIC = 1.5 $\mu$ g/mL; *Aspergillus versicolor*, MIC = 0.125 $\mu$ g/mL, Miconazole, MIC = 2 $\mu$ g/mL; *Aspergillus flavus*, MIC = 1 $\mu$ g/mL, Miconazole, MIC = 0.5 $\mu$ g/mL; *Penicillium ochrochloron*, MIC = 0.25 $\mu$ g/mL, Miconazole, MIC = 2 $\mu$ g/mL; *Penicillium funiculosum*, MIC = 0.5 $\mu$ g/mL, Miconazole, MIC = 2 $\mu$ g/mL; *Trichoderma viride*, MIC = 0.25 $\mu$ g/mL, Miconazole, MIC = 2 $\mu$ g/mL; *Cladosporium cladosporioides*, MIC = 0.5 $\mu$ g/mL, Miconazole, MIC = 0.03 $\mu$ g/mL; *Alternaria alternata*, MIC = 0.25 $\mu$ g/mL, Miconazole, MIC = 0.5 $\mu$ g/mL). Source: *Centaurea thessala* ssp. *drakiensis* (aerial parts), *Centaurea attica* ssp. *attica* (aerial parts). Ref: 5115.



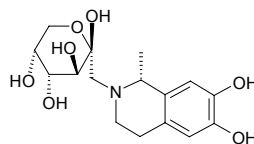
**6031 1,7-Dihydroxy-2,3-methylenedioxyxanthone**  
 $C_{14}H_8O_6$  (272.22). Colorless acicular crystals (chloroform-methanol), mp 224~226°C, mp 245~247°C, mp 243~245°C. Pharm: Aldose reductase inhibitor (eye lens). Source: HUANG HUA YUAN ZHI *Polygala arillata*, JIA HUANG HUA YUAN ZHI *Polygala fallax* [Syn. *Polygala aureocauda*] (root and stem: yield = 0.00135%)<sup>[4683]</sup>. Ref: 345, 658, 4683.



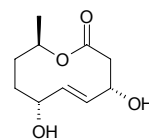
**6032 7,4'-Dihydroxy-8-methylflavan**  
 $C_{16}H_{16}O_3$  (256.30). Pharm: Antibacterial (phytopathogenic bacteria, *Corynebacterium betae* and *Corynebacterium fascians*); antifungal (*Botrytis cinerea*, ED<sub>50</sub> = 32 $\mu$ g/mL). Source: LONG XUE SHU *Dracaena draco*. Ref: 658.



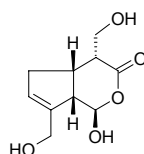
**6033 6,7-Dihydroxy-1-methyl-N-(6'-fructopyranosyl)-1,2,3,4-tetrahydroisoquinoline**  
 $C_{16}H_{23}NO_7$  (341.36). Amorphous brownish solid, 105° dec (MeOH),  $[\alpha]_D^{25} = -45^\circ$  ( $c = 1.90$ , MeOH). Source: GONG XING MA DOU LING *Aristolochia arcuata*. Ref: 2037.



**6034 4,7-Dihydroxy-10-methyl-3,4,7,8,9,10-hexahydro-oxecin-2-one**  
 $C_{10}H_{16}O_4$  (200.24). Colorless crystals (MeOH-CHCl<sub>3</sub>), mp 203~204°C,  $[\alpha]_D^{29} = -55^\circ$  ( $c = 0.036$ , MeOH). Pharm: Antimalarial inactive (*Plasmodium falciparum* K1, 20 $\mu$ g/mL; control Dihydroartemisinin, IC<sub>50</sub> = 1.2ng/mL). Source: YONG CHONG CAO *Cordyceps militaris*. Ref: 4784.

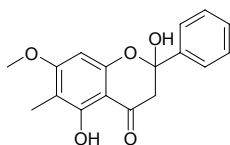


**6035 (1R,4R,4aS,7aS)-4,7-Dihydroxymethyl-1-hydroxyl-1,4,4a,7a-tetrahydrocyclopenta-6-ene[e]pyran-3-one**  
 $C_{10}H_{14}O_5$  (214.22). Colorless gum,  $[\alpha]_D^{25} = +32.0^\circ$  ( $c = 0.30$ , CHCl<sub>3</sub>). Source: GUANG YAO DA HUANG HUA *Cymbaria mongolica*. Ref: 2001.

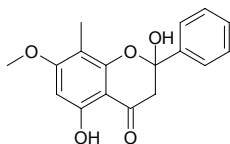


**6036 2,5-Dihydroxy-6-methyl-7-methoxyflavanone**

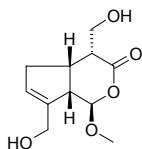
[186906-54-7] C<sub>17</sub>H<sub>16</sub>O<sub>5</sub> (300.31). Source: YUAN ZHI YE AO ZHOU CHA *Leptospermum polygalifolium* ssp. *Polygalifolium* (foliage). Ref: 3485.

**6037 2,5-Dihydroxy-8-methyl-7-methoxyflavanone**

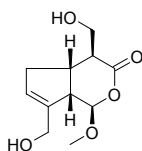
[186906-53-6] C<sub>17</sub>H<sub>16</sub>O<sub>5</sub> (300.31). Source: YUAN ZHI YE AO ZHOU CHA *Leptospermum polygalifolium* ssp. *Polygalifolium* (foliage). Ref: 3485.

**6038 (1R,4R,4aS,7aS)-4,7-Dihydroxymethyl-1-methoxyl-1,4,4a,7a-tetrahydrocyclopenta-6-ene[e]pyran-3-one**

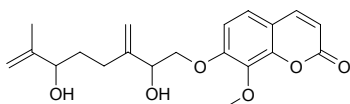
C<sub>11</sub>H<sub>16</sub>O<sub>5</sub> (228.25). Colorless gum, [α]<sub>D</sub><sup>25</sup> = +27.8° (c = 0.20, CHCl<sub>3</sub>). Source: GUANG YAO DA HUANG HUA *Cymbaria mongolica*. Ref: 2001.

**6039 (1R,4S,4aS,7aS)-4,7-Dihydroxymethyl-1-methoxyl-1,4,4a,7a-tetrahydrocyclopenta-6-ene[e]pyran-3-one**

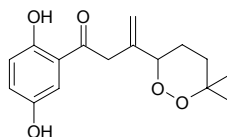
C<sub>11</sub>H<sub>16</sub>O<sub>5</sub> (228.25). Colorless gum, [α]<sub>D</sub><sup>25</sup> = -8.5° (c = 0.10, CHCl<sub>3</sub>). Source: GUANG YAO DA HUANG HUA *Cymbaria mongolica*. Ref: 2001.

**6040 7-(2',6'-Dihydroxy-7'-methyl-3'-methyleneocta-7'-en-1-oxy)-8-methoxycoumarin**

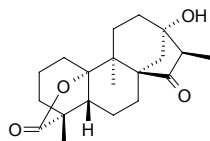
C<sub>20</sub>H<sub>24</sub>O<sub>6</sub> (360.41). Pharm: Antibacterial; smooth muscle relaxant; anticoagulant; photosensitive agent; ichthyotoxin; toxin. Source: *Zanthoxylum* sp. Ref: 2176.

**6041 1,4-Dihydroxy-2-(7'-methyl-3'-methylene-1'-oxo-4',7'-peroxide-octyl)benzene**

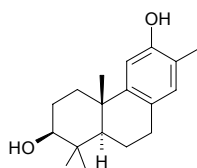
C<sub>16</sub>H<sub>20</sub>O<sub>5</sub> (292.33). White amorphous powder. Pharm: Antifungal (TLC bioautographic assay, *Cladosporium cladosporioides*, MA = 5.0μg, control Miconazole, MA = 1.0μg; *Cladosporium sphaerospermum*, MA = 10.0μg, Miconazole, MA = 1.0μg). Source: CU YE MAI HU JIAO *Piper crassinervium*. Ref: 3440.

**6042 10α,13α-Dihydroxy-9α-methyl-15-oxo-20-nor-kauran-19-oic acid γ-lactone**

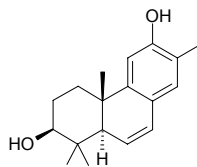
C<sub>20</sub>H<sub>28</sub>O<sub>4</sub> (332.44). Pale-yellow crystals, mp 85–88°C, [α]<sub>D</sub><sup>25</sup> = -68.0° (c = 0.1, MeOH). Pharm: Cytotoxic (Lu1, Col2, KB, LNCaP, hTERT-RPE1, ED<sub>50</sub> = 10–20μg/mL, HUVEC, ED<sub>50</sub> > 20μg/mL; control Taxol, ED<sub>50</sub> = 0.002μg/mL, 0.003μg/mL, 0.0005μg/mL, 0.001μg/mL, 0.004μg/mL, 0.008μg/mL, respectively). Source: *Parinari sprucei* (leaf). Ref: 4991.

**6043 3β,12-Dihydroxy-13-methyl-8,10,13-podocarpantriene**

C<sub>18</sub>H<sub>26</sub>O<sub>2</sub> (274.41). Semi solid, [α]<sub>D</sub><sup>25</sup> = -12.6° (c = 0.5, MeOH). Source: MA FENG SHU *Jatropha curcas* (aerial parts). Ref: 4287.

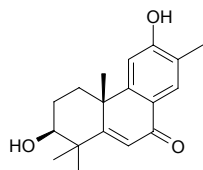
**6044 3β,12-Dihydroxy-13-methyl-6,8,11,13-podocarpatetraen**

C<sub>18</sub>H<sub>24</sub>O<sub>2</sub> (272.39). Yellow oil, [α]<sub>D</sub><sup>20</sup> = +86.7° (c = 0.91, acetone). Pharm: Cytotoxic (*in vitro*, pulmonary adenocarcinoma A549 cells, IC<sub>50</sub> = 31.8μmol/L; hepatocarcinoma Bel 7402 cells, IC<sub>50</sub> = 22.9μmol/L; gastric carcinoma BGC823 cells, IC<sub>50</sub> = 21.1μmol/L; colorectal adenocarcinoma HCT8 cells, IC<sub>50</sub> = 21.8μmol/L; ovarian cancer A2780 cells, IC<sub>50</sub> = 23.7μmol/L). Source: YI YE QIU *Securinega suffruticosa* (callus). Ref: 4544.

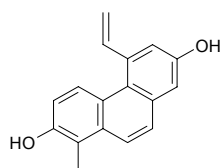


**6045 3 $\beta$ ,12-Dihydroxy-13-methyl-5,8,11,13-podocarpataetraen-7-one**

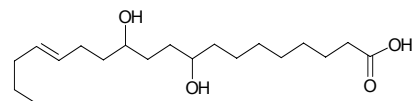
C<sub>18</sub>H<sub>22</sub>O<sub>3</sub> (286.37). Pale yellow oil,  $[\alpha]_D^{20} = -56.6^\circ$  ( $c = 0.09$ , acetone). **Pharm:** Cytotoxic (*in vitro*, pulmonary adenocarcinoma A549 cells, IC<sub>50</sub> = 31.6 $\mu$ mol/L; hepatocarcinoma Bel 7402 cells, IC<sub>50</sub> = 26.5 $\mu$ mol/L; gastric carcinoma BGC823 cells, IC<sub>50</sub> = 20.0 $\mu$ mol/L; colorectal adenocarcinoma HCT8 cells, IC<sub>50</sub> = 22.0 $\mu$ mol/L; ovarian cancer A2780 cells, IC<sub>50</sub> = 21.8 $\mu$ mol/L). **Source:** YI YE QIU *Securinega suffruticosa* (callus). **Ref:** 4544.

**6046 2,7-Dihydroxy-1-methyl-5-vinylphenanthrene**

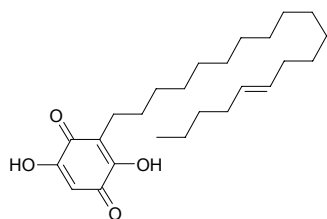
C<sub>17</sub>H<sub>14</sub>O<sub>2</sub> (250.30). **Source:** JIAN DENG XIN CAO *Juncus acutus*. **Ref:** 1965.

**6047 9,12-Dihydroxy-15-nonadecenoic acid**

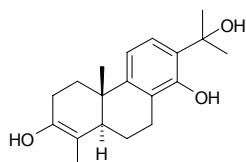
C<sub>19</sub>H<sub>36</sub>O<sub>4</sub> (328.50). **Source:** CU LIU GUO *Hippophae rhamnoides*. **Ref:** 2.

**6048 2,5-Dihydroxy-3-(nonadec-14-enyl)-benzoquinone**

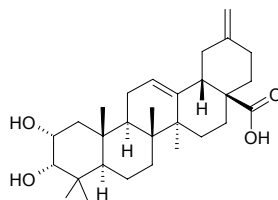
C<sub>25</sub>H<sub>40</sub>O<sub>4</sub> (404.60). Yellow brown crystals (MeOH), mp 138~139°C,  $[\alpha]_D^{25} = -40^\circ$  ( $c = 1.0$ , CH<sub>2</sub>Cl<sub>2</sub>). **Source:** PI ZHEN DU JING SHAN *Maesa lanceolata* (fruit). **Ref:** 3464.

**6049 3,15-Dihydroxy-18-norabieta-3,8,11,13-tetraene**

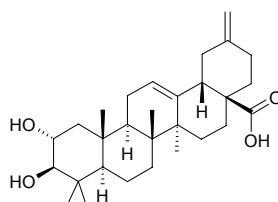
C<sub>19</sub>H<sub>26</sub>O<sub>3</sub> (302.42). White-brown powder,  $[\alpha]_D^{24} = +23.5^\circ$  ( $c = 2.9$ , MeOH). **Pharm:** Cytotoxic (KB, IC<sub>50</sub> > 66 $\mu$ mol/L, control Podophyllotoxin, IC<sub>50</sub> = 0.014 $\mu$ mol/L); antibacterial (*Bacillus cereus*, MIC = 423.84 $\mu$ mol/L; control Chloramphenicol, MIC = 6.19 $\mu$ mol/L). **Source:** GAO MEI YING BAN *Crossopetalum gaueri* (root). **Ref:** 3969.

**6050 2 $\alpha$ ,3 $\alpha$ -Dihydroxy-30-noroleana-12,20(29)-dien-28-oic acid**

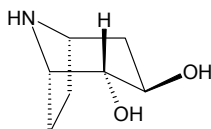
C<sub>29</sub>H<sub>44</sub>O<sub>4</sub> (456.67). Amorphous solid,  $[\alpha]_D^{27} = +142.0^\circ$  ( $c = 0.10$ , MeOH). **Source:** SAN YE MU TONG *Akebia trifoliata* (stem). **Ref:** 4545.

**6051 2 $\alpha$ ,3 $\beta$ -Dihydroxy-30-noroleana-12,20(29)-dien-28-oic acid**

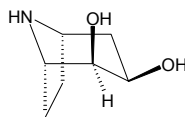
C<sub>29</sub>H<sub>44</sub>O<sub>4</sub> (456.67). Amorphous solid,  $[\alpha]_D^{27} = +70.0^\circ$  ( $c = 0.10$ , MeOH). **Source:** SAN YE MU TONG *Akebia trifoliata* (stem). **Ref:** 4545.

**6052 2 $\alpha$ ,3 $\beta$ -Dihydroxynortropane**

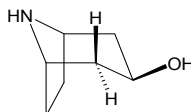
C<sub>7</sub>H<sub>13</sub>NO<sub>2</sub> (143.19). Colorless powder,  $[\alpha]_D = -33.9^\circ$  ( $c = 0.32$ , H<sub>2</sub>O). **Pharm:**  $\alpha$ -Glucosidase inhibitor inactive (control 1-Deoxynojirimucin, IC<sub>50</sub> = 0.98mmol/L, Fagoming, IC<sub>50</sub> = 15mmol/L). **Source:** SANG SHI *Morus alba*. **Ref:** 4161.

**6053 2 $\beta$ ,3 $\beta$ -Dihydroxynortropane**

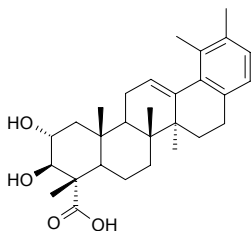
C<sub>7</sub>H<sub>13</sub>NO<sub>2</sub> (143.19). Colorless powder,  $[\alpha]_D = -34.0^\circ$  ( $c = 0.61$ , H<sub>2</sub>O). **Pharm:**  $\alpha$ -Glucosidase inhibitor inactive (control 1-Deoxynojirimucin, IC<sub>50</sub> = 0.98mmol/L, Fagoming, IC<sub>50</sub> = 15mmol/L). **Source:** SANG SHI *Morus alba*. **Ref:** 4161.

**6054 3 $\beta$ ,6-*exo*-Dihydroxynortropane**

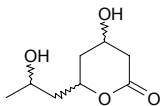
C<sub>7</sub>H<sub>13</sub>NO<sub>2</sub> (143.19). Colorless powder,  $[\alpha]_D = -1.3^\circ$  ( $c = 0.60$ , H<sub>2</sub>O). **Pharm:**  $\alpha$ -Glucosidase inhibitor (IC<sub>50</sub> = 33mmol/L, control 1-Deoxynojirimucin, IC<sub>50</sub> = 0.98mmol/L, Fagoming, IC<sub>50</sub> = 15mmol/L). **Source:** SANG SHI *Morus alba*. **Ref:** 4161.



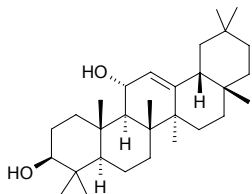
**6055 2 $\alpha$ ,3 $\beta$ -Dihydroxy-28-norurs-12,17,19(20),21-tetraen-23-oic acid**  
 C<sub>29</sub>H<sub>40</sub>O<sub>4</sub> (452.64). White amorphous powder,  $[\alpha]_D^{28.6} = +19.8^\circ$  ( $c = 0.21$ , MeOH). **Pharm:** Cytotoxic (SGC cell, EC<sub>50</sub> = 10.2 $\mu$ mol/L). **Source:** DI YU *Sanguisorba officinalis*. **Ref:** 5304.



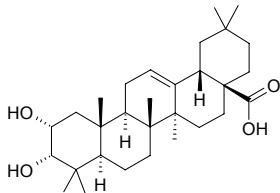
**6056 3,7-Dihydroxy-5-octanolide**  
 C<sub>8</sub>H<sub>14</sub>O<sub>4</sub> (174.20). White powder, mp 93.5~94.0°C,  $[\alpha]_D^{26} = -24.4^\circ$  ( $c = 0.086$ , EtOH). **Source:** YE YA CHUN *Euscaphis japonica*. **Ref:** 2204.



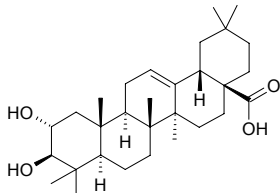
**6057 3 $\beta$ ,11 $\alpha$ -Dihydroxy-olean-12-ene**  
 C<sub>30</sub>H<sub>50</sub>O<sub>2</sub> (442.73). White crystals (acetone), easily soluble in CHCl<sub>3</sub> and MeOH, mp 192~196°C. **Source:** SI CHUAN QING FENG TENG *Sabia schumanniana* (aerial parts). **Ref:** 4883.



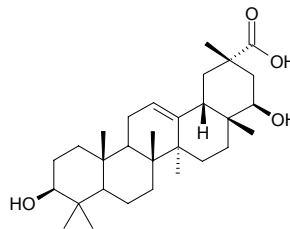
**6058 2 $\alpha$ ,3 $\alpha$ -Dihydroxyolean-12-en-28-oic acid**  
 C<sub>30</sub>H<sub>48</sub>O<sub>4</sub> (472.71). **Source:** SAN YE MU TONG *Akebia trifoliata* (stem). **Ref:** 4545.



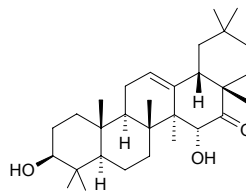
**6059 2 $\alpha$ ,3 $\beta$ -Dihydroxyolean-12-en-28-oic acid**  
 (–)-Maslinic acid; Cratogeolic acid [4373-41-5] C<sub>30</sub>H<sub>48</sub>O<sub>4</sub> (472.71). mp (–) 263~265°C. **Source:** DA ZAO *Ziziphus jujuba*, HUO XIANG *Agastache rugosus*, SAN YE MU TONG *Akebia trifoliata* (stem), YANG MEI SHU PI *Myrica rubra* (bark: yield = 0.00083%). **Ref:** 2, 660, 1247, 4163, 4545.



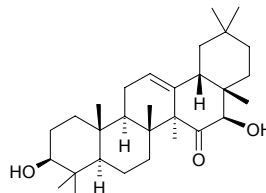
**6060 3 $\beta$ ,22 $\beta$ -Dihydroxyolean-12-en-29-oic acid**  
 C<sub>30</sub>H<sub>48</sub>O<sub>4</sub> (472.71). **Pharm:** DPPH scavenger inactive (for 40 $\mu$ mol/L DPPH radical, SC<sub>50</sub> > 40 $\mu$ mol/L). **Source:** SUO LA MU *Salacia prinoides* [Syn. *Salacia chinensis*] (stem). **Ref:** 4378.



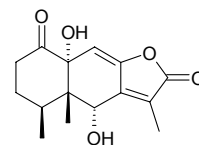
**6061 3 $\beta$ ,15 $\alpha$ -Dihydroxy-olean-12-en-16-one**  
 Eriocarpin A; 3 $\beta$ ,15 $\alpha$ -Dihydroxy-olean-12(13)-en-16-one C<sub>30</sub>H<sub>48</sub>O<sub>3</sub> (456.72). Colorless acicular crystals (MeOH), mp 195~197°C,  $[\alpha]_D^{20} = +0^\circ$  ( $c = 0.011$ , MeOH). **Source:** MAO GUO YU TENG *Derris eriocarpa*, YUN NAN GE TENG *Pueraria peduncularis*. **Ref:** 665, 2262.



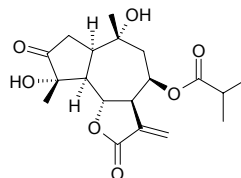
**6062 3 $\beta$ ,16 $\beta$ -Dihydroxy-olean-12-en-15-one**  
 C<sub>30</sub>H<sub>48</sub>O<sub>3</sub> (456.72). Colorless acicular crystals mp 218~220°C. **Source:** YUN NAN GE TENG *Pueraria peduncularis*. **Ref:** 853.



**6063 6 $\alpha$ ,10 $\alpha$ -Dihydroxy-1-oxoeremophila-7(11),8(9)-dien-12,8-olide**  
 C<sub>15</sub>H<sub>18</sub>O<sub>5</sub> (278.31). **Source:** *Ligularia virgaurea* ssp. *oligocephala* (whole herb). **Ref:** 4981.

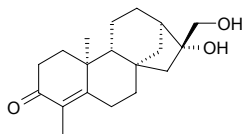


**6064 4 $\alpha$ ,10 $\alpha$ -Dihydroxy-3-oxo-8 $\beta$ -isobutyryloxyguaia-11(13)-en-12,6 $\alpha$ -olide**  
 C<sub>19</sub>H<sub>26</sub>O<sub>7</sub> (366.41). **Pharm:** Cytotoxic (antiproliferative, Col2 cells, IC<sub>50</sub> = 18.9 $\mu$ g/mL); cytotoxic (cellular differentiation inducer, hmn promyelocytic leukemia HL-60 cells, 4 $\mu$ g/mL, activity denotes percentage of cells differentiated = 32.4%); cytotoxic (MMOC model, inhibits DMBA-induced preneoplastic lesion formation, 10 $\mu$ g/mL, rel-InRt = 48.7%, control DMBA, rel-InRt = 100%). **Source:** ZHONG BIN JU *Tithonia diversifolia* (aerial parts: yield = 0.0063%dw). **Ref:** 4622.

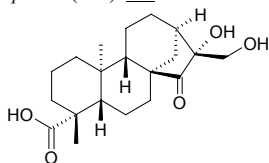


**6065 16 $\alpha$ ,17-Dihydroxy-3-oxo-19-nor-ent-kaur-4-ene**

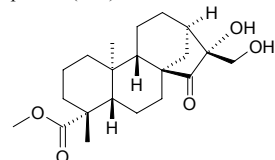
C<sub>19</sub>H<sub>28</sub>O<sub>3</sub> (304.43). **Pharm:** Antibacterial (*Staphylococcus aureus*, MIC < 1.5mg/mL; *Bacillus cereus* and *Pseudomonas aeruginosa*, MIC = 2.0~3.0mg/mL; *Escherichia coli*, inactive). **Source:** *Antennaria geyeri* (aerial parts). **Ref:** 3853.

**6066 16 $\alpha$ ,17-Dihydroxy-15-oxo-ent-kaur-19-oic acid**

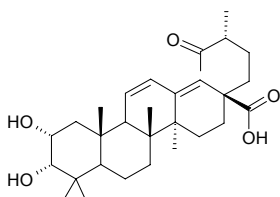
C<sub>20</sub>H<sub>30</sub>O<sub>5</sub> (350.46). Brownish solid, mp 137~142°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +5.0° (*c* = 0.1, MeOH). **Pharm:** Cytotoxic inactive (Lu1, Col2, KB, LNCaP, hTERT-RPE1, HUVEC; control Taxol, ED<sub>50</sub> = 0.002μg/mL, 0.003μg/mL, 0.0005μg/mL, 0.001μg/mL, 0.004μg/mL, 0.008μg/mL, respectively). **Source:** *Parinari sprucei* (leaf). **Ref:** 4991.

**6067 16 $\alpha$ ,17-Dihydroxy-15-oxo-ent-kaur-19-oic acid methyl ester**

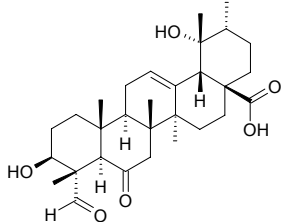
C<sub>21</sub>H<sub>32</sub>O<sub>5</sub> (364.49). White solid, mp 187~193°C (dec), [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +27.0° (*c* = 0.1, MeOH). **Pharm:** Cytotoxic inactive (Lu1, Col2, KB, LNCaP, hTERT-RPE1, HUVEC; control Taxol, ED<sub>50</sub> = 0.002μg/mL, 0.003μg/mL, 0.0005μg/mL, 0.001μg/mL, 0.004μg/mL, 0.008μg/mL, respectively). **Source:** *Parinari sprucei* (leaf). **Ref:** 4991.

**6068 2 $\alpha$ ,3 $\alpha$ -Dihydroxy-19-oxo-18,19-seco-urs-11,13(18)-dien-28-oic acid**

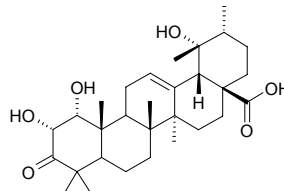
C<sub>30</sub>H<sub>46</sub>O<sub>5</sub> (486.70). White amorphous powder. **Source:** FEI LONG ZHANG XUE *Toddalia asiatica* [Syn. *Toddalia aculeata*; *Paullinia asiatica*] (stem). **Ref:** 4561.

**6069 3 $\beta$ ,19 $\alpha$ -Dihydroxy-6-oxo-urs-12-en-23-al-28-oic acid**

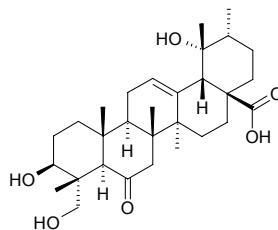
C<sub>30</sub>H<sub>44</sub>O<sub>6</sub> (500.68). **Source:** BI LU GOU TENG *Uncaria tomentosa*. **Ref:** 5341.

**6070 2 $\alpha$ ,19 $\alpha$ -Dihydroxy-3-oxo-12-ursen-28-oic acid**

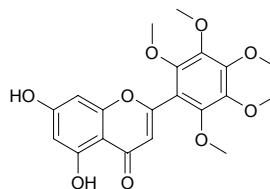
C<sub>30</sub>H<sub>46</sub>O<sub>6</sub> (502.70). **Pharm:** Immunosuppressant (hmn mononuclear cells antiproliferation, involving T lymphocytes, B lymphocytes, and macrophages isolated from peripheral blood, IC<sub>50</sub> = 40.0μmol/L; control Cyclosporine A, IC<sub>50</sub> = 0.012μmol/L). **Source:** TAI WAN PI PA *Eriobotrya deflexa* (leaf). **Ref:** 3064.

**6071 3 $\beta$ ,19 $\alpha$ -Dihydroxy-6-oxo-urs-12-en-23-ol-28-oic acid**

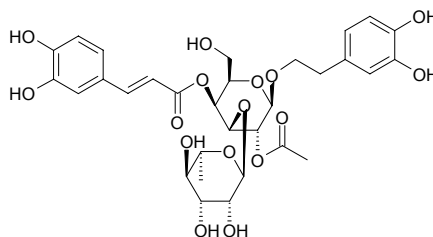
C<sub>30</sub>H<sub>46</sub>O<sub>6</sub> (502.70). **Source:** BI LU GOU TENG *Uncaria tomentosa*. **Ref:** 5341.

**6072 5,7-Dihydroxy-2',3',4',5',6'-pentamethoxyflavone**

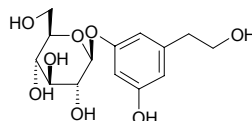
C<sub>20</sub>H<sub>20</sub>O<sub>9</sub> (404.38). **Pharm:** Anti-HIV-1 inactive. **Source:** TAI GUO ZHI ZI *Gardenia thailandica* (leaf and twig). **Ref:** 4963.

**6073 3,4-Dihydroxyphenethoxy-O- $\alpha$ -L-rhamnopyranosyl-(1→3)- $\beta$ -D-(2-O-acetyl-4-O-caffeoyl)-galactopyranoside**

C<sub>31</sub>H<sub>38</sub>O<sub>16</sub> (666.64). White amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>28</sup> = -43.34° (*c* = 0.47, MeOH). **Source:** LAI JIANG TENG *Brandisia hancei* (whole herb). **Ref:** 4569.

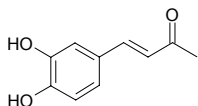
**6074 3,5-Dihydroxyphenethyl alcohol 3-O- $\beta$ -glucopyranoside**

C<sub>14</sub>H<sub>20</sub>O<sub>8</sub> (316.31). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>23</sup> = -33.5° (*c* = 0.18, MeOH). **Pharm:** Antioxidant (DPPH scavenger, DPPH radical 15μmol/L: 10μmol/L, ScRt = 41.4%; control BHA, 10μmol/L, ScRt = 23.0%; Vitamin E, 10μmol/L, ScRt = 41.1%). **Source:** JIA HUI SE JIU LI XIANG PO PO NA *Veronica thymoides* ssp. *pseudocinerea*. **Ref:** 3846.

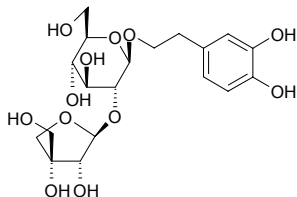


**6075 (E)-4-(3,4-Dihydroxyphenyl)but-3-en-2-one**

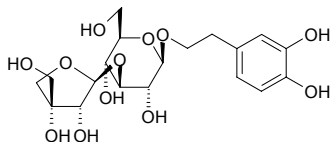
$C_{10}H_{10}O_3$  (178.19). **Pharm:** Cytotoxic (*in vitro*, A549,  $IC_{50} > 0.28 \mu\text{mol/L}$ ; BGC823,  $IC_{50} = 0.243 \mu\text{mol/L}$ ; MCF7,  $IC_{50} = 0.141 \mu\text{mol/L}$ ; Bel7402,  $IC_{50} = 0.153 \mu\text{mol/L}$ ; Ketr3,  $IC_{50} = 0.245 \mu\text{mol/L}$ ; HCT8,  $IC_{50} = 0.227 \mu\text{mol/L}$ ; control Topotecan, A549,  $IC_{50} = 0.0032 \mu\text{mol/L}$ ; BGC823,  $IC_{50} = 0.0043 \mu\text{mol/L}$ ; MCF7,  $IC_{50} = 0.0018 \mu\text{mol/L}$ ; Bel7402,  $IC_{50} = 0.0012 \mu\text{mol/L}$ ; Ketr3,  $IC_{50} = 0.0049 \mu\text{mol/L}$ ; HCT8,  $IC_{50} = 0.0015 \mu\text{mol/L}$ ). **Source:** SANG HUANG *Phellinus igniarius* (sporocarp: yield = 0.0062%dw). **Ref:** 4747.

**6076 3,4-Dihydroxyphenylethanol-8-O-[β-D-apiofuranosyl(1→2)]-β-D-glucopyranoside**

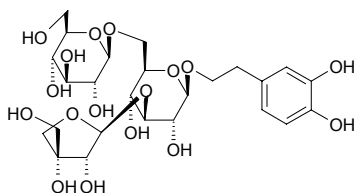
$C_{19}H_{28}O_{12}$  (448.43). Yellow-white amorphous powder, has accessibility, easily soluble in water and methanol,  $[\alpha]_D^{25} = -59.3^\circ$  ( $c = 0.14$ , MeOH). **Source:** SHI DAN CAO *Corallodiscus flabellatus* [Syn. *Didissandra flabellata*]. **Ref:** 2463.

**6077 3,4-Dihydroxyphenylethanol-8-O-[β-D-apiofuranosyl(1→3)]-β-D-glucopyranoside**

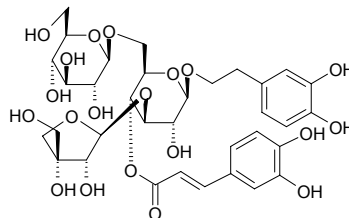
$C_{19}H_{28}O_{12}$  (447.43). Yellow-white amorphous powder, has accessibility, easily soluble in water and methanol,  $[\alpha]_D^{25} = -61.6^\circ$  ( $c = 0.16$ , MeOH). **Source:** SHI DAN CAO *Corallodiscus flabellatus* [Syn. *Didissandra flabellata*]. **Ref:** 2460.

**6078 3,4-Dihydroxyphenylethanol-8-O-[β-D-apiofuranosyl(1→3)]-β-D-glucopyranosyl(1→6)]-β-D-glucopyranoside**

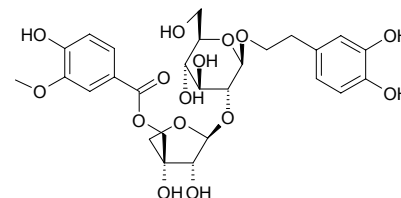
$C_{25}H_{38}O_{17}$  (610.57). Yellow-white amorphous powder, has accessibility, easily soluble in water and methanol,  $[\alpha]_D^{25} = -70.5^\circ$  ( $c = 0.12$ , MeOH). **Source:** SHI DAN CAO *Corallodiscus flabellatus* [Syn. *Didissandra flabellata*]. **Ref:** 2460.

**6079 3,4-Dihydroxyphenylethanol-8-O-[4-O-trans-caffeoyl-β-D-apiofuranosyl(1→3)]-β-D-glucopyranosyl(1→6)]-β-D-glucopyranoside**

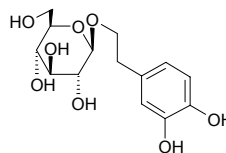
$C_{34}H_{44}O_{20}$  (772.72). Yellow-white amorphous powder, has accessibility, easily soluble in water and methanol,  $[\alpha]_D^{25} = -65.6^\circ$  ( $c = 0.09$ , MeOH). **Source:** SHI DAN CAO *Corallodiscus flabellatus* [Syn. *Didissandra flabellata*]. **Ref:** 2460.

**6080 3,4-Dihydroxyphenylethanol-8-O-[(5-O-vanilloyl)-β-D-apiofuranosyl(1→2)]-β-D-glucopyranoside**

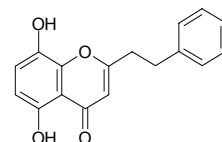
$C_{27}H_{34}O_{15}$  (598.56). White amorphous powder, has accessibility, easily soluble in water and methanol,  $[\alpha]_D^{25} = -54.8^\circ$  ( $c = 0.42$ , MeOH). **Source:** SHI DAN CAO *Corallodiscus flabellatus* [Syn. *Didissandra flabellata*]. **Ref:** 2463.

**6081 3,4-Dihydroxyphenylethyl alcohol glucoside**

2-(3,4-Dihydroxyphenyl)-ethyl-*O*-β-D-glucopyranoside  $C_{14}H_{20}O_8$  (316.31). **Pharm:** Antioxidant (DPPH scavenger, DPPH radical  $15 \mu\text{mol/L}$ :  $10 \mu\text{mol/L}$ , ScRt = 41.4%; control BHA,  $10 \mu\text{mol/L}$ , ScRt = 23.0%; Vitamin E,  $10 \mu\text{mol/L}$ , ScRt = 41.1%)<sup>[3846]</sup>, antioxidant (hydroxyl radical scavenger,  $IC_{50} = 55.9 \mu\text{mol/L}$ , control Ascorbic acid,  $IC_{50} = 51.8 \mu\text{mol/L}$ , superoxide anion radical scavenger,  $IC_{50} = 86.5 \mu\text{mol/L}$ , Ascorbic acid,  $IC_{50} = 86.2 \mu\text{mol/L}$ )<sup>[4289]</sup>. **Source:** HUANG LIAN *Coptis chinensis*, JIA HUI SE JIU LI XIANG PO PO NA *Veronica thymoides* ssp. *pseudocinerea*, XI ZANG HU HUANG LIAN *Picrorhiza scrophulariiflora* (root)<sup>[4289]</sup>. **Ref:** 2, 3846, 4289.

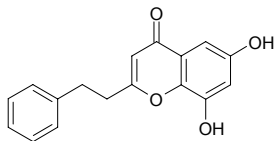
**6082 5,8-Dihydroxy-2-(2-phenylethyl)chromone**

$C_{17}H_{14}O_4$  (282.30). Colorless lump crystals, mp 159–160°C. **Source:** BAI MU XIANG *Aquilaria sinensis*. **Ref:** 13, 660.

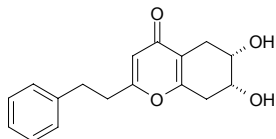


**6083 6,8-Dihydroxy-2-(2-phenylethyl)chromone**

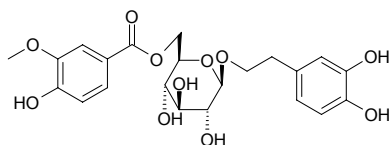
$C_{17}H_{14}O_4$  (282.30). Colorless needles, mp 218–220°C (MeOH). Source: CHEN XIANG *Aquilaria agallocha*. Ref: 4173.

**6084 6,7-Dihydroxy-2-(2-phenylethyl)-5,6,7,8-tetrahydrochromone**

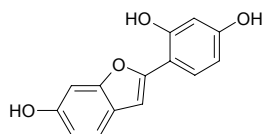
$C_{17}H_{18}O_4$  (286.33). Brown amorphous solid,  $[\alpha]_D^{25} = -15.1^\circ$  ( $c = 1.0$ , MeOH). Source: BAI MU XIANG *Aquilaria sinensis* (withered wood). Ref: 4339.

**6085 1'-O-β-D-(3,4-Dihydroxyphenyl)-ethyl-6'-O-vanilloyl-glucopyranoside**

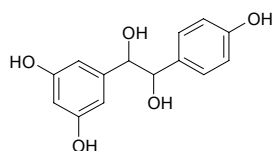
$C_{22}H_{26}O_{11}$  (466.45). White amorphous powder, having hygroscopicity, mp 145–147°C,  $[\alpha]_D^{25} = -42.1^\circ$  ( $c = 0.41$ , MeOH). Source: SHI DAN CAO *Corallodiscus flabellatus* [Syn. *Didissandra flabellat*] (whole herb). Ref: 4849.

**6086 2-(2,4-Dihydroxyphenyl)-6-hydroxybenzofuran**

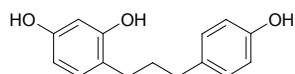
$C_{14}H_{10}O_4$  (242.23). Pharm: Antioxidant (rat brain homogenate lipid peroxidation test,  $IC_{50} = 0.2\mu\text{mol/L}$ , control EGCg,  $IC_{50} = 0.07\mu\text{mol/L}$ ). Source: TONG XING LIE PIAN HU ZHI ZI *Lespedeza homoloba*. Ref: 2356.

**6087 1-(3',5'-Dihydroxyphenyl)-2-(4'-hydroxyphenyl)ethane-1,2-diol**

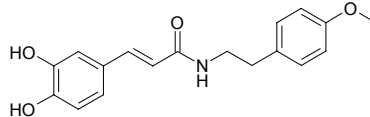
$C_{14}H_{14}O_5$  (262.26). Amorphous powder,  $[\alpha]_D^{25} = +13.5^\circ$  ( $c = 0.32$ , MeOH). Source: HU ZHANG *Polygonum cuspidatum*. Ref: 4186.

**6088 1-(2,4-Dihydroxyphenyl)-3-(4-hydroxyphenyl)propane**

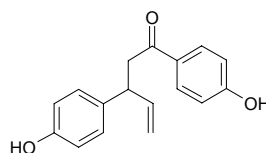
$C_{15}H_{16}O_3$  (244.29). Brown powder, mp 92–93°C. Pharm: Aromatase inhibitor inactive (*in vitro*,  $IC_{50} > 40\mu\text{mol/L}$ ; control Aminoglutethimide,  $IC_{50} = 6.4\mu\text{mol/L}$ ). Source: GOU SHU *Broussonetia papyrifera*. Ref: 3090.

**6089 7'-(3',4'-Dihydroxyphenyl)-N-[(4-methoxyphenyl)ethyl]propenamide**

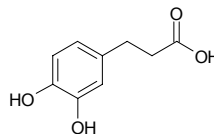
$C_{18}H_{19}NO_4$  (313.36). Colorless solid. Pharm:  $\alpha$ -Glucosidase inhibitor (type VI,  $IC_{50} = 103.58\mu\text{mol/L}$ , control 1-Deoxyojirimycin,  $IC_{50} = 300\mu\text{mol/L}$ ); thrombin inhibitor inactive;  $\beta$ -glucuronidase inhibitor inactive. Source: YUN NAN TU SI ZI *Cuscuta reflexa*. Ref: 4155.

**6090 1,3-Di-p-hydroxyphenyl-4-penten-1-one**

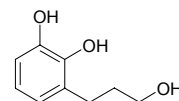
$C_{17}H_{16}O_3$  (268.32). Pharm: Cytotoxic (*in vitro*, HOG.R5,  $CC_{50} = 20.6\mu\text{g/mL}$  (76.8 $\mu\text{mol/L}$ ), control Ellipticine, HOG.R5,  $IC_{50} = 0.02\mu\text{g/mL}$  (0.08 $\mu\text{mol/L}$ )); cytotoxic inactive (KB, Col2, LNCaP, Lu1, HUVEC,  $IC_{50} > 20\mu\text{g/mL}$ ); anti-HIV ( $IC_{50} = 20\mu\text{g/mL}$  (74.6 $\mu\text{mol/L}$ )). Source: TIAN MEN DONG *Asparagus cochinchinensis* [Syn. *Asparagus lucidus*] (dried root: yield = 0.00005%dw). Ref: 3009.

**6091 3-(3,4-Dihydroxyphenyl)propanoic acid**

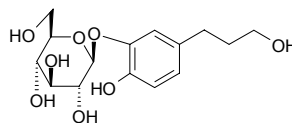
$C_9H_{10}O_4$  (182.18). Pharm: Tyrosine kinase inhibitor ( $IC_{50} = 418\mu\text{mol/L}$ , interleukin-2 inducible T-cell kinase). Source: MO LEI NAN YANG SHEN *Polyscias murrayi*. Ref: 5252.

**6092 3-(3,4-Dihydroxyphenyl)-1-propanol**

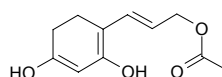
$C_9H_{12}O_3$  (168.19). Source: TAI WAN CUI BAI *Calocedrus macrolepis* var. *formosana* (leaf). Ref: 4297.

**6093 3,4-Dihydroxyphenylpropanol β-D-glucopyranoside**

$C_{13}H_{22}O_8$  (330.34). Amorphous powder,  $[\alpha]_D^{23} = -41^\circ$  ( $c = 0.2$ , MeOH). Source: YIN DU ZANG HUI XIANG *Carum ajowan* (fruit). Ref: 3547.

**6094 3-(3,4-Dihydroxyphenyl)-2-propen-1-ethanoate**

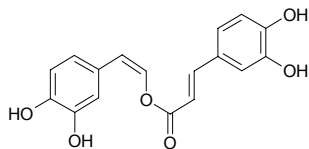
$C_{11}H_{14}O_4$  (210.23). Pharm:  $\alpha$ -Glucosidase inhibitor inactive (type VI, control 1-Deoxyojirimycin,  $IC_{50} = 0.3\text{mmol/L}$ ); thrombin inhibitor inactive;  $\beta$ -glucuronidase inhibitor inactive<sup>[4155]</sup>. Source: YUN NAN TU SI ZI *Cuscuta reflexa*. Ref: 4155.



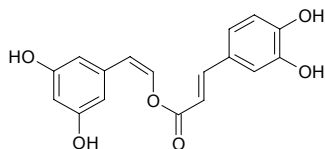


**6095 3-(3,4-Dihydroxyphenyl)-2-propenoic acid (Z,E)-2-(3,4-dihydroxyphenyl) ethenyl ester**

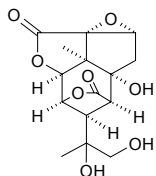
[55486-06-1] C<sub>17</sub>H<sub>14</sub>O<sub>6</sub> (314.29). Yellow acicular crystals (methanol–water), mp 183~185°C (dec). **Pharm:** Xanthinoxidase inhibitor (*in vitro*, IC<sub>50</sub> = 0.021 μg/mL). **Source:** JIAN ZI SU *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*]. **Ref:** 1006.

**6096 3-(3,4-Dihydroxyphenyl)-2-propenoic acid (Z,E)-2-(3,5-dihydroxyphenyl) ethenyl ester**

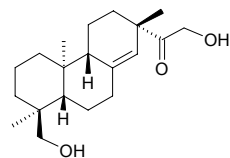
[130233-90-8] C<sub>17</sub>H<sub>14</sub>O<sub>6</sub> (314.29). Yellow thin crystals (methanol–water), mp 188~190°C. **Pharm:** Xanthinoxidase inhibitor (*in vitro*, IC<sub>50</sub> = 0.124 μg/mL). **Source:** JIAN ZI SU *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*]. **Ref:** 1006.

**6097 Dihydroxypicrotoxinin**

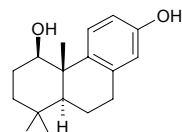
C<sub>15</sub>H<sub>18</sub>O<sub>8</sub> (326.31). Colorless needles, mp 260~262°C, [α]<sub>D</sub><sup>17</sup> = -65° (c = 1.34, EtOH) **Source:** *Anamirta cocculus*. **Ref:** 1876.

**6098 ent-16,18-Dihydroxy-8(14)-pimaren-15-one**

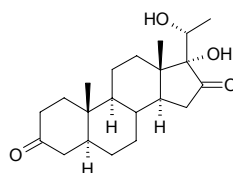
C<sub>20</sub>H<sub>32</sub>O<sub>3</sub> (320.48). Viscous oil, [α]<sub>D</sub><sup>26</sup> = -9.1° (c = 0.55, MeOH). **Source:** HAI NAN JIAN MU *Dysoxylum hainanense*. **Ref:** 750.

**6099 1β,13-Dihydroxy-8,11,13-podocarpatriene**

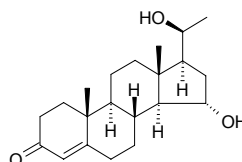
C<sub>17</sub>H<sub>24</sub>O<sub>2</sub> (260.38). Yellow amorphous solid, [α]<sub>D</sub><sup>23</sup> = -3.1° (c = 0.55, CHCl<sub>3</sub>). **Source:** TAI WAN SHAN *Taiwania cryptomerioides* (bark). **Ref:** 4182.

**6100 17α,20R-Dihydroxypregnan-3,16-dione**

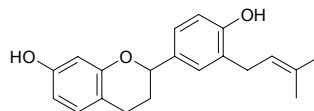
C<sub>21</sub>H<sub>32</sub>O<sub>4</sub> (348.49). Colorless acicular crystals (Me<sub>2</sub>CO), [α]<sub>D</sub><sup>26</sup> = -106.3° (c = 0.31, CHCl<sub>3</sub>). **Source:** YA LUO CHUN *Cipadessa baccifera*. **Ref:** 745.

**6101 15α,20β-Dihydroxy-Δ<sup>4</sup>-pregnen-3-one**

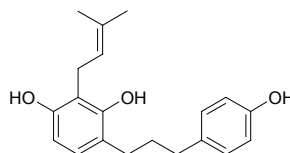
C<sub>21</sub>H<sub>32</sub>O<sub>3</sub> (332.49). **Source:** HONG HUA *Carthamus tinctorius*. **Ref:** 8.

**6102 (2S)-7,4'-Dihydroxy-3'-prenylflavan**

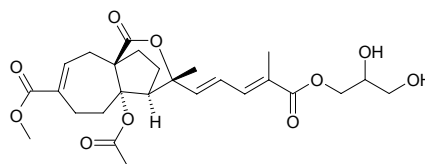
C<sub>20</sub>H<sub>22</sub>O<sub>3</sub> (310.4). Brown powder, mp 116~117°C. **Pharm:** Aromatase inhibitor inactive (*in vitro*, IC<sub>50</sub> > 40 μmol/L; control Aminoglutethimide, IC<sub>50</sub> = 6.4 μmol/L). **Source:** GOU SHU *Broussonetia papyrifera*. **Ref:** 3090.

**6103 1-(2,4-Dihydroxy-3-prenylphenyl)-3-(4-hydroxyphenyl)-propane**

Anticancer Benzenoid PMV70P691-003 C<sub>20</sub>H<sub>24</sub>O<sub>3</sub> (312.41). Brown powder, mp 115~116°C. **Pharm:** Aromatase inhibitor inactive (*in vitro*, IC<sub>50</sub> > 40 μmol/L; control Aminoglutethimide, IC<sub>50</sub> = 6.4 μmol/L)<sup>[3090]</sup>; cytotoxic (antioxidant assay)<sup>[5038]</sup>. **Source:** GOU SHU *Broussonetia papyrifera*. **Ref:** 3090, 5038.

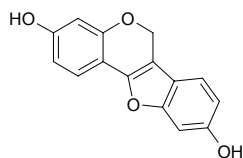
**6104 2',3'-Dihydroxy-1'-propoxypseudolarate B**

C<sub>26</sub>H<sub>34</sub>O<sub>10</sub> (506.55). White amorphous powder, [α]<sub>D</sub><sup>20</sup> = -18.3° (c = 0.46, Me<sub>2</sub>CO). **Source:** TU JING PI *Pseudolarix amabilis* [Syn. *Larix amabilis*; *Pseudolarix kaempferi*] (root cortex; yield = 0.000047%dw). **Ref:** 4637.

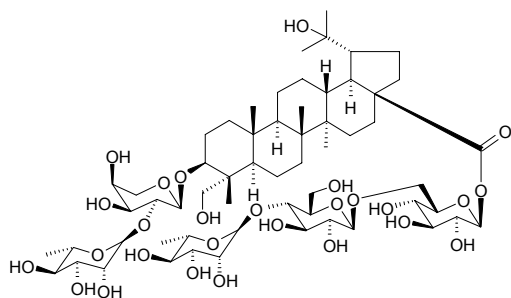


**6105 3,9-Dihydroxypteroicarp-6a-ene**

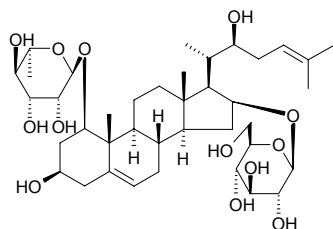
$C_{15}H_{10}O_4$  (254.24). **Pharm:** Antioxidant (rat brain homogenate lipid peroxidation test,  $IC_{50} = 0.2\mu\text{mol/L}$ , control EGCg,  $IC_{50} = 0.07\mu\text{mol/L}$ ); Antiallergic (50mg/kg, InRt = 49.6%, control EGCg, InRt = 12.8%). **Source:** TONG XING LIE PIAN HU ZHI ZI *Lespedeza homoloba*. **Ref:** 2356.

**6106 20,23-Dihydroxy-3β-[(O-α-L-rhamnopyranosyl-(1→2)-α-L-arabinopyranosyl)oxy]lupan-28-oic acid 28-O-α-L-rhamnopyranosyl-(1→4)-O-β-D-glucopyranosyl-(1→6)-β-D-glucopyranosyl ester**

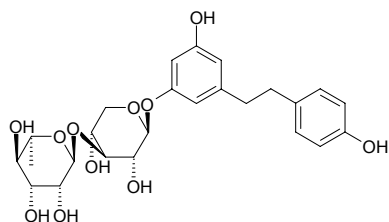
$C_{59}H_{98}O_{27}$  (1239.42). Amorphous solid,  $[\alpha]_D^{26} = -48.0^\circ$  ( $c = 0.10$ , MeOH). **Source:** BAI TOU WENG *Pulsatilla chinensis*. **Ref:** 3086.

**6107 (22S)-3β,22-Dihydroxy-1β-[(α-L-rhamnopyranosyl)oxy]cholest-5,24-dien-16β-yl β-D-glucopyranoside**

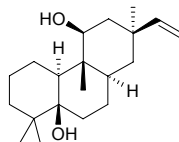
$C_{39}H_{64}O_{13}$  (740.94). Amorphous solid,  $[\alpha]_D^{25} = -40.0^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Cytotoxic (HL-60 cells,  $IC_{50} > 10\mu\text{mol/L}$ , control Etoposide,  $IC_{50} = 0.025\mu\text{mol/L}$ ). **Source:** XIA FENG XIN ZI *Galtonia candicans* (bulb). **Ref:** 4116.

**6108 5,4'-Dihydroxy-3-α-L-rhamnosyl-(1''→3')-β-D-xylopyranosyloxy-bibenzyl**

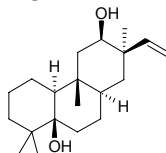
$C_{25}H_{32}O_{11}$  (508.53). Amorphous yellowish color,  $>179^\circ\text{C}$  (glass transition),  $[\alpha]_D^{20} = -39^\circ$  ( $c = 0.235$ , MeOH). **Pharm:** Antioxidant (DPPH scavenger,  $IC_{50} = (8.93\pm 0.94)\mu\text{g/mL}$ ; control Ascorbic acid,  $IC_{50} = (2.49\pm 0.32)\mu\text{g/mL}$ ; Caffeic acid,  $IC_{50} = (1.78\pm 0.03)\mu\text{g/mL}$ ; Chlorogenic acid,  $IC_{50} = (1.28\pm 0.38)\mu\text{g/mL}$ ). **Source:** SUAN YE PO LUO MEN SHEN *Tragopogon porrifolius* (subaerial parts). **Ref:** 5307.

**6109 5β,11β-Dihydroxy-ros-15-ene**

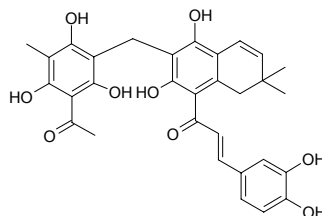
$C_{20}H_{34}O_2$  (306.49).  $[\alpha]_D^{20} = +68^\circ$  ( $c = 0.23$ ,  $\text{CHCl}_3$ ). **Source:** *Gackstroemia decipiens*. **Ref:** 3907.

**6110 5β,12β-Dihydroxy-ros-15-ene**

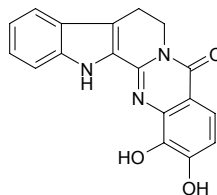
$C_{20}H_{34}O_2$  (306.49).  $[\alpha]_D^{20} = +57^\circ$  ( $c = 0.27$ ,  $\text{CHCl}_3$ ). **Source:** *Gackstroemia decipiens*. **Ref:** 3907.

**6111 3,4-Dihydroxyrottlerin**

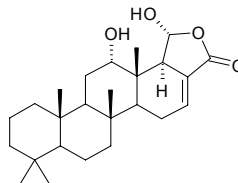
[24650-82-6]  $C_{31}H_{30}O_9$  (546.58). mp  $200^\circ\text{C}$ . **Source:** LV SONG QIU MAO *Mallotus philippinensis*. **Ref:** 6.

**6112 1,2-Dihydroxyrutacarpine**

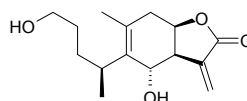
$C_{18}H_{13}N_3O_3$  (319.32). Yellow amorphous solid. **Source:** *Bouchardatia neurococca*. **Ref:** 3445.

**6113 12,25-Dihydroxy-16-scalaren-24,25-olide**

$C_{25}H_{38}O_4$  (402.58). **Source:** *Cacospongia scalaris*. **Ref:** 1521.

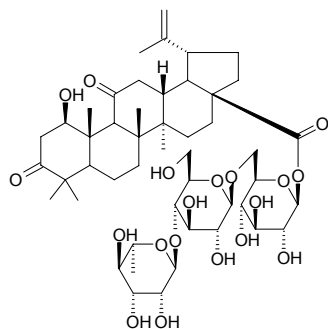
**6114 1,6α-Dihydroxy-4aH-1,10-secoeudesma-5(10),11(13)-dien-12,8β-olide**

$C_{15}H_{22}O_4$  (266.34). **Pharm:** Cytotoxic (SMMC-7721  $IC_{50} = (52.22\pm 1.25)\mu\text{g/mL}$ , Vincristine  $IC_{50} = (30.35\pm 2.23)\mu\text{g/mL}$ ; HO-8910  $IC_{50} = (21.32\pm 2.64)\mu\text{g/mL}$ , Vincristine  $IC_{50} = (20.74\pm 1.91)\mu\text{g/mL}$ )<sup>[5422]</sup>. **Source:** JIN FEI CAO *Inula japonica*. **Ref:** 5422.



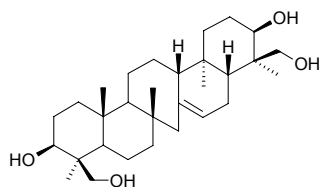
**6115 (1R)-1,11- $\alpha$ -Dihydroxy-3,4-seco-lupa-4(23), 20(29)-diene-3,28-dioic acid 3,11-lactone 28-O- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl (1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside**

$C_{48}H_{74}O_{19}$  (955.11). White needles, mp 232–234°C [ $\alpha$ ]<sub>D</sub><sup>14</sup> = +11.7° (*c* = 0.5, MeOH). Source: CI WU JIA *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*]. Ref: 469.



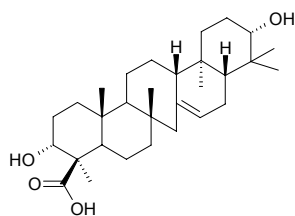
**6116 3 $\alpha$ ,21 $\beta$ -Dihydroxyserrat-14-ene-24,29-diol**

$C_{30}H_{50}O_4$  (474.73). Source: QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*] (whole herb: yield = 0.00022%dw). Ref: 4729.



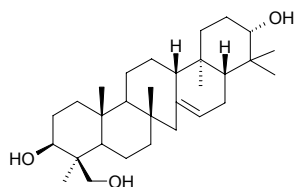
**6117 3 $\alpha$ ,21 $\alpha$ -Dihydroxyserrat-14-en-24-oic acid**

$C_{30}H_{48}O_4$  (472.71). White powder (CHCl<sub>3</sub>–CH<sub>3</sub>OH), mp 304–306°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = –0.6° (*c* = 0.78, C<sub>5</sub>D<sub>5</sub>N). Source: QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*] (whole herb: yield = 0.000036%dw). Ref: 4729.



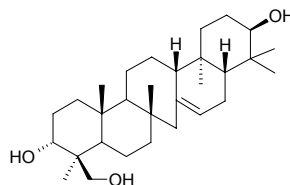
**6118 3 $\beta$ ,21 $\alpha$ -Dihydroxyserrat-14-en-24-ol**

$C_{30}H_{50}O_3$  (458.73). Source: QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*] (whole herb: yield = 0.00017%dw). Ref: 4729.



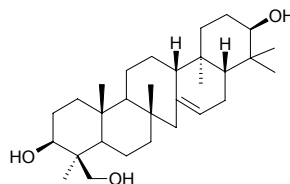
**6119 3 $\alpha$ ,21 $\beta$ -Dihydroxyserrat-14-en-24-ol**

$C_{30}H_{50}O_3$  (458.73). Source: QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*] (whole herb: yield = 0.0001%dw). Ref: 4729.



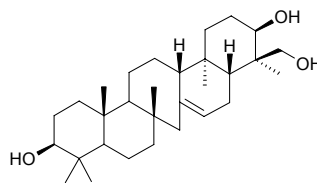
**6120 3 $\beta$ ,21 $\beta$ -Dihydroxyserrat-14-en-24-ol**

$C_{30}H_{50}O_3$  (458.73). Source: QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*] (whole herb: yield = 0.000032%dw). Ref: 4729.



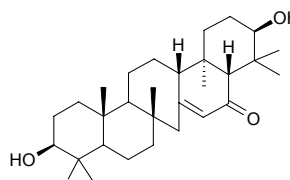
**6121 3 $\beta$ ,21 $\beta$ -Dihydroxyserrat-14-en-29-ol**

$C_{30}H_{50}O_3$  (458.73). Source: QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*] (whole herb: yield = 0.00025%dw). Ref: 4729.



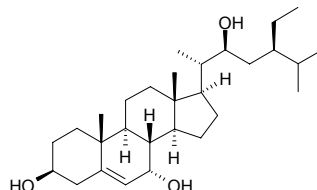
**6122 3 $\beta$ ,21 $\beta$ -Dihydroxyserrat-14-en-16-one**

16-Oxo-21-episerratenediol  $C_{30}H_{48}O_3$  (456.72). Source: QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*] (whole herb: yield = 0.000084%dw), SHEN JIN CAO *Lycopodium japonicum* [Syn. *Lycopodium clavatum*]. Ref: 1410, 2811, 4729.



**6123 7 $\alpha$ ,22S-Dihydroxysitosterol**

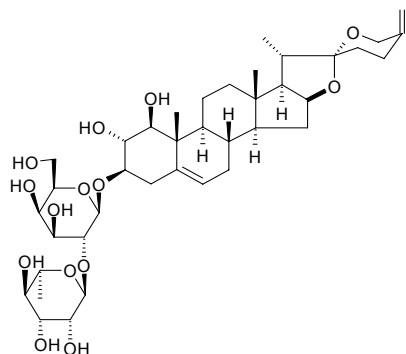
$C_{29}H_{53}O_3$  (446.72). White powder, mp 183–185°C Source: MA BIAN CAO *Verbena officinalis*. Ref: 2173.



**6124** 1 $\beta$ ,2 $\alpha$ -Dihydroxyspirosta-5,25(27)-dien-3 $\beta$ -yl *O*- $\alpha$ -D-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -L-galactopyranoside

C<sub>39</sub>H<sub>60</sub>O<sub>14</sub> (752.90). Amorphous solid,  $[\alpha]_D^{25} = -70.7^\circ$  ( $c = 0.20$ , MeOH).

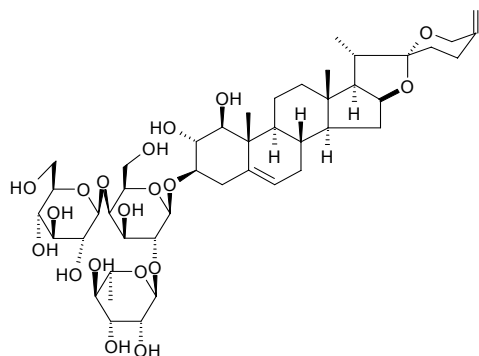
Source: *Cestrum sendtnerianum* (leaf). Ref: 5105.



**6125** 1 $\beta$ ,2 $\alpha$ -Dihydroxyspirosta-5,25(27)-dien-3 $\beta$ -yl *O*- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)]- $\beta$ -D-galactopyranoside

C<sub>45</sub>H<sub>70</sub>O<sub>19</sub> (915.05). Amorphous solid,  $[\alpha]_D^{25} = -124.4^\circ$  ( $c = 0.25$ , MeOH).

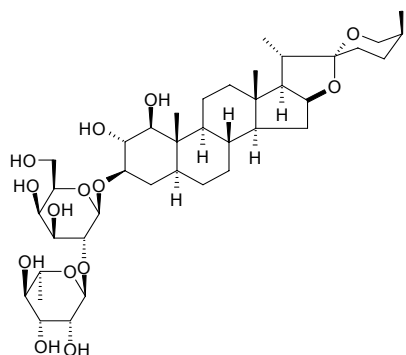
Pharm: Cytotoxic (HL-60, IC<sub>50</sub> = 7.7 $\mu$ g/mL, control Etoposide, IC<sub>50</sub> = 0.75 $\mu$ g/mL). Source: *Cestrum sendtnerianum* (leaf). Ref: 5105.



**6126** (25*R*)-1 $\beta$ ,2 $\alpha$ -Dihydroxy-5 $\alpha$ -spirostan-3 $\beta$ -yl *O*- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-galactopyranoside

C<sub>39</sub>H<sub>64</sub>O<sub>14</sub> (756.94). Amorphous solid,  $[\alpha]_D^{25} = -56.4^\circ$  ( $c = 0.11$ , MeOH).

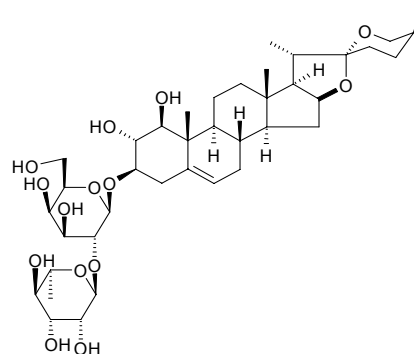
Source: *Cestrum sendtnerianum* (leaf). Ref: 5105.



**6127** (25*R*)-1 $\beta$ ,2 $\alpha$ -Dihydroxyspirost-5-en-3 $\beta$ -yl *O*- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-galactopyranoside

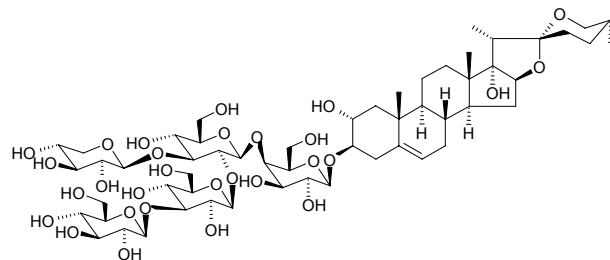
C<sub>39</sub>H<sub>62</sub>O<sub>14</sub> (754.92). Amorphous solid,  $[\alpha]_D^{25} = -57.1^\circ$  ( $c = 0.14$ , MeOH).

Source: *Cestrum sendtnerianum* (leaf). Ref: 5105.



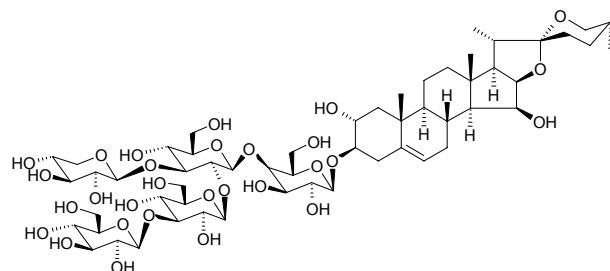
**6128** (25*R*)-2 $\alpha$ ,17 $\alpha$ -Dihydroxyspirost-5-en-3 $\beta$ -yl *O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)-*O*- $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 3)]-*O*- $\beta$ -D-galactopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-galactopyranoside

C<sub>56</sub>H<sub>90</sub>O<sub>29</sub> (1227.32). Amorphous powder,  $[\alpha]_D^{24} = -57^\circ$  ( $c = 0.2$ , CHCl<sub>3</sub>:MeOH, 1:1). Pharm: Cytotoxic (HSC-2 cells, LD<sub>50</sub> = 5.5 $\mu$ g/mL; HGF, LD<sub>50</sub> = 34 $\mu$ g/mL)<sup>[3023]</sup>; cytotoxic (*in vitro*, HSC-2, LD<sub>50</sub> = 4.4 $\mu$ g/mL; control Doxorubicin, LD<sub>50</sub> = 2.5 $\mu$ g/mL)<sup>[4667]</sup>. Source: YE XIANG SHU *Cestrum nocturnum* (leaf: yield = 0.0077%fw). Ref: 3023, 4667.



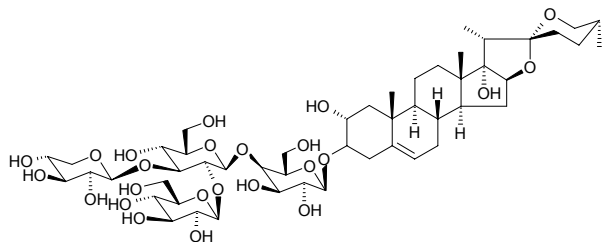
**6129** (25*R*)-2 $\alpha$ ,15 $\beta$ -Dihydroxyspirost-5-en-3 $\beta$ -yl *O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)-*O*- $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 3)]-*O*- $\beta$ -D-galactopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-galactopyranoside

C<sub>56</sub>H<sub>90</sub>O<sub>29</sub> (1227.32). Amorphous powder,  $[\alpha]_D^{24} = -60^\circ$  ( $c = 0.13$ , CHCl<sub>3</sub>:MeOH, 1:1). Pharm: Cytotoxic (HSC-2 cells, LD<sub>50</sub> = 4.4 $\mu$ g/mL; HGF, LD<sub>50</sub> = 22 $\mu$ g/mL). Source: YE XIANG SHU *Cestrum nocturnum* (leaf: yield = 0.0071%fw). Ref: 3023.



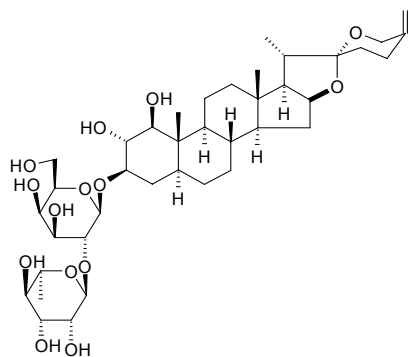
**6130 (25R)-2 $\alpha$ ,17 $\alpha$ -Dihydroxyspirost-5-en-3 $\beta$ -yl O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)-O- $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 3)]-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-galactopyranoside**

C<sub>50</sub>H<sub>80</sub>O<sub>24</sub> (1065.18). Amorphous powder,  $[\alpha]_D^{24} = -70.8^\circ$  ( $c = 0.13$ , CHCl<sub>3</sub>:MeOH, 1:1). **Pharm:** Cytotoxic (HSC-2 cells, LD<sub>50</sub> = 13 $\mu$ g/mL; HGF, LD<sub>50</sub> = 58 $\mu$ g/mL). **Source:** YE XIANG SHU *Cestrum nocturnum* (leaf; yield = 0.0070%fw). **Ref:** 3023.



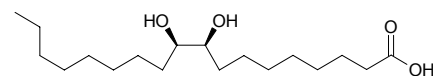
**6131 1 $\beta$ ,2 $\alpha$ -Dihydroxy-5 $\alpha$ -spirost-25(27)-en-3 $\beta$ -yl O- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-galactopyranoside**

C<sub>39</sub>H<sub>62</sub>O<sub>14</sub> (754.92). Amorphous solid,  $[\alpha]_D^{25} = -54.2^\circ$  ( $c = 0.43$ , MeOH). **Source:** *Cestrum sendtnerianum* (leaf). **Ref:** 5105.



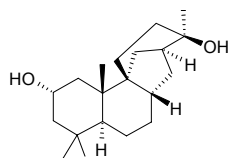
**6132 9,10-Dihydroxystearic acid**

C<sub>18</sub>H<sub>36</sub>O<sub>4</sub> (316.49). **Source:** BI MA ZI *Ricinus communis*. **Ref:** 658.



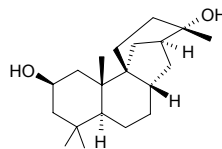
**6133 2 $\alpha$ ,13(R)-Dihydroxystemodane**

C<sub>20</sub>H<sub>34</sub>O<sub>2</sub> (306.49). Plates, mp 235~237°C,  $[\alpha]_D^{27} = +16.5^\circ$  ( $c = 0.38$ , MeOH). **Source:** DAO GEN MEI *Rhizopus oryzae*. **Ref:** 3781.



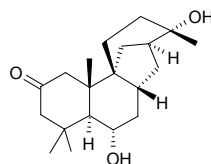
**6134 2 $\beta$ ,13(S)-Dihydroxystemodane**

C<sub>20</sub>H<sub>34</sub>O<sub>2</sub> (306.49). Needles, mp 157~159°C,  $[\alpha]_D^{27} = +11.9^\circ$  ( $c = 0.78$ , MeOH). **Source:** DAO GEN MEI *Rhizopus oryzae*. **Ref:** 3781.



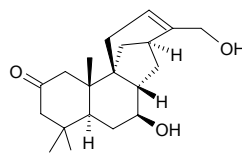
**6135 6 $\alpha$ ,13(S)-Dihydroxystemodan-2-one**

C<sub>20</sub>H<sub>32</sub>O<sub>3</sub> (320.48). Needles, mp 191~193°C,  $[\alpha]_D^{27} = +55.6^\circ$  ( $c = 4.5$ , CHCl<sub>3</sub>). **Source:** DAO GEN MEI *Rhizopus oryzae*. **Ref:** 3781.



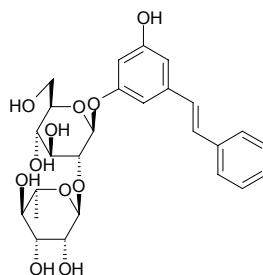
**6136 7 $\beta$ ,17-Dihydroxystemod-12-en-2-one**

C<sub>20</sub>H<sub>30</sub>O<sub>3</sub> (318.46). Needles, mp 220~225°C,  $[\alpha]_D^{27} = -10.9^\circ$  ( $c = 2.8$ , Me<sub>2</sub>CO). **Source:** DAO GEN MEI *Rhizopus oryzae*. **Ref:** 3781.



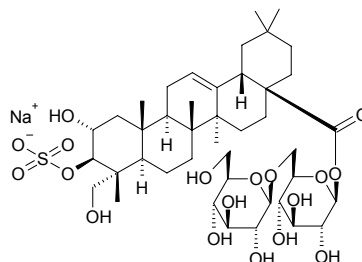
**6137 3,5-Dihydroxy-stilbene-3-O-neohesperidoside**

C<sub>26</sub>H<sub>32</sub>O<sub>11</sub> (520.54). White powder, mp 184~186°C,  $[\alpha]_D^{20} = -100^\circ$  ( $c = 0.045$ , MeOH). **Source:** QIAN LIE LIN MAO JUE *Dryopteris sublaeta*. **Ref:** 4879.



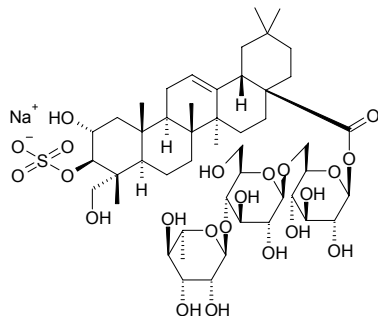
**6138 2 $\alpha$ ,23-Dihydroxy-3 $\beta$ -sulfoylean-12-en-28-oic acid**

**O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl ester sodium salt**  
C<sub>42</sub>H<sub>67</sub>NaO<sub>18</sub>S (915.05). Amorphous solid,  $[\alpha]_D^{27} = +14.0^\circ$  ( $c = 0.10$ , MeOH). **Source:** SAN YE MU TONG *Akebia trifoliata* (stem). **Ref:** 4545.



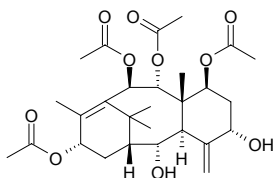
**6139** 2 $\alpha$ ,23-Dihydroxy-3 $\beta$ -sulfoxyolean-12-en-28-oic acid *O*- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl ester sodium salt

C<sub>48</sub>H<sub>77</sub>NaO<sub>22</sub>S (1061.19). Amorphous solid,  $[\alpha]_D^{27} = -8.0^\circ$  ( $c = 0.10$ , MeOH). Source: SAN YE MU TONG *Akebia trifoliata* (stem). Ref: 4545.



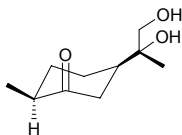
**6140** 2 $\alpha$ ,5 $\alpha$ -Dihydroxy-7 $\beta$ ,9 $\alpha$ ,10 $\beta$ ,13 $\alpha$ -tetraacetoxy-4(20),11-taxadiene

C<sub>28</sub>H<sub>40</sub>O<sub>10</sub> (536.63). Source: AO DA LI YA HONG DOU SHAN *Austrotaxus spicata*, SU MEN DA LA HONG DOU SHAN *Taxus sumatrana* (twig and leaf)<sup>[4800]</sup>. Ref: 662, 4800.



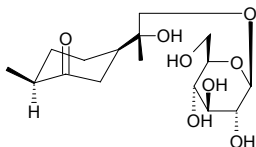
**6141** (1S,4S,8S)-8,9-Dihydroxytetrahydrocarvone

C<sub>10</sub>H<sub>18</sub>O<sub>3</sub> (186.25). Amorphous powder,  $[\alpha]_D^{21} = -23^\circ$  ( $c = 0.5$ , MeOH). Source: SHI LUO ZI *Anethum graveolens* (fruit). Ref: 4177.



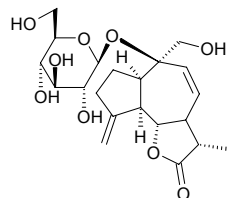
**6142** (1S,4S,8S)-8,9-Dihydroxytetrahydrocarvone 9-*O*- $\beta$ -D-glucopyranoside

C<sub>16</sub>H<sub>28</sub>O<sub>8</sub> (348.40). Amorphous powder,  $[\alpha]_D^{25} = -28^\circ$  ( $c = 3.5$ , MeOH). Source: SHI LUO ZI *Anethum graveolens* (fruit). Ref: 4177.



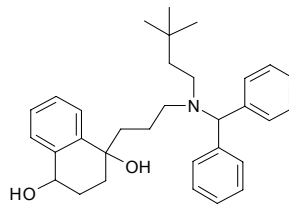
**6143** 10 $\beta$ ,14-Dihydroxy-10(14),11 $\beta$ (13)-tetrahydro-8,9-didehydro-3-deoxyzalanin C 10-*O*- $\beta$ -D-glucopyranoside

C<sub>21</sub>H<sub>30</sub>O<sub>9</sub> (426.47). Solid,  $[\alpha]_D^{25.8} = -41.8^\circ$  ( $c = 0.63$ , MeOH). Source: KAN CHA JIA MAO LIAN CAI *Picris kamschatca*. Ref: 1932.



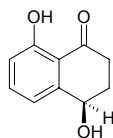
**6144** *N*-(1',4'-Dihydroxy-1',2',3',4'-tetrahydronaphthyl)-propyl-*N*-diphenylmethyl-*N*-3,3-dimethylbutylamine

C<sub>32</sub>H<sub>41</sub>NO<sub>2</sub> (471.69). Colorless filamentary needles mp 148.5°C. Source: YI BEI MU *Fritillaria pallidiflora*. Ref: 2116.



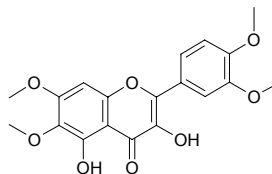
**6145** (4*R*)-4,8-Dihydroxy- $\alpha$ -tetralone

C<sub>10</sub>H<sub>10</sub>O<sub>3</sub> (178.19). Source: DONG BEI HU TAO *Juglans mandshurica* var. *sieboldiana* (fruit). Ref: 4492.



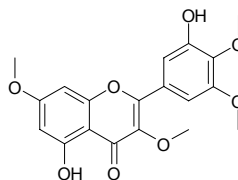
**6146** 3,5-Dihydroxy-6,7,3',4'-tetramethoxyflavone

Quercetagenin-6,7,3',4'-tetramethyl ether C<sub>19</sub>H<sub>18</sub>O<sub>8</sub> (374.35). Source: HUANG HUA HAO *Artemisia annua*. Ref: 2, 660.



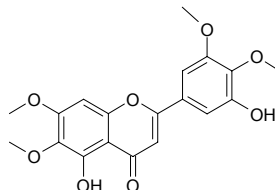
**6147** 5,3'-Dihydroxy-3,7,4',5'-tetramethoxyflavone

C<sub>19</sub>H<sub>18</sub>O<sub>8</sub> (374.35). Amorphous. Source: NIAN MAO LIAO *Polygonum viscosum* (whole herbs). Ref: 3955.



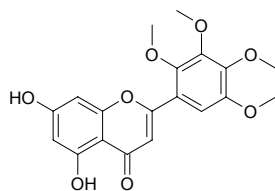
**6148** 5,3'-Dihydroxy-6,7,4',5'-tetramethoxyflavone

C<sub>19</sub>H<sub>18</sub>O<sub>8</sub> (374.35). Pharm: Antioxidant (ferric thiocyanate method, 0.5mmol/L, peroxidation value = 11.4%, control BHA, 0.5mmol/L, peroxidation value = 4.5%, control Vitamin E, 0.5mmol/L, peroxidation value = 14.7%). Source: TIAN SHE CAO *Lippia dulcis* (aerial parts). Ref: 4508.

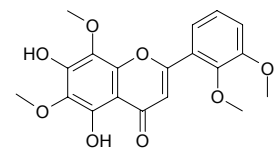


**6149 5,7-Dihydroxy-2',3',4',5'-tetramethoxy-flavone**

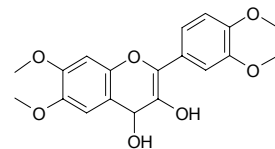
$C_{19}H_{18}O_8$  (374.35). Pharm: Anti-HIV-1 inactive. Source: TAI GUO ZHI ZI *Gardenia thailandica* (leaf and twig). Ref: 4963.

**6150 5,7-Dihydroxy-6,8,2',3'-tetramethoxyflavone**

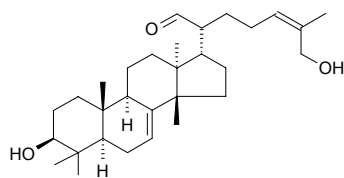
$C_{19}H_{18}O_8$  (374.35). Source: HUANG QIN *Scutellaria baicalensis*. Ref: 2.

**6151 3,4-Dihydroxy-6,7,3',4'-tetramethoxyflavonol**

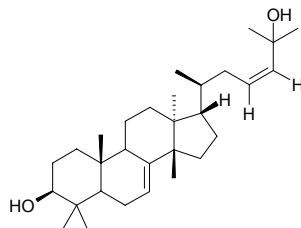
$C_{19}H_{20}O_7$  (360.37). Source: HUANG HUA HAO *Artemisia annua*. Ref: 2, 660.

**6152 (24Z)-3β,27-Dihydroxy-7,24-tirucalladien-21-al**

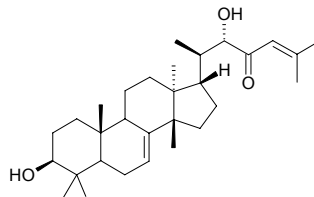
$C_{30}H_{48}O_3$  (456.72). Source: KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. Ref: 12.

**6153 3β,25-Dihydroxy-tirucalla-7,23-diene**

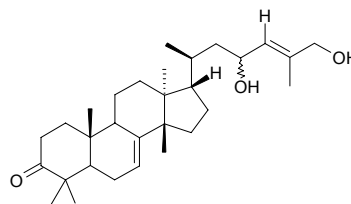
$C_{30}H_{50}O_2$  (442.73). Colorless needles (Me<sub>2</sub>CO), mp 168~170°C,  $[\alpha]_D^{27} = -31.0^\circ$  ( $c = 0.45$ , CHCl<sub>3</sub>). Source: HAI NAN JIAN MU *Dysoxylum hainanense* (bark). Ref: 3987.

**6154 3β,22S-Dihydroxy-tirucalla-7,24-dien-23-one**

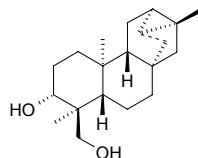
$C_{30}H_{48}O_3$  (456.72). White powder, mp 80~82°C,  $[\alpha]_D^{26} = +33.3^\circ$  ( $c = 0.45$ , CH<sub>3</sub>OH). Source: HAI NAN JIAN MU *Dysoxylum hainanense* (bark). Ref: 3987.

**6155 23,26-Dihydroxy-tirucalla-7,24-dien-3-one**

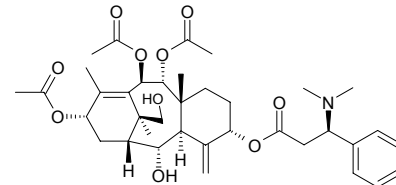
$C_{30}H_{48}O_3$  (456.72). Colorless needles (Me<sub>2</sub>CO), mp 138~140°C,  $[\alpha]_D^{19} = -72.5^\circ$  ( $c = 0.29$ , CH<sub>3</sub>OH). Source: HAI NAN JIAN MU *Dysoxylum hainanense* (bark). Ref: 3987.

**6156 3α,19-Dihydroxy trachylobane**

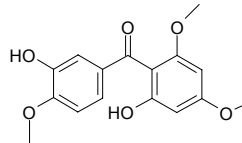
$C_{20}H_{32}O_2$  (304.48). mp 149~150°C,  $[\alpha]_D^{18} = -35^\circ$  ( $c = 4$ , CHCl<sub>3</sub>:MeOH = 1:1). Source: CHANG SUI BA DOU *Croton macrostachys*. Ref: 3983, 4552.

**6157 2α17-Dihydroxy-9α,10β,13α-triacetoxy-5α-(3'-N,N-dimethylamino-3'-phenyl)-propionyloxytaxa-4(20),11-diene**

$C_{37}H_{51}NO_{10}$  (669.82). Amorphous powder,  $[\alpha]_D^{22} = +39^\circ$  ( $c = 0.1$ , CHCl<sub>3</sub>). Source: JIA NA DA HONG DOU SHAN *Taxus canadensis* (needle leaf). Ref: 3886.

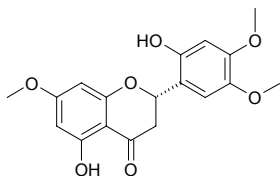
**6158 3',6-Dihydroxy-2,4,4'-trimethoxybenzophenone**

$C_{16}H_{16}O_6$  (304.30). Pale yellow solid, mp 161~162°C. Source: DAO NIAN ZI *Garcinia mangostana* (heartwood). Ref: 5311.

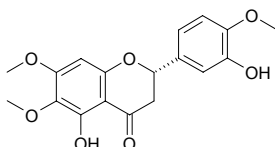


**6159 (2S)-5,2'-Dihydroxy-7,4',5'-trimethoxyflavanone**

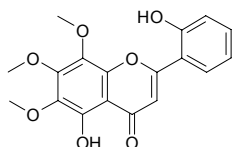
$C_{18}H_{18}O_7$  (346.34). Crystalline solid, mp 192–193 °C,  $[\alpha]_D^{25} = -8.5^\circ$  ( $c = 0.11$ , MeOH). **Pharm:** AChE inhibitor (*in vitro*,  $IC_{50} = (11.6 \pm 0.6) \mu\text{mol/L}$ , control Galanthamine,  $IC_{50} = (32.2 \pm 2.5) \mu\text{mol/L}$ ); BChE inhibitor (*in vitro*,  $IC_{50} = (15.7 \pm 2.0) \mu\text{mol/L}$ , control Galanthamine,  $IC_{50} = (163.0 \pm 5.0) \mu\text{mol/L}$ ). **Source:** CU YING MAO DIAN ZI CAO *Onosma hispida* (whole herb). **Ref:** 4333.

**6160 5,3'-Dihydroxy-6,7,4'-trimethoxyflavanone**

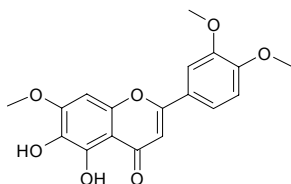
$C_{18}H_{18}O_7$  (346.34). **Pharm:** Cytotoxic (*in vitro*, PC12,  $GI_{50} = 2.27 \mu\text{g/mL}$ , control Cisplatin,  $GI_{50} = 0.111 \mu\text{g/mL}$ ; HCT116,  $GI_{50} = 2.87 \mu\text{g/mL}$ , control Cisplatin,  $GI_{50} = 0.794 \mu\text{g/mL}$ ). **Source:** DAN YE MAN JING ZI *Vitex rotundifolia* [Syn. *Vitex trifolia* var. *simplicifolia*] (seed: yield = 0.0017%dw). **Ref:** 4623.

**6161 5,2'-Dihydroxy-6,7,8-trimethoxyflavone**

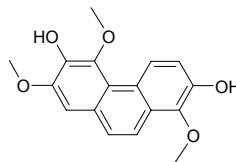
$C_{18}H_{16}O_7$  (344.32). **Source:** HUANG QIN *Scutellaria baicalensis*. **Ref:** 2.

**6162 5,6-Dihydroxy-7,3',4'-trimethoxyflavone**

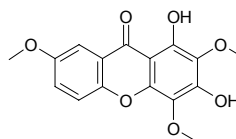
[25782-23-4]  $C_{18}H_{16}O_7$  (344.32). Pale yellow powder, mp 244–247°C. **Pharm:** PFTase inhibitor (100  $\mu\text{g/mL}$ , InRt = 62%,  $IC_{50} = 25 \mu\text{g/mL}$ )<sup>[5378]</sup>; cytotoxic (inhibits growth of hmn cancer cells: SW620,  $GI_{50} = (9.5 \pm 1.0) \mu\text{mol/L}$ , control Adriamycin,  $GI_{50} = 0.34 \mu\text{mol/L}$ ; A549,  $GI_{50} = (19.3 \pm 2.0) \mu\text{mol/L}$ , Adriamycin,  $GI_{50} = 0.21 \mu\text{mol/L}$ ; PC3,  $GI_{50} = (13.4 \pm 1.0) \mu\text{mol/L}$ , Adriamycin,  $GI_{50} = 0.39 \mu\text{mol/L}$ ; LOX-IMVI,  $GI_{50} = (4.9 \pm 0.5) \mu\text{mol/L}$ , Adriamycin,  $GI_{50} = 0.12 \mu\text{mol/L}$ ; HCT15,  $GI_{50} = (8.8 \pm 0.6) \mu\text{mol/L}$ , Adriamycin,  $GI_{50} = 0.84 \mu\text{mol/L}$ )<sup>[5378]</sup>; cytotoxic inactive (hmn breast cancer cell lines: MDA-MB-231, MCF7, T47D, 20  $\mu\text{g/mL}$ )<sup>[5378]</sup>; angiogenesis inhibitor inactive (chicken embryo chorioallantoic membrane (CAM) assay, 10  $\mu\text{g}$ )<sup>[5378]</sup>; antineoplastic (nude mouse, hmn tumor xenograft model, SW620 hmn colon cancer cell, 0.5% tween 80, ip 60mg/(kg·d), for 22 days, reduces tumor volume 44.6% at final day and no loss of body weight; good candidate as antitumor agents)<sup>[5378]</sup>. **Source:** AI YE *Artemisia argyi*, *Thymus piperella*, *Thymra* spp. **Ref:** 1521, 5378.

**6163 2,6-Dihydroxy-1,5,7-trimethoxyphenanthrene**

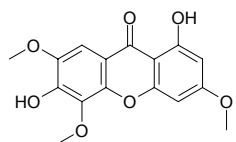
$C_{17}H_{16}O_5$  (300.31). **Source:** MI HUA SHI HU *Dendrobium densiflorum* (stem). **Ref:** 5171.

**6164 1,3-Dihydroxy-2,4,7-trimethoxyxanthone**

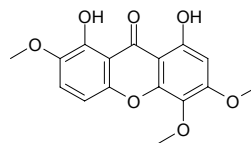
$C_{16}H_{14}O_7$  (318.29). Yellow solid. **Pharm:** Cytotoxic (*in vitro* antiproliferative activity, LoVo,  $IC_{50} = (34.6 \pm 2.3) \mu\text{mol/L}$ , control Doxorubicin,  $IC_{50} = (0.04 \pm 0.005) \mu\text{mol/L}$ ; LoVo/Doxo,  $IC_{50} = (39.5 \pm 1.8) \mu\text{mol/L}$ , Doxorubicin,  $IC_{50} = (10.2 \pm 0.1) \mu\text{mol/L}$ ). **Source:** PU TONG YUAN ZHI *Polygala vulgaris*. **Ref:** 4246.

**6165 1,6-Dihydroxy-3,5,7-trimethoxyxanthone**

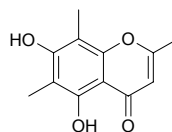
3,8-Dihydroxy-2,4,6-trimethoxyxanthone  $C_{16}H_{14}O_7$  (318.29). **Pharm:** Cytotoxic ( $P_{388}$   $ED_{50} = 5.11 \mu\text{g/mL}$ , control Mithramycin  $ED_{50} = 0.06 \mu\text{g/mL}$ , HT29  $ED_{50} = 6.25 \mu\text{g/mL}$ , Mithramycin  $ED_{50} = 0.08 \mu\text{g/mL}$ )<sup>[4094]</sup>. **Source:** SHAN ZHU ZI *Garcinia multiflora* (stem: yield = 0.000021%dw), TAI WAN LV DAO TENG HUANG *Garcinia linnii*, YUAN ZHI *Polygala tenuifolia*. **Ref:** 2, 4094, 4708.

**6166 1,8-Dihydroxy-3,4,7-trimethoxyxanthone**

$C_{16}H_{14}O_7$  (318.29). Yellow needles (EtOH), mp 165–169°C **Source:** CHUAN DONG ZHANG YA CAI *Swertia davidii*. **Ref:** 2237.

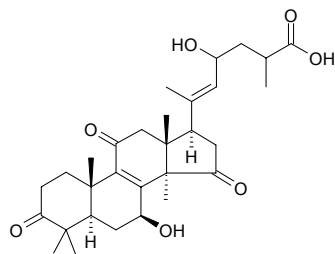
**6167 5,7-Dihydroxy-2,6,8-trimethylchromone**

8-Methyleugenitol  $C_{12}H_{12}O_4$  (220.23). **Source:** CUI YUN CAO *Selaginella uncinata* (whole herb). **Ref:** 4398.



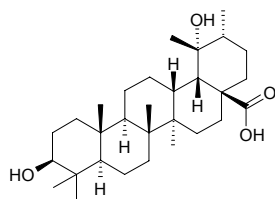


**6168** 7 $\beta$ ,23 $\xi$ -Dihydroxy-3,11,15-trioxolanosta-8,20E(22)-dien-26-oic acid  
 C<sub>30</sub>H<sub>42</sub>O<sub>7</sub> (514.67). Colorless amorphous solid,  $[\alpha]_D^{27} = +95.4^\circ$  ( $c = 0.2$ , MeOH). Source: SHU SHE *Ganoderma applanatum* (sporocarp: yield = 0.00057%). Ref: 4756.



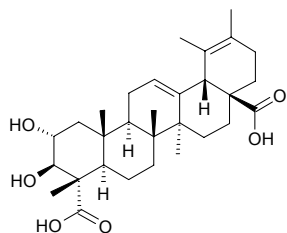
**6169** 3 $\beta$ ,19 $\alpha$ -Dihydroxyursan-28-oic acid

C<sub>30</sub>H<sub>50</sub>O<sub>4</sub> (474.73). Source: WU SE MEI *Lantana camara*. Ref: 744.



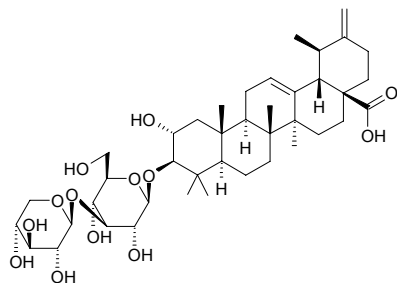
**6170** 2 $\alpha$ ,3 $\beta$ -Dihydroxyurs-12,19-dien-23,28-oic acid

C<sub>30</sub>H<sub>44</sub>O<sub>6</sub> (500.68). White powder, mp 320°C. Source: MAO E MEI *Rubus chroosepalus*. Ref: 866.



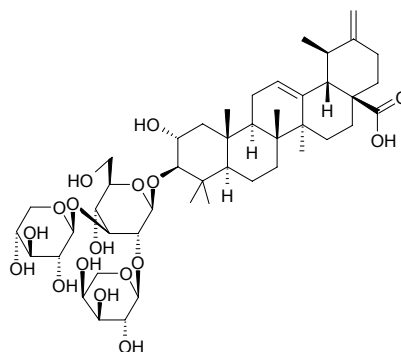
**6171** 2 $\alpha$ ,3 $\beta$ -Dihydroxyurs-12,20(30)-dien-28-oic acid 3-O- $\{\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 3)-D-glucopyranoside}

C<sub>41</sub>H<sub>64</sub>O<sub>13</sub> (764.96).  $[\alpha]_D^{25} = +32^\circ$  ( $c = 1$ , MeOH). Source: CI HUA LIAN ZI CAO *Alternanthera repens*. Ref: 2336.



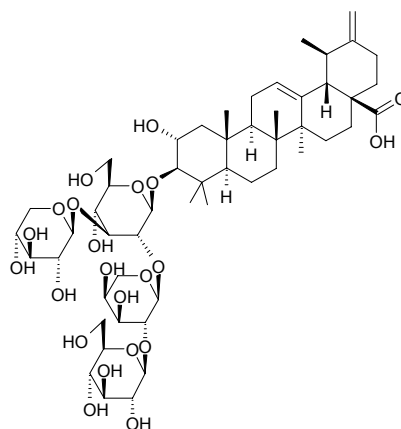
**6172** 2 $\alpha$ ,3 $\beta$ -Dihydroxyurs-12,20(30)-dien-28-oic acid 3-O- $\{O$ - $\alpha$ -L-arabinopyranosyl-(1 $\rightarrow$ 2)-O- $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 3) $\beta$ -D-glucopyranoside}

C<sub>46</sub>H<sub>72</sub>O<sub>17</sub> (897.08).  $[\alpha]_D^{25} = +28^\circ$  ( $c = 1$ , MeOH). Source: CI HUA LIAN ZI CAO *Alternanthera repens*. Ref: 2336.



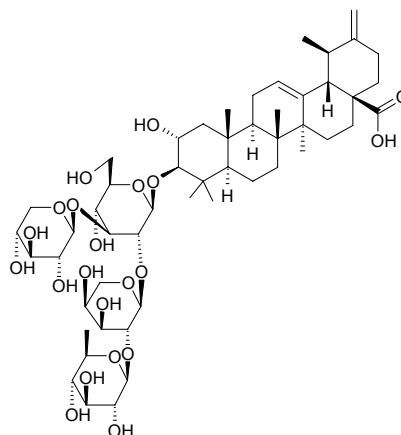
**6173** 2 $\alpha$ ,3 $\beta$ -Dihydroxyurs-12,20(30)-dien-28-oic acid 3-O- $\{O$ - $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)-O- $\alpha$ -L-arabinopyranosyl-(1 $\rightarrow$ 2)-O- $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 3) $\beta$ -D-glucopyranoside}

C<sub>52</sub>H<sub>82</sub>O<sub>22</sub> (1059.22).  $[\alpha]_D^{25} = +19.0^\circ$  ( $c = 1$ , MeOH). Source: CI HUA LIAN ZI CAO *Alternanthera repens*. Ref: 2336.



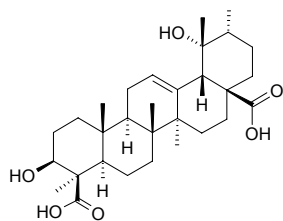
**6174** 2 $\alpha$ ,3 $\beta$ -Dihydroxyurs-12,20(30)-dien-28-oic acid 3-O- $\{O$ - $\beta$ -D-quinopyranosyl-(1 $\rightarrow$ 2)-O- $\alpha$ -L-arabinopyranosyl-(1 $\rightarrow$ 2)-O- $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 3) $\beta$ -D-glucopyranoside}

C<sub>52</sub>H<sub>82</sub>O<sub>21</sub> (1043.22).  $[\alpha]_D^{25} = +16^\circ$  ( $c = 1$ , MeOH). Source: CI HUA LIAN ZI CAO *Alternanthera repens*. Ref: 2336.

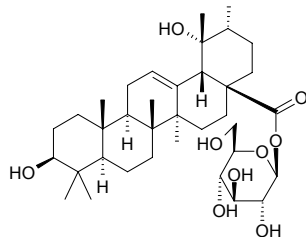


**6175 3 $\beta$ ,19 $\alpha$ -Dihydroxyurs-12-en-24,28-dioic acid**

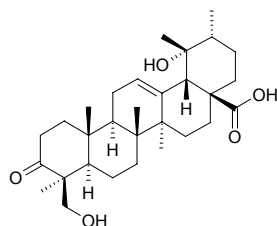
Ilexgenin A [108524-94-3] C<sub>30</sub>H<sub>46</sub>O<sub>6</sub> (502.70). Powder, mp > 300°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +30.8° (c = 0.97, pyridine). Source: MAO DONG QING *Ilex pubescens*. Ref: 1521.

**6176 3 $\beta$ ,19 $\alpha$ -Dihydroxyurs-12-en-28-oic acid 28- $\beta$ -D-glucopyranosyl ester**

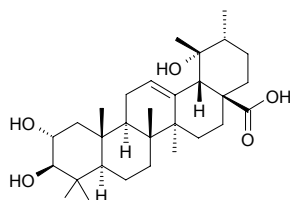
C<sub>36</sub>H<sub>58</sub>O<sub>9</sub> (634.86). Pharm: Cytotoxic (HSC-2, IC<sub>50</sub> = 50  $\mu$ g/mL; HGF, IC<sub>50</sub> > 200  $\mu$ g/mL). Source: DI YU *Sanguisorba officinalis*. Ref: 5160.

**6177 19,24-Dihydroxyurs-12-en-3-one-28-oic acid**

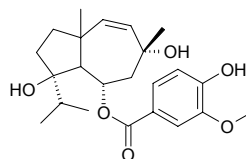
C<sub>30</sub>H<sub>46</sub>O<sub>5</sub> (486.70). Colorless prisms, mp 189.5~191.0°C, [ $\alpha$ ]<sub>D</sub><sup>17.6</sup> = 27.4° (c = 1.55, acetone). Source: DU JUAN HUA YE *Rhododendron simsii*. Ref: 749.

**6178 2 $\alpha$ ,19 $\alpha$ -Dihydroxyursolic acid**

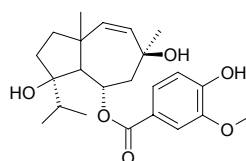
Tormentonic acid [13850-16-3] C<sub>30</sub>H<sub>48</sub>O<sub>5</sub> (488.71). Yellowish crystalline powder, mp 265~269°C; 273°C; 288~289°C, [ $\alpha$ ]<sub>D</sub><sup>15</sup> = -17.3° (c = 0.2, pyridine); colorless crystals powder, mp 260~262°C (methanol-water), 273°C, [ $\alpha$ ]<sub>D</sub> = -20° (pyridine). Pharm: Antibacterial (*Streptococcus* var.); hypoglycemic (rat, orl, 10mg/kg)<sup>[900]</sup>. Source: BAN BIAN SU *Elsholtzia ciliata*, CU YE XUAN GOU ZI *Rubus alceaefolius*, PI PA YE *Eriobotrya japonica*, QIANG WEI GEN *Rosa multiflora*, SHAN DI XIANG CHA CAI *Isodon oresbia*, SHUI YANG MEI *Geum japonicum*, TUN XING GUO *Pygeum topengii*, WU LING ZHI *Trogopterus xanthipes*; *Pteromys volans*, XIN ZANG JIA ZI CAO *Arnebia euchroma*, ZE LAN *Lycopus lucidus*. Ref: 6, 447, 592, 595, 606, 637, 900.

**6179 4 $\beta$ ,8 $\alpha$ -Dihydroxy-6 $\alpha$ -vanilloyloxydauc-9-ene**

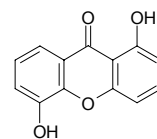
C<sub>23</sub>H<sub>32</sub>O<sub>6</sub> (404.51). Source: YI LANG A WEI *Ferula kuhistanica* (root). Ref: 3977.

**6180 4 $\beta$ ,8 $\beta$ -Dihydroxy-6 $\alpha$ -vanilloyloxydauc-9-ene**

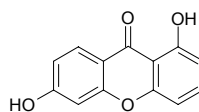
C<sub>23</sub>H<sub>32</sub>O<sub>6</sub> (404.51). Source: YI LANG A WEI *Ferula kuhistanica* (stem). Ref: 3977.

**6181 1,5-Dihydroxyxanthone**

C<sub>13</sub>H<sub>8</sub>O<sub>4</sub> (228.21). Pharm: Cytotoxic (P<sub>388</sub> ED<sub>50</sub> = 4.71  $\mu$ g/mL, control Mithramycin ED<sub>50</sub> = 0.06  $\mu$ g/mL, HT29 ED<sub>50</sub> = 5.01  $\mu$ g/mL, Mithramycin ED<sub>50</sub> = 0.08  $\mu$ g/mL)<sup>[4094]</sup>; antifungal (*Aspergillus fumigatus* CBS113.26, MIC<sub>80</sub> = 16  $\mu$ g/mL, control Amphotericin B, MIC<sub>80</sub> = 8  $\mu$ g/mL; *Aspergillus flavus* IHEM37.19, MIC<sub>80</sub> = 16  $\mu$ g/mL, Amphotericin B, MIC<sub>80</sub> = 8  $\mu$ g/mL; *Aspergillus niger* IHEM2951, MIC<sub>80</sub> = 31  $\mu$ g/mL, Amphotericin B, MIC<sub>80</sub> = 16  $\mu$ g/mL; *Aspergillus terreus* 5029.2000, MIC<sub>80</sub> = 62  $\mu$ g/mL; Amphotericin B, MIC<sub>80</sub> = 16  $\mu$ g/mL; *Candida albicans* ATCC663.90, MIC<sub>80</sub> = 62  $\mu$ g/mL; Amphotericin B, MIC<sub>80</sub> = 1  $\mu$ g/mL)<sup>[4995]</sup>. Source: FEI ZHOU HUANG GUO *Mammea Africana*, HAI TANG GUO *Calophyllum inophyllum* (root cortex and nut), MEI ZHOU MAN MI PING GUO *Mammea americana*, SU GE LAN HU TONG *Calophyllum caledonicum* (stem cortex), TAI WAN LV DAO TENG HUANG *Garcinia linii*, TIE LI MU *Mesua ferrea*., *Mesua thwaitesii*, *Calophyllum* spp., *Garcinia* spp. Ref: 1521, 3866, 4094, 4995.

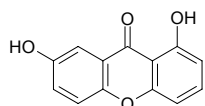
**6182 1,6-Dihydroxyxanthone**

C<sub>13</sub>H<sub>8</sub>O<sub>4</sub> (228.21). Source: CHAN YI TENG *Securidaca inappendiculata* (stem). Ref: 5238.

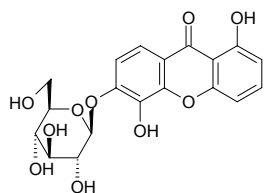


**6183 1,7-Dihydroxyxanthone**

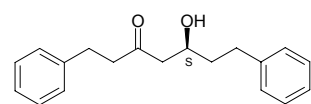
Euxanthone [529-61-3]  $C_{13}H_8O_4$  (238.21). **Pharm:** Cytotoxic ( $P_{388}$   $ED_{50}$  = 1.21  $\mu\text{g/mL}$ , control Mithramycin  $ED_{50}$  = 0.06  $\mu\text{g/mL}$ , HT29  $ED_{50}$  = 3.94  $\mu\text{g/mL}$ , Mithramycin  $ED_{50}$  = 0.08  $\mu\text{g/mL}$ )<sup>[4094]</sup>; cytotoxic inactive (hmn small cell lung cancer NCI-H187 cell line, control Ellipticine,  $IC_{50}$  = (0.35 $\pm$ 0.15)  $\mu\text{g/mL}$ )<sup>[5061]</sup>; anti-inflammatory. **Source:** CHAN YI TENG *Securidaca inappendiculata* (stem), DA HUA GE NA XIANG *Goniothalamus griffithii*, MEI ZHOU MAN MI PING GUO *Mammea Americana*, QIAO MU ZHUANG HUANG NIU MU *Cratogeomys arborescens* (stem cortex), TAI WAN LV DAO TENG HUANG *Garcinia linii*. **Ref:** 658, 4094, 5061, 5238, 5453.

**6184 1,5-Dihydroxyxanthone-6-O- $\beta$ -D-glucoside**

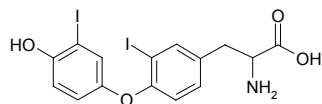
$C_{19}H_{18}O_{10}$  (406.35). Yellow amorphous powder, mp 265~266°C. **Source:** DI ER CAO *Hypericum japonicum*, HENG LI DI ER CAO *Hypericum henryi*. **Ref:** 775.

**6185 Dihydroxyashabushiketol**

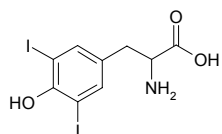
1,7-Diphenyl-5-hydroxy-3-heptanone  $C_{19}H_{22}O_2$  (282.39). Yellow oil,  $[\alpha]_D^{20}$  = -3° ( $c$  = 0.7, MeOH). **Pharm:** 5 $\alpha$ -Reductase inhibitor (rat prostate 5 $\alpha$ -Reductase,  $IC_{50}$  = (230 $\pm$ 70)  $\mu\text{mol/L}$ , control Curcumin,  $IC_{50}$  > 1000  $\mu\text{mol/L}$ , Finasteride,  $IC_{50}$  = 0.01  $\mu\text{mol/L}$ ). **Source:** GAO LIANG JIANG *Alpinia officinarum*. **Ref:** 5345.

**6186 3,3'-Diiodothyronine**

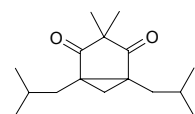
$C_{15}H_{13}I_2NO_4$  (525.08). **Source:** NIU YE *Bos taurus domesticus*; *Bubalus bubalis*. **Ref:** 6.

**6187 Diiodotyrosine**

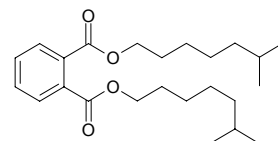
[66-02-4]  $C_9H_9I_2NO_3$  (432.99). mp (+) 202°C (dec), (-) 213°C (dec), ( $\pm$ ) 202°C (dec). **Source:** NIU YE *Bos taurus domesticus*; *Bubalus bubalis*. **Ref:** 6.

**6188 1,5-Di-isobutyl-3,3-dimethyl[3,1,0]cyclohexadione**

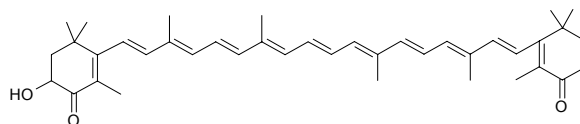
$C_{16}H_{26}O_2$  (250.38). **Source:** DANG SHEN *Codonopsis pilosula*. **Ref:** 2.

**6189 Diisocapryl phthalate**

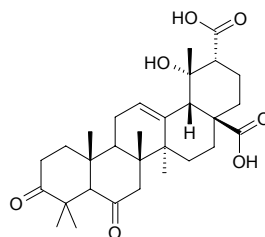
[27554-26-3]  $C_{24}H_{38}O_4$  (390.57). **Source:** SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. **Ref:** 2.

**6190 4,4'-Diketo-3-hydroxy- $\beta$ -carotene**

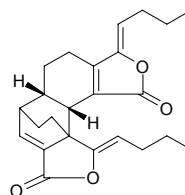
$C_{40}H_{52}O_3$  (580.86). **Source:** JIN YU *Carassius auratus*. **Ref:** 6.

**6191 Diketouncaric acid**

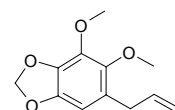
$C_{30}H_{42}O_7$  (514.67). **Source:** CHANG HUA GOU TENG *Uncaria longiflora*, TUO YUAN GOU TENG *Uncaria elliptica*, *Uncaria thwaitesii*. **Ref:** 5341.

**6192 (Z,Z')-Diligustilide**

$C_{24}H_{28}O_4$  (380.49). **Source:** CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*]. **Ref:** 2.

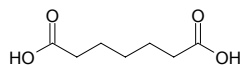
**6193 Dillapiol**

Dillapiole [484-31-1]  $C_{12}H_{14}O_4$  (222.24). Oil, mp 29.5°C, bp 285°C, bp 162°C/11mmHg, bp 100°C/0.8mmHg. **Pharm:** Antihepatotoxin; inhibits mutation (100  $\mu\text{mol/L}$ , Ames InRt = 43.4%); molluscicide (10mg/L); synergist of pyrethrin; sedative; hypnotic (prolongs sleeping time induced by hexobarbital,  $ED_{50}$  = 1.57mg/kg). **Source:** DA YE XIANG RU *Mosla dianthera*, GOU ZHUANG HU JIAO *Piper aduncum*, HUI XIANG GEN *Foeniculum vulgare*, JIAN ZI SU *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*], SHI LUO ZI *Anethum graveolens*, SU GE LAN DANG GUI *Ligusticum scoticum*, TAI WAN JI NING *Orthodon formosanus*, XIN HE LAN HU JIAO *Piper nove-hollandae*, YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*], *Erigeron* sp. **Ref:** 6, 658, 900.

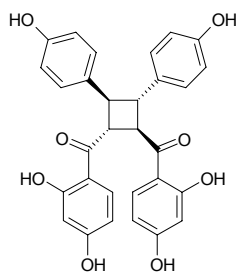


**6194 Dimelic acid**

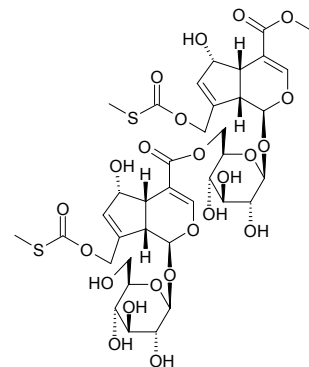
Heptanedioic acid [111-16-0] C<sub>7</sub>H<sub>12</sub>O<sub>4</sub> (160.17). Prisms (H<sub>2</sub>O), mp 104~105°C, bp 212°C/10mmHg, pK<sub>a1</sub> = 4.46, pK<sub>a2</sub> = 5.58 (25°C). Source: BI MA ZI *Ricinus communis*, *Anthyllis sericea*. Ref: 658, 1521.

**6195 Dimeric 4,2',4'-trihydroxydihydrochalcone**

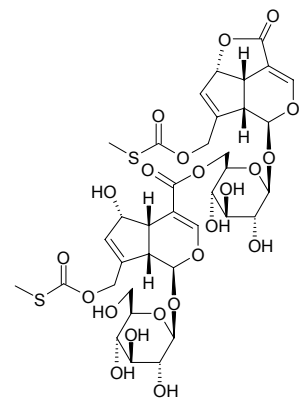
*rel*-(1 $\beta$ ,2 $\alpha$ )-Di-(2,4-dihydroxybenzoyl)-*rel*-(3 $\beta$ ,4 $\alpha$ )-di-(4-hydroxyphenyl)-cyclobutane C<sub>30</sub>H<sub>24</sub>O<sub>8</sub> (512.52). Yellow oil. Source: FEI ZHOU BAI ZI LIAN *Agapanthus africanus* (root). Ref: 5279.

**6196 Dimer iridoid glucoside 10**

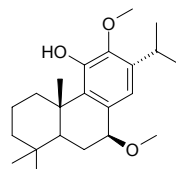
C<sub>37</sub>H<sub>48</sub>O<sub>23</sub>S<sub>2</sub> (924.91). Yellow powder, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -5.7° (c = 1.00, MeOH). Source: JI SHI TENG *Paederia scandens*. Ref: 1963.

**6197 Dimer iridoid glucoside 12**

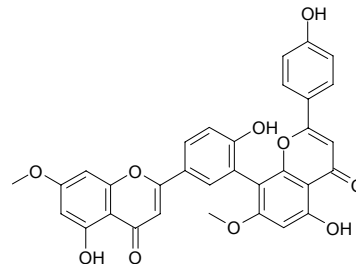
C<sub>36</sub>H<sub>44</sub>O<sub>22</sub>S<sub>2</sub> (892.87). Yellow powder, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -108.9° (c = 0.54, MeOH). Source: JI SHI TENG *Paederia scandens*. Ref: 1963.

**6198 7 $\beta$ ,12-Dimethoxy-8,11,13-abietatrien-11-ol**

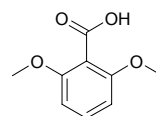
C<sub>22</sub>H<sub>34</sub>O<sub>3</sub> (346.51). Source: DU SONG SHI *Juniperus rigida*. Ref: 6.

**6199 7,7''-Dimethoxyamentoflavone**

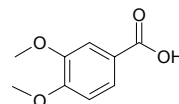
C<sub>32</sub>H<sub>22</sub>O<sub>10</sub> (566.53). Source: YUN NAN SUI HUA SHAN *Amentotaxus yunnanensis* (leaf and twig: yield = 0.020%dw). Ref: 4707.

**6200 2,6-Dimethoxy benzoic acid**

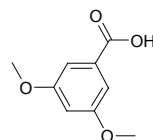
C<sub>9</sub>H<sub>10</sub>O<sub>4</sub> (182.18). Pharm: Antioxidant (hydroxyl radical scavenger, IC<sub>50</sub> = 1.51 μmol/L, control EGCG, IC<sub>50</sub> = 0.43 μmol/L, superoxide anion radical scavenger, IC<sub>50</sub> = 3.21 μmol/L, control EGCG, IC<sub>50</sub> = 0.53 μmol/L). Source: XIAN MAO *Curculigo orchoides* (rhizome). Ref: 4499.

**6201 3,4-Dimethoxybenzoic acid**

Veratric acid C<sub>9</sub>H<sub>10</sub>O<sub>4</sub> (182.18). Pharm: NO production inhibitor inactive (LPS-activated macrophage-like J774.1 cells, IC<sub>50</sub> = 129 μg/mL, control L-NMMA, IC<sub>50</sub> = 27.4 μg/mL)<sup>[4473]</sup>. Source: CHANG BAN JIN LIAN HUA *Trollius macropetalus*, CHOU LENG SHAN *Abies nephrolepis*, HE SE ZHONG HUA SHU *Tabebuia avellaneda* (inner bark), HONG CHE ZHOU CAO *Trifolium pratense*, JIN LIAN HUA *Trollius chinensis* [Syn. *Trollius asiaticus* var. *chinensis*], SANG HUANG *Phellinus igniarius*, TAI WAN GE NA XIANG *Goniothalamus amuyon* (fresh leaf: yield = 0.00012%fw)<sup>[4686]</sup>. Ref: 660, 4473, 4686.

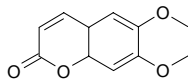
**6202 3,5-Dimethoxybenzoic acid**

C<sub>9</sub>H<sub>10</sub>O<sub>4</sub> (182.18). Source: DIAN NAN HONG HOU KE *Calophyllum polyanthum* (seed: yield = 0.0017%dw). Ref: 4767.

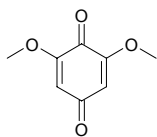


**6203 6,7-Dimethoxy-2H-1-benzopyran-2-one**

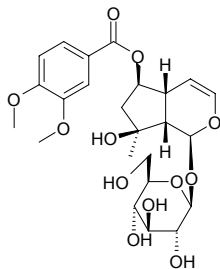
[120-08-1] C<sub>11</sub>H<sub>12</sub>O<sub>4</sub> (208.22). **Pharm:**  $\alpha$ -Glucosidase inhibitor (type VI, IC<sub>50</sub> = 0.44mmol/L, control 1-Deoxynojirimycin, IC<sub>50</sub> = 0.3mmol/L); thrombin inhibitor inactive;  $\beta$ -glucuronidase inhibitor inactive<sup>[4155]</sup>. **Source:** YUN NAN TU SI ZI *Cuscuta reflexa*. **Ref:** 4155.

**6204 2,6-Dimethoxybenzoquinone**

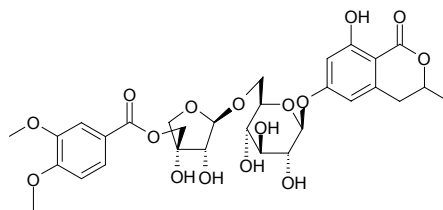
2,6-Dimethoxy-*p*-benzoquinone [530-55-2] C<sub>8</sub>H<sub>8</sub>O<sub>4</sub> (168.15). Yellow needles, mp 260°C, easy to sublimation when heated. **Pharm:** Cytotoxic (P<sub>388</sub> *in vitro*); Cytotoxic (K562 cells, IC<sub>50</sub> = 25.50 $\mu$ g/mL)<sup>[4600]</sup>; cytotoxic (P<sub>388</sub>, ED<sub>50</sub> = 0.12 $\mu$ g/mL, control Mithramycin, ED<sub>50</sub> = 0.08 $\mu$ g/mL; HT29, ED<sub>50</sub> = 3.97 $\mu$ g/mL, Mithramycin, ED<sub>50</sub> = 0.07 $\mu$ g/mL; A549, ED<sub>50</sub> = 10.57 $\mu$ g/mL, Mithramycin, ED<sub>50</sub> = 0.06 $\mu$ g/mL)<sup>[4947]</sup>; platelet aggregation inhibitor (washed rabbit platelets, 50 $\mu$ g/mL, 100 $\mu$ mol/L AA-induced, AggRt = 100%, control 50 $\mu$ mol/L Aspirin, AggRt = 100%; 10 $\mu$ g/mL collagen-induced, AggRt = 100%, 100 $\mu$ mol/L Aspirin, AggRt = 4.9%; 0.1U/mL thrombin-induced, AggRt = 100%, 100 $\mu$ mol/L Aspirin, AggRt = 1.7%; 2ng/mL PAF-induced, AggRt = 100%, 100 $\mu$ mol/L Aspirin, AggRt = 2.1%)<sup>[5427]</sup>. **Source:** CHUN FU SHOU CAO *Adonis vernalis*, CUI TU LUO FU MU *Rauvolfia vomitoria*, CHU BAI PI *Ailanthus altissima*, CI WU JIA *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*], JIAN YE CEN *Fraxinus szaboana* [Syn. *Fraxinus chinensis* var. *acuminata*], MI MAI E ZHANG CHAI *Schefflera venulosa* (stem cortex), XIAO MAI *Triticum aestivum* [Syn. *Triticum vulgare*], PI ZHEN XING YAO HUA *Wikstroemia lanceolata* (stem and root), SAN QI CAO *Gynura segetum* [Syn. *Gynura japonica*] (rhizome). **Ref:** 2, 6, 658, 660, 4600, 4947, 5427.

**6205 6-O-(3,4-Dimethoxybenzoyl)-ajugol**

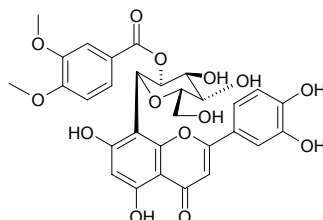
C<sub>24</sub>H<sub>32</sub>O<sub>12</sub> (512.52). **Pharm:** NO production inhibitor (LPS-activated macrophage-like J774.1 cells, IC<sub>50</sub> = 15.1 $\mu$ g/mL, control *L*-NMMA, IC<sub>50</sub> = 27.4 $\mu$ g/mL)<sup>[4473]</sup>. **Source:** HE SE ZHONG HUA SHU *Tabebuia avellaneda* (inner bark). **Ref:** 4473.

**6206  $\beta$ -D-[5-O-(3,4-Dimethoxybenzoyl)]-apiofuranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl**

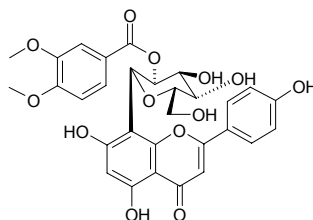
C<sub>30</sub>H<sub>36</sub>O<sub>16</sub> (652.61). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>22</sup> = -94.8° (*c* = 1.59, MeOH). **Source:** BAN ZHEN ZHONG HUA SHU *Tabebuia impetiginosa* (bark). **Ref:** 3817.

**6207 2''-O-(3''',4'''-Dimethoxybenzoyl)orientin**

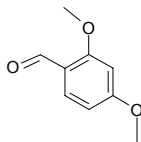
C<sub>30</sub>H<sub>28</sub>O<sub>14</sub> (612.55). Yellow powder, mp 202~204°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -72.2° (*c* = 0.054, CH<sub>3</sub>OH). **Source:** DUAN BAN JIN LIAN HUA *Trollius ledebourii* (flower: yield = 0.00033%dw). **Ref:** 4743.

**6208 2''-O-(3''',4'''-Dimethoxybenzoyl)vitexin**

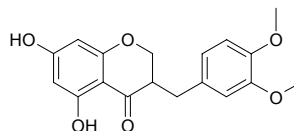
C<sub>30</sub>H<sub>28</sub>O<sub>13</sub> (596.55). Pale yellow powder, mp 277~279°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -182.7° (*c* = 0.064, CH<sub>3</sub>OH). **Source:** DUAN BAN JIN LIAN HUA *Trollius ledebourii* (flower: yield = 0.00073%dw). **Ref:** 4743.

**6209 2,4-Dimethoxybenzaldehyde**

[613-45-6] C<sub>9</sub>H<sub>10</sub>O<sub>3</sub> (166.18). mp 71°C, bp 165°C/10mmHg. **Source:** XIANG GEN QIN *Osmorhiza aristata* var. *laxa*. **Ref:** 6.

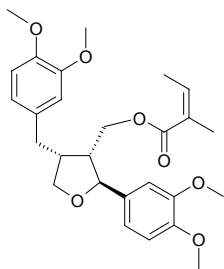
**6210 3-(3,4-Dimethoxybenzyl)-5,7-dihydroxychroman-4-one**

C<sub>18</sub>H<sub>18</sub>O<sub>6</sub> (330.34). White powder, mp 183~185°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -74.7° (*c* = 0.39, MeOH). **Source:** *Scilla nervosa* (bulb). **Ref:** 2381.



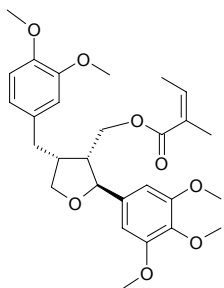
**6211 [(2*S*,3*R*,4*R*)-4-(3,4-Dimethoxybenzyl)-2-(3,4-dimethoxyphenyl)-tetrahydrofuran-3-yl]-methyl (2*Z*)-2-methylbut-2-en-oate**

$C_{27}H_{34}O_7$  (470.57). **Pharm:** Anti-Inflammatory (anti-oedema, control oedema =  $(7.8 \pm 0.3)$ mg,  $100 \mu\text{g}/\text{cm}^2$ , oedema =  $(4.0 \pm 0.6)$ mg,  $p < 0.05$ , reduction = 49%, Indomethacin oedema =  $(3.4 \pm 0.3)$ mg,  $p < 0.05$ , reduction = 56%)<sup>[4985]</sup>; leukotriene biosynthesis Inhibitor (*in vitro*,  $IC_{50} = 10.7 \mu\text{mol}/\text{L}$ ,  $p < 0.05$ , control Zileuton,  $IC_{50} = 10.4 \mu\text{mol}/\text{L}$ ,  $p < 0.05$ )<sup>[5037]</sup>. **Source:** GAO SHAN HUO RONG CAO *Leontopodium alpinum* (root). **Ref:** 4985, 5037.



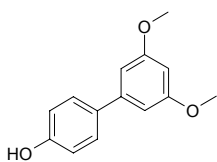
**6212 [(2*S*,3*R*,4*R*)-4-(3,4-Dimethoxybenzyl)-2-(3,4,5-trimethoxyphenyl)-tetrahydrofuran-3-yl]-methyl (2*Z*)-2-methylbut-2-en-oate**

$C_{28}H_{36}O_8$  (500.59). Colorless gum,  $[\alpha]_D^{20} = +20.86^\circ$ , ( $c = 0.302$ , MeOH). **Source:** GAO SHAN HUO RONG CAO *Leontopodium alpinum* (root). **Ref:** 5037.



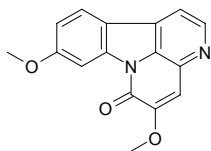
**6213 3',5'-Dimethoxy-biphenyl-4-ol**

$C_{14}H_{14}O_3$  (230.27). White powder. **Pharm:** Cytotoxic (*in vitro* antiproliferative activity, LoVo,  $IC_{50} > 40 \mu\text{mol}/\text{L}$ , control Doxorubicin,  $IC_{50} = (0.04 \pm 0.005) \mu\text{mol}/\text{L}$ ). **Source:** PU TONG YUAN ZHI *Polygala vulgaris*. **Ref:** 4246.



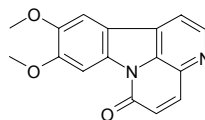
**6214 5,9-Dimethoxycanthin-6-one**

$C_{16}H_{12}N_2O_3$  (280.29). **Source:** *Eurycoma* sp. **Ref:** 4556.



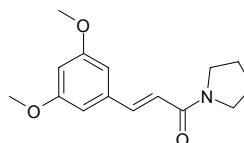
**6215 9,10-Dimethoxycanthin-6-one**

$C_{16}H_{12}N_2O_3$  (280.29). **Source:** CHANG YE KUAN MU *Eurycoma longifolia* (root: yield = 0.000019%dw), *Eurycoma harmandiana* (root). **Ref:** 4728, 5137.



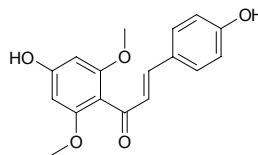
**6216 3',5'-Dimethoxy-cinnamic acid pyrrolidine**

$C_{15}H_{19}NO_3$  (261.32). **Pharm:** Platelet aggregation inhibitor (rbt platelets induced by thrombin,  $100 \mu\text{g}/\text{mL}$ , add thrombin  $0.1 \text{u}/\text{mL}$ , AggRt =  $(92.6 \pm 0.4)\%$ , control AggRt =  $(92.6 \pm 0.4)\%$ ; add AA,  $100 \mu\text{mol}/\text{L}$ ,  $100 \mu\text{g}/\text{mL}$ , AggRt =  $(85.2 \pm 0.9)\%$ , control AggRt =  $(87.8 \pm 0.3)\%$ , Aspirin  $50 \mu\text{g}/\text{mL}$ , AggRt =  $(11.7 \pm 10.1)\%$ ; add collagen  $10 \mu\text{g}/\text{mL}$ ,  $100 \mu\text{g}/\text{mL}$ , AggRt =  $(86.9 \pm 1.2)\%$ , control AggRt =  $(89.3 \pm 0.5)\%$ , Aspirin  $100 \mu\text{g}/\text{mL}$ , AggRt =  $(81.3 \pm 0.5)\%$ ; add PAF  $2 \text{ng}/\text{mL}$ ,  $100 \mu\text{g}/\text{mL}$ , AggRt =  $(91.5 \pm 0.3)\%$ , control AggRt =  $(93.0 \pm 0.6)\%$ ). **Source:** TAI WAN HU JIAO *Piper taiwanense* (stem). **Ref:** 4938.



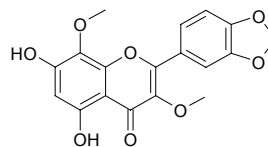
**6217 2',6'-Dimethoxy-4,4'-dihydroxychalcone**

$C_{17}H_{16}O_5$  (300.31). **Pharm:** Cytotoxic (Colon26-L5,  $ED_{50} = 28.7 \mu\text{mol}/\text{L}$ ; HT1080,  $ED_{50} = 50.5 \mu\text{mol}/\text{L}$ )<sup>[3042]</sup>. **Source:** YUN NAN CAO KOU *Alpinia blepharocalyx* (seed: yield = 0.00018%–0.0129%). **Ref:** 3042, 3048.



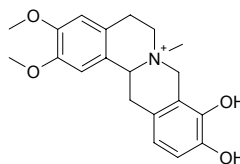
**6218 3,8-Dimethoxy-5,7-dihydroxy-3',4'-methylenedioxyflavone**

$C_{18}H_{14}O_8$  (358.31). Yellow crystals. **Source:** RU NI WENG DAO MI ZHU YU *Melicope coodeana*. **Ref:** 1975.



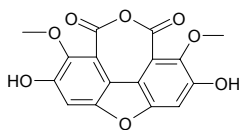
**6219 2,3-Dimethoxy-9,10-dihydroxy-N-methyl-tetrahydroprotoberberine quaternary salt**

Haitinosporine  $C_{20}H_{24}NO_4^+$  (342.42). White crystals, mp  $242\text{--}245^\circ\text{C}$ . **Source:** HAI NAN QING NIU DAN *Tinospora hainanensis*. **Ref:** 408.

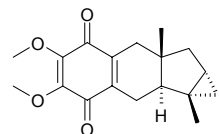


**6220 2,2'-Dimethoxy-3,3'-dihydroxy-5,5'-oxygen-6,6'-biphenylformic anhydride**

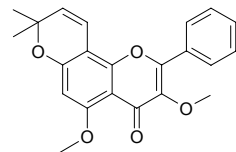
$C_{16}H_{10}O_8$  (330.25). White powder, mp 296.5~298.0°C. Source: DA JI<sup>(3)</sup>  
*Euphorbia pekinensis*. Ref: 360.

**6221 (1aS\*,1bS\*,7aS\*,8aS\*)-4,5-Dimethoxy-1a,7a-dimethyl-1,1a,1b,2,7,7a,8,8a-octahydrocyclopropa[3,4]cyclopenta[1,2-b]naphthalene-3,6-dione**

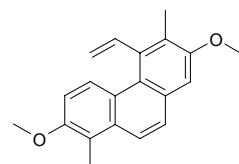
$C_{18}H_{22}O_4$  (302.37). Yellowish oil. Pharm: Cytotoxic (B-16  $IC_{50}$  = 1.30 $\mu$ g/mL, control Doxorubicin  $IC_{50}$  = 0.03 $\mu$ g/mL; MCF7  $IC_{50}$  = 5.04 $\mu$ g/mL, Doxorubicin  $IC_{50}$  = 0.20 $\mu$ g/mL; HCT8  $IC_{50}$  = 2.49 $\mu$ g/mL, Doxorubicin  $IC_{50}$  = 0.04 $\mu$ g/mL; HL-60  $IC_{50}$  = 1.56 $\mu$ g/mL, Doxorubicin  $IC_{50}$  = 0.02 $\mu$ g/mL; CEM  $IC_{50}$  = 1.24 $\mu$ g/mL, Doxorubicin  $IC_{50}$  = 0.02 $\mu$ g/mL). Source: QIU ZHUANG PO BU MU *Cordia globosa* (root). Ref: 5043.

**6222 3,5-Dimethoxy-2'',2''-dimethylpyrano-(5'',6'':8,7)-flavone**

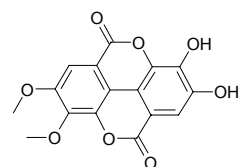
$C_{22}H_{20}O_5$  (364.40). Viscous yellowish oil. Source: *Lonchocarpus latifolius* (root). Ref: 5108.

**6223 2,7-Dimethoxy-1,6-dimethyl-5-vinylphenanthrene**

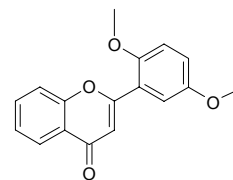
$C_{20}H_{20}O_2$  (292.38). Source: JIAN DENG XIN CAO *Juncus acutus*. Ref: 1965.

**6224 2,3-Dimethoxyellagic acid**

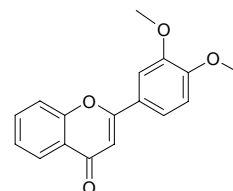
3,4-Di-*O*-methylsuccinic acid  $C_{16}H_{10}O_8$  (330.25). mp > 300°C. Source: BA WANG BIAN *Euphorbia royleana*, WU JIU MU GEN PI *Sapium sebiferum*. Ref: 6.

**6225 2',5'-Dimethoxyflavone**

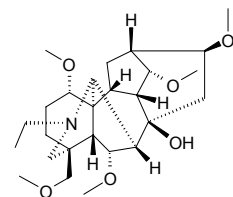
$C_{17}H_{14}O_4$  (282.30). Light yellow solid ( $CHCl_3$ ). Source: HUANG HUA JIU LUN CAO *Primula veris* [Syn. *Primula officinalis*] (leaf). Ref: 5275.

**6226 3',4'-Dimethoxyflavone**

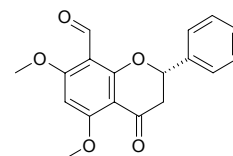
$C_{17}H_{14}O_4$  (282.30). White crystalline solid ( $CHCl_3$ ). Source: HUANG HUA JIU LUN CAO *Primula veris* [Syn. *Primula officinalis*] (leaf). Ref: 5275.

**6227 6,14-Dimethoxyforensicine**

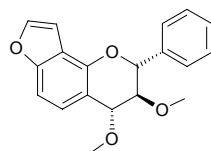
$C_{26}H_{43}NO_6$  (465.64). White powder,  $[\alpha]_D^{18}$  = +27.2° ( $c$  = 0.31, EtOH). Source: BAI HOU WU TOU *Aconitum leucostomum*. Ref: 483.

**6228 (2S)-5,7-Dimethoxy-8-formylflavanone**

Anticancer Flavonoid PMV70P691-016  $C_{18}H_{16}O_5$  (312.33). Yellow oil,  $[\alpha]_D$  = -28.0° ( $c$  = 0.10, MeOH). Pharm: Cytotoxic (*in vitro*, Hepa 1c1c7 mouse hepatoma cells,  $IC_{50}$  > 10 $\mu$ g/mL, CD = 2.6 $\mu$ g/mL, CI > 3.9; control Sulforaphane,  $IC_{50}$  = 2.1 $\mu$ g/mL, CD = 0.087 $\mu$ g/mL, CI = 24.1)<sup>[4721]</sup>; cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells)<sup>[5038]</sup>. Source: SHUI LIU DOU *Pongamia pinnata* (stem cortex: yield = 0.0001%)<sup>[4721]</sup>. Ref: 4721, 5038.

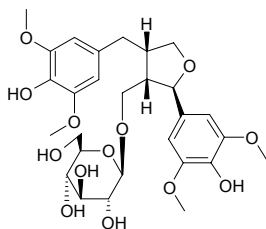
**6229 (2,3-trans-3,4-trans)-3,4-Dimethoxy-(2'',3'':7,8)-furanoflavon**

$C_{19}H_{18}O_4$  (310.35). Needles,  $[\alpha]_D^{20}$  = +21° ( $c$  = 0.4,  $CH_2Cl_2$ ). Source: *Lonchocarpus latifolius* (root). Ref: 5108.

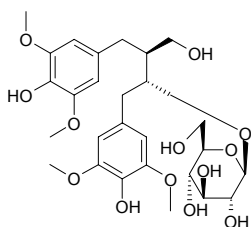


**6230 (+)-5,5'-Dimethoxy-9-O-β-D-glucopyranosyl lariciresinol**

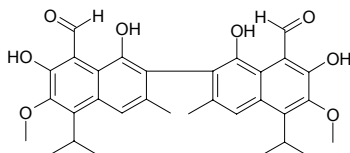
$C_{28}H_{38}O_{13}$  (582.61). **Pharm:** Anti-HSV-1 inactive ( $EC_{50} > 172 \mu\text{mol/L}$ ). **Source:** MA LAN GEN *Baphicacanthus cusia* [Syn. *Strobilanthes cusia*]. **Ref:** 2577.

**6231 (+)-5,5'-Dimethoxy-9-O-β-D-glucopyranosyl secoisolariciresinol**

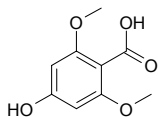
$C_{28}H_{40}O_{13}$  (584.62). **Source:** MA LAN GEN *Baphicacanthus cusia* [Syn. *Strobilanthes cusia*]. **Ref:** 2577.

**6232 6,6'-Dimethoxygossypol**

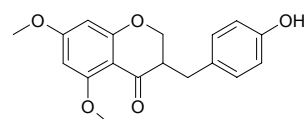
$C_{32}H_{34}O_8$  (546.62). mp 181~184°C. **Source:** MIAN HUA GEN *Gossypium herbaceum*. **Ref:** 6.

**6233 1,5-Dimethoxy-3-hydroxybenzoic acid**

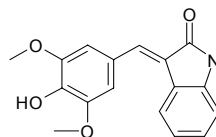
$C_9H_{10}O_5$  (198.18). **Source:** MAO GUO QI *Acer nikoense* (stem cortex). **Ref:** 4304.

**6234 5,7-Dimethoxy-3-(4-hydroxybenzyl)chroman-4-one**

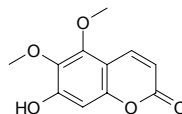
$C_{18}H_{18}O_5$  (314.34). Acetyl-: vitreous off-white solid. **Source:** *Scilla nervosa*. **Ref:** 2328.

**6235 (E)-3-(3',5'-Dimethoxy-4'-hydroxybenzylidene)-2-indolinone**

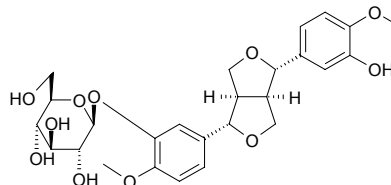
$C_{17}H_{15}NO_4$  (297.31). Yellow column crystals mp 204~206°C. **Source:** BAN LAN GEN *Isatis indigotica*. **Ref:** 2119.

**6236 5,6-Dimethoxy-7-hydroxycoumarin**

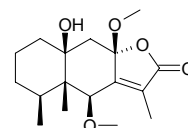
$C_{11}H_{10}O_5$  (222.20). **Source:** HUANG HUA HAO *Artemisia annua*. **Ref:** 2.

**6237 4,4-Dimethoxy-3'-hydroxy-7,9':7',9-diepoxy lignan-3-O-β-D-glucopyranoside**

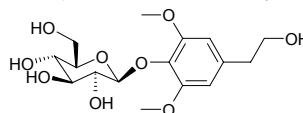
$C_{26}H_{32}O_{11}$  (520.54). White amorphous powder,  $[\alpha]_D^{21} = -54.69^\circ$ . **Source:** DA YE XIAN MAO *Curculigo capitulata* [Syn. *Leucojum capitulata*]. **Ref:** 2493.

**6238 6β,8β-Dimethoxy-10β-hydroxyeremophil-7(11)-en-12,8α-olide**

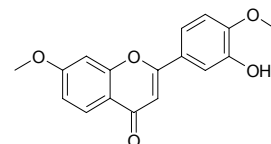
$C_{17}H_{26}O_5$  (310.39). Colorless plates, mp 164~166°C (Me<sub>2</sub>CO),  $[\alpha]_D^{20} = +166.7^\circ$  ( $c = 0.27$ , Me<sub>2</sub>CO). **Pharm:** Antibacterial (*Staphylococcus aureus*, antibacterial circle = 13~16mm; *Bacillus subtilis*, antibacterial circle = 13~16mm; *Escherichia coli*, antibacterial circle < 12mm). **Source:** JIAN YE TOU WU GEN *Ligularia sagitta*. **Ref:** 5382.

**6239 2,6-Dimethoxy-4-(2-hydroxyethyl)phenol 1-O-β-D-glucopyranoside**

$C_{16}H_{24}O_9$  (360.36). Off-white amorphous powder,  $[\alpha]_D^{20} = +19.3^\circ$  ( $c = 0.7$ , MeOH). **Source:** AN MO LE *Phyllanthus emblica* (root). **Ref:** 3065.

**6240 7,4'-Dimethoxy-3'-hydroxyflavone**

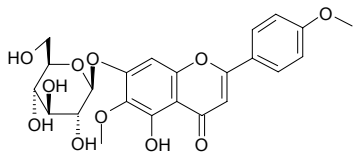
$C_{17}H_{14}O_5$  (298.30). Yellow amorphous powder, mp 128~130°C (MeOH); colorless needles (MeOH), mp 190~192°C. **Source:** WU CI ZHU YING HUA *Calliandra inermis*, XIANG HE HUAN *Albizzia odoratissima* (root cortex). **Ref:** 2588, 4229.



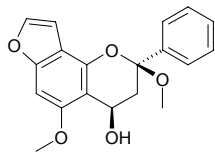


**6241 6,4'-dimethoxy-5-hydroxyflavone 7-glucoside**

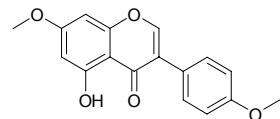
C<sub>23</sub>H<sub>24</sub>O<sub>11</sub> (476.44). Yellow amorphous powder. Source: AI JI ZHONG ZHI YUAN WEI *Iris cartholiniae*. Ref: 1880.

**6242 2,5-Dimethoxy-4-hydroxy-[2'',3'':7,8]-furanoflavan**

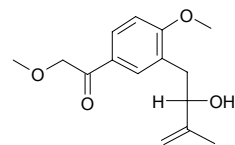
C<sub>19</sub>H<sub>18</sub>O<sub>5</sub> (326.35). Colorless crystals, mp 135~136°, [ $\alpha$ ]<sub>D</sub><sup>28</sup> = +42.1° (*c* = 0.3, MeOH). Source: HONG E JI XUE TENG *Millettia erythrocalyx*. Ref: 1937.

**6243 7,4'-Dimethoxy-5-hydroxyisoflavone**

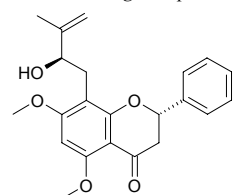
C<sub>17</sub>H<sub>14</sub>O<sub>5</sub> (298.30). Pale yellow crystals (CHCl<sub>3</sub>: petrol = 1:2, v/v), mp 145~146°C. Source: MENG MAI ROU DOU KOU *Myristica malabarica* (heartwood). Ref: 3906.

**6244 2,4'-Dimethoxy-3'-(2-hydroxy-3-methyl-3-butenyl)acetophenone**

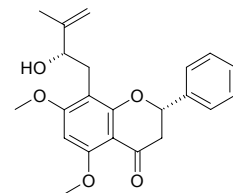
C<sub>15</sub>H<sub>20</sub>O<sub>4</sub> (264.32). Yellow oil, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -25.0° (*c* = 0.04, MeOH). Pharm: Prolyl endopeptidase inhibitor (flavobacterium origin, IC<sub>50</sub> = (845±0.005)μmol/L, control Z-pro-prolinal, IC<sub>50</sub> = (0.884±0.025)μmol/L); thrombin inhibitor inactive (bovine source, control Leupeptin, IC<sub>50</sub> = (45.4±0.03)μmol/L). Source: JIA LIAN QIAO *Duranta repens* (whole herb). Ref: 4179.

**6245 (2S)-5,7-Dimethoxy-8-(2R-hydroxy-3-methyl-3-butenyl)-flavanone**

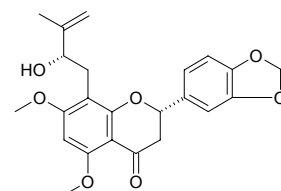
C<sub>22</sub>H<sub>24</sub>O<sub>5</sub> (368.43). Yellow oil, [ $\alpha$ ]<sub>D</sub> = -33.0° (*c* = 0.1, MeOH). Source: SHUI LIU DOU *Pongamia pinnata* (stem cortex: yield = 0.00062%). Ref: 4721.

**6246 (2S)-5,7-Dimethoxy-8-(2S-hydroxy-3-methyl-3-butenyl)-flavanone**

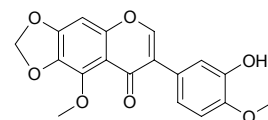
Anticancer Flavonoid PMV70P691-017 C<sub>22</sub>H<sub>24</sub>O<sub>5</sub> (368.43). Yellow oil, [ $\alpha$ ]<sub>D</sub> = -22.0° (*c* = 0.1, MeOH). Pharm: Cytotoxic (*in vitro*, Hepa 1c1c7 mouse hepatoma cells, IC<sub>50</sub> = 19.3μg/mL, CD = 4.4μg/mL, CI = 4.4; control Sulforaphane, IC<sub>50</sub> = 2.1μg/mL, CD = 0.087μg/mL, CI = 24.1)<sup>[4721]</sup>; cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells)<sup>[5038]</sup>. Source: SHUI LIU DOU *Pongamia pinnata* (stem cortex: yield = 0.00036%). Ref: 4721, 5038.

**6247 (2S)-5,7-Dimethoxy-8-(2S-hydroxy-3-methyl-3-butenyl)-3',4'-methylenedioxyflavanone**

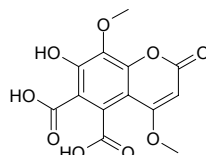
C<sub>23</sub>H<sub>24</sub>O<sub>7</sub> (412.44). Yellow oil, [ $\alpha$ ]<sub>D</sub> = -36.0° (*c* = 0.1, MeOH). Source: SHUI LIU DOU *Pongamia pinnata* (stem cortex: yield = 0.00018%). Ref: 4721.

**6248 4',5-Dimethoxy-3-hydroxy-6,7-methylenedioxyisoflavone**

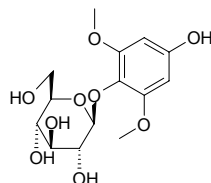
C<sub>18</sub>H<sub>14</sub>O<sub>7</sub> (342.31). Source: JUAN QIAO YUAN WEI *Iris potaninii* (underground part). Ref: 4235.

**6249 4,8-Dimethoxy-7-hydroxy-2-oxo-2H-1-benzopyran-5,6-dicarboxylic acid**

C<sub>13</sub>H<sub>10</sub>O<sub>9</sub> (310.22). Source: XIAO DI YU *Sanguisorba minor*. Ref: 3385.

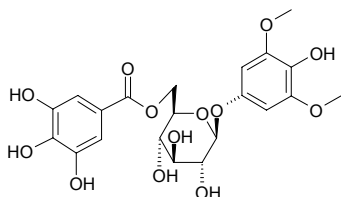
**6250 2,6-Dimethoxy-4-hydroxyphenol-1-O-β-D-glucopyranoside**

C<sub>14</sub>H<sub>20</sub>O<sub>9</sub> (332.31). White powder. Source: XIAO YE SHI NAN *Photinia parvifolia* (stem). Ref: 4553.

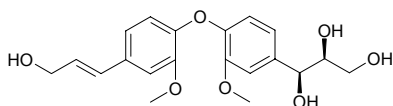


**6251 3,5-Dimethoxy-4-hydroxyphenol 1-O-β-D-(6'-O-galloyl)glucopyranoside**

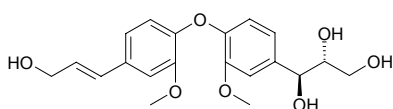
$C_{21}H_{24}O_{13}$  (484.42). Source: YANG MEI SHU PI *Myrica rubra* (bark; yield = 0.012%). Ref: 4163.

**6252 erythro-2,2'-Dimethoxy-4-(3-hydroxy-1-propenyl)-4'-(1,2,3-trihydroxypropyl) diphenyl ether**

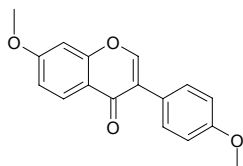
$C_{20}H_{24}O_7$  (376.41). Source: *Eurycoma* sp. Ref: 4556.

**6253 threo-2,2'-Dimethoxy-4-(3-hydroxy-1-propenyl)-4'-(1,2,3-trihydroxypropyl) diphenyl ether**

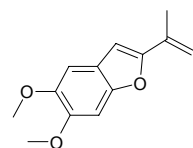
$C_{20}H_{24}O_7$  (376.41). Source: *Eurycoma* sp. Ref: 4556.

**6254 7,4'-Dimethoxyisoflavone**

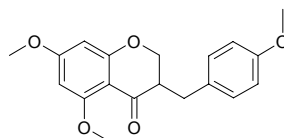
Dimethoxydaidzein [1157-39-7]  $C_{17}H_{14}O_4$  (282.30). Acicular crystals (ethanol), mp 154–156°C. Pharm: Cytotoxic (Raji cells); cAMP phosphodiesterase inhibitor (rat heart,  $IC_{50} = 2.3\mu\text{mol/L}$ ). Source: CI GUO GAN CAO *Glycyrrhiza pallidiflora*. Ref: 900.

**6255 5,6-Dimethoxy-2-isopropenylbenzofuran**

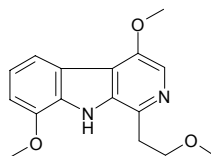
$C_{13}H_{14}O_3$  (218.25). Source: ZHAI TOU TUO WU *Ligularia stenocephala* (root). Ref: 4536.

**6256 5,7-Dimethoxy-3-(4-methoxybenzyl)chroman-4-one**

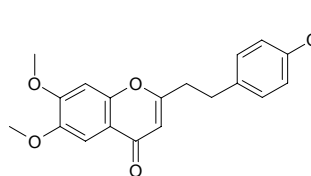
3-(4-Methoxybenzyl)-5,7-dimethoxychroman-4-one  $C_{19}H_{20}O_5$  (328.37). Colorless gum,  $[\alpha]_D^{25} = 70.6^\circ$  ( $c = 0.38$ , MeOH); mp 115–117°C,  $[\alpha]_D = -50^\circ$  ( $c = 0.3$  l, MeOH). Source: *Scilla nervosa* (bulb). Ref: 2328, 2381.

**6257 4,8-Dimethoxy-1-(2-methoxyethyl)-β-carboline**

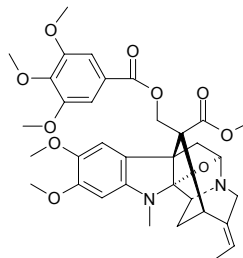
$C_{16}H_{18}N_2O_3$  (286.33). Source: KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. Ref: 12.

**6258 6,7-Dimethoxy-2-[2-(4'-methoxyphenyl)ethyl]chromone**

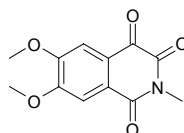
$C_{20}H_{20}O_5$  (340.38). Colorless acicular crystals, mp 88–90°C. Source: BAI MU XIANG *Aquilaria sinensis*. Ref: 13, 660.

**6259 10,11-Dimethoxy-1-methyldeacetylpicraline-3',4',5'-trimethoxybenzoate**

$C_{34}H_{40}N_2O_{10}$  (636.71). Source: DA YE TANG JIAO SHU *Alstonia macrophylla* (leaf; yield = 0.0017%). Ref: 3020.

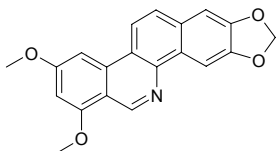
**6260 6,7-Dimethoxy-N-methyl-3,4-dioxo-1(2H)-isoquinolinone**

$C_{12}H_{11}NO_5$  (249.23). Yellow powder, mp 185–189°C. Source: BIAN FU GE GEN *Menispermum dauricum*. Ref: 3792.

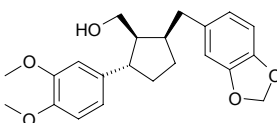


**6261 7,9-Dimethoxy-2,3-methylenedioxybenzophenanthridine**

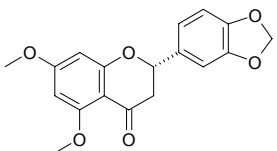
$C_{20}H_{15}NO_4$  (333.35). **Pharm:** Platelet aggregation inhibitor; DNA isomerase inhibitor; antibacterial; cytotoxic. **Source:** *Zanthoxylum* sp. **Ref:** 2176.

**6262 3,4-Dimethoxy-3',4'-methylenedioxy-7,9'-epoxyignan-9-ol**

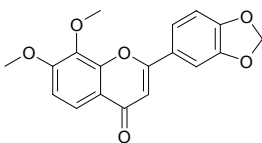
$C_{22}H_{26}O_5$  (370.45). **Pharm:** Antineoplastic; cathartic; sthenic; pesticide; ichthyotoxin; muscle relaxant. **Source:** *Zanthoxylum* sp. **Ref:** 2176.

**6263 (2S)-5,7-Dimethoxy-3',4'-methylenedioxyflavanone**

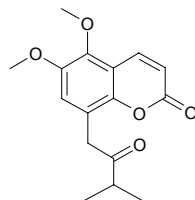
$C_{18}H_{16}O_6$  (328.32). Colorless needles ( $CHCl_3$ ), mp 192~194°C,  $[\alpha]_D^{25} = -18.5^\circ$  ( $c = 0.1$ , MeOH). **Pharm:** Antibacterial (gram-positive bacteria: *Staphylococcus aureus*, 30µg/mL DIZ = 7mm, *Bacillus subtilis*, 30µg/mL DIZ = 7mm, *Bacillus sphaericus*, 30µg/mL DIZ = 6mm, control Penicillin G, 30µg/mL DIZ = 12, 15, 14mm, respectively; gram-negative bacteria: *Pseudomonas aeruginosa*, 30µg/mL DIZ = 7mm, *Klebsiella aerogenes*, 30µg/mL DIZ = 7mm, *Chromobacterium violaceum*, 30µg/mL DIZ = 8mm, control Penicillin G, 30µg/mL DIZ = 24, 23, 24mm, respectively)<sup>[3407]</sup>; antifungal (*Aspergillus niger*, 100µg/mL DIZ = 8mm, *Candida albicans*, 100µg/mL DIZ = 7mm, *Rhizopus oryzae*, 150µg/mL inactive, control Clotrimazole, 100µg/mL DIZ = 22, 25, 24mm, respectively)<sup>[3407]</sup>. **Source:** CAI BAN YANG TI JIA *Bauhinia variegata* (root cortex), JI MEI YUN SHI *Caesalpinia pulcherrima*. **Ref:** 3407, 3468.

**6264 7,8-Dimethoxy-3',4'-methylenedioxyflavone**

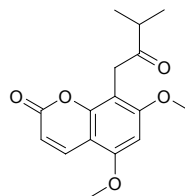
$C_{18}H_{14}O_6$  (326.31). Yellow amorphous powder, mp 252~254°C (MeOH). **Source:** XIANG HE HUAN *Albizia odoratissima* (root cortex). **Ref:** 4229.

**6265 5,6-Dimethoxy-8-(3'-methyl-2'-oxobutyl) coumarin**

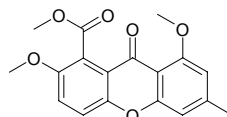
$C_{16}H_{18}O_5$  (290.32). **Source:** JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*]. **Ref:** 11.

**6266 5,7-Dimethoxy-8-(3'-methyl-2'-oxobutyl)coumarin**

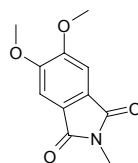
$C_{16}H_{18}O_5$  (290.32). **Pharm:** Platelet aggregation inhibitor (washed rabbit platelets, induced by thrombin, AA, collagen and PAF, 100µg/mL: thrombin = 0.1U/mL, AggRt = (77.7±1.1)%, control, AggRt = (80.0±1.1)%; AA = 100µmol/L, AggRt = (0±0)%,  $p < 0.001$ , control, AggRt = (77.0±1.5)%; collagen = 10µg/mL, AggRt = (0±0)%,  $p < 0.001$ , control, AggRt = (78.3±1.3)%; PAF = 1ng/mL, AggRt = (60.7±7.8)%,  $p < 0.01$ , control, AggRt = (82.5±1.5)%<sup>[5417]</sup>). **Source:** JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*], QI GUO JIU LI XIANG *Murraya omphalocarpa* (leaf). **Ref:** 11, 5417.

**6267 2,8-Dimethoxy-6-methyl-9-oxo-9H-xanthene-1-carboxylic acid methyl ester**

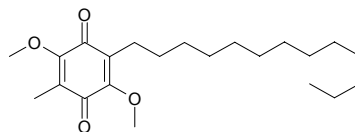
$C_{18}H_{16}O_6$  (328.32). Stable yellow needles ( $CHCl_3$ ), mp 219~221°C. **Pharm:** Cytotoxic inactive (brine shrimp *Artemia salina* lethality assay, 20µg/mL or 200µg/mL). **Source:** *Xylaria* sp. **Ref:** 3845.

**6268 5,6-Dimethoxy-N-methylphthalimide**

$C_{11}H_{11}NO_4$  (221.21). **Source:** BIAN FU GE GEN *Menispermum dauricum*, SHUI LIAN YE TONG *Hernandia nymphaeifolia* (trunk bark). **Ref:** 1521, 3792.

**6269 2,5-Dimethoxy-6-methyl-3-tridecyl-1,4-benzoquinone**

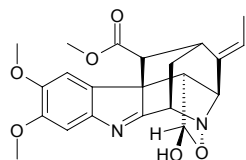
$C_{22}H_{36}O_4$  (364.53). Pale yellow solid, mp 54~55°C. **Source:** PI ZHEN DU JING SHAN *Maesa lanceolata*. **Ref:** 1860.



**6270 10,11-Dimethoxynareline**

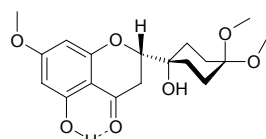
$C_{22}H_{24}N_2O_6$  (412.45). Light yellowish oil,  $[\alpha]_D = -56^\circ$  ( $c = 1.57$ ,  $CHCl_3$ ).

Source: DA YE TANG JIAO SHU *Alstonia macrophylla* (leaf: yield = 0.0112%). Ref: 3020.

**6271 (2S)-4',4'-Dimethoxy-ongokein**

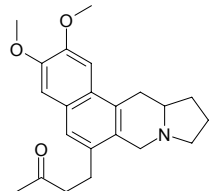
(2S)-5-Hydroxy-2-(1'-hydroxy-4',4'-dimethoxycyclohexyl)-7-methoxychroman-4-one  $C_{18}H_{24}O_7$  (352.39). White amorphous powder, mp 52–55°C,  $[\alpha]_D = +51^\circ$  ( $c = 0.36$ ). Source: EN GE MU *Ongokea gore* (stem cortex and root).

Ref: 5308.

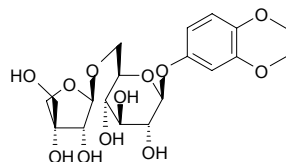
**6272 2,3-Dimethoxy-6-(3-oxo-butyl)-7,9,10,11,11a,12-hexahydrobenzo[f]pyrrolo[1,2-b]isoquinoline**

$C_{22}H_{27}NO_3$  (353.47). Colorless needles, mp 164–166°C,  $[\alpha]_D^{25} = -71.0^\circ$  ( $c = 0.0011$ ,  $CHCl_3$ ). Pharm: Antiviral (tobacco mosaic virus (TMV), 500µg/mL, InRt = 15%). Source: NIU XIN PIAO ZI *Cynanchum komarovii* (aerial parts).

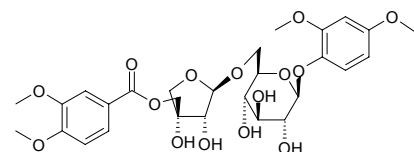
Ref: 5241.

**6273 3,4-Dimethoxyphenol β-D-apiofuranosyl(1→6)-β-D-glucopyranoside**

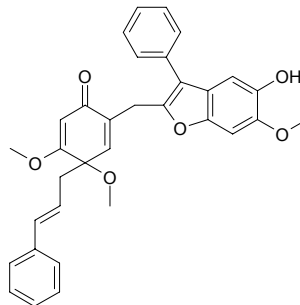
$C_{19}H_{28}O_{12}$  (448.43). White powder,  $[\alpha]_D^{25} = -58.9^\circ$  ( $c = 0.68$ , MeOH). Source: SHAN FAN GEN *Symplocos caudata*. Ref: 2535.

**6274 2,4-Dimethoxyphenol 1-O-β-D-[5-O-(3,4-dimethoxybenzoyl)]apiofuranosyl(1→6)-β-D-glucopyranoside**

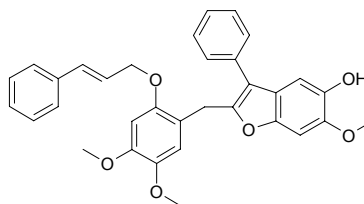
$C_{28}H_{36}O_{15}$  (612.59). Amorphous powder,  $[\alpha]_D^{23} = -74^\circ$  ( $c = 0.43$ , MeOH). Source: BAN ZHEN ZHONG HUA SHU *Tabebuia impetiginosa* (bark). Ref: 3817.

**6275 2-[4,5-Dimethoxy-5-(3-phenyl-trans-allyl)cyclohexa-3,6-dien-2-on-1-ylmethyl]-5-hydroxy-6-methoxy-3-phenylbenzofuran**

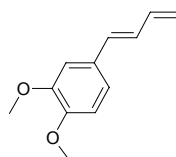
$C_{33}H_{30}O_6$  (522.6). Yellow amorphous solid, mp 78–83°C,  $[\alpha]_D^{25} = +23.6^\circ$  ( $c = 0.44$ ,  $CHCl_3$ ). Pharm: Testosterone 5α-reductase inhibitor (25µg/mL, InRt = 0.6%, 50µg/mL, InRt = 3.8%, 100µg/mL, InRt = 17%; control Glycyrrhetic acid, 25µg/mL, InRt = 31.7%, 50µg/mL, InRt = 64.7%, 100µg/mL, InRt = 87.1%). Source: JIAO ZHI HUANG TAN *Dalbergia cochinchinensis* (stem: yield = 0.0017%dw). Ref: 4716.

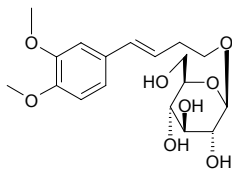
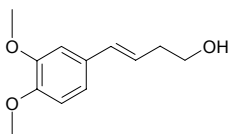
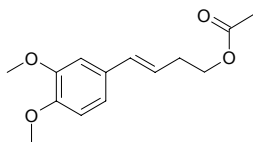
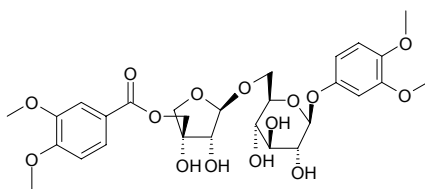
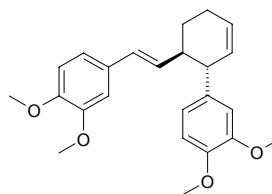
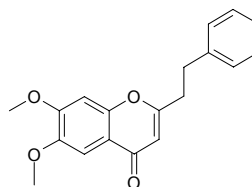
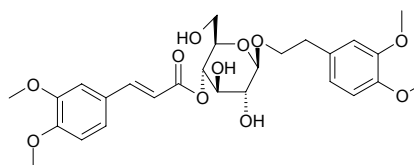
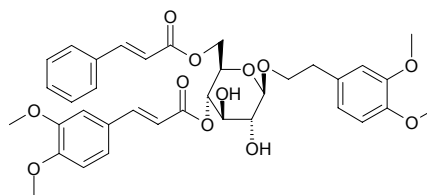
**6276 2-[4,5-Dimethoxy-2-(3-phenyl-trans-allyloxy)benzyl]-5-hydroxy-6-methoxy-3-phenylbenzofuran**

$C_{33}H_{30}O_6$  (522.6). Amorphous solid, mp 63–68°C. Pharm: Testosterone 5α-reductase inhibitor (25µg/mL, InRt = 11.5%, 50µg/mL, InRt = 15.9%, 100µg/mL, InRt = 18.1%; control Glycyrrhetic acid, 25µg/mL, InRt = 31.7%, 50µg/mL, InRt = 64.7%, 100µg/mL, InRt = 87.1%). Source: JIAO ZHI HUANG TAN *Dalbergia cochinchinensis* (stem: yield = 0.0012%dw). Ref: 4716.

**6277 4-(3,4-Dimethoxyphenyl)-but-1,3-diene**

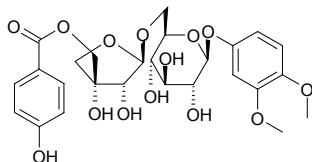
$C_{12}H_{14}O_2$  (190.24). Pharm: Cytotoxic (A549,  $IC_{50} > 50\mu\text{mol/L}$ , control Ellipticine,  $IC_{50} = 0.8\mu\text{mol/L}$ ; Col2,  $IC_{50} > 50\mu\text{mol/L}$ , Ellipticine,  $IC_{50} = 1.6\mu\text{mol/L}$ ; SNU638,  $IC_{50} = 44.7\mu\text{mol/L}$ , Ellipticine,  $IC_{50} = 1.6\mu\text{mol/L}$ ; HT1080,  $IC_{50} = 7.9\mu\text{mol/L}$ , Ellipticine,  $IC_{50} = 1.2\mu\text{mol/L}$ )<sup>[4081]</sup>; COX-2 inhibitor (RAW264.7 cells, LPS-induced PGE<sub>2</sub> production,  $IC_{50} = 20.68\mu\text{mol/L}$ , control Celecoxib,  $IC_{50} = 0.52\text{nmol/L}$ )<sup>[4532]</sup>. Source: YE JIANG *Zingiber cassumunar* (rhizome). Ref: 4081, 4532.



**6278 (E)-4-(3,4-Dimethoxyphenyl)but-3-en-1-O-β-D-glucopyranoside**C<sub>18</sub>H<sub>26</sub>O<sub>8</sub> (370.40). Pale yellow gum,  $[\alpha]_D^{25} = -21.4^\circ$  ( $c = 0.23$ , MeOH).**Pharm:** COX-2 inhibitor inactive (RAW264.7 cells, LPS-induced PGE<sub>2</sub> production, IC<sub>50</sub> > 50 μmol/L, control Celecoxib, IC<sub>50</sub> = 0.52 nmol/L). **Source:** YE JIANG *Zingiber cassumunar* (rhizome). **Ref:** 4532.**6279 (E)-4-(3,4-Dimethoxyphenyl)but-3-en-1-ol**C<sub>12</sub>H<sub>16</sub>O<sub>3</sub> (208.26). **Pharm:** COX-2 inhibitor inactive (RAW264.7 cells, LPS-induced PGE<sub>2</sub> production, IC<sub>50</sub> > 50 μmol/L, control Celecoxib, IC<sub>50</sub> = 0.52 nmol/L). **Source:** YE JIANG *Zingiber cassumunar* (rhizome). **Ref:** 4532.**6280 (E)-4-(3,4-Dimethoxyphenyl)but-3-en-1-ol acetate**C<sub>14</sub>H<sub>18</sub>O<sub>4</sub> (250.30). **Pharm:** COX-2 inhibitor inactive (RAW264.7 cells, LPS-induced PGE<sub>2</sub> production, IC<sub>50</sub> > 50 μmol/L, control Celecoxib, IC<sub>50</sub> = 0.52 nmol/L). **Source:** YE JIANG *Zingiber cassumunar* (rhizome). **Ref:** 4532.**6281 3,4-Dimethoxyphenyl 1-O-β-D-[5-O-(3,4-dimethoxybenzoyl)]-apiofuranosyl-(1→6)-β-D-glucopyranoside**C<sub>28</sub>H<sub>36</sub>O<sub>15</sub> (612.59). Amorphous powder,  $[\alpha]_D^{22} = -72.0^\circ$  ( $c = 1.89$ , MeOH). **Pharm:** NO production inhibitor (LPS-activated macrophage-like J774.1 cells, IC<sub>50</sub> = 75.9 μg/mL, control L-NMMA, IC<sub>50</sub> = 27.4 μg/mL)<sup>[4473]</sup>.**Source:** BAN ZHEN ZHONG HUA SHU *Tabebuia impetiginosa* (bark), HE SE ZHONG HUA SHU *Tabebuia avellanedae* (inner bark). **Ref:** 3817, 4473.**6282 (±)-trans-3-(3,4-Dimethoxyphenyl)-4-[(E)-3,4-dimethoxystyryl]cyclohex-1-ene**C<sub>24</sub>H<sub>28</sub>O<sub>4</sub> (380.49). **Pharm:** Cytotoxic (A549, IC<sub>50</sub> = 12.6 μmol/L, control Ellipticine, IC<sub>50</sub> = 0.8 μmol/L; Col2, IC<sub>50</sub> = 15.5 μmol/L, Ellipticine, IC<sub>50</sub> = 1.6 μmol/L; SNU638, IC<sub>50</sub> = 8.7 μmol/L, Ellipticine, IC<sub>50</sub> = 1.6 μmol/L; HT1080, IC<sub>50</sub> = 16.1 μmol/L, Ellipticine, IC<sub>50</sub> = 1.2 μmol/L)<sup>[4081]</sup>; COX-2 inhibitor (RAW264.7 cells, LPS-induced PGE<sub>2</sub> production, IC<sub>50</sub> = 2.71 μmol/L, control Celecoxib, IC<sub>50</sub> = 0.52 nmol/L)<sup>[4532]</sup>. **Source:** YE JIANG *Zingiber cassumunar* (rhizome). **Ref:** 4081, 4532.**6283 6,7-Dimethoxy-2-(2-phenylethyl) chromone**C<sub>19</sub>H<sub>18</sub>O<sub>4</sub> (310.35). Colorless acicular crystals, mp 118–120°C. **Source:** BAI MU XIANG *Aquilaria sinensis*. **Ref:** 13, 660.**6284 3,4,1-O-3,4-Dimethoxy-phenylethyl-6-O-cinnamoyl-beta-D-glucopyranose**C<sub>27</sub>H<sub>34</sub>O<sub>11</sub> (534.57). **Pharm:** Cytotoxic (EAC, T/C = 240%; P<sub>388</sub>, ED<sub>50</sub> = 16.1 μg/mL). **Source:** FAN SHI LIU ZI *Psidium guajava*. **Ref:** 3826.**6285 1-O-3,4-Dimethoxy-phenylethyl-4-O-3,4-dimethoxy cinnamoyl-6-O-cinnamoyl-beta-D-glucopyranose**C<sub>36</sub>H<sub>40</sub>O<sub>12</sub> (664.71). Amorphous off-white powder. **Pharm:** Cytotoxic (EAC, T/C = 220%; P<sub>388</sub>, ED<sub>50</sub> = 17.3 μg/mL). **Source:** FAN SHI LIU ZI *Psidium guajava*. **Ref:** 3826.

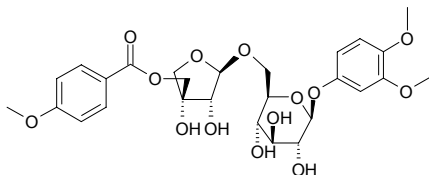
**6286 3,4-Dimethoxyphenyl 1-O-β-D-[5-O-(4-hydroxybenzoyl)]-apiofuranosyl-(1→6)-β-D-glucopyranoside**

C<sub>26</sub>H<sub>32</sub>O<sub>14</sub> (568.54). Amorphous powder, [α]<sub>D</sub><sup>22</sup> = -75° (c = 0.66, MeOH). **Pharm:** NO production inhibitor (LPS-activated macrophage-like J774.1 cells, IC<sub>50</sub> = 44.1 μg/mL, control L-NMMA, IC<sub>50</sub> = 27.4 μg/mL)<sup>[4473]</sup>. **Source:** BAN ZHEN ZHONG HUA SHU *Tabebuia impetiginosa* (bark), HE SE ZHONG HUA SHU *Tabebuia avellanedae* (inner bark). **Ref:** 3817, 4473.



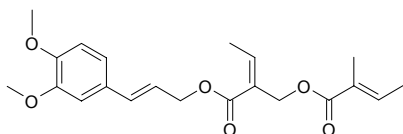
**6287 3,4-Dimethoxyphenyl 1-O-β-D-[5-O-(4-methoxybenzoyl)]-apiofuranosyl-(1→6)-β-D-glucopyranoside**

C<sub>27</sub>H<sub>34</sub>O<sub>14</sub> (582.56). Amorphous powder, [α]<sub>D</sub><sup>22</sup> = -76.0° (c = 1.79, MeOH). **Pharm:** NO production inhibitor (LPS-activated macrophage-like J774.1 cells, IC<sub>50</sub> = 38.2 μg/mL, control L-NMMA, IC<sub>50</sub> = 27.4 μg/mL)<sup>[4473]</sup>. **Source:** BAN ZHEN ZHONG HUA SHU *Tabebuia impetiginosa* (bark), HE SE ZHONG HUA SHU *Tabebuia avellanedae* (inner bark). **Ref:** 3817, 4473.



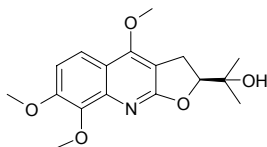
**6288 (E)-3-(3,4-Dimethoxyphenyl)-2-propen-1-yl (Z)-2-[(Z)-2-methyl-2-butenoyloxymethyl] butanoate**

C<sub>21</sub>H<sub>26</sub>O<sub>6</sub> (374.44). **Pharm:** Anti-inflammatory (NF-κB inhibitor, hmn monocytes, prevents LPS-induced cytokines (IL-1, IL-6, TNF, IL-8) release and PGE<sub>2</sub> synthesis: unstimulated control: PGE<sub>2</sub> = 0.54 pg/mL, IL-6 = 0.97 pg/mL, IL-1β = 0 pg/mL, TNF-α = 0.02 pg/mL, IL-8 = 3.45 pg/mL; LPS (10 ng/mL): PGE<sub>2</sub> = 19.24 pg/mL, IL-6 = 71.42 pg/mL, IL-1β = 3.61 pg/mL, TNF-α = 2.66 pg/mL, IL-8 = 235.18 pg/mL; LPS (10 ng/mL + compound 1 μg/mL): PGE<sub>2</sub> = 6.58 pg/mL, IL-6 = 52.23 pg/mL, IL-1β = 1.25 pg/mL, TNF-α = 1.18 pg/mL, IL-8 = 158.3 pg/mL). **Source:** GUAN MU CHAI HU *Bupleurum fruticosum* (aerial parts). **Ref:** 5033.



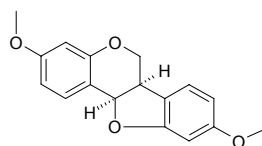
**6289 (S)-(-)-7,8-Dimethoxyplatydesmine**

C<sub>17</sub>H<sub>21</sub>NO<sub>5</sub> (319.36). **Pharm:** Cytotoxic (P<sub>388</sub> cell line, ED<sub>50</sub> = 7.5 μg/mL, control Mithramycin, ED<sub>50</sub> = 0.06 μg/mL; HT29, ED<sub>50</sub> = 28.3 μg/mL, Mithramycin, ED<sub>50</sub> = 0.07 μg/mL; A549, ED<sub>50</sub> = 1.9 μg/mL, Mithramycin, ED<sub>50</sub> = 0.08 μg/mL). **Source:** SI ROU TUO GUO YE MI ZHU YU *Melicope semecarpifolia*. **Ref:** 5405.



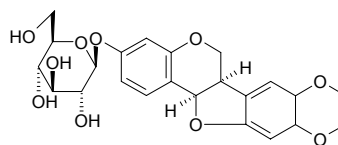
**6290 3,9-Dimethoxypterocarpan**

Homopterocarpan; Baphinitone [606-91-7] C<sub>17</sub>H<sub>16</sub>O<sub>4</sub> (284.31). Needles (petroleum ether or EtOH), mp 88–89°C, mp 83–85°C, [α]<sub>D</sub><sup>22</sup> = -225° (CHCl<sub>3</sub>). **Pharm:** Antineoplastic; antifungal; hepatoprotective (mus primary cultured hepatocytes, antihepatotoxin induced by D-galactosamine (GalN), 100 μmol/L, InRt = (19.9 ± 2.0)%, weak, control Silybin, 100 μmol/L, InRt = (77.0 ± 5.5)%)<sup>[4095]</sup>. **Source:** ZI TAN *Pterocarpus indicus*, CHAO XIAN HUAI *Maackia amurensis*, GUANG BU DING GONG TENG *Erycibe expansa*, MA DAO SI WO CI DOU *Swartzia madagascariensis*, ZA JIAO CHE ZHOU CAO *Trifolium hybridum*, *Pericopsis angolensis*. **Ref:** 5, 658, 1521, 4095



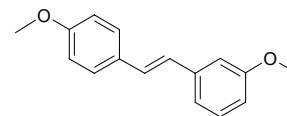
**6291 9,10-Dimethoxy-pterocarpane-3-O-β-D-glucoside**

C<sub>23</sub>H<sub>28</sub>O<sub>10</sub> (464.47). **Source:** HUANG QI *Astragalus membranaceus*, MENG GU HUANG QI *Astragalus mongholicus*. **Ref:** 2, 660.



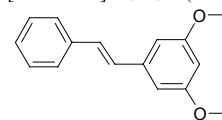
**6292 (E)-3,4'-Dimethoxystilbene**

C<sub>16</sub>H<sub>16</sub>O<sub>2</sub> (240.30). **Source:** GE ZHI HUA DI QIAN *Corsinia coriandrina*. **Ref:** 3888.



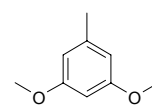
**6293 3,5-Dimethoxystilbene**

[78916-49-1] C<sub>16</sub>H<sub>16</sub>O<sub>2</sub> (240.30). **Source:** HAI SONG ZI *Pinus koraiensis*. **Ref:** 6.



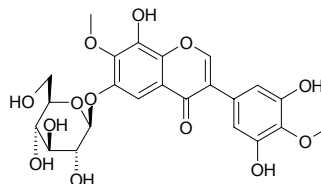
**6294 3,5-Dimethoxytoluene**

[4179-19-5] C<sub>9</sub>H<sub>12</sub>O<sub>2</sub> (152.19). **Source:** XI XIN *Asarum sieboldii*, LIAO XI XIN *Asarum heterotropoides* var. *mandshuricum*. **Ref:** 2, 660.



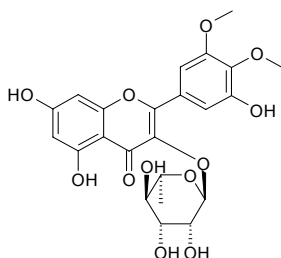
**6295 7,4'-Dimethoxy-8,3',5'-trihydroxy-6-O-β-D-glucopyranosyliso-flavone**

C<sub>23</sub>H<sub>24</sub>O<sub>13</sub> (508.44). Amorphous solid. **Source:** JUAN QIAO YUAN WEI *Iris potaninii* (underground part). **Ref:** 4235.

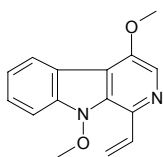


**6296 3',4'-Dimethoxy-5,7,5'-trihydroxyl-flavone 3-O- $\alpha$ -L-rhamnopyranoside**

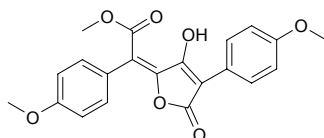
3',4'-Dimethoxy-5,7,5'-trihydroxyl-flavone 3-O- $\alpha$ -L-rhamnopyranoside  
 $C_{23}H_{24}O_{12}$  (492.44). Source: SHAN HUANG PI *Clausena excavata*. Ref: 2135.

**6297 4,9-Dimethoxy-1-vinyl- $\beta$ -carboline**

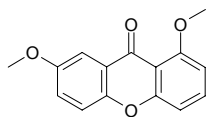
[88142-62-5]  $C_{15}H_{14}N_2O_2$  (254.29). Source: KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. Ref: 12.

**6298 4,4'-Dimethoxyvulpinic acid**

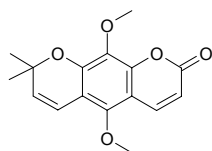
$C_{21}H_{18}O_7$  (382.37). Pharm: Antitubercular (*Mycobacterium tuberculosis* H37Ra, MIC = 25  $\mu$ g/mL); anti-HSV-1 inactive; cytotoxic inactive (hmn lung cancer cells NCI-H187). Source: HUANG YING PI MA BO *Scleroderma citrinum*. Ref: 5406.

**6299 1,7-Dimethoxyxanthone**

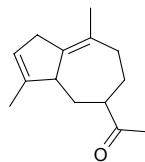
$C_{15}H_{12}O_4$  (256.26). Source: YUAN ZHI *Polygala tenuifolia* (cortex). Ref: 4507.

**6300 5,8-Dimethoxyxanthyletin**

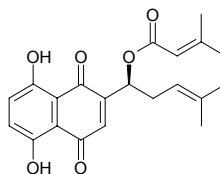
Racemosin [68421-13-6]  $C_{16}H_{16}O_5$  (288.30). mp 179~180°C. Source: SHI JIAO CAO *Boenninghausenia sessilicarpa*, YAN JIAO CAO *Boenninghausenia albiflora* (root). Ref: 660, 1521, 2495.

**6301 2,8-Dimethyl-5-acetyl-bicyclo[5,3,0] decadiene-1,8**

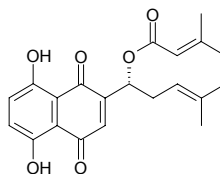
$C_{14}H_{20}O$  (204.31). Source: SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. Ref: 2.

**6302  $\beta,\beta$ -Dimethylacrylalkannin**

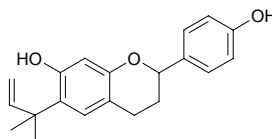
$C_{21}H_{22}O_6$  (370.41). mp 116~117°C. Pharm: Antibacterial (*Staphylococcus aureus*, *Staphylococcus epidermidis* and *Mycobacterium tuberculosis* H37Rv); inhibits ejection of sperm (male toad, caused by injecting chorionic gonadotrophin); used in treatment of allergic purpura. Source: DIAN ZI CAO *Onosma paniculatum*, OU ZI CAO *Alkanna tinctoria* (root: content scope = 0.46%~0.50%<sup>[5501]</sup>), XIN ZANG JIA ZI CAO *Arnebia euchroma*, ZI CAO *Lithospermum erythrorhizon*. Ref: 2, 5, 658, 5501.

**6303  $\beta,\beta$ -Dimethylacrylshikonin**

$C_{21}H_{22}O_6$  (370.41). Sorrel lamellar crystals, mp 116~117°C. Pharm: Antibacterial (*Staphylococcus aureus* 209P, *Staphylococcus aureus* TPR27, *S. epidermidis* TPR25, *Sarcina lutea* and *Bacillus subtilis*, MIC = 160  $\mu$ g/mL); antineoplastic ( $W_{256}$ , *in vitro* and *in vivo*); contracts blood vessels (inhibits ACh-induced relaxation on intact thoracic aorta, IC<sub>50</sub> = (1.461±0.052)  $\mu$ mol/L, 1,4-Naphthoquinone IC<sub>50</sub> = (1.504±0.171)  $\mu$ mol/L)<sup>[4916]</sup>. Source: DIAN ZI CAO *Onosma paniculatum* (root: content = 0.095%)<sup>[5508]</sup>, JIA ZI CAO *Arnebia guttata* (root: content = 0.121%)<sup>[5508]</sup>, XIN ZANG JIA ZI CAO *Arnebia euchroma* (root: mean content of 3 origins = 0.879%)<sup>[5508]</sup>, ZI CAO *Lithospermum erythrorhizon* (root: content = 0.137%)<sup>[5508]</sup>. Ref: 661, 4916, 5501, 5508.

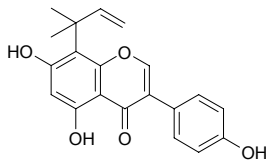
**6304 6(1,1-Dimethylallyl)-7,4'-dihydroxyflavan**

$C_{20}H_{22}O_3$  (310.40). Light yellow gum,  $[\alpha]_D = +3.5^\circ$  ( $c = 0.14$ , MeOH). Source: TUO YUAN DUO TAN CAO *Dorstenia elliptica* (twig). Ref: 3754.

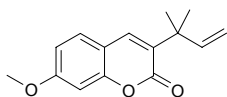


**6305 8-(1,1-Dimethylallyl)genistein**

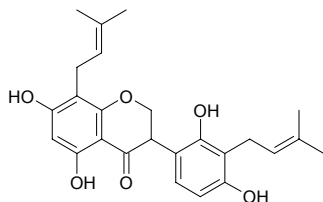
$C_{20}H_{18}O_5$  (338.36). Yellow prisms ( $CHCl_3$ ), mp 94–96°C. Source: FEI LV BIN QIAN JIN BA *Moghania philippinensis* (root). Ref: 3500.

**6306 3-(1,1-Dimethyl allyl) herniarin**

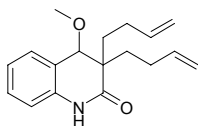
[20958-63-8]  $C_{15}H_{16}O_3$  (244.29). mp 126–128°C. Source: CHOU CAO *Ruta graveolens*. Ref: 6.

**6307 3'-(γ,γ-Dimethylallyl)-kievitone**

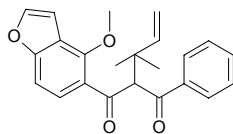
3'-(3,3-Dimethylallyl)-kievitone  $C_{25}H_{28}O_6$  (424.50). Source: CU MAO GAN CAO *Glycyrrhiza aspera*, GAN CAO *Glycyrrhiza Uralensis*, GUANG GUO GAN CAO *Glycyrrhiza glabra*. Ref: 2431.

**6308 3,3-Dimethylallyl-4-methoxy-2-quinolone**

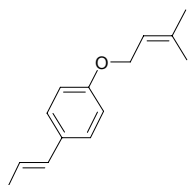
$C_{18}H_{23}NO_2$  (285.39). Source: WU ZHU YU *Evodia rutaecarpa*. Ref: 877.

**6309 8-(α,β-Dimethylallyl)-pongamol**

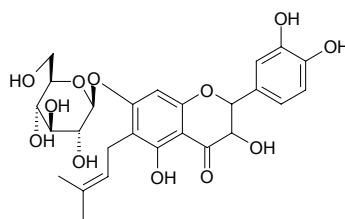
$C_{23}H_{22}O_4$  (362.43). Pharm: Cytotoxic (BST,  $LC_{50} = 2.69\mu g/mL$ ). Source: *Lonchocarpus latifolius* (root). Ref: 5108.

**6310 3,3-Dimethyl allyl-p-propenyl phenyl ether**

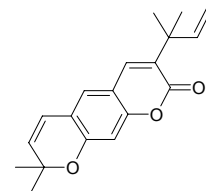
$C_{14}H_{18}O$  (202.30). Source: BA JIAO HUI XIANG *Illicium verum*. Ref: 6.

**6311 6-γ,γ-Dimethylallyltaxifolin 7-O-β-D-glucoside**

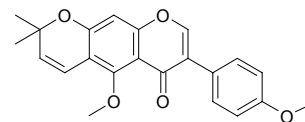
$C_{26}H_{30}O_{12}$  (534.52). mp 170–172°C,  $[\alpha]_D^{20} = -6.6^\circ$  ( $c = 0.5$ , MeOH). Source: JIN LIAN MU *Ochna integerrima* (leaf). Ref: 5133.

**6312 3-(1,1-Dimethylallyl)-xanthyletin**

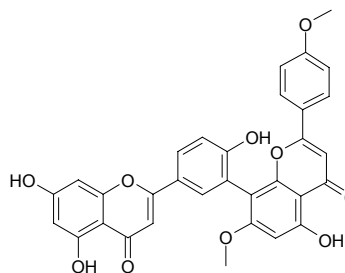
$C_{19}H_{20}O_3$  (296.37). mp 98–99°C. Pharm: Phytogrowth inhibitor (100 $\mu g/mL$ , *Amaranthus hypochondriacus*, InRt = (74.9 $\pm$ 1.5)%; *E. crusgalli*, InRt = (83.7 $\pm$ 1.9)%<sup>[5253]</sup>). Source: YAN JIAO CAO *Boenninghausenia albiflora*, *Stauranthus perforatus* (root). Ref: 2495, 5253.

**6313 Dimethylalpinumisoflavone**

$C_{22}H_{20}O_5$  (364.40). Source: CI TONG *Erythrina variegata* [Syn. *Erythrina indica*] (stem cortex). Ref: 5220.

**6314 4',7-Dimethylamentoflavone**

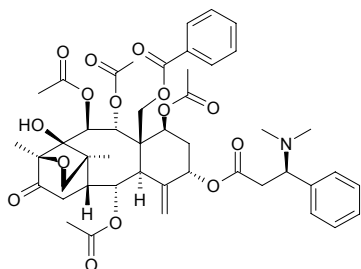
$C_{32}H_{22}O_{10}$  (566.53). Yellowish amorphous powder (MeOH), mp 317–319°C,  $[\alpha]_D^{17.6} = +15.92^\circ$  ( $c = 0.26$ ,  $C_5H_5N$ ). Pharm: Tissue proteinase B inhibitor ( $IC_{50} = 0.55\mu mol/L$ ); cytotoxic (A549,  $IC_{50} = 7.74\mu mol/L$ , Bel7402,  $IC_{50} = 17.16\mu mol/L$ , DU145,  $IC_{50} = 12.42\mu mol/L$ , HT29,  $IC_{50} = 14.54\mu mol/L$ ). Source: MO XI GE LUO YU SHAN *Taxodium mucronatum* (twig and leaf). Ref: 4571.



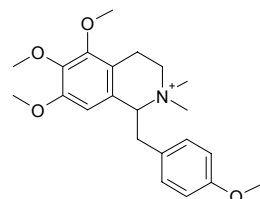


**6315 5 $\alpha$ -O-(3'-Dimethylamino-3'-phenylpropionyl) taxinine M**

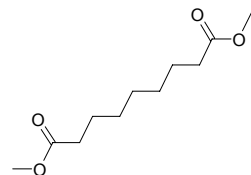
C<sub>46</sub>H<sub>55</sub>NO<sub>15</sub> (861.95). Colorless solid. **Pharm:** Cytotoxic (A549, ED<sub>50</sub> = (10.1 $\pm$ 2.4) $\mu$ mol/L). **Source:** XI MA LA YA HONG DOU SHAN *Taxus wallichiana* (needle leaf). **Ref:** 5225.

**6316 N,N-Dimethylanomurine**

Tetrahydrobenzylisoquinoline alkaloid C<sub>22</sub>H<sub>30</sub>NO<sub>4</sub><sup>+</sup> (372.49). Colorless amorphous powder, [α]<sub>D</sub><sup>22</sup> = -26.3° (c = 0.32, MeOH). **Source:** XIAO HUA MU BAN SHU *Xylopiya parviflora* (bark and root). **Ref:** 3794.

**6317 Dimethyl azelate**

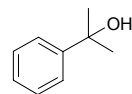
Methyl azelate [1732-10-1] C<sub>11</sub>H<sub>20</sub>O<sub>4</sub> (216.28). **Source:** DANG GUI *Angelica sinensis*. **Ref:** 2.

**6318 1,2-Dimethylbenzene**

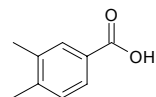
[95-47-6] C<sub>8</sub>H<sub>10</sub> (106.17). **Source:** SHAN ZHA *Crataegus pinnatifida*. **Ref:** 2.

**6319 α,α-Dimethylbenzene methanol**

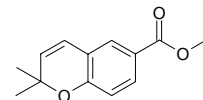
[617-94-7] C<sub>9</sub>H<sub>12</sub>O (136.20). **Source:** SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. **Ref:** 2.

**6320 3,4-Dimethylbenzoic acid**

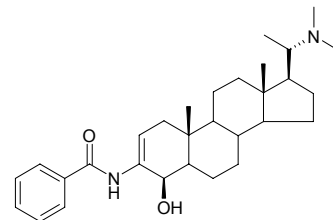
3,4-Xylylic acid [619-04-5] C<sub>9</sub>H<sub>10</sub>O<sub>2</sub> (150.18). mp 166°C. **Source:** MU TIAN LIAO *Actinidia polygama*. **Ref:** 6.

**6321 2,2-Dimethyl-2H-1-benzopyran-6-carboxylic acid methyl ester**

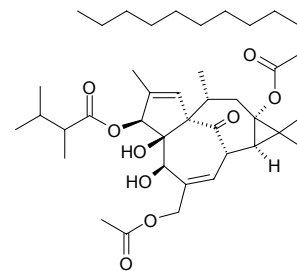
2,2-Dimethyl-6-methoxycarbonyl-2H-benzopyran [34818-57-0] C<sub>13</sub>H<sub>14</sub>O<sub>3</sub> (218.25). **Source:** BAI HUA LONG DAN *Gentiana algida*. **Ref:** 704.

**6322 N<sup>20</sup>,N<sup>20</sup>-Dimethyl-N<sup>3</sup>-benzoyl-3,20-diaminopregn-2-en-4-ol**

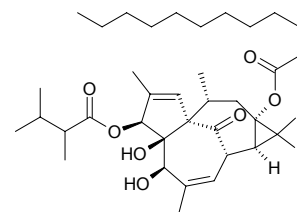
Anticancer Alkaloid PMV70P691-001 C<sub>30</sub>H<sub>44</sub>N<sub>2</sub>O<sub>2</sub> (464.70). **Pharm:** Cytotoxic (estrone sulfatase assay). **Source:** YANG WO BAN DENG GUO *Pachysandra procumbens*. **Ref:** 5038.

**6323 3-O-(2,3-Dimethylbutanoyl)-13-O-dodecanoyl-20-acetylgingenol**

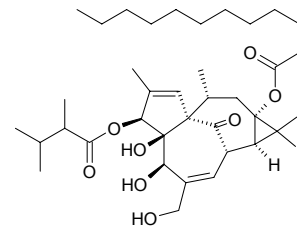
C<sub>40</sub>H<sub>62</sub>O<sub>9</sub> (686.93). Colorless gum, [α]<sub>D</sub><sup>23</sup> = 11.5° (c = 0.69, MeOH). **Source:** GAN SUI *Euphorbia kansui*. **Ref:** 4368.

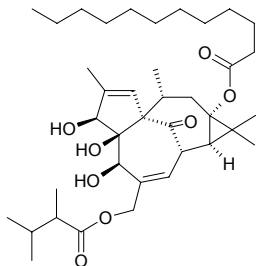
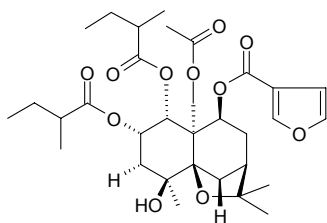
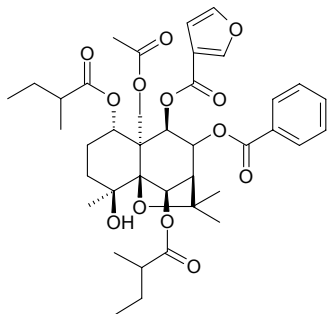
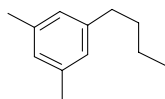
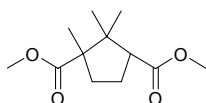
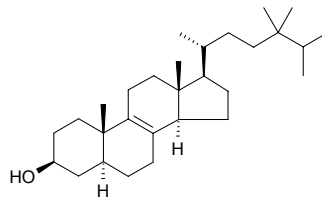
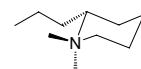
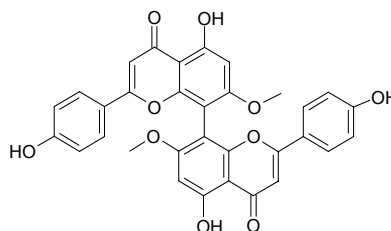
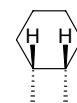
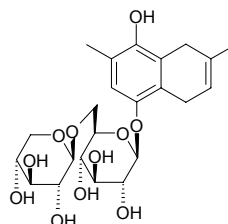
**6324 3-O-(2,3-Dimethylbutanoyl)-13-O-dodecanoyl-20-deoxyingenol**

C<sub>38</sub>H<sub>60</sub>O<sub>7</sub> (628.90). Colorless gum, [α]<sub>D</sub><sup>23</sup> = -4.4° (c = 0.73, MeOH). **Source:** GAN SUI *Euphorbia kansui*. **Ref:** 4368.

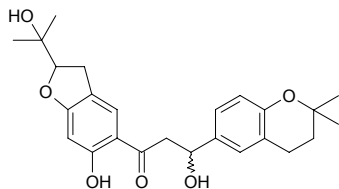
**6325 3-O-(2,3-Dimethylbutanoyl)-13-O-dodecanoylgingenol**

C<sub>38</sub>H<sub>60</sub>O<sub>8</sub> (644.90). **Pharm:** Induces cell cleavage arrest (*Xenopus laevis* embryo cells at the blastular stage, at 10 $\mu$ g/mL compound results in > 60% cell cleavage arrest). **Source:** GAN SUI *Euphorbia kansui*. **Ref:** 4368.

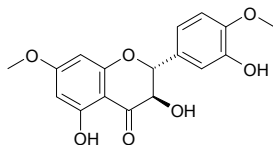


**6326 20-O-(2,3-Dimethylbutanoyl)-13-O-dodecanoylingenol**C<sub>38</sub>H<sub>60</sub>O<sub>8</sub> (644.90). Source: GAN SUI *Euphorbia kansui*. Ref: 4368.**6327 1 $\alpha$ ,2 $\alpha$ -Di-(*a*-methyl)-butanoyl-4 $\beta$ -hydroxy-9 $\beta$ -( $\beta$ -)-furoyloxy-15-acetoxy- $\beta$ -dihydroagarofuran**C<sub>32</sub>H<sub>46</sub>O<sub>11</sub> (606.72). Colorless gum,  $[\alpha]_D^{20} = +42^\circ$  ( $c = 1.00$ , CHCl<sub>3</sub>). Pharm: Cytotoxic (*in vitro*, Bel7402 liver carcinoma, IC<sub>50</sub> = 38.26 $\mu$ g/mL, control Etoposide, IC<sub>50</sub> = 7.00 $\mu$ g/mL). Source: *Euonymus nanoides* (seed). Ref: 4962.**6328 1S,6R-Di(2-methylbutanoyloxy-4S-hydroxy-8S-benzoyloxy-9R-(3)-furancarboxyloxy-13-acetyloxy- $\beta$ -dihydroagarofuran**C<sub>39</sub>H<sub>50</sub>O<sub>13</sub> (726.83). Yellow oil,  $[\alpha]_D = +39.4^\circ$  ( $c = 6.3$ , CHCl<sub>3</sub>). Pharm: Cytotoxic (hmn Bel7402, IC<sub>50</sub> = 6.9 $\mu$ mol/L, hmn HL-60, IC<sub>50</sub> = 51.4 $\mu$ mol/L, hmn A549, IC<sub>50</sub> = 81.7 $\mu$ mol/L, mouse, P<sub>388</sub>, IC<sub>50</sub> = 51.2 $\mu$ mol/L). Source: *Euonymus nanoides* (seed; yield = 0.0053%dw). Ref: 1129.**6329 3,5-Dimethylbutylbenzene**C<sub>12</sub>H<sub>18</sub> (162.27). Source: SHAN ZHA *Crataegus pinnatifida*. Ref: 2.**6330 Dimethyl camphorite**C<sub>12</sub>H<sub>20</sub>O<sub>4</sub> (228.29). Source: DANG GUI *Angelica sinensis*. Ref: 2.**6331 24,24-Dimethyl-5 $\alpha$ -cholesta-8-en-3 $\beta$ -ol**C<sub>29</sub>H<sub>50</sub>O (414.72). Source: JIAO GU LAN *Gynostemma pentaphyllum*. Ref: 2.**6332 N,N-Dimethylconiine**C<sub>10</sub>H<sub>23</sub>N (157.30). Source: SA BA LU HUI *Aloe sabaea*. Ref: 728.**6333 7,7''-Di-O-methylcupressu-flavone**C<sub>32</sub>H<sub>22</sub>O<sub>10</sub> (566.53). mp > 300°C. Source: CE BAI YE *Thuja orientalis* [Syn. *Platycladus orientalis*; *Biota orientalis*]. Ref: 6.**6334 1,4-Dimethyl-*cis*-cyclohexane**[589-90-2] C<sub>8</sub>H<sub>16</sub> (112.22). Source: SHAN ZHA *Crataegus pinnatifida*. Ref: 2.**6335 1,6-Dimethyl-*cis*-cyclohexane**[583-57-3] C<sub>8</sub>H<sub>16</sub> (112.22). Source: SHAN ZHA *Crataegus pinnatifida*. Ref: 2.**6336 2,7-Dimethyl-1,4-dihydronaphthalene-5,8-diol 5-O- $\beta$ -D-xylopyranosyl(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside**C<sub>23</sub>H<sub>32</sub>O<sub>11</sub> (484.50). mp 215~217°C,  $[\alpha]_D^{26} = -33.9^\circ$  ( $c = 0.13$ , MeOH). Source: RI BEN LU TI CAO *Pyrola japonica* (whole herb). Ref: 4294.

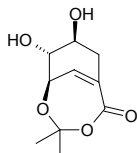
**6337 (+)-3,4-(6'',6''-Dimethyldihydropyrano)-4',5'-[2''''-(1-hydroxy-1-methylethyl)-dihydrofuran]-2',3''''-dihydroxydihydrochalcone**  
 $C_{25}H_{30}O_6$  (426.51). Yellow powder, mp 114~116°C,  $[\alpha]_D^{25} = +414^\circ$  ( $c = 0.013$ , MeOH). Source: *Dorstenia barteri* var. *subtriangularis* (twig). Ref: 3765.



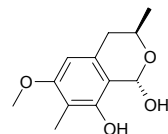
**6338 4',7-Di-O-methyldihydroquercetin**  
 $C_{17}H_{16}O_7$  (332.31). Yellow amorphous powder. Pharm: Cytotoxic (HeLa,  $IC_{50} = 22.4\mu\text{g/mL}$ , control Mitomycin C,  $IC_{50} = 1.7\mu\text{g/mL}$ )<sup>[4092]</sup>. Source: JUAN QIAO YUAN WEI *Iris potaninii* (underground part), TUAN JI AI NA XIANG *Blumea glomerata*. Ref: 4092, 4235.



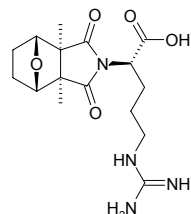
**6339 4,4-Dimethyl-7 $\alpha$ ,8 $\beta$ -dihydroxy-3,5-dioxobicyclo[4.3.1]dec-1(10)-en-2-one**  
 $C_{10}H_{14}O_5$  (214.22). Colorless squama crystals, mp 175~177°C. Source: MEI LI JIN SI TAO *Hypericum bellum*. Ref: 2492.



**6340 3,7-Dimethyl-1,8-dihydroxy-6-methoxy-isochroman**  
 $C_{12}H_{16}O_4$  (224.26).  $[\alpha]_D^{20} = -6.3^\circ$  ( $c = 0.083$ , MeOH). Source: *Penicillium steckii*. Ref: 3960.



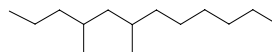
**6341 (2S)-2-[(3aR\*,4S\*,7R\*,7aS\*)-3a,7a-Dimethyl-1,3-dioxo-4,7-epoxy-octahydroisoindol-2-yl]-5-guanidino pentanoic acid**  
 $C_{16}H_{24}N_4O_5$  (352.39). Powder, mp 195.0~197.0°C,  $[\alpha]_D = -21.1^\circ$  ( $c = 2.2$ , MeOH:H<sub>2</sub>O = 1:1). Source: BAN MAO *Mylabris phalerata*; *Mylabris cichorii*. Ref: 4052.



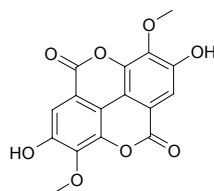
**6342 Dimethyl disulfide**  
 $C_2H_6S_2$  (94.20). mp -98°C, bp 110°C; 116~118°C. Source: DA SUAN *Allium sativum*, JIU CAI *Allium tuberosum*, YANG CONG *Allium cepa*. Ref: 6.



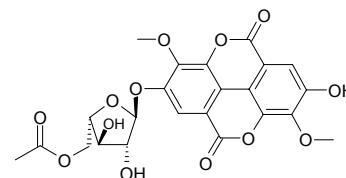
**6343 4,6-Dimethyl dodecane**  
 $C_{14}H_{30}$  (198.40). Source: ROU CONG RONG *Cistanche deserticola*. Ref: 2.



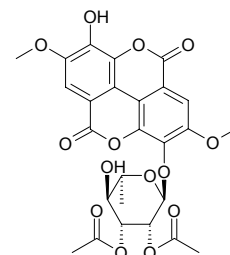
**6344 3,3'-Di-O-methylelagic acid**  
 $C_{16}H_{10}O_8$  (330.25). Pharm: Antioxidant (*in vitro*, effect on conjugated diene formation of LDL or MDA level in rat brain). Source: SHI LIU ZHONG ZI *Punica granatum* (seed; yield = 0.00063%). Ref: 4792.



**6345 3,3'-Di-O-methylelagic acid 4-(5''-acetyl)- $\alpha$ -L-arabinofuranoside**  
 $C_{23}H_{20}O_{13}$  (504.41). Off-white amorphous powder,  $[\alpha]_D^{28} = -180.0^\circ$  ( $c = 0.13$ , M<sub>2</sub>SO). Source: JI SU ZI *Cornus capitata* [Syn. *Dendrobenthamia capitata*] (root). Ref: 5177.

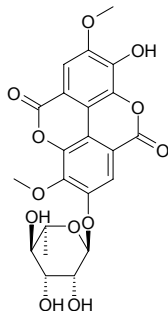


**6346 4,4'-O-Dimethylelagic acid 3-(2'',3''-di-O-acetyl)- $\alpha$ -L-rhamnoside**  
 $C_{26}H_{24}O_{14}$  (560.47). Amorphous powder,  $[\alpha]_D = -21.6^\circ$  ( $c = 0.1$ , MeOH). Pharm: Cytotoxic (panel of hmn cancer cell lines, according to established protocols of Likitwitayawuid 1993 and Seo 2001, ED<sub>50</sub> values of > 5mg/mL are regarded as inactive). Source: MA SI TE SI DU YING *Elaeocarpus mastersii*. Ref: 2020.

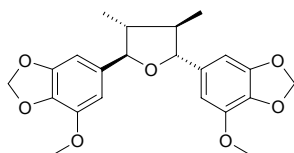


**6347 3,4'-O-Dimethyllellagic acid 4-O- $\alpha$ -L-rhamnopyranoside**

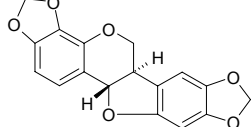
$C_{22}H_{20}O_{12}$  (476.40).  $[\alpha]_D = -42.4^\circ$  ( $c = 0.1$ , MeOH). Source: SHI LIU XIN CAI *Punica granatum*. Ref: 5415.

**6348 *rel*-(7*R*,8*R*,7'*R*,8'*R*)-3,4,3',4'-Dimethylenedioxy-5,5'-dimethoxy-7,7'-epoxylignan**

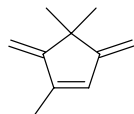
$C_{22}H_{24}O_7$  (400.43). Pale yellow oil,  $[\alpha]_D^{21} = -10.1^\circ$  ( $c = 0.01$ , MeOH). Pharm: Antitrypanosomal (trypanomastigote form of *Trypanosoma cruzi* (Y strain),  $IC_{50} = 3.47\mu\text{g/mL}$ ). Source: *Piper solmsianum*. Ref: 3450.

**6349 3,4-Dimethylenedioxypterocarpan**

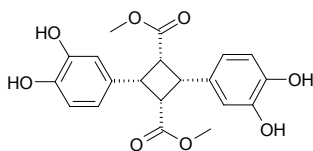
$C_{17}H_{12}O_6$  (312.28). White crystals, mp 154~156°C. Source: KEN NI YA HUI YE *Tephrosia aequilata*. Ref: 1957.

**6350 3,5-Dimethylene-1,4,4-trimethylcyclopentene**

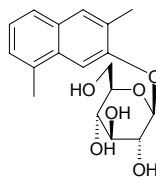
$C_{10}H_{14}$  (134.22). Colorless oil. Source: *Lavandula luisieri* (essential oil). Ref: 5301.

**6351 Dimethyl ester of (1 $\alpha$ ,2 $\alpha$ ,3 $\alpha$ ,4 $\alpha$ )-2,4-bis(3,4-dihydroxyphenyl)-1,3-cyclobutanedicarboxylic acid**

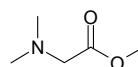
$C_{20}H_{20}O_8$  (388.38). Colorless needles,  $[\alpha]_D = 0^\circ$  ( $c = 0.47$ , MeOH). Pharm: Antihistamine (inhibits histamine release, rat mast cell, induced by antigen-antibody reaction,  $IC_{50} = 16.9\mu\text{g/mL}$ , control Indomethacin,  $IC_{50} = 89.5\mu\text{g/mL}$ ); PGE<sub>2</sub> production inhibitor (30 $\mu\text{g/mL}$ , InRt = 76.5%). Source: XIAO HUA GUI ZHEN *Bidens parviflora* Ref: 3364.

**6352 2,5-Dimethyl-3-O- $\beta$ -D-glucopyranosylnaphthol**

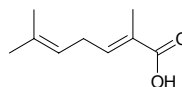
$C_{18}H_{22}O_6$  (334.37). Yellowish oil. Source: DA MA JIN *Hibiscus cannabinus* (bark). Ref: 5233.

**6353 *N,N*-Dimethyl glycine methyl ester**

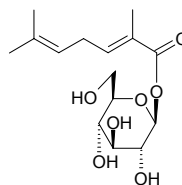
[7148-06-3]  $C_5H_{11}NO_2$  (117.15). Source: ROU CONG RONG *Cistanche deserticola*. Ref: 2.

**6354 (2*E*)-2,6-Dimethyl-2,5-heptadienoic acid**

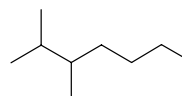
$C_9H_{14}O_2$  (154.21). Colorless oil. Source: DA GUO XI FAN LIAN *Passiflora quadrangularis* (fruit). Ref: 3900.

**6355 (2*E*)-2,6-Dimethyl-2,5-heptadienoic acid  $\beta$ -D-glucopyranosyl ester**

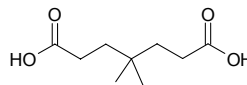
$C_{15}H_{24}O_7$  (316.35). Colorless oil,  $[\alpha]_D^{25} = +12.6^\circ$  ( $c = 0.78$ , MeOH). Source: DA GUO XI FAN LIAN *Passiflora quadrangularis* (fruit). Ref: 3900.

**6356 2,3-Dimethylheptane**

[3074-71-3]  $C_9H_{20}$  (128.26). Source: SHAN ZHA *Crataegus pinnatifida*. Ref: 2.

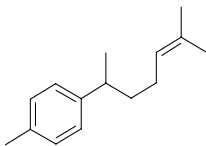
**6357 4,4-Dimethyl-1,7-heptanedioic acid**

$C_9H_{16}O_4$  (188.23). White powder, easy dissolve in methanol and acetone, mp 104~107°C. Source: CHAN YI TENG *Securidaca inappendiculata*. Ref: 2183.

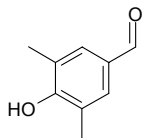


**6358 1-(1,5-Dimethyl-4-hexenyl)-4-methyl benzene**

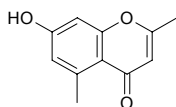
$C_{15}H_{22}$  (202.34). Source: SHENG JIANG *Zingiber officinale*. Ref: 2.

**6359 3,5-Dimethyl-4-hydroxy-benzaldehyde**

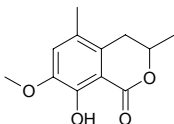
$C_9H_{10}O_2$  (150.18). Source: LIU CHUAN YU *Linaria vulgaris*. Ref: 4237.

**6360 2,5-Dimethyl-7-hydroxy chromone**

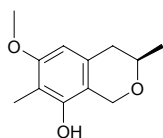
$C_{11}H_{10}O_3$  (190.20). mp 220~222°C. Source: HU ZHANG *Polygonum cuspidatum*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], TIAN SHAN DA HUANG *Rheum wittrockii*. Ref: 2, 609.

**6361 3,5-Dimethyl-8-hydroxy-7-methoxy-3,4-dihydroisocoumarin**

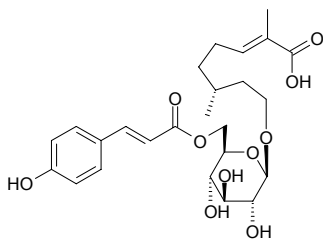
$C_{12}H_{14}O_4$  (222.24). Colorless needles. Pharm: Antifungal (*Aspergillus niger*, MIC = 50µg/mL control Nystatin, MIC = 12.5µg/mL; *Cladosporium herbarum*, MIC = 50µg/mL, Nystatin, MIC = 12.5µg/mL); antibacterial (*Bacillus subtilis*, MIC = 25µg/mL, control Chloramphenicol, MIC = 3.13µg/mL; *Pseudomonas syringae*, MIC = 100µg/mL, control Chloramphenicol, MIC = 3.13µg/mL). Source: *Cytospora eucalypticola*. Ref: 3367.

**6362 3,7-Dimethyl-8-hydroxy-6-methoxyisochroman**

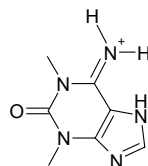
$C_{12}H_{16}O_3$  (208.26). Source: *Penicillium steckii*. Ref: 3960.

**6363 (2E,6R)-2,6-Dimethyl-8-hydroxy-2-octenoic acid****8-O-[6'-O-(E)-p-coumaroyl]-β-D-glucopyranoside**

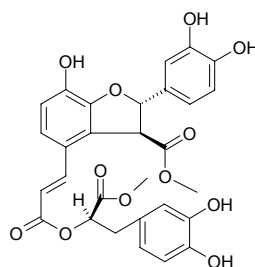
$C_{25}H_{34}O_{10}$  (494.54). Amorphous powder,  $[\alpha]_D^{25} = -15.0^\circ$  ( $c = 0.1$ , MeOH). Source: ZI YE *Catalpa ovata* (leaf, fallen leaf). Ref: 3536, 4290.

**6364 1,3-Dimethylisoguaninium**

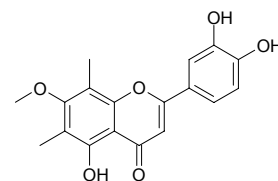
$C_7H_{10}N_5O^+$  (180.19). Colorless needles (EtOH). Pharm: Inhibits specifically basic fibroblast growth factor (bFGF)-induced proliferation of bovine aorta endothelial cells (BAECs); reduces tube formation of BAECs in a time-dependent manner. Source: Sponge *Amphimedon paraviridis*. Ref: 4351.

**6365 Dimethyl lithospermate**

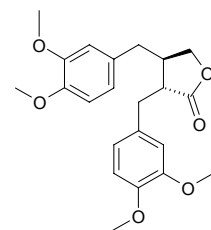
$C_{29}H_{26}O_{12}$  (566.52). Pharm: Antioxidant (DPPH scavenger,  $IC_{50} = 0.1197$ mmol/L, control Propyl gallate,  $IC_{50} = 0.03$ mmol/L; superoxide radical inhibitor, inactive, Propyl gallate,  $IC_{50} = 0.106$ mmol/L; iron chelating assay, inactive, Propyl gallate,  $IC_{50} = 0.064$ mmol/L). Source: MING XIAN HUA ZHU CHANG ZHU LIU LI CAO *Lindelofia stylosa* (aerial parts). Ref: 4533.

**6366 6,8-Di-C-methyllyuteolin 7-methyl ether**

$C_{18}H_{16}O_6$  (328.32). Yellow needles ( $CHCl_3$ -MeOH), mp 288~290°C. Pharm: Antibacterial (oral pathogens: *Streptococcus mutans*, MIC > 500µg/mL, control Chlorhexidine gluconate, MIC = 1.25µg/mL; *Fusobacterium nucleatum*, MIC = 375µg/mL, Chlorhexidine gluconate, MIC = 2.5µg/mL). Source: BAI MAO GEN<sup>(4)</sup> *Hydrastis canadensis* (root). Ref: 5418.

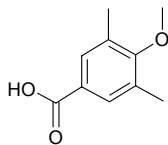
**6367 Dimethylmatairesinol**

$C_{22}H_{26}O_6$  (386.45). Pharm: Cytotoxic (A549,  $ED_{50} = 1.9$ µmol/L,  $ED_{50} = 5.0$ µg/mL, control Adriamycin,  $ED_{50} = 0.01$ µmol/L,  $ED_{50} = 0.02$ µg/mL; MCF7,  $ED_{50} = 1.8$ µmol/L,  $ED_{50} = 4.7$ µg/mL, Adriamycin,  $ED_{50} = 0.1$ µmol/L,  $ED_{50} = 0.1$ µg/mL; HT29,  $ED_{50} = 1.4$ µmol/L,  $ED_{50} = 3.5$ µg/mL, Adriamycin,  $ED_{50} = 0.1$ µmol/L,  $ED_{50} = 0.1$ µg/mL)<sup>[5088]</sup>. Source: E SHEN *Anthriscus sylvestris*, TAI WAN SHAN *Taiwania cryptomerioides* (heartwood). Ref: 5088, 5499.

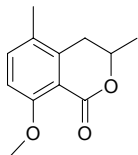


**6368 3,5-Dimethyl-4-methoxybenzoic acid**

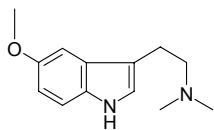
[21553-46-8] C<sub>10</sub>H<sub>12</sub>O<sub>3</sub> (180.21). mp 145°C. Source: JIAN YE FAN XIE YE *Cassia acutifolia*. Ref: 6, 660.

**6369 3,5-Dimethyl-8-methoxy-3,4-dihydroisocoumarin**

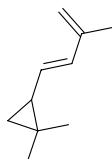
C<sub>12</sub>H<sub>14</sub>O<sub>3</sub> (206.24). Colorless needles. Source: *Cytospora eucalypticola*. Ref: 3367.

**6370 N,N-Dimethyl-5-methoxy tryptamine**

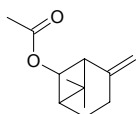
5-Methoxy-N,N-dimethyl-tryptamine [1019-45-0] C<sub>13</sub>H<sub>18</sub>N<sub>2</sub>O (218.30). mp 47°C. Pharm: Toxin (similar action with bufotenine). Source: WU ZHU YU *Evodia rutaecarpa*, HONG MU JI CAO *Desmodium gangeticum*, PAI QIAN CAO *Desmodium pulchellum* [Syn. *Phylloidium pulchellum*], YI CAO *Phalaris arundinacea*. Ref: 2, 6, 658.

**6371 1,1-Dimethyl-2-(3-methyl-1,3-butadiene)cyclo-propane**

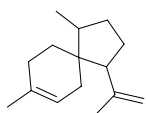
C<sub>10</sub>H<sub>16</sub> (136.24). Source: BAI ZHI *Angelica dahurica* [Syn. *Angelica porphyrocaulis*]. Ref: 2.

**6372 7,7-Dimethyl-2-methylenebicyclo[3.1.1]heptan-6-ol acetate**

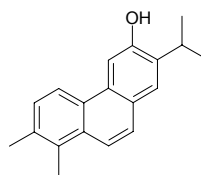
C<sub>12</sub>H<sub>18</sub>O<sub>2</sub> (194.28). Colorless oil. Source: *Psiadia anchusifolia* (fresh leaf). Ref: 3787.

**6373 1,8-Dimethyl-4-(1-methylenyl)-spiro(4,5) dec-7-ene**

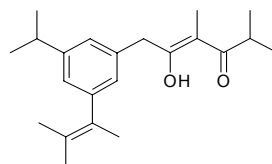
Isoacoradinene C<sub>15</sub>H<sub>24</sub> (204.36). Source: DANG GUI *Angelica sinensis*, WU WEI ZI *Schisandra chinensis*. Ref: 2, 660.

**6374 7,8-Dimethyl-2-(1-methylethyl)phenanthren-3-ol**

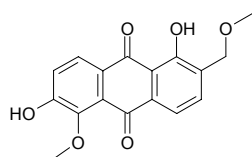
C<sub>19</sub>H<sub>20</sub>O (264.37). Yellowish gum. Source: XIU QIU SHU WEI CAO *Salvia hydrangea* (root). Ref: 5447.

**6375 2,4-Dimethyl-6-(3'-methyl-isobuten-5'-isopropyl)-phenyl-3,5-hexanedione**

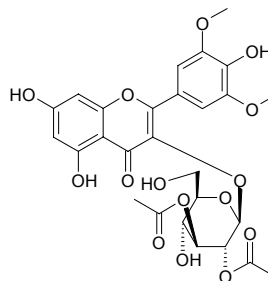
C<sub>22</sub>H<sub>32</sub>O<sub>2</sub> (328.50). Brick red oil. Source: XIAN MAI XUAN FU HUA *Inula nervosa*. Ref: 795.

**6376 5,15-Dimethylmorindol**

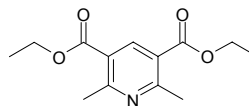
C<sub>17</sub>H<sub>14</sub>O<sub>6</sub> (314.30). Yellow amorphous powder. Source: HAI BA JI *Morinda citrifolia* (fruit). Ref: 4542.

**6377 3',5'-O-Dimethylmyricetin 3-O-β-D-2'',3''-diacetylglucopyranoside**

C<sub>27</sub>H<sub>28</sub>O<sub>15</sub> (592.52). Yellow amorphous powder, mp>250°C. Source: *Warburgia stuhlmannii* (leaf). Ref: 3398.

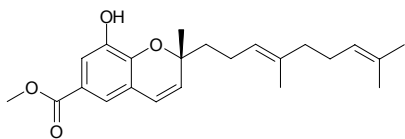
**6378 2,6-Di-C-methyl-nicotinic acid 3,5-diethyl ester**

C<sub>13</sub>H<sub>17</sub>NO<sub>4</sub> (251.28). Colorless needles. Source: *Viburnum tinus* (leaf). Ref: 5339.

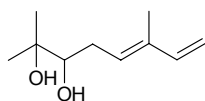


**6379 2-(4',8'-Dimethylnona-3',7'-dienyl)-8-hydroxy-2-methyl-2H-chromene-6-carboxylic methyl ester**

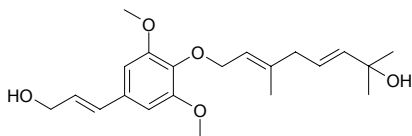
$C_{23}H_{30}O_4$  (370.49). Brown amorphous solid. Source: SAN XING HU JIAO *Piper umbellatum* (branch), DUN YE HU JIAO *Piper peltatum* (branch). Ref: 5274.

**6380 (5E)-2,6-Dimethyl-5,7-octadiene-2,3-diol**

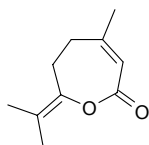
$C_{10}H_{18}O_2$  (170.25). Colorless oil.  $[\alpha]_D^{23} = -19.7^\circ$  ( $c = 0.62$ , MeOH). Source: DA GUO XI FAN LIAN *Passiflora quadrangularis* (fruit). Ref: 3900.

**6381 4-O-[(2E,5E)-3,7-Dimethyl-2,5-octadiene-7-ol]-sinapyl alcohol**

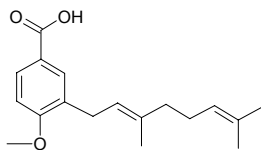
$C_{21}H_{30}O_5$  (362.47). Source: LIAN YE TUO WU *Ligularia nelumbifolia* (root, yield = 0.0013%dw). Ref: 4632.

**6382 3,7-Dimethyl-2,6-octadien-1,6-olide**

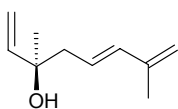
$C_{10}H_{14}O_2$  (166.22). Source: *Plagiochila rutilans*. Ref: 5144.

**6383 3-(3',7'-Dimethyl-2',6'-octadienyl)-4-methoxybenzoic acid**

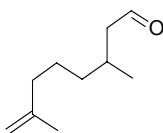
$C_{18}H_{24}O_3$  (288.39). Amorphous solid. Source: GOU ZHUANG HU JIAO *Piper aduncum*. Ref: 2323.

**6384 3,7-Dimethyl-1,5,7-octatrien-3-ol**

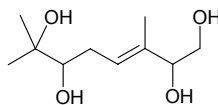
$C_{10}H_{16}O$  (152.24). Source: CHA YE *Camellia sinensis* [Syn. *Thea sinensis*]. Ref: 6.

**6385 3,7-Dimethyl-7-octenal**

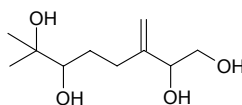
[141-26-4]  $C_{10}H_{18}O$  (154.25). Source: JU PI *Citrus reticulata*. Ref: 2.

**6386 (3E)-3,7-Dimethyl-3-octene-1,2,6,7-tetrol**

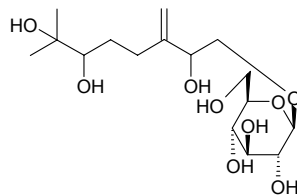
$C_{10}H_{20}O_4$  (204.27). Colorless oil.  $[\alpha]_D^{25} = -11.9^\circ$  ( $c = 0.67$ , MeOH). Source: DA GUO XI FAN LIAN *Passiflora quadrangularis* (fruit). Ref: 3900.

**6387 3,7-Dimethyloct-3(10)-ene-1,2,6,7-tetrol**

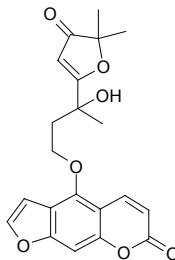
$C_{10}H_{20}O_4$  (204.27). Source: BEI SHA SHEN *Glehnia littoralis* (fruit). Ref: 3525.

**6388 (2S,6Z)-3,7-Dimethyloct-3(10)-ene-1,2,6,7-tetrol 1-O-beta-D-glucopyranoside**

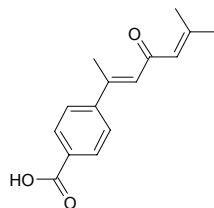
$C_{16}H_{30}O_9$  (366.41). Amorphous powder,  $[\alpha]_D^{24} = -21^\circ$  ( $c = 0.5$ , MeOH). Source: BEI SHA SHEN *Glehnia littoralis* (fruit). Ref: 3525.

**6389 O-[3-(2,2-Dimethyl-3-oxo-2H-furan-5-yl)-3-hydroxybutyl]bergaptol**

$C_{21}H_{20}O_7$  (384.39). Colorless needles (hexane-EtOAc), mp 168–169°C,  $[\alpha]_D = -5.0^\circ$  ( $c = 0.12$ , MeOH). Source: TUO YUAN DUO TAN CAO *Dorstenia elliptica* (twig). Ref: 3754.

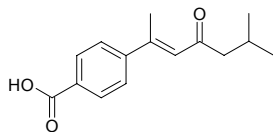
**6390 (E)-4-(1,5-Dimethyl-3-oxo-1,4-hexadienyl)benzoic acid**

$C_{15}H_{16}O_3$  (244.29). mp 156°C. Pharm: Antifungal (TLC bioautography method at very low concentration). Source: SI LI LAN KA TU MI SHU *Bridelia retusa*. Ref: 2021.

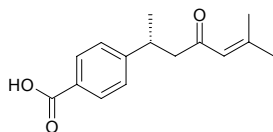


**6391 (E)-4-(1,5-Dimethyl-3-oxo-1-hexenyl)benzoic acid**

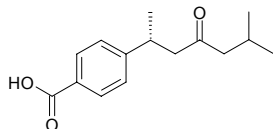
$C_{15}H_{18}O_3$  (246.31). mp 122°C. Pharm: Antifungal (TLC bioautography method at very low concentration). Source: SI LI LAN KA TU MI SHU *Bridelia retusa*. Ref: 2021.

**6392 (R)-4-(1,5-Dimethyl-3-oxo-4-hexenyl)benzoic acid**

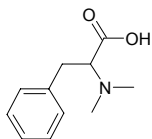
$C_{15}H_{18}O_3$  (246.31). mp 83~88°C,  $[\alpha]_D^{25} = -68.1^\circ$  ( $c = 0.34$ ,  $CHCl_3$ ). Pharm: Antifungal (TLC bioautography method at very low concentration). Source: SI LI LAN KA TU MI SHU *Bridelia retusa*. Ref: 2021.

**6393 (R)-4-(1,5-Dimethyl-3-oxohexyl)benzoic acid**

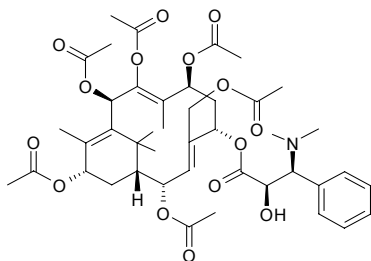
$C_{15}H_{20}O_3$  (248.32). mp 62°C,  $[\alpha]_D^{25} = -26.3^\circ$  ( $c = 0.63$ ,  $CHCl_3$ ). Pharm: Antifungal (TLC bioautography method at very low concentration). Source: SI LI LAN KA TU MI SHU *Bridelia retusa*. Ref: 2021.

**6394 N,N-Dimethylphenylalanine**

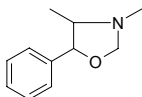
$C_{11}H_{15}NO_2$  (193.15). Colorless acicular crystals. Source: HUANG YING PI MA BO *Scleroderma citrinum*. Ref: 2180.

**6395 (2'S,3'R)-5-(N,N-Dimethyl-3'-phenylisoseril)-taxachitriene A**

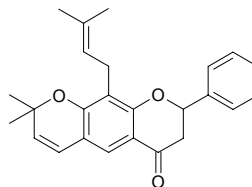
$C_{43}H_{57}NO_{15}$  (827.93). mp 93~95°C,  $[\alpha]_D = +22.3^\circ$  ( $CHCl_3$ ). Source: HONG DOU SHAN *Taxus chinensis*. Ref: 662.

**6396 3,4-Dimethyl-5-phenyloxazolidine**

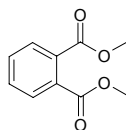
$C_{11}H_{15}NO$  (177.25). Source: MA HUANG *Ephedra sinica*. Ref: 2.

**6397 8,8-Dimethyl-2-phenyl-10-prenyl-2,3-dihydro-8H-pyrano[3,2-g]chroman-4-one**

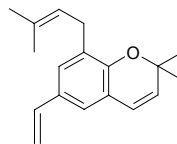
$C_{25}H_{26}O_3$  (374.48). Colorless needles (petroleum ether :  $CHCl_3 = 10:1$ ), mp 121~122°C. Source: GAN HUA DOU *Fordia cauliflora* (stem). Ref: 4564.

**6398 Dimethyl phthalate**

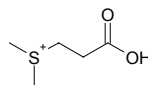
[131-11-3]  $C_{10}H_{10}O_4$  (194.19). Source: DANG GUI *Angelica sinensis*. Ref: 2.

**6399 2,2-Dimethyl-8-prenyl-6-vinylchromene**

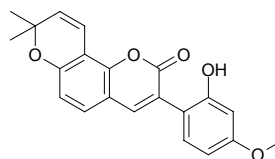
$C_{18}H_{22}O$  (254.38). Colorless oil. Source: FENG JIAO *Apis mellifera ligustica*. Ref: 4124.

**6400 Dimethyl-β-propriothetin**

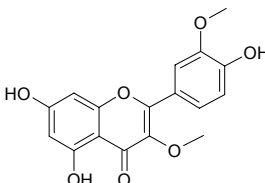
[4337-33-1]  $C_5H_{11}O_2S^+$  (135.11). Source: SHI CHUN *Ulva lactuca*. Ref: 6.

**6401 [6'',6''-Dimethylpyrano-(2'',3'':7,8)]-4'-methoxy-3-arylcoumarin**

$C_{21}H_{18}O_5$  (350.37). Source: *Glycyrrhiza* sp. Ref: 2431.

**6402 3,3'-Dimethylquercetin**

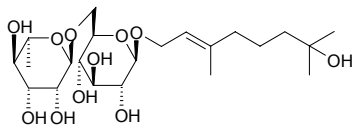
3,3'-Dimethoxyquercetin [4382-17-6]  $C_{17}H_{14}O_7$  (330.29). Yellowish acicular crystals (methanol), mp 255°C. Pharm: Antifungal; antiviral (epidemic type-1 poliomyelitis virus and Gesak-B<sub>4</sub> virus, 0.01μg/mL, InRt = 90%); cytotoxic (P<sub>388</sub>, ED<sub>50</sub> = 1.7μg/mL); insect antifeedant (boll weevil); smooth muscle relaxant. Source: E BU SHI CAO *Centipeda minima*, GAN CAO *Glycyrrhiza uralensis*, LU CAO *Rhaponticum carthamoides*. Ref: 171, 660, 900, 4006, 4007.





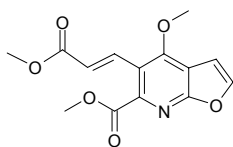
**6403 (E)-3,7-Dimethyl-1-O-[ $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl-oct-2-en-7-ol**

$C_{22}H_{40}O_{11}$  (480.56). Viscous solid,  $[\alpha]_D^{24.3} = -57.0^\circ$  ( $c = 0.383$ , MeOH).  
**Source:** YU YE GUI DENG QING *Rodgersia pinnata* (rhizome). **Ref:** 4570.



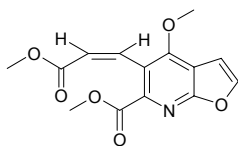
**6404 E-Dimethyl rhoifolinat**

$C_{14}H_{13}NO_6$  (291.26). **Pharm:** Cytotoxic (P<sub>388</sub> cell line, ED<sub>50</sub> = 8.1  $\mu$ g/mL, control Mithramycin, ED<sub>50</sub> = 0.06  $\mu$ g/mL; HT29, ED<sub>50</sub> = 13.5  $\mu$ g/mL, Mithramycin, ED<sub>50</sub> = 0.07  $\mu$ g/mL; A549, ED<sub>50</sub> = 3.6  $\mu$ g/mL, Mithramycin, ED<sub>50</sub> = 0.08  $\mu$ g/mL)<sup>[5405]</sup>. **Source:** SI ROU TUO GUO YE MI ZHU YU *Melicope semecarpifolia*. **Ref:** 5405.



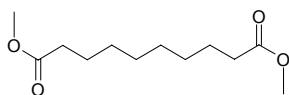
**6405 Z-Dimethyl rhoifolinat**

$C_{14}H_{13}NO_6$  (291.26). **Pharm:** Cytotoxic (P<sub>388</sub> cell line, ED<sub>50</sub> = 8.0  $\mu$ g/mL, control Mithramycin, ED<sub>50</sub> = 0.06  $\mu$ g/mL; HT29, ED<sub>50</sub> = 16.2  $\mu$ g/mL, Mithramycin, ED<sub>50</sub> = 0.07  $\mu$ g/mL; A549, ED<sub>50</sub> = 3.4  $\mu$ g/mL, Mithramycin, ED<sub>50</sub> = 0.08  $\mu$ g/mL). **Source:** SI ROU TUO GUO YE MI ZHU YU *Melicope semecarpifolia*. **Ref:** 5405.



**6406 Dimethyl sebacate**

[106-79-6]  $C_{12}H_{22}O_4$  (230.31). **Source:** DANG GUI *Angelica sinensis*. **Ref:** 2.



**6407 Dimethyl sulfide**

[75-18-3]  $C_2H_6S$  (62.13). bp 37.5~38.0°C. **Source:** DA SUAN *Allium sativum*, SHUI SONG *Codium fragile*. **Ref:** 6.



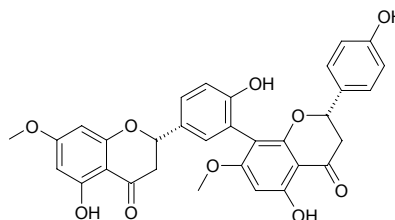
**6408 Dimethyl sulfone**

Sulfonyl bis-methane [67-71-0]  $C_2H_6O_2S$  (94.13). **Source:** MU ZEI *Equisetum hiemale*. **Ref:** 2.



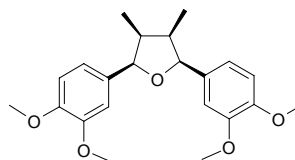
**6409 (2S,2''S)-7,7''-Di-O-methyltetrahydroaemtoflavone**

$C_{32}H_{26}O_{10}$  (570.56). Yellow amorphous powder,  $[\alpha]_D = -25.4^\circ$  ( $c = 0.024$ , Me<sub>2</sub>SO). **Pharm:** Antimalarial (*Plasmodium falciparum* W2, IC<sub>50</sub> = 0.98  $\mu$ g/mL, control Chloroquine, IC<sub>50</sub> = 0.238  $\mu$ g/mL; *Plasmodium falciparum* D6, IC<sub>50</sub> = 2.8  $\mu$ g/mL, Chloroquine, IC<sub>50</sub> = 0.026  $\mu$ g/mL); cytotoxic inactive. **Source:** SHU ZHI YAN FU MU *Rhus retinorrhoea* (leaf). **Ref:** 5201.



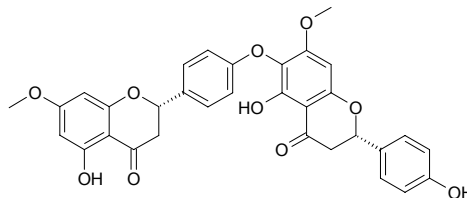
**6410 Di-O-methyltetrahydrofuruaiacin B**

$C_{22}H_{28}O_5$  (372.47). Amorphous powder,  $[\alpha]_D = +43^\circ$  ( $c = 0.5$ , CHCl<sub>3</sub>). **Source:** SAN BAI CAO *Saururus chinensis* (underground part). **Ref:** 4122.



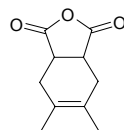
**6411 7,7''-Di-O-methyltetrahydrohinokiflavone**

$C_{32}H_{26}O_{10}$  (570.56). Colorless needles (Me<sub>2</sub>CO), mp 226~228°C,  $[\alpha]_D^{25} = -1.45^\circ$  ( $c = 1.0$ , MeOH). **Source:** NAN YIN DU SU TIE SHU GUO *Cycas beddomei* (stem). **Ref:** 3929.



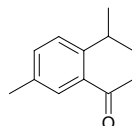
**6412 5,6-Dimethyl-3a,4,7,7a-tetrahydro-1,3-isoben-zofurandione**

$C_{10}H_{12}O_3$  (180.21). **Source:** DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*]. **Ref:** 2.



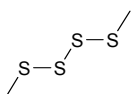
**6413 4,7-Dimethyl-1-tetralone**

1,6-Dimethyl-4-keto-tetrahydronaphthalene [28449-86-7]  $C_{12}H_{14}O$  (174.24). Oil, bp 118°C/4mmHg, bp 146.5~147.0°C/11.5mmHg, bp 145~152°C/15mmHg,  $[\alpha]_D^{20} = +5.60^\circ$  ( $c = 0.3035$ , chloroform). **Pharm:** Antimalarial (*in vitro*, *Plasmodium falciparum*, EC<sub>50</sub> = 86.2  $\mu$ mol/L). **Source:** XIANG FU *Cyperus rotundus*. **Ref:** 900, 1089.

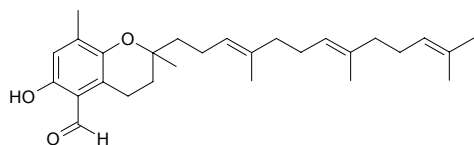


**6414 Dimethyl tetrasulfide**

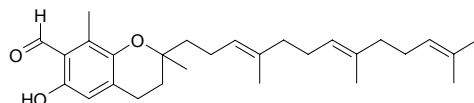
[5756-24-1] C<sub>2</sub>H<sub>6</sub>S<sub>4</sub> (158.33). Source: JIU CAI *Allium tuberosum*. Ref: 6.

**6415 2,8-Dimethyl-2-[(3E,7E)-4,8,12-trimethyltrideca-3,7,11-trienyl]-5-formyl-chroman-6-ol**

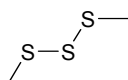
C<sub>28</sub>H<sub>40</sub>O<sub>3</sub> (424.63). Pale yellow oil, [α]<sub>D</sub><sup>25</sup> = -11.1° (c = 0.18, MeOH). Source: DUO ZHI ZHI TENG HUANG *Garcinia virgata* (stem cortex). Ref: 3874.

**6416 2,8-Dimethyl-2-[(3E,7E)-4,8,12-trimethyltrideca-3,7,11-trienyl]-7-formyl-chroman-6-ol**

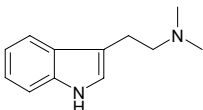
C<sub>28</sub>H<sub>40</sub>O<sub>3</sub> (424.63). Source: DUO ZHI ZHI TENG HUANG *Garcinia virgata* (stem cortex). Ref: 3874.

**6417 Dimethyl trisulfide**

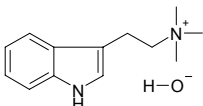
[3658-80-8] C<sub>2</sub>H<sub>6</sub>S<sub>3</sub> (126.26). Source: DA SUAN *Allium sativum*. Ref: 2.

**6418 N,N-Dimethyltryptamine**

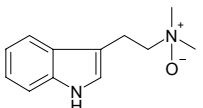
[61-50-7] C<sub>12</sub>H<sub>16</sub>N<sub>2</sub> (188.27). mp 48–49°C. Pharm: Causes mental illness; increases blood pressure; mydriatic. Source: CI YANG LI DOU *Mucuna pruriens*, LU ZHU GEN *Arundo donax*, HONG MU JI CAO *Desmodium gangeticum*, PAI QIAN CAO *Desmodium pulchellum* [Syn. *Phylloidium pulchellum*]. Ref: 6, 658.

**6419 N,N-Dimethyltryptamine-methoxyhydroxide**

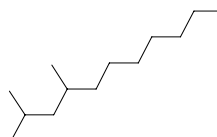
C<sub>13</sub>H<sub>20</sub>N<sub>2</sub>O (203.31). Source: LU ZHU GEN *Arundo donax*. Ref: 6.

**6420 N,N-Dimethyltryptamine N-oxide**

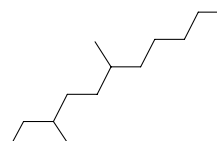
C<sub>12</sub>H<sub>16</sub>N<sub>2</sub>O (204.27). Pharm: Uterine stimulant. Source: CI YANG LI DOU *Mucuna pruriens*, HONG MU JI CAO *Desmodium gangeticum*, PAI QIAN CAO *Desmodium pulchellum* [Syn. *Phylloidium pulchellum*]. Ref: 6.

**6421 2,4-Dimethyl-undecane**

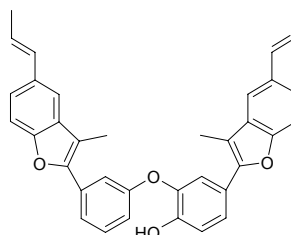
C<sub>13</sub>H<sub>28</sub> (184.37). Source: SHAN ZHA *Crataegus pinnatifida*. Ref: 2.

**6422 3,6-Dimethyl-undecane**

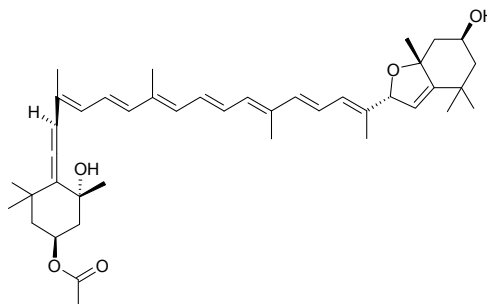
C<sub>13</sub>H<sub>28</sub> (184.37). Source: ROU CONG RONG *Cistanche deserticola*. Ref: 2.

**6423 Dineolignan**

C<sub>36</sub>H<sub>30</sub>O<sub>4</sub> (526.64). Yellow viscous oil. Source: TE LI NI DA HU JIAO *Piper aequale*. Ref: 1910.

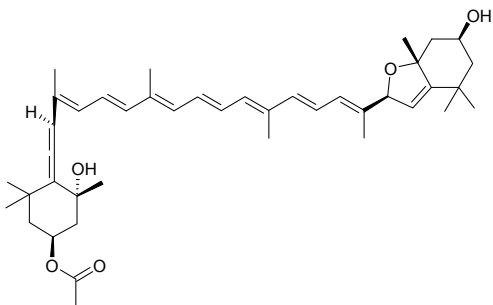
**6424 Dinochrome A**

(3*S*,5*R*,6*R*,3'*S*,5'*R*,8'*R*)-Epoxy-6,7-didehydro-5,6,5',8'-tetrahydro-β,β-c arotene-3,5,3'-triol 3-*O*-acetate C<sub>42</sub>H<sub>58</sub>O<sub>5</sub> (642.93). Yellow crystal. Pharm: Anti-carcinogenic (inhibits 50nmol/L 12-*O*-tetradecanoyl phorbol 13-acetate (TPA)-stimulated <sup>32</sup>P-incorporation into the phospholipids of HeLa cells, 25μg/mL, InRt = 72.1%; inhibits the proliferation of hmn malignant tumor cells, such as GOTO, OST and HeLa cells). Source: ER JIAO DUO JIA ZAO *Peridinium bipes*. Ref: 4256.

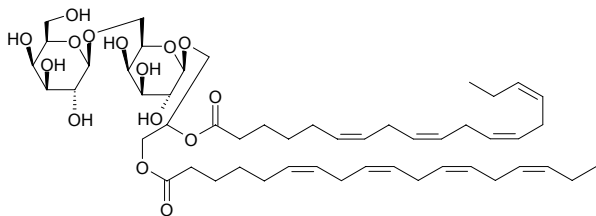


**6425 Dinochrome B**

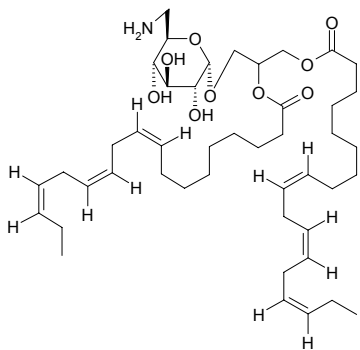
(3*S*,5*R*,6*R*,3'*S*,5'*R*,8'*S*)-5',8'-Epoxy-6,7-didehydro-5,6,5',8'-tetrahydro- $\beta$ - $\beta$ -carotene-3,5,3'-triol 3-*O*-acetate C<sub>42</sub>H<sub>58</sub>O<sub>5</sub> (642.93). Yellow crystal. **Pharm:** Anti-carcinogenic (inhibits 50nmol/L 12-*O*-tetradecanoyl phorbol 13-acetate (TPA)-stimulated <sup>32</sup>P-incorporation into the phospholipids of HeLa cells, 25 $\mu$ g/mL, InRt = 35.0%). **Source:** ER JIAO DUO JIA ZAO *Peridinium bipes*. **Ref:** 4256.

**6426 (2*S*)-1,2-*O*-6,9,12,15-Dioctadecatetraenoyl-3-*O*-[ $\alpha$ -*D*-galactopyranosyl-(1'''' $\rightarrow$ 6''')-*O*- $\beta$ -*D*-galactopyranosyl]-glycerol**

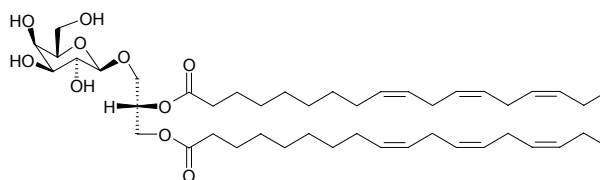
C<sub>51</sub>H<sub>80</sub>O<sub>15</sub> (933.20). [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +52° (*c* = 0.80, MeOH). **Source:** KA SHI QIAN GOU ZAO *Amphidinium carterae*. **Ref:** 4448.

**6427 1,2-*O*-(9*Z*,12*Z*,15*Z*-octadecatrienoyl)-3-*O*-(6-*amino*-6-*deoxy*- $\alpha$ -*D*-glucosyl)-glycerol**

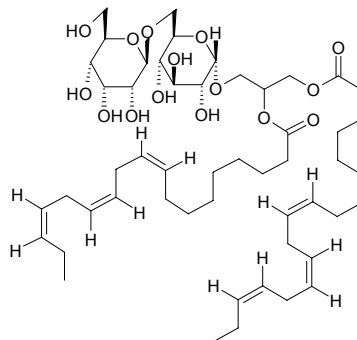
C<sub>45</sub>H<sub>75</sub>NO<sub>9</sub> (774.10). Colorless gum, [ $\alpha$ ]<sub>D</sub><sup>24</sup> = +25.5° (*c* = 3.01, MeOH). **Pharm:** Antibacterial (*Bacillus subtilis*, IZD = 10~12mm, control Chloramphenicol, IZD = 16~20mm; *Escherichia coli*, IZD = 16~20mm, Chloramphenicol, IZD = 16~20mm; *Staphylococcus aureus*, IZD = 10~12mm, Chloramphenicol, IZD = 16~20mm); cytotoxic (SMMC-7721, IC<sub>50</sub> = (351.4 $\pm$ 6.1) $\mu$ g/mL, control Vincristine, IC<sub>50</sub> = (63.2 $\pm$ 1.8) $\mu$ g/mL; B16, IC<sub>50</sub> = (157.3 $\pm$ 2.5) $\mu$ g/mL, Vincristine, IC<sub>50</sub> = (70.7 $\pm$ 2.8) $\mu$ g/mL; HeLa, IC<sub>50</sub> = (168.2 $\pm$ 1.9) $\mu$ g/mL, Vincristine, IC<sub>50</sub> = (67.2 $\pm$ 2.2) $\mu$ g/mL). **Source:** YI BAO MA HUA TOU *Serratula strangulata* (root stem). **Ref:** 5244.

**6428 (2*S*)-1,2-*O*-[(9*Z*,12*Z*,15*Z*)-octadeca-9,12,15-trienoyl]-3-*O*- $\beta$ -*D*-galactopyranosyl glycerol**

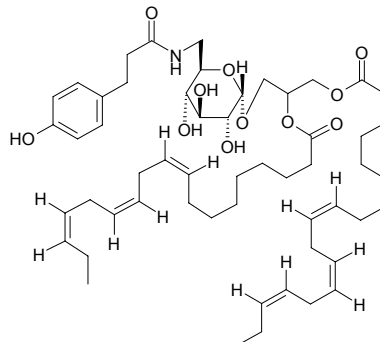
C<sub>45</sub>H<sub>74</sub>O<sub>10</sub> (775.09). Colorless oil, [ $\alpha$ ]<sub>D</sub><sup>26</sup> = -3.0° (*c* = 0.4 CHCl<sub>3</sub>). **Pharm:** Anti-inflammatory (inhibits chemotaxis of hmn peripheral blood neutrophils *in vitro*, The inhibiting activity at 100, 50, 10, 1, and 0.1 $\mu$ g/mL, InRt = 82%, 77%, 62%, 64%, and 7%, respectively). **Source:** QUAN CHI QIANG WEI *Rosa canina* (fruit: yield = 0.025%dw). **Ref:** 4705.

**6429 1,2-*O*-(9*Z*,12*Z*,15*Z*-octadecatrienoyl)-3-*O*-[ $\alpha$ -*D*-glucose(1 $\rightarrow$ 6)- $\beta$ -*D*-allose]-glycerol**

C<sub>51</sub>H<sub>84</sub>O<sub>15</sub> (937.23). Colorless gum, [ $\alpha$ ]<sub>D</sub><sup>24</sup> = +25.3° (*c* = 6.01, MeOH). **Pharm:** Antibacterial (*Bacillus subtilis*, IZD = 13~15mm, control Chloramphenicol, IZD = 16~20mm; *Escherichia coli*, IZD = 13~15mm, Chloramphenicol, IZD = 16~20mm; *Staphylococcus aureus*, IZD = 10~12mm, Chloramphenicol, IZD = 16~20mm). **Source:** YI BAO MA HUA TOU *Serratula strangulata* (root stem). **Ref:** 5244.

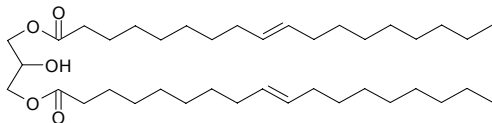
**6430 1,2-*O*-(9*Z*,12*Z*,15*Z*-octadecatrienoyl)-3-*O*-(6-*p*-hydroxy-phenyl-propionamido-6-*deoxy*- $\alpha$ -*D*-glucosyl)-glycerol**

C<sub>54</sub>H<sub>83</sub>NO<sub>11</sub> (922.26). Colorless gum, [ $\alpha$ ]<sub>D</sub><sup>24</sup> = +25.8° (*c* = 2.7, MeOH). **Pharm:** Antibacterial (*Bacillus subtilis*, IZD = 13~15mm, control Chloramphenicol, IZD = 16~20mm; *Escherichia coli*, IZD = 16~20mm, Chloramphenicol, IZD = 16~20mm; *Staphylococcus aureus*, IZD = 10~12mm, Chloramphenicol, IZD = 16~20mm); cytotoxic (SMMC-7721, IC<sub>50</sub> = (151.6 $\pm$ 6.3) $\mu$ g/mL, control Vincristine, IC<sub>50</sub> = (63.2 $\pm$ 1.8) $\mu$ g/mL; B16, IC<sub>50</sub> = (70.3 $\pm$ 2.2) $\mu$ g/mL, Vincristine, IC<sub>50</sub> = (70.7 $\pm$ 2.8) $\mu$ g/mL; HeLa, IC<sub>50</sub> = (121.9 $\pm$ 3.1) $\mu$ g/mL, Vincristine, IC<sub>50</sub> = (67.2 $\pm$ 2.2) $\mu$ g/mL). **Source:** YI BAO MA HUA TOU *Serratula strangulata* (root stem). **Ref:** 5244.

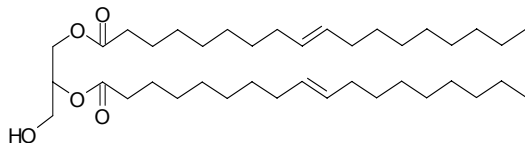


**6431  $\alpha$ : $\alpha$ -Diolein**

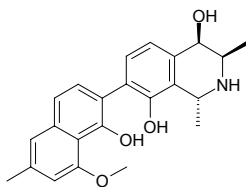
[98168-52-6] C<sub>39</sub>H<sub>72</sub>O<sub>5</sub> (621.01). mp 21.5°C, 25°C. Source: MANG GUO HE *Mangifera indica*. Ref: 6.

**6432  $\alpha$ : $\beta$ -Diolein**

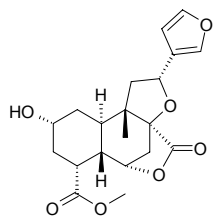
C<sub>39</sub>H<sub>72</sub>O<sub>5</sub> (621.01). Source: MANG GUO HE *Mangifera indica*. Ref: 6.

**6433 Dioncophyllinol B**

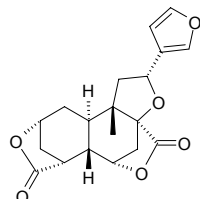
C<sub>23</sub>H<sub>25</sub>NO<sub>4</sub> (379.46). Pharm: Antimalarial (*Plasmodium falciparum* K1, IC<sub>50</sub> = 34ng/mL, NF54, IC<sub>50</sub> = 43ng/mL, MIC > 200µg/mL). Source: SAN YE MU *Triphyophyllum peltatum* (leaf). Ref: 3962.

**6434 Diosbulbin A**

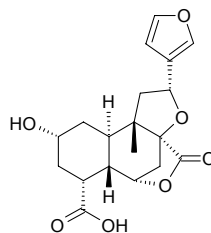
[20086-05-9] C<sub>20</sub>H<sub>24</sub>O<sub>7</sub> (376.41). mp 265°C. Source: HUANG YAO ZI *Dioscorea bulbifera*. Ref: 6, 641.

**6435 Diosbulbin B**

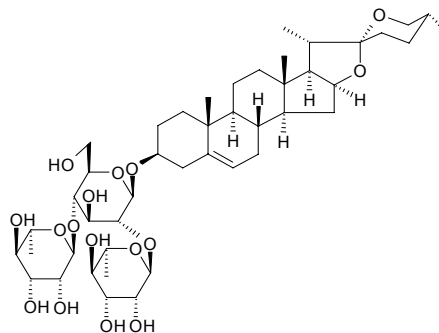
[20086-06-0] C<sub>19</sub>H<sub>20</sub>O<sub>6</sub> (344.37). mp 285°C (dec). Source: HUANG YAO ZI *Dioscorea bulbifera*. Ref: 6, 641.

**6436 Diosbulbin C**

[20086-07-1] C<sub>19</sub>H<sub>22</sub>O<sub>7</sub> (362.38). mp 247~250°C (dec). Source: HUANG YAO ZI *Dioscorea bulbifera*. Ref: 6, 641.

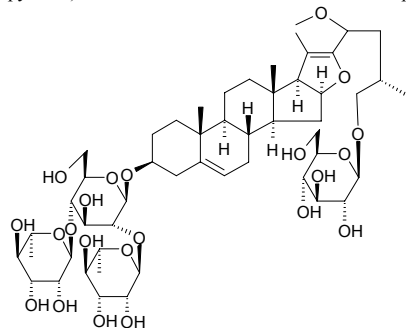
**6437 Dioscin**

[19057-60-4] C<sub>45</sub>H<sub>72</sub>O<sub>16</sub> (869.07). White amorphous powder, mp 288°C, [α]<sub>D</sub><sup>20</sup> = -115° (c = 0.4, MeOH); [α]<sub>D</sub><sup>25</sup> = -108.0° (c = 0.07, pyridine). Pharm: Antifungal (hmn pathogenic yeasts *Candida albicans*, MIC = 12.5µg/mL; *Candida glabrata*, MIC = 12.5µg/mL; *Candida tropicalis*, MIC = 25µg/mL)<sup>[4931]</sup>; antifungal (*Trichophyton mentagrophytes*); insecticidal; cytotoxic (HL-60); cytotoxic (*in vitro*: A375, IC<sub>50</sub> = (2.38±1.12)µmol/L, control Mithramycin, IC<sub>50</sub> = (0.37±0.05)µmol/L; L-929, IC<sub>50</sub> = (2.67±1.38)µmol/L, Mithramycin, IC<sub>50</sub> = (0.31±0.03)µmol/L; HeLa, IC<sub>50</sub> = (3.06±1.95)µmol/L, Mithramycin, IC<sub>50</sub> = (0.19±0.03)µmol/L)<sup>[5000]</sup>. Source: BAI YAO ZI *Stephania cepharantha*, BI XIE *Dioscorea hypoglauca* [Syn. *Dioscorea collettii* var. *hypoglauca*], CHUAN LONG SHU YU *Dioscorea nipponica*, CI JI LI *Tribulus terrestris*, FU ZHOU SHU YU *Dioscorea futschauensis*, HUANG SHAN YAO *Dioscorea panthaica*, LONG XUE SHU *Dracaena draco* (stem cortex)<sup>[4696]</sup>, MIAN BI XIE *Dioscorea spongiosa* (Rhizome: yield = 0.0019%)<sup>[4692]</sup>, RI BEN SHU YU *Dioscorea japonica*, SHAN BI XIE *Dioscorea tokoro*, SHAN YAO *Dioscorea batatas* [Syn. *Dioscorea opposita*], SHU KUI YE SHU YU *Dioscorea althaeoides*, XIAN XI SHU YU *Dioscorea gracillima*, ZAO XIU *Paris polyphylla*, HU BEI HUANG JING *Polygonatum zanlanscianense*, *Dioscorea cayenensis* (rhizome), *Costus* sp., *Trigonella* sp. Ref: 4, 10, 658, 660, 2165, 4692, 4696, 4931, 5000, 5501.

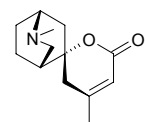


**6438 Dioscoreside C**

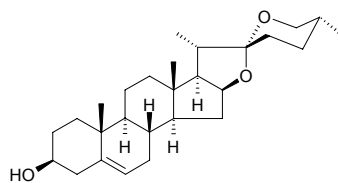
$C_{52}H_{84}O_{22}$  (1061.24). White powder, mp 180~182°C,  $[\alpha]_D^{25} = -54.2^\circ$  ( $c = 0.005$ , pyridine). Source: HUANG SHAN YAO *Dioscorea panthaica*. Ref: 867, 2075.

**6439 Dioscorine**

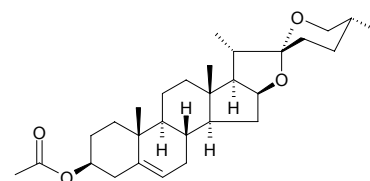
[3329-91-7]  $C_{13}H_{19}NO_2$  (221.30). mp 55°C. Pharm: Anticholinergic (gpg ileum, *in vitro*); enhances action to boost blood pressure caused by adrenalin (anesthetic cat); local anesthetic (gpg, local injection); similar action with cocaine. Source: BAI SHU LANG *Dioscorea hispida*, CU MAO SHU YU *Dioscorea hirsuta*. Ref: 6, 658.

**6440 Diosgenin**

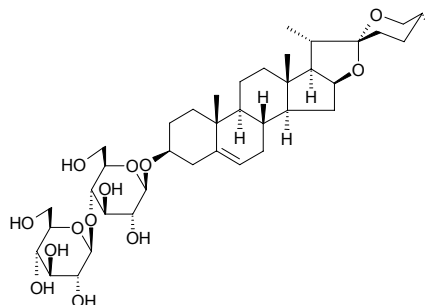
*Dioscorea sapogenin* [512-04-9]  $C_{27}H_{42}O_3$  (414.63). mp 205~206°C; 189~192°C; 196~198°C; 204~205°C; 199~202°C; from moldy source plant, both mp and content of sapogenin decreasing, mp 195~196°C; 176~178°C; 186~194°C; 194~195°C; 180~192°C. Pharm: Estrogenic activity; antihypercholesterolemic (reduces the level of cholesterol in serum). Source: BAI SHU LANG *Dioscorea hispida*, BI XIE *Dioscorea hypoglauca* [Syn. *Dioscorea collettii* var. *hypoglauca*] (dried rhizome: mean content of 3 batch samples = 1.24%<sup>[5508]</sup>), CHA RUI SHU YU *Dioscorea collettii*, CHAI HUANG JIANG *Dioscorea nipponica* ssp. *rosthornii*, CHANG YAO GE CHONG LOU *Paris polyphylla* var. *pseudothibetica* (rhizome: content = 0.83%<sup>[5508]</sup>), CHUAN LONG SHU YU *Dioscorea nipponica* (dried rhizome: content = 1.73%<sup>[5508]</sup>), DUN YE SHU YU *Dioscorea zingiberensis* (dried rhizome: mean content = 2.39%<sup>[5508]</sup>), FANG JI YE BA QIA *Smilax menispermoides*, FU ZHOU SHU YU *Dioscorea futschauensis*, HU LU BA *Trigonella foenum-graecum* (dried ripe seed: mean content of 3 origins = 12.9%<sup>[5508]</sup>), HUANG SHAN YAO *Dioscorea panthaica*, LONG XUE SHU *Dracaena draco* (stem cortex)<sup>[4696]</sup>, MAI DONG *Ophiopogon japonicus* (dried tuberoid: mean content = 0.005%<sup>[5508]</sup>), MIAN BI XIE(I) *Dioscorea septemloba*, QIU YAO GE CHONG LOU *Paris fargesii* (rhizome: content = 1.08%<sup>[5508]</sup>), SHAN YAO *Dioscorea batatas* [Syn. *Dioscorea opposita*] (rhizome: content = 0.012%<sup>[5508]</sup>), SHU KUI YE SHU YU *Dioscorea althaeoides*, XIA YE CHONG LOU *Paris polyphylla* var. *stenophylla* (rhizome: content = 0.86%<sup>[5508]</sup>), XIAN XI SHU YU *Dioscorea gracillima*, XIAO HUA DUN YE SHU YU *Dioscorea parviflora*, YUN NAN CHONG LOU *Paris polyphylla* var. *yunnanensis* (rhizome: mean content = 0.94%<sup>[5508]</sup>), ZAO XIU *Paris polyphylla* (rhizome: content = 0.90%<sup>[5508]</sup>), ZHANG LIU TOU *Costus speciosus*, *Paris* sp., *Trillium* sp., *Trigonella* sp. Ref: 10, 658, 660, 4696, 5501, 5508.

**6441 Diosgenin acetate**

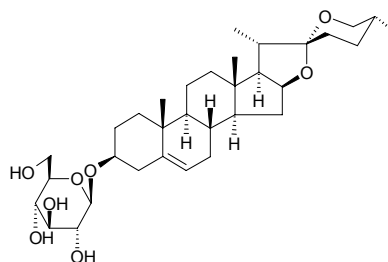
$C_{29}H_{44}O_4$  (456.67). Source: FANG JI YE BA QIA *Smilax menispermoides*, BI XIE *Dioscorea hypoglauca* [Syn. *Dioscorea collettii* var. *hypoglauca*]. Ref: 10, 660.

**6442 Diosgenin-3-di-beta-O-glucopyranoside**

Diosgenin-dioglucoside  $C_{39}H_{62}O_{13}$  (738.92). mp 271~273°C. Source: SHAN YAO *Dioscorea batatas* [Syn. *Dioscorea opposita*], DUN YE SHU YU *Dioscorea zingiberensis*. Ref: 6, 10.

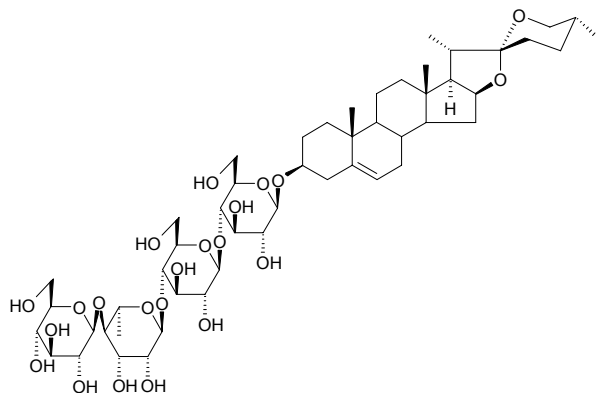
**6443 Diosgenin-3-O-beta-D-glucopyranoside**

Trillin  $C_{33}H_{52}O_8$  (576.78). mp 274°C; 275~280°C. Source: DUN YE SHU YU *Dioscorea zingiberensis*, CHUAN LONG SHU YU *Dioscorea nipponica*, FU ZHOU SHU YU *Dioscorea futschauensis*, YAN LING CAO *Trillium tschonoskii*, ZAO XIU *Paris polyphylla*. Ref: 6, 10, 660.



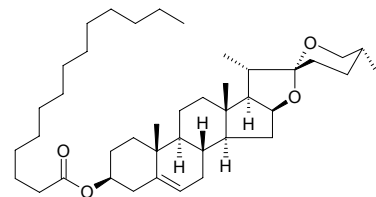
**6444 Diosgenin 3-O- $\beta$ -D-glucopyranosyl (1 $\rightarrow$ 4)- $\alpha$ -L-rhamnopyranosyl (1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl (1 $\rightarrow$ 4)- $\beta$ -D-glucopyranoside**

$C_{51}H_{82}O_{22}$  (1047.21). White powder crystals, mp 229~233°C (des),  $[\alpha]_D = -70.42^\circ$  ( $c = 0.738$ , MeOH). Source: HU LU BA *Trigonella foenum-graecum*. Ref: 4578.



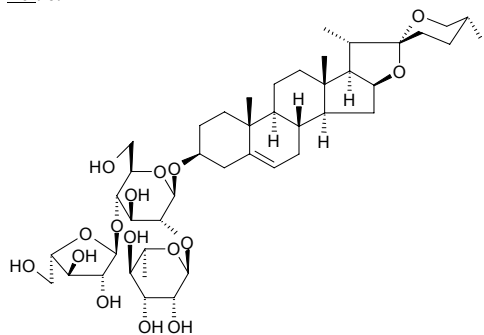
**6445 Diosgenin palmitate**

$C_{43}H_{72}O_4$  (653.05). Source: CHA RUI SHU YU *Dioscorea collettii*, BI XIE *Dioscorea hypoglauca* [Syn. *Dioscorea collettii* var. *hypoglauca*]. Ref: 10, 660.



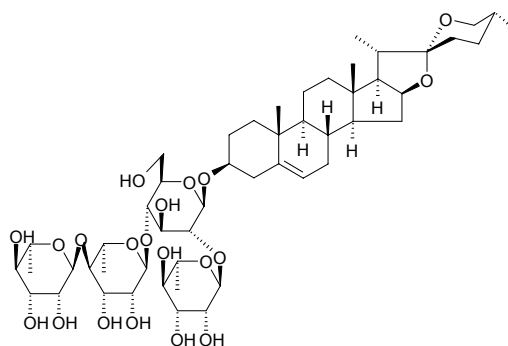
**6446 Diosgenin 3-O- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)-[ $\alpha$ -L-arabinofuranosyl-(1 $\rightarrow$ 4)]- $\beta$ -D-glucopyranoside**

$C_{44}H_{70}O_{16}$  (855.04). mp 276~278°C (dec). Source: ZAO XIU *Paris polyphylla*. Ref: 6.



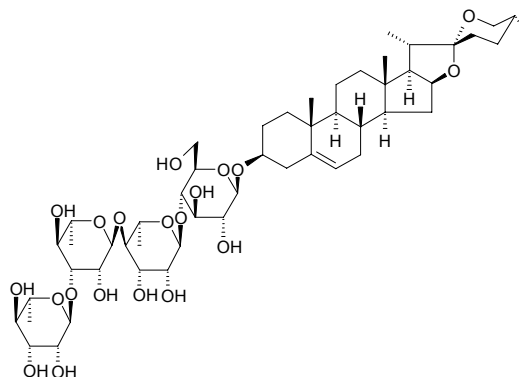
**6447 Diosgenin 3-O- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)-[ $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -D-glucopyranoside**

Diosgenin tetraglycoside  $C_{51}H_{82}O_{20}$  (1015.21). White amorphous powder,  $[\alpha]_D^{20} = -113^\circ$  ( $c = 057$ , MeOH); mp 203~206°C (dec). Pharm: Antifungal (hmn pathogenic yeasts *Candida albicans*, MIC = 100  $\mu$ g/mL; *Candida glabrata*, MIC = 200 $\mu$ g/mL; *Candida tropicalis*, MIC > 200 $\mu$ g/mL)<sup>[4931]</sup>; cytotoxic (HSC-2 cells, LD<sub>50</sub> = 2 $\mu$ g/mL; HGF, LD<sub>50</sub> = 2.8 $\mu$ g/mL)<sup>[3023]</sup>. Source: *Dioscorea cayenensis* (rhizome), YE XIANG SHU *Cestrum nocturnum* (leaf: yield = 0.0024%fw), ZAO XIU *Paris polyphylla*. Ref: 4931, 6, 3023.



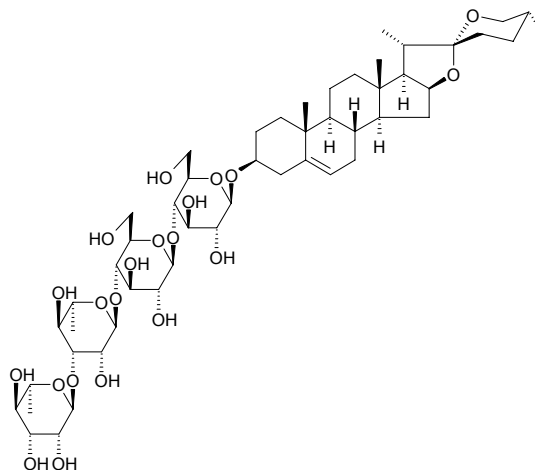
**6448 Diosgenin 3-O-[ $\alpha$ -L-rhamnopyranosyl (1 $\rightarrow$ 3)- $\alpha$ -L-rhamnopyranosyl (1 $\rightarrow$ 4)]- $\beta$ -D-glucopyranoside**

$C_{51}H_{82}O_{20}$  (1015.21). Colorless acicular crystals, mp 216~218°C (dec.),  $[\alpha]_D^{20} = -96.2^\circ$  ( $c = 0.38$ , pyridine), easily solving in pyridine, solving in methanol, ethanol and water. Source: CHUAN LONG SHU YU *Dioscorea nipponica*. Ref: 2227.



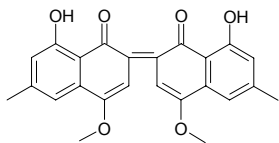
**6449 Diosgenin 3-O- $\alpha$ -L-rhamnopyranosyl (1 $\rightarrow$ 3)- $\alpha$ -L-rhamnopyranosyl (1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl (1 $\rightarrow$ 4)- $\beta$ -D-glucopyranoside**

$C_{51}H_{82}O_{21}$  (1031.21). White granular crystals, mp 196~197°C (des),  $[\alpha]_D^{20} = -78.92^\circ$  ( $c = 0.937$ , MeOH). Source: HU LU BA *Trigonella foenum-graecum*. Ref: 4578.

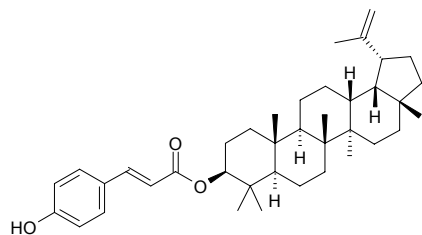


**6450 Diosindigo A**

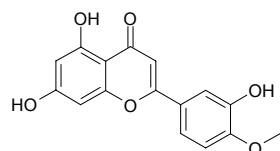
$C_{24}H_{20}O_6$  (404.42). Deep blue needles (petrol ether-chloroform), Source: *Diospyros sylvatica* (root). Ref: 3811.

**6451 Dioslupecin A**

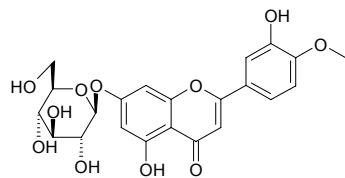
$C_{39}H_{56}O_3$  (572.88). Source: HAI SHI *Diospyros maritima*, XIAO HUA MU LAN GUO *Bruguiera parviflora*. Ref: 1521, 2532.

**6452 Diosmetin**

5,7,3'-Trihydroxy-4'-methoxyflavone [520-34-3]  $C_{16}H_{12}O_6$  (300.27). mp 253–255°C. Pharm: Protects against shock. Source: BAI CI HUA *Sophora viciifolia*, MENG GU SHAN LUO BO *Scabiosa comosa*, RONG MAO DAN SHEN *Salvia tomentosa*, YAO YONG PU GONG YING *Taraxacum officinale*. Ref: 6, 561, 602, 658, 660.

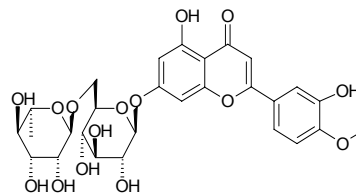
**6453 Diosmetin 7-O-β-D-glucopyranoside**

$C_{22}H_{22}O_{11}$  (462.41). Pharm: Aldose reductase inhibitor (rat lens,  $IC_{50}$  = 23 μmol/L, control Epalrestat,  $IC_{50}$  = 0.072 μmol/L)<sup>[4214]</sup>. Source: YE JU HUA *Chrysanthemum indicum* (flower: yield = 0.086%). Ref: 4214.

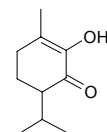
**6454 Diosmin**

[520-27-4]  $C_{28}H_{32}O_{15}$  (608.56). mp 278–280°C. Pharm: Anti-inflammatory (rat, ip, swollen foot model caused by carrageenan,  $ED_{50}$  = 100mg/kg); similar action with vitamin C<sub>2</sub> (gpg, enhances blood capillary resistance and reduces loss of ascorbic acid in adrenal); similar action with vitamin P (rbt, reduces blood capillary permeability);  $LD_{50}$  (mus, orl) = 10g/kg, (mus, ip) = 4g/kg. Source: BA XIAN CAO *Galium aparine*, BAI CI HUA *Sophora viciifolia*, BAI CI HUA YE *Sophora viciifolia*, FEI LONG ZHANG XUE *Toddalia asiatica* [Syn. *Toddalia aculeata*; *Paullinia asiatica*], FO SHOU *Citrus medica* var. *sarcodactylis*, GAO JIA SUO LAN PEN HUA *Scabiosa caucasica*, JI CAI *Capsella bursa-pastoris*, JI CAI ZI *Capsella bursa-pastoris*,

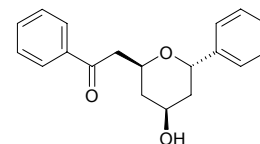
LIN SHENG XUAN SHEN *Scrophularia nodosa*, MI DIE XIANG *Rosmarinus officinalis*, NING MENG *Citrus limon*, NING MENG PI *Citrus limon*, QIAN MA *Urtica cannabina*, RU DI JIN NIU *Zanthoxylum nitidum*, YING BU BO *Zanthoxylum avicennae*. Ref: 6, 658, 660, 5501.

**6455 Diosphenol**

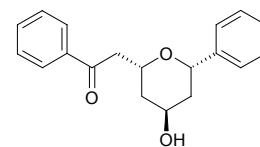
[490-03-9]  $C_{10}H_{16}O_2$  (168.24). Pharm: Diuretic. Source: MI HUA XIANG MAO *Cymbopogon densiflorus*, YU XIANG CAO *Mentha rotundifolia*. Ref: 658.

**6456 Diospongina A**

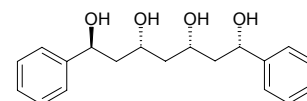
$C_{19}H_{20}O_3$  (296.37). Colorless amorphous solid,  $[\alpha]_D^{25}$  = -21.2° ( $c$  = 0.8, CHCl<sub>3</sub>). Pharm: Bone resorption inhibitor (bones were cultured with PTH 200 μmol/L, <sup>45</sup>Ca release = (44.6±3.3)%, control <sup>45</sup>Ca release = (15.4±1.3)%). Source: HAI JIN BI XIE *Dioscorea spongiosa* (rhizome). Ref: 4921.

**6457 Diospongina B**

$C_{19}H_{20}O_3$  (296.37). Colorless amorphous solid,  $[\alpha]_D^{25}$  = -23.4° ( $c$  = 0.6, CHCl<sub>3</sub>). Pharm: Bone resorption inhibitor (bones were cultured with PTH 200 μmol/L, <sup>45</sup>Ca release = (30.5±0.4)%, contro <sup>45</sup>Ca release = (15.4±1.3)%). Source: HAI JIN BI XIE *Dioscorea spongiosa* (rhizome). Ref: 4921.

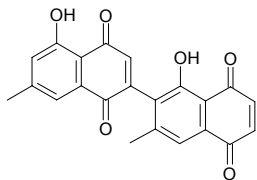
**6458 Diospongina C**

$C_{19}H_{24}O_4$  (316.40). Light yellow oil,  $[\alpha]_D^{25}$  = -45.5° ( $c$  = 0.5, CHCl<sub>3</sub>). Pharm: Bone resorption inhibitor (bones were cultured with PTH 200 μmol/L, <sup>45</sup>Ca release = (19.1±1.6)%,  $p$  < 0.01, control <sup>45</sup>Ca release = (15.4±1.3)%). Source: HAI JIN BI XIE *Dioscorea spongiosa* (rhizome). Ref: 4921.

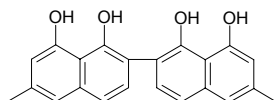


**6459 Diospyrin**

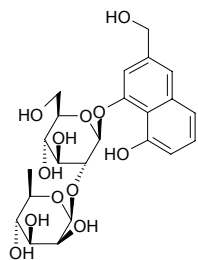
[28164-57-0] C<sub>22</sub>H<sub>14</sub>O<sub>6</sub> (374.35). **Pharm:** Cytotoxic (EAC, high dose); immunoenhancer (low dose). **Source:** *Diospyros* sp. **Ref:** 658.

**6460 Diospyrol**

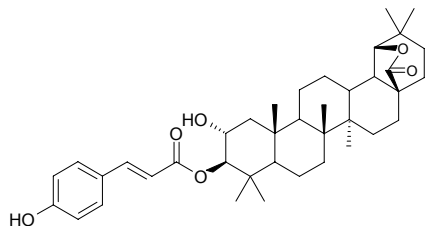
C<sub>22</sub>H<sub>18</sub>O<sub>4</sub> (346.39). Acicular crystals (methanol), mp 251~257°C (dec). **Pharm:** Anthelmintic (hookworm, dwarf tapeworm). **Source:** RUAN SHI *Diospyros mollis* (the compound was isolated from the plant by K.Yoshihira, et al. in 1969)<sup>[5505]</sup>. **Ref:** 661, 5505.

**6461 Diospyrosonaphthoside**

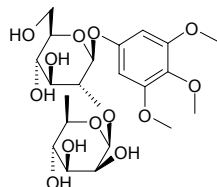
4[ $\alpha$ -L-Rhamnosyl(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranosyloxy]-2-hydroxymethylene,5-hydroxy naphthalene C<sub>23</sub>H<sub>30</sub>O<sub>12</sub> (498.49). White amorphous powder,  $[\alpha]_D^{27} = -119.0^\circ$  ( $c = 0.17$ , MeOH). **Source:** *Diospyros angustifolia* (stem cortex). **Ref:** 3835.

**6462 Diospyrosoleanolide**

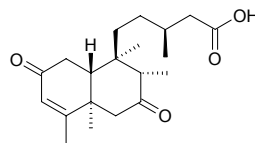
2 $\alpha$ -Hydroxy-3 $\beta$ -trans-p-coumaroyl-28,19 $\beta$ -oleanolide C<sub>39</sub>H<sub>54</sub>O<sub>6</sub> (618.86). White amorphous powder,  $[\alpha]_D^{29} = -16.6^\circ$  ( $c = 0.102$ , C<sub>5</sub>H<sub>5</sub>N). **Source:** *Diospyros angustifolia* (stem cortex). **Ref:** 3835.

**6463 Diospyrososide**

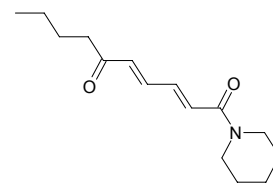
1[ $\alpha$ -L-Rhamnosyl(1 $\rightarrow$ 2)-( $\beta$ -D-glucopyranosyloxy)]-3,4,5-trimethoxy benzene C<sub>21</sub>H<sub>32</sub>O<sub>13</sub> (492.48). White amorphous powder,  $[\alpha]_D^{27} = -80.0^\circ$  ( $c = 0.12$ , MeOH). **Source:** *Diospyros angustifolia* (stem cortex). **Ref:** 3835.

**6464 ent-2,7-Dioxo-3-cleroden-15-oic acid**

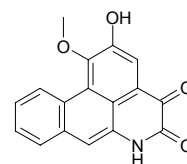
C<sub>20</sub>H<sub>30</sub>O<sub>4</sub> (334.46). Colorless oil,  $[\alpha]_D^{20} = -10^\circ$  ( $c = 0.215$ , CHCl<sub>3</sub>). **Pharm:** Antimalarial (*Plasmodium falciparum* FcB1, IC<sub>50</sub> = (8.0 $\pm$ 0.2) $\mu$ g/mL, control Chloroquine, IC<sub>50</sub> = (0.05 $\pm$ 0.002) $\mu$ g/mL). **Source:** *Nuxia sphaerocephala* (leaf). **Ref:** 4419.

**6465 1-(1,6-Dioxo-2E,4E-decadienyl)piperidine**

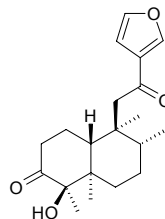
C<sub>15</sub>H<sub>23</sub>NO<sub>2</sub> (249.36). Colorless oil. **Source:** HU JIAO *Piper nigrum* (root: yield = 0.00031%dw). **Ref:** 4753.

**6466 4,5-Dioxodehydroasimilobine**

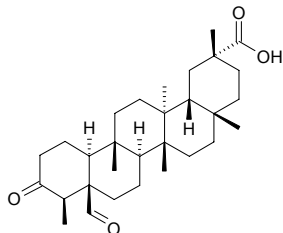
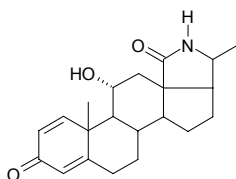
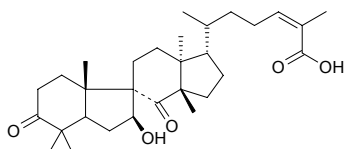
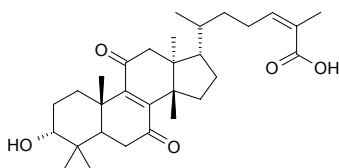
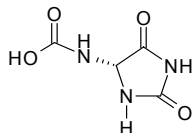
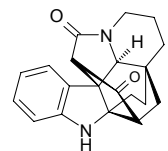
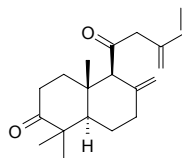
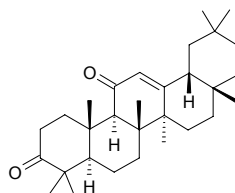
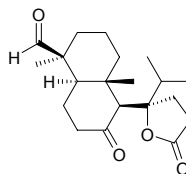
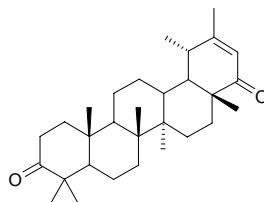
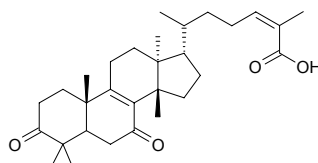
2-Hydroxy-1-methoxy-4H-dibenzo[de,g]quinoline-4,5-(6H)-dione C<sub>17</sub>H<sub>11</sub>NO<sub>4</sub> (293.28). **Pharm:** Platelet aggregation inhibitor (rbt platelets induced by thrombin, 50 $\mu$ g/mL, add thrombin 0.1u/mL, AggRt = (86.6 $\pm$ 1.6)%, control AggRt = (92.6 $\pm$ 0.4)%; add AA, 100 $\mu$ mol/L, 50 $\mu$ g/mL, AggRt = (0.0 $\pm$ 0.0)%, 2 $\mu$ g/mL, control AggRt = (80.7 $\pm$ 1.7)%, Aspirin 50 $\mu$ g/mL, AggRt = (11.7 $\pm$ 10.1)%; add collagen 10 $\mu$ g/mL, 50 $\mu$ g/mL, AggRt = (25.4 $\pm$ 0.9)%, 2 $\mu$ g/mL, AggRt = (81.5 $\pm$ 0.0)%, control AggRt = (89.3 $\pm$ 0.5)%, Aspirin 100 $\mu$ g/mL, AggRt = (81.3 $\pm$ 0.5)%; add PAF 2ng/mL, 50 $\mu$ g/mL, AggRt = (87.2 $\pm$ 0.0)%, control AggRt = (93.0 $\pm$ 0.6)%<sup>[4938]</sup>. **Source:** MIAN MAO MA DOU LING *Aristolochia mollissima* (dried root and stem: yield = 0.00037%dw), TAI WAN HU JIAO *Piper taiwanense* (stem). **Ref:** 3026, 4938.

**6467 3,12-Dioxo-15,16-epoxy-4-hydroxy-cleroda-13(16),14-diene**

C<sub>20</sub>H<sub>28</sub>O<sub>4</sub> (332.44). **Source:** *Croton hovarum*. **Ref:** 4552.

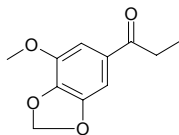




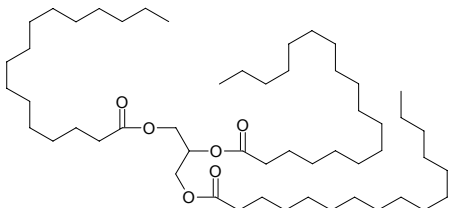
**6468 3,24-Dioxo-friedelan-29-oic acid**[105249-56-7] C<sub>30</sub>H<sub>46</sub>O<sub>4</sub> (470.70). Colorless acicular crystals, mp 294°C.Source: LEI GONG TENG *Tripterygium wilfordii*. Ref: 60.**6469 3,18-Dioxo-11 $\alpha$ -hydroxycona-1,4-diene**C<sub>21</sub>H<sub>27</sub>NO<sub>3</sub> (341.45). Orange rods (MeOH), mp 130–132°C. Source: DUANROU MAO ZHI XIE MU *Holarrhena pubescens* (bark). Ref: 5231.**6470 3,8-Dioxo-7 $\beta$ -hydroxy-7,9-cyclo-7,8-seco-24Z-tirucalladien-26-oic acid**C<sub>30</sub>H<sub>46</sub>O<sub>5</sub> (486.70). Colorless powder, mp 95–98°C, [ $\alpha$ ]<sub>D</sub> = +255.1° (*c* = 1.0,MeOH). Source: *Juliania adstringens* (bark). Ref: 3786.**6471 7,11-Dioxo-3 $\alpha$ -hydroxy-8,24Z-tirucalladien-26-oic acid**C<sub>30</sub>H<sub>44</sub>O<sub>5</sub> (484.68). Yellow powder, mp 94–95°C, [ $\alpha$ ]<sub>D</sub> = –85.7° (*c* = 1.0,MeOH). Source: *Juliania adstringens* (bark). Ref: 3786.**6472 (2,5-Dioxo-4-imidazolidinyl)carbamic acid**C<sub>4</sub>H<sub>5</sub>O<sub>4</sub>N<sub>3</sub> (159.10). Colorless block crystals, mp 244–246°C. Source: ROUCONG RONG *Cistanche deserticola*. Ref: 825.**6473 10,22-Dioxokopsan**C<sub>20</sub>H<sub>20</sub>N<sub>2</sub>O<sub>2</sub> (320.39). Source: HONG HUA RUI MU *Kopsia fruticosa* (leaf).Ref: 3830.**6474 3,11-Dioxo-labda-8(17),13(16),14-triene**C<sub>20</sub>H<sub>28</sub>O<sub>2</sub> (300.44). [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +12.1° (*c* = 2.5, CHCl<sub>3</sub>). Source: YUAN YE TAI*Jamesoniella colorata*. Ref: 3375.**6475 3,11-Dioxo-olean-12-ene**C<sub>30</sub>H<sub>46</sub>O<sub>2</sub> (438.70). White lamellar crystals (acetone), easily soluble in CHCl<sub>3</sub>and MeOH, mp 232–235°C. Source: SI CHUAN QING FENG TENG *Sabia**schumanniana* (aerial parts). Ref: 4883.**6476 8,19-Dioxo-8,14-seco-chinan-14,11-olide**C<sub>20</sub>H<sub>30</sub>O<sub>4</sub> (334.46). Colorless solid, mp 163–164°C, [ $\alpha$ ]<sub>D</sub><sup>27</sup> = –101.5° (*c* = 0.47,CHCl<sub>3</sub>). Source: LONG BAI *Juniperus chinensis* var. *kaizuka* (leaf: yield =0.00012%dw). Ref: 3050.**6477 3,22-Dioxo-20-taraxastene**C<sub>30</sub>H<sub>46</sub>O<sub>2</sub> (438.70). Colorless solid, mp 245–248°C, [ $\alpha$ ]<sub>D</sub><sup>24</sup> = +63.9° (*c* = 0.2,CHCl<sub>3</sub>). Pharm: Cytotoxic inactive (HONE-1 cell, IC<sub>50</sub> > 10 μmol/L; KB cell,IC<sub>50</sub> > 10 μmol/L; HT29 cell, IC<sub>50</sub> > 10 μmol/L). Source: RONG SHU *Ficus**microcarpa* (aerial root). Ref: 5254.**6478 3,7-Dioxo-8,24Z-tirucalladien-26-oic acid**C<sub>30</sub>H<sub>44</sub>O<sub>4</sub> (468.68). Colorless powder, mp 91–93°C, [ $\alpha$ ]<sub>D</sub> = –27.7° (*c* = 1.0,MeOH). Pharm: Cytotoxic (leukemia cells L<sub>1210</sub>, IC<sub>50</sub> = 30 μg/mL). Source:*Juliania adstringens* (bark). Ref: 3786.

**6479 3,4-Dioxymethylene-5-methoxy-1-(1-oxopropyl)benzene**

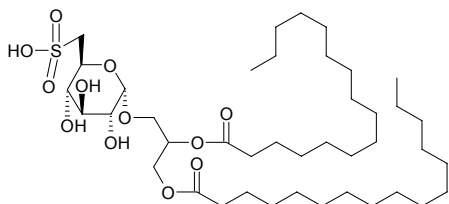
3,4-Methylenedioxy-5-methoxy-1-(1-oxopropyl)benzene C<sub>11</sub>H<sub>12</sub>O<sub>4</sub> (208.22). mp 87–88°C, 91–92°C. Source: SHA QIAN HU *Ferula borealis*. Ref: 6.

**6480 (2S)-1,3-Di-(O-palmitoyl)-2-O-octadecanoyl glycerol**

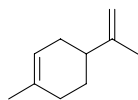
C<sub>53</sub>H<sub>102</sub>O<sub>6</sub> (835.40). Source: XI NANG MA WEI ZAO *Sargassum parvivesiculosum*. Ref: 2591.

**6481 (2S)-1,2-Di-O-palmitoyl-3-O-(6-sulpho-α-D-quinovopyranosyl) glycerol**

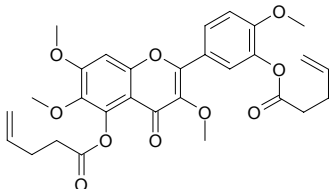
C<sub>41</sub>H<sub>78</sub>O<sub>12</sub>S (795.14). White powder. Source: XI NANG MA WEI ZAO *Sargassum parvivesiculosum*. Ref: 2591.

**6482 Dipentene**

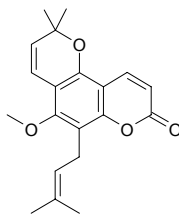
1,8-*p*-Menthadiene [138-86-3] C<sub>10</sub>H<sub>16</sub> (136.24). bp 178°C. Pharm: Antitussive (dispels phlegm); sedative; sensitizer; irritant. Source: DA YE XIANG RU *Mosla dianthera*, FENG XIANG SHU *Liquidambar formosana* [Syn. *Liquidambar taiwaniana*], GANG SONG *Baeckea frutescens*, HAI SONG ZI *Pinus koraiensis*, HU SUI ZI *Coriandrum sativum*, HUI XIANG *Foeniculum vulgare*, KUO YE XIE CAO *Valeriana officinalis* var. *latifolia*, LU DOU LE HUA *Pandanus tectorius*, MO YAO *Commiphora myrrha* [Syn. *Commiphora molmol*], RU XIANG *Boswellia carterii*, YA ER QIN *Cryptotaenia japonica*. Ref: 6, 660.

**6483 5,3'-Dipent-4-enoyloxy-3,6,7,4'-tetramethoxyflavone**

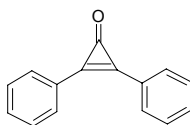
C<sub>29</sub>H<sub>30</sub>O<sub>10</sub> (538.56). mp 155–157°C. Pharm: Cytotoxic (*in vitro*, Col2, ED<sub>50</sub> = 15 μg/mL; hTERT-RPE1, ED<sub>50</sub> = 0.6 μg/mL; HUVEC, ED<sub>50</sub> = 5.5 μg/mL; KB, ED<sub>50</sub> = 0.6 μg/mL; HUVEC, ED<sub>50</sub> = 0.7 μg/mL; Lu1, ED<sub>50</sub> = 1.4 μg/mL). Source: HUANG JING YE *Vitex negundo*. Ref: 4699.

**6484 Dipetaline**

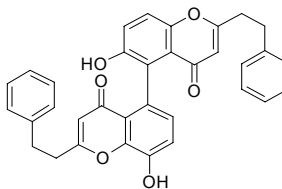
[59701-36-9] C<sub>20</sub>H<sub>22</sub>O<sub>4</sub> (326.40). Pharm: Cytotoxic (inhibits DNA biosynthesis by blocking thymidine to go into HL-60 cells). Source: MEI ZHOU HUA JIAO *Zanthoxylum americanum* [Syn. *Xanthoxylum americanum*]. Ref: 2176.

**6485 2,3-Diphenyl-2-cyclopropen-1-one**

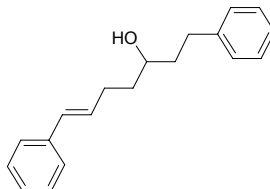
[886-38-4] C<sub>15</sub>H<sub>10</sub>O (206.25). Source: DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*]. Ref: 2.

**6486 2,2'-Di-(2-phenylethyl)-8,6'-dihydroxy-5,5'-bichromone (AH11)**

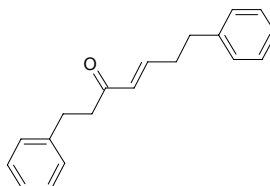
C<sub>34</sub>H<sub>26</sub>O<sub>6</sub> (530.58). Light dark-yellow powder, mp 239–242°C. Source: CHEN XIANG *Aquilaria agallocha*. Ref: 13.

**6487 trans-1,7-Diphenyl-1-hepten-5-ol**

*trans*-1,7-Diphenyl-5-hydroxy-1-heptene [87095-76-9] C<sub>19</sub>H<sub>22</sub>O (266.38). White rhombic crystals (hexane–acetone), mp 47–49°C, [α]<sub>D</sub><sup>20</sup> = +7° (*c* = 1.2, chloroform). Pharm: Anti-inflammatory (swollen foot model caused by carrageenan); nematocide (EC<sub>95</sub> = 0.7 μg/mL). Source: CAO DOU KOU *Alpinia katsumadai*. Ref: 978, 1069, 1151, 1152.

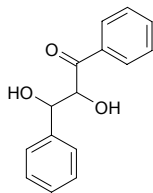
**6488 1,7-Diphenylhept-4-en-3-one**

C<sub>19</sub>H<sub>20</sub>O (264.37). Colorless or yellow oleaginous liquid. Pharm: 5α-Reductase inhibitor (rat prostate 5α-Reductase, IC<sub>50</sub> = (390±30) μmol/L, control Curcumin, IC<sub>50</sub> > 1000 μmol/L, Finasteride, IC<sub>50</sub> = 0.01 μmol/L)<sup>[5345]</sup>. Source: GAO LIANG JIANG *Alpinia officinarum*. Ref: 435, 5345.

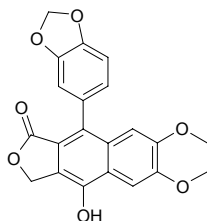


**6489 1,3-Diphenylpropane-1,2-diol-3-one**

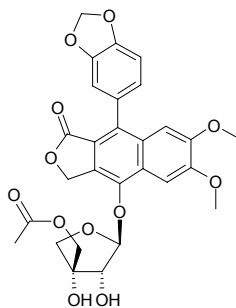
$C_{15}H_{14}O_3$  (242.28). Source: LUO HUA SHENG *Arachis hypogaea*. Ref: 6.

**6490 Diphyllin**

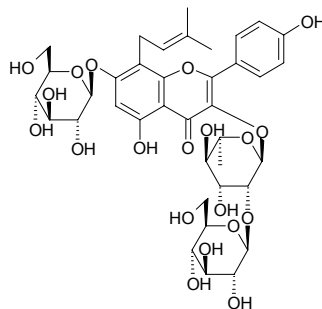
[22055-22-7]  $C_{21}H_{16}O_7$  (380.36). mp 291°C. Pharm: Antineoplastic; cytotoxic (hmn LoVo Cell Line, *in Vitro*,  $IC_{50} = (7.55 \pm 0.75) \mu\text{L/mL}$ )<sup>[4206]</sup>; cytotoxic (*in vitro*, 212,  $ED_{50} = 2.7 \mu\text{g/mL}$ , control *cis*-Platin,  $ED_{50} = 1.3 \mu\text{g/mL}$ ; CaSki, no significant activity, control Actinomycin D,  $ED_{50} = 0.0019 \mu\text{g/mL}$ ; Hep3B,  $ED_{50} = 3.6 \mu\text{g/mL}$ , control 5-FU,  $ED_{50} = 0.0715 \mu\text{g/mL}$ ; SiHa, no significant activity, control Actinomycin D,  $ED_{50} = 0.00081 \mu\text{g/mL}$ ; HepG2,  $ED_{50} = 0.4 \mu\text{g/mL}$ , control 5-FU,  $ED_{50} = 0.033 \mu\text{g/mL}$ ; HT29,  $ED_{50} = 2.5 \mu\text{g/mL}$ , control 5-FU,  $ED_{50} = 0.074 \mu\text{g/mL}$ ; HCT116,  $ED_{50} = 0.8 \mu\text{g/mL}$ , control 5-FU,  $ED_{50} = 0.48 \mu\text{g/mL}$ ; MCF7, no significant activity; MCF7-ras, no significant activity)<sup>[4612]</sup>; piscicide. Source: JUE CHUANG *Rostellularia procumbens* [Syn. *Justicia procumbens*] (whole herb: yield = 0.00024%dw)<sup>[4612]</sup>, SHAN HE YE *Diphylleia grayi* (rhizome: content = 0.064%)<sup>[5508]</sup>, WO ER QI *Diphylleia sinensis* (rhizome: content scope = 0.1%–0.5%, mean content of 8 origins = 0.388%)<sup>[5508]</sup>, *Haplophyllum patavinum* (shoot). Ref: 6, 279, 658, 4206, 4612, 5508.

**6491 Diphyllin acetylapioside**

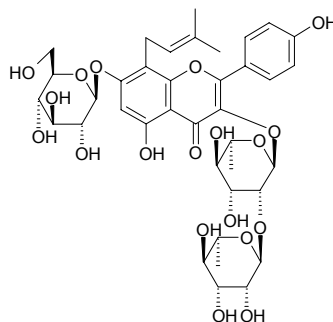
$C_{28}H_{26}O_{12}$  (554.51). Pharm: Anti-inflammatory (5-lipoxygenase inhibitor)<sup>[4415]</sup>. Source: XI BAN YA YUN XIANG CAO *Haplophyllum hispanicum*. Ref: 4415.

**6492 Diphyloside A**

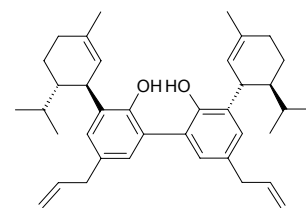
Ikarisoside C [113558-11-5]  $C_{38}H_{48}O_{20}$  (824.79). Yellow powder, mp 204–206°C. Source: CHUAN E YIN YANG HUO *Epimedium fargesii*, CU MAO YIN YANG HUO *Epimedium acuminatum*, WAN SHAN YIN YANG HUO *Epimedium wanshanense*, YIN YANG HUO *Epimedium brevicornum*. Ref: 465, 565, 567, 624.

**6493 Diphyloside B**

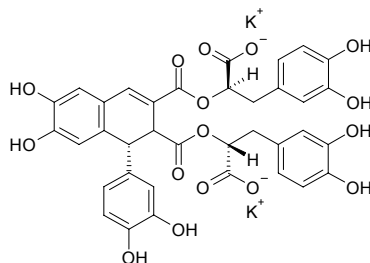
[118544-18-6]  $C_{38}H_{48}O_{19}$  (808.79). Yellow powder, mp 187–189°C. Source: WAN SHAN YIN YANG HUO *Epimedium wanshanense*, CU MAO YIN YANG HUO *Epimedium acuminatum*. Ref: 465, 624.

**6494 Dipiperitylmagnolol**

$C_{38}H_{50}O_2$  (538.82). Source: DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*]. Ref: 2.

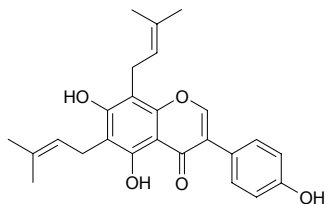
**6495 Dipotassium radosiin**

$C_{36}H_{28}K_2O_{16}$  (794.81). Tan amorphous powder,  $[\alpha]_D^{22} = -113.4^\circ$  ( $c = 0.91$ ,  $H_2O$ ). Pharm: Contraceptive. Source: XIN ZANG JIA ZI CAO *Arnebia euchroma*. Ref: 2187.

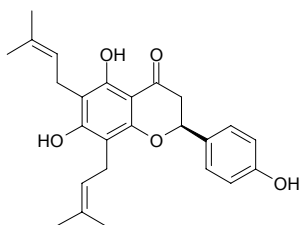


**6496 6,8-Diprenylgenistein**

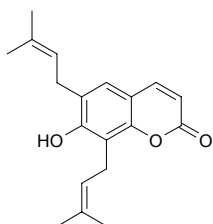
5,7,4'-Trihydroxy-6,8-diprenylisoflavone C<sub>25</sub>H<sub>26</sub>O<sub>5</sub> (406.48). Yellow amorphous. **Pharm:** Antifungal (dermatophyte *Trichophyton mentagrophytes*, 250µg/mL)<sup>[2347]</sup>. **Source:** KU TAN ZI *Millettia pachycarpa*, SAN XIAU YE SHAN DOU GEN *Euchresta japonica*, PAN YUAN YU TENG *Derris scandens*, *Erythrina vogelii*. **Ref:** 1521, 2347, 4421.

**6497 6,8-Diprenylnaringenin**

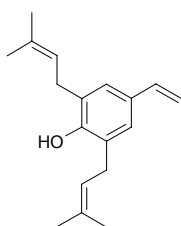
Lonchocarpol A C<sub>25</sub>H<sub>28</sub>O<sub>5</sub> (408.50). **Pharm:** Cytotoxic (cyclooxygenase-2 inhibitor, IC<sub>50</sub> = 3.9µg/mL)<sup>[5038]</sup>, cytotoxic (mouse mammary organ culture assay, 86% at 10µg/mL)<sup>[5038]</sup>. **Source:** PI JIU HUA *Humulus lupulus* (strobile), ZHEN YE XUE TONG *Macaranga confiera*. **Ref:** 4789, 5038.

**6498 6,8-Diprenylumbelliferone**

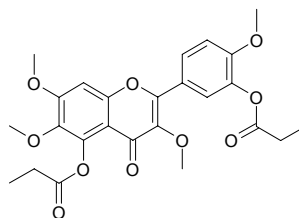
C<sub>19</sub>H<sub>22</sub>O<sub>3</sub> (298.39). **Pharm:** Antineoplastic (Raji cells, antitumor promotor, *in vivo*, inhibits TPA-induced EBV-EA activation, compound concentration = 500(mol ratio/32pmol TPA): EBV-EA-positive cells = (23.7±1.3)% (viability > 80%), β-Carotene, EBV-EA-positive cells = (34.3±1.1)% (viability = 60%), Curcumin, EBV-EA-positive cells = (22.8±1.8)% (viability > 80%), compound IC<sub>50</sub> = 216(mol ratio/32pmol TPA), β-Carotene, IC<sub>50</sub> = 400(mol ratio/32pmol TPA), Curcumin, IC<sub>50</sub> = 341(mol ratio/32pmol TPA)). **Source:** CHENG ZI *Citrus junos*. **Ref:** 5048.

**6499 2,6-Diprenyl-4-vinylphenol**

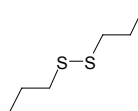
C<sub>18</sub>H<sub>24</sub>O (256.39). Amorphous powder. **Source:** FENG JIAO *Apis mellifera ligustica*. **Ref:** 4124.

**6500 5,3'-Dipropanoyloxy-3,6,7,4'-tetramethoxyflavone**

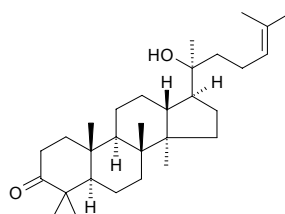
C<sub>25</sub>H<sub>26</sub>O<sub>10</sub> (486.48). mp 131~132°C. **Pharm:** Cytotoxic (*in vitro*, Col2, ED<sub>50</sub> > 20µg/mL; hTERT-RPE1, ED<sub>50</sub> = 0.5µg/mL; HUVEC, ED<sub>50</sub> = 6.5µg/mL; KB, ED<sub>50</sub> = 0.6µg/mL; HUVEC, ED<sub>50</sub> = 0.4µg/mL; Lu1, ED<sub>50</sub> = 1.0µg/mL). **Source:** HUANG JING YE *Vitex negundo*. **Ref:** 4699.

**6501 Dipropyl disulfide**

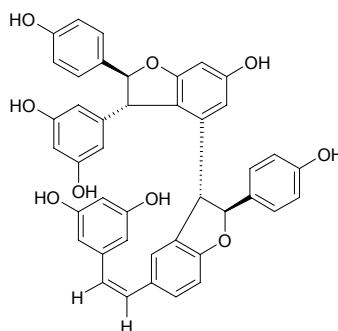
4,5-Dithiooctane [629-19-6] C<sub>6</sub>H<sub>14</sub>S<sub>2</sub> (150.31). Colorless volatile oil with a strong odour of garlic. **Pharm:** Antifungal (plant pathogenic fungi *Cladosporium sphaerospermum*, MIC = 0.1µg, control Nystatin, MIC = 1.0µg; *Cladosporium cladosporioides*, MIC = 1.0µg, control Nystatin, MIC = 1.0µg)<sup>[5159]</sup>; antineoplastic (mechanism-based yeast bioassay for DNA-modifying agents, mutant yeast *Saccharomyces cerevisiae*: RS 188N (rad+), IC<sub>12</sub> = 389µg/mL; RS 321, IC<sub>12</sub> = 68µg/mL; RS 52YK (rad 52Y), IC<sub>12</sub> = 11µg/mL, control Camptothecin, RS 52YK(rad 52Y), IC<sub>12</sub> = 0.6µg/mL)<sup>[5159]</sup>; flavorant. **Source:** SUAN CHOU MU JI CAO *Petiveria alliacea* (root, stem and leaf), DA SUAN *Allium sativum*, *Allium* sp. **Ref:** 2, 658, 5159.

**6502 Dipterocarpol**

[471-69-2] C<sub>30</sub>H<sub>50</sub>O<sub>2</sub> (442.73). **Pharm:** Induces growth of radial root nodule commensal "Frankia". **Source:** RU DU XIANG *Pistacia terebinthus*, BING PIAN *Dryobalanops aromatica*. **Ref:** 2, 658.

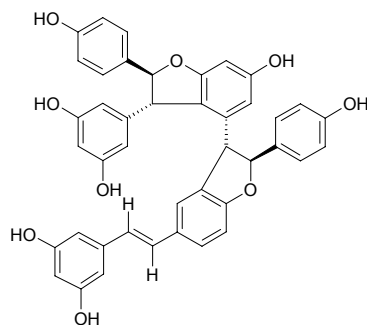
**6503 cis-Diptoindonesin B**

C<sub>42</sub>H<sub>32</sub>O<sub>9</sub> (680.72). White amorphous powder, [α]<sub>D</sub><sup>20</sup> = -99° (c = 0.1, MeOH). **Source:** JU YUAN YE LONG NAO XIANG *Dryobalanops oblongifolia*. **Ref:** 3422.

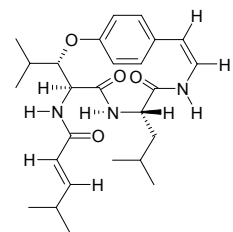


**6504 trans-Diptoindonesin B**

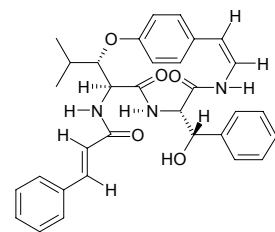
$C_{42}H_{32}O_9$  (680.72). White amorphous powder,  $[\alpha]_D^{20} = -192^\circ$  ( $c = 0.1$ , MeOH). Source: JU YUAN YE LONG NAO XIANG *Dryobalanops oblongifolia*. Ref: 3422.

**6505 Discarine M**

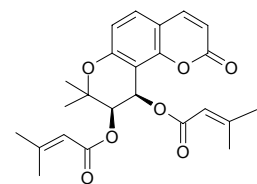
$C_{26}H_{37}N_3O_5$  (455.60). White amorphous powder,  $[\alpha]_D^{20} = -176.7^\circ$  ( $c = 0.2$ , MeOH:CHCl<sub>3</sub> = 1:1). Source: *Discaria americana* (bark). Ref: 3793.

**6506 Discarine N**

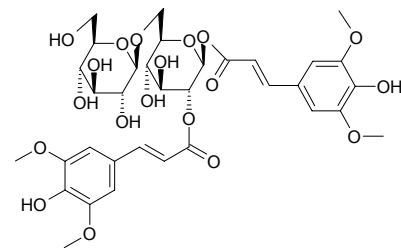
$C_{32}H_{33}N_3O_5$  (539.64). White powder, mp 233~235°C,  $[\alpha]_D^{20} = +98.1^\circ$  ( $c = 0.092$ , MeOH:CHCl<sub>3</sub> = 1:1). Source: *Discaria americana* (bark). Ref: 3793.

**6507 Disenecionyl cis-khellactone**

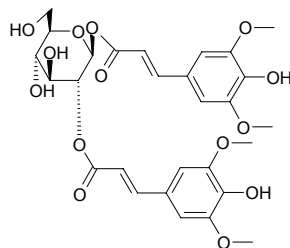
$C_{24}H_{26}O_7$  (426.47). Pharm: Antispasmodic; coronary vasodilator. Source: HUI BAI XIE HAO *Seseli incanum*, LI BA NEN XIE HAO *Seseli libanotis*. Ref: 658.

**6508 1,2-Di-O-E-sinapoyl-β-gentiobiose**

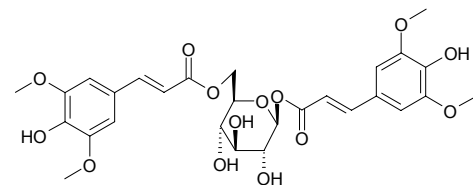
$C_{34}H_{42}O_{19}$  (754.70). Source: OU ZHOU YOU CAI *Brassica napus* (seed). Ref: 5289.

**6509 1,2-Di-O-E-sinapoyl-β-glucopyranose**

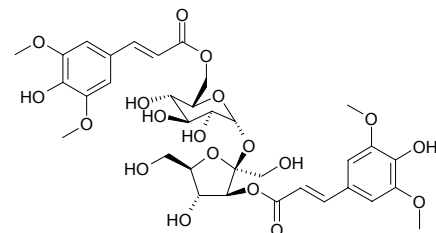
$C_{28}H_{32}O_{14}$  (592.56). Source: OU ZHOU YOU CAI *Brassica napus* (seed). Ref: 5289.

**6510 1,6-Di-O-sinapoylglucose**

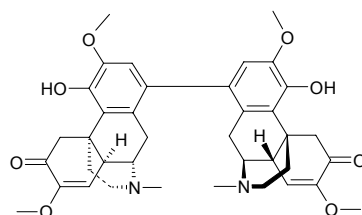
1,6-Di-O-E-sinapoyl-β-glucopyranose  $C_{28}H_{32}O_{14}$  (592.56). Source: OU ZHOU YOU CAI *Brassica napus* (seed). Ref: 5289.

**6511 3',6-Disinapoylsucrose**

$C_{34}H_{42}O_{19}$  (754.7). Yellow prisms, mp 133~135° (MeOH). Source: CHOU CAO *Ruta graveolens* (dried aerial parts). Ref: 3073.

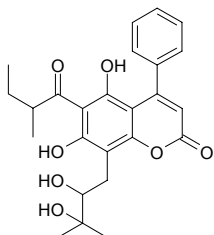
**6512 Disinomenine**

[596-58-7]  $C_{38}H_{44}N_2O_8$  (656.78). mp 222°C. Source: BIAN FU GE *Menispermum dauricum*, QING FENG TENG *Sinomenium acutum*. Ref: 6.

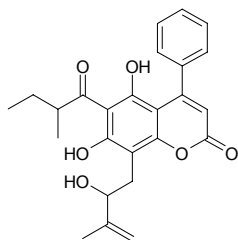


**6513 Dispardiol B**

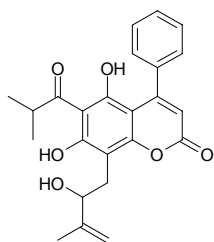
5,7-Dihydroxy-8-(2,3-dihydroxy-3-methylbutyl)-6-(2-methyl-1-oxobutyl)-4-phenyl-2*H*-[1]benzopyran-2-one C<sub>25</sub>H<sub>28</sub>O<sub>7</sub> (440.50).  $[\alpha]_D^{25} = 0^\circ$  ( $c = 0.08$ , CHCl<sub>3</sub>). **Source:** BU DENG HONG HOU KE *Calophyllum dispar* (fruit and stem cortex). **Ref:** 5196.

**6514 Disparinol B**

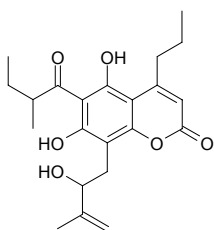
C<sub>25</sub>H<sub>26</sub>O<sub>6</sub> (422.48). **Pharm:** Cytotoxic (KB, EC<sub>50</sub> = 7 μg/mL). **Source:** BU DENG HONG HOU KE *Calophyllum dispar* (fruit and stem cortex). **Ref:** 5196.

**6515 Disparinol D**

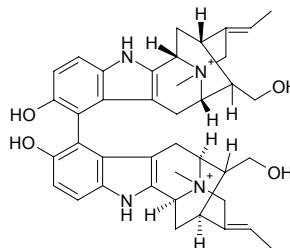
5,7-Dihydroxy-8-(2-hydroxy-3-methylbut-3-enyl)-6-(2-methyl-1-oxopropyl)-4-phenyl-2*H*-[1]benzopyran-2-one C<sub>24</sub>H<sub>24</sub>O<sub>6</sub> (408.46).  $[\alpha]_D^{25} = 0^\circ$  ( $c = 0.16$ , CHCl<sub>3</sub>). **Pharm:** Cytotoxic (KB, EC<sub>50</sub> = 21 μg/mL). **Source:** BU DENG HONG HOU KE *Calophyllum dispar* (fruit and stem cortex). **Ref:** 5196.

**6516 Disparpropylinol B**

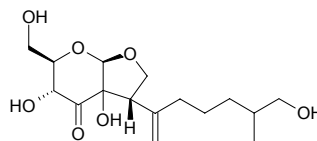
5,7-Dihydroxy-8-(2-hydroxy-3-methylbut-3-enyl)-6-(2-methyl-1-oxobutyl)-4-propyl-2*H*-[1]benzopyran-2-one C<sub>22</sub>H<sub>28</sub>O<sub>6</sub> (388.46). Yellow crystals, mp 111~112°C (*n*-hexane:EtOAc = 9:1),  $[\alpha]_D^{25} = 0^\circ$  ( $c = 0.6$ , CHCl<sub>3</sub>). **Pharm:** Cytotoxic (KB, EC<sub>50</sub> = 4 μg/mL). **Source:** BU DENG HONG HOU KE *Calophyllum dispar* (fruit and stem cortex). **Ref:** 5196.

**6517 Dispegatine**

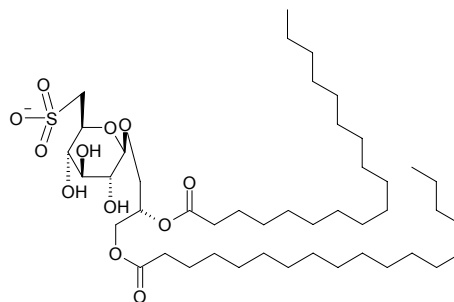
[102488-56-2] C<sub>40</sub>H<sub>48</sub>N<sub>4</sub>O<sub>4</sub><sup>2+</sup> (648.85). Colorless square crystals, mp > 280°C (dec),  $[\alpha]_D^{23} = +230^\circ$  ( $c = 0.1$ , methanol). **Pharm:** Adrenergic  $\alpha$ -receptor blocker. **Source:** HAI NAN LUO FU MU *Rauvolfia verticillata* var. *hainanensis*. **Ref:** 46.

**6518 Dissectol A**

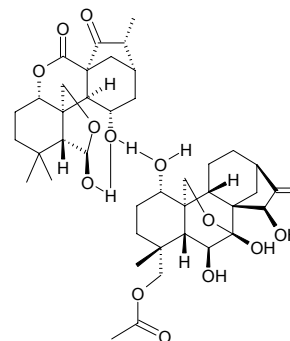
C<sub>16</sub>H<sub>26</sub>O<sub>7</sub> (330.38). Syrup,  $[\alpha]_D^{26} = +125.0^\circ$  ( $c = 2.0$ , MeOH). **Pharm:** Antitubercular (*Mycobacterium tuberculosis*, showed modest activity when compared to rifampicin in an agar diffusion assay). **Source:** SHEN LIE YE JIAO HAO *Incarvillea dissectifoliola*. **Ref:** 5403.

**6519 (2*S*)-1,2-Distearoyl-3-*O*-(6-sulpho- $\alpha$ -*D*-quinovopyranosyl)-glycerol**

C<sub>45</sub>H<sub>85</sub>O<sub>12</sub>S<sup>-</sup> (850.24). **Source:** KA SHI QIAN GOU ZAO *Amphidinium carterae*. **Ref:** 4448.

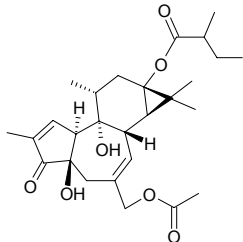
**6520 Diterp-Complex-RA**

C<sub>42</sub>H<sub>60</sub>O<sub>13</sub> (772.94). mp 213~215°C,  $[\alpha]_D = -46.5^\circ$  ( $c = 0.16$ , MeOH). **Source:** XIA YE XIANG CHA CAI *Isodon angustifolia*. **Ref:** 4067.

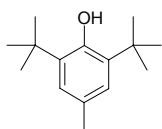


**6521 Diterpenoid EF-D**

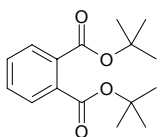
$C_{27}H_{38}O_7$  (474.60). **Pharm:** Irritant (to skin). **Source:** NONG DA JI *Euphorbia fortissima*. **Ref:** 658.

**6522 2,6-Ditertbutyl-4-methyl phenol**

[128-37-0]  $C_{15}H_{24}O$  (220.36). **Source:** REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*], XI YANG SHEN *Panax quinquefolium*. **Ref:** 2.

**6523 Ditertbutyl phthalate**

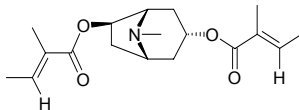
$C_{16}H_{22}O_4$  (278.35). **Source:** SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. **Ref:** 2.

**6524 Dithiocyclopentene**

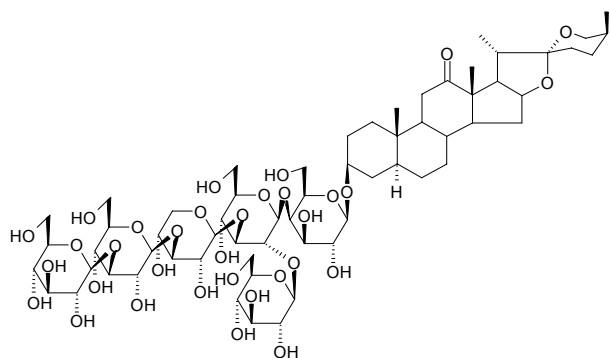
$C_3H_4S_2$  (104.19). **Source:** DA SUAN *Allium sativum*. **Ref:** 2.

**6525 L-3α,6β-Ditigloyloxytropane**

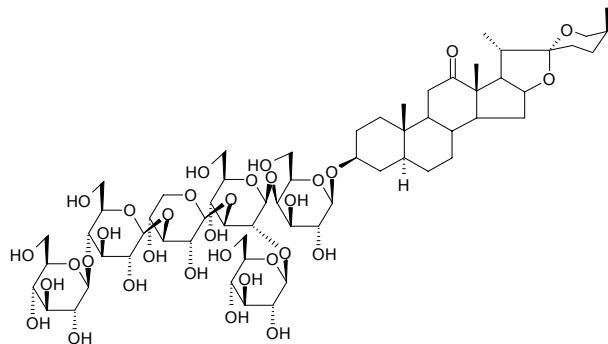
[23517-33-1]  $C_{18}H_{27}NO_4$  (321.42). **Source:** MAO MAN TUO LUO GEN *Datura innoxia*. **Ref:** 6, 660.

**6526 Diuranthoside F**

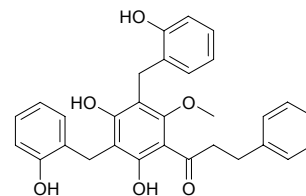
$C_{62}H_{100}O_{33}$  (1373.47). White powder. **Source:** NAN CHUAN LU SI CAO *Diuranthera inarticulata*. **Ref:** 2122.

**6527 Diuranthoside G**

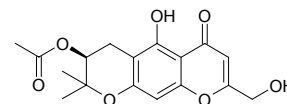
$C_{62}H_{100}O_{33}$  (1373.47). White powder. **Source:** NAN CHUAN LU SI CAO *Diuranthera inarticulata*. **Ref:** 2122.

**6528 Diuaretin**

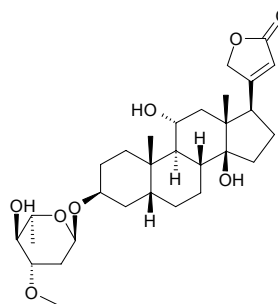
$C_{30}H_{28}O_6$  (484.55). Colorless crystals, mp 127~131°C (CHCl<sub>3</sub>). **Pharm:** Cytotoxic (hmn promyelocytic leukemia HL-60 cells, IC<sub>50</sub> = 6.1 μmol/L). **Source:** JIAN ZI YU PAN *Uvaria acuminata* (root). **Ref:** 4261.

**6529 Divaricatol**

$C_{17}H_{18}O_7$  (334.33). White crystalline powder, mp 168~171°C,  $[\alpha]_{589nm} = -30^\circ$ . **Pharm:** Analgesic (mus writhing method, orl, 1 mg/kg). **Source:** FANG FENG *Saposhnikovia divaricata* [Syn. *Ledebourriella seseloides*]. **Ref:** 3508.

**6530 Divaricoside**

Sarmentogenin 3-O-α-oleandroside  $C_{30}H_{46}O_8$  (534.70). mp 220~223°C. **Pharm:** Cardiotonic (one of main components in divasides). **Source:** YANG JIAO AO ZI *Strophanthus divaricatus*. **Ref:** 4, 6, 658.

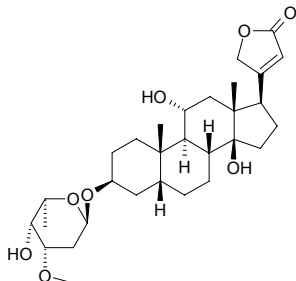
**6531 Divinyl sulfide**

Vinyl sulfide [627-51-0]  $C_4H_6S$  (86.16). **Source:** DA SUAN *Allium sativum*. **Ref:** 2.

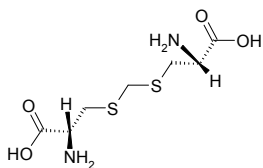


**6532 Divostroside**

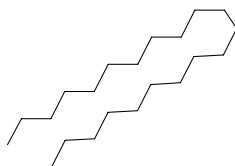
Sarmentogenin 3-*O*- $\alpha$ -*L*-diginoside C<sub>30</sub>H<sub>46</sub>O<sub>8</sub> (534.70). mp 225~231°C.  
**Pharm:** Toxin (vertebrate). **Source:** YANG JIAO AO ZI *Strophanthus divaricatus*. **Ref:** 6, 658.

**6533 L-Djenkolic acid**

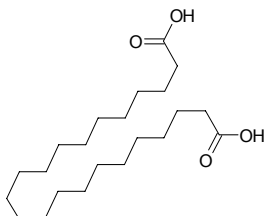
C<sub>7</sub>H<sub>14</sub>N<sub>2</sub>O<sub>4</sub>S<sub>2</sub> (254.33). **Pharm:** Toxin. **Source:** YU ZHUANG HE HUAN *Albizia lophantha*, *Mimosa* sp., *Acacia* sp. **Ref:** 658.

**6534 Docosane**

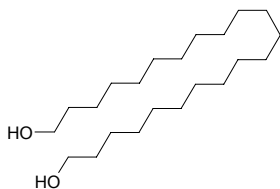
[629-97-0] C<sub>22</sub>H<sub>46</sub> (310.61). **Source:** DANG SHEN *Codonopsis pilosula*, SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. **Ref:** 2.

**6535 Docosanedioic acid**

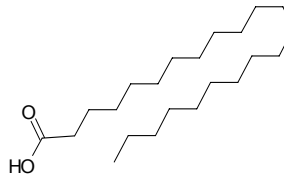
[505-56-6] C<sub>22</sub>H<sub>42</sub>O<sub>4</sub> (370.58). mp 124.2~124.4°C. **Source:** LIN BEI ZI *Toxicodendron succedaneum* [Syn. *Rhus succedanea*], QI ZI *Rhus verniciflua* [Syn. *Toxicodendron verniciflum*]. **Ref:** 6.

**6536 1,22-Docosanediol**

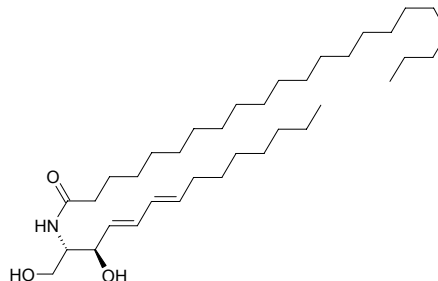
[22513-81-1] C<sub>22</sub>H<sub>46</sub>O<sub>2</sub> (342.61). **Source:** MU JIN PI *Hibiscus syriacus*. **Ref:** 519.

**6537 Docosanoic acid**

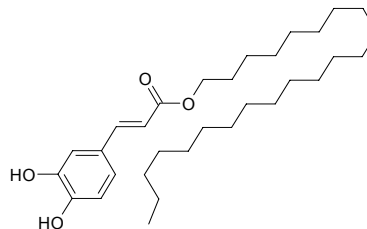
[112-85-6] C<sub>22</sub>H<sub>44</sub>O<sub>2</sub> (340.59). **Source:** BU GU ZHI *Psoralea corylifolia*, GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], GUANG JING QIAN CAO *Rubia wallichiana* (stem), QIANG HUO *Notopterygium incisum*, WU SE MEI *Lantana camara* (aerial parts). **Ref:** 2, 4309, 4369.

**6538 (4E,6E,2S,3R)-2-N-Docosanoyl-4,6-tetradecasphingadienine**

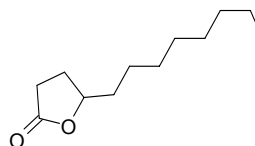
C<sub>36</sub>H<sub>69</sub>NO<sub>3</sub> (563.96). White powder; mp 71.8°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -3.6° (c = 0.176, CHCl<sub>3</sub>). **Pharm:** Neurotrophic (neurite outgrowth promoter, measuring neurite length of PC12 cell, 10 $\mu$ mol/L, activity greater than that of 50ng/mL NGF). **Source:** BAI JIANG CAN *Bombyx mori*. **Ref:** 4684.

**6539 Docosyl caffeate**

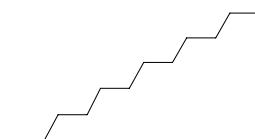
C<sub>31</sub>H<sub>52</sub>O<sub>4</sub> (488.76). mp 115°C. **Source:** SHAN DOU GEN *Sophora subprostrata* [Syn. *Sophora tonkinensis*], ZI CAO *Lithospermum erythrorhizon*. **Ref:** 6, 408, 2193.

**6540  $\gamma$ -Dodecalactone**

[2305-05-7] C<sub>12</sub>H<sub>22</sub>O<sub>2</sub> (198.31). **Source:** XING REN *Prunus armeniaca*. **Ref:** 2.

**6541 Dodecane**

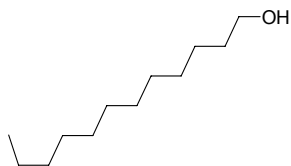
[112-40-3] C<sub>12</sub>H<sub>26</sub> (170.34). **Source:** REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], XI YANG SHEN *Panax quinquefolium*, LANG DU *Stellera chamaejasme*. **Ref:** 2, 660.



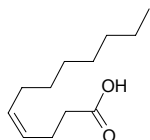


**6542 Dodecanol**

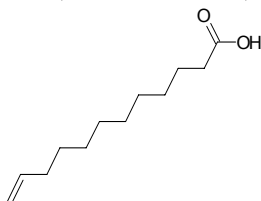
[112-53-8] C<sub>12</sub>H<sub>26</sub>O (186.34). Source: DANG GUI *Angelica sinensis*. Ref: 2.

**6543 cis-4-Dodecenoic acid**

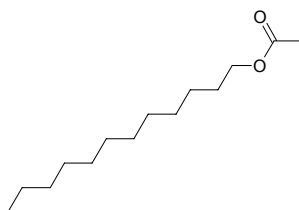
Linderic acid [2430-94-6] C<sub>12</sub>H<sub>22</sub>O<sub>2</sub> (198.31). mp 1.0~1.3°C, bp 170~172°C/13mmHg. Source: ZHEN CAI *Litsea pungens*. Ref: 6.

**6544 Dodecenoic acid**

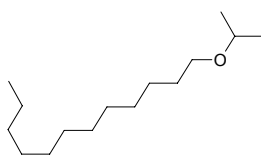
C<sub>12</sub>H<sub>22</sub>O<sub>2</sub> (198.31). bp 165~168°C/8mmHg. Source: BING LANG *Areca catechu*, FU LING *Poria cocos*, YANG RU *Capra hircus*; *Ovis aries*. Ref: 2, 6.

**6545 n-Dodecyl acetate**

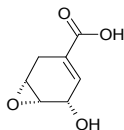
[112-66-3] C<sub>14</sub>H<sub>28</sub>O<sub>2</sub> (228.38). bp 150.5~151.5°C/15mmHg. Source: HEI MA YI *Formica fusca*. Ref: 6.

**6546 Dodecyl isopropyl ether**

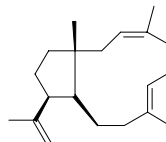
C<sub>15</sub>H<sub>32</sub>O (228.42). Source: DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*]. Ref: 2.

**6547 Doederleinic acid**

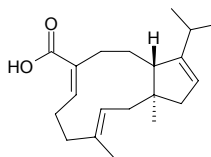
7(β)-Oxa-bicyclo-[4,1,0]-hept-3-ene-3-carboxylic acid-5(β)-hydroxy C<sub>7</sub>H<sub>8</sub>O<sub>4</sub> (156.14). White granular powder, mp 185~186°C, [α]<sub>D</sub><sup>10</sup> = -13.8° (c = 0.2, EtOH). Source: DA YE CAI *Selaginella doederleinii*. Ref: 484.

**6548 (-)-Dolabella-3,7,18-triene**

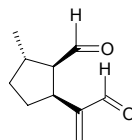
C<sub>20</sub>H<sub>32</sub> (272.48). Source: KAN MAI NIANG ZHUANG SHA CAO *Cyperus alopecuroides* (essential oil). Ref: 5129.

**6549 Dolabeserpenoic acid A**

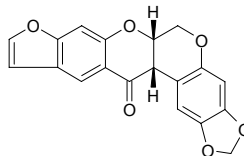
(3E,7Z)-Dollabella-3,7,12-trien-17-oic acid C<sub>20</sub>H<sub>30</sub>O<sub>2</sub> (302.46). Amorphous powder. [α]<sub>D</sub> = -32.1° (c = 1.5, CHCl<sub>3</sub>). Pharm: Antifungal. Source: PU FU QIANG DAO YAO *Hypoestes serpens*. Ref: 2063.

**6550 Dolichodial**

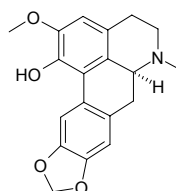
[5951-57-5] C<sub>10</sub>H<sub>14</sub>O<sub>2</sub> (166.22). Pharm: Anthelmintic; lacrimator. Source: MA SHI XIANG KE KE *Teucrium marum*. Ref: 658.

**6551 Dolineone**

[10065-28-8] C<sub>19</sub>H<sub>12</sub>O<sub>6</sub> (336.30). mp 233~235°C. Pharm: Antiviral (HSV-1, 50μg/mL, InRt = 15.4%; HSV-2, 50μg/mL, InRt = 24.4%). Source: DI GUA ZI *Pachyrhizus erosus*, DOU SHU *Pachyrhizus erosus* (seed). Ref: 6, 4180.

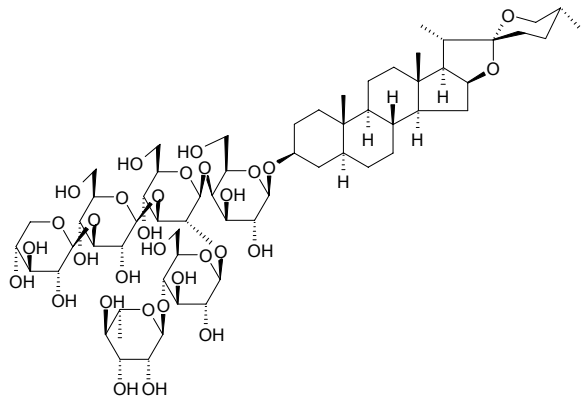
**6552 Domesticine**

[476-71-1] C<sub>19</sub>H<sub>19</sub>NO<sub>4</sub> (325.37). mp 115~117°C. Pharm: Convulsant (high dose, warm-blooded animal such as dog); inhibits CNS with activity similar to that of morphine (poikilotherm such as frog); inhibits heart (rbt and frog, *in vitro*); reduces intestinal vessel tension (gpg, *in vitro*); mild anesthetic (low dose, warm-blooded animal such as mus or dog); paralyzes striated muscle; paralyzes uterus (high dose, rbt, *in vitro*); uterine stimulant (low dose, rbt, *in vitro*); rises intestinal vessel tension (gpg, *in vivo*). Source: GE CAI KE SHI ZI JIN *Corydalis gortschakovii*, JIAN JU ZI JIN *Corydalis suaveolens* [Syn. *Corydalis sheareri*], NAN TIAN ZHU GEN *Nandina domestica*, NAN TIAN ZHU GENG *Nandina domestica*, NAN TIAN ZHU ZI *Nandina domestica*. Ref: 4, 6, 658.

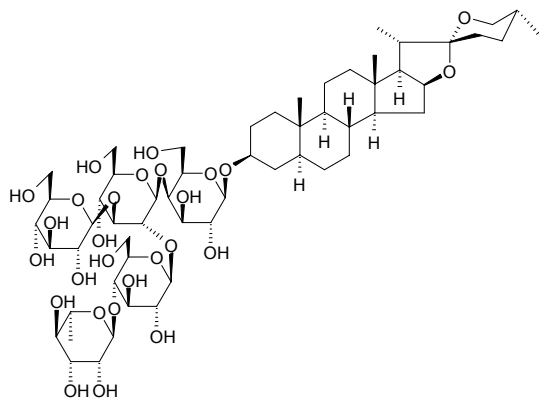


**6553 Dongnoside A**

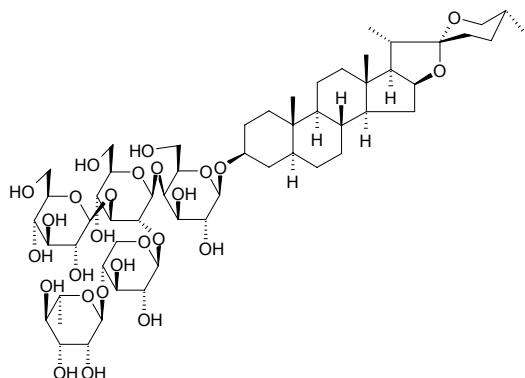
3-*O*-[ $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)-[ $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-galactopyranoside] [149664-94-8] C<sub>62</sub>H<sub>102</sub>O<sub>31</sub> (1343.49). mp 265~270°C, [ $\alpha$ ]<sub>D</sub> = -51.5°. Source: DONG YI HAO JIAN MA *Agave east-one*. Ref: 2503.

**6554 Dongnoside B**

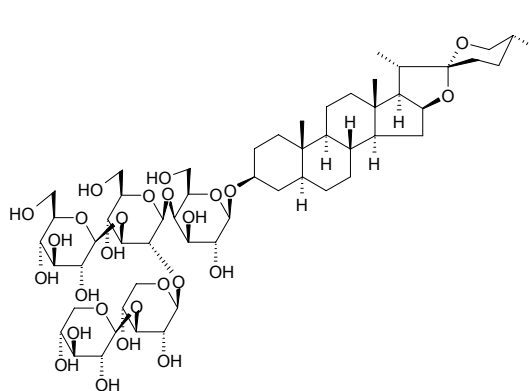
3-*O*-[ $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-galactopyranoside] [149664-93-7] C<sub>57</sub>H<sub>94</sub>O<sub>27</sub> (1211.37). mp 275~277°C, [ $\alpha$ ]<sub>D</sub> = -50.8°. Source: DONG YI HAO JIAN MA *Agave east-one*. Ref: 2503.

**6555 Dongnoside C**

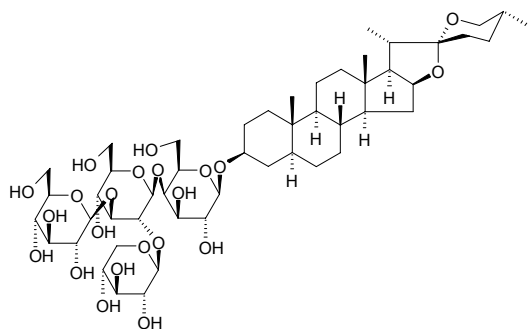
3-*O*-[ $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 2)-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-galactopyranoside] [125265-73-8] C<sub>56</sub>H<sub>92</sub>O<sub>26</sub> (1181.34). Source: DONG YI HAO JIAN MA *Agave east-one*. Ref: 10.

**6556 Dongnoside D**

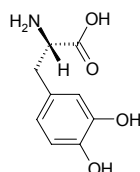
3-*O*-[ $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 3)-[ $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-galactopyranoside] [125288-52-0] C<sub>55</sub>H<sub>90</sub>O<sub>26</sub> (1167.31). Source: DONG YI HAO JIAN MA *Agave east-one*. Ref: 10.

**6557 Dongnoside E**

3-*O*-[ $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 3)-[ $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-galactopyranoside] [125265-72-7] C<sub>50</sub>H<sub>82</sub>O<sub>22</sub> (1035.20). Source: DONG YI HAO JIAN MA *Agave east-one*. Ref: 10.

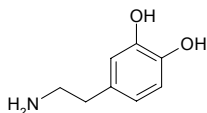
**6558 Dopa**

*L*-3,4-Dihydroxyphenylalanine [59-92-7] C<sub>9</sub>H<sub>11</sub>NO<sub>4</sub> (197.19). mp (-) 283°C, ( $\pm$ ) 271~272°C (dec). Pharm: Precursor to biosynthesis of arterenol and dopamine; LD<sub>50</sub> (mus, orl) = 3650mg/kg, (rat, orl)  $\geq$  4000mg/kg, (rbt, orl) = 609mg/kg. Source: CAN DOU *Vicia faba*, MAO DOU *Mucuna cochinchinensis*, CHANG CHUN YOU MA TENG *Mucuna sempervirens*, BAI HUA YOU MA TENG *Mucuna birdwoodiana*, LI DOU *Stizolobium capitatum*, CAN DOU YE *Vicia faba*, CAN DOU JIA KE *Vicia faba*, MA CHI XIAN *Portulaca oleracea*, XU SUI ZI JING ZHONG BAI ZHI *Euphorbia lathyris*, *Lupinus* sp. Ref: 6, 658.

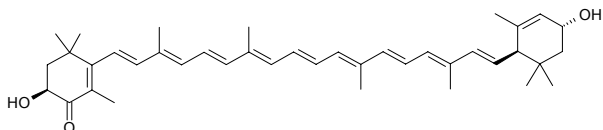


**6559 Dopamine**

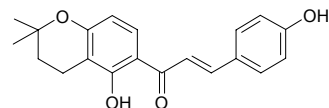
4-(2-Aminoethyl)pyrocatechol [51-61-6]  $C_8H_{11}NO_2$  (153.18). **Pharm:** Enhances myocardial contractility and increases blood flow; improves peripheral circulation and markedly increases amount of urine; neurotransmitter (in adrenal medulla and brain); Precursor to biosynthesis of adrenalin. **Source:** AN LU LONG SHE LAN *Lophophora williamsii*, JIN QUE ER *Cytisus scoparius* [Syn. *Spartium scoparium*], MA CHI XIAN *Portulaca oleracea*, SHAN YAO *Dioscorea batatas* [Syn. *Dioscorea opposita*], XIANG JIAO *Musa paradisiaca* var. *sapientum* [Syn. *Musa sapientum*]. **Ref:** 2, 6, 658.

**6560 Doradexanthin**

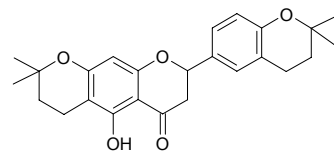
4-Ketolutein [29125-77-7]  $C_{40}H_{54}O_3$  (582.87). **Source:** LI YU PI *Cyprinus carpio*, JIN YU *Carassius auratus*. **Ref:** 6, 660.

**6561 Dorsmanin A**

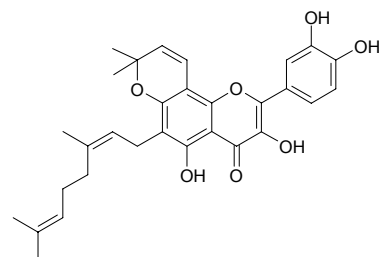
$C_{20}H_{20}O_4$  (324.38). **Source:** MAN NI DUO TAN CAO *Dorstenia mannii* (aerial parts). **Ref:** 5116.

**6562 Dorsmanin B**

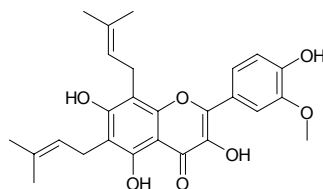
$C_{25}H_{28}O_5$  (408.50). **Source:** MAN NI DUO TAN CAO *Dorstenia mannii* (aerial parts). **Ref:** 5116.

**6563 Dorsmanin C**

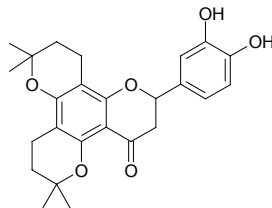
$C_{30}H_{32}O_7$  (504.59). **Source:** MAN NI DUO TAN CAO *Dorstenia mannii* (aerial parts). **Ref:** 5116.

**6564 Dorsmanin D**

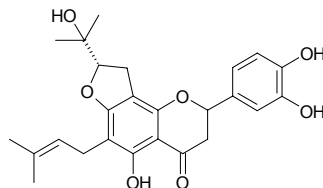
$C_{26}H_{28}O_7$  (452.51). **Source:** MAN NI DUO TAN CAO *Dorstenia mannii* (aerial parts). **Ref:** 5116.

**6565 Dorsmanin E**

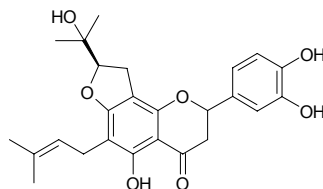
$C_{25}H_{28}O_6$  (424.50). **Source:** MAN NI DUO TAN CAO *Dorstenia mannii* (aerial parts). **Ref:** 5116.

**6566 Dorsmanin Fa**

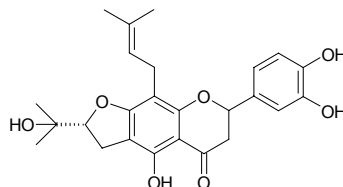
2''-Epidorsmanin Fa  $C_{25}H_{28}O_7$  (440.50). Beige plates ( $CH_2Cl_2$ ), mp 168–170°C. **Source:** MAN NI DUO TAN CAO *Dorstenia mannii* (aerial parts). **Ref:** 5116.

**6567 Dorsmanin Fb**

2''-Epidorsmanin Fb  $C_{25}H_{28}O_7$  (440.50). Beige plates ( $CH_2Cl_2$ ), mp 168–170°C. **Source:** MAN NI DUO TAN CAO *Dorstenia mannii* (aerial parts). **Ref:** 5116.

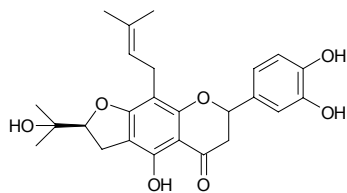
**6568 Dorsmanin Ga**

2''-Epidorsmanin Ga  $C_{25}H_{28}O_7$  (440.50). Colorless powder, mp 148–150°C. **Source:** MAN NI DUO TAN CAO *Dorstenia mannii* (aerial parts). **Ref:** 5116.

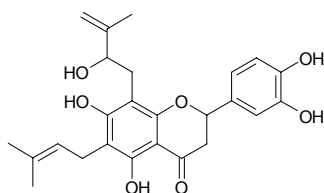


**6569 Dorsmanin Gb**

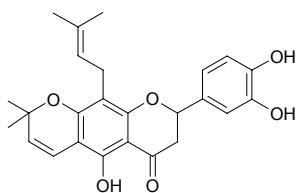
2"-Epidorsmanin Gb C<sub>25</sub>H<sub>28</sub>O<sub>7</sub> (440.50). Colorless powder, mp 148–150°C.  
 Source: MAN NI DUO TAN CAO *Dorstenia mannii* (aerial parts). Ref: 5116.

**6570 Dorsmanin H**

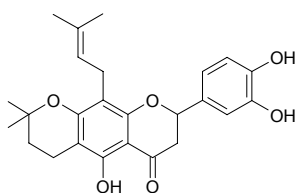
C<sub>25</sub>H<sub>28</sub>O<sub>7</sub> (440.50). Source: MAN NI DUO TAN CAO *Dorstenia mannii* (aerial parts). Ref: 5116.

**6571 Dorsmanin I**

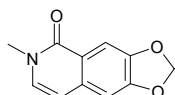
6,7-(2,2-Dimethylpyrano)-8-prenyl-5,3',4'-trihydroxyflavanone C<sub>25</sub>H<sub>26</sub>O<sub>6</sub> (422.48). Yellow plates (hexane-EtOAc), mp 172–174°C, [α]<sub>D</sub><sup>20</sup> = -27° (c = 0.12, MeOH). Source: MAN NI DUO TAN CAO *Dorstenia mannii* (aerial parts). Ref: 5116.

**6572 Dorsmanin J**

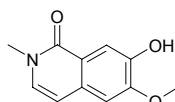
6,7-(2,2-Dimethylidihydropyrano)-8-prenyl-5,3',4'-trihydroxyflavanone C<sub>25</sub>H<sub>28</sub>O<sub>6</sub> (424.50). Brown gum, [α]<sub>D</sub><sup>20</sup> = -17° (c = 0.17, MeOH). Source: MAN NI DUO TAN CAO *Dorstenia mannii* (aerial parts). Ref: 5116.

**6573 Doryanine**

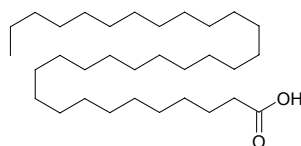
C<sub>11</sub>H<sub>9</sub>NO<sub>3</sub> (203.20). Source: HOU KE GUI *Cryptocarya chinensis* (wood). Ref: 3092.

**6574 Doryphornine**

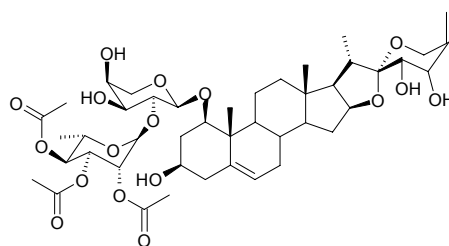
C<sub>11</sub>H<sub>11</sub>NO<sub>3</sub> (205.22). Source: BIAN FU GE GEN *Menispermum dauricum*, *Doryphora sassafras* (bark). Ref: 1521, 3792.

**6575 Dotriacontanic acid**

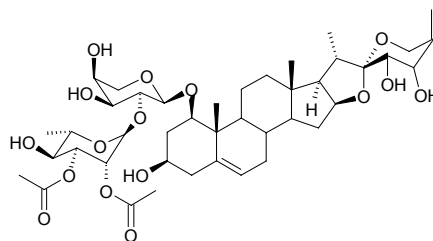
[3625-52-3] C<sub>32</sub>H<sub>64</sub>O<sub>2</sub> (480.87). Source: HUI BAO HAO *Artemisia roxbugiana*. Ref: 503.

**6576 DraconinA**

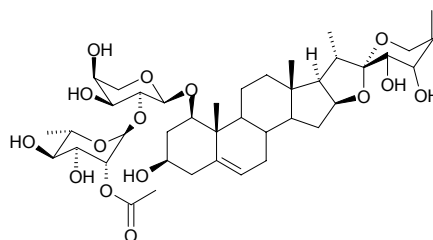
(23S,24S)-Spirosta-5,25(27)-diene-1β,3β,23,24-tetrol-O-{{O-(2,3,4-tri-O-acetyl-1-α-L-rhamnopyranosyl)-(1→2)-α-L-arabinopyranosyl}} C<sub>44</sub>H<sub>64</sub>O<sub>17</sub> (864.99). Amorphous solid, [α]<sub>D</sub><sup>20</sup> = -70° (c = 1.5, ethanol). Pharm: Cytotoxic (*in vitro*, HL-60, IC<sub>50</sub> = 9.7 μmol/L). Source: LONG XUE SHU *Dracaena draco* (stem cortex: yield = 0.00034%). Ref: 4696.

**6577 DraconinB**

(23S,24S)-Spirosta-5,25(27)-diene-1β,3β,23,24-tetrol 1-O-{{O-(2,3-di-O-acetyl-α-L-rhamnopyranosyl)-(1→2)-α-L-arabinopyranosyl}} C<sub>42</sub>H<sub>62</sub>O<sub>16</sub> (822.95). Amorphous solid, [α]<sub>D</sub><sup>20</sup> = -100° (c = 2.6, ethanol). Pharm: Cytotoxic (*in vitro*, HL-60, IC<sub>50</sub> = 39 μmol/L). Source: LONG XUE SHU *Dracaena draco* (stem cortex: yield = 0.0017%). Ref: 4696.

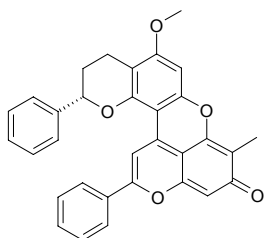
**6578 DraconinC**

(23S,24S)-Spirosta-5,25(27)-diene-1β,3β,23,24-tetrol 1-O-{{O-(2-O-acetyl-α-L-rhamnopyranosyl)-(1→2)-α-L-arabinopyranosyl}} C<sub>40</sub>H<sub>60</sub>O<sub>15</sub> (780.92). Amorphous solid, [α]<sub>D</sub><sup>20</sup> = -85° (c = 11.5, ethanol). Pharm: Cytotoxic inactive (*in vitro*, HL-60, IC<sub>50</sub> > 100 μmol/L). Source: LONG XUE SHU *Dracaena draco* (stem cortex: yield = 0.0039%). Ref: 4696.

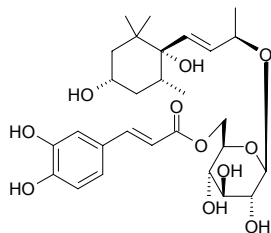


**6579 Dracorubin**

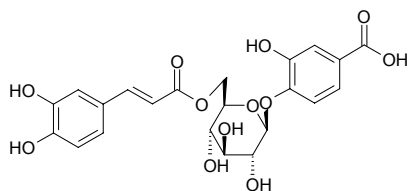
[6219-63-2] C<sub>32</sub>H<sub>24</sub>O<sub>5</sub> (488.55). Source: LONG XUE SHU *Dracaena draco*.  
Ref: 658.

**6580 Dracunculifoside A**

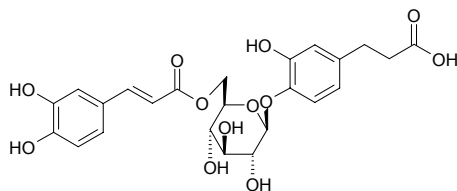
C<sub>28</sub>H<sub>41</sub>O<sub>11</sub> (552.62). Amorphous powder,  $[\alpha]_D^{26} = -24.4^\circ$  ( $c = 0.75$ , MeOH).  
Source: XIAO LONG YE KUO BAO JU *Baccharis dracunculifolia* (aerial parts). Ref: 4137.

**6581 Dracunculifoside B**

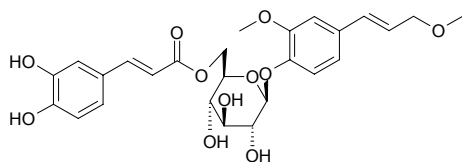
C<sub>22</sub>H<sub>22</sub>O<sub>12</sub> (478.41). Amorphous powder,  $[\alpha]_D^{26} = -72.9^\circ$  ( $c = 0.40$ , MeOH).  
Source: XIAO LONG YE KUO BAO JU *Baccharis dracunculifolia* (aerial parts). Ref: 4137.

**6582 Dracunculifoside C**

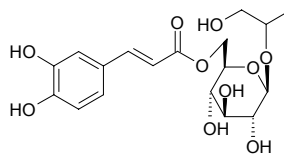
C<sub>24</sub>H<sub>26</sub>O<sub>12</sub> (506.47). Amorphous powder,  $[\alpha]_D^{26} = -58.9^\circ$  ( $c = 0.59$ , MeOH).  
Source: XIAO LONG YE KUO BAO JU *Baccharis dracunculifolia* (aerial parts). Ref: 4137.

**6583 Dracunculifoside D**

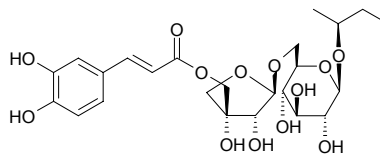
C<sub>26</sub>H<sub>30</sub>O<sub>11</sub> (518.52). Amorphous powder,  $[\alpha]_D^{26} = -6.7^\circ$  ( $c = 0.36$ , MeOH).  
Source: XIAO LONG YE KUO BAO JU *Baccharis dracunculifolia* (aerial parts). Ref: 4137.

**6584 Dracunculifoside E**

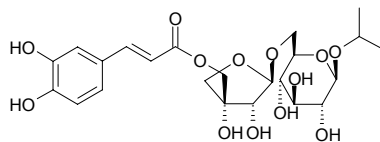
C<sub>18</sub>H<sub>24</sub>O<sub>10</sub> (400.39). Amorphous powder,  $[\alpha]_D^{26} = -19.9^\circ$  ( $c = 0.68$ , MeOH).  
Source: XIAO LONG YE KUO BAO JU *Baccharis dracunculifolia* (aerial parts). Ref: 4137.

**6585 Dracunculifoside F**

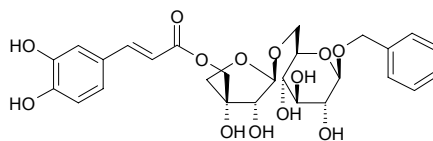
C<sub>24</sub>H<sub>34</sub>O<sub>13</sub> (530.52). Amorphous powder,  $[\alpha]_D^{26} = -41.9^\circ$  ( $c = 0.95$ , MeOH).  
Source: XIAO LONG YE KUO BAO JU *Baccharis dracunculifolia* (aerial parts). Ref: 4137.

**6586 Dracunculifoside G**

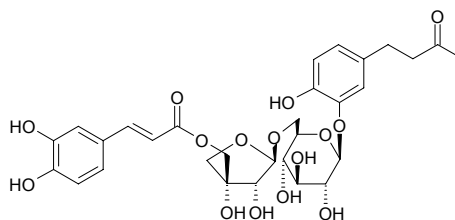
C<sub>23</sub>H<sub>32</sub>O<sub>13</sub> (516.50). Amorphous powder,  $[\alpha]_D^{26} = -51.8^\circ$  ( $c = 0.46$ , MeOH).  
Source: XIAO LONG YE KUO BAO JU *Baccharis dracunculifolia* (aerial parts). Ref: 4137.

**6587 Dracunculifoside H**

C<sub>27</sub>H<sub>32</sub>O<sub>13</sub> (564.55). Amorphous powder,  $[\alpha]_D^{26} = -64.0^\circ$  ( $c = 0.84$ , MeOH).  
Source: XIAO LONG YE KUO BAO JU *Baccharis dracunculifolia* (aerial parts). Ref: 4137.

**6588 Dracunculifoside I**

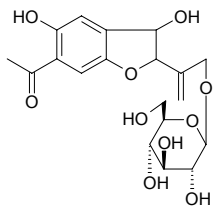
C<sub>30</sub>H<sub>36</sub>O<sub>15</sub> (636.61). Amorphous powder,  $[\alpha]_D^{26} = -77.6^\circ$  ( $c = 0.59$ , MeOH).  
Source: XIAO LONG YE KUO BAO JU *Baccharis dracunculifolia* (aerial parts). Ref: 4137.



**6589 Dracunculifoside J**

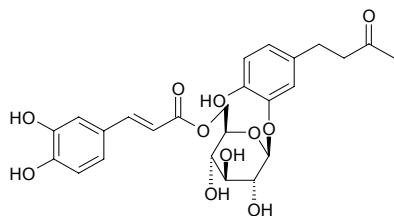
$C_{19}H_{24}O_{10}$  (412.40). Amorphous powder,  $[\alpha]_D^{26} = -18.8^\circ$  ( $c = 0.86$ , MeOH).

Source: XIAO LONG YE KUO BAO JU *Baccharis dracunculifolia* (aerial parts). Ref: 4137.

**6590 Dracunculifoside K**

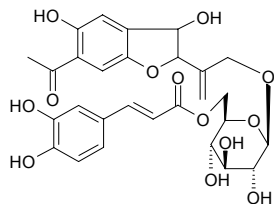
$C_{25}H_{28}O_{11}$  (504.50). Amorphous powder,  $[\alpha]_D^{22} = -49^\circ$  ( $c = 0.55$ , MeOH).

Source: XIAO LONG YE KUO BAO JU *Baccharis dracunculifolia* (aerial parts). Ref: 4184.

**6591 Dracunculifoside L**

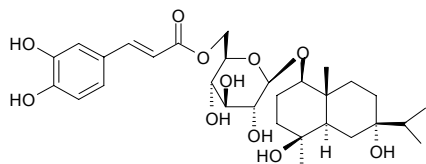
$C_{28}H_{30}O_{13}$  (574.54). Amorphous powder,  $[\alpha]_D^{22} = -28^\circ$  ( $c = 0.23$ , MeOH).

Source: XIAO LONG YE KUO BAO JU *Baccharis dracunculifolia* (aerial parts). Ref: 4184.

**6592 Dracunculifoside M**

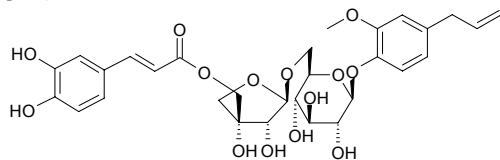
$C_{30}H_{44}O_{11}$  (580.68). Amorphous powder,  $[\alpha]_D^{22} = -35^\circ$  ( $c = 0.35$ , MeOH).

Source: XIAO LONG YE KUO BAO JU *Baccharis dracunculifolia* (aerial parts). Ref: 4184.

**6593 Dracunculifoside N**

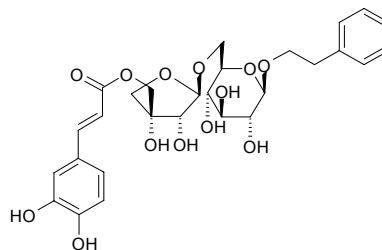
$C_{30}H_{36}O_{14}$  (620.61). Amorphous powder,  $[\alpha]_D^{22} = -71^\circ$  ( $c = 0.54$ , MeOH).

Source: XIAO LONG YE KUO BAO JU *Baccharis dracunculifolia* (aerial parts). Ref: 4184.

**6594 Dracunculifoside O**

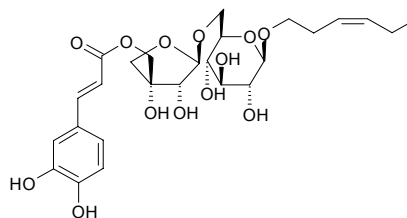
$C_{28}H_{34}O_{13}$  (578.58). Amorphous powder,  $[\alpha]_D^{22} = -51^\circ$  ( $c = 0.36$ , MeOH).

Source: XIAO LONG YE KUO BAO JU *Baccharis dracunculifolia* (aerial parts). Ref: 4184.

**6595 Dracunculifoside P**

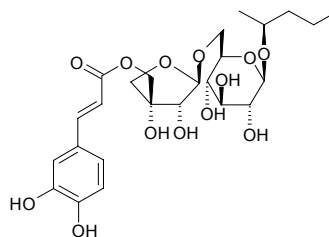
$C_{26}H_{36}O_{13}$  (556.57). Amorphous powder,  $[\alpha]_D^{22} = -49^\circ$  ( $c = 0.39$ , MeOH).

Source: XIAO LONG YE KUO BAO JU *Baccharis dracunculifolia* (aerial parts). Ref: 4184.

**6596 Dracunculifoside Q**

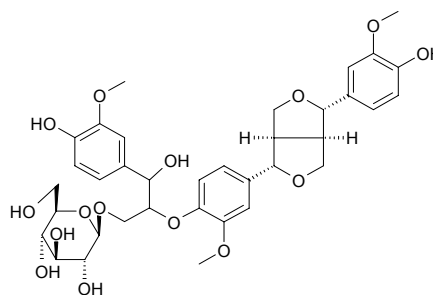
$C_{25}H_{36}O_{13}$  (544.56). Amorphous powder,  $[\alpha]_D^{22} = -58^\circ$  ( $c = 0.16$ , MeOH).

Source: XIAO LONG YE KUO BAO JU *Baccharis dracunculifolia* (aerial parts). Ref: 4184.

**6597 Dracunculifoside R**

$C_{36}H_{44}O_{15}$  (716.74). Amorphous powder,  $[\alpha]_D^{22} = +8.5^\circ$  ( $c = 0.30$ , MeOH).

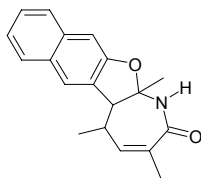
Source: XIAO LONG YE KUO BAO JU *Baccharis dracunculifolia* (aerial parts). Ref: 4184.



**6598 Drazepinone**

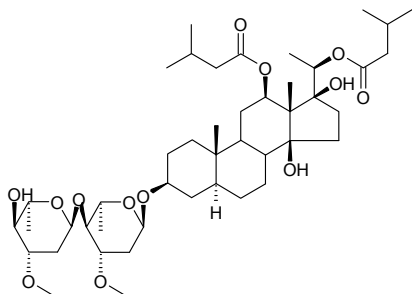
3,5,12a-Trimethyl-2,5,5a,12a-tetrahydro-1*H*-naphtho[2',3':4,5]furo[2,3-*b*]azepin-2-one C<sub>19</sub>H<sub>19</sub>NO<sub>2</sub> (293.37).  $[\alpha]_D^{25} = +7.1^\circ$  ( $c = 0.2$ ). **Pharm:** Herbicide.

**Source:** *Drechslera siccans*. **Ref:** 5268.

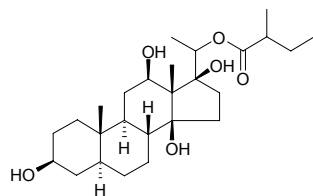
**6599 Dregeoside B**

12,20-Di-*O*-isovaleryl-tomentogenin-3-*O*- $\alpha$ -*L*-oleandropyranosyl-(1 $\rightarrow$ 4)-*O*- $\alpha$ -*L*-oleandropyranoside [133086-69-8] C<sub>45</sub>H<sub>76</sub>O<sub>13</sub> (825.10). White powder, mp 123~126°C,  $[\alpha]_D^{20} = +38.5^\circ$  ( $c = 0.25$ , methanol). **Source:** KU SHENG

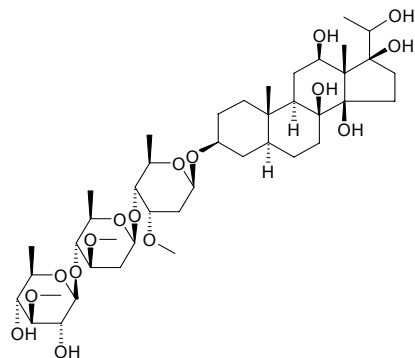
*Dregea sinensis*. **Ref:** 165.

**6600 Dresigenin B**

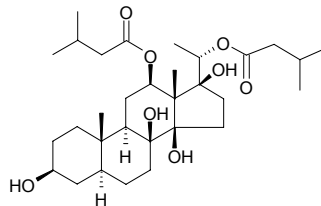
20-*O*-(2-Methylbutyryl)tomentogenin C<sub>26</sub>H<sub>44</sub>O<sub>6</sub> (452.64). Colorless acicular crystals, mp 232~235°C. **Source:** KU SHENG *Dregea sinensis*. **Ref:** 363.

**6601 Dresioside I**

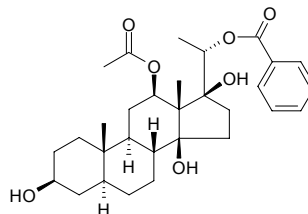
Dihydrosarcostin 3-*O*- $\beta$ -*D*-thevetopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-cymaropyranoside C<sub>42</sub>H<sub>72</sub>O<sub>16</sub> (833.03). White amorphous powder, mp 151~154°C. **Source:** KU SHENG *Dregea sinensis*. **Ref:** 363.

**6602 Drevogenin I**

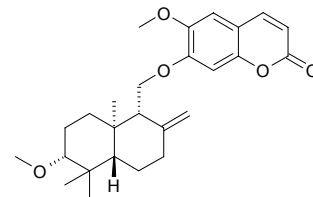
*cis*-5 $\alpha$ -*H*,3 $\beta$ ,8 $\beta$ ,14 $\beta$ ,17 $\beta$ -Tetrahydroxy-12 $\beta$ -*O*-isovaleryl-20-*O*-isovaleryl-pregnane [125310-02-3] C<sub>31</sub>H<sub>52</sub>O<sub>8</sub> (552.76). Prismatic crystals, mp 235~238°C,  $[\alpha]_D^{25} = +34.5^\circ$  ( $c = 0.15$ , MeOH). **Source:** KU SHENG *Dregea sinensis*. **Ref:** 134.

**6603 Drevogenin II**

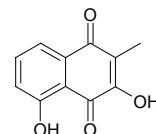
*cis*-5 $\alpha$ -*H*,3 $\beta$ ,14 $\beta$ ,17 $\beta$ -Trihydroxy-12 $\beta$ -*O*-acetyl-20-*O*-benzoyl-pregnane [125472-06-2] C<sub>30</sub>H<sub>42</sub>O<sub>7</sub> (514.67). Prismatic crystals, mp 235~237°C,  $[\alpha]_D^{25} = +36.5^\circ$  ( $c = 0.52$ , MeOH). **Source:** KU SHENG *Dregea sinensis*. **Ref:** 134.

**6604 Driportlandin**

(5 $\beta$ ,9 $\alpha$ ,10 $\alpha$ )-7-*O*-(3 $\alpha$ -Methoxy-8'(12')-drimen-11'-yl)-scopoletin C<sub>26</sub>H<sub>34</sub>O<sub>5</sub> (426.56). White amorphous solid,  $[\alpha]_D^{25} = +30.1^\circ$  ( $c = 0.40$ , CHCl<sub>3</sub>). **Pharm:** P-glycoprotein inhibitor (hmn MDR1 gene transfected mouse lymphoma cells, reverses multidrug resistance (MDR), more active than positive control Verapamil). **Source:** BO TE LAN DA JI *Euphorbia portlandica* (whole herb). **Ref:** 5019.

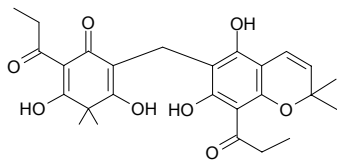
**6605 Droserone**

3,5-Dihydroxy-2-methyl-1,4-naphthoquinone [478-40-0] C<sub>11</sub>H<sub>8</sub>O<sub>4</sub> (204.18). mp 181°C. **Pharm:** Antibacterial (hmn *Mycobacterium tuberculosis* H37RV, *in vitro*, MIC = 25 $\mu$ g/mL). **Source:** DUN ZHUANG MAO GAO CAI *Drosera peltata*, HUI TE KE MAO GAO CAI *Drosera whittakeri*, MAO GAO CAI *Drosera peltata* var. *lunata*. **Ref:** 6, 621, 658.

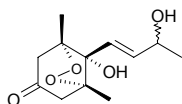


**6606 Drummondin A**

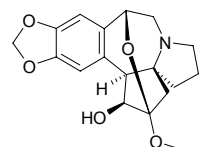
[119171-76-5]  $C_{26}H_{30}O_8$  (470.52). **Pharm:** Antimicrobial; cytotoxic (P<sub>388</sub>, KB). **Source:** DE LA MENG DE JIN SI TAO *Hypericum drummondii*. **Ref:** 658.

**6607 Drummondol**

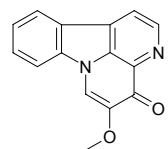
$C_{12}H_{18}O_5$  (242.27). **Source:** HONG HAI JIAO *Capsicum annuum* (stem and root: yield = 0.00021%dw). **Ref:** 4779.

**6608 Drupacine**

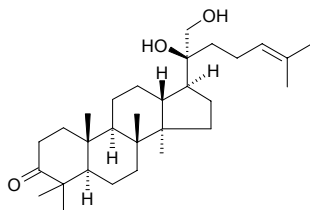
[49686-57-9]  $C_{18}H_{21}NO_5$  (331.37). **Source:** HAI NAN CU FEI *Cephalotaxus hainanensis* [Syn. *Cephalotaxus manni*], SAN JIAN SHAN *Cephalotaxus fortunei* (drupe: yield = 0.10%)<sup>[4675]</sup>, ZHONG GUO CU FEI ZHI YE *Cephalotaxus sinensis* [Syn. *Cephalotaxus harringtonia* var. *sinensis*]. **Ref:** 2, 660, 4675.

**6609 Drymaritin**

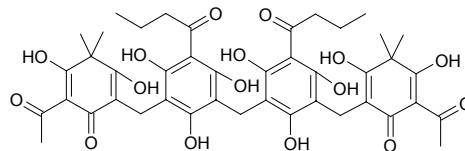
$C_{15}H_{10}N_2O_2$  (250.26). Pale yellow amorphous solid, mp 181~183°C,  $[\alpha]_D^{25} = 0^\circ$  ( $c = 0.02$ ,  $CHCl_3$ ). **Pharm:** Anti-HIV (H9 lymphocytes,  $EC_{50} = 0.699\mu g/mL$ ,  $TI = 20.6$ ). **Source:** ER RUI HE LIAN DOU *Drymaria diandra* [Syn. *Drymaria cordata* ssp. *diandra*] (whole herb: yield = 0.0011%dw). **Ref:** 4758.

**6610 Dryobalanone**

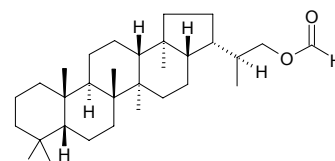
20,21-Dihydroxydammar-24-en-3-one [17939-10-5]  $C_{30}H_{50}O_3$  (458.73). **Source:** BING PIAN *Dryobalanops aromatica*. **Ref:** 2.

**6611 Dryocrassin**

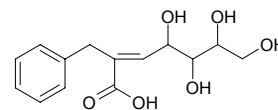
[12777-70-78]  $C_{43}H_{48}O_{16}$  (820.85). Yellow crystals (acetone), mp 209~214°C; yellowish powder crystals, mp 210~214°C. **Pharm:** Schistosomacide (*Bilharzia japonica*). **Source:** GUAN ZHONG *Dryopteris crassirhizoma* (dried rhizome: content scope = 2.15%~6.95%, mean content = 4.37%<sup>[5508]</sup>). **Ref:** 658, 5508.

**6612 Dryocrassyl formate**

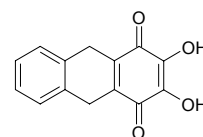
$C_{31}H_{52}O_2$  (456.76). mp 67°C,  $[\alpha]_D = +21.3^\circ$  ( $c = 0.2$ ,  $CHCl_3$ ). **Source:** BING YE SUO LUO *Yathea podophylla* (fresh frond). **Ref:** 4401.

**6613 Drypearmoracin A**

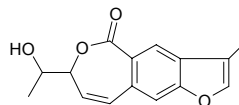
(*E*)-4,5,6,7-Tetrahydroxy-2-benzylhept-2-enoic acid  $C_{14}H_{18}O_6$  (282.30). Colorless crystals, mp 250°C,  $[\alpha]_D = +27^\circ$  ( $c = 0.750$ , MeOH). **Source:** LA GEN HE GUO MU *Drypetes armoracia*. **Ref:** 3389.

**6614 Drypearmoracin B**

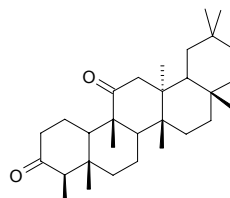
2,3-Dihydroxy-9,10-tetrahydroanthra-1,4-quinone  $C_{14}H_{10}O_4$  (242.23). White crystals, mp 160°C. **Source:** LA GEN HE GUO MU *Drypetes armoracia*. **Ref:** 3389.

**6615 Drypemolundein A**

$C_{15}H_{14}O_4$  (258.28). White crystals, mp 148~150°C,  $[\alpha]_D^{25} = -137.0^\circ$  ( $c = 1.01$ ,  $CHCl_3$ ). **Source:** *Drypetes molunduana* (stem). **Ref:** 3989.

**6616 Drypemolundein B**

$C_{30}H_{48}O_2$  (440.72). White powder, mp 290~292°C,  $[\alpha]_D^{25} = -8.0^\circ$  ( $c = 1.0$ ,  $CHCl_3$ ). **Source:** *Drypetes molunduana* (stem). **Ref:** 3989.

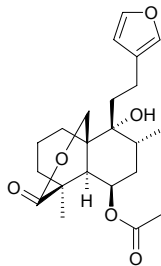




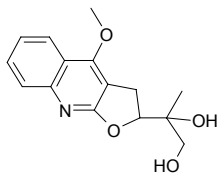
**6617 Dubiin**

$C_{22}H_{30}O_6$  (390.48). **Pharm:** Cytotoxic ( $L_{1210}$  in tissue culture,  $IC_{50} = 50\text{--}60\mu\text{g/mL}$ ).

**Source:** XI YE YI MU CAO *Leonurus sibiricus* (aerial parts). **Ref:** 4328.

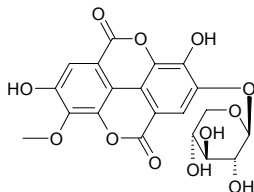
**6618 Dubinidine**

[22964-77-8]  $C_{15}H_{17}NO_4$  (275.31). mp 132~133°C; hydrochloride: mp 195~196°C; nitrate: mp 176~177°C. **Pharm:** Anti-diuretic (2000mg/kg); sedative (mus and rat, 100mg/kg orl); antipyretic (mus and rat, 100mg/kg orl). **Source:** DA YE YUN XIANG CAO *Haplophyllum perforatum*. **Ref:** 658.

**6619 Ducheside A**

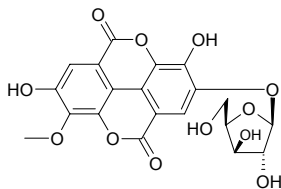
3'-*O*-Methyl-ellagic acid-4-*O*- $\beta$ -*D*-xylopyranoside  $C_{20}H_{16}O_{12}$  (448.34).

Yellowish powder, mp > 360°C,  $[\alpha]_D^{18} = -11.3^\circ$  ( $c = 0.035$ , methanol). **Source:** SHE MEI *Duchesnea indica*. **Ref:** 368.

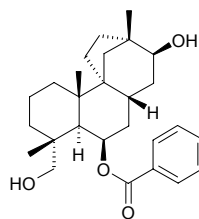
**6620 Ducheside B**

3'-*O*-Methyl-ellagic acid 4-*O*- $\alpha$ -*L*-arabinofuranoside  $C_{20}H_{16}O_{12}$  (448.34).

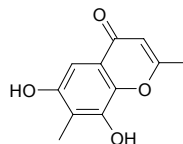
Yellowish powder, mp > 360°C,  $[\alpha]_D^{19} = -126.5^\circ$  ( $c = 0.027$ , methanol). **Source:** SHE MEI *Duchesnea indica*. **Ref:** 368.

**6621 Dulcidiol**

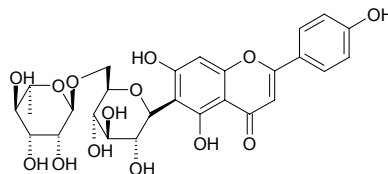
$C_{27}H_{38}O_4$  (426.6). Gum,  $[\alpha]_D^{25} = -33.5^\circ$  ( $c = 0.50$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (*in vitro*, SCL,  $ED_{50} = 45.3\mu\text{mol/L}$ ; SCL-6,  $ED_{50} = 46\mu\text{mol/L}$ ; SCL-37'6,  $ED_{50} = 42.6\mu\text{mol/L}$ ; SCL-9,  $ED_{50} = 41.6\mu\text{mol/L}$ ; Kato3,  $ED_{50} = 29\mu\text{mol/L}$ ; NUGC-4,  $ED_{50} = 105.1\mu\text{mol/L}$ ; control Vinblastine Sulfate: SCL,  $ED_{50} = 5.9\mu\text{mol/L}$ ; SCL-6,  $ED_{50} = 6.1\mu\text{mol/L}$ ; SCL-37'6,  $ED_{50} = 5.3\mu\text{mol/L}$ ; SCL-9,  $ED_{50} = 5.3\mu\text{mol/L}$ ; Kato3,  $ED_{50} = 6.1\mu\text{mol/L}$ ; NuGc-4,  $ED_{50} = 5.3\mu\text{mol/L}$ ). **Source:** YE GAN CAO *Scoparia dulcis* (aerial parts: yield = 0.00231%dw). **Ref:** 4703.

**6622 Dulcinone**

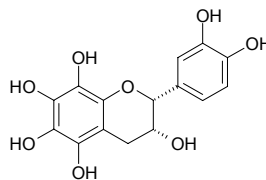
6,8-Dihydroxy-2,7-dimethyl-4*H*-chromen-4-one  $C_{11}H_{10}O_4$  (206.20). Yellow solid. **Pharm:** Antioxidant inactive (DPPH scavenger, 10 $\mu\text{mol/L}$ , ScRt = 3%; control BHT, 10 $\mu\text{mol/L}$ , ScRt = 43%,  $IC_{50} = 19.00\mu\text{mol/L}$ ). **Source:** TIAN SHAN ZHU ZI *Garcinia dulcis* (flower). **Ref:** 4422.

**6623 Dulcinoside**

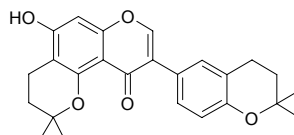
5,7,4'-Trihydroxyflavone 6-*C*-[ $\alpha$ -rhamnopyranosyl-(1 $\rightarrow$ 6)]- $\beta$ -glucopyranoside  $C_{27}H_{30}O_{14}$  (578.53). Yellow solid, mp 200~202°C. **Pharm:** Antioxidant (DPPH scavenger, 10 $\mu\text{mol/L}$ , ScRt = 22%, control BHT, 10 $\mu\text{mol/L}$ , ScRt = 43%). **Source:** TIAN SHAN ZHU ZI *Garcinia dulcis* (fruit). **Ref:** 5319.

**6624 Dulcisflavan**

3,5,6,7,8,3',4'-Heptahydroxyflavan  $C_{15}H_{14}O_8$  (322.27). Light brown solid, mp 240~242°C,  $[\alpha]_D^{29} = -72.0^\circ$  ( $c = 0.012$ ,  $CH_3OH$ ). **Pharm:** Antioxidant (DPPH scavenger, 10 $\mu\text{mol/L}$ , ScRt = 87%, control BHT, 10 $\mu\text{mol/L}$ , ScRt = 43%). **Source:** TIAN SHAN ZHU ZI *Garcinia dulcis* (fruit). **Ref:** 5319.

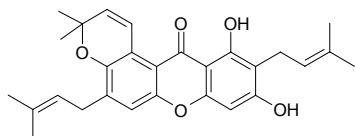
**6625 Dulcisoflavone**

7-Hydroxy-2'',2''-dimethylchromano[5,6:6',5'']-2''',2'''-dimethylchromano[3',4':5'',6''']isoflavone  $C_{25}H_{26}O_5$  (406.48). Yellow solid, mp 178~180°C. **Pharm:** Antioxidant (DPPH scavenger, 10 $\mu\text{mol/L}$ , ScRt = 15%, control BHT, 10 $\mu\text{mol/L}$ , ScRt = 43%). **Source:** TIAN SHAN ZHU ZI *Garcinia dulcis* (fruit). **Ref:** 5319.

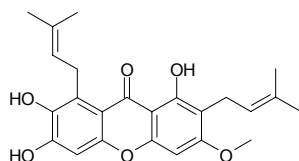


**6626 Dulcisxanthone A**

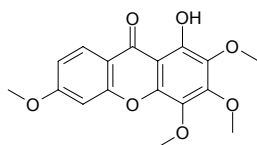
1,3-Dihydroxy-2,6-bis(3-methyl-2-butenyl)-2,2-dimethylchromeno(5<sup>'''</sup>,6<sup>'''</sup>:8,7)xanthone C<sub>28</sub>H<sub>30</sub>O<sub>5</sub> (446.55). Yellow solid, mp 119~120°C. Pharm: Antioxidant (DPPH scavenger, 10μmol/L, ScRt = 2%, control BHT, 10μmol/L, ScRt = 43%); antibacterial (*Staphylococcus aureus* ATCC 25923, MIC > 128μg/mL, control Vancomycin, MIC = 2μg/mL; *Staphylococcus aureus* MRSA SK1, MIC > 128μg/mL, Vancomycin, MIC = 2μg/mL). Source: TIAN SHAN ZHU ZI *Garcinia dulcis* (fruit). Ref: 5319.

**6627 Dulcisxanthone B**

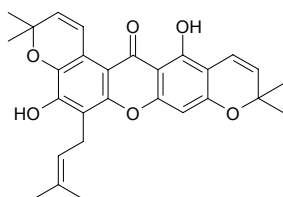
1,6,7-Trihydroxy-3-methoxy-2,8-bis(3-methyl-2-butenyl)xanthone C<sub>24</sub>H<sub>26</sub>O<sub>6</sub> (410.47). Yellow solid, mp 170~172°C. Pharm: Antioxidant (DPPH scavenger, 10μmol/L, ScRt = 18%, control BHT, 10μmol/L, ScRt = 43%). Source: TIAN SHAN ZHU ZI *Garcinia dulcis* (fruit). Ref: 5319.

**6628 Dulcisxanthone C**

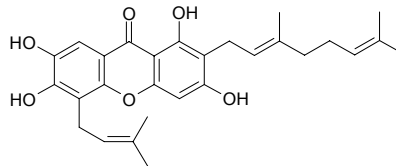
1-Hydroxy-2,3,4,6-tetramethoxyxanthone C<sub>17</sub>H<sub>16</sub>O<sub>7</sub> (322.31). Yellow solid, mp 125~128°C. Pharm: Antioxidant inactive (DPPH scavenger, 10μmol/L, ScRt = 2%; control BHT, 10μmol/L, ScRt = 43%, IC<sub>50</sub> = 19.00μmol/L). Source: TIAN SHAN ZHU ZI *Garcinia dulcis* (flower). Ref: 4422.

**6629 Dulcisxanthone D**

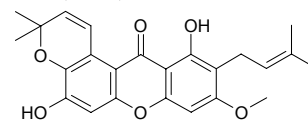
Tovophyllin B; 1,6-Dihydroxy-5-(3-methyl-2-butenyl)-2',2'-dimethylchromeno(5',6':2,3)-2''',2'''-dimethylchromeno(5''',6''':8,7)xanthone C<sub>28</sub>H<sub>28</sub>O<sub>6</sub> (460.53). Orange solid, mp 218~220°C. Pharm: Antioxidant inactive (DPPH scavenger, 10μmol/L, ScRt = 16%; control BHT, 10μmol/L, ScRt = 43%, IC<sub>50</sub> = 19.00μmol/L)<sup>[4422]</sup>; antitubercular (*Mycobacterium tuberculosis*, MIC = 25μg/mL)<sup>[4358]</sup>. Source: DAO NIAN ZI *Garcinia mangostana* (fruit, fruit hull), TIAN SHAN ZHU ZI *Garcinia dulcis* (flower). Ref: 3066, 4358, 4422.

**6630 Dulcisxanthone E**

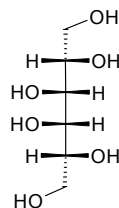
1,3,6,7-Tetrahydroxy-2-(3,7-dimethyl-2,6-octadienyl)-5-(3-methyl-2-butenyl)xanthone C<sub>28</sub>H<sub>32</sub>O<sub>6</sub> (464.56). Yellow solid. Pharm: Antioxidant inactive (DPPH scavenger, 10μmol/L, ScRt = 15%; control BHT, 10μmol/L, ScRt = 43%, IC<sub>50</sub> = 19.00μmol/L). Source: TIAN SHAN ZHU ZI *Garcinia dulcis* (flower). Ref: 4422.

**6631 Dulcisxanthone F**

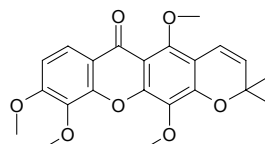
1,6-Dihydroxy-2-(3-methyl-2-butenyl)-3-methoxy-2''-dimethylchromeno-(5',6':8,7)-xanthone C<sub>24</sub>H<sub>24</sub>O<sub>6</sub> (408.46). Yellow solid. Pharm: Antioxidant inactive (DPPH scavenger, 10μmol/L, ScRt = 2%; control BHT, 10μmol/L, ScRt = 43%, IC<sub>50</sub> = 19.00μmol/L). Source: TIAN SHAN ZHU ZI *Garcinia dulcis* (flower). Ref: 4422.

**6632 Dulcitol**

Galactitol [608-66-2] C<sub>6</sub>H<sub>14</sub>O<sub>6</sub> (182.17). mp 188.5°C, bp 275~280°C/1mmHg; mp 110~111°C (anhydrate); mp 188~190°C, bp 275~280°C/1mmHg. Pharm: Sweetener (sugar substitute); laxative (veterinary). Source: A LA BO PO NA *Veronica persica* (aerial parts), DOU SHU *Pachyrrhizus erosus* (seed), DU ZHONG *Eucommia ulmoides*, FU FANG TENG *Euonymus fortunei*, GUI JIAN YU *Euonymus alatus*, HAI HONG DOU *Adenantha pavonina*, JI CAI *Capsella bursa-pastoris*, LEI GONG TENG *Tripterygium wilfordii*, OU ZHOU HUA QIU *Sorbus aucuparia*, PI PA YE *Eriobotrya japonica*, SHI LIU GEN *Punica granatum*, SHUI ZHI *Gardenia jasminoides* var. *grandiflora*, SHUI ZHI YE *Gardenia jasminoides* var. *grandiflora*, SI MIAN MU *Euonymus bungeanus*, SUO LA MU *Salacia prinooides* [Syn. *Salacia chinensis*], WU YE TENG *Cassytha filiformis*, YE ZI RANG *Cocos nucifera*, YUAN CAN ZI *Bombyx mori*, ZI GUO WEI MAO *Euonymus atropurpureus*. Ref: 2, 6, 587, 658, 1521, 4180, 4211.

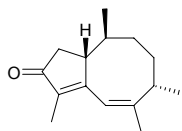
**6633 Dulxanthone E**

5,9,10,12-Tetramethoxy-2,2-dimethyl-2H-pyrano[5,6-b]xanthen-6-one C<sub>22</sub>H<sub>22</sub>O<sub>7</sub> (398.42). Yellow cubes, mp 191~192°C. Source: TIAN SHAN ZHU ZI *Garcinia dulcis*. Ref: 2399.

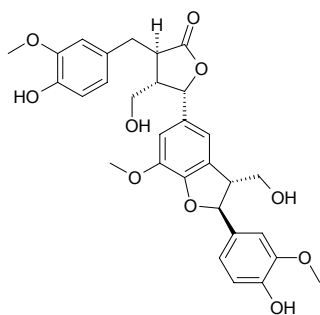


**6634 4,6-Dumortadien-3-one**

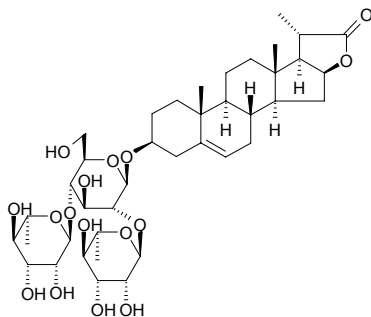
[240417-19-0] C<sub>15</sub>H<sub>22</sub>O (218.34). Oil. Source: MAO DI QIAN *Dumortiera hirsuta*. Ref: 2283.

**6635 Dumosaol**

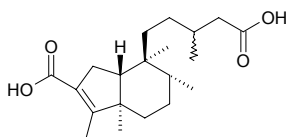
3-(4-Hydroxy-3-methoxy-benzyl)-5-[2-(4-hydroxy-3-methoxy-phenyl)-3-hydroxymethyl-7-methoxy-2,3-dihydro-benzofuran-5-yl]-4-hydroxymethyl-dihydro-furan-2-one C<sub>30</sub>H<sub>32</sub>O<sub>10</sub> (552.58). Amorphous powder, mp 70~72°C, [α]<sub>D</sub><sup>27</sup> = +30.44° (c = 0.77, MeOH). Source: YUN NAN TIE SHAN *Tsuga dumosa* (heartwood). Ref: 4572.

**6636 Dumoside**

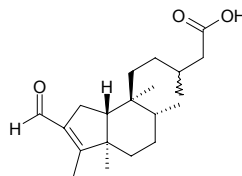
(2*S*)-3β,16β-dihydroxy pregn-5-ene-22-carboxylic acid (22,16)-lactone-3-*O*-β-chacotrioxide C<sub>40</sub>H<sub>62</sub>O<sub>16</sub> (798.93). white amorphous, mp 185.5~187°C, [α]<sub>D</sub><sup>25</sup> = -13.38° (c = 0.36, MeOH). Source: GUAN MU TIAN MEN DONG *Asparagus dumosus*, HAI JIN BI XIE *Dioscorea spongiosa* (Rhizome: yield = 0.00013%)<sup>[4692]</sup>. Ref: 1908, 4692.

**6637 Dunniana acid A**

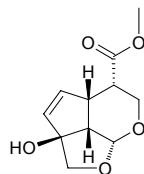
C<sub>20</sub>H<sub>32</sub>O<sub>4</sub> (336.48). Colorless oil, [α]<sub>D</sub><sup>23</sup> = +281.4° (c = 0.35, CHCl<sub>3</sub>). Source: HEI GUO HUANG PI *Clausena dunniana* (aerial parts: yield = 0.00035%dw). Ref: 4615.

**6638 Dunniana acid B**

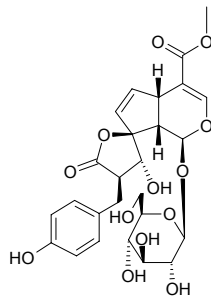
C<sub>20</sub>H<sub>32</sub>O<sub>3</sub> (320.48). Colorless oil, [α]<sub>D</sub><sup>23</sup> = +83.3° (c = 0.75, CHCl<sub>3</sub>). Source: HEI GUO HUANG PI *Clausena dunniana* (aerial parts: yield = 0.00075%dw). Ref: 4615.

**6639 Dunnisinin**

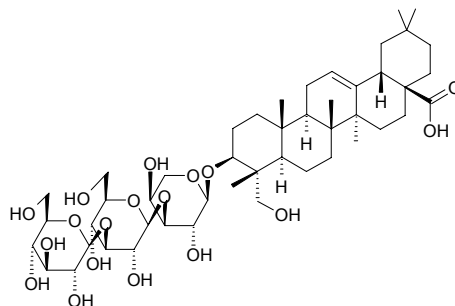
C<sub>11</sub>H<sub>14</sub>O<sub>5</sub> (226.23). Colorless acicular crystals, mp 178~179°C, [α]<sub>D</sub><sup>25</sup> = +213.5° (c = 0.2, MeOH). Source: XIU QIU QIAN CAO *Dunnia sinensis*. Ref: 764.

**6640 Dunnisinide**

C<sub>26</sub>H<sub>30</sub>O<sub>13</sub> (550.52). Colorless prisms, mp 221~223°C, [α]<sub>D</sub><sup>25</sup> = +28.4° (c = 0.25, MeOH). Source: XIU QIU QIAN CAO *Dunnia sinensis*. Ref: 764.

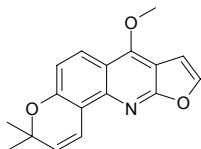
**6641 Duruposide C**

Hederagenin 3-*O*-β-*D*-glucopyranosyl(1→3)-β-*D*-glucopyranosyl(1→3)-α-*L*-arabinopyranoside C<sub>47</sub>H<sub>76</sub>O<sub>18</sub> (929.12). Amorphous powder (MeOH), [α]<sub>D</sub><sup>27</sup> = +35.7° (c = 0.28, MeOH). Source: LIAO DONG CONG MU YE *Aralia elata*. Ref: 4471.

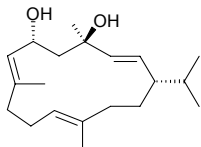


**6642 Dutadrupine**

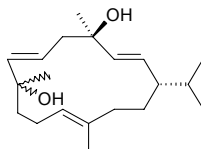
$C_{17}H_{15}NO_3$  (281.31). **Pharm:** Cytotoxic (P<sub>388</sub> cell line, ED<sub>50</sub> = 0.09 μg/mL, control Mithramycin, ED<sub>50</sub> = 0.06 μg/mL; HT29, ED<sub>50</sub> = 0.11 μg/mL, Mithramycin, ED<sub>50</sub> = 0.07 μg/mL; A549, ED<sub>50</sub> = 0.13 μg/mL, Mithramycin, ED<sub>50</sub> = 0.08 μg/mL). **Source:** SI ROU TUO GUO YE MI ZHU YU *Melicope semecarpifolia*. **Ref:** 5405.

**6643 β-4,8,13-Duvatriene-1,3-diol**

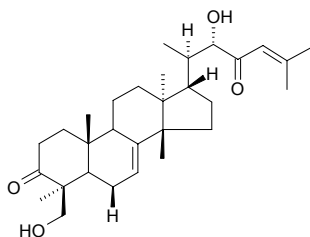
(1*S*,2*E*,4*R*,6*R*,7*E*,11*E*)-2,7,11-Cembratriene-4,6-diol [57605-81-9]  $C_{20}H_{34}O_2$  (306.49). mp 127.0~127.5°C (hexane),  $[\alpha]_D^{25} = +162^\circ$  (chloroform). **Pharm:** Antineoplastic (tumor caused by TPA, mus skin cancer caused by DMBA); anti-inflammatory; prostaglandin biosynthesis inhibitor (IC<sub>50</sub> = 0.39 mmol/L); plant growth inhibitor; aldose reductase inhibitor; pesticide (kills aphids, LC<sub>50</sub> = 15.7 μg/aphid). **Source:** YAN CAO *Nicotiana tabacum*. **Ref:** 900.

**6644 β-3,8,13-Duvatriene-1,5-diol**

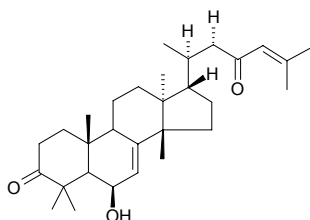
$C_{20}H_{34}O_2$  (306.49). Crystals (Et<sub>2</sub>O), mp 150~152°C,  $[\alpha]_D^{25} = +40^\circ$ . **Source:** YAN CAO *Nicotiana tabacum*. **Ref:** 1521.

**6645 Dymacrin A**

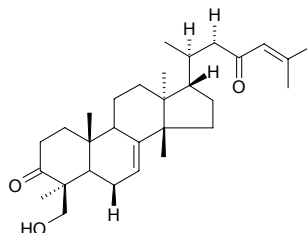
$C_{30}H_{46}O_4$  (470.70).  $[\alpha]_D = +31^\circ$  (*c* = 1, CHCl<sub>3</sub>). **Source:** DA HUA JIAN MU *Dysoxylum macranthum*. **Ref:** 2407.

**6646 Dymacrin B**

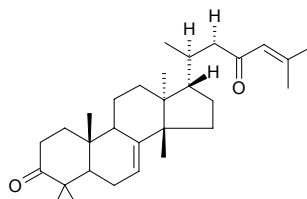
$C_{30}H_{46}O_3$  (454.70).  $[\alpha]_D = -17^\circ$  (*c* = 1, CHCl<sub>3</sub>). **Pharm:** Cytotoxic (KB cells, IC<sub>50</sub> = 5.6 μg/mL). **Source:** DA HUA JIAN MU *Dysoxylum macranthum*. **Ref:** 2407.

**6647 Dymacrin C**

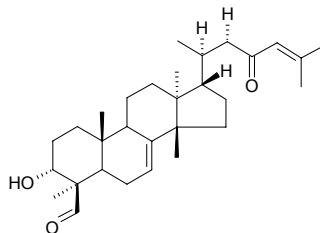
$C_{30}H_{46}O_3$  (454.70).  $[\alpha]_D = +16^\circ$  (*c* = 1, CHCl<sub>3</sub>). **Pharm:** Cytotoxic (KB cells, IC<sub>50</sub> = 5.0 μg/mL)<sup>[2407]</sup>. **Source:** DA HUA JIAN MU *Dysoxylum macranthum*. **Ref:** 2407.

**6648 Dymacrin D**

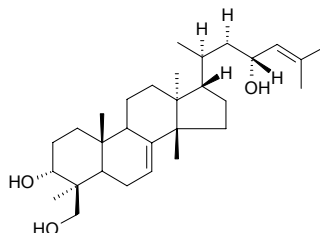
$C_{30}H_{46}O_2$  (438.70).  $[\alpha]_D = -36^\circ$  (*c* = 1, CHCl<sub>3</sub>). **Source:** DA HUA JIAN MU *Dysoxylum macranthum*. **Ref:** 2407.

**6649 Dymacrin E**

$C_{30}H_{46}O_3$  (454.70).  $[\alpha]_D = +4^\circ$  (*c* = 1, CHCl<sub>3</sub>). **Source:** DA HUA JIAN MU *Dysoxylum macranthum*. **Ref:** 2407.

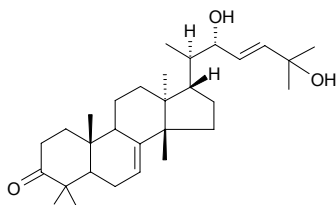
**6650 Dymacrin F**

$C_{30}H_{50}O_3$  (458.73).  $[\alpha]_D = -27^\circ$  (*c* = 1, CHCl<sub>3</sub>). **Source:** DA HUA JIAN MU *Dysoxylum macranthum*. **Ref:** 2407.

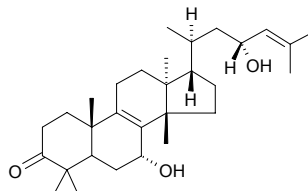


**6651 Dymacrin G**

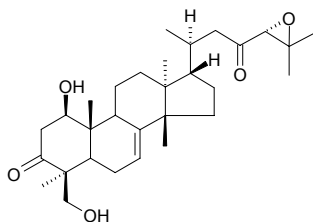
$C_{30}H_{48}O_3$  (456.72).  $[\alpha]_D = -17^\circ$  ( $c = 1$ ,  $CHCl_3$ ). Source: DA HUA JIAN MU *Dysoxylum macranthum*. Ref: 2407.

**6655 Dymacrin K**

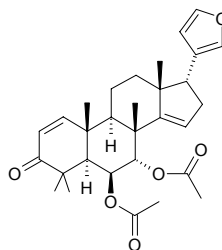
$C_{30}H_{48}O_3$  (456.72).  $[\alpha]_D = -5^\circ$  ( $c = 1$ ,  $CHCl_3$ ). Source: DA HUA JIAN MU *Dysoxylum macranthum*. Ref: 2407.

**6652 Dymacrin H**

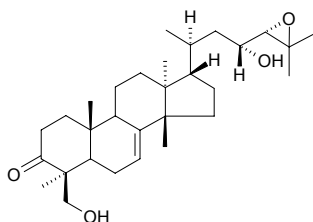
$C_{30}H_{46}O_5$  (486.70).  $[\alpha]_D = +17^\circ$  ( $c = 1$ ,  $CHCl_3$ ). Pharm: Cytotoxic (KB cells,  $IC_{50} = 8.3 \mu g/mL$ )<sup>[2407]</sup>. Source: DA HUA JIAN MU *Dysoxylum macranthum*. Ref: 2407.

**6656 Dysobinin**

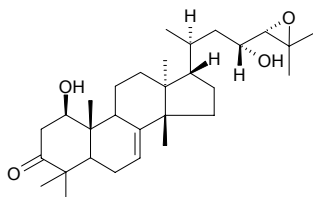
[62655-03-2]  $C_{30}H_{38}O_6$  (494.63). mp 185–187°C,  $[\alpha]_D = +150^\circ$  (chloroform). Pharm: Anti-inflammatory; CNS depressant. Source: HONG GUO JIAN MU *Dysoxylum binectariferum*. Ref: 661.

**6653 Dymacrin I**

$C_{30}H_{48}O_4$  (472.71).  $[\alpha]_D = -31^\circ$  ( $c = 1$ ,  $CHCl_3$ ). Source: DA HUA JIAN MU *Dysoxylum macranthum*. Ref: 2407.

**6654 Dymacrin J**

$C_{30}H_{48}O_4$  (472.71).  $[\alpha]_D = +30^\circ$  ( $c = 1$ ,  $CHCl_3$ ). Pharm: Cytotoxic (KB cells,  $IC_{50} = 1.0 \mu g/mL$ )<sup>[2407]</sup>. Source: DA HUA JIAN MU *Dysoxylum macranthum*. Ref: 2407.

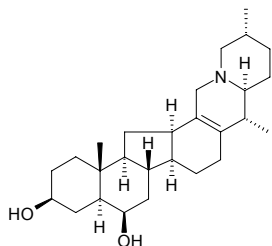


## E

**6657 Ebeienine**

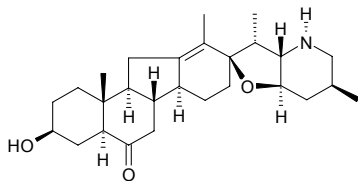
$C_{27}H_{43}NO_2$  (413.65). mp 274.5~278.5°C,  $[\alpha]_D = -2.9^\circ$  ( $c = 0.5$ , MeOH).

Source: XI BEI MU *Fritillaria imperialis* (bulb), ZI HUA E BEI BEI MU *Fritillaria ebeiensis* var. *purpurea*. Ref: 1521, 2201, 4217.

**6658 Ebeiensine**

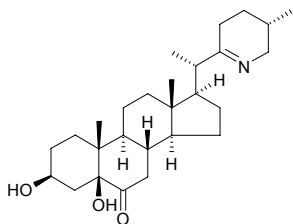
$C_{27}H_{41}NO_3$  (427.63). mp 228~230°C,  $[\alpha]_D = -38^\circ$  ( $c = 0.16$ ,  $CHCl_3$ ). Source:

E BEI BEI MU *Fritillaria ebeiensis*, AN HUI BEI MU *Fritillaria anhuiensis*, ZHE BEI MU *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*]. Ref: 2201.

**6659 Ebeietinone**

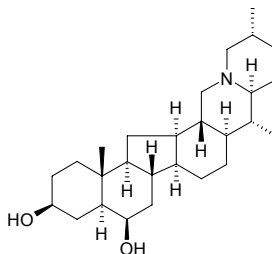
$C_{27}H_{43}NO_3$  (429.65). mp 199~203°C,  $[\alpha]_D = -53.3^\circ$  ( $c = 0.24$ ,  $CHCl_3$ ). Source:

ZI HUA E BEI BEI MU *Fritillaria ebeiensis* var. *purpurea*. Ref: 2201.

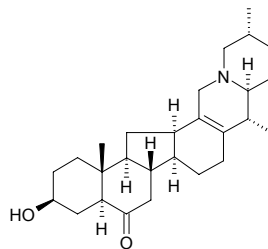
**6660 Ebeinine**

$C_{27}H_{45}NO_2$  (415.67). mp 114~115°C,  $[\alpha]_D = -45.0^\circ$  ( $c = 0.70$ , MeOH). Source:

E BEI BEI MU *Fritillaria ebeiensis*, ZI HUA E BEI BEI MU *Fritillaria ebeiensis* var. *purpurea*. Ref: 2201.

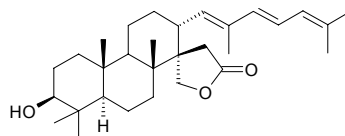
**6661 Ebeinone**

[125409-58-7]  $C_{27}H_{41}NO_2$  (411.63). mp 108~110°C,  $[\alpha]_D = -54.9^\circ$  ( $c = 0.47$ , MeOH). Source: E BEI BEI MU *Fritillaria ebeiensis*, XI BEI MU *Fritillaria imperialis* (bulb), ZI HUA E BEI BEI MU *Fritillaria ebeiensis* var. *purpurea*, ZHE BEI MU *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*]. Ref: 2201, 4217.

**6662 Ebelin lactone**

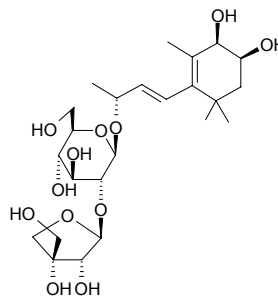
[3649-76-1]  $C_{30}H_{46}O_3$  (454.70). mp 182~185°C. Source: SUAN ZAO REN

*Ziziphus jujuba* var. *spinosa*. Ref: 2.

**6663 Ebracteatoside A**

$C_{24}H_{40}O_{12}$  (520.58). Amorphous powder,  $[\alpha]_D^{17} = -52.2^\circ$  ( $c = 2.0$ , MeOH).

Source: XIAO HUA LAO SHU LE *Acanthus ebracteatus* (aerial parts). Ref: 5211.

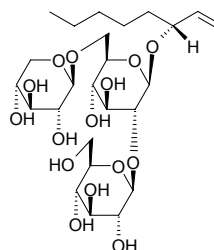
**6664 Ebracteatoside B**

(3*R*)-1-Octen-3-ol-3-*O*-β-*D*-xylopyranosyl-(1<sup>'''</sup>→6<sup>'</sup>)-*O*-[β-*D*-glucopyranosyl-

(1<sup>''</sup>→2<sup>'</sup>)]-*O*-β-*D*-glucopyranoside  $C_{25}H_{44}O_{15}$  (584.62). Amorphous powder,

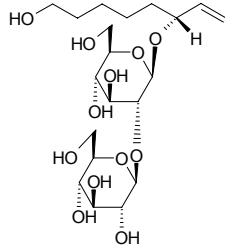
$[\alpha]_D^{22} = -45.0^\circ$  ( $c = 2.11$ , MeOH). Source: XIAO HUA LAO SHU LE

*Acanthus ebracteatus* (aerial parts). Ref: 5211.

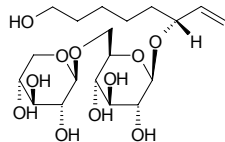


**6665 Ebracteatoside C**

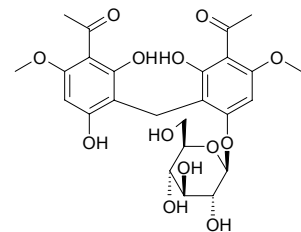
(6*R*)-7-Octene-1,6-diol 6-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)-*O*- $\beta$ -*D*-glucopyranoside C<sub>20</sub>H<sub>36</sub>O<sub>12</sub> (468.50). Amorphous powder,  $[\alpha]_D^{22} = -19.8^\circ$  ( $c = 2.62$ , MeOH). Source: XIAO HUA LAO SHU LE *Acanthus ebracteatus* (aerial parts). Ref: 5211.

**6666 Ebracteatoside D**

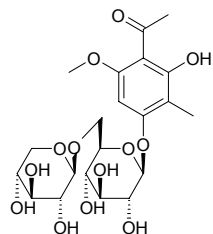
(6*R*)-7-Octene-1,6-diol 6-*O*- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 6)-*O*- $\beta$ -*D*-glucopyranoside C<sub>19</sub>H<sub>34</sub>O<sub>11</sub> (438.48). Amorphous powder,  $[\alpha]_D^{22} = -57.7^\circ$  ( $c = 0.35$ , MeOH). Source: XIAO HUA LAO SHU LE *Acanthus ebracteatus* (aerial parts). Ref: 5211.

**6667 Ebractelatinoside B**

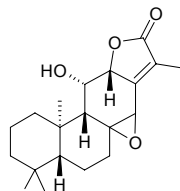
3,3'-Diacetyl-4,4'-dimethoxy-2,2',6,6'-tetrahydroxy diphenyl methane-6'-*O*- $\beta$ -*D*-glucopyranoside C<sub>25</sub>H<sub>30</sub>O<sub>13</sub> (538.51). Yellowish amorphous powder, mp 260–261°C. Source: YUE XIAN DA JI *Euphorbia ebracteolata*. Ref: 678.

**6668 Ebractelatinoside C**

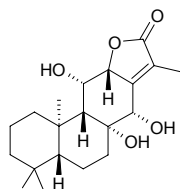
2,4-Dihydroxy-6-methoxy-3-methyl acetophenone 4-*O*- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside C<sub>21</sub>H<sub>30</sub>O<sub>13</sub> (490.47). White amorphous powder, mp 198°C. Source: YUE XIAN DA JI *Euphorbia ebracteolata*. Ref: 678.

**6669 Ebracteolatanolide A**

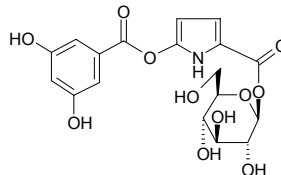
C<sub>20</sub>H<sub>28</sub>O<sub>4</sub> (332.44). White acicular crystals, mp 210°C. Source: YUE XIAN DA JI *Euphorbia ebracteolata*. Ref: 404.

**6670 Ebracteolatanolide B**

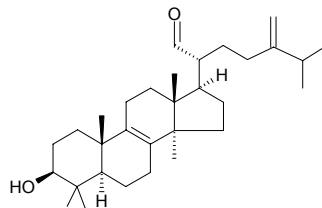
C<sub>20</sub>H<sub>30</sub>O<sub>5</sub> (350.46). White acicular crystals, mp 218°C. Source: YUE XIAN DA JI *Euphorbia ebracteolata*. Ref: 404.

**6671 Ebracteolatinoside A**

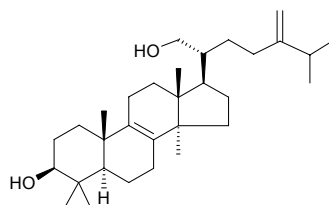
C<sub>18</sub>H<sub>19</sub>NO<sub>11</sub> (425.35). Sallow powder, mp 160°C. Source: YUE XIAN DA JI *Euphorbia ebracteolata*. Ref: 820.

**6672 Eburical**

C<sub>31</sub>H<sub>50</sub>O<sub>2</sub> (454.74). Source: A LI HONG *Fomes officinalis*. Ref: 6.

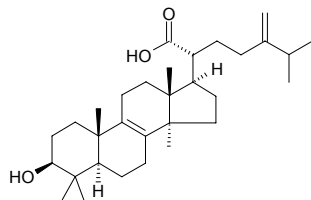
**6673 Eburicodiol**

C<sub>31</sub>H<sub>52</sub>O<sub>2</sub> (456.76). Source: A LI HONG *Fomes officinalis*. Ref: 6.

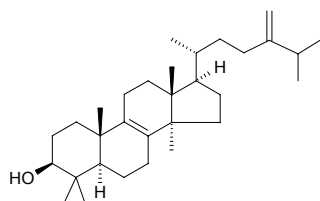


**6674 Eburicoic acid**

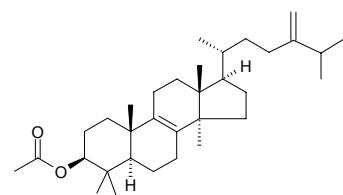
$C_{31}H_{50}O_3$  (470.74). mp 292~293°C. Source: A LI HONG *Fomes officinalis*, FU LING *Poria cocos*. Ref: 2.

**6675 Eburicol**

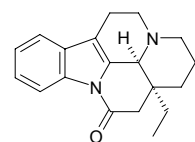
[6890-88-6]  $C_{31}H_{52}O$  (440.76). mp 158~159°C. Source: A LI HONG *Fomes officinalis*. Ref: 6.

**6676 Eburicyl acetate**

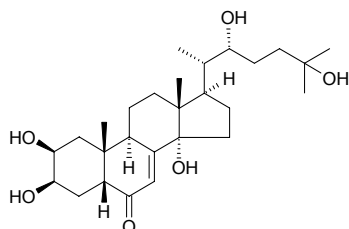
$C_{33}H_{54}O_2$  (482.80). mp 142~143°C. Source: A LI HONG *Fomes officinalis*. Ref: 6.

**6677 Eburnamonine**

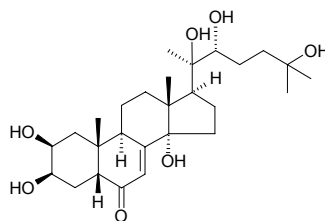
[4880-88-0]  $C_{19}H_{22}N_2O$  (294.40). Pharm: Vasodilator. Source: MAN CHANG CHUN HUA *Vinca minor*. Ref: 658.

**6678 Ecdysone**

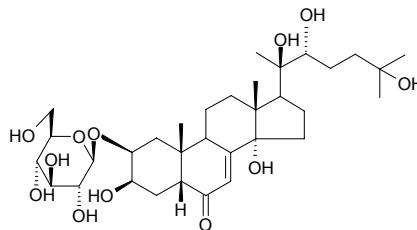
$\alpha$ -Ecdysone [3604-87-3]  $C_{27}H_{44}O_6$  (464.65). mp 242°C. Pharm: Insect ecdysone (badly inhibits growth of ovary in juvenile female fly). Source: BAI JIANG CAN *Bombyx mori* (in 1954, the compound was first isolated from the animal by A. Butenandt, et al.)<sup>[5505]</sup>, DA HUA JIAN QIU LUO *Lychnis fulgens*, DUO ZU JUE *Polypodium vulgare*, LUO YAN CAO *Lemmaphyllum microphyllum*, OU ZHOU JUE *Pteridium aquilinum*, SHUI LONG GU *Polypodium niponicum*, XIAO WU MAO JUE *Blechnum minus*, XIAO YE GUAN ZHONG *Matteuccia struthiopteris*, YUAN CAN E *Bombyx mori*, ZI QI *Osmunda japonica*. Ref: 6, 658, 5505.

**6679 Ecdysterone**

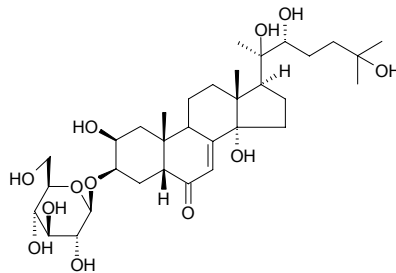
$\beta$ -Ecdysone  $C_{27}H_{44}O_7$  (480.65). mp 237.5~239.5°C. Pharm: Insect ecdysone; low toxin. Source: BAI MAO XIA KU CAO *Ajuga decumbens*, CANG BAI CHENG GOU FENG *Diploclisia glaucescens*, CHUAN NIU XI *Cyathula officinalis* (root: content = 0.057%)<sup>[5508]</sup>, DUN YE TU NIU XI *Achyranthes aspera* var. *indica* (root: content = 0.018%)<sup>[5508]</sup>, JI MAO SONG *Podocarpus imbricatus*, LOU LU *Rhaponticum uniflorum* (dried root: mean content of 3 origins = 0.3993%)<sup>[5508]</sup>, LUO HAN SONG YE *Podocarpus macrophyllum*, LUO YAN CAO *Lemmaphyllum microphyllum*, MA NIU XI *Cyathula capitata* (root: content = 0.046%)<sup>[5508]</sup>, NIU XI *Achyranthes bidentata* (root: mean content of 13 origins = 0.06%)<sup>[5508]</sup>, SANG YE *Morus alba*, SHUI LONG GU *Polypodium niponicum*, TU NIU XI *Achyranthes aspera*, WA WEI *Lepisorus thunbergianus*, XIAO YE GUAN ZHONG *Matteuccia struthiopteris*, YAN LING CAO *Trillium tschonoskii*, ZI QI *Osmunda japonica*, ZI SHAN *Taxus cuspidata*. Ref: 2, 6, 194, 580, 582, 658, 660, 5501, 5508.

**6680 20 $\beta$ -Ecdysterone 2-O- $\beta$ -D-glucopyranoside**

$C_{33}H_{54}O_{12}$  (642.79). White solid. Source: JIANG XI QING NIU DAN *Tinospora craveniana* (root). Ref: 4557.

**6681 Ecdysterone-3-O- $\beta$ -D-glucopyranoside**

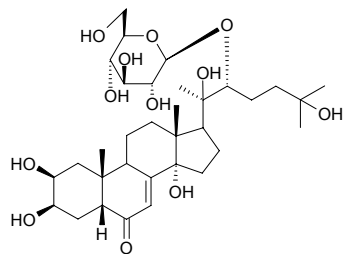
$C_{33}H_{54}O_{12}$  (642.79). White powder. Source: LOU LU *Rhaponticum uniflorum*. Ref: 444.



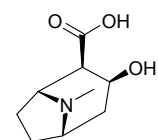


**6682 Ecdysterone-22-O-β-D-glucopyranoside**

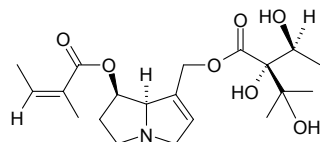
$C_{33}H_{54}O_{12}$  (642.79). White powder, mp 240~242°C. Source: MAO JIAN QIU LUO *Lychnis coronaria*. Ref: 2189.

**6683 Ecgonine**

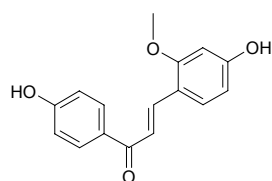
[481-37-8]  $C_9H_{15}NO_3$  (185.22). Pharm: Local anesthetic; supertoxic agent. Source: GU KE *Erythroxylum coca*. Ref: 658.

**6684 Echimidine**

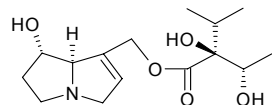
[520-68-3]  $C_{20}H_{31}NO_7$  (397.47). Gum,  $[\alpha]_D^{25} = +6.6^\circ$  ( $c = 0.3$ ,  $CHCl_3$ ). Pharm: Mutagen (drosophila); toxin (exhibits hepatic toxicity). Source: CHE QIAN YE LAN JI *Echium plantagineum*, DONG FANG XI MEN FEI CAO *Symphytum orientale*, KUAI JING XI MEN FEI CAO *Symphytum tuberosum*, XI MEN FEI CAO *Symphytum officinale* (root: yield = 0.00038%dw)<sup>[3039]</sup>, XIN FEI CAO *Symphytum caucasicum*. Ref: 658, 3039.

**6685 Echinatin**

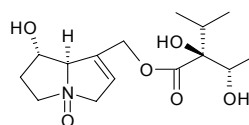
$C_{16}H_{14}O_4$  (270.29). Source: JI GAN CAO *Glycyrrhiza echinata* (cultured cells). Ref: 2431.

**6686 Echinatine**

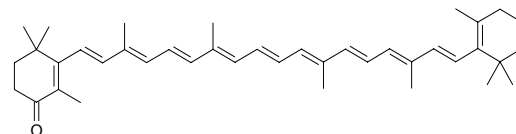
Indicine [480-83-1]  $C_{15}H_{25}NO_5$  (299.37). mp 109~110°C, 97~98°C. Pharm: Ganglionic blocker; enhances blood pressure increase caused by adrenaline; toxin (low toxicity in mus with single iv dose, but continuous injection causes liver denaturation). Source: DA WEI YAO *Heliotropium indicum*, GOU SHI HUA *Cynoglossum amabile*, YAO YONG DAO TI HU *Cynoglossum officinale*, XIN FEI CAO *Symphytum caucasicum*. Ref: 6, 658.

**6687 Echinatine N-oxide**

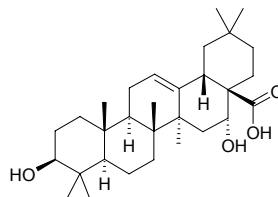
Heliotridine viridiflorate N-oxide [20267-93-0]  $C_{15}H_{25}NO_6$  (315.37). Source: YAO YONG DAO TI HU *Cynoglossum officinale*. Ref: 6.

**6688 Echinenone**

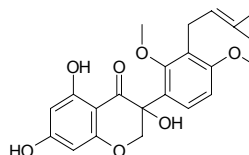
[432-68-8]  $C_{40}H_{54}O$  (550.88). mp 192~193°C. Source: HAI XIA *Penaeus orientalis*. Ref: 6.

**6689 Echinocystic acid**

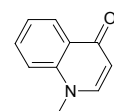
Echinaystic acid  $C_{30}H_{48}O_4$  (472.71). Pharm: Cytotoxic inactive (HL-60,  $IC_{50} > 100\mu\text{mol/L}$ , control Taxol,  $IC_{50} = (4.1E-4 \pm 1.1E-4)\mu\text{mol/L}$ ; MCF7,  $IC_{50} > 100\mu\text{mol/L}$ , Taxol,  $IC_{50} = (15.3 \pm 2.6)\mu\text{mol/L}$ ; Bel7402,  $IC_{50} > 100\mu\text{mol/L}$ , Taxol,  $IC_{50} = (0.3 \pm 0.1)\mu\text{mol/L}$ ; BGC823,  $IC_{50} > 100\mu\text{mol/L}$ ; HeLa,  $IC_{50} > 100\mu\text{mol/L}$ , Taxol,  $IC_{50} = (33.0 \pm 6.1)\mu\text{mol/L}$ ; KB,  $> 100\mu\text{mol/L}$ , Taxol,  $IC_{50} > 100\mu\text{mol/L}$ )<sup>[5015]</sup>; apoptosis inducer inactive (HL-60 cells,  $15\mu\text{mol/L}$ , sub-G1 population =  $(8.7 \pm 4.7)\%$ , control sub-G1 population =  $(5.4 \pm 3.2)\%$ , positive control Taxol, sub-G1 population =  $(40.5 \pm 0.2)\%$ )<sup>[5015]</sup>. Source: HUA NAN ZAO JIA *Gleditsia fera* (fruit: content = 0.0224%)<sup>[5508]</sup>, ZAO JIA *Gleditsia sinensis* [Syn. *Gleditsia horrida*] (fruit: mean content = 0.1168%)<sup>[5508]</sup>. Ref: 5015, 5508.

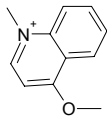
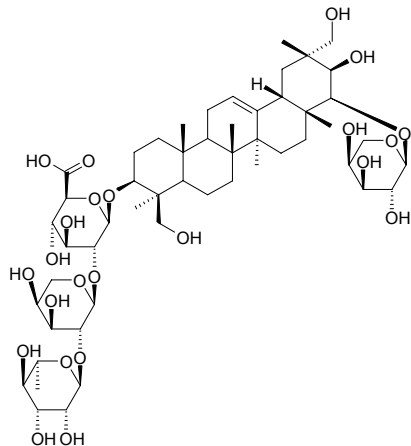
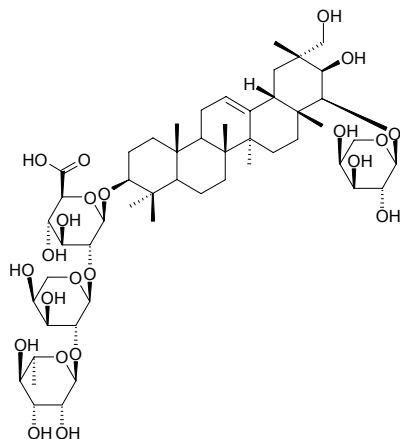
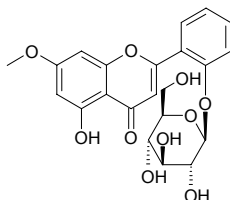
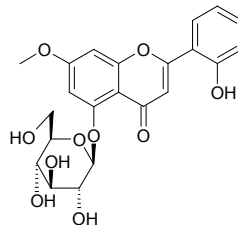
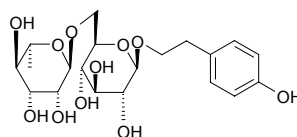
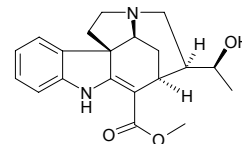
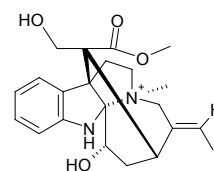
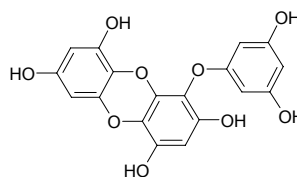
**6690 Echinisoflavanone**

$C_{22}H_{24}O_7$  (400.43). Pharm: Anti-inflammatory (NO production inhibitor)<sup>[4415]</sup>. Source: *Echinosophora koreensis* (root). Ref: 1521, 4415.

**6691 Echinopsine**

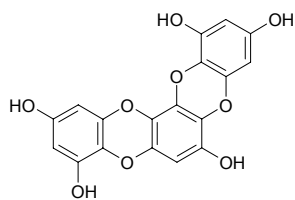
[83-54-5]  $C_{10}H_9NO$  (159.19). mp ( $\alpha$ ) 152°C, ( $\beta$ ) 135°C. Pharm: Enhances myocardial contractility and reduces scope of contraction (frog heart *in vitro*, narcosis cat, *in vivo*); enhances tension of intestinal canal (cat, *in vitro*, but inhibits the tension in rbt); antihypertensive (narcosis cat); similar action with strychnine; vasodilator (rbt ear, *in vitro*). Source: XIN JIANG LAN CI TOU *Echinops ritro*, WU ZHU YU *Evodia rutaecarpa* (fruit). Ref: 4, 6, 658, 660, 5031.



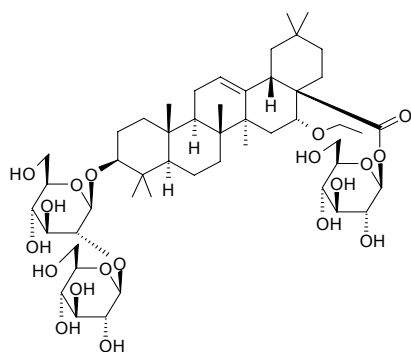
**6692 Echinorine**[18095-64-2] C<sub>11</sub>H<sub>12</sub>NO<sup>+</sup> (174.22). Source: XIN JIANG LAN CI TOU*Echinops ritro*. Ref: 6, 660.**6693 Echinophoroside A<sub>1</sub>**3-*O*- $\alpha$ -L-Rhamnopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranosyl(1 $\rightarrow$ 2)- $\beta$ -D-glucuronopyranosyl kudzu-sapogenol A 22-*O*- $\alpha$ -L-arabinopyranoside C<sub>52</sub>H<sub>84</sub>O<sub>23</sub> (1077.24). Source:CHAO XIAN LANG YA CI *Sophora koreensis* (root). Ref: 4056.**6694 Echinophoroside B**3-*O*- $\alpha$ -L-Rhamnopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranosyl(1 $\rightarrow$ 2)- $\beta$ -D-glucuronopyranosyl abrisapogenol C 22-*O*- $\alpha$ -L-arabinopyranoside C<sub>52</sub>H<sub>84</sub>O<sub>22</sub> (1061.24). Source:CHAO XIAN LANG YA CI *Sophora koreensis* (root). Ref: 4056.**6695 Echioidinin-2'-*O*- $\beta$ -D-glucopyranoside**C<sub>22</sub>H<sub>22</sub>O<sub>10</sub> (446.41). Yellow needles (MeOH), mp 276~278°C (dec). Source:*Andrographis rothii* (whole herb). Ref: 4311.**6696 Echioidinin-5-*O*- $\beta$ -D-glucopyranoside**C<sub>22</sub>H<sub>22</sub>O<sub>10</sub> (446.41). Pale yellow solid (MeOH), mp 245~246°C, [ $\alpha$ ]<sub>D</sub><sup>28</sup> = -70.1° (c = 0.2, C<sub>5</sub>H<sub>5</sub>N). Source: *Andrographis neesiana* (whole herb). Ref: 4357.**6697 Echipuroside A**C<sub>20</sub>H<sub>30</sub>O<sub>11</sub> (446.46). White powder, mp 108~110°C. Source: ZI HUA SONG GUO JU *Echinacea purpurea*. Ref: 2219.**6698 Echitamidine**[38681-90-2] C<sub>20</sub>H<sub>24</sub>N<sub>2</sub>O<sub>3</sub> (340.43). mp 244°C (dec). Source: PEN JIA SHU *Winchia calophylla*, XIANG PI MU *Alstonia scholaris*. Ref: 270, 1521.**6699 Echitamine**C<sub>22</sub>H<sub>29</sub>N<sub>2</sub>O<sub>4</sub> (385.49). Hydrate: (C<sub>22</sub>H<sub>30</sub>N<sub>2</sub>O<sub>5</sub>), white crystals, mp 206°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -29° (ethanol); chloride: long acicular crystals (water), mp 295°C, [ $\alpha$ ]<sub>D</sub><sup>15</sup> = -58°.Pharm: Ganglionic blocker (curariform action); diuretic; antihypertensive (high dose). Source: DAO ZHUANG JI GU CHANG SHAN *Alstonia spatulata*, GAN LAO JI GU CHANG SHAN *Alstonia boonei*, XIANG PI MU *Alstonia scholaris*, ZHUANG GUAN JI GU CHANG SHAN *Alstonia spectabilis*. Ref: 6, 661.**6700 Eckol**[88798-74-7] C<sub>18</sub>H<sub>12</sub>O<sub>9</sub> (372.29). Colorless flake crystals (acetone-water), mp 243~244°C; Amorphous powder. Pharm: Antifibrinolysis ( $\alpha_2$ -macroglobulin, IC<sub>50</sub> = 2.5 $\mu$ g/mL,  $\alpha_2$ -fibrinolysin, IC<sub>50</sub> = 1.6 $\mu$ g/mL); antithrombotic; tyrosinase inhibitor; antioxidant (DPPH scavenger, IC<sub>50</sub> = 11.5 $\mu$ mol/L, control Ascorbic acid, IC<sub>50</sub> = 10.3 $\mu$ mol/L)<sup>[4376]</sup>. Source: HEI KUN BU *Ecklonia kurome*, Brown alga *Ecklonia stolonifera*. Ref: 1019, 4376.

**6701 Eckstonolol**

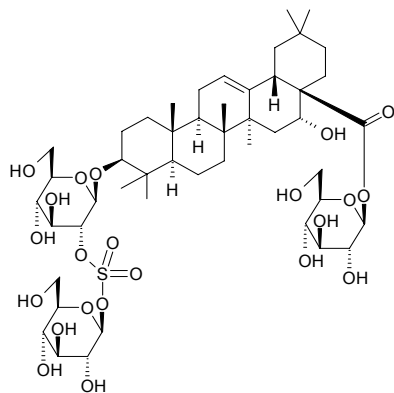
$C_{18}H_{10}O_9$  (370.27). Off-white powder,  $[\alpha]_D^{20} = 0^\circ$  ( $c = 0.008$ , MeOH). **Pharm:** Antioxidant (DPPH scavenger,  $IC_{50} = 8.8 \mu\text{mol/L}$ , control Ascorbic acid,  $IC_{50} = 10.3 \mu\text{mol/L}$ ). **Source:** Brown alga *Ecklonia stolonifera*. **Ref:** 4376.

**6702 Eclalbasaponin XI**

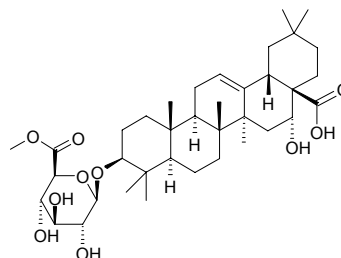
3-*O*-[ $\beta$ -*D*-Glucopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl]-16 $\alpha$ -ethoxy-olean-12-ene-28-oic acid 28-*O*- $\beta$ -*D*-glucopyranoside  $C_{50}H_{82}O_{19}$  (987.20). White crystals mp 231~233°C. **Source:** MO HAN LIAN *Eclipta prostrata* [Syn. *Eclipta alba*]. **Ref:** 2124.

**6703 Eclalbasaponin XII**

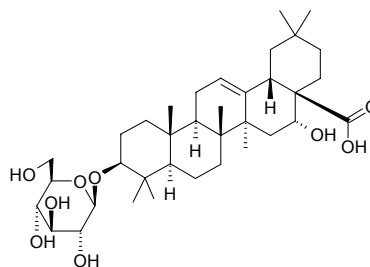
3-*O*-[(2-*O*-Sulfuryl- $\beta$ -*D*-glucopyranosyl)(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl]-echinocystic acid 28-*O*- $\beta$ -*D*-glucopyranoside  $C_{48}H_{78}O_{22}S$  (1039.21). White amorphous powder, mp 130~131°C. **Pharm:** Induces distortion of mycelial (mold of rice blast). **Source:** MO HAN LIAN *Eclipta prostrata* [Syn. *Eclipta alba*]. **Ref:** 2124.

**6704 Eclalbasaponin XIII**

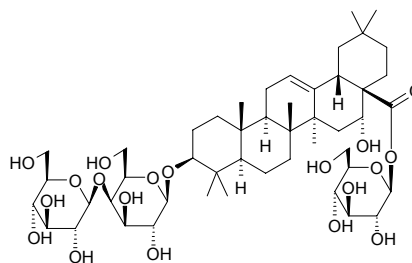
Echinocystic acid 3-*O*-(6'-*O*-methyl)- $\beta$ -*D*-glucuronopyranoside  $C_{37}H_{58}O_{10}$  (662.87). White powdery crystals, mp 195~198°C. **Source:** MO HAN LIAN *Eclipta prostrata* [Syn. *Eclipta alba*]. **Ref:** 2266.

**6705 Ecliptasaponin A**

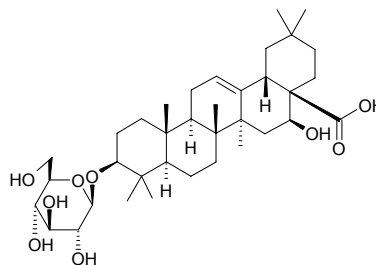
3 $\beta$ ,16 $\alpha$ -Dihydroxyolean-12-ene-28-oic acid 3-*O*- $\beta$ -*D*-glucopyranoside  $C_{36}H_{58}O_9$  (634.86). White acicular crystals, mp 237~238°C (methanol). **Source:** MO HAN LIAN *Eclipta prostrata* [Syn. *Eclipta alba*]. **Ref:** 349.

**6706 Ecliptasaponin B**

3 $\beta$ -*O*-[( $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl)-16 $\alpha$ -hydroxyolean-12-ene-28-oic acid-28-*O*- $\beta$ -*D*-glucopyranoside  $C_{48}H_{78}O_{19}$  (959.15). White acicular crystals, mp 220~221°C (methanol). **Source:** MO HAN LIAN *Eclipta prostrata* [Syn. *Eclipta alba*]. **Ref:** 349.

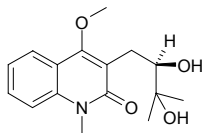
**6707 Ecliptasaponin D**

$C_{36}H_{58}O_9$  (634.86). White powder, mp 240~243°C. **Source:** MO HAN LIAN *Eclipta prostrata* [Syn. *Eclipta alba*]. **Ref:** 392.

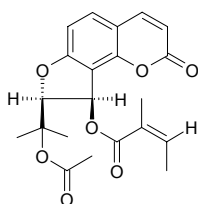


**6708 Edulinine**

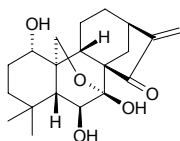
[27495-36-9] C<sub>16</sub>H<sub>21</sub>NO<sub>4</sub> (291.35). mp 140–142°C. **Pharm:** Analgesic; CNS depressant; anti-epilepsy (rat, brain hippocampus section CA1, eximine-induced epilepsy); cytotoxic (P<sub>388</sub> cell line, ED<sub>50</sub> = 27.1 μg/mL, control Mithramycin, ED<sub>50</sub> = 0.06 μg/mL; HT29, ED<sub>50</sub> = 43.6 μg/mL, Mithramycin, ED<sub>50</sub> = 0.07 μg/mL; A549, ED<sub>50</sub> = 25.5 μg/mL, Mithramycin, ED<sub>50</sub> = 0.08 μg/mL)<sup>[5405]</sup>. **Source:** CHOU CAO *Ruta graveolens*, SI ROU TUO GUO YE MI ZHU YU *Melicope semecarpifolia*. **Ref:** 6, 1625, 1626, 5405.

**6709 Edultin**

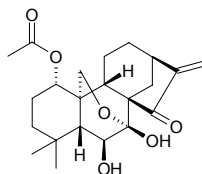
Cnidimine [15591-75-0] C<sub>21</sub>H<sub>22</sub>O<sub>7</sub> (386.41). **Pharm:** Reversing MDR of KBV200 cells (obviously)<sup>[2787]</sup>. **Source:** SHE CHUANG ZI *Cnidium monnieri* (ripe seed: mean content of 6 origins = 0.652%<sup>[5508]</sup>). **Ref:** 6, 2787, 5508.

**6710 Effusanin A**

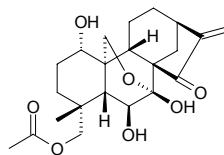
C<sub>20</sub>H<sub>28</sub>O<sub>5</sub> (348.44). Colorless needles (EtOH), mp 252–256°C, [α]<sub>D</sub><sup>23</sup> = –53.8° (c = 0.4, EtOH); mp 262–265°C, [α]<sub>D</sub> = –76.0° (c = 0.05, EtOH); mp 266–268°C, [α]<sub>D</sub><sup>20</sup> = –79.7° (c = 0.35, C<sub>5</sub>H<sub>5</sub>N). **Pharm:** Cytotoxic (DNA-damaging activity, mutant yeast strain RAD 52Y, IC<sub>12</sub> = 20 μg/mL, control Streptonigrin, IC<sub>12</sub> = 0.4 μg/mL; wild type yeast strain RAD+, IC<sub>12</sub> = 50 μg/mL, Streptonigrin, IC<sub>12</sub> = 1.0 μg/mL)<sup>[5348]</sup>. **Source:** KAI ZHAN XIANG CHA CAI *Isodon effusa*, ZHOU YE XIANG CHA CAI *Isodon rugosus* [Syn. *Rabdosia rugosa*]. **Ref:** 4067, 5348.

**6711 Effusanin B**

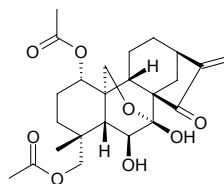
C<sub>22</sub>H<sub>30</sub>O<sub>6</sub> (390.48). Colorless prisms (acetone–hexane), mp 254–256°C, [α]<sub>D</sub><sup>23</sup> = –60° (c = 0.1, MeOH); mp 258–260°C, [α]<sub>D</sub> = –66.7° (c = 0.027, EtOH); mp 264–267°C, [α]<sub>D</sub><sup>20</sup> = –61° (CHCl<sub>3</sub>). **Pharm:** Cytotoxic (DNA-damaging activity, mutant yeast strain RAD 52Y, IC<sub>12</sub> = 12 μg/mL, control Streptonigrin, IC<sub>12</sub> = 0.4 μg/mL; wild type yeast strain RAD+, IC<sub>12</sub> = 35 μg/mL, Streptonigrin, IC<sub>12</sub> = 1.0 μg/mL)<sup>[5348]</sup>. **Source:** KAI ZHAN XIANG CHA CAI *Isodon effusa*, ZHOU YE XIANG CHA CAI *Isodon rugosus* [Syn. *Rabdosia rugosa*]. **Ref:** 4067, 5348.

**6712 Effusanin C**

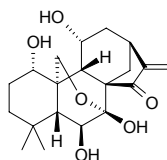
C<sub>22</sub>H<sub>30</sub>O<sub>7</sub> (406.48). mp 243–245°C, [α]<sub>D</sub><sup>21</sup> = –54.0° (c = 0.46, C<sub>5</sub>H<sub>5</sub>N). **Source:** KAI ZHAN XIANG CHA CAI *Isodon effusa*. **Ref:** 4067.

**6713 Effusanin D**

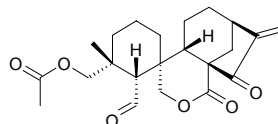
C<sub>24</sub>H<sub>32</sub>O<sub>8</sub> (448.52). mp 188–190°C, [α]<sub>D</sub><sup>21</sup> = –28.2° (c = 0.41, CHCl<sub>3</sub>). **Source:** KAI ZHAN XIANG CHA CAI *Isodon effusa*. **Ref:** 4067.

**6714 Effusanin E**

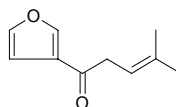
C<sub>20</sub>H<sub>28</sub>O<sub>6</sub> (364.44). Colorless prisms (EtOH), mp 231–235°C, mp 240–242°C, [α]<sub>D</sub><sup>23</sup> = –28.2° (c = 0.06, EtOH); [α]<sub>D</sub> = –81.3° (c = 0.28, C<sub>5</sub>H<sub>5</sub>N); mp 250–252°C, [α]<sub>D</sub><sup>21</sup> = –81.3° (c = 0.20, C<sub>5</sub>H<sub>5</sub>N). **Pharm:** Cytotoxic (DNA-damaging activity, mutant yeast strain RAD 52Y, IC<sub>12</sub> = 95 μg/mL, control Streptonigrin, IC<sub>12</sub> = 0.4 μg/mL; wild type yeast strain RAD+, IC<sub>12</sub> > 100 μg/mL, Streptonigrin, IC<sub>12</sub> = 1.0 μg/mL)<sup>[5348]</sup>. **Source:** KAI ZHAN XIANG CHA CAI *Isodon effusa*, SHAN DI XIANG CHA CAI *Isodon oresbia* (aerial parts), ZHOU YE XIANG CHA CAI *Isodon rugosus* [Syn. *Rabdosia rugosa*]. **Ref:** 3808, 4067, 5348.

**6715 Effusin**

C<sub>22</sub>H<sub>28</sub>O<sub>6</sub> (388.46). mp 211–213°C, [α]<sub>D</sub><sup>35</sup> = +21° (c = 1.12, C<sub>5</sub>H<sub>5</sub>N). **Source:** KAI ZHAN XIANG CHA CAI *Isodon effusa*. **Ref:** 4067.

**6716 Egomaketone**

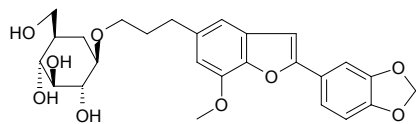
[59204-74-9] C<sub>10</sub>H<sub>12</sub>O<sub>2</sub> (164.21). bp 124–126°C/20mmHg. **Source:** BAI SU ZI *Perilla frutescens*, ZI SU GENG *Perilla frutescens* var. *arguta*. **Ref:** 6, 660.



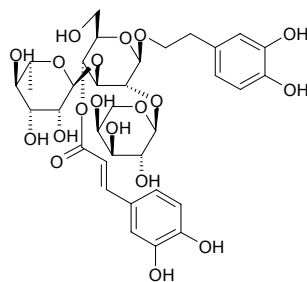
**6717 Egonol glucoside**

$C_{26}H_{30}O_9$  (486.52). Viscous yellowish oil,  $[\alpha]_D^{25} = -15.2^\circ$  ( $c = 0.6$ , MeOH).

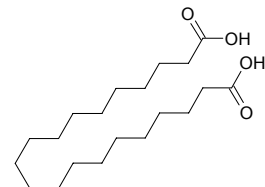
Source: RI BEN AN XI XIANG JING PI *Styrax japonica*. Ref: 2546.

**6718 Ehrenoside**

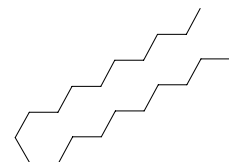
[106323-63-1]  $C_{34}H_{44}O_{19}$  (756.72). Amorphous powder,  $[\alpha]_D^{23} = -58^\circ$  ( $c = 0.16$ , MeOH). Pharm: Antioxidant (DPPH scavenger, 0.5mmol/L, InRt = 50%, control BHA, 0.5mmol/L, InRt = 30%)<sup>[4191]</sup>. Source: SHU CHI PO PO NA *Veronica pectinata* var. *glandulosa* (aerial parts). Ref: 4191.

**6719 Eicosandioic acid**

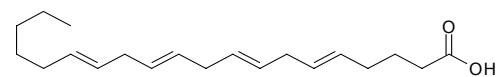
[2424-92-2]  $C_{20}H_{38}O_4$  (342.52). mp 122–123°C. Source: LIN BEI ZI *Toxicodendron succedaneum* [Syn. *Rhus succedanea*], QI ZI *Rhus verniciflua* [Syn. *Toxicodendron verniciflum*]. Ref: 6.

**6720 Eicosane**

*n*-Eicosane [112-95-8]  $C_{20}H_{42}$  (282.56). Source: DONG CHONG XIA CAO *Cordyceps sinensis*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], ROU CONG RONG *Cistanche deserticola*, SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. Ref: 2.

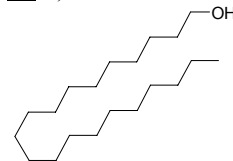
**6721 Eicosanetetraenoic acid**

$C_{20}H_{32}O_2$  (304.48). mp -49.5°C. Source: NIU GAN *Bos taurus domesticus*; *Bubalus bubalis*, ZI CAI *Porphyra tenera*. Ref: 6.

**6722 Eicosanol**

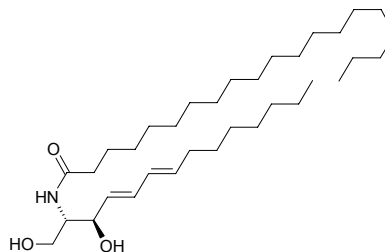
1-Eicosanol [629-96-9]  $C_{20}H_{42}O$  (298.56). mp 65.5°C, bp 220°C/3mmHg.

Source: KU CAO *Vallisneria spiralis*, ZI CAO *Lithospermum erythrorhizon*. Ref: 6, 660.

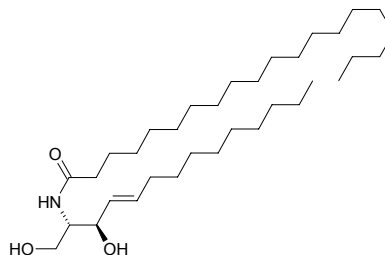
**6723 (4E,6E,2S,3R)-2-N-Eicosanoyl-4,6-tetradecasphingadienine**

$C_{34}H_{65}NO_3$  (535.9). White powder; mp 73.6°C,  $[\alpha]_D^{20} = -3.2^\circ$  ( $c = 0.05$ ,  $CHCl_3$ ). Pharm: Neurotrophic (neurite outgrowth promoter, measuring neurite length of PC12 cell, 10μmol/L, activity greater than that of 50ng/mL NGF).

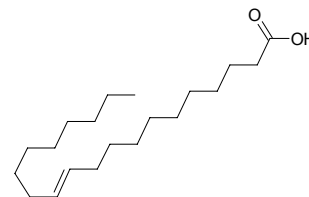
Source: BAI JIANG CAN *Bombyx mori*. Ref: 4684.

**6724 (4E,2S,3R)-2-N-Eicosanoyl-4-tetradecasphinganine**

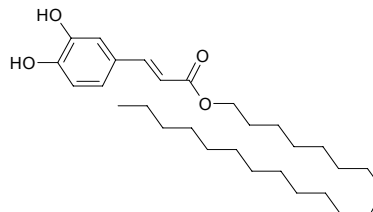
$C_{34}H_{67}NO_3$  (537.92). White powder; mp 81.7°C,  $[\alpha]_D^{20} = -4.0^\circ$  ( $c = 0.082$ ,  $CHCl_3$ ). Source: BAI JIANG CAN *Bombyx mori*. Ref: 4684.

**6725 11-Eicosenoic acid**

[5561-99-9]  $C_{20}H_{38}O_2$  (310.52). Source: QIANG HUO *Notopterygium incisum*. Ref: 2.

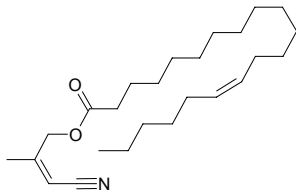
**6726 Eicosyl caffeate**

$C_{29}H_{48}O_4$  (460.70). Source: ZI CAO *Lithospermum erythrorhizon*. Ref: 2193.

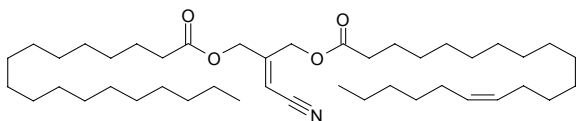


**6727 3-O-14,15-Eicosylenoyl-1-cyano-2-methyl-1,2-propene**

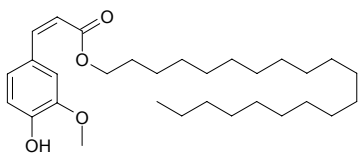
$C_{25}H_{43}NO_2$  (389.63). Colorless wax. Source: LUAN SHU *Koelreuteria paniculata*. Ref: 849.

**6728****3-O-14,15-Eicosylenoyl-4-O-stearoyl-1-cyano-2-oxymethyl-1,2-propene**

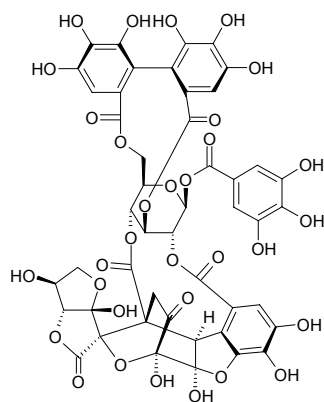
$C_{43}H_{77}NO_4$  (672.10). Colorless wax. Source: LUAN SHU *Koelreuteria paniculata*. Ref: 849.

**6729 Eicosyl ferulate**

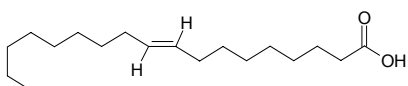
$C_{30}H_{50}O_4$  (474.73). Source: YA MA ZI *Linum usitatissimum*. Ref: 6.

**6730 Elaecarpusin**

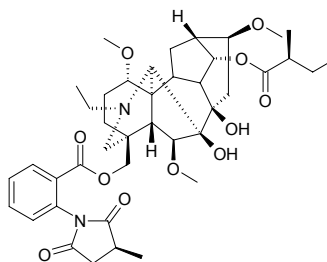
$C_{47}H_{34}O_{32}$  (1110.78). Source: AN MO LE *Phyllanthus emblica* (fruit juice). Ref: 3094.

**6731 Elaidic acid**

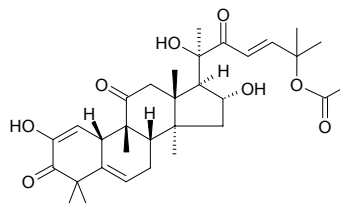
*trans*-9-Octadecenoic acid [112-79-8]  $C_{18}H_{34}O_2$  (282.47). mp 44.5°C. Source: DENG LONG CAO *Physalis peruviana*, HU TAO YE *Juglans regia*. Ref: 6.

**6732 Elanine**

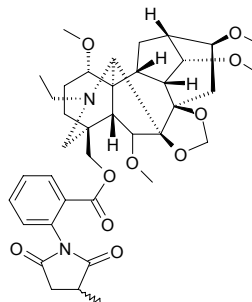
$C_{41}H_{56}N_2O_{11}$  (752.91). Source: HEI SHUI CUI QUE HUA BIAN ZHONG *Delphinium potaninii* var. *juifengshanense* (root). Ref: 4227.

**6733 Elaterin**

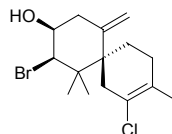
Cucurbitacin [18444-66-1]  $C_{32}H_{44}O_8$  (556.70). mp 234°C. Source: GUA DI *Cucumis melo*, SI GUA ZI *Luffa cylindrica*. Ref: 6.

**6734 Elatine**

[26000-16-8]  $C_{38}H_{50}N_2O_{10}$  (694.83). mp 233~235°C. Pharm: Ganglionic blocker; muscle relaxant (competitive); toxin. Source: FEI YAN CAO *Consolida ajacis* [Syn. *Delphinium ajacis*], GAO FEI YAN CAO *Delphinium elatum*. Ref: 6, 658.

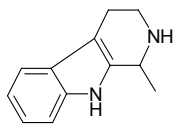
**6735 Elatol**

$C_{15}H_{22}BrClO$  (333.70). Oil,  $[\alpha]_D^{24} = +75.3^\circ$  ( $c = 0.318$ , MeOH). Pharm: Antibacterial (*Clostridium cellobioparum*, MIC = 5µg/disc; *Proteus mirabilis*, MIC = 5µg/disc; *Flavobacterium helmiphilum*, MIC = 10µg/disc; *Chromobacterium violaceum*, *Clostridium fallax*, *Clostridium novyi*, *Clostridium sordellii*, *Escherichia coli*, *Enterobacter aerogenes*, *Shigella flexneri*, *Vibrio cholerae*, *Vibrio parahaemolyticus*, *Vibrio vulnificus*, MIC = 15~30µg/disc)<sup>[5183]</sup>. Source: GAO AO DING ZAO *Laurencia elata* (the compound was isolated from the plant by J.J.Sions, et al. in 1974)<sup>[5505]</sup>, LUE DA AO DING ZAO *Laurencia majuscula*. Ref: 5183, 5505.

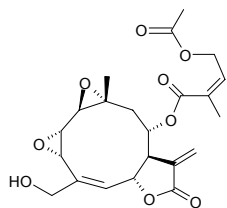


**6736 Eleagnine**

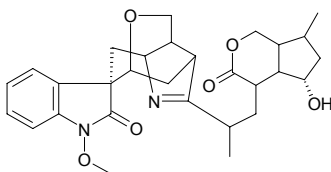
Tetrahydroharman [525-40-6] C<sub>12</sub>H<sub>14</sub>N<sub>2</sub> (186.26). mp 180.0–181.5°C; 178–180°C. Source: LU ZHU GEN *Arundo donax*, SHA ZAO SHU PI *Elaeagnus angustifolia*. Ref: 6.

**6737 Eleganin**

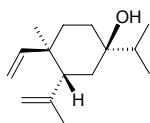
[57498-84-7] C<sub>22</sub>H<sub>26</sub>O<sub>9</sub> (434.45). mp 142–143°C, [α]<sub>D</sub><sup>22</sup> = –108°. Pharm: Antineoplastic; cytotoxic. Source: HUA LI SHE BIAN JU *Liatris elegans*, CU CAO SHE BIAN JUJU *Liatris scabra*. Ref: 658.

**6738 Elegansamine**

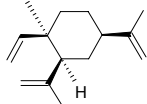
[120090-58-6] C<sub>29</sub>H<sub>36</sub>N<sub>2</sub>O<sub>6</sub> (508.62). mp 172–173°C. Source: GOU WEN *Gelsemium elegans*. Ref: 13.

**6739 Elema-1,3-dien-7-ol**

(+)-(1*R*,3*R*,4*R*)-4-Ethenyl-4-methyl-3-(1-methylethenyl)-1-(1-methylethyl)-cyclohexanol C<sub>15</sub>H<sub>26</sub>O (222.37). Colorless oil. Source: YING ZHI YE TAI *Lepidozia vitrea* (essential oil). Ref: 5209.

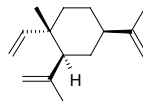
**6740 (-)-cis-β-Elemene**

C<sub>15</sub>H<sub>24</sub> (204.36). Colorless oil. Source: BO BAN HE YE TAI *Scapania undulata* (essential oil). Ref: 3752.

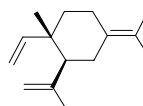
**6741 β-Elemene**

C<sub>15</sub>H<sub>24</sub> (204.36). bp 117–124°C/15.5mmHg. Pharm: Cytotoxic (leukemia cell, IC<sub>50</sub> = 33.5 μg/mL); antineoplastic (animal model, EAC ascites tumour, ARS ascites tumour, YAS ascites tumour, S<sub>180</sub> ascites tumour). Source: BING PIAN *Dryobalanops aromatica*, CANG ZHU *Attractylodes lancea*, DONG LING CAO *Rabdosia rubescens*, DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*], GUANG HUO XIANG *Pogostemon cablin* [Syn. *Mentha cablin*],

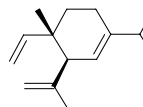
HONG CHAI HU *Bupleurum scorzonerifolium*, HUANG HUA HAO *Artemisia annua*, HUO XIANG *Agastache rugosus*, JING JIE *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*], MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*], REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*], SHANG ZUO JIAN YE GUANG E TAI *Porella acutifolia* ssp. *Tosana*, SHENG JIANG *Zingiber officinale*, WU WEI ZI *Schisandra chinensis*, YIN CHEN HAO *Artemisia capillaris*. Ref: 2, 5, 660, 3932, 5501.

**6742 γ-Elemene**

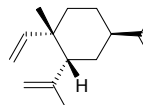
[30824-67-0] C<sub>15</sub>H<sub>24</sub> (204.36). Source: HUANG HUA HAO *Artemisia annua*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*], SHENG JIANG *Zingiber officinale*. Ref: 2, 660.

**6743 δ-Elemene**

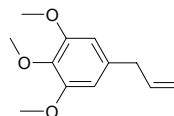
[20307-84-0] C<sub>15</sub>H<sub>24</sub> (204.36). bp 107°C/10mmHg. Source: REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. Ref: 2.

**6744 cis-β-Elemene diastereomer**

C<sub>15</sub>H<sub>24</sub> (204.36). Colorless oil. Source: BO BAN HE YE TAI *Scapania undulata* (essential oil). Ref: 3752.

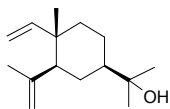
**6745 Elemicin**

[487-11-6] C<sub>12</sub>H<sub>16</sub>O<sub>3</sub> (208.26). bp 144–147°C/10mmHg. Pharm: Anesthetic (mus, rbt, cat, and dog, iv); platelet aggregation inhibitor (rbt). Source: BAN KE HU JIAO *Piper banksii*, CHANG XIANG MAO *Cymbopogon procerus*, DU HENG *Asarum forbesii*, GAO DA HU JIAO *Macropiper excelsum*, HAI FENG TENG *Piper kadsura* [Syn. *Piper futokadsura*], HUI HUI SU GENG *Perilla frutescens* var. *crispa*, JIAN ZI SU *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*], JIAN ZI SU YE *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*], LIAO XI XIN *Asarum heterotropoides* var. *mandshuricum* (whole herb: content scope = 0.011%–0.069%)<sup>[5501]</sup>, NAN HE SHI *Daucus carota*, SHAN ZHU YU *Cornus officinalis* [Syn. *Macrocarpium officinale*], SHUANG YE XI XIN *Asarum caulescens*, SI JING JIE BA DOU *Croton nepetaefolius*, XI XIN *Asarum sieboldii*, YE XIANG MAO *Cymbopogon goeringii*, YUN NAN ZHANG *Cinnamomum glanduliferum*, ZHAO WA GAN LAN *Canarium commune*. Ref: 2, 658, 660, 2537, 5501.

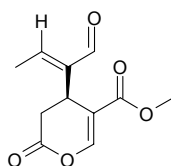


**6746 Elemol**

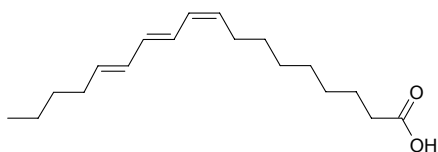
[32142-08-8] C<sub>15</sub>H<sub>26</sub>O (222.37). mp 52.5~53.5°C. Source: BEI CANG ZHU *Atractylodes chinensis*, CANG ZHU *Atractylodes lancea*, HOU PO *Magnolia officinalis*, MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*], SHENG JIANG *Zingiber officinale*. Ref: 2, 660.

**6747 Elenolide**

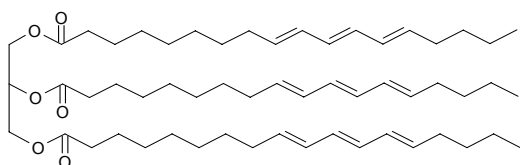
[24582-91-0] C<sub>11</sub>H<sub>12</sub>O<sub>5</sub> (224.22). Acicular crystals (hot ethanol), mp 155.2°C, [α]<sub>D</sub><sup>20</sup> = +360° (chloroform). Pharm: Antihypertensive. Source: YOU GAN LAN *Olea europaea*. Ref: 661.

**6748 α-Eleostearic acid**

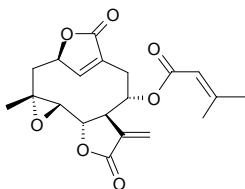
[506-23-0] C<sub>18</sub>H<sub>30</sub>O<sub>2</sub> (278.44). Source: TONG YOU *Aleurites cordata* [Syn. *Aleurites fordii*]. Ref: 658.

**6749 α-Eleostearin**

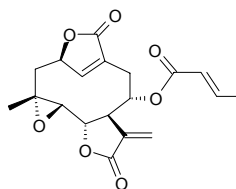
C<sub>57</sub>H<sub>92</sub>O<sub>6</sub> (873.37). Source: TONG YOU *Aleurites cordata* [Syn. *Aleurites fordii*]. Ref: 6.

**6750 Elephantin**

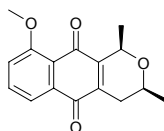
[21899-50-3] C<sub>20</sub>H<sub>22</sub>O<sub>7</sub> (374.39). mp 242~244°C, [α]<sub>D</sub><sup>27</sup> = -380°. Pharm: Antineoplastic (rat, W<sub>256</sub>, 50~100mg/kg; mus, P<sub>388</sub>); cytotoxic (KB, ED<sub>50</sub> = 0.28~2.00μg/mL); plant growth regulator. Source: GAO DI DAN CAO *Elephantopus elatus*. Ref: 661.

**6751 Elephantopin**

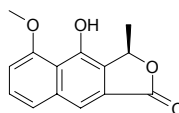
[13017-11-3] C<sub>19</sub>H<sub>20</sub>O<sub>7</sub> (360.37). mp 262~264°C, [α]<sub>D</sub><sup>25</sup> = -398°. Pharm: Antineoplastic (rat, W<sub>256</sub>, 50~100mg/kg; mus, P<sub>388</sub>); cytotoxic (KB, ED<sub>50</sub> = 0.28~2.00μg/mL). Source: GAO DI DAN CAO *Elephantopus elatus*. Ref: 661.

**6752 Eleutherin**

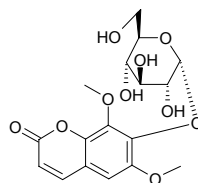
[478-36-4] C<sub>16</sub>H<sub>16</sub>O<sub>4</sub> (272.30). Orange crystals, mp 173~175°C, [α]<sub>D</sub><sup>34</sup> = 345.6° (chloroform). Pharm: Antibacterial (*Staphylococcus aureus*, *Mycobacterium smegmatis*); increases coronary flow. Source: XIAO HONG SUAN *Eleutherine americana*. Ref: 661.

**6753 Eletherol**

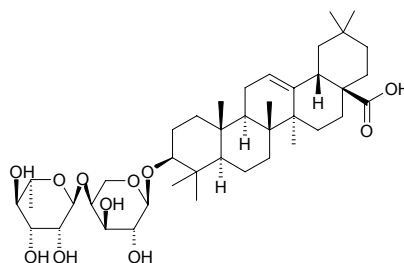
[480-00-2] C<sub>14</sub>H<sub>12</sub>O<sub>4</sub> (244.25). Pharm: Increases coronary flow. Source: XIAO HONG SUAN *Eleutherine americana*. Ref: 658.

**6754 Eletheroside B<sub>1</sub>**

7-Hydroxy-6,8-dimethoxycoumarin glucoside [16845-16-2] C<sub>17</sub>H<sub>20</sub>O<sub>10</sub> (384.34). mp 218°C. Pharm: Increases the weight and RNA content of both prostate and testis (male mus, orl, 5~7mg/(kg·d)). Source: WU JIA PI *Acanthopanax gracilistylus*. Ref: 6, 658.

**6755 Eletheroside I**

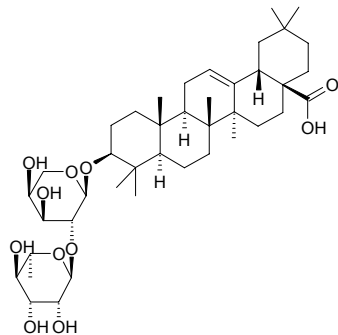
Mubenin B; Raddeanin B [35790-94-4] C<sub>41</sub>H<sub>66</sub>O<sub>11</sub> (734.98). mp 234~235°C (dec), mp 237~240°C, [α]<sub>D</sub><sup>24</sup> = +12° (c = 0.5, MeOH). Pharm: Hemolytic. Source: CI WU JIA YE *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*], DUO BEI YIN LIAN HUA *Anemone raddeana* (root: yield = 0.0043%), NA TENG GUO *Stauntonia hexaphylla*. Ref: 6, 660, 900, 1312.



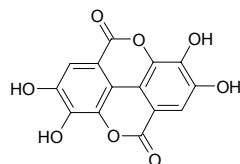


**6756 Eleutheroside K**

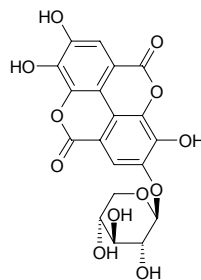
$\beta$ -Hederin; Oleanolic acid 3-*O*- $\alpha$ -L-rhamnopyranosyl (1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranoside [35790-95-5] C<sub>41</sub>H<sub>66</sub>O<sub>11</sub> (734.98). White needles, mp 221~223°C; White amorphous powder,  $[\alpha]_D^{23} = +10.9^\circ$  ( $c = 0.55$ , MeOH). **Pharm:** Cytotoxic (hmn gastric carcinoma cells BGC823, hmn myelocytic leukemia cell K562, obvious effect)<sup>[4812]</sup>; hemolytic. **Source:** CI WU JIA *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*] (seed), CI WU JIA YE *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*], DUO BEI YIN LIAN HUA *Anemone raddeana*, HUANG HUA BAI JIANG *Patrinia scabiosaefolia*, YANG CHANG CHUN TENG *Hedera helix*. **Ref:** 6, 658, 660, 2240, 4812, 4904.

**6757 Ellagic acid**

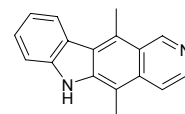
2,3,7,8-Tetrahydroxy[1]benzopyrano[5,4,3-*cde*][1]benzopyran-5,7-dione [476-66-4] C<sub>14</sub>H<sub>6</sub>O<sub>8</sub> (302.20). Yellow, mp > 360°C. **Pharm:** Hemostatic; uterine stimulant; antimutagenic (caused by aromatic hydrocarbons); antiplasmodial<sup>[5361]</sup>; ACE inhibitor (IC<sub>50</sub> = 400 μmol/L, control Lisinopril, IC<sub>50</sub> = 1 nmol/L); NEP inhibitor (IC<sub>50</sub> > 500 μmol/L, control Phosphoramidon, IC<sub>50</sub> = 9 nmol/L); APN inhibitor inactive; antibacterial (*Erwinia carotovora*, IZD = 15mm/100 μg, control Quercetin sulfate, IZD = 21mm/10 μg; *Staphylococcus aureus*, IZD = 0mm/100 μg, Quercetin sulfate, IZD = 14mm/10 μg; *Corynebacterium accolens*, IZD = 12mm/100 μg, Quercetin sulfate, IZD = 28mm/10 μg)<sup>[5250]</sup>; antifungal (*Candida albicans*, IZD = 10mm/100 μg, control Nystatin, IZD = 11mm/20 μg)<sup>[5250]</sup>; xanthine oxidase inhibitor (IC<sub>50</sub> = 2.8 μg/mL, IC<sub>50</sub> = 9.3 μmol/L; control Quercetin, IC<sub>50</sub> = 3.4 μg/mL, IC<sub>50</sub> = 10 μmol/L)<sup>[5250]</sup>. **Source:** DA FEI YANG CAO *Euphorbia hirta*, DA YE KU NUO NI *Cunonia macrophylla* (leaf), HE ZI *Terminalia chebula*, HONG KUAI ZI *Chamaenerion angustifolium* [Syn. *Epilobium angustifolium*], HUA XIANG SHU YE *Platycarya strobilacea*, MANG GUO *Mangifera indica*, NING MENG AN YE *Eucalyptus citriodora*, QIAN QU CAI *Lythrum salicaria*, SHU ZHANG LAO GUAN CAO *Geranium sibiricum*, XIAN HE CAO *Agrimonia pilosa* var. *japonica*, *Tristaniopsis calobuxus* (bark), YUN NAN FENG CHE ZI *Combretum yunnanensis* (branch)<sup>[4693]</sup>, occurs in many plants (widely distributed in higher plants: found by Bate-Smith in 75 genera of dicotyledons and in only one monocotyledonous sp. *Hypoxis filiformis* in family Amaryllidaceae). **Ref:** 6, 71, 658, 1521, 4693, 5034, 5250, 5361.

**6758 Ellagic acid-4- $\beta$ -D-xylopyranoside**

C<sub>19</sub>H<sub>14</sub>O<sub>12</sub> (434.12). Pink. **Pharm:** Antibacterial (*Erwinia carotovora*, IZD = 12mm/100 μg, control Quercetin sulfate, IZD = 21mm/10 μg; *Staphylococcus aureus*, IZD = 0mm/100 μg, Quercetin sulfate, IZD = 14mm/10 μg; *Corynebacterium accolens*, IZD = 0mm/100 μg, Quercetin sulfate, IZD = 28mm/10 μg); antifungal (*Candida albicans*, IZD = 0mm/100 μg, control Nystatin, IZD = 11mm/20 μg); xanthine oxidase inhibitor (IC<sub>50</sub> = 2.1 μg/mL, IC<sub>50</sub> = 4.7 μmol/L; control Quercetin, IC<sub>50</sub> = 3.4 μg/mL, IC<sub>50</sub> = 10 μmol/L). **Source:** DA YE KU NUO NI *Cunonia macrophylla* (leaf). **Ref:** 5250.

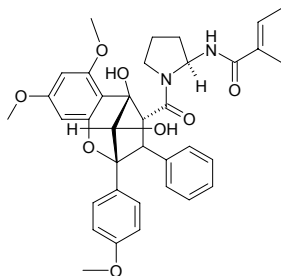
**6759 Ellipticine**

[519-23-3] C<sub>17</sub>H<sub>14</sub>N<sub>2</sub> (246.31). Yellowish acicular crystals (ethyl acetate), mp 311~315°C (dec). **Pharm:** cytotoxic (*in vitro*, Lu1, IC<sub>50</sub> = 0.02 μg/mL (0.08 μmol/L), LNCaP, IC<sub>50</sub> = 0.8 μg/mL (3.25 μmol/L), Col2, IC<sub>50</sub> = 0.3 μg/mL (1.22 μmol/L), HUVEC, IC<sub>50</sub> = 0.09 μg/mL (0.37 μmol/L), KB, IC<sub>50</sub> = 0.04 μg/mL (0.16 μmol/L), HOG.R5, IC<sub>50</sub> = 0.02 μg/mL (0.08 μmol/L))<sup>[3009]</sup>; cytotoxic (*in vitro*, Lu1, ED<sub>50</sub> = 0.02 μg/mL; Col2, ED<sub>50</sub> = 0.3 μg/mL; KB, ED<sub>50</sub> = 0.04 μg/mL; LNCaP, ED<sub>50</sub> = 0.8 μg/mL; KB in absence of 1 μg/mL vinblastine, ED<sub>50</sub> = 0.3 μg/mL; KB in presence of 1 μg/mL vinblastine, ED<sub>50</sub> = 0.2 μg/mL; BC-1, ED<sub>50</sub> = 0.5 μg/mL)<sup>[3479]</sup>; cytotoxic (BC, IC<sub>50</sub> = 0.3 μg/mL; KB, IC<sub>50</sub> = 0.3 μg/mL)<sup>[3858]</sup>; cytotoxic (Vero cells, IC<sub>50</sub> = (0.4±0.1) μg/mL, colorimetric method (P. Skehan, et al., J Natl Cancer Inst 1990, 82, 1107-1112))<sup>[4078]</sup>; cytotoxic (A549, IC<sub>50</sub> = 0.8 μmol/L; Col2, IC<sub>50</sub> = 1.6 μmol/L; SNU638, IC<sub>50</sub> = 1.6 μmol/L; HT1080, IC<sub>50</sub> = 1.2 μmol/L)<sup>[4081]</sup>; cytotoxic (hmn small cell lung cancer NCI-H187 cell line, IC<sub>50</sub> = (0.35±0.15) μg/mL)<sup>[5061]</sup>; cytotoxic (NCI-H187, IC<sub>50</sub> = 0.2~0.3 μg/mL; KB, IC<sub>50</sub> = 0.2~0.3 μg/mL; BC-1, IC<sub>50</sub> = 0.2~0.3 μg/mL; Vero cell, IC<sub>50</sub> = 0.2~0.3 μg/mL)<sup>[5062]</sup>; cytotoxic (KB, ED<sub>50</sub> = 0.10 μg/mL)<sup>[5075]</sup>; cytotoxic (KB, EC<sub>50</sub> = 0.3 μg/mL; BC, EC<sub>50</sub> = 0.3 μg/mL)<sup>[5092]</sup>; cytotoxic (Col2, IC<sub>50</sub> = 0.3 μg/mL; P<sub>388</sub>, IC<sub>50</sub> = 0.1 μg/mL)<sup>[5400]</sup>; cytotoxic (KB cells, IC<sub>50</sub> = (0.3±0.1) μg/mL; BC, IC<sub>50</sub> = (0.3±0.1) μg/mL)<sup>[5435]</sup>; cytotoxic (P<sub>388</sub>, ED<sub>50</sub> = 0.61 μg/mL; KB, ED<sub>50</sub> = 0.54 μg/mL; Col2, ED<sub>50</sub> = 0.60 μg/mL; Lu1, ED<sub>50</sub> = 0.61 μg/mL; BCA-1, ED<sub>50</sub> = 0.52 μg/mL)<sup>[5478]</sup>; antineoplastic (L<sub>1210</sub>, EAC cells, liver cancer in rat, P<sub>388</sub>, S<sub>180</sub>)<sup>[661]</sup>; antitrypanosomal (*Trypanosoma cruzi*)<sup>[661]</sup>; hemolytic (animal model)<sup>[661]</sup>. **Source:** GU CHENG MEI GUI SHU *Ochrosia elliptica*, WEI BAI BAI JIAN MU *Aspidosperma subincanum*. **Ref:** 661, 3009, 3479, 3858, 4078, 4081, 5061, 5062, 5075, 5092, 5400, 5435, 5478, 5507.

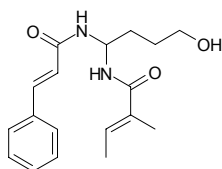


**6760 Elliptifoline**

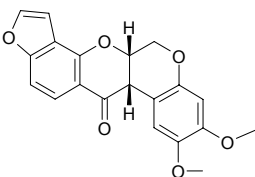
$C_{36}H_{40}N_2O_8$  (628.73). White powder, mp 184~185°C,  $[\alpha]_D^{22} = -88.9^\circ$  ( $c = 0.6$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (A549,  $ED_{50} = 18.9\mu g/mL$ ; HL-60,  $ED_{50} > 50\mu g/mL$ ; HT29,  $ED_{50} > 50\mu g/mL$ ; KB,  $ED_{50} > 50\mu g/mL$ ; P388,  $ED_{50} = 3.41\mu g/mL$ ). **Source:** DA YE SHU LAN *Aglaia elliptifolia* (leaf: yield = 0.00071%dw). **Ref:** 3031.

**6761 Elliptinol**

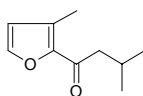
$C_{18}H_{24}N_2O_3$  (316.4). White powder, mp 162~163°C,  $[\alpha]_D^{22} = +38.6^\circ$  ( $c = 0.05$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (A549,  $ED_{50} > 50\mu g/mL$ ; HL-60,  $ED_{50} = 32.1\mu g/mL$ ; HT29,  $ED_{50} > 50\mu g/mL$ ; KB,  $ED_{50} > 50\mu g/mL$ ; P388,  $ED_{50} = 3.62\mu g/mL$ ). **Source:** DA YE SHU LAN *Aglaia elliptifolia* (leaf: yield = 0.00005%dw). **Ref:** 3031.

**6762 Elliptone**

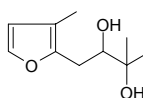
$C_{20}H_{16}O_6$  (352.35). **Pharm:** Anti-tumor promotor (*in vivo*, mouse skin tumor, inhibits TPA-induced EBV-EA activation, 100 mol ratio/32pmol TPA, EBV-EA positive cells = 76.8% viability, positive control  $\beta$ -Carotene, EBV-EA positive cells = 82.7% viability). **Source:** YU TENG *Derris trifoliata* (stem). **Ref:** 4982.

**6763 Elsholtzia ketone**

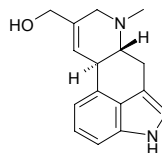
[488-05-1]  $C_{10}H_{14}O_2$  (166.22). bp 210°C. **Source:** BAN BIAN SU *Elsholtzia ciliata*. **Ref:** 6.

**6764 Elsholtzidiol**

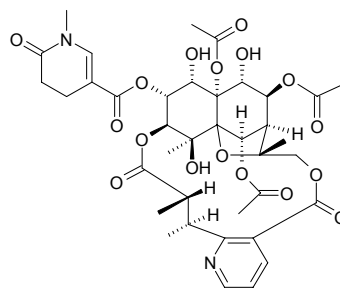
[28666-20-8]  $C_{10}H_{16}O_3$  (184.24). mp 58~59°C. **Source:** XIANG RU *Elsholtzia splendens*. **Ref:** 6.

**6765 Elymoclavine**

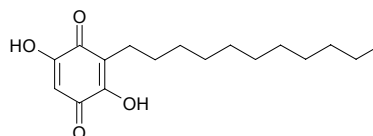
[548-43-6]  $C_{16}H_{18}N_2O$  (254.33). mp 250~252°C. **Pharm:** Inhibits release of galactin; CNS stimulant. **Source:** MAI JIAO *Claviceps purpurea*, QIAN NIU ZI *Pharbitis nil*. **Ref:** 6, 658.

**6766 Emarginatine**

$C_{38}H_{46}N_2O_{17}$  (802.79). **Pharm:** Cytotoxic (KB  $ED_{50} = 1.7mg/L$ , Colon205  $ED_{50} = 4.1mg/L$ ). **Source:** NAN SHE TENG GEN *Celastrus orbiculatus* [Syn. *Celastrus articulatus*]. **Ref:** 2511.

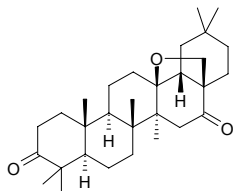
**6767 Embelin**

2,5-Dihydroxy-3-undecyl-2,5-cyclohexadiene-1,4-dione [550-24-3]  $C_{17}H_{26}O_4$  (294.39). Orange crystals (MeOH or hexane-EtOH), mp 145~146°C, mp 143°C. **Pharm:** Analgesic; anti-fertility agent (rat); anti-inflammatory; antipyretic; anthelmintic (teniafuge); DPPH free radical scavenger ( $IC_{50} = (23.3\pm 0.5)\mu mol/L$ , control Trolox,  $IC_{50} = (25.4\pm 0.8)\mu mol/L$ )<sup>[4244]</sup>; antineoplastic (rat, autochthonous fibrosarcomas induced by methylcholanthrene, prolonged the survival time of the animals)<sup>[5369]</sup>; cytotoxic (*in vitro*, fibrosarcoma cell line, concentration-dependent decrease in thymidine uptake and glutathione levels of the tumor cells)<sup>[5369]</sup>. **Source:** AI ZI JIN NIU *Ardisia humilis*, BA BEI SUAN TENG ZI *Embelia barbeyana*, CHI YE TIE ZI *Myrsine semiserrata*, CU YE MAI MI HUA SHU *Rapanea neurophylla*, CU ZHUANG SUAN TENG ZI *Embelia robusta*, LA ZHU GUO *Aegiceras corniculatum*, MA GUI HUA *Embelia oblongifolia*, SAN HUA MI HUA SHU *Rapanea umbellata*, TIE ZI *Myrsine africana*, WEI LING XIAN *Clematis chinensis*, XIAN SUAN QIANG *Embelia ribes*, XIAO TOU TIE ZI *Myrsine capitellata*, YOU SE ZI JIN NIU *Ardisia colorata* (fruit), ZHU SHA GEN *Ardisia crenata*, ZI JIN NIU *Ardisia japonica*, *Connarus ritchiei*, *Embelia kilimandscharica*, *Embelia tsjersium-cottam*, *Rapanea* sp. **Ref:** 6, 658, 1521, 4244, 5369.

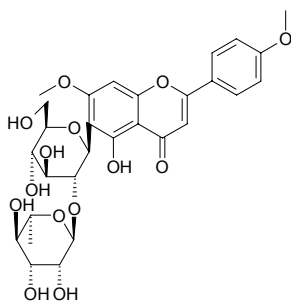


**6768 Embelinone**

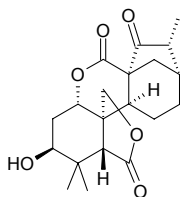
3,16-dioxo-13 $\beta$ -17-methyleneoxyoleanane C<sub>30</sub>H<sub>46</sub>O<sub>3</sub> (454.70). Clear needles, mp 257~259°C [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -4° (c = 0.6, CHCl<sub>3</sub>). Source: KEN NI YA XIAN SUAN QIANG *Embelia schimperi*. Ref: 2058.

**6769 Embinin**

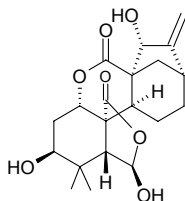
[52589-13-6] C<sub>29</sub>H<sub>34</sub>O<sub>14</sub> (606.59). mp 181°C. Pharm: Xanthinoxidase inhibitor (50 $\mu$ g/mL, InRt = 22.8 %); aldose reductase inhibitor (rat eye lens, 10 $\mu$ mol/L InRt = 12.7%). Source: HU DIE HUA *Iris japonica*, YUAN WEI *Iris tectorum*. Ref: 6, 1632, 1631.

**6770 Ememodin**

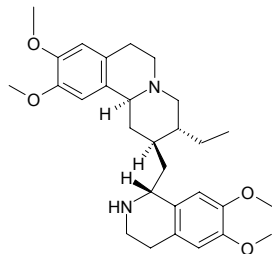
C<sub>20</sub>H<sub>26</sub>O<sub>6</sub> (362.43). mp 237~239°C, [ $\alpha$ ]<sub>D</sub><sup>17</sup> = -131° (c = 0.0498, EtOH). Source: MAO GUO XIANG CHA CAI *Isodon trichocarpa*. Ref: 4067.

**6771 Ememogin**

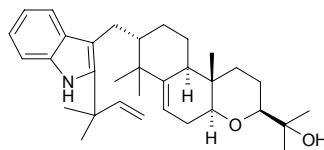
C<sub>20</sub>H<sub>26</sub>O<sub>7</sub> (378.43). mp > 300°C, [ $\alpha$ ]<sub>D</sub><sup>24</sup> = -145.8° (c = 0.20, C<sub>5</sub>H<sub>5</sub>N). Source: MAO GUO XIANG CHA CAI *Isodon trichocarpa*. Ref: 4067.

**6772 Emetine**

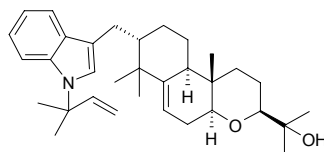
Cephaeline methylether [483-18-1] C<sub>29</sub>H<sub>40</sub>N<sub>2</sub>O<sub>4</sub> (480.65). White powder, mp 74°C, turning yellow if exposed or heated, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -50° (c = 2, chloroform), easily soluble in ethanol, acetic ester, chloroform, ether, insoluble in water.<sup>[5507]</sup> Pharm: Antiamebic; antineoplastic; antiviral; antitussive (dispels phlegm); emetic; LD (hmn) = 10~20mg/kg. Source: TU GEN *Cephaelis ipecacuanha* (root: content scope = 2%~4%)<sup>[5507]</sup>, YANG CHANG CHUN TENG *Hedera helix*. Ref: 658, 661, 5507.

**6773 Emindole PA**

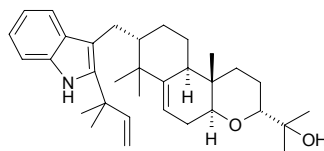
C<sub>33</sub>H<sub>47</sub>NO<sub>2</sub> (489.75). Colorless amorphous powder. Source: ZI LUO KE BAO *Emericella purpurea*. Ref: 1101.

**6774 Emindole PB**

C<sub>33</sub>H<sub>47</sub>NO<sub>2</sub> (489.75). Colorless amorphous powder. Source: ZI LUO KE BAO *Emericella purpurea*. Ref: 1101.

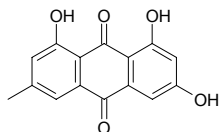
**6775 Emindole PC**

C<sub>33</sub>H<sub>47</sub>NO<sub>2</sub> (489.75). Colorless crystalline powder (ether), mp 238~240°C. Source: ZI LUO KE BAO *Emericella purpurea*. Ref: 1101.

**6776 Emodin**

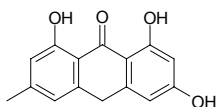
1,3,8-Trihydroxy-6-methylantraquinone [518-82-1] C<sub>15</sub>H<sub>10</sub>O<sub>5</sub> (270.24). Orange red prismatic crystals, mp 250~257°C. Pharm: Antibacterial (*Staphylococcus aureus*, *Bacillus coli*, *Bacillus pyocyaneus*, *Bacillus dysenteriae*, *Bacillus influenzae*, *Bacillus diphtheriae*, *Bacillus subtilis*, *Bacillus paratyphosus*, *Coccus catarrhal*, and  $\alpha$ -Streptococcus); antineoplastic (mus, B16 melanoma BL, 50mg/(kg·d), InRt = 76%, mus, mammary cancer and EAC); antifungal (*Trichophyton interdigitale*, *Microsporum* sp.); antispasmodic; antispirochetic; antitussive; cytotoxic (Walker sarcoma, P<sub>388</sub>);

diuretic; antihypertensive; inhibits coronal wart growth in potato flower tray; antitrypanosomal (*Trypanosoma brucei*,  $IC_{50} = (18.1 \pm 4.2) \mu\text{g/mL}$ , control Melarsoprol,  $IC_{50} = (0.0015 \pm 0.0009) \mu\text{g/mL}$ ; *Trypanosoma cruzi*,  $IC_{50} = (19.8 \pm 2.4) \mu\text{g/mL}$ , control Benznidazole,  $IC_{50} = (0.39 \pm 0.15) \mu\text{g/mL}$ )<sup>[5008]</sup>; antileishmanial (*Leishmania donovani*,  $IC_{50} = (20.5 \pm 0.5) \mu\text{g/mL}$ , control Miltefosine,  $IC_{50} = (0.23 \pm 0.03) \mu\text{g/mL}$ )<sup>[5008]</sup>; antimalarial (*Plasmodium falciparum*,  $IC_{50} = (9.7 \pm 1.2) \mu\text{g/mL}$ , control Chloroquine,  $IC_{50} = (0.055 \pm 0.02) \mu\text{g/mL}$ , control Artemisinin,  $IC_{50} = (0.0011 \pm 0.0006) \mu\text{g/mL}$ )<sup>[5008]</sup>; cytotoxic (L6,  $IC_{50} = (20.3 \pm 2.6) \mu\text{g/mL}$ , control Podophyllotoxin,  $IC_{50} = 0.0075 \mu\text{g/mL}$ )<sup>[5008]</sup>; cytotoxic (*in vitro*, Calu1,  $IC_{50} = (6.25 \pm 2.9) \mu\text{mol/L}$ ; HeLa,  $IC_{50} = (15.6 \pm 4.2) \mu\text{mol/L}$ ; K562,  $IC_{50} > 100 \mu\text{mol/L}$ ; Raji,  $IC_{50} = (43.8 \pm 7.3) \mu\text{mol/L}$ ; Vero,  $IC_{50} = (40 \pm 1.7) \mu\text{mol/L}$ ; Wish,  $IC_{50} = (28.8 \pm 1.9) \mu\text{mol/L}$ , 1,3,8-trihydroxy for anthraquinone plays a significant role in the cytotoxic activity)<sup>[3057]</sup>; cytotoxic inactive (MCF, HM02, HEPG2)<sup>[5232]</sup>; antioxidant inactive (DPPH radical scavenger assay)<sup>[5232]</sup>; antioxidant inactive (DPPH radical scavenger,  $IC_{50} > 100 \mu\text{g/mL}$ ; control Ascorbic acid,  $IC_{50} = 3.9 \mu\text{g/mL}$ )<sup>[4711]</sup>. **Source:** BAI HE *Lilium brownii* var. *viridulum* [Syn. *Lilium brownii* var. *colchesteri*], CHAO XIAN YIN YANG HUO *Epimedium koreanum*, CHI MA *Boehmeria platanifolia* [Syn. *Boehmeria tricuspis*], DA HUANG *Rheum officinale*, DONG FANG WEI SI MU *Vismia orientalis* (stem cortex), DUN YE JUE MING *Cassia obtusifolia* (ripe seed: mean content = 0.011%)<sup>[5508]</sup>, GANG BAN GUI GEN *Polygonum perfoliatum*, HE SHOU WU *Polygonum multiflorum* (dried tuberoid (raw): content scope of 9 batch samples = 0.0026%–0.132%, mean content = 0.044%)<sup>[5508]</sup>, HE SHOU WU *Polygonum multiflorum* (dried tuberoid (preparing): content scope of 8 batch samples = 0.0020%–0.168%, mean content = 0.042%)<sup>[5508]</sup>, HU ZHANG *Polygonum cuspidatum* (rhizome: mean content = 1.40%)<sup>[5508]</sup>, HUANG HAO *Artemisia scoparia* [Syn. *Artemisia capillaris* var. *scoparia*], JUE MING ZI *Cassia tora*, MAO GUO YI HE GUO *Ventilago calyculata*, NI BO ER YANG TI *Rumex nepalensis*, NIU ER DA HUANG *Rumex crispus*, NIU SHE CAO *Rumex dentatus* (root: mean content = 0.0805%)<sup>[5508]</sup>, NIU XI XI *Rumex patientia* (root: mean content = 0.1159%)<sup>[5508]</sup>, OU SHU LI *Rhamnus frangula* [Syn. *Frangula alnus*], SHU LI *Rhamnus davurica*, SUAN MO *Rumex acetosa* (root: mean content = 0.3025%)<sup>[5508]</sup>, TANG GU TE DA HUANG *Rheum tanguticum*, TIAN SHAN DA HUANG *Rheum wittrockii*, TIE ZI *Myrsine africana*, WANG JIANG NAN *Cassia occidentalis*, WANG JIANG NAN ZI *Cassia occidentalis* (ripe seed: content = 0.0016%)<sup>[5508]</sup>, YANG TI *Rumex japonicus* (root: mean content = 0.0881%)<sup>[5508]</sup>, YI HE GUO *Ventilago leiocarpa* (stem)<sup>[3057]</sup>, ZANG BIAN DA HUANG *Rheum emodi* [Syn. *Rheum australe*] (stem and rhizome: content = 1.38%)<sup>[5508]</sup>, yield = 0.53%<sup>[4711]</sup>, ZHANG YE DA HUANG *Rheum palmatum* (stem and rhizome: content = 0.42%)<sup>[5508]</sup>, occurs in many plants. **Ref:** 2, 4, 458, 511, 608, 658, 660, 3057, 4711, 5008, 5232, 5501, 5508.



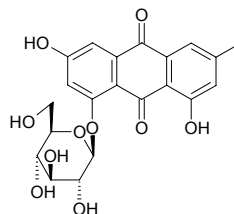
#### 6777 Emodin anthrone

[491-60-1]  $C_{15}H_{12}O_4$  (256.26). mp 236°C. **Source:** JUE MING ZI *Cassia tora*. **Ref:** 2, 6.



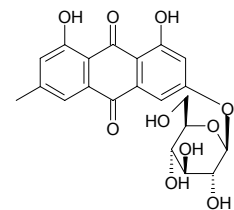
#### 6778 Emodin-1-O-β-D-glucopyranoside

$C_{21}H_{20}O_{10}$  (432.39). **Pharm:** Inhibits sperm movement (hmn); antioxidant inactive (DPPH radical scavenger); cytotoxic inactive (MCF, HM02, HEPG2). **Source:** DA HUANG *Rheum officinale*, HU ZHANG *Polygonum cuspidatum*, NIU XI XI *Rumex patientia*, OU SHU LI *Rhamnus frangula* [Syn. *Frangula alnus*], TANG GU TE DA HUANG *Rheum tanguticum*, ZHANG YE DA HUANG *Rheum palmatum*. **Ref:** 2, 658, 660, 5232.



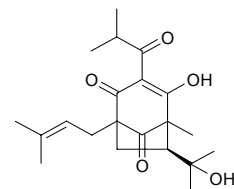
#### 6779 Emodin-3-O-β-D-glucopyranoside

$C_{21}H_{20}O_{10}$  (432.39). Amorphous. **Pharm:** Antioxidant inactive (DPPH radical scavenger assay)<sup>[5232]</sup>; cytotoxic inactive (MCF, HM02, HEPG2)<sup>[5232]</sup>. **Source:** JUE MING ZI *Cassia tora*, NIU XI XI *Rumex patientia*. **Ref:** 2, 5232.



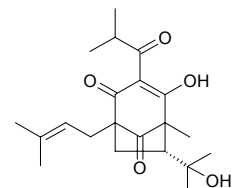
#### 6780 Enaimeone A

$C_{21}H_{30}O_5$  (362.47). **Pharm:** Antioxidant inactive (PMN cellular chemiluminescence assay, FMLP-induced and OZ-induced oxidative burst). **Source:** *Hypericum papuanum* **Ref:** 5371.



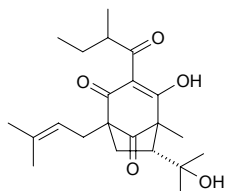
#### 6781 Enaimeone B

$C_{21}H_{30}O_5$  (362.47). **Pharm:** Antioxidant inactive (PMN cellular chemiluminescence assay, FMLP-induced and OZ-induced oxidative burst). **Source:** *Hypericum papuanum* **Ref:** 5371.

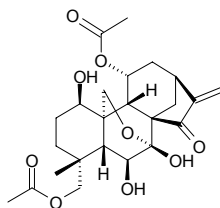


**6782 Enaimeone C**

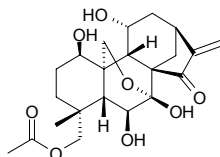
$C_{22}H_{32}O_5$  (376.50). **Pharm:** Antioxidant inactive (PMN cellular chemiluminescence assay, FMLP-induced and OZ-induced oxidative burst). **Source:** *Hypericum papuanum* **Ref:** 5371.

**6783 Enanderianin A**

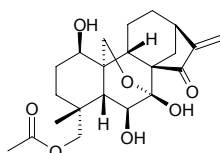
$C_{24}H_{32}O_9$  (464.52). mp 225–227°C,  $[\alpha]_D^{22} = -76.9^\circ$  ( $c = 0.52$ , MeOH). **Source:** ZI MAO XIANG CHA CAI *Isodon enanderianus*. **Ref:** 4067.

**6784 Enanderianin B**

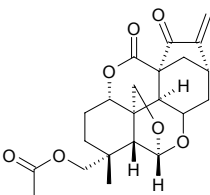
$C_{22}H_{30}O_8$  (422.48). mp 208–210°C,  $[\alpha]_D^{22} = -71.4^\circ$  ( $c = 0.63$ , MeOH). **Source:** ZI MAO XIANG CHA CAI *Isodon enanderianus*. **Ref:** 4067.

**6785 Enanderianin C**

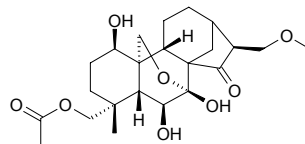
Xerophilusin H [247939-40-8]  $C_{22}H_{30}O_7$  (406.48). Colorless acicular crystals,  $[\alpha]_D^{23} = -149.4^\circ$  ( $c = 0.43$ , pyridine), mp 238–240°C, mp 262–264°C. **Pharm:** Cytotoxic (K562,  $IC_{50} = 1.17\mu\text{g/mL}$ , control Mitoxantrone,  $IC_{50} = 0.29\mu\text{g/mL}$ ; HL-60,  $IC_{50} = 0.87\mu\text{g/mL}$ , Mitoxantrone,  $IC_{50} = 0.29\mu\text{g/mL}$ ; HCT,  $IC_{50} = 52.78\mu\text{g/mL}$ , Mitoxantrone,  $IC_{50} = 1.54\mu\text{g/mL}$ ; MKN28,  $IC_{50} = 1.86\mu\text{g/mL}$ , Mitoxantrone,  $IC_{50} = 0.02\mu\text{g/mL}$ )<sup>[5182]</sup>. **Source:** HAN SHENG XIANG CHA CAI *Isodon xerophilus* (leaf), ZI MAO XIANG CHA CAI *Isodon enanderianus*. **Ref:** 894, 4067, 5182.

**6786 Enanderianin F**

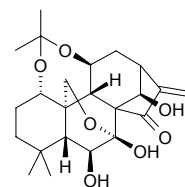
$C_{22}H_{26}O_7$  (402.45). White amorphous powder,  $[\alpha]_D^{26} = +24.6^\circ$  ( $c = 0.20$ , MeOH). **Source:** ZI MAO XIANG CHA CAI *Isodon enanderianus*. **Ref:** 1948.

**6787 Enanderianin G**

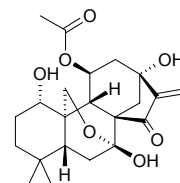
$C_{23}H_{34}O_8$  (438.52). White amorphous powder,  $[\alpha]_D^{26} = -108.2^\circ$  ( $c = 0.50$ , MeOH). **Source:** ZI MAO XIANG CHA CAI *Isodon enanderianus*. **Ref:** 1948.

**6788 Enanderianin H**

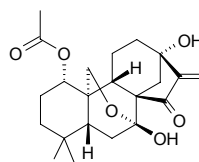
$C_{23}H_{34}O_7$  (420.51). White amorphous powder,  $[\alpha]_D^{26} = -108.2^\circ$  ( $c = 0.37$ , MeOH). **Source:** ZI MAO XIANG CHA CAI *Isodon enanderianus*. **Ref:** 1948.

**6789 Enanderianin K**

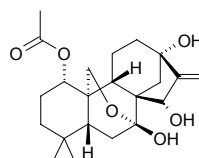
1 $\alpha$ ,7 $\beta$ ,13 $\alpha$ -Trihydroxy-11 $\beta$ -acetoxy-7 $\alpha$ ,20-epoxy-*ent*-kaur-16-en-15-one  $C_{22}H_{30}O_7$  (406.48). Colorless cubic crystals (MeOH), mp 235–237°C,  $[\alpha]_D^{20} = -33.3^\circ$  ( $c = 0.20$ , MeOH). **Pharm:** Cytotoxic (hmn tumor K562 cells,  $IC_{50} = 0.67\mu\text{g/mL}$ , control *cis*-Platin,  $IC_{50} = 0.52\mu\text{g/mL}$ ). **Source:** ZI MAO XIANG CHA CAI *Isodon enanderianus* (aerial parts). **Ref:** 5475.

**6790 Enanderianin L**

7 $\beta$ ,13 $\alpha$ -Dihydroxy-1 $\alpha$ -acetoxy-7 $\alpha$ ,20-epoxy-*ent*-kaur-16-en-15-one  $C_{22}H_{30}O_6$  (390.48). Colorless needles ( $\text{Me}_2\text{CO}$ ), mp 123–125°C,  $[\alpha]_D^{20} = -89.8^\circ$  ( $c = 0.25$ , MeOH). **Pharm:** Cytotoxic (hmn tumor K562 cells,  $IC_{50} = 0.16\mu\text{g/mL}$ , control *cis*-Platin,  $IC_{50} = 0.52\mu\text{g/mL}$ ). **Source:** ZI MAO XIANG CHA CAI *Isodon enanderianus* (aerial parts). **Ref:** 5475.

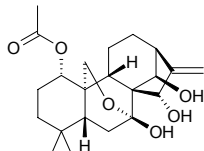
**6791 Enanderianin M**

7 $\beta$ ,13 $\alpha$ ,15 $\beta$ -Trihydroxy-1 $\alpha$ -acetoxy-7 $\alpha$ ,20-epoxy-*ent*-kaur-16-ene  $C_{22}H_{32}O_6$  (392.50). Colorless needles ( $\text{Me}_2\text{CO}$ ), mp 253–255°C,  $[\alpha]_D^{20} = +25.0^\circ$  ( $c = 0.08$ , MeOH). **Pharm:** Cytotoxic (hmn tumor K562 cells, very weak). **Source:** ZI MAO XIANG CHA CAI *Isodon enanderianus* (aerial parts). **Ref:** 5475.

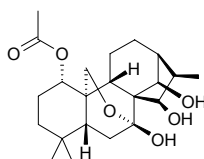


**6792 Enanderianin N**

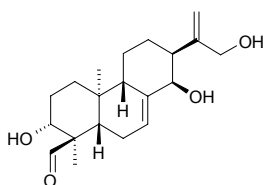
7 $\beta$ ,14 $\beta$ ,15 $\beta$ -Trihydroxy-1 $\alpha$ -acetoxy-7 $\alpha$ ,20-epoxy-*ent*-kaur-16-ene C<sub>22</sub>H<sub>32</sub>O<sub>6</sub> (392.50). Colorless needles (Me<sub>2</sub>CO), mp 216–218°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +5.7° (*c* = 0.26, MeOH). **Pharm:** Cytotoxic (hmn tumor K562 cells, very weak). **Source:** ZI MAO XIANG CHA CAI *Isodon enanderianus* (aerial parts). **Ref:** 5475.

**6793 Enanderianin O**

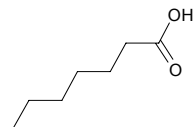
7 $\beta$ ,14 $\beta$ ,15 $\beta$ -Trihydroxy-1 $\alpha$ -acetoxy-7 $\alpha$ ,20-epoxy-*ent*-kaurane C<sub>22</sub>H<sub>34</sub>O<sub>6</sub> (394.51). Colorless cubes (Me<sub>2</sub>CO), mp 196–198°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = –38.5° (*c* = 0.13, MeOH). **Source:** ZI MAO XIANG CHA CAI *Isodon enanderianus* (aerial parts). **Ref:** 5475.

**6794 Enanderianin P**

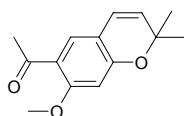
3 $\alpha$ ,14 $\beta$ ,17-Trihydroxy-18-*alant*-abieta-7(8),15(16)-diene C<sub>20</sub>H<sub>30</sub>O<sub>4</sub> (334.46). Colorless cubes (Me<sub>2</sub>CO), mp 187–189°C, [ $\alpha$ ]<sub>D</sub><sup>24</sup> = –0.7° (*c* = 5.00, MeOH). **Pharm:** Cytotoxic (hmn tumor K562 cells, IC<sub>50</sub> = 0.59 $\mu$ g/mL, control *cis*-Platin, IC<sub>50</sub> = 0.52 $\mu$ g/mL). **Source:** ZI MAO XIANG CHA CAI *Isodon enanderianus* (aerial parts). **Ref:** 5475.

**6795 Enanthic acid**

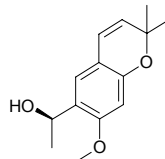
Heptanoic acid [111-14-8] C<sub>7</sub>H<sub>14</sub>O<sub>2</sub> (130.19). **Source:** DANG SHEN *Codonopsis pilosula*, CHAI HU *Bupleurum chinense*, SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*], XI YANG SHEN *Panax quinquefolium*. **Ref:** 2, 6.

**6796 Enecalol**

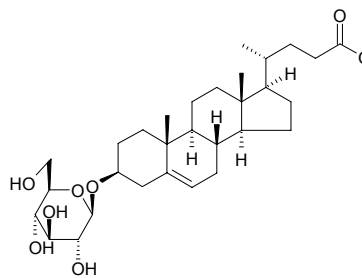
C<sub>14</sub>H<sub>16</sub>O<sub>3</sub> (232.28). **Pharm:** Pesticide; phytotoxic (yeast and bacteria). **Source:** XIAN ZE LAN *Eupatorium glandulosum*. **Ref:** 658.

**6797 Enecalolol**

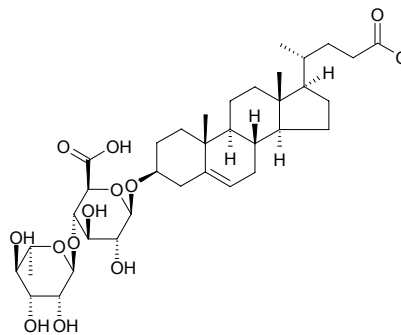
Enecalolol C<sub>14</sub>H<sub>18</sub>O<sub>3</sub> (234.30). **Pharm:** Antifungal (*Trichophyton mentagrophytes* ATCC28185, MIC = 12.5 $\mu$ g/mL, control Miconazole, MIC = 8 $\mu$ g/mL; *Trichophyton rubrum* ATCC28188, MIC = 12.5 $\mu$ g/mL, Miconazole, MIC = 8 $\mu$ g/mL; *Candida albicans* ATCC10231, MIC = 100 $\mu$ g/mL, Nistatin, MIC = 8 $\mu$ g/mL; *Candida niger* ATCC10335, MIC = 200 $\mu$ g/mL, Miconazole, MIC = 16 $\mu$ g/mL)<sup>[5472]</sup>. **Source:** FU CHUI FE LAO JU *Flourensia cernua*, *Eupatorium aschenbornianum*. **Ref:** 1521, 5472.

**6798 5-Ene-methyl-7,12-didehydroxy-cholate-3-O- $\beta$ -D-glucopyranoside**

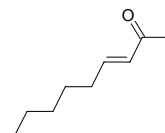
C<sub>31</sub>H<sub>50</sub>O<sub>8</sub> (550.74). White lamellar crystals, mp 201–205°C, soluble in methanol. **Source:** SAN LENG *Spartanium stoloniferum*. **Ref:** 497.

**6799 5-Ene-methyl-7,12-didehydroxy-cholate-3-O- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucuronopyranoside**

C<sub>37</sub>H<sub>58</sub>O<sub>13</sub> (710.8). White amorphous powder, mp 215–219°C, soluble in methanol. **Source:** SAN LENG *Spartanium stoloniferum*. **Ref:** 497.

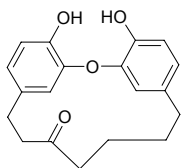
**6800 3-Ene-nonanone-2**

[14309-57-0] C<sub>9</sub>H<sub>16</sub>O (140.23). **Source:** SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. **Ref:** 2.

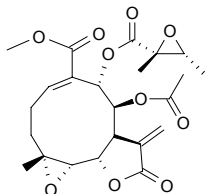


**6801 Engelhardione**

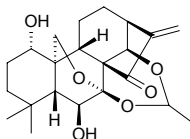
$C_{19}H_{20}O_4$  (312.37). Colorless needles ( $CH_2Cl_2$ -MeOH), mp 73~75°C. **Pharm:** Antitubercular (*Mycobacterium tuberculosis* 90-221387, MIC = 3.125 $\mu$ g/mL; *Mycobacterium tuberculosis* H37Rv, MIC = 0.2 $\mu$ g/mL). **Source:** HUANG QI II *Engelhardia roxburghiana* (root). **Ref:** 5059.

**6802 Enhydrin**

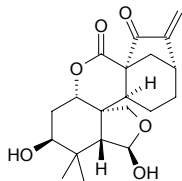
[33880-85-2]  $C_{23}H_{28}O_{10}$  (464.47). **Pharm:** Antihypertensive. **Source:** ZHAO JU *Enhydra fluctuans*. **Ref:** 658.

**6803 Enmedol**

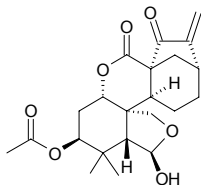
$C_{22}H_{30}O_6$  (390.48). mp 297~299°C,  $[\alpha]_D^{27.5} = -45^\circ$  ( $c = 0.1147$ , MeOH). **Source:** MAO GUO XIANG CHA CAI *Isodon trichocarpa*. **Ref:** 4067.

**6804 Enmein**

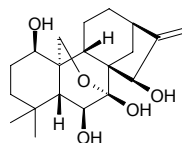
[3776-39-4]  $C_{20}H_{26}O_6$  (362.43). Colorless short columnar crystals, mp 297~299°C (dec),  $[\alpha]_D = -156^\circ$  (acetone),  $[\alpha]_D^{10} = -131.3^\circ$  ( $c = 1.0$ ,  $C_5H_5N$ ). **Pharm:** Antineoplastic (male mus, EAC, 10~15mg/kg ip, biotic prolonged rate = (39~66)%). **Source:** MAO YE XIANG CHA CAI *Isodon japonica* [Syn. *Rabdosia japonica*] (the compound was isolated from the plant in 1965)<sup>[5505]</sup>, MAO GUO XIANG CHA CAI *Isodon trichocarpa*, SHAN DI XIANG CHA CAI *Isodon oresbia* (aerial parts). **Ref:** 661, 4067, 5505, 3808, 4067.

**6805 Enmein-3-acetate**

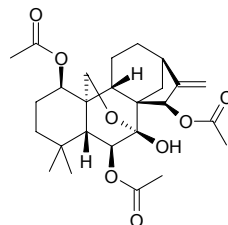
$C_{22}H_{28}O_7$  (404.46). mp 267~271(dec)°C,  $[\alpha]_D^{17} = -112^\circ$  ( $c = 1.0$ ,  $C_5H_5N$ ). **Source:** MAO YE XIANG CHA CAI *Isodon japonica* [Syn. *Rabdosia japonica*]. **Ref:** 4067.

**6806 Enmelol**

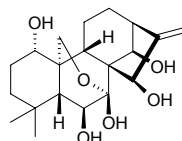
$C_{20}H_{30}O_5$  (350.45). mp 263~265°C,  $[\alpha]_D^{35} = -48^\circ$  ( $c = 0.0863$ , EtOH). **Source:** MAO GUO XIANG CHA CAI *Isodon trichocarpa*, SHAN DI XIANG CHA CAI *Isodon oresbia* (aerial parts). **Ref:** 4067, 3808.

**6807 Enmenin monoacetate**

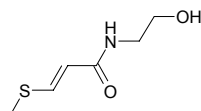
$C_{26}H_{36}O_8$  (476.57). **Source:** SHAN DI XIANG CHA CAI *Isodon oresbia* (aerial parts). **Ref:** 3808.

**6808 Enmenol**

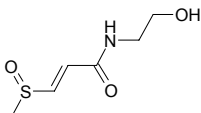
$C_{20}H_{30}O_6$  (366.46). mp 255~257°C. **Source:** LU SHAN XIANG CHA CAI *Isodon rubescens* var. *lushanensis* (leaf), MAO GUO XIANG CHA CAI *Isodon trichocarpa*. **Ref:** 4067, 4353.

**6809 Entadamide A**

$C_6H_{11}NO_2S$  (161.22). Pale yellow oil. **Pharm:** Antitubercular inactive (*Mycobacterium tuberculosis* H37Ra); antimalarial inactive (*Plasmodium falciparum*,  $EC_{50} > 20\mu$ g/mL). **Source:** TAI GUO NIU XU HUA *Clinacanthus siamensis* (leaf). **Ref:** 4410.

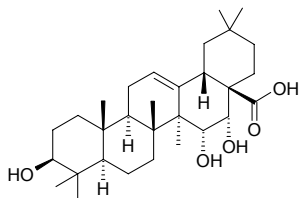
**6810 Entadamide C**

$C_6H_{11}NO_3S$  (177.22). Colorless needles (acetone), mp 141~142°C. **Pharm:** Antitubercular inactive (*Mycobacterium tuberculosis* H37Ra); antimalarial inactive (*Plasmodium falciparum*,  $EC_{50} > 20\mu$ g/mL). **Source:** TAI GUO NIU XU HUA *Clinacanthus siamensis* (leaf). **Ref:** 4410.

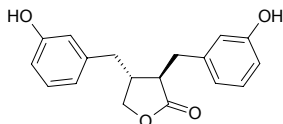


**6811 Entagenic acid**

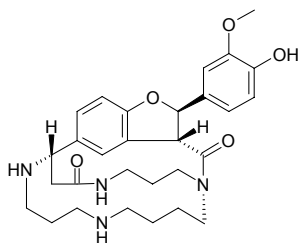
[5951-41-7]  $C_{30}H_{48}O_5$  (488.71). mp 310–315°C. Source: KE TENG ZI *Entada phaseoloides* [Syn. *Lens phaseoloides*]. Ref: 6.

**6812 Enterolactone**

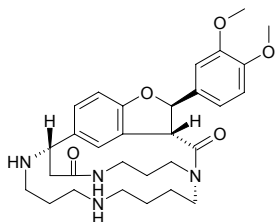
[78473-71-9]  $C_{18}H_{18}O_4$  (298.34). Pharm: Cancer-preventing activity. Source: family Brassicaceae spp. Ref: 1521, 1582.

**6813 Ephedradine B**

[71327-57-6]  $C_{29}H_{38}N_4O_5$  (522.65). Crystals without free alkali, dihydrobromide: ( $C_{29}H_{38}N_4O_5 \cdot 2HBr \cdot H_2O$ ) mp 219–221°C,  $[\alpha]_D = -101.5^\circ$  (water). Pharm: Antihypertensive. Source: *Ephedra* sp. Ref: 661.

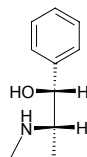
**6814 Ephedradine C**

[73276-37-6]  $C_{30}H_{40}N_4O_5$  (536.68). Crystals without free alkali, dihydrobromide: ( $C_{30}H_{40}N_4O_5 \cdot 2HBr \cdot H_2O$ ) mp 224–225°C,  $[\alpha]_D = -100.7^\circ$  (water). Pharm: Antihypertensive. Source: *Ephedra* sp. Ref: 661.

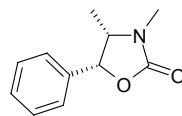
**6815 Ephedrine**

Ephedrine; 1-Phenyl-2-methylaminopropanol [299-42-3]  $C_{10}H_{15}NO$  (165.24). mp 38.1°C, bp 225°C,  $[\alpha]_D^{20} = -6.3^\circ$  (ethanol),  $[\alpha]_D^{21} = -41^\circ$  (1mol HCl), easily soluble in water, ethanol, soluble in chloroform, benzene, ether.<sup>[5507]</sup> Pharm: Antiasthmatic (bronchial smooth muscle relaxant); contracts peripheral blood vessels; increases blood pressure; adrenergic  $\alpha$ - and  $\beta$ -receptor agonist to produce sympathomimetic action; CNS stimulant.

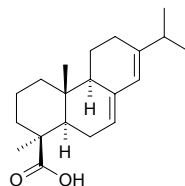
Source: BAN XIA *Pinellia ternata* (dried tuber: content = 0.0020%)<sup>[5501 5508]</sup>, BAN ZI MA HUANG *Ephedra lepidosperma* (herbaceous twigs: content = 0.024%)<sup>[5508]</sup>, DAN ZI MA HUANG *Ephedra monosperma* (herbaceous twigs: content = 1.247%)<sup>[5508]</sup>, HUANG HUA REN *Sida acuta*, LI JIANG MA HUANG *Ephedra likiangensis* (herbaceous twigs: mean content of 3 origins = 0.727%)<sup>[5508]</sup>, MA HUANG *Ephedra sinica* (herbaceous twigs: content scope = 0.272%–0.889%)<sup>[5501]</sup>, mean content of 5 origins = 0.654%)<sup>[5508]</sup>, MO GUO MA HUANG *Ephedra przewalskii* (herbaceous twigs: mean content of 2 origins = 0.027%)<sup>[5508]</sup>, MU ZEI MA HUANG *Ephedra equisetina* (herbaceous twigs: content scope = 1.113%–1.409%)<sup>[5501]</sup>, mean content of 2 origins = 1.256%)<sup>[5508]</sup>, SHAN LING MA HUANG *Ephedra gerardiana* (herbaceous twigs: content = 0.696%)<sup>[5508]</sup>, SHU ZHUANG MA HUANG *Ephedra procera* (herbaceous twigs: content = 0.06%)<sup>[5508]</sup>, SHUANG SUI MA HUANG *Ephedra distachya* (herbaceous twigs: content = 0.19%)<sup>[5508]</sup>, XI ZANG ZHONG MA HUANG *Ephedra intermedia* var. *tibetica* (herbaceous twigs: content = 1.060%)<sup>[5508]</sup>, XI ZI MA HUANG *Ephedra regeliana* (herbaceous twigs: content = 0.054%)<sup>[5508]</sup>, YI ZHU AI MA HUANG *Ephedra minuta* var. *dioeca* (herbaceous twigs: mean content of 2 origins = 0.567%)<sup>[5508]</sup>, ZANG MA HUANG *Ephedra saxatilis* (herbaceous twigs: content = 0.601%)<sup>[5508]</sup>, ZHONG MA HUANG *Ephedra intermedia* (herbaceous twigs:), ZHONG MA HUANG *Ephedra intermedia* (herbaceous twigs: content scope = 0.125%–0.47%)<sup>[5501]</sup>, mean content of 3 origins = 0.266%)<sup>[5508]</sup>, *Ephedra tweediana* (herbaceous twigs: content = 0.0028%)<sup>[5508]</sup>. Ref: 4, 658, 660, 5501, 5507, 5508.

**6816 (4S,5R) Ephedroxane**

[16251-46-0]  $C_{11}H_{13}NO_2$  (191.23). Pharm: Anti-inflammatory. Source: AI MA HUANG *Ephedra minuta*, MA HUANG *Ephedra sinica*, MU ZEI MA HUANG *Ephedra equisetina*, SHAN LING MA HUANG *Ephedra gerardiana*, SHUANG SUI MA HUANG *Ephedra distachya*, ZHONG MA HUANG *Ephedra intermedia*. Ref: 2, 658, 660.

**6817 4-Epi-abietic acid**

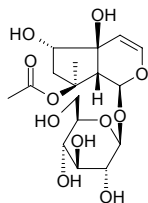
$C_{20}H_{30}O_2$  (302.46). White amorphous powder. Source: JIA DI FENG PI *Illicium jiadifengpi* (bark). Ref: 4560.



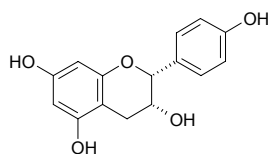


**6818 6-Epi-8-O-acetylharpagide**

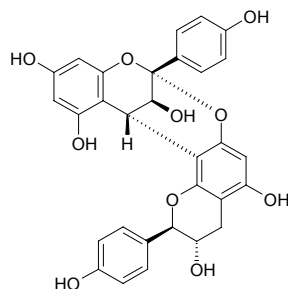
$C_{17}H_{26}O_{11}$  (406.39). White amorphous powder,  $[\alpha]_D = -36^\circ$  ( $c = 0.0035$ , MeOH). Source: ZA JIAO YOU<sup>(2)</sup> *Caryopteris clandonensis*. Ref: 3988.

**6819 (-)-Epiatzelechin**

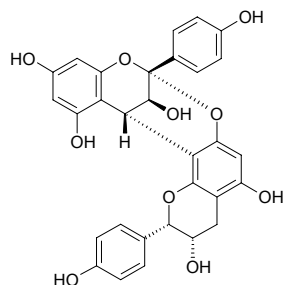
[24808-04-6]  $C_{15}H_{14}O_5$  (274.28). White crystals, mp 248~250°C,  $[\alpha]_D = -59^\circ$  ( $c = 0.1$ , MeOH). Pharm: Antioxidant (DPPH free radical scavenger,  $IC_{50} = 7.5 \mu\text{g/mL}$ )<sup>[3028]</sup>. Source: AN MO LE *Phyllanthus emblica* (branch and leaf)<sup>[3094]</sup>, NAN SHE TENG YECelastrus orbiculatus [Syn. *Celastrus articulatus*], NAN SHE TENG *Celastrus orbiculatus* [Syn. *Celastrus articulatus*] (aerial parts: yield = 0.0025%dw)<sup>[3028]</sup>, OU ZHOU CI BAI *Juniperus communis*, XI BO JUE MING *Cassia sieberiana*. Ref: 713, 3028, 3094.

**6820 ent-Epiatzelechin-(2α→O→7, 4α→8)-(+)-afzelechin**

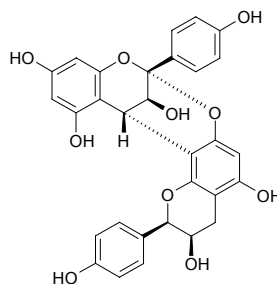
$C_{30}H_{24}O_{10}$  (544.52). Amorphous powder, mp > 300°C. Source: XING REN *Prunus armeniaca*. Ref: 1896.

**6821 ent-Epiatzelechin-(2α→O→7, 4α→8)-(-)-afzelechin**

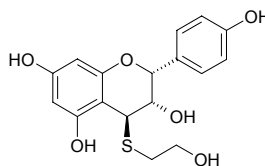
$C_{30}H_{24}O_{10}$  (544.52). Amorphous powder, mp > 300°C. Source: XING REN *Prunus armeniaca*. Ref: 1896.

**6822 ent-Epiatzelechin-(2α→O→7, 4α→8)-epiatzelechin**

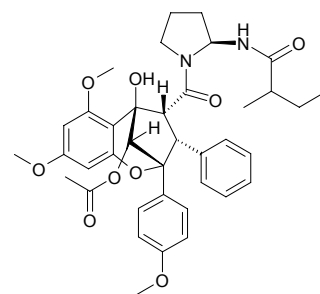
Mahuangnin A  $C_{30}H_{24}O_{10}$  (544.52). Amorphous powder, mp > 300°C. Source: MA HUANG GEN *Ephedra sinica*, XING REN *Prunus armeniaca*. Ref: 1230, 1896.

**6823 (-)-Epiatzelechin-4-(2-hydroxyethyl)thio ether**

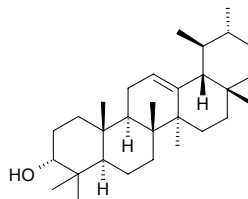
$C_{17}H_{18}O_6S$  (350.39). Red amorphous powder,  $[\alpha]_D = +208.5^\circ$  ( $c = 0.4$ , MeOH). Source: XIAO GUO YE JIAO *Musa acuminata* (fruit). Ref: 3913.

**6824 4-Epiaglalin A**

$C_{38}H_{44}N_2O_9$  (672.78). Amorphous powder,  $[\alpha]_D^{20} = -1.0^\circ$  ( $c = 0.97$ ,  $CHCl_3$ ). Source: TUE YUAN MI ZI LAN *Aglaia elliptica* (leaf). Ref: 4127.

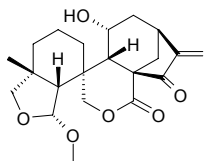
**6825 Epi-α-amyrin**

[5937-48-4]  $C_{30}H_{50}O$  (426.73). Source: MI DIE XIANG *Rosmarinus officinalis*. Ref: 6.

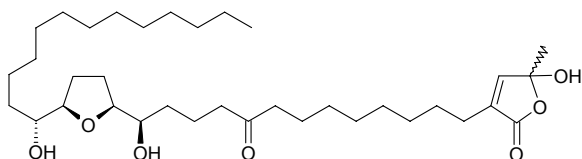


**6826 6-Epiangustifolin**

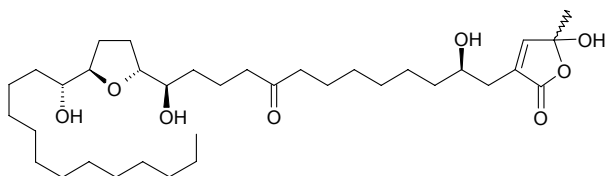
$C_{21}H_{28}O_6$  (376.45). Colorless needles (MeOH), mp 240~242°C,  $[\alpha]_D^{17} = -94.7^\circ$  ( $c = 0.41$ , MeOH). **Pharm:** Cytotoxic (*in vitro*, K562,  $IC_{50} = 0.87\mu\text{g/mL}$ ; control *cis*-Platin,  $IC_{50} = 0.52\mu\text{g/mL}$ )<sup>[4732]</sup>. **Source:** LU SHI DONG LING CAO *Isodon rubescens* var. *lushiensis* (leaf: yield = 0.0004%dw)<sup>[4732]</sup>, ZI MAO XIANG CHA CAI *Isodon enanderianus*. **Ref:** 2030, 4732.

**6827 34-Epiannomolon A**

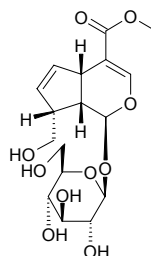
$C_{35}H_{62}O_7$  (594.88). White powder, mp 82.1~82.7°C,  $[\alpha]_D^{23} = -5.0^\circ$  ( $c = 0.02$ ,  $\text{CH}_2\text{Cl}_2$ ). **Pharm:** The data are from mixture of annomolon A and 34-epi-annomolon A: cytotoxic (BST,  $LC_{50} = 0.375\mu\text{g/mL}$ ); cytotoxic (*in vitro*, A549,  $ED_{50} = 1.26\mu\text{g/mL}$ ; MCF7,  $ED_{50} = 0.303\mu\text{g/mL}$ ; HT29,  $ED_{50} = 0.193\mu\text{g/mL}$ ; A498,  $ED_{50} = 0.93\mu\text{g/mL}$ ; PC3,  $ED_{50} = 0.198\mu\text{g/mL}$ ; MIA-PaCa-2,  $ED_{50} = 0.00312\mu\text{g/mL}$ ; control Adriamycin: A549,  $ED_{50} = 0.00113\mu\text{g/mL}$ ; MCF7,  $ED_{50} = 0.0182\mu\text{g/mL}$ ; HT29,  $ED_{50} = 0.0128\mu\text{g/mL}$ ; A498,  $ED_{50} = 0.00226\mu\text{g/mL}$ ; PC3,  $ED_{50} = 0.0502\mu\text{g/mL}$ ; MIA-PaCa-2,  $ED_{50} = 0.00262\mu\text{g/mL}$ ). **Source:** MAO YE FAN LI ZHI *Annona cherimolia* (seed). **Ref:** 4731.

**6828 34-Epiannomolon B**

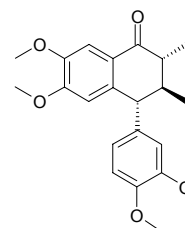
$C_{35}H_{62}O_8$  (610.88). White powder, mp 86.3~87.2°C,  $[\alpha]_D^{23} = +6.0^\circ$  ( $c = 0.02$ ,  $\text{CH}_2\text{Cl}_2$ ). **Pharm:** The data are from mixtures of annomolon B and 34-epi-annomolon B: cytotoxic (BST,  $LC_{50} = 0.07\mu\text{g/mL}$ ); cytotoxic (*in vitro*, A549,  $ED_{50} = 1.37\mu\text{g/mL}$ ; MCF7,  $ED_{50} = 0.047\mu\text{g/mL}$ ; HT29,  $ED_{50} = 0.0719\mu\text{g/mL}$ ; A498,  $ED_{50} = 0.377\mu\text{g/mL}$ ; PC3,  $ED_{50} = 0.0553\mu\text{g/mL}$ ; MIA-PaCa-2,  $ED_{50} = 0.00748\mu\text{g/mL}$ ; control Adriamycin: A549,  $ED_{50} = 0.00113\mu\text{g/mL}$ ; MCF7,  $ED_{50} = 0.0182\mu\text{g/mL}$ ; HT29,  $ED_{50} = 0.0128\mu\text{g/mL}$ ; A498,  $ED_{50} = 0.00226\mu\text{g/mL}$ ; PC3,  $ED_{50} = 0.0502\mu\text{g/mL}$ ; MIA-PaCa-2,  $ED_{50} = 0.00262\mu\text{g/mL}$ ). **Source:** MAO YE FAN LI ZHI *Annona cherimolia* (seed). **Ref:** 4731.

**6829 8-Epiapodantheroside**

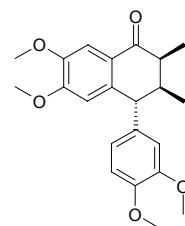
$C_{17}H_{24}O_{10}$  (388.37). Amorphous powder,  $[\alpha]_D^{25} = -128.6^\circ$  ( $c = 0.0715$ , MeOH). **Source:** ZHI ZI YE *Gardenia jasminoides* [Syn. *Gardenia florida*]. **Ref:** 4408.

**6830 (+)-8,8'-Epi-aristoligone**

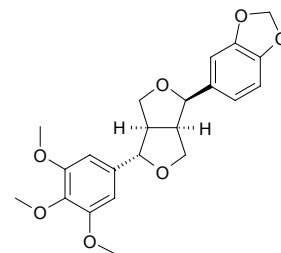
(7*R*,8*R*,8'*S*)-8,8'-Dimethyl-3',4',4,5-tetramethoxy-2,7'-cyclo lignan-7-one  $C_{22}H_{26}O_5$  (370.45). Yellow crystals, mp 146.5~149.3°C,  $[\alpha]_D^{25} = -30.0^\circ$  ( $c = 1.33$ ,  $\text{CHCl}_3$ ). **Source:** *Holostylis reniformis* (root). **Ref:** 3784.

**6831 (-)-8,8'-Epi-aristoligone**

(7*R*,8*S*,8'*S*)-8,8'-Dimethyl-3',4',4,5-tetramethoxy-2,7'-cyclo lignan-7-one  $C_{22}H_{26}O_5$  (370.45). Yellow crystals, mp 130.0~132.0°C,  $[\alpha]_D^{25} = -64.3^\circ$  ( $c = 1.04$ ,  $\text{CHCl}_3$ ). **Source:** *Holostylis reniformis* (root). **Ref:** 3784.

**6832 Epiaschantin**

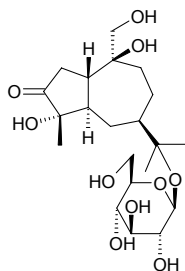
$C_{22}H_{24}O_7$  (400.43).  $[\alpha]_D^{20} = +95^\circ$  ( $c = 0.2$ ,  $\text{CHCl}_3$ ). **Source:** LIAN YE TONG *Hernandia Sonora* [Syn. *Hernandia ovigera*] (seed). **Ref:** 5030.



**6833 10-Epiatractyloside A**

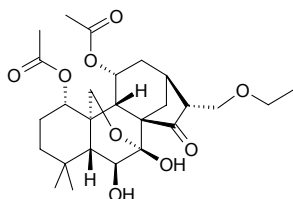
$C_{21}H_{36}O_{10}$  (448.52). Amorphous powder,  $[\alpha]_D^{22} = +14^\circ$  ( $c = 1.2$ , MeOH).

Source: CANG ZHU *Atractylodes lancea*, GUAN CANG ZHU *Atractylodes japonica* (fresh rhizome). Ref: 4310, 4348.

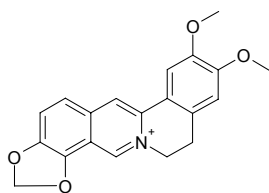
**6834 Epi-baiyecrystal C**

$C_{26}H_{38}O_9$  (494.59). mp 224–225.5°C,  $[\alpha]_D^{22.3} = -5.68^\circ$  ( $c = 0.26$ , MeOH).

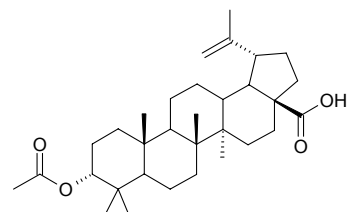
Source: BAI YE XIANG CHA CAI *Isodon leucophyllus*. Ref: 4067.

**6835 Epiberberine**

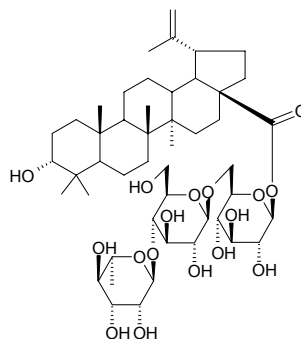
$C_{20}H_{18}NO_4$  (336.37). Pharm: Cytotoxic (topoisomerase I inhibitor *in vitro*)<sup>[5369]</sup>. Source: DUO HUA XIAO BO *Berberis floribunda*, HUANG LIAN *Coptis chinensis* (rhizome: mean content = 1.29%<sup>[5508]</sup>), NAN TIAN ZHU YE *Nandina domestica*, SAN JIAO YE HUANG LIAN *Coptis deltoidea* (rhizome: mean content = 0.54%<sup>[5508]</sup>), SAN YE HUANG LIAN *Coptis trifolia*. Ref: 1521, 5369, 5508.

**6836 3-Epi-betulnic acid acetate**

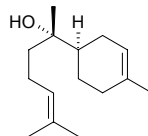
$C_{32}H_{50}O_4$  (498.75).  $[\alpha]_D^{26} = +75.1^\circ$  ( $c = 0.21$ , EtOH). Source: HUANG QI II *Engelhardia roxburghiana* (root). Ref: 5059.

**6837 3-Epibetulnic acid 28-O-α-L-rhamnopyranosyl-(1→4)-β-D-glucopyranosyl-(1→6)-β-D-glucopyranoside**

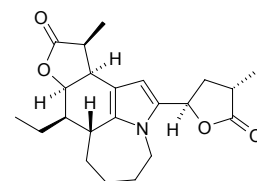
$C_{48}H_{78}O_{17}$  (927.15). White powder, mp 208–210 °C  $[\alpha]_D^{20} = -38.7^\circ$  ( $c = 0.4$ , MeOH). Source: DONG BEI CI REN SHEN *Oplopanax elatus*. Ref: 467, 1521.

**6838 (+)-4-Epi-α-bisabolol**

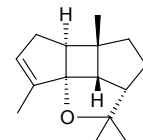
$C_{15}H_{26}O$  (222.37). Source: FEN CHA DANG GUI *Angelica furcujuga* (flower). Ref: 4454.

**6839 Epi-bisdehydrotuberostemonine J**

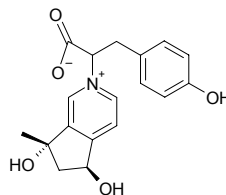
$C_{22}H_{29}NO_4$  (371.48). mp 186–188°C,  $[\alpha]_D^{20} = -16.1^\circ$  ( $c = 0.1$ , MeOH). Pharm: Antitussive inactive (guinea pig cough model)<sup>[5463]</sup>. Source: BAI BU *Stemona tuberosa*. Ref: 5463.

**6840 (-)-(1S\*,5S\*,6S\*,7S\*,10S\*)-7-Epi-bourbon-3-en-5,11-oxide**

$C_{15}H_{22}O$  (218.34). Colorless oil. Source: XIAO E TAI *Mylia taylorii* (essential oil), LUO XIAO E TAI *Mylia nuda* (essential oil). Ref: 3840.

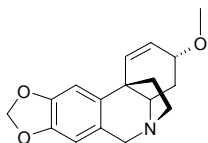
**6841 Epibueropteridinium A**

$C_{18}H_{19}NO_5$  (329.36). Colorless hyaloid oil. Source: XUAN SHEN *Scrophularia ningpoensis*. Ref: 8.

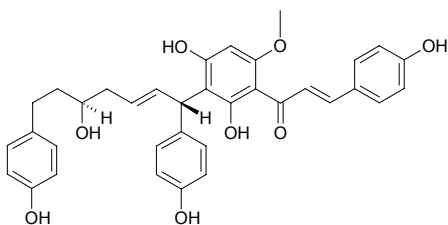


**6842 Epibuphanisine**

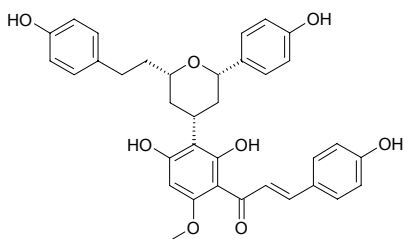
$C_{17}H_{19}NO_3$  (285.35). **Pharm:** AChE inhibitor ( $IC_{50} = (547 \pm 5) \mu\text{mol/L}$ , control Galanthamine,  $IC_{50} = (1.9 \pm 0.2) \mu\text{mol/L}$ ). **Source:** *Crinum moorei*. **Ref:** 4952.

**6843 Epicalyxin B**

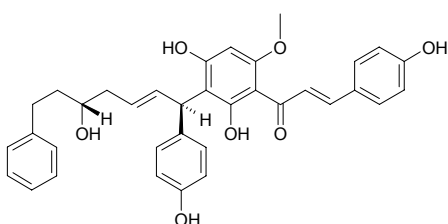
$C_{35}H_{34}O_8$  (582.66). **Source:** ZHU SUI SHAN JIANG *Alpinia pinnanensis* (rhizome). **Ref:** 4522.

**6844 Epicalyxin F**

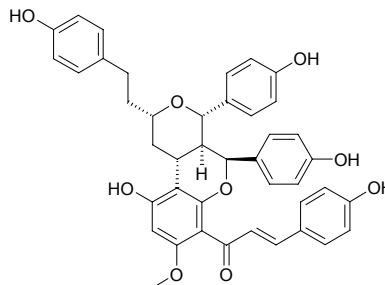
$C_{35}H_{34}O_8$  (582.66). Light yellow amorphous solid,  $[\alpha]_D^{25} = +103.1^\circ$  ( $c = 0.05$ , MeOH). **Pharm:** Cytotoxic (Colon26-L5,  $ED_{50} = 0.89 \mu\text{mol/L}$ ; HT1080,  $ED_{50} = 1.71 \mu\text{mol/L}$ ; control Curcumin, Colon26-L5,  $ED_{50} = 23.2 \mu\text{mol/L}$ ; HT1080,  $ED_{50} = 23.4 \mu\text{mol/L}$ ). **Source:** YUN NAN CAO KOU *Alpinia blepharocalyx* (seed: 0.000043%). **Ref:** 3035.

**6845 Epicalyxin H**

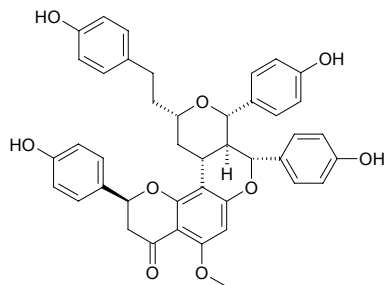
$C_{35}H_{34}O_7$  (566.66). **Source:** ZHU SUI SHAN JIANG *Alpinia pinnanensis* (rhizome). **Ref:** 4522.

**6846 Epicalyxin I**

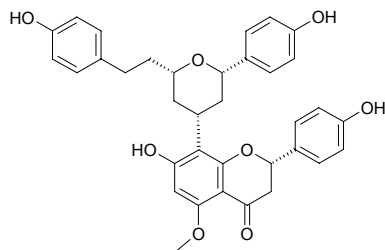
$C_{42}H_{38}O_9$  (686.77). Light yellow amorphous solid,  $[\alpha]_D^{25} = +28.3^\circ$  ( $c = 0.025$ , MeOH). **Pharm:** Cytotoxic (Colon26-L5,  $ED_{50} = 12.1 \mu\text{mol/L}$ ; HT1080,  $ED_{50} = 5.88 \mu\text{mol/L}$ ; control Curcumin, Colon26-L5,  $ED_{50} = 23.2 \mu\text{mol/L}$ ; HT1080,  $ED_{50} = 23.4 \mu\text{mol/L}$ )<sup>[3035]</sup>. **Source:** YUN NAN CAO KOU *Alpinia blepharocalyx* (seed: yield = 0.000040%<sup>[3035]</sup>; yield = 0.000040%<sup>[3048]</sup>). **Ref:** 3035, 3048.

**6847 Epicalyxin J**

$C_{42}H_{38}O_9$  (686.77). Light yellow amorphous solid. **Pharm:** Cytotoxic (mixture of calyxin J and epicalyxin J (1:1): Colon26-L5,  $ED_{50} = 13.7 \mu\text{mol/L}$ ; HT1080,  $ED_{50} = 0.32 \mu\text{mol/L}$ ; control Curcumin, Colon26-L5,  $ED_{50} = 23.2 \mu\text{mol/L}$ ; HT1080,  $ED_{50} = 23.4 \mu\text{mol/L}$ ). **Source:** YUN NAN CAO KOU *Alpinia blepharocalyx* (seed: yield = 0.000056%). **Ref:** 3035.

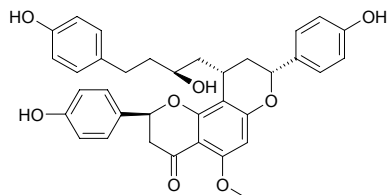
**6848 Epicalyxin K**

$C_{35}H_{34}O_8$  (582.66). Pale yellow amorphous solid,  $[\alpha]_D^{25} = -17.0^\circ$  ( $c = 0.085$ , MeOH). **Pharm:** Cytotoxic (Colon26-L5,  $ED_{50} = 33.0 \mu\text{mol/L}$ ; HT1080,  $ED_{50} = 4.75 \mu\text{mol/L}$ ; control Curcumin, Colon26-L5,  $ED_{50} = 23.2 \mu\text{mol/L}$ ; HT1080,  $ED_{50} = 23.4 \mu\text{mol/L}$ ). **Source:** YUN NAN CAO KOU *Alpinia blepharocalyx* (seed: yield = 0.000017%). **Ref:** 3035.

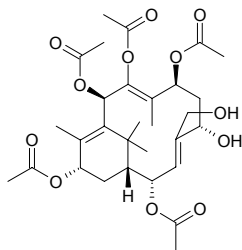


**6849 Epicalyxin M**

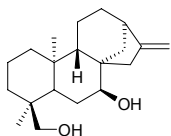
$C_{35}H_{34}O_8$  (582.66). Yellow amorphous solid (An epimeric mixture of calyxin M and epicalyxin M). **Pharm:** Cytotoxic (mixture of calyxin M and epicalyxin M (3:2): Colon26-L5,  $ED_{50} = 42.1 \mu\text{mol/L}$ ; HT1080,  $ED_{50} = 10.1 \mu\text{mol/L}$ ; control Curcumin, Colon26-L5,  $ED_{50} = 23.2 \mu\text{mol/L}$ ; HT1080,  $ED_{50} = 23.4 \mu\text{mol/L}$ ). **Source:** YUN NAN CAO KOU *Alpinia blepharocalyx* (seed). **Ref:** 3035.

**6850 5-Epicanadense**

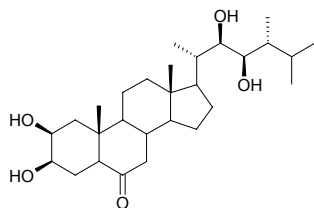
$C_{30}H_{42}O_{12}$  (594.66). **Source:** JIA NA DA HONG DOU SHAN *Taxus canadensis*. **Ref:** 662.

**6851 7-Epicandicandiol**

$C_{20}H_{32}O_2$  (304.48). Colorless needles ( $\text{CHCl}_3$ ). **Source:** *Sideritis ozturkii* (aerial parts). **Ref:** 3827.

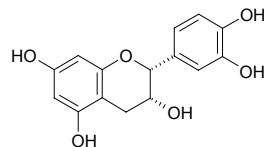
**6852 24-Epicasterone**

$C_{28}H_{48}O_5$  (464.69). **Source:** YANG JIAN QIU LUO *Lychnis viscaria*. **Ref:** 2418.

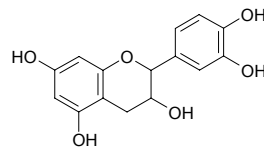
**6853 (-)-Epicatechin**

5,7,3',4',-Tetrahydroxyflavanol  $C_{15}H_{14}O_6$  (290.28). mp  $242^\circ\text{C}$ ,  $[\alpha]_D = -68.2^\circ$  (96% ethanol). **Pharm:** Antiallergic; antibacterial; anti-inflammatory; antimutagenic; inhibits lactic acid bacteria; antioxidant (inhibits free-radical induced lysis of rat red blood cells and exhibits strong and dose-dependent protection of cell membrane)<sup>[5341]</sup>; cholinesterase inhibitor; antihypercholesterolemic (reduces the level of cholesterol in serum); antioxidant (DPPH free radical scavenger, for  $40 \mu\text{mol/L}$  DPPH radical,  $SC_{50} = 4.1 \mu\text{mol/L}$ )<sup>[4378]</sup>; DPPH scavenger ( $IC_{50} = 8.5 \mu\text{g/mL}$ );  $\beta$ -hexosaminidase inhibitor inactive (RBL-2H3 cells, inhibits release of  $\beta$ -hexosaminidase,  $100 \mu\text{mol/L}$ ,  $\text{InRt} = (-3.9 \pm 1.2)\%$ )<sup>[4304]</sup>;

inhibits cancer cell invasion (MM1 cells, *in vitro*,  $10 \mu\text{g/mL}$ ,  $\text{InRt} = 20.3\%$ )<sup>[4329]</sup>; bone marrow cell proliferation promotor ( $1\sim 100 \text{mg/mL}$ , promotes proliferation of cultured bone marrow cells, stimulates formation of myeloid colonies and enhances the effect of IL-3 to increase the number of colony forming-units in culture (CFU-c))<sup>[5390]</sup>; bone marrow cell proliferation promoter (*ex vivo*, model mouse of decreasing bone marrow functions, orally  $100 \text{mg}/(\text{kg}\cdot\text{d})$ , stimulates IL-3-induced CFU-c formation of bone marrow cells)<sup>[5390]</sup>; antioxidant (DPPH free radical scavenger,  $10 \mu\text{mol/L}$ ,  $\text{ScRt} = 82\%$ , control BHT,  $10 \mu\text{mol/L}$ ,  $\text{ScRt} = 43\%$ )<sup>[5319]</sup>; antioxidant (DPPH free radical scavenger,  $IC_{50} = 8.5 \mu\text{g/mL}$ )<sup>[3028]</sup>. **Source:** A LA BO JIAO JIN HE HUAN *Acacia nilotica*, AN MO LE *Phyllanthus emblica* (branch and leaf)<sup>[3094]</sup>, BAI GUO *Ginkgo biloba*, BI LU GOU TENG *Uncaria tomentosa*, CAO YUAN LAO GUAN CAO *Geranium pratense*, CHA YE *Camellia sinensis* [Syn. *Thea sinensis*], DAN ZI SHAN ZHA *Crataegus monogyna*, DAO NIAN ZI *Garcinia mangostana* (fruit hull)<sup>[3066]</sup>, E RONG WEI LING CAI *Potentilla anserina*, ER CHA GOU TENG *Uncaria gambir* (dried decocted extract of trunk: content scope of 10 origins =  $1.57\%\sim 3.84\%$ ; mean content =  $2.45\%$ )<sup>[5508]</sup>, GOU TENG *Uncaria rhynchophylla* [Syn. *Nauclea rhynchophylla*], GUAN YE LIAN QIAO *Hypericum perforatum*, HAI ER CHA *Acacia catechu* (dried decocted extract of trunk: content scope of 8 origins =  $7.56\%\sim 14.20\%$ ; mean content =  $11.3\%$ )<sup>[5508]</sup>, HEI ZI LI GUO JI SHENG *Scurrula atropurpurea*, HONG QI YE SHU *Aesculus carnea*, JIA ZHOU QI YE SHU *Aesculus californica*, JIAN PU ZHAI GU KE *Erythroxylum cambodianum* (aerial parts), LING LAN *Convallaria keiskei* [Syn. *Convallaria majalis*], MAO GUO QI *Acer nikoense* (stem cortex), MEI LI TENG HUANG *Garcinia speciosa* (trunk bark and stems), NAN SHE TENG *Celastrus orbiculatus* [Syn. *Celastrus articulatus*] (aerial parts: yield =  $0.050\% \text{dw}$ )<sup>[3028]</sup>, QUAN SHEN *Polygonum bistorta*, SHA ZAO *Elaeagnus angustifolia*, SHAN CHA *Camellia japonica*, SUO LA MU *Salacia prinoides* [Syn. *Salacia chinensis*] (stem), TIAN SHAN ZHU ZI *Garcinia dulcis* (fruit), TUO YUAN GOU TENG *Uncaria elliptica*, YUE JU YE *Vaccinium vitis-idaea*, ZHU BAI *Myrica nagi* [Syn. *Podocarpus nagi*], *Pterocarpus* sp., occurs in many plants. **Ref:** 6, 658, 661, 1521, 3028, 3066, 3094, 4304, 4329, 4378, 4461, 5319, 5341, 5375, 5390, 5491, 5508.

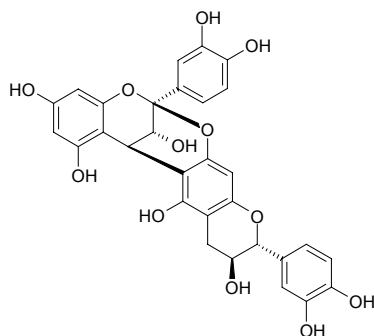
**6854 Epicatechin**

Epicatechol  $C_{15}H_{14}O_6$  (290.28). mp (+)  $245^\circ\text{C}$  (dec), (-)  $245^\circ\text{C}$  (dec), (+/-)  $224\sim 226^\circ\text{C}$  (dec). **Pharm:** antioxidant (DPPH radical scavenger,  $IC_{50} = 1.7 \mu\text{g/mL}$ ; control Ascorbic acid,  $IC_{50} = 3.9 \mu\text{g/mL}$ )<sup>[4711]</sup>. **Source:** BAI GUO YE *Ginkgo biloba*, DA HUANG *Rheum officinale*, HAI ER CHA *Acacia catechu*, SHAN LI HONG *Crataegus pinnatifida* var. *major*, SHAN ZHA *Crataegus pinnatifida*, TANG GU TE DA HUANG *Rheum tanguticum*, YE SHAN ZHA *Crataegus cuneata*, ZANG BIAN DA HUANG *Rheum emodi* [Syn. *Rheum australe*] (root: yield =  $0.033\% \text{dw}$ )<sup>[4711]</sup>, ZHAI YE BAN FENG HE *Pterospermum lanceaeifolium*, ZHANG YE DA HUANG *Rheum palmatum*. **Ref:** 2, 6, 433, 660, 4711, 5375.

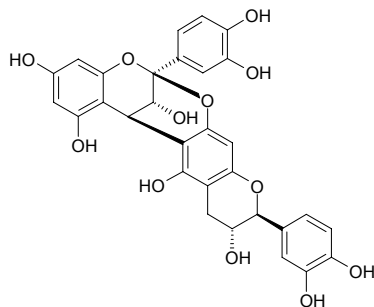


**6855 Epicatechin-(2 $\beta$ →O→7,4 $\beta$ →6)-catechin**

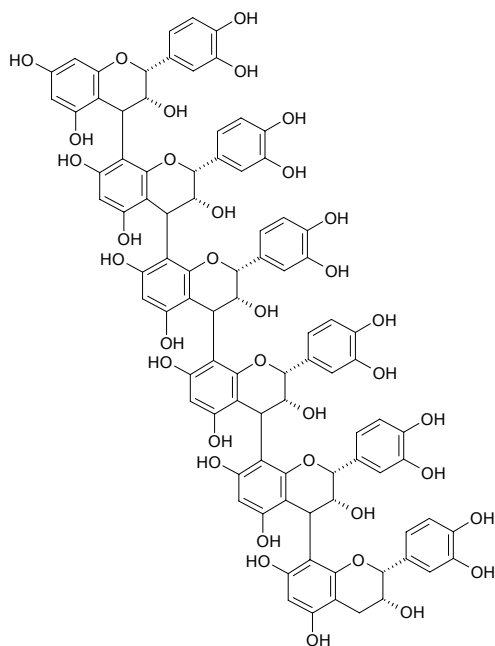
C<sub>30</sub>H<sub>24</sub>O<sub>12</sub> (576.52). Colorless needles (H<sub>2</sub>O), mp 271–273°C (dec), [ $\alpha$ ]<sub>D</sub> = +10.12° (c = 1.05, acetone). **Pharm:** Hyaluronidase inhibitor. **Source:** LUO HUA SHENG *Arachis hypogaea*. **Ref:** 2284.

**6856 Epicatechin-(2 $\beta$ →O→7,4 $\beta$ →6)-ent-epicatechin**

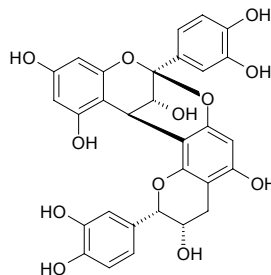
C<sub>30</sub>H<sub>24</sub>O<sub>12</sub> (576.52). White amorphous powder (H<sub>2</sub>O); mp 262°C (dec). **Pharm:** Hyaluronidase inhibitor. **Source:** LUO HUA SHENG *Arachis hypogaea*. **Ref:** 2284.

**6857 [Epicatechin-(4 $\beta$ →8)] 5-epicatechin**

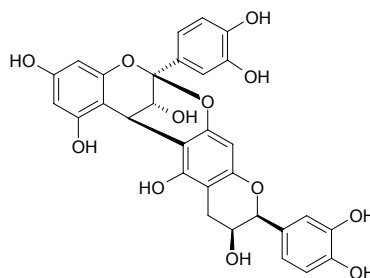
C<sub>90</sub>H<sub>74</sub>O<sub>36</sub> (1731.57). **Pharm:** Tanning agent. **Source:** ROU GUI *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*]. **Ref:** 658.

**6858 Epicatechin-(2 $\beta$ →O→7,4 $\beta$ →8)-ent-epicatechin**

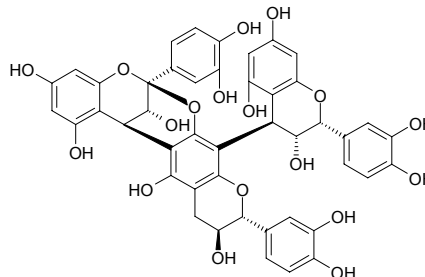
C<sub>30</sub>H<sub>24</sub>O<sub>12</sub> (576.52). White crystalline powder (H<sub>2</sub>O), mp 260°C (dec). **Pharm:** Hyaluronidase inhibitor. **Source:** LUO HUA SHENG *Arachis hypogaea*. **Ref:** 2284.

**6859 Epicatechin-(4 $\beta$ →6,2 $\beta$ →O→7)-ent-epicatechin**

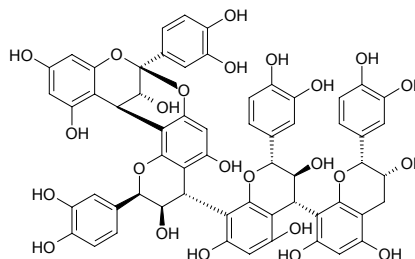
C<sub>30</sub>H<sub>24</sub>O<sub>12</sub> (576.52). White amorphous powder (H<sub>2</sub>O/MeOH); mp 280°C (dec). **Pharm:** Hyaluronidase inhibitor. **Source:** LUO HUA SHENG *Arachis hypogaea*. **Ref:** 2284.

**6860 Epicatechin-(2 $\beta$ →O→7,4 $\beta$ →6)-[epicatechin-(4 $\beta$ →8)]-catechin**

C<sub>45</sub>H<sub>36</sub>O<sub>18</sub> (864.78). Off-white amorphous powder, mp 272°C (dec), [ $\alpha$ ]<sub>D</sub> = +86.2° (c = 0.3, acetone). **Pharm:** Antioxidant (DPPH scavenger, IC<sub>50</sub> = (1.21±0.11)μmol/L; control EGG, IC<sub>50</sub> = (1.13±0.08)μmol/L). **Source:** LUO HUA SHENG *Arachis hypogaea* (seed). **Ref:** 3848.

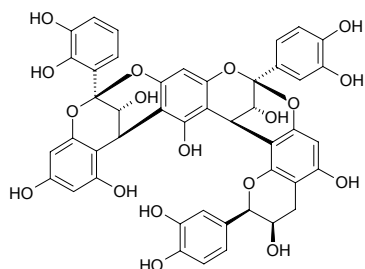
**6861 Epicatechin-(2 $\beta$ →O→7,4 $\beta$ →8)epicatechin-(4 $\alpha$ →8)-catechin-(4 $\alpha$ →8)-epicatechin**

C<sub>60</sub>H<sub>48</sub>O<sub>24</sub> (1153.04). Off-white amorphous powder, mp 260°C (dec), [ $\alpha$ ]<sub>D</sub> = +27.6° (c = 0.3, acetone). **Pharm:** Antioxidant (DPPH scavenger, IC<sub>50</sub> = (1.32±0.16)μmol/L; control EGG, IC<sub>50</sub> = (1.13±0.08)μmol/L). **Source:** LUO HUA SHENG *Arachis hypogaea* (seed). **Ref:** 3848.

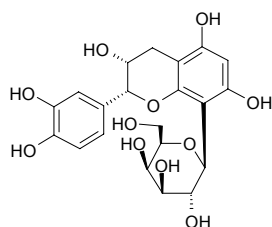


**6862 Epicatechin-(2 $\beta$ →O→7,4 $\beta$ →6)-epicatechin-(2 $\beta$ →O→7,4 $\beta$ →8)-epicatechin**

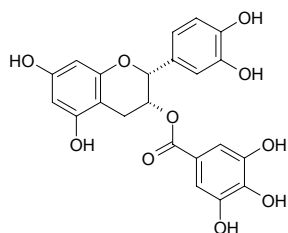
C<sub>45</sub>H<sub>34</sub>O<sub>18</sub> (862.76). Pale yellow amorphous powder,  $[\alpha]_D^{21} = +184.9^\circ$  ( $c = 1.08$ , MeOH). Source: CHANG JIE ZHU *Parameria laevigata* (bark). Ref: 3523.

**6863 Epicatechin-8-C- $\beta$ -D-galactopyranoside**

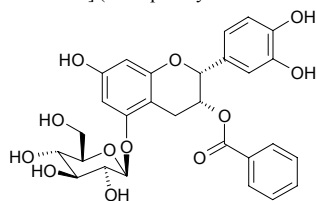
C<sub>21</sub>H<sub>24</sub>O<sub>11</sub> (452.42). Light-brown amorphous powder,  $[\alpha]_D = -25.8^\circ$  ( $c = 0.9$ , MeOH). Pharm: Antioxidant (inhibits NADPH-dependent lipid peroxidation in microsomes and autoxidation of linoleic acid); antioxidant (DPPH scavenger, effective). Source: KE KE *Theobroma cacao*. Ref: 2023.

**6864 (-)-Epicatechin-3-O-gallate**

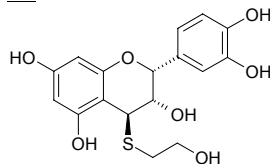
Galloylepicatechin C<sub>27</sub>H<sub>18</sub>O<sub>10</sub> (442.38). mp 253°C. Pharm: Inhibits cancer cell invasion (MM1 cells, *in vitro*, 10 $\mu$ g/mL, InRt = 59.9%)<sup>[4329]</sup>; bone marrow cell proliferation promotor (100mg/mL, stimulates formation of myeloid colonies)<sup>[5390]</sup>. Source: CHA YE *Camellia sinensis* [Syn. *Thea sinensis*], DA HUANG *Rheum officinale*, HEI ZI LI GUO JI SHENG *Scurrura atropurpurea*, ZHANG YE DA HUANG *Rheum palmatum*, TANG GU TE DA HUANG *Rheum tanguticum*, TAO GEN *Prunus persica*. Ref: 2, 6, 660, 4329, 5390.

**6865 (-)-Epicatechin-5-O- $\beta$ -D-glucopyranosyl-3-benzoate**

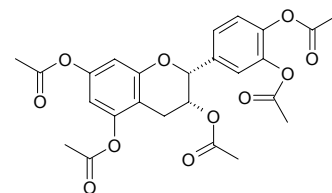
C<sub>28</sub>H<sub>28</sub>O<sub>12</sub> (556.53). Bright pink needles (CH<sub>2</sub>Cl<sub>2</sub>:MeOH = 1:1), mp 191~192°C;  $[\alpha]_D^{25} = -95^\circ$  ( $c = 0.3$ , MeOH). Pharm: Antioxidant (DPPH scavenger, IC<sub>50</sub> = 25 $\mu$ g/mL)<sup>[3028]</sup>. Source: NAN SHE TENG *Celastrus orbiculatus* [Syn. *Celastrus articulatus*] (aerial parts: yield = 0.0026%dw). Ref: 3028.

**6866 (-)-Epicatechin 4-(2-hydroxyethyl)thio ether**

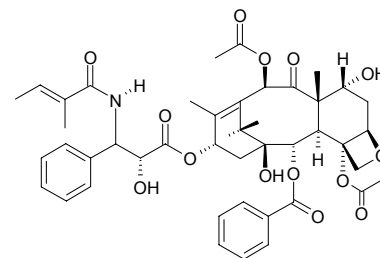
C<sub>17</sub>H<sub>18</sub>O<sub>7</sub>S (366.39). Source: XIAO GUO YE JIAO *Musa acuminata* (fruit). Ref: 3913.

**6867 (-)-Epicatechin-pentaacetate**

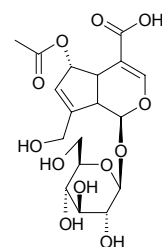
C<sub>25</sub>H<sub>24</sub>O<sub>11</sub> (500.46). Source: BAI GUO *Ginkgo biloba*. Ref: 2.

**6868 7-Epicephalommannine**

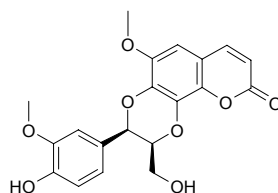
C<sub>45</sub>H<sub>52</sub>NO<sub>14</sub> (831.92). mp 210°C,  $[\alpha]_D = -7.32^\circ$  (MeOH). Source: ZA JIAO JIE ZHI HONG DOU SHAN *Taxus x media*. Ref: 662.

**6869 6-O-Epiacetylscaidoside**

C<sub>18</sub>H<sub>24</sub>O<sub>12</sub> (432.38). White amorphous powder,  $[\alpha]_D^{19} = -94.6^\circ$  ( $c = 0.19$ , MeOH). Source: MA LAI BAN DAO RAN MU SHU *Saprosma scortechinii* (stem and leaf). Ref: 4219.

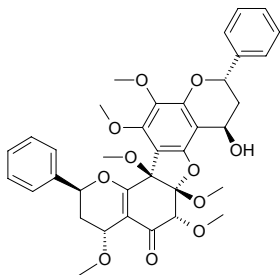
**6870 8'-Epi-cleomiscosin A**

C<sub>20</sub>H<sub>18</sub>O<sub>8</sub> (386.36). Amorphous powder,  $[\alpha]_D^{25} = +15.5^\circ$  ( $c = 0.1$ , C<sub>2</sub>D<sub>5</sub>N). Pharm: Tyrosinase inhibitor (IC<sub>50</sub> = (1.33±1.06) $\mu$ mol/L, control Kojic acid, IC<sub>50</sub> = (16.67±0.52) $\mu$ mol/L, L-Mimosine, IC<sub>50</sub> = (3.68±0.02) $\mu$ mol/L). Source: A FU HAN DU JUAN HUA *Rhododendron collettianum*. Ref: 2544.

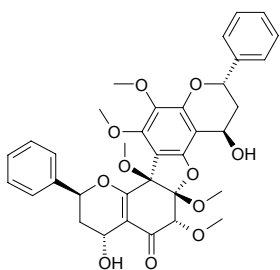


**6871 6''-Epi-calyflorenone B**

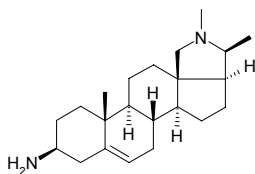
$C_{36}H_{38}O_{11}$  (646.70). Pale amorphous solid, mp 110~112°C (Et<sub>2</sub>O–petrol),  $[\alpha]_D^{20} = -30.05^\circ$  ( $c = 0.183$ ). Source: E CHI TENG *Calycopteris floribunda* (green part). Ref: 3779.

**6872 6''-Epi-calyflorenone C**

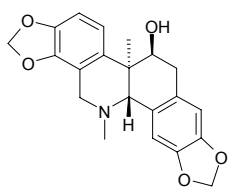
$C_{35}H_{36}O_{11}$  (632.67). Pale amorphous solid, mp 117~119°C (Et<sub>2</sub>O–petrol),  $[\alpha]_D^{20} = -21.86^\circ$  ( $c = 0.183$ ). Source: E CHI TENG *Calycopteris floribunda* (green part). Ref: 3779.

**6873 3-Epiconamine**

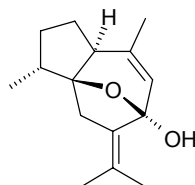
$C_{22}H_{36}N_2$  (328.55). mp 95~100°C. Source: ZHI XIE MU PI *Holarhena antidysenterica*. Ref: 6.

**6874 (+)-14-Epicorynoline**

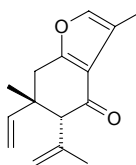
[51151-82-7]  $C_{21}H_{21}NO_5$  (367.41). Source: ZI HUA YU DENG CAO *Corydalis incisa*. Ref: 6.

**6875 4-Epicurcumenol**

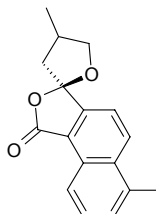
$C_{15}H_{22}O_2$  (234.34). Colorless oil,  $[\alpha]_D^{26} = +120.1^\circ$  ( $c = 1.8$ , CHCl<sub>3</sub>). Pharm: NO production inhibitor (mus peritoneal macrophages, induced by LPS, 100μmol/L, InRt = (40.1±1.4)%), control *L*-NMMA, 100μmol/L, InRt = (79.2±0.9)%,  $p < 0.01$ ). Source: PING E SHU *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*]. Ref: 4150.

**6876 Epicurzerenone**

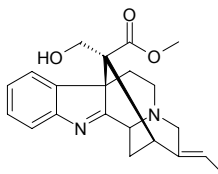
$C_{15}H_{18}O_2$  (230.31). Source: PING E SHU *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*]. Ref: 6.

**6877 Epidanshenspiroketallactone**

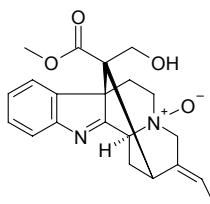
$C_{17}H_{16}O_3$  (268.32). Source: DAN SHEN *Salvia miltiorrhiza*, GAN XI SHU WEI CAO *Salvia przewalskii*. Ref: 1521, 4538.

**6878 16-Epideacetylakuammiline**

$C_{21}H_{24}N_2O_3$  (352.44). Source: HONG HUA RUI MU *Kopsia fruticosa* (leaf). Ref: 3830.

**6879 16-Epideacetylakuammiline N(4)-oxide**

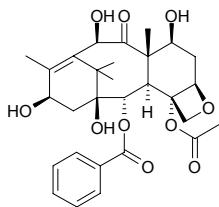
$C_{21}H_{24}N_2O_4$  (368.44).  $[\alpha]_D = -66^\circ$  ( $c = 0.15$ , CHCl<sub>3</sub>). Source: MA LAI XI YA RUI MU *Kopsia griffithii*. Ref: 1854.



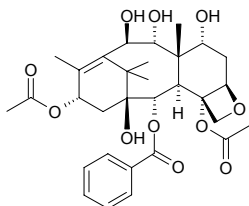


**6880 13-Epi-10-deacetylbaccatin III**

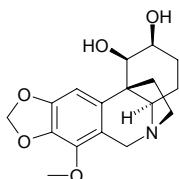
$C_{29}H_{36}O_{10}$  (544.60). Source: JIANG GUO ZI SHAN *Taxus baccata*. Ref: 662.

**6881 7-Epi-9,10-deacetylbaccatin VI**

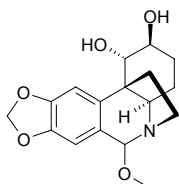
$C_{31}H_{40}O_{11}$  (588.66). Source: JIA NA DA HONG DOU SHAN *Taxus canadensis*. Ref: 662.

**6882 1-Epideacetylbowdensine**

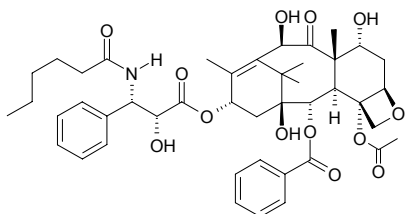
$C_{17}H_{21}NO_5$  (319.36). Source: GUAN MU WEN SHU LAN *Crinum macowanii* (bulb). Ref: 4000.

**6883 1-Epideacetylbowdensine‡**

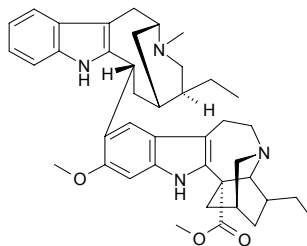
$C_{17}H_{21}NO_5$  (319.36). Source: *Crinum moorei*. Ref: 4952.

**6884 7-Epi-10-deacetyltaxuyunnanine A**

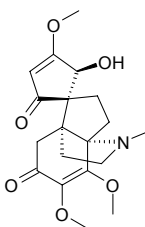
7-Epi-10-deacetyltaxol; Taxuspinanane E  $C_{44}H_{55}NO_{13}$  (805.93).  $[\alpha]_D = -22.9^\circ$  (MeOH). Source: YUN NAN HONG DOU SHAN *Taxus yunnanensis*, ZI SHAN *Taxus cuspidata*. Ref: 662.

**6885 20-Epi-16'-decarbomethoxy-conoduramine**

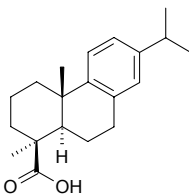
$C_{41}H_{54}N_4O_3$  (650.91). Source: YAO YONG GOU YA HUA *Ervatamia officinalis*. Ref: 799.

**6886 1-Epidechloroacutumine**

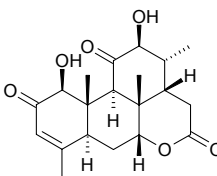
$C_{19}H_{25}NO_6$  (363.41).  $[\alpha]_D^{25} = -45^\circ$  ( $c = 0.2$ , MeOH). Source: BIAN FU GE *Menispermum dauricum*. Ref: 1946.

**6887 4-Epidehydroabietic acid**

[5155-70-4]  $C_{20}H_{28}O_2$  (300.44). White amorphous powder. Source: JIA DI FENG PI *Illicium jiadifengpi* (bark). Ref: 4560.

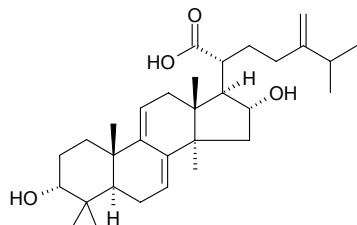
**6888 12-Epi-11-dehydroklaineanone**

$C_{20}H_{26}O_6$  (362.43). Colorless glassy resin,  $[\alpha]_D^{25} = -11.2^\circ$  ( $c = 0.1$ , MeOH). Pharm: Plant growth inhibitor (Cucumber seedling, root growth,  $IC_{50} > 200\mu\text{mol/L}$ , shoot growth,  $IC_{50} > 200\mu\text{mol/L}$ ; Rice seedling, root growth,  $IC_{50} > 200\mu\text{mol/L}$ , shoot growth,  $IC_{50} > 200\mu\text{mol/L}$ )<sup>[5215]</sup>. Source: CHANG YE KUAN MU *Eurycoma longifolia* (leaf). Ref: 5215.

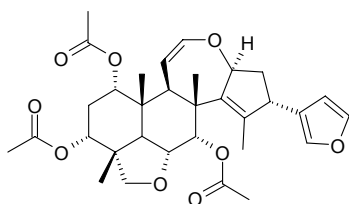


**6889 3-Epidehydrotumulosic acid**

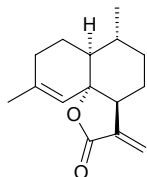
$C_{31}H_{48}O_4$  (484.73). **Pharm:** Antineoplastic (EBV-EA induced by TPA, mol ratio/TPA = 1000, relative percentage of EBV-EA = 0% (positive control value 32pmol, 20ng TPA = 100%), viability of Raji cells = 70%; reference compound  $\beta$ -Carotene, relative percentage = 8.6%). **Source:** FU LING *Poria cocos* (sclerotium: yield = 0.00029%dw). **Ref:** 4616.

**6890 17-Epi-12-dehydroxyheudebolin**

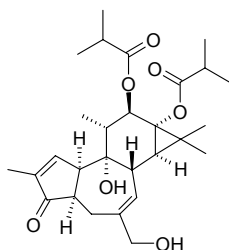
$C_{32}H_{40}O_9$  (568.67). White crystals (hexane-EtOAc), mp 122~124°C,  $[\alpha]_D^{20} = -190.1^\circ$  ( $c = 1.3$ ,  $CHCl_3$ ). **Source:** *Turreanthus africanus* (seed). **Ref:** 3884.

**6891 Epideoxyarteannuin B**

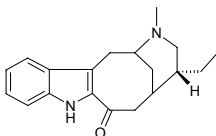
Deoxyisoartemisinin B  $C_{15}H_{20}O_2$  (232.33). **Source:** HUANG HUA HAO *Artemisia annua*. **Ref:** 660, 5224.

**6892 4-Epi-4-deoxyphorbol 12,13-bis(isobutyrate)**

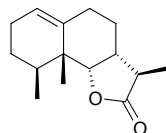
[250258-02-7]  $C_{28}H_{40}O_7$  (488.63). Oil,  $[\alpha]_D = +3^\circ$  ( $c = 0.7$ ,  $CHCl_3$ ). **Source:** DUN YE DA JI *Euphorbia obtusifolia* var. *obtusifolia*. **Ref:** 2365.

**6893 20-Epi-19,20-dihydro-decarbomethoxy vobasine**

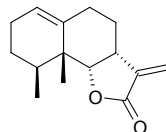
$C_{19}H_{24}N_2O$  (296.42). **Source:** YAO YONG GOU YA HUA *Ervatamia officinalis*. **Ref:** 799.

**6894 5-Epidilatanolide A**

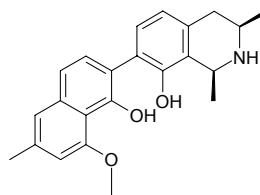
$C_{15}H_{22}O_2$  (234.34). Colorless solid, mp 106~107°C,  $[\alpha]_D = -21.5^\circ$  ( $c = 0.40$ ,  $CHCl_3$ ). **Source:** BA XI ER YE TAI *Frullania brasiliensis*. **Ref:** 1981.

**6895 5-Epidilatanolide B**

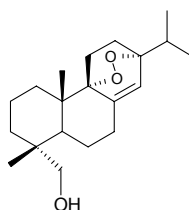
$C_{15}H_{20}O_2$  (232.33). Colorless oil,  $[\alpha]_D = +50.8^\circ$  ( $c = 0.27$ ,  $CHCl_3$ ). **Source:** BA XI ER YE TAI *Frullania brasiliensis*. **Ref:** 1981.

**6896 1-Epi-dioncophylline B**

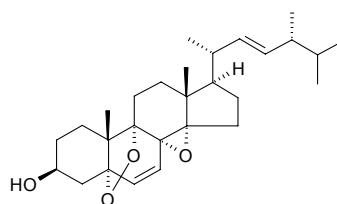
$C_{23}H_{25}NO_3$  (363.46). **Pharm:** Antimalarial (*Plasmodium falciparum* K1,  $IC_{50} = 155$ ng/mL, NF54,  $IC_{50} = 273$ ng/mL, MIC > 200µg/mL). **Source:** SAN YE MU *Triphyophyllum peltatum* (leaf). **Ref:** 3962.

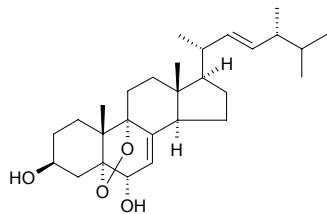
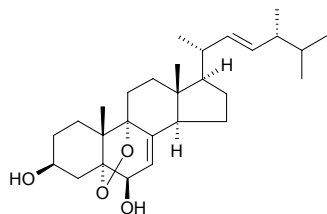
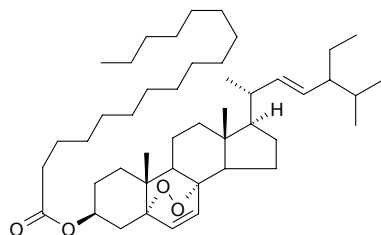
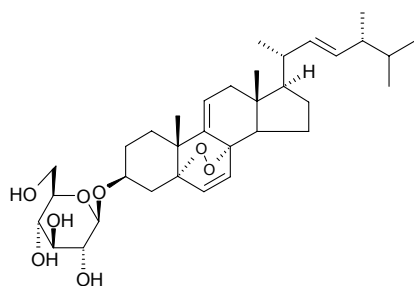
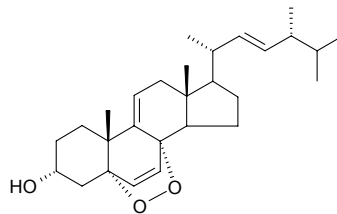
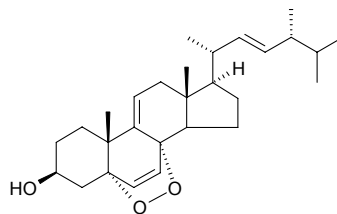
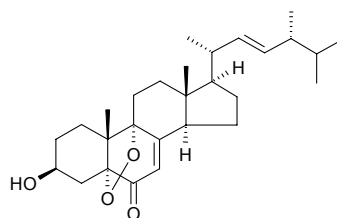
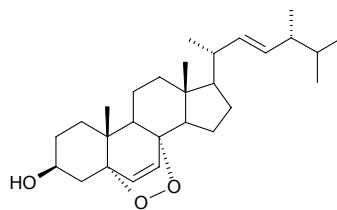
**6897 9α,13α-Epi-dioxiabiet-8(14)-en-18-ol**

$C_{20}H_{32}O_3$  (320.48). Colorless oil,  $[\alpha]_D = -51.8^\circ$  ( $c = 1.0$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (A549,  $IC_{50} > 5$ µg/mL; H116,  $IC_{50} > 5$ µg/mL; PSN1,  $IC_{50} > 5$ µg/mL; T98G,  $IC_{50} > 5$ µg/mL; SKBR3,  $IC_{50} > 5$ µg/mL). **Source:** BEI FEI XUE SONG *Cedrus atlantica* (cone). **Ref:** 5248.

**6898 5α,9α-Epidioxy-8α,14α-epoxy-(22E)-ergosta-6,22-dien-3β-ol**

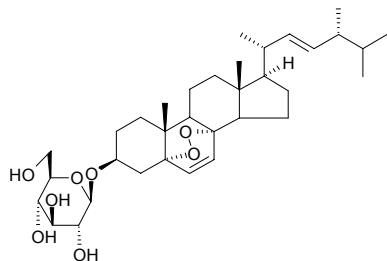
$C_{28}H_{42}O_4$  (442.64). Colorless amorphous solid,  $[\alpha]_D^{19} = -33.9^\circ$  ( $c = 0.06$ ,  $CHCl_3$ ). **Source:** HOU SHU SHAN GU *Panellus serotinus*, *Pleurotus eryngii*. **Ref:** 4183.



**6899 5 $\alpha$ ,9 $\alpha$ -Epidioxy-(22E)-ergosta-7,22-diene-3 $\beta$ ,6 $\alpha$ -diol**C<sub>28</sub>H<sub>44</sub>O<sub>4</sub> (444.66). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>23</sup> = -8.8° (c = 0.1, CHCl<sub>3</sub>).Source: HOU SHU SHAN GU *Panellus serotinus*. Ref: 3526.**6900 5 $\alpha$ ,9 $\alpha$ -Epidioxy-(22E)-ergosta-7,22-diene-3 $\beta$ ,6 $\beta$ -diol**C<sub>28</sub>H<sub>44</sub>O<sub>4</sub> (444.66). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>19</sup> = -24.4° (c = 0.08, CHCl<sub>3</sub>).Source: ZI DING XIANG MO *Lepista nuda*, HOU SHU SHAN GU *Panellus serotinus*, SONG XUN *Tricholoma matsutake* [Syn. *Armillaria matsutake*], *Pleurotus eryngii*. Ref: 3526, 4183.**6901 5 $\alpha$ ,8 $\alpha$ -Epidioxyergosta-6,22-dien-3 $\beta$ -yl stearate**C<sub>46</sub>H<sub>78</sub>O<sub>4</sub> (695.18). White amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +13° (c = 0.2, CH<sub>2</sub>Cl<sub>2</sub>). Pharm: Antitubercular (*Mycobacterium tuberculosis* growth inhibitor, MIC = 4 $\mu$ g/mL). Source: *Ruprechtia triflora* (aerial parts).Ref: 5416.**6902 (22E,24R)-5 $\alpha$ ,8 $\alpha$ -Epidioxyergosta-6,9,22-triene-3 $\beta$ -ol 3-O- $\beta$ -D-glycopyranoside**C<sub>34</sub>H<sub>52</sub>O<sub>8</sub> (588.79). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +5.6° (c = 2.0, MeOH).Source: *Chlorophyllum molybdites*. Ref: 4112.**6903 5 $\alpha$ ,8 $\alpha$ -Epidioxyergosta-6,9(11),22-trien-3 $\alpha$ -ol**C<sub>28</sub>H<sub>42</sub>O<sub>3</sub> (426.65). Source: JIA LIAN QIAO *Duranta repens* (whole herb).Ref: 4179.**6904 5 $\alpha$ ,8 $\alpha$ -Epidioxyergosta-6,9(11),22-trien-3 $\beta$ -ol**9(11)-Dehydroergosterol peroxide C<sub>28</sub>H<sub>42</sub>O<sub>3</sub> (426.65). White needles (EtOAc).Source: AI LI SI DUO KONG JUN *Polyporus ellisii*, JIA LIAN QIAO *Duranta repens* (whole herb). Ref: 2435, 4179.**6905 5 $\alpha$ ,9 $\alpha$ -Epidioxy-3 $\beta$ -hydroxy-(22E)-ergosta-7,22-dien-6-one**C<sub>28</sub>H<sub>42</sub>O<sub>4</sub> (442.64). Source: *Pleurotus eryngii*. Ref: 4183.**6906 5 $\alpha$ ,8 $\alpha$ -Epidioxy-24(R)-methylcholesta-6,22-diene-3 $\beta$ -ol**Ergosterol peroxide C<sub>28</sub>H<sub>44</sub>O<sub>3</sub> (428.66). Colorless needles, mp 180~182°C,[ $\alpha$ ]<sub>D</sub> = -33.3 (c = 0.3, CHCl<sub>3</sub>). Pharm: DNA Topoisomerase I Inhibitor (inhibits the relaxation of supercoiled DNA (pBR322) induced by DNA topoisomerase I); cytotoxic (marginal activity, selective cytotoxic activity against hmn colon tumor cells, Colon205 ED<sub>50</sub> = 8.56 $\mu$ g/mL). Source: *Penicillium oxalicum*. Ref: 5046.

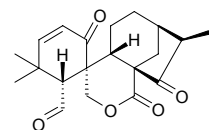
**6907 5 $\alpha$ ,8 $\alpha$ -Epidioxy-24(R)-methylcholesta-6,22-dien-3 $\beta$ -D-glucopyranoside**

[140447-22-9] C<sub>34</sub>H<sub>54</sub>O<sub>8</sub> (590.80). **Pharm:** Antiproliferative (K562, Jurkat, WM-1341, HL-60 and RPMI-8226 tumor cell lines, 10 $\mu$ g/mL, greater inhibitor by 10% to 40% than 5 $\alpha$ , 8 $\alpha$ -Epidioxy-24(R)-methylcholesta-6, 22-dien-3 $\beta$ -ol). **Source:** DONG CHONG XIA CAO *Cordyceps sinensis*. **Ref:** 2322.



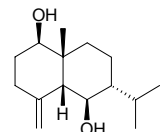
**6908 Epi-ericalyxin A**

C<sub>20</sub>H<sub>24</sub>O<sub>5</sub> (344.41). **Source:** MAO E XIANG CHA CAI *Rabdosia ericalyx*. **Ref:** 4067.



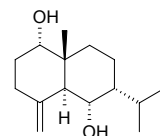
**6909 5-Epi-eudesm-4(15)-ene-1 $\beta$ ,6 $\beta$ -diol**

C<sub>15</sub>H<sub>26</sub>O<sub>2</sub> (238.37). Colorless monoclinic crystals (petroleum ether–EtOAc), [ $\alpha$ ]<sub>D</sub><sup>20</sup> = –88° (c = 0.6, CHCl<sub>3</sub>); white powder, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +36.5° (c = 0.32, CHCl<sub>3</sub>). **Pharm:** Anti-HIV (MT-2 cell infected by HIV-IIIB virus, 10 $\mu$ g/mL, weak activity)<sup>[4786]</sup>; anti-HIV-1 (HIV-1 replication inhibitor *in vitro*, HOG.R5, IC<sub>50</sub> = 17.4 $\mu$ g/mL (73.1 $\mu$ mol/L), cytotoxic, 20 $\mu$ g/mL, inactive)<sup>[4688]</sup>. **Source:** DIE DA LAO *Litsea verticillata* (leaf and twig: yield = 0.00011%dw), ZHONG JIAN JIN JI ER *Caragana intermedia* (aerial parts). **Ref:** 4688, 4786.



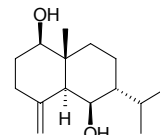
**6910 7-Epieudesm-4(15)-ene-1 $\alpha$ ,6 $\alpha$ -diol**

C<sub>15</sub>H<sub>26</sub>O<sub>2</sub> (238.37). White powder, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = –35.3° (c = 0.05, CHCl<sub>3</sub>). **Pharm:** Anti-HIV-1 inactive (*in vitro*, HOG.R5)<sup>[4688]</sup>. **Source:** DIE DA LAO *Litsea verticillata* (leaf and twig: yield = 0.00015%dw). **Ref:** 4688.



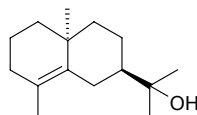
**6911 7-Epi-eudesm-4(15)-ene-1 $\beta$ ,6 $\beta$ -diol**

C<sub>15</sub>H<sub>26</sub>O<sub>2</sub> (238.37). White powder, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = –16.0° (c = 0.03, CHCl<sub>3</sub>). **Pharm:** Anti-HIV-1 inactive (*in vitro*, HOG.R5). **Source:** DIE DA LAO *Litsea verticillata* (leaf and twig: yield = 0.00008%dw). **Ref:** 4688.



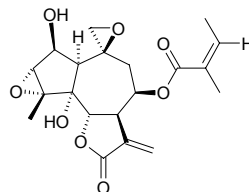
**6912 (–)-10-Epi- $\gamma$ -eudesmol**

C<sub>15</sub>H<sub>26</sub>O (222.37). **Source:** CHEN XIANG *Aquilaria agallocha*. **Ref:** 13.



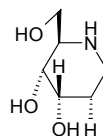
**6913 10-Epieupatoroxin**

[20071-54-9] C<sub>20</sub>H<sub>24</sub>O<sub>8</sub> (392.41). mp 230–232°C, [ $\alpha$ ]<sub>D</sub><sup>26</sup> = –109° (c = 0.33, methanol). **Pharm:** Cytotoxic (KB, ED<sub>50</sub> = 2.6 $\mu$ g/mL). **Source:** YUAN YE ZE LAN *Eupatorium rotundifolium*. **Ref:** 661.



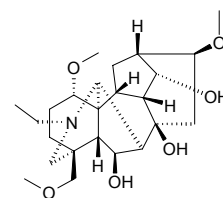
**6914 3-Epifagomine**

C<sub>6</sub>H<sub>13</sub>NO<sub>3</sub> (147.18). **Pharm:** Lactase inhibitor (isomaltose enzyme inhibitor)<sup>[2513]</sup>. **Source:** SANG BAI PI *Morus alba*. **Ref:** 2513.



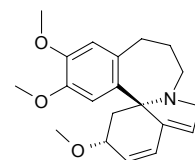
**6915 6-Epiforesticine**

C<sub>24</sub>H<sub>39</sub>NO<sub>6</sub> (437.58). White amorphous powder. **Source:** GUA YE WU TOU *Aconitum hemleyanum*. **Ref:** 2208.



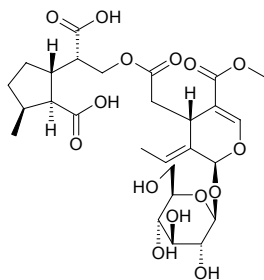
**6916 3-Epifortuneine**

C<sub>20</sub>H<sub>25</sub>NO<sub>3</sub> (327.43). **Source:** SAN JIAN SHAN *Cephalotaxus fortunei*. **Ref:** 2.

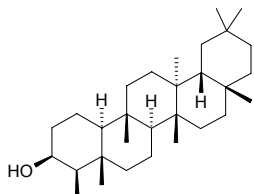


**6917 2''-Epiframeroside**

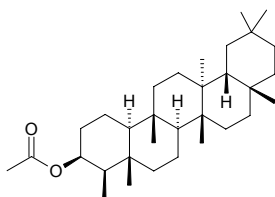
$C_{27}H_{38}O_{15}$  (602.59). Colorless amorphous powder,  $[\alpha]_D^{24} = -116^\circ$  ( $c = 0.22$ , MeOH). **Source:** A FU HAN DING XIANG *Syringa afghanica*. **Ref:** 2006.

**6918 Epifriedelanol**

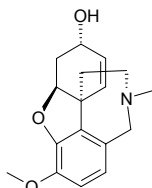
Friedelan-3 $\beta$ -ol; Friedelinol [16844-71-6]  $C_{30}H_{52}O$  (428.75). Colorless acicular crystals, mp 283.5~285.0°C; mp 263~265°C. **Pharm:** NFAT transcription factor inhibitor inactive ( $IC_{50} > 50\mu\text{mol/L}$ , positive control Cyclosporin A,  $IC_{50} = (0.31\pm 0.01)\mu\text{mol/L}$ )<sup>[4511]</sup>. **Source:** CHAO XIAN LUO WAN *Gymnaster koraiensis* (leaf), DONG FENG CAI *Doellingeria scaber* [Syn. *Aster scaber*], DUO SUI SHI KE YE *Lithocarpus polystachyus*, GUI JIAN YU *Euonymus alatus*, HUO XIANG *Agastache rugosus*, HUO YANG LE *Euphorbia antiquorum*, KU DI DAN *Elephantopus scaber*, KU HAO *Conyza blinii*, LIANG YE YAN DOU TENG *Milletia nitida*, LONG YAN YE *Euphorbia longan* [Syn. *Dimocarpus longan*], NAN ZHU ZI *Vaccinium bracteatum*, QIU FENG MU *Bischofia javanica* [Syn. *Bischofia trifoliata*], TIAO JING CAO *Euonymus japonicus*, XI YUAN TENG *Pericampylus glaucus*, XUAN FU HUA *Inula britannica*, YU DAI GEN *Pedilanthus tithymaloides*, ZI WAN *Aster tataricus*. **Ref:** 6, 505, 596, 660, 4511.

**6919 Epifriedelinol acetate**

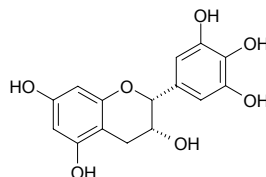
$C_{32}H_{54}O_2$  (470.79). mp 282~285°C. **Source:** QIU FENG MU *Bischofia javanica* [Syn. *Bischofia trifoliata*], YU DAI GEN *Pedilanthus tithymaloides*. **Ref:** 6.

**6920 2-Epigalanthamine**

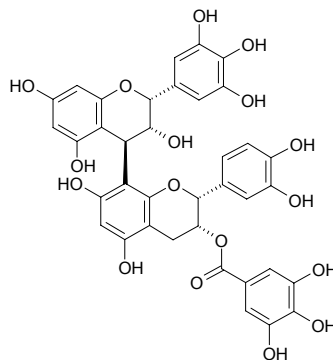
[1668-85-5]  $C_{17}H_{21}NO_3$  (287.36). mp 190°C. **Source:** SHI SUAN *Lycoris radiata* [Syn. *Amaryllis radiata*]. **Ref:** 6.

**6921 L-Epigallocatechin**

(-)-Epigallocatechin [970-74-1]  $C_{15}H_{14}O_7$  (306.27). mp 227°C. **Pharm:** Angiotensin I-converting enzyme inhibitor; platelet aggregation inhibitor (rbt, stronger than aspirin, weaker than persantin); antibacterial (*Bacillus typhosus*, *Bacillus paratyphosus*, *Staphylococcus hemolyticus flavus*, *Staphylococcus aureus*); cytotoxic (HeLa, *in vitro*); antispasmodic (rat); lipoxidase inhibitor (soy,  $IC_{50} = 10\sim 20\mu\text{mol/L}$ ); inhibits cancer cell invasion (MM1 cells, *in vitro*,  $10\mu\text{g/mL}$ , InRt = 27.8%)<sup>[4329]</sup>; antioxidant (DPPH free radical scavenger, for  $40\mu\text{mol/L}$  DPPH radical,  $SC_{50} = 2.5\mu\text{mol/L}$ )<sup>[4378]</sup>; bone marrow cell proliferation promotor ( $100\text{mg/mL}$ , stimulates formation of myeloid colonies)<sup>[5390]</sup>; inhibits degranulation and release of  $\beta$ -hexosaminidase (RBL-2H3 cells,  $100\mu\text{mol/L}$ , InRt = (12.6 $\pm$ 4.2)%), control Curcumin,  $100\mu\text{mol/L}$ , InRt = (62.6 $\pm$ 1.0)%, did not affect the enzyme activity of  $\beta$ -hexosaminidase)<sup>[4163]</sup>. **Source:** A LA BO JIAO JIN HE HUAN *Acacia nilotica*, AN MO LE *Phyllanthus emblica* (branch and leaf)<sup>[3094]</sup>, CHA YE *Camellia sinensis* [Syn. *Thea sinensis*], KUN MING SHAN HAI TANG *Tripterygium hypoglaucum*, SUO LA MU *Salacia prinoides* [Syn. *Salacia chinensis*] (stem), YANG MEI SHU PI *Myrica rubra* (bark; yield = 0.0066%)<sup>[4163]</sup>. **Ref:** 6, 612, 1564, 1565, 1566, 1567, 1568, 1569, 3094, 4163, 4329, 4378, 5375, 5390.

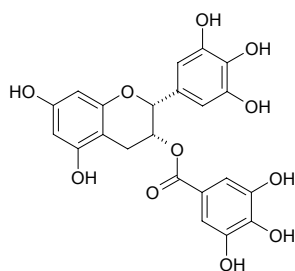
**6922 Epigallocatechin-(4 $\beta$ →8)-epicatechin-3-O-gallate ester**

$C_{37}H_{30}O_{17}$  (746.64). **Pharm:** Tanning agent. **Source:** CHA YE *Camellia sinensis* [Syn. *Thea sinensis*]. **Ref:** 658.

**6923 Epigallocatechin 3-gallate (EGCG)**

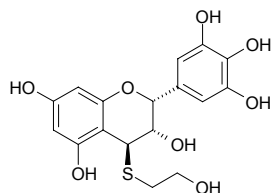
(-)-Epigallocatechin-3-O-gallate [989-51-5]  $C_{22}H_{18}O_{11}$  (458.38). mp 215~216°C;  $[\alpha]_D^{25} = -121.2^\circ$  ( $c = 0.99$ , acetone). **Pharm:** Special spicery of tea; inhibits cancer cell invasion (MM1 cells, *in vitro*,  $10\mu\text{g/mL}$ , InRt = 72.8%,  $5\mu\text{g/mL}$ , InRt = 59.7%)<sup>[4329]</sup>; bone marrow cell proliferation promotor ( $100\text{mg/mL}$ , stimulates formation of myeloid colonies)<sup>[5390]</sup>; 5 $\alpha$ -reductase inhibitor inactive ( $IC_{50} > 1\text{mmol/L}$ ; control Finasteride,  $IC_{50} = (0.38\pm 0.06)\mu\text{mol/L}$ ;  $\alpha$ -Linolenic acid,  $IC_{50} = (160.3\pm 24.6)\mu\text{mol/L}$ )<sup>[5398]</sup>;

inhibits cell proliferation of PBMC (activated by phytohemagglutinin (PHA),  $IC_{50} = 28.9 \mu\text{mol/L}$ , inhibitory mechanism may involve the blocking of IL-2 and IFN- $\gamma$  production)<sup>[4100]</sup>; TNF- $\alpha$  release inhibitor (BALB/3T3 cells, okadaic acid-stimulated, mean  $IC_{50} = 26 \mu\text{mol/L}$ )<sup>[4416]</sup>; anti-inflammatory (NF- $\kappa$ B pathway)<sup>[4415]</sup>; anti-inflammatory (NO production inhibitor)<sup>[4415]</sup>; anti-inflammatory (modulator of cytokine network: leukocyte elastase MMP-2/9 inhibitor)<sup>[4416]</sup>; antioxidant (DPPH scavenger,  $IC_{50} = (1.13 \pm 0.08) \mu\text{mol/L}$ )<sup>[3848]</sup>; antioxidant (hydroxyl radical scavenger,  $IC_{50} = 0.43 \mu\text{mol/L}$ )<sup>[4499]</sup>; antioxidant (superoxide anion radical scavenger,  $IC_{50} = 0.53 \mu\text{mol/L}$ )<sup>[4499]</sup>. Source: CHA YE *Camellia sinensis* [Syn. *Thea sinensis*], HEI ZI LI GUO JI SHENG *Scurrura atropurpurea*, MEI ZHOU JIN LV MEI *Hamamelis virginiana*, YOU GAN YE *Phyllanthus emblica* (branch and leaf), YANG PU TAO YE *Syzygium samarangense*, MAO GUO QI *Acer nikoense*, MAO YANG MEI *Myrica esculent*, YE WU TONG *Mallotus japonicus*. Ref: 6, 658, 1521, 3848, 4100, 4205, 4329, 4415, 4416, 4499, 5390, 5398.



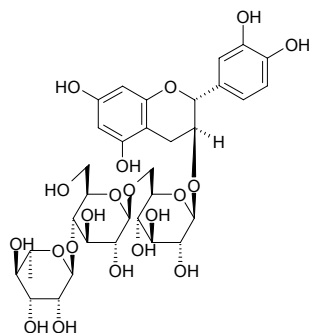
#### 6924 (-)-Epigallocatechin 4-(2-hydroxyethyl)thio ether

$C_{17}H_{18}O_8S$  (382.39). Source: XIAO GUO YE JIAO *Musa acuminata* (fruit). Ref: 3913.



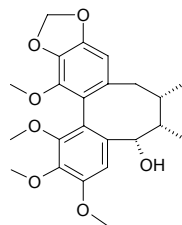
#### 6925 Epigeoside

Catechin-3-*O*- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside  $C_{33}H_{44}O_{20}$  (760.71). Colorless powder, mp 165–168°C,  $[\alpha]_D^{20} = -32.5^\circ$  ( $c = 1.05$ , methanol). Source: SI MAO TENG *Epigynum auritum*. Ref: 208.



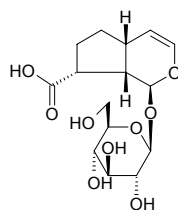
#### 6926 Epigomisin O

[73036-31-4]  $C_{23}H_{28}O_7$  (416.48). Source: WU WEI ZI *Schisandra chinensis*. Ref: 2.



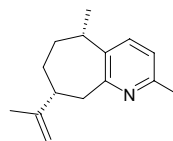
#### 6927 8-Epi-grandifloric acid

$C_{15}H_{22}O_9$  (346.34). Amorphous powder,  $[\alpha]_D^{19} = +55.4^\circ$  ( $c = 0.98$ , MeOH). Source: TAI GUO SHAN QIAN NIU *Thunbergia laurifolia*. Ref: 1968.



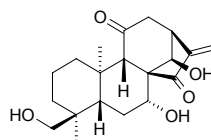
#### 6928 Epiguaiipyridine

Guaipyridine [41447-48-7]  $C_{15}H_{21}N$  (215.34). Source: GUANG HUO XIANG *Pogostemon cablin* [Syn. *Mentha cablin*]. Ref: 2, 6, 660.



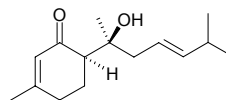
#### 6929 4-Epihenryne

Henryne A; Amethystoidin A  $C_{20}H_{28}O_5$  (348.44). mp 264–267°C,  $[\alpha]_D^{25} = +30.8^\circ$  ( $c = 4.5$ ,  $C_5H_5N$ ). Source: E XI XIANG CHA CAI *Isodon henryi*. Ref: 4067.



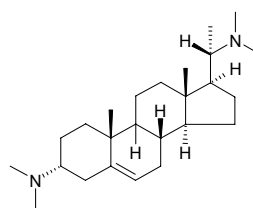
#### 6930 (-)-Epihernandulcin

$C_{15}H_{24}O_2$  (236.36). Source: TIAN SHE CAO *Lippia dulcis* (aerial parts). Ref: 4508.



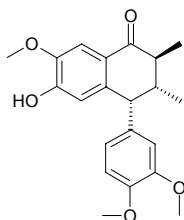
#### 6931 Epiheteroconessine

[In DNP]  $C_{25}H_{44}N_2$  (372.64). mp 148–150°C. Source: ZHI XIE MU PI *Holarrhena antidysenterica*. Ref: 6.

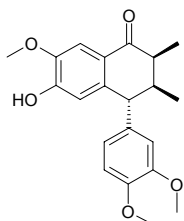


**6932 (-)-8,8'R-Epi-holostylone**

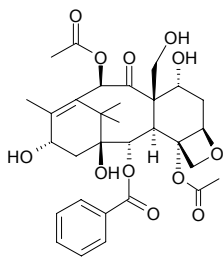
(7'R,8S,8'R)-8,8'-Dimethyl-4-hydroxy-3',4',5-trimethoxy-2,7'-cyclolignan-7-one C<sub>21</sub>H<sub>24</sub>O<sub>5</sub> (356.42). Amorphous yellow solid,  $[\alpha]_D^{25} = -171.6^\circ$  ( $c = 0.32$ , CHCl<sub>3</sub>). Source: *Holostylis reniformis* (root). Ref: 3784.

**6933 (-)-8,8'S-Epi-holostylone**

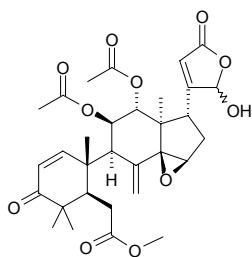
(7'R,8S,8'S)-8,8'-Dimethyl-4-hydroxy-3',4',5-trimethoxy-2,7'-cyclolignan-7-one C<sub>21</sub>H<sub>24</sub>O<sub>5</sub> (356.42). Yellow crystals, mp 169.0~172.0°C,  $[\alpha]_D^{25} = -40.6^\circ$  ( $c = 1.23$ , CHCl<sub>3</sub>). Source: *Holostylis reniformis* (root). Ref: 3784.

**6934 7-Epi-19-hydroxybaccatin III**

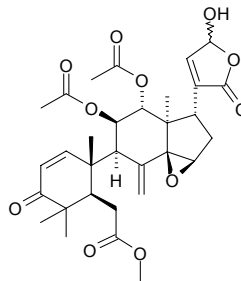
C<sub>31</sub>H<sub>38</sub>O<sub>12</sub> (602.64). Source: HONG DOU SHAN *Taxus chinensis*. Ref: 662.

**6935 11-Epi-21-hydroxytoonacilide**

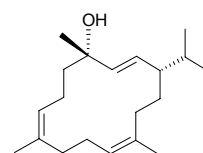
C<sub>31</sub>H<sub>38</sub>O<sub>11</sub> (586.64). White crystals, mp 124~126°C. Source: XIAO YE DU LIAN *Turraea parvifolia*. Ref: 2052.

**6936 11-Epi-23-hydroxytoonacilide**

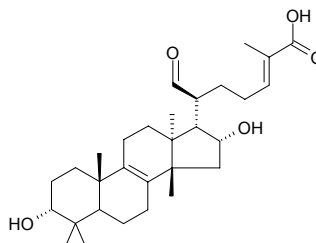
C<sub>31</sub>H<sub>38</sub>O<sub>11</sub> (586.64). White crystals, mp 139~142°C. Source: XIAO YE DU LIAN *Turraea parvifolia*. Ref: 2052.

**6937 4-Epiisocembrol**

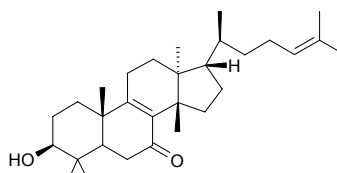
C<sub>20</sub>H<sub>34</sub>O (290.49). Source: HAI SONG ZI *Pinus koraiensis*. Ref: 6.

**6938 3-Epi-isomasticadienolalic acid**

C<sub>30</sub>H<sub>46</sub>O<sub>5</sub> (486.70).  $[\alpha]_D^{25} = +23.6^\circ$  ( $c = 0.5$ , CHCl<sub>3</sub>). Pharm: Anti-inflammatory (chronic inflammation model, in the form of eczema, provoked by repeated administration of TPA to the ears of mouse, swelling reduction = 39%, control Dexamethasone, swelling reduction = 85%; reduces leukocyte infiltration, measured as tissue peroxidase activity, InRt = 57%, Dexamethasone, InRt = 55%); toxic (rat peritoneal polymorphonuclear leukocytes, 100μmol/L). Source: ROU MAO XIAO RU XIANG *Schinus molle* (fruit). Ref: 5459.

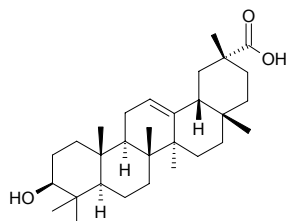
**6939 Epi-kansene**

Tirucalla-8,24-diene-3β-ol-7-one C<sub>30</sub>H<sub>48</sub>O<sub>2</sub> (440.72). Colorless gum,  $[\alpha]_D^{23} = -10.2^\circ$  ( $c = 0.43$ , MeOH). Pharm: Cell division arrester (cultured individual *Xenopus laevis* cells at blastular stage, 10μg/mL, >50% cleavage arrest). Source: GAN SUI *Euphorbia kansui* (dried root: yield = 0.00008%). Ref: 4690.

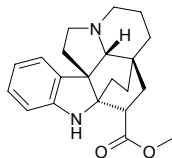


**6940 3-Epikatonin acid**

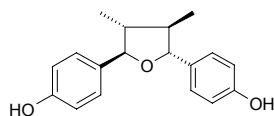
[76035-62-6]  $C_{30}H_{48}O_3$  (456.72). Colorless acicular crystals, mp 284~286°C (MeOH). **Pharm:** Spermicidal (mus, 0.125mg/mL). **Source:** LEI GONG TENG *Tripterygium wilfordii*. **Ref:** 2, 60, 670, 1572.

**6941 16-Epikopsinine**

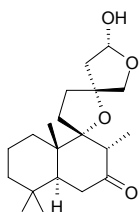
$C_{21}H_{26}N_2O_2$  (338.45). **Source:** HONG HUA RUI MU *Kopsia fruticosa* (leaf). **Ref:** 3830.

**6942 4-Epi-larreatricin**

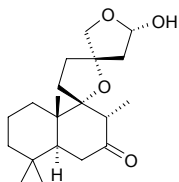
8'-Epi-larreatricin  $C_{18}H_{20}O_3$  (284.36). **Pharm:** Antioxidant (Takamatsu DCFH method, myelomonocytic HL-60 cells,  $IC_{50} = (18.0 \pm 2.5) \mu\text{g/mL}$ ; control NDGA,  $IC_{50} = (0.7 \pm 0.3) \mu\text{g/mL}$ , Vitamin C,  $IC_{50} = (1.9 \pm 0.7) \mu\text{g/mL}$ , Trolox,  $IC_{50} = (1.4 \pm 0.5) \mu\text{g/mL}$ )<sup>[3850]</sup>; cytotoxic (XTT assay, HL-60 cells,  $IC_{50} > 50.0 \mu\text{g/mL}$ ; control NDGA,  $IC_{50} = (2.6 \pm 0.2) \mu\text{g/mL}$ , Vitamin C,  $IC_{50} > 10.0 \mu\text{g/mL}$ , Trolox,  $IC_{50} > 10.0 \mu\text{g/mL}$ )<sup>[3850]</sup>. **Source:** SAN CHI LA RUI A *Larrea tridentata* (leaf). **Ref:** 1521, 3850.

**6943 15-Epileoheteronone B**

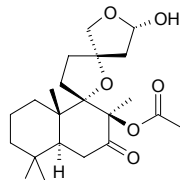
$C_{20}H_{32}O_4$  (336.48). White amorphous powder. **Source:** YI MU CAO *Leonurus heterophyllus* [Syn. *Leonurus artemisia*] (aerial parts). **Ref:** 4534.

**6944 15-Epileoheteronone D**

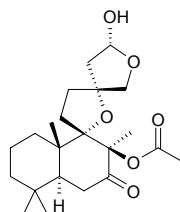
$C_{20}H_{32}O_4$  (336.48). White amorphous powder. **Source:** YI MU CAO *Leonurus heterophyllus* [Syn. *Leonurus artemisia*] (aerial parts). **Ref:** 4534.

**6945 15-Epileoheteronone E**

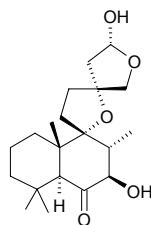
$C_{22}H_{34}O_6$  (394.51). White amorphous powder. **Source:** YI MU CAO *Leonurus heterophyllus* [Syn. *Leonurus artemisia*] (aerial parts). **Ref:** 4534.

**6946 15-Epileopersin B**

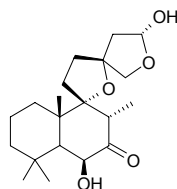
$C_{22}H_{34}O_6$  (394.51). White powder. **Source:** BO SI YI MU CAO *Leonurus persicus*, YI MU CAO *Leonurus heterophyllus* [Syn. *Leonurus artemisia*] (aerial parts). **Ref:** 2499, 4534.

**6947 15-Epileopersin C**

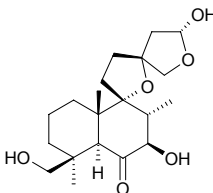
$C_{20}H_{32}O_5$  (352.48). Oil liquid. **Source:** YI MU CAO *Leonurus heterophyllus* [Syn. *Leonurus artemisia*] (aerial parts), BO SI YI MU CAO *Leonurus persicus*. **Ref:** 4534, 2499.

**6948 15-Epi-leopersin J**

$C_{20}H_{32}O_5$  (352.48). Oil liquid. **Source:** BO SI YI MU CAO *Leonurus persicus*. **Ref:** 2499.

**6949 15-Epi-leopersin O**

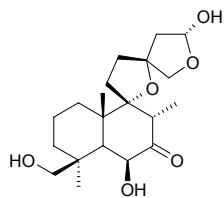
$C_{20}H_{32}O_6$  (368.47). Oil liquid. **Source:** BO SI YI MU CAO *Leonurus persicus*. **Ref:** 2499.



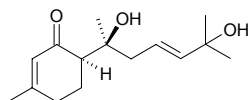


**6950 15-Epi-leopersin Q**

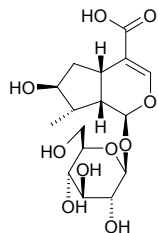
$C_{20}H_{32}O_6$  (368.47). Oil liquid. Source: BO SI YI MU CAO *Leonurus persicus*. Ref: 2499.

**6951 Epilippidulcine A**

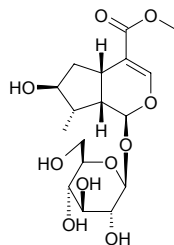
$C_{15}H_{24}O_3$  (252.36). Colorless oil,  $[\alpha]_D^{31} = -118.4^\circ$  ( $c = 0.5$ ,  $CHCl_3$ ). Source: TIAN SHE CAO *Lippia dulcis* (aerial parts). Ref: 4508.

**6952 8-Epiloganic acid**

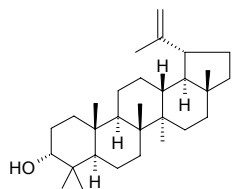
$C_{16}H_{24}O_{10}$  (376.36). Source: FEI LV BIN SHI ZI *Gmelina philippensis* (aerial parts), GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], ROU CONG RONG *Cistanche deserticola*. Ref: 2, 502, 628, 3954.

**6953 8-Epiloganin**

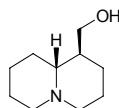
$C_{17}H_{26}O_{10}$  (390.39). Source: JI ZI MU *Sinoadina Racemosa* [Syn. *Adina racemosa*] (leaf, flower and twig: yield = 0.0003%dw)<sup>[4723]</sup>, TIAN SHE CAO *Lippia dulcis* (aerial parts). Ref: 4508, 4723.

**6954 3-Epilupeol**

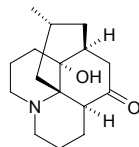
$C_{30}H_{50}O$  (426.73). Pharm: Cytotoxic (hmn fibrosarcoma cells HT1080,  $ED_{50} > 100\mu g/mL$ ; control Adriamycin,  $ED_{50} = 0.1\mu g/mL$ )<sup>[4437]</sup>. Source: LIE WEI LIE LAN *Bursera graveolens* (stem), RI BEN HUANG BAI *Phellodendron japonicum* (leaf). Ref: 4437, 4502.

**6955 Epilupinine**

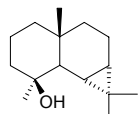
Isolupinine [486-71-5]  $C_{10}H_{19}NO$  (169.27). mp 77~78°C. Source: *Lupinus varius*. Ref: 1521.

**6956 12-Epilycodoline**

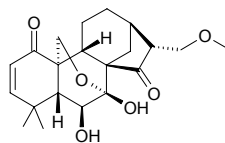
$C_{16}H_{25}NO_2$  (263.38).  $[\alpha]_D^{25} = -44^\circ$  (MeOH). Source: DONG BEI SHI SHAN *Huperzia myoschiana*. Ref: 5412.

**6957 (-)-4-Epi-maaliol**

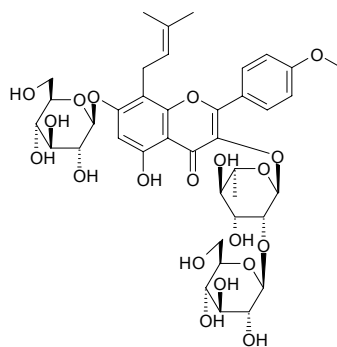
$C_{15}H_{26}O$  (222.37). Colorless oil. Source: TIE JIAO JUE YU TAI *Plagiochila asplenioides* (essential oil). Ref: 5257.

**6958 Epi-maoecrystal P**

$C_{21}H_{28}O_6$  (376.45). mp 222~224°C,  $[\alpha]_D^{25} = -14.2^\circ$  ( $c = 0.62$ ,  $CHCl_3$ ). Source: MAO E XIANG CHA CAI *Rabdosia eriocalyx*. Ref: 4067.

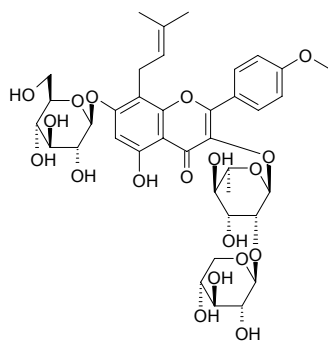
**6959 Epimedinin A**

4'-Methoxy-5-hydroxy-8-3,3-dimethylallyl-flavone-3-glucosyl-(1→2)rhamnose-7-glucoside [110623-72-8]  $C_{39}H_{50}O_{20}$  (838.82). Source: CHAO XIAN YIN YANG HUO *Epimedium koreanum* (aerial parts: content = 0.345%<sup>[5508]</sup>), YIN YANG HUO *Epimedium brevicornum*. Ref: 2,660, 1521, 5508.

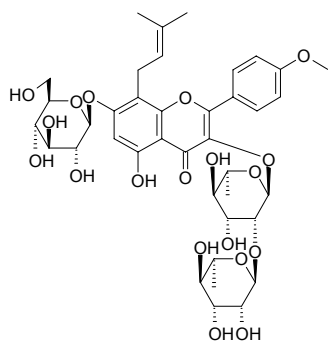


**6960 Epimedinin B**

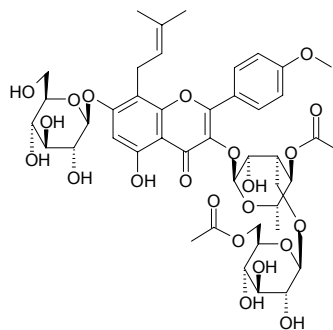
4'-Methoxy-5-hydroxy-8-3,3-dimethyl allylflavone-3-xyloxy-(1→2)rhamnoside-7-glucoside [110623-73-9]  $C_{38}H_{48}O_{19}$  (808.79). **Source:** CHAO XIAN YIN YANG HUO *Epimedium koreanum* (aerial parts: content scope = 0.39%~1.24%, mean content = 0.82%<sup>[5508]</sup>), CHUAN E YIN YANG HUO *Epimedium fargesii*, JIAN YE YIN YANG HUO *Epimedium sagittatum* (aerial parts: mean content of 3 origins = 0.552%<sup>[5508]</sup>), ROU MAO YIN YANG HUO *Epimedium pubescens* (aerial parts: content = 0.739%<sup>[5508]</sup>) WU SHAN YIN YANG HUO *Epimedium wushanense* (aerial parts: mean content of 2 origins = 0.349%<sup>[5508]</sup>), YIN YANG HUO *Epimedium brevicornum* (aerial parts: mean content of 2 origins = 1.09%<sup>[5508]</sup>), *Epimedium* spp. **Ref:** 2, 567, 660, 1521, 5508.

**6961 Epimedinin C**

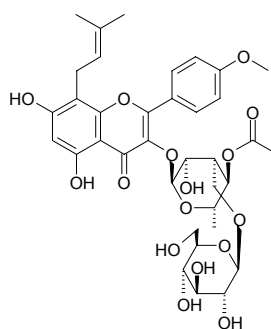
4'-Methoxy-5-hydroxy-8-3,3-dimethyl allylflavone-3-rhamnosyl-(1→2)rhamnoside-7-glucoside [110642-44-9]  $C_{39}H_{50}O_{19}$  (822.82). Yellow powder, mp 240~245°C, soluble in methanol. **Pharm:** Immunoenhancer (enhances multiplication of lymphocyte, recovers to produce interleukin-2). **Source:** CHAO XIAN YIN YANG HUO *Epimedium koreanum* (aerial parts: content scope = 0.19%~0.89%, mean content = 0.61%<sup>[5508]</sup>), CHUAN DIAN YIN YANG HUO *Epimedium davidii*, CHUAN E YIN YANG HUO *Epimedium fargesii*, CU MAO YIN YANG HUO *Epimedium acuminatum* (aerial parts: content = 2.18%<sup>[5508]</sup>), JIAN YE YIN YANG HUO *Epimedium sagittatum* (aerial parts: content scope = 0.39%~1.60%, mean content = 1.09%<sup>[5508]</sup>), QIAN LING YIN YANG HUO *Epimedium leptorrhizum* (aerial parts: content = 1.56%<sup>[5508]</sup>), ROU MAO YIN YANG HUO *Epimedium pubescens* (aerial parts: content scope = 1.14%~1.36%, mean content = 1.25%<sup>[5508]</sup>), TIAN PING SHAN YIN YANG HUO *Epimedium myrianthum* (aerial parts: content = 2.22%<sup>[5508]</sup>), WU SHAN YIN YANG HUO *Epimedium wushanense* (aerial parts: content scope = 1.63%~3.11%, mean content = 2.37%<sup>[5508]</sup>), YIN YANG HUO *Epimedium brevicornum* (aerial parts: mean content of 2 origins = 1.141%<sup>[5508]</sup>). **Ref:** 2, 114, 540, 567, 623, 624, 660, 1521, 1784, 5508.

**6962 Epimedokoreanoside I**

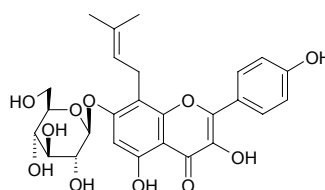
[130756-11-5]  $C_{44}H_{56}O_{22}$  (936.92). **Source:** YIN YANG HUO *Epimedium brevicornum*. **Ref:** 2.

**6963 Epimedokoreanoside II**

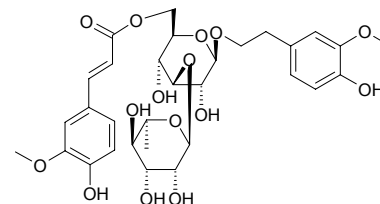
[130756-12-6]  $C_{36}H_{44}O_{16}$  (732.74). **Source:** YIN YANG HUO *Epimedium brevicornum*. **Ref:** 2.

**6964 Epimedeside C**

[53394-98-4]  $C_{26}H_{28}O_{11}$  (516.51). **Source:** YIN YANG HUO *Epimedium brevicornum*. **Ref:** 2, 112.

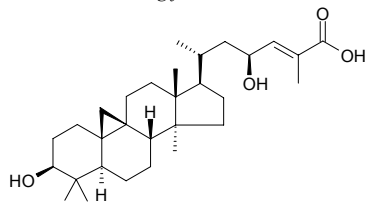
**6965 Epimeredinoside A**

2-(3-Methoxy-4-hydroxy) phenyl ethanol 1-O- $\alpha$ -L-[(1→3)-rhamnopyranosyl-6-O-feruloyl] glucoside  $C_{31}H_{40}O_{15}$  (652.66). Yellowish amorphous powder, mp 140~141°C (MeOH). **Source:** GUANG FANG FENG *Anisomeles indica* [Syn. *Epimeredi indica*] (whole herb). **Ref:** 4592.

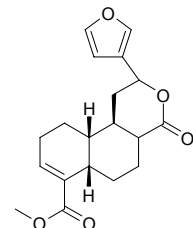


**6966 23-Epimeric 3 $\beta$ ,23-dihydroxycycloart-24-en-26-oic acid**

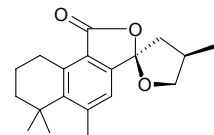
C<sub>30</sub>H<sub>48</sub>O<sub>4</sub> (472.71). Shining crystals (CHCl<sub>3</sub>-MeOH), mp 240~242°C. Source: MANG GUO *Mangifera indica*. Ref: 1868.

**6967 12-Epi-methyl-barbascoate**

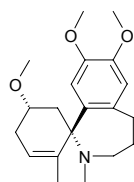
C<sub>19</sub>H<sub>22</sub>O<sub>5</sub> (330.38). Source: WU LU BA DOU *Croton urucurana*. Ref: 4552.

**6968 Epi-6-methylcryptoacetalide**

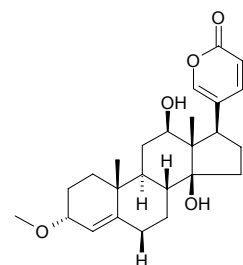
C<sub>19</sub>H<sub>24</sub>O<sub>3</sub> (300.40). Source: AI JI SHU WEI CAO *Salvia aegyptiaca*. Ref: 1919.

**6969 3-Epimethylschelhammericine B**

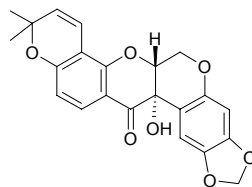
C<sub>20</sub>H<sub>27</sub>NO<sub>3</sub> (329.44). Source: SAN JIAN SHAN *Cephalotaxus fortunei*. Ref: 2, 27.

**6970 3-Epi-O-Methyl-scilliphaeosidin**

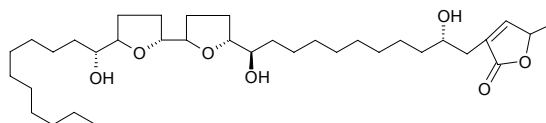
C<sub>25</sub>H<sub>34</sub>O<sub>5</sub> (414.55). Amorphous powder. [ $\alpha$ ]<sub>D</sub><sup>28</sup> = +49.9° (c = 0.66, MeOH). Source: HAI CONG *Urginea maritima* (bulb). Ref: 3513.

**6971 12a-Epimillettosin**

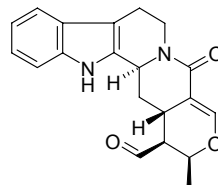
C<sub>22</sub>H<sub>18</sub>O<sub>7</sub> (394.38). Pharm: Antimalarial (antiplasmodial, chloroquine-resistant W2 strain of *Plasmodium falciparum*, IC<sub>50</sub> = 22.2 μmol/L, control Chloroquine, IC<sub>50</sub> = 0.094 μmol/L, control Quinine, IC<sub>50</sub> = 0.209 μmol/L; chloroquine-sensitive D6 strain of *Plasmodium falciparum*, IC<sub>50</sub> = 19.4 μmol/L, control Chloroquine, IC<sub>50</sub> = 0.009 μmol/L, control Quinine, IC<sub>50</sub> = 0.044 μmol/L). Source: *Millettia usaramensis* ssp. *usaramensis*. Ref: 3454.

**6972 22-Epimolvizarin**

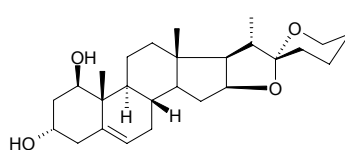
C<sub>35</sub>H<sub>62</sub>O<sub>7</sub> (594.88). White solid, mp 104~105°C, [ $\alpha$ ]<sub>D</sub> = +19.3° (c = 0.064, MeOH). Source: FAN LI ZHI *Annona squamosa*. Ref: 886.

**6973 17-Epinaucleidinal**

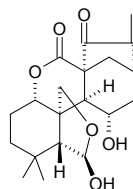
[77513-46-3] C<sub>20</sub>H<sub>20</sub>N<sub>2</sub>O<sub>3</sub> (336.39). [ $\alpha$ ]<sub>D</sub> = +97.7 (c = 0.085, EtOH). Pharm: Antibacterial (*in vitro*: *Staphylococcus aureus*, *Bacillus subtilis*, *Bacillus coli*, *Bacillus diphtheriae*, *Streptococcus* sp., *Streptobacillus* sp., *Salmonella* sp., *Bacillus proteus*, *Bacillus lactis*, *Klebsiella pneumoniae*); antileishmanial; antifungal (*Aspergillus niger*). Source: KUAN YE WU TAN *Nauclea latifolia*. Ref: 2178.

**6974 3-Epineoruscogenin**

Spirost-5,25(27)-dien-1 $\beta$ ,3r-diol C<sub>27</sub>H<sub>40</sub>O<sub>4</sub> (428.62). Colorless prisms, [ $\alpha$ ]<sub>D</sub><sup>24</sup> = -61.7° (c = 1.67, CHCl<sub>3</sub>). Source: KAI KOU JIAN *Tupistra chinensis* (underground part). Ref: 4676.

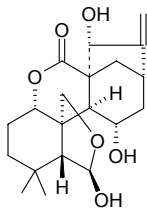
**6975 Epinodosin**

C<sub>20</sub>H<sub>26</sub>O<sub>6</sub> (362.43). mp 245~248°C, [ $\alpha$ ]<sub>D</sub><sup>27</sup> = -200° (c = 0.027, C<sub>5</sub>H<sub>5</sub>N). Source: LU SHAN XIANG CHA CAI *Isodon rubescens* var. *lushanensis* (leaf), MAO YE XIANG CHA CAI *Isodon japonica* [Syn. *Rabdosia japonica*]. Ref: 4067, 4067, 4353.

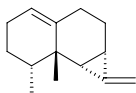


**6976 Epinodosinol**

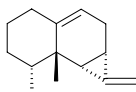
$C_{20}H_{28}O_6$  (364.44). mp 236–238°C. Source: MAO YE XIANG CHA CAI *Isodon japonica* [Syn. *Rabdosia japonica*]. Ref: 4067.

**6977 4-Epi-11-nor-aristola-1(10),11-diene**

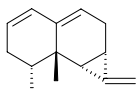
$C_{14}H_{20}$  (188.32). Colorless oil. Source: RI BEN BIAN TAI *Bazzania japonica*. Ref: 3399.

**6978 4-Epi-11-nor-aristola-9,11-diene**

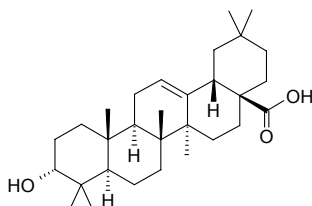
$C_{14}H_{20}$  (188.32). Colorless oil. Source: RI BEN BIAN TAI *Bazzania japonica*. Ref: 3399.

**6979 4-Epi-11-nor-aristola-1,9,11-triene**

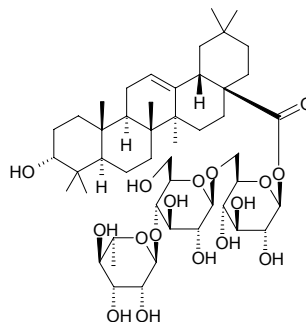
$C_{14}H_{18}$  (186.30). Colorless oil. Source: RI BEN BIAN TAI *Bazzania japonica*. Ref: 3399.

**6980 3-Epioleanolic acid**

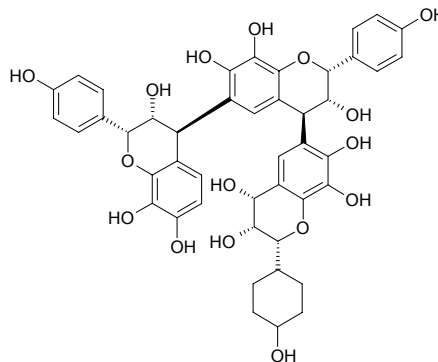
[25499-90-5]  $C_{30}H_{48}O_3$  (456.72). Pharm: Gastroprotective (30 mg/kg, Gp = (88.8±5.1)%; control Carbenoxolone, Gp = (88.4±5.4)%,  $p < 0.05$ )<sup>[5461]</sup>. Source: SHOU LIAN LIANG YI MU *Amphipterygium adstringens* (stem cortex), SU HE XIANG *Liquidambar orientalis*. Ref: 6, 5461.

**6981 3-Epi-oleanolic acid-28-O-α-L-rhamnopyranosyl-(1→4)-β-D-glucopyranosyl-(1→6)-β-D-glucopyranoside**

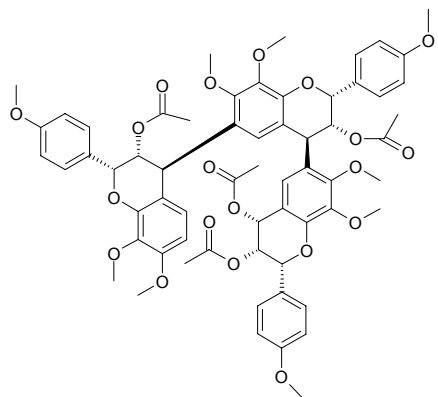
3β-Hydroxyolean-12-en-28-oic acid *O*-α-*L*-rhamnopyranosyl-(1→4)-*O*-β-*D*-glucopyranosyl-(1→6)-β-*D*-glucopyranosyl ester  $C_{48}H_{78}O_{17}$  (927.15). White powder, mp 207–209°C,  $[\alpha]_D^{20} = -15^\circ$  ( $c = 0.4$ , methanol). Source: DONG BEI CI REN SHEN *Oplopanax elatus*, SAN YE MU TONG *Akebia trifoliata* (stem). Ref: 370, 660, 4545.

**6982 Epioritin-(4β→6)-epioritin-(4β→6)-epioritin-4α-ol**

$C_{45}H_{44}O_{16}$  (840.84). Source: *Acacia galpinii* (heartwood), *Acacia caffra* (heartwood). Ref: 3753.

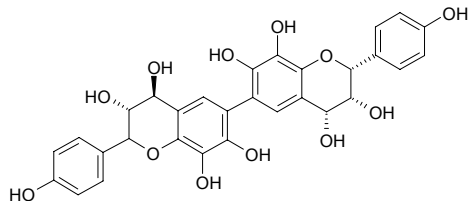
**6983 Epioritin-(4β→6)-epioritin-(4β→6)-epioritin-4α-ol nona-O-methyl-ether tetra-acetate**

$C_{62}H_{64}O_{20}$  (1129.19). Source: *Acacia galpinii* (heartwood). Ref: 3753.

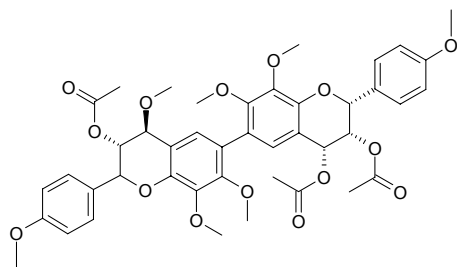


**6984 Epioritin-4 $\alpha$ -ol-(6 $\rightarrow$ 6)-epioritin-4 $\beta$ -ol**

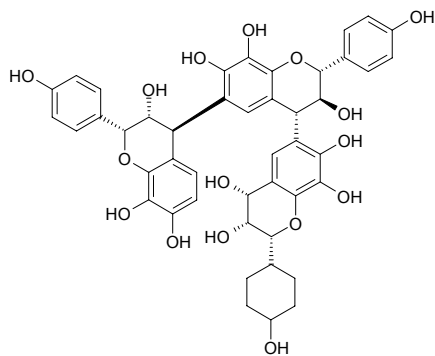
C<sub>30</sub>H<sub>26</sub>O<sub>12</sub> (578.53). Source: *Acacia galpinii* (heartwood), *Acacia caffra* (heartwood). Ref: 3753.

**6985 Epioritin-4 $\alpha$ -ol-(6 $\rightarrow$ 6)-epioritin-4 $\beta$ -ol hepta-*O*-methylether triacetate**

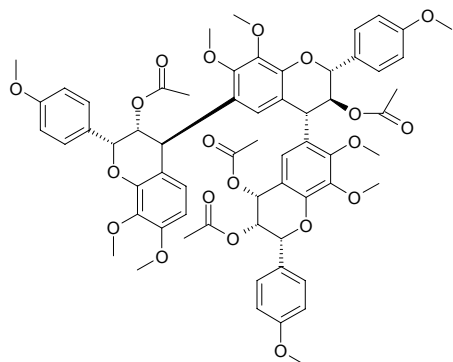
C<sub>43</sub>H<sub>46</sub>O<sub>15</sub> (802.84). Source: *Acacia galpinii* (heartwood). Ref: 3753.

**6986 Epioritin-(4 $\beta$ →6)-oritin-(4 $\alpha$ →6)-epioritin-4 $\alpha$ -ol**

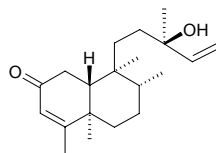
C<sub>43</sub>H<sub>44</sub>O<sub>16</sub> (840.84). Source: *Acacia galpinii* (heartwood), *Acacia caffra* (heartwood). Ref: 3753.

**6987 Epioritin-(4 $\beta$ →6)-oritin-(4 $\alpha$ →6)-epioritin-4 $\alpha$ -ol nona-*O*-methyl-ether tetra-acetate**

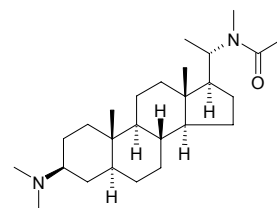
C<sub>62</sub>H<sub>64</sub>O<sub>20</sub> (1129.19). Source: *Acacia galpinii* (heartwood). Ref: 3753.

**6988 13-Epi-2-oxo-kolavelool**

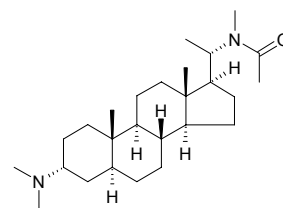
C<sub>20</sub>H<sub>32</sub>O<sub>2</sub> (304.48). Colorless amorphous solid, mp 158–159°C (hexane), [ $\alpha$ ]<sub>D</sub><sup>25</sup> = –25.0° (c = 0.10, CHCl<sub>3</sub>). Source: BA XI MA DOU LING *Aristolochia chamissonis*. Ref: 1904.

**6989 Epipachysamine A**

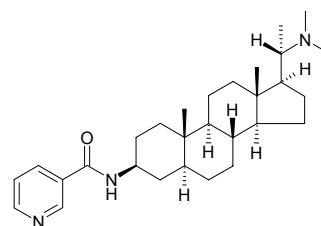
[2309-42-4] C<sub>26</sub>H<sub>46</sub>N<sub>2</sub>O (402.67). mp 203–205°C. Source: XUE SHAN LIN *Pachysandra terminalis*. Ref: 6.

**6990 Epipachysamine AII**

C<sub>26</sub>H<sub>46</sub>N<sub>2</sub>O (402.67). Colorless flake crystals (dichloromethane–acetone), mp 201–203°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = –17° (c = 1.24). Pharm: Antiulcerative (inhibits secretion hydrochloric acid in gastric juice); LD<sub>50</sub> (mus, ip) = 47.2mg/kg, CD<sub>50</sub> (mus, ip) = 32.5mg/kg. Source: XUE SHAN LIN *Pachysandra terminalis*. Ref: 941, 1141, 1197, 1200.

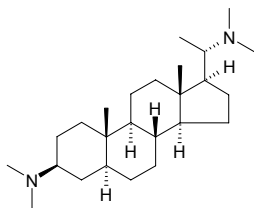
**6991 Epipachysamine B**

[2552-06-9] C<sub>29</sub>H<sub>45</sub>N<sub>3</sub>O (451.70). mp 260–262°C. Source: XUE SHAN LIN *Pachysandra terminalis*. Ref: 6.

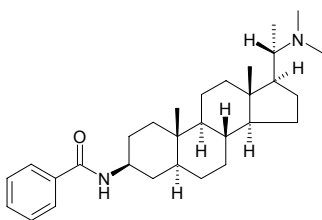


**6992 Epipachysamine C**

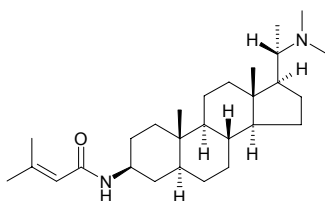
[4215-74-1] C<sub>25</sub>H<sub>46</sub>N<sub>2</sub> (374.66). Source: XUE SHAN LIN *Pachysandra terminalis*. Ref: 6.

**6993 Epipachysamine D**

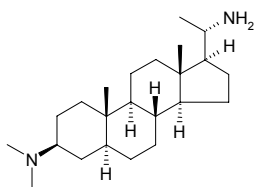
[3697-77-6] C<sub>30</sub>H<sub>46</sub>N<sub>2</sub>O (450.71). mp 245–248°C. Source: XUE SHAN LIN *Pachysandra terminalis*. Ref: 6.

**6994 Epipachysamine E**

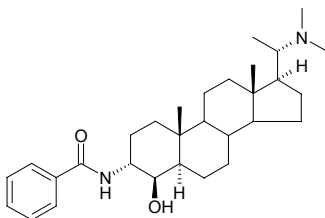
[3697-79-8] C<sub>28</sub>H<sub>46</sub>N<sub>2</sub>O (428.71). mp 210–212°C. Source: XUE SHAN LIN *Pachysandra terminalis*. Ref: 6.

**6995 Epipachysamine F**

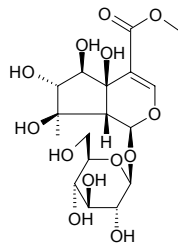
[5141-99-1] C<sub>23</sub>H<sub>42</sub>N<sub>2</sub> (346.60). mp 250–253°C. Source: XUE SHAN LIN *Pachysandra terminalis*. Ref: 6.

**6996 Epipachysandrine A**

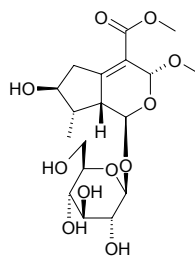
C<sub>30</sub>H<sub>46</sub>N<sub>2</sub>O<sub>2</sub> (466.71). mp > 295°C. Source: XUE SHAN LIN *Pachysandra terminalis*. Ref: 6.

**6997 7-Epiphlomiol**

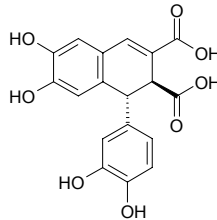
[139757-58-7] C<sub>17</sub>H<sub>26</sub>O<sub>13</sub> (438.39). Source: MENG GU CAO SU *Phlomis mongolica*. Ref: 561.

**6998 3-Epiphlomurin**

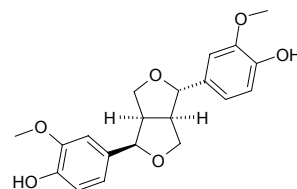
C<sub>18</sub>H<sub>28</sub>O<sub>11</sub> (420.42). [α]<sub>D</sub><sup>21</sup> = –22.2° (c = 0.7, MeOH). Source: JIN HUANG CAO SU *Phlomis aurea* (leaf) Ref: 5093.

**6999 Epiphyllic acid**

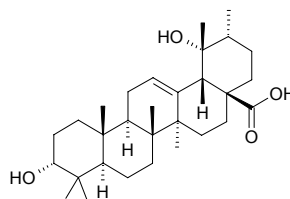
C<sub>18</sub>H<sub>14</sub>O<sub>8</sub> (358.31). Source: QIU YUAN YE TAI *Jamesoniella autumnalis*, XI TAI *Pellia epiphylla*. Ref: 1521, 4549.

**7000 (+)-Epipinoresinol**

[24404-50-5] C<sub>20</sub>H<sub>22</sub>O<sub>6</sub> (358.39). Source: DU ZHONG *Eucommia ulmoides*. Ref: 2.

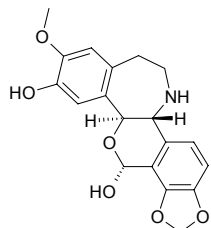
**7001 3-Epipomolic acid**

C<sub>30</sub>H<sub>48</sub>O<sub>4</sub> (472.71). Source: DUO SUI PO BU MU *Cordia multispicata* (leaf). Ref: 4106.

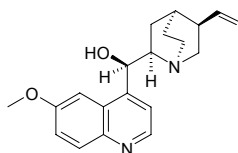


**7002 Epiorphoxine**

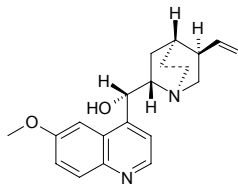
$C_{19}H_{19}NO_6$  (357.37). Source: HUO XIANG YE LV RONG HAO *Meconopsis betonicifolia*, *Papaver* spp. Ref: 1521.

**7003 Epiquinidine**

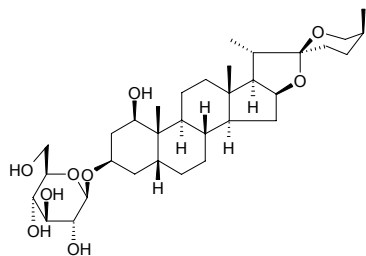
[572-59-8]  $C_{20}H_{24}N_2O_2$  (324.43). mp 113°C. Source: JIN JI LE *Cinchona ledgeriana*. Ref: 6.

**7004 Epiquinine**

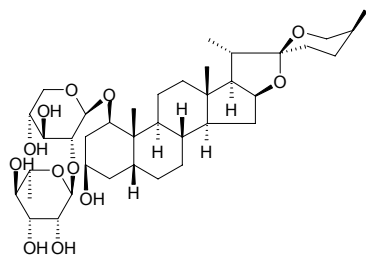
[572-60-1]  $C_{20}H_{24}N_2O_2$  (324.43). Source: JIN JI LE *Cinchona ledgeriana*. Ref: 6.

**7005 22-Epirhodeasapogenin-3-O-β-D-glucopyranoside**

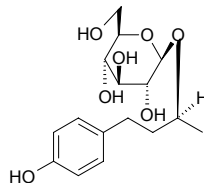
$C_{33}H_{54}O_9$  (594.79). Source: WAN NIAN QING GEN *Rohdea japonica* [Syn. *Orontium japonicum*]. Ref: 660.

**7006 22-Epirhodeasapogenin-1-O-α-L-rhamnopyranosyl(1→2)-β-D-xylopyranoside**

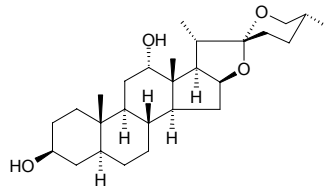
$C_{38}H_{62}O_{12}$  (710.91). Source: WAN NIAN QING GEN *Rohdea japonica* [Syn. *Orontium japonicum*]. Ref: 660.

**7007 Epirhododendrin**

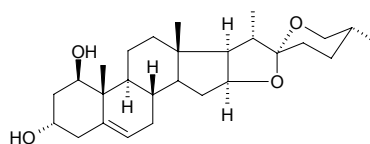
$C_{16}H_{24}O_7$  (328.37). Source: MAO GUO QI *Acer nikoense* (stem cortex). Ref: 4304.

**7008 12-Epirockogenin**

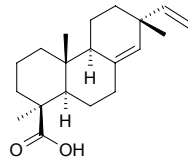
[545-77-7]  $C_{27}H_{44}O_4$  (432.65). mp 218°C. Source: FAN MA *Agave americana*, JIAN MA *Agave sisalana*, TAN XIANG *Santalum album*. Ref: 6, 10.

**7009 3-Epiruscogenin**

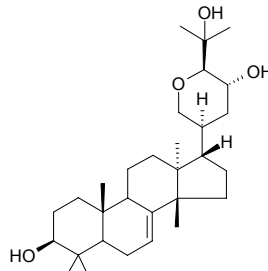
(2*R*)-Spirost-5-en-1β,3α-diol  $C_{27}H_{42}O_4$  (430.63). White amorphous powder,  $[\alpha]_D^{24} = -63.8^\circ$  ( $c = 1.28$ ,  $CHCl_3$ ). Source: KAI KOU JIAN *Tupistra chinensis* (underground part). Ref: 4676.

**7010 4-Epi-sandaracopimaric acid**

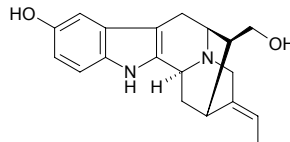
$C_{20}H_{30}O_2$  (302.46). White amorphous powder. Source: JIA DI FENG PI *Illicium jiadifengpi* (bark). Ref: 4560.

**7011 3-Episapeline A**

$C_{30}H_{50}O_4$  (474.73). Source: *Eurycoma* sp. Ref: 4556.

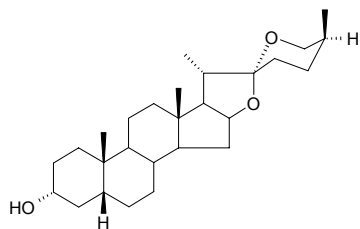
**7012 16-Episarpagine**

$C_{19}H_{22}N_2O_2$  (310.40). Acicular crystals, mp 300°C (dec),  $[\alpha]_D^{30} = +34.7^\circ$  ( $c = 0.085$ , ethanol). Source: DIAN JI GU CHANG SHAN *Alstonia yunnanensis*. Ref: 42.

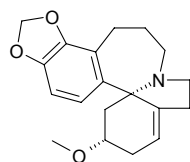


**7013 Epi-sarsasapogenin**

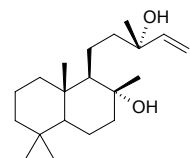
$C_{27}H_{44}O_3$  (416.65). mp 204~206°C,  $[\alpha]_D^{29} = -49.6^\circ$  ( $c = 0.31$ ,  $CHCl_3$ ). Source: CHA RUI SHU YU *Dioscorea collettii*. Ref: 10, 24, 660.

**7014 3-Epischelhammericine**

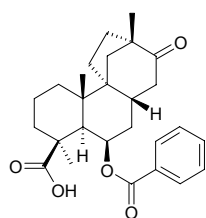
[24204-36-2]  $C_{19}H_{23}NO_3$  (313.40). Source: HAI NAN CU FEI *Cephalotaxus hainanensis* [Syn. *Cephalotaxus manni*], SAN JIAN SHAN *Cephalotaxus fortunei*. Ref: 2, 27, 660.

**7015 13-Epi-sclareol**

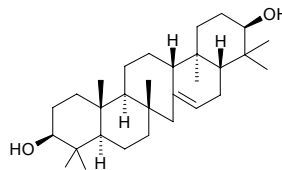
$C_{20}H_{36}O_2$  (308.51). Pharm: Antibacterial (gram-positive bacteria, showing a bactericidal and lytic action, inhibits oxygen consumption of intact gram-positive cells, but not with gram-negative bacteria, NADH oxidase inhibitor, cytochrome C reductase inhibitor). Source: *Pseudognaphalium cheiranthifolium*, *Pseudognaphalium heterotrichum* Ref: 4075.

**7016 4-Episcopadulcic acid B**

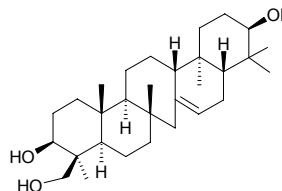
$C_{27}H_{34}O_5$  (438.57). Gum,  $[\alpha]_D^{25} = +3.0^\circ$  ( $c = 0.50$ ,  $CHCl_3$ ). Pharm: Cytotoxic (*in vitro*, SCL,  $ED_{50} = 37\mu\text{mol/L}$ ; SCL-6,  $ED_{50} = 136.9\mu\text{mol/L}$ ; SCL-376,  $ED_{50} = 59.3\mu\text{mol/L}$ ; SCL-9,  $ED_{50} = 48.3\mu\text{mol/L}$ ; Kato3,  $ED_{50} = 124.3\mu\text{mol/L}$ ; NuGc-4,  $ED_{50} = 109.9\mu\text{mol/L}$ ; control Vinblastine Sulfate: SCL,  $ED_{50} = 5.9\mu\text{mol/L}$ ; SCL-6,  $ED_{50} = 6.1\mu\text{mol/L}$ ; SCL-376,  $ED_{50} = 5.3\mu\text{mol/L}$ ; SCL-9,  $ED_{50} = 5.3\mu\text{mol/L}$ ; Kato3,  $ED_{50} = 6.1\mu\text{mol/L}$ ; NUGC-4,  $ED_{50} = 5.3\mu\text{mol/L}$ ). Source: YE GAN CAO *Scoparia dulcis* (aerial parts: 0.00185%dw). Ref: 4703.

**7017 21-Episerratenediol**

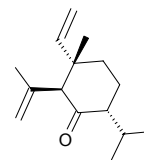
Serratenediol [1449-06-5]  $C_{30}H_{50}O_2$  (442.73). Colorless powder, mp 303~308°C, mp 303-304°C (MeOH),  $[\alpha]_D^{26} = -19.6^\circ$  ( $c = 0.3$ ,  $CHCl_3$ ). Source: PU DI WU GONG *Lycopodium cernuum* (root, stem and leaf: yield = 0.0027%dw)<sup>[4633]</sup>, QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*]. Ref: 6, 109, 4633.

**7018 21-Episerratriol**

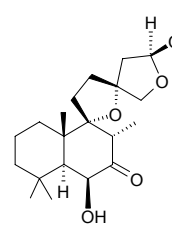
$C_{30}H_{50}O_3$  (458.73). mp 330~333°C. Source: PU DI WU GONG *Lycopodium cernuum*. Ref: 6.

**7019 Epishybunone**

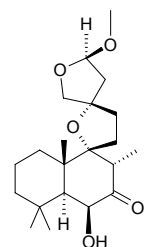
[39020-72-9]  $C_{15}H_{24}O$  (220.36). Source: BAI CHANG *Acorus calamus*. Ref: 6.

**7020 15-Epi-sibiricinone D**

$C_{21}H_{34}O_5$  (366.5). Source: XI YE YI MU CAO *Leonurus sibiricus* (aerial parts). Ref: 4744.

**7021 15-Epi-sibiricinone E**

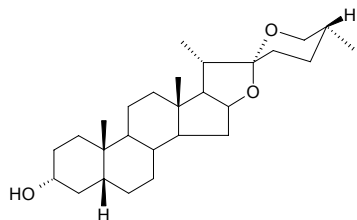
$C_{21}H_{34}O_5$  (366.5). Source: XI YE YI MU CAO *Leonurus sibiricus* (aerial parts). Ref: 4744.



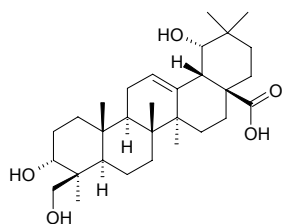


**7022 Epismilagenin**

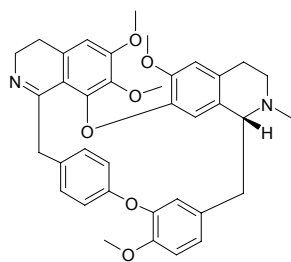
$C_{27}H_{44}O_3$  (416.65). **Source:** QIAN JIN TENG *Stephania japonica*. **Ref:** 10, 24.

**7023 3-epi-spathodic acid**

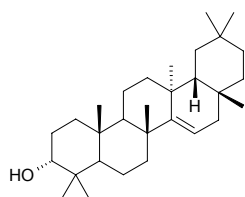
$C_{30}H_{48}O_5$  (488.71). **Pharm:** Quinone reductase inducer inactive (mouse Hepa lclc7 hepatoma cells,  $CD > 10\mu\text{g/mL}$ ). **Source:** *Coussarea brevicaulis*. **Ref:** 3434.

**7024 Epistephanine**

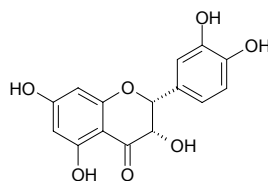
[549-08-6]  $C_{37}H_{38}N_2O_6$  (606.73). mp 202°C. **Pharm:** Adrenergic antagonist (blocks adrenergic nerve markedly). **Source:** BI XIE *Dioscorea hypoglauca* [Syn. *Dioscorea collettii* var. *hypoglauca*], CHA RUI SHU YU *Dioscorea collettii*, CHUAN LONG SHU YU *Dioscorea nipponica*, DUN YE SHU YU *Dioscorea zingiberensis*, FU ZHOU SHU YU *Dioscorea futschauensis*, MU FANG JI *Cocculus trilobus* [Syn. *Cocculus sarmentosus*], QIAN JIN TENG *Stephania japonica*, RU LAN *Stephania hernandifolia*, SHU KUI YE SHU YU *Dioscorea althaeoides*. **Ref:** 6, 658, 660.

**7025 Epitaraxerol**

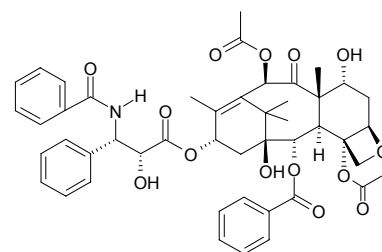
$C_{30}H_{50}O$  (426.73). **Pharm:** Cytotoxic inactive (A2780 ovarian cancer cell line,  $IC_{50} = 18.8\text{mg/mL}$ )<sup>[5379]</sup>. **Source:** SHANG LU *Phytolacca esculenta* [Syn. *Phytolacca acinosa*] (berry), MU SHU DI SHANG BU FEN *Manihot esculenta*. **Ref:** 4714, 5379.

**7026 Epitaxifolin**

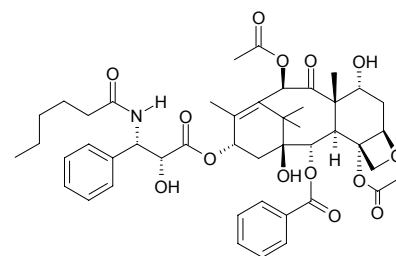
$C_{15}H_{12}O_7$  (304.26). **Pharm:** Cytotoxic (cyclooxygenase-1 inhibitor). **Source:** PU<sup>(2)</sup> TAO *Vitis vinifera* (cell culture). **Ref:** 5038.

**7027 7-Epitaxol**

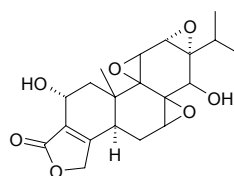
[In DNP]  $C_{47}H_{51}NO_{14}$  (853.93). mp 168~171°C,  $[\alpha]_D = -32.3^\circ$  (MeOH). **Pharm:** Cytotoxic (KB,  $ED_{50} = 3.0 \times 10^{-5}\mu\text{g/mL}$ ). **Source:** DUAN YE HONG DOU SHAN *Taxus brevifolia*. **Ref:** 662, 1831.

**7028 7-Epitaxuyunnanine A**

$C_{46}H_{57}NO_{14}$  (847.97).  $[\alpha]_D = -47.3^\circ$  ( $\text{CHCl}_3$ ). **Source:** YUN NAN HONG DOU SHAN *Taxus yunnanensis*. **Ref:** 662.

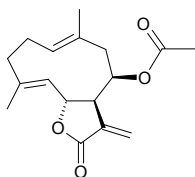
**7029 2-Epitripdiolide**

$C_{20}H_{24}O_7$  (376.41). Yellowish needles, mp 224~226°C. **Source:** LEI GONG TENG *Tripterygium wilfordii* (root cortex). **Ref:** 4871.

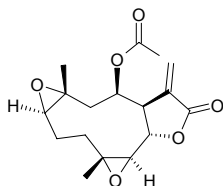


**7030 Eptulipinolide**

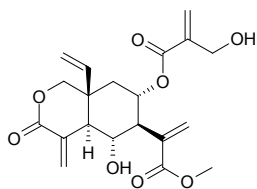
[24164-13-4] C<sub>17</sub>H<sub>22</sub>O<sub>4</sub> (290.36). mp 91~92°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +76° (*c* = 3.2, chloroform). **Pharm:** Cytotoxic (KB, ED<sub>50</sub> = 2.1 μg/mL); antineoplastic. **Source:** BAI CI GUO TUN CAO *Ambrosia dumosa*, BEI MEI E ZHANG QIU *Liriodendron tulipifera*, CHA MI SEN TUN CAO *Ambrosia chamissonis*. **Ref:** 658, 661.

**7031 Eptulipinolide diepoxide**

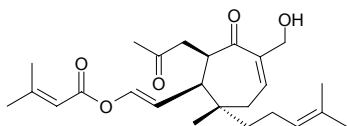
[39815-40-2] C<sub>17</sub>H<sub>22</sub>O<sub>6</sub> (322.36). mp 214~215°C (ethanol-ether), [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -55.7° (*c* = 0.525, chloroform). **Pharm:** Cytotoxic (KB, ED<sub>50</sub> = 0.34 μg/mL); antineoplastic; insect antifeedant. **Source:** BEI MEI E ZHANG QIU *Liriodendron tulipifera*. **Ref:** 658, 661.

**7032 Epivernodalol**

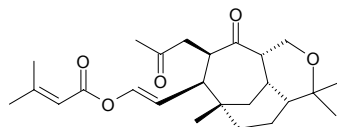
C<sub>20</sub>H<sub>24</sub>O<sub>8</sub> (392.41). mp 132°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +92.5° (*c* = 0.5, CHCl<sub>3</sub>). **Pharm:** Cytotoxic (*in vitro*, hmn colon carcinoma cell lines HCT15, IC<sub>50</sub> = (39.3±1.8) μmol/L, control 5-FU, IC<sub>50</sub> = 66 μmol/L; colon carcinoma HT29, IC<sub>50</sub> = (21.9±0.8) μmol/L, 5-FU, IC<sub>50</sub> = 49 μmol/L; breast carcinoma T47D, IC<sub>50</sub> = (22.5±0.7) μmol/L, control Adriamycin, IC<sub>50</sub> = 0.075 μmol/L; cervix carcinoma SiHa, IC<sub>50</sub> = (43.4±1.8) μmol/L, 5-FU, IC<sub>50</sub> = 0.034 μmol/L). **Source:** *Vernonia lasiopus*. **Ref:** 5359.

**7033 5-Epi-vibsanin C**

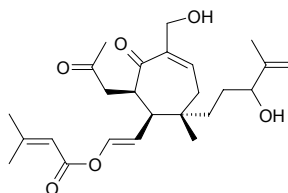
C<sub>25</sub>H<sub>36</sub>O<sub>5</sub> (416.56). [ $\alpha$ ]<sub>D</sub><sup>24</sup> = +38.6° (*c* = 0.59, CHCl<sub>3</sub>). **Pharm:** Cytotoxic (KB cells, IC<sub>50</sub> = 10.7 μmol/L). **Source:** RI BEN JIA MI *Viburnum awabuki* (leaf). **Ref:** 4168.

**7034 5-Epi-vibsanin E**

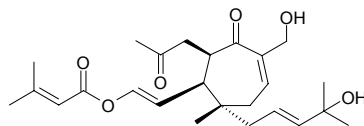
C<sub>25</sub>H<sub>36</sub>O<sub>5</sub> (416.56). [ $\alpha$ ]<sub>D</sub><sup>21</sup> = -34.7° (*c* = 0.21, CHCl<sub>3</sub>). **Source:** RI BEN JIA MI *Viburnum awabuki* (leaf). **Ref:** 4168.

**7035 5-Epivibsanin G**

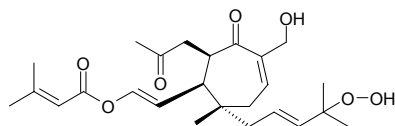
C<sub>25</sub>H<sub>36</sub>O<sub>6</sub> (432.56). Colorless amorphous solid, [ $\alpha$ ]<sub>D</sub><sup>26</sup> = +5° (*c* = 3.4, CHCl<sub>3</sub>). **Pharm:** Cytotoxic (*in vitro*, NUGC-3, weak activity). **Source:** XIANG QI JIA MI *Viburnum odoratissimum* (leaf and flower: yield = 0.00016%dw). **Ref:** 3004.

**7036 5-Epi-vibsanin H**

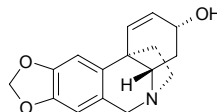
C<sub>25</sub>H<sub>36</sub>O<sub>6</sub> (432.56). [ $\alpha$ ]<sub>D</sub><sup>21</sup> = +49.2° (*c* = 0.41, CHCl<sub>3</sub>). **Pharm:** Cytotoxic (KB cells, IC<sub>50</sub> = 45.5 μmol/L)<sup>[4168]</sup>. **Source:** RI BEN JIA MI *Viburnum awabuki* (leaf), XIANG QI JIA MI *Viburnum odoratissimum* (leaf and flower: yield = 0.00036%dw)<sup>[3004]</sup>. **Ref:** 3004, 4168.

**7037 5-Epi-vibsanin K**

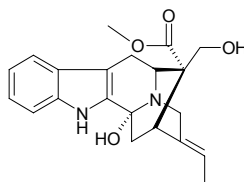
C<sub>25</sub>H<sub>36</sub>O<sub>7</sub> (448.56). [ $\alpha$ ]<sub>D</sub><sup>21</sup> = +52.4° (*c* = 0.20, CHCl<sub>3</sub>). **Source:** RI BEN JIA MI *Viburnum awabuki* (leaf). **Ref:** 4168.

**7038 Epivittatine**

C<sub>16</sub>H<sub>17</sub>NO<sub>3</sub> (271.32). **Pharm:** AChE inhibitor (IC<sub>50</sub> = (239±9) μmol/L, control Galanthamine, IC<sub>50</sub> = (1.9±0.2) μmol/L). **Source:** *Crinum moorei*. **Ref:** 4952.

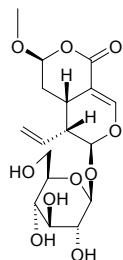
**7039 16-Epi-voacarpine**

[114027-38-2] C<sub>21</sub>H<sub>24</sub>N<sub>2</sub>O<sub>4</sub> (368.44). mp 162~165°C (dec), [ $\alpha$ ]<sub>D</sub> = +42.3°. **Source:** GOU WEN *Gelsemium elegans*. **Ref:** 13.

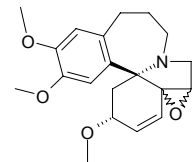


**7040 Epivogeloside**

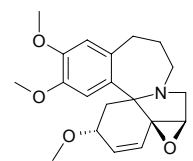
$C_{17}H_{24}O_{10}$  (388.37). **Source:** JI ZI MU *Sinoadina Racemosa* [Syn. *Adina racemosa*] (leaf, flower and twig: yield = 0.0016%dw)<sup>[4723]</sup>, LIU QIU SHE GEN CAO *Ophiorrhiza liukiensis* (whole herb). **Ref:** 4527, 4723.

**7041 Epiwilsonine**

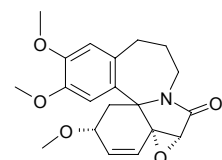
$C_{20}H_{25}NO_4$  (343.43). **Pharm:** Cytotoxic (KB oral epidermoid carcinoma, ED<sub>50</sub> = 1.94 μg/mL)<sup>[4253]</sup>. **Source:** SAN JIAN SHAN *Cephalotaxus fortunei*, TAI WAN CU FEI *Cephalotaxus wilsoniana* (twig), ZHONG GUO CU FEI ZHI YE *Cephalotaxus sinensis* [Syn. *Cephalotaxus harringtonia* var. *sinensis*]. **Ref:** 2, 660, 4253.

**7042 C-3-Epiwilsonine**

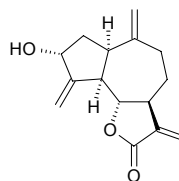
$C_{20}H_{25}NO_4$  (343.43). **Source:** TAI WAN CU FEI *Cephalotaxus wilsoniana* (leaf: yield = 0.00048%dw). **Ref:** 4759.

**7043 C-3-Epiwilsonione**

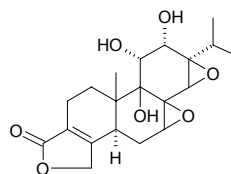
1,2-Didehydro-6,7-epoxy-3 $\alpha$ ,16,17-trimethoxyerythrinan-8-one  $C_{20}H_{23}NO_5$  (357.41). Colorless powder,  $[\alpha]_D^{28} = +11^\circ$  ( $c = 0.104$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (*in vitro*, HepG<sub>2</sub>, IC<sub>50</sub> = 52 μg/mL; MCF7, IC<sub>50</sub> = 42 μg/mL; Hep3B, IC<sub>50</sub> = 52 μg/mL; HT29, IC<sub>50</sub> = 24.4 μg/mL). **Source:** TAI WAN CU FEI *Cephalotaxus wilsoniana* (leaf: yield = 0.00067%dw). **Ref:** 4759.

**7044 3-Epizaluzanin C**

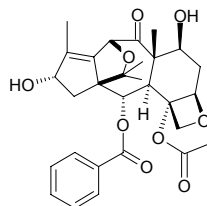
Isozaluzanin C  $C_{15}H_{18}O_3$  (246.31). **Pharm:** Cytotoxic (*in vitro*, HepG<sub>2</sub>, CD<sub>50</sub> = 15 μg/mL; HeLa, CD<sub>50</sub> = 13.5 μg/mL; OVCAR-3, CD<sub>50</sub> = 7.5 μg/mL; control Cisplatin, HepG<sub>2</sub>, CD<sub>50</sub> = 2.8 μg/mL; HeLa, CD<sub>50</sub> = 5.2 μg/mL; OVCAR-3, CD<sub>50</sub> = 3 μg/mL; without significant antibacterial effect)<sup>[4720]</sup>. **Source:** MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*] (root: yield = 0.0003%dw)<sup>[4720]</sup>. **Ref:** 2, 4720.

**7045 13,14-Epoxy 9,11,12-trihydroxytriptolide**

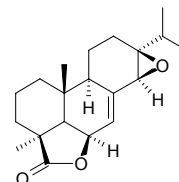
$C_{20}H_{26}O_7$  (378.43). Colorless filiform crystals, mp 268–270°C. **Source:** LEI GONG TENG *Tripterygium wilfordii*. **Ref:** 256.

**7046 10,15-Epoxy-11(15→1)-abeo-10-deacetylbaaccatin III**

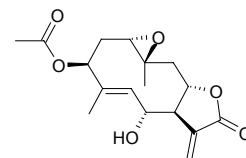
$C_{29}H_{34}O_9$  (526.59).  $[\alpha]_D = -18^\circ$  ( $CH_2Cl_2$ ). **Source:** XI MA LA YA HONG DOU SHAN *Taxus wallichiana*. **Ref:** 662.

**7047 13 $\beta$ ,14 $\beta$ -Epoxyabiet-7-en-19,6 $\beta$ -olide**

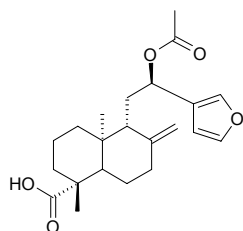
$C_{20}H_{28}O_3$  (316.44). Oil,  $[\alpha]_D^{25} = -8.8^\circ$  ( $c = 0.12$ ,  $CHCl_3$ ). **Source:** LONG BAI *Juniperus chinensis* var. *kaizuka* (leaf: yield = 0.000017%dw). **Ref:** 3050.

**7048 (E)-1 $\alpha$ ,10 $\beta$ -Epoxy-3 $\beta$ -acetoxy-6 $\alpha$ -hydroxygermacra-4,11(13)-dien-12,8 $\alpha$ -olide**

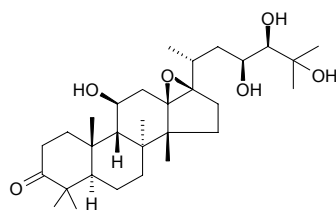
$C_{17}H_{22}O_6$  (322.36). Amorphous solid,  $[\alpha]_D^{25} = +54^\circ$  ( $c = 0.35$ ,  $CHCl_3$ ). **Source:** *Anthemis carpatica* (aerial parts). **Ref:** 3974.



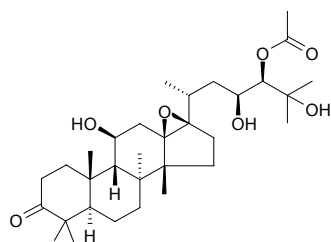
**7049 15,16-Epoxy-12(R)-acetoxy-8(17),13(16),14-ent-labdatrien-19-oic acid**  
 $C_{22}H_{30}O_5$  (374.48). Yellow oil,  $[\alpha]_D^{25} = -10.8^\circ$  ( $c = 0.93$ ,  $CHCl_3$ ). **Pharm:**  
 Anticidal (inhibits growth of alga *Raphidocelis subcapitata*, 72h  $IC_{50} = 107.8 \mu\text{mol/L}$ ). **Source:** BI CHI YAN ZI CAI *Potamogeton pectinatus* (whole herb). **Ref:** 3488.



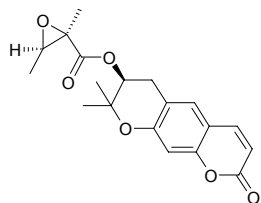
**7050 13β,17β-Epoxyalisol A**  
 $C_{30}H_{50}O_6$  (506.73). Colorless powder. **Source:** ZE XIE *Alisma orientale* [Syn. *Alisma plantago-aquatica* var. *orientale*]. **Ref:** 2213.



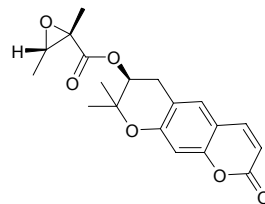
**7051 13β,17β-Epoxyalisol A 24-acetate**  
 $C_{32}H_{52}O_7$  (548.77). Colorless needles, mp 262~263°C. **Source:** ZE XIE *Alisma orientale* [Syn. *Alisma plantago-aquatica* var. *orientale*]. **Ref:** 2213.



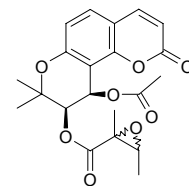
**7052 (2''R,3''R)-Epoxyangeloyldecurisinal**  
 $C_{19}H_{20}O_6$  (344.37). Colorless needles (MeOH), mp 141~143°C,  $[\alpha]_D = +24^\circ$  ( $c = 0.5$ ,  $CHCl_3$ ). **Pharm:** Neuroprotective (primary cultures of rat cortical cells, control, cell viability = 100%, injured by glutamate, cell viability = 0%, 0.1  $\mu\text{mol/L}$ , cell viability = (47.5±4.0)%,  $p < 0.01$ , 1  $\mu\text{mol/L}$ , cell viability = (61.1±5.0)%,  $p < 0.01$ , 10  $\mu\text{mol/L}$ , cell viability = (56.7±2.8)%,  $p < 0.01$ ). **Source:** CHAO XIAN DANG GUI *Angelica gigas* (root: yield = 0.0003%dw). **Ref:** 4796.



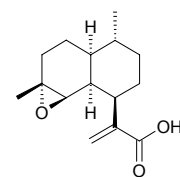
**7053 (2''S,3''S)-Epoxyangeloyldecurisinal**  
 $C_{19}H_{20}O_6$  (344.37). Colorless needles (MeOH), mp 140~142°C,  $[\alpha]_D = +91^\circ$  ( $c = 0.5$ ,  $CHCl_3$ ). **Pharm:** Neuroprotective (primary cultures of rat cortical cells, control, cell viability = 100%, injured by glutamate, cell viability = 0%, 0.1  $\mu\text{mol/L}$ , cell viability = (70.0±6.0)%,  $p < 0.001$ , 1  $\mu\text{mol/L}$ , cell viability = (52.5±4.4)%,  $p < 0.01$ , 10  $\mu\text{mol/L}$ , cell viability = (49.0±3.0)%,  $p < 0.01$ ). **Source:** CHAO XIAN DANG GUI *Angelica gigas* (root: yield = 0.00015%dw). **Ref:** 4796.



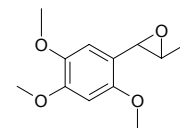
**7054 (3'R,4'R)-3'-Epoxyangeloyloxy-4'-acetoxy-3',4'-dihydroseselin**  
 $C_{21}H_{22}O_8$  (402.40). **Pharm:** Antiallergic. **Source:** SHI SHI DANG GUI *Angelica shkiokiana*. **Ref:** 658.



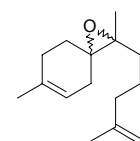
**7055 Epoxyarteannuinic acid**  
 $C_{15}H_{22}O_3$  (250.34). **Source:** HUANG HUA HAO *Artemisia annua*. **Ref:** 2.



**7056 cis-1',2'-Epoxyasarone**  
 1,2,4-Trimethoxy-5-(E-3'-methyloxiranyl) benzene  $C_{12}H_{16}O_4$  (224.26). Colorless oil. **Source:** SHI CHANG PU *Acorus tatarinowii*. **Ref:** 8, 660.

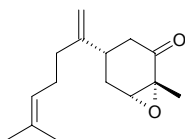


**7057 6,7-Epoxybisabola-2,11-diene**  
 (2,6-Dimethyl-2-(4-methylpent-4-enyl)-1-oxaspiro[2.5]oct-5-ene)  $C_{15}H_{24}O$  (220.36). Colorless oil. **Source:** NING BIAN E TAI *Radula perrottetii* (essential oil). **Ref:** 5272.

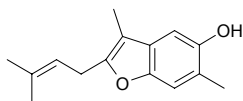


**7058 (3R,4R,6S)-3,4-Epoxybisabola-7(14),10-dien-2-one**

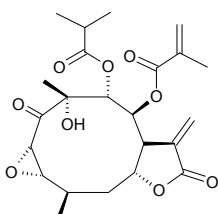
$C_{15}H_{22}O_2$  (234.34). Colorless oil,  $[\alpha]_D^{22} = -23.2^\circ$  ( $c = 0.2$ ,  $CHCl_3$ ). Source: KUAN DONG HUA *Tussilago farfara* (flower bud). Ref: 3531.

**7059 1,8-Epoxy-1(6),2,4,7,10-bisabolapentaen-4-ol**

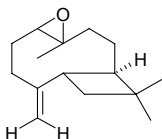
$C_{15}H_{18}O_2$  (230.31). Colorless oil. Source: RI BEN LIU SHAN *Cryptomeria japonica* (black heartwood). Ref: 4279.

**7060 2,3-Epoxycalealactone A**

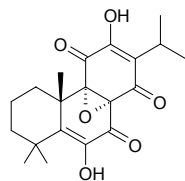
$C_{23}H_{30}O_9$  (450.49). Colorless needles, mp 99~101°C,  $[\alpha]_D^{20} = +168.7^\circ$  ( $c = 0.001$ ,  $CHCl_3$ ). Pharm: Cytotoxic (U937,  $IC_{50} > 5\mu mol/L$ ; control Parthenolide,  $IC_{50} = 1.9\mu mol/L$ ). Source: YOU KA MEI JU *Calea urticifolia* (leaf). Ref: 3887.

**7061 4,5-Epoxy-β-caryophyllene**

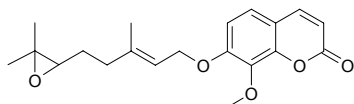
$C_{15}H_{24}O$  (220.36). Source: *Stauranthus perforatus* (root). Ref: 5253.

**7062 8α,9α-Epoxycoleon U-quinone**

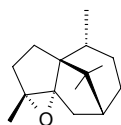
$C_{20}H_{24}O_6$  (360.41). Pharm: Cytotoxic (*in vitro*, K562,  $IC_{50} = 13.9\mu g/mL$ ; control Mitoxantrone,  $IC_{50} = 2\mu g/mL$ ). Source: HUANG QIAO RUI HUA *Coleus xanthanthus* (aerial parts; yield = 0.00047%dw). Ref: 4625.

**7063 Epoxycollinin**

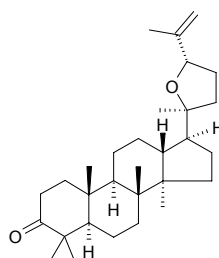
$C_{20}H_{24}O_5$  (344.41). Pharm: Antibacterial; smooth muscle relaxant; anticoagulant; photosensitive agent; ichthyotoxin; toxin. Source: *Zanthoxylum* sp. Ref: 2176.

**7064 Epoxycyperene**

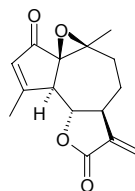
$C_{15}H_{24}O$  (220.36). Source: KAN MAI NIANG ZHUANG SHA CAO *Cyperus alopecuroides* (essential oil). Ref: 5129.

**7065 20R,24R-Epoxy-25-dammaren-3-one**

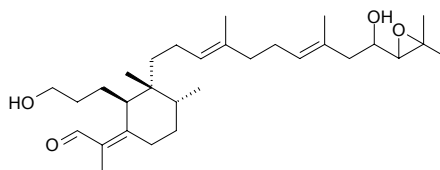
$C_{30}H_{48}O_2$  (440.72). Colorless acicular crystals (MeOH), mp 225°C,  $[\alpha]_D^{21.5} = +57^\circ$  ( $c = 1.0$ ,  $CHCl_3$ ). Source: XIANG GANG JIAN MU *Dysoxylum hongkongense*. Ref: 422.

**7066 1β,10β-Epoxydehydroleucodin**

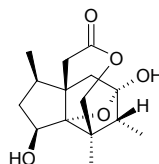
$C_{15}H_{16}O_4$  (260.29). Source: YI KUA *Artemisia myriantha* (aerial parts). Ref: 4618.

**7067 22,23-Epoxy-10-deoxy-21-hydroxyiridal**

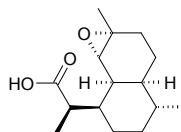
$C_{30}H_{50}O_4$  (474.73). Source: SHI GUAN YUAN WEI *Iris cristata*. Ref: 2417.

**7068 (3S\*,6R\*)-4,7-Epoxy-6-deoxypseudoanisatin**

$C_{15}H_{22}O_5$  (282.34).  $[\alpha]_D^{23} = +42.6^\circ$  ( $c = 0.96$ , MeOH). Source: MIN WAN BA JIAO *Illicium minwanense* (pericarp: 0.00011%dw). Ref: 4697.

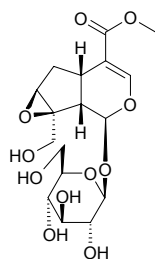
**7069 α-Epoxy-dihydroartemisinic acid**

$C_{15}H_{24}O_5$  (252.36). Source: HUANG HUA HAO *Artemisia annua* (seed). Ref: 3435.

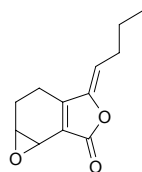


**7070 7 $\beta$ ,8 $\beta$ -Epoxy-8 $\alpha$ -dihydrogeniposide**

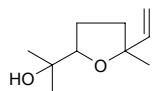
C<sub>17</sub>H<sub>24</sub>O<sub>11</sub> (404.37). Amorphous powder,  $[\alpha]_D^{25} = -43.4^\circ$  ( $c = 0.554$ , MeOH). Source: ZHI ZI *Gardenia jasminoides* [Syn. *Gardenia florida*] (leaf). Ref: 4408.

**7071 (Z)-6,7-Epoxy-6,7-dihydroligustilide**

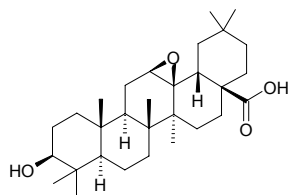
C<sub>12</sub>H<sub>14</sub>O<sub>3</sub> (206.24). Source: CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*]. Ref: 2.

**7072 Epoxydihydrolinalool**

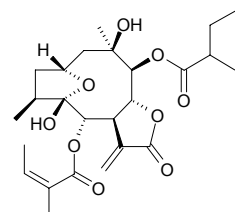
[60047-17-8] C<sub>10</sub>H<sub>18</sub>O<sub>2</sub> (170.25). Source: XING ZI *Prunus armeniaca*. Ref: 6.

**7073 Epoxydihydro-oleanolic acid**

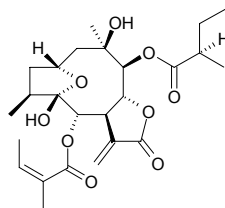
C<sub>30</sub>H<sub>48</sub>O<sub>4</sub> (472.71). Source: NAN HE SHI *Daucus carota*. Ref: 6.

**7074 2,5-Epoxy-5,10-dihydroxy-6-angeloyloxy-9-(2-methylbutyryloxy)-germacran-8,12-olide**

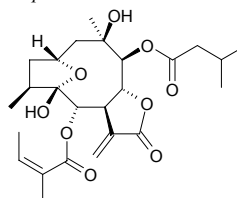
[247050-76-6] C<sub>25</sub>H<sub>36</sub>O<sub>9</sub> (480.56). White crystals, mp 190–193°C,  $[\alpha]_D^{25} = -4.3^\circ$  ( $c = 1.0$ , MeOH). Source: DONG BEI AN HUA JIN WA ER *Carpesium triste* var. *manshuricum*. Ref: 2349.

**7075 2,5-Epoxy-5,10-dihydroxy-6-angeloyloxy-9-(2R-methylbutyryloxy)-germacran-8,12-olide**

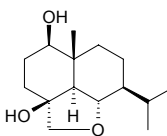
Inepatolide [75102-66-8] C<sub>25</sub>H<sub>36</sub>O<sub>9</sub> (480.56). Source: ZE LAN YANG ER JU *Inula eupatorioides*. Ref: 1521.

**7076 2,5-Epoxy-5,10-dihydroxy-6-angeloyloxy-9-(3-methylbutyryloxy)-germacran-8,12-olide**

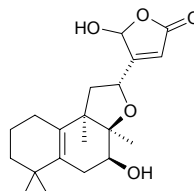
[247017-80-7] C<sub>25</sub>H<sub>36</sub>O<sub>9</sub> (480.56). White crystals, mp 160–164°C,  $[\alpha]_D^{25} = +1.13^\circ$  ( $c = 1.0$ , MeOH). Source: DONG BEI AN HUA JIN WA ER *Carpesium triste* var. *manshuricum*. Ref: 2349.

**7077 6,15 $\alpha$ -Epoxy-1 $\beta$ ,4 $\beta$ -dihydroxyeudesmane**

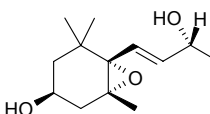
C<sub>15</sub>H<sub>26</sub>O<sub>3</sub> (254.37). Source: ZHOU YE MU LAN *Magnolia praecocissima* (seed). Ref: 4181.

**7078 ent-8S,12S-Epoxy-7R,16-dihydroxyhalima-5(10),13-dien-15,16-olide**

C<sub>20</sub>H<sub>28</sub>O<sub>5</sub> (348.44). White amorphous powder,  $[\alpha]_D = -110^\circ$  (CHCl<sub>3</sub>,  $c = 0.05$ ). Pharm: Cytotoxic (Lu1, ED<sub>50</sub> = 15.4 μg/mL, control Ellipticine, ED<sub>50</sub> = 0.02 μg/mL; Col2, ED<sub>50</sub> = 14.8 μg/mL, Ellipticine, ED<sub>50</sub> = 0.3 μg/mL; KB, ED<sub>50</sub> = 16.9 μg/mL, Ellipticine, ED<sub>50</sub> = 0.04 μg/mL; LNCaP, ED<sub>50</sub> = 13.7 μg/mL, Ellipticine, ED<sub>50</sub> = 0.8 μg/mL). Source: *Alomia myriadenia* (aerial parts). Ref: 3479.

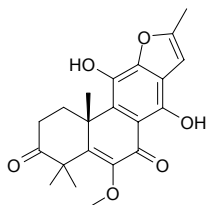
**7079 (3S,5R,6S,7E,9R)-5,6-Epoxy-3,9-dihydroxy-7-megastigmane**

C<sub>13</sub>H<sub>22</sub>O<sub>3</sub> (226.32). Colorless oil,  $[\alpha]_D^{25} = -53.9^\circ$  ( $c = 0.47$ , CH<sub>2</sub>Cl<sub>2</sub>). Pharm: Phytotoxin (inhibits germination and growth of *Lactuca sativa*). Source: PA KE YE XIANG SHU *Cestrum parqui* (leaf). Ref: 3776.



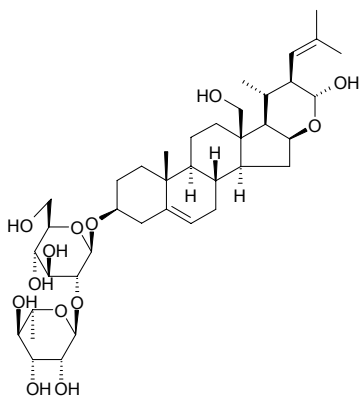
**7080 12,16-Epoxy-11,14-dihydroxy-6-methoxy-17(15-16)-abeo-abieta-5,8,11,13,15-pentaene-3,7-dione**

$C_{21}H_{22}O_6$  (370.41). mp 248.0°C,  $[\alpha]_D^{20} = +50.0^\circ$  ( $c = 0.5$ ,  $CHCl_3$ ). **Pharm:** Antiproliferative (*in vitro*, MTT assay, CEM,  $IC_{50} = 24.2\mu\text{mol/L}$ , control Doxorubicin,  $IC_{50} = 0.036\mu\text{mol/L}$ , HeLa,  $IC_{50} = 12.7\mu\text{mol/L}$ , Doxorubicin,  $IC_{50} = 0.027\mu\text{mol/L}$ , HCT8,  $IC_{50} > 72.2\mu\text{mol/L}$ , Doxorubicin,  $IC_{50} = 0.024\mu\text{mol/L}$ , MCF7,  $IC_{50} > 72.2\mu\text{mol/L}$ , Doxorubicin,  $IC_{50} = 0.183\mu\text{mol/L}$ , B-16,  $IC_{50} > 72.2\mu\text{mol/L}$ , Doxorubicin,  $IC_{50} = 0.056\mu\text{mol/L}$ ). **Source:** *Aegiphila thotzkiana* (root). **Ref:** 4940.



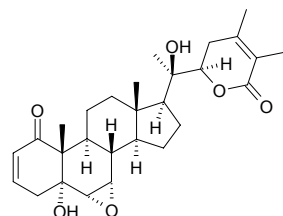
**7081 (22S,23R)-16β,23-Epoxy-18,23-dihydroxy-22-(2-methyl-1-propenyl)-24-norchol-5-en-3β-yl O-α-L-rhamnopyranosyl-(1→2)-β-D-glucopyranoside**

$C_{39}H_{62}O_{13}$  (738.92). Amorphous solid,  $[\alpha]_D^{25} = -18.0^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Cytotoxic (HL-60 cells,  $IC_{50} > 10\mu\text{mol/L}$ , control Etoposide,  $IC_{50} = 0.025\mu\text{mol/L}$ ). **Source:** XIA FENG XIN ZI *Galtonia candicans* (bulb). **Ref:** 4116.



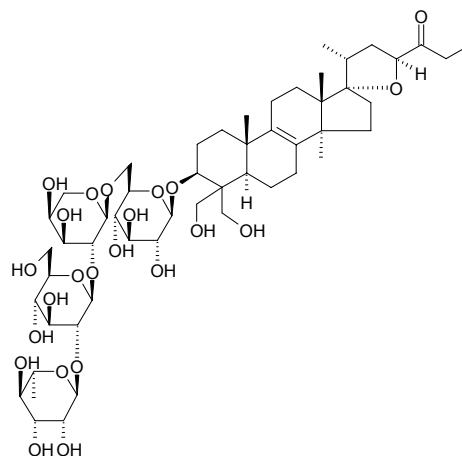
**7082 6α,7α-Epoxy-5α,20β-dihydroxy-1-oxowitha-2,24-dienolide**

$C_{28}H_{38}O_6$  (470.61). **Pharm:** BChE inhibitor ( $IC_{50} = (50\pm 2)\mu\text{mol/L}$ , control Galanthamine  $IC_{50} = (0.50\pm 0.001)\mu\text{mol/L}$ , Eserine  $IC_{50} = (0.04\pm 0.0001)\mu\text{mol/L}$ ); AChE inhibitor inactive<sup>[2563]</sup>. **Source:** CUI MIAN SHUI QIE *Withania somnifera*. **Ref:** 2563.



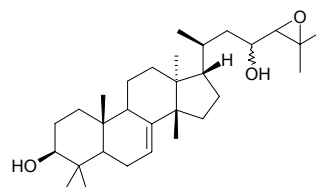
**7083 (23S)-17α,23-Epoxy-28,29-dihydroxy-3β-[(O-α-L-rhamnopyranosyl-(1→2)-O-β-D-glucopyranosyl-(1→2)-α-L-arabinopyranosyl-(1→6)-β-D-glucopyranosyl)oxy]-27-norlanost-8-en-24-one**

$C_{52}H_{84}O_{23}$  (1077.24). **Pharm:** Cytotoxic (Hmn oral squamous cell carcinoma cells HSC-2,  $IC_{50} = 19\mu\text{g/mL}$ , control Etoposide,  $IC_{50} = 24\mu\text{g/mL}$ ). **Source:** XUE GUANG HUA *Chionodoxa luciliae* (fresh bulb). **Ref:** 4308.



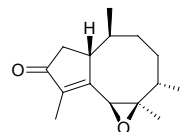
**7084 24,25-Epoxy-3β,23-dihydroxy-7-tirucallene**

$C_{30}H_{50}O_3$  (458.73). Prisms ( $Me_2CO$ ), mp 155–157°C. **Source:** HAI NAN JIAN MU *Dysoxylum hainanense* (bark). **Ref:** 3987.



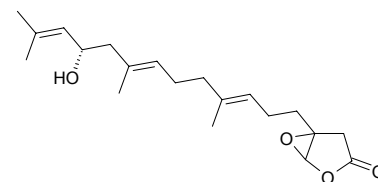
**7085 6,7-Epoxy-4-dumorten-3-one**

$C_{15}H_{22}O_2$  (234.34). Oil. **Source:** MAO DI QIAN *Dumortiera hirsuta*. **Ref:** 2283.



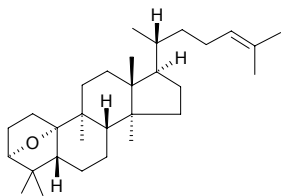
**7086 Epoxyelegantolactone**

1,2-Epoxy-13-hydroxy-6,10,14-phyttatrien-20,1-olide [165133-76-6]  $C_{20}H_{30}O_4$  (334.46). Oil,  $[\alpha]_D^{25} = -0.9^\circ$  ( $c = 2.8$ ,  $CH_2Cl_2$ ). **Source:** SHUANG CHA ZAO *Bifurcaria bifurcata*. **Ref:** 2405.

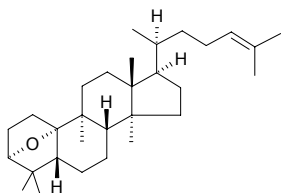


**7087 (20R)-3 $\alpha$ ,10 $\alpha$ -Epoxy-9-epi-cucurbita-24-ene**

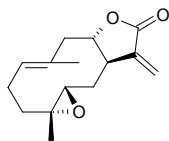
[259657-91-5] C<sub>30</sub>H<sub>50</sub>O (426.73). Oil. Source: *Senecio selloi*. Ref: 2416.

**7088 (20S)-3 $\alpha$ ,10 $\alpha$ -Epoxy-9-epi-cucurbita-24-ene**

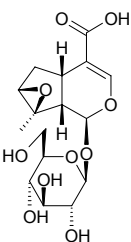
[259657-93-7] C<sub>30</sub>H<sub>50</sub>O (426.73). Oil. Source: *Senecio selloi*. Ref: 2416.

**7089 4 $\alpha$ ,5 $\beta$ -Epoxy-8-epiinnunolide**

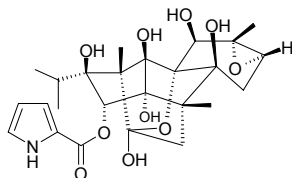
C<sub>15</sub>H<sub>20</sub>O<sub>3</sub> (248.32). Source: SHANG ZUO JIAN YE GUANG E TAI *Porella acutifolia* ssp. *tosana*. Ref: 3932.

**7090 7,8-Epoxy-8-epi-loganic acid**

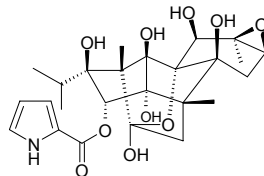
C<sub>16</sub>H<sub>22</sub>O<sub>10</sub> (374.35). White powder. Source: BO SI YI MU CAO *Leonurus persicus*. Ref: 2499.

**7091 8 $\alpha$ ,9 $\alpha$ -Epoxy-10-epi-ryanodine**

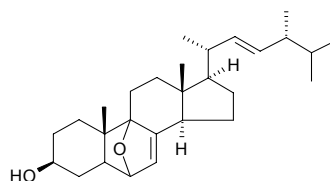
C<sub>25</sub>H<sub>33</sub>NO<sub>10</sub> (507.54). Crystals (CHCl<sub>3</sub>:Me<sub>2</sub>CO = 3:1), mp 196°C, [ $\alpha$ ]<sub>D</sub> = +13° (c = 0.4). Pharm: Cardiac contraction inhibitor (guinea-pig papillary muscle, causes a prolongation of the latency time and decrease of contraction force, EC<sub>50</sub> = 770nmol/L). Source: QU CHONG CAO *Spigelia anthelmia* (aerial parts). Ref: 5139.

**7092 8 $\beta$ ,9 $\beta$ -Epoxy-10-epi-ryanodine**

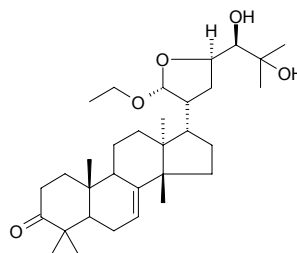
C<sub>25</sub>H<sub>33</sub>NO<sub>10</sub> (507.54). Crystals (CHCl<sub>3</sub>:Me<sub>2</sub>CO = 3:1), mp 212°C, [ $\alpha$ ]<sub>D</sub> = +7° (c = 0.2). Pharm: Cardiac contraction inhibitor (guinea-pig papillary muscle, causes a prolongation of the latency time and decrease of contraction force, EC<sub>50</sub> = 540nmol/L). Source: QU CHONG CAO *Spigelia anthelmia* (aerial parts). Ref: 5139.

**7093 6,9-Epoxy-ergosta-7,22-dien-3-ol**

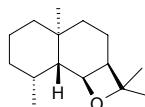
C<sub>28</sub>H<sub>44</sub>O<sub>2</sub> (412.66). White acicular crystals, mp 229–230°C. Source: SHI HU XIAO GU *Mycena dendrobii*. Ref: 851.

**7094 21R,23R-Epoxy,21 $\alpha$ -ethoxy,24S,25-dihydroxyapotirucalla-7-en-3-one**

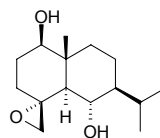
C<sub>32</sub>H<sub>52</sub>O<sub>5</sub> (516.77). White crystals. Source: MA LA BA JIAN MU *Dysoxylum malabaricum* (leaf). Ref: 5130.

**7095 (+)-6,11-Epoxy-eudesmane**

C<sub>15</sub>H<sub>26</sub>O (222.37). Colorless oil. Source: *Tritomaria polita* (essential oil). Ref: 3446.

**7096 4 $\alpha$ ,15-Epoxyeudesmane-1 $\beta$ ,6 $\alpha$ -diol**

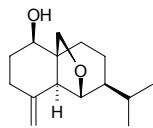
C<sub>15</sub>H<sub>26</sub>O<sub>3</sub> (254.37). Source: YI NIAN PENG *Erigeron annuus* (aerial parts), SU MEN BAI JIU CAO *Erigeron sumatrensis* (aerial parts). Ref: 4338.



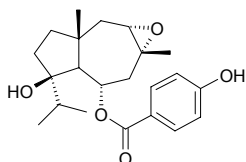


**7097 6 $\beta$ ,14-Epoxyeudesm-4(15)-en-1 $\beta$ -ol**

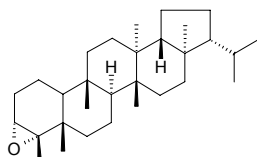
C<sub>15</sub>H<sub>24</sub>O<sub>2</sub> (236.36). Colorless amorphous solid, [ $\alpha$ ]<sub>D</sub><sup>26</sup> = +14.6° (*c* = 0.1, CHCl<sub>3</sub>). Source: FEI CHENG FEI PENG *Erigeron philadelphicus* (aerial parts). Ref: 4338.

**7098 8,9-Epoxy-ferutinin**

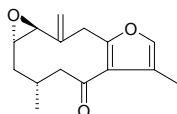
C<sub>22</sub>H<sub>30</sub>O<sub>5</sub> (374.48). Source: YI LANG A WEI *Ferula kuhistanica* (stem). Ref: 3977.

**7099 3 $\alpha$ ,4 $\alpha$ -Epoxyfilicane**

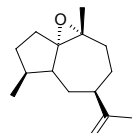
[23983-65-5] C<sub>30</sub>H<sub>50</sub>O (426.73). mp 229~231°C. Source: ZHU ZONG CAO *Adiantum capillus-veneris*. Ref: 6.

**7100 rel-1S,2S-Epoxy-4R-furanogermacr-10(15)-en-6-one**

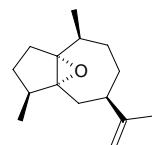
C<sub>15</sub>H<sub>18</sub>O<sub>3</sub> (246.31). Colorless oil, [ $\alpha$ ]<sub>D</sub> = -160.0° (*c* = 2.5, CHCl<sub>3</sub>). Pharm: Cytotoxic (*in vitro*, MCF7, IC<sub>50</sub> = 40 μmol/L, weak activity). Source: MO YAO *Commiphora myrrha* [Syn. *Commiphora molmol*]. Ref: 3093.

**7101 (-)-1,10-Epoxy-guaia-11-ene**

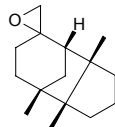
C<sub>15</sub>H<sub>24</sub>O (220.36). Source: CHEN XIANG *Aquilaria agallocha*. Ref: 13.

**7102 Epoxyguaie**

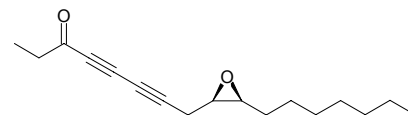
C<sub>15</sub>H<sub>24</sub>O (220.36). bp 102~104°C/1mmHg. Source: XIANG FU *Cyperus rotundus*. Ref: 6.

**7103 3(15)-Epoxygymnomitrane**

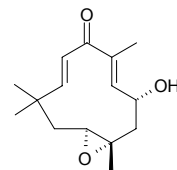
C<sub>15</sub>H<sub>24</sub>O (220.36). Oil, [ $\alpha$ ]<sub>D</sub><sup>21</sup> = -4.8° (*c* = 0.83). Source: JIE XING YE TAI *Jungermannia truncata*. Ref: 4201.

**7104 (9R,10S)-Epoxyheptadecan-4,6-diyn-3-one**

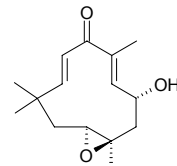
C<sub>17</sub>H<sub>24</sub>O<sub>2</sub> (260.38). Light yellow oil, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -70.0° (*c* = 1.0, CHCl<sub>3</sub>). Pharm: DGAT inhibitor (IC<sub>50</sub> = 9 μg/mL, control Evocarpine, IC<sub>50</sub> = 8.1 μg/mL). Source: REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. Ref: 4943.

**7105 (2R,3R,5R)-2,3-Epoxy-6,9-humuladien-5-ol-8-one**

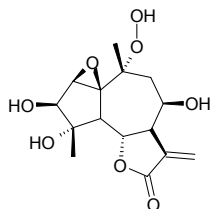
C<sub>15</sub>H<sub>22</sub>O<sub>3</sub> (250.34). Pharm: CYP3A4 inhibitor (IC<sub>50</sub> = 42.6 μmol/L, control Ketoconazole, IC<sub>50</sub> = 0.245 μmol/L); CYP2D6 inhibitor inactive (IC<sub>50</sub> > 100 μmol/L, control Quinidine, IC<sub>50</sub> = 0.078 μmol/L). Source: FANG XIANG JIANG *Zingiber aromaticum* (rhizome: 0.00060%dw). Ref: 4669.

**7106 (2R,3S,5R)-2,3-Epoxy-6,9-humuladien-5-ol-8-one**

C<sub>15</sub>H<sub>22</sub>O<sub>3</sub> (250.34). Pharm: CYP3A4 inhibitor (IC<sub>50</sub> = 62.5 μmol/L, control Ketoconazole, IC<sub>50</sub> = 0.245 μmol/L); CYP2D6 inhibitor inactive (IC<sub>50</sub> > 100 μmol/L, control Quinidine, IC<sub>50</sub> = 0.078 μmol/L). Source: FANG XIANG JIANG *Zingiber aromaticum* (rhizome: 0.00050%dw). Ref: 4669.

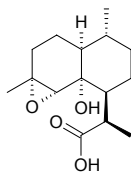
**7107 1 $\beta$ ,2 $\beta$ -Epoxy-10 $\alpha$ -hydroperoxy-3 $\beta$ ,4 $\alpha$ ,8 $\beta$ -trihydroxyguaia-11(13)-en-12,6 $\alpha$ -olide**

C<sub>15</sub>H<sub>20</sub>O<sub>8</sub> (328.32). Colorless gum, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +24° (*c* = 0.10, MeOH). Pharm: Antifungal (*Candida albicans*, MIC = 20 μg/mL). Source: GUAN MU YA JU *Ajania fruticulosa* (aerial parts). Ref: 5222.

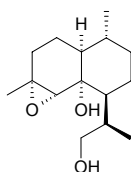


**7108 4 $\alpha$ ,5 $\alpha$ -Epoxy-6 $\alpha$ -hydroxy amorphan-12-oic acid**

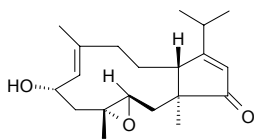
C<sub>15</sub>H<sub>24</sub>O<sub>4</sub> (268.36). Colorless oil,  $[\alpha]_D = -62.5^\circ$  ( $c = 1.0$ , CHCl<sub>3</sub>). Source: HUANG HUA HAO *Artemisia annua* (seed). Ref: 3435.

**7109 4 $\alpha$ ,5 $\alpha$ -Epoxy-6 $\alpha$ -hydroxy amorphan-12-ol**

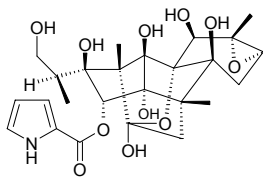
C<sub>15</sub>H<sub>26</sub>O<sub>3</sub> (254.37). Colorless oil. Source: HUANG HUA HAO *Artemisia annua* (seed). Ref: 3435.

**7110 (1S\*,3R\*,4R\*,6S\*,11S\*)-3,4-Epoxy-6-hydroxy-dolabella-7E,12-dien-14-one**

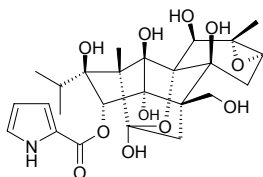
C<sub>20</sub>H<sub>30</sub>O<sub>3</sub> (318.46). Clear film,  $[\alpha]_D^{20} = -77.3^\circ$  ( $c = 0.21$ , CHCl<sub>3</sub>). Source: fungus *Stachybotrys chartarum*. Ref: 5104.

**7111 (13S)-8 $\alpha$ ,9 $\alpha$ -Epoxy-18-hydroxy-10-epi-ryanodine**

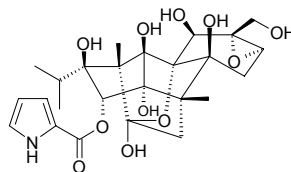
C<sub>25</sub>H<sub>33</sub>NO<sub>11</sub> (523.54). Crystals (CHCl<sub>3</sub>:Me<sub>2</sub>CO = 3:1), mp 200°C,  $[\alpha]_D = +7^\circ$  ( $c = 0.2$ ). Source: QU CHONG CAO *Spigelia anthelmia* (aerial parts). Ref: 5139.

**7112 8 $\alpha$ ,9 $\alpha$ -Epoxy-20-hydroxy-10-epi-ryanodine**

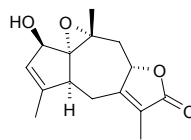
C<sub>25</sub>H<sub>33</sub>NO<sub>11</sub> (523.54). Crystals (CHCl<sub>3</sub>:Me<sub>2</sub>CO = 3:1), mp 208°C,  $[\alpha]_D = +8^\circ$  ( $c = 0.1$ ). Source: QU CHONG CAO *Spigelia anthelmia* (aerial parts). Ref: 5139.

**7113 8 $\alpha$ ,9 $\alpha$ -Epoxy-21-hydroxy-10-epi-ryanodine**

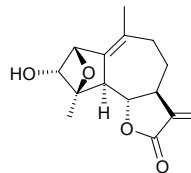
EP-1 C<sub>25</sub>H<sub>33</sub>NO<sub>11</sub> (523.54). Crystals (CHCl<sub>3</sub>:Me<sub>2</sub>CO = 3:1), mp 193°C,  $[\alpha]_D = +13^\circ$  ( $c = 0.2$ ). Source: QU CHONG CAO *Spigelia anthelmia* (aerial parts). Ref: 5139.

**7114 (1 $\alpha$ ,2 $\beta$ ,5 $\alpha$ ,8 $\alpha$ 10 $\alpha$ )-1,10-Epoxy-2-hydroxy-3,7(11)-guaiaadien-12,8-olide**

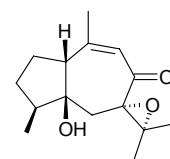
C<sub>15</sub>H<sub>18</sub>O<sub>4</sub> (262.31). Yellow oil,  $[\alpha]_D^{25} = +61.0^\circ$  ( $c = 0.4$ , CHCl<sub>3</sub>). Pharm: CYP3A4 inhibitor and CYP2D6 inhibitor (*in vitro*, CYP3A4, IC<sub>50</sub> = 98.2 μmol/L; CYP2D6, IC<sub>50</sub> > 100 μmol/L; control Ketoconazole, CYP3A4, IC<sub>50</sub> = 0.72 μmol/L; control Quinidine, CYP2D6, IC<sub>50</sub> = 0.082 μmol/L). Source: BI CHENG QIE *Piper cubeba* (fruit: yield = 0.00023% dw). Ref: 4797.

**7115 5 $\alpha$ H-2 $\beta$ ,4 $\beta$ -Epoxy-3 $\alpha$ -hydroxy-guaia-1(10),11(13)-dien-6 $\alpha$ ,12-olide**

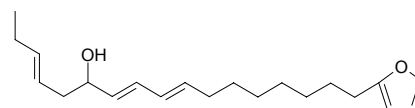
C<sub>15</sub>H<sub>18</sub>O<sub>4</sub> (262.31). Colorless gum,  $[\alpha]_D^{20} = +12.9^\circ$  ( $c = 0.1$ , EtOH). Pharm: Cytotoxic (KB ATCC CCL17, IC<sub>50</sub> = 3.6 μg/mL). Source: *Warionia saharae*. Ref: 5399.

**7116 7 $\alpha$ -11 $\alpha$ -Epoxy-5 $\beta$ -hydroxy-9-guaiaen-8-one**

C<sub>15</sub>H<sub>22</sub>O<sub>3</sub> (250.34). Pharm: NO production inhibitor (mus peritoneal macrophages, induced by LPS, 100 μmol/L, InRt = (32.0 ± 2.0)%, control L-NMMA, 100 μmol/L, InRt = (79.2 ± 0.9)%,  $p < 0.01$ ). Source: PING E SHU *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*]. Ref: 4150.

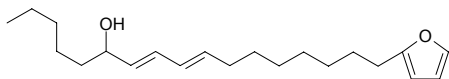
**7117 1,4-Epoxy-16-hydroxyheneicos-1,3,12,14,18-pentaene**

C<sub>21</sub>H<sub>32</sub>O<sub>2</sub> (316.49). Viscous oil. Source: YA LUO CHUN *Cipadessa baccifera*. Ref: 745.

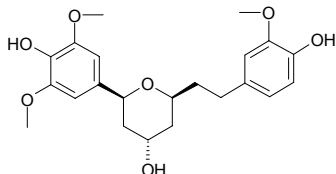


**7118 1,4-Epoxy-16-hydroxyhenicos-1,3,12,14-tetraene**

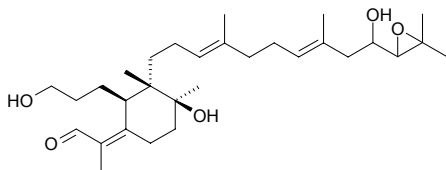
$C_{21}H_{34}O_2$  (318.50). Viscous oil. Source: YA LUO CHUN *Cipadessa baccifera*. Ref: 745.

**7119 1,5-Epoxy-3-hydroxy-1-(4-hydroxy-3,5-dimethoxyphenyl)-7-(4-hydroxy-3-methoxyphenyl)heptane**

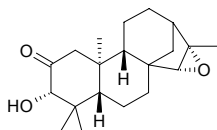
$C_{22}H_{28}O_7$  (404.46). Colorless oil,  $[\alpha]_D^{16} = -24^\circ$  ( $c = 0.19$ , EtOH). Source: SHENG JIANG *Zingiber officinale*. Ref: 3803.

**7120 22,23-Epoxy-21-hydroxyiridal**

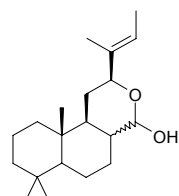
$C_{30}H_{50}O_5$  (490.73). Source: SHI GUAN YUAN WEI *Iris cristata*. Ref: 2417.

**7121 ent-15,16-Epoxy-3β-hydroxy-kauran-2-one**

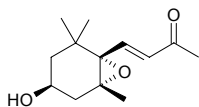
$C_{20}H_{30}O_3$  (318.46). Colorless needle crystals, mp  $123^\circ\text{C}$ ,  $[\alpha]_D^{24} = -5^\circ$  ( $c = 0.13$ , MeOH). Pharm: Antibacterial (inhibits colony formation of *X. campestris* pv. *oryzae*, 200mg/L, InRt = 30%). Source: DAO CAO *Oryza sativa* (leaf). Ref: 3814.

**7122 12,17-Epoxy-17-hydroxyabda-13(E)-ene**

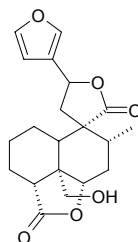
$C_{20}H_{34}O_2$  (306.49). mp  $150\sim 152^\circ\text{C}$ ,  $[\alpha]_D^{20} = -8.526^\circ$  ( $c = 1.08$ ,  $\text{CHCl}_3$ ). Pharm: Cytotoxic inactive (*in vitro*, BT474, CHAGO, HepG2, Kato3, SW620:  $> 10\mu\text{g/mL}$ ). Source: GUANG YE BA DOU *Croton oblongifolius* [Syn. *Croton laevigatus*]. Ref: 5363.

**7123 (3S,5R,6S,7E)-5,6-Epoxy-3-hydroxy-7-megastigmen-9-one**

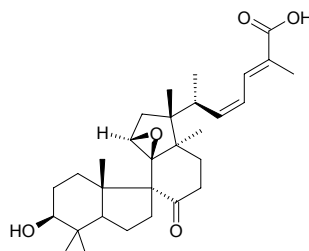
$C_{13}H_{20}O_3$  (224.30). Colorless oil,  $[\alpha]_D^{25} = -43.7^\circ$  ( $c = 0.39$ ,  $\text{CH}_2\text{Cl}_2$ ). Pharm: Phytotoxin (inhibits germination and growth of *Lactuca sativa*). Source: PA KE YE XIANG SHU *Cestrum parqui* (leaf). Ref: 3776.

**7124 12(S)-15,16-Epoxy-19-hydroxy-neo-cleroda-13(16),14-dien-18,6α:20,12-dioldide**

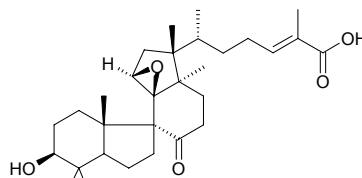
$C_{20}H_{24}O_6$  (360.41). White powder,  $[\alpha]_D^{25} = +26.0^\circ$  ( $c = 0.001$ , MeOH). Source: SHI CAN XIANG KE KE *Teucrium chamaedrys*. Ref: 3431.

**7125 14β,15β-Epoxy-3β-hydroxy-9-oxo-11(10→8)-abeolanosta-22-cis,24-trans-dien-26-oic acid**

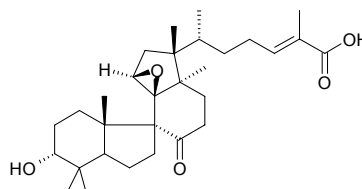
$C_{30}H_{44}O_5$  (484.68). White needles (MeOH), mp  $210^\circ\text{C}$  (dec). Pharm: Cytotoxic (*in vitro*, MCF7,  $GI_{50} = 69.6\mu\text{mol/L}$ ; NCI-H460,  $GI_{50} = 70.3\mu\text{mol/L}$ ; SF268,  $GI_{50} = 95.7\mu\text{mol/L}$ ; control Doxorubicin,  $GI_{50} = 0.043\mu\text{mol/L}$ ; NCI-H460,  $GI_{50} = 0.094\mu\text{mol/L}$ ; SF268,  $GI_{50} = 0.093\mu\text{mol/L}$ ). Source: MEI LI TENG HUANG *Garcinia speciosa* (bark). Ref: 4790.

**7126 14β,15β-Epoxy-3β-hydroxy-9-oxo-11(10→8)-abeolanosta-24-trans-en-26-oic acid**

$C_{30}H_{46}O_5$  (486.7). White needles (MeOH), mp  $205\sim 207^\circ\text{C}$ . Pharm: Cytotoxic (*in vitro*, MCF7,  $GI_{50} = 63.8\mu\text{mol/L}$ ; NCI-H460,  $GI_{50} = 68.6\mu\text{mol/L}$ ; SF268,  $GI_{50} = 86.4\mu\text{mol/L}$ ; control Doxorubicin,  $GI_{50} = 0.043\mu\text{mol/L}$ ; NCI-H460,  $GI_{50} = 0.094\mu\text{mol/L}$ ; SF268,  $GI_{50} = 0.093\mu\text{mol/L}$ ). Source: MEI LI TENG HUANG *Garcinia speciosa* (bark). Ref: 4790.

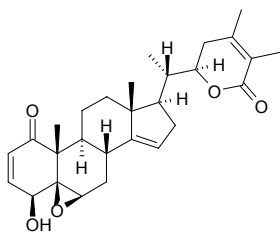
**7127 14β,15β-Epoxy-3α-hydroxy-9-oxo-11(10→8)-abeolanost-24-trans-en-26-oic acid**

$C_{30}H_{46}O_5$  (486.7). Yellowish gum. Source: MEI LI TENG HUANG *Garcinia speciosa* (bark). Ref: 4790.

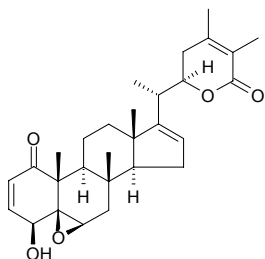


**7128 5 $\beta$ ,6 $\beta$ -Epoxy-4 $\beta$ -hydroxy-1-oxowitha-2,14,24-trienolide**

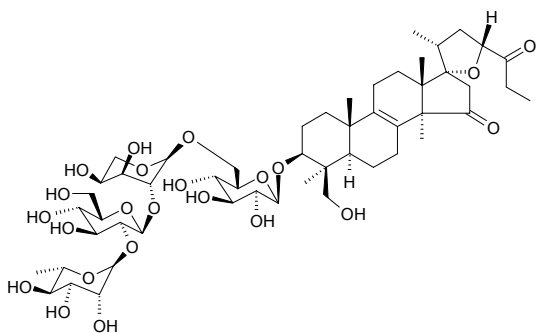
C<sub>28</sub>H<sub>36</sub>O<sub>5</sub> (452.60). **Pharm:** BChE inhibitor (IC<sub>50</sub> = (124.0±1.1)μmol/L, control Galanthamine IC<sub>50</sub> = (0.50±0.001)μmol/L, Eserine IC<sub>50</sub> = (0.04±0.0001)μmol/L); AChE inhibitor (IC<sub>50</sub> = (62.5±2.0)μmol/L, control Galanthamine IC<sub>50</sub> = (8.2±0.01)μmol/L, Eserine IC<sub>50</sub> = (0.85±0.0001)μmol/L). **Source:** CUI MIAN SHUI QIE *Withania somnifera*. **Ref:** 2563.

**7129 5 $\beta$ ,6 $\beta$ -Epoxy-4 $\beta$ -hydroxy-1-oxo-witha-2,16,24-trienolide**

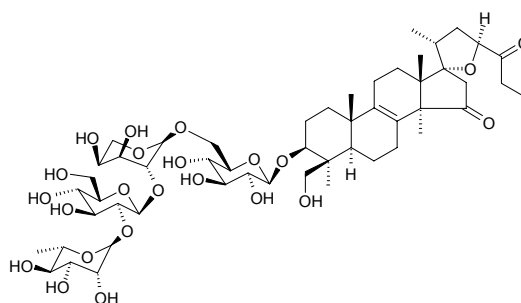
C<sub>28</sub>H<sub>36</sub>O<sub>5</sub> (452.60). mp 268°C, [ $\alpha$ ]<sub>D</sub><sup>30</sup> = +92.60° (c = 0.25, CHCl<sub>3</sub>). **Source:** CUI MIAN SHUI QIE *Withania somnifera* (leaf). **Ref:** 5329.

**7130 (23R)-17 $\alpha$ ,23-Epoxy-29-hydroxy-3 $\beta$ -[(O- $\alpha$ -L-rhamnopyranosyl-(1→2)-O- $\beta$ -D-glucopyranosyl-(1→2)-O- $\alpha$ -L-arabinopyranosyl-(1→6)- $\beta$ -D-glucopyranosyl)oxy]-27-norlanost-8-ene-15,24-dione**

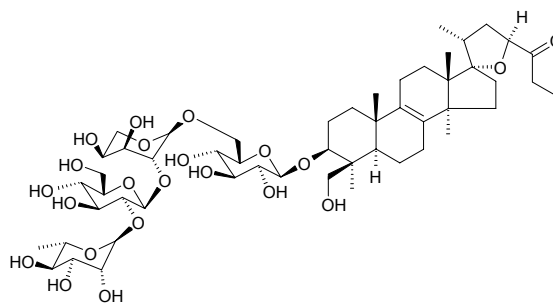
C<sub>52</sub>H<sub>82</sub>O<sub>23</sub> (1075.22). Amorphous solid, [ $\alpha$ ]<sub>D</sub><sup>28</sup> = -16.0° (c = 0.10, MeOH). **Pharm:** Cytotoxic inactive (*in vitro*, HSC-2, 100μmol/L; control Etoposide, IC<sub>50</sub> = 41μmol/L). **Source:** QI YI PU TAO FENG XIN ZI *Muscari paradoxum* (bulb: yield = 0.00054%fw). **Ref:** 4793.

**7131 (23S)-17 $\alpha$ ,23-Epoxy-29-hydroxy-3 $\beta$ -[(O- $\alpha$ -L-rhamnopyranosyl-(1→2)-O- $\beta$ -D-glucopyranosyl-(1→2)-O- $\alpha$ -L-arabinopyranosyl-(1→6)- $\beta$ -D-glucopyranosyl)oxy]-27-norlanost-8-ene-15,24-dione**

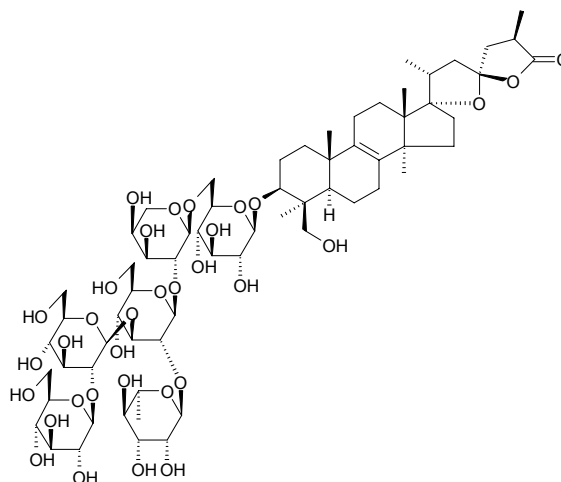
C<sub>52</sub>H<sub>82</sub>O<sub>23</sub> (1075.22). **Pharm:** Cytotoxic (*in vitro*, HSC-2, IC<sub>50</sub> = 63μmol/L; control Etoposide, IC<sub>50</sub> = 41μmol/L). **Source:** QI YI PU TAO FENG XIN ZI *Muscari paradoxum* (bulb: yield = 0.0034%fw). **Ref:** 4793.

**7132 (23S)-17 $\alpha$ ,23-Epoxy-29-hydroxy-3 $\beta$ -[(O- $\alpha$ -L-rhamnopyranosyl-(1→2)-O- $\beta$ -D-glucopyranosyl-(1→2)-O- $\alpha$ -L-arabinopyranosyl-(1→6)- $\beta$ -D-glucopyranosyl)oxy]-27-norlanost-8-en-24-one**

C<sub>52</sub>H<sub>84</sub>O<sub>22</sub> (1061.24). **Pharm:** Cytotoxic (*in vitro*, HSC-2, IC<sub>50</sub> = 32μmol/L; control Etoposide, IC<sub>50</sub> = 41μmol/L). **Source:** QI YI PU TAO FENG XIN ZI *Muscari paradoxum* (bulb: yield = 0.001%fw). **Ref:** 4793.

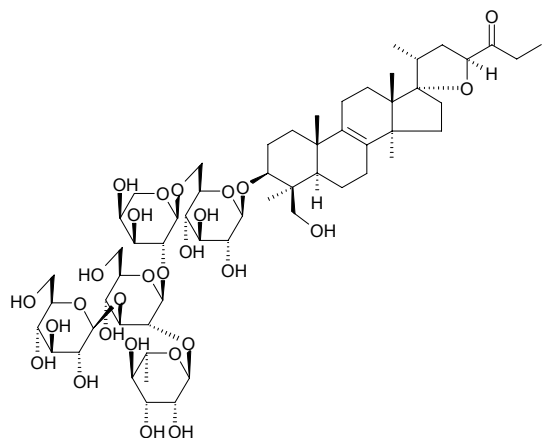
**7133 (23S,25R)-17 $\alpha$ ,23-Epoxy-29-hydroxy-3 $\beta$ -[(O- $\alpha$ -L-rhamnopyranosyl-(1→2)-O-[O- $\beta$ -D-glucopyranosyl-(1→2)- $\beta$ -D-glucopyranosyl-(1→3)]- $\beta$ -D-glucopyranosyl-(1→2)- $\alpha$ -L-arabinopyranosyl-(1→6)- $\beta$ -D-glucopyranosyl)oxy]lanost-8-en-23,26-olide**

C<sub>65</sub>H<sub>104</sub>O<sub>33</sub> (1413.53). **Pharm:** Cytotoxic (Hmn oral squamous cell carcinoma cells HSC-2, IC<sub>50</sub> = 14μg/mL, control Etoposide, IC<sub>50</sub> = 24μg/mL). **Source:** XUE GUANG HUA *Chionodoxa luciliae* (fresh bulb). **Ref:** 4308.



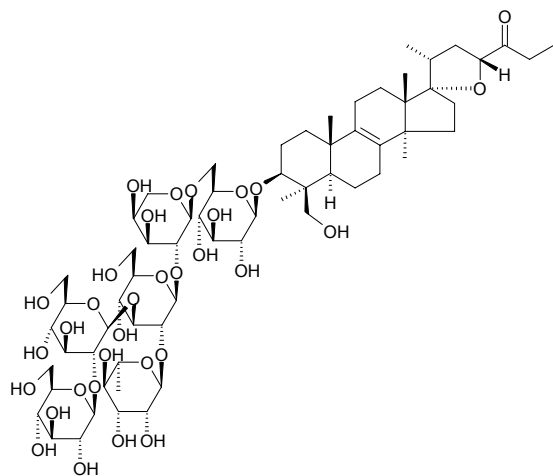
**7134 (23S)-17 $\alpha$ ,23-Epoxy-29-hydroxy-3 $\beta$ -[(*O*- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)-*O*-[ $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)]-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl)oxy]-27-norlanost-8-en-24-one**

C<sub>58</sub>H<sub>94</sub>O<sub>27</sub> (1223.38). **Pharm:** Cytotoxic (Hmn oral squamous cell carcinoma cells HSC-2, IC<sub>50</sub> = 23 $\mu$ g/mL, control Etoposide, IC<sub>50</sub> = 24 $\mu$ g/mL). **Source:** XUE GUANG HUA *Chionodoxa luciliae* (fresh bulb). **Ref:** 4308.



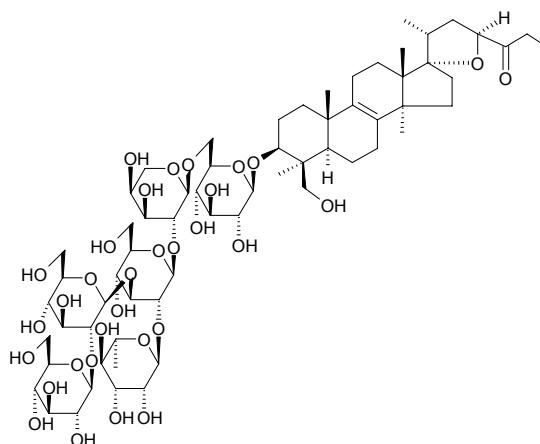
**7135 (23R)-17 $\alpha$ ,23-Epoxy-29-hydroxy-3 $\beta$ -[(*O*- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)-*O*-[ $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)]-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl)oxy]-27-norlanost-8-en-24-one**

C<sub>64</sub>H<sub>104</sub>O<sub>32</sub> (1385.52). **Pharm:** Cytotoxic (Hmn oral squamous cell carcinoma cells HSC-2, IC<sub>50</sub> > 50 $\mu$ g/mL, control Etoposide, IC<sub>50</sub> = 24 $\mu$ g/mL). **Source:** XUE GUANG HUA *Chionodoxa luciliae* (fresh bulb). **Ref:** 4308.



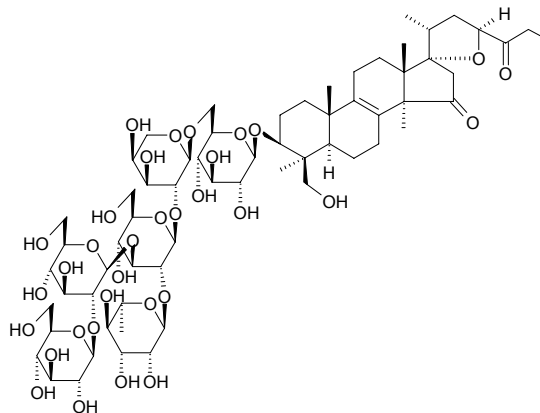
**7136 (23S)-17 $\alpha$ -Epoxy-29-hydroxy-3 $\beta$ -[(*O*- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)-*O*-[ $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)]-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl)oxy]-27-norlanost-8-en-24-one**

C<sub>64</sub>H<sub>104</sub>O<sub>32</sub> (1385.52). **Pharm:** Cytotoxic (Hmn oral squamous cell carcinoma cells HSC-2, IC<sub>50</sub> = 10 $\mu$ g/mL, control Etoposide, IC<sub>50</sub> = 24 $\mu$ g/mL). **Source:** XUE GUANG HUA *Chionodoxa luciliae* (fresh bulb). **Ref:** 4308.



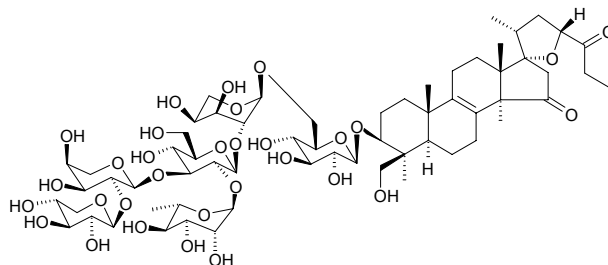
**7137 (23S)-17 $\alpha$ ,23-Epoxy-29-hydroxy-3 $\beta$ -[(*O*- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)-*O*-[ $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)]-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl)oxy]-27-norlanost-8-ene-15,24-dione**

C<sub>64</sub>H<sub>102</sub>O<sub>33</sub> (1399.51). Amorphous solid, [ $\alpha$ ]<sub>D</sub><sup>26</sup> = -18.0° (*c* = 0.1, MeOH). **Pharm:** Cytotoxic (Hmn oral squamous cell carcinoma cells HSC-2, IC<sub>50</sub> > 50 $\mu$ g/mL, control Etoposide, IC<sub>50</sub> = 24 $\mu$ g/mL). **Source:** XUE GUANG HUA *Chionodoxa luciliae* (fresh bulb). **Ref:** 4308.



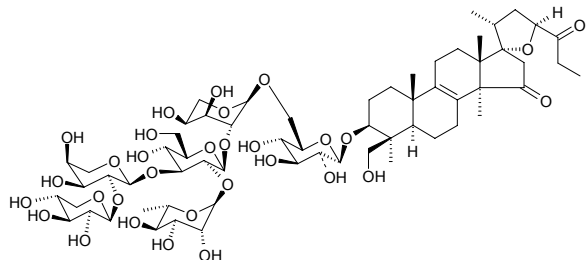
**7138 (23R)-17 $\alpha$ ,23-Epoxy-29-hydroxy-3 $\beta$ -[(*O*- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)-*O*-[ $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranosyl-(1 $\rightarrow$ 3)]-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)-*O*- $\alpha$ -L-arabinopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl)oxy]-27-norlanost-8-ene-15,24-dione**

C<sub>62</sub>H<sub>98</sub>O<sub>31</sub> (1339.45). Amorphous solid, [ $\alpha$ ]<sub>D</sub><sup>28</sup> = -12.0° (*c* = 0.10, MeOH). **Pharm:** Cytotoxic inactive (*in vitro*, HSC-2, 100 $\mu$ mol/L; control Etoposide, IC<sub>50</sub> = 41 $\mu$ mol/L). **Source:** QI YI PU TAO FENG XIN ZI *Muscari paradoxum* (bulb: yield = 0.00094%fw). **Ref:** 4793.



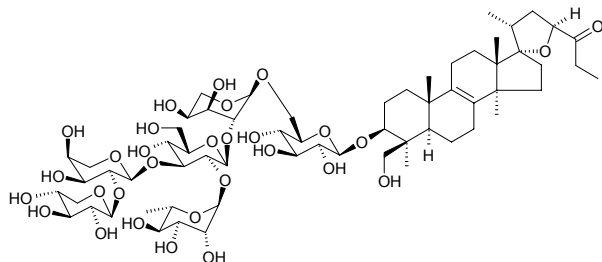
**7139 (23S)-17 $\alpha$ ,23-Epoxy-29-hydroxy-3 $\beta$ -[(*O*- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)-*O*-[*O*- $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranosyl-(1 $\rightarrow$ 3)]-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)-*O*- $\alpha$ -L-arabinopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl)oxy]-27-norlanost-8-ene-15,24-dione**

C<sub>62</sub>H<sub>98</sub>O<sub>31</sub> (1339.45). Amorphous solid,  $[\alpha]_D^{28} = -22.0^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Cytotoxic (*in vitro*, HSC-2, IC<sub>50</sub> = 19  $\mu$ mol/L; control Etoposide, IC<sub>50</sub> = 41  $\mu$ mol/L). **Source:** QI YI PU TAO FENG XIN ZI *Muscari paradoxum* (bulb: yield = 0.0051%fw). **Ref:** 4793.



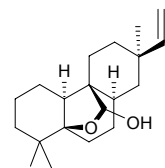
**7140 (23S)-17 $\alpha$ ,23-Epoxy-29-hydroxy-3 $\beta$ -[(*O*- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)-*O*-[*O*- $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranosyl-(1 $\rightarrow$ 3)]-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)-*O*- $\alpha$ -L-arabinopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl)oxy]-27-norlanost-8-en-24-one**

C<sub>62</sub>H<sub>100</sub>O<sub>30</sub> (1325.47). Amorphous solid,  $[\alpha]_D^{28} = -54.0^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Cytotoxic (*in vitro*, HSC-2, IC<sub>50</sub> = 7.3  $\mu$ mol/L; control Etoposide, IC<sub>50</sub> = 41  $\mu$ mol/L). **Source:** QI YI PU TAO FENG XIN ZI *Muscari paradoxum* (bulb: yield = 0.00033%fw). **Ref:** 4793.



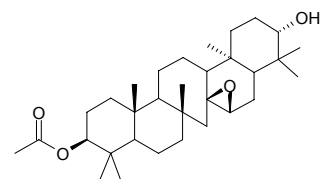
**7141 5 $\beta$ ,20-Epoxy-20-hydroxy-ros-15-ene**

C<sub>20</sub>H<sub>32</sub>O<sub>2</sub> (304.48).  $[\alpha]_D^{20} = +35^\circ$  ( $c = 0.22$ , CHCl<sub>3</sub>). **Source:** *Gackstroemia decipiens*. **Ref:** 3907.



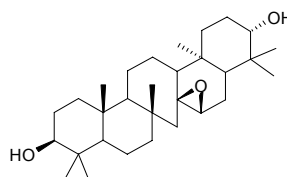
**7142 14 $\beta$ ,15 $\beta$ -Epoxy-3 $\beta$ -hydroxyserratan-21 $\alpha$ -ol-3 $\beta$ -O-acetate**

C<sub>32</sub>H<sub>52</sub>O<sub>4</sub> (500.77). Colorless needles (CHCl<sub>3</sub>), mp 273–276°C,  $[\alpha]_D^{20} = +12.9^\circ$  ( $c = 1.00$ , CHCl<sub>3</sub>). **Source:** QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*]. **Ref:** 5349.



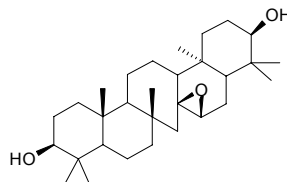
**7143 14 $\beta$ ,15 $\beta$ -Epoxy-3 $\beta$ -hydroxyserratan-21 $\alpha$ -ol**

C<sub>30</sub>H<sub>50</sub>O<sub>3</sub> (458.73). Colorless needles (CHCl<sub>3</sub>-CH<sub>3</sub>OH), mp 280–283°C,  $[\alpha]_D^{20} = +0.2^\circ$  ( $c = 0.44$ , C<sub>5</sub>H<sub>5</sub>N). **Source:** QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*]. **Ref:** 5349.



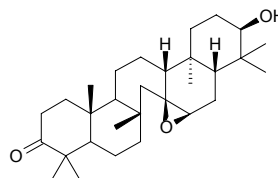
**7144 14 $\beta$ ,15 $\beta$ -Epoxy-3 $\beta$ -hydroxy-serratan-21 $\beta$ -ol**

C<sub>30</sub>H<sub>50</sub>O<sub>3</sub> (458.73). Colorless prisms (CHCl<sub>3</sub>-CH<sub>3</sub>OH), mp 272–274°C,  $[\alpha]_D^{20} = -19.7^\circ$  ( $c = 0.57$ , CHCl<sub>3</sub>). **Source:** QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*]. **Ref:** 5349.



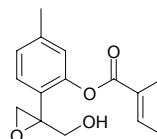
**7145 14 $\beta$ ,15 $\beta$ -Epoxy-21 $\beta$ -hydroxyserratan-3-one**

C<sub>30</sub>H<sub>48</sub>O<sub>3</sub> (456.72). Needles, mp 310–312°C (MeOH-CHCl<sub>3</sub>),  $[\alpha]_D = -14.5^\circ$  ( $c = 0.52$ ). **Source:** RI BEN YU LIN SONG *Picea jezoensis* (cuticle). **Ref:** 3076.



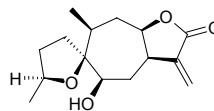
**7146 8,10-Epoxy-9-hydroxy thymol 3-O-tiglate**

C<sub>15</sub>H<sub>18</sub>O<sub>4</sub> (262.31).  $[\alpha]_D^{23} = -32.0^\circ$  ( $c = 1.1$ , CHCl<sub>3</sub>). **Source:** PEI LAN *Eupatorium fortunei* (aerial parts). **Ref:** 3077.



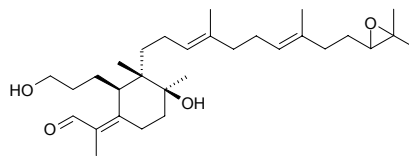
**7147 1 $\beta$ ,4 $\beta$ -Epoxy-5 $\beta$ -hydroxy-10 $\alpha$ H-xantha-11(13)-en-12,8 $\beta$ -olide**

C<sub>15</sub>H<sub>22</sub>O<sub>4</sub> (266.34). Colorless gum,  $[\alpha]_D^{20} = +23.0^\circ$  ( $c = 0.71$ , CHCl<sub>3</sub>). **Source:** CHANG YE TIAN MING JING *Carpesium longifolium* (aerial parts: yield = 0.0009%dw). **Ref:** 4736.



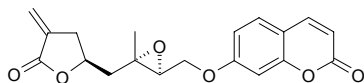
**7148 22,23-Epoxyiridal**

C<sub>30</sub>H<sub>50</sub>O<sub>4</sub> (474.73). **Source:** SHI GUAN YUAN WEI *Iris cristata*. **Ref:** 2417.

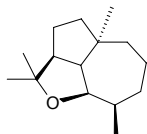


**7149 2',3'-Epoxyisocapnolactone**

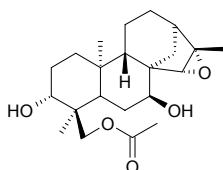
$C_{19}H_{18}O_6$  (342.35). White needles, mp 103~105°C. Source: JI XIAO XIAO YUN XIANG MU *Micromelum minutum* (leaf). Ref: 3467.

**7150 (+)-6,11-Epoxy-isodaucane**

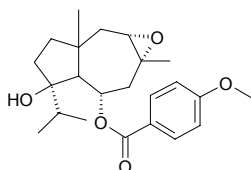
$C_{15}H_{26}O$  (222.37). Colorless oil. Source: *Tritomaria polita* (essential oil). Ref: 3446.

**7151 Epoxyisolinearol**

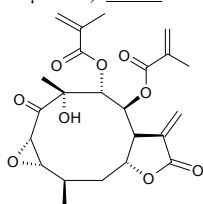
$C_{22}H_{34}O_5$  (378.51). Colorless needles ( $CHCl_3$ ). Source: *Sideritis ozturkii* (aerial parts). Ref: 3827.

**7152 2,3-Epoxy-jaeschkeanadiol p-methoxybenzoate**

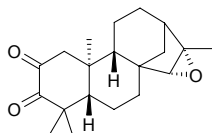
$C_{23}H_{32}O_5$  (388.51). Source: YI LANG A WEI *Ferula kuhistanica* (stem). Ref: 3977.

**7153 2,3-Epoxyjuanislinin**

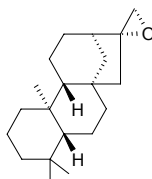
$C_{23}H_{28}O_9$  (448.47). White powder,  $[\alpha]_D^{20} = +154.0^\circ$  ( $c = 0.001$ ,  $CHCl_3$ ). Pharm: Cytotoxic (U937,  $IC_{50} = 1.8\mu mol/L$ ; control Parthenolide,  $IC_{50} = 1.9\mu mol/L$ ). Source: YOU KA MEI JU *Calea urticifolia* (leaf). Ref: 3887.

**7154 ent-15,16-Epoxy-kauran-2,3-dione**

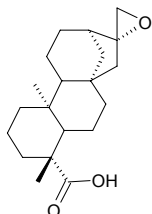
Oryzadione  $C_{20}H_{28}O_3$  (316.44). Colorless needle crystals, mp 138°C,  $[\alpha]_D^{24} = -13^\circ$  ( $c = 0.21$ , MeOH). Pharm: Antibacterial (inhibits colony formation of *X. campestris* pv. *oryzae*, 200mg/L, InRt = 40%). Source: DAO CAO *Oryza sativa* (leaf). Ref: 3814.

**7155 ent-16β,17-Epoxy-kaurane**

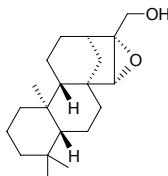
$C_{20}H_{32}O$  (288.48). mp 174.0~176.5°C,  $[\alpha]_D^{17} = -45.9^\circ$  ( $c = 0.18$ ,  $CHCl_3$ ). Source: ZHE BEI MU *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*]. Ref: 2182.

**7156 (-)-16β,17-Epoxykauran-19-oic acid**

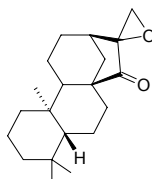
$C_{20}H_{30}O_3$  (318.46). White solid, mp 154~156°C,  $[\alpha]_D^{20} = -98.4^\circ$  ( $c = 1$ ,  $CHCl_3$ ). Pharm:  $Na^+, K^+$ -ATP inhibitor (crude enzyme  $Na^+, K^+$ -ATPase from rat brain,  $IC_{50} = 480\mu mol/L$ ). Source: GUANG YE BA DOU *Croton oblongifolius* [Syn. *Croton laevigatus*] (semi-synthetic derivative). Ref: 5404.

**7157 ent-15β,16-Epoxy-kauran-17-ol**

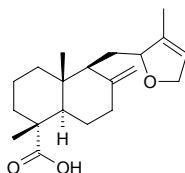
$C_{20}H_{32}O_2$  (304.48). mp 160°C,  $[\alpha]_D^{20} = +9.4^\circ$  ( $c = 1.5$ ,  $CHCl_3$ ). Source: ZHE BEI MU *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*]. Ref: 2182.

**7158 ent-16,17-Epoxykauran-15-one**

$C_{20}H_{30}O_2$  (302.46). Oil,  $[\alpha]_D^{23} = -109.0^\circ$  ( $c = 0.28$ ). Source: JIE XING YE TAI *Jungermannia truncata*. Ref: 4201.

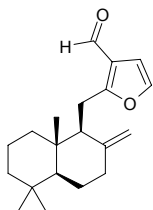
**7159 12,15-Epoxy-8(17),13-labdadien-18-oic acid**

$C_{20}H_{30}O_3$  (318.46). Amorphous,  $[\alpha]_D^{27} = +37.6^\circ$  ( $c = 0.19$ ,  $CHCl_3$ ). Source: TAI WAN SHAN MU *Cunninghamia konishii* (wood). Ref: 4176.

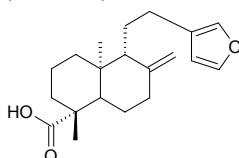


**7160 12,15-Epoxyabda-8(17),12,14-trien-16-al**

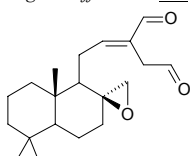
$C_{20}H_{28}O_2$  (300.44). Orange oil,  $[\alpha]_D^{20} = +50.5^\circ$  ( $c = 0.42$ ,  $CHCl_3$ ). Source: *Turraanthus africanus* (seed). Ref: 3884.

**7161 15,16-Epoxy-8(17),13(16),14-ent-labdatrien-19-oic acid**

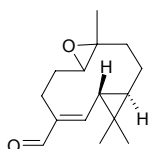
Danielliac acid  $C_{20}H_{28}O_3$  (316.44). Pharm: Angicidal (inhibits growth of alga *Raphidocelis subcapitata*, 72h  $IC_{50} = 17.2\mu\text{mol/L}$ ). Source: AO SHI DAN NI SU MU *Daniellia oliveri*, BI CHI YAN ZI CAI *Potamogeton pectinatus* (whole herb). Ref: 3488.

**7162 (E)-8β,17-Epoxyabd-12-ene-15,16-dial**

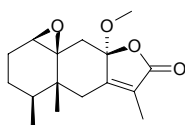
$C_{20}H_{30}O_3$  (318.46). Source: GAN JIANG *Zingiber officinale*, SHENG JIANG *Zingiber officinale*. Ref: 2.

**7163 1,10-Epoxyepidozenal**

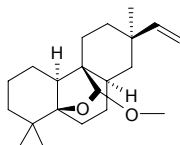
$C_{15}H_{22}O_2$  (234.34). Source: MIAN MAO MA DOU LING *Aristolochia mollissima* (dried root and stem: yield = 0.00031%dw). Ref: 3026.

**7164 1β,10β-Epoxy-8α-methoxyeremophil-7(11)-en-12,8β-olide**

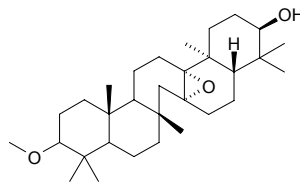
$C_{16}H_{22}O_4$  (278.35). Colorless crystals, mp 102–103°C (hexane),  $[\alpha]_D = -87.5^\circ$  ( $c = 1$ ,  $CHCl_3$ ). Source: HUANG SE QIAN LI GUANG *Senecio flavus*. Ref: 2409.

**7165 5β,20-Epoxy-20-methoxy-ros-15-ene**

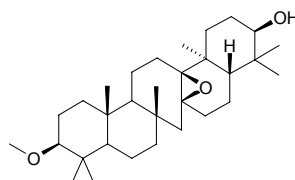
$C_{21}H_{34}O_2$  (318.50).  $[\alpha]_D^{20} = +33^\circ$  ( $c = 0.12$ ,  $CHCl_3$ ). Source: *Gackstroemia decipiens*. Ref: 3907.

**7166 13α,14α-Epoxy-3β-methoxyserratan-21β-ol**

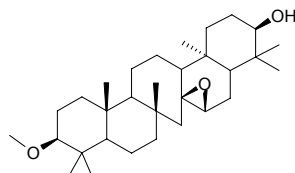
$C_{31}H_{52}O_3$  (472.76). Prisms, mp 242–244°C (MeOH– $CHCl_3$ ),  $[\alpha]_D = +31^\circ$  ( $c = 0.38$ ). Source: RI BEN YU LIN SONG *Picea jezoensis* (cuticle). Ref: 3076.

**7167 13β,14β-Epoxy-3β-methoxyserratan-21β-ol**

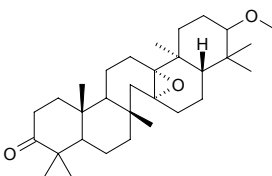
$C_{31}H_{52}O_3$  (472.76). Colorless prisms, mp 264–267°C,  $[\alpha]_D^{23.5} = +4.7^\circ$  ( $c = 0.11$ ,  $CHCl_3$ ). Pharm: Antineoplastic promoter (mouse skin carcinogenesis, TPA-induced EBV-EA activation assay, compound concentration (mol ratio/32 pmol TPA) = 500, EBV-EA viability = 25.7%,  $IC_{50}$ (mol ratio/32 pmol TPA) = 288; control Oleonic acid, compound concentration (mol ratio/32 pmol TPA) = 500, EBV-EA viability = 30.0%,  $IC_{50}$ (mol ratio/32 pmol TPA) = 360). Source: YU LIN YUN SHAN *Picea jezoensis* var. *jezoensis* (stem cortex). Ref: 5477.

**7168 14β,15β-Epoxy-3β-methoxyserratan-21β-ol**

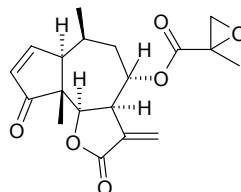
$C_{31}H_{52}O_3$  (472.76). Source: QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*]. Ref: 5349.

**7169 13α,14α-Epoxy-21α-methoxyserratan-3-one**

$C_{31}H_{50}O_3$  (470.74). Prisms, mp 219–222°C (MeOH– $CHCl_3$ ),  $[\alpha]_D = -98^\circ$  ( $c = 0.83$ ). Source: RI BEN YU LIN SONG *Picea jezoensis* (cuticle). Ref: 3076.

**7170 8α-Epoxyethylacrylyloxyambrosin**

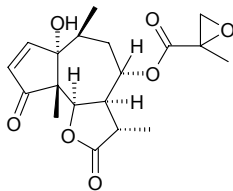
[219319-63-8]  $C_{19}H_{22}O_6$  (346.38). Source: YIN JIAO JU *Parthenium hysterophorus*. Ref: 2393.



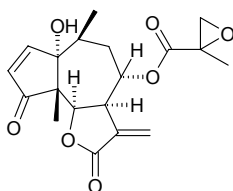


**7171 8 $\alpha$ -Epoxyethylacryloyloxy-11,13-dihydroparthenin**

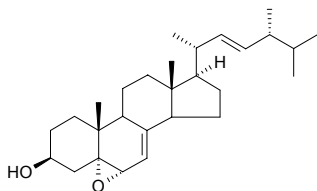
[219319-61-6] C<sub>19</sub>H<sub>24</sub>O<sub>7</sub> (364.40). Non-crystalline. Source: YIN JIAO JU *Parthenium hysterophorus*. Ref: 2393.

**7172 8 $\alpha$ -Epoxyethylacryloyloxyparthenin**

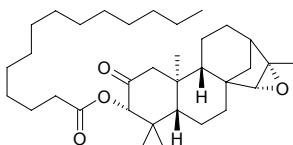
[219319-59-2] C<sub>19</sub>H<sub>22</sub>O<sub>7</sub> (362.38). Non-crystalline. Source: YIN JIAO JU *Parthenium hysterophorus*. Ref: 2393.

**7173 5,6-Epoxy-24(R)-methylcholesta-7,22-dien-3 $\beta$ -ol**

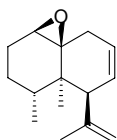
[23637-31-2] C<sub>28</sub>H<sub>44</sub>O<sub>2</sub> (412.66). Source: DONG CHONG XIA CAO *Cordyceps sinensis*. Ref: 2322.

**7174 ent-15,16-Epoxy-3 $\beta$ -myristoyloxy-kauran-2-one**

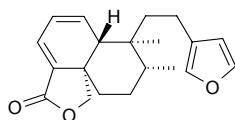
C<sub>34</sub>H<sub>56</sub>O<sub>4</sub> (528.82). Amorphous, [ $\alpha$ ]<sub>D</sub><sup>24</sup> = -33° (*c* = 0.41, MeOH). Pharm: Antibacterial (inhibits colony formation of *X. campestris* pv. *oryzae*, 500mg/L, InRt = 30%). Source: DAO CAO *Oryza sativa* (leaf). Ref: 3814.

**7175 1 $\beta$ ,10 $\beta$ -Epoxy-nardosin-7,11-diene**

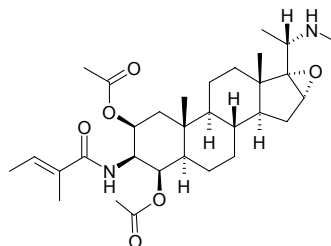
C<sub>15</sub>H<sub>22</sub>O (218.34). [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +195° (*c* = 0.61, CHCl<sub>3</sub>). Source: *Gackstroemia decipiens*. Ref: 3907.

**7176 15,16-Epoxy-neo-clerodan-1,3,13(16),14-tetraen-18,19-olide**

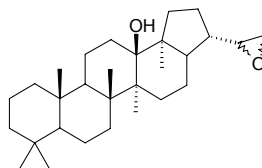
C<sub>20</sub>H<sub>24</sub>O<sub>3</sub> (312.41). Colorless oil, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +6.1° (*c* = 0.26, CHCl<sub>3</sub>). Source: SHAN XING KUO BAO JU *Baccharis flabellata*. Ref: 1921.

**7177 Epoxyneepakistamine A**

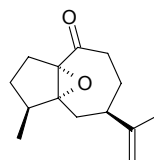
(20*S*)-20-(*N*-Methylamino)-3 $\beta$ -(tigloylamino)-5 $\alpha$ -pregna-16 $\alpha$ ,17 $\alpha$ -epoxy-2 $\beta$ ,4 $\beta$ -di-*O*-acetate C<sub>31</sub>H<sub>48</sub>N<sub>2</sub>O<sub>6</sub> (544.74). Colorless crystalline solid (CHCl<sub>3</sub>), mp 119~120°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +14° (*c* = 0.07, CHCl<sub>3</sub>). Pharm: BChE inhibitor (horse serum BChE, IC<sub>50</sub> = (77.4±0.024)μmol/L, control Eserine IC<sub>50</sub> = (0.857±0.008)μmol/L); AChE inhibitor (electric eel AChE, IC<sub>50</sub> > 200μmol/L, control Eserine IC<sub>50</sub> = (0.041±0.001)μmol/L). Source: YUN NAN YE SHAN HUA *Sarcococca coriacea* [Syn. *Sarcococca wallichii*] (leaf). Ref: 4241.

**7178 22,29 $\xi$ -Epoxy-30-norhopane-13 $\beta$ -ol**

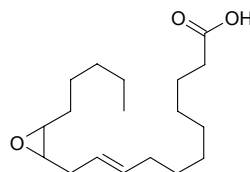
C<sub>29</sub>H<sub>48</sub>O<sub>2</sub> (428.70). Colorless solid, mp 264~266°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +15.10° (*c* = 0.25, CHCl<sub>3</sub>). Pharm: Antibacterial (*Salmonella typhimurium*, 100μg/disk, IZD = 9mm, control Kanamycin, 30μg/disk, IZD = 14mm; *Bacillus subtilis*, 100μg/disk, IZD = 8mm, Kanamycin, 30μg/disk, IZD = 31mm). Source: BAN YUE XING TIE XIAN JUE *Adiantum lunulatum*. Ref: 5124.

**7179 (+)-1,5-Epoxy-nor-ketoguaia-11-ene**

C<sub>14</sub>H<sub>20</sub>O<sub>2</sub> (220.31). Source: CHEN XIANG *Aquilaria agallocha*. Ref: 13.

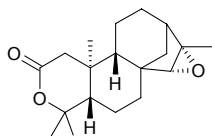
**7180 (±)-12,13-Epoxyoleic acid**

C<sub>18</sub>H<sub>32</sub>O<sub>3</sub> (296.45). [ $\alpha$ ]<sub>D</sub><sup>20</sup> = 0° (*c* = 0.5, CHCl<sub>3</sub>). Pharm: COX-1 inhibitor (100μg/mL, InRt = 30%, control *trans*-Resveratrol, IC<sub>50</sub> = 0.25μg/mL); COX-2 inhibitor (100μg/mL, InRt = 58%, control *trans*-Resveratrol, IC<sub>50</sub> = 0.30μg/mL). Source: LIAN YE TONG *Hernandia Sonora* [Syn. *Hernandia ovigera*] (seed). Ref: 5030.

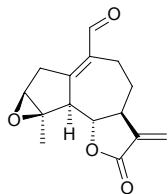


**7181 ent-15,16-Epoxy-3-oxa-kauran-2-one**

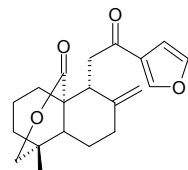
$C_{19}H_{28}O_3$  (304.43). Colorless needle crystals, mp 183°C,  $[\alpha]_D^{24} = -54^\circ$  ( $c = 0.05$ , MeOH). **Pharm:** Antibacterial (inhibits colony formation of *X. campestris* pv. *oryzae*, 210mg/L, InRt = 45%). **Source:** DAO CAO *Oryza sativa* (leaf). **Ref:** 3814.

**7182 5aH-3β,4β-Epoxy-14-oxo-guaia-1(10),11(13)-dien-6α,12-olide**

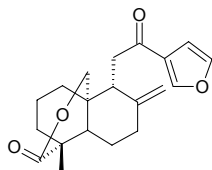
$C_{15}H_{16}O_4$  (260.29). Colorless gum,  $[\alpha]_D^{20} = +9.4^\circ$  ( $c = 0.1$ , EtOH). **Pharm:** Cytotoxic (KB ATCC CCL17,  $IC_{50} = 3.5\mu\text{g/mL}$ ). **Source:** *Warionia saharae*. **Ref:** 5399.

**7183 15,16-Epoxy-12-oxo-8(17),13(16),14-ent-labdatrien-20,19-olide**

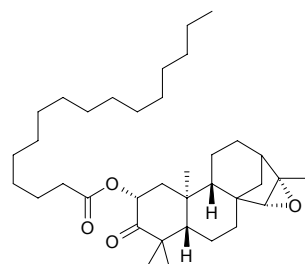
$C_{20}H_{24}O_4$  (328.41). Colorless oil,  $[\alpha]_D^{25} = +22.5^\circ$  ( $c = 0.43$ ,  $\text{CHCl}_3$ ). **Source:** FU YE YAN ZI CAI *Potamogeton natans*. **Ref:** 5184.

**7184 15,16-Epoxy-12-oxo-8(17),13(16),14-ent-labdatrien-19,20-olide**

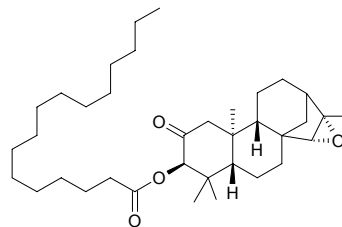
$C_{20}H_{24}O_4$  (328.41). Colorless oil,  $[\alpha]_D^{25} = +65.3^\circ$  ( $c = 0.04$ ,  $\text{CHCl}_3$ ). **Source:** FU YE YAN ZI CAI *Potamogeton natans*. **Ref:** 5184.

**7185 ent-15,16-Epoxy-2β-palmitoyloxy-kauran-2-one**

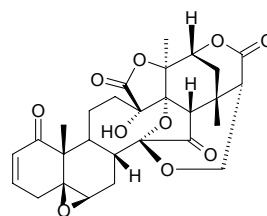
$C_{36}H_{60}O_4$  (556.88). Amorphous,  $[\alpha]_D^{24} = -67^\circ$  ( $c = 0.34$ , MeOH). **Pharm:** Antibacterial (inhibits colony formation of *X. campestris* pv. *oryzae*, 500mg/L, InRt = 45%). **Source:** DAO CAO *Oryza sativa* (leaf). **Ref:** 3814.

**7186 ent-15,16-Epoxy-3α-palmitoyloxy-kauran-2-one**

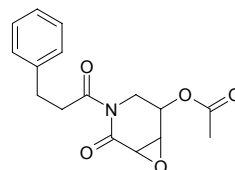
$C_{36}H_{60}O_4$  (556.88). Amorphous,  $[\alpha]_D^{24} = -17^\circ$  ( $c = 0.14$ , MeOH). **Source:** DAO CAO *Oryza sativa* (leaf). **Ref:** 3814.

**7187 5β,6β-Epoxyphysalin B**

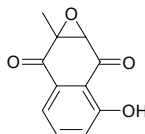
$C_{28}H_{30}O_{10}$  (526.55). **Source:** TIAN PAO ZI *Physalis minima*. **Ref:** 6.

**7188 3α,4α-Epoxy-5β-pipermethystine**

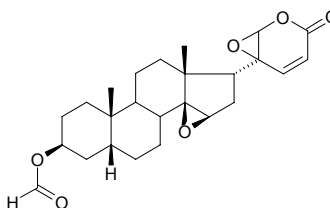
$C_{16}H_{17}NO_5$  (303.32). Colorless needles (hexane), mp 59°C,  $[\alpha]_D^{22} = -98.8^\circ$  ( $c = 0.5$ ,  $\text{Me}_2\text{CO}$ ). **Source:** KA WA HU JIAO *Piper methysticum*. **Ref:** 3373.

**7189 2,3-Epoxyplumbagin**

$C_{11}H_8O_4$  (204.18). Pale yellow needles (hexane), mp 92~93°C, 95~96°C,  $[\alpha]_D^{28} = -4.51^\circ$  ( $c = 2.41$ ,  $\text{CHCl}_3$ ). **Pharm:** Ichthyotoxin (MLC = 3.0mg/L, control Juglone, MLC = 0.2mg/L). **Source:** HAI SHI *Diospyros maritima* (fruit). **Ref:** 4185.

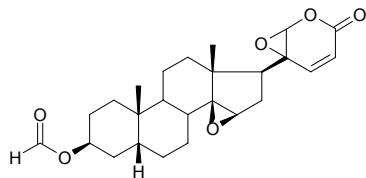
**7190 20R,21-Epoxyresibufogenin 3-formate**

$C_{25}H_{32}O_6$  (428.53). Colorless needles, mp 147~150°C,  $[\alpha]_D^{19} = -11.5^\circ$  ( $c = 0.1$ ,  $\text{CHCl}_3$ ). **Pharm:** Cytotoxic (*in vitro*, KB,  $IC_{50} > 25\mu\text{g/mL}$ ; MH-60,  $IC_{50} > 25\mu\text{g/mL}$ ). **Source:** CHAN SU *Bufo bufo gargarizans*; *Bufo melanostictus* (dried secretion of skin glands: yield = 0.00082%dw). **Ref:** 4634.

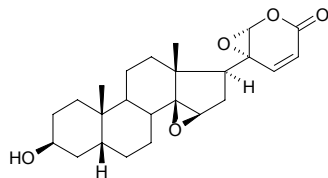


**7191 20S,21-Epoxyresibufogenin 3-formate**

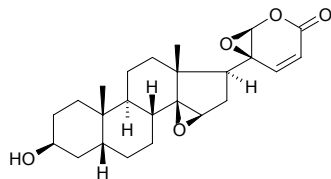
$C_{25}H_{32}O_6$  (428.53). Colorless needles, mp 180–182°C,  $[\alpha]_D^{19} = +17.2^\circ$  ( $c = 0.1$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (*in vitro*, KB,  $IC_{50} > 25\mu g/mL$ ; MH-60,  $IC_{50} > 25\mu g/mL$ ). **Source:** CHAN SU *Bufo bufo gargarizans*; *Bufo melanostictus* (dried secretion of skin glands: yield = 0.0022%dw). **Ref:** 4634.

**7192 20R,21-Epoxyresibufogenin**

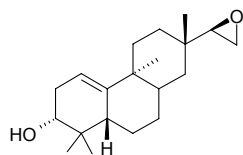
$C_{24}H_{32}O_5$  (400.52). Colorless needles, mp 90–94°C,  $[\alpha]_D^{19} = -17.0^\circ$  ( $c = 0.1$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (*in vitro*, KB,  $IC_{50} = 8.09\mu g/mL$ ; MH-60,  $IC_{50} = 1.8\mu g/mL$ ). **Source:** CHAN SU *Bufo bufo gargarizans*; *Bufo melanostictus* (dried secretion of skin glands: yield = 0.031%dw). **Ref:** 4634.

**7193 20S,21-Epoxyresibufogenin**

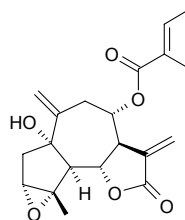
$C_{24}H_{32}O_5$  (400.52). Colorless plates, mp 184–186°C,  $[\alpha]_D^{18} = +18.2^\circ$  ( $c = 0.1$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (*in vitro*, KB,  $IC_{50} = 10.88\mu g/mL$ ; MH-60,  $IC_{50} = 1.82\mu g/mL$ ). **Source:** CHAN SU *Bufo bufo gargarizans*; *Bufo melanostictus* (dried secretion of skin glands: yield = 0.044%dw). **Ref:** 4634.

**7194 (3R,15R)-ent-15,16-Epoxy-1(10)-rosen-3-ol**

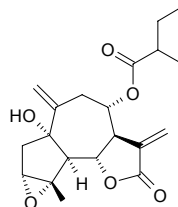
$C_{20}H_{32}O_2$  (304.48).  $[\alpha]_D^{20} = -4.9^\circ$  ( $c = 0.78$ ,  $CHCl_3$ ). **Source:** *Heteroscyphus billardieri*, *Plagiochila deltoidea*. **Ref:** 4284.

**7195 3a,4a-Epoxyrupicolin C**

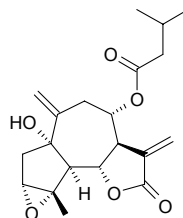
8-Angelyloxy-1 $\alpha$ -hydroxy-3 $\alpha$ ,4 $\alpha$ -epoxy-5 $\alpha$ ,7 $\alpha$ H-10(14),11(13)-guaiaadien-12,6 $\alpha$ -olide  $C_{20}H_{24}O_6$  (360.41). White amorphous powder, mp 88–89°C,  $[\alpha]_D^{25} = -5.83^\circ$  ( $c = 0.03$ , MeOH). **Pharm:** Anti-inflammatory (RAW264.7 cells, LPS-induced: NF- $\kappa$ B inhibitor,  $IC_{50} = (0.89\pm 0.02)\mu mol/L$ , control PTN,  $IC_{50} = (3.42\pm 0.08)\mu mol/L$ ; NO production inhibitor,  $IC_{50} = (2.34\pm 0.05)\mu mol/L$ , PTN,  $IC_{50} = (2.41\pm 0.06)\mu mol/L$ , AG,  $IC_{50} = (34.18\pm 0.98)\mu mol/L$ ; TNF- $\alpha$  production inhibitor,  $IC_{50} = (7.58\pm 0.22)\mu mol/L$ , PTN,  $IC_{50} = (2.68\pm 0.11)\mu mol/L$ ). **Source:** LIN DI HAO *Artemisia sylvatica* (aerial parts). **Ref:** 3837.

**7196 3a,4a-Epoxyrupicolin D**

8 $\alpha$ -Methylbutyryloxy-1 $\alpha$ -hydroxy-3 $\alpha$ ,4 $\alpha$ -epoxy-5 $\alpha$ ,7 $\alpha$ H-10(14),11(13)-guaiaadien-12,6 $\alpha$ -olide  $C_{20}H_{26}O_6$  (362.43). White needles, mp 118–119°C,  $[\alpha]_D^{25} = -10.22^\circ$  ( $c = 0.01$ , MeOH). **Pharm:** Anti-inflammatory (RAW264.7 cells, LPS-induced: NF- $\kappa$ B inhibitor,  $IC_{50} = (2.73\pm 0.01)\mu mol/L$ , control PTN,  $IC_{50} = (3.42\pm 0.08)\mu mol/L$ ; NO production inhibitor,  $IC_{50} = (6.16\pm 0.12)\mu mol/L$ , PTN,  $IC_{50} = (2.41\pm 0.06)\mu mol/L$ , AG,  $IC_{50} = (34.18\pm 0.98)\mu mol/L$ ; TNF- $\alpha$  production inhibitor,  $IC_{50} = (9.86\pm 0.31)\mu mol/L$ , PTN,  $IC_{50} = (2.68\pm 0.11)\mu mol/L$ ). **Source:** LIN DI HAO *Artemisia sylvatica* (aerial parts). **Ref:** 3837.

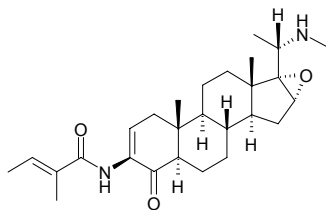
**7197 3a,4a-Epoxyrupicolin E**

8 $\alpha$ -Sovaleryloxy-1 $\alpha$ -hydroxy-3 $\alpha$ ,4 $\alpha$ -epoxy-5 $\alpha$ ,7 $\alpha$ H-10(14),11(13)-guaiaadien-12,6 $\alpha$ -olide  $C_{20}H_{26}O_6$  (362.43). White needles, mp 117–118°C,  $[\alpha]_D^{25} = -21.55^\circ$  ( $c = 0.01$ , MeOH). **Pharm:** Anti-inflammatory (RAW264.7 cells, LPS-induced: NF- $\kappa$ B inhibitor,  $IC_{50} = (2.68\pm 0.06)\mu mol/L$ , control PTN,  $IC_{50} = (3.42\pm 0.08)\mu mol/L$ ; NO production inhibitor,  $IC_{50} = (5.52\pm 0.15)\mu mol/L$ , PTN,  $IC_{50} = (2.41\pm 0.06)\mu mol/L$ , AG,  $IC_{50} = (34.18\pm 0.98)\mu mol/L$ ; TNF- $\alpha$  production inhibitor,  $IC_{50} = (8.86\pm 0.70)\mu mol/L$ , PTN,  $IC_{50} = (2.68\pm 0.11)\mu mol/L$ ). **Source:** LIN DI HAO *Artemisia sylvatica* (aerial parts). **Ref:** 3837.

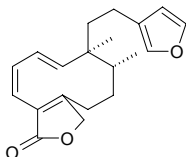


**7198 Epoxysarcovagenine D**

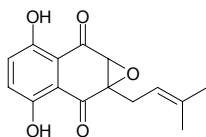
(20S)-20-(N-Methylamino)-3 $\beta$ -(tigloylamino)-5 $\alpha$ -pregna-2-en-16 $\alpha$ ,17 $\alpha$ -epoxy-4-one C<sub>27</sub>H<sub>40</sub>N<sub>2</sub>O<sub>3</sub> (440.63). Yellowish amorphous solid (CHCl<sub>3</sub>), mp 119–120 °C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +24° (c = 0.116, CHCl<sub>3</sub>). Source: YUN NAN YE SHAN HUA *Sarcococca coriacea* [Syn. *Sarcococca wallichii*] (leaf). Ref: 4241.

**7199 15,16-Epoxy-5,10-seco-clerodan-1(10),2,4,13(16),14-pentaen-18,19-olide**

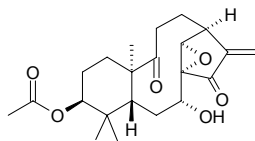
C<sub>20</sub>H<sub>24</sub>O<sub>3</sub> (312.41). Colorless oil, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = –135.7° (c = 0.28, CHCl<sub>3</sub>). Source: SHAN XING KUO BAO JU *Baccharis flabellata*. Ref: 1921.

**7200 2,3-Epoxy sesamone**

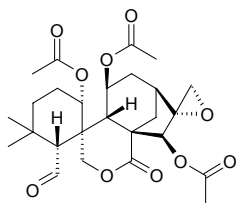
C<sub>15</sub>H<sub>14</sub>O<sub>5</sub> (274.28). Pale yellow crystals (MeOH), mp 85–86°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = –43° (c = 0.34, CHCl<sub>3</sub>). Pharm: Antifungal (*Cladosporium fulvum*, 10 $\mu$ g/spot)<sup>[5234]</sup>. Source: HU MA GEN *Sesamum indicum*. Ref: 5234.

**7201 Epoxyshikoccin**

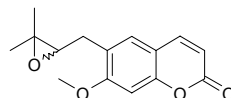
C<sub>22</sub>H<sub>30</sub>O<sub>6</sub> (390.48). mp 124–126°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = –6.3° (c = 0.35, MeOH). Source: XI SI GUO XIANG CHA CAI *Isodon shikokiana* var. *occidentalis*. Ref: 4067.

**7202 16,17-Epoxyshikokianal acetate**

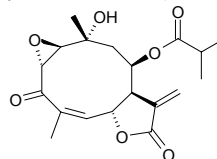
C<sub>26</sub>H<sub>34</sub>O<sub>10</sub> (506.55). mp 205.0–206.5°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +66° (c = 0.32, CHCl<sub>3</sub>). Source: SI GUO XIANG CHA CAI *Rabdosia shikokiana*. Ref: 4067.

**7203 Epoxysuberosin**

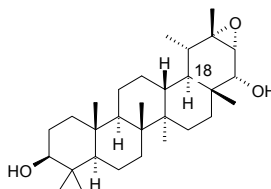
C<sub>15</sub>H<sub>16</sub>O<sub>4</sub> (260.29). Pharm: Antineoplastic (Raji cells, antitumor promotor, *in vivo*, inhibits TPA-induced EBV-EA activation, compound concentration = 500mol ratio/32 pmol TPA: EBV-EA-positive cells = (19.9 $\pm$ 1.2)% (viability > 80%),  $\beta$ -Carotene, EBV-EA-positive cells = (34.3 $\pm$ 1.1)% (viability > 80), Curcumin, EBV-EA-positive cells = (22.8 $\pm$ 1.8)% (viability > 80%), compound IC<sub>50</sub> = 208mol ratio/32 pmol TPA,  $\beta$ -Carotene, IC<sub>50</sub> = 400mol ratio/32 pmol TPA, Curcumin, IC<sub>50</sub> = 341mol ratio/32 pmol TPA). Source: *Citrus tamurana*. Ref: 5048.

**7204 1 $\beta$ ,2 $\alpha$ -Epoxytagitinin C**

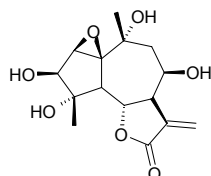
C<sub>19</sub>H<sub>24</sub>O<sub>7</sub> (364.4). Pharm: Cytotoxic (antiproliferative, Col2 cells, IC<sub>50</sub> = 1.7 $\mu$ g/mL); cytotoxic (cellular differentiation inducer, hmn promyelocytic leukemia HL-60 cells, 4 $\mu$ g/mL, activity denotes percentage of cells differentiated < 10%); cytotoxic (MMOC model, inhibits DMBA-induced preneoplastic lesion formation, 10 $\mu$ g/mL, rel-InRt = 44.4%, control DMBA, rel-InRt = 100%). Source: ZHONG BIN JU *Tithonia diversifolia* (aerial parts: yield = 0.0013%dw). Ref: 4622.

**7205 20 $\alpha$ ,21 $\alpha$ -Epoxy-taraxastane-3 $\beta$ ,22 $\alpha$ -diol**

C<sub>30</sub>H<sub>50</sub>O<sub>3</sub> (458.73). Colorless crystals, mp 223–224°C (CHCl<sub>3</sub>–MeOH), [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +121° (c = 0.56, CHCl<sub>3</sub>). Pharm: Cytotoxic (SMMC-7721, IC<sub>50</sub> = (113.6 $\pm$ 4.3) $\mu$ g/mL, control Vincristine, IC<sub>50</sub> = (63.2 $\pm$ 1.8) $\mu$ g/mL; B16, IC<sub>50</sub> = (51.4 $\pm$ 3.7) $\mu$ g/mL, Vincristine, IC<sub>50</sub> = (70.7 $\pm$ 2.8) $\mu$ g/mL; HeLa, IC<sub>50</sub> = (88.7 $\pm$ 6.0) $\mu$ g/mL, Vincristine, IC<sub>50</sub> = (67.2 $\pm$ 2.2) $\mu$ g/mL); antibacterial (*Bacillus subtilis*, IZD = (13.9 $\pm$ 0.8)mm, control Chloramphenicol, IZD = (14.5 $\pm$ 1.1)mm; *Escherichia coli*, IZD = (14.1 $\pm$ 2.9)mm, Chloramphenicol, IZD = (14.9 $\pm$ 1.3)mm; *Staphylococcus aureus*, IZD = (10.5 $\pm$ 2.1)mm, Chloramphenicol, IZD = (15.1 $\pm$ 1.2)mm). Source: *Saussurea petrovii* (whole herb). Ref: 5219.

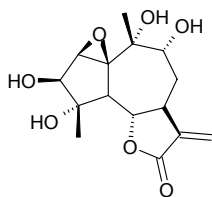
**7206 1 $\beta$ ,2 $\beta$ -Epoxy-3 $\beta$ ,4 $\alpha$ ,8 $\beta$ ,10 $\alpha$ -tetrahydroguaia-11(13)-en-12,6 $\alpha$ -olide**

C<sub>15</sub>H<sub>20</sub>O<sub>7</sub> (312.32). Colorless gum, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +31° (c = 0.12, MeOH). Pharm: Antifungal (*Candida albicans*, MIC = 20 $\mu$ g/mL)<sup>[5222]</sup>. Source: GUAN MU YA JU *Ajania fruticulosa* (aerial parts). Ref: 5222.

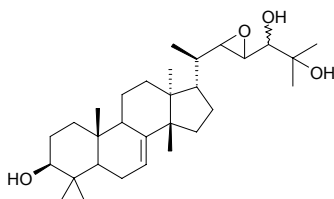


**7207 1 $\beta$ ,2 $\beta$ -Epoxy-3 $\beta$ ,4 $\alpha$ ,9 $\alpha$ ,10 $\alpha$ -tetrahydroxyguaia-11(13)-en-12,6 $\alpha$ -olide**

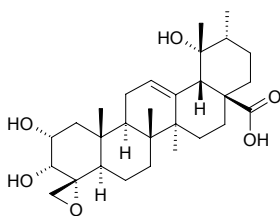
C<sub>15</sub>H<sub>20</sub>O<sub>7</sub> (312.32). Colorless gum,  $[\alpha]_D^{20} = +18^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Antifungal (*Candida albicans*, MIC = 20 $\mu$ g/mL). **Source:** GUAN MU YA JU *Ajania fruticulosa* (aerial parts). **Ref:** 5222.

**7208 22,23-Epoxy-tirucalla-7-ene-3 $\beta$ ,24,25-triol**

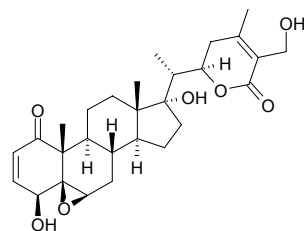
C<sub>30</sub>H<sub>50</sub>O<sub>4</sub> (474.73). Colorless needles (Me<sub>2</sub>CO), mp 118–120°C,  $[\alpha]_D^{26} = -4.7^\circ$  ( $c = 0.95$ , CH<sub>3</sub>OH). **Source:** HAI NAN JIAN MU *Dysoxylum hainanense* (bark). **Ref:** 3987.

**7209 4(R),23-Epoxy-2 $\alpha$ ,3 $\alpha$ ,19 $\alpha$ -trihydroxy-24-norurs-12-en-28-oic acid**

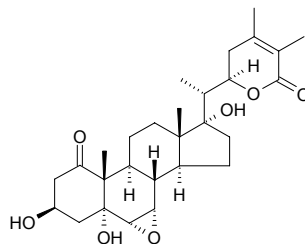
C<sub>29</sub>H<sub>44</sub>O<sub>6</sub> (488.67). White powder, mp 232–234°C,  $[\alpha]_D^{25} = +33.4^\circ$  ( $c = 0.05$ , MeOH). **Source:** YANG TI *Rumex japonicus* (stem). **Ref:** 4541.

**7210 5 $\beta$ ,6 $\beta$ -Epoxy-4 $\beta$ ,17 $\alpha$ ,27-trihydroxy-1-oxowitha-2,24-dienolide**

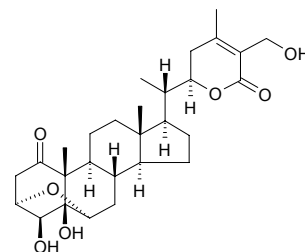
17-Hydroxy withaferin C<sub>28</sub>H<sub>38</sub>O<sub>7</sub> (486.61). White amorphous powder,  $[\alpha]_D^{25} = +12^\circ$  ( $c = 0.11$ , CH<sub>2</sub>Cl<sub>2</sub>). **Pharm:** BChE inhibitor (IC<sub>50</sub> = (161.5±1.1) $\mu$ mol/L, control Galanthamine, IC<sub>50</sub> = (0.50±0.001) $\mu$ mol/L, Eserine IC<sub>50</sub> = (0.04±0.00) $\mu$ mol/L)<sup>[2563]</sup>; AChE inhibitor inactive<sup>[2563]</sup>. **Source:** CUI MIAN SHUI QIE *Withania somnifera*, CUI MIAN SHUI QIE *Withania somnifera* (leaf). **Ref:** 2563, 5329.

**7211 6 $\alpha$ ,7 $\alpha$ -Epoxy-3 $\beta$ ,5 $\alpha$ ,17 $\alpha$ -trihydroxy-1-oxo-witha-24-enolide**

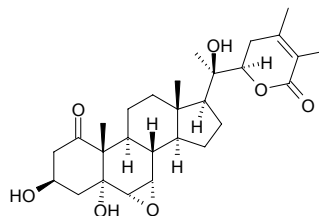
C<sub>28</sub>H<sub>40</sub>O<sub>7</sub> (488.63). mp 258°C,  $[\alpha]_D^{30} = +66.00^\circ$  ( $c = 0.25$ , MeOH). **Source:** CUI MIAN SHUI QIE *Withania somnifera* (leaf). **Ref:** 5329.

**7212 (20S,22R)-3 $\alpha$ ,6 $\alpha$ -Epoxy-4 $\beta$ ,5 $\beta$ ,27-trihydroxy-1-oxowitha-24-enolide**

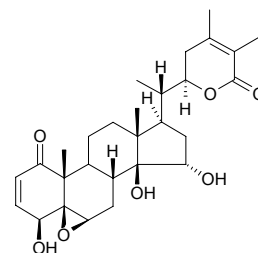
C<sub>28</sub>H<sub>40</sub>O<sub>7</sub> (488.63). Amorphous powder,  $[\alpha]_D^{23} = -17.4^\circ$  ( $c = 0.109$ , MeOH). **Pharm:** Neurite outgrowth activity (hmn neuroblastoma SH-SY5Y cell line, 1 $\mu$ mol/L). **Source:** CUI MIAN SHUI QIE *Withania somnifera* (root). **Ref:** 4198.

**7213 6 $\alpha$ ,7 $\alpha$ -Epoxy-3 $\beta$ ,5 $\alpha$ ,20 $\beta$ -trihydroxy-1-oxowitha-24-enolide**

C<sub>28</sub>H<sub>40</sub>O<sub>7</sub> (488.63). White amorphous powder,  $[\alpha]_D^{25} = -196^\circ$  ( $c = 0.006$ , MeOH). **Pharm:** AChE inhibitor inactive; BChE inhibitor inactive. **Source:** CUI MIAN SHUI QIE *Withania somnifera*. **Ref:** 2563.

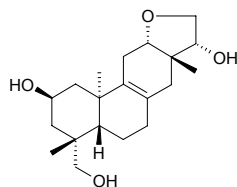
**7214 (20S,22R)-5 $\beta$ ,6 $\beta$ -epoxy-4 $\beta$ ,14 $\beta$ ,15 $\alpha$ -trihydroxy-1-oxowith-2,24-dienolide**

C<sub>28</sub>H<sub>38</sub>O<sub>7</sub> (486.61). Colorless needles,  $[\alpha]_D = +68^\circ$  ( $c = 0.2$ , MeOH). **Source:** DENG LONG CAO *Physalis peruviana*. **Ref:** 1915.

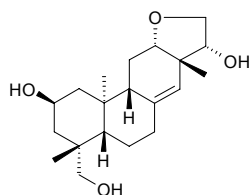


**7215 ent-12 $\alpha$ ,16-Epoxy-2 $\beta$ ,15 $\alpha$ ,19-trihydroxypimar-8-ene**

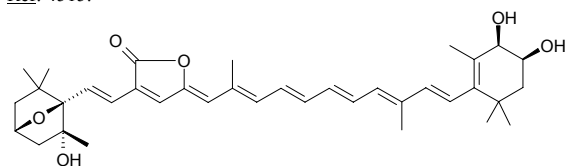
C<sub>20</sub>H<sub>32</sub>O<sub>4</sub> (336.48). White amorphous powder,  $[\alpha]_D^{20} = +13.8^\circ$  ( $c = 0.63$ , MeOH). Source: XI XIAN *Siegesbeckia orientalis* (aerial parts: yield = 0.00033%). Ref: 4764.

**7216 ent-12 $\alpha$ ,16-Epoxy-2 $\beta$ ,15 $\alpha$ ,19-trihydroxypimar-8(14)-ene**

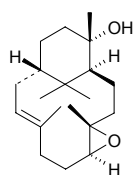
C<sub>20</sub>H<sub>32</sub>O<sub>4</sub> (336.48). White amorphous powder,  $[\alpha]_D^{20} = +6.5^\circ$  ( $c = 1.40$ , MeOH). Source: XI XIAN *Siegesbeckia orientalis* (aerial parts: yield = 0.00083%). Ref: 4764.

**7217 3,6-Epoxy-5,3',4'-trihydroxy-12',13',20'-trinor- $\beta$ , $\beta$ -caroten-19,11-olide**

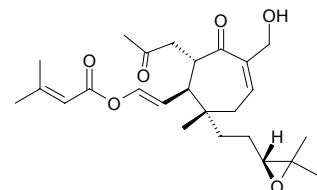
C<sub>37</sub>H<sub>48</sub>O<sub>6</sub> (588.79). Reddish solid. Source: MU LI (Oyster) *Crassostrea gigas*. Ref: 4515.

**7218 (9S,10S)-ent-9,10-Epoxyverticillol**

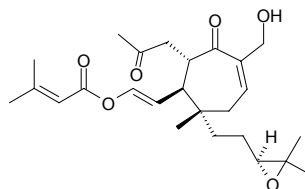
C<sub>20</sub>H<sub>34</sub>O<sub>2</sub> (306.49). Colorless crystals (*n*-hexane), mp 157~158°C,  $[\alpha]_D^{18} = -114.2^\circ$  ( $c = 1.81$ ). Source: ZHAO WA JIA KE TAI *Jackiella javanica*. Ref: 5303.

**7219 14R\*,15-Epoxyvibsanin C**

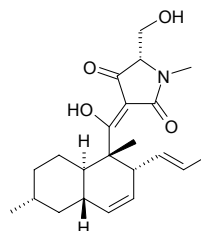
C<sub>25</sub>H<sub>36</sub>O<sub>6</sub> (432.56). Colorless oil,  $[\alpha]_D^{20} = +97.0^\circ$  ( $c = 0.12$ , CHCl<sub>3</sub>). Source: XIANG QI JIA MI *Viburnum odoratissimum* (leaf). Ref: 3512.

**7220 14S\*,15-Epoxyvibsanin C**

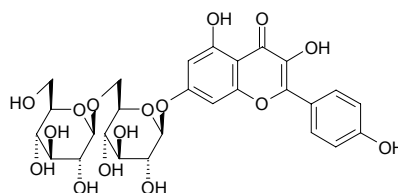
C<sub>25</sub>H<sub>36</sub>O<sub>6</sub> (432.56). Colorless oil,  $[\alpha]_D^{20} = +86.0^\circ$  ( $c = 0.12$ , CHCl<sub>3</sub>). Source: XIANG QI JIA MI *Viburnum odoratissimum* (leaf). Ref: 3512.

**7221 Equisetin**

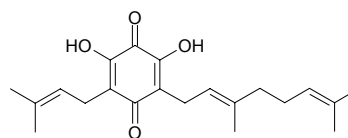
[57749-43-6] C<sub>22</sub>H<sub>31</sub>NO<sub>4</sub> (373.50). Amorphous powder, mp 65~66°C. Pharm: Antibacterial (gram-positive bacteria). Source: *Fusarium equiseti*. Ref: 2094.

**7222 Equisetrin**

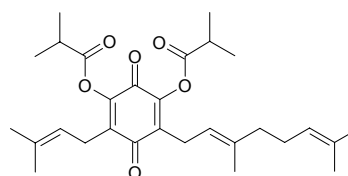
C<sub>27</sub>H<sub>30</sub>O<sub>16</sub> (610.53). mp 195~196°C. Source: WEN JING *Equisetum arvense*. Ref: 6, 1521.

**7223 Erectquione A**

2,6-Dihydroxyl-3-geranyl-5-isoprenyl-2,5-dihexadiene-1,4-dione C<sub>21</sub>H<sub>28</sub>O<sub>4</sub> (344.45). Red oil. Source: XIAO LIAN QIAO *Hypericum erectum*. Ref: 1990.

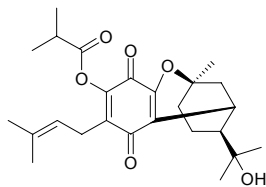
**7224 Erectquione B**

2,6-Diisobutyryloxy-3-geranyl-5-isoprenyl-2,5-dihexadiene-1,4-dione C<sub>29</sub>H<sub>40</sub>O<sub>6</sub> (484.64). Yellow oil. Source: XIAO LIAN QIAO *Hypericum erectum*. Ref: 1990.

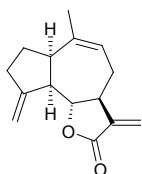


**7225 Erectquione C**

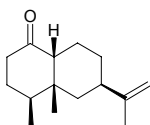
$C_{25}H_{34}O_6$  (430.55). Yellow oil,  $[\alpha]_D^{25} = -10^\circ$  ( $c = 0.10$ ,  $CHCl_3$ ). Source: XIAO LIAN QIAO *Hypericum erectum*. Ref: 1990.

**7226 Eremanthin**

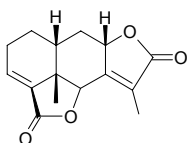
Vanillosmin [37936-58-6]  $C_{15}H_{18}O_2$  (230.31). Pharm: Schistosomacide. Source: *Vernonia* sp. Ref: 658.

**7227 Eremofukinone**

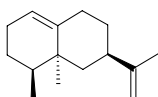
$C_{15}H_{24}O$  (220.36). bp 75~100°C/0.15mmHg. Source: FENG DOU CAI *Petasites japonicus*. Ref: 6.

**7228 8βH-Eremophil-3,7(11)-diene-12,8α(14,6α)-diolide**

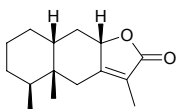
$C_{15}H_{16}O_4$  (260.29). Colorless plates, mp 230~231°C,  $[\alpha]_D^{20} = +28.0^\circ$  ( $c = 0.20$ ,  $CHCl_3$ ). Source: DONG E LUO DU WU *Ligularia tongolensis* (root). Ref: 4523.

**7229 Eremophilene**

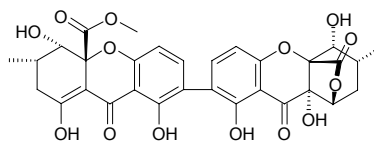
$C_{15}H_{24}$  (204.36). bp 129.5°C/13mmHg. Source: DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*], FENG DOU CAI *Petasites japonicus*, XIE CAO *Valeriana officinalis*. Ref: 2.

**7230 Eremophilenolide**

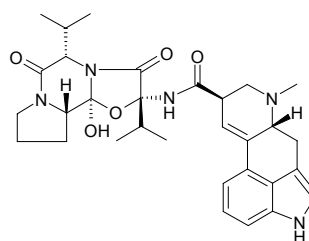
$C_{15}H_{22}O_2$  (234.34). Pharm: Antispasmodic. Source: *Petasites* sp. Ref: 658.

**7231 Ergochrysin**

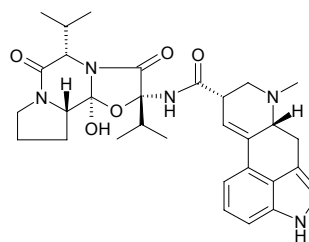
$C_{31}H_{28}O_{14}$  (624.56). mp 285°C (dec). Source: MAI JIAO *Claviceps purpurea*. Ref: 6.

**7232 Ergocornine**

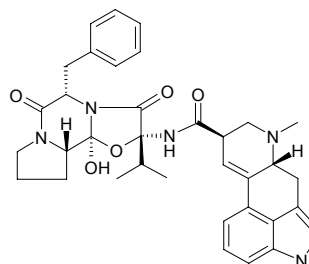
[564-36-3]  $C_{31}H_{39}N_5O_5$  (561.69). mp 181~184°C (dec). Pharm: Antineoplastic (rat, mammary cancer caused by DMBA); inhibits release of galactin; uterine stimulant; contracts blood vessels. Source: MAI JIAO *Claviceps purpurea*, WU ZHAO LONG *Ipomoea cairica* [Syn. *Ipomoea palmata*]. Ref: 5, 6, 658.

**7233 Ergocorninine**

[564-37-4]  $C_{31}H_{41}N_5O_5$  (563.70). mp 228°C (dec). Source: MAI JIAO *Claviceps purpurea*. Ref: 6.

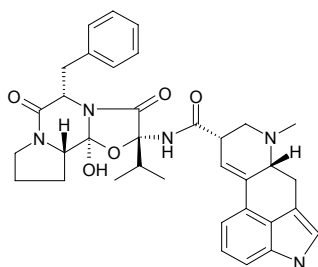
**7234 Ergocristine**

[511-08-0]  $C_{35}H_{39}N_5O_5$  (609.73). mp 165~170°C (dec). Pharm: Contracts blood vessels (similar physiological activity with ergot); inhibits release of galactin. Source: MAI JIAO *Claviceps purpurea*. Ref: 6, 658.

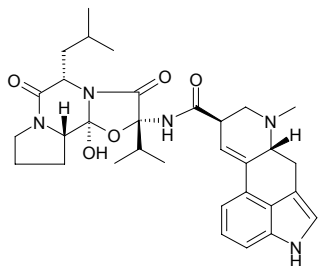


**7235 Ergocristinine**

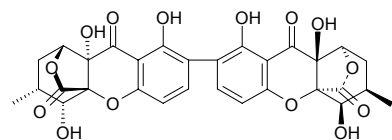
[511-07-9] C<sub>35</sub>H<sub>39</sub>N<sub>5</sub>O<sub>5</sub> (609.73). mp 214°C (dec). Source: MAI JIAO *Claviceps purpurea*. Ref: 6.

**7236 Ergocryptine**

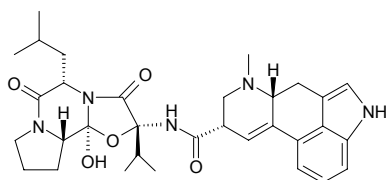
Ergokryptine [511-09-1] C<sub>32</sub>H<sub>41</sub>N<sub>5</sub>O<sub>5</sub> (575.71). Combining with solvent, prismatic crystals (acetone or benzene or methanol); recrystallization in methanol, mp 212°C (dec), [α]<sub>D</sub><sup>20</sup> = -120° (pyridine); [α]<sub>D</sub><sup>20</sup> = -198° (chloroform). Pharm: Antineoplastic; galactin inhibitor (female sheep); toxin. Source: MAI JIAO *Claviceps purpurea*. Ref: 5, 6, 658.

**7237 Ergoflavine**

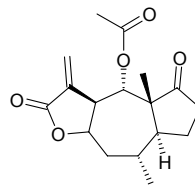
C<sub>30</sub>H<sub>26</sub>O<sub>14</sub> (610.53). mp 350°C (dec). Source: MAI JIAO *Claviceps purpurea*. Ref: 6.

**7238 α-Ergokryptinine**

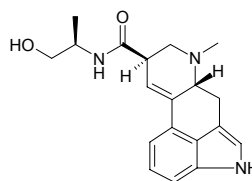
[511-10-4] C<sub>32</sub>H<sub>41</sub>N<sub>5</sub>O<sub>5</sub> (575.71). mp 240~242°C (dec). Source: MAI JIAO *Claviceps purpurea*. Ref: 6.

**7239 Ergolide**

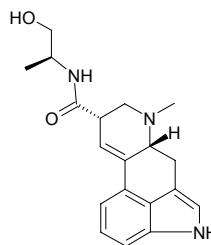
[54999-07-4] C<sub>17</sub>H<sub>22</sub>O<sub>5</sub> (306.36). White acicular crystals, mp 169~170°C, [α]<sub>D</sub><sup>20</sup> = +133° (c = 1.26, CH<sub>2</sub>Cl<sub>2</sub>). Pharm: Anti-inflammatory (NF-κB pathway)<sup>[4415]</sup>, anti-inflammatory (NO production inhibitor)<sup>[4415]</sup>. Source: SHUI CHAO YANG *Inula helianthus-aquatica*. Ref: 430, 4415.

**7240 Ergometrine**

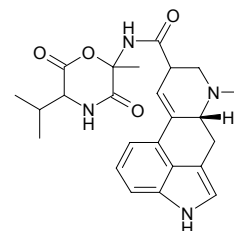
Ergobasine; Ergonovine; Ergostetrine; Ergoklinine; Ergotrate; Syntometrine [60-79-7] C<sub>19</sub>H<sub>23</sub>N<sub>3</sub>O<sub>2</sub> (325.41). Tetrahedral crystals (acetic ester), acicular crystals (benzene), mp 162°C, [α]<sub>D</sub><sup>20</sup> = -16° (c = 1, peridine), [α]<sub>D</sub><sup>20</sup> = -44° (chloroform), [α]<sub>D</sub><sup>20</sup> = +42° (ethanol), easily soluble in methanol, ethanol, acetic ester, acetone, slightly soluble in chloroform.<sup>[5507]</sup> Pharm: Inhibits release of galactin; similar action with arterenol to nerve system; uterine stimulant; used in treatment of post-partum uterus bleeding. Source: MAI JIAO *Claviceps purpurea*, YIN YE SHU *Ipomoea argyrophylla* MO XI GE XUAN HUA *River corymbosa* (the compound was isolated from the plant by A.Hofmann, et al. in 1961)<sup>[5505]</sup>. Ref: 4, 658, 5505, 5507.

**7241 Ergometrinine**

[479-00-5] C<sub>19</sub>H<sub>23</sub>N<sub>3</sub>O<sub>2</sub> (325.41). mp (+) 195~197°C (dec). Source: MAI JIAO *Claviceps purpurea*. Ref: 6.

**7242 Ergosecalinine**

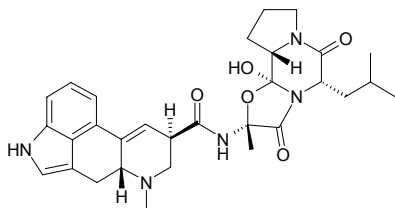
C<sub>24</sub>H<sub>28</sub>N<sub>4</sub>O<sub>4</sub> (436.52). mp 217°C (dec). Source: MAI JIAO *Claviceps purpurea*. Ref: 6.



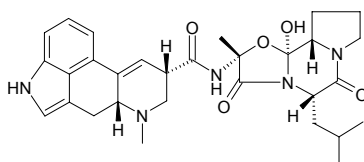


**7243 Ergosine**

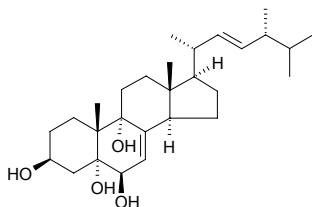
[561-94-4] C<sub>30</sub>H<sub>37</sub>N<sub>5</sub>O<sub>5</sub> (547.66). mp 228°C (dec). **Pharm:** Anti-fertility agent (rat, sc); anti-inflammatory (rat, swollen foot model caused by 5-HT and carrageenan); 5-HT receptor blocker (gpg uterus *in vitro*); adrenergic  $\alpha$ -receptor blocker (gpg testis *in vitro*); contracts blood vessels and increases blood pressure (cat, iv); inhibits release of galactin; oxytocic (rbt uterus iv, *in vivo*); similar action with ergotamine. **Source:** MAI JIAO *Claviceps purpurea*. **Ref:** 6, 658.

**7244 Ergosinine**

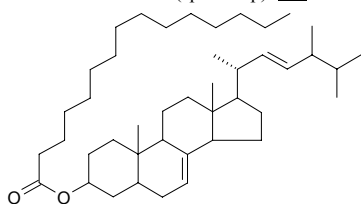
[596-88-3] C<sub>30</sub>H<sub>37</sub>N<sub>5</sub>O<sub>5</sub> (547.66). mp 228°C (dec). **Source:** MAI JIAO *Claviceps purpurea*. **Ref:** 6.

**7245 22E,24R-Ergosta-7,22-diene-3 $\beta$ ,5 $\alpha$ ,6 $\beta$ ,9 $\alpha$ -tetraol**

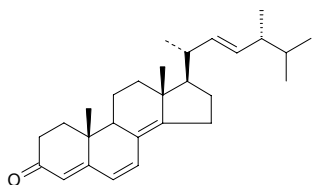
C<sub>28</sub>H<sub>46</sub>O<sub>4</sub> (446.68). White powder. **Source:** DUO ZHI RU GU *Lactarius rolemus*. **Ref:** 752.

**7246 Ergosta-7,22-dien-3 $\beta$ -yl pentadecanoate**

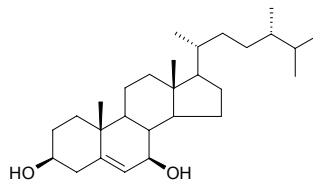
C<sub>43</sub>H<sub>74</sub>O<sub>2</sub> (623.07). White powder, mp 113~115°C. **Source:** LING ZHI *Ganoderma lucidum* (sporocarp). **Ref:** 4810.

**7247 Ergosta-4,6,8(14),22-tetraen-3-one**

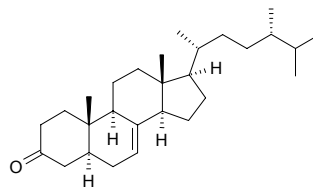
[19254-69-4] C<sub>28</sub>H<sub>40</sub>O (392.63). mp 114~115°C. **Source:** A LI HONG *Fomes officinalis*, LING TRAPA *bispinosa*, ZHU LING *Polyporus umbellatus*. **Ref:** 2, 6.

**7248 (24S)-Ergost-5-en-3 $\beta$ ,7 $\beta$ -diol**

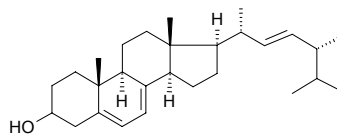
C<sub>28</sub>H<sub>48</sub>O<sub>2</sub> (416.69). Colorless crystals, mp 211~213°C, [ $\alpha$ ]<sub>D</sub><sup>28</sup> = -64.1° (c = 0.05, CHCl<sub>3</sub>). **Source:** *Lobophytum* sp. **Ref:** 4432.

**7249 Ergost-7-en-3-one**

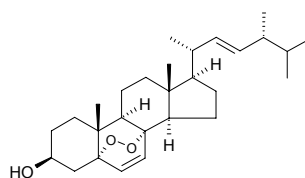
5 $\alpha$ ,8 $\alpha$ -Epi-dioxysterol-6-en-3 $\beta$ -ol C<sub>28</sub>H<sub>46</sub>O (398.68). **Source:** MU TI CENG KONG JUN *Fomes fomentarius* [Syn. *Pyropolyporus fomentarius*; *Boletus fomentarius*; *Polyporus fomentarius*]. **Ref:** 3972.

**7250 Ergosterol**

(22E)-Ergosta-5,7,22-trien-3 $\beta$ -ol [57-87-4] C<sub>28</sub>H<sub>44</sub>O (396.66). mp 163°C. **Pharm:** Transforms into vitamin D<sub>2</sub> under ultraviolet ray. **Source:** A LI HONG *Fomes officinalis*, BAI JIANG CAN *Bombyx mori*, BAI QU CAI *Chelidonium majus*, DONG CHONG XIA CAO *Cordyceps sinensis* (dried fungal stroma growing on larva of a caterpillar: content = 0.213%<sup>[5508]</sup>), FU LING *Poria cocos*, JI ZONG *Collybia albuminosa*, LING ZHI *Ganoderma lucidum*, MA BO *Lasiosphaera fenzlii*, MAI JIAO *Claviceps purpurea*, MU ER *Auricularia auricula*, NIU HUANG *Bos taurus domesticus*; *Bubalus bubalis*, REN GONG YONG CHONG CAO *Cordyceps militaris* cv. (sclerotium and stroma: content = 0.210%<sup>[5508]</sup>), SANG HUANG *Phellinus igniarius*, SHUANG BAO MO GU *Agaricus bisporus*, SONG XUN *Tricholoma matsutake* [Syn. *Armillaria matsutake*], XIANG XUN *Lentinus edodes*, YONG CHONG CAO *Cordyceps militaris* (sclerotium and stroma: content = 0.226%<sup>[5508]</sup>), YUAN CAN SHA *Bombyx mori*, ZHEN MO *Armillariella mellea*, ZHU LING *Polyporus umbellatus*, ZI ZHI *Ganoderma japonicum* [Syn. *Ganoderma sinense*], occurs in many plants. **Ref:** 2, 6, 587, 660, 1407, 5508.

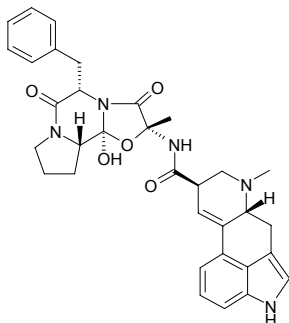
**7251 Ergosterol peroxide**

5 $\alpha$ ,8 $\alpha$ -Epidioxysterol-6,22-dien-3 $\beta$ -ol [2061-64-5] C<sub>28</sub>H<sub>44</sub>O<sub>3</sub> (428.66). Colorless acicular crystals, mp 182~184°C, mp 165~169°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -34° (c = 0.6, CHCl<sub>3</sub>). **Pharm:** Anti-HIV-1 (weakly). **Source:** LING ZHI *Ganoderma lucidum* (dried sporocarp: yield = 0.003%<sup>[4603]</sup>), ZI DING XIANG MO *Lepista nuda*, *Pleurotus eryngii*, *Antrodia camphorata* (fruit: yield = 0.060%dw). **Ref:** 2169, 3003, 4183, 4603.

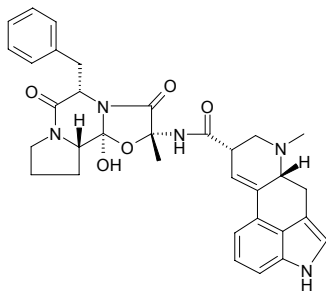


**7252 Ergotamine**

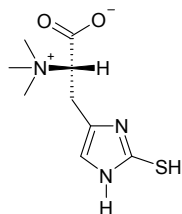
[113-15-5] C<sub>33</sub>H<sub>35</sub>N<sub>5</sub>O<sub>5</sub> (581.68). mp 212~214°C (dec). Pharm: Adrenergic receptor blocker (large dose, to turn over boost pressure action due to adrenalin); smooth muscle stimulant (peripheral blood vessel *in vitro*); relieves headache (recovers normal for over-dilation and excess beat of cerebral arteries); uterine stimulant; toxin (damages vascular endothelial cells in high dose). Source: MAI JIAO *Claviceps purpurea*. Ref: 4, 658.

**7253 Ergotaminine**

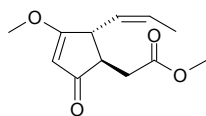
[639-81-6] C<sub>33</sub>H<sub>35</sub>N<sub>5</sub>O<sub>5</sub> (581.68). mp 252°C (dec). Source: MAI JIAO *Claviceps purpurea*. Ref: 6.

**7254 Ergothioneine**

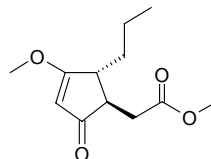
[497-30-3] C<sub>9</sub>H<sub>15</sub>N<sub>3</sub>O<sub>2</sub>S (229.30). mp 290°C (dec). Source: MAI JIAO *Claviceps purpurea*. Ref: 6.

**7255 Erigerenone A**

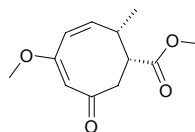
C<sub>12</sub>H<sub>16</sub>O<sub>4</sub> (224.26). Colorless oil, [α]<sub>D</sub><sup>24</sup> = +7.3° (c = 0.14, MeOH). Source: FEI CHENG FEI PENG *Erigeron philadelphicus* (aerial parts). Ref: 4366.

**7256 Erigerenone B**

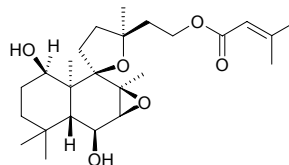
C<sub>12</sub>H<sub>18</sub>O<sub>4</sub> (226.27). Colorless oil, [α]<sub>D</sub><sup>24</sup> = +7.9° (c = 0.25, MeOH). Source: FEI CHENG FEI PENG *Erigeron philadelphicus*, YI NIAN PENG *Erigeron annuus*, SU MEN BAI JIU CAO *Erigeron sumatrensis* (aerial parts). Ref: 4366.

**7257 Erigerenone C**

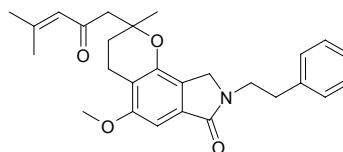
C<sub>12</sub>H<sub>16</sub>O<sub>4</sub> (224.26). Colorless oil, [α]<sub>D</sub><sup>22</sup> = +4.2° (c = 0.24, MeOH). Source: FEI CHENG FEI PENG *Erigeron philadelphicus* (aerial parts). Ref: 4366.

**7258 Erigerol**

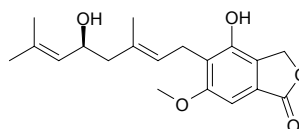
C<sub>25</sub>H<sub>40</sub>O<sub>6</sub> (436.59). Source: FEI CHENG FEI PENG *Erigeron philadelphicus* (aerial parts). Ref: 4338.

**7259 Erinacerin A**

C<sub>27</sub>H<sub>31</sub>NO<sub>4</sub> (433.55). Colorless oil, [α]<sub>D</sub><sup>21</sup> = +0° (c = 0.4, MeOH). Source: HOU TOU JUN *Herichium erinaceus* [Syn. *Hydnum erinaceus*]. Ref: 4513.

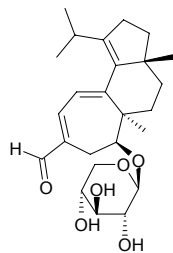
**7260 Erinacerin B**

C<sub>19</sub>H<sub>24</sub>O<sub>5</sub> (332.40). Amorphous powder, [α]<sub>D</sub><sup>24</sup> = +12.7° (c = 0.2, MeOH). Source: HOU TOU JUN *Herichium erinaceus* [Syn. *Hydnum erinaceus*]. Ref: 4513.

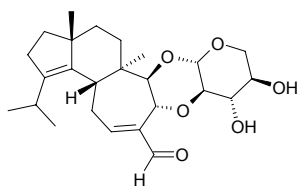


**7261 Erinacine A**

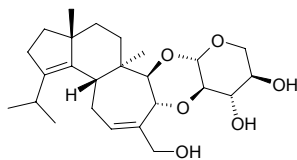
Erinacin A [156101-08-5] C<sub>25</sub>H<sub>36</sub>O<sub>6</sub> (432.56). White crystals mp 74~76°C, [ $\alpha$ ]<sub>D</sub> = +216° (*c* = 0.28, methanol). **Pharm:** Stimulates synthesis of NGF (mus neuroglia astrocytes *in vitro*, 1.0 mmol/L, NGF = 250.1pg/mL, comparing with adrenaline NGF = 69.2pg/mL) **Source:** HOU TOU JUN *Hericium erinaceus* [Syn. *Hydnum erinaceus*]. **Ref:** 948, 1174.

**7262 Erinacine B**

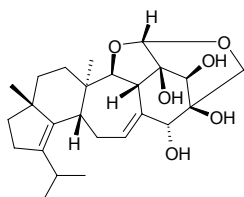
Erinacin B [156101-10-9] C<sub>25</sub>H<sub>36</sub>O<sub>6</sub> (432.56). White crystals mp 125~127°C, [ $\alpha$ ]<sub>D</sub> = -34.9° (*c* = 0.18, methanol). **Pharm:** Stimulates synthesis of NGF (rat spider neuroglia cell *in vitro*, 1.0 mmol/L, NGF = 129pg/mL, comparing with adrenaline NGF = 69pg/mL) **Source:** HOU TOU JUN *Hericium erinaceus* [Syn. *Hydnum erinaceus*]. **Ref:** 948, 1174.

**7263 Erinacine C**

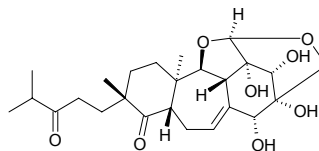
Erinacin C [156101-09-6] C<sub>25</sub>H<sub>38</sub>O<sub>6</sub> (434.58). White crystals mp 115~118°C, [ $\alpha$ ]<sub>D</sub> = -72.5° (*c* = 0.73, methanol). **Pharm:** Stimulates synthesis of NGF (mus spider neuroglia cell *in vitro*, 1.0 mmol/L, NGF = 299pg/mL, comparing with adrenaline NGF = 69.2pg/mL) **Source:** HOU TOU JUN *Hericium erinaceus* [Syn. *Hydnum erinaceus*]. **Ref:** 948, 1174.

**7264 Erinacine E**

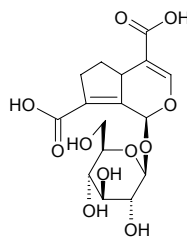
Erinacin E [178232-25-2] C<sub>25</sub>H<sub>36</sub>O<sub>6</sub> (432.56). mp 161~163°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -114° (*c* = 0.50, methanol). **Pharm:** Stimulates synthesis of NGF (rat spider neuroglia cell *in vitro*, 5.0 mmol/L, NGF = 105pg/mL) **Source:** HOU TOU JUN *Hericium erinaceus* [Syn. *Hydnum erinaceus*]. **Ref:** 1175.

**7265 Erinacine G**

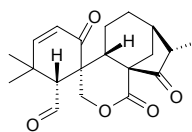
Erinacin G [182927-59-9] C<sub>25</sub>H<sub>36</sub>O<sub>8</sub> (464.56). [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -13° (*c* = 0.25, methanol). **Source:** HOU TOU JUN *Hericium erinaceus* [Syn. *Hydnum erinaceus*]. **Ref:** 1521.

**7266 Erinaside**

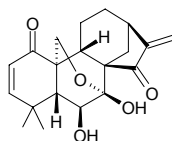
C<sub>16</sub>H<sub>20</sub>O<sub>11</sub> (388.33). Amorphous solid. **Source:** *Erinus alpinus* (frozen whole herb). **Ref:** 5291.

**7267 Eriocalysin A**

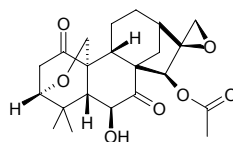
C<sub>20</sub>H<sub>24</sub>O<sub>5</sub> (344.41). mp 242~244°C, [ $\alpha$ ]<sub>D</sub><sup>18.5</sup> = +157.2° (*c* = 0.127, CHCl<sub>3</sub>). **Source:** MAO E XIANG CHA CAI *Rabdosia eriocalyx*. **Ref:** 4067.

**7268 Eriocalysin B**

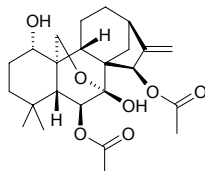
Rabdosianone C<sub>20</sub>H<sub>24</sub>O<sub>5</sub> (344.41). mp 216~218°C, [ $\alpha$ ]<sub>D</sub><sup>18.5</sup> = -185.2° (*c* = 0.108, CHCl<sub>3</sub>). **Source:** MAO E XIANG CHA CAI *Rabdosia eriocalyx*. **Ref:** 4067.

**7269 Eriocalysin C**

C<sub>22</sub>H<sub>28</sub>O<sub>7</sub> (404.46). mp 191.5~192.5°C, [ $\alpha$ ]<sub>D</sub><sup>22</sup> = -67.1° (*c* = 0.26, MeOH). **Source:** MAO E XIANG CHA CAI *Rabdosia eriocalyx*. **Ref:** 4067.

**7270 Eriocalysin D**

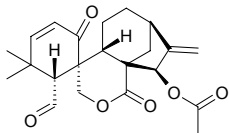
C<sub>24</sub>H<sub>34</sub>O<sub>7</sub> (434.53). mp 208~210°C, [ $\alpha$ ]<sub>D</sub><sup>23</sup> = -64.6° (*c* = 0.27, MeOH). **Source:** MAO E XIANG CHA CAI *Rabdosia eriocalyx*. **Ref:** 4067.



**7271 Eriocalysin E**

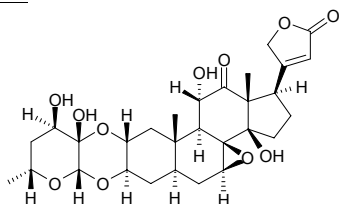
$C_{22}H_{26}O_6$  (386.45). mp 178~179.5°C,  $[\alpha]_D^{23} = +92.7^\circ$  ( $c = 0.27$ , MeOH).

Source: MAO E XIANG CHA CAI *Rabdosia eriocalyx*. Ref: 4067.

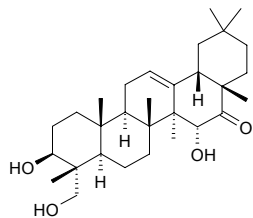
**7272 Eriocarpin**

Desglucosyrioside  $C_{29}H_{38}O_{11}$  (562.62). Pharm: LD<sub>50</sub> (male Swiss Webster mus, ip) = 6.5mg/kg. Source: MAO GUO MA LI JIN *Asclepias eriocarpa*.

Ref: 658.

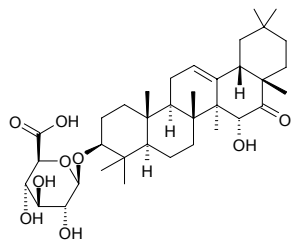
**7273 Eriocarpin B**

3 $\beta$ ,15 $\alpha$ ,23-Trihydroxy-olean-12-en-16-one  $C_{30}H_{48}O_4$  (472.71). Colorless crystals (MeOH), R[20, D] = +11.02° ( $c = 0.003$ , MeOH); colorless lamellar crystals, mp 218~220°C. Source: MAO GUO YU TENG *Derris eriocarpa*, YUN NAN GE TENG *Pueraria peduncularis*. Ref: 665, 2262.

**7274 Eriocarpin C**

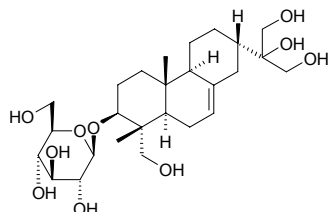
15 $\alpha$ -Hydroxy-16-oxo-olean-12(13)-en-3-*O*- $\beta$ -glucuronopyranoside  $C_{36}H_{56}O_9$  (632.84). Colorless crystals (MeOH), R[20, D] = -20.67° ( $c = 0.0052$ , MeOH).

Source: MAO GUO YU TENG *Derris eriocarpa*. Ref: 2262.

**7275 Eriocaside A**

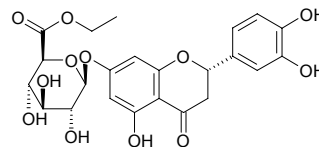
$C_{26}H_{44}O_{10}$  (516.63).  $[\alpha]_D^{21} = +0.83^\circ$  ( $c = 0.12$ , MeOH). Source: MAO E

XIANG CHA CAI *Rabdosia eriocalyx*. Ref: 4067.

**7276 Eriodictyl 7-*O*- $\beta$ -D-(6'-ethyl ester)-glucuronopyranoside**

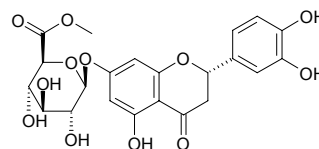
$C_{23}H_{24}O_{12}$  (492.44). Yellow needles (MeOH), mp 158~161°C,  $[\alpha]_D^{20} = -58.1^\circ$  ( $c = 0.56$ , MeOH). Source: NIU JIN TIAO *Dichotomanthes tristaniaecarpa*.

Ref: 2263.

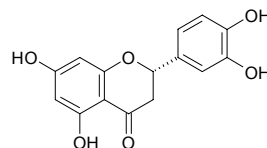
**7277 Eriodictyl 7-*O*- $\beta$ -D-(6'-methyl ester)-glucuronopyranoside**

$C_{22}H_{22}O_{12}$  (478.41). Yellow needles (MeOH), mp 121~123°C,  $[\alpha]_D = -71.3^\circ$  ( $c = 0.61$ , MeOH). Source: NIU JIN TIAO *Dichotomanthes tristaniaecarpa*.

Ref: 2263.

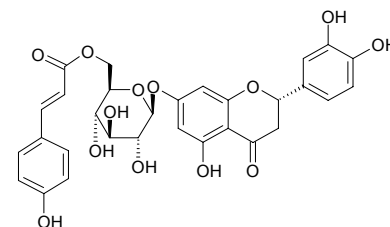
**7278 Eriodictyol**

[552-58-9]  $C_{15}H_{12}O_6$  (288.26). mp 267°C. Pharm: Antibacterial (*Pseudomonas maltophilia*, *Enterobacter cloacae*); diuretic (rbt); induces gene expression of pea nodule bacteria and accrete host *Pisum sativum*; larvacide (inhibits *Heliothis zea* larva growth); aldose reductase inhibitor (rat eye lens, 10<sup>-5</sup>mg/L, InRt = 90%); anti-inflammatory (modulator of cytokine network: inhibits LPS-stimulated TNF- $\alpha$  release in RAW264.7 macrophages, IC<sub>50</sub>  $\approx$  50 $\mu$ mol/L)<sup>[44]61</sup>. Source: BA DAN XING REN *Prunus amygdalus*, DA CHI JI *Onopordum acanthium*, HUANG QIN *Scutellaria baicalensis*, JIN JI ZE LAN *Eupatorium subhastatum*, LI MU *Lyonia ovalifolia*, OU BO HE *Mentha longifolia*, YOU GAN YE *Phyllanthus emblica* (branch and leaf). Ref: 6, 658, 660, 4205, 4416.

**7279 (S)-Eriodictyol-7-*O*-(6''-*O*-*trans*-*p*-coumaroyl)- $\beta$ -D-glucopyranoside**

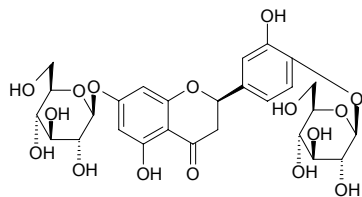
$C_{30}H_{28}O_{13}$  (596.55). Yellow amorphous powder,  $[\alpha]_D^{28} = -92.8^\circ$  ( $c = 0.36$ , MeOH).

Source: YOU GAN YE *Phyllanthus emblica* (branch and leaf). Ref: 4205.

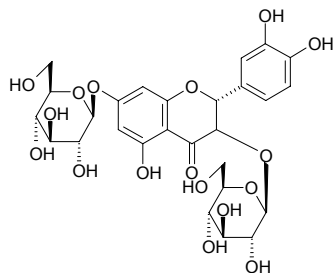


**7280 (2R)-Eriodictyol-7,4'-di-O-β-D-glucopyranoside**

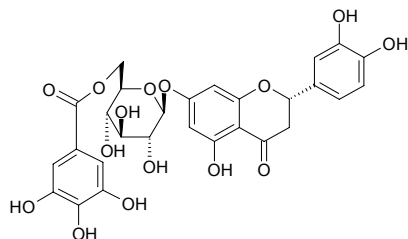
C<sub>27</sub>H<sub>32</sub>O<sub>16</sub> (612.55). Pale yellow amorphous solid. **Pharm:** Antioxidant (hydroxyl radical, IC<sub>50</sub> = 0.18mmol/L, control EGCG, IC<sub>50</sub> = 0.58mmol/L; superoxide anion, IC<sub>50</sub> = 0.25mmol/L, EGCG, IC<sub>50</sub> = 0.53mmol/L). **Source:** HU JI SHENG *Viscum coloratum* (branch and leaf: yield = 0.0008%dw). **Ref:** 920.

**7281 Eriodictyol-7,3-diglucoside**

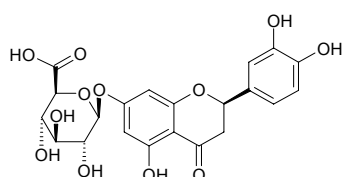
C<sub>27</sub>H<sub>32</sub>O<sub>17</sub> (628.55). **Source:** SHAN ZHA *Crataegus pinnatifida*. **Ref:** 2.

**7282 (S)-Eriodictyol-7-O-(6''-O-galloyl)-β-D-glucopyranoside**

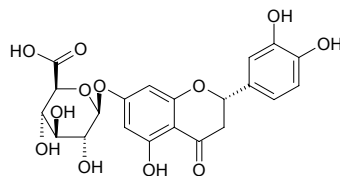
C<sub>28</sub>H<sub>26</sub>O<sub>15</sub> (602.51). Yellow amorphous powder, [α]<sub>D</sub><sup>28</sup> = -79.4° (c = 0.41, MeOH). **Source:** YOU GAN YE *Phyllanthus emblica* (branch and leaf). **Ref:** 4205.

**7283 (2R)-Eriodictyol-7-O-β-D-glucopyranosiduronic acid**

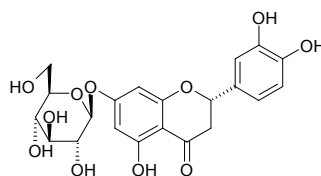
C<sub>21</sub>H<sub>20</sub>O<sub>12</sub> (464.39). Yellow powder, [α]<sub>D</sub><sup>24</sup> = -54.5° (c = 0.10, MeOH). **Pharm:** Aldose reductase inhibitor (rat lens, IC<sub>50</sub> = 1.5μmol/L, control Epalrestat, IC<sub>50</sub> = 0.072μmol/L)<sup>[4214]</sup>. **Source:** LU SHAN SHI WEI *Pyrrosia shearerii* (dried leaf: content = 0.043%)<sup>[5508]</sup>, SHI WEI *Pyrrosia lingua* (dried leaf: content scope of 3 origins = 0.026%~0.168%, mean content = 0.0763%)<sup>[5508]</sup>, XI NAN SHI WEI *Pyrrosia gralla* (dried leaf: content = 0.037%)<sup>[5508]</sup>, YE JU HUA *Chrysanthemum indicum* (flower-head: yield = 0.0023%)<sup>[4214]</sup>, YOU BING SHI WEI *Pyrrosia petiolosa* (dried leaf: content scope of 12 origins = 0.861%~2.743%, mean content = 1.613%)<sup>[5508]</sup>, ZHAN MAO SHI WEI *Pyrrosia drakeana* (dried leaf: content = 0.051%)<sup>[5508]</sup>. **Ref:** 4214, 5508.

**7284 (2S)-Eriodictyol-7-O-β-D-glucopyranosiduronic acid**

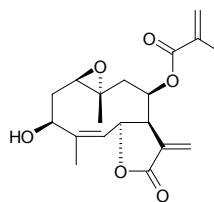
C<sub>21</sub>H<sub>20</sub>O<sub>12</sub> (464.39). Yellow powder, [α]<sub>D</sub><sup>26</sup> = -35.6° (c = 0.20, MeOH). **Pharm:** Aldose reductase inhibitor (rat lens, IC<sub>50</sub> = 2.1μmol/L, control Epalrestat, IC<sub>50</sub> = 0.072μmol/L). **Source:** YE JU HUA *Chrysanthemum indicum* (flower: yield = 0.0027%). **Ref:** 4214.

**7285 Eriodictyol-7-glucoside**

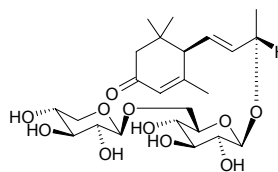
[In DNP] C<sub>21</sub>H<sub>22</sub>O<sub>11</sub> (450.40). mp 175~177°C. **Source:** SHUI YANG ZHI YE *Salix purpurea*, YOU GAN YE *Phyllanthus emblica* (branch and leaf). **Ref:** 6, 4205.

**7286 Erioflorin**

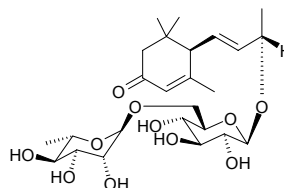
C<sub>19</sub>H<sub>24</sub>O<sub>6</sub> (348.40). **Source:** *Viguiera eriophora* ssp. *eriphora* (aerial parts), *Viguiera puruana* (aerial parts). **Ref:** 5090.

**7287 Eriojaposide A**

(6R,9R)-3-Oxo-α-ionyl-9-O-β-xylopyranosyl-(1''→6')-β-glucopyranoside C<sub>24</sub>H<sub>38</sub>O<sub>11</sub> (502.56). Amorphous powder, [α]<sub>D</sub><sup>23</sup> = +26.7° (c = 1.0, MeOH). **Source:** PI PA YE *Eriobotrya japonica* (branch and leaf). **Ref:** 3061.

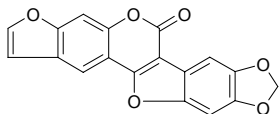
**7288 Eriojaposide B**

(6R,9R)-3-Oxo-α-ionyl-9-O-α-rhamnopyranosyl-(1''→6')-β-glucopyranoside C<sub>25</sub>H<sub>40</sub>O<sub>11</sub> (516.59). Amorphous powder, [α]<sub>D</sub><sup>23</sup> = +33.5° (c = 1.0, MeOH). **Source:** PI PA YE *Eriobotrya japonica* (branch and leaf). **Ref:** 3061.

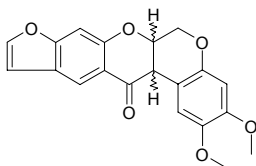


**7289 Erosnine**

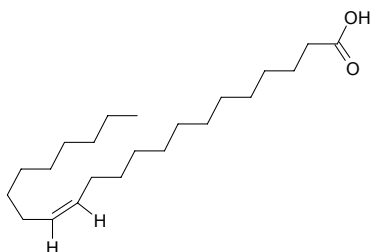
[In DNP] C<sub>18</sub>H<sub>8</sub>O<sub>6</sub> (320.26). mp 350°C (dec). Source: DI GUA ZI *Pachyrhizus erosus*. Ref: 6.

**7290 Erosone**

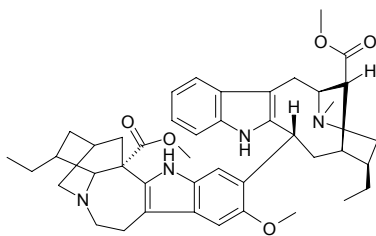
[15236-21-2] C<sub>20</sub>H<sub>16</sub>O<sub>6</sub> (352.35). mp 218°C. Source: DI GUA ZI *Pachyrhizus erosus*. Ref: 6.

**7291 Erucic acid**

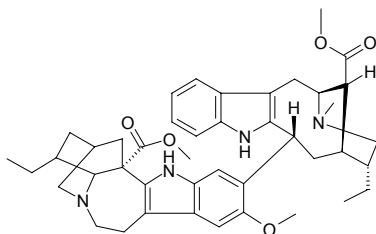
*cis*-13-Docosenoic acid [112-86-7] C<sub>22</sub>H<sub>42</sub>O<sub>2</sub> (338.58). mp 33.5–34.0°C, bp 241–243°C/5mmHg. Source: BO NIANG HAO *Descurainia sophia*, GUI ZHU XIANG *Cheiranthus cheiri*, HAN LIAN HUA *Tropaeolum majus*, LAI FU ZI *Raphanus sativus*, YUN TAI ZI *Brassica campestris* [Syn. *Brassica campestris* var. *oleifera*]. Ref: 6, 658, 660.

**7292 Ervdivaricatine A**

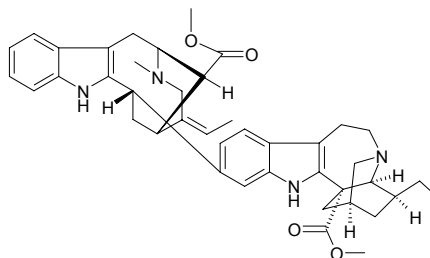
C<sub>43</sub>H<sub>56</sub>N<sub>4</sub>O<sub>5</sub> (708.95). mp 217–220°C. Source: DAN BAN GOU YA HUA *Ervatamia divaricata*. Ref: 802.

**7293 Ervdivaricatine B**

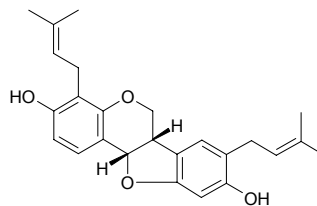
C<sub>43</sub>H<sub>56</sub>N<sub>4</sub>O<sub>5</sub> (708.95). mp 190°C. Source: DAN BAN GOU YA HUA *Ervatamia divaricata*. Ref: 802.

**7294 Ervahanine A**

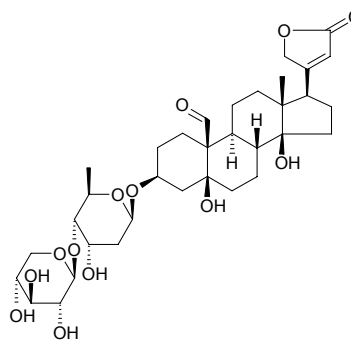
C<sub>42</sub>H<sub>50</sub>N<sub>4</sub>O<sub>4</sub> (674.89). Source: SAN FANG HUA XU HONG YUE GUI *Tabernaemontana corymbosa*. Ref: 3403.

**7295 Erybraedin C**

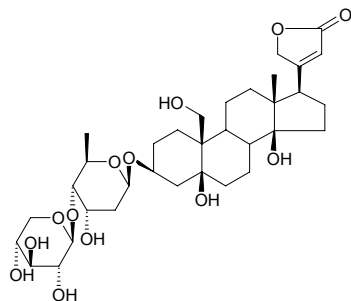
C<sub>25</sub>H<sub>28</sub>O<sub>4</sub> (392.50). [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -17° (c = 0.5, MeOH). Pharm: Cytotoxic (KB, IC<sub>50</sub> = (23.7±0.5)μmol/L, control Helenalin, IC<sub>50</sub> = (0.64±0.08)μmol/L, Melphalan, IC<sub>50</sub> = (6.0±0.5)μmol/L; Mono-Mac-6, IC<sub>50</sub> = (28.6±1.4)μmol/L, Helenalin, IC<sub>50</sub> = (3.1±0.3)μmol/L; Jurkat-T, IC<sub>50</sub> = (21.4±0.5)μmol/L, Helenalin, IC<sub>50</sub> = (1.14±0.08)μmol/L, Melphalan, IC<sub>50</sub> = (9.1±0.8)μmol/L). Source: *Bituminaria morisiana* (leaf). Ref: 5077.

**7296 Erychroside**

[630-65-9] C<sub>34</sub>H<sub>50</sub>O<sub>13</sub> (666.77). mp 243–246°C, [ $\alpha$ ]<sub>D</sub> = +18° (methanol). Pharm: Cardiotonic; antihypertensive. Source: GUI ZHU TANG JIE *Erysimum cheiranthoides*. Ref: 6, 661.

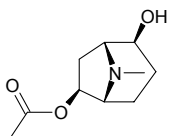
**7297 Erychrosol**

C<sub>34</sub>H<sub>52</sub>O<sub>13</sub> (668.79). Source: GUI ZHU TANG JIE *Erysimum cheiranthoides*. Ref: 6.

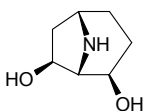


**7298 Erycibe alkaloid II**

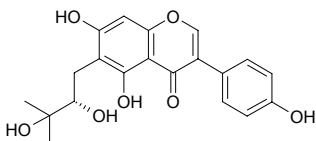
$C_{10}H_{17}NO_3$  (199.25). White mucilage,  $[\alpha]_D^{20} = -5.56^\circ$  ( $c = 0.90$ ,  $CHCl_3$ ); benzoate: white tiny acicular crystals (benzene or acetone), mp 160–161°C. **Pharm:** Antihypertensive (rbt, iv, 0.5mL of 0.025% solution); causes miosis. **Source:** DING GONG TENG *Erycibe obtusifolia*. **Ref:** 661.

**7299 Erycibelline**

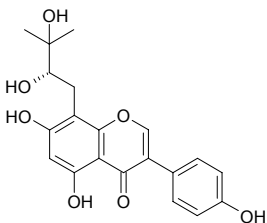
2β,7β-Dihydroxynortropine [107633-95-4]  $C_7H_{13}NO_2$  (143.19). Alkaline colorless oleaginous,  $[\alpha]_D^{10} = -12.5^\circ$  ( $c = 0.57$ , ethanol). **Source:** AO MAI DING GONG TENG *Erycibe elliptilimba*. **Ref:** 68.

**7300 Erycibenin A**

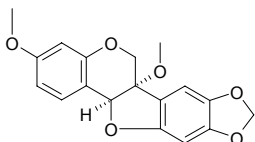
$C_{20}H_{20}O_7$  (372.38). **Pharm:** Hepatoprotective (mus primary cultured hepatocytes, antihepatotoxin induced by *D*-galactosamine (GalN),  $IC_{50} = 79\mu\text{mol/L}$ , control Silybin  $IC_{50} = 41\mu\text{mol/L}$ ). **Source:** GUANG BU DING GONG TENG *Erycibe expansa*. **Ref:** 4095.

**7301 Erycibenin B**

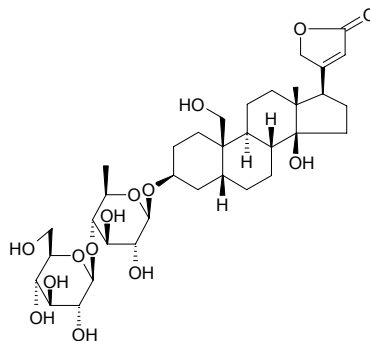
$C_{20}H_{20}O_7$  (372.38). **Pharm:** Hepatoprotective (mus primary cultured hepatocytes, antihepatotoxin induced by *D*-galactosamine (GalN),  $100\mu\text{mol/L}$ ,  $\text{InRt} = (31.9 \pm 0.3)\%$ , weak, control Silybin,  $100\mu\text{mol/L}$ ,  $\text{InRt} = (77.0 \pm 5.5)\%$ ). **Source:** GUANG BU DING GONG TENG *Erycibe expansa*. **Ref:** 4095.

**7302 Erycibenin C**

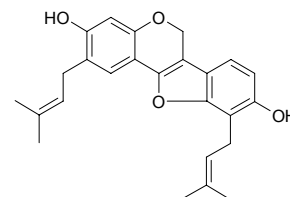
$C_{18}H_{16}O_6$  (328.32). **Pharm:** Hepatoprotective (mus primary cultured hepatocytes, antihepatotoxin induced by *D*-galactosamine (GalN),  $100\mu\text{mol/L}$ ,  $\text{InRt} = (10.5 \pm 2.7)\%$ , weak, control Silybin,  $100\mu\text{mol/L}$ ,  $\text{InRt} = (77.0 \pm 5.5)\%$ ). **Source:** GUANG BU DING GONG TENG *Erycibe expansa*. **Ref:** 4095.

**7303 Erycordine**

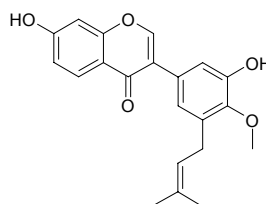
[13428-83-6]  $C_{35}H_{54}O_{14}$  (698.81). **Pharm:** Cardiotonic; increases coronary flow; antihypertensive. **Source:** GUI ZHU TANG JIE *Erysimum cheiranthoides*, HUAN YANG SHEN YE TANG JIE *Erysimum crepidifolium*. **Ref:** 6, 658.

**7304 Erycrystalgallin**

$C_{25}H_{26}O_4$  (390.48). mp 179–180°C. **Pharm:** Antimalarial (antiplasmodial in *in vitro*, *Plasmodium falciparum*, W2 strain,  $IC_{50} = (20.1 \pm 3.6)\mu\text{mol/L}$ , control Quinine,  $IC_{50} = (0.21 \pm 0.01)\mu\text{mol/L}$ ; D6 strain,  $IC_{50} = (19.0 \pm 0.9)\mu\text{mol/L}$ , Quinine,  $IC_{50} = (0.042 \pm 0.002)\mu\text{mol/L}$ ). **Source:** A BI XI NI YA CI TONG *Erythrina abyssinica* (root cortex). **Ref:** 5420.

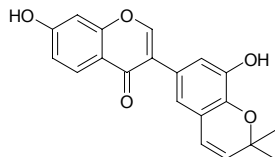
**7305 Erylatissin A**

7,3'-Dihydroxy-4'-methoxy-5'-(γ,γ-dimethylallyl)isoflavone  $C_{21}H_{20}O_5$  (352.39). Brown paste. **Pharm:** Antibacterial (*Escherichia coli*, MIA = 5.00μg, control Chloramphenicol, MIA = 0.001μg; *Staphylococcus aureus*, MIA = 0.10μg, Chloramphenicol, MIA = 0.0001μg; *Bacillus subtilis*, MIA = 0.10μg, Chloramphenicol, MIA = 0.0001μg); antifungal (*Candida mycoderma*, MIA = 0.02μg, control Miconazole, MIA = 0.0001μg); antioxidant (DPPH scavenger, TLC, MIA = 0.5μg,  $IC_{50} = 780\mu\text{g/mL}$ ; control Quercetin, MIA < 0.05μg,  $IC_{50} = 7\mu\text{g/mL}$ , Gallic acid, MIA < 0.05μg,  $IC_{50} = 4\mu\text{g/mL}$ ; Ascorbic acid, MIA < 0.10μg,  $IC_{50} = 18\mu\text{g/mL}$ ). **Source:** JI KUAN CI TONG *Erythrina latissima* (stem wood). **Ref:** 5247.

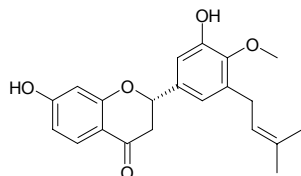


**7306 Erylatissin B**

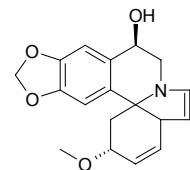
7,3'-Dihydroxy-6",6"-dimethyl-4",5"-dehydropyrano [2",3":4',5']isoflavone C<sub>20</sub>H<sub>16</sub>O<sub>5</sub> (336.35). Yellowish paste. **Pharm:** Antibacterial (*Staphylococcus aureus*, MIA = 1.00µg, Chloramphenicol, MIA = 0.0001µg; *Bacillus subtilis*, MIA = 1.00µg, Chloramphenicol, MIA = 0.0001µg); antifungal (*Candida mycoderma*, MIA = 1.00µg, control Miconazole, MIA = 0.0001µg); antioxidant (DPPH scavenger, TLC, MIA = 10µg, IC<sub>50</sub> > 1000µg/mL; control Quercetin, MIA < 0.05µg, IC<sub>50</sub> = 7µg/mL, Gallic acid, MIA < 0.05µg, IC<sub>50</sub> = 4µg/mL; Ascorbic acid, MIA < 0.10µg, IC<sub>50</sub> = 18µg/mL). **Source:** JI KUAN CI TONG *Erythrina latissima* (stem wood). **Ref:** 5247.

**7307 Erylatissin C**

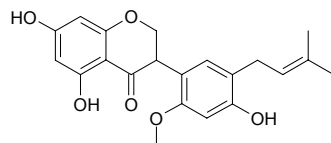
(-)-7,3'-Dihydroxy-4'-methoxy-5'-(γ,γ-dimethylallyl)flavanone C<sub>21</sub>H<sub>22</sub>O<sub>5</sub> (354.41). Yellow solid, mp 56–59°C, [α]<sub>D</sub> = -78° (c = 0.025, MeOH). **Pharm:** Antibacterial (*Escherichia coli*, MIA = 0.50µg, control Chloramphenicol, MIA = 0.001µg; *Staphylococcus aureus*, MIA = 0.10µg, Chloramphenicol, MIA = 0.0001µg; *Bacillus subtilis*, MIA = 0.01µg, Chloramphenicol, MIA = 0.0001µg); antifungal (*Candida mycoderma*, MIA = 0.01µg, control Miconazole, MIA = 0.0001µg); antioxidant (DPPH scavenger, TLC, MIA = 0.5µg, IC<sub>50</sub> = 710µg/mL; control Quercetin, MIA < 0.05µg, IC<sub>50</sub> = 7µg/mL, Gallic acid, MIA < 0.05µg, IC<sub>50</sub> = 4µg/mL; Ascorbic acid, MIA < 0.10µg, IC<sub>50</sub> = 18µg/mL). **Source:** JI KUAN CI TONG *Erythrina latissima* (stem wood). **Ref:** 5247.

**7308 Eryphrinine**

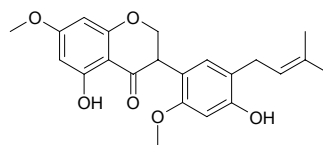
C<sub>18</sub>H<sub>19</sub>NO<sub>4</sub> (313.36). **Source:** JI GUAN CI TONG *Erythrina crysragalli* (the compound was isolated from the plant in 1973). **Ref:** 5505.

**7309 Erypoeigin C**

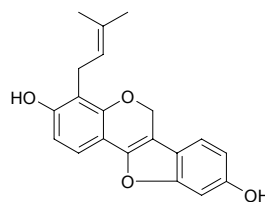
C<sub>21</sub>H<sub>22</sub>O<sub>6</sub> (370.41). Colorless oil. **Source:** SHAN DI CI TONG *Erythrina poeppigiana*. **Ref:** 1972.

**7310 Erypoeigin D**

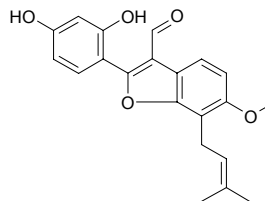
C<sub>22</sub>H<sub>24</sub>O<sub>6</sub> (384.43). Colorless oil. **Source:** SHAN DI CI TONG *Erythrina poeppigiana*. **Ref:** 1972.

**7311 Erypoeigin E**

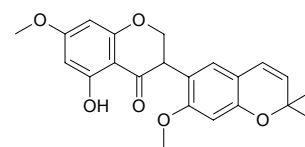
C<sub>20</sub>H<sub>18</sub>O<sub>4</sub> (322.36). Yellowish oil. **Source:** SHAN DI CI TONG *Erythrina poeppigiana*. **Ref:** 1972.

**7312 Erypoeigin F**

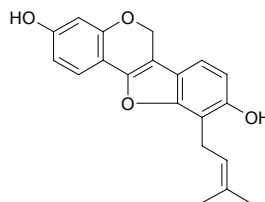
C<sub>21</sub>H<sub>20</sub>O<sub>5</sub> (352.39). Amorphous powder. **Pharm:** Antibacterial (13 strains of methicillin-resistant *Staphylococcus aureus* (MRSA), for 13/13 active). **Source:** SHAN DI CI TONG *Erythrina poeppigiana* (root). **Ref:** 3400.

**7313 Erypoeigin G**

C<sub>22</sub>H<sub>22</sub>O<sub>6</sub> (382.42). Amorphous powder, [α]<sub>D</sub> = ±0°. **Pharm:** Antibacterial inactive (13 strains of methicillin-resistant *Staphylococcus aureus* (MRSA), for 13/13 inactive). **Source:** SHAN DI CI TONG *Erythrina poeppigiana* (root). **Ref:** 3400.

**7314 Erypoeigin H**

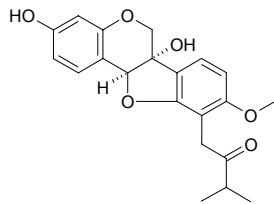
C<sub>20</sub>H<sub>18</sub>O<sub>4</sub> (326.36). Amorphous powder. **Pharm:** Antibacterial (13 strains of methicillin-resistant *Staphylococcus aureus* (MRSA), for 13/13 active). **Source:** SHAN DI CI TONG *Erythrina poeppigiana* (root). **Ref:** 3400.



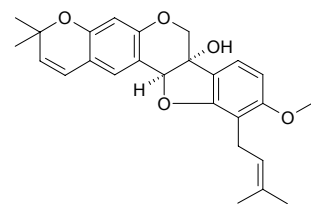


**7315 Erypoeigin I**

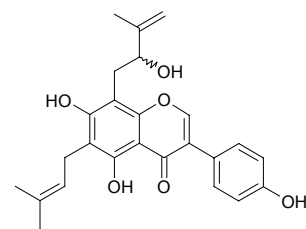
$C_{21}H_{22}O_6$  (370.41). Amorphous powder,  $[\alpha]_D = -71^\circ$  ( $c = 0.1$ , MeOH). **Pharm:** Antibacterial inactive (13 strains of methicillin-resistant *Staphylococcus aureus* (MRSA), for 13/13 inactive). **Source:** SHAN DI CI TONG *Erythrina poeppigiana* (root). **Ref:** 3400.

**7316 Erypoeigin J**

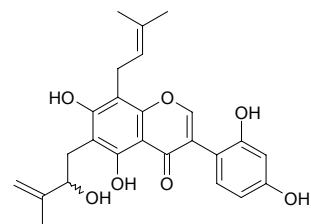
$C_{26}H_{28}O_5$  (420.51). Amorphous powder,  $[\alpha]_D = -96^\circ$  ( $c = 0.1$ , MeOH). **Pharm:** Antibacterial inactive (13 strains of methicillin-resistant *Staphylococcus aureus* (MRSA), for 13/13 inactive). **Source:** SHAN DI CI TONG *Erythrina poeppigiana* (root). **Ref:** 3400.

**7317 Erysenegalensein E**

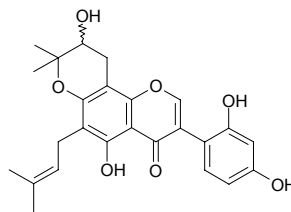
$C_{25}H_{26}O_6$  (422.48). Colorless amorphous,  $[\alpha]_D = +4.8^\circ$  ( $c = 0.056$ , EtOH). **Pharm:** Antifungal (*Trichophyton mentagrophytes*, 500–1000  $\mu\text{g}/\text{mL}$ )<sup>[2347]</sup>, cytotoxic (KB,  $EC_{50} = 6.25 \mu\text{g}/\text{mL}$ ). **Source:** CI TONG *Erythrina variegata* [Syn. *Erythrina indica*] (stem cortex), PAN YUAN YU TENG *Derris scandens*. **Ref:** 2347, 5220.

**7318 Erysenegalensein N**

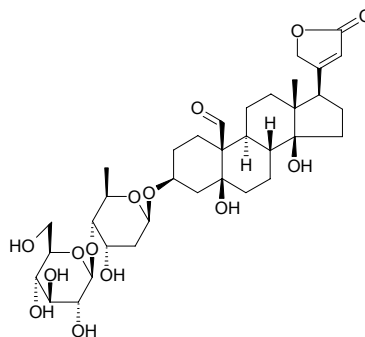
5,7,2',4'-Tetrahydroxy-6-(2''-hydroxy-3''-methylbut-3''-enyl)-8-( $\gamma,\gamma$ -dimethylallyl) isoflavone  $C_{25}H_{26}O_7$  (438.48). Pale-yellow oil,  $[\alpha]_D^{20} = -3.3^\circ$  ( $c = 0.8$ , MeOH). **Source:** SAI NEI JIA ER CI TONG *Erythrina senegalensis*. **Ref:** 2344.

**7319 Erysenegalensein O**

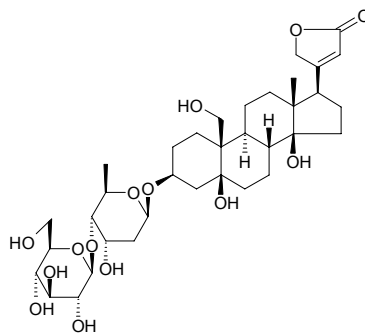
5,2',4'-Trihydroxy-6-( $\gamma,\gamma$ -dimethylallyl)-3''-hydroxy-2''-dimethyldihydropyrano[5''',6''';8,7]isoflavone  $C_{25}H_{26}O_7$  (438.48). Pale-yellow oil. **Source:** SAI NEI JIA ER CI TONG *Erythrina senegalensis*. **Ref:** 2344.

**7320 Erysimoside**

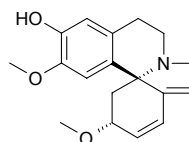
$C_{35}H_{52}O_{14}$  (696.80). mp 170–173°C. **Pharm:** Cardiotonic. **Source:** CHANG SHUO HUANG MA *Corchorus olitorius*, GUI ZHU TANG JIE *Erysimum cheiranthoides*, HUANG MA YE *Corchorus capsularis*, HUANG MA ZI *Corchorus capsularis*, KANG PI DU MAO XUAN HUA *Strophanthus kombe*, LING LAN *Convallaria keiskei* [Syn. *Convallaria majalis*], MENG GU CE JIN ZHAN HUA *Adonis mongolica*, TANG JIE *Erysimum diffusum*. **Ref:** 6, 658.

**7321 Erysimosol**

3-O-Digilanidobioside [11006-14-7]  $C_{35}H_{54}O_{14}$  (698.81). **Source:** GUI ZHU TANG JIE *Erysimum cheiranthoides*. **Ref:** 6.

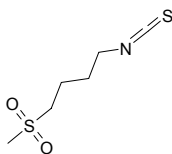
**7322 Erysoidine**

[7290-03-1]  $C_{18}H_{21}NO_3$  (299.37). mp 204–205°C. **Source:** QIAO MU CI TONG *Erythrina arborescens*. **Ref:** 6.

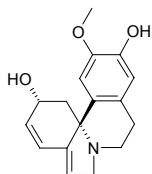


**7323 Erysoline**

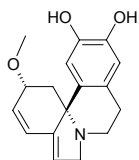
[504-84-7] C<sub>6</sub>H<sub>11</sub>NO<sub>2</sub>S<sub>2</sub> (193.29). mp 59–60°C. **Pharm:** Antibacterial (gram-positive bacteria, gram-negative bacteria, acid-fast bacteria, EC = 125–500 μg/mL); antiprotozoal (*Trichomonas vaginalis* and *Trypanosoma equiperdum*, *in vitro*, EC = 1.0 μg/mL, *Castellanella gambiense*, *in vitro*, EC = 0.5–2.5 μg/mL); antiviral (*in vitro*); cytotoxic (EAC *in vitro*, 500 μg/mL, after 24h completely inhibition). **Source:** A FU HAN TANG JIE *Erysimum perofskianum*, QUN XIN CAI *Cardaria draba*, MAO DU XING CAI *Lepidium draba*. **Ref:** 661.

**7324 Erysonine**

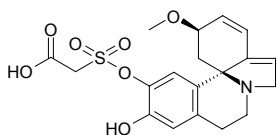
[7290-05-3] C<sub>17</sub>H<sub>19</sub>NO<sub>3</sub> (285.35). **Pharm:** Neuromuscular blocker. **Source:** JIA LE BI CI TONG *Erythrina caribea*, HEI CI CI TONG *Erythrina melanacantha*. **Ref:** 658.

**7325 Erysoipine**

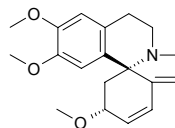
C<sub>17</sub>H<sub>19</sub>NO<sub>3</sub> (285.35). mp 242–243°C. **Pharm:** Ganglionic blocker (curariform action). **Source:** A BI XI NI YA CI TONG *Erythrina abyssinica*, CI TONG *Erythrina variegata* [Syn. *Erythrina indica*], FU KE CI TONG *Erythrina folkersii*, QIAO MU CI TONG *Erythrina arborescens*, SHU WEI CAO HUA CI TONG *Erythrina salviiflora*, YING HE CI TONG *Erythrina lithosperma*. **Ref:** 6, 658.

**7326 Erysothiopine**

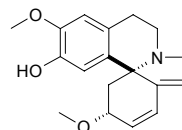
[In DNP] C<sub>19</sub>H<sub>21</sub>NO<sub>7</sub>S (407.45). Hydrate crystals (solution of ethanol in water), mp 168–169°C, [α]<sub>D</sub><sup>25</sup> = +194° (ethanol). **Pharm:** Neuromuscular blocker. **Source:** HUI CI TONG *Erythrina glauca*. **Ref:** 658.

**7327 Erysoitrine**

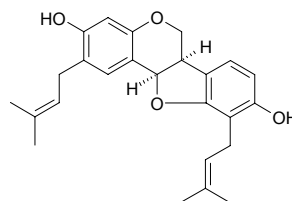
[27740-43-8] C<sub>19</sub>H<sub>23</sub>NO<sub>3</sub> (313.40). Free alkali: mp 95–97°C (light petroleum ether); hydrochloride: mp 206–208°C (ether–ethanol); bitter acid salt: mp 162–163, [α]<sub>D</sub><sup>21</sup> = +142° (c = 0.4, ethanol). **Pharm:** Antineoplastic; neuromuscular blocker; uterine stimulant. **Source:** GOU QI XIAO BO *Berberis zycium*, SHUAN ZHUANG CI TONG *Erythrina suberosa*. **Ref:** 661.

**7328 Erysovine**

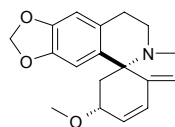
[466-72-8] C<sub>18</sub>H<sub>21</sub>NO<sub>3</sub> (299.37). mp 178–179°C. **Pharm:** Ganglionic blocker (curariform action). **Source:** CI TONG *Erythrina variegata* [Syn. *Erythrina indica*], FU KE CI TONG *Erythrina folkersii*, QIAO MU CI TONG *Erythrina arborescens*, SHU WEI CAO HUA CI TONG *Erythrina salviiflora*. **Ref:** 6, 658.

**7329 Erythrabssin II**

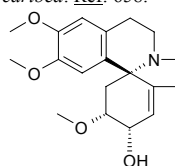
C<sub>25</sub>H<sub>28</sub>O<sub>4</sub> (392.50). **Pharm:** Antimalarial (antiplasmodial *in vitro*, *Plasmodium falciparum*, W2 strain, IC<sub>50</sub> = (6.5±0.6) μmol/L, control Quinine, IC<sub>50</sub> = (0.21±0.01) μmol/L; D6 strain, IC<sub>50</sub> = (8.1±1.4) μmol/L, Quinine, IC<sub>50</sub> = (0.042±0.002) μmol/L). **Source:** A BI XI NI YA CI TONG *Erythrina abyssinica* (root cortex). **Ref:** 5420.

**7330 Erythraline**

[466-77-3] C<sub>18</sub>H<sub>19</sub>NO<sub>3</sub> (297.36). mp 106–107°C. **Pharm:** Ganglionic blocker (curariform action). **Source:** HAI TONG PI *Erythrina variegata* var. *orientalis*. **Ref:** 6, 658.

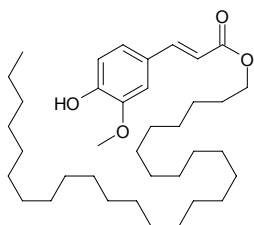
**7331 Erythratidine**

[41431-22-5] C<sub>19</sub>H<sub>25</sub>NO<sub>4</sub> (331.42). **Pharm:** Neuromuscular blocker. **Source:** HEI CI CI TONG *Erythrina melanacantha*, JIA LE BI CI TONG *Erythrina caribea*. **Ref:** 658.

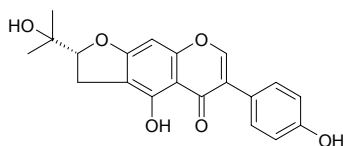


**7332 Erythrinassinate B**

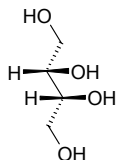
$C_{37}H_{64}O_4$  (572.92). Source: CI TONG *Erythrina variegata* [Syn. *Erythrina indica*] (stem cortex). Ref: 5220.

**7333 Erythrinin C**

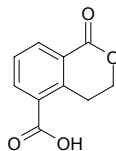
[63807-85-2]  $C_{20}H_{18}O_6$  (354.36). Source: *Glycyrrhiza* sp. Ref: 2431.

**7334 Erythritol**

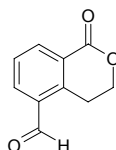
Threitol [149-32-6]  $C_4H_{10}O_4$  (122.12). Amorphous powder,  $[\alpha]_D^{23} = 0^\circ$ , mp *D*(+) 88.5~89.0°C, *L*(-) 88°C, *dl* 72 °C; mp 121.5°C, bp 329~331°C. Pharm: Coronary vasodilator. Source: BAO CHUN HUA *Primula malacoides*, BEI SHA SHEN *Glehnia littoralis* (fruit), SHI LUO ZI *Anethum graveolens* (fruit), YING SU KE *Papaver somniferum*, ZHANG YE BAN XIA *Pinellia pedatisecta*, ZHEN MO *Armillariella mellea*. Ref: 6, 586, 658, 3525, 4177.

**7335 Erythrocentauric acid**

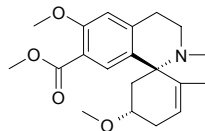
5-Carboxyl-3,4-dihydrogen-1*H*-2-benzopyran-1-one  $C_{10}H_8O_4$  (192.17). Tubbiness colorless transparent needles, mp 251~253°C. Source: QIN JIAO *Gentiana macrophylla*. Ref: 4594, 4824.

**7336 Erythrocentaurin**

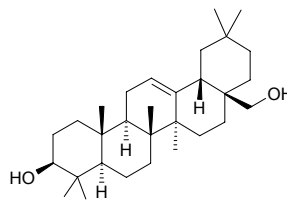
$C_{10}H_8O_3$  (176.17). Colorless needles, mp 145~147°C ( $CHCl_3$ ). Source: QIN JIAO *Gentiana macrophylla*. Ref: 4594, 4824.

**7337 Erythroculine**

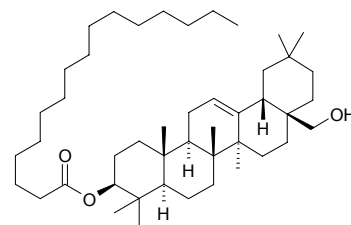
[22150-96-5]  $C_{20}H_{25}NO_4$  (343.43). Source: HENG ZHOU WU YAO *Cocculus laurifolius*. Ref: 6.

**7338 Erythrodiol**

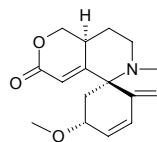
Olean-12-en-3,28-diol  $C_{30}H_{50}O_2$  (442.73). mp 215~217°C. Source: BING PIAN *Dryobalanops aromatica*, BING PIAN *Dryobalanops aromatica*, FENG XIANG JI SHENG *Viscum articulatum*, MANG GUO SHU PI *Mangifera indica*. Ref: 2, 6.

**7339 Erythrodiol 3-O-palmitate**

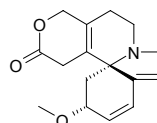
$C_{46}H_{80}O_3$  (681.15). Source: HUANG LONG DAN *Gentiana lutea* (rhizome and root). Ref: 4307.

**7340  $\alpha$ -Erythroidine**

[466-80-8]  $C_{16}H_{19}NO_3$  (273.33). Acicular crystals (pentane), mp 58~60°C,  $[\alpha]_D^{27} = +136^\circ$  ( $c = 0.5$ , water), instable in air. Pharm: Neuromuscular blocker. Source: MEI ZHOU CI TONG *Erythrina americana*. Ref: 658.

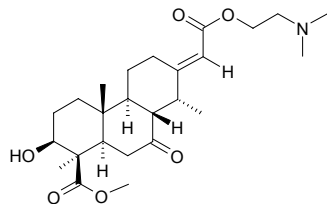
**7341  $\beta$ -Erythroidine**

[466-81-9]  $C_{16}H_{19}NO_3$  (273.33). Crystals (absolute ethanol), mp 99.5~100.0°C,  $[\alpha]_D^{25} = +88.8^\circ$ . Pharm: Hypnotic; inhibits respiration; antihypertensive; neuromuscular blocker; LD<sub>50</sub> (mus, ip) = 29.5mg/kg. Source: MEI ZHOU CI TONG *Erythrina americana*. Ref: 658.

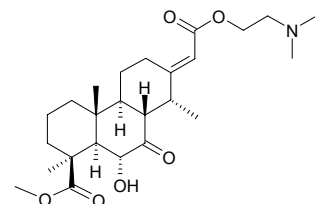


**7342 Erythroplamine**

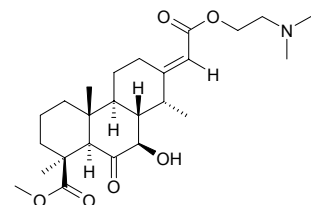
$C_{25}H_{39}NO_6$  (449.59). Crystals (ethanol–petroleum ether), mp 149–157°C,  $[\alpha]_D^{20} = -62.5^\circ$  ( $c = 0.911$ , ethanol). Pharm: Cardiotonic. Source: FEI ZHOU GE MU *Erythrophleum africanum*, JI NEI YA GE MU *Erythrophleum guineense*, KAO MING GE MU *Erythrophleum couminga*, XIANG YA HAI AN GE MU *Erythrophleum ivorense*, YE XIANG GE MU *Erythrophleum suaveolens*. Ref: 658.

**7343 Erythropleguine**

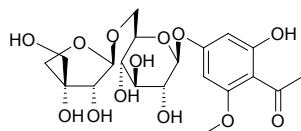
[4829-28-1]  $C_{25}H_{39}NO_6$  (449.59). mp 77–78°C,  $[\alpha]_D = -38^\circ$  (ethanol). Pharm: Cardiotonic; enhances myocardial contractility; slows heart rate. Source: JI NEI YA GE MU *Erythrophleum guineense*, KAO MING GE MU *Erythrophleum couminga*, XIANG YA HAI AN GE MU *Erythrophleum ivorense*, YE XIANG GE MU *Erythrophleum suaveolens*. Ref: 658.

**7344 Erythrosumamine**

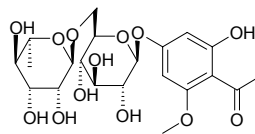
$C_{25}H_{39}NO_6$  (449.59). Source: JI NEI YA GE MU *Erythrophleum guineense*. Ref: 1521.

**7345 Erythroxyloside A**

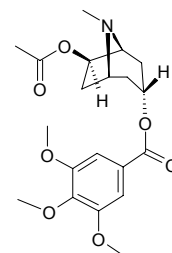
$C_{20}H_{28}O_{13}$  (476.44). Amorphous powder,  $[\alpha]_D^{24} = -88.0^\circ$  ( $c = 0.97$ , MeOH). Source: JIAN PU ZHAI GU KE *Erythroxylum cambodianum* (aerial parts). Ref: 4461.

**7346 Erythroxyloside B**

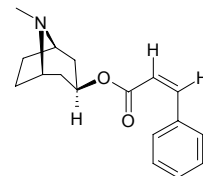
$C_{21}H_{30}O_{13}$  (490.47). Amorphous powder,  $[\alpha]_D^{24} = -78.3^\circ$  ( $c = 1.07$ , MeOH). Source: JIAN PU ZHAI GU KE *Erythroxylum cambodianum* (aerial parts). Ref: 4461.

**7347 Erythrozeylanine A**

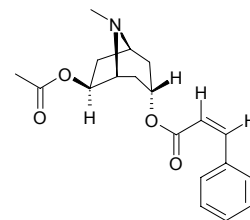
1*R*,3*R*,5*S*,6*R*-6-Acetoxy-3-(3',4',5'-trimethoxybenzoyloxy)tropane  $C_{20}H_{27}NO_7$  (393.44). Colorless semisolid,  $[\alpha]_D^{25} = -22.1^\circ$  ( $c = 0.3$ ,  $CHCl_3$ ). Source: XI LAN GU KE *Erythroxylum zeylanicum* (root). Ref: 3919.

**7348 Erythrozeylanine B**

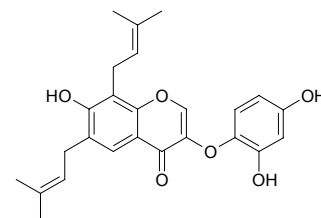
*cis*-3β-(Cinnamoyloxy)tropane  $C_{17}H_{21}NO_2$  (271.36). Source: XI LAN GU KE *Erythroxylum zeylanicum* (root). Ref: 3919.

**7349 Erythrozeylanine C**

*cis*-6β-Acetoxy-3α-(cinnamoyloxy)tropane  $C_{19}H_{23}NO_4$  (329.40). Source: XI LAN GU KE *Erythroxylum zeylanicum* (twig, leaf). Ref: 3919.

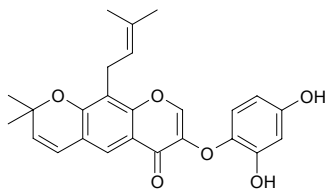
**7350 Eryvarin F**

3-(2,4-Dihydroxyphenoxy)-7-hydroxy-6,8-di(3,3-dimethylallyl)chromen-4-one  $C_{25}H_{26}O_6$  (422.48). Amorphous powder. Source: CI TONG *Erythrina variegata* [Syn. *Erythrina indica*]. Ref: 2040.

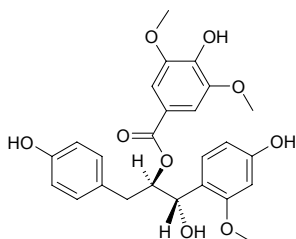


**7351 Eryvarin G**

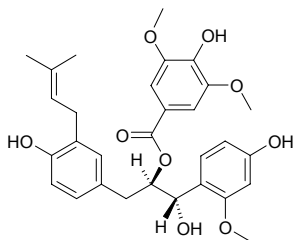
3-(2,4-dihydroxyphenoxy)-8-(3,3-dimethylallyl)-2,2-dimethylpyrano[5,6:6,7]chromen-4-one C<sub>25</sub>H<sub>24</sub>O<sub>6</sub> (420.47). Amorphous powder. Source: CI TONG *Erythrina variegata* [Syn. *Erythrina indica*]. Ref: 2040.

**7352 Eryvarinol A**

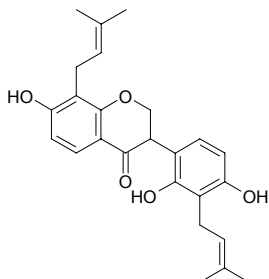
C<sub>25</sub>H<sub>26</sub>O<sub>9</sub> (470.48). Amorphous powder,  $[\alpha]_D^{23} = -74^\circ$  ( $c = 0.1$ , MeOH). Source: CI TONG *Erythrina variegata* [Syn. *Erythrina indica*] (root: yield = 0.0015%). Ref: 4671.

**7353 Eryvarinol B**

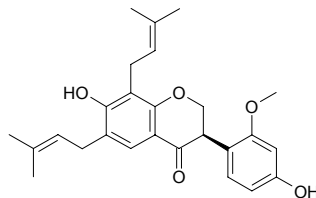
C<sub>30</sub>H<sub>34</sub>O<sub>9</sub> (538.6). Amorphous powder,  $[\alpha]_D^{23} = -62^\circ$  ( $c = 0.1$ , MeOH). Source: CI TONG *Erythrina variegata* [Syn. *Erythrina indica*] (root: yield = 0.0021%). Ref: 4671.

**7354 Eryzerin A**

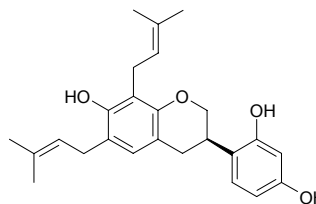
(±)-7,2',4'-Trihydroxy-8,3'-di(γ,γ-dimethylallyl)isoflavanone C<sub>25</sub>H<sub>28</sub>O<sub>5</sub> (408.50). Amorphous powder,  $[\alpha]_D = \pm 0^\circ$ . Pharm: Antibacterial (Methicillin-Resistant *Staphylococcus aureus* (MRSA), MIC range = 12.5–25 μg/mL, MIC<sub>50</sub> = 25 μg/mL, MIC<sub>90</sub> = 25 μg/mL, proportion of sensitive strains at 12.5 μg/mL = 4/13). Source: *Erythrina zeyheri* (root). Ref: 3451.

**7355 Eryzerin B**

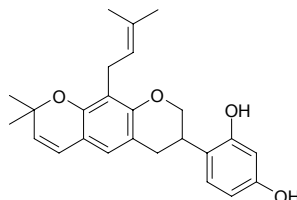
(3*R*)-7,4'-Dihydroxy-2'-methoxy-6,8-di(γ,γ-dimethylallyl)isoflavanone C<sub>26</sub>H<sub>30</sub>O<sub>5</sub> (422.53). Amorphous powder,  $[\alpha]_D = -41^\circ$  ( $c = 0.1$ , MeOH). Pharm: Antibacterial (Methicillin-Resistant *Staphylococcus aureus* (MRSA), MIC range = 25–50 μg/mL, MIC<sub>50</sub> > 50 μg/mL, MIC<sub>90</sub> > 50 μg/mL, proportion of sensitive strains at 12.5 μg/mL = 0/13). Source: *Erythrina zeyheri* (root). Ref: 3451.

**7356 Eryzerin C**

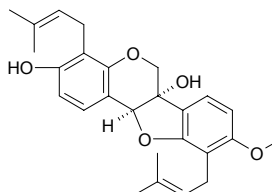
(3*R*)-7,2',4'-Trihydroxy-6,8-di(γ,γ-dimethylallyl)isoflavan C<sub>25</sub>H<sub>30</sub>O<sub>4</sub> (394.52). Amorphous powder,  $[\alpha]_D = -9^\circ$  ( $c = 0.1$ , MeOH). Pharm: Antibacterial (Methicillin-Resistant *Staphylococcus aureus* (MRSA), MIC range = 3.13–6.25 μg/mL, MIC<sub>50</sub> = 6.25 μg/mL, MIC<sub>90</sub> = 6.25 μg/mL, proportion of sensitive strains at 12.5 μg/mL = 13/13). Source: *Erythrina zeyheri* (root). Ref: 3451.

**7357 Eryzerin D**

2',4'-Dihydroxy-8-γ,γ-dimethylallyl-2''-dimethylpyrano-[5,6:6,7]isoflavan C<sub>25</sub>H<sub>28</sub>O<sub>4</sub> (392.50). Amorphous powder,  $[\alpha]_D = +3^\circ$  ( $c = 0.1$ , MeOH). Pharm: Antibacterial (Methicillin-Resistant *Staphylococcus aureus* (MRSA), MIC range = 6.25–12.5 μg/mL, MIC<sub>50</sub> = 12.5 μg/mL, MIC<sub>90</sub> = 12.5 μg/mL, proportion of sensitive strains at 12.5 μg/mL = 13/13). Source: *Erythrina zeyheri* (root). Ref: 3451.

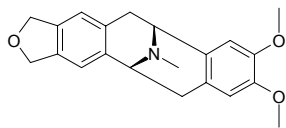
**7358 Eryzerin E**

(6*aS*,11*aS*)-3,6*a*-Dihydroxy-9-methoxy-4,10-di(γ,γ-dimethylallyl)pterocarpan C<sub>26</sub>H<sub>30</sub>O<sub>5</sub> (422.53). Amorphous powder,  $[\alpha]_D = -87^\circ$  ( $c = 0.1$ , MeOH). Pharm: Antibacterial (Methicillin-Resistant *Staphylococcus aureus* (MRSA), MIC range = 6.25–25 μg/mL, MIC<sub>50</sub> = 6.25 μg/mL, MIC<sub>90</sub> = 12.5 μg/mL, proportion of sensitive strains at 12.5 μg/mL = 12/13). Source: *Erythrina zeyheri* (root). Ref: 3451.

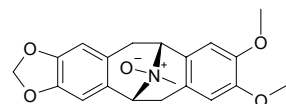


**7359 (+)-Eschscholtzidine**

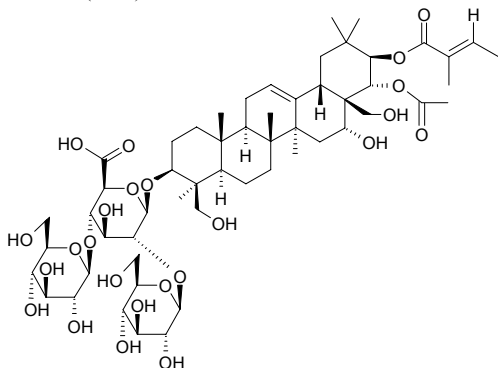
$C_{21}H_{23}NO_3$  (337.42). Source: HOU KE GUI *Cryptocarya chinensis* (wood). Ref: 3092.

**7360 (+)-Eschscholtzidine-N-oxide**

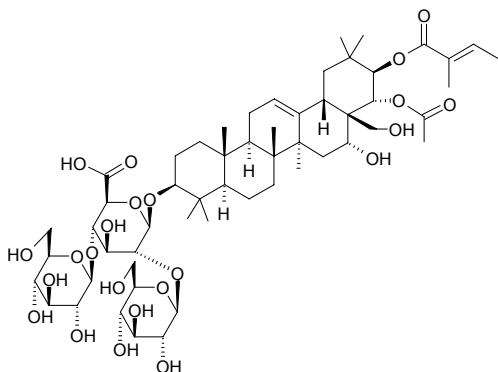
$C_{20}H_{21}NO_5$  (355.39). Colorless needles (MeOH), mp 193~194°C,  $[\alpha]_D^{25} = +145.3^\circ$  ( $c = 0.1278$ , MeOH). Source: HOU KE GUI *Cryptocarya chinensis* (wood). Ref: 3092.

**7361 Escin Ia**

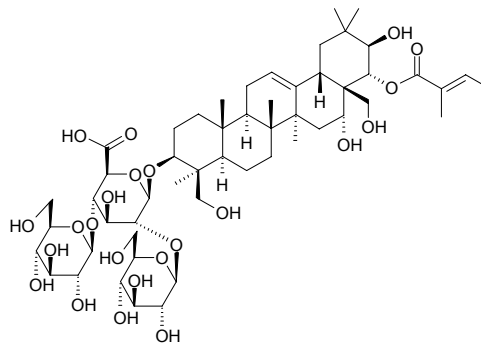
21-*O*-Tigloyl-22-*O*-acetylprotoaescigenin-3-*O*-[ $\beta$ -*D*-glucopyranosyl(1→2)][ $\beta$ -*D*-glucopyranosyl(1→4)]- $\beta$ -*D*-glucopyranosiduronic acid  $C_{55}H_{86}O_{24}$  (1131.28). Pharm: Anti-inflammatory (mus, assay of Dimethyl benzene-induced inflammation, dose 30mg/kg, InRt = 79.3%, control Dexamethasone, dose 1mg/kg, InRt = 55.6%). Source: QI YE SHU *Aesculus chinensis* (seeds). Ref: 2578.

**7362 Escin IIIa**

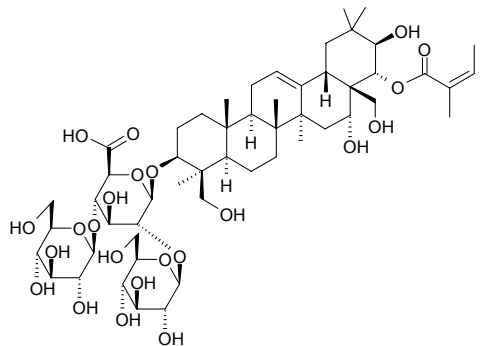
$C_{55}H_{86}O_{23}$  (1115.28). White amorphous powder,  $[\alpha]_D^{25} = -53.3^\circ$  ( $c = 0.90$ , MeOH). Source: QI YE SHU *Aesculus chinensis* (seed). Ref: 3528.

**7363 Escin IVg**

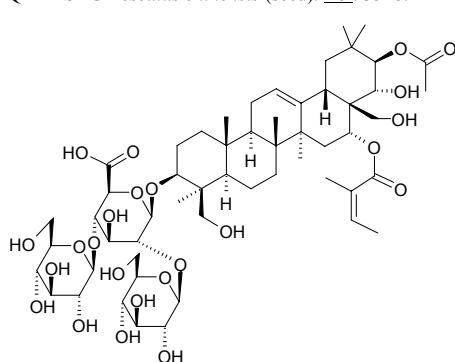
22-Tigloylprotoaescigenin 3-*O*-[ $\beta$ -*D*-glucopyranosyl(1→2)][ $\beta$ -*D*-glucopyranosyl(1→4)]- $\beta$ -*D*-glucopyranosiduronic acid  $C_{53}H_{84}O_{23}$  (1089.25). White amorphous powder,  $[\alpha]_D^{25} = -25.0^\circ$  ( $c = 1.00$ , MeOH). Source: QI YE SHU *Aesculus chinensis* (seed). Ref: 3528.

**7364 Escin IVh**

22-Angeloylprotoaescigenin 3-*O*-[ $\beta$ -*D*-glucopyranosyl(1→2)][ $\beta$ -*D*-glucopyranosyl(1→4)]- $\beta$ -*D*-glucopyranosiduronic acid  $C_{53}H_{84}O_{23}$  (1089.25). White amorphous powder,  $[\alpha]_D^{25} = -60^\circ$  ( $c = 1.05$ , MeOH). Source: QI YE SHU *Aesculus chinensis* (seed). Ref: 3528.

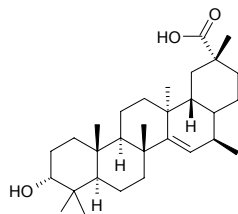
**7365 Escin VIb**

16-Angeloyl-21-acetylprotoaescigenin 3-*O*-[ $\beta$ -*D*-glucopyranosyl(1→2)][ $\beta$ -*D*-glucopyranosyl(1→4)]- $\beta$ -*D*-glucopyranosiduronic acid  $C_{55}H_{86}O_{24}$  (1131.28). White amorphous powder,  $[\alpha]_D^{25} = -55^\circ$  ( $c = 1.00$ , MeOH). Source: QI YE SHU *Aesculus chinensis* (seed). Ref: 3528.

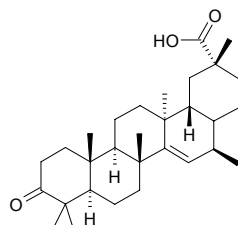


**7366 Esculentioic acid A**

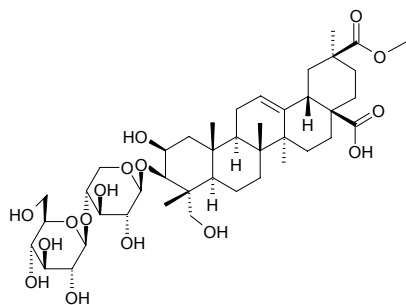
$C_{30}H_{48}O_3$  (456.72). Colorless powder, mp 248~251°C,  $[\alpha]_D^{25} = -16.4^\circ$  ( $c = 0.64$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (A2780 ovarian cancer cell line,  $IC_{50} = 6.4\text{mg/mL}$ , marginally active). **Source:** MU SHU DI SHANG BU FEN *Manihot esculenta*. **Ref:** 5379.

**7367 Esculentioic acid B**

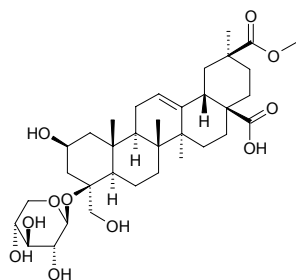
$C_{30}H_{46}O_3$  (454.70). Colorless needles, mp 276~278°C,  $[\alpha]_D^{25} = +10.6^\circ$  ( $c = 0.48$ ,  $CHCl_3$ :MeOH = 1:1). **Pharm:** Cytotoxic (A2780 ovarian cancer cell line,  $IC_{50} = 4.8\text{mg/mL}$ , marginally active). **Source:** MU SHU DI SHANG BU FEN *Manihot esculenta*. **Ref:** 5379.

**7368 Esculentoside A**

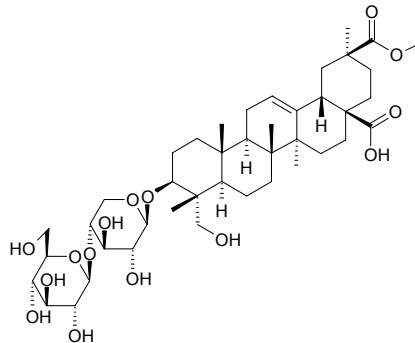
Phytolaccoside E [65497-07-6]  $C_{42}H_{66}O_{16}$  (826.98). Powder, mp 257~258°C,  $[\alpha]_D^{21} = +51.3^\circ$  ( $c = 0.99$ , EtOH). **Source:** MEI SHANG LU *Phytolacca americana* [Syn. *Phytolacca decandra*] (dried root: content = 0.86%<sup>[5523]</sup>), SHANG LU *Phytolacca esculenta* [Syn. *Phytolacca acinosa*] (dried root: mean content of 11 origins = 0.37%<sup>[5523]</sup>). **Ref:** 660, 1521, 1535, 5523.

**7369 Esculentoside B**

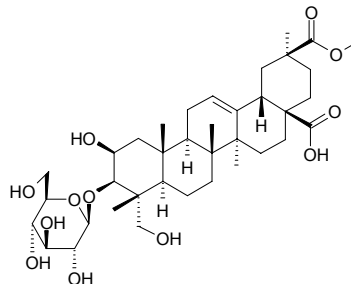
$C_{35}H_{54}O_{11}$  (650.81). **Source:** SHANG LU *Phytolacca esculenta* [Syn. *Phytolacca acinosa*]. **Ref:** 1535.

**7370 Esculentoside C**

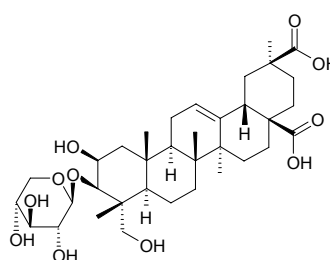
Phytolaccoside D [65931-92-2]  $C_{42}H_{66}O_{15}$  (810.99). mp 220~222°C,  $[\alpha]_D = +40^\circ$  ( $c = 0.3$ , MeOH). **Pharm:** Anti-inflammatory. **Source:** MEI SHANG LU *Phytolacca americana* [Syn. *Phytolacca decandra*], SHANG LU *Phytolacca esculenta* [Syn. *Phytolacca acinosa*]. **Ref:** 1535, 3106, 3108.

**7371 Esculentoside D**

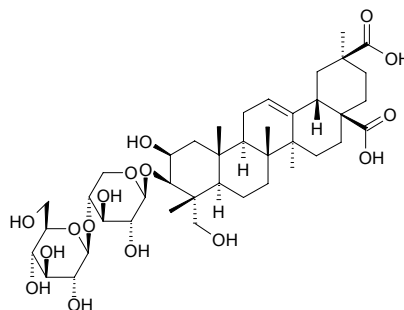
$C_{37}H_{58}O_{12}$  (694.87). **Source:** SHANG LU *Phytolacca esculenta* [Syn. *Phytolacca acinosa*]. **Ref:** 1535.

**7372 Esculentoside E**

[65949-36-7]  $C_{35}H_{54}O_{11}$  (650.81). **Source:** SHANG LU *Phytolacca esculenta* [Syn. *Phytolacca acinosa*]. **Ref:** 1536.

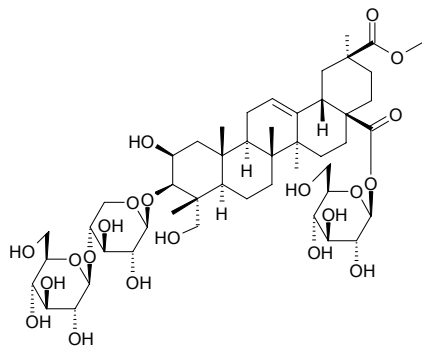
**7373 Esculentoside F**

[95263-31-3]  $C_{41}H_{64}O_{16}$  (812.96). **Source:** SHANG LU *Phytolacca esculenta* [Syn. *Phytolacca acinosa*]. **Ref:** 1536.

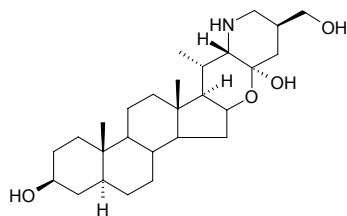


**7374 Esculentoside H**

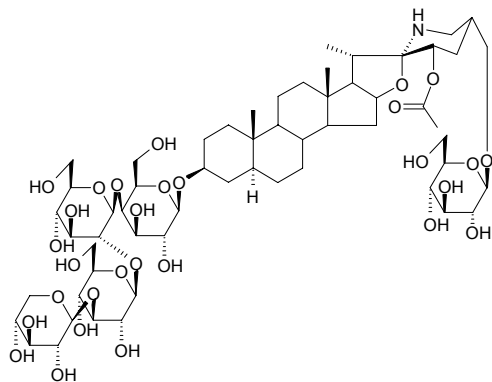
Phytolaccasaponin B [66656-92-6]  $C_{48}H_{76}O_{21}$  (989.13). Needles +3H<sub>2</sub>O, mp 218~220°C,  $[\alpha]_D^{29} = +38.3^\circ$  ( $c = 0.93$ , EtOH). Source: MEI SHANG LU *Phytolacca americana* [Syn. *Phytolacca decandra*], SHANG LU *Phytolacca esculenta* [Syn. *Phytolacca acinosa*]. Ref: 1521, 1537.

**7375 Esculeogenin B**

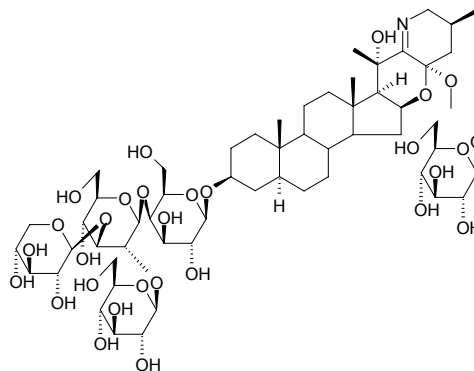
(5 $\alpha$ ,22*S*,23*R*,25*S*)-22,26-Epimino-16 $\beta$ ,23-epoxy-3 $\beta$ ,23,27-trihydroxycholestan e  $C_{27}H_{45}NO_4$  (447.66). Amorphous powder,  $[\alpha]_D = -96.2^\circ$  ( $c = 0.05$ , pyridine). Source: FAN QIE *Lycopersicon esculentum*. Ref: 4484.

**7376 Esculeoside A**

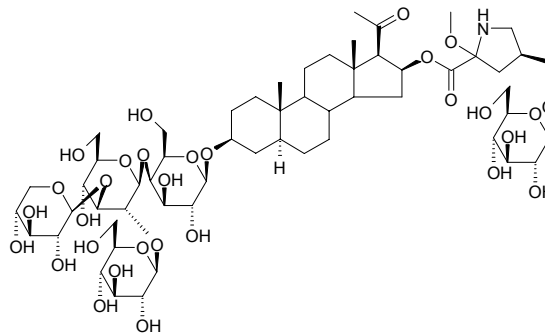
$C_{58}H_{95}NO_{29}$  (1270.39). white powder,  $[\alpha]_D = -52.5^\circ$  (MeOH). Pharm: Cytotoxic (MCF7 cells,  $IC_{50} = 24.5\mu\text{mol/L}$ , control Tomatine,  $IC_{50} = 15\mu\text{mol/L}$ , cytotoxicity of compounds was measured using the WST-8 proliferation reagent, see M. Ishiyama, et al., *Talanta*, 1999, 44, 1299). Source: FAN QIE *Lycopersicon esculentum*. Ref: 4317.

**7377 Esculeoside C**

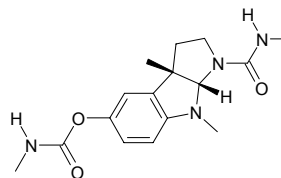
3-*O*- $\beta$ -Lycotetraosyl(5*S*,25*S*)-22,26-epimino-16 $\beta$ ,23-epoxy-23 $\alpha$ -methoxy-22(*N*)-ene-3 $\beta$ ,20 $\alpha$ ,27-trihydroxycholestane 27-*O*- $\beta$ -*D*-glucopyranoside  $C_{57}H_{93}NO_{29}$  (1256.37). Amorphous powder,  $[\alpha]_D^{24} = -56.7^\circ$  ( $c = 0.9$ , pyridine). Source: YING TAO FAN QIE *Lycopersicon esculentum* var. *cerasiforme* (ripe fruit: yield = 0.00009%fw). Ref: 1453.

**7378 Esculeoside D**

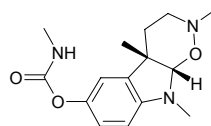
3-*O*- $\beta$ -Lycotetraosyl 3 $\beta$ ,16 $\beta$ -dihydroxy-5 $\alpha$ -pregn-20-one 16-*O*-[(4*S*)-2,5-epimino-2-methoxy-4-( $\beta$ -*D*-glucopyranosyloxy) methyl-pentanoic acid]-ester  $C_{57}H_{93}NO_{30}$  (1272.37). Amorphous powder,  $[\alpha]_D^{24} = -20.7^\circ$  ( $c = 1.0$ , pyridine). Source: YING TAO FAN QIE *Lycopersicon esculentum* var. *cerasiforme* (ripe fruit: yield = 0.00009%fw). Ref: 1453.

**7379 Eseramine**

[6091-57-2]  $C_{16}H_{22}N_4O_3$  (318.38). Pharm: Cholinesterase inhibitor. Source: DU BIAN DOU *Physostigma venenosum*. Ref: 658.

**7380 Eseridine**

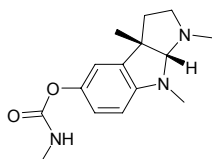
Geneserine [25573-43-7]  $C_{15}H_{21}N_3O_3$  (291.35). Pharm: Cholinesterase inhibitor. Source: DU BIAN DOU *Physostigma venenosum*. Ref: 658.



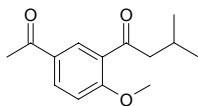


**7381 Eserine**

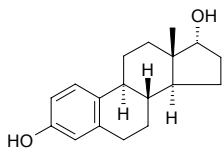
Physostigmine; Cogmine; Physostol [57-47-6]  $C_{15}H_{21}N_3O_2$  (275.35). Trapezoidal half-prismatic crystals (ether or benzene), mp 105–106°C,  $[\alpha]_D^{17} = -76^\circ$  ( $c = 1.3$ , chloroform),  $[\alpha]_D^{25} = -120^\circ$  (benzene), soluble in ethanol, benzene, chloroform, slightly soluble in water.<sup>[5507]</sup> **Pharm:** BChE inhibitor ( $IC_{50} = (0.04 \pm 0.0001) \mu\text{mol/L}$ <sup>[2563]</sup>,  $IC_{50} = (0.857 \pm 0.008) \mu\text{mol/L}$ <sup>[4217]</sup>,  $IC_{50} = (0.875 \pm 0.008) \mu\text{mol/L}$ <sup>[5216]</sup>); BChE inhibitor (horse serum BChE,  $IC_{50} = (0.857 \pm 0.008) \mu\text{mol/L}$ <sup>[4241]</sup>); AChE inhibitor ( $IC_{50} = (0.41 \pm 0.001) \mu\text{mol/L}$ <sup>[4217]</sup>,  $IC_{50} = (0.041 \pm 0.001) \mu\text{mol/L}$ <sup>[5216]</sup>); AChE inhibitor (electric eel AChE,  $IC_{50} = (0.041 \pm 0.001) \mu\text{mol/L}$ <sup>[4241]</sup>); antidote (poisoning from anticholinergic); used in treatment of glaucoma (0.2%–0.5%) and myoparalysis<sup>[658]</sup>;  $LD_{50}$  (mus, ip) = 2.5 mg/kg<sup>[658]</sup>. **Source:** DU BIAN DOU *Physostigma venenosum* (in 1864, isolated from the plant for the first time<sup>[5507]</sup>; in 1969, isolated from the plant by R.K.Hill, et al.<sup>[5505]</sup>). **Ref:** 658, 2563, 4217, 4241, 5216, 5505, 5507.

**7382 Espeleton**

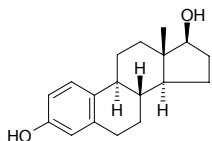
$C_{14}H_{18}O_3$  (234.30). **Pharm:** Antifungal (*Trichophyton mentagrophytes* ATCC28185, MIC = 100  $\mu\text{g/mL}$ , control Miconazole, MIC = 8  $\mu\text{g/mL}$ ; *Trichophyton rubrum* ATCC28188, MIC = 100  $\mu\text{g/mL}$ , Miconazole, MIC = 8  $\mu\text{g/mL}$ ). **Source:** *Eupatorium aschenbornianum*. **Ref:** 5472.

**7383  $\alpha$ -Estradiol**

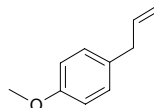
[50-28-2]  $C_{18}H_{24}O_2$  (272.39). mp 223°C. **Pharm:** Promotes normal growth of female sexual organs and secondary sex characters. **Source:** LU RONG *Cervus nippon*; *Cervus elaphus*, SHE XIANG *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*, ZI HE CHE *Homo sapiens*. **Ref:** 2, 658, 5501.

**7384  $\beta$ -Estradiol**

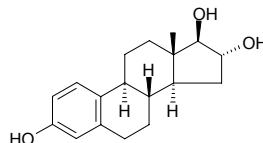
17 $\beta$ -Oestradiol [57-91-0]  $C_{18}H_{24}O_2$  (272.39). mp 178°C. **Pharm:** Promotes normal growth of female sexual organs and secondary sex characters. **Source:** BAI FAN DOU *Phaseolus vulgaris*, LU RONG *Cervus nippon*; *Cervus elaphus*, SHE XIANG *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*, ZI HE CHE *Homo sapiens*. **Ref:** 2, 658, 5501.

**7385 Estragole**

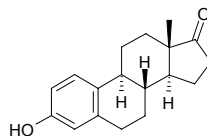
4-Methoxyallylbenzene [140-67-0]  $C_{10}H_{12}O$  (148.21). bp 215–216°C, bp 102°C/16 mmHg. **Pharm:** Antibacterial; antispasmodic; leukopoietic; promotes liver regeneration; sedative;  $LD_{50}$  (mus, orl) = 4000 mg/kg. **Source:** HUA JIAO *Zanthoxylum bungeanum*, HUI XIANG *Foeniculum vulgare*, QIAN HU *Angelica decursiva* [Syn. *Peucedanum decursivum*], SHUI HUI XIANG *Limnophila rugosa*, XI XIN *Asarum sieboldii*, LIAO XI XIN *Asarum heterotropoides* var. *mandshuricum*, HUO XIANG *Agastache rugosus*, BA JIAO HUI XIANG *Illicium verum*, OU ZHOU CHI SONG *Pinus sylvestris*, RI BEN XIN YI *Magnolia kobus*. **Ref:** 2, 4, 6, 658, 660, 1521.

**7386 Estriol**

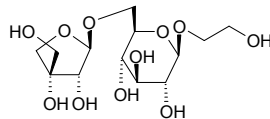
Estratriol [50-27-1]  $C_{18}H_{24}O_3$  (288.39). mp 282–283°C. **Pharm:** Leukopoietic (promotes growth of white blood cells); used in treatment of menopathy and female climacteric syndrome. **Source:** ZI HE CHE *Homo sapiens*. **Ref:** 5, 6, 658.

**7387 Estrone**

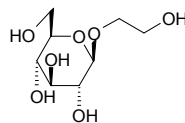
3-Hydroxy-1,3,5(10)-estratrien-17-one [53-16-7]  $C_{18}H_{22}O_2$  (270.37). Crystals (acetone), mp ( $\pm$ ) 251–254°C, mp (+) 254.5–256.0°C,  $[\alpha]_D^{25} = +158$ –168° (dioxane). **Pharm:** Estrogenic activity. **Source:** LU RONG *Cervus nippon*; *Cervus elaphus*, SUAN SHI LIU *Punica granatum*, WU LOU ZI *Phoenix dactylifera*, ZI HE CHE *Homo sapiens*, YUE JI SHI LIU *Punica granatum* cv. *nana*, YE ZI *Cocos nucifera* (fruit; the compound was isolated from the plant by A. Butenandt et al. in 1938)<sup>[5505]</sup>. **Ref:** 6, 658, 5501, 5505.

**7388 Ethane-1,2-diol 1-O- $\beta$ -D-apiofuranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside**

$C_{13}H_{24}O_{11}$  (356.33). Colorless syrup,  $[\alpha]_D^{21} = -47^\circ$  ( $c = 0.7$ , MeOH). **Source:** ZI RAN QIN *Cuminum cyminum* (fruit). **Ref:** 3395.

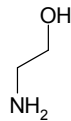
**7389 Ethane-1,2-diol 1-O- $\beta$ -D-glucopyranoside**

$C_8H_{16}O_7$  (224.21). Colorless syrup,  $[\alpha]_D^{21} = -17^\circ$  ( $c = 0.6$ , MeOH). **Source:** HUI QIN *Pimpinella anisum* (fruit). **Ref:** 3402.

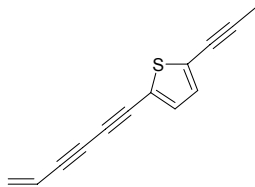


**7390 Ethanolamine**

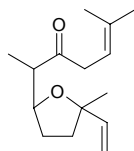
2-Aminoethanol [141-43-5]  $C_2H_7NO$  (61.08). bp 171°C. Source: XI JIAO *Rhinoceros unicornis*; *Rhinoceros sondaicus*; *Rhinoceros sumatrensis*. Ref: 6.

**7391 2-(Ethenylbutadiynyl)-5-(propinyl)-thiophene**

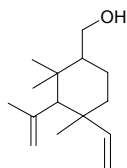
$C_{13}H_8S$  (196.27). Source: MO LI HUA *Jasminum sambac*. Ref: 6.

**7392 2-(5-Ethenyl-5-methyl-2-tetrahydrofuranyl)-6-methyl-5-hepten-3-one**

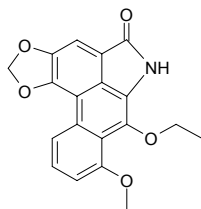
$C_{15}H_{24}O_2$  (236.36). Source: WU WEI ZI *Schisandra chinensis*. Ref: 2.

**7393 4-Ethenyl-2,2,4-trimethyl-3-(1-methylethenyl)-cyclohexane-methanol**

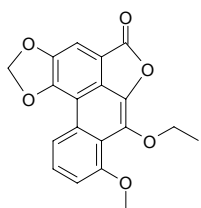
$C_{15}H_{26}O$  (222.37). Source: SHENG JIANG *Zingiber officinale*. Ref: 2.

**7394 9-Ethoxy-aristolactam**

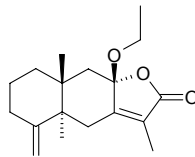
$C_{19}H_{15}NO_5$  (337.34). Source: MIAN MAO MA DOU LING *Aristolochia mollissima*. Ref: 127.

**7395 9-Ethoxy-aristolactone**

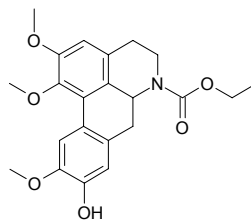
9-Ethoxy-aristololide  $C_{19}H_{14}O_6$  (338.32). Source: MIAN MAO MA DOU LING *Aristolochia mollissima*. Ref: 127.

**7396 8β-Ethoxy atractylenolide III**

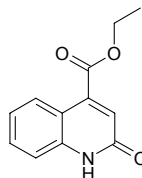
$C_{18}H_{26}O_3$  (290.41). Source: BAI ZHU *Atractylodes macrocephala* [Syn. *Atractylis macrocephala*]. Ref: 2.

**7397 N-Ethoxycarbonyllaurotetanine**

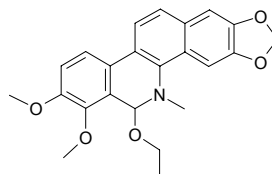
$C_{22}H_{25}NO_6$  (399.45). Yellowish powder. Source: XIA YE SHAN HU JIAO *Lindera angustifolia* (root). Ref: 4875.

**7398 4-Ethoxycarbonyl-2-quinolinone**

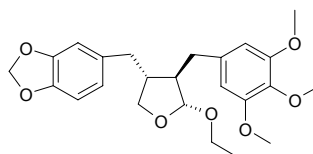
[5466-27-3]  $C_{12}H_{11}NO_3$  (217.23). Colorless acicular crystals, mp 208–209°C. Source: YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*]. Ref: 2, 156.

**7399 Ethoxychelerythrine**

$C_{23}H_{23}NO_5$  (393.44). White lamellar crystals (ammonia absolute ethanol), mp 207–208°C; Pharm: Cytotoxic (Ehrlich ascites carcinoma cells)<sup>[5369]</sup>; antineoplastic (cervical carcinoma, thyroid carcinoma); antibacterial; anti-inflammatory (used in treatment of cervicitis). Source: BO LUO HUI *Macleaya cordata*. Ref: 658, 5369.

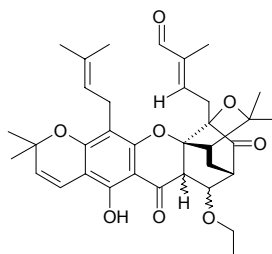
**7400 Ethoxyclusin**

$C_{24}H_{30}O_7$  (430.50). Pharm: CYP3A4 inhibitor and CYP2D6 inhibitor (*in vitro*, CYP3A4,  $IC_{50} = 0.44\mu\text{mol/L}$ ; CYP2D6,  $IC_{50} = 87.9\mu\text{mol/L}$ ; control Ketoconazole, CYP3A4,  $IC_{50} = 0.72\mu\text{mol/L}$ ; control Quinidine, CYP2D6,  $IC_{50} = 0.082\mu\text{mol/L}$ ). Source: BI CHENG QIE *Piper cubeba* (fruit: yield = 0.00005%dw). Ref: 4797.

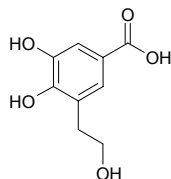


**7401 Ethoxydihydroisomoreollin**

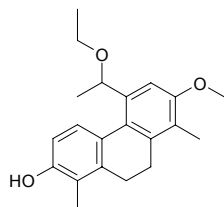
$C_{35}H_{42}O_8$  (590.72). mp 143°C. Source: TENG HUANG *Garcinia morella*. Ref: 6.

**7402 3-Ethoxy-4,5-dihydroxy-benzoic acid**

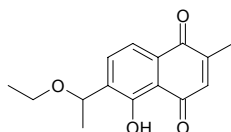
$C_9H_{10}O_5$  (198.18). White powder, mp > 300°C. Source: AN MO LE *Phyllanthus emblica*. Ref: 2434.

**7403 5-(1-Ethoxy-ethyl)-2-hydroxy-7-methoxy-1,8-dimethyl-9,10-dihydrophenanthrene**

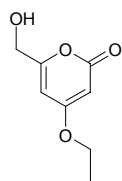
$C_{21}H_{26}O_3$  (326.44). Source: JIAN DENG XIN CAO *Juncus acutus*. Ref: 1965.

**7404 6-(1-Ethoxyethyl)plumbagin**

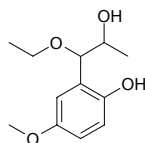
$C_{15}H_{16}O_4$  (260.29). Orange needles (hexane), mp 73°C,  $[\alpha]_D^{30} = -0.06^\circ$  ( $c = 0.36$ ,  $CHCl_3$ ). Pharm: Ichthyotoxin (MLC = 0.9mg/L, control Juglone, MLC = 0.2mg/L). Source: HAI SHI *Diospyros maritima* (fruit). Ref: 4185.

**7405 4-Ethoxy-6-hydroxymethyl- $\alpha$ -pyrone**

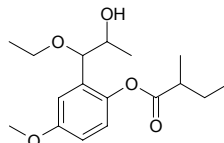
$C_8H_{10}O_4$  (170.17). White needles, mp 94.5~96.8°C. Pharm: DPPH scavenger ( $SC_{50} > 100\mu\text{mol/L}$ )<sup>[4247]</sup>; antioxidant (superoxide anion radical scavenger, superoxide dismutase method,  $IC_{50}$  for Formazan formation activity  $> 100\mu\text{mol/L}$ )<sup>[4247]</sup>. Source: XIAN REN ZHANG *Opuntia dillenii* (fresh stem; yield = 0.00013%)<sup>[4247]</sup>. Ref: 2468, 4247.

**7406 2-(1-Ethoxy-2-hydroxy)propyl-4-methoxyphenol**

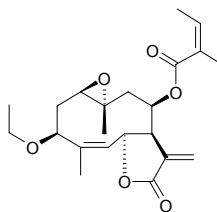
$C_{12}H_{18}O_4$  (226.27). Colorless liquid. Source: YANG HONG SHAN *Pimpinella thelungiana*. Ref: 371.

**7407 2-(1-Ethoxy-2-hydroxy)propyl-4-methoxyphenol-2-methyl-butyrat**

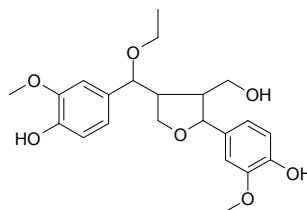
$C_{17}H_{26}O_5$  (310.39). Colorless liquid. Source: YANG HONG SHAN *Pimpinella thelungiana*. Ref: 371.

**7408 3 $\beta$ -Ethoxy-leptocarpin**

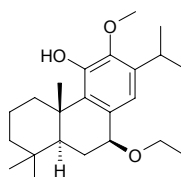
$C_{22}H_{30}O_6$  (390.48). Source: *Viguiera puruana* (aerial parts). Ref: 5090.

**7409 4-[1-Ethoxyl-1-(4'-hydroxy-3'-methoxy)benzyl]methyl-2-(4-hydroxy-3-methoxy)benzyl-3-hydroxymethyl-tetrahydro-furan**

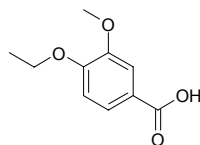
$C_{22}H_{28}O_7$  (404.46). White powder, mp 114~116°C. Source: CAO YE BAI JIANG *Patrinia scabra*. Ref: 2467.

**7410 7 $\beta$ -Ethoxy-12-methoxy-8,11,13-abietatrien-11-ol**

$C_{23}H_{36}O_3$  (360.54). Source: DU SONG SHI *Juniperus rigida*. Ref: 6.

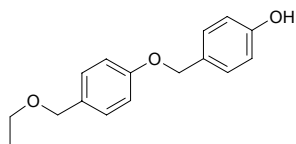
**7411 4-Ethoxy-3-methoxybenzoic acid**

$C_{10}H_{12}O_4$  (196.20). Source: FEN CHA DANG GUI *Angelica furcijuga* (flower). Ref: 4454.

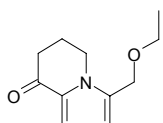


**7412 4-Ethoxymethylphenyl-4'-hydroxybenzylether**

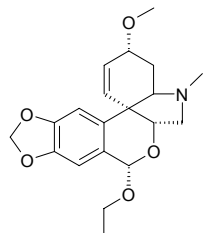
$C_{16}H_{18}O_3$  (258.32). Source: TIAN MA *Gastrodia elata*. Ref: 2.

**7413 3-Ethoxymethyl-5,6,7,8-tetrahydro-8-indolizinone**

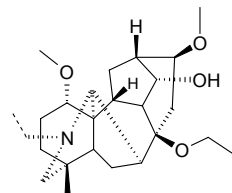
$C_{11}H_{15}NO_2$  (193.25). Pharm: Antifungal (*Penicillium avellaneum* UC-4376, MIA = 250.0 $\mu$ g/disk, control Amphotericin B, MIA = 0.08 $\mu$ g/disk); antibacterial (*Staphylococcus aureus*, MIA = 400.0 $\mu$ g/disk, control Rifampicin, MIA = 1.0 $\mu$ g/disk; *Mycobacterium tuberculosis*, MIA = 300.0 $\mu$ g/disk, Rifampicin, MIA = 1.0 $\mu$ g/disk; *Streptococcus pneumoniae*, MIA = 300.0 $\mu$ g/disk, Rifampicin, MIA = 1.0 $\mu$ g/disk). Source: DIAN HUANG JING *Polygonatum kingianum* (dried rhizome). Ref: 5484.

**7414 8 $\alpha$ -Ethoxyprocivelline**

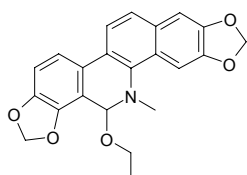
$C_{20}H_{25}NO_5$  (359.43). Amorphous,  $[\alpha]_D^{28} = +116.6^\circ$  ( $c = 0.06$ ,  $CHCl_3$ ). Pharm: AChE inhibitor ( $IC_{50} = (1145 \pm 87) \mu\text{mol/L}$ , control Galanthamine,  $IC_{50} = (1.9 \pm 0.2) \mu\text{mol/L}$ )<sup>[4952]</sup>. Source: LIN JING ZHONG ZI WEN SHU LAN *Crinum bulbispermum*. Ref: 2369, 4952.

**7415 8-Ethoxysachaonitine**

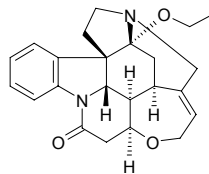
$C_{23}H_{41}NO_4$  (419.61). Amorphous solid,  $[\alpha]_D^{25} = -17.6^\circ$  ( $c = 0.08$ ,  $CHCl_3$ ). Source: BAN HUA WU TOU *Aconitum variegatum* (aerial parts). Ref: 5270.

**7416 Ethoxysanguinarine**

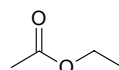
$C_{22}H_{19}NO_5$  (377.40). White lamellar crystals (ammonia absolute ethanol), mp 210–211°C. Pharm: Antibacterial; antineoplastic (cervical carcinoma, thyroid carcinoma); anti-inflammatory (used in treatment of cervicitis). Source: BO LUO HUI *Macleaya cordata*. Ref: 658.

**7417 16-Ethoxystrychnine**

$C_{23}H_{26}N_2O_3$  (378.48). mp 224–225°C. Source: LV SONG GUO *Strychnos ignatii*. Ref: 6.

**7418 Ethyl acetate**

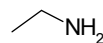
Ethyl ethanoate [141-78-6]  $C_4H_8O_2$  (88.11). bp 77.1°C. Source: JIU LIQUOR, SHENG JIANG *Zingiber officinale*. Ref: 2.

**7419 Ethyl aldehyde**

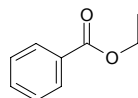
Acetaldehyde [75-07-0]  $C_2H_4O$  (44.05). Source: HAI JIU CAI *Triglochin maritimum*, NIU BANG GEN *Arctium lappa*. Ref: 6.

**7420 Ethylamine**

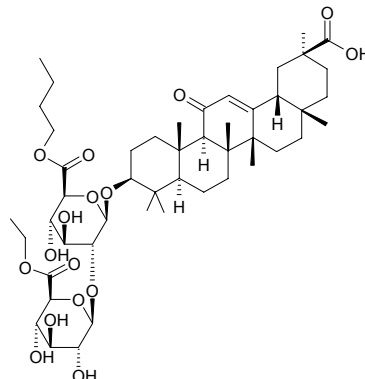
Aminoethane [75-04-7]  $C_2H_7N$  (45.08). bp 16.6°C. Source: LING MAO XIANG *Viverra zibetha*. Ref: 6.

**7421 Ethyl benzoate**

Ethyl benzenecarboxylate [93-89-0]  $C_9H_{10}O_2$  (150.18). bp 212.9°C. Source: XUAN CAO GEN *Hemerocallis fulva*. Ref: 6.

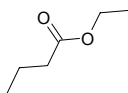
**7422 Ethyl-n-butyl-uralsaponin A esters**

3 $\beta$ -Hydroxy-11-oxo-olean-12-en-30-oic acid-3-O- $\beta$ -D-(n-butyl-glucuronopyranosyl ester)-(1 $\rightarrow$ 2)- $\beta$ -D-(ethyl-glucuronopyranosyl ester)  $C_{48}H_{74}O_{16}$  (907.12). Colorless powder, mp 178°C. Source: GAN CAO *Glycyrrhiza uralensis*. Ref: 2148.

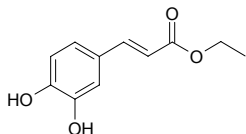


**7423 Ethyl butyrate**

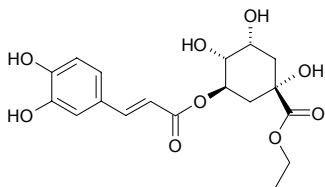
Ethyl butanoate [105-54-4] C<sub>6</sub>H<sub>12</sub>O<sub>2</sub> (116.16). bp 119.9°C. Source: JIU Liquor. Ref: 6.

**7424 Ethyl caffeate**

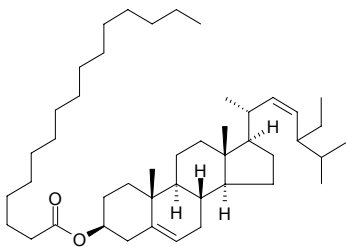
C<sub>11</sub>H<sub>12</sub>O<sub>4</sub> (208.22). Colorless acicular crystals, mp 138~140°C (acetone). Source: JIA BAI HE *Notholirion hyacinthinum* [Syn. *Notholirion bulbuliferum*], NAN CHUAN GUAN CHUN HUA *Microtoena prainiana* (stem: 0.00014%dw)<sup>[4752]</sup>. Ref: 663, 4752.

**7425 Ethyl chlorogenate**

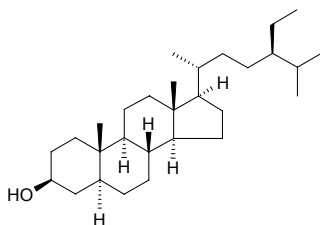
C<sub>18</sub>H<sub>22</sub>O<sub>9</sub> (382.37). Cream white acicular crystals (acetone), mp 106~110°C. Source: JI ZI MU *Sinoadina Racemosa* [Syn. *Adina racemosa*] (leaf, flower and twig: yield = 0.00073%dw)<sup>[4723]</sup>, XI NAN REN DONG *Lonicera bournei*. Ref: 439, 4723.

**7426 24-Ethylcholesta-5,22-dien-3β-ol palmitic acid ester**

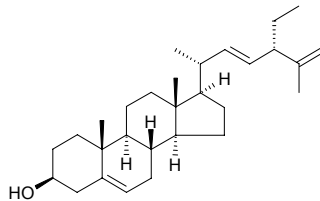
Stigmasteryl palmitate C<sub>45</sub>H<sub>78</sub>O<sub>2</sub> (651.12). Colorless columnar crystals (CH<sub>3</sub>OH), mp 193~194°C. Source: WU WEN ZI BEI TAI *Plagiochasma intermedium*, CHE QIAN *Plantago asiatica*, HUI XIANG GEN *Foeniculum vulgare*. Ref: 6, 857.

**7427 24α-Ethyl-5α-cholestan-3β-ol**

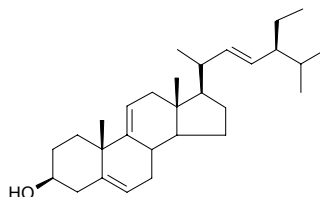
[83-45-4] C<sub>29</sub>H<sub>52</sub>O (416.74). Source: JIAO GU LAN *Gynostemma pentaphyllum*. Ref: 2.

**7428 (24S)-Ethylcholesta-5,22,25-trien-3β-ol**

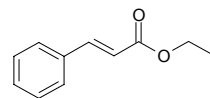
C<sub>29</sub>H<sub>46</sub>O (410.69). mp 152~153°C. Source: CHOU MO LI *Clerodendron fragrans*, SHUI HU MAN *Clerodendron inerme*. Ref: 6.

**7429 24β-Ethylcholesta-5,9(11),22-trien-3β-ol**

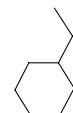
C<sub>29</sub>H<sub>46</sub>O (410.69). Crystalline solid, mp 158~160°C, [α]<sub>D</sub> = -47° (CHCl<sub>3</sub>). Source: KU LANG SHU *Clerodendrum inerme*. Ref: 3382.

**7430 Ethylcinnamate**

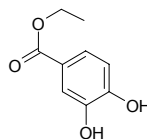
*trans*-Ethyl cinnamate; Ethyl *trans*-3-phenylpropenoate [103-36-6] C<sub>11</sub>H<sub>12</sub>O<sub>2</sub> (176.22). bp (*cis*) 125°C/12mmHg. (*trans*) 271°C. Source: ROU GUI *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*] (bark: content = 0.042%)<sup>[5508]</sup>, SHAN NAI *Kaempferia galanga*. Ref: 6, 5508.

**7431 Ethylcyclohexane**

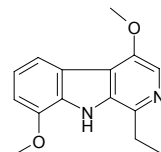
[1678-91-7] C<sub>8</sub>H<sub>16</sub> (112.22). Source: SHAN ZHA *Crataegus pinnatifida*. Ref: 2.

**7432 Ethyl 3,4-dihydroxybenzoate**

C<sub>9</sub>H<sub>10</sub>O<sub>4</sub> (182.18). Pharm: DPPH scavenger (SC<sub>50</sub> = 4.9 μmol/L)<sup>[4247]</sup>, antioxidant (superoxide anion radical scavenger, superoxide dismutase method, IC<sub>50</sub> for Formazan formation activity = 11 μmol/L). Source: XIAN REN ZHANG *Opuntia dillenii* (fresh stem: yield = 0.00014%). Ref: 4247.

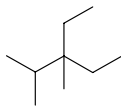
**7433 1-Ethyl-4,8-dimethoxy-β-carboline**

C<sub>15</sub>H<sub>16</sub>N<sub>2</sub>O<sub>2</sub> (256.31). Source: KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. Ref: 12.

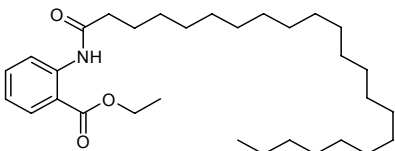


**7434 3-Ethyl-2,3-dimethyl-pentane**

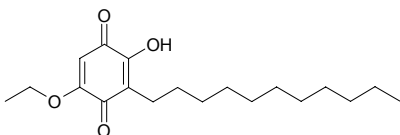
$C_9H_{20}$  (128.26). Source: SHAN ZHA *Crataegus pinnatifida*. Ref: 2.

**7435 Ethyl *N*-docosanoylanthranilate****7436**

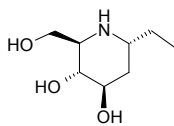
[209523-04-6]  $C_{31}H_{53}NO_3$  (487.77). Source: XI ZANG QIN JIAO *Gentiana tibetica*. Ref: 702.

**7436 5-*O*-Ethylembelin**

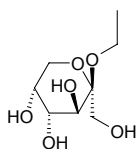
$C_{19}H_{30}O_4$  (322.45). Orange crystals, mp 59–60°C. Pharm: Cytotoxic (*in vitro*, HL-60,  $IC_{50} = 2.5\mu\text{g/mL}$ ; Bel7402,  $IC_{50} = 2.7\mu\text{g/mL}$ ; HeLa,  $IC_{50} = 3.9\mu\text{g/mL}$ ; U937,  $IC_{50} = 1.3\mu\text{g/mL}$ ; control Colchicine, HL-60,  $IC_{50} = 1.6\mu\text{g/mL}$ ; Bel7402,  $IC_{50} = 0.4\mu\text{g/mL}$ ; HeLa,  $IC_{50} = 0.1\mu\text{g/mL}$ ; U937,  $IC_{50} = 0.1\mu\text{g/mL}$ )<sup>[4746]</sup>. Source: LA ZHU GUO *Aegiceras corniculatum* (stem and twig; yield = 0.00050%). Ref: 4746.

**7437  $\alpha$ -1-*C*-Ethyl-fagomine**

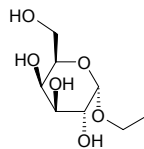
$C_8H_{17}NO_3$  (175.23).  $[\alpha]_D^{25} = +45.7^\circ$  ( $c = 0.71$ ,  $H_2O$ ). Pharm: Enzymes inhibitor ( $\alpha$ -glucosidase: rice,  $IC_{50} = 490\mu\text{mol/L}$ , control DMDP,  $IC_{50} = 300\mu\text{mol/L}$ ; yeast,  $IC_{50} > 1000\mu\text{mol/L}$ , DMDP,  $IC_{50} = 3.6\mu\text{mol/L}$ ; rat intestinal maltase,  $IC_{50} > 1000\mu\text{mol/L}$ , DMDP,  $IC_{50} = 290\mu\text{mol/L}$ ;  $\beta$ -glucosidase, almond,  $IC_{50} > 1000\mu\text{mol/L}$ , DMDP,  $IC_{50} = 13\mu\text{mol/L}$ ;  $\beta$ -galactosidase, bovine liver,  $IC_{50} = 29\mu\text{mol/L}$ , DMDP,  $IC_{50} = 2.2\mu\text{mol/L}$ ; trehalase, porcine kidney,  $IC_{50} > 1000\mu\text{mol/L}$ , DMDP,  $IC_{50} = 200\mu\text{mol/L}$ ; amyloglucosidase, *Aspergillus niger*,  $IC_{50} > 1000\mu\text{mol/L}$ , DMDP,  $IC_{50} = 19\mu\text{mol/L}$ ). Source: RI BEN SAN YE SHA SEN *Adenophora triphylla* var. *japonica* (fresh whole herbs). Ref: 3915.

**7438 Ethyl- $\alpha$ -*D*-fructoside**

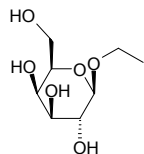
$C_8H_{16}O_6$  (208.21). Source: DANG SHEN *Codonopsis pilosula*. Ref: 2.

**7439 1-Ethyl- $\alpha$ -*D*-galactoside**

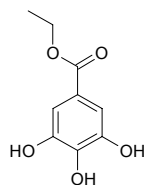
Eleutheroside C  $C_8H_{16}O_6$  (208.21). mp 142°C. Source: CI WU JIA *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*], CI WU JIA PI *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*]. Ref: 2, 6.

**7440 1-Ethyl- $\beta$ -*D*-galactoside**

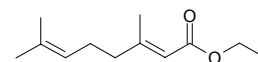
$C_8H_{16}O_6$  (208.21). Source: GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*]. Ref: 2.

**7441 Ethyl gallate**

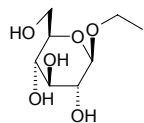
Gallic acid ethyl ester [831-61-8]  $C_9H_{10}O_5$  (198.18). White rhombic crystals (chloroform–methanol), mp 155–158°C. Pharm: Antibacterial (*Bacillus dysenteriae*); antifibrotic; platelet aggregation inhibitor (*in vitro*); inhibits OH-free radicals damaging AT-III (Antithrombase-III) (0.6 mmol/L, InRt = 48.5%); collagenase inhibitor (hmn *in vitro*,  $IC_{50} = 2\mu\text{g/mL}$ ); analgesic. Source: A LA BO JIN HE HUAN *Acacia arabica*, CHA TIAO QI *Acer ginnala*, DA HUA HONG JING TIAN *Rhodiola crenulata* [Syn. *Rhodiola euryphylla*], HE ZI *Terminalia chebula*, LI SHU PI *Castanea mollissima*, MU MIAN HUA *Bombax malabaricum* [Syn. *Gossampinus malabarica*], SHE PU TAO *Ampelopsis brevipedunculata*, SHENG DI HONG JING TIAN *Rhodiola sacra*, WAN SHOU JU *Tagetes erecta*, XI XI LI QI SHU *Rhus coriaria*. Ref: 552, 660, 900.

**7442 Ethyl geranate**

[13058-12-3]  $C_{12}H_{20}O_2$  (196.29). bp 110–120°C. Source: YUN XIANG CAO *Cymbopogon distans*. Ref: 6.

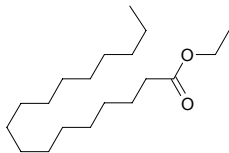
**7443 Ethyl  $\beta$ -*D*-glucopyranoside**

$C_8H_{16}O_6$  (208.21). Colorless syrup,  $[\alpha]_D^{25} = -26^\circ$ . Source: BEI SHA SHEN *Glehnia littoralis* (fruit), SHI LUO ZI *Anethum graveolens* (fruit). Ref: 3525, 4177.

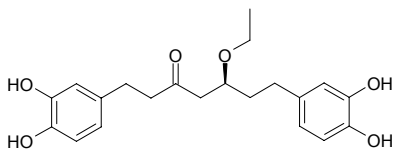


**7444 Ethyl heptadecanoate**

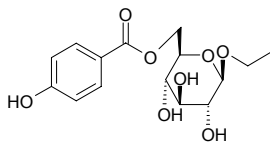
Ethyl margarate [14010-23-2] C<sub>19</sub>H<sub>38</sub>O<sub>2</sub> (298.51). Source: CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*]. Ref: 2.

**7445 5-O-Ethyl-hirsutanonol**

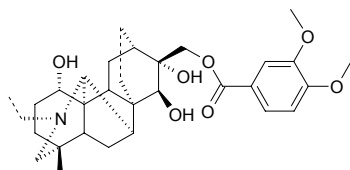
C<sub>21</sub>H<sub>26</sub>O<sub>6</sub> (374.44). Pharm: Antioxidant (superoxide radical scavenger, IC<sub>50</sub> = 2.9 μmol/L; DPPH scavenger, IC<sub>50</sub> = 4.3 μmol/L). Source: CHI YANG *Alnus japonica* (leaf). Ref: 4535.

**7446 Ethyl (6-O-p-hydroxybenzoyl)-β-D-glucopyranoside**

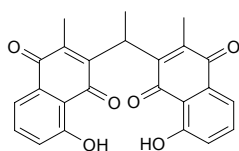
C<sub>15</sub>H<sub>20</sub>O<sub>8</sub> (328.32). Source: ZI YE *Catalpa ovata* (fallen leaf). Ref: 4290.

**7447 N-Ethyl-1α-hydroxy-17-veratrolydictizine**

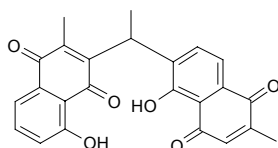
C<sub>31</sub>H<sub>43</sub>NO<sub>7</sub> (541.69). Amorphous solid, [α]<sub>D</sub><sup>25</sup> = +30.0° (c = 0.11, CHCl<sub>3</sub>). Source: BAN HUA WU TOU *Aconitum variegatum* (aerial parts). Ref: 5270.

**7448 Ethylidene-3,3'-biplumbagin**

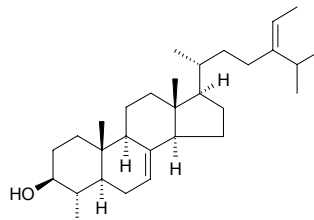
C<sub>24</sub>H<sub>18</sub>O<sub>6</sub> (402.41). Orange-red plates (hexane-C<sub>6</sub>H<sub>6</sub>), mp 200~201°C. Pharm: Ichthyotoxin (MLC > 10mg/L, control Juglone, MLC = 0.2mg/L). Source: HAI SHI *Diospyros maritima* (fruit). Ref: 4185.

**7449 Ethylidene-3,6'-biplumbagin**

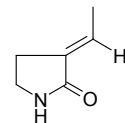
C<sub>24</sub>H<sub>18</sub>O<sub>6</sub> (402.41). Orange-red plates (hexane-C<sub>6</sub>H<sub>6</sub>), mp 185~186°C, [α]<sub>D</sub><sup>28</sup> = -1.50° (c = 1.28, CHCl<sub>3</sub>). Pharm: Ichthyotoxin (MLC > 10mg/L, control Juglone, MLC = 0.2mg/L). Source: HAI SHI *Diospyros maritima* (fruit). Ref: 4185.

**7450 24-Ethylidene lophenol**

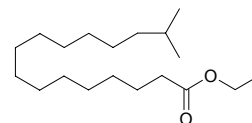
[474-40-8] C<sub>30</sub>H<sub>50</sub>O (426.73). mp 162~164°C. Source: GAN ZHE *Saccharum sinensis*. Ref: 6.

**7451 trans-3-Ethylidene-2-pyrrolidinone**

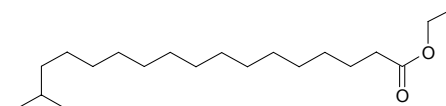
Corydalactam [930-94-9] C<sub>6</sub>H<sub>9</sub>NO (111.14). mp 172~174°C. Source: JU HUA HUANG LIAN *Corydalis pallida*. Ref: 6.

**7452 Ethylisoheptadecanoate**

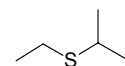
C<sub>19</sub>H<sub>38</sub>O<sub>2</sub> (298.51). Source: CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*]. Ref: 2.

**7453 Ethylisooctadecanoate**

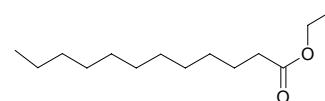
C<sub>20</sub>H<sub>40</sub>O<sub>2</sub> (312.54). Source: CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*]. Ref: 2.

**7454 Ethylisopropyl sulfide**

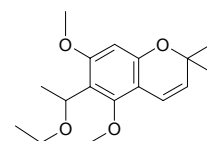
2-Methyl-3-thiapentane [5145-99-3] C<sub>5</sub>H<sub>12</sub>S (104.22). Source: SHENG JIANG *Zingiber officinale*. Ref: 2.

**7455 Ethyllaurate**

Ethyl dodecanoate [106-33-2] C<sub>14</sub>H<sub>28</sub>O<sub>2</sub> (228.38). Source: BAI ZHI *Angelica dahurica* [Syn. *Angelica porphyrocaulis*]. Ref: 2.

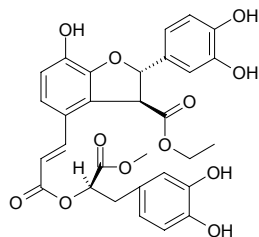
**7456 Ethylleptol B**

C<sub>17</sub>H<sub>24</sub>O<sub>4</sub> (292.38). Yellowish oleaginous substances, [α]<sub>D</sub><sup>10</sup> = +3.26° (c = 0.307, Me<sub>2</sub>CO). Source: SAN CHA KU *Evodia lepta* [Syn. *Ilex lepta*]. Ref: 393.

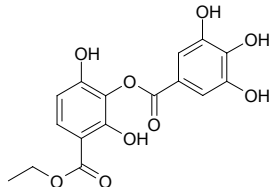


**7457 Ethyl lithospermate**

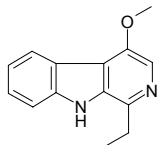
$C_{30}H_{28}O_{12}$  (580.55). Brown yellow gum,  $[\alpha]_D^{23} = +65.6^\circ$  ( $c = 0.25$ , MeOH). **Pharm:** Antioxidant (DPPH scavenger,  $IC_{50} = 0.1028$ mmol/L, control Propyl gallate,  $IC_{50} = 0.03$ mol/L; superoxide radical inhibitor, inactive, control Propyl gallate,  $IC_{50} = 0.106$ mmol/L; iron chelating assay, inactive, control Propyl gallate,  $IC_{50} = 0.064$ mmol/L). **Source:** MING XIAN HUA ZHU CHANG ZHU LIU LI CAO *Lindelofia stylosa* (aerial parts). **Ref:** 4533.

**7458 Ethyl-m-digallate**

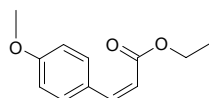
$C_{16}H_{14}O_9$  (350.28). Colorless colloid. **Source:** LUAN SHU *Koeleruteria paniculata*. **Ref:** 677.

**7459 1-Ethyl-4-methoxy-β-carboline**

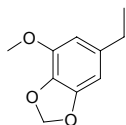
$C_{14}H_{14}N_2O$  (226.28). **Source:** KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. **Ref:** 12.

**7460 Ethyl p-methoxy-cis-cinnamate**

$C_{12}H_{14}O_3$  (206.24). **Pharm:** Anti-cancer-promoted activity ( $IC_{50} = 5.5$ μmol/L). **Source:** SHAN NAI *Kaempferia galanga*. **Ref:** 2252.

**7461 5-Ethyl-1-methoxy-2,3-methylenedioxybenzene**

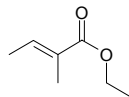
$C_{10}H_{12}O_3$  (180.21). **Source:** *Plagiochila rutilans*. **Ref:** 5144.

**7462 1-Ethyl-2-methylbenzene**

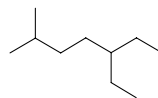
[611-14-3]  $C_9H_{12}$  (120.20). **Source:** SHAN ZHA *Crataegus pinnatifida*. **Ref:** 2.

**7463 Ethyl-2-methylbut-2-enoate**

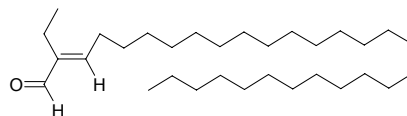
[5837-78-5]  $C_7H_{12}O_2$  (128.17). **Pharm:** Flavorant. **Source:** WEN PO *Cydonia oblonga*. **Ref:** 658.

**7464 5-Ethyl-2-methylheptane**

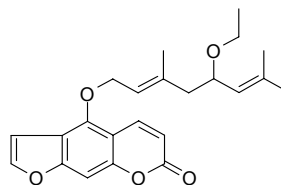
$C_{10}H_{22}$  (142.29). **Source:** SHAN ZHA *Crataegus pinnatifida*. **Ref:** 2.

**7465 (2E)-2-Ethyl-2-nonacosenal**

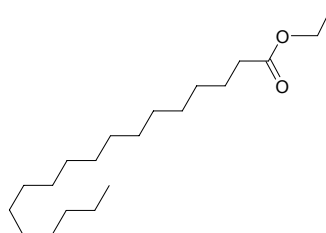
$C_{31}H_{60}O$  (448.82). White crystals, mp 65~66°C. **Source:** JI DAN SHEN *Codonopsis convolvulacea*. **Ref:** 779.

**7466 Ethylnotopterol**

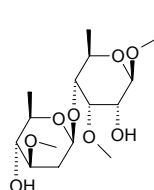
5-(2E,5E)-3,7-Dimethyl-7-[(1-ethoxy)ethoxy-2,5-octadienyloxy] psoralen  $C_{23}H_{26}O_5$  (328.26). Colorless ropy substance. **Source:** QIANG HUO *Notopterygium incisum*. **Ref:** 325.

**7467 Ethyloctadecanoate**

Ethyl stearate [111-61-5]  $C_{20}H_{40}O_2$  (312.54). **Source:** CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*]. **Ref:** 2.

**7468 Ethyl O-β-D-oleandropyranosyl-(1→4)-O-3-O-methyl-6-deoxy-β-D-allopyranoside**

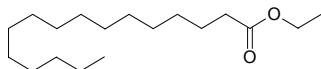
$C_{16}H_{30}O_8$  (350.41). **Source:** ROU LEI NIU NAI CAI *Marsdenia roylei*. **Ref:** 1875.



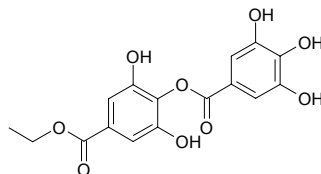


**7469 Ethylpalmitate**

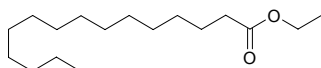
Ethyl hexadecanoate [628-97-7]  $C_{18}H_{36}O_2$  (284.49). mp ( $\alpha$ ) 24°C, ( $\beta$ ) 19.3°C. Source: CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*], DANG SHEN *Codonopsis pilosula*, JIN YIN HUA *Lonicera japonica*, SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. Ref: 2, 6, 638.

**7470 Ethyl-p-digallate**

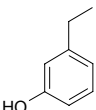
$C_{16}H_{14}O_9$  (350.28). Colorless colloid. Source: LUAN SHU *Koeleruteria paniculata*. Ref: 677.

**7471 Ethylpentadecanoate**

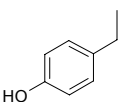
[41114-00-5]  $C_{17}H_{34}O_2$  (270.46). Source: CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*]. Ref: 2.

**7472 m-Ethylphenol**

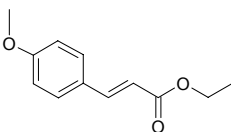
$C_8H_{10}O$  (122.17). Source: DANG GUI *Angelica sinensis*, YIN CHEN HAO *Artemisia capillaris*. Ref: 2, 660.

**7473 p-Ethylphenol**

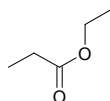
$C_8H_{10}O$  (122.17). Source: DANG GUI *Angelica sinensis*, YIN CHEN HAO *Artemisia capillaris*. Ref: 2, 660.

**7474 Ethyl-p-methoxycinnamate**

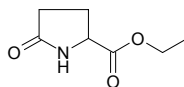
p-Methoxycinnamic acid ethyl ether [24393-56-4]  $C_{12}H_{14}O_3$  (206.24). Pharm: Cytotoxic (HeLa). Source: SHAN NAI *Kaempferia galanga*, TU LIANG JIANG *Hedychium spicatum*. Ref: 6, 658.

**7475 Ethylpropionate**

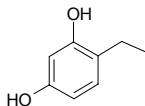
[105-37-3]  $C_5H_{10}O_2$  (102.13). Source: SHENG JIANG *Zingiber officinale*, CHUAN XU DUAN *Dipsacus asperoides*. Ref: 2, 660.

**7476 Ethyl pyroglutamate**

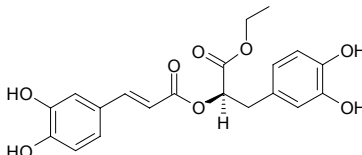
$C_7H_{11}NO_3$  (157.17). Source: SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. Ref: 2487.

**7477 4-Ethylresorcinol**

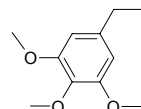
[2896-60-8]  $C_8H_{10}O_2$  (138.17). Source: DANG GUI *Angelica sinensis*. Ref: 2.

**7478 Ethyl rosmarinate**

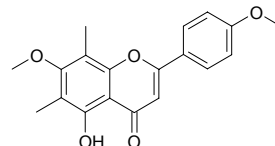
$C_{20}H_{20}O_8$  (388.38). Pharm: Antioxidant (DPPH scavenger,  $IC_{50} = 0.0412$ mmol/L, control Propyl gallate,  $IC_{50} = 0.03$ mol/L; superoxide radical inhibitor, inactive, control Propyl gallate,  $IC_{50} = 0.106$ mmol/L; iron chelating assay, inactive, control Propyl gallate,  $IC_{50} = 0.064$ mmol/L). Source: MING XIAN HUA ZHU CHANG ZHU LIU LI CAO *Lindelofia stylosa* (aerial parts). Ref: 4533.

**7479 5-Ethyl-1,2,3-trimethoxybenzene**

$C_{11}H_{16}O_3$  (196.25). Source: *Plagiochila rutilans*. Ref: 5144.

**7480 Eucalyptin**

[3122-88-1]  $C_{19}H_{18}O_5$  (326.35). mp 198.5~200.0°C. Source: AN YE *Eucalyptus globulus*, NING MENG AN YE *Eucalyptus citriodora*. Ref: 6.

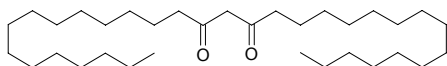
**7481 Eucalyptol**

[470-82-6]  $C_{10}H_{18}O$  (154.25). Colorless liquid, camphor-like odor, mp 1.5°C, bp 176~177°C. Pharm: Analgesic; antiasthmatic; antibacterial; anti-inflammatory; anthelmintic; antipyretic. Source: AN YE *Eucalyptus globulus* (95.13% in volatile oil), BAI QIAN CENG *Melaleuca leucadendra*, BIN HAO *Artemisia maritima*, DA YE AN YE *Eucalyptus robusta*, GAO LIANG JIANG *Alpinia officinarum* (dried rhizome: mean content of 6 origins = 0.35%)<sup>[5508]</sup>, LUO LE *Ocimum basilicum*, MEI GUO XIA LA MEI *Calycanthus floridus*, QING GUO *Canarium album*, SHU ZHI BAN RI HUA *Csitis ladaniferus*, TU QIANG HUO *Hedychium coronarium*, ZHANG MU *Cinnamomum camphora* (wood: content = 0.21%)<sup>[5501]</sup>, ZI SUI HUAI *Amorpha fruticosa*. Ref: 661, 5501, 5508.

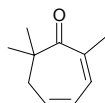


**7482 Eucalyptus wax**

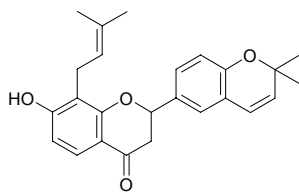
$C_{33}H_{64}O_2$  (492.88). **Pharm:** Used in treatment of diseases in lung and bronchus. **Source:** *Eucalyptus* sp., *Acacia* sp. **Ref:** 658.

**7483 Eucarvone**

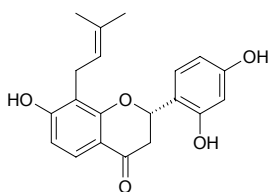
[503-93-5]  $C_{10}H_{14}O$  (150.22). bp 99~100°C/22mmHg. **Source:** LIAO XI XIN *Asarum heterotropoides* var. *mandshuricum*. **Ref:** 2, 660, 1521.

**7484 Euchrenone**

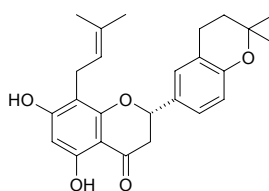
$C_{25}H_{26}O_4$  (390.48). **Source:** GUANG GUO GAN CAO *Glycyrrhiza glabra*. **Ref:** 2431.

**7485 (2S)-Euchrenone A<sub>7</sub>**

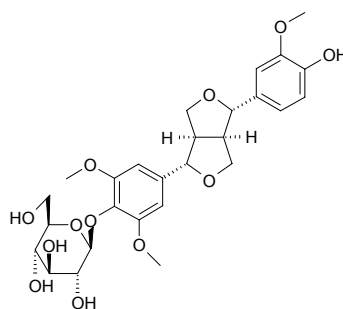
Anticancer Flavonoid PMV70P691-90  $C_{20}H_{20}O_5$  (340.38). **Pharm:** Aromatase inhibitor (*in vitro*,  $IC_{50} = 3.4 \mu\text{mol/L}$ ; control Aminoglutethimide,  $IC_{50} = 6.4 \mu\text{mol/L}$ )<sup>[3090, 5038]</sup>. **Source:** GOU SHU *Broussonetia papyrifera*. **Ref:** 3090, 5038.

**7486 (2S)-Euchrenone A<sub>16</sub>**

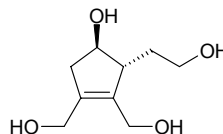
5,7-Dihydroxy-8-( $\gamma,\gamma$ -dimethylallyl)-[6''',6'''-dimethyl-4''',5'''-dihydropyrano-(2''',3''':4',3')] -flavanone  $C_{25}H_{28}O_5$  (408.50). Yellow oil,  $[\alpha]_D^{24} = -213^\circ$  ( $c = 0.05$ ,  $CHCl_3$ ). **Source:** TAI WAN SHAN DOU GEN *Euchresta formosana*. **Ref:** 1977.

**7487 Eucommin A**

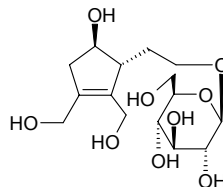
(+)-Medioresinol monoglucoside [99633-12-2]  $C_{27}H_{34}O_{12}$  (550.56). **Pharm:** Immunomodulator **Source:** DU ZHONG *Eucommia ulmoides*, HUANG CHAN *Allemanda neritifolia*. **Ref:** 2.

**7488 Eucommiol**

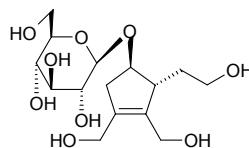
[55930-44-4]  $C_9H_{16}O_4$  (188.23). **Source:** DU ZHONG *Eucommia ulmoides*. **Ref:** 2.

**7489 Eucommioside I**

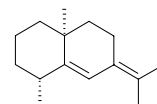
[82225-01-2]  $C_{15}H_{26}O_9$  (350.37). **Source:** DU ZHONG *Eucommia ulmoides*. **Ref:** 2.

**7490 Eucommioside-II**

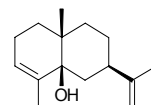
[94190-27-9]  $C_{15}H_{26}O_9$  (350.37). **Source:** DU ZHONG *Eucommia ulmoides*. **Ref:** 2.

**7491 (+)-Eudesma-5,7(11)-diene**

$C_{15}H_{24}$  (204.36). Colorless oil. **Source:** *Tritomaria polita* (essential oil). **Ref:** 3446.

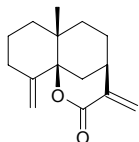
**7492 (-)-Eudesma-3,11-dien-5-ol**

$C_{15}H_{24}O$  (220.36). **Source:** KAN MAI NIANG ZHUANG SHA CAO *Cyperus alopecuroides* (essential oil). **Ref:** 5129.

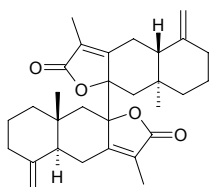


**7493 Eudesma-4(15),11(13)-dien-12,5 $\beta$ -olide**

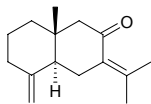
C<sub>15</sub>H<sub>20</sub>O<sub>2</sub> (232.33). Source: LIU LENG JU *Laggera alata* (aerial parts: yield = 0.00083%dw). Ref: 4709.

**7494 Bis-[8-eudesma-4(15),7(11)-dien-12,8 $\alpha$ -olide]**

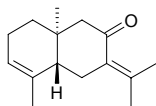
C<sub>30</sub>H<sub>38</sub>O<sub>4</sub> (462.63). Colorless prisms, mp 211~212°C (CH<sub>2</sub>Cl<sub>2</sub>), 210~212°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +255.8° (*c* = 0.122, CHCl<sub>3</sub>). Source: *Trattinickia rhoifolia* (resin). Ref: 4213.

**7495 (+)-Eudesma-4(15),7(11)-dien-8-one**

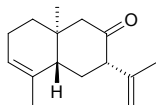
Selina-4(15),7(11)-dien-8-one; Selina-4(14),7(11)-dien-8-one C<sub>15</sub>H<sub>22</sub>O (218.34). Colorless oil, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +92.6° (*c* = 0.034, methanol). Pharm: Anti-inflammatory (mus, reduces blood capillary permeability caused by acetic acid, 300mg/kg, InRt = (31.6±11.9)%). Source: BAI ZHU *Atractylodes macrocephala* [Syn. *Atractylis macrocephala*], BEI CANG ZHU *Atractylodes chinensis*, CANG ZHU *Atractylodes lancea*, GUAN CANG ZHU *Atractylodes japonica*, SHUANG YE XI XIN *Asarum caulescens*. Ref: 660, 661.

**7496 (+)-Eudesma-3,7(11)-dien-8-one**

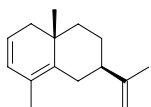
C<sub>15</sub>H<sub>22</sub>O (218.34). Colorless oil. Source: *Tritomaria polita* (essential oil). Ref: 3446.

**7497 (+)-Eudesma-3,11-dien-8-one**

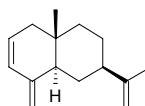
C<sub>15</sub>H<sub>22</sub>O (218.34). Colorless oil. Source: *Tritomaria polita* (essential oil). Ref: 3446.

**7498 Eudesma-2,4,11-triene**

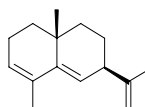
C<sub>15</sub>H<sub>22</sub> (202.34). Source: KAN MAI NIANG ZHUANG SHA CAO *Cyperus alopecuroides* (essential oil). Ref: 5129.

**7499 (-)-Eudesma-2,4(15),11-triene**

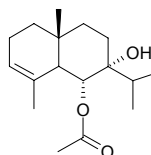
C<sub>15</sub>H<sub>22</sub> (202.34). Source: KAN MAI NIANG ZHUANG SHA CAO *Cyperus alopecuroides* (essential oil). Ref: 5129.

**7500 Eudesma-3,5,11-triene**

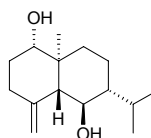
C<sub>15</sub>H<sub>22</sub> (202.34). Source: KAN MAI NIANG ZHUANG SHA CAO *Cyperus alopecuroides* (essential oil). Ref: 5129.

**7501 (-)-Eudesm-3-ene-6 $\alpha$ -acetoxy-7 $\alpha$ -ol**

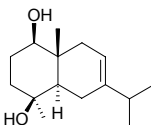
C<sub>17</sub>H<sub>28</sub>O<sub>3</sub> (280.41). Colorless needle crystals, mp 141~142°C. Source: LIE E TAI *Chiloscyphus polyanthus*. Ref: 2188.

**7502 ent-4(15)-Eudesmene-1 $\beta$ ,6 $\alpha$ -diol**

C<sub>15</sub>H<sub>26</sub>O<sub>2</sub> (238.37). Amorphous, [ $\alpha$ ]<sub>D</sub><sup>26</sup> = -36.8° (*c* = 0.16, CHCl<sub>3</sub>), [ $\alpha$ ]<sub>D</sub><sup>12</sup> = -31.5° (*c* = 0.13, MeOH). Source: ZHAO WA JIA KE TAI *Jackiella javanica*. Ref: 5303.

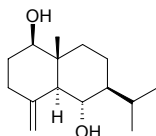
**7503 7-Eudesmene-1,4-diol**

C<sub>15</sub>H<sub>26</sub>O<sub>2</sub> (238.37). Colorless plates, mp 107~109°C. Pharm: Antiplasmodial (*Plasmodium falciparum* strains, IC<sub>50</sub> = 4.17 $\mu$ g/mL, control Chloroquine, IC<sub>50</sub> = 0.0028 $\mu$ g/mL)<sup>[2383]</sup>. Source: *Reneilmia cincinnata* (fruits). Ref: 2383.

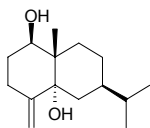


**7504 Eudesm-4(15)-ene-1 $\beta$ ,6 $\alpha$ -diol**

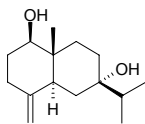
1 $\beta$ ,6 $\alpha$ -Dihydroxy-eudesman-4(15)-ene C<sub>15</sub>H<sub>26</sub>O<sub>2</sub> (238.37). Colorless oil, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +4.5° (c = 0.2, CHCl<sub>3</sub>); [ $\alpha$ ]<sub>D</sub><sup>17</sup> = +7° (c = 0.50, CHCl<sub>3</sub>); White powder, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -27.1° (c = 1.47, CHCl<sub>3</sub>); colorless needles (petroleum ether-EtOAc), [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +45° (c = 0.1, CHCl<sub>3</sub>). **Pharm:** Cytotoxic (inhibits growth of Bel7402 cell, 0.0001mol/L, InRt = 29.1%, control Etoposide, InRt = 96.0%)<sup>[5073]</sup>; anti-HIV-1 inactive (*in vitro*, HOG R5)<sup>[4688]</sup>. **Source:** DIE DA LAO *Litsea verticillata* (leaf and twig: 0.00049%dw), FEI CHENG FEI PENG *Erigeron philadelphicus* (aerial parts), HUANG HUA HAO *Artemisia annua* (seed), SU MEN BAI JIU CAO *Erigeron sumatrensis* (aerial parts), YI NIAN PENG *Erigeron annuus* (aerial parts), ZHONG JIAN JIN JI ER *Caragana intermedia* (aerial parts). **Ref:** 3435, 4338, 4688, 4786, 5073.

**7505 4(15)-Eudesmene-1 $\beta$ ,5 $\alpha$ -diol**

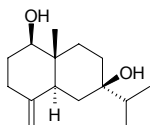
1 $\beta$ ,5 $\alpha$ -Dihydroxyeudesman-4(15)-ene C<sub>15</sub>H<sub>26</sub>O<sub>2</sub> (238.37). Colorless monoclinic crystals (petroleum ether-EtOAc), [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +122° (c = 0.7, CHCl<sub>3</sub>); [ $\alpha$ ]<sub>D</sub><sup>17</sup> = +30° (c = 0.10, CHCl<sub>3</sub>). **Pharm:** Antifungal (*Pyricularia oryzae* P-2b, MIC = 20 $\mu$ g/mL)<sup>[4786]</sup>; glucose consumption activity (C<sub>2</sub>C<sub>12</sub> muscle cell assay, IC = 10.7 $\mu$ g/mL; in animal tests, it showed the same effect on oral glucose tolerance in db/db mouse as metformin, MIC = 100mg/mL)<sup>[4786]</sup>. **Source:** YI NIAN PENG *Erigeron annuus* (aerial parts), ZHONG JIAN JIN JI ER *Caragana intermedia* (aerial parts). **Ref:** 4338, 4786, 5073.

**7506 4(15)-Eudesmene-1 $\beta$ ,7 $\alpha$ -diol**

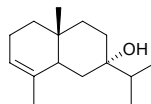
1 $\beta$ ,7 $\alpha$ -Dihydroxyeudesman-4(15)-ene C<sub>15</sub>H<sub>26</sub>O<sub>2</sub> (238.37). Colorless oil, [ $\alpha$ ]<sub>D</sub><sup>17</sup> = +30° (c = 0.13, CHCl<sub>3</sub>); colorless needles (petroleum ether-EtOAc), [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +35° (c = 0.1, CHCl<sub>3</sub>). **Pharm:** Antifungal (*Pyricularia oryzae* P-2b, MIC = 12 $\mu$ g/mL)<sup>[4786]</sup>. **Source:** YI NIAN PENG *Erigeron annuus* (aerial parts), ZHONG JIAN JIN JI ER *Caragana intermedia* (aerial parts). **Ref:** 4786, 5073.

**7507 4(15)-Eudesmene-1 $\beta$ ,7 $\beta$ -diol**

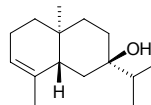
C<sub>15</sub>H<sub>26</sub>O<sub>2</sub> (238.37). Colorless needles (petroleum ether-EtOAc), [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -12° (c = 0.1, CHCl<sub>3</sub>). **Pharm:** Antifungal (*Pyricularia oryzae* P-2b, MIC = 16 $\mu$ g/mL)<sup>[4786]</sup>. **Source:** ZHONG JIAN JIN JI ER *Caragana intermedia* (aerial parts). **Ref:** 4786.

**7508 (+)-Eudesm-3-ene-7 $\alpha$ -ol**

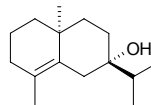
C<sub>15</sub>H<sub>26</sub>O (222.37). Greenish oil. **Source:** LIE E TAI *Chiloscyphus polyanthus*. **Ref:** 2188.

**7509 Eudesm-3-en-7-ol**

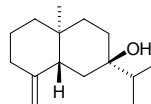
(+)-(2*R*,4*a*S,8*a*R)-1,2,3,4,4*a*,5,6,7,8*a*-Octahydro-4*a*,8-dimethyl-2-(1-methylethyl)-1,2-naphthalenol C<sub>15</sub>H<sub>26</sub>O (222.37). Colorless oil. **Source:** YING ZHI YE TAI *Lepidozia vitrea* (essential oil). **Ref:** 5209.

**7510 Eudesm-4-en-7 $\alpha$ -ol**

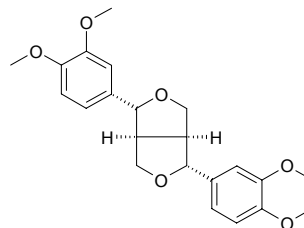
(-)-1,2,3,4,4*a*,5,6,7-Octahydro-4*a*,8-dimethyl-2-(1-methylethyl)-naphthalen-2-ol C<sub>15</sub>H<sub>26</sub>O (222.37). Colorless oil. **Source:** DONG YA ZHI YE TAI *Lepidozia fauriana* (essential oil), YING ZHI YE TAI *Lepidozia vitrea* (essential oil). **Ref:** 5209.

**7511 Eudesm-4(15)-en-7-ol**

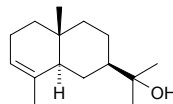
(-)-(2*R*,4*a*S,8*a*R)-Decahydro-4*a*-methyl-8-methylene-2-(1-methylethyl)-2-naphthalenol C<sub>15</sub>H<sub>26</sub>O (222.37). Colorless oil. **Source:** YING ZHI YE TAI *Lepidozia vitrea* (essential oil). **Ref:** 5209.

**7512 Eudesmin**

C<sub>22</sub>H<sub>26</sub>O<sub>6</sub> (386.45). mp 107-108°C. **Pharm:** Tuberculostatic (*in vitro*); calcium antagonist (gpg, colon bands). **Source:** BAN PI AN *Eucalyptus hemiphloia*, WANG CHUN YU LAN *Magnolia biondii* [Syn. *Magnolia fargesii*], XI BING MU JIANG ZI *Litsea gracilipes*, ZHAI YE NAN YANG SHAN *Araucaria angustifolia*, ZHOU YE MU LAN *Magnolia praecocissima* (seed), *Haplophyllum* sp. **Ref:** 6, 658, 660, 4181.

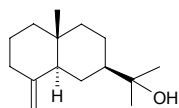
**7513  $\alpha$ -Eudesmol**

[473-16-5] C<sub>15</sub>H<sub>26</sub>O (222.37). mp 75°C, bp 156°C/10mmHg. **Source:** CANG ZHU *Atractylodes lancea*, HOU PO *Magnolia officinalis*, AO YE HOU PO *Magnolia biloba*. **Ref:** 6, 660.

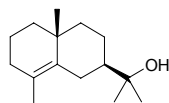


**7514  $\beta$ -Eudesmol**

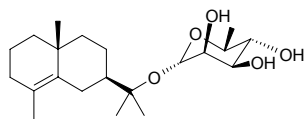
[473-15-4] C<sub>15</sub>H<sub>26</sub>O (222.37). mp 76°C. **Pharm:** NO production inhibitor (mus peritoneal macrophages, induced by LPS, 100 $\mu$ mol/L, InRt = (98.5 $\pm$ 1.8)%, control *L*-NMMA, 100 $\mu$ mol/L, InRt = (79.2 $\pm$ 0.9)%,  $p < 0.01$ )<sup>[4150]</sup>. **Source:** AO YE HOU PO *Magnolia biloba*, BEI CANG ZHU *Atractylodes chinensis* (dried rhizome: content = 2.20%<sup>[5531]</sup>), CANG ZHU *Atractylodes lancea* (dried rhizome: content scope of 5 origins = 0.44%~1.56%, mean content = 0.84%<sup>[5531]</sup>), FANG FENG *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*] (root: content = 1.549% in male, content = 1.727% in female)<sup>[5501]</sup>, GAN SONG *Nardostachys chinensis*, GUAN CANG ZHU *Atractylodes japonica* (dried rhizome: content = 0.02%<sup>[5531]</sup>), HOU PO *Magnolia officinalis*, LIU SHAN *Cryptomeria fortunei*, PING E SHU *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*], SHENG JIANG *Zingiber officinale*. **Ref:** 2, 6, 660, 4150, 5501, 5531.

**7515  $\gamma$ -Eudesmol**

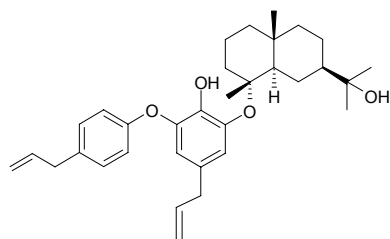
C<sub>15</sub>H<sub>26</sub>O (222.37). **Pharm:** Cytotoxic (*in vitro*, HepG<sub>2</sub>, IC<sub>50</sub> = 1.5 $\mu$ g/mL, Hep 2,2,15, IC<sub>50</sub> = 0.01 $\mu$ g/mL). **Source:** YI LAN *Cananga odorata* (fruit). **Ref:** 3055.

**7516  $\gamma$ -Eudesmol 11- $\alpha$ -L-rhamnoside**

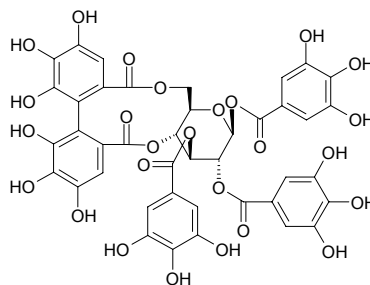
C<sub>21</sub>H<sub>36</sub>O<sub>5</sub> (368.52). Gum, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -11.5° ( $c = 0.24$ , CHCl<sub>3</sub>). **Pharm:** Cytotoxic (*in vitro*, HepG<sub>2</sub>, IC<sub>50</sub> = 3.9 $\mu$ g/mL, Hep2,2,15, IC<sub>50</sub> = 10.6 $\mu$ g/mL). **Source:** YI LAN *Cananga odorata* (fruit). **Ref:** 3055.

**7517 Eudesobovatol A**

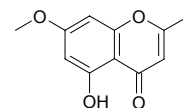
[125196-77-2] C<sub>33</sub>H<sub>44</sub>O<sub>4</sub> (504.72). **Pharm:** CNS depressant; used in treatment of neurosis and gastrointestinal disease; neurotrophic. **Source:** RI BEN HOU PO *Magnolia obovata*. **Ref:** 658.

**7518 Eugeniiin**

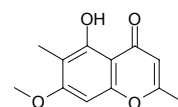
Tellimagrandin II; Cornustannin 2 [58970-75-5] C<sub>41</sub>H<sub>30</sub>O<sub>26</sub> (938.68). **Pharm:** Antiviral (herpes simplex virus); inhibits lipolysis (rat fat cells, induced by adrenaline); antioxidant (SOD-like activity, EC<sub>50</sub> = 94.8 $\mu$ mol/L, control Gallic acid, EC<sub>50</sub> = 31.7 $\mu$ mol/L, *L*-Ascorbic acid, EC<sub>50</sub> = 34.6 $\mu$ mol/L)<sup>[3408]</sup>; antioxidant (DPPH scavenger, EC<sub>50</sub> = 0.44 $\mu$ mol/L, control Gallic acid, EC<sub>50</sub> = 5.88 $\mu$ mol/L, *L*-Ascorbic acid, EC<sub>50</sub> = 6.25 $\mu$ mol/L)<sup>[3408]</sup>. **Source:** BAI SHAO *Paeonia albiflora* [Syn. *Paeonia lactiflora*], BAI SHAO *Paeonia albiflora* [Syn. *Paeonia lactiflora*] (fresh fruit: yield = 0.063%fw)<sup>[4695]</sup>, CHI SHAO *Paeonia lactiflora* wild, DING XIANG *Syzygium aromaticum* [Syn. *Eugenia caryophyllata*], HU TAO REN *Juglans regia*, RI BEN MA SANG *Coriaria japonica*, SHAN ZHU YU *Cornus officinalis* [Syn. *Macrocarpium officinale*], XIN SHAO NA CAO *Tellima grandifolia*, *Rosa* sp., *Quercus* sp., *Fuchsia* sp. **Ref:** 2, 658, 3408, 4695.

**7519 Eugenin**

C<sub>11</sub>H<sub>10</sub>O<sub>4</sub> (206.20). **Pharm:** Cytotoxic (hmn peripheral blood T cells, dose = 5.0 $\mu$ g/mL, T cell survival rate = 98%)<sup>[3498]</sup>; immunosuppressant (inhibits IL-2 secretion costimulated by CD28, dose = 5.0 $\mu$ g/mL, InRt = 59%). **Source:** HONG CHAI HU *Bupleurum scorzoniferifolium* (root). **Ref:** 3498.

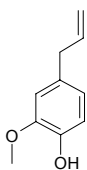
**7520 Eugenitin**

[480-12-6] C<sub>12</sub>H<sub>12</sub>O<sub>4</sub> (220.23). mp 162°C. **Source:** DING XIANG *Syzygium aromaticum* [Syn. *Eugenia caryophyllata*]. **Ref:** 6.

**7521 Eugenol**

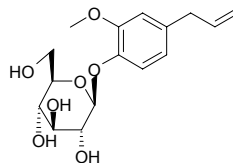
4-Allyl-2-methoxyphenol [97-53-0] C<sub>10</sub>H<sub>12</sub>O<sub>2</sub> (164.21). mp -9°C, bp 254-255°C. **Pharm:** Antibacterial (*Staphylococcus aureus*, *Klebsiella pneumoniae*, *Escherichia coli*, *Shigella shigae*, *Bacillus proteus* etc., IC = 1:2000~1:8000)<sup>[5501]</sup>; antifungal (pathogen fungi, EC = 1:8000~1:16000)<sup>[5501]</sup>; antioxidant<sup>[5501]</sup>; CNS activity (rbt, iv, anesthesia action, lowers blood pressure, inhibits respiration and anticonvulsion)<sup>[5501]</sup>; platelet aggregation inhibitor (rbt platelets induced by thrombin, 100 $\mu$ g/mL, add thrombin 0.1u/mL, AggRt = (91.9 $\pm$ 0.4)%, control AggRt = (92.6 $\pm$ 0.4)%; add AA,

100 $\mu$ mol/L, 100 $\mu$ g/mL, AggRt = (0.0 $\pm$ 0.0)%, 2 $\mu$ g/mL, AggRt = (86.3 $\pm$ 3.9)%, control AggRt = (87.8 $\pm$ 0.3)%, Aspirin 50 $\mu$ g/mL, AggRt = (11.7 $\pm$ 10.1)%; add collagen 10 $\mu$ g/mL, 100 $\mu$ g/mL, AggRt = (17.1 $\pm$ 5.6)%, 2 $\mu$ g/mL, AggRt = (88.2 $\pm$ 1.0)%, control AggRt = (89.3 $\pm$ 0.5)%, Aspirin 100 $\mu$ g/mL, AggRt = (81.3 $\pm$ 0.5)%; add PAF 2ng/mL, 100 $\mu$ g/mL, AggRt = (91.0 $\pm$ 1.0)%, control AggRt = (93.0 $\pm$ 0.6)%<sup>[4938]</sup>; antipyretic (rbt with IL-induced fever, stronger than acetyl aminophenol, antipyretic mechanism involves inhibition of PG synthesis in brain)<sup>[5501]</sup>; anti-inflammatory (rat, swollen foot model caused by carrageenan; mouse, edema on ears caused by oleum crotonis; gpg, edema on ears caused by benzoic acid)<sup>[5501]</sup>; smooth muscle relaxant (smooth muscle in blood vessel, intestine and isolated uterus, smooth muscle in gpg trachea ED<sub>50</sub> = (39 $\pm$ 5) $\mu$ mol/L, smooth muscle in gpg ileum ED<sub>50</sub> = (6.8 $\pm$ 1.0) $\mu$ g/mL, but causes constriction of rat isolated bladder)<sup>[5501]</sup>; anti-androgenic (testosterone-5 $\alpha$ -reductase inhibitor)<sup>[5501]</sup>; LD<sub>50</sub> (rat, orl) = 1.93g/kg, (rat, orl) = 2.68g/kg; (mouse, orl) = 3g/kg<sup>[5501]</sup>. **Source:** BAI CHANG *Acorus calamus*, CHA SHU *Sassafras tzumu*, CHAI HU *Bupleurum chinense*, DA LIANG JIANG *Alpinia galanga*, DING XIANG *Syzygium aromaticum* [Syn. *Eugenia caryophyllata*] (dried bud: content scope = 11.2%–15.3%<sup>[5501]</sup>, mean content = 12.49%<sup>[5508]</sup>), DU HENG *Asarum forbesii*, DUO XIANG GUO *Pimenta dioica*, FAN SHI LIU YE *Psidium guajava*, FEI LONG ZHANG XUE *Toddalia asiatica* [Syn. *Toddalia aculeata*; *Paullinia asiatica*], GAO LIANG JIANG *Alpinia officinarum*, GUANG HUO XIANG *Pogostemon cablin* [Syn. *Mentha cablin*], GUI PI *Cinnamomum japonicum*, HUANG HAO *Artemisia scoparia* [Syn. *Artemisia capillaris* var. *scoparia*], JIA JING JIE *Nepeta cataria*, JIAN ZI SU YE *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*], JIN YIN HUA *Lonicera japonica*, JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*], JU JIANG YE *Piper betle*, KE SHI HAO *Artemisia klotzschiana*, KONG SHI CHUN *Ulva pertusa*, LUO LE *Ocimum basilicum*, MA HUA *Cannabis sativa*, MEI GUI HUA *Rosa rugosa*, MO YAO *Commiphora myrrha* [Syn. *Commiphora molmol*], ROU DOU KOU *Myristica fragrans* (kernel: content = 0.456%<sup>[5508]</sup>), SAN TIAO JIN *Cinnamomum tamala*, SANG YE *Morus alba*, SHE XIANG SHI CAO *Achillea moschata*, SHI CHANG PU *Acorus tatarinowii*, SHI ZHU *Dianthus chinensis*, SHI XIANG RU *Mosla chinensis* [Syn. *Orthodon chinensis*], SHUI XIAN HUA *Narcissus tazetta* var. *chinensis*, TAI WAN CHA MU *Sassafras randainense*, TAI WAN HU JIAO *Piper taiwanense* (stem), TIAN NIU ZHI *Origanum majorana*, XI XIN *Asarum sieboldii*, XIANG ZHANG *Cinnamomum parthenoxylum* [Syn. *Cinnamomum porrectum*], XIAO CAO WU *Delphinium yunnanense*, XIN YI *Magnolia liliflora*, YANG SHI CAO *Achillea millefolium*, YE XIANG SHU *Cestrum nocturnum*, YIN CHEN HAO *Artemisia capillaris*, YIN XING CAO *Siphonostegia chinensis*, YUE GUI ZI *Laurus nobilis*, ZHANG MU *Cinnamomum camphora*, *Ocimum* sp., occurs in many plants. **Ref:** 2, 4, 11, 638, 658, 660, 4938, 5501, 5508.



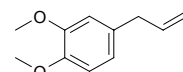
### 7522 Eugenol- $\beta$ -D-glucopyranoside

3-Hydroxyestragele- $\beta$ -D-glucopyranoside C<sub>16</sub>H<sub>22</sub>O<sub>7</sub> (326.35). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>23</sup> = -34° (c = 0.4, MeOH). **Pharm:** Neurite outgrowth enhancer inactive (PC12D cells, nerve growth factor-mediated, 10-100 $\mu$ mol/L)<sup>[4745]</sup>. **Source:** HUI QIN *Pimpinella anisum* (fruit), SHE XIANG CAO *Thymus vulgaris*, YE GAN CAO *Scoparia dulcis* (aerial parts: yield = 0.0015%). **Ref:** 2592, 3402, 4745.



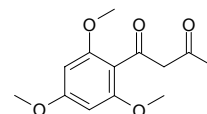
### 7523 Eugenol methyl ether

Methyl eugenol [93-15-2] C<sub>11</sub>H<sub>14</sub>O<sub>2</sub> (178.23). bp 248–249°C. **Pharm:** Antispasmodic. ; CNS depressant; antipyretic; skeletal muscle relaxant. **Source:** JU JIANG YE *Piper betle*, LIAO XI XIN *Asarum heterotropoides* var. *mandshuricum*, LUO LE *Ocimum basilicum*, ROU DOU KOU *Myristica fragrans* (kernel: content = 1.052%<sup>[5508]</sup>), SHAN ZHU YU *Cornus officinalis* [Syn. *Macrocarpium officinale*], SHENG JIANG *Zingiber officinale*, SHI CHANG PU *Acorus tatarinowii*, SI JING JIE BA DOU *Croton nepetaefolius*, XI XIN *Asarum sieboldii*, YIN CHEN HAO *Artemisia capillaris*, occurs in many plants (in many essential oils). **Ref:** 2, 4, 658, 660, 5501, 5508.



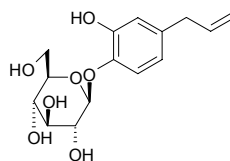
### 7524 Eugenone

[480-27-3] C<sub>13</sub>H<sub>16</sub>O<sub>5</sub> (252.27). mp 97–98°C. **Source:** DING XIANG *Syzygium aromaticum* [Syn. *Eugenia caryophyllata*]. **Ref:** 6.



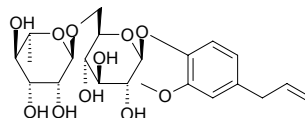
### 7525 Eugenylglucoside

3,4-Dihydroxy-allylbenzene-4-O- $\beta$ -D-glucopyranoside C<sub>15</sub>H<sub>20</sub>O<sub>7</sub> (312.32). White powder. **Source:** BAI MEI HUA *Prunus mume* (flower: yield = 0.050%fw), JIAN YE LONG XUE SHU *Dracaena cochinchinensis*. **Ref:** 2114, 4641.



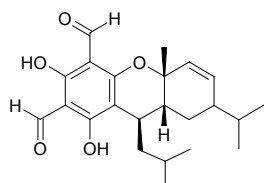
### 7526 Eugenyl- $\beta$ -rutinoside

C<sub>22</sub>H<sub>32</sub>O<sub>11</sub> (472.49). Yellow-white powder. **Source:** BO SI YI MU CAO *Leonurus persicus*. **Ref:** 2499.

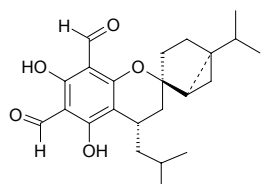


**7527 Euglobal Ia<sub>1</sub>**

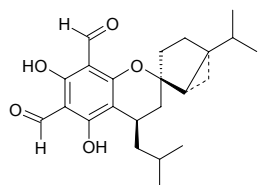
[77844-93-0] C<sub>23</sub>H<sub>30</sub>O<sub>5</sub> (386.49). **Pharm:** Inhibits granulation. **Source:** AN YE *Eucalyptus globulus*. **Ref:** 658.

**7528 Euglobal Ib**

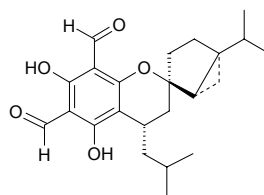
[77844-94-1] C<sub>23</sub>H<sub>30</sub>O<sub>5</sub> (386.49). Colorless acicular crystals (chloroform), mp 118~120°C, [α]<sub>D</sub><sup>20</sup> = +2.27 (*c* = 0.65, chloroform). **Pharm:** Anti-inflammatory; antineoplastic (EBV-EA induced by TPA, InRt = (70~80)% with molecular ratio of Euglobal-Ib/TPA 1000, while InRt = 50% with ratio 100). **Source:** AN YE *Eucalyptus globulus*. **Ref:** 977, 982.

**7529 Euglobal Ic**

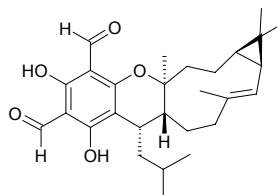
[77794-60-6] C<sub>23</sub>H<sub>30</sub>O<sub>5</sub> (386.49). Colorless rhombic crystals (ethanol), mp 108~110°C, [α]<sub>D</sub><sup>20</sup> = -3.12 (*c* = 1.0, chloroform). **Pharm:** Anti-inflammatory; antineoplastic (EBV-EA induced by TPA, InRt over 80% with molecular ratio of Euglobal-Ic/TPA 1000, while InRt = (20~30)% with ratio 100). **Source:** AN YE *Eucalyptus globulus*. **Ref:** 977, 982.

**7530 Euglobal Iia**

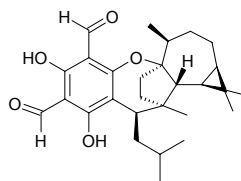
[77844-92-9] C<sub>23</sub>H<sub>30</sub>O<sub>5</sub> (386.49). Colorless rhombic crystals (chloroform), mp 115~117°C, [α]<sub>D</sub><sup>20</sup> = +26.7° (*c* = 0.7, chloroform). **Pharm:** Anti-inflammatory; antineoplastic (EBV-EA induced by TPA, InRt over 80% with molecular ratio of Euglobal-Iia/TPA 1000, while InRt (20~30)% with ratio 100). **Source:** AN YE *Eucalyptus globulus*. **Ref:** 977, 982.

**7531 Euglobal III**

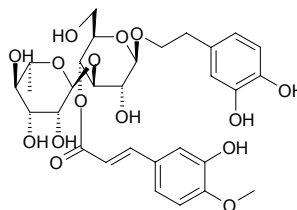
[76449-26-8] C<sub>28</sub>H<sub>38</sub>O<sub>5</sub> (454.61). Colorless acicular crystals (ethanol), mp 169~170°C, [α]<sub>D</sub><sup>20</sup> = +229° (*c* = 1.0, chloroform). **Pharm:** Anti-inflammatory; antineoplastic (EBV-EA induced by TPA, InRt = 100% with molecular ratio of Euglobal-III/TPA 1000, while InRt over 70% with ratio 500). **Source:** AN YE *Eucalyptus globulus*. **Ref:** 981, 984, 1013.

**7532 Euglobal V**

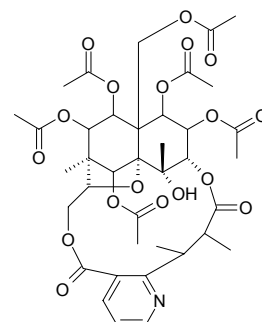
[77809-89-3] C<sub>28</sub>H<sub>38</sub>O<sub>5</sub> (454.61). Colorless rhombic crystals, mp 184~185°C, [α]<sub>D</sub><sup>20</sup> = -206° (*c* = 1, chloroform). **Pharm:** Anti-inflammatory; antineoplastic (EBV-EA induced by TPA, InRt = 80% with molecular ratio of Euglobal-V/TPA 1000, while InRt over 40% with ratio 500). **Source:** AN YE *Eucalyptus globulus*. **Ref:** 981, 984, 1042.

**7533 Eukovoside**

C<sub>30</sub>H<sub>38</sub>O<sub>15</sub> (638.63). Amorphous powder. **Source:** DUAN XIAN XIAO MI CAO *Euphrasia regelii*. **Ref:** 2432.

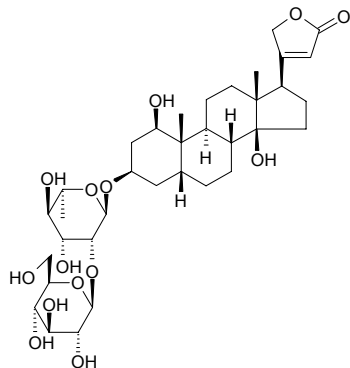
**7534 Euonymine**

C<sub>38</sub>H<sub>47</sub>NO<sub>18</sub> (805.79). White powder. **Source:** LEI GONG TENG *Tripterygium wilfordii* (root heart). **Ref:** 4559.

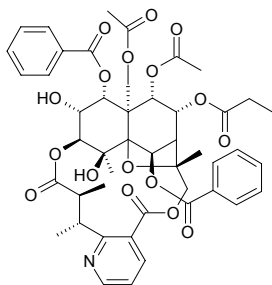


**7535 Euonymoside A**

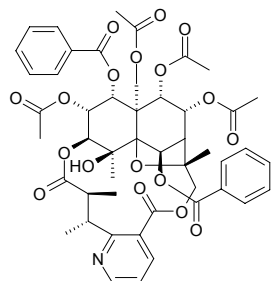
[155740-04-8] C<sub>35</sub>H<sub>54</sub>O<sub>14</sub> (698.81). Colorless thin crystals (methanol), mp 172–173°C, [α]<sub>D</sub><sup>25</sup> = +33.9° (c = 2.42, chloroform:methanol = 4:1). **Pharm:** Cytotoxic (A549 *in vitro*, IC<sub>50</sub> = 0.06 μg/mL, SK-OV-3, IC<sub>50</sub> = 0.4 μg/mL). **Source:** XI BO SHI WEI MAO *Euonymus sieboldianus* **Ref:** 994, 1148, 1521.

**7536 Euophelline**

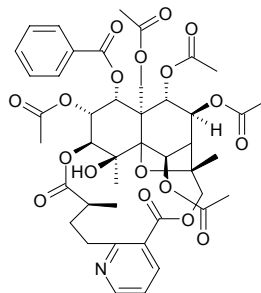
C<sub>47</sub>H<sub>51</sub>NO<sub>17</sub> (901.93). Amorphous white powder, mp 168–169°C, [α]<sub>D</sub><sup>24</sup> = +2.2° (c = 0.45, CHCl<sub>3</sub>). **Source:** YOU DIAN WEI MAO *Euonymus verrucosides*, FU FANG TENG *Euonymus fortunei*, SHUAN CHI WEI MAO *Euonymus phellomana*. **Ref:** 1928.

**7537 Euoverrine A**

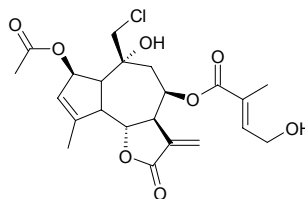
C<sub>48</sub>H<sub>51</sub>NO<sub>18</sub> (929.94). Amorphous white powder, mp 145–146°C, [α]<sub>D</sub><sup>24</sup> = +5.5° (c = 0.55, CHCl<sub>3</sub>). **Source:** YOU DIAN WEI MAO *Euonymus verrucosides*, FU FANG TENG *Euonymus fortunei*, SHUAN CHI WEI MAO *Euonymus phellomana*. **Ref:** 1928.

**7538 Euoverrine B**

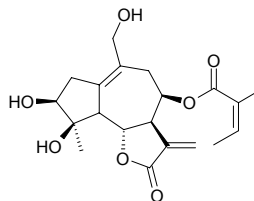
C<sub>43</sub>H<sub>49</sub>NO<sub>18</sub> (867.87). Amorphous white powder, mp. 148–149°C, [α]<sub>D</sub><sup>24</sup> = +10.9° (c = 0.55, CHCl<sub>3</sub>). **Source:** YOU DIAN WEI MAO *Euonymus verrucosides*, FU FANG TENG *Euonymus fortunei*, SHUAN CHI WEI MAO *Euonymus phellomana*. **Ref:** 1928.

**7539 Eupachifolin D**

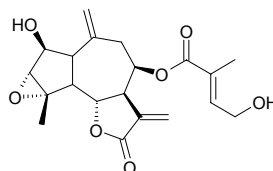
C<sub>22</sub>H<sub>27</sub>ClO<sub>8</sub> (454.91). **Source:** CHENG GAN SHENG MA *Eupatorium lindleyanum* (whole herb: yield = 0.00036%<sup>[4762]</sup>), HUA ZE LAN *Eupatorium chinense* (whole herb: yield = 0.0023%<sup>[4739]</sup>). **Ref:** 4739, 4762.

**7540 Eupachinilide A**

8β-Angelyloxy-3β,4β,14-trihydroxy-5αH,6βH,7αH-guai-1(10),11(13)-diene-6,12-olide C<sub>20</sub>H<sub>26</sub>O<sub>7</sub> (378.43). White powder, [α]<sub>D</sub><sup>20</sup> = −65.8° (c = 0.58, CH<sub>3</sub>OH). **Pharm:** Cytotoxic (*in vitro*, HL-60, IC<sub>50</sub> = 10.8 μg/mL; Bel7402, IC<sub>50</sub> = 72.2 μg/mL; control Hydroxycamptothecin, HL-60, IC<sub>50</sub> = 0.024 μg/mL; Bel7402, IC<sub>50</sub> = 0.62 μg/mL). **Source:** HUA ZE LAN *Eupatorium chinense* (whole herb: yield = 0.0036%). **Ref:** 4739.

**7541 Eupachinilide B**

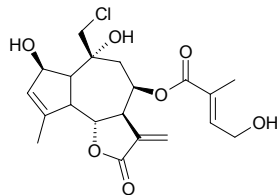
8β-(4'-Hydroxytiglyloxy)-3α,4α-epoxy-2β-hydroxy-1αH,5αH,6βH,7αH-guai-1(10),11(13)-diene-6,12-olide C<sub>20</sub>H<sub>24</sub>O<sub>7</sub> (376.41). White powder, [α]<sub>D</sub><sup>20</sup> = −67.1° (c = 0.50, CH<sub>3</sub>OH). **Source:** HUA ZE LAN *Eupatorium chinense* (whole herb: yield = 0.0036%). **Ref:** 4739.



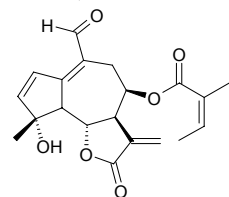


**7542 Eupachinilide C**

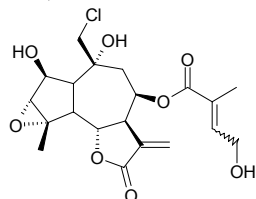
$C_{20}H_{25}ClO_7$  (412.87). Gum,  $[\alpha]_D^{20} = -66.9^\circ$  ( $c = 0.50$ ,  $CH_3OH$ ). **Source:** CHENG GAN SHENG MA *Eupatorium lindleyanum* (whole herb: yield = 0.0265%<sup>[4762]</sup>), HUA ZE LAN *Eupatorium chinense* (whole herb: yield = 0.00032%<sup>[4739]</sup>). **Ref:** 4739, 4762.

**7543 Eupachinilide D**

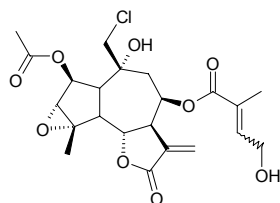
$8\beta$ -Angelyloxy-4 $\alpha$ -hydroxy-14-oxo-5 $\alpha H$ ,6 $\beta H$ ,7 $\alpha H$ -guaia-2,10(14),11(13)-trien-6,12-olide  $C_{20}H_{22}O_6$  (358.39). White powder,  $[\alpha]_D^{20} = -204.0^\circ$  ( $c = 1.53$ ,  $CH_3OH$ ). **Source:** HUA ZE LAN *Eupatorium chinense* (whole herb: yield = 0.0036%). **Ref:** 4739.

**7544 Eupachinilide E**

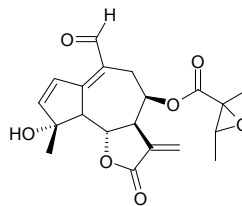
$8\beta$ -(4'-Hydroxytiglyloxy)-14-chlorine-3 $\alpha$ ,4 $\alpha$ -epoxy-2 $\beta$ ,10 $\alpha$ -dihydroxy-1 $\alpha H$ ,5 $\alpha H$ ,6 $\beta H$ ,7 $\alpha H$ -guaia-11(13)-ene-6,12-olide  $C_{20}H_{25}ClO_8$  (428.87). White powder,  $[\alpha]_D^{20} = -59.4^\circ$  ( $c = 0.60$ ,  $CH_3OH$ ). **Pharm:** Cytotoxic (*in vitro*, HL-60,  $IC_{50} = 1.3\mu g/mL$ ; Bel7402,  $IC_{50} = 18\mu g/mL$ ; control Hydroxycamptothecin, HL-60,  $IC_{50} = 0.024\mu g/mL$ ; Bel7402,  $IC_{50} = 0.62\mu g/mL$ )<sup>[4739]</sup>. **Source:** CHENG GAN SHENG MA *Eupatorium lindleyanum* (whole herb: yield = 0.00059%<sup>[4762]</sup>), HUA ZE LAN *Eupatorium chinense* (whole herb: yield = 0.0032%<sup>[4739]</sup>). **Ref:** 4739, 4762.

**7545 Eupachinilide F**

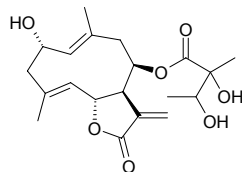
$8\beta$ -(4'-Hydroxytiglyloxy)-2 $\beta$ -acetoxy-14-chlorine-3 $\alpha$ ,4 $\alpha$ -epoxy-10 $\alpha$ -hydroxy-1 $\alpha H$ ,5 $\alpha H$ ,6 $\beta H$ ,7 $\alpha H$ -guaia-11(13)-ene-6,12-olide  $C_{22}H_{27}ClO_9$  (470.91). White powder,  $[\alpha]_D^{20} = -52.3^\circ$  ( $c = 0.84$ ,  $CH_3OH$ ). **Pharm:** Cytotoxic (*in vitro*, HL-60,  $IC_{50} = 0.87\mu g/mL$ ; Bel7402,  $IC_{50} = 3.7\mu g/mL$ ; control Hydroxycamptothecin, HL-60,  $IC_{50} = 0.024\mu g/mL$ ; Bel7402,  $IC_{50} = 0.62\mu g/mL$ ). **Source:** HUA ZE LAN *Eupatorium chinense* (whole herb: yield = 0.0027%). **Ref:** 4739.

**7546 Eupachinilide G**

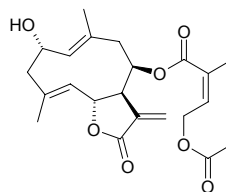
$8\beta$ -(2',3'-Epoxy-2'-methylbutanoxy)-4 $\alpha$ -hydroxy-14-oxo-5 $\alpha H$ ,6 $\beta H$ ,7 $\alpha H$ -guaia-1(10),2,11(13)-trien-6,12-olide  $C_{20}H_{22}O_7$  (374.39). Gum,  $[\alpha]_D^{20} = -216.5^\circ$  ( $c = 0.65$ ,  $CH_3OH$ ). **Source:** HUA ZE LAN *Eupatorium chinense* (whole herb: yield = 0.00023%). **Ref:** 4739.

**7547 Eupachinilide H**

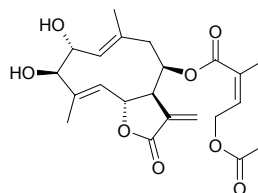
$8\beta$ -(2',3'-Dihydroxy-2'-methylbutanoxy)-2 $\alpha$ -hydroxy-6 $\beta H$ ,7 $\alpha H$ -germacra-1(10)-E,4E,11(13)-trien-6,12-olide  $C_{20}H_{28}O_7$  (380.44). White powder,  $[\alpha]_D^{20} = +34.7^\circ$  ( $c = 0.54$ ,  $CH_3OH$ ). **Source:** HUA ZE LAN *Eupatorium chinense* (whole herb: yield = 0.00091%). **Ref:** 4739.

**7548 Eupachinilide I**

$8\beta$ -(4'-Acetoxyangelyloxy)-2 $\alpha$ -hydroxy-6 $\beta H$ ,7 $\alpha H$ -germacra-1(10)-E,4E,11(13)-trien-6,12-olide  $C_{22}H_{28}O_7$  (404.46). White powder,  $[\alpha]_D^{20} = +76.1^\circ$  ( $c = 0.65$ ,  $CH_3OH$ ). **Pharm:** Cytotoxic (*in vitro*, HL-60,  $IC_{50} = 0.94\mu g/mL$ ; Bel7402,  $IC_{50} = 3.6\mu g/mL$ ; control Hydroxycamptothecin, HL-60,  $IC_{50} = 0.024\mu g/mL$ ; Bel7402,  $IC_{50} = 0.62\mu g/mL$ ). **Source:** HUA ZE LAN *Eupatorium chinense* (whole herb: yield = 0.0018%). **Ref:** 4739.

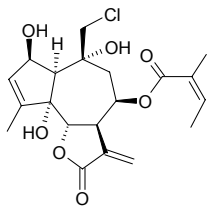
**7549 Eupachinilide J**

$8\beta$ -(4'-Acetoxyangelyloxy)-2 $\alpha$ ,3 $\beta$ -dihydroxy-6 $\beta H$ ,7 $\alpha H$ -germacra-1(10)E,4E,11(13)-trien-6,12-olide  $C_{22}H_{28}O_8$  (420.46). White powder,  $[\alpha]_D^{20} = +40.8^\circ$  ( $c = 0.55$ ,  $CH_3OH$ ). **Source:** HUA ZE LAN *Eupatorium chinense* (whole herb: yield = 0.0018%). **Ref:** 4739.

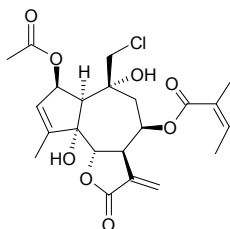


**7550 Eupachlorin**

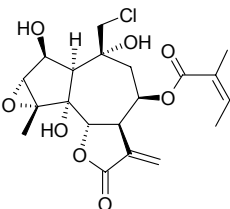
[20071-50-5] C<sub>20</sub>H<sub>25</sub>NO<sub>7</sub> (412.87). Colorless lamellar crystals (methanol), mp 219~221°C (dec), [α]<sub>D</sub><sup>27</sup> = -110° (c = 0.35, ethanol). **Pharm:** Antineoplastic; cytotoxic (KB, ED<sub>50</sub> = 0.21 μg/mL). **Source:** YUAN YE ZE LAN *Eupatorium rotundifolium*. **Ref:** 661.

**7551 Eupachlorin acetate**

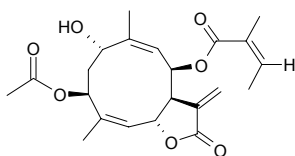
[20501-52-4] C<sub>22</sub>H<sub>27</sub>ClO<sub>8</sub> (454.91). Colorless acicular crystals (benzene), mp 161~164°C (vacuum, dec), [α]<sub>D</sub><sup>26</sup> = -192° (c = 0.63, methanol). **Pharm:** Antineoplastic (rat W<sub>256</sub>); cytotoxic (KB, ED<sub>50</sub> = 0.18 μg/mL). **Source:** YUAN YE ZE LAN *Eupatorium rotundifolium*. **Ref:** 661.

**7552 Eupachloroxin**

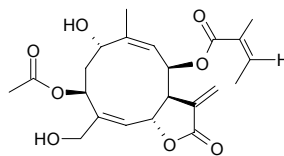
[20071-52-7] C<sub>20</sub>H<sub>25</sub>ClO<sub>8</sub> (428.87). Amorphous powder. **Pharm:** Antineoplastic; cytotoxic (KB, ED<sub>50</sub> = 0.21 μg/mL). **Source:** YUAN YE ZE LAN *Eupatorium rotundifolium*. **Ref:** 661.

**7553 Eupacunin**

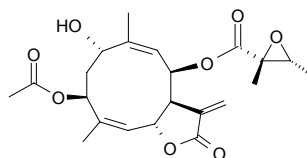
[33854-15-8] C<sub>22</sub>H<sub>28</sub>O<sub>7</sub> (404.46). Colorless acicular crystals (methanol-ether), mp 166~167°C, [α]<sub>D</sub><sup>25</sup> = +55° (c = 1.24, acetone). **Pharm:** Antineoplastic (rat, P<sub>388</sub>, W<sub>256</sub>, *in vivo*); cytotoxic (KB, ED<sub>50</sub> = 2.1 μg/mL). **Source:** XIE YE ZE LAN *Eupatorium cuneifolium*, ZHEN YE ZE LAN *Eupatorium lancifolium*. **Ref:** 661.

**7554 Eupacunolin**

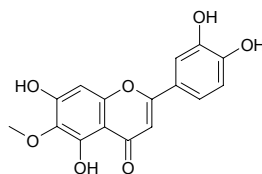
[79491-59-1] C<sub>22</sub>H<sub>28</sub>O<sub>8</sub> (420.46). Colorless acicular crystals (methanol-chloroform), mp 164~165°C, [α]<sub>D</sub><sup>26</sup> = +46° (c = 1.02, acetone). **Pharm:** Antineoplastic; cytotoxic (KB, ED<sub>50</sub> = 3.7 μg/mL). **Source:** XIE YE ZE LAN *Eupatorium cuneifolium*. **Ref:** 661.

**7555 Eupacunoxin**

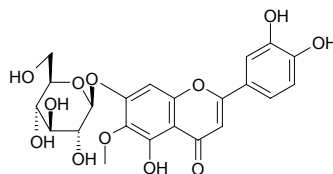
[33853-88-2] C<sub>22</sub>H<sub>28</sub>O<sub>8</sub> (420.46). Colorless acicular crystals (ether), mp 171~172°C, [α]<sub>D</sub><sup>26</sup> = +27° (c = 1.0, acetone). **Pharm:** Antineoplastic; cytotoxic (KB, ED<sub>50</sub> = 2.1 μg/mL). **Source:** XIE YE ZE LAN *Eupatorium cuneifolium*. **Ref:** 661.

**7556 Eupafolin**

5,7,3',4'-Tetrahydroxy-6-methoxyflavone; 6-Methoxyluteolin [520-11-6] C<sub>16</sub>H<sub>12</sub>O<sub>7</sub> (316.27). Yellow acicular crystals, mp 257~259°C. **Pharm:** Cytotoxic (KB, ED<sub>50</sub> = 18 μg/mL). **Source:** JIN JI ZE LAN *Eupatorium subastatum*, LI ZHI CAO *Salvia plebeia*, MAO LIAN HAO *Artemisia vestita*, MI DIE XIANG *Rosmarinus officinalis*, PENG LAI CAO *Lippia nodiflora*, XIE YE ZE LAN *Eupatorium cuneifolium*, YIN DU JIA JING JIE *Nepeta hindostana*. **Ref:** 5, 474, 658.

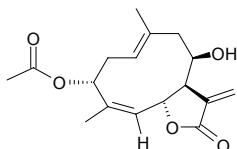
**7557 Eupafolin-7-glucoside**

Nepitrin; 6-Methoxyluteolin-7-glucoside C<sub>22</sub>H<sub>22</sub>O<sub>12</sub> (478.41). mp 252~256°C (dec). **Pharm:** Antioxidant (DPPH free radical scavenger, DPPH radical 15 μmol/L: 10 μmol/L, ScRt = 38.1%; control BHA, 10 μmol/L, ScRt = 23.0%; Vitamin E, 10 μmol/L, ScRt = 41.1%)<sup>[3846]</sup>. **Source:** DA MA YE ZE LAN *Eupatorium cannabinum*, JIA HUI SE JIU LI XIANG PO PO NA *Veronica thymoides* ssp. *pseudocinerea*<sup>[3846]</sup>, LI ZHI CAO *Salvia plebeia*, MAO DI HUANG *Digitalis purpurea*, MAO HUA MAO DI HUANG *Digitalis lanata*, PENG LAI CAO *Lippia nodiflora*, XIANG RI KUI YE *Helianthus annuus*, XUAN FU HUA *Inula britannica*, YANG SHI CAO *Achillea millefolium*. **Ref:** 6, 660, 1388, 3846.

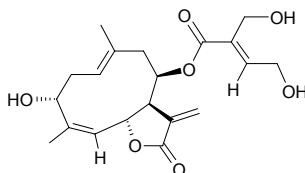


**7558 Eupaformonin**

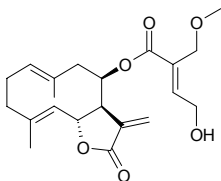
[55520-20-2] C<sub>17</sub>H<sub>22</sub>O<sub>5</sub> (306.36). Colorless prismatic crystals, mp 216~218°C. **Pharm:** Cytotoxic (hmn throat epicytoma cells, *in vitro*). **Source:** TAI WAN ZE LAN *Eupatorium formosanum*. **Ref:** 661.

**7559 Eupaformosanin**

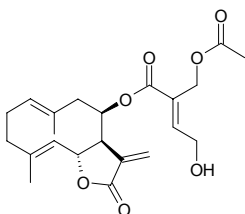
[64439-43-6] C<sub>20</sub>H<sub>26</sub>O<sub>7</sub> (378.43). **Pharm:** Antineoplastic; cytotoxic. **Source:** TAI WAN ZE LAN *Eupatorium formosanum*. **Ref:** 658.

**7560 Eupaglehnin A**

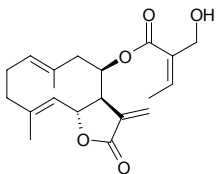
C<sub>21</sub>H<sub>29</sub>O<sub>6</sub> (376.45). Oil, [α]<sub>D</sub><sup>24</sup> = +55.3° (c = 0.86, EtOH). **Source:** KU YE DAO ZE LAN *Eupatorium sachalinense* [Syn. *Eupatorium glehni*]. **Ref:** 4226.

**7561 Eupaglehnin B**

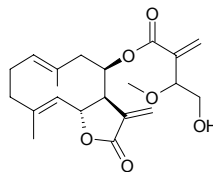
C<sub>22</sub>H<sub>28</sub>O<sub>7</sub> (404.46). Oil, [α]<sub>D</sub><sup>20</sup> = +52.5° (c = 0.5, CHCl<sub>3</sub>). **Source:** KU YE DAO ZE LAN *Eupatorium sachalinense* [Syn. *Eupatorium glehni*]. **Ref:** 4226.

**7562 Eupaglehnin C**

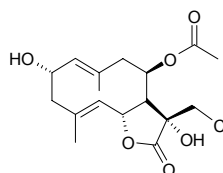
C<sub>20</sub>H<sub>26</sub>O<sub>5</sub> (346.43). Oil, [α]<sub>D</sub><sup>20</sup> = +48.0° (c = 1.5, CHCl<sub>3</sub>). **Source:** KU YE DAO ZE LAN *Eupatorium sachalinense* [Syn. *Eupatorium glehni*]. **Ref:** 4226.

**7563 Eupaglehnin D**

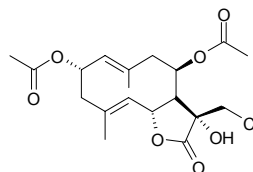
C<sub>21</sub>H<sub>28</sub>O<sub>6</sub> (376.45). Oil, [α]<sub>D</sub><sup>20</sup> = +19.7° (c = 0.39, CHCl<sub>3</sub>). **Source:** KU YE DAO ZE LAN *Eupatorium sachalinense* [Syn. *Eupatorium glehni*]. **Ref:** 4226.

**7564 Eupaglehnin E**

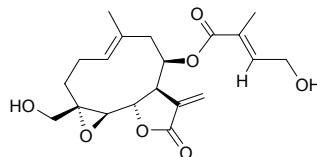
C<sub>17</sub>H<sub>23</sub>ClO<sub>6</sub> (358.82). Oil, [α]<sub>D</sub><sup>24</sup> = +63.8° (c = 0.5, EtOH). **Source:** KU YE DAO ZE LAN *Eupatorium sachalinense* [Syn. *Eupatorium glehni*]. **Ref:** 4226.

**7565 Eupaglehnin F**

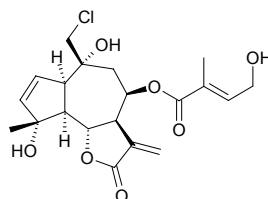
C<sub>19</sub>H<sub>25</sub>ClO<sub>7</sub> (400.86). Oil, [α]<sub>D</sub><sup>20</sup> = +40.0° (c = 0.3, CHCl<sub>3</sub>). **Source:** KU YE DAO ZE LAN *Eupatorium sachalinense* [Syn. *Eupatorium glehni*]. **Ref:** 4226.

**7566 Eupahyssopin**

Eupahyssopin [57718-77-1] C<sub>20</sub>H<sub>26</sub>O<sub>7</sub> (378.43). Colorless prismatic crystals (chloroform), mp 125°C, [α]<sub>D</sub><sup>25</sup> = -138.9° (c = 1.45, chloroform). **Pharm:** Antiarthritic (animal model); antineoplastic (rat, W<sub>256</sub>); anti-inflammatory (animal model); cytotoxic (mus EAC cells, inhibits biosynthesis of DNA, RNA, protein and cholesterol). **Source:** SHEN XIANG CAO YE ZE LAN *Eupatorium hyssopifolium*. **Ref:** 661.

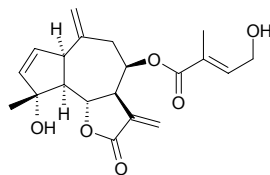
**7567 Eupalinilide A**

8β-(4'-Hydroxytylgloyloxy)-14-chloro-4β,10β-dihydroxy-1αH,5αH,6βH,7αH-guai-2,11(13)-dien-6,12-olide C<sub>20</sub>H<sub>25</sub>ClO<sub>7</sub> (412.87). Colorless gum, [α]<sub>D</sub><sup>20</sup> = -34.3° (c = 0.47, CHCl<sub>3</sub>). **Source:** CHENG GAN SHENG MA *Eupatorium lindleyanum* (whole herb: yield = 0.00055%dw). **Ref:** 4762.

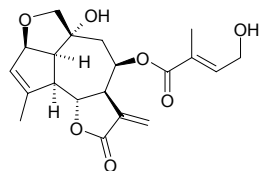


**7568 Eupalinilide B**

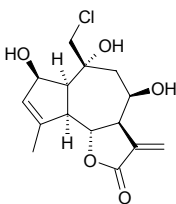
8 $\beta$ -(4'-Hydroxytigloyloxy)-4 $\alpha$ -hydroxy-1 $\alpha$ H,5 $\alpha$ H,6 $\beta$ H,7 $\alpha$ H-guai-2,10-(14),11(13)-trien-6,12-olide C<sub>20</sub>H<sub>24</sub>O<sub>6</sub> (360.41). Colorless gum,  $[\alpha]_D^{20} = -84.9^\circ$  ( $c = 0.67$ , CHCl<sub>3</sub>). **Pharm:** Cytotoxic (*in vitro*, P<sub>388</sub>, IC<sub>50</sub> = 0.21 $\mu$ g/mL; A549, IC<sub>50</sub> = 0.75 $\mu$ g/mL; control Pseudolaric acid B, P<sub>388</sub>, IC<sub>50</sub> = 0.32 $\mu$ g/mL; A549, IC<sub>50</sub> = 0.86 $\mu$ g/mL). **Source:** CHENG GAN SHENG MA *Eupatorium lindleyanum* (whole herb: yield = 0.00045%dw). **Ref:** 4762.

**7569 Eupalinilide C**

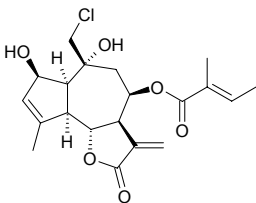
8 $\beta$ -(4'-Hydroxytigloyloxy)-2 $\beta$ ,14-epoxy-10 $\alpha$ -hydroxy-1 $\alpha$ H,5 $\alpha$ H,6 $\beta$ H,7 $\alpha$ H-guai-3,11(13)-dien-6,12-olide C<sub>20</sub>H<sub>24</sub>O<sub>7</sub> (376.41). White powder,  $[\alpha]_D^{20} = -7.0^\circ$  ( $c = 1.0$ , CHCl<sub>3</sub>). **Pharm:** Cytotoxic (*in vitro*, P<sub>388</sub>, IC<sub>50</sub> = 1.2 $\mu$ g/mL; A549, IC<sub>50</sub> = 11 $\mu$ g/mL; control Pseudolaric acid B, P<sub>388</sub>, IC<sub>50</sub> = 0.32 $\mu$ g/mL; A549, IC<sub>50</sub> = 0.86 $\mu$ g/mL). **Source:** CHENG GAN SHENG MA *Eupatorium lindleyanum* (whole herb: yield = 0.00068%dw). **Ref:** 4762.

**7570 Eupalinilide D**

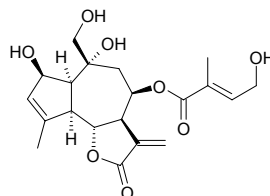
14-Chloro-2 $\beta$ ,8 $\beta$ ,10 $\alpha$ -trihydroxy-1 $\alpha$ H,5 $\alpha$ H,6 $\beta$ H,7 $\alpha$ H-guai-3,11(13)-dien-6,12-olide C<sub>15</sub>H<sub>19</sub>ClO<sub>5</sub> (314.77). Colorless gum,  $[\alpha]_D^{20} = -59.4^\circ$  ( $c = 0.8$ , CHCl<sub>3</sub>). **Source:** CHENG GAN SHENG MA *Eupatorium lindleyanum* (whole herb: yield = 0.00055%dw). **Ref:** 4762.

**7571 Eupalinilide E**

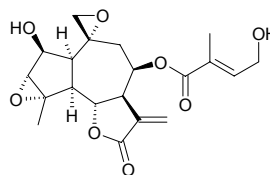
8 $\beta$ -Tigloyloxy-14-chloro-2 $\beta$ ,10 $\alpha$ -dihydroxy-1 $\alpha$ H,5 $\alpha$ H,6 $\beta$ H,7 $\alpha$ H-guai-3,11(13)-dien-6,12-olide C<sub>20</sub>H<sub>25</sub>ClO<sub>6</sub> (396.87). White powder,  $[\alpha]_D^{20} = -56.2^\circ$  ( $c = 1.0$ , CHCl<sub>3</sub>). **Pharm:** Cytotoxic (*in vitro*, P<sub>388</sub>, inactive; A549, IC<sub>50</sub> = 0.028 $\mu$ g/mL; control Pseudolaric acid B, P<sub>388</sub>, IC<sub>50</sub> = 0.32 $\mu$ g/mL; A549, IC<sub>50</sub> = 0.86 $\mu$ g/mL). **Source:** CHENG GAN SHENG MA *Eupatorium lindleyanum* (whole herb: yield = 0.0033%dw). **Ref:** 4762.

**7572 Eupalinilide F**

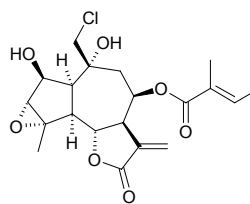
8 $\beta$ -(4'-Hydroxytigloyloxy)-2 $\beta$ ,10 $\alpha$ ,14-trihydroxy-1 $\alpha$ H,5 $\alpha$ H,6 $\beta$ H,7 $\alpha$ H-guai-3,11(13)-dien-6,12-olide C<sub>20</sub>H<sub>26</sub>O<sub>8</sub> (394.43). Colorless gum,  $[\alpha]_D^{20} = -38.0^\circ$  ( $c = 1.3$ , CH<sub>3</sub>OH). **Pharm:** Cytotoxic inactive (*in vitro*, P<sub>388</sub>, A549; control Pseudolaric acid B, P<sub>388</sub>, IC<sub>50</sub> = 0.32 $\mu$ g/mL; A549, IC<sub>50</sub> = 0.86 $\mu$ g/mL). **Source:** CHENG GAN SHENG MA *Eupatorium lindleyanum* (whole herb: yield = 0.0034%dw). **Ref:** 4762.

**7573 Eupalinilide G**

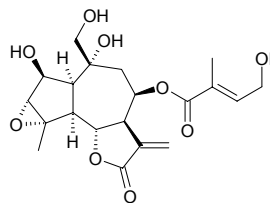
8 $\beta$ -(4'-Hydroxytigloyloxy)-3 $\alpha$ ,4 $\alpha$ :10 $\alpha$ ,14-diepoxy-2 $\beta$ -hydroxy-1 $\alpha$ H,5 $\alpha$ H,6 $\beta$ H,7 $\alpha$ H-guai-11(13)-en-6,12-olide C<sub>20</sub>H<sub>24</sub>O<sub>8</sub> (392.41). Colorless gum,  $[\alpha]_D^{20} = -44.3^\circ$  ( $c = 0.47$ , CHCl<sub>3</sub>). **Source:** CHENG GAN SHENG MA *Eupatorium lindleyanum* (whole herb: yield = 0.00032%dw). **Ref:** 4762.

**7574 Eupalinilide H**

8 $\beta$ -Tigloyloxy-14-chloro-3 $\alpha$ ,4 $\alpha$ -epoxy-2 $\beta$ ,10-dihydroxy-1 $\alpha$ H,5 $\alpha$ H,6 $\beta$ H,7 $\alpha$ H-guai-11(13)-en-6,12-olide C<sub>20</sub>H<sub>25</sub>ClO<sub>7</sub> (412.87). Colorless gum,  $[\alpha]_D^{20} = -45.0^\circ$  ( $c = 1.5$ , CHCl<sub>3</sub>). **Source:** CHENG GAN SHENG MA *Eupatorium lindleyanum* (whole herb: yield = 0.0021%dw). **Ref:** 4762.

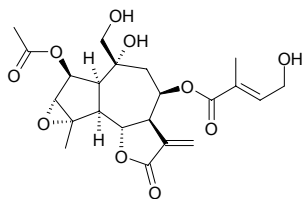
**7575 Eupalinilide I**

8 $\beta$ -(4'-Hydroxytigloyloxy)-3 $\alpha$ ,4 $\alpha$ -epoxy-2 $\beta$ ,10 $\alpha$ ,14-trihydroxy-1 $\alpha$ H,5 $\alpha$ H,6 $\beta$ H,7 $\alpha$ H-guai-11(13)-en-6,12-olide C<sub>20</sub>H<sub>26</sub>O<sub>9</sub> (410.42). Colorless gum,  $[\alpha]_D^{20} = -43.4^\circ$  ( $c = 1.0$ , CH<sub>3</sub>OH). **Pharm:** Cytotoxic inactive (*in vitro*, P<sub>388</sub>, A549; control Pseudolaric acid B, P<sub>388</sub>, IC<sub>50</sub> = 0.32 $\mu$ g/mL; A549, IC<sub>50</sub> = 0.86 $\mu$ g/mL). **Source:** CHENG GAN SHENG MA *Eupatorium lindleyanum* (whole herb: yield = 0.00086%dw). **Ref:** 4762.

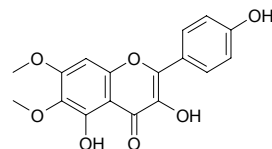


**7576 Eupalinilide J**

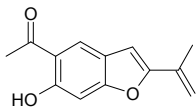
8 $\beta$ -(4'-Hydroxytigloyloxy)-3 $\alpha$ ,4 $\alpha$ -epoxy-2 $\beta$ -acetoxy-10 $\alpha$ ,14-dihydroxy-1 $\alpha$ H,5 $\alpha$ H,6 $\beta$ H,7 $\alpha$ H-guai-11(13)-en-6,12-olide C<sub>22</sub>H<sub>28</sub>O<sub>10</sub> (452.46). Colorless gum, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -46.7° (c = 0.68, CHCl<sub>3</sub>). **Source:** CHENG GAN SHENG MA *Eupatorium lindleyanum* (whole herb: yield = 0.00055%dw). **Ref:** 4762.

**7577 Eupalitin**

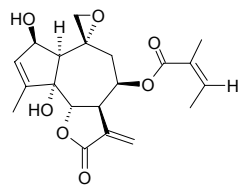
6,7-Dimethoxy-3,5,4'-trihydroxyflavone [In DNP] C<sub>17</sub>H<sub>14</sub>O<sub>7</sub> (330.30). **Source:** CU YING MAO DIAN ZI CAO *Onosma hispida* (whole herb), YIN CHEN HAO *Artemisia capillaris*. **Ref:** 2, 4490.

**7578 Euparin**

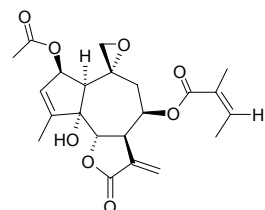
[532-48-9] C<sub>13</sub>H<sub>12</sub>O<sub>3</sub> (216.24). mp 121~122°C. **Source:** CHENG GAN SHENG MA *Eupatorium lindleyanum*, PEI LAN *Eupatorium fortunei*, ZHAI TOU TUO WU *Ligularia stenocephala* (root). **Ref:** 6, 4536.

**7579 Euparotin**

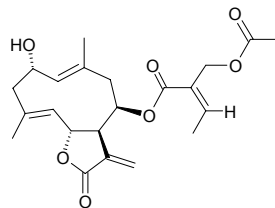
[10191-01-2] C<sub>20</sub>H<sub>24</sub>O<sub>7</sub> (376.41). Acicular crystals (ethyl acetate-petroleum ether), mp 199~200°C (vacuum), [ $\alpha$ ]<sub>D</sub><sup>32</sup> = -124° (c = 1.25, ethanol). **Pharm:** Antineoplastic; cytotoxic (KB, ED<sub>50</sub> = 0.21 $\mu$ g/mL). **Source:** YUAN YE ZE LAN *Eupatorium rotundifolium*. **Ref:** 661.

**7580 Euparotin acetate**

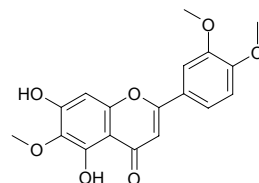
[10215-89-1] C<sub>22</sub>H<sub>26</sub>O<sub>8</sub> (418.45). mp 156~157°C (vacuum), [ $\alpha$ ]<sub>D</sub><sup>30</sup> = -191° (c = 0.54, ethanol). **Pharm:** Antineoplastic; cytotoxic (KB, ED<sub>50</sub> = 0.21 $\mu$ g/mL). **Source:** YUAN YE ZE LAN *Eupatorium rotundifolium*. **Ref:** 661.

**7581 Eupaserrin**

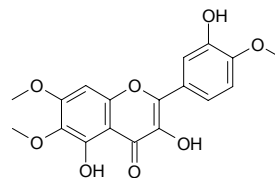
[38456-36-9] C<sub>22</sub>H<sub>28</sub>O<sub>7</sub> (404.46). Crystals (ether-methanol), mp 153~154°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +71.2° (c = 0.94, methanol). **Pharm:** Antineoplastic (mus, P<sub>388</sub>, 30mg/kg); cytotoxic (KB, ED<sub>50</sub> = 0.23 $\mu$ g/mL). **Source:** BAN JU CHI ZHUANG ZE LAN *Eupatorium semiserratum*, HUA ZE LAN *Eupatorium chinense* (whole herb: yield = 0.0014%)<sup>[4739]</sup>, KU YE DAO ZE LAN *Eupatorium sachalinense* [Syn. *Eupatorium glehni*], ROU MAO XIANG RI KUI *Helianthus mollis*. **Ref:** 661, 4226, 4739.

**7582 Eupatilin**

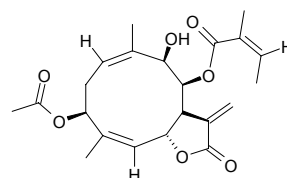
5,7-Dihydroxy-3',4',6'-trimethoxyflavone [22368-21-4] C<sub>18</sub>H<sub>16</sub>O<sub>7</sub> (344.32). Crystals (ethyl acetate), mp 234~236°C. **Pharm:** Cytotoxic (KB, ED<sub>50</sub> = 38 or 45 $\mu$ g/mL). **Source:** BAN JU CHI ZHUANG ZE LAN *Eupatorium semiserratum*, HONG ZU HAO *Artemisia rubripes*, JU PI *Citrus reticulata*, YE JU HUA *Chrysanthemum indicum*. **Ref:** 661, 4214.

**7583 Eupatin**

3,5,3'-Trihydroxy-6,7,4'-trimethoxy flavone [19587-65-6] C<sub>18</sub>H<sub>16</sub>O<sub>8</sub> (360.32). Golden bar crystals (methanol), mp 243~245°C. **Pharm:** Cytotoxic (KB, ED<sub>50</sub> = 4.6 $\mu$ g/mL). **Source:** BAN JU CHI ZHUANG ZE LAN *Eupatorium semiserratum*, HUANG HUA HAO *Artemisia annua*. **Ref:** 2, 660, 661.

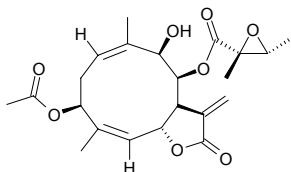
**7584 Eupatocunin**

[33853-87-1] C<sub>22</sub>H<sub>28</sub>O<sub>7</sub> (404.46). Colorless prismatic crystals (methanol-ether), mp 163~164°C, [ $\alpha$ ]<sub>D</sub><sup>26</sup> = -129° (c = 1.36, acetone). **Pharm:** Antineoplastic; cytotoxic (KB, ED<sub>50</sub> = 0.11 $\mu$ g/mL). **Source:** XIE YE ZE LAN *Eupatorium cuneifolium*. **Ref:** 661.

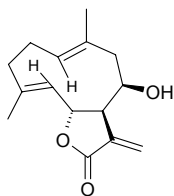


**7585 Eupatocunoxin**

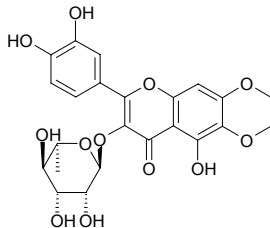
[39204-36-9] C<sub>22</sub>H<sub>28</sub>O<sub>8</sub> (420.46). Acicular crystals (acetone), mp 200~201°C, [ $\alpha$ ]<sub>D</sub><sup>26</sup> = -209° (c = 1, acetone). Pharm: Antineoplastic; cytotoxic (KB, ED<sub>50</sub> = 1.7μg/mL). Source: XIE YE ZE LAN *Eupatorium cuneifolium*. Ref: 661.

**7586 Eupatolide**

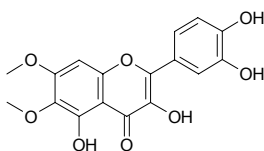
[6750-25-0] C<sub>15</sub>H<sub>20</sub>O<sub>3</sub> (248.32). Crystals (chloroform), mp 188~190°C. Pharm: Antineoplastic; anti-inflammatory; cytotoxic (HEP2, ED<sub>50</sub> = 0.469μg/mL, W-18Va-2, ED<sub>50</sub> = 0.034μg/mL, KB, HeLa, normal Rk and EAC-E4 cells). Source: KU YE DAO ZE LAN *Eupatorium sachalinense* [Syn. *Eupatorium glehni*], TAI WAN ZE LAN *Eupatorium formosanum*. Ref: 661, 4226.

**7587 Eupatolin**

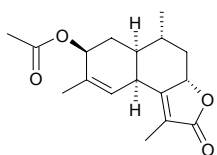
[29725-50-6] C<sub>23</sub>H<sub>24</sub>O<sub>12</sub> (492.44). mp 200~201°C. Source: PEI LAN *Eupatorium fortunei*. Ref: 6.

**7588 Eupatolitin**

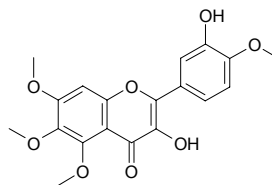
3,5,3',4'-Tetrahydroxy-6,7-dimethoxyflavone [29536-44-5] C<sub>17</sub>H<sub>14</sub>O<sub>8</sub> (346.30). Source: HUANG HUA HAO *Artemisia annua*, YIN CHEN HAO *Artemisia capillaris*. Ref: 2, 660.

**7589 Eupatoranolide**

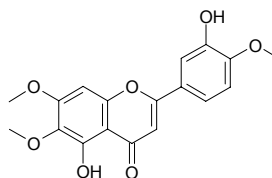
C<sub>17</sub>H<sub>22</sub>O<sub>4</sub> (290.36). Colorless crystals, mp 182~184°C. Source: ZI JING ZE LAN HUA *Eupatorium adenophorum*. Ref: 882.

**7590 Eupatoretin**

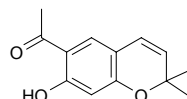
3,3'-Dihydroxy-4',5,6,7-tetramethoxyflavone [19587-69-0] C<sub>19</sub>H<sub>18</sub>O<sub>8</sub> (374.35). Yellowish acicular crystals (benzene), mp 146~148°C. Pharm: Cytotoxic (KB). Source: BAN JU CHI ZHUANG ZE LAN *Eupatorium semiserratum*. Ref: 661.

**7591 Eupatorin**

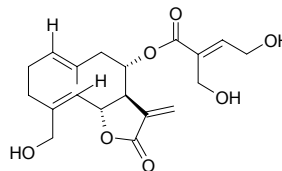
3',5-Dihydroxy-4',6,7-trimethoxyflavone [855-96-9] C<sub>18</sub>H<sub>16</sub>O<sub>7</sub> (344.32). Crystals (dioxane-water), mp 196~198°C. Pharm: Antioxidant (ferric thiocyanate method, 0.5mmol/L, peroxidation value = 11.7%, control BHA, 0.5mmol/L, peroxidation value = 4.5%, control Vitamin E, 0.5mmol/L, peroxidation value = 14.7%)<sup>[4508]</sup>. Source: BAN JU CHI ZHUANG ZE LAN *Eupatorium semiserratum*, GAO ZE LAN *Eupatorium altissimum*, TIAN SHE CAO *Lippia dulcis* (aerial parts), XIONG RUI ZHUANG ZHI GUAN CAO *Orthosiphon stamineus* [Syn. *Orthosiphon aristatus*; *Orthosiphon grandiflorus*; *Orthosiphon spicatus*] (aerial parts: yield = 0.00028%dw)<sup>[3053]</sup>. Ref: 661, 3053, 4508.

**7592 Eupatoriochromene**

6-Acetyl-7-hydroxy-2,2-dimethyl-2H-1-benzopyran [19013-03-7] C<sub>13</sub>H<sub>14</sub>O<sub>3</sub> (218.25). Pharm: Phototoxic (yeast and bacteria). Source: HE AN ZE LAN *Eupatorium riparium*. Ref: 658.

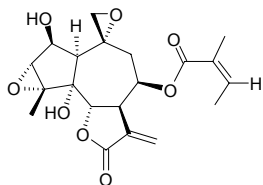
**7593 Eupatoriopicrin**

[6856-01-5] C<sub>20</sub>H<sub>26</sub>O<sub>7</sub> (378.43). mp 157~161°C (dilute ethanol), [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +95° (chloroform). Pharm: Antineoplastic; cytotoxic (KB, HeLa, normal Rk cells and EAC-E4 cells). Source: PEI LAN *Eupatorium fortunei*, DA MA YE ZE LAN *Eupatorium cannabinum*, KU YE DAO ZE LAN *Eupatorium sachalinense* [Syn. *Eupatorium glehni*]. Ref: 6, 661, 4226.

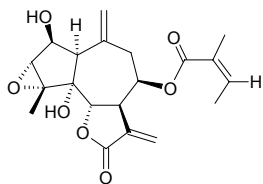


**7594 Eupatoroxin**

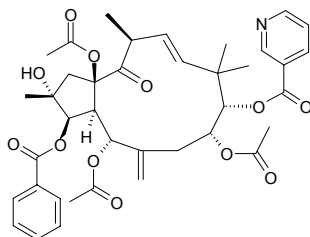
[20071-51-6] C<sub>20</sub>H<sub>24</sub>O<sub>8</sub> (392.41). mp 197~200°C, [ $\alpha$ ]<sub>D</sub><sup>26</sup> = -98° (c = 1.10, methanol). **Pharm:** Antineoplastic; cytotoxic (KB, ED<sub>50</sub> = 2.8µg/mL). **Source:** YUAN YE ZE LAN *Eupatorium rotundifolium*. **Ref:** 661.

**7595 Eupatundin**

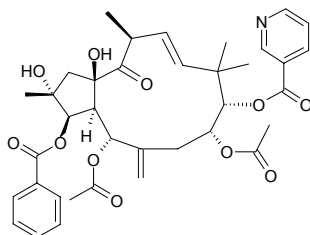
[20071-53-8] C<sub>20</sub>H<sub>24</sub>O<sub>7</sub> (376.41). mp 188~189°C (vacuum), [ $\alpha$ ]<sub>D</sub><sup>29</sup> = -80° (c = 0.44, ethanol). **Pharm:** Antineoplastic; cytotoxic (KB, ED<sub>50</sub> = 0.39µg/mL). **Source:** YUAN YE ZE LAN *Eupatorium rotundifolium*. **Ref:** 661.

**7596 Euphocharacin A**

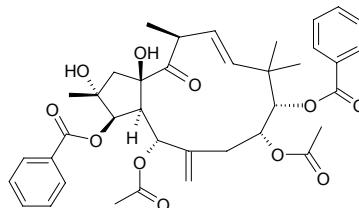
C<sub>39</sub>H<sub>45</sub>NO<sub>12</sub> (719.79). Colorless amorphous solid, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -22.17° (c = 0.1, CHCl<sub>3</sub>). **Pharm:** Cancer cell P-Glycoprotein inhibitor (cellular P-glycoprotein-mediated daunomycin efflux, InRt = (59±1)%, relative standard Cyclosporin A(CsA) InRt = 100%). **Source:** DI ZHONG HAI DA JI *Euphorbia characias* (whole herb). **Ref:** 5003.

**7597 Euphocharacin B**

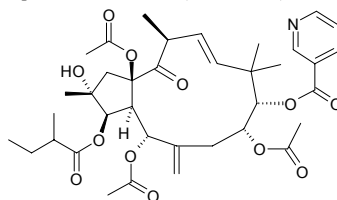
C<sub>37</sub>H<sub>43</sub>NO<sub>11</sub> (677.76). Colorless amorphous solid, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +117.69° (c = 0.1, CHCl<sub>3</sub>). **Pharm:** Cancer cell P-Glycoprotein inhibitor (cellular P-glycoprotein-mediated daunomycin efflux, InRt = (72±1)%, relative standard Cyclosporin A(CsA) InRt = 100%). **Source:** DI ZHONG HAI DA JI *Euphorbia characias* (whole herb). **Ref:** 5003.

**7598 Euphocharacin C**

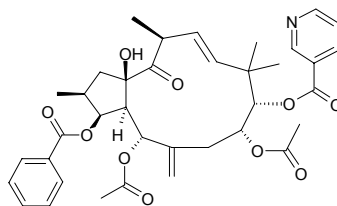
C<sub>38</sub>H<sub>44</sub>O<sub>11</sub> (676.77). Colorless amorphous solid, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +16.67° (c = 0.1, CHCl<sub>3</sub>). **Pharm:** Cancer cell P-Glycoprotein inhibitor (cellular P-glycoprotein-mediated daunomycin efflux, InRt = (123±2)%, relative standard Cyclosporin A(CsA) InRt = 100%). **Source:** DI ZHONG HAI DA JI *Euphorbia characias* (whole herb). **Ref:** 5003.

**7599 Euphocharacin D**

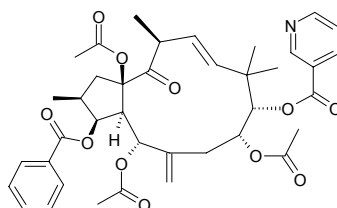
C<sub>37</sub>H<sub>49</sub>NO<sub>12</sub> (699.80). Colorless amorphous solid, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +8.0° (c = 0.1, CHCl<sub>3</sub>). **Pharm:** Cancer cell P-Glycoprotein inhibitor (cellular P-glycoprotein-mediated daunomycin efflux, InRt = (52±3)%, relative standard Cyclosporin A(CsA) InRt = 100%). **Source:** DI ZHONG HAI DA JI *Euphorbia characias* (whole herb). **Ref:** 5003.

**7600 Euphocharacin E**

C<sub>37</sub>H<sub>43</sub>NO<sub>10</sub> (661.76). Colorless amorphous solid, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -16.71° (c = 0.1, CHCl<sub>3</sub>). **Pharm:** Cancer cell P-Glycoprotein inhibitor (cellular P-glycoprotein-mediated daunomycin efflux, InRt = (105±3)%, relative standard Cyclosporin A(CsA) InRt = 100%). **Source:** DI ZHONG HAI DA JI *Euphorbia characias* (whole herb). **Ref:** 5003.

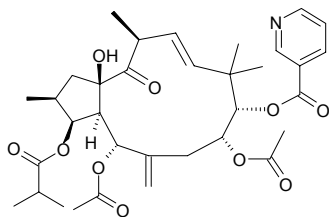
**7601 Euphocharacin F**

C<sub>39</sub>H<sub>45</sub>NO<sub>11</sub> (703.79). Colorless amorphous solid, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -2.10° (c = 0.1, CHCl<sub>3</sub>). **Pharm:** Cancer cell P-Glycoprotein inhibitor (cellular P-glycoprotein-mediated daunomycin efflux, InRt = (86±2)%, relative standard Cyclosporin A(CsA) InRt = 100%). **Source:** DI ZHONG HAI DA JI *Euphorbia characias* (whole herb). **Ref:** 5003.

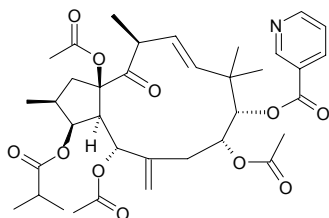


**7602 Euphocharacin G**

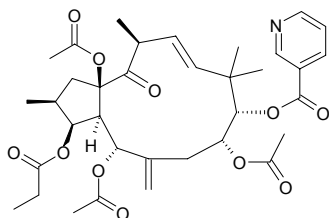
$C_{34}H_{45}NO_{10}$  (627.74). White amorphous solid,  $[\alpha]_D^{25} = -25.0^\circ$  ( $c = 0.1$ ,  $CHCl_3$ ). **Pharm:** Cancer cell P-Glycoprotein inhibitor (cellular P-glycoprotein-mediated daunomycin efflux, InRt =  $(61 \pm 2)\%$ ), relative standard Cyclosporin A(CsA) InRt = 100%). **Source:** DI ZHONG HAI DA JI *Euphorbia characias* (whole herb). **Ref:** 5003.

**7603 Euphocharacin H**

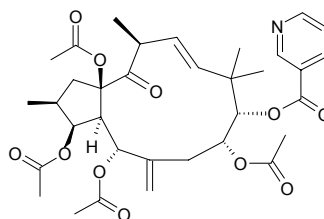
$C_{36}H_{47}NO_{11}$  (669.78). Colorless amorphous solid,  $[\alpha]_D^{25} = -17.27^\circ$  ( $c = 0.1$ ,  $CHCl_3$ ). **Pharm:** Cancer cell P-Glycoprotein inhibitor (cellular P-glycoprotein-mediated daunomycin efflux, InRt =  $(62 \pm 4)\%$ ), relative standard Cyclosporin A(CsA) InRt = 100%). **Source:** DI ZHONG HAI DA JI *Euphorbia characias* (whole herb). **Ref:** 5003.

**7604 Euphocharacin I**

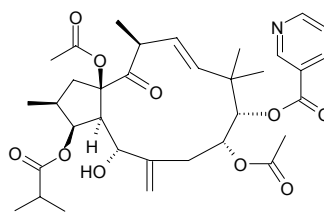
$C_{35}H_{45}NO_{11}$  (655.75). Colorless amorphous solid,  $[\alpha]_D^{25} = -22.0^\circ$  ( $c = 0.1$ ,  $CHCl_3$ ). **Pharm:** Cancer cell P-Glycoprotein inhibitor (cellular P-glycoprotein-mediated daunomycin efflux, InRt =  $(123 \pm 3)\%$ ), relative standard Cyclosporin A(CsA) InRt = 100%). **Source:** DI ZHONG HAI DA JI *Euphorbia characias* (whole herb). **Ref:** 5003.

**7605 Euphocharacin J**

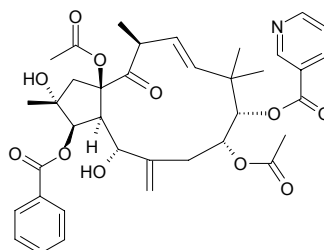
$C_{34}H_{43}NO_{11}$  (641.72). Colorless amorphous solid,  $[\alpha]_D^{25} = -46.0^\circ$  ( $c = 0.1$ ,  $CHCl_3$ ). **Pharm:** Cancer cell P-Glycoprotein inhibitor (cellular P-glycoprotein-mediated daunomycin efflux, InRt =  $(62 \pm 2)\%$ ), relative standard Cyclosporin A(CsA) InRt = 100%). **Source:** DI ZHONG HAI DA JI *Euphorbia characias* (whole herb). **Ref:** 5003.

**7606 Euphocharacin K**

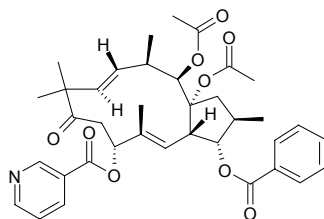
$C_{34}H_{45}NO_{10}$  (627.74). Colorless amorphous solid,  $[\alpha]_D^{25} = -19.33^\circ$  ( $c = 0.1$ ,  $CHCl_3$ ). **Pharm:** Cancer cell P-Glycoprotein inhibitor (cellular P-glycoprotein-mediated daunomycin efflux, InRt =  $(47 \pm 5)\%$ ), relative standard Cyclosporin A(CsA) InRt = 100%). **Source:** DI ZHONG HAI DA JI *Euphorbia characias* (whole herb). **Ref:** 5003.

**7607 Euphocharacin L**

$C_{37}H_{43}NO_{11}$  (677.76). Colorless amorphous solid,  $[\alpha]_D^{25} = -40.0^\circ$  ( $c = 0.1$ ,  $CHCl_3$ ). **Pharm:** Cancer cell P-Glycoprotein inhibitor (cellular P-glycoprotein-mediated daunomycin efflux, InRt =  $(79 \pm 4)\%$ ), relative standard Cyclosporin A(CsA) InRt = 100%). **Source:** DI ZHONG HAI DA JI *Euphorbia characias* (whole herb). **Ref:** 5003.

**7608 Euphoheliosnoid A**

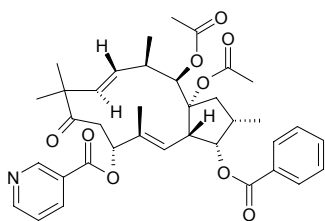
$C_{37}H_{43}NO_9$  (645.76). Colorless oil,  $[\alpha]_D^{20} = +19^\circ$  ( $c = 1.36$ ,  $CHCl_3$ ). **Source:** ZE QI *Euphorbia helioscopia* (whole herb). **Ref:** 5076.



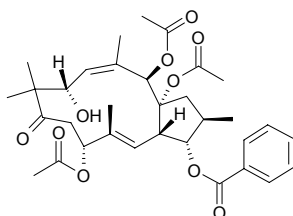


**7609 Euphoheliosnoid B**

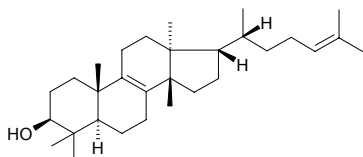
$C_{37}H_{43}NO_9$  (645.76). Colorless oil,  $[\alpha]_D^{20} = +25^\circ$  ( $c = 1.00$ ,  $CHCl_3$ ). Source: ZE QI *Euphorbia helioscopia* (whole herb). Ref: 5076.

**7610 Euphoheliosnoid C**

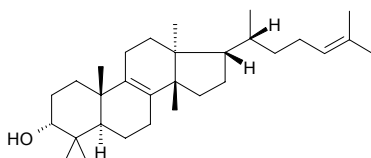
$C_{33}H_{42}O_{10}$  (598.70). Colorless oil,  $[\alpha]_D^{20} = +33^\circ$  ( $c = 0.58$ ,  $CHCl_3$ ). Source: ZE QI *Euphorbia helioscopia* (whole herb). Ref: 5076.

**7611 Euphol**

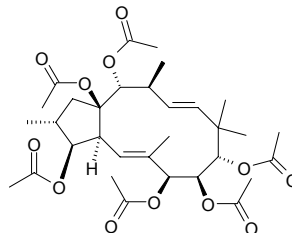
Euphadienol; Eupha-8,24-dien-3 $\beta$ -ol [514-47-6]  $C_{30}H_{50}O$  (426.73). mp 116°C. Pharm: Antihypertensive (anesthetic dog, iv, 0.31~10mg/kg, blood pressure is lowered by 20~30mmHg to 50~93mmHg for 0.75~4.5 hours,  $ED_{50}$  (iv) = 2.18mg/Kg); cytotoxic ( $P_{388}$ ,  $ED_{50} = 2.4\mu g/mL$ ); antineoplastic (EBV-EA induced by TPA, mol ratio/TPA = 1000, relative percentage of EBV-EA = 0% (positive control value 32pmol, 20ng TPA = 100%), viability of Raji cells = 70%; reference compound  $\beta$ -Carotene, relative percentage = 8.6%)<sup>[4606]</sup>. Source: BA WANG BIAN *Euphorbia royleana*, GAN SUI *Euphorbia kansui*, HUO YANG LE *Euphorbia antiquorum* (latex: yield = 0.38%fw)<sup>[4606]</sup>, XI YE DA JI *Euphorbia esula* var. *cyparissoides*. Ref: 6, 1812, 1813, 4606.

**7612  $\alpha$ -Euphol**

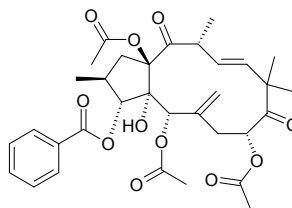
$C_{30}H_{50}O$  (426.73). Source: GAN SUI *Euphorbia kansui* (dried root). Ref: 4690.

**7613 Euphobubescene**

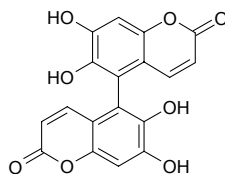
3 $\beta$ ,7 $\beta$ ,8 $\beta$ ,9 $\alpha$ ,14 $\alpha$ ,15 $\beta$ -Hexaacetoxy-2 $\beta$ H-jatropha-5E,11E-diene  $C_{32}H_{46}O_{12}$  (622.72). White amorphous powder,  $[\alpha]_D^{25} = -139^\circ$  ( $c = 0.14$ ,  $CHCl_3$ ). Pharm: Cytotoxic (*in vitro* MCF7 cell lines,  $GI_{50} = (72.0\pm 5.8)\mu mol/L$ , Doxorubicin,  $GI_{50} = (42.8\pm 8.2)\mu mol/L$ ; NCI-H460 cell lines,  $GI_{50} = (40.9\pm 0.8)\mu mol/L$ , Doxorubicin,  $GI_{50} = (94.0\pm 8.7)\mu mol/L$ ; SF268 cell lines,  $GI_{50} > 100\mu mol/L$ , Doxorubicin,  $GI_{50} = (93.0\pm 7.0)\mu mol/L$ ). Source: DUAN ROU MAO DA JI *Euphorbia pubescens* (whole herb). Ref: 4949.

**7614 Euphobubescenol**

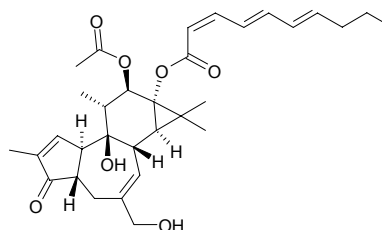
5 $\alpha$ ,8 $\alpha$ ,15 $\beta$ -Triacetoxy-3 $\alpha$ -benzoyloxy-4 $\alpha$ -hydroxy-9,14-dioxo-13 $\beta$ H-jatropha-6(17),11E-diene  $C_{33}H_{40}O_{11}$  (612.68). White amorphous powder,  $[\alpha]_D^{25} = +29^\circ$  ( $c = 0.12$ ,  $CHCl_3$ ). Pharm: Cytotoxic (*in vitro* MCF7,  $GI_{50} = (68.6\pm 3.2)\mu mol/L$ , Doxorubicin,  $GI_{50} = (42.8\pm 8.2)\mu mol/L$ ; NCI-H460,  $GI_{50} = 75\mu mol/L$ , Doxorubicin,  $GI_{50} = (94.0\pm 8.7)\mu mol/L$ ; SF268,  $GI_{50} > 100\mu mol/L$ , Doxorubicin,  $GI_{50} = (93.0\pm 7.0)\mu mol/L$ ). Source: DUAN ROU MAO DA JI *Euphorbia pubescens* (whole herb). Ref: 4949.

**7615 Euphorbetin**

[35897-99-5]  $C_{18}H_{10}O_8$  (354.28). Source: QIAN JIN ZI *Euphorbia lathyris*. Ref: 6.

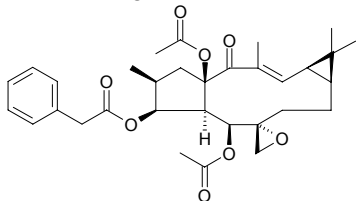
**7616 Euphorbia factor Ti<sub>2</sub>**

$C_{32}H_{42}O_7$  (538.69). Pharm: Irritant. Source: LU YU SHU *Euphorbia tirucalli*. Ref: 658.

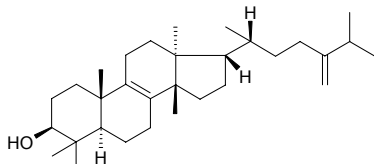


**7617 Euphorbiasteroid**

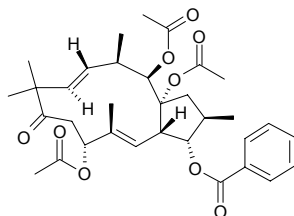
5,10-Diacetyl-6,20-epoxy-3-phenyl-acetyllythyrol  $C_{32}H_{40}O_8$  (552.67). mp 199.5°C. **Pharm:** Laxative. **Source:** QIAN JIN ZI *Euphorbia lathyris*, XUE TONG *Macaranga tanarius*. **Ref:** 6, 661, 5501.

**7618 Euphorbol**

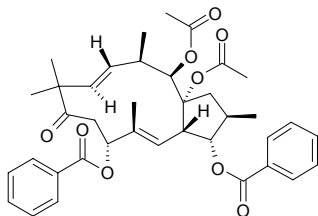
$\alpha$ -Euphorbol [566-14-3]  $C_{31}H_{52}O$  (440.76). Needles, mp 123~126°C, mp 127~128°C,  $[\alpha]_D^{25} = -1.0^\circ$  ( $c = 0.20$ ). **Pharm:** Antineoplastic (EBV-EA induced by TPA, mol ratio/TPA = 1000, relative percentage of EBV-EA = 0% (positive control value 32pmol, 20ng TPA = 100%), viability of Raji cells = 70%; reference compound  $\beta$ -Carotene, relative percentage = 8.6%). **Source:** BA WANG BIAN *Euphorbia royleana*, GAN SUI *Euphorbia kansui*, HUO YANG LE *Euphorbia antiqorum* (latex). **Ref:** 6, 4606.

**7619 Euphoscopin B**

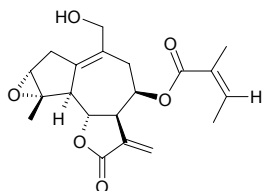
$C_{33}H_{42}O_9$  (598.706). **Source:** ZE QI *Euphorbia helioscopia* (whole herb). **Ref:** 5076.

**7620 Euphoscopin C**

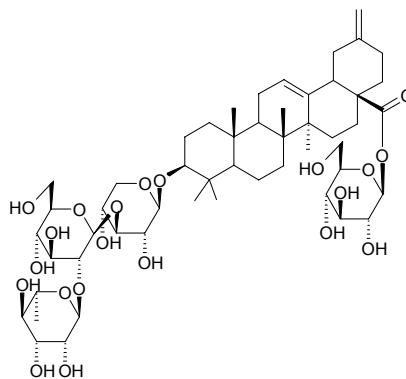
$C_{38}H_{44}O_9$  (644.77). **Source:** ZE QI *Euphorbia helioscopia* (whole herb). **Ref:** 5076.

**7621 Euponin**

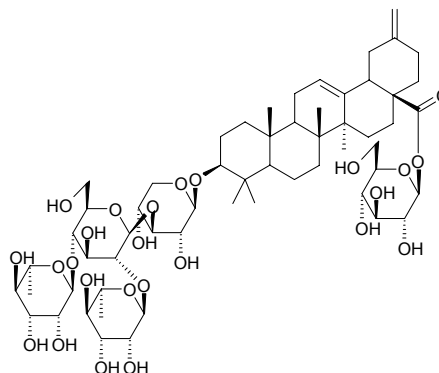
[70469-59-9]  $C_{20}H_{24}O_6$  (360.41). **Pharm:** Larvacide (insect larva growth inhibitor). **Source:** CHENG GAN CAO *Eupatorium japonicum*. **Ref:** 658.

**7622 Eupteleasaponin I**

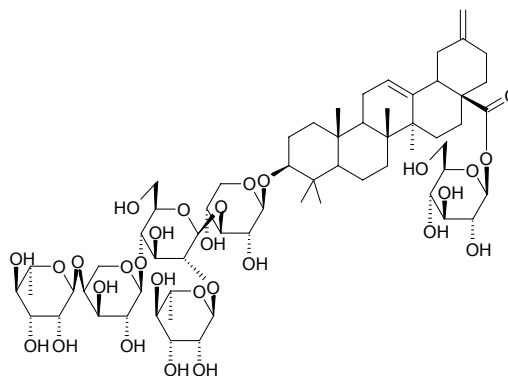
$C_{52}H_{82}O_{21}$  (1043.22). **Source:** DUO XIONG RUI LING CHUN MU *Euptelea polyandra* (fresh leaf). **Ref:** 3537.

**7623 Eupteleasaponin II**

$C_{58}H_{92}O_{25}$  (1189.36). **Source:** DUO XIONG RUI LING CHUN MU *Euptelea polyandra* (fresh leaf). **Ref:** 3537.

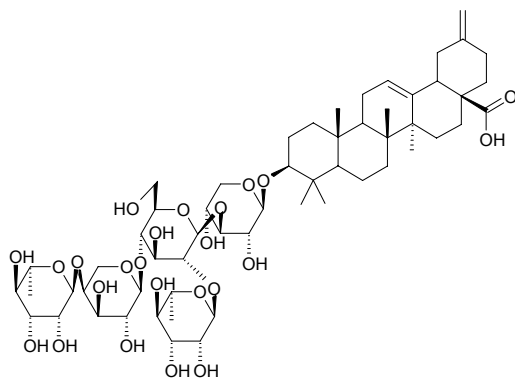
**7624 Eupteleasaponin III**

$C_{63}H_{100}O_{29}$  (1321.48). **Source:** DUO XIONG RUI LING CHUN MU *Euptelea polyandra* (fresh leaf). **Ref:** 3537.

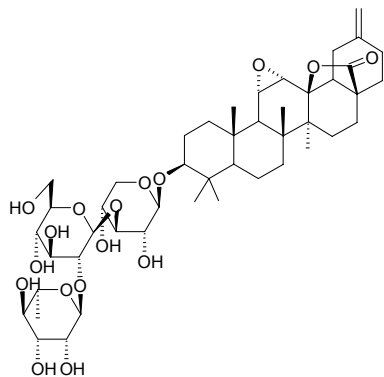


**7625 Eupteleasaponin IV**

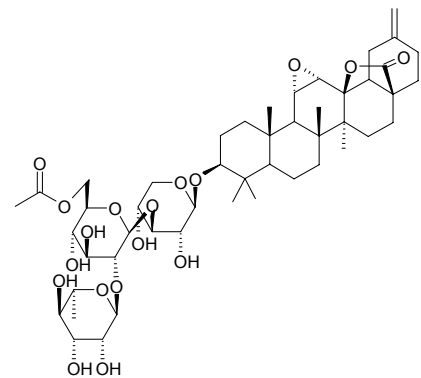
$C_{57}H_{90}O_{24}$  (1159.34). Source: DUO XIONG RUI LING CHUN MU *Euptelea polyandra* (fresh leaf). Ref: 3537.

**7626 Eupteleasaponin V**

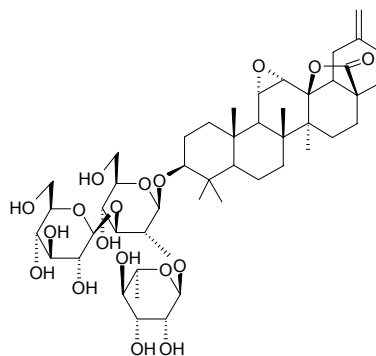
$C_{46}H_{70}O_{17}$  (895.06). Source: DUO XIONG RUI LING CHUN MU *Euptelea polyandra* (fresh leaf). Ref: 3537.

**7627 Eupteleasaponin V acetate**

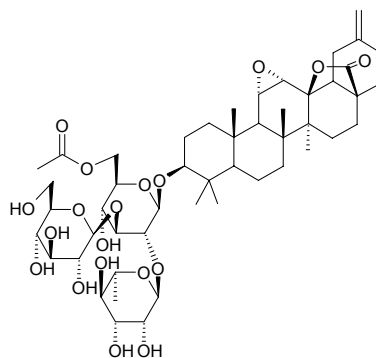
$C_{48}H_{72}O_{18}$  (937.10). Source: DUO XIONG RUI LING CHUN MU *Euptelea polyandra* (fresh leaf). Ref: 3537.

**7628 Eupteleasaponin VI**

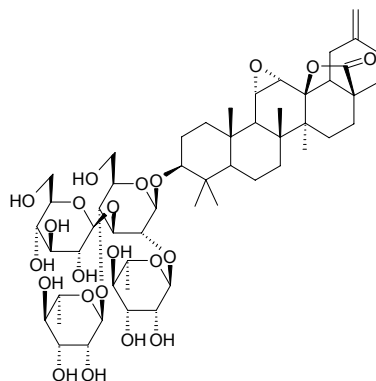
Eupteleogenin 3-*O*- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)-[ $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucopyranoside  $C_{47}H_{72}O_{18}$  (925.09). Colorless fine crystals (CHCl<sub>3</sub>-MeOH), mp 184–187°C,  $[\alpha]_D^{25} = +46.8^\circ$  ( $c = 0.1$ , MeOH). Source: DUO XIONG RUI LING CHUN MU *Euptelea polyandra* (fresh leaf). Ref: 3537.

**7629 Eupteleasaponin VI acetate**

Eupteleogenin 3-*O*-[ $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)][ $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 3)]-6'-*O*-acetyl- $\beta$ -*D*-glucopyranoside  $C_{49}H_{74}O_{19}$  (967.12). Colorless fine crystals (CHCl<sub>3</sub>-MeOH), mp 180–184°C,  $[\alpha]_D^{26} = +31.9^\circ$  ( $c = 0.1$ , MeOH). Source: DUO XIONG RUI LING CHUN MU *Euptelea polyandra* (fresh leaf). Ref: 3537.

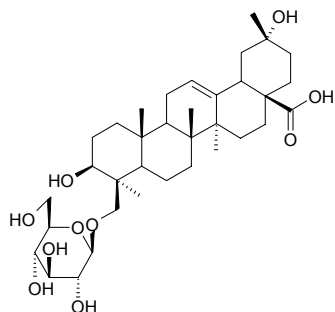
**7630 Eupteleasaponin VII**

Eupteleogenin 3-*O*-[ $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)][ $\beta$ -*D*-galactopyranosyl(1 $\rightarrow$ 3)][ $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 4)]- $\beta$ -*D*-glucopyranoside  $C_{53}H_{82}O_{22}$  (1071.23). Colorless fine crystals (CHCl<sub>3</sub>-MeOH), mp 168–172°C,  $[\alpha]_D^{26} = +14.6^\circ$  ( $c = 0.1$ , MeOH). Source: DUO XIONG RUI LING CHUN MU *Euptelea polyandra* (fresh leaf). Ref: 3537.

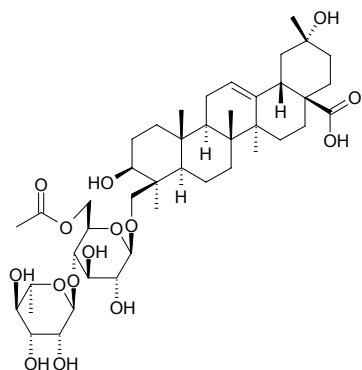


**7631 Eupteleasaponin VIII**

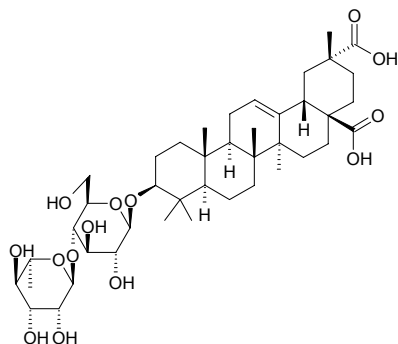
3 $\beta$ ,20 $\alpha$ ,24-Trihydroxy-29-norolean-12-en-28-oic acid 24-*O*- $\beta$ -D-glucopyranoside C<sub>35</sub>H<sub>56</sub>O<sub>10</sub> (636.83). Colorless fine crystals (CHCl<sub>3</sub>-MeOH), mp 199~201°C, [ $\alpha$ ]<sub>D</sub><sup>26</sup> = +73.9° (*c* = 0.1, MeOH). Source: DUO XIONG RUI LING CHUN MU *Euptelea polyandra* (fresh leaf). Ref: 3537.

**7632 Eupteleasaponin IX**

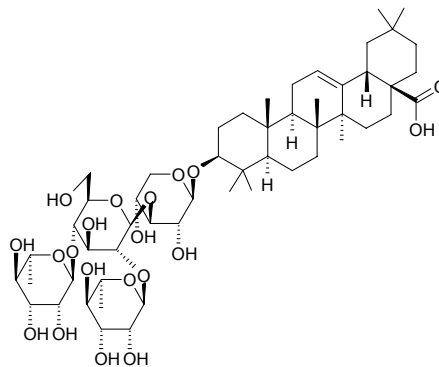
3 $\beta$ ,20 $\alpha$ ,24-Trihydroxy-29-norolean-12-en-28-oic acid 24-*O*-[ $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 4)]-6'-*O*-acetyl- $\beta$ -D-glucopyranoside C<sub>43</sub>H<sub>68</sub>O<sub>15</sub> (825.01). Colorless fine crystals (CHCl<sub>3</sub>-MeOH), mp 221~225°C, [ $\alpha$ ]<sub>D</sub><sup>26</sup> = +34.9° (*c* = 0.1, MeOH). Source: DUO XIONG RUI LING CHUN MU *Euptelea polyandra* (fresh leaf). Ref: 3537.

**7633 Eupteleasaponin X**

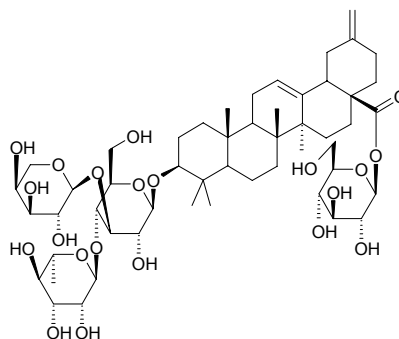
Serratagenic acid 3-*O*- $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranoside C<sub>42</sub>H<sub>66</sub>O<sub>14</sub> (794.99). Colorless fine crystals (CHCl<sub>3</sub>-MeOH), mp 237~239°C, [ $\alpha$ ]<sub>D</sub><sup>26</sup> = +12.1° (*c* = 0.1, MeOH). Source: DUO XIONG RUI LING CHUN MU *Euptelea polyandra* (fresh leaf). Ref: 3537.

**7634 Eupteleasaponin XI**

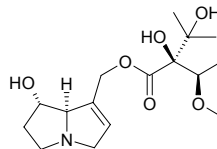
Oleanolic acid 3-*O*-{ $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 2)-[ $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 4)]- $\beta$ -D-glucopyranosyl(1 $\rightarrow$ 3)}- $\beta$ -D-xylopyranoside C<sub>53</sub>H<sub>86</sub>O<sub>20</sub> (1043.26). Colorless fine crystals (CHCl<sub>3</sub>-MeOH), mp 241~245°C, [ $\alpha$ ]<sub>D</sub><sup>26</sup> = +116° (*c* = 0.1, MeOH). Source: DUO XIONG RUI LING CHUN MU *Euptelea polyandra* (fresh leaf). Ref: 3537.

**7635 Eupteleasaponin XII**

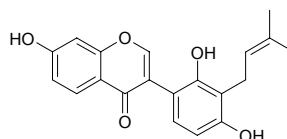
8-*O*- $\beta$ -D-Glucopyranosylakebonic acid 3-*O*- $\alpha$ -L-arabinopyranosyl(1 $\rightarrow$ 3)-[ $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 4)]- $\beta$ -D-glucopyranoside C<sub>52</sub>H<sub>82</sub>O<sub>21</sub> (1043.22). Colorless fine crystals (CHCl<sub>3</sub>-MeOH), mp 175~177°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +33.9° (*c* = 0.1, MeOH). Source: DUO XIONG RUI LING CHUN MU *Euptelea polyandra* (fresh leaf). Ref: 3537.

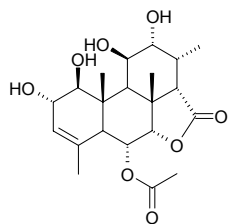
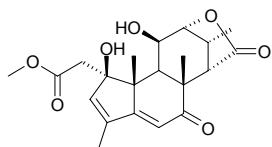
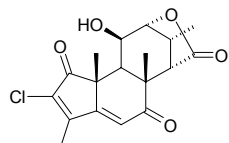
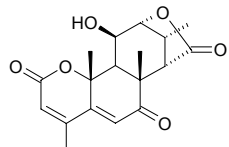
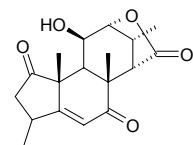
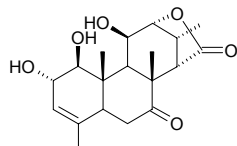
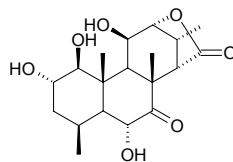
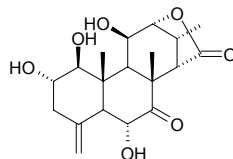
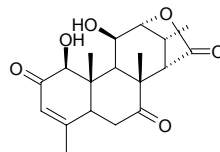
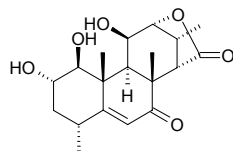
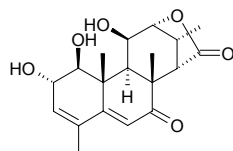
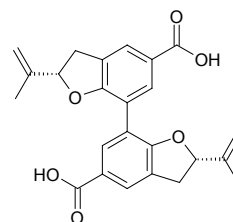
**7636 Europine**

[570-19-4] C<sub>16</sub>H<sub>27</sub>NO<sub>6</sub> (329.40). Pharm: Anticholinergic (rat); hepatotoxicin. Source: OU ZHOU TIAN JIE CAI *Heliotropium europaeum*, YUAN YE TIAN JIE CAI *Heliotropium rotundifolium*. Ref: 658.

**7637 Eurycarpin A**

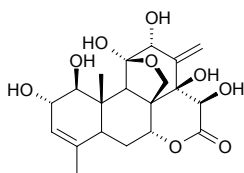
7,2',4'-Trihydroxy-(3,3-dimethylallyl)isoflavone [166547-20-2] C<sub>20</sub>H<sub>18</sub>O<sub>5</sub> (338.36). Powder (methanol), mp 85~87°C. Source: HUANG GAN CAO *Glycyrrhiza kansuensis*. Ref: 379.



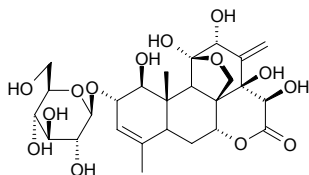
**7638 Eurycolactone**C<sub>21</sub>H<sub>30</sub>O<sub>8</sub> (410.47). [Source](#): *Eurycoma* sp. [Ref](#): 4556.**7639 Eurycolactone A**C<sub>21</sub>H<sub>26</sub>O<sub>7</sub> (390.44). [Source](#): *Eurycoma* sp. [Ref](#): 4556.**7640 Eurycolactone B**C<sub>18</sub>H<sub>19</sub>ClO<sub>5</sub> (350.38). [Source](#): *Eurycoma* sp. [Ref](#): 4556.**7641 Eurycolactone C**C<sub>18</sub>H<sub>20</sub>O<sub>6</sub> (332.36). [Source](#): *Eurycoma* sp. [Ref](#): 4556.**7642 Eurycolactone D**C<sub>18</sub>H<sub>22</sub>O<sub>5</sub> (318.37). [Source](#): *Eurycoma* sp. [Ref](#): 4556.**7643 Eurycolactone E**C<sub>19</sub>H<sub>26</sub>O<sub>6</sub> (350.42). [Source](#): *Eurycoma* sp. [Ref](#): 4556.**7644 Eurycolactone F**C<sub>19</sub>H<sub>28</sub>O<sub>7</sub> (368.43). [Source](#): *Eurycoma* sp. [Ref](#): 4556.**7645 Eurycolactone G**C<sub>19</sub>H<sub>26</sub>O<sub>7</sub> (366.41). [Source](#): *Eurycoma* sp. [Ref](#): 4556.**7646 Eurycomalactone**C<sub>19</sub>H<sub>24</sub>O<sub>6</sub> (348.40). [Pharm](#): Cytotoxic (A549 cancer cells, remarkable activity; MCF7 cancer cells, IC<sub>50</sub> < 2.5 μg/mL); antileishmanial (IC<sub>50</sub> = 0.21 μg/mL, control Thalloquin, IC<sub>50</sub> = 0.21 μg/mL). [Source](#): *Eurycoma* sp. [Ref](#): 4556.**7647 Eurycomalide A**C<sub>19</sub>H<sub>26</sub>O<sub>6</sub> (350.42). [Source](#): *Eurycoma* sp. [Ref](#): 4556.**7648 Eurycomalide B**C<sub>19</sub>H<sub>24</sub>O<sub>6</sub> (348.40). [Source](#): *Eurycoma* sp. [Ref](#): 4556.**7649 Eurycomalin A**C<sub>24</sub>H<sub>22</sub>O<sub>6</sub> (406.44). [Source](#): *Eurycoma* sp. [Ref](#): 4556.

**7650 Eurycomanol**

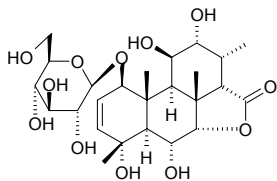
$C_{20}H_{26}O_9$  (410.42). **Pharm:** Cytotoxic (KB cells,  $IC_{50} = 3.6\mu\text{g/mL}$ )<sup>[4556]</sup>, antileishmanial ( $IC_{50} = 0.28\mu\text{g/mL}$ , control Thallioquin,  $IC_{50} = 0.21\mu\text{g/mL}$ ). **Source:** *Eurycoma* sp. **Ref:** 4556.

**7651 Eurycomanol-2-O-β-glucopyranoside**

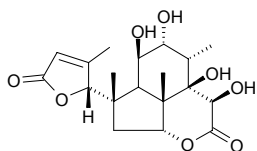
$C_{26}H_{36}O_{14}$  (572.57). **Pharm:** Antileishmanial (thallioquin-resistance *Leishmania* sp.,  $IC_{50} = 0.389\sim 3.498\mu\text{mol/L}$ , control Thallioquin,  $IC_{50} = 0.323\sim 0.774\mu\text{mol/L}$ ). **Source:** *Eurycoma* sp. **Ref:** 4556.

**7652 Eurycomaoside**

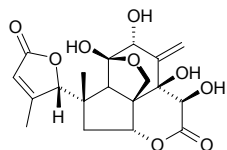
$C_{25}H_{38}O_{12}$  (530.57).  $[\alpha]_D^{25} = -10.9^\circ$  ( $c = 0.5$ , MeOH). **Source:** CHANG YE KUAN MU *Eurycoma longifolia* (root). **Ref:** 4400.

**7653 Eurylactone A**

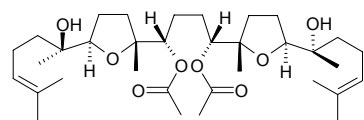
$C_{19}H_{26}O_8$  (382.41). **Source:** *Eurycoma* sp. **Ref:** 4556.

**7654 Eurylactone B**

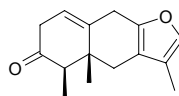
$C_{19}H_{22}O_9$  (394.38). **Source:** *Eurycoma* sp. **Ref:** 4556.

**7655 Eurylene**

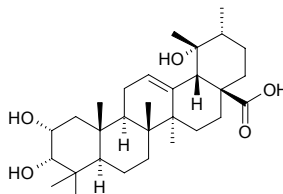
$C_{34}H_{58}O_8$  (594.84). **Pharm:** Cytotoxic (KB cells, gtdrolysis product 11-Deacetyureylene  $IC_{50} = 0.33\mu\text{g/mL}$ ). **Source:** *Eurycoma* sp. **Ref:** 4556.

**7656 Euryopsin-3-one**

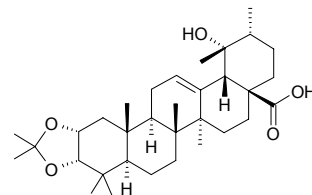
$C_{15}H_{18}O_2$  (230.31). Colorless oil. **Source:** HUANG SE QIAN LI GUANG *Senecio flavus*. **Ref:** 2409.

**7657 Euscaphic acid**

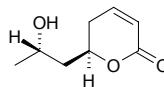
2 $\alpha$ ,3 $\alpha$ ,19 $\alpha$ -Trihydroxyurs-12-en-28-oic acid [53155-25-2]  $C_{30}H_{48}O_5$  (488.71). Colorless powder crystals, mp 269~271°C,  $[\alpha]_D^{18} = -22.4^\circ$  ( $c = 0.05$ , pyridine). **Pharm:** Immunosuppressant (hmn mononuclear cells antiproliferation, involving T lymphocytes, B lymphocytes, and macrophages isolated from peripheral blood,  $IC_{50} = 28.8\mu\text{mol/L}$ ; control Cyclosporin A,  $IC_{50} = 0.012\mu\text{mol/L}$ )<sup>[3064]</sup>; cytotoxic inactive (HSC-2,  $IC_{50} > 200\mu\text{g/mL}$ ; HGF,  $IC_{50} > 200\mu\text{g/mL}$ )<sup>[5160]</sup>. **Source:** DI YU *Sanguisorba officinalis*, JIN YING ZI *Rosa laevigata*, JUAN MAO QIANG WEI *Rosa sericea*, PI PA HE *Eriobotrya japonica*, SAN YE SHU WEI CAO *Salvia trijuga*, TAI WAN PI PA *Eriobotrya deflexa* (leaf)<sup>[3064]</sup>, TUN XING GUO *Pygeum topengii*. **Ref:** 447, 570, 592, 643, 3064, 5160.

**7658 Euscaphic acid 2,3-monoacetonide**

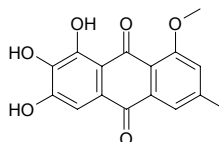
$C_{33}H_{52}O_5$  (528.78). White acicular crystals, mp 188~190°C acetone-petroleum ether). **Source:** JUAN MAO QIANG WEI *Rosa sericea*. **Ref:** 676.

**7659 Euscapholide**

7-Hydroxy-2-octen-5-olide  $C_8H_{12}O_3$  (156.18). **Pharm:** Anti-inflammatory (remarkably inhibits inflammation induced by *k*-carrageenan)<sup>[4546]</sup>. **Source:** YE YA CHUN *Euscaphis japonica* (twig and leaf). **Ref:** 4546.

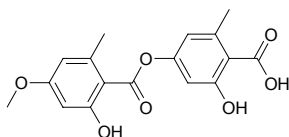
**7660 Evariquinone**

1,2,3-Trihydroxy-6-methyl-8-methoxyanthraquinone  $C_{16}H_{12}O_6$  (300.27). mp 238~242°C (sublimation). **Source:** BIAN SE HE KE BAO *Emericella varicolor*. **Ref:** 3386.

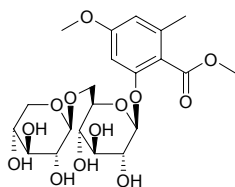


**7661 Evernic acid**

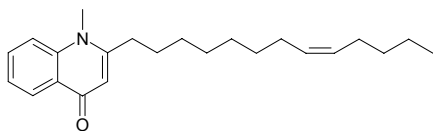
[537-09-7]  $C_{17}H_{16}O_7$  (332.31). mp 169.6~170.1°C. Source: XIAO LA BA *Cladonia verticillata*. Ref: 6.

**7662 Evernic acid methyl ester 2-O-β-xylopyranosyl-(1→6)-β-glucopyranoside**

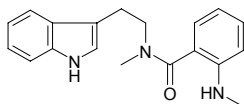
$C_{21}H_{30}O_{13}$  (490.47). Amorphous powder,  $[\alpha]_D^{20} = -41.2^\circ$  ( $c = 0.80$ , MeOH). Source: NAO YANG HUA *Rhododendron molle*. Ref: 5396.

**7663 Evocarpine**

[15266-38-3]  $C_{23}H_{33}NO$  (339.53). Note: evocarpine is a mixture, and the following structure is its main component. Pharm: DGAT inhibitor ( $IC_{50} = 8.1 \mu\text{g/mL}$ )<sup>[4943]</sup>, leukotriene biosynthesis inhibitor (hmn polymorphonuclear granulocytes,  $IC_{50} = 14.6 \mu\text{mol/L}$ , zileuton,  $IC_{50} = 10.4 \mu\text{mol/L}$ )<sup>[5031]</sup>. Source: WU ZHU YU *Evodia rutaecarpa* (fruit). Ref: 2, 4943, 5031.

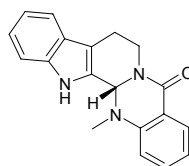
**7664 Evodiamide**

$C_{19}H_{21}N_3O$  (307.40). Source: WU ZHU YU *Evodia rutaecarpa*. Ref: 2, 347, 877.

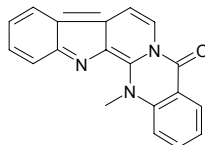
**7665 Evodiamine**

8,13,13b,14-Tetrahydro-14-methylindolo[2',3':3,4]pyrido[2,1b]quinazolin-5(7H)-one [518-17-2]  $C_{19}H_{17}N_3O$  (303.37). Yellow lamellar crystals (ethanol), mp 278°C.  $[\alpha]_D^{15} = +352^\circ$  (acetone), mp (+) 270~272°C. Pharm: Analgesic (has both stimulatory and desensitizing effects on sensory nerves, as capsaicin does)<sup>[5394]</sup>; diuretic; raises body temperature; induces sweating; cytotoxic (induces apoptosis of HeLa cell); CGRP stimulator (Calcitonin gene-related peptide, CGRP, protects the myocardium against ischemia-reperfusion injury)<sup>[4088]</sup>; a detail study on protective effects of evodiamine on myocardial ischemia-reperfusion injury in rats (Rats were pretreated with evodiamine 10min before the experiment, and then the left main coronary artery of rat hearts was subjected to 60min occlusion followed by 180min reperfusion. Infarct size, the activity of serum creatine kinase, serum concentrations of TNF- $\alpha$  and plasma concentrations of CGRP were measured. Pretreatment with evodiamine (30 or 60 $\mu\text{g/kg}$ , iv) markedly increased the content of CGRP in plasma concomitantly with a significant reduction in infarct size, the activity of serum creatine kinase, and TNF- $\alpha$

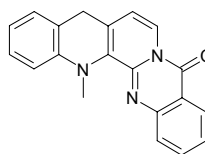
level, and the effects of evodiamine were completely abolished by capsazepine (5.0mg/kg, sc), a competitive vanilloid receptor antagonist. These results suggest that evodiamine exerts a protection against myocardial ischemia-reperfusion injury in rats and that the protective effects of evodiamine are related to stimulation of CGRP release via activation of vanilloid receptors)<sup>[4088]</sup>. Source: BO SHI WU ZHU YU *Evodia rutaecarpa* var. *bodinieri* (dried and almost ripe fruit: content scope of 4 origins = 0.117%~1.229%, mean content = 0.544%)<sup>[5508]</sup>, HUA NAN WU ZHU YU *Evodia austrosinensis* (dried and almost ripe fruit: content = 0.12%)<sup>[5508]</sup>, SHI HU<sup>(3)</sup> *Evodia rutaecarpa* var. *officinalis* (dried and almost ripe fruit: content scope of 14 origins = 0.093%~1.242%, mean content = 0.503%)<sup>[5508]</sup>, WU ZHU YU *Evodia rutaecarpa* (dried and almost ripe fruit: content scope of 14 origins = 0.203%~3.221%, mean content = 1.200%)<sup>[5508]</sup>, YI HUA WU ZHU YU *Evodia baberi* (dried and almost ripe fruit: content scope of 2 origins = 0.114%~0.152%, mean content = 0.133%)<sup>[5508]</sup>. Ref: 2, 6, 347, 661, 1643, 4088, 5394, 5501, 5508.

**7666 Evodianinine**

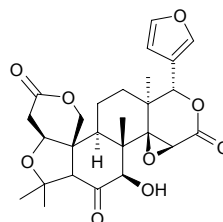
$C_{19}H_{13}NO_3$  (299.33). Pale yellow crystals, mp 185~187°C ( $\text{CHCl}_3$ ),  $[\alpha]_D^{23} = 0^\circ$  ( $c = 0.5$ ,  $\text{CHCl}_3$ ). Source: WU ZHU YU *Evodia rutaecarpa* (fruit). Ref: 4848.

**7667 Evodioxinine**

$C_{20}H_{15}N_3O$  (313.36). Yellow needles, mp 175~176°C,  $[\alpha]_D^{23} = 0^\circ$  ( $c = 0.5$ ,  $\text{CHCl}_3$ ). Source: WU ZHU YU *Evodia rutaecarpa* (fruit). Ref: 4914.

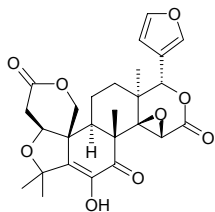
**7668 Evodinone**

Rutaevin [33237-37-5]  $C_{26}H_{30}O_9$  (486.52). mp 295~297°C (dec). Source: WU ZHU YU *Evodia rutaecarpa*. Ref: 2, 6.

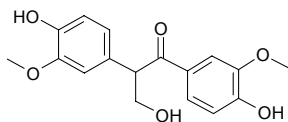


**7669 Evodol**

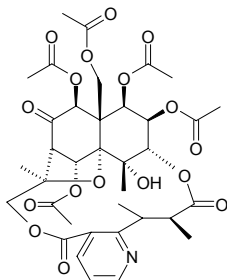
Limonindiosphenol [22318-10-1] C<sub>26</sub>H<sub>28</sub>O<sub>9</sub> (484.51). mp 280~281°C. Source: BAI XIAN PI *Dictamnus dasycarpus*, WU ZHU YU *Evodia rutaecarpa*. Ref: 2, 660, 1521.

**7670 Evofolin B**

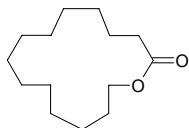
[168254-96-4] C<sub>17</sub>H<sub>18</sub>O<sub>6</sub> (318.33). Yellow oil, [α]<sub>D</sub><sup>26</sup> = +16.7° (c = 0.30, CH<sub>3</sub>OH). Pharm: Cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells)<sup>[5038]</sup>. Source: HAI NAN JIAN MU *Dysoxylum hainanense*, *Couepia ulei*. Ref: 2140, 5038.

**7671 Evonine**

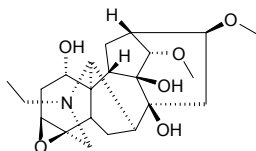
C<sub>36</sub>H<sub>43</sub>NO<sub>17</sub> (761.74). mp 149~153°C. Source: GUI JIAN YU *Euonymus alatus* (the compound was isolated from the plant by H.Wada, et al. in 1971). Ref: 5505.

**7672 Exaltolide**

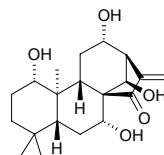
Oxacyclohexadecan-2-one [106-02-5] C<sub>15</sub>H<sub>28</sub>O<sub>2</sub> (240.39). Source: BAI ZHI *Angelica dahurica* [Syn. *Angelica porphyrocaulis*]. Ref: 2.

**7673 Excelsine**

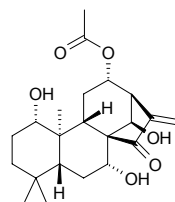
9β-Hydroxy-monticamine [41645-62-9] C<sub>22</sub>H<sub>33</sub>NO<sub>6</sub> (407.51). Colorless quadratus crystals, mp 87~89°C (acetone); 103~105°C. Source: JI LIN WU *Aconitum kirinense*, ZI HUA GAO WU *Aconitum excelsum*. Ref: 1521, 2515.

**7674 Excisanin A**

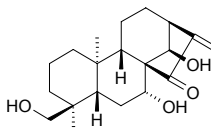
1α,7α,12α,14β-Tetrahydroxy-*ent*-kaur-16-en-15-one C<sub>20</sub>H<sub>30</sub>O<sub>5</sub> (350.46). mp 262~264°C, [α]<sub>D</sub><sup>20</sup> = -27.7° (c = 1.01, C<sub>5</sub>H<sub>5</sub>N). Pharm: Cytotoxic (*in vitro*, P<sub>388</sub>, ED<sub>50</sub> = 1.1 μg/mL)<sup>[3012]</sup>. Source: WEI YE XIANG CHA CAI *Rabdosia excisa* (aerial parts: yield = 0.0069%dw). Ref: 3012, 4067.

**7675 Excisanin B**

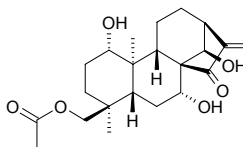
1α,7α,14β-Trihydroxy-12α-acetoxy-*ent*-kaur-16-en-15-one C<sub>22</sub>H<sub>32</sub>O<sub>6</sub> (392.50). mp 240~243°C, [α]<sub>D</sub><sup>20</sup> = -13.9° (c = 1.00, C<sub>5</sub>H<sub>5</sub>N). Pharm: Cytotoxic (*in vitro*, P<sub>388</sub>, ED<sub>50</sub> = 0.63 μg/mL)<sup>[3012]</sup>. Source: WEI YE XIANG CHA CAI *Rabdosia excisa* (aerial parts: yield = 0.0013%dw). Ref: 3012, 4067.

**7676 Excisanin C**

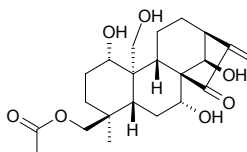
C<sub>20</sub>H<sub>30</sub>O<sub>4</sub> (334.46). [α]<sub>D</sub><sup>21</sup> = -112.7° (c = 0.15, MeOH). Source: WEI YE XIANG CHA CAI *Rabdosia excisa*. Ref: 4067.

**7677 Excisanin D**

C<sub>22</sub>H<sub>32</sub>O<sub>6</sub> (392.50). mp 140~142°C, [α]<sub>D</sub> = -56° (c = 0.42, MeOH). Pharm: Cytotoxic (*in vitro*, P<sub>388</sub>, IC<sub>50</sub> = 0.72 μg/mL)<sup>[3012]</sup>. Source: WEI YE XIANG CHA CAI *Rabdosia excisa* (aerial parts: yield = 0.0001%dw). Ref: 3012, 4067.

**7678 Excisanin E**

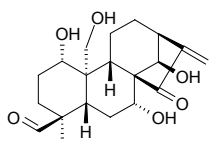
C<sub>22</sub>H<sub>32</sub>O<sub>7</sub> (408.50). Yellow powder, [α]<sub>D</sub> = -46.1° (c = 0.64, MeOH). Source: WEI YE XIANG CHA CAI *Rabdosia excisa*. Ref: 4067.



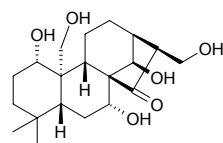


**7679 Excisanin F**

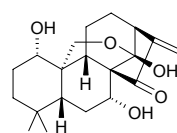
$C_{20}H_{28}O_6$  (364.44).  $[\alpha]_D^{20} = +27.3^\circ$  ( $c = 0.55$ , MeOH). Source: WEI YE XIANG CHA CAI *Rabdosia excisa*. Ref: 4067.

**7680 Excisanin G**

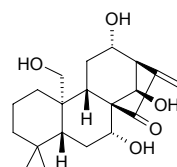
$C_{20}H_{32}O_6$  (368.47). mp 214–216°C,  $[\alpha]_D^{20} = -100.8^\circ$  ( $c = 0.51$ , MeOH). Source: WEI YE XIANG CHA CAI *Rabdosia excisa*. Ref: 4067.

**7681 Excisanin H**

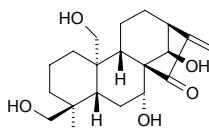
14 $\alpha$ ,20-Epoxy-1 $\alpha$ ,7 $\alpha$ ,14 $\beta$ -trihydroxy-*ent*-kaur-16-en-15-one  $C_{20}H_{28}O_5$  (348.44). Colorless powder (MeOH), mp 206–207°C,  $[\alpha]_D = -87.9^\circ$  ( $c = 0.07$ , MeOH). Pharm: Cytotoxic (*in vitro*,  $P_{388}$ ,  $ED_{50} = 0.96\mu\text{g/mL}$ ). Source: WEI YE XIANG CHA CAI *Rabdosia excisa* (aerial parts: yield = 0.00007%dw). Ref: 3012.

**7682 Excisanin I**

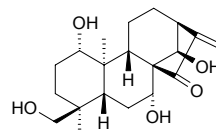
7 $\alpha$ ,12 $\alpha$ ,14 $\beta$ ,20-Tetrahydroxy-*ent*-kaur-16-en-15-one  $C_{20}H_{30}O_5$  (350.46). Colorless powder (MeOH), mp 142–144°C,  $[\alpha]_D = -110.3^\circ$  ( $c = 0.06$ , MeOH). Pharm: Cytotoxic (*in vitro*,  $P_{388}$ ,  $ED_{50} = 0.87\mu\text{g/mL}$ ). Source: WEI YE XIANG CHA CAI *Rabdosia excisa* (aerial parts: yield = 0.00009%dw). Ref: 3012.

**7683 Excisanin J**

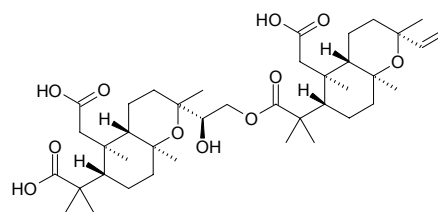
7 $\alpha$ ,14 $\beta$ ,18,20-Tetrahydroxy-*ent*-kaur-16-en-15-one  $C_{20}H_{30}O_5$  (350.46). Colorless powder (MeOH), mp 116–118°C,  $[\alpha]_D = -125.0^\circ$  ( $c = 0.17$ , MeOH). Pharm: Cytotoxic (*in vitro*,  $P_{388}$ ,  $ED_{50} = 0.92\mu\text{g/mL}$ ). Source: WEI YE XIANG CHA CAI *Rabdosia excisa* (aerial parts: yield = 0.00009%dw). Ref: 3012.

**7684 Excisanin K**

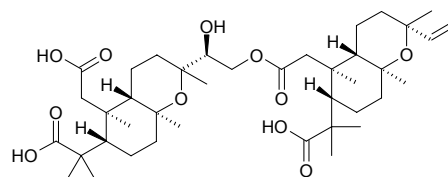
1 $\alpha$ ,7 $\alpha$ ,14 $\beta$ ,18-Tetrahydroxy-*ent*-kaur-16-en-15-one  $C_{20}H_{30}O_5$  (350.46). Colorless powder (MeOH), mp 128–129°C,  $[\alpha]_D = -109.2^\circ$  ( $c = 0.23$ , MeOH). Pharm: Cytotoxic (*in vitro*,  $P_{388}$ ,  $ED_{50} = 0.92\mu\text{g/mL}$ ). Source: WEI YE XIANG CHA CAI *Rabdosia excisa* (aerial parts: yield = 0.00013%dw). Ref: 3012.

**7685 Excoecarin R<sub>1</sub>**

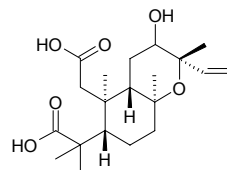
$C_{40}H_{64}O_{11}$  (720.95). Source: HAI QI *Excoecaria agallocha* (resinous resinous wood: yield = 0.0019%). Ref: 4674.

**7686 Excoecarin R<sub>2</sub>**

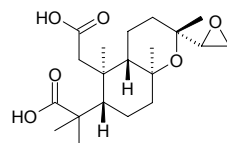
$C_{40}H_{64}O_{11}$  (720.95). Source: HAI QI *Excoecaria agallocha* (resinous wood: yield = 0.0015%). Ref: 4674.

**7687 Excoecarin S**

$C_{20}H_{32}O_6$  (368.47). Colorless needles (MeOH), mp 254–256°C,  $[\alpha]_D^{26} = -47.2^\circ$  ( $c = 0.9$ , MeOH). Source: HAI QI *Excoecaria agallocha* (resinous wood). Ref: 3461.

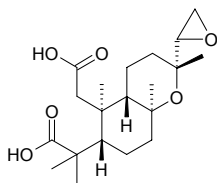
**7688 Excoecarin T<sub>1</sub>**

$C_{20}H_{32}O_6$  (368.47). As dimethyl ester: colorless needles (aqueous MeOH), mp 102–103°C,  $[\alpha]_D^{30} = -8.1^\circ$  ( $c = 1.0$ ,  $\text{CHCl}_3$ ). Source: HAI QI *Excoecaria agallocha* (resinous wood). Ref: 3461.

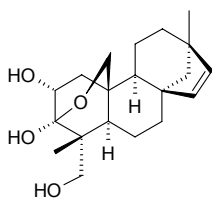


**7689 Excoecarin T<sub>2</sub>**

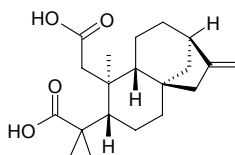
C<sub>20</sub>H<sub>32</sub>O<sub>6</sub> (368.47). As dimethyl ester: colorless needles (aqueous MeOH), mp 130~133°C,  $[\alpha]_D^{30} = -14.7^\circ$  ( $c = 0.5$ , CHCl<sub>3</sub>). Source: HAI QI *Excoecaria agallocha* (resinous wood). Ref: 3461.

**7690 Excoecarin V<sub>1</sub>**

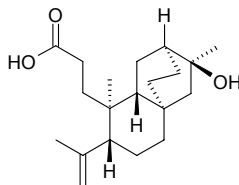
2 $\alpha$ ,3 $\alpha$ ,18-Trihydroxy-3 $\beta$ ,20-epoxybeyer-15-ene C<sub>20</sub>H<sub>30</sub>O<sub>4</sub> (334.46). Colorless prisms (MeOH), mp 177~179°C,  $[\alpha]_D^{26} = -19.3^\circ$  ( $c = 0.5$ , MeOH). Source: HAI QI *Excoecaria agallocha* (fresh stem). Ref: 4386.

**7691 Excoecarin V<sub>2</sub>**

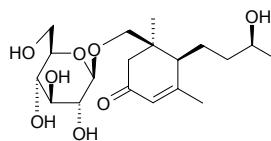
ent-2,3-Secokaur-16-en-2,3-dioic acid C<sub>20</sub>H<sub>30</sub>O<sub>4</sub> (334.46). Source: HAI QI *Excoecaria agallocha* (fresh stem). Ref: 4386.

**7692 Excoecarin V<sub>3</sub>**

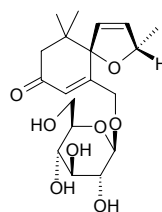
ent-3,4-Seco-16 $\alpha$ -hydroxyatis-4(19)-en-3-oic acid C<sub>20</sub>H<sub>32</sub>O<sub>3</sub> (320.48). Colorless plates (MeOH), mp 101~102°C,  $[\alpha]_D^{28} = -53.7^\circ$  ( $c = 1.0$ , MeOH). Source: HAI QI *Excoecaria agallocha* (fresh stem). Ref: 4386.

**7693 Excoecarioside A**

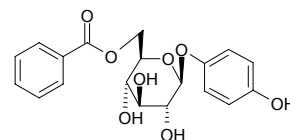
C<sub>19</sub>H<sub>32</sub>O<sub>8</sub> (388.46). Amorphous powder,  $[\alpha]_D^{25} = -10.3^\circ$  ( $c = 1.36$ , MeOH). Source: LU BEI GUI HUA *Excoecaria cochinchinensis* var. *viridis*. Ref: 4543.

**7694 Excoecarioside B**

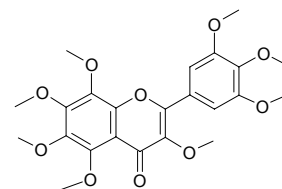
C<sub>19</sub>H<sub>28</sub>O<sub>8</sub> (384.43). Syrup,  $[\alpha]_D^{25} = +29.3^\circ$  ( $c = 0.82$ , MeOH). Source: LU BEI GUI HUA *Excoecaria cochinchinensis* var. *viridis*. Ref: 4543.

**7695 Eximine**

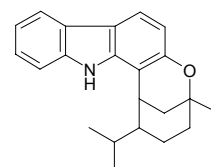
C<sub>19</sub>H<sub>20</sub>O<sub>8</sub> (376.37). Source: YAO YONG HEI MIAN SHEN YE *Breynia officinalis* (leaf). Ref: 2583.

**7696 Exoticin**

3,5,6,7,8,3',4',5'-Octamethoxyflavone [13364-94-8] C<sub>23</sub>H<sub>26</sub>O<sub>10</sub> (462.46). mp 124~125°C. Source: JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*]. Ref: 6, 11.

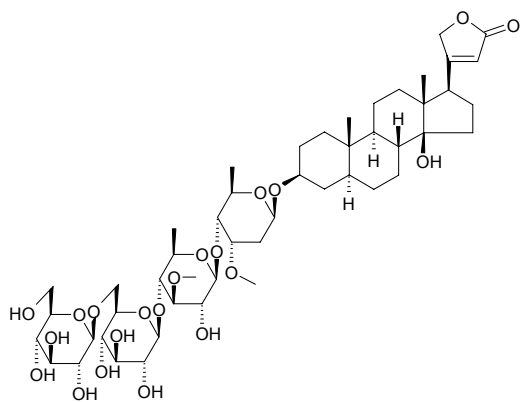
**7697 Exozoline**

[70561-79-4] C<sub>22</sub>H<sub>25</sub>NO (319.45). Source: JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*]. Ref: 11.

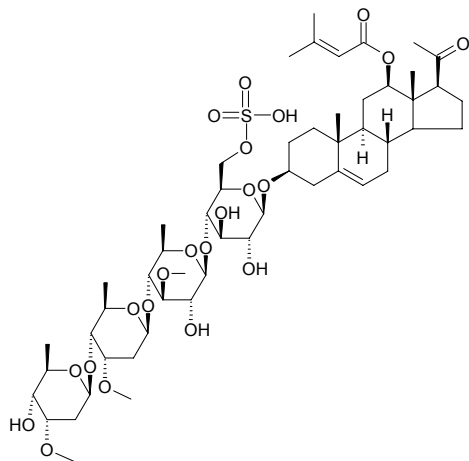


**7698 Extensumside A**

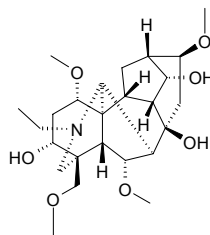
17 $\beta$ -Uzarienin-3-*O*- $\beta$ -glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -thevetopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -cymaropyranoside C<sub>49</sub>H<sub>78</sub>O<sub>21</sub> (1003.16). White amorphous powder, mp 176–178°C,  $[\alpha]_D^{25} = -12.5^\circ$  ( $c = 0.4$ , MeOH). **Pharm:** Cytotoxic (9 cancer cell lines, mean GI<sub>50</sub> = 0.346 $\mu$ g/mL: NCI-H460, GI<sub>50</sub> = (0.107 $\pm$ 0.016) $\mu$ g/mL; Colon205, GI<sub>50</sub> = (0.123 $\pm$ 0.014) $\mu$ g/mL; MDA-MB-231, GI<sub>50</sub> = (0.527 $\pm$ 0.036) $\mu$ g/mL; MCF7, GI<sub>50</sub> = (0.385 $\pm$ 0.019) $\mu$ g/mL; MDA-MB-231, GI<sub>50</sub> = (0.470 $\pm$ 0.018) $\mu$ g/mL; OVCAR-3, GI<sub>50</sub> = (0.407 $\pm$ 0.017) $\mu$ g/mL; A549, GI<sub>50</sub> = (0.296 $\pm$ 0.008) $\mu$ g/mL; HT29, GI<sub>50</sub> = (0.436 $\pm$ 0.011) $\mu$ g/mL; ACHN, GI<sub>50</sub> = (0.361 $\pm$ 0.022) $\mu$ g/mL; control Taxol, GI<sub>50</sub> = (0.102 $\pm$ 0.009) $\mu$ g/mL, (0.099 $\pm$ 0.001) $\mu$ g/mL, (0.028 $\pm$ 0.006) $\mu$ g/mL, (0.030 $\pm$ 0.001) $\mu$ g/mL, (0.032 $\pm$ 0.003) $\mu$ g/mL and (0.088 $\pm$ 0.004) $\mu$ g/mL), respectively for last 6 cell lines). **Source:** CHI GUO TENG *Myriophyton extensum* (whole herb). **Ref:** 4992.

**7699 Extensumside B**

12-(3-Methylbut-2-enyloxy)pregn-5-en-20-one 3-*O*-[ $\beta$ -cymaropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -cymaropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -thevetopyranosyl-(1 $\rightarrow$ 4)-(6-*O*-sulfo- $\beta$ -glucopyranoside)] C<sub>53</sub>H<sub>84</sub>O<sub>22</sub>S (1105.31). White amorphous powder, mp 196–198°C,  $[\alpha]_D^{25} = -12.0^\circ$  ( $c = 0.4$ , MeOH). **Pharm:** Cytotoxic inactive (NCI-H460, Colon205, MDA-MB-231, all GI<sub>50</sub> > 100 $\mu$ g/mL). **Source:** CHI GUO TENG *Myriophyton extensum* (whole herb). **Ref:** 4992.

**7700 Ezochasmanine**

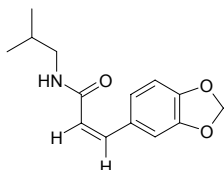
C<sub>25</sub>H<sub>41</sub>NO<sub>7</sub> (467.61). **Source:** ZHUA KUI GUA YE WU TOU *Aconitum hemsleyanum* var. *leueanthus* (root: yield = 0.00038%dw). **Ref:** 4678.



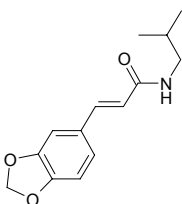
## F

**7701 cis-Fagaramide**

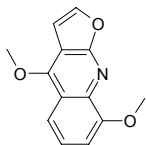
$C_{14}H_{17}NO_3$  (247.30). **Pharm:** Antioxidant (TLC-based assay, DPPH scavenger, MIQ = 10 $\mu$ g; control Quercetin, MIQ = 1 $\mu$ g). **Source:** *Fagara xanthoxyloides*. **Ref:** 5385.

**7702 trans-Fagaramide**

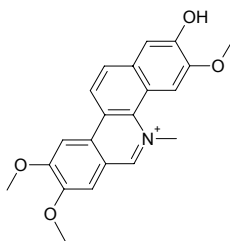
*N*-Isobutyl-3,4-methylenedioxybenzethenylamide  $C_{14}H_{17}NO_3$  (247.30). **Pharm:** Antioxidant (TLC-based assay, DPPH scavenger, MIQ = 10 $\mu$ g; control Quercetin, MIQ = 1 $\mu$ g)<sup>[5385]</sup>. **Source:** SHAN CI GU *Asarum sagittarioides*, *Fagara xanthoxyloides*. **Ref:** 660, 5385.

**7703  $\gamma$ -Fagarine**

4,8-Dimethoxyfuro[2,3-*b*]quinoline [524-15-2]  $C_{13}H_{11}NO_3$  (229.24). mp 142°C. **Pharm:** Antiarrhythmic (in clinic); antibacterial; antifungal; antispasmodic. **Source:** BAI XIAN PI *Dictamnus dasycarpus*, CHOU CAO *Ruta graveolens*, CHOU SHAN YANG *Orixa japonica* (stem: yield = 0.00038%dw)<sup>[4774]</sup>, GAO JIA SUO BAI XIAN *Dictamnus caucasicus*, HU JIAO HUA JIAO *Zanthoxylum piperitum*, MU<sup>(4)</sup> JU *Aegle marmelos*, QI HAN NING HUA JIAO *Zanthoxylum tsihanimposa*, ZHU YE JIAO *Zanthoxylum planispinum*, ZHU YE JIAO GEN *Zanthoxylum planispinum*. **Ref:** 6, 658, 4774.

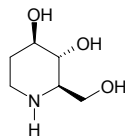
**7704 Fagaronine**

$C_{21}H_{20}NO_4$  (350.40). **Pharm:** Cytotoxic (binds to calf thymus DNA by intercalation and toxic to topoisomerases I and II)<sup>[5369]</sup>. **Source:** *Fagara xanthoxyloides*. **Ref:** 1521, 5369.

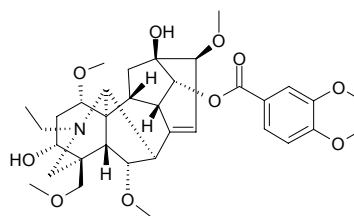
**7705 Fagomine**

3,4-Dihydroxy-2-piperidinemethanol [53185-12-9]  $C_6H_{13}NO_3$  (147.18).

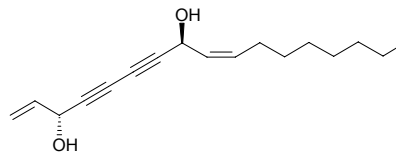
**Pharm:** Hypoglycemic (mus diabetes mellitus induced by SIZ, distinct effect)<sup>[2170]</sup>;  $\alpha$ -Glucosidase inhibitor (IC<sub>50</sub> = 15mmol/L)<sup>[4161]</sup>. **Source:** SANG ZHI *Morus alba*. **Ref:** 2170, 4161.

**7706 Falaconitine**

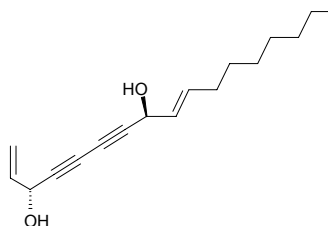
[62926-57-2]  $C_{34}H_{47}NO_{10}$  (629.75). **Pharm:** Causes paralysis, paroxysmal spasm, convulsion and death (gpg); similar action with aconitine (small animals). **Source:** FA KANG WU TOU *Aconitum falconeri*. **Ref:** 658.

**7707 cis-Falcarindiol**

1,9Z-Heptadecadiene-4,6-diyne-3R,8S-diol [55297-87-5]  $C_{17}H_{24}O_2$  (260.38). **Pharm:** Analgesic; plant antitoxin; antibacterial (*Staphylococcus aureus*, MIC = 2.2mg/mL; *Streptomyces scabies*, MIC = 1.5mg/mL; *Bacillus subtilis*, MIC = 1.4mg/mL; *Bacillus cereus*, MIC = 1.6mg/mL; *Pseudomonas aeruginosa*, MIC = 1.4mg/mL)<sup>[5305]</sup>; antifungal (*Aspergillus niger*, MIC = 0.5mg/mL)<sup>[5305]</sup>. **Source:** BEI SHA SHEN *Glehnia littoralis* (root without cortex: content = 0.146%)<sup>[5508]</sup>, CHOU A WEI *Ferula foetida* (root: yield = 0.00026%)<sup>[4659]</sup>, DIAN QIN *Sinodielsia yunnanensis* (root: yield = 2.90%), FANG FENG *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*], HE SHI FENG *Daucus carota* (root), LI JIANG QIAN HU *Peucedanum govianum* var. *bicolo*, LONG YAN DU HUO *Aralia fargesii*, NAN HE SHI *Daucus carota*, SONG YE FANG FENG *Seseli yunnanense*, *Niphogeton ternata*. **Ref:** 2, 549, 557, 571, 658, 4156, 4305, 4659, 5305, 5508.

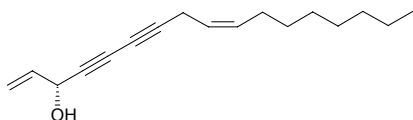
**7708 trans-Falcarindiol**

1,9E-Heptadecadiene-4,6-diyne-3R,8S-diol; Falcarindiol  $C_{17}H_{24}O_2$  (260.38). Brown oleaginous substance. **Source:** QIANG HUO *Notopterygium incisum*. **Ref:** 452.

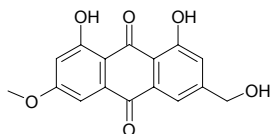


**7709 Falcarinol**

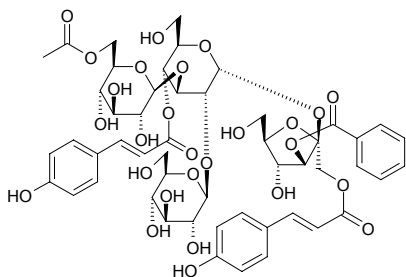
$C_{17}H_{24}O$  (244.38). Source: *Niphogeton ternata*. Ref: 4156.

**7710 Fallacinol**

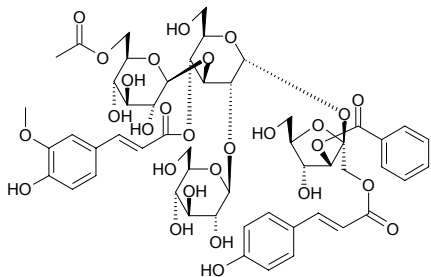
1,8-Dihydroxy-3-hydroxymethyl-6-methoxyanthraquinone [569-05-1]  
 $C_{16}H_{12}O_6$  (300.27). Source: HU ZHANG *Polygonum cuspidatum*. Ref: 2.

**7711 Fallaxose C**

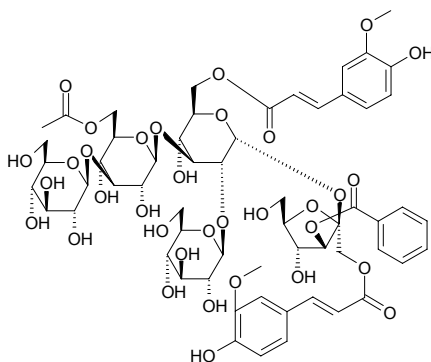
$C_{51}H_{60}O_{27}$  (1105.03).  $[\alpha]_D = -6.8^\circ$ . Source: JIA HUANG HUA YUAN ZHI  
*Polygala fallax* [Syn. *Polygala aureocauda*]. Ref: 2184.

**7712 Fallaxose D**

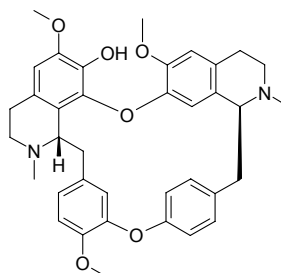
$C_{52}H_{62}O_{28}$  (1135.06).  $[\alpha]_D = -6.5^\circ$ . Source: JIA HUANG HUA YUAN ZHI  
*Polygala fallax* [Syn. *Polygala aureocauda*]. Ref: 2184.

**7713 Fallaxose E**

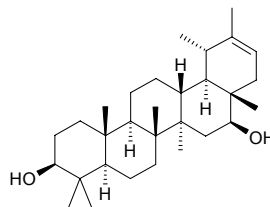
$C_{59}H_{74}O_{34}$  (1327.23).  $[\alpha]_D = +16.1^\circ$ . Source: JIA HUANG HUA YUAN ZHI  
*Polygala fallax* [Syn. *Polygala aureocauda*]. Ref: 2184.

**7714 Fangchinoline**

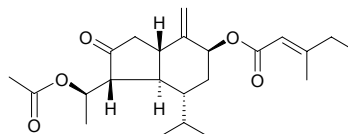
Demethyltetrandrine  $C_{37}H_{40}N_2O_6$  (608.74). mp 237–238°C (acetone); mp 177–179°C (CH<sub>3</sub>OH). Pharm: Cytotoxic (HeLa *in vitro*, ED<sub>50</sub> = 4.1 μg/mL); antihypertensive; platelet aggregation inhibitor (due to collagen); analgesic; anti-inflammatory (modulator of cytokine network: prevents integrin-mediated neutrophil adhesion and fMLP- or leukotriene B<sub>4</sub>-induced transmigration, IC<sub>50</sub> = 1–5 μg/mL)<sup>[4416]</sup>; IL-6 inhibitor (*in vitro*, IC<sub>50</sub> > 6 μmol/L)<sup>[4416]</sup>; LD<sub>50</sub> (mus, ip) ≥ 50 mg/kg. Source: FANG JI *Stephania tetrandra* (dried root: mean content of 6 origins = 0.759%<sup>[5508]</sup>), RU LAN *Stephania hernandifolia*. Ref: 2, 4, 5, 44, 658, 660, 4416, 5501, 5508.

**7715 Faradiol**

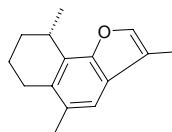
20-Taraxastene-3,16-diol [20554-95-4]  $C_{30}H_{50}O_2$  (442.73). mp 236–237°C.  
Source: KUAN DONG HUA *Tussilago farfara*. Ref: 1521.

**7716 Farfaratin**

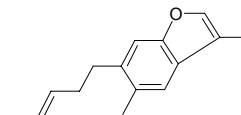
$C_{23}H_{34}O_5$  (390.52). White hyaloid crystals, mp 100–101°C. Source: KUAN DONG HUA *Tussilago farfara*. Ref: 145.

**7717 Farfugin A**

[36061-18-4]  $C_{15}H_{18}O$  (214.31). Source: LIAN PENG CAO *Farfugium japonicum*. Ref: 6.

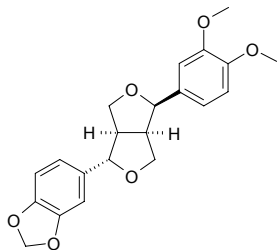
**7718 Farfugin B**

[36061-19-5]  $C_{15}H_{18}O$  (214.31). Source: LIAN PENG CAO *Farfugium japonicum*. Ref: 6.

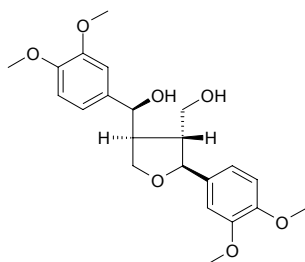


**7719 Fargesin**

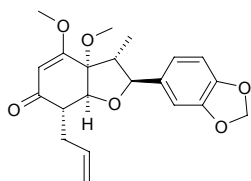
[31008-19-2]  $C_{21}H_{22}O_6$  (370.41). Colorless rhombic crystals, mp 130.0–130.5°C (methanol),  $[\alpha]_D^{22} = -111.7^\circ$  ( $c = 0.57$ , chloroform); mp 139°C. **Pharm:** Platelet aggregation inhibitor (strong, induced by PAF,  $IC_{50} = 10\mu\text{mol/L}$ , PAF receptor antagonist,  $ED_{50} = 1.3\mu\text{mol/L}$ ); phyto growth inhibitor (100 $\mu\text{g/mL}$ , *Amaranthus hypochondriacus*,  $\text{InRt} = (92.1 \pm 1.8)\%$ ; *E. crusgalli*,  $\text{InRt} = (83.7 \pm 2.2)\%$ )<sup>[5233]</sup>. **Source:** CI HUA JIAO *Zanthoxylum acanthopodium* (stem cortex), WANG CHUN YU LAN *Magnolia biondii* [Syn. *Magnolia fargesii*], YU LAN *Magnolia denudata* [Syn. *Magnolia heptapata*], *Stauranthus perforatus* (root). **Ref:** 6, 543, 660, 900, 1521, 4439, 5253.

**7720 (-)-Fargesol**

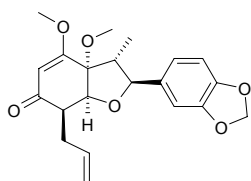
$C_{22}H_{28}O_7$  (404.46). **Source:** ZHOU YE MU LAN *Magnolia praecoccissima* (seed). **Ref:** 4181.

**7721 Fargesone A**

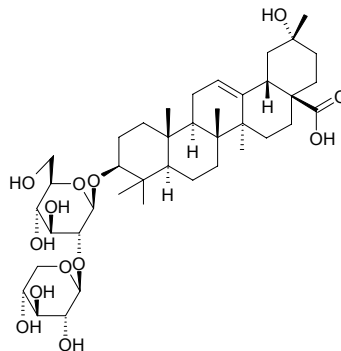
$C_{21}H_{24}O_6$  (372.42). **Pharm:** Calcium antagonist (gpg, colon bands). **Source:** WANG CHUN YU LAN *Magnolia biondii* [Syn. *Magnolia fargesii*]. **Ref:** 658.

**7722 Fargesone B**

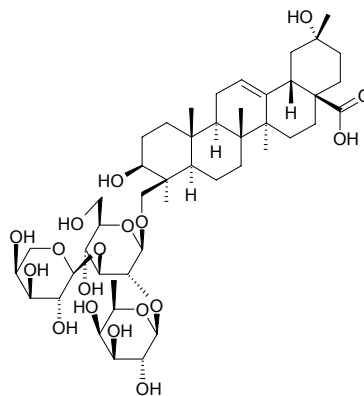
$C_{21}H_{24}O_6$  (372.42). **Source:** YU LAN *Magnolia denudata* [Syn. *Magnolia heptapata*]. **Ref:** 4439.

**7723 Fargoside A**

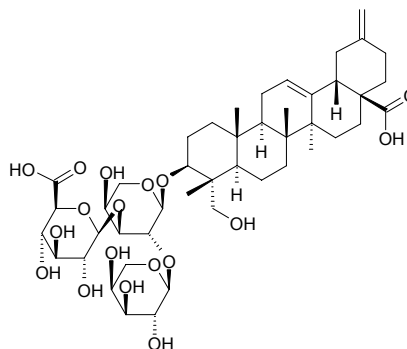
3 $\beta$ ,20 $\alpha$ -Dihydroxy-29-norolean-12-en-28-oic acid 3-*O*- $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranoside  $C_{40}H_{64}O_{13}$  (752.95). Amorphous solid,  $[\alpha]_D^{25} = +24.4^\circ$  ( $c = 1.0$ , MeOH). **Source:** WU YE GUA TENG *Holboellia fargesii* (root). **Ref:** 4109.

**7724 Fargoside B**

3 $\beta$ ,20 $\alpha$ ,24-Trihydroxy-29-norolean-12-en-28-oic acid 23-*O*- $\beta$ -D-fucopyranosyl-(1 $\rightarrow$ 2)-[ $\alpha$ -L-arabinopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -D-glucopyranoside  $C_{46}H_{74}O_{18}$  (915.09). Amorphous solid,  $[\alpha]_D^{22} = +39.6^\circ$  ( $c = 1.0$ , MeOH). **Source:** WU YE GUA TENG *Holboellia fargesii* (root). **Ref:** 4109.

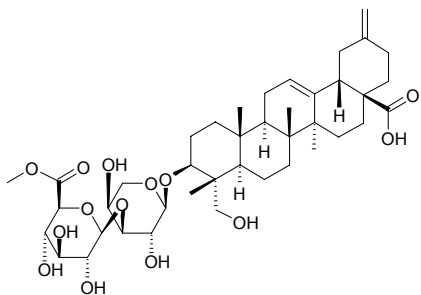
**7725 Fargoside C**

3 $\beta$ ,23-Dihydroxy-30-norolean-2,20(29)-dien-28-oic acid 3-*O*- $\alpha$ -L-arabinopyranosyl-(1 $\rightarrow$ 2)-[ $\beta$ -D-glucopyranosyluronic acid-(1 $\rightarrow$ 3)]- $\alpha$ -L-arabinopyranoside  $C_{45}H_{68}O_{18}$  (897.03). Amorphous solid,  $[\alpha]_D^{25} = +54.0^\circ$  ( $c = 0.6$ , MeOH). **Source:** WU YE GUA TENG *Holboellia fargesii* (root). **Ref:** 4109.

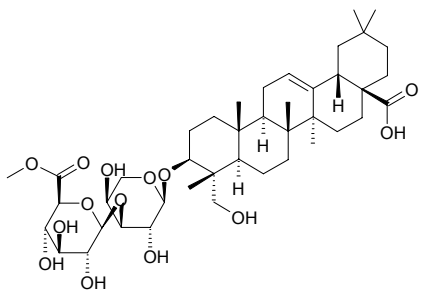


**7726 Fargoside D**

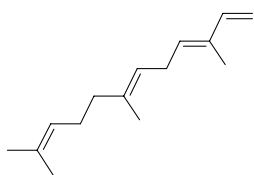
3 $\beta$ ,23-Dihydroxy-30-norolean-12,20(29)-dien-28-oic acid 3-*O*-methyl  $\beta$ -*D*-glucopyranosyluronate-(1 $\rightarrow$ 3)- $\alpha$ -*L*-arabinopyranoside C<sub>41</sub>H<sub>62</sub>O<sub>14</sub> (778.94). Amorphous solid,  $[\alpha]_D^{23} = +65.6^\circ$  ( $c = 0.5$ , MeOH). Source: WU YE GUA TENG *Holboellia fargesii* (root). Ref: 4109.

**7727 Fargoside E**

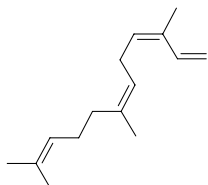
3 $\beta$ ,23-Dihydroxy-olean-12-en-28-oic acid 3-*O*-methyl  $\beta$ -*D*-glucopyranosyluronate-(1 $\rightarrow$ 3)- $\alpha$ -*L*-arabinopyranoside C<sub>42</sub>H<sub>66</sub>O<sub>14</sub> (794.99). Amorphous solid,  $[\alpha]_D^{28} = +18.3^\circ$  ( $c = 0.8$ , MeOH). Source: WU YE GUA TENG *Holboellia fargesii* (root). Ref: 4109.

**7728 (E,E)- $\alpha$ -Farnesene**

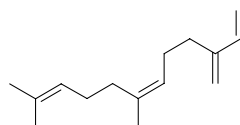
[21499-64-9] C<sub>15</sub>H<sub>24</sub> (204.36). Source: GAN JIANG *Zingiber officinale*. Ref: 2.

**7729 (Z,Z)- $\alpha$ -Farnesene**

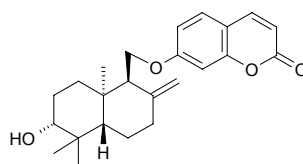
C<sub>15</sub>H<sub>24</sub> (204.36). bp 128~130°C/12mmHg. Source: DU SONG SHI *Juniperus rigida*, HONG CHAI HU *Bupleurum scorzonerifolium*, JU PI *Citrus reticulata*, MU<sup>(3)</sup> JU *Matricaria chamomilla* [Syn. *Matricaria recutita*], PI PA YE *Eriobotrya japonica*, PI PA YE *Eriobotrya japonica*, SHENG JIANG *Zingiber officinale*, *Malus* sp., *Pyrus* sp. Ref: 2, 660.

**7730  $\beta$ -Farnesene**

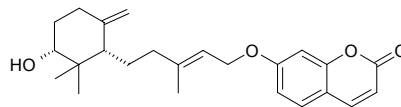
C<sub>15</sub>H<sub>24</sub> (204.36). bp 121~122°C/9mmHg. Source: BO SHI QIE *Solanum berthaultii*, CHAN CHU DAN *Bufo bufo gargarizans*; *Bufo melanostictus*, GUANG HUO XIANG *Pogostemon cablin* [Syn. *Mentha cablin*], HUA DONG LAN CI TOU *Echinops grijsii*, HUANG HUA HAO *Artemisia annua*, HUO XIANG *Agastache rugosus*, PI PA YE *Eriobotrya japonica*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], SHENG JIANG *Zingiber officinale*, TAN XIANG *Santalum album*, XI YANG SHEN *Panax quinquefolium*. Ref: 2, 660.

**7731 Farnesiferol A**

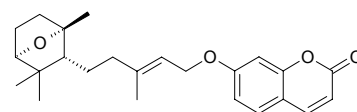
[511-33-1] C<sub>24</sub>H<sub>30</sub>O<sub>4</sub> (382.50). mp (-) 155.0~155.5°C, mp ( $\pm$ ) 152~156°C. Source: A WEI *Ferula assafoetida*. Ref: 6.

**7732 Farnesiferol B**

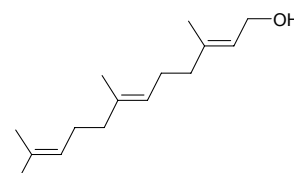
[54990-68-0] C<sub>24</sub>H<sub>30</sub>O<sub>4</sub> (382.50). mp 112.5~113.5°C. Source: A WEI *Ferula assafoetida*. Ref: 6.

**7733 Farnesiferol C**

[512-17-4] C<sub>24</sub>H<sub>30</sub>O<sub>4</sub> (382.50). mp 83.5~84.5°C. Source: A WEI *Ferula assafoetida*. Ref: 6.

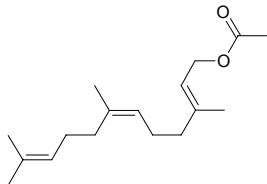
**7734 Farnesol**

3,7,11-Trimethyl-2,6,10-dodecatrien-1-ol [4602-84-0] C<sub>15</sub>H<sub>26</sub>O (222.37). bp 160°C/10mmHg. Pharm: Flavorant. Source: DAI DAI HUA *Citrus aurantium* var. *amara*, HUANG KUI *Abelmoschus moschatus* [Syn. *Hibiscus abelmoschus*], JIN YIN HUA *Lonicera japonica*, LA MEI HUA *Chimonanthus fragrans* [Syn. *Chimonanthus praecox*], PI PA *Eriobotrya japonica*, PI PA YE *Eriobotrya japonica*, PU TI SHU HUA *Tilia miqueliana*, SHENG JIANG *Zingiber officinale*. Ref: 2, 6, 658, 660.

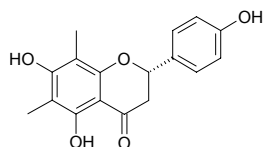


**7735 Farnesyl acetate**

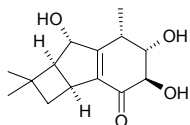
$C_{17}H_{28}O_2$  (264.41). bp 169~170°C/10mmHg. Source: HUANG HUA HAO *Artemisia annua*, MU HAO *Artemisia japonica*. Ref: 6, 660.

**7736 Farrerol**

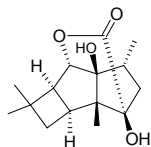
[24211-30-1]  $C_{17}H_{16}O_5$  (300.31). mp ( $\pm$ ) 223~224°C. Pharm: Antibacterial (*Staphylococcus aureus*, MIC = 25 $\mu$ g/mL); antitussive (dispels phlegm, main effective component in *Rhododendron dauricum* MAN SHAN HONG to treat trachitis); inhibits tissue respiration in lung trachea (rat, *in vitro*); LD<sub>50</sub> (mus, orl) = (1500 $\pm$ 23)mg/kg. Source: MAN SHAN HONG *Rhododendron dauricum* (branchlet-leaf or flower: content = 0.1%<sup>[5501]</sup>, content = 0.07%<sup>[5508]</sup>; leaf: mean content of 8 origins = 0.097%<sup>[5527]</sup>), XIN XI LAN MA *Phormium tenax*. Ref: 4, 6, 658, 5501, 5508, 5527.

**7737 Fascicularone A**

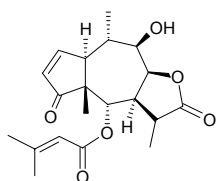
(1*S*,9*S*)-4 $\alpha$ ,11,11-Trimethyl-2 $\alpha$ ,5 $\alpha$ ,6 $\beta$ -trihydroxytricyclo[5,4,0,0<sup>2,5</sup>]undec-3-en-7-one  $C_{14}H_{20}O_4$  (252.31). Colorless needles, mp 75~77°C,  $[\alpha]_D^{20} = +323.8^\circ$  ( $c = 0.56$ ,  $CHCl_3$ ). Source: CU SHENG HUANG REN SAN *Naematoloma fasciculare*. Ref: 3775.

**7738 Fascicularone B**

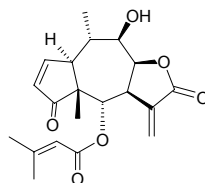
(1*S*,8*S*)-4 $\alpha$ ,7 $\beta$ ,10,10-Tetramethyl-3 $\beta$ ,6 $\beta$ -dihydroxytricyclo[5,3,0,0<sup>2,5</sup>]decan-2 $\alpha$ ,6-olide  $C_{15}H_{22}O_4$  (266.34). Colorless needles, mp 127~128°C,  $[\alpha]_D^{20} = +63.5^\circ$  ( $c = 0.88$ ,  $CHCl_3$ ). Source: CU SHENG HUANG REN SAN *Naematoloma fasciculare*. Ref: 3775.

**7739 Fastigilin B**

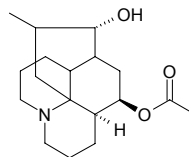
[6995-11-5]  $C_{20}H_{26}O_6$  (362.43). mp 259~261°C (acetone-petroleum ether). Pharm: Antineoplastic; cytotoxic. Source: BAI LAI SHI JU *Baileya multiradiata*. Ref: 658.

**7740 Fastigilin C**

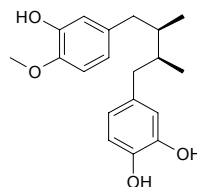
[6995-12-6]  $C_{20}H_{24}O_6$  (360.41). mp 197~199°C (acetone-isopropane ether),  $[\alpha]_D^{23} = -85.8^\circ$  ( $c = 1.11$ ). Pharm: Antineoplastic (mus, P<sub>388</sub> and Lewis lung cancer, *in vivo*); cytotoxic (mus, P<sub>388</sub> *in vitro*, ED<sub>50</sub> = 0.004 $\mu$ g/mL; mus, L<sub>1210</sub> *in vitro*, ED<sub>50</sub> < 0.01 $\mu$ g/mL; KB, ED<sub>50</sub> = 1.0 $\mu$ g/mL). Source: BAI LAI SHI JU *Baileya multiradiata*. Ref: 661.

**7741 Fawcettiine**

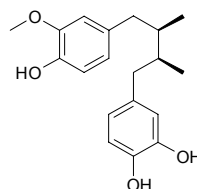
$\beta$ -Lofoline [6899-87-2]  $C_{18}H_{29}NO_3$  (307.44). mp 166~167°C. Source: SHEN JIN CAO *Lycopodium japonicum* [Syn. *Lycopodium clavatum*]. Ref: 6.

**7742 FB1**

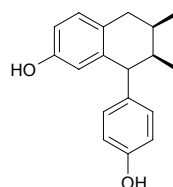
$C_{19}H_{24}O_4$  (316.40). Pharm: Anti-HIV. Source: SAN CHI LA RUI A *Larrea tridentata*. Ref: 2268.

**7743 FB2**

$C_{19}H_{24}O_4$  (316.40). Pharm: Anti-HIV (strong). Source: SAN CHI LA RUI A *Larrea tridentata*. Ref: 2268.

**7744 FB3**

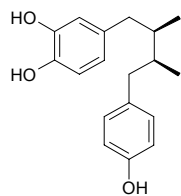
$C_{18}H_{20}O_2$  (268.36). Pharm: Anti-HIV. Source: SAN CHI LA RUI A *Larrea tridentata*. Ref: 2268.



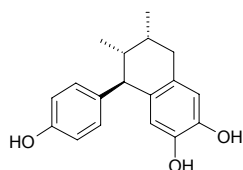


**7745 FB4**

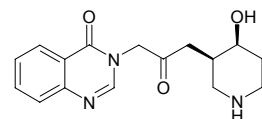
$C_{18}H_{22}O_3$  (286.37). **Pharm:** Anti-HIV. **Source:** SAN CHI LA RUI A *Larrea tridentata*. **Ref:** 2268.

**7746 FB5**

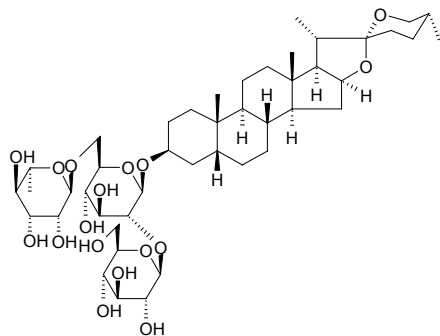
3'-Demethoxy-6-O-demethylisogaucin  $C_{18}H_{20}O_3$  (284.36). **Pharm:** Anti-HIV; antioxidant (Takamatsu DCFH method, myelomonocytic HL-60 cells,  $IC_{50} = (1.6 \pm 0.4) \mu\text{g/mL}$ ; control NDGA,  $IC_{50} = (0.7 \pm 0.3) \mu\text{g/mL}$ , Vitamin C,  $IC_{50} = (1.9 \pm 0.7) \mu\text{g/mL}$ , Trolox,  $IC_{50} = (1.4 \pm 0.5) \mu\text{g/mL}$ )<sup>[3850]</sup>; cytotoxic (XTT assay, HL-60 cells,  $IC_{50} = (13.6 \pm 2.6) \mu\text{g/mL}$ ; control NDGA,  $IC_{50} = (2.6 \pm 0.2) \mu\text{g/mL}$ , Vitamin C,  $IC_{50} > 10.0 \mu\text{g/mL}$ , Trolox,  $IC_{50} > 10.0 \mu\text{g/mL}$ )<sup>[3850]</sup>. **Source:** SAN CHI LA RUI A *Larrea tridentata*. **Ref:** 1521, 2268, 3850.

**7747 Febrifugine**

$C_{16}H_{19}N_3O_3$  (301.35). mp 139–140°C. **Source:** CHANG SHAN *Dichroa febrifuga* (in 1948, the compound was isolated from the plant by F.A. Kuehl, et al.)<sup>[5505]</sup>. **Ref:** 5505.

**7748 Fenbaqia saponin**

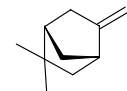
$C_{45}H_{74}O_{17}$  (887.08). **Pharm:** Hemolytic (chicken blood trial, distinct effect). **Source:** HEI GUO BA QIA *Smilax glauco-china*. **Ref:** 2165.

**7749  $\alpha$ -Fenchene**

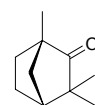
[471-84-1]  $C_{10}H_{16}$  (136.24). bp (+) 155–156°C, (–) 153–154°C/720mmHg, ( $\pm$ ) 154–156°C. **Source:** XIE CAO *Valeriana officinalis*. **Ref:** 6.

**7750  $\beta$ -Fenchene**

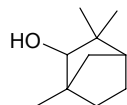
[33404-67-0]  $C_{10}H_{16}$  (136.24). **Source:** HONG CHAI HU *Bupleurum scorzoniferolium*, SHENG JIANG *Zingiber officinale*. **Ref:** 2.

**7751 Fenchone**

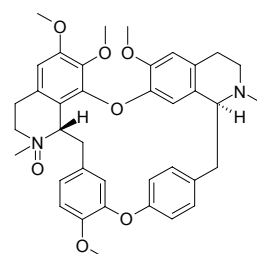
1,3,3-Trimethylbicyclo[2.2.1]heptan-2-one [1195-79-5]  $C_{10}H_{16}O$  (152.24). mp (+) 5.5°C, (–) 6°C, bp ( $\pm$ ) 72–73°C/12mmHg. **Pharm:** Local stimulant. **Source:** BEI MEI YA BAI *Thuja occidentalis*, CE BAI YE *Thuja orientalis* [Syn. *Platycladus orientalis*; *Biota orientalis*], FU SHE SONG *Pinus radiata*, HUANG HUA HAO *Artemisia annua*, HUI XIANG *Foeniculum vulgare*, LIU YE MU LAN *Magnolia salicifolia*, SHUI SHAN *Metasequoia glyptostroboides*, XIA KU CAO *Prunella vulgaris*, XIANG LI *Chenopodium botrys*, XIANG ZHI LENG SHAN *Abies balsamea*, XUAN YE XIANG QING *Anaphalis contorta*, ZHANG MU *Cinnamomum camphora*. **Ref:** 6, 658, 660.

**7752 Fenchyl alcohol**

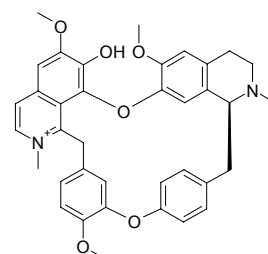
1,3,3-Trimethyl-2-norbornanol  $C_{10}H_{18}O$  (154.25). bp 200°C. **Source:** GANG SONG *Baeckea frutescens*, SHENG JIANG *Zingiber officinale*. **Ref:** 2.

**7753 Fentifangine A**

[115556-32-6]  $C_{38}H_{42}N_2O_7$  (638.77). **Source:** FANG JI *Stephania tetrandra*. **Ref:** 2.

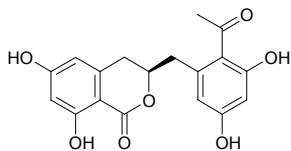
**7754 Fentifangine D**

1,3,4-Tridehydrofentifanginolinium [115439-62-8]  $C_{37}H_{37}N_2O_6^+$  (605.72). **Source:** FANG JI *Stephania tetrandra*. **Ref:** 2, 1521.

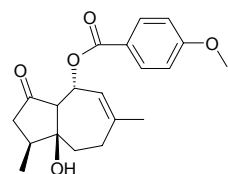


**7755 Feralolide**

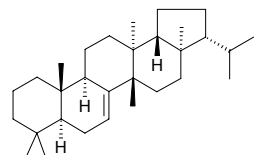
[149418-38-2] C<sub>18</sub>H<sub>16</sub>O<sub>7</sub> (344.32). mp 176~178°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -44.9° (*c* = 0.025, MeOH). Source: HAO WANG JIAO LU HUI *Aloe ferox*. Ref: 730.

**7756 Fercomin**

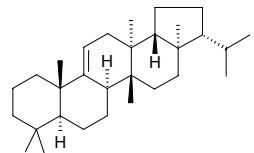
C<sub>20</sub>H<sub>24</sub>O<sub>5</sub> (344.41). Pharm: Antibacterial (*Staphylococcus aureus*, MIC = 2.3mg/mL; *Streptomyces scabies*, MIC = 2.1mg/mL; *Bacillus subtilis*, MIC = 1.7mg/mL; *Bacillus cereus*, MIC = 1.4mg/mL; *Pseudomonas aeruginosa*, MIC = 1.00mg/mL); antifungal (*Aspergillus niger*, MIC = 1.0mg/mL). Source: HE SHI FENG *Daucus carota* (root). Ref: 5305.

**7757 7-Fernene**

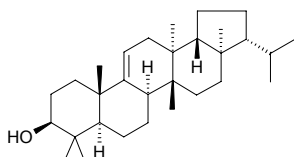
C<sub>30</sub>H<sub>50</sub> (410.73). mp 208.5~209.5°C. Source: TIE SI QI *Adiantum pedatum*. Ref: 6.

**7758 9(11)-Fernene**

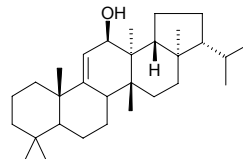
C<sub>30</sub>H<sub>50</sub> (410.73). mp 170~171°C. Source: GUAN ZHONG *Dryopteris crassirhizoma*, SHUI LONG GU *Polypodium niponicum*, TIE SI QI *Adiantum pedatum*. Ref: 6, 660.

**7759 Fernenol**

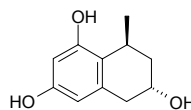
C<sub>30</sub>H<sub>50</sub>O (426.73). mp 194°C. Source: AI YE *Artemisia argyi*, LONG XU CAO *Poa sphondyloides*, MAO CAO YE *Imperata cylindrica* var. *major*. Ref: 6.

**7760 Fern-9(11)-en-12β-ol**

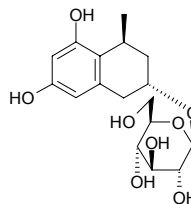
C<sub>30</sub>H<sub>50</sub>O (426.73). Source: ZHU ZONG CAO *Adiantum capillus-veneris* (fresh frond). Ref: 4230.

**7761 Feroxidin**

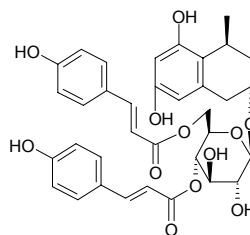
(-)-Feroxidin; (6*R*,8*R*)-5,6,7,8-Tetrahydro-8-methyl-1,3,6-naphthalenetriol [129622-85-1] C<sub>11</sub>H<sub>14</sub>O<sub>3</sub> (194.23). White amorphous powder, mp 84°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -11.3° (*c* = 0.11, MeOH). Source: HAO WANG JIAO LU HUI *Aloe ferox*. Ref: 731.

**7762 Feroxin A**

[142905-36-0] C<sub>17</sub>H<sub>24</sub>O<sub>8</sub> (356.38). Source: HAO WANG JIAO LU HUI *Aloe ferox*. Ref: 732.

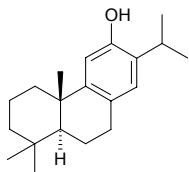
**7763 Feroxin B**

[142905-37-1] C<sub>35</sub>H<sub>36</sub>O<sub>12</sub> (648.67). Source: HAO WANG JIAO LU HUI *Aloe ferox*. Ref: 732.

**7764 Ferruginol**

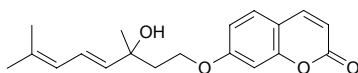
8,11,13-Abietatrien-12-ol [514-62-5] C<sub>20</sub>H<sub>30</sub>O (286.46). mp 57~59°C, bp 175°C/0.3mmHg, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +40.3° (*c* = 1.0, EtOH), [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +43° (*c* = 1.0, CHCl<sub>3</sub>), [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +39.3° (*c* = 0.70, CHCl<sub>3</sub>); [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +40.6°. Pharm: Antibacterial (*Staphylococcus aureus*, MIC = 31.2μg/mL (MCC > 250μg/mL), control Tetracycline, MIC = 1.56μg/mL; *Bacillus subtilis*, MIC = 7.8μg/mL (MCC > 250μg/mL), Tetracycline, MIC = 1.56μg/mL; *Enterococcus faecalis*, MIC = 7.8μg/mL (MCC > 250μg/mL), Tetracycline,

MIC = 1.56 µg/mL; *Listeria monocytogenes*, MIC = 7.8 µg/mL (MCC = 31.25 µg/mL), Tetracycline, MIC < 0.39 µg/mL; *Salmonella enteritidis*, MIC > 250 µg/mL, Tetracycline, MIC = 1.56 µg/mL; *Escherichia coli*, MIC > 250 µg/mL, Tetracycline, MIC = 1.56 µg/mL; *Shigella sonnei*, MIC > 250 µg/mL, Tetracycline, MIC = 6.25 µg/mL<sup>[5401]</sup>; antifungal (*Candida albicans*, MIC > 250 µg/mL, Miconazole, MIC = 8 µg/mL; *Candida krusei*, MIC > 250 µg/mL, Miconazole, MIC = 2 µg/mL)<sup>[5401]</sup>; cytotoxic (Col2, IC<sub>50</sub> = 9.7 µg/mL, control Ellipticine, IC<sub>50</sub> = 0.3 µg/mL; LNCaP, IC<sub>50</sub> = 17.1 µg/mL, Ellipticine, IC<sub>50</sub> = 0.8 µg/mL; P<sub>388</sub>, IC<sub>50</sub> = 16.3 µg/mL, Ellipticine, IC<sub>50</sub> = 0.1 µg/mL; A2780, IC<sub>50</sub> = 33.3 µg/mL, control Actinomycin D, IC<sub>50</sub> = 0.001 µg/mL; KB-VI, IC<sub>50</sub> > 20 µg/mL; KB, IC<sub>50</sub> > 20 µg/mL; Lu1, IC<sub>50</sub> > 20 µg/mL; BC-1, IC<sub>50</sub> > 20 µg/mL)<sup>[5400]</sup>; cytotoxic (EBV-EA inhibitor TPA-induced, mol ratio/TPA = 1000, InRt = 100%)<sup>[5352]</sup>. **Source:** CHANG GENG CU FEI *Cephalotaxus harringtonia* var. *drupacea*, DAN SHEN *Salvia miltiorrhiza* (dried root: content = 0.117%)<sup>[5508]</sup>, DU SONG SHI *Juniperus rigida*, GAN XI SHU WEI CAO *Salvia przewalskii*, RI BEN XIANG BAI JING PI *Thuja standishii*, SAN YE SHU WEI CAO *Salvia trijuga*, XIONG RUI ZHUANG SHU WEI CAO *Salvia staminea*. **Ref:** 6, 116, 182, 4538, 5352, 5400, 5401, 5508.



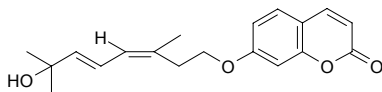
#### 7765 Ferulagol A

7-[(*E*)-3'-Hydroxy-3',7'-dimethyl-4',6'-octadienyloxy]coumarin C<sub>19</sub>H<sub>22</sub>O<sub>4</sub> (314.38). **Source:** *Ferula ferulago* (root). **Ref:** 5163.



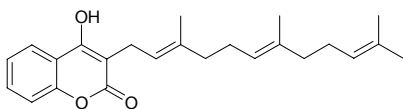
#### 7766 Ferulagol B

7-[(3*Z*,5*E*)-7'-Hydroxy-3',7'-dimethyl-3',5'-octadienyloxy]coumarin C<sub>19</sub>H<sub>22</sub>O<sub>4</sub> (314.38). **Source:** *Ferula ferulago* (root). **Ref:** 5163.



#### 7767 Ferulenol

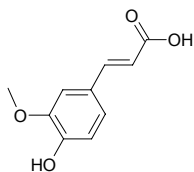
C<sub>24</sub>H<sub>30</sub>O<sub>3</sub> (366.50). **Pharm:** Antibacterial (*Staphylococcus aureus*, MIC = 2.4 mg/mL; *Streptomyces scabies*, MIC = 2.2 mg/mL; *Bacillus subtilis*, MIC = 2.0 mg/mL; *Bacillus cereus*, MIC = 2.1 mg/mL; *Pseudomonas aeruginosa*, MIC = 2.3 mg/mL; *Escherichia coli*, MIC = 4.8 mg/mL)<sup>[5305]</sup>; antifungal (*Fusarium oxysporum*, MIC = 4.6 mg/mL; *Aspergillus niger*, MIC = 4.7 mg/mL)<sup>[5305]</sup>. **Source:** HE SHI FENG *Daucus carota* (root). **Ref:** 5305.



#### 7768 Ferulic acid

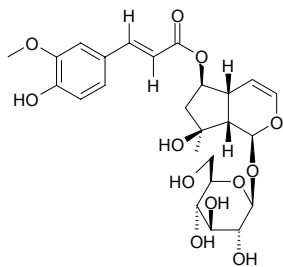
4-Hydroxy-3-methoxycinnamic acid [537-98-4] C<sub>10</sub>H<sub>10</sub>O<sub>4</sub> (194.19). White powder, mp 170~171°C (Me<sub>2</sub>CO); mp 173~178°C. **Pharm:** Antineoplastic; antimitotic; cytotoxic (cyclooxygenase-1 inhibitor)<sup>[5038]</sup>; antibacterial; antiestrogenic; antifungal; antihepatotoxic; platelet aggregation inhibitor; antioxidant (DPPH scavenger, EC<sub>50</sub> = 3.8 µg/mL = 19.6 µmol/L, control Ascorbic acid, EC<sub>50</sub> = 1.6 µg/mL = 9.1 µmol/L)<sup>[4154]</sup>; DPPH scavenger (SC<sub>50</sub> = 4.5 µmol/L)<sup>[4247]</sup>; antioxidant (superoxide anion radical scavenger, superoxide dismutase method, IC<sub>50</sub> for Formazane formation activity > 100 µmol/L)<sup>[4247]</sup>; antitubercular (*Mycobacterium tuberculosis*, MIC > 128 µg/mL, cytotoxic, Vero cells, IC<sub>50</sub> > 102 µg/mL, positive control Rifampin, MIC = 0.03 µg/mL, IC<sub>50</sub> = 98.3 µg/mL, SI = 3277)<sup>[4986]</sup>; platelet aggregation inhibitor (100 µmol/L AA-induced, 5 µg/mL, InRt = (100.0 ± 0.0)%, *p* < 0.001, control Aspirin, 50 µg/mL, InRt = (100 ± 0.0)%; 10 µg/mL collagen-induced, 100 µg/mL, InRt = (93.5 ± 1.3)%, *p* < 0.001, Aspirin, 50 µg/mL, InRt = (12.2 ± 1.7)%; 2 nmol/L PAF-induced, 100 µg/mL, InRt = (16.0 ± 1.3)%, *p* < 0.05, Aspirin, 50 µg/mL, InRt = (9.6 ± 1.2)%; 0.1 µg/mL thrombin-induced, 100 µg/mL, InRt = (7.2 ± 2.1)%); neuroprotectant (primary cultures of rat cortical cells injured by glutamate, 0.1 µmol/L, cell viability = (54.8 ± 1.1)%, *p* < 0.01, control MK-801, 0.1 µmol/L, cell viability = (31.8 ± 7.1)%, APV, 0.1 µmol/L, cell viability = (5.7 ± 1.9)%, XNQX, 0.1 µmol/L, cell viability = (28.1 ± 5.6)%)<sup>[3967]</sup>. **Source:** A WEI *Ferula assafoetida* (balsam: content scope = 0.03%~0.09%)<sup>[5501]</sup>, AI WA JIN GU CAO *Ajuga iva*, BEI SHA SHEN *Glehnia littoralis* (underground part), BEI XUAN SHEN *Scrophularia buergeriana* (root), CHA XIONG *Ligusticum sinense* cv. *chaxiong*, CHOU A WEI *Ferula foetida*, CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*] (rhizome: mean content of 5 batch samples = 0.065%)<sup>[5508]</sup>, DA CHE QIAN *Plantago major*, DA SAN YE SHENG MA *Cimicifuga heracleifolia* (dried rhizome: content = 0.004%)<sup>[5508]</sup>, DANG GUI *Angelica sinensis* (dried root: mean content = 0.058%)<sup>[5508]</sup>, DANG SHEN *Codonopsis pilosula* (dried root: mean content = 0.00221%)<sup>[5508]</sup>, DI SHAO GUA *Cynanchum thesioides*, DUAN PIAN GAO BEN *Ligusticum brachylobum* (root and rhizome: content = 0.02%)<sup>[5508]</sup>, FEN CHA DANG GUI *Angelica furcijuga* (flower), GAO BEN *Ligusticum sinense* (root and rhizome: mean content of 8 origins = 0.084%)<sup>[5508]</sup>, GAO GUI CHUN HUANG JU *Anthemis nobilis*, GUAN MU TONG *Aristolochia manshuriensis* (stem: yield = 0.00070%)<sup>[4706]</sup>, HU HUANG LIAN *Picrorhiza kurroa* (dried rhizome: content scope = 0.82%~2.41%)<sup>[5508]</sup>, HUANG LIAN *Coptis chinensis*, HUI XIANG JING YE *Foeniculum vulgare*, JIA BAI HE *Notholirion hyacinthinum* [Syn. *Notholirion bulbiferum*], JING MI *Oryza sativa*, KE XI JIA SONG *Pinus laricio*, LAI FU *Raphanus sativus*, LAI FU ZI *Raphanus sativus*, LAO SHU GUA *Capparis spinosa*, LI MENG YE *Citrus limonia*, LIAO GAO BEN *Ligusticum jeholense* (root and rhizome: mean content of 5 origins = 0.137%)<sup>[5508]</sup>, LUAN BAN ZAO ZHUI *Arenaria kansuensis* var. *ovatipeatala* (whole herb: mean content = 0.0406%)<sup>[5508]</sup>, MAO GENG XI XIAN *Siegesbeckia orientalis* var. *glabrescens* [Syn. *Siegesbeckia glabrescens*], MI PI KANG *Oryza sativa*, MU ZEI *Equisetum hiemale*, NING MENG GEN *Citrus limon*, NING MENG PI *Citrus limon*, OU DANG GUI *Levisticum officinale* (dried root: mean content = 0.025%)<sup>[5508]</sup>, QIANG HUO *Notopterygium incisum*, SHEN JIN CAO *Lycopodium japonicum* [Syn. *Lycopodium clavatum*], SHENG MA *Cimicifuga foetida* (dried rhizome: content scope of 10 origins = 0.003%~0.063%, mean content = 0.018%)<sup>[5508]</sup>, SHI DIAO BAI *Asparagus officinalis*, SHU HUA JIE CAO *Valeriana laxiflora* (aerial parts and root),

SUAN ZAO REN *Ziziphus jujuba* var. *spinosa*, TAI WAN FENG DOU CAI *Petasites formosanus*, TAI WAN FU RONG *Hibiscus taiwanensis*, TI MU CAO *Phleum pratense*, TIAN CAI *Beta vulgaris*, XI LA GANG LIU *Periploca graeca*, XI ZANG HU HUANG LIAN *Picrorhiza scrophulariiflora* (dried rhizome: content scope = 0.82%~2.41%<sup>[5508]</sup>), XIA TIAN WU *Corydalis decumbens* [Syn. *Corydalis amabilis*], XIAN REN ZHANG *Opuntia dillenii* (fresh stem: yield = 0.00053%), XIAO JIE JIN CAO *Huperzia selago* [Syn. *Lycopodium selago*], XIN JIANG GAO BEN *Conioselinum vaginatum* (root and rhizome: content = 0.30%)<sup>[5508]</sup>, XING AN SHENG MA *Cimicifuga dahurica* (dried rhizome: mean content of 3 origins = 0.010%<sup>[5508]</sup>), XUAN FU HUA *Inula britannica*, YANG CONG *Allium cepa*, YAO YONG PU GONG YING *Taraxacum officinale*, YI YE TIE SHAN *Tsuga heterophylla*, YI ZHU QIAN MA *Urtica dioica*, ZI BAI PI *Catalpa ovata*, occurs in many plants (widely distributed in plants. firstly isolated from *Ferula foetida*. found by Bate-Smith in 33% of investigated dicotyledonous and 67% of monocotyledonous plants). Ref: 2, 4, 456, 476, 500, 507, 512, 601, 602, 658, 660, 663, 2377, 2529, 3967, 4154, 4247, 4454, 4706, 4986, 5038, 5501, 5508.



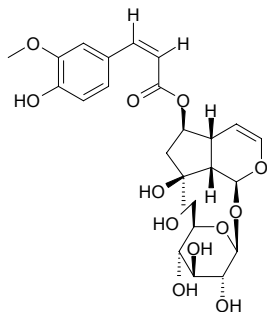
#### 7769 6-O-E-Feruloylajugol

C<sub>25</sub>H<sub>32</sub>O<sub>12</sub> (254.53). Source: GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*]. Ref: 2.



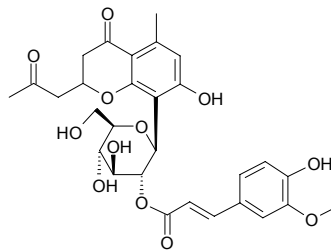
#### 7770 6-O-Z-Feruloylajugol

C<sub>25</sub>H<sub>32</sub>O<sub>12</sub> (524.53). Source: GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*]. Ref: 2.



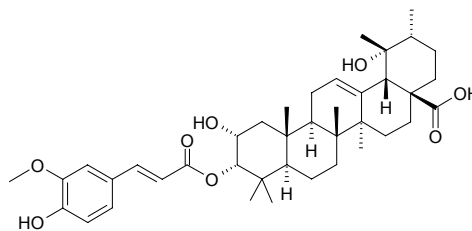
#### 7771 2''-O-Feruloylaloetin

C<sub>29</sub>H<sub>32</sub>O<sub>12</sub> (572.57). Source: LU HUI *Aloe vera* [Syn. *Aloe barbadensis*]. Ref: 2.



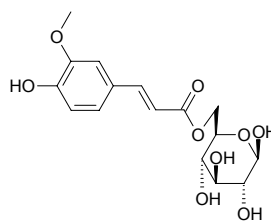
#### 7772 3-O-trans-Feruloylaleucic acid

C<sub>40</sub>H<sub>56</sub>O<sub>8</sub> (6648.9). Source: PI PA YE *Eriobotrya japonica* (stem and leaf). Ref: 3061.



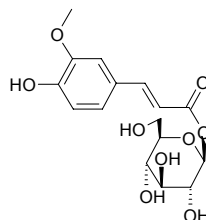
#### 7773 6-O-Feruloyl-beta-D-glucopyranoside

C<sub>16</sub>H<sub>20</sub>O<sub>9</sub> (356.33). Pharm: Antioxidant inactive (hydroxyl radical scavenger, IC<sub>50</sub> > 400 μmol/L, control Ascorbic acid, IC<sub>50</sub> = 51.8 μmol/L, superoxide anion radical scavenger, IC<sub>50</sub> > 400 μmol/L, control Ascorbic acid, IC<sub>50</sub> = 86.2 μmol/L)<sup>[4289]</sup>. Source: XI ZANG HU HUANG LIAN *Picrorhiza scrophulariiflora* (root). Ref: 4289.



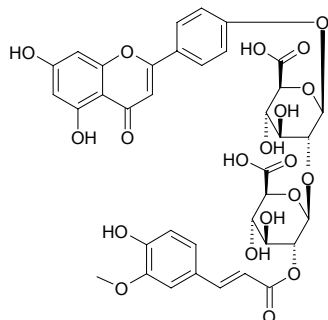
#### 7774 1-O-Feruloyl-beta-glucose

C<sub>16</sub>H<sub>20</sub>O<sub>9</sub> (356.33). Source: JI ZI MU *Sinoadina Racemosa* [Syn. *Adina racemosa*] (leaf, flower and twig: yield = 0.0053%dw). Ref: 4723.



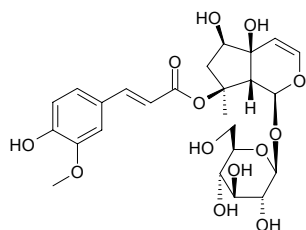
**7775 4'-O-[2'-O-E-Feruloyl-O-β-D-glucuronopyranosyl(1→2)-O-β-D-glucuronopyranoside]apigenin**

C<sub>37</sub>H<sub>34</sub>O<sub>20</sub> (798.67). Amorphous yellow powder, mp 197–198°C, [α]<sub>D</sub><sup>20</sup> = –74.2° (c = 0.1, MeOH). Source: MU XU *Medicago sativa* (aerial parts). Ref: 5167.



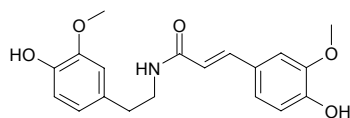
**7776 8-O-Feruloylharpagide**

C<sub>25</sub>H<sub>32</sub>O<sub>13</sub> (540.53). Amorphous powder; mp 150–152°C, [α]<sub>D</sub> = –24.20° (c = 0.231, MeOH). Source: NAN FEI GOU MA *Harpagophytum procumbens*, XUAN SHEN *Scrophularia ningpoensis*. Ref: 1855, 5458.



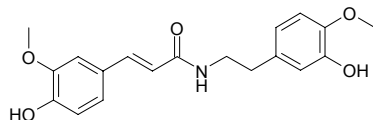
**7777 N-trans-Feruloylmethoxytyramine**

*N-trans*-Feruloyl-3-methyl-dopamine C<sub>19</sub>H<sub>21</sub>NO<sub>5</sub> (343.38). Yellowish prismatic crystals (Me<sub>2</sub>CO), mp 105–106°C. Pharm: Germination/growth inhibitor/stimulator (dicotyledon *Lactuca sativa* lettuce, *Lycopersicon esculentum* tomato, monocotyledon *Allium cepa* onion, 0.0001–0.1 mmol/L)<sup>[3499]</sup>; anti-HIV inactive (*in vitro*, acutely infected H9 lymphocyte cells)<sup>[4706]</sup>; cytotoxic inactive (*in vitro*, MCF7 and A549)<sup>[4706]</sup>. Source: BO CAI *Spinacia oleracea*, GUAN MU TONG *Aristolochia manshuriensis* (stem: yield = 0.00055%), LI *Chenopodium album* (aerial parts), ZHU MAO CAI *Salsola collina* (aerial parts). Ref: 3499, 4706, 4846.



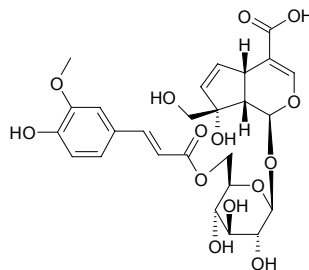
**7778 N-trans-Feruloyl-4'-O-methyl-dopamine**

C<sub>19</sub>H<sub>21</sub>NO<sub>5</sub> (343.38). Pharm: Germination/growth inhibitor/stimulator (dicotyledon *Lactuca sativa* lettuce, *Lycopersicon esculentum* tomato, monocotyledon *Allium cepa* onion, 0.0001–0.1 mmol/L). Source: LI *Chenopodium album* (root, aerial parts). Ref: 3499.



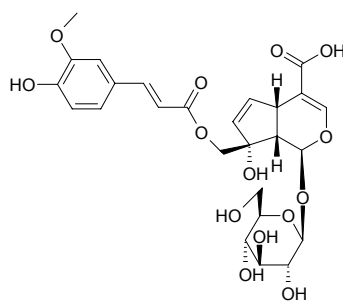
**7779 6'-O-E-Feruloylmonotropein**

C<sub>26</sub>H<sub>30</sub>O<sub>14</sub> (566.52). Crystals, mp 143–144°C (MeOH) [α]<sub>D</sub><sup>20</sup> = –30.2° (c = 0.24, MeOH). Source: JI SHI TENG *Paederia scandens*. Ref: 2561.



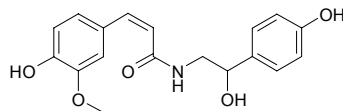
**7780 10-O-E-Feruloylmonotropein**

C<sub>26</sub>H<sub>30</sub>O<sub>14</sub> (566.52). Crystals, mp 147–148°C (MeOH), [α]<sub>D</sub><sup>20</sup> = –26.0° (c = 0.23, MeOH). Source: JI SHI TENG *Paederia scandens*. Ref: 2561.



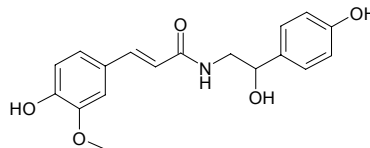
**7781 N-cis-Feruloyloctopamine**

C<sub>18</sub>H<sub>19</sub>NO<sub>5</sub> (329.36). Colorless oil. Source: MA LING SHU *Solanum tuberosum* (tuber). Ref: 5321.



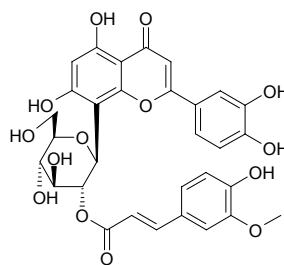
**7782 N-trans-Feruloyloctopamine**

C<sub>18</sub>H<sub>19</sub>NO<sub>5</sub> (329.36). Colorless oil. Source: MA LING SHU *Solanum tuberosum* (tuber). Ref: 5321.



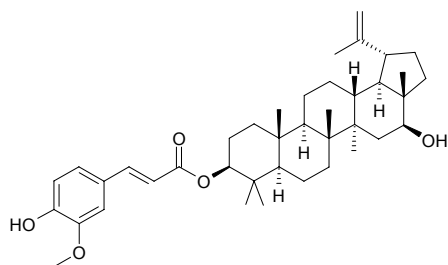
**7783 2''-O-Feruloylorientin**

C<sub>31</sub>H<sub>28</sub>O<sub>14</sub> (624.56). Yellow powder, mp 234–236°C, [α]<sub>D</sub><sup>20</sup> = –73.7° (c = 0.048, MeOH). Source: DUAN BAN JIN LIAN HUA *Trollius ledebourii* (flower). Ref: 5278.

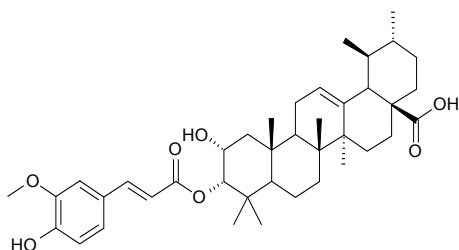


**7784 3 $\beta$ -trans-Feruloyloxy-16 $\beta$ -hydroxylup-20(29)-ene**

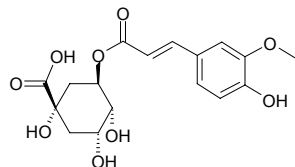
C<sub>40</sub>H<sub>58</sub>O<sub>5</sub> (618.91). White amorphous powder (CHCl<sub>3</sub>-MeOH), mp 168°C (dec) [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +18.7° (c = 0.15, MeOH). Source: FEI LV BIN PIAO SHU *Celtis philippinensis*. Ref: 2060.

**7785 3 $\alpha$ -trans-Feruloyloxy-2 $\alpha$ -hydroxyurs-12-en-28-oic acid**

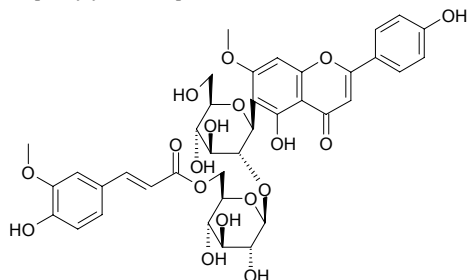
C<sub>40</sub>H<sub>56</sub>O<sub>7</sub> (648.89). White amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>22</sup> = +7.2° (c = 0.12, MeOH). Source: PI PA YE *Eriobotrya japonica* (stem and leaf). Ref: 3061.

**7786 3-O-Feruloylquinic acid**

C<sub>17</sub>H<sub>20</sub>O<sub>9</sub> (368.34). mp 196–197°C. Source: DI SHAO GUA *Cynanchum thesioides*, XIANG RI KUI YE *Helianthus annuus*. Ref: 6.

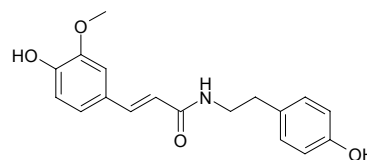
**7787 6'''-Feruloylspinosin**

C<sub>38</sub>H<sub>40</sub>O<sub>18</sub> (784.73). Source: DA ZAO *Ziziphus jujuba*, SUAN ZAO REN *Ziziphus jujuba* var. *spinosa*. Ref: 2.

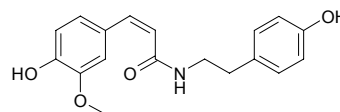
**7788 N-trans-Feruloyltyramine**

Moupinamide; (2,3)-trans-N-(p-Hydroxyphenethyl)ferulamide C<sub>18</sub>H<sub>19</sub>NO<sub>4</sub> (313.36). Colorless pillar crystals, mp 97–99°C; colorless lamellar crystals, (chloroform-acetone), mp 142–143°C, colorless needles. Pharm: Anti-HIV (H9 lymphocytic cells, inhibits replication, IC<sub>50</sub> (concentration that inhibits uninfected H9 cell growth by 50%) > 25μg/mL)<sup>[2529]</sup>; cytotoxic (hmn, A549 EC<sub>50</sub> > 20μg/mL, MCF7 EC<sub>50</sub> > 20μg/mL)<sup>[2529]</sup>; cytotoxic (BST, IC<sub>50</sub> =

6.7μg/mL, PD, InRt = 26.4%, A549, ED<sub>50</sub> = 13.35μg/mL, MCF7, ED<sub>50</sub> = 4.76μg/mL, HT29, ED<sub>50</sub> = 23.58μg/mL); cytotoxic (quinone reductase induction assay in cultured Hepal c1c7 mouse hepatoma cells, CD = 8.5μg/mL)<sup>[5038]</sup>; cytotoxic (mouse mammary organ culture assay, 75% at 10μg/mL)<sup>[5038]</sup>; cytotoxic (P<sub>388</sub>, ED<sub>50</sub> = 2.20μg/mL, control Mithramycin, ED<sub>50</sub> = 0.58μg/mL; A549, ED<sub>50</sub> = 22.42μg/mL, Mithramycin, ED<sub>50</sub> = 0.073μg/mL; HT29, ED<sub>50</sub> = 6.22μg/mL, Mithramycin, ED<sub>50</sub> = 0.076μg/mL)<sup>[5421]</sup>; cytotoxic inactive (*in vitro*, LNCaP, IC<sub>50</sub> > 100μmol/L)<sup>[4607]</sup>; antioxidant (lipid peroxidation inhibitor, brain tissue, caused by insufficient oxygen and sugar); platelet aggregation inhibitor (due to ADP); prostaglandin biosynthesis inhibitor (IC<sub>50</sub> = 210μmol/L); insect antifeedant (termites, 750mg/L, antifeedant index = 38.7); positive inotropic effect in heart (*in vitro*, increases calcium flow in frog, ventricular myocyte); immunoenhancer<sup>[2100]</sup>; germination/growth inhibitor/stimulator (dicotyledon *Lactuca sativa* lettuce, *Lycopersicon esculentum* tomato, monocotyledon *Allium cepa* onion, 0.0001–0.1mmol/L)<sup>[3499]</sup>; anti-HIV inactive (*in vitro*, acutely infected H9 lymphocyte cells)<sup>[4706]</sup>; cytotoxic inactive (*in vitro*, MCF7 and A549)<sup>[4706]</sup>. Source: BAI HUA YOU MA TENG *Mucuna birdwoodiana*, CANG BAI CHENG GOU FENG *Diploclisia glaucescens*, CI JI LI *Tribulus terrestris*, CI TIAN QIE *Solanum khasianum*, FAN LI ZHI *Annona squamosa*, GUAN MU TONG *Aristolochia manshuriensis* (stem: yield = 0.00076%), HE SHOU WU *Polygonum multiflorum*, HONG HAI JIAO *Capsicum annuum* (stem and root: yield = 0.0016%dw)<sup>[4779]</sup>, HUAI TONG *Aristolochia moupinensis*, HUANG HUA REN *Sida acuta*, HUO MA REN *Cannabis sativa*, LANG DANG ZI *Hyoscyamus niger* (seed: yield = 0.0006%dw)<sup>[4607]</sup>, LI *Chenopodium album* (aerial parts), MA LING SHU *Solanum tuberosum* (tuber), MAI DONG *Ophiopogon japonicus* (tuber)<sup>[4663]</sup>, TAI WAN FU RONG *Hibiscus taiwanensis*, TIAN QIE ZI *Solanum indicum* (root)<sup>[3087]</sup>, MO ZHI JIAO GU CUI *Casearia membranacea* (stem), *Hyecoum* sp., occurs in many plants. Ref: 715, 900, 1316, 2100, 2529, 3087, 3499, 4607, 4663, 4706, 4779, 5038, 5321, 5421.

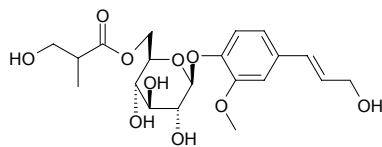
**7789 N-cis-Feruloyltyramine**

C<sub>18</sub>H<sub>19</sub>NO<sub>4</sub> (313.36). Pharm: Cytotoxic (P<sub>388</sub>, ED<sub>50</sub> = 2.71μg/mL, control Mithramycin, ED<sub>50</sub> = 0.58μg/mL; A549, ED<sub>50</sub> = 35.94μg/mL, Mithramycin, ED<sub>50</sub> = 0.073μg/mL; HT29, ED<sub>50</sub> = 18.41μg/mL, Mithramycin, ED<sub>50</sub> = 0.076μg/mL)<sup>[5421]</sup>. Source: HONG HAI JIAO *Capsicum annuum* (stem and root: yield = 0.00048%dw), MA LING SHU *Solanum tuberosum* (tuber), TAI WAN FU RONG *Hibiscus taiwanensis*, MO ZHI JIAO GU CUI *Casearia membranacea* (stem). Ref: 2529, 4779, 5321, 5421.



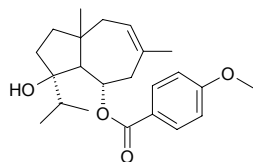
**7790 *trans-p*-Ferulylalcohol-4-*O*-[6-(2-methyl-3-hydroxypropionyl)]glucopyranoside**

$C_{20}H_{28}O_{10}$  (428.44). Source: HONG HAI JIAO *Capsicum annuum*. Ref: 3419.



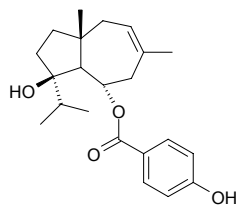
**7791 Ferutidin**

Jaeschkeanadiol *p*-methoxybenzoate  $C_{23}H_{32}O_4$  (372.51). Source: YI LANG A WEI *Ferula kuhistanica* (stem). Ref: 3977.



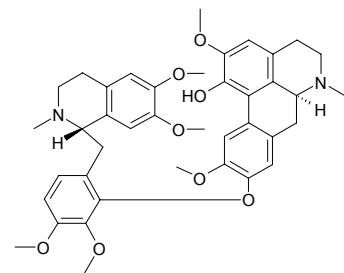
**7792 Ferutin**

Jaeschkeanadiol *p*-hydroxybenzoate  $C_{22}H_{30}O_4$  (358.48). Pharm: Antibacterial (MSSA, MIC = 8 μg/mL, control Ampicillin, MIC = 1 μg/mL; MRSA, MIC = 16 μg/mL, Ampicillin, MIC = 2 μg/mL; *Staphylococcus epidermidis* IFO 3762, MIC = 16 μg/mL, Ampicillin, MIC < 0.125 μg/mL; *Enterococcus faecalis* ATCC 21212, MIC = 31 μg/mL, Ampicillin, MIC = 1 μg/mL; *Bacillus subtilis* IFO 3134, MIC = 16 μg/mL, Ampicillin, MIC < 0.125 μg/mL; *Salmonella typhimurium* IFO 13245, MIC > 250 μg/mL, Ampicillin, MIC = 1 μg/mL; *Proteus mirabilis* IFO 3849, MIC > 250 μg/mL, Ampicillin, MIC = 2 μg/mL; *Escherichia coli* NIHJ JC-2, MIC > 250 μg/mL, Ampicillin, MIC = 4 μg/mL)<sup>[5207]</sup>. Source: YI LANG A WEI *Ferula kuhistanica* (root), YI LANG A WEI *Ferula kuhistanica* (fruit). Ref: 3977, 5207.



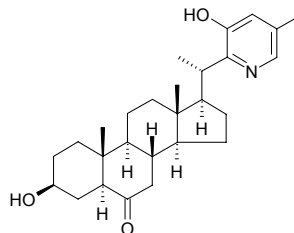
**7793 Fetidine**

[7072-86-8]  $C_{40}H_{46}N_2O_8$  (682.82). mp (+) 132~135°C. Pharm: Anti-inflammatory; inhibits neuroaction; antihypertensive. Source: XIANG TANG SONG CAO *Thalictrum foetidum*. Ref: 6, 658, 660.



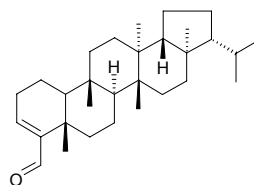
**7794 Fetisinine**

(3*R*,20*S*)-3-Hydroxyl-20-(5'-hydroxy-3'-methylpyridin-6'-yl)-5α-pregnan-6-one  $C_{27}H_{39}NO_3$  (425.62). Amorphous colorless powder,  $[\alpha]_D^{25} = -118^\circ$  ( $c = 0.10$ , MeOH). Source: XI BEI MU *Fritillaria imperialis*. Ref: 3372.



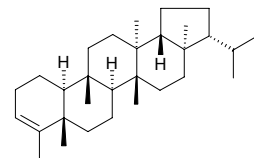
**7795 Filicenal**

[13843-88-4]  $C_{30}H_{48}O$  (424.72). mp 272°C. Source: TIE SI QI *Adiantum pedatum*. Ref: 6.



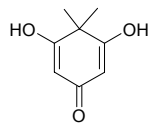
**7796 Filicene**

[2472-29-9]  $C_{30}H_{50}$  (410.73). mp 228.5~229.5°C. Source: GUAN ZHONG *Dryopteris crassirhizoma*, TIE SI QI *Adiantum pedatum*. Ref: 6.



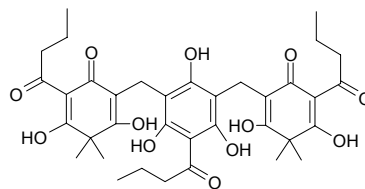
**7797 Filicinic acid**

[2065-00-1]  $C_8H_{10}O_3$  (154.17). mp 215°C (dec). Source: GUAN ZHONG *Dryopteris crassirhizoma*. Ref: 6.



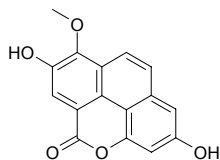
**7798 Filixic acid BBB**

[4482-83-1]  $C_{36}H_{44}O_{12}$  (668.74). Pharm: Anthelmintic. Source: MIAN MA *Dryopteris filix-mas*. Ref: 658.

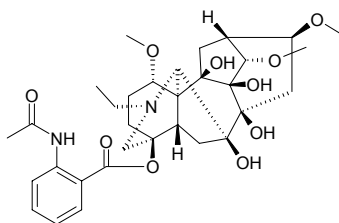


**7799 Fimbriatone**

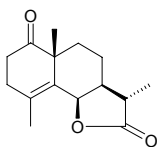
$C_{16}H_{10}O_5$  (282.26). Yellowish powder, mp 272~273°C. Source: LIU SU JIN SHI HU *Dendrobium fimbriatum*. Ref: 2469.

**7800 Finaconitine**

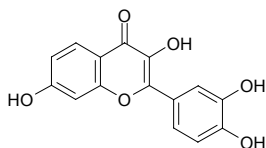
[81161-27-5]  $C_{32}H_{44}N_2O_{10}$  (616.71). Crystals (ethanol), mp 220~221°C,  $[\alpha]_D^{22} = +44.7^\circ$  ( $c = 1$ , methanol). Pharm: Analgesic. Source: GAN WAN WU TOU *Aconitum finetianum*. Ref: 658.

**7801 Finitin**

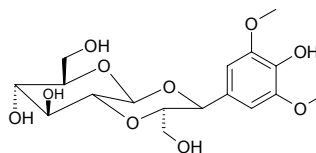
[54192-33-5]  $C_{15}H_{20}O_3$  (248.32). mp 153~155°C. Source: DONG BEI HUI HAO *Seriphidium finitum* [Syn. *Artemisia finita*]. Ref: 6.

**7802 Fisetin**

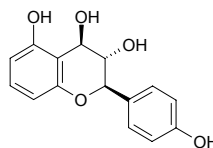
3,7,3',4'-Tetrahydroxyflavone [528-48-3]  $C_{15}H_{10}O_6$  (286.24). Yellow acicular crystals (dilute ethanol), mp 330°C (dec), mp 348°C, mp 350°C; yellow thin acicular, mp > 300°C. Pharm: Antibacterial; antispasmodic (mus small intestine, caused by acetylcholine, smooth muscle relaxant); inhibits metabolism and release of arachidonic acid; antihistamine (inhibits histamine release, basophilic granulocyte); prostaglandin biosynthesis inhibitor;  $\Delta^5$ -lipoxygenase inhibitor; NADH oxidase inhibitor; iodine-induced thyronine deiodinase inhibitor; aldose reductase inhibitor (rat eye lens,  $ID_{50} = 1 \mu\text{mol/L}$ ); protein kinase C inhibitor; succinic oxidase inhibitor; regulates allergic reaction. Source: HAI ER CHA *Acacia catechu*, HUANG LIAN YA *Pistacia chinensis*, LIAO SHANG RONG MAO HUA *Anthyllis vulneraria*, LIN BEI ZI *Toxicodendron succedaneum* [Syn. *Rhus succedanea*], MANG GUO *Mangifera indica*, YE QI SHU YE *Rhus sylvestris*. Ref: 6, 661.

**7803 Fissistigmoside**

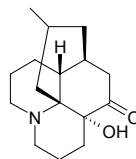
$C_{17}H_{24}O_{10}$  (388.37). White crystals, mp 188~190°C. Source: HEI FENG TENG *Fissistigma polyanthum*. Ref: 669.

**7804 Fistacacidin**

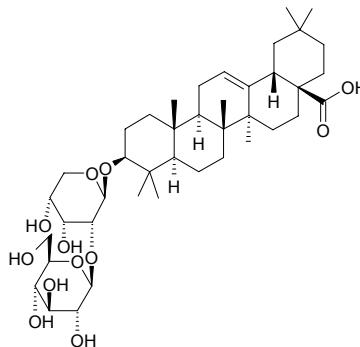
[25375-34-2]  $C_{15}H_{14}O_5$  (274.28). mp 245~247°C. Source: PO LUO MEN ZAO JIA *Cassia fistula*. Ref: 6.

**7805 Flabelliformine**

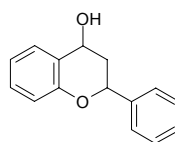
$C_{16}H_{25}NO_2$  (263.38).  $[\alpha]_D^{25} = -78^\circ$  (MeOH). Source: DONG BEI SHI SHAN *Huperzia miyoshiana*. Ref: 5412.

**7806 Flaccidin B**

$C_{41}H_{66}O_{12}$  (750.98). Pharm: Reverse transcriptase inhibitor of RNA tumor virus. Source: E ZHANG CAO *Anemone flaccida*. Ref: 4060.

**7807 Flavanol**

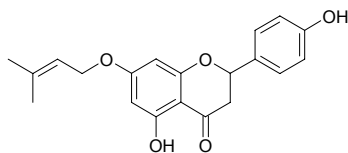
Flavan-4-ol  $C_{15}H_{14}O_2$  (226.28). mp 119°C. Source: LUO TUO CI *Alhagi pseudalhagi*, CHA SHU GEN *Camellia sinensis* [Syn. *Thea sinensis*]. Ref: 6.



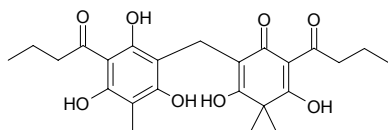


**7808 Flavanone 4',5-dihydroxy-7-prenyloxyflavanone**

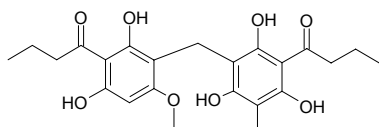
$C_{20}H_{20}O_5$  (340.38). Fine needles, mp 69–70°C. Source: GAO GUI YOU MU YUN XIANG *Teclea nobilis* (aerial parts). Ref: 3503.

**7809 Flavaspidic acid BB**

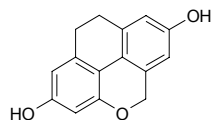
[114-42-1]  $C_{24}H_{30}O_8$  (446.50). mp ( $\alpha$ ) 92°C; 150°C, ( $\beta$ ) 156°C. Pharm: Antibacterial; antifungal; anthelmintic. Source: GAO JIA SUO LIN MAO JUE *Dryopteris caucasica*, GUAN ZHONG *Dryopteris crassirhizoma*, HUANG MAO LIN MAO JUE *Dryopteris chrysocoma*, MIAN MA *Dryopteris filix-mas*. Ref: 6, 658.

**7810 Flavaspidin**

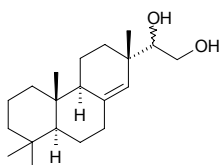
[1763-14-0]  $C_{23}H_{28}O_8$  (432.47). mp 211–212°C. Source: GUAN ZHONG *Dryopteris crassirhizoma*. Ref: 6.

**7811 Flavidin**

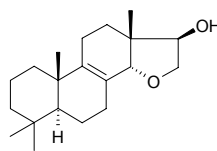
[83924-98-5]  $C_{15}H_{12}O_3$  (240.26). Pharm: Antispasmodic. Source: BEI MU LAN *Coelogyne ovalis*, JIE JING SHI XIAN TAO *Pholidota articulata*. Ref: 658.

**7812 Flavidusin A**

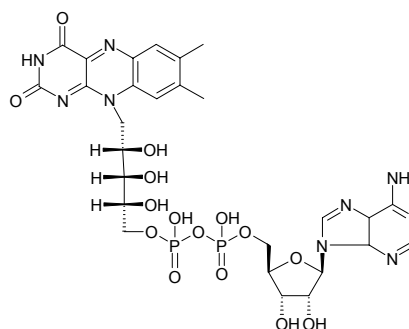
$C_{20}H_{34}O_2$  (306.49). mp 85–86°C,  $[\alpha]_D^{22} = +31.82^\circ$  ( $c = 0.55$ ,  $CHCl_3$ ). Source: DAN HUANG XIANG CHA CAI *Isodon flavidus*. Ref: 4067.

**7813 Flavidusin B**

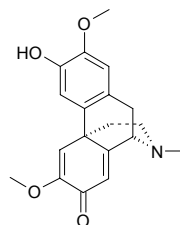
$C_{20}H_{32}O_2$  (304.48). mp 79–80°C,  $[\alpha]_D^{22} = +109.0^\circ$  ( $c = 0.65$ ,  $CHCl_3$ ). Source: DAN HUANG XIANG CHA CAI *Isodon flavidus*. Ref: 4067.

**7814 Flavinadenine dinucleotide**

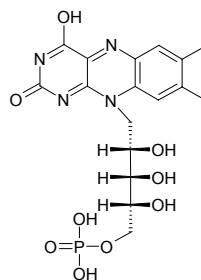
[146-14-5]  $C_{27}H_{35}N_9O_{15}P_2$  (787.58). Source: QING WA *Rana nigromaculata*; *Rana plancyi*, YUAN CAN ZI *Bombyx mori*. Ref: 6.

**7815 (+)-Flavinantine**

$C_{19}H_{21}NO_4$  (327.38). Pharm: Cytotoxic (*in vitro*, HepG<sub>2</sub>, IC<sub>50</sub> = 9.3 μg/mL; Hep2,2,15, IC<sub>50</sub> = 9.7 μg/mL)<sup>[3083]</sup>. Source: YOU GOU YING ZHAO *Artabotrys uncinatus* (root and stem). Ref: 3083.

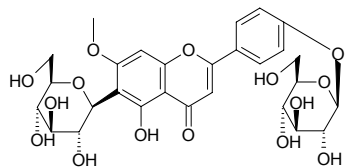
**7816 Flavin mononucleotide**

[146-17-8]  $C_{17}H_{21}N_4O_9P$  (456.35). Source: YUAN CAN ZI *Bombyx mori*, ZHANG LANG *Blatta orientalis*. Ref: 6.

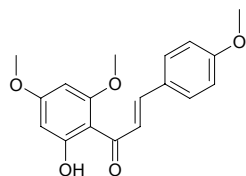


**7817 Flavocommelin**

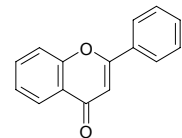
[16049-42-6] C<sub>28</sub>H<sub>32</sub>O<sub>15</sub> (608.56). mp 216~217°C. Source: YA ZHI CAO  
*Commelina communis*. Ref: 6.

**7818 Flavokawain A**

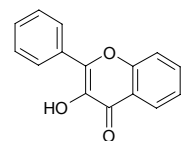
2'-Hydroxy-4,4',6'-trimethoxychalcone C<sub>18</sub>H<sub>18</sub>O<sub>5</sub> (314.34). Yellow plates  
(*n*-hexane-EtOAc), mp 112°C, mp 114~115°C. Source: CHANG YE GE NA  
XIANG *Goniothalamus gardneri* (aerial parts). Ref: 5096.

**7819 Flavone**

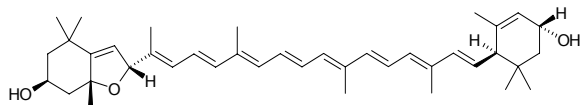
2-Phenylchromone [525-82-6] C<sub>15</sub>H<sub>10</sub>O<sub>2</sub> (222.25). mp 97°C. Pharm: Platelet  
aggregation inhibitor (hmn); inhibits release of histamine from basophiles;  
5-lipoxygenase inhibitor; cyclooxygenase inhibitor. Source: YIN FEN BAO  
CHUN *Primula pulverulenta*, WU LOU ZI *Phoenix dactylifera*. Ref: 6, 658.

**7820 Flavonol**

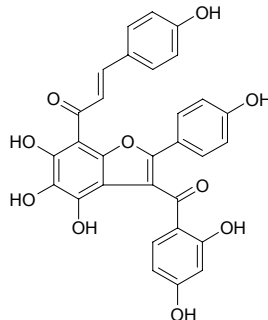
[577-85-5] C<sub>15</sub>H<sub>10</sub>O<sub>3</sub> (238.25). mp 169~170°C. Source: BAI GUO YE *Ginkgo*  
*biloba*, BAI QU CAI *Chelidonium majus*, CHA SHU GEN *Camellia sinensis*  
[Syn. *Thea sinensis*]. Ref: 6.

**7821 Flavoxanthin**

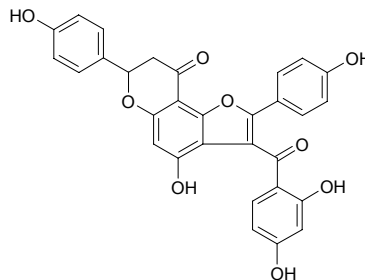
5,8-Epoxy-5,8-dihydro- $\beta$ -*epsilon*-carotene-3,3'-diol [512-29-8] C<sub>40</sub>H<sub>56</sub>O<sub>3</sub>  
(584.89). mp 184°C. Pharm: Yellow pigment. Source: CAO DI MAO GEN  
*Ranunculus acris*, DA BAI DING CAO *Senecio oryzetorum*, JIN ZHAN JU  
*Calendula officinalis*, OU ZHOU QIAN LI GUANG *Senecio vulgaris*, QIAN  
LI GUANG *Senecio scandens* [Syn. *Senecio chinensis*], WAN SHOU JU  
*Tagetes erecta*, XI YANG JIE GU MU *Sambucus nigra*, XING REN *Prunus*  
*armeniaca*, YANG LI *Prunus domestica*, YAO YONG PU GONG YING  
*Taraxacum officinale*, YE MU XU *Medicago falcata* (whole herb: content  
scope = 7%~8%), YIN BAI JIN HE HUAN *Acacia dealbata*, *Berberis* sp.,  
*Chrysanthemum* sp., *Narcissus* sp., *Rosa* sp., *Tulipa* sp. Ref: 6, 658, 660.

**7822 Flavumone A**

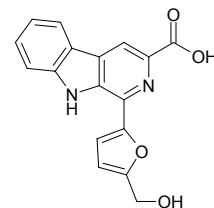
1-[3-(2,4-Dihydroxy-benzoyl)-4,5,6-trihydroxy-2-(4-hydroxy-phenyl)-benzofuran-7-yl]-3-(4-hydroxy-phenyl)-propenone C<sub>30</sub>H<sub>20</sub>O<sub>10</sub> (540.49). Yellow  
crystals, mp 240~241°C (Me<sub>2</sub>CO). Source: HUANG SAI JIN LIAN MU  
*Ouratea flava* (stem cortex). Ref: 3384.

**7823 Flavumone B**

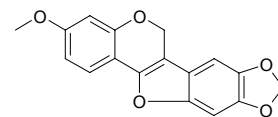
3-(2,4-Dihydroxy-benzoyl)-4-hydroxy-2,7-bis-(4-hydroxy-phenyl)-7,8-dihydro-  
o-furo[2,3-f]chromen-9-on C<sub>30</sub>H<sub>20</sub>O<sub>9</sub> (524.49). Amorphous yellow solid.  
[ $\alpha$ ]<sub>D</sub><sup>25</sup> = +29° (c = 0.5, MeOH). Source: HUANG SAI JIN LIAN MU *Ouratea*  
*flava* (stem cortex). Ref: 3384.

**7824 Flazin**

C<sub>17</sub>H<sub>12</sub>N<sub>2</sub>O<sub>4</sub> (308.30). Pharm: Cytotoxic (mouse mammary organ culture  
assay, 75% at 4 $\mu$ g/mL)<sup>[5038]</sup>. Source: YA DAN ZI *Brucea javanica* [Syn.  
*Brucea sumatrana*; *Rhus javanica*]. Ref: 5038.

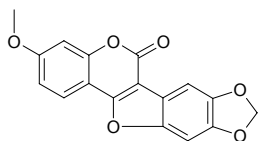
**7825 Flemichapparin B**

C<sub>17</sub>H<sub>12</sub>O<sub>5</sub> (296.28). Pharm: Antioxidant (DPPH scavenger, ScRt = 5.26%,  
control BHT, ScRt = 71.5%)<sup>[3810]</sup>; antibacterial (*Staphylococcus aureus* ATCC  
25923, MIC > 512 $\mu$ g/mL, control Vancomycin, MIC = 0.5 $\mu$ g/mL; MRSA  
SK1, MIC > 512 $\mu$ g/mL, Vancomycin, MIC = 1.0 $\mu$ g/mL)<sup>[3810]</sup>; increases blood  
pressure (anesthetized rats, increases in mean arterial blood pressure,  
0.4mg/kg, 8.9mmHg)<sup>[3810]</sup>. Source: PAN YUAN YU TENG *Derris scandens*  
(stem). Ref: 3810.

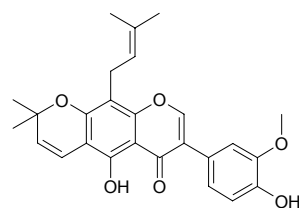


**7826 Flemichapparin C**

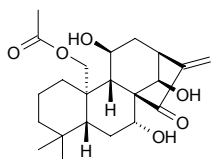
$C_{17}H_{10}O_6$  (310.27). **Pharm:** Antioxidant (DPPH scavenger, ScRt = 21.05%, control BHT, ScRt = 71.5%). **Source:** PAN YUAN YU TENG *Derris scandens* (stem). **Ref:** 3810.

**7827 Flemiphilippinin C**

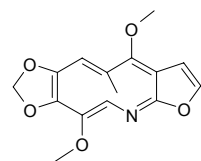
[133830-92-9]  $C_{26}H_{26}O_6$  (434.49). Yellowish acicular crystals (methanol–water), mp 143–145°C. **Source:** MAN XING QIAN JIN BA *Flemingia philippinensis* [Syn. *Moghania philippinensis*]. **Ref:** 179.

**7828 Flexicaulin A**

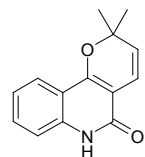
$C_{22}H_{32}O_6$  (392.50). mp 224–226.5°C,  $[\alpha]_D^{21} = -99.43^\circ$  ( $c = 0.52$ , MeOH). **Source:** ROU JING XIANG CHA CAI *Isodon flexicaulis*. **Ref:** 4067.

**7829 Flindersiamine**

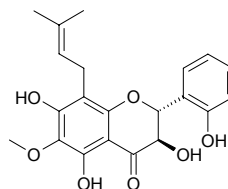
$C_{15}H_{15}NO_5$  (289.29). **Pharm:** Antibacterial (*Staphylococcus aureus* and *Streptococcus faecalis*, moderate). **Source:** Esenbeckia yaaxhokob (leaf). **Ref:** 4929.

**7830 Flindersine**

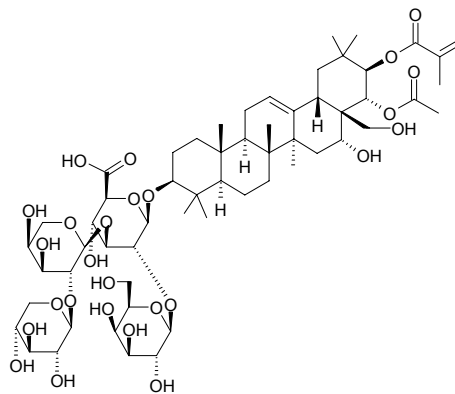
$C_{14}H_{13}NO_2$  (227.27). **Pharm:** Photo-activated antibacterial (*Staphylococcus aureus*)<sup>[4989]</sup>; photo-activated antifungal (*Candida albicans* weak)<sup>[4989]</sup>; photo-activated DNA binding inactive (16 restriction enzymes)<sup>[4989]</sup>. **Source:** JIAN YE YUN XIANG CAO *Haplophyllum acutifolium*, *Sarcomelicope glauca*. **Ref:** 4989, 5175.

**7831 Floranol**

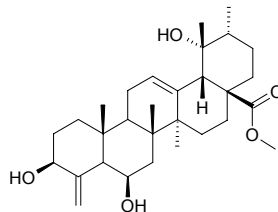
$C_{21}H_{22}O_7$  (386.41). **Source:** DA HUA DI AO DOU *Dioclea grandiflora* (root). **Ref:** 4978.

**7832 Floratheasaponin A**

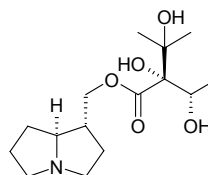
$C_{59}H_{92}O_{26}$  (1217.38). **Pharm:** Antihyperlipidemic<sup>[4537]</sup>. **Source:** PU ER CHA *Camellia sinensis* var. *assamica* (flower). **Ref:** 4537.

**7833 Floridic acid methyl ester**

$C_{30}H_{46}O_5$  (486.70). **Pharm:** Anti-inflammatory<sup>[5341]</sup>; antiviral. **Source:** MIAN MAO GOU TENG *Uncaria lanosa*. **Ref:** 5341.

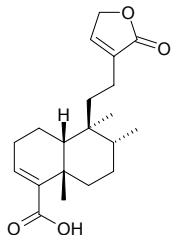
**7834 Floridinine**

[200067-94-3]  $C_{15}H_{27}NO_5$  (301.39). Oil,  $[\alpha]_D = -8.3^\circ$  ( $c = 0.096$ , ethanol). **Pharm:** Antifungal (*Fusarium moniliforme*). **Source:** *Heliotropium floridum* var. *latifolium*. **Ref:** 1554.

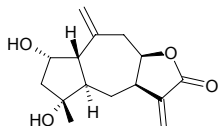


**7835 Floridiolide A**

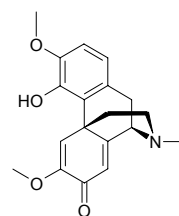
Limbatolide C C<sub>20</sub>H<sub>28</sub>O<sub>4</sub> (332.44). Gummy solid,  $[\alpha]_D^{23} = -98.231^\circ$  ( $c = 0.063$ , CHCl<sub>3</sub>). **Pharm:** AChE inhibitor (*in vitro*, IC<sub>50</sub> = (103.7±0.5)μmol/L, positive control Galanthamine, IC<sub>50</sub> = (0.5±0.01)μmol/L)<sup>[4453]</sup>; BChE inhibitor (*in vitro*, IC<sub>50</sub> = (14.2±0.3)μmol/L, positive control Galanthamine, IC<sub>50</sub> = (8.5±0.1)μmol/L)<sup>[4453]</sup>. **Source:** GE LUN BI YA BA DOU *Croton schiedeanus* (aerial parts), YOU YAN AO TUO SI TE CAO *Otostegia limbata* (root). **Ref:** 4447, 4453.

**7836 Florilenalin**

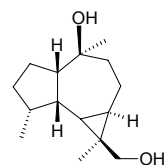
2,4-Dihydroxy-10(14),11(13)-guaiaadien-12,8-olide [54964-49-7] C<sub>15</sub>H<sub>20</sub>O<sub>4</sub> (264.32). Oil. **Pharm:** Cytotoxic (hmn H.Ep.-2 cutis cancer in throat, 1μg/mL). **Source:** DUI XIN JU *Helenium autumnale*. **Ref:** 661.

**7837 Floripavine**

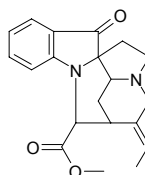
(+)-Salutaridine [1936-18-1] C<sub>19</sub>H<sub>21</sub>NO<sub>4</sub> (327.38). mp 197~198°C. **Pharm:** Antineoplastic (W<sub>256</sub>). **Source:** YA PIAN *Papaver somniferum*, DA HONG YING SU *Papaver bracteatum*, JIN DONG YING SU *Papaver orientale*, XIANG BA DOU *Croton balsamifera*, YI KANG BA DOU *Croton salutaris*, YING SU *Papaver somniferum*. **Ref:** 6, 658.

**7838 Flourensadiol**

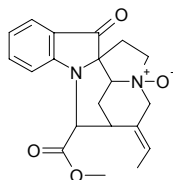
C<sub>15</sub>H<sub>26</sub>O<sub>2</sub> (238.37). **Pharm:** Phytotoxin (inhibits radicle growth, *Amaranthus hypochondriacus*, IC<sub>50</sub> = 412μmol/L, control 2,4-D, IC<sub>50</sub> = 180μmol/L; *Echinochloa crusgalli*, IC<sub>50</sub> = 4200μmol/L, control 2,4-D, IC<sub>50</sub> = 230μmol/L); CaM interactor (cAMP phosphodiesterase inhibitor, IC<sub>50</sub> = 5.2μmol/L, control Chlorpromazine, IC<sub>50</sub> = 10.2μmol/L, interacted with bovine-brain calmodulin and inhibited the activation of the calmodulin-dependent enzyme cAMP phosphodiesterase). **Source:** FU CHUI FE LAO JU *Flourensia cernua*. **Ref:** 3433.

**7839 Fluorocarpamine**

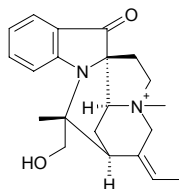
[2254-31-1] C<sub>20</sub>H<sub>22</sub>N<sub>2</sub>O<sub>3</sub> (338.41). **Source:** CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochnera rosea*]. **Ref:** 2.

**7840 Fluorocarpamine-N-oxide**

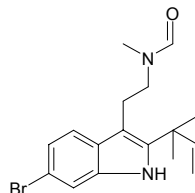
[88746-90-1] C<sub>20</sub>H<sub>22</sub>N<sub>2</sub>O<sub>4</sub> (354.41). **Source:** CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochnera rosea*]. **Ref:** 2.

**7841 Fluorocurine**

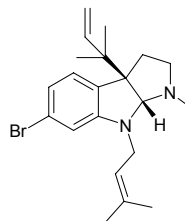
C<sub>21</sub>H<sub>27</sub>N<sub>2</sub>O<sub>2</sub> (339.46). **Source:** *Strychnos guianensis* (stem cortex). **Ref:** 3943.

**7842 Flustrabromine**

C<sub>17</sub>H<sub>21</sub>BrN<sub>2</sub>O (349.27). **Pharm:** Affinity to nAChR ( $\alpha 4\beta 2$  subtype,  $K_i > 50000$ nmol/L, control (-)-Nicotine,  $K_i = (0.838 \pm 0.132)$ nmol/L;  $\alpha 7$  subtype,  $K_i > 50000$ nmol/L, (-)-Nicotine,  $K_i = (127 \pm 5)$ nmol/L)<sup>[5029]</sup>. **Source:** BEI HAI XIAN TAI CHONG *Flustra foliacea* **Ref:** 5029.

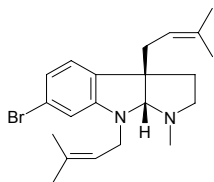
**7843 Flustramine A**

C<sub>21</sub>H<sub>29</sub>BrN<sub>2</sub> (389.38). **Pharm:** Affinity to nAChR ( $\alpha 4\beta 2$  subtype,  $K_i > 50000$ nmol/L, control (-)-Nicotine,  $K_i = (0.838 \pm 0.132)$ nmol/L;  $\alpha 7$  subtype,  $K_i > 50000$ nmol/L, (-)-Nicotine,  $K_i = (127 \pm 5)$ nmol/L)<sup>[5029]</sup>. **Source:** BEI HAI XIAN TAI CHONG *Flustra foliacea*. **Ref:** 5029.

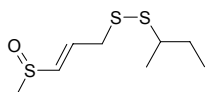


**7844 Flustramine B**

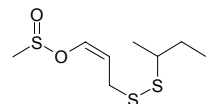
[71239-65-1] C<sub>21</sub>H<sub>29</sub>BrN<sub>2</sub> (389.38). Source: BEI HAI XIAN TAI CHONG *Flustra foliacea*. Ref: 1521.

**7845 Foetisulfide A**

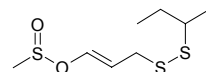
*E*-3-Methylsulfinyl-2-propenyl *sec*-butyl disulfide C<sub>8</sub>H<sub>16</sub>OS<sub>2</sub> (224.41). Pale yellow oil, [α]<sub>D</sub><sup>25</sup> = -36.7° (*c* = 1.1, MeOH). Source: CHOU A WEI *Ferula foetida* (root: yield = 0.0029%). Ref: 4659.

**7846 Foetisulfide B**

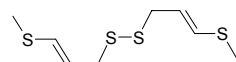
*Z*-3-Methylsulfinyloxy-2-propenyl *sec*-butyl disulfide C<sub>8</sub>H<sub>16</sub>O<sub>2</sub>S<sub>2</sub> (240.41). Pale yellow oil, [α]<sub>D</sub><sup>25</sup> = +8.8° (*c* = 0.9, MeOH). Source: CHOU A WEI *Ferula foetida* (root: yield = 0.00051%). Ref: 4659.

**7847 Foetisulfide C**

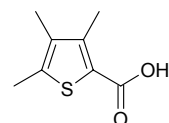
*E*-3-Methylsulfinyloxy-2-propenyl *sec*-butyl disulfide C<sub>8</sub>H<sub>16</sub>O<sub>2</sub>S<sub>2</sub> (240.41). Pale yellow oil, [α]<sub>D</sub><sup>25</sup> = +27.5° (*c* = 1.2, MeOH). Source: CHOU A WEI *Ferula foetida* (root: yield = 0.00077%). Ref: 4659.

**7848 Foetisulfide D**

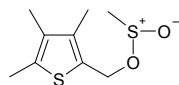
Bis(3-methylthio-2*E*-propenyl) disulfide C<sub>8</sub>H<sub>14</sub>S<sub>4</sub> (238.46). Colorless oil. Source: CHOU A WEI *Ferula foetida* (root: yield = 0.00026%). Ref: 4659.

**7849 Foetithiophene A**

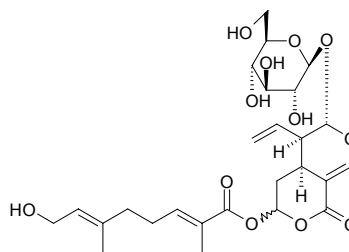
3,4,5-Trimethyl-2-thiophenecarboxylic acid C<sub>8</sub>H<sub>10</sub>O<sub>2</sub>S (170.23). Colorless needles, mp 166.0~166.5°C. Source: CHOU A WEI *Ferula foetida* (root: yield = 0.00051%). Ref: 4659.

**7850 Foetithiophene B**

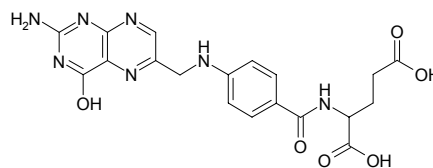
3,4,5-Trimethyl-2-(methylsulfinyloxymethyl) thiophene C<sub>9</sub>H<sub>14</sub>O<sub>2</sub>S<sub>2</sub> (218.34). Pale yellow oil. Source: CHOU A WEI *Ferula foetida* (root: yield = 0.00051%). Ref: 4659.

**7851 Foliamenthin**

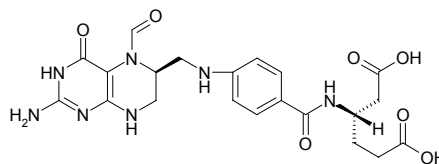
[21848-66-8] C<sub>26</sub>H<sub>36</sub>O<sub>12</sub> (540.57). mp 194~196°C. Source: SHUI CAI *Menyanthes trifoliata* (the compound was isolated from the plant by Battersby et al. in 1968)<sup>[5505]</sup>, SHUI CAI GEN *Menyanthes trifoliata*. Ref: 6, 5505.

**7852 Folic acid**

Pteroylglutamic acid; Cytofol; Folipac [59-30-3] C<sub>19</sub>H<sub>19</sub>N<sub>7</sub>O<sub>6</sub> (441.41). mp 250°C (dec), [α]<sub>D</sub><sup>25</sup> = +23° (*c* = 0.5, 0.1 mol NaOH).<sup>[5507]</sup> Pharm: Hematopoietic vitamin (used in treatment of megaloblastic anemia due to lack of folic acid). Source: BEI HAI DANG GUI *Angelica acutiloba* var. *sugiyamae*, BO CAI *Spinacia oleracea*, CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*], CU LIU GUO *Hippophae rhamnoides*, DONG DANG GUI *Angelica acutiloba* [Syn. *Ligusticum acutilobum*], HONG CHE ZHOU CAO *Trifolium pratense*, HUANG QI *Astragalus membranaceus*, LI ZHI *Litchi chinensis*, LIN QIN *Malus asiatica*, MANG GUO *Mangifera indica*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], SANG YE *Morus alba*, YANG SHI GUO *Syzygium cumini*. Ref: 2, 658, 660, 5507.

**7853 Folinic acid**

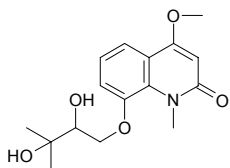
[58-05-9] C<sub>21</sub>H<sub>25</sub>N<sub>7</sub>O<sub>7</sub> (487.48). mp 248~250°C. Source: BA JIAO HUI XIANG *Illicium verum*, BO CAI *Spinacia oleracea*, CAN DOU YE *Vicia faba*, CU LIU GUO *Hippophae rhamnoides*, DANG GUI *Angelica sinensis*, FENG MI *Apis cerana*, FENG RU *Apis cerana*, HEI DA DOU *Glycine max*, HEI DA DOU YE *Glycine max*, HEI ZHI MA *Sesamum indicum* (black seed) [Syn. *Sesamum orientale* (black seed)], HONG CHE ZHOU CAO *Trifolium pratense*, HONG CHE ZHOU CAO *Trifolium pratense*, HUANG QI *Astragalus membranaceus*, LI ZHI *Litchi chinensis*, MANG GUO *Mangifera indica*, MO GU *Agaricus campestris*, NIU RU *Bos taurus domesticus*; *Bubalus bubalis*, SANG YE *Morus alba*, YAO YONG PU GONG YING *Taraxacum officinale*. Ref: 6, 660.



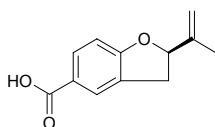
**7854 Foliosidine**

[2520-38-9] C<sub>16</sub>H<sub>21</sub>NO<sub>5</sub> (307.35). mp 141~142°C, [ $\alpha$ ]<sub>D</sub> = +42° (ethanol).

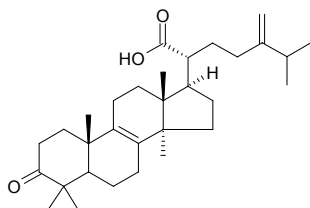
**Pharm:** Antiarrhythmic (cat, caused by CaCl<sub>2</sub> or adrenaline, 20~30mg/kg iv, the action maintains 20~60min); LD<sub>50</sub> (mus, iv) = 209mg/kg. **Source:** DA YE YUN XIANG CAO *Haplophyllum perforatum*. **Ref:** 658.

**7855 Fomannoxin acid**

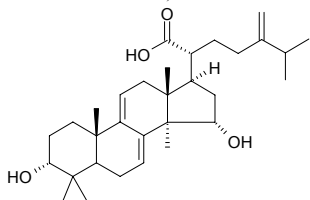
2-Isopropenyl-2,3-dihydrobenzofuran-5-carboxylic acid [84015-64-5] C<sub>12</sub>H<sub>12</sub>O<sub>3</sub> (204.23). **Source:** BAI HUA LONG DAN *Gentiana algida*. **Ref:** 704.

**7856 Fomefficinic acid A**

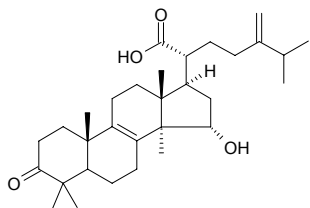
24-Methylene-3-oxo-lanost-8-en-21-oic acid C<sub>31</sub>H<sub>48</sub>O<sub>3</sub> (468.73). White needles, mp 201~203°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +4.6° (*c* = 0.06, CHCl<sub>3</sub>:MeOH = 1:1). **Source:** A LI HONG *Fomes officinalis*. **Ref:** 2566.

**7857 Fomefficinic acid B**

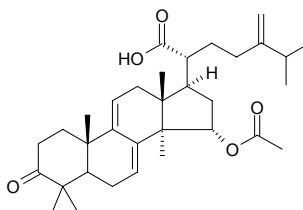
3 $\alpha$ ,15 $\alpha$ -Dihydroxy-24-methylene-lanosta-7,9(11)-dien-21-oic acid C<sub>31</sub>H<sub>48</sub>O<sub>4</sub> (484.73). White amorphous powder, mp 194~196°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +25.8° (*c* = 0.05, CHCl<sub>3</sub>:MeOH = 1:1). **Source:** A LI HONG *Fomes officinalis*. **Ref:** 2566.

**7858 Fomefficinic acid D**

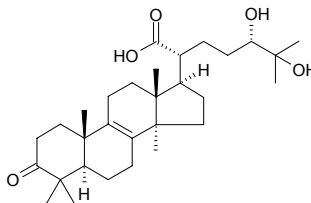
15 $\alpha$ -Hydroxy-3-oxo-24-methylenelanost-8-en-21-oic acid C<sub>31</sub>H<sub>48</sub>O<sub>4</sub> (484.73). White amorphous powder, mp 205~207°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +37.5° (*c* = 0.04, CHCl<sub>3</sub>:MeOH = 1:1). **Source:** A LI HONG *Fomes officinalis*. **Ref:** 2566.

**7859 Fomefficinic acid E**

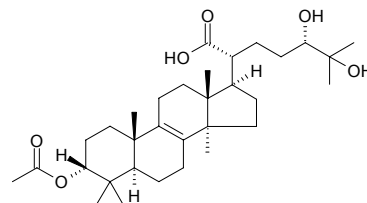
15 $\alpha$ -Acetoxy-3-oxo-24-methylenelanosta-7,9(11)-dien-21-oic acid C<sub>33</sub>H<sub>48</sub>O<sub>5</sub> (524.75). White amorphous powder, mp 207~209°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +46.7° (*c* = 0.03, CHCl<sub>3</sub>:MeOH = 1:1). **Source:** A LI HONG *Fomes officinalis*. **Ref:** 2566.

**7860 Fomitopic acid A**

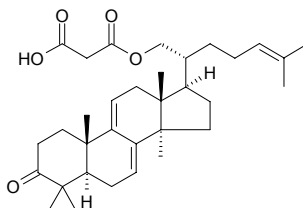
24S,25-Dihydroxy-3-oxolanost-8-en-21-oic acid C<sub>30</sub>H<sub>48</sub>O<sub>5</sub> (488.71). Colorless needles (CHCl<sub>3</sub>), mp 182~184°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +33.8° (*c* = 1.1, MeOH). **Pharm:** Anti-inflammatory (*in vitro*, COX-1 inhibitor, 10 $\mu$ g/mL, InRt = 18.1%, COX-2 inhibitor, IC<sub>50</sub> = 1.15 $\mu$ mol/L; control Indomethacin, COX-1 inhibitor, IC<sub>50</sub> = 0.10 $\mu$ mol/L; COX-2 inhibitor, IC<sub>50</sub> = 0.60 $\mu$ mol/L). **Source:** HONG YUAN CENG KONG JUN *Fomitopsis pinicola* [Syn. *Fomes pinicola*; *Polyporus pinicola*] (sporocarp: yield = 0.0036%fw). **Ref:** 4798.

**7861 Fomitopic acid B**

24,25-Dihydroxy-3 $\alpha$ -acetoxy-lanost-8-en-21-oic acid C<sub>32</sub>H<sub>52</sub>O<sub>6</sub> (532.77). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +16.7° (*c* = 0.3, MeOH). **Source:** HONG YUAN CENG KONG JUN *Fomitopsis pinicola* [Syn. *Fomes pinicola*; *Polyporus pinicola*] (sporocarp: yield = 0.00058%fw). **Ref:** 4798.

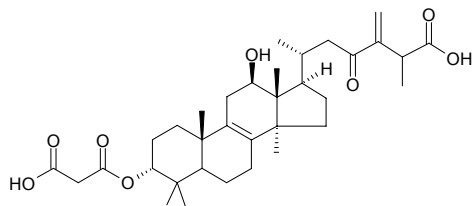
**7862 Fomitopic acid B**

C<sub>33</sub>H<sub>48</sub>O<sub>5</sub> (524.75). **Source:** HONG YUAN CENG KONG JUN *Fomitopsis pinicola* [Syn. *Fomes pinicola*; *Polyporus pinicola*] (sporocarp: yield = 0.017%fw). **Ref:** 1521, 4798.

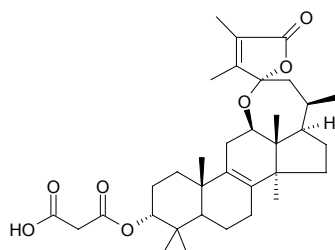


**7863 Fomitopsin A**

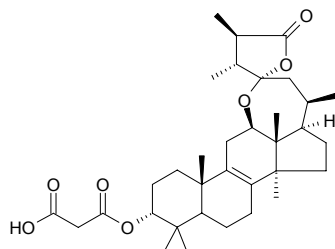
3-Carboxyacetyloxy-24-exomethylene-12 $\beta$ -hydroxy-23-oxo-lanost-8-en-26-oic acid C<sub>34</sub>H<sub>50</sub>O<sub>8</sub> (586.77). [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +5.5° (c = 0.4, CHCl<sub>3</sub>). Source: CENG KONG JUN *Fomitopsis spraguei*. Ref: 5302.

**7864 Fomitopsin B**

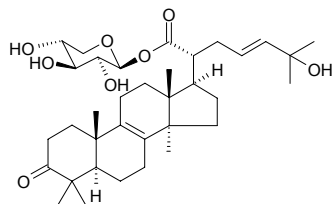
C<sub>34</sub>H<sub>48</sub>O<sub>7</sub> (568.76). Source: CENG KONG JUN *Fomitopsis spraguei*. Ref: 5302.

**7865 Fomitopsin C**

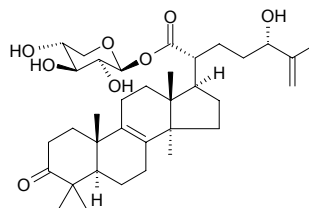
C<sub>34</sub>H<sub>50</sub>O<sub>7</sub> (570.77). Source: CENG KONG JUN *Fomitopsis spraguei*. Ref: 5302.

**7866 Fomitoside A**

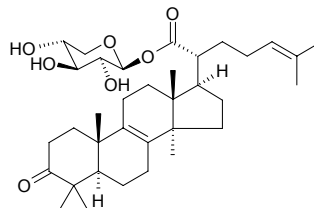
C<sub>35</sub>H<sub>54</sub>O<sub>8</sub> (602.82). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +1.1° (c = 0.2, MeOH). Source: HONG YUAN CENG KONG JUN *Fomitopsis pinicola* [Syn. *Fomes pinicola*; *Polyporus pinicola*] (sporocarp: yield = 0.00055%fw). Ref: 4798.

**7867 Fomitoside B**

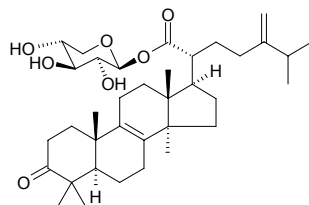
C<sub>35</sub>H<sub>54</sub>O<sub>8</sub> (602.82). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -18.3° (c = 0.2, MeOH). Source: HONG YUAN CENG KONG JUN *Fomitopsis pinicola* [Syn. *Fomes pinicola*; *Polyporus pinicola*] (sporocarp: yield = 0.00091%fw). Ref: 4798.

**7868 Fomitoside C**

3-Oxolanosta-8,24-dien-21-oic acid 21-O- $\beta$ -D-xylopyranoside C<sub>35</sub>H<sub>54</sub>O<sub>7</sub> (586.82). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +31.4° (c = 2.4, MeOH). Pharm: Anti-inflammatory (*in vitro*, COX-1 inhibitor, IC<sub>50</sub> = 1.91mmol/L, COX-2 inhibitor, IC<sub>50</sub> = 5.11mmol/L; control Indomethacin, COX-1 inhibitor, IC<sub>50</sub> = 0.10 $\mu$ mol/L; COX-2 inhibitor, IC<sub>50</sub> = 0.60 $\mu$ mol/L). Source: HONG YUAN CENG KONG JUN *Fomitopsis pinicola* [Syn. *Fomes pinicola*; *Polyporus pinicola*] (sporocarp: yield = 0.0044%fw). Ref: 4798.

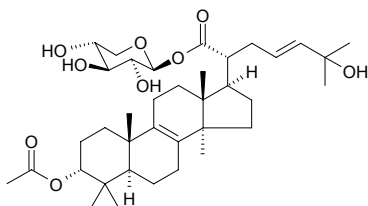
**7869 Fomitoside D**

3-Oxolanosta-8,24(31)-dien-21-oic acid 21-O- $\beta$ -D-xylopyranoside C<sub>36</sub>H<sub>56</sub>O<sub>7</sub> (600.84). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +36.6° (c = 0.6, MeOH). Pharm: Anti-inflammatory (*in vitro*, COX-1 inhibitor, IC<sub>50</sub> = 3.33mmol/L, COX-2 inhibitor, IC<sub>50</sub> = 2.39mmol/L; control Indomethacin, COX-1 inhibitor, IC<sub>50</sub> = 0.10 $\mu$ mol/L; COX-2 inhibitor, IC<sub>50</sub> = 0.60 $\mu$ mol/L). Source: HONG YUAN CENG KONG JUN *Fomitopsis pinicola* [Syn. *Fomes pinicola*; *Polyporus pinicola*] (sporocarp: yield = 0.0054%fw). Ref: 4798.

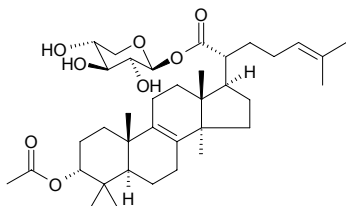


**7870 Fomitoside E**

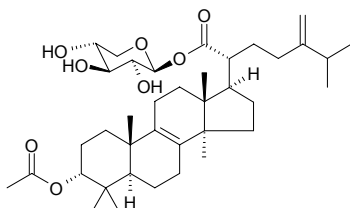
25-Hydroxy-3 $\alpha$ -acetoxylanost-8-en-21-oic acid 21-*O*- $\beta$ -D-xylopyranoside C<sub>37</sub>H<sub>58</sub>O<sub>9</sub> (646.87). Amorphous powder,  $[\alpha]_D^{25} = +1.6^\circ$  ( $c = 0.7$ , MeOH). **Pharm:** Anti-inflammatory (*in vitro*, COX-1 inhibitor, 10 $\mu$ g/mL, InRt = 57.2%, COX-2 inhibitor, IC<sub>50</sub> = 0.15 $\mu$ mol/L; control Indomethacin, COX-1 inhibitor, IC<sub>50</sub> = 0.10 $\mu$ mol/L; COX-2 inhibitor, IC<sub>50</sub> = 0.60 $\mu$ mol/L). **Source:** HONG YUAN CENG KONG JUN *Fomitopsis pinicola* [Syn. *Fomes pinicola*; *Polyporus pinicola*] (sporocarp: yield = 0.0018%fw). **Ref:** 4798.

**7871 Fomitoside F**

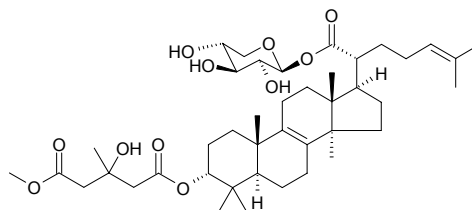
C<sub>37</sub>H<sub>58</sub>O<sub>8</sub> (630.87). Colorless needles (MeOH), mp 185–186.6°C,  $[\alpha]_D^{25} = -3.4^\circ$  ( $c = 2.6$ , MeOH). **Pharm:** Anti-inflammatory (*in vitro*, COX-1 inhibitor, 10 $\mu$ g/mL, InRt = 27.5%, COX-2 inhibitor, IC<sub>50</sub> = 1.13 $\mu$ mol/L; control Indomethacin, COX-1 inhibitor, IC<sub>50</sub> = 0.10 $\mu$ mol/L; COX-2 inhibitor, IC<sub>50</sub> = 0.60 $\mu$ mol/L). **Source:** HONG YUAN CENG KONG JUN *Fomitopsis pinicola* [Syn. *Fomes pinicola*; *Polyporus pinicola*] (sporocarp: yield = 0.010%fw). **Ref:** 4798.

**7872 Fomitoside G**

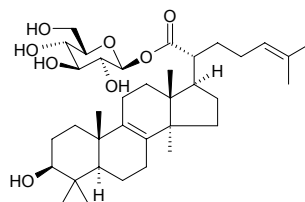
3 $\alpha$ -Acetoxylanosta-8,24(31)-dien-21-oic acid 21-*O*- $\beta$ -D-xylopyranoside C<sub>38</sub>H<sub>60</sub>O<sub>8</sub> (644.9). Amorphous powder,  $[\alpha]_D^{25} = +5.0^\circ$  ( $c = 0.7$ , MeOH). **Pharm:** Anti-inflammatory (*in vitro*, COX-1 inhibitor, 10 $\mu$ g/mL, InRt = 21.7%, COX-2 inhibitor, IC<sub>50</sub> = 18.5 $\mu$ mol/L; control Indomethacin, COX-1 inhibitor, IC<sub>50</sub> = 0.10 $\mu$ mol/L; COX-2 inhibitor, IC<sub>50</sub> = 0.60 $\mu$ mol/L). **Source:** HONG YUAN CENG KONG JUN *Fomitopsis pinicola* [Syn. *Fomes pinicola*; *Polyporus pinicola*] (sporocarp: yield = 0.0018%fw). **Ref:** 4798.

**7873 Fomitoside H**

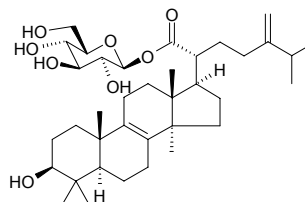
C<sub>42</sub>H<sub>66</sub>O<sub>11</sub> (746.99). Amorphous powder,  $[\alpha]_D^{25} = -67.4^\circ$  ( $c = 0.2$ , MeOH). **Pharm:** Anti-inflammatory (*in vitro*, COX-1 inhibitor, IC<sub>50</sub> = 73.9 $\mu$ mol/L, COX-2 inhibitor, 10 $\mu$ g/mL, InRt = 70.1%; control Indomethacin, COX-1 inhibitor, IC<sub>50</sub> = 0.10 $\mu$ mol/L; COX-2 inhibitor, IC<sub>50</sub> = 0.60 $\mu$ mol/L). **Source:** HONG YUAN CENG KONG JUN *Fomitopsis pinicola* [Syn. *Fomes pinicola*; *Polyporus pinicola*] (sporocarp: yield = 0.0025%fw). **Ref:** 4798.

**7874 Fomitoside I**

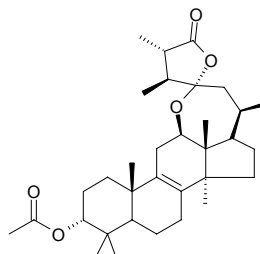
Trametenolic acid 21-*O*- $\beta$ -D-glucopyranoside C<sub>36</sub>H<sub>58</sub>O<sub>8</sub> (618.86). Amorphous powder,  $[\alpha]_D^{25} = +1.77^\circ$  ( $c = 0.1$ , MeOH). **Source:** HONG YUAN CENG KONG JUN *Fomitopsis pinicola* [Syn. *Fomes pinicola*; *Polyporus pinicola*] (sporocarp: yield = 0.00055%fw). **Ref:** 4798.

**7875 Fomitoside J**

Eburicic acid 21-*O*- $\beta$ -D-glucopyranoside C<sub>37</sub>H<sub>60</sub>O<sub>8</sub> (632.89). Amorphous powder,  $[\alpha]_D^{25} = +22.1^\circ$  ( $c = 0.3$ , MeOH). **Source:** HONG YUAN CENG KONG JUN *Fomitopsis pinicola* [Syn. *Fomes pinicola*; *Polyporus pinicola*] (sporocarp: yield = 0.00064%fw). **Ref:** 4798.

**7876 Fomlactone A**

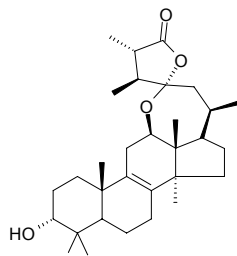
C<sub>33</sub>H<sub>50</sub>O<sub>5</sub> (526.76). White needles (MeOH), mp 184–186°C,  $[\alpha]_D^{15} = +30^\circ$  ( $c = 0.02$ , CHCl<sub>3</sub>). **Source:** FEN ROU CENG KONG JUN *Fomes cajanderi* (sporocarp: yield = 0.0018%dw). **Ref:** 4726.



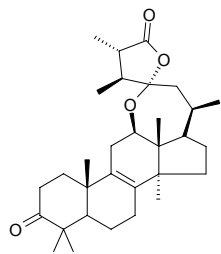


**7877 Fomlactone B**

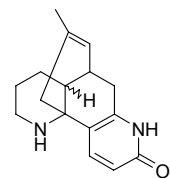
$C_{31}H_{48}O_4$  (484.73). White needles (MeOH), mp 278~280°C,  $[\alpha]_D^{15} = +37^\circ$  ( $c = 0.06$ ,  $CHCl_3$ ). Source: FEN ROU CENG KONG JUN *Fomes cajanderi* (sporocarp: yield = 0.0020%dw). Ref: 4726.

**7878 Fomlactone C**

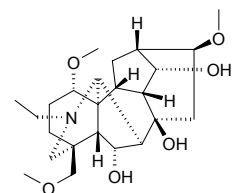
$C_{31}H_{46}O_4$  (482.71). White crystals (MeOH), mp 246~250°C,  $[\alpha]_D^{15} = +40^\circ$  ( $c = 0.03$ ,  $CHCl_3$ ). Source: FEN ROU CENG KONG JUN *Fomes cajanderi* (sporocarp: yield = 0.00012%dw). Ref: 4726.

**7879 Fordimine**

[103548-82-9]  $C_{16}H_{20}N_2O$  (256.35). Acicular crystals, mp 149~150°C (dec). Source: HUA NAN MA WEI SHAN *Phlegmarius fordii*. Ref: 95.

**7880 Foresticine**

[91794-15-9]  $C_{24}H_{39}NO_6$  (437.58). Source: LI JIANG WU TOU *Aconitum forrestii* [Syn. *Aconitum likiangense*]. Ref: 1521.

**7881 Formaldehyde**

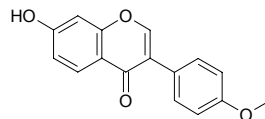
Methanal [50-00-0]  $CH_2O$  (30.03). mp  $-92^\circ C$ , bp  $-21^\circ C$ . Source: CU vinegar, NIU BANG GEN *Arctium lappa*, YANG SHI CAO *Achillea millefolium*. Ref: 6.

**7882 Formic acid**

Methanoic acid [64-18-6]  $CH_2O_2$  (46.03). mp  $8.4^\circ C$ , bp  $100.5^\circ C$ . Pharm: Astringent; corrosion. Source: BAI GUO *Ginkgo biloba*, BAI BU *Stemona tuberosa*, QIAN MA *Urtica cannabina*, KUAN YE XIANG PU *Typha latifolia*. Ref: 2, 658, 660.

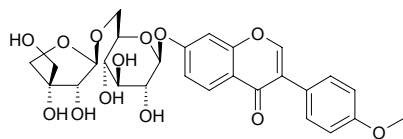
**7883 Formononetin**

Pratol; 7-Hydroxy-4'-methoxyisoflavone; Formononetin [485-72-3]  $C_{16}H_{12}O_4$  (268.27). mp 265~266°C; 257~258°C; 256~257°C. Pharm: Diuretic (in clinic); estrogenic activity; antihypercholesterolemic (male rat, hyperlipemia, due to Triton WR1339); hepatoprotective (mus primary cultured hepatocytes, antihepatotoxin induced by *D*-galactosamine (GalN), 100  $\mu$ mol/L, InRt = (6.3 $\pm$ 1.0)%), inactive, control Silybin, 100  $\mu$ mol/L, InRt = (77.0 $\pm$ 5.5)%<sup>[4095]</sup>; antimalarial (*Plasmodium falciparum* PoW, IC<sub>50</sub> > 50  $\mu$ g/mL, control Chloroquine diphosphate, IC<sub>50</sub> = (0.006 $\pm$ 0.002)  $\mu$ g/mL; Dd2, IC<sub>50</sub> < 50  $\mu$ g/mL, Chloroquine diphosphate, IC<sub>50</sub> = (0.063 $\pm$ 0.01)  $\mu$ g/mL)<sup>[5208]</sup>; antibacterial (*Escherichia coli*, MIA = 50.0  $\mu$ g, control Chloramphenicol, MIA = 0.001  $\mu$ g; *Bacillus subtilis*, MIA = 50.0  $\mu$ g, Chloramphenicol, MIA = 0.001  $\mu$ g; *Staphylococcus aureus*, MIA = 10.0  $\mu$ g, Chloramphenicol, MIA = 0.001  $\mu$ g)<sup>[3785]</sup>; antifungal (*Candida mycoderma*, MIA = 10.0  $\mu$ g, Miconazole = MIA = 0.0001  $\mu$ g)<sup>[3785]</sup>; antioxidant (DPPH scavenger, TLC detection limit = 0.5  $\mu$ g, IC<sub>50</sub> = 960  $\mu$ g/mL; control Quercetin, TLC detection limit < 0.05  $\mu$ g, IC<sub>50</sub> = 7  $\mu$ g/mL; Gallic acid, TLC detection limit < 0.05  $\mu$ g, IC<sub>50</sub> = 4  $\mu$ g/mL; Ascorbic acid, TLC detection limit < 0.10  $\mu$ g, IC<sub>50</sub> = 18  $\mu$ g/mL)<sup>[3785]</sup>. Source: AO DA LI YA YAN DIAN *Baptisia australis*, BO TE LAN DA JI *Euphorbia portlandica* (whole herb), CI GUO GAN CAO *Glycyrrhiza pallidiflora*, CI MANG BING HUA *Ononis spinosa*, DI XIA CHE ZHOU CAO *Trifolium subterraneum*, DUO MAI NAN MEI ROU DOU KOU *Viola multinervia*, GAN CAO *Glycyrrhiza uralensis*, GE GEN *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*], GUANG GUO GAN CAO *Glycyrrhiza glabra*, HONG CHE ZHOU CAO *Trifolium pratense*, HUANG QI *Astragalus membranaceus* (dried root: mean content of 5 origins = 0.0068%)<sup>[5519]</sup>, HUI HUI DOU *Cicer arietinum*, KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*], LUO HUA NAN MEI ROU DOU KOU *Viola caducifolia*, MENG GU HUANG QI *Astragalus mongholicus* (dried root: mean content of 4 origins = 0.0032%)<sup>[5508]</sup>, MU XU *Medicago sativa*, SI TE WEN HUANG TAN *Dalbergia stevensonii*, WU CI KE YA SHU *Andira inermis* (leaf), XI A LA HUANG TAN *Dalbergia cearensis*, YI KA TUO YE HUANG TAN *Dalbergia ecastophyllum*, ZI SUI HUI *Amorpha fruticosa*, ZI TAN *Pterocarpus indicus*, *Baptisia* spp., family Fabaceae spp., *Bolusanthus speciosus* (root wood), occurs in many plants. Ref: 6, 2, 6, 243, 372, 379, 658, 660, 1521, 3785, 4095, 5019, 5208, 5508, 5519.

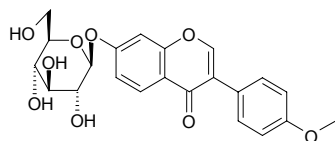


**7884 Formononetin-7-O-β-D-apiofuranosyl-(1→6)-β-D-glucopyranoside**

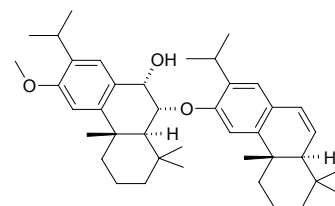
$C_{27}H_{30}O_{13}$  (562.53). White powder,  $[\alpha]_D^{25} = +78.2^\circ$  ( $c = 0.25$ , MeOH:H<sub>2</sub>O = 1:0.5). **Source:** FENG CHENG JI XUE TENG *Milletia nitida* var. *hirsutissima* (stem). **Ref:** 4455.

**7885 Formononetin-7-glucoside**

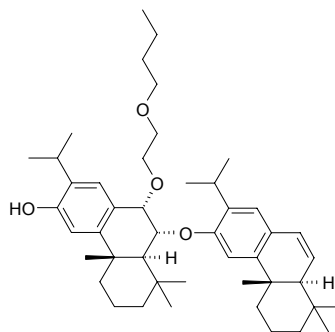
Ononin; Ononoside [486-62-4]  $C_{22}H_{22}O_9$  (430.42). **Source:** GAN CAO *Glycyrrhiza uralensis* (root and rhizome: mean content of 4 origins = 0.037%<sup>[5508]</sup>), GE GEN *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*], GUANG GUO GAN CAO *Glycyrrhiza glabra* (root and rhizome: content = 0.032%<sup>[5508]</sup>), HUANG GAN CAO *Glycyrrhiza kansuensis* (root and rhizome: content = 0.0279%<sup>[5508]</sup>), ZHANG GUO GAN CAO *Glycyrrhiza inflata* (root and rhizome: content = 0.011%<sup>[5508]</sup>). **Ref:** 2, 660, 5508.

**7886 Formosadimer A**

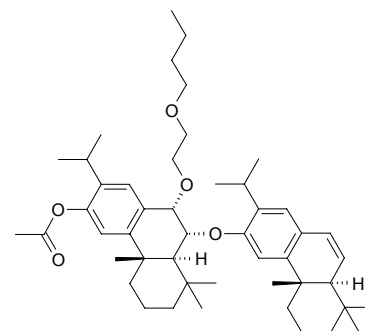
6,7-Dehydroabieta-8,11,13-trien-12-yl 7a-hydroxy-12-methoxyabieta-8,11,13-trien-6a-yl ether  $C_{41}H_{58}O_3$  (598.92). Gum,  $[\alpha]_D^{23} = +45.9^\circ$  ( $c = 0.4$ , MeOH). **Source:** TAI WAN CUI BAI *Calocedrus macrolepis* var. *formosana* (bark). **Ref:** 4531.

**7887 Formosadimer B**

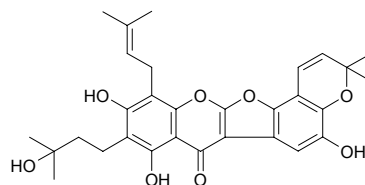
7a-Butoxyethoxy-12-hydroxyabieta-6a-yl 6,7-dehydroabieta-8,11,13-trien-12-yl ether  $C_{46}H_{68}O_4$  (685.05). Gum,  $[\alpha]_D^{25} = +85.8^\circ$  ( $c = 0.3$ , MeOH). **Source:** TAI WAN CUI BAI *Calocedrus macrolepis* var. *formosana* (bark). **Ref:** 4531.

**7888 Formosadimer C**

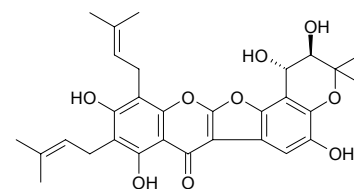
12-Acetoxy-7a-butoxyethoxyabieta-6a-yl 6,7-dehydroabieta-8,11,13-trien-12-yl ether  $C_{48}H_{70}O_5$  (727.09). Gum,  $[\alpha]_D^{25} = +37.0^\circ$  ( $c = 0.2$ , MeOH). **Source:** TAI WAN CUI BAI *Calocedrus macrolepis* var. *formosana* (bark). **Ref:** 4531.

**7889 Formosanatin A**

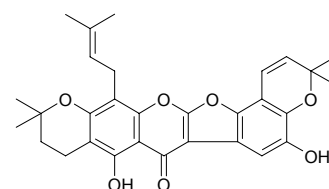
{5,7,5'-Trihydroxy-6-(3-hydroxy-3-methylbutyl)-8-(γ,γ-dimethylallyl)-[6''',6'''-dimethylpyrano-(2''',3''':4',3')] }-coumaronochromone  $C_{30}H_{32}O_8$  (520.58). Colorless needles, mp 221~223°C. **Source:** TAI WAN SHAN DOU GEN *Euchresta formosana*. **Ref:** 1977.

**7890 Formosanatin B**

{5,7,5',4''',5''''-Pentahydroxy-6,8-bis-(γ,γ-dimethylallyl)-[6''',6'''-dimethyl-4''',5''''-dihydropyrano-(2''',3''':4',3')] }-coumaronochromone  $C_{30}H_{32}O_9$  (536.58). Yellow needles, mp 243~245°C,  $[\alpha]_D^{24} = -40^\circ$  ( $c = 0.05$ , CHCl<sub>3</sub>). **Source:** TAI WAN SHAN DOU GEN *Euchresta formosana*. **Ref:** 1977.

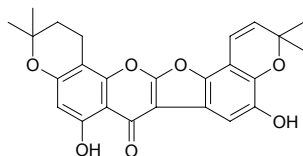
**7891 Formosanatin C**

{5,5'-Dihydroxy-8-(γ,γ-dimethylallyl)-[6'',6''-dimethyl-4'',5''-dihydropyrano-(2'',3''':7,6)]-[6''',6'''-dimethylpyrano-(2''',3''':4',3')] }-coumaronochromone  $C_{30}H_{30}O_7$  (502.57). Pale yellow Needles, mp 248~250°C. **Source:** TAI WAN SHAN DOU GEN *Euchresta formosana*. **Ref:** 1977.

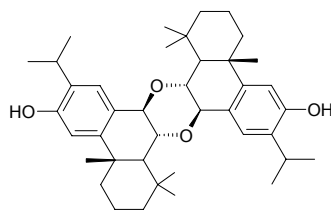


**7892 Formosanatin D**

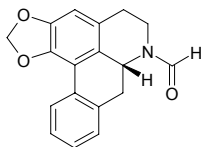
{5,5'-Dihydroxy-8-[6'',6''-dimethyl-4'',5''-dihydropyrano-(2'',3'':7,8)]-[6''',6'''-dimethylpyrano-(2''',3''':4',3')]}}-coumaronochromone C<sub>25</sub>H<sub>22</sub>O<sub>7</sub> (434.45). Yellow needles (CHCl<sub>3</sub>), mp 246~248°C. Source: TAI WAN SHAN DOU GEN *Euchresta formosana*. Ref: 1977.

**7893 Formosaninol**

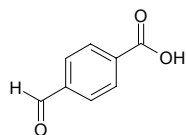
C<sub>40</sub>H<sub>56</sub>O<sub>4</sub> (600.89). Colorless solid, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +36.3° (c = 0.48, CHCl<sub>3</sub>). Source: RI BEN LIU SHAN *Cryptomeria japonica* (black heartwood). Ref: 4268.

**7894 N-Formylanonaine**

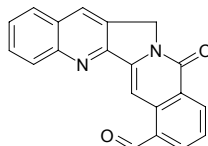
C<sub>18</sub>H<sub>15</sub>NO<sub>3</sub> (293.33). Pharm: Platelet aggregation inhibitor (rat blood): 2~5μmol/L ADP-induced, IC<sub>50</sub> = 930μmol/L, control Acetylsalicylic acid, IC<sub>50</sub> > 1000μmol/L; 2~5μg/mL collagen-induced, IC<sub>50</sub> = 6.9μmol/L, Acetylsalicylic acid, IC<sub>50</sub> = 420μmol/L; 1~4μmol/L epinephrine-induced with threshold concentration of collagen (0.8~1.0μg/mL), IC<sub>50</sub> = 0.24μmol/L, Acetylsalicylic acid, IC<sub>50</sub> = 53μmol/L; 10~40μmol/L AA-induced with threshold concentration of collagen (0.8~1.0μg/mL), IC<sub>50</sub> = 0.27μmol/L, Acetylsalicylic acid, IC<sub>50</sub> = 66μmol/L; 1~5μmol/L U46619-induced with threshold concentration of collagen (0.8~1.0μg/mL), IC<sub>50</sub> = 3.8μmol/L, Acetylsalicylic acid, IC<sub>50</sub> = 340μmol/L; 1~2μmol/L hmn U46619 in 1mmol/L acetylsalicylic acid -induced, IC<sub>50</sub> > 100μmol/L, control Pentolamine, IC<sub>50</sub> > 100μmol/L, control Yohimbine, IC<sub>50</sub> > 100μmol/L)<sup>[5381]</sup>. Source: RI BEN HOU PO *Magnolia obovata* (leaf). Ref: 5381.

**7895 p-Formyl benzoic acid**

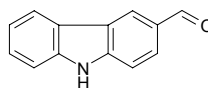
C<sub>8</sub>H<sub>6</sub>O<sub>3</sub> (150.14). Source: TAI WAN FU RONG *Hibiscus taiwanensis*. Ref: 2529.

**7896 20-Formylbenzo[6,7]indolizino[1,2-b]quinolin-11 (13H)-one**

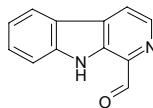
C<sub>20</sub>H<sub>12</sub>N<sub>2</sub>O<sub>2</sub> (312.33). Source: XI SHU *Camptotheca acuminata*. Ref: 4097.

**7897 3-Formylcarbazole**

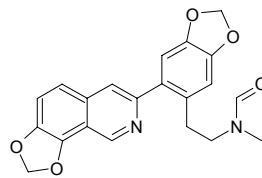
C<sub>13</sub>H<sub>9</sub>NO (195.22). Pharm: Antitubercular (MIC > 128μg/mL, control Rifampin, MIC = (0.040±0.017)μg/mL)<sup>[5072]</sup>; cytotoxic (Vero, IC<sub>50</sub> > 102μg/mL, Rifampin, IC<sub>50</sub> = 100μg/mL)<sup>[5072]</sup>; antibacterial (*Mycobacterium tuberculosis*, MIC = 100μg/mL, control Isoniazide, MIC = 0.040~0.090μg/mL, Kanamycin sulfate, MIC = 2.0~5.0μg/mL)<sup>[5367]</sup>; antifungal (*Candida albicans*, IC<sub>50</sub> = 13.6μg/mL, control Amphotericin, IC<sub>50</sub> = 0.01μg/mL)<sup>[5367]</sup>. Source: SHAN HUANG PI *Clausena excavata*, YING MAO XIAO YUN MU *Micromelum hirsutum* (stem cortex). Ref: 5072, 5367.

**7898 1-Formyl-β-carboline**

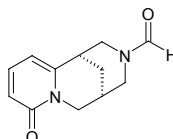
[20127-63-3] C<sub>12</sub>H<sub>8</sub>N<sub>2</sub>O (196.21). Orange crystals, mp 200~202°C. Source: KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. Ref: 12.

**7899 N-Formylecorydamine**

[In DNP] C<sub>21</sub>H<sub>18</sub>N<sub>2</sub>O<sub>5</sub> (378.39). mp 159.5~160.5°C. Source: ZI HUA YU DENG CAO *Corydalis incisa*. Ref: 6.

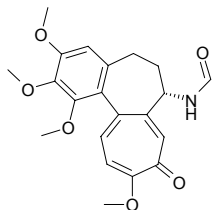
**7900 N-Formylcytisine**

[53007-06-0] C<sub>12</sub>H<sub>14</sub>N<sub>2</sub>O<sub>2</sub> (218.26). Colorless acicular crystals, mp 174~176°C, [ $\alpha$ ]<sub>D</sub> = -233° (c = 0.16, EtOH). Source: MU MA DOU *Thermopsis lanceolata*. Ref: 699.

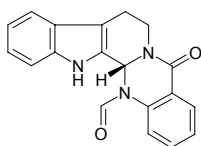


**7901 N-Formyl-N-deacetylcolchicine**

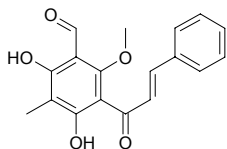
$C_{21}H_{23}NO_6$  (385.42). mp 264~266°C. Source: CAO BEI MU *Iphigenia indica*. Ref: 6.

**7902 14-Formyldihydorutaecarpine**

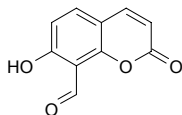
[68353-23-1]  $C_{19}H_{15}N_3O_2$  (317.35). Source: WU ZHU YU *Evodia rutaecarpa* (dried and almost ripe fruit: content scope of 7 origins = trace~0.21%, mean content = 0.04%<sup>[5508]</sup>). Ref: 1521, 5508.

**7903 3'-Formyl-4',6'-dihydroxy-2'-methoxy-5'-methylchalcone**

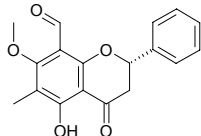
$C_{18}H_{16}O_5$  (312.33). Orange yellow needles (MeOH), mp 123~124°C. Source: SHUI RONG *Cleistocalyx operculatus* (bud). Ref: 3768.

**7904 8-Formyl-7-hydroxycoumarin**

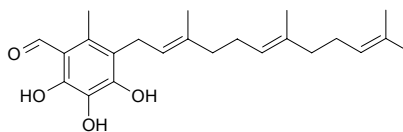
$C_{10}H_6O_4$  (190.16). Pharm: Antineoplastic (Raji cells, antitumor promotor, *in vivo*, inhibits TPA-induced EBV-EA activation, compound concentration = 500mol ratio/32 pmol TPA: EBV-EA-positive cells = (12.0±2.3)% (viability = 60%),  $\beta$ -Carotene, EBV-EA-positive cells = (34.3±1.1)% (viability >80), Curcumin, EBV-EA-positive cells = (22.8±1.8)% (viability > 80%), compound  $IC_{50}$  = 129mol ratio/32 pmol TPA,  $\beta$ -Carotene,  $IC_{50}$  = 400mol ratio/32 pmol TPA, Curcumin,  $IC_{50}$  = 341mol ratio/32 pmol TPA). Source: YOU PU TAO YPU ZA JIAO ZHONG *Citrus grandis* cv. x *Citrus paradisi*. Ref: 5048.

**7905 (2S)-8-Formyl-5-hydroxy-7-methoxy-6-methylflavanone**

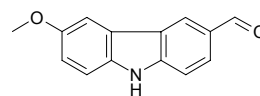
$C_{18}H_{16}O_5$  (312.33). Yellow needles (MeOH), mp 154~155°C,  $[\alpha]_D^{25} = -2.4^\circ$  ( $c = 0.01$ , MeOH). Source: SHUI RONG *Cleistocalyx operculatus* (bud). Ref: 3768.

**7906 1-Formyl-3-hydroxyneogrifolin**

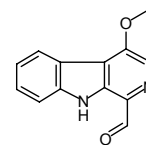
$C_{23}H_{32}O_4$  (372.51). Yellow needles, mp 83~84°C. Source: RE BEN MO GU *Albatrellus ovinus*. Ref: 2005.

**7907 3-Formyl-6-methoxycarbazole**

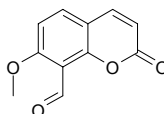
$C_{14}H_{11}NO_2$  (225.25). Pharm: Antitubercular (MIC = (42.3±0.5)µg/mL, control Rifampin, MIC = (0.040±0.017)µg/mL); cytotoxic vero,  $IC_{50}$  = 101µg/mL, Rifampin,  $IC_{50}$  = 100µg/mL<sup>[5072]</sup>. Source: YING MAO XIAO YUN MU *Micromelum hirsutum* (stem cortex). Ref: 5072.

**7908 1-Formyl-4-methoxy-β-carboline**

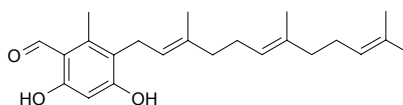
Kumujancine [92631-69-1]  $C_{13}H_{10}N_2O_2$  (226.24). Yellowish needle crystals, mp 209~210°C. Source: KU MU *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. Ref: 12.

**7909 8-Formyl-7-methoxycoumarin**

$C_{11}H_8O_4$  (204.18). Pharm: Antineoplastic (Raji cells, antitumor promotor, *in vivo*, inhibits TPA-induced EBV-EA activation, compound concentration = 500mol ratio/32 pmol TPA: EBV-EA-positive cells = (19.5±1.7)% (viability > 80%),  $\beta$ -Carotene, EBV-EA-positive cells = (34.3±1.1)% (viability >80), Curcumin, EBV-EA-positive cells = (22.8±1.8)% (viability > 80%), compound  $IC_{50}$  = 217mol ratio/32 pmol TPA,  $\beta$ -Carotene,  $IC_{50}$  = 400mol ratio/32 pmol TPA, Curcumin,  $IC_{50}$  = 341mol ratio/32 pmol TPA). Source: CHENG ZI *Citrus junos*, *Citrus rugulosa*, *Citrus sulcata*. Ref: 5048.

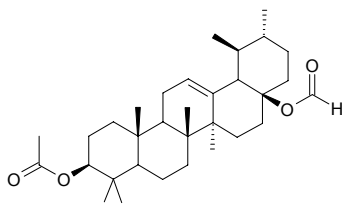
**7910 1-Formylneogrifolin**

$C_{23}H_{32}O_3$  (356.51). White plates, mp 98~102°C. Source: RE BEN MO GU *Albatrellus ovinus*. Ref: 2005.

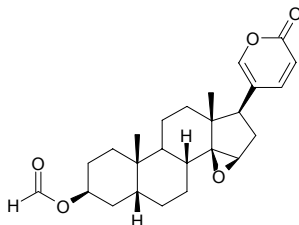


**7911 17 $\beta$ -Formyloxy-3 $\beta$ -acetyloxy-28-nor-urs-12-ene**

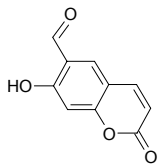
C<sub>32</sub>H<sub>50</sub>O<sub>4</sub> (498.75). Colorless needles (MeOH), mp 203~204°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +59° (*c* = 0.05, CHCl<sub>3</sub>). **Pharm:** Cytotoxic (HL-60 cells, IC<sub>50</sub> = (83±24)μmol/L). **Source:** ZHI ZHUANG E AN *Eucalyptus cladocalyx* (leaf). **Ref:** 5259.

**7912 3 $\beta$ -Formyloxyresibufogenin**

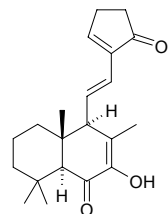
C<sub>25</sub>H<sub>32</sub>O<sub>5</sub> (412.53). Colorless solid, [ $\alpha$ ]<sub>D</sub><sup>21</sup> = +12.0° (*c* = 0.1, CH<sub>3</sub>OH). **Pharm:** Cytotoxic (*in vitro*, KB, IC<sub>50</sub> = 3.4μg/mL; HL-60, IC<sub>50</sub> = 1μg/mL; MH-60, IC<sub>50</sub> = 8.1μg/mL; BXPC3, IC<sub>50</sub> = 1.6μg/mL; MCF7, IC<sub>50</sub> = 0.6μg/mL; SF268, IC<sub>50</sub> = 0.38μg/mL; NCI-H460, IC<sub>50</sub> = 0.53μg/mL; KM20L2, IC<sub>50</sub> = 0.54μg/mL; DU145, IC<sub>50</sub> = 0.42μg/mL). **Source:** CHAN SU *Bufo bufo gargarizans*; *Bufo melanostictus*. **Ref:** 3082.

**7913 6-Formylumbelliferone**

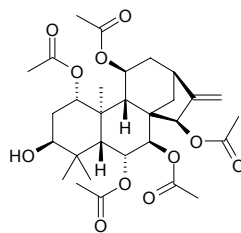
C<sub>10</sub>H<sub>6</sub>O<sub>4</sub> (190.16). **Pharm:** Antineoplastic (Raji cells, antitumor promotor, *in vivo*, inhibits TPA-induced EBV-EA activation, compound concentration = 500mol ratio/32 pmol TPA: EBV-EA-positive cells = (44.9±1.2)% (viability > 80%),  $\beta$ -Carotene, EBV-EA-positive cells = (34.3±1.1)% (viability >80), Curcumin, EBV-EA-positive cells = (22.8±1.8)% (viability > 80%), compound IC<sub>50</sub> = 449mol ratio/32 pmol TPA,  $\beta$ -Carotene, IC<sub>50</sub> = 400mol ratio/32 pmol TPA, Curcumin, IC<sub>50</sub> = 341mol ratio/32 pmol TPA). **Source:** *Citrus medica* var. *etrog*. **Ref:** 5048.

**7914 Forrestiin A**

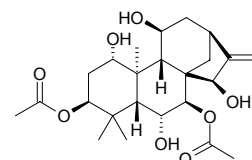
[163597-22-6] C<sub>20</sub>H<sub>26</sub>O<sub>4</sub> (330.43). Acicular crystals, [ $\alpha$ ]<sub>D</sub><sup>19</sup> = +105.6° (*c* = 0.71, chloroform). **Pharm:** Cytotoxic (KB *in vitro*, IC<sub>50</sub> = 18.96μg/mL). **Source:** YUAN BAN JIANG HUA *Hedychium forrestii*. **Ref:** 322.

**7915 Forrestin A**

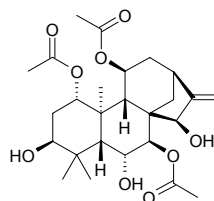
C<sub>30</sub>H<sub>42</sub>O<sub>11</sub> (578.66). mp 276~278°C, [ $\alpha$ ]<sub>D</sub> = -27.93° (*c* = 0.54, MeOH). **Source:** ZI E XIANG CHA CAI *Isodon forrestii*. **Ref:** 4067.

**7916 Forrestin B**

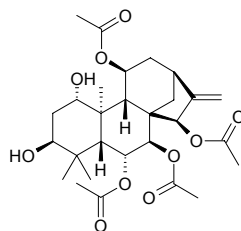
C<sub>24</sub>H<sub>36</sub>O<sub>8</sub> (452.55). mp 228~229°C. **Source:** ZI E XIANG CHA CAI *Isodon forrestii*. **Ref:** 4067.

**7917 Forrestin C**

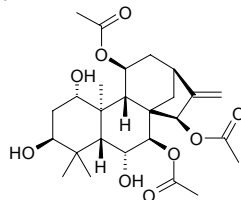
C<sub>26</sub>H<sub>38</sub>O<sub>9</sub> (494.59). mp 291~292°C, [ $\alpha$ ]<sub>D</sub> = -29.44° (*c* = 0.523, MeOH). **Source:** XIAN HUA XIANG CHA CAI *Rabdosia adenantha* (leaf: yield = 0.00073%dw), ZI E XIANG CHA CAI *Isodon forrestii*. **Ref:** 4067, 4640.

**7918 Forrestin D**

C<sub>28</sub>H<sub>40</sub>O<sub>10</sub> (536.63). mp 136~138°C, [ $\alpha$ ]<sub>D</sub> = -46.01° (*c* = 0.489, MeOH). **Source:** ZI E XIANG CHA CAI *Isodon forrestii*. **Ref:** 4067.

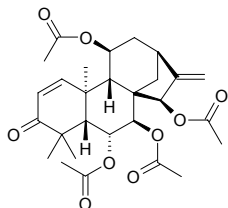
**7919 Forrestin E**

C<sub>26</sub>H<sub>38</sub>O<sub>9</sub> (494.59). mp 251~254°C. **Source:** ZI E XIANG CHA CAI *Isodon forrestii*. **Ref:** 4067.

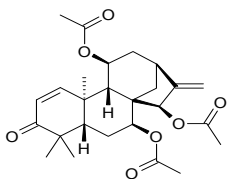


**7920 Forrestin F**

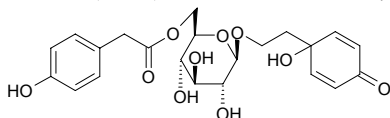
$C_{28}H_{36}O_9$  (516.59). mp 255~256°C,  $[\alpha]_D = -112.2^\circ$  ( $c = 0.55$ , MeOH). Source: ZI E XIANG CHA CAI *Isodon forrestii*. Ref: 4067.

**7921 Forrestin G**

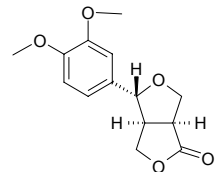
$C_{26}H_{34}O_7$  (458.56). mp 204~206°C,  $[\alpha]_D = -69.88^\circ$  ( $c = 0.508$ , MeOH). Source: ZI E XIANG CHA CAI *Isodon forrestii*. Ref: 4067.

**7922 Forsythenside A**

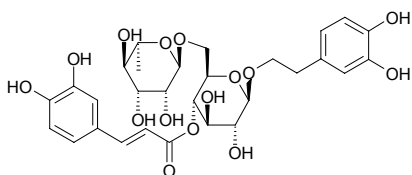
$C_{22}H_{26}O_{10}$  (450.45). Source: LIAN QIAO *Forsythia suspensa*. Ref: 8.

**7923 Forsythenside B**

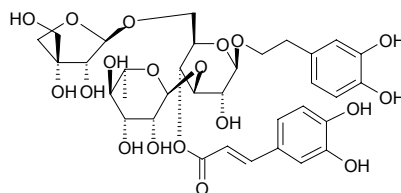
$C_{14}H_{16}O_5$  (264.28). Source: LIAN QIAO *Forsythia suspensa*. Ref: 8.

**7924 Forsythoside A**

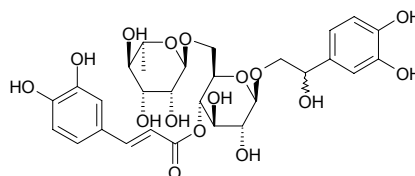
Forsythiaside [79916-77-1]  $C_{29}H_{36}O_{15}$  (624.60). Pale-yellowish powder + 2H<sub>2</sub>O, mp 144~150°C,  $[\alpha]_D^{20} = -18.6^\circ$  (EtOH). Pharm: Immunomodulator (selectively inhibits formation of 5-HETE and leukotriene LTB<sub>4</sub>, which are products of 5-lipoxygenase, IC<sub>50</sub> = 1.92 μmol/L and 1.01 μmol/L respectively); 5-HETE production inhibitor (IC<sub>50</sub> = 2.50 μmol/L); antiallergic; antiasthmatic; cAMP phosphodiesterase inhibitor (*in vitro*, IC<sub>50</sub> = 110 μmol/L); leucine aminopeptidase inhibitor (competitive, K<sub>i</sub> = 8.0 μmol/L); antibacterial (strong action for 11 pathogenic bacteria, including plant pathogenic bacteria); free radical scavenger; 5-lipoxygenase inhibitor (rat peritoneum cells and hmn leucocyte *in vitro*). Source: CHAO XIAN LIAN QIAO *Forsythia koreana*, GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], LIAN QIAO *Forsythia suspensa* (green fruit: mean content = 1.31%, ripe fruit: mean content = 0.64%<sup>[5508]</sup>). Ref: 2, 47, 658, 1639, 1640, 1641, 1642, 5508.

**7925 Forsythoside B**

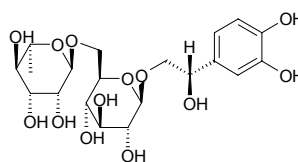
$C_{34}H_{44}O_{19}$  (756.72). Colorless amorphous powder,  $[\alpha]_D^{20} = -66^\circ$  ( $c = 0.1$ , MeOH). Pharm: Antioxidant (*in vitro* inhibits LDL peroxidation, Cu<sup>2+</sup>-induced and AAPH-induced)<sup>[5370]</sup>; inhibits minimally oxidized LDL-induced cellular toxicity (cultured bovine aortic endothelial cells, BAEC)<sup>[5370]</sup>; antioxidant (DPPH free radical scavenger, IC<sub>50</sub> = 113 μmol/L, control Ascorbic acid IC<sub>50</sub> = 129 μmol/L)<sup>[5449]</sup>; antitrypanosomal (*Trypanosoma b. rhodesiense*, IC<sub>50</sub> = 5.8 μg/mL, control Melarsoprol, IC<sub>50</sub> = 0.00098 μg/mL; *Trypanosoma cruzi*, IC<sub>50</sub> > 90 μg/mL, control Benznidazole, IC<sub>50</sub> = 1.06 μg/mL)<sup>[5009]</sup>; antileishmanial (*Leishmania donovani*, IC<sub>50</sub> = 11.4 μg/mL, control Miltefosine, IC<sub>50</sub> = 0.102 μg/mL)<sup>[5009]</sup>; antimalarial (*Plasmodium falciparum*, IC<sub>50</sub> > 50 μg/mL, control Artemisinin, IC<sub>50</sub> = 0.0022 μg/mL)<sup>[5009]</sup>; cytotoxic (L6, IC<sub>50</sub> = 70.1 μg/mL, control Podophyllotoxin, IC<sub>50</sub> = 0.008 μg/mL)<sup>[5009]</sup>. Source: LIAN QIAO *Forsythia suspensa*, OU XIA ZHI CAO *Marrubium vulgare* (aerial parts), ZI HUA GUAN MAO RUI HUA *Verbascum wiedemannianum*, ZONG KUI CAO SU *Phlomis brunneogaleata*. Ref: 2, 5009, 5370, 5449.

**7926 Forsythoside C**

Suspensaside  $C_{29}H_{36}O_{16}$  (640.60). Powder, mp 177~181°C,  $[\alpha]_D^{18} = -18.7^\circ$  ( $c = 1.7$ , MeOH). Pharm: Antibacterial; free radical scavenger; inhibits metabolism of arachidonic acid (in leucocytes); 5-lipoxygenase inhibitor (rat, peritoneum cells); cAMP phosphodiesterase inhibitor; used in treatment of asthma and allergic disease. Source: LIAN QIAO *Forsythia suspensa*. Ref: 47, 658.

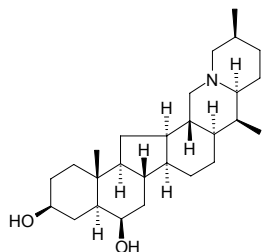
**7927 Forsythoside D**

Decaffeoyl forsythoside C [84233-74-9]  $C_{20}H_{30}O_{13}$  (478.45).  $[\alpha]_D = -30.5^\circ$  (methanol). Pharm: Antibacterial (*Staphylococcus aureus*, MIC ≤ 2 mmol/L). Source: LIAN QIAO *Forsythia suspensa*. Ref: 1037.

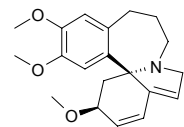


**7928 Forticine**

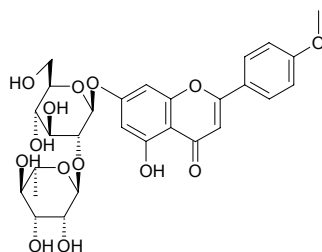
(20S,22S,25S)-5 $\alpha$ -Cevanine-3 $\beta$ ,6 $\beta$ -diol C<sub>27</sub>H<sub>45</sub>NO<sub>2</sub> (415.67). Colorless needle, mp 221~223°C (dec), [ $\alpha$ ]<sub>D</sub><sup>23</sup> = -52° (c = 0.5, CHCl<sub>3</sub>). **Pharm:** AChE inhibitor (IC<sub>50</sub> > 500  $\mu$ mol/L, control Eserine, IC<sub>50</sub> = (0.41 $\pm$ 0.01)  $\mu$ mol/L); BChE inhibitor (IC<sub>50</sub> = (100.5 $\pm$ 0.5)  $\mu$ mol/L, control Eserine, IC<sub>50</sub> = (0.86 $\pm$ 0.01)  $\mu$ mol/L). **Source:** XI BEI MU *Fritillaria imperialis* (bulb). **Ref:** 4217.

**7929 Fortuneine**

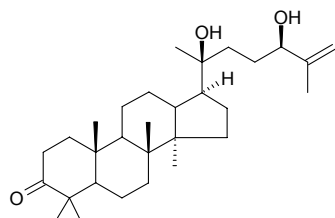
[87340-25-9] C<sub>20</sub>H<sub>25</sub>NO<sub>3</sub> (327.43). **Source:** SAN JIAN SHAN *Cephalotaxus fortunei*. **Ref:** 2.

**7930 Fortunellin**

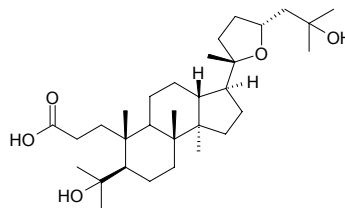
[20633-93-6] C<sub>28</sub>H<sub>32</sub>O<sub>14</sub> (592.56). mp 214~216°C. **Source:** JIN JU *Fortunella margarita*, JIN DAN *Fortunella crassifolia*. **Ref:** 6, 660.

**7931 Fouquierone**

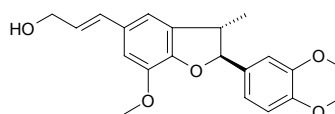
Dammar-25-ene-20,24-diol-3-one C<sub>30</sub>H<sub>50</sub>O<sub>3</sub> (458.73). White powder, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +58° (c = 0.16, CHCl<sub>3</sub>). **Source:** YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*] (stem cortex). **Ref:** 4111.

**7932 Foveolin B**

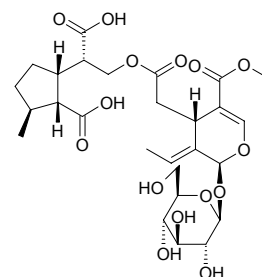
[220358-68-9] C<sub>31</sub>H<sub>54</sub>O<sub>5</sub> (506.77). **Source:** DA YE SHU LAN *Aglaia elliptifolia* (leaf: yield = 0.00020%dw), FENG CHAO MI ZI LAN *Aglaia foveolata*. **Ref:** 1521, 3031.

**7933 Fragransol C**

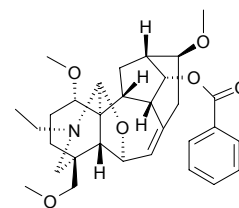
[114926-96-4] C<sub>21</sub>H<sub>24</sub>O<sub>3</sub> (356.42). **Source:** ROU DOU KOU *Myristica fragrans*. **Ref:** 909, 1521.

**7934 Frameroside**

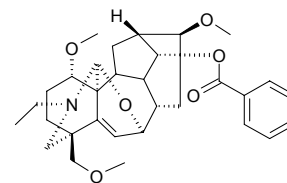
C<sub>27</sub>H<sub>38</sub>O<sub>15</sub> (602.59). Colorless amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>27</sup> = -134° (c = 1.09, MeOH). **Source:** MEI GUO BAI CEN *Fraxinus americana* (leaf). **Ref:** 5091.

**7935 Franchetine**

C<sub>31</sub>H<sub>41</sub>NO<sub>6</sub> (523.68). **Source:** ZHUA KUI GUA YE WU TOU *Aconitum hemsleyanum* var. *leueanthus* (root: yield = 0.0028%dw). **Ref:** 4678.

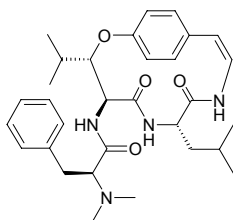
**7936 Franchitine**

[88661-42-1] C<sub>31</sub>H<sub>41</sub>NO<sub>6</sub> (523.68). White amorphous powder. **Source:** GONG BU WU TOU *Aconitum kongboense*. **Ref:** 2211, 1521.

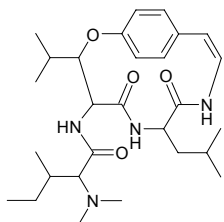


**7937 Frangufoline**

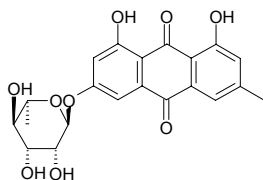
Sanjoinine A [19526-09-1] C<sub>31</sub>H<sub>42</sub>N<sub>4</sub>O<sub>4</sub> (534.70). mp 244°C. Source: MIAN ZAO *Ziziphus mauritiana*. Ref: 6.

**7938 Frangulanine**

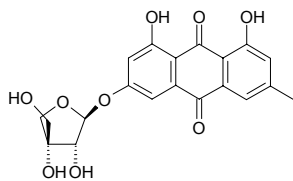
[25350-22-5] C<sub>28</sub>H<sub>44</sub>N<sub>4</sub>O<sub>4</sub> (500.69). mp 275~277°C. Pharm: Laxative. Source: OU SHU LI *Rhamnus frangula* [Syn. *Frangula alnus*], ZHI JU GEN *Hovenia dulcis*. Ref: 6, 658, 660.

**7939 Frangulin A**

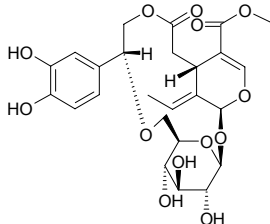
[521-62-0] C<sub>21</sub>H<sub>20</sub>O<sub>9</sub> (416.39). Pharm: Laxative. Source: YAO SHU LI *Rhamnus cathartica*, OU SHU LI *Rhamnus frangula* [Syn. *Frangula alnus*]. Ref: 658.

**7940 Frangulin B**

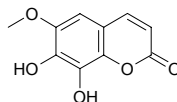
[14101-04-3] C<sub>20</sub>H<sub>18</sub>O<sub>9</sub> (402.36). Pharm: Laxative. Source: YAO SHU LI *Rhamnus cathartica*, OU SHU LI *Rhamnus frangula* [Syn. *Frangula alnus*]. Ref: 658.

**7941 Fraxamoside**

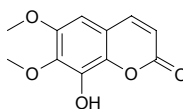
C<sub>25</sub>H<sub>30</sub>O<sub>13</sub> (538.51). Colorless amorphous powder,  $[\alpha]_D^{22} = -137^\circ$  ( $c = 0.12$ , MeOH). Source: MEI GUO BAI CEN *Fraxinus americana* (leaf). Ref: 5091.

**7942 Fraxetin**

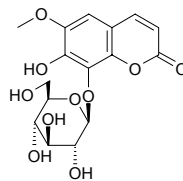
[574-84-5] C<sub>10</sub>H<sub>8</sub>O<sub>5</sub> (208.17). mp 228°C. Pharm: Antibacterial (*Bacillus dysenteriae*, used in treatment of infant bacillary dysentery). Source: MAO GUO QI *Acer nikoense* (stem cortex), XIAO YE CEN *Fraxinus bungeana*, HUA BAI LA SHU *Fraxinus ornus*, XI MA BAI LA SHU *Fraxinus floribunda*, RI BEN QI YE SHU *Aesculus turbinata*, OU ZHOU QI YE SHU *Aesculus hippocastanum*, BAI LA SHU *Fraxinus chinensis*. Ref: 2, 658, 660, 4304.

**7943 Fraxidin**

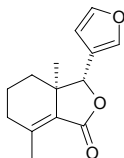
C<sub>11</sub>H<sub>10</sub>O<sub>5</sub> (222.20). Source: *Eurycoma* sp. Ref: 4556.

**7944 Fraxin**

Fraxoside; Paviin; Fraxetin-8-glucoside [524-30-1] C<sub>16</sub>H<sub>18</sub>O<sub>10</sub> (370.32). mp 205°C, easily soluble in hot water, hot EtOH, slightly soluble in cold water, cold ether, insoluble in ether<sup>[5507]</sup>. Pharm: Antibacterial; antitussive (dispels phlegm); diuretic;  $\beta$ -hexosaminidase inhibitor inactive (RBL-2H3 cells, inhibits release of  $\beta$ -hexosaminidase, 100 $\mu$ mol/L, InRt =  $(-7.7 \pm 4.4)\%$ )<sup>[4304]</sup>. Source: HUA BAI LA SHU *Fraxinus ornus*, JIAN YE CEN *Fraxinus szaboana* [Syn. *Fraxinus chinensis* var. *acuminata*], LA MEI HUA *Chimonanthus fragrans* [Syn. *Chimonanthus praecox*], LIU YE CEN *Fraxinus stylosa*, MAO GUO QI *Acer nikoense* (stem cortex), OU ZHOU BAI LA SHU *Fraxinus excelsior*<sup>[5507]</sup>, OU ZHOU QI YE SHU *Aesculus hippocastanum*, QIN LING BAI LA SHU *Fraxinus paxiana*<sup>[5507]</sup>, TU ER QI SI TAN BAI LA SHU *Fraxinus potamophila*, XIAO YE CEN *Fraxinus bungeana*, *Symphoricarpos* sp., *Campanula* sp. Ref: 2, 658, 660, 4304, 5507.

**7945 Fraxinellone**

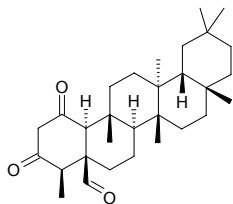
[28808-62-0] C<sub>14</sub>H<sub>16</sub>O<sub>3</sub> (232.28). mp 108~110°C; 120°C. Pharm: Anti-fertility agent (rat, orl, 75mg/(kg·d), pregnant rate = 6/10); platelet aggregation inhibitor; antihypertensive (relaxes aortal contraction induced by K<sup>+</sup> and Ca<sup>2+</sup>, ID<sub>50</sub>  $\approx$  25 $\mu$ mol/L); coronary vasodilator (calcium selective antagonist). Source: BAI XIAN PI *Dictamnus dasycarpus*, KU LIAN PI *Melia azedarach*. Ref: 6, 1644, 1645, 1646.



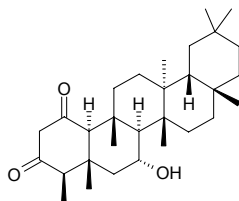


**7946 Friedelan-1,3-dion-24-al**

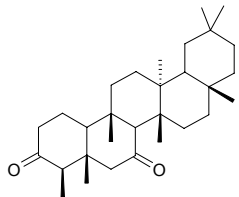
$C_{30}H_{46}O_3$  (454.70). Source: SUO LA MU *Salacia prinoides* [Syn. *Salacia chinensis*]. Ref: 6.

**7947 Friedelan-1,3-dion-7 $\alpha$ -ol**

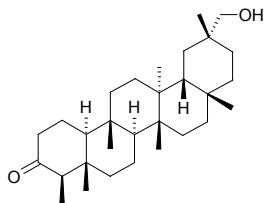
$C_{30}H_{48}O_3$  (456.72). Source: SUO LA MU *Salacia prinoides* [Syn. *Salacia chinensis*]. Ref: 6.

**7948 Friedelane-3,7-dione**

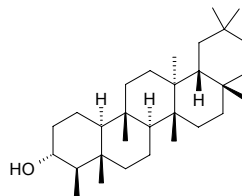
$C_{30}H_{48}O_2$  (440.72). White powder, mp 286°C. Source: *Drypetes molunduana* (stem). Ref: 3989.

**7949 Friedelane-3-one-29-ol**

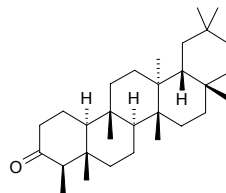
$C_{30}H_{50}O_2$  (442.73). Pharm: DPPH scavenger inactive (for 40  $\mu$ mol/L DPPH radical,  $SC_{50} > 40 \mu$ mol/L)<sup>[4378]</sup>. Source: SUO LA MU *Salacia prinoides* [Syn. *Salacia chinensis*] (stem). Ref: 4378.

**7950 Friedelan-3 $\alpha$ -ol**

[5085-72-3]  $C_{30}H_{52}O$  (428.75). mp 302~304°C. Pharm: Antifungal; anti-inflammatory. Source: TIAO JING CAO *Euonymus japonicus*, DONG FENG CAI *Doellingeria scaber* [Syn. *Aster scaber*], HE AN ZE LAN *Eupatorium riparium*, HUO YANG LE *Euphorbia antiquorum*, LIANG YE RONG *Ficus nitida*, MEI LI YIN BEI TENG *Argyrea speciosa*, QIU FENG MU *Bischofia javanica* [Syn. *Bischofia trifoliata*], TIAN LAN ZE LAN *Eupatorium azureum*, XUE TONG *Macaranga tanarius*, YANG YE YIN BEI TENG *Argyrea populifolia*. Ref: 6, 658.

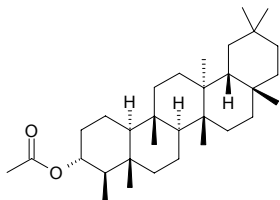
**7951 Friedelan-3-one**

Friedelin [559-74-0]  $C_{30}H_{50}O$  (426.73). Colorless thin acicular crystals, mp 257~264°C,  $[\alpha]_D^{28} = -14.1^\circ$  ( $c = 0.07$ ,  $CHCl_3$ ). Pharm: Anti-inflammatory; NFAT transcription factor inhibitor inactive ( $IC_{50} > 50 \mu$ mol/L, positive control Cyclosporin A,  $IC_{50} = (0.31 \pm 0.01) \mu$ mol/L)<sup>[4511]</sup>; cytotoxic ( $P_{388}$ ,  $ED_{50} = 14.61 \mu$ g/mL, control Mithramycin,  $ED_{50} = 0.58 \mu$ g/mL; A549,  $ED_{50} = 30.72 \mu$ g/mL, Mithramycin,  $ED_{50} = 0.073 \mu$ g/mL; HT29,  $ED_{50} = 17.30 \mu$ g/mL, Mithramycin,  $ED_{50} = 0.076 \mu$ g/mL)<sup>[5421]</sup>. Source: BIAN TAO *Mangifera persiciformis*, CHAO XIAN LUO WAN *Gymnaster koraiensis* (leaf), CHUAN DANG SHEN *Codonopsis tangshen*, CHUAN LI GUO *Pyrus pashia*, DA FEI YANG CAO *Euphorbia hirta*, DANG SHEN *Codonopsis pilosula* (dried root: mean content = 0.0095%<sup>[5508]</sup>), HAI TANG GUO *Calophyllum inophyllum* (root cortex and nut), HEI XIAN TIAO TENG HUANG *Garcinia nigrolineata* (leaf)<sup>[4735]</sup>, HUANG HUA HAO *Artemisia annua*, HUI BAO HAO *Artemisia roxburgiana*, HUO XIANG *Agastache rugosus*, KUAI JING MA LI JIN *Asclepias tuberosa*, KUO JIA HE HUAN *Albizia lebbek*, LONG XU CAO *Poa sphondylodes*, LU BIAN QING *Clerodendron cyrtophyllum*, MANG GUO *Mangifera indica*, MAO LIAN HAO *Artemisia vestita*, MENG GU LI *Quercus mongolica*, MO ZHI JIAO GU CUI *Casearia membranacea* (stem), NAN ZHU ZI *Vaccinium bracteatum*, QIU HUA DANG SHEN *Codonopsis subglobosa*, QUE MEI TENG *Sageretia theezans* [Syn. *Sageretia thea*], QUN DAI CAI *Undaria pinnatifida*, RI BEN HUANG BAI *Phellodendron japonicum* (leaf), SHI LIU PI *Punica granatum*, SU HUA DANG SHEN *Codonopsis pilosula* var. *modesta* [Syn. *Codonopsis modesta*] (dried root: mean content = 0.0162%<sup>[5508]</sup>), TAI BAI HUA *Cladonia stellaris* [Syn. *Cladonia alpestris*], TUN XING GUO *Pygeum topengii*, XIAO SHE ZI WAN *Aster albescens*, YA ZHI CAO *Commelina communis*, ZI WAN *Aster tataricus*, occurs in many plants. Ref: 2, 447, 474, 503, 505, 515, 550, 572, 600, 611, 658, 660, 3866, 4502, 4511, 4735, 5421, 5501, 5508.

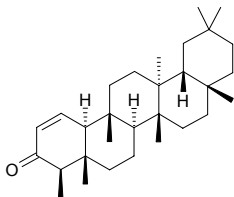


**7952 Friedelan-3 $\alpha$ -yl acetate**

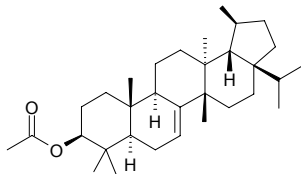
$C_{32}H_{54}O_2$  (470.79). mp 317~319°C. Source: QIU FENG MU *Bischofia javanica* [Syn. *Bischofia trifoliata*]. Ref: 6.

**7953 1-Friedelen-3-one**

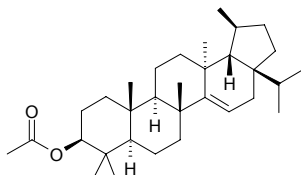
$C_{30}H_{48}O$  (424.72). mp 262~263°C. Source: SUO LAMU *Salacia prinoides* [Syn. *Salacia chinensis*]. Ref: 6.

**7954 D:C-Friedomadeir-7-en-3 $\beta$ -yl acetate**

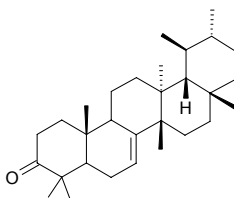
$C_{32}H_{52}O_2$  (468.77). White granular crystals, mp 213~214°C,  $[\alpha]_D = -61.5^\circ$  ( $c = 0.75$ ,  $CHCl_3$ ). Source: YOU AN DI JIN *Euphorbia stygiana*. Ref: 3383.

**7955 D-Friedomadeir-14-en-3 $\beta$ -yl acetate**

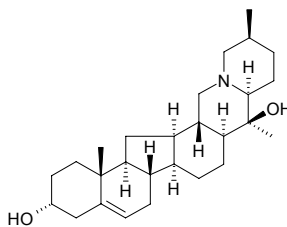
$C_{32}H_{52}O_2$  (468.77). White powder, mp 220~221°C,  $[\alpha]_D = +23.4^\circ$  ( $c = 0.6$ ,  $CHCl_3$ ). Source: YOU AN DI JIN *Euphorbia stygiana*. Ref: 3383.

**7956 D:C-Friedo-urs-7-en-3-one**

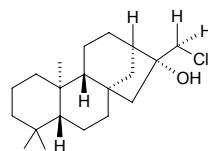
$C_{30}H_{48}O$  (424.72). Colorless needles, mp 212~214°C,  $[\alpha]_D^{25} = -4.1^\circ$  ( $c = 0.4$ ,  $CHCl_3$ ). Pharm: Antimutagenic (*E. coli* PQ37, antigenotoxicity test, for mutagen MNNG shows 20% reduction of induction factor, for mutagen NQO, shows 25% reduction of induction factor)<sup>[4459]</sup>. Source: ZAO JIA CI *Gleditsia sinensis* [Syn. *Gleditsia horrida*] (thorn). Ref: 4459.

**7957 Fritillarizine**

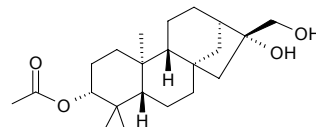
[76733-86-3]  $C_{27}H_{43}NO_2$  (413.65). mp 141.5~143.0°C,  $[\alpha]_D = -18.6^\circ$  ( $c = 1.0$ ,  $CHCl_3$ ). Source: ZHE BEI MU *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*]. Ref: 2201.

**7958 Fritillaziebinol**

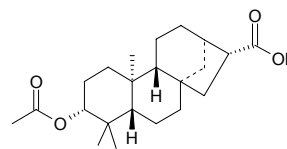
*ent*-Kauran-16 $\beta$ -hydroxy-17-chloride  $C_{20}H_{23}ClO$  (324.94). Colorless square crystals, mp 153~154°C. Source: ZI HUA E BEI BEI MU *Fritillaria ebeiensis* var. *purpurea*. Ref: 833.

**7959 Fritillebeinol**

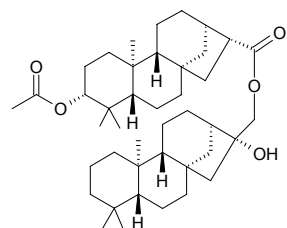
*ent*-3 $\beta$ -Acetoxy-kauran-16 $\beta$ ,17-diol  $C_{22}H_{36}O_4$  (364.53). Colorless acicular crystals, mp 163~164°C. Source: E BEI BEI MU *Fritillaria ebeiensis*. Ref: 827.

**7960 Fritillebic acid**

$C_{22}H_{34}O_4$  (362.50). mp 235~237°C,  $[\alpha]_D^{28} = -60.6^\circ$  ( $c = 1.0$ ,  $CHCl_3$ ). Source: HU BEI BEI MU *Fritillaria hupehensis*. Ref: 2182.

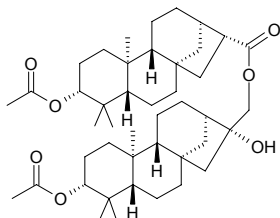
**7961 Fritillebin A**

$C_{42}H_{66}O_5$  (650.99). mp 237~239°C,  $[\alpha]_D^{28} = -61.7^\circ$  ( $c = 1.3$ ,  $CHCl_3$ ). Source: E BEI BEI MU *Fritillaria ebeiensis*. Ref: 578, 2182.

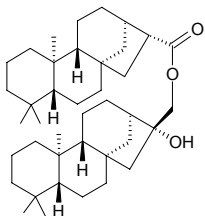


**7962 Fritillebin B**

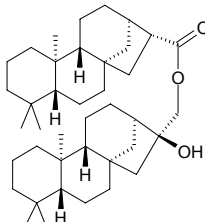
$C_{44}H_{68}O_7$  (709.03). mp 243~245°C,  $[\alpha]_D^{28} = -61.7^\circ$  ( $c = 0.4$ ,  $CHCl_3$ ). Source: E BEI BEI MU *Fritillaria ebeiensis*. Ref: 578, 2182.

**7963 Fritillebin C**

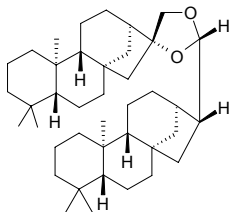
$C_{40}H_{64}O_3$  (592.95). mp 210~212°C,  $[\alpha]_D^{25} = -95.1^\circ$  ( $c = 0.25$ ,  $CHCl_3$ ). Source: E BEI BEI MU *Fritillaria ebeiensis*. Ref: 584, 2182.

**7964 Fritillebin D**

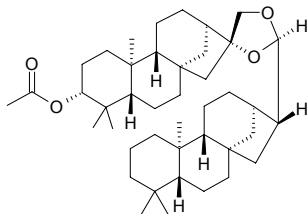
$C_{40}H_{64}O_3$  (592.95). mp 231~233°C,  $[\alpha]_D^{25} = -86.4^\circ$  ( $c = 0.16$ ,  $CHCl_3$ ). Source: E BEI BEI MU *Fritillaria ebeiensis*. Ref: 584, 2182.

**7965 Fritillebinide A**

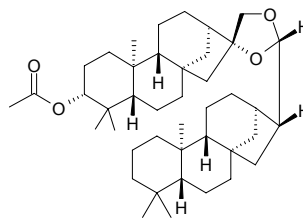
*ent*-Kauran-16 $\beta$ ,17-acetal *ent*-16 $\beta$ -kauran-17(*S*)-aldehyde  $C_{40}H_{64}O_2$  (576.95). Source: ZI HUA E BEI BEI MU *Fritillaria ebeiensis* var. *purpurea*. Ref: 682, 906.

**7966 Fritillebinide B**

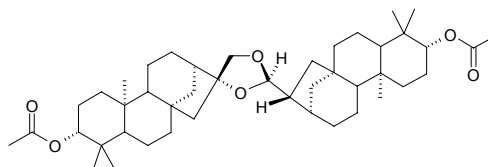
$C_{42}H_{66}O_4$  (634.99). Source: ZI HUA E BEI BEI MU *Fritillaria ebeiensis* var. *purpurea*. Ref: 906.

**7967 Fritillebinide C**

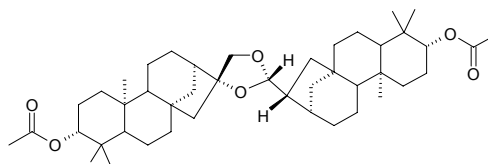
$C_{42}H_{66}O_4$  (634.99). Source: E BEI BEI MU *Fritillaria ebeiensis*. Ref: 906.

**7968 Fritillebinide D**

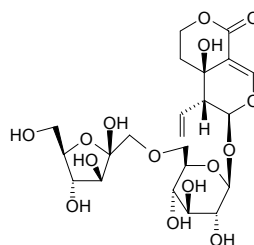
$C_{44}H_{68}O_6$  (693.03). Colorless needles (EtOAc), mp 247~249°C. Source: ZI HUA E BEI BEI MU *Fritillaria ebeiensis* var. *purpurea*. Ref: 4806.

**7969 Fritillebinide E**

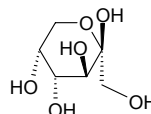
$C_{44}H_{68}O_6$  (693.03). Colorless needles (EtOAc), mp 247~248°C. Source: ZI HUA E BEI BEI MU *Fritillaria ebeiensis* var. *purpurea*. Ref: 4806.

**7970 6'-O- $\beta$ -D-Fructofuranosylswertiamarin**

$C_{22}H_{32}O_{15}$  (536.49). Amorphous powder,  $[\alpha]_D^{25} = -80.2^\circ$  ( $c = 0.08$ , MeOH). Source: RI BEN ZHANG YA CAI *Swertia japonica*. Ref: 2573.

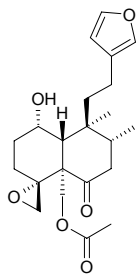
**7971 Fructose**

$C_6H_{12}O_6$  (180.16). mp *L* (+) 101~103°C, *D*(-) 102~104°C (dec). Pharm: Provides energy and restores body fluid (for patients with diabetes and hepatitis). Source: REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], DANG SHEN *Codonopsis pilosula*, YAO YONG PU GONG YING *Taraxacum officinale*, XI SHU *Camptotheca acuminata*. Ref: 2, 660, 4097.

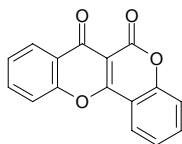


**7972 Fruticolone**

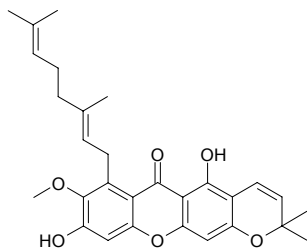
$C_{22}H_{30}O_6$  (390.48). **Pharm:** Insect antifeedant (fifth instar larvae of *Spodoptera littoralis*, dual-choice feeding assays, dose =  $10\mu\text{g}/\text{cm}^2$ ,  $\text{FR}_{50} = 0.69 \pm 0.11$ ). **Source:** GUAN CONG XIANG KE KE *Teucrium fruticans*. **Ref:** 3761.

**7973 Frutinone A**

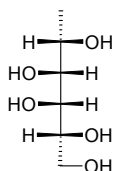
[38210-27-4]  $C_{16}H_8O_4$  (264.24). **Pharm:** Antifungal (*Cladosporium cucumerinum*). **Source:** GUAN MU YUAN ZHI *Polygala fruticosa*. **Ref:** 658.

**7974 Fucaxanthone A**

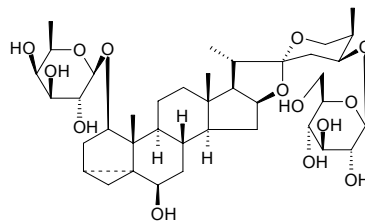
$C_{29}H_{32}O_6$  (476.57). **Pharm:** Antioxidant (DPPH scavenger,  $\text{IC}_{50} > 200\mu\text{mol}/\text{L}$ , control BHT,  $\text{IC}_{50} = 5.10\mu\text{g}/\text{mL}$ ; crude latex of *Garcinia cowa*,  $\text{IC}_{50} = 13.20\mu\text{g}/\text{mL}$ ). **Source:** YUN NAN SHAN ZHU ZI *Garcinia cowa* (latex). **Ref:** 5281.

**7975 L-Fucitol**

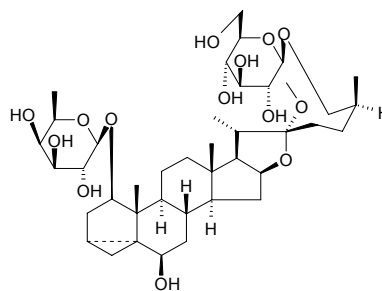
$C_6H_{14}O_5$  (166.18). Amorphous powder,  $[\alpha]_D^{21} = -5^\circ$  ( $c = 0.1$ ,  $\text{H}_2\text{O}$ ). **Source:** GE LU ZI *Carum carvi*. **Ref:** 1926.

**7976 (24S,25R)-1β-[(β-D-Fucopyranosyl)oxy]-6β-hydroxy-3α,5α-cyclospirostan-24-yl β-D-glucopyranoside**

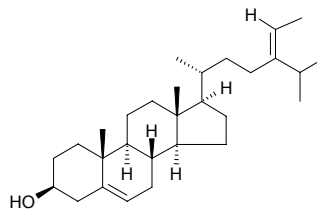
$C_{39}H_{62}O_{14}$  (754.92). Amorphous solid,  $[\alpha]_D^{26} = -90.0^\circ$  ( $c = 0.10$ , MeOH). **Source:** DUO ZHI LONG XUE SHU *Dracaena surculosa* (whole herb). **Ref:** 4216.

**7977 (25S)-1β-[(β-D-Fucopyranosyl)oxy]-6β-hydroxy-22a-methoxy-3α,5α-cyclofurostan-26-yl β-D-glucopyranoside**

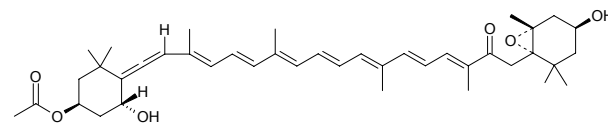
$C_{40}H_{66}O_{14}$  (770.96). Amorphous solid,  $[\alpha]_D^{26} = -56.0^\circ$  ( $c = 0.10$ , MeOH). **Source:** DUO ZHI LONG XUE SHU *Dracaena surculosa* (whole herb). **Ref:** 4216.

**7978 Fucosterol**

Stigmasta-5,24(28)*E*-dien-3-ol [17605-67-3]  $C_{29}H_{48}O$  (412.71). mp  $124^\circ\text{C}$ . **Pharm:** Antihypercholesterolemic (reduces the level of cholesterol in serum); antithrombotic; ACE inhibitor (endothelial cells, inhibits synthesis of glucocorticoid receptor). **Source:** QUN DAI CAI *Undaria pinnatifida*, SHUI LONG GU *Polypodium niponicum*, YE ZI YOU *Cocos nucifera*. **Ref:** 6, 660, 1601, 1602, 1603.

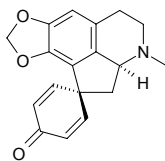
**7979 Fucoxanthin**

[3351-86-8]  $C_{41}H_{56}O_6$  (644.90). **Pharm:** Antineoplastic (mus, inhibits occurrence of cutaneous carcinoma and duodenum carcinoma). **Source:** FAN QIE *Lycopersicon esculentum*. **Ref:** 1521, 1582.

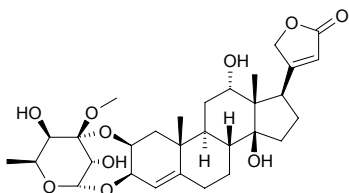


**7980 Fugapavine**

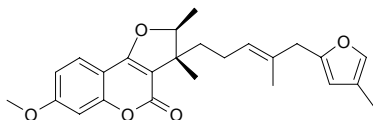
Mecambrine [1093-07-8] C<sub>18</sub>H<sub>17</sub>NO<sub>3</sub> (295.34). **Pharm:** Eclamptogenic (high dose); increases blood pressure (animal model); slows heart rate (animal model); respiratory stimulant (animal model); LD<sub>50</sub> (mus) = 4.1 mg/kg. **Source:** CHANG GUO YING SU *Papaver dubium*, WEI ER SHI LV RONG HAO *Meconopsis cambrica*, YI XIAN YING SU *Papaver fugax*. **Ref:** 658.

**7981 Fugaxin**

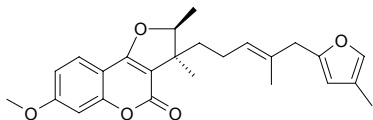
12 $\alpha$ ,14 $\beta$ -Dihydroxy-2 $\alpha$ ,3 $\beta$ -(tetrahydro-3',5'-dihydroxy-4'-methoxy-6'-methyl-2H-pyran-2',4'-diylbisoxo)-card-4,20-dienolide C<sub>30</sub>H<sub>42</sub>O<sub>10</sub> (562.66). Whitish amorphous. **Source:** YI XIAN HAI CONG *Urginea fugax* (bulb). **Ref:** 3871.

**7982 Fukanefuromarin E**

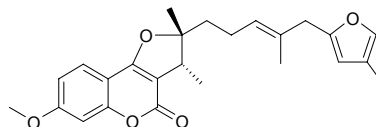
2,3-Dihydro-7-methoxy-2S\*,3R\*-dimethyl-3-[4-methyl-5-(4-methyl-2-furyl)-3(E)-pentenyl]-furo[3,2-c]coumarin C<sub>25</sub>H<sub>28</sub>O<sub>5</sub> (408.50). Colorless oil, [ $\alpha$ ]<sub>D</sub><sup>23</sup> = -2.0° (c = 0.36, MeOH). **Pharm:** NO production inhibitor (macrophage-like cell line RAW264.7 activated by LPS/IFN- $\gamma$ , IC<sub>50</sub> = (29.0 $\pm$ 1.0) $\mu$ mol/L); inhibits the inducible nitric oxide synthase (iNOS) gene expression (LPS/IFN- $\gamma$  treatment increased the level of iNOS mRNA expression, and the compound inhibits this increase, dose-dependent manner); cytotoxic inactive (MTT assay, 3~100 $\mu$ mol/L, did not demonstrate any significant cytotoxicity upon LPS/IFN- $\gamma$  treatment for 24h.). **Source:** FU KANG A WEI GEN *Ferula fukanensis*. **Ref:** 2574.

**7983 Fukanefuromarin F**

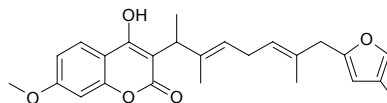
2,3-Dihydro-7-methoxy-2R\*,3R\*-dimethyl-3-[4-methyl-5-(4-methyl-2-furyl)-3(E)-pentenyl]-furo[3,2-c]coumarin C<sub>25</sub>H<sub>28</sub>O<sub>5</sub> (408.50). Colorless oil, [ $\alpha$ ]<sub>D</sub><sup>23</sup> = +41.7° (c = 0.14, MeOH). **Pharm:** NO production inhibitor (macrophage-like cell line RAW264.7 activated by LPS/IFN- $\gamma$ , IC<sub>50</sub> = (30.7 $\pm$ 0.9) $\mu$ mol/L); cytotoxic inactive (MTT assay, 3~100 $\mu$ mol/L, did not demonstrate any significant cytotoxicity upon LPS/IFN- $\gamma$  treatment for 24h.). **Source:** FU KANG A WEI GEN *Ferula fukanensis*. **Ref:** 2574.

**7984 Fukanefuromarin G**

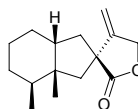
2,3-Dihydro-7-methoxy-2R\*,3R\*-dimethyl-2-[4-methyl-5-(4-methyl-2-furyl)-3(E)-pentenyl]-furo[3,2-c]coumarin C<sub>25</sub>H<sub>28</sub>O<sub>5</sub> (408.50). Colorless oil, [ $\alpha$ ]<sub>D</sub><sup>23</sup> = -8.9° (c = 0.18, MeOH). **Pharm:** NO production inhibitor (macrophage-like cell line RAW264.7 activated by LPS/IFN- $\gamma$ , IC<sub>50</sub> = (27.3 $\pm$ 2.3) $\mu$ mol/L); cytotoxic inactive (MTT assay, 3~100 $\mu$ mol/L, did not demonstrate any significant cytotoxicity upon LPS/IFN- $\gamma$  treatment for 24h.). **Source:** FU KANG A WEI GEN *Ferula fukanensis*. **Ref:** 2574.

**7985 Fukanemarin B**

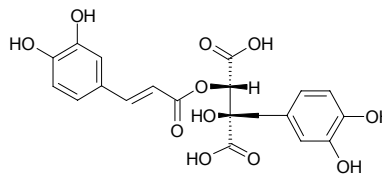
4-Hydroxy-7-methoxy-3-[1,2,6-trimethyl-7-(4-methyl-2-furyl)-hepta-2(E),5(E)-dienyl]-coumarin C<sub>25</sub>H<sub>28</sub>O<sub>5</sub> (408.50). Yellow oil, [ $\alpha$ ]<sub>D</sub><sup>23</sup> =  $\pm$ 0° (c = 0.23, MeOH). **Pharm:** NO production inhibitor (macrophage-like cell line RAW264.7 activated by LPS/IFN- $\gamma$ , IC<sub>50</sub> = (30.2 $\pm$ 1.7) $\mu$ mol/L); inhibits the inducible nitric oxide synthase (iNOS) gene expression (LPS/IFN- $\gamma$  treatment increased the level of iNOS mRNA expression, and the compound inhibits this increase, dose-dependent manner); cytotoxic inactive (MTT assay, 3~100 $\mu$ mol/L, did not demonstrate any significant cytotoxicity upon LPS/IFN- $\gamma$  treatment for 24h.). **Source:** FU KANG A WEI GEN *Ferula fukanensis*. **Ref:** 2574.

**7986 Fukinanolide**

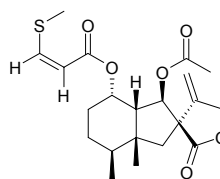
[19906-72-0] C<sub>15</sub>H<sub>22</sub>O<sub>2</sub> (234.34). mp 80.5~80.6°C. **Source:** FENG DOU CAI *Petasites japonicus*. **Ref:** 6.

**7987 Fukinolic acid**

[50982-40-6] C<sub>20</sub>H<sub>18</sub>O<sub>11</sub> (434.36). **Source:** FENG DOU CAI *Petasites japonicus*. **Ref:** 6.

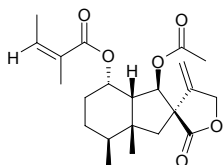
**7988 S-Fukinolide**

[18456-03-6] C<sub>21</sub>H<sub>28</sub>O<sub>6</sub>S (408.52). mp 207°C. **Source:** FENG DOU CAI *Petasites japonicus*. **Ref:** 6.

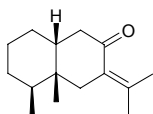


**7989 Fukinolide**

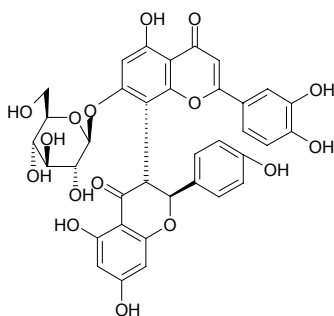
[18455-98-6] C<sub>22</sub>H<sub>30</sub>O<sub>6</sub> (390.48). mp 101~102°C. Source: FENG DOU CAI *Petasites japonicus*. Ref: 6.

**7990 Fukinone**

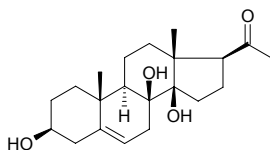
[19593-06-7] C<sub>15</sub>H<sub>24</sub>O (220.36). bp 97°C/0.8mmHg. Source: FENG DOU CAI *Petasites japonicus*. Ref: 6.

**7991 Fukugiside**

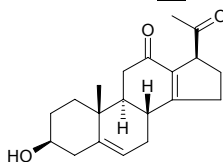
[29082-55-1] C<sub>36</sub>H<sub>30</sub>O<sub>16</sub> (718.63). mp 242~243°C (dec). Pharm: Antioxidant (DPPH radical scavenger, 10μmol/L, ScRt = 56%, IC<sub>50</sub> = 11.40μmol/L; control BHT, 10μmol/L, ScRt = 43%, IC<sub>50</sub> = 19.00μmol/L)<sup>[4422]</sup>. Source: SHAN ZHU ZI *Garcinia multiflora*, TIAN SHAN ZHU ZI *Garcinia dulcis* (flower). Ref: 6, 4422.

**7992 Fukujusone**

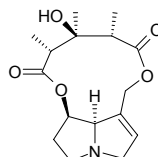
3β,8β,14β-Trihydroxypregn-5-en-20-one [25276-16-8] C<sub>21</sub>H<sub>32</sub>O<sub>4</sub> (348.49). mp 224~227°C. Source: FU SHOU CAO *Adonis amurensis*. Ref: 6.

**7993 Fukujusonone**

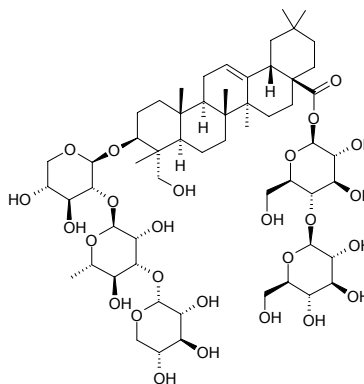
[26708-71-4] C<sub>20</sub>H<sub>26</sub>O<sub>3</sub> (314.43). mp 88~90°C. Source: FU SHOU CAO *Adonis amurensis*. Ref: 6.

**7994 Fulvine**

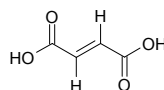
[6029-87-4] C<sub>16</sub>H<sub>23</sub>NO<sub>5</sub> (309.37). Prismatic crystals (acetone), mp 212~213°C, [α]<sub>D</sub><sup>20</sup> = -50.8° (c = 1, chloroform); hydrochloride: colorless prismatic crystals, mp 285°C (dec); bitter acid salt: yellow acicular crystals, mp 185°C (dec). Pharm: Antineoplastic (rat, Walker carcinoma); toxic (hepatic and pulmonary toxicity); mutagen (*drosophila*); similar action with narceine (rat and gpg, ileum). Source: AN HUANG ZHU SHI DOU *Crotalaria fulva*, MA DU LA ZHU SHI DOU *Crotalaria madurensis*, YUAN ZHUI ZHU SHI DOU *Crotalaria paniculata*, ZOU BO ZHUANG ZHU SHI DOU *Crotalaria crispata*. Ref: 658.

**7995 Fulvotomentoside A**

C<sub>58</sub>H<sub>94</sub>O<sub>26</sub> (1207.38). White thin acicular crystals, mp 215~217°C, [α]<sub>D</sub><sup>27.5</sup> = -14.9° (c = 0.98, MeOH). Source: HUANG HE MAO REN DONG *Lonicera fulvotomentosa*. Ref: 126.

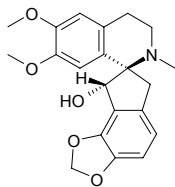
**7996 Fumaric acid**

(E)-2-Butenedioic acid [110-17-8] C<sub>4</sub>H<sub>4</sub>O<sub>4</sub> (116.07). mp 250~260°C. Pharm: Analgesic; antibacterial; antineoplastic; anti-electroshock; antitussive. Source: DA CHE QIAN *Plantago major*, GAN ZHE *Saccharum sinensis*, HUANG HAI YING SU *Glaucium flavum*, HUO YANG LE *Euphorbia antiquorum*, JI CAI *Capsella bursa-pastoris*, JIN SHUA BA *Cladonia fallax*, JIU JIE CHA *Sarcandra glabra* [Syn. *Chloranthus glaber*] (dried whole herb: content scope of 6 origins = 0.052%~0.183%, mean content = 0.122%<sup>[5508]</sup>), LU SHAN SHI WEI *Pyrrosia sheareri*, MAI JIA GONG *Lithospermum arvense*, NIU ER FENG ZI *Daphniphyllum calycinum*, PING GUO HAI TANG *Malus domestica*, SHI RUI *Cladonia rangiferina*, WAN DOU *Pisum sativum*, WU HUA GUO *Ficus carica*, XIANG RI KUI ZI *Helianthus annuus*, YAN HU SUO *Corydalis yanhusuo* [Syn. *Corydalis turtschaninovii* f. *yanhusuo*], YAO YONG QIU GUO ZI JIN *Fumaria officinalis*, YI ZHU QIAN MA *Urtica dioica*, YUN NAN FEI SHU *Torreya yunnanensis* (leaf and twig), ZI ZHI *Ganoderma japonicum* [Syn. *Ganoderma sinense*], occurs in many plants. Ref: 6, 658, 660, 4707, 5501, 5508.

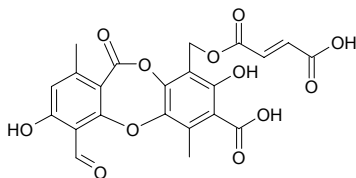


**7997 Fumaricine**

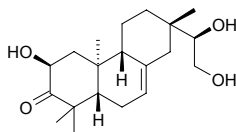
[24181-77-9] C<sub>21</sub>H<sub>23</sub>NO<sub>5</sub> (369.42). **Pharm:** Used in treatment of skin disease, hepatitis, and inflammation (using the source plant YAO YONG QIU GUO ZI JIN *Fumaria officinalis*). **Source:** YAO YONG QIU GUO ZI JIN *Fumaria officinalis*. **Ref:** 658.

**7998 Fumarprotocetraric acid**

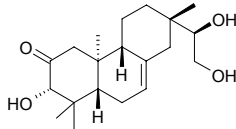
[489-50-9] C<sub>22</sub>H<sub>16</sub>O<sub>12</sub> (472.37). mp 250–260°C. **Pharm:** Cytotoxic (L1210, IC<sub>50</sub> = (82.3±12.3)µg/mL, control Etoposide, IC<sub>50</sub> = (0.3±0.15)µg/mL; 3LL, IC<sub>50</sub> = (75.9±9.7)µg/mL, Etoposide, IC<sub>50</sub> = (2.6±0.8)µg/mL; DU145, IC<sub>50</sub> > 100µg/mL, Etoposide, IC<sub>50</sub> = (0.9±0.2)µg/mL; MCF7, IC<sub>50</sub> > 100µg/mL, Etoposide, IC<sub>50</sub> = (12.2±0.5)µg/mL; K562, IC<sub>50</sub> > 100µg/mL, Etoposide, IC<sub>50</sub> = (2.1±1.3)µg/mL; U251, IC<sub>50</sub> > 100µg/mL, Etoposide, IC<sub>50</sub> = (0.28±0.06)µg/mL)<sup>[5027]</sup>. **Source:** JIN SHUA BA *Cladonia fallax*, SHI RUI *Cladonia rangiferina*, ZONG JUAN SHI RUI *Cladonia convoluta*. **Ref:** 6, 5027.

**7999 Fumotoshidin A**

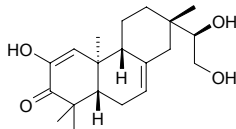
[89354-44-9] C<sub>20</sub>H<sub>32</sub>O<sub>4</sub> (336.48). **Source:** BIAN YUAN LIN GAI JUE *Microlepis marginata*. **Ref:** 1538.

**8000 Fumotoshidin B**

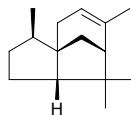
[89354-43-8] C<sub>20</sub>H<sub>32</sub>O<sub>4</sub> (336.48). **Source:** BIAN YUAN LIN GAI JUE *Microlepis marginata*. **Ref:** 1538.

**8001 Fumotoshidin C**

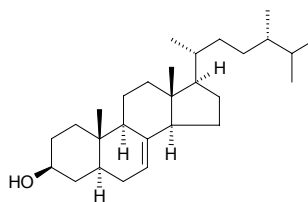
[89354-42-7] C<sub>20</sub>H<sub>30</sub>O<sub>4</sub> (334.46). **Source:** BIAN YUAN LIN GAI JUE *Microlepis marginata*. **Ref:** 1538.

**8002 α-Funebrene**

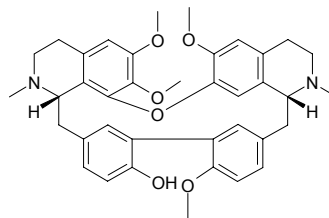
[50894-66-1] C<sub>15</sub>H<sub>24</sub> (204.36). **Source:** BAI SHU YE *Cupressus funebris*, DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*]. **Ref:** 2.

**8003 Fungisterol**

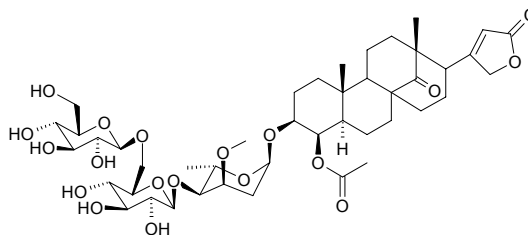
Ergost-7-en-3-ol [53260-54-1] C<sub>28</sub>H<sub>48</sub>O (400.69). mp 152°C. **Source:** XIANG XUN *Lentinus edodes*. **Ref:** 6.

**8004 Funiferine**

C<sub>38</sub>H<sub>42</sub>N<sub>2</sub>O<sub>6</sub> (622.77). **Pharm:** Antitrypanosomal (inhibits trypanosome form of *Trypanosoma cruzi*, strain Y, IC<sub>50</sub> = 29.7µg/mL, IC<sub>90</sub> = 88.2µg/mL); antimalarial (*Plasmodium falciparum* D6, LC<sub>50</sub> = 114.0ng/mL, SI = 92; *Plasmodium falciparum* W2, LC<sub>50</sub> = 183.3ng/mL, SI = 57); cytotoxic (KB, LC<sub>50</sub> = 10500ng/mL). **Source:** *Guatteria boliviana* (stem cortex). **Ref:** 3976.

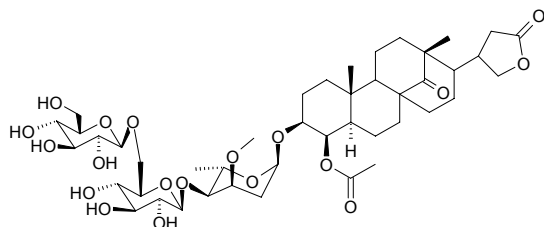
**8005 Funingenoside A**

(8*R*)-3*β*,4*β*-Dihydroxy-yl-14-oxo-5*α*-15(14→8)-abeo-card-20(22)-enolide C<sub>44</sub>H<sub>66</sub>O<sub>19</sub> (899.01). Colorless needles (MeOH), mp 261~265°C, [α]<sub>D</sub><sup>26</sup> ~-53.7° (*c* = 0.87, MeOH). **Source:** FU NING TENG *Parepignym funingense* (root: yield = 0.0026%dw). **Ref:** 4701.

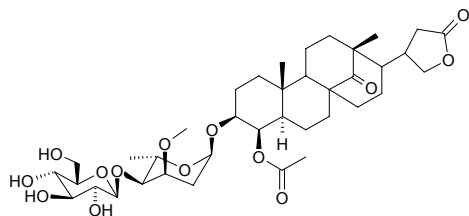


**8006 Funingenoside B**

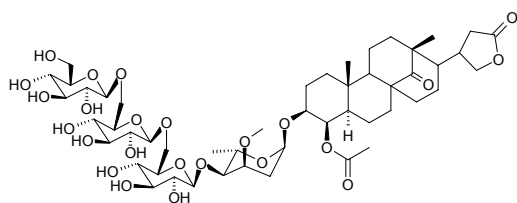
(8*R*)-4β-Acetoxy-3β-[(*O*-β-*D*-glucopyranosyl-(1→6)-*O*-β-*D*-glucopyranosyl-(1→4)-α-*L*-cymaropyranosyl)-oxy]-14-oxo-5α-15-(14→8)-abeo-card-20(22)-dihydroenolide C<sub>44</sub>H<sub>68</sub>O<sub>19</sub> (901.02). White powder, mp 271~275°C,  $[\alpha]_D^{26} = -73.9^\circ$  ( $c = 0.43$ , MeOH). Source: FU NING TENG *Parepigynum funingense* (root: yield = 0.0073%dw). Ref: 4701.

**8007 Funingenoside C**

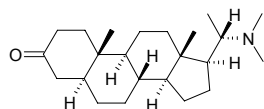
(8*R*)-4β-Acetoxy-3β-[(*O*-β-*D*-glucopyranosyl-(1→4)-α-*L*-cymaropyranosyl)-oxy]-14-oxo-5α-15-(14→8)-abeo-card-20(22)-dihydroenolide C<sub>38</sub>H<sub>58</sub>O<sub>14</sub> (738.88). White powder, mp 256~259°C,  $[\alpha]_D^{13} = -75.9^\circ$  ( $c = 0.22$ , MeOH). Source: FU NING TENG *Parepigynum funingense* (root: yield = 0.0014%dw). Ref: 4701.

**8008 Funingenoside D**

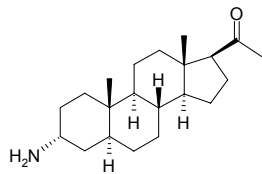
(8*R*)-4β-Acetoxy-3β-[(*O*-β-*D*-glucopyranosyl-(1→6)-*O*-β-*D*-glucopyranosyl-(1→6)-*O*-β-*D*-glucopyranosyl-(1→4)-α-*L*-cymaopyranosyl)-oxy]-14-oxo-5α-15-(14→8)-abeo-card-20(22)-dihydroenolide C<sub>50</sub>H<sub>78</sub>O<sub>24</sub> (1063.16). White powder, mp 248~253°C,  $[\alpha]_D^{13} = -66.0^\circ$  ( $c = 0.67$ , MeOH). Source: FU NING TENG *Parepigynum funingense* (root: yield = 0.00035%dw). Ref: 4701.

**8009 Funtumafrine C**

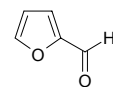
(2*S*)-20-(*N,N*-dimethylamino)-5α-pregna-3-one C<sub>23</sub>H<sub>39</sub>NO (345.57). White crystalline solid (CHCl<sub>3</sub>), mp 169~170°C,  $[\alpha]_D^{25} = +50^\circ$  ( $c = 0.06$ , CHCl<sub>3</sub>). Pharm: BChE inhibitor (horse serum BChE, IC<sub>50</sub> = (6.56±0.12)μmol/L, control Eserine, IC<sub>50</sub> = (0.86±0.01)μmol/L); AChE inhibitor (electric eel AChE, IC<sub>50</sub> = (45.75±1.12)μmol/L, control Eserine, IC<sub>50</sub> = (0.041±0.001)μmol/L). Source: YUN NAN YE SHAN HUA *Sarcococca coriacea* [Syn. *Sarcococca wallichii*] (leaf). Ref: 4241.

**8010 Funtumine**

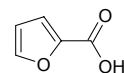
[474-45-3] C<sub>21</sub>H<sub>35</sub>NO (317.52). Prismatic crystals (ethyl acetate), mp 126°C,  $[\alpha]_D = +95^\circ$  ( $c = 1.7$ , chloroform). Pharm: Antipyretic; local anesthetic; antihypertensive; promotes respiration; vasodilator. Source: GANG GUO HE ZHI XIE MU *Holarrhena congolensis*, SI JIAO SHU *Funtumia elastica*, TUI RE ZHI XIE MU *Holarrhena febrifuga*. Ref: 658.

**8011 2-Furaldehyde**

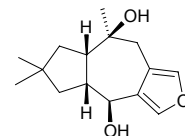
Furan-2-carboxaldehyde [98-01-1] C<sub>5</sub>H<sub>4</sub>O<sub>2</sub> (96.09). bp 162°C. Source: CANG ZHU *Atractylodes lancea*, HONG CHE ZHOU CAO *Trifolium pratense*, HUANG HAO *Artemisia scoparia* [Syn. *Artemisia capillaris* var. *scoparia*], KONG SHI CHUN *Ulva pertusa*, LUO LE *Ocimum basilicum*, SHAN ZHU YU *Cornus officinalis* [Syn. *Macrocarpum officinale*], SHUI SONG *Codium fragile*, YIN CHEN HAO *Artemisia capillaris*, ZE XIE *Alisma orientale* [Syn. *Alisma plantago-aquatica* var. *orientale*], ZI CAI *Porphyra tenera*. Ref: 2, 6, 660.

**8012 2-Furancarboxylic acid**

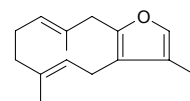
Pyromucic acid [88-14-2] C<sub>5</sub>H<sub>4</sub>O<sub>3</sub> (112.09). Leaflets (H<sub>2</sub>O), mp 133~134°C, bp 230~232°C, bp 141~144°C/20mmHg. Source: BAI FAN DOU *Phaseolus vulgaris*, DANG SHEN *Codonopsis pilosula*, JIAN WEI YU *Alocasia cucullata* [Syn. *Arum cucullatum*], QIAN LI GUANG *Senecio scandens* [Syn. *Senecio chinensis*], SHI YE *Diospyros kaki*, fungus *Epicoccum* sp. Ref: 2, 660, 1521, 2721, 2980, 5445.

**8013 Furanliol**

C<sub>15</sub>H<sub>22</sub>O<sub>3</sub> (250.34). Source: MEI WEI HONG GU *Russula delicata* (sporocarp). Ref: 4374.

**8014 Furanodiene**

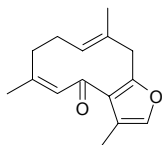
Isofuranodiene [19912-61-9] C<sub>15</sub>H<sub>20</sub>O (216.38). mp 44~45°C. Pharm: NO production inhibitor (mus peritoneal macrophages, induced by LPS, 100μmol/L, InRt = (67.0±1.4)%), control *L*-NMMA, 100μmol/L, InRt = (79.2±0.9)%,  $p < 0.01$ )<sup>[4150]</sup>. Source: JI JI *Chloranthus serratus*, JIN SU LAN *Chloranthus spicatus*, PING E SHU *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*], YIN XIAN CAO *Chloranthus japonicus*. Ref: 6, 660, 4150.



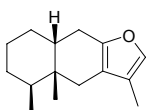


**8015 Furanodienone**

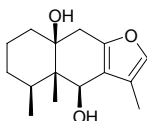
Isofuranodienone [24268-42-6]  $C_{15}H_{18}O_2$  (230.31). mp 89.5–90.5°C; 70–71°C. **Pharm:** NO production inhibitor (mus peritoneal macrophages, induced by LPS, 100  $\mu$ mol/L, InRt = (64.6 $\pm$ 2.6)%, control *L*-NMMA, 100  $\mu$ mol/L, InRt = (79.2 $\pm$ 0.9)%,  $p < 0.01$ )<sup>[4150]</sup>. **Source:** PING E SHU *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*]. **Ref:** 6, 660, 4150.

**8016 Furanocremophilane**

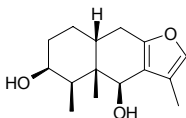
[6750-13-6]  $C_{15}H_{22}O$  (218.34). bp 148°C/16mmHg. **Source:** FENG DOU CAI *Petasites japonicus*. **Ref:** 6.

**8017 Furanocremophilane-6 $\beta$ ,10 $\beta$ -diol**

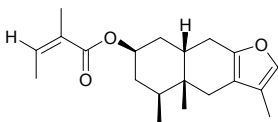
[35101-40-7]  $C_{15}H_{22}O_3$  (250.34). mp 122°C. **Source:** LIAN PENG CAO *Farfugium japonicum*. **Ref:** 6.

**8018 Furanofukinol**

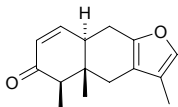
[In DNP]  $C_{15}H_{22}O_3$  (250.34). mp 178–180°C (dec). **Source:** FENG DOU CAI *Petasites japonicus*. **Ref:** 6.

**8019 Furanojaponin**

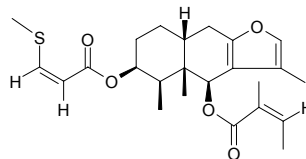
[34335-98-3]  $C_{20}H_{28}O_3$  (316.44). bp 110–130°C/0.0005mmHg. **Source:** FENG DOU CAI *Petasites japonicus*. **Ref:** 6.

**8020 10 $\alpha$ -H-Furanoligularenone**

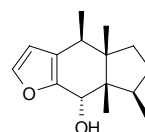
Furanoligularenone [16148-24-6]  $C_{15}H_{18}O_2$  (230.31). mp 95°C. **Pharm:** Anti-inflammatory (NO production inhibitor)<sup>[4415]</sup>; anti-inflammatory (RAW264.7 stimulated by LPS, inhibits PGE2 production,  $IC_{50}$  = 1.93  $\mu$ mol/L; inhibits expression of COX-2)<sup>[4415]</sup>. **Source:** HU LU QI *Ligularia fischeri*, HU LU QI BIAN ZHONG *Ligularia fischeri* var. *spiciformis*. **Ref:** 6, 4415.

**8021 S-Furanopetasitin**

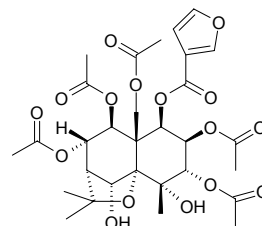
[34335-97-2]  $C_{24}H_{32}O_5S$  (432.58). mp 107–108°C. **Source:** FENG DOU CAI *Petasites japonicus*. **Ref:** 6.

**8022 Furanopinguisanol**

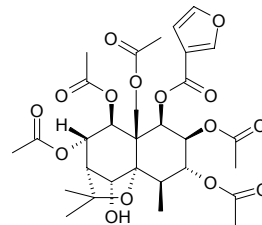
$C_{15}H_{22}O_2$  (234.34). **Source:** YE TAI *Trocholejeunea sandvicensis*. **Ref:** 3909.

**8023 1 $\beta$ -Furanoyl-2 $\beta$ ,3 $\alpha$ ,7 $\alpha$ ,8 $\beta$ ,11-pentaacetoxy-4 $\alpha$ ,5 $\alpha$ -dihydroxy-dihydroagarofuran**

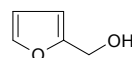
$C_{30}H_{38}O_{16}$  (654.63). Amorphous powder,  $[\alpha]_D^{25} = -12.2^\circ$  ( $c = 0.8$ , MeOH). **Pharm:** Immunosuppressant (inhibits lymphocyte transformation, 80  $\mu$ g/mL, InRt = 17%, control Dexamethasone, 50  $\mu$ g/mL, InRt = 61%). **Source:** LEI GONG TENG *Tripterygium wilfordii* (xylem). **Ref:** 4466.

**8024 1 $\beta$ -Furanoyl-2 $\beta$ ,3 $\alpha$ ,7 $\alpha$ ,8 $\beta$ ,11-pentaacetoxy-5 $\alpha$ -hydroxy-dihydroagarofuran**

$C_{30}H_{38}O_{15}$  (638.63). Amorphous powder,  $[\alpha]_D^{25} = -32.3^\circ$  ( $c = 1.7$ , MeOH). **Pharm:** Immunosuppressant (inhibits lymphocyte transformation, 80  $\mu$ g/mL, InRt = 44%, control Dexamethasone, 50  $\mu$ g/mL, InRt = 61%). **Source:** LEI GONG TENG *Tripterygium wilfordii* (xylem). **Ref:** 4466.

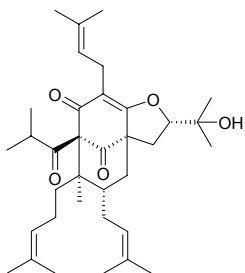
**8025 Furfuryl alcohol**

2-Hydroxymethylfuran [98-00-0]  $C_5H_6O_2$  (98.10). bp 170–171°C. **Source:** CHA YE *Camellia sinensis* [Syn. *Thea sinensis*], SHUI SONG *Codium fragile*. **Ref:** 6.

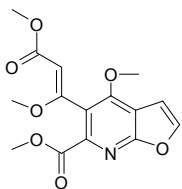


**8026 Furohyperforin**

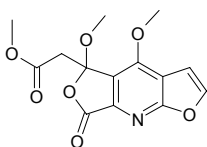
[219793-20-1] C<sub>35</sub>H<sub>52</sub>O<sub>5</sub> (552.80). Oil, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +62.4° (c = 0.9, CHCl<sub>3</sub>).  
 Source: GUAN YE LIAN QIAO *Hypericum perforatum* (aerial parts: yield = 0.00016%dw). Ref: 1521, 3032.

**8027 Furomegistine I**

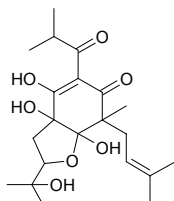
C<sub>15</sub>H<sub>15</sub>NO<sub>7</sub> (321.29). Pharm: Cytotoxic (A549, IC<sub>50</sub> = 90 μmol/L; HT29, IC<sub>50</sub> = 100 μmol/L). Source: *Sarcomelicope megistophylla* (bark). Ref: 5155.

**8028 Furomegistine II**

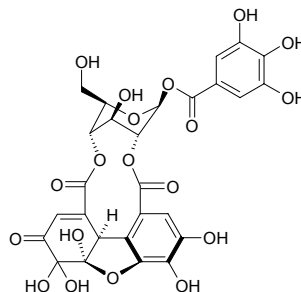
C<sub>14</sub>H<sub>13</sub>NO<sub>7</sub> (307.26). [ $\alpha$ ]<sub>D</sub> = 0° (c = 0.1, CH<sub>2</sub>Cl<sub>2</sub>). Pharm: Cytotoxic (A549, IC<sub>50</sub> = 90 μmol/L; HT29, IC<sub>50</sub> = 100 μmol/L). Source: *Sarcomelicope megistophylla* (bark). Ref: 5155.

**8029 Furonequinone B**

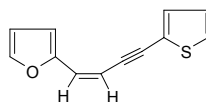
C<sub>21</sub>H<sub>32</sub>O<sub>7</sub> (396.48). Pharm: Antioxidant inactive (PMN cellular chemiluminescence assay, FMLP-induced and OZ-induced oxidative burst). Source: *Hypericum pappunum* Ref: 5371.

**8030 Furosin**

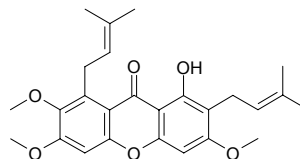
C<sub>27</sub>H<sub>22</sub>O<sub>19</sub> (650.46). Source: AN MO LE *Phyllanthus emblica* (branch and leaf). Ref: 3094.

**8031 cis-1-(2-Furyl)-4-(2-thienyl)-1-buten-3-yne**

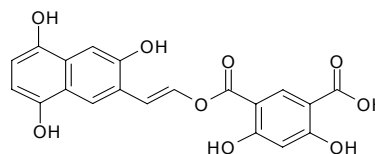
[20288-15-7] C<sub>12</sub>H<sub>8</sub>OS (200.26). bp 100~110°C/0.3mmHg. Source: YANG SHI CAO *Achillea millefolium*. Ref: 6.

**8032 Fuscaxanthone C**

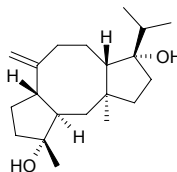
C<sub>26</sub>H<sub>30</sub>O<sub>6</sub> (438.53). Pharm: Cytotoxic inactive (hmn small cell lung cancer NCI-H187 cell line, control Ellipticine, IC<sub>50</sub> = (0.35±0.15) μg/mL). Source: QIAO MU ZHUANG HUANG NIU MU *Cratogeomys arborescens* (stem cortex). Ref: 5061.

**8033 Fuscoporine**

C<sub>20</sub>H<sub>14</sub>O<sub>9</sub> (398.33). Dull-brown powder, mp > 300°C. Source: HUA HE KONG JUN *Fuscoporia obliqua*. Ref: 792.

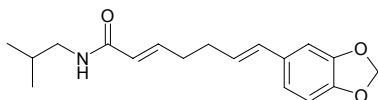
**8034 Fusicoserpenol A**

4 $\alpha$ ,12 $\alpha$ -Dihydroxy-8(17)-fusicoccene C<sub>20</sub>H<sub>34</sub>O<sub>2</sub> (306.49). Colorless crystals (hexane), mp 87~90°C, [ $\alpha$ ]<sub>D</sub> = +19.4° (c = 0.5, CHCl<sub>3</sub>). Pharm: Antifungal. Source: PU FU QIANG DAO YAO *Hypoestes serpens*. Ref: 2063.

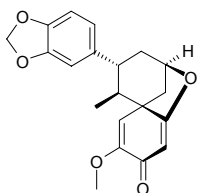


**8035 Futoamide**

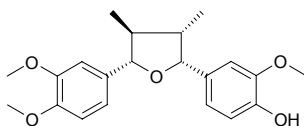
$C_{18}H_{23}NO_3$  (301.39). mp 128~130°C. Source: HAI FENG TENG *Piper kadsura* [Syn. *Piper futokadsura*], SHAN JU *Piper hancei*. Ref: 6, 75.

**8036 Futoenone**

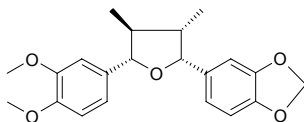
[19913-01-1]  $C_{20}H_{20}O_5$  (340.38). mp 197°C. Source: HAI FENG TENG *Piper kadsura* [Syn. *Piper futokadsura*]. Ref: 6.

**8037 Futokadsurin A**

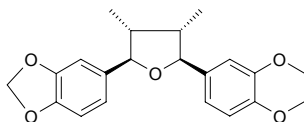
(7*S*,8*S*,7'*S*,8'*R*)-3,4,3'-Trimethoxy-4'-hydroxy-7,7'-epoxyylignan  $C_{21}H_{26}O_5$  (358.44). Colorless oil,  $[\alpha]_D^{25} = +12.3^\circ$  ( $c = 1.09$ ,  $CHCl_3$ ). Pharm: NO production inhibitor (mus, macrophage-like cell line RAW264.7 activated by LPS/IFN,  $IC_{50} = 47.2\mu mol/L$ , control quercetin,  $IC_{50} = 26.8\mu mol/L$ )<sup>[2537]</sup>. Source: HAI FENG TENG *Piper kadsura* [Syn. *Piper futokadsura*]. Ref: 2537.

**8038 Futokadsurin B**

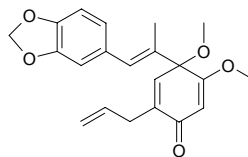
(7*R*,8*R*,7'*R*,8'*S*)-3,4-Dimethoxy-3',4'-methylenedioxy-7,7'-epoxyylignan  $C_{21}H_{24}O_5$  (356.42). Colorless needles, mp 102°C,  $[\alpha]_D^{23} = +33.7^\circ$  ( $c = 1.18$ ,  $CHCl_3$ ). Pharm: NO production inhibitor (mus, macrophage-like cell line RAW264.7 activated by LPS/IFN,  $IC_{50} = 55.0\mu mol/L$ , control quercetin,  $IC_{50} = 26.8\mu mol/L$ )<sup>[2537]</sup>. Source: HAI FENG TENG *Piper kadsura* [Syn. *Piper futokadsura*]. Ref: 2537.

**8039 Futokadsurin C**

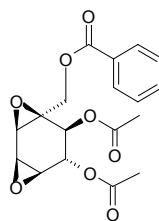
(7*R*,8*R*,7'*S*,8'*S*)-3,4-Methylenedioxy-3',4'-dimethoxy-7,7'-epoxyylignan  $C_{21}H_{24}O_5$  (356.42). Colorless oil,  $[\alpha]_D^{23} = -11.7^\circ$  ( $c = 3.26$ ,  $CHCl_3$ ). Pharm: NO production inhibitor (mus, macrophage-like cell line RAW264.7 activated by LPS/IFN,  $IC_{50} = 79.2\mu mol/L$ , control quercetin,  $IC_{50} = 26.8\mu mol/L$ )<sup>[2537]</sup>. Source: HAI FENG TENG *Piper kadsura* [Syn. *Piper futokadsura*]. Ref: 2537.

**8040 Futoquinol**

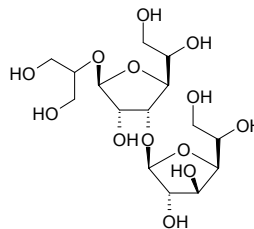
Hancinone D [28178-92-9]  $C_{21}H_{22}O_5$  (354.41). White crystals (hexane), mp 96~97°C, mp 97~98°C,  $[\alpha]_D^{14} = 0^\circ$  ( $c = 0.3$ ,  $CHCl_3$ ). Pharm: PAF antagonist ( $IC_{50} = 23\mu mol/L$ ). Source: HAI FENG TENG *Piper kadsura* [Syn. *Piper futokadsura*], SHAN JU *Piper hancei*, ZHANG YE HU JIAO *Piper polysyphorum*. Ref: 6, 130, 191, 1578.

**8041 Futoxide**

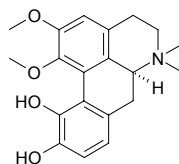
Crotopoxide [20421-13-0]  $C_{18}H_{18}O_8$  (362.34). mp 150~151°C. Source: HAI FENG TENG *Piper kadsura* [Syn. *Piper futokadsura*]. Ref: 6, 5501.

**8042 Fuzinoside**

Glycerol-2-*O*-β-*D*-galactofuranosyl (1→3)-galactofuranoside  $C_{15}H_{28}O_{13}$  (416.38). Yellowish powder. Source: FU ZI *Aconitum carmichaeli*. Ref: 4588.

**8043 Fuzitine**

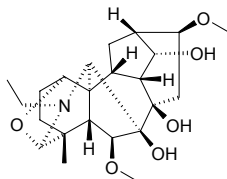
$C_{20}H_{25}NO_4$  (343.43). Brown solid, mp 210~212°C(dec.),  $[\alpha]_D^{25} = +212^\circ$  ( $c = 0.1$ , MeOH). Source: XIAN MAO HEI ZHONG CAO *Nigella glandulifera* (seed). Ref: 4277.



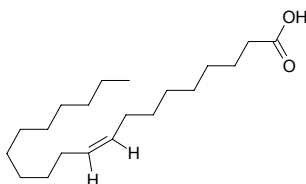
## G

**8044 Gadesine**

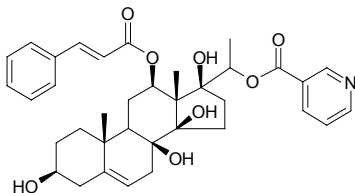
[70420-60-9] C<sub>23</sub>H<sub>35</sub>NO<sub>6</sub> (421.54). mp 174~177°C, [ $\alpha$ ]<sub>D</sub> = +76° (*c* = 0.27, EtOH). Source: WU ZHU FEI YAN CAO *Delphinium pentagynum*. Ref: 1521.

**8045 Gadoleic acid**

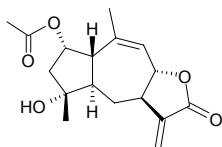
[29204-02-2] C<sub>20</sub>H<sub>38</sub>O<sub>2</sub> (310.52). mp (*cis*)23.0~23.5°C, bp 170°C/0.1mmHg. Source: LUO HUA SHENG YOU *Arachis hypogaea*. Ref: 6.

**8046 Gagaminine**

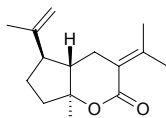
[41060-37-1] C<sub>36</sub>H<sub>43</sub>NO<sub>8</sub> (617.75). mp 166~169°C. Source: LUO MO *Metaplexis japonica*. Ref: 6.

**8047 Gaillardin**

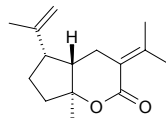
[14682-46-3] C<sub>17</sub>H<sub>22</sub>O<sub>5</sub> (306.36). Crystals, mp 199~200°C (vacuum), [ $\alpha$ ]<sub>D</sub><sup>30</sup> = -15° (*c* = 1.08, chloroform). Pharm: Antineoplastic (KB, ED<sub>50</sub> = 0.80~1.60µg/mL or 2.30µg/mL); antiprotozoal (amebic and *Trichomonas vaginalis*, 0.24~7.8µg/mL). Source: TIAN REN JU *Gaillardia pulchella*, ZHONG GUO XUAN FU HUA *Inula britannica* var. *chinensis*. Ref: 661.

**8048 Gajutsulactone A**

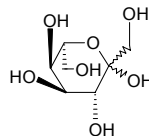
C<sub>15</sub>H<sub>22</sub>O<sub>2</sub> (234.34). Colorless oil, [ $\alpha$ ]<sub>D</sub><sup>28</sup> = -128.4° (*c* = 0.10, CHCl<sub>3</sub>). Pharm: NO production inhibitor (mus peritoneal macrophages, induced by LPS, 100µmol/L, InRt = (53.6±3.0)%, control *L*-NMMA, 100µmol/L, InRt = (79.2±0.9)%, *p*<0.01). Source: PING E SHU *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*]. Ref: 4150.

**8049 Gajutsulactone B**

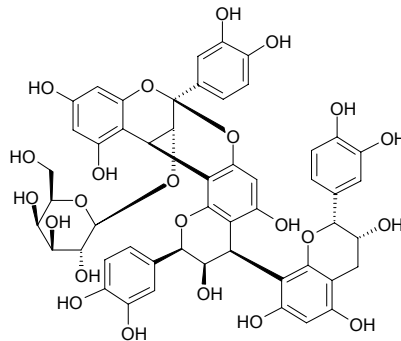
C<sub>15</sub>H<sub>22</sub>O<sub>2</sub> (234.34). Colorless oil, [ $\alpha$ ]<sub>D</sub><sup>27</sup> = -35.0° (*c* = 0.10, CHCl<sub>3</sub>), [ $\alpha$ ]<sub>D</sub><sup>26</sup> = -53.4° (*c* = 0.1, MeOH). Pharm: NO production inhibitor (mus peritoneal macrophages, induced by LPS, 100µmol/L, InRt = (57.5±3.5)%, control *L*-NMMA, 100µmol/L, InRt = (79.2±0.9)%, *p*<0.01). Source: PING E SHU *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*]. Ref: 4150.

**8050 L-Galactoheptulose**

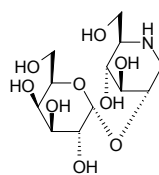
[29325-35-7] C<sub>7</sub>H<sub>14</sub>O<sub>7</sub> (210.19). mp 110~115°C (dec). Source: MU XU *Medicago sativa*. Ref: 6, 1521.

**8051 3T-O-β-D-Galactopyranosylcinamtannin B<sub>1</sub>**

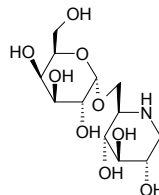
C<sub>51</sub>H<sub>46</sub>O<sub>23</sub> (1026.92). Light-brown amorphous powder, [ $\alpha$ ]<sub>D</sub> = +17.1° (*c* = 1, MeOH). Pharm: Antioxidant (inhibits NADPH-dependent lipid peroxidation in microsomes and autoxidation of linoleic acid); antioxidant (DPPH scavenger (effective)). Source: KE KE *Theobroma cacao*. Ref: 2023.

**8052 2-O-α-D-Galactopyranosyl-1-deoxynojirimycin**

C<sub>12</sub>H<sub>23</sub>NO<sub>9</sub> (325.32). Pharm: Hypoglycemic (mus diabetes mellitus induced by SIZ, distinct effect). Source: SANG ZHI *Morus alba*. Ref: 2170.

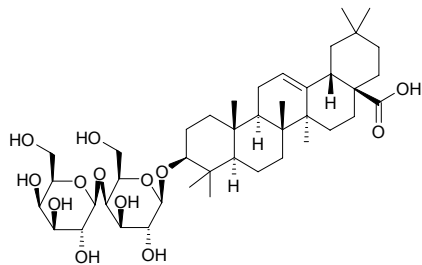
**8053 6-O-α-D-Galactopyranosyl-1-deoxynojirimycin**

C<sub>12</sub>H<sub>23</sub>NO<sub>9</sub> (325.32). Source: *Morus* sp. Ref: 2513.

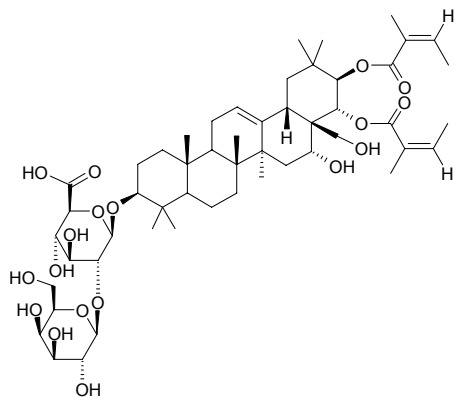


**8054 3-O-β-D-Galactopyranosyl-(1→4)-β-D-galactopyranosyloleanolic acid**

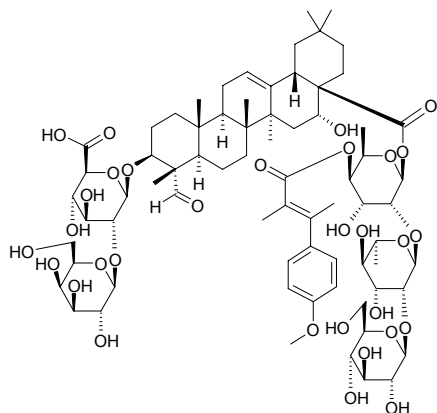
$C_{42}H_{68}O_{13}$  (781.00). **Pharm:** Cytotoxic (A2780,  $IC_{50} = (9.6 \pm 0.3) \mu\text{g/mL}$ ; control Actinomycin D,  $IC_{50} = 2\text{--}5 \text{ ng/mL}$ ). **Source:** DA YE NAN YANG SHEN *Polyscia amplifolia* (infructescence), GUANG YE JUE MING *Cassia laevigata* [Syn. *Cassia floribunda*]. **Ref:** 5397.

**8055 3-O-β-D-Galactopyranosyl-(1→2)-β-D-glucuronopyranosyl-21β, 22α-di-O-angeloylbarringtonol C**

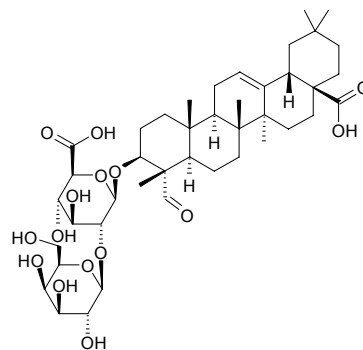
$C_{52}H_{80}O_{18}$  (993.21).  $[\alpha]_D^{21} = +2.3^\circ$  ( $c = 0.13$ , MeOH). **Source:** NAN SU GE LAN JIA SHAN LUO *Harpullia austro-caledonica* (stem cortex). **Ref:** 5269.

**8056 3-O-[β-D-Galactopyranosyl-(1→2)-β-D-glucuronopyranosyl]-28-O-[β-D-glucopyranosyl-(1→2)-α-L-rhamnopyranosyl-(1→2)-β-D-4-O-trans-p-methoxycinnamoyl-fucopyranosyl] quillaic acid**

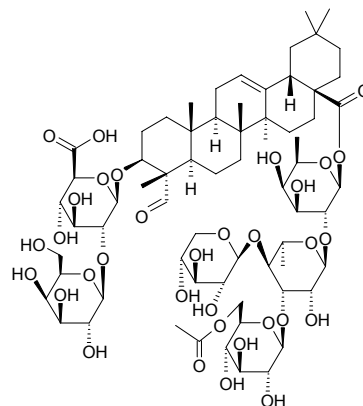
$C_{72}H_{106}O_{31}$  (1467.63). **Source:** HAN MAI PING CAO *Silene jennisensis*. **Ref:** 709.

**8057 3-O-β-D-Galactopyranosyl-(1→2)-β-D-glucuronopyranosyl-gypso-genin**

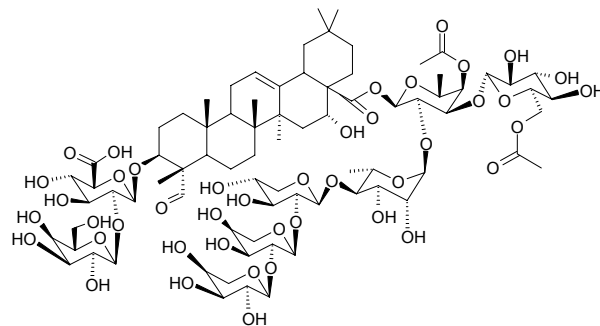
$C_{42}H_{64}O_{15}$  (808.97). White amorphous powder. **Source:** JIN TIE SUO *Psammosilene tunicoides*. **Ref:** 2261.

**8058 3-O-β-D-Galactopyranosyl-(1→2)-β-D-glucuronopyranosyl-gypso-genin-28-O-β-D-xylopyranosyl(1→4)-[β-D-6-O-acetylglucopyranosyl (1→3)]-α-L-rhamnopyranosyl(1→2)-β-D-fucopyranoside**

$C_{67}H_{104}O_{33}$  (1437.56). White powder. **Source:** JIN TIE SUO *Psammosilene tunicoides*. **Ref:** 2261.

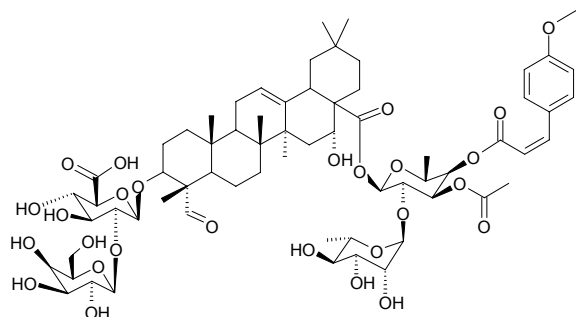
**8059 3-O-[β-D-Galactopyranosyl-(1→2)-β-D-glucuronopyranosyl] quillaic acid-28-O-[α-L-arabinopyranosyl-(1→2)-α-L-arabinopyranosyl-(1→3)-β-D-xylopyranosyl-(1→4)-α-L-rhamnopyranosyl-(1→2)]-[6-O-acetyl-β-D-glucopyranosyl-(1→3)]-4-O-acetyl-β-D-fucopyranoside**

$C_{79}H_{122}O_{43}$  (1757.83). White amorphous powder,  $[\alpha]_D^{20} = +13^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Proliferation stimulator (Jurkat-Tumor cell lines, at low concentration). **Source:** YING ZI CAO *Silene fortunei* (root: yield = 0.0028% dw). **Ref:** 4658.



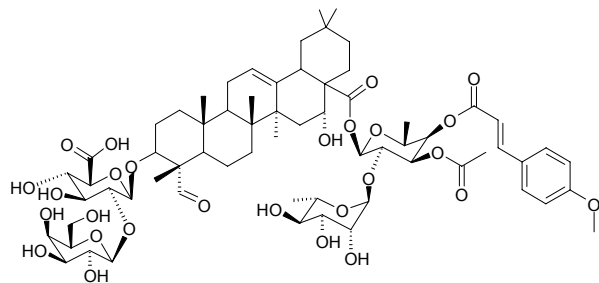
**8060 3-O-[ $\beta$ -D-Galactopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucuronopyranosyl] quillaic acid-28-O- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)-3-O-acetyl-4-O-cis-p-methoxycinnamoyl  $\beta$ -D-fucopyranoside**

C<sub>66</sub>H<sub>94</sub>O<sub>27</sub> (1319.47). White amorphous powder. **Pharm:** Proliferation stimulator or inhibitor (Jurkat-Tumor cell lines, stimulator at low concentration, inhibitor at high concentration). **Source:** YING ZI CAO *Silene fortunei* (root). **Ref:** 4658.



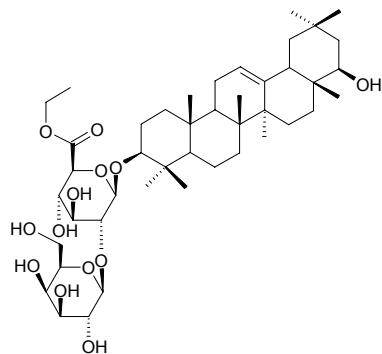
**8061 3-O-[ $\beta$ -D-Galactopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucuronopyranosyl] quillaic acid-28-O- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)-3-O-acetyl-4-O-trans-p-methoxycinnamoyl  $\beta$ -D-fucopyranoside**

C<sub>66</sub>H<sub>94</sub>O<sub>27</sub> (1319.47). White amorphous powder. **Pharm:** Proliferation stimulator or inhibitor (Jurkat-Tumor cell lines, stimulator at low concentration, inhibitor at high concentration). **Source:** YING ZI CAO *Silene fortunei* (root). **Ref:** 4658.



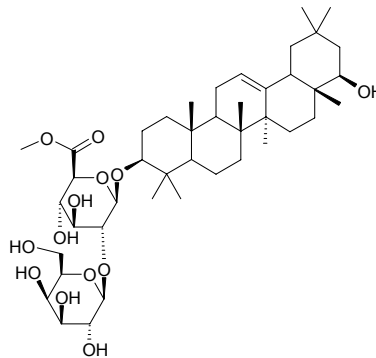
**8062 3-O-[ $\beta$ -D-Galactopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucuronopyranosyl]-sophoradiol ethyl ester**

C<sub>44</sub>H<sub>72</sub>O<sub>13</sub> (809.06). White amorphous powder. **Source:** HUAI *Sophora japonica* (bud). **Ref:** 4823.



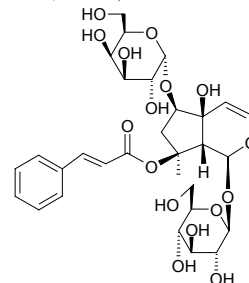
**8063 3-O-[ $\beta$ -D-Galactopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucuronopyranosyl]-sophoradiol methyl ester**

C<sub>43</sub>H<sub>70</sub>O<sub>13</sub> (795.03). **Source:** HUAI *Sophora japonica* (bud). **Ref:** 4823.



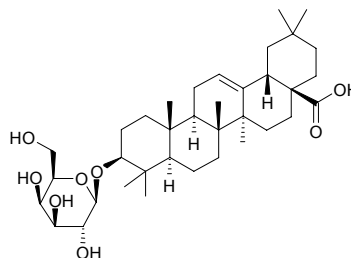
**8064 6-O- $\alpha$ -D-Galactopyranosylharpagoside**

C<sub>30</sub>H<sub>40</sub>O<sub>16</sub> (656.64). Amorphous powder, mp 169–173°C, [ $\alpha$ ]<sub>D</sub> =  $\alpha$ -7.43° (c = 0.336, MeOH). **Source:** XUAN SHEN *Scrophularia ningpoensis*. **Ref:** 1855.



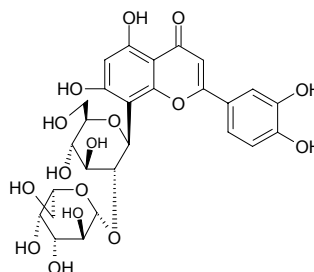
**8065 3-O- $\beta$ -D-Galactopyranosyloleanolic acid**

C<sub>36</sub>H<sub>58</sub>O<sub>8</sub> (618.86). **Pharm:** Cytotoxic (A2780, IC<sub>50</sub> = (10.8±0.5)μg/mL; control Actinomycin D, IC<sub>50</sub> = 2–5ng/mL). **Source:** DA YE NAN YANG SHEN *Polyscias amplifolia* (inflorescence), DUAN HUA HU LU *Lagenaria breviflora*, *Brenania brieyi*. **Ref:** 5397.



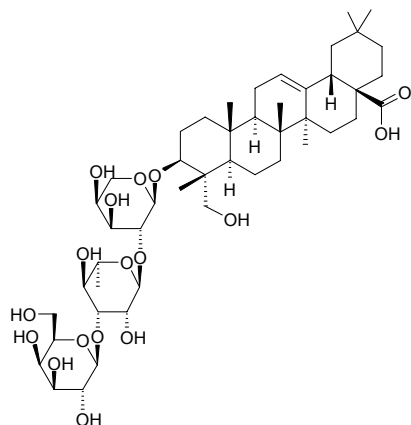
**8066 2''-O- $\beta$ -L-Galactopyranosylorientin**

C<sub>27</sub>H<sub>30</sub>O<sub>16</sub> (610.53). Yellow powder, mp 218–220°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +28.9° (c = 0.045, MeOH). **Source:** DUAN BAN JIN LIAN HUA *Trollius ledbourii* (flower). **Ref:** 5278.



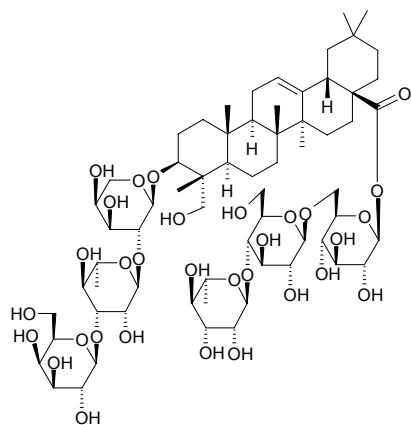
**8067** 3 $\beta$ -O- $\beta$ -D-Galactopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranosyl-23-hydroxyolean-12-en-28-oic acid

[245050-38-8] C<sub>47</sub>H<sub>76</sub>O<sub>17</sub> (913.12). [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +36.2° (c = 0.1, MeOH). Source: DUO BAN LV TI CAO *Caltha polypetala*. Ref: 2338.



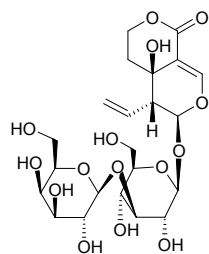
**8068** 3 $\beta$ -O- $\beta$ -D-Galactopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranosyl-23-hydroxyolean-12-en-28-oic acid 28-O- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl ester

[245050-37-7] C<sub>65</sub>H<sub>106</sub>O<sub>31</sub> (1383.55). [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -18.60° (c = 0.1, MeOH). Source: DUO BAN LV TI CAO *Caltha polypetala*. Ref: 2338.



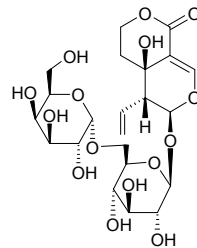
**8069** 3'-O- $\beta$ -D-Galactopyranosylswertiamarin

C<sub>22</sub>H<sub>32</sub>O<sub>15</sub> (536.49). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>27</sup> = -88.2° (c = 0.05, MeOH). Source: RI BEN ZHANG YA CAI *Swertia japonica*. Ref: 2573.



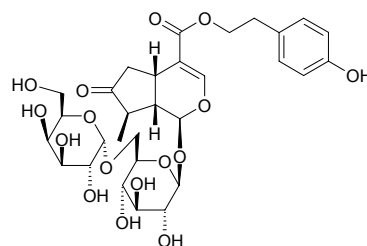
**8070** 6'-O- $\alpha$ -D-Galactopyranosylswertiamarin

C<sub>22</sub>H<sub>32</sub>O<sub>15</sub> (536.49). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>27</sup> = -46.0° (c = 0.09, MeOH). Source: RI BEN ZHANG YA CAI *Swertia japonica*. Ref: 2573.



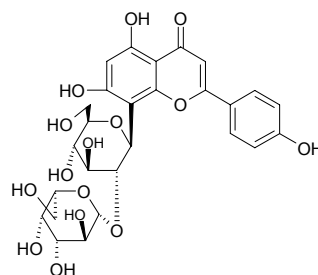
**8071** 6'-O- $\alpha$ -D-Galactopyranosylsyringopicroside

C<sub>30</sub>H<sub>40</sub>O<sub>16</sub> (656.64). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -21.1° (c = 0.389, MeOH). Source: BAO MA ZI *Syringa amurensis* [Syn. *Syringa reticulata* var. *amurensis*] (leaf). Ref: 4363, 4723.



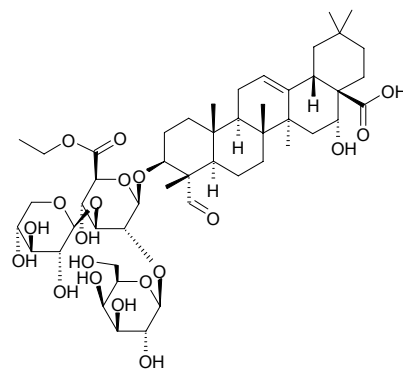
**8072** 2''-O- $\beta$ -L-Galactopyranosylvitexin

C<sub>27</sub>H<sub>30</sub>O<sub>15</sub> (594.53). Yellow powder, mp 260-262°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -37.2° (c = 0.022, MeOH). Source: DUAN BAN JIN LIAN HUA *Trollius ledebourii* (flower). Ref: 5278.



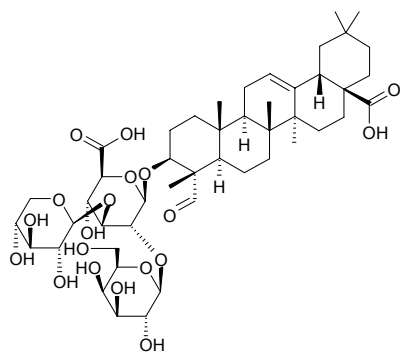
**8073** 3-O- $\beta$ -D-Galactopyranosyl-(1 $\rightarrow$ 2)-[ $\beta$ -D-xylopyranosyl(1 $\rightarrow$ 3)]- $\beta$ -D-6-O-ethylglucuronopyranosyl-quillaic acid

C<sub>49</sub>H<sub>76</sub>O<sub>20</sub> (985.14). White amorphous powder, mp 232-235°C [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -106.98° (c = 0.43, MeOH). Source: JIN TIE SUO *Psammosilene tunicoides*. Ref: 2486.



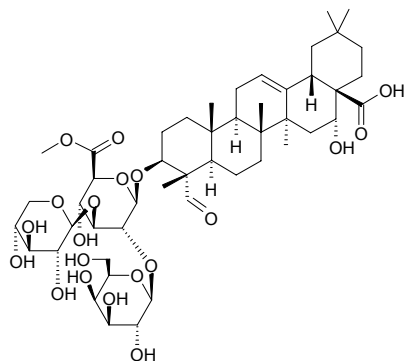
**8074 3-O-β-D-Galactopyranosyl-(1→2)-[β-D-xylopyranosyl(1→3)]-β-D-glucuronopyranosyl-gypsogenin**

C<sub>47</sub>H<sub>72</sub>O<sub>19</sub> (941.09). White amorphous powder. Source: JIN TIE SUO *Psammosilene tunicoides*. Ref: 2261.



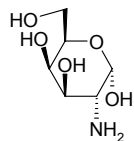
**8075 3-O-β-D-Galactopyranosyl(1→2)-[β-D-xylopyranosyl(1→3)]-β-D-6-O-methylglucuronopyranosyl-quillaic acid**

C<sub>48</sub>H<sub>74</sub>O<sub>20</sub> (971.11). White amorphous powder, mp 225~228°C [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +12.31° (c = 0.325, MeOH). Source: JIN TIE SUO *Psammosilene tunicoides*. Ref: 2486.



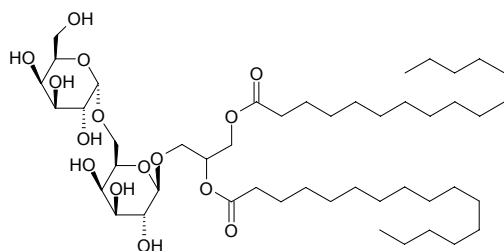
**8076 Galactosamine**

[7535-00-4] C<sub>6</sub>H<sub>13</sub>NO<sub>5</sub> (179.17). mp D(-) 185°C. Source: LU RONG *Cervus nippon*; *Cervus elaphus*, YE YU *Colocasia antiquorum*. Ref: 2.



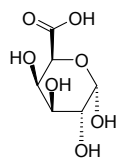
**8077 1-O-β-D-Galactosyl (6→1)-α-D-galactosyl-2,3-O-dihexadecanoyl-glycerol**

C<sub>47</sub>H<sub>88</sub>O<sub>15</sub> (893.22). Yellowish gum. Source: XIAO YE GUAN ZHONG *Matteuccia struthiopteris* (rhizome). Ref: 4862.



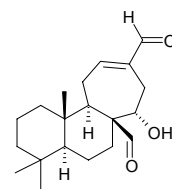
**8078 D-Galacturonic acid**

[6294-16-2] C<sub>6</sub>H<sub>10</sub>O<sub>7</sub> (194.14). mp (α) 156~159°C (dec), mp (β) 160°C (dec). Source: CHUN *Brasenia schreberi*, FEN TUAN HUA *Hydrangea paniculata*, HAI DAI *Zostera marina*, KU GUA *Momordica charantia*, LUO LE ZI *Ocimum basilicum*, MU MIAN HUA *Bombax malabaricum* [Syn. *Gossampinus malabarica*], YE YU *Colocasia antiquorum*, YI ZHU QIAN MA *Urtica dioica*, YU SHU SHU *Zea mays*. Ref: 6, 660.



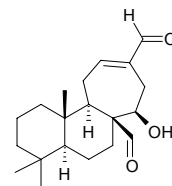
**8079 Galanal A**

[104086-74-0] C<sub>20</sub>H<sub>30</sub>O<sub>3</sub> (318.46). Colorless rhombic Crystals, mp 167~169°C, [ $\alpha$ ]<sub>D</sub> = -44° (c = 0.1, chloroform). Pharm: Antifungal (*Candida guilliermondii*, MIC = 12.5μg/mL); cytotoxic (KB, ED<sub>50</sub> = 3.25μg/mL). Source: DA LIANG JIANG *Alpinia galanga*. Ref: 1140.



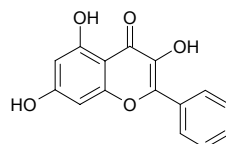
**8080 Galanal B**

[104113-52-2] C<sub>20</sub>H<sub>30</sub>O<sub>3</sub> (318.46). Colorless rhombic Crystals, mp 134.0~134.5°C, [ $\alpha$ ]<sub>D</sub> = -48° (c = 0.1, chloroform). Pharm: Antifungal (*Candida guilliermondii*, MIC = 12.5μg/mL, *Candida tropicalis*, MIC = 50μg/mL); cytotoxic (KB, ED<sub>50</sub> = 15.0μg/mL). Source: DA LIANG JIANG *Alpinia galanga*. Ref: 1140.



**8081 Galangin**

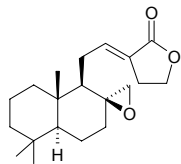
4*H*-1-Benzopyran-4-one,3,5,7-trihydroxy-2-phenyl [548-83-4] C<sub>15</sub>H<sub>10</sub>O<sub>5</sub> (270.24). Yellow acicular Crystals (MeOH), mp 214~216°C. Pharm: Antimicrobial (bacteria on skin surface, such as *Pseudomonas maltophilia*, *Enterobacter cloacae*, and *Staphylococcus epidermidis*); cyclo-oxygenase inhibitor (ox spermia); mutagen (*Salmonella aertrycke* TA98 and TA100); antiemetic (young male chicks, copper sulfate induced emesis assay, 20mg/kg, InRt = 25.4%, p < 0.01)<sup>[4649]</sup>. Source: BING TOU CAO *Scutellaria galericulata*, CHUI QI MU *Alnus pendula*, DA CHE QIAN *Plantago major*, DA LIANG JIANG *Alpinia galanga*, FENG JIAO *Apis mellifera ligustica*, GAO LIANG JIANG *Alpinia officinarum* (dried rhizome: content scope of 12 origins = 0.35%~1.30%, mean content = 0.756%<sup>[5508]</sup>; yield = 0.063%<sup>[4649]</sup>), *Escallonia* sp. Ref: 6, 463, 658, 4649, 5501, 5508.



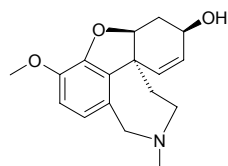


**8082 Galanolactone**

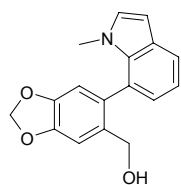
[115753-79-2] C<sub>20</sub>H<sub>30</sub>O<sub>3</sub> (318.46). Source: DALIANG JIANG *Alpinia galanga*, SHENG JIANG *Zingiber officinale*. Ref: 1140, 1542.

**8083 Galanthamine**

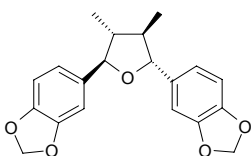
Jikon; Lycoremine; Galantamine [357-70-7] C<sub>17</sub>H<sub>21</sub>NO<sub>3</sub> (287.36). Crystals (benzene), mp 126~127°C (benzene), [α]<sub>D</sub><sup>20</sup> = -118.8° (c = 1.378, ethanol), soluble in hot water, easily soluble in ethanol, acetone, chloroform, slightly soluble in benzene, ether.<sup>[5507]</sup> Pharm: Analgesic; pesticide (kills *Eurema hecabe mandarina*); cholinesterase inhibitor (reversibly inhibits cholinesterase and easily passes BBB: AChE, IC<sub>50</sub> = (0.50±0.01) μmol/L, BChE, IC<sub>50</sub> = (8.2±0.01) μmol/L); AChE inhibitor (IC<sub>50</sub> = (1.9±0.2) μmol/L)<sup>[4952]</sup>. Source: BAI SHUI XIAN *Narcissus papyraceus*, DA YI ZHI JIAN *Lycoris aurea*, LU CONG *Lycoris squamigera*, SHI SUAN *Lycoris radiata* [Syn. *Amaryllis radiata*], SHUI XIAN GEN *Narcissus tazetta* var. *chinensis*, XIA XUE PIAN LIAN *Leucojum aestivum*, XUE HUA LIAN *Galanthus nivalis*, XUE PIAN LIAN *Leucojum vernum*. Ref: 4, 6, 658, 2563, 4952, 5507.

**8084 Galanthindole**

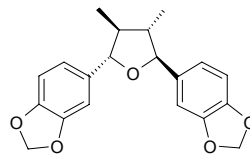
C<sub>17</sub>H<sub>15</sub>NO<sub>3</sub> (281.31). Colorless amorphous solid. Source: TU ER QI XUE HUA LIAN *Galanthus plicatus* ssp. *byzantinus*. Ref: 5443.

**8085 (+)-Galbacin**

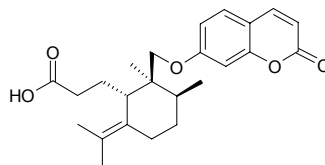
[528-64-3] C<sub>20</sub>H<sub>20</sub>O<sub>5</sub> (340.38). Crystals (EtOAc), mp 115.5~116°C, [α]<sub>D</sub> = +117° (CHCl<sub>3</sub>). Pharm: Antibacterial (*Mycobacterium tuberculosis* H37Rv). Source: RI BEN NAN *Machilus japonica*, SAN JIAO MA DOU LING *Aristolochia triangularis*. Ref: 658, 1521.

**8086 (-)-Galbacin**

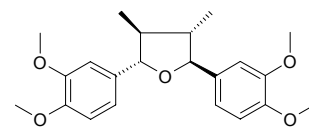
C<sub>20</sub>H<sub>20</sub>O<sub>5</sub> (340.38). Pharm: NO production inhibitor (mus, macrophage-like cell line RAW264.7 activated by LPS/IFN, IC<sub>50</sub> = 47.7 μmol/L, control quercetin, IC<sub>50</sub> = 26.8 μmol/L)<sup>[2537]</sup>. Source: HAI FENG TENG *Piper kadsura* [Syn. *Piper futokadsura*], YU LAN *Magnolia denudata* [Syn. *Magnolia heptapata*]. Ref: 2537, 4439.

**8087 Galbanic acid**

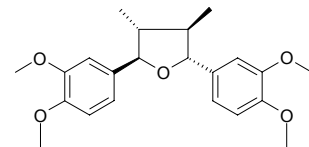
C<sub>24</sub>H<sub>30</sub>O<sub>5</sub> (398.50). Source: A WEI *Ferula assafoetida* (root). Ref: 5243.

**8088 (-)-Galbelgin**

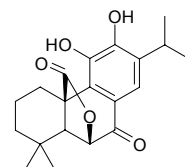
C<sub>22</sub>H<sub>28</sub>O<sub>5</sub> (372.47). Pharm: NO production inhibitor (mus, macrophage-like cell line RAW264.7 activated by LPS/IFN, IC<sub>50</sub> > 100 μmol/L, control quercetin, IC<sub>50</sub> = 26.8 μmol/L). Source: HAI FENG TENG *Piper kadsura* [Syn. *Piper futokadsura*]. Ref: 2537.

**8089 (+)-Galbelgin**

C<sub>22</sub>H<sub>28</sub>O<sub>5</sub> (372.47). Pharm: Neuroprotective (glutamate-induced neurotoxicity in primary cultures of cortical cells, 0.1 μmol/L, protection rate = (20.9±3.2)%, p<0.05, MK-801: 1.0 μmol/L, protection rate = (83.6±2.0)%, p<0.001, CNQX: 1.0 μmol/L, protection rate = (70.5±1.5)%, p<0.001). Source: HONG NAN PI *Machilus thunbergii*. Ref: 4927.

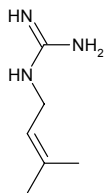
**8090 Galdosol**

rosmanol [52591-18-1] C<sub>20</sub>H<sub>24</sub>O<sub>5</sub> (344.41). Pharm: Binding activity to benzodiazepine receptor (IC<sub>50</sub> = (0.8±0.1) μmol/L, control Diazepam, IC<sub>50</sub> = (0.05±0.01) μmol/L)<sup>[5366]</sup>. Source: YAO YONG DAN SHEN YE *Salvia officinalis*. Ref: 5366.

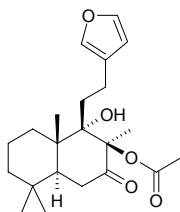


**8091 Galegine**

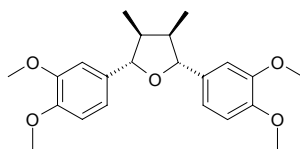
[543-83-9] C<sub>6</sub>H<sub>13</sub>N<sub>3</sub> (127.19). Moisture absorption bitter Crystals, mp 60–65°C. **Pharm:** Hypoglycemic; toxin. **Source:** SHAN YANG DOU *Galega officinalis*. **Ref:** 661.

**8092 Galeopsin**

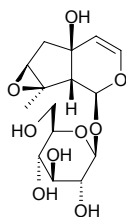
[76475-16-6] C<sub>22</sub>H<sub>32</sub>O<sub>5</sub> (376.50). **Source:** YI MU CAO *Leonurus heterophyllus* [Syn. *Leonurus artemisia*]. **Ref:** 1543, 4493, 4534.

**8093 (±)-Galgravin**

C<sub>22</sub>H<sub>28</sub>O<sub>5</sub> (372.47). **Pharm:** NO production inhibitor (mus, macrophage-like cell line RAW264.7 activated by LPS/IFN, IC<sub>50</sub> = 33.4 μmol/L, control quercetin, IC<sub>50</sub> = 26.8 μmol/L)<sup>[2537]</sup>. **Source:** HAI FENG TENG *Piper kadsura* [Syn. *Piper futokadsura*], YU LAN *Magnolia denudata* [Syn. *Magnolia heptapata*]. **Ref:** 2537, 4439.

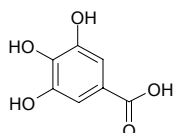
**8094 Galiridoside**

C<sub>15</sub>H<sub>22</sub>O<sub>9</sub> (346.34). White powder. **Source:** BO SI YI MU CAO *Leonurus persicus*, TAI WAN JIN GU CAO *Ajuga taiwanensis* (whole herb). **Ref:** 2499, 4483.

**8095 Gallic acid**

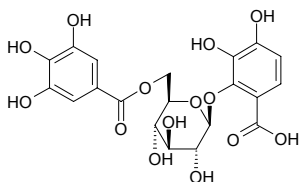
3,4,5-Trihydroxybenzoic acid [149-91-7] C<sub>7</sub>H<sub>6</sub>O<sub>5</sub> (170.12). mp 235–240°C (dec). **Pharm:** Antiallergic; antibacterial (*in vitro*: *Staphylococcus aureus*, *Sarcina* sp., *α-Streptococcus*, *Neisseria* sp., *Bacillus pyocyaneus*, *Bacillus dysenteriae*, *Bacillus typhorus* and *Bacillus paratyphosus* A, EC = 5 mg/mL); antineoplastic (mus, pulmonary adenoma induced by morpholine and sodium nitrite); cytotoxic (antioxidant assay)<sup>[5038]</sup>; antifungal (17 kinds of fungi *in vitro*, EC = 3%); anti-inflammatory; antimutagenic; antiviral (influenza virus); astringent (intestinal tract of livestock animals); antiasthmatic; choleric; inhibits degradation of insulin, IL-10-like activity (proliferation assay, dose-dependent, maximal at 30 μg/mL)<sup>[4445]</sup>; antioxidant (DPPH scavenger, TLC, MIA < 0.05 μg, IC<sub>50</sub> = 4 μg/mL)<sup>[5247]</sup>; DPPH scavenger (IC<sub>50</sub> = (12.4±0.2) μmol/L, control Trolox, IC<sub>50</sub> = (25.4±0.8) μmol/L)<sup>[4244]</sup>; cell growth inhibitor (tsFT210 cell, ≥ 12.5 μg/L, inhibits G2/M stage); ACE inhibitor (IC<sub>50</sub> > 500 μmol/L, control Lisinopril, IC<sub>50</sub> = 1 nmol/L); NEP inhibitor (IC<sub>50</sub> = 480 μmol/L, control Phosphoramidon, IC<sub>50</sub> = 9 nmol/L); APN inhibitor inactive; antibacterial (*Erwinia carotovora*, IZD = 13 mm/100 μg, control Quercetin sulfate, IZD = 21 mm/10 μg; *Staphylococcus aureus*, IZD = 7 mm/100 μg, Quercetin sulfate, IZD = 14 mm/10 μg; *Corynebacterium accolens*, IZD = 7 mm/100 μg, Quercetin sulfate, IZD = 28 mm/10 μg)<sup>[5250]</sup>; antifungal (*Candida albicans*, IZD = 7 mm/100 μg, control Nystatin, IZD = 11 mm/20 μg)<sup>[5250]</sup>; xanthine oxidase inhibitor (IC<sub>50</sub> = 7.1 μg/mL, IC<sub>50</sub> = 41.7 μmol/L; control Quercetin, IC<sub>50</sub> = 3.4 μg/mL, IC<sub>50</sub> = 10 μmol/L)<sup>[5250]</sup>. **Source:** A LA BO JIN HE HUAN *Acacia arabica*, BAI HUA QIAN HU *Peucedanum praeruptorum*, BAI LIAN *Ampelopsis japonica* [Syn. *Paullinia japonica*], BAI SHAO *Paeonia albiflora* [Syn. *Paeonia lactiflora*] (fresh fruit: yield = 1.13%fw)<sup>[4695]</sup>, BIAN XU *Polygonum aviculare*, CAO YUAN LAO GUAN CAO *Geranium pratense*, CHANG YE SHUI MA *Debregeasia longifolia*, CHENG LIU *Tamarix chinensis*, CU LIU GUO *Hippophae rhamnoides*, DA HUANG *Rheum officinale* (stem and rhizome: mean content = 0.282%<sup>[5508]</sup>), DA YE AN YE *Eucalyptus robusta*, DA YE KU NUO NI *Cunonia macrophylla* (leaf), DI JIN CAO *Euphorbia humifusa*, DI YU *Sanguisorba officinalis* (dried root: mean content of 6 origins = 0.25%<sup>[5508]</sup>), DIAN NAN HONG HOU KE *Calophyllum polyanthum* (seed: yield = 0.0047%dw)<sup>[4767]</sup>, DUO HUA SHAO YAO *Paeonia emodi* (fruit), ER CHA GOU TENG *Uncaria gambir*, FAN SHI LIU GAN *Psidium guajava*, HE TAO DA HUANG *Rheum hotaense* (stem and rhizome: content = 0.38%<sup>[5508]</sup>), HE ZI *Terminalia chebula* (fruit: content scope = 1.04%–2.78%<sup>[5501, 5508]</sup>, content = 1.04%<sup>[5508]</sup>), HONG KUAI ZI *Chamaenerion angustifolium* [Syn. *Epilobium angustifolium*], HU LU BA *Trigonella foenum-graecum*, HU TAO YE *Juglans regia*, HU ZHANG *Polygonum cuspidatum*, HUA XIANG SHU YE *Platycarya strobilacea*, HUANG LIAN YA *Pistacia chinensis*, HUANG LU *Cotinus coggygria*, HUANG LU ZHI YE *Cotinus coggygria* var. *cinerea*, JI MU *Loropetalum chinense*, KUAN DONG HUA *Tussilago farfara*, LU JIAO QI SHU *Rhus typhina*, LU XIAN CAO *Pyrola calliantha* [Syn. *Pyrola rotundifolia* ssp. *chinensis*], LV BEI GUI HUA *Excoecaria cochinchinensis* var. *viridis*, MA SANG *Coriaria sinica* [Syn. *Coriaria nepalensis*], MA SANG YE *Coriaria sinica* [Syn. *Coriaria nepalensis*], MANG GUO *Mangifera indica*, MAO YAN CAO *Euphorbia lumulata* (whole herb), MEI GUI HUA *Rosa rugosa*, MO SHI ZI *Quercus infectoria* (parasitic bee: *Cynips gallae-tinctoriae*), MU DAN PI *Paeonia moutan* [Syn. *Paeonia suffruticosa*], NAN SUAN ZAO *Choerospondias axillaris* (dried ripe fruit: mean content of 5 origins = 0.063%<sup>[5508]</sup>), NI LUO HE CHENG LIU *Tamarix nilotica*, PU<sup>(2)</sup> TAO *Vitis*

*vinifera*, QIAN NIU ZI *Pharbitis nil*, QIAN QU CAI *Lythrum salicaria*, QING GUO *Canarium album* (dried ripe fruit: content = 0.216%)<sup>[5508]</sup>, QUAN SHEN *Polygonum bistorta*, SAN WEI ZHI FAN YING TAO *Eugenia sandwicensis*, SHAN ZHU YU *Cornus officinalis* [Syn. *Macrocarpium officinale*] (dried ripe fruit: mean content of 8 origins = 0.147%)<sup>[5508]</sup>, SHENG DI HONG JING TIAN *Rhodiola sacra*, SHI DI *Diospyros kaki* (calyx: mean content = 0.029%)<sup>[5508]</sup>, SHI LIU PI *Punica granatum*, SHU ZHANG LAO GUAN CAO *Geranium sibiricum*, SHUI JIE GU DAN *Epilobium hirsutum*, SU MU *Caesalpinia sappan*, TANG GU TE DA HUANG *Rheum tanguticum* (stem and rhizome: content = 0.93%)<sup>[5508]</sup>, WEI LING CAI *Potentilla chinensis*, WU JIU MU GEN PI *Sapium sebiferum*, WU JIU YE *Sapium sebiferum*, WU YA GUO *Dillenia indica*, XI FAN LIAN *Passiflora caerulea*, XI XI LI QI SHU *Rhus coriaria*, XIAN HE CAO *Agrimonia pilosa* var. *japonica*, XIANG SI ZI *Abrus precatorius*, XIN XING PU TAO *Syzygium cordatum*, YAN FU ZI *Rhus chinensis* [Syn. *Rhus semialata*], YANG MEI SHU PI *Myrica rubra* (bark: content = 0.026%), YE XIA ZHU *Phyllanthus urinaria* (whole herb: mean content = 0.115%)<sup>[5508]</sup>, YOU GAN MU PI *Phyllanthus emblica*, YOU GAN YE *Phyllanthus emblica*, YOU SE ZI JIN NIU *Ardisia colorata* (fruit), YUE JI HUA *Rosa chinensis*, ZANG BIAN DA HUANG *Rheum emodi* [Syn. *Rheum australe*] (stem and rhizome: content = 0.042%)<sup>[5508]</sup>, ZHANG YE DA HUANG *Rheum palmatum* (stem and rhizome: content = 0.30%)<sup>[5508]</sup>, ZHU HONG SHI *Diospyros cinnabarina*, ZI WEI HUA *Lagerstroemia indica*., ZONG LV PI *Trachycarpus fortunei* (petiole and fibre of sheath, roasted petiole: mean content of 5 origins = 0.029%)<sup>[5508]</sup>, occurs in many plants. Ref: 2, 4, 5, 6, 283, 297, 658, 660, 3802, 4163, 4186, 4244, 4445, 4543, 4695, 4767, 4893, 5034, 5038, 5247, 5250, 5375, 5501, 5508.



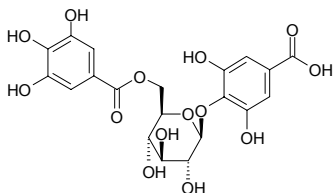
#### 8096 Gallic acid-3-O-(6'-O-galloyl)glucoside

[87087-61-4] C<sub>20</sub>H<sub>20</sub>O<sub>14</sub> (484.37). Source: AN MO LE *Phyllanthus emblica* (branch and leaf)<sup>[3094]</sup>, DA HUANG *Rheum officinale*, TANG GU TE DA HUANG *Rheum tanguticum*, ZHANG YE DA HUANG *Rheum palmatum*. Ref: 2, 660, 3094.



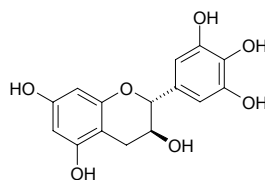
#### 8097 Gallic acid-4-O-(6'-O-galloyl)-glucoside

[87087-62-5] C<sub>20</sub>H<sub>20</sub>O<sub>14</sub> (484.37). Source: DA HUANG *Rheum officinale*, ZHANG YE DA HUANG *Rheum palmatum*, TANG GU TE DA HUANG *Rheum tanguticum*. Ref: 2, 660.



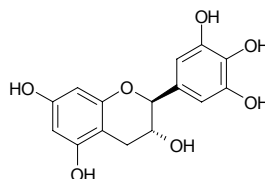
#### 8098 (+)-Gallocatechin

[970-73-0] C<sub>15</sub>H<sub>14</sub>O<sub>7</sub> (306.27). Yellow powder, mp 188~190°C, [α]<sub>D</sub><sup>20</sup> = -80° (c = 0.5, CHCl<sub>3</sub>), mp (+) 185~188°C, (-) 218°C (dec). Pharm: Inhibitory activity against NFAT transcription (IC<sub>50</sub> = (24.5±0.9) μmol/L, positive control Cyclosporin A, IC<sub>50</sub> = (0.29±0.01) μmol/L)<sup>[2536]</sup>; inhibits cancer cell invasion (MM1 cells, *in vitro*, 10 μg/mL, InRt = 24.2%)<sup>[4329]</sup>. Source: AN MO LE *Phyllanthus emblica* (branch and leaf)<sup>[3094]</sup>, BAI GUO YE *Ginkgo biloba*, CHA YE *Camellia sinensis* [Syn. *Thea sinensis*], HUA CHA BIAO *Ribes fasciculatum* var. *chinense*. Ref: 6, 2536, 3094, 4329.



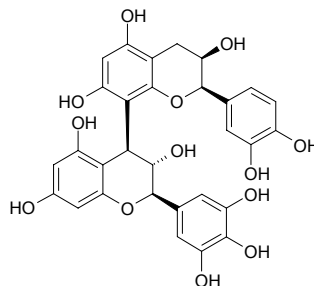
#### 8099 (-)-Gallocatechin

C<sub>15</sub>H<sub>14</sub>O<sub>7</sub> (306.27). Red amorphous powder, [α]<sub>D</sub> = -5.4° (c = 0.5, MeOH). Source: XIAO GUO YE *Jiao Musa acuminata* (fruit). Ref: 3913.



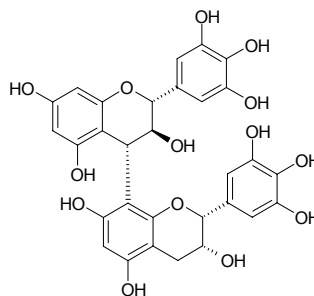
#### 8100 Gallocatechin-(4α→8)epicatechin

[79199-56-7] C<sub>30</sub>H<sub>26</sub>O<sub>13</sub> (594.53). mp 223~227°C. Source: KUN MING SHAN HAI TANG *Tripterygium hypoglaucum*. Ref: 612.



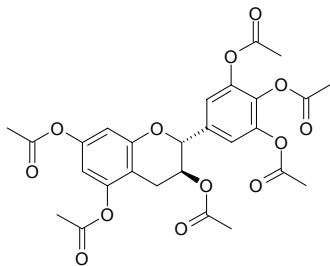
#### 8101 Gallocatechin-(4α→8)-epigallocatechin

C<sub>30</sub>H<sub>26</sub>O<sub>14</sub> (610.53). Source: SAN XIAO CAO *Trifolium repens* (flower). Ref: 3970.

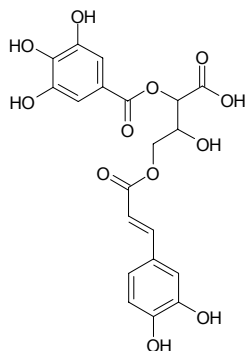


**8102 (+)-Galocatechin-hexacetate**

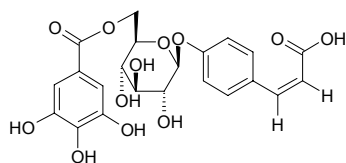
$C_{27}H_{26}O_{13}$  (558.50). Source: BAI GUO *Ginkgo biloba*. Ref: 2.

**8103 (-)-2-Galloyl-4-(E)-caffeoyl-L-threonic acid**

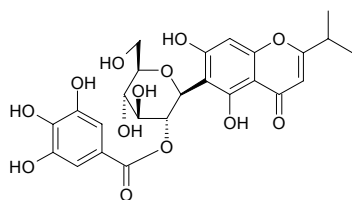
$C_{20}H_{18}O_{12}$  (450.36). Dark brown amorphous powder, mp 128–130°C,  $[\alpha]_D^{20} = -27^\circ$  ( $c = 0.09$ , MeOH). Source: DENG TAI SHU *Cornus controversa* [Syn. *Bothrocaryum controversum*] (leaf). Ref: 3918.

**8104 4-O-(6'-O-Galloyl-β-D-glucopyranosyl)-cis-p-coumaric acid**

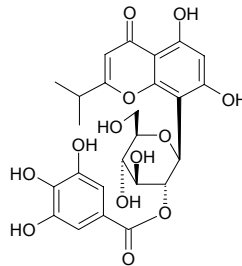
$C_{22}H_{22}O_{12}$  (478.41). White amorphous powder,  $[\alpha]_D = -14.3^\circ$  ( $c = 1.1$ , MeOH). Source: *Monochaetum multijlorum* (leaf). Ref: 5185.

**8105 6-β-C-(2'-Galloylglucopyranosyl)-5,7-dihydroxy-2-isopropylchromone**

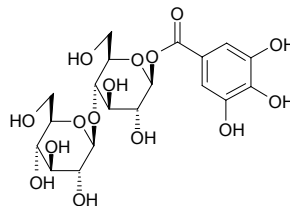
$C_{25}H_{26}O_{13}$  (534.48). Colorless amorphous powder,  $[\alpha]_D^{21} = -93.1^\circ$  ( $c = 2.50$ , MeOH). Source: GANG SONG *Baeckea frutescens*. Ref: 1895.

**8106 8-β-C-(2'-Galloylglucopyranosyl)-5,7-dihydroxy-2-isopropylchromone**

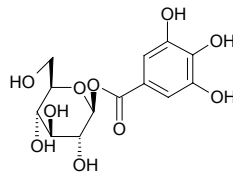
$C_{25}H_{26}O_{13}$  (534.48). Colorless amorphous powder.  $[\alpha]_D^{21} = -136.9^\circ$  ( $c = 2.53$ , MeOH). Source: GANG SONG *Baeckea frutescens*. Ref: 1895.

**8107 1-Galloyl-β-D-glucopyranosyl-(1→4)-β-D-galactopyranoside**

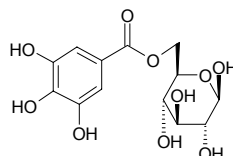
$C_{19}H_{26}O_{15}$  (494.41). Oil,  $[\alpha]_D^{25} = +7.2^\circ$  ( $c = 0.10$ , MeOH). Pharm: Antifungal (*Candida albicans* ATCC2091, MIC > 200μg/mL, control Amphotericin B, MIC = 1μg/mL; *Candida albicans* 32, MIC > 200μg/mL, Amphotericin B, MIC = 4μg/mL; *Candida albicans* 19, MIC = 100μg/mL, Amphotericin B, MIC = 2μg/mL); cytotoxic inactive (MIC > 200μg/mL); antibacterial inactive. Source: *Baseonema acuminatum* (leaf). Ref: 5021.

**8108 1-O-Galloyl-glucose**

Glucogallin  $C_{13}H_{16}O_{10}$  (332.27). mp 212°C (dec); mp ( $\alpha$ ) 179–181°C, ( $\beta$ ) 207. Source: AN MO LE *Phyllanthus emblica* (fruit juice, branch and leaf)<sup>[3094]</sup>, BAI SHAO *Paeonia albiflora* [Syn. *Paeonia lactiflora*] (fresh fruit: yield = 0.0056%fw)<sup>[4695]</sup>, DA HUANG *Rheum officinale*, HE ZI *Terminalia chebula*, YOU GAN MU PI *Phyllanthus emblica*, YOU GAN YE *Phyllanthus emblica*, TANG GU TE DA HUANG *Rheum tanguticum*, ZHANG YE DA HUANG *Rheum palmatum*. Ref: 6, 660, 3094, 4695.

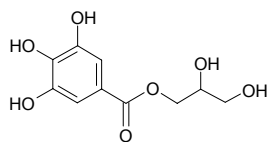
**8109 6-O-Galloyl-glucose**

$C_{13}H_{16}O_{10}$  (332.27). mp 166°C (dec). Source: AN MO LE *Phyllanthus emblica* (root)<sup>[3065]</sup>, CAO YUAN LAO GUAN CAO *Geranium pratense*, DA HUANG *Rheum officinale*, ZHANG YE DA HUANG *Rheum palmatum*, TANG GU TE DA HUANG *Rheum tanguticum*, QUAN SHEN *Polygonum bistorta*. Ref: 2, 660, 3065.

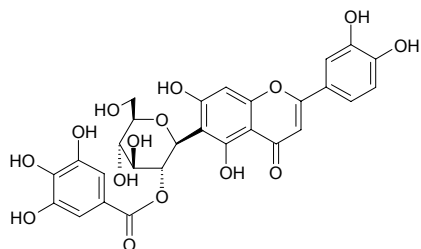


**8110 1-O-Galloyl-glycerol**

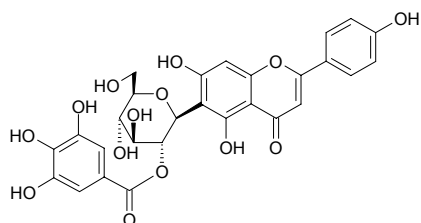
$C_{10}H_{12}O_7$  (244.20). Source: DA HUANG *Rheum officinale*. Ref: 2.

**8111 2''-O-Galloylisorientin**

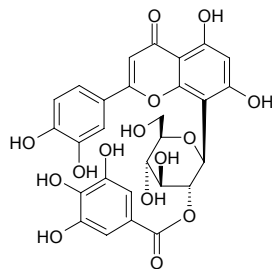
$C_{28}H_{24}O_{15}$  (600.49). Yellow amorphous powder,  $[\alpha]_D^{20} = -174^\circ$  ( $c = 0.13$ , methanol). Source: SHEN YE TIAN ZHU KUI *Pelargonium reniforme*. Ref: 1994.

**8112 2''-O-Galloylisovitexin**

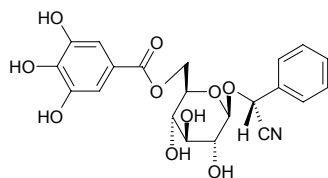
$C_{28}H_{24}O_{14}$  (584.50). Yellow amorphous powder,  $[\alpha]_D^{20} = -165^\circ$  ( $c = 0.07$ , methanol). Source: SHEN YE TIAN ZHU KUI *Pelargonium reniforme*. Ref: 1994.

**8113 2''-O-Galloylorientin**

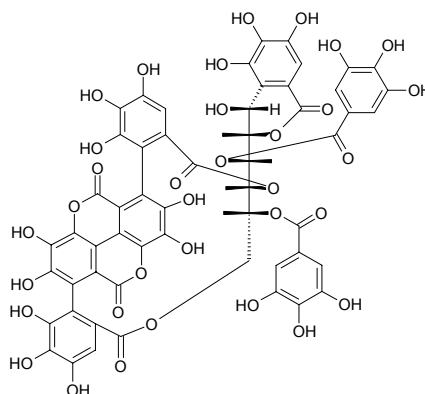
$C_{28}H_{24}O_{15}$  (600.49). Yellow amorphous powder,  $[\alpha]_D^{20} = -228.7^\circ$  ( $c = 0.15$ , methanol). Source: SHEN YE TIAN ZHU KUI *Pelargonium reniforme*. Ref: 1994.

**8114 6'-O-Galloylprunasin**

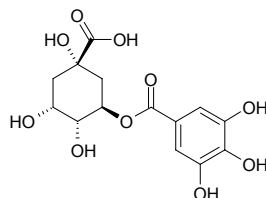
$C_{21}H_{21}NO_{10}$  (447.40). White amorphous powder,  $[\alpha]_D = -17.0^\circ$  ( $c = 1.9$ , MeOH). Source: *Monochaetum multiflorum* (leaf). Ref: 5185.

**8115 5-O-Galloylpunicacortein D**

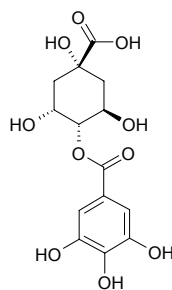
$C_{59}H_{42}O_{34}$  (1294.97). Pale yellow amorphous powder. Source: SHI LIU XIN CAI *Punica granatum*. Ref: 1942.

**8116 3-O-Galloyl quinic acid**

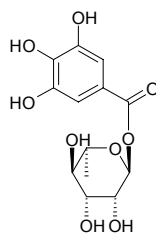
$C_{14}H_{16}O_{10}$  (344.28). Source: BAI SHAO *Paeonia albiflora* [Syn. *Paeonia lactiflora*] (fresh fruit: yield = 0.011%fw). Ref: 4695.

**8117 4-O-Galloyl quinic acid**

$C_{14}H_{16}O_{10}$  (344.28). Source: BAI SHAO *Paeonia albiflora* [Syn. *Paeonia lactiflora*] (fresh fruit: yield = 0.0019%fw). Ref: 4695.

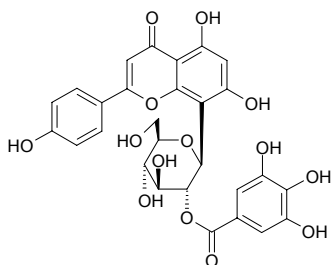
**8118 1-O-Galloyl-α-L-rhamnose**

$C_{13}H_{16}O_9$  (316.27). Source: HONG HUA QI *Acer rubrum*. Ref: 2419.

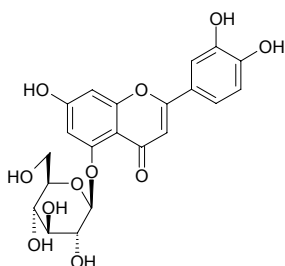


**8119 2''-O-Galloylvitexin**

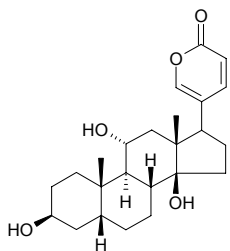
$C_{28}H_{24}O_{14}$  (584.50). Yellow amorphous powder,  $[\alpha]_D^{20} = -235.5^\circ$  ( $c = 0.11$ , methanol). Source: SHEN YE TIAN ZHU KUI *Pelargonium reniforme*. Ref: 1994.

**8120 Galuteolin**

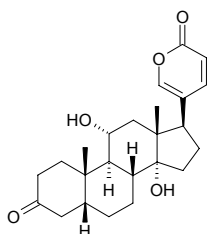
[20344-46-1]  $C_{21}H_{20}O_{11}$  (448.39). mp 260~263°C. Source: LIAN ZI XIN *Nelumbo nucifera*, WEN JING *Equisetum arvense*. Ref: 6.

**8121 Gamabufogenin**

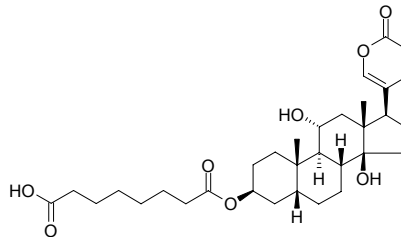
Gamabufotalin [465-11-2]  $C_{24}H_{34}O_5$  (402.54). mp 261~263°C (dec). Pharm: Cytotoxic (*in vitro*, KB,  $IC_{50} = 0.75\mu\text{g/mL}$ ; HL-60,  $IC_{50} = 0.014\mu\text{g/mL}$ ; MH-60,  $IC_{50} > 25\mu\text{g/mL}$ )<sup>[3082]</sup>. Source: CHAN SU *Bufo bufo gargarizans* (dried secretion: content = 0.22%<sup>[5508]</sup>); *Bufo melanostictus* (dried secretion: content = 0.01%<sup>[5508]</sup>). Ref: 2, 6, 3082, 5508.

**8122 Gamabufotalin**

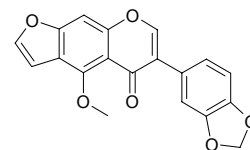
$C_{24}H_{32}O_5$  (400.52). mp 263~265°C. Source: CHAN PI *Bufo bufo gargarizans*; *Bufo melanostictus*. Ref: 6.

**8123 Gamabufotalin-3-suberate**

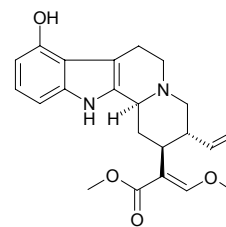
$C_{32}H_{46}O_8$  (558.72). Source: CHAN SU *Bufo bufo gargarizans*; *Bufo melanostictus*. Ref: 6.

**8124 Gamatin**

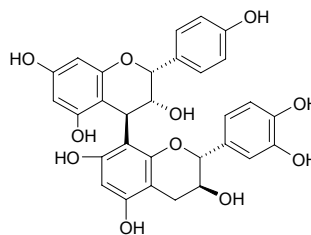
[479-85-6]  $C_{19}H_{12}O_6$  (336.30). mp 233~234°C. Source: SHUI LIU DOU *Pongamia pinnata*. Ref: 6.

**8125 Gambireine**

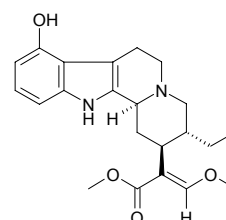
$C_{22}H_{26}N_2O_4$  (382.46). Source: CHANG HUA GOU TENG *Uncaria longiflora*, HOU YE GOU TENG *Uncaria callophylla*. Ref: 5341.

**8126 Gambiriin C**

[76236-89-0]  $C_{30}H_{26}O_{11}$  (562.54). Pharm: Tanning agent. Source: ER CHA GOU TENG *Uncaria gambir*. Ref: 658.

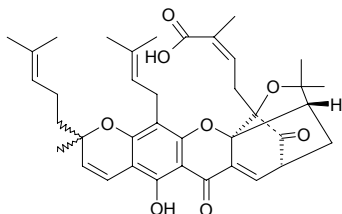
**8127 Gambirine**

[29472-77-3]  $C_{22}H_{28}N_2O_4$  (384.48). mp 163~165°C,  $[\alpha]_D = +29^\circ$  (chloroform). Pharm: Uterine stimulant. Source: ER CHA GOU TENG *Uncaria gambir*, HOU YE GOU TENG *Uncaria callophylla*. Ref: 6, 660, 661, 1521.

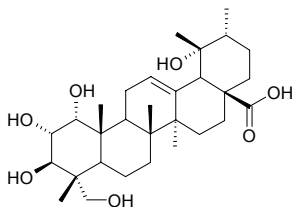


**8128 Gambogic acid**

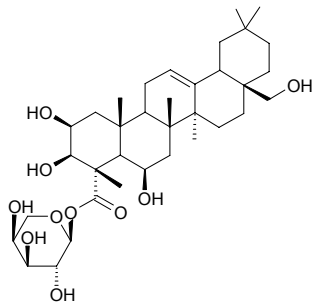
$\beta$ -Guttiferin [2752-65-0]  $C_{38}H_{44}O_8$  (628.73). Yellow amorphous resin; pyridine salt Crystals, mp 147~149°C. **Pharm:** Antineoplastic (mus, EAC, EC = 5mg/kg,  $S_{180}$ , InRt = 61%~79%); antiprotozoal (non-pathogenicity, *in vitro*); cytotoxic (cultural hmn liver cancer cells and HeLa, 4 $\mu$ g/mL); laxative (mus). **Source:** TENG HUANG *Garcinia morella* (dried balsam: content scope of 9 batch samples = 19.70%~51.05%, mean content = 33.84%)<sup>[5508]</sup>, TENG HUANG SHU *Garcinia hanburyi*<sup>[661]</sup>. **Ref:** 661, 5508.

**8129 Gamboukokoensin A**

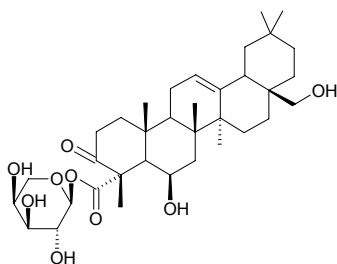
1 $\alpha$ ,2 $\alpha$ ,3 $\beta$ ,19 $\alpha$ ,23-Pentahydroxyurs-12-en-28-oic acid  $C_{30}H_{48}O_7$  (520.71). White powder, mp > 300°C. **Source:** *Gambeya boukokoensis*. **Ref:** 3463.

**8130 Gamboukokoenside A**

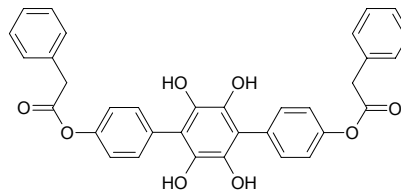
2 $\beta$ ,3 $\beta$ ,6 $\beta$ ,28-Tetrahydroxyolean-12-en-23-oic acid 23-*O*- $\alpha$ -L-arabinopyranosyl ester  $C_{35}H_{56}O_{10}$  (636.83). White powder, mp > 300°C. **Source:** *Gambeya boukokoensis*. **Ref:** 3463.

**8131 Gamboukokoenside B**

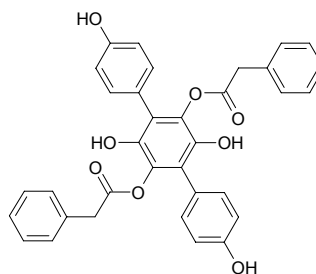
6 $\beta$ ,28-Dihydroxy-3-oxoolean-12-en-23-oic acid 23-*O*- $\alpha$ -L-arabinopyranosyl ester  $C_{35}H_{54}O_9$  (618.82). White powder, mp > 300°C. **Source:** *Gambeya boukokoensis*. **Ref:** 3463.

**8132 Ganbajunin C**

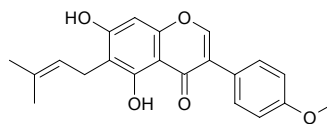
$C_{34}H_{26}O_8$  (562.58). **Source:** JIN HUANG GE JUN *Thelephora aurantiotincta*. **Ref:** 3423.

**8133 Ganbajunin E**

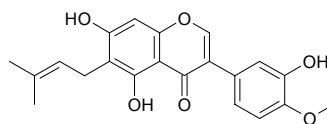
$C_{34}H_{26}O_8$  (562.58). **Source:** JIN HUANG GE JUN *Thelephora aurantiotincta*. **Ref:** 3423.

**8134 Gancaonin A**

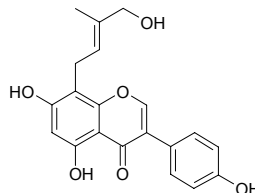
$C_{21}H_{20}O_5$  (352.39). **Source:** GAN CAO *Glycyrrhiza uralensis*. **Ref:** 660.

**8135 Gancaonin B**

[124596-86-7]  $C_{21}H_{20}O_6$  (368.39). **Source:** GAN CAO *Glycyrrhiza uralensis*. **Ref:** 660.

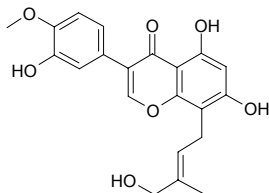
**8136 Gancaonin C**

[124596-87-8]  $C_{20}H_{18}O_6$  (354.36). **Pharm:** Antibacterial (*Escherichia coli*, MIA = 0.10 $\mu$ g, control Chloramphenicol, MIA = 0.001 $\mu$ g; *Bacillus subtilis*, MIA = 0.05 $\mu$ g, Chloramphenicol, MIA = 0.001 $\mu$ g; *Staphylococcus aureus*, MIA = 0.05 $\mu$ g, Chloramphenicol, MIA = 0.001 $\mu$ g)<sup>[3785]</sup>; antifungal (*Candida mycoderma*, MIA = 0.05 $\mu$ g, Miconazole = MIA = 0.0001 $\mu$ g)<sup>[3785]</sup>; antioxidant (DPPH scavenger, TLC detection limit = 0.5 $\mu$ g, IC<sub>50</sub> = 610 $\mu$ g/mL; control Quercetin, TLC detection limit < 0.05 $\mu$ g, IC<sub>50</sub> = 7 $\mu$ g/mL; Gallic acid, TLC detection limit < 0.05 $\mu$ g, IC<sub>50</sub> = 4 $\mu$ g/mL; Ascorbic acid, TLC detection limit < 0.10 $\mu$ g, IC<sub>50</sub> = 18 $\mu$ g/mL)<sup>[3785]</sup>. **Source:** GAN CAO *Glycyrrhiza uralensis*, *Bolusanthus speciosus* (root wood)<sup>[3785]</sup>. **Ref:** 660, 2431, 3785.

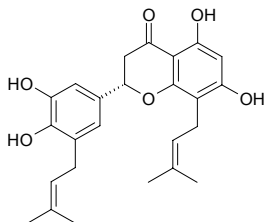


**8137 Gancaonin D**

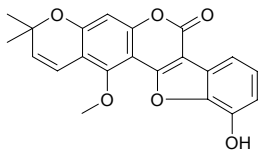
[124596-88-9] C<sub>21</sub>H<sub>20</sub>O<sub>7</sub> (384.39). Source: GAN CAO *Glycyrrhiza uralensis*. Ref: 660.

**8138 Gancaonin E**

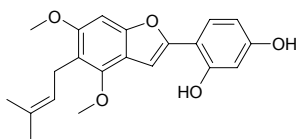
[124596-89-0] C<sub>25</sub>H<sub>28</sub>O<sub>6</sub> (424.50). Source: GAN CAO *Glycyrrhiza uralensis*. Ref: 660.

**8139 Gancaonin F**

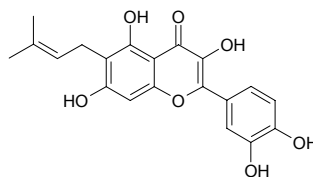
[126716-33-4] C<sub>21</sub>H<sub>16</sub>O<sub>6</sub> (364.36). Source: GAN CAO *Glycyrrhiza uralensis*. Ref: 660.

**8140 Gancaonin I**

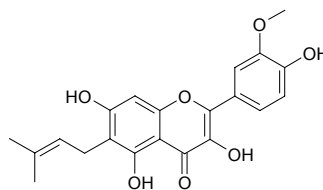
C<sub>21</sub>H<sub>22</sub>O<sub>5</sub> (354.41). Pharm: Antibacterial (*Enterococcus faecalis* JCM7783 (VSE) (= ATCC19434), MIC = 3.13 μg/mL, control Linezolid, MIC = 1.56 μg/mL; *Enterococcus faecalis* JU1856 (VRE, VanA), MIC = 3.13 μg/mL, Linezolid, MIC = 0.78 μg/mL; *Enterococcus faecalis* JU1782 (VRE, VanB), MIC = 3.13 μg/mL, Linezolid, MIC = 0.78 μg/mL; *Enterococcus faecium* JCM5804 (VSE) (= ATCC 29212), MIC = 6.25 μg/mL, Linezolid, MIC = 1.56 μg/mL; *Enterococcus faecium* JU1858 (VRE, VanA), MIC = 3.13 μg/mL, Linezolid MIC = 0.78 μg/mL; *Enterococcus faecium* JU1777 (VRE, VanB), MIC = 3.13 μg/mL, Linezolid, MIC = 1.56 μg/mL; *Enterococcus gallinarum* JU2786 (VRE, VanC), MIC = 3.13 μg/mL, Linezolid, MIC = 0.78 μg/mL; *Staphylococcus aureus* JCM2874 (MSSA) (= ATCC29213), MIC = 3.13 μg/mL, Linezolid, MIC = 1.56 μg/mL; *Staphylococcus aureus* (MRSA, 10 strains), MIC = 3.13 μg/mL, Linezolid, MIC = 0.78 μg/mL; *Staphylococcus aureus* (MRSA, 8 strains), mean MIC<sub>80</sub> = 3.13 μg/mL, Linezolid, mean MIC<sub>80</sub> = 0.78 μg/mL)<sup>[5007]</sup>. Source: GAN CAO *Glycyrrhiza uralensis*. Ref: 5007.

**8141 Gancaonin P**

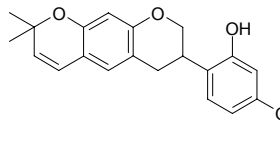
C<sub>20</sub>H<sub>18</sub>O<sub>7</sub> (370.36). Pharm: Aromatase inhibitor inactive (*in vitro*, IC<sub>50</sub> > 40 μmol/L; control Aminoglutethimide, IC<sub>50</sub> = 6.4 μmol/L)<sup>[3090]</sup>. Source: GOU SHU *Broussonetia papyrifera*. Ref: 3090.

**8142 Gancaonin P-3'-methylether**

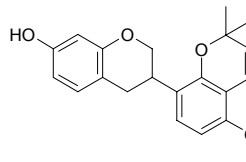
3,5,7,4'-Tetrahydroxy-3'-methoxy-6-isoprenyl flavone C<sub>21</sub>H<sub>20</sub>O<sub>7</sub> (384.39). Yellow lamellar Crystals. mp 160–162°C. Source: GAN CAO *Glycyrrhiza uralensis*. Ref: 275, 660.

**8143 Gancaonin X**

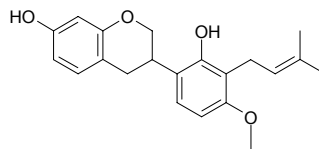
C<sub>21</sub>H<sub>22</sub>O<sub>4</sub> (338.41). Source: GAN CAO *Glycyrrhiza Uralensis*. Ref: 2431.

**8144 Gancaonin Y**

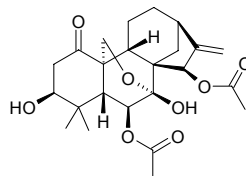
C<sub>21</sub>H<sub>22</sub>O<sub>4</sub> (338.41). Source: *Glycyrrhiza* sp. Ref: 2431.

**8145 Gancaonin Z**

C<sub>21</sub>H<sub>24</sub>O<sub>4</sub> (340.42). Source: *Glycyrrhiza* sp. Ref: 2431.

**8146 Ganervosin A**

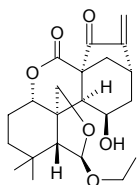
C<sub>24</sub>H<sub>32</sub>O<sub>8</sub> (448.52). mp 224–226°C. Source: XIAN MAI XIANG CHA CAI *Rabdosia nervosa*. Ref: 4067.



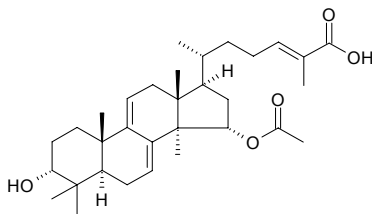


**8147 Ganerosin B**

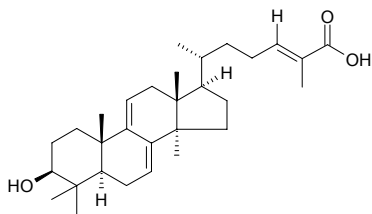
$C_{22}H_{30}O_6$  (390.48). mp 278~281°C,  $[\alpha]_D^{20} = -80^\circ$  ( $c = 0.23$ ,  $C_5H_5N$ ). Source: XIAN MAI XIANG CHA CAI *Rabdosia nervosa*. Ref: 4067.

**8148 Ganode-7,9-dien-ric acid X**

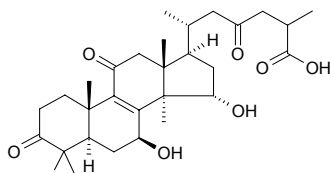
Ganoderic acid X [86377-53-9]  $C_{32}H_{48}O_5$  (512.74). Pharm: Cytotoxic (mus hepatosarcoma cell HTC, distinctly inhibits cell proliferation). Source: LING ZHI *Ganoderma lucidum*. Ref: 2235.

**8149 Ganode-7,9-dien-ric acid Y**

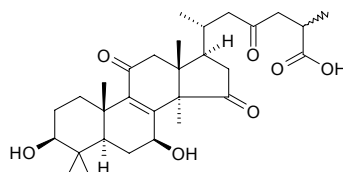
Ganoderic acid Y [86377-52-8]  $C_{30}H_{46}O_3$  (454.70). Pharm: Cytotoxic (mus hepatosarcoma cell HTC, distinctly inhibits cell proliferation). Source: LING ZHI *Ganoderma lucidum*. Ref: 2235.

**8150 Ganode-8-en-ric acid A**

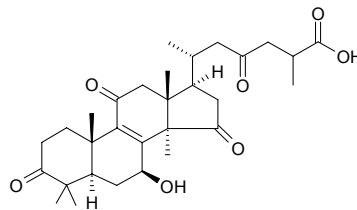
Ganoderic acid A [81907-62-2]  $C_{30}H_{44}O_7$  (516.68). Amorphous powder,  $[\alpha]_D^{27} = +153.8^\circ$  ( $c = 0.156$ ,  $CHCl_3$ ). Pharm: Analgesic (best dose = 3~5mg/kg sc, InRt of twister reaction = (30~60)%,  $p < 0.05$ ); protein opopanax ester transferase (FPT) selective inhibitor; cytotoxic inactive (mus lung carcinoma LLC cell,  $ED_{50} > 20\mu g/mL$ ; hmn carcinoma T-47D,  $ED_{50} > 20\mu g/mL$ ; S<sub>180</sub>,  $ED_{50} > 20\mu g/mL$ ; mus sarcoma Meth-A,  $ED_{50} > 20\mu g/mL$ ; control adriamycin,  $ED_{50} = 0.06\mu g/mL$ ,  $0.02\mu g/mL$ ,  $0.11\mu g/mL$ ,  $0.13\mu g/mL$ , respectively)<sup>[4204]</sup>. Source: LING ZHI *Ganoderma lucidum* (dried sporocarp: content scope of 6 origins = 0.036%~1.560%, mean content = 0.340%<sup>[5508]</sup>; yield = 0.002%<sup>[4603]</sup>). Ref: 188, 387, 2235, 4204, 4603, 5508.

**8151 Ganode-8-en-ric acid B**

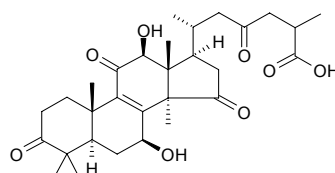
Ganoderic acid B [81907-61-1]  $C_{30}H_{44}O_7$  (516.68). Amorphous powder. Pharm: HIV-1 protease inhibitor ( $IC_{50} = 0.17\text{mmol/L}$ ); analgesic (best dose = 3~5mg/kg sc, InRt of twister reaction = (30~60)%,  $p < 0.05$ ). Source: LING ZHI *Ganoderma lucidum* (dried sporocarp: mean content of 2 origins = 0.15%<sup>[5508]</sup>; yield = 0.0015%<sup>[4603]</sup>). Ref: 2235, 4603, 5508.

**8152 Ganode-8-en-ric acid C<sub>1</sub>**

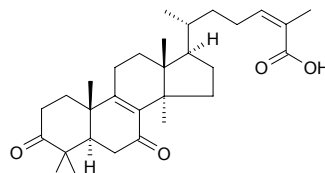
Ganoderic acid C<sub>1</sub> [95311-97-0]  $C_{30}H_{42}O_7$  (514.67). Crystals, mp 150~151°C,  $[\alpha]_D^{15} = +175.4^\circ$  ( $c = 0.057$ ,  $CHCl_3$ ). Pharm: HIV-1 protease inhibitor ( $IC_{50} = 0.18\text{~}0.32\text{mmol/L}$ ). Source: LING ZHI *Ganoderma lucidum*. Ref: 2235.

**8153 Ganode-8-en-ric acid D**

Ganoderic acid D [97653-94-6]  $C_{30}H_{42}O_8$  (530.66). Crystals (EtOAc), mp 201~203°C,  $[\alpha]_D^{22} = +185^\circ$  ( $c = 0.1$ , EtOH). Pharm: Antihistamine (inhibits histamine release, mus must cells *in vitro*, induced by ConA,  $0.4\mu g/mL$  InRt = 15%). Source: LING ZHI *Ganoderma lucidum* (dried sporocarp: content scope of 6 origins = 0.024%~0.686%, mean content = 0.334%<sup>[5508]</sup>). Ref: 2235, 5508.

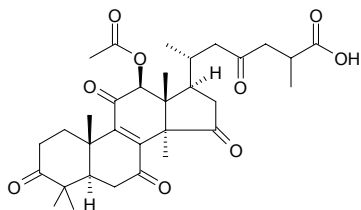
**8154 Ganode-8-en-ric acid DM**

Ganoderic acid DM  $C_{30}H_{44}O_4$  (468.68). Yellowish acicular crystals (chloroform-methanol), mp 203~205°C. Source: LING ZHI *Ganoderma lucidum* (sporocarp: yield = 0.0017%<sup>[4603]</sup>). Ref: 387, 4603.

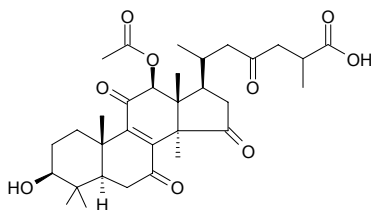


**8155 Ganode-8-en-ric acid F**

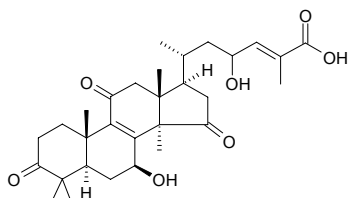
Ganoderic acid F [98665-15-7] C<sub>32</sub>H<sub>42</sub>O<sub>9</sub> (570.69). **Pharm:** ACEI (IC<sub>50</sub> = 4.7 μmol/L); EBV-EA activation inhibitor (Raji cells *in vitro*, TPA-induced, IC<sub>50</sub> = 293 mol ratio/32 pmol TPA, control β-Carotene, IC<sub>50</sub> = 400 mol ratio/32 pmol TPA)<sup>[4737]</sup>. **Source:** LING ZHI *Ganoderma lucidum* (sporocarp: yield = 0.0097% dw). **Ref:** 2235, 4737.

**8156 Ganode-8-en-ric acid H**

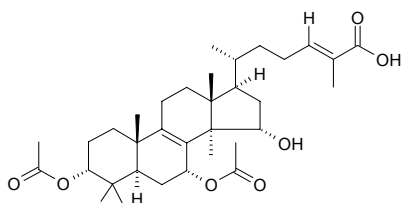
Ganoderic acid H C<sub>32</sub>H<sub>44</sub>O<sub>9</sub> (572.70). **Pharm:** HIV-1 protease inhibitor (IC<sub>50</sub> = 0.18–0.32 mmol/L); analgesic (best dose = 3–5 mg/kg sc, InRt of twister reaction = (30–60)%, *p* < 0.05). **Source:** LING ZHI *Ganoderma lucidum* (sporocarp: yield = 0.0025%)<sup>[4603]</sup>. **Ref:** 2235, 4603.

**8157 Ganode-8-en-ric acid LM<sub>2</sub>**

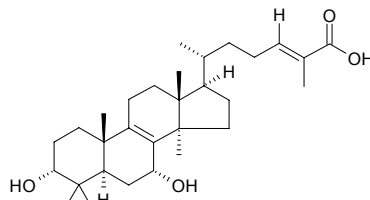
Ganoderic acid LM<sub>2</sub> C<sub>30</sub>H<sub>42</sub>O<sub>7</sub> (514.67). mp 227–229°C, [α]<sub>D</sub> = +132°. **Source:** LING ZHI *Ganoderma lucidum*. **Ref:** 2235.

**8158 Ganode-8-en-ric acid Ma**

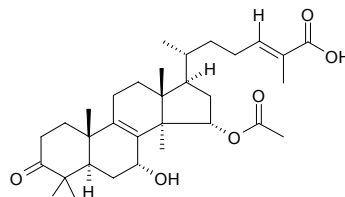
Ganoderic acid Ma C<sub>34</sub>H<sub>52</sub>O<sub>7</sub> (572.79). **Source:** LING ZHI *Ganoderma lucidum*. **Ref:** 1521.

**8159 Ganode-8-en-ric acid U**

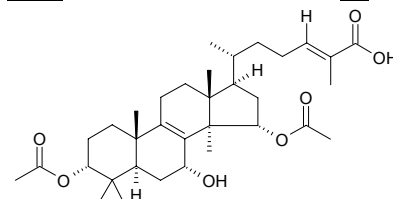
Ganoderic acid U C<sub>30</sub>H<sub>48</sub>O<sub>4</sub> (472.71). Crystals, mp 196–199°C, [α]<sub>D</sub> = +35°. **Pharm:** Cytotoxic (mus hepatosarcoma cell HTC, distinctly inhibits cell proliferation). **Source:** LING ZHI *Ganoderma lucidum*. **Ref:** 2235.

**8160 Ganode-8-en-ric acid V**

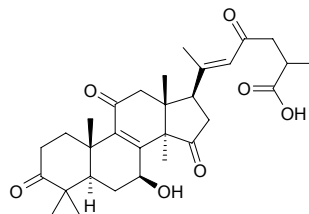
Ganoderic acid V [86377-50-6] C<sub>32</sub>H<sub>48</sub>O<sub>6</sub> (528.74). **Pharm:** Cytotoxic (mus hepatosarcoma cell HTC, distinctly inhibits cell proliferation). **Source:** LING ZHI *Ganoderma lucidum*. **Ref:** 2235.

**8161 Ganode-8-en-ric acid W**

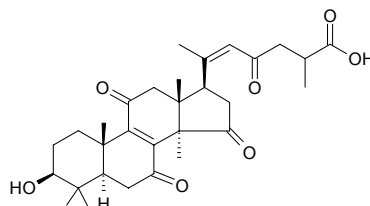
Ganoderic acid W C<sub>34</sub>H<sub>52</sub>O<sub>7</sub> (572.79). Amorphous, mp 114–117°C. **Pharm:** Cytotoxic (mus hepatosarcoma cell HTC, distinctly inhibits cell proliferation). **Source:** LING ZHI *Ganoderma lucidum*. **Ref:** 2235.

**8162 Ganoderenic acid D**

(*E*)-7β-Hydroxy-3,11,15,23-tetraoxolanosta-8,20(22)-dien-26-oic acid C<sub>30</sub>H<sub>40</sub>O<sub>7</sub> (512.65). **Source:** *Ganoderma lipsiense*. **Ref:** 3972.

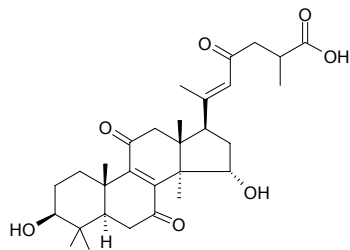
**8163 Ganoderenic acid H**

[120462-48-8] C<sub>30</sub>H<sub>40</sub>O<sub>7</sub> (512.65). **Source:** SHU SHE *Ganoderma applanatum*. **Ref:** 1521.

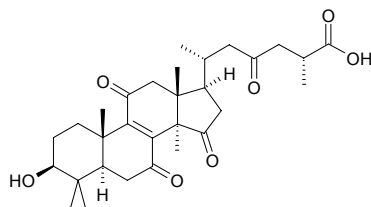


**8164 Ganoderenic acid I**

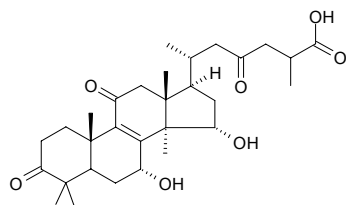
[120462-49-9] C<sub>30</sub>H<sub>42</sub>O<sub>7</sub> (514.67). Source: SHU SHE *Ganoderma applanatum*. Ref: 1521.

**8165 Ganoderenic acid AM<sub>1</sub>**

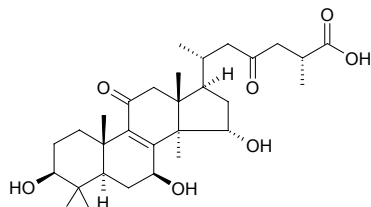
C<sub>30</sub>H<sub>42</sub>O<sub>7</sub> (514.67). Source: LING ZHI *Ganoderma lucidum* (sporocarp: yield = 0.0004%). Ref: 4603.

**8166 Ganoderenic acid B<sub>8</sub>**

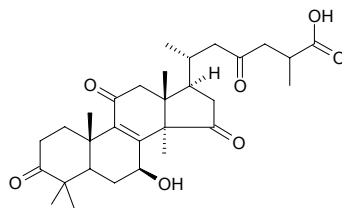
C<sub>30</sub>H<sub>44</sub>O<sub>7</sub> (516.68). Pharm: Cytotoxic inactive (mus lung carcinoma LLC cell, ED<sub>50</sub> > 20μg/mL; hmn carcinoma T-47D, ED<sub>50</sub> > 20μg/mL; mus sarcoma S<sub>180</sub>, ED<sub>50</sub> > 20μg/mL; mus sarcoma Meth-A, ED<sub>50</sub> > 20μg/mL; control Adriamycin, ED<sub>50</sub> = 0.06μg/mL, 0.02μg/mL, 0.11μg/mL, 0.13μg/mL, respectively). Source: LING ZHI *Ganoderma lucidum*. Ref: 4204.

**8167 Ganoderenic acid C**

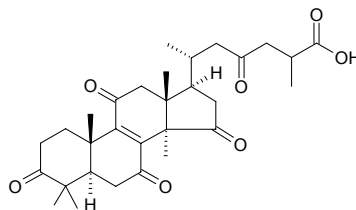
[98296-48-1] C<sub>30</sub>H<sub>46</sub>O<sub>7</sub> (518.70). Pharm: Antihistamine (inhibits histamine release, rat mastocyte *in vitro*, inhibits ConA-reduced histamine release, 0.4μg/mL, InRt = 15%); cytotoxic (*in vitro*, HepG<sub>2</sub>, IC<sub>50</sub> = 0.144nmol/L; Hep2,2,15, IC<sub>50</sub> = 0.105nmol/L; CCM2, IC<sub>50</sub> = 31.3μmol/L; P<sub>388</sub>, IC<sub>50</sub> = 5μmol/L)<sup>[3081]</sup>. Source: LING ZHI *Ganoderma lucidum* (dried sporocarp: content scope of 6 origins = 0.106%~0.901%, mean content = 0.472%<sup>[5508]</sup>). Ref: 387, 1521, 3081, 5508.

**8168 Ganoderenic acid C<sub>1</sub>**

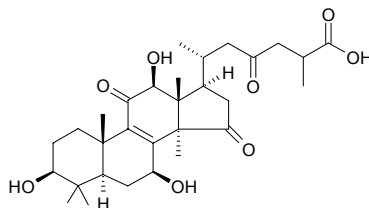
C<sub>30</sub>H<sub>42</sub>O<sub>7</sub> (514.67). Pharm: Cytotoxic inactive (mus lung carcinoma LLC cell, ED<sub>50</sub> > 20μg/mL; hmn carcinoma T47D, ED<sub>50</sub> > 20μg/mL; mus sarcoma S<sub>180</sub>, ED<sub>50</sub> > 20μg/mL; mus sarcoma Meth-A, ED<sub>50</sub> > 20μg/mL; control Adriamycin, ED<sub>50</sub> = 0.06μg/mL, 0.02μg/mL, 0.11μg/mL, 0.13μg/mL, respectively). Source: LING ZHI *Ganoderma lucidum*. Ref: 4204.

**8169 Ganoderenic acid E**

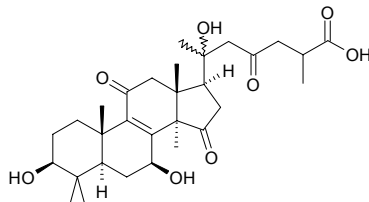
C<sub>30</sub>H<sub>40</sub>O<sub>7</sub> (512.65). Pharm: EBV-EA activation inhibitor (Raji cells *in vitro*, TPA-induced, IC<sub>50</sub> = 281mol ratio/32pmol TPA, control β-Carotene, IC<sub>50</sub> = 400mol ratio/32pmol TPA)<sup>[4737]</sup>. Source: LING ZHI *Ganoderma lucidum* (dried sporocarp: content scope of 6 origins = 0.342%~1.129%, mean content = 0.784%<sup>[5508]</sup>; yield = 0.0066%<sup>[4737]</sup>). Ref: 4737, 5508.

**8170 Ganode-8-en-ric acid G**

Ganoderenic acid G [98665-22-6] C<sub>30</sub>H<sub>44</sub>O<sub>8</sub> (532.68). Plates (EtOAc-MeOH), mp 218~220°C, [α]<sub>D</sub><sup>22</sup> = +105.7° (c = 0.48, CHCl<sub>3</sub>). Pharm: Analgesic (best dose = 3~5mg/kg sc, InRt of twister reaction = (30~60)%, p < 0.05). Source: LING ZHI *Ganoderma lucidum* (sporocarp: yield = 0.005%<sup>[4603]</sup>). Ref: 2235, 4603.

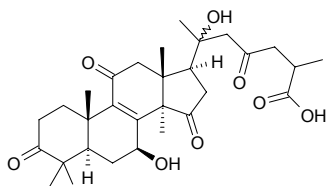
**8171 Ganoderenic acid I**

C<sub>30</sub>H<sub>44</sub>O<sub>8</sub> (532.68). Source: LING ZHI *Ganoderma lucidum* (sporocarp: yield = 0.0013%). Ref: 4603.

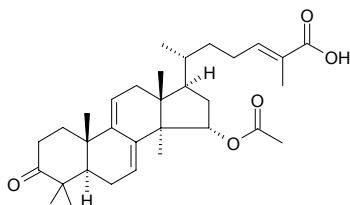


**8172 Ganoderic acid N**

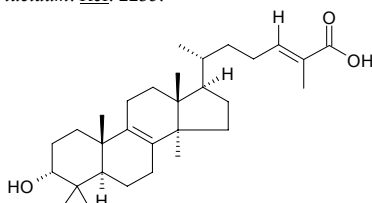
7 $\beta$ ,20-Dihydroxy-3,11,15,23-tetraoxolanosta-8-en-26-oic acid C<sub>30</sub>H<sub>42</sub>O<sub>8</sub>  
(530.66). Source: *Ganoderma lipsiense*. Ref: 3972.

**8173 Ganoderic acid T-Q**

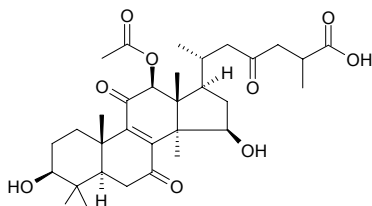
C<sub>32</sub>H<sub>46</sub>O<sub>5</sub> (510.72). Pharm: EBV-EA activation inhibitor (Raji cells *in vitro*, TPA-induced, IC<sub>50</sub> = 281mol ratio/32pmol TPA, control  $\beta$ -Carotene, IC<sub>50</sub> = 400mol ratio/32pmol TPA). Source: LING ZHI *Ganoderma lucidum* (sporocarp: yield = 0.0124%dw). Ref: 4737.

**8174 Ganoderic acid Z**

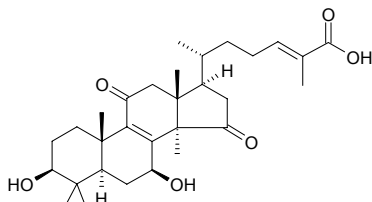
[86420-19-1] C<sub>30</sub>H<sub>48</sub>O<sub>3</sub> (456.72). Pharm: Cytotoxic (mus hepatosarcoma cell HTC, distinctly inhibits cell proliferation). Source: LING ZHI *Ganoderma lucidum*. Ref: 2235.

**8175 Ganoderic acid  $\alpha$** 

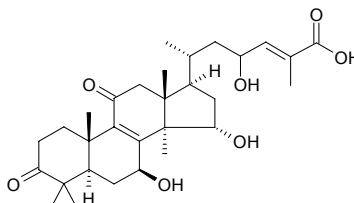
C<sub>32</sub>H<sub>46</sub>O<sub>9</sub> (574.72). [ $\alpha$ ]<sub>D</sub> = +55°. Pharm: HIV-1 protease inhibitor (IC<sub>50</sub> = 0.18–0.32mmol/L). Source: LING ZHI *Ganoderma lucidum*. Ref: 2235.

**8176 Ganoderic acid  $\beta$** 

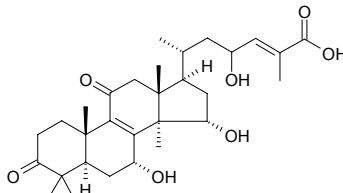
C<sub>30</sub>H<sub>44</sub>O<sub>6</sub> (500.68). mp 187–189°C, [ $\alpha$ ]<sub>D</sub> = +60°. Pharm: HIV-1 protease inhibitor (*in vitro*, IC<sub>50</sub> = 20 $\mu$ mol/L). Source: LING ZHI *Ganoderma lucidum*. Ref: 341, 2235.

**8177 Ganoderic acid  $\gamma$** 

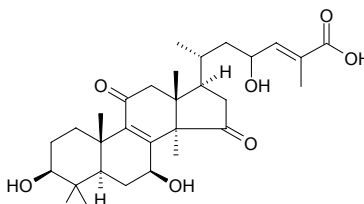
(7 $\beta$ ,15 $\alpha$ ,23S,24E)-7,15,23-Trihydroxy-3,11-dioxolanosta-8,24-dien-26-oic acid [294674-00-3] C<sub>30</sub>H<sub>44</sub>O<sub>7</sub> (516.68). mp 243–245°C, [ $\alpha$ ]<sub>D</sub> = +155.3°. Source: LING ZHI *Ganoderma lucidum*. Ref: 2235.

**8178 Ganoderic acid  $\delta$** 

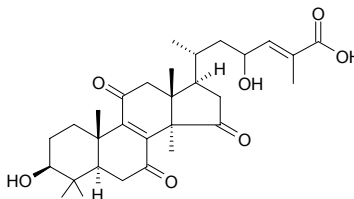
[294674-02-5] C<sub>30</sub>H<sub>44</sub>O<sub>7</sub> (516.68). [ $\alpha$ ]<sub>D</sub> = +160°. Source: LING ZHI *Ganoderma lucidum*. Ref: 2235.

**8179 Ganoderic acid  $\epsilon$** 

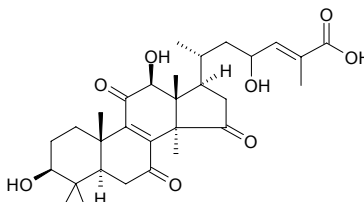
3,7,23-Trihydroxy-11,15-dioxolanosta-8,24-dien-26-oic acid [294674-05-8] C<sub>30</sub>H<sub>44</sub>O<sub>7</sub> (516.68). mp 249–251°C, [ $\alpha$ ]<sub>D</sub> = +153.3°. Source: LING ZHI *Ganoderma lucidum*. Ref: 2235.

**8180 Ganoderic acid  $\zeta$** 

3,23-Dihydroxy-7,11,15-trioxolanosta-8,24-dien-26-oic acid. [294674-09-2] C<sub>30</sub>H<sub>42</sub>O<sub>7</sub> (514.67). mp 143–145°C, [ $\alpha$ ]<sub>D</sub> = +213.3°. Source: LING ZHI *Ganoderma lucidum*. Ref: 2235.

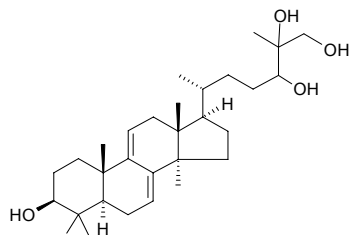
**8181 Ganoderic acid  $\theta$** 

C<sub>30</sub>H<sub>42</sub>O<sub>8</sub> (530.66). mp 131–133°C, [ $\alpha$ ]<sub>D</sub> = +71.3°. Source: LING ZHI *Ganoderma lucidum*. Ref: 255, 2235.

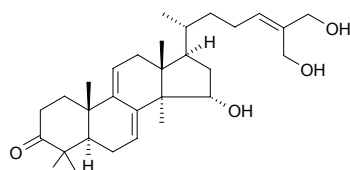


**8182 Ganoderiol A**

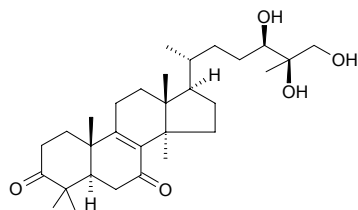
$C_{30}H_{50}O_4$  (474.73). Needles ( $CHCl_3$ ), mp 232–234°C,  $[\alpha]_D^{23} = +20^\circ$  ( $c = 0.1$ , EtOH). **Pharm:** HIV-1 protease inhibitor ( $IC_{50} = 0.18\text{--}0.32\text{mmol/L}$ ). **Source:** LING ZHI *Ganoderma lucidum*. **Ref:** 2235.

**8183 Ganoderiol B**

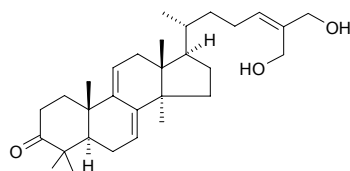
[106518-62-1]  $C_{30}H_{46}O_4$  (470.70). Amorphous powder. **Pharm:** HIV-1 protease inhibitor ( $IC_{50} = 0.17\text{mmol/L}$ ). **Source:** LING ZHI *Ganoderma lucidum* (sporocarp: yield = 0.00025%)<sup>[4603]</sup>. **Ref:** 2235, 4603.

**8184 Ganoderiol D**

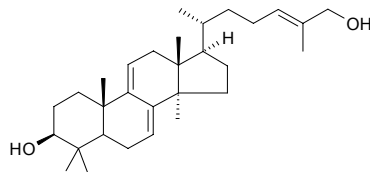
[114567-45-2]  $C_{30}H_{48}O_5$  (488.71). **Source:** LING ZHI *Ganoderma lucidum*. **Ref:** 387.

**8185 Ganoderiol F**

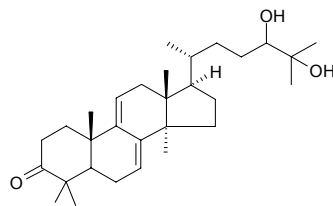
[114567-47-4]  $C_{30}H_{46}O_3$  (454.70). Yellowish plates ( $CHCl_3$ –MeOH), mp 116–120°C,  $[\alpha]_D^{21} = +42^\circ$  ( $c = 0.1$ , MeOH). **Pharm:** Anti-HIV-1 (MT-4 cell, inhibits cytotoxic effect induced by HIV-1,  $IC_{100} = 7.8\mu\text{g/mL}$  and this concentration is 50% of that of cytotoxic concentration only); HIV-1 protease inhibitor ( $IC_{50} = 0.18\text{--}0.32\text{mmol/L}$ ). **Source:** LING ZHI *Ganoderma lucidum*. **Ref:** 2235.

**8186 Ganodermadiol**

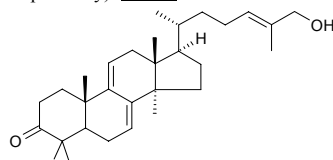
$C_{30}H_{48}O_2$  (440.72). **Pharm:** Cytotoxic (mus lung carcinoma LLC cell,  $ED_{50} > 20\mu\text{g/mL}$ ; hmn carcinoma T-47D,  $ED_{50} > 20\mu\text{g/mL}$ ; mus sarcoma S<sub>180</sub>,  $ED_{50} > 20\mu\text{g/mL}$ ; mus sarcoma Meth-A,  $ED_{50} = 10.3\mu\text{g/mL}$ ; control Adriamycin,  $ED_{50} = 0.06\mu\text{g/mL}$ ,  $0.02\mu\text{g/mL}$ ,  $0.11\mu\text{g/mL}$ ,  $0.13\mu\text{g/mL}$ , respectively). **Source:** LING ZHI *Ganoderma lucidum*. **Ref:** 4204.

**8187 Ganodermanondiol**

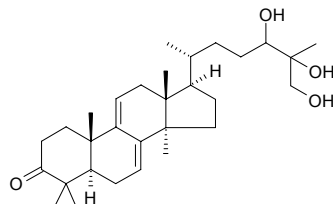
$C_{30}H_{48}O_3$  (456.72). **Pharm:** Cytotoxic (mus lung carcinoma LLC cell,  $ED_{50} = 14.0\mu\text{g/mL}$ ; hmn breast carcinoma T47D,  $ED_{50} = 4.7\mu\text{g/mL}$ ; mus sarcoma S<sub>180</sub>,  $ED_{50} = 11.0\mu\text{g/mL}$ ; mus sarcoma Meth-A,  $ED_{50} = 9.2\mu\text{g/mL}$ ; control Adriamycin,  $ED_{50} = 0.06\mu\text{g/mL}$ ,  $0.02\mu\text{g/mL}$ ,  $0.11\mu\text{g/mL}$ ,  $0.13\mu\text{g/mL}$ , respectively). **Source:** LING ZHI *Ganoderma lucidum*. **Ref:** 4204.

**8188 Ganodermanonol**

$C_{30}H_{46}O_2$  (438.70). **Pharm:** Cytotoxic (mus lung carcinoma LLC cell,  $ED_{50} > 20\mu\text{g/mL}$ ; hmn breast carcinoma T47D,  $ED_{50} = 4.8\mu\text{g/mL}$ ; mus sarcoma S<sub>180</sub>,  $ED_{50} = 10.0\mu\text{g/mL}$ ; mus sarcoma Meth-A,  $ED_{50} = 2.8\mu\text{g/mL}$ ; control Adriamycin,  $ED_{50} = 0.06\mu\text{g/mL}$ ,  $0.02\mu\text{g/mL}$ ,  $0.11\mu\text{g/mL}$ ,  $0.13\mu\text{g/mL}$ , respectively). **Source:** LING ZHI *Ganoderma lucidum*. **Ref:** 4204.

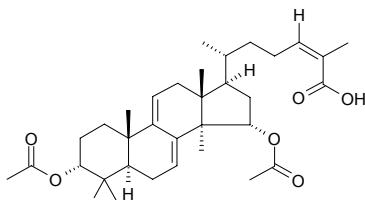
**8189 Ganodermanontriol**

[106518-63-2]  $C_{30}H_{48}O_4$  (472.71). Crystals, mp 168–170°C,  $[\alpha]_D^{24} = +41^\circ$  ( $c = 0.2$ , MeOH). **Pharm:** Anti-HIV-1 (MT-4 cell, inhibits cytotoxic effect induced by HIV-1,  $IC_{100} = 7.8\mu\text{g/mL}$  and this concentration is 50% of that of cytotoxic concentration only); cytotoxic inactive (mus lung carcinoma LLC cell,  $ED_{50} > 20\mu\text{g/mL}$ ; hmn carcinoma T47D,  $ED_{50} > 20\mu\text{g/mL}$ ; mus sarcoma S<sub>180</sub>,  $ED_{50} > 20\mu\text{g/mL}$ ; mus sarcoma Meth-A,  $ED_{50} > 20\mu\text{g/mL}$ ; control adriamycin,  $ED_{50} = 0.06\mu\text{g/mL}$ ,  $0.02\mu\text{g/mL}$ ,  $0.11\mu\text{g/mL}$ ,  $0.13\mu\text{g/mL}$ , respectively)<sup>[4204]</sup>. **Source:** LING ZHI *Ganoderma lucidum*. **Ref:** 2235, 4204.

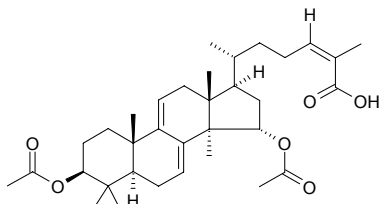


**8190 Ganodermic acid R**

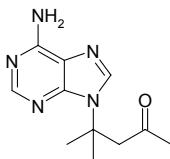
[108026-93-3] C<sub>34</sub>H<sub>50</sub>O<sub>6</sub> (554.77). Pharm: inhibits biosynthesis of cholesterol (inhibits absorption of cholesterol in foods). Source: LING ZHI *Ganoderma lucidum*. Ref: 2235.

**8191 Ganodermic acid S**

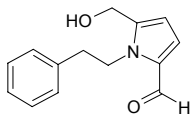
[112430-63-4] C<sub>34</sub>H<sub>50</sub>O<sub>6</sub> (554.77). Pharm: platelet aggregation inhibitor (2 μmol/L, InRt = 50%, 7.5~10 μmol/L, InRt = 100%, IC<sub>50</sub> = 2 μmol/L); inhibits biosynthesis of cholesterol (inhibits absorption of cholesterol in foods). Source: LING ZHI *Ganoderma lucidum*. Ref: 2235.

**8192 Ganoderpurine**

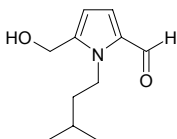
[133086-82-5] C<sub>11</sub>H<sub>15</sub>N<sub>5</sub>O (233.28). Oleaginous substance, mp 151~152°C. Source: BAO GAI LING ZHI *Ganoderma capense*. Ref: 164.

**8193 Ganodine**

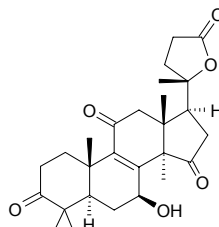
[133086-81-4] C<sub>14</sub>H<sub>15</sub>NO<sub>2</sub> (229.28). Source: BAO GAI LING ZHI *Ganoderma capense*. Ref: 164.

**8194 Ganoine**

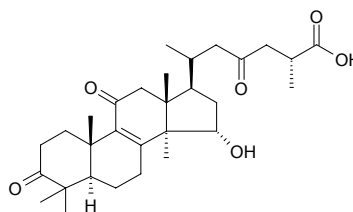
[133086-80-3] C<sub>11</sub>H<sub>17</sub>NO<sub>2</sub> (195.26). Oleaginous liquid. Source: BAO GAI LING ZHI *Ganoderma capense*. Ref: 164.

**8195 Ganolactone**

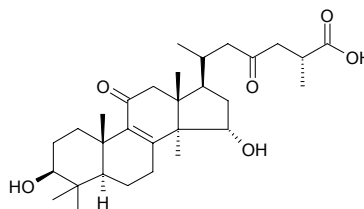
Lucidenolactone C<sub>27</sub>H<sub>36</sub>O<sub>6</sub> (456.58). White acicular Crystals, mp 294~296°C, [α]<sub>D</sub><sup>20</sup> = +6° (c = 0.1148, chloroform). Source: LING ZHI *Ganoderma lucidum*. Ref: 350, 3081.

**8196 Ganolucidic acid A**

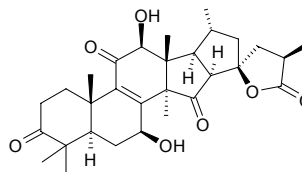
[98665-21-5] C<sub>30</sub>H<sub>44</sub>O<sub>6</sub> (500.68). Pharm: HIV-1 protease inhibitor (distinct effect). Source: LING ZHI *Ganoderma lucidum*. Ref: 2235.

**8197 Ganolucidic acid B**

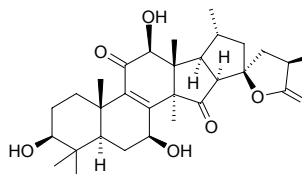
[98683-75-1] C<sub>30</sub>H<sub>46</sub>O<sub>6</sub> (502.70). Source: LING ZHI *Ganoderma lucidum*. Ref: 2235.

**8198 Ganosporelactone A**

C<sub>30</sub>H<sub>40</sub>O<sub>7</sub> (512.65). White acicular Crystals, mp 238~240°C, [α]<sub>D</sub><sup>13</sup> = +74.5° (c = 0.057, chloroform). Source: LING ZHI *Ganoderma lucidum*. Ref: 192.

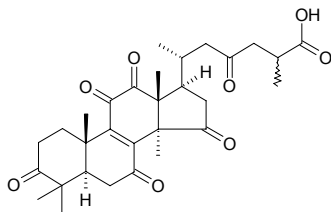
**8199 Ganosporelactone B**

C<sub>30</sub>H<sub>42</sub>O<sub>7</sub> (514.67). White acicular Crystals, mp 235~237°C, [α]<sub>D</sub><sup>12</sup> = +68.8° (c = 0.083, chloroform). Source: LING ZHI *Ganoderma lucidum*. Ref: 192.

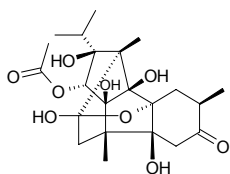


**8200 Ganosporeric acid A**

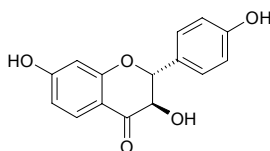
[135357-25-4] C<sub>30</sub>H<sub>38</sub>O<sub>8</sub> (526.63). Yellow acicular Crystals, mp 115~118°C, [ $\alpha$ ]<sub>D</sub><sup>28</sup> = +48° (c = 0.1, chloroform). Source: LING ZHI *Ganoderma lucidum* (dried sporocarp: mean content of 2 origins = 0.14%<sup>[5508]</sup>) Ref: 188, 5508.

**8201 Garajonone**

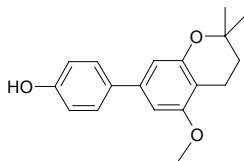
C<sub>22</sub>H<sub>32</sub>O<sub>9</sub> (440.49). Pharm: Antifeedant (*Spodoptera littoralis*, EC<sub>50</sub> > 23nmol/cm<sup>2</sup>, *Leptinotarsa decemlineata*, EC<sub>50</sub> > 23nmol/cm<sup>2</sup>). Source: YIN DU E LI *Persea indica* (aerial parts). Ref: 5128.

**8202 Garbanzol**

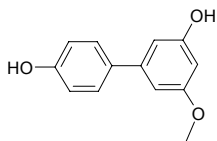
Aromadendrin-4',7-dimethyl ether [1226-22-8] C<sub>15</sub>H<sub>12</sub>O<sub>5</sub> (272.26). mp 189~190°C. Source: HUI HUI DOU *Cicer arietinum*, NING MENG AN YE *Eucalyptus citriodora*. Ref: 6, 1521.

**8203 Garcibenzopyran**

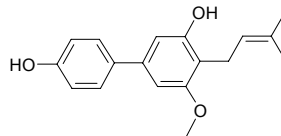
C<sub>18</sub>H<sub>20</sub>O<sub>3</sub> (284.36). Colorless amorphous powder, mp 82~83°C. Pharm: Cytotoxic (P<sub>388</sub> ED<sub>50</sub> = 3.98μg/mL, control Mithramycin ED<sub>50</sub> = 0.06μg/mL, HT29 ED<sub>50</sub> = 6.90μg/mL, control Mithramycin ED<sub>50</sub> = 0.08μg/mL). Source: TAI WAN LV DAO TENG HUANG *Garcinia linii*. Ref: 4094.

**8204 Garcibiphenyl A**

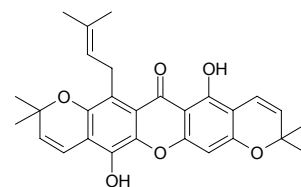
C<sub>17</sub>H<sub>12</sub>O<sub>3</sub> (216.24). Colorless oil. Pharm: Cytotoxic (P<sub>388</sub> ED<sub>50</sub> = 10.2μg/mL, control Mithramycin ED<sub>50</sub> = 0.06μg/mL, HT29 ED<sub>50</sub> = 13.5μg/mL, control Mithramycin ED<sub>50</sub> = 0.08μg/mL). Source: TAI WAN LV DAO TENG HUANG *Garcinia linii*. Ref: 4094.

**8205 Garcibiphenyl B**

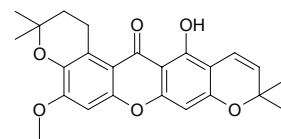
C<sub>18</sub>H<sub>20</sub>O<sub>3</sub> (284.36). Colorless oil. Pharm: Cytotoxic (P<sub>388</sub> ED<sub>50</sub> = 6.63μg/mL, control Mithramycin ED<sub>50</sub> = 0.06μg/mL, HT29 ED<sub>50</sub> = 12.7μg/mL, control Mithramycin ED<sub>50</sub> = 0.08μg/mL). Source: TAI WAN LV DAO TENG HUANG *Garcinia linii*. Ref: 4094.

**8206 Garcimangosone A**

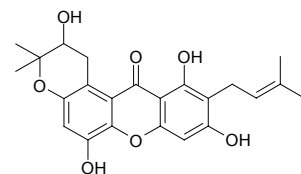
C<sub>28</sub>H<sub>28</sub>O<sub>6</sub> (460.53). Yellow powder, mp 143~145°C. Source: DAO NIAN ZI *Garcinia mangostana* (fruit hull). Ref: 3066.

**8207 Garcimangosone B**

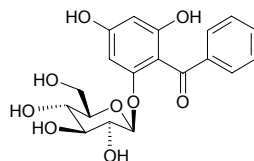
C<sub>24</sub>H<sub>24</sub>O<sub>6</sub> (408.46). Yellow powder, mp 136~138°C. Source: DAO NIAN ZI *Garcinia mangostana* (fruit hull). Ref: 3066.

**8208 Garcimangosone C**

C<sub>23</sub>H<sub>24</sub>O<sub>7</sub> (412.44). Yellow powder, mp 260~262°C. Source: DAO NIAN ZI *Garcinia mangostana* (fruit hull). Ref: 3066.

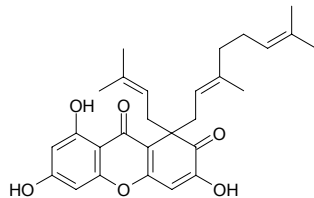
**8209 Garcimangosone D**

C<sub>19</sub>H<sub>20</sub>O<sub>9</sub> (392.37). Yellow powder, mp 136~138°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -64° (c = 0.5, MeOH). Source: DAO NIAN ZI *Garcinia mangostana* (fruit hull). Ref: 3066.

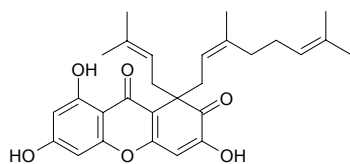


**8210 Garcinianone A**

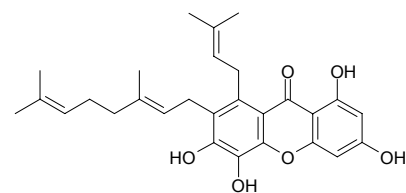
$C_{28}H_{32}O_6$  (464.56). Yellow oil,  $[\alpha]_D^{25} = 0^\circ$  ( $c = 0.48$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (BST,  $LD_{50} = 7.7\mu\text{mol/L}$ ; control Berberine,  $LD_{50} = 67\mu\text{mol/L}$ ); antioxidant (DPPH radical scavenger,  $IC_{50} = 107.4\mu\text{mol/L}$ ; control Catechin,  $IC_{50} = 2.53\mu\text{mol/L}$ ). **Source:** SHAN ZHU ZI *Garcinia multiflora* (stem: yield = 0.000042%dw). **Ref:** 4708.

**8211 Garcinianone B**

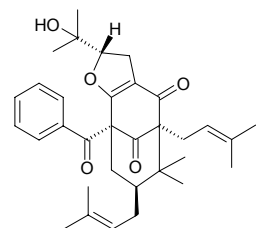
$C_{28}H_{32}O_6$  (464.56). Yellow oil,  $[\alpha]_D^{25} = 0^\circ$  ( $c = 0.21$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (BST,  $LD_{50} = 25.8\mu\text{mol/L}$ ; control Berberine,  $LD_{50} = 67\mu\text{mol/L}$ ); antioxidant (DPPH radical scavenger,  $IC_{50} = 144.8\mu\text{mol/L}$ ; control Catechin,  $IC_{50} = 2.53\mu\text{mol/L}$ ). **Source:** SHAN ZHU ZI *Garcinia multiflora* (stem: yield = 0.000036%dw). **Ref:** 4708.

**8212 Garciniaxanthone E**

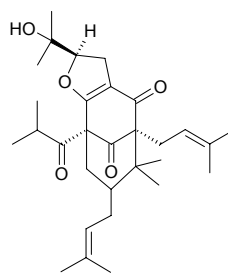
$C_{28}H_{32}O_6$  (464.56). **Pharm:** Neurite outgrowth enhancer (PC12D cells,  $10\mu\text{mol/L}$ , NGF-mediated neurite outgrowth, to enhance the ability of NGF, may be useful in the treatment of neurological disorders). **Source:** DA YE TENG HUANG *Garcinia xanthochymus* (wood). **Ref:** 4404.

**8213 Garcinielliptone K**

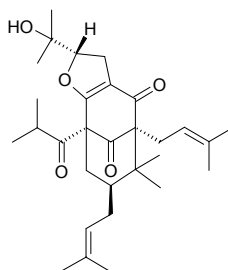
$2\alpha$ -Benzoyl-9,9-dimethyl-6 $\alpha$ ,8 $\beta$ -di-( $\gamma,\gamma$ -dimethylallyl)-3,4-[2 $\alpha$ -(2'-hydroxyisopropyl)-2,3-dihydrofuran]-8 $\alpha$ -H-cis-bicyclo[3.3.1]nona-3-ene-1,5-dione  $C_{33}H_{42}O_5$  (518.7). Colorless oil,  $[\alpha]_D = +27^\circ$  ( $c = 0.27$ ,  $CHCl_3$ ). **Source:** FU MU *Garcinia subelliptica* (seed: yield = 0.000027%fw). **Ref:** 4773.

**8214 Garcinielliptone L**

9,9-Dimethyl-6 $\alpha$ ,8 $\beta$ -di-( $\gamma,\gamma$ -dimethylallyl)-3,4-[2 $\beta$ -(2'-hydroxyisopropyl)-2,3-dihydrofuran]-2 $\alpha$ -(1-oxo-2-methylpropyl)-8 $\alpha$ -H-cis-bicyclo[3.3.1]nona-1,5-dione  $C_{30}H_{44}O_5$  (484.68). Colorless oil,  $[\alpha]_D = -41^\circ$  ( $c = 0.29$ ,  $CHCl_3$ ). **Pharm:** Anti-inflammatory (rat mast cells stimulated with  $10\mu\text{g/mL}$  compound 48/80, *in vitro*: inhibits release of  $\beta$ -glucuronidase,  $IC_{50} = 22.9\mu\text{mol/L}$ ; inhibits release of histamine,  $IC_{50} > 30\mu\text{mol/L}$ ; control Mepacrine, inhibits release of  $\beta$ -glucuronidase,  $IC_{50} = 13.7\mu\text{mol/L}$ ; inhibits release of histamine,  $IC_{50} = 23.3\mu\text{mol/L}$ ); anti-inflammatory (inhibits accumulation of  $NO_2^-$ , culture media of RAW264.7 macrophage-like cells in response to  $1\mu\text{g/mL}$  LPS,  $IC_{50} = 22.7\mu\text{mol/L}$ ; N9 microglial cells in response to lipopolysaccharide ( $10\text{ng/mL}$ )/IFN- $\gamma$  ( $10\text{U/mL}$ ),  $IC_{50} = 12.8\mu\text{mol/L}$ ; control *N*-(3-Aminomethyl)benzylacetamide, RAW264.7 cells,  $IC_{50} = 2.9\mu\text{mol/L}$ ; N9 cells,  $IC_{50} = 6.3\mu\text{mol/L}$ ). **Source:** FU MU *Garcinia subelliptica* (seed: yield = 0.00011%fw). **Ref:** 4773.

**8215 Garcinielliptone M**

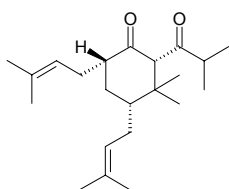
9,9-Dimethyl-6 $\alpha$ ,8 $\beta$ -di-( $\gamma,\gamma$ -dimethylallyl)-3,4-[2 $\beta$ -(2'-hydroxyisopropyl)-2,3-dihydrofuran]-2 $\alpha$ -(1-oxo-2-methylpropyl)-8 $\alpha$ -H-cis-bicyclo[3.3.1]nona-1,5-dione  $C_{30}H_{44}O_5$  (484.68). Colorless oil,  $[\alpha]_D = +73^\circ$  ( $c = 0.16$ ,  $CHCl_3$ ). **Pharm:** Anti-inflammatory (rat mast cells stimulated with  $10\mu\text{g/mL}$  compound 48/80, *in vitro*: inhibits release of  $\beta$ -glucuronidase,  $IC_{50} = 13.6\mu\text{mol/L}$ ; inhibits release of histamine,  $IC_{50} = 19.0\mu\text{mol/L}$ ; control Mepacrine, inhibits release of  $\beta$ -glucuronidase,  $IC_{50} = 13.7\mu\text{mol/L}$ ; inhibits release of histamine,  $IC_{50} = 23.3\mu\text{mol/L}$ ); anti-inflammatory (inhibits accumulation of  $NO_2^-$ , culture media of RAW264.7 macrophage-like cells in response to  $1\mu\text{g/mL}$  LPS,  $IC_{50} = 15.3\mu\text{mol/L}$ ; N9 microglial cells in response to lipopolysaccharide ( $10\text{ng/mL}$ )/IFN- $\gamma$  ( $10\text{U/mL}$ ),  $IC_{50} > 30\mu\text{mol/L}$ ; control *N*-(3-Aminomethyl)benzylacetamide, RAW264.7 cells,  $IC_{50} = 2.9\mu\text{mol/L}$ ; N9 cells,  $IC_{50} = 6.3\mu\text{mol/L}$ ). **Source:** FU MU *Garcinia subelliptica* (seed, yield = 0.00008%fw). **Ref:** 4773.



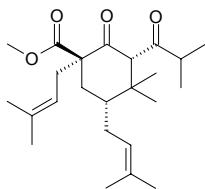


**8216 Garcinielliptone N**

3,3-Dimethyl-4 $\alpha$ ,6 $\alpha$ -di( $\gamma$ , $\gamma$ -dimethylallyl)-2 $\alpha$ -(2-methyl-1-oxopropyl)cyclohexanone C<sub>22</sub>H<sub>36</sub>O<sub>2</sub> (332.53). Colorless oil,  $[\alpha]_D = -42^\circ$  ( $c = 0.38$ , CHCl<sub>3</sub>). **Pharm:** Anti-inflammatory inactive (rat mast cells stimulated with 10 $\mu$ g/mL compound 48/80, *in vitro*: inhibits release of  $\beta$ -glucuronidase, IC<sub>50</sub> > 30 $\mu$ mol/L; inhibits release of histamine, IC<sub>50</sub> > 30 $\mu$ mol/L; control Mepacrine, inhibits release of  $\beta$ -glucuronidase, IC<sub>50</sub> = 13.7 $\mu$ mol/L; inhibits release of histamine, IC<sub>50</sub> = 23.3 $\mu$ mol/L); anti-inflammatory inactive (inhibits accumulation of NO<sub>2</sub><sup>-</sup>, culture media of RAW264.7 macrophage-like cells in response to 1 $\mu$ g/mL LPS, IC<sub>50</sub> > 30 $\mu$ mol/L; N9 microglial cells in response to lipopolysaccharide (10ng/mL)/IFN- $\gamma$  (10U/mL), IC<sub>50</sub> > 30 $\mu$ mol/L; control *N*-(3-Aminomethyl)benzylacetamide, RAW264.7 cells, IC<sub>50</sub> = 2.9 $\mu$ mol/L; N9 cells, IC<sub>50</sub> = 6.3 $\mu$ mol/L). **Source:** FU MU *Garcinia subelliptica* (seed, yield = 0.000053%fw). **Ref:** 4773.

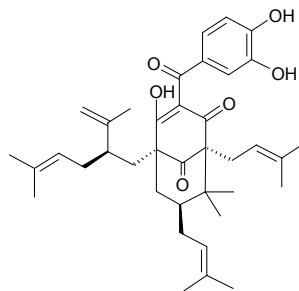
**8217 Garcinielliptone O**

6-Methoxycarbonyl-3,3-dimethyl-4 $\alpha$ ,6 $\alpha$ -di( $\gamma$ , $\gamma$ -dimethylallyl)-2 $\alpha$ -(2-methyl-1-oxo-propyl)cyclohexanone C<sub>24</sub>H<sub>38</sub>O<sub>4</sub> (390.57). Colorless oil,  $[\alpha]_D = -277^\circ$  ( $c = 016$ , CHCl<sub>3</sub>). **Pharm:** Anti-inflammatory inactive (rat mast cells stimulated with 10 $\mu$ g/mL compound 48/80, *in vitro*: inhibits release of  $\beta$ -glucuronidase, IC<sub>50</sub> > 30 $\mu$ mol/L; inhibits release of histamine, IC<sub>50</sub> > 30 $\mu$ mol/L; control Mepacrine, inhibits release of  $\beta$ -glucuronidase, IC<sub>50</sub> = 13.7 $\mu$ mol/L; inhibits release of histamine, IC<sub>50</sub> = 23.3 $\mu$ mol/L); anti-inflammatory inactive (inhibits accumulation of NO<sub>2</sub><sup>-</sup>, culture media of RAW264.7 macrophage-like cells in response to 1 $\mu$ g/mL LPS, IC<sub>50</sub> > 30 $\mu$ mol/L; N9 microglial cells in response to lipopolysaccharide (10ng/mL)/IFN- $\gamma$  (10U/mL), IC<sub>50</sub> > 30 $\mu$ mol/L; control *N*-(3-Aminomethyl)benzylacetamide, RAW264.7 cells, IC<sub>50</sub> = 2.9 $\mu$ mol/L; N9 cells, IC<sub>50</sub> = 6.3 $\mu$ mol/L). **Source:** FU MU *Garcinia subelliptica* (seed: yield = 0.00028%fw). **Ref:** 4773.

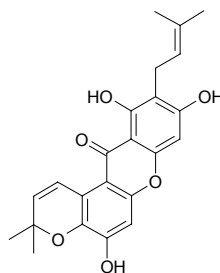
**8218 Garcinol**

Camboginol; Guttiferone E [78824-30-3] C<sub>38</sub>H<sub>50</sub>O<sub>6</sub> (602.82). **Pharm:** Antibacterial (*Staphylococcus aureus* MRSA, MIC = 16 $\mu$ g/mL)<sup>[4452]</sup>; antifungal; antioxidant (DPPH scavenger, 10 $\mu$ mol/L, ScRt = 74%, control BHT, 10 $\mu$ mol/L, ScRt = 43%)<sup>[5319]</sup>; antioxidant (DPPH radical scavenger, 10 $\mu$ mol/L, ScRt = 59%, IC<sub>50</sub> = 10.10 $\mu$ mol/L; control BHT, 10 $\mu$ mol/L, ScRt = 43%, IC<sub>50</sub> = 19.00 $\mu$ mol/L)<sup>[4422]</sup>; antibacterial (*Staphylococcus aureus* ATCC 25923, MIC = 16 $\mu$ g/mL, control Vancomycin, MIC = 2 $\mu$ g/mL;

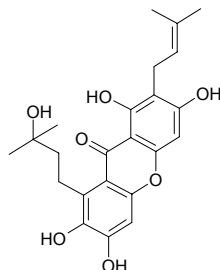
*Staphylococcus aureus* MRSA SK1, MIC = 16 $\mu$ g/mL, Vancomycin, MIC = 2 $\mu$ g/mL)<sup>[5319]</sup>. **Source:** TENG HUANG SHAN ZHU ZI *Garcinia cambogia*, TIAN SHAN ZHU ZI *Garcinia dulcis* (fruit), TIAN SHAN ZHU ZI *Garcinia dulcis* (flower), YIN DU TENG HUANG *Garcinia indica*, *Garcinia bancana* (twig and leaf). **Ref:** 658, 4422, 4452, 5319.

**8219 Garcinone B**

C<sub>23</sub>H<sub>22</sub>O<sub>6</sub> (394.43). **Pharm:** Antitubercular (*Mycobacterium tuberculosis*, MIC = 6.25 $\mu$ g/mL)<sup>[4358]</sup>; antioxidant (DPPH scavenger, 10 $\mu$ mol/L, ScRt = 15%, control BHT, 10 $\mu$ mol/L, ScRt = 43%)<sup>[5319]</sup>; antibacterial (*Staphylococcus aureus* ATCC 25923, MIC = 8 $\mu$ g/mL, control Vancomycin, MIC = 2 $\mu$ g/mL; *Staphylococcus aureus* MRSA SK1, MIC > 128 $\mu$ g/mL, Vancomycin, MIC = 2 $\mu$ g/mL)<sup>[5319]</sup>; cytotoxic inactive (KB cancer cell lines, BC-1, NCI-H187)<sup>[1619]</sup>; antioxidant inactive (DPPH scavenger, 50 $\mu$ mol/L, ScRt = 6.9%; control BHT, 50 $\mu$ mol/L, ScRt = 51.7%, IC<sub>50</sub> = 28.9 $\mu$ mol/L)<sup>[4423]</sup>. **Source:** DAO NIAN ZI *Garcinia mangostana* (young fruit: yield = 0.0017%dw)<sup>[1619]</sup>, DAO NIAN ZI *Garcinia mangostana* (fruit hull), HUANG NIU MU *Cratoxylum cochinchinense* (root), TIAN SHAN ZHU ZI *Garcinia dulcis* (fruit), TIAN SHAN ZHU ZI *Garcinia dulcis* (flower). **Ref:** 1521, 1619, 3066, 4358, 4422, 4423, 5319.

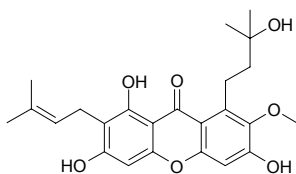
**8220 Garcinone C**

C<sub>23</sub>H<sub>26</sub>O<sub>7</sub> (414.46). **Pharm:** Cytotoxic (KB cancer cell lines, IC<sub>50</sub> = 7.48 $\mu$ g/mL, control Ellipticine, IC<sub>50</sub> = 1.33 $\mu$ g/mL; BC-1, IC<sub>50</sub> = 2.18 $\mu$ g/mL, Ellipticine, IC<sub>50</sub> = 1.46 $\mu$ g/mL; NCI-H187, IC<sub>50</sub> = 3.66 $\mu$ g/mL Ellipticine, IC<sub>50</sub> = 0.39 $\mu$ g/mL). **Source:** DAO NIAN ZI *Garcinia mangostana* (young fruit: yield = 0.0068%dw). **Ref:** 1619.

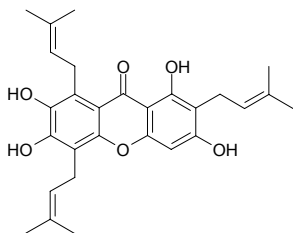


**8221 Garcinone D**

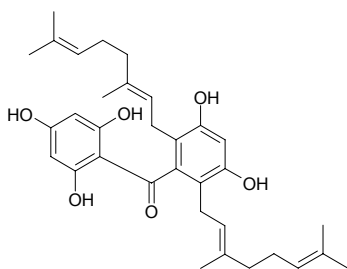
$C_{24}H_{28}O_7$  (428.49). **Pharm:** Antitubercular (*Mycobacterium tuberculosis*, MIC = 25  $\mu\text{g}/\text{mL}$ )<sup>[4358]</sup>; antioxidant (DPPH scavenger, 10  $\mu\text{mol}/\text{L}$ , ScRt = 3%, control BHT, 10  $\mu\text{mol}/\text{L}$ , ScRt = 43%)<sup>[5319]</sup>; antioxidant inactive (DPPH scavenger, 50  $\mu\text{mol}/\text{L}$ , ScRt = 6.9%; control BHT, 50  $\mu\text{mol}/\text{L}$ , ScRt = 51.7%, IC<sub>50</sub> = 28.9  $\mu\text{mol}/\text{L}$ )<sup>[4423]</sup>; antibacterial (*Staphylococcus aureus* ATCC 25923, MIC = 16  $\mu\text{g}/\text{mL}$ , control Vancomycin, MIC = 2  $\mu\text{g}/\text{mL}$ ; *Staphylococcus aureus* MRSA SK1, MIC = 32  $\mu\text{g}/\text{mL}$ , Vancomycin, MIC = 2  $\mu\text{g}/\text{mL}$ )<sup>[5319]</sup>; cytotoxic (KB cancer cell lines, IC<sub>50</sub> = 3.56  $\mu\text{g}/\text{mL}$ , control Ellipticine, IC<sub>50</sub> = 1.33  $\mu\text{g}/\text{mL}$ ; BC-1, IC<sub>50</sub> = 2.81  $\mu\text{g}/\text{mL}$ , Ellipticine, IC<sub>50</sub> = 1.46  $\mu\text{g}/\text{mL}$ ; NCI-H187, IC<sub>50</sub> = 11.04  $\mu\text{g}/\text{mL}$  Ellipticine, IC<sub>50</sub> = 0.39  $\mu\text{g}/\text{mL}$ )<sup>[1619]</sup>. **Source:** DAO NIAN ZI *Garcinia mangostana* (fruit hull), DAO NIAN ZI *Garcinia mangostana* (young fruit: yield = 0.030%dw)<sup>[1619]</sup>, HUANG NIU MU *Cratogeomys cochinchinense* (root), TIAN SHAN ZHU ZI *Garcinia dulcis* (fruit). **Ref:** 1521, 1619, 3066, 4358, 4423, 5319.

**8222 Garcinone E**

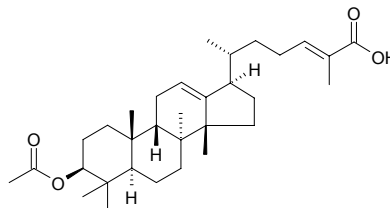
$C_{28}H_{32}O_6$  (464.56). **Pharm:** Cytotoxic (KB cancer cell lines, IC<sub>50</sub> = 2.67  $\mu\text{g}/\text{mL}$ , control Ellipticine, IC<sub>50</sub> = 1.33  $\mu\text{g}/\text{mL}$ ; BC-1, IC<sub>50</sub> = 1.44  $\mu\text{g}/\text{mL}$ , Ellipticine, IC<sub>50</sub> = 1.46  $\mu\text{g}/\text{mL}$ ; NCI-H187, IC<sub>50</sub> = 3.74  $\mu\text{g}/\text{mL}$  Ellipticine, IC<sub>50</sub> = 0.39  $\mu\text{g}/\text{mL}$ )<sup>[1619]</sup>; cytotoxic (*in vitro*, HL-60, IC<sub>50</sub> = 15.0  $\mu\text{mol}/\text{L}$ )<sup>[4715]</sup>. **Source:** DAO NIAN ZI *Garcinia mangostana* (fruit hull, pericarp), DAO NIAN ZI *Garcinia mangostana* (young fruit: yield = 0.0078%dw)<sup>[1619]</sup>. **Ref:** 1619, 3066, 4715.

**8223 Garciosaphenone A**

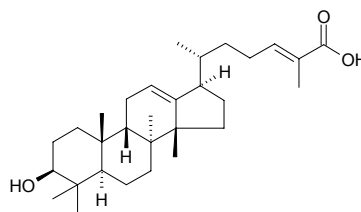
$C_{33}H_{42}O_6$  (534.70). Yellow solid, mp 159–161°C. **Pharm:** Anti-HIV-1 (HIV-1 reverse transcriptase assay, 200  $\mu\text{g}/\text{mL}$ , InRt = 97.7%, IC<sub>50</sub> = 23.9  $\mu\text{g}/\text{mL}$ ). **Source:** MEI LI TENG HUANG *Garcinia speciosa* (trunk bark and stems). **Ref:** 5491.

**8224 Garciosaterpene A**

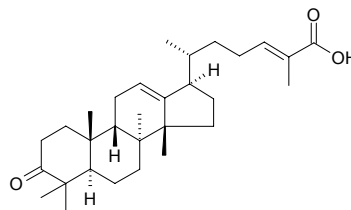
$C_{32}H_{50}O_4$  (498.75). White needles, mp 120–121°C,  $[\alpha]_D^{29} = +12^\circ$  ( $c = 0.13$ , MeOH). **Pharm:** Anti-HIV-1 (HIV-1 reverse transcriptase assay, 200  $\mu\text{g}/\text{mL}$ , InRt = 96.2%, IC<sub>50</sub> = 15.5  $\mu\text{g}/\text{mL}$ ). **Source:** MEI LI TENG HUANG *Garcinia speciosa* (trunk bark and stems). **Ref:** 5491.

**8225 Garciosaterpene B**

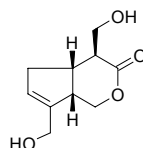
$C_{30}H_{48}O_3$  (456.72). White needles, mp 201–202°C,  $[\alpha]_D^{29} = -121^\circ$  ( $c = 0.008$ , MeOH). **Pharm:** Anti-HIV-1 (HIV-1 reverse transcriptase assay, 200  $\mu\text{g}/\text{mL}$ , InRt = 38.1%). **Source:** MEI LI TENG HUANG *Garcinia speciosa* (trunk bark and stems). **Ref:** 5491.

**8226 Garciosaterpene C**

$C_{30}H_{46}O_3$  (454.70). White needles, mp 93–95°C,  $[\alpha]_D^{29} = +125^\circ$  ( $c = 0.008$ , MeOH). **Pharm:** Anti-HIV-1 (HIV-1 reverse transcriptase assay, 200  $\mu\text{g}/\text{mL}$ , InRt = 96.3%, IC<sub>50</sub> = 12.2  $\mu\text{g}/\text{mL}$ ). **Source:** MEI LI TENG HUANG *Garcinia speciosa* (trunk bark and stems). **Ref:** 5491.

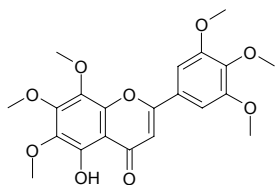
**8227 Gardendiol**

[160262-60-2]  $C_{10}H_{14}O_4$  (198.22). **Source:** ZHI ZI *Gardenia jasminoides* [Syn. *Gardenia florida*]. **Ref:** 317, 1521.

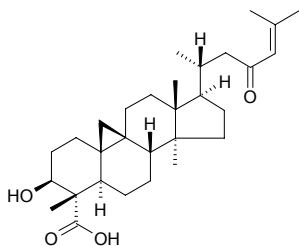


**8228 Gardenin**

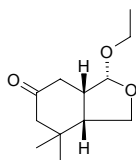
5-Hydroxy-6,7,8,3',4',5'-hexamethoxy flavone [21187-73-5]  $C_{21}H_{22}O_8$  (418.40). mp 163~164°C. Source: ZHI ZI *Gardenia jasminoides* [Syn. *Gardenia florida*], YI ZHI HAO *Achillea alpina* [Syn. *Achillea sibirica*]. Ref: 2, 33, 626.

**8229 Gardenolic acid A**

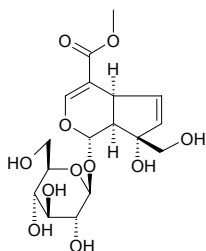
$C_{30}H_{46}O_4$  (470.70). Pharm: Anti-HIV-1 (syncytium assay:  $IC_{50} > 125 \mu\text{g/mL}$ ,  $EC_{50} = 110.0 \mu\text{g/mL}$ ; HIV-1 RT assay:  $200 \mu\text{g/mL}$ ,  $\text{InRt} = 92.3\%$ ,  $IC_{50} < 22.5 \mu\text{g/mL}$ , Fagaronine chloride  $IC_{50} = 10.9 \mu\text{g/mL}$ , Nevirapine  $IC_{50} = 1.8 \mu\text{g/mL}$ ). Source: TAI GUO ZHI ZI *Gardenia thailandica* (leaf and twig). Ref: 4963.

**8230 Gardenone**

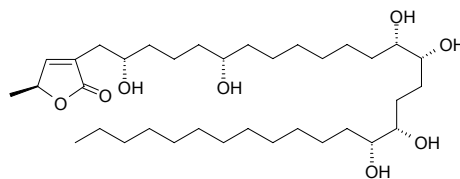
$C_{12}H_{20}O_3$  (212.29). Source: ZHI ZI *Gardenia jasminoides* [Syn. *Gardenia florida*]. Ref: 317, 1521.

**8231 Gardenoside**

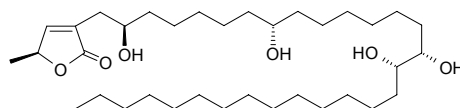
[24512-62-7]  $C_{17}H_{24}O_{11}$  (404.37). mp 118~120°C. Pharm: Laxative (mus, orl,  $ED_{50} = 1.2 \text{g/kg}$ ). Source: JING NI PING *Genipa Americana* (fruit), SHUI ZHI *Gardenia jasminoides* var. *grandiflora*, ZHI ZI *Gardenia jasminoides* [Syn. *Gardenia florida*] (dried ripe fruit: mean content =  $3.75\%$ <sup>[5508]</sup>). Ref: 2, 658, 4524, 5501, 5508.

**8232 Gardnerilin A**

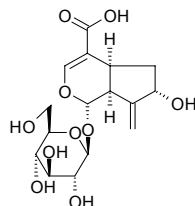
$C_{35}H_{66}O_8$  (614.91). White amorphous powder, mp 94~95°C,  $[\alpha]_D^{11} = +21.9^\circ$  ( $c = 0.07$ , MeOH). Source: CHANG YE GE NA XIANG *Goniothalamus gardneri*. Ref: 774.

**8233 Gardnerilin B**

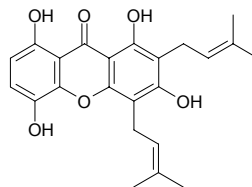
$C_{35}H_{66}O_6$  (582.91). White amorphous powder, mp 65~66°C,  $[\alpha]_D^{11} = +12.78^\circ$  ( $c = 0.11$ , MeOH). Source: CHANG YE GE NA XIANG *Goniothalamus gardneri*. Ref: 774.

**8234 Gardoside**

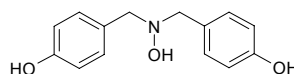
[54835-76-6]  $C_{16}H_{22}O_{10}$  (374.35). Source: FEI LV BIN SHI ZI *Gmelina philippensis* (aerial parts), ZHI ZI *Gardenia jasminoides* [Syn. *Gardenia florida*]. Ref: 2, 3954.

**8235 Gartanin**

$C_{23}H_{24}O_6$  (396.44). Pharm: Cytotoxic (KB cancer cell lines,  $IC_{50} = 15.63 \mu\text{g/mL}$ , control Ellipticine,  $IC_{50} = 1.33 \mu\text{g/mL}$ ; BC-1,  $IC_{50} = 15.54 \mu\text{g/mL}$ , Ellipticine,  $IC_{50} = 1.46 \mu\text{g/mL}$ ; NCI-H187,  $IC_{50} = 1.08 \mu\text{g/mL}$  Ellipticine,  $IC_{50} = 0.39 \mu\text{g/mL}$ )<sup>[1619]</sup>, antioxidant (DPPH scavenger,  $10 \mu\text{mol/L}$ ,  $\text{ScRt} = 2\%$ , control BHT,  $10 \mu\text{mol/L}$ ,  $\text{ScRt} = 43\%$ )<sup>[5319]</sup>. Source: DAO NIAN ZI *Garcinia mangostana* (young fruit: yield =  $0.0060\%$ dw)<sup>[1619]</sup>, TIAN SHAN ZHU ZI *Garcinia dulcis* (fruit). Ref: 1521, 1619, 3066, 5319.

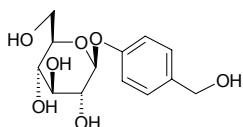
**8236 Gastrodamine**

$C_{14}H_{15}NO_3$  (245.28). Colorless acicular Crystals ( $\text{CHCl}_3$ -MeOH), mp 185~187°C. Source: TIAN MA *Gastrodia elata*. Ref: 888.

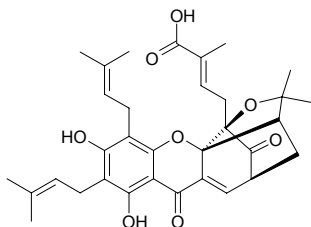


**8237 Gastrodin**

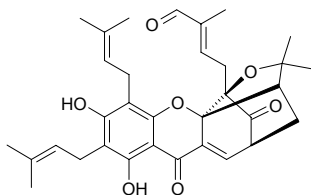
4-Hydroxybenzyl alcohol 4-*O*- $\beta$ -*D*-glucopyranoside [62499-27-8] C<sub>13</sub>H<sub>18</sub>O<sub>7</sub> (286.28). White solid, mp 96–98°C, [ $\alpha$ ]<sub>D</sub><sup>15</sup> = –66.4° (water), soluble in water, methanol, acetone, hot acetic ester, slightly soluble in ether.<sup>[5507]</sup> **Source:** LAN YU BAI JI *Bletilla formosana* (whole herb), SHAN HU LAN *Galeola faberi*, SHI LUO ZI *Anethum graveolens* (fruit), TIAN MA *Gastrodia elata* (dried tuber: content scope of 5 batch samples = 0.210%–0.943%, mean content = 0.467%<sup>[5513]</sup>). **Ref:** 4, 280, 4177, 4500, 5501, 5507, 5513.

**8238 Gaudichaudic acid**

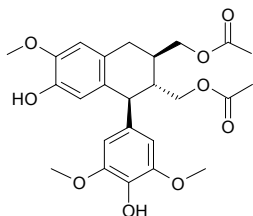
C<sub>33</sub>H<sub>38</sub>O<sub>8</sub> (562.67). Bright yellow amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>28</sup> = –535°, (*c* = 0.065, CHCl<sub>3</sub>). **Pharm:** Cytotoxic (hmn leukemia: doxorubicin-resistant K562, IC<sub>50</sub> = (0.61±0.05)μg/mL, control Adriamycin, IC<sub>50</sub> = (1.79±0.17)μg/mL; drug-sensitive K562, IC<sub>50</sub> = (0.41±0.03)μg/mL, Adriamycin, IC<sub>50</sub> = (0.11±0.01)μg/mL). **Source:** TENG HUANG SHU *Garcinia hanburyi* (resin). **Ref:** 1583.

**8239 Gaudichaudione A**

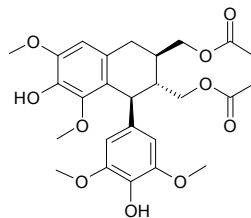
C<sub>33</sub>H<sub>38</sub>O<sub>7</sub> (546.67). Yellow oil, [ $\alpha$ ]<sub>D</sub> = –571.7° (*c* = 0.1, CHCl<sub>3</sub>). **Pharm:** Cytotoxic. **Source:** GAO DI CHA SHAN ZHU ZI *Garcinia gaudichaudii*. **Ref:** 1521.

**8240 Gaultherin A**

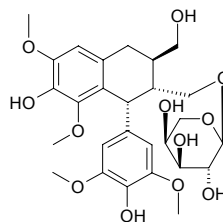
5-Methoxy-(+)-isolariciresinol-9,9'-diacetate [243468-37-3] C<sub>25</sub>H<sub>30</sub>O<sub>9</sub> (474.51). White powder (acetone:water = 2:1), mp 159–160°C, [ $\alpha$ ]<sub>D</sub><sup>23</sup> = +30° (*c* = 0.08, MeOH). **Source:** DIAN BAI ZHU SHU *Gaultheria yunnanensis*. **Ref:** 2295.

**8241 Gaultherin B**

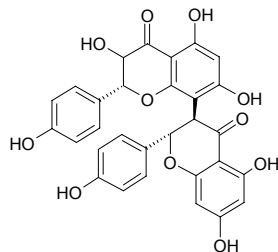
(+)-Lyoniresinol-9,9'-diacetate C<sub>26</sub>H<sub>32</sub>O<sub>10</sub> (504.54). White powder (acetone:water = 2:1), mp 120–121°C, [ $\alpha$ ]<sub>D</sub><sup>23</sup> = +40° (*c* = 0.05, MeOH). **Source:** DIAN BAI ZHU SHU *Gaultheria yunnanensis*. **Ref:** 2295.

**8242 Gaultheroside A**

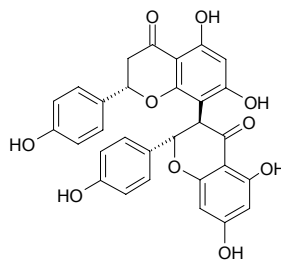
(+)-Lyoniresinol-2 $\alpha$ -*O*- $\alpha$ -*L*-arabinopyranoside (D<sub>1</sub>) C<sub>27</sub>H<sub>36</sub>O<sub>12</sub> (552.58). White powder, mp 154–155°C. **Source:** BAI ZHU SHU *Gaultheria leucocarpa* var. *cumingiana* (root: content = 0.014%)<sup>[5508]</sup>; DIAN BAI ZHU SHU *Gaultheria yunnanensis* (root: content scope of 3 origins = 0.050%–0.128%, mean content = 0.085%<sup>[5508]</sup>); FANG XIANG BAI ZHU *Gaultheria fragrantissima* (root: content = 0.062%)<sup>[5508]</sup>; SI LIE BAI ZHU *Gaultheria tetramera* (root: content = 0.022%)<sup>[5508]</sup>; WEI YE BAI ZHU *Gaultheria griffithiana* (root: content = 0.045%)<sup>[5508]</sup>. **Ref:** 666, 5508.

**8243 GB1**

[14736-58-4] C<sub>30</sub>H<sub>22</sub>O<sub>11</sub> (558.50). **Source:** SHAN ZHU ZI *Garcinia multiflora*. **Ref:** 6.

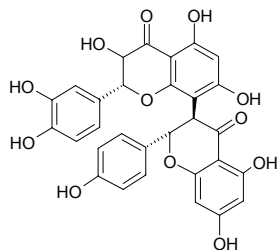
**8244 GB1a**

[19360-72-6] C<sub>30</sub>H<sub>22</sub>O<sub>10</sub> (542.50). **Source:** SHAN ZHU ZI *Garcinia multiflora*. **Ref:** 6.

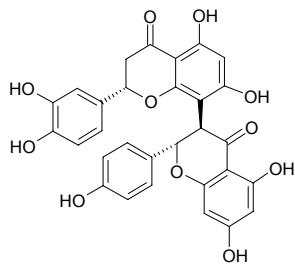


**8245 GB2**

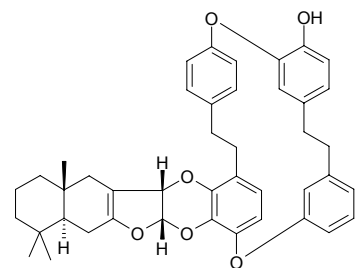
[18913-18-3]  $C_{30}H_{22}O_{12}$  (574.50). Source: SHAN ZHU ZI *Garcinia multiflora*. Ref: 6.

**8246 GB2a**

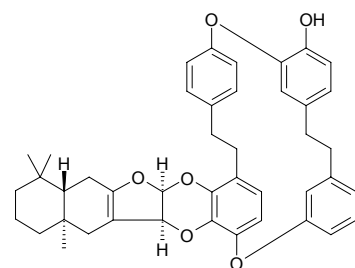
Dihydromorelloflavone [18412-96-9]  $C_{30}H_{22}O_{11}$  (558.50). Buff powder, mp 214–216°C (dec),  $[\alpha]_D = +28.2^\circ$  (acetone). Pharm: Anti-HIV-1 RT (200 $\mu$ g/mL, InRt = 96.0%, IC<sub>50</sub> = 170 $\mu$ mol/L); antiviral (EBV); antioxidant (DPPH radical scavenger, 10 $\mu$ mol/L, ScRt = 33%; control BHT, 10 $\mu$ mol/L, ScRt = 43%, IC<sub>50</sub> = 19.00 $\mu$ mol/L)<sup>[4422]</sup>. Source: SHAN ZHU ZI *Garcinia multiflora*, TIAN SHAN ZHU ZI *Garcinia dulcis* (flower). Ref: 6, 900, 1072, 4422.

**8247 GBB A**

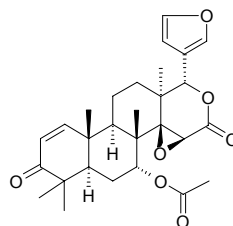
$C_{43}H_{44}O_6$  (656.83). Source: CANG BAI QI SHE TAI *Schistochila glaucescens*. Ref: 4549.

**8248 GBB B**

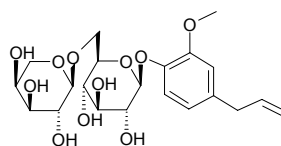
$C_{43}H_{44}O_6$  (656.83). Source: CANG BAI QI SHE TAI *Schistochila glaucescens*. Ref: 4549.

**8249 Gedunin**

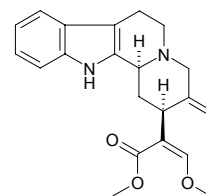
[2753-30-2]  $C_{28}H_{34}O_7$  (482.58). mp 157°C, 218°C. Source: KU LIAN PI *Melia azedarach*. Ref: 6.

**8250 Gein**

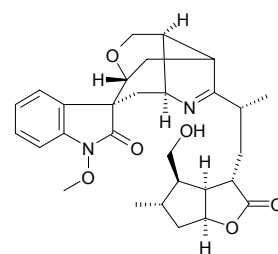
Geoside [585-90-0]  $C_{21}H_{30}O_{11}$  (458.47). mp 146–147°C, bp 183–184°C. Source: SHUI YANG MEI *Geum japonicum*, SHUI YANG MEI GEN *Geum japonicum*. Ref: 6.

**8251 Geissoschizine methyl ether**

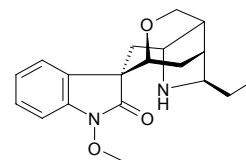
[60314-89-8]  $C_{22}H_{26}N_2O_3$  (366.46). Pharm: Vasorelaxant (*in vitro*, isolated rat aorta)<sup>[5341]</sup>, CNS activity (agonistic activity, against the central serotonergic receptor, binding to  $\alpha$ -adrenoceptor, 5-HT, dopamine and GABA receptors; agonist of 5-HT<sub>1A</sub> receptor while blocking 5-HT<sub>2A</sub> receptor)<sup>[5341]</sup>. Source: GOU TENG *Uncaria rhynchophylla* [Syn. *Nauclea rhynchophylla*]. Ref: 2, 5341.

**8252 Gelsamydine**

[120881-61-0]  $C_{29}H_{36}N_2O_6$  (508.62). mp 194–196°C,  $[\alpha]_D = -126.9^\circ$ . Source: GOU WEN *Gelsemium elegans*. Ref: 14.

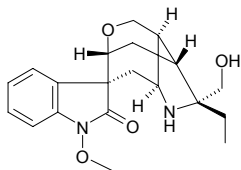
**8253 Gelsedine**

[7096-96-0]  $C_{19}H_{24}N_2O_3$  (328.41). mp 172.5–174.0°C. Source: GOU WEN *Gelsemium elegans*. Ref: 14.

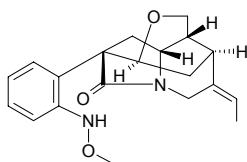


**8254 Gelsegine**

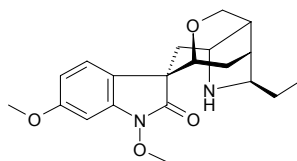
[131653-76-4] C<sub>20</sub>H<sub>26</sub>N<sub>2</sub>O<sub>4</sub> (358.44). mp 167~168°C, [ $\alpha$ ]<sub>D</sub> = -30°. Source: GOU WEN *Gelsemium elegans*. Ref: 14.

**8255 Gelseamide**

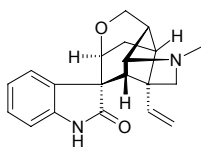
[122297-34-1] C<sub>20</sub>H<sub>24</sub>N<sub>2</sub>O<sub>3</sub> (340.43). mp 183~184°C, [ $\alpha$ ]<sub>D</sub> = +228.3°. Source: GOU WEN *Gelsemium elegans*. Ref: 14.

**8256 Gelsemicine**

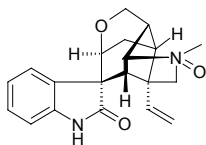
[6887-28-1] C<sub>20</sub>H<sub>26</sub>N<sub>2</sub>O<sub>4</sub> (358.44). mp 171°C, [ $\alpha$ ]<sub>D</sub><sup>24</sup> = -140° (ethanol). Pharm: Paralyzes respiration (high dose); respiratory stimulant (low dose); uterine stimulant; MLD (rbt, iv) = 0.08mg/kg. Source: CHANG LV GOU WEN *Gelsemium sempervirens*. Ref: 661.

**8257 Gelsemine**

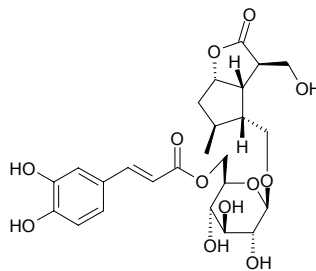
Kiuminine [509-15-9] C<sub>20</sub>H<sub>22</sub>N<sub>2</sub>O<sub>2</sub> (322.41). mp 178°C. Pharm: Analgesic; CNS stimulant; increases blood pressure (blocks decrease of blood pressure due to injection of acetylcholine or electrostimulation of the vagus in heart); toxin. Source: CHANG LV GOU WEN *Gelsemium sempervirens*, GOU WEN *Gelsemium elegans*. Ref: 5, 6, 14, 658.

**8258 Gelsemine N-oxide**

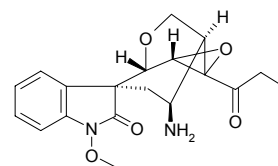
[113900-76-8] C<sub>20</sub>H<sub>22</sub>N<sub>2</sub>O<sub>3</sub> (338.41). Amorphous, [ $\alpha$ ]<sub>D</sub> = -16.9°. Source: GOU WEN *Gelsemium elegans*. Ref: 14.

**8259 Gelsemiol 6'-trans-caffeoyl-1-glucoside**

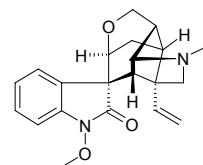
C<sub>25</sub>H<sub>32</sub>O<sub>12</sub> (524.53). Colorless needle crystals (MeOH), mp 122~124°C, [ $\alpha$ ]<sub>D</sub><sup>27</sup> = +3.4° (c = 0.23, MeOH). Pharm: Neurite outgrowth enhancer (PC12D cells, NGF-mediated neurite outgrowth, to enhance the ability of NGF, may be useful in the treatment of neurological disorders, such as Parkinson's disease (PD), Alzheimer's disease (AD), Huntington's disease (HD), amyotrophic lateral sclerosis (ALS), and hmn immunodeficiency virus associated dementia (HAD)). Source: HAI BIAN MA BIAN CAO *Verbena littoralis* (aerial parts). Ref: 4383.

**8260 Gelsemoxonine**

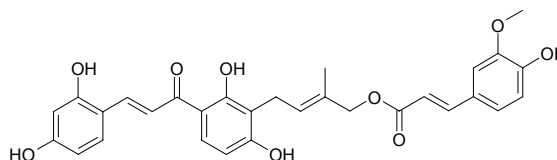
[135626-64-1] C<sub>19</sub>H<sub>22</sub>N<sub>2</sub>O<sub>5</sub> (358.40). Powder, [ $\alpha$ ]<sub>D</sub> = -188.5°. Source: GOU WEN *Gelsemium elegans*. Ref: 14.

**8261 Gelseverine**

[38990-03-3] C<sub>21</sub>H<sub>24</sub>N<sub>2</sub>O<sub>3</sub> (352.44). Oil, [ $\alpha$ ]<sub>D</sub> = -4.5°. Source: GOU WEN *Gelsemium elegans*. Ref: 14.

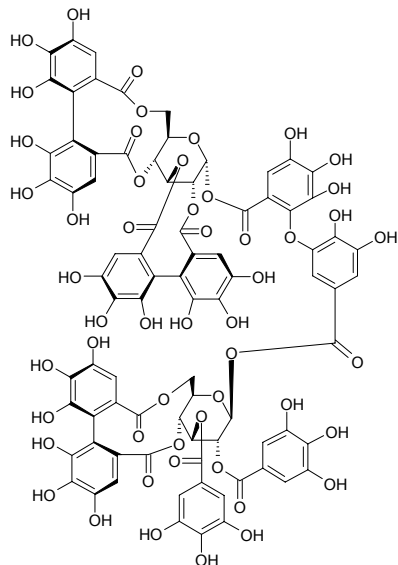
**8262 Gemichalcone C**

Isogemichalcone C; 3'-[ $\gamma$ -Hydroxymethyl (*E*)- $\gamma$ -methylallyl]-2,4,2',4'-tetrahydroxychalcone 11'-*O*-coumarate; Anticancer Flavonoid PMV70P691-020 C<sub>30</sub>H<sub>28</sub>O<sub>9</sub> (532.55). Yellow powder (MeOH). Pharm: Cytotoxic (aromatase inhibitor, a promising lead as potential cancer chemopreventive agents)<sup>[5038]</sup>; aromatase inhibitor (*in vitro*, IC<sub>50</sub> = 7.1 $\mu$ mol/L; control Aminoglutethimide, IC<sub>50</sub> = 6.4 $\mu$ mol/L)<sup>[3090]</sup>. Source: GOU SHU *Broussonetia papyrifera*, GOU SHU *Broussonetia papyrifera*, SHUANG HUA JIN SI TAO *Hypericum geminiflorum*. Ref: 3090, 3493, 5038.

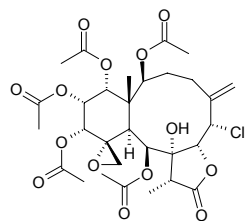


**8263 Gemin A**

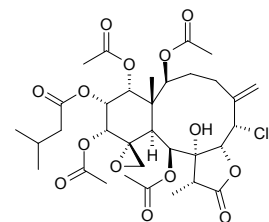
[82220-61-9] C<sub>82</sub>H<sub>56</sub>O<sub>52</sub> (1873.33). Pharm: Antineoplastic (S<sub>180</sub>). Source: SHUI YANG MEI *Geum japonicum*. Ref: 658.

**8264 Gemmacolide A**

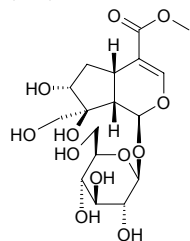
C<sub>30</sub>H<sub>39</sub>ClO<sub>14</sub> (659.09). Source: DENG XIN LIU SHAN HU *Junceella juncea* (yield = 0.00018%). Ref: 4781.

**8265 Gemmacolide B**

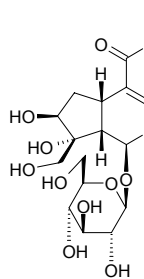
C<sub>33</sub>H<sub>45</sub>ClO<sub>14</sub> (701.17). Source: DENG XIN LIU SHAN HU *Junceella juncea* (yield = 0.00024%). Ref: 4781.

**8266 Genameside A**

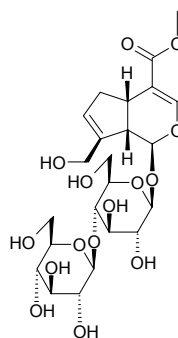
$\alpha$ -Hydroxy-6,7-dihydrogardenoside C<sub>17</sub>H<sub>26</sub>O<sub>12</sub> (422.39). Colorless syrup,  $[\alpha]_D^{26} = -91.9^\circ$  ( $c = 2.4$ , MeOH). Source: JING NI PING *Genipa Americana* (fruit). Ref: 4524.

**8267 Genameside B**

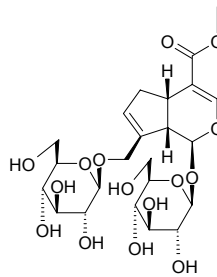
C<sub>17</sub>H<sub>26</sub>O<sub>12</sub> (422.39). Colorless syrup,  $[\alpha]_D^{26} = -63.8^\circ$  ( $c = 1.9$ , MeOH). Source: JING NI PING *Genipa Americana* (fruit). Ref: 4524.

**8268 Genameside C**

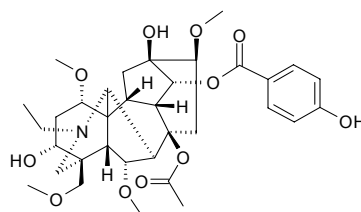
Genipin  $\beta$ -cellobioside C<sub>23</sub>H<sub>34</sub>O<sub>15</sub> (550.52). White powder,  $[\alpha]_D^{26} = -0.4^\circ$  ( $c = 3.3$ , MeOH). Source: JING NI PING *Genipa Americana* (fruit). Ref: 4524.

**8269 Genameside D**

10-*O*- $\beta$ -D-Glucopyranosyl geniposide C<sub>23</sub>H<sub>34</sub>O<sub>15</sub> (550.52). Colorless syrup,  $[\alpha]_D^{26} = +3.3^\circ$  ( $c = 6.0$ , MeOH). Source: JING NI PING *Genipa Americana* (fruit). Ref: 4524.

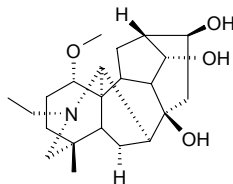
**8270 Genticuline**

20-Ethyl-8-acetoxy-14-(*p*-hydroxybenzoyloxy)-1 $\alpha$ -,6 $\alpha$ -,16 $\beta$ -,18-tetramethoxyac onitane-3 $\alpha$ -,13 $\beta$ -diol C<sub>34</sub>H<sub>47</sub>NO<sub>11</sub> (645.75). Amorphous powder,  $[\alpha]_D^{25.5} = +31.6^\circ$  ( $c = 0.00372$ , CHCl<sub>3</sub>). Source: XI BAN WU TOU *Aconitum geniculatum*. Ref: 2142.

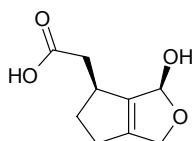


**8271 Genicunine A**

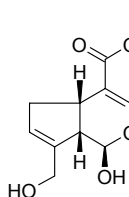
$C_{22}H_{35}NO_4$  (377.53). White amorphous powder. Source: GONG GA SHAN WU TOU *Aconitum liljestrandii*. Ref: 2191.

**8272 Genipic acid**

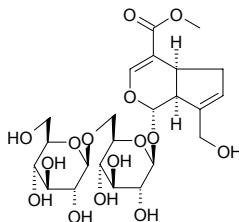
[6902-76-7]  $C_9H_{12}O_4$  (184.19).  $[\alpha]_D^{27} = -105^\circ$  ( $c = 1$ , ethanol). Pharm: Antibacterial. Source: JING NI PING *Genipa americana*. Ref: 661.

**8273 Genipin**

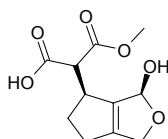
[6902-77-8]  $C_{11}H_{14}O_5$  (226.23). Pharm: Anticholinergic (mus ileum); antihistamine (gpg ileum); choleric; inhibits gastric secretion (pylorus-ligated rat); analgesic (mus, ip, acetic acid-induced writhing model). Source: ZHI ZI *Gardenia jasminoides* [Syn. *Gardenia florida*], JING NI PING *Genipa americana*, DU ZHONG *Eucommia ulmoides*. Ref: 2, 658, 5501.

**8274 Genipengentiobioside**

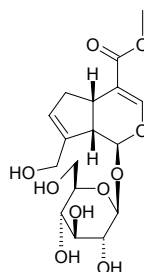
$C_{23}H_{34}O_{15}$  (550.52). mp 193~195°C ( $C_2H_5OH$ ), 227~229°C. Source: JING NI PING *Genipa Americana* (fruit), SHUI ZHI *Gardenia jasminoides* var. *grandiflora*, ZHI ZI *Gardenia jasminoides* [Syn. *Gardenia florida*] (dried ripe fruit: mean content of 22 origins = 0.400%<sup>[5508]</sup>). Ref: 2, 4524, 5508.

**8275 Genipinic acid**

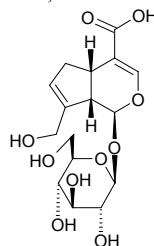
$C_{11}H_{14}O_6$  (242.23). Very unstable moisture absorptive amorphous white powder,  $[\alpha]_D^{26} = -126^\circ$  ( $c = 1$ , ethanol). Pharm: Antibacterial. Source: JING NI PING *Genipa americana*. Ref: 661.

**8276 Geniposide**

1- $\beta$ -Glucogeniposide [24512-63-8]  $C_{17}H_{24}O_{10}$  (388.37). mp 163~164°C. Pharm: Analgesic (mus, ip, acetic acid-induced writhing model); laxative ( $ED_{50} = 300mg/kg$ ); cell growth inhibitor (transformed NIH3T3 cell line, 25~100 $\mu mol/L$ )<sup>[4979]</sup>. Source: AI LAI MU *Cornus suecica*, DU ZHONG *Eucommia ulmoides* (bark of 10 years old plant: content = 0.39%<sup>[5508]</sup>), GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *Huechingensis*], JING NI PING *Genipa Americana* (fruit), SHUI ZHI *Gardenia jasminoides* var. *grandiflora*, SHUI ZHI YE *Gardenia jasminoides* var. *grandiflora*, WU SE MEI *Lantana camara*, ZHI ZI *Gardenia jasminoides* [Syn. *Gardenia florida*] (dried ripe fruit: mean content = 3.25%<sup>[5508]</sup>), ZHI ZI YE *Gardenia jasminoides* [Syn. *Gardenia florida*]. Ref: 2, 234, 658, 4524, 4979, 5501, 5508.

**8277 Geniposidic acid**

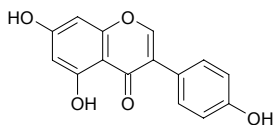
[27741-01-1]  $C_{16}H_{22}O_{10}$  (374.35). Pharm: Laxative ( $ED_{50} > 800mg/kg$ ). Source: DU ZHONG *Eucommia ulmoides* (bark: mean content = 0.306%<sup>[5508]</sup>), DU ZHONG YE *Eucommia ulmoides* (leaf: mean content = 0.085%<sup>[5508]</sup>), FEI LV BIN SHI ZI *Gmelina philippensis* (aerial parts), JING NI PING *Genipa Americana* (fruit), LONG CHUAN HUA *Ixora chinensis*, ROU CONG RONG *Cistanche deserticola*, SHUI XIAN CAO *Hedyotis corymbosa* [Syn. *Oldenlandia corymbosa*], ZHI ZI *Gardenia jasminoides* [Syn. *Gardenia florida*] (dried ripe fruit: mean content = 0.29%<sup>[5508]</sup>). Ref: 2, 628, 658, 3954, 4524, 5508.

**8278 Genistein**

[446-72-0]  $C_{15}H_{10}O_5$  (270.24). mp 301~302°C (dec). Pharm: Cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells)<sup>[5038]</sup>; cytotoxic (KB,  $ED_{50} = 7.4\mu g/mL$ ); cytotoxic (*in vitro*, Hs740T,  $ED_{50} = 4.38\mu g/mL$ ; Hs756T,  $ED_{50} = 5.82\mu g/mL$ ; Hs578T,  $ED_{50} = 3.5\mu g/mL$ ; Hs742T,  $ED_{50} = 14.88\mu g/mL$ ; DU145,  $ED_{50} = 2.39\mu g/mL$ ; LNCaP-FGC,  $ED_{50} = 25.45\mu g/mL$ )<sup>[4630]</sup>; antineoplastic (Inhibition of DMBA-induced preneoplastic lesions *in vitro*, MMOC assay,  $IC_{50} = 45.2\mu mol/L$ ; control Sulforaphane,  $IC_{50} = 11\mu mol/L$ )<sup>[4718]</sup>; catechol-*O*-methyltransferase inhibitor (competitive); histidine decarboxylase inhibitor (competitive); peroxidase inhibitor (competitive); lipase inhibitor (soy, competitive); antihypercholesterolemic (rat, reduces the level of cholesterol and triglyceride in serum, hyperlipemia caused by trinitrotoluene); CyP1A inhibitor ( $IC_{50} = (4.9\pm 0.5)\mu mol/L$ )<sup>[5347]</sup>; QR inhibitor (cultured mouse Hepa1c1c7 cells, CD

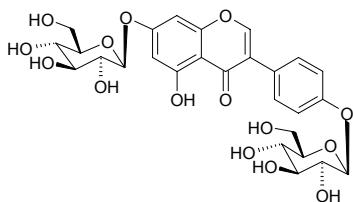


= (17.1±8.5)μmol/L, IC<sub>50</sub> = (23.9±5.9)μmol/L)<sup>[5347]</sup>; DPPH scavenger (SC<sub>50</sub> > 250μmol/L, 250μmol/L scavenging rate = 2%)<sup>[5347]</sup>; anti-inflammatory (inhibit brain liposomal peroxidation, 62.5μg/mL, optical density of DMSO control = (52.8±0.3)%; positive control Propyl gallate, 7.5μmol/mL, optical density of DMSO control = (20.6±0.2)%<sup>[4984]</sup>; granular release inhibitor<sup>[4984]</sup>; hepatoprotective (mus primary cultured hepatocytes, antihepatotoxin induced by *D*-galactosamine (GalN), IC<sub>50</sub> = 29μmol/L, control Silybin IC<sub>50</sub> = 41μmol/L)<sup>[4095]</sup>; anti-inflammatory (modulator of cytokine network: inhibits LPS-stimulated TNF-α and IL-6 release in RAW264.7 macrophages, IC<sub>50</sub> = 5μmol/L)<sup>[4416]</sup>; anti-inflammatory (NO production inhibitor)<sup>[4415]</sup>; antioxidant (DPPH scavenger, TLC detection limit = 1.0μg, IC<sub>50</sub> = 1810μg/mL; control Quercetin, TLC detection limit < 0.05μg, IC<sub>50</sub> = 7μg/mL; Gallic acid, TLC detection limit < 0.05μg, IC<sub>50</sub> = 4μg/mL; Ascorbic acid, TLC detection limit < 0.10μg, IC<sub>50</sub> = 18μg/mL)<sup>[3785]</sup>; antibacterial (*Escherichia coli*, MIA = 100.0μg, control Chloramphenicol, MIA = 0.001μg; *Staphylococcus aureus*, MIA = 1.00μg, Chloramphenicol, MIA = 0.0001μg; *Bacillus subtilis*, MIA = 5.00μg, Chloramphenicol, MIA = 0.0001μg)<sup>[5247]</sup>; antifungal (*Candida mycoderma*, MIA = 0.10μg, control Miconazole, MIA = 0.0001μg)<sup>[5247]</sup>; antioxidant (DPPH scavenger, TLC, MIA = 0.5μg, IC<sub>50</sub> = 354μg/mL; control Quercetin, MIA < 0.05μg, IC<sub>50</sub> = 7μg/mL, Gallic acid, MIA < 0.05μg, IC<sub>50</sub> = 4μg/mL; Ascorbic acid, MIA < 0.10μg, IC<sub>50</sub> = 18μg/mL)<sup>[5247]</sup>. **Source:** DA DOU *Glycine max* (Soybean phytochemical concentrate: yield = 0.013%dw)<sup>[4630]</sup>, DU HUI MAO DOU *Tephrosia toxicaria* (stem: yield = 0.000065%dw)<sup>[4718]</sup>, GE GEN *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*], HONG CHE ZHOU CAO *Trifolium pratense*, HUAI *Sophora japonica*, HUAI JIAO *Sophora japonica*, HUANG HUA MU *Piptanthus nepalensis*, HUANG YU SHAN DOU *Lupinus luteus*, HEI DA DOU *Glycine max*, JI KUAN CI TONG *Erythrina latissima* (stem wood), PAN YUAN YU TENG *Derris scandens* (stem), RAN LIAO MU *Genista tinctoria*, SHAN DOU GEN *Sophora subprostrata* [Syn. *Sophora tonkinensis*], *Prunus* sp., PAN YUAN YU TENG *Derris scandens* (stem), GUANG BU DING GONG TENG *Erycibe expansa*, *Bolusanthus speciosus* (root wood)<sup>[3785]</sup>. **Ref:** 2, 4, 5, 658, 3785, 3810, 4095, 4416, 4415, 4630, 4718, 4984, 5038, 5247, 5347.



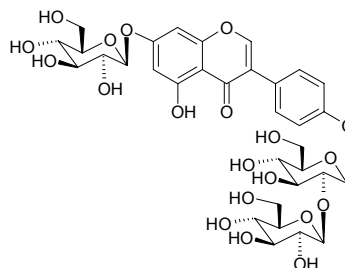
#### 8279 Genistein 7-O-β-D-glucopyranoside-4'-O-β-D-glucopyranoside

C<sub>27</sub>H<sub>30</sub>O<sub>15</sub> (594.53). **Source:** HUAI *Sophora japonica* (pericarp). **Ref:** 3080.



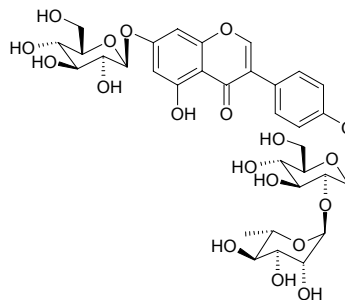
#### 8280 Genistein 7-O-β-D-glucopyranoside-4'-O-(β-D-glucopyranosyl)-(1→2)-β-D-glucopyranoside

C<sub>33</sub>H<sub>40</sub>O<sub>20</sub> (756.67). White amorphous powder, mp 241~243°C, [α]<sub>D</sub><sup>25</sup> = -65° (c = 0.001, DMSO). **Source:** HUAI *Sophora japonica* (pericarp). **Ref:** 3080.



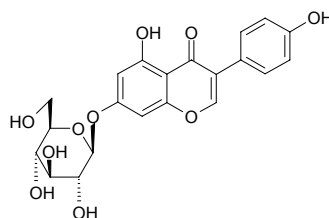
#### 8281 Genistein 7-O-β-D-glucopyranoside-4'-O-(α-L-rhamnopyranosyl)-(1→2)-β-D-glucopyranoside

C<sub>33</sub>H<sub>40</sub>O<sub>19</sub> (740.68). White amorphous powder, mp 229~231°C, [α]<sub>D</sub><sup>25</sup> = -73° (c = 0.001, DMSO). **Source:** HUAI *Sophora japonica* (pericarp). **Ref:** 3080.



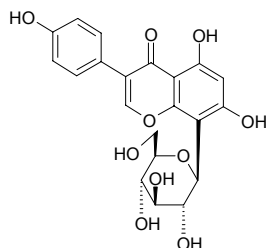
#### 8282 Genistein 7-glucoside

Genistin [529-59-9] C<sub>21</sub>H<sub>20</sub>O<sub>10</sub> (432.39). mp 254~256°C. **Pharm:** Estrogenic activity; inhibits growth of wheat coleoptile *in vitro*. **Source:** AI JING DOU *Ulex nanus*, DA DOU *Glycine max* (Soybean phytochemical concentrate: yield = 0.011%dw)<sup>[4630]</sup>, GE GEN *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*], HEI DA DOU *Glycine max*, HUAI *Sophora japonica*, HUAI *Sophora japonica* (pericarp)<sup>[3080]</sup>, HUANG HUA MU *Piptanthus nepalensis*, HUANG YU SHAN DOU *Lupinus luteus*, RAN LIAO MU *Genista tinctoria*. **Ref:** 6, 658, 660, 3080, 4630.

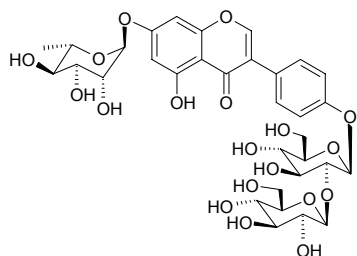


**8283 Genistein 8-C-glucoside**

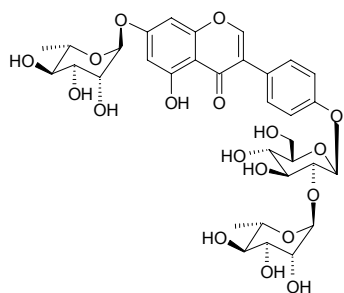
[66026-80-0] C<sub>21</sub>H<sub>20</sub>O<sub>10</sub> (432.39). Source: HUANG YU SHAN DOU *Lupinus luteus*, GUANG LIANG HUANG TAN *Dalbergia nitidula*. Ref: 658.

**8284 Genistein 7-O- $\alpha$ -L-rhamnopyranoside-4'-O-[( $\beta$ -D-glucopyranosyl)-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranoside]**

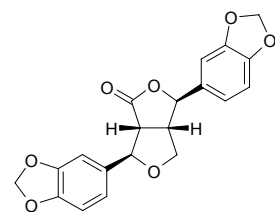
C<sub>33</sub>H<sub>40</sub>O<sub>19</sub> (740.68). White amorphous powder, mp 211~213°C,  $[\alpha]_D^{25} = -85^\circ$  ( $c = 0.001$ , DMSO). Source: HUAI *Sophora japonica* (pericarp). Ref: 3080.

**8285 Genistein 7-O- $\alpha$ -L-rhamnopyranoside-4'-O-[( $\alpha$ -L-rhamnopyranosyl)-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranoside]**

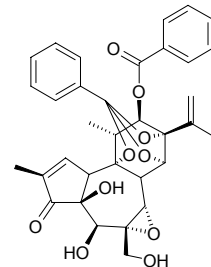
C<sub>33</sub>H<sub>40</sub>O<sub>18</sub> (724.68). White amorphous powder, mp 212~214°C,  $[\alpha]_D^{25} = -95^\circ$  ( $c = 0.001$ , DMSO). Source: HUAI *Sophora japonica* (pericarp). Ref: 3080.

**8286 Genkdaphin**

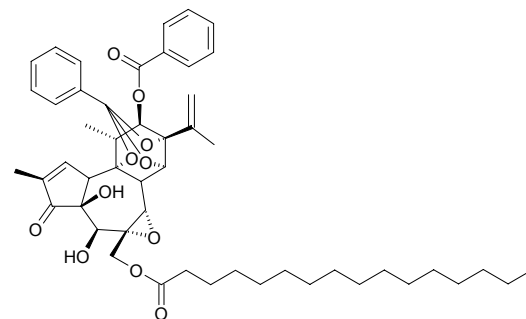
C<sub>20</sub>H<sub>16</sub>O<sub>7</sub> (368.35). Colorless acicular Crystals, mp 118.0~119.5°C,  $[\alpha]_D = -64.8^\circ$  ( $c = 0.5$ , chloroform). Source: YUAN HUA *Daphne genkwa*. Ref: 175.

**8287 Genkwadaphnin**

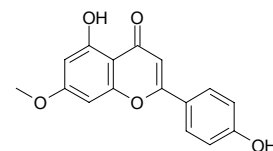
[55073-32-0] C<sub>34</sub>H<sub>34</sub>O<sub>10</sub> (602.64). Pharm: *Daphne oleoides* ssp. *oleoides* Source: YOU RUI XIANG *Daphne oleoides*. Ref: 2410.

**8288 Genkwadaphnin-20-palmitate**

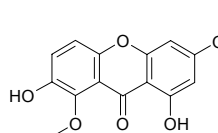
C<sub>50</sub>H<sub>64</sub>O<sub>11</sub> (841.06). Amorphous powder,  $[\alpha]_D^{25} = +37.5^\circ$  ( $c = 1.74$ , CHCl<sub>3</sub>). Source: YOU RUI XIANG *Daphne oleoides*. Ref: 2410.

**8289 Genkwanin**

4',5-Dihydroxy-7-methoxy flavone [437-64-9] C<sub>16</sub>H<sub>12</sub>O<sub>5</sub> (284.27). mp 286°C, 293°C. Pharm: Inhibits frog heart *in vitro*; inhibits intestinal and uterine movement (animal *in vitro*); antihypertensive (dog, iv); uterine stimulant (dog, iv); improves respiration (dog, iv). Source: CI CAO SU *Phlomis pungens*, GUANG GUO GAN CAO *Glycyrrhiza glabra*, JI CHA KAI LA RUI A *Larrea divaricata*, JIAO ZHI SHU WEI CAO *Salvia glutinosa*, MI DIE XIANG *Rosmarinus officinalis*, SAN CHI LA RUI A *Larrea tridentata*, XI YE YI MU CAO *Leonurus sibiricus* (aerial parts: yield = 0.00074%)<sup>[4744]</sup>, YI MU CAO *Leonurus heterophyllus* [Syn. *Leonurus artemisia*] (aerial parts), YIN CHEN HAO *Artemisia capillaris*, YING TAO *Prunus pseudocerasus*, YUAN HUA *Daphne genkwa* (dried bud: mean content of 19 origins = 0.390%<sup>[5535]</sup>). Ref: 2, 6, 658, 4493, 4744, 5501, 5508, 5535.

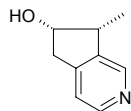
**8290 Gentiacauleine**

[15402-27-4] C<sub>15</sub>H<sub>12</sub>O<sub>6</sub> (288.26). Pharm: Vasodilator (rat aortic preparations, pre-contracted by 3 $\mu$ mol/L arterenol, pIC<sub>50</sub> = 5.00 $\pm$ 0.03; pre-contracted by 20 $\mu$ mol/L KCl, pIC<sub>50</sub> = 4.90 $\pm$ 0.15)<sup>[5434]</sup>. Source: XUE LONG DAN *Gentiana nivalis*, KU HE LONG DAN *Gentiana kochiana*. Ref: 658, 5434.

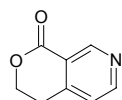


**8291 Gentialutine**

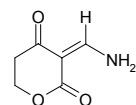
Venoterpine [17948-42-4]  $C_9H_{11}NO$  (149.19). mp 129~130°C. Source: SHUI CAI *Menyanthes trifoliata*, XI SHU *Camptotheca acuminata*, XI ZANG QIN JIAO *Gentiana tibetica*. Ref: 6, 660, 1521.

**8292 Gentianadine**

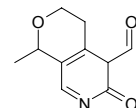
[6790-32-5]  $C_8H_7NO_2$  (149.15). Pharm: Anti-inflammatory; antihypertensive; antipyretic; muscle relaxant; toxin. Source: AO LIE GE LONG DAN *Gentiana olgae*, AO SHI LONG DAN *Gentiana olivieri*, TU ER QI SI TAN LONG DAN *Gentiana turkestanorum*. Ref: 658.

**8293 Gentianaine**

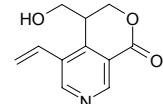
Gentiocrucine [58213-76-6]  $C_6H_7NO_3$  (141.13). mp 149~150°C. Pharm: Anti-inflammatory. Source: AO LIE GE LONG DAN *Gentiana olgae*, AO SHI LONG DAN *Gentiana olivieri*, GAO JIA SUO LONG DAN *Gentiana caucasa*, TIAN SHAN QIN JIAO *Gentiana tianschanica*, TU ER QI SI TAN LONG DAN *Gentiana turkestanorum*, ZHONG YA QIN JIAO *Gentiana kaufmanniana*. Ref: 6, 658, 660.

**8294 Gentianal**

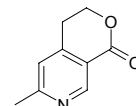
$C_{10}H_{11}NO_3$  (193.20). Source: DIAN LONG DAN *Gentiana rigescens*. Ref: 2, 660.

**8295 Gentianamine**

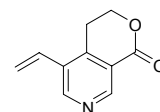
[22952-54-1]  $C_{11}H_{11}NO_3$  (205.22). Pharm: Anti-inflammatory. Source: AO SHI LONG DAN *Gentiana olivieri*, TU ER QI SI TAN LONG DAN *Gentiana turkestanorum*. Ref: 658.

**8296 Gentianidine**

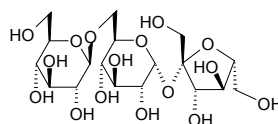
[2202-12-2]  $C_9H_9NO_2$  (163.18). mp 131~132°C. Source: DIAN LONG DAN *Gentiana rigescens*, QIN JIAO *Gentiana macrophylla*, SHUI CAI *Menyanthes trifoliata*. Ref: 2, 660.

**8297 Gentianine**

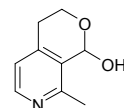
[439-89-4]  $C_{10}H_9NO_2$  (175.19). mp 82~83°C; mp 79~80°C (ethanol)<sup>[5507]</sup>. Pharm: Anti-inflammatory (arthritis induced by formaldehyde or egg white); antiulcerative; inhibits gastric secretion; bidirectional action to CNS system (mus, central sedation at low dose, central stimulation at moderate dose and paralytic death at high dose); increases level of blood sugar (rat and mus, ip, 150~200mg/kg); inhibits frog heart *in vitro*; antihypertensive (gpg, anesthetic dog and anesthetic rbt); reduces blood capillary permeability; anti-allergic (rat, protects against sensitive shock caused by egg white); Protects against shock (gpg, induced by histamine); LD<sub>50</sub> (mus, orl) = 460mg/kg, (mus, ip) = 350mg/kg, (mus, iv) = 250~300mg/kg, (mus, sc) ≥ 500mg/kg. Source: BAI HUA LONG DAN *Gentiana algida*, CU JING QIN JIAO *Gentiana crassicaulis* (dried root: content = 0.41%<sup>[5508]</sup>), DA WU LI QIN JIAO *Gentiana dahurica* (dried root: content = 0.89%<sup>[5508]</sup>), DIAN LONG DAN *Gentiana rigescens*, GUAN HUA QIN JIAO *Gentiana siphonantha* (dried root: content = 0.19%<sup>[5508]</sup>), HU LU BA *Trigonella foenum-graecum*, LONG DAN *Gentiana scabra*, MA HUA JIAO *Gentiana straminea* (dried root: content = 0.52%<sup>[5508]</sup>), QIN JIAO *Gentiana macrophylla* (dried root: content = 1.43%<sup>[5508]</sup>), SHUI CAI *Menyanthes trifoliata*, TIAN SHAN QIN JIAO *Gentiana tianschanica*, XI ZANG QIN JIAO *Gentiana tibetica*. Ref: 2, 4, 658, 660, 5501, 5507, 5508.

**8298 Gentianose**

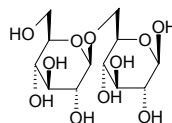
[25954-44-3]  $C_{18}H_{32}O_{16}$  (504.45). mp 209°C. Source: LONG DAN *Gentiana scabra*. Ref: 2.

**8299 Gentiatibetine**

[26005-36-7]  $C_9H_{11}NO_2$  (165.19). mp 161°C. Source: SHUI CAI GEN *Menyanthes trifoliata*. Ref: 6.

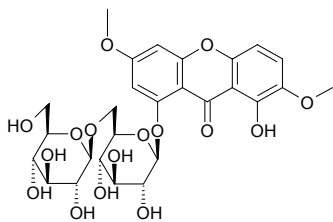
**8300 Gentiobiose**

[5996-00-9]  $C_{12}H_{22}O_{11}$  (342.30). mp 190~195°C. Source: ZANG HONG HUA *Crocus sativus*. Ref: 6.

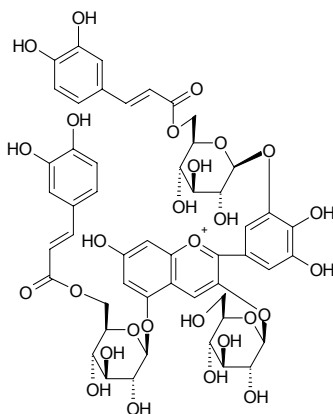


**8301 1-O-Gentiobiosyl-3,7-dimethoxy-8-hydroxyxanthone**

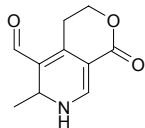
$C_{27}H_{32}O_{16}$  (612.55). Yellow Crystals, mp 184~186°C,  $[\alpha]_D^{20} = -33.63^\circ$  ( $c = 0.33$ , DMSO). Source: XI DIAN ZHANG YA CAI *Swertia punctata*. Ref: 2155.

**8302 Gentiodelphin**

[84331-34-0]  $C_{51}H_{53}O_{28}$  (1113.97). Source: MU YE LONG DAN *Gentiana makinoi*. Ref: 658.

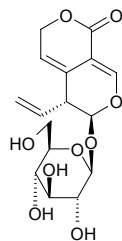
**8303 Gentioflavine**

[18058-50-9]  $C_{10}H_{11}NO_3$  (193.20). mp 218~220°C (dec). Source: LONG DAN *Gentiana scabra*, TIAN SHAN QIN JIAO *Gentiana tianschanica*. Ref: 2, 660.

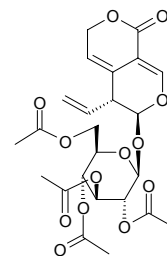
**8304 Gentiopicroside**

Gentiopicroin; Gentiopicroin [20831-76-9]  $C_{16}H_{20}O_9$  (356.33). mp 122°C. Pharm: Anti-inflammatory (swollen foot model caused by carrageenan); antiprotozoal (plasmidium); gastric secretion promotor. Source: BAO JING ZHANG YA CAI *Swertia franchetiana* (whole herb: content = 0.05%)<sup>[5508]</sup>, BU SHI LONG DAN *Gentiana burseri*, CHUAN DONG ZHANG YA CAI *Swertia davidii* (whole herb: content = 0.13%)<sup>[5508]</sup>, CU CAO LONG DAN *Gentiana scabra* var. *buesgeri* (root: mean content of 6 origins = 6.73%)<sup>[5508]</sup>, CU HUA ZHANG YA CAI *Swertia fasciculata* (whole herb: content = 0.054%)<sup>[5508]</sup>, CU JING QIN JIAO *Gentiana crassicaulis* (root: mean content = 8.96%)<sup>[5534]</sup>, CU ZHUANG LONG DAN *Gentiana robusta* (root: content = 3.63%)<sup>[5508]</sup>, DA WU LI QIN JIAO *Gentiana dahurica*, DA ZI ZHANG YA CAI *Swertia macrosperma* (whole herb: content = 0.02%)<sup>[5508]</sup>, DAN HUANG ZHANG YA CAI *Swertia punicea* var. *lutescens* (whole herb: content = 0.0045%)<sup>[5508]</sup>, DIAN LONG DAN *Gentiana rigescens* (root: mean content of 11 origins = 1.75%)<sup>[15, 5508]</sup>, DONG BEI LONG DAN *Gentiana manshurica* (root: mean

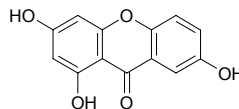
content of 11 origins = 5.01%)<sup>[15, 5508]</sup>, GUI ZHOU ZHANG YA CAI *Swertia kouitchensis* (whole herb: content = 3.61%)<sup>[5508]</sup>, HONG HUA LONG DAN *Gentiana rhodantha* (root: mean content of 2 origins = 0.06%)<sup>[5508]</sup>, HONG ZHI ZHANG YA CAI *Swertia erythrosticta* (whole herb: content = 0.5081%)<sup>[5508]</sup>, HUANG LONG DAN *Gentiana lutea* (the compound was isolated from the plant by H.Inouye et al. in 1968)<sup>[5505]</sup>, LONG DAN *Gentiana scabra* (root: content scope = 1.28%~7.62%, mean content = 4.61%)<sup>[15, 5508]</sup>, MA HUA JIAO *Gentiana straminea* (dried root: mean content = 23.3%)<sup>[5508]</sup>, MAN ZHI LONG DAN *Gentiana leptoclada* (whole herb: content = 0.01%)<sup>[5508]</sup>, MAO ZHANG YA CAI *Swertia pubescens* (whole herb: content = 0.0158%)<sup>[5508]</sup>, QIN JIAO *Gentiana macrophylla* (dried root: mean content = 15.6%)<sup>[5508]</sup>, SAN HUA LONG DAN *Gentiana triflora* (root: mean content = 3.68%)<sup>[15, 5508]</sup>, TOU HUA LONG DAN *Gentiana cephalantha* (root: content = 0.43%)<sup>[5508]</sup>, XI NAN ZHANG YA CAI *Swertia cincta* (whole herb: content = 0.06%)<sup>[5508]</sup>, XIA YE ZHANG YA CAI *Swertia angustifolia* (whole herb: content = 0.148%)<sup>[5508]</sup>, XIAN MAI ZHANG YA CAI *Swertia nervosa* (whole herb: content = 0.13%)<sup>[5508]</sup>, ZHANG YA CAI *Swertia pseudochinensis* (whole herb: content = 0.34%)<sup>[5508]</sup>, ZHE JIANG ZHANG YA CAI *Swertia hickinii* (whole herb: content = 1.84%)<sup>[5508]</sup>, ZI HONG ZHANG YA CAI *Swertia punicea* (whole herb: mean content = 0.54%)<sup>[5508]</sup>. Ref: 2, 658, 660, 5501, 5505, 5508, 5534.

**8305 Gentiopicroside tetraacetate**

$C_{24}H_{28}O_{13}$  (524.48). Source: LONG DAN *Gentiana scabra*. Ref: 2.

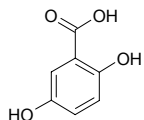
**8306 Gentioin**

1,3,7-Trihydroxyxanthone [529-49-7]  $C_{13}H_8O_5$  (244.21). Pharm: Antibacterial (*Mycobacterium tuberculosis*). Source: CHAN YI TENG *Securidaca inappendiculata* (stem), DI GEN JIN SI TAO *Hypericum degenii*, HUANG LONG DAN *Gentiana lutea*. Ref: 658, 5238.

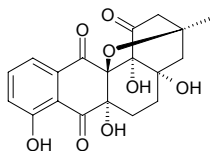


**8307 Genticic acid**

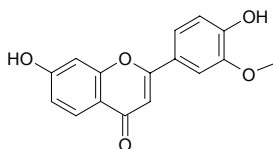
[490-79-9]  $C_7H_6O_4$  (154.12). mp 204.5~205.0°C. **Pharm:** Antibacterial; antirheumatic and analgesic (sodium salt); antiviral. **Source:** DA CHE QIAN *Plantago major*, HUI XIANG JING YE *Foeniculum vulgare*, JU AN *Eucalyptus grandis*, JU YU *Helianthus tuberosus*, LAI FU *Raphanus sativus*, LI MENG GEN *Citrus limonia*, LI MENG YE *Citrus limonia*, PU<sup>(2)</sup> TAO *Vitis vinifera*, SI ZI TAN *Pterocarpus santalinus*, ZAI PEI GAN JU *Citrus cultivars*, *Gentiana* sp. **Ref:** 6, 658, 660.

**8308 Gephyromycin**

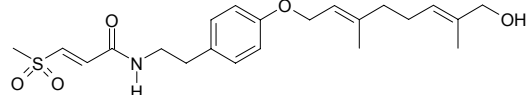
$C_{19}H_{18}O_8$  (374.35). White crystalline solid (MeOH), mp 212°C,  $[\alpha]_D^{20} = -51^\circ$  ( $c = 0.05$ , MeOH). **Pharm:** Glutaminergic agonist (neuronal cells)<sup>[5290]</sup>. **Source:** *Streptomyces griseus*. **Ref:** 5290.

**8309 Geraldone**

[21583-32-4]  $C_{16}H_{12}O_5$  (284.27). **Pharm:** Nodulation signal for metabiosis of pea and *Rhizobium leguminosarum*. **Source:** DI XIA CHE ZHOU CAO *Trifolium subterraneum*. **Ref:** 658.

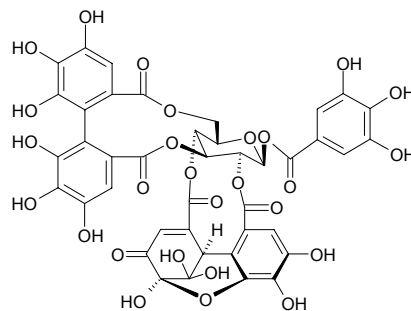
**8310 Gerambullol**

(*E*)-3-(Methylsulfonyl)-propenoic acid (2*E*,6*E*)-4-(8-hydroxy-3,7-dimethyl-2,6-octadienyloxy)-phenethyl amide  $C_{22}H_{31}NO_5S$  (421.56). Colorless crystals ( $Et_2O$ ), mp 128~129°C. **Source:** LV ZI SHAN XIAO JU *Glycosmis chlorosperma* (leaf). **Ref:** 3956.

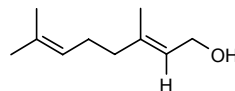
**8311 Geraniin**

[60976-49-0]  $C_{41}H_{28}O_{27}$  (952.66). **Pharm:** Inhibits adipose peroxidation (rat, hepatic microsome); inhibits lipolysis (rat, adipose cells induced by adrenaline); promotes lipolysis (adipose cells induced by ACTH); TNF- $\alpha$  release inhibitor (BALB/3T3 cells, okadaic acid-stimulated, mean  $IC_{50} = 43 \mu mol/L$ )<sup>[4416]</sup>.

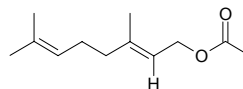
**Source:** AN MO LE *Phyllanthus emblica* (branch and leaf)<sup>[3094]</sup>, MAO GUO QI *Acer nikoense*, GU KE *Erythroxylum coca*, RI BEN MA SANG *Coriaria japonica*, YE WU TONG *Mallotus japonicus*, *Geranium* sp., *Euphorbia* sp., *Acer* sp., *Fuchsia* sp. **Ref:** 658, 3094, 4416.

**8312 Geraniol**

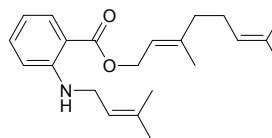
Geranyl alcohol [106-24-1]  $C_{10}H_{18}O$  (154.25). mp 230°C. **Pharm:** Antifungal (genus *Trichophyton* and *Microsporium audouini*, MIC = 0.39mg/mL); antiseptic; anthelmintic (gpg, ascaricide); treatment of chronic bronchitis; antineoplastic (leukemia); LD<sub>50</sub> (rat, orl) = 4.8g/kg, (rbt, iv) = 50mg/kg. **Source:** BAN BIAN SU *Elsholtzia ciliata*, CHAI HU *Bupleurum chinense*, DA MA SHI GE QIANG WEI *Rosa damascena*, DA SUAN *Allium sativum*, FA GUO QIANG WEI *Rosa gallica*, GAN JIANG *Zingiber officinale*, JIN YIN HUA *Lonicera japonica*, JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*], MANG NIU ER MIAO *Erodium stephanianum*, MEI GUI HUA *Rosa rugosa*, SHENG JIANG *Zingiber officinale*, SHUI SONG *Codium fragile*, WU WEI ZI *Schisandra chinensis*, YUE GUI ZI *Laurus nobilis*, YUN XIANG CAO *Cymbopogon distans*. **Ref:** 2, 4, 11, 638, 658, 660, 1582.

**8313 Geranyl acetate**

[105-87-3]  $C_{12}H_{20}O_2$  (196.29). bp 242~245°C/764mmHg. **Pharm:** Insect attractant. **Source:** TIAN MING JING *Carpesium abrotanoides*, HU LUO BO *Daucus carota* var. *sativa*, HU LUO BO ZI *Daucus carota* var. *sativa*, HUANG HAO *Artemisia scoparia* [Syn. *Artemisia capillaris* var. *scoparia*], JU YUAN *Citrus medica*, MEI GUI HUA *Rosa rugosa*, NING MENG *Citrus limon*, NING MENG PI *Citrus limon*, SHENG JIANG *Zingiber officinale*, TIAN MING JING *Carpesium abrotanoides*, TU XIANG RU *Origanum vulgare*, YE XIANG MAO *Cymbopogon goeringii*, YIN CHEN HAO *Artemisia capillaris*. **Ref:** 6, 658, 660.

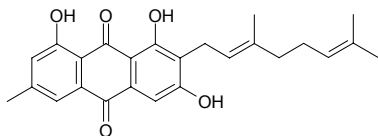
**8314 Geranyl N-Dimethylallylanthranilate**

$C_{22}H_{31}NO_2$  (341.50). Yellow oil. **Pharm:** Antibacterial (*Staphylococcus aureus*). **Source:** *Esenbeckia yaaxhokob* (leaf). **Ref:** 4929.

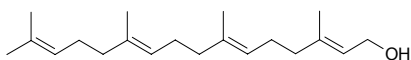


**8315 2-Geranylemodin**

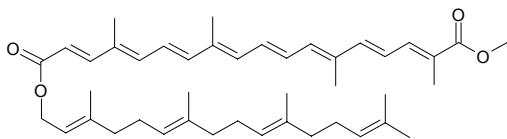
$C_{25}H_{26}O_5$  (406.48). **Pharm:** Cytotoxic (hmn small cell lung cancer NCI-H187 cell line,  $IC_{50} = (3.08 \pm 0.73) \mu\text{g/mL}$ , control Ellipticine,  $IC_{50} = (0.35 \pm 0.15) \mu\text{g/mL}$ ). **Source:** QIAO MU ZHUANG HUANG NIU MU *Cratogeomys arborescens* (stem cortex). **Ref:** 5061.

**8316 Geranylgeraniol**

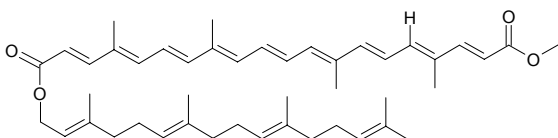
[24034-73-9]  $C_{20}H_{34}O$  (290.49). **Source:** YAMA *Linum usitatissimum*, HONG CHUN *Toona ciliata*. **Ref:** 658.

**8317 6-Geranylgeranyl 8'-methyl-6,8'-diapocaroten-6,8'-dioate**

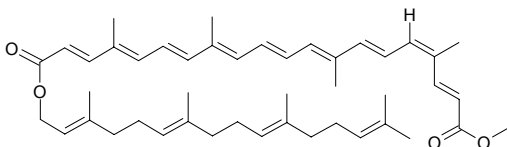
[247030-33-7]  $C_{43}H_{60}O_4$  (640.96). **Source:** HONG MU *Bixa orellana* (seed coat). **Ref:** 2352.

**8318 6-Geranylgeranyl 6'-methyl-(9'E)-6,6'-diapocaroten-6,6'-dioate**

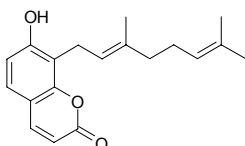
$C_{45}H_{62}O_4$  (666.99). **Source:** HONG MU *Bixa orellana* (seed coat). **Ref:** 2352.

**8319 6-Geranylgeranyl 6'-methyl-(9'Z)-6,6'-diapocaroten-6,6'-dioate**

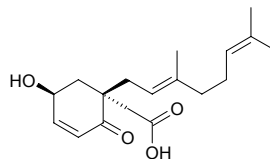
$C_{45}H_{62}O_4$  (666.99). **Source:** HONG MU *Bixa orellana* (seed coat). **Ref:** 2352.

**8320 8-Geranyl-7-hydroxycoumarin**

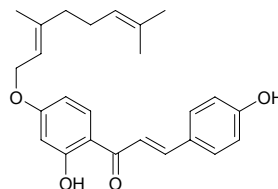
$C_{19}H_{22}O_3$  (298.39). **Source:** DONG FENG JU GEN *Atalantia buxifolia* [Syn. *Severinia buxifolia*] (root cortex). **Ref:** 3075.

**8321 2-(1'-β-Geranyl-5'β-hydroxy-2'-oxocyclohex-3'-enyl)acetic acid**

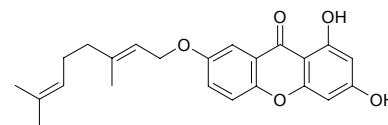
$C_{18}H_{26}O_4$  (306.41). Colorless oil,  $[\alpha]_D^{22} = -2.9^\circ$  ( $c = 0.1$ ,  $CHCl_3$ ). **Pharm:** Antiplasmodial (*in vitro Plasmodium falciparum*: D6,  $IC_{50} = 1462.00 \text{ ng/mL}$ , control Mefloquine,  $IC_{50} = 11.67 \text{ ng/mL}$ ; W2,  $IC_{50} = 2552.94 \text{ ng/mL}$ , control Mefloquine,  $IC_{50} = 4.78 \text{ ng/mL}$ ). **Source:** *Glossocalyx brevipes* (leaf). **Ref:** 4973.

**8322 4'-O-Geranylisoliquiritigenin**

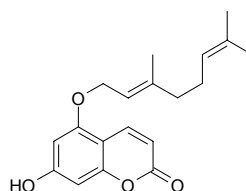
$C_{25}H_{28}O_4$  (392.50). **Pharm:** Antimalarial (antiplasmodial, chloroquine-resistant W2 strain of *Plasmodium falciparum*,  $IC_{50} = 8.7 \mu\text{mol/L}$ , control Chloroquine,  $IC_{50} = 0.094 \mu\text{mol/L}$ , control Quinine,  $IC_{50} = 0.209 \mu\text{mol/L}$ ; chloroquine-sensitive D6 strain of *Plasmodium falciparum*,  $IC_{50} = 10.6 \mu\text{mol/L}$ , control Chloroquine,  $IC_{50} = 0.009 \mu\text{mol/L}$ , control Quinine,  $IC_{50} = 0.044 \mu\text{mol/L}$ ). **Source:** *Milletia usaramensis* ssp. *usaramensis*. **Ref:** 3454.

**8323 7-Geranyloxy-1,3-dihydroxyxanthone**

$C_{23}H_{24}O_5$  (380.44). Yellow needles ( $CH_2Cl_2$ -hexane) mp 138~1408°C. **Source:** HUANG NIU MU *Cratogeomys cochinchinense*. **Ref:** 1907.

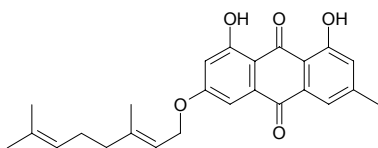
**8324 5-Geranyloxy-7-hydroxycoumarin**

$C_{19}H_{22}O_4$  (314.38). **Pharm:** EBV-EA inhibitor (TPA-induced,  $IC_{50} = 331 \text{ Mol ratio/32 pmol TPA}$ , control  $\beta$ -Carotene,  $IC_{50} = 400 \text{ Mol ratio/32 pmol TPA}$ ). **Source:** YUAN DONG JIU LI XIANG *Murraya siamensis* (leaf). **Ref:** 5255.

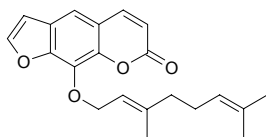


**8325 3-Geranyloxy-6-methyl-1,8-dihydroxyanthraquinone**

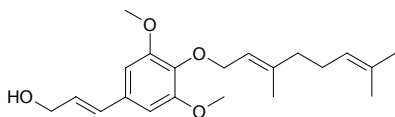
$C_{25}H_{26}O_5$  (406.48). Yellow brown crystals, mp 120~121°C. **Pharm:** Antitrypanosomal (*Trypanosoma brucei*,  $IC_{50} = (14.4 \pm 8.1) \mu\text{g/mL}$ , control Melarsoprol,  $IC_{50} = (0.0015 \pm 0.0009) \mu\text{g/mL}$ ; *Trypanosoma cruzi*,  $IC_{50} > 90 \mu\text{g/mL}$ , control Benznidazole,  $IC_{50} = (0.39 \pm 0.15) \mu\text{g/mL}$ )<sup>[5008]</sup>; antileishmanial (*Leishmania donovani*,  $IC_{50} = (12.0 \pm 1.0) \mu\text{g/mL}$ , control Miltefosine,  $IC_{50} = (0.23 \pm 0.03) \mu\text{g/mL}$ ; *Plasmodium falciparum*,  $IC_{50} = (25.6 \pm 1.4) \mu\text{g/mL}$ , control Chloroquine,  $IC_{50} = (0.055 \pm 0.02) \mu\text{g/mL}$ , control Artemisinin,  $IC_{50} = (0.0011 \pm 0.0006) \mu\text{g/mL}$ )<sup>[5008]</sup>; cytotoxic (L6,  $IC_{50} > 90 \mu\text{g/mL}$ , control Podophyllotoxin,  $IC_{50} = 0.0075 \mu\text{g/mL}$ ; brine shrimp lethality,  $IC_{50} = 21.3 \mu\text{g/mL}$ , control Cyclophosphamide,  $IC_{50} = 16.33 \mu\text{g/mL}$ )<sup>[5008]</sup>; cytotoxic inactive (hmn small cell lung cancer NCI-H187 cell line, control Ellipticine,  $IC_{50} = (0.35 \pm 0.15) \mu\text{g/mL}$ )<sup>[5061]</sup>. **Source:** DONG FANG WEI SI MU *Vismia orientalis* (stem cortex), QIAO MU ZHUANG HUANG NIU MU *Cratogeomys arborescens* (stem cortex). **Ref:** 5008, 5061.

**8326 8-Geranyloxy psoralen**

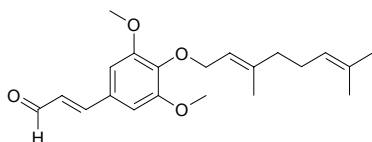
$C_{21}H_{22}O_4$  (338.41). mp 51~53°C. **Source:** YUN NAN QIANG HUO *Pleurospermum rivulorum*. **Ref:** 551.

**8327 Geranyloxy sinapyl alcohol**

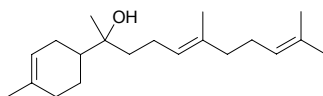
$C_{21}H_{30}O_4$  (346.47). **Pharm:** Cytotoxic (*in vitro*, A549,  $IC_{50} = 34 \mu\text{mol/L}$ ; HL-60,  $6.7 \mu\text{mol/L}$ ; KB,  $3.0 \mu\text{mol/L}$ ). **Source:** LIAN YE TUO WU *Ligularia nelumbifolia* (root, yield = 0.0040%dw). **Ref:** 4632.

**8328 Geranyloxy sinapyl aldehyde**

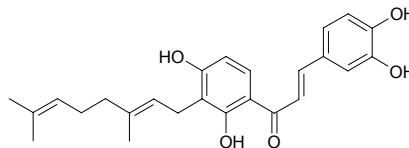
$C_{21}H_{28}O_4$  (344.45). **Pharm:** Cytotoxic (*in vitro*, A549,  $IC_{50} = 22 \mu\text{mol/L}$ ; HL-60,  $12 \mu\text{mol/L}$ ; KB,  $2.6 \mu\text{mol/L}$ ). **Source:** LIAN YE TUO WU *Ligularia nelumbifolia* (root, yield = 0.0018%dw). **Ref:** 4632.

**8329 9-Geranyl-terpineol**

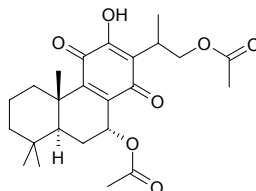
$C_{20}H_{34}O$  (290.49). Colorless oil,  $[\alpha]_D^{31.2} = -51.3^\circ$  ( $c = 0.046$ , MeOH). **Source:** DI ER CAO *Hypericum japonicum*. **Ref:** 762.

**8330 3'-Geranyl-2',3,4,4'-tetrahydroxychalcone**

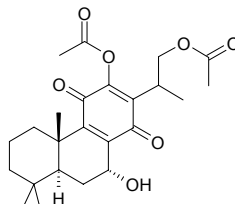
2',3,4,4'-Tetrahydroxy-3'-geranylchalcone  $C_{25}H_{28}O_5$  (408.50). Yellow powder, mp 131~132°C. **Pharm:** Antifungal (*Cladosporium cladosporioides*, TLC bioautography method,  $2 \mu\text{g/spot}$ , control Benlate)<sup>[3813]</sup>; antioxidant (DPPH scavenger, TLC bioautography method,  $1 \mu\text{g/spot}$ , control Vitamin E,  $1 \mu\text{g/spot}$ )<sup>[3813]</sup>;  $5\alpha$ -reductase inhibitor ( $IC_{50} = 104 \mu\text{mol/L}$ , control  $\alpha$ -Linolenic acid,  $IC_{50} = 116 \mu\text{mol/L}$ )<sup>[3979]</sup>. **Source:** GAO GUI BO LUO MI *Artocarpus nobilis* (leaf), MIAN BAO GUO *Artocarpus incisa* [Syn. *Artocarpus communis*] (leaf). **Ref:** 3813, 3979.

**8331 Gerardianin A**

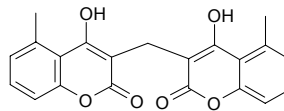
$C_{24}H_{32}O_7$  (432.52). mp 135°C. **Source:** XIA JI XIAN WEN XIANG CHA CAI *Isodon lophanthoides* var. *gerardiana*. **Ref:** 4067.

**8332 Gerardianin B**

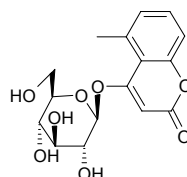
$C_{24}H_{32}O_7$  (432.52). mp 158°C. **Source:** XIA JI XIAN WEN XIANG CHA CAI *Isodon lophanthoides* var. *gerardiana*. **Ref:** 4067.

**8333 Gerberinol I**

[84153-78-6]  $C_{21}H_{16}O_6$  (364.36). Acicular crystals, mp 262~264°C. **Pharm:** Antibacterial (*Staphylococcus aureus*,  $MIC \leq 125 \mu\text{g/mL}$ ). **Source:** DA DING CAO *Gerbera anandria* [Syn. *Leibnitzia anandria*]. **Ref:** 77, 921, 1121.

**8334 Gerberinside**

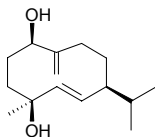
[76474-54-9]  $C_{16}H_{18}O_8$  (338.32). Acicular crystals, mp 153~154°C,  $[\alpha]_D^{21} = -109^\circ$  ( $c = 0.127$ , methanol). **Pharm:** Antibacterial (*Bacillus pyocyaneus*, infected mus, *in vivo*, survival rate = (57.8~71.0)%,  $ED_{50} = 46.2 \text{mg/kg}$ , *in vitro* no effects). **Source:** DA DING CAO *Gerbera anandria* [Syn. *Leibnitzia anandria*]. **Ref:** 900.



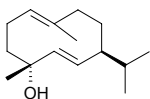
**8335 5E,10(14)-Germacradien-1 $\beta$ ,4 $\beta$ -diol**

$C_{15}H_{26}O_2$  (238.37). Colorless prisms (*n*-hexane–EtOAc), mp 120–122°C.

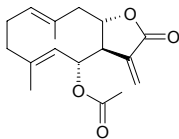
**Pharm:** Antiplasmodial (*Plasmodium falciparum* strains,  $IC_{50}$  = 1.63  $\mu$ g/mL, control Chloroquine,  $IC_{50}$  = 0.0028  $\mu$ g/mL)<sup>[2383]</sup>. **Source:** YI NIAN PENG *Erigeron annuus* (aerial parts), SU MEN BAI JIU CAO *Erigeron sumatrensis* (aerial parts), *Reneilmia cincinnata* (fruits). **Ref:** 2383, 4338.

**8336 1(10)E,5E-Germacradien-4-ol**

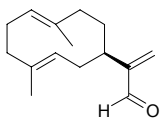
$C_{15}H_{26}O$  (222.37). Brown oil,  $[\alpha]_D^{26}$  = 118° (*c* = 0.80,  $CHCl_3$ ). **Pharm:** Antiplasmodial (*Plasmodium falciparum* strains,  $IC_{50}$  = 1.54  $\mu$ g/mL, control Chloroquine,  $IC_{50}$  = 0.0028  $\mu$ g/mL). **Source:** *Reneilmia cincinnata* (fruits). **Ref:** 2383.

**8337 Germacranolide**

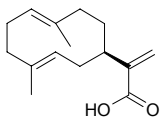
$C_{17}H_{22}O_4$  (290.36). **Source:** YUE GUI ZI *Laurus nobilis*. **Ref:** 6.

**8338 Germacra-1(10),4,11(13)-trien-12-ol**

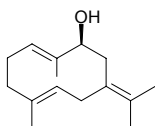
$C_{15}H_{22}O$  (218.34). Slight-yellow oil with strong mossy odor. **Source:** MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*]. **Ref:** 5190.

**8339 Germacra-1(10),4,11(13)-trien-12-oic acid**

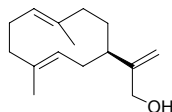
$C_{15}H_{22}O_2$  (234.34). White crystals. **Source:** MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*]. **Ref:** 5190.

**8340 Germacra-1(10),4,7(11)-trien-9 $\alpha$ -ol**

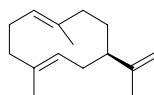
$C_{15}H_{24}O$  (220.36). bp 62–63°C/13mmHg. **Source:** XI XIN *Asarum sieboldii*. **Ref:** 6.

**8341 Germacra-1(10),4,11(13)-trien-12-ol**

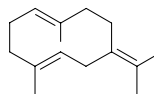
$C_{15}H_{24}O$  (220.36). Colorless or slight-yellow oil. **Source:** MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*]. **Ref:** 5190.

**8342 (+)-Germacrene A<sub>1</sub>**

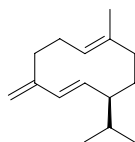
$C_{15}H_{24}$  (204.36). Colorless oil. **Source:** MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*]. **Ref:** 5190.

**8343 Germacrene B**

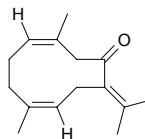
[15423-57-1]  $C_{15}H_{24}$  (204.36). **Source:** CHENG ZI PI *Citrus junos*. **Ref:** 6.

**8344 Germacrene D**

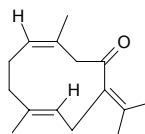
[23986-74-5]  $C_{15}H_{24}$  (204.36). **Source:** CHENG ZI PI *Citrus junos*. **Ref:** 6.

**8345 1-cis,5-cis Germacrone**

$C_{15}H_{22}O$  (218.34). bp 100°C/1mmHg. **Source:** MAN SHAN HONG *Rhododendron dauricum*. **Ref:** 6.

**8346 1-cis,5-trans Germacrone**

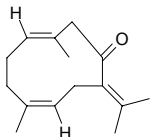
$C_{15}H_{22}O$  (218.34). bp 100°C/1mmHg. **Source:** MAN SHAN HONG *Rhododendron dauricum*. **Ref:** 6.



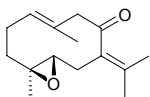


**8347 1-trans,5-trans Germacrone**

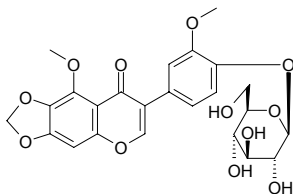
1(10)*E,4E*-Germacrone C<sub>15</sub>H<sub>22</sub>O (218.34). **Pharm:** NO production inhibitor (mus peritoneal macrophages, induced by LPS, 100μmol/L, InRt = (32.7±1.3)%, control *L*-NMMA, 100μmol/L, InRt = (79.2±0.9)%, *p*<0.01)<sup>[4150]</sup>; antitussive (mus); LD<sub>50</sub> = (mus, orl) = 970mg/kg. **Source:** MAN SHAN HONG *Rhododendron dauricum* (leaf: content scope = 0.045%~0.060%)<sup>[5501]</sup>, PING E SHU *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*]. **Ref:** 4150, 5501.

**8348 (+)-Germacrone 4,5-epoxide**

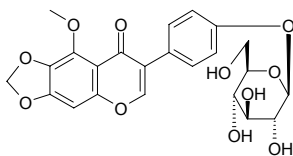
C<sub>15</sub>H<sub>22</sub>O<sub>2</sub> (234.34). **Pharm:** NO production inhibitor (mus peritoneal macrophages, induced by LPS, 100μmol/L, InRt = (29.5±4.5)%, control *L*-NMMA, 100μmol/L, InRt = (79.2±0.9)%, *p*<0.01). **Source:** PING E SHU *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*]. **Ref:** 4150.

**8349 Germanaism A**

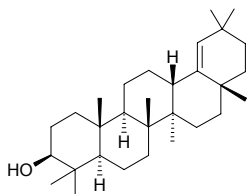
Iriskashmirianin 4'-*O*-β-*D*-glucoside C<sub>24</sub>H<sub>24</sub>O<sub>12</sub> (504.45). White amorphous solid, mp 187 °C, [α]<sub>D</sub><sup>24</sup> = +61.6° (*c* = 0.83, MeOH). **Source:** DE GUO YUAN WEI *Iris germanica* (rhizome). **Ref:** 4223.

**8350 Germanaism B**

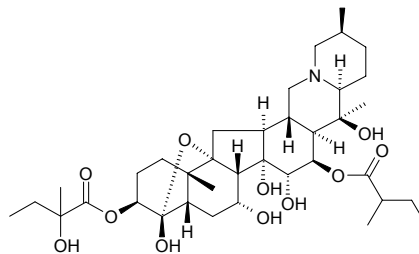
Nigricin 4'-*O*-β-*D*-glucoside C<sub>23</sub>H<sub>22</sub>O<sub>11</sub> (474.43). Amorphous solid, [α]<sub>D</sub><sup>24</sup> = +50.2° (*c* = 0.57, MeOH). **Source:** DE GUO YUAN WEI *Iris germanica* (rhizome). **Ref:** 4223.

**8351 Germanicol**

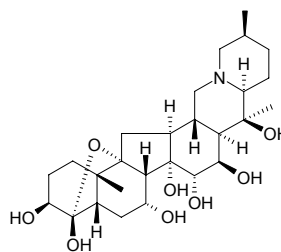
[465-02-1] C<sub>30</sub>H<sub>50</sub>O (426.73). mp 175~176°C (MeOH-CHCl<sub>3</sub>), lit. (Yamada et al., 1965) 176~177°C, [α]<sub>D</sub><sup>25</sup> = +6.0°. **Source:** SHAN WO JU *Lactuca indica*, XIE WEI JU *Koelipnia linearis* (aerial parts). **Ref:** 6, 3912.

**8352 Germerine**

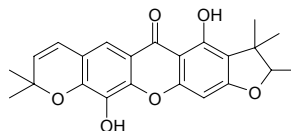
[508-67-8] C<sub>37</sub>H<sub>59</sub>NO<sub>11</sub> (693.88). mp 193~195°C (dec). **Source:** LI LU *Veratrum nigrum*. **Ref:** 6.

**8353 Germine**

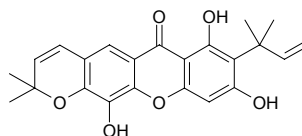
[508-65-6] C<sub>23</sub>H<sub>47</sub>NO<sub>8</sub> (509.65). **Pharm:** Causes arrhythmia and bradycardia; antihypertensive. **Source:** LV LI LU *Veratrum viride*. **Ref:** 658.

**8354 Gerontoxanthone A**

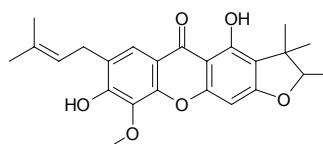
C<sub>23</sub>H<sub>22</sub>O<sub>6</sub> (394.43). **Pharm:** Cytotoxic (HSC-2 cells, CC<sub>50</sub> > 0.51mmol/L; HGF, CC<sub>50</sub> > 0.51mmol/L). **Source:** GOU JI *Cudrania cochinchinensis* (root: yield = 0.00095%dw). **Ref:** 3025.

**8355 Gerontoxanthone B**

C<sub>23</sub>H<sub>22</sub>O<sub>6</sub> (394.43). **Pharm:** Cytotoxic (HSC-2 cells, CC<sub>50</sub> = 0.39mmol/L; HGF, CC<sub>50</sub> > 0.51mmol/L). **Source:** GOU JI *Cudrania cochinchinensis* (root: yield = 0.00017%dw). **Ref:** 3025.

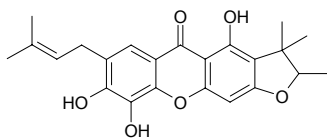
**8356 Gerontoxanthone E**

C<sub>24</sub>H<sub>26</sub>O<sub>6</sub> (410.47). [α]<sub>D</sub><sup>20</sup> = +2.2° (*c* = 0.5, MeOH). **Source:** ZHE TENG *Cudrania fruticosa* (root). **Ref:** 5074.

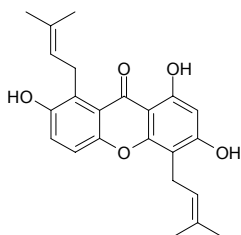


**8357 Gerontoxanthone G**

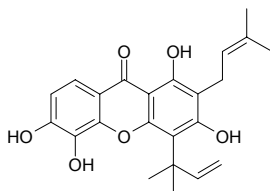
$C_{23}H_{24}O_6$  (396.44). **Pharm:** Cytotoxic (HSC-2 cells,  $CC_{50} > 0.51$ mmol/L; HGF,  $CC_{50} > 0.51$ mmol/L). **Source:** GOU JI *Cudrania cochinchinensis* (root: yield = 0.0024%dw). **Ref:** 3025.

**8358 Gerontoxanthone H**

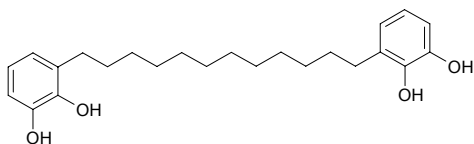
$C_{23}H_{24}O_5$  (380.44). **Pharm:** Cytotoxic (HSC-2 cells,  $CC_{50} = 0.12$ mmol/L; HGF,  $CC_{50} = 0.20$ mmol/L). **Source:** GOU JI *Cudrania cochinchinensis* (root: yield = 0.00062%dw). **Ref:** 3025.

**8359 Gerontoxanthone I**

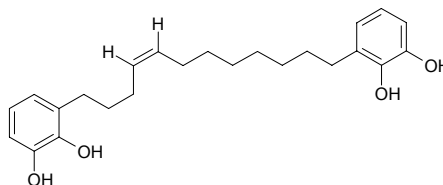
$C_{23}H_{24}O_6$  (396.44). **Pharm:** Cytotoxic (HSC-2 cells,  $CC_{50} = 0.43$ mmol/L; HGF,  $CC_{50} > 0.51$ mmol/L). **Source:** GOU JI *Cudrania cochinchinensis* (root: yield = 0.00115%dw). **Ref:** 3025.

**8360 Gerronemin A**

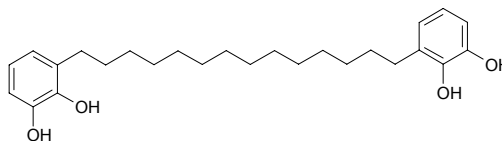
1,2-Dihydroxy-3-[12-(2,3-dihydroxyphenyl)dodecyl]benzene  $C_{24}H_{34}O_4$  (386.54). Colorless oil. **Pharm:** Cytotoxic (HL-60  $IC_{50} = 2.5$ μg/mL, U937  $IC_{50} = 1\sim 2$ μg/mL, L<sub>1210</sub>  $IC_{50} = 2.5$ μg/mL, COS-7  $IC_{50} = 15$ μg/mL, HeLa-S3  $IC_{50} > 40$ μg/mL; inhibits cellular macromolecular biosyntheses); anti-inflammatory (blocks inducible expression of proinflammatory enzymes hCOX-2 and iNOS promoter driven reporter gene,  $IC_{50} = 1\sim 5$ mg/mL). **Source:** *Gerronema* spp. **Ref:** 2022.

**8361 Gerronemin B**

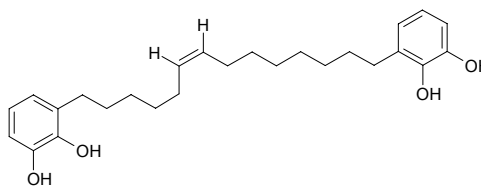
1,2-Dihydroxy-3-[12-(2,3-dihydroxyphenyl)-(Z)-dodec-4-enyl]benzene  $C_{24}H_{32}O_4$  (384.52). Colorless oil. **Pharm:** Cytotoxic (HL-60  $IC_{50} = 2.5$ μg/mL, U937  $IC_{50} = 3\sim 4$ μg/mL, L<sub>1210</sub>  $IC_{50} = 2.5$ μg/mL, COS-7  $IC_{50} = 15$ μg/mL, HeLa-S3  $IC_{50} > 40$ μg/mL; inhibits cellular macromolecular biosyntheses); anti-inflammatory (blocks inducible expression of proinflammatory enzymes hCOX-2 and iNOS promoter driven reporter gene,  $IC_{50} = 1\sim 5$ mg/mL). **Source:** *Gerronema* spp. **Ref:** 2022.

**8362 Gerronemin C**

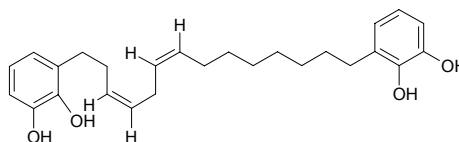
1,2-Dihydroxy-3-[14-(2,3-dihydroxyphenyl)tetradecyl]benzene  $C_{26}H_{38}O_4$  (414.59). Colorless oil. **Source:** *Gerronema* spp. **Ref:** 2022.

**8363 Gerronemin D**

1,2-Dihydroxy-3-[14-(2,3-dihydroxyphenyl)-(Z)-tetradec-6-enyl]benzene  $C_{26}H_{36}O_4$  (412.57). Colorless oil. **Pharm:** Cytotoxic (HL-60  $IC_{50} = 4$ μg/mL, U937  $IC_{50} = 1\sim 2$ μg/mL, L<sub>1210</sub>  $IC_{50} = 2.5$ μg/mL, COS-7  $IC_{50} = 15$ μg/mL, HeLa-S3  $IC_{50} > 40$ μg/mL; inhibits cellular macromolecular biosyntheses); anti-inflammatory (blocks inducible expression of proinflammatory enzymes hCOX-2 and iNOS promoter driven reporter gene,  $IC_{50} = 1\sim 5$ mg/mL). **Source:** *Gerronema* spp. **Ref:** 2022.

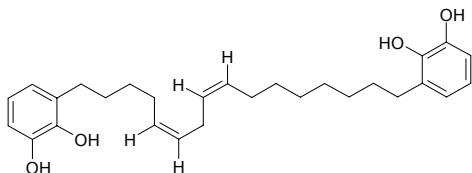
**8364 Gerronemin E**

1,2-Dihydroxy-3-[14-(2,3-dihydroxyphenyl)-(Z,Z)-tetradeca-3,6-dienyl]benzene  $C_{26}H_{34}O_4$  (410.56). Colorless oil. **Pharm:** Cytotoxic (HL-60  $IC_{50} = 2.5$ μg/mL, U937  $IC_{50} = 2$ μg/mL, L<sub>1210</sub>  $IC_{50} = 2.5$ μg/mL, COS-7  $IC_{50} = 15$ μg/mL, HeLa-S3  $IC_{50} > 40$ μg/mL; inhibits cellular macromolecular biosyntheses). **Source:** *Gerronema* spp. **Ref:** 2022.

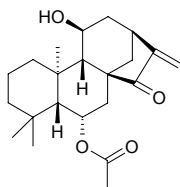


**8365 Gerronemin F**

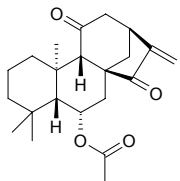
1,2-Dihydroxy-3-[16-(2,3-dihydroxyphenyl)-(Z,Z)-hexadeca-5,8-dienyl]benzene  $C_{28}H_{38}O_4$  (438.61). Colorless oil. **Pharm:** Cytotoxic (HL-60  $IC_{50}$  = 4~5  $\mu$ g/mL, U937  $IC_{50}$  = 1.5  $\mu$ g/mL, L<sub>1210</sub>  $IC_{50}$  = 2.5  $\mu$ g/mL, COS-7  $IC_{50}$  = 15  $\mu$ g/mL, HeLa-S3  $IC_{50}$  > 40  $\mu$ g/mL; inhibits cellular macromolecular biosyntheses); anti-inflammatory (blocks inducible expression of proinflammatory enzymes hCOX-2 and iNOS promoter driven reporter gene,  $IC_{50}$  = 1~5 mg/mL). **Source:** *Gerronema* spp. **Ref:** 2022.

**8366 Gesneroidin A**

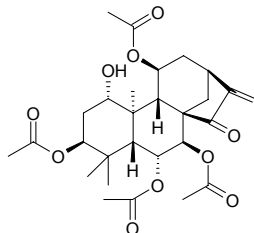
$C_{22}H_{32}O_4$  (360.50). mp 167°C,  $[\alpha]_D^{25}$  = -130.9° ( $c$  = 0.84,  $CHCl_3$ ). **Source:** JU TAI XIANG CHA CAI *Isodon gesneroides*. **Ref:** 4067.

**8367 Gesneroidin B**

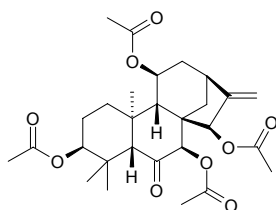
$C_{22}H_{30}O_4$  (358.48). mp 186°C,  $[\alpha]_D^{25}$  = +17.9° ( $c$  = 1.12,  $CHCl_3$ ). **Source:** JU TAI XIANG CHA CAI *Isodon gesneroides*. **Ref:** 4067.

**8368 Gesneroidin C**

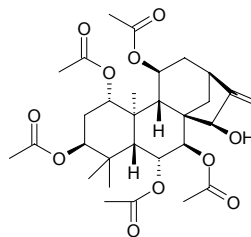
$C_{28}H_{38}O_{10}$  (534.61). mp 202°C,  $[\alpha]_D^{22}$  = -69.5° ( $c$  = 0.92,  $CHCl_3$ ). **Source:** JU TAI XIANG CHA CAI *Isodon gesneroides*. **Ref:** 4067.

**8369 Gesneroidin D**

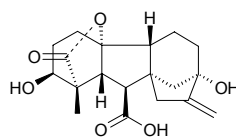
$C_{28}H_{38}O_9$  (518.61). mp 129.5~130.5°C,  $[\alpha]_D^{25}$  = +8.67° ( $c$  = 0.75,  $CHCl_3$ ). **Source:** JU TAI XIANG CHA CAI *Isodon gesneroides*. **Ref:** 4067.

**8370 Gesneroidin E**

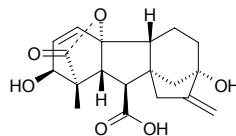
$C_{30}H_{42}O_{11}$  (578.66). mp 149~151.5°C,  $[\alpha]_D^{25}$  = -4.5° ( $c$  = 0.50,  $CHCl_3$ ). **Source:** JU TAI XIANG CHA CAI *Isodon gesneroides*. **Ref:** 4067.

**8371 Gibberellin A<sub>1</sub>**

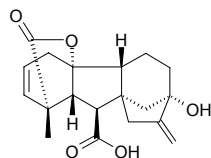
[545-97-1]  $C_{19}H_{24}O_6$  (348.40). mp 255~258°C (dec). **Source:** YU JIN XIANG *Tulipa gesneriana*, YU JIN XIANG GEN *Tulipa gesneriana*. **Ref:** 6.

**8372 Gibberellin A<sub>3</sub>**

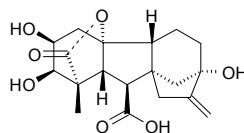
Gibberellic acid [7700605]  $C_{19}H_{22}O_6$  (346.38). Crystals (ethyl acetate), mp 233~235°C (blister),  $[\alpha]_D^{19}$  = +86° ( $c$  = 2.12). **Pharm:** Estrogenic activity (female rat, ovariectomy model, 35mg/kg-d for 7 days, effectively treats uterine atrophy); phytohormone. **Source:** QIAN NIU ZI *Pharbitis nil*, YUAN YE QIAN NIU ZI *Pharbitis purpurea*. **Ref:** 6, 658, 660.

**8373 Gibberellin A<sub>5</sub>**

[561-56-8]  $C_{19}H_{22}O_5$  (330.38). mp 260~261 (dec). **Source:** QIAN NIU ZI *Pharbitis nil*, YUAN YE QIAN NIU ZI *Pharbitis purpurea*, YU JIN XIANG GEN *Tulipa gesneriana*. **Ref:** 6, 660.

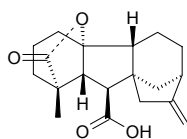
**8374 Gibberellin A<sub>8</sub>**

[7044-72-6]  $C_{19}H_{24}O_7$  (364.40). mp 210~215°C (dec). **Source:** YU JIN XIANG GEN *Tulipa gesneriana*, YUAN YE QIAN NIU ZI *Pharbitis purpurea*. **Ref:** 6, 660.

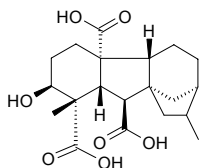


**8375 Gibberellin A<sub>9</sub>**

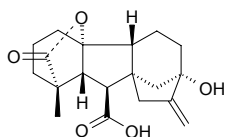
[427-77-0] C<sub>19</sub>H<sub>24</sub>O<sub>4</sub> (316.40). mp 208~211°C. Source: YU JIN XIANG GEN *Tulipa gesneriana*. Ref: 6.

**8376 Gibberellin A<sub>13</sub>**

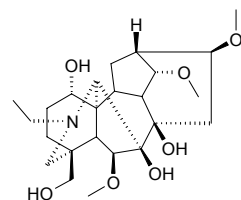
Fujic acid [2922-24-9] C<sub>20</sub>H<sub>28</sub>O<sub>7</sub> (380.44). mp 194~196°C (dec). Source: YU JIN XIANG GEN *Tulipa gesneriana*. Ref: 6.

**8377 Gibberellin A<sub>20</sub>**

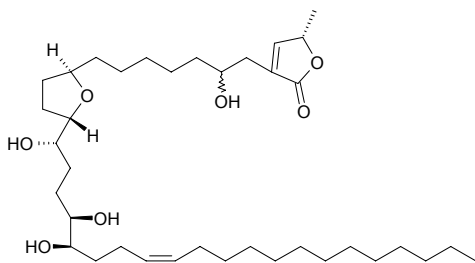
[19143-87-4] C<sub>19</sub>H<sub>24</sub>O<sub>5</sub> (332.40). Source: QIAN NIU ZI *Pharbitis nil*, WAN DOU *Pisum sativum*, YUAN YE QIAN NIU ZI *Pharbitis purpurea*. Ref: 6, 660.

**8378 Gigaconitine**

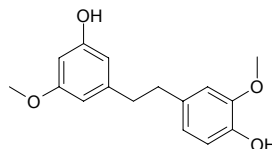
C<sub>24</sub>H<sub>39</sub>NO<sub>7</sub> (453.58). Colorless needles, mp 164~166°C (acetone). Source: JI LIN WU TOU *Aconitum kirinense*. Ref: 2515.

**8379 Gigantetronenin**

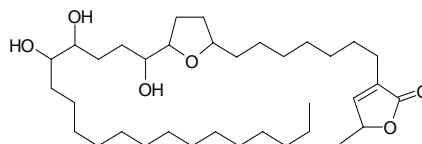
C<sub>37</sub>H<sub>66</sub>O<sub>7</sub> (622.93). Pharm: Cytotoxic (*in vitro* HepG2, EC<sub>50</sub> = 0.086 µg/mL, Hep3B, EC<sub>50</sub> = 3.85 µg/mL; control Doxorubicin, HepG2, EC<sub>50</sub> = 0.38 µg/mL, Hep3B, EC<sub>50</sub> = 0.36 µg/mL). Source: SHAN FAN LI ZHI *Annona montana* (seed). Ref: 5035.

**8380 Gigantol**

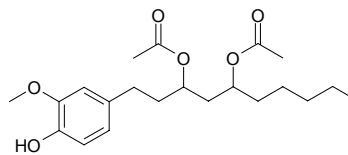
C<sub>16</sub>H<sub>18</sub>O<sub>4</sub> (274.32). Pharm: Platelet aggregation inhibitor (50 µmol/L, InRt = -10%; 100 µmol/L, InRt = 31%). Source: MI HUA SHI HU *Dendrobium densiflorum* (stem). Ref: 5171.

**8381 Gigantriocin**

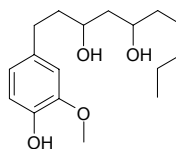
[134955-490] C<sub>35</sub>H<sub>64</sub>O<sub>6</sub> (580.90). mp 69~71°C, [α]<sub>D</sub><sup>25</sup> = +18° (CHCl<sub>3</sub>) Source: JIN PING GE NA XIANG *Goniothalamus leiocarpus*, DA GE NA XIANG *Goniothalamus giganteus*. Ref: 420, 1521.

**8382 [6]-Gingediacetate**

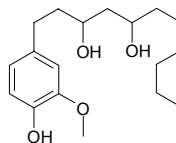
C<sub>21</sub>H<sub>32</sub>O<sub>6</sub> (380.49). Source: SHENG JIANG *Zingiber officinale*. Ref: 2.

**8383 [6]-Gingediol**

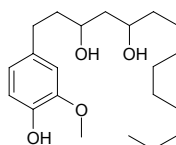
[53318-09-5] C<sub>17</sub>H<sub>28</sub>O<sub>4</sub> (296.41). Source: SHENG JIANG *Zingiber officinale*. Ref: 2.

**8384 [8]-Gingediol**

[53254-76-5] C<sub>19</sub>H<sub>32</sub>O<sub>4</sub> (324.46). Source: SHENG JIANG *Zingiber officinale*. Ref: 2.

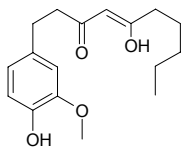
**8385 [10]-Gingediol**

[53254-77-6] C<sub>21</sub>H<sub>36</sub>O<sub>4</sub> (352.52). Source: SHENG JIANG *Zingiber officinale*. Ref: 2.

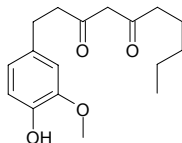


**8386 [6]-Gingerdione (enol form)**

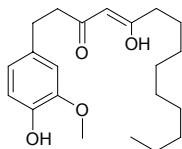
[61871-71-4] C<sub>17</sub>H<sub>24</sub>O<sub>4</sub> (292.38). **Pharm:** Prostaglandin biosynthesis inhibitor (*in vitro*). **Source:** SHENG JIANG *Zingiber officinale*, GAN JIANG *Zingiber officinale*. **Ref:** 2, 658.

**8387 [6]-Gingerdione (keto form)**

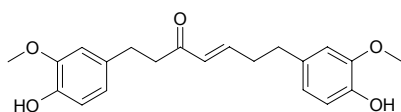
C<sub>17</sub>H<sub>24</sub>O<sub>4</sub> (292.38). **Source:** GAN JIANG *Zingiber officinale*. **Ref:** 2.

**8388 [10]-Gingerdione**

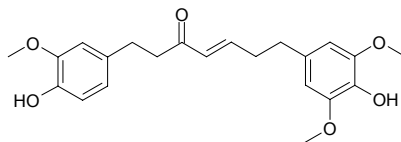
C<sub>21</sub>H<sub>32</sub>O<sub>4</sub> (348.49). **Pharm:** Anti-inflammatory (prostaglandin biosynthesis inhibitor, IC<sub>50</sub> = 4.9 μmol/L); antihepatotoxin (rat liver cells, *in vitro*, 1.0 mg/mL, liver toxicosis induced by CCl<sub>4</sub> GPT = (72±2)%, P<0.01); inhibits onset of senility (inhibits formation of active oxygen); prostaglandin synthetase inhibitor (IC<sub>50</sub> = 2.0 μmol/L). **Source:** GAN JIANG *Zingiber officinale*. **Ref:** 2, 1815, 1816, 1817, 1818.

**8389 Gingerenone A**

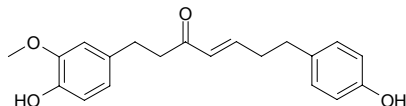
Dehydroxytetrahydrocurcumin [128700-97-0] C<sub>21</sub>H<sub>24</sub>O<sub>5</sub> (356.42). **Pharm:** Antifungal (*in vitro*). **Source:** GAN JIANG *Zingiber officinale*, SHENG JIANG *Zingiber officinale*. **Ref:** 2, 658.

**8390 Gingerenone B**

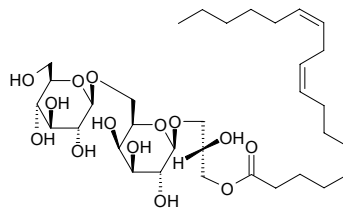
[128700-98-1] C<sub>22</sub>H<sub>26</sub>O<sub>6</sub> (386.45). **Source:** GAN JIANG *Zingiber officinale*, SHENG JIANG *Zingiber officinale*. **Ref:** 2.

**8391 Gingerenone C**

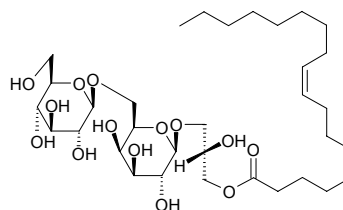
[128701-01-9] C<sub>20</sub>H<sub>22</sub>O<sub>4</sub> (326.40). **Source:** GAN JIANG *Zingiber officinale*, SHENG JIANG *Zingiber officinale*. **Ref:** 2.

**8392 Gingerglycolipid B**

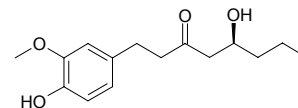
C<sub>33</sub>H<sub>58</sub>O<sub>14</sub> (678.82). White amorphous powder, [α]<sub>D</sub> = +50.9° (c = 7.5, MeOH). **Pharm:** PAF antagonist. **Source:** XI LAN ROU GUI *Cinnamomum zeylanicum*. **Ref:** 2199.

**8393 Gingerglycolipid C**

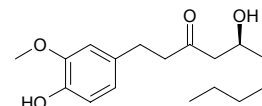
C<sub>33</sub>H<sub>60</sub>O<sub>14</sub> (680.84). White amorphous powder, [α]<sub>D</sub> = +26.9° (c = 10.0, MeOH). **Pharm:** PAF antagonist. **Source:** XI LAN ROU GUI *Cinnamomum zeylanicum*. **Ref:** 2199.

**8394 [4]-Gingerol**

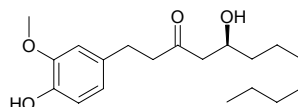
C<sub>15</sub>H<sub>22</sub>O<sub>4</sub> (266.34). **Source:** GAN JIANG *Zingiber officinale*, SHENG JIANG *Zingiber officinale*. **Ref:** 2.

**8395 [6]-Gingerol**

C<sub>17</sub>H<sub>26</sub>O<sub>4</sub> (294.39). bp 277~279°C/6mmHg. **Pharm:** CYP3A4 inhibitor (IC<sub>50</sub> = 36.4 μmol/L, control Ketoconazole, IC<sub>50</sub> = 0.245 μmol/L)<sup>[4669]</sup>, CYP2D6 inhibitor inactive (IC<sub>50</sub> > 100 μmol/L, control Quinidine, IC<sub>50</sub> = 0.078 μmol/L)<sup>[4669]</sup>; antiemetic; anti-seronine; cyclo-oxygenase inhibitor. **Source:** FANG XIANG JIANG *Zingiber aromaticum* (rhizome: yield = 0.0023% dw)<sup>[4669]</sup>, GAN JIANG *Zingiber officinale*, SHENG JIANG *Zingiber officinale* (rhizome: mean content of 4 origins = 0.700%<sup>[5508]</sup>). **Ref:** 2, 6, 658, 4669, 5508.

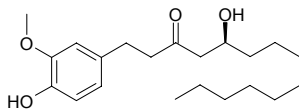
**8396 [8]-Gingerol**

C<sub>19</sub>H<sub>30</sub>O<sub>4</sub> (322.45). **Pharm:** CYP3A4 inhibitor (IC<sub>50</sub> = 81.6 μmol/L, control Ketoconazole IC<sub>50</sub> = 0.24 μmol/L)<sup>[4449]</sup>, CYP2D6 inhibitor (IC<sub>50</sub> = 68.7 μmol/L, control Quinidine IC<sub>50</sub> = 0.068 μmol/L)<sup>[4449]</sup>. **Source:** FANG XIANG JIANG *Zingiber aromaticum* (rhizome), GAN JIANG *Zingiber officinale*. **Ref:** 2, 4449.

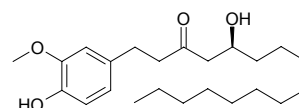


**8397 [10]-Gingerol**

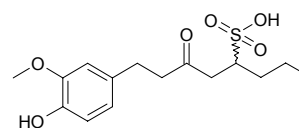
$C_{21}H_{34}O_4$  (350.50). **Pharm:** CYP3A4 inhibitor ( $IC_{50} = 41.3\mu\text{mol/L}$ , control Ketoconazole  $IC_{50} = 0.24\mu\text{mol/L}$ )<sup>[4449]</sup>; CYP2D6 inhibitor inactive ( $IC_{50} > 100\mu\text{mol/L}$ , control Quinidine  $IC_{50} = 0.068\mu\text{mol/L}$ )<sup>[4449]</sup>. **Source:** FANG XIANG JIANG *Zingiber aromaticum* (rhizome), GAN JIANG *Zingiber officinale*. **Ref:** 2, 4449.

**8398 [12]-Gingerol**

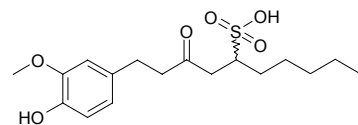
$C_{23}H_{38}O_4$  (378.56). **Source:** GAN JIANG *Zingiber officinale*. **Ref:** 2.

**8399 4-Gingesulfonic acid**

$C_{15}H_{22}O_6S$  (330.40). Pale brownish amorphous powder, mp 180–190°C (dec),  $[\alpha]_D^{21} = +1.0^\circ$  ( $c = 2.00$ , MeOH). **Source:** SHENG JIANG *Zingiber officinale*. **Ref:** 3361.

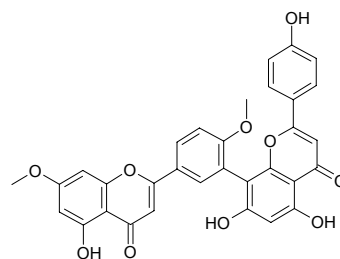
**8400 6-Gingesulfonic acid**

$C_{17}H_{26}O_6S$  (358.46). White amorphous powder, mp 177–181°C (dec),  $[\alpha]_D^{21} = +0.7^\circ$  ( $c = 1.00$ , MeOH). **Source:** SHENG JIANG *Zingiber officinale*. **Ref:** 3361.

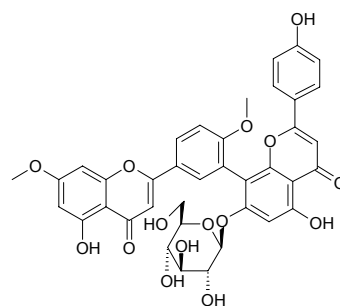
**8401 Ginkgetin**

[481-46-9]  $C_{32}H_{22}O_{10}$  (566.53). Yellow powder, mp 330°C (dec). **Pharm:** Antihypercholesterolemic (reduces the level of cholesterol in serum and normalizes the ratio between phospholipid to cholesterol); treatment of angina pectoris; phospholipase A<sub>2</sub> inhibitor<sup>[4415]</sup>; anti-inflammatory (reduces arthritic inflammation in rat adjuvant-induced arthritis as well as abdominal constriction caused by acetic acid,  $ID_{50} = 8.9\text{mg/kg}$ )<sup>[4415]</sup>; anti-inflammatory (inhibits croton oil-induced ear skin oedema by down-regulation of COX-2)<sup>[4415]</sup>; anti-inflammatory (NO production inhibitor)<sup>[4415]</sup>. **Source:** BAI GUO *Ginkgo biloba*, BAI GUO YE *Ginkgo biloba* (leaf: mean content = 0.653%<sup>[5508]</sup>); the compound was first isolated from the plant by Kōichi Nakazawa in 1941<sup>[5505]</sup>, CHAO XIAN YIN YANG HUO *Epimedium koreanum*, HAN SHENG JUAN BAI *Selaginella stauntoniana* (dried whole herb: content = 0.164%<sup>[5508]</sup>), MAO ZHI JUAN BAI *Selaginella braunii* (dried whole herb: content = 0.121%<sup>[5508]</sup>), RI BEN CU FEI *Cephalotaxus*

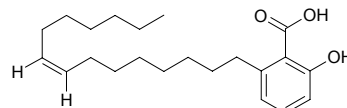
*harringtonia*, SAN JIAN SHAN *Cephalotaxus fortunei*, YUAN ZHI JUAN BAI *Selaginella sanguinolenta* (dried whole herb: content = 0.363%<sup>[5508]</sup>), ZHI MU *Anemarrhena asphodeloides*, *Dacrydium* sp. **Ref:** 2, 442, 658, 4415, 5501, 5505, 5508.

**8402 Ginkgetin 7''-O-β-D-glycopyranoside**

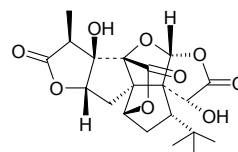
$C_{38}H_{32}O_{15}$  (728.67). Yellow amorphous powder,  $[\alpha]_D^{20} = +5.5^\circ$  ( $c = 0.004$ , MeOH). **Source:** BAI GUO YE *Ginkgo biloba*. **Ref:** 4512.

**8403 Ginkgolic acid**

Ginkgolic acid [22910-60-7]  $C_{22}H_{34}O_3$  (346.51). Yellowish oil, mp 41–43°C. **Pharm:** Antibacterial (*in vitro*, *Mycobacterium tuberculosis*); antineoplastic; antimicrobial; prostaglandin biosynthetase inhibitor; molluscicide; prolyl endopeptidase inhibitor ( $K_i = 0.87\mu\text{mol/L}$ ,  $IC_{50} = (0.86\pm 0.04)\mu\text{mol/L}$ , control Oleic acid  $IC_{50} = (31.3\pm 2.4)\mu\text{mol/L}$ , Salicylic acid  $IC_{50} = (1650\pm 70)\mu\text{mol/L}$ , Z-Pro-prolinol  $IC_{50} = (0.00219\pm 0.00022)\mu\text{mol/L}$ )<sup>[4098]</sup>. **Source:** BAI GUO *Ginkgo biloba* (dried ripe seed: content = 0.0222%<sup>[5508]</sup>), BAI GUO YE *Ginkgo biloba*, DU XIAN ZI *Anacardium occidentale*. **Ref:** 4, 658, 4098, 5501, 5508.

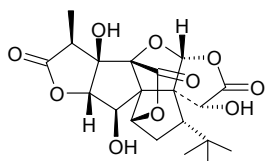
**8404 Ginkgolide A**

[15291-75-5]  $C_{20}H_{24}O_9$  (408.41). Crystals (ethanol), mp 300°C,  $[\alpha]_D^{24} = -53.4^\circ$  ( $c = 1$ , ethanol).<sup>[5507]</sup> **Pharm:** Enhances effects of cytotoxic drugs against cancer metastasis; platelet aggregation inhibitor (rbt, due to PAF, *in vitro*,  $IC_{50} = 94\mu\text{mol/L}$ ); insect antifeedant; PAF receptor antagonist; nerve protectant (mus, 50mg/kg), Antiasthmatic; insect antifeedant. **Source:** BAI GUO *Ginkgo biloba*, BAI GUO GEN *Ginkgo biloba*, BAI GUO YE *Ginkgo biloba* (leaf: mean content of 12 samples = 2.56%<sup>[5508]</sup>). **Ref:** 6, 658, 900, 5507, 5508

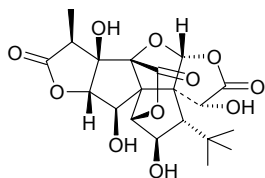


**8405 Ginkgolide B**

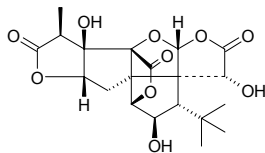
[15291-77-7] C<sub>20</sub>H<sub>24</sub>O<sub>10</sub> (424.41). Crystals (ethanol), mp 300°C, [ $\alpha$ ]<sub>D</sub><sup>24</sup> = -52.6° (c = 1, ethanol).<sup>[5507]</sup> **Pharm:** Antibacterial (*Bacillus fusiformis*); enhances effects of cytotoxic drugs against cancer metastasis; increases fertility; platelet aggregation inhibitor (rbt, mus and pig, due to PAF, *in vitro*); insect antifeedant; PAF receptor antagonist; nerve protectant; reduces nephrotoxicity of cyclosporine; anti-hypotension (PAF-induced, ID<sub>50</sub> = (38.5±2.7)μmol/kg, control CV-3988, ID<sub>50</sub> = (2.4±1.2)μmol/kg)<sup>[5050]</sup>; anti-inflammatory (to determine release of lysosome enzyme from polymorphonuclear (PMN) leukocytes induced by PAF of rats, 10μmol/L, InRt = 58.9%)<sup>[3891, 5013]</sup>. **Source:** BAI GUO *Ginkgo biloba*, BAI GUO GEN *Ginkgo biloba*, BAI GUO YE *Ginkgo biloba* (leaf: mean content of 12 samples = 1.40%<sup>[5508]</sup>). **Ref:** 6, 900, 3891, 5013, 5050, 5507, 5508.

**8406 Ginkgolide C**

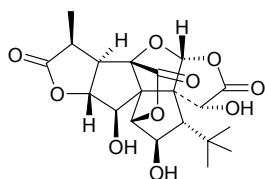
[15291-76-6] C<sub>20</sub>H<sub>24</sub>O<sub>11</sub> (440.41). Crystals (ethanol), mp 300°C, [ $\alpha$ ]<sub>D</sub><sup>24</sup> = -14.7° (c = 1, ethanol). **Pharm:** Platelet aggregation inhibitor (rbt, *in vitro*, due to PAF, IC<sub>50</sub> = 17μmol/L); PAF receptor antagonist. **Source:** BAI GUO GEN *Ginkgo biloba*, BAI GUO YE *Ginkgo biloba* (leaf: mean content of 12 samples = 1.48%<sup>[5508]</sup>). **Ref:** 6, 900, 5508.

**8407 Ginkgolide J**

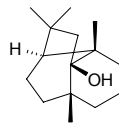
[107438-79-9] C<sub>20</sub>H<sub>24</sub>O<sub>10</sub> (424.41). Crystals, mp 322°C, [ $\alpha$ ]<sub>589nm</sub><sup>20</sup> = -2.5° (c = 1, dioxocyclohexane). **Pharm:** Platelet aggregation inhibitor (due to PAF); PAF receptor antagonist. **Source:** BAI GUO *Ginkgo biloba*. **Ref:** 943, 1036, 1078.

**8408 Ginkgolide M**

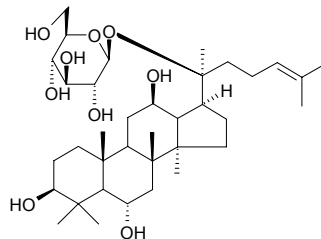
[15291-78-8] C<sub>20</sub>H<sub>24</sub>O<sub>10</sub> (424.41). Crystals (ethanol), mp > 280°C (dec), [ $\alpha$ ]<sub>D</sub> = -39° (c = 1, dioxocyclohexane). **Pharm:** PAF receptor antagonist. **Source:** BAI GUO GEN *Ginkgo biloba*. **Ref:** 6, 1035, 1036, 1164.

**8409 Ginsenosol**

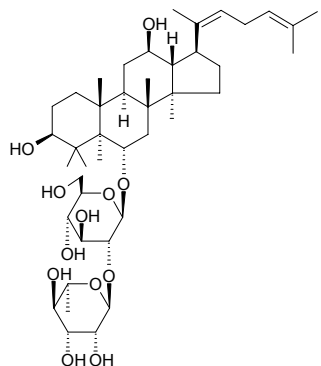
C<sub>15</sub>H<sub>26</sub>O (204.36). **Source:** REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. **Ref:** 5330.

**8410 Ginsenoside F<sub>1</sub>**

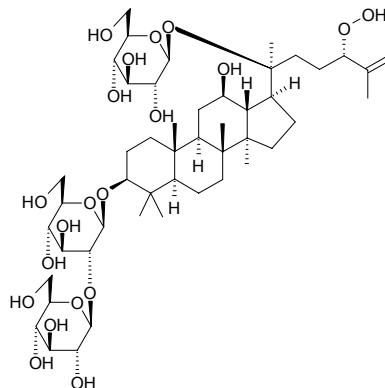
C<sub>36</sub>H<sub>62</sub>O<sub>9</sub> (638.89). **Source:** REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. **Ref:** 5064.

**8411 Ginsenoside F<sub>4</sub>**

3β,6α,12β-Trihydroxy-20(22),24-dammardiene-6-O-α-L-rhamnopyranosyl(1→2)-O-β-D-glucopyranoside C<sub>42</sub>H<sub>70</sub>O<sub>12</sub> (767.02). mp 177~180°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +10.8° (c = 0.5, MeOH). **Source:** REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. **Ref:** 8.

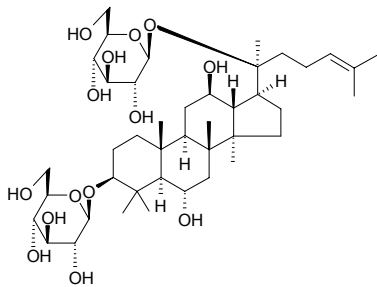
**8412 Ginsenoside I**

C<sub>48</sub>H<sub>82</sub>O<sub>20</sub> (979.18). **Source:** REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. **Ref:** 8.

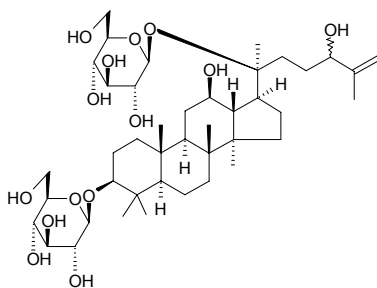


**8413 Ginsenoside Ia**

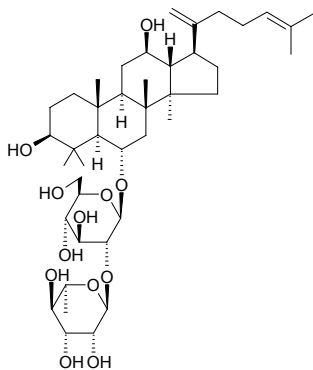
20(*S*)-Protopanaxatriol-3,20-di-*O*- $\beta$ -*D*-glucopyranoside C<sub>42</sub>H<sub>72</sub>O<sub>14</sub> (801.03). White powder, mp 190~191°C. Source: REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. Ref: 8.

**8414 Ginsenoside Ib**

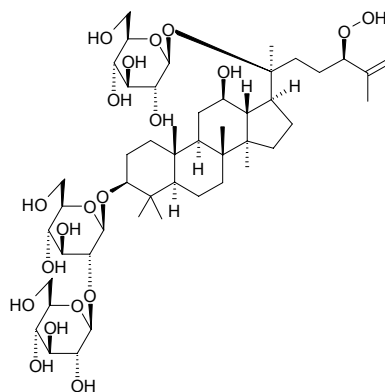
3 $\beta$ ,12 $\beta$ ,20(*S*),24 $\zeta$ -Tetrahydroxy-20-*O*- $\beta$ -*D*-glucopyranosyl-3-*O*- $\beta$ -*D*-glucopyranoside C<sub>42</sub>H<sub>72</sub>O<sub>14</sub> (801.23). White powder, mp 187~188°C. Source: REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. Ref: 8.

**8415 Ginsenoside Ic**

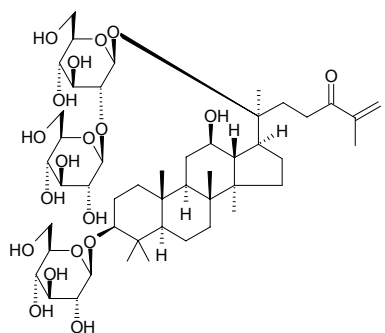
3 $\beta$ ,6 $\alpha$ ,12 $\beta$ -Trihydroxy-20(22),24-dammar-20(*H*),24-diene-6-*O*- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)-*O*- $\beta$ -*D*-glucopyranoside C<sub>42</sub>H<sub>70</sub>O<sub>12</sub> (767.02). White powder. Source: REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. Ref: 8.

**8416 Ginsenoside II**

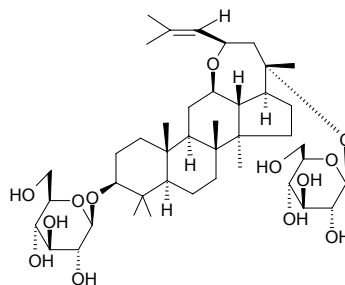
3 $\beta$ -*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 2)-*O*- $\beta$ -*D*-glucopyranosyl-20-*O*- $\beta$ -*D*-glucopyranosyl-3 $\beta$ ,12 $\beta$ ,20(*S*)-trihydroxy-24-hydrogenperoxide-dammar-25-ene C<sub>48</sub>H<sub>82</sub>O<sub>20</sub> (979.18). Source: REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. Ref: 8.

**8417 Ginsenoside III**

C<sub>48</sub>H<sub>80</sub>O<sub>19</sub> (961.16). Source: REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. Ref: 8.

**8418 Ginsenoside La**

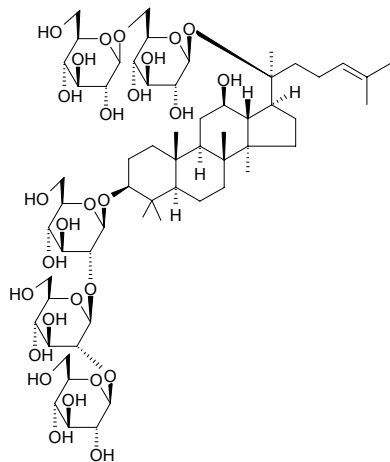
[123617-34-5] C<sub>42</sub>H<sub>70</sub>O<sub>13</sub> (783.02). White powder (methanol), mp 179~180°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -18.4° (pyridine). Source: REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. Ref: 155, 1521.



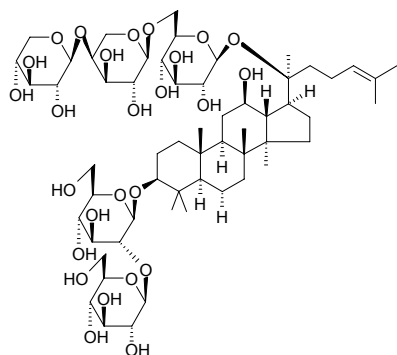


**8419 Ginsenoside Ra<sub>0</sub>**

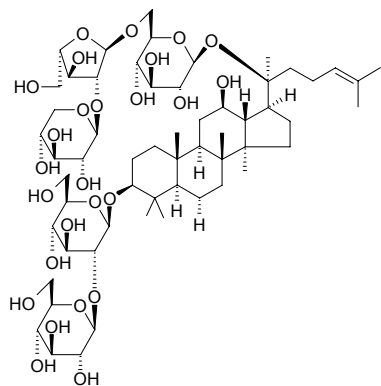
20(S)-Protopanaxadiol 3-*O*-β-*D*-glucopyranosyl-(1→2)-β-*D*-glucopyranosyl-(1→2)-β-*D*-glucopyranoside, 20-*O*-β-*D*-glucopyranosyl-(1→2)-β-*D*-glucopyranoside [112722-00-6] C<sub>60</sub>H<sub>102</sub>O<sub>28</sub> (1271.47). White acicular crystals, mp 192~193°C. **Source:** REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], XI YANG SHEN *Panax quinquefolium*. **Ref:** 2, 87.

**8420 Ginsenoside Ra<sub>1</sub>**

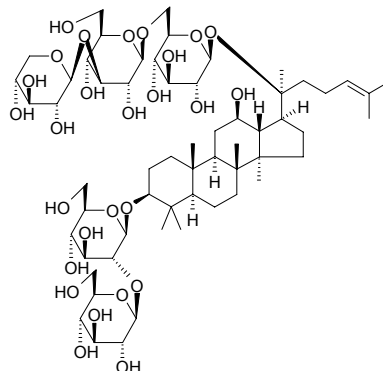
[83459-41-0] C<sub>58</sub>H<sub>98</sub>O<sub>26</sub> (1211.41). **Source:** REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. **Ref:** 1521.

**8421 Ginsenoside Ra<sub>2</sub>**

[83459-42-1] C<sub>58</sub>H<sub>98</sub>O<sub>26</sub> (1211.41). **Source:** REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. **Ref:** 2, 1521.

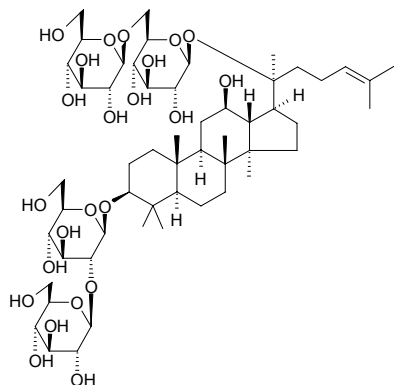
**8422 Ginsenoside Ra<sub>3</sub>**

[90985-77-6] C<sub>59</sub>H<sub>100</sub>O<sub>27</sub> (1241.44). **Source:** REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. **Ref:** 2, 1521.

**8423 Ginsenoside Rb<sub>1</sub>**

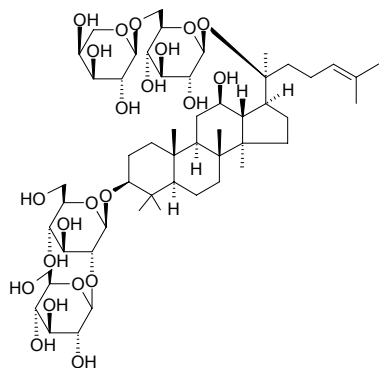
Sanchinoside E<sub>1</sub>; Gypenoside III [41753-43-9] C<sub>54</sub>H<sub>92</sub>O<sub>23</sub> (1109.32). White powder (ethanol:butyl alcohol = 1:1), mp 197~198°C, [α]<sub>D</sub><sup>22</sup> = +12.42° (*c* = 0.91, methanol). **Pharm:** Antiarrhythmic (rat arrhythmia caused by BaCl<sub>2</sub>); inhibits fatigue; antiviral; inhibits replication of HSV-1; bidirectional action to blood pressure (mus, first increases and then lowers blood pressure, while heart rate slows); calcium antagonist; increases blood pressure (injecting 0.3μL into lateral area of rat hypothalamus, average arteriotony noticeably rising); antioxidant (rat hepatic homogenate, caused by H<sub>2</sub>O<sub>2</sub>, IC<sub>50</sub> = 644.8μg/mL); cAMP phosphodiesterase inhibitor (*in vitro*, IC<sub>50</sub> = 137μmol/L); antihypercholesterolemic (reduces the level of cholesterol in serum); promotes biosynthesis of DNA, protein and lipid (murine marrow cells); enhances cytotoxic effects of daunomycin and vincalucoblastine; promotes plasma secretion of corticosterone (ED<sub>50</sub> = 112μmol/kg); liver and nerve protectant; reduces uterine contraction (gpg, *in vitro*, caused by acetylcholine); vasodilator (dog); anti-inflammatory (modulator of cytokine network: inhibits TNF-α production in RAW264.7 and U937 cells stimulated with LPS, mean IC<sub>50</sub> = 56.5μmol/L and 51.3μmol/L, respectively)<sup>[4416]</sup>; antinociception (i.t. injected 0.7μg substance P-induced pain model, EC = 50μg i.t.)<sup>[5474]</sup>; neurite outgrowth enhancer (hmn neuroblastoma SK-N-SH cells, 100μmol/L, total length of neurites = 149.3μm, number of varicosity per cell = 0.93, *p* < 0.05; control, total length of neurites = 45.3μm, number of varicosity per cell = 0.10)<sup>[4647]</sup>; hepatoprotective (inhibits activation of macrophages, inhibits increase in sALT and sAST levels, *in vivo*, D-GalN/LPS-induced liver injury in mouse, 100mg/kg ip for sALT, InRt = 33%; 100mg/kg ip for sAST, InRt = 40%; control Hydrocortisone, 20mg/kg ip for sALT, InRt = 99%; 20mg/kg ip for sAST, InRt = 97%)<sup>[4702]</sup>. **Source:** HUI GUO JIAO GU LAN *Gynostemma yixingense*, JIAO GU LAN *Gynostemma pentaphyllum*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*] (rhizome: content = 0.88%<sup>[5508]</sup>; content = 0.56%<sup>[5501]</sup>), SAN QI HUA LEI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*] (flower bud: yield = 0.24%dw)<sup>[4702]</sup>, SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*] (flower: mean content of 8 origins = 1.60%<sup>[5525]</sup>), SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*] (rhizome: content = 4.1%<sup>[5508]</sup>), XI YANG SHEN *Panax quinquefolium* (rhizome: content = 1.9%<sup>[5508]</sup>), YU YE SAN QI *Panax japonicus* var. *bipinnatifidus*, ZHU JIE SAN QI *Panax*

*pseudo-ginseng* var. *japonicus* (rhizome: content = 1.7%<sup>[5508]</sup>, yield = 0.025%<sup>[4647]</sup>). Ref: 2, 4, 87, 135, 329, 613, 900, 4139, 4416, 4647, 4702, 5474, 5501, 5508, 5525.



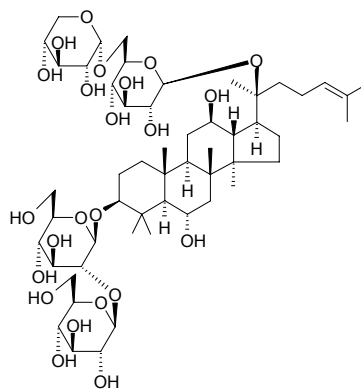
#### 8424 Ginsenoside Rb<sub>2</sub>

[11021-13-9] C<sub>53</sub>H<sub>90</sub>O<sub>22</sub> (1079.30). White powder (ethanol:butyl alcohol = 1:5), mp 200–203°C, [α]<sub>D</sub><sup>22</sup> = +3.05° (c = 0.98, methanol), [α]<sub>D</sub><sup>20</sup> = +12.3 (c = 0.92, MeOH). **Pharm:** Antiarrhythmic (rat arrhythmia caused by BaCl<sub>2</sub>); antineoplastic (inhibits murine melanoma lung metastasis and prevents new vessel formation); inhibits fatigue; antiviral; inhibits replication of HSV-1; bidirectional action to blood pressure (murine, first increases and then lowers blood pressure, while heart rate slows); calcium antagonist; hemolytic; inhibits kidney damage in diabetic rat; platelet aggregation inhibitor; inhibits content of free radicals in myocardial cells (induced by xanthinoxidase); cAMP phosphodiesterase inhibitor (*in vitro*, IC<sub>50</sub> = 199 μmol/L); antihypercholesterolemic (reduces the level of cholesterol in serum); promotes biosynthesis of DNA, protein and lipid (murine marrow cells); promotes RNA polymerase activity (promotes synthesis of rRNA and mRNA in diabetic rat); vasodilator (dog); anti-inflammatory (modulator of cytokine network: inhibits TNF-α production in RAW264.7 and U937 cells stimulated with LPS, mean IC<sub>50</sub> = 27.5 μmol/L and 26.8 μmol/L, respectively)<sup>[4416]</sup>; antinociception (i.t. injected 0.7 μg substance P-induced pain model, EC = 50 μg *i.t.*)<sup>[5474]</sup>. **Source:** REN SHEN *Panax ginseng* [Syn. *Panax schinseng*] (rhizome: content = 0.57%<sup>[5508]</sup>), SAN QI HUA LEI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*] (flower bud: yield = 0.29%<sup>[4702]</sup>), SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*] (rhizome: content = 0.17%<sup>[5508]</sup>), XI YANG SHEN *Panax quinquefolium* (rhizome: content = 0.10%<sup>[5508]</sup>). Ref: 4, 87, 451, 900, 4416, 4702, 5474, 5508.



#### 8425 Ginsenoside Rb<sub>3</sub>

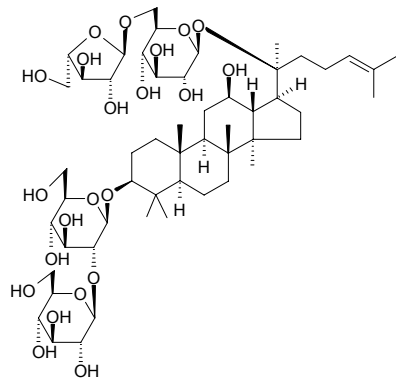
[68406-26-8] C<sub>53</sub>H<sub>90</sub>O<sub>23</sub> (1095.29). White powder, mp 193–195°C, [α]<sub>D</sub><sup>20</sup> = +19.4° (c = 1, MeOH). **Pharm:** Neurite outgrowth enhancer (hmn neuroblastoma SK-N-SH cells, 100 μmol/L, total length of neurites = 131.4 μm, number of varicosity per cell = 0.80, *p* < 0.05; control, total length of neurites = 45.3 μm, number of varicosity per cell = 0.10)<sup>[4647]</sup>; hepatoprotective (inhibits activation of macrophages, inhibits increase in sALT and sAST levels, *in vivo*, D-GalN/LPS-induced liver injury in mouse, 50 mg/kg ip for sALT, InRt = 77%, 100 mg/kg ip for sALT, InRt = 91%; 50 mg/kg ip for sAST, InRt = 72%; 100 mg/kg ip for sAST, InRt = 80%; control Hydrocortisone, 20 mg/kg ip for sALT, InRt = 99%; 20 mg/kg ip for sAST, InRt = 97%)<sup>[4702]</sup>. **Source:** JIAO GU LAN *Gynostemma pentaphyllum* (leaf: yield = 0.007%<sup>[4757]</sup>), REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], SAN QI HUA LEI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*] (flower bud: yield = 3.15%<sup>[4702]</sup>), XI YANG SHEN *Panax quinquefolium*, YU YE SAN QI *Panax japonicus* var. *bipinnatifidus*, ZHU JIE SAN QI *Panax pseudo-ginseng* var. *japonicus* (underground part: yield = 0.025%<sup>[4647]</sup>). Ref: 135, 451, 4647, 4702, 4757.



#### 8426 Ginsenoside Rc

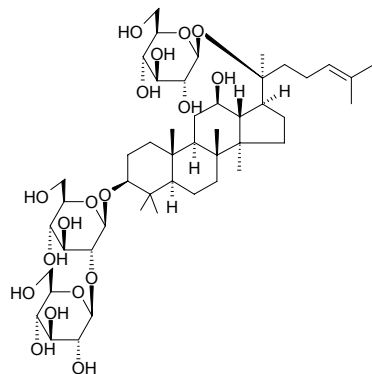
[11021-14-0] C<sub>53</sub>H<sub>90</sub>O<sub>22</sub> (1079.30). White powder (ethanol:butyl alcohol = 1:5), mp 199–201°C, [α]<sub>D</sub><sup>20</sup> = +1.83° (c = 0.65, methanol). **Pharm:** Antiarrhythmic (rat arrhythmia caused by BaCl<sub>2</sub>); inhibits fatigue; bidirectional action to blood pressure (murine, first increases and then lowers blood pressure, while heart rate slows); calcium antagonist; antioxidant of rat hepatic homogenate (caused by H<sub>2</sub>O<sub>2</sub>, IC<sub>50</sub> = (265.5 ± 48.1) μg/mL, by FeSO<sub>4</sub>, IC<sub>50</sub> = (129.3 ± 5.6) μg/mL, by H<sub>2</sub>O<sub>2</sub> + FeSO<sub>4</sub>, IC<sub>50</sub> = (536.8 ± 142.3) μg/mL); cAMP phosphodiesterase inhibitor (*in vitro*, IC<sub>50</sub> = 264 μmol/L); promotes biosynthesis of DNA, protein and lipid (murine marrow cells); promotes plasma secretion of corticosterone (ED<sub>50</sub> = 44 μmol/kg); antihepatotoxin (GalN-caused liver damage); reduces uterine contraction (gpg, *in vitro*, caused by acetylcholine); vasodilator (dog); hepatoprotective (inhibits activation of macrophages, inhibits increase in sALT and sAST levels, *in vivo*, D-GalN/LPS-induced liver injury in mouse, 50 mg/kg ip for sALT, InRt = 77%, 100 mg/kg ip for sALT, InRt = 89%; 50 mg/kg ip for sAST, InRt = 80%; 100 mg/kg ip for sAST, InRt = 87%; control Hydrocortisone, 20 mg/kg ip for sALT, InRt = 99%; 20 mg/kg ip for sAST, InRt = 97%)<sup>[4702]</sup>. **Source:** REN SHEN *Panax ginseng* [Syn. *Panax schinseng*] (rhizome: content = 0.47%<sup>[5508]</sup>), SAN QI HUA LEI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*] (flower bud: yield = 1.79%<sup>[4702]</sup>), SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*], XI YANG SHEN *Panax quinquefolium* (rhizome: content = 0.13%<sup>[5508]</sup>), ZHU JIE SAN QI

*Panax pseudo-ginseng* var. *japonicus* (rhizome: content = 0.23%<sup>[5508]</sup>, yield = 0.0011%<sup>[4647]</sup>). Ref: 4, 900, 4647, 4702, 5508.



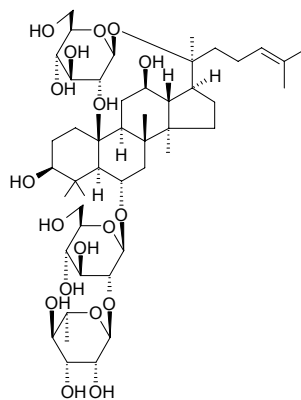
#### 8427 Ginsenoside Rd

Gypenoside VIII [52705-93-8] C<sub>48</sub>H<sub>82</sub>O<sub>18</sub> (947.18). White powder (ethanol:butyl alcohol = 1:1), mp 206–209°C, [α]<sub>D</sub><sup>22</sup> = +19.38° (c = 1.03, methanol). **Pharm:** Antiarrhythmic (rat arrhythmia caused by BaCl<sub>2</sub>); antiviral; inhibits replication of HSV-1; antioxidant (rat hepatic homogenate, caused by H<sub>2</sub>O<sub>2</sub>, IC<sub>50</sub> = (12.0±0.8)μg/mL, by FeSO<sub>4</sub>, IC<sub>50</sub> = (457.5±15.4)μg/mL); 11-β-Hydroxysteroid dehydrogenase inhibitor; cAMP phosphodiesterase inhibitor (*in vitro*, IC<sub>50</sub> = 84μmol/L); promotes cytotoxic effects of daunomycin and vincalurecoblantine; promotes plasma secretion of corticosterone (ED<sub>50</sub> = 112μmol/kg); regulates kidney function and inhibits reproduction of glomerulus cells; vasodilator; antinociception (i.t. injected 0.7μg substance P-induced pain model, EC = 50μg i.t.)<sup>[5474]</sup>; hepatoprotective (inhibits activation of macrophages, inhibits increase in sALT and sAST levels, *in vivo*, D-GalN/LPS-induced liver injury in mouse, 100mg/kg ip for sALT, InRt = 97%; 100mg/kg ip for sAST, InRt = 93%; control Hydrocortisone, 20mg/kg ip for sALT, InRt = 99%; 20mg/kg ip for sAST, InRt = 97%)<sup>[4702]</sup>. **Source:** JIAO GU LAN *Gynostemma pentaphyllum* (leaf: yield = 0.009%<sup>[4757]</sup>), QIN LING ZHU ZI SHEN *Panax japonicus* var. *major*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*] (rhizome: content = 0.16%<sup>[5508]</sup>), SAN QI HUA LEI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*] (flower bud: yield = 0.010%<sup>[4702]</sup>), SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*] (rhizome: content = 1.3%<sup>[5508]</sup>), XI YANG SHEN *Panax quinquefolium* (rhizome: content = 0.78%<sup>[5508]</sup>), ZHU JIE SAN QI *Panax pseudo-ginseng* var. *japonicus* (underground part: yield = 0.0018%<sup>[4647]</sup>). Ref: 4, 87, 451, 900, 4647, 4702, 4757, 5474, 5508.



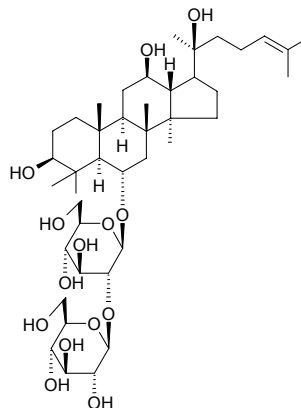
#### 8428 Ginsenoside Re

Chikusetsusaponin IVc; Ginsenoside B<sub>2</sub> [52286-59-6] C<sub>48</sub>H<sub>82</sub>O<sub>18</sub> (947.18). Colorless acicular Crystals, mp 201–203°C, [α]<sub>D</sub><sup>20</sup> = -1.5° (c = 0.52, MeOH). **Pharm:** Analgesic (mus, 10mg/kg); inhibits fatigue; bidirectional action to blood pressure (murine, first increases and then lowers blood pressure, while heart rate slows); reduces uterine contraction (gpg *in vitro*, caused by acetylcholine); hepatoprotective (inhibits activation of macrophages, inhibits increase in sALT and sAST levels, *in vivo*, D-GalN/LPS-induced liver injury in mouse, 100mg/kg ip for sALT, InRt = 92%; 100mg/kg ip for sAST, InRt = 90%; control Hydrocortisone, 20mg/kg ip for sALT, InRt = 99%; 20mg/kg ip for sAST, InRt = 97%)<sup>[4702]</sup>. **Source:** REN SHEN *Panax ginseng* [Syn. *Panax schinseng*] (rhizome: content = 0.30%<sup>[5501]</sup>, content = 0.57%<sup>[5508]</sup>), SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*] (rhizome: content = 0.50%<sup>[5508]</sup>), XI YANG SHEN *Panax quinquefolium* (rhizome: content = 2.0%<sup>[5508]</sup>), ZHU JIE SAN QI *Panax pseudo-ginseng* var. *japonicus* (rhizome: content = 0.04%<sup>[5508]</sup>, yield = 0.011%<sup>[4610]</sup>). Ref: 4, 87, 451, 613, 658, 1521, 4610, 4702, 5501, 5508.



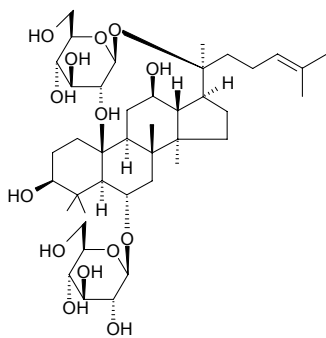
#### 8429 Ginsenoside Rf

[52286-58-5] C<sub>42</sub>H<sub>72</sub>O<sub>14</sub> (801.03). White powder, mp 197–198°C. **Pharm:** Antineoplastic; inhibits fatigue; bidirectional action to blood pressure (murine, first increases and then lowers blood pressure, while heart rate slows); reduces uterine contraction (gpg, *in vitro*, caused by acetylcholine); antinociception (i.t. injected 0.7μg substance P-induced pain model, EC = 50μg i.t.)<sup>[5474]</sup>. **Source:** REN SHEN *Panax ginseng* [Syn. *Panax schinseng*] (rhizome: content = 0.15%<sup>[5508]</sup>), XI YANG SHEN *Panax quinquefolium*. Ref: 4, 87, 658, 5474, 5508.

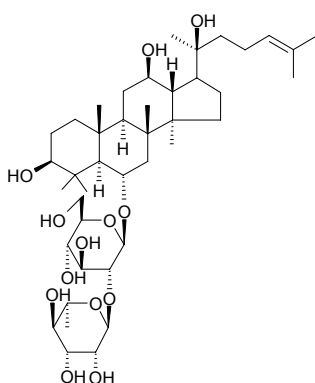


**8430 Ginsenoside Rg<sub>1</sub>**

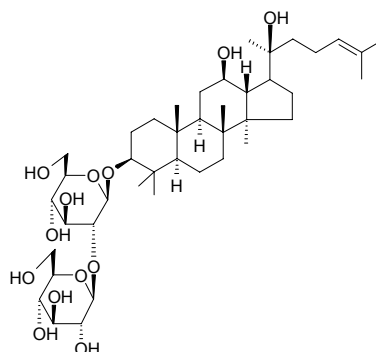
Ginsenoside A<sub>2</sub> [22427-39-0] C<sub>42</sub>H<sub>72</sub>O<sub>14</sub> (801.03). mp 194.0~196.5°C. **Pharm:** Antineoplastic; treatment of cancer of stomach; inhibits fatigue; bidirectional action to blood pressure (murine, first increases and then lowers blood pressure, while heart rate slows); promotes biosynthesis of DNA, protein and lipid (murine marrow cells); reduces uterine contraction (gpg, *in vitro*, caused by acetylcholine); vasodilator (animal model); hepatoprotective (inhibits activation of macrophages, inhibits increase in sALT and sAST levels, *in vivo*, D-GalN/LPS-induced liver injury in mouse, 100mg/kg ip for sALT, InRt = 30%; 100mg/kg ip for sAST, InRt = 12%; control Hydrocortisone, 20mg/kg ip for sALT, InRt = 99%; 20mg/kg ip for sAST, InRt = 97%)<sup>[4702]</sup>; LD<sub>50</sub> (mus, orl) ≥ 5000mg/kg, (mus, ip) = 1600mg/kg, (mus, iv) = 396mg/kg. **Source:** REN SHEN *Panax ginseng* [Syn. *Panax schinseng*] (rhizome: content = 0.46%<sup>[5501]</sup>, content = 0.38%<sup>[5508]</sup>), SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*] (rhizome: content = 4.7%<sup>[5508]</sup>), XI YANG SHEN *Panax quinquefolium* (rhizome: content = 0.20%<sup>[5508]</sup>), ZHU JIE SAN QI *Panax pseudo-ginseng* var. *japonicus* (rhizome: content = 0.09%<sup>[5508]</sup>, yield = 0.011%dw<sup>[4610]</sup>). **Ref:** 4, 87, 658, 4139, 4610, 4702, 5501, 5508.

**8431 Ginsenoside Rg<sub>2</sub>**

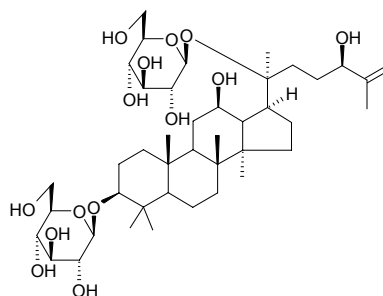
Ginsenoside C C<sub>42</sub>H<sub>72</sub>O<sub>13</sub> (785.03). Crystals, mp 187~189°C, [α]<sub>D</sub><sup>30</sup> = +5.5° (c = 1, MeOH). **Source:** REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], XI YANG SHEN *Panax quinquefolium*. **Ref:** 1521.

**8432 20(S)-Ginsenoside Rg<sub>3</sub>**

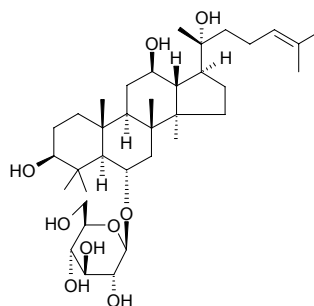
[14197-60-5] C<sub>42</sub>H<sub>72</sub>O<sub>13</sub> (785.03). **Source:** REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. **Ref:** 2.

**8433 Ginsenoside Rg<sub>7</sub>**

3-O-β-D-Glucopyranosyl 3β,12β,20(S),24(R)-tetrahydroxy-dammar-25-ene 20-O-β-D-glucopyranoside C<sub>42</sub>H<sub>72</sub>O<sub>14</sub> (801.03). White powder. **Source:** REN SHEN YE *Panax ginseng* [Syn. *Panax schinseng*]. **Ref:** 3517.

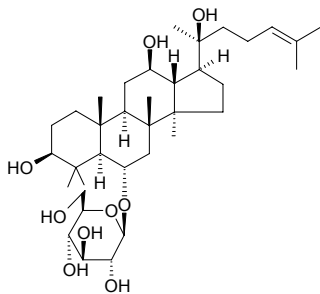
**8434 20(R)-Ginsenoside Rh<sub>1</sub>**

C<sub>36</sub>H<sub>62</sub>O<sub>9</sub> (638.89). **Source:** REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. **Ref:** 2.

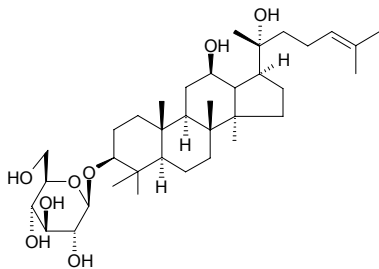


**8435 20(S)-Ginsenoside Rh<sub>1</sub>**

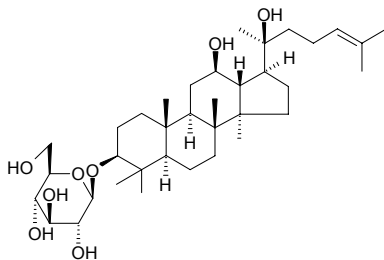
Ginsenoside Rh<sub>1</sub> [63223-86-9] C<sub>36</sub>H<sub>62</sub>O<sub>9</sub> (638.89). **Pharm:** Hepatoprotective (inhibits activation of macrophages, inhibits increase in sALT and sAST levels, *in vivo*, D-GalN/LPS-induced liver injury in mouse, 100mg/kg ip for sALT, InRt = 93%; 100mg/kg ip for sAST, InRt = 90%; control Hydrocortisone, 20mg/kg ip for sALT, InRt = 99%; 20mg/kg ip for sAST, InRt = 97%)<sup>[4702]</sup>. **Source:** REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*], XI YANG SHEN *Panax quinquefolium*. **Ref:** 2, 28, 87, 4702.

**8436 20(R)-Ginsenoside-Rh<sub>2</sub>**

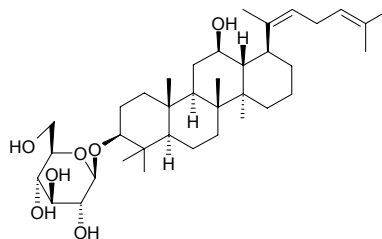
[112246-15-8] C<sub>36</sub>H<sub>62</sub>O<sub>8</sub> (622.89). **Pharm:** Antineoplastic (hmn, leukemia HL-60, 2μg/mL; mus myelocytic leukemia M1, inducing cell differentiation activity, 50μmol/L, growth rate = 70%); cytotoxic (*in vitro*, enhances cytotoxicity for drug-resistant strain P<sub>388</sub>, IC<sub>50</sub> = 75.6μmol/L, MT-4, CC<sub>50</sub> (concentration of half cytotoxicity) = 475μmol/L). **Source:** REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. **Ref:** 2, 1615, 1616, 1617, 1618.

**8437 20(S)-Ginsenoside Rh<sub>2</sub>**

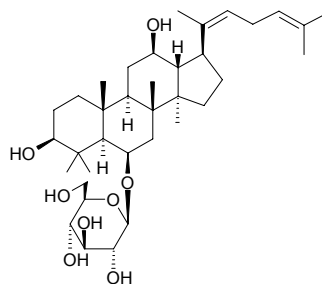
[78214-33-2] C<sub>36</sub>H<sub>62</sub>O<sub>8</sub> (622.89). **Source:** REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. **Ref:** 2.

**8438 Ginsenoside Rh<sub>3</sub>**

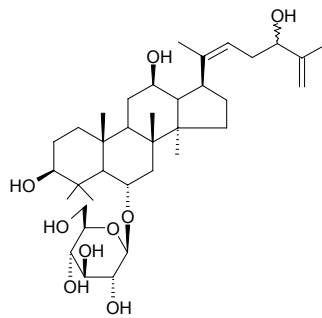
3β,12β-Dihydroxy-dammar-20(22),24-diene-3-O-β-D-glucopyranoside [105558-26-7] C<sub>37</sub>H<sub>62</sub>O<sub>7</sub> (618.90). White powder, mp 255~257°C, [α]<sub>D</sub><sup>27</sup> = +7° (c = 0.778, methanol). **Source:** REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. **Ref:** 84.

**8439 Ginsenoside Rh<sub>4</sub>**

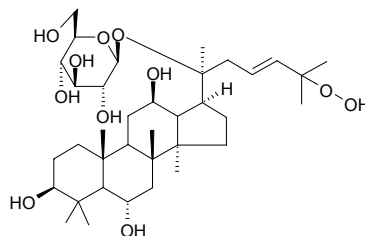
[174721-08-5] C<sub>36</sub>H<sub>60</sub>O<sub>8</sub> (620.87). Colorless thin crystals (methanol-water), mp 160~161°C, [α]<sub>D</sub> = +28.2° (c = 1, methanol). **Pharm:** Cytotoxic (P<sub>388</sub>, ED<sub>50</sub> = 25μmol/L, L<sub>1210</sub>, ED<sub>50</sub> = 23μmol/L). **Source:** REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. **Ref:** 1149.

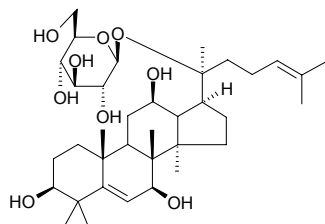
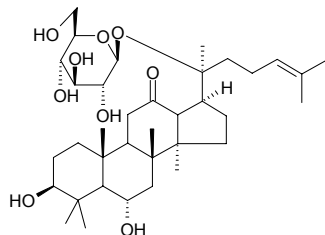
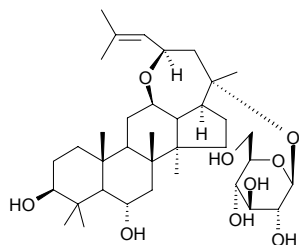
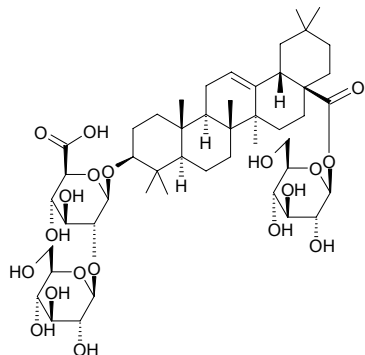
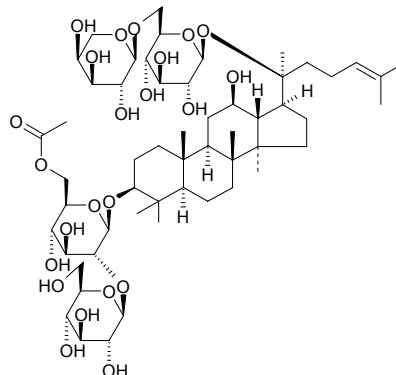
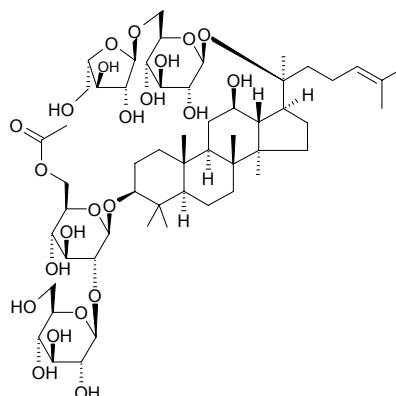
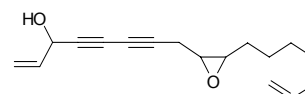
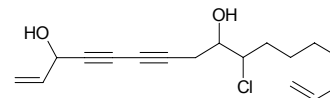
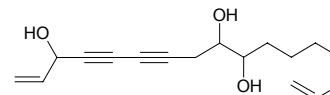
**8440 Ginsenoside Rh<sub>5</sub>**

3β,6α,12β,24ξ-Tetrahydroxy-dammar-20(22),25-diene 6-O-β-D-glucopyranoside C<sub>36</sub>H<sub>60</sub>O<sub>9</sub> (636.87). White powder, [α]<sub>D</sub><sup>21</sup> = +20.8° (c = 0.1, MeOH). **Source:** REN SHEN YE *Panax ginseng* [Syn. *Panax schinseng*]. **Ref:** 3517.

**8441 Ginsenoside Rh<sub>6</sub>**

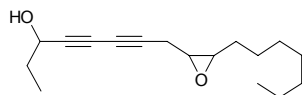
3β,6α,12β,20(S)-Tetrahydroxy-25-hydroperoxy-dammar-23-ene 20-O-β-D-glucopyranoside C<sub>36</sub>H<sub>62</sub>O<sub>11</sub> (670.89). White powder, [α]<sub>D</sub><sup>21</sup> = +21.8° (c = 0.1, MeOH). **Source:** REN SHEN YE *Panax ginseng* [Syn. *Panax schinseng*]. **Ref:** 3517.



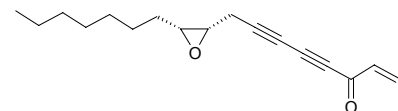
**8442 Ginsenoside Rh<sub>7</sub>**3 $\beta$ ,7 $\beta$ ,12 $\beta$ ,20(S)-Tetrahydroxy-dammar-5,24-diene20-O- $\beta$ -D-glucopyranoside C<sub>36</sub>H<sub>60</sub>O<sub>9</sub> (636.87). White powder,  $[\alpha]_D^{21} = +30.1^\circ$  ( $c = 0.1$ , MeOH). [Source](#): REN SHEN YE *Panax ginseng* [Syn. *Panax schinseng*]. [Ref](#): 3517.**8443 Ginsenoside Rh<sub>8</sub>**3 $\beta$ ,6 $\alpha$ ,20(S)-Trihydroxy-dammar-24-ene-12-one 20-O- $\beta$ -D-glucopyranosideC<sub>36</sub>H<sub>60</sub>O<sub>9</sub> (636.87). White powder. [Source](#): REN SHEN YE *Panax ginseng* [Syn. *Panax schinseng*]. [Ref](#): 3517.**8444 Ginsenoside Rh<sub>9</sub>**3 $\beta$ ,6 $\alpha$ ,20(S)-Trihydroxy-12 $\beta$ ,23-epoxy-dammar-24-ene20-O- $\beta$ -D-glucopyranoside C<sub>36</sub>H<sub>60</sub>O<sub>9</sub> (636.87). White powder. [Source](#): REN SHEN YE *Panax ginseng* [Syn. *Panax schinseng*]. [Ref](#): 3517.**8445 Ginsenoside Ro**[34367-04-9] C<sub>48</sub>H<sub>76</sub>O<sub>19</sub> (957.13). [Source](#): REN SHEN *Panax ginseng* [Syn. *Panax schinseng*] (rhizome: content = 1.8%<sup>[5508]</sup>), XI YANG SHEN *Panax quinquefolium* (rhizome: content = 0.65%<sup>[5508]</sup>), ZHU JIE SAN QI *Panax pseudo-ginseng* var. *japonicus* (rhizome: content = 2.7%<sup>[5508]</sup>). [Ref](#): 2, 5508.**8446 Ginsenoside Rs<sub>1</sub>**[87733-67-3A] C<sub>55</sub>H<sub>92</sub>O<sub>23</sub> (1121.33). [Source](#): REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. [Ref](#): 2.**8447 Ginsenoside Rs<sub>2</sub>**[87733-66-2] C<sub>55</sub>H<sub>92</sub>O<sub>23</sub> (1121.33). [Source](#): REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. [Ref](#): 2, 1521.**8448 Ginsenoyne A**[139163-34-1] C<sub>17</sub>H<sub>22</sub>O<sub>2</sub> (258.36). [Source](#): REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. [Ref](#): 2.**8449 Ginsenoyne B**[139035-29-3] C<sub>17</sub>H<sub>23</sub>ClO<sub>2</sub> (294.82). [Source](#): REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. [Ref](#): 2.**8450 Ginsenoyne C**[139163-35-2] C<sub>17</sub>H<sub>24</sub>O<sub>3</sub> (276.38). [Source](#): REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. [Ref](#): 2.

**8451 Ginsenoyne D**

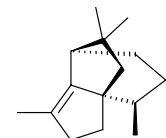
$C_{17}H_{26}O_2$  (262.40). Source: REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. Ref: 2.

**8452 Ginsenoyne E**

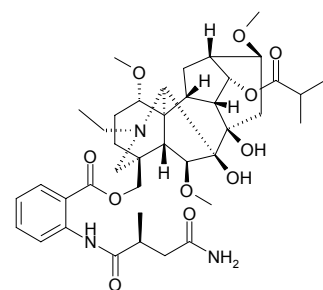
3-Oxopanaxydol; PQ-3 [126146-63-2]  $C_{17}H_{22}O_2$  (258.36). Oil,  $[\alpha]_D = -36.9^\circ C$  ( $c = 0.68$ , MeOH). Pharm: Cytotoxic ( $L_{1210}$ , 0.5-1.0  $\mu g/mL$ , InRt = 100%). Source: REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], XI YANG SHEN *Panax quinquefolium*. Ref: 2, 1017, 1521.

**8453 Ginsinsene**

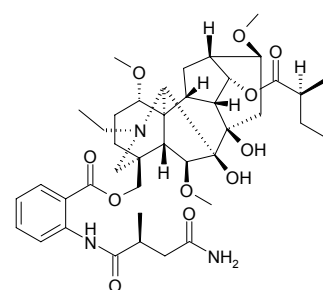
(1*R*\*,6*R*\*,7*R*\*)-3,7,10,10-Tetramethyltricyclo[4.3.2.0<sup>2,6</sup>]undec-2-ene  $C_{15}H_{24}$  (204.36). Source: REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. Ref: 5330.

**8454 Giralidine G**

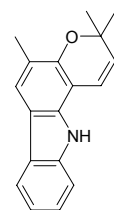
$C_{40}H_{57}N_3O_{11}$  (755.91). White amorphous powder, mp 108-110 °C,  $[\alpha]_D^{20} = +35.4^\circ$  ( $c = 0.42$ ,  $CHCl_3$ ). Source: QIN LING CUI QUE HUA *Delphinium giraldii* (root). Ref: 4278.

**8455 Giralidine H**

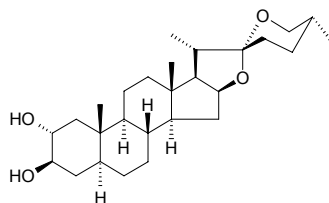
$C_{41}H_{59}N_3O_{11}$  (769.94). White amorphous powder, mp 122-124 °C,  $[\alpha]_D^{20} = +34.6^\circ$  ( $c = 0.35$ ,  $CHCl_3$ ). Source: QIN LING CUI QUE HUA *Delphinium giraldii* (root). Ref: 4278.

**8456 Girinimbine**

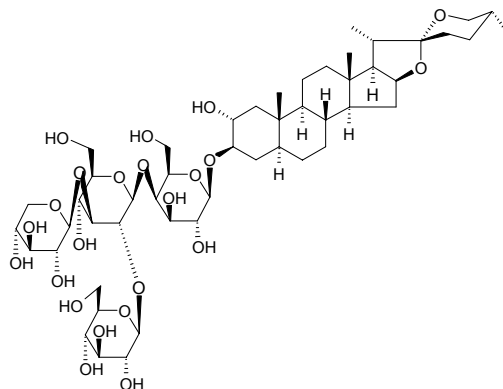
[23095-44-5]  $C_{18}H_{17}NO$  (263.34). Pharm: Antibacterial (*Staphylococcus aureus*, MIC = 3.13  $\mu g/mL$ , MIC = 0.012  $\mu mol/L$ , control Kanamycin, MIC = 3.13  $\mu g/mL$ ; *Bacillus subtilis*, MIC = 25  $\mu g/mL$ , MIC = 0.095  $\mu mol/L$ , Kanamycin, MIC = 6.25  $\mu g/mL$ ; *Escherichia coli*, MIC = 50  $\mu g/mL$ , MIC = 0.190  $\mu mol/L$ , Kanamycin, MIC = 12.5  $\mu g/mL$ ; *Proteus vulgaris*, MIC = 12.5  $\mu g/mL$ , MIC = 0.047  $\mu mol/L$ , Kanamycin, MIC = 12.5  $\mu g/mL$ )<sup>[5299]</sup>; antifungal (*Aspergillus niger*, MIC = 25  $\mu g/mL$ , MIC = 0.095  $\mu mol/L$ ; *Candida albicans*, MIC = 100  $\mu g/mL$ , MIC = 0.302  $\mu mol/L$ , control Fluconazole, MIC = 25  $\mu g/mL$ , MIC = 0.082  $\mu mol/L$ )<sup>[5299]</sup>. Source: NEN YE JIU LI XIANG *Murraya microphylla*, YUAN DONG JIU LI XIANG *Murraya siamensis*, YIN DU JIU LI XIANG *Murraya koenigii* (stem cortex). Ref: 11, 5299.

**8457 Gitogenin**

[511-96-6]  $C_{27}H_{44}O_4$  (432.65). mp 271-272 °C. Source: DA YU BIAO HUA *Hosta sieboldiana*, FAN MA *Agave americana*, HU LU BA *Trigonella foenum-graecum*, JI LI GEN *Tribulus terrestris*. Ref: 6, 10.

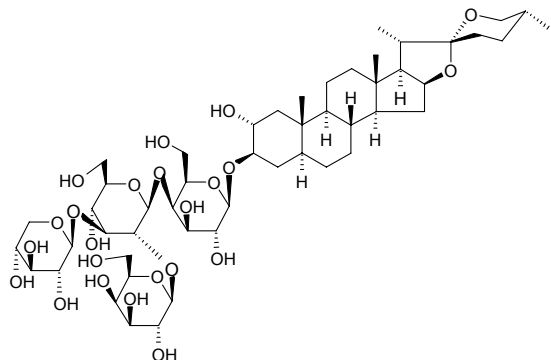
**8458 F-Gitoinin**

Gitogenin  $\beta$ -lycotetraoside [28591-01-7]  $C_{50}H_{82}O_{23}$  (1051.20). Micro needles from MeOH, mp 260-263 °C,  $[\alpha]_D^{24} = -51.6^\circ$  ( $c = 0.21$ , pyridine). Pharm: Antineoplastic (HeLa, inhibits <sup>32</sup>P combines with phospholipid in HeLa cells, 50  $\mu g/mL$ , InRt = 23.1%); antiviral (reduces titer of tobacco mosaic virus by 2-3 times). Source: CI JI LI *Tribulus terrestris*. Ref: 706, 1636, 1637, 1638.

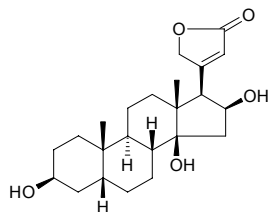


**8459 Gitonin**

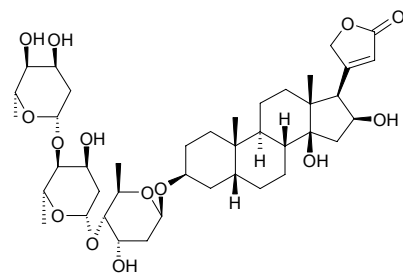
Capsicosin D<sub>1</sub> [39937-47-8] C<sub>50</sub>H<sub>82</sub>O<sub>23</sub> (1051.20). Acicular Crystals (MeOH), mp 250~253°C,  $[\alpha]_D^{19} = -40^\circ$  ( $c = 1$ , pyridine). Source: CI JI LI *Tribulus terrestris*. Ref: 706.

**8460 Gitoxigenin**

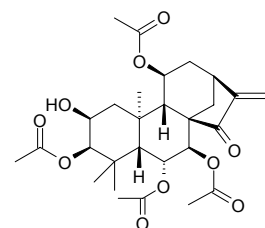
[545-26-6] C<sub>23</sub>H<sub>34</sub>O<sub>5</sub> (390.52). mp 220~225°C. Source: JIA ZHU TAO *Nerium indicum*. Ref: 6.

**8461 Gitoxin**

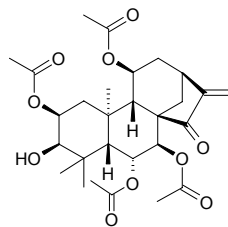
[4562-36-1] C<sub>41</sub>H<sub>64</sub>O<sub>14</sub> (780.96). Pharm: Cardiotonic; toxin (vertebrate). Source: MAO DI HUANG *Digitalis purpurea* (dried leaf: content = 0.0140%<sup>[5508]</sup>), MAO HUA MAO DI HUANG *Digitalis lanata*. Ref: 658, 5508.

**8462 Glabcensin A**

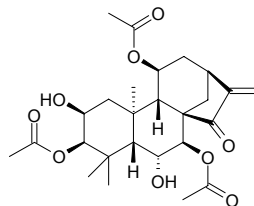
C<sub>28</sub>H<sub>38</sub>O<sub>10</sub> (534.61). Amorphous powder, mp 198~199°C,  $[\alpha]_D^{22} = -74.9^\circ$  ( $c = 0.57$ , MeOH). Source: MAO GENG XIA YE XIANG CHA CAI *Isodon angustifolius* var. *glabrescens*. Ref: 4067.

**8463 Glabcensin B**

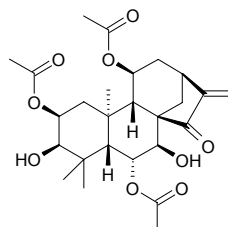
C<sub>28</sub>H<sub>38</sub>O<sub>10</sub> (534.61). Amorphous powder,  $[\alpha]_D^{22} = -54.7^\circ$  ( $c = 0.51$ , MeOH). Source: MAO GENG XIA YE XIANG CHA CAI *Isodon angustifolius* var. *glabrescens*. Ref: 4067.

**8464 Glabcensin C**

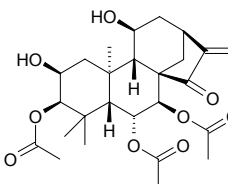
C<sub>26</sub>H<sub>36</sub>O<sub>9</sub> (492.57). Amorphous powder,  $[\alpha]_D^{22} = -28.5^\circ$  ( $c = 0.57$ , CHCl<sub>3</sub>). Source: MAO GENG XIA YE XIANG CHA CAI *Isodon angustifolius* var. *glabrescens*. Ref: 4067.

**8465 Glabcensin D**

C<sub>26</sub>H<sub>36</sub>O<sub>9</sub> (492.57). Amorphous powder,  $[\alpha]_D^{22} = -37.9^\circ$  ( $c = 0.44$ , CHCl<sub>3</sub>). Source: MAO GENG XIA YE XIANG CHA CAI *Isodon angustifolius* var. *glabrescens*. Ref: 4067.

**8466 Glabcensin E**

C<sub>26</sub>H<sub>36</sub>O<sub>9</sub> (492.57). Amorphous powder,  $[\alpha]_D^{22} = -46.9^\circ$  ( $c = 0.46$ , MeOH). Source: MAO GENG XIA YE XIANG CHA CAI *Isodon angustifolius* var. *glabrescens*. Ref: 4067.

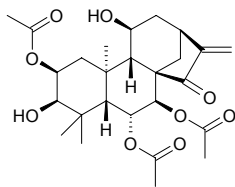




**8467 Glabcensin F**

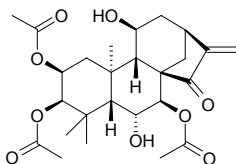
$C_{26}H_{36}O_9$  (492.57). Amorphous powder,  $[\alpha]_D^{22} = -39.2^\circ$  ( $c = 0.49$ ,  $CHCl_3$ ).

Source: MAO GENG XIA YE XIANG CHA CAI *Isodon angustifolius* var. *glabrescens*. Ref: 4067.

**8468 Glabcensin G**

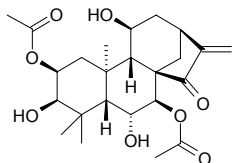
$C_{26}H_{36}O_9$  (492.57). Amorphous powder,  $[\alpha]_D^{22} = -11.1^\circ$  ( $c = 0.45$ ,  $CHCl_3$ ).

Source: MAO GENG XIA YE XIANG CHA CAI *Isodon angustifolius* var. *glabrescens*. Ref: 4067.

**8469 Glabcensin H**

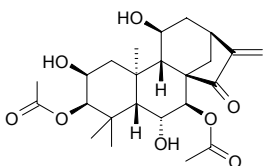
$C_{24}H_{34}O_8$  (450.53). Amorphous powder,  $[\alpha]_D^{22} = -16.1^\circ$  ( $c = 0.53$ ,  $CHCl_3$ ).

Source: MAO GENG XIA YE XIANG CHA CAI *Isodon angustifolius* var. *glabrescens*. Ref: 4067.

**8470 Glabcensin I**

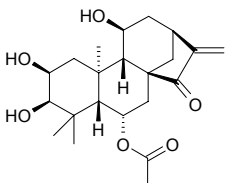
$C_{24}H_{34}O_8$  (450.53). Amorphous powder,  $[\alpha]_D^{22} = -39.6^\circ$  ( $c = 0.52$ ,  $MeOH$ ).

Source: MAO GENG XIA YE XIANG CHA CAI *Isodon angustifolius* var. *glabrescens*. Ref: 4067.

**8471 Glabcensin J**

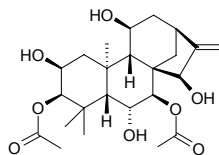
$C_{22}H_{32}O_6$  (392.50). Amorphous powder,  $[\alpha]_D^{22} = -32.4^\circ$  ( $c = 0.48$ ,  $CHCl_3$ ).

Source: MAO GENG XIA YE XIANG CHA CAI *Isodon angustifolius* var. *glabrescens*. Ref: 4067.

**8472 Glabcensin K**

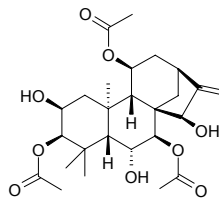
$C_{24}H_{36}O_8$  (452.55). Amorphous powder,  $[\alpha]_D^{22} = -34.5^\circ$  ( $c = 0.52$ ,  $MeOH$ ).

Source: MAO GENG XIA YE XIANG CHA CAI *Isodon angustifolius* var. *glabrescens*. Ref: 4067.

**8473 Glabcensin L**

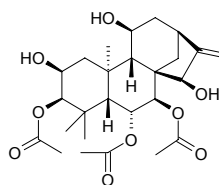
$C_{26}H_{38}O_9$  (494.59). Amorphous powder,  $[\alpha]_D^{22} = -33.5^\circ$  ( $c = 0.48$ ,  $CHCl_3$ ).

Source: MAO GENG XIA YE XIANG CHA CAI *Isodon angustifolius* var. *glabrescens*. Ref: 4067.

**8474 Glabcensin M**

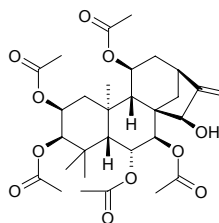
$C_{26}H_{38}O_9$  (494.59). Amorphous powder,  $[\alpha]_D^{22} = -45.4^\circ$  ( $c = 0.54$ ,  $MeOH$ ).

Source: MAO GENG XIA YE XIANG CHA CAI *Isodon angustifolius* var. *glabrescens*. Ref: 4067.

**8475 Glabcensin N**

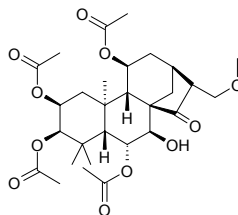
$C_{30}H_{42}O_{11}$  (578.66). Amorphous powder,  $[\alpha]_D^{22} = -22.18^\circ$  ( $c = 0.50$ ,  $CHCl_3$ ).

Source: MAO GENG XIA YE XIANG CHA CAI *Isodon angustifolius* var. *glabrescens*. Ref: 4067.

**8476 Glabcensin O**

$C_{29}H_{42}O_{11}$  (566.65). Amorphous powder,  $[\alpha]_D^{22} = -26.5^\circ$  ( $c = 0.49$ ,  $CHCl_3$ ).

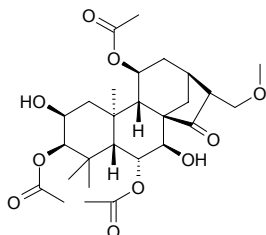
Source: MAO GENG XIA YE XIANG CHA CAI *Isodon angustifolius* var. *glabrescens*. Ref: 4067.



**8477 Glabcesin P**

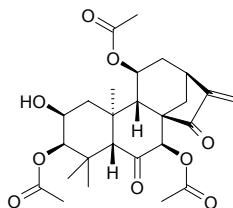
$C_{27}H_{40}O_{10}$  (524.61). Amorphous powder,  $[\alpha]_D^{22} = -31.8^\circ$  ( $c = 0.42$ ,  $CHCl_3$ ).

Source: MAO GENG XIA YE XIANG CHA CAI *Isodon angustifolius* var. *glabrescens*. Ref: 4067.

**8478 Glabcesin Q**

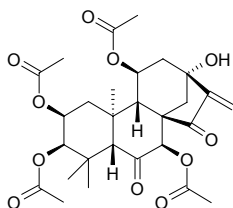
$C_{26}H_{34}O_9$  (490.56). Amorphous powder,  $[\alpha]_D^{22} = -32.8^\circ$  ( $c = 0.46$ ,  $CHCl_3$ ).

Source: MAO GENG XIA YE XIANG CHA CAI *Isodon angustifolius* var. *glabrescens*. Ref: 4067.

**8479 Glabcesin R**

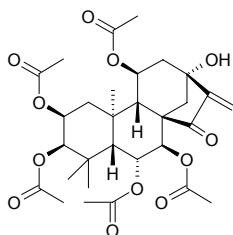
$C_{28}H_{36}O_{11}$  (548.59). Amorphous powder,  $[\alpha]_D^{22} = -28.2^\circ$  ( $c = 0.48$ ,  $CHCl_3$ ).

Source: MAO GENG XIA YE XIANG CHA CAI *Isodon angustifolius* var. *glabrescens*. Ref: 4067.

**8480 Glabcesin S**

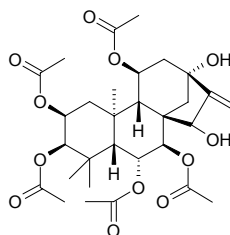
$C_{30}H_{40}O_{12}$  (592.65). Amorphous powder,  $[\alpha]_D^{22} = -36.5^\circ$  ( $c = 0.45$ ,  $CHCl_3$ ).

Source: MAO GENG XIA YE XIANG CHA CAI *Isodon angustifolius* var. *glabrescens*. Ref: 4067.

**8481 Glabcesin T**

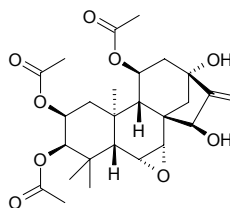
$C_{30}H_{42}O_{12}$  (594.66). Amorphous powder,  $[\alpha]_D^{22} = -37.5^\circ$  ( $c = 0.52$ ,  $CHCl_3$ ).

Source: MAO GENG XIA YE XIANG CHA CAI *Isodon angustifolius* var. *glabrescens*. Ref: 4067.

**8482 Glabcesin U**

$C_{26}H_{36}O_9$  (492.57). Amorphous powder,  $[\alpha]_D^{22} = -21.5^\circ$  ( $c = 0.45$ ,  $CHCl_3$ ).

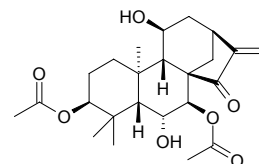
Source: MAO GENG XIA YE XIANG CHA CAI *Isodon angustifolius* var. *glabrescens*. Ref: 4067.

**8483 Glabcesin V**

Gesneroidin F  $C_{24}H_{34}O_7$  (434.53). Amorphous powder,  $[\alpha]_D^{22} = -7.32^\circ$  ( $c =$

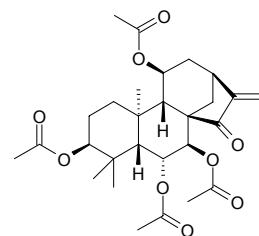
$0.48$ ,  $CHCl_3$ );  $[\alpha]_D^{25.6} = -22.0^\circ$  ( $c = 0.25.0$ , MeOH). Pharm: Cytotoxic (hmn tumor K562 cells,  $IC_{50} = 0.4 \mu g/mL$ , control *cis*-Platin  $IC_{50} = 1.1 \mu g/mL$ )<sup>[4955]</sup>.

Source: MAO GENG XIA YE XIANG CHA CAI *Isodon angustifolius* var. *glabrescens*, DONG LING CAO *Rabdosia rubescens* (leaf). Ref: 1869, 4067, 4955.

**8484 Glabcesin W**

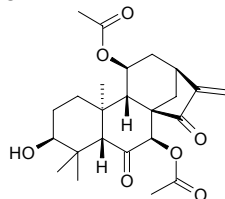
$C_{28}H_{38}O_9$  (518.61). Amorphous powder,  $[\alpha]_D^{22} = -59.98^\circ$  ( $c = 0.42$ , MeOH).

Source: MAO GENG XIA YE XIANG CHA CAI *Isodon angustifolius* var. *glabrescens*. Ref: 1869, 4067.

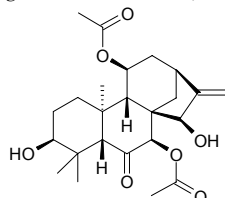


**8485 Glabcensin X**

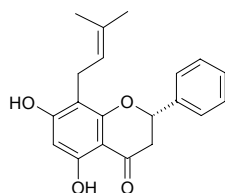
$C_{24}H_{32}O_7$  (432.52). Amorphous powder,  $[\alpha]_D^{22} = -24.5^\circ$  ( $c = 0.54$ ,  $CHCl_3$ ).  
**Source:** MAO GENG XIA YE XIANG CHA CAI *Isodon angustifolius* var. *glabrescens*. **Ref:** 1869, 4067.

**8486 Glabcensin Y**

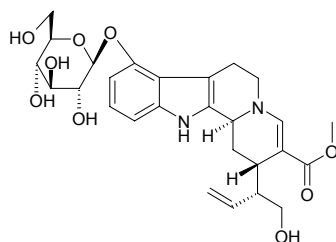
$C_{24}H_{34}O_7$  (434.53). Amorphous powder,  $[\alpha]_D^{22} = -13.0^\circ$  ( $c = 0.54$ ,  $CHCl_3$ ).  
**Source:** MAO GENG XIA YE XIANG CHA CAI *Isodon angustifolius* var. *glabrescens*. **Ref:** 1869, 4067.

**8487 Glabranin**

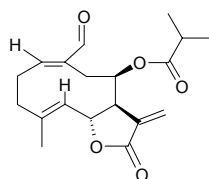
[41983-91-9]  $C_{20}H_{20}O_4$  (324.38). **Pharm:** Antimicrobial (broad spectrum); promotes estrogenic activity. **Source:** MEI ZHOU GAN CAO *Glycyrrhiza lepidota*, GUANG GUO GAN CAO *Glycyrrhiza glabra*, GUANG GUO GAN CAO *Glycyrrhiza glabra* (leaf)<sup>[4685]</sup>. **Ref:** 2, 658, 660, 4685.

**8488 Glabratine**

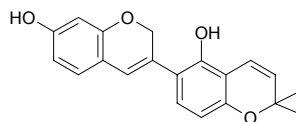
$C_{27}H_{34}N_2O_9$  (530.58). **Source:** CHANG HUA GOU TENG *Uncaria longiflora*, MIAN MAO GOU TENG *Uncaria lanosa*. **Ref:** 5341.

**8489 Glabratolide**

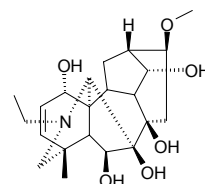
[75744-65-9]  $C_{19}H_{24}O_5$  (332.40). Amorphous gum. **Pharm:** Cytotoxic (KB *in vitro*,  $ED_{50} = 2.3\mu\text{g/mL}$ ). **Source:** GUANG CI BAO JU *Acanthospermum glabratum*. **Ref:** 658, 661, 1521.

**8490 Glabrene**

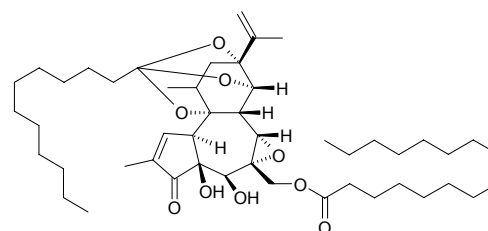
[60008-03-9]  $C_{20}H_{18}O_4$  (322.36). **Pharm:** Antibacterial (*Staphylococcus aureus* ATCC13709 and *Mycobacterium smegmatis* ATCC607, MIC =  $25\mu\text{g/mL}$ ). **Source:** GUANG GUO GAN CAO *Glycyrrhiza glabra*. **Ref:** 2, 658, 660.

**8491 Glabrephinine**

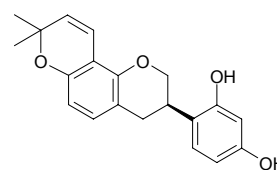
[132160-37-3]  $C_{22}H_{33}NO_6$  (407.51). White acicular Crystals, mp 201–203°C. **Source:** ZHAN MAO CUI QUE HUA *Delphinium kamaonense* var. *glabrescens*. **Ref:** 157.

**8492 Glabrescin**

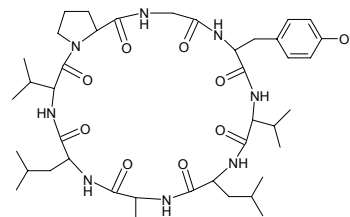
$C_{48}H_{78}O_9$  (799.15). Orange oil,  $[\alpha]_D^{24} = +82^\circ$  ( $c = 0.35$ ,  $CHCl_3$ ). **Source:** *Neoboutonia glabrescens*. **Ref:** 3441.

**8493 Glabridin**

$C_{20}H_{20}O_4$  (324.38). **Pharm:** Antibacterial (*Staphylococcus aureus* ATCC13709, MIC =  $6.25\mu\text{g/mL}$ ; *Mycobacterium smegmatis*); antifungal (*Candida albicans* ATCC1023, MIC =  $25\mu\text{g/mL}$ ). **Source:** GUANG GUO GAN CAO *Glycyrrhiza glabra*. **Ref:** 2, 658, 660.

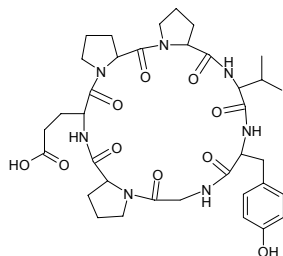
**8494 Glabrin C**

Cyclo-(prolyl-glycyl-tyrosyl-valyl-leucyl-alanyl-leucyl-valyl)  $C_{41}H_{64}N_8O_9$  (813.02). Amorphous powder, mp 153°,  $[\alpha]_D^{29} = -35.11^\circ$  ( $c = 0.235$ , MeOH). **Source:** YUAN HUA FAN LI ZHI *Annona glabra*. **Ref:** 1858.

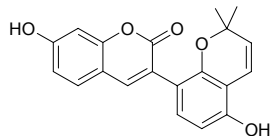


**8495 Glabrin D**

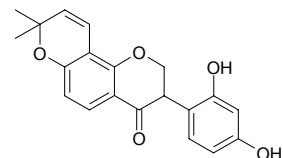
Cyclo-(prolyl-prolyl-valyl-tyrosyl-glycyl-prolyl-glutamyl) C<sub>36</sub>H<sub>49</sub>N<sub>7</sub>O<sub>10</sub> (739.83). Amorphous powder, mp 219°, [ $\alpha$ ]<sub>D</sub><sup>29</sup> = -53.54° (c = 0.551 MeOH).  
 Source: YUAN HUA FAN LI ZHI *Annona glabra*. Ref: 1858.

**8496 Glabrocoumarin**

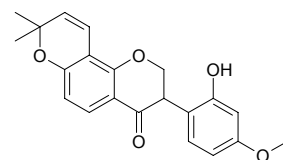
C<sub>20</sub>H<sub>16</sub>O<sub>5</sub> (336.35). Slightly yellow needles (benzene-acetone), mp 254–256°C. Source: GUANG GUO GAN CAO *Glycyrrhiza glabra* (root).  
 Ref: 4486.

**8497 Glabroisoflavanone A**

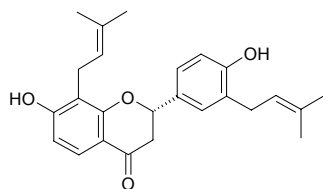
C<sub>20</sub>H<sub>18</sub>O<sub>5</sub> (338.36). Colorless prisms (MeOH-H<sub>2</sub>O), mp 113–116°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = 0° (c = 0.073, MeOH). Source: GUANG GUO GAN CAO *Glycyrrhiza glabra* (root). Ref: 4486.

**8498 Glabroisoflavanone B**

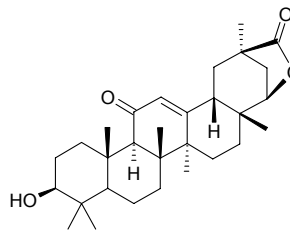
C<sub>21</sub>H<sub>20</sub>O<sub>5</sub> (352.39). Colorless prisms (MeOH-H<sub>2</sub>O), mp 161–162°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = 0° (c = 0.036, MeOH). Source: GUANG GUO GAN CAO *Glycyrrhiza glabra* (root). Ref: 4486.

**8499 Glabrol**

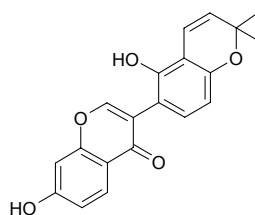
[59870-65-4] C<sub>25</sub>H<sub>28</sub>O<sub>4</sub> (392.50). Pharm: Antibacterial (*Staphylococcus aureus* ATCC13709, MIC = 1.56µg/mL; *Mycobacterium smegmatis* ATCC607, MIC = 1.56µg/mL). Source: GUANG GUO GAN CAO *Glycyrrhiza glabra*, HUANG GAN CAO *Glycyrrhiza kansuensis*. Ref: 2, 591, 658, 660.

**8500 Glabrolide**

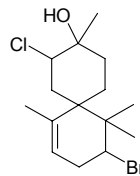
[10401-33-9] C<sub>30</sub>H<sub>44</sub>O<sub>4</sub> (468.68). Source: CU MAO GAN CAO *Glycyrrhiza aspera*, GAN CAO *Glycyrrhiza uralensis*, GUANG GUO GAN CAO *Glycyrrhiza glabra*. Ref: 1521.

**8501 Glabrone**

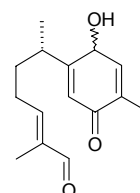
Eurycarpin B; 7,2'-Dihydroxy-6'',6''-dimethylpyrano-(2'',3''-4',3')isoflavone [60008-02-8] C<sub>20</sub>H<sub>16</sub>O<sub>5</sub> (336.35). Yellowish acicular Crystals, mp 227–229°C. Pharm: Antioxidant (*in vitro*, 8µg/mL, oxygen clearance = 28.6%, 10µg/mL, hemolytic InRt induced by H<sub>2</sub>O<sub>2</sub> = 94.2%). Source: GUANG GUO GAN CAO *Glycyrrhiza glabra*, HUANG GAN CAO *Glycyrrhiza kansuensis*, ZHANG GUO GAN CAO *Glycyrrhiza inflata*. Ref: 2, 379, 660, 1753.

**8502 Glanduliforol**

C<sub>15</sub>H<sub>24</sub>BrClO (335.71). Source: XIAO XIAN AO DING ZAO *Laurencia glandulifera* (in 1974, the compound was isolated from the plant by M.Suzuki et al.). Ref: 5505.

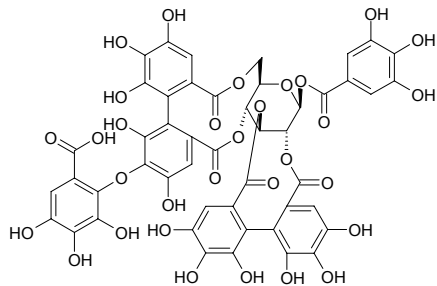
**8503 Glandulone C**

C<sub>15</sub>H<sub>20</sub>O<sub>3</sub> (248.32). Brown oil, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +23.6° (c = 0.12, methanol). Source: XIANG RI KUI YE *Helianthus annuus*. Ref: 1521, 1556.

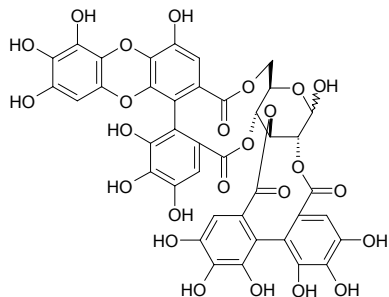


**8504 Glansrin A**

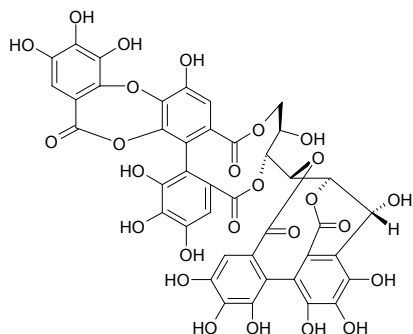
$C_{48}H_{32}O_{31}$  (1104.77). Off-white amorphous powder,  $[\alpha]_D^{23} = -11^\circ$  ( $c = 0.3$ , MeOH). **Pharm:** Antioxidant (SOD-like activity,  $EC_{50} = 190\mu\text{mol/L}$ , control Gallic acid,  $EC_{50} = 31.7\mu\text{mol/L}$ , *L*-Ascorbic acid,  $EC_{50} = 34.6\mu\text{mol/L}$ ); antioxidant (DPPH free radical scavenger,  $EC_{50} = 0.36\mu\text{mol/L}$ , control Gallic acid,  $EC_{50} = 5.88\mu\text{mol/L}$ , *L*-Ascorbic acid,  $EC_{50} = 6.25\mu\text{mol/L}$ ). **Source:** HU TAO REN *Juglans regia*. **Ref:** 3408.

**8505 Glansrin B**

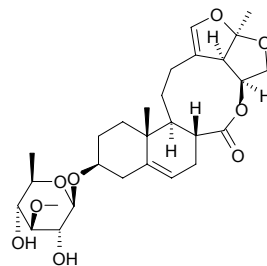
$C_{40}H_{26}O_{25}$  (906.64). Off-brown amorphous powder,  $[\alpha]_D^{23} = +90^\circ$  ( $c = 0.1$ , MeOH). **Pharm:** Antioxidant (SOD-like activity,  $EC_{50} = 41.9\mu\text{mol/L}$ , control Gallic acid,  $EC_{50} = 31.7\mu\text{mol/L}$ , *L*-Ascorbic acid,  $EC_{50} = 34.6\mu\text{mol/L}$ ); antioxidant (DPPH free radical scavenger,  $EC_{50} = 0.93\mu\text{mol/L}$ , control Gallic acid,  $EC_{50} = 5.88\mu\text{mol/L}$ , *L*-Ascorbic acid,  $EC_{50} = 6.25\mu\text{mol/L}$ ). **Source:** HU TAO REN *Juglans regia*. **Ref:** 3408.

**8506 Glansrin C**

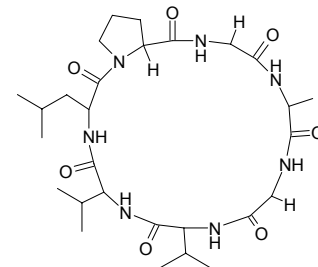
$C_{41}H_{26}O_{26}$  (934.65). Off-brown amorphous powder,  $[\alpha]_D^{23} = +79^\circ$  ( $c = 0.1$ , MeOH). **Pharm:** Antioxidant (SOD-like activity,  $EC_{50} = 21.4\mu\text{mol/L}$ , control Gallic acid,  $EC_{50} = 31.7\mu\text{mol/L}$ , *L*-Ascorbic acid,  $EC_{50} = 34.6\mu\text{mol/L}$ ); antioxidant (DPPH free radical scavenger,  $EC_{50} = 0.57\mu\text{mol/L}$ , control Gallic acid,  $EC_{50} = 5.88\mu\text{mol/L}$ , *L*-Ascorbic acid,  $EC_{50} = 6.25\mu\text{mol/L}$ ). **Source:** HU TAO REN *Juglans regia*. **Ref:** 3408.

**8507 Glaucogenin C mono-D-thevetoside**

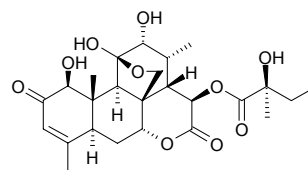
Glaucogenin C 3-*O*- $\beta$ -*D*-thevetopyranoside  $C_{28}H_{40}O_9$  (520.63). Colorless fine needles, mp 185–187°C,  $[\alpha]_D^{25} = +26.10^\circ$  ( $c = 0.991$ , MeOH). **Pharm:** Anti-inflammatory inactive (no significant inhibitory effects on mast cells and neutrophils stimulated with various inducers; no significant inhibitory effects on TNF- $\alpha$  formation from RAW264.7 stimulated with LPS and N9 microglial cells stimulated with LPS/INF- $\gamma$ )<sup>[3054]</sup>; vasodilator inactive (*in vitro*, rat isolated aortic rings with endothelium, pre-contracted by 0.1 $\mu\text{mol/L}$  Phenylephrine or 100mmol/L KCl)<sup>[4077]</sup>. **Source:** BAI WEI *Cynanchum atratum* (root), LIU YE BAI QIAN *Cynanchum stauntonii*. **Ref:** 3054, 4077.

**8508 Glaucacyclopeptide A**

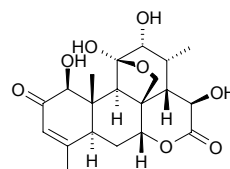
$C_{28}H_{47}N_7O_7$  (593.73). Colorless solid, mp 174–175°C,  $[\alpha]_D^{22} = -57^\circ$  ( $c = 0.2$ , MeOH). **Pharm:** Cytotoxic (*in vitro*, KB cells,  $IC_{50} = 0.73\mu\text{mol/L}$ , control Doxorubicin,  $IC_{50} = 0.02\mu\text{mol/L}$ ). **Source:** ROU MAO FAN LI ZHI *Annona glauca* (seed). **Ref:** 5282.

**8509 Glaucarubinone**

[1259-86-5]  $C_{25}H_{34}O_{10}$  (494.54). mp 228–230°C,  $[\alpha]_D^{20} = +50^\circ$  ( $c = 0.27$ , methanol). **Pharm:** Antiamebic; antineoplastic (P<sub>388</sub>, Lewis lung cancer and B16 melanoma, 0.12–0.5mg/kg); antimalarial (ED = 0.006 $\mu\text{g/mL}$ ); cytotoxic (KB, ED<sub>50</sub> = 0.025 $\mu\text{g/mL}$ ); pesticide. **Source:** GAO CHU *Ailanthus excelsa*. **Ref:** 661.

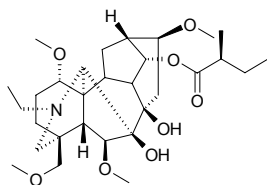
**8510 Glaucarubolone**

$C_{20}H_{26}O_8$  (394.43). **Source:** *Eurycoma harmandiana* (root). **Ref:** 5164.

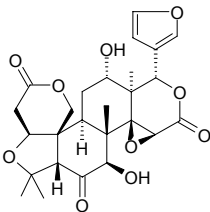


**8511 Glaucedine**

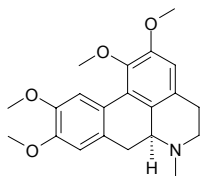
$C_{30}H_{49}NO_8$  (551.73). Source: HEI SHUI CUI QUE HUA BIAN ZHONG *Delphinium potaninii* var. *jiufengshanense* (root). Ref: 4227.

**8512 Glaucin A**

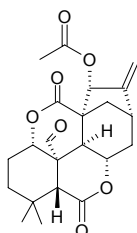
[88848-59-3]  $C_{26}H_{30}O_{10}$  (502.52). Source: WU ZHU YU *Evodia rutaecarpa*. Ref: 482.

**8513 Glaucine**

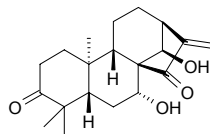
[475-81-0]  $C_{21}H_{25}NO_4$  (355.44). mp 120°C. Pharm: Treatment of amebic dysentery. Source: BEI JIA ER TANG SONG CAO *Thalictrum baicalense*, DONG BEI YAN HU SUO *Corydalis ambigua* var. *amurensis* [Syn. *Corydalis ambigua*] (rhizome: mean content of 3 origins = 0.114%<sup>[5508]</sup>), HUANG HUA HAI YING SU *Glaucium davum*, SHAN YAN HU SUO *Corydalis bulbosa* [Syn. *Corydalis solida*], SUI MAO HE BAO MU DAN *Dicentra eximia*, XIANG TANG SONG CAO *Thalictrum foetidum*, XIAO GUO TANG SONG CAO *Thalictrum microgynum* (root: content = 0.093%<sup>[5508]</sup>), YAN HU SUO *Corydalis yanhusuo* [Syn. *Corydalis turtschaninovii* f. *Yanhusuo*] (rhizome: mean content of 2 origins = 0.078%<sup>[5508]</sup>), YING SU *Papaver somniferum*. Ref: 4, 56, 658, 660, 5508.

**8514 Glaucolactone**

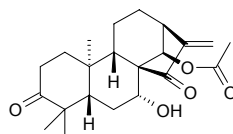
$C_{22}H_{26}O_7$  (402.45). mp 318–320°C,  $[\alpha]_D^{25} = +55^\circ$  ( $c = 0.30$ ,  $CHCl_3$ ). Source: LAN E XIANG CHA CAI *Isodon japonica* var. *glaucocalyx*. Ref: 4067.

**8515 Glaucocalyxin A**

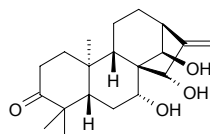
Leukamenin F  $C_{20}H_{28}O_4$  (332.44). mp 220–222°C,  $[\alpha]_D^{20} = -182.9^\circ$  ( $c = 0.25$ ,  $CHCl_3$ ). Source: LAN E XIANG CHA CAI *Isodon japonica* var. *glaucocalyx*. Ref: 4067.

**8516 Glaucocalyxin B**

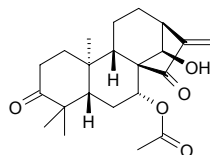
$C_{22}H_{30}O_5$  (374.48). mp 190–192°C,  $[\alpha]_D^{20} = -127.9^\circ$  ( $c = 0.203$ ,  $CHCl_3$ ). Source: LAN E XIANG CHA CAI *Isodon japonica* var. *glaucocalyx*. Ref: 4067.

**8517 Glaucocalyxin C**

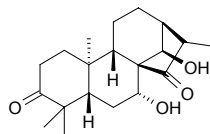
$C_{20}H_{30}O_4$  (334.46). mp 272–273°C,  $[\alpha]_D^{29} = -109^\circ$  ( $c = 0.1$ , MeOH). Source: LAN E XIANG CHA CAI *Isodon japonica* var. *glaucocalyx*. Ref: 4067.

**8518 Glaucocalyxin D**

$C_{22}H_{30}O_5$  (374.48). mp 130–132°C,  $[\alpha]_D^{19} = -161.5^\circ$  ( $c = 0.15$ , MeOH). Source: LAN E XIANG CHA CAI *Isodon japonica* var. *glaucocalyx*. Ref: 4067.

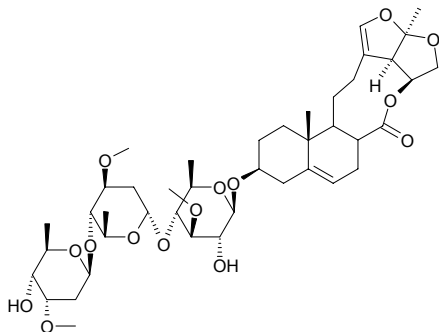
**8519 Glaucocalyxin E**

$C_{20}H_{30}O_4$  (334.46). mp 228–230°C,  $[\alpha]_D^{20} = -142.5^\circ$  ( $c = 0.15$ , MeOH). Source: LAN E XIANG CHA CAI *Isodon japonica* var. *glaucocalyx*. Ref: 4067.



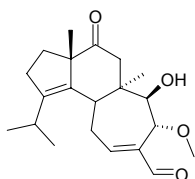
**8520 Glaucogenin C 3-O-β-D-cymaropyranosyl-(1→4)-α-L-diginopyranosyl-(1→4)-β-D-thvetopyranoside**

$C_{42}H_{64}O_{15}$  (808.97). **Pharm:** Anti-inflammatory (*in vitro*, inhibits TNF- $\alpha$  formation, 30 $\mu$ mol/L; RAW264.7 cell lines LPS-stimulated, InRt = (33.7 $\pm$ 6.2)%; N9 microglial cell lines, LPS/IFN- $\gamma$ -stimulated, InRt = (30.9 $\pm$ 4.3)%; no significant inhibitory effects on mast cells and neutrophils stimulated with various inducers); cytotoxic (*in vitro*, 212 cells, ED<sub>50</sub> = 0.96 $\mu$ g/mL, significant activity). **Source:** BAI WEI *Cynanchum atratum* (root). **Ref:** 3054.



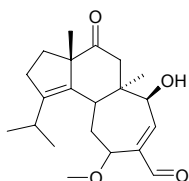
**8521 Glaucopine A**

14-Hydroxy-13-methoxy-8-oxocyclohexa-3,11-diene-12-carbaldehyde  $C_{21}H_{30}O_4$  (346.47). Colorless resin,  $[\alpha]_D^{31} = -30.8^\circ$  ( $c = 0.42$ ,  $CHCl_3$ ). **Pharm:** Anti-inflammatory (*in vivo*, mouse ear edema induced by croton oil, 1.0 $\mu$ mol/cm<sup>2</sup>, edema reduction = 62%, control Indomethacin, 0.3 $\mu$ mol/cm<sup>2</sup>, edema reduction = 61%). **Source:** CANG BAI BING ROU CHI JUN *Sarcodon glaucopus*. **Ref:** 5063.



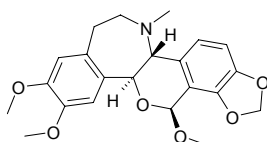
**8522 Glaucopine B**

14-Hydroxy-11-methoxy-8-oxocyclohexa-3,12-diene-12-carbaldehyde  $C_{21}H_{30}O_4$  (346.47). Colorless resin,  $[\alpha]_D^{31} = -98.0^\circ$  ( $c = 0.73$ ,  $CHCl_3$ ). **Pharm:** Anti-inflammatory (*in vivo*, mouse ear edema induced by croton oil, 1.0 $\mu$ mol/cm<sup>2</sup>, edema reduction = 55%, control Indomethacin, 0.3 $\mu$ mol/cm<sup>2</sup>, edema reduction = 61%). **Source:** CANG BAI BING ROU CHI JUN *Sarcodon glaucopus*. **Ref:** 5063.



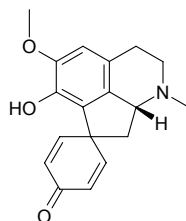
**8523 Gladine**

[5140-40-9]  $C_{22}H_{25}NO_6$  (399.45). mp 103–105°C. **Source:** YA PIAN *Papaver somniferum*. **Ref:** 6.



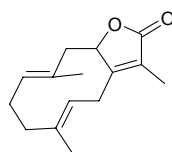
**8524 Glaziovine**

[6808-72-6]  $C_{18}H_{19}NO_3$  (297.36). Colorless lamellar Crystals (benzene), mp 223°C,  $[\alpha]_D = -45.74^\circ$  ( $c = 0.26$ , methanol). **Pharm:** Antineoplastic (nasopharyngeal carcinoma cells, ED<sub>50</sub> = 2.6 $\mu$ g/mL); antiulcerative (rat and gpg, 5mg/kg iv); CNS depressant (animal, relieves anxiety); antihypertensive (rat, 5–15mg iv, 1–3h blood pressure reduced by (50–70)%); anxiolytic and antidepressant, treatment of terror, anxiety and melancholy. **Source:** SAN HUA BA DOU *Croton sparsiflorus*, WEI ER SHI LV RONG HAO *Meconopsis cambrica*, ZI FAN LI ZHI *Annona purpurea*. **Ref:** 658, 661.



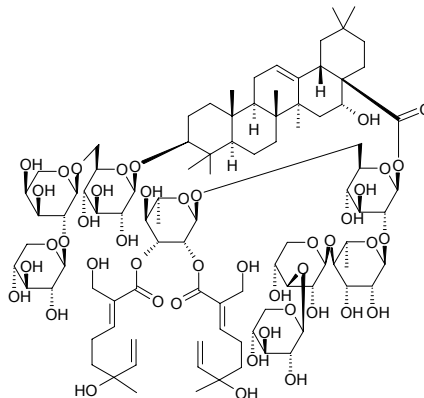
**8525 Glechomanolide**

$C_{15}H_{20}O_2$  (232.33). **Pharm:** NO production inhibitor (mus peritoneal macrophages, induced by LPS, 100 $\mu$ mol/L, InRt = (86.5 $\pm$ 1.0)%, control L-NMMA, 100 $\mu$ mol/L, InRt = (79.2 $\pm$ 0.9)%,  $p < 0.01$ ). **Source:** PING E SHU *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*]. **Ref:** 4150.



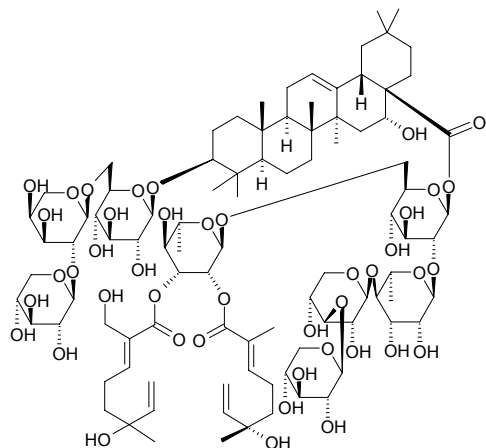
**8526 Gleditsiasaponin B**

$C_{94}H_{148}O_{44}$  (1982.20).  $[\alpha]_D^{25} = -20^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Cytotoxic (HL-60, IC<sub>50</sub> = (1.0 $\pm$ 0.2) $\mu$ mol/L, control Taxol, IC<sub>50</sub> = (4.1E-4 $\pm$ 1.1E-4) $\mu$ mol/L; MCF7, IC<sub>50</sub> = (24.5 $\pm$ 1.2) $\mu$ mol/L, Taxol, IC<sub>50</sub> = (15.3 $\pm$ 2.6) $\mu$ mol/L; Bel7402, IC<sub>50</sub> = (42.6 $\pm$ 4.2) $\mu$ mol/L, Taxol, IC<sub>50</sub> = (0.3 $\pm$ 0.1) $\mu$ mol/L; BGC823, IC<sub>50</sub> = (60.6 $\pm$ 2.8) $\mu$ mol/L; HeLa, IC<sub>50</sub> = (50.6 $\pm$ 0.4) $\mu$ mol/L, Taxol, IC<sub>50</sub> = (33.0 $\pm$ 6.1) $\mu$ mol/L; KB, IC<sub>50</sub> = (44.7 $\pm$ 4.0) $\mu$ mol/L, Taxol, IC<sub>50</sub> > 100 $\mu$ mol/L); apoptosis inducer (HL-60 cells, 15 $\mu$ mol/L, sub-G1 population = (59.1 $\pm$ 2.8)%, control sub-G1 population = (5.4 $\pm$ 3.2)%, positive control Taxol, sub-G1 population = (40.5 $\pm$ 0.2)%). **Source:** ZAO JIA *Gleditsia sinensis* [Syn. *Gleditsia horrida*] (fruit). **Ref:** 5015.

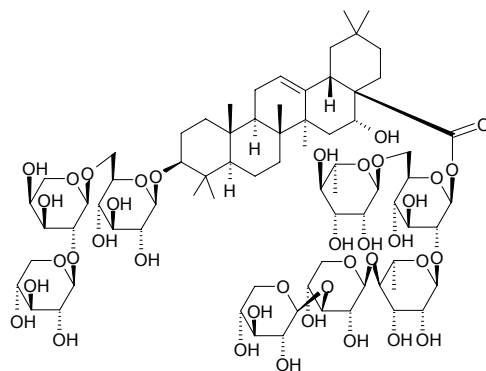


**8527 Gleditsiasaponin C'**

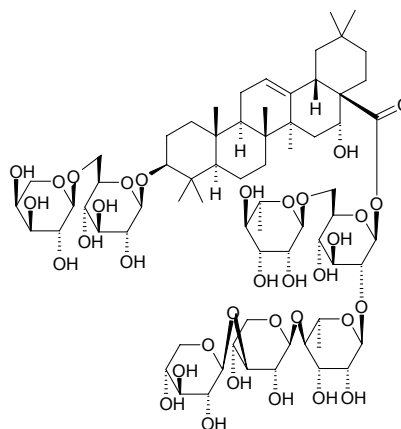
$C_{94}H_{148}O_{43}$  (1966.20).  $[\alpha]_D^{25} = -21^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Cytotoxic (HL-60,  $IC_{50} = (0.4 \pm 0.0) \mu\text{mol/L}$ , control Taxol,  $IC_{50} = (4.1E-4 \pm 1.1E-4) \mu\text{mol/L}$ ; MCF7,  $IC_{50} = (28.7 \pm 3.0) \mu\text{mol/L}$ , Taxol,  $IC_{50} = (15.3 \pm 2.6) \mu\text{mol/L}$ ; Bel7402,  $IC_{50} = (37.6 \pm 3.7) \mu\text{mol/L}$ , Taxol,  $IC_{50} = (0.3 \pm 0.1) \mu\text{mol/L}$ ; BGC823,  $IC_{50} = (40.0 \pm 3.4) \mu\text{mol/L}$ ; HeLa,  $IC_{50} = (33.9 \pm 0.0) \mu\text{mol/L}$ , Taxol,  $IC_{50} = (33.0 \pm 6.1) \mu\text{mol/L}$ ; KB,  $IC_{50} = (44.6 \pm 0.7) \mu\text{mol/L}$ , Taxol,  $IC_{50} > 100 \mu\text{mol/L}$ ); apoptosis inducer (HL-60 cells,  $15 \mu\text{mol/L}$ , sub-G1 population =  $(40.4 \pm 4.7)\%$ , control sub-G1 population =  $(5.4 \pm 3.2)\%$ , positive control Taxol, sub-G1 population =  $(40.5 \pm 0.2)\%$ ). **Source:** ZAO JIA *Gleditsia sinensis* [Syn. *Gleditsia horrida*] (fruit). **Ref:** 5015.

**8528 Gleditsiasaponin C'**

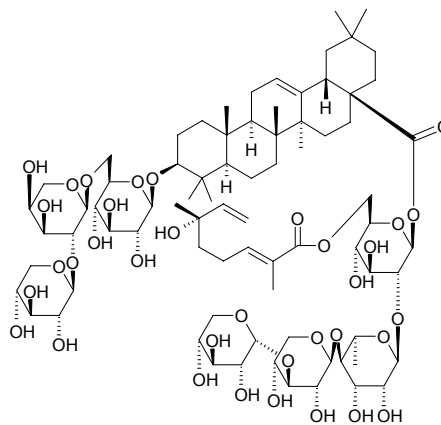
3-*O*-β-*D*-Xylopyranosyl(1→2)-α-*L*-arabinopyranosyl(1→6)-β-*D*-glucopyranosyl-28-*O*-β-*D*-Xylopyranosyl(1→3)-β-*D*-Xylopyranosyl(1→4)-α-*L*-rhamnopyranosyl(1→2)-[α-*L*-rhamnopyranosyl(1→6)]-β-*D*-glucopyranosyl echinocystic acid  $C_{74}H_{120}O_{38}$  (1617.76). White amorphous solid, mp 234–235°C(dec),  $[\alpha]_D^{21} = -18^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Cytotoxic (HL-60,  $IC_{50} = (100.0 \pm 5.2) \mu\text{mol/L}$ , control Taxol,  $IC_{50} = (4.1E-4 \pm 1.1E-4) \mu\text{mol/L}$ ; MCF7,  $IC_{50} = (35.7 \pm 2.5) \mu\text{mol/L}$ , Taxol,  $IC_{50} = (15.3 \pm 2.6) \mu\text{mol/L}$ ; Bel7402,  $IC_{50} > 100 \mu\text{mol/L}$ , Taxol,  $IC_{50} = (0.3 \pm 0.1) \mu\text{mol/L}$ ; BGC823,  $IC_{50} = (100 \pm 3.7) \mu\text{mol/L}$ ; HeLa,  $IC_{50} = (54.0 \pm 1.7) \mu\text{mol/L}$ , Taxol,  $IC_{50} = (33.0 \pm 6.1) \mu\text{mol/L}$ ; KB,  $IC_{50} > 100 \mu\text{mol/L}$ , Taxol,  $IC_{50} > 100 \mu\text{mol/L}$ )<sup>[5015]</sup>; apoptosis inducer (HL-60 cells,  $15 \mu\text{mol/L}$ , sub-G1 population =  $(8.6 \pm 2.6)\%$ , control sub-G1 population =  $(5.4 \pm 3.2)\%$ , positive control Taxol, sub-G1 population =  $(40.5 \pm 0.2)\%$ )<sup>[5015]</sup>. **Source:** YUN NAN ZAO JIA *Gleditsia delavayi*, ZAO JIA *Gleditsia sinensis* [Syn. *Gleditsia horrida*]. **Ref:** 2257, 2375, 5015.

**8529 Gleditsiasaponin E'**

$C_{69}H_{112}O_{34}$  (1485.64). White amorphous solid, mp 232–233°C(dec),  $[\alpha]_D^{21} = -33^\circ$  ( $c = 0.10$ , MeOH). **Source:** ZAO JIA *Gleditsia sinensis* [Syn. *Gleditsia horrida*]. **Ref:** 2375.

**8530 Gleditsioside A**

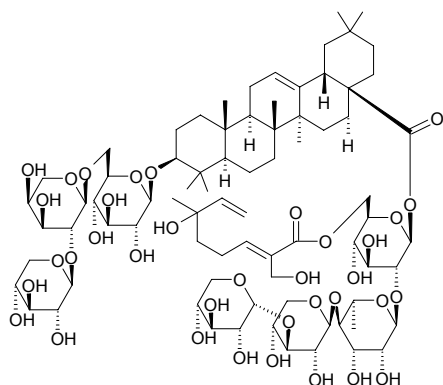
$C_{78}H_{124}O_{35}$  (1621.84).  $[\alpha]_D^{25} = -11^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Cytotoxic (HL-60,  $IC_{50} = (16.7 \pm 0.8) \mu\text{mol/L}$ , control Taxol,  $IC_{50} = (4.1E-4 \pm 1.1E-4) \mu\text{mol/L}$ ; MCF7,  $IC_{50} = (12.9 \pm 1.1) \mu\text{mol/L}$ , Taxol,  $IC_{50} = (15.3 \pm 2.6) \mu\text{mol/L}$ ; Bel7402,  $IC_{50} = (34.6 \pm 0.8) \mu\text{mol/L}$ , Taxol,  $IC_{50} = (0.3 \pm 0.1) \mu\text{mol/L}$ ; BGC823,  $IC_{50} = (37.5 \pm 2.5) \mu\text{mol/L}$ ; HeLa,  $IC_{50} = (35.8 \pm 1.2) \mu\text{mol/L}$ , Taxol,  $IC_{50} = 33.0 \pm 6.1 \mu\text{mol/L}$ ; KB,  $IC_{50} = (44.5 \pm 3.0) \mu\text{mol/L}$ , Taxol,  $IC_{50} > 100 \mu\text{mol/L}$ ); apoptosis inducer (HL-60 cells,  $15 \mu\text{mol/L}$ , sub-G1 population =  $(8.3 \pm 1.7)\%$ , control sub-G1 population =  $(5.4 \pm 3.2)\%$ , positive control Taxol, sub-G1 population =  $(40.5 \pm 0.2)\%$ ). **Source:** ZAO JIA *Gleditsia sinensis* [Syn. *Gleditsia horrida*] (fruit). **Ref:** 5015.



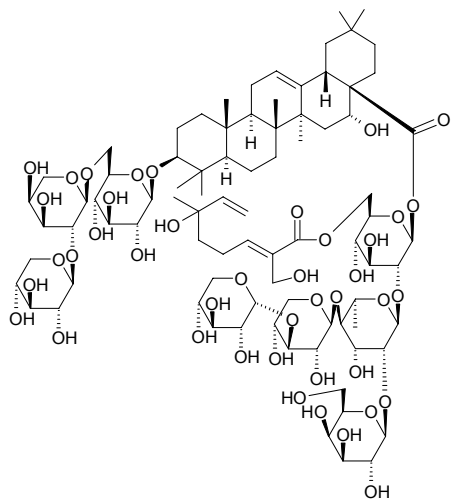


**8531 Gleditsioside B**

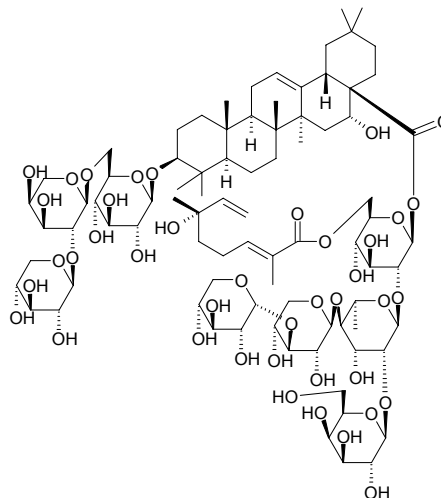
$C_{78}H_{124}O_{36}$  (1637.84).  $[\alpha]_D^{25} = -10^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Cytotoxic (HL-60,  $IC_{50} = (14.7 \pm 1.1) \mu\text{mol/L}$ , control Taxol,  $IC_{50} = (4.1E-4 \pm 1.1E-4) \mu\text{mol/L}$ ; MCF7,  $IC_{50} = (17.5 \pm 0.8) \mu\text{mol/L}$ , Taxol,  $IC_{50} = (15.3 \pm 2.6) \mu\text{mol/L}$ ; Bel7402,  $IC_{50} = (27.4 \pm 0.8) \mu\text{mol/L}$ , Taxol,  $IC_{50} = (0.3 \pm 0.1) \mu\text{mol/L}$ ; BGC823,  $IC_{50} = (46.6 \pm 4.6) \mu\text{mol/L}$ ; HeLa,  $IC_{50} = (35.9 \pm 1.7) \mu\text{mol/L}$ , Taxol,  $IC_{50} = (33.0 \pm 6.1) \mu\text{mol/L}$ ; KB,  $IC_{50} = (44.7 \pm 4.3) \mu\text{mol/L}$ , Taxol,  $IC_{50} > 100 \mu\text{mol/L}$ ); apoptosis inducer (HL-60 cells,  $15 \mu\text{mol/L}$ , sub-G1 population =  $(14.9 \pm 3.0)\%$ , control sub-G1 population =  $(5.4 \pm 3.2)\%$ , positive control Taxol, sub-G1 population =  $(40.5 \pm 0.2)\%$ ). **Source:** ZAO JIA *Gleditsia sinensis* [Syn. *Gleditsia horrida*] (fruit). **Ref:** 5015.

**8532 Gleditsioside C**

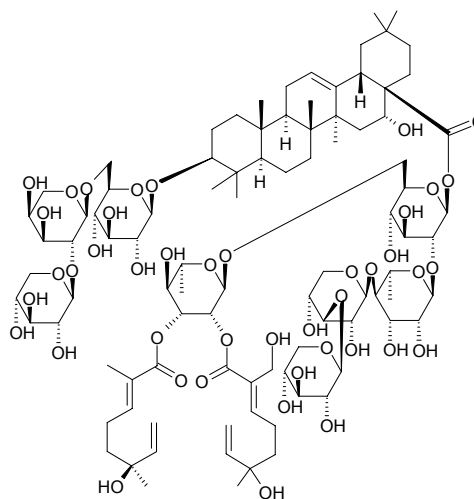
$C_{84}H_{134}O_{42}$  (1815.98).  $[\alpha]_D^{25} = -15^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Cytotoxic (HL-60,  $IC_{50} = (2.2 \pm 0.2) \mu\text{mol/L}$ , control Taxol,  $IC_{50} = (4.1E-4 \pm 1.1E-4) \mu\text{mol/L}$ ; MCF7,  $IC_{50} = (26.3 \pm 2.3) \mu\text{mol/L}$ , Taxol,  $IC_{50} = (15.3 \pm 2.6) \mu\text{mol/L}$ ; Bel7402,  $IC_{50} = (50.3 \pm 2.7) \mu\text{mol/L}$ , Taxol,  $IC_{50} = (0.3 \pm 0.1) \mu\text{mol/L}$ ; BGC823,  $IC_{50} = (50.6 \pm 4.2) \mu\text{mol/L}$ ; HeLa,  $IC_{50} = (36.7 \pm 3.2) \mu\text{mol/L}$ , Taxol,  $IC_{50} = (33.0 \pm 6.1) \mu\text{mol/L}$ ; KB,  $IC_{50} = (33.1 \pm 3.7) \mu\text{mol/L}$ , Taxol,  $IC_{50} > 100 \mu\text{mol/L}$ ); apoptosis inducer (HL-60 cells,  $15 \mu\text{mol/L}$ , sub-G1 population =  $(25.8 \pm 4.0)\%$ , control sub-G1 population =  $(5.4 \pm 3.2)\%$ , positive control Taxol, sub-G1 population =  $(40.5 \pm 0.2)\%$ ). **Source:** ZAO JIA *Gleditsia sinensis* [Syn. *Gleditsia horrida*] (fruit). **Ref:** 5015.

**8533 Gleditsioside D**

$C_{84}H_{134}O_{41}$  (1799.98).  $[\alpha]_D^{25} = -19^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Cytotoxic (HL-60,  $IC_{50} = (3.5 \pm 0.1) \mu\text{mol/L}$ , control Taxol,  $IC_{50} = (4.1E-4 \pm 1.1E-4) \mu\text{mol/L}$ ; MCF7,  $IC_{50} = (9.7 \pm 0.7) \mu\text{mol/L}$ , Taxol,  $IC_{50} = (15.3 \pm 2.6) \mu\text{mol/L}$ ; Bel7402,  $IC_{50} = (6.6 \pm 0.7) \mu\text{mol/L}$ , Taxol,  $IC_{50} = (0.3 \pm 0.1) \mu\text{mol/L}$ ; BGC823,  $IC_{50} = (6.0 \pm 2.2) \mu\text{mol/L}$ ; HeLa,  $IC_{50} = (4.7 \pm 0.7) \mu\text{mol/L}$ , Taxol,  $IC_{50} = (33.0 \pm 6.1) \mu\text{mol/L}$ ; KB,  $IC_{50} = (42.5 \pm 3.8) \mu\text{mol/L}$ , Taxol,  $IC_{50} > 100 \mu\text{mol/L}$ ); apoptosis inducer (HL-60 cells,  $15 \mu\text{mol/L}$ , sub-G1 population =  $(13.8 \pm 2.5)\%$ , control sub-G1 population =  $(5.4 \pm 3.2)\%$ , positive control Taxol, sub-G1 population =  $(40.5 \pm 0.2)\%$ ). **Source:** ZAO JIA *Gleditsia sinensis* [Syn. *Gleditsia horrida*] (fruit). **Ref:** 5015.

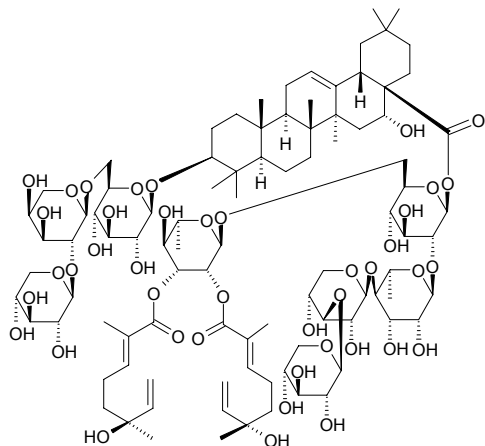
**8534 Gleditsioside E**

$C_{94}H_{148}O_{43}$  (1966.20).  $[\alpha]_D^{25} = -23^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Cytotoxic (Bel7402 cancer cell,  $IC_{50} = (3.1 \pm 2.8) \mu\text{mol/L}$ , control Paclitaxel,  $IC_{50} = (0.3 \pm 0.1) \mu\text{mol/L}$ ; BGC823,  $IC_{50} = (8.0 \pm 1.2) \mu\text{mol/L}$ ; HeLa,  $IC_{50} = (5.0 \pm 3.4) \mu\text{mol/L}$ , Paclitaxel,  $IC_{50} = (33.0 \pm 6.1) \mu\text{mol/L}$ ; HL-60,  $IC_{50} = (3.0 \pm 1.3) \mu\text{mol/L}$ , Paclitaxel,  $IC_{50} = (4.1E-4 \pm 1.1E-4) \mu\text{mol/L}$ ; KB,  $IC_{50} = (34.3 \pm 4.5) \mu\text{mol/L}$ ; MCF7,  $IC_{50} = (6.6 \pm 2.3) \mu\text{mol/L}$ , Paclitaxel,  $IC_{50} = (15.3 \pm 2.6) \mu\text{mol/L}$ )<sup>[5410]</sup>. **Source:** ZAO JIA *Gleditsia sinensis* [Syn. *Gleditsia horrida*] (fruit). **Ref:** 5015, 5410.

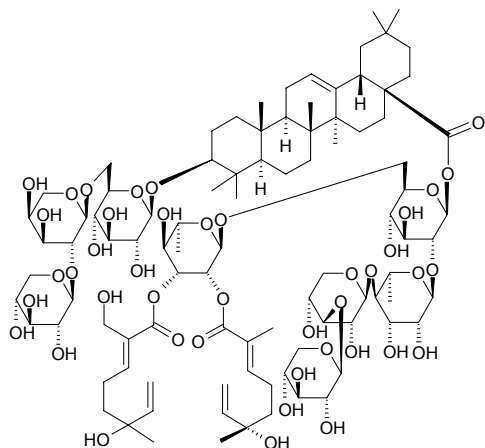


**8535 Gleditsioside F**

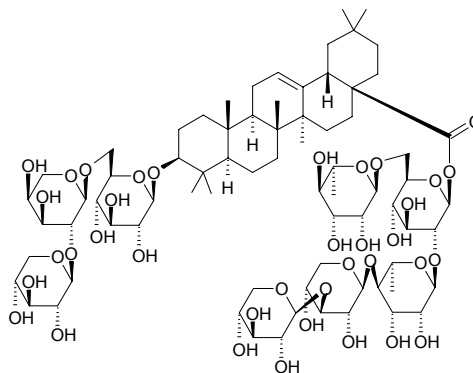
$C_{94}H_{148}O_{42}$  (1950.20).  $[\alpha]_D^{25} = -20^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Cytotoxic (HL-60,  $IC_{50} = (1.1 \pm 0.1) \mu\text{mol/L}$ , control Taxol,  $IC_{50} = (4.1 \times 10^{-4} \pm 1.1 \times 10^{-4}) \mu\text{mol/L}$ ; MCF7,  $IC_{50} = (23.6 \pm 3.2) \mu\text{mol/L}$ , Taxol,  $IC_{50} = (15.3 \pm 2.6) \mu\text{mol/L}$ ; Bel7402,  $IC_{50} = (3.5 \pm 0.1) \mu\text{mol/L}$ , Taxol,  $IC_{50} = (0.3 \pm 0.1) \mu\text{mol/L}$ ; BGC823,  $IC_{50} = (49.1 \pm 0.1) \mu\text{mol/L}$ ; HeLa,  $IC_{50} = (3.3 \pm 0.2) \mu\text{mol/L}$ , Taxol,  $IC_{50} = (33.0 \pm 6.1) \mu\text{mol/L}$ ; KB,  $IC_{50} = (36.7 \pm 3.0) \mu\text{mol/L}$ , Taxol,  $IC_{50} > 100 \mu\text{mol/L}$ ); apoptosis inducer (HL-60 cells,  $15 \mu\text{mol/L}$ , sub-G1 population =  $(16.6 \pm 2.0)\%$ , control sub-G1 population =  $(5.4 \pm 3.2)\%$ , positive control Taxol, sub-G1 population =  $(40.5 \pm 0.2)\%$ ). **Source:** ZAO JIA *Gleditsia sinensis* [Syn. *Gleditsia horrida*] (fruit). **Ref:** 5015.

**8536 Gleditsioside G**

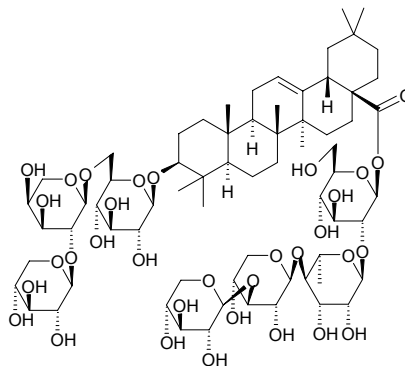
$C_{94}H_{148}O_{42}$  (1950.20).  $[\alpha]_D^{25} = -10^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Cytotoxic (HL-60,  $IC_{50} = (21.9 \pm 2.2) \mu\text{mol/L}$ , control Taxol,  $IC_{50} = (4.1 \times 10^{-4} \pm 1.1 \times 10^{-4}) \mu\text{mol/L}$ ; MCF7,  $IC_{50} = (35.8 \pm 5.8) \mu\text{mol/L}$ , Taxol,  $IC_{50} = (15.3 \pm 2.6) \mu\text{mol/L}$ ; Bel7402,  $IC_{50} = (39.0 \pm 0.3) \mu\text{mol/L}$ , Taxol,  $IC_{50} = (0.3 \pm 0.1) \mu\text{mol/L}$ ; BGC823,  $IC_{50} = (52.9 \pm 5.2) \mu\text{mol/L}$ ; HeLa,  $IC_{50} = (45.0 \pm 2.1) \mu\text{mol/L}$ , Taxol,  $IC_{50} = (33.0 \pm 6.1) \mu\text{mol/L}$ ; KB,  $IC_{50} = (42.5 \pm 0.8) \mu\text{mol/L}$ , Taxol,  $IC_{50} > 100 \mu\text{mol/L}$ ); apoptosis inducer (HL-60 cells,  $15 \mu\text{mol/L}$ , sub-G1 population =  $(27.5 \pm 4.8)\%$ , control sub-G1 population =  $(5.4 \pm 3.2)\%$ , positive control Taxol, sub-G1 population =  $(40.5 \pm 0.2)\%$ ). **Source:** ZAO JIA *Gleditsia sinensis* [Syn. *Gleditsia horrida*] (fruit). **Ref:** 5015.

**8537 Gleditsioside H**

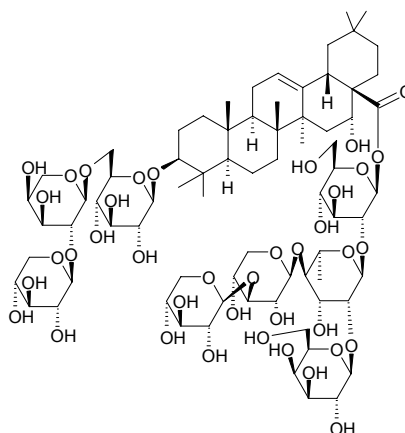
$C_{74}H_{120}O_{37}$  (1601.76). White amorphous solid, mp  $250\text{--}251^\circ\text{C}$ (dec),  $[\alpha]_D^{21} = -12^\circ$  ( $c = 0.10$ , MeOH). **Source:** ZAO JIA *Gleditsia sinensis* [Syn. *Gleditsia horrida*]. **Ref:** 2375.

**8538 Gleditsioside I**

$C_{68}H_{110}O_{33}$  (1455.62). White amorphous solid, mp  $255\text{--}256^\circ\text{C}$ (dec),  $[\alpha]_D^{21} = -17^\circ$  ( $c = 0.10$ , MeOH). **Source:** ZAO JIA *Gleditsia sinensis* [Syn. *Gleditsia horrida*]. **Ref:** 2375.

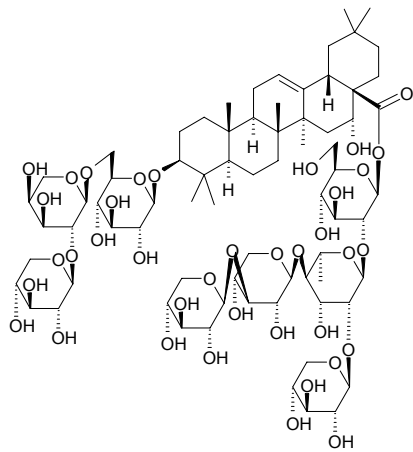
**8539 Gleditsioside J**

$C_{74}H_{120}O_{39}$  (1633.76). White amorphous solid, mp  $256\text{--}257^\circ\text{C}$ (dec),  $[\alpha]_D^{21} = -15^\circ$  ( $c = 0.10$ , MeOH). **Source:** ZAO JIA *Gleditsia sinensis* [Syn. *Gleditsia horrida*]. **Ref:** 2375.

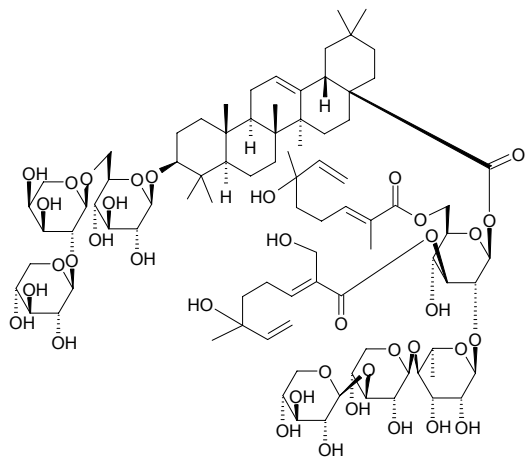


**8540 Gleditsioside K**

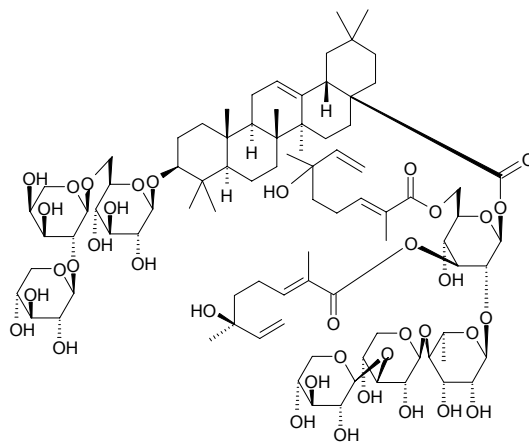
$C_{73}H_{118}O_{38}$  (1603.73). White amorphous solid, mp 238~239°C(dec),  $[\alpha]_D^{21} = -12^\circ$  ( $c = 0.10$ , MeOH). Source: ZAO JIA *Gleditsia sinensis* [Syn. *Gleditsia horrida*]. Ref: 2375.

**8541 Gleditsioside N**

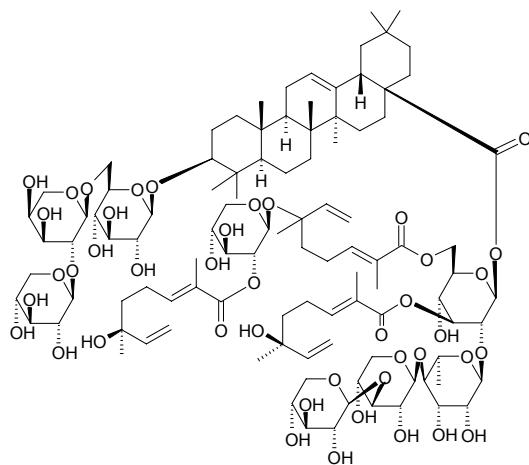
$C_{88}H_{138}O_{38}$  (1804.06).  $[\alpha]_D^{25} = -18^\circ$  ( $c = 0.10$ , MeOH). Pharm: Cytotoxic (HL-60,  $IC_{50} = (31.9 \pm 1.8) \mu\text{mol/L}$ , control Taxol,  $IC_{50} = (4.1 \times 10^{-4} \pm 1.1 \times 10^{-4}) \mu\text{mol/L}$ ; MCF7,  $IC_{50} = (58.1 \pm 4.2) \mu\text{mol/L}$ , Taxol,  $IC_{50} = (15.3 \pm 2.6) \mu\text{mol/L}$ ; Bel7402,  $IC_{50} = (49.3 \pm 5.8) \mu\text{mol/L}$ , Taxol,  $IC_{50} = (0.3 \pm 0.1) \mu\text{mol/L}$ ; BGC823,  $IC_{50} = (54.7 \pm 0.7) \mu\text{mol/L}$ ; HeLa,  $IC_{50} = (35.7 \pm 1.8) \mu\text{mol/L}$ , Taxol,  $IC_{50} = (33.0 \pm 6.1) \mu\text{mol/L}$ ; KB,  $IC_{50} = 60.6 \pm 3.5 \mu\text{mol/L}$ , Taxol,  $IC_{50} > 100 \mu\text{mol/L}$ ); apoptosis inducer (HL-60 cells,  $15 \mu\text{mol/L}$ , sub-G1 population =  $(9.1 \pm 0.9)\%$ , control sub-G1 population =  $(5.4 \pm 3.2)\%$ , positive control Taxol, sub-G1 population =  $(40.5 \pm 0.2)\%$ ). Source: ZAO JIA *Gleditsia sinensis* [Syn. *Gleditsia horrida*] (fruit). Ref: 5015.

**8542 Gleditsioside O**

$C_{88}H_{138}O_{37}$  (1788.06).  $[\alpha]_D^{25} = -20^\circ$  ( $c = 0.10$ , MeOH). Pharm: Cytotoxic (HL-60,  $IC_{50} = (68.1 \pm 2.3) \mu\text{mol/L}$ , control Taxol,  $IC_{50} = (4.1 \times 10^{-4} \pm 1.1 \times 10^{-4}) \mu\text{mol/L}$ ); apoptosis inducer (HL-60 cells,  $15 \mu\text{mol/L}$ , sub-G1 population =  $(7.8 \pm 2.5)\%$ , control sub-G1 population =  $(5.4 \pm 3.2)\%$ , positive control Taxol, sub-G1 population =  $(40.5 \pm 0.2)\%$ ). Source: ZAO JIA *Gleditsia sinensis* [Syn. *Gleditsia horrida*] (fruit). Ref: 5015.

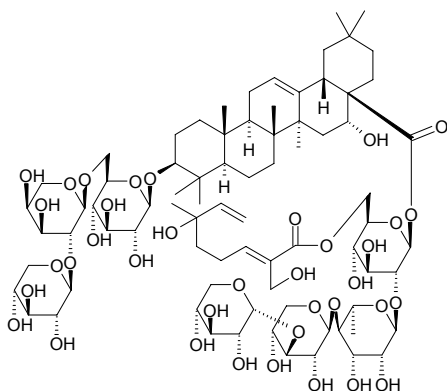
**8543 Gleditsioside P**

$C_{103}H_{160}O_{43}$  (2086.40).  $[\alpha]_D^{25} = -20^\circ$  ( $c = 0.10$ , MeOH). Pharm: Cytotoxic (HL-60,  $IC_{50} = (31.9 \pm 2.6) \mu\text{mol/L}$ , control Taxol,  $IC_{50} = (4.1 \times 10^{-4} \pm 1.1 \times 10^{-4}) \mu\text{mol/L}$ ; MCF7,  $IC_{50} = (23.1 \pm 2.0) \mu\text{mol/L}$ , Taxol,  $IC_{50} = (15.3 \pm 2.6) \mu\text{mol/L}$ ; Bel7402,  $IC_{50} = (40.0 \pm 2.3) \mu\text{mol/L}$ , Taxol,  $IC_{50} = (0.3 \pm 0.1) \mu\text{mol/L}$ ; BGC823,  $IC_{50} = (40.0 \pm 2.1) \mu\text{mol/L}$ ; HeLa,  $IC_{50} = (35.7 \pm 0.7) \mu\text{mol/L}$ , Taxol,  $IC_{50} = (33.0 \pm 6.1) \mu\text{mol/L}$ ; KB,  $IC_{50} = 36.7 \pm 4.3 \mu\text{mol/L}$ , Taxol,  $IC_{50} > 100 \mu\text{mol/L}$ ); apoptosis inducer (HL-60 cells,  $15 \mu\text{mol/L}$ , sub-G1 population =  $(31.4 \pm 2.2)\%$ , control sub-G1 population =  $(5.4 \pm 3.2)\%$ , positive control Taxol, sub-G1 population =  $(40.5 \pm 0.2)\%$ ). Source: ZAO JIA *Gleditsia sinensis* [Syn. *Gleditsia horrida*] (fruit). Ref: 5015.

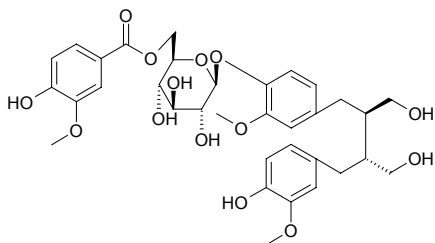


**8544 Gleditsioside Q**

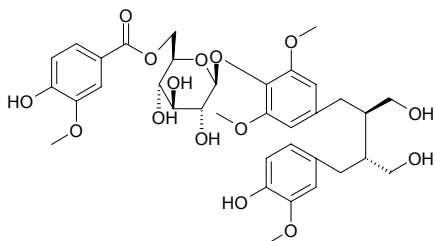
$C_{78}H_{124}O_{37}$  (1653.84).  $[\alpha]_D^{25} = -12^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Cytotoxic (HL-60,  $IC_{50} = (5.9 \pm 0.5) \mu\text{mol/L}$ , control Taxol,  $IC_{50} = (4.1 \times 10^{-4} \pm 1.1 \times 10^{-4}) \mu\text{mol/L}$ ; MCF7,  $IC_{50} = (34.4 \pm 0.8) \mu\text{mol/L}$ , Taxol,  $IC_{50} = (15.3 \pm 2.6) \mu\text{mol/L}$ ; Bel7402,  $IC_{50} = (29.0 \pm 2.7) \mu\text{mol/L}$ , Taxol,  $IC_{50} = (0.3 \pm 0.1) \mu\text{mol/L}$ ; BGC823,  $IC_{50} = (51.0 \pm 3.0) \mu\text{mol/L}$ ; HeLa,  $IC_{50} = (43.9 \pm 1.5) \mu\text{mol/L}$ , Taxol,  $IC_{50} = (33.0 \pm 6.1) \mu\text{mol/L}$ ; KB,  $IC_{50} = (44.9 \pm 3.6) \mu\text{mol/L}$ , Taxol,  $IC_{50} > 100 \mu\text{mol/L}$ ); apoptosis inducer (HL-60 cells,  $15 \mu\text{mol/L}$ , sub-G1 population =  $(24.2 \pm 3.0)\%$ , control sub-G1 population =  $(5.4 \pm 3.2)\%$ , positive control Taxol, sub-G1 population =  $(40.5 \pm 0.2)\%$ ). **Source:** ZAO JIA *Gleditsia sinensis* [Syn. *Gleditsia horrida*] (fruit). **Ref:** 5015.

**8545 Glehlinoside A**

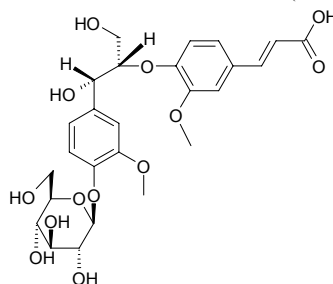
$C_{34}H_{43}O_{14}$  (674.71). Colorless amorphous solid,  $[\alpha]_D = -158.3^\circ$  ( $c = 0.08$ , MeOH). **Pharm:** Antioxidant (DPPH scavenger,  $EC_{50} = 18.9 \mu\text{g/mL} = 28.0 \mu\text{mol/L}$ , control Ascorbic acid,  $EC_{50} = 1.6 \mu\text{g/mL} = 9.1 \mu\text{mol/L}$ )<sup>[4154]</sup>. **Source:** BEI SHA SHEN *Glehnia littoralis* (underground part). **Ref:** 4154.

**8546 Glehlinoside B**

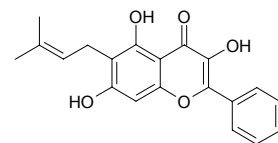
$C_{35}H_{44}O_{15}$  (704.73). Colorless amorphous solid,  $[\alpha]_D = -54.5^\circ$  ( $c = 0.107$ , MeOH). **Pharm:** Antioxidant (DPPH scavenger,  $EC_{50} > 50 \mu\text{g/mL}$ ,  $50 \mu\text{g/mL}$  InRt = 37%, control Ascorbic acid,  $EC_{50} = 1.6 \mu\text{g/mL} = 9.1 \mu\text{mol/L}$ )<sup>[4154]</sup>. **Source:** BEI SHA SHEN *Glehnia littoralis* (underground part). **Ref:** 4154.

**8547 Glehlinoside C**

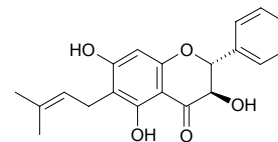
$C_{26}H_{32}O_{13}$  (552.54). Off-white amorphous solid,  $[\alpha]_D = -34.3^\circ$  ( $c = 0.087$ , MeOH). **Pharm:** Antioxidant (DPPH scavenger,  $EC_{50} > 50 \mu\text{g/mL}$ ,  $50 \mu\text{g/mL}$  InRt = 18%, control Ascorbic acid,  $EC_{50} = 1.6 \mu\text{g/mL} = 9.1 \mu\text{mol/L}$ ). **Source:** BEI SHA SHEN *Glehnia littoralis* (underground part). **Ref:** 4154.

**8548 Glepidotin A**

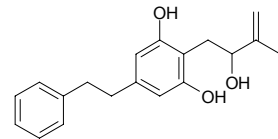
[42193-83-9]  $C_{20}H_{18}O_5$  (388.36). **Pharm:** Antibacterial (*Staphylococcus aureus*, *Mycobacterium smegmatis* and *Klebsiella pneumoniae*); antifungal (*Candida albicans*). **Source:** MEI ZHOU GAN CAO *Glycyrrhiza lepidota*. **Ref:** 1521.

**8549 Glepidotin B**

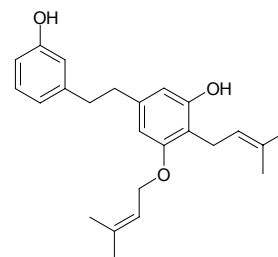
[87440-56-0]  $C_{20}H_{20}O_5$  (340.38). **Pharm:** Antimicrobial (broad spectrum). **Source:** MEI ZHOU GAN CAO *Glycyrrhiza lepidota*. **Ref:** 1521.

**8550 Glepidotin C**

[126026-25-3]  $C_{19}H_{22}O_3$  (298.39). **Pharm:** Antimicrobial. **Source:** MEI ZHOU GAN CAO *Glycyrrhiza lepidota*. **Ref:** 658.

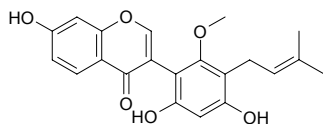
**8551 Glepidotin D**

2-(3-Methyl-2-butenyl)-3-O-(3-methyl-2-butenyl)-5-[2-(3-hydroxyphenyl)ethyl]-1,3-benzenediol  $C_{24}H_{30}O_3$  (366.50). **Pharm:** Anti-HIV ( $IC_{50} = 5.0 \mu\text{g/mL}$ ,  $EC_{50} = 2.0 \mu\text{g/mL}$ )<sup>[5180]</sup>. **Source:** MEI ZHOU GAN CAO *Glycyrrhiza lepidota* (stem and leaf). **Ref:** 5180.

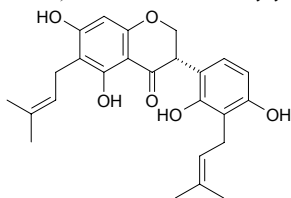


**8552 Glicoricone**

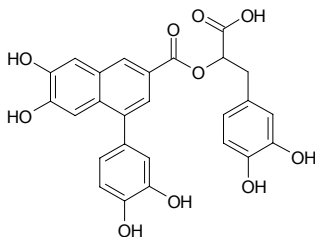
$C_{21}H_{20}O_6$  (368.39). Source: *Glycyrrhiza* sp. Ref: 2431.

**8553 Glisoflavanone**

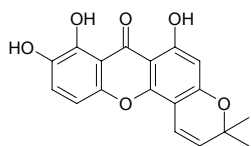
$C_{25}H_{28}O_6$  (424.50). Pale yellow acicular Crystals, mp 131°C,  $[\alpha]_D = 0^\circ$  ( $c = 1$ , acetone). Source: GAN CAO *Glycyrrhiza uralensis*. Ref: 748.

**8554 Globoidnan A**

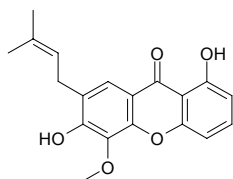
$C_{26}H_{20}O_{10}$  (492.44). Brown oil,  $[\alpha]_D = +14.4^\circ$  ( $c = 0.118$ , MeOH). Pharm: HIV integrase Inhibitor ( $IC_{50} = 0.64 \mu\text{mol/L}$ ). Source: *Eucalyptus globoidea* (bud). Ref: 3894.

**8555 Globulixanthone C**

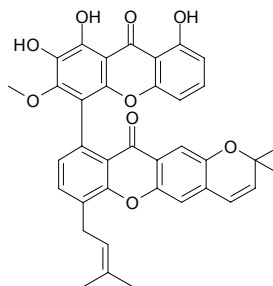
1,7,8-Trihydroxy-2,2-dimethylpyrano[5',6':3,4]xanthone  $C_{18}H_{14}O_6$  (326.31). Yellow needles, mp 285°C. Pharm: Antimicrobial (*in vitro*, significant activity against a range of microorganisms). Source: KA MAI LONG XIN FO NI A *Symphonia globulifera*. Ref: 2029.

**8556 Globulixanthone D**

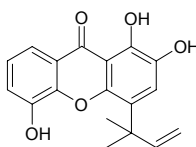
1,6-Dihydroxy-5-methoxy-7-(3-methylbut-2-enyl)xanthone  $C_{19}H_{18}O_5$  (326.35). Yellow Crystals, mp 120°C. Pharm: Antimicrobial (*in vitro*, significant activity against a range of microorganisms); cytotoxic ( $P_{388} \text{ED}_{50} = 0.42 \mu\text{g/mL}$ , control Mithramycin  $\text{ED}_{50} = 0.06 \mu\text{g/mL}$ , HT29  $\text{ED}_{50} = 0.98 \mu\text{g/mL}$ , control Mithramycin  $\text{ED}_{50} = 0.08 \mu\text{g/mL}$ )<sup>[4094]</sup>. Source: KA MAI LONG XIN FO NI A *Symphonia globulifera*, TAI WAN LV DAO TENG HUANG *Garcinia linii*. Ref: 2029, 4094.

**8557 Globulixanthone E**

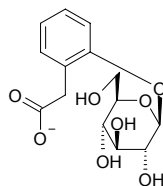
$C_{37}H_{30}O_9$  (618.65). Pale yellow amorphous powder, mp 228°C. Pharm: Antimicrobial (*in vitro*, significant activity against a range of microorganisms). Source: KA MAI LONG XIN FO NI A *Symphonia globulifera*. Ref: 2029.

**8558 Globuxanthone**

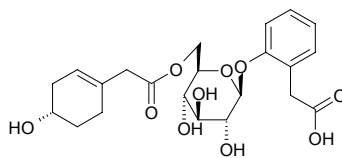
[13586-28-2]  $C_{18}H_{16}O_5$  (312.33). Source: KA MAI LONG XIN FO NI A *Symphonia globulifera*, *Garcinia vilsersiana* (bark). Ref: 1521, 3902.

**8559 Glochidacuminoside A**

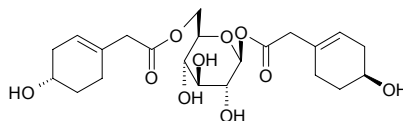
$C_{14}H_{17}O_8^-$  (313.29). Amorphous powder,  $[\alpha]_D^{20} = -39.2^\circ$  ( $c = 0.26$ , MeOH). Source: JIAN JIAN SUAN PAN ZI *Glochidion acuminatum* (leaf). Ref: 4286.

**8560 Glochidacuminoside B**

$C_{22}H_{28}O_{10}$  (452.46). Amorphous powder,  $[\alpha]_D^{23} = -48.0^\circ$  ( $c = 0.85$ , MeOH). Source: JIAN JIAN SUAN PAN ZI *Glochidion acuminatum* (leaf). Ref: 4286.

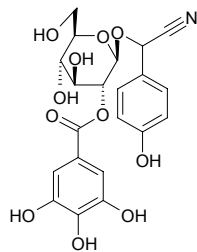
**8561 Glochidacuminoside C**

$C_{22}H_{32}O_{10}$  (456.49). Amorphous powder,  $[\alpha]_D^{26} = -25.8^\circ$  ( $c = 1.91$ , MeOH). Source: JIAN JIAN SUAN PAN ZI *Glochidion acuminatum* (leaf). Ref: 4286.

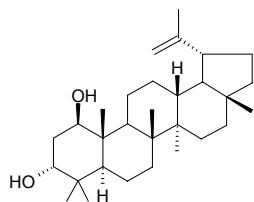


**8562 Glochidacuminoside D**

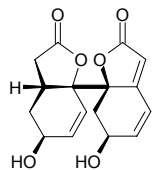
$C_{21}H_{21}NO_{11}$  (463.40). Amorphous powder,  $[\alpha]_D^{28} = -72.8^\circ$  ( $c = 0.67$ , MeOH).  
 Source: JIAN JIAN SUAN PAN ZI *Glochidion acuminatum* (leaf). Ref: 4286.

**8563 Glochidiol**

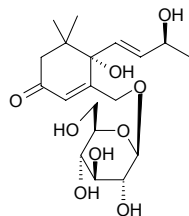
$C_{30}H_{50}O_2$  (442.73). mp 260~262°C,  $[\alpha]_D^{23} = +19^\circ$  ( $c = 0.98$ ,  $CHCl_3$ ); mp 265~267°C (hexane),  $[\alpha]_D^{20} = +18.3^\circ$  ( $c = 0.05$ g/mL,  $CHCl_3$ ). Pharm: Antineoplastic (EBV-EA induced by TPA,  $IC_{50} = 290$  (mol ratio/32pmol TPA), control Curcumin  $IC_{50} = 343$  (mol ratio/32pmol TPA)<sup>[4099]</sup>; cytotoxic (inhibition growth of hmn tumor cell lines, MCF7 (breast),  $GI_{50} = (6.6 \pm 0.7) \mu\text{mol/L}$ , control Doxorubicin,  $GI_{50} = (42.8 \pm 8.2) \mu\text{mol/L}$ ; NCI-H460 (lung),  $GI_{50} = (7.5 \pm 0.5) \mu\text{mol/L}$ , Doxorubicin,  $GI_{50} = (94.0 \pm 8.7) \mu\text{mol/L}$ ; SF268(CNS),  $GI_{50} = (9.7 \pm 0.3) \mu\text{mol/L}$ , Doxorubicin,  $GI_{50} = (93.0 \pm 7.0) \mu\text{mol/L}$ )<sup>[5065]</sup>. Source: CHUI ZHU SUAN PAN ZI *Glochidion zeylanicum* (stem cortex), MAO GUO SUAN PAN ZI *Glochidion eriocarpum* (root and stem wood), YUAN GUO SUAN PAN ZI *Glochidion sphaerogynum* (root and stem wood). Ref: 4099, 5065.

**8564 Glochidiolide**

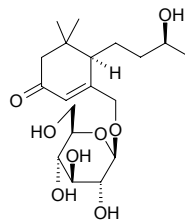
$C_{16}H_{16}O_6$  (304.30). Colorless rods, mp 210~213°C,  $[\alpha]_D^{25} = -69.8^\circ$  ( $c = 0.49$ , DMSO).  
 Source: JIAN JIAN SUAN PAN ZI *Glochidion acuminatum* (leaf). Ref: 4286.

**8565 Glochidionionoside A**

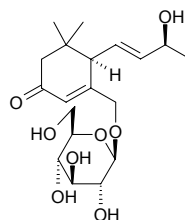
(6*S*,7*E*,9*S*)-Megastigman-3-one-4,7-diene-6,9,13-triol 13-*O*-β-*D*-glucopyranoside  $C_{19}H_{30}O_9$  (402.45). Amorphous powder,  $[\alpha]_D^{28} = +29.1^\circ$  ( $c = 1.48$ , MeOH). Source: CHUI ZHU SUAN PAN ZI *Glochidion zeylanicum* (leaf). Ref: 4323.

**8566 Glochidionionoside B**

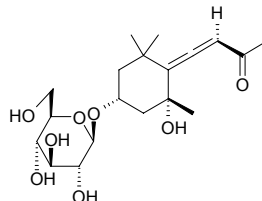
(6*R*,9*S*)-Megastigman-3-on-4-ene-9,13-diol  $C_{19}H_{32}O_8$  (388.46). Amorphous powder,  $[\alpha]_D^{28} = +7.4^\circ$  ( $c = 1.22$ , MeOH);  $[\alpha]_D^{25} = +7.5^\circ$  ( $c = 0.53$ , MeOH). Source: CHUI ZHU SUAN PAN ZI *Glochidion zeylanicum* (leaf), LV BEI GUI HUA *Excoecaria cochinchinensis* var. *viridis*. Ref: 4323, 4543.

**8567 Glochidionionoside C**

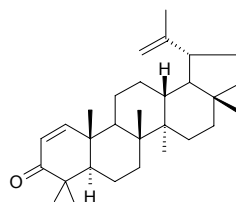
(6*R*,7*E*,9*S*)-Megastigman-3-one-4,7-diene-9,13-diol 13-*O*-β-*D*-glucopyranoside  $C_{19}H_{30}O_8$  (386.45). Amorphous powder,  $[\alpha]_D^{28} = +112.1^\circ$  ( $c = 1.42$ , MeOH). Source: CHUI ZHU SUAN PAN ZI *Glochidion zeylanicum* (leaf). Ref: 4323.

**8568 Glochidionionoside D**

$C_{19}H_{30}O_8$  (386.45). Amorphous powder,  $[\alpha]_D^{28} = -47.8^\circ$  ( $c = 1.15$ , MeOH).  
 Source: CHUI ZHU SUAN PAN ZI *Glochidion zeylanicum* (leaf). Ref: 4323.

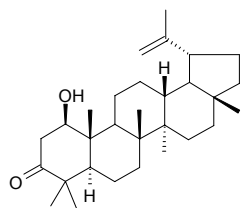
**8569 Glochidone**

$C_{30}H_{46}O$  (422.70). mp 165~167°C,  $[\alpha]_D^{23} = +42^\circ$  ( $c = 0.46$ ,  $CHCl_3$ ); mp 163~164°C (EtOH),  $[\alpha]_D^{20} = +70.6^\circ$  ( $c = 7$ mg/mL,  $CHCl_3$ ). Pharm: Antineoplastic (EBV-EA induced by TPA,  $IC_{50} = 341$  (mol ratio/32pmol TPA), control Curcumin  $IC_{50} = 343$  (mol ratio/32pmol TPA)<sup>[4099]</sup>; cytotoxic (inhibition growth of hmn tumor cell lines, MCF7 (breast),  $GI_{50} > 100 \mu\text{mol/L}$ , control Doxorubicin,  $GI_{50} = (42.8 \pm 8.2) \mu\text{mol/L}$ ; NCI-H460 (lung),  $GI_{50} > 100 \mu\text{mol/L}$ , Doxorubicin,  $GI_{50} = (94.0 \pm 8.7) \mu\text{mol/L}$ ; SF268(CNS),  $GI_{50} > 100 \mu\text{mol/L}$ , Doxorubicin,  $GI_{50} = (93.0 \pm 7.0) \mu\text{mol/L}$ )<sup>[5065]</sup>. Source: CHUI ZHU SUAN PAN ZI *Glochidion zeylanicum* (stem cortex), MAO GUO SUAN PAN ZI *Glochidion eriocarpum* (root and stem wood). Ref: 4099, 5065.

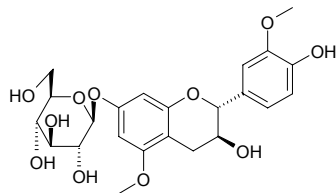


**8570 Glochidonol**

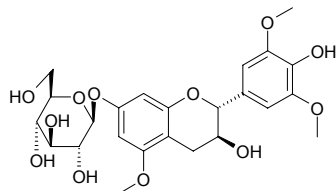
$C_{30}H_{48}O_2$  (440.72). mp 225–227°C,  $[\alpha]_D^{23} = +23^\circ$  ( $c = 0.95$ ,  $CHCl_3$ ); mp 228–230°C (hexane),  $[\alpha]_D^{20} = +50.7^\circ$  ( $c = 0.5g/100mL$ ,  $CHCl_3$ ). **Pharm:** Antineoplastic (EBV-EA induced by TPA,  $IC_{50} = 325$  (mol ratio/32pmol TPA), control Curcumin  $IC_{50} = 343$  (mol ratio/32pmol TPA)<sup>[4099]</sup>; cytotoxic (inhibition growth of hmn tumor cell lines, MCF7 (breast),  $GI_{50} = (9.0 \pm 3.7)\mu mol/L$ , control Doxorubicin,  $GI_{50} = (42.8 \pm 8.2)\mu mol/L$ ; NCI-H460 (lung),  $GI_{50} = (4.9 \pm 0.2)\mu mol/L$ , Doxorubicin,  $GI_{50} = (94.0 \pm 8.7)\mu mol/L$ ; SF268(CNS),  $GI_{50} = (9.8 \pm 0.5)\mu mol/L$ , Doxorubicin,  $GI_{50} = (93.0 \pm 7.0)\mu mol/L$ )<sup>[5065]</sup>. **Source:** CHUI ZHU SUAN PAN ZI *Glochidion zeylanicum* (stem cortex), MAO GUO SUAN PAN ZI *Glochidion eriocarpum* (root and stem wood), YUAN GUO SUAN PAN ZI *Glochidion sphaerogynum* (root and stem wood). **Ref:** 4099, 5065.

**8571 Glochiflavanoside A**

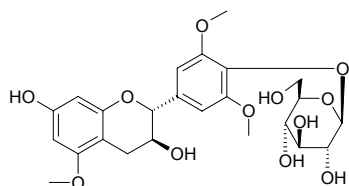
$C_{23}H_{28}O_{11}$  (480.47). Amorphous powder,  $[\alpha]_D^{22} = -47.1^\circ$  ( $c = 1.57$ , MeOH). **Source:** CHUI ZHU SUAN PAN ZI *Glochidion zeylanicum* (leaf). **Ref:** 4103.

**8572 Glochiflavanoside B**

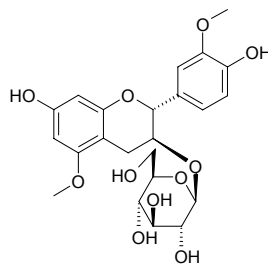
$C_{24}H_{30}O_{12}$  (510.50). Colorless needles (MeOH), mp 222–224°C,  $[\alpha]_D^{22} = -61.4^\circ$  ( $c = 0.57$ , MeOH). **Source:** CHUI ZHU SUAN PAN ZI *Glochidion zeylanicum* (leaf). **Ref:** 4103.

**8573 Glochiflavanoside C**

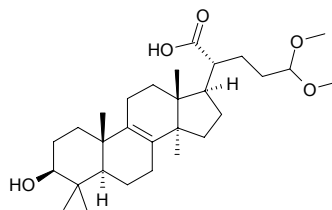
$C_{24}H_{30}O_{12}$  (510.50). Colorless needles (MeOH), mp 260–262°C,  $[\alpha]_D^{25} = -5.7^\circ$  ( $c = 0.35$ , MeOH). **Source:** CHUI ZHU SUAN PAN ZI *Glochidion zeylanicum* (leaf). **Ref:** 4103.

**8574 Glochiflavanoside D**

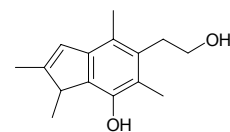
$C_{23}H_{28}O_{11}$  (480.47). Amorphous powder. **Source:** CHUI ZHU SUAN PAN ZI *Glochidion zeylanicum* (leaf). **Ref:** 4103.

**8575 Gloeophyllic acid A dimethylacetal**

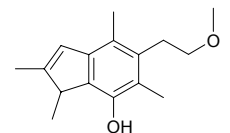
4,4,14α-Trimethyl-24-oxo-5α-chole-8-en-21-oic acid dimethylacetal  $C_{29}H_{48}O_5$  (476.70). Amorphous yellow powder, mp 205–210°C. **Source:** *Gloeophyllum odoratum*. **Ref:** 3972.

**8576 Gloeophyllol A**

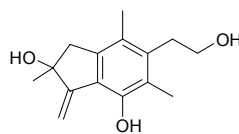
$C_{15}H_{20}O_2$  (232.23). Colorless oil,  $[\alpha]_D = -33^\circ$  ( $c = 0.2$ ,  $CHCl_3:CH_3OH = 19:1$ ). **Pharm:** Antibacterial inactive (*Bacillus brevis*, *Bacillus subtilis*, *Enterobacter dissolvens*, *Micrococcus luteus*, 100μg/filter disc); antifungal inactive (*Mucor miehei*, *Paecilomyces notatum*, *Paecilomyces variotii*, *Nematospora coryli*, 100μg/filter disc); cytotoxic inactive (HeLa-S3, HL-60, COS-7). **Source:** *Gloeophyllum* sp. **Ref:** 3968.

**8577 Gloeophyllol B**

$C_{16}H_{22}O_2$  (246.35). Colorless oil. **Pharm:** Antifungal (*Mucor miehei*, *Penicillium notatum*, 50μg/filter disc, weak activity); cytotoxic inactive (HeLa-S3, HL-60, COS-7). **Source:** *Gloeophyllum* sp. **Ref:** 3968.

**8578 Gloeophyllol C**

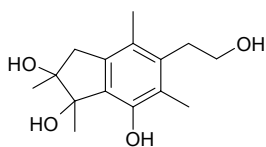
$C_{15}H_{20}O_3$  (248.32). Colorless oil, with no optical activity ( $c = 0.6$ ,  $CHCl_3$ ). **Pharm:** Antifungal inactive (*Mucor miehei*, *Penicillium notatum*, 50μg/filter disc); cytotoxic inactive (HeLa-S3, HL-60, COS-7). **Source:** *Gloeophyllum* sp. **Ref:** 3968.



**8579 Gloeophyllol D**

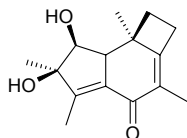
$C_{15}H_{22}O_4$  (266.34). Colorless oil, with no optical activity ( $c = 0.4$ ,  $CHCl_3$ ).

**Pharm:** Antibacterial inactive (*Bacillus brevis*, *Bacillus subtilis*, *Enterobacter dissolvens*, 100 $\mu$ g/filter disc); antifungal (*Mucor miehei*, *Paecilomyces notatum*, *Paecilomyces variotii*, *Nematospora coryli*, 100 $\mu$ g/filter disc); cytotoxic inactive (HeLa-S3, HL-60, COS-7). **Source:** *Gloeophyllum* sp. **Ref:** 3968.

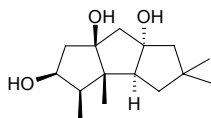
**8580 Gloeophyllone**

$C_{15}H_{20}O_3$  (248.32). Colorless oil,  $[\alpha]_D = -140^\circ$  ( $c = 0.3$ ,  $CHCl_3$ ). **Pharm:**

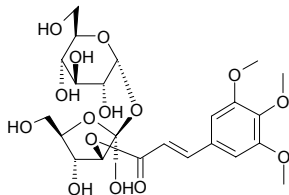
Antibacterial inactive (*Bacillus brevis*, *Bacillus subtilis*, *Enterobacter dissolvens*, 100 $\mu$ g/filter disc); antifungal inactive (*Mucor miehei*, *Paecilomyces notatum*, *Paecilomyces variotii*, *Nematospora coryli*, 100 $\mu$ g/filter disc); cytotoxic inactive (HeLa-S3, HL-60, COS-7). **Source:** *Gloeophyllum* sp. **Ref:** 3968.

**8581 Gloosteretriol**

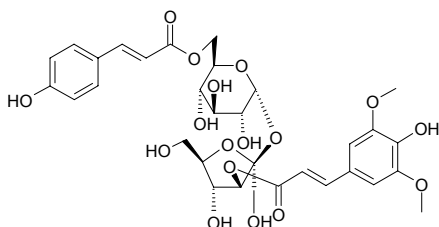
$C_{15}H_{26}O_3$  (254.37). Colorless prismatic Crystals, mp 205~206°C,  $[\alpha]_D^{22} = +5.6^\circ$  ( $c = 0.115$ , methanol). **Source:** YU ER *Gloeostereum incarnatum*. **Ref:** 214.

**8582 Glomeratose A**

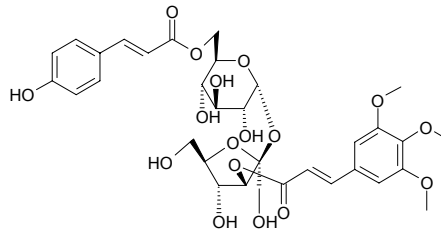
$C_{24}H_{34}O_{15}$  (562.53).  $[\alpha]_D = +5.7^\circ$ . **Source:** DA JIN NIU CAO *Polygala chinensis* [Syn. *Polygala glomerata*]. **Ref:** 2184.

**8583 Glomeratose B**

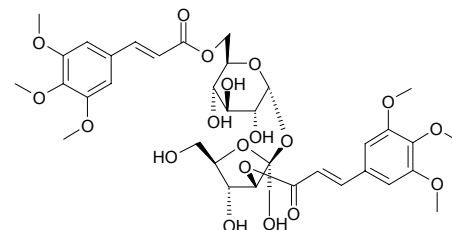
$C_{32}H_{38}O_{17}$  (694.65).  $[\alpha]_D = -51.6^\circ$ . **Source:** DA JIN NIU CAO *Polygala chinensis* [Syn. *Polygala glomerata*]. **Ref:** 2184.

**8584 Glomeratose C**

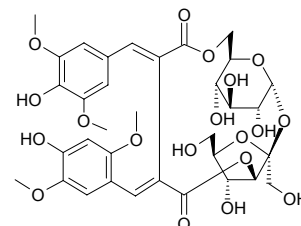
$C_{33}H_{40}O_{17}$  (708.68).  $[\alpha]_D = -71.2^\circ$ . **Source:** DA JIN NIU CAO *Polygala chinensis* [Syn. *Polygala glomerata*]. **Ref:** 2184.

**8585 Glomeratose D**

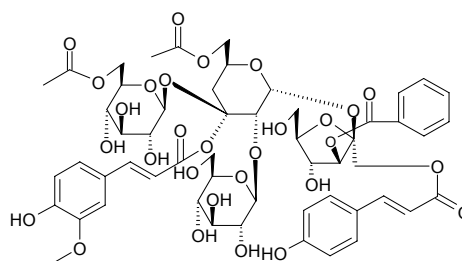
$C_{36}H_{46}O_{19}$  (782.76).  $[\alpha]_D = -55.8^\circ$ . **Source:** DA JIN NIU CAO *Polygala chinensis* [Syn. *Polygala glomerata*]. **Ref:** 2184.

**8586 Glomeratose E**

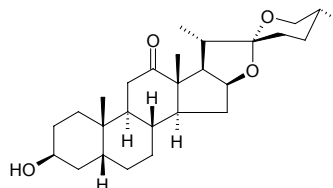
$C_{34}H_{40}O_{19}$  (752.69).  $[\alpha]_D = -133.0^\circ$ . **Source:** DA JIN NIU CAO *Polygala chinensis* [Syn. *Polygala glomerata*]. **Ref:** 2184.

**8587 Glomeratose F**

$C_{54}H_{64}O_{29}$  (1177.09).  $[\alpha]_D = -133.0^\circ$ . **Source:** DA JIN NIU CAO *Polygala chinensis* [Syn. *Polygala glomerata*]. **Ref:** 2184.

**8588 Gloriogenin**

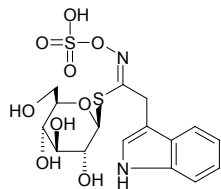
[38676-82-3]  $C_{27}H_{42}O_4$  (430.63). mp 166°C. **Source:** JIAN MA *Agave sisalana*. **Ref:** 2503.



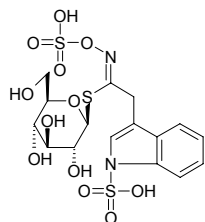


**8589 Glucobrassicin**

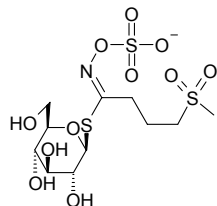
[4356-52-9]  $C_{16}H_{20}N_2O_9S_2$  (448.47). Source: BAO ZI GAN LAN *Brassica oleracea* var. *gemmifera*, DA QING YE *Isatis indigotica*, GAN LAN *Brassica oleracea* var. *capitata*, LAI FU ZI *Raphanus sativus*, OU ZHOU YOU CAI *Brassica napus*. Ref: 2, 1521.

**8590 Glucobrassicin-1-Sulfonate**

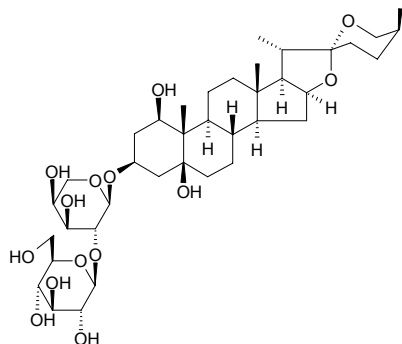
$C_{16}H_{20}N_2O_{12}S_3$  (528.54). Source: DA QING YE *Isatis indigotica*. Ref: 2, 6.

**8591 Glucocheirolin**

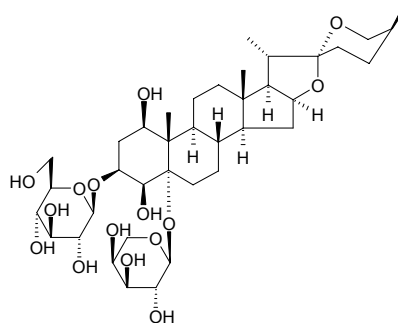
[554-86-9]  $C_{11}H_{20}NO_{11}S_3^-$  (438.47). Monohydrate, acicular crystals (90% ethanol), mp 158~160°C,  $[\alpha]_D^{27} = -21.56^\circ$  (water). Pharm: Antibacterial. Source: GUI ZHU XIANG *Cheiranthus cheiri*, HUA YE CAI *Brassica oleracea* var. *botrytis*, LA GEN *Armoracia lapathifolia*, WU JING GAN LAN *Brassica napus* var. *napobrassica*. Ref: 661.

**8592 Glucoconvallasaponin A**

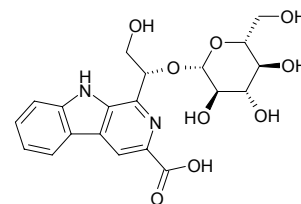
[19316-99-5]  $C_{38}H_{62}O_{14}$  (742.91). Source: LING LAN *Convallaria keiskei* [Syn. *Convallaria majalis*]. Ref: 6.

**8593 Glucoconvallasaponin B**

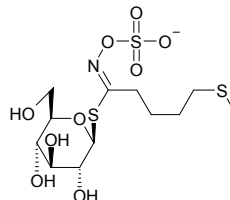
[16939-88-1]  $C_{38}H_{62}O_{15}$  (758.91). Source: LING LAN *Convallaria keiskei* [Syn. *Convallaria majalis*]. Ref: 6.

**8594 Glucodichotomine B**

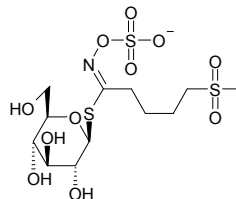
$C_{20}H_{22}N_2O_9$  (434.41). Yellow powder,  $[\alpha]_D^{27} = -28.2^\circ$  ( $c = 0.20$ , MeOH). Pharm:  $\beta$ -Hexosaminidase inhibitor inactive (RBL-2H3 cells, 100 $\mu$ mol/L, InRt = (3.2 $\pm$ 1.1)%), control Ketotifen fumarate, InRt = (19.1 $\pm$ 1.3)%<sup>[2571]</sup>. Source: YIN CHAI HU *Stellaria dichotoma* var. *lanceolata* (root: yield = 0.0014%). Ref: 2571.

**8595 Glucoerucin**

[21973-56-8]  $C_{12}H_{22}NO_9S_3^-$  (420.50). Source: BAO ZI GAN LAN *Brassica oleracea* var. *gemmifera*, GAN LAN *Brassica oleracea* var. *capitata*, WU JING GAN LAN *Brassica napus* var. *napobrassica*, ZHI MA CAI *Eruca sativa*. Ref: 658.

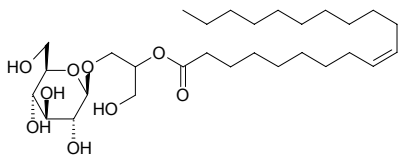
**8596 Glucoerysolin**

[74542-16-8]  $C_{12}H_{22}NO_{11}S_3^-$  (452.50). Pharm: Antibacterial (using its ligand erysoline); antifungal (using its ligand erysoline); cytotoxic (animal, using its ligand erysoline). Source: WU JING GAN LAN *Brassica napus* var. *napobrassica*, A FU HAN TANG JIE *Erysimum perofskianum*. Ref: 658.

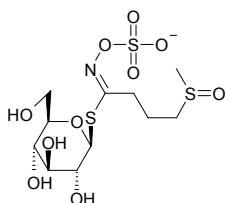


**8597 1-O-Gluco-2-O-gadoleic-glyceride**

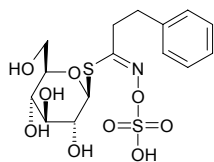
$C_{29}H_{54}O_9$  (546.75). White lamellar solid, mp 177~179°C. Source: CAO SU *Phlomis umbrosa*. Ref: 823.

**8598 Glucoiberin**

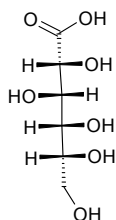
[554-88-1]  $C_{11}H_{20}NO_{10}S_3^-$  (422.47). Pharm: Cytotoxic (animal model). Source: BAO ZI GAN LAN *Brassica oleracea* var. *gemmifera*, GAN LAN *Brassica oleracea* var. *capitata*, HUA YE CAI *Brassica oleracea* var. *botrytis*, LA GEN *Armoracia lapathifolia*, PIE LAN *Brassica oleracea* var. *gongylodes*, QU QU HUA *Iberis amara*, YU YI GAN LAN *Brassica oleracea* var. *sabauda*. Ref: 658.

**8599 Gluconasturtiin**

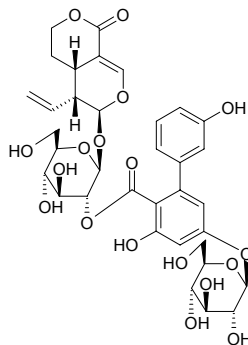
2-Phenylethyl glucosinolate [499-30-9]  $C_{15}H_{21}NO_9S_2$  (423.46). Off-white crystals (MeOH-EtOH, as K salt), mp 171°C (K salt),  $[\alpha]_D^{20} = -20.7^\circ$  ( $c = 1.0$ , H<sub>2</sub>O). Pharm: Cytotoxic (animal model). Source: BAI JIE ZI *Sinapis alba* [Syn. *Brassica alba*; *Brassica hirta*], DOU BAN CAI *Nasturtium officinale*, HEI JIE *Brassica nigra*, JIE CAI *Brassica juncea*, JIE ZI *Brassica juncea*, JIA DU XING CAI *Lepidium sativum*, OU ZHOU SHAN JIE *Barbarea vulgaris*. Ref: 658, 1521, 3196.

**8600 Gluconic acid**

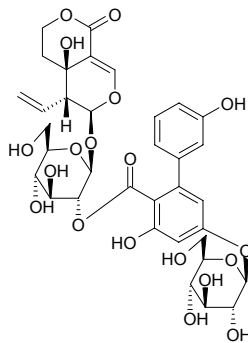
*D*-Gluconic acid  $C_6H_{12}O_7$  (196.16). mp 125~126°C. Source: HE YE *Nelumbo nucifera*. Ref: 6.

**8601 5''-O-β-D-Glucopyranosylamarogentin**

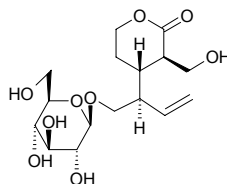
$C_{35}H_{40}O_{18}$  (748.70). Source: RI BEN ZHANG YA CAI *Swertia japonica*. Ref: 2573.

**8602 5''-O-β-D-Glucopyranosylamaroswerin**

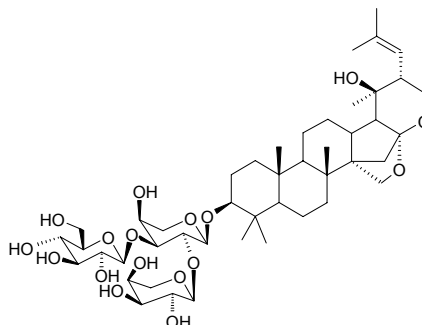
$C_{35}H_{40}O_{19}$  (764.70). Amorphous powder,  $[\alpha]_D^{25} = -40.4^\circ$  ( $c = 1.3$ , MeOH). Source: RI BEN ZHANG YA CAI *Swertia japonica*. Ref: 2573.

**8603 1-O-β-D-Glucopyranosylamplexin**

[157464-32-9]  $C_{16}H_{26}O_9$  (362.38). Source: BAI HUA LONG DAN *Gentiana algida*<sup>[704]</sup>, LONG DAN *Gentiana scabra* (dried rhizome and root)<sup>[3097]</sup>, RI BEN ZHANG YA CAI *Swertia japonica*<sup>[2528]</sup>. Ref: 704, 2528, 3097.

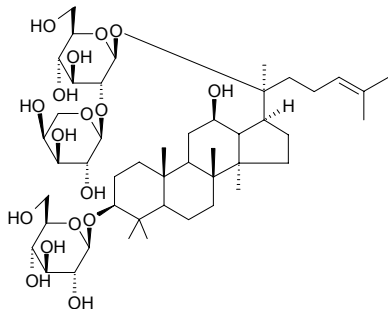
**8604 3-O-[β-D-Glucopyranosyl-(1→3)][α-L-arabinopyranosyl-(1→2)]-α-L-arabinopyranosyl-pseudojubenin**

$C_{46}H_{74}O_{17}$  (899.09). Source: JIA MA CHI XIAN *Bacopa monniera* (whole herb: yield = 0.019%fw). Ref: 4664.



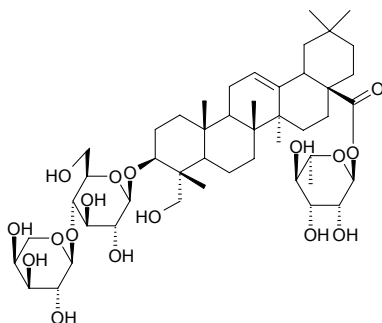
**8605 3 $\beta$ -O- $\beta$ -D-Glucopyranosyl-20-O-[ $\alpha$ -L-arabinopyranosyl(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranosyl]3 $\beta$ ,12 $\beta$ ,20(S)-trihydroxydammar-24-ene**

C<sub>47</sub>H<sub>80</sub>O<sub>17</sub> (917.15). Colorless amorphous powder, mp 189~192°C, [ $\alpha$ ]<sub>D</sub><sup>21</sup> = +34.5 (c = 0.08, MeOH). **Pharm:** Inhibits zoospore motility (*Aphanomyces cochlioides*, a causative fungus of spinach root rot). **Source:** SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. **Ref:** 2387.



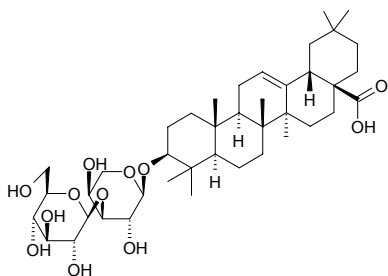
**8606 3 $\beta$ -O- $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -L-arabinopyranosyl hederagenin 28-O- $\alpha$ -L-rhamnopyranosyl ester**

C<sub>47</sub>H<sub>76</sub>O<sub>17</sub> (913.12). Colorless plate crystals (MeOH), mp 237~242°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +33.3° (c = 0.1, MeOH). **Pharm:** Antifungal (*Penicillium avellaneum*, MIA = 8 $\mu$ g/disc, control Amphotericin B, MIA = 0.04 $\mu$ g/disc; *Candida albicans*, MIA = 50 $\mu$ g/disc, control Amphotericin B, MIA = 0.4 $\mu$ g/disc; *Candida glabrata*, MIA = 20 $\mu$ g/disc, Amphotericin B, MIA = 0.8 $\mu$ g/disc; *Saccharomyces cerevisiae*, MIA = 5 $\mu$ g/disc, Amphotericin B, MIA = 3.2 $\mu$ g/disc; *Cryptococcus neoformans*, MIA = 50 $\mu$ g/disc, Amphotericin B, MIA = 0.08 $\mu$ g/disc; *T. beigeli*, MIA = 10 $\mu$ g/disc, Amphotericin B, MIA = 0.8 $\mu$ g/disc; *P. oryzae*, MIA = 10 $\mu$ g/disc, Amphotericin B, MIA = 0.08 $\mu$ g/disc). **Source:** GAN QING TIE XIAN LIAN *Clematis tangutica*. **Ref:** 5413.



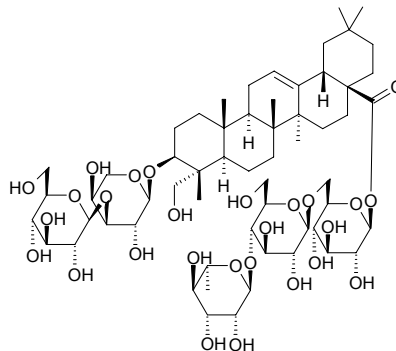
**8607 3-O- $\beta$ -D-Glucopyranosyl(1 $\rightarrow$ 3)- $\alpha$ -L-arabinopyranosyl oleanolic acid**

C<sub>41</sub>H<sub>66</sub>O<sub>12</sub> (750.98). White powder (CHCl<sub>3</sub>/MeOH), mp 224~226°C. **Source:** HUANG HUA BAI JIANG *Patrinia scabiosaefolia*. **Ref:** 2455.



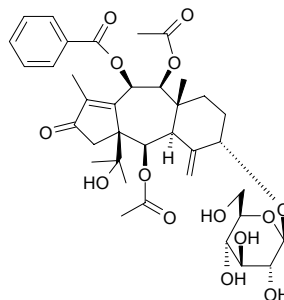
**8608 3 $\beta$ -[(O- $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -L-arabinopyranosyl)oxy]-23-hydroxyolean-12-en-28-oic acid O- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl ester**

C<sub>59</sub>H<sub>96</sub>O<sub>27</sub> (1237.41). **Source:** SAN YE MU TONG *Akebia trifoliata* (stem). **Ref:** 4545.



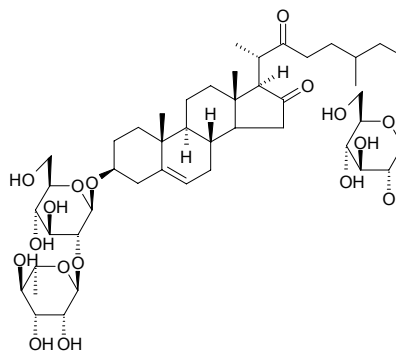
**8609 5 $\alpha$ -O-( $\beta$ -D-Glucopyranosyl)-10 $\beta$ -benzoyltaxacustone**

C<sub>37</sub>H<sub>48</sub>O<sub>14</sub> (716.79). mp 178~180°C, [ $\alpha$ ]<sub>D</sub> = -92.6° (CHCl<sub>3</sub>). **Source:** ZI SHAN *Taxus cuspidata*. **Ref:** 662.



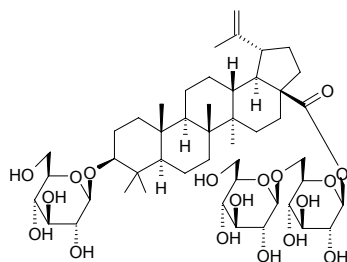
**8610 26-O- $\beta$ -D-Glucopyranosyl-3 $\beta$ ,26-dihydroxy- $A^5$ -choleslen-16,22-dioxo-3-O- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranoside**

C<sub>45</sub>H<sub>72</sub>O<sub>18</sub> (901.06). White powder (MeOH), mp 225~226°C, mp 208~209°C. **Source:** BAI HE *Lilium brownii* var. *viridulum* [Syn. *Lilium brownii* var. *colchesteri*]. **Ref:** 418, 441.



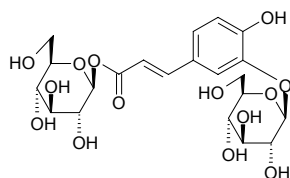
**8611 3-O-β-D-Glucopyranosyl betulinic acid-28-O-β-D-glucopyranosyl-(1→6)-β-D-glucopyranoside**

C<sub>48</sub>H<sub>78</sub>O<sub>18</sub> (943.15). White powder, mp 204~206°C,  $[\alpha]_D^{20} = -16.9^\circ$  ( $c = 0.5$ , methanol). Source: DONG BEI CI REN SHEN *Oplopanax elatus*. Ref: 370.



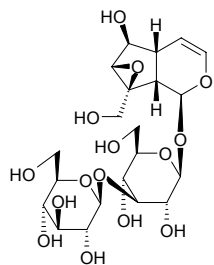
**8612 1-O-(3'-O-β-D-Glucopyranosyl)-(E)-caffeoyl-β-D-glucopyranose**

C<sub>21</sub>H<sub>28</sub>O<sub>14</sub> (504.45). Yellow amorphous powder,  $[\alpha]_D^{15} = -438.4^\circ$  ( $c = 0.5$ , MeOH). Source: GE XUN *Balanophora japonica* (underground part: yield = 0.0026%). Ref: 4101.



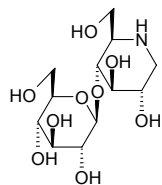
**8613 3'-O-β-D-Glucopyranosyl-catalpol**

C<sub>21</sub>H<sub>32</sub>O<sub>15</sub> (524.48). Amorphous powder,  $[\alpha]_D^{27} = -74.9^\circ$  ( $c = 3.41$ , MeOH). Source: CHA RU SHI WAN CUO *Asystasia intrusa*. Ref: 2589.



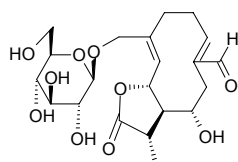
**8614 4-O-β-D-Glucopyranosyl-1-deoxyojirimycin**

C<sub>12</sub>H<sub>23</sub>NO<sub>9</sub> (325.32). Source: *Morus* sp. Ref: 2513.



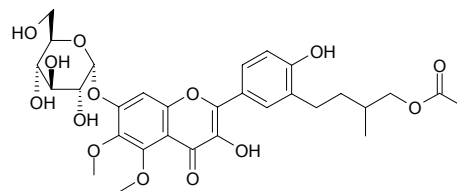
**8615 15-O-β-D-Glucopyranosyl-11β,13-dihydrourospermal A**

C<sub>21</sub>H<sub>30</sub>O<sub>10</sub> (442.47). Oil. Source: XU DUAN JU *Sonchus asper* [Syn. *Sonchus oleraceus* var. *asper*] (root). Ref: 3923.



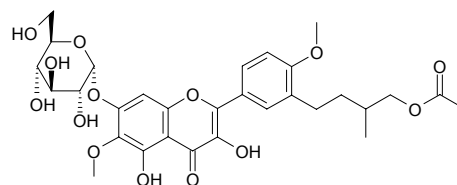
**8616 7-O-α-D-Glucopyranosyl-3,4'-dihydroxy-3'-(4''-acetoxy-3''-methylbutyl)-5,6-dimethoxyflavone**

C<sub>30</sub>H<sub>36</sub>O<sub>14</sub> (620.61). Yellowish gummy solid,  $[\alpha]_D^{24} = +14.2^\circ$  ( $c = 0.07$ , MeOH). Pharm: α-Glucosidase inhibitor inactive. Source: JIA LIAN QIAO YE *Duranta repens*. Ref: 4050.



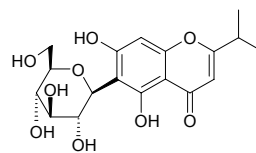
**8617 7-O-α-D-Glucopyranosyl-3,5-dihydroxy-3'-(4''-acetoxy-3''-methylbutyl)-6,4'-dimethoxyflavone**

C<sub>30</sub>H<sub>36</sub>O<sub>14</sub> (620.61). Yellowish gummy solid,  $[\alpha]_D^{24} = +27^\circ$  ( $c = 0.1$ , MeOH). Pharm: α-Glucosidase inhibitor (IC<sub>50</sub> = (65.5±2.5)μmol/L, control Deoxyojirimycin, IC<sub>50</sub> = (425.6±8.1)μmol/L). Source: JIA LIAN QIAO YE *Duranta repens*. Ref: 4050.



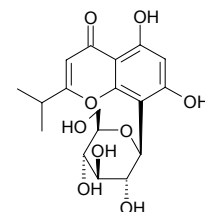
**8618 6β-C-Glucopyranosyl-5,7-dihydroxy-2-isopropylchromone**

C<sub>18</sub>H<sub>22</sub>O<sub>9</sub> (382.37). Colorless needles, mp 142~145°C,  $[\alpha]_D^{21} = +37.4^\circ$  ( $c = 0.51$ , MeOH). Source: GANG SONG *Baeckea frutescens*. Ref: 1895.



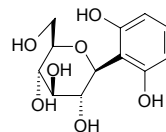
**8619 8β-C-Glucopyranosyl-5,7-dihydroxy-2-isopropylchromone**

C<sub>18</sub>H<sub>22</sub>O<sub>9</sub> (382.37). Colorless needles, mp 145~153°C,  $[\alpha]_D^{21} = +6.08^\circ$  ( $c = 1.05$ , MeOH). Source: GANG SONG *Baeckea frutescens*. Ref: 1895.



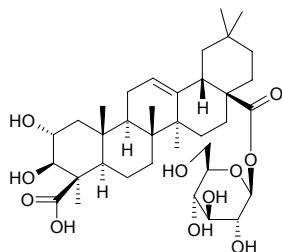
**8620 C-β-D-Glucopyranosyl-2,6-dihydroxyl benzene**

C<sub>12</sub>H<sub>16</sub>O<sub>7</sub> (272.26). Source: NANG ZHUANG ZI TAN *Pterocarpus marsupium* (heartwood). Ref: 3789.



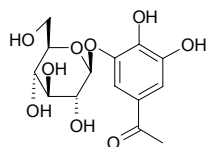
**8621 28-O-β-D-Glucopyranosyl-2α-3β-dihydroxyolean-12-ene-24,28-dioic acid**

C<sub>36</sub>H<sub>56</sub>O<sub>11</sub> (664.84). **Pharm:** Tissue factor inhibitor (IC<sub>50</sub> = 0.036 mmol/L/Unit of TF). **Source:** MU GUA *Chaenomeles sinensis*. **Ref:** 5387.



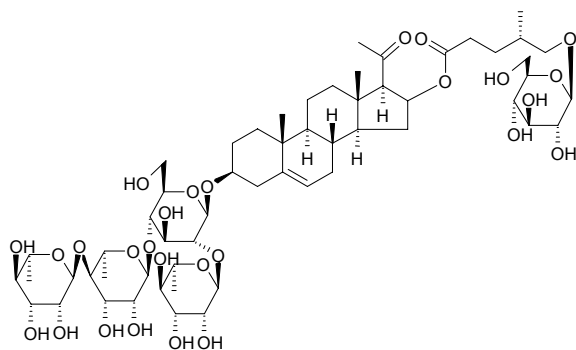
**8622 1-(3-O-β-D-Glucopyranosyl-4,5-dihydroxyphenyl)-ethanone**

C<sub>14</sub>H<sub>18</sub>O<sub>9</sub> (330.29). **Source:** HU ZHANG *Polygonum cuspidatum*. **Ref:** 4186.



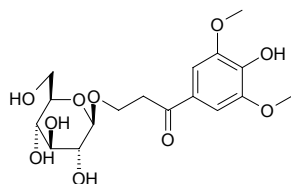
**8623 26-O-β-D-Glucopyranosyl-3β,26-dihydroxy-20,22-seco-25(R)-furost-5-en-20,22-dione-3-O-α-L-rhamnopyranosyl-(1→4)-α-L-rhamnopyranosyl-(1→4)-[α-L-rhamnopyranosyl-(1→2)]-β-D-glucopyranoside**

C<sub>57</sub>H<sub>92</sub>O<sub>27</sub> (1209.35). White amorphous powder. **Pharm:** Antifungal inactive (*Candida albicans*, *Candida glabrata*, *Candida tropicalis*, MIC > 200 μg/mL). **Source:** YUAN SHU YU *Dioscorea rotundata* [Syn. *Dioscorea cayenensis*]. **Ref:** 2560.



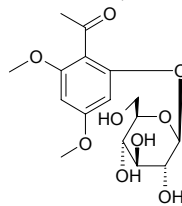
**8624 3-O-(β-D-Glucopyranosyl)-1-(3',5'-dimethoxy-4'-hydroxyphenyl)-1-propanone**

C<sub>17</sub>H<sub>24</sub>O<sub>10</sub> (388.37). White powder. **Source:** XIAO YE SHI NAN *Photinia parvifolia* (stem). **Ref:** 4553.



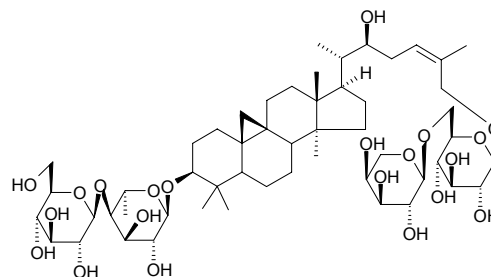
**8625 2-O-(2)-β-D-Glucopyranosyl-4,6-dimethoxy phenylenthanone**

C<sub>16</sub>H<sub>22</sub>O<sub>9</sub> (358.35). White powder. **Source:** YAN SHENG JIA MU ZEI *Anabasis salsa*, DUAN YE JIA MU ZEI *Anabasis brevifolia*. **Ref:** 4861.



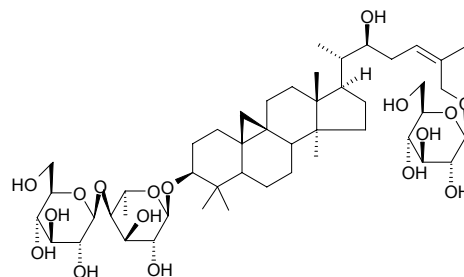
**8626 3-O-β-D-Glucopyranosyl-(1→4)-β-D-fucopyranosyl (22S,24Z)-cycloart-24-en-3β,22,26-triol 26-O-α-L-arabinopyranosyl-(1→6)-β-D-glucopyranoside**

C<sub>53</sub>H<sub>88</sub>O<sub>21</sub> (1061.28). White powder, [α]<sub>D</sub> = 26.4° (c = 0.025, MeOH). **Source:** HUA DONG TANG SONG CAO *Thalictrum fortunei* (aerial parts: yield = 0.0040% dw). **Ref:** 911.



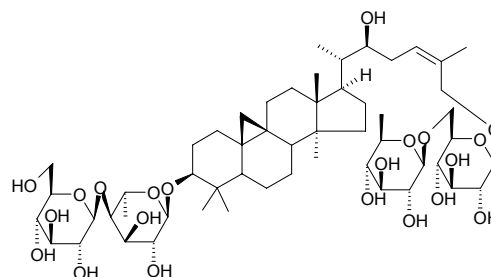
**8627 3β-O-β-D-Glucopyranosyl-(1→4)-β-D-fucopyranosyl (22S,24Z)-cycloart-24-en-3β,22,26-triol 26-O-β-D-glucopyranoside**

C<sub>48</sub>H<sub>80</sub>O<sub>17</sub> (929.16). White powder, [α]<sub>D</sub> = 7.40° (c = 0.14, MeOH). **Source:** HUA DONG TANG SONG CAO *Thalictrum fortunei* (aerial parts: yield = 0.0048% dw). **Ref:** 911.



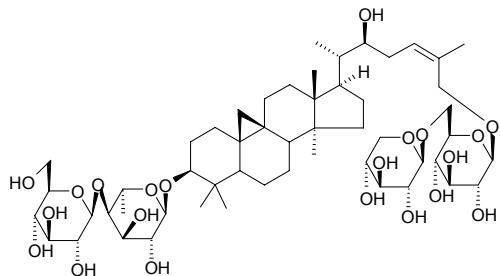
**8628 3-O-β-D-Glucopyranosyl-(1→4)-β-D-fucopyranosyl (22S,24Z)-cycloart-24-en-3β,22,26-triol 26-O-β-D-quinovopyranosyl-(1→6)-β-D-glucopyranoside**

C<sub>54</sub>H<sub>90</sub>O<sub>21</sub> (1075.31). White powder, [α]<sub>D</sub> = 3.58° (c = 0.12, MeOH). **Source:** HUA DONG TANG SONG CAO *Thalictrum fortunei* (aerial parts: yield = 0.0025% dw). **Ref:** 911.



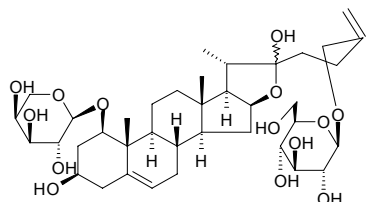
**8629 3-O-β-D-Glucopyranosyl-(1→4)-β-D-fucopyranosyl (22S,24Z)-cycloart-24-en-3β,22,26-triol 26-O-β-D-xylopyranosyl-(1→6)-β-D-glucopyranoside**

C<sub>53</sub>H<sub>88</sub>O<sub>21</sub> (1061.28). White powder, [α]<sub>D</sub><sup>20</sup> = -2.91° (c = 0.28, MeOH). Source: HUA DONG TANG SONG CAO *Thalictrum fortunei* (aerial parts: yield = 0.0017%dw). Ref: 911.



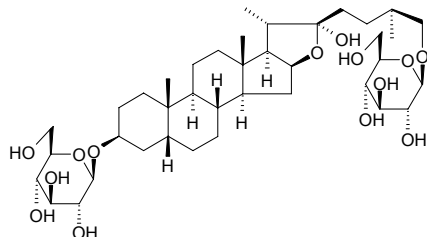
**8630 26-O-β-D-Glucopyranosyl-furostan-5,25(27)-diene-1β,3β,22β,26-tetrahydroxy-1-O-α-L-arabinopyranoside**

C<sub>38</sub>H<sub>60</sub>O<sub>14</sub> (740.89). White powder. Source: JIAN YE LONG XUE SHU *Dracaena cochinchinensis*. Ref: 2114.



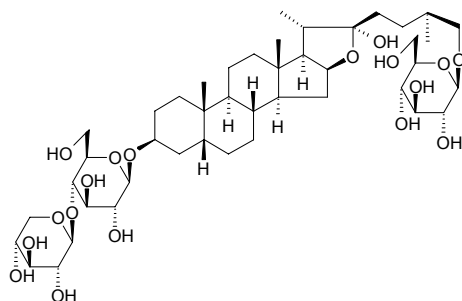
**8631 26-O-β-D-Glucopyranosylfurostane-3β,26-diol-3-O-β-D-glucopyranoside**

C<sub>39</sub>H<sub>66</sub>O<sub>14</sub> (758.95). [α]<sub>D</sub><sup>21</sup> = -48.0° (c = 1.00, MeOH). Source: GE BI TIAN MEN *Asparagus gobicus* (root). Ref: 4975.



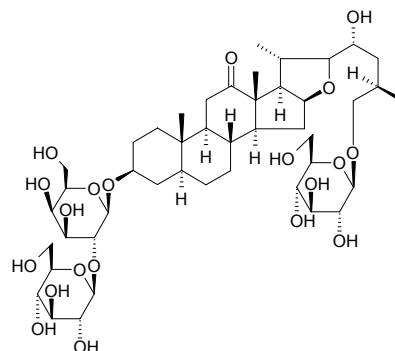
**8632 26-O-β-D-Glucopyranosylfurostane-3β,26-diol-3-O-β-D-xylopyranosyl-(1→4)-β-D-glucopyranoside**

C<sub>44</sub>H<sub>74</sub>O<sub>18</sub> (891.07). [α]<sub>D</sub><sup>21</sup> = -29.5° (c = 0.75, MeOH). Pharm: Cytotoxic (*in vitro*, HO-8910, IC<sub>50</sub> > 226 μmol/L, Vincristine, IC<sub>50</sub> = (25.1 ± 1.9) μmol/L; Bel7405, IC<sub>50</sub> > 226 μmol/L, Vincristine, IC<sub>50</sub> = (31.4 ± 3.4) μmol/L). Source: GE BI TIAN MEN *Asparagus gobicus* (root). Ref: 4975.



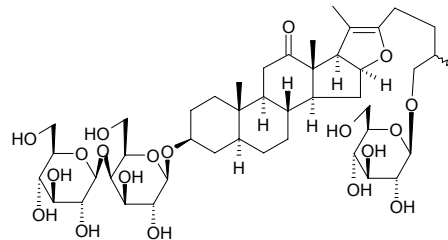
**8633 26-O-β-D-Glucopyranosyl(25R)-5α-furostane-12-one-3β,22α,26-triol-3-O-β-D-glucopyranosyl-(1→2)-β-D-galactopyranoside**

C<sub>45</sub>H<sub>74</sub>O<sub>20</sub> (935.08). White powder, [α]<sub>D</sub><sup>15</sup> = -15° (c = 0.2, pyridine). Pharm: Enhances sex drive; inhibits onset of senility; treatment of angiocardiopathy. Source: CI JI LI *Tribulus terrestris*. Ref: 688.



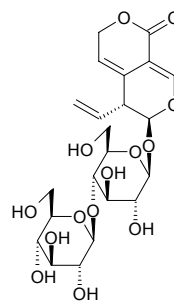
**8634 26-O-β-D-Glucopyranosyl(25R,S)-5α-furostane-12-one-20(22)-en-3β,26-diol-3-O-β-D-glucopyranosyl-(1→4)-β-D-galactopyranoside**

C<sub>45</sub>H<sub>72</sub>O<sub>19</sub> (917.06). White powder, [α]<sub>D</sub><sup>15</sup> = +5° (c = 0.2, pyridine). Pharm: Enhances sex drive; inhibits onset of senility; treatment of angiocardiopathy. Source: CI JI LI *Tribulus terrestris*. Ref: 688.



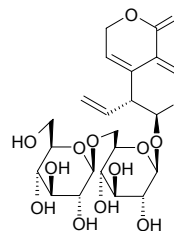
**8635 4'-O-β-D-Glucopyranosylgentiopicroside**

C<sub>22</sub>H<sub>30</sub>O<sub>14</sub> (518.48). Source: LONG DAN *Gentiana scabra* (dried rhizome and root). Ref: 3097.



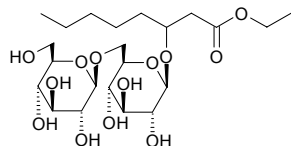
**8636 6'-O-β-D-Glucopyranosylgentiopicroside**

[115713-06-9] C<sub>22</sub>H<sub>30</sub>O<sub>14</sub> (518.48). Source: LONG DAN *Gentiana scabra* (dried rhizome and root)<sup>[3097]</sup>, QIN JIAO *Gentiana macrophylla*, RI BEN ZHANG YA CAI *Swertia japonica*. Ref: 707, 2573, 3097.



**8637 3-O- $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside of ethyl 3-hydroxyoctanoate**

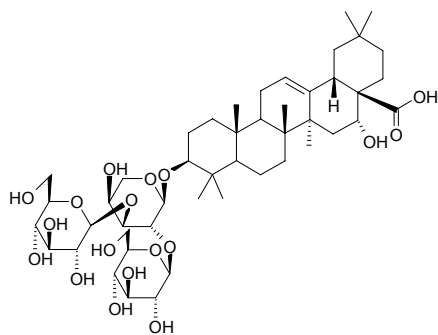
C<sub>22</sub>H<sub>40</sub>O<sub>13</sub> (512.56). Source: DENG LONG CAO *Physalis peruviana*. Ref: 1997.



**8638 3 $\beta$ -O-[ $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 3)]-[ $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)]- $\alpha$ -L-arabinopyranosyl echinocystic acid**

C<sub>47</sub>H<sub>76</sub>O<sub>18</sub> (929.12). Amorphous powder,  $[\alpha]_D^{23} = +19.5^\circ$  ( $c = 0.94$ , MeOH).

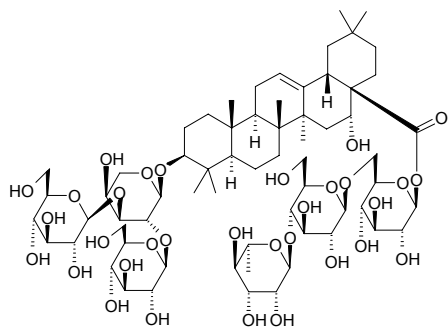
Source: *Dizygotheca kerchoveana* (stem and leaf of branch). Ref: 3885.



**8639 3-O-[ $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 3)]-[ $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)]- $\alpha$ -L-arabinopyranosyl echinocystic acid 28-O-[ $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl] ester**

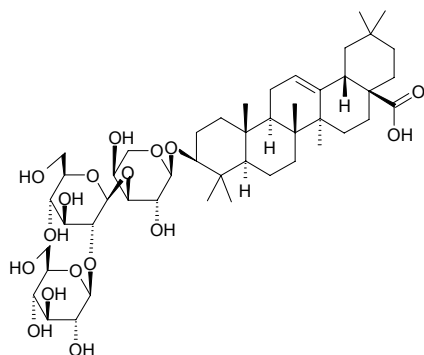
C<sub>65</sub>H<sub>106</sub>O<sub>32</sub> (1399.55). Amorphous powder,  $[\alpha]_D^{23} = -13.0^\circ$  ( $c = 0.94$ , MeOH).

Source: *Dizygotheca kerchoveana* (stem and leaf of branch). Ref: 3885.



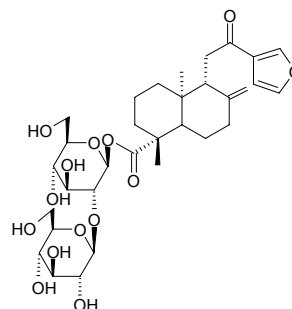
**8640 3 $\beta$ -[(O- $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 2)-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)]- $\alpha$ -L-arabinopyranosyl]oxy]olean-12-en-28-oic acid**

C<sub>47</sub>H<sub>76</sub>O<sub>17</sub> (913.12). Source: SAN YE MU TONG *Akebia trifoliata* (stem). Ref: 4545.



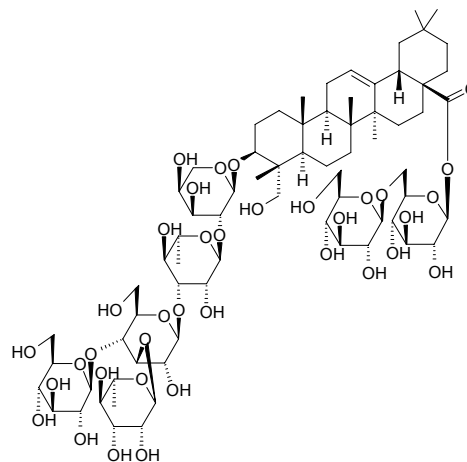
**8641  $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranosyl-15,16-epoxy-12-oxo-8(17),13(16)-14-*ent*-labdatrien-19-oate**

C<sub>32</sub>H<sub>46</sub>O<sub>14</sub> (654.72). Yellow gum,  $[\alpha]_D^{25} = -2.0^\circ$  ( $c = 0.25$ , CH<sub>3</sub>OH). Source: BI CHI YAN ZI CAI *Potamogeton pectinatus*. Ref: 3849.



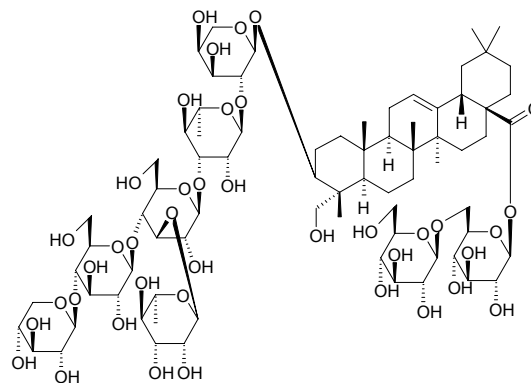
**8642 28-O- $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl ester of 3-O-[ $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)] [ $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -arabinopyranosyl-hederagenin**

C<sub>71</sub>H<sub>116</sub>O<sub>36</sub> (1545.69). White powder, mp 224–227°C,  $[\alpha]_D^{21} = -17.4^\circ$  ( $c = 0.25$ , MeOH). Source: CHUAN XU DUAN *Dipsacus asperoides*. Ref: 265.



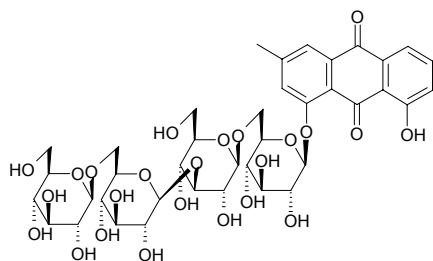
**8643 28-O- $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl ester of 3-O-[ $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)] [ $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -arabinopyranosyl-hederagenin**

C<sub>76</sub>H<sub>124</sub>O<sub>40</sub> (1677.81). White powder, mp 236–240°C (methanol–acetic ester),  $[\alpha]_D^{21} = -21.8^\circ$  ( $c = 0.24$ , methanol). Source: CHUAN XU DUAN *Dipsacus asperoides*. Ref: 249.



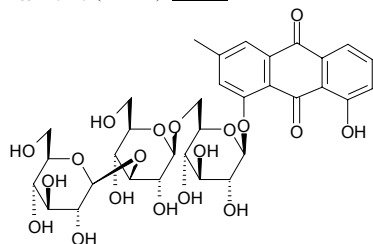
**8644** 1-[( $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 6)-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)-O- $\beta$ -D-glucopyranosyl)oxy]-8-hydroxy-3-methyl-9,10-anthraquinone

C<sub>39</sub>H<sub>50</sub>O<sub>24</sub> (902.82). Source: JUE MING ZI *Cassia tora*. Ref: 2.



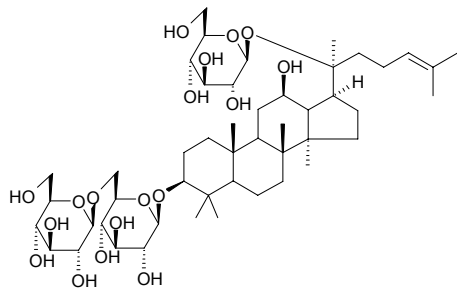
**8645** 1-[( $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 3)-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)-O- $\beta$ -D-glucopyranosyl)oxy]-8-hydroxy-3-methyl-9,10-anthraquinone

C<sub>33</sub>H<sub>40</sub>O<sub>19</sub> (740.68). Source: JUE MING ZI *Cassia tora*. Ref: 2.



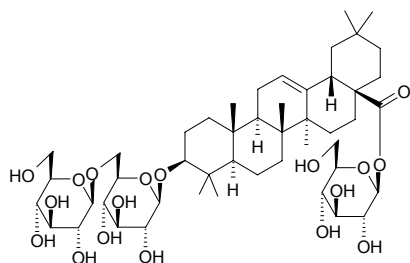
**8646** 3-O-[( $\beta$ -D-Glucopyranosyl(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl]-20-O- $\beta$ -D-glucopyranosyl-3 $\beta$ ,12 $\beta$ ,20(S)-trihydroxydammar-24-ene

C<sub>48</sub>H<sub>82</sub>O<sub>18</sub> (947.18). Colorless amorphous powder, mp 190~194°C, [ $\alpha$ ]<sub>D</sub><sup>21</sup> = +13.2 (c = 0.45, MeOH). Pharm: Inhibits zoospore motility (*Aphanomyces cochlioides*, a causative fungus of spinach root rot)<sup>[2387]</sup>. Source: SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. Ref: 2387.



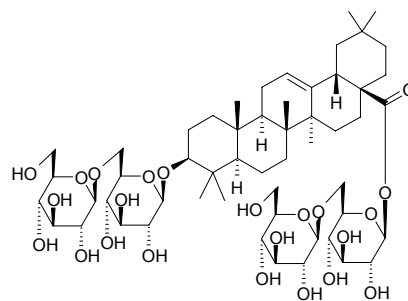
**8647** 3-O- $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl oleanolic acid 28-O- $\beta$ -D-glucopyranosyl ester

C<sub>48</sub>H<sub>78</sub>O<sub>18</sub> (943.15). Amorphous powder, mp 202~209°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -6.5° (c = 0.11, MeOH). Source: CHI GENG TENG *Gymnema sylvestri*. Ref: 766.



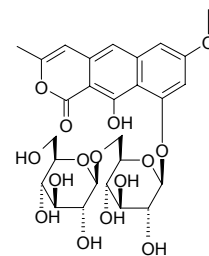
**8648** 3-O- $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl oleanolic acid 28- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl ester

C<sub>54</sub>H<sub>88</sub>O<sub>23</sub> (1105.29). Amorphous powder, mp 209~211°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -12.1° (c = 0.12, MeOH). Source: CHI GENG TENG *Gymnema sylvestri*. Ref: 766.



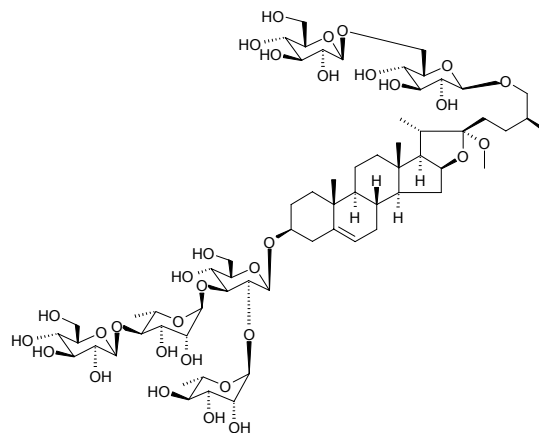
**8649** 9-[( $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 6)-O- $\beta$ -D-glucopyranosyl)oxy]-10-hydroxy-7-methoxy-3-methyl-1*H*-naphthol[2,3-*c*]pyran-1-one

Cassiaside C; Toralactone 9-gentiobioside [119170-52-4] C<sub>27</sub>H<sub>32</sub>O<sub>15</sub> (596.55). Source: DUN YE JUE MING *Cassia obtusifolia*, JUE MING ZI *Cassia tora*. Ref: 2, 2081.



**8650** (2*S*)-26-[(O- $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl)oxy]-22*a*-methoxyfurost-5-en-3 $\beta$ -yl O- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)-O-[O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -D-glucopyranoside

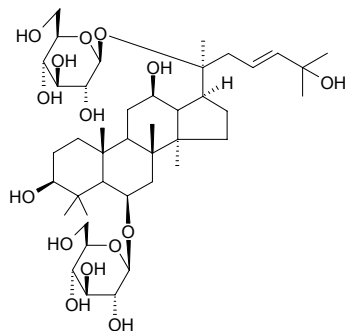
C<sub>64</sub>H<sub>106</sub>O<sub>32</sub> (1387.54). Amorphous solid, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -54.0° (c = 0.10, CHCl<sub>3</sub>: MeOH = 1:1). Source: JIAN GEN SHU *Tacca chantrieri* [Syn. *Tacca minor*; *Tacca esquirolii*] (rhizome: yield = 0.00090%dw). Ref: 4648.





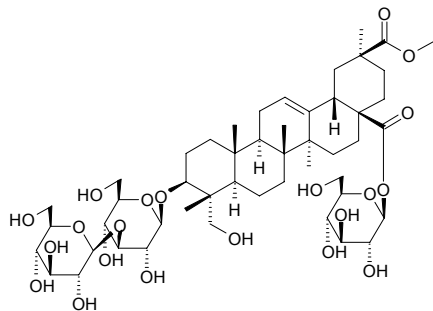
**8651 6-O-β-D-Glucopyranosyl-20-O-β-D-glucopyranosyl-3β,6α,12β,20(S),25-pentahydroxydammar-23-ene**

C<sub>42</sub>H<sub>72</sub>O<sub>15</sub> (817.03). Colorless amorphous powder, mp 208~212°C, [α]<sub>D</sub><sup>21</sup> = +31.2° (c = 0.25, MeOH). **Pharm:** Inhibits zoospore motility (*Aphanomyces cochlioides*, a causative fungus of spinach root rot). **Source:** SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. **Ref:** 2387.



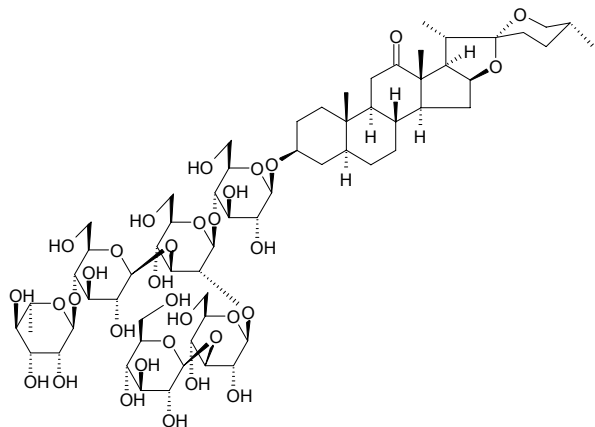
**8652 3-O-[β-D-Glucopyranosyl-(1→3)-β-D-glucopyranosyl]phytolaccagenic acid 28-O-β-D-glucopyranosyl ester**

C<sub>49</sub>H<sub>78</sub>O<sub>21</sub> (1003.16). mp 214~218°C, [α]<sub>D</sub><sup>25</sup> = +48.3° (c = 0.65, MeOH). **Source:** CANG BAI CHENG GOU FENG *Diploclisia glaucescens*. **Ref:** 2054.



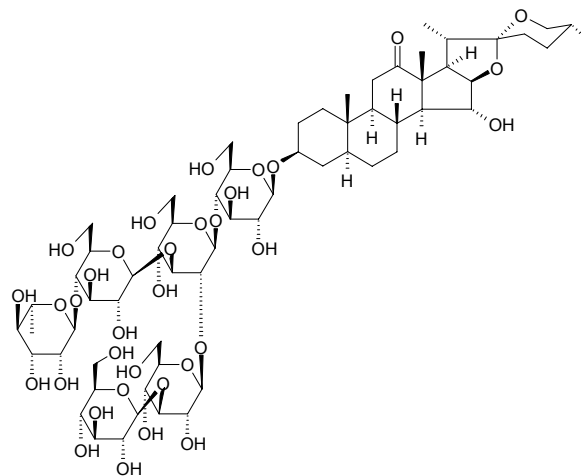
**8653 (25R)-3β-[(O-β-D-Glucopyranosyl-(1→3)-O-β-D-glucopyranosyl-(1→2)-O-[O-α-L-rhamnopyranosyl-(1→4)-β-D-glucopyranosyl-(1→3)]-O-β-D-glucopyranosyl-(1→4)-β-D-galactopyranosyl)oxy]-5α-spirostan-12-one**

C<sub>63</sub>H<sub>102</sub>O<sub>33</sub> (1387.50). **Pharm:** Cytotoxic (hmn oral squamous cell HSC-2, LD<sub>50</sub> = 2.2μg/mL; normal hmn gingival fibroblast HGF cell, LD<sub>50</sub> = 2.4μg/mL). **Source:** *Camassia leichtlinii* (bulb). **Ref:** 3535.



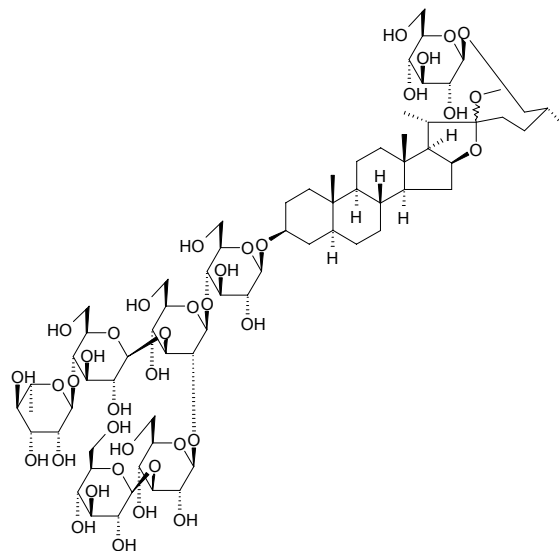
**8654 (25R)-3β-[(O-β-D-Glucopyranosyl-(1→3)-O-β-D-glucopyranosyl-(1→2)-O-[O-α-L-rhamnopyranosyl-(1→4)-β-D-glucopyranosyl-(1→3)]-O-β-D-glucopyranosyl-(1→4)-β-D-galactopyranosyl)oxy]-15α-hydroxy-5α-spirostan-12-one**

C<sub>63</sub>H<sub>102</sub>O<sub>34</sub> (1403.49). Amorphous solid, [α]<sub>D</sub><sup>25</sup> = -34.0° (c = 0.10, MeOH). **Pharm:** Cytotoxic (hmn oral squamous cell HSC-2, LD<sub>50</sub> = 35μg/mL; normal hmn gingival fibroblast HGF cell, LD<sub>50</sub> = 34μg/mL). **Source:** *Camassia leichtlinii* (bulb). **Ref:** 3535.



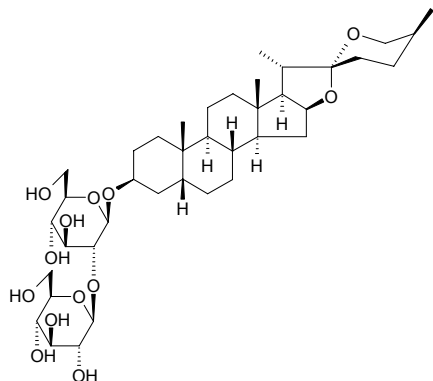
**8655 (25R)-3β-[(O-β-D-Glucopyranosyl-(1→3)-O-β-D-glucopyranosyl-(1→2)-O-[O-α-L-rhamnopyranosyl-(1→4)-β-D-glucopyranosyl-(1→3)]-O-β-D-glucopyranosyl-(1→4)-β-D-galactopyranosyl)oxy]-22ξ-methoxy-5α-furostan-26-yl β-D-glucopyranoside**

C<sub>70</sub>H<sub>118</sub>O<sub>38</sub> (1567.70). Amorphous solid, [α]<sub>D</sub><sup>25</sup> = -44.0° (c = 0.10, MeOH). **Pharm:** Cytotoxic (hmn oral squamous cell HSC-2, LD<sub>50</sub> = 4.7μg/mL; normal hmn gingival fibroblast HGF cell, LD<sub>50</sub> = 34μg/mL). **Source:** *Camassia leichtlinii* (bulb). **Ref:** 3535.



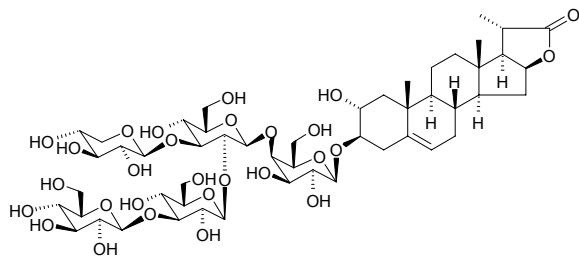
**8656 3-O- $\beta$ -D-Glucopyranosyl(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranosyl]-(25S)-5 $\beta$ -spirostan-3 $\beta$ -ol**

C<sub>39</sub>H<sub>64</sub>O<sub>13</sub> (740.94).  $[\alpha]_D^{21} = -60.9^\circ$  ( $c = 1.00$ , C<sub>5</sub>H<sub>5</sub>N). **Pharm:** Cytotoxic (*in vitro*, HO-8910, IC<sub>50</sub> = (5.8 $\pm$ 0.4) $\mu$ mol/L, Vincristine, IC<sub>50</sub> = (25.1 $\pm$ 1.9) $\mu$ mol/L; Bel7405, IC<sub>50</sub> = (5.9 $\pm$ 0.4) $\mu$ mol/L, Vincristine, IC<sub>50</sub> = (31.4 $\pm$ 3.4) $\mu$ mol/L). **Source:** GE BI TIAN MEN *Asparagus gobicus* (root). **Ref:** 4975.



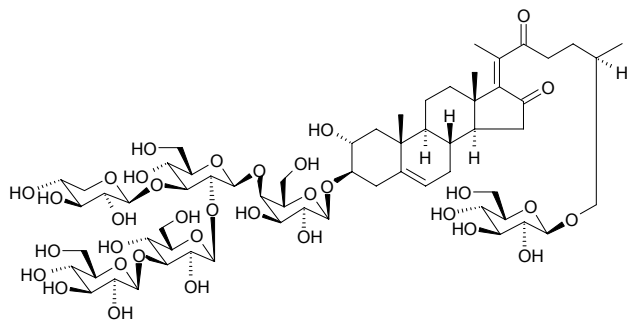
**8657 3 $\beta$ -[(O- $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 3))-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)-O- $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 3))-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-galactopyranosyl)-oxy]-2 $\alpha$ ,16 $\beta$ -dihydroxypregn-5-ene-20-carboxylic acid  $\gamma$ -lactone**

C<sub>51</sub>H<sub>80</sub>O<sub>28</sub> (1141.19). Amorphous powder,  $[\alpha]_D^{28} = -54.0^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Cytotoxic (*in vitro*, HSC-2, LD<sub>50</sub> > 300 $\mu$ g/mL; control Doxorubicin, LD<sub>50</sub> = 2.5 $\mu$ g/mL). **Source:** YE XIANG SHU *Cestrum nocturnum* (leaf; yield = 0.0014%fw). **Ref:** 4667.



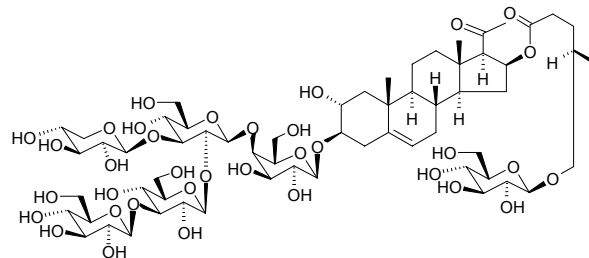
**8658 (25R)-3 $\beta$ -[(O- $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 3))-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)-O- $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 3))-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-galactopyranosyl)-oxy]-26-[( $\beta$ -D-glucopyranosyl)oxy]-2 $\alpha$ -hydroxycholesta-5,17-diene-16,22-dione**

C<sub>62</sub>H<sub>98</sub>O<sub>34</sub> (1387.45). Amorphous powder,  $[\alpha]_D^{29} = -76.0^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Cytotoxic (*in vitro*, HSC-2, LD<sub>50</sub> = 281 $\mu$ g/mL; control Doxorubicin, LD<sub>50</sub> = 2.5 $\mu$ g/mL). **Source:** YE XIANG SHU *Cestrum nocturnum* (leaf; yield = 0.0088%fw). **Ref:** 4667.



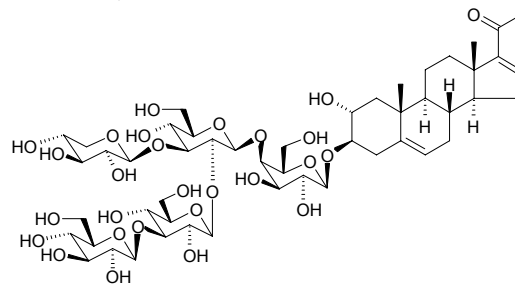
**8659 3 $\beta$ -[(O- $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 3))-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)-O- $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 3))-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-galactopyranosyl)oxy]-16 $\beta$ -[(4R)-5-( $\beta$ -D-glucopyranosyloxy)-4-methyl-1-oxopentyl]oxy]-2 $\alpha$ -hydroxypregn-5-en-20-one**

C<sub>62</sub>H<sub>100</sub>O<sub>35</sub> (1405.47). Amorphous powder,  $[\alpha]_D^{29} = -50.0^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Cytotoxic (*in vitro*, HSC-2, LD<sub>50</sub> > 300 $\mu$ g/mL; control Doxorubicin, LD<sub>50</sub> = 2.5 $\mu$ g/mL). **Source:** YE XIANG SHU *Cestrum nocturnum* (leaf; yield = 0.0026%fw). **Ref:** 4667.



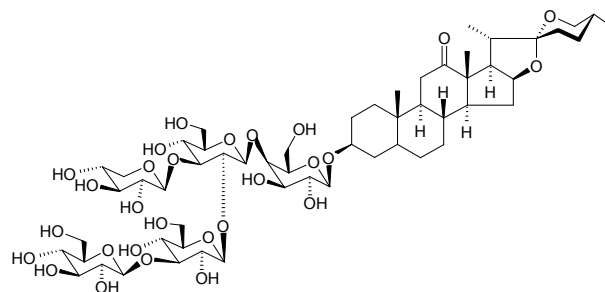
**8660 3 $\beta$ -[(O- $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 3))-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)-O- $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 3))-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-galactopyranosyl)oxy]-2 $\alpha$ -hydroxypregna-5,16-dien-20-one**

C<sub>50</sub>H<sub>78</sub>O<sub>27</sub> (1111.16). Amorphous powder,  $[\alpha]_D^{28} = -42.0^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Cytotoxic (*in vitro*, HSC-2, LD<sub>50</sub> = 192 $\mu$ g/mL; control Doxorubicin, LD<sub>50</sub> = 2.5 $\mu$ g/mL). **Source:** YE XIANG SHU *Cestrum nocturnum* (leaf; yield = 0.0082%fw). **Ref:** 4667.



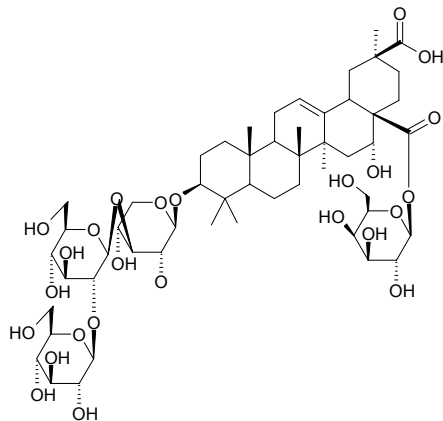
**8661 (25R)-3 $\beta$ -[(O- $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 3))-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)-O- $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 3))-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-galactopyranosyl)oxy]-5 $\alpha$ -spirostan-12-one**

C<sub>56</sub>H<sub>90</sub>O<sub>28</sub> (1211.32). Amorphous solid,  $[\alpha]_D^{26} = -30.0^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Cytotoxic (*in vitro*, HL-60, IC<sub>50</sub> = 5.9 $\mu$ g/mL; HSC-2, IC<sub>50</sub> = 1.5 $\mu$ g/mL; control Etoposide: HL-60, IC<sub>50</sub> = 0.3 $\mu$ g/mL; HSC-2, IC<sub>50</sub> = 24.4 $\mu$ g/mL). **Source:** WAN XIANG YU *Polianthes tuberosa* (underground part; yield = 0.0065%dw). **Ref:** 4651.



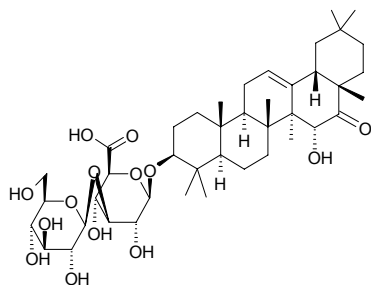
**8662 3β-O-(β-Glucopyranosyl-(1→2)-β-glucopyranosyl(1→3)-β-xylopyranosyl)-16α-hydroxyolean-12-en-28-O-(β-galactopyranosyl) ester-30-oic acid**

C<sub>53</sub>H<sub>84</sub>O<sub>25</sub> (1121.25). White amorphous powder,  $[\alpha]_D^{25} = +18^\circ$  ( $c = 1$ , MeOH). **Pharm:** Antiproliferative (*in vitro*, J774 cell line, IC<sub>50</sub> = 0.20 μmol/L, control 6-Mercaptopurine, IC<sub>50</sub> = 0.003 μmol/L; HEK-293, IC<sub>50</sub> = 0.15 μmol/L, 6-Mercaptopurine, IC<sub>50</sub> = 0.007 μmol/L; WEHI-164, IC<sub>50</sub> = 0.24 μmol/L, 6-Mercaptopurine, IC<sub>50</sub> = 0.017 μmol/L). **Source:** *Schefflera faguetai*. **Ref:** 5436.



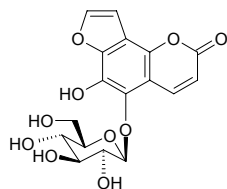
**8663 3-O-[β-D-Glucopyranosyl-(1→3)-O-β-D-glucuronopyranosyl]-15-α-hydroxyolean-12-en-16-one**

C<sub>42</sub>H<sub>66</sub>O<sub>14</sub> (794.99). White amorphous powder, mp 248–250°C. **Source:** YUN NAN GE TENG *Pueraria peduncularis*. **Ref:** 853.



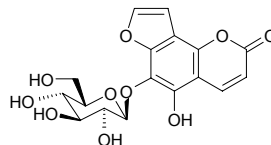
**8664 5-O-β-D-Glucopyranosyl-6-hydroxyangelicin**

C<sub>17</sub>H<sub>16</sub>O<sub>10</sub> (380.31). Light yellow amorphous powder,  $[\alpha]_D^{20} = +4.1^\circ$  ( $c = 0.15$ , pyridine). **Pharm:** Anti-inflammatory (antiproliferation, hmn mononuclear cells involving T lymphocytes, B lymphocytes, and macrophages isolated from peripheral blood, IC<sub>50</sub> = 33.4 μmol/L; control Cyclosporine, IC<sub>50</sub> = 12 nmol/L). **Source:** LAN YU LUO YE RONG *Ficus ruficaulis* var. *antaoensis* (leaf: yield = 0.00454%fw). **Ref:** 4794.



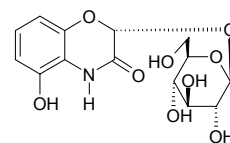
**8665 6-O-β-D-Glucopyranosyl-5-hydroxyangelicin**

C<sub>17</sub>H<sub>16</sub>O<sub>10</sub> (380.31). Light yellow amorphous powder,  $[\alpha]_D^{20} = -40.0^\circ$  ( $c = 0.04$ , pyridine). **Pharm:** Antiproliferation inactive (hmn mononuclear cells involving T lymphocytes, B lymphocytes, and macrophages isolated from peripheral blood, 100 μmol/L; control Cyclosporine, IC<sub>50</sub> = 12 nmol/L). **Source:** LAN YU LUO YE RONG *Ficus ruficaulis* var. *antaoensis* (leaf: yield = 0.0012%fw). **Ref:** 4794.



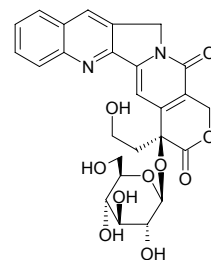
**8666 (2R)-2-O-β-D-Glucopyranosyl-5-hydroxy-2H-1,4-benzoxazin-3(4H)-one**

C<sub>14</sub>H<sub>17</sub>NO<sub>9</sub> (343.29). Amorphous powder,  $[\alpha]_D^{26} = +95.0^\circ$  ( $c = 0.40$ , DMSO). **Source:** LAO SHU LE *Acanthus ilicifolius* (aerial parts). **Ref:** 5204.



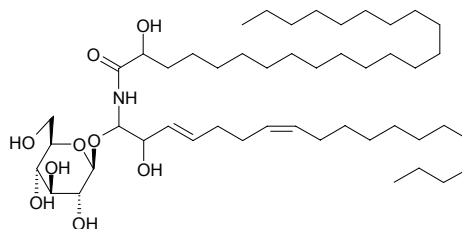
**8667 20-O-β-Glucopyranosyl 18-hydroxycamptothecin**

C<sub>26</sub>H<sub>26</sub>N<sub>2</sub>O<sub>10</sub> (526.50). **Source:** XI SHU *Camptotheca acuminata*. **Ref:** 4097.



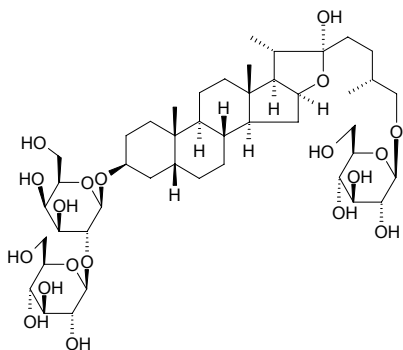
**8668 1-O-β-D-Glucopyranosyl-(2S,3R,4E,8Z)-2-N-(2'-hydroxydocosano-yl) eicosasphinga-4,8-dienine**

C<sub>48</sub>H<sub>91</sub>NO<sub>9</sub> (826.26). White powder. **Source:** XIAO YE GUAN ZHONG *Matteuccia struthiopteris* (rhizome). **Ref:** 4862.



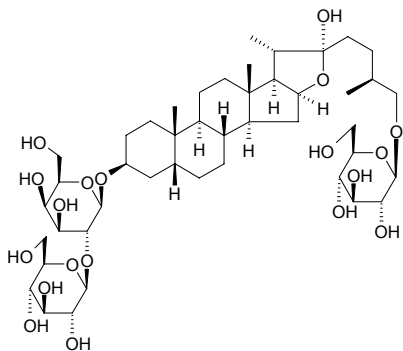
**8669 (25R)-26-O-β-D-Glucopyranosyl-22-hydroxy-5β-furostane-3β,26-diol 3-O-β-D-glucopyranosyl-(1→2)-O-β-D-galactopyranoside**

C<sub>45</sub>H<sub>76</sub>O<sub>19</sub> (921.10). White powder, mp 194–196°C [ $\alpha$ ]<sub>D</sub><sup>25</sup> = –31.5° (c = 0.001, H<sub>2</sub>O). **Pharm:** Cytotoxic (SF268 and NCI-H460 cancer cells, EC = 25 μg/mL; HepG2 cells, inactive). **Source:** XIE BAI *Allium macrostemon*. **Ref:** 4897.



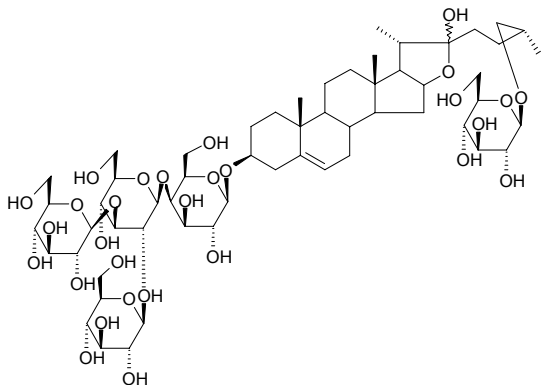
**8670 (25S)-26-O-β-D-Glucopyranosyl-22-hydroxy-5β-furostane-3β,26-diol 3-O-β-D-glucopyranosyl-(1→2)-O-β-D-galactopyranoside**

C<sub>45</sub>H<sub>76</sub>O<sub>19</sub> (921.10). **Pharm:** Cytotoxic (SF268 and NCI-H460 cancer cells, EC = 25 μg/mL; HepG2 cells, inactive). **Source:** ZHI MU *Anemarrhena asphodeloides*. **Ref:** 2.



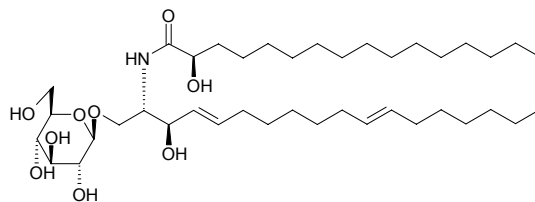
**8671 (25R)-26-O-β-D-Glucopyranosyl-22-hydroxy-furost-5(6)-ene-3β,26-diol-3-O-β-D-glucopyranosyl-(1→2)-[β-D-glucopyranosyl(1→3)]-β-D-glucopyranosyl-(1→4)-β-D-galactopyranoside**

C<sub>57</sub>H<sub>94</sub>O<sub>29</sub> (1243.37). White powder, mp 223–225°C [ $\alpha$ ]<sub>D</sub><sup>27</sup> = –32.7° (c = 0.098, H<sub>2</sub>O). **Pharm:** Cytotoxic (SF268 cells, EC = 25 μg/mL, NCI-H460 cells, EC = 25 μg/mL, HepG2 cells, inactive). **Source:** XIE BAI *Allium macrostemon*. **Ref:** 4897.



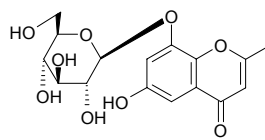
**8672 1-O-β-D-Glucopyranosyl-(2S,3R,4E,11E)-2-(2'R-hydroxyhexadecenoynlamino)-4,11-octadecadiene-1,3-diol**

C<sub>40</sub>H<sub>75</sub>NO<sub>9</sub> (714.05). White amorphous powder, mp 136–138°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = –6.0° (c = 0.5, MeOH). **Pharm:** Antibacterial (*Bacillus subtilis*, MIC = 20 μg/mL, control Penicillin G, MIC = 0.80 μg/mL; *Staphylococcus aureus*, MIC = 50 μg/mL, control Penicillin G, MIC = 0.34 μg/mL)<sup>[3472]</sup>; antifungal (*Aspergillus niger*, MIC = 30 μg/mL, control Ketoconazole, MIC = 0.90 μg/mL; *Candida albicans*, MIC = 10 μg/mL, control Ketoconazole, MIC = 0.65 μg/mL). **Source:** BAN XIA *Pinellia ternata*. **Ref:** 3472.



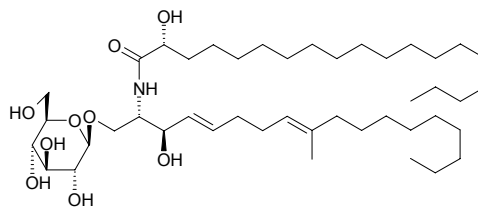
**8673 8-O-β-D-Glucopyranosyl-6-hydroxy-2-methyl-4H-1-benzopyran-4-one**

C<sub>16</sub>H<sub>18</sub>O<sub>9</sub> (354.32). White powder, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = –75.1° (c = 0.056, MeOH). **Pharm:** Tyrosinase inhibitor (IC<sub>50</sub> = (256.97±0.96) μmol/L, control Kojic acid, IC<sub>50</sub> = (16.67±0.52) μmol/L, L-Mimosine, IC<sub>50</sub> = (3.68±0.02) μmol/L). **Source:** A FU HAN DU JUAN HUA *Rhododendron collettianum*. **Ref:** 2544.



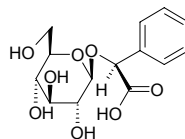
**8674 1-O-(β-D-Glucopyranosyl)-(2S,3R,4E,8E)-2-[(2'R)-2'-hydroxy-nonadecanoylamino]-9-methyl-4,8-octadecadiene-1,3-diol**

C<sub>44</sub>H<sub>83</sub>NO<sub>9</sub> (770.15). Colorless solid, mp 218–220°C, [ $\alpha$ ]<sub>D</sub><sup>28</sup> = –13.2° (c = 0.05, CHCl<sub>3</sub>). **Source:** *Lobophytum* sp. **Ref:** 4432.



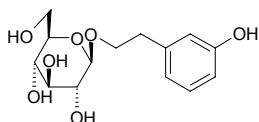
**8675 (2S)-2-O-β-D-Glucopyranosyl-2-hydroxyphenylacetic acid**

C<sub>14</sub>H<sub>18</sub>O<sub>8</sub> (314.29). Colorless oil, [ $\alpha$ ]<sub>D</sub> = +6°. **Pharm:** Plant growth stimulatory or inhibitory activity (radicle length: *Lactuca sativa*, 1 μmol/L, StRt or InRt < 10%, 10 μmol/L, StRt or InRt < 10%, 100 μmol/L, StRt or InRt < 10%, 1 mmol/L, StRt or InRt < 10%; *Raphanus sativus*, 1 μmol/L, InRt = (10–30)%, 10 μmol/L, InRt = (10–30)%, 100 μmol/L, InRt = (10–30)%, 1 mmol/L, InRt = (10–30); *Allium cepa*, 1 μmol/L, InRt = (10–30)%, 10 μmol/L, InRt = (10–30)%, 100 μmol/L, InRt = (10–30)%, 1 mmol/L, InRt = (31–60)%). **Source:** XI YANG JIE GU MU *Sambucus nigra*. **Ref:** 5217.

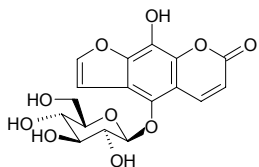


**8676 1-O-β-D-Glucopyranosyl-2-(3-hydroxyphenyl)-ethanol**

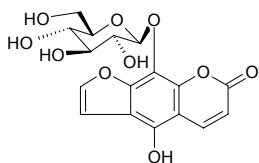
C<sub>14</sub>H<sub>20</sub>O<sub>7</sub> (300.31). Colorless oil. **Pharm:** Plant growth stimulatory or inhibitory activity (radicle length: *Lactuca sativa*, 1 μmol/L, StRt or InRt < 10%, 10 μmol/L, StRt or InRt < 10%, 100 μmol/L, StRt = (31–60)%, 1 mmol/L, StRt = (31–60)%; *Raphanus sativus*, 1 μmol/L, StRt or InRt < 10%, 10 μmol/L, InRt = (10–30)%, 100 μmol/L, InRt = (10–30)%, 1 mmol/L, InRt = (10–30)%; *Allium cepa*, 1 μmol/L, InRt = (10–30)%, 10 μmol/L, StRt or InRt < 10%, 100 μmol/L, InRt = (10–30)%, 1 mmol/L, InRt = (10–30)%). **Source:** XI YANG JIE GU MU *Sambucus nigra*. **Ref:** 5217.

**8677 5-O-β-D-Glucopyranosyl-8-hydroxy-psoralen**

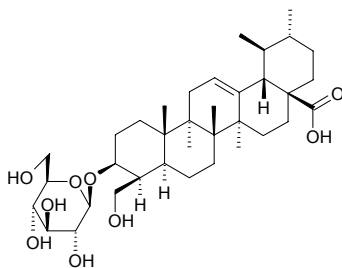
C<sub>17</sub>H<sub>16</sub>O<sub>10</sub> (380.31). **Pharm:** Antiproliferation inactive (hmn mononuclear cells involving T lymphocytes, B lymphocytes, and macrophages isolated from peripheral blood, 100 μmol/L; control Cyclosporine, IC<sub>50</sub> = 12 nmol/L). **Source:** LAN YU LUO YE RONG *Ficus ruficaulis* var. *antaoensis* (leaf: yield = 0.00065%fw). **Ref:** 4794.

**8678 8-O-β-D-Glucopyranosyl-5-hydroxy-psoralen**

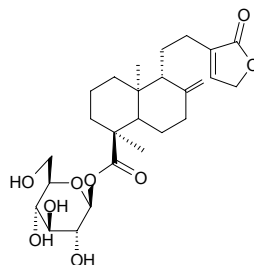
C<sub>17</sub>H<sub>16</sub>O<sub>10</sub> (380.31). Light yellow amorphous powder, [α]<sub>D</sub><sup>20</sup> = -28.8° (c = 0.07, pyridine). **Pharm:** Antiproliferation inactive (hmn mononuclear cells involving T lymphocytes, B lymphocytes, and macrophages isolated from peripheral blood, 100 μmol/L; control Cyclosporine, IC<sub>50</sub> = 12 nmol/L). **Source:** LAN YU LUO YE RONG *Ficus ruficaulis* var. *antaoensis* (leaf: yield = 0.00075%fw). **Ref:** 4794.

**8679 3-O-β-D-Glucopyranosyl-23-hydroxyursolic acid**

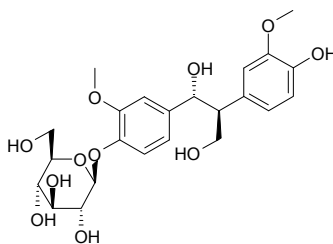
C<sub>36</sub>H<sub>58</sub>O<sub>9</sub> (634.86). White amorphous powder (MeOH/CH<sub>2</sub>Cl<sub>2</sub>), 280–281°C, [α]<sub>D</sub><sup>31</sup> = +43.4° (c = 0.046, MeOH). **Pharm:** Anti-inflammatory (*in vitro*, murine macrophage RAW264.7 Cells, inhibits LPS-induced NO and PGE<sub>2</sub> release). **Source:** *Cussonia bancoensis*. **Ref:** 5016.

**8680 β-D-Glucopyranosyl-8(17),13-ent-labdadien-16,15-olid-18-oate**

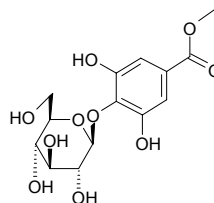
C<sub>26</sub>H<sub>38</sub>O<sub>9</sub> (494.59). Yellow gum, [α]<sub>D</sub><sup>25</sup> = -18.1° (c = 0.73, CH<sub>3</sub>OH). **Source:** GUANG YE YAN ZI CAI *Potamogeton lucens* (whole herb). **Ref:** 3795.

**8681 (1S,2R)-1-(4'-O-β-D-Glucopyranosyl-3'-methoxyphenyl)-2-(4''-hydroxy-3''-methoxyphenyl)-1,3-propanediol**

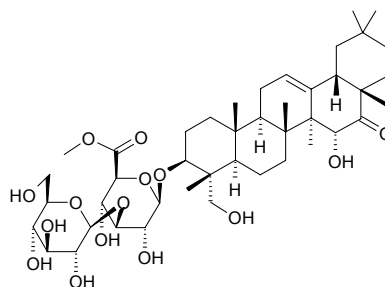
C<sub>23</sub>H<sub>30</sub>O<sub>11</sub> (482.49). White powder, mp 135–137°C, [α]<sub>D</sub><sup>25</sup> = +24.6° (c = 0.11, MeOH). **Source:** SHAN FAN GEN *Symplocos caudata*. **Ref:** 2535.

**8682 4-O-β-D-Glucopyranosyl methyl gallate**

C<sub>14</sub>H<sub>18</sub>O<sub>10</sub> (346.29). Yellowish powder, mp 169–170°C. **Source:** JUAN MAO QIANG WEI *Rosa sericea*. **Ref:** 676.

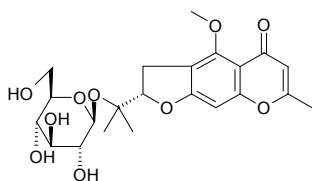
**8683 3-O-β-D-Glucopyranosyl (1→3)-β-D-6-O-methyl-glucuronopyranosyl]-3β,15α,23-trihydroxy-olean-12-en-16-one**

C<sub>43</sub>H<sub>68</sub>O<sub>15</sub> (825.01). White powder, mp 207–209°C, [α]<sub>D</sub><sup>20</sup> = -9.5° (c = 0.084, MeOH). **Pharm:** Antifungal (*Aspergillus niger*). **Source:** YUN NAN GE TENG *Pueraria peduncularis*. **Ref:** 2159.

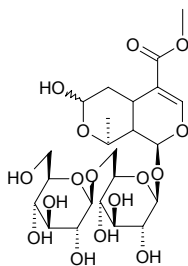


**8684 4'-O-β-Glucopyranosyl-5-O-methylvisamminol**

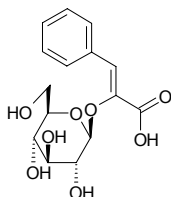
C<sub>22</sub>H<sub>28</sub>O<sub>10</sub> (452.46). Source: FANG FENG *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*]. Ref: 2.

**8685 6'-O-β-D-Glucopyranosylmorroneiside**

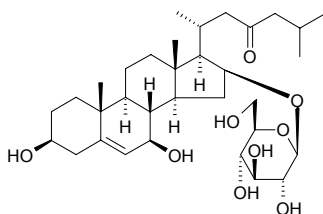
C<sub>23</sub>H<sub>35</sub>O<sub>16</sub> (568.53). Amorphous powder,  $[\alpha]_D^{27} = -71.4^\circ$  ( $c = 0.56$ , MeOH). Source: RI BEN SHUANG HU DIE *Tripterospermum japonicum*. Ref: 3533.

**8686 (Z)-8-β-D-Glucopyranosyloxycinnamic acid**

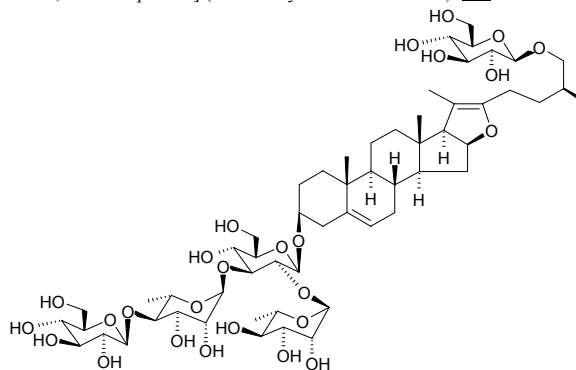
C<sub>15</sub>H<sub>18</sub>O<sub>8</sub> (326.31). Source: LV DOU *Onobrychis viciifolia* (leaf). Ref: 5084.

**8687 16β-[(β-D-Glucopyranosyl)-oxy]-3β,7β-dihydroxycholest-5-en-23-one**

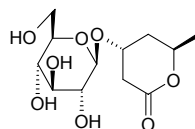
C<sub>33</sub>H<sub>54</sub>O<sub>9</sub> (594.79). Pharm: Cytotoxic (hmn oral squamous cell HSC-2, LD<sub>50</sub> = 68 μg/mL; normal hmn gingival fibroblast HGF cell, LD<sub>50</sub> = 83 μg/mL). Source: *Camassia leichtlinii* (bulb). Ref: 3535.

**8688 (25S)-26-[(β-D-Glucopyranosyl)oxy]furosta-5,20(22)-dien-3β-yl O-α-L-rhamnopyranosyl-(1→2)-O-[O-β-D-glucopyranosyl-(1→4)-α-L-rhamnopyranosyl-(1→3)]-β-D-glucopyranoside**

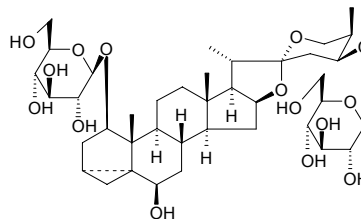
C<sub>57</sub>H<sub>92</sub>O<sub>26</sub> (1193.35). Amorphous solid,  $[\alpha]_D^{25} = -60.0^\circ$  ( $c = 0.10$ , CHCl<sub>3</sub>:MeOH = 1:1). Source: JIAN GEN SHU *Tacca chantrieri* [Syn. *Tacca minor*; *Tacca esquirolii*] (rhizome: yield = 0.0018%dw). Ref: 4648.

**8689 (3R,5R)-3-(β-D-Glucopyranosyloxy)-5-hexanolide**

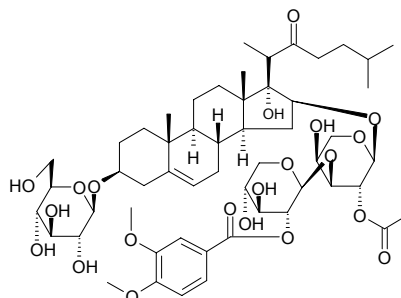
C<sub>12</sub>H<sub>20</sub>O<sub>8</sub> (292.29). Oil,  $[\alpha]_D^{22} = -21.8^\circ$  ( $c = 1.62$ , MeOH). Source: MO JUE *Hymenophyllum barbatum*. Ref: 4151.

**8690 (24S,25R)-1β-[(β-D-Glucopyranosyl)oxy]-6β-hydroxy-3α,5α-cyclospirostan-24-yl β-D-glucopyranoside**

C<sub>30</sub>H<sub>62</sub>O<sub>15</sub> (770.92). Amorphous solid,  $[\alpha]_D^{26} = -42.0^\circ$  ( $c = 0.10$ , MeOH). Source: DUO ZHI LONG XUE SHU *Dracaena surculosa* (whole herb). Ref: 4216.

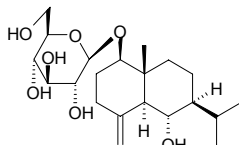
**8691 3β-[(β-D-Glucopyranosyl)oxy]-17α-hydroxy-16β-[(O-(2-O-3,4-dimethoxybenzoyl)-β-D-xylopyranosyl)-(1→2)-2-O-acetyl-α-L-arabinopyranosyl)oxy]cholest-5-en-22-one**

C<sub>54</sub>H<sub>80</sub>O<sub>21</sub> (1065.23). Amorphous solid,  $[\alpha]_D^{25} = -50.0^\circ$  ( $c = 0.10$ , MeOH). Pharm: Cytotoxic (HL-60 cells, IC<sub>50</sub> = 0.00048 μmol/L, control Etoposide, IC<sub>50</sub> = 0.025 μmol/L). Source: XIA FENG XIN ZI *Galtonia candicans* (bulb). Ref: 4116.

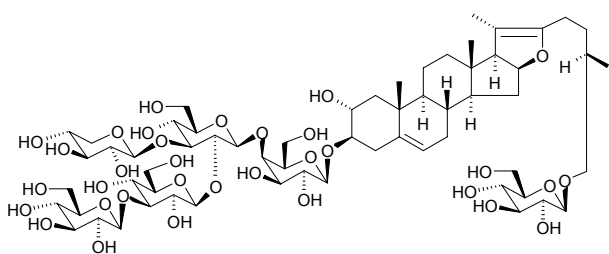


**8692 1 $\beta$ -D-Glucopyranosyloxy-6 $\alpha$ -hydroxyeudesman-4(15)-ene**

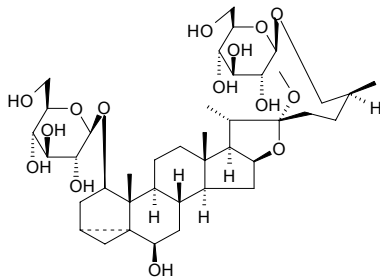
C<sub>21</sub>H<sub>36</sub>O<sub>7</sub> (400.52). Colorless oil,  $[\alpha]_D^{17} = -14^\circ$  ( $c = 1.90$ , CHCl<sub>3</sub>). **Pharm:** Cytotoxic (inhibits growth of Bel7402 cell, 0.0001mol/L, InRt = 30.1%, control Etoposide, InRt = 96.0%). **Source:** YI NIAN PENG *Erigeron annuus* (aerial parts). **Ref:** 5073.

**8693 (25R)-26-[( $\beta$ -D-Glucopyranosyl)oxy]-2 $\alpha$ -hydroxyfurosta-5,20(22)-dien-3 $\beta$ -yl O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)-O- $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 3)]-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-galactopyranoside**

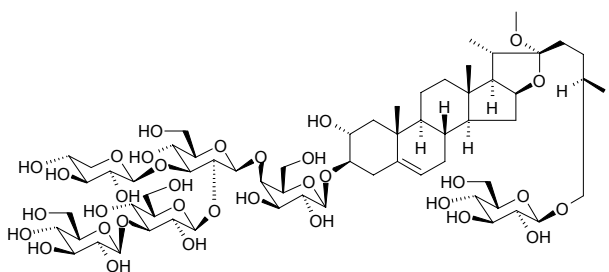
C<sub>62</sub>H<sub>100</sub>O<sub>33</sub> (1373.47). Amorphous powder,  $[\alpha]_D^{28} = -46.0^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Cytotoxic (*in vitro*, HSC-2, LD<sub>50</sub> > 300 $\mu$ g/mL; control Doxorubicin, LD<sub>50</sub> = 2.5 $\mu$ g/mL). **Source:** YE XIANG SHU *Cestrum nocturnum* (leaf; yield = 0.0033%fw). **Ref:** 4667.

**8694 (25S)-1 $\beta$ -[( $\beta$ -D-Glucopyranosyl)oxy]-6 $\beta$ -hydroxy-22 $\alpha$ -methoxy-3 $\alpha,5\alpha$ -cyclofurostan-26-yl  $\beta$ -D-glucopyranoside**

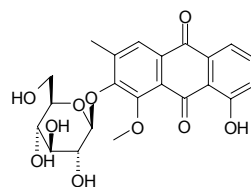
C<sub>40</sub>H<sub>66</sub>O<sub>15</sub> (786.96). Amorphous solid,  $[\alpha]_D^{26} = -42.0^\circ$  ( $c = 0.10$ , MeOH). **Source:** DUO ZHI LONG XUE SHU *Dracaena surculosa* (whole herb). **Ref:** 4216.

**8695 (25R)-26-[( $\beta$ -D-Glucopyranosyl)oxy]-2 $\alpha$ -hydroxy-22 $\alpha$ -methoxyfurost-5-en-3 $\beta$ -yl-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)-O- $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 3)]-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-galactopyranoside**

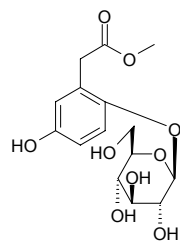
C<sub>63</sub>H<sub>104</sub>O<sub>34</sub> (1405.51). Amorphous powder,  $[\alpha]_D^{27} = -60.0^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Cytotoxic (*in vitro*, HSC-2, LD<sub>50</sub> = 6.1 $\mu$ g/mL; control Doxorubicin, LD<sub>50</sub> = 2.5 $\mu$ g/mL). **Source:** YE XIANG SHU *Cestrum nocturnum* (leaf; yield = 0.0264%fw). **Ref:** 4667.

**8696 2-( $\beta$ -D-Glucopyranosyloxy)-8-hydroxy-1-methoxy-3-methyl-9,10-anthraquinone**

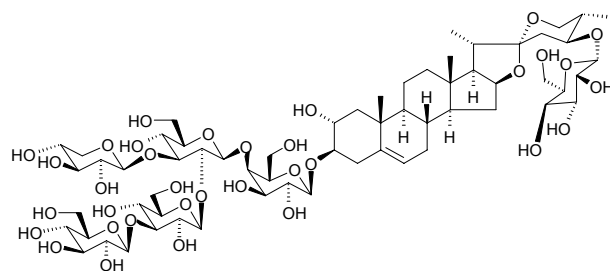
Obtusifolin-2-O- $\beta$ -D-glucoside C<sub>22</sub>H<sub>22</sub>O<sub>10</sub> (446.41). **Pharm:** Platelet aggregation inhibitor (rat). **Source:** DUN YE JUE MING *Cassia obtusifolia*, JUE MING ZI *Cassia tora*. **Ref:** 2, 658, 660.

**8697 2- $\beta$ -D-Glucopyranosyloxy-5-hydroxyphenylacetic acid methyl ester**

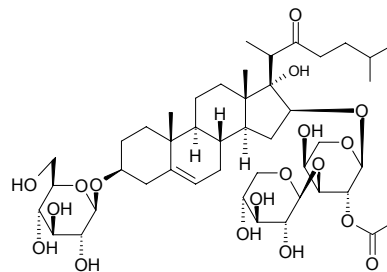
C<sub>15</sub>H<sub>20</sub>O<sub>9</sub> (344.32). mp 180–182°C,  $[\alpha]_D^{31} = -37.9^\circ$  ( $c = 0.3$ , MeOH). **Source:** RI BEN LU TI CAO *Pyrola japonica* (whole herb). **Ref:** 4294.

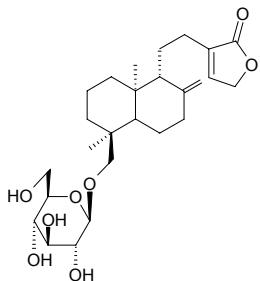
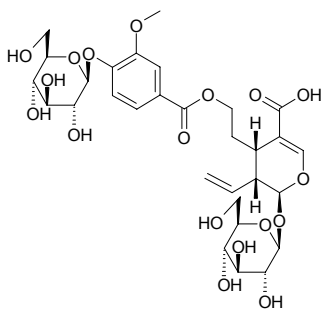
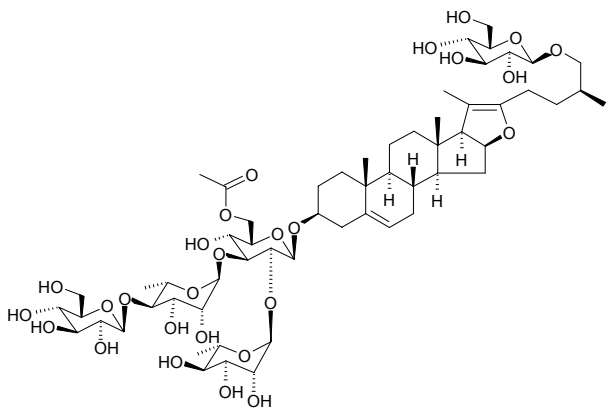
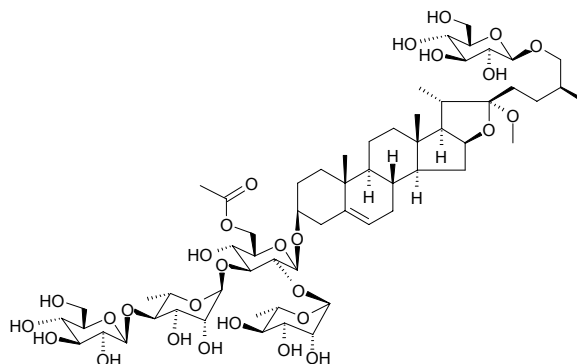
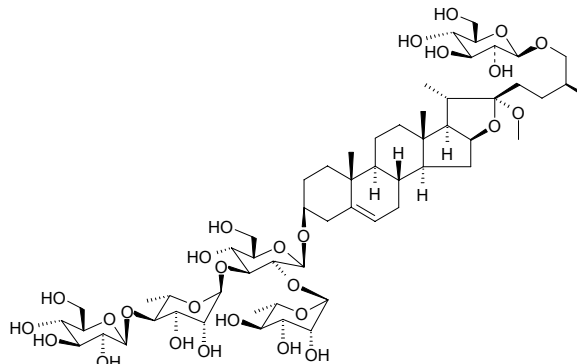
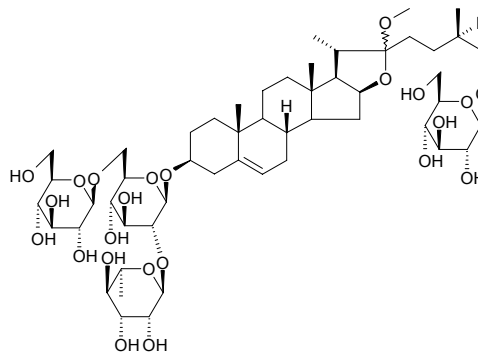
**8698 (24S,25S)-24-[( $\beta$ -D-Glucopyranosyl)oxy]-2 $\alpha$ -hydroxyspirost-5-en-3 $\beta$ -yl O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)-O- $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 3)]-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-galactopyranoside**

C<sub>62</sub>H<sub>100</sub>O<sub>34</sub> (1389.47). Amorphous powder,  $[\alpha]_D^{28} = -48.0^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Cytotoxic (*in vitro*, HSC-2, LD<sub>50</sub> > 300 $\mu$ g/mL; control Doxorubicin, LD<sub>50</sub> = 2.5 $\mu$ g/mL)<sup>[4667]</sup>. **Source:** YE XIANG SHU *Cestrum nocturnum* (leaf; yield = 0.0060%fw). **Ref:** 4667.

**8699 3 $\beta$ -[( $\beta$ -D-Glucopyranosyl)oxy]-17 $\alpha$ -hydroxy-16 $\beta$ -[(O- $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 2)-2-O-acetyl- $\alpha$ -L-arabinopyranosyl)oxy]cholest-5-en-22-one**

C<sub>45</sub>H<sub>72</sub>O<sub>18</sub> (901.06). Amorphous solid,  $[\alpha]_D^{25} = -50.0^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Cytotoxic (HL-60 cells, IC<sub>50</sub> = 0.0024 $\mu$ mol/L, control Etoposide, IC<sub>50</sub> = 0.025 $\mu$ mol/L). **Source:** XIA FENG XIN ZI *Galtonia candicans* (bulb). **Ref:** 4116.

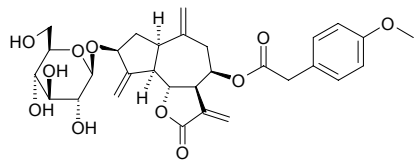


**8700 18-β-D-Glucopyranosyloxy-8(17),13-ent-labdadien-16,15-olide**C<sub>26</sub>H<sub>40</sub>O<sub>8</sub> (480.60). Yellow oil,  $[\alpha]_D^{25} = -37.8^\circ$  ( $c = 0.87$ , CH<sub>3</sub>OH).Source: GUANG YE YAN ZI CAI *Potamogeton lucens* (whole herb). Ref: 3795.**8701 7-O-(4-β-D-Glucopyranosyloxy-3-methoxybenzoyl) seco-loganic acid**C<sub>30</sub>H<sub>40</sub>O<sub>18</sub> (688.64). Amorphous powder,  $[\alpha]_D^{26} = -96.4^\circ$  ( $c = 0.149$ ,MeOH). Source: JIN YIN HUA *Lonicera japonica* (stem and leaf). Ref: 4220.**8702 (25S)-26-[(β-D-Glucopyranosyl)oxy]-22α-methoxyfurosta-5,20(22)-dien-3β-yl O-α-L-rhamnopyranosyl-(1→2)-O-[O-β-D-glucopyranosyl-(1→4)-α-L-rhamnopyranosyl-(1→3)]-6-O-acetyl-β-D-glucopyranoside**C<sub>59</sub>H<sub>94</sub>O<sub>27</sub> (1235.39). Amorphous solid,  $[\alpha]_D^{25} = -42.0^\circ$  ( $c = 0.10$ , CHCl<sub>3</sub>:MeOH = 1:1). Source: JIAN GEN SHU *Tacca chantrieri* [Syn. *Tacca minor*; *Tacca esquirolii*] (rhizome: yield = 0.00029%dw). Ref: 4648.**8703 (25S)-26-[(β-D-Glucopyranosyl)oxy]-22α-methoxyfurost-5-en-3β-yl O-α-L-rhamnopyranosyl-(1→2)-O-[O-β-D-glucopyranosyl-(1→4)-α-L-rhamnopyranosyl-(1→3)]-6-O-acetyl-β-D-glucopyranoside**C<sub>60</sub>H<sub>98</sub>O<sub>28</sub> (1267.43). Amorphous solid,  $[\alpha]_D^{25} = -106.0^\circ$  ( $c = 0.10$ , CHCl<sub>3</sub>:MeOH = 1:1). Source: JIAN GEN SHU *Tacca chantrieri* [Syn. *Tacca minor*; *Tacca esquirolii*] (rhizome: yield = 0.0027%dw). Ref: 4648.**8704 (25S)-26-[(β-D-Glucopyranosyl)oxy]-22α-methoxyfurost-5-en-3β-yl O-α-L-rhamnopyranosyl-(1→2)-O-[O-β-D-glucopyranosyl-(1→4)-α-L-rhamnopyranosyl-(1→3)]-β-D-glucopyranoside**C<sub>58</sub>H<sub>96</sub>O<sub>27</sub> (1225.4). Amorphous solid,  $[\alpha]_D^{25} = -82.0^\circ$  ( $c = 0.10$ , CHCl<sub>3</sub>:MeOH = 1:1). Source: JIAN GEN SHU *Tacca chantrieri* [Syn. *Tacca minor*; *Tacca esquirolii*] (rhizome: yield = 0.14%dw). Ref: 4648.**8705 (25R)-26-(β-D-Glucopyranosyloxy)-22-methoxyfurost-5-en-3β-yl O-α-L-rhamnopyranosyl-(1→2)-O-[β-D-glucopyranosyl-(1→6)]-β-D-glucopyranoside**[244160-64-3] C<sub>52</sub>H<sub>86</sub>O<sub>23</sub> (1079.25). Amorphous solid,  $[\alpha]_D^{29} = -69.0^\circ$  ( $c = 0.29$ , MeOH). Source: QING LIANG BAI HE *Lilium candidum*. Ref: 2303.



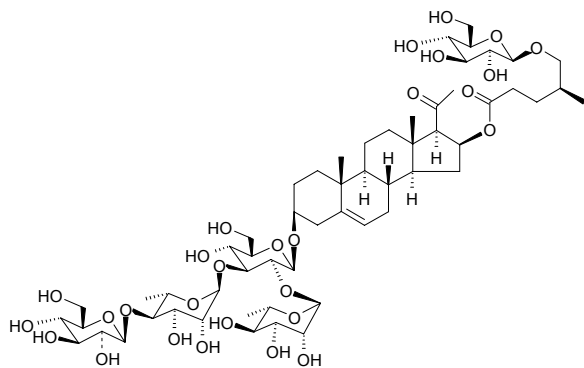
**8706** 2β-(β-D-glucopyranosyloxy)-8β-(4''-methoxyphenylacetox)-guaia-4(15),10(14),11(13)-trien-1α,5α,6β,7αH-12,6-olide

C<sub>30</sub>H<sub>36</sub>O<sub>11</sub> (572.61). Source: NAN XI BAN YA HUAN YANG SHEN *Crepis tingitana*. Ref: 1859.



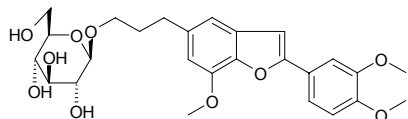
**8707** 16β-[[[(4S)-5-(β-D-Glucopyranosyloxy)-4-methyl-1-oxopentyl]oxy]-3β-[(O-α-L-rhamnopyranosyl-(1→2)-O-[O-β-D-glucopyranosyl-(1→4)-α-L-rhamnopyranosyl-(1→3)]-β-D-glucopyranosyl)oxy]pregn-5-en-20-one

C<sub>57</sub>H<sub>92</sub>O<sub>28</sub> (1225.35). Amorphous solid, [α]<sub>D</sub><sup>25</sup> = -22.0° (c = 0.10, CHCl<sub>3</sub>:MeOH = 1:1). Source: JIAN GEN SHU *Tacca chantrieri* [Syn. *Tacca minor*; *Tacca esquirolii*] (rhizome: yield = 0.00082%dw). Ref: 4648.



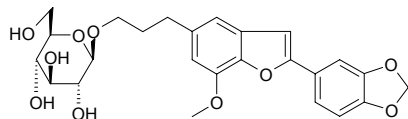
**8708** 5-[3''-(β-D-Glucopyranosyloxy)propyl]-7-methoxy-2-(3',4'-dimethoxyphenyl)benzofuran

C<sub>26</sub>H<sub>32</sub>O<sub>10</sub> (504.54). White powder, [α]<sub>D</sub><sup>25</sup> = -22.23° (c = 0.8, CH<sub>3</sub>OH). Pharm: Antibacterial (*Staphylococcus aureus*, MIC = 20μg/mL; control Chloramphenicol, MIC = 5μg/mL); antifungal (*Candida albicans*, MIC = 20μg/mL, control Chloramphenicol, MIC = 5μg/mL; *Cladosporium sphaerospermum*, inactive at 20μg). Source: XIU SE AN XI XIANG *Styrax ferrugineus* (leaf). Ref: 5100.



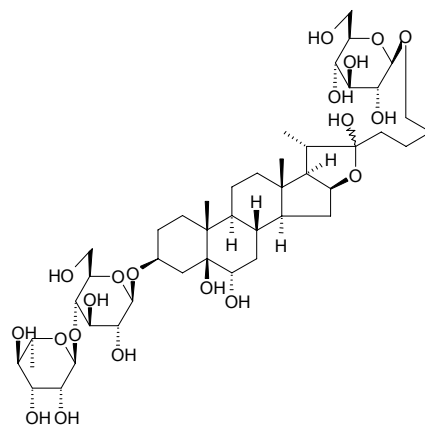
**8709** 5-[3''-β-D-Glucopyranosyloxy)propyl]-7-methoxy-2-(3',4'-methylendioxyphenyl)benzofuran

C<sub>25</sub>H<sub>28</sub>O<sub>10</sub> (488.50). White powder. Pharm: Antibacterial (*Staphylococcus aureus*, MIC = 15μg/mL; control Chloramphenicol, MIC = 5μg/mL); antifungal (*Candida albicans*, MIC = 15μg/mL, control Chloramphenicol, MIC = 5μg/mL; *Cladosporium sphaerospermum*, inactive at 20μg). Source: XIU SE AN XI XIANG *Styrax ferrugineus* (leaf). Ref: 5100.



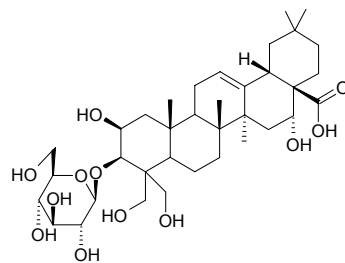
**8710** 26-O-β-D-Glucopyranosyl-(25S)-3β,5β,6α,22ξ,26-pentahydroxyl-5β-furostane 3-O-α-L-rhamnopyranosyl-(1→4)-β-D-glucopyranoside

C<sub>45</sub>H<sub>76</sub>O<sub>20</sub> (937.10). Amorphous powder, [α]<sub>D</sub><sup>29</sup> = -53.2° (c = 0.20, pyridine). Source: JIU ZI *Allium tuberosum*. Ref: 4262.



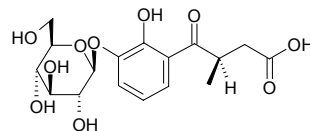
**8711** 3-O-β-D-Glucopyranosyl platycodigenin

3-O-β-D-Glucopyranosyl-2β,3β,16α,23,24-pentahydroxyolean-12-ene-28-oic acid C<sub>36</sub>H<sub>58</sub>O<sub>12</sub> (682.86). White amorphous powder. Source: JIE GENG *Platycodon grandiflorum*. Ref: 4900.



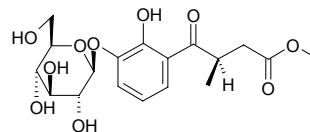
**8712** 3'-O-β-Glucopyranosyl plumbagic acid

C<sub>17</sub>H<sub>22</sub>O<sub>10</sub> (386.36). Amorphous powder. Source: BAI HUA DAN *Plumbago zeylanica*. Ref: 2047.



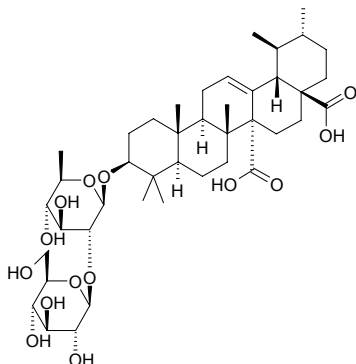
**8713** 3'-O-β-Glucopyranosyl plumbagic acid methyl ester

C<sub>18</sub>H<sub>24</sub>O<sub>10</sub> (400.39). [α]<sub>D</sub><sup>27</sup> = -37° (c = 0.35, MeOH). Source: BAI HUA DAN *Plumbago zeylanica*. Ref: 2047.



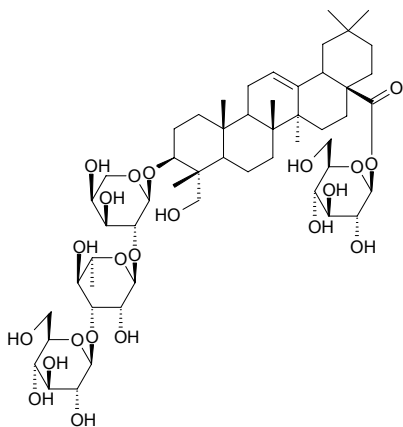
**8714 3-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-quinovopyranosyl quinovic acid**

$C_{42}H_{66}O_{14}$  (794.99). Colorless crystalline solid, mp 220–222 °C ( $H_2O$ ),  $[\alpha]_D^{22} = +43^\circ$  ( $c = 0.6$ , MeOH). Source: WU BING XIN WU TAN *Neonauclea sessilifolia* [Syn. *Nauclea sessilifolia*; *Adina sessilifolia*](root). Ref: 4405.



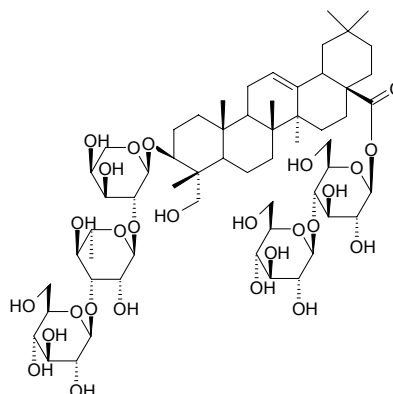
**8715 3 $\beta$ -O-( $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranosyl)-hederagenin-28-O- $\beta$ -D-glucopyranosyl ester**

$C_{53}H_{86}O_{22}$  (1075.26). White powder,  $[\alpha]_D^{25} = +47^\circ$ , ( $c = 1$ , MeOH). Pharm: Cytotoxic (antiproliferative *in vitro*: J774.A1 cell line,  $IC_{50} = 0.51 \mu\text{mol/L}$ , HEK-293 cell line,  $IC_{50} = 1.8 \mu\text{mol/L}$ , WEHI-164 cell line,  $IC_{50} = 1.74 \mu\text{mol/L}$ ; control 6-Mercaptopurine, J774.A1 cell line,  $IC_{50} = 0.003 \mu\text{mol/L}$ , HEK-293 cell line,  $IC_{50} = 0.007 \mu\text{mol/L}$ , WEHI-164 cell line,  $IC_{50} = 0.015 \mu\text{mol/L}$ ). Source: YUAN YE E ZHANG CHAI *Schefflera rotundifolia* (aerial parts). Ref: 5036.



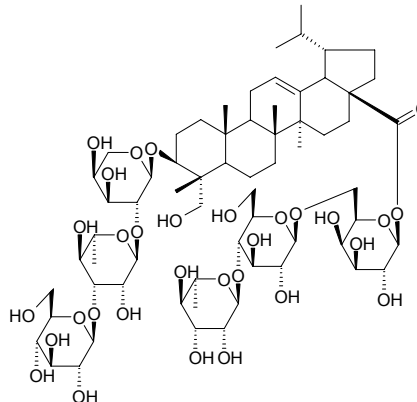
**8716 3 $\beta$ -O-( $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranosyl)-hederagenin-28-O-( $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl)ester**

$C_{59}H_{96}O_{27}$  (1237.41). White powder,  $[\alpha]_D^{25} = +29^\circ$ , ( $c = 1$ , MeOH). Pharm: Cytotoxic (antiproliferative, *in vitro*: J774.A1 cell line,  $IC_{50} = 1.63 \mu\text{mol/L}$ , WEHI-164 cell line,  $IC_{50} = 0.64 \mu\text{mol/L}$ ; control 6-Mercaptopurine, J774.A1 cell line,  $IC_{50} = 0.003 \mu\text{mol/L}$ , WEHI-164 cell line,  $IC_{50} = 0.015 \mu\text{mol/L}$ ). Source: YUAN YE E ZHANG CHAI *Schefflera rotundifolia* (aerial parts). Ref: 5036.



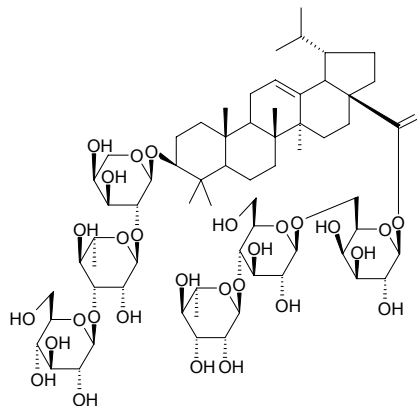
**8717 3 $\beta$ -O-( $\beta$ -Glucopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -arabinopyranosyl)-23-hydroxylup-12-en-28-O-( $\alpha$ -rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -galactopyranosyl) ester**

$C_{65}H_{106}O_{31}$  (1383.55). White amorphous powder,  $[\alpha]_D^{25} = +120^\circ$  ( $c = 1$ , MeOH). Pharm: Antiproliferative (*in vitro*, J774 cell line,  $IC_{50} = 0.46 \mu\text{mol/L}$ , control 6-Mercaptopurine,  $IC_{50} = 0.003 \mu\text{mol/L}$ ; WEHI-164,  $IC_{50} = 1.9 \mu\text{mol/L}$ , 6-Mercaptopurine,  $IC_{50} = 0.017 \mu\text{mol/L}$ ). Source: *Schefflera faguetai*. Ref: 5436.



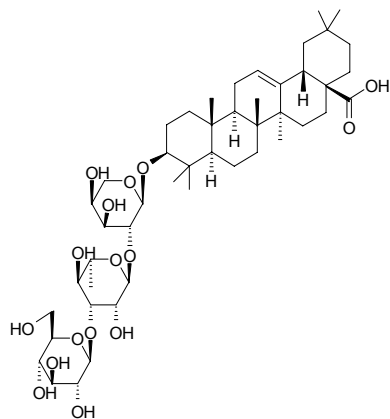
**8718 3 $\beta$ -O-( $\beta$ -Glucopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -arabinopyranosyl)-lup-12-en-28-O-( $\alpha$ -rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -galactopyranosyl) ester**

$C_{65}H_{106}O_{30}$  (1367.55). White amorphous powder,  $[\alpha]_D^{25} = +139^\circ$  ( $c = 1$ , MeOH). Pharm: Antiproliferative (*in vitro*, J774 cell line,  $IC_{50} = 0.19 \mu\text{mol/L}$ , control 6-Mercaptopurine,  $IC_{50} = 0.003 \mu\text{mol/L}$ ; WEHI-164,  $IC_{50} = 0.56 \mu\text{mol/L}$ , 6-Mercaptopurine,  $IC_{50} = 0.017 \mu\text{mol/L}$ ). Source: *Schefflera faguetai*. Ref: 5436.



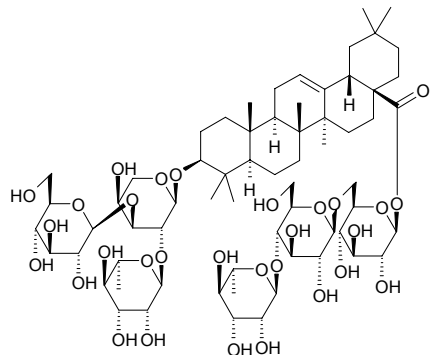
**8719 3-O- $\alpha$ -L-Glucopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranosyloleonic acid**

C<sub>47</sub>H<sub>76</sub>O<sub>16</sub> (897.12). Source: SAN YE MU TONG *Akebia trifoliata* (stem), HUANG HUA BAI JIANG *Patrinia scabiosaefolia*. Ref: 660, 4545.



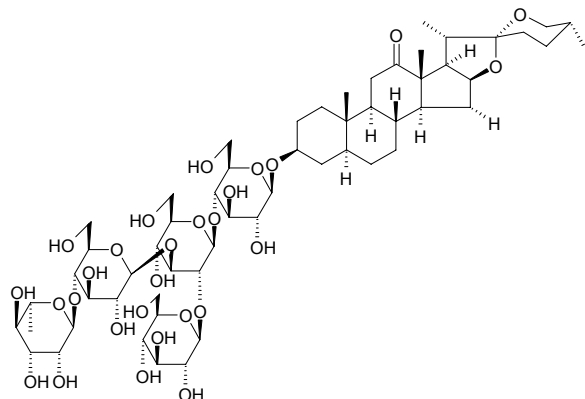
**8720 3 $\beta$ -[(O- $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 3)-O-[ $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranosyl]oxy]olean-12-en-28-oic acid O- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl ester**

C<sub>65</sub>H<sub>106</sub>O<sub>30</sub> (1367.55). Source: SAN YE MU TONG *Akebia trifoliata* (stem). Ref: 4545.



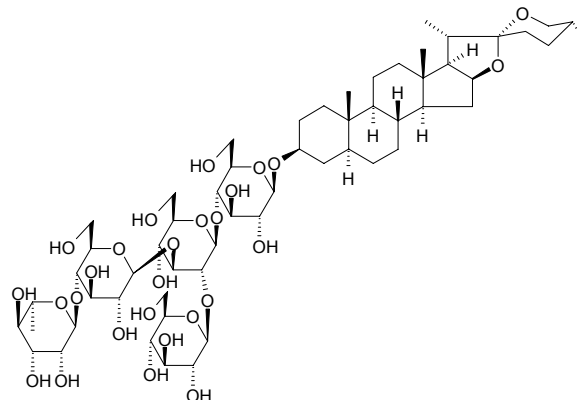
**8721 (25R)-3 $\beta$ -[(O- $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 2)-O-[O- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)]-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-galactopyranosyl]oxy]-5 $\alpha$ -spirostan-12-one**

C<sub>57</sub>H<sub>92</sub>O<sub>28</sub> (1225.35). Amorphous solid,  $[\alpha]_D^{25} = -36.0^\circ$  ( $c = 0.10$ , MeOH). Pharm: Cytotoxic (hmn oral squamous cell HSC-2, LD<sub>50</sub> = 2.4 $\mu$ g/mL; normal hmn gingival fibroblast HGF cell, LD<sub>50</sub> = 18 $\mu$ g/mL). Source: *Camassia leichtlinii* (bulb). Ref: 3535.



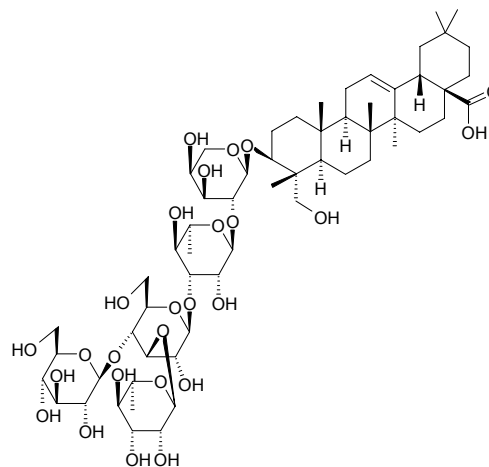
**8722 (25R)-3 $\beta$ -[(O- $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 2)-O-[O- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)]-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-galactopyranosyl]oxy]-5 $\alpha$ -spirostane**

C<sub>57</sub>H<sub>94</sub>O<sub>27</sub> (1211.37). Pharm: Cytotoxic (hmn oral squamous cell HSC-2, LD<sub>50</sub> = 1.9 $\mu$ g/mL; normal hmn gingival fibroblast HGF cell, LD<sub>50</sub> = 20 $\mu$ g/mL). Source: *Camassia leichtlinii* (bulb). Ref: 3535.



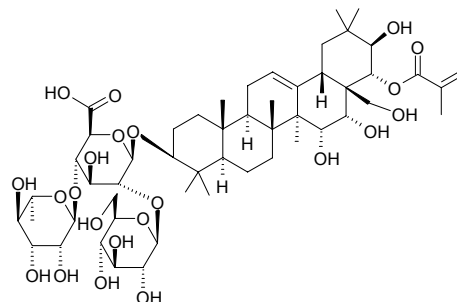
**8723 3-O- $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 4)[ $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -arabinopyranosyl-hederagenin**

C<sub>59</sub>H<sub>96</sub>O<sub>26</sub> (1221.41). White powder, mp 239–243°C,  $[\alpha]_D^{21} = -12.3^\circ$  ( $c = 0.28$ , MeOH). Source: CHUAN XU DUAN *Dipsacus asperoides*. Ref: 265.

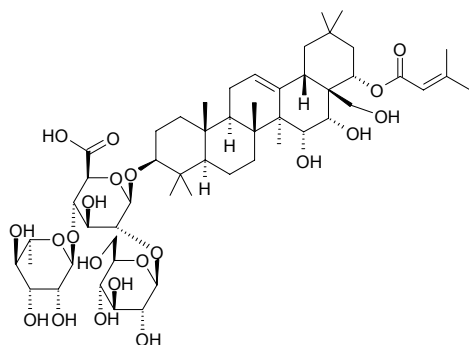


**8724 3-O- $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 2)-[ $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)]- $\beta$ -D-glucuronopyranosyl-22-O-angeloyl-barrigenol R<sub>1</sub>**

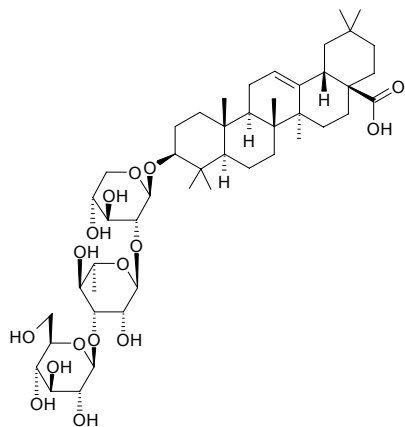
C<sub>53</sub>H<sub>84</sub>O<sub>22</sub> (1073.25). White amorphous powder,  $[\alpha]_D^{25} = -33.0^\circ$  ( $c = 0.03$ , MeOH). Source: TIAN YE CI QIN *Eryngium campestre* (root). Ref: 4518.



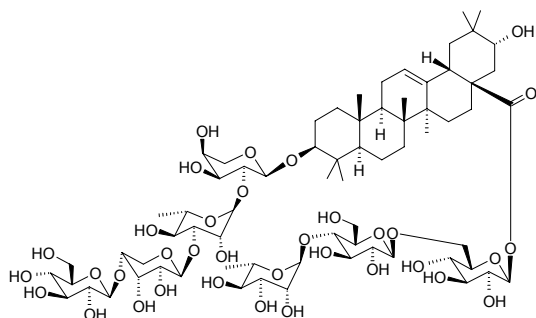
**8725** 3-*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 2)-[ $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)]- $\beta$ -*D*-glucuronopyranosyl-22-*O*- $\beta$ , $\beta$ -dimethylacryloyl-barrigenol A<sub>1</sub>  
C<sub>53</sub>H<sub>84</sub>O<sub>21</sub> (1057.25). White amorphous powder,  $[\alpha]_D^{25} = -33.0^\circ$  ( $c = 0.03$ , MeOH). Source: TIAN YE CI QIN *Eryngium campestre* (root). Ref: 4518.



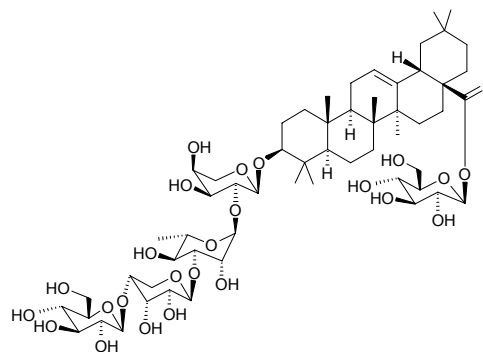
**8726** 3-*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-xylopyranosyl oleanolic acid  
C<sub>47</sub>H<sub>76</sub>O<sub>16</sub> (897.12). White powder (acetone), mp 234–238°C (dec). Source: HUANG HUA BAI JIANG *Patrinia scabiosaefolia*. Ref: 776.



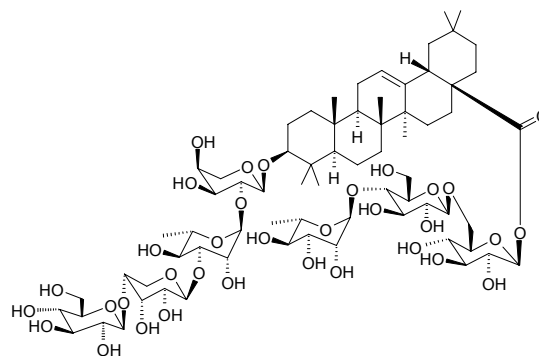
**8727** 3 $\beta$ -[(*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 4)-*O*- $\beta$ -*D*-ribopyranosyl-(1 $\rightarrow$ 3)-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl)oxy]-21 $\alpha$ -hydroxy olean-12-en-28-oic acid *O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl ester  
C<sub>70</sub>H<sub>114</sub>O<sub>35</sub> (1515.67). Amorphous solid,  $[\alpha]_D^{25} = -108.0^\circ$  ( $c = 0.25$ , MeOH). Source: WEI LING XIAN *Clematis chinensis* (root; yield = 0.0024%). Ref: 4763.



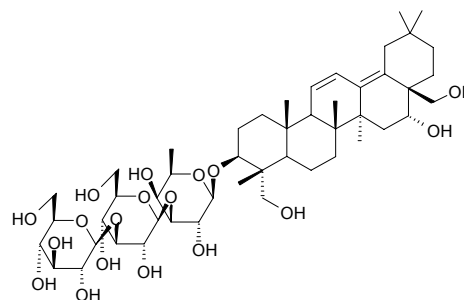
**8728** 3 $\beta$ -[(*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 4)-*O*- $\beta$ -*D*-ribopyranosyl-(1 $\rightarrow$ 3)-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl)oxy]olean-12-en-28-oic acid *O*- $\beta$ -*D*-glucopyranosyl ester  
C<sub>58</sub>H<sub>94</sub>O<sub>25</sub> (1191.38). Amorphous solid,  $[\alpha]_D^{25} = -38.0^\circ$  ( $c = 0.10$ , MeOH). Source: WEI LING XIAN *Clematis chinensis* (root; yield = 0.00028%). Ref: 4763.



**8729** 3 $\beta$ -[(*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 4)-*O*- $\beta$ -*D*-ribopyranosyl-(1 $\rightarrow$ 3)-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl)oxy]olean-12-en-28-oic acid *O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl ester  
C<sub>70</sub>H<sub>114</sub>O<sub>34</sub> (1499.67). Source: WEI LING XIAN *Clematis chinensis* (root; yield = 0.0125%). Ref: 4763.

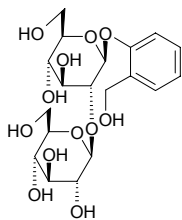


**8730** 2''-*O*- $\beta$ -*D*-glucopyranosyl saikosaponin b<sub>2</sub>  
C<sub>48</sub>H<sub>78</sub>O<sub>18</sub> (943.15). Source: WEN CHUAN CHAI HU *Bupleurum wenchuanense*. Ref: 2247.

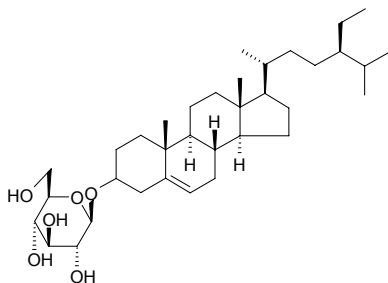


**8731 2'-O-β-D-Glucopyranosylsalicin**

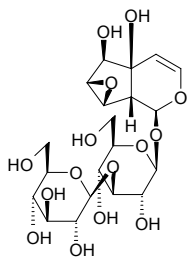
C<sub>19</sub>H<sub>28</sub>O<sub>12</sub> (448.43). [α]<sub>D</sub><sup>22</sup> = -33° (c = 0.35, MeOH). Source: BA JIAO FENG *Alangium chinense* (leaf). Ref: 4131.

**8732 3-O-β-D-Glucopyranosyl-β-sitosterol**

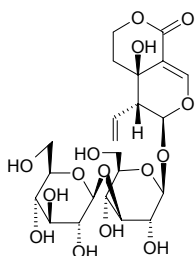
C<sub>35</sub>H<sub>60</sub>O<sub>6</sub> (576.86). Crystals, mp 287~289°C. Source: *Zygophyllum atriplicoides* (whole herb). Ref: 4504.

**8733 3'-O-β-D-Glucopyranosylstilbericoside**

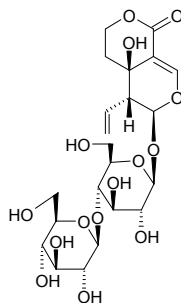
C<sub>20</sub>H<sub>30</sub>O<sub>15</sub> (510.45). Amorphous powder, [α]<sub>D</sub><sup>19</sup> = -105.3° (c = 0.69, MeOH). Source: TAI GUO SHAN QIAN NIU *Thunbergia laurifolia*. Ref: 1968.

**8734 3'-O-β-D-Glucopyranosylswertiamarin**

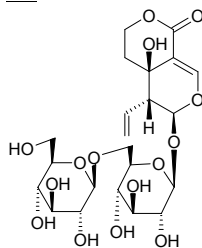
C<sub>22</sub>H<sub>32</sub>O<sub>15</sub> (536.49). Amorphous powder, [α]<sub>D</sub><sup>25</sup> = -114.6° (c = 0.2, MeOH). Source: RI BEN ZHANG YA CAI *Swertia japonica*. Ref: 2573.

**8735 4'-O-β-D-Glucopyranosylswertiamarin**

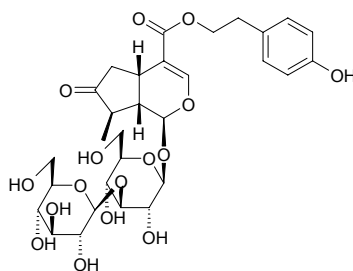
C<sub>22</sub>H<sub>32</sub>O<sub>15</sub> (536.49). Amorphous powder, [α]<sub>D</sub><sup>25</sup> = -96.8° (c = 0.2, MeOH). Source: RI BEN ZHANG YA CAI *Swertia japonica*. Ref: 2573.

**8736 6'-O-β-D-Glucopyranosylswertiamarin**

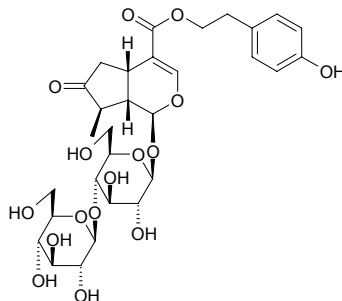
C<sub>22</sub>H<sub>32</sub>O<sub>15</sub> (536.49). Source: RI BEN ZHANG YA CAI *Swertia japonica*. Ref: 2573.

**8737 3'-O-β-D-Glucopyranosylsyringopicroside**

C<sub>30</sub>H<sub>40</sub>O<sub>16</sub> (656.64). Amorphous powder, [α]<sub>D</sub><sup>26</sup> = -88.9° (c = 0.3, MeOH). Source: BAO MA ZI *Syringa amurensis* [Syn. *Syringa reticulata* var. *amurensis*] (leaf). Ref: 4175.

**8738 4'-O-β-D-Glucopyranosylsyringopicroside**

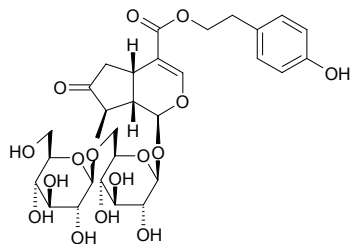
C<sub>30</sub>H<sub>40</sub>O<sub>16</sub> (656.64). Amorphous powder, [α]<sub>D</sub><sup>26</sup> = -77.2° (c = 0.8, MeOH). Source: BAO MA ZI *Syringa amurensis* [Syn. *Syringa reticulata* var. *amurensis*] (leaf). Ref: 4175.



**8739 6'-O- $\alpha$ -D-Glucopyranosylsyringopioside**

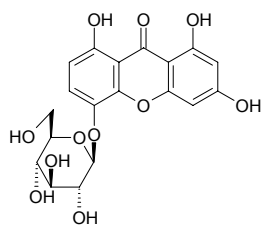
$C_{30}H_{40}O_{16}$  (656.64). Amorphous powder,  $[\alpha]_D^{26} = -28.6^\circ$  ( $c = 0.2$ , MeOH).

Source: BAO MA ZI *Syringa amurensis* [Syn. *Syringa reticulata* var. *amurensis*] (leaf). Ref: 4175.

**8740 5-O- $\beta$ -D-Glucopyranosyl-1,3,8-trihydroxyanthone**

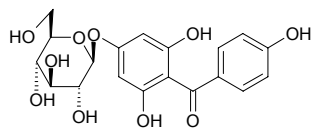
$C_{19}H_{18}O_{11}$  (422.35). Yellow amorphous powder, mp 280–282°C. Source:

CHUAN DONG ZHANG YA CAI *Swertia davidii* (whole herb). Ref: 4839.

**8741 4-O- $\beta$ -D-Glucopyranosyl-2,6,4'-trihydroxybenzophenone**

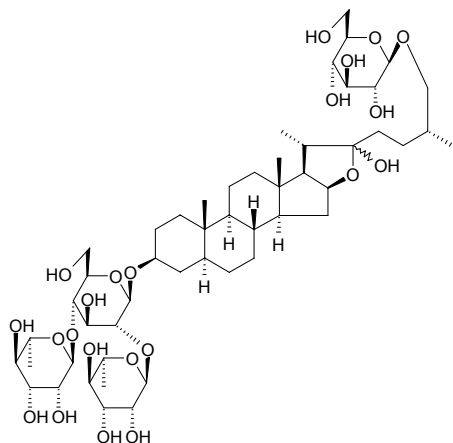
$C_{19}H_{20}O_{10}$  (408.37). Source: KUO YE GU SUI BU *Davallia solida*. Ref:

5150.

**8742 26-O- $\beta$ -D-Glucopyranosyl-(25R)-3 $\beta$ ,22 $\zeta$ ,26-trihydroxyl-5 $\alpha$ -furostane 3-O- $\beta$ -chacotrioside**

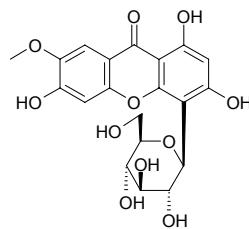
$C_{51}H_{86}O_{22}$  (1051.24). Amorphous powder,  $[\alpha]_D^{29} = -45.4^\circ$  ( $c = 0.17$ , pyridine).

Source: JIU ZI *Allium tuberosum*. Ref: 4262.

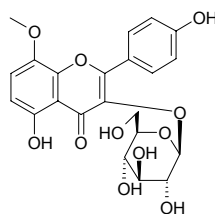
**8743 4-C- $\beta$ -D-Glucopyranosyl-1,3,6-trihydroxy-7-methoxyxanthone**

$C_{20}H_{20}O_{11}$  (436.38). Yellow powder, mp 182–186°C. Source: YUAN ZHI

*Polygala tenuifolia*. Ref: 2433.

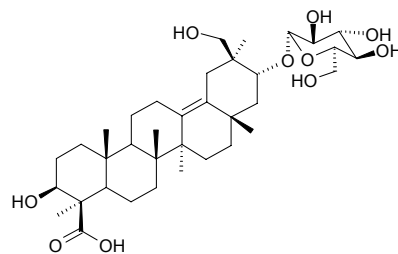
**8744 3-O- $\beta$ -D-Glucopyranosyl-5,9,4'-trihydroxy-8-methoxyflavone**

$C_{22}H_{22}O_{11}$  (462.41). Source: MA HUANG *Ephedra sinica*. Ref: 2.

**8745 21-O- $\beta$ -D-Glucopyranosyl-3 $\beta$ ,21 $\alpha$ ,30-trihydroxyolean-13(18)-en-24-oic acid**

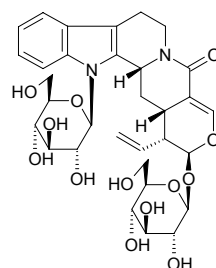
$C_{36}H_{58}O_{10}$  (650.86). Amorphous white powder (MeOH), mp 270–272°C,

$[\alpha]_D^{25} = -11.7^\circ$  ( $c = 0.41$ , MeOH). Source: SI CHI SI LENG CAO *Schnabelia tetradonta* (aerial parts: yield = 0.00010%dw). Ref: 4665.

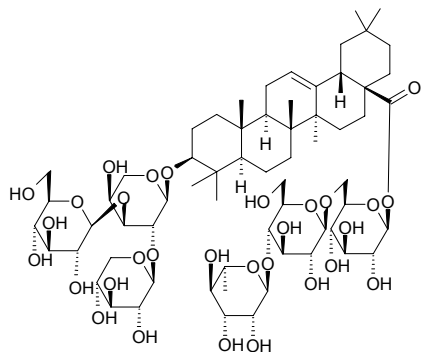
**8746 N- $\beta$ -D-Glucopyranosyl vincosamide**

$C_{32}H_{40}N_2O_{13}$  (660.68). Yellow amorphous powder. Source: PING HUA GUO

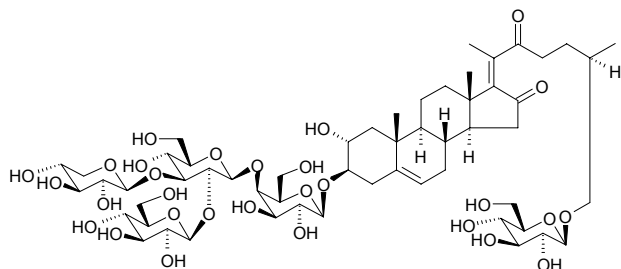
JIU JE *Psychotria leiocarpa* (shoot). Ref: 3769.



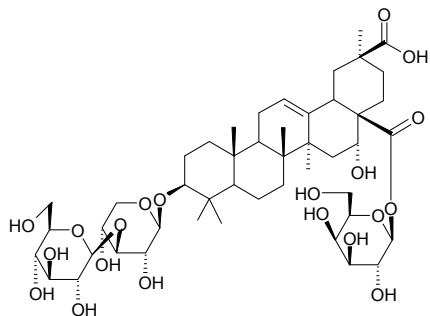
**8747** 3 $\beta$ -[(*O*- $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 3)-*O*- $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 2)]- $\alpha$ -L-arabinopyranosyl)oxy]olean-12-en-28-oic acid *O*- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl ester  
C<sub>64</sub>H<sub>104</sub>O<sub>30</sub> (1353.52). Source: SAN YE MU TONG *Akebia trifoliata* (stem). Ref: 4545.



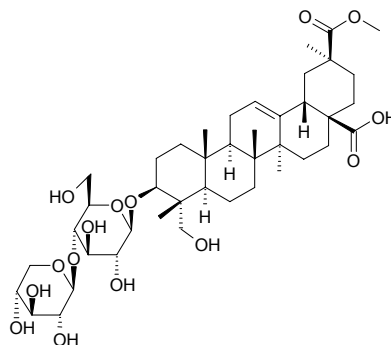
**8748** (25*R*)-3 $\beta$ -[(*O*- $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 2)-*O*- $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 3)]-*O*- $\beta$ -D-galactopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-galactopyranosyl)oxy]-26-[( $\beta$ -D-glucopyranosyl)oxy]-2 $\alpha$ -hydroxycholesta-5,17-diene-16,22-dione  
C<sub>56</sub>H<sub>88</sub>O<sub>29</sub> (1225.31). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>29</sup> = -104.0° (*c* = 0.10, MeOH). Pharm: Cytotoxic (*in vitro*, HSC-2, LD<sub>50</sub> > 300 $\mu$ g/mL; control Doxorubicin, LD<sub>50</sub> = 2.5 $\mu$ g/mL). Source: YE XIANG SHU *Cestrum nocturnum* (leaf; yield = 0.0040%fw). Ref: 4667.



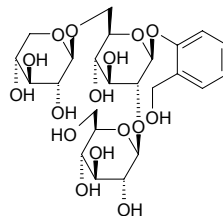
**8749** 3 $\beta$ -*O*-( $\beta$ -Glucopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -xylopyranosyl)-16 $\alpha$ -hydroxy-olean-12-ene-28,30-dioic acid 28-*O*-( $\beta$ -galactopyranosyl) ester  
C<sub>47</sub>H<sub>74</sub>O<sub>20</sub> (959.10). White amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +11° (*c* = 1, MeOH). Pharm: Antiproliferative (*in vitro*, J774 cell line, IC<sub>50</sub> = 3.6 $\mu$ mol/L, control 6-Mercaptopurine, IC<sub>50</sub> = 0.003 $\mu$ mol/L; HEK-293, IC<sub>50</sub> = 0.50 $\mu$ mol/L, 6-Mercaptopurine, IC<sub>50</sub> = 0.007 $\mu$ mol/L; WEHI-164, IC<sub>50</sub> = 0.18 $\mu$ mol/L, 6-Mercaptopurine, IC<sub>50</sub> = 0.017 $\mu$ mol/L). Source: *Schefflera faguetai*. Ref: 5436.



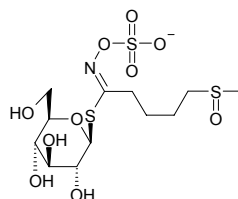
**8750** 3-*O*- $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-xylopyranosyl]phytolaccinic Acid  
C<sub>42</sub>H<sub>66</sub>O<sub>15</sub> (810.99). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>21.8</sup> = +46.1° (*c* = 0.74, MeOH). Source: MEI SHANG LU *Phytolacca americana* [Syn. *Phytolacca decandra*]. Ref: 2443.



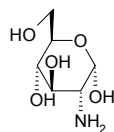
**8751** 2'-*O*- $\beta$ -D-Glucopyranosyl-6'-*O*- $\beta$ -D-xylopyranosylsalicin  
C<sub>24</sub>H<sub>36</sub>O<sub>16</sub> (580.54). [ $\alpha$ ]<sub>D</sub><sup>19</sup> = -31° (*c* = 0.27, MeOH). Source: BA JIAO FENG *Alangium chinense* (leaf). Ref: 4131.



**8752** Glucoraphanin  
[21414-41-5] C<sub>12</sub>H<sub>22</sub>NO<sub>10</sub>S<sub>3</sub><sup>-</sup> (436.50). Pharm: Antifungal; antimicrobial. Source: BAO ZI GAN LAN *Brassica oleracea* var. *gemmifera*, GAN LAN *Brassica oleracea* var. *capitata*, JU SAN HUA YE CAI *Brassica oleracea* var. *botrytis* subvar. *cymosa*, LAI FU ZI *Raphanus sativus*. Ref: 658.

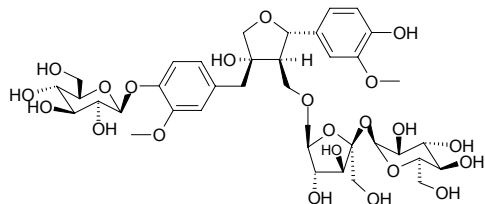


**8753** Glucosamine  
[3416-24-8] C<sub>6</sub>H<sub>13</sub>NO<sub>5</sub> (179.17). mp ( $\alpha$ ) 88°C, ( $\beta$ ) 110°C (dec). Pharm: Antiarthritic (approved by clinical trial). Source: BAI FAN DOU *Phaseolus vulgaris*, GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *Huechingensis*], HAI SHEN CHANG *Stichopus japonicus*, LU RONG *Cervus nippon*; *Cervus elaphus*, NIU NAO *Bos taurus domesticus*; *Bubalus bubalis*, YE JU *Chrysanthemum indicum*, ZI ZHI *Ganoderma japonicum* [Syn. *Ganoderma sinense*]. Ref: 2, 658, 660.

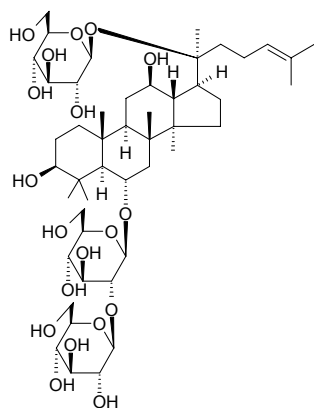


**8754 4'-O-β-D-Glucosyl-9-O-(6''-deoxysaccharosyl)olivil**

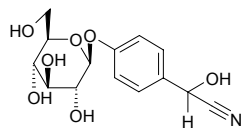
C<sub>38</sub>H<sub>54</sub>O<sub>22</sub> (862.84). [α]<sub>D</sub><sup>21</sup> = -27° (c = 0.05, DMSO). **Pharm:** Adenosine A<sub>1</sub> receptor partial agonist (rat and hmn adenosine A<sub>1</sub> receptor, the first non-nucleoside adenosine receptor agonist not structurally related to adenosine). **Source:** XIE CAO *Valeriana officinalis* (root: yield = 0.021%dw). **Ref:** 4656.

**8755 20-Glucosylginsenoside Rf**

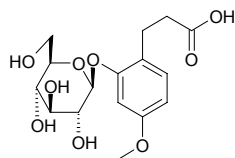
C<sub>48</sub>H<sub>82</sub>O<sub>19</sub> (963.18). **Source:** REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], ZHU JIE SAN QI *Panax pseudo-ginseng* var. *japonicus* (underground part: yield = 0.010%dw). **Ref:** 2, 4610.

**8756 p-Glucosyloxymandelonitrile**

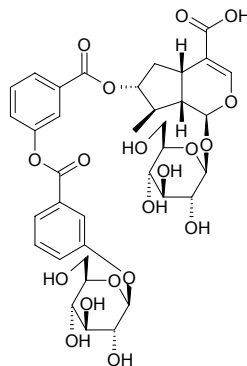
C<sub>14</sub>H<sub>17</sub>NO<sub>7</sub> (311.29). **Pharm:** Toxin. **Source:** NAN TIAN ZHU ZI *Nandina domestica*. **Ref:** 658.

**8757 2-O-β-D-Glucosyloxy-4-methoxybenzenepropanoic acid**

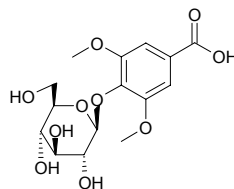
C<sub>16</sub>H<sub>22</sub>O<sub>9</sub> (358.35). mp 168–169°C (Me<sub>2</sub>CO), [α]<sub>D</sub><sup>22</sup> = -80° (c = 1.610, MeOH). **Source:** DUO TOU GE NI DI MU *Gnidia polycephala* (stem). **Ref:** 3502.

**8758 3'''-O-Glucosylsenburiside II**

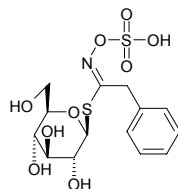
Senburiside IV C<sub>36</sub>H<sub>42</sub>O<sub>19</sub> (778.72). Amorphous, [α]<sub>D</sub><sup>26</sup> = -83.4° (c = 0.69, MeOH); White amorphous powder (MeOH-H<sub>2</sub>O), [α]<sub>D</sub><sup>25</sup> = -60.2° (c = 1.14, MeOH). **Source:** LIU QIU SHE GEN CAO *Ophiorrhiza liukiensis* (whole herb), BAO JING ZHANG YA CAI *Swertia franchetiana* (whole herb). **Ref:** 4527, 4469.

**8759 Glucosyringic acid**

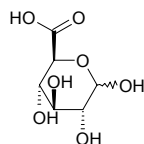
[33228-65-8] C<sub>15</sub>H<sub>20</sub>O<sub>10</sub> (360.32). Amorphous powder, mp 204–207°C, mp 215–217°C. **Source:** LIU CHUAN YU *Linaria vulgaris*, NAO YANG HUA *Rhododendron molle*, QUE MEI TENG *Sageretia theezans* [Syn. *Sageretia thea*]. **Ref:** 515, 4237, 5396.

**8760 Glucotropaeolin**

[499-26-3] C<sub>14</sub>H<sub>19</sub>NO<sub>9</sub>S<sub>2</sub> (409.44). Acicular Crystals (ethanol), tetramethylammonium, mp 188.0–189.2°C, [α]<sub>D</sub><sup>21</sup> = -16.7° (water). **Pharm:** Antibacterial; antifungal. **Source:** HAN LIAN HUA *Tropaeolum majus*, LA GEN *Armoracia lapathifolia*, FAN MU GUA *Carica papaya*. **Ref:** 6, 661.

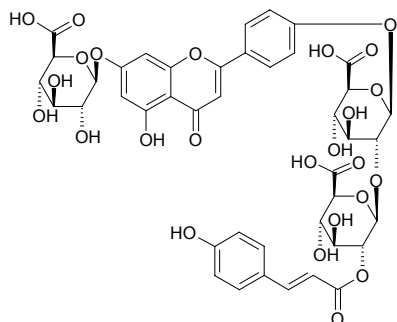
**8761 Glucuronic acid**

Glycuronic acid C<sub>6</sub>H<sub>10</sub>O<sub>7</sub> (194.14). **Pharm:** Antidote. **Source:** HUANG QI *Astragalus membranaceus*, LU HUI *Aloe vera* [Syn. *Aloe barbadensis*], REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. **Ref:** 2, 658.

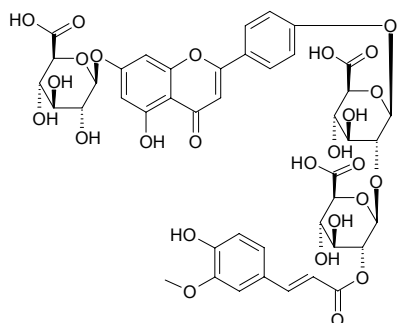




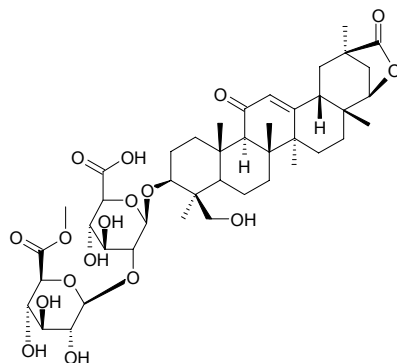
**8762 7-O-β-D-Glucuronopyranosyl-4'-O-[2'-O-p-E-coumaroyl-O-β-D-glucuronopyranosyl(1→2)-O-β-D-glucuronopyranoside]apigenin**  
 C<sub>42</sub>H<sub>40</sub>O<sub>25</sub> (944.77). Amorphous powder, mp 197~198°C,  $[\alpha]_D^{20} = -52.45^\circ$  ( $c = 0.1$ , MeOH). Source: MU XU *Medicago sativa* (aerial parts). Ref: 5167.



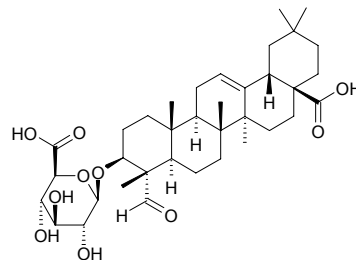
**8763 7-O-β-D-Glucuronopyranosyl-4'-O-[2'-O-E-feruloyl-O-β-D-glucuronopyranosyl(1→2)-O-β-D-glucuronopyranoside]apigenin**  
 C<sub>43</sub>H<sub>42</sub>O<sub>26</sub> (974.80). Amorphous yellow powder, mp 197~198°C,  $[\alpha]_D^{20} = -10.23^\circ$  ( $c = 0.1$ , MeOH). Source: MU XU *Medicago sativa* (aerial parts). Ref: 5167.



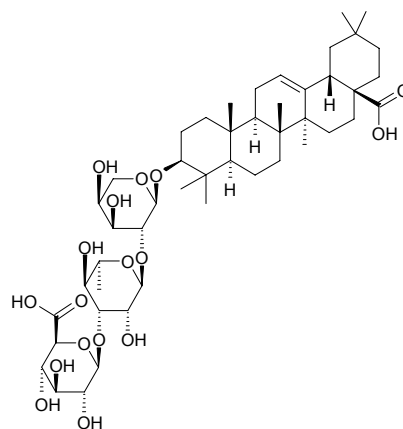
**8764 3-O-[β-D-Glucuronopyranosyl-(1→2)-O-β-D-glucuronopyranosyl]-24-hydroxyglabrolide**  
 C<sub>43</sub>H<sub>62</sub>O<sub>17</sub> (850.96). White powder,  $[\alpha]_D^{25} = +3.5$  ( $c = 0.002$ , CHCl<sub>3</sub>:CH<sub>3</sub>OH = 1:5). Source: GAN CAO *Glycyrrhiza uralensis*. Ref: 2085, 2445.



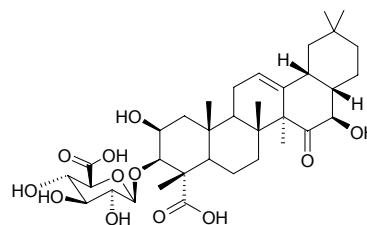
**8765 3-O-β-D-Glucuronopyranosyl gypsogenin**  
 C<sub>36</sub>H<sub>54</sub>O<sub>10</sub> (646.83). White lamellar Crystals, mp 238~240°C. Source: SHAN KU GUA *Momordica dioica*. Ref: 645.



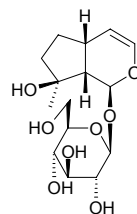
**8766 3β-[(O-β-D-Glucuronopyranosyl-(1→3)-O-[α-L-rhamnopyranosyl-(1→2)]-α-L-arabinopyranosyl)oxy]olean-12-en-28-oic acid**  
 C<sub>47</sub>H<sub>74</sub>O<sub>17</sub> (911.10). Amorphous solid,  $[\alpha]_D^{27} = -4.0^\circ$  ( $c = 0.10$ , MeOH). Source: SAN YE MU TONG *Akebia trifoliata* (stem). Ref: 4545.



**8767 3-O-β-D-Glucuronopyranosyl-2β,3β,16β-trihydroxy-28-norolean-12-en-15-on-23-oic acid**  
 C<sub>35</sub>H<sub>52</sub>O<sub>12</sub> (664.8). White needles (MeOH), mp >350°C,  $[\alpha]_D^{25} = +54.5^\circ$  ( $c = 0.44$ , MeOH). Source: SI CHI SI LENG CAO *Schnabelia tetradonta* (aerial parts: yield = 0.00026%dw). Ref: 4665.

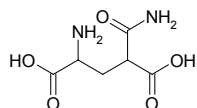


**8768 Glucoside**  
 C<sub>15</sub>H<sub>24</sub>O<sub>8</sub> (332.35). Source: ROU CONG RONG *Cistanche deserticola*. Ref: 2448.

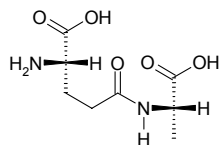


**8769 L-Glutamic acid- $\gamma$ -methylamide**

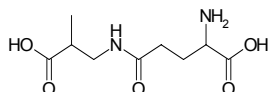
$C_6H_{10}N_2O_5$  (190.16). Source: CHA ZI XIN *Camellia oleifera*, YOU CHA GEN PI *Camellia oleifera*. Ref: 6.

**8770  $\gamma$ -Glutamyl-alanine**

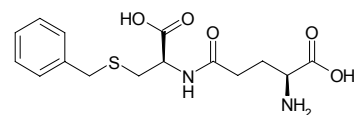
[5875-41-2]  $C_8H_{14}N_2O_5$  (218.21). mp 194~195°C (dec),  $[\alpha]_D = -28^\circ$  ( $c = 2$ ,  $H_2O$ ). Source: NIU NAO *Bos taurus domesticus*; *Bubalus bubalis*. Ref: 6, 1521.

**8771  $\gamma$ -L-Glutamyl-L- $\beta$ -aminoisobutyric acid**

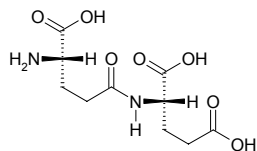
$C_9H_{16}N_2O_5$  (232.24). Source: NIU NAO *Bos taurus domesticus*; *Bubalus bubalis*. Ref: 6.

**8772 ( $S_{C2}R_{C7}$ )- $\gamma$ -Glutamyl-S-benzylcysteine**

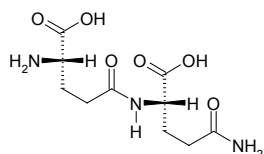
$C_{15}H_{20}N_2O_5S$  (340.40). White hygroscopic solid, mp 152~155°C,  $[\alpha]_D^{22} = -14.7^\circ$  ( $c = 0.03$ ,  $H_2O$ ). Source: SUAN CHOU MU JI CAO *Petiveria alliacea* (root). Ref: 5322.

**8773  $\gamma$ -L-Glutamyl-L-glutamic acid**

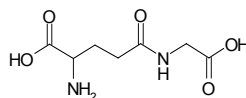
[1116-22-9]  $C_{10}H_{16}N_2O_7$  (276.25). mp 191~192°C,  $[\alpha]_D^{16} = +6.6^\circ$  ( $c = 1$ , 1mol/L HCl). Source: NIU NAO *Bos taurus domesticus*; *Bubalus bubalis*. Ref: 6, 1521.

**8774  $\gamma$ -L-Glutamyl-glutamine**

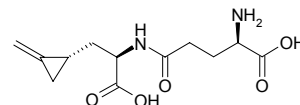
$C_{10}H_{17}N_3O_6$  (275.26). mp 191~192°C,  $[\alpha]_D^{16} = +11^\circ$  ( $c = 1$ , 1mol/L HCl). Source: NIU NAO *Bos taurus domesticus*; *Bubalus bubalis*. Ref: 6, 1521.

**8775  $\gamma$ -L-Glutamyl-glycine**

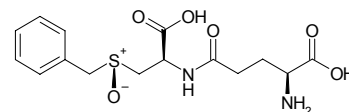
$C_7H_{12}N_2O_5$  (204.18). Source: NIU NAO *Bos taurus domesticus*; *Bubalus bubalis*. Ref: 6.

**8776 L- $\gamma$ -Glutamyl-L-hypoglycin**

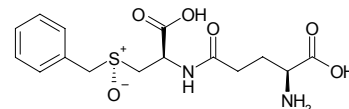
$C_{12}H_{18}N_2O_5$  (270.29). Pharm: Supertoxic agent. Source: XI FEI LI ZHI GUO *Blighia sapida*. Ref: 658.

**8777  $\gamma$ -L-Glutamyl-petiveriin A**

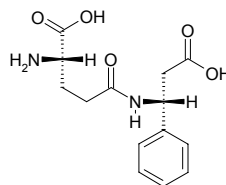
( $S_{C2}R_{C7}R_S$ )- $\gamma$ -Glutamyl-S-benzylcysteine sulfoxide  $C_{15}H_{20}N_2O_6S$  (356.40). White hygroscopic solid, mp 126~129°C,  $[\alpha]_D^{22} = +3.2^\circ$  ( $c = 0.06$ ,  $H_2O$ ). Source: SUAN CHOU MU JI CAO *Petiveria alliacea* (root). Ref: 5322.

**8778  $\gamma$ -L-Glutamyl-petiveriin B**

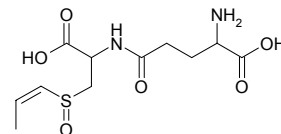
( $S_{C2}R_{C7}S_S$ )- $\gamma$ -Glutamyl-S-benzylcysteine sulfoxide  $C_{15}H_{20}N_2O_6S$  (356.40). White hygroscopic solid, mp 138~140°C,  $[\alpha]_D^{22} = -26.2^\circ$  ( $c = 0.06$ ,  $H_2O$ ). Source: SUAN CHOU MU JI CAO *Petiveria alliacea* (root). Ref: 5322.

**8779  $\gamma$ -L-Glutamyl-L-phenylalanine**

$C_{14}H_{18}N_2O_5$  (294.31). mp 164~174°C (dec). Source: DI YANG QUE *Lotus corniculatus*. Ref: 6, 1521.

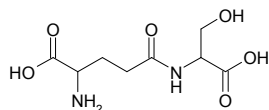
**8780  $\gamma$ -L-Glutamyl-S-(prop-1-enyl)cystein sulfoxide**

$C_{11}H_{18}N_2O_6S$  (306.34). Source: TAN XIANG *Santalum album*. Ref: 6.

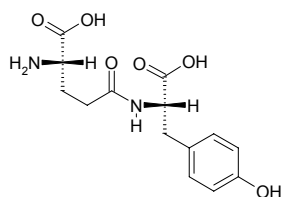


**8781  $\gamma$ -Glutamyl-serine**

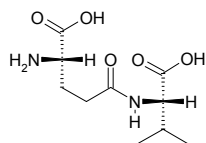
$C_8H_{14}N_2O_6$  (234.21). Source: NIU NAO *Bos taurus domesticus*; *Bubalus bubalis*. Ref: 6.

**8782  $\gamma$ -L-Glutamyl-L-tyrosine**

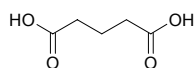
[6720-09-8]  $C_{14}H_{18}N_2O_6$  (310.31). mp 221~222°C (dec),  $[\alpha]_D^{31} = +26.6^\circ$  (c = 4). Source: DI YANG QUE *Lotus corniculatus*. Ref: 6, 1521.

**8783  $\gamma$ -Glutamyl-valine**

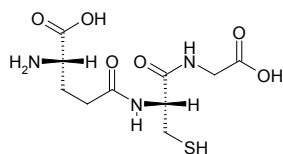
[2746-34-1]  $C_{10}H_{18}N_2O_5$  (246.27). mp 207°C,  $[\alpha]_D = 0^\circ$  (c = 2.4, H<sub>2</sub>O). Source: NIU NAO *Bos taurus domesticus*; *Bubalus bubalis*. Ref: 6, 1521.

**8784 Glutaric acid**

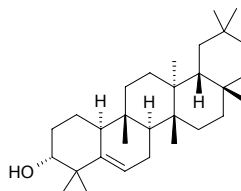
Pentanedioic acid [110-94-1]  $C_5H_8O_4$  (132.12). mp 97~98°C, bp 302~304°C. Pharm: Toxin. Source: TIAN CAI *Beta vulgaris*, NING MENG AN YE *Eucalyptus citriodora*. Ref: 6, 658.

**8785 Glutathione**

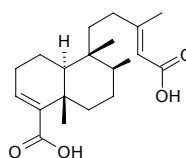
$\gamma$ -L-Glutamyl-L-cysteinylglycine; Glutamid; Glutinal; Triptide; Tathion [70-18-8]  $C_{10}H_{17}N_3O_6S$  (307.33). mp 195°C (50% ethanol),  $[\alpha]_D^{25} = -18.9^\circ$  (c = 4.653, water),  $[\alpha]_D^{27} = -21^\circ$  (c = 2.74), easily soluble in water, diluted ethanol, liquid ammonia, dimethylformamide.<sup>[5507]</sup> Pharm: Has an important role in normal metabolic processes; antidote (from poisoning by sulfhydryl enzyme). Source: MU LI ROU *Ostrea rivularis*; *Ostrea talienshanensis*; *Ostrea gigas*, XIAO BAI BU *Asparagus officinalis*. Ref: 6, 658, 1521, 5507.

**8786  $\alpha$ -Glutenol**

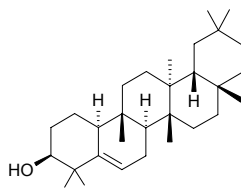
Glut-5-en-3 $\alpha$ -ol  $C_{30}H_{50}O$  (426.73). mp 203~205°C. Source: BA WANG BIAN *Euphorbia royleana*, XI YE DA JI *Euphorbia esula* var. *cyprisoides*. Ref: 6, 1521.

**8787 Glutinic acid**

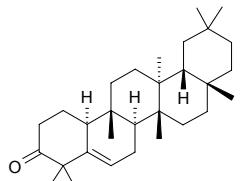
$C_{20}H_{30}O_4$  (334.46). White acicular Crystals, mp 119~120°C, easy soluble in acetone and pyridine. Source: NIAN YE YOU<sup>(2)</sup> *Caryopteris glutinosa*. Ref: 248.

**8788  $\beta$ -Glutinol**

Glutin-5-en-3 $\beta$ -ol  $C_{30}H_{50}O$  (426.73). White amorphous material, mp 211°C, mp 212°C,  $[\alpha]_D^{25} = 63.3^\circ$  (c = 0.71, CHCl<sub>3</sub>). Pharm: Anti-inflammatory (modified assay of Tan and Berridge, 400 $\mu$ g/mL, InRt = 11.44%, control Aspirin, InRt = 70.45%)<sup>[5316]</sup>; cell viability (hmn isolated neutrophils, 12.5 $\mu$ g/mL, cell viability = 100%, 100 $\mu$ g/mL, cell viability = 100%, 200 $\mu$ g/mL, cell viability = 72.29%)<sup>[5316]</sup>. Source: BA WANG BIAN *Euphorbia royleana*, CHI YANG *Alnus japonica*, MENG GU LI *Quercus mongolica*, SONG LUO *Usnea longissima*, TAI WAN XIU XIAN JU *Spiraea formosana*. Ref: 6, 611, 2575, 5316.

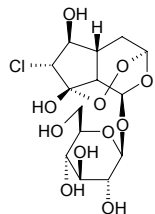
**8789 Glutinone**

[508-09-8]  $C_{30}H_{48}O$  (424.72). mp 245~246°C. Source: LONG XU CAO *Poa sphondylodes*. Ref: 6.

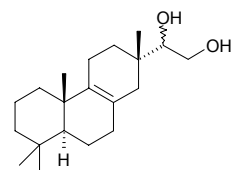


**8790 Glutinoside**

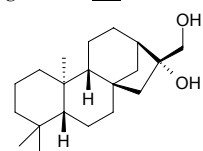
[103744-80-5]  $C_{14}H_{21}ClO_{11}$  (400.70). Source: GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *Huechingensis*]. Ref: 2.

**8791 Glutinosin**

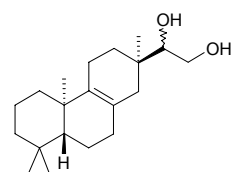
$C_{20}H_{34}O_2$  (306.49). mp 89~90°C,  $[\alpha]_D^{22} = +57.60^\circ$  ( $c = 1.03$ ,  $CHCl_3$ ). Source: JIAO NIAN XIANG CHA CAI *Isodon glutinosa*. Ref: 4067.

**8792 Glutinosin A**

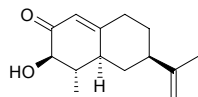
$C_{20}H_{34}O_2$  (306.49). mp 190°C. Source: JIAO NIAN XIANG CHA CAI *Isodon glutinosa*. Ref: 4067.

**8793 Glutinosin B**

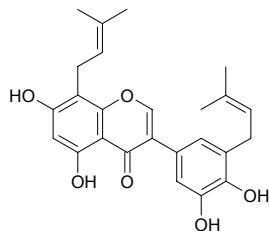
$C_{20}H_{34}O_2$  (306.49).  $[\alpha]_D = +59.6^\circ$ . Source: JIAO NIAN XIANG CHA CAI *Isodon glutinosa*. Ref: 4067.

**8794 Glutinosone**

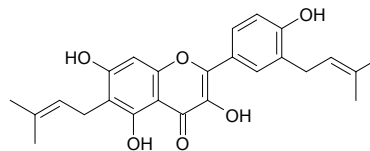
[55051-94-0]  $C_{14}H_{20}O_2$  (220.31). Pharm: Antifungal. Source: JIAO YAN CAO *Nicotiana glutinosa*. Ref: 658.

**8795 Glyarallin B**

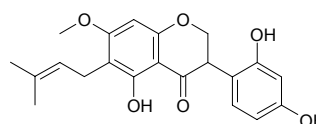
$C_{25}H_{26}O_6$  (422.48). Source: GAN CAO *Glycyrrhiza Uralensis*. Ref: 2431.

**8796 Glyasperin A**

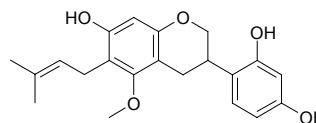
$C_{25}H_{26}O_6$  (422.48). Source: CU MAO GAN CAO *Glycyrrhiza aspera*. Ref: 2431.

**8797 Glyasperin B**

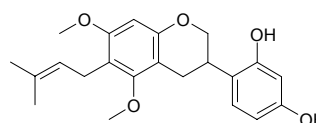
$C_{21}H_{22}O_6$  (370.41). Source: CU MAO GAN CAO *Glycyrrhiza aspera*. Ref: 2431.

**8798 Glyasperin C**

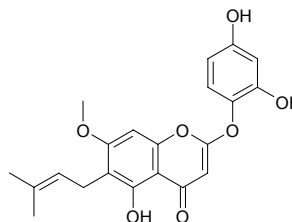
$C_{21}H_{24}O_5$  (356.42). Source: CU MAO GAN CAO *Glycyrrhiza aspera*. Ref: 2431.

**8799 Glyasperin D**

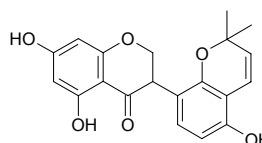
$C_{22}H_{26}O_5$  (370.45). Source: CU MAO GAN CAO *Glycyrrhiza aspera*. Ref: 2431.

**8800 Glyasperin E**

$C_{21}H_{20}O_7$  (384.39). Source: CU MAO GAN CAO *Glycyrrhiza aspera*. Ref: 2431.

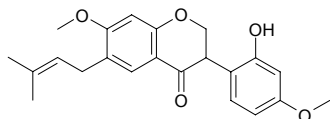
**8801 Glyasperin F**

$C_{20}H_{18}O_6$  (354.36). Source: CU MAO GAN CAO *Glycyrrhiza aspera*. Ref: 2431.

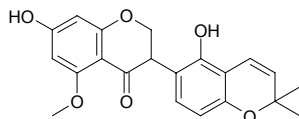


**8802 Glyasperin K**

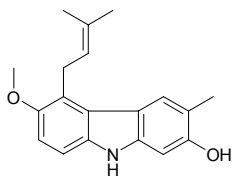
$C_{22}H_{24}O_5$  (368.43). Source: CU MAO GAN CAO *Glycyrrhiza aspera*. Ref: 2431.

**8803 Glyasperin M**

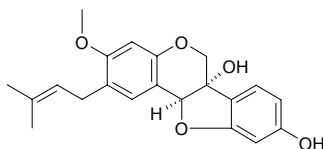
$C_{21}H_{20}O_6$  (368.39). Source: CU MAO GAN CAO *Glycyrrhiza aspera*. Ref: 2431.

**8804 Glybomine B**

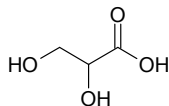
$C_{19}H_{21}NO_2$  (295.38). Pharm: Anti-HIV ( $CC_{50} = 13.62\mu\text{g/mL}$ ,  $IC_{50} = 9.73\mu\text{g/mL}$ ,  $SI = 1.40$ ; control AZT,  $CC_{50} = 794.2\mu\text{g/mL}$ ,  $IC_{50} = 0.131\mu\text{g/mL}$ ,  $SI = 6100$ ). Source: MENG DA NA SHAN XIAO JU *Glycosmis montana* (twig and leaf). Ref: 5266.

**8805 Glyceollin IV**

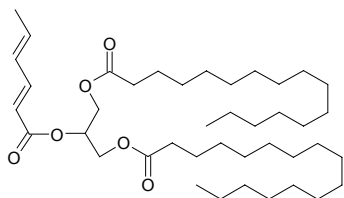
[69393-94-8]  $C_{21}H_{22}O_5$  (354.41). Not crystalline. Pharm: Antifungal. Source: HEI DA DOU *Glycine max*. Ref: 661.

**8806 D-Glyceric acid**

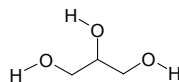
[600-19-1]  $C_3H_6O_4$  (106.08). Pharm: Diuretic (rbt). Source: CAN DOU *Vicia faba*, CAN DOU JIA KE *Vicia faba*, CAN DOU JING *Vicia faba*, CAN DOU YE *Vicia faba*, PU<sup>(2)</sup> TAO *Vitis vinifera*, PU TAO TENG YE *Vitis vinifera*, YI ZHU QIAN MA *Urtica dioica*. Ref: 6, 658, 660.

**8807 Glyceride-1,3-dipalmito-2-sorbate**

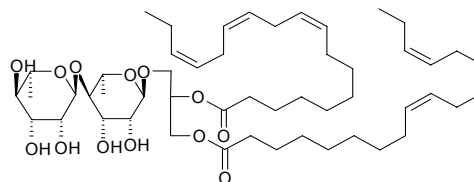
$C_{41}H_{74}O_6$  (663.04). Colorless acicular crystals, mp 62.0–62.5°C (petroleum spirit–acetic ester). Source: DI SHAO GUA *Cynanchum thesioides*. Ref: 236.

**8808 Glycerol**

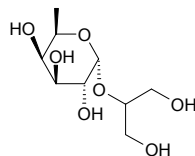
[56-81-5]  $C_3H_8O_3$  (92.10). mp 17.8°C, bp 290°C (dec). Pharm: Vasodilator. Source: BAI YAO ZI *Stephania cepharantha*, JIU Liquor, SHI LI ZI *Aleurites moluccana*, SHI LIU GEN *Punica granatum*, SHI LUO ZI *Anethum graveolens* (fruit). Ref: 6, 4177.

**8809 Glycerol- $\alpha,\beta$ -dilinolenate- $\alpha'$ -rhamno-rhamnoside**

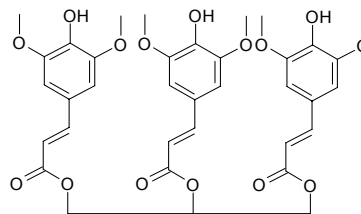
$C_{51}H_{84}O_{13}$  (905.23). White powder. Source: SU MI *Setaria italica*. Ref: 2120.

**8810 Glycerol 2-O- $\alpha$ -L-fucopyranoside**

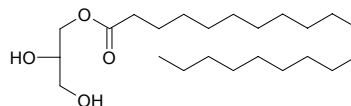
$C_9H_{18}O_7$  (238.24). Source: SHI LUO ZI *Anethum graveolens* (fruit). Ref: 4177.

**8811 Glycerol sinapate**

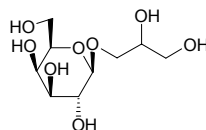
$C_{36}H_{38}O_{15}$  (710.70). Source: LAI FU ZI *Raphanus sativus*. Ref: 6.

**8812 Glyceryl-1-eicosanoate**

$C_{23}H_{46}O_4$  (386.62). White amorphous powder. Source: DUO CI HUANG HUA REN *Sida spinosa*. Ref: 2043.

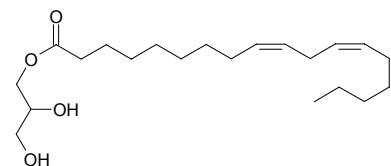
**8813 (2R)-1-O-Glyceryl- $\beta$ -D-galactoside**

$C_9H_{18}O_8$  (254.24). Amorphous white powder,  $[\alpha]_D = -7.5^\circ$  ( $c = 0.90$ ,  $H_2O$ ). Source: FEI YUE GUO *Feijoa sellowiana* (leaf). Ref: 3878.

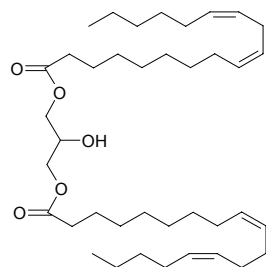


**8814 Glyceryl linolenate I**

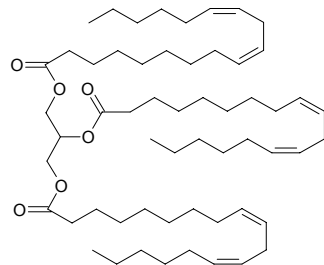
1-*O*-(9*Z*,12*Z*-Octadecadienoyl) glycerol C<sub>21</sub>H<sub>38</sub>O<sub>4</sub> (354.53). [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +0.1° (*c* = 0.5, CHCl<sub>3</sub>), mp ( $\beta$ ) 15.7°C, ( $\beta'$ ) -13.5°C. **Pharm:** COX-1 inhibitor (IC<sub>50</sub> = 13.3µg/mL, control *trans*-Resveratrol, IC<sub>50</sub> = 0.25µg/mL)<sup>[5030]</sup>, COX-2 inhibitor (IC<sub>50</sub> = 0.18µg/mL, control *trans*-Resveratrol, IC<sub>50</sub> = 0.30µg/mL)<sup>[5030]</sup>; cytotoxic inactive (*in vitro*, LNCaP, IC<sub>50</sub> > 100µmol/L)<sup>[4607]</sup>. **Source:** LANG DANG ZI *Hyoscyamus niger* (seed: yield = 0.004%dw), LIAN YE TONG *Hernandia Sonora* [Syn. *Hernandia ovigera*] (seed), YU ZHI ZI *Akebia quinata*. **Ref:** 6, 4607, 5030.

**8815 Glyceryl linolenate II**

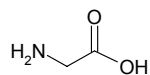
Dilinolenin C<sub>39</sub>H<sub>68</sub>O<sub>5</sub> (616.97). mp -12.3°C. **Source:** YU ZHI ZI *Akebia quinata*. **Ref:** 6.

**8816 Glyceryl linolenate III**

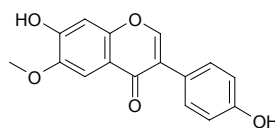
Trilinoleyl glyceride [537-40-6] C<sub>57</sub>H<sub>98</sub>O<sub>6</sub> (879.41). **Source:** BAI SU ZI *Perilla frutescens*, YU ZHI ZI *Akebia quinata*, ZANG SAN QI *Panax pseudo-ginseng*. **Ref:** 6, 743.

**8817 Glycine**

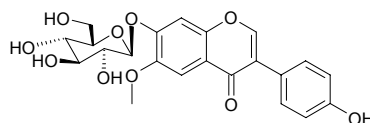
Aminoethanoic acid [56-40-6] C<sub>2</sub>H<sub>5</sub>NO<sub>2</sub> (75.07). mp 262°C (dec). **Pharm:** Metabolic intermediate. **Source:** BAN XIA *Pinellia ternata* (dried tuber: content scope of 4 origins = 0.72%~1.05%, mean content = 0.91%)<sup>[5521]</sup>, CHUAN DANG SHEN *Codonopsis tangshen*, DANG SHEN *Codonopsis pilosula*, GOU QI ZI *Lycium chinense*, LONG KUI *Solanum nigrum*, MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*], QIU HUA DANG SHEN *Codonopsis subglobosa*, SU HUA DANG SHEN *Codonopsis pilosula* var. *modesta* [Syn. *Codonopsis modesta*]. **Ref:** 6, 658, 660, 5521.

**8818 Glycitein**

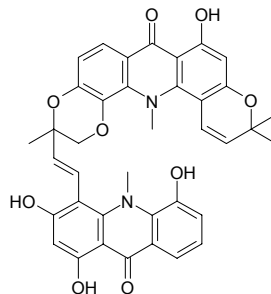
[40957-83-3] C<sub>16</sub>H<sub>12</sub>O<sub>5</sub> (284.27). mp 311~313°C (90% ethanol). **Pharm:** Antihemolytic; lipoxygenase inhibitor; anti-inflammatory (NO production inhibitor)<sup>[4415]</sup>. **Source:** DA DOU *Glycine max* (Soybean phytochemical concentrate: yield = 0.0025%dw)<sup>[4630]</sup>, HEI DA DOU *Glycine max*. **Ref:** 661, 4415, 4630.

**8819 Glycitin**

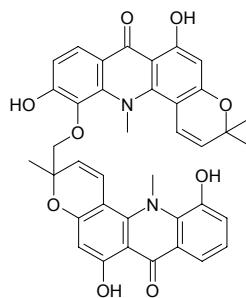
Glycitein-7-*O*- $\beta$ -D-glucoside [40246-10-4] C<sub>22</sub>H<sub>22</sub>O<sub>10</sub> (446.41). **Source:** DA DOU *Glycine max* (Soybean phytochemical concentrate: yield = 0.0020%dw). **Ref:** 4630.

**8820 Glycobismine F**

C<sub>38</sub>H<sub>32</sub>N<sub>2</sub>O<sub>9</sub> (660.69). Yellow oil, [ $\alpha$ ]<sub>D</sub> = 0° (*c* = 0.174, CHCl<sub>3</sub>). **Source:** SHAN XIAO JU *Glycosmis citrifolia* (root). **Ref:** 4270.

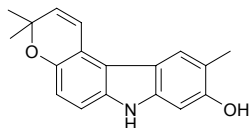
**8821 Glycobismine G**

C<sub>38</sub>H<sub>32</sub>N<sub>2</sub>O<sub>9</sub> (660.69). Yellow oil, [ $\alpha$ ]<sub>D</sub> = 0° (*c* = 0.13, CHCl<sub>3</sub>). **Source:** SHAN XIAO JU *Glycosmis citrifolia* (root). **Ref:** 4270.

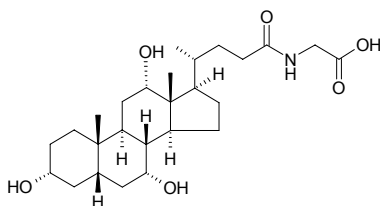


**8822 Glycoborinine**

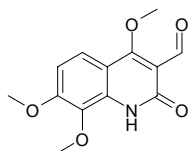
$C_{18}H_{17}NO_2$  (279.34). **Pharm:** Anti-HIV ( $CC_{50} = 20.69\mu\text{g/mL}$ ,  $IC_{50} = 4.47\mu\text{g/mL}$ ,  $SI = 4.63$ ; control AZT,  $CC_{50} = 794.2\mu\text{g/mL}$ ,  $IC_{50} = 0.131\mu\text{g/mL}$ ,  $SI = 6100$ ). **Source:** MENG DA NA SHAN XIAO JU *Glycosmis montana* (twig and leaf). **Ref:** 5266.

**8823 Glycocholic acid**

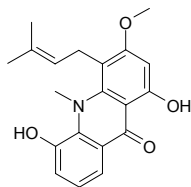
[475-31-0]  $C_{26}H_{43}NO_6$  (465.64). mp 165~168°C (anhydrous), mp 230~240°C (sodium salt). **Source:** NIU DAN *Bos taurus domesticus*; *Bubalus bubalis*, NIU HUANG *Bos taurus domesticus*; *Bubalus bubalis* (gallstone: mean content = 0.26%). **Ref:** 6, 5508.

**8824 Glycoctritidine**

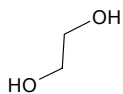
$C_{13}H_{13}NO_5$  (263.25). **Pharm:** Cytotoxic ( $P_{388}$  cell line,  $ED_{50} = 9.2\mu\text{g/mL}$ , control Mithramycin,  $ED_{50} = 0.06\mu\text{g/mL}$ ; HT29,  $ED_{50} = 42.1\mu\text{g/mL}$ , Mithramycin,  $ED_{50} = 0.07\mu\text{g/mL}$ ; A549,  $ED_{50} = 0.52\mu\text{g/mL}$ , Mithramycin,  $ED_{50} = 0.08\mu\text{g/mL}$ ). **Source:** SI ROU TUO GUO YE MI ZHU YU *Melicope semecarpifolia*. **Ref:** 5405.

**8825 Glycoctritine I**

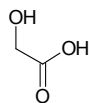
$C_{20}H_{21}NO_4$  (339.39). **Source:** DONG FENG JU GEN *Atalantia buxifolia* [Syn. *Severinia buxifolia*] (root cortex). **Ref:** 3075.

**8826 Glycol**

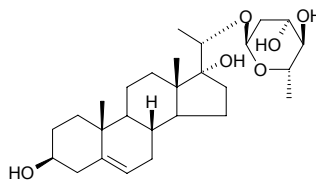
Ethandiol [107-21-1]  $C_2H_6O_2$  (62.07). mp -11.5°C, bp 197°C. **Source:** XI GUA *Citrullus vulgaris* [Syn. *Citrullus lanatus*]. **Ref:** 6.

**8827 Glycolic acid**

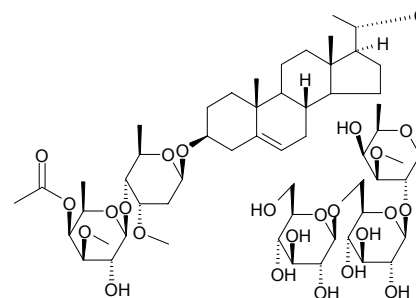
Hydroxyacetic acid [79-14-1]  $C_2H_4O_3$  (76.05). mp 80°C. **Pharm:** Irritant (to skin and mucosa). **Source:** GAN ZHE *Saccharum sinensis*, HAN QIN *Apium graveolens*, MENG GU SHAN LUO BO *Scabiosa comosa*. **Ref:** 6, 658.

**8828 Glycoside E**

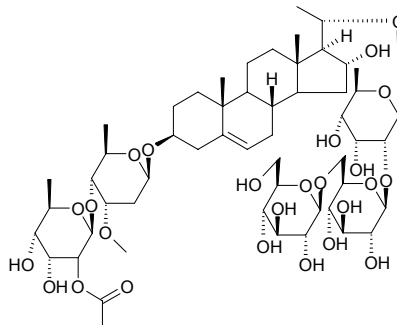
$C_{27}H_{44}O_6$  (464.65). mp 239~240°C. **Source:** XIANG JIA PI *Periploca sepium*. **Ref:** 6.

**8829 Glycoside H<sub>1</sub>**

3-*O*-[4-*O*-Acetyl-3-*O*-methyl- $\beta$ -*D*-fucopyranosyl-(1 $\rightarrow$ 4)-2,6-dideoxy-3-*O*-methyl- $\beta$ -*D*-ribo-hexopyranoside] 20-*O*-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)-3-*O*-methyl- $\beta$ -*D*-fucopyranoside] [37074-77-4]  $C_{56}H_{92}O_{24}$  (1149.34). mp 182°C. **Source:** XIANG JIA PI *Periploca sepium*. **Ref:** 6.

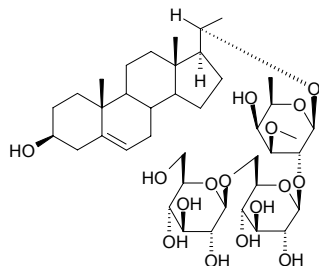
**8830 Glycoside H<sub>2</sub>**

$C_{54}H_{88}O_{25}$  (1137.29). mp 191~192°C,  $[\alpha]_D = -25.9^\circ$ . **Source:** XIANG JIA PI *Periploca sepium*. **Ref:** 2498.

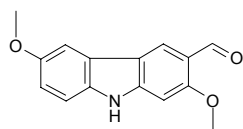


**8831 Glycoside K (Periplocae)**

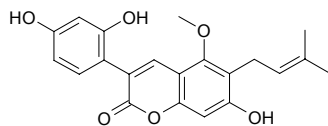
$C_{40}H_{66}O_{16}$  (802.96). mp 240~241°C. Source: XIANG JIA PI *Periploca sepium*.  
Ref: 6.

**8832 Glycozolidal**

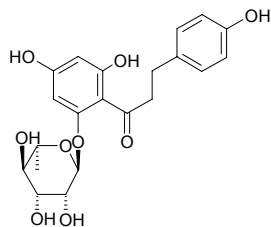
2,6-Dimethoxy-9*H*-Carbazole-3-carboxaldehyde; 2,6-Dimethoxy-3-formyl-carbazole; *O*-Methylansine. [51971-09-6]  $C_{15}H_{13}NO_3$  (255.28). Source: SHAN HUANG PI *Clausena excavata*. Ref: 703.

**8833 Glycoumarin**

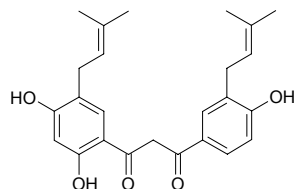
[94805-82-0]  $C_{21}H_{20}O_6$  (368.39). Pharm: Antibacterial (mutational *Streptococcus*, MIC = 12.5µg/mL; *Staphylococcus aureus*, MIC = 3.13µg/mL; *Bacillus subtilis*, MIC = 6.25µg/mL); antifungal (*Candida* sp., MIC = 50µg/mL; *Saccharomyces cerevisiae*, MIC = 25µg/mL); cAMP phosphodiesterase inhibitor (IC<sub>50</sub> = 7µmol/L); free radical scavenger (IC<sub>50</sub> = 41µmol/L); anti-HIV. Source: GAN CAO *Glycyrrhiza uralensis*. Ref: 2, 1678, 1680, 1701, 1702.

**8834 Glycyphyllin**

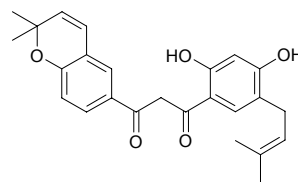
[19253-17-9]  $C_{21}H_{24}O_9$  (420.42). Pharm: Bitter-sweet taste. Source: *Smilax* sp. Ref: 658.

**8835 Glycyrdione A**

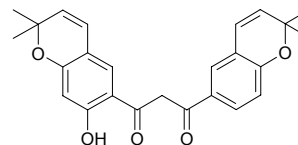
$C_{25}H_{28}O_5$  (408.50). Source: ZHANG GUO GAN CAO *Glycyrrhiza inflata*. Ref: 2431.

**8836 Glycyrdione B**

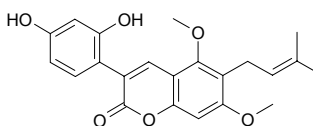
$C_{25}H_{26}O_5$  (406.48). Source: ZHANG GUO GAN CAO *Glycyrrhiza inflata*. Ref: 2431.

**8837 Glycyrdione D**

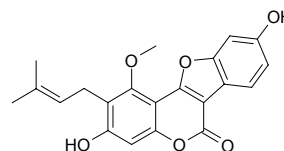
$C_{25}H_{24}O_5$  (404.47). Source: *Glycyrrhiza* sp. Ref: 2431.

**8838 Glycyrin**

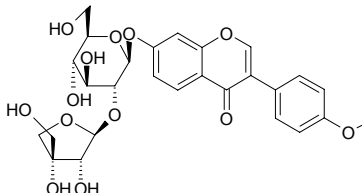
[66056-18-6]  $C_{22}H_{22}O_6$  (382.42). Source: GAN CAO *Glycyrrhiza uralensis*. Ref: 2.

**8839 Glycyrol**

Neoglycyrol [23013-84-5]  $C_{21}H_{18}O_6$  (366.37). Yellowish acicular crystals, mp 263~265°C; mp 243.5~245.0°C. Source: CU MAO GAN CAO *Glycyrrhiza aspera*, GAN CAO *Glycyrrhiza uralensis*. Ref: 2, 6, 181, 660, 1521.

**8840 Glycyroside**

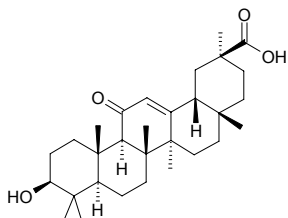
[125310-04-5]  $C_{27}H_{30}O_{13}$  (562.53). Yellowish powder, mp 126~128°C. Source: HUANG GAN CAO *Glycyrrhiza kansuensis*. Ref: 133.

**8841 Glycyrrhetic acid**

[471-53-4]  $C_{30}H_{46}O_4$  (470.70). mp 297~298°C. Pharm: Adrenal cortex hormoneoid (desoxycortoneoid action); antiallergic; antibacterial (cooperates with berberine to inhibit *Staphylococcus aureus*, *in vitro*); antineoplastic (rat, transplanting Oberling-Guerin myeloma); anti-inflammatory (rat, tampon granuloma model, formaldehyde edema model, tuberculin reaction model, subcutaneous granuloma model, and swollen foot model caused by carrageenan); antiulcerative (pylorus-ligated rat); reduces serum bilirubin and

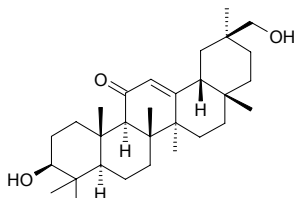


enhances output of bilirubin in urine (choledoch-ligated rat and rbt); toxin (gpg, inhibits thyroid function and reduces basal metabolism). **Source:** CU MAO GAN CAO *Glycyrrhiza aspera* (root and rhizome: content = 0.72%)<sup>[15]</sup>, GAN CAO *Glycyrrhiza uralensis* (root and rhizome: mean content of 3 origins = 4.93%)<sup>[15]</sup>, GUANG GUO GAN CAO *Glycyrrhiza glabra* (root and rhizome: content = 3.40%)<sup>[15]</sup>, HUANG GAN CAO *Glycyrrhiza kansuensis* (root and rhizome: content = 4.16%)<sup>[15]</sup>, YUN NAN GAN CAO *Glycyrrhiza yunnanensis* (root and rhizome: content = 2.52%)<sup>[15]</sup>, ZHANG GUO GAN CAO *Glycyrrhiza inflata* (root and rhizome: content = 3.72%)<sup>[15]</sup>. **Ref:** 4, 15, 658, 5501.



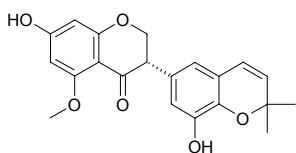
#### 8842 Glycyrrhetol

$C_{30}H_{48}O_3$  (456.72). **Source:** GAN CAO *Glycyrrhiza uralensis*. **Ref:** 2.



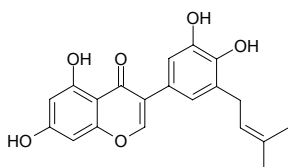
#### 8843 Glycyrrhisoflavanone

[116709-69-4]  $C_{21}H_{20}O_6$  (368.39). **Source:** GAN CAO *Glycyrrhiza uralensis*. **Ref:** 2.



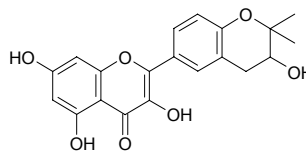
#### 8844 Glycyrrhisoflavone

[116709-70-7]  $C_{20}H_{18}O_6$  (354.36). **Pharm:** Anti-HIV (20 $\mu$ g/mL, inhibits formation of giant-cell); free radical scavenger ( $EC_{50}$  = 38 $\mu$ mol/L); xanthinoxidase inhibitor ( $IC_{50}$  = 53 $\mu$ mol/L); monoamine oxidase inhibitor ( $IC_{50}$  = 95 $\mu$ mol/L). **Source:** GAN CAO *Glycyrrhiza uralensis*. **Ref:** 2, 1679, 1680, 1681, 1682.



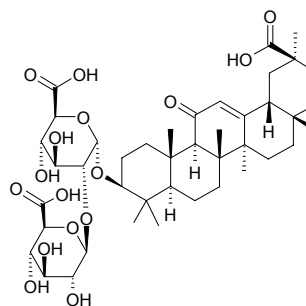
#### 8845 Glycyrrhiza-flavonol A

[197304-01-1]  $C_{20}H_{18}O_7$  (370.36). Yellow acicular crystals (methanol), mp 163°C,  $[\alpha]_D = 0^\circ$  ( $c = 1$ , methanol). **Pharm:** DPPH scavenger ( $EC_{50}$  = 37 $\mu$ mol/L). **Source:** GAN CAO *Glycyrrhiza uralensis*. **Ref:** 1001.



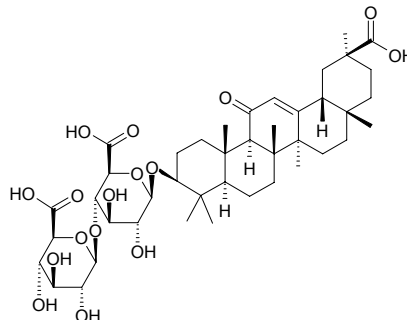
#### 8846 Glycyrrhizic acid

Glycyrrhizin; Glycyrrhetic acid glycoside; Glycyrrhizinic acid [1405-86-3]  $C_{42}H_{62}O_{16}$  (822.95). White acicular crystals, mp 220°C (dec),  $[\alpha]_D^{17} = +46.2^\circ$  (ethanol), easily soluble in water, ethanol, insoluble in ether.<sup>[5507]</sup> **Pharm:** Adrenal cortex hormoneoid; antiallergic; antineoplastic; anti-HIV (0.5mg/mL InRt = 98%, 0.125mg/mL InRt = 50%); anti-inflammatory; antiviral (chickenpox virus, herpes zoster virus); antihepatotoxin (rat with  $CCl_4$  poisoning, reduces excess SGPT); reduces accumulation of trilaurin in liver; reduces serum bilirubin and increases output of bilirubin in urine (rbt and rat, ligated in common bile duct); antihypercholesterolemic (reduces the level of cholesterol in serum); antihypertensive; smooth muscle relaxant (*in vitro* ileum in rbt and trachea in gpg, caused by histamine, acetylcholine and SRSA). **Source:** CU MAO GAN CAO *Glycyrrhiza aspera*, GAN CAO *Glycyrrhiza uralensis* (root and rhizome: content scope of 14 origins = 2.60%~8.44%, mean content = 5.92%)<sup>[15, 5508]</sup>, GUANG GUO GAN CAO *Glycyrrhiza glabra* (root and rhizome: mean content = 4.22%)<sup>[5508]</sup>, HUANG GAN CAO *Glycyrrhiza kansuensis*, XIANG SI ZI *Abrus precatorius*, ZHANG GUO GAN CAO *Glycyrrhiza inflata* (root and rhizome: mean content = 4.59%)<sup>[15, 5508]</sup>. **Ref:** 4, 15, 658, 660, 5501, 5507, 5508.



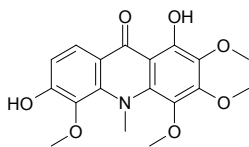
#### 8847 Glycyrsaponin

3 $\beta$ -Hydroxy-11-oxo-olean-12-en-30-oic acid-3-*O*- $\beta$ -D-glucuronopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucuronopyranoside [137476-70-1]  $C_{42}H_{62}O_{16}$  (822.95). White powder, mp 288°C,  $[\alpha]_D^{18} = +22.5^\circ$  ( $c = 0.062$ , methanol). **Source:** HUANG GAN CAO *Glycyrrhiza kansuensis*. **Ref:** 195.

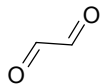


**8848 Glyfoline**

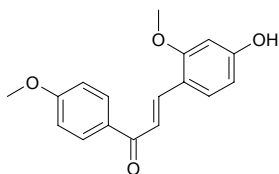
$C_{18}H_{19}NO_7$  (361.35). **Pharm:** Antineoplastic (caused tumor cell death selectively, without showing any cytotoxicity to normal fibroblasts). **Source:** SHAN XIAO JU *Glycosmis citrifolia*. **Ref:** 5042.

**8849 Glyoxal**

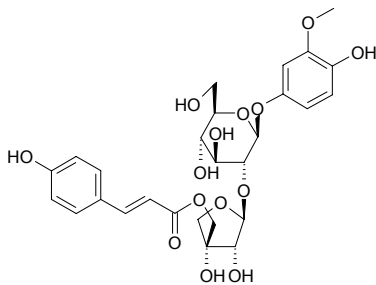
[107-22-2]  $C_2H_2O_2$  (58.04). **Source:** SHENG JIANG *Zingiber officinale*. **Ref:** 2.

**8850 Glypallichalcone**

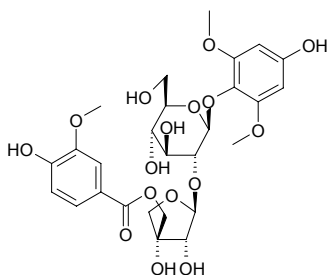
4-Hydroxy-2,4'-dimethoxychalcone  $C_{17}H_{16}O_4$  (284.31). Yellow columnar Crystals, mp 140~142°C. **Source:** CI GUO GAN CAO *Glycyrrhiza pallidiflora*. **Ref:** 243.

**8851 Glypentoside A**

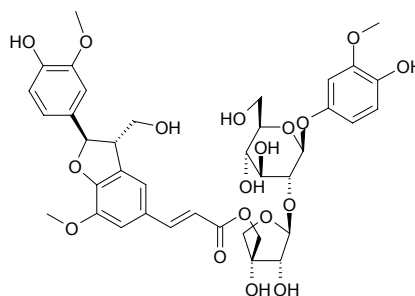
Methoxyquinol 4-*O*-[(5-*O*-*trans*-*p*-coumaroyl)- $\beta$ -*D*-apiofuranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranoside]  $C_{27}H_{32}O_{14}$  (580.55). Amorphous powder,  $[\alpha]_D^{25} = -7.5^\circ$  ( $c = 0.33$ , MeOH). **Source:** JIU BING YE *Glycosmis pentaphylla* (stem). **Ref:** 4424.

**8852 Glypentoside B**

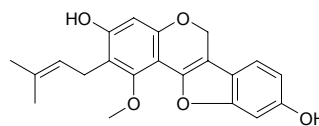
4-Demethylantiariol 4-*O*-[(3-methoxy-4-hydroxy-benzoyl)- $\beta$ -*D*-apiofuranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranoside]  $C_{27}H_{34}O_{16}$  (614.56). Amorphous powder,  $[\alpha]_D^{25} = -60.7^\circ$  ( $c = 0.48$ , MeOH). **Source:** JIU BING YE *Glycosmis pentaphylla* (stem). **Ref:** 4424.

**8853 Glypentoside C**

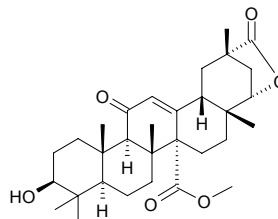
$C_{38}H_{44}O_{18}$  (788.76). Amorphous powder,  $[\alpha]_D^{25} = -49.7^\circ$  ( $c = 0.84$ , MeOH). **Source:** JIU BING YE *Glycosmis pentaphylla* (stem). **Ref:** 4424.

**8854 Glyrallin A**

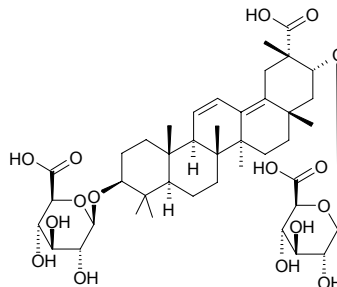
$C_{21}H_{20}O_5$  (352.39). **Source:** GAN CAO *Glycyrrhiza Uralensis*. **Ref:** 2431.

**8855 Glyuranolide**

3 $\beta$ ,22 $\alpha$ -Dihydroxy-11-oxo- $\Delta^{12}$ -olean-ene-27 $\alpha$ -methoxy carbonyl-29-oic acid (29,22 $\alpha$ ) lactone [123914-44-3]  $C_{31}H_{44}O_6$  (512.69). White rhomboid crystals, mp 301~303°C,  $[\alpha]_D^{14} = +46^\circ$  ( $c = 0.087$ ). **Source:** GAN CAO *Glycyrrhiza uralensis*. **Ref:** 128, 660.

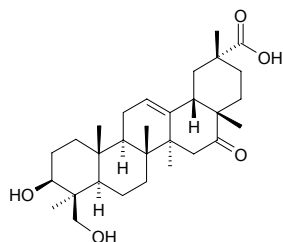
**8856 Glyyunnanprosopogenin D**

Oleana-11,13(18)-dien-29-oic acid 3 $\beta$ ,21 $\alpha$ -di-*O*- $\beta$ -*D*-glucuronopyranoside [139979-69-4]  $C_{42}H_{62}O_{16}$  (822.95). **Source:** YUN NAN GAN CAO *Glycyrrhiza yunnanensis*. **Ref:** 170.

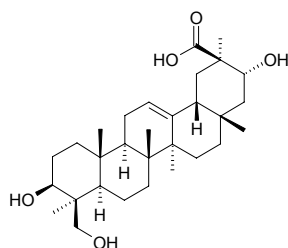


**8857 Glyunnansapogenin A**

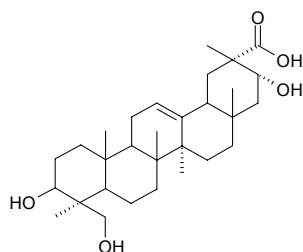
3 $\beta$ ,24-Dihydroxy-16-oxo-olean-12-en-29-oic acid [131137-98-9] C<sub>30</sub>H<sub>46</sub>O<sub>5</sub> (486.70). Colorless crystals. Source: YUN NAN GAN CAO *Glycyrrhiza yunnanensis*. Ref: 160.

**8858 Glyunnansapogenin B**

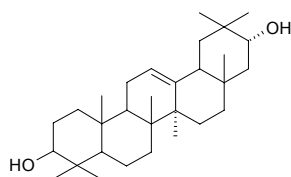
3 $\beta$ ,21 $\alpha$ ,24-Trihydroxy-olean-12-en-30-oic acid [20528-70-5] C<sub>30</sub>H<sub>48</sub>O<sub>5</sub> (488.71). Colorless crystals, mp 287~289°C. Source: YUN NAN GAN CAO *Glycyrrhiza yunnanensis*. Ref: 160.

**8859 Glyunnansapogenin B<sub>1</sub>**

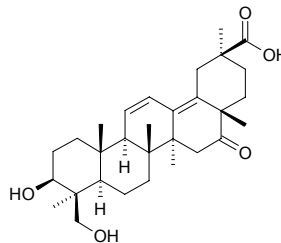
C<sub>30</sub>H<sub>48</sub>O<sub>5</sub> (488.71). White acicular crystals, mp 303~305°C. Source: YUN NAN GAN CAO *Glycyrrhiza yunnanensis*. Ref: 321.

**8860 Glyunnansapogenin B<sub>2</sub>**

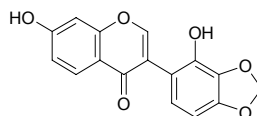
C<sub>30</sub>H<sub>50</sub>O<sub>2</sub> (442.73). White powder, mp 224~228°C. Source: YUN NAN GAN CAO *Glycyrrhiza yunnanensis*. Ref: 321.

**8861 Glyunnansapogenin F**

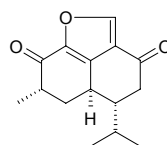
3 $\beta$ ,24 $\alpha$ -Dihydroxy-16-oxo-oleana-11,13(18)-dien-30-oic acid [139953-40-5] C<sub>30</sub>H<sub>44</sub>O<sub>5</sub> (484.68). Source: YUN NAN GAN CAO *Glycyrrhiza yunnanensis*. Ref: 170, 1521.

**8862 Glyzaglabrin**

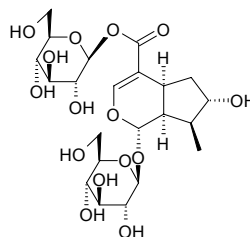
[65242-64-0] C<sub>16</sub>H<sub>10</sub>O<sub>6</sub> (298.25). Source: GAN CAO *Glycyrrhiza uralensis*. Ref: 2, 1521.

**8863 Gmelofuran**

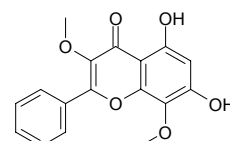
[70863-78-4] C<sub>15</sub>H<sub>18</sub>O<sub>3</sub> (246.31). Crystals, mp 122~123°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -900° (CHCl<sub>3</sub>). Source: CHEN XIANG *Aquilaria agallocha*, GAO HONG JIN *Hibiscus elatus*, TAI WAN FU RONG *Hibiscus taiwanensis*, YUN NAN SHI ZI *Gmelina arborea*. Ref: 13, 1521, 2529.

**8864 Gmephiloside**

1-*O*-(8-Epi-loganoyl)- $\beta$ -*D*-glucopyranose C<sub>22</sub>H<sub>34</sub>O<sub>15</sub> (538.51). White amorphous powder. Source: FEI LV BIN SHI ZI *Gmelina philippensis* (aerial parts). Ref: 3954.

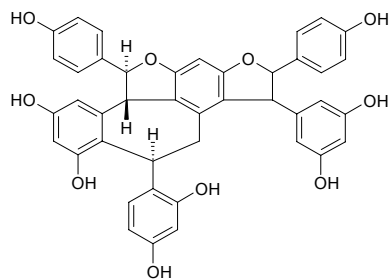
**8865 Gnaphaliin**

C<sub>17</sub>H<sub>14</sub>O<sub>6</sub> (314.30). Pharm: Anti-inflammatory<sup>[4415]</sup>. Source: YI DA LI LA JU *Helichrysum italicum* Ref: 4415.

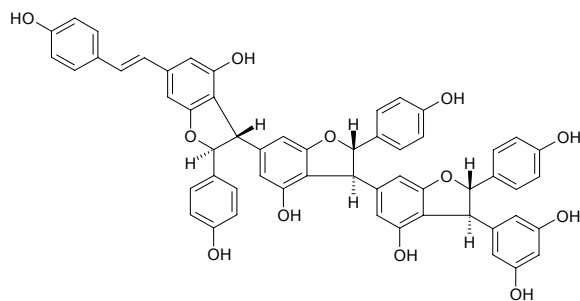


**8866 Gnemonol A**

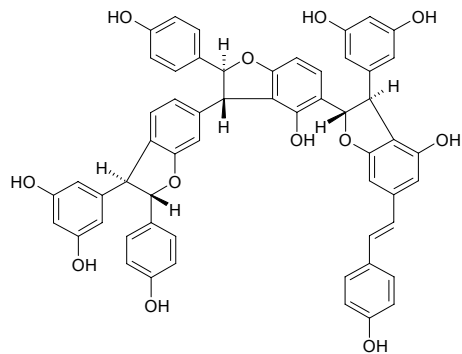
$C_{42}H_{32}O_{10}$  (696.72). White amorphous powder. Source: XIAN ZHOU MAI MA TENG *Gnetum gnemon* (root). Ref: 4200.

**8867 Gnemonol B**

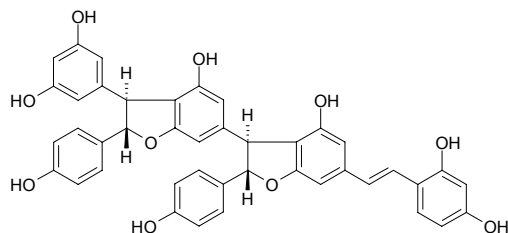
$C_{56}H_{42}O_{12}$  (906.95). White amorphous powder. Source: XIAN ZHOU MAI MA TENG *Gnetum gnemon* (root). Ref: 4200.

**8868 Gnemonol C**

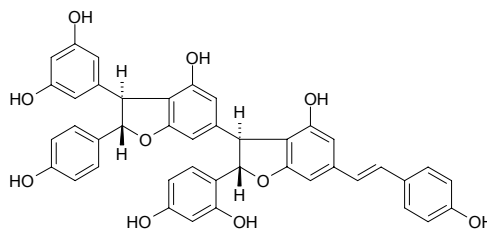
$C_{56}H_{42}O_{12}$  (906.95). White amorphous powder. Source: XIAN ZHOU MAI MA TENG *Gnetum gnemon* (root). Ref: 4200.

**8869 Gnemonol D**

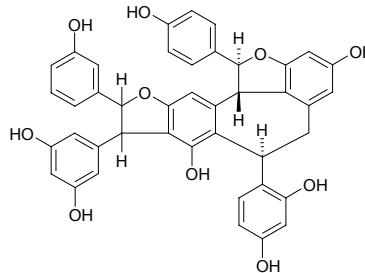
$C_{42}H_{32}O_{10}$  (696.72). White amorphous powder,  $[\alpha]_D = -22^\circ$  ( $c = 0.2$ , MeOH). Pharm: Antioxidant (super oxide scavenger,  $IC_{50} = 60\mu\text{mol/L}$ , control  $\epsilon$ -Viniferin,  $IC_{50} = 20\mu\text{mol/L}$ ; lipid peroxide inhibitory activity,  $IC_{50} > 100\mu\text{mol/L}$ , control  $\epsilon$ -Viniferin,  $IC_{50} = 33\mu\text{mol/L}$ ). Source: XIAN ZHOU MAI MA TENG *Gnetum gnemon* (root; yield = 0.0023%dw). Ref: 4306.

**8870 Gnemonol E**

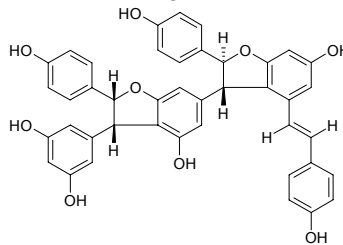
$C_{42}H_{32}O_{10}$  (696.72). White amorphous powder,  $[\alpha]_D = -14^\circ$  ( $c = 0.4$ , MeOH). Pharm: Antioxidant (super oxide scavenger,  $IC_{50} = 72\mu\text{mol/L}$ , control  $\epsilon$ -Viniferin,  $IC_{50} = 20\mu\text{mol/L}$ ; lipid peroxide inhibitory activity,  $IC_{50} = 47\mu\text{mol/L}$ , control  $\epsilon$ -Viniferin,  $IC_{50} = 33\mu\text{mol/L}$ ). Source: XIAN ZHOU MAI MA TENG *Gnetum gnemon* (root; yield = 0.0040%dw). Ref: 4306.

**8871 Gnemonol F**

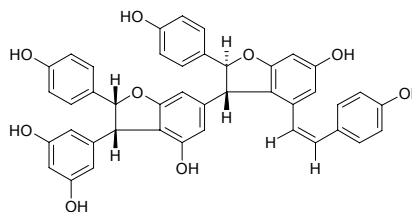
$C_{42}H_{32}O_{10}$  (696.72). White amorphous powder,  $[\alpha]_D = -18^\circ$  ( $c = 0.1$ , MeOH). Pharm: Antioxidant (super oxide scavenger,  $IC_{50} = 13\mu\text{mol/L}$ , control  $\epsilon$ -Viniferin,  $IC_{50} = 20\mu\text{mol/L}$ ; lipid peroxide inhibitory activity,  $IC_{50} > 100\mu\text{mol/L}$ , control  $\epsilon$ -Viniferin,  $IC_{50} = 33\mu\text{mol/L}$ ). Source: XIAN ZHOU MAI MA TENG *Gnetum gnemon* (root; yield = 0.0005%dw). Ref: 4306.

**8872 Gnemonol K**

$C_{42}H_{32}O_9$  (680.72). Colorless amorphous powder,  $[\alpha]_D = +6^\circ$  ( $c = 0.72$ , MeOH). Pharm: Antioxidant (superoxide anion scavenger,  $IC_{50} = 69\mu\text{mol/L}$ ; inhibits lipid peroxidation,  $IC_{50} = 19\mu\text{mol/L}$ ). Source: XIAN ZHOU MAI MA TENG *Gnetum gnemon*. Ref: 2045.

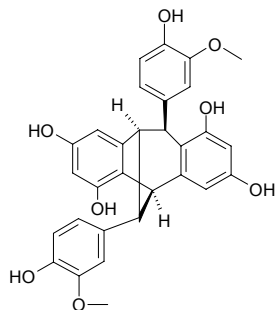
**8873 Gnemonol L**

$C_{42}H_{32}O_9$  (680.72). Colorless amorphous powder,  $[\alpha]_D = +23^\circ$  ( $c = 0.49$ , MeOH). Pharm: Antioxidant (superoxide anion scavenger,  $IC_{50} = 59\mu\text{mol/L}$ ; inhibits lipid peroxidation,  $IC_{50} = 7\mu\text{mol/L}$ ). Source: XIAN ZHOU MAI MA TENG *Gnetum gnemon*. Ref: 2045.

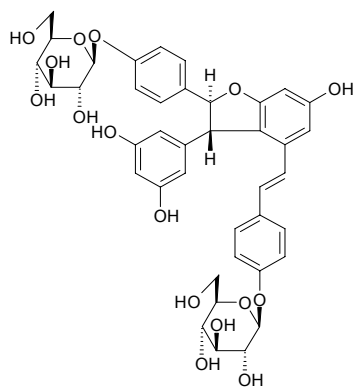


**8874 Gnemonol M**

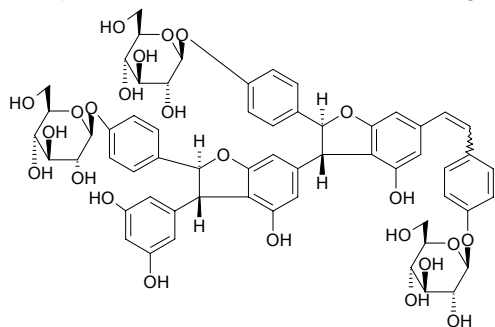
$C_{30}H_{26}O_8$  (514.54). Colorless amorphous powder,  $[\alpha]_D = -28^\circ$  ( $c = 0.12$ , MeOH). Source: XIAN ZHOU MAI MA TENG *Gnetum gnemon*. Ref: 2045.

**8875 Gnemonoside E**

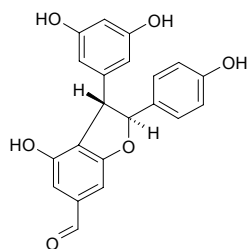
$C_{40}H_{42}O_{16}$  (778.77). Brown amorphous powder. Source: MA LAI XI YA MAI MA TENG *Gnetum gnemonoides* (stem). Ref: 4200.

**8876 Gnemonoside K**

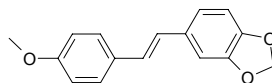
$C_{60}H_{62}O_{24}$  (1167.15). Colorless amorphous powder,  $[\alpha]_D = -36^\circ$  ( $c = 0.52$ , MeOH). Source: XIAN ZHOU MAI MA TENG *Gnetum gnemon*. Ref: 2045.

**8877 Gnetal**

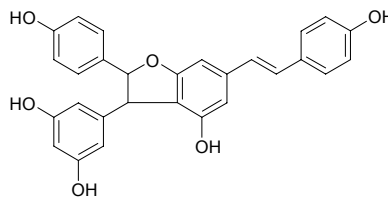
$C_{21}H_{16}O_6$  (364.36). White amorphous powder. Source: MA LAI XI YA MAI MA TENG *Gnetum gnemonoides* (stem). Ref: 4200.

**8878 Gnetin**

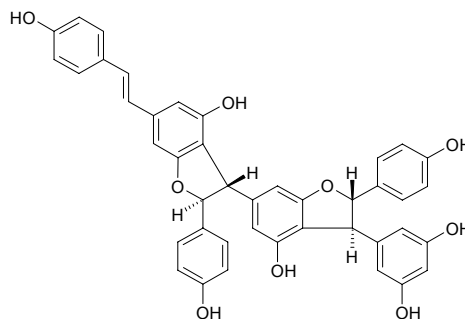
[56041-27-1]  $C_{16}H_{14}O_3$  (254.29). Crystals ( $CHCl_3$ -pet. ether), mp 121~122°C. Source: YIN DU MAI MA TENG *Gnetum ula*. Ref: 1521.

**8879 Gnetin C**

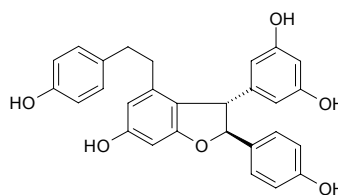
$C_{28}H_{22}O_6$  (454.48). Yellowish powder (acetone), mp 146~147°C. Source: AI DA HUANG *Rheum nanum*. Ref: 4807.

**8880 Gnetin E**

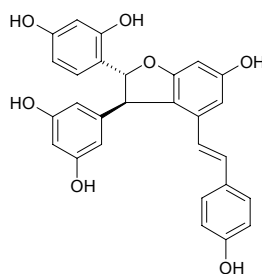
$C_{42}H_{32}O_9$  (680.72). Source: XIAN ZHOU MAI MA TENG *Gnetum gnemon* (root), MA LAI XI YA MAI MA TENG *Gnetum gnemonoides* (stem). Ref: 4200.

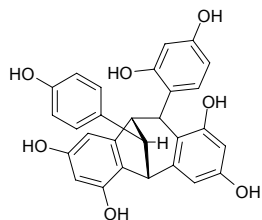
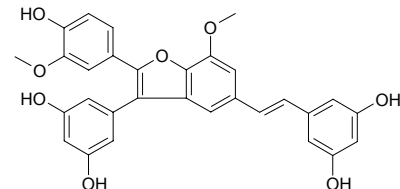
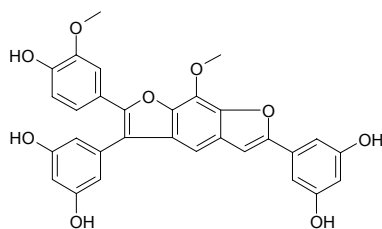
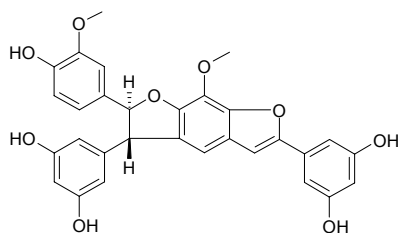
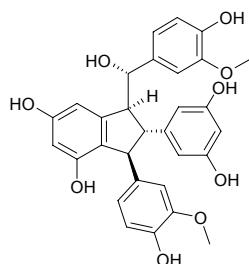
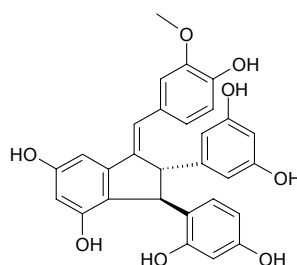
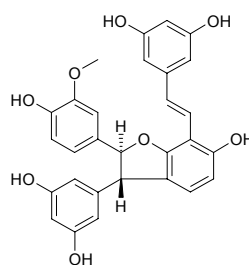
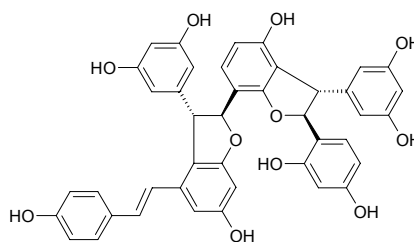
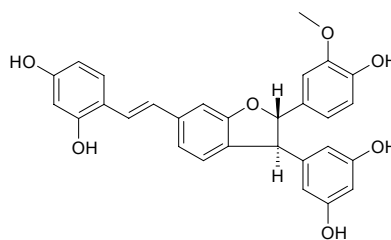
**8881 Gnetin F**

$C_{28}H_{24}O_6$  (456.50). Source: BAI SUI YE *Welwitschia mirabilis*. Ref: 2233, 2234.

**8882 Gnetuhainin A**

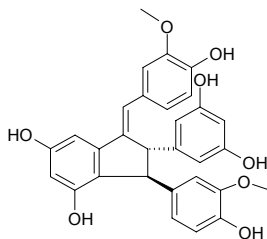
$C_{28}H_{22}O_7$  (470.48). Source: HAI NAN MAI MA TENG *Gnetum hainanense*. Ref: 2233, 2234.



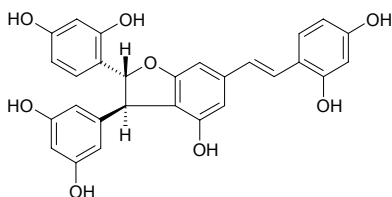
**8883 Gnetuhainin C**C<sub>28</sub>H<sub>22</sub>O<sub>7</sub> (470.48). [Source](#): HAI NAN MAI MA TENG *Gnetum hainanense*.[Ref](#): 2233, 2234.**8884 Gnetuhainin F**C<sub>30</sub>H<sub>26</sub>O<sub>8</sub> (512.52). [Source](#): HAI NAN MAI MA TENG *Gnetum hainanense*.[Ref](#): 2233, 2234.**8885 Gnetuhainin G**C<sub>30</sub>H<sub>22</sub>O<sub>9</sub> (526.50). Greenish amorphous powder,  $[\alpha]_D^{25} = 0^\circ$  ( $c = 0.084$ , MeOH). [Source](#): HAI NAN MAI MA TENG *Gnetum hainanense*. [Ref](#): 3995.**8886 Gnetuhainin H**C<sub>30</sub>H<sub>24</sub>O<sub>9</sub> (528.52). Yellowish amorphous powder,  $[\alpha]_D^{25} = +16.0^\circ$  ( $c = 0.072$ , MeOH). [Source](#): HAI NAN MAI MA TENG *Gnetum hainanense*. [Ref](#): 3995.**8887 Gnetuhainin I**C<sub>30</sub>H<sub>28</sub>O<sub>9</sub> (532.55). [Source](#): HAI NAN MAI MA TENG *Gnetum hainanense*.[Ref](#): 2234.**8888 Gnetuhainin J**C<sub>29</sub>H<sub>24</sub>O<sub>8</sub> (500.51). [Source](#): HAI NAN MAI MA TENG *Gnetum hainanense*.[Ref](#): 2234.**8889 Gnetuhainin K**C<sub>29</sub>H<sub>24</sub>O<sub>8</sub> (500.51). [Source](#): HAI NAN MAI MA TENG *Gnetum hainanense*.[Ref](#): 2234.**8890 Gnetuhainin M**C<sub>42</sub>H<sub>32</sub>O<sub>11</sub> (712.72). [Source](#): HAI NAN MAI MA TENG *Gnetum hainanense*.[Ref](#): 2233, 2234.**8891 Gnetuhainin Q**C<sub>29</sub>H<sub>24</sub>O<sub>7</sub> (484.51). [Source](#): HAI NAN MAI MA TENG *Gnetum hainanense*.[Ref](#): 2234.

**8892 Gnetulin**

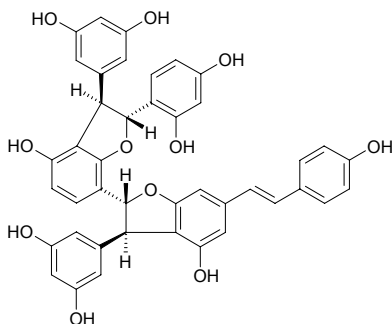
$C_{30}H_{26}O_8$  (514.54). Pale brownish amorphous solid. Source: XIAO YE MAI MA TENG *Gnetum parvifolium* [Syn. *Gnetum indicum*] (bark), YIN DU MAI MA TENG *Gnetum ula*. Ref: 2234, 3550.

**8893 Gnetumontanin A**

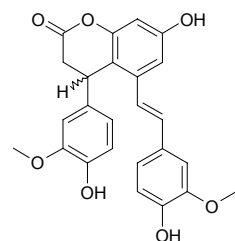
$C_{28}H_{22}O_8$  (486.48). Yellowish amorphous powder, mp 233~234°C,  $[\alpha]_D^{22} = +17.0^\circ$  ( $c = 0.10$ , MeOH). Source: DA ZI MAI MA TENG *Gnetum montanum* f. *megalocarpum*. Ref: 4936.

**8894 Gnetumontanin B**

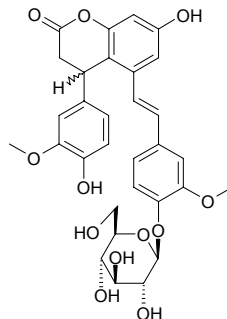
$C_{42}H_{32}O_{11}$  (712.72). Off-white amorphous powder, mp 209~210°C,  $[\alpha]_D^{22} = -16.0^\circ$  ( $c = 0.10$ , MeOH). Pharm: TNF- $\alpha$  inhibitor ( $IC_{50} = 1.49 \mu\text{mol/L}$ )<sup>[4936]</sup>. Source: DA ZI MAI MA TENG *Gnetum montanum* f. *megalocarpum*. Ref: 4936.

**8895 Gnetumontanin C**

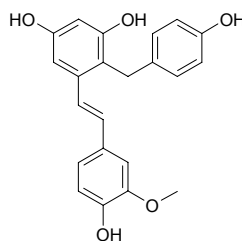
$C_{25}H_{22}O_7$  (434.45). Yellowish amorphous powder, mp 72~73°C,  $[\alpha]_D^{20} = 0^\circ$  ( $c = 0.04$ , MeOH). Source: DA ZI MAI MA TENG *Gnetum montanum* f. *megalocarpum*. Ref: 4936.

**8896 Gnetumontanin D**

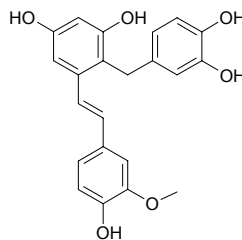
$C_{31}H_{32}O_{12}$  (596.59). Yellowish amorphous powder,  $[\alpha]_D^{20} = -24.0^\circ$  ( $c = 0.075$ , MeOH). Source: DA ZI MAI MA TENG *Gnetum montanum* f. *megalocarpum*. Ref: 4936.

**8897 Gnetupendin A**

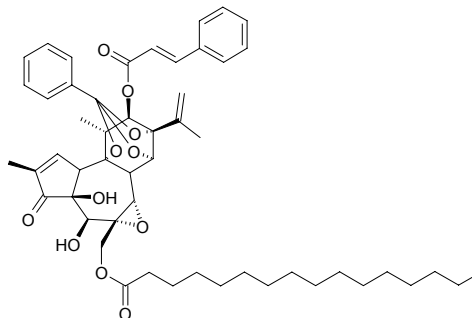
10-(4-Hydroxybenzyl)-isorhapontigenin  $C_{22}H_{20}O_5$  (364.40). Pale yellow solid. Source: CHUI ZI MAI MA TENG *Gnetum pendulum*. Ref: 5199.

**8898 Gnetupendin B**

10-(3,4-Dihydroxybenzyl)-isorhapontigenin  $C_{22}H_{20}O_6$  (380.40). Brown solid. Pharm: PGE<sub>2</sub> production inhibitor (mouse peritoneal macrophages, LPS-induced, 0.1  $\mu\text{mol/L}$ , InRt = 24.4%,  $P < 0.05$ ; control Meloxicam,  $IC_{50} = 0.0286 \mu\text{mol/L}$ ; may have cyclo-oxygenase-2 inhibition activity). Source: CHUI ZI MAI MA TENG *Gnetum pendulum*. Ref: 5199.

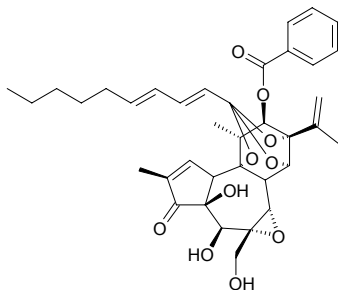
**8899 Gnidicin-20-palmitate**

$C_{52}H_{66}O_{11}$  (867.10). Amorphous powder,  $[\alpha]_D^{25} = +41.7^\circ$  ( $c = 0.56$ ,  $\text{CHCl}_3$ ). Source: YOU RUI XIANG *Daphne oleoides*. Ref: 2410.

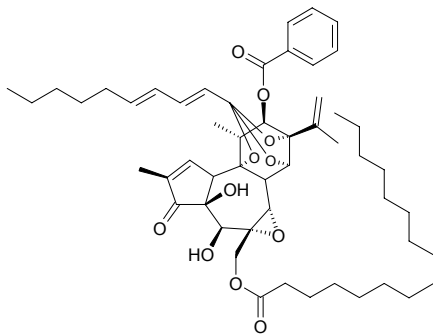


**8900 Gnidilatin**

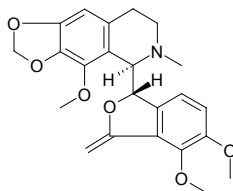
[60195-70-2] C<sub>37</sub>H<sub>44</sub>O<sub>10</sub> (648.76). Source: YOU RUI XIANG *Daphne oleoides*. Ref: 2410.

**8901 Gnidilatin 20-palmitate**

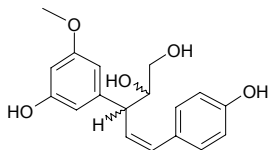
[60195-68-8] C<sub>53</sub>H<sub>74</sub>O<sub>11</sub> (887.17). Source: YOU RUI XIANG *Daphne oleoides*. Ref: 2410.

**8902 Gnoscopine**

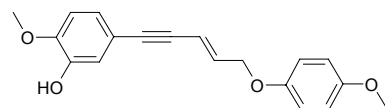
[6035-40-1] C<sub>23</sub>H<sub>25</sub>NO<sub>6</sub> (411.46). mp 232°C. Source: YA PIAN *Papaver somniferum*. Ref: 6.

**8903 Gobicusin A**

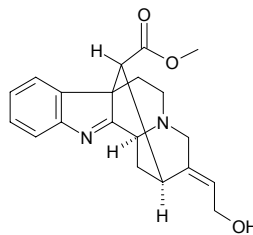
C<sub>18</sub>H<sub>20</sub>O<sub>5</sub> (316.36). Colorless gum, [α]<sub>D</sub><sup>21</sup> = +51.6° (c = 5.50, Me<sub>2</sub>CO). Source: GE BI TIAN MEN *Asparagus gobicus* (root). Ref: 4975.

**8904 Gobicusin B**

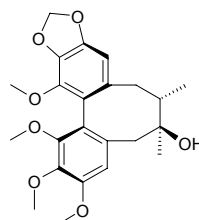
C<sub>19</sub>H<sub>18</sub>O<sub>4</sub> (310.35). White powder, mp 127–129°C (CHCl<sub>3</sub>), [α]<sub>D</sub><sup>21</sup> = -92.0° (c = 0.80, CHCl<sub>3</sub>). Source: GE BI TIAN MEN *Asparagus gobicus* (root). Ref: 4975.

**8905 Gomaline**

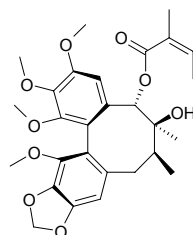
[89384-07-6] C<sub>20</sub>H<sub>22</sub>N<sub>2</sub>O<sub>3</sub> (338.41). Source: CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochnera rosea*]. Ref: 2.

**8906 Gomisin A**

Wuweizi alcohol B [58546-54-6] C<sub>23</sub>H<sub>28</sub>O<sub>7</sub> (416.48). mp 54–56°C, [α]<sub>D</sub><sup>22</sup> = +60.8° (c = 0.58, chloroform); mp 88–89°C, [α]<sub>D</sub> = +67.9°. Pharm: Antineoplastic (screened as potential antitumor promoters, EBV-EA induced by TPA, mol ratio/TPA = 1000, relative percentage of EBV-EA = (7.1±0.4)% (positive control value 32pmol, 20ng TPA = 100%), viability of Raji cells = 70%)<sup>[4644]</sup>; antihepatotoxin, reduces excess SGPT (orl 100mg/kg); prevents toxicosis (mus, due to CCl<sub>4</sub> or thioacetamide); promotes biosynthesis of hepatic glycogen (normal hungry mus); toxin (mus, orl, 250mg/kg, mortality = 2/4; mus, ip, 250mg/kg, mortality = 2/3). Source: NEI NAN WU WEI ZI *Kadsura interior* (stem)<sup>[4644]</sup>, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], WU WEI ZI *Schisandra chinensis* (dried ripe fruit: mean content of 11 origins = 0.23%)<sup>[5508]</sup>. Ref: 2, 661, 1582, 4644, 5508.

**8907 Gomisin B**

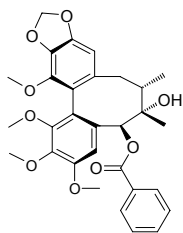
Schizantherin B; Schisantherin B; Wuweizi ester B; Schisanhenrin [58546-55-7] C<sub>28</sub>H<sub>34</sub>O<sub>9</sub> (514.58). Prismatic crystals (ether–petroleum ether), mp 88°C, [α]<sub>D</sub><sup>23</sup> = -27° (c = 1.0, chloroform); mp 97–99°C. Pharm: Antihepatotoxin (mus, orl, 50mg/(kg·d), reduces activity of SGPT); amino transferase inhibitor (mus, hepatitis induced by CCl<sub>4</sub>)<sup>[658]</sup>; antihepatitis (HbsAg: 100μg/mL InRt = 74.1%, 50μg/mL InRt = 28.9%, 25μg/mL InRt = 3.3%; HbeAg: 100μg/mL InRt = 34.1%, 50μg/mL InRt = 28.2%, 25μg/mL InRt = 15.7%; DMSO 2.5μl/mL, InRt = 0%)<sup>[4397]</sup>. Source: HUA ZHONG WU WEI ZI *Schisandra sphenanthera*, WU WEI ZI *Schisandra chinensis*, YI GENG WU WEI ZI *Schisandra henryi*, A LI SHAN WU WEI ZI *Schisandra arisanensis* (stem). Ref: 2, 4, 6, 658, 4397.



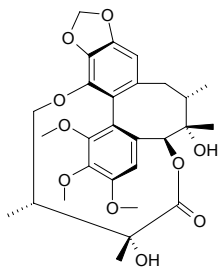


**8908 Gomisin C**

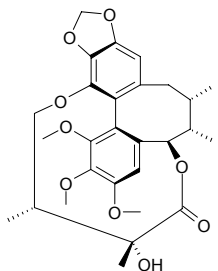
Wuweizi ester A; Schisantherin A [58546-56-8]  $C_{30}H_{32}O_9$  (536.58). mp 116~118°C, 122~124°C. **Pharm:** Antineoplastic (screened as potential antitumor promoters, EBV-EA induced by TPA, mol ratio/TPA = 1000, relative percentage of EBV-EA =  $(19.7 \pm 0.5)\%$  (positive control value 32pmol, 20ng TPA = 100%), viability of Raji cells = 60%)<sup>[4644]</sup>; antihepatotoxin (mus. orl, 100mg/(kg·d), repairs hepatic injury induced by  $CCl_4$  or thioacetamide, amino transferase inhibitor in rat). **Source:** HUA ZHONG WU WEI ZI *Schisandra sphenanthera* (dried ripe fruit: content scope of 12 origins = 0.03%~2.69%, mean content = 1.27%)<sup>[5508]</sup>, NEI NAN WU WEI ZI *Kadsura interior* (stem)<sup>[4644]</sup>, WU WEI ZI *Schisandra chinensis* (dried ripe fruit: content scope of 6 origins = 0.08%~1.95%, mean content = 0.76%)<sup>[5508]</sup>. **Ref:** 2, 4, 6, 658, 4644, 5508.

**8909 Gomisin D**

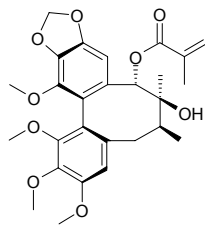
[60546-10-3]  $C_{28}H_{34}O_{10}$  (530.58). **Source:** WU WEI ZI *Schisandra chinensis*. **Ref:** 2.

**8910 Gomisin E**

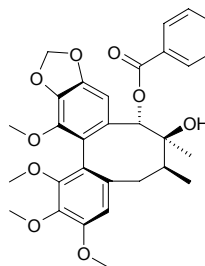
[72960-21-5]  $C_{28}H_{34}O_9$  (514.58).  $[\alpha]_D^{23} = +25.0^\circ$  ( $c = 0.40$ ,  $CHCl_3$ ). **Pharm:** NFAT transcription inhibitor ( $IC_{50} = (4.73 \pm 0.09)\mu\text{mol/L}$ , control Cyclosporin A,  $IC_{50} = (1.20 \pm 0.29)\text{nmol}$ )<sup>[5343]</sup>. **Source:** WU WEI ZI *Schisandra chinensis*. **Ref:** 2, 5343.

**8911 Gomisin F**

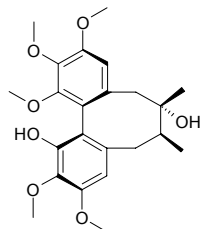
[62956-47-2]  $C_{28}H_{34}O_9$  (514.58). **Source:** WU WEI ZI *Schisandra chinensis*. **Ref:** 2.

**8912 Gomisin G**

[62956-48-3]  $C_{30}H_{32}O_9$  (536.58). Prisms ( $Me_2CO/Et_2O$ ), mp 97~98°C,  $[\alpha]_D^{25} = -126^\circ$  ( $c = 0.427$ ,  $CHCl_3$ ). **Pharm:** Antihepatitis (HbsAg: 100 $\mu\text{g/mL}$  InRt = 76.3%, 50 $\mu\text{g/mL}$  InRt = 42.4%, 25 $\mu\text{g/mL}$  InRt = 17.9%; HbeAg: 100 $\mu\text{g/mL}$  InRt = 22.1%, 50 $\mu\text{g/mL}$  InRt = 20.0%, 25 $\mu\text{g/mL}$  InRt = 6.3%; DMSO 2.5 $\mu\text{L/mL}$ , InRt = 0%)<sup>[4397]</sup>; antineoplastic (screened as potential antitumor promoters, EBV-EA induced by TPA, mol ratio/TPA = 1000, relative percentage of EBV-EA =  $(18.9 \pm 0.6)\%$  (positive control value 32pmol, 20ng TPA = 100%), viability of Raji cells = 60%)<sup>[4644]</sup>. **Source:** NEI NAN WU WEI ZI *Kadsura interior* (stem)<sup>[4644]</sup>, WU WEI ZI *Schisandra chinensis*, A LI SHAN WU WEI ZI *Schisandra arisanensis* (stem). **Ref:** 2, 1521, 4397, 4644.

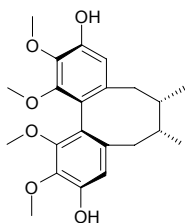
**8913 Gomisin H**

[66056-20-0]  $C_{23}H_{30}O_7$  (418.49). **Pharm:** Inhibits vasomotion (dog mesenteric artery, calcium-induced vasomotion,  $IC_{50} = 530\mu\text{mol/L}$ , induced by prostaglandin  $F_{2\alpha}$ ,  $IC_{50} = 41\mu\text{mol/L}$ ); antihepatotoxin (rat, hepatic cells, GPT's increase induced by galactosamine, 1.0mg/mL shows weak action). **Source:** WU WEI ZI *Schisandra chinensis* (dried ripe fruit: mean content of 11 origins = 0.31%)<sup>[5508]</sup>. **Ref:** 2, 1730, 1731, 5508.

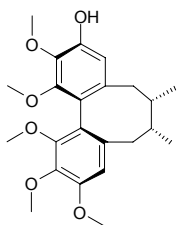


**8914 Gomisin J**

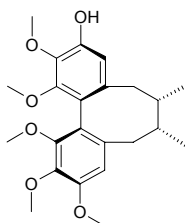
[66280-25-9]  $C_{22}H_{28}O_6$  (388.46). **Pharm:** Inhibits vasomotion (dog mesenteric artery, calcium-induced vasomotion,  $IC_{50} = 12\mu\text{mol/L}$ , induced by prostaglandin  $F_{2\alpha}$ ,  $IC_{50} = 17\mu\text{mol/L}$ ); increases coronary flow (anesthetic dog); antihepatotoxin (rat, hepatic cells,  $CCl_4$ -induced increase of GPT level, 1.0mg/mL); antioxidant (mitochondria of rat hepatic cells,  $Fe^{2+}/VC$ -induced lipid peroxidation,  $IC_{50} = 5.5\mu\text{mol/L}$ , ADP/NADPH-induced lipid peroxidation,  $IC_{50} = 4.7\mu\text{mol/L}$ ); cardioprotective agent (inhibits malondialdehyde (MDA) formed by abnormality of calcium concentration in cardiac muscle cells,  $10\mu\text{mol/L}$ ); cAMP phosphodiesterase inhibitor ( $IC_{50} = 136\mu\text{mol/L}$ ); antineoplastic (mus, TPA-induced skin tumor); anti-HIV (*in vitro*); inhibits gastric ulcer (mus, orl, 100mg/kg, gastric ulcer induced by experimental stress). **Source:** WU WEI ZI *Schisandra chinensis*. **Ref:** 2, 1730, 1731, 1732, 1733, 1734, 1735, 1736.

**8915 (-)-Gomisin K<sub>1</sub>**

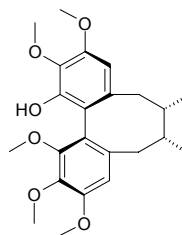
[75629-20-8]  $C_{23}H_{30}O_6$  (402.49). **Source:** WU WEI ZI *Schisandra chinensis*. **Ref:** 2.

**8916 (+)-Gomisin K<sub>2</sub>**

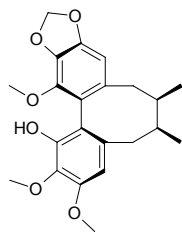
[75684-44-5]  $C_{23}H_{30}O_6$  (402.49). **Source:** WU WEI ZI *Schisandra chinensis*. **Ref:** 2.

**8917 (+)-Gomisin K<sub>3</sub>**

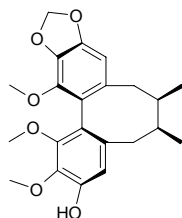
Schisanhenol; Schisanhenol [69363-14-0]  $C_{23}H_{30}O_6$  (402.49). **Pharm:** Antihepatitis (HbsAg: 100 $\mu\text{g/mL}$  InRt = 76.3%, 50 $\mu\text{g/mL}$  InRt = 42.4%, 25 $\mu\text{g/mL}$  InRt = 17.9%; HbeAg: 50 $\mu\text{g/mL}$  InRt = 20.0%, 25 $\mu\text{g/mL}$  InRt = 16.1%; DMSO 2.5 $\mu\text{l/mL}$ , InRt = 0%)<sup>[4397]</sup>; antihepatotoxin (mus, orl, 200mg/kg). **Source:** A LI SHAN WU WEI ZI *Schisandra arisanensis* (stem), HONG HUA WU WEI ZI *Schisandra rubriflora*, HUA ZHONG WU WEI ZI *Schisandra sphenanthera* (dried ripe fruit: content scope of 12 origins = 0.11%~7.57%, mean content = 1.07%)<sup>[5508]</sup>, WU WEI ZI *Schisandra chinensis* (dried ripe fruit: content scope of 3 origins = 0.021%~0.41%, mean content = 0.14%)<sup>[5508]</sup>. **Ref:** 2, 2, 658, 4397, 5501, 5508.

**8918 (-)-Gomisin L<sub>1</sub>**

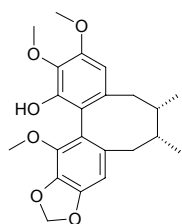
[82425-43-2]  $C_{22}H_{26}O_6$  (386.45). **Source:** WU WEI ZI *Schisandra chinensis*. **Ref:** 2.

**8919 (-)-Gomisin L<sub>2</sub>**

[82425-44-3]  $C_{22}H_{26}O_6$  (386.45). **Source:** WU WEI ZI *Schisandra chinensis*. **Ref:** 2.

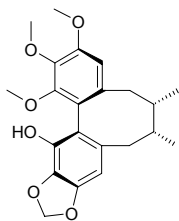
**8920 ( $\pm$ )-Gomisin M<sub>1</sub>**

[82467-50-3]  $C_{22}H_{26}O_6$  (386.45). **Source:** WU WEI ZI *Schisandra chinensis*. **Ref:** 2.

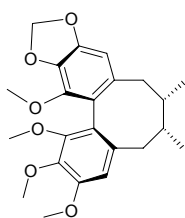


**8921 (+)-Gomisin M<sub>2</sub>**

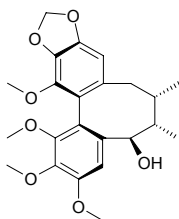
[82425-45-4] C<sub>22</sub>H<sub>26</sub>O<sub>6</sub> (386.45). Source: WU WEI ZI *Schisandra chinensis*. Ref: 2.

**8922 Gomisin N**

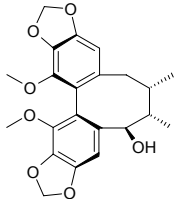
[69176-52-9] C<sub>23</sub>H<sub>28</sub>O<sub>6</sub> (400.48).  $[\alpha]_D^{23} = -83.4^\circ$  ( $c = 1.07$ , CHCl<sub>3</sub>). Pharm: NFAT transcription inhibitor (IC<sub>50</sub> = (1.33±0.05) μmol/L, control Cyclosporin A, IC<sub>50</sub> = (1.20±0.29) nmol/L)<sup>[5343]</sup>. Source: WU WEI ZI *Schisandra chinensis*. Ref: 5343.

**8923 Gomisin O**

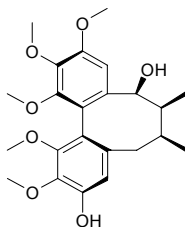
[72960-22-6] C<sub>23</sub>H<sub>28</sub>O<sub>7</sub> (416.48). Source: HONG HUA WU WEI ZI *Schisandra rubriflora*, WU WEI ZI *Schisandra chinensis*. Ref: 2, 39.

**8924 Gomisin R**

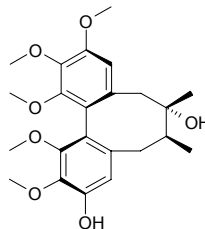
[83864-72-6] C<sub>22</sub>H<sub>24</sub>O<sub>7</sub> (400.43). Source: WU WEI ZI *Schisandra chinensis*. Ref: 2.

**8925 Gomisin S**

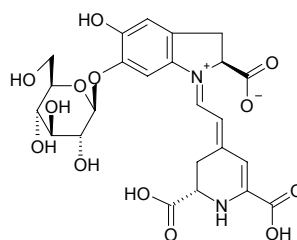
[119239-49-5] C<sub>23</sub>H<sub>30</sub>O<sub>7</sub> (418.49). Colorless rhombic Crystals, mp 172~176°C,  $[\alpha]_D^{23} = -63^\circ$  ( $c = 0.49$ , chloroform). Pharm: Aldose reductase inhibitor (rat eye lens, 0.1ng/mL, InRt = 28%). Source: WU WEI ZI *Schisandra chinensis*. Ref: 2, 1023.

**8926 Gomisin T**

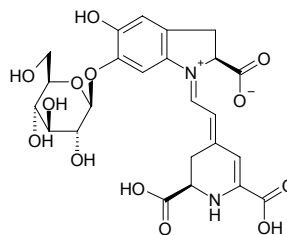
Gomisin T-ol [119139-66-1] C<sub>23</sub>H<sub>30</sub>O<sub>7</sub> (418.49). White amorphous powder,  $[\alpha]_D^{23} = +60^\circ$  ( $c = 0.50$ , chloroform). Pharm: 5-Lipoxygenase inhibitor (100 μmol/mL, InRt = 55.6%). Source: WU WEI ZI *Schisandra chinensis*. Ref: 2, 1023.

**8927 Gomphrenin I**

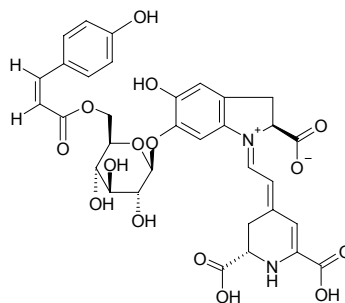
[17008-59-2] C<sub>24</sub>H<sub>26</sub>N<sub>2</sub>O<sub>13</sub> (550.48). Pharm: Purple phytochrome. Source: QIAN RI HONG *Gomphrena globosa*. Ref: 15, 658.

**8928 Gomphrenin II**

[17008-60-5] C<sub>24</sub>H<sub>26</sub>N<sub>2</sub>O<sub>13</sub> (550.48). Source: QIAN RI HONG *Gomphrena globosa*. Ref: 15.

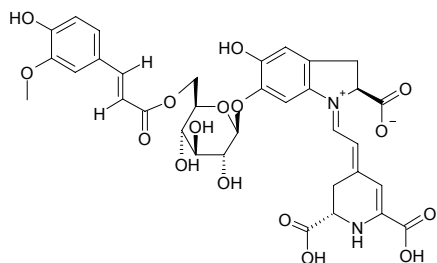
**8929 Gomphrenin III**

C<sub>33</sub>H<sub>32</sub>N<sub>2</sub>O<sub>15</sub> (696.63). Source: QIAN RI HONG *Gomphrena globosa*. Ref: 6, 15.

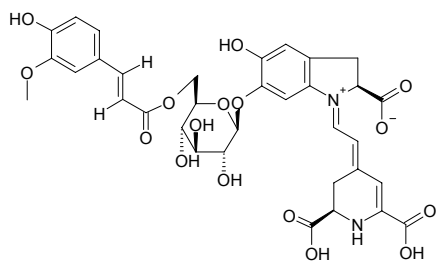


**8930 Gomphrenin V**

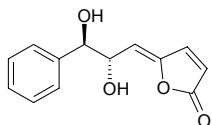
[16955-52-5]  $C_{34}H_{34}N_2O_{16}$  (726.65). **Pharm:** Purple phytochrome. **Source:** QIAN RI HONG *Gomphrena globosa*. **Ref:** 6, 15, 658.

**8931 Gomphrenin VI**

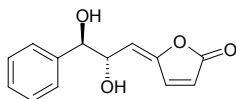
[16955-53-6]  $C_{34}H_{34}N_2O_{16}$  (726.65). **Source:** QIAN RI HONG *Gomphrena globosa*. **Ref:** 6, 15.

**8932 Goniobutenolide A**

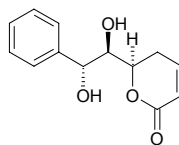
$C_{13}H_{12}O_4$  (232.24). **Pharm:** Cytotoxic (HepG2,  $IC_{50}$  = 5.83  $\mu$ g/mL, control Doxorubicin,  $IC_{50}$  = 0.38  $\mu$ g/mL; Hep3B,  $IC_{50}$  = 15.33  $\mu$ g/mL, Doxorubicin,  $IC_{50}$  = 0.36  $\mu$ g/mL; MDA-MB-231,  $IC_{50}$  = 1.36  $\mu$ g/mL, Doxorubicin,  $IC_{50}$  = 1.20  $\mu$ g/mL; MCF7, inactive). **Source:** TAI WAN GE NA XIANG *Goniothalamus amuyon* (stem and leaf). **Ref:** 5056.

**8933 Goniobutenolide B**

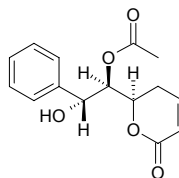
$C_{13}H_{12}O_4$  (232.24). **Pharm:** Cytotoxic (HepG2,  $IC_{50}$  = 6.68  $\mu$ g/mL, control Doxorubicin,  $IC_{50}$  = 0.38  $\mu$ g/mL; Hep3B,  $IC_{50}$  = 10.99  $\mu$ g/mL, Doxorubicin,  $IC_{50}$  = 0.36  $\mu$ g/mL; MDA-MB-231,  $IC_{50}$  = 1.40  $\mu$ g/mL, Doxorubicin,  $IC_{50}$  = 1.20  $\mu$ g/mL; MCF7, inactive). **Source:** TAI WAN GE NA XIANG *Goniothalamus amuyon* (stem and leaf). **Ref:** 5056.

**8934 (6R,7R,8R)-Goniodiol**

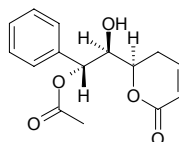
$C_{13}H_{14}O_4$  (234.25). **Pharm:** Cytotoxic (HepG2,  $IC_{50}$  = 9.15  $\mu$ g/mL, control Doxorubicin,  $IC_{50}$  = 0.38  $\mu$ g/mL; Hep3B,  $IC_{50}$  = 17.21  $\mu$ g/mL, Doxorubicin,  $IC_{50}$  = 0.36  $\mu$ g/mL; MDA-MB-231,  $IC_{50}$  = 8.80  $\mu$ g/mL, Doxorubicin,  $IC_{50}$  = 1.20  $\mu$ g/mL). **Source:** TAI WAN GE NA XIANG *Goniothalamus amuyon* (stem and leaf). **Ref:** 5056.

**8935 Goniodiol-7-monoacetate**

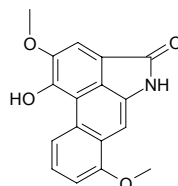
$C_{15}H_{16}O_5$  (276.29). **Pharm:** Cytotoxic (*in vitro*, NUGC,  $IC_{50}$  = 4.12  $\mu$ g/mL; HONE-1,  $IC_{50}$  = 5.69  $\mu$ g/mL; control Actinomycin, NUGC,  $IC_{50}$  = 6.61  $\mu$ g/mL; HONE-1,  $IC_{50}$  = 4.53  $\mu$ g/mL)<sup>[4686]</sup>; cytotoxic (HepG2, inactive; Hep3B,  $IC_{50}$  = 7.85  $\mu$ g/mL, control Doxorubicin,  $IC_{50}$  = 0.36  $\mu$ g/mL; MDA-MB-231, inactive; MCF7, inactive)<sup>[5056]</sup>. **Source:** TAI WAN GE NA XIANG *Goniothalamus amuyon* (fresh leaf: yield = 0.028%fw; stem: yield = 0.0016%fw). **Ref:** 4686, 5056.

**8936 Goniodiol-8-monoacetate**

$C_{15}H_{16}O_5$  (276.29). **Pharm:** Cytotoxic (*in vitro*, NUGC,  $IC_{50}$  = 5.02  $\mu$ g/mL; HONE-1,  $IC_{50}$  = 6.09  $\mu$ g/mL; control Actinomycin, NUGC,  $IC_{50}$  = 6.61  $\mu$ g/mL; HONE-1,  $IC_{50}$  = 4.53  $\mu$ g/mL)<sup>[4686]</sup>; cytotoxic (HepG2, inactive; Hep3B,  $IC_{50}$  = 4.63  $\mu$ g/mL, control Doxorubicin,  $IC_{50}$  = 0.36  $\mu$ g/mL; MDA-MB-231,  $IC_{50}$  = 8.05  $\mu$ g/mL, Doxorubicin,  $IC_{50}$  = 1.20  $\mu$ g/mL; MCF7, inactive)<sup>[5056]</sup>. **Source:** TAI WAN GE NA XIANG *Goniothalamus amuyon* (fresh leaf: yield = 0.0044%fw). **Ref:** 4686, 5056.

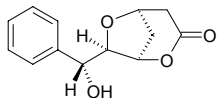
**8937 Gonioffithine**

10-Amino-2,4-dimethoxyphenanthrene-1-carboxylic acid lactam [240122-32-1]  $C_{17}H_{13}NO_4$  (295.30). Yellow acicular Crystals, mp 312–314°C. **Source:** DA HUA GE NA XIANG *Goniothalamus griffithii*. **Ref:** 848, 5453.

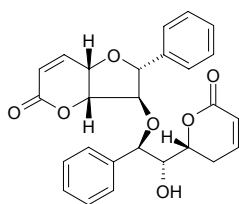


**8938 Goniofupryrone A**

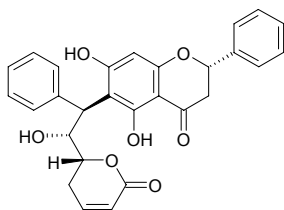
$C_{13}H_{14}O_4$  (234.25). Colorless plates, mp 154–156°C,  $[\alpha]_D^{23} = -25.6^\circ$  ( $c = 0.08$ , MeOH). **Pharm:** Cytotoxic inactive (HepG2, Hep3B, MDA-MB-231, MCF7). **Source:** TAI WAN GE NA XIANG *Goniothalamus amuyon* (stem and leaf). **Ref:** 5056.

**8939 Goniolactone A**

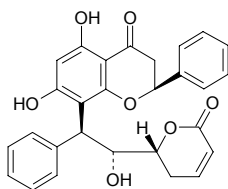
$C_{26}H_{24}O_7$  (448.48). White needles, mp 166–168°C,  $[\alpha]_D^{20} = +83.6^\circ$  ( $c = 0.26$ , EtOH). **Pharm:** Cytotoxic (*in vitro*, showed no significant inhibitory activities toward A2780, HCT8 and KB). **Source:** GE NA XIANG *Goniothalamus cheliensis* (root: yield = 0.00025%dw). **Ref:** 4631.

**8940 Goniolactone B**

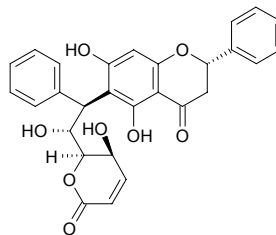
$C_{28}H_{24}O_7$  (472.5). Amorphous powder, mp 176–178°C,  $[\alpha]_D^{20} = +33.7^\circ$  ( $c = 0.92$ , EtOH). **Pharm:** Cytotoxic (*in vitro*, A2780,  $IC_{50} = 7.4 \mu\text{mol/L}$ ; HCT8,  $IC_{50} = 4.43 \mu\text{mol/L}$ ; KB,  $IC_{50} = 7.23 \mu\text{mol/L}$ ). **Source:** GE NA XIANG *Goniothalamus cheliensis* (root: yield = 0.00029%dw). **Ref:** 4631.

**8941 Goniolactone C**

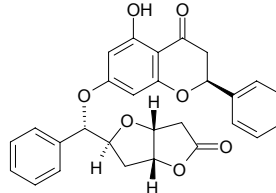
$C_{28}H_{24}O_7$  (472.5). Colorless oil,  $[\alpha]_D^{20} = -53.9^\circ$  ( $c = 0.71$ , EtOH). **Source:** GE NA XIANG *Goniothalamus cheliensis* (root: yield = 0.00005%dw). **Ref:** 4631.

**8942 Goniolactone D**

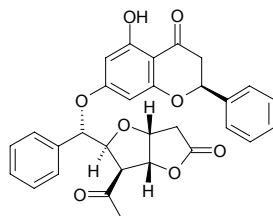
$C_{28}H_{24}O_8$  (488.5). White needles, mp 158–160°C,  $[\alpha]_D^{20} = +17.6^\circ$  ( $c = 0.42$ , EtOH). **Pharm:** Cytotoxic inactive (*in vitro*, A2780, HCT8 and KB). **Source:** GE NA XIANG *Goniothalamus cheliensis* (root: yield = 0.00021%dw). **Ref:** 4631.

**8943 Goniolactone E**

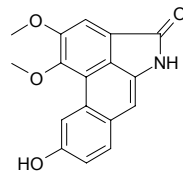
$C_{28}H_{24}O_7$  (472.5). White powder, mp 238–240°C,  $[\alpha]_D^{20} = 0^\circ$  ( $c = 0.10$ , EtOH). **Source:** GE NA XIANG *Goniothalamus cheliensis* (root: yield = 0.00003%dw). **Ref:** 4631.

**8944 Goniolactone F**

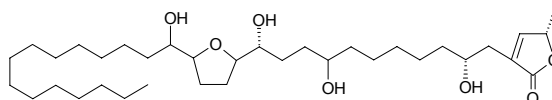
$C_{30}H_{26}O_8$  (514.54). White powder, mp 257–258°C,  $[\alpha]_D^{20} = +17.6^\circ$  ( $c = 0.21$ , EtOH). **Pharm:** Cytotoxic inactive (*in vitro*, A2780, HCT8 and KB). **Source:** GE NA XIANG *Goniothalamus cheliensis* (root: yield = 0.00013%dw). **Ref:** 4631.

**8945 Goniothalactam**

$C_{17}H_{13}NO_4$  (295.30). **Source:** *Goniothalamus* sp. **Ref:** 2447.

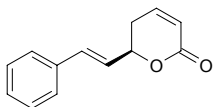
**8946 cis-Goniothalamycin**

[172586-14-0]  $C_{35}H_{64}O_7$  (596.90). White amorphous powder (hexane), mp 80°C,  $[\alpha]_D^{25} = 7.2^\circ$  ( $c = 0.03$ , chloroform). **Pharm:** Cytotoxic (A549,  $IC_{50} = 0.13 \mu\text{g/mL}$ , MCF7,  $IC_{50} = 1.05 \mu\text{g/mL}$ , HT29,  $IC_{50} = 0.0053 \mu\text{g/mL}$ ); cytotoxic (BST,  $LC_{50} = 5.2 \mu\text{g/mL}$ , PD experiment,  $\text{InRt} = 47\%$ ); cytotoxic (*in vitro* HepG2,  $EC_{50} = 0.202 \mu\text{g/mL}$ , Hep3B,  $EC_{50} = 3.11 \mu\text{g/mL}$ ; control Doxorubicin, HepG2,  $EC_{50} = 0.38 \mu\text{g/mL}$ , Hep3B,  $EC_{50} = 0.36 \mu\text{g/mL}$ )<sup>[5035]</sup>. **Source:** CI GUO FAN LI ZHI *Annona muricata*, SHAN FAN LI ZHI *Annona montana* (seed). **Ref:** 1062, 5035.

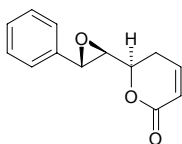


**8947 Goniotalamin**

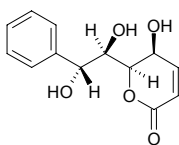
[17303-67-2] C<sub>13</sub>H<sub>12</sub>O<sub>2</sub> (200.24). White crystals, mp 85°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +170° (c = 1.38, CHCl<sub>3</sub>); [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -183.9° (c = 0.6, MeOH). **Pharm:** Cytotoxic (HepG2, IC<sub>50</sub> = 0.31 μg/mL, control Doxorubicin, IC<sub>50</sub> = 0.38 μg/mL; Hep3B, IC<sub>50</sub> = 1.07 μg/mL, control Doxorubicin, IC<sub>50</sub> = 0.36 μg/mL; MDA-MB-231, IC<sub>50</sub> = 1.07 μg/mL, control Doxorubicin, IC<sub>50</sub> = 1.20 μg/mL; MCF7, IC<sub>50</sub> = 4.65 μg/mL, control Doxorubicin, IC<sub>50</sub> = 2.51 μg/mL)<sup>[5056]</sup>. **Source:** DA HUA GE NA XIANG *Goniotalamus griffithii*, JIN PING GE NA XIANG *Goniotalamus leiocarpus*, TAI WAN GE NA XIANG *Goniotalamus amuyon* (stem and leaf), TAI WAN GE NA XIANG *Goniotalamus amuyon* (fresh leaf: yield = 0.00061%fw)<sup>[4686]</sup>. **Ref:** 420, 4686, 5056, 5453.

**8948 Goniotalamin epoxide**

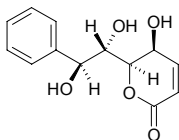
C<sub>13</sub>H<sub>12</sub>O<sub>3</sub> (216.24). **Pharm:** Cytotoxic (*in vitro*, NUGC, IC<sub>50</sub> = 32.1 μg/mL; HONE-1, IC<sub>50</sub> = 36.3 μg/mL; control Actinomycin, NUGC, IC<sub>50</sub> = 6.61 μg/mL; HONE-1, IC<sub>50</sub> = 4.53 μg/mL)<sup>[4686]</sup>; cytotoxic (HepG2, IC<sub>50</sub> = 0.19 μg/mL, control Doxorubicin, IC<sub>50</sub> = 0.38 μg/mL; Hep3B, IC<sub>50</sub> = 3.29 μg/mL, Doxorubicin, IC<sub>50</sub> = 0.36 μg/mL; MDA-MB-231, IC<sub>50</sub> = 1.23 μg/mL, Doxorubicin, IC<sub>50</sub> = 1.20 μg/mL; MCF7, IC<sub>50</sub> = 1.94 μg/mL, Doxorubicin, IC<sub>50</sub> = 2.51 μg/mL)<sup>[5056]</sup>. **Source:** TAI WAN GE NA XIANG *Goniotalamus amuyon* (fresh leaf: yield = 0.00035%fw; stem: yield = 0.00047%fw). **Ref:** 4686, 5056.

**8949 (5S,6R,7R,8R)-Goniotriol**

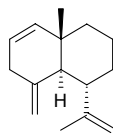
C<sub>13</sub>H<sub>14</sub>O<sub>5</sub> (250.25). **Source:** TAI WAN GE NA XIANG *Goniotalamus amuyon* (fresh leaf: yield = 0.0059%fw; stem: yield = 0.00047%fw). **Ref:** 4686.

**8950 (5S,6R,7S,8S)-Goniotriol**

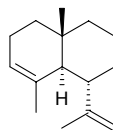
C<sub>13</sub>H<sub>14</sub>O<sub>5</sub> (250.25). **Source:** TAI WAN GE NA XIANG *Goniotalamus amuyon* (fresh leaf: yield = 0.00065%fw). **Ref:** 4686.

**8951 (5S,6S,10S)-Gorgona-1,4(15),11-triene**

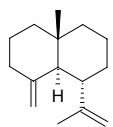
(4S,4aS,8aS)-8a-Methyl-5-methylene-4-(1-methylvinyl)-1,2,3,4,4a,5,6,8a-octa-hydro-naphthalene C<sub>15</sub>H<sub>22</sub> (202.34). Colorless oil. **Source:** *Saccogyna viticulosa* (essential oil). **Ref:** 3839.

**8952 (+)-(5R,6S,10S)-α-Gorgonene**

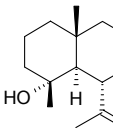
(+)-(1S,4aS,8aR)-4a,8-Dimethyl-1-(1-methylvinyl)-1,2,3,4,4a,5,6,8a-octahydro-o-naphthalene C<sub>15</sub>H<sub>24</sub> (204.36). Colorless oil. **Source:** *Saccogyna viticulosa* (essential oil). **Ref:** 3839.

**8953 β-Gorgonene**

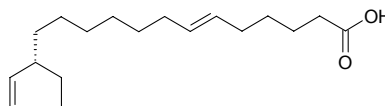
(+)-(5S,6S,10S)-β-Gorgonene C<sub>15</sub>H<sub>24</sub> (204.36). **Source:** *Saccogyna viticulosa* (essential oil). **Ref:** 3839.

**8954 (-)-(4R,5R,6S,10S)-Gorgon-11-en-4-ol**

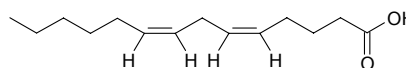
(-)-(1R,4aS,8S,9R)-1,4a-Dimethyl-8-(1-methylethenyl)-decahydro-naphthalen-1-ol C<sub>15</sub>H<sub>26</sub>O (222.37). Colorless oil. **Source:** *Saccogyna viticulosa* (essential oil). **Ref:** 3839.

**8955 Gorlic acid**

C<sub>18</sub>H<sub>30</sub>O<sub>2</sub> (278.44). **Pharm:** Antileprotic (inhibits *Mycobacterium leprae*). **Source:** DA FENG ZI *Hydnocarpus anthelminticus* (seed: content scope = 0.57%~1.03%). **Ref:** 5501.

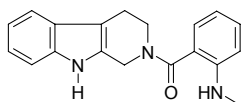
**8956 Goshuyic acid**

Goshuynic acid [39039-37-7] C<sub>14</sub>H<sub>24</sub>O<sub>2</sub> (224.35). **Source:** WU ZHU YU *Evodia rutaecarpa*. **Ref:** 6, 1521.

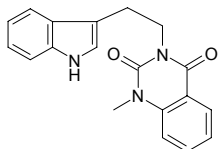


**8957 Goshuyamide I**

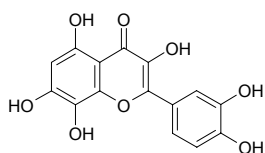
[126223-62-9] C<sub>19</sub>H<sub>19</sub>N<sub>3</sub>O (305.38). Source: WU ZHU YU *Evodia rutaecarpa*.  
Ref: 2, 347, 877.

**8958 GoshuyamideII**

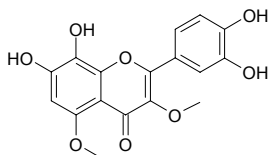
[95274-42-3] C<sub>19</sub>H<sub>17</sub>N<sub>3</sub>O<sub>2</sub> (319.37). Source: WU ZHU YU *Evodia rutaecarpa*.  
Ref: 2, 877.

**8959 Gossypetin**

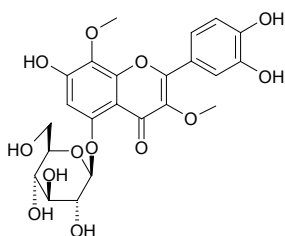
[489-35-0] C<sub>15</sub>H<sub>10</sub>O<sub>8</sub> (318.24). mp 311~313°C. Pharm: Antibacterial (*Pseudomonas maltophilia* and *Enterobacter cloacae*). Source: BAI HUA YING SHAN HONG *Rhododendron mucronatum*, HENG GEN FEI CAI *Sedum kamtschaticum*, MAN SHAN HONG *Rhododendron dauricum*, XIAO YE PI PA *Rhododendron anthopogonoides*, YING SHAN HONG *Rhododendron mucronulatum*, ZHAO SHAN BAI *Rhododendron micranthum*.  
Ref: 6, 658.

**8960 Gossypetin-3,5-dimethyl ether**

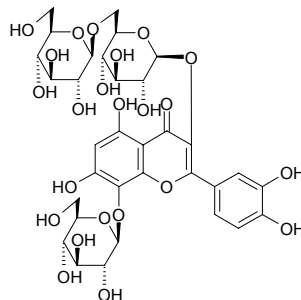
C<sub>17</sub>H<sub>14</sub>O<sub>8</sub> (346.30). Source: KE SHI FAN YING TAO *Eugenia edulis* (leaf).  
Ref: 3469.

**8961 Gossypetin-3,8-dimethyl ether-5-O-beta-glucoside**

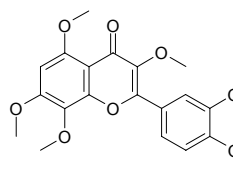
C<sub>23</sub>H<sub>24</sub>O<sub>13</sub> (508.44). Source: KE SHI FAN YING TAO *Eugenia edulis* (leaf).  
Ref: 3469.

**8962 Gossypetin-3-beta-D-(2-O-beta-D-glucopyranosylglucopyranoside)-8-beta-D-glucopyranoside**

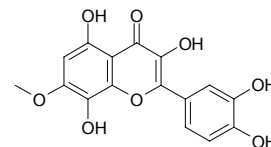
C<sub>33</sub>H<sub>40</sub>O<sub>23</sub> (804.67). Source: MU ZEI *Equisetum hiemale*. Ref: 2.

**8963 Gossypetin hexamethyl ether**

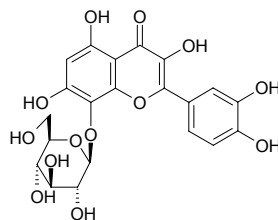
C<sub>21</sub>H<sub>22</sub>O<sub>8</sub> (402.40). mp 159~161°C, 170~171°C. Source: JI CAI *Capsella bursa-pastoris*. Ref: 6.

**8964 Gossypetin-7-methylether**

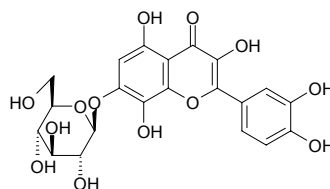
[18799-01-4] C<sub>16</sub>H<sub>12</sub>O<sub>8</sub> (332.27). Source: DI YANG QUE *Lotus corniculatus*. Ref: 6.

**8965 Gossypin**

[652-78-8] C<sub>21</sub>H<sub>20</sub>O<sub>13</sub> (480.39). mp 230°C (dec). Pharm: Analgesic; anti-inflammatory (reduces swollen foot and increase of blood capillary permeability caused by variety of phlogogenic agents); antiulcerative (gastric ulcer). Source: HENG GEN FEI CAI *Sedum kamtschaticum*, MO PAN CAO *Abutilon indicum*, PU TAO YE MU JIN *Hibiscus vitifolius*, YIN DU MIAN *Gossypium indicum*. Ref: 6, 661.

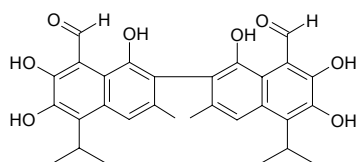
**8966 Gossypitrin**

[489-34-9] C<sub>21</sub>H<sub>20</sub>O<sub>13</sub> (480.39). mp 252°C. Source: MU ZEI *Equisetum hiemale*, MO PAN CAO *Abutilon indicum*, WEN JING *Equisetum arvense*. Ref: 2.

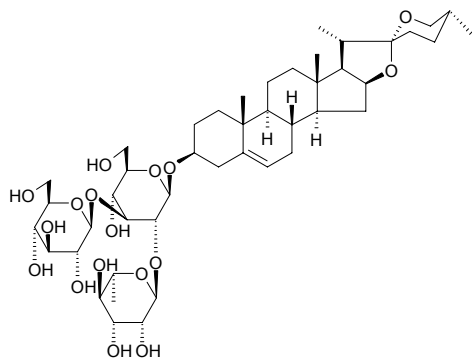


**8967 Gossypol**

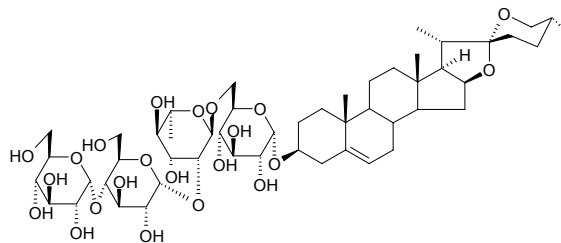
[303-45-7]  $C_{30}H_{30}O_8$  (518.57). mp 184°C, 199°C, 214°C. **Pharm:** Antibacterial (*Staphylococcus aureus*, hemolytic streptococcus); antineoplastic (mus, P<sub>388</sub>, hystero-myoma, deciduoma caused by luteosterone); anti-fertility agent (inhibits generation and movement of sperma, *D*-isomer has no activity); antiviral ( $\alpha$ -influenza virus PR<sub>8</sub> and Japanese encephalitis virus); promotes regeneration of muscle tissue (ointment); LD<sub>50</sub> (mus, orl) = 315mg/kg. **Source:** DI TANG HUA *Kerria japonica*, HAI DAO MIAN *Gossypium barbadense* [root cortex: content = 1.8%<sup>[5508]</sup>], LU DI MIAN *Gossypium hirsutum* [Syn. *Gossypium mexicanum*] (root cortex: content = 1.6%<sup>[5508]</sup>), MIAN HUA *Gossypium herbaceum*, MIAN HUA GEN *Gossypium herbaceum* (root cortex: content = 1.3%<sup>[5508]</sup>), MIAN ZI YOU *Gossypium herbaceum* (seed: mean content of 5 batch samples = 0.13%<sup>[5508]</sup>). **Ref:** 4, 5, 6, 658, 5508.

**8968 Gracillin**

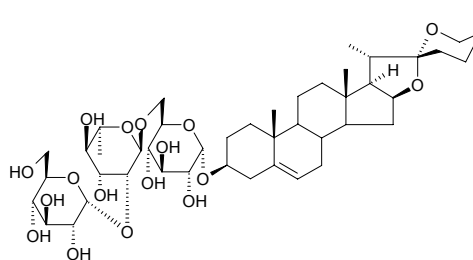
Gracilline [19083-00-2]  $C_{45}H_{72}O_{17}$  (885.07). Colorless rhombic crystals (methanol), mp 287–289°C (dec); 298–302°C; 290–293°C,  $[\alpha]_D^{20} = -86.2^\circ$  ( $c = 0.12$ , dimethylformamide). **Pharm:** Antibacterial (*Bacillus dysenteriae*, MIC = 2.5mg/mL; *Serratia marcescens*, MIC = 2.5mg/mL; *Bacillus coli*, MIC = 5.0mg/mL; drug-fast *Staphylococcus aureus*, MIC = 2.5mg/mL; sensitive *Staphylococcus aureus*, MIC = 2.5mg/mL); antifungal (*Trichophyton mentagrophytes*); cardiotoxic; cytotoxic (*in vitro*, HeLa, IC<sub>50</sub> = 12.74 $\mu$ g/mL; control Cisplatin, HeLa, IC<sub>50</sub> = 0.75 $\mu$ g/mL<sup>[4788]</sup>); hemolytic (extremely strong); antineoplastic (inhibits TPA-induced <sup>32</sup>P combines with phospholipid in HeLa cells, 5 $\mu$ g/mL, InRt = 11.5%); cAMP phosphodiesterase inhibitor (*in vitro*, IC<sub>50</sub> = 61 $\mu$ mol/L). **Source:** BA QIA *Smilax china* [Syn. *Smilax japonica*], CI JI LI *Tribulus terrestris*, DUN YE SHU YU *Dioscorea zingiberensis*, FU ZHOU SHU YU *Dioscorea futschauensis*, HAI JIN BI XIE *Dioscorea spongiosa* (Rhizome: yield = 0.00041%<sup>[4692]</sup>), HU BEI HUANG JING *Polygonatum zanlanscianense* (rhizome: yield = 0.00045%dw<sup>[4788]</sup>), SHU KUI YE SHU YU *Dioscorea althaeoides*, XIAN XI SHU YU *Dioscorea gracillima*, ZHANG LIU TOU *Costus speciosus*, XIAO HUA DUN YE SHU YU *Dioscorea parviflora*, *Costus* sp. **Ref:** 6, 10, 15, 660, 900, 4692, 4788.

**8969 Graecunin E**

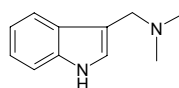
$C_{51}H_{82}O_{22}$  (1047.21). **Source:** HU LU BA *Trigonella foenum-graecum*. **Ref:** 2458.

**8970 Graecunin G**

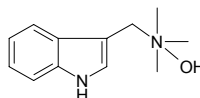
$C_{45}H_{72}O_{17}$  (885.07). **Source:** HU LU BA *Trigonella foenum-graecum*. **Ref:** 2458.

**8971 Gramine**

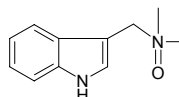
Donaxine [87-52-5]  $C_{11}H_{14}N_2$  (174.25). Acicular or lamellar crystals, (acetone), mp 138–139°C, soluble in ethanol, ether, chloroform, slightly soluble in cold acetone, insoluble in petroleum ether, water.<sup>[5507]</sup> **Pharm:** Insect antifeedant; toxin (sheep, causes Phalaris blind stagger). **Source:** HONG HUA QI *Acer rubrum*, JI MU *Loropetalum chinense*, LU ZHU GEN *Arundo donax*, MAI YA *Hordeum vulgare*, YI CAO *Phalaris arundinacea*, YIN BAI QI *Acer saccharinum*, *Lupinus* sp. **Ref:** 4, 6, 658, 5507.

**8972 Gramine methohydroxide**

$C_{12}H_{18}N_2O$  (206.29). **Source:** LU ZHU GEN *Arundo donax*. **Ref:** 6.

**8973 Gramine Nb-oxide**

$C_{11}H_{14}N_2O$  (190.25). **Source:** LU ZHU GEN *Arundo donax*. **Ref:** 6.

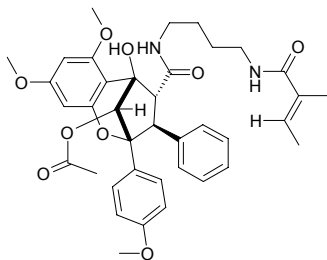




**8974 Grandiamide A**

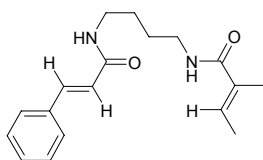
$C_{38}H_{44}N_2O_9$  (672.78). Amorphous powder,  $[\alpha]_D^{25} = -108.8^\circ$  ( $c = 0.25$ ,  $CHCl_3$ ).

Source: JU DA MI ZI LAN *Aglaiia grandis* (leaf). Ref: 3947.

**8975 Grandiamide B**

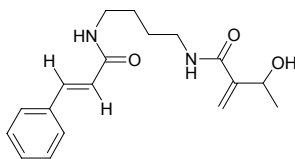
$C_{18}H_{24}N_2O_2$  (300.40). mp 99~102°C (Hexane-EtOH). Source: JU DA MI ZI

LAN *Aglaiia grandis* (leaf). Ref: 3947.

**8976 Grandiamide C**

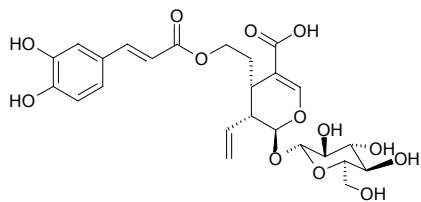
$C_{18}H_{24}N_2O_3$  (316.40). Amorphous powder,  $[\alpha]_D^{20} = \pm 0^\circ$  ( $c = 1.13$ ,  $CHCl_3$ ).

Source: JU DA MI ZI LAN *Aglaiia grandis* (leaf). Ref: 3947.

**8977 Grandifloroside**

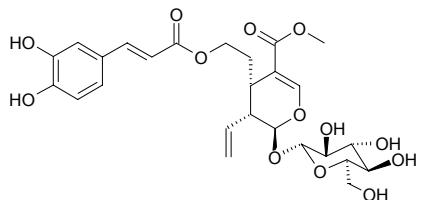
$C_{25}H_{30}O_{13}$  (538.51). Source: JI ZI MU *Sinoadina Racemosa* [Syn. *Adina*

*racemosa*] (leaf, flower and twig: yield = 0.0046%dw). Ref: 4723.

**8978 Grandifloroside 11-methyl ester**

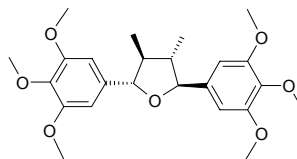
$C_{26}H_{32}O_{13}$  (552.54). Amorphous powder,  $[\alpha]_D^{26} = -94^\circ$  ( $c = 0.66$ , MeOH).

Source: JI ZI MU *Sinoadina Racemosa* [Syn. *Adina racemosa*] (leaf, flower and twig: yield = 0.0018%dw). Ref: 4723.

**8979 Grandisin**

[53250-50-3]  $C_{24}H_{32}O_7$  (432.52). Pharm: Inhibits PAF; antitrypanosomal (trypanostigote form of *Trypanosoma cruzi* (Y strain),  $IC_{50} = 8.74\mu g/mL$ )<sup>[3450]</sup>.

Source: DA MU JIANG ZI *Litsea grandis*, *Piper solmsianum*. Ref: 658, 3450.

**8980 cis-Grandmarin**

$C_{15}H_{16}O_6$  (292.29). Pharm: Antineoplastic (Raji cells, antitumor promotor, *in*

*vivo*, inhibits TPA-induced EBV-EA activation, compound concentration =

500mol ratio/32 pmol TPA: EBV-EA-positive cells = (41.8±1.4)%

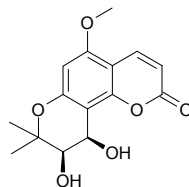
(viability > 80%),  $\beta$ -Carotene, EBV-EA-positive cells = (34.3±1.1)%

(viability >80), Curcumin, EBV-EA-positive cells = (22.8±1.8)% (viability

> 80%), compound  $IC_{50} = 350$ mol ratio/32 pmol TPA,  $\beta$ -Carotene,  $IC_{50} =$

400mol ratio/32 pmol TPA, Curcumin,  $IC_{50} = 341$ mol ratio/32 pmol TPA).

Source: *Citrus tamurana*. Ref: 5048.

**8981 trans-Grandmarin isovalerate**

$C_{20}H_{24}O_7$  (376.41). Pharm: Antineoplastic (Raji cells, antitumor promotor, *in*

*vivo*, inhibits TPA-induced EBV-EA activation, compound concentration =

500mol ratio/32 pmol TPA: EBV-EA-positive cells = (42.5±1.3)%

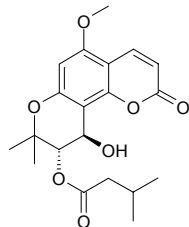
(viability > 80%),  $\beta$ -Carotene, EBV-EA-positive cells = (34.3±1.1)%

(viability >80), Curcumin, EBV-EA-positive cells = (22.8±1.8)% (viability

> 80%), compound  $IC_{50} = 428$ mol ratio/32 pmol TPA,  $\beta$ -Carotene,  $IC_{50} =$

400mol ratio/32 pmol TPA, Curcumin,  $IC_{50} = 341$ mol ratio/32 pmol TPA).

Source: *Citrus hassaku*. Ref: 5048.

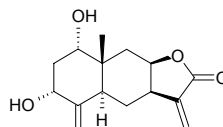
**8982 Granilin**

[40737-97-1]  $C_{15}H_{20}O_4$  (264.32). Pharm: Antibacterial. Source: A SHI HAO

*Artemisia ashurbajevii*, DA YE TU MU XIANG *Inula grandis*, DUO SUI

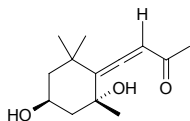
TUN CAO *Ambrosia polystachya*, TIAN MING JING *Carpesium*

*abrotanoides*. Ref: 658, 1521.

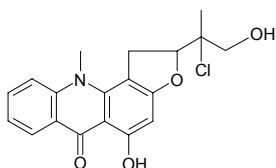


**8983 Grassopperketone**

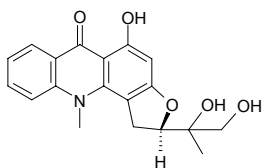
$C_{13}H_{20}O_3$  (224.30). Source: RI BEN HUANG BAI *Phellodendron japonicum* (leaf). Ref: 4502.

**8984 Gravacridonechlorine**

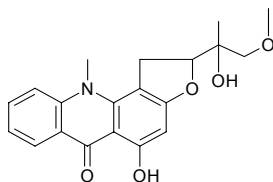
[38494-84-7]  $C_{19}H_{18}ClNO_4$  (359.81). mp 254–257°C. Source: CHOU CAO *Ruta graveolens*. Ref: 6, 2101.

**8985 Gravacridonediol**

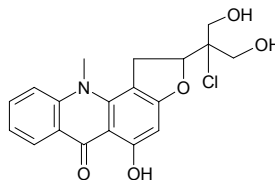
[37551-75-0]  $C_{19}H_{19}NO_5$  (341.37). Yellow amorphous powder, mp 224–227°C,  $[\alpha]_D = -111.1^\circ$  ( $c = 0.1$ , MeOH). Pharm: Antileishmanial (*Leishmania major* promastigote, 10  $\mu\text{mol/L}$ , survival = (54.0 $\pm$ 1.1)%, 1  $\mu\text{mol/L}$ , survival = (97.2 $\pm$ 2.2)%, control Amphotericin B, 10  $\mu\text{mol/L}$ , survival = (0.2 $\pm$ 0.04)%, 1  $\mu\text{mol/L}$ , survival = (71.9 $\pm$ 4.4)%; *Leishmania major* amastigote, 10  $\mu\text{mol/L}$ , survival = (9.5 $\pm$ 1.0)%, 1  $\mu\text{mol/L}$ , survival = (58.0 $\pm$ 3.1)%, control Amphotericin B, 10  $\mu\text{mol/L}$ , survival = (0.4 $\pm$ 0.02)%, 1  $\mu\text{mol/L}$ , survival = (0.5 $\pm$ 0.03)%)<sup>[3797]</sup>; antifungal inactive (silica gel TLC, *Cladosporium cucumerinum*, control Nystatin, MIA = 0.2  $\mu\text{g}$ )<sup>[3797]</sup>; algicidal (*Oscillatoria perornata*, LCIC = 10 mg/L; *Selenastrum capricornutum*, LCIC > 100 mg/L)<sup>[5328]</sup>. Source: CHOU CAO *Ruta graveolens*, *Thamnosma rhodesica* (root). Ref: 6, 3797, 5328, 1521.

**8986 Gravacridonediol monomethyl ether**

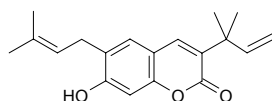
$C_{20}H_{21}NO_5$  (355.39). mp 219–221°C. Source: CHOU CAO *Ruta graveolens*. Ref: 6.

**8987 Gravacridonolchlorine**

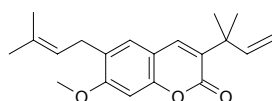
[38494-85-8]  $C_{19}H_{18}ClNO_5$  (375.81). mp 233–237°C. Source: CHOU CAO *Ruta graveolens*. Ref: 6.

**8988 Gravelliferone**

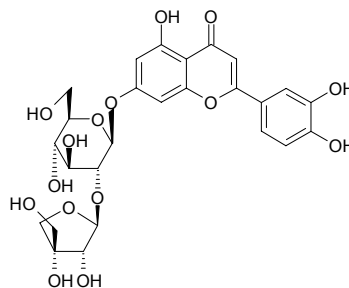
[21316-80-3]  $C_{19}H_{22}O_3$  (298.39). mp 116–118°C. Source: CHOU CAO *Ruta graveolens*. Ref: 6.

**8989 Gravelliferone methyl ether**

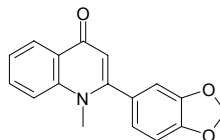
$C_{20}H_{24}O_3$  (312.41). Pharm: Vasodilator (cerebral, pig, *in vitro*). Source: SHAN MO LI YUN XIANG *Ruta oreojasme*, CHOU CAO *Ruta graveolens*. Ref: 6, 658.

**8990 Graveobioside A**

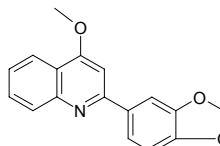
Luteolin-7-apio-glucoside [63808-23-1]  $C_{26}H_{28}O_{15}$  (580.50). mp 251–252°C. Source: HAN QIN *Apium graveolens*. Ref: 6, 1521.

**8991 Graveoline**

[485-61-0]  $C_{17}H_{13}NO_3$  (279.30). mp 204–205°C. Source: CHOU CAO *Ruta graveolens*, WU ZHU YU *Evodia rutaecarpa* (fruit). Ref: 6, 5031.

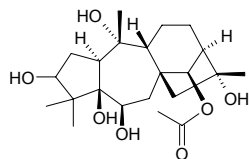
**8992 Graveolinine**

[4179-37-7]  $C_{17}H_{17}NO_3$  (279.30). mp 115–116°C. Source: CHOU CAO *Ruta graveolens*. Ref: 6.

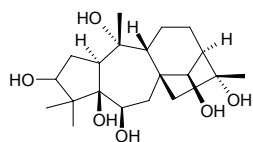


**8993 Grayanotoxin I**

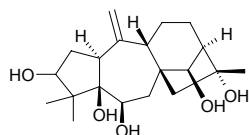
$C_{22}H_{36}O_7$  (412.53). Source: MU LI LU *Leucothoe grayana* (in 1971 the compound was isolated from the plant)<sup>[5505]</sup>. Ref: 5505, 5507.

**8994 Grayanotoxin III**

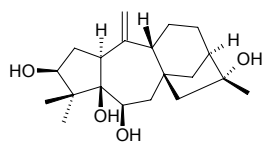
$C_{20}H_{34}O_6$  (370.49). Source: MU LI LU *Leucothoe grayana* (in 1971 the compound was isolated from the plant)<sup>[5505]</sup>, RI BEN MA ZUI MU *Pieris japonica* (in 1959 the compound was separated from the plant)<sup>[5505]</sup>. Ref: 5505, 5507.

**8995 Grayanotoxin II**

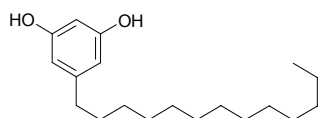
$C_{20}H_{32}O_5$  (352.48). Source: MU LI LU *Leucothoe grayana* (the compound was isolated from the plant in 1971)<sup>[5505]</sup>, NAO YANG HUA *Rhododendron molle* (flower: yield = 0.00023%dw). Ref: 5505, 4780.

**8996 Grayanotoxin XVIII**

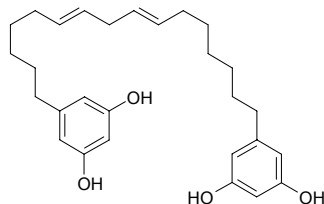
$C_{20}H_{32}O_4$  (336.48). White solid. Source: JIN YE ZI *Craibiodendron yunnanese* (leaf). Ref: 4575.

**8997 Grevillol**

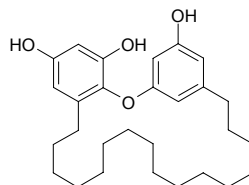
5-Tridecyl-1,3-benzenediol [5259-01-8]  $C_{19}H_{32}O_2$  (292.47). Acicular crystals (benzene), mp 82~83°C. Pharm: Dermatitic (causes contact dermatitis); 5-lipoxygenase inhibitor; irritant (to skin). Source: YIN HUA *Grevillea robusta*, *Grevillea* spp. Ref: 658, 2108.

**8998 Grevirobstol A**

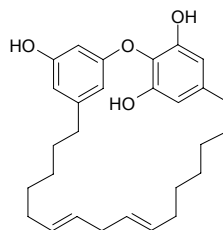
$C_{28}H_{38}O_4$  (438.61). Yellowish oil. Source: YIN HUA *Grevillea robusta* (leaf). Ref: 3905.

**8999 Grevirobstol B**

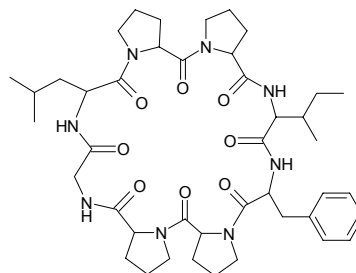
$C_{28}H_{40}O_4$  (440.63). Amorphous powder. Source: YIN HUA *Grevillea robusta* (leaf). Ref: 3905.

**9000 Grevirobstol C**

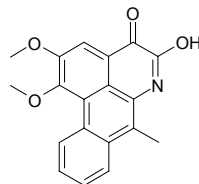
$C_{28}H_{36}O_4$  (436.60). Yellowish oil. Source: YIN HUA *Grevillea robusta* (leaf). Ref: 3905.

**9001 Grifficycloin A**

$C_{43}H_{62}N_8O_8$  (819.02).  $[\alpha]_D^{20} = -132^\circ$  ( $c = 0.12$ , MeOH). Source: DA HUA GE NA XIANG *Goniothalamus griffithii*. Ref: 5453.

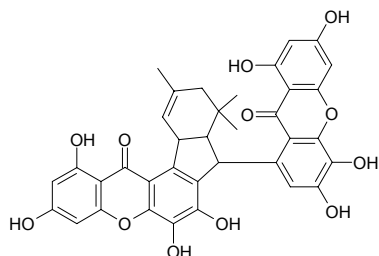
**9002 Griffinin**

$C_{19}H_{15}NO_4$  (321.34). mp > 250°C. Source: DA HUA GE NA XIANG *Goniothalamus griffithii*. Ref: 5453.

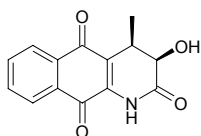


**9003 Griffipavixanthone**

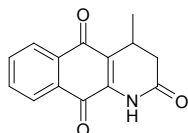
$C_{36}H_{28}O_{12}$  (652.62). **Pharm:** Antioxidant (DPPH scavenger,  $EC_{50}$  = 0.115 $\mu$ g/mL, control BHA,  $EC_{50}$  = 0.136 $\mu$ g/mL, Vitamin E,  $EC_{50}$  = 0.138 $\mu$ g/mL). **Source:** DUO ZHI ZHI TENG HUANG *Garcinia virgata* (stem cortex). **Ref:** 3874.

**9004 Griffithazanone A**

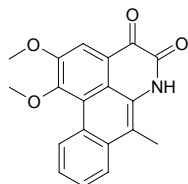
$C_{14}H_{11}NO_4$  (257.25). **Source:** DA HUA GE NA XIANG *Goniothalamus griffithii*. **Ref:** 2447.

**9005 Griffithazanone B**

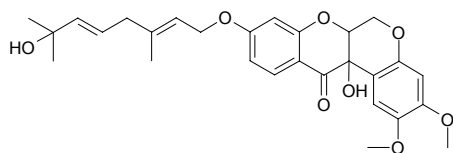
$C_{14}H_{11}NO_3$  (241.25). **Source:** DA HUA GE NA XIANG *Goniothalamus griffithii*. **Ref:** 2447.

**9006 Griffithdione**

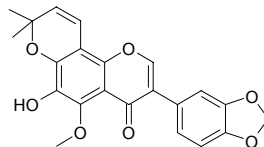
$C_{19}H_{15}NO_4$  (321.34). **Source:** DA HUA GE NA XIANG *Goniothalamus griffithii*. **Ref:** 2447, 5453.

**9007 Griffonianone A**

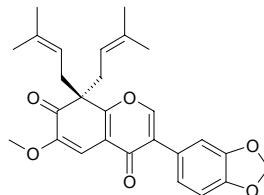
$C_{28}H_{32}O_8$  (496.56). Yellowish amorphous solid. **Source:** *Milletia griffoniana* (root cortex). **Ref:** 5134.

**9008 Griffonianone B**

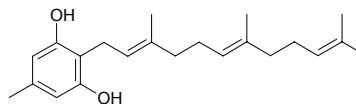
$C_{22}H_{18}O_7$  (394.38). Yellowish amorphous solid. **Source:** *Milletia griffoniana* (root cortex). **Ref:** 5134.

**9009 Griffonianone C**

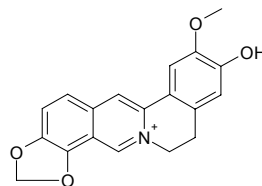
$C_{17}H_{28}O_6$  (448.52). White crystals (MeOH), mp 138~139°C. **Source:** *Milletia griffoniana* (root cortex). **Ref:** 5134.

**9010 Grifolin**

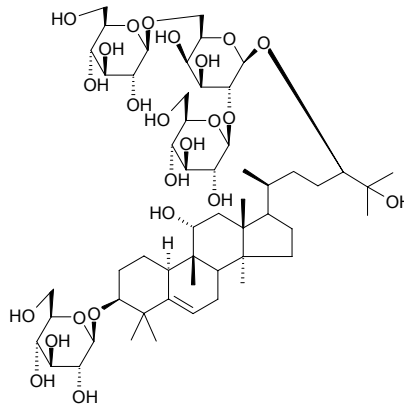
$C_{22}H_{30}O_2$  (326.5). **Pharm:** Antihistamine (inhibits histamine release, rat peritoneal mast cells, compound 48/80-induced). **Source:** MAN SHAN HONG *Rhododendron dauricum* (twig and leaf; yield = 0.0031%) **Ref:** 4755.

**9011 Groenlandicin**

$C_{19}H_{16}NO_4^+$  (322.34). **Pharm:** Cytotoxic (topoisomerase I inhibitor *in vitro*)<sup>[5369]</sup>. **Source:** *Coptis groenlandica*. **Ref:** 1521, 5369.

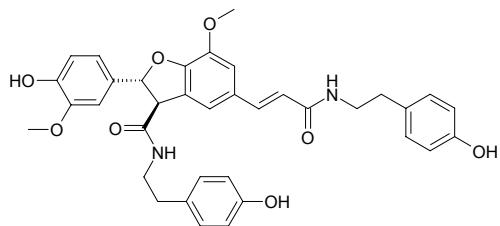
**9012 Grosomoside I**

Mogro-3-*O*- $\beta$ -*D*-glucopyranoside-24-*O* {[ $\beta$ -*D*-glucopyranosyl (2 $\rightarrow$ 1)]-[ $\beta$ -*D*-glucopyranosyl (6 $\rightarrow$ 1)]- $\beta$ -*D*-glucopyranoside}  $C_{54}H_{92}O_{24}$  (1125.32). White amorphous powder. **Source:** LUO HAN GUO *Siraitia grosvenorii* [Syn. *Momordica grosvenorii*]. **Ref:** 4805.

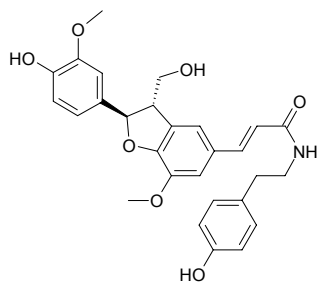


**9013 Grossamide**

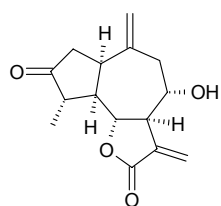
2-(4-Hydroxy-3-methoxyphenyl)-3-[N-2-(4-hydroxyphenyl)ethyl]carbamoyl-5-[N-2-(4-hydroxyphenyl)ethyl]carbamoylethenyl-7-methoxybenzodihydrofuran C<sub>36</sub>H<sub>36</sub>N<sub>2</sub>O<sub>8</sub> (624.70). Yellowish oil. **Pharm:** Cytotoxic (*in vitro*, LNCaP, IC<sub>50</sub> = 33 μmol/L)<sup>[4607]</sup>; feeding deterrent<sup>[4607]</sup>. **Source:** DA MA JIN *Hibiscus cannabinus* (bark), LANG DANG ZI *Hyoscyamus niger* (seed: yield = 0.006%dw)<sup>[4607]</sup>. **Ref:** 4607, 5233.

**9014 Grossamide K**

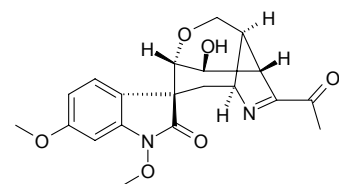
2-(4-Hydroxy-3-methoxyphenyl)-3-hydroxymethyl-5-[N-2-(4-hydroxyphenyl)ethyl]carbamoylethenyl-7-methoxybenzodihydrofuran C<sub>28</sub>H<sub>29</sub>NO<sub>7</sub> (491.55). Yellowish oil. **Source:** DA MA JIN *Hibiscus cannabinus* (bark). **Ref:** 5233.

**9015 Grosheimin**

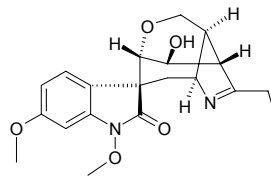
Grosheimin C<sub>15</sub>H<sub>18</sub>O<sub>4</sub> (262.31). mp 200–202°C, [α]<sub>D</sub><sup>20</sup> = +159.9° (c = 1.14, chloroform); mp 205°C (methanol), [α]<sub>D</sub><sup>20</sup> = +137.7° (c = 0.225, methanol). **Pharm:** Antineoplastic; cytotoxic (HeLa, ED<sub>50</sub> = 2.5 μg/mL); insect antifeedant. **Source:** BO LIN JU *Chartolepis intermedia*, CAI JI *Cynara scolymus*, NI JIN ZHAN JU *Venidium decurrens*. **Ref:** 661.

**9016 GS-1**

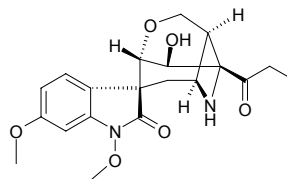
C<sub>20</sub>H<sub>22</sub>N<sub>2</sub>O<sub>6</sub> (386.41). Amorphous. **Source:** CHANG LV GOU WEN *Gelsemium sempervirens* (stem and leaf). **Ref:** 4395.

**9017 GS-2**

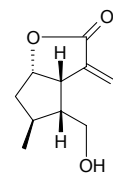
C<sub>20</sub>H<sub>24</sub>N<sub>2</sub>O<sub>5</sub> (372.42). Amorphous. **Source:** CHANG LV GOU WEN *Gelsemium sempervirens* (stem and leaf). **Ref:** 4395.

**9018 GS-3**

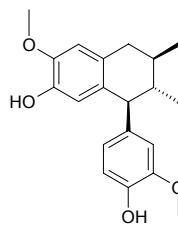
C<sub>20</sub>H<sub>24</sub>N<sub>2</sub>O<sub>6</sub> (388.42). Amorphous. **Source:** CHANG LV GOU WEN *Gelsemium sempervirens* (stem and leaf). **Ref:** 4395.

**9019 GSIR-1**

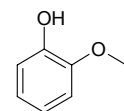
C<sub>10</sub>H<sub>15</sub>O<sub>3</sub> (182.22). Amorphous. **Source:** CHANG LV GOU WEN *Gelsemium sempervirens* (stem and leaf). **Ref:** 4395.

**9020 (+)-Guaiaicin**

C<sub>20</sub>H<sub>24</sub>O<sub>4</sub> (328.41). **Pharm:** Neuroprotective (glutamate-induced neurotoxicity in primary cultures of cortical cells, 0.1 μmol/L, protection rate = (16.7±1.1)%, MK-801: 1.0 μmol/L, protection rate = (83.6±2.0)%, p<0.001, CNQX: 1.0 μmol/L, protection rate = (70.5±1.5)%, p<0.001). **Source:** HONG NAN PI *Machilus thunbergii*. **Ref:** 4927.

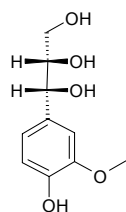
**9021 Guaiacol**

*o*-Methoxy phenol [90-05-1] C<sub>7</sub>H<sub>8</sub>O<sub>2</sub> (124.14). mp 32°C, bp 205°C. **Pharm:** Antitussive (dispels phlegm). **Source:** AN YE *Eucalyptus globulus*, CHAI HU *Bupleurum chinense*, DANG GUI *Angelica sinensis*, HAN QIN *Apium graveolens*, SANG YE *Morus alba*, WU HUA GUO YE *Ficus carica*, *Betula* sp. **Ref:** 2, 658.

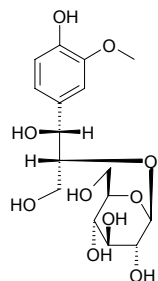


**9022 erythro-Guaiacylglycerol**

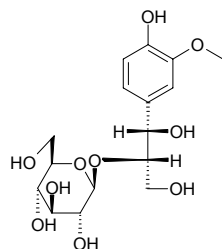
$C_{10}H_{14}O_5$  (214.22). Source: DU ZHONG *Eucommia ulmoides*. Ref: 2.

**9023 D-threo-Guaiacylglycerol 8-β-D-glucopyranoside**

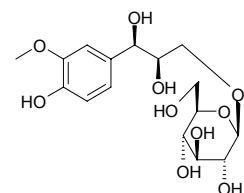
$C_{16}H_{24}O_{10}$  (376.36). White powder,  $[\alpha]_D^{20} = -30.2^\circ$  ( $c = 0.26$ , MeOH). Source: XIAO YE SHI NAN *Photinia parvifolia* (stem). Ref: 4553.

**9024 L-threo-Guaiacylglycerol 8-β-D-glucopyranoside**

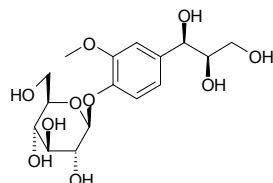
$C_{16}H_{24}O_{10}$  (376.36). White powder. Source: XIAO YE SHI NAN *Photinia parvifolia* (stem). Ref: 4553.

**9025 (1'R,2'R)-Guaiacyl glycerol 3'-O-β-D-glucopyranoside**

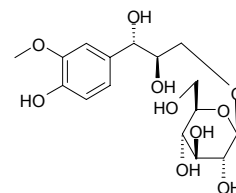
$C_{16}H_{24}O_{10}$  (376.36). Amorphous powder,  $[\alpha]_D^{22} = -13^\circ$  ( $c = 1.0$ , MeOH). Source: HUI QIN *Pimpinella anisum* (fruit). Ref: 4242.

**9026 (1'R,2'R)-Guaiacyl glycerol 4-O-β-D-glucopyranoside**

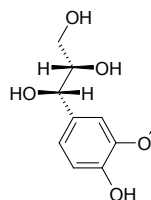
$C_{16}H_{24}O_{10}$  (376.36). Amorphous powder,  $[\alpha]_D^{21} = -50^\circ$  ( $c = 0.5$ , MeOH). Source: HUI QIN *Pimpinella anisum* (fruit). Ref: 4242.

**9027 (1'S,2'R)-Guaiacyl glycerol 3'-O-β-D-glucopyranoside**

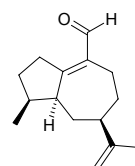
$C_{16}H_{24}O_{10}$  (376.36). Amorphous powder,  $[\alpha]_D^{22} = -20^\circ$  ( $c = 0.8$ , MeOH). Source: HUI QIN *Pimpinella anisum* (fruit). Ref: 4242.

**9028 threo-Guaiacylglycerol**

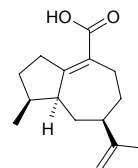
$C_{10}H_{14}O_5$  (214.22). Source: DU ZHONG *Eucommia ulmoides*. Ref: 2.

**9029 (-)-Guaia-1(10),11-dien-15-al**

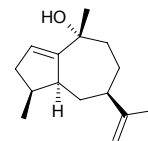
[133593-95-0]  $C_{15}H_{22}O$  (218.34). Source: CHEN XIANG *Aquilaria agallocha*. Ref: 13.

**9030 (-)-Guaia-1(10),11-dien-15-carboxylic acid**

$C_{15}H_{22}O_2$  (234.34). Source: CHEN XIANG *Aquilaria agallocha*. Ref: 13.

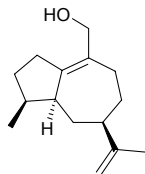
**9031 (-)-Guaia-1,11-dien-10α-ol**

$C_{15}H_{24}O$  (220.36). White solid, mp 117~118°C,  $[\alpha]_D = -66.1^\circ$  ( $c = 0.40$ ,  $CHCl_3$ ); mp 118.5°C,  $[\alpha]_D = -79.2^\circ$  ( $c = 0.71$ ,  $CHCl_3$ ). Pharm: Antitrypanosomal (epimastigotes of *Trypanosoma cruzi*, *in vitro*, MLC > 200mmol/L)<sup>[2551]</sup>. Source: GUANG HUO XIANG *Pogostemon cablin* [Syn. *Mentha cablin*]. Ref: 2551.

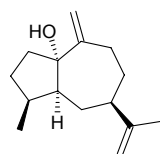


**9032 (-)-Guaia-1(10),11-dien-15-ol**

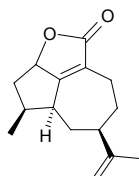
$C_{15}H_{24}O$  (220.36). Colorless oil,  $[\alpha]_D = -8.3^\circ$  ( $c = 0.15$ , EtOH);  $[\alpha]_D = -11.6^\circ$  ( $c = 1.0$ , EtOH). **Pharm:** Antitrypanosomal (epimastigotes of *Trypanosoma cruzi*, *in vitro*, MLC > 200mmol/L)<sup>[2551]</sup>. **Source:** CHEN XIANG *Aquilaria agallocha*, GUANG HUO XIANG *Pogostemon cablin* [Syn. *Mentha cablin*]. **Ref:** 13, 2551.

**9033 (+)-Guaia-10(15),11-dien-1 $\alpha$ -ol**

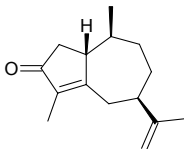
$C_{15}H_{24}O$  (220.36). White solid, mp 64–65°C,  $[\alpha]_D = +67.6^\circ$  ( $c = 0.23$ ,  $CHCl_3$ ); 69.5°C,  $[\alpha]_D = +67.1^\circ$  ( $c = 0.73$ ,  $CHCl_3$ ). **Pharm:** Antitrypanosomal (epimastigotes of *Trypanosoma cruzi*, *in vitro*, MLC > 200mmol/L). **Source:** GUANG HUO XIANG *Pogostemon cablin* [Syn. *Mentha cablin*]. **Ref:** 2551.

**9034 (-)-Guaia-1(10),11-dien-15,2-olide**

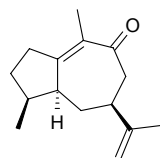
$C_{15}H_{20}O_2$  (232.33). **Source:** CHEN XIANG *Aquilaria agallocha*. **Ref:** 13.

**9035 1 $\alpha$ ,7 $\alpha$ ,10 $\alpha$ H-Guaia-4,11-dien-3-one**

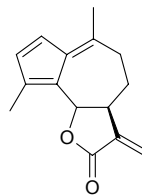
$C_{15}H_{22}O$  (218.34). Colorless oil,  $[\alpha]_D^{24} = +63.1^\circ$  ( $c = 0.23$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic ( $P_{388}$ ,  $ED_{50} = 1.19\mu g/mL$ , control Mithramycin,  $ED_{50} = 0.08\mu g/mL$ ; HT29,  $ED_{50} > 50\mu g/mL$ , Mithramycin,  $ED_{50} = 0.07\mu g/mL$ ; A549,  $ED_{50} > 50\mu g/mL$ , Mithramycin,  $ED_{50} = 0.06\mu g/mL$ ). **Source:** PI ZHEN XING YAO HUA *Wikstroemia lanceolata* (stem and root). **Ref:** 4947.

**9036 (+)-Guaia-1(10),11-dien-9-one**

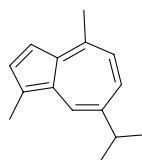
$C_{15}H_{22}O$  (218.34). Oil,  $[\alpha]_D^{20} = +27.2^\circ$  ( $c = 0.07$ ,  $CHCl_3$ ). **Source:** CHEN XIANG *Aquilaria agallocha*. **Ref:** 13, 1521.

**9037 Guaia-1(10),2,4,11(13)-tetraen-12,6 $\xi$ -olide**

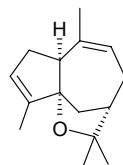
$C_{15}H_{16}O_2$  (228.29). Gum,  $[\alpha]_D = -34.2^\circ$  ( $c = 0.12$ ,  $CHCl_3$ ). **Source:** YI KUA *Artemisia myriantha* (aerial parts). **Ref:** 4618.

**9038 Guaiazulene**

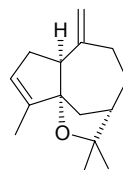
[489-84-9]  $C_{15}H_{18}$  (198.31). Blue oil, mp 31.5°C, bp 165–170°C/10mmHg, 176°C/17mmHg. **Pharm:** Anti-inflammatory; 5 $\alpha$ -reductase inhibitor ( $IC_{50} = (100.8\pm 9.3)\mu mol/L$ ; control Finasteride,  $IC_{50} = (0.38\pm 0.06)\mu mol/L$ ;  $\alpha$ -Linolenic acid,  $IC_{50} = (160.3\pm 24.6)\mu mol/L$ )<sup>[5398]</sup>. **Source:** MU<sup>(3)</sup> JU *Matricaria chamomilla* [Syn. *Matricaria recutita*], YU CHUANG MU *Guajacum officinale*. **Ref:** 658, 5398.

**9039 (-)-(1S\*,5S\*,7S\*)-Guai-3,9-dien-5,11-oxide**

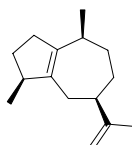
2,2,6,9-Tetramethyl-3,4,6a,7-tetrahydro-2H-3,9a-methanocyclopent[b]oxocin  $C_{15}H_{22}O$  (218.34). Colorless oil. **Source:** XIAO E TAI *Mylia taylorii* (essential oil), LUO XIAO E TAI *Mylia nuda* (essential oil). **Ref:** 3840.

**9040 (+)-(1S\*,5S\*,7S\*)-Guai-3,10(14)-dien-5,11-oxide**

2,2,9-Trimethyl-6-methylene-3,4,5,6,6a,7-hexahydro-2H-3,9a-methanocyclopent[b]oxocin  $C_{15}H_{22}O$  (218.34). Colorless oil. **Source:** XIAO E TAI *Mylia taylorii* (essential oil), LUO XIAO E TAI *Mylia nuda* (essential oil). **Ref:** 3840.

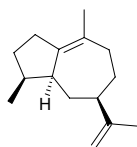
**9041  $\alpha$ -Guaiene**

[3691-12-1]  $C_{15}H_{24}$  (204.36). bp 78–79°C/2.5mmHg. **Source:** CANG ZHU *Atractylodes lancea*, GUANG HUO XIANG *Pogostemon cablin* [Syn. *Mentha cablin*], REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. **Ref:** 2, 660.

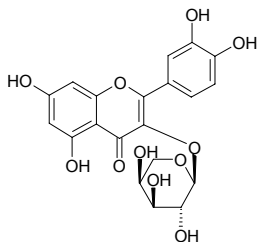


**9042  $\delta$ -Guaiene**

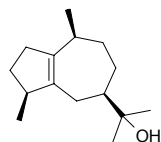
[3691-11-0] C<sub>15</sub>H<sub>24</sub> (204.36). bp 118°C/8mmHg. Source: CANG ZHU *Atractylodes lancea*, DANG SHEN *Codonopsis pilosula*, GUANG HUO XIANG *Pogostemon cablin* [Syn. *Mentha cablin*], HUA DONG LAN CI TOU *Echinops grijstii*, SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. Ref: 2, 660.

**9043 Guaijaverin**

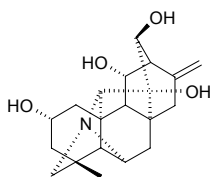
Quercetin-3-*O*-arabinoside; Foeniculin [22255-13-6] C<sub>20</sub>H<sub>18</sub>O<sub>11</sub> (434.36). mp 256°C. Source: DIAO GAN MA *Celastrus angulatus*, FAN SHI LIU GAN *Psidium guajava*, FAN SHI LIU YE *Psidium guajava*, HE SHOU WU *Polygonum multiflorum*, HUI XIANG JING YE *Foeniculum vulgare*, HU ZHANG *Polygonum cuspidatum*. Ref: 2, 6.

**9044 Guaiol**

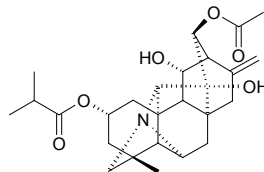
1(5)-Guaien-11-ol; (-)-Guaiol [489-86-1] C<sub>15</sub>H<sub>26</sub>O (222.37). mp 91°C, bp 288°C. Pharm: 5 $\alpha$ -Reductase inhibitor (IC<sub>50</sub> = (81.6 $\pm$ 10.2) $\mu$ mol/L; control Finasteride, IC<sub>50</sub> = (0.38 $\pm$ 0.06) $\mu$ mol/L;  $\alpha$ -Linolenic acid, IC<sub>50</sub> = (160.3 $\pm$ 24.6) $\mu$ mol/L)<sup>[5398]</sup>. Source: AN YE *Eucalyptus globulus*, CANG ZHU *Atractylodes lancea*, DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*], HOU PO *Magnolia officinalis*, NING MENG *Citrus limon*, QIANG HUO *Notopterygium incisum*. Ref: 2, 660, 5398.

**9045 Guan-fu aminealcohol**

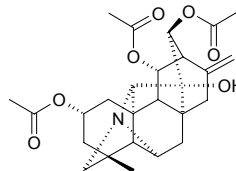
C<sub>20</sub>H<sub>27</sub>NO<sub>4</sub> (345.44). Source: HUANG HUA WU TOU *Aconitum coreanum* (tuberoïd). Ref: 4593.

**9046 Guan-fu base F**

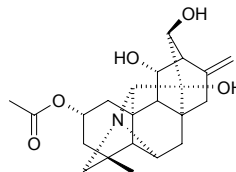
C<sub>26</sub>H<sub>35</sub>NO<sub>6</sub> (457.57). Source: HUANG HUA WU TOU *Aconitum coreanum* (tuberoïd). Ref: 4593.

**9047 Guan-fu base G**

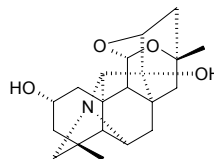
C<sub>26</sub>H<sub>33</sub>NO<sub>7</sub> (471.56). Source: HUANG HUA WU TOU *Aconitum coreanum* (tuberoïd). Ref: 4593.

**9048 Guan-fu base I**

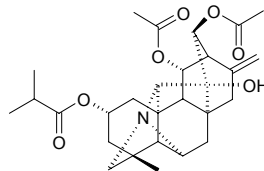
C<sub>22</sub>H<sub>29</sub>NO<sub>5</sub> (387.48). Source: HUANG HUA WU TOU *Aconitum coreanum* (tuberoïd). Ref: 4593.

**9049 Guan-fu base K**

C<sub>20</sub>H<sub>27</sub>NO<sub>4</sub> (345.44). Source: HUANG HUA WU TOU *Aconitum coreanum* (tuberoïd). Ref: 4593.

**9050 Guan-fu base P**

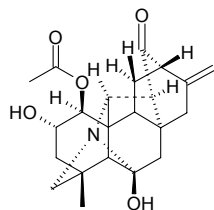
11,13-Diacetyl-14-hydroxy-2-isobutyryl hetisine C<sub>28</sub>H<sub>37</sub>NO<sub>7</sub> (499.61). Yellowish resin. Source: HUANG HUA WU TOU *Aconitum coreanum* (tuberoïd). Ref: 4593.



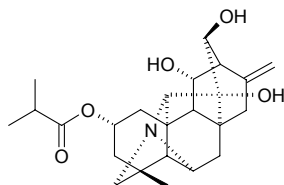


**9051 Guanfu base Q**

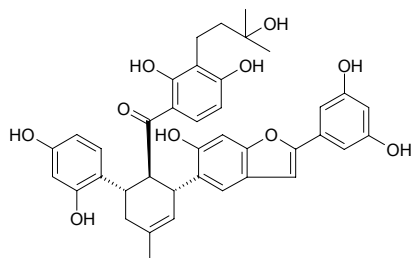
13-Dehydro-1 $\beta$ -acetyl-2 $\alpha$ ,6 $\beta$ -dihydroxyhetisine C<sub>22</sub>H<sub>27</sub>NO<sub>5</sub> (385.46). Colorless needles, mp 235–236°C. Source: HUANG HUA WU TOU *Aconitum coreanum* (stem and leaf). Ref: 4872.

**9052 Guan-fu base Z**

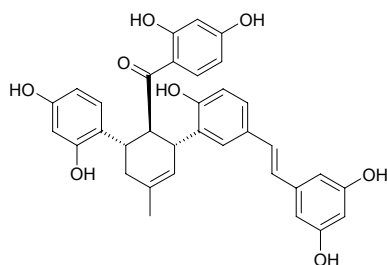
C<sub>24</sub>H<sub>33</sub>NO<sub>5</sub> (415.53). Source: HUANG HUA WU TOU *Aconitum coreanum* (tuberoid). Ref: 4593.

**9053 Guangsangon A**

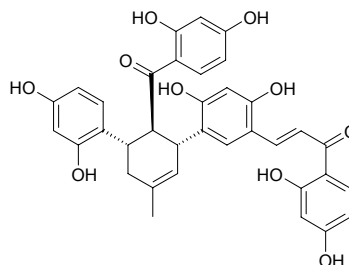
C<sub>39</sub>H<sub>38</sub>O<sub>10</sub> (666.73). Yellow amorphous powder,  $[\alpha]_D^{29} = -408.5^\circ$  ( $c = 0.13$ , MeOH). Pharm: Antioxidant (100 $\mu$ mol/L, InRt of MDA = 102.7%, control Vitamin E, InRt of MDA = 81.5%; 10 $\mu$ mol/L, InRt of MDA = 84.9%, Vitamin E, InRt of MDA = 33.9%); anti-inflammation (polymorphonuclear leukocytes, lysosome enzyme release inhibitor, 10 $\mu$ mol/L, InRt = 19.0%,  $p < 0.05$ , control Ginkgolide B, InRt = 58.9%). Source: NAI SANG *Morus macrourea* (stem cortex). Ref: 5013.

**9054 Guangsangon B**

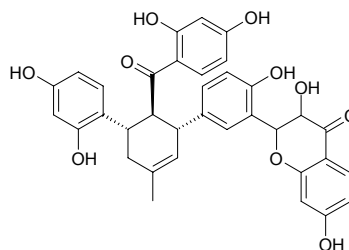
C<sub>34</sub>H<sub>30</sub>O<sub>8</sub> (566.61). Brown amorphous powder,  $[\alpha]_D^{29} = -394.7^\circ$  ( $c = 0.11$ , MeOH). Pharm: Antioxidant (100 $\mu$ mol/L, InRt of MDA = 95.1%, control Vitamin E, InRt of MDA = 81.5%; 10 $\mu$ mol/L, InRt of MDA = 83.7%, Vitamin E, InRt of MDA = 33.9%); anti-inflammation (polymorphonuclear leukocytes, lysosome enzyme release inhibitor, 10 $\mu$ mol/L, InRt = 57.3%,  $p < 0.001$ , control Ginkgolide B, InRt = 58.9%). Source: NAI SANG *Morus macrourea* (stem cortex). Ref: 5013.

**9055 Guangsangon C**

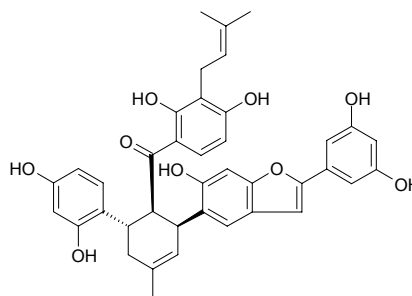
C<sub>35</sub>H<sub>30</sub>O<sub>10</sub> (610.62). Yellow amorphous powder,  $[\alpha]_D^{29} = -412.8^\circ$  ( $c = 0.13$ , MeOH). Pharm: Antioxidant (100 $\mu$ mol/L, InRt of MDA = 96.2%, control Vitamin E, InRt of MDA = 81.5%; 10 $\mu$ mol/L, InRt of MDA = 81.7%, Vitamin E, InRt of MDA = 33.9%). Source: NAI SANG *Morus macrourea* (stem cortex). Ref: 5013.

**9056 Guangsangon D**

C<sub>35</sub>H<sub>30</sub>O<sub>10</sub> (610.62). Yellow amorphous powder,  $[\alpha]_D^{29} = -108.3^\circ$  ( $c = 0.13$ , MeOH). Pharm: Antioxidant (100 $\mu$ mol/L, InRt of MDA = 90.1%, control Vitamin E, InRt of MDA = 81.5%; 10 $\mu$ mol/L, InRt of MDA = 77.6%, Vitamin E, InRt of MDA = 33.9%); anti-inflammation (polymorphonuclear leukocytes, lysosome enzyme release inhibitor, 10 $\mu$ mol/L, InRt = 24.3%,  $p < 0.05$ , control Ginkgolide B, InRt = 58.9%). Source: NAI SANG *Morus macrourea* (stem cortex). Ref: 5013.

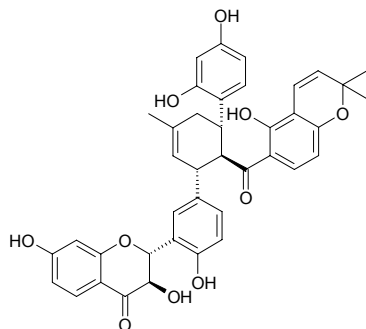
**9057 Guangsangon E**

C<sub>39</sub>H<sub>36</sub>O<sub>9</sub> (648.72). Brown amorphous powder,  $[\alpha]_D^{29} = +139.7^\circ$  ( $c = 0.11$ , MeOH). Pharm: Antioxidant (100 $\mu$ mol/L, InRt of MDA = 94.8%, control Vitamin E, InRt of MDA = 81.5%; 10 $\mu$ mol/L, InRt of MDA = 88.1%, Vitamin E, InRt of MDA = 33.9%). Source: NAI SANG *Morus macrourea* (stem cortex). Ref: 5013.

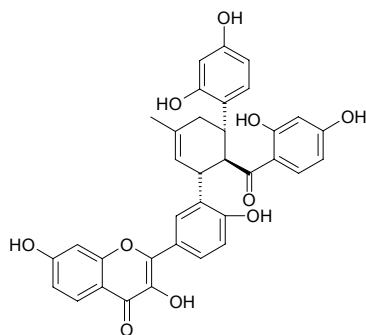


**9058 Guangsangon F**

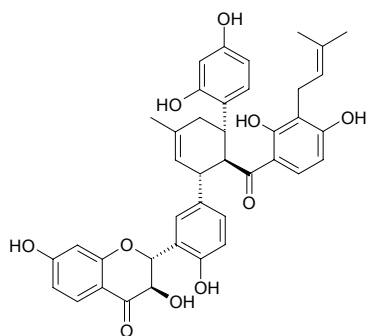
$C_{40}H_{36}O_{10}$  (676.73). Brown amorphous powder,  $[\alpha]_D^{21} = -112.1^\circ$  ( $c = 0.13$ , MeOH). Source: NAI SANG *Morus macroua* (stem cortex). Ref: 3891.

**9059 Guangsangon G**

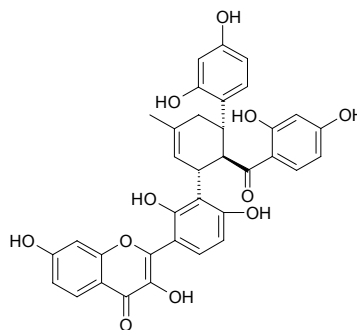
$C_{35}H_{28}O_{10}$  (608.61). Yellow amorphous powder,  $[\alpha]_D^{21} = -469.1^\circ$  ( $c = 0.11$ , MeOH). Source: NAI SANG *Morus macroua* (stem cortex). Ref: 3891.

**9060 Guangsangon H**

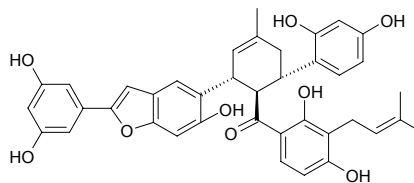
$C_{40}H_{38}O_{10}$  (678.74). Yellow amorphous powder,  $[\alpha]_D^{21} = -127.9^\circ$  ( $c = 0.15$ , MeOH). Pharm: Antioxidant (to determine inhibitory rates of malondialdehyde (MDA) (H. Lu, et al., *Chem Biol Interact*, 1991, 78, 77-84.),  $10\mu\text{mol/L}$ , InRt = 93.1%, control Vitamin E, InRt = 33.4%); anti-inflammatory (to determine release of lysosome enzyme from polymorphonuclear (PMN) leukocytes induced by PAF of rats,  $10\mu\text{mol/L}$ , InRt = 49.4%, control Ginkgolide B, InRt = 58.9%). Source: NAI SANG *Morus macroua* (stem cortex). Ref: 3891.

**9061 Guangsangon I**

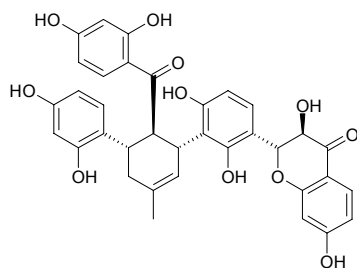
$C_{35}H_{28}O_{11}$  (624.61). Brown amorphous powder,  $[\alpha]_D^{21} = -470.5^\circ$  ( $c = 0.17$ , MeOH). Pharm: Antioxidant (to determine inhibitory rates of malondialdehyde (MDA) (H. Lu, et al., *Chem Biol Interact*, 1991, 78, 77-84.),  $10\mu\text{mol/L}$ , InRt = 93.9%, control Vitamin E, InRt = 33.4%); anti-inflammatory (to determine release of lysosome enzyme from polymorphonuclear (PMN) leukocytes induced by PAF of rats,  $10\mu\text{mol/L}$ , InRt = 43.8%, control Ginkgolide B, InRt = 58.9%). Source: NAI SANG *Morus macroua* (stem cortex). Ref: 3891.

**9062 Guangsangon J**

$C_{39}H_{36}O_9$  (648.72). Brown amorphous powder,  $[\alpha]_D^{21} = -419.7^\circ$  ( $c = 0.16$ , MeOH). Pharm: Antioxidant (to determine inhibitory rates of malondialdehyde (MDA),  $10\mu\text{mol/L}$ , InRt = 91.1%, control Vitamin E, InRt = 33.4%); anti-inflammatory (to determine release of lysosome enzyme from polymorphonuclear (PMN) leukocytes induced by PAF of rats,  $10\mu\text{mol/L}$ , InRt = 41.3%, control Ginkgolide B, InRt = 58.9%). Source: NAI SANG *Morus macroua* (stem cortex). Ref: 3891.

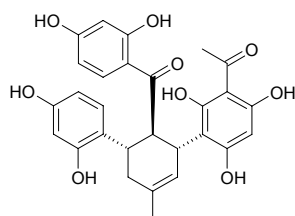
**9063 Guangsangon K**

$C_{35}H_{30}O_{11}$  (626.62). Brown amorphous powder,  $[\alpha]_D^{25} = -178.5^\circ$  ( $c = 0.14$ , MeOH). Pharm: Antioxidant (microsomal lipid peroxidation induced by ferrous-cysteine *in vitro*, determined by the content of malondialdehyde,  $10\mu\text{mol/L}$ , InRt = 91.8%, control Vitamin E, InRt = 18.2%). Source: NAI SANG *Morus macroua*. Ref: 2570.

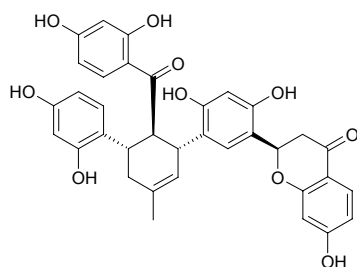


**9064 Guangsangon L**

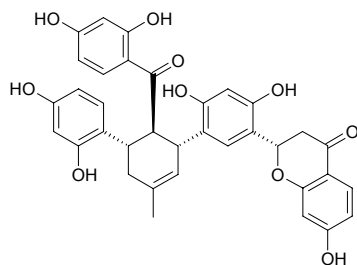
$C_{28}H_{26}O_9$  (506.51). Yellow amorphous powder,  $[\alpha]_D^{25} = -389.3^\circ$  ( $c = 0.14$ , MeOH). **Pharm:** Antioxidant (microsomal lipid peroxidation induced by ferrous-cysteine *in vitro*, determined by the content of malondialdehyde,  $10\mu\text{mol/L}$ , InRt = 97.6%, control Vitamin E, InRt = 18.2%). **Source:** NAI SANG *Morus macrourea*. **Ref:** 2570.

**9065 Guangsangon M**

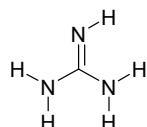
$C_{35}H_{30}O_{10}$  (610.62). Brown amorphous powder,  $[\alpha]_D^{25} = -276.5^\circ$  ( $c = 0.12$ , MeOH). **Pharm:** Antioxidant (microsomal lipid peroxidation induced by ferrous-cysteine *in vitro*, determined by the content of malondialdehyde,  $10\mu\text{mol/L}$ , InRt = 98.3%, control Vitamin E, InRt = 18.2%). **Source:** NAI SANG *Morus macrourea*. **Ref:** 2570.

**9066 Guangsangon N**

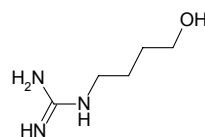
$C_{35}H_{30}O_{10}$  (610.62). Brown amorphous powder,  $[\alpha]_D^{25} = -335.3^\circ$  ( $c = 0.13$ , MeOH). **Pharm:** Antioxidant (microsomal lipid peroxidation induced by ferrous-cysteine *in vitro*, determined by the content of malondialdehyde,  $10\mu\text{mol/L}$ , InRt = 100%, control Vitamin E, InRt = 18.2%). **Source:** NAI SANG *Morus macrourea*. **Ref:** 2570.

**9067 Guanidine**

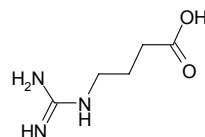
[113-00-8]  $CH_5N_3$  (59.07). **Pharm:** Supertoxic agent (orl). **Source:** GUI GAI *Coprinus atramentarius*, QIU YIN *Pheretima aspergillum*; *Allolobophora caliginosa trapezoides*, SHUI NIU JIAO *Bubalus bubalis*. **Ref:** 6.

**9068 4-Guanidino-1-butanol**

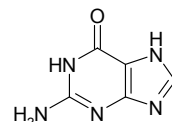
$C_5H_{13}N_3O$  (131.18). **Source:** YI MU CAO *Leonurus heterophyllus* [Syn. *Leonurus artemisia*]. **Ref:** 6.

**9069 γ-Guanidinobutyric acid**

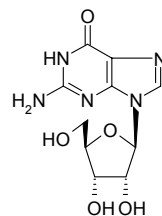
4-Guanidino-butyric acid [463-00-3]  $C_5H_{11}N_3O_2$  (145.16). mp 276–278°C (dec). **Source:** WANG GUA ZI *Trichosanthes cucumeroides*, WEI NAO *Erinaceus europaeus*; *Hemiechinus dauuricus*; *Hemiechinus auritus*, YI MU CAO *Leonurus heterophyllus* [Syn. *Leonurus artemisia*]. **Ref:** 6.

**9070 Guanine (1,7-Dihydro-form)**

[73-40-5]  $C_5H_5N_5O$  (151.13). mp > 300°C. **Pharm:** Nitrogen-containing base occurring in DNA and RNA. **Source:** DONG CHONG XIA CAO *Cordyceps sinensis* (dried fungal stroma growing on larva of a caterpillar: content = 0.018%)<sup>[5512]</sup>, QIU YIN *Pheretima aspergillum*; *Allolobophora caliginosa trapezoides*, REN GONG YONG CHONG CAO *Cordyceps militaris* cv. (sclerotium and stroma: content = 0.011%)<sup>[5512]</sup>. **Ref:** 6, 5512.

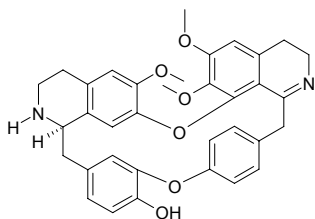
**9071 Guanosine**

9-β-Ribofuranosylguanine [118-00-3]  $C_{10}H_{13}N_5O_5$  (283.25). mp 230–235°C (dec). **Source:** BAN XIA *Pinellia ternata* (dried tuber: content scope of 4 origins = 0.0038%–0.0220%, mean content = 0.0107%)<sup>[5508]</sup>, DANG GUI *Angelica sinensis* (root: content = 0.019%)<sup>[5514]</sup>, DONG CHONG XIA CAO *Cordyceps sinensis* (dried fungal stroma growing on larva of a caterpillar: content = 0.135%)<sup>[5512]</sup>, GUAN HUA ROU CONG RONG *Cistanche tubulosa* (fleshy stem: content = 0.007%)<sup>[5514]</sup>, HUANG QI *Astragalus membranaceus* (root: content = 0.032%)<sup>[5514]</sup>, MAI DONG *Ophiopogon japonicus* (tuberoid: content = 0.003%)<sup>[5514]</sup>, MAI JIAO *Claviceps purpurea*, REN GONG YONG CHONG CAO *Cordyceps militaris* cv. (sclerotium and stroma: content = 0.274%)<sup>[5512]</sup>, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*] (root: content = 0.035%)<sup>[5514]</sup>. **Ref:** 2, 5508, 5512, 5514.

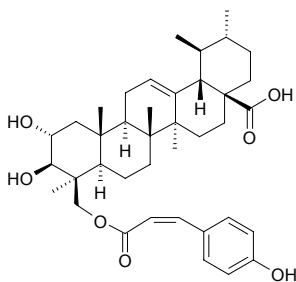


**9072 (+)-Guatteboline**

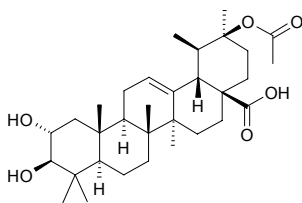
$C_{35}H_{34}N_2O_6$  (578.67). Amorphous,  $[\alpha]_D^{20} = +138^\circ$  ( $c = 0.8$ ,  $CHCl_3$ ). **Pharm:** Antitrypanosomal (inhibits trypomastigote form of *Trypanosoma cruzi*, strain Y,  $IC_{50} = 57.9\mu g/mL$ ,  $IC_{90} = 96.5\mu g/mL$ )<sup>[3976]</sup>; antimalarial (*Plasmodium falciparum* D6,  $LC_{50} = 207.5ng/mL$ ,  $SI = 29$ ; *Plasmodium falciparum* W2,  $LC_{50} = 72.5ng/mL$ ,  $SI = 83$ ); cytotoxic (KB,  $LC_{50} = 6000ng/mL$ )<sup>[3976]</sup>. **Source:** *Guatteria boliviana* (stem cortex). **Ref:** 3976.

**9073 Guavacoumaric acid**

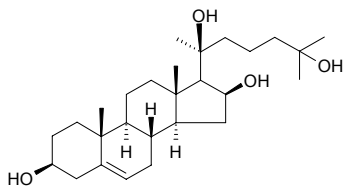
2 $\alpha$ ,3 $\beta$ -Dihydroxy-24-*p*-z-coumaroyloxyurs-12-en-28-oic acid  $C_{39}H_{54}O_7$  (634.86). Colorless needles ( $CHCl_3$ :MeOH = 1:1), mp 188~190°C. **Source:** FAN SHI LIU YE *Psidium guajava*. **Ref:** 1922.

**9074 Guavanoic acid**

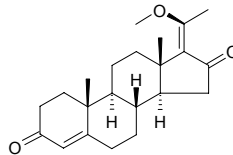
20 $\beta$ -Acetoxy-2 $\alpha$ ,3 $\beta$ -dihydroxyurs-12-en-28-oic acid  $C_{32}H_{50}O_6$  (530.75). Colorless needles ( $CHCl_3$ :MeOH = 1:1), mp 221~222°C. **Source:** FAN SHI LIU YE *Psidium guajava*. **Ref:** 1922.

**9075 Guggulsterol Y**

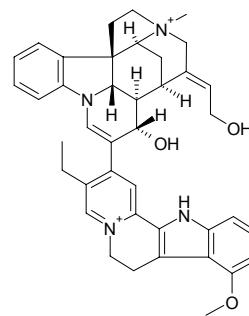
$C_{27}H_{46}O_4$  (434.67). Needles, mp 236~238°C (MeCN),  $[\alpha]_D = -28.8^\circ$  ( $c = 0.5$ , MeOH) **Source:** A MAN SU DAN MO YAO *Commiphora wightii*. **Ref:** 2062.

**9076 Guggulsterone M**

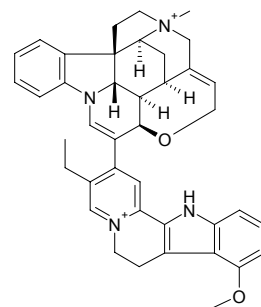
$C_{22}H_{30}O_3$  (342.48). Needles (mp 206~208°C (MeCN),  $[\alpha]_D = +93^\circ$  ( $c = 0.65$ , MeOH). **Source:** A MAN SU DAN MO YAO *Commiphora wightii*. **Ref:** 2062.

**9077 Guiachry sine**

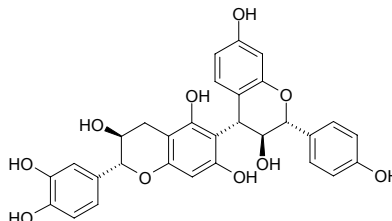
$C_{40}H_{44}N_4O_3$  (628.82). Orange-colored amorphous powder. **Pharm:** Supertoxic agent ( $LD_{100} = 4\sim 6mg/kg$ , death occurs fairly rapidly in 5~10min)<sup>[3943]</sup>; neuromuscular toxicity (neuromuscular transmission inhibitor,  $IC_{50} = 12.5\mu mol/L$ ; Venezuelan calabash curare,  $IC_{50} = 6.5\mu mol/L$ )<sup>[5202]</sup>. **Source:** *Strychnos guianensis* (stem cortex). **Ref:** 3943, 5202.

**9078 Guiaflavine**

$C_{40}H_{42}N_4O_2$  (610.81). **Pharm:** Neuromuscular toxicity (neuromuscular transmission inhibitor,  $IC_{50} = 25.5\mu mol/L$ ; Venezuelan calabash curare,  $IC_{50} = 6.5\mu mol/L$ )<sup>[5202]</sup>. **Source:** *Strychnos guianensis* (stem cortex). **Ref:** 3943, 5202.

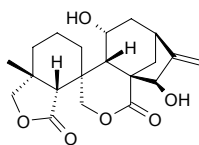
**9079 Guibourtinidol-(4 $\alpha$ →6)-catechin**

[27277-74-7]  $C_{30}H_{26}O_{10}$  (546.54). **Pharm:** Tanning agent. **Source:** LE SHI JIN HE HUAN *Acacia luederitzii*. **Ref:** 658.

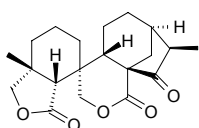


**9080 Guidongnin**

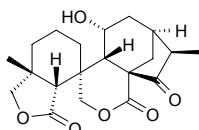
Guidongnin A  $C_{20}H_{26}O_6$  (362.43). mp 235~237°C,  $[\alpha]_D^{22} = -160^\circ$  ( $c = 1.0$ ,  $C_5H_5N$ ). **Pharm:** Cytotoxic (*in vitro*, K562,  $IC_{50} = 0.3\mu\text{g/mL}$ ; control *cis*-Platin,  $IC_{50} = 0.52\mu\text{g/mL}$ )<sup>[4732]</sup>. **Source:** DONG LING CAO *Rabdosia rubescens*, LU SHI DONG LING CAO *Isodon rubescens* var. *lushiensis* (leaf: yield = 0.0026%dw)<sup>[4732]</sup>. **Ref:** 4067, 4732.

**9081 Guidongnin B**

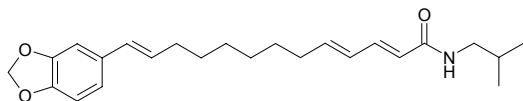
Ludongnin B  $C_{20}H_{26}O_5$  (346.43). mp 296~299°C. **Pharm:** Cytotoxic inactive (*in vitro*, K562,  $IC_{50} > 50\mu\text{g/mL}$ ; control *cis*-Platin,  $IC_{50} = 0.52\mu\text{g/mL}$ )<sup>[4732]</sup>. **Source:** LU SHI DONG LING CAO *Isodon rubescens* var. *lushiensis* (leaf: yield = 0.00021%dw). **Ref:** 4067, 4732.

**9082 Guidongnin C**

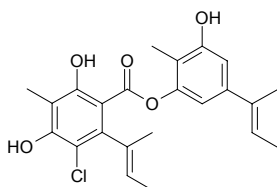
$C_{20}H_{26}O_6$  (362.43). **Pharm:** Cytotoxic inactive (*in vitro*, K562,  $IC_{50} > 50\mu\text{g/mL}$ ; control *cis*-Platin,  $IC_{50} = 0.52\mu\text{g/mL}$ )<sup>[4732]</sup>. **Source:** LU SHI DONG LING CAO *Isodon rubescens* var. *lushiensis* (leaf: yield = 0.00016%dw). **Ref:** 4732.

**9083 Guineensine**

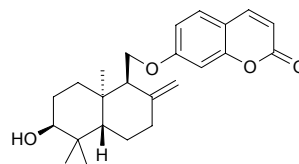
$C_{24}H_{33}NO_3$  (383.54). Colorless crystals; crystalline solid. **Pharm:** Protective gastric lesions (rat, ethanol-induced, 25mg/kg orl, length = (78.6±13.0)mm, control, length = (118.6±16.2)mm, InRt = 33.7%; indomethacin-induced in rats, dose, 25mg/kg orl, length = (54.3±9.8)mm, control, length = (89.5±9.8)mm, InRt = 39.3%)<sup>[4935]</sup>; ACAT inhibitor (dose-dependent manner,  $IC_{50} = 3.12\mu\text{mol/L}$ )<sup>[5005]</sup>. **Source:** BI BA *Piper longum* (fruit), *Piper chaba* (fruit). **Ref:** 4935, 5005.

**9084 Guisinol**

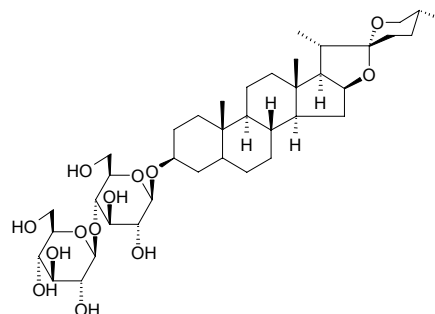
$C_{23}H_{35}ClO_5$  (416.91). Yellowish oil. **Source:** *Emericella unguis*. **Ref:** 1890.

**9085 Gummosin**

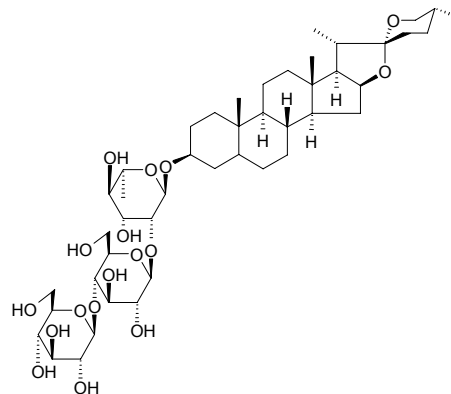
$C_{24}H_{30}O_4$  (382.50). **Source:** A WEI *Ferula assafoetida* (root). **Ref:** 5243.

**9086 Gurillin G**

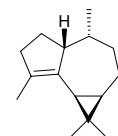
$C_{39}H_{64}O_{13}$  (740.94). **Source:** WAN QU TIAN MEN DONG *Asparagus curillus*. **Ref:** 697.

**9087 Gurillin H**

$C_{45}H_{74}O_{17}$  (887.08). **Source:** WAN QU TIAN MEN DONG *Asparagus curillus*. **Ref:** 697.

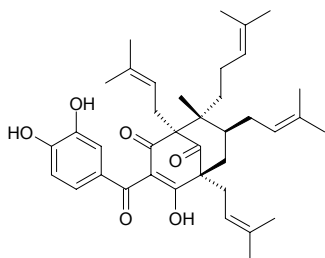
**9088 α-Guriunene**

$C_{15}H_{24}$  (204.36). bp 114~116°C/10mmHg. **Source:** BAI ZHI *Angelica dahurica* [Syn. *Angelica porphyrocaulis*], GUANG HUO XIANG *Pogostemon cablin* [Syn. *Mentha cablin*], NAN HE SHI *Daucus carota*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*], SHAN NAI *Kaempferia galanga*, SHUI CAI *Menyanthes trifoliata*. **Ref:** 2, 660.

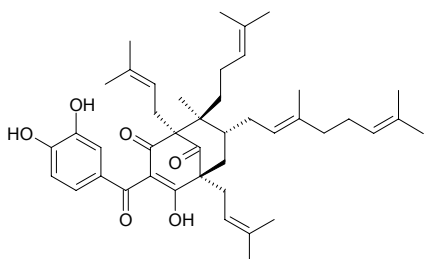


**9089 Guttiferone A**

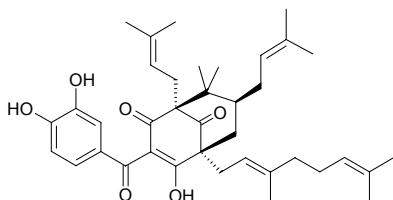
$C_{38}H_{50}O_6$  (602.82). Yellow oil,  $[\alpha]_D^{20} = +32^\circ$  ( $c = 0.04$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (hmn ovarian A2780 cell line,  $IC_{50} = 6.8\mu g/mL$ , control Actinomycin D,  $IC_{50} = 0.003\mu g/mL$ ). **Source:** *Garcinia macrophylla* (twig). **Ref:** 5442.

**9090 Guttiferone G**

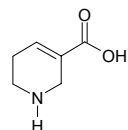
$C_{43}H_{58}O_6$  (670.54). Yellow amorphous powder,  $[\alpha]_D^{20} = -25^\circ$  ( $c = 0.04$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (hmn ovarian A2780 cell line,  $IC_{50} = 8.0\mu g/mL$ , control Actinomycin D,  $IC_{50} = 0.003\mu g/mL$ ). **Source:** *Garcinia macrophylla* (twig). **Ref:** 5442.

**9091 Guttiferone I**

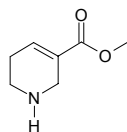
$C_{38}H_{50}O_6$  (602.82). Bright yellow solid, mp 60–62°C,  $[\alpha]_D = -68^\circ$  ( $c = 1.2$ ,  $CHCl_3$ ). **Source:** GE LI FEI SI TENG HUANG *Garcinia griffithii* (stem cortex). **Ref:** 5311.

**9092 Guvacine**

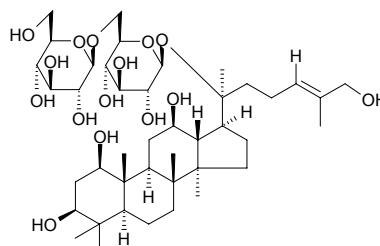
[498-96-4]  $C_6H_9NO_2$  (127.14). mp 285°C (dec). **Pharm:** Inhibits absorption of GABA and  $\beta$ -alanine (cat, myeloid section and cerebral section); Antidyskinetic (inhibits spontaneous movement, mus, 50–100mg/kg, ip). **Source:** BING LANG *Areca catechu* (dried ripe seed: content scope 0.19%–0.72%, middle value = 0.46%<sup>[5508]</sup>). **Ref:** 6, 658, 5508.

**9093 Guvacoline**

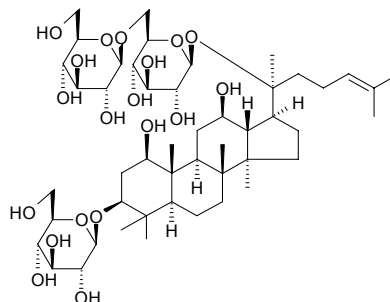
[495-19-2]  $C_7H_{11}NO_2$  (141.17). mp 27°C, bp 114°C/14mmHg. **Source:** BING LANG *Areca catechu* (dried ripe seed: content scope 0.03%–0.06%<sup>[5508]</sup>). **Ref:** 2, 5508.

**9094 Gycomoside I**

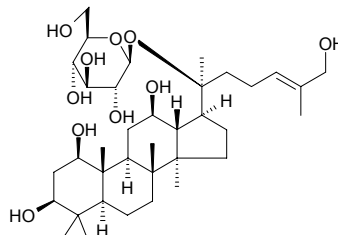
1 $\beta$ ,3 $\beta$ ,12 $\beta$ ,20(S),26-Pentahydroxy-dammer-24(25)-en-20(S)-O- $\beta$ -D-glucopyranosyl-(1→6)- $\beta$ -D-glucopyranoside [150626-50-9]  $C_{42}H_{72}O_{15}$  (817.03). Colorless acicular Crystals, mp 196–197°C,  $[\alpha]_D^{22} = +18.56^\circ$  ( $c = 1.67$ , MeOH). **Source:** BIAN GUO JIAO GU LAN *Gynostemma compressum*. **Ref:** 266.

**9095 Gycomoside II**

1 $\beta$ ,3 $\beta$ ,12 $\beta$ ,20(S)-Tetrahydroxy-dammer-24(25)-en-3-O- $\beta$ -D-glucopyranosyl-20(S)-O- $\beta$ -D-glucopyranosyl-(1→6)- $\beta$ -D-glucopyranoside [150626-51-0]  $C_{48}H_{82}O_{19}$  (963.18). White powder, mp 195–197°C,  $[\alpha]_D^{22} = +21.05^\circ$  ( $c = 0.57$ , MeOH). **Source:** BIAN GUO JIAO GU LAN *Gynostemma compressum*. **Ref:** 266, 1521.

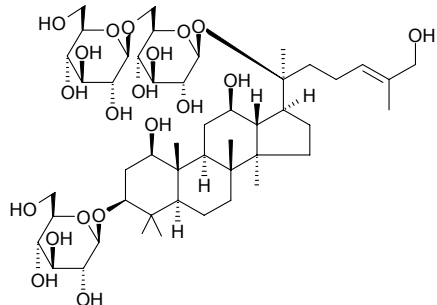
**9096 Gycomoside III**

1 $\beta$ ,3 $\beta$ ,12 $\beta$ ,20(S),26-Pentahydroxy-dammer-24(25)-en-20(S)-O- $\beta$ -D-glucopyranoside  $C_{36}H_{62}O_{10}$  (654.89). Yellowish powder, mp 178–180°C,  $[\alpha]_D^{22} = +23.73^\circ$  ( $c = 0.59$ , MeOH). **Source:** BIAN GUO JIAO GU LAN *Gynostemma compressum*. **Ref:** 266.

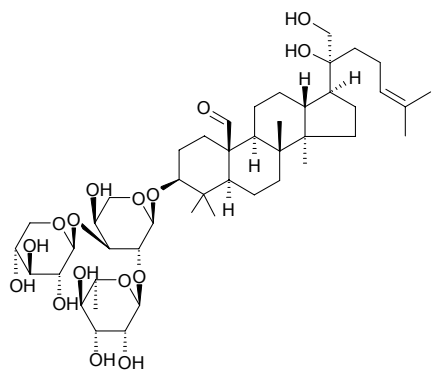


**9097 Gycomoside IV**

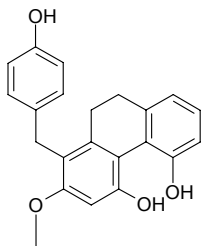
1 $\beta$ ,3 $\beta$ ,12 $\beta$ ,20(S),26-Pentahydroxy-dammer-24(25)-en-3-O- $\beta$ -D-glucopyranosyl-1-20(S)-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside C<sub>48</sub>H<sub>82</sub>O<sub>20</sub> (979.18). White powder, mp 207~209°C,  $[\alpha]_D^{22} = +12.96^\circ$  ( $c = 1.08$ , MeOH). Source: BIAN GUO JIAO GU LAN *Gynostemma compressum*. Ref: 266.

**9098 Gylongiposide I**

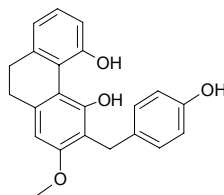
C<sub>46</sub>H<sub>76</sub>O<sub>16</sub> (885.11). White crystalline powder, mp 219.5~220.0°C,  $[\alpha]_D^{20} = -1.7^\circ$  ( $c = 1$ , methanol). Source: CHANG GENG JIAO GU LAN *Gynostemma longipes*. Ref: 390.

**9099 Gymconopin A**

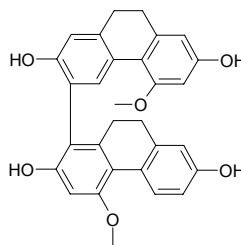
C<sub>22</sub>H<sub>20</sub>O<sub>4</sub> (348.40). White powder. Pharm: Antiallergic  $\beta$ -Hexosaminidase inhibitor (rat basophilic RBL-2H3 cells, inhibits release of  $\beta$ -hexosaminidase, 100 $\mu$ mol/L, InRt = (21.3 $\pm$ 2.9) $\mu$ mol/L,  $p < 0.01$ ; 300 $\mu$ mol/L control Ketotifen fumarate, InRt = (72.5 $\pm$ 0.9) $\mu$ mol/L,  $p < 0.01$ ). Source: SHOU ZHANG SHEN *Gymnadenia conopsea* (tuber). Ref: 5022.

**9100 Gymconopin B**

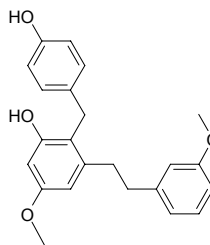
C<sub>22</sub>H<sub>20</sub>O<sub>4</sub> (348.40). White powder. Pharm: Antiallergic  $\beta$ -Hexosaminidase inhibitor (rat basophilic RBL-2H3 cells, inhibits release of  $\beta$ -hexosaminidase, 100 $\mu$ mol/L, InRt = (96.9 $\pm$ 1.8) $\mu$ mol/L,  $p < 0.01$ ; 300 $\mu$ mol/L control Ketotifen fumarate, InRt = (72.5 $\pm$ 0.9) $\mu$ mol/L,  $p < 0.01$ ). Source: SHOU ZHANG SHEN *Gymnadenia conopsea* (tuber). Ref: 5022.

**9101 Gymconopin C**

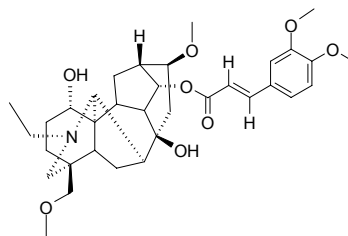
C<sub>30</sub>H<sub>26</sub>O<sub>6</sub> (482.54). White powder. Source: SHOU ZHANG SHEN *Gymnadenia conopsea* (tuber). Ref: 5022.

**9102 Gymconopin D**

C<sub>23</sub>H<sub>24</sub>O<sub>4</sub> (364.45). White powder. Pharm: Antiallergic  $\beta$ -Hexosaminidase inhibitor (rat basophilic RBL-2H3 cells, inhibits release of  $\beta$ -hexosaminidase, 100 $\mu$ mol/L, InRt = (86.9 $\pm$ 0.9) $\mu$ mol/L,  $p < 0.01$ ; 300 $\mu$ mol/L control Ketotifen fumarate, InRt = (72.5 $\pm$ 0.9) $\mu$ mol/L,  $p < 0.01$ )<sup>[5022]</sup>. Source: SHOU ZHANG SHEN *Gymnadenia conopsea* (tuber). Ref: 5022.

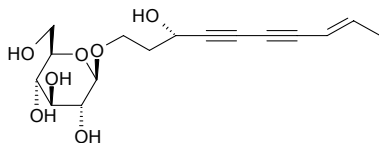
**9103 Gymnaconitine**

[103956-41-8] C<sub>34</sub>H<sub>47</sub>NO<sub>8</sub> (597.76). White acicular Crystals, mp 110~111°C,  $[\alpha]_D^{17} = +18.2^\circ$ . Source: LU RUI WU TOU *Aconitum gymmandrum*. Ref: 52.

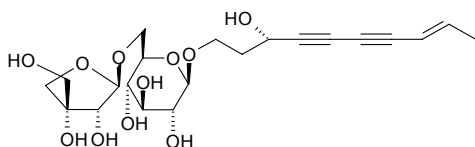


**9104 Gymnasterkoreaside A**

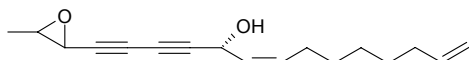
(3*R*)-8-Decene-4,6-diyne-1,3-diol 1-*O*- $\beta$ -*D*-glucopyraside C<sub>16</sub>H<sub>22</sub>O<sub>7</sub> (326.35). Bright yellow oil,  $[\alpha]_D^{20} = -28^\circ$  ( $c = 1$ , MeOH). Source: CHAO XIAN LUO WAN *Gymnaster koraiensis* (root). Ref: 4196.

**9105 Gymnasterkoreaside B**

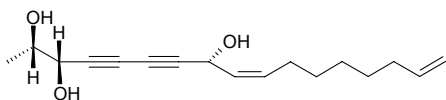
(3*R*)-8-Decene-4,6-diyne-1,3-diol 1-*O*- $\beta$ -*D*-apiofuranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyraside C<sub>21</sub>H<sub>30</sub>O<sub>11</sub> (458.47). Bright yellow oil,  $[\alpha]_D^{20} = -78^\circ$  ( $c = 1$ , MeOH). Source: CHAO XIAN LUO WAN *Gymnaster koraiensis* (root). Ref: 4196.

**9106 Gymnasterkoreayne B**

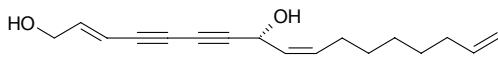
C<sub>17</sub>H<sub>22</sub>O<sub>2</sub> (258.36).  $[\alpha]_D^{20} = +163.0^\circ$  ( $c = 0.3$ , CHCl<sub>3</sub>). Pharm: NFAT transcription factor inhibitor (IC<sub>50</sub> = (1.44 $\pm$ 0.59) $\mu$ mol/L, control Cyclosporin A, IC<sub>50</sub> = (0.31 $\pm$ 0.01) $\mu$ mol/L). Source: CHAO XIAN LUO WAN *Gymnaster koraiensis* (leaf). Ref: 4511.

**9107 Gymnasterkoreayne E**

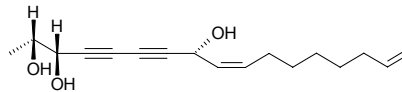
C<sub>17</sub>H<sub>24</sub>O<sub>3</sub> (276.38).  $[\alpha]_D^{20} = +87.9^\circ$  ( $c = 0.3$ , CHCl<sub>3</sub>). Pharm: NFAT transcription factor inhibitor (IC<sub>50</sub> = (7.24 $\pm$ 0.42) $\mu$ mol/L, positive control Cyclosporin A, IC<sub>50</sub> = (0.31 $\pm$ 0.01) $\mu$ mol/L)<sup>[4511]</sup>. Source: CHAO XIAN LUO WAN *Gymnaster koraiensis* (leaf). Ref: 4511.

**9108 Gymnasterkoreayne F**

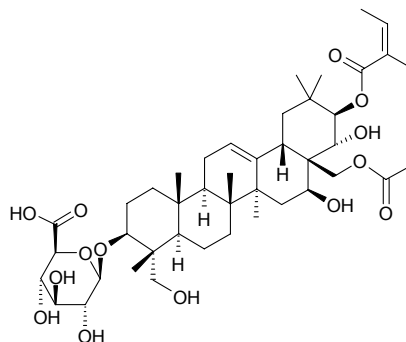
C<sub>17</sub>H<sub>22</sub>O<sub>2</sub> (258.36).  $[\alpha]_D^{20} = +134.0^\circ$  ( $c = 0.3$ , CHCl<sub>3</sub>). Pharm: NFAT transcription factor inhibitor (IC<sub>50</sub> = (10.6 $\pm$ 0.5) $\mu$ mol/L, control Cyclosporin A, IC<sub>50</sub> = (0.31 $\pm$ 0.01) $\mu$ mol/L)<sup>[4511]</sup>. Source: CHAO XIAN LUO WAN *Gymnaster koraiensis* (leaf). Ref: 4511.

**9109 Gymnasterkoreayne G**

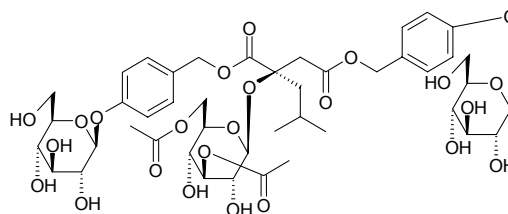
C<sub>17</sub>H<sub>24</sub>O<sub>3</sub> (276.38). Orange oil,  $[\alpha]_D^{20} = +40.0^\circ$  ( $c = 0.3$ , CHCl<sub>3</sub>). Pharm: NFAT transcription factor inhibitor (IC<sub>50</sub> = (43.9 $\pm$ 2.2) $\mu$ mol/L, positive control Cyclosporin A, IC<sub>50</sub> = (0.31 $\pm$ 0.01) $\mu$ mol/L). Source: CHAO XIAN LUO WAN *Gymnaster koraiensis* (leaf). Ref: 4511.

**9110 Gymnemic acid I**

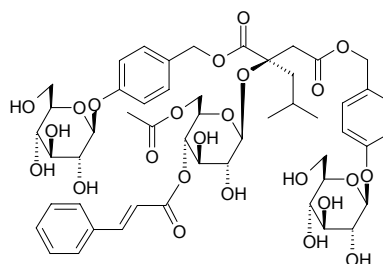
[122168-40-5] C<sub>43</sub>H<sub>66</sub>O<sub>14</sub> (807.00). Pharm: Flavorant. Source: CHI GENG TENG *Gymnema sylvestre*. Ref: 658.

**9111 Gymnoside VIII**

C<sub>44</sub>H<sub>60</sub>O<sub>24</sub> (972.95). White powder,  $[\alpha]_D^{24} = -37.3^\circ$  ( $c = 0.39$ , MeOH). Source: SHOU ZHANG SHEN *Gymnadenia conopsea* (tuber: yield = 0.0003%). Ref: 2089.

**9112 Gymnoside IX**

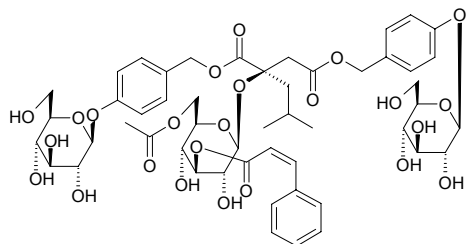
C<sub>51</sub>H<sub>64</sub>O<sub>24</sub> (1061.06). White powder,  $[\alpha]_D^{24} = -26.5^\circ$  ( $c = 1.61$ , MeOH). Source: SHOU ZHANG SHEN *Gymnadenia conopsea* (tuber: yield = 0.013%). Ref: 2089.



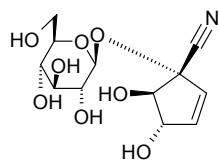


**9113 Gymnoside X**

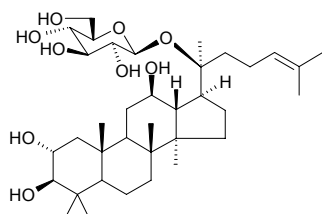
$C_{51}H_{64}O_{24}$  (1061.06). White powder,  $[\alpha]_D^{24} = -11.2^\circ$  ( $c = 1.00$ , MeOH).  
**Source:** SHOU ZHANG SHEN *Gymnadenia conopsea* (tuber: yield = 0.0005%). **Ref:** 2089.

**9114 Gynocardin**

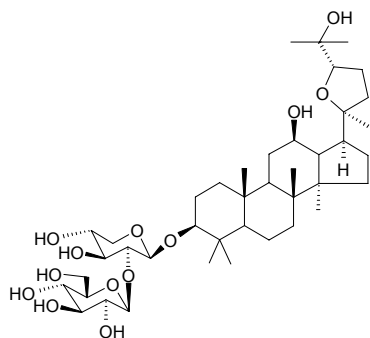
[14332-17-3]  $C_{12}H_{17}NO_8$  (303.27). **Pharm:** Toxin. **Source:** MA DAN GUO *Gynocardia odorata*. **Ref:** 658.

**9115 Gynosaponin TN<sub>1</sub>**

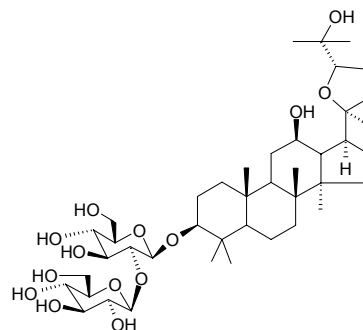
$C_{36}H_{62}O_9$  (638.89). **Source:** JIAO GU LAN *Gynostemma pentaphyllum* (leaf: yield = 0.036%dw). **Ref:** 4757.

**9116 Gynoside A**

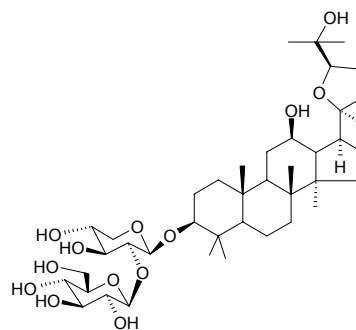
(20S,24S)-20,-24-Epoxy-12,25-dihydroxydammaran-3-yl *O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-xylopyranoside  $C_{41}H_{70}O_{13}$  (771.01). Colorless plates, mp 203~205°C,  $[\alpha]_D^{20} = -0.47^\circ$  ( $c = 0.9$ , MeOH). **Source:** JIAO GU LAN *Gynostemma pentaphyllum* (leaf: yield = 0.002%dw). **Ref:** 4757.

**9117 Gynoside B**

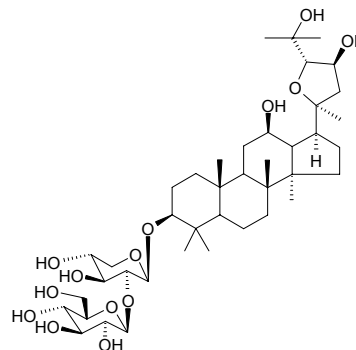
(20S,24S)-20,24-Epoxy-12,25-dihydroxydammaran-3-yl *O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranoside  $C_{42}H_{72}O_{14}$  (801.03). Amorphous powder, mp 194~196°C,  $[\alpha]_D^{20} = +0.10^\circ$  ( $c = 0.05$ , MeOH). **Source:** JIAO GU LAN *Gynostemma pentaphyllum* (leaf: yield = 0.00025%dw). **Ref:** 4757.

**9118 Gynoside C**

(20S,24R)-20,24-Epoxy-12,25-dihydroxydammaran-3-yl *O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-xylopyranoside  $C_{41}H_{70}O_{13}$  (771.01). Amorphous powder, mp 194~196°C,  $[\alpha]_D^{20} = -8.0^\circ$  ( $c = 0.1$ , MeOH). **Source:** JIAO GU LAN *Gynostemma pentaphyllum* (leaf: yield = 0.00012%dw). **Ref:** 4757.

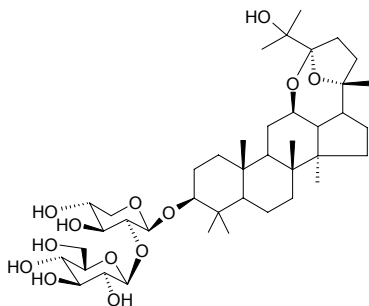
**9119 Gynoside D**

(20S,24S)-20,24-Epoxy-12,23 $\beta$ ,25-trihydroxydammaran-3 $\beta$ -yl *O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-xylopyranoside  $C_{41}H_{70}O_{14}$  (787.01). Amorphous powder, mp 195~197°C,  $[\alpha]_D^{20} = +0.61^\circ$  ( $c = 0.1$ , MeOH). **Source:** JIAO GU LAN *Gynostemma pentaphyllum* (leaf: yield = 0.00077%dw). **Ref:** 4757.

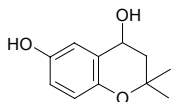


**9120 Gynoside E**

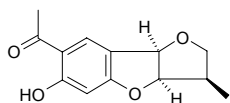
(12*R*,20*S*,24*S*)-20,24;20,12-Diepoxy-25-hydroxydammaran-3 $\beta$ -yl  
*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-xylopyranoside C<sub>41</sub>H<sub>68</sub>O<sub>13</sub> (768.99).  
 Amorphous powder, mp 207~209°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +2.0° (*c* = 0.15, MeOH).  
Source: JIAO GU LAN *Gynostemma pentaphyllum* (leaf: yield =  
 0.0001%dw). Ref: 4757.

**9121 Gynunol**

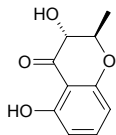
C<sub>11</sub>H<sub>14</sub>O<sub>3</sub> (194.23). Colorless oil. Source: TUO YUAN SAN QI CAO *Gynura elliptica*. Ref: 763.

**9122 (+)-Gynunone**

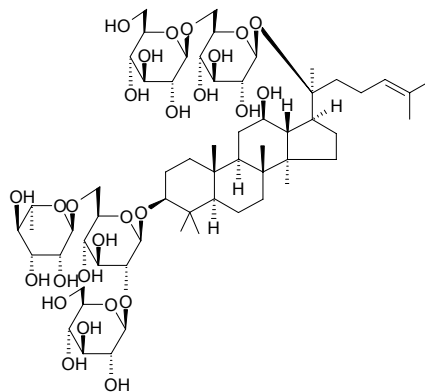
C<sub>13</sub>H<sub>14</sub>O<sub>4</sub> (234.25). Colorless oil, [ $\alpha$ ]<sub>D</sub><sup>27</sup> = 117.8° (*c* = 0.15, CHCl<sub>3</sub>). Source:  
 TUO YUAN SAN QI CAO *Gynura elliptica*. Ref: 763.

**9123 (-)-Gynuraone**

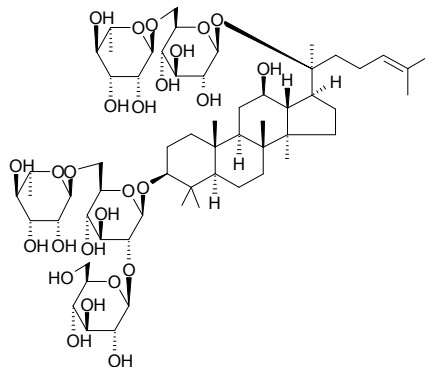
C<sub>10</sub>H<sub>10</sub>O<sub>4</sub> (194.19). Colorless oil, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -64.5° (*c* = 0.93, CHCl<sub>3</sub>). Pharm:  
 Platelet aggregation inhibitor (washed rabbit platelets, 100 $\mu$ g/mL, 100 $\mu$ mol/L  
 AA-induced, AggRt = 7.2%, control 50 $\mu$ mol/L Aspirin, AggRt = 100%;  
 10 $\mu$ g/mL collagen-induced, AggRt = 7.5%, 100 $\mu$ mol/L Aspirin, AggRt = 4.9%;  
 0.1U/mL thrombin-induced, AggRt = 4.0%, 100 $\mu$ mol/L Aspirin, AggRt =  
 1.7%; 2ng/mL PAF-induced, AggRt = 2.9%, 100 $\mu$ mol/L Aspirin, AggRt =  
 2.1%). Source: SAN QI CAO *Gynura segetum* [Syn. *Gynura japonica*]  
 (rhizome). Ref: 5427.

**9124 Gypenoside I**

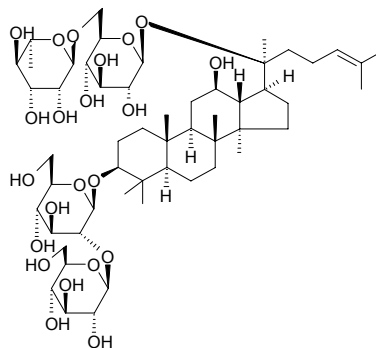
C<sub>60</sub>H<sub>102</sub>O<sub>27</sub> (1255.47). Source: JIAO GU LAN *Gynostemma pentaphyllum*.  
Ref: 2.

**9125 Gypenoside II**

C<sub>60</sub>H<sub>102</sub>O<sub>26</sub> (1239.47). Source: JIAO GU LAN *Gynostemma pentaphyllum*.  
Ref: 2.

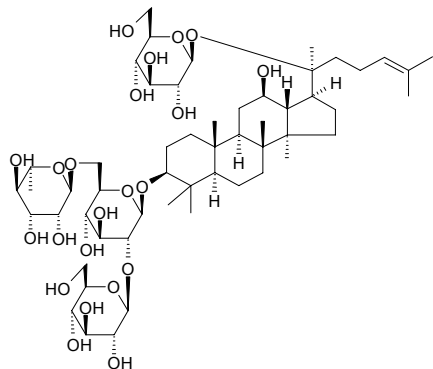
**9126 Gypenoside V**

Gynosaponin E [80321-60-4] C<sub>54</sub>H<sub>92</sub>O<sub>22</sub> (1093.32). Source: JIAO GU LAN  
*Gynostemma pentaphyllum*. Ref: 2, 1521.

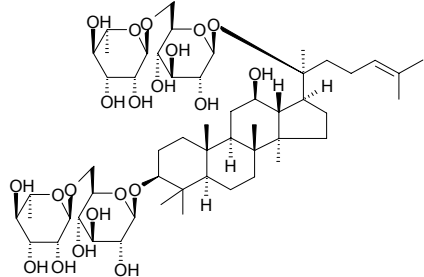


**9127 Gypenoside VI**

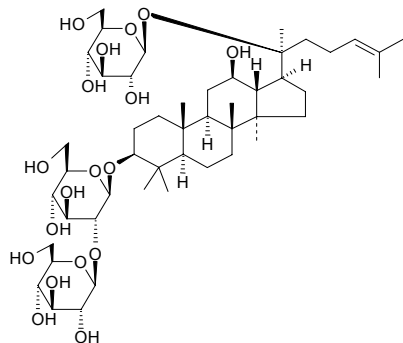
$C_{54}H_{92}O_{22}$  (1093.32). Source: JIAO GU LAN *Gynostemma pentaphyllum*. Ref: 2.

**9128 Gypenoside VII**

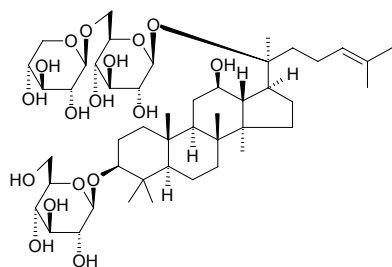
Gynosaponin G [80321-62-6]  $C_{54}H_{92}O_{21}$  (1077.32). Source: JIAO GU LAN *Gynostemma pentaphyllum*. Ref: 2, 1521.

**9129 Gypenoside VIII**

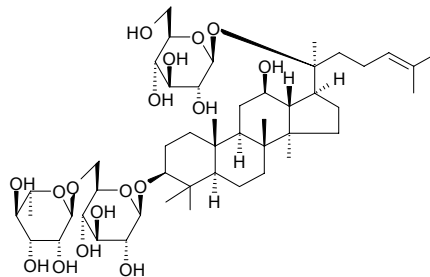
[52705-93-8]  $C_{48}H_{82}O_{18}$  (947.18). Source: JIAO GU LAN *Gynostemma pentaphyllum* (aerial parts: yield = 0.0041%dw)<sup>[4751]</sup>. Ref: 2, 4751.

**9130 Gypenoside IX**

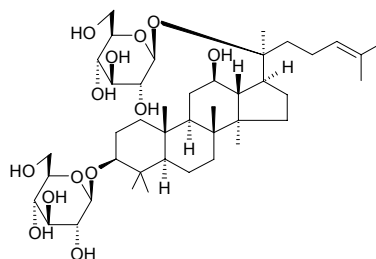
[80321-63-7]  $C_{47}H_{80}O_{17}$  (917.15). Source: JIAO GU LAN *Gynostemma pentaphyllum*, SAN QI HUA LEI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*] (flower bud: yield = 0.11%dw)<sup>[4702]</sup>. Ref: 2, 1521, 4702.

**9131 Gypenoside XI**

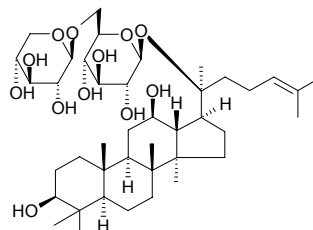
Gynosaponin K [80321-64-8]  $C_{48}H_{82}O_{17}$  (931.18). Source: JIAO GU LAN *Gynostemma pentaphyllum*. Ref: 2, 1521.

**9132 Gypenoside XII**

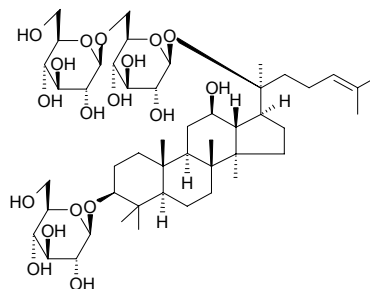
$C_{42}H_{72}O_{13}$  (785.03). Source: JIAO GU LAN *Gynostemma pentaphyllum*. Ref: 2.

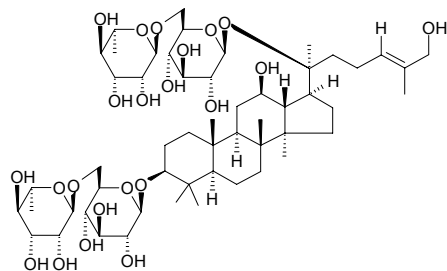
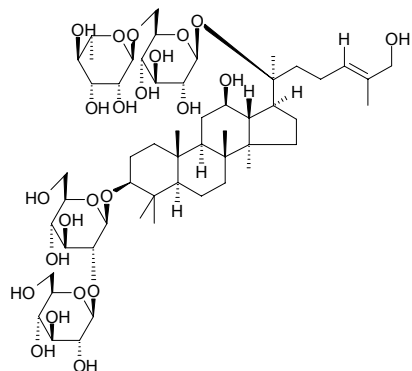
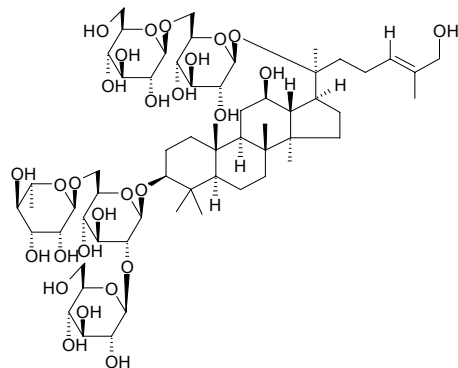
**9133 Gypenoside XIII**

Gynosaponin M [80325-22-0]  $C_{41}H_{70}O_{12}$  (755.01). Source: JIAO GU LAN *Gynostemma pentaphyllum*. Ref: 2, 1521.

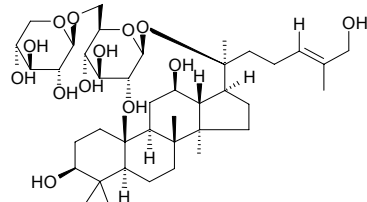
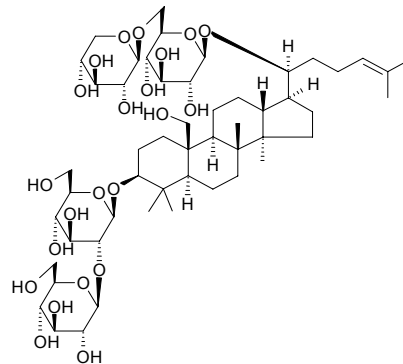
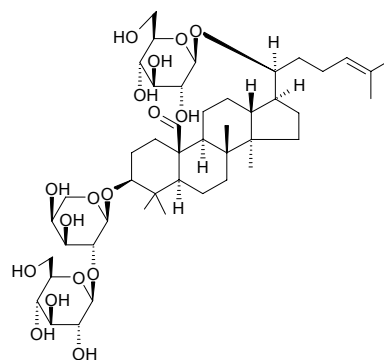
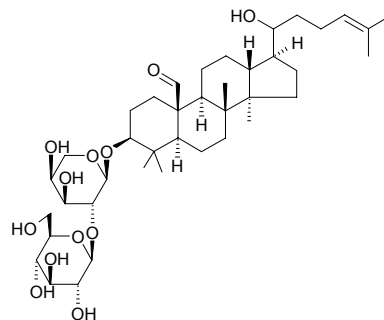
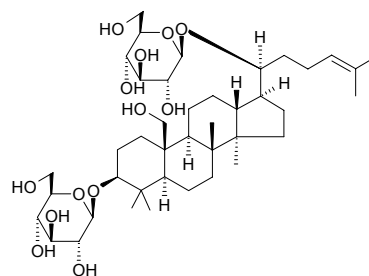
**9134 Gypenoside XVII**

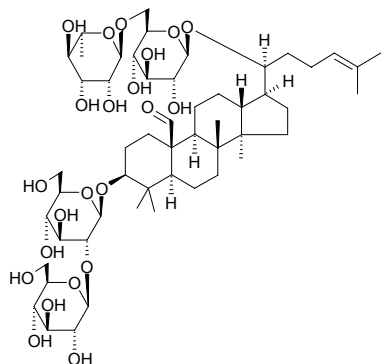
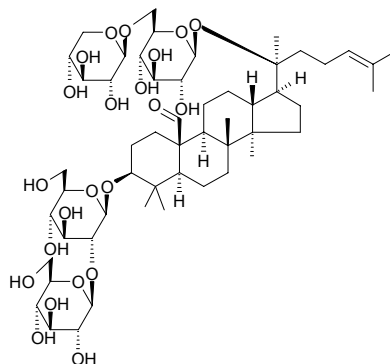
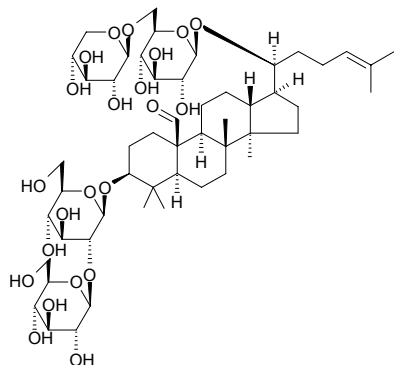
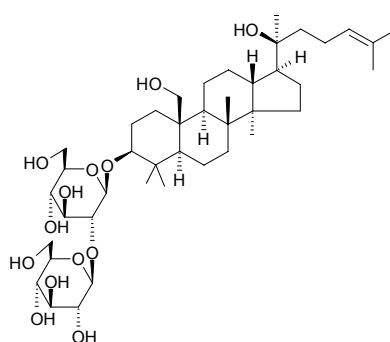
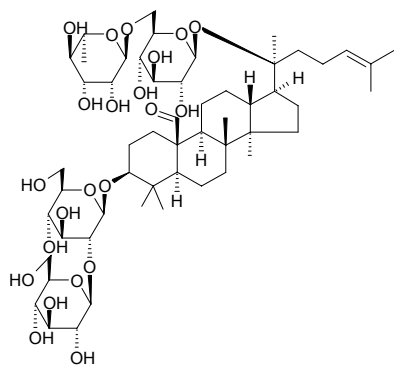
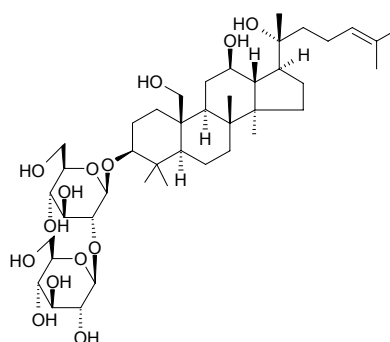
Gynosaponin S  $C_{48}H_{82}O_{18}$  (947.18). Pharm: Hepatoprotective (inhibits activation of macrophages, inhibits increase in sALT and sAST levels, *in vivo*, *D*-GalN/LPS-induced liver injury in mouse, 100mg/kg ip for sALT, InRt = 95%; 100mg/kg ip for sAST, InRt = 91%; control Hydrocortisone, 20mg/kg ip for sALT, InRt = 99%; 20mg/kg ip for sAST, InRt = 97%)<sup>[4702]</sup>. Source: JIAO GU LAN *Gynostemma pentaphyllum*, SAN QI HUA LEI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*] (flower bud: yield = 0.18%dw)<sup>[4702]</sup>. Ref: 2, 1521, 4702.

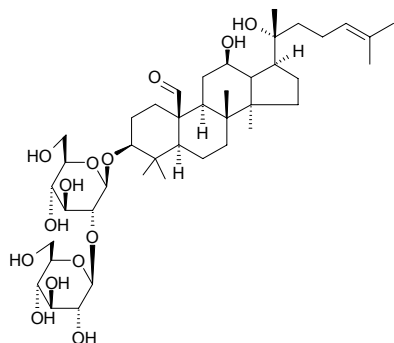
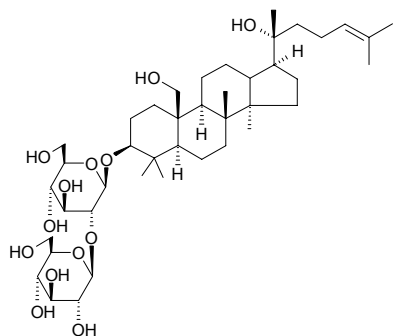
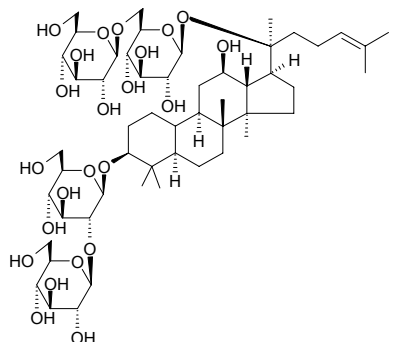
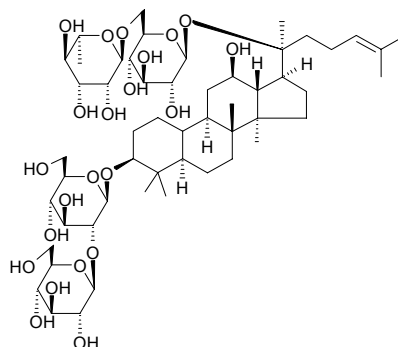
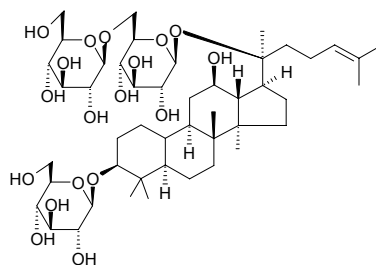
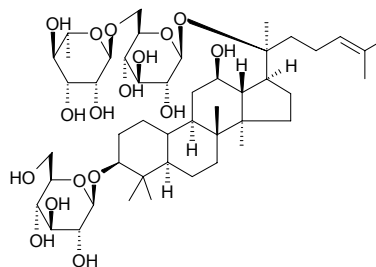


**9135 Gypenoside XVIII**C<sub>54</sub>H<sub>92</sub>O<sub>22</sub> (1093.32). Source: JIAO GU LAN *Gynostemma pentaphyllum*.Ref: 2.**9136 Gypenoside XIX**[80321-66-0] C<sub>54</sub>H<sub>92</sub>O<sub>23</sub> (1109.32). Source: JIAO GU LAN *Gynostemma pentaphyllum*. Ref: 2.**9137 Gypenoside XX**C<sub>60</sub>H<sub>102</sub>O<sub>28</sub> (1271.47). Source: JIAO GU LAN *Gynostemma pentaphyllum*.Ref: 2, 1521.**9138 Gypenoside XXI**C<sub>41</sub>H<sub>70</sub>O<sub>13</sub> (771.01). Source: JIAO GU LAN *Gynostemma pentaphyllum*. Ref:

2, 1521.

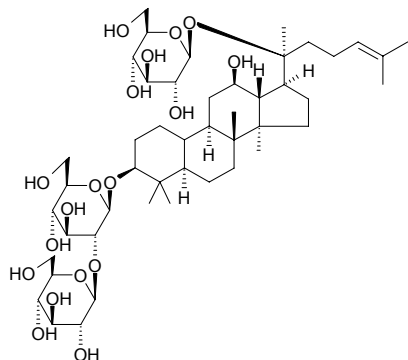
**9139 Gypenoside XXII**C<sub>52</sub>H<sub>88</sub>O<sub>22</sub> (1065.27). Source: JIAO GU LAN *Gynostemma pentaphyllum*.Ref: 2.**9140 Gypenoside XXVI**C<sub>46</sub>H<sub>76</sub>O<sub>17</sub> (901.11). Source: JIAO GU LAN *Gynostemma pentaphyllum*.Ref: 2.**9141 Gypenoside XXIX**C<sub>40</sub>H<sub>66</sub>O<sub>12</sub> (738.96). Source: JIAO GU LAN *Gynostemma pentaphyllum*.Ref: 2.**9142 Gypenoside XXX**C<sub>41</sub>H<sub>70</sub>O<sub>13</sub> (771.01). Source: JIAO GU LAN *Gynostemma pentaphyllum*.Ref: 2.

**9143 Gypenoside XXXIV**C<sub>53</sub>H<sub>88</sub>O<sub>22</sub> (1077.28). Source: JIAO GU LAN *Gynostemma pentaphyllum*.Ref: 2.**9146 Gypenoside XXXVII**C<sub>53</sub>H<sub>88</sub>O<sub>22</sub> (1077.28). Source: JIAO GU LAN *Gynostemma pentaphyllum*.Ref: 2.**9144 Gypenoside XXXV**C<sub>52</sub>H<sub>86</sub>O<sub>22</sub> (1063.25). Source: JIAO GU LAN *Gynostemma pentaphyllum*.Ref: 2.**9147 Gypenoside XXXVIII**C<sub>42</sub>H<sub>72</sub>O<sub>13</sub> (785.03). Source: JIAO GU LAN *Gynostemma pentaphyllum*.Ref: 2.**9145 Gypenoside XXXVI**C<sub>54</sub>H<sub>90</sub>O<sub>22</sub> (1091.31). Source: JIAO GU LAN *Gynostemma pentaphyllum*.Ref: 2.**9148 Gypenoside XXXIX**C<sub>42</sub>H<sub>72</sub>O<sub>14</sub> (801.03). Source: JIAO GU LAN *Gynostemma pentaphyllum*.Ref: 2.

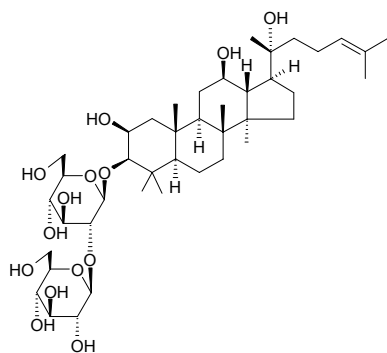
**9149 Gypenoside XL**C<sub>42</sub>H<sub>70</sub>O<sub>14</sub> (799.02). Source: JIAO GU LAN *Gynostemma pentaphyllum*.Ref: 2.**9150 Gypenoside XLI**C<sub>42</sub>H<sub>72</sub>O<sub>13</sub> (758.03). Source: JIAO GU LAN *Gynostemma pentaphyllum*.Ref: 2.**9151 Gypenoside XLII**C<sub>53</sub>H<sub>90</sub>O<sub>23</sub> (1095.29). Source: HUI GUO JIAO GU LAN *Gynostemma yixingense*, JIAO GU LAN *Gynostemma pentaphyllum* (leaf)<sup>[4757]</sup>. Ref: 2, 329, 4757.**9152 Gypenoside XLIII**C<sub>53</sub>H<sub>90</sub>O<sub>22</sub> (1079.30). Source: JIAO GU LAN *Gynostemma**pentaphyllum*. Ref: 2.**9153 Gypenoside XLIV**C<sub>47</sub>H<sub>80</sub>O<sub>18</sub> (933.15). Source: HUI GUO JIAO GU LAN *Gynostemma yixingense*, JIAO GU LAN *Gynostemma pentaphyllum*. Ref: 2, 329.**9154 Gypenoside XLV**C<sub>47</sub>H<sub>80</sub>O<sub>17</sub> (917.15). Source: JIAO GU LAN *Gynostemma pentaphyllum*.Ref: 2.

**9155 Gypenoside XLVI**

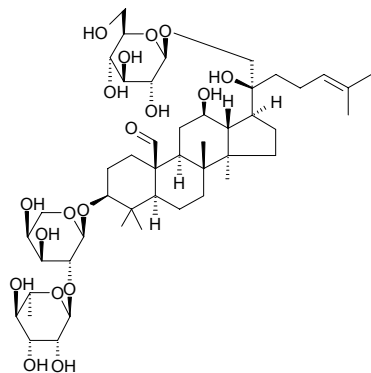
$C_{47}H_{80}O_{18}$  (933.15). Source: JIAO GU LAN *Gynostemma pentaphyllum* (leaf: yield = 0.051%dw)<sup>[4757]</sup>. Ref: 2, 4757.

**9156 Gypenoside LI**

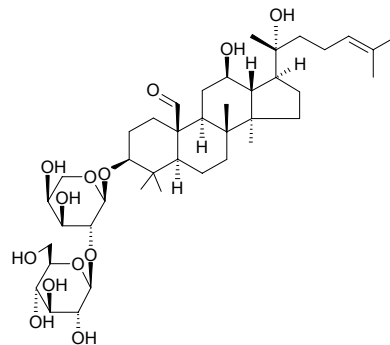
$C_{42}H_{72}O_{14}$  (801.03). Source: JIAO GU LAN *Gynostemma pentaphyllum*. Ref: 2.

**9157 Gypenoside LII**

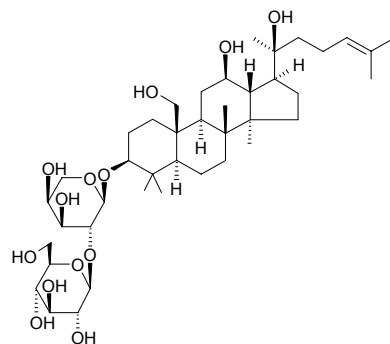
$C_{47}H_{78}O_{18}$  (931.13). Source: JIAO GU LAN *Gynostemma pentaphyllum*. Ref: 2.

**9158 Gypenoside LIII**

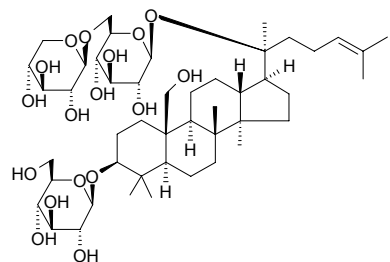
$C_{41}H_{68}O_{13}$  (768.99). Source: JIAO GU LAN *Gynostemma pentaphyllum*. Ref: 2.

**9159 Gypenoside LIV**

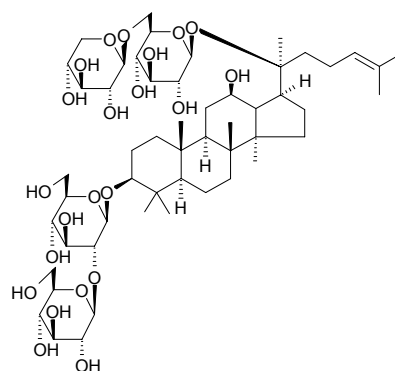
$C_{41}H_{70}O_{13}$  (771.01). Source: JIAO GU LAN *Gynostemma pentaphyllum*. Ref: 2.

**9160 Gypenoside LV**

$C_{47}H_{80}O_{17}$  (917.15). Source: JIAO GU LAN *Gynostemma pentaphyllum*. Ref: 2.

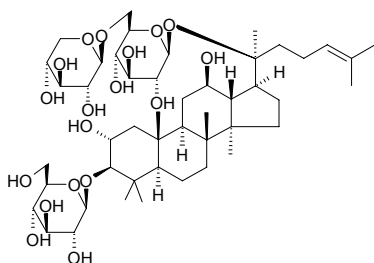
**9161 Gypenoside LVI**

$C_{53}H_{90}O_{22}$  (1079.30). Source: JIAO GU LAN *Gynostemma pentaphyllum* (leaf: yield = 0.00063%dw)<sup>[4757]</sup>. Ref: 2, 1521, 4757.

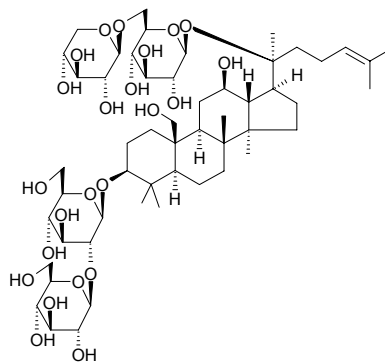


**9162 Gypenoside LVII**

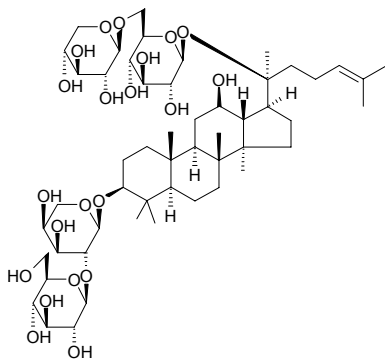
$C_{47}H_{80}O_{18}$  (933.15). Source: JIAO GU LAN *Gynostemma pentaphyllum* (leaf: yield = 0.051%dw)<sup>[4757]</sup>. Ref: 2, 1521, 4757.

**9166 Gypenoside LXII**

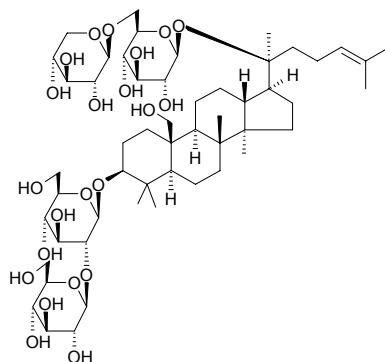
$C_{53}H_{90}O_{23}$  (1095.29). Source: JIAO GU LAN *Gynostemma pentaphyllum*. Ref: 2.

**9163 Gypenoside LVIII**

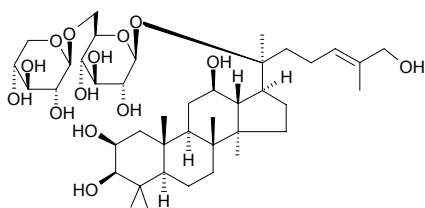
$C_{52}H_{88}O_{21}$  (1049.27). Source: JIAO GU LAN *Gynostemma pentaphyllum*. Ref: 2.

**9167 Gypenoside LXIII**

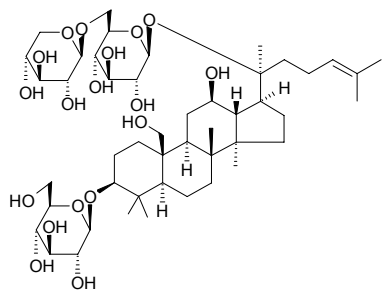
$C_{53}H_{90}O_{22}$  (1079.30). Source: JIAO GU LAN *Gynostemma pentaphyllum*. Ref: 2.

**9164 Gypenoside LIX**

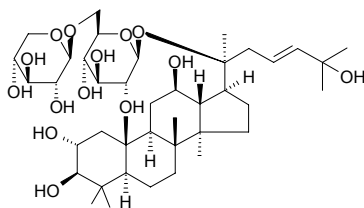
[105214-50-4]  $C_{41}H_{70}O_{14}$  (787.01). Source: JIAO GU LAN *Gynostemma pentaphyllum*. Ref: 2, 1521.

**9168 Gypenoside LXIV**

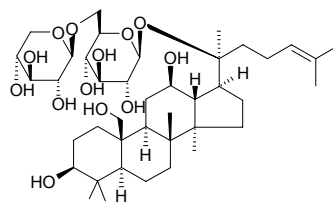
$C_{47}H_{80}O_{18}$  (933.15). Source: JIAO GU LAN *Gynostemma pentaphyllum*. Ref: 2.

**9165 Gypenoside LX**

$C_{41}H_{70}O_{14}$  (787.01). Source: JIAO GU LAN *Gynostemma pentaphyllum* (leaf: yield = 0.00023%dw)<sup>[4757]</sup>. Ref: 2, 4757.

**9169 Gypenoside LXV**

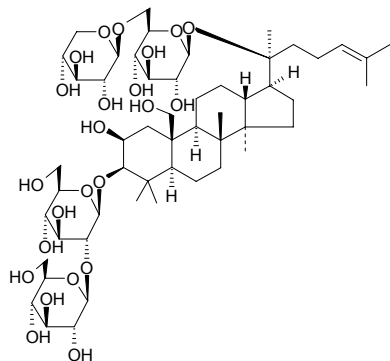
$C_{41}H_{70}O_{13}$  (771.01). Source: JIAO GU LAN *Gynostemma pentaphyllum*. Ref: 2.





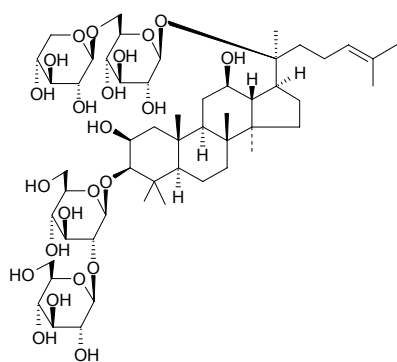
**9170 Gypenoside LXVII**

$C_{53}H_{90}O_{23}$  (1095.29). Source: JIAO GU LAN *Gynostemma pentaphyllum*. Ref: 2.

**9171 Gypenoside LXVIII**

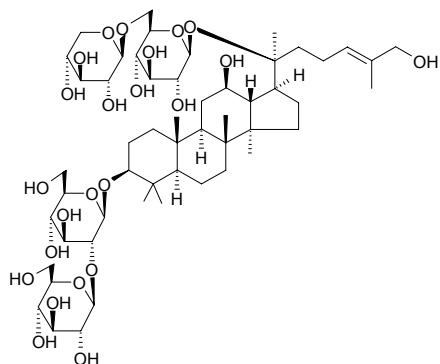
$C_{53}H_{90}O_{23}$  (1095.29). Source: JIAO GU LAN *Gynostemma pentaphyllum*.

Ref: 2.

**9172 Gypenoside LXX**

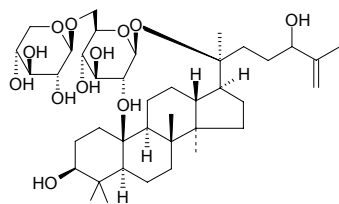
$C_{53}H_{90}O_{23}$  (1095.29). Source: JIAO GU LAN *Gynostemma pentaphyllum*.

Ref: 2.

**9173 Gypenoside LXXI**

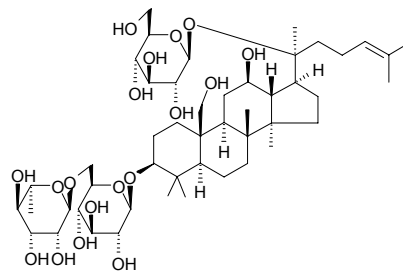
$C_{41}H_{70}O_{12}$  (755.01). Source: JIAO GU LAN *Gynostemma pentaphyllum*

(aerial parts: yield = 0.0012%dw)<sup>[4751]</sup>. Ref: 2, 4751.

**9174 Gypenoside LXXII**

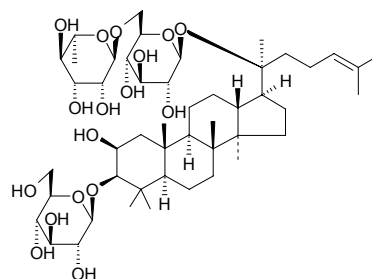
$C_{48}H_{82}O_{18}$  (947.18). Source: JIAO GU LAN *Gynostemma pentaphyllum*.

Ref: 2.

**9175 Gypenoside LXXIII**

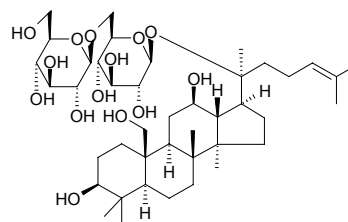
$C_{48}H_{82}O_{17}$  (931.18). Source: JIAO GU LAN *Gynostemma pentaphyllum*.

Ref: 2.

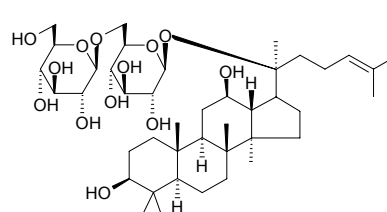
**9176 Gypenoside LXXIV**

$C_{42}H_{72}O_{14}$  (801.03). Source: JIAO GU LAN *Gynostemma pentaphyllum*.

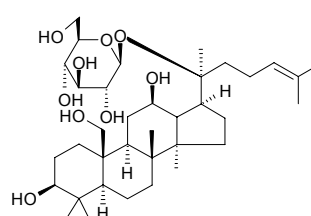
Ref: 2.

**9177 Gypenoside LXXV**

$C_{42}H_{72}O_{13}$  (785.03). Source: JIAO GU LAN *Gynostemma pentaphyllum*. Ref: 2.

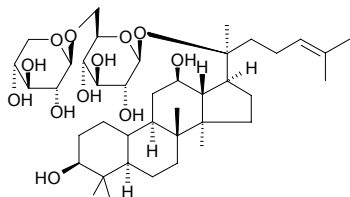
**9178 Gypenoside LXXVI**

$C_{36}H_{62}O_9$  (638.89). Source: JIAO GU LAN *Gynostemma pentaphyllum*. Ref: 2.

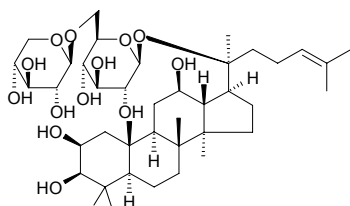


**9179 Gypenoside LXXVII**

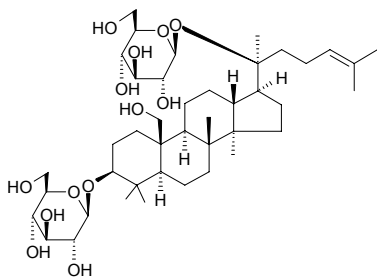
$C_{40}H_{68}O_{12}$  (740.98). Source: JIAO GU LAN *Gynostemma pentaphyllum* (leaf: yield = 0.061%dw)<sup>[4757]</sup>. Ref: 2, 4757.

**9180 Gypenoside LXXVIII**

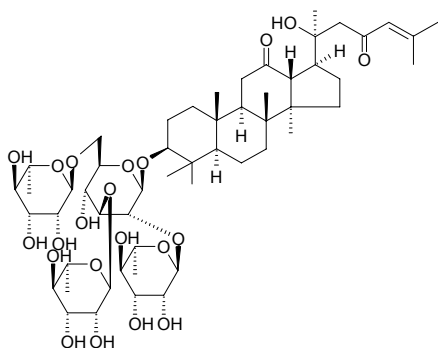
$C_{41}H_{70}O_{13}$  (771.01). Source: JIAO GU LAN *Gynostemma pentaphyllum*. Ref: 2.

**9181 Gypenoside LXXIX**

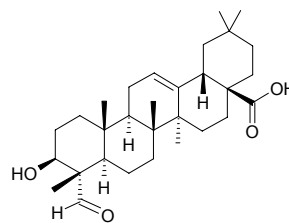
$C_{42}H_{72}O_{13}$  (785.03). Source: JIAO GU LAN *Gynostemma pentaphyllum*. Ref: 2.

**9182 Gypentonoside A**

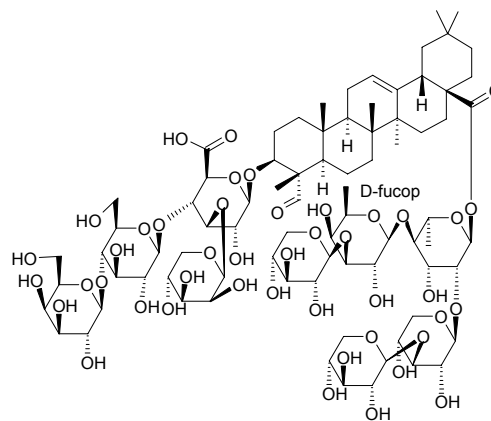
[20S]-3 $\beta$ ,20-Dihydroxy-24-dammaren-12,23-dione-3-O-[ $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)-[ $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 3)]- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 6)]- $\beta$ -D-glucopyranoside  $C_{54}H_{88}O_{21}$  (1073.29). White powder, mp 272~274°C. Source: JIAO GU LAN *Gynostemma pentaphyllum*. Ref: 364.

**9183 Gypsogenin**

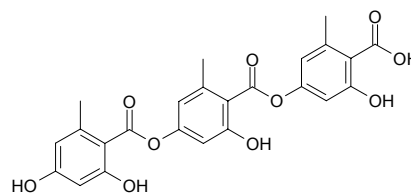
[639-14-5]  $C_{30}H_{46}O_4$  (470.70). mp 274°C. Pharm: Toxin (mammal). Source: YIN CHAI HU *Stellaria dichotoma* var. *lanceolata*, SHAN YIN CHAI HU *Gypsophila pacifica*, MAI XIAN WENG *Agrostemma githago*. Ref: 6, 658.

**9184 Gypsoside**

[15588-68-8]  $C_{80}H_{126}O_{44}$  (1791.87). mp 215~220°C (dec),  $[\alpha]_D^{20} = 22.1^\circ \pm 2^\circ$  (c = 3.07, water). Pharm: Antispasmodic (delays convulsive spasm, mus, caused by corazol, camphor or coffeine); hypnotic (mus hypnotic synergism with barbital sodium and chloral hydrate); antihypercholesterolemic (atherosis rbt, reduces the level of cholesterol in serum, cholesterol/cephalin coefficient, and lipid content in aorta); anticonvulsant (caused by strychnine). Source: SHAN YIN CHAI HU *Gypsophila pacifica*. Ref: 661.

**9185 Gyrophoric acid**

[548-89-0]  $C_{24}H_{20}O_{10}$  (468.42). mp 220°C (dec). Source: SHI HUA *Parmelia saxatilis*. Ref: 6.



Jiaju Zhou · Guirong Xie · Xinjian Yan

# Encyclopedia of Traditional Chinese Medicines

Molecular Structures, Pharmacological Activities,  
Natural Sources and Applications

## Vol.3

Isolated Compounds H-M

 Springer

Encyclopedia of Traditional Chinese Medicines  
Molecular Structures, Pharmacological Activities,  
Natural Sources and Applications



Jiaju Zhou • Guirong Xie • Xinjian Yan

Encyclopedia of  
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Molecular Structures, Pharmacological  
Activities, Natural Sources and Applications

Vol. 3: Isolated Compounds H-M

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# Encyclopedia of Traditional Chinese Medicines

Molecular Structures, Pharmacological Activities, Natural Sources and Applications

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# Preface

A significant preoccupation of modern traditional Chinese medicine (TCM) research has been the characterization of TCM components, such as pertain to their isolation, purification, structural determination, and pharmacological activity. As a reference tool, this *Encyclopedia of Traditional Chinese Medicines* presents a comprehensive and integrative work on surveying TCM plant sources, chemistry, pharmacology and medicinal effects and indications in a systematic manner.

This encyclopedia is an integrated achievement of a long-term TCM research project by the authors at the Chinese Academy of Sciences<sup>[1-4]</sup>, involving three parts and now organized in six volumes:

Part I (Volumes 1 to 4 and part of Volume 5) provides structural, physical, pharmacological and natural source information on 23,033 isolated chemicals captured from 5,535 references, basically up to year 2005. A great deal of effort has been paid on overlapping or contradictory data in order to provide readers with an accurate and reliable resource.

Part II (last part of Volume 5) describes 6,926 TCM plants and congeners, together with their medicinal effects and indications. The contents of Part I and Part II are all organized in alphabetical order.

Part III (Volume 6) includes seven indexes produced by a computer program. Based on the indexes, users can readily find concerned contents in multiple ways.

With this encyclopedia, the authors attempt to provide a bridge for the communication between the TCM system and Western medicinal systems, and a platform with multiple-subjects in support of research and development of the health sciences.

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Sep, 2010, Beijing

- 
- [1] Xinjian Yan, Jiaju Zhou and Guirong Xie, *Traditional Chinese Medicines: Molecular structures, natural sources, and applications*, 1st edition, Ashgate Publishing house, 1999
- [2] Jiaju Zhou, Guirong Xie and Xinjian Yan, *Traditional Chinese Medicines: Molecular structures, natural sources, and applications*, 2nd edition, Ashgate Publishing house, 2002
- [3] Jiaju Zhou, Guirong Xie and Xinjian Yan, *Handbook of Chemical Components in Plant Origins of Traditional Chinese Medicines*, Chemical Industry Press, Beijing, 2004 (in Chinese)
- [4] Jiaju Zhou, Guirong Xie and Xinjian Yan, *Data Collection of Chemical Components in Plant Origins of Traditional Chinese Medicines*, Vol 1-3, Science Press, Beijing, 2009 (in Chinese)



# Introduction

This encyclopedia mainly consists two parts - compound and plant. Its core content is the structural and pharmacological information of 23,033 phytochemicals, as well as medical effects and indications of 6,926 plant species from which the phytochemicals were isolated. The compounds, i.e. phytochemicals, are ordered alphabetically, and their ordinal numbers are used as compound unique codes. The plant species are coded from T0001 to T6926. With this code system, the complicated “many to many” relationship between compounds and plants can be clearly expressed, and any individual compound or plant could be located easily in this 6 volumes book.

## 1. Compound Entry

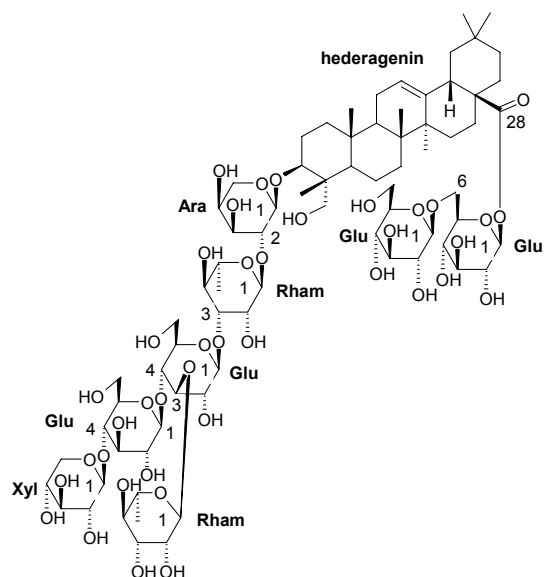
**Format of Compound Entry.** A compound entry starts with a title line, in which there are two items: the compound’s unique code and main name. Following the title line is the compound physical, pharmacological and source information, which may include 8 items:

**Title line (code number, main name)**

- A. Synonyms of the compound (if any);
- B. CASRN number (if any);
- C. Formula (relative molecular mass);
- D. Physicochemical properties;
- E. Pharmacological data (if any);
- F. Source(s);
- G. Reference(s);
- H. Graphic structure.

**Chemical Names and Synonyms.** Generally, a compound may have one scientific name and several trivial names. In the encyclopedia, based on original articles, we select one name as the “main name” (appeared at the title line of each compound entry), and use it to alphabetically order the 23,033 compounds in the first 5 volumes. The main name is either a scientific name or a trivial name. All of other names of each compound, if any, are presented after the title line.

**Stereochemistry of Chemical Structure.** We protracted all compound structures down to atom-bond level including complicated glycosides, with stereo-chemical information based on the data in the original papers. For example, the structure with full stereochemistry of compound 22,834 (isolated from CHUAN XU DUAN *Dipsacus asperoides*) is:



3-O-[ $\beta$ -D-Xylopyranosyl(1 $\rightarrow$ 4)- $\beta$ -D-gluco-pyranosyl(1 $\rightarrow$ 4)]  
 [ $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 3)]- $\beta$ -D-gluco-pyranosyl(1 $\rightarrow$ 3)-  
 $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranosyl **hederagenin**-  
 28-O- $\beta$ -D-gluco-pyranosyl(1 $\rightarrow$ 6)- $\beta$ -D-gluco-pyranoside

**Normalization of Pharmacological Data.** More than 8,000 TCM components in this encyclopedia have a variety of pharmacological data, which are valuable not only for the study of TCM, but also for the development of Western medicine. Because different expressions are used for the same kind of data in different articles, we have to define and normalize thousands pharmacological terms, so that the data could be expressed by a unified way, and be easily understood by readers.

The pharmacological terms in the encyclopedia are presented by a multi-layered structure. In the top layer, there are around 20 types of pharmacological activity terms, they are cytotoxic (*in vitro* anticancer), antineoplastic (*in vivo* anticancer), antibacterial, antifungal, antiviral, anti-HIV, anti-inflammatory, antioxidant, antimalarial, enzyme inhibitors, NO production inhibitors, cardiovascular activity, smooth muscle relaxant and stimulant, toxin and medium lethal dose LD<sub>50</sub>, and so forth. For each term there is a regulation about how to describe related pharmacological data. The following is an example:

**Term name** (*in vitro/in vivo*,  
 target cell **1**, quantitative data,  
 control Compound, control's data;  
 target cell **2**, quantitative data,  
 control Compound, control's data;  
 target cell **3**, quantitative data,  
 control Compound, control's data;  
 terse description of related mechanism if any).

Under the subtitle “Pharm:” of compound entry 248 (17-Acetoxyabda-7,12(*E*),14-triene), a set of bio-data is presented as follows:

Pharm: **Cytotoxic** (*in vitro*,  
 BT474 human galactophore cancer cell, IC<sub>50</sub> = 4.7µg/mL,  
 control Doxorubicin hydrochloride, IC<sub>50</sub> = 0.08µg/mL;  
 CHAGO human undifferentiated lung cancer cell, IC<sub>50</sub> = 5.7µg/mL,  
 control Doxorubicin hydrochloride, IC<sub>50</sub> = 2.3µg/mL;  
 HepG2 human liver cancer cell, IC<sub>50</sub> = 6.5µg/mL,  
 control Doxorubicin hydrochloride, IC<sub>50</sub> = 0.9µg/mL;  
 Kato3 human gastric cancer cell, IC<sub>50</sub> = 5.3µg/mL,  
 control Doxorubicin hydrochloride, IC<sub>50</sub> = 1.7µg/mL;  
 SW620 human colorectal adenocarcinoma cell, IC<sub>50</sub> = 5.6µg/mL,  
 control Doxorubicin hydrochloride, IC<sub>50</sub> = 1.1µg/mL).

In order to standardize abbreviations of cancer cells, such as BT474, CHAGO, etc., we defined and used 270 cancer cell codes (CCC) in the encyclopedia. For explanations of these codes, please see “Cancer Cell Codes in the Pharmacological Models” in Volume 1 of the encyclopedia.

By means of the formatted and structuralized methods, we normalized expressions of most pharmacological data appeared in the encyclopedia. For complete information of all 3367 normalized pharmacological activity terms, please see “Compound Pharmacological Activities Index” in Volume 6.

## 2. Plant Entry

**One Species One Entry.** Conventionally, a TCM name may include more than one plant species that have the same medical functions; therefore, a plant may not have an independent TCM entry and may be described under a TCM name. In this book, modern botany classification regulation is adopted and each plant species has an independent entry.

For example, traditional Chinese medicine DAN SHEN includes three species. They are equivalent in both effects and indications in TCM practice. In this encyclopedia, we defined three plant entries for each one of them.

T5680 *Salvia miltiorrhiza* (Lamiaceae); DAN SHEN; Danshen;  
 T5681 *Salvia miltiorrhiza* f. *alba* (Lamiaceae); BAI HUA DAN SHEN; Whiteflower Danshen;  
 T5688 *Salvia przewalskii* (Lamiaceae); GAN XI SHU WEI CAO; Przewalsk Sage.

With this method, we are able to smoothly link TCM information with that of modern botany.

**Simplified Latin Name.** For each TCM plant or TCM congener, four names are used in the encyclopedia. They are Latin name, English name, PIN-YIN name and Chinese

name, while the Chinese name only appears in TCM Plants PIN-YIN/Chinese Names Index” not in the main part of the book. For plant Latin name (e.g. scientific name), we use a simplified nomenclature, in which the nomenclator(s) information is not included. For example the Latin name of Chinese Angelica (DANG GUI) in the encyclopedia is “*Angelica sinensis*”, not “*Angelica sinensis* (Oliv.) Diels”.

**Family Name.** According to the “International Code of Botanical Nomenclature” (2007), the following eight authoritative family names are used in the encyclopedia. The family names of long usage, which are not used in are the encyclopedia, indicated in parentheses:

Apiaceae (Umbelliferae);  
 Arecaceae (Palmae);  
 Asteraceae (Compositae);  
 Brassicaceae (Cruciferae);  
 Clusiaceae (Guttiferae);  
 Fabaceae (Leguminosae);  
 Lamiaceae (Labiatae) and  
 Poaceae (Gramineae).

**PIN-YIN Name and Chinese Name.** A simplified PIN-YIN name system is used in the encyclopedia. That is not to include the four-tone mark. However, there are exceptions. Among the thousand PIN-YIN names in the book, there are seven confusing cases. For each mistakable name, a superscript is attached to the name for indicating its four-tone in order to distinguish it from other plant species. For example: BAI MAO GEN<sup>(1)</sup> and BAI MAO GEN<sup>(4)</sup> are two different TCM plants:

T3416 *Imperata cylindrica* var. *major* (Poaceae); BAI MAO GEN<sup>(1)</sup>; Lalang Grass Rhizome.  
 T3309 *Hydrastis canadensis* (Ranunculaceae); BAI MAO GEN<sup>(4)</sup>; Golden-seal.

Other six cases are:

T1449 *Cirsium japonicum* (Asteraceae); DA JI<sup>(4)</sup>; Japanese Thistle.  
 T2608 *Euphorbia pekinensis* (Euphorbiaceae); DA JI<sup>(3)</sup>; Peking Euphorbia.  
 T4124 *Matricaria chamomilla* [Syn. *Matricaria recutita*] (Asteraceae); MU<sup>(3)</sup> JU; Mayweed.  
 T0197 *Aegle marmelos* (Rutaceae); MU<sup>(4)</sup> JU; Sepiaria.  
 T1039 *Bruguiera gymnorrhiza* (Rhizophoraceae); MU LAN<sup>(3)</sup>; Common Bruguiera.  
 T3423 *Indigofera tinctoria* (Fabaceae); MU LAN<sup>(2)</sup>; True Indigo.  
 T6798 *Vitis vinifera* (Vitaceae); PU<sup>(2)</sup> TAO; European Grape.  
 T6267 *Syzygium jambos* (Myrtaceae); PU<sup>(3)</sup> TAO; Roseapple.  
 T2107 *Dendrobium nobile* (Orchidaceae); SHI HU<sup>(4)</sup>; Noble Dendrobium.  
 T2646 *Evodia rutaecarpa* var. *officinalis* (Rutaceae); SHI HU<sup>(3)</sup>; Official Evodia.  
 T1221 *Caryopteris divaricata* (Verbenaceae); YOU<sup>(2)</sup>; Divaricate Bluebeard.  
 T1478 *Citrus grandis* (Rutaceae); YOU<sup>(4)</sup>; Pummelo.

**Translation of TCM Effects Terms.** In the Volume 5 of the encyclopedia, 6,926 TCM Plant entries list in alphabetical order of *Latin names*, including 2,923 original TCM plants (including few of animals)<sup>[R01-R04]</sup> and 4,003 congeners (including a few of non-TCM medicinal plants). For each TCM plant, two most important features are traditional TCM effects and indications.

For preparing this encyclopedia, one of the greatest challenges is how to correctly translate each TCM term into correspondent English, so that Western readers are able to understand the true meaning of the content in the book. After comparing several translation systems, we decided to use Wiseman's terminological system<sup>[R05-R07]</sup> for this book.

Wiseman's system obeys two most important principles: (1). The English-language terms should be faithful to the original concepts in traditional Chinese medicine. (2). The English-language TCM terminology should be flexible enough to allow modifications and extensions so that derivative effects can be described by a structuralized manner. For instance, the term "quicken blood" describes a general effect meaning "activating blood flow" or "promoting blood circulation". Elaboration of this term produces "quicken blood and transform stasis", "quicken blood and relieve pain", "quicken blood and regulate menstruation", and so on. The following illustrations are an example of the structuralized expressions related to the term "quicken blood":

quicken blood and disinhibit water  
 quicken blood and dispel stasis  
 quicken blood and dispel wind  
 quicken blood and disperse swelling  
 quicken blood and disperse welling abscess  
 quicken blood and dissipate binds  
 quicken blood and dissipate stasis  
 quicken blood and free menstruation  
 quicken blood and free network vessels  
 quicken blood and free vessels  
 quicken blood and joint bones  
 quicken blood and move *qi*  
 quicken blood and move stasis  
 quicken blood and nourish heart  
 quicken blood and promote milk  
 quicken blood and quiet spirit  
 quicken blood and regulate menstruation  
 quicken blood and relieve pain  
 quicken blood and resolve toxin  
 quicken blood and settle pain  
 quicken blood and soothe sinews  
 quicken blood and stanch bleeding  
 quicken blood and strengthen sinews  
 quicken blood and transform stasis  
 quicken blood and vessels



**Translation of TCM Indications Terms.** Based on Wiseman's terminological system, "Chinese-English Dictionary of Traditional Chinese Medicine" compiled by Guangzhen Gao *et al.*<sup>[R08]</sup>, "An English-Chinese Medical Dictionary, Second Edition" compiled by Weiyi Chen *et al.*<sup>[R09]</sup>, and other reference dictionaries, we defined over 3,800 standard indication terms for translating TCM indications terms from Chinese to English. Among the 3,800 terms, 2,526 terms are actually used in the encyclopedia, in which 85% terms are traditional TCM terms and the rest 15% are common modern medicinal terms. Some typical examples of traditional TCM indication terms are as follows:

*yin* vacuity internal heat  
*yin* vacuity lung dryness  
*yin* vacuity tidal fever  
chest impediment  
chest impediment and heart pain  
chest impediment and heart pain over back  
chest oppression and pain  
chest oppression with breathe hard  
distention pain in rib-side  
distention pain in stomach duct  
distention pain in stomach duct and abdomen  
externally contracted summer heat-damp  
externally contracted wind evil  
externally contracted wind-cold  
externally contracted wind-heat  
knocks and falls  
sores  
sores clove boil  
swelling of sores and boils  
sore scab and lichen  
toxin swelling of sores

In summary, this encyclopedia provides a collection of more than 23,000 TCM chemical components isolated from natural resources and a large number of pharmacological activity data of these components. It may be used not only as a handbook to look for structures and pharmacological activities of TCM chemical components and source plant information, but also a fundamental platform for studying TCM with a systematic and integrative approach.

## Acknowledgements

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# How to Use the Books

## 1. Three Kinds of “Many to Many” Relationships

To help readers effectively search and use of the books, authors strongly suggest readers being familiar with the structure of the encyclopedia and certain important linkers or pointers between different data sets.

Firstly, in order to avoid confusing cases, please keep in mind the following three features of the book:

(a) In the encyclopedia, all of pharmacological data belong to compounds, not to plants. In other words, the encyclopedia doesn't include plants' pharmacological data.

(b) All effect and indication terms belong to TCM plants, not to compounds. And almost all of effect terms as well as 85% indication terms are pure Chinese traditional concepts.

(c) In the encyclopedia, there are three kinds of “many to many” relationships: (i), compounds to plants, which is the most important relationship. (ii), pharmacological data to compounds in the molecular level only. (iii), plants to effects/indications in the species level.

Pharm. data ↔ Compound 1		Plant T0001 ↔ effects, indications
Pharm. data ↔ Compound 2		Plant T0002 ↔ effects, indications
Pharm. data ↔ Compound 3	↔	Plant T0003 ↔ effects, indications
.....		.....
Pharm. data ↔ Compound 23032		Plant T6925 ↔ effects, indications
Pharm. data ↔ Compound 23033		Plant T6926 ↔ effects, indications
(Molecular level)		(Species level)

### Sketch Map of Three Important “Many to Many” Relationships

## 2. Seven Useful Indexes

In Volume 6, there are seven indexes for data searching.

The indexes 1-3 are tools to search compounds from different starting-points:

**Index 1** (Compound Pharmacological Activity Index) links pharmacological terms

with related compound codes. For example, if there is a question as:

“Which compounds have *in vitro* cytotoxic activity against human breast cancer cells?”

From the index 1, the answer can easily be obtained as follows:

Cytotoxic, BC hmn breast cancer cells 24, 349, 526, 2244, 3416, 3429, 3708, 4775, 5095, 6759, 6759, 6759, 12453, 12454, 15494, 15495, 18515, 20671.

Cytotoxic, BC-1 hmn breast cancer cells 1277, 2260, 5064, 5327, 6759, 6759, 8220, 8221, 8222, 8235, 10250, 10297, 10511, 11353, 13489, 13490, 13491, 13492, 13493, 13494, 13495, 15919, 17008, 18866, 20809.

Cytotoxic, BCA-1 hmn breast cancer cells 6759, 13468, 13469, 13470, 15739.

Cytotoxic, Bcap37 hmn breast cancer cells 843, 11392, 13123, 16183, 17717, 18499.

Then, from compounds code numbers, one can get detailed data for each compound.

**Index 2** (Compound Molecular Formula Index) connects a molecular formula to its all isomers. For example, there are five isomers with formula  $C_{45}H_{76}O_{18}$ :

$C_{45}H_{76}O_{18}$

Abutiloside F, 40

Asp-IV, 1905

Asp-V, 1906

Trigoneoside IIIa, 21669

Trigoneoside IIIb, 21670

**Index 3** (Compound Synonym Index) is useful for searching a compound from a known name. A strong suggestion to readers is that when searching a compound from a known name, to search twice probably is necessary: firstly from entry title in the encyclopedia text and then from the index 3.

The indexes 4–7 are tools to search TCM plants:

**Index 4** (TCM Plant English Name Index) links a Plant English Name to other names of the plant, for example:

Chinese Angelica = T0495 *Angelica sinensis* = DANG GUI

Siberian Phlojodicarpus = T4804 *Phlojodicarpus sibiricus* = ZHANG GUO QIN

Dahurian Angelica = T0478 *Angelica dahurica* [Syn. *Angelica porphyrocaulis*] = BAI ZHI

Gigantic Angelica = T0483 *Angelica gigas* = CHAO XIAN DANG GUI

Narrowleaf Angelica = T0476 *Angelica anomala* = XIA YE DANG GUI

**Index 5** (TCM Plant PIN-YIN and Chinese Name Index) links PIN-YIN name to Latin name and/or English name, for example:

BAI HUA QIAN HU = T4768 *Peucedanum praeruptorum* = Whiteflower Hogfennel

BAI HUA SHE GAN = T3457 *Iris dichotoma* = Vesper Iris

BAI HUA SHE SHE CAO = T4485 *Oldenlandia diffusa* [Syn. *Hedyotis diffusa*] = Spreading Hedyitis

**Index 6** (TCM Plant Traditional Effects Index) and **Index 7** (TCM Plant Traditional Indications Index) connect specific effect and/or indication to related plants.

For example, to search all plants with effect “nourish heart and quiet spirit”, the result is:

**nourish heart and quiet spirit:**

T0944 *Biota orientalis* [Syn. *Thuja orientalis*; *Platyclusus orientalis*],  
 T1292 *Celastrus orbiculatus* [Syn. *Celastrus articulatus*],  
 T1381 *Choerospondias axillaris*,  
 T4194 *Menyanthes trifoliata*,  
 T4400 *Nelumbo nucifera*,  
 T4902 *Pimpinella thelungiana*,  
 T5108 *Polygonum multiflorum*,  
 T5497 *Rhodiola kirilowii*,  
 T5701 *Salvia yunnanensis*.

If searching all plants with indication “angina pectoris” (a modern medicinal term), “externally contracted wind-cold” (a TCM term), and “externally contracted wind-heat” (a TCM term), you will obtain the following results:

**angina pectoris:** T1215 *Carthamus tinctorius*, T1395 *Chrysanthemum morifolium* [Syn. *Dendranthema morifolium*], T1775 *Crataegus pinnatifida*, T1778 *Crataegus pinnatifida* var. *major*, T2274 *Dryobalanops aromatica*, T2389 *Epimedium acuminatum*, T2390 *Epimedium brevicornum*, T2392 *Epimedium davidii*, T2394 *Epimedium elongatum*, T2398 *Epimedium koreanum*, T2401 *Epimedium pubescens*, T2402 *Epimedium sagittatum*, T2404 *Epimedium sutchuenense*, T2406 *Epimedium wushanense*, T2846 *Ganoderma japonicum* [Syn. *Ganoderma sinense*], T2848 *Ganoderma lucidum*, T2964 *Ginkgo biloba*, T3388 *Ilex chinensis* [Syn. *Ilex purpurea*], T3396 *Ilex pubescens*, T3397 *Ilex pubescens* var. *glaber*, T3875 *Liriope spicata* var. *prolifera*, T3925 *Loranthus parasiticus* [Syn. *Loranthus chinensis*; *Taxillus chinensis*], T3926 *Loropetalum chinense*, T4303 *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*, T4507 *Ophiopogon japonicus*, T4608 *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*], T4953 *Piper longum*, T5312 *Pueraria edulis*, T5313 *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*], T5316 *Pueraria omeiensis*, T5318 *Pueraria phaseoloides*, T5320 *Pueraria thomsonii*, T5680 *Salvia miltiorrhiza*, T5681 *Salvia miltiorrhiza* f. *alba*, T5688 *Salvia przewalskii*, T6510 *Trichosanthes kirilowii*, T6513 *Trichosanthes rosthornii* [Syn. *Trichosanthes uniflora*], T6584 *Typha angustata*, T6585 *Typha angustifolia*, T6587 *Typha latifolia*.

**externally contracted wind-cold:** T4039 *Magnolia grandiflora*, T4445 *Notopterygium forbesii* [Syn. *Notopterygium franchetii*], T4446 *Notopterygium incisum*, T4956 *Piper mullesua*, T5727 *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*].

**externally contracted wind-heat:** T0480 *Angelica decursiva* [Syn. *Peucedanum decursivum*], T1395 *Chrysanthemum morifolium* [Syn. *Dendranthema morifolium*], T1933 *Cyclea sutchuenensis*, T2798 *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*], T3819 *Ligusticum brachylobum*, T4413 *Nepeta cataria*, T4761 *Peucedanum longshengens*, T4768 *Peucedanum praeruptorum*, T4769 *Peucedanum rubricaulis*, T6791 *Vitex rotundifolia* [Syn. *Vitex trifolia* var. *simplicifolia*], T6793 *Vitex trifolia*.

### 3. Data Survey Example of Compound Entry

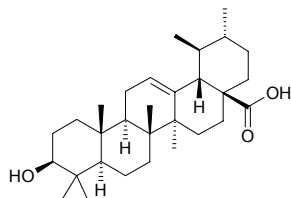
At last, we would like to take Ursolic acid (compound code 22270 in the books) as a data survey example. Under this compound there are a quite number of data as follows:



**22270 Ursolic acid**

$\beta$ -Ursolic acid [77-52-1] C<sub>30</sub>H<sub>48</sub>O<sub>3</sub> (456.72).

White solid powder (chloroform–methanol), mp 298~294°C, 265~267°C.

**Pharm: (27 items)**

- Cytotoxic** (KB, ED<sub>50</sub> > 25µg/mL, control Doxorubicin, ED<sub>50</sub> = 0.12µg/mL; Hep3B, ED<sub>50</sub> > 25µg/mL, control Doxorubicin, ED<sub>50</sub> = 0.14µg/mL; Colon205, ED<sub>50</sub> > 25µg/mL, control Doxorubicin, ED<sub>50</sub> = 0.10µg/mL; HeLa, ED<sub>50</sub> > 25µg/mL, control Doxorubicin, ED<sub>50</sub> = 0.11µg/mL)<sup>[4369]</sup>;
- cytotoxic** (*in vitro*, HONE-1 cell, IC<sub>50</sub> = (8.8±1.5)µmol/L, control Etoposide, IC<sub>50</sub> = (0.5±0.2)µmol/L, *cis*-Platin, IC<sub>50</sub> = (3.2±0.5)µmol/L; KB cell, IC<sub>50</sub> = (8.2±2.7)µmol/L, Etoposide, IC<sub>50</sub> = (0.9±0.3)µmol/L, *cis*-Platin, IC<sub>50</sub> = (4.4±0.9)µmol/L; HT29 cell, IC<sub>50</sub> = (4.7±1.5)µmol/L, Etoposide, IC<sub>50</sub> = (2.4±0.5)µmol/L, *cis*-Platin, IC<sub>50</sub> = (5.7±1.1)µmol/L)<sup>[5254]</sup>;
- antineoplastic** (liver cancer cells *in vitro*, mus ascites carcinoma *in vivo*, life was prolonged);
- antibacterial** (*Escherichia coli*, IZD = 13~15mm, control Chloramphenicol, IZD = 16~20mm, control DMSO (4%), IZD < 10mm; *Staphylococcus aureus*, IZD = 10~12mm, control Chloramphenicol, IZD = 16~20mm, control DMSO (4%), IZD < 10mm; *Bacillus subtilis*, IZD = 13~15mm; control Chloramphenicol, IZD = 16~20mm, control DMSO (4%), IZD < 10mm)<sup>[5315]</sup>;
- antibacterial** (*Staphylococcus* spp. *in vitro*, MIC = 300µg/mL, gram-positive bacteria *in vitro*, MIC = 50~400µg/mL, gram-negative bacteria *in vitro*, MIC = 200~800µg/mL, microzyme *in vitro*, MIC = 100~700µg/mL);
- antitubercular** (*Mycobacterium tuberculosis*, MIC = 41.9µg/mL, cytotoxic, Vero cells, IC<sub>50</sub> = 46.5µg/mL, SI (IC<sub>50</sub>/MIC) = 1.11, positive control Rifampin, MIC = 0.03µg/mL, IC<sub>50</sub> = 98.3µg/mL, SI = 3277)<sup>[4986]</sup>;
- anticonvulsant** (induced by corazol);
- anti-inflammatory** (rat, induced by embedding woolball, 12.5mg/(kg·d) ip, 7 days, effective);
- anti-inflammatory** (*in vitro*, murine macrophage RAW264.7 Cells, inhibits LPS-induced NO and PGE<sub>2</sub> release)<sup>[5016]</sup>;
- COX-2 enzyme selective inhibitor** (mean IC<sub>50</sub> of isomers = 130µmol/L)<sup>[4415]</sup>;
- COX-2 enzyme inhibitor** (PMA-treated hmn mammary and oral epithelial cells, molecular mechanisms is mediated by a cAMP response element in the COX-2 promoter, associated with inhibition of protein kinases)<sup>[4415]</sup>;
- antipyretic** (clearly reduces normal body temperature of rat);
- reduces serum transaminase** (animal, 100mg/kg);
- antitrypanosomal** (epimastigotes of *Trypanosoma cruzi*, MLC = 6.2µmol/L, control Gentian violet, MLC = 6.2µmol/L)<sup>[2579]</sup>;
- mucin release stimulator** (acts directly on airway mucin-secreting cells, increased mucin release (40~50)% above control at the highest concentrations 0.00001~0.001mol/L, possible use to treatment of chronic airway diseases)<sup>[4084]</sup>;
- platelet aggregation inhibitor** (2~5mg/mL collagen-induced, IC<sub>50</sub> = (511±4)µmol/L, control ASA, IC<sub>50</sub> = (420±3)µmol/L; 1~4µmol/L epinephrine-induced with 0.8~1.0mg/mL collagen, IC<sub>50</sub> = (82.6±2.8)µmol/L, ASA, IC<sub>50</sub> = (53.0±4.5)µmol/L; 10~40µmol/L Sodium arachidonate-induced with 0.8~1.0mg/mL collagen, IC<sub>50</sub> =

(669±12)μmol/L, ASA, IC<sub>50</sub> = (66.0±2.1)μmol/L; 1~5μmol/L PGH<sub>2</sub>/TXA<sub>2</sub> receptor agonist U46619-induced with 0.8~1.0mg/mL collagen, IC<sub>50</sub> > 1000μmol/L, ASA, IC<sub>50</sub> = (340±12)μmol/L)<sup>[4994]</sup>;

**tissue factor inhibitor inactive**<sup>[5387]</sup>;

**antirheumatic**<sup>[5341]</sup>;

**anti-diabetic**<sup>[5341]</sup>;

**antiulcer**<sup>[5341]</sup>;

**hypolipidemic**<sup>[5341]</sup>;

**anti-atherosclerotic**<sup>[5341]</sup>;

**anti-HIV**<sup>[5341]</sup>;

**TGF-β1 antagonist** (inhibits the binding of <sup>125</sup>I-TGF-β1 to its receptor in Balb/c 3T3 cell, IC<sub>50</sub> = (6.9±0.8)μmol/L, suggests TGF-β1 antagonistic activity is responsible, at least in part, for therapeutic efficacy of *Clerodendranthus spicatus* to treat humans with renal disease)<sup>[5496]</sup>;

**glucocorticoid** (enhances glycogen in liver, reduces glycogen in heart and striated muscles);

**LD<sub>50</sub>** (mus, ip) = 680mg/kg.

### Sources: (52 species)

BAI HUA SHE SHE CAO *Oldenlandia diffusa* [Syn. *Hedyotis diffusa*] (whole herb: mean content of 16 origins = 0.211%)<sup>[5508]</sup>;

BI LU GOU TENG *Uncaria tomentosa*,

CHE QIAN *Plantago asiatica* (whole herb: content scope = 0.28%~2.32%, mean content = 0.97%)<sup>[5508]</sup>;

CHI NAN *Syzygium buxifolium*,

CHONG YA YAO *Isodon ternifolius*,

CI WU JIA YE *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*],

DA CHE QIAN *Plantago major*,

DA ZAO *Ziziphus jujuba* (ripe fruit: mean content = 0.016%)<sup>[5508]</sup>,

DAN SHEN *Salvia miltiorrhiza*,

DIAN NAN HONG HOU KE *Calophyllum polyanthum* (seed: yield = 0.0064%dw),

DONG LING CAO *Rabdosia rubescens* (whole herb: mean content = 0.414%<sup>[5508]</sup>; leaf: mean content = 0.573%)<sup>[5508]</sup>;

DU ZHONG *Eucommia ulmoides*,

DUAN TING SHAN MAI DONG *Liriope muscari* (tuber),

GOU GU YE *Ilex cornuta* (leaf: mean content = 0.96%)<sup>[5508]</sup>,

GUANG JING QIAN CAO *Rubia wallichiana* (stem),

HONG HUA LU TI CAO *Pyrola incarnata* (whole herb: content = 2.06%)<sup>[5508]</sup>,

HU BEI SHAN ZHA *Crataegus hupehensis* (dried ripe fruit: mean content = 0.455%),

JIAN YE TOU WU GEN *Ligularia sagitta*,

LIAN QIAN CAO *Glechoma lungituba*,

LIAN QIAO *Forsythia suspensa*,

LIU QIU SHE GEN CAO *Ophiorrhiza liukiensis* (whole herb),

MA BIAN CAO *Verbena officinalis* (whole herb: mean content of 5 batch samples = 0.227%)<sup>[5508]</sup>,

MAO CAO LONG *Ludwigia octovalvis* (whole herb: yield = 0.00012%dw),

MAO PAO TONG *Paulownia tomentosa*,

MAO XU CAO *Clerodendranthus spicatus*,

MU GUA *Chaenomeles sinensis*,

NV ZHEN ZI *Ligustrum lucidum*,

PI PA YE *Eriobotrya japonica* (dried leaf: mean content = 0.677%)<sup>[5508]</sup>,

PI PA YE *Eriobotrya japonica* (stem and leaf),

PING CHE QIAN *Plantago depressa* (whole herb: mean content = 0.276%)<sup>[5508]</sup>,

RI BEN LU TI CAO *Pyrola japonica*,

RONG SHU *Ficus microcarpa* (aerial root),  
 SHAN DI XIANG CHA CAI *Isodon oresbia*,  
 SHAN LI HONG *Crataegus pinnatifida* var. *major*,  
 SHAN ZHA *Crataegus pinnatifida* (fruit: content scope = 0.31%~0.56%)<sup>[5501]</sup>,  
 SHAN ZHU YU *Cornus officinalis* [Syn. *Macrocarpium officinale*] (dried ripe fruit: content  
 scope = 0.24%~0.32%)<sup>[5501]</sup>, mean content = 0.263%)<sup>[5508]</sup>,  
 SHI NAN *Photinia serrulata* (leaf: mean content = 1.50%)<sup>[5508]</sup>,  
 SHI SHENG BIAN LEI *Gentianopsis paludosa*,  
 SHI YE *Diospyros kaki* (dried leaf: mean content = 0.784%)<sup>[5508]</sup>,  
 SHU HUA JIE CAO *Valeriana laxiflora* (aerial parts and root),  
 SUAN ZAO *Ziziphus jujuba* var. *spinosa* (ripe fruit: content = 0.030%)<sup>[5508]</sup>,  
 SUO YANG *Cynomorium songaricum* (fleshy stem: content = 0.78%)<sup>[5508]</sup>,  
 WEI LING CAI *Potentilla chinensis*,  
 WU GENG WU JIA PI *Acanthopanax sessiliflorus* (fruit),  
 XIA KU CAO *Prunella vulgaris* (dried spike: content = 0.780%)<sup>[5508]</sup>,  
 YANG MEI SHU PI *Myrica rubra* (bark: content = 0.027%),  
 YE SHAN ZHA *Crataegus cuneata* (dried ripe fruit: mean content of 3 origins =  
 0.399%)<sup>[5508]</sup>,  
 YI LANG QING LAN *Dracocephalum kotschyi*,  
 ZHI ZI *Gardenia jasminoides* [Syn. *Gardenia florida*] (dried ripe fruit: mean content =  
 0.041%)<sup>[5508]</sup>,  
 ZHOU YE LU TI CAO *Pyrola rugosa* (whole herb: content = 3.00%)<sup>[5508]</sup>,  
*Cussonia bancoensis*,  
 Occurs in many plants.

**Ref:** 4, 367, 428, 454, 501, 592, 595, 600, 658, 660, 2579, 3005, 3061, 4084, 4163, 4369,  
 4415, 4527, 4767, 4772, 4986, 4994, 5016, 5254, 5315, 5382, 5387, 5341, 5496, 5501,  
 5508.

# Abbreviations and Symbols

12(S)-HETE	12(S)-Hydroxy-5,8,10,14-EicosaTetraEnoic acid	cAMP-PDE	cAMP-phosphodiesterase
<sup>125</sup> I-TGF- $\beta$ 1	<sup>125</sup> I-Transforming Growth Factor- $\beta$ 1	CAPE	Caffeic Acid Phenethyl Ester
5-FU	5-FluoroUracil	CB	cytochalasin B
5-HT	5-HydroxyTryptamine (serotonin)	CC	macrophage inflammatory protein (MIP-1 $\beta$ ), monocyte chemotactic protein (MCP-2), and C lymphotactin (ltn) (a chemokine family)
95%FL (=CI <sub>95</sub> )	95% Fiducial Limits (=95% Confidence Interval)	CC <sub>0</sub>	Minimum cytotoxic concentration
AA	Arachidonic Acid	CC <sub>50</sub>	IC <sub>50</sub> of cytotoxicity (concentration of the 50% cytotoxic effect)
AAPH	2,2'-Azo-bis-(2-AmidinoPropane)-diHydrochloride	CCR1	chemokine receptor 1
ABTS <sup>+</sup>	2,2'-Azino-Bis-(3-ethylbenzThiazoline 6-Sulphonic acid), radical	CD	concentration required to double enzyme (induction) activity
ACAT	Acyl-CoA Cholesterol acyltransferase	CD	Concentration required to double quinone reductase (induction) activity
ACE	Angiotensin Converting Enzyme	CD <sub>50</sub>	medium Convulsive Dose
Ach	Acetylcholine	cGMP	cyclic guanosine monophosphate
AChE	Acetylcholinesterase	cGMP-PDE	cGMP-phosphodiesterase
ACTH	AdrenoCorticoTropic Hormone	CGN	<i>cis</i> -Golgi network
AD	Alzheimer's disease	CGRP	Calcitonin gene-related peptide
ADM	adriamycin	CHO	Chinese hamster ovarian
ADP	adenosine diphosphate	CI	Chemopreventive index (=IC <sub>50</sub> /CD)
AG	aminoguanidine	CI <sub>95</sub> (=95%FL)	95% Confidence Interval (=95% Fiducial Limits)
AggRt	aggregation rate	CIC	complete inhibiting concentration
AIDS	acquired immunodeficiency syndrome	CIMC	complete inhibiting minimum concentration
ALS	amyotrophic lateral sclerosis	CINC-1	cytokine-induced neutrophil chemoattractant 1
ALT	alanine aminotransferase	CMV	Cytomegalovirus
AMP	adenosine monophosphate	CNQX	6-Cyano-7-nitroquinoxaline-2,3-dione (non-NMDA receptor antagonist)
AMV	avian myeloblastosis virus	CNS	central nervous system
AP	angina pectoris	ConA	concanavalin A
AP-1	activator protein-1	COX	cyclooxygenase
APN	Aminopeptidase N	COX-1	cyclooxygenase-1
APV	<i>dl</i> -2-Amino-5-phosphonovaleric acid (a competitive antagonist of the NMDA receptor)	COX-2	cyclooxygenase-2
aq.	aqueous solution	CPT	camptothecin
ASA	AcetylSalicylic Acid	CRF	corticotrophin releasing factor
AST	aspartate transaminase; aspartate aminotransferase	CRH-1	corticotrophin releasing hormone-1
AT-III	Antithrombase-III	CRP	C-reactive protein
ATPase	Adenosine triphosphatase	CV-3988	<i>rac</i> -3-( <i>N</i> -octadecylcarbomoyloxy)-2-methoxypropyl 2-thiazoliethyl phosphate
AZT	3'-azido-3'-deoxythymidine	CVS	cardiac vascular system
BACE1	$\beta$ -Secretase	CXC	Stromal cell-derived factor (SDF)-1 $\alpha$ and IL-8 (a chemokine)
BChE	Butyrylcholinesterase	CYP1A	Cytochrome P450 1A
bFGF	basic Fibroblast Growth Factor	CYP2D6	Cytochrome P450 2D6
BHA	Butylated HydroxyAnisole; 3- <i>tert</i> -Butyl-4-HydroxyAnisole	CYP3A4	Cytochrome P450 3A4
BHT	Butylated HydroxyToluene	d	day
bid	bis in die (Latin)	DCFH	2',7'-dichlorodihydrofluorescein dye
BLM	bleomycin	DDDP	DNA-dependent DNA polymerase
bp	boiling point	dec	decomposition
BST	Brine Shrimp lethality bioassay = Brine Shrimp Test	<i>D</i> -GalN	<i>D</i> -galactosamine
<i>c</i>	concentration		
C5a	complement 5a		
cAMP	cyclic adenosine monophosphate		

DGAT	Diacylglycerol acyltransferase	GSH	Glutathione; <i>N</i> -( <i>N</i> - <i>L</i> - $\gamma$ -Glutamyl- <i>L</i> -cysteinyl)glycine
dil.	dilute	GTP	Guanosine TriPhosphate
DIZ	Diameter of Inhibitory Zone	GVHR	Graft-Versus-HostReaction
DMBA	9,10-dimethyl-1,2-benzanthracene (carcinogen); 7,12-dimethylbenz[a]anthracene (carcinogen)	h	hour
DMDP	(2 <i>R</i> ,3 <i>R</i> ,4 <i>R</i> ,5 <i>R</i> )-2,5-DihydroxyMethyl-3,4-Dihydroxy-Pyrrolidine	HAD	hmn immunodeficiency virus associated dementia
DMSO	DiMethyl SulphOxide	HBeAg	hmn type B Hepatitis, e Antigen
DNA	deoxyribonucleic acid	HBsAg	hmn type B Hepatitis, Surface Antigen
DNJ	1-Deoxynojirimucin (one kind of polyhydroxy alkaloid, glucosidase inhibitor)	HBV	Hepatitis B Virus
DOX	doxorubicin	HC <sub>50</sub>	medium Hemolytic Concentration
DPI	Diphenyleneiodonium	HCoV-229E	hmn coronavirus strain 229E
DPPH	1,1-DiPhenyl-2-PicrylHydrazyl free radical	HD	Huntington's disease
DS8000	Dextran sulphate, prepared from average Mr 8000	HER rat	Hypertensive Essential Rat
DSCG	DiSodium ChromoGlycate (anti-allergic agent)	HIV	hmn immunodeficiency virus
dw	dried weight	HIV-1	hmn immunodeficiency virus type 1
E.A.	Enzyme Activity	HIV-1 IN	hmn immunodeficiency virus type 1 integrase
EBV-EA	Epstein-Barr Virus Early Antigen	HIV-1 RT	hmn immunodeficiency virus type 1 reverse transcriptase
EC	Effective Concentration	HIV-RT	hmn immunodeficiency virus reverse transcriptase
EC <sub>50</sub>	medium Effective Concentration	hmn	human
ED	Effective Dose	HSV-1	herpes simplex virus 1
ED <sub>25</sub>	Effective Dose for 25%	HSV-2	herpes simplex virus 2
ED <sub>50</sub>	medium Effective Dose (in some cases for the medium Effective Concentration)	HVA	homovanillic acid
EGCG (EGCg)	(-)-Epigallocatechin gallate	hydroxyl radical	OH <sup>•</sup>
EGF	Epidermal Growth Factor (it protects MPP <sup>+</sup> -induced cell death)	ia	intra-arterial injection
EGFR	Epidermal Growth Factor Receptor	IAA	indole-3-acetic acid
ELAM-1	Endothelial-Leukocyte Adhesion Molecule-1	IC	Inhibiting Concentration
ELISA	Enzyme-Linked ImmunoSorbent Assay	IC <sub>50</sub>	median Inhibiting Concentration
eotaxin	eosinophilous cytotoxin	IC <sub>100</sub>	Absolute Inhibiting Concentration
ERK	Extracellular signal-Regulated Kinase	ICAM-1	Intercellular Cell Adhesion Molecule-1
ET	experimental times	ICR	Imprinting Control Region mouse
FAG	Fagomine (one kind of polyhydroxy alkaloid, glucosidase inhibitor)	id	intradermal injection
FCA	Freund's complete adjuvant	ID	Inhibiting Dose
FI	Feeding Index (= ((C-T)/(C+T)×100)	ID <sub>50</sub>	Median Inhibiting Dose
Flu-A	influenza virus type A	IFN	interferon
fMLP	<i>N</i> -formyl- <i>L</i> -Methionyl- <i>L</i> -Leucyl- <i>L</i> -Phenylalanine	IFN- $\gamma$	Interferon- $\gamma$
fp	freezing point	IgE	Immunoglobulin E
FR <sub>50</sub>	Feeding ratio when the consumed area of control disc (CCD) is 50% [FR = CTD(consumed area of treated disc)/CCD]	IgG	Immunoglobulin G
fw	fresh weight	IL	interleukin
G6PD	Glucose-6-Phosphate Dehydrogenase	IL-1	Interleukin-1
GABA	$\gamma$ -aminobutyric acid	IL-1 $\alpha$	interleukin-1 $\alpha$
GaIN	galactosamine	IL-1 $\beta$	interleukin-1 $\beta$
GI	growth inhibition	IL-2	Interleukin-2
GI <sub>50</sub>	the concentration of sample necessary to inhibit the growth to 50% of the control	IL-4	Interleukin-4
Glu	glutamate	IL-6	Interleukin-6
GOT	Glutamate-Oxaloacetate Transaminase	IL-8	Interleukin-8
Gp	Gastro protective effect	IL-10	Interleukin-10
gpg	guinea pig	IL-12	Interleukin-12
GPT	GlutamicPyruvic Transaminase	im	intramuscular injection
GRO	Growth-Related Oncogene	<i>in vitro</i>	<i>in vitro</i>
		<i>in vivo</i>	<i>in vivo</i>
		Indo	indomethacin
		iNOS	inducible Nitric Oxide Synthase
		InRt	inhibitive rate
		ip	intraperitoneal injection

i.t.	intrathecal injection	MMP	Matrix MetalloProteinases
iv	intravenous injection	MMP-2	Matrix MetalloProteinase-2
IZA	Inhibition Zone Area (mm <sup>2</sup> )	mp	melting point
IZD	Inhibition Zone Diameter (mm)	mPGES	microsomal ProstaGlandin E Synthase
J774.A1	murine monocyte/macrophage cell J774.A1	MPP+	1-methyl-4-phenylpyridinium ion (neurotoxin)
JNK	c-Jun NH <sub>2</sub> -terminal kinase	MRSA	Methicillin-Resistant <i>Staphylococcus aureus</i>
KD <sub>50</sub>	Dose required to Knock down 50% of the population of insects	MSSA	Methicillin-Sensitive <i>Staphylococcus aureus</i>
LC <sub>50</sub>	concentration at which only 50% of the cell are viable	MTC	Minimal Toxic Concentration
LC <sub>50</sub>	concentration of inhibiting luminous intensity 50%	MTT	A Cytotoxicity measurement method (tetrazolium-based colorimetric assay used for cytotoxicity bioassay, see Rubinstein L. V., et al., <i>Nat. Cancer Inst.</i> , 82, 1113-1118, 1990)
LCIC	Lowest Complete Inhibition Concentration	mus	mouse
LD	Lethal Dose	<i>n</i>	number of parallel experiments
LD <sub>100</sub>	100% Lethal Dose	nAChR	neuronal nicotinic AcetylCholine Receptor
LD <sub>50</sub>	medium Lethal Dose	NADH	reduced nicotinamide adenine dinucleotide
LDH	lactate dehydrogenase	NADPH	cytochrome C reductase
LDL	Low Density Lipoprotein	NCCLS	A standard antibacterial activity test method (see Wayne P. A., "National Committee for Clinical Laboratory Standards Performance Standards for Antimicrobial Disk Susceptibility Tests," 6th ed., Approved standards M2-A6. NCCLS, 1997)
L-NA	N <sup>o</sup> -L-nitroarginine	NDGA	Nordihydroguaiaretic acid
L-NMMA	N <sup>G</sup> -monomethyl-L-arginine	NEP	Neutral EndoPeptidase
LOX	Lipoxygenase	NF	Nuclear Factor
LPO	lipid peroxidation	NF-κB	Nuclear Factor κB
LPS	lipopolysaccharide	NFAT	Nuclear Factor of Activated T cell
LTB <sub>4</sub>	Leukotriene B <sub>4</sub>	NGF	Nerve Growth Factor
LTC <sub>4</sub>	Leukotriene C <sub>4</sub>	NMDA	N-methyl-D-aspartate
LTD <sub>4</sub>	Leukotriene D <sub>4</sub>	NO	nitric oxide
MA	maytenfolic acid	non-oral	paraoral
MA	maslinic acid	NOR1	(+/-)-(E)-4-methyl-2-[(E)-hydroxyimino]-5-nitro-6-methoxy-3-hexenamid
MA	minimal amount	NOS-2	Nitric oxide synthase type-2
MABA	Microplate Alamar Blue Assay	OCIF	OsteoClastogenesis-Inhibitory Factor
MAC-1	integrin MAC-1	oral	oral
MAO-A	Monoamine oxidase A	OVA	ovalbumin
MAO-B	Monoamine oxidase B	oxazolone	oxazolone
MAPK	Mitogen-Activated Protein Kinase	OZ	opsonized zymosan
MCC	Minimum Cytocidal Concentration	P450	Cytochrome P450
MCP	Monocyte Chemotactic Protein	PAF	Platelet Activating Factor
MCTHBE	Minimum Concentration for Total Haemolysis of Bovine Erythrocytes (µg/mL)	PAF	Platelet Aggregation Factor
MDA	Methylene Dihydroxy Amphetamine	PAI-1	Plasminogen Activator Inhibitor type 1
MDA	Malondialdehyde	Para-3 (=PIV3)	Parainfluenza type 3 virus
MDR	MultiDrug Resistance	PBMC	hmN Peripheral Blood Mononuclear Cell
MED	Minimal Effective Dose	PCA reaction	Passive Cutaneous Anaphylaxis reaction
MFC	Minimal Fungicidal Concentration	PD	Parkinson's Disease
MIA	Minimal Inhibitory Amounts (µg/disc)	PD	a cytotoxic model
MIC	Minimum Inhibitory Concentration	pD2 (=pEC <sub>50</sub> )	negative logarithm (-logM) of the concentration required to produce 50% of the maximum response (EC <sub>50</sub> )
MIC <sub>80</sub>	Minimal Inhibitive Concentration for 80%	PDE	phosphodiesterase
MIC <sub>90</sub>	Minimal Inhibitive Concentration for 90%	PDTC	pyrrolidine dithiocarbamate
min	minute	PEBP2αA	polyoma enhancer binding protein 2αA
MIP-1α/β	macrophage inflammatory protein	pEC <sub>50</sub>	negative logarithm (-logM) of the concentration required to produce 50% of the maximum response (EC <sub>50</sub> )
MIQ	Minimum inhibitory quantity (µg)		
MK-801	dizocipline maleate (a non-competitive antagonist of the NMDA receptor)		
MLC	Minimum Lethal Concentration		
MLD	Minimum Lethal Dose		
MMDC	Minimal Morphological Deformation Concentration		
MMOC	Mouse Mammary Organ Culture model		

PEG	PolyEthylene Glycol	Singlet oxygen	$^1\text{O}_2$
PEP	Prolyl endopeptidase (a serine protease)	SIZ	sulfisoxazole
pet. ether	petroleum ether	SNP	sodium nitroprusside
PFTase	farnesylprenyltransferase	SOD	Superoxide dismutase
PGD <sub>2</sub>	prostaglandin D <sub>2</sub>	sp.	species
PGE <sub>2</sub>	prostaglandin E <sub>2</sub>	SP-A	pulmonary surfactant Protein A
PGF <sub>2<math>\alpha</math></sub>	prostaglandin F <sub>2<math>\alpha</math></sub>	spp.	species (plural)
PGH <sub>2</sub>	prostaglandin H <sub>2</sub>	SRSA	Slow-Reacting Substance of Anaphylaxis
PGI <sub>2</sub>	prostacyclin (prostaglandin I <sub>2</sub> )	StRt	Stimulatory Rate
PHA	phytohemagglutinin	STZ	streptozotocin
Phe	Phenylephrine	superoxide anion	$\text{O}_2^{\bullet-}$
pIC <sub>50</sub>	negative logarithm (-logM) of IC <sub>50</sub>	SuRt	survival rate
PK	protein kinase	Syn.(= ‡)	Synonym
PKC	protein kinase C	T/C	survival ratio
PLA <sub>2</sub>	phospholipase A <sub>2</sub>	TACE	$\alpha$ -Secretase (a serine protease)
PMA (=TPA)	Phorbol-12-Myristate-13-Acetate	TBARS	ThioBarbituric Acid Reactive Substance assay
PMNs	polymorphonuclear cell	TC <sub>50</sub>	50% cytoToxic Concentration
pNPPase	<i>p</i> -nitrophenylphosphate enzyme	TCM	Traditional Chinese Medicines
POA	pentacyclic oxindole alkaloids	TFP	Trifluoperazine (calmodulin antagonist)
PPase1	Protein serine/threonine Phosphatase	TGF- $\beta_1$	Transforming Growth Factor- $\beta_1$
PRA	Plaque Reduction Assay	TGI	Total Growth Inhibition, concentration at which no growth was observed
PTH	parathyroid hormone	TI	Therapeutic Index (=IC <sub>50</sub> /EC <sub>50</sub> )
PTN	parthenolide	TNF- $\alpha$	Tumor Necrosis Factor- $\alpha$
PTP1B	Protein Tyrosine Phosphatase 1B	TOA	tetracyclic oxindole alkaloids
QR	quinone reductase	topo II	DNA topoisomerase II
RA	rheumatoid arthritis	TP	Thymidine phosphorylase
Raji	EBV-transformed B cell line	tPA	tissue Plasminogen Activator
rat	white rat	TPA (=PMA)	12- <i>O</i> -tetradecanoyl phorbol 13-acetate
rbt	rabbit	TrkA	proto-oncogene TrkA
RDDP	RNA-dependent DNA polymerase	TXA <sub>2</sub>	thromboxane A <sub>2</sub>
RDS	Respiratory Distress Syndrome	TXB <sub>2</sub>	thromboxane B <sub>2</sub>
rel-InRt	relative inhibitive rate (taking the control compound as 100%)	UDP-MurNac	UDP- <i>N</i> -acetylmuramic acid
RM	Relative Mobility	VCAM-1	Vascular Cell Adhesion Molecule-1
RNA	ribonucleic acid	VCR	vincristine
RNase H	inherent ribonuclease H	VEGF	Vascular Endothelial Growth Factor
ROS	reactive oxygen species (they are involved in the genesis of various cancers, arteriosclerosis, rheumatism and ageing)	Veraguensin	veraguensin
RSV	Respiratory Syncytial Virus	VHR DS-PTPase	VHR Dual-Specificity Protein Tyrosine Phosphatase
RT	Reverse Transcriptase	VHR protein	Vaccinia open reading-frame H1-Related protein phosphatase
RT-PCR	reverse-transcribed polymerase chain reaction	VP-16	A positive control for cytotoxic assay (Sigma product)
sALT	serum alanine transaminase	VRE	Vancomycin-Resistant <i>Enterococci</i> sp
sAST	serum aspartate transaminase	VSE	Vancomycin-Sensitive <i>Enterococci</i> sp
sc	subcutaneous injection	VSV	Vesicular Stomatitis Virus
SC <sub>50</sub>	Half-maximal radical Scavenging Concentration	ww	wet weight
SC <sub>50</sub>	50% Scavenging Concentration	XTT	sodium 3'-[1-(phenylaminocarbonyl)-3,4-tetrazolium] bis(4-methoxy-6-nitrobenzene)sulfonic acid
ScRt	scavenging rate	†	homonym mark
SDF	Stromal cell-Derived Factor	‡ (=Syn.)	synonym mark
SGOT	serum Glutamic Oxalacetic Transaminase	*	the name is given by the authors of the books
SGPT	serum Glutamic Pyruvic Transaminase		
SHR rat	Spontaneously Hypertensive Rats		
SI	Selective index = cytotoxic CC <sub>50</sub> /target EC <sub>50</sub>		
SI	Selective index = cytotoxic IC <sub>50</sub> /target IC <sub>50</sub>		
SI	Selective index = cytotoxic IC <sub>50</sub> /target MIC		

# Cancer Cell Codes

This set of codes for 270 cancer cells, named as **CCC code**, are defined and tried out in the books for the first time by the authors.

<b>1A9</b>	hmn ovarian cancer (cell).	<b>CaEs-17</b>	hmn esophageal cancer (cell).
<b>212</b>	inducible <i>Ha-ras</i> oncogene transformed from the NIH/3T3 cell line.	<b>CAKI</b>	hmn renal cancer (cell).
<b>308</b>	cultured mouse epidermal cells.	<b>CAKI-1</b>	hmn renal cancer (cell).
<b>3LL</b>	mus Lewis lung cancer (cell).	<b>Calu1</b>	hmn lung cancer (cell).
<b>3PS</b>	mouse leukemia (cell).	<b>Capan1</b>	pancreas cancer (cell).
<b>780-6</b>	renal cancer (cell).	<b>Capan2</b>	pancreas cancer (cell).
<b>9KB</b>	hmn epidermatoid nasopharyngeal carcinoma (cell).	<b>CaSki</b>	hmn cervical carcinoma (cell).
<b>9L</b>	rat glioma (cell).	<b>CEM</b>	leukemia (cell).
<b>9PS</b>	mouse lymphocytic leukemia (cell).	<b>CHAGO</b>	hmn undifferentiated lung cancer (cell).
<b>A2780</b>	hmn ovarian cancer (cell).	<b>CNE</b>	hmn nasopharyngeal carcinoma (cell).
<b>A375</b>	hmn melanoma (cell).	<b>Col1</b>	hmn colorectal cancer (cell).
<b>A431</b>	hmn epidermic cancer (cell).	<b>Col2</b>	hmn colorectal cancer (cell).
<b>A498</b>	hmn renal cancer (cell).	<b>COLO320DM</b>	hmn colorectal cancer (cell).
<b>A549</b>	hmn non-small cell lung cancer (cell).	<b>Colon205</b>	colorectal cancer (cell).
<b>ACHN</b>	hmn renal cancer (cell).	<b>Colon26-L5</b>	mus colorectal cancer (cell).
<b>AGS</b>	gastric adenocarcinoma (cell).	<b>COS-7</b>	monkey kidney cells.
<b>APM1840</b>	hmn leukemia (cell).	<b>CPAE</b>	calf pulmonary arterial endothelial cells.
<b>B16</b>	mouse melanoma (cell).	<b>CT-26</b>	mus colorectal cancer (cell).
<b>B16(F-10)</b>	mouse melanoma (cell).	<b>CTV1</b>	hmn leukemia (cell).
<b>BAEC</b>	bovine aortic endothelial cells.	<b>CXF94L</b>	hmn tumor (cell).
<b>BC</b>	hmn breast cancer (cell).	<b>DLD</b>	hmn colorectal adenocarcinoma (cell).
<b>BC-1</b>	hmn breast cancer (cell).	<b>DLD-1</b>	hmn colorectal adenocarcinoma (cell).
<b>BCA-1</b>	hmn breast cancer (cell).	<b>DMS114</b>	hmn lung cancer (cell).
<b>Bcap37</b>	hmn breast cancer (cell).	<b>DMS273</b>	hmn lung cancer (cell).
<b>Bel7402</b>	hmn liver cancer (cell).	<b>DU145</b>	prostatic cancer (cell).
<b>Bel7405</b>	hmn liver cancer (cell).	<b>EAC</b>	Ehrlich ascites cancer (cell).
<b>BGC823</b>	hmn gastric cancer (cell).	<b>EJ-1</b>	hmn bladder cancer (cell).
<b>BIU87</b>	bladder cancer (cell).	<b>FM3A</b>	mus breast cancer (cell).
<b>BL6</b>	mouse melanoma (cell).	<b>H.Ep.-2</b>	hmn cutis cancer cells in throat.
<b>Bowes</b>	skin cancer cells.	<b>H116</b>	hmn colorectal cancer (cell).
<b>Bre04</b>	hmn breast cancer (cell).	<b>H9</b>	lymphocytes.
<b>BSY1</b>	breast cancer (cell).	<b>HBC4</b>	breast cancer (cell).
<b>BT474</b>	hmn galactophore cancer (cell).	<b>HBC5</b>	breast cancer (cell).
<b>BT549</b>	hmn galactophore cancer (cell).	<b>HCC2998</b>	hmn colorectal cancer (cell).
<b>BXPC3</b>	pancreas cancer (cell).	<b>HCT</b>	hmn colorectal cancer (cell).
<b>C6</b>	rat glioma (cell).	<b>HCT116</b>	hmn colorectal cancer (cell).
<b>CA</b>	hmn liver cancer (cell).	<b>HCT15</b>	hmn colorectal cancer (cell).



**HCT8** hmn colorectal cancer (cell).  
**HEK-293** hmn epithelial kidney cell.  
**HEL** hmn embryonic lung fibrocytes.  
**HeLa** culture cervical epithelial cancer (cell) from Henrietta Lack.  
**HeLa ATCC-17** hmn cervical epithelial cancer (cell).  
**HeLa-S3** hmn cervical epithelial cancer (cell).  
**HELF** normal hmn embryo lung fibroblasts.  
**Hep2** hmn liver cancer (cell).  
**Hep2,2,15** hmn liver cancer (cell) transfected with hepatitis B virus.  
**Hep3B** hmn liver cancer (cell).  
**Hepa** hmn liver cancer (cell).  
**Hepa1c1c7** mus liver cancer (cell).  
**Hepa59T/VGH** hmn liver cancer (cell).  
**HepG2** hmn liver cancer (cell).  
**HEPZ** hmn epithelial cancer (cell).  
**HFF** hmn foreskin fibroblasts.  
**HGF** normal hmn gingival fibroblast cells.  
**HL-60** hmn acute promyelocytic leukemia (cell).  
**HM02** hmn melanoma (cell).  
**HMC-1** hmn leukemic mast cells.  
**HMEC** hmn microvascular endothelial cells.  
**HO-8910** hmn ovarian cancer (cell).  
**HOG.R5** green fluorescent protein (GFP)-based reporter cell.  
**HONE-1** hmn nasopharyngeal carcinoma (cell).  
**HOP-62** non-small cell lung cancer (cell).  
**Hs578T** hmn breast cancer (cell).  
**Hs740T** hmn gastric cancer (cell).  
**Hs742T** hmn breast cancer (cell).  
**Hs756T** hmn gastric cancer (cell).  
**HSC-2** hmn oral squamous cell carcinoma cells.  
**HSG** hmn salivary gland tumor (cell).  
**HT** sarcoma (cell).  
**HT1080** hmn fibrosarcoma (cell).  
**HT29** hmn colorectal cancer (cell).  
**HT3** hmn cervical carcinoma (cell).  
**hTERT-RPE1** hmn telomerase reverse transcriptase-retinal pigment epithelial cells.  
**Huh7** hmn hepatoma (cell).  
**HUVEC** hmn umbilical vein endothelial cell.  
**Jurkat-T** hmn T-cell leukemia (cell).  
**K562** hmn leukemia (cell).  
**K562/ADM** hmn leukemia (cell) of adriamycin-resistant.  
**Kato3** hmn gastric cancer (cell).  
**KB** hmn nasopharyngeal carcinoma (cell).  
**KB15** hmn nasopharyngeal carcinoma (cell).  
**KB16** hmn nasopharyngeal carcinoma (cell).  
**KB3** hmn nasopharyngeal carcinoma (cell).  
**KBV200** MDR nasopharyngeal carcinoma (cell).  
**KB-VIN** vincristine-resistant nasopharyngeal carcinoma (cell).  
**Ketr3** hmn renal cancer (cell).  
**KG-1** hmn leukemia (cell).  
**KM12** hmn colorectal cancer (cell).  
**KM20L2** hmn colorectal cancer (cell).  
**KU-1** hmn bladder cancer (cell).  
**L<sub>1210</sub>** Lymphocytic leukemia (cell).  
**L5178Y** lymphosarcoma (cell).  
**L-6** rat skeletal myoblasts.  
**L<sub>615</sub>** mouse spleen leukemia (cell).  
**L<sub>7212</sub>** mouse leukemia (cell).  
**L-929** fibrosarcoma (cell).  
**LLC** mouse Lewis lung cancer (cell).  
**LMTK** mouse fiber cells.  
**LNCaP** hmn prostatic cancer (cell).  
**LNCaP-FGC** hmn prostatic cancer (cell).  
**LO2** hmn liver cell.  
**LoVo** hmn colorectal cancer (cell).  
**LoVo/Doxo** hmn colorectal cancer cell, drug-resistant subclone.  
**LOX** melanoma (cell).  
**LOX-IMVI** melanoma (cell).  
**LS174T** colorectal cancer (cell).  
**Lu04** hmn lung cancer (cell).  
**Lu1** hmn lung cancer (cell).  
**LXFL529L** hmn large cell lung cancer (cell).  
**M1** mus myelocytic leukemia (cell).  
**M14** melanoma (cell).  
**M4BEU** hmn melanoma (cell).  
**M5076** ovarian sarcoma (cell).  
**Ma7373** mus breast cancer (cell).  
**MALME-3M** melanoma (cell).  
**MBT-2** mus bladder cancer (cell).  
**MCF7** hmn breast cancer (cell).  
**MCF7/6** hmn breast cancer (cell).  
**MCF7/ADR-RES** hmn breast cancer (cell).  
**MCF7-ras** hmn breast cancer (cell).  
**MDA231** hmn breast cancer (cell).  
**MDA-MB-231** hmn breast cancer (cell).  
**MDA-MB-435** hmn breast cancer (cell).  
**MDCK** Madin-Darby Canine.  
**MEL-28** hmn melanoma cell.  
**Meth-A** Meth-A sarcoma (cell).  
**MGc803** hmn gastric adenocarcinoma (cell).  
**MH-60** mus leukemia (cell).  
**MI4** melanoma (cell).  
**MIA-PaCa-2** hmn pancreas cancer (cell).  
**MK1** hmn gastric cancer (cell).  
**MKN1** hmn gastric cancer (cell).  
**MKN28** hmn gastric cancer (cell).  
**MKN45** hmn gastric cancer (cell).  
**MKN7** hmn gastric cancer (cell).  
**MKN74** hmn gastric cancer (cell).  
**MM1** highly invasive clone isolated from parental rat ascites hepatoma AH130 cells.  
**Molt4** hmn lymphoma (cell).  
**Mono-Mac-6** mononuclear cells.  
**MQc80-3** gastric adenocarcinoma (cell).  
**MRC-5** hmn diploid embryonic cells.

**MS301** mus breast cancer (cell).  
**MS310** mus breast cancer (cell).  
**N04** hmn neuroma (cell).  
**NCI-H1417** hmn small cell lung cancer (cell).  
**NCI-H187** hmn small cell lung cancer (cell).  
**NCI-H226** hmn non-small cell lung cancer (cell).  
**NCI-H23** hmn lung cancer (cell).  
**NCI-H460** hmn lung cancer (cell).  
**NCI-H522** hmn lung cancer (cell).  
**NK/LY** ascites cancer (cell).  
**NSCLC-N6** hmn non-small cell lung cancer (cell).  
**NUGC** hmn gastric cancer (cell).  
**NUGC-3** hmn gastric cancer (cell).  
**NUGC-4** hmn gastric cancer (cell).  
**OVCAR-2780** ovarian adenocarcinoma (cell).  
**OVCAR-3** ovarian adenocarcinoma (cell).  
**OVCAR-4** ovarian adenocarcinoma (cell).  
**OVCAR-5** ovarian adenocarcinoma (cell).  
**OVCAR-8** ovarian adenocarcinoma (cell).  
**P1534** mus, transplanted leukemia (cell).  
**P<sub>388</sub>** mouse lymphocytic leukemia (cell).  
**P<sub>388</sub>/ADM** mouse lymphocytic leukemia (cell) of adriamycin-resistant.  
**PACA-2** hmn pancreas cancer (cell) .  
**PANC1** pancreas cancer (cell).  
**PBMC** peripheral blood mononuclear cells.  
**PC12** hmn lung cancer (cell).  
**PC3** hmn prostatic cancer (cell).  
**PC-6** hmn lung cancer (cell).  
**PLC/PRF/5** hmn liver cancer (cell).  
**PSN1** hmn pancreas cancer (cell).  
**PTX10** ovarian cancer cells with  $\beta$ -tubulin mutation.  
**QGY-7703** hmn liver cancer (cell).  
**RAW264.7** mouse macrophages.  
**RBL-2H3** rat basophilic cells.  
**RL33** rbt lung cancer (cell).  
**RPMI-7951** melanoma (cell).  
**RPMI-8226** leukemia (cell).  
**RXF-393** renal cancer (cell).  
**RXF-631L** renal cancer (cell).  
**S<sub>180</sub>** mouse sarcoma (cell).  
**S37** mouse sarcoma (cell).  
**Sca7901** hmn gastric adenocarcinoma (cell).  
**SCL** hmn gastric cancer (cell).  
**SCL-37\*6** hmn gastric cancer (cell).  
**SCL-6** hmn gastric cancer (cell).  
**SCL-9** hmn gastric cancer (cell).  
**SF268** hmn brain tumor (cell).  
**SF295** hmn brain tumor (cell).  
**SF539** hmn brain tumor (cell).  
**SGC** hmn gastric cancer (cell).  
**SGC7901** hmn gastric cancer (cell).  
**SiHa** hmn cervical carcinoma (cell).  
**SKBR3** hmn breast cancer (cell).  
**SKCO1** colorectal cancer (cell).  
**SK-MEL** hmn caucasian melanoma (cell).  
**SK-MEL-2** hmn melanoma (cell).  
**SK-MEL-28** hmn melanoma (cell).  
**SK-MEL-5** hmn melanoma (cell).  
**SK-MES-1** bronchogenic carcinoma cell.  
**SK-OV-3** ovarian adenocarcinoma (cell).  
**SMMC-7721** hmn liver cancer (cell).  
**SNB75** hmn brain tumor (cell).  
**SNB78** hmn brain tumor (cell).  
**SNU638** hmn gastric adenocarcinoma (cell).  
**SR** leukemia (cell).  
**St4** gastric cancer (cell).  
**SVR** mouse endothelial cells.  
**SW620** hmn colorectal adenocarcinoma (cell).  
**T24** hmn liver cancer (cell).  
**T24S** hmn bladder cancer (cell).  
**T47D** hmn breast cancer (cell).  
**T98G** hmn caucasian glioblastoma (cell).  
**TK10** renal cancer (cell).  
**Tmolt3** hmn leukemia (cell).  
**U14** mouse cervical carcinoma (cell).  
**U251** brain tumor (cell).  
**U373** caucasian glioblastoma (cell).  
**U4** mouse cervical carcinoma (cell).  
**U-87-MG** caucasian glioblastoma (cell).  
**U937** hmn monocytic leukemia (cell).  
**UACC62** melanoma (cell).  
**UO-31** renal cancer (cell).  
**Vero** green monkey kidney tumour (cell).  
**W<sub>256</sub>** rat Walker sarcoma (cell).  
**WEHI-164** mus fibrosarcoma (cell).  
**WHCO1** hmn esophageal cancer (cell).  
**WI-38** hmn lung fibrocyte (normal hmn diploid fibrocyte).  
**WiDr** colorectal adenocarcinoma (cell).  
**Wish** transformed epithelial tumour (cell).  
**XF-498** hmn tumor (cell).  
**ZR-75-1** hmn breast cancer (cell).



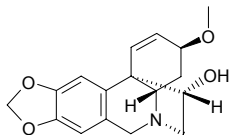
# **Volume 3 Isolated Compounds (H-M)**



# H

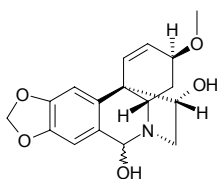
## 9186 Haemanthamine

Hemanthamine [466-75-1]  $C_{17}H_{19}NO_4$  (301.35). mp 203~203.5°C,  $[\alpha]_D^{25} = +19.7^\circ$  ( $c = 3.8$ , methanol),  $[\alpha]_D^{25} = +33$  ( $c = 1.25$ ,  $CHCl_3$ ). **Pharm:** Antihypertensive (mild); antiretroviral and cytotoxic ( $ID_{50} = 0.8\mu g/mL$ ,  $TC_{50} = 1.0\mu g/mL$ ,  $TI_{50} (TC_{50}/ID_{50}) = 1.3$ )<sup>[5026]</sup>. **Source:** XUE PIAN LIAN *Leucojum vernum* (bulb), family Amaryllidaceae spp. **Ref:** 658, 5026.



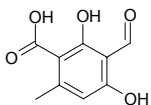
## 9187 Haemanthidine

Pancratine [466-73-9]  $C_{17}H_{19}NO_5$  (317.34). mp 189~190°C (hemihydrate),  $[\alpha]_D^{22} = -41^\circ$  ( $c = 1$ ,  $CHCl_3$ ). Exists in solution as a mixture of C6 epimers. **Pharm:** (-)-Haemanthidine activity: Cytotoxic (hmn prostate cancer LNCaP cell,  $ED_{50} = 0.7\mu g/mL$ ; sarcoma cell HT,  $ED_{50} = 1.6\mu g/mL$ ; A-431, KB, Lu1, ZR-75-1); analgesic (improved Koster trial, stronger than aspirin); sedative (mus, lengthens sleeping time induced by hexobarbital or pentobarbital.). **Source:** GAN FENG CAO *Zephyranthes candida*, SHI SUAN *Lycoris radiata* [Syn. *Amaryllis radiata*]. **Ref:** 6, 1719, 1720, 1721.



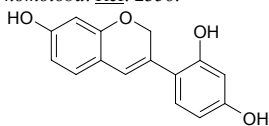
## 9188 Haematommic acid

$C_9H_8O_5$  (196.16). **Source:** JIN SI SHUA *Lethariella cladonioides* **Ref:** 660.



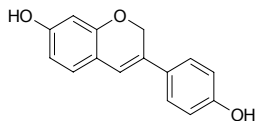
## 9189 Haginin D

2',4',7-Trihydroxyisoflavone  $C_{15}H_{12}O_4$  (256.26). **Pharm:** Antioxidant (rat brain homogenate lipid peroxidation test,  $IC_{50} = 0.2\mu mol/L$ , control EGCg,  $IC_{50} = 0.07\mu mol/L$ ). **Source:** TONG XING LIE PIAN HU ZHI ZI *Lespedeza homoloba*. **Ref:** 2356.



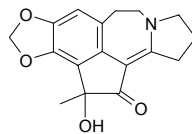
## 9190 Haginin E

$C_{15}H_{12}O_3$  (240.26). Amorphous powder. **Pharm:** Antioxidant (rat brain homogenate lipid peroxidation test,  $IC_{50} = 0.3\mu mol/L$ , control EGCg,  $IC_{50} = 0.07\mu mol/L$ ). **Source:** TONG XING LIE PIAN HU ZHI ZI *Lespedeza homoloba*. **Ref:** 2356.



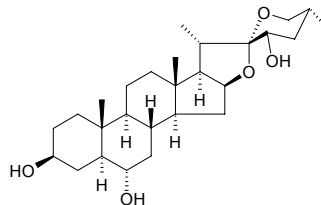
## 9191 Hainanensine

$C_{17}H_{17}NO_4$  (299.33). **Source:** HAI NAN CU FEI *Cephalotaxus hainanensis* [Syn. *Cephalotaxus mannii*], SAN JIAN SHAN *Cephalotaxus fortunei*. **Ref:** 660.



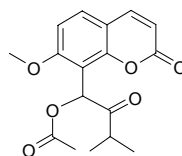
## 9192 Hainangenin

$C_{27}H_{44}O_5$  (448.65). **Source:** JIAN MA *Agave sisalana*, WU CI FAN MA *Agave americana* var. *marginata* [Syn. *Agave americana* var. *variegata*]. **Ref:** 10.



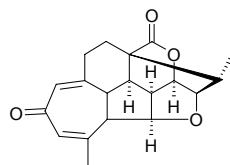
## 9193 Hainanmurpanin

[95360-22-8]  $C_{17}H_{18}O_6$  (318.33). Crystals, mp 98~101°C,  $[\alpha]_D^{28} = +7^\circ$  ( $CHCl_3$ ). **Source:** JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*]. **Ref:** 11.



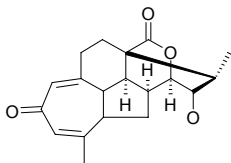
## 9194 Hainanolide

Harringtonolide [64761-48-4]  $C_{19}H_{18}O_4$  (310.35). Pale yellow crystals ( $CH_2Cl_2$ -MeOH), mp 285~288°C (dec),  $[\alpha]_D^{30} = +83.0^\circ$  ( $c = 1.5$ ,  $CHCl_3$ ); mp 266~268°C. **Pharm:** Cytotoxic (KB oral epidermoid carcinoma,  $ED_{50} = 0.11\mu g/mL$ ; Hep3B hepatoma cells,  $ED_{50} = 0.05\mu g/mL$ ; HeLa,  $ED_{50} = 0.37\mu g/mL$ )<sup>[4253]</sup>; antineoplastic (L-615, S180, W256, P388, L1210, and Lewis lung cancer); antiviral (influenza virus, Newcastle disease virus, epidemic type-B encephalitis virus and vaccinia virus, tissue culture model). **Source:** HAI NAN CU FEI *Cephalotaxus hainanensis* [Syn. *Cephalotaxus mannii*], SAN JIAN SHAN *Cephalotaxus fortunei*, TAI WAN CU FEI *Cephalotaxus wilsoniana* (twig), ZHONG GUO CU FEI ZI *Cephalotaxus sinensis* [Syn. *Cephalotaxus harringtonia* var. *sinensis*], ZHONG GUO CU FEI ZHI YE *Cephalotaxus sinensis* [Syn. *Cephalotaxus harringtonia* var. *sinensis*]. **Ref:** 658, 660, 4253.

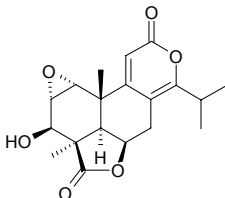


**9195 Hainanolidol**

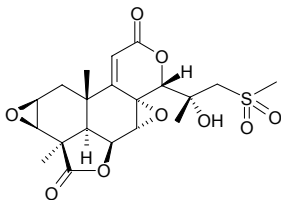
[73213-63-5] C<sub>19</sub>H<sub>20</sub>O<sub>4</sub> (312.37). Source: HAI NAN CU FEI *Cephalotaxus hainanensis* [Syn. *Cephalotaxus manni*], SAN JIAN SHAN *Cephalotaxus fortunei*. Ref: 2, 660.

**9196 Hallactone A**

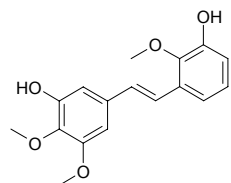
[41787-72-8] C<sub>19</sub>H<sub>22</sub>O<sub>6</sub> (346.38). Crystals, mp 266~268°C (dec). Pharm: Larvicide (toxic to larva of housefly). Source: HA SHI LUO HAN SONG *Podocarpus hallii*. Ref: 658.

**9197 Hallactone B**

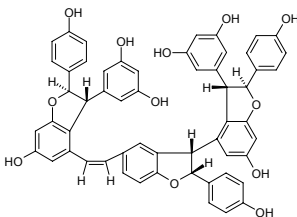
[35470-59-8] C<sub>20</sub>H<sub>24</sub>O<sub>9</sub>S (440.47). Crystals, mp 325~330°C (dec). Pharm: Larvicide (toxic to larva of housefly). Source: HA SHI LUO HAN SONG *Podocarpus hallii*. Ref: 658.

**9198 Halophilol A**

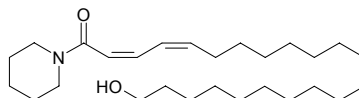
C<sub>17</sub>H<sub>18</sub>O<sub>5</sub> (302.33). Amorphous powder. Pharm: Cytotoxic (KB, IC<sub>50</sub> = 17.28 μmol/L; hmn microvascular endothelial cells HMEC, IC<sub>50</sub> = 22.47 μmol/L). Source: XI YAN YUAN WEI *Iris halophila* (seed). Ref: 5429.

**9199 Halophilol B**

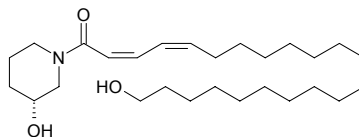
C<sub>56</sub>H<sub>42</sub>O<sub>12</sub> (906.95). Brown amorphous powder, [α]<sub>D</sub><sup>25</sup> = +152.4° (c = 1.28, MeOH). Pharm: Cytotoxic inactive (KB and HMEC). Source: XI YAN YUAN WEI *Iris halophila* (seed). Ref: 5429.

**9200 Haloxyline A**

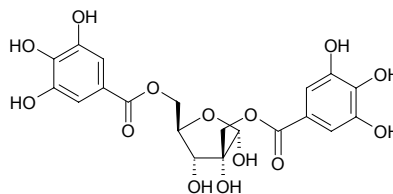
C<sub>27</sub>H<sub>49</sub>NO<sub>2</sub> (419.70). Colorless crystals, mp 161~162°C. Pharm: AChE inhibitor (*in vitro*, IC<sub>50</sub> = (25.3±0.02) μmol/L, control Galanthamine, IC<sub>50</sub> = (0.5±0.05) μmol/L); BChE inhibitor (*in vitro*, IC<sub>50</sub> = (19.0±0.03) μmol/L, control Galanthamine, IC<sub>50</sub> = (8.5±0.01) μmol/L); antifungal (*Trichophyton longifusus*, *Candida albicans*, *Aspergillus flavus*, *Microsporum canis*, *Candida glabrata*, *Fusarium solani*). Source: YAN JIAO CAO SUO SUO *Haloxylon salicornicum* (whole herb). Ref: 4460.

**9201 Haloxyline B**

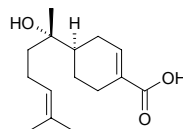
C<sub>27</sub>H<sub>49</sub>NO<sub>3</sub> (435.70). Colorless crystals, mp 142~143°C. Pharm: AChE inhibitor (*in vitro*, IC<sub>50</sub> = (20.2±0.01) μmol/L, control Galanthamine, IC<sub>50</sub> = (0.5±0.05) μmol/L); BChE inhibitor (*in vitro*, IC<sub>50</sub> = (14.7±0.02) μmol/L, control Galanthamine, IC<sub>50</sub> = (8.5±0.01) μmol/L); antifungal (*Trichophyton longifusus*, *Candida albicans*, *Aspergillus flavus*, *Microsporum canis*, *Candida glabrata*, *Fusarium solani*). Source: YAN JIAO CAO SUO SUO *Haloxylon salicornicum* (whole herb). Ref: 4460.

**9202 Hamamelitannin**

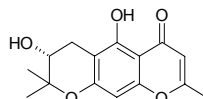
C<sub>20</sub>H<sub>20</sub>O<sub>14</sub> (484.37). Pharm: 5-LOX inhibitor (IC<sub>50</sub> = 1.0~18.7 μmol/L)<sup>[4415]</sup>. Source: BAI GUO *Ginkgo biloba*, HONG LI *Quercus rubra*, MEI ZHOU JIN LV MEI *Hamamelis virginiana*, OU ZHOU LI *Castanea sativa*. Ref: 660, 1521, 4415.

**9203 Hamanasic acid A**

C<sub>15</sub>H<sub>24</sub>O<sub>3</sub> (252.36). Source: MEI GUI HUA *Rosa rugosa*. Ref: 660.

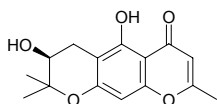
**9204 3'(R)-(+)-Hamaudol**

[204779-06-6] C<sub>15</sub>H<sub>16</sub>O<sub>5</sub> (276.29). Yellow acicular crystals, mp 187~189°C. Source: MA SHAN QIAN HU *Peucedanum mshanens*. Ref: 803.

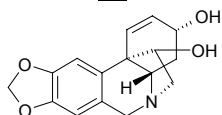


**9205 3'(S)-(-)-Hamaudol**

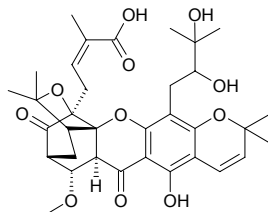
[735-46-6] C<sub>15</sub>H<sub>16</sub>O<sub>5</sub> (276.29). Needles (C<sub>2</sub>H<sub>5</sub>OH), mp 202~202.5°C, [α]<sub>D</sub><sup>25</sup> = -22.0° (c = 0.46, CHCl<sub>3</sub>). Source: FANG FENG *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*]. Ref: 2.

**9206 Hamayne**

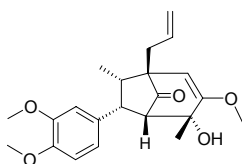
Bulbispermine; Demethylcrinamine [61948-11-6] C<sub>16</sub>H<sub>17</sub>NO<sub>4</sub> (287.32). Pharm: AChE inhibitor (IC<sub>50</sub> = (553±3)μmol/L, control Galanthamine, IC<sub>50</sub> = (1.9±0.2)μmol/L). Source: GUAN MU WEN SHU LAN *Crinum macowanii*. Ref: 4952.

**9207 Hanburinone**

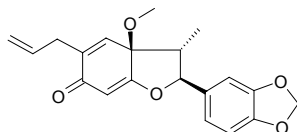
C<sub>34</sub>H<sub>42</sub>O<sub>11</sub> (626.71). Yellow gum, [α]<sub>D</sub><sup>28</sup> = -62° (c = 0.09, CHCl<sub>3</sub>). Source: TENG HUANG SHU *Garcinia hanburyi* (fresh fruit). Ref: 4487.

**9208 Hancinol**

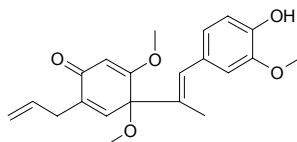
rel-(7S,8S,1'R,3'S,4'R)-1'-Allyl-7-(3,4-dimethoxyphenyl)-4'-hydroxy-5'-methoxy-8-methyl-2'-oxobicyclo[3.2.1]oct-5'-ene [108864-50-2] C<sub>22</sub>H<sub>28</sub>O<sub>5</sub> (372.47). Source: SHAN JU *Piper hancei*. Ref: 75.

**9209 Hancinone**

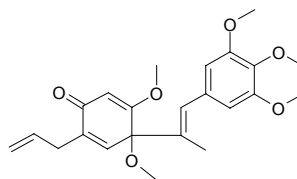
C<sub>20</sub>H<sub>20</sub>O<sub>5</sub> (340.38). Source: SHAN JU *Piper hancei*, YU LAN *Magnolia denudata* [Syn. *Magnolia heptapata*]. Ref: 54, 660, 4439.

**9210 Hancinone B**

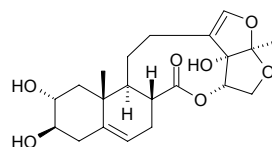
C<sub>21</sub>H<sub>24</sub>O<sub>5</sub> (356.42). Source: SHAN JU *Piper hancei*. Ref: 660.

**9211 Hancinone C**

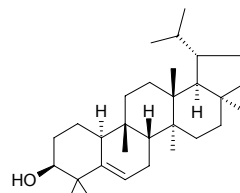
C<sub>23</sub>H<sub>28</sub>O<sub>6</sub> (400.48). Source: SHAN JU *Piper hancei*. Ref: 660.

**9212 Hancogenin B**

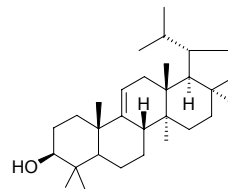
C<sub>21</sub>H<sub>28</sub>O<sub>7</sub> (392.45). Colorless acicular crystals (acetone), mp 202~203°C. Source: HUA BEI BAI QIAN *Cynanchum hancockianum*. Ref: 237.

**9213 Hancokinol**

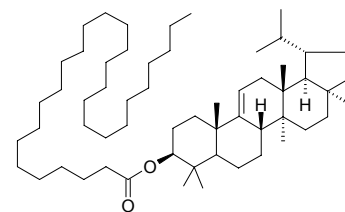
25,26-Dinor-9,13-dimethylpup-5-en-3-ol [132294-77-0] C<sub>30</sub>H<sub>50</sub>O (426.73). Needles (MeOH), mp 229~230°C, [α]<sub>D</sub><sup>20</sup> = +16.2° (c = 0.77, CHCl<sub>3</sub>); mp 221~223°C; colorless acicular crystals (chloroform), mp 223~225°C. Source: HUA BEI BAI QIAN *Cynanchum hancockianum*, LIU YE BAI QIAN *Cynanchum stauntonii*. Ref: 510, 198, 1521.

**9214 Hancolupenol**

C<sub>30</sub>H<sub>50</sub>O (426.73). Colorless acicular crystals, mp 184~185°C (chloroform), [α]<sub>D</sub><sup>29</sup> = +14.9° (c = 0.3, chloroform). Source: HUA BEI BAI QIAN *Cynanchum hancockianum*. Ref: 198.

**9215 Hancolupenol octacosanate**

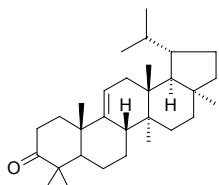
C<sub>58</sub>H<sub>104</sub>O<sub>2</sub> (833.47). Amorphous powder, mp 99~101°C (chloroform). Source: HUA BEI BAI QIAN *Cynanchum hancockianum*. Ref: 198.



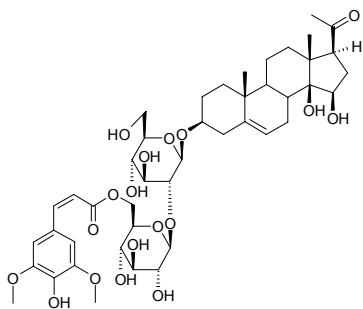


**9216 Hancolupenone**

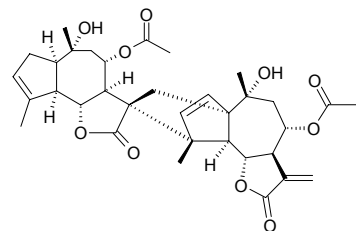
$C_{30}H_{48}O$  (424.72). Colorless acicular crystals, mp 228.0~229.5°C (chloroform),  $[\alpha]_D^{29} = +14.9^\circ$  ( $c = 0.2$ , chloroform). Source: HUA BEI BAI QIAN *Cynanchum hancockianum*. Ref: 198.

**9217 Hancoside A**

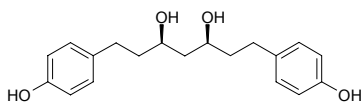
Hancoside [145701-08-2]  $C_{44}H_{62}O_{18}$  (878.97). White powder, mp 185~187°C (methanol).  $[\alpha]_D^{27} = -12.3^\circ$  ( $c = 0.13$ , dioxycyclohexane). Pharm: Anti-endotoxin. Source: HUA BEI BAI QIAN *Cynanchum hancockianum*. Ref: 237, 1071.

**9218 Handelin**

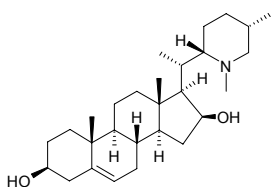
Chrysanthelide  $C_{34}H_{42}O_{10}$  (610.70). Source: YE JU HUA *Chrysanthemum indicum*. Ref: 660.

**9219 Hannokinol**

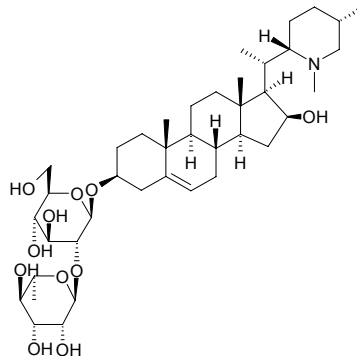
1,7-Bis(4-hydroxyphenyl)-3*R*,5*S*-heptanediol  $C_{19}H_{24}O_4$  (316.40). Source: CHI YANG *Alnus japonica*. Ref: 660.

**9220 Hapepunine**

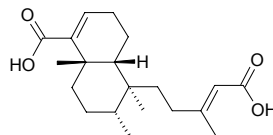
[68422-01-5]  $C_{27}H_{47}NO_2$  (429.69). Needles ( $C_2H_5OH$ ), mp 201~202°C,  $[\alpha]_D = -72.6^\circ$ . Source: ZHE BEI MU *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*], HEI BAI HE *Fritillaria camtschatcensis*. Ref: 2201.

**9221 Hapepunine 3-O- $\alpha$ -L-rhamnosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranoside**

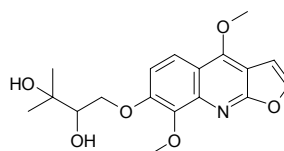
$C_{40}H_{67}NO_{11}$  (737.98). Needles, +1H<sub>2</sub>O (MeOH aq.) mp 269~274°C (dec),  $[\alpha]_D = -67.2^\circ$  ( $c = 1.5$ , pyridine). Source: ZHE BEI MU *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*]. Ref: 1521, 2201.

**9222 Haplopappic acid**

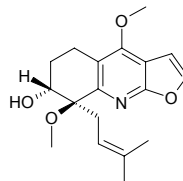
$C_{20}H_{30}O_4$  (334.46). Source: GE LUN BI YA BA DOU *Croton schiedeana* (aerial parts). Ref: 4447.

**9223 Haploperine**

Haplophytin B; Evoxine [522-11-2]  $C_{18}H_{21}NO_6$  (347.37). mp 154~155°C, mp 151~152°C,  $[\alpha]_D = +5^\circ$  (ethanol),  $[\alpha]_D^{22} = +14.6^\circ$  (ethanol); mp 151.5~153°C,  $[\alpha]_D = +63.6^\circ$  ( $c = 0.33$ , MeOH). Pharm: Anticonvulsant (mus and rat, caused by camphor); hypnotic (mus); sedative (mus, chloride); antibacterial inactive (various tested bacteria)<sup>[5175]</sup>; antifungal inactive (various tested fungi)<sup>[5175]</sup>; LD<sub>50</sub> (mus, ip) = 705mg/kg, (mus, iv) = 135mg/kg. Source: DA YE YUN XIANG CAO *Haplophyllum perforatum*, JIAN YE YUN XIANG CAO *Haplophyllum acutifolium*. Ref: 661, 1521, 5175.

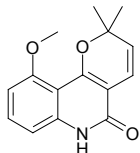
**9224 Haplophyllidine**

[18063-21-3]  $C_{18}H_{23}NO_4$  (317.39). Colorless acicular crystals (petroleum ether), mp 110~111°C,  $[\alpha]_D^{20} = -16.24^\circ$  ( $c = 1.477$ , acetone). Pharm: Anti-atropine (dog, iv, 20mg/kg); diuretic (mus); hypnotic (hypnotic synergism with solubilized hexobarbital, phenobarbital, chloral hydrate); sedative (mus). Source: DA YE YUN XIANG CAO *Haplophyllum perforatum*, *Haplophyllum glabrinum*. Ref: 658, 1521.

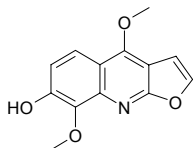


**9225 Haplophytin A**

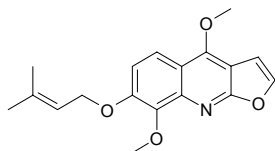
$C_{15}H_{15}NO_3$  (257.29). mp 209~210.5°C,  $[\alpha]_D = 0^\circ$  ( $c = 0.506$ ,  $CHCl_3$ ). **Pharm:** Antibacterial inactive (various tested bacteria); antifungal inactive (various tested fungi). **Source:** JIAN YE YUN XIANG CAO *Haplophyllum acutifolium*. **Ref:** 5175.

**9226 Haplopine**

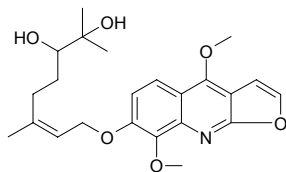
[5876-17-5]  $C_{13}H_{11}NO_4$  (245.24). mp 203~204°C. **Pharm:** Phototoxic (yeast, *Saccharomyces cerevisiae*); photo-activated antibacterial (*Staphylococcus aureus*)<sup>[4989]</sup>; photo-activated antifungal (*Candida albicans* weak)<sup>[4989]</sup>; photo-activated DNA binding (Asc I and Sma I with restriction sequences consisting only of G and C was very weak)<sup>[4989]</sup>; cytotoxic (P<sub>388</sub> cell line, ED<sub>50</sub> = 7.6 μg/mL, control Mithramycin, ED<sub>50</sub> = 0.06 μg/mL; HT29, ED<sub>50</sub> = 13.1 μg/mL, Mithramycin, ED<sub>50</sub> = 0.07 μg/mL; A549, ED<sub>50</sub> = 3.3 μg/mL, Mithramycin, ED<sub>50</sub> = 0.08 μg/mL)<sup>[5405]</sup>. **Source:** HUA JIAO LE *Zanthoxylum cuspidatum*, SI ROU TUO GUO YE MI ZHU YU *Melicope semecarpifolia*, *Sarcomelicope glauca*. **Ref:** 658, 1521, 4989, 5405.

**9227 Haplopine-3,3'-dimethylallylether**

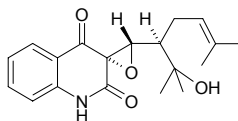
$C_{18}H_{19}NO_4$  (313.36). Yellow needles, mp 100~101°C. **Source:** GAO GUI YOU MU YUN XIANG *Teclea nobilis* (aerial parts). **Ref:** 3503.

**9228 Haplotubine**

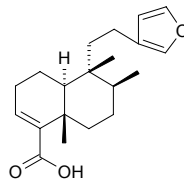
$C_{23}H_{29}NO_6$  (415.49). Amorphous yellow powder,  $[\alpha]_D^{22} = -6^\circ$  ( $c = 1.2$ ,  $CH_2Cl_2$ ). **Source:** LIU ZHUANG DAN YE YUN XIANG *Ruta tuberculata* [Syn. *Haplophyllum tuberculatum*] (aerial parts). **Ref:** 5156.

**9229 Haplotubinone**

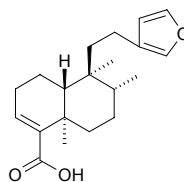
$C_{19}H_{23}NO_4$  (329.40). Colorless crystals (ether), mp 177.0~178.0°C,  $[\alpha]_D^{22} = 0^\circ$  ( $c = 0.500$ ,  $CH_2Cl_2$ ). **Source:** LIU ZHUANG DAN YE YUN XIANG *Ruta tuberculata* [Syn. *Haplophyllum tuberculatum*] (aerial parts). **Ref:** 5156.

**9230 (+)-Hardwickiic acid**

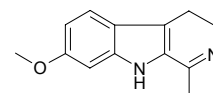
$C_{20}H_{28}O_3$  (316.44). **Source:** JIA LIAN QIAO YE *Duranta repens*. **Ref:** 4050.

**9231 (-)-Hardwickiic acid**

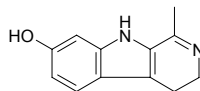
$C_{20}H_{28}O_3$  (316.44). Crystallized (MeOH-H<sub>2</sub>O), mp 114~116°C,  $[\alpha]_D^{25} = -84.7^\circ$  ( $c = 1.0$ ,  $CHCl_3$ ). **Source:** *Salvia wagneriana* (aerial parts). **Ref:** 4976.

**9232 Harmaline**

4,9-Dihydro-7-methoxy-1-methyl-3H-pyrido[3,4-b]indole; Harmidine; Dihydroharmine [304-21-2]  $C_{13}H_{14}N_2O$  (214.27). Rhombic columnar crystals (methanol), rhombic octahedral crystals (ethanol), mp 229~231°C, slightly soluble in water, ether, soluble in ethanol.<sup>[5507]</sup> **Pharm:** CNS activity (stimulates pallium, spinal cord and motorium to cause illusion, tremors, and paroxysmal convulsions); striated muscle stimulant (high dose); slows heart rate (frog heart *in vitro* EC = 1:25000); monoamine oxidase inhibitor; intestinal smooth muscle relaxant (small intestine, low dose); stimulates pons (causes spasm and stiffness in limbs). **Source:** LUO TUO PENG *Peganum harmala*, JI DAN GUO *Passiflora edulis*, FEN HONG SE XI FAN LIAN *Passiflora incarnata*, LUO TUO PENG ZI *Peganum harmala*. **Ref:** 6, 658, 1521, 5507.

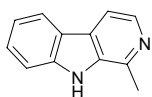
**9233 Harmalol**

[525-57-5]  $C_{12}H_{12}N_2O$  (200.24). Trihydrate, red acicular crystals ( $C_2H_5OH$  aq.), absolute substance mp 212°C (dec). **Pharm:** Causes progressive paralysis of CNS (animal model); inhibits transport of active sodium (in bladder); monoamine oxidase inhibitor;  $Na^+$ ,  $K^+$ -ATP inhibitor; antihypertensive; Slows heart rate and enhances myocardial contractility (anesthetic dog, chloride). **Source:** LUO TUO PENG *Peganum harmala*, JI DAN GUO *Passiflora edulis*. **Ref:** 661, 1521.

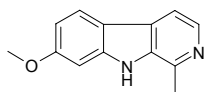


**9234 Harman**

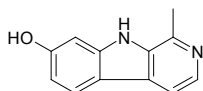
[486-84-0] C<sub>12</sub>H<sub>10</sub>N<sub>2</sub> (182.23). mp 237~238°C, mp 228°C. **Pharm:** Antifungal (*Trichophyton interdigitalis*, MIC = 1.6~200.0µg/mL); bidirectional action to nervous system (motor depressant in low dose and causes convulsion in high dose); inhibits transport of active sodium (frog, bladder); Na<sup>+</sup>,K<sup>+</sup>-ATP inhibitor (frog kidney); plant growth inhibitor; uterine stimulant. **Source:** CI JI LI *Tribulus terrestris*, CU LIU GUO *Hippophae rhamnoides*, FEN HONG SE XI FAN LIAN *Passiflora incarnata*, GOU TENG *Uncaria rhynchophylla* [Syn. *Nauclea rhynchophylla*], JI DAN GUO *Passiflora edulis*, LIU QIU SHE GEN CAO *Ophiorrhiza liukuensis* (whole herb), RI BEN SHE GEN CAO *Ophiorrhiza japonica*, SHA ZAO *Elaeagnus angustifolia*, YUAN ZHI *Polygala tenuifolia*, ZHU ZI SHU *Symplocos racemosa*, DONG FANG GOU TENG *Uncaria orientalis*, DUO MAI GOU TENG *Uncaria nervosa*, HOU YE GOU TENG *Uncaria callophylla*, MIAN MAO GOU TENG *Uncaria lanosa*, PO LUO ZHOU GOU TENG *Uncaria borneensis*, QIAN HUI GOU TENG *Uncaria canescens*, SUAN GOU TENG *Uncaria acida*, TUO YUAN GOU TENG *Uncaria elliptica*, XIA GOU TENG *Uncaria attenuata*, *Uncaria barbata*, occurs in many plants. **Ref:** 2, 539, 658, 4527, 5341.

**9235 Harmine**

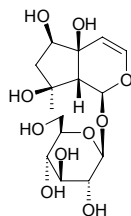
Banisterine; Leucuharmine; Telepathine; Yageine [442-51-3] C<sub>13</sub>H<sub>12</sub>N<sub>2</sub>O (212.25). Crystals, mp 257~259°C, mp 264~265°C. **Pharm:** Antitrypanosomal; CVS activity (anesthetic dog, chloride, slows heart rate, increases output blood pressure, blood flow in aorta and myocardial contractility); hallucinogen (large dose); uterine relaxant; monoamine oxidase inhibitor (hmn); CNS stimulant. **Source:** CI JI LI *Tribulus terrestris*, JI DAN GUO *Passiflora edulis*, LUO TUO PENG *Peganum harmala*, LUO TUO PENG ZI *Peganum harmala*, SHA ZAO *Elaeagnus angustifolia*, SHAN YOU MA *Trema dielsiana*, XIANG TANG SONG CAO *Thalictrum foetidum*. **Ref:** 4, 6, 658, 660, 1521.

**9236 Harmol**

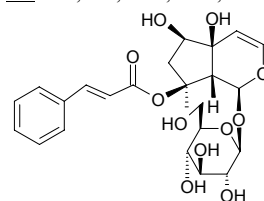
7-Hydroxyharman [149022-16-2] C<sub>12</sub>H<sub>10</sub>N<sub>2</sub>O (198.23). mp 321°C, mp 304~307°C. **Source:** CU LIU GUO *Hippophae rhamnoides*, LUO TUO PENG ZI *Peganum harmala*, JI LI GEN *Tribulus terrestris*, SHA ZAO *Elaeagnus angustifolia*, FEN HONG SE XI FAN LIAN *Passiflora incarnata*. **Ref:** 6, 1521.

**9237 Harpagide**

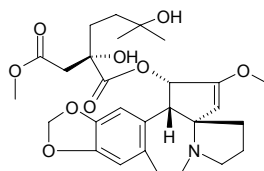
C<sub>15</sub>H<sub>24</sub>O<sub>10</sub> (364.35). **Pharm:** Neuroprotective (primary cultures of rat cortical cells injured by 50µmol/L glutamate, 0.1µmol/L, cell viability = 41.4%; control MK-801, cell viability = 31.8%; APV, cell viability = 5.7%; CNQX, cell viability = 28.1%)<sup>[4660]</sup>. **Source:** BEI XUAN SHEN *Scrophularia buergeriana* (root: yield = 0.0004%)<sup>[4660]</sup>; the compound was isolated from the plant by Isao Kitakawa et al. in 1967<sup>[5505]</sup>, TAI WAN JIN GU CAO *Ajuga taiwanensis* (whole herb), XUAN SHEN *Scrophularia ningpoensis*. **Ref:** 660, 4483, 4660, 5505.

**9238 Harpagoside**

C<sub>24</sub>H<sub>30</sub>O<sub>11</sub> (494.50). [α]<sub>D</sub><sup>21</sup> = -27.7° (c = 0.194, chloroform); -42.6° (c = 0.990, methanol); -37.5° (c = 0.670, water). **Pharm:** Analgesic (rbt ear model); anti-inflammatory (granuloma model); nicotine antagonist (gpg, ileum *in vitro*); elastase inhibitor (hmn leukocyte *in vitro*, IC<sub>50</sub> > 500µg/mL = >800µmol/L; control Caffeic acid, IC<sub>50</sub> = 86µg/mL = 475µmol/L)<sup>[5458]</sup>; neuroprotective (primary cultures of rat cortical cells injured by 50µmol/L glutamate, 0.1µmol/L, cell viability = 38.2%; control MK-801, cell viability = 31.8%; APV, cell viability = 5.7%; CNQX, cell viability = 28.1%)<sup>[4660]</sup>. **Source:** BEI XUAN SHEN *Scrophularia buergeriana* (root: yield = 0.00032%)<sup>[4660]</sup>, LIN SHENG XUAN SHEN *Scrophularia nodosa*, NAN FEI GOU MA *Harpagophytum procumbens*, XUAN SHEN *Scrophularia ningpoensis* (root: mean content of 22 origins = 0.136%)<sup>[5508]</sup>, *Lamium* sp. **Ref:** 658, 661, 4660, 5458, 5508.

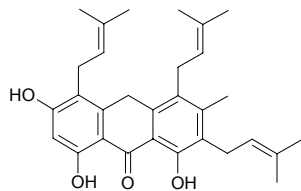
**9239 Harringtonine**

[26833-85-2] C<sub>28</sub>H<sub>37</sub>NO<sub>9</sub> (531.61). mp 73~75°C. **Pharm:** Antineoplastic (mouse leukemia L<sub>615</sub> and L<sub>7212</sub>, sarcoma S<sub>180</sub>, rat Walker sarcoma). **Source:** BI ZI CU FEI *Cephalotaxus oliveri*, HAI NAN CU FEI *Cephalotaxus hainanensis* [Syn. *Cephalotaxus manni*] (branchlet and bark: mean content of 2 samples = 0.032%)<sup>[5508]</sup>, RI BEN CU FEI *Cephalotaxus harringtonia*, SAN JIAN SHAN *Cephalotaxus fortunei* (branchlet and bark: mean content of 2 origins = 0.021%)<sup>[5508]</sup>, ZHONG GUO CU FEI ZHI YE *Cephalotaxus sinensis* [Syn. *Cephalotaxus harringtonia* var. *sinensis*]. **Ref:** 4, 658, 660, 5508.

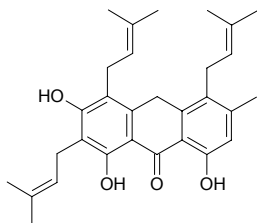


**9240 Harunganol B**

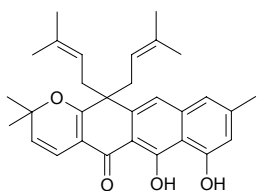
1,3,8-Trihydroxy-4,5,7-tris-(3,3-dimethylallyl)-6-methyl-anthrone  $C_{30}H_{36}O_4$  (460.62). Yellow crystals (hexane-ethyl acetate), mp 200°C. Pharm: Antioxidant (DPPH scavenger,  $IC_{50} = (64.8 \pm 5.5) \mu\text{mol/L}$ ; control 3-t-Butyl-4-hydroxyanisole,  $IC_{50} = (44.2 \pm 1.2) \mu\text{mol/L}$ ). Source: MA DAO HA NI MU *Harungana madagascariensis* (stem cortex). Ref: 5286.

**9241 Harungin anthrone**

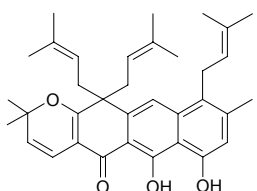
1,3,8-Trihydroxy-2,4,5-tris-(3,3-dimethylallyl)-6-methylanthrone  $C_{30}H_{36}O_4$  (460.62). Brown crystals (hexane), mp 170.6°C. Pharm: Antioxidant (DPPH scavenger,  $IC_{50} = (92.1 \pm 4.5) \mu\text{mol/L}$ ; control 3-t-Butyl-4-hydroxyanisole,  $IC_{50} = (44.2 \pm 1.2) \mu\text{mol/L}$ ). Source: MA DAO HA NI MU *Harungana madagascariensis* (stem cortex). Ref: 5286.

**9242 Harunmadagascarin A**

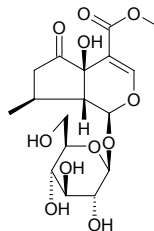
8,9-Dihydroxy-4,4-bis-(3,3-dimethylallyl)-6-methyl-2,3-(2,2-dimethylpyran o)anthrone  $C_{30}H_{34}O_4$  (458.60). Orange crystals (hexane), mp 149°C. Pharm: Antioxidant (DPPH scavenger,  $IC_{50} = (61.0 \pm 3.2) \mu\text{mol/L}$ ; control 3-t-Butyl-4-hydroxyanisole,  $IC_{50} = (44.2 \pm 1.2) \mu\text{mol/L}$ ). Source: MA DAO HA NI MU *Harungana madagascariensis* (stem cortex). Ref: 5286.

**9243 Harunmadagascarin B**

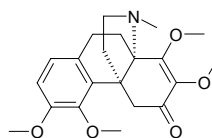
8,9-Dihydroxy-4,4,5-tris-(3,3-dimethylallyl)-6-methyl-2,3-(2,2-dimethylpyran ano)anthrone  $C_{35}H_{42}O_4$  (526.72). Orange crystals (MeOH), mp 122.5°C. Pharm: Antioxidant (DPPH scavenger,  $IC_{50} = (155.4 \pm 2.5) \mu\text{mol/L}$ ; control 3-t-Butyl-4-hydroxyanisole,  $IC_{50} = (44.2 \pm 1.2) \mu\text{mol/L}$ ). Source: MA DAO HA NI MU *Harungana madagascariensis* (stem cortex). Ref: 5286.

**9244 Hastatoside**

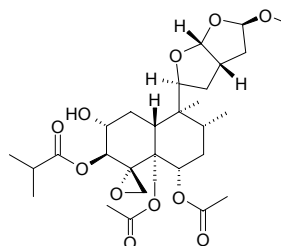
$C_{17}H_{24}O_{11}$  (404.37). Source: JI YE MA BIAN CAO *Verbena hastata*, MA BIAN CAO *Verbena officinalis*. Ref: 660.

**9245 Hasubanonine**

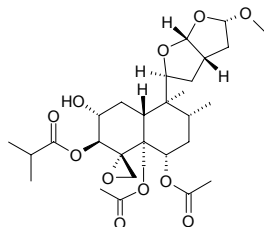
O-Methylaknadinine [1805-85-2]  $C_{21}H_{27}NO_5$  (373.45). mp 116–117°C,  $[\alpha]_D^{27} = -214^\circ$  ( $c = 2.0$ , MeOH). Source: QIAN JIN TENG *Stephania japonica*, AO DA LI YA QIAN JIN TENG *Stephania japonica* var. *australis*, YA LI QIAN JIN TENG *Stephania elegans*. Ref: 6, 1521.

**9246 Hativene A**

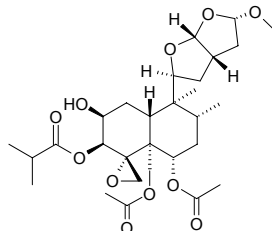
$C_{29}H_{44}O_{11}$  (568.67). Colorless oil,  $[\alpha]_D^{20} = -12.1^\circ$  ( $c = 0.3$ ,  $CHCl_3$ ). Source: *Ajuga pseudoiva* (leaf). Ref: 2412.

**9247 Hativene B**

$C_{29}H_{44}O_{11}$  (568.67). Colorless oil,  $[\alpha]_D^{20} = -2.8^\circ$  ( $c = 0.12$ ,  $CHCl_3$ ). Source: *Ajuga pseudoiva* (leaf). Ref: 2412.

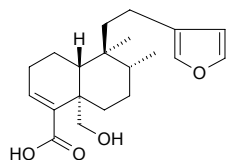
**9248 Hativene C**

$C_{29}H_{44}O_{11}$  (568.67). Colorless oil. Source: *Ajuga pseudoiva* (leaf). Ref: 2412.

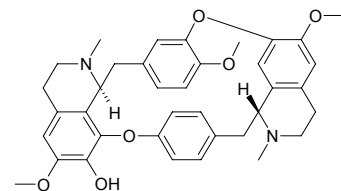


**9249 Hautriwaic acid**

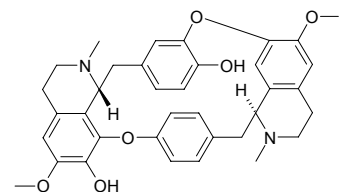
[18411-75-1]  $C_{20}H_{28}O_4$  (332.44). mp 183~184°C,  $[\alpha]_D = -105^\circ$ . Source: CHE SANG ZI YE *Dodonaea viscosa*. Ref: 6, 1521.

**9250 Hayatidine**

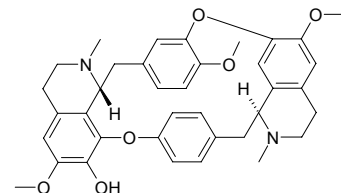
[16543-77-4]  $C_{37}H_{40}N_2O_6$  (608.74). mp 179~180°C,  $[\alpha]_D = -109^\circ$  (pyridine). Source: XI SHENG TENG *Cissampelos pareira*. Ref: 6, 1521.

**9251 Hayatine**

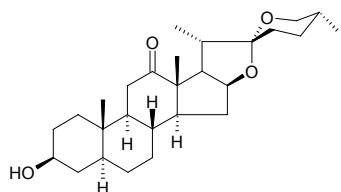
$C_{36}H_{38}N_2O_6$  (594.71). mp 281°C (dec), ( $\pm$ ) 303°C (dec). Source: XI SHENG TENG *Cissampelos pareira*. Ref: 4.

**9252 Hayatinine**

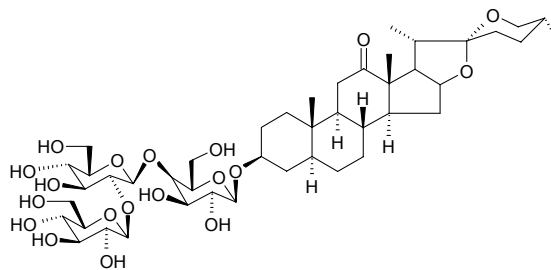
$C_{37}H_{40}N_2O_6$  (608.74). mp 231~232°C. Source: XI SHENG TENG *Cissampelos pareira*. Ref: 6.

**9253 Hecogenin**

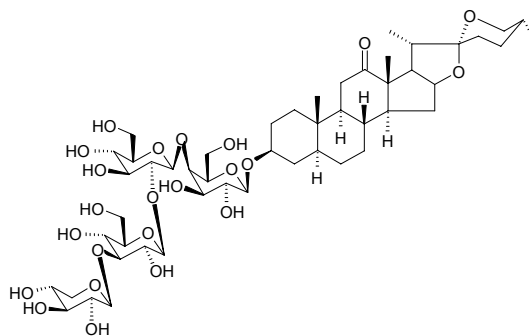
12-Oxotigogenin; 3 $\beta$ -Hydroxy-5 $\alpha$ ,25D-spirostan-12-one [467-55-0]  $C_{27}H_{42}O_4$  (430.63). mp 245°C, mp 253°C, mp 265°C, mp 268°C,  $[\alpha]_D = -10^\circ$  (dioxane). Source: DONG YI HAO JIAN MA *Agave east-one*, DUAN YE LONG SHE LAN *Agave angustifolia*, FAN MA *Agave americana*, JIAN MA *Agave sisalana*, WEN ZHU *Asparagus setaceus* [Syn. *Asparagus plumosus*], WU CI FAN MA *Agave americana* var. *marginata* [Syn. *Agave americana* var. *variegata*], XIA YE LONG SHE LAN *Agave cantala*, YIN BIAN LONG SHE LAN *Agave angustifolia* var. *marginata*. Ref: 6, 10, 658, 1521.

**9254 Hecogenin 3-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-galactopyranoside**

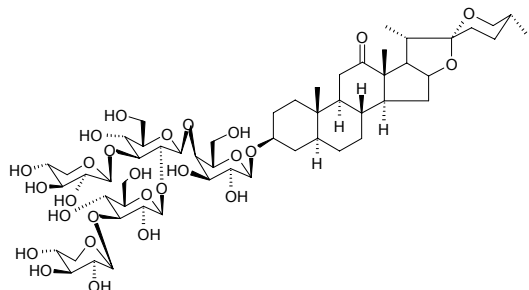
$C_{45}H_{72}O_{19}$  (917.06). Pharm: Cytotoxic (*in vitro*, HeLa,  $IC_{50} = 8.6\mu\text{g/mL}$ ; control *cis*-Platin,  $IC_{50} = 0.75\mu\text{g/mL}$ ). Source: WAN XIANG YU *Polianthes tuberosa* (tuber: yield = 0.0048%fw). Ref: 3002.

**9255 Hecogenin 3-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)-[ $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-galactopyranoside**

$C_{50}H_{80}O_{23}$  (1049.18). Pharm: Cytotoxic (*in vitro*, HeLa,  $IC_{50} = 8.2\mu\text{g/mL}$ ; control *cis*-Platin,  $IC_{50} = 0.75\mu\text{g/mL}$ ). Source: WAN XIANG YU *Polianthes tuberosa* (tuber: yield = 0.041%fw). Ref: 3002.

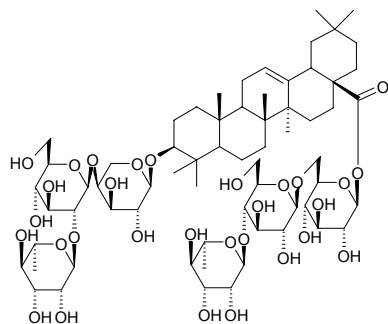
**9256 Hecogenin 3-O- $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)-[ $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-galactopyranoside**

$C_{55}H_{88}O_{27}$  (1181.3). Pharm: Cytotoxic (*in vitro*, HeLa,  $IC_{50} = 4\mu\text{g/mL}$ ; control *cis*-Platin,  $IC_{50} = 0.75\mu\text{g/mL}$ ). Source: WAN XIANG YU *Polianthes tuberosa* (tuber: yield = 0.0035%fw). Ref: 3002.

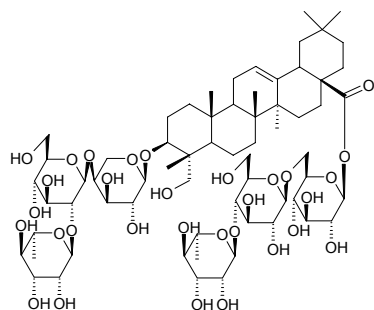


**9257 Hederacolchiside E**

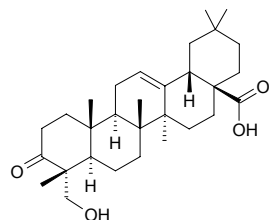
$C_{65}H_{106}O_{30}$  (1367.55). **Pharm:** Antioxidant (75 $\mu$ g/mL, total antioxidant activity (lipid peroxidation of linoleic acid emulsion) = 88%, control  $\alpha$ -Tocopherol, total antioxidant activity = 67%; reducing power = 0.508,  $\alpha$ -Tocopherol, reducing power = 1.929; DPPH scavenging,  $IC_{50}$  = 73.5 $\mu$ g/mL,  $\alpha$ -Tocopherol,  $IC_{50}$  = 48.1 $\mu$ g/mL; superoxide radical scavenging,  $IC_{50}$  = 46.3 $\mu$ g/mL,  $\alpha$ -Tocopherol,  $IC_{50}$  = 50.0 $\mu$ g/mL; iron chelating,  $IC_{50}$  = 70.8 $\mu$ g/mL,  $\alpha$ -Tocopherol,  $IC_{50}$  = 50.0 $\mu$ g/mL;  $H_2O_2$  scavenging,  $IC_{50}$  = 41.2 $\mu$ g/mL,  $\alpha$ -Tocopherol,  $IC_{50}$  = 40.3 $\mu$ g/mL). **Source:** QIU SHUI XIAN CHANG CHUN TENG *Hedera colchica*. **Ref:** 4993.

**9258 Hederacolchiside F**

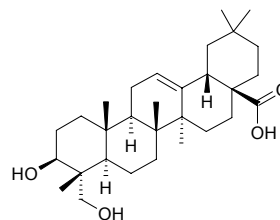
$C_{65}H_{106}O_{31}$  (1383.55). **Pharm:** Antioxidant (75 $\mu$ g/mL, total antioxidant activity (lipid peroxidation of linoleic acid emulsion) = 75%, control  $\alpha$ -Tocopherol, total antioxidant activity = 67%; reducing power = 0.282,  $\alpha$ -Tocopherol, reducing power = 1.929; DPPH scavenging,  $IC_{50}$  = 96.2 $\mu$ g/mL,  $\alpha$ -Tocopherol,  $IC_{50}$  = 48.1 $\mu$ g/mL; superoxide radical scavenging,  $IC_{50}$  = 45.8 $\mu$ g/mL,  $\alpha$ -Tocopherol,  $IC_{50}$  = 50.0 $\mu$ g/mL; iron chelating,  $IC_{50}$  = 60.5 $\mu$ g/mL,  $\alpha$ -Tocopherol,  $IC_{50}$  = 50.0 $\mu$ g/mL;  $H_2O_2$  scavenging,  $IC_{50}$  = 67.0 $\mu$ g/mL,  $\alpha$ -Tocopherol,  $IC_{50}$  = 40.3 $\mu$ g/mL)<sup>[4993]</sup>. **Source:** QIU SHUI XIAN CHANG CHUN TENG *Hedera colchica*. **Ref:** 4993.

**9259 Hederagenic acid**

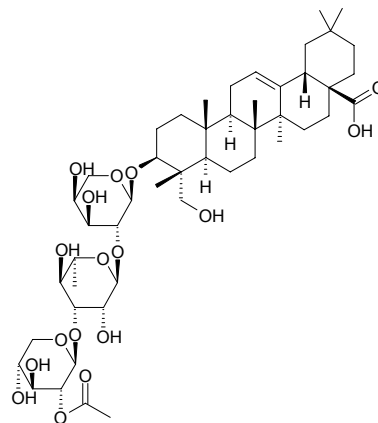
$C_{30}H_{46}O_4$  (470.70). **Source:** HONG JIA MI *Viburnum erubescens*, MA TI YE *Caltha palustris*. **Ref:** 660, 1521.

**9260 Hederagenin**

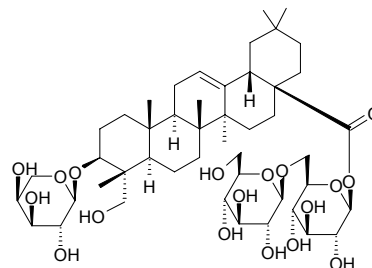
Mukurosigenin; Caulosapogenin; Hederidin; Kalosapogenin; Melanthigenin; Astrantiagenin E [465-99-6]  $C_{30}H_{48}O_4$  (472.71). White powder, mp 332–334°C. **Source:** BAI TOU WENG *Pulsatilla chinensis*, CHUAN XU DUAN *Dipsacus asperoides*, GUAN MU TONG *Aristolochia manshuriensis*, HUANG HUA BAI JIANG *Patrinia scabiosaefolia*, JIN YIN HUA *Lonicera japonica*, LU CAO *Rhaponticum carthamoides*, MU TONG *Akebia quinata*, WEI LING XIAN *Clematis chinensis*. **Ref:** 2, 6, 638, 660, 698.

**9261 Hederagenin 3-O-(2-O-acetyl- $\beta$ -D-xylopyranosyl)-(1 $\rightarrow$ 3)- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranoside**

$C_{48}H_{76}O_{17}$  (925.13). White amorphous powder,  $[\alpha]_D^{22} = +5.9^\circ$  ( $c = 3.7$ , MeOH). **Source:** AO TOU WU HUAN ZI *Sapindus emarginatus* (pericarp). **Ref:** 4123.

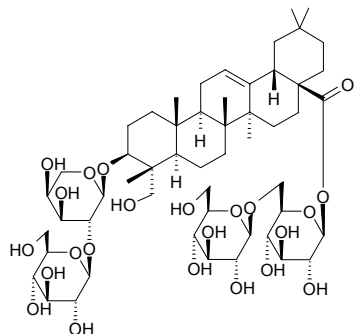
**9262 Hederagenin 3-O- $\alpha$ -L-arabinopyranosyl-28-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside**

$C_{47}H_{76}O_{18}$  (929.12). **Source:** HUANG HUA BAI JIANG *Patrinia scabiosaefolia*, REN DONG TENG *Lonicera japonica*. **Ref:** 660.



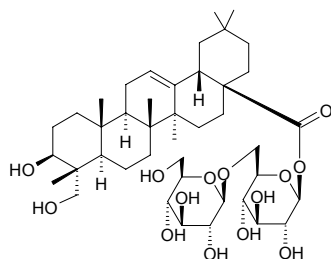
**9263 Hederagenin-3-*O*- $\beta$ -D-glucopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranosyl-28-*O*- $\beta$ -D-glucopyranosyl(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside**

$C_{53}H_{86}O_{23}$  (1091.26). Source: REN DONG TENG *Lonicera japonica*. Ref: 660.



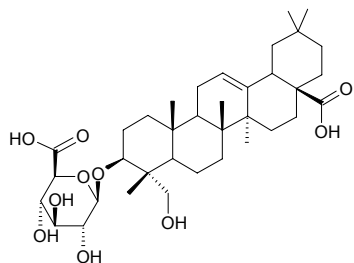
**9264 Hederagenin-28-*O*- $\beta$ -D-glucopyranosyl(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside**

$C_{42}H_{68}O_{14}$  (797.00). Source: CHUAN XU DUAN *Dipsacus asperoides*. Ref: 660.



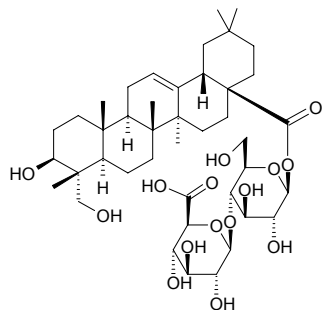
**9265 Hederagenin-3-*O*- $\beta$ -glucuronopyranoside**

$C_{36}H_{56}O_{10}$  (648.84). White amorphous powder (MeOH), mp 224–227°C,  $[\alpha]_D^{20} = +22.6^\circ$  ( $c = 1.00$ , MeOH). Source: CI WU JIA *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*] (seed). Ref: 4904.



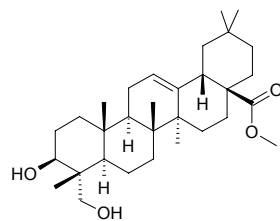
**9266 Hederagenin-28-*O*- $\beta$ -D-glucuronopyranosyl (1 $\rightarrow$ 4)- $\beta$ -D-glucopyranoside**

$C_{42}H_{66}O_{15}$  (810.99). White powder, mp 204–206°C (dec). Source: TOU XU CONG MU *Aralia dasyphylla*. Ref: 876.



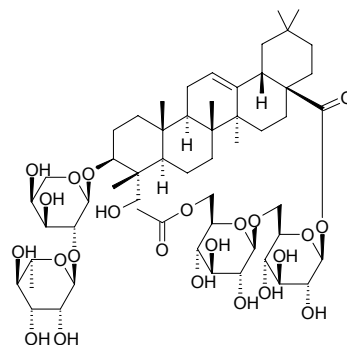
**9267 Hederagenin methyl ester**

$C_{31}H_{50}O_4$  (486.74). Source: XIANG SI ZI *Abrus precatorius*. Ref: 660.



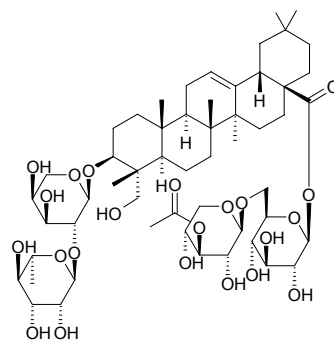
**9268 Hederagenin-3-*O*- $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranosyl-28-*O*-6-acetyl- $\beta$ -D-glucopyranosyl(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside**

$C_{55}H_{88}O_{23}$  (1117.30). Source: REN DONG TENG *Lonicera japonica*. Ref: 660.



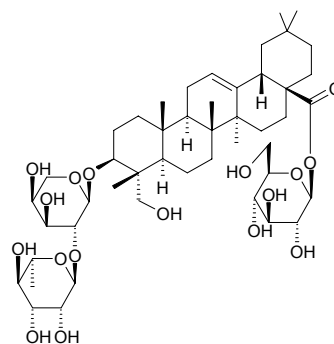
**9269 Hederagenin-3-*O*- $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranosyl-28-*O*-3-acetyl- $\beta$ -D-xylopyranosyl(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside**

$C_{54}H_{86}O_{22}$  (1087.27). Source: REN DONG TENG *Lonicera japonica*. Ref: 660.



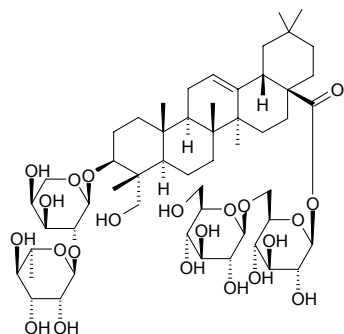
**9270 Hederagenin-3-*O*- $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranosyl-28-*O*- $\beta$ -D-glucopyranoside**

$C_{47}H_{76}O_{17}$  (913.12). Source: REN DONG TENG *Lonicera japonica*. Ref: 660.



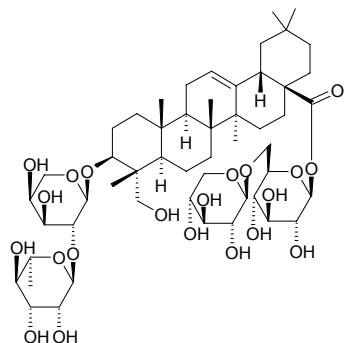
**9271 deragenin-3-O- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranosyl-28-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside**

C<sub>53</sub>H<sub>86</sub>O<sub>22</sub> (1075.26). Source: REN DONG TENG *Lonicera japonica*. Ref: 660.



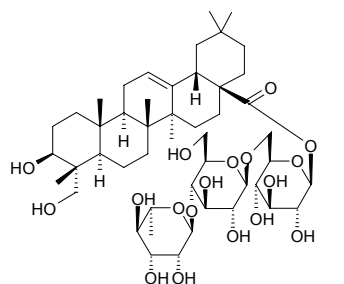
**9272 Hederagenin-3-O- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranosyl-28-O- $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside**

C<sub>52</sub>H<sub>84</sub>O<sub>21</sub> (1045.24). Source: LIAO DONG CONG MU YE *Aralia elata*, REN DONG TENG *Lonicera japonica*. Ref: 660, 4471.



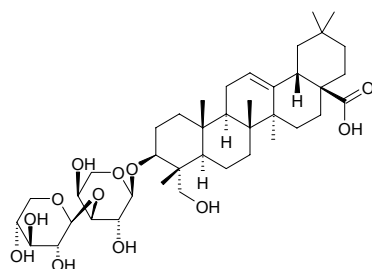
**9273 Hederagenin 28-O- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside**

C<sub>48</sub>H<sub>78</sub>O<sub>18</sub> (943.15). White powder, mp 214–216 °C [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -3.0° (*c* = 0.5, MeOH). Source: DONG BEI CI REN SHEN *Oplopanax elatus*. Ref: 467.



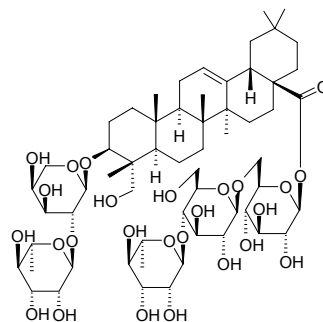
**9274 Hederagenin-3-O- $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -L-arabinopyranoside**

C<sub>40</sub>H<sub>64</sub>O<sub>12</sub> (736.95). Source: YU ZHI ZI *Akebia quinata*. Ref: 660.



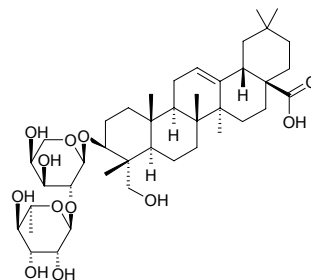
**9275 Hederasaponin C**

Pericarsaponin Pk C<sub>59</sub>H<sub>96</sub>O<sub>26</sub> (1221.41). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +16.2° (*c* = 0.10, MeOH). Pharm: Antioxidant (75 $\mu$ g/mL, total antioxidant activity (lipid peroxidation of linoleic acid emulsion) = 86%, control  $\alpha$ -Tocopherol, total antioxidant activity = 67%; reducing power = 0.696,  $\alpha$ -Tocopherol, reducing power = 1.929; DPPH scavenging, IC<sub>50</sub> = 82.4 $\mu$ g/mL,  $\alpha$ -Tocopherol, IC<sub>50</sub> = 48.1 $\mu$ g/mL; superoxide radical scavenging, IC<sub>50</sub> = 45.8 $\mu$ g/mL,  $\alpha$ -Tocopherol, IC<sub>50</sub> = 50.0 $\mu$ g/mL; iron chelating, IC<sub>50</sub> = 52.9 $\mu$ g/mL,  $\alpha$ -Tocopherol, IC<sub>50</sub> = 50.0 $\mu$ g/mL; H<sub>2</sub>O<sub>2</sub> scavenging, IC<sub>50</sub> = 59.5 $\mu$ g/mL,  $\alpha$ -Tocopherol, IC<sub>50</sub> = 40.3 $\mu$ g/mL)<sup>[4993]</sup>. Source: DUO YE JI DOU *Oxytropis myriophylla* (whole herb), SAN YE MU TONG *Akebia trifoliata* (stem), XI ZANG TIE XIAN LIAN *Clematis tibetana* (aerial parts), YANG CHANG CHUN TENG *Hedera helix*. Ref: 3530, 4222, 4545, 4993.



**9276  $\alpha$ -Hederin**

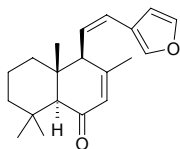
Kalopanaxsaponin A; Kalopanax septemlobus asponin A; Prosapogenin CP<sub>36</sub>; Hederagenin-3-O- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranoside C<sub>41</sub>H<sub>66</sub>O<sub>12</sub> (750.98). mp 228–230°C. Pharm: Anti-inflammatory (male ICR mus, ori, dose = 50mg/kg)<sup>[4212]</sup>; anti-inflammatory (modulator of cytokine network: prevents formation of TNF- $\alpha$  in RAW264.7 macrophages stimulated with LPS, IC<sub>50</sub> = 5 $\mu$ mol/L)<sup>[4416]</sup>; antioxidant (75 $\mu$ g/mL, total antioxidant activity (lipid peroxidation of linoleic acid emulsion) = 94%, control  $\alpha$ -Tocopherol, total antioxidant activity = 67%; reducing power = 1.412,  $\alpha$ -Tocopherol, reducing power = 1.929; DPPH scavenging, IC<sub>50</sub> = 69.4 $\mu$ g/mL,  $\alpha$ -Tocopherol, IC<sub>50</sub> = 48.1 $\mu$ g/mL; superoxide radical scavenging, IC<sub>50</sub> = 50.7 $\mu$ g/mL,  $\alpha$ -Tocopherol, IC<sub>50</sub> = 50.0 $\mu$ g/mL; iron chelating, IC<sub>50</sub> = 51.4 $\mu$ g/mL,  $\alpha$ -Tocopherol, IC<sub>50</sub> = 50.0 $\mu$ g/mL; H<sub>2</sub>O<sub>2</sub> scavenging, IC<sub>50</sub> = 45.2 $\mu$ g/mL,  $\alpha$ -Tocopherol, IC<sub>50</sub> = 40.3 $\mu$ g/mL)<sup>[4993]</sup>. Source: CHANG CHUN TENG *Hedera nepalensis* var. *sinensis*, ZHUO SE CI QIU *Kalopanax pictum*, CI QIU SHU PI *Kalopanax septemlobus*, HONG MAO WU JIA PI *Acanthopanax giraldii* [Syn. *Acanthopanax giraldii* var. *inermis*; *Eleutherococcus giraldii*], HUANG HE MAO REN DONG *Lonicera fulvotomentosa*, HUANG HUA BAI JIANG *Patrinia scabiosaefolia*, MA TI YE *Caltha palustris*, REN DONG TENG *Lonicera japonica*, WEI LING XIAN *Clematis chinensis*, XI ZANG TIE XIAN LIAN *Clematis tibetana* (aerial parts), YANG CHANG CHUN TENG *Hedera helix*, YU ZHI ZI *Akebia quinata*. Ref: 6, 660, 3530, 4212, 4416, 4993.



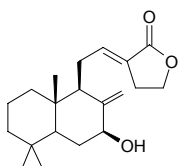


**9277 Hedychenone**

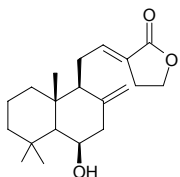
[56324-54-0] C<sub>20</sub>H<sub>26</sub>O<sub>2</sub> (298.43). Crystals (hexane), mp 135~136°C, [ $\alpha$ ]<sub>D</sub> = +142° (CHCl<sub>3</sub>). Source: DIAN JIANG HUA *Hedychium yunnanense*, TU LIANG JIANG *Hedychium spicatum*, TU QIANG HUO *Hedychium coronarium* (rhizome), YUAN BAN JIANG HUA *Hedychium forrestii*. Ref: 6, 322, 660, 1521, 4221.

**9278 Hedychilactone A**

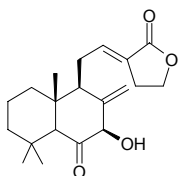
C<sub>20</sub>H<sub>30</sub>O<sub>3</sub> (318.46). Pharm:  $\beta$ -Hexosaminidase inhibitor (RBL-2H3 cells, 100 $\mu$ mol/L, InRt = (39.1 $\pm$ 2.7)%,  $p < 0.01$ )<sup>[4221]</sup>. Source: TU QIANG HUO *Hedychium coronarium* (rhizome). Ref: 4221.

**9279 Hedychilactone B**

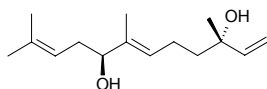
C<sub>20</sub>H<sub>30</sub>O<sub>3</sub> (318.46). Source: TU QIANG HUO *Hedychium coronarium* (rhizome). Ref: 4221.

**9280 Hedychilactone C**

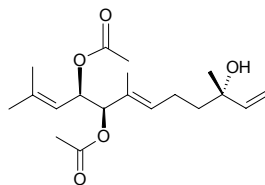
C<sub>20</sub>H<sub>28</sub>O<sub>4</sub> (332.44). Source: TU QIANG HUO *Hedychium coronarium* (rhizome). Ref: 4221.

**9281 Hedychiol A**

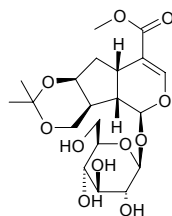
C<sub>15</sub>H<sub>26</sub>O<sub>2</sub> (238.37). Colorless oil, [ $\alpha$ ]<sub>D</sub><sup>26</sup> = -2.4° ( $c = 0.800$ , CHCl<sub>3</sub>). Source: TU QIANG HUO *Hedychium coronarium* (rhizome). Ref: 4221.

**9282 Hedychiol B 8,9-diacetate**

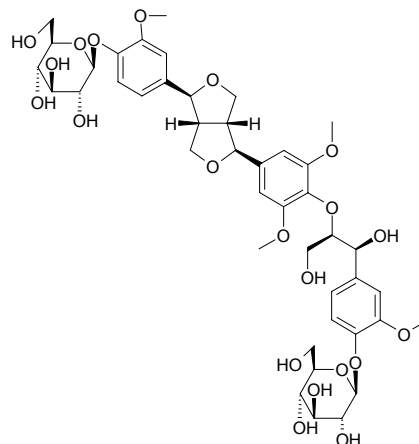
C<sub>19</sub>H<sub>30</sub>O<sub>5</sub> (338.45). Colorless oil, [ $\alpha$ ]<sub>D</sub><sup>21</sup> = -18.8° ( $c = 0.300$ , CHCl<sub>3</sub>). Pharm:  $\beta$ -Hexosaminidase inhibitor (RBL-2H3 cells, 100 $\mu$ mol/L, InRt = (11.4 $\pm$ 1.2)%,  $p < 0.01$ )<sup>[4221]</sup>. Source: TU QIANG HUO *Hedychium coronarium* (rhizome). Ref: 4221.

**9283 Hedyoside**

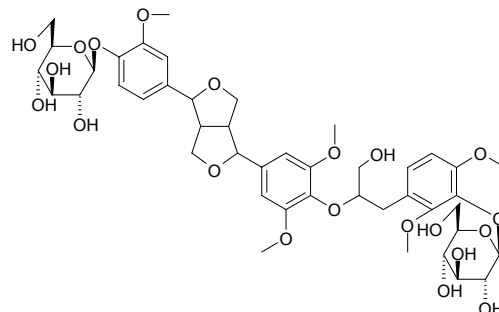
[209115-90-2] C<sub>20</sub>H<sub>30</sub>O<sub>11</sub> (446.46). White powder, [ $\alpha$ ]<sub>D</sub> = -26.3° ( $c = 0.049$ , methanol). Source: JIN MAO ER CAO *Hedyotis chrysotricha* [Syn. *Oldenlandia chrysotricha*]. Ref: 40.

**9284 Hedytol C 4,4''-di-O- $\beta$ -D-glucopyranoside**

[107668-75-7] C<sub>43</sub>H<sub>56</sub>O<sub>21</sub> (908.91). Source: DU ZHONG *Eucommia ulmoides*. Ref: 2, 184.

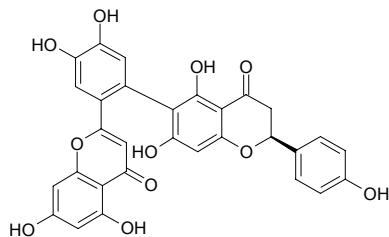
**9285 Hedyalignan A**

C<sub>44</sub>H<sub>58</sub>O<sub>21</sub> (922.94). White powder, mp 160~164°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +4.0° ( $c = 0.22$ , MeOH). Source: DUO XU YAN HUANG QI *Hedysarum polybotrys*. Ref: 2470.

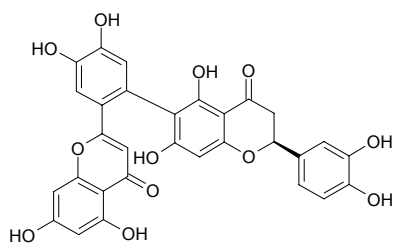


**9286 Hegoflavone A**

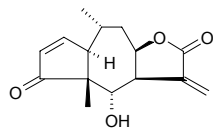
2,3-Dihydro-3''-hydroxy-6'''-biapigenin C<sub>30</sub>H<sub>20</sub>O<sub>11</sub> (556.49). Source: SUO LUO *Alsophila spinulosa*. Ref: 660.

**9287 Hegoflavone B**

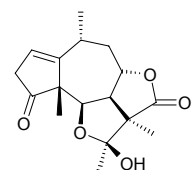
2,3-Dihydro-6,6'''-biluteolin C<sub>30</sub>H<sub>20</sub>O<sub>12</sub> (572.49). Source: SUO LUO *Alsophila spinulosa*. Ref: 660.

**9288 Helenalin**

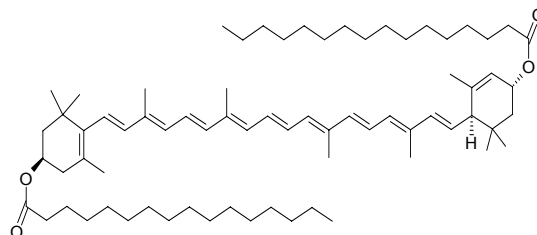
[6754-13-8] C<sub>15</sub>H<sub>18</sub>O<sub>4</sub> (262.31). Crystals (C<sub>2</sub>H<sub>5</sub>OH or C<sub>6</sub>H<sub>6</sub>), mp 225–228°C, [α]<sub>D</sub><sup>25</sup> = –102.8° (CHCl<sub>3</sub>). Pharm: Antibacterial (*Staphylococcus aureus*, MIC = 100μg/mg; *Bacillus subtilis*, MIC = 100μg/mg); antineoplastic (mus, P<sub>388</sub>, *in vivo*); anti-inflammatory (rat swollen foot model caused by carrageenan, 2.5mg/kg, InRt = 72%, rat experimental arthritis, 2.5mg/kg, InRt = 73%); anthelmintic; cytotoxic (HeLa *in vitro*, ED<sub>50</sub> = 0.03μg/mL, normal hmn diploid fibrocyte WI-38 *in vitro*, ED<sub>50</sub> = 0.03μg/mL, hmn throat epidermic carcinoma cells H-Ep-2, ED<sub>50</sub> = 0.08μg/mL, W-18Va-2 cells, ED<sub>50</sub> = 0.07μg/mL); molluscicide; toxin (hmn, animals, fish and insects); anti-inflammatory (NF-κB pathway)<sup>[4415]</sup>. Source: DUI XIN JU *Helenium autumnale*, FANG XIANG DUI XIN JU *Helenium aromaticum*, SHAN DI DUI XIN JU *Helenium autumnale* var. *montanum*, XI YE DUI XIN JU *Helenium tenuifolium*, XIAO TOU DUI XIN JU *Helenium microcephalum*. Ref: 4, 658, 1521, 4415.

**9289 Heleniamarin**

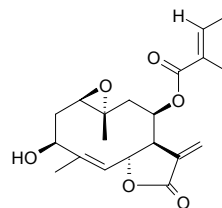
[66607-74-7] C<sub>17</sub>H<sub>22</sub>O<sub>5</sub> (306.36). Crystals (Et<sub>2</sub>O), mp 151–153°C, [α]<sub>D</sub><sup>21</sup> = +58.5° (c = 0.25, CHCl<sub>3</sub>). Source: KU WEI DUI XIN JU *Helenium amarum*. Ref: 4, 1521.

**9290 Helenien**

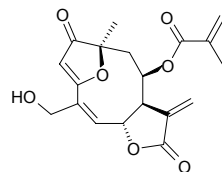
Xantofyl palmitate; Adaptinol; Aptinol [547-17-1] C<sub>72</sub>H<sub>116</sub>O<sub>4</sub> (1045.72). Red crystals (C<sub>2</sub>H<sub>5</sub>OH), mp 92°C. Pharm: Yellow pigment. Source: WAN SHOU JU *Tagetes erecta*, DUI XIN JU *Helenium autumnale*, KONG QUE CAO *Tagetes patula*, DI TANG HUA *Kerria japonica*. Ref: 6, 658, 1521.

**9291 Heliangin**

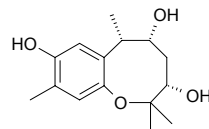
[13323-48-3] C<sub>20</sub>H<sub>26</sub>O<sub>6</sub> (362.43). Crystals (MeOH), mp 227–229°C, [α]<sub>D</sub><sup>23</sup> = –110° (c = 0.5, CHCl<sub>3</sub>). Pharm: Plant growth regulator. Source: CHENG GAN SHENG MA *Eupatorium lindleyanum* (whole plant: yield = 0.0012%dw)<sup>[4762]</sup>, JU YU *Helianthus tuberosus*, XIANG RI KUI YE *Helianthus annuus*, XIANG RI KUI ZI *Helianthus annuus*. Ref: 6, 658, 1521, 4762.

**9292 Heliangolide 17,18-dehydro-viguiepinin**

C<sub>19</sub>H<sub>20</sub>O<sub>7</sub> (360.37). Source: *Viguiera eriophora* ssp. *eriophora* (aerial parts). Ref: 5090.

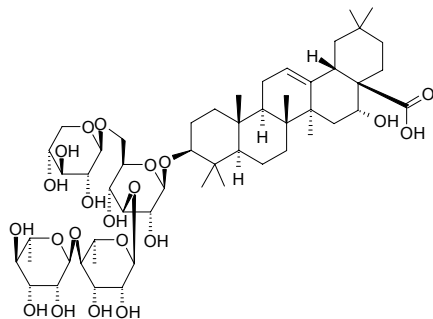
**9293 Heliannuol L**

C<sub>15</sub>H<sub>22</sub>O<sub>4</sub> (266.34). Colorless oil. Source: XIANG RI KUI YE *Helianthus annuus*. Ref: 1927.

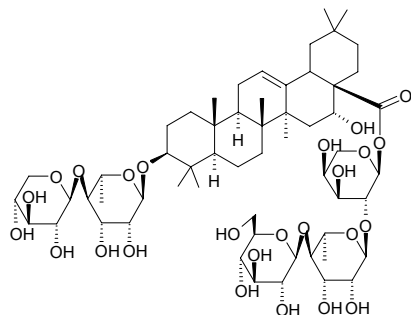


**9294 Helianthoside A**

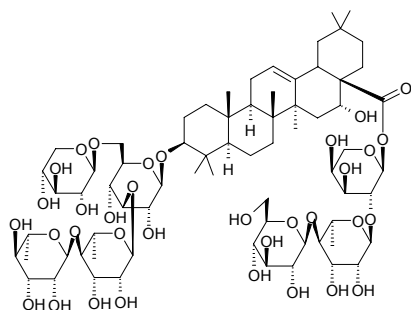
[139164-70-8] C<sub>53</sub>H<sub>86</sub>O<sub>21</sub> (1059.26). **Pharm:** Hemolytic. **Source:** XIANG RI KUI ZI *Helianthus annuus*. **Ref:** 658.

**9295 Helianthoside B**

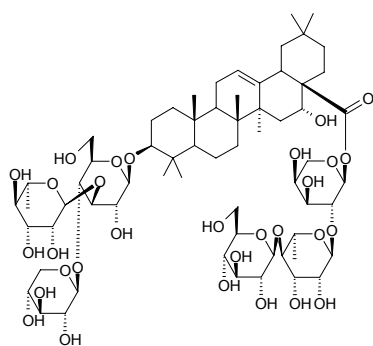
[29108-67-6] C<sub>58</sub>H<sub>94</sub>O<sub>25</sub> (1191.38). **Source:** XIANG RI KUI HUA *Helianthus annuus*. **Ref:** 6.

**9296 Helianthoside C**

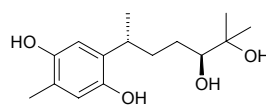
C<sub>70</sub>H<sub>114</sub>O<sub>34</sub> (1499.67). mp 215~217°C. **Source:** XIANG RI KUI HUA *Helianthus annuus*. **Ref:** 6.

**9297 Helianthussaponin 2**

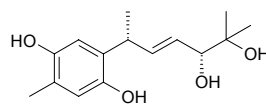
C<sub>64</sub>H<sub>104</sub>O<sub>30</sub> (1353.52). **Source:** MAI XIAN WENG *Agrostemma githago* (root). **Ref:** 5464.

**9298 Helibisabonol A**

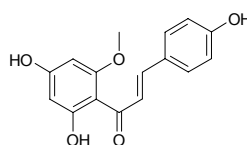
C<sub>15</sub>H<sub>22</sub>O<sub>4</sub> (268.36). Colorless oil, [α]<sub>D</sub><sup>25</sup> = -44.9° (c = 0.1, CH<sub>3</sub>COCH<sub>3</sub>). **Source:** XIANG RI KUI YE *Helianthus annuus*. **Ref:** 1927.

**9299 Helibisabonol B**

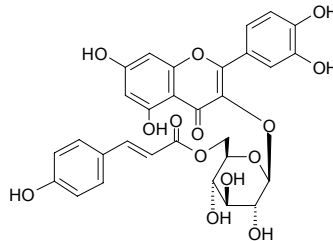
C<sub>15</sub>H<sub>22</sub>O<sub>4</sub> (266.34). Colorless oil, [α]<sub>D</sub><sup>25</sup> = -7.2° (c = 0.1, CH<sub>3</sub>COCH<sub>3</sub>). **Source:** XIANG RI KUI YE *Helianthus annuus*. **Ref:** 1927.

**9300 Helichrysetin**

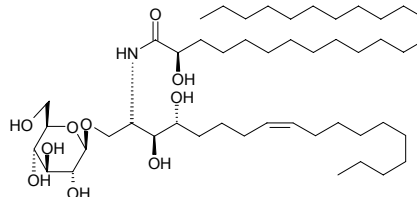
C<sub>16</sub>H<sub>14</sub>O<sub>5</sub> (286.29). **Pharm:** Cytotoxic (Colon26-L5, ED<sub>50</sub> = 64.7 μmol/L; HT1080, ED<sub>50</sub> = 40.1 μmol/L). **Source:** YUN NAN CAO KOU *Alpinia blepharocalyx* (seed: yield = 0.00079%). **Ref:** 3042.

**9301 Helichrysoiside**

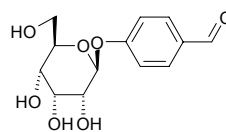
[56343-26-1] C<sub>30</sub>H<sub>26</sub>O<sub>14</sub> (610.53). Bright yellow lamellar crystals (with 1.5 H<sub>2</sub>O), mp 181~184°C, [α]<sub>D</sub><sup>21</sup> = -44° (c = 1.0, methanol). **Pharm:** Antihypertensive (rat, inhibits sympathetic nervous system and relaxes blood vessels). **Source:** ZANG HONG HUA *Crocus sativus*. **Ref:** 1029, 1173.

**9302 Helicia cerebroside A**

1-β-D-Glucopyranosyl-(2S,3S,4R,8Z)-2-[(2'R)-2'-hydroxylignocenoyl-amino]-8-octadecene-1,3,4-triol C<sub>48</sub>H<sub>93</sub>NO<sub>10</sub> (844.28). White crystalline powder. **Source:** SHEN LU SHAN LONG YAN *Helicia nilagirica* (leaf). **Ref:** 4843.

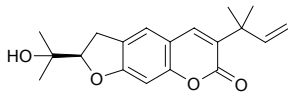
**9303 Helicide**

C<sub>13</sub>H<sub>16</sub>O<sub>7</sub> (284.27). **Source:** SHEN LU SHAN LONG YAN *Helicia nilagirica*. **Ref:** 660.

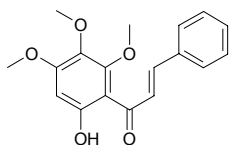


**9304 Heliettin**

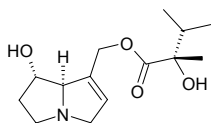
Chalepin; Rutamarin alcohol [33054-89-6]  $C_{19}H_{22}O_4$  (314.38). mp 165°C. Pharm: Cytotoxic (*in vitro*); phyto-growth inhibitor (100 $\mu$ g/mL, *Amaranthus hypochondriacus*, InRt = (45.1 $\pm$ 1.3)%,  $P < 0.05$ ; *E. crusgalli*, InRt = (88.5 $\pm$ 1.8)%)<sup>[5253]</sup>. Source: CHOU CAO *Ruta graveolens*, SUI ZHUANG YUN XIANG *Ruta chalepensis*, *Stauranthus perforatus* (root). Ref: 6, 658, 5253.

**9305 Helilandin B**

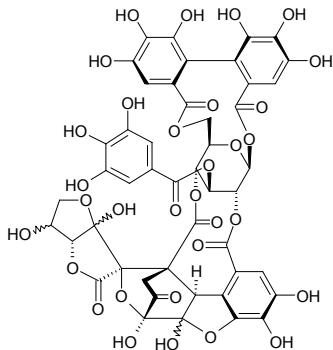
$C_{18}H_{18}O_5$  (314.34). Source: *Didymocarpus pedicellata*, *Helichrysum sutherlandii*. Ref: 660.

**9306 Heliohoustine**

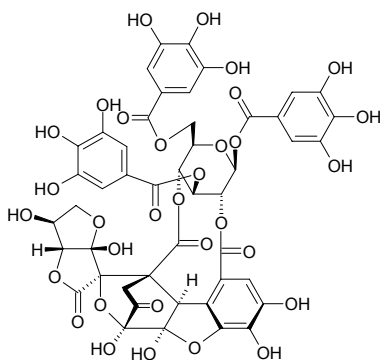
$O^9$ -(2*S*-2 $\alpha$ -Hydroxy-2,3-dimethyl-butanoyl)  $C_{14}H_{23}NO_4$  (269.34). Source: XIONG ER CAO *Ageratum houstonianum* (aerial parts). Ref: 5173.

**9307 Helioscopin A**

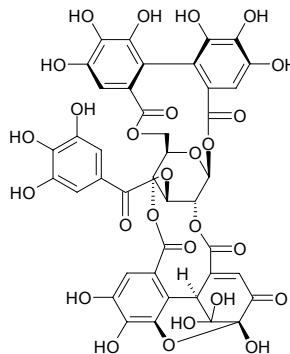
$C_{47}H_{34}O_{32}$  (1110.78). Source: ZE QI *Euphorbia helioscopia*. Ref: 660.

**9308 Helioscopin B**

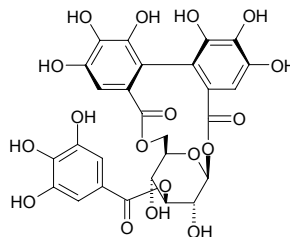
$C_{47}H_{36}O_{32}$  (1112.79). Source: ZE QI *Euphorbia helioscopia*. Ref: 660.

**9309 Helioscopin A**

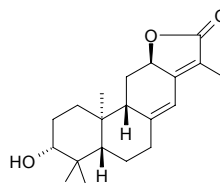
$C_{41}H_{28}O_{27}$  (952.66). Source: ZE QI *Euphorbia helioscopia*. Ref: 660.

**9310 Helioscopin B**

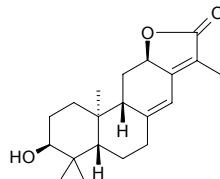
$C_{27}H_{22}O_{18}$  (634.47). Source: ZE QI *Euphorbia helioscopia*. Ref: 660.

**9311 Helioscopinolide A**

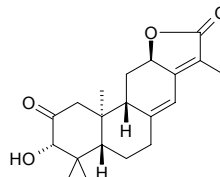
$C_{20}H_{28}O_3$  (316.44). Colorless needles. Source: DA GUO DA JI *Euphorbia wallichii* (root), ZE QI *Euphorbia helioscopia*. Ref: 660, 4585.

**9312 Helioscopinolide B**

$C_{20}H_{28}O_3$  (316.44). Source: ZE QI *Euphorbia helioscopia*. Ref: 660.

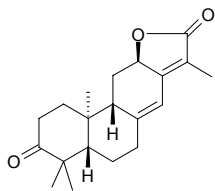
**9313 Helioscopinolide C**

$C_{20}H_{26}O_4$  (330.43). Colorless needles. Source: DA GUO DA JI *Euphorbia wallichii* (root), ZE QI *Euphorbia helioscopia*. Ref: 660, 4585.

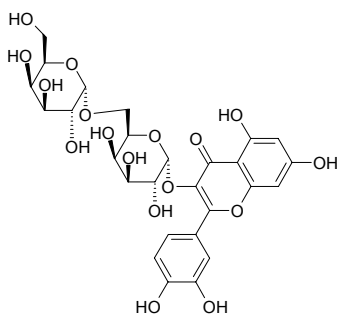


**9314 Helioscopinolide E**

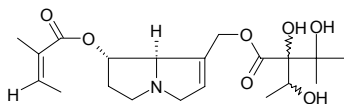
$C_{20}H_{26}O_3$  (314.43). Colorless needles. Source: DA GUO DA JI *Euphorbia wallichii* (root). Ref: 4585.

**9315 Heliosin**

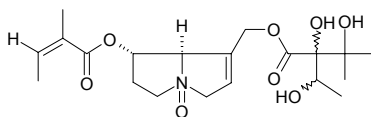
$C_{27}H_{30}O_{17}$  (626.53). Hemi-hydrate, yellow acicular crystals, mp 187°C,  $[\alpha]_D = -104.4^\circ$  ( $c = 0.498$ , 95% ethanol). Pharm: Antitussive (used in treatment of chronic bronchitis, in 286 cases, 5 days constituting a single therapeutic course, excellent effective rate = 50%). Source: ZE QI *Euphorbia helioscopia*. Ref: 661.

**9316 Heliosupine**

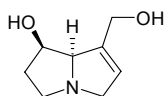
[32728-78-2]  $C_{20}H_{31}NO_7$  (397.47). mp 148~149°C. Pharm: Hepatotoxin. Source: ZHUO SE LIU LI CAO *Cynoglossum pictum*, CU XI MEN FEI CAO *Symphytum asperum*, LAN JI *Echium vulgare*, NAN FANG LIU LI CAO *Cynoglossum australe*, XI MEN FEI CAO *Symphytum officinale*, YANG XIN TIAN JIE CAI *Heliotropium supinum*, YAO YONG DAO TI HU *Cynoglossum officinale*. Ref: 6, 658.

**9317 Heliosupine N-oxide**

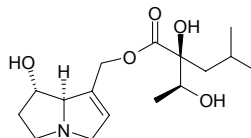
$C_{20}H_{31}NO_8$  (413.47). mp 165°C (dec). Source: YAO YONG DAO TI HU *Cynoglossum officinale*. Ref: 6.

**9318 Heliotridine**

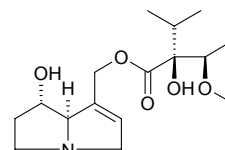
Retronecine† [480-85-3]  $C_8H_{13}NO_2$  (155.20). Crystals ( $Me_2CO$ ), mp 121~122°C,  $[\alpha]_D^{26} = +50.2^\circ$  (ethanol). Pharm: Hepatotoxin. Source: JIA DONG FANG QIAN LI GUANG *Senecio pseudoorientalis*, *Crotalaria* sp., *Heliotropium* sp. Ref: 658, 1521.

**9319 Heliotridine 2S-hydroxy-2S-(1S-hydroxyethyl)-4-methyl-pentanoyl ester**

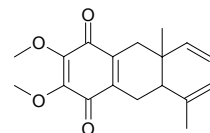
$C_{16}H_{27}NO_5$  (313.40). Yellow-orange oil,  $[\alpha]_D^{25} = +14.3^\circ$  ( $c = 0.1$ , MeOH). Source: CU MAO NIU SHE CAO *Anchusa strigosa* (flower, leaf and root). Ref: 5298.

**9320 Heliotrine**

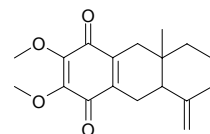
[303-33-3]  $C_{16}H_{27}NO_5$  (313.40). Prisms ( $Me_2CO$ ), mp 125~126°C, mp 128°C,  $[\alpha]_D^{20} = +63.8^\circ$  ( $CHCl_3$ ),  $[\alpha]_D = +17.6^\circ$  (ethanol). Pharm: Antineoplastic (adenoma 755, S<sub>180</sub>, subcutaneous Walker sarcoma and Walker sarcoma in murine muscle *in vivo*); cytotoxic (KB *in vitro*, ED<sub>50</sub> = 15µg/L); mutagen (Ames, drosophila, rat experiments); teratogen (Ames, drosophila, rat experiments). Source: A GU JI TIAN JIE CAI *Heliotropium arguzioides*, AI SHI TIAN JIE CAI *Heliotropium eichwaldii*, AO ER JIA TIAN JIE CAI *Heliotropium olgae*, DA WEI YAO *Heliotropium indicum*, DUO ZHI TIAN JIE CAI *Heliotropium ramosissimum*, OU ZHOU TIAN JIE CAI *Heliotropium europaeum*, YAN TIAN JIE CAI *Heliotropium curassavicum*, YAO YONG DAO TI HU *Cynoglossum officinale*. Ref: 5, 658.

**9321 Heliotropinone A**

7-Isopropenyl-2,3-dimethoxy-6-methyl-6-vinyl-5,6,7,8-tetrahydronaphthalene-1,4-dione  $C_{18}H_{22}O_4$  (302.37). Dark yellow oil,  $[\alpha]_D = 0^\circ$  ( $c = 0.05$ , MeOH). Pharm: Antifungal (*Cladosporium cucumerinum*, MIA = 2µg, control Nystatin, MIA = 1µg; *Candida albicans*, MIA = 4µg, Nystatin, MIA = 1µg)<sup>[5203]</sup>; antibacterial (*Bacillus subtilis*, MIA = 0.2µg; control Chloramphenicol, MIA = 0.01µg)<sup>[5203]</sup>. Source: LUAN YE TIAN JIE CAI *Heliotropium ovalifolium* (aerial parts). Ref: 5203.

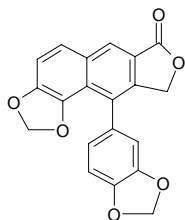
**9322 Heliotropinone B**

2,3-Dimethoxy-8α-methyl-5-methylene-5,6,7,8,8α,9,10,10a-octahydroanthracene-1,4-dione  $C_{18}H_{22}O_4$  (302.37). Dark yellow oil,  $[\alpha]_D = +4^\circ$  ( $c = 0.05$ , MeOH). Pharm: Antifungal (*Cladosporium cucumerinum*, MIA = 2µg, control Nystatin, MIA = 1µg; *Candida albicans*, MIA = 2µg, Nystatin, MIA = 1µg); antibacterial (*Bacillus subtilis*, MIA = 0.2µg; control Chloramphenicol, MIA = 0.01µg). Source: LUAN YE TIAN JIE CAI *Heliotropium ovalifolium* (aerial parts). Ref: 5203.

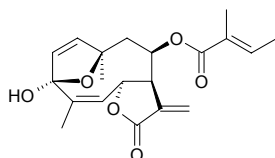


**9323 Helioxanthin**

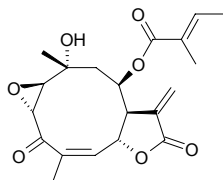
[18920-47-3]  $C_{20}H_{12}O_6$  (348.32). mp 240~241°C. **Pharm:** Cytotoxic (A549,  $ED_{50} = 11.3\mu\text{mol/L}$ ,  $ED_{50} = 32.4\mu\text{g/mL}$ , control Adriamycin,  $ED_{50} = 0.01\mu\text{mol/L}$ ,  $ED_{50} = 0.02\mu\text{g/mL}$ ; MCF7,  $ED_{50} = 12.6\mu\text{mol/L}$ ,  $ED_{50} = 36.1\mu\text{g/mL}$ , Adriamycin,  $ED_{50} = 0.1\mu\text{mol/L}$ ,  $ED_{50} = 0.1\mu\text{g/mL}$ ; HT29,  $ED_{50} = 13.4\mu\text{mol/L}$ ,  $ED_{50} = 38.6\mu\text{g/mL}$ , Adriamycin,  $ED_{50} = 0.1\mu\text{mol/L}$ ,  $ED_{50} = 0.1\mu\text{g/mL}$ )<sup>[5088]</sup>. **Source:** DA JIN NIU CAO *Polygala chinensis* [Syn. *Polygala glomerata*], QIANG DAO YAO *Hypoestes purpurea* [Syn. *Justicia purpurea*; *Hypoestes sinica*] (aerial parts: yield = 0.000067%dw)<sup>[4783]</sup>, TAI WAN SHAN *Taiwania cryptomerioides* (heartwood). **Ref:** 6, 4783, 5088.

**9324 Helivypolide D**

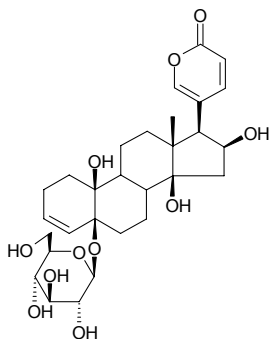
$C_{20}H_{24}O_6$  (360.41). Colorless oil. **Source:** ZAI PEI XIANG RI KUI YE *Helianthus annuus* cv. **Ref:** 2370.

**9325 Helivypolide E**

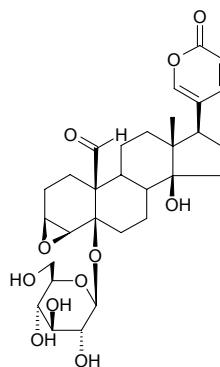
$C_{20}H_{24}O_7$  (376.41). Colorless oil. **Source:** ZAI PEI XIANG RI KUI YE *Helianthus annuus* cv. **Ref:** 2370.

**9326 Hellebortin A**

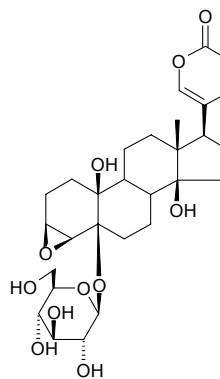
5-[ $\beta$ -D-Glucopyranosyloxy]-10,14,16-trihydroxy-19-nor- $\{5\beta,10\beta,14\beta,16\beta\}$ -bufa-3,20,22-trienolide  $C_{29}H_{40}O_{11}$  (564.64). Colorless glassy solid. **Pharm:** Ecdysteroid agonist or antagonist inactive (*Drosophila melanogaster* B<sub>11</sub> cell line, 1~1000 $\mu\text{mol/L}$ ). **Source:** NIU QU TI GEN CAO *Helleborus torquatus* [Syn. *Helleborus serbicus*] (seed). **Ref:** 5142.

**9327 Hellebortin B**

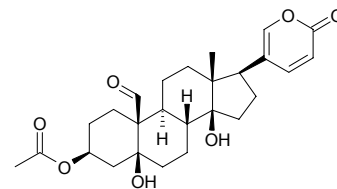
5-[ $\beta$ -D-Glucopyranosyloxy]-3,4-epoxy-14-hydroxy-19-oxo-bufa-20,22-dienolide  $C_{30}H_{40}O_{11}$  (576.65). White glassy solid. **Source:** NIU QU TI GEN CAO *Helleborus torquatus* [Syn. *Helleborus serbicus*] (seed). **Ref:** 5142.

**9328 Hellebortin C**

5-[ $\beta$ -D-Glucopyranosyloxy]-3,4-epoxy-10,14-dihydroxy-19-nor-bufa-20,22-dienolide  $C_{29}H_{40}O_{11}$  (564.64). Colorless glassy solid. **Source:** NIU QU TI GEN CAO *Helleborus torquatus* [Syn. *Helleborus serbicus*] (seed). **Ref:** 5142.

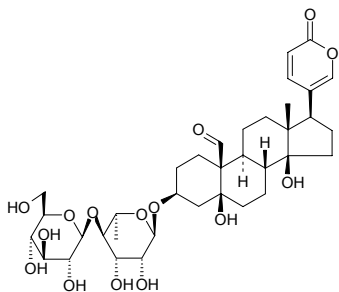
**9329 Hellebrigenin 3-acetate**

$C_{26}H_{34}O_7$  (458.56). **Pharm:** Antineoplastic. **Source:** TI GEN CAO *Helleborus niger*, TIE KUAI ZI *Helleborus thibetanus*, CHAN CHU *Bufo bufo gargarizans*; *Bufo melanostictus*. **Ref:** 658.

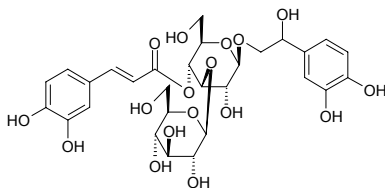


**9330 Hellebrin**

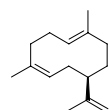
Hellebrigenin glucorhamnoside [13289-18-4]  $C_{36}H_{52}O_{15}$  (724.81). mp 283~284°C. **Pharm:** Anticonvulsant (caused by pentylenetetrazol); anti-electroshock; cardiac glycoside; cytotoxic (hmn epidermoid carcinoma KB cells, *in vitro*); LD<sub>50</sub> (pgg, perfusion in stomach) = 0.85μmol/kg. **Source:** TI GEN CAO *Helleborus niger*, ZI TI GEN CAO *Helleborus purpurascens*, TIE KUAI ZI *Helleborus thibetanus*, XIANG TIE KUAI ZI *Helleborus odoratus*, MA TI YE *Caltha palustris*. **Ref:** 5, 658, 660.

**9331 Hellicoside**

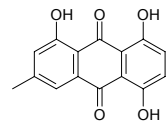
[132278-04-7]  $C_{29}H_{36}O_{17}$  (656.59). Amorphous powder, mp 182.6~190.3°C,  $[\alpha]_D^{23} = -27^\circ$  ( $c = 1.0$ , MeOH). **Pharm:** 5-LOX Inhibitor (IC<sub>50</sub> = 0.316μmol/L); aldose reductase inhibitor (IC<sub>50</sub> = 926μmol/L); cAMP phosphodiesterase inhibitor (*in vitro*, IC<sub>50</sub> = 169μmol/L); cyclo-adenyl mononucleotide phosphodiesterase inhibitor. **Source:** CHE QIAN *Plantago asiatica*. **Ref:** 658, 1096.

**9332 (+)-Helminthogermacrene**

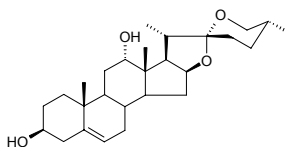
$C_{15}H_{24}$  (204.36). Colorless oil. **Source:** BO BAN HE YE TAI *Scapania undulata* (essential oil). **Ref:** 3752.

**9333 Helminthosporin**

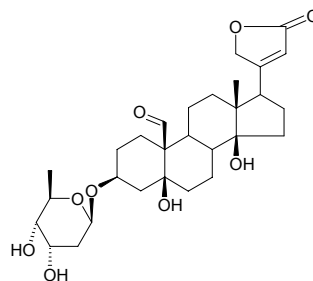
[518-80-9]  $C_{15}H_{10}O_5$  (270.24). Red needles (pyriding or Et<sub>2</sub>O), mp 228°C. **Source:** LU HUI *Aloe vera* [Syn. *Aloe barbadensis*], WANG JIANG NAN *Cassia occidentalis*. **Ref:** 2, 1521.

**9334 Heloniogenin**

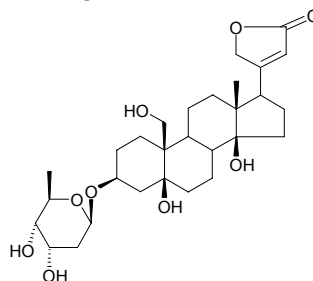
[6869-16-5]  $C_{27}H_{42}O_4$  (430.63). Crystals (MeOH), mp 212~213°C,  $[\alpha]_D = -91^\circ$  (CHCl<sub>3</sub>). **Source:** LEI GONG QI *Clintonia alpina*. **Ref:** 6, 1521.

**9335 Helveticoside**

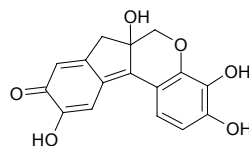
Alleoside A; Erysimin; Erysimotoxin [630-64-8]  $C_{29}H_{42}O_9$  (534.65). Crystals +2H<sub>2</sub>O (EtOH aq.), mp 168~172°C (dec),  $[\alpha]_D^{20} = +43.5^\circ$  (ethanol); mp 153~157°C. **Pharm:** Cardiac glycoside; contracts blood vessels (cat heart, vasa coronaria, *in vitro*, high concentration); diuretic (mus); sedative (cat); LD<sub>50</sub> (cat) = 0.09mg/kg. **Source:** BO NIANG HAO *Descurainia sophia*, CHANG SHUO HUANG MA *Corchorus olitorius*, GUI ZHU TANG JIE *Erysimum cheiranthoides*, HUAN YANG SHEN YE TANG JIE *Erysimum crepidifolium*, HUANG BAI TANG JIE *Erysimum ochroleucum*, HUANG MA YE *Corchorus capsularis*, HUANG MA ZI *Corchorus capsularis*, TANG JIE *Erysimum diffusum*, KANG PI DU MAO XUAN HUA *Strophanthus kombe*. **Ref:** 5, 6, 658, 1521.

**9336 Helveticosol**

[18695-02-8]  $C_{29}H_{44}O_9$  (536.67). Plates (H<sub>2</sub>O), mp 147~152°C. **Source:** GUI ZHU TANG JIE *Erysimum cheiranthoides*, KANG PI DU MAO XUAN HUA *Strophanthus kombe*, *Castilla elastica*. **Ref:** 6, 1521.

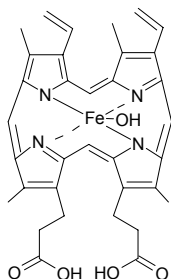
**9337 Hematein**

Hydroxybrazilein  $C_{16}H_{12}O_6$  (300.27). mp > 200°C, mp 250°C (dec), insoluble in benzene, chloroform, very slightly soluble in water, slightly soluble in ethanol, ether.<sup>[5507]</sup> **Pharm:** Anti-inflammatory (modulator of cytokine network: reduces expression of VCAM-1 in aorta of hypercholesterolemic New Zealand rabbits; reduces TNF- $\alpha$ -induced VCAM-1 expression in HUVECs; diminishes increase in VCAM-1 and MCP-1 levels induced by TNF- $\alpha$  and oxidized LDL in HUVECs, respectively, as well as reducing TNF- $\alpha$  and IL-1 $\beta$  production in peritoneal macrophages stimulated with LPS plus IFN $\gamma$ ; reduces cell surface expression of adhesion molecules, resulting in inhibition of THP-1 monocyte adhesion to TNF- $\alpha$  stimulated HUVECs)<sup>[4416]</sup>. **Source:** SU MU *Caesalpinia sappan*. **Ref:** 4416, 5507.

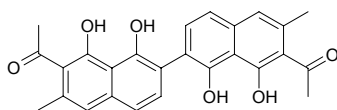


**9338 Hematin**

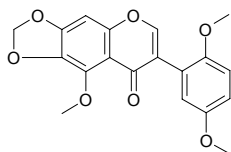
Haematin [15489-90-4]  $C_{34}H_{33}FeN_4O_5$  (633.51). mp 200°C (dec). Source: NIU XUE *Bos taurus domesticus*; *Bubalus bubalis*. Ref: 6, 1521.

**9339 Hemerocallin**

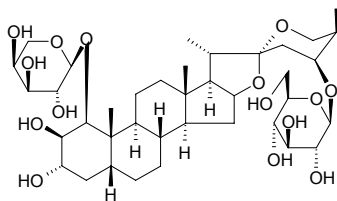
Stypanrol [99305-33-6]  $C_{26}H_{22}O_6$  (430.46). Orange needles ( $CHCl_3$ ), mp 256~266°C (dec); mp 266~269°C. Pharm: Schistosomacide (main effective component in Orange Daylily, *Hemerocallis fulva* XUAN CAO GEN, used in treatment of schistosomiasis); toxin (animal, sheep and goat, neurotoxic, cumulative poisoning, palsy and death). Source: SHE XIANG XUAN *Hemerocallis thunbergii*, XIAO XUAN CAO GEN *Hemerocallis minor*, family Liliaceae spp. Ref: 6, 658, 660, 1521.

**9340 Hemerocallone**

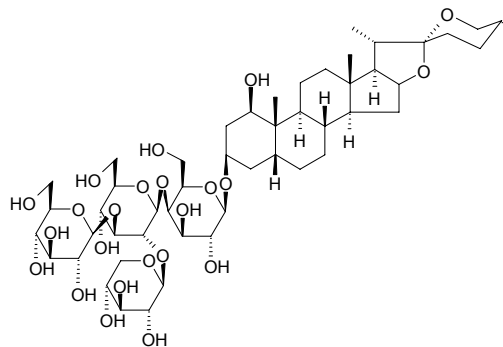
[82869-19-0]  $C_{19}H_{16}O_7$  (356.34). Colorless long acicular, mp 177~179°C. Pharm: Diuretic (rat). Source: XIAO XUAN CAO GEN *Hemerocallis minor*. Ref: 658, 1521.

**9341 Hemeroside A**

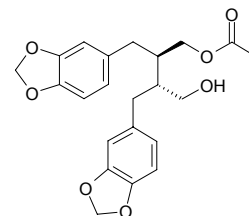
24S-Hydroxy-neotokorogenin 1-*O*- $\alpha$ -L-arabinopyranosyl 24-*O*- $\beta$ -D-glucopyranoside  $C_{38}H_{62}O_{15}$  (758.91). White powder, mp 120~125°C,  $[\alpha]_D^{26} = 17.6^\circ$  ( $c = 0.9$ , MeOH). Source: CHONG BAN XUAN CAO *Hemerocallis fulva* var. *kwanso* (aerial parts). Ref: 3514.

**9342 Hemeroside B**

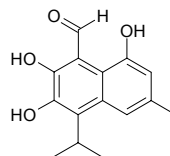
Isorhodeasapogenin 3-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)-[ $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-galactopyranoside  $C_{50}H_{82}O_{23}$  (1050.20). Colorless needles, mp 287~290°C,  $[\alpha]_D^{26} = 56.0^\circ$  ( $c = 1.5$ , pyridine). Source: CHONG BAN XUAN CAO *Hemerocallis fulva* var. *kwanso* (aerial parts). Ref: 3514.

**9343 Hemiarisensin**

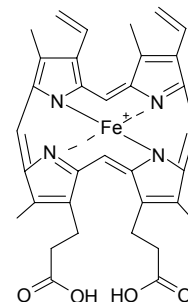
4-Acetoxy-2,3-bis(3,4-methylene-dioxybenzyl)-butan-1-ol  $C_{22}H_{24}O_7$  (400.43). Source: BI CHENG QIE *Piper cubeba*. Ref: 660.

**9344 Hemigossypol**

[40817-07-0]  $C_{15}H_{16}O_4$  (260.29). Yellow crystals ( $CHCl_3$ ), mp 159~163°C (dec). Pharm: Antifungal. Source: LU DI MIAN *Gossypium hirsutum* [Syn. *Gossypium mexicanum*], MIAN HUA GEN *Gossypium herbaceum*. Ref: 6, 658.

**9345 Hemin**

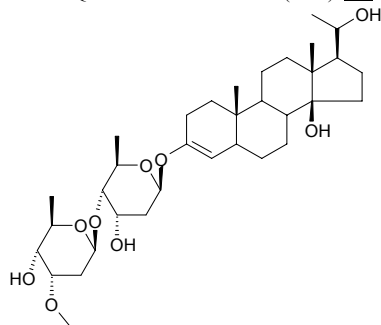
Haemin; Protoporphyrin iron(III) complex [16009-13-5]  $C_{34}H_{32}FeN_4O_4^+$  (616.51). Source: CU LIU GUO *Hippophae rhamnoides*. Ref: 6, 1521.



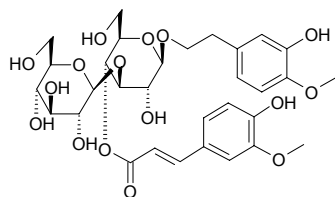


**9346 Heminine**

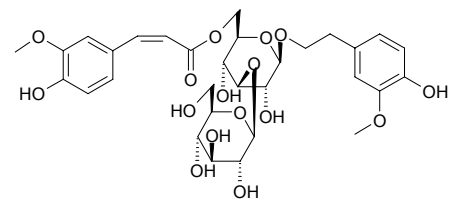
Calogenin 3-*O*- $\beta$ -D-cymaropyranosyl-(1 $\rightarrow$ 4)-*O*- $\beta$ -D-digitoxopyranoside  
 $C_{34}H_{56}O_9$  (608.82). mp 132°C,  $[\alpha]_D = -62.5^\circ$  ( $c = 0.11$ , MeOH). Source: YIN DU BA QIA *Hemidesmus indicus* (stem). Ref: 5081.

**9347 Hemiphroside A**

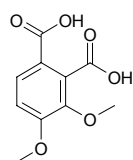
$C_{31}H_{40}O_{16}$  (668.65). Pharm: Antioxidant (hydroxyl radical scavenger,  $IC_{50} = 110.5 \mu\text{mol/L}$ , control Ascorbic acid,  $IC_{50} = 51.8 \mu\text{mol/L}$ , superoxide anion radical scavenger,  $IC_{50} = 208.5 \mu\text{mol/L}$ , control Ascorbic acid,  $IC_{50} = 86.2 \mu\text{mol/L}$ ). Source: XI ZANG HU HUANG LIAN *Picrorhiza scrophulariiflora* (root). Ref: 4289.

**9348 Hemiphroside C**

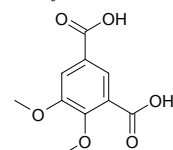
$C_{31}H_{40}O_{16}$  (668.65). Yellowish amorphous powder. Source: BIAN DA XIU QIU *Hemiphragma heterophyllum* (whole herb). Ref: 4816.

**9349 Hemipic acid**

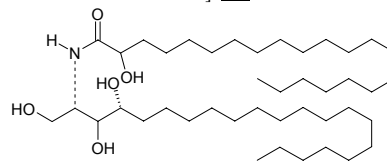
Hemipinic acid  $C_{10}H_{10}O_6$  (226.19). Source: YING SU *Papaver somniferum*. Ref: 660.

**9350 m-Hemipic acid**

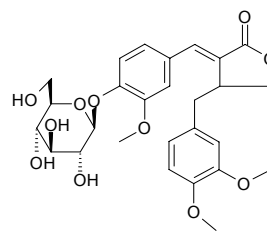
*m*-Hemipinic acid  $C_{10}H_{10}O_6$  (226.19). Source: YING SU *Papaver somniferum*. Ref: 660.

**9351 Hemisceramide**

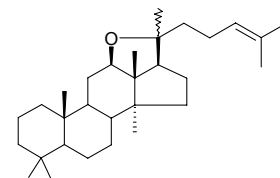
$C_{42}H_{85}NO_5$  (684.15). White powdery crystals (MeOH), mp 129–130°C. Source: NI HU CAI *Hemistepta lyrata* [Syn. *Hemistepta carthamoides*; *Saussurea carthamoides*]. Ref: 2231.

**9352 Hemislienoside**

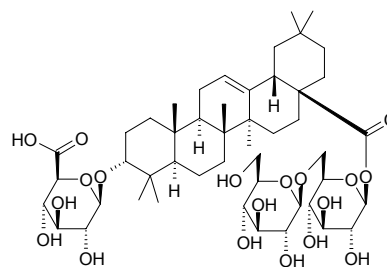
$C_{27}H_{32}O_{11}$  (532.55). Colorless granulous crystals, mp 112–113°C. Source: NI HU CAI *Hemistepta lyrata* [Syn. *Hemistepta carthamoides*; *Saussurea carthamoides*]. Ref: 2127.

**9353 Hemistriterpene ether**

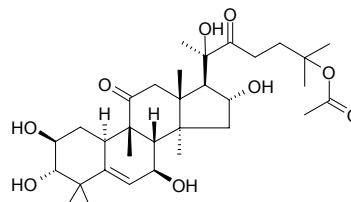
$C_{30}H_{50}O$  (426.73). Colorless granular crystals (MeOH), mp > 300°C,  $[\alpha]_D^{20} = +13.6^\circ$  ( $c = 0.000151$ , MeOH). Source: NI HU CAI *Hemistepta lyrata* [Syn. *Hemistepta carthamoides*; *Saussurea carthamoides*]. Ref: 2231.

**9354 Hemsgiganoside B**

$C_{48}H_{76}O_{19}$  (957.13). White powder. Source: JU HUA XUE DAN *Hemsleya gigantea*. Ref: 2491.

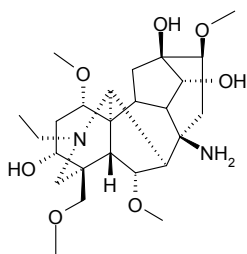
**9355 Hemslecin G**

$C_{32}H_{50}O_9$  (578.75). White powder, mp 132–138°C. Source: JU HUA XUE DAN *Hemsleya gigantea*. Ref: 2491.

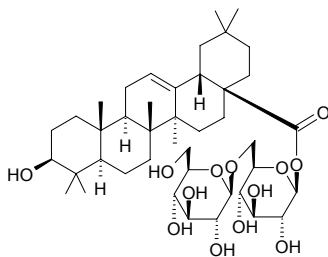


**9356 Hemsleyatine**

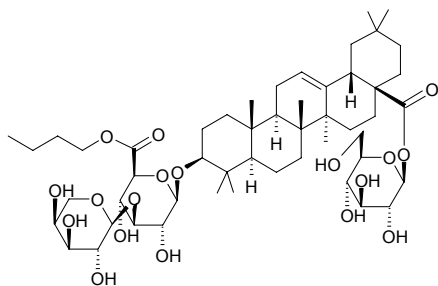
$C_{25}H_{42}N_2O_7$  (482.62). White amorphous powder, mp 89–90°C (chloroform–acetone–diethylamine),  $[\alpha]_D = +36.5^\circ$  ( $c = 0.55$ ,  $CHCl_3$ ).  
Source: GUA YE WU TOU *Aconitum hemsleyanum* (root). Ref: 4343.

**9357 Hemsionin A**

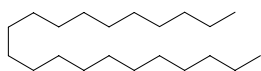
Oleanolic acid 28-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside  
 $C_{42}H_{68}O_{13}$  (781.00). White crystals, mp 245–250°C (dec),  $[\alpha]_D^{26} = 18.52^\circ$  ( $c = 0.19$ , MeOH). Source: GU LIN XUE DAN *Hemsleya penxianensis* var. *gulinensis*. Ref: 2484.

**9358 Hemsionin B**

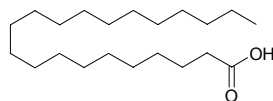
3-*alpha*-*O*-*L*-Arabinopyranosyl-(1 $\rightarrow$ 3)-(6'-butyl ester)- $\beta$ -*D*-glucopyranosyl-oleanolic acid-28-*O*- $\beta$ -*D*-glucopyranoside  
 $C_{51}H_{82}O_{18}$  (983.21). White powder, mp 198–200°C (dec),  $[\alpha]_D^{26} = +16.62^\circ$  ( $c = 0.361$ , MeOH).  
Source: GU LIN XUE DAN *Hemsleya penxianensis* var. *gulinensis*. Ref: 2484.

**9359 Heneicosane**

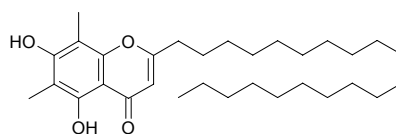
[629-94-7]  $C_{21}H_{44}$  (296.58). Wax, mp 40.5°C, bp 356.5°C, bp 215°C/15mmHg, bp 129°C/0.05mmHg. Source: DANG SHEN *Codonopsis pilosula*, ROU CONG RONG *Cistanche deserticola*, SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. Ref: 2, 1521.

**9360 Heneicosanoic acid**

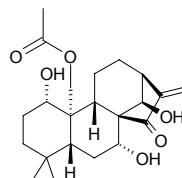
[2363-71-5]  $C_{21}H_{42}O_2$  (326.57). Needles (Me<sub>2</sub>CO), mp 73–74°C. Source: DANG SHEN *Codonopsis pilosula*, ROU CONG RONG *Cistanche deserticola*, SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*], GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *Huechingensis*]. Ref: 2, 660.

**9361 2-*n*-Heneicosyl-5,7-dihydroxy-6,8-dimethyl chromone**

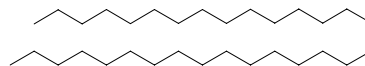
$C_{32}H_{52}O_4$  (500.77). Source: KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. Ref: 660.

**9362 Henryin**

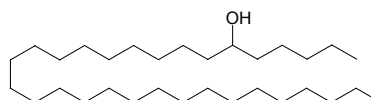
1 $\alpha$ ,7 $\alpha$ ,14 $\beta$ -Trihydroxy-20-acetoxy-*ent*-kaur-16-en-15-one; Reniformin A  
 $C_{22}H_{32}O_6$  (392.50). mp 201–203°C,  $[\alpha]_D^{12} = -88^\circ$  ( $c = 0.1$ , MeOH). Pharm: Cytotoxic (*in vitro*, P<sub>388</sub>, ED<sub>50</sub> = 0.58 $\mu$ g/mL)<sup>[3012]</sup>. Source: WEI YE XIANG CHA CAI *Rabdosia excisa* (aerial parts: yield = 0.00003%dw), E XI XIANG CHA CAI *Isodon henryi*. Ref: 3012, 4067.

**9363 Hentriacontane**

Untriacontane [630-04-6]  $C_{31}H_{64}$  (436.86). Wax, mp 68°C, bp 458°C, bp 302°C/15mmHg. Pharm: Fruit protective film. Source: FAN QIE *Lycopersicon esculentum*, ZANG HONG HUA SE SHUI QIN *Oenanthhe crocata*, SHUANG BIAN GUA LOU *Trichosanthes rosthornii* [Syn. *Trichosanthes uniflora*], YIN YANG HUO *Epimedium brevicornum*, RI BEN LU TI CAO *Pyrola japonica*, CHE QIAN *Plantago asiatica*. Ref: 2, 658, 660, 1521.

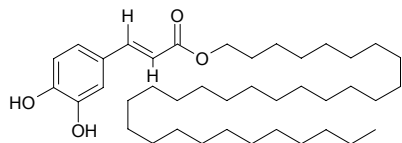
**9364 Hentriacontanol-6**

$C_{31}H_{64}O$  (452.86). Source: PU HUANG *Typha angustata*. Ref: 2.

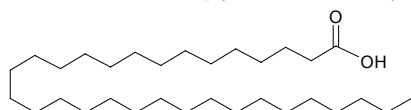


**9365 Hentriacontanyl caffeate**

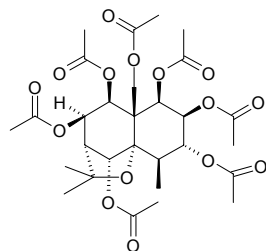
3,4-Dihydroxy-*trans*-cinnamic acid hentriacontanylester C<sub>40</sub>H<sub>70</sub>O<sub>4</sub> (615.50).  
**Pharm:** Anti-inflammatory (COX-1 inhibitor, 1000μmol/L, InRt = (52±2)%, positive control Indomethacin, 1.7μmol/L, InRt = (43±3)%<sup>[4413]</sup>. **Source:** LUO YE SONG YE JIN SI TAO *Hypericum laricifolium* (aerial parts). **Ref:** 4413.

**9366 Hentriacontic acid**

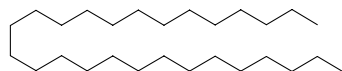
Melissic acid B [38232-01-8] C<sub>31</sub>H<sub>62</sub>O<sub>2</sub> (466.84). mp 93.5–94.0°C. **Source:** GOU QI GEN PI *Lycium chinense*, SHUANG BIAN GUA LOU *Trichosanthes rosthornii* [Syn. *Trichosanthes uniflora*]. **Ref:** 2, 660.

**9367 1β,2β,3α,5α,7β,8β,11-Heptaacetoxy-dihydroagarofuran**

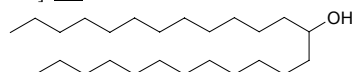
C<sub>29</sub>H<sub>40</sub>O<sub>15</sub> (628.63). Amorphous powder, [α]<sub>D</sub><sup>25</sup> = -19.7° (c = 2.1, MeOH).  
**Pharm:** Immunosuppressant (inhibits lymphocyte transformation, 80μg/mL, InRt = 34%, control Dexamethasone, 50μg/mL, InRt = 61%). **Source:** LEI GONG TENG *Tripterygium wilfordii* (xylem). **Ref:** 4466.

**9368 n-Heptacosane**

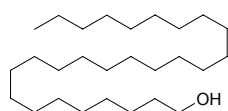
Heptacosane [593-49-7] C<sub>27</sub>H<sub>56</sub> (380.75). mp 59.5°C, bp 422°C, bp 270°C/15mmHg. **Source:** SHUANG BIAN GUA LOU *Trichosanthes rosthornii* [Syn. *Trichosanthes uniflora*], JIAN YE LONG XUE SHU *Dracaena cochinchinensis*. **Ref:** 2, 616, 660, 1521.

**9369 14-Heptacosanol**

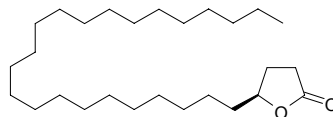
C<sub>27</sub>H<sub>56</sub>O (396.75). **Source:** MO HAN LIAN *Eclipta prostrata* [Syn. *Eclipta alba*]. **Ref:** 660.

**9370 Heptacosanol**

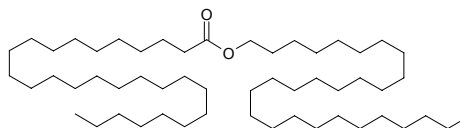
1-Heptacosanol [2004-39-9] C<sub>27</sub>H<sub>56</sub>O (396.75). mp 81.5°C, mp 76°C. **Source:** MAO GENG XI XIAN *Siegesbeckia orientalis* var. *glabrescens* [Syn. *Siegesbeckia glabrescens*]. **Ref:** 476.

**9371 Heptacosan-4-olide**

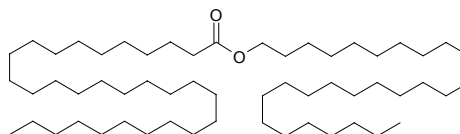
C<sub>27</sub>H<sub>52</sub>O<sub>2</sub> (408.71). **Source:** FU CHUI FE LAO JU *Flourensia cernua*. **Ref:** 3433.

**9372 Heptacosyl heptacosanate**

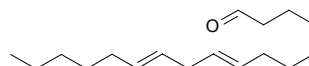
C<sub>54</sub>H<sub>108</sub>O<sub>2</sub> (789.46). **Source:** CHONG BAI LA *Ericerus pela*. **Ref:** 6.

**9373 Heptacosyl melissate**

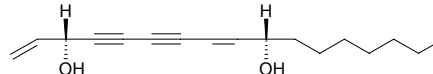
C<sub>57</sub>H<sub>114</sub>O<sub>2</sub> (831.54). **Source:** CHONG BAI LA *Ericerus pela*. **Ref:** 6.

**9374 (Z,Z)-8,11-Heptadecadienal**

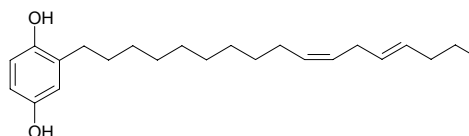
C<sub>17</sub>H<sub>30</sub>O (250.43). **Source:** KONG SHI CHUN *Ulva pertusa*. **Ref:** 660.

**9375 1,8-Heptadecadiene-4,6-diyne-3,10-diol**

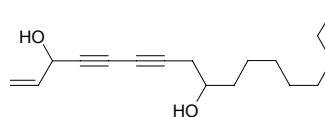
C<sub>17</sub>H<sub>24</sub>O<sub>2</sub> (260.38). **Source:** FANG FENG *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*], REN SHEN XI YANG SHEN ZA JIAO ZHONG *Panax ginseng* x *P. quinquefolium* (hairy root). **Ref:** 2, 5495.

**9376 10'(Z),13'(E)-Heptadecadienylhydroquinone**

C<sub>23</sub>H<sub>36</sub>O<sub>2</sub> (344.54). Colorless oil. **Pharm:** Cytotoxic (*in vitro*, HeLa, IC<sub>50</sub> = 4.6μg/mL; Huh7, IC<sub>50</sub> = 6μg/mL; HCT116, IC<sub>50</sub> = 3.5μg/mL; LoVo, IC<sub>50</sub> = 5.6μg/mL; C6, IC<sub>50</sub> = 1μg/mL); antioxidant (iron/ascorbate system with linoleic acid as substrate for antioxidative potency (AOP) determination, 4mg/L, AOP = 95%; control BHT, AOP = 100%). **Source:** LIN BEI ZI *Toxicodendron succedaneum* [Syn. *Rhus succedanea*] (sap: yield = 3.15%). **Ref:** 4662.

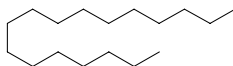
**9377 Heptadeca-1-en-4,6-diyne-3,9-diol**

C<sub>17</sub>H<sub>26</sub>O<sub>2</sub> (262.40). **Source:** FANG FENG *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*]. **Ref:** 2.

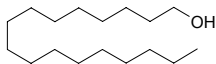


**9378 Heptadecane**

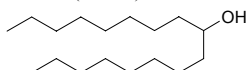
[629-78-7] C<sub>17</sub>H<sub>36</sub> (240.48). Source: DANG SHEN *Codonopsis pilosula*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], ROU CONG RONG *Cistanche deserticola*, SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. Ref: 2.

**9379 1-Heptadecanol**

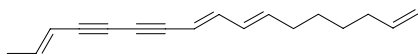
[1454-85-9] C<sub>17</sub>H<sub>36</sub>O (256.48). Source: BAI ZHI *Angelica dahurica* [Syn. *Angelica porphyrocaulis*], REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. Ref: 2.

**9380 9-Heptadecanol**

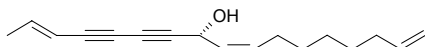
C<sub>17</sub>H<sub>36</sub>O (256.48). Source: BAN XIA *Pinellia ternata*. Ref: 660.

**9381 Heptadeca-1,7,9,15-tetraene-11,13-diyne\***

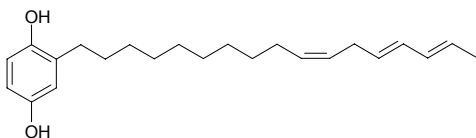
C<sub>17</sub>H<sub>20</sub> (224.35). Yellowish powder, mp 72~73°C. Pharm: Cytotoxic (HL-60, IC<sub>50</sub> = 2.3 μg/mL, K562, IC<sub>50</sub> = 5.6 μg/mL). Source: GUI ZHEN CAO *Bidens bipinnata* (whole herb). Ref: 4596.

**9382 2(E),9(Z),16-Heptadecatriene-4,6-diyne-8-ol**

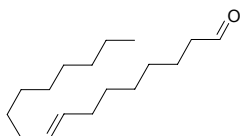
C<sub>17</sub>H<sub>22</sub>O (242.36). [α]<sub>D</sub><sup>20</sup> = +173.5° (c = 0.3, CHCl<sub>3</sub>). Pharm: NFAT transcription factor inhibitor (IC<sub>50</sub> = (4.95±0.24) μmol/L, control Cyclosporin A, IC<sub>50</sub> = (0.31±0.01) μmol/L). Source: CHAO XIAN LUO WAN *Gymnaster koraiensis* (leaf). Ref: 4511.

**9383 10'(Z),13'(E),15'(E)-Heptadecatrienylhydroquinone**

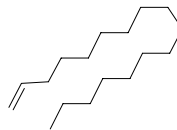
C<sub>23</sub>H<sub>34</sub>O<sub>2</sub> (342.53). Pale yellow oil. Pharm: Cytotoxic (*in vitro*, HeLa, IC<sub>50</sub> = 2.8 μg/mL; Huh7, IC<sub>50</sub> = 3.9 μg/mL; HCT116, IC<sub>50</sub> = 2 μg/mL; LoVo, IC<sub>50</sub> = 4.5 μg/mL; C6, IC<sub>50</sub> = 0.9 μg/mL); antioxidant (iron/ascorbate system with linoleic acid as substrate for antioxidative potency (AOP) determination, 4mg/L, AOP = 97%; control BHT, AOP = 100%). Source: LIN BEI ZI *Toxicodendron succedaneum* [Syn. *Rhus succedanea*] (sap: yield = 2.30%). Ref: 4662.

**9384 8-Heptadecenal**

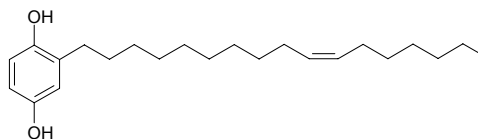
C<sub>17</sub>H<sub>32</sub>O (252.44). Source: JIAO MO *Monostroma nitidum*, KONG SHI CHUN *Ulva pertusa*, TIAO HU TAI *Enteromorpha clathrata*. Ref: 660.

**9385 1-Heptadecene**

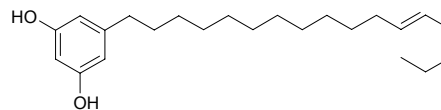
C<sub>17</sub>H<sub>34</sub> (238.46). Source: HONG HUA *Carthamus tinctorius*, MIAN MA *Dryopteris filix-mas*, NIU BANG GEN *Arctium lappa*, XIAO GUO QIANG WEI GEN *Rosa cymosa*, XUE LIAN *Saussurea involucrata*. Ref: 660.

**9386 10'(Z)-Heptadecenylhydroquinone**

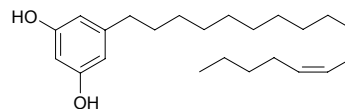
C<sub>23</sub>H<sub>38</sub>O<sub>2</sub> (346.56). Pharm: Cytotoxic (*in vitro*, HeLa, IC<sub>50</sub> = 4.7 μg/mL; Huh7, IC<sub>50</sub> = 6.4 μg/mL; HCT116, IC<sub>50</sub> = 3.4 μg/mL; LoVo, IC<sub>50</sub> = 2.9 μg/mL; C6, IC<sub>50</sub> = 1.1 μg/mL); antioxidant (iron/ascorbate system with linoleic acid as substrate for antioxidative potency (AOP) determination, 4mg/L, AOP = 60%; control BHT, AOP = 100%). Source: LIN BEI ZI *Toxicodendron succedaneum* [Syn. *Rhus succedanea*] (sap: yield = 3.15%). Ref: 4662.

**9387 5-(Heptadec-12E-enyl)resorcinol**

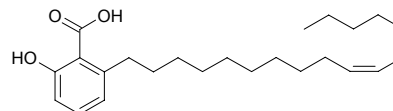
C<sub>23</sub>H<sub>38</sub>O<sub>2</sub> (346.56). Pharm: Antifungal (*Alternaria alternata*). Source: MANG GUO *Mangifera indica*. Ref: 658.

**9388 5-(Heptadec-12Z-enyl)resorcinol**

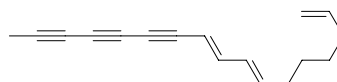
C<sub>23</sub>H<sub>38</sub>O<sub>2</sub> (346.56). Pharm: Cytotoxic (*in vitro*, A2780 ovarian cancer cell line, IC<sub>50</sub> = 9 μg/mL, marginal activity, control Actinomycin D, IC<sub>50</sub> = 1~3 ng/mL). Source: *Protorhus thouvenotii* (dried fruit). Ref: 5006.

**9389 6-(10'Z-Heptadecenyl)salicylic acid**

C<sub>24</sub>H<sub>38</sub>O<sub>3</sub> (374.57). Yellowish oil. Pharm: Prolyl endopeptidase inhibitor (*Ki* = 0.80 μmol/L, IC<sub>50</sub> = (0.62±0.02) μmol/L, control Oleic acid IC<sub>50</sub> = (31.3±2.4) μmol/L, Salicylic acid IC<sub>50</sub> = (1650±70) μmol/L, Z-Pro-prolinal IC<sub>50</sub> = (0.00219±0.00022) μmol/L). Source: BAI GUO YE *Ginkgo biloba*. Ref: 4098.

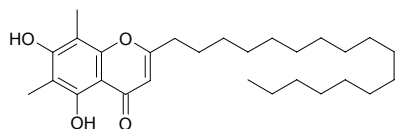
**9390 Heptadec-1,7,9-trien-11,13,15-triyne**

C<sub>17</sub>H<sub>18</sub> (222.33). mp 18°C. Source: AI YE *Artemisia argyi*. Ref: 6.

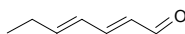


**9391 2-*n*-Heptadecy-5,7-dihydroxy-6,8-dimethyl chromone**

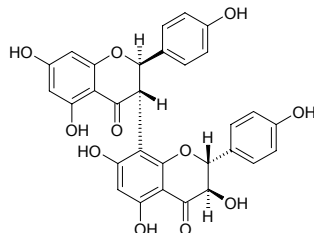
C<sub>28</sub>H<sub>44</sub>O<sub>4</sub> (444.66). Source: KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. Ref: 660.

**9392 (*E,E*)-2,4-Heptadienal**

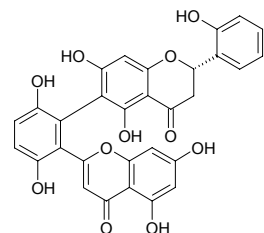
C<sub>7</sub>H<sub>10</sub>O (110.16). Source: KUN BU *Laminaria japonica*. Ref: 660.

**9393 3'',4'',4''',5'',5'',7''-Heptahydroxy-3,8''-biflavanone**

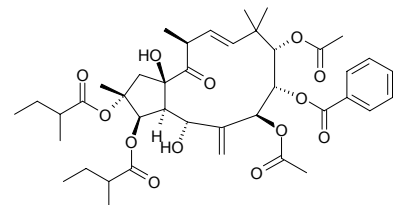
C<sub>30</sub>H<sub>22</sub>O<sub>11</sub> (558.50). Faint brown powder. Pharm: Antibacterial (methicillin-resistant *Staphylococcus aureus* (MRSA), MIC = 32μg/mL; vancomycin-resistant *Enterococci* sp. (VRE), MIC = 128μg/mL). Source: KE LE TENG HUANG *Garcinia kola* (root). Ref: 4495.

**9394 (1-2*S*)-1-5,11-5,1-7,11-7,1-2',11-2',11-5'-Heptahydroxy-[1-6,11-6']-flavanonylflavone**

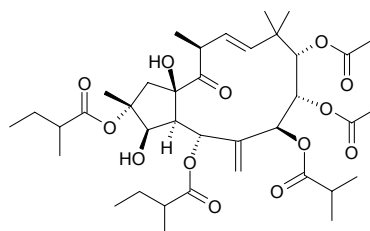
C<sub>30</sub>H<sub>20</sub>O<sub>11</sub> (556.49). Yellow needles (MeOH), mp 217–218°C (dec). Source: KE AI HUANG QIN *Scutellaria amabilis* (root; yield = 0.0052%dw). Ref: 2072.

**9395 (2*R*,3*R*,4*R*,5*R*,7*S*,8*S*,9*S*,11*E*,13*S*,15*R*)-2,3,5,7,8,9,15-Heptahydroxyjatropa-6(17),11-diene-14-one-7,9-diacetate-8-benzoate-2,3-bis(2-methylbutyrate)**

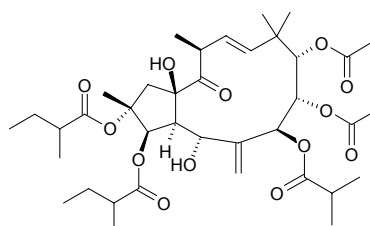
[250293-39-1] C<sub>41</sub>H<sub>56</sub>O<sub>13</sub> (756.90). Oil, [α]<sub>D</sub> = +18° (*c* = 0.88, CHCl<sub>3</sub>); [α]<sub>D</sub><sup>25</sup> = +18° (*c* = 0.88, CHCl<sub>3</sub>). Pharm: NADH oxidase inhibitor (submitochondrial particles from bovine heart, IC<sub>50</sub> = (7.0±3.7)μmol/L, control Rotenone, IC<sub>50</sub> = (0.0051±0.0009)μmol/L)<sup>[5356]</sup>. Source: DUN YE DA JI *Euphorbia obtusifolia* var. *obtusifolia*. Ref: 2365, 5356.

**9396 (2*R*,3*R*,4*R*,5*R*,7*S*,8*S*,9*S*,11*E*,13*S*,15*R*)-2,3,5,7,8,9,15-Heptahydroxyjatropa-6(17),11-diene-14-one-8,9-diacetate-7-isobutyrate-2,5-bis(2-methylbutyrate)**

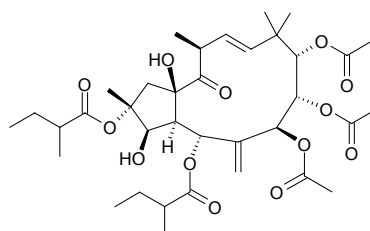
[250293-37-9] C<sub>38</sub>H<sub>58</sub>O<sub>13</sub> (722.88). Oil, [α]<sub>D</sub> = +26° (*c* = 0.86, CHCl<sub>3</sub>); [α]<sub>D</sub><sup>25</sup> = +26° (*c* = 0.86, CHCl<sub>3</sub>). Pharm: NADH oxidase inhibitor (submitochondrial particles from bovine heart, IC<sub>50</sub> = (6.3±1.4)μmol/L, control Rotenone, IC<sub>50</sub> = (0.0051±0.0009)μmol/L)<sup>[5356]</sup>. Source: DUN YE DA JI XIANG JIANG *Euphorbia obtusifoli*, DUN YE DA JI *Euphorbia obtusifolia* var. *obtusifolia*. Ref: 2365, 5356.

**9397 (2*R*,3*R*,4*R*,5*R*,7*S*,8*S*,9*S*,11*E*,13*S*,15*R*)-2,3,5,7,8,9,15-Heptahydroxyjatropa-6(17),11-diene-14-one-8,9-diacetate-7-isobutyrate-2,3-bis(2-methylbutyrate)**

[250293-40-4] C<sub>38</sub>H<sub>58</sub>O<sub>13</sub> (722.88). Oil, [α]<sub>D</sub> = +8° (*c* = 2.2, CHCl<sub>3</sub>); [α]<sub>D</sub><sup>25</sup> = +8° (*c* = 2.2, CHCl<sub>3</sub>). Pharm: NADH oxidase inhibitor (submitochondrial particles from bovine heart, IC<sub>50</sub> = (5.1±0.2)μmol/L, control Rotenone, IC<sub>50</sub> = (0.0051±0.0009)μmol/L)<sup>[5356]</sup>. Source: DUN YE DA JI *Euphorbia obtusifolia* var. *obtusifolia*. Ref: 2365, 5356.

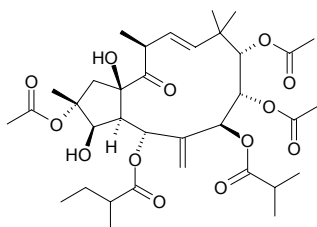
**9398 (2*R*,3*R*,4*R*,5*R*,7*S*,8*S*,9*S*,11*E*,13*S*,15*R*)-2,3,5,7,8,9,15-Heptahydroxyjatropa-6(17),11-diene-14-one-7,8,9-triacetate-2,5-bis(2-methylbutyrate)**

[250293-34-6] C<sub>36</sub>H<sub>54</sub>O<sub>13</sub> (694.82). Oil, [α]<sub>D</sub> = +23° (*c* = 0.78, CHCl<sub>3</sub>); [α]<sub>D</sub><sup>25</sup> = +23° (*c* = 0.78, CHCl<sub>3</sub>). Pharm: NADH oxidase inhibitor (submitochondrial particles from bovine heart, IC<sub>50</sub> = (10.9±2.4)μmol/L, control Rotenone, IC<sub>50</sub> = (0.0051±0.0009)μmol/L)<sup>[5356]</sup>. Source: DUN YE DA JI *Euphorbia obtusifolia* var. *obtusifolia*. Ref: 2365, 5356.



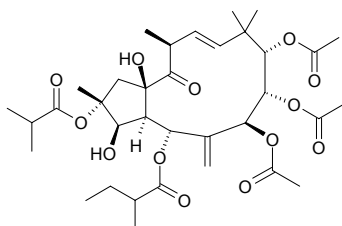
**9399 (2R,3R,4R,5R,7S,8S,9S,11E,13S,15R)-2,3,5,7,8,9,15-Heptahydroxyjatropa-6(17),11-diene-14-one-2,8,9-triacetate-7-isobutyrate-5-(2-methylbutyrate)**

[250293-38-0] C<sub>35</sub>H<sub>52</sub>O<sub>13</sub> (680.80). Oil, [α]<sub>D</sub> = +32° (c = 0.68, CHCl<sub>3</sub>); [α]<sub>D</sub><sup>25</sup> = +32° (c = 0.68, CHCl<sub>3</sub>). **Pharm:** NADH oxidase inhibitor (submitochondrial particles from bovine heart, IC<sub>50</sub> = (12.7±3.6)μmol/L, control Rotenone, IC<sub>50</sub> = (0.0051±0.0009)μmol/L)<sup>[5356]</sup>. **Source:** DUN YE DA JI *Euphorbia obtusifolia* var. *obtusifolia*. **Ref:** 2365, 5356.



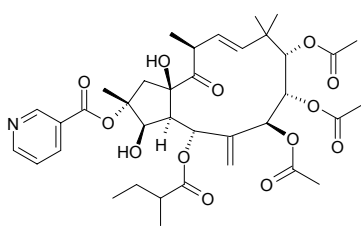
**9400 (2R,3R,4R,5R,7S,8S,9S,11E,13S,15R)-2,3,5,7,8,9,15-Heptahydroxyjatropa-6(17),11-diene-14-one-7,8,9-triacetate-2-isobutyrate-5-(2-methylbutyrate)**

[250293-35-7] C<sub>35</sub>H<sub>52</sub>O<sub>13</sub> (680.80). Oil, [α]<sub>D</sub> = +29° (c = 0.68, CHCl<sub>3</sub>); [α]<sub>D</sub><sup>25</sup> = +29° (c = 0.68, CHCl<sub>3</sub>). **Pharm:** NADH oxidase inhibitor (submitochondrial particles from bovine heart, IC<sub>50</sub> = (13.9±1.6)μmol/L, control Rotenone, IC<sub>50</sub> = (0.0051±0.0009)μmol/L)<sup>[5356]</sup>. **Source:** DUN YE DA JI *Euphorbia obtusifolia* var. *obtusifolia*. **Ref:** 2365, 5356.



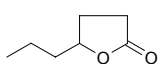
**9401 (2R,3R,4R,5R,7S,8S,9S,11E,13S,15R)-2,3,5,7,8,9,15-Heptahydroxyjatropa-6(17),11-diene-14-one-7,8,9-triacetate-2-nicotinate-5-(2-methylbutyrate)**

[250293-36-8] C<sub>37</sub>H<sub>49</sub>NO<sub>13</sub> (715.80). Oil, [α]<sub>D</sub> = -6° (c = 0.68, CHCl<sub>3</sub>); [α]<sub>D</sub><sup>25</sup> = -6° (c = 0.68, CHCl<sub>3</sub>). **Pharm:** NADH oxidase inhibitor (submitochondrial particles from bovine heart, IC<sub>50</sub> = (13.9±1.8)μmol/L, control Rotenone, IC<sub>50</sub> = (0.0051±0.0009)μmol/L)<sup>[5356]</sup>. **Source:** DUN YE DA JI *Euphorbia obtusifolia* var. *obtusifolia*. **Ref:** 2365, 5356.



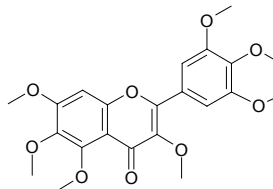
**9402 γ-Heptalactone**

[105-21-5] C<sub>7</sub>H<sub>12</sub>O<sub>2</sub> (128.17). **Source:** CHAI HU *Bupleurum chinense*. **Ref:** 2.



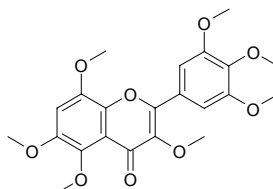
**9403 3,5,6,7,3',4',5'-Heptamethoxyflavone**

C<sub>22</sub>H<sub>24</sub>O<sub>9</sub> (432.43). mp 156–157°C. **Source:** JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*]. **Ref:** 6, 11.



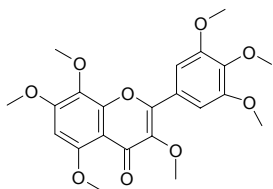
**9404 3,5,6,8,3',4',5'-Heptamethoxy flavone**

C<sub>22</sub>H<sub>24</sub>O<sub>9</sub> (432.43). **Source:** JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*]. **Ref:** 660.



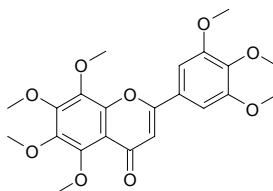
**9405 3,5,7,8,3',4',5'-Heptamethoxyflavone**

Hibiscetin-heptamethylether C<sub>22</sub>H<sub>24</sub>O<sub>9</sub> (432.43). **Source:** JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*]. **Ref:** 11.



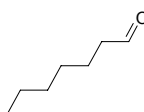
**9406 5,6,7,8,3',4',5'-Heptamethoxy flavone**

5'-Methoxynobiletin C<sub>22</sub>H<sub>24</sub>O<sub>9</sub> (432.43). **Pharm:** Cytotoxic (HeLa, IC<sub>50</sub> = 43.3μg/mL, control Mitomycin C, IC<sub>50</sub> = 1.7μg/mL)<sup>[4092]</sup>. **Source:** JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*], TUAN JI AI NA XIANG *Blumea glomerata*. **Ref:** 660, 4092.



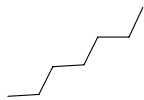
**9407 Heptanal**

[111-71-7] C<sub>7</sub>H<sub>14</sub>O (114.19). mp -43.3°C, bp 152.8°C, bp 59.6°C/30mmHg. **Source:** KUAN YE QIANG HUO *Notopterygium forbesii* [Syn. *Notopterygium franchetii*]. **Ref:** 2, 660, 1521.

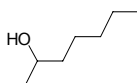


**9408 Heptane**

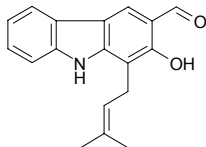
[142-82-5] C<sub>7</sub>H<sub>16</sub> (100.21). mp -91.61°C, bp 98.3°C. Source: SHAN ZHA *Crataegus pinnatifida*, SHENG JIANG *Zingiber officinale*. Ref: 2, 1521.

**9409 2-Heptanol**

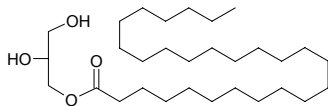
[543-49-7] C<sub>7</sub>H<sub>16</sub>O (116.21). Source: GAN JIANG *Zingiber officinale*, SHENG JIANG *Zingiber officinale*. Ref: 2, 1521.

**9410 Heptaphylline**

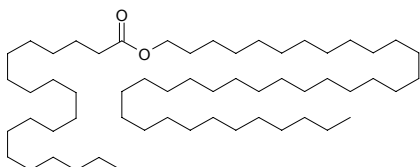
2-Hydroxy-1-(3-methyl-2-butenyl)-carbazole-3-carboxaldehyde [17750-35-5] C<sub>18</sub>H<sub>17</sub>NO<sub>2</sub> (279.34). Bright-yellow needles (Et<sub>2</sub>O or CHCl<sub>3</sub>-hexane), mp 171~172°C. Source: SHAN HUANG PI *Clausena excavata*, QI YE HUANG PI *Clausena heptaphylla*. Ref: 703, 1521.

**9411 (2S)-1-O-Heptacosanoyl glycerol**

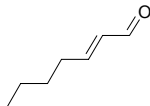
C<sub>30</sub>H<sub>60</sub>O<sub>4</sub> (484.81). White powder, mp 64~65°C. Source: XI NANG MA WEI ZAO *Sargassum parvivesiculosum*. Ref: 2591.

**9412 Heptatriacontanyl eicosanoate**

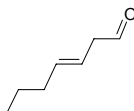
C<sub>57</sub>H<sub>114</sub>O<sub>2</sub> (831.54). mp 73.9°C. Source: CHANG YE AI JU *Tanacetum longifolium*. Ref: 1934.

**9413 α-Heptenal**

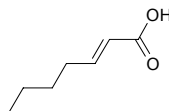
[18829-55-5] C<sub>7</sub>H<sub>12</sub>O (112.17). bp 165~167°C, bp 61~62°C/15mmHg. Source: CHA YE *Camellia sinensis* [Syn. *Thea sinensis*]. Ref: 6, 1521.

**9414 3-Heptenal**

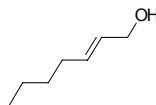
C<sub>7</sub>H<sub>12</sub>O (112.17). bp 151°C. Source: CHA YE *Camellia sinensis* [Syn. *Thea sinensis*]. Ref: 6.

**9415 2-Heptenic acid**

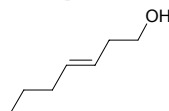
[18999-28-5] C<sub>7</sub>H<sub>12</sub>O<sub>2</sub> (128.17). Source: CHAI HU *Bupleurum chinense*. Ref: 2.

**9416 β-Heptenol**

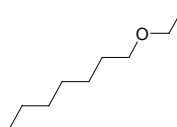
[22104-77-4] C<sub>7</sub>H<sub>14</sub>O (114.19). bp 177~179°C. Source: CHA YE *Camellia sinensis* [Syn. *Thea sinensis*]. Ref: 6, 1521.

**9417 γ-Heptenol**

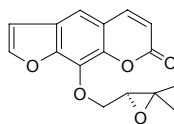
[1708-81-2] C<sub>7</sub>H<sub>14</sub>O (114.19). bp (*cis*- and *trans*-) 81~83°C/19mmHg, (*trans*-) 170~171°C. Source: CHA YE *Camellia sinensis* [Syn. *Thea sinensis*]. Ref: 6.

**9418 Heptyl ethyl ether**

[1969-43-3] C<sub>9</sub>H<sub>20</sub>O (144.26). bp 166.6°C. Source: WEN PO *Cydonia oblonga*. Ref: 6.

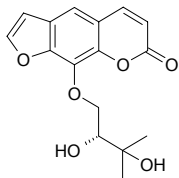
**9419 Heraclenin‡**

Epoxyimperatorin C<sub>16</sub>H<sub>14</sub>O<sub>5</sub> (286.29). Yellowish slender acicular crystals (hexane-ethyl acetate), mp (+) 111°C, (-) 106.5~108.0°C, (±) 113.0~114.5°C. [α]<sub>589nm</sub><sup>23</sup> = +25.8°, [α]<sub>500nm</sub><sup>23</sup> = +29.5°, [α]<sub>450nm</sub><sup>23</sup> = +41.6°, [α]<sub>400nm</sub><sup>23</sup> = +66.4° (c = 1.085, pyridine); [α]<sub>D</sub><sup>32</sup> = +22° (pyridine). Pharm: Anti-inflammatory (rat, swollen foot model caused by carrageenan, 100mg/kg orl, InRt = 69%); antispasmodic (rat intestine *in vitro*); CVS activity (enhances arterial tension and myocardial contractility); respiratory stimulant (rat, 1~2mg/kg); T-Cell Proliferation inhibitor<sup>[4071]</sup>. Source: GOU JU HE *Poncirus trifoliata*, YIN DU JIU LI XIANG *Murraya koenigii*, HUI BAI DU HUO *Heraclium canescens*, GUANG RONG YIN YU *Skimmia laureola*, BEI FANG DANG GUI *Angelica ursina*, SHUAN CHI QIN *Prangos pabularia*, AO PA CAO *Oppopanax chironium* (root). Ref: 6, 900, 1521, 4071. ‡Note: See compound 16447.

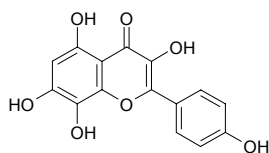


**9420 Heraclenol**

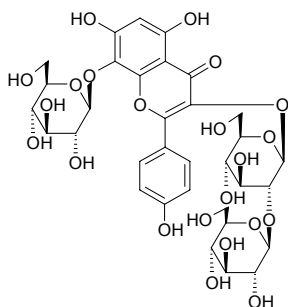
Prangenin hydrate; Komalin [2817-09-6] C<sub>16</sub>H<sub>16</sub>O<sub>6</sub> (304.30). mp 115~117°C; mp 117~118°C, [α]<sub>D</sub><sup>32</sup> = +16.5° (pyridine). Source: GOU JU ZHI SHI *Poncirus trifoliata*, YAN JIAO CAO *Boenninghausenia albiflora*, YUN NAN QIANG HUO *Pleurospermum rivulorum*. Ref: 551, 1521, 2495, 3302.

**9421 Herbacetin**

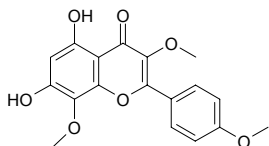
[527-95-7] C<sub>15</sub>H<sub>10</sub>O<sub>7</sub> (302.24). Pharm: Yellow pigment. Source: MA HUANG *Ephedra sinica*. Ref: 2, 658.

**9422 Herbacetin-3-β-D-(2-O-β-D-glucopyranosylglucopyranoside)-8-β-D-glucopyranoside**

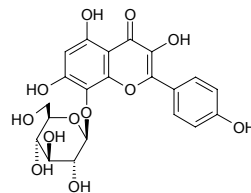
C<sub>33</sub>H<sub>40</sub>O<sub>22</sub> (788.67). Source: MU ZEI *Equisetum hiemale*. Ref: 2.

**9423 Herbacetin 3,8,4'-trimethyl ether**

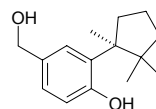
C<sub>18</sub>H<sub>16</sub>O<sub>7</sub> (344.32). Pharm: Antioxidant (Takamatsu DCFH method, myelomonocytic HL-60 cells, IC<sub>50</sub> > 62.5 μg/mL; control NDGA, IC<sub>50</sub> = (0.7±0.3) μg/mL, Vitamin C, IC<sub>50</sub> = (1.9±0.7) μg/mL, Trolox, IC<sub>50</sub> = (1.4±0.5) μg/mL)<sup>[3850]</sup>; cytotoxic (XTT assay, HL-60 cells, IC<sub>50</sub> > 50.0 μg/mL; control NDGA, IC<sub>50</sub> = (2.6±0.2) μg/mL, Vitamin C, IC<sub>50</sub> > 10.0 μg/mL, Trolox, IC<sub>50</sub> > 10.0 μg/mL)<sup>[3850]</sup>. Source: JIAN TENG BAI JIU CAO *Conyza stricta*, SAN CHI LA RUI A *Larrea tridentata* (leaf), SAN JIAO FEN YE JUE *Pityrogramma triangularis*, XIAO XING HUA YAN QIANG WEI *Cistus parviflorus*. Ref: 1521, 3850.

**9424 Herbacin**

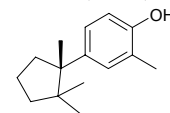
[11021-22-0] C<sub>21</sub>H<sub>20</sub>O<sub>12</sub> (464.39). mp 212~214°C. Source: SHU KUI HUA *Althaea rosea*. Ref: 6, 1521.

**9425 (-)-Herbertene-1,12-diol**

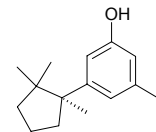
(-)-4-Hydroxymethyl-2-(1',2',2'-trimethylcyclopentyl) phenol C<sub>15</sub>H<sub>22</sub>O<sub>2</sub> (234.34). Colorless oil. Source: *Tylimanthus renifolius*. Ref: 3491.

**9426 β-Herbertenol**

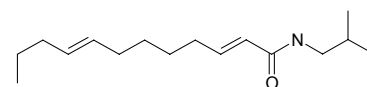
C<sub>15</sub>H<sub>22</sub>O (218.34). Source: DI SUO LUO *Marchantia polymorpha*. Ref: 660.

**9427 (-)-γ-Herbertenol**

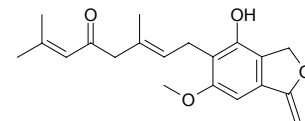
(-)-5-Methyl-3-(1',2',2'-trimethylcyclopentyl) phenol C<sub>15</sub>H<sub>22</sub>O (218.34). Colorless oil. Source: *Tylimanthus renifolius*. Ref: 3491.

**9428 Herculin**

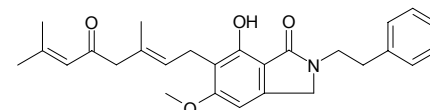
C<sub>16</sub>H<sub>29</sub>NO (251.42). Crystals (light petroleum), disgusting pungent odor, mp 59~60°C. Pharm: Pesticide. Source: MEI GUO CI JIAO *Zanthoxylum clava-hercules*, HUANG BAI *Phellodendron amurense*. Ref: 661.

**9429 Hericenone A**

C<sub>19</sub>H<sub>22</sub>O<sub>5</sub> (330.38). Source: HOU TOU JUN *Hericium erinaceus* [Syn. *Hydnum erinaceus*]. Ref: 660, 4513.

**9430 Hericenone B**

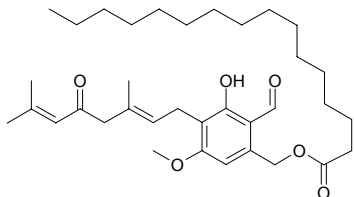
C<sub>27</sub>H<sub>31</sub>NO<sub>4</sub> (433.55). Source: HOU TOU JUN *Hericium erinaceus* [Syn. *Hydnum erinaceus*]. Ref: 660.



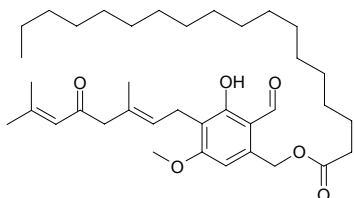


**9431 Hericenone C**

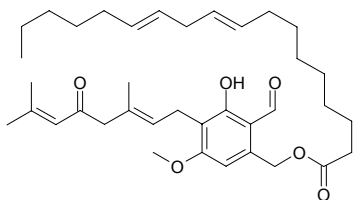
$C_{35}H_{54}O_6$  (570.82). Source: HOU TOU JUN *Hericium erinaceus* [Syn. *Hydnum erinaceus*]. Ref: 660.

**9432 Hericenone D**

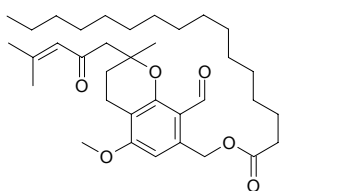
$C_{37}H_{58}O_6$  (598.87). Source: HOU TOU JUN *Hericium erinaceus* [Syn. *Hydnum erinaceus*]. Ref: 660.

**9433 Hericenone E**

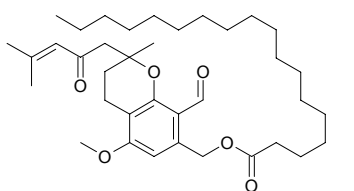
$C_{37}H_{54}O_6$  (594.84). Source: HOU TOU JUN *Hericium erinaceus* [Syn. *Hydnum erinaceus*]. Ref: 660.

**9434 Hericenone F**

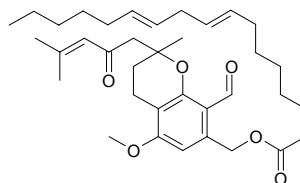
$C_{35}H_{54}O_6$  (570.82). Source: HOU TOU JUN *Hericium erinaceus* [Syn. *Hydnum erinaceus*]. Ref: 660.

**9435 Hericenone G**

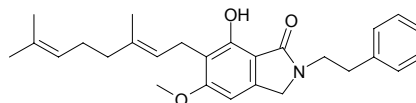
$C_{37}H_{58}O_6$  (598.87). Source: HOU TOU JUN *Hericium erinaceus* [Syn. *Hydnum erinaceus*]. Ref: 660.

**9436 Hericenone H**

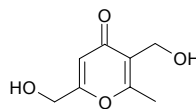
[141973-37-7]  $C_{36}H_{52}O_6$  (580.81). Yellowish oil. Pharm: Inhibits biosynthesis of PGE<sub>2</sub> (25µg/mL, rat macrophage); NGF synthetic stimulant (induces mus spider neuroglia cell, 33µg/mL, 4 times normal NGF). Source: HOU TOU JUN *Hericium erinaceus* [Syn. *Hydnum erinaceus*]. Ref: 1521, 1095.

**9437 Hericerin**

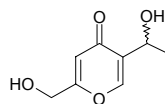
$C_{27}H_{33}NO_3$  (419.57). Source: HOU TOU JUN *Hericium erinaceus* [Syn. *Hydnum erinaceus*]. Ref: 660.

**9438 Herierin III**

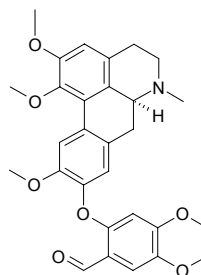
6-Methyl-2,5-dihydroxymethyl-γ-pyrone III  $C_8H_{10}O_4$  (170.17). Colorless columnar crystals, mp 122~123°C. Source: HOU TOU JUN *Hericium erinaceus* [Syn. *Hydnum erinaceus*]. Ref: 161, 660.

**9439 Herierin IV**

$C_8H_{10}O_4$  (170.17). Source: HOU TOU JUN *Hericium erinaceus* [Syn. *Hydnum erinaceus*]. Ref: 660.

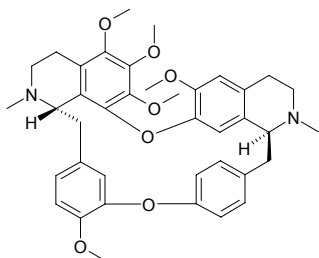
**9440 Hernandaline**

$C_{29}H_{31}NO_7$  (505.57). Source: LIAN YE TONG *Hernandia Sonora* [Syn. *Hernandia ovigera*]. Ref: 660.

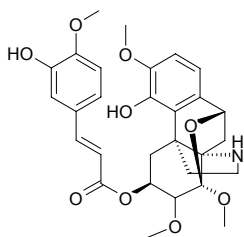


**9441 Hernandezine**

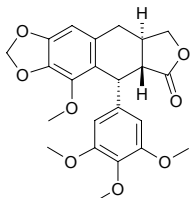
Thalicsimine; Thaliximine [6681-13-6]  $C_{39}H_{44}N_2O_7$  (652.79). Crystals (hexane), mp 192~193°C, mp 122~124°C, mp 158~159°C,  $[\alpha]_D^{20} = +250^\circ$  ( $c = 0.2$ , chloroform). **Pharm:** Antibacterial (*Mycobacterium smegmatis*, MIC = 25µg/mg; *Staphylococcus aureus*, MIC = 100µg/mg); Antifungal (*Candida albicans*, MIC = 50µg/mg); anti-inflammatory; antihypertensive (cat, iv, 1~3mg/kg); LD (cat, leads to rapid reduction of blood pressure until death) = 10mg/kg. **Source:** BAN RUI TANG SONG CAO *Thalictrum petaloideum* (root: content < 0.001%)<sup>[5508]</sup>, BING GUO TANG SONG CAO *Thalictrum podocarpum*, DA YE TANG SONG CAO *Thalictrum faberi* (root: content < 0.001%)<sup>[5508]</sup>, FEN SHI TANG SONG CAO *Thalictrum fendleri*, HE SHI TANG SONG CAO *Thalictrum hernandezii*, JIN SI MA WEI LIAN *Thalictrum glandulosissimum* (root: content = 0.21%)<sup>[5508]</sup>, MA WEI LIAN *Thalictrum foliolosum* (root: content = 0.45%)<sup>[5508]</sup>, RU LAN *Stephania hernandifolia*, XIA XU TANG SONG CAO *Thalictrum atriplex* (root: content = 0.09%)<sup>[5508]</sup>, XIAO GUO TANG SONG CAO *Thalictrum microgynum* (root: content < 0.001%)<sup>[5508]</sup>, YAN GUO CAO *Thalictrum thunbergii* (root: content = 0.07%)<sup>[5508]</sup>, YING SHUI HUANG LIAN *Thalictrum simplex* [Syn. *Thalictrum simplex* var. *brevipes*] (root: content < 0.001%)<sup>[5508]</sup>. **Ref:** 6, 658, 660, 5508.

**9442 Hernandifoline**

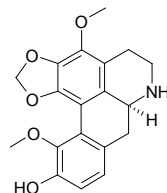
[30511-63-8]  $C_{29}H_{33}NO_9$  (539.59). Crystals ( $CHCl_3-Et_2O$ ), mp 133~135°C ( $CHCl_3$  solvate),  $[\alpha]_D^{32} = +48^\circ$  ( $c = 0.82$ , MeOH),  $[\alpha]_D = -25^\circ$  (EtOH). **Source:** RU LAN *Stephania hernandifolia*. **Ref:** 6, 1521.

**9443 Hernandin**

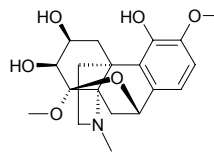
$C_{23}H_{24}O_8$  (428.44). **Source:** LIAN YE TONG *Hernandia Sonora* [Syn. *Hernandia ovigera*]. **Ref:** 660.

**9444 Hernandine**

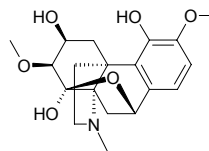
$C_{19}H_{19}NO_5$  (341.37). **Pharm:** Anti-HIV-1 inactive (HIV-1 IN inhibitor,  $IC_{50} > 100\mu\text{mol/L}$ , positive control Suramin,  $IC_{50} = 2.4\mu\text{mol/L}$ )<sup>[4224]</sup>. **Source:** DING HU DIAO ZHANG *Lindera chunii* (root). **Ref:** 4224.

**9445 Hernandine A**

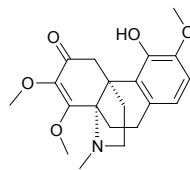
Hernandine [32593-70-7]  $C_{19}H_{25}NO_6$  (363.41). mp 197~199°C,  $[\alpha]_D = -33^\circ$  (EtOH). **Source:** RU LAN *Stephania hernandifolia*. **Ref:** 6, 1521.

**9446 Hernandine B**

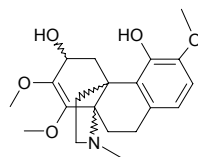
$C_{19}H_{25}NO_6$  (363.41). **Source:** RU LAN *Stephania hernandifolia*. **Ref:** 6.

**9447 Hernandoline**

Aknadinine [24148-86-5]  $C_{20}H_{25}NO_5$  (359.43). mp 70°C,  $[\alpha]_D^{29} = -283^\circ$  ( $c = 0.1$ , EtOH). **Source:** RU LAN *Stephania hernandifolia*, YA LI QIAN JIN TENG *Stephania elegans*, TAI WAN QIAN JIN TENG *Stephania sasakii*. **Ref:** 6, 1521.

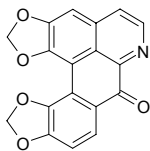
**9448 Hernandolinol**

[35452-61-0]  $C_{20}H_{27}NO_5$  (361.44).  $[\alpha]_D = -97.9^\circ$  (EtOH). **Source:** RU LAN *Stephania hernandifolia*. **Ref:** 6, 1521.

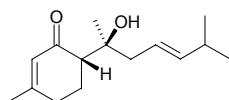


**9449 Hernandonine**

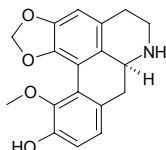
$C_{18}H_{19}NO_5$  (319.28). **Pharm:** Anti-HIV-1 (HIV-1 IN inhibitor,  $IC_{50}$  = 16.3  $\mu$ mol/L, positive control Suramin,  $IC_{50}$  = 2.4  $\mu$ mol/L). **Source:** DING HU DIAO ZHANG *Lindera chunii* (root). **Ref:** 4224.

**9450 (+)-Hernandulcin**

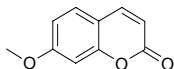
$C_{15}H_{24}O_2$  (236.36). **Source:** TIAN SHE CAO *Lippia dulcis* (aerial parts). **Ref:** 4508.

**9451 Hernangerine**

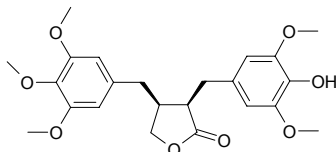
Nandigerine  $C_{18}H_{17}NO_4$  (311.34). **Pharm:** Anti-HIV-1 inactive (HIV-1 IN inhibitor,  $IC_{50}$  > 100  $\mu$ mol/L, positive control Suramin,  $IC_{50}$  = 2.4  $\mu$ mol/L)<sup>[4224]</sup>. **Source:** DING HU DIAO ZHANG *Lindera chunii* (root), LIAN YE TONG *Hernandia Sonora* [Syn. *Hernandia ovigera*], YUE GUI YE *Laurus nobilis*. **Ref:** 660, 2601, 4224.

**9452 Herniarin**

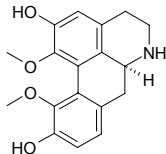
7-Methoxycoumarin [531-59-9]  $C_{10}H_8O_3$  (176.17). mp 117~118°C. **Pharm:** Cytotoxic inactive (*in vitro*, HONE-1 and NUGC cancer cell lines, no significant activity)<sup>[3069]</sup>. **Source:** A YA PAN ZE LAN *Eupatorium ayapana*, BO NIANG HAO *Descurainia sophia*, YA JIAO AI *Artemisia lactiflora* (whole plant: mean content in different growth period = 0.70%<sup>[5508]</sup>), YU ZHUANG YUN XIANG *Ruta pinnata*, ZHONG GUO XIU QIU *Hydrangea chinensis* (root)<sup>[3069]</sup>. **Ref:** 6, 660, 1521, 3069, 5508.

**9453 (-)-Hernolactone**

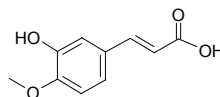
$C_{23}H_{28}O_8$  (432.47).  $[\alpha]_D^{20}$  = -24.9° ( $c$  = 2.0,  $CHCl_3$ ). **Source:** LIAN YE TONG *Hernandia Sonora* [Syn. *Hernandia ovigera*] (seed). **Ref:** 5030.

**9454 Hernovine**

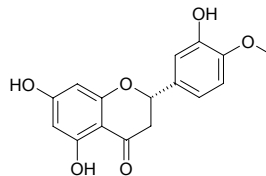
$C_{18}H_{19}NO_4$  (313.36). **Source:** LIAN YE TONG *Hernandia Sonora* [Syn. *Hernandia ovigera*]. **Ref:** 660.

**9455 Hesperetic acid**

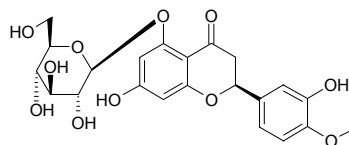
Isoferulic acid; Hesperetic acid [537-73-5]  $C_{10}H_{10}O_4$  (194.19). Colorless acicular crystals, mp 225~229°C; mp 238~240°C; plates, mp 233~234°C. **Pharm:** Antipyretic; anti-inflammatory. **Source:** DA SAN YE SHENG MA *Cimicifuga heracleifolia* (dried rhizome: content = 0.20%<sup>[5508]</sup>), DAN SHEN *Salvia miltiorrhiza*, HUANG SAN QI *Souliea vaginata* (dried rhizome: content = 0.07%<sup>[5508]</sup>), LEI YE SHENG MA *Cimicifuga asiatica* (dried rhizome: content = 0.05%<sup>[5508]</sup>), MAO LIAN HAO *Artemisia vestita*, NAN CHUAN SHENG MA *Cimicifuga nanchuanensis* (dried rhizome: content = 0.10%<sup>[5508]</sup>), SAN MIAN DAO *Cimicifuga acerina* (dried rhizome: content = 0.03%<sup>[5508]</sup>), SHENG MA *Cimicifuga foetida* (dried rhizome: content scope = 0.03%~0.26%<sup>[5501]</sup>, content = 0.13%<sup>[5508]</sup>), TIE PO LUO *Beesia calthaeifolia* (dried rhizome: content = 0.12%<sup>[5508]</sup>), XIE CAO *Valeriana officinalis*, XING AN SHENG MA *Cimicifuga dahurica* (dried rhizome: content = 0.26%<sup>[5508]</sup>), YE SHENG MA *Cimicifuga simplex* (dried rhizome: content = 0.15%<sup>[5508]</sup>), ZI BAI PI *Catalpa ovata*, ZONG ZHUANG SHENG MA *Cimicifuga racemosa*. **Ref:** 2, 6, 474, 660, 1521, 5501, 5508.

**9456 Hesperetin**

Hesperitin [520-33-2]  $C_{16}H_{14}O_6$  (302.29). Triangular lamellar matter (ethanol), mp 216~218°C,  $[\alpha]_D^{27}$  = -37.6° ( $c$  = 1.80, ethanol). **Pharm:** Antibacterial; antiviral; feeding-inhibitor (*Schizaphis graminus* and *Myzus persicae*); inhibits lipolysis (rat fat cells, induced by adrenaline and theocin); anti-tumor promotor; 3- $\alpha$ -hydroxysteroid dehydrogenase inhibitor; aldose reductase inhibitor (0.01 mg/mL, InRt = 25.6%); promotes biosynthesis of DNA (karyons of murine hepatic cells *in vitro*); anti-inflammatory (modulator of cytokine network: inhibits LPS-stimulated TNF- $\alpha$  release in RAW264.7 macrophages,  $IC_{50}$   $\approx$  50  $\mu$ mol/L)<sup>[4416]</sup>; passive cutaneous anaphylaxis inhibitor (inhibits IgE-induced  $\beta$ -hexosaminidase release from RBL-2H3 cells,  $IC_{50}$  = (71 $\pm$ 2)  $\mu$ mol/L, control Azelastine,  $IC_{50}$  = (35 $\pm$ 2)  $\mu$ mol/L; PCA reaction inhibitor, 5mg/kg ip, InRt = (65.9 $\pm$ 2.9)%<sup>[5041]</sup>). **Source:** JING JIE *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*], NING MENG *Citrus limon*, TIAN CHENG *Citrus sinensis*, WU HE MI JU *Citrus unshiu* (pericarp). **Ref:** 2, 900, 1521, 4416, 5041.

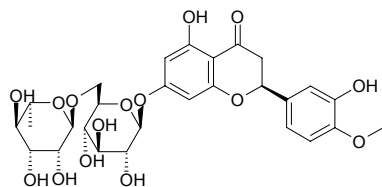
**9457 Hesperetin-5-glucoside**

[69651-80-5]  $C_{22}H_{24}O_{11}$  (464.43). mp 257~258°C,  $[\alpha]_D$  = -112.8° (ethanol). **Source:** TAO GEN *Prunus persica*. **Ref:** 6, 1521.

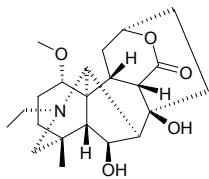


**9458 Hesperidin**

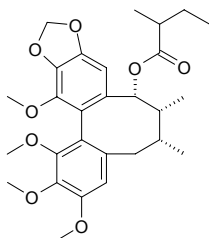
Citrus-hesperidin; Cirontin; Vitamin B; Cirantin [520-26-3]  $C_{28}H_{34}O_{15}$  (610.57). Needles, mp 258–262°C (softens at 250°C),  $[\alpha]_D^{20} = -47.3^\circ$  (pyridine). **Pharm:** Antiviral; aldose reductase inhibitor (rat eye lens); promotes oviposition (*Papilio xuthus* and *Papilio protenor*); frostbite preventive; enhances effects of vitamin C; passive cutaneous anaphylaxis inhibitor (inhibits IgE-induced  $\beta$ -hexosaminidase release from RBL-2H3 cells,  $IC_{50} > 500 \mu\text{mol/L}$ , control Azelastine,  $IC_{50} = (35 \pm 2) \mu\text{mol/L}$ ; PCA reaction inhibitor, 20mg/kg orl,  $\text{InRt} = (71.9 \pm 5.5)\%$ )<sup>[5041]</sup>. **Source:** BA XIAN *Galium aparine*, FO SHOU *Citrus medica* var. *sarcodactylis*, GAN PI *Citrus chachiensis* (dried ripe pericarp: content = 2.10%)<sup>[5508]</sup>, GOU JU *Poncirus trifoliata*, JI CAI *Capsella bursa-pastoris*, JIAO GAN *Citrus tankan*, JIAO GAN PI *Citrus tankan*, JING JIE *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*], JU PI *Citrus reticulata* (dried ripe pericarp: content scope = 3.4%–7.2%)<sup>[5501]</sup>, mean content = 5.81%<sup>[5508]</sup>, JU YUAN *Citrus medica*, LI MENG PI *Citrus limonia*, NAN CHUAN GUAN CHUN HUA *Microtoena prainiana* (stem: yield = 0.000014%dw)<sup>[4752]</sup>, NING MENG *Citrus limon*, NING MENG PI *Citrus limon*, OU BO HE *Mentha longifolia*, SU ZHU YANG YANG *Galium mollugo*, WU HE MI JU *Citrus unshiu* (pericarp), ZHI KE *Citrus aurantium* (dried ripe pericarp: content = 3.10%)<sup>[5508]</sup>, ZHI SHI *Citrus aurantium* (dried ripe pericarp: content = 0.99%)<sup>[5508]</sup>. **Ref:** 2, 4, 658, 660, 4752, 5041, 5501, 5508.

**9459 Heteratisine**

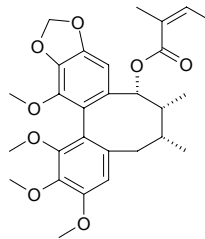
[3328-84-5]  $C_{22}H_{33}NO_5$  (391.51). mp 267–269°C,  $[\alpha]_D^{28} = +40^\circ$  ( $c = 1$ , MeOH). **Pharm:** Increases blood pressure (short acting). **Source:** YI YE WU TOU *Aconitum heterophyllum*, GAN QING WU TOU *Aconitum tanguticum*, ZE WU TOU *Aconitum zeravschanicum*. **Ref:** 658, 1521.

**9460 Heteroclitin A**

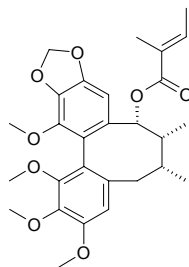
[140369-75-1]  $C_{28}H_{36}O_8$  (500.59). **Source:** YI XING NAN WU WEI ZI *Kadsura heteroclitia* [Syn. *Uvaria heteroclitia*]. **Ref:** 2436.

**9461 Heteroclitin B**

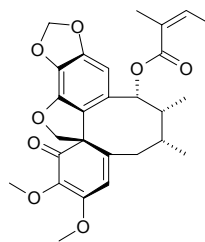
[140461-47-8]  $C_{28}H_{34}O_8$  (498.58). **Source:** YI XING NAN WU WEI ZI *Kadsura heteroclitia* [Syn. *Uvaria heteroclitia*]. **Ref:** 2436.

**9462 Heteroclitin C**

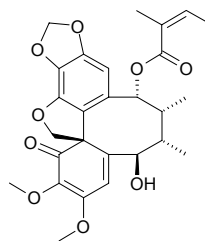
[140460-42-0]  $C_{28}H_{34}O_8$  (498.58). **Source:** YI XING NAN WU WEI ZI *Kadsura heteroclitia* [Syn. *Uvaria heteroclitia*]. **Ref:** 2436.

**9463 Heteroclitin D**

[140369-76-2]  $C_{27}H_{30}O_8$  (482.54). **Pharm:** Antineoplastic (screened as potential antitumor promoters, EBV-EA induced by TPA, mol ratio/TPA = 1000, relative percentage of EBV-EA = (9.4±0.5)% (positive control value 32pmol, 20ng TPA = 100%), viability of Raji cells = 70%)<sup>[4644]</sup>. **Source:** NEI NAN WU WEI ZI *Kadsura interior* (stem), YI XING NAN WU WEI ZI *Kadsura heteroclitia* [Syn. *Uvaria heteroclitia*]. **Ref:** 2436, 4644.

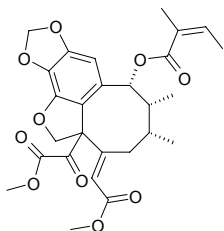
**9464 Heteroclitin E**

[140369-77-3]  $C_{27}H_{30}O_9$  (498.53). **Source:** YI XING NAN WU WEI ZI *Kadsura heteroclitia* [Syn. *Uvaria heteroclitia*]. **Ref:** 2436.

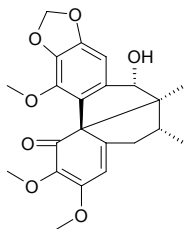


**9465 Heteroclitin F**

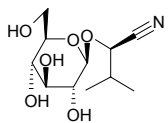
[144049-67-2] C<sub>27</sub>H<sub>30</sub>O<sub>10</sub> (514.53). **Pharm:** Antineoplastic (screened as potential antitumor promoters, EBV-EA induced by TPA, mol ratio/TPA = 1000, relative percentage of EBV-EA = (16.5±0.6)% (positive control value 32pmol, 20ng TPA=100%), viability of Raji cells = 60%)<sup>[4644]</sup>. **Source:** NEI NAN WU WEI ZI *Kadsura interior* (stem: yield = 0.00039%dw), YI XING NAN WU WEI ZI *Kadsura heteroclita* [Syn. *Uvaria heteroclita*]. **Ref:** 2436, 4644.

**9466 Heteroclitin G**

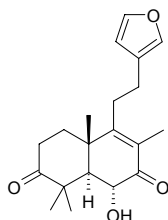
Kadsulignan K [144027-74-7] C<sub>22</sub>H<sub>24</sub>O<sub>7</sub> (400.43). **Source:** YI XING NAN WU WEI ZI *Kadsura heteroclita* [Syn. *Uvaria heteroclita*]. **Ref:** 2436.

**9467 Heterodendrin**

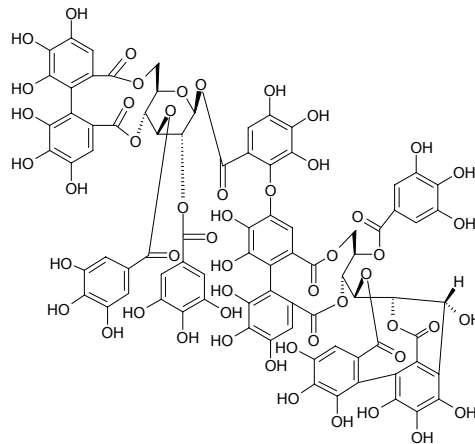
(S)-2-(β-D-Glucopyranosyloxy)-3-methylbutanenitrile [66465-22-3] C<sub>11</sub>H<sub>19</sub>NO<sub>6</sub> (261.28). mp 106~107°C (as tetra-Ac), [α]<sub>D</sub><sup>25</sup> = -45° (c = 0.5, MeOH). **Pharm:** Toxin. **Source:** SHENG DI HONG JING TIAN *Rhodiola sacra*, MAI YA *Hordeum vulgare*, XI BO JIN HE HUAN *Acacia sieberiana*, *Passiflora* sp., *Acacia* sp. **Ref:** 658, 742, 1521.

**9468 Heteronone A**

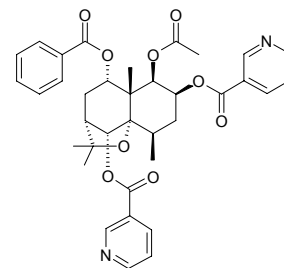
6β-Hydroxy-labdane-15,16-epoxy-14,13(16),8(9)-trien-3,7-dione C<sub>20</sub>H<sub>26</sub>O<sub>4</sub> (330.43). White needles, mp 160~161°C. **Source:** YI MU CAO *Leonurus heterophyllum* [Syn. *Leonurus artemisia*] (aerial parts). **Ref:** 4428.

**9469 Heterophyllin B**

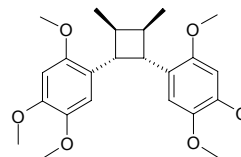
C<sub>82</sub>H<sub>56</sub>O<sub>52</sub> (1873.33). Grey-white powder, [α]<sub>D</sub> = +104° (c = 1.0, MeOH). **Source:** ZHEN *Corylus heterophylla* (leaf). **Ref:** 4584.

**9470 Heterophylline**

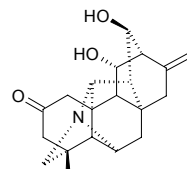
1β-Acetoxy-9α-benzoyloxy-2β,6α-dinicotinoyloxy-β-dihydroagarofuran C<sub>36</sub>H<sub>38</sub>N<sub>2</sub>O<sub>9</sub> (642.71). mp 132~135°C, [α]<sub>D</sub> = +63.2° (c = 1.00, CHCl<sub>3</sub>). **Source:** YI YE MEI DENG MU *Maytenus heterophylla*. **Ref:** 5189.

**9471 Heterotropan**

C<sub>24</sub>H<sub>32</sub>O<sub>6</sub> (416.52). **Source:** BI CHENG QIE *Piper cubeba*. **Ref:** 660.

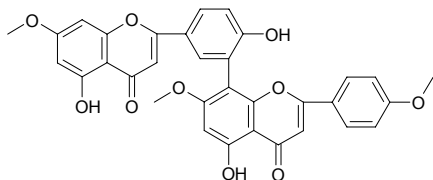
**9472 Hetisinone**

11,13-Dihydroxyhetisan-2-one; Dihydrohetisine [4829-55-4] C<sub>20</sub>H<sub>25</sub>NO<sub>3</sub> (327.43). Colorless crystals, mp 268~270°C; Rhombs (C<sub>6</sub>H<sub>6</sub>), mp 273~275°C, [α]<sub>D</sub> = +18°. **Source:** GAN QING WU TOU *Aconitum tanguticum*, YI YE WU TOU *Aconitum heterophyllum*, KANG DING CUI QUE HUA *Delphinium tatsienense*. **Ref:** 2203.

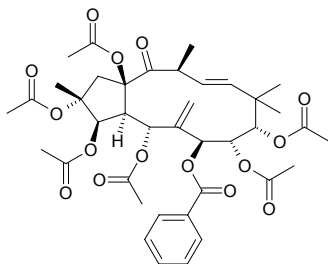


**9473 Heveaflavone**

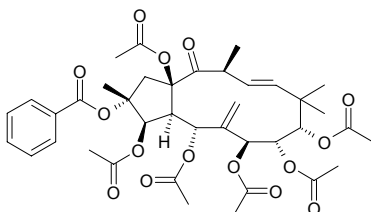
$C_{33}H_{24}O_{10}$  (580.55). Source: DA YE CAI *Selaginella doederleinii*. Ref: 660.

**9474 2 $\alpha$ ,3 $\beta$ ,5 $\alpha$ ,8 $\alpha$ ,9 $\alpha$ ,15 $\beta$ -Hexaacetoxy-7 $\beta$ -benzoyloxyjatropa-6(17), 11 $E$ -dien-14-one**

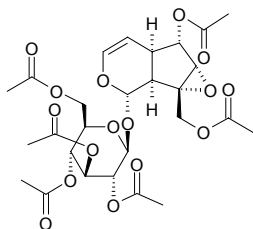
$C_{39}H_{48}O_{15}$  (756.81). Colorless crystals, mp 166–168°C,  $[\alpha]_D^{25} = +12.9^\circ$  ( $c = 0.50$ ,  $CHCl_3$ ). Pharm: Cytotoxic (*in vitro*, B16 melanoma cell line,  $IC_{50} > 5\mu g/mL$ , no significant cytotoxicity)<sup>[3078]</sup>; irritant inactive (mouse ear inflammation model,  $ID_{50} > 100\mu g/ear$ ). Source: *Euphorbia turczaninowii* (whole herb). Ref: 3078.

**9475 3 $\beta$ ,5 $\alpha$ ,7 $\beta$ ,8 $\alpha$ ,9 $\alpha$ ,15 $\beta$ -Hexaacetoxy-2 $\alpha$ -benzoyloxyjatropa-6(17), 11 $E$ -dien-14-one**

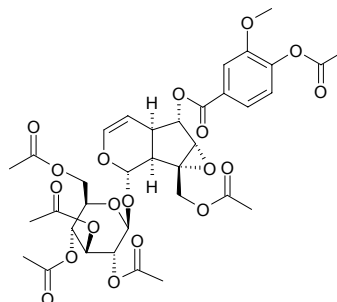
$C_{39}H_{48}O_{15}$  (756.81). Colorless crystals, mp 139–141°C,  $[\alpha]_D^{25} = -59.1^\circ$  ( $c = 0.62$ ,  $CHCl_3$ ). Pharm: Cytotoxic (*in vitro*, B16 melanoma cell line,  $IC_{50} > 5\mu g/mL$ , no significant cytotoxicity)<sup>[3078]</sup>; irritant inactive (mouse ear inflammation model,  $ID_{50} > 100\mu g/ear$ ). Source: *Euphorbia turczaninowii* (whole herb). Ref: 3078.

**9476 Hexaacetyl catalpol**

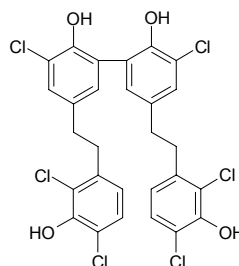
$C_{27}H_{34}O_{16}$  (614.56). Source: HU HUANG LIAN *Picrorhiza kurroa*. Ref: 660.

**9477 Hexaacetyl-6-vaniloyl catalpol**

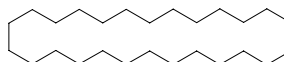
$C_{35}H_{40}O_{19}$  (764.70). Source: HU HUANG LIAN *Picrorhiza kurroa*. Ref: 660.

**9478 6,6',10,10',12,12'-Hexachloroisoperrottetin A**

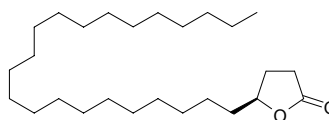
$C_{28}H_{20}Cl_6O_4$  (633.19).  $[\alpha]_D^{20} = +0.0^\circ$  ( $c = 0.2$ ,  $CHCl_3$ ). Source: YUAN YE TAI *Jamesoniella colorata*. Ref: 3375.

**9479 n-Hexacosane**

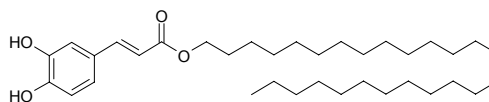
$C_{26}H_{54}$  (366.72). Source: MENG GU LI *Quercus mongolica*. Ref: 660.

**9480 Hexacosan-4-olide**

$C_{26}H_{50}O_2$  (394.69). White powder, mp 69°C (Hexane:EtOAc = 9:1). Pharm: Phytotoxin inactive (doesn't inhibit radicle growth of *Amaranthus hypochondriacus* and *Echinochloa crusgalli*)<sup>[3433]</sup>; CaM interactor inactive<sup>[3433]</sup>. Source: FU CHUI FE LAO JU *Flourensia cernua*. Ref: 3433.

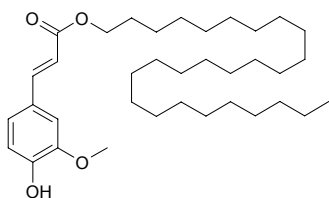
**9481 Hexacosanyl caffeate**

$C_{35}H_{60}O_4$  (544.87). Source: TAI WAN FU RONG *Hibiscus taiwanensis*. Ref: 2529.

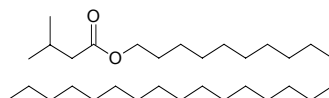


**9482 Hexacosanyl ferulate**

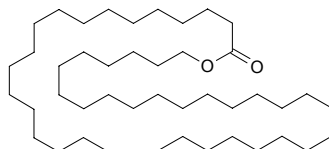
[63034-29-7] C<sub>36</sub>H<sub>62</sub>O<sub>4</sub> (558.89). Source: JIAN YE LONG XUE SHU *Dracaena cochinchinensis*. Ref: 616.

**9483 n-Hexacosanyl isovalerate**

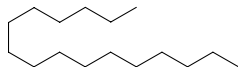
C<sub>31</sub>H<sub>62</sub>O<sub>2</sub> (466.84). Source: GAN SONG *Nardostachys chinensis*. Ref: 6.

**9484 Hexacosyl stearate**

C<sub>44</sub>H<sub>88</sub>O<sub>2</sub> (649.12). White waxy solid, mp 79~82°C. Source: HUANG LIAN HUA *Lysimachia davurica*. Ref: 2525.

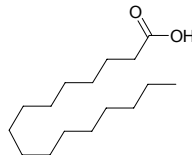
**9485 Hexadecane**

Cetane [544-76-3] C<sub>16</sub>H<sub>34</sub> (226.45). mp 18.17°C, bp 287°C/160mmHg, bp 105~110°C/0.1mmHg. Source: REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*], XI YANG SHEN *Panax quinquefolium*, MEI GUI HUA *Rosa rugosa*, BI BA *Piper longum*. Ref: 2, 1521.

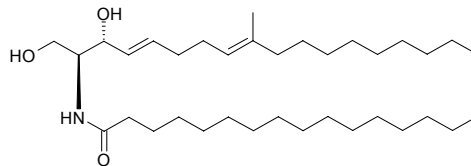
**9486 Hexadecanoic acid**

Palmitic acid; Aethalic acid; Cetylic acid [57-10-3] C<sub>16</sub>H<sub>32</sub>O<sub>2</sub> (256.43). Crystals, mp 63~64°C, bp 390°C, bp 268.5°C/100mmHg, bp 215°C/15mmHg. Pharm: Antifungal inactive (hmn pathogenic yeasts *Candida albicans*, *Candida glabrata* and *Candida tropicalis*); COX-1 and COX-2 inhibitor (IC<sub>50</sub> = 3.9~180 μmol/L, lacking selectivity)<sup>[4415]</sup>; platelet aggregation inhibitor (washed rabbit platelets, 100 μg/mL, 100 μmol/L AA-induced, InRt = 4.5%, control 50 μmol/L Aspirin, InRt = 100%; 10 μg/mL collagen-induced, InRt = 3.9%, 100 μmol/L Aspirin, InRt = 4.9%; 0.1 U/mL thrombin-induced, InRt = 6.0%, 100 μmol/L Aspirin, InRt = 1.7%; 2 ng/mL PAF-induced, InRt = 3.5%, 100 μmol/L Aspirin, InRt = 2.1%)<sup>[5427]</sup>; LD<sub>50</sub> (mus, iv) = 57 mg/kg. Source: BA DOU *Croton tiglium*, BAI CHANG *Acorus calamus*, BAI ZHI *Angelica dahurica* [Syn. *Angelica porphyrocaulis*], BING LANG *Areca catechu*, CHAI HU *Bupleurum chinense*, CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*], CU LIU GUO *Hippophae rhamnoides*, DA CHE QIAN *Plantago major*, DA QING YE *Isatis indigotica*, DA ZAO *Ziziphus jujuba*, DANG GUI *Angelica sinensis*, DANG SHEN *Codonopsis pilosula*, DONG CHONG XIA CAO *Cordyceps sinensis*, DONG LING CAO *Rabdosia rubescens*, FU LING *Poria cocos*, GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f.

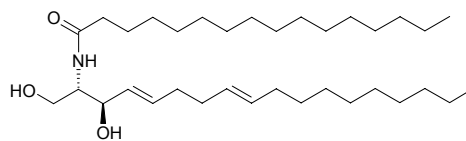
*Huechingensis*], GUA LOU *Trichosanthes kirilowii*, GUANG YE DING GONG TENG *Erycibe schmidtii*, HONG HUA *Carthamus tinctorius*, HUA DONG LAN CI TOU *Echinops grijsii*, HUANG QI *Astragalus membranaceus*, HUANG QIN *Scutellaria baicalensis*, LANG DANG ZI *Hyoscyamus niger* (dried ripe seed: content = 6.5%)<sup>[5508]</sup>, LU HUI *Aloe vera* [Syn. *Aloe barbadensis*], MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*], PU HUANG *Typha angustata*, QIANG HUO *Notopterygium incisum*, QING HAO *Artemisia apiacea* [Syn. *Artemisia carvifolia*; *Artemisia caruifolia*], QUAN XIE *Buthus martensi*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], SAN QI CAO *Gynura segetum* [Syn. *Gynura japonica*] (rhizome), SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*], SHAN YAO *Dioscorea batatas* [Syn. *Dioscorea opposita*], SHAN ZHA *Crataegus pinnatifida*, SHAN ZHU YU *Cornus officinalis* [Syn. *Macrocarpium officinale*], TIAN HUA FEN *Trichosanthes kirilowii*, TIAN MA *Gastrodia elata*, WU SE MEI *Lantana camara* (aerial parts), XI YANG SHEN *Panax quinquefolium*, XING REN *Prunus armeniaca*, YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*], YIN YANG HUO *Epimedium brevicornum*, YU XING CAO *Houttuynia cordata*, occurs in many plants. Ref: 2, 531, 549, 551, 557, 576, 582, 585, 596, 601, 660, 1521, 2576, 4309, 4415, 5427, 5508.

**9487 (2S,3R,4E,8E)-N-Hexadecanoyl-2-amino-9-methyl-4,8-octadecadiene-1,3-diol**

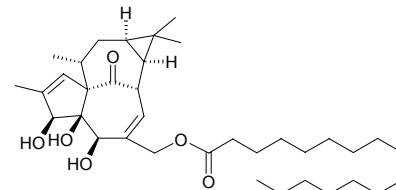
C<sub>33</sub>H<sub>67</sub>NO<sub>3</sub> (549.93). Amorphous powder, [α]<sub>D</sub><sup>21</sup> = -11.6° (c = 0.09, CHCl<sub>3</sub>). Source: HOU SHU SHAN GU *Panellus serotinus*. Ref: 4195.

**9488 (2S,3R,4E,8E)-2-Hexadecanoylamino-4,8-octadecadiene-1,3-diol**

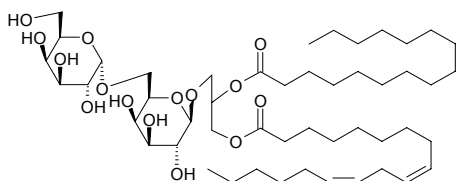
C<sub>34</sub>H<sub>65</sub>NO<sub>3</sub> (535.90). Colorless solid, mp 98~100°C, [α]<sub>D</sub><sup>28</sup> = +12.1° (c = 0.05, CHCl<sub>3</sub>). Pharm: Cytotoxic (hmn peripheral blood mononuclear cells (PBMC), ED<sub>50</sub> = 20 μg/mL). Source: *Lobophytum* sp. Ref: 4432.

**9489 20-Hexadecanoylingenol**

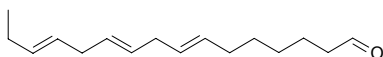
C<sub>36</sub>H<sub>58</sub>O<sub>6</sub> (586.86). Source: QIAN JIN ZI *Euphorbia lathyris*. Ref: 6.



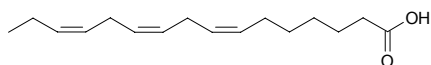
**9490 1-O-Hexadecanoyl-2-O-(9Z,12Z-octadecadienyl)-3-O-[ $\alpha$ -D-galactopyranosyl-(1''-6')-O- $\beta$ -D-galactopyranosyl]-glycerol**  
 C<sub>49</sub>H<sub>88</sub>O<sub>15</sub> (917.24). White amorphous powder. **Pharm:** PAF antagonist.  
**Source:** XI LAN ROU GUI *Cinnamomum zeylanicum*. **Ref:** 2199.



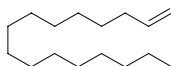
**9491 7,10,13-Hexadecatrienal**  
 C<sub>16</sub>H<sub>26</sub>O (234.39). **Source:** KONG SHI CHUN *Ulva pertusa*. **Ref:** 660.



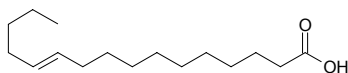
**9492 7Z,10Z,13Z-Hexadecatrienoic acid**  
 C<sub>16</sub>H<sub>26</sub>O<sub>2</sub> (250.38). **Source:** FU PING *Lemna minor*. **Ref:** 660.



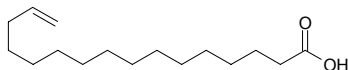
**9493 1-Hexadecene**  
 C<sub>16</sub>H<sub>32</sub> (224.43). **Source:** HONG HUA *Carthamus tinctorius*. **Ref:** 660.



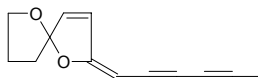
**9494 11Z-Hexadecenoic acid**  
 C<sub>16</sub>H<sub>30</sub>O<sub>2</sub> (254.42). **Source:** FU PING *Lemna minor*. **Ref:** 660.



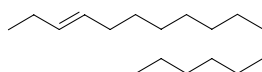
**9495 omega-Hexadecenoic acid**  
 C<sub>16</sub>H<sub>30</sub>O<sub>2</sub> (254.42). **Source:** KUN BU *Laminaria japonica*. **Ref:** 660.



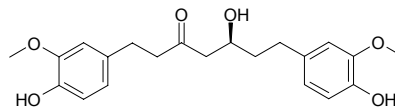
**9496 2-(Hexa-2,4-dien-1-ylidene)-1,6-dioxaspiro[4.4]non-3-ene**  
 [50257-98-2] C<sub>13</sub>H<sub>12</sub>O<sub>2</sub> (200.24). Yellowish crystals (petroleum ether), mp 48.5–49.5°C, [ $\alpha$ ]<sub>D</sub> = -45.3° (Et<sub>2</sub>O). **Pharm:** Anti-inflammatory; insect antifeedant. **Source:** MU<sup>(3)</sup> JU *Matricaria chamomilla* [Syn. *Matricaria recutita*], *Chrysanthemum* spp. **Ref:** 6, 1521.



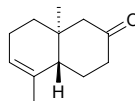
**9497 Hexahydroaplotaxene**  
 Z-14-Heptadecene C<sub>17</sub>H<sub>34</sub> (238.46). **Source:** DA JI<sup>(4)</sup> *Cirsium japonicum*. **Ref:** 660.



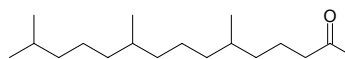
**9498 Hexahydrocurcumin**  
 C<sub>21</sub>H<sub>26</sub>O<sub>6</sub> (374.44). mp 90–91°C (benzene), [ $\alpha$ ]<sub>D</sub><sup>24</sup> = +9°. **Pharm:** Choleric (animals, *in vivo*); antihypercholesterolemic. **Source:** GAN JIANG *Zingiber officinale*, GAO LIANG JIANG *Alpinia officinarum*, JIANG HUANG *Curcuma longa*. **Ref:** 658, 660.



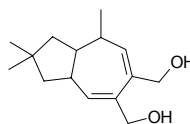
**9499 (+)-3,4,4aR,7,8,8aR-Hexahydro-5,8a-dimethylnaphthalen-2(1H)-one**  
 C<sub>12</sub>H<sub>18</sub>O (178.28). Colorless oil. **Source:** *Tritomaria polita* (essential oil). **Ref:** 3446.



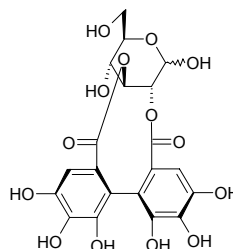
**9500 Hexahydrofarnesyl acetone**  
 6,10,14-Trimethyl-pentadecan-2-one C<sub>18</sub>H<sub>36</sub>O (268.49). **Source:** AI YE *Artemisia argyi*, DENG XIN CAO *Juncus effusus*, HONG CHAI HU *Bupleurum scorzonerifolium*, LING XIANG CAO *Lysimachia foenum-graecum*, WU LIAN MEI *Cayratia japonica*, XIAO GUO XIANG CAO *Lysimachia microcarpa*, XUE LIAN *Saussurea involucrata*. **Ref:** 660.



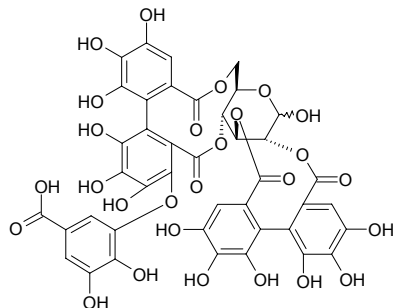
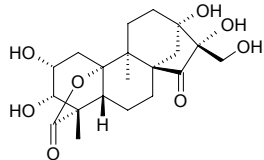
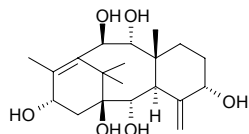
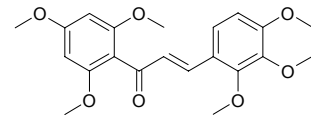
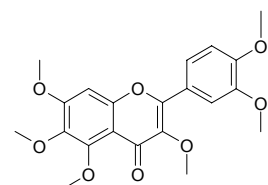
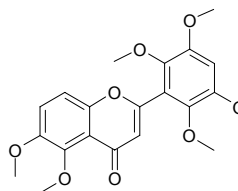
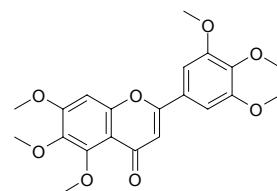
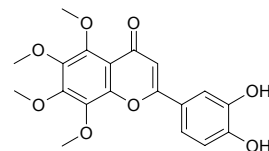
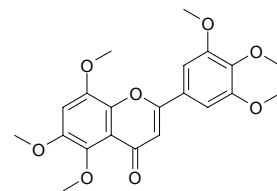
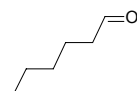
**9501 1,2,3,3a,8,8a-Hexahydro-2,2,8-trimethyl-5,6-azulene-dimethanol**  
 C<sub>15</sub>H<sub>24</sub>O<sub>2</sub> (236.36). **Source:** WU WEI ZI *Schisandra chinensis*. **Ref:** 2.



**9502 2,3-O-(S)-Hexahydroxydiphenyl-D-glucopyranose**  
 C<sub>20</sub>H<sub>18</sub>O<sub>14</sub> (482.36). **Pharm:** Antioxidant (SOD-like activity, EC<sub>50</sub> = 166 μmol/L, control Gallic acid, EC<sub>50</sub> = 31.7 μmol/L, L-Ascorbic acid, EC<sub>50</sub> = 34.6 μmol/L)<sup>[3408]</sup>; antioxidant (DPPH free radical scavenger, EC<sub>50</sub> = 4.35 μmol/L, control Gallic acid, EC<sub>50</sub> = 5.88 μmol/L, L-Ascorbic acid, EC<sub>50</sub> = 6.25 μmol/L)<sup>[3408]</sup>. **Source:** AN MO LE *Phyllanthus emblica* (root), BAI SHAO *Paeonia albiflora* [Syn. *Paeonia lactiflora*] (fresh fruit: yield = 0.010%fw)<sup>[4695]</sup>, HU TAO REN *Juglans regia*. **Ref:** 3065, 3408, 4695.



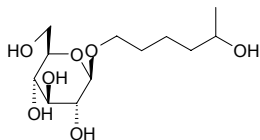


**9503 2,3-O-Hexahydroxydiphenoyl-4,6-O-sanguisorboyl- ( $\alpha/\beta$ )-glucose**C<sub>41</sub>H<sub>28</sub>O<sub>27</sub> (952.66). Source: SHEN SHENG XUAN GOU ZI *Rubus sanctus*.Ref: 3421.**9504 2 $\alpha$ ,3 $\alpha$ ,10 $\alpha$ ,13 $\alpha$ ,16 $\alpha$ ,17-Hexahydroxy-9 $\alpha$ -methyl-15-oxo-20-norkauran-19-oic acid (19,10)-lactone**C<sub>20</sub>H<sub>28</sub>O<sub>8</sub> (396.44). White amorphous solid, mp 150°C(dec), [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +16.0° (c = 0.1, MeOH). Pharm: Cytotoxic inactive (Lu1, Col2, KB, LNCaP, hTERT-RPE1, HUVEC; control Taxol, ED<sub>50</sub> = 0.002 $\mu$ g/mL, 0.003 $\mu$ g/mL, 0.0005 $\mu$ g/mL, 0.001 $\mu$ g/mL, 0.004 $\mu$ g/mL, 0.008 $\mu$ g/mL, respectively). Source: *Parinari sprucei* (leaf). Ref: 4991.**9505 Hexahydroxytaxadiene**1 $\beta$ ,2 $\alpha$ ,5 $\alpha$ ,9 $\alpha$ ,10 $\beta$ ,13 $\alpha$ -Hexahydroxy-4(20),11-taxadiene C<sub>20</sub>H<sub>32</sub>O<sub>6</sub> (368.47). mp 120~121°C, [ $\alpha$ ]<sub>D</sub> = -5.6° (CHCl<sub>3</sub>). Source: HONG DOU SHAN *Taxus chinensis*. Ref: 662.**9506 2,3,4,2',4',6'-Hexamethoxychalcone**C<sub>21</sub>H<sub>24</sub>O<sub>7</sub> (388.42). Pale orange-yellow solid (CHCl<sub>3</sub>), mp 174~176°C.Source: *Andrographis neesiana* (whole herb). Ref: 4357.**9507 3,5,6,7,3',4'-Hexamethoxyflavone**C<sub>21</sub>H<sub>22</sub>O<sub>8</sub> (402.40). Pale yellow amorphous solid, mp 179~180°C. Pharm: Cytotoxic inactive (*in vitro*, Col2, ED<sub>50</sub> > 20 $\mu$ g/mL; hTERT-RPE1, ED<sub>50</sub> > 20 $\mu$ g/mL; HUVEC, ED<sub>50</sub> > 20 $\mu$ g/mL; KB, ED<sub>50</sub> > 20 $\mu$ g/mL; HUVEC, ED<sub>50</sub> > 20 $\mu$ g/mL; Lu1, ED<sub>50</sub> > 20 $\mu$ g/mL). Source: HUANG JING YE *Vitex negundo*. Ref: 4699.**9508 5,6,2',3',5',6'-Hexamethoxyflavone**C<sub>21</sub>H<sub>22</sub>O<sub>8</sub> (402.40). Yellow amorphous solid. Source: SI JI XIANG ROU GUO *Casimiroa tetrameria* (leaf). Ref: 5262.**9509 5,6,7,3',4',5'-Hexamethoxyflavone**C<sub>21</sub>H<sub>22</sub>O<sub>8</sub> (402.40). White needles (acetone). Pharm: Cytotoxic (HeLa, IC<sub>50</sub> = 42.9 $\mu$ g/mL, control Mitomycin C, IC<sub>50</sub> = 1.7 $\mu$ g/mL)<sup>[4092]</sup>. Source: JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*], LONG XU TENG *Bauhinia championii*, SHENG HONG JI *Ageratum conyzoides*, TUAN JI AI NA XIANG *Blumea glomerata*. Ref: 660, 4092, 4548.**9510 5,6,7,8,3',4'-Hexamethoxyflavone**C<sub>19</sub>H<sub>18</sub>O<sub>8</sub> (374.35). Source: JU PI *Citrus reticulata*. Ref: 2.**9511 5,6,8,3',4',5'-Hexamethoxyflavone**C<sub>21</sub>H<sub>22</sub>O<sub>8</sub> (402.40). Source: JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*]. Ref: 660.**9512 Hexanal**[66-25-1] C<sub>6</sub>H<sub>12</sub>O (100.16). Source: FANG FENG *Saposhnikovia divaricata* [Syn. *Ledebouria seseloides*], KUAN YE QIANG HUO *Notopterygium forbesii* [Syn. *Notopterygium franchetii*], SHAN XING REN *Prunus armeniaca* var. *ansu*. Ref: 2, 660.

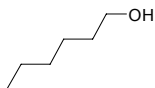
**9513 Hexane-1,5-diol-1-O-β-D-glucopyranoside**

$C_{12}H_{24}O_7$  (280.32). Amorphous powder,  $[\alpha]_D^{21} = -19^\circ$  ( $c = 0.4$ , MeOH).

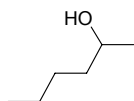
Source: HUI QIN *Pimpinella anisum* (fruit). Ref: 3402.

**9514 Hexanol**

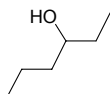
[111-27-3]  $C_6H_{14}O$  (102.18). Source: FANG FENG *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*]. Ref: 2.

**9515 2-Hexanol**

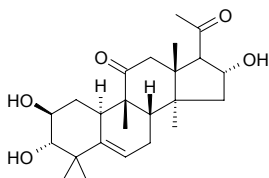
$C_6H_{14}O$  (102.18). Source: BO HE *Mentha haplocalyx* [Syn. *Mentha canadaensis*; *Mentha arvensis* var. *haplocalyx*; *Mentha arvensis*], HONG HUA *Carthamus tinctorius*. Ref: 660.

**9516 3-Hexanol**

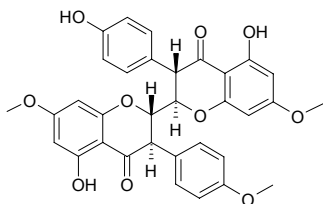
$C_6H_{14}O$  (102.18). Source: HONG HUA *Carthamus tinctorius*. Ref: 660.

**9517 Hexanorcucurbitacin F**

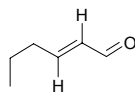
[96253-53-1]  $C_{24}H_{36}O_5$  (404.55). Colorless needles (Me<sub>2</sub>CO), mp 128~130°C,  $[\alpha]_D^{28} = +140.2^\circ$  ( $c = 0.180$ , MeOH). Source: KU XUAN SHEN *Picria felterrae* (whole herb). Ref: 4853.

**9518 Hexaspermone C**

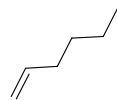
$C_{33}H_{28}O_{10}$  (584.59). Pharm: Antibacterial inactive (MDR *Staphylococcus aureus*: RN4220 strain, 64μg/mL, control Erythromycin, MIC = 128μg/mL; XU212 strain, 64μg/mL, control Tetracycline, MIC = 128μg/mL; SA-1199-B strain, 64μg/mL, control Norfloxacin, MIC = 32μg/mL). Source: CHANG E JIN LIAN MU PI *Ochna macrocalyx*, LIU ZI SAI JIN LIAN MU *Oureatea hexasperma*. Ref: 5372.

**9519 (E)-2-Hexenal**

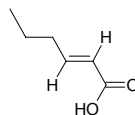
[6728-26-3]  $C_6H_{10}O$  (98.15). Source: SHAN XING REN *Prunus armeniaca* var. *ansu*. Ref: 2.

**9520 1-Hexene**

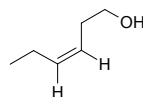
[592-41-6]  $C_6H_{12}$  (84.16). Source: JIN YIN HUA *Lonicera japonica*. Ref: 2.

**9521 trans-2-Hexenoic acid**

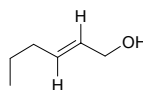
[13419-69-7]  $C_6H_{10}O_2$  (114.15). mp 36~37°C, bp 217°C. Source: NIU BANG GEN *Arctium lappa*. Ref: 6.

**9522 β-Hexenol**

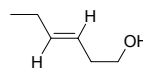
[928-96-1]  $C_6H_{12}O$  (100.16). bp (*cis*-) 156~157°C. Pharm: Attractant for many plant-eating insects. Source: CI HUAI HUA *Robinia pseudoacacia*, PI PA YE *Eriobotrya japonica*, HUO XIANG *Agastache rugosus*. Ref: 6, 660, 660.

**9523 trans-2-Hexenol**

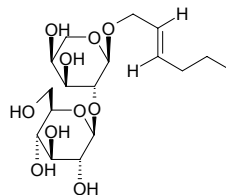
[928-95-0]  $C_6H_{12}O$  (100.16). mp 158~160°C. Source: XING ZI *Prunus armeniaca*. Ref: 6.

**9524 γ-Hexenol**

*trans*-3-Hexen-1-ol [928-97-2]  $C_6H_{12}O$  (100.16). bp 153~156°C. Source: PI PA YE *Eriobotrya japonica*, HUO XIANG *Agastache rugosus*. Ref: 6, 660.

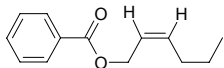
**9525 (E)-2-Hexenyl-α-L-arabinopyranosyl-(1→2)-β-D-glucopyranoside**

$C_{17}H_{30}O_{10}$  (394.42). Source: CHUAN DANG SHEN *Codonopsis tangshen*. Ref: 2, 660.

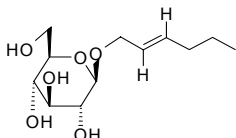


**9526 2-Hexenyl benzoate**

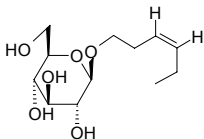
$C_{13}H_{16}O_2$  (204.27). Source: CHA YE *Camellia sinensis* [Syn. *Thea sinensis*].  
Ref: 6.

**9527 (E)-2-Hexenyl-β-D-glucopyranoside**

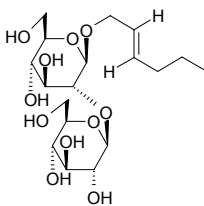
$C_{12}H_{22}O_6$  (262.31). Source: CHUAN DANG SHEN *Codonopsis tangshen*.  
Ref: 2, 660.

**9528 (Z)-3-Hexenyl-β-D-glucopyranoside**

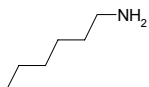
$C_{12}H_{22}O_6$  (262.31). Amorphous powder, RI(23, D) = -31°. Pharm: To induce expression of defense genes in uninfected leaves. Source: CHUAN DANG SHEN *Codonopsis tangshen*, JIN WU MAO SAO JU *Pertya glabrescens*, SHE XIANG CAO *Thymus vulgaris*. Ref: 2, 660, 2592.

**9529 (E)-2-Hexenyl-β-D-glucopyranosyl-(1→2)-β-D-glucopyranoside**

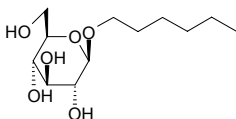
$C_{18}H_{32}O_{11}$  (424.45). Source: CHUAN DANG SHEN *Codonopsis tangshen*.  
Ref: 2, 660.

**9530 Hexyl amine-1**

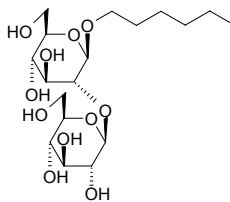
[111-26-2]  $C_6H_{15}N$  (101.19). mp -19°C, bp 129-130°C/742mmHg. Source: MAI JIAO *Claviceps purpurea*. Ref: 6.

**9531 n-Hexyl-β-D-glucopyranoside**

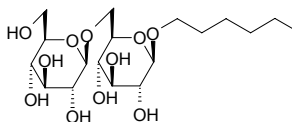
$C_{12}H_{24}O_6$  (264.32). Source: DANG SHEN *Codonopsis pilosula*. Ref: 2.

**9532 Hexyl-β-D-glucopyranosyl-(1→2)-β-D-glucopyranoside**

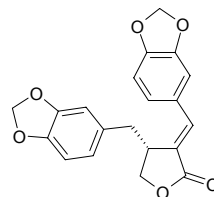
$C_{18}H_{34}O_{11}$  (426.47). Source: CHUAN DANG SHEN *Codonopsis tangshen*.  
Ref: 2, 660.

**9533 Hexyl-β-D-glucopyranosyl-(1→6)-β-D-glucopyranoside**

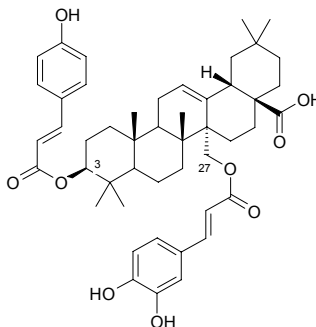
$C_{18}H_{34}O_{11}$  (426.47). Source: CHUAN DANG SHEN *Codonopsis tangshen*.  
Ref: 2, 660.

**9534 (-)-(R,E)-Hibialactone**

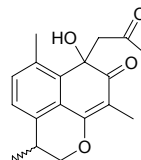
$C_{20}H_{16}O_6$  (352.35). Source: QIANG DAO YAO *Hypoestes purpurea* [Syn. *Justicia purpurea*; *Hypoestes sinica*] (aerial parts: yield = 0.00074%dw).  
Ref: 4783.

**9535 Hibicusin**

$C_{48}H_{60}O_9$  (781.01). White powder, mp 211-213°C,  $[\alpha]_D = +31.7^\circ$  ( $c = 0.32$ , MeOH). Pharm: Anti-HIV (H9 lymphocytic cells, inhibits replication,  $IC_{50}$  (concentration that inhibits uninfected H9 cell growth by 50%) > 25 μg/mL); cytotoxic (hmn, A549  $EC_{50} = 16.4 \mu\text{g/mL}$ , MCF7  $EC_{50} > 20 \mu\text{g/mL}$ )<sup>[2529]</sup>.  
Source: TAI WAN FU RONG *Hibiscus taiwanensis*. Ref: 2529.

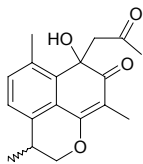
**9536 Hibicuslide A**

$C_{18}H_{20}O_4$  (300.36). Yellow syrup,  $[\alpha]_D = +15^\circ$  ( $c = 0.1$ , MeOH). Source: TAI WAN FU RONG *Hibiscus taiwanensis*. Ref: 2529.

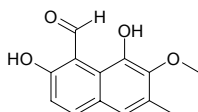


**9537 Hibicuslide B**

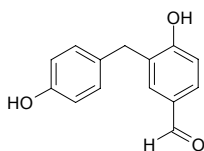
$C_{18}H_{20}O_4$  (300.36). Yellow syrup,  $[\alpha]_D = +77.0^\circ$  ( $c = 0.13$ , MeOH). Source: TAI WAN FU RONG *Hibiscus taiwanensis*. Ref: 2529.

**9538 Hibicuslide C**

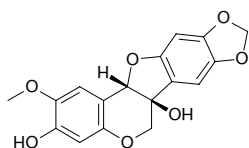
$C_{13}H_{12}O_4$  (232.24). Colorless oil. Source: TAI WAN FU RONG *Hibiscus taiwanensis*. Ref: 2529.

**9539 Hibicutaiwanin**

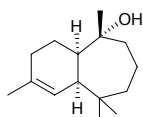
$C_{14}H_{12}O_3$  (228.25). Colorless oil. Source: TAI WAN FU RONG *Hibiscus taiwanensis*. Ref: 2529.

**9540 Hildecarpin**

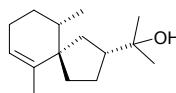
[99624-64-3]  $C_{17}H_{14}O_7$  (330.30). Pharm: Insect antifeedant; antifungal. Source: XI SHI HUI MAO DOU *Tephrosia hildebrandtii*. Ref: 658.

**9541 Himachalol**

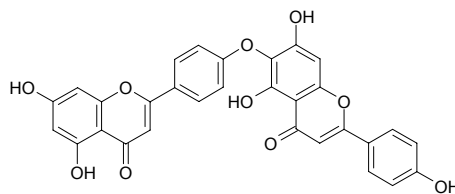
[1891-45-8]  $C_{15}H_{26}O$  (222.37). White acicular crystals (ethanol), mp 67–68°C,  $[\alpha]_D = +72.9^\circ$  ( $c = 0.18$ ); colorless trapezoid crystals, mp 67°C. Pharm: Antispasmodic (ileum in gpg, jejunum in rbt, uterus in rat); smooth muscle relaxant (caused by acetylcholine, 5-HT, nicotine and  $BaCl_2$ ); LD<sub>50</sub> (mus, orl) = 265mg/kg, (mus, ip) = 247mg/kg. Source: XUE SONG *Cedrus deodara*. Ref: 660, 661.

**9542 Hinesol**

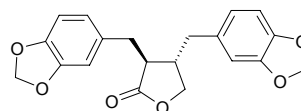
1(10)-Spirovetiven-11-ol [23811-08-7]  $C_{15}H_{26}O$  (222.37). Crystals (MeOH), mp 59–60°C,  $[\alpha]_D^{20} = -40.2^\circ$ . Source: BEI CANG ZHU *Atractylodes chinensis* (dried rhizome: content = 3.42%<sup>[5531]</sup>), CANG ZHU *Atractylodes lancea* (dried rhizome: content scope of 5 origins = 0.13%~1.94%, mean content = 0.71%<sup>[5531]</sup>), GUAN CANG ZHU *Atractylodes japonica* (dried rhizome: content = 0.01%<sup>[5531]</sup>). Ref: 2, 660, 1521, 5501, 5531.

**9543 Hinokiflavone**

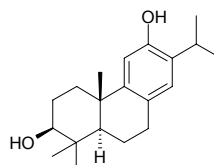
[19202-36-9]  $C_{30}H_{18}O_{10}$  (538.47). mp 353–355°C (dec). Pharm: Cyclo-nucleotide phosphodiesterase inhibitor; anti-HIV (HIV-RT inhibitor). Source: BAI SHU YE *Cupressus funebris*, CE BAI YE *Thuja orientalis* [Syn. *Platycladus orientalis*; *Biota orientalis*], CUI YUN CAO *Selaginella uncinata* (whole herb), DU SONG SHI *Juniperus rigida*, HUI<sup>(4)</sup> YE *Sobina chinensis*, JI MAO SONG *Podocarpus imbricatus*, JUAN BAI *Selaginella tamariscina*, LIN BEI ZI *Toxicodendron succedaneum* [Syn. *Rhus succedanea*], LIU SHAN *Cryptomeria fortunei*, LUO HAN SONG SHI *Podocarpus macrophyllus*, LUO HAN SONG YE *Podocarpus macrophyllus*, SHAN ZHU ZI *Garcinia multiflora*, SU TIE SHU GUO *Cycas revoluta*. Ref: 6, 580, 658, 2268, 4398.

**9544 (+)-Hinokinin**

$C_{20}H_{18}O_6$  (354.36).  $[\alpha]_D^{25} = +41.5^\circ$  ( $c = 0.20$ ,  $CHCl_3$ ). Pharm: Cytotoxic (P<sub>388</sub>, ED<sub>50</sub> = 1.54μg/mL, control Mithramycin, ED<sub>50</sub> = 0.08μg/mL; HT29, ED<sub>50</sub> = 4.61μg/mL, Mithramycin, ED<sub>50</sub> = 0.07μg/mL; A549, ED<sub>50</sub> = 8.01μg/mL, Mithramycin, ED<sub>50</sub> = 0.06μg/mL)<sup>[4947]</sup>. Source: E SHEN *Anthriscus sylvestris*, PI ZHEN XING YAO HUA *Wikstroemia lanceolata* (stem and root). Ref: 4947, 5499.

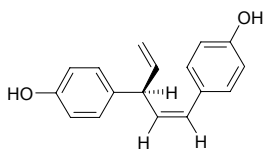
**9545 Hinokiol**

$C_{20}H_{30}O_2$  (302.46). mp 233–235°C,  $[\alpha]_D^{22} = +72.5^\circ$  ( $c = 0.46$ ,  $CHCl_3$ ). Source: DAN HUANG XIANG CHA CAI *Isodon flavidus*. Ref: 4067.

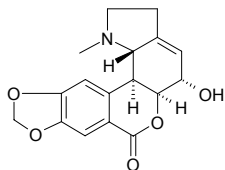


**9546 cis-Hinokiresinol**

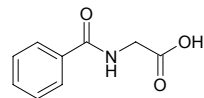
Nyasol C<sub>17</sub>H<sub>16</sub>O<sub>2</sub> (252.32). [ $\alpha$ ]<sub>D</sub><sup>21</sup> = +137.0° (*c* = 1.40, Me<sub>2</sub>CO). **Pharm:** cAMP phosphodiesterase inhibitor; cytotoxic (*in vitro*, HO-8910, IC<sub>50</sub> = (30.6±1.2)μmol/L, Vincristine, IC<sub>50</sub> = (25.1±1.9)μmol/L; Bel7405, IC<sub>50</sub> = (29.4±2.9)μmol/L, Vincristine, IC<sub>50</sub> = (31.4±3.4)μmol/L)<sup>[4975]</sup>; cytotoxic (*in vitro*, HOG.R5, CC<sub>50</sub> = 15.6μg/mL (58.1μmol/L), control Ellipticine, HOG.R5, IC<sub>50</sub> = 0.02μg/mL (0.08μmol/L))<sup>[3009]</sup>; cytotoxic inactive (KB, Col2, LNCaP, Lu1, HUVEC, IC<sub>50</sub> > 20μg/mL)<sup>[3009]</sup>; anti-HIV (IC<sub>50</sub> = 11.7μg/mL (46.4μmol/L))<sup>[3009]</sup>; antifungal (1~50μg/mL, inhibits mycelian growth of *Colletotrichum orbiculare*, *Phytophthora capsici*, *Pythium ultimum*, *Rhizoctonia solani*, *Cladosporium cucumerinum*, did not affect the growth of bacteria and yeast)<sup>[3476]</sup>. **Source:** GE BI TIAN MEN *Asparagus gobicus* (root), RI BEN BIAN BAI *Chamaecyparis obtusa*, TIAN MEN DONG *Asparagus cochinchinensis* [Syn. *Asparagus lucidus*] (dried root: yield = 0.00011%<sup>[3009]</sup>), ZHAI YE NAN YANG SHAN *Araucaria angustifolia*, ZHI MU *Anemarrhena asphodeloides*. **Ref:** 658, 3009, 3476, 4975.

**9547 Hippeastrine**

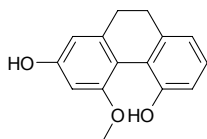
Trisphaerine; Trispherine; (+)-Hippeastrine [477-17-8] C<sub>17</sub>H<sub>17</sub>NO<sub>5</sub> (315.33). mp 214~215°C, [ $\alpha$ ]<sub>D</sub><sup>22</sup> = +160° (*c* = 0.3, CHCl<sub>3</sub>). **Pharm:** Insect antifeedant (pento-larva of *Euremahecabae mandarina*); antibacterial (*Staphylococcus aureus*, MIC = 125μg/mL)<sup>[3829]</sup>; antifungal (*Candida albicans*, IZD = 25mm, MIC = 125μg/mL)<sup>[3829]</sup>. **Source:** GU TING HUA *Amaryllis belladonna* (bulb), JUN ZI LAN *Clivia miniata*, SU MEN DA LA WEN SHU LAN *Crinum amabile*, XI NAN WEN SHU LAN *Crinum latifolium*, SHI SUAN *Lycoris radiata* [Syn. *Amaryllis radiata*], HUANG SI TAN BAO *Sternbergia lutea*. **Ref:** 6, 658, 3829.

**9548 Hippuric acid**

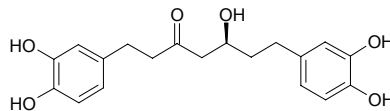
[495-69-2] C<sub>9</sub>H<sub>9</sub>NO<sub>3</sub> (179.18). mp 187°C. **Source:** REN NIAO *Homo sapiens*. **Ref:** 6.

**9549 Hircinol**

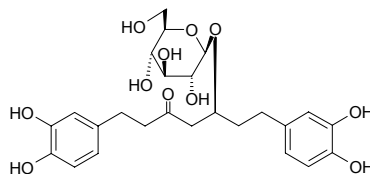
[41060-05-3] C<sub>15</sub>H<sub>14</sub>O<sub>3</sub> (242.28). **Pharm:** Antifungal (*Aspergillus niger*); inhibits fermentation of indole-3-acetic acid (IAA). **Source:** YUAN SHU YU *Dioscorea rotundata* [Syn. *Dioscorea cayenensis*]. **Ref:** 658.

**9550 Hirsutanonol**

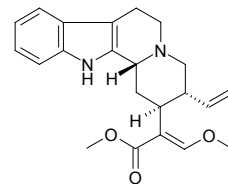
[91998-02-6] C<sub>19</sub>H<sub>22</sub>O<sub>6</sub> (346.38). **Pharm:** Antioxidant (superoxide radical scavenger, IC<sub>50</sub> = 3.0μmol/L; DPPH scavenger, IC<sub>50</sub> = 3.1μmol/L)<sup>[4535]</sup>. **Source:** CHI YANG *Alnus japonica* (leaf). **Ref:** 4535.

**9551 Hirsutanonol-5-O-β-D-glucopyranoside**

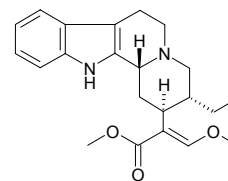
C<sub>25</sub>H<sub>32</sub>O<sub>11</sub> (508.53). **Pharm:** Antioxidant (3.125μg/mL, superoxide radical scavenging activity = 3.4%, control Urcumin 16.1%; 6.25μg/mL, DPPH radical scavenging activity = 3.9%, control Urcumin 50.0%). **Source:** CHI YANG *Alnus japonica* (leaf). **Ref:** 4535.

**9552 Hirsuteine**

[35467-43-7] C<sub>22</sub>H<sub>26</sub>N<sub>2</sub>O<sub>3</sub> (366.46). mp 92~94°C. **Source:** BI LU GOU TENG *Uncaria tomentosa*, DUO MAI GOU TENG *Uncaria nervosa*, GOU TENG *Uncaria rhynchophylla* [Syn. *Nauclea rhynchophylla*], GUI YA NA GOU TENG *Uncaria guianensis*, HUA GOU TENG *Uncaria sinensis*, XIA GOU TENG *Uncaria attenuata*. **Ref:** 2, 660, 1521, 5341.

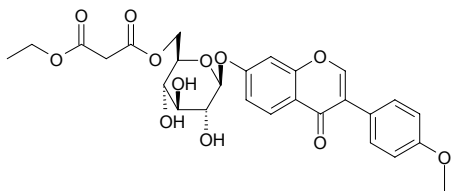
**9553 Hirsutine**

[7729-23-9] C<sub>22</sub>H<sub>28</sub>N<sub>2</sub>O<sub>3</sub> (368.48). Crystals (Et<sub>2</sub>O), mp 101°C, [ $\alpha$ ]<sub>D</sub><sup>23</sup> = +68.6° (*c* = 0.32, CHCl<sub>3</sub>). **Pharm:** Calcium antagonist (anesthetic rat and dog, hypotensor and vasodilator); antiarrhythmic (mus, arrhythmia induced by aconitine, gpg, arrhythmia induced by ouabain); CNS depressant; LD<sub>50</sub> (mus, iv) = 35mg/kg, LD<sub>50</sub> (mus, ip) = 110mg/kg. **Source:** BAI GOU TENG *Uncaria sessilifrutus* [Syn. *Nauclea sessilifrutus*], BI LU GOU TENG *Uncaria tomentosa*, DUO MAI GOU TENG *Uncaria nervosa*, FENG XIANG SHU YE *Cephalanthus occidentalis*, GOU TENG *Uncaria rhynchophylla* [Syn. *Nauclea rhynchophylla*], GUI YA NA GOU TENG *Uncaria guianensis*, HUA GOU TENG *Uncaria sinensis*, XIA GOU TENG *Uncaria attenuata*, *Uncaria kunstleri*. **Ref:** 2, 6, 1688, 1689, 1521, 5341.

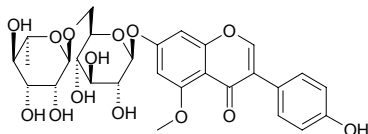


**9554 Hirsutissimide A**

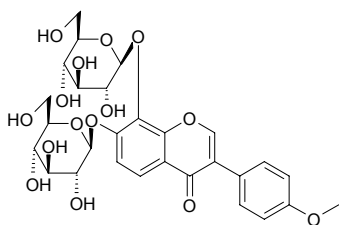
Formononetin 7-*O*- $\beta$ -*D*-(6'-ethylmalonyl)-glucopyranoside C<sub>27</sub>H<sub>28</sub>O<sub>12</sub> (544.52). White powder,  $[\alpha]_D^{25} = -26.3^\circ$  ( $c = 0.13$ , MeOH:H<sub>2</sub>O = 1:0.5). Source: FENG CHENG JI XUE TENG *Millettia nitida* var. *hirsutissima* (stem). Ref: 4455.

**9555 Hirsutissimide B**

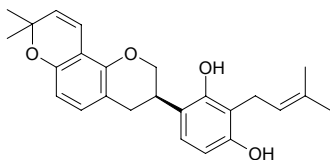
5-*O*-Methyl genistein 7-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside C<sub>28</sub>H<sub>32</sub>O<sub>14</sub> (592.56). White powder,  $[\alpha]_D^{25} = -73.3^\circ$  ( $c = 0.19$ , MeOH). Source: FENG CHENG JI XUE TENG *Millettia nitida* var. *hirsutissima* (stem). Ref: 4455.

**9556 Hirsutissimide C**

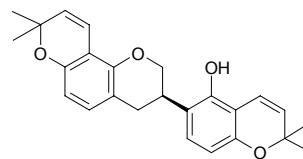
Retusin 7,8-di-*O*- $\beta$ -*D*-glucopyranoside C<sub>28</sub>H<sub>32</sub>O<sub>15</sub> (608.56). White powder,  $[\alpha]_D^{25} = -38.0^\circ$  ( $c = 0.14$ , MeOH:H<sub>2</sub>O = 1:1). Source: FENG CHENG JI XUE TENG *Millettia nitida* var. *hirsutissima* (stem). Ref: 4455.

**9557 Hispaglabridin A**

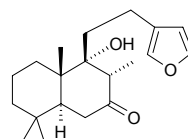
[68978-03-0] C<sub>25</sub>H<sub>28</sub>O<sub>4</sub> (392.50). Crystals (cyclohexane), mp 132~133°C,  $[\alpha]_D^{25} = -8.23^\circ$  ( $c = 2.43$ , CHCl<sub>3</sub>). Pharm: Antibacterial (*Staphylococcus aureus* ATCC13709, MIC = 3.12 $\mu$ g/kg; *Mycobacterium smegmatis* ATCC607, MIC = 3.12mg/kg). Source: GAN CAO *Glycyrrhiza uralensis*, GUANG GUO GAN CAO *Glycyrrhiza glabra*. Ref: 658, 1521.

**9558 Hispaglabridin B**

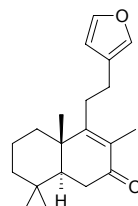
[68978-02-9] C<sub>25</sub>H<sub>26</sub>O<sub>4</sub> (390.48). Amorphous powder,  $[\alpha]_D^{25} = -25.7^\circ$  ( $c = 2.35$ , CHCl<sub>3</sub>). Pharm: Antibacterial (*Staphylococcus aureus* ATCC13709, MIC = 6.25 $\mu$ g/mL; *Mycobacterium smegmatis* ATCC607, MIC = 3.12 $\mu$ g/mL). Source: OU YA GAN CAO *Glycyrrhiza glabra* var. *typica*, GAN CAO *Glycyrrhiza uralensis*, GUANG GUO GAN CAO *Glycyrrhiza glabra*. Ref: 2, 658, 1521.

**9559 Hispanolone**

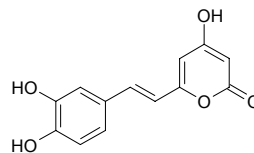
C<sub>20</sub>H<sub>30</sub>O<sub>3</sub> (318.46). Crystals. Source: YI MU CAO *Leonurus heterophyllus* [Syn. *Leonurus artemisia*]. Ref: 660, 2499, 4493.

**9560 Hispanone**

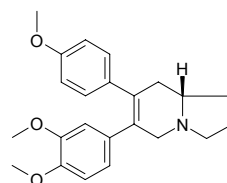
C<sub>20</sub>H<sub>28</sub>O<sub>2</sub> (300.44). Source: YI MU CAO *Leonurus heterophyllus* [Syn. *Leonurus artemisia*] (aerial parts). Ref: 4493, 4534.

**9561 Hispidin**

C<sub>13</sub>H<sub>10</sub>O<sub>5</sub> (246.22). Pharm: Chymotrypsin inhibitor inactive (20.0 $\mu$ mol/L, InRt = (1.4 $\pm$ 0.3)%); trypsin inhibitor inactive (20.0 $\mu$ mol/L, InRt = (1.0 $\pm$ 0.2)%); elastase inhibitor inactive (20.0 $\mu$ mol/L, InRt = (3.1 $\pm$ 1.3)%); PEP inhibitor (20.0 $\mu$ mol/L, InRt = (61.3 $\pm$ 7.0)%); TACE inhibitor inactive (20.0 $\mu$ mol/L, InRt = (1.1 $\pm$ 0.1)%); BACE1 inhibitor (20.0 $\mu$ mol/L, InRt = (63.4 $\pm$ 3.1)%). Source: LIE TI MU CENG KONG JUN *Phellinus linteus*. Ref: 4934.

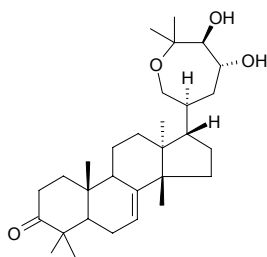
**9562 Hispidine**

C<sub>23</sub>H<sub>27</sub>NO<sub>3</sub> (365.48). Source: DUI YE RONG *Ficus hispida*. Ref: 660.

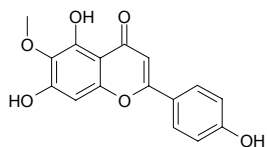


**9563 Hispidone**

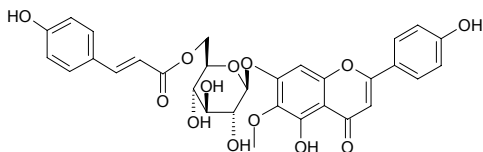
[73891-72-2] C<sub>30</sub>H<sub>48</sub>O<sub>4</sub> (472.71). Source: CHANG YE KUAN MU *Eurycoma longifolia*. Ref: 1521, 4556.

**9564 Hispidulin**

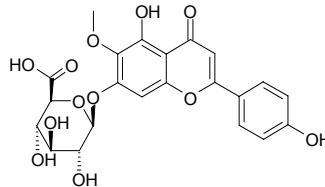
Dinatin [1447-88-7] C<sub>16</sub>H<sub>12</sub>O<sub>6</sub> (300.27). Pale yellow powder, mp 287~289°C, mp 281~282°C, mp 291~292°C, mp 304~305°C. Pharm: Antihepatotoxin; antitussive; cytotoxic (KB *in vitro*, ED<sub>50</sub> = 96µg/mL); antitussive (dispels phlegm); platelet aggregation inhibitor; binding activity to benzodiazepine receptor (IC<sub>50</sub> = (1.3±0.2)µmol/L, control Diazepam, IC<sub>50</sub> = (0.05±0.01)µmol/L)<sup>[5378]</sup>; PFTase inhibitor (100µg/mL, InRt = 75%)<sup>[5378]</sup>; cytotoxic (strongly inhibits growth of ZR-75-1 cells, GI<sub>50</sub> = 1.2µg/mL)<sup>[5378]</sup>; cytotoxic inactive (hmn breast cancer cell lines: MDA-MB-231, MCF7, T47D, 20µg/mL)<sup>[5378]</sup>; angiogenesis inhibitor inactive (chicken embryo chorioallantoic membrane (CAM) assay, 10µg)<sup>[5378]</sup>. Source: AI YE *Artemisia argyi*, CHANG GUAN JIA MO LI *Clerodendron indicum*, CHOU MO LI *Clerodendron fragrans*, DUI XIN JU *Helenium autumnale*, LI ZHI CAO *Salvia plebeia*, SU DA QI GAN JU *Citrus sudachii*, XIU MAO DI HUANG *Digitalis ferruginea*, YA PIAN *Papaver somniferum*, YI WA JU *Iva frutescens*, YIN DU JIA JING JIE *Nepeta hindostana*, ZI MEI SHU *Millingtonia hortensis*, MAO HUA MAO DI HUANG *Digitalis lanata*, CU YING MAO TUN CAO *Ambrosia hispida*, AI YE HUANG QIN *Scutellaria przewalskii*, FU CHUI FE LAO JU *Flourensia cernua*, YAO YONG DAN SHEN YE *Salvia officinalis*, *Warionia saharae*. Ref: 5, 658, 1521, 5366, 5378, 5399.

**9565 Hispidulin 7-(6-E-p-coumaroyl-β-D-glucopyranoside)**

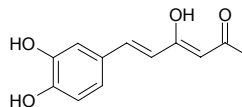
C<sub>31</sub>H<sub>28</sub>O<sub>13</sub> (608.56). Amorphous yellowish powder, mp 288~289°C, [α]<sub>D</sub><sup>25</sup> = -46.4° (c = 0.5, CHCl<sub>3</sub>). Source: GU JING CAO *Eriocaulon buergerianum*. Ref: 1923.

**9566 Hispidulin-7-O-glucuronide**

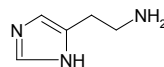
C<sub>22</sub>H<sub>20</sub>O<sub>12</sub> (476.40). mp 220~222°C. Source: JIN SI TAO GUO SHI *Hypericum chinense*. Ref: 6.

**9567 Hispolon**

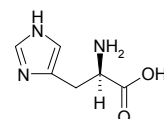
[173933-40-9] C<sub>12</sub>H<sub>12</sub>O<sub>4</sub> (220.23). Pharm: Cytotoxic (*in vitro*, A549, IC<sub>50</sub> = 0.183µmol/L; BGC823, IC<sub>50</sub> = 0.205µmol/L; MCF7, IC<sub>50</sub> = 0.025µmol/L; Bel7402, IC<sub>50</sub> = 0.038µmol/L; Ketr3, IC<sub>50</sub> = 0.206µmol/L; HCT8, IC<sub>50</sub> = 0.199µmol/L; control Topotecan, A549, IC<sub>50</sub> = 0.0032µmol/L; BGC823, IC<sub>50</sub> = 0.0043µmol/L; MCF7, IC<sub>50</sub> = 0.0018µmol/L; Bel7402, IC<sub>50</sub> = 0.0012µmol/L; Ketr3, IC<sub>50</sub> = 0.0049µmol/L; HCT8, IC<sub>50</sub> = 0.0015µmol/L)<sup>[4747]</sup>. Source: CU YING MAO XIAN KONG JUN *Inonotus hispidus*, SANG HUANG *Phellinus igniarius* (sporocarp: yield = 0.0022%dw)<sup>[4747]</sup>. Ref: 1521, 4747.

**9568 Histamine**

[51-45-6] C<sub>5</sub>H<sub>9</sub>N<sub>3</sub> (111.15). mp 75~80°C, mp 86°C, bp 167°C/0.8mmHg. Pharm: An important medium of inflammation and anaphylaxis; bronchial smooth muscle stimulant; irritant; vasodilator. Source: BAI QU CAI *Chelidonium majus*, BO CAI *Spinacia oleracea*, CHUN *Brasenia schreberi*, FENG DU *Apis cerana*, LI YU *Cyprinus carpio*, MAI JIAO *Claviceps purpurea*, MAN LI YU *Anguilla japonica*, MIAN HUA *Gossypium herbaceum*, QIE YE *Solanum melongena*, SAN XIAO CAO *Trifolium repens*, SHANG LU *Phytolacca esculenta* [Syn. *Phytolacca acinosa*] (dried root: content = 0.103%)<sup>[5508]</sup>, WU GONG *Scolopendra subspinipes mutilans* (dried body: mean content of 4 origins = %0.044)<sup>[5508]</sup>, XIANG JIAO *Musa paradisiaca* var. *sapientum* [Syn. *Musa sapientum*], YE DU ZHONG *Euonymus grandiflorus*, YI ZHU QIAN MA *Urtica dioica*, *Sarracenia* sp., *Drosera* sp., *Nepenthes* sp. Ref: 6, 658, 5508.

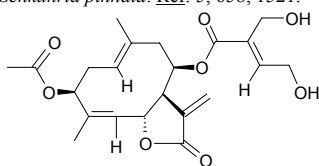
**9569 L-Histidine**

[71-00-1] C<sub>6</sub>H<sub>9</sub>N<sub>3</sub>O<sub>2</sub> (155.16). Pharm: An essential amino acid for children; promotes ulcer healing. Source: BAN XIA *Pinellia ternata* (dried tuber: content scope of 4 origins = 0.22%~2.33%, mean content = 0.88%)<sup>[5521]</sup>, HU LU BA *Trigonella foenum-graecum*<sup>[658]</sup>, YI YE JIA FAN LV *Pseudostellaria heterophylla* (tuberoid: mean content of 5 origins = 0.0456%)<sup>[5508]</sup>. Ref: 658, 5508, 5521.

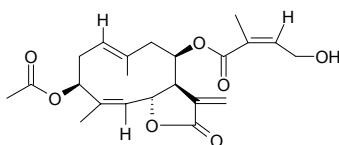


**9570 Hiyodorilactone A**

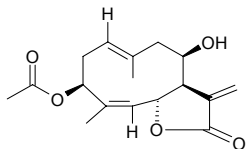
Schkuhrin I; Eucannabinolide; Hydroxychromolaenide [38458-58-1]  
 $C_{22}H_{28}O_8$  (420.46). Gum or yellow oil,  $[\alpha]_D = -121^\circ$  ( $CHCl_3$ ). **Pharm:**  
 Antibacterial (gram-positive bacteria); cytotoxic (KB); insect antifeedant.  
**Source:** DA MA YE ZE LAN *Eupatorium cannabinum*, KU YE DAO ZE LAN  
*Eupatorium sachalinense* [Syn. *Eupatorium glehni*], SHI KU JU  
*Schkuhria pinnata*. **Ref:** 5, 658, 1521.

**9571 Hiyodorilactone B**

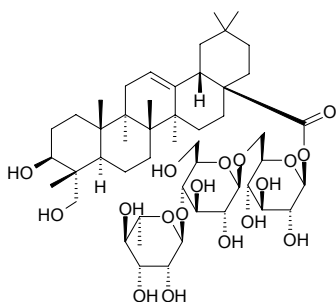
[68539-58-2]  $C_{22}H_{28}O_7$  (404.46). Yellow oil,  $[\alpha]_D^{24} = -140^\circ$  ( $c = 0.67$ ,  
 ethanol). **Pharm:** Antineoplastic. **Source:** KU YE DAO ZE LAN *Eupatorium*  
*sachalinense* [Syn. *Eupatorium glehni*]. **Ref:** 661, 1521.

**9572 Hiyodorilactone C**

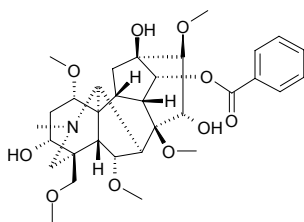
[68628-57-9]  $C_{17}H_{22}O_5$  (306.36). Oil,  $[\alpha]_D^{24} = -109^\circ$  ( $c = 0.91$ , ethanol).  
**Pharm:** Antineoplastic. **Source:** KU YE DAO ZE LAN *Eupatorium*  
*sachalinense* [Syn. *Eupatorium glehni*]. **Ref:** 661, 1521.

**9573 HN Saponin H**

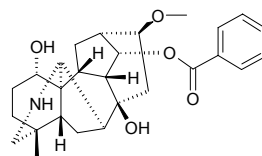
$C_{48}H_{78}O_{18}$  (943.15). **Source:** XI ZANG TIE XIAN LIAN *Clematis tibetana*  
 (aerial parts). **Ref:** 3530.

**9574 Hokbusine A**

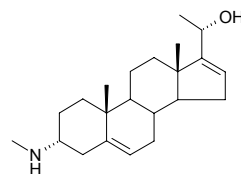
$C_{32}H_{45}NO_{10}$  (603.72). **Source:** WU TOU *Aconitum carmichaeli*. **Ref:** 660.

**9575 Hokbusine B**

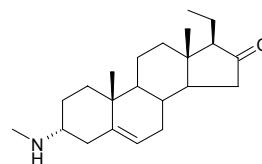
$C_{27}H_{35}NO_5$  (453.58). **Source:** WU TOU *Aconitum carmichaeli*. **Ref:** 660.

**9576 Holadysamine**

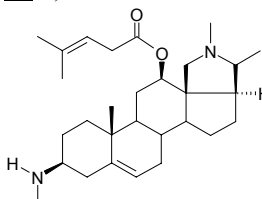
$C_{22}H_{35}NO$  (329.53). Crystals (hexane), mp  $173^\circ C$ ,  $[\alpha]_D = -78^\circ$  ( $c = 1$ ,  
 $CHCl_3$ ). **Source:** ZHI XIE MU PI *Holarrhena antiodysenterica*. **Ref:** 6, 1521.

**9577 Holadysine**

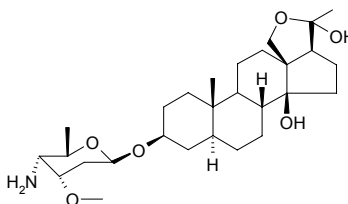
3 $\alpha$ -(Methylamino)pregn-5-en-16-one  $C_{22}H_{35}NO$  (329.53). Crystals (hexane),  
 mp  $120^\circ C$ ,  $[\alpha]_D = -199^\circ$  ( $c = 1.2$ ,  $CHCl_3$ ). **Source:** ZHI XIE MU PI  
*Holarrhena antiodysenterica*. **Ref:** 6, 1521.

**9578 Holarfrine**

Holarrhesine [70866-29-4]  $C_{29}H_{46}N_2O_2$  (454.70). Platelets ( $Me_2CO$ ), mp  
 $116-117^\circ C$ ,  $[\alpha]_D^{20} = -19.1^\circ$  ( $c = 0.93$ ,  $CHCl_3$ ). **Source:** ZHI XIE MU PI  
*Holarrhena antiodysenterica*, FEI ZHOU ZHI XIE MU *Holarrhena africana*.  
**Ref:** 6, 1521.

**9579 Holantosine A**

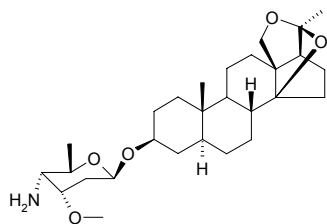
[28719-38-2]  $C_{28}H_{47}NO_6$  (493.69). **Source:** ZHI XIE MU PI *Holarrhena*  
*antiodysenterica*. **Ref:** 6, 1521.



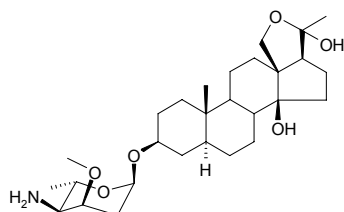


**9580 Holantosine B**

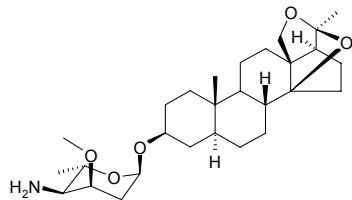
[28719-39-3]  $C_{28}H_{45}NO_5$  (475.67). Source: ZHI XIE MU PI *Holarrhena antidysenterica*. Ref: 6, 1521.

**9581 Holantosine C**

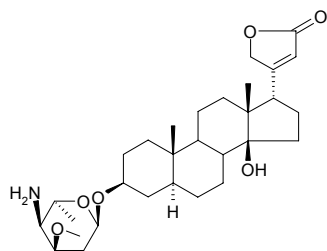
[34312-24-8]  $C_{28}H_{47}NO_6$  (493.69). Source: ZHI XIE MU PI *Holarrhena antidysenterica*. Ref: 6, 1521.

**9582 Holantosine D**

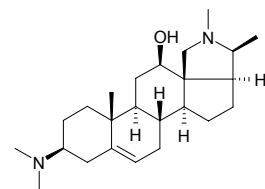
[33662-04-3]  $C_{28}H_{45}NO_5$  (475.67).  $[\alpha]_D = -67^\circ$  ( $c = 6$ ,  $CHCl_3$ ). Source: ZHI XIE MU PI *Holarrhena antidysenterica*. Ref: 6, 1521.

**9583 Holarosine A**

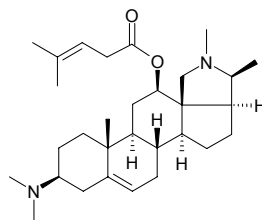
[34303-94-1]  $C_{30}H_{47}NO_6$  (517.71). Source: ZHI XIE MU PI *Holarrhena antidysenterica*. Ref: 6, 1521.

**9584 Holarrhenine**

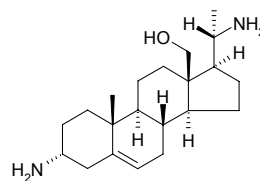
12 $\beta$ -Hydroxyconessine [561-22-8]  $C_{24}H_{40}N_2O$  (372.60). Needles (EtOAc), mp 197~198°C,  $[\alpha]_D = -7.1^\circ$  ( $CHCl_3$ ). Source: ZHI XIE MU PI *Holarrhena antidysenterica*, GANG GUO HE ZHI XIE MU *Holarrhena congolensis*, WEN ROU ZHI XIE MU *Holarrhena mitis*. Ref: 6, 1521.

**9585 Holarrhetine**

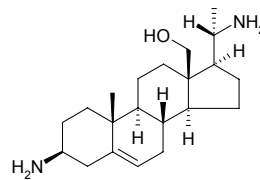
$C_{30}H_{48}N_2O_2$  (468.73). mp 74~75°C,  $[\alpha]_D = -4.6^\circ$  ( $c = 1.12$ , EtOH),  $[\alpha]_D = -14.9^\circ$  ( $c = 1.12$ ,  $CHCl_3$ ). Source: ZHI XIE MU PI *Holarrhena antidysenterica*, FEI ZHOU ZHI XIE MU *Holarrhena africana*. Ref: 6, 1521.

**9586 Holarrhidine**

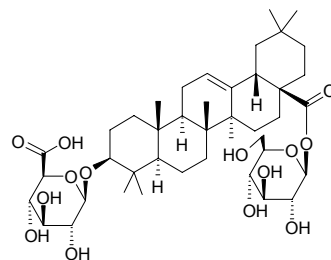
$C_{21}H_{36}N_2O$  (332.53). mp 180~181°C,  $[\alpha]_D = -23^\circ$  ( $CHCl_3$ ). Source: ZHI XIE MU PI *Holarrhena antidysenterica*. Ref: 6, 1521.

**9587 Holarrhimine**

[468-31-5]  $C_{21}H_{36}N_2O$  (332.53). mp 183°C,  $[\alpha]_D = -14^\circ$  ( $CHCl_3$ ). Source: ZHI XIE MU PI *Holarrhena antidysenterica*, WEN ROU ZHI XIE MU *Holarrhena mitis*, TUI RE ZHI XIE MU *Holarrhena febrifuga*. Ref: 6, 1521.

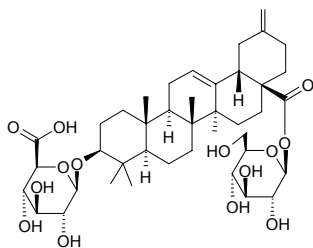
**9588 Hollow alternanthera saponin A**

*Calendula officinalis* Glycoside D<sub>2</sub>. Momordin IIb [51415-02-2]  $C_{42}H_{66}O_{14}$  (794.99). White amorphous powder, mp 218~220°C. Source: JIN ZHAN JU *Calendula officinalis* (flower), KONG XIN XIAN *Alternanthera philoxeroides*, LUO KUI HUA *Basella rubra* (aerial parts). Ref: 700, 3544, 3551.

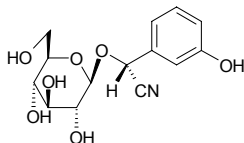


**9589 Hollow alternanthera saponin D**

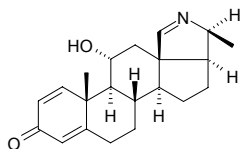
$C_{41}H_{62}O_{14}$  (778.94). White amorphous powder, mp 311~312°C. **Pharm:** Molluscicide (*Oncomelania*). **Source:** KONG XIN XIAN *Alternanthera philoxeroides*. **Ref:** 700.

**9590 Holocalin**

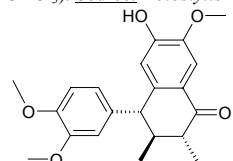
$C_{14}H_{17}NO_7$  (311.29). **Pharm:** Plant growth stimulatory or inhibitory activity (radicle length: *Lactuca sativa*, 1 $\mu$ mol/L, InRt = (31~60)%, 10 $\mu$ mol/L, InRt = (31~60)%, 100 $\mu$ mol/L, InRt = (31~60)%, 1mmol/L, InRt > 61%; *Raphanus sativus*, 1 $\mu$ mol/L, InRt = (10~30)%, 10 $\mu$ mol/L, InRt = (10~30)%, 100 $\mu$ mol/L, InRt = (31~60)%, 1mmol/L, InRt > 61%; *Allium cepa*, 1 $\mu$ mol/L, StRt or InRt < 10%, 10 $\mu$ mol/L, StRt or InRt < 10%, 100 $\mu$ mol/L, StRt or InRt < 10%, 1mmol/L, InRt = (31~60)%). **Source:** XI YANG JIE GU MU *Sambucus nigra*. **Ref:** 5217.

**9591 Holonamine**

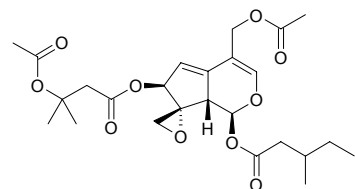
$C_{21}H_{27}NO_2$  (325.45). mp 257~259°C,  $[\alpha]_D^{21} = -14.8^\circ$  ( $c = 1.1$ , MeOH). **Source:** ZHI XIE MU PI *Holarrena antidysenterica*. **Ref:** 6, 1521.

**9592 (+)-Holostylone**

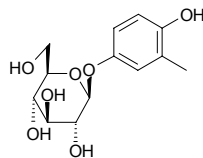
(7*R*,8*R*,8'*S*)-8,8'-Dimethyl-4-hydroxy-3',4',5-trimethoxy-2,7-cyclolignan-7-one  $C_{21}H_{24}O_5$  (356.42). Amorphous yellow solid,  $[\alpha]_D^{25} = -27.4^\circ$  ( $c = 0.31$ ,  $CHCl_3$ ). **Source:** *Holostylis reniformis* (root). **Ref:** 3784.

**9593 1-Homoacevaltrate**

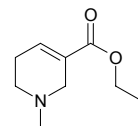
$C_{25}H_{34}O_{10}$  (494.54). Oil,  $[\alpha]_D^{24} = +175.9^\circ$  ( $c = 0.01$ , MeOH). **Source:** ZHI ZHU XIANG *Valeriana jatamansii* [Syn. *Valeriana wallichii*]. (rhizome and root: yield = 0.000007%dw). **Ref:** 4672.

**9594 Homoarbutin**

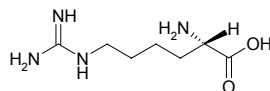
[25712-94-1]  $C_{13}H_{18}O_7$  (286.28). mp 192~193°C,  $[\alpha]_D^{21} = -79.2^\circ$ . **Pharm:** Cytotoxic (P<sub>388</sub>). **Source:** DA LI LU TI CAO *Pyrola forrestiana* (whole herb: content = 0.092%)<sup>[5508]</sup>, HONG HUA LU TI CAO *Pyrola incarnata*, LU XIAN CAO *Pyrola calliantha* [Syn. *Pyrola rotundifolia* ssp. *chinensis*] (whole herb: mean content = 0.102%)<sup>[5508]</sup>, PU TONG LU TI CAO *Pyrola decorata* (whole herb: content = 0.063%)<sup>[5508]</sup>, RI BEN LU TI CAO *Pyrola japonica*, XI ZANG LU TI CAO *Pyrola calliantha* var. *tibetana* (whole herb: content = 0.075%)<sup>[5508]</sup>, YUAN YE LU TI CAO *Pyrola rotundifolia*, ZHOU YE LU TI CAO *Pyrola rugosa* (whole herb: content = 0.061%)<sup>[5508]</sup>, ZI BEI LU TI CAO *Pyrola atropurpurea* (whole herb: content = 0.0051%)<sup>[5508]</sup>. **Ref:** 6, 660, 1562, 5508.

**9595 Homoarecoline**

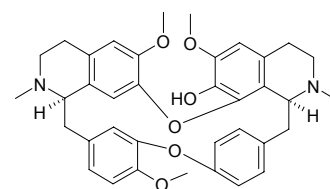
[28125-84-0]  $C_9H_{15}NO_2$  (169.23). **Source:** BING LANG *Areca catechu*. **Ref:** 2.

**9596 L-Homoarginine**

[156-86-5]  $C_7H_{16}N_4O_2$  (188.23). **Pharm:** Antibacterial (*Streptococcus* sp. and *Bacillus coli*); antifungal (*Candida albicans*); germination inhibitor; toxin (mus and some insects). **Source:** BIAN JIA SHAN LI DOU *Lathyrus cicera*, CAO XIANG WAN DOU *Lathyrus sativus*, *Lotus helleri*. **Ref:** 658, 1521.

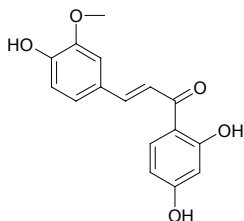
**9597 Homoaromoline**

*O*-Methylaromoline; Homoaromoline; Thalrugosamine; Homo-thalricrine; *N*-Methyldaphnandrine [17132-74-0]  $C_7H_{40}N_2O_6$  (608.74). Crystals (MeOH), mp 235~237°C,  $[\alpha]_D^{19} = +409^\circ$  ( $CHCl_3$ ); mp 238~240°C, mp 235~236°C (dec). **Pharm:** Antibacterial (*Mycobacterium smegmatis*, MIC = 100 $\mu$ g/mL); antifungal (*Candida albicans*, MIC = 1000 $\mu$ g/mL); antihypertensive (anesthetic dog, 1~4mg, venae femoralis injection, blood pressure is lowered by 2.67kPa); muscle relaxant (animals, methyl iodide salt). **Source:** BAI YAO ZI *Stephania cepharantha*, YIN BU HUAN *Cyclea barbata*, TOU MING TANG SONG CAO *Thalictrum lucidum*, YAN GUO CAO *Thalictrum thunbergii*, ZOU WEN TANG SONG CAO *Thalictrum rugosum*, ZHI LI QIAN JIN TENG *Stephania erecta*, *Albertisia papuana*, *Pycnarrhena longifolia*. **Ref:** 6, 658, 1311, 1521.

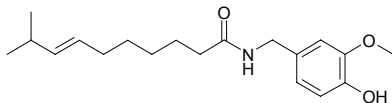


**9598 Homobutein**

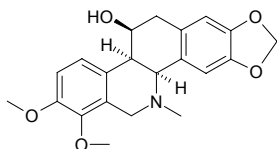
$C_{16}H_{14}O_5$  (286.29). **Pharm:** Antimalarial (*Plasmodium falciparum* D6,  $IC_{50} = (15.0 \pm 2.8) \mu\text{g/mL}$ , control Chloroquine,  $IC_{50} = (0.009 \pm 0.002) \mu\text{g/mL}$ , Quinine,  $IC_{50} = (0.04 \pm 0.01) \mu\text{g/mL}$ ; *Plasmodium falciparum* W2,  $IC_{50} = (16.1 \pm 2.1) \mu\text{g/mL}$ , Chloroquine,  $IC_{50} = (0.08 \pm 0.003) \mu\text{g/mL}$ , Quinine,  $IC_{50} = (0.21 \pm 0.01) \mu\text{g/mL}$ )<sup>[3879]</sup>. **Source:** A BI XI NI YA CI TONG *Erythrina abyssinica* (stem cortex), DI XIA CHE ZHOU CAO *Trifolium subterraneum*, GUAN MU ZHUANG CHE ZHOU CAO *Trifolium fruticosum*, *Iryanthera polyneura*, *Acacia* spp. **Ref:** 1521, 3879.

**9599 Homocapsaicin**

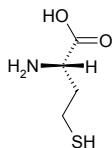
$C_{19}H_{29}NO_3$  (319.45). **Source:** HONG HAI JIAO *Capsicum annum*. **Ref:** 660.

**9600 Homochelidonine**

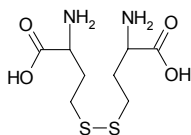
$\alpha$ -Homochelidonine [476-33-5]  $C_{21}H_{23}NO_5$  (369.42). mp 169~170°C, mp 182°C, mp 192~193.5°C,  $[\alpha]_D = +116^\circ$  (CHCl<sub>3</sub>). **Source:** BAI QU CAI *Chelidonium majus*. **Ref:** 6, 1521.

**9601 L-Homocysteine**

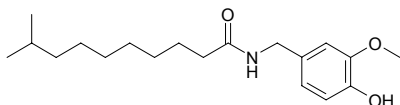
[6027-13-0]  $C_4H_9NO_2S$  (135.19). **Pharm:** Flavorant. **Source:** BO CAI *Spinacia oleracea*. **Ref:** 658.

**9602 Homocystine**

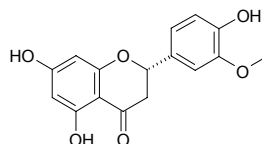
$C_8H_{16}N_2O_4S_2$  (268.36). mp L(+) 281~284°C (dec), D(-) 281~284°C (dec), (DL) 260~265°C (dec). **Source:** MO GU *Agaricus campestris*. **Ref:** 6.

**9603 Homodihydrocapsaicin**

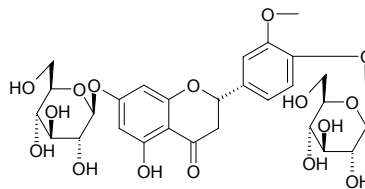
$C_{19}H_{21}NO_3$  (321.46). **Source:** HONG HAI JIAO *Capsicum annum*. **Ref:** 660.

**9604 Homoeriodictyol**

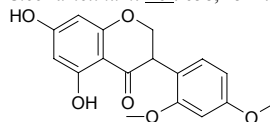
3'-O-Methyl eriodictyol; Eriodictyonone [446-71-9]  $C_{16}H_{14}O_6$  (302.29). Crystals (70% acetic acid), high vacuum (0.003~0.050mm); 190~195°C sublimes as acicular crystals; diluting ethanol yield lamellar crystals; 225°C (dec, 100°C dried in vacuum),  $[\alpha]_D^{20} = -28^\circ$  (ethanol). **Pharm:** Platelet aggregation inhibitor (50  $\mu\text{mol/L}$ , InRt = 17%; 100  $\mu\text{mol/L}$ , InRt = 50%)<sup>[5171]</sup>; Diuretic (rbt); insect antifeedant (*Schizaphis graminum* and *Myzus persicae*). **Source:** HU JI SHENG *Viscum coloratum*, LENG ZHI HU JI SHENG *Viscum angulatum* (whole plant: yield = 0.00074%dw)<sup>[4626]</sup>, MI HUA SHI HU *Dendrobium densiflorum* (stem), SI BO LI YA AI JU *Tanacetum sibiricum* [Syn. *Filifolium sibiricum*], TIAN YE HAO *Artemisia campestris*. **Ref:** 661, 1434, 1521, 4626, 5171.

**9605 (2S)-Homoeriodictyol 7,4'-di-O-β-D-glucopyranoside**

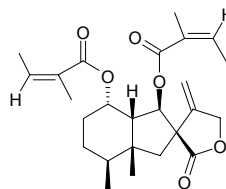
$C_{28}H_{34}O_{16}$  (626.57). Pale yellow amorphous powder. **Pharm:** Antioxidant (hydroxyl radical,  $IC_{50} = 0.21 \text{ mmol/L}$ , control EGCG,  $IC_{50} = 0.58 \text{ mmol/L}$ ; superoxide anion,  $IC_{50} = 0.39 \text{ mmol/L}$ , EGCG,  $IC_{50} = 0.53 \text{ mmol/L}$ ). **Source:** HU JI SHENG *Viscum coloratum* (branche and leaf: yield = 0.0015%dw). **Ref:** 920.

**9606 Homoferreirin**

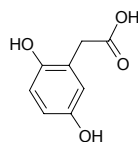
[482-01-9]  $C_{17}H_{16}O_6$  (316.31). Rectangular plates (C<sub>6</sub>H<sub>6</sub>-petroleum ether or MeOH aq.), mp 168~169°C. **Pharm:** Antifungal. **Source:** HUI HUI DOU *Cicer arietinum*. **Ref:** 658, 1521.

**9607 Homofukinolide**

[41059-96-5]  $C_{25}H_{34}O_6$  (430.55). Crystals (petroleum ether), mp 184~186°C,  $[\alpha]_D^{22} = -127^\circ$  (c = 1, CHCl<sub>3</sub>). **Source:** FENG DOU CAI *Petasites japonicus*. **Ref:** 6, 1521.

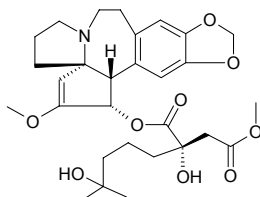
**9608 Homogentisic acid**

(2,5-Dihydroxyphenyl)acetic acid; Alcapton [451-13-8]  $C_8H_8O_4$  (168.15). **Source:** BAN XIA *Pinellia ternata*. **Ref:** 2, 1521.

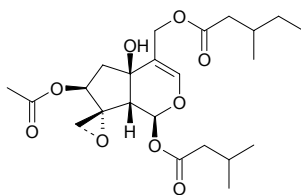


**9609 Homoharringtonine**

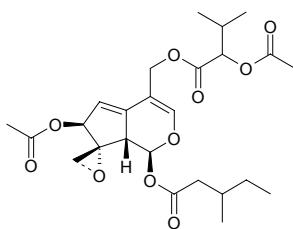
[26833-87-4]  $C_{29}H_{39}NO_9$  (545.64). mp 144~146°C,  $[\alpha]_D = -119^\circ$  ( $c = 0.96$ ,  $CHCl_3$ ). **Pharm:** Antineoplastic (curative for nonlymphatic leukemia, mus lymphatic leukemia, HeLa, L<sub>1210</sub> cells and colon carcinoma). **Source:** HAI NAN CU FEI *Cephalotaxus hainanensis* [Syn. *Cephalotaxus manni*] (branchlet and bark: mean content of 2 samples = 0.041%<sup>[5508]</sup>), HE GUO CU FEI *Cephalotaxus drupacea*, RI BEN CU FEI *Cephalotaxus harringtonia*, SAN JIAN SHAN *Cephalotaxus fortunei* (branchlet and bark: mean content of 2 origins = 0.070%<sup>[5508]</sup>), ZHONG GUO CU FEI ZHI YE *Cephalotaxus sinensis* [Syn. *Cephalotaxus harringtonia* var. *sinensis*]. **Ref:** 2, 4, 658, 660, 1521, 5508.

**9610 11-Homohydroxydidrovaltrate**

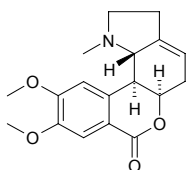
$C_{23}H_{34}O_9$  (454.52). Oil,  $[\alpha]_D^{24} = -67.3^\circ$  ( $c = 0.01$ , MeOH). **Source:** ZHI ZHU XIANG *Valeriana jatamansii* [Syn. *Valeriana wallichii*]. (rhizome and root: yield = 0.000009%dw). **Ref:** 4672.

**9611 1-Homoisoacevaltrate**

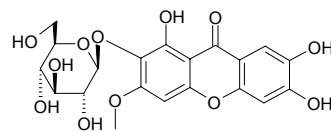
$C_{25}H_{34}O_{10}$  (494.54). Oil,  $[\alpha]_D^{24} = +198.5^\circ$  ( $c = 0.01$ , MeOH). **Source:** ZHI ZHU XIANG *Valeriana jatamansii* [Syn. *Valeriana wallichii*]. (rhizome and root: yield = 0.000008%dw). **Ref:** 4672.

**9612 Homolycorine**

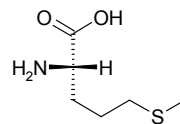
Narcipoetine [477-20-3]  $C_{18}H_{21}NO_4$  (315.37). mp 175°C,  $[\alpha]_D = +85^\circ$  (95% EtOH); pale-yellow crystals, 177~178°C,  $[\alpha]_D^{28} = +98^\circ$  ( $c = 0.1$ , EtOH). **Pharm:** Antiretroviral and cytotoxic ( $ID_{50} = 7.3\mu g/mL$ ,  $TC_{50} = 12.8\mu g/mL$ ,  $TI_{50}$  ( $TC_{50}/ID_{50}$ ) = 1.8)<sup>[5026]</sup>. **Source:** DA YI ZHI JIAN *Lycoris aurea*, SHI SUAN *Lycoris radiata* [Syn. *Amaryllis radiata*], HONG KOU SHUI XIAN *Narcissus poeticus*, XUE PIAN LIAN *Leucojum vernum* (bulb), family Amaryllidaceae spp. **Ref:** 6, 1521, 5026.

**9613 Homomangiferin**

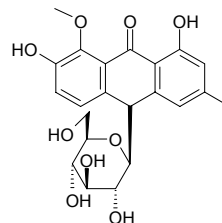
$C_{20}H_{20}O_{12}$  (452.38). **Source:** MANG GUO SHU PI *Mangifera indica*. **Ref:** 6.

**9614 Homomethionin**

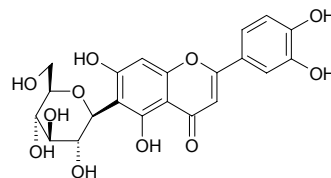
$C_6H_{13}NO_2S$  (163.24). **Source:** GAN LAN *Brassica oleracea* var. *capitata*, LA GEN *Armoracia lappathifolia*. **Ref:** 660.

**9615 Homonataloin**

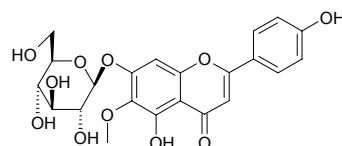
[477-66-7]  $C_{22}H_{24}O_9$  (432.43). mp 202~204°C,  $[\alpha]_D = -112.3^\circ$ . **Source:** LU HUI *Aloe vera* [Syn. *Aloe barbadensis*], *Aloe cremnophila*, *Aloe distans*, *Aloe jacksonii*. **Ref:** 2, 1521.

**9616 Homoorientin**

Isoorientin; Luteolin-6-C- $\beta$ -D-glucopyranoside [4261-42-1]  $C_{21}H_{20}O_{11}$  (448.39). Lightyellow needles, mp 235°C,  $[\alpha]_D^{20} = +30.8^\circ$  ( $c = 1.2$ , pyridine),  $[\alpha]_D^{22} = 0^\circ$  ( $c = 0.73$ , pyridine). **Pharm:** Phytoalexin<sup>[4727]</sup>;  $\beta$ -glucosidase inhibitor<sup>[4727]</sup>; pectinase inhibitor<sup>[4727]</sup>. **Source:** HONG CAO *Polygonum orientale*, HU LU BA *Trigonella foenum-graecum*, HU ZHI ZI *Lespedeza bicolor*, HUANG GUA *Cucumis sativus* (leaf)<sup>[4727]</sup>, NAN ZHU ZI *Vaccinium bracteatum*, QIAO MAI JIE *Fagopyrum esculentum*, RI BEN SHUANG HU DIE *Tripterospermum japonicum*, SUAN JIAO *Tamarindus indica*, XIA KU CAO *Prunella vulgaris*, YA MA *Linum usitatissimum*, ZHANG YA CAI *Swertia pseudochinensis*. **Ref:** 6, 1521, 2508, 3533, 4727.

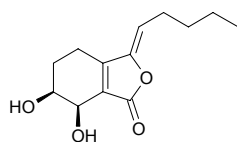
**9617 Homoplataginin**

Hispidulose [17680-84-1]  $C_{22}H_{22}O_{11}$  (462.41). Yellow needles (EtOH), mp 241~242°C (dec). **Pharm:** Antitussive (dispels phlegm). **Source:** LI ZHI CAO *Salvia plebeia*, CHE QIAN *Plantago asiatica*. **Ref:** 6, 658, 660, 1521.

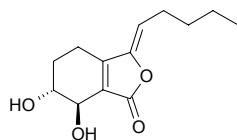


**9618 Homosenkyunolide H**

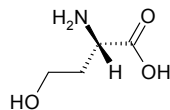
$C_{13}H_{28}O_4$  (238.29). Colorless oil. Source: DANG GUI *Angelica sinensis*. Ref: 2474.

**9619 Homosenkyunolide I**

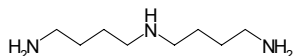
$C_{13}H_{28}O_4$  (238.29). Colorless oil. Source: DANG GUI *Angelica sinensis*. Ref: 2474.

**9620 L-Homoserine**

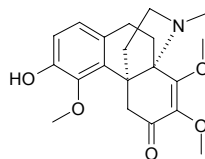
[672-15-1]  $C_4H_9NO_3$  (119.12). mp (+) 203°C (dec). Pharm: Plays a key role in biosynthesis of threonine, isoleucine and methionine. Source: AN YE *Eucalyptus globulus*, DAO DOU *Canavalia gladiata*, DUO HUA HUANG JING *Polygonatum cyrtonema* [Syn. *Polygonatum multiflorum*], SAN YE SHU WEI CAO *Salvia trijuga*, WAN DOU *Pisum sativum*, ZI YUN YING ZI *Astragalus sinicus*. Ref: 6, 182, 658, 660.

**9621 sym-Homospermidine**

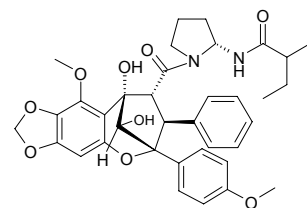
4,4'-Diaminobutylamine; 1,9-Diamino-5-azanonane [4427-76-3]  $C_8H_{21}N_3$  (159.28). Source: TAN XIANG *Santalum album*, SHUI HU LU *Eichhornia crassipes* (root). Ref: 6, 1521.

**9622 Homostephanoline**

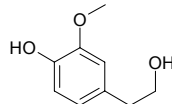
[2689-15-8]  $C_{20}H_{25}NO_5$  (359.43). mp 233°C,  $[\alpha]_D^{22} = -247.8^\circ$  (CHCl<sub>3</sub>). Source: QIAN JIN TENG *Stephania japonica*. Ref: 6, 660, 1521.

**9623 Homothapsakin A**

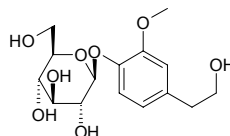
(-)-(2*R*,3*S*,4*R*,5*R*,10*S*,2'*S*)-1-[2,3,4,5-Tetrahydro-5,10-dihydroxy-2-(4-methoxyphenyl)-6-methoxy-7,8-methylenedioxy-3-phenyl-2,5-methano-1-benzoxepin-4-carbonyl]-2-(2-methylbutanoylamino)-pyrrolidine  $C_{36}H_{40}N_2O_9$  (644.73).  $[\alpha]_D^{20} = -135^\circ$  ( $c = 0.3$ , CHCl<sub>3</sub>). Source: KE SHI MI ZI LAN *Aglaiia edulis*. Ref: 2355.

**9624 Homovanillyl alcohol**

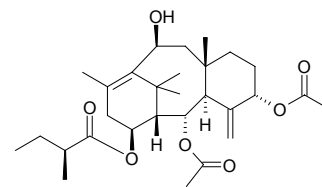
$C_9H_{12}O_3$  (168.19). Source: QIAN MA *Urtica cannabina*. Ref: 660.

**9625 Homovanillyl alcohol-4-O-glucoside**

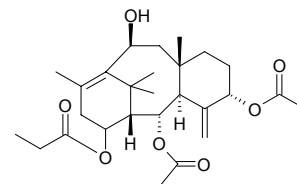
$C_{15}H_{22}O_8$  (330.34). Source: QIAN MA *Urtica cannabina*. Ref: 660.

**9626 Hongdoushan A**

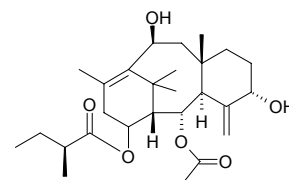
$C_{29}H_{44}O_7$  (504.67). Colorless amorphous solid,  $[\alpha]_D^{25} = +81.3^\circ$  ( $c = 0.06$ , CHCl<sub>3</sub>). Pharm: Cytotoxic (*in vitro*, 26-L5, EC<sub>50</sub> = 61 μg/mL; HT1080, EC<sub>50</sub> = 40.1 μg/mL; control 5-Fluorouracil, Colon26-L5, EC<sub>50</sub> = 0.29 μg/mL; HT1080, EC<sub>50</sub> = 0.07 μg/mL)<sup>[4661]</sup>; antioxidant (DPPH scavenger, IC<sub>50</sub> > 200 μmol/L, control Caffeic acid, IC<sub>50</sub> = 25.5 μmol/L)<sup>[5407]</sup>; NO production inhibitor (IC<sub>50</sub> = 15.0 μmol/L, control L-NMMA, IC<sub>50</sub> = 28.5 μmol/L)<sup>[5407]</sup>. Source: YUN NAN HONG DOU SHAN *Taxus yunnanensis* (wood: yield = 0.0018%dw). Ref: 4661, 5407.

**9627 Hongdoushan B**

$C_{27}H_{40}O_7$  (476.62). Colorless amorphous solid,  $[\alpha]_D^{25} = +68.9^\circ$  ( $c = 0.08$ , CHCl<sub>3</sub>). Pharm: Cytotoxic (*in vitro*, 26-L5, EC<sub>50</sub> > 100 μg/mL; HT1080, EC<sub>50</sub> = 70.4 μg/mL; control 5-Fluorouracil, Colon26-L5, EC<sub>50</sub> = 0.29 μg/mL; HT1080, EC<sub>50</sub> = 0.07 μg/mL)<sup>[4661]</sup>; NO production inhibitor (IC<sub>50</sub> = 43.5 μmol/L, control L-NMMA, IC<sub>50</sub> = 28.5 μmol/L)<sup>[5407]</sup>. Source: YUN NAN HONG DOU SHAN *Taxus yunnanensis* (wood: yield = 0.0042%dw). Ref: 4661, 5407.

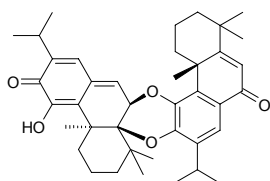
**9628 Hongdoushan C**

$C_{27}H_{42}O_6$  (462.63). Colorless amorphous solid,  $[\alpha]_D^{25} = +77.4^\circ$  ( $c = 0.14$ , CHCl<sub>3</sub>). Pharm: Cytotoxic (*in vitro*, 26-L5, EC<sub>50</sub> = 61.1 μg/mL; HT1080, EC<sub>50</sub> = 3.8 μg/mL; control 5-Fluorouracil, Colon26-L5, EC<sub>50</sub> = 0.29 μg/mL; HT1080, EC<sub>50</sub> = 0.07 μg/mL). Source: YUN NAN HONG DOU SHAN *Taxus yunnanensis* (wood: yield = 0.00034%dw). Ref: 4661.

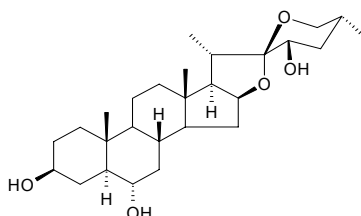


**9629 Hongencaotone**

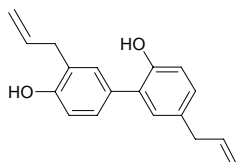
$C_{40}H_{50}O_5$  (610.84). Yellow plates (cyclohexane), mp 191–192°C,  $[\alpha]_D^{25} = 588^\circ$  ( $c = 0.05$ , MeOH). **Pharm:** Cytotoxic inactive (*in vitro*, HL-60 and Bel7402 tumor cell lines). **Source:** HONG GEN CAO *Salvia prionitis* (root). **Ref:** 3072.

**9630 Hongguanggenin**

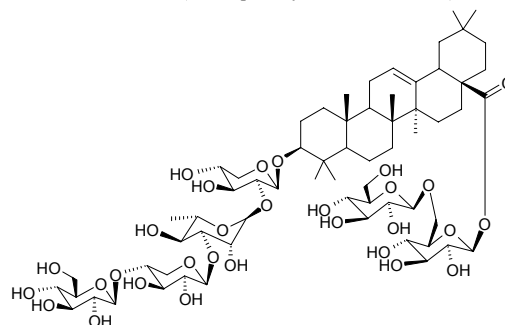
[65620-57-7]  $C_{27}H_{44}O_5$  (448.65). **Source:** JIAN MA *Agave sisalana*. **Ref:** 10, 1521.

**9631 Honokiol**

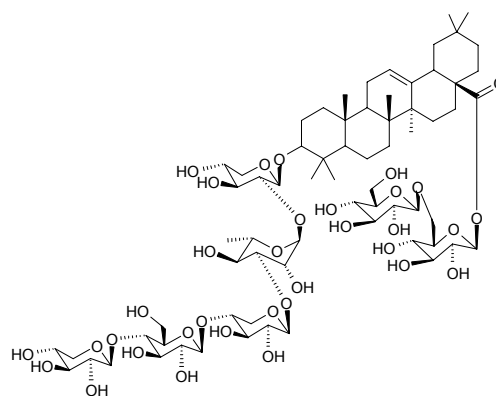
[35354-74-6]  $C_{18}H_{18}O_2$  (266.34). mp 87.5°C. **Pharm:** Hepatoprotective (inhibits cellular leakage of LDH and AST, and cell death, induced by 1.5  $\mu\text{mol/L}$  tBH for 1h, effective dose = 20  $\mu\text{mol/L}$ , 40  $\mu\text{mol/L}$ ; induced by 30  $\mu\text{mol/L}$  GalN, effective dose = 1  $\mu\text{mol/L}$ , 5  $\mu\text{mol/L}$ , and 20  $\mu\text{mol/L}$ )<sup>[5344]</sup>; hepatoprotective (inhibits tBH-induced lipid peroxidation, primary cultured rat hepatocytes, thiobarbituric acid reactive substance (TBARS) assay, effective dose = 5, 20 and 40  $\mu\text{mol/L}$ )<sup>[5344]</sup>; hepatoprotective (inhibits GSH depletion, GSH concentration in tBH-treated hepatocytes was significantly reduced to 17 % of that of normal hepatocytes, effective dose = 5  $\mu\text{mol/L}$ , 20  $\mu\text{mol/L}$ , and 40  $\mu\text{mol/L}$ ; induced by GalN, effective dose = 1  $\mu\text{mol/L}$ , 5  $\mu\text{mol/L}$  and 20  $\mu\text{mol/L}$ )<sup>[5344]</sup>; antioxidant (protects rat heart and liver mitochondria against lipidperoxidation; hydroxyl radical scavenger)<sup>[5362]</sup>; platelet aggregation inhibitor<sup>[5362]</sup>; antiarrhythmic<sup>[5362]</sup>; anti-ischemia myocardial (myocardial ischemia-reperfusion injury)<sup>[5362]</sup>; anti-myocardial infarction (rat, reduces area of coronary artery infarction)<sup>[5362]</sup>; increases tolerance to anoxia (rat, no significant hemodynamic change after intravenous infusion of honokiol at the dosages of 0.01  $\mu\text{g/kg}$ , 0.1  $\mu\text{g/kg}$  and 1.0  $\mu\text{g/kg}$ , however significantly reduces total volume of infarction at 0.1  $\mu\text{g/kg}$  or 1.0  $\mu\text{g/kg}$ )<sup>[5362]</sup>; antibacterial (gram-negative bacteria and acid-fast bacteria); anticaries (inhibits tooth decay); antifungal; CNS depressant; pesticide; skeletal muscle relaxant. **Source:** AO YE HOU PO *Magnolia biloba*, HOU PO *Magnolia officinalis* (bark: content scope of 5 origins = 1.05%–6.82%, mean content = 4.61%<sup>[5508]</sup>), RI BEN HOU PO *Magnolia obovata* (dried bark). **Ref:** 2, 625, 658, 660, 1521, 5344, 5362, 5501, 5508.

**9632 Hookeroside A**

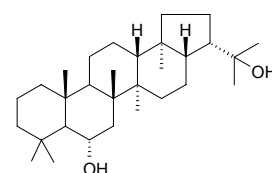
$C_{64}H_{104}O_{30}$  (1353.52). **Pharm:** Pancreatic lipase inhibitor (*in vitro*, 1 mg/mL, InRt comparing the control = 73%). **Source:** HUA BEI LAN PEN HUA *Scabiosa tschiliensis* (whole plant: yield = 0.0010%dw). **Ref:** 3021.

**9633 Hookeroside B**

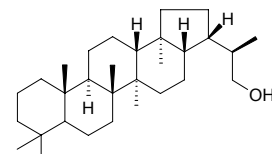
$C_{69}H_{112}O_{34}$  (1485.64). **Pharm:** Pancreatic lipase inhibitor (*in vitro*, 1 mg/mL, InRt comparing the control = 92%). **Source:** HUA BEI LAN PEN HUA *Scabiosa tschiliensis* (whole plant: yield = 0.00048%dw). **Ref:** 3021.

**9634 6 $\alpha$ ,22-Hopanediol**

Zeorin  $C_{30}H_{52}O_2$  (444.75). **Source:** SHI DI QIAN *Reboulia hemisphaerica*, XUE LING ZHI *Arenaria kansuensis* [Syn. *Arenaria kumaonensis*]. **Ref:** 660.

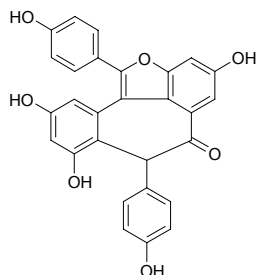
**9635 29-Hopanol**

Neriifoliol [34620-75-2]  $C_{30}H_{52}O$  (428.75). Crystals, mp 242–244°C,  $[\alpha]_D = +35^\circ$ . **Source:** GUAN ZHONG *Dryopteris crassirhizoma*, DA YE GU SUI BU *Davallia divaricata* [Syn. *Davallia formosana*; *Davallia orientalis*]. **Ref:** 6, 660, 1521.

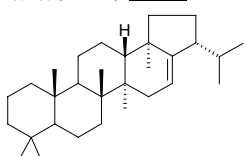


**9636 Hopeafuran**

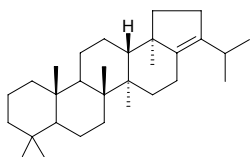
$C_{28}H_{17}O_7$  (466.45). Yellow solid,  $[\alpha]_D^{24} = -46^\circ$  ( $c = 0.1$ , MeOH). Source: YOU YONG PO LEI *Hopea utilis* (stem wood). Ref: 3546.

**9637 Hop-16-ene**

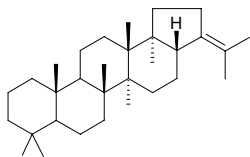
$C_{30}H_{50}$  (410.73). Source: HAI ZHOU GU SUI BU *Davallia mariesii*. Ref: 660.

**9638 Hop-17(21)-ene**

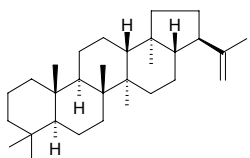
$C_{30}H_{50}$  (410.73). Source: DUO ZU JUE *Polypodium vulgare*, HAI ZHOU GU SUI BU *Davallia mariesii*, PING *Marsilea quadrifolia*, SHUI LONG GU *Polypodium niponicum*. Ref: 660.

**9639 Hop-21-ene**

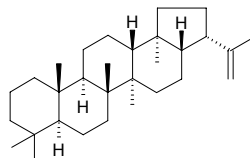
$C_{30}H_{50}$  (410.73). Source: DA YE GU SUI BU *Davallia divaricata* [Syn. *Davallia formosana*; *Davallia orientalis*], GU SUI BU *Drynaria fortunei*, HAI ZHOU GU SUI BU *Davallia mariesii*, SHUI LONG GU *Polypodium niponicum*. Ref: 660.

**9640 21 $\alpha$ H-22(29)-Hopene**

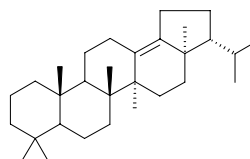
$C_{30}H_{50}$  (410.73). Crystals (Me<sub>2</sub>CO), mp 212~214°C,  $[\alpha]_D^{23} = +27.1^\circ$  (CHCl<sub>3</sub>). Source: HAI ZHOU GU SUI BU *Davallia mariesii*. Ref: 1521.

**9641 21 $\beta$ H-22(29)-Hopene**

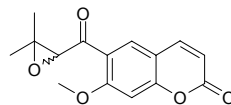
Diploptene; Hopene-B [1615-91-4]  $C_{30}H_{50}$  (410.73). Crystals, mp 210~211°C,  $[\alpha]_D = +61^\circ$  (CHCl<sub>3</sub>). Source: GUAN ZHONG *Dryopteris crassirhizoma*, SHI WEI *Pyrrhosia lingua*, LU SHAN SHI WEI *Pyrrhosia shearer*, SHUI LONG GU *Polypodium niponicum*, DAN GAI TIE XIAN JUE *Adiantum monochlamys*. Ref: 6, 660, 1521.

**9642 Hopene II**

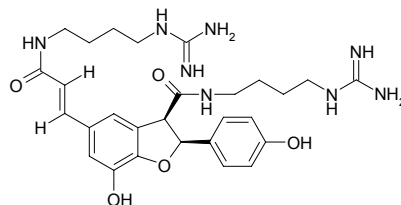
13(18)-Neohopene; Wallichene [21681-17-4]  $C_{30}H_{50}$  (410.73). Crystals (Me<sub>2</sub>CO), mp 196~197°C,  $[\alpha]_D = +2^\circ$  ( $c = 1.4$ , CHCl<sub>3</sub>). Source: CHUAN SHI JIAN *Pseudodrynaria coronans*, DUO ZU JUE *Polypodium vulgare*, GAO SHAN TIAO JUE *Oleandra wallichii*, HAI ZHOU GU SUI BU *Davallia mariesii*, SHUI LONG GU *Polypodium niponicum*, TIE SI QI *Adiantum pedatum*. Ref: 6, 660, 1521.

**9643 Hopeyhopin**

$C_{15}H_{14}O_5$  (274.28). Pharm: Antineoplastic (Raji cells, antitumor promotor, *in vivo*, inhibits TPA-induced EBV-EA activation, compound concentration = 500mol ratio/32 pmol TPA: EBV-EA-positive cells = (20.6±1.3)% (viability > 80%),  $\beta$ -Carotene, EBV-EA-positive cells = (34.3±1.1)% (viability > 80%), Curcumin, EBV-EA-positive cells = (22.8±1.8)% (viability > 80%), compound IC<sub>50</sub> = 207mol ratio/32 pmol TPA,  $\beta$ -Carotene, IC<sub>50</sub> = 400mol ratio/32 pmol TPA, Curcumin, IC<sub>50</sub> = 341mol ratio/32 pmol TPA)<sup>[5048]</sup>. Source: *Citrus medica* var. *etrog*, *Citrus sulcata*, *Citrus tamurana*. Ref: 5048.

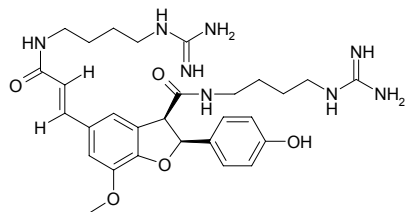
**9644 Hordatine A**

[7073-64-5]  $C_{28}H_{38}N_8O_5$  (566.67).  $[\alpha]_D^{26} = +69^\circ$ , Di-bitter acid salt, tiny crystals (methanol), mp 127~128°C. Pharm: Antifungal. Source: MAI YA *Hordeum vulgare*. Ref: 658, 1521, 5501.

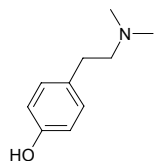


**9645 Hordatine B**

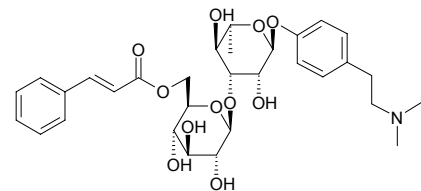
[10502-21-3]  $C_{29}H_{40}N_8O_5$  (580.69).  $[\alpha]_D^{23} = +54^\circ$ , Di-bitter acid salt: mp 132~135°C. **Pharm:** Antifungal. **Source:** MAI YA *Hordeum vulgare*. **Ref:** 658, 1521, 5501.

**9646 Hordenine**

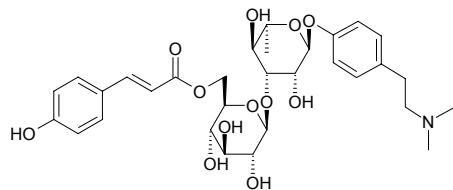
*N,N*-Dimethyltyramine [539-15-1]  $C_{10}H_{15}NO$  (165.24). mp 117°C, bp 173~174°C/11mmHg. **Pharm:** Antiasthmatic (cat, bronchospasm caused by proserine, ED = 0.5~1.0mg/kg, no activity in normal cat); uterine stimulant (enhances tension and movement of uterus, gpg, 1.0mg/kg); insect antifeedant; radioprotector; similar action with ephedrine. **Source:** DUAN YE SHAN MA HUANG *Desmodium tiliaefolium*, HONG MU JI CAO *Desmodium gangeticum*, JIA MU DOU *Desmodium cephalotes*, LUO TUO CI *Alhagi pseudalhagi*, LUO XUAN JIN HE HUAN *Acacia spirorbis*, MAI YA *Hordeum vulgare* (germinated fruit: content scope = 0.13%~0.25%<sup>[5501]</sup>), XI MA DU WEI CAO *Eremurus himalaicus*, YI CAO *Phalaris arundinacea*, GAN QING WU TOU *Aconitum tanguticum*, occurs in many plants (family Cactaceae spp., family Amaryllidaceae spp., family Gramineae spp., family Fabaceae spp.). **Ref:** 6, 658, 1521, 2203, 5501.

**9647 (E)-Hordenine-(6-O-cinnamoyl-β-D-glucopyranosyl)-(1→3)-α-L-rhamnopyranoside**

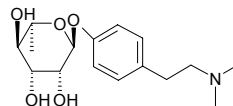
$C_{31}H_{41}NO_{11}$  (603.67). **Source:** DA YE CAI *Selaginella doederleinii*. **Ref:** 660.

**9648 (E)-Hordenine-[6-O-(4-hydroxycinnamoyl)-β-D-glucopyranosyl]-(1→3)-α-L-rhamnopyranoside**

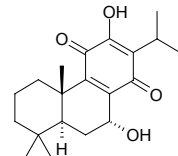
$C_{31}H_{41}NO_{12}$  (619.67). **Source:** DA YE CAI *Selaginella doederleinii*. **Ref:** 660.

**9649 Hordenine-O-α-L-rhamnopyranoside**

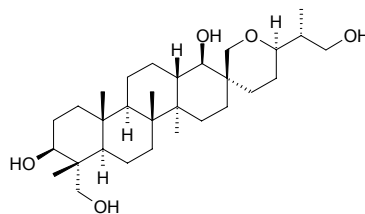
$C_{16}H_{25}NO_5$  (311.38). **Source:** DA YE CAI *Selaginella doederleinii*. **Ref:** 660.

**9650 Horminone**

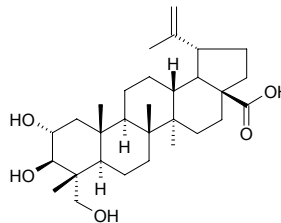
$C_{20}H_{28}O_4$  (332.44). **Source:** *Rabdosia* spp. **Ref:** 660.

**9651 Hosenkol A**

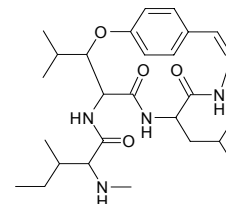
$C_{30}H_{52}O_5$  (492.75). **Source:** JI XING ZI *Impatiens balsamina*. **Ref:** 660.

**9652 Hovenic acid**

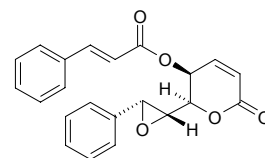
$C_{30}H_{48}O_5$  (488.71). **Source:** ZHI JU ZI *Hovenia dulcis*. **Ref:** 660.

**9653 Hovenine A**

*N*-Demethylfrangulanine [52309-78-1]  $C_{27}H_{42}N_4O_4$  (486.66). mp 215°C. **Source:** ZHI JU GEN *Hovenia dulcis*. **Ref:** 6, 1521.

**9654 Howiinin A**

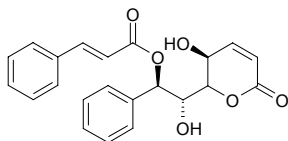
6*S*-(1*S*,2*R*-Epoxyphenethyl-5*S*-cinnamyloxy)-5,6-dihydro-2-pyrone [215055-08-6]  $C_{22}H_{18}O_5$  (362.40). White acicular crystals, mp 176~178°C,  $[\alpha]_D = +97.6^\circ$  ( $c = 0.087$ , chloroform). **Source:** HAI NAN GE NA XIANG *Goniiothalamus howii*. **Ref:** 410.



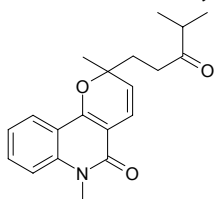


**9655 Howiinol A**

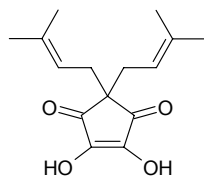
6S-(1*R*-Hydroxy-2*R*-cinnamyloxyphenethyl)-5,6-dihydro-5*S*-hydroxy-2-pyrone [190848-69-2] C<sub>22</sub>H<sub>20</sub>O<sub>6</sub> (380.40). White acicular crystals, mp 176~178°C, [α]<sub>D</sub><sup>20</sup> = +97.6° (*c* = 0.087, chloroform). **Pharm:** Antineoplastic (hmn tumor, *in vivo* and *in vitro*, cell proliferation inhibitor, blocks cell from G<sub>1</sub> to S phase, increases fluidity of L<sub>1210</sub> cell membrane)<sup>[2442]</sup>. **Source:** HAI NAN GE NA XIANG *Goniiothalamus howii*. **Ref:** 410, 1620, 2442.

**9656 Huajiaoosimuline**

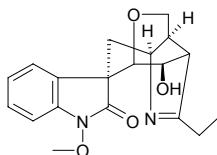
[155416-21-0] C<sub>20</sub>H<sub>23</sub>NO<sub>3</sub> (325.41). Oil. **Pharm:** Cytotoxic (hmn mammary cancer cell ZR-75-1 selective cytotoxic, ED<sub>50</sub> = 11.1 μmol/L, mus P<sub>388</sub>, ED<sub>50</sub> = 9.8 μmol/L); platelet aggregation inhibitor (rbt, 100 μg/mL, due to arachidonic acid, InRt = 100%, due to collagen, InRt = 83.9%, due to PAF, InRt = 100%). **Source:** YE HUA JIAO PI *Zanthoxylum simulans*. **Ref:** 1052, 1120.

**9657 Hulupinic acid**

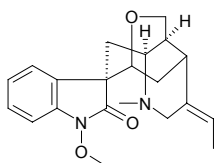
C<sub>15</sub>H<sub>20</sub>O<sub>4</sub> (264.32). Colorless needles (MeOH). **Pharm:** NO production Inhibitor inactive (*in vitro*, macrophage RAW264.7 cells, induced by LPS/IFN-γ, IC<sub>50</sub> > 100 μmol/L)<sup>[4795]</sup>. **Source:** PI JIU HUA *Humulus lupulus* (strobile). **Ref:** 4795.

**9658 Humantenidine**

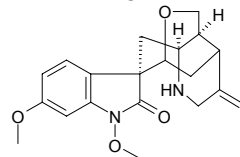
[82375-28-8] C<sub>19</sub>H<sub>22</sub>N<sub>2</sub>O<sub>4</sub> (342.40). Gum, [α]<sub>D</sub><sup>20</sup> = -123°. **Source:** GOU WEN *Gelsemium elegans*. **Ref:** 14.

**9659 Humantenine**

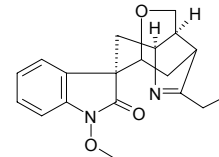
[82375-29-9] C<sub>21</sub>H<sub>26</sub>N<sub>2</sub>O<sub>3</sub> (354.45). Gum, [α]<sub>D</sub><sup>20</sup> = -142°. **Source:** GOU WEN *Gelsemium elegans*. **Ref:** 14.

**9660 Humantenirine**

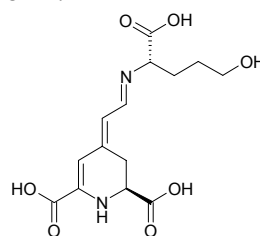
[82375-30-2] C<sub>21</sub>H<sub>26</sub>N<sub>2</sub>O<sub>4</sub> (370.45). Needles (Me<sub>2</sub>CO), mp 167~170°C, [α]<sub>D</sub><sup>20</sup> = -135° (*c* = 0.56, MeOH); mp 168~169°C. **Source:** GOU WEN *Gelsemium elegans*, *Gelsemium rankinii*. **Ref:** 14, 1521.

**9661 Humantenmine**

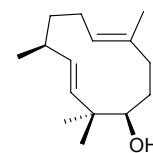
Gelsenicine [82354-38-9] C<sub>19</sub>H<sub>22</sub>N<sub>2</sub>O<sub>3</sub> (326.40). mp 166~168°C, [α]<sub>D</sub><sup>20</sup> = -147°. **Pharm:** Analgesic. **Source:** GOU WEN *Gelsemium elegans*. **Ref:** 14, 1521.

**9662 Humilixanthin**

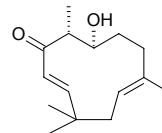
C<sub>14</sub>H<sub>18</sub>N<sub>2</sub>O<sub>7</sub> (326.31). **Source:** DA HUA MA CHI XIAN *Portulaca grandiflora*. **Ref:** 660.

**9663 1,6-Humuladien-10-ol**

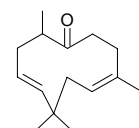
C<sub>15</sub>H<sub>26</sub>O (222.37). Oil, [α]<sub>D</sub><sup>20</sup> = +56.4° (*c* = 0.20, CHCl<sub>3</sub>). **Source:** *Tylimanthus tenellus*. **Ref:** 4280.

**9664 2,9-Humuladien-6-ol-8-one**

C<sub>15</sub>H<sub>24</sub>O<sub>2</sub> (236.36). [α]<sub>D</sub><sup>24</sup> = -11.8° (*c* = 0.10, CHCl<sub>3</sub>). **Pharm:** CYP3A4 inhibitor (IC<sub>50</sub> = 27.2 μmol/L, control Ketoconazole IC<sub>50</sub> = 0.24 μmol/L); CYP2D6 inhibitor inactive (IC<sub>50</sub> > 100 μmol/L, control Quinidine IC<sub>50</sub> = 0.068 μmol/L). **Source:** FANG XIANG JIANG *Zingiber aromaticum* (rhizome). **Ref:** 4449.

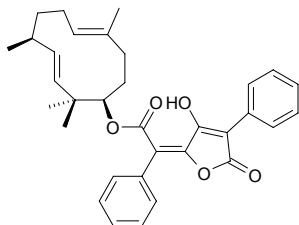
**9665 Humuladienone**

2,9-Humuladien-6-one [24405-90-1] C<sub>15</sub>H<sub>24</sub>O (220.36). [α]<sub>D</sub><sup>24</sup> = +5° (*c* = -0.7, CHCl<sub>3</sub>). **Source:** PI JIU HUA *Humulus lupulus*. **Ref:** 1521.



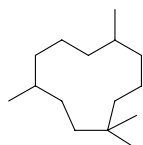
**9666 Humuladien-10-yl-(3-Hydroxy-5-oxo-4-phenyl-5H-furan-2-ylidene)-phenylacetic acid-ester**

$C_{33}H_{36}O_5$  (516.25). Yellow crystals, mp 116°C,  $[\alpha]_D = +3.0^\circ$  ( $c = 0.53$ ,  $CHCl_3$ ). Source: *Tylimanthus tenellus*. Ref: 4280.



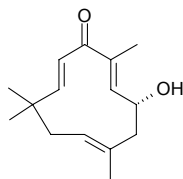
**9667 Humulane**

1,1,4,8-Tetramethylcycloundecane [430-19-3]  $C_{15}H_{30}$  (210.41). Source: MAN SHAN HONG *Rhododendron dauricum*. Ref: 6.



**9668 (5R)-2,6,9-Humulatrien-5-ol-8-one**

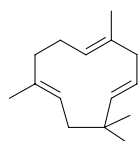
$C_{15}H_{22}O_2$  (234.34). Pharm: CYP3A4 inhibitor ( $IC_{50} = 35.5\mu\text{mol/L}$ , control Ketoconazole,  $IC_{50} = 0.245\mu\text{mol/L}$ ); CYP2D6 inhibitor inactive ( $IC_{50} > 100\mu\text{mol/L}$ , control Quinidine,  $IC_{50} = 0.078\mu\text{mol/L}$ ). Source: FANG XIANG JIANG *Zingiber aromaticum* (rhizome: yield = 0.00031%dw). Ref: 4669.



**9669  $\alpha$ -Humulene**

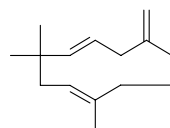
[6753-98-6]  $C_{15}H_{24}$  (204.36). bp 123°C/10mmHg. Pharm: Cytotoxic (cancer cell: MCF7,  $GI_{50} = (73\pm 2)\mu\text{mol/L}$ , PC3,  $GI_{50} = (73\pm 2)\mu\text{mol/L}$ , A549,  $GI_{50} = (68\pm 2)\mu\text{mol/L}$ , DLD-1,  $GI_{50} = (71\pm 2)\mu\text{mol/L}$ , M4BEU hmn melanoma cell,  $GI_{50} = (55\pm 2)\mu\text{mol/L}$ , L-929,  $GI_{50} = (50\pm 1)\mu\text{mol/L}$ , CT-26,  $GI_{50} = (53\pm 1)\mu\text{mol/L}$ ; normal hmn cell: fibroblasts,  $GI_{50} = (85\pm 5)\mu\text{mol/L}$ ; control Etoposide,  $GI_{50} < 1.5\mu\text{mol/L}$ , Chlorambucil,  $GI_{50} < 50\mu\text{mol/L}$ ; induces decrease in cellular GSH content and increases ROS production)<sup>[5391]</sup>; flavorant. Source: BAI DOU KOU *Amomum kravanh* [Syn. *Amomum cardamomum*], BING PIAN *Dryobalanops aromatica*, CANG ZHU *Atractylodes lancea*, CHAI HU *Bupleurum chinense*, DA CAO KOU *Alpinia speciosa*, DA YE XIANG RU *Mosla dianthera*, DING XIANG *Syzygium aromaticum* [Syn. *Eugenia caryophyllata*], DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*], DU SONG SHI *Juniperus rigida*, FU JU *Citrus tangemna*,

HONG CHAI HU *Bupleurum scorzonerifolium*, HOU PO *Magnolia officinalis*, HUA DONG LAN CI TOU *Echinops grijsii*, JI NING *Mosla grosseserrata*, JIN QIAN PU *Acorus gramineus*, LIAN JIANG *Alpinia chinensis*, MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*], PI JIU HUA *Humulus lupulus*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], SHI JI NING *Mosla scabra* [Syn. *Mosla punctata*], SHI XIANG RU *Mosla chinensis* [Syn. *Orthodon chinensis*], TU DANG GUI *Aralia cordata*, WU SE MEI *Lantana camara*, WU YAO *Lindera strychnifolia* [Syn. *Lindera aggregata*], XIANG ZHI LENG SHAN *Abies balsamea* (essential oil extracted from leaves), YE XIANG MAO *Cymbopogon goeringii*, YIN CHEN HAO *Artemisia capillaris*, ZHANG MU *Cinnamomum camphora*, ZHU JU *Citrus erythrosa*, occurs in many plants. Ref: 2, 6, 658, 660, 1521, 5391.



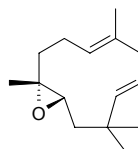
**9670  $\beta$ -Humulene**

2,7(14),9-Humulatriene [116-04-1]  $C_{15}H_{24}$  (204.36). Source: HUO XIANG *Agastache rugosus*, JING JIE *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*], REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], PI JIU HUA *Humulus lupulus*, WU YAO *Lindera strychnifolia* [Syn. *Lindera aggregata*]. Ref: 2, 1521.



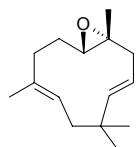
**9671 Humulene epoxide I**

2,3-Epoxy-6,9-humuladiene [19888-33-6]  $C_{15}H_{24}O$  (220.36). Oil, bp 104~105°C/1.5mmHg,  $[\alpha]_D^{30} = -22.8^\circ$  ( $c = 3.6$ ,  $CHCl_3$ ). Pharm: Antineoplastic (mus, liver and small intestine, glutathione S-transferase activator). Source: BAI DOU KOU *Amomum kravanh* [Syn. *Amomum cardamomum*], PI JIU HUA *Humulus lupulus*, HONG QIU JIANG *Zingiber zerumbet*. Ref: 6, 1808, 1521.



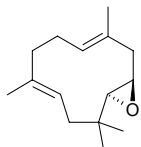
**9672 Humulene epoxide II**

6,7-Epoxy-2,9-humuladiene [19888-34-7]  $C_{15}H_{24}O$  (220.36). Oil, bp 105~106°C/1.5mmHg,  $[\alpha]_D^{30} = -31.2^\circ$  ( $c = 4.2$ ,  $CHCl_3$ ). Source: BAI DOU KOU *Amomum kravanh* [Syn. *Amomum cardamomum*], PI JIU HUA *Humulus lupulus*, HONG QIU JIANG *Zingiber zerumbet*. Ref: 6, 1521.

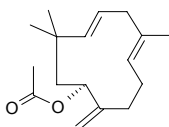


**9673 Humulene epoxide III**

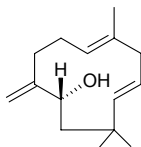
9,10-Epoxy-2,6-humuladiene [21624-36-2]  $C_{15}H_{24}O$  (220.36). Oil, bp 120~130°C/15mmHg,  $[\alpha]_D = +2.15^\circ$  ( $c = 1.25$ ,  $CHCl_3$ ). Source: BAI DOU KOU *Amomum kravanh* [Syn. *Amomum cardamomum*]. Ref: 6, 1521.

**9674  $\alpha$ -Humulenol acetate**

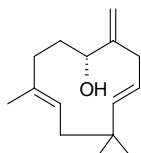
$C_{17}H_{26}O_2$  (262.40). Source: JU PI *Citrus reticulata*. Ref: 6.

**9675 Humulenol I**

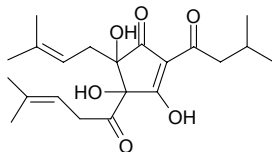
$C_{15}H_{24}O$  (220.36). Source: PI JIU HUA *Humulus lupulus*. Ref: 660.

**9676 Humulenol II**

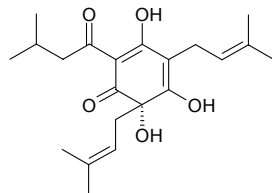
$C_{15}H_{24}O$  (220.36). Source: PI JIU HUA *Humulus lupulus*. Ref: 660.

**9677 Humulinone**

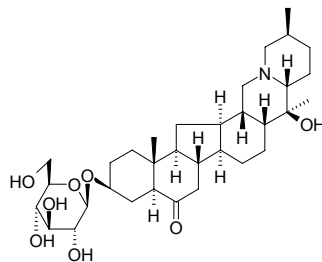
$C_{21}H_{30}O_6$  (378.47). Source: PI JIU HUA *Humulus lupulus* (strobile). Ref: 4789.

**9678 Humulone**

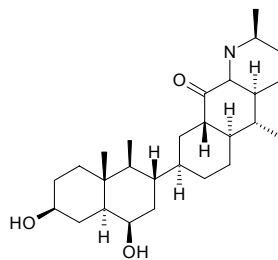
$C_{21}H_{30}O_5$  (362.47). mp 63~65°C. Pharm: Antibiotic (inhibits gram-positive bacteria including *Bacillus anthracis*, *Bacillus cereus*, *Bacillus diphtheriae*, *Diplococcus pneumoniae*, *Staphylococcus aureus*, and *Mycobacterium tuberculosis*); main bitter component in beer. Source: LU CAO *Rhaponticum carthamoides*, PI JIU HUA *Humulus lupulus*. Ref: 6, 658.

**9679 Hupehemonoside**

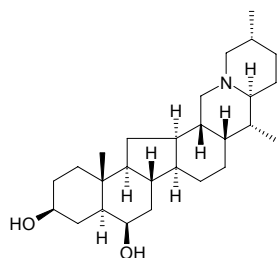
$C_{33}H_{53}NO_8$  (591.79). Colorless amorphous powder, mp 206~208°C,  $[\alpha]_D^{27} = -48.3^\circ$  ( $c = 0.46$ , methanol). Source: HU BEI BEI MU *Fritillaria hupehensis*. Ref: 206.

**9680 Hupehenidine**

[123857-37-4]  $C_{27}H_{45}NO_3$  (431.66). mp 174~175°C,  $[\alpha]_D = -82.6^\circ$  ( $c = 0.05$ , MeOH). Source: HU BEI BEI MU *Fritillaria hupehensis*, E BEI BEI MU *Fritillaria ebeiensis*. Ref: 2201, 1521.

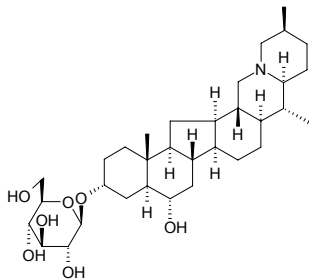
**9681 Hupehenine**

Persicanidine A [139757-61-2]  $C_{27}H_{45}NO_2$  (415.67). Colorless prisms (MeOH), mp 208°C (dec),  $[\alpha]_D^{30} = -7.8^\circ$  ( $c = 0.23$ ,  $CHCl_3$ ). Pharm: cAMP phosphodiesterase inhibitor ( $IC_{50} = 247 \mu\text{mol/L}$ ). Source: HU BEI BEI MU *Fritillaria hupehensis* (bulb: mean content of 9 samples = 0.082%<sup>[5508]</sup>), TAO BEI MU *Fritillaria persica*. Ref: 660, 1755, 3608, 5508.

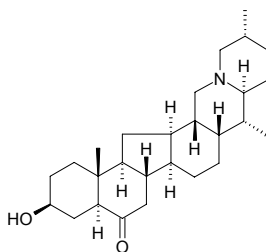


**9682 Hupeheninoside**

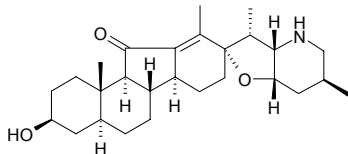
5 $\alpha$ ,14 $\alpha$ -Cevanine-6 $\alpha$ -hydroxyl-3 $\alpha$ - $\beta$ -D-glucoside [98985-22-9] C<sub>33</sub>H<sub>55</sub>NO<sub>7</sub> (577.81). Colorless prismatic crystals, mp 241~244°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -41° (c = 0.16, methanol). **Pharm:** cAMP phosphodiesterase inhibitor (IC<sub>50</sub> = 127 $\mu$ mol/L) **Source:** HU BEI BEI MU *Fritillaria hupehensis*. **Ref:** 30, 1755, 1521.

**9683 Hupehenirine**

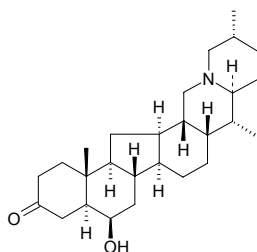
C<sub>27</sub>H<sub>43</sub>NO<sub>2</sub> (413.65). **Source:** HU BEI BEI MU *Fritillaria hupehensis*. **Ref:** 660.

**9684 Hupehenisine**

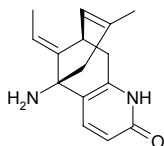
C<sub>27</sub>H<sub>41</sub>NO<sub>3</sub> (427.63). **Source:** HU BEI BEI MU *Fritillaria hupehensis*. **Ref:** 59, 660.

**9685 Hupehenizine**

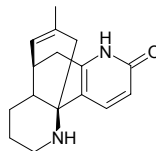
C<sub>27</sub>H<sub>43</sub>NO<sub>2</sub> (413.65). **Source:** HU BEI BEI MU *Fritillaria hupehensis*. **Ref:** 660.

**9686 Huperzine A**

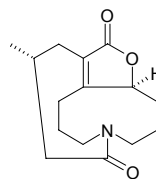
Selagine C<sub>15</sub>H<sub>18</sub>N<sub>2</sub>O (242.32). mp 224~226°C. **Pharm:** Cholinesterase inhibitor (marked activity). **Source:** QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*] (whole herb: mean content of 3 origins = 0.020%<sup>[5508]</sup>), XIAO JIE JIN CAO *Huperzia selago* [Syn. *Lycopodium selago*]. **Ref:** 6, 660, 1521, 5508.

**9687 Huperzine B**

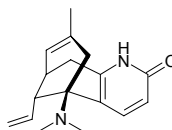
C<sub>16</sub>H<sub>20</sub>N<sub>2</sub>O (256.35). **Pharm:** Cholinesterase inhibitor (marked activity). **Source:** QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*]. **Ref:** 660, 1521.

**9688 Huperzine R**

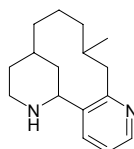
C<sub>15</sub>H<sub>21</sub>NO<sub>3</sub> (263.34). Colorless prisms (petroleum ether-acetone), mp 189~191°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -0.115° (c = 0.417, CHCl<sub>3</sub>). **Source:** QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*] (whole herb: yield = 0.00017%dw). **Ref:** 4636.

**9689 Huperzinine**

[119188-49-7] C<sub>17</sub>H<sub>22</sub>N<sub>2</sub>O (270.38). White thin acicular crystals, mp 251~253°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -25.3° (c = 0.1456, chloroform). **Source:** QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*]. **Ref:** 108.

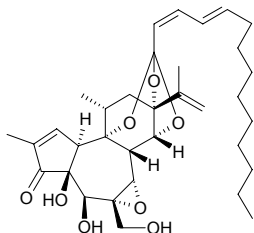
**9690 Huperzinine C**

C<sub>16</sub>H<sub>24</sub>N<sub>2</sub> (244.38). White granular crystals (petroleum ether), mp 42~44°C. **Source:** QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*]. **Ref:** 4831.

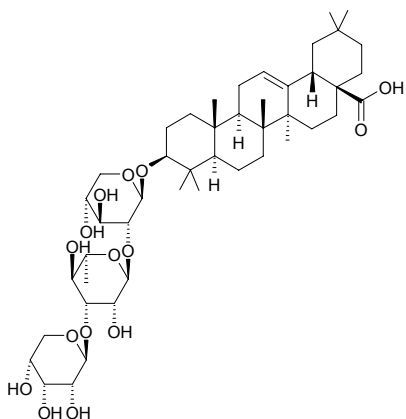


**9691 Huratoxin**

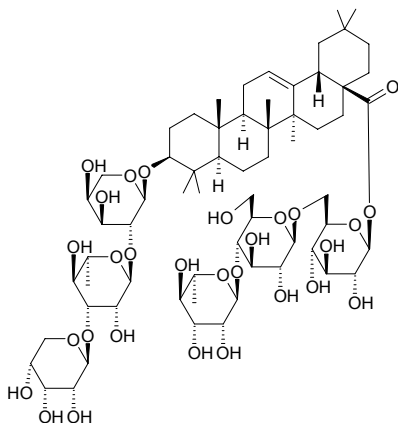
[33465-16-6] C<sub>34</sub>H<sub>48</sub>O<sub>8</sub> (584.76). Glassy resin, [ $\alpha$ ]<sub>D</sub><sup>28</sup> = +55.1° (c = 2.7, chloroform). **Pharm:** Fish toxin. **Source:** SHA HE SHU *Hura crepitans*. **Ref:** 658, 1521.

**9692 Huzhangoside A**

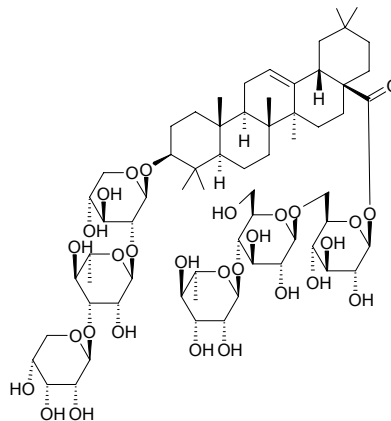
C<sub>46</sub>H<sub>74</sub>O<sub>15</sub> (867.09). **Source:** HU ZHANG CAO *Anemone rivularis* (root). **Ref:** 660.

**9693 Huzhangoside B**

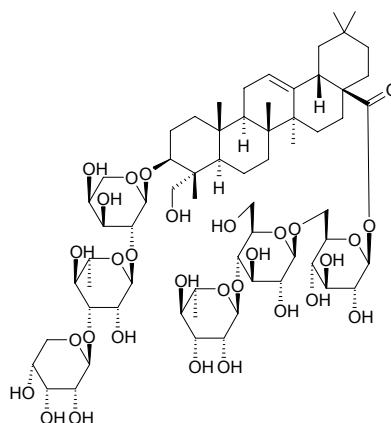
C<sub>64</sub>H<sub>104</sub>O<sub>29</sub> (1337.53). **Source:** HU ZHANG CAO *Anemone rivularis* (root). **Ref:** 660.

**9694 Huzhangoside C**

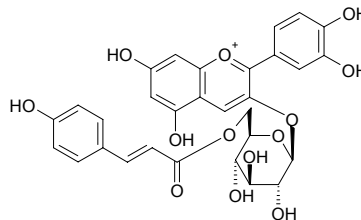
C<sub>64</sub>H<sub>104</sub>O<sub>29</sub> (1337.53). **Source:** HU ZHANG CAO *Anemone rivularis* (root). **Ref:** 660.

**9695 Huzhangoside D**

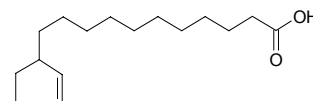
[96315-53-6] C<sub>64</sub>H<sub>104</sub>O<sub>30</sub> (1353.52). **Source:** HU ZHANG CAO *Anemone rivularis* (root), XI ZANG TIE XIAN LIAN *Clematis tibetana* (aerial parts). **Ref:** 660, 1521, 3530.

**9696 Hyacinthin**

Cyanidin-3-*O*- $\beta$ -D-(6-*O*-*p*-coumaroyl)-glucoside C<sub>30</sub>H<sub>27</sub>O<sub>13</sub><sup>+</sup> (595.54). **Source:** FENG XIN ZI *Hyacinthus orientalis*, PU<sup>(2)</sup> TAO *Vitis vinifera*. **Ref:** 660, 1521.

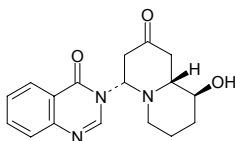
**9697 Hydnocarpic acid**

[459-67-6] C<sub>16</sub>H<sub>28</sub>O<sub>2</sub> (252.40). mp ( $\pm$ ) 59.0~59.5°C, (+) 59~60°C. **Pharm:** Antileprotic (infected mouse, sc or ip, inhibits *Mycobacterium leprae*). **Source:** DA FENG ZI *Hydnocarpus anthelminticus* (seed: content scope = 23.78%~28.28%<sup>[5501]</sup>). **Ref:** 6, 5501.

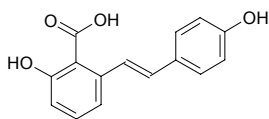


**9698 Hydrachine A**

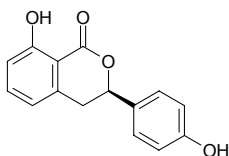
3-[9 $\beta$ -Hydroxy-2-oxo-4a-quinolizidyl]-4-quinazolinone C<sub>17</sub>H<sub>19</sub>N<sub>3</sub>O<sub>3</sub> (313.36). Semisolid, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +25.32° (*c* = 0.2, CHCl<sub>3</sub>). **Pharm:** Cytotoxic inactive (*in vitro*, HONE-1 and NUGC cancer cell lines, no significant activity). **Source:** ZHONG GUO XIU QIU *Hydrangea chinensis* (root). **Ref:** 3069.

**9699 Hydrangeic acid**

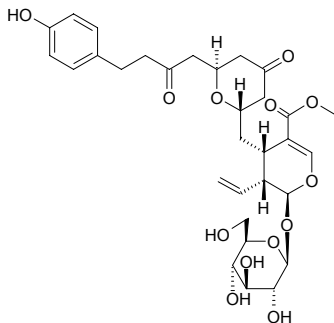
[491-79-2] C<sub>15</sub>H<sub>12</sub>O<sub>4</sub> (256.26). mp 181°C. **Source:** BA XIAN HUA *Hydrangea macrophylla*. **Ref:** 6.

**9700 Hydrangenol**

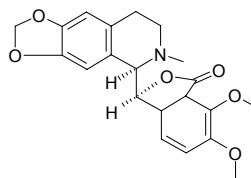
[480-47-7] C<sub>15</sub>H<sub>12</sub>O<sub>4</sub> (256.26). mp 181°C. **Pharm:** Antifungal; allergen (one of allergens in *Hydrangea macrophylla* BA XIAN HUA); cytotoxic inactive (*in vitro*, HONE-1 and NUGC cancer cell lines, no significant activity)<sup>[3069]</sup>. **Source:** BA XIAN HUA *Hydrangea macrophylla*, SE BO GE XIU QIU *Hydrangea macrophylla* var. *thunbergii*, ZHONG GUO XIU QIU *Hydrangea chinensis* (root)<sup>[3069]</sup>. **Ref:** 6, 658, 1521, 3069.

**9701 Hydrangenoside A**

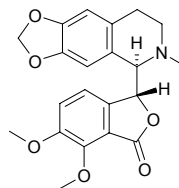
C<sub>31</sub>H<sub>40</sub>O<sub>13</sub> (620.66). **Pharm:** Cytotoxic inactive (*in vitro*, HONE-1 and NUGC cancer cell lines, no significant activity). **Source:** ZHONG GUO XIU QIU *Hydrangea chinensis* (root). **Ref:** 3069.

**9702  $\beta$ -Hydrastine**

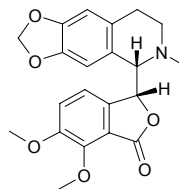
C<sub>21</sub>H<sub>23</sub>NO<sub>6</sub> (385.42). mp 130~132°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -57.0° (*c* = 0.2, CHCl<sub>3</sub>). **Pharm:** Antibacterial (oral pathogens: *Streptococcus mutans*, MIC > 500 $\mu$ g/mL, control Chlorhexidine gluconate, MIC = 1.25 $\mu$ g/mL; *Fusobacterium nucleatum*, MIC > 500 $\mu$ g/mL, Chlorhexidine gluconate, MIC = 2.5 $\mu$ g/mL). **Source:** BAI MAO GEN<sup>(4)</sup> *Hydrastis canadensis* (root). **Ref:** 5418.

**9703 (1R,9R)-Hydrastine**

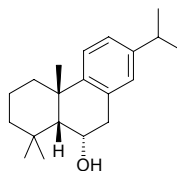
C<sub>21</sub>H<sub>21</sub>NO<sub>6</sub> (383.40). Trapezoid prismatic crystals (ethanol), mp 132°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -50° (*c* = 0.3, absolute ethanol); ~12.5 (*c* = 0.4, 97% ethanol). **Pharm:** Antiseptic; hemostatic; mydriatic. **Source:** BAI MAO GEN<sup>(4)</sup> *Hydrastis canadensis*. **Ref:** 658, 754.

**9704 D-(1S,9R)-Hydrastine**

C<sub>21</sub>H<sub>21</sub>NO<sub>6</sub> (383.40). **Pharm:** anthelmintic (tapeworm, 0.3% solution, death rate = 68.9%~70.2%). **Source:** ZHI LI ZI JIN *Corydalis stricta*. **Ref:** 5501.

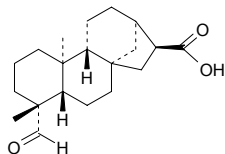
**9705 5 $\beta$ -Hydro-8,11,13-abietatrien-6 $\alpha$ -ol**

[136378-62-6] C<sub>20</sub>H<sub>30</sub>O (286.46). Acicular crystals (petroleum ether), mp 129~130°C, [ $\alpha$ ]<sub>D</sub><sup>26</sup> = +30.8° (*c* = 0.003, chloroform). **Pharm:** Anti-inflammatory (rat, swollen foot model caused by carrageenan, 50mg/kg, InRt = 18.1%). **Source:** HU JI SHENG *Viscum coloratum*. **Ref:** 1039.

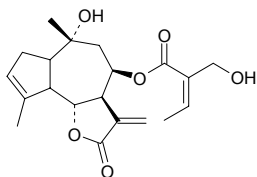


**9706 16 $\alpha$ -Hydro-19-*al-ent*-kauran-17-oic acid**

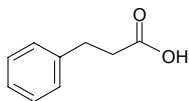
$C_{20}H_{30}O_3$  (318.46). **Pharm:** Platelet aggregation selected inhibitor (washed rabbit platelets, 200 $\mu$ mol/L: 100 $\mu$ mol/L AA induced, InRt = 100%; 10 $\mu$ g/mL collagen induced, InRt = 100%; 1ng/mL PAF induced, InRt = 11.8%; 0.05U/mL thrombin induced, InRt = 6.8%)<sup>[4654]</sup>; antioxidant (inhibits superoxide anion generation, fMLP/CB, IC<sub>50</sub> = (6.95 $\pm$ 0.39) $\mu$ g/mL,  $p$ <0.001, control DPI, IC<sub>50</sub> = (0.13 $\pm$ 0.06) $\mu$ g/mL,  $p$ <0.001)<sup>[4950]</sup>. **Source:** FAN LI ZHI *Amnona squamosa* (stem: yield = 0.20%fw). **Ref:** 4654, 4950.

**9707 1,10-Hydrobahia**

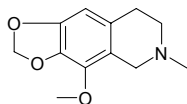
$C_{20}H_{26}O_6$  (362.43). **Source:** HUA ZE LAN *Eupatorium chinense* (whole herb, yield = 0.0036%). **Ref:** 4739.

**9708 Hydrocinnamic acid**

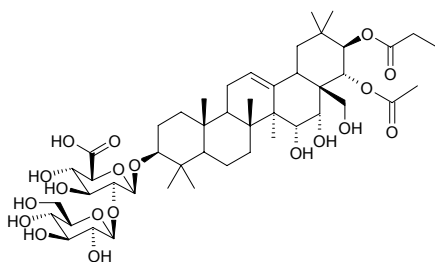
[501-52-0]  $C_9H_{10}O_2$  (150.18). mp 48.5°C. **Source:** CHEN XIANG *Aquilaria agallocha*. **Ref:** 6.

**9709 Hydrocotarnine**

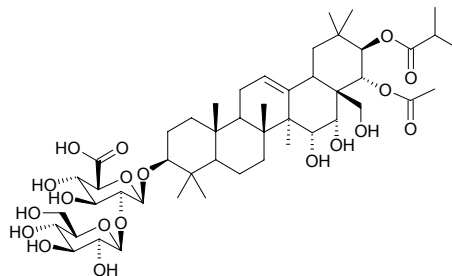
[550-10-7]  $C_{12}H_{15}NO_3$  (221.26). mp 55~56°C. **Source:** YA PIAN *Papaver somniferum*. **Ref:** 6.

**9710 Hydrocotyloside I**

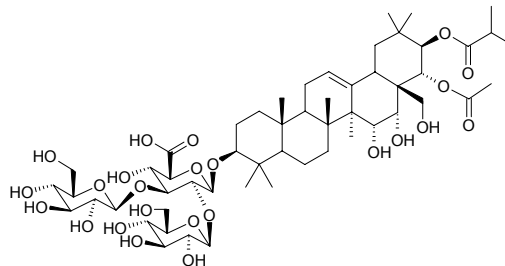
3-*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucuronopyranosyl-22-*O*-acetyl-21-*O*-propanoyl-3 $\beta$ ,15 $\beta$ ,16 $\alpha$ ,21 $\beta$ ,22 $\alpha$ ,28-hexahydroxyolean-12-ene  $C_{47}H_{74}O_{19}$  (943.1). Amorphous powder,  $[\alpha]_D^{23} = -1.1^\circ$  ( $c = 0.46$ , MeOH). **Source:** TIAN HU SUI *Hydrocotyle sibthorpioides* (whole herb: yield = 0.00051%dw). **Ref:** 3013.

**9711 Hydrocotyloside II**

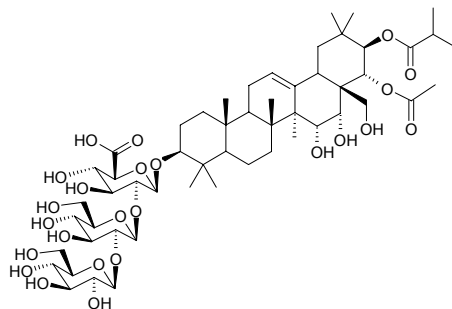
3-*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucuronopyranosyl-22-*O*-acetyl-21-*O*-(2-methylpropanoyl)-3 $\beta$ ,15 $\alpha$ ,16 $\alpha$ ,21 $\beta$ ,22 $\alpha$ ,28-hexahydroxyolean-12-ene  $C_{48}H_{76}O_{19}$  (957.13). Amorphous powder,  $[\alpha]_D^{23} = -1.5^\circ$  ( $c = 0.91$ , MeOH). **Source:** TIAN HU SUI *Hydrocotyle sibthorpioides* (whole herb: yield = 0.011%dw). **Ref:** 3013.

**9712 Hydrocotyloside III**

3-*O*-[ $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucuronopyranosyl-22-*O*-acetyl-21-*O*-(2-methylpropanoyl)-3 $\beta$ ,15 $\alpha$ ,16 $\alpha$ ,21 $\beta$ ,22 $\alpha$ ,28-hexahydroxyolean-12-ene  $C_{54}H_{86}O_{24}$  (1119.27). Amorphous powder,  $[\alpha]_D^{23} = -0.8^\circ$  ( $c = 0.86$ , MeOH). **Source:** TIAN HU SUI *Hydrocotyle sibthorpioides* (whole herb: yield = 0.0011%dw). **Ref:** 3013.

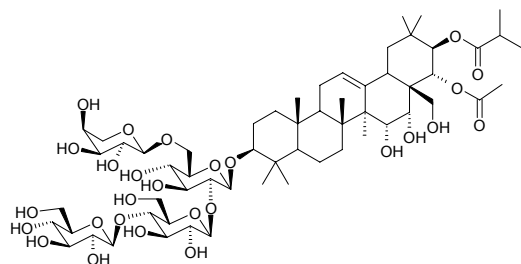
**9713 Hydrocotyloside IV**

3-*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucuronopyranosyl-22-*O*-acetyl-21-*O*-(2-methylpropanoyl)-3 $\beta$ ,15 $\alpha$ ,16 $\alpha$ ,21 $\beta$ ,22 $\alpha$ ,28-hexahydroxyolean-12-ene  $C_{54}H_{86}O_{24}$  (1119.27). Amorphous powder,  $[\alpha]_D^{23} = -1.1^\circ$  ( $c = 0.63$ , MeOH). **Source:** TIAN HU SUI *Hydrocotyle sibthorpioides* (whole herb: yield = 0.0019%dw). **Ref:** 3013.

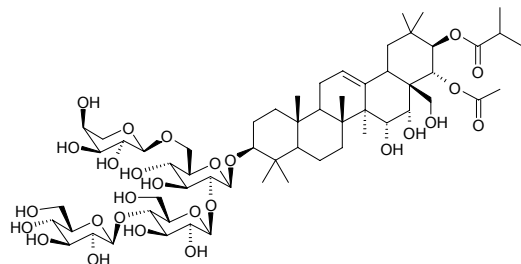


**9714 Hydrocotyloside V**

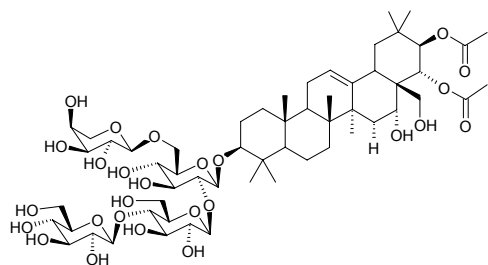
3-*O*-[ $\alpha$ -*L*-Arabinopyranosyl-(1 $\rightarrow$ 6)]- [ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)]- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl-22-*O*-acetyl-21-*O*-(2-methylpropanoyl)-3 $\beta$ ,15 $\alpha$ ,16 $\alpha$ ,21 $\beta$ ,22 $\alpha$ ,28-hexahydroxyolean-12-ene C<sub>59</sub>H<sub>96</sub>O<sub>27</sub> (1237.41). Amorphous powder,  $[\alpha]_D^{23} = -1.5^\circ$  ( $c = 0.85$ , MeOH). **Source:** TIAN HU SUI *Hydrocotyle sibthorpioides* (whole herb: yield = 0.0046%dw). **Ref:** 3013.

**9715 Hydrocotyloside VI**

3-*O*- $\alpha$ -[*L*-Arabinopyranosyl-(1 $\rightarrow$ 6)]- [ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)]- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl-22-*O*-acetyl-21-*O*-(2-methylbutanoyl)-3 $\beta$ ,15 $\alpha$ ,16 $\alpha$ ,21 $\beta$ ,22 $\alpha$ ,28-hexahydroxyolean-12-ene C<sub>60</sub>H<sub>98</sub>O<sub>27</sub> (1251.43). Amorphous powder,  $[\alpha]_D^{23} = -1.2^\circ$  ( $c = 0.34$ , MeOH). **Source:** TIAN HU SUI *Hydrocotyle sibthorpioides* (whole herb: yield = 0.00042%dw). **Ref:** 3013.

**9716 Hydrocotyloside VII**

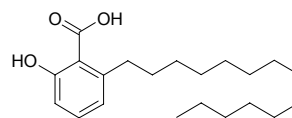
3-*O*-[ $\alpha$ -*L*-Arabinopyranosyl-(1 $\rightarrow$ 6)]- [ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)]- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl-21-*O*-acetyl-22-*O*-acetyl-3 $\beta$ ,16 $\alpha$ ,21 $\beta$ ,22 $\alpha$ ,28-pentahydroxyolean-12-ene C<sub>57</sub>H<sub>92</sub>O<sub>26</sub> (1193.35). Amorphous powder,  $[\alpha]_D^{23} = -1.5^\circ$  ( $c = 0.81$ , MeOH). **Source:** TIAN HU SUI *Hydrocotyle sibthorpioides* (whole herb: yield = 0.0072%dw). **Ref:** 3013.

**9717 Hydrocyanic acid**

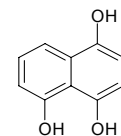
[74-90-8] CHN (27.03). mp  $-13.3^\circ\text{C}$ , bp  $25.7^\circ\text{C}$ . **Source:** BA DAN XING REN *Prunus amygdalus*, CI NAN SHE TENG *Celastrus flagellaris*, DA CHAO CAI *Vicia sativa*, HAI JIU CAI *Triglochin maritimum*, LUO XIN FU *Astilbe chinensis*, MANG GUO HE *Mangifera indica*, MANG GUO YE *Mangifera indica*, PI PA HE *Eriobotrya japonica*, QIU MU GUA *Chaenomeles lagenaria* [Syn. *Chaenomeles speciosa*], WANG BU LIU XING *Vaccaria segetalis* [Syn. *Vaccaria pyramidata*], WU MEI *Prunus mume*, YING TAO *Prunus pseudocerasus*, YU LI REN *Prunus japonica* [Syn. *Cerasus japonica*], YUE SI GUA *Luffa acutangula*. **Ref:** 6, 660.

**9718 Hydroginkgolonic acid**

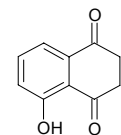
C<sub>21</sub>H<sub>34</sub>O<sub>3</sub> (334.50). mp  $74\text{--}76^\circ\text{C}$ . **Source:** BAI GUO *Ginkgo biloba*. **Ref:** 6.

**9719  $\alpha$ -Hydrojuglone**

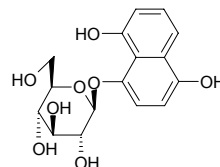
[481-40-3] C<sub>10</sub>H<sub>8</sub>O<sub>3</sub> (176.17). mp  $168\text{--}169^\circ\text{C}$ . **Pharm:** Hemostatic (rbt, 10mg/kg iv, bleeding time reduced 20%). **Source:** HU TAO REN *Juglans regia*, HU TAO QING PI *Juglans regia*. **Ref:** 6, 658.

**9720  $\beta$ -Hydrojuglone**

C<sub>10</sub>H<sub>8</sub>O<sub>3</sub> (176.17). mp  $96\text{--}97^\circ\text{C}$ . **Pharm:** Antibacterial. **Source:** HU TAO REN *Juglans regia*, HU TAO QING PI *Juglans regia*. **Ref:** 6, 658.

**9721  $\alpha$ -Hydrojuglone glucoside**

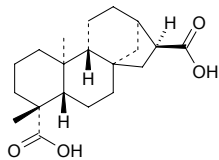
C<sub>16</sub>H<sub>18</sub>O<sub>8</sub> (338.32). **Source:** HU TAO YE *Juglans regia*. **Ref:** 6.



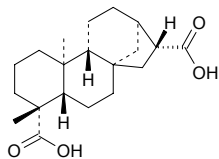


**9722 16 $\alpha$ -Hydro-ent-kauran-17,19-dioic acid**

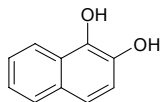
C<sub>20</sub>H<sub>30</sub>O<sub>4</sub> (334.46). Source: FAN LI ZHI *Annona squamosa* (stem: yield = 0.00033%fw). Ref: 4654.

**9723 16 $\beta$ -Hydro-ent-kauran-17,19-dioic acid**

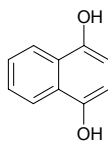
C<sub>20</sub>H<sub>30</sub>O<sub>4</sub> (334.46). Pharm: Platelet aggregation selected inhibitor (washed rabbit platelets, 200 $\mu$ mol/L: 100 $\mu$ mol/L AA induced, InRt = 15.4%; 10 $\mu$ g/mL collagen induced, InRt = 56.9%; 1ng/mL PAF induced, InRt = 15.2%; 0.05U/mL thrombin induced, InRt = 6.0%)<sup>[4654]</sup>; antioxidant (inhibits superoxide anion generation, fMPLP/CB, IC<sub>50</sub> = (3.52 $\pm$ 0.52) $\mu$ g/mL,  $p$ <0.001, control DPI, IC<sub>50</sub> = (0.13 $\pm$ 0.06) $\mu$ g/mL,  $p$ <0.001)<sup>[4950]</sup>. Source: FAN LI ZHI *Annona squamosa* (stem: yield = 0.0012%fw). Ref: 4654, 4950.

**9724 1,2-Hydronaphthoquinone**

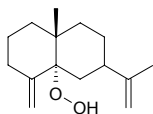
[574-00-5] C<sub>10</sub>H<sub>8</sub>O<sub>2</sub> (160.17). mp 60°C. Source: MAO GAO CAI *Drosera peltata* var. *lunata*. Ref: 6.

**9725 1,4-Hydronaphthoquinone**

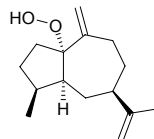
[571-60-8] C<sub>10</sub>H<sub>8</sub>O<sub>2</sub> (160.17). mp 175°C. Source: MAO GAO CAI *Drosera peltata* var. *lunata*. Ref: 6.

**9726 5 $\alpha$ -Hydroperoxy-eudesma-4(15),11-diene**

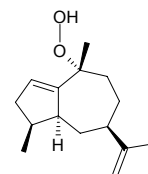
C<sub>15</sub>H<sub>24</sub>O<sub>2</sub> (242.36). Colorless oil. Source: HUANG HUA HAO *Artemisia annua* (seed). Ref: 3435.

**9727 1 $\alpha$ -Hydroperoxy-guaia-10(15),11-diene**

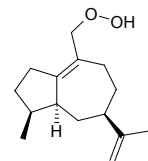
C<sub>15</sub>H<sub>24</sub>O<sub>2</sub> (236.36). Colorless oil, [ $\alpha$ ]<sub>D</sub> = +71.8° ( $c$  = 0.58, EtOH). Pharm: Antitrypanosomal (epimastigotes of *Trypanosoma cruzi*, *in vitro*, MLC = 1.7mmol/L)<sup>[2551]</sup>. Source: GUANG HUO XIANG *Pogostemon cablin* [Syn. *Mentha cablin*]. Ref: 2551.

**9728 10 $\alpha$ -Hydroperoxy-guaia-1,11-diene**

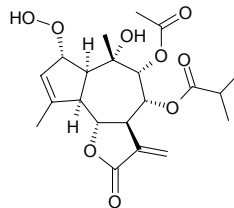
C<sub>15</sub>H<sub>24</sub>O<sub>2</sub> (236.36). Colorless oil, [ $\alpha$ ]<sub>D</sub> = +24.5° ( $c$  = 0.35, EtOH). Pharm: Antitrypanosomal (epimastigotes of *Trypanosoma cruzi*, *in vitro*, MLC = 0.84mmol/L). Source: GUANG HUO XIANG *Pogostemon cablin* [Syn. *Mentha cablin*]. Ref: 2551.

**9729 15 $\alpha$ -Hydroperoxy-guaia-1(10),11-diene**

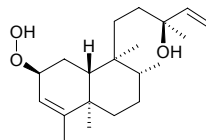
C<sub>15</sub>H<sub>24</sub>O<sub>2</sub> (236.36). Colorless oil, [ $\alpha$ ]<sub>D</sub> = +7.3° ( $c$  = 0.23, EtOH). Pharm: Antitrypanosomal (epimastigotes of *Trypanosoma cruzi*, *in vitro*, MLC = 1.7mmol/L). Source: GUANG HUO XIANG *Pogostemon cablin* [Syn. *Mentha cablin*]. Ref: 2551.

**9730 2 $\alpha$ -Hydroperoxy-8-O-isobutyryl-9 $\alpha$ -acetoxycumambrin B**

C<sub>21</sub>H<sub>28</sub>O<sub>9</sub> (424.45). Source: *Anthemis carpatica* (aerial parts). Ref: 3974.

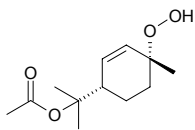
**9731 (-)-2 $\beta$ -Hydroperoxykolavelool**

C<sub>20</sub>H<sub>34</sub>O<sub>3</sub> (322.49). Colorless amorphous solid, [ $\alpha$ ]<sub>D</sub><sup>25</sup> =  $\alpha$ -20.0° ( $c$  = 0.10, CHCl<sub>3</sub>). Source: BA XI MA DOU LING *Aristolochia chamissonis*. Ref: 1904.

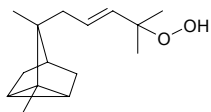


**9732 (1R,4S)-1-Hydroperoxy-*p*-menth-2-en-8-ol acetate**

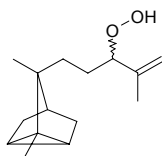
$C_{12}H_{20}O_4$  (228.29). Colorless needles (petroleum ether), mp 87.5~88.5°C,  $[\alpha]_D = -7.9^\circ$  ( $c = 0.61$ , EtOH). **Pharm:** Antitrypanosomal (epimastigotes of *Trypanosoma cruzi*, MLC = 1.4  $\mu\text{mol/L}$ ). **Source:** YUE GUI YE *Laurus nobilis*. **Ref:** 4248.

**9733 11-Hydroperoxy- $\alpha$ -santal-9-ene**

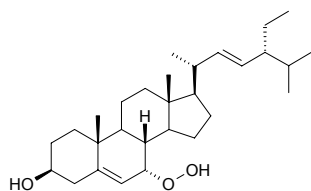
$C_{15}H_{24}O_2$  (236.36). Oil,  $[\alpha]_D = +15.0^\circ$  ( $c = 2.8$ ,  $\text{CHCl}_3$ ). **Source:** DU AI BA JIAO *Illicium tsangii*. **Ref:** 1866.

**9734 10 $\xi$ -Hydroperoxy- $\alpha$ -santal-11-ene**

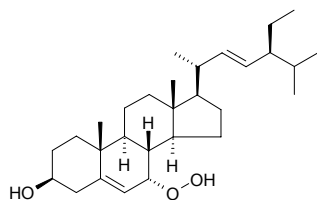
$C_{15}H_{24}O_2$  (236.36). Oil,  $[\alpha]_D = -2.8^\circ$  ( $c = 0.58$ ,  $\text{CHCl}_3$ ). **Source:** DU AI BA JIAO *Illicium tsangii*. **Ref:** 1866.

**9735 (24R)-7 $\alpha$ -Hydroperoxystigmasta-5,22-dien-3 $\beta$ -ol**

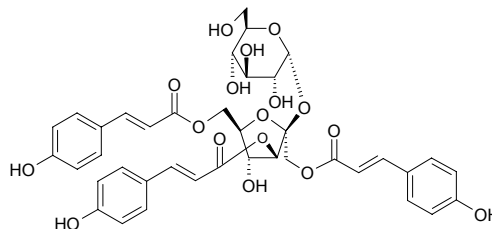
$C_{29}H_{48}O_3$  (444.70).  $[\alpha]_D^{21} = -48.3^\circ$  ( $c = 0.4$ ,  $\text{CHCl}_3$ ). **Source:** SAN QI CAO *Gynura segetum* [Syn. *Gynura japonica*] (rhizome). **Ref:** 5427.

**9736 (22E,24S)-7 $\alpha$ -Hydroperoxystigmasta-5,22-dien-3 $\beta$ -ol**

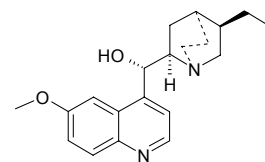
$C_{29}H_{48}O_3$  (444.70). Colorless powder (MeOH), mp 147~150°C,  $[\alpha]_D^{21} = -56.5^\circ$  ( $c = 0.032$ ,  $\text{CHCl}_3$ ). **Pharm:** Platelet aggregation inhibitor (washed rabbit platelets, 20  $\mu\text{g/mL}$ , 100  $\mu\text{mol/L}$  AA-induced, AggRt = 2.9%, control 50  $\mu\text{mol/L}$  Aspirin, AggRt = 100%; 10  $\mu\text{g/mL}$  collagen-induced, AggRt = 4.7%, 100  $\mu\text{mol/L}$  Aspirin, AggRt = 4.9%; 0.1 U/mL thrombin-induced, AggRt = 8.1%, 100  $\mu\text{mol/L}$  Aspirin, AggRt = 1.7%; 2 ng/mL PAF-induced, AggRt = 2.9%, 100  $\mu\text{mol/L}$  Aspirin, AggRt = 2.1%). **Source:** SAN QI CAO *Gynura segetum* [Syn. *Gynura japonica*] (rhizome). **Ref:** 5427.

**9737 Hydropiperoside**

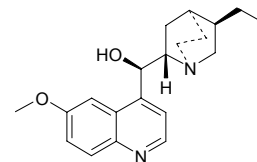
$C_{39}H_{40}O_{17}$  (780.74). Amorphous powder,  $[\alpha]_D = 61.86^\circ$  ( $c = 0.31$ , MeOH). **Source:** SHUI LIAO *Polygonum hydropiper* (root), YU LIAO *Polygonum lapathifolium* (aerial parts). **Ref:** 660, 3091.

**9738 Hydroquinidine**

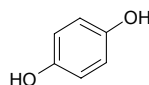
[1435-55-8]  $C_{20}H_{26}N_2O_2$  (326.44). mp 168~169°C. **Pharm:** Antiarrhythmic; antimalarial. **Source:** ZHENG JI NA SHU *Cinchona officinalis*, JIN JI LE *Cinchona ledgeriana*. **Ref:** 6, 658.

**9739 Hydroquinine**

[522-66-7]  $C_{20}H_{26}N_2O_2$  (326.44). mp 172.3°C. **Pharm:** Antimalarial; decolorant. **Source:** JIN JI LE *Cinchona ledgeriana*. **Ref:** 6, 658.

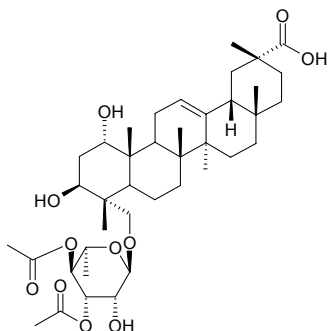
**9740 Hydroquinone**

1,4-Benzenediol; *p*-Quinol [123-31-9]  $C_6H_6O_2$  (110.11). mp 170.3°C. **Pharm:** Antibacterial; antineoplastic; antimitotic; cytotoxic (rat, liver carcinoma cells); urease inhibitor; antihypertensive; LD<sub>50</sub> (rat, orl) = 320 mg/kg. **Source:** DUO ZHI SONG *Pinus resinosa*, HUI QIN *Pimpinella anisum*, JI SHI TENG *Paederia scandens*, JI SHI TENG GUO *Paederia scandens*, JIA NA DA CANG ER *Xanthium canadense*, MAN SHAN HONG *Rhododendron dauricum*, MI PU LUO TI YA MU *Protea mellifera*, QIAN LI GUANG *Senecio scandens* [Syn. *Senecio chinensis*], XI YANG LI *Pyrus communis*, YUE JU YE *Vaccinium vitis-idaea*. **Ref:** 6, 658.



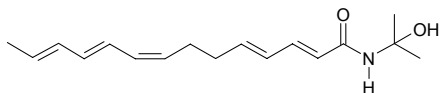
**9741 1 $\alpha$ ,3 $\beta$ -Hydroxyimberbic acid-23-*O*- $\alpha$ -L-3,4-diacetylramnopyranoside**

1 $\alpha$ ,3 $\beta$ ,23-Trihydroxy-olean-12-en-29-oate-23-*O*- $\alpha$ -L-3,4-diacetylramnopyranoside C<sub>40</sub>H<sub>62</sub>O<sub>11</sub> (718.93). Yellow amorphous solid, mp 190°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +56.8° (*c* = 0.22, MeOH). Source: WU MAO FENG CHE ZI *Combretum imberbe*. Ref: 2068.



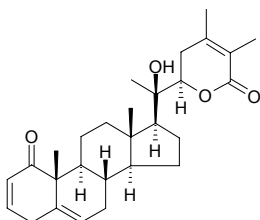
**9742 Hydroxy- $\gamma$ -Sanshool**

C<sub>17</sub>H<sub>25</sub>NO<sub>2</sub> (275.39). Pharm: Platelet aggregation inhibitor. Source: QUAN YUAN YE HUA JIAO *Zanthoxylum integrifoliolum*. Ref: 2176.



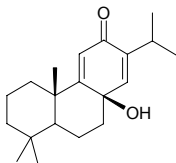
**9743 20 $\beta$ -Hydroxy-1-oxo-(22*R*)-witha-2,5,24-trienolide**

C<sub>28</sub>H<sub>38</sub>O<sub>4</sub> (438.61). [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +34° (*c* = 0.053, CHCl<sub>3</sub>). Source: NING GU SHUI QIE *Withania coagulans*. Ref: 3378.



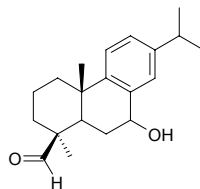
**9744 8 $\beta$ -Hydroxy-9(11),13-abietadien-12-one**

C<sub>20</sub>H<sub>30</sub>O<sub>2</sub> (302.46). Amorphous solid, mp 180°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -140° (*c* = 1.0, CHCl<sub>3</sub>). Source: CHANG GENG CU FEI *Cephalotaxus harringtonia* var. *drupacea*. Ref: 5401.



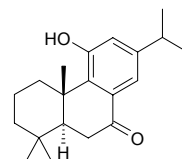
**9745 7 $\beta$ -Hydroxyabieta-8,11,13-trien-19-al**

C<sub>20</sub>H<sub>28</sub>O<sub>2</sub> (300.44). Oil. Source: LONG BAI *Juniperus chinensis* var. *kaizuka* (leaf: yield = 0.000044%dw). Ref: 3050.



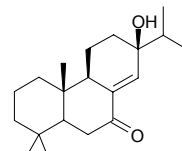
**9746 11-Hydroxyabieta-8,11,13-trien-7-one**

C<sub>20</sub>H<sub>28</sub>O<sub>2</sub> (300.44). Amorphous solid, [ $\alpha$ ]<sub>D</sub><sup>23</sup> = +22.3° (*c* = 0.3, CHCl<sub>3</sub>). Source: TAI WAN SHAN *Taiwania cryptomerioides* (bark). Ref: 4443.



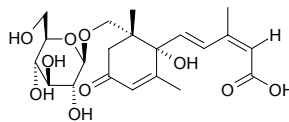
**9747 13 $\beta$ -Hydroxyabiet-8(14)-en-7-one**

C<sub>20</sub>H<sub>32</sub>O<sub>2</sub> (304.48). Colorless oil, [ $\alpha$ ]<sub>D</sub> = +45.0° (*c* = 0.34, CHCl<sub>3</sub>). Pharm: Cytotoxic (A549, IC<sub>50</sub> > 5 $\mu$ g/mL; H116, IC<sub>50</sub> > 5 $\mu$ g/mL; PSN1, IC<sub>50</sub> > 5 $\mu$ g/mL; T98G, IC<sub>50</sub> > 5 $\mu$ g/mL; SKBR3, IC<sub>50</sub> > 5 $\mu$ g/mL). Source: BEI FEI XUE SONG *Cedrus atlantica* (cone). Ref: 5248.



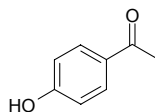
**9748 (1'*S*,6'*R*)-8'-Hydroxyabscisic acid  $\beta$ -*D*-glucoside**

(1'*S*,6'*R*,2*Z*,4*Z*)-5-[(1'-Hydroxy-2',6'-dimethyl-6'-hydroxymethyl-4'-oxo-8'- $\beta$ -*D*-glucosyl)-cyclohex-2'-en-1'-yl]-3-methyl-penta-2,4-dienoic acid C<sub>21</sub>H<sub>30</sub>O<sub>10</sub> (442.47). Ambar gum, [ $\alpha$ ]<sub>D</sub> = +196.5° (*c* = 0.13, MeOH). Source: E LI *Persea americana* [Syn. *Persea gratissima*] (seed). Ref: 3796.



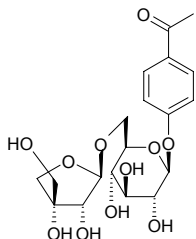
**9749 *p*-Hydroxyacetophenone**

[99-93-4] C<sub>8</sub>H<sub>8</sub>O<sub>2</sub> (136.15). mp 109°C. Pharm: Choleric. Source: HUANG HAO *Artemisia scoparia* [Syn. *Artemisia capillaris* var. *scoparia*] (aerial parts: content scope = 0.005%~0.04%<sup>[5501]</sup>). Ref: 2, 6, 5501.



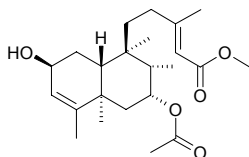
**9750 4-Hydroxyacetophenone 4-O-(6-O-β-D-apiofuranosyl)-β-D-glucopyranoside**

$C_{19}H_{26}O_{11}$  (430.41). **Pharm:** Antitrypanosomal (*Trypanosoma b. rhodesiense*,  $IC_{50} > 100\mu\text{g/mL}$ , control Melarsoprol,  $IC_{50} = 0.00098\mu\text{g/mL}$ ; *Trypanosoma cruzi*,  $IC_{50} > 90\mu\text{g/mL}$ , control Benznidazole,  $IC_{50} = 1.06\mu\text{g/mL}$ ); antileishmanial (*Leishmania donovani*,  $IC_{50} = 11.2\mu\text{g/mL}$ , control Miltefosine,  $IC_{50} = 0.102\mu\text{g/mL}$ ); antimalarial (*Plasmodium falciparum*,  $IC_{50} > 50\mu\text{g/mL}$ , control Artemisinin,  $IC_{50} = 0.0022\mu\text{g/mL}$ ); cytotoxic (L6,  $IC_{50} > 90\mu\text{g/mL}$ , control Podophyllotoxin,  $IC_{50} = 0.008\mu\text{g/mL}$ ). **Source:** ZONG KUI CAO SU *Phlomis brunneogaleata*. **Ref:** 5009.



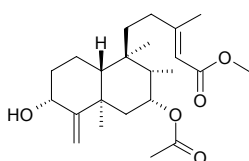
**9751 2β-Hydroxy-7-acetoxy-3,13-clerodadien-15-oic acid methyl ester**

$C_{23}H_{36}O_5$  (392.54).  $[\alpha]_D^{22} = -31.7^\circ$  ( $c = 0.59$ ,  $\text{CHCl}_3$ ). **Source:** GAO YI ZHI HUANG HUA *Solidago altissima*. **Ref:** 2366.



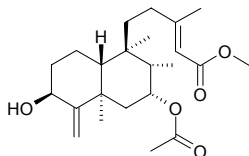
**9752 3α-Hydroxy-7-acetoxy-4(18),13-clerodadien-15-oic acid methyl ester**

$C_{23}H_{36}O_5$  (392.54).  $[\alpha]_D^{24} = -1.7^\circ$  ( $c = 0.24$ ,  $\text{CHCl}_3$ ). **Source:** GAO YI ZHI HUANG HUA *Solidago altissima*. **Ref:** 2366.



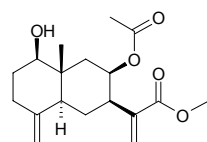
**9753 3β-Hydroxy-7-acetoxy-4(18),13-clerodadien-15-oic acid methyl ester**

$C_{23}H_{36}O_5$  (392.54). **Source:** GAO YI ZHI HUANG HUA *Solidago altissima*. **Ref:** 2366.



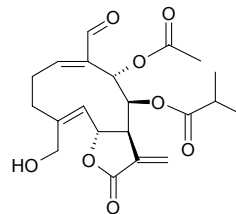
**9754 1β-Hydroxy-8β-acetoxycostic acid methyl ester**

$C_{18}H_{26}O_5$  (322.40). Colorless gum,  $[\alpha]_D^{25} = -38.0^\circ$  ( $c = 0.72$ ,  $\text{CHCl}_3$ ). **Source:** JIN FEI CAO *Inula japonica*. **Ref:** 5422.



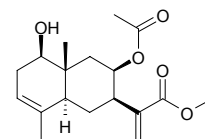
**9755 15-Hydroxy-9α-acetoxy-8β-isobutyryloxy-14-oxo-melampolide**

$C_{21}H_{26}O_8$  (406.44). **Source:** XI XIAN *Siegesbeckia orientalis*. **Ref:** 660.



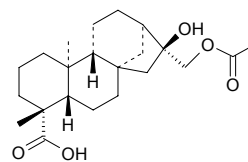
**9756 1β-Hydroxy-8β-acetoxyisocostic acid methyl ester**

$C_{18}H_{26}O_5$  (322.40). Colorless gum,  $[\alpha]_D^{25} = -21.9^\circ$  ( $c = 0.42$ ,  $\text{CHCl}_3$ ). **Source:** JIN FEI CAO *Inula japonica*. **Ref:** 5422.



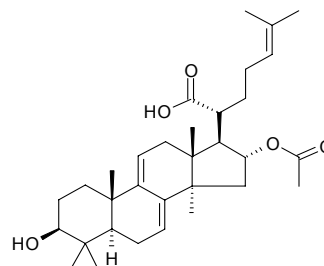
**9757 16β-Hydroxy-17-acetoxy-ent-kauran-19-oic acid**

$C_{22}H_{34}O_5$  (378.51). **Pharm:** Platelet aggregation selected inhibitor (washed rabbit platelets,  $200\mu\text{mol/L}$ :  $100\mu\text{mol/L}$  AA induced,  $\text{InRt} = 10.8\%$ ;  $10\mu\text{g/mL}$  collagen induced,  $\text{InRt} = 30.1\%$ ;  $1\text{ng/mL}$  PAF induced,  $\text{InRt} = 11.1\%$ ;  $0.05\text{U/mL}$  thrombin induced,  $\text{InRt} = 8.0\%$ )<sup>[4654]</sup>; antioxidant (inhibits superoxide anion generation,  $\text{fMLP/CB}$ ,  $IC_{50} = (2.40 \pm 0.16)\mu\text{g/mL}$ ,  $p < 0.001$ , control DPI,  $IC_{50} = (0.13 \pm 0.06)\mu\text{g/mL}$ ,  $p < 0.001$ )<sup>[4950]</sup>. **Source:** FAN LI ZHI *Annona squamosa* (stem: yield = 0.00060%fw). **Ref:** 4654, 4950.



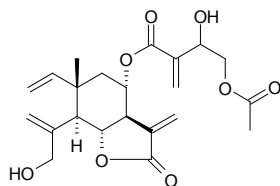
**9758 3β-Hydroxy-16α-acetoxy-lanosta-7,9(11),24-trien-21-oic acid**

$C_{32}H_{48}O_5$  (512.74). Colorless acicular crystals, mp  $269\text{--}270^\circ\text{C}$ . **Source:** FU LING *Poria cocos*. **Ref:** 809.



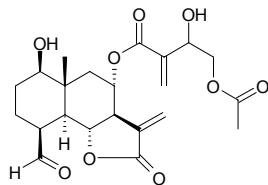
**9759 8 $\alpha$ -(3-Hydroxy-4-acetoxy-2-methylene-butanoyloxy)-dehydro-melitensin**

C<sub>22</sub>H<sub>28</sub>O<sub>8</sub> (420.46). **Pharm:** Antifungal (*Aspergillus niger*, MIC = 0.5 $\mu$ g/mL, control Miconazole, MIC = 1.5 $\mu$ g/mL; *Aspergillus ochraceus*, MIC = 0.25 $\mu$ g/mL, Miconazole, MIC = 1.5 $\mu$ g/mL; *Aspergillus versicolor*, MIC = 0.5 $\mu$ g/mL, Miconazole, MIC = 2 $\mu$ g/mL; *Aspergillus flavus*, MIC = 0.5 $\mu$ g/mL, Miconazole, MIC = 0.5 $\mu$ g/mL; *Penicillium ochrocloron*, MIC = 0.5 $\mu$ g/mL, Miconazole, MIC = 2 $\mu$ g/mL; *Penicillium funiculosum*, MIC = 1 $\mu$ g/mL, Miconazole, MIC = 2 $\mu$ g/mL; *Trichoderma viride*, MIC = 0.5 $\mu$ g/mL, Miconazole, MIC = 2 $\mu$ g/mL; *Cladosporium cladosporioides*, MIC = 0.5 $\mu$ g/mL, Miconazole, MIC = 0.03 $\mu$ g/mL; *Alternaria alternata*, MIC = 0.03 $\mu$ g/mL, Miconazole, MIC = 0.5 $\mu$ g/mL). **Source:** *Centaurea thessala* ssp. *drakiensis* (aerial parts). **Ref:** 5115.



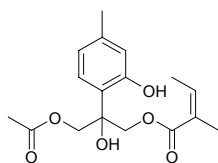
**9760 8 $\alpha$ -(3'-Hydroxy-4'-acetoxy-2'-methylene-butanoyloxy)4-epi-sonchucarpolide**

C<sub>22</sub>H<sub>28</sub>O<sub>9</sub> (436.46). Oil, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +29.3° (*c* = 0.15, CHCl<sub>3</sub>). **Pharm:** Antifungal (*Aspergillus niger*, MIC = 0.5 $\mu$ g/mL, control Miconazole, MIC = 1.5 $\mu$ g/mL; *Aspergillus ochraceus*, MIC = 1 $\mu$ g/mL, Miconazole, MIC = 1.5 $\mu$ g/mL; *Aspergillus versicolor*, MIC = 1 $\mu$ g/mL, Miconazole, MIC = 2 $\mu$ g/mL; *Aspergillus flavus*, MIC = 1 $\mu$ g/mL, Miconazole, MIC = 0.5 $\mu$ g/mL; *Penicillium ochrocloron*, MIC = 1 $\mu$ g/mL, Miconazole, MIC = 2 $\mu$ g/mL; *Penicillium funiculosum*, MIC = 1 $\mu$ g/mL, Miconazole, MIC = 2 $\mu$ g/mL; *Trichoderma viride*, MIC = 1 $\mu$ g/mL, Miconazole, MIC = 2 $\mu$ g/mL; *Cladosporium cladosporioides*, MIC = 1 $\mu$ g/mL, Miconazole, MIC = 0.03 $\mu$ g/mL; *Alternaria alternata*, MIC = 0.06 $\mu$ g/mL, Miconazole, MIC = 0.5 $\mu$ g/mL). **Source:** *Centaurea attica* ssp. *attica* (aerial parts). **Ref:** 5115.



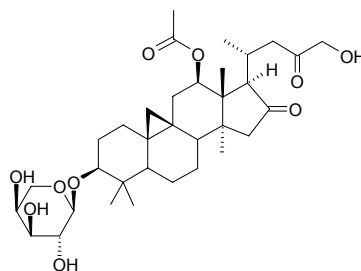
**9761 8-Hydroxy-10-acetoxythymol 9-O-angelate**

C<sub>17</sub>H<sub>22</sub>O<sub>6</sub> (322.36). [ $\alpha$ ]<sub>D</sub><sup>23</sup> = -7.9° (*c* = 1.2, CHCl<sub>3</sub>). **Source:** PEI LAN *Eupatorium fortunei* (aerial parts). **Ref:** 3077.



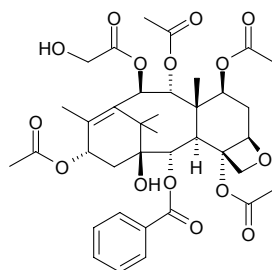
**9762 24-Hydroxy-12 $\beta$ -acetoxy-25,26,27-trinorcyloartan-16,23-dione 3 $\beta$ -O- $\alpha$ -L-arabinopyranoside**

C<sub>34</sub>H<sub>52</sub>O<sub>10</sub> (620.79). White powder (MeOH), mp 233~235°C. **Source:** XING AN SHENG MA *Cimicifuga dahurica* (rhizome). **Ref:** 4140.



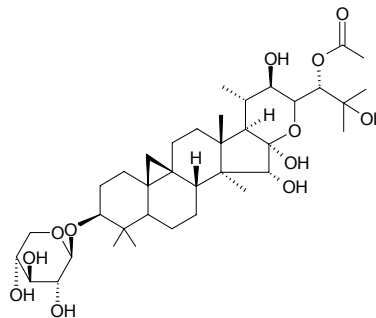
**9763 10-Hydroxyacetylbaaccatin VI**

C<sub>37</sub>H<sub>46</sub>O<sub>15</sub> (730.77). **Source:** JIA NA DA HONG DOU SHAN *Taxus canadensis*. **Ref:** 662.



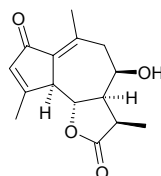
**9764 (22R)-22-Hydroxy-24-O-acetylhydroshengmanol 3-O- $\beta$ -D-xylopyranoside**

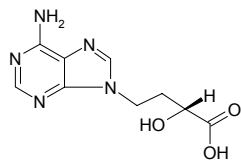
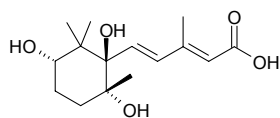
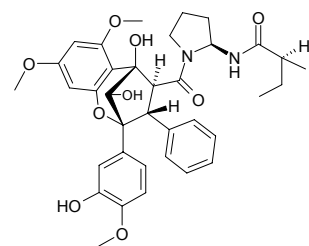
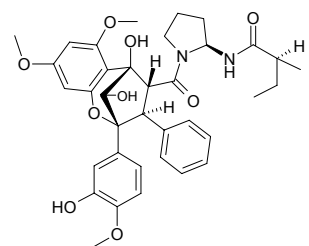
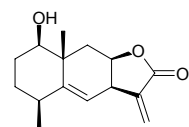
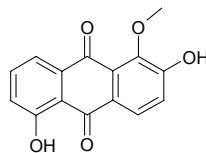
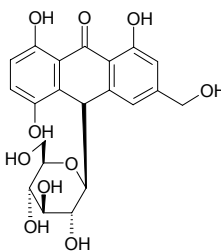
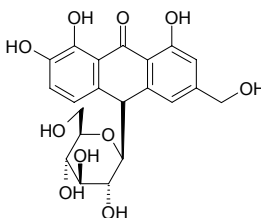
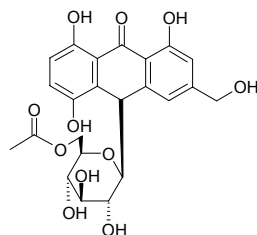
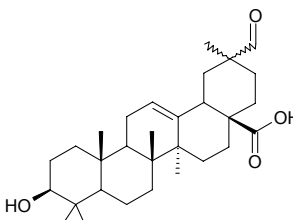
C<sub>37</sub>H<sub>60</sub>O<sub>12</sub> (696.88). White powder (MeOH), mp 226~228°C. **Source:** SAN MIAN DAO *Cimicifuga acerina*. **Ref:** 873.



**9765 Hydroxyachillin**

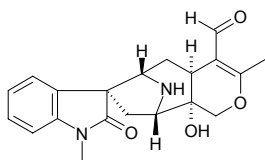
C<sub>14</sub>H<sub>16</sub>O<sub>4</sub> (248.28). **Pharm:** NO production inhibitor (LPS-induced, concentration-dependent manner, IC<sub>50</sub> = 2.8 $\mu$ mol/L or 21.2 $\mu$ mol/L); PGE<sub>2</sub> production inhibitor (LPS-induced, concentration-dependent manner, IC<sub>50</sub> = 10.8 $\mu$ mol/L or 28.6 $\mu$ mol/L). **Source:** XIAO YE JU HAO *Tanacetum microphyllum* (aerial parts). **Ref:** 4918.



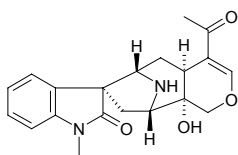
**9766 (2R)-Hydroxy-4-(9-adenyl)butyric acid**C<sub>9</sub>H<sub>11</sub>N<sub>5</sub>O<sub>3</sub> (237.22). Source: XIANG XUN *Lentinus edodes*. Ref: 6.**9767 sec-Hydroxyaeginitic acid**C<sub>15</sub>H<sub>24</sub>O<sub>5</sub> (284.36). Source: SHU DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*]. Ref: 660.**9768 3'-Hydroxyaglaine B**C<sub>36</sub>H<sub>42</sub>N<sub>2</sub>O<sub>9</sub> (646.74). [α]<sub>D</sub><sup>20</sup> = -11.4° (c = 0.25, CHCl<sub>3</sub>). Source: MI ZI LAN *Aglaia odorata*. Ref: 2289.**9769 3'-Hydroxyaglaine C**C<sub>36</sub>H<sub>42</sub>N<sub>2</sub>O<sub>9</sub> (646.74). [α]<sub>D</sub><sup>20</sup> = -103.4° (c = 0.43, CHCl<sub>3</sub>). Source: MI ZI LAN *Aglaia odorata*. Ref: 2289.**9770 1β-Hydroxy-alantolactone**C<sub>15</sub>H<sub>20</sub>O<sub>3</sub> (248.32). Source: JIN FEI CAO *Inula japonica*. Ref: 5422.**9771 5-Hydroxyalizarin-1-methylether**C<sub>15</sub>H<sub>10</sub>O<sub>5</sub> (270.24). Source: HU CI *Dammacanthus indicus*. Ref: 6.**9772 5-Hydroxyaloin A**C<sub>21</sub>H<sub>22</sub>O<sub>10</sub> (434.4). Source: MA SHI LU HUI *Aloe marlothii*. Ref: 726.**9773 7-Hydroxyaloin A**C<sub>21</sub>H<sub>22</sub>O<sub>10</sub> (434.40). Source: LU HUI *Aloe vera* [Syn. *Aloe barbadensis*]. Ref: 2.**9774 5-Hydroxyaloin A 6'-O-acetate**C<sub>23</sub>H<sub>24</sub>O<sub>11</sub> (476.44). Source: MA SHI LU HUI *Aloe marlothii*. Ref: 726.**9775 3β-Hydroxy-29(or 30)-al-olean-12-en-28-oic acid**C<sub>30</sub>H<sub>46</sub>O<sub>4</sub> (470.70). Source: BAI MU TONG *Akebia trifoliata* var. *australis*. Ref: 660.

**9776 16-Hydroxylstonal**

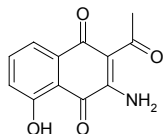
$C_{20}H_{22}N_2O_4$  (354.41). White amorphous powder,  $[\alpha]_D^{25} = +153^\circ$  ( $c = 0.26$ ,  $CHCl_3$ ). **Source:** DA YE TANG JIAO SHU *Alstonia macrophylla* (leaf; yield = 0.0036%). **Ref:** 3020.

**9777 16-Hydroxylstonisine**

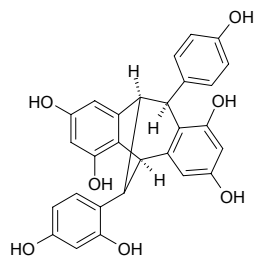
$C_{20}H_{22}N_2O_4$  (354.41). White amorphous powder,  $[\alpha]_D^{25} = +170^\circ$  ( $c = 0.15$ ,  $CHCl_3$ ). **Source:** DA YE TANG JIAO SHU *Alstonia macrophylla* (leaf; yield = 0.0016%). **Ref:** 3020.

**9778 5-Hydroxy-3-amino-2-acetyl-1,4-naphthoquinone**

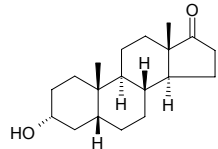
$C_{12}H_9NO_4$  (231.21). **Source:** *Goniothalamus* sp. **Ref:** 2447.

**9779 2b-Hydroxyampelopsin F**

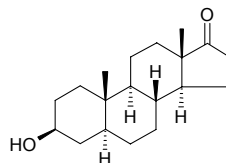
$C_{28}H_{22}O_7$  (470.48). Pale brownish amorphous solid. **Pharm:** Protein glycation (Maillard reaction) inhibitor (10  $\mu$ g/mL, InRt = 70%, protein glycation is one of the causes of diabetic complications and aging of the skin)<sup>[3550]</sup>. **Source:** MA LAI XI YA MAI MA TENG *Gnetum gnemonoides* (stem), XIAN ZHOU MAI MA TENG *Gnetum gnemon* (root), XIAO YE MAI MA TENG *Gnetum parvifolium* [Syn. *Gnetum indicum*] (bark). **Ref:** 3550, 4200.

**9780 3 $\alpha$ -Hydroxy-5 $\beta$ -androstan-17-one**

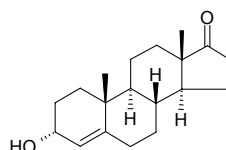
$C_{19}H_{30}O_2$  (290.45). **Source:** SHE XIANG *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*. **Ref:** 2.

**9781 3 $\beta$ -Hydroxy-5 $\alpha$ -androstan-17-one**

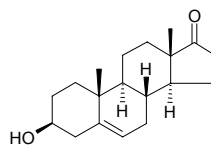
$C_{19}H_{30}O_2$  (290.45). **Source:** SHE XIANG *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*. **Ref:** 2.

**9782 3 $\alpha$ -Hydroxy-androst-4-ene-17-one**

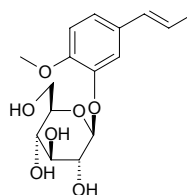
$C_{19}H_{28}O_2$  (288.43). **Source:** SHE XIANG *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*. **Ref:** 2, 660.

**9783 3 $\beta$ -Hydroxy-androst-5-ene-17-one**

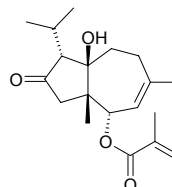
$C_{19}H_{28}O_2$  (288.43). **Source:** SHE XIANG *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*. **Ref:** 2.

**9784 (E)-3-Hydroxyanethole  $\beta$ -D-glucopyranoside**

$C_{16}H_{22}O_7$  (326.35). Amorphous powder,  $[\alpha]_D^{23} = -28^\circ$  ( $c = 0.4$ , MeOH). **Source:** HUI QIN *Pimpinella anisum* (fruit). **Ref:** 3402.

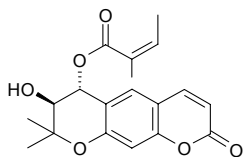
**9785 5 $\beta$ -Hydroxy-10 $\alpha$ -O-angeloyl-3-oxodauc-8-ene**

$C_{20}H_{30}O_4$  (334.46). Colorless cubes (EtOAc), mp 62~63°C,  $[\alpha]_D^{21} = -222.56^\circ$  ( $c = 1.22$ ,  $CHCl_3$ ). **Source:** DIAN QIN *Sinodielsia yunnanensis* (root and rhizome). **Ref:** 5470.

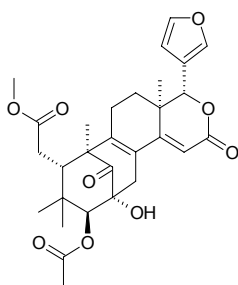


**9786 3'(S)-Hydroxy-4'(R)-angeloyloxy-3',4'-dihydroxanthyletin**

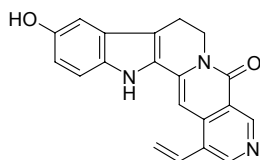
$C_{19}H_{20}O_6$  (344.37). White powder, mp 100~102°C. Source: QIAN HU *Angelica decursiva* [Syn. *Peucedanum decursivum*]. Ref: 874.

**9787 2-Hydroxyangustidenolide**

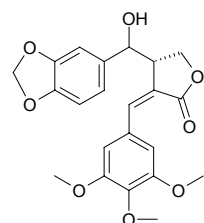
[26906-60-5]  $C_{29}H_{34}O_9$  (526.59). Crystals (MeOH), mp 210~220°C,  $[\alpha]_D^{25} = +101^\circ$  ( $c = 2$ ,  $CHCl_3$ ). Source: QIAN HU *Angelica decursiva* [Syn. *Peucedanum decursivum*] Ref: 2082.

**9788 10-Hydroxyangustine**

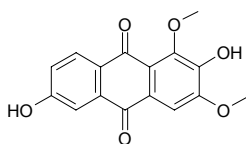
$C_{20}H_{15}N_3O_2$  (329.36). Pharm: Antibacterial (*in vitro*: *Staphylococcus aureus*, *Bacillus subtilis*, *Bacillus coli*, *Bacillus diphtheriae*, *Streptococcus* sp., *Streptobacillus* sp., *Salmonella* sp., *Bacillus proteus*, *Bacillus lactis*, *Klebsiella pneumoniae*); antileishmanial; antifungal (*Aspergillus niger*). Source: KUAN YE WU TAN *Nauclea latifolia*. Ref: 2178.

**9789 7-Hydroxyanhydriporhizol**

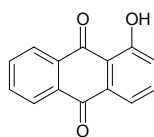
$C_{22}H_{22}O_8$  (414.42). Source: E SHEN *Anthriscus sylvestris*. Ref: 5499.

**9790 6-Hydroxy-anthragalol-1,3-dimethylether**

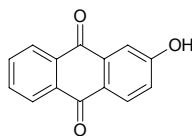
$C_{16}H_{12}O_6$  (300.27). Source: HAI BA JI *Morinda citrifolia* (fruit). Ref: 4542.

**9791  $\alpha$ -Hydroxyanthraquinone**

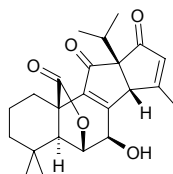
[129-43-1]  $C_{14}H_8O_3$  (224.22). mp 193°C (sub). Source: BA JI TIAN *Morinda officinalis*, WANG JIANG NAN *Cassia occidentalis*. Ref: 6, 228.

**9792 2-Hydroxyanthraquinone**

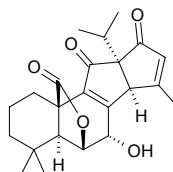
[605-32-3]  $C_{14}H_8O_3$  (224.22). mp 306°C, 320°C. Source: YANG JIAO TENG *Morinda umbellata*. Ref: 6.

**9793 *rel*-(5S,6S,7R,10R,12S,13R)-7-Hydroxyapiana-8,14-diene-11,16-dion-(22,6)-olide**

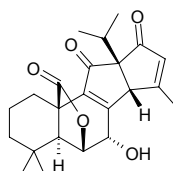
$C_{23}H_{28}O_5$  (384.48). Amorphous solid,  $[\alpha]_D^{27} = +89.2^\circ$  ( $c = 0.251$ ,  $CHCl_3$ ). Source: YAO YONG DAN SHEN YE *Salvia officinalis*. Ref: 5226.

**9794 *rel*-(5S,6S,7S,10R,12R,13S)-7-Hydroxyapiana-8,14-diene-11,16-dion-(22,6)-olide**

$C_{23}H_{28}O_5$  (384.48). Amorphous solid,  $[\alpha]_D^{27} = +18.8^\circ$  ( $c = 0.136$ ,  $CHCl_3$ ). Source: YAO YONG DAN SHEN YE *Salvia officinalis*. Ref: 5226.

**9795 *rel*-(5S,6S,7S,10R,12S,13R)-7-Hydroxyapiana-8,14-diene-11,16-dion-(22,6)-olide**

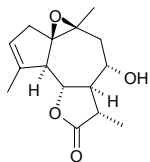
$C_{23}H_{28}O_5$  (384.48). Colorless needles (benzene-acetone), mp 245°C,  $[\alpha]_D^{27} = +131.3^\circ$  ( $c = 0.420$ ,  $CHCl_3$ ). Source: YAO YONG DAN SHEN YE *Salvia officinalis*. Ref: 5226.



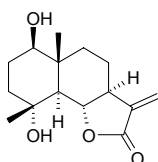


**9796 8 $\alpha$ -Hydroxyarborescin**

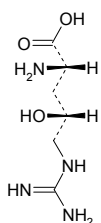
C<sub>15</sub>H<sub>22</sub>O<sub>4</sub> (264.32). Source: YI KUA *Artemisia myriantha* (aerial parts). Ref: 4618.

**9797 1 $\beta$ -Hydroxyarbusculin A**

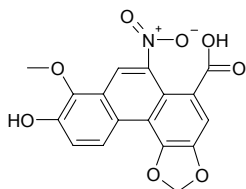
C<sub>15</sub>H<sub>22</sub>O<sub>4</sub> (266.34). Colorless acicular crystals, mp 194~196°C. Source: YUN NAN HAN XIAO *Michelia yunnanensis*. Ref: 426.

**9798  $\gamma$ -Hydroxyarginine**

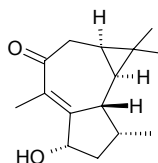
[61370-10-3] C<sub>6</sub>H<sub>14</sub>N<sub>4</sub>O<sub>3</sub> (190.20). Pharm: Enzymatic substrate (arginase, arginine decarboxylase, *L*-amino-acidoxidase); germination inhibitor (toxic to plants). Source: DA CHAO CAI *Vicia sativa*, BING DOU *Lens culinaris*, *Vicia* sp. Ref: 6, 658, 1521.

**9799 7-Hydroxy-aristolochic acid A**

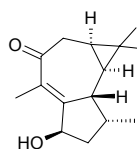
[79185-75-4] C<sub>17</sub>H<sub>11</sub>NO<sub>8</sub> (357.28). Source: MA DOU LING *Aristolochia debilis* [Syn. *Aristolochia longa*], HAN FANG JI *Aristolochia heterophylla*. Ref: 517, 660.

**9800 2 $\alpha$ -Hydroxyaromadendr-1(10)-en-9-one**

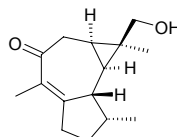
C<sub>15</sub>H<sub>22</sub>O<sub>2</sub> (234.34). Cubes (acetone), mp 72~74°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -91° (*c* = 18.6, CHCl<sub>3</sub>). Pharm: Insecticidal (adult *Cylas formicarius elegantulus*, 0.04mg/insect, 24h mortality = 0%, 48h mortality = 30%, 72h mortality = 80%). Source: *Curvularia lunata*. Ref: 5140.

**9801 2 $\beta$ -Hydroxyaromadendr-1(10)-en-9-one**

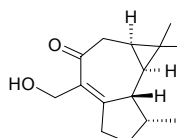
C<sub>15</sub>H<sub>22</sub>O<sub>2</sub> (234.34). Cubes (acetone), mp 85~86°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -186° (*c* = 6.3, CHCl<sub>3</sub>). Pharm: Insecticidal (adult *Cylas formicarius elegantulus*, 0.04mg/insect, 24h mortality = 0%, 48h mortality = 30%, 72h mortality = 100%). Source: *Curvularia lunata*. Ref: 5140.

**9802 13-Hydroxyaromadendr-1(10)-en-9-one**

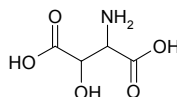
C<sub>15</sub>H<sub>22</sub>O<sub>2</sub> (234.34). Oil, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -118° (*c* = 4.4, CHCl<sub>3</sub>). Pharm: Insecticidal (adult *Cylas formicarius elegantulus*, 0.04mg/insect, 24h mortality = 10%, 48h mortality = 40%, 72h mortality = 100%). Source: *Curvularia lunata*. Ref: 5140.

**9803 14-Hydroxyaromadendr-1(10)-en-9-one**

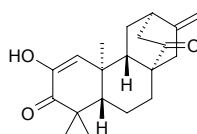
C<sub>15</sub>H<sub>22</sub>O<sub>2</sub> (234.34). Cubes (EtOH), mp 61~62°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -98° (*c* = 3.9, CHCl<sub>3</sub>). Pharm: Insecticidal (adult *Cylas formicarius elegantulus*, 0.04mg/insect, 24h mortality = 0%, 48h mortality = 30%, 72h mortality = 80%). Source: *Curvularia lunata*. Ref: 5140.

**9804 erythro- $\beta$ -Hydroxy-*L*-aspartic acid**

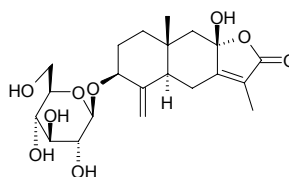
[4294-45-5] C<sub>4</sub>H<sub>7</sub>NO<sub>3</sub> (149.10). mp 210°C. Source: ZI YUN YING ZI *Astragalus sinicus*. Ref: 6.

**9805 ent-2-Hydroxyatis-1,16(17)-dien-3,14-dione**

C<sub>20</sub>H<sub>26</sub>O<sub>3</sub> (314.43). White powder. Source: DA GUO DA JI *Euphorbia wallichii* (root). Ref: 4585.

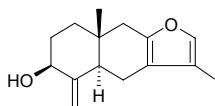
**9806 (3*S*)-3-Hydroxyatractylenolide III 3-*O*- $\beta$ -D-glucopyranoside**

C<sub>21</sub>H<sub>30</sub>O<sub>9</sub> (426.47). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>22</sup> = +95° (*c* = 1.1, MeOH). Source: GUAN CANG ZHU *Atractylodes japonica* (fresh rhizome). Ref: 4310.

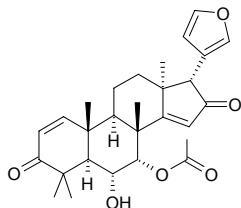


**9807 3 $\beta$ -Hydroxyatractylone**

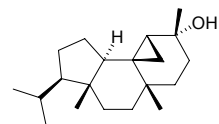
C<sub>15</sub>H<sub>20</sub>O<sub>2</sub> (232.33). **Source:** CANG ZHU *Atractylodes lancea*. **Ref:** 2.

**9808 6 $\alpha$ -Hydroxyazadiradione**

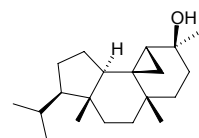
C<sub>28</sub>H<sub>34</sub>O<sub>6</sub> (466.58). Pale yellow gum, [ $\alpha$ ]<sub>D</sub> = +23° (c = 0.312, CHCl<sub>3</sub>). **Source:** *Quivisia papinae* (seed). **Ref:** 3759.

**9809 13 $\alpha$ -Hydroxyazorellane**

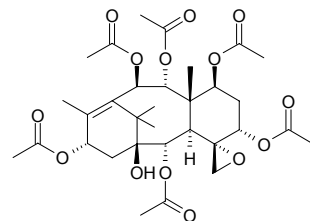
C<sub>20</sub>H<sub>34</sub>O (290.49). **Pharm:** Trichomonocidal (*Trichomonas vaginalis*, LD<sub>50</sub> = 119  $\mu$ mol/L). **Source:** *Azorella yareta* (aerial parts). **Ref:** 5125.

**9810 13 $\beta$ -Hydroxyazorellane**

C<sub>20</sub>H<sub>34</sub>O (290.49). Needles, mp 95–96°C (petrol–EtOAc), [ $\alpha$ ]<sub>D</sub><sup>24</sup> = +17.2° (c = 0.23, CHCl<sub>3</sub>). **Pharm:** Trichomonocidal (*Trichomonas vaginalis*, LD<sub>50</sub> = 100  $\mu$ mol/L). **Source:** *Azorella yareta* (aerial parts). **Ref:** 5125.

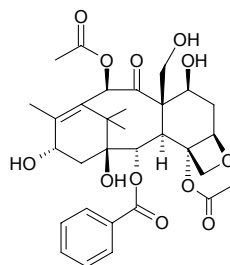
**9811 1 $\beta$ -Hydroxybaccatin I**

[30244-37-2] C<sub>32</sub>H<sub>44</sub>O<sub>14</sub> (652.70). **Pharm:** Antioxidant (DPPH free radical scavenger, IC<sub>50</sub> > 200  $\mu$ mol/L, control Caffeic acid, IC<sub>50</sub> = 25.5  $\mu$ mol/L); NO production inhibitor (IC<sub>50</sub> = 92.0  $\mu$ mol/L, control L-NMMA, IC<sub>50</sub> = 28.5  $\mu$ mol/L)<sup>[5407]</sup>. **Source:** JIANG GUO ZI SHAN *Taxus baccata*, XI MA LA YA HONG DOU SHAN *Taxus wallichiana*, MEI LI HONG DOU SHAN *Taxus mairei*, YUN NAN HONG DOU SHAN *Taxus yunnanensis* (wood). **Ref:** 300, 662, 5407.

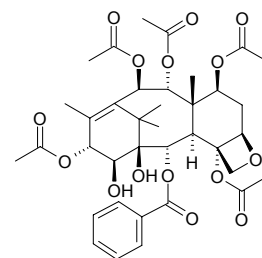
**9812 19-Hydroxybaccatin III**

C<sub>31</sub>H<sub>38</sub>O<sub>12</sub> (602.64). **Pharm:** Cytotoxic (*in vitro*, 30  $\mu$ g/mL: A498, InRt = 26.7%; NCI-H226, InRt = 44.6%; A549, InRt = 0%; PC3, InRt = 47.7%; control Taxol, 30  $\mu$ g/mL: A498, InRt = 98.2%; NCI-H226, InRt = 71.2%; A549, InRt = 79.7%; PC3, InRt = 91.7%)<sup>[4800]</sup>. **Source:** JIANG GUO ZI

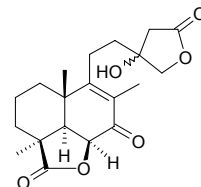
SHAN *Taxus baccata*, SU MEN DA LA HONG DOU SHAN *Taxus sumatrana* (twig and leaf: yield = 0.00002%dw)<sup>[4666, 4800]</sup>, XI MA LA YA HONG DOU SHAN *Taxus wallichiana*, YUN NAN HONG DOU SHAN *Taxus yunnanensis*. **Ref:** 662, 4666, 4800.

**9813 14 $\beta$ -Hydroxybaccatin VI**

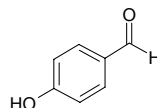
C<sub>37</sub>H<sub>46</sub>O<sub>15</sub> (730.77). Colorless needles, mp 241–243°C [ $\alpha$ ]<sub>D</sub><sup>15.8</sup> = +9.42° (c = 0.57, MeOH). **Source:** HONG DOU SHAN *Taxus chinensis*. **Ref:** 2488.

**9814 13-Hydroxy ballonigrinolide**

[71135-32-5] C<sub>20</sub>H<sub>26</sub>O<sub>6</sub> (362.43). White crystals. **Source:** BO SI YI MU CAO *Leonurus persicus*. **Ref:** 2499.

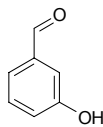
**9815 p-Hydroxybenzaldehyde**

[123-08-0] C<sub>7</sub>H<sub>6</sub>O<sub>2</sub> (122.12). **Pharm:** Cytotoxic inactive (Colon26-L5, HT1080, 100  $\mu$ mol/L)<sup>[3042]</sup>; cytotoxic inactive (*in vitro*, HONE-1 and NUGC cancer cell lines, no significant activity)<sup>[3069]</sup>. **Source:** ER RUI HE LIAN DOU *Drymaria diandra* [Syn. *Drymaria cordata* ssp. *diandra*] (whole herb: yield = 0.000028%dw)<sup>[4758]</sup>, KAI KOU JIAN *Tupistra chinensis* (underground part)<sup>[4676]</sup>, MU ZEI *Equisetum hiemale*, PI JIU HUA *Humulus lupulus* (strobile)<sup>[4789]</sup>, PU HUANG *Typha angustata*, RI BEN HUANG BAI *Phellodendron japonicum* (leaf), SANG HUANG *Phellinus ignarius* (sporocarp: yield = 0.00066%dw)<sup>[4747]</sup>, TAI WAN HUANG BO *Phellodendron amurense* var. *wilsonii* (leaf: yield = 0.00015%dw)<sup>[4722]</sup>, TAI WAN PU GONG YING *Taraxacum formosanum* (fresh root), TIAN MA *Gastrodia elata*, YI ZHU QIAN MA *Urtica dioica*, YUN NAN CAO KOU *Alpinia blepharocalyx* (seed: yield = 0.00193%)<sup>[3042]</sup>, ZHONG GUO XIU QIU *Hydrangea chinensis* (root)<sup>[3069]</sup>. **Ref:** 2, 660, 3042, 3069, 4488, 4502, 4676, 4722, 4747, 4758, 4789.

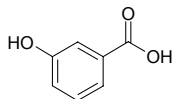


**9816 *m*-Hydroxybenzaldehyde**

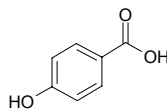
$C_7H_6O_2$  (122.12). Source: DI SUO LUO *Marchantia polymorpha*. Ref: 660.

**9817 *m*-Hydroxybenzoic acid**

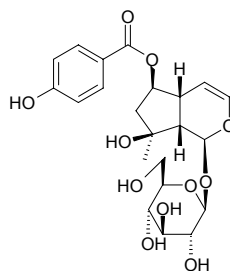
*m*-Salicylic acid [99-06-9]  $C_7H_6O_3$  (138.12). Source: MU ZEI *Equisetum hiemale*. Ref: 2.

**9818 *p*-Hydroxybenzoic acid**

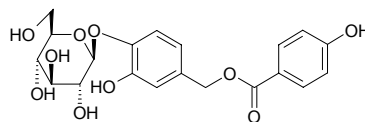
*p*-Salicylic acid [99-96-7]  $C_7H_6O_3$  (138.12). White crystals (water), mp 216–218°C. Pharm: Prostaglandin synthetase activator; antimutagenic; antidote (mus, cobra-poisoning); inhibits sickling action of cells; NO production inhibitor inactive (LPS-activated macrophage-like J774.1 cells,  $IC_{50} = 150\mu\text{g/mL}$ , control *L*-NMMA,  $IC_{50} = 27.4\mu\text{g/mL}$ )<sup>[4473]</sup>; antioxidant (DPPH scavenger,  $IC_{50} = 87.6\mu\text{mol/L}$ , control Vitamin E,  $IC_{50} = 27.0\mu\text{mol/L}$ )<sup>[4502]</sup>. Source: BAN BIAN LIAN *Lobelia chinensis* [Syn. *Lobelia radicans*], DA CHE QIAN *Plantago major*, DUO HUA SHAO YAO *Paeonia emodi* (fruit), ER RUI HE LIAN DOU *Drymaria diandra* [Syn. *Drymaria cordata* ssp. *diandra*] (whole herb: yield = 0.000042%dw)<sup>[4758]</sup>, GE YE MI HOU TAO *Actinidia rubricaulis* var. *coriacea* (ripe fruit: content = 0.19%)<sup>[5508]</sup>, GUAN MU TONG *Aristolochia manshuriensis* (stem: yield = 0.00001%)<sup>[4706]</sup>, HE SE ZHONG HUA SHU *Tabebuia avellanadae* (inner bark), HONG HUA JIAO *Zanthoxylum rubescens*, HUA NAN MI HOU TAO *Actinidia glaucophylla* (ripe fruit: content = 0.17%)<sup>[5508]</sup>, JI MAO SONG *Podocarpus imbricatus*, JIN HUA MI HOU TAO *Actinidia chrysantha* (ripe fruit: content = 0.24%)<sup>[5508]</sup>, JIN HUANG GE JUN *Thelephora aurantiotincta*, JING LI MI HOU TAO *Actinidia callosa* var. *henryi* (ripe fruit: content = 0.24%)<sup>[5508]</sup>, KUO YE MI HOU TAO *Actinidia latifolia* (ripe fruit: content = 0.14%)<sup>[5508]</sup>, LV BEI GUI HUA *Excoecaria cochinchinensis* var. *viridis*, MAN JING ZI *Vitex trifolia*, MAO HUA MI HOU TAO *Actinidia eriantha* (ripe fruit: content = 0.08%)<sup>[5508]</sup>, MEI WEI MI HOU TAO *Actinidia deliciosa* (ripe fruit: content = 0.25%)<sup>[5508]</sup>, MENG ZI CAO HU JIAO *Peperomia duclouxii* (whole herb: yield = 0.00055%)<sup>[4733]</sup>, MI HOU LI *Actinidia arguta* (ripe fruit: content = 0.17%)<sup>[5508]</sup>, MI HOU TAO *Actinidia chinensis* (ripe fruit: content = 0.23%)<sup>[5508]</sup>, MU TIAN LIAO *Actinidia polygama* (ripe fruit: content = 0.09%)<sup>[5508]</sup>, MU ZEI *Equisetum hiemale*, MU ZEI MA HUANG *Ephedra equisetina*, PU<sup>(2)</sup> TAO *Vitis vinifera*, RI BEN HUANG BAI *Phellodendron japonicum* (leaf), SI ZI TAN *Pterocarpus santalinus*, TAI WAN FU RONG *Hibiscus taiwanensis*, TAI WAN HUANG BO *Phellodendron amurense* var. *wilsonii* (leaf: yield = 0.00037%dw)<sup>[4722]</sup>, TAI WAN PU GONG YING *Taraxacum formosanum* (fresh root), TIAN QIAO MAI GEN *Fagopyrum cymosum* [Syn. *Polygonum cymosum*], XUAN FU HUA *Inula britannica*, ZANG HONG HUA *Crocus sativus* (pollen), ZONG LV PI *Trachycarpus fortunei* (petiole and fibre of sheath, roasted petiole: mean content of 5 origins = 1.14%)<sup>[5508]</sup>, occurs in many plants. Ref: 2, 415, 544, 562, 594, 658, 660, 2529, 3423, 3802, 4233, 4473, 4488, 4502, 4544, 4706, 4722, 4733, 4758, 5508.

**9819 6-*O*-(4-Hydroxybenzoyl)-ajugol**

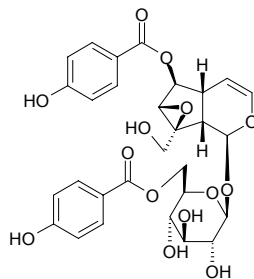
$C_{22}H_{28}O_{11}$  (468.46). Pharm: NO production inhibitor (LPS-activated macrophage-like J774.1 cells,  $IC_{50} = 26.1\mu\text{g/mL}$ , control *L*-NMMA,  $IC_{50} = 27.4\mu\text{g/mL}$ )<sup>[4473]</sup>. Source: GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *Huechingensis*], HE SE ZHONG HUA SHU *Tabebuia avellanadae* (inner bark). Ref: 2, 4473.

**9820 *p*-Hydroxybenzoyl calleryanin**

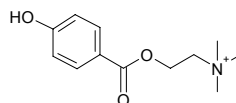
$C_{20}H_{22}O_{10}$  (422.39). Source: YE LI ZHI YE *Pyrus calleryana*. Ref: 6.

**9821 6'-*O*-*p*-Hydroxybenzoylcatalposide**

$C_{29}H_{30}O_{14}$  (602.55). Amorphous powder,  $[\alpha]_D^{25} = -123.5^\circ$  ( $c = 0.2$ , MeOH). Source: ZI YE *Catalpa ovata* (leaf, fallen leaf). Ref: 3536, 4290.

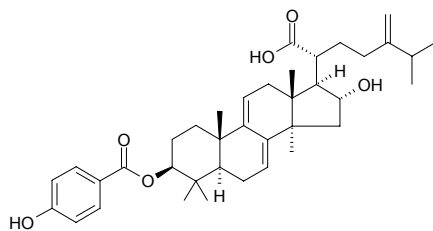
**9822 4-Hydroxybenzoyl choline**

$C_{12}H_{18}NO_3^+$  (224.28). Source: BAI JIE ZI *Sinapis alba* [Syn. *Brassica alba*; *Brassica hirta*]. Ref: 660.

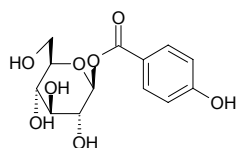


**9823 3 $\beta$ -*p*-Hydroxybenzoyldehydrotumulosic acid**

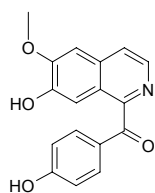
[213764-76-2] C<sub>38</sub>H<sub>52</sub>O<sub>6</sub> (604.83). Colorless acicular crystals (pyridine-*n*-hexane), mp 242~244°C, [ $\alpha$ ]<sub>D</sub> = 40° (*c* = 0.2, MeOH). Source: FU LING *Poria cocos*. Ref: 711.

**9824 1-*O*-(4-Hydroxybenzoyl)- $\beta$ -D-glucose**

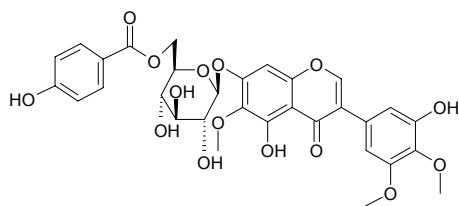
C<sub>13</sub>H<sub>16</sub>O<sub>8</sub> (300.27). Source: ZANG HONG HUA *Crocus sativus* (pollen). Ref: 4233.

**9825 1-(4-Hydroxybenzoyl)-7-hydroxy-6-methoxyisoquinoline**

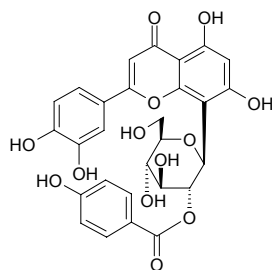
C<sub>17</sub>H<sub>13</sub>NO<sub>4</sub> (295.30). Red needles, mp 230~232°C. Source: BIAN FU GE GEN *Menispermum dauricum*. Ref: 3792.

**9826 6''-*O*-*p*-Hydroxybenzoyliridin**

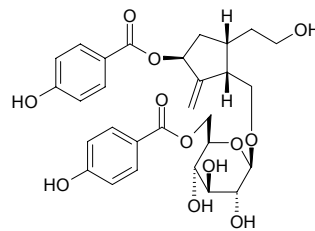
C<sub>31</sub>H<sub>30</sub>O<sub>15</sub> (642.58). Pale yellow amorphous powder, [ $\alpha$ ]<sub>D</sub> = +3.4° (*c* = 0.5, MeOH). Source: SHE GAN *Belamcanda chinensis* (rhizome). Ref: 4128.

**9827 2''-*O*-*p*-Hydroxybenzoylorientin**

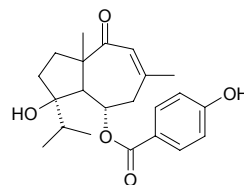
C<sub>28</sub>H<sub>24</sub>O<sub>13</sub> (568.50). Yellow amorphous powder. Source: ZUI GAO MU JING YE *Vitex altissima* (leaf). Ref: 5309.

**9828 7-*O*-*p*-Hydroxybenzoylovatol 1-*O*-(6'-*O*-*p*-hydroxybenzoyl)- $\beta$ -D-glucopyranoside**

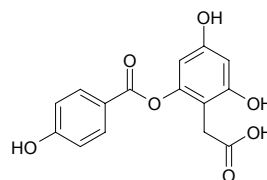
C<sub>29</sub>H<sub>34</sub>O<sub>12</sub> (574.59). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +22.2° (*c* = 0.3, MeOH). Source: ZI YE *Catalpa ovata* (leaf, fallen leaf). Ref: 3536, 4290.

**9829 5*a*-*p*-Hydroxybenzoyloxydauc-2-ene-1-one**

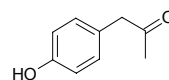
C<sub>22</sub>H<sub>28</sub>O<sub>5</sub> (372.47). Source: YI LANG A WEI *Ferula kuhistanica* (root). Ref: 3977.

**9830 2-*O*-(4-Hydroxybenzoyl)-2,4,6-trihydroxyphenylacetic acid**

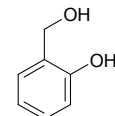
C<sub>15</sub>H<sub>12</sub>O<sub>7</sub> (304.26). Solid. Source: LI CHUN HUA *Papaver commutatum* [Syn. *Papaver rhoeas*] (petal). Ref: 4965.

**9831 *p*-Hydroxybenzyl acetone**

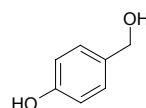
C<sub>9</sub>H<sub>10</sub>O<sub>2</sub> (150.18). Source: BAN ZHI LIAN *Scutellaria barbata* [Syn. *Scutellaria rivularis*]. Ref: 660.

**9832 2-Hydroxybenzyl alcohol**

C<sub>7</sub>H<sub>8</sub>O<sub>2</sub> (124.14). Source: QIAN MA *Urtica cannabina*. Ref: 660.

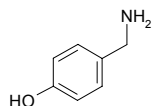
**9833 *p*-Hydroxybenzyl alcohol**

[623-05-2] C<sub>7</sub>H<sub>8</sub>O<sub>2</sub> (124.14). Source: SHAN HU LAN *Galeola faberi*, TIAN MA *Gastrodia elata*, YI ZHU QIAN MA *Urtica dioica*. Ref: 2, 280, 660.

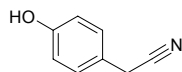


**9834 4-Hydroxybenzylamine**

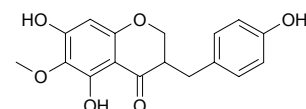
$C_7H_9NO$  (123.16). mp 114–115°C (dec). Source: QIAO MAI *Fagopyrum esculentum*. Ref: 6.

**9835 4-Hydroxybenzyl cyanide**

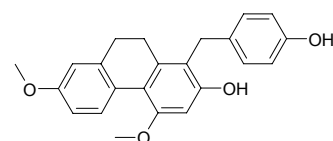
$C_8H_7NO$  (133.15). Source: FEN CHA DANG GUI *Angelica furcijuga* (flower). Ref: 4454.

**9836 3-(4-Hydroxybenzyl)-5,7-dihydroxy-6-methoxychroman-4-one**

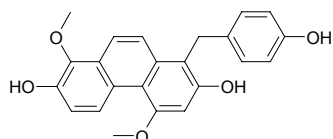
$C_{17}H_{16}O_6$  (316.31). Yellow plates ( $CH_2Cl_2$ ), mp 189–200°C. Source: *Scilla nervosa* (bulb). Ref: 2381.

**9837 1-(4-Hydroxybenzyl)-4,7-dimethoxy-9,10-dihydrophenanthrene-2-ol**

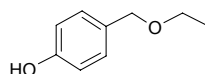
$C_{23}H_{22}O_4$  (362.43). Pale yellow amorphous powder. Source: LAN YU BAI JI *Bletilla formosana* (whole herb). Ref: 4500.

**9838 1-(4-Hydroxybenzyl)-4,8-di-methoxyphenanthrene-2,7-diol**

$C_{23}H_{20}O_5$  (376.41). Source: LAN YU BAI JI *Bletilla formosana* (whole herb). Ref: 4500.

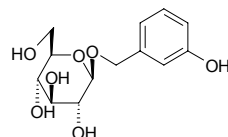
**9839 p-Hydroxybenzyl ethyl ether**

$C_9H_{12}O_2$  (152.19). Source: TIAN MA *Gastrodia elata*. Ref: 2.

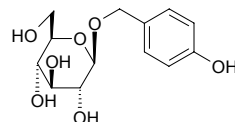
**9840 3-Hydroxybenzyl-1-O-β-D-glucopyranoside**

$C_{13}H_{18}O_7$  (286.28). Colorless oil. Pharm: Plant growth stimulatory or inhibitory activity (radicle length: *Lactuca sativa*, 1 μmol/L, StRt = (10–30)%, 10 μmol/L, StRt = (10–30)%, 100 μmol/L, StRt or InRt < 10%, 1 mmol/L, StRt or InRt < 10%; *Raphanus sativus*, 1 μmol/L, StRt or InRt < 10%, 10 μmol/L, StRt or InRt < 10%, 100 μmol/L, InRt = (10–30)%, 1 mmol/L, InRt = (10–30)%; *Allium cepa*, 1 μmol/L, StRt or InRt < 10%, 10 μmol/L, StRt or

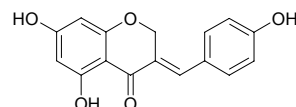
InRt < 10%, 100 μmol/L, StRt or InRt < 10%, 1 mmol/L, InRt = (10–30)%)<sup>[5217]</sup>. Source: RI BEN ZHANG YA CAI *Swertia japonica*, XI YANG JIE GU MU *Sambucus nigra*. Ref: 2528, 5217.

**9841 4-Hydroxybenzyl-O-β-D-glucopyranoside**

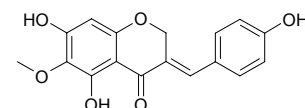
$C_{13}H_{18}O_7$  (286.28). Source: SHI LUO ZI *Anethum graveolens* (fruit). Ref: 4177.

**9842 3-(4-Hydroxybenzylidene)-5,7-dihydroxychroman-4-one**

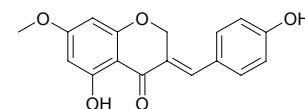
$C_{16}H_{12}O_5$  (284.27). Yellow powder, mp 208–211°C. Source: *Scilla nervosa* (bulb). Ref: 2381.

**9843 3-(4-Hydroxybenzylidene)-5,7-dihydroxy-6-methoxychroman-4-one**

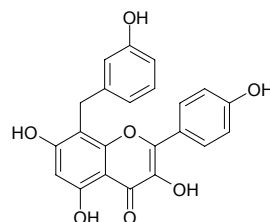
$C_{17}H_{14}O_6$  (314.30). Yellow powder, mp 242–245°C. Source: *Scilla nervosa* (bulb). Ref: 2381.

**9844 3-(4-Hydroxybenzylidene)-5-hydroxy-7-methoxychroman-4-one**

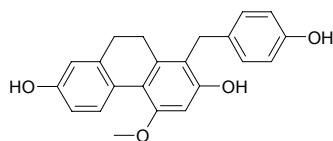
$C_{17}H_{14}O_5$  (298.30). Yellow gum. Source: *Scilla nervosa* (bulb). Ref: 2381.

**9845 8-C-p-Hydroxybenzylkaempferol**

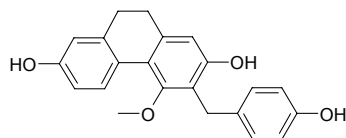
$C_{22}H_{16}O_7$  (392.37). Source: LAN YU BAI JI *Bletilla formosana* (whole herb). Ref: 4500.



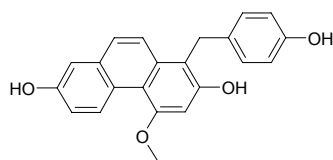
**9846 1-(*p*-Hydroxybenzyl)-4-methoxy-9,10-dihydrophenanthrene-2,7-diol**  
 $C_{22}H_{20}O_4$  (348.40). Colorless needles. **Pharm:** Antiallergic  $\beta$ -Hexosaminidase inhibitor (rat basophilic RBL-2H3 cells, inhibits release of  $\beta$ -hexosaminidase, 100  $\mu$ mol/L, InRt = (80.4 $\pm$ 3.3)  $\mu$ mol/L,  $p < 0.01$ ; 300  $\mu$ mol/L control Ketotifen fumarate, InRt = (72.5 $\pm$ 0.9)  $\mu$ mol/L,  $p < 0.01$ )<sup>[5022]</sup>. **Source:** LAN YU BAI JI *Bletilla formosana* (whole herb), SHOU ZHANG SHEN *Gymnadenia conopsea* (tuber). **Ref:** 4500, 5022.



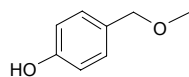
**9847 3-(*p*-Hydroxybenzyl)-4-methoxy-9,10-dihydrophenanthrene-2,7-diol**  
 $C_{22}H_{20}O_4$  (348.40). **Source:** BAI JI *Bletilla striata*. **Ref:** 660.



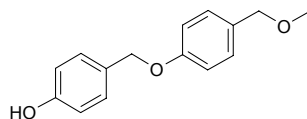
**9848 1-*p*-Hydroxybenzyl-4-methoxyphenanthrene-2,7-diol**  
 $C_{22}H_{18}O_4$  (346.39). Yellow needles. **Pharm:** Antiallergic  $\beta$ -Hexosaminidase inhibitor (rat basophilic RBL-2H3 cells, inhibits release of  $\beta$ -hexosaminidase, 100  $\mu$ mol/L, InRt = (97.5 $\pm$ 1.1)  $\mu$ mol/L,  $p < 0.01$ ; 300  $\mu$ mol/L control Ketotifen fumarate, InRt = (72.5 $\pm$ 0.9)  $\mu$ mol/L,  $p < 0.01$ )<sup>[5022]</sup>. **Source:** BAI JI *Bletilla striata*, LAN YU BAI JI *Bletilla formosana* (whole herb), SHOU ZHANG SHEN *Gymnadenia conopsea* (tuber). **Ref:** 660, 4500, 5022.



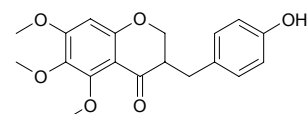
**9849 4-Hydroxybenzyl methyl ether**  
 $C_8H_{10}O_2$  (138.17). **Source:** TIAN MA *Gastrodia elata*. **Ref:** 2.



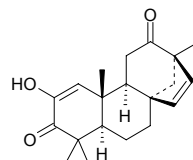
**9850 4-(4'-Hydroxybenzyloxy)benzyl methyl ether**  
 $C_{15}H_{16}O_3$  (244.29). **Source:** TIAN MA *Gastrodia elata*. **Ref:** 2.



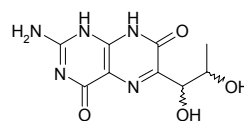
**9851 3-(4-Hydroxybenzyl)-5,6,7-trimethoxychroman-4-one**  
 $C_{19}H_{20}O_6$  (344.37). Yellow oil,  $[\alpha]_D^{25} = -231.9^\circ$  ( $c = 0.13$ , MeOH). **Source:** *Scilla nervosa* (bulb). **Ref:** 2381.



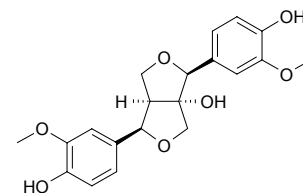
**9852 2-Hydroxy-1,15-beyeradiene-3,12-dione**  
 $C_{20}H_{26}O_3$  (314.43). Colorless oil,  $[\alpha]_D^{25} = -22.4^\circ$  ( $c = 0.53$ ,  $CHCl_3$ ). **Source:** HAI QI *Excoecaria agallocha* (root: yield = 0.0018%dw). **Ref:** 4613.



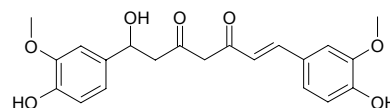
**9853 7-Hydroxybiopterin**  
 Ichthyopterin [490-58-4]  $C_9H_{11}N_5O_4$  (253.22). mp > 300°C (dec). **Source:** JIN YU *Carassius auratus*, QING WA *Rana nigromaculata*; *Rana plancyi*. **Ref:** 6.



**9854 (+)-1-Hydroxy-2,6-bis-epi-pinoresinol**  
 $C_{20}H_{22}O_7$  (374.39). **Pharm:** Antitubercular (*Mycobacterium tuberculosis*, MIC = 127  $\mu$ g/mL, cytotoxic, Vero cells, IC<sub>50</sub> = 91.0  $\mu$ g/mL, SI (IC<sub>50</sub>/MIC) = 0.72, positive control Rifampin, MIC = 0.03  $\mu$ g/mL, IC<sub>50</sub> = 98.3  $\mu$ g/mL, SI = 3300). **Source:** SHU HUA JIE CAO *Valeriana laxiflora* (aerial parts and root). **Ref:** 4986.

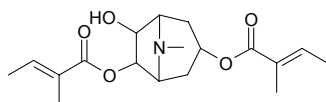


**9855 1 $\zeta$ -Hydroxy-1,7-bis(4-hydroxy-3-methoxyphenyl)-6-heptene-3,5-dione**  
 1 $\zeta$ -Hydroxydihydrocurcumin  $C_{21}H_{22}O_7$  (386.41). Yellow powder, mp 92~94°C. **Pharm:** Neuroprotective (*in vitro* protects PC12 cells from  $\beta$ -Amyloid insult: anti- $\beta$ A(25-35), ED<sub>50</sub> = (30.7 $\pm$ 3.3)  $\mu$ g/mL; anti- $\beta$ A(1-41), ED<sub>50</sub> = (44.3 $\pm$ 3.1)  $\mu$ g/mL; control Congo red: anti- $\beta$ A(25-35), ED<sub>50</sub> = (37.5 $\pm$ 5.4)  $\mu$ g/mL; anti- $\beta$ A(1-41), ED<sub>50</sub> = (39.2 $\pm$ 5.2)  $\mu$ g/mL)<sup>[4643]</sup>. **Source:** GAO LIANG JIANG *Alpinia officinarum*, JIANG HUANG *Curcuma longa* (turmeric powder: yield = 0.00008%dw). **Ref:** 660, 4643.

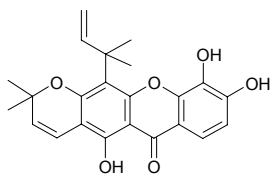


**9856 7-Hydroxy-3,6-bis(tigloyloxy)tropane**

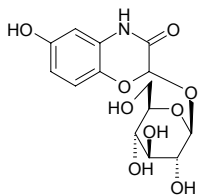
$C_{18}H_{27}NO_5$  (337.42). Source: MAO MAN TUO LUO GEN *Datura innoxia*.  
Ref: 6, 660.

**9857 3-Hydroxyblancoxanthone**

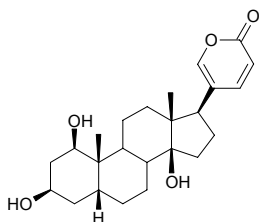
Macluraxanthone  $C_{23}H_{22}O_6$  (394.43). Yellowish powder. Pharm: Antimalarial; anthelmintic (termites); larvicide (toxic to mosquito larvae); cytotoxic (HSC-2 cells,  $CC_{50} > 0.51$ mmol/L; HGF,  $CC_{50} > 0.51$ mmol/L)<sup>[3025]</sup>; antibacterial inactive (*Staphylococcus aureus*, 20µg/disk; *Escherichia coli*, 20µg/disk; *Vibrio anguillarum*, 20µg/disk)<sup>[3866]</sup>; antifungal inactive (*Candida tropicalis*, 20µg/disk)<sup>[3866]</sup>; antioxidant (DPPDPPH scavenger, 50µmol/L, ScRt = 75.9%,  $IC_{50} = 19.0$ µmol/L; control BHT, 50µmol/L, ScRt = 51.7%,  $IC_{50} = 28.9$ µmol/L)<sup>[4423]</sup>. Source: GOU JI *Cudrania cochinchinensis* (root: yield = 0.00006%dw), HAI TANG GUO *Calophyllum inophyllum* (root cortex and nuts), HUANG NIU MU *Cratoxylum cochinchinense* (root), LUAN YE TENG HUANG *Garcinia ovalifolia*, SANG CHENG *Maclura pomifera*, *Calophyllum blancoi* (root). Ref: 658, 3025, 3866, 4441, 4423.

**9858 6-Hydroxy blepharin**

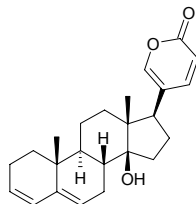
2-*O*-β-*D*-Glucopyranosyl-6-hydroxy-2*H*-1,4-benzoxazin-3(4*H*)-one  
 $C_{14}H_{17}NO_9$  (343.29). White solid. Source: YOU CHOU YE ZHI MA *Lamium galeobdolon* (aerial parts). Ref: 3504.

**9859 1β-Hydroxybufalin**

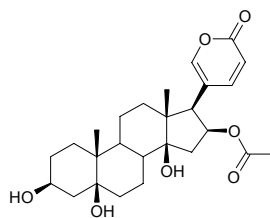
$C_{24}H_{34}O_5$  (402.54). Colorless solid,  $[\alpha]_D^{21} = -18.7^\circ$  ( $c = 0.1$ ,  $CH_3OH$ ). Pharm: Cytotoxic (*in vitro*, KB,  $IC_{50} = 0.19$ µg/mL; HL-60,  $IC_{50} < 0.01$ µg/mL; MH-60,  $IC_{50} > 25$ µg/mL; BXPC3,  $IC_{50} = 0.024$ µg/mL; MCF7,  $IC_{50} = 0.012$ µg/mL; SF268,  $IC_{50} = 0.0044$ µg/mL; NCI-H460,  $IC_{50} = 0.014$ µg/mL; KM20L2,  $IC_{50} = 0.011$ µg/mL; DU145,  $IC_{50} = 0.005$ µg/mL). Source: CHAN SU *Bufo bufo gargarizans*; *Bufo melanostictus*. Ref: 3082.

**9860 14β-Hydroxybufa-3,5,20,22-tetraenolide**

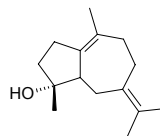
$C_{24}H_{30}O_3$  (366.50). Off-white powdery solid, mp 215–217°C. Source: CHU TU HAI CONG *Urginea epigea* (bulb). Ref: 3882.

**9861 5β-Hydroxybufotalin**

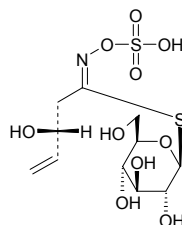
$C_{26}H_{36}O_7$  (460.57). Pharm: Cytotoxic (*in vitro*, KB,  $IC_{50} = 0.2$ µg/mL; HL-60,  $IC_{50} < 0.01$ µg/mL; MH-60,  $IC_{50} > 25$ µg/mL; BXPC3,  $IC_{50} = 0.11$ µg/mL; MCF7,  $IC_{50} = 0.046$ µg/mL; SF268,  $IC_{50} = 0.033$ µg/mL; NCI-H460,  $IC_{50} = 0.048$ µg/mL; KM20L2,  $IC_{50} = 0.034$ µg/mL; DU145,  $IC_{50} = 0.024$ µg/mL). Source: CHAN SU *Bufo bufo gargarizans*; *Bufo melanostictus*. Ref: 3082.

**9862 4-Hydroxy-β-bulnesene**

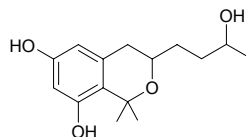
$C_{15}H_{24}O$  (220.36). Source: SHUANG YE XI XIN *Asarum caulescens*. Ref: 660.

**9863 2-Hydroxybut-3-enyl glucosinolate**

Progoitrin  $C_{11}H_{19}NO_{10}S_2$  (389.40). Source: JIE CAI *Brassica juncea*. Ref: 660.

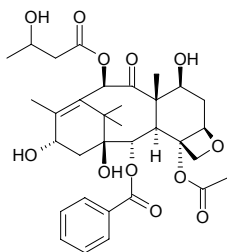
**9864 3-(3-Hydroxybutyl)-1,1-dimethylisochroman-6,8-diol**

$C_{15}H_{22}O_4$  (266.34). White solid,  $[\alpha]_D^{20} = -10.0^\circ$  ( $c = 0.05$ , MeOH). Source: MU LAN<sup>(3)</sup> *Bruguiera gymnorrhiza* (stem). Ref: 5057.

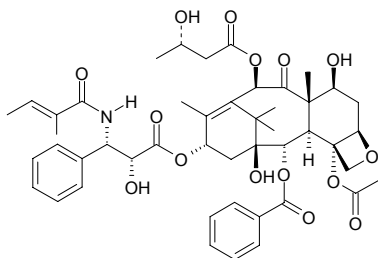


**9865 10-( $\beta$ -Hydroxybutyryl)-10-deacetylbaccatin I**

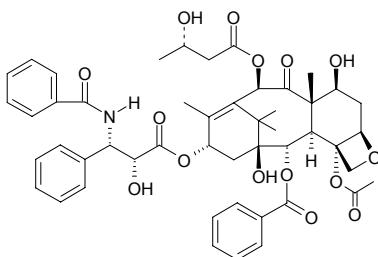
$C_{33}H_{42}O_{12}$  (630.70). Source: JIANG GUO ZI SHAN *Taxus baccata*. Ref: 662.

**9866 10-( $\beta$ -Hydroxybutyryl)-10-deacetylcephalomannine**

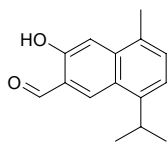
$C_{49}H_{57}NO_{15}$  (875.98). Source: JIANG GUO ZI SHAN *Taxus baccata*. Ref: 662.

**9867 10-( $\beta$ -Hydroxybutyryl)-10-deacetyltaxol**

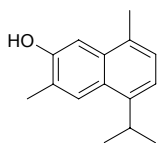
$C_{49}H_{55}NO_{15}$  (897.98). Source: JIANG GUO ZI SHAN *Taxus baccata*. Ref: 662.

**9868 7-Hydroxycadalenal**

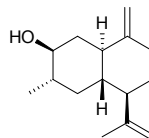
$C_{15}H_{16}O_2$  (228.29). mp 85°C. Source: LANG YU PI *Ulmus parvifolia*. Ref: 6.

**9869 7-Hydroxycadalene**

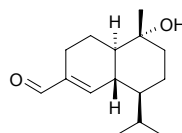
7-Hydroxycadalene [2102-75-2]  $C_{15}H_{18}O$  (214.31). White rhombic crystals (hexane), mp 118.0–119.5°C. Pharm: Antibacterial (gram-positive bacteria, MIC = 6.25–12.5  $\mu$ g/mL); antioxidant (10  $\mu$ g/mL, InRt = 70%); cytotoxic (HeLa, IC<sub>50</sub> = 1.96  $\mu$ g/mL, BT-20, IC<sub>50</sub> = 2.86  $\mu$ g/mL). Source: JI SU ZI *Cornus capitata* [Syn. *Dendrobenthamia capitata*], MU MIAN HUA *Bombax malabaricum* [Syn. *Gossampinus malabarica*]. Ref: 1066, 1083, 1142, 1143.

**9870 (4S)-3 $\beta$ -Hydroxycadina-10(15),12(13)-diene**

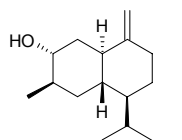
$C_{15}H_{24}O$  (220.36). Amorphous crystals, mp 79–83°C,  $[\alpha]_D = +121^\circ$  ( $c = 0.015$ , CHCl<sub>3</sub>). Pharm: Insecticidal (adult *Cylas formicarius elegantulus*, 0.27mg/insect, 24h, mortality = 0%, 48h mortality = 15%, control Farnesyl methyl ether, 0.27mg/insect, 24h, mortality = 85%, 48h mortality = 100%). Source: BAI JIANG JUN *Beauveria bassiana*. Ref: 3949.

**9871 10 $\alpha$ -Hydroxycadin-4-en-15-al**

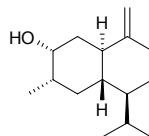
$C_{15}H_{24}O_2$  (236.36). Colorless amorphous solid,  $[\alpha]_D^{26} = -12.8^\circ$  ( $c = 0.08$ , CHCl<sub>3</sub>). Source: YI NIAN PENG *Erigeron annuus* (aerial parts). Ref: 4338.

**9872 (4R)-3 $\alpha$ -Hydroxycadin-10(15)-ene**

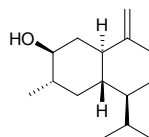
$C_{15}H_{26}O$  (222.37). Amorphous crystals, mp 132–135°C,  $[\alpha]_D = -13^\circ$  ( $c = 0.05$ , CHCl<sub>3</sub>). Pharm: Phytogrowth inhibitor (*Raphanus sativus* seeds, IC<sub>50</sub> = 0.25  $\mu$ g/mL, control Colchicine, IC<sub>50</sub> = 0.40  $\mu$ g/mL); insecticidal (adult *Cylas formicarius elegantulus*, 0.27mg/insect, 24h, mortality = 15%, 48h mortality = 20%, control Farnesyl methyl ether, 0.27mg/insect, 24h, mortality = 85%, 48h mortality = 100%). Source: BAI JIANG JUN *Beauveria bassiana*. Ref: 3949.

**9873 (4S)-3 $\alpha$ -Hydroxycadin-10(15)-ene**

$C_{15}H_{26}O$  (222.37). Oil. Pharm: Phytogrowth inhibitor (*Raphanus sativus* seeds, IC<sub>50</sub> = 0.25  $\mu$ g/mL, control Colchicine, IC<sub>50</sub> = 0.40  $\mu$ g/mL); insecticidal (adult *Cylas formicarius elegantulus*, 0.18mg/insect, 24h, mortality = 85%, 48h mortality = 100%, control Farnesyl methyl ether, 0.18mg/insect, 24h, mortality = 65%, 48h mortality = 95%). Source: BAI JIANG JUN *Beauveria bassiana*. Ref: 3949.

**9874 (4S)-3 $\beta$ -Hydroxycadin-10(15)-ene**

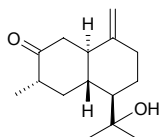
$C_{15}H_{26}O$  (222.37). Gum. Pharm: Insecticidal (adult *Cylas formicarius elegantulus*, 0.27mg/insect, 24h, mortality = 60%, 48h mortality = 100%, control Farnesyl methyl ether, 0.27mg/insect, 24h, mortality = 85%, 48h mortality = 100%). Source: BAI JIANG JUN *Beauveria bassiana*. Ref: 3949.



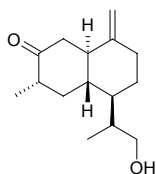


**9875 (4S)-12-Hydroxycadin-10(15)-en-3-one**

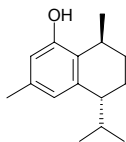
$C_{15}H_{24}O_2$  (236.36). Plates, mp 58~61°C,  $[\alpha]_D = -101^\circ$  ( $c = 0.082$ ,  $CHCl_3$ ). **Pharm:** Phytogrowth inhibitor (*Raphanus sativus* seeds,  $IC_{50} = 4.90\mu g/mL$ , control Colchicine,  $IC_{50} = 0.40\mu g/mL$ ); insecticidal (adult *Cylas formicarius elegantulus*, 0.18mg/insect, 24h, mortality = 45%, 48h mortality = 55%, control Farnesyl methyl ether, 0.18mg/insect, 24h, mortality = 65%, 48h mortality = 95%). **Source:** BAI JIANG JUN *Beauveria bassiana*. **Ref:** 3949.

**9876 (4S)-13-Hydroxycadin-10(15)-en-3-one**

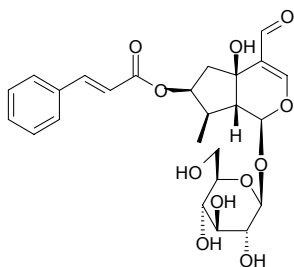
$C_{15}H_{24}O_2$  (236.36). Gum. **Pharm:** Phytogrowth inhibitor (*Raphanus sativus* seeds,  $IC_{50} = 1.75\mu g/mL$ , control Colchicine,  $IC_{50} = 0.40\mu g/mL$ ); insecticidal (adult *Cylas formicarius elegantulus*, 0.27mg/insect, 24h, mortality = 15%, 48h mortality = 35%, control Farnesyl methyl ether, 0.27mg/insect, 24h, mortality = 85%, 48h mortality = 100%). **Source:** BAI JIANG JUN *Beauveria bassiana*. **Ref:** 3949.

**9877 (+)-8-Hydroxycalamenone**

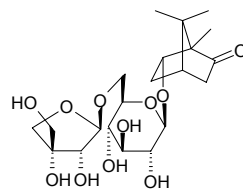
$C_{15}H_{22}O$  (218.34). **Pharm:** Antibacterial; fish toxin; toxin. **Source:** CONG JIAN MU *Dysoxylum alliaceum*, RUI JIAO JIAN MU *Dysoxylum acutangulum*. **Ref:** 658.

**9878 5-Hydroxycampenoside**

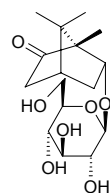
$C_{25}H_{30}O_{11}$  (506.51). **Source:** ZI WEI JING YE *Campsis grandiflora*. **Ref:** 660.

**9879 (1R,4S,6S)-6-Hydroxycamphor-β-D-apiofuranosyl-(1→6)-β-D-glucopyranoside**

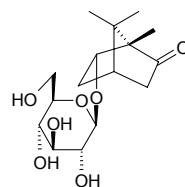
$C_{21}H_{34}O_{11}$  (462.50). Amorphous powder,  $[\alpha]_D^{21} = -73^\circ$  ( $c = 0.5$ , MeOH). **Source:** HU SUI ZI *Coriandrum sativum*. **Ref:** 4302.

**9880 (1S,4R,6S)-6-Hydroxycamphor-β-D-glucopyranoside**

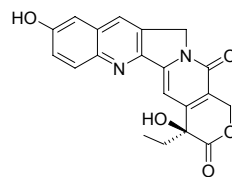
$C_{16}H_{26}O_7$  (330.38). **Source:** SUO SHA MI *Amomum xanthioides* (seed). **Ref:** 4365.

**9881 (1R,4S,6S)-6-Hydroxycamphor-β-D-glucopyranoside**

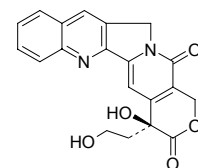
$C_{16}H_{26}O_7$  (330.38). **Source:** SUO SHA MI *Amomum xanthioides* (seed). **Ref:** 4365.

**9882 10-Hydroxycamptothecin**

$C_{20}H_{16}N_2O_5$  (364.36). mp 268~270°C. **Pharm:** Antineoplastic; mutagen. **Source:** XI SHU *Camptotheca acuminata*. **Ref:** 4, 658.

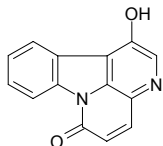
**9883 18-Hydroxycamptothecin**

[116139-46-9]  $C_{20}H_{16}N_2O_5$  (364.36). Yellow acicular crystals, mp 256~258°C,  $[\alpha]_D^{11} = -21.4^\circ$  ( $c = 0.11$ , pyridine). **Pharm:** Cytotoxic (P<sub>388</sub>). **Source:** XI SHU *Camptotheca acuminata*. **Ref:** 98.

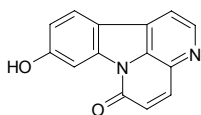


**9884 1-Hydroxycanthin-6-one**

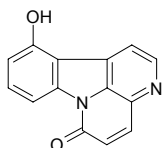
$C_{14}H_8N_2O_2$  (236.23). Source: CHANG YE KUAN MU *Eurycoma longifolia* (root: yield = 0.000014%dw), *Eurycoma* sp. Ref: 4556, 4728.

**9885 9-Hydroxycanthin-6-one**

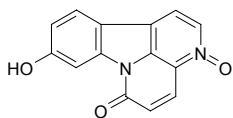
$C_{14}H_8N_2O_2$  (236.23). Pharm: Cytotoxic (*in vitro*, A549,  $ED_{50}$  = 10 $\mu$ g/mL; MCF7,  $ED_{50}$  = 19.6 $\mu$ g/mL; HIV, no significant effect)<sup>[4728]</sup>; antimalarial (*Plasmodium falciparum* W2,  $IC_{50}$  = 2.3 $\mu$ g/mL)<sup>[4728]</sup>. Source: CHANG YE KUAN MU *Eurycoma longifolia* (root: yield = 0.00086%dw), *Eurycoma harmandiana* (root). Ref: 4728, 5137.

**9886 11-Hydroxycanthin-6-one**

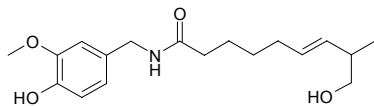
$C_{14}H_8N_2O_2$  (236.23). Source: *Eurycoma* sp. Ref: 4556.

**9887 9-Hydroxycanthin-6-one 3-N-oxide**

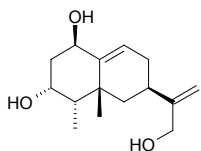
$C_{14}H_8N_2O_3$  (252.23). Pharm: Antimalarial inactive (*Plasmodium falciparum* clones W2, D6, and TM91C235)<sup>[4728]</sup>. Source: CHANG YE KUAN MU *Eurycoma longifolia* (root: yield = 0.000057%dw), *Eurycoma* sp. Ref: 4556, 4728.

**9888  $\omega$ -Hydroxycapsaicin**

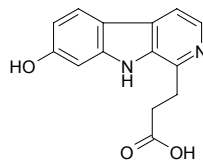
$C_{18}H_{27}NO_4$  (321.42). Light yellow oil,  $[\alpha]_D^{20}$  = +3.5° ( $c$  = 0.28,  $CHCl_3$ ) Source: HONG HAI JIAO *Capsicum annuum* (fruit: yield = 0.00007%). Ref: 4710.

**9889 13-Hydroxycapsidiol**

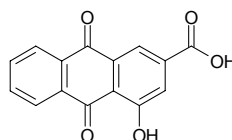
$C_{15}H_{24}O_3$  (252.36). Source: HONG HAI JIAO *Capsicum annuum* (stem and root: yield = 0.0016%dw). Ref: 4779.

**9890 7-Hydroxy- $\beta$ -carboline-1-propionic acid**

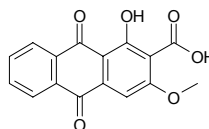
$C_{14}H_{12}N_2O_3$  (256.26). Amorphous powder. Source: *Eurycoma harmandiana* (root), *Eurycoma* sp. Ref: 4556, 5137.

**9891 4-Hydroxy-2-carboxyanthraquinone**

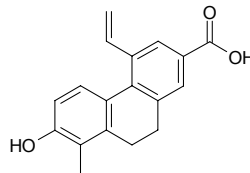
$C_{15}H_8O_5$  (268.32). Source: QIAN CAO GEN *Rubia cordifolia*. Ref: 660.

**9892 1-Hydroxy-2-carboxy-3-methoxyanthraquinone**

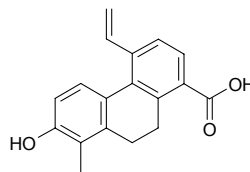
$C_{16}H_{10}O_6$  (298.25). Source: QIAN CAO GEN *Rubia cordifolia*. Ref: 660.

**9893 2-Hydroxy-7-carboxy-1-methyl-5-ethenyl-9,10-dihydrophenanthrene**

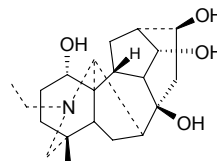
$C_{18}H_{16}O_3$  (280.33). Source: DENG XIN CAO *Juncus effusus*. Ref: 660.

**9894 2-Hydroxy-8-carboxy-1-methyl-5-ethenyl-9,10-dihydrophenanthrene**

$C_{18}H_{16}O_3$  (280.33). Source: DENG XIN CAO *Juncus effusus*. Ref: 660.

**9895 16 $\beta$ -Hydroxycardiopetaline**

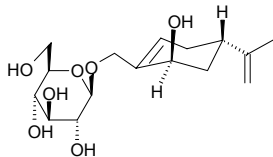
$C_{21}H_{33}NO_4$  (363.50). Amorphous solid,  $[\alpha]_D^{20}$  = -11.3° ( $c$  = 0.15,  $CHCl_3$ ). Source: BAN HUA WU TOU *Aconitum variegatum* (aerial parts). Ref: 5270.



**9896 (4R,6S)-7-Hydroxycarveol 7-O- $\beta$ -D-glucopyranoside**

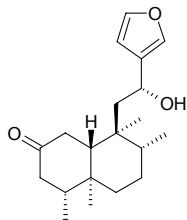
$C_{16}H_{26}O_7$  (330.38). Amorphous powder,  $[\alpha]_D^{24} = +12^\circ$  ( $c = 0.4$ , MeOH).

Source: GE LU ZI *Carum carvi* (fruit). Ref: 4153.

**9897 (12R)-12-Hydroxy cascarillon**

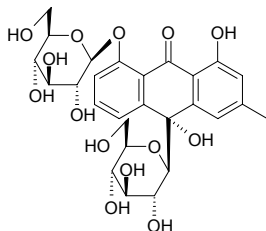
$C_{20}H_{30}O_3$  (318.46).  $[\alpha]_D = -47.6^\circ$  ( $c = 0.31$ ,  $CHCl_3$ ). Source: GE LUN BI YA

BA DOU *Croton schiedeana*. Ref: 2049.

**9898 10-Hydroxycascaroside C**

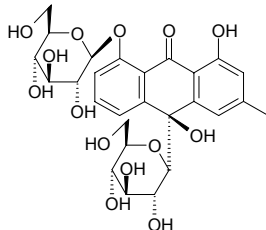
$C_{27}H_{32}O_{14}$  (580.55). Pale yellow amorphous,  $[\alpha]_D^{21} = -41.2^\circ$  ( $c = 0.051$ ,

MeOH). Source: ZANG BIAN DA HUANG *Rheum emodi* [Syn. *Rheum australe*] (root). Ref: 4273.

**9899 10-Hydroxycascaroside D**

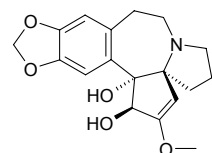
$C_{27}H_{32}O_{14}$  (580.55). Pale yellow amorphous,  $[\alpha]_D^{21} = -81.9^\circ$  ( $c = 0.085$ ,

MeOH). Source: ZANG BIAN DA HUANG *Rheum emodi* [Syn. *Rheum australe*] (root). Ref: 4273.

**9900 4-Hydroxycephalotaxine**

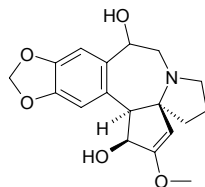
[84567-08-8]  $C_{18}H_{21}NO_5$  (331.37). Source: SAN JIAN SHAN *Cephalotaxus*

*fortunei*. Ref: 2, 660.

**9901 11-Hydroxycephalotaxine**

[49686-55-7]  $C_{18}H_{21}NO_5$  (331.37). Source: SAN JIAN SHAN *Cephalotaxus*

*fortunei*, SAN JIAN SHAN *Cephalotaxus fortunei* (drupe: yield = 0.00012%)<sup>[4675]</sup>, ZHONG GUO CU FEI ZHI YE *Cephalotaxus sinensis* [Syn. *Cephalotaxus harringtonia* var. *sinensis*]. Ref: 2, 660, 1521, 4675.

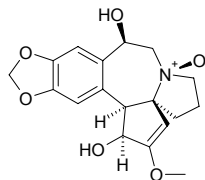
**9902 11- $\beta$ -Hydroxycephalotaxine  $\beta$ -N-oxide**

$C_{18}H_{21}NO_6$  (347.37). Amorphous solid,  $[\alpha]_D^{21} = -94^\circ$  ( $c = 0.5$ ,  $CHCl_3$ ). Pharm:

Cytotoxic (*in vitro*, nasopharynx KB cells,  $IC_{50} = 31 \mu g/mL$ , weak activity).

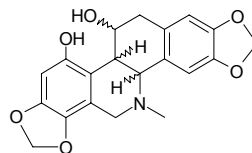
Source: SAN JIAN SHAN *Cephalotaxus fortunei* (drupe: yield = 0.00036%).

Ref: 4675.

**9903 10-Hydroxychelidonine**

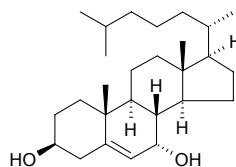
$C_{20}H_{19}NO_6$  (369.38). mp 203~204°C,  $[\alpha]_D^{20} = +107^\circ$  ( $c = 0.28$ ,  $CHCl_3$ ).

Source: BAI QU CAI *Chelidonium majus*. Ref: 1521.

**9904 7 $\alpha$ -Hydroxycholesterol**

$C_{27}H_{46}O_2$  (402.67). Source: CHAN SU *Bufo bufo gargarizans*; *Bufo*

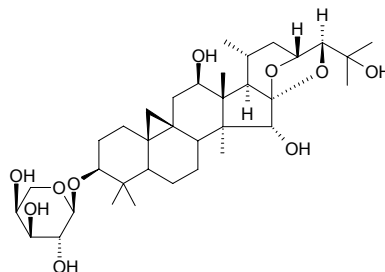
*melanostictus*. Ref: 6.

**9905 12 $\beta$ -Hydroxycimigenol 3-O- $\alpha$ -L-arabinopyranoside**

$C_{35}H_{58}O_{10}$  (363.83). Pharm: Cytotoxic (HSC-2 cells,  $IC_{50} = 74 \mu mol/L$ , control

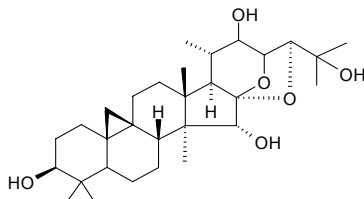
Etoposide,  $IC_{50} = 24 \mu mol/L$ ; HGF cells,  $IC_{50} = 352 \mu mol/L$ ). Source: ZONG

ZHUANG SHENG MA *Cimicifuga racemosa* (rhizome). Ref: 4158.

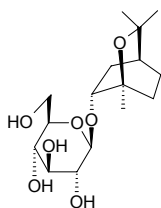


**9906 (2R)-22-Hydroxycimigenol**

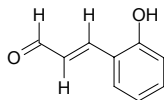
$C_{30}H_{48}O_6$  (504.71). White powder, mp 270~273°C. Source: SAN MIAN DAO *Cimicifuga acerina*. Ref: 873.

**9907 (1R,2R,4S)-2-Hydroxy-1,8-cineole  $\beta$ -D-glucopyranoside**

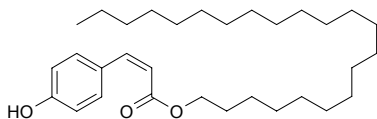
$C_{16}H_{28}O_7$  (332.40). Source: GUAN CANG ZHU *Atractylodes japonica* (fresh rhizome). Ref: 4310.

**9908 2'-Hydroxycinnamaldehyde**

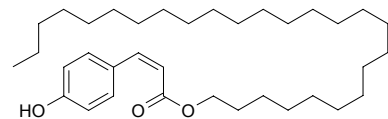
$C_9H_8O_2$  (148.16). Bright crystals (acetone-hexane), mp 131~132°C. Pharm: Farnesyl-protein transferase inhibitor (ox brain,  $IC_{50}$  = 22  $\mu$ g/mL). Source: GUI ZHI *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*]. Ref: 1163.

**9909 4'-Hydroxy-*cis*-cinnamic acid docosyl ester**

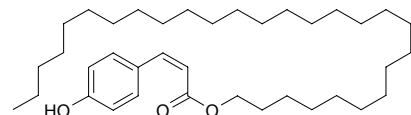
$C_{31}H_{52}O_3$  (472.76). Source: MEI GUI HUA *Rosa rugosa*. Ref: 660.

**9910 4'-Hydroxy-*cis*-cinnamic acid hexacosyl ester**

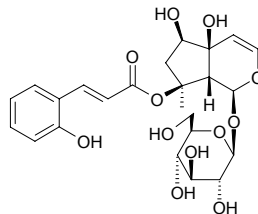
$C_{35}H_{60}O_3$  (528.87). Source: MEI GUI HUA *Rosa rugosa*. Ref: 660.

**9911 4'-Hydroxy-*cis*-cinnamic acid octacosyl ester**

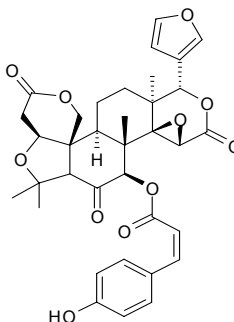
$C_{37}H_{64}O_3$  (556.92). Source: MEI GUI HUA *Rosa rugosa*. Ref: 660.

**9912 8-O-(2-Hydroxycinnamoyl)harpagide**

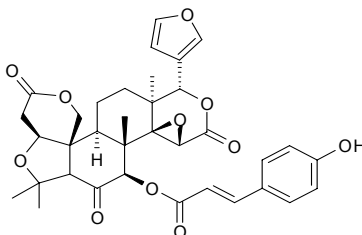
$C_{24}H_{30}O_{12}$  (510.50). Gum,  $[\alpha]_D^{25}$  =  $-35.73^\circ$  ( $c$  = 0.187, MeOH). Source: XUAN SHEN *Scrophularia ningpoensis*. Ref: 1855.

**9913 *cis*-*p*-Hydroxycinnamoylrutaevin**

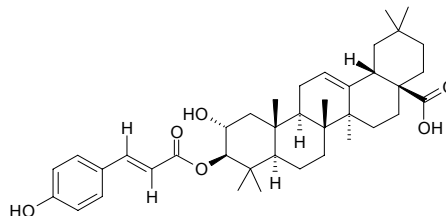
Rutaevin (*Z*)-*p*-hydroxycinnamate [195392-12-2]  $C_{35}H_{36}O_{11}$  (632.67). Source: WEI KONG CAO *Microula sikkimensis*. Ref: 720.

**9914 *trans*-*p*-Hydroxycinnamoylrutaevin**

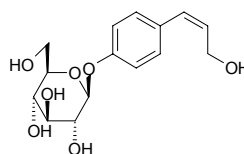
Rutaevin (*E*)-*p*-hydroxycinnamate [195392-13-3]  $C_{35}H_{36}O_{11}$  (632.67). Source: WEI KONG CAO *Microula sikkimensis*. Ref: 720.

**9915 3-*O*-*p*-Hydroxy-*trans*-cinnamoylmaslinic acid**

$C_{39}H_{54}O_6$  (618.86). Source: LI MU *Lyonia ovalifolia*. Ref: 6.

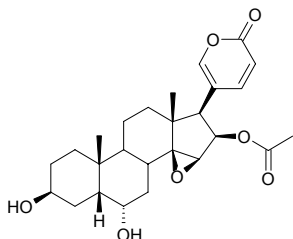
**9916 (*Z*)-4-Hydroxycinnamyl alcohol 4-*O*- $\beta$ -*D*-glucopyranoside**

$C_{15}H_{20}O_7$  (312.32). Amorphous powder,  $[\alpha]_D^{22}$  =  $-63^\circ$  ( $c$  = 0.2, MeOH). Source: HUI QIN *Pimpinella anisum* (fruit). Ref: 4242.

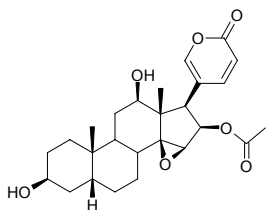


**9917 6 $\alpha$ -Hydroxycinobufagin**

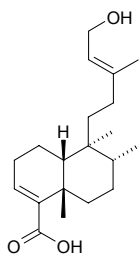
C<sub>26</sub>H<sub>34</sub>O<sub>7</sub> (458.56). Colorless solid,  $[\alpha]_D^{21} = -3.2^\circ$  ( $c = 0.1$ , CH<sub>3</sub>OH). **Pharm:** Cytotoxic (*in vitro*, KB, IC<sub>50</sub> = 0.87 $\mu$ g/mL; HL-60, IC<sub>50</sub> = 0.038 $\mu$ g/mL; MH-60, IC<sub>50</sub> > 25 $\mu$ g/mL; BXPC3, IC<sub>50</sub> = 0.46 $\mu$ g/mL; MCF7, IC<sub>50</sub> = 0.36 $\mu$ g/mL; SF268, IC<sub>50</sub> = 0.32 $\mu$ g/mL; NCI-H460, IC<sub>50</sub> = 0.74 $\mu$ g/mL; KM20L2, IC<sub>50</sub> = 0.28 $\mu$ g/mL; DU145, IC<sub>50</sub> = 0.21 $\mu$ g/mL). **Source:** CHAN SU *Bufo bufo gargarizans*; *Bufo melanostictus*. **Ref:** 3082.

**9918 12 $\beta$ -Hydroxycinobufagin**

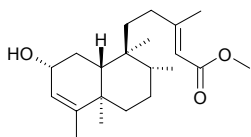
C<sub>26</sub>H<sub>34</sub>O<sub>7</sub> (458.56). **Pharm:** Cytotoxic (*in vitro*, KB, IC<sub>50</sub> = 0.79 $\mu$ g/mL; HL-60, IC<sub>50</sub> < 0.01 $\mu$ g/mL; MH-60, IC<sub>50</sub> > 25 $\mu$ g/mL). **Source:** CHAN SU *Bufo bufo gargarizans*; *Bufo melanostictus*. **Ref:** 3082.

**9919 (+)-15-Hydroxy-cis-cleroda-3,13-dien-18-oic acid**

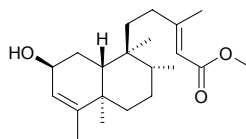
C<sub>20</sub>H<sub>32</sub>O<sub>3</sub> (320.48). **Source:** GE LUN BI YA BA DOU *Croton schiedeanus* (aerial parts). **Ref:** 4447.

**9920 2 $\alpha$ -Hydroxy-3,13-clerodadien-15-oic acid methyl ester**

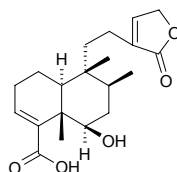
C<sub>27</sub>H<sub>34</sub>O<sub>3</sub> (334.50).  $[\alpha]_D^{24} = -78.3^\circ$  ( $c = 0.41$ , CHCl<sub>3</sub>). **Source:** GAO YI ZHI HUANG HUA *Solidago altissima*. **Ref:** 2366.

**9921 2 $\beta$ -Hydroxy-3,13-clerodadien-15-oic acid methyl ester**

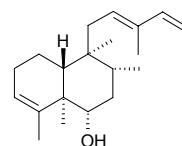
C<sub>27</sub>H<sub>34</sub>O<sub>3</sub> (334.50).  $[\alpha]_D^{24} = -5.9^\circ$  ( $c = 0.8$ , CHCl<sub>3</sub>). **Source:** GAO YI ZHI HUANG HUA *Solidago altissima*. **Ref:** 2366.

**9922 (-)-6 $\beta$ -Hydroxy-5 $\beta$ ,8 $\beta$ ,9 $\beta$ ,10 $\alpha$ -cleroda-3,13-dien-16,15-olid-18-oic acid**

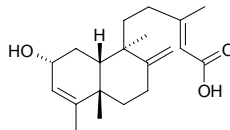
C<sub>20</sub>H<sub>28</sub>O<sub>5</sub> (348.44). Colorless gummy solid,  $[\alpha]_D^{24} = -75^\circ$  ( $c = 0.2$ , MeOH). **Pharm:**  $\alpha$ -Glucosidase inhibitor (IC<sub>50</sub> = (577.7 $\pm$ 19.0) $\mu$ mol/L, control Deoxynojirimycin, IC<sub>50</sub> = (425.6 $\pm$ 8.1) $\mu$ mol/L). **Source:** JIA LIAN QIAO YE *Duranta repens*. **Ref:** 4050.

**9923 6 $\alpha$ -Hydroxy-3,12E,14-clerodatriene**

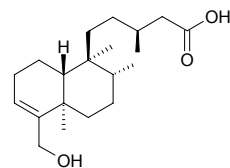
C<sub>20</sub>H<sub>32</sub>O (288.48).  $[\alpha]_D^{20} = -40.9^\circ$  ( $c = 0.13$ , CHCl<sub>3</sub>). **Source:** *Heteroscyphus billardieri*, *Plagiochila deltoidea*. **Ref:** 4284.

**9924 2- $\alpha$ -Hydroxy-cis-cleroda-3,13(Z),8(17)-trien-15-oic acid**

C<sub>20</sub>H<sub>30</sub>O<sub>3</sub> (318.46). Colorless oil,  $[\alpha]_D^{25} = -35.0^\circ$  ( $c = 0.5$ , CHCl<sub>3</sub>). **Pharm:** Antibacterial (*Bacillus cereus*, MIC = 0.625 $\mu$ g, control Tetracyclin, MIC = 0.25 $\mu$ g; *Bacillus coagulans*, MIC = 0.625 $\mu$ g, Tetracyclin, MIC = 0.25 $\mu$ g; *Bacillus subtilis*, MIC = 1.25 $\mu$ g, Tetracyclin, MIC = 0.25 $\mu$ g; *Micrococcus luteus*, MIC = 0.625 $\mu$ g, Tetracyclin, MIC = 0.25 $\mu$ g; *Staphylococcus aureus*, MIC = 0.625 $\mu$ g, Tetracyclin, MIC = 5.0 $\mu$ g)<sup>[5419]</sup>. **Source:** *Haplopappus foliosus*. **Ref:** 5419.

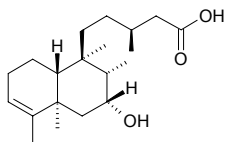
**9925 ent-18-Hydroxy-3-cleroden-15-oic acid**

C<sub>20</sub>H<sub>34</sub>O<sub>3</sub> (322.49). **Source:** *Nuxia sphaerocephala* (leaf). **Ref:** 4419.

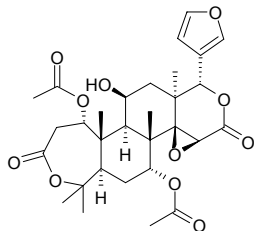


**9926 (13S)-ent-7 $\beta$ -Hydroxy-3-cleroden-15-oic acid**

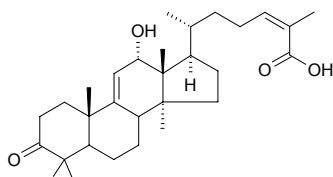
$C_{20}H_{34}O_3$  (322.49). Colorless oil,  $[\alpha]_D^{20} = -32.3^\circ$  ( $c = 0.4$ ,  $CHCl_3$ ). **Pharm:** Antimalarial (*Plasmodium falciparum* FcB1,  $IC_{50} = (14.6 \pm 1.4) \mu g/mL$ , control Chloroquine,  $IC_{50} = (0.05 \pm 0.002) \mu g/mL$ ). **Source:** *Nuxia sphaerocephala* (leaf). **Ref:** 4419.

**9927 11 $\beta$ -Hydroxycneurin G**

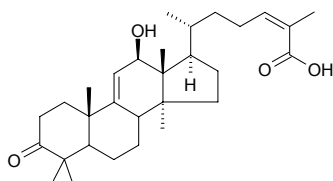
$C_{30}H_{38}O_{11}$  (574.63). Colorless prisms ( $CHCl_3$ -MeOH), mp 279–281°C,  $[\alpha]_D^{23} = -41.1^\circ$  ( $c = 0.1$ ,  $CHCl_3$ ). **Source:** ZHONG GUO YANG CHUN *Cedrela sinensis* (leaf). **Ref:** 3883.

**9928 12 $\alpha$ -Hydroxycoccinic acid**

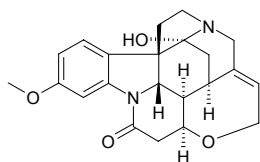
$C_{30}H_{46}O_4$  (470.70). **Pharm:** Antineoplastic<sup>[2523]</sup>; anti-HIV<sup>[2523]</sup>. **Source:** LENG FAN TUAN *Kadsura coccinea* [syn. *Kadsura chenensis*; *Kadsura hainanensis*], YI XING NAN WU WEI ZI *Kadsura heteroclita* [Syn. *Uvaria heteroclita*]. **Ref:** 2436, 2523.

**9929 12 $\beta$ -Hydroxycoccinic acid**

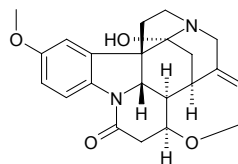
$C_{30}H_{46}O_4$  (470.70). **Pharm:** Antineoplastic<sup>[2523]</sup>; anti-HIV<sup>[2523]</sup>. **Source:** LENG FAN TUAN *Kadsura coccinea* [syn. *Kadsura chenensis*; *Kadsura hainanensis*], YI XING NAN WU WEI ZI *Kadsura heteroclita* [Syn. *Uvaria heteroclita*]. **Ref:** 2436, 2523.

**9930 16-Hydroxy- $\alpha$ -colubrine**

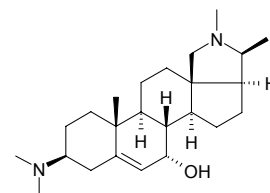
[34479-58-8]  $C_{22}H_{24}N_2O_4$  (380.45). **Source:** MA QIAN ZI *Strychnos nux-vomica*. **Ref:** 6.

**9931 16-Hydroxy- $\beta$ -colubrine**

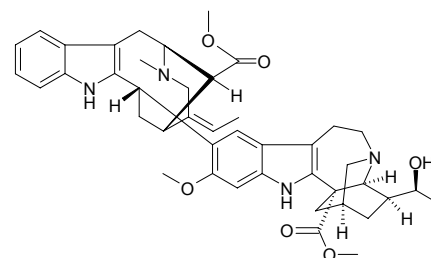
[29079-34-3]  $C_{22}H_{24}N_2O_4$  (380.45). **Source:** MA QIAN ZI *Strychnos nux-vomica*. **Ref:** 6.

**9932 7 $\alpha$ -Hydroxyconessine**

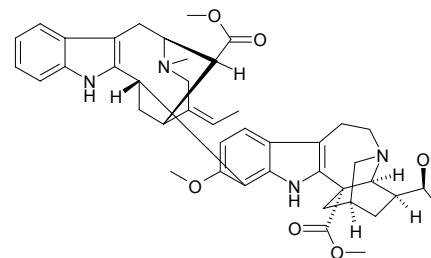
$C_{24}H_{40}N_2O$  (372.60). mp 176–178°C,  $[\alpha]_D^{20} = -61^\circ$  ( $c = 0.95$ ,  $CHCl_3$ ). **Source:** ZHI XIE MU PI *Holarrhena antidysenterica*. **Ref:** 6, 1521.

**9933 19'(S)-Hydroxyconoduramine**

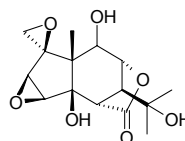
$C_{43}H_{52}N_4O_6$  (720.92). Light yellowish oil,  $[\alpha]_D = -43^\circ$  ( $c = 0.63$ ,  $CHCl_3$ ). **Source:** SAN FANG HUA XU HONG YUE GUI *Tabernaemontana corymbosa*. **Ref:** 3403.

**9934 19'(S)-Hydroxyconodurine**

$C_{43}H_{52}N_4O_6$  (720.92). Light yellowish oil,  $[\alpha]_D = -69^\circ$  ( $c = 0.12$ ,  $CHCl_3$ ). **Source:** SAN FANG HUA XU HONG YUE GUI *Tabernaemontana corymbosa*. **Ref:** 3403.

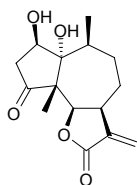
**9935 Hydroxycoriatin**

$C_{15}H_{20}O_7$  (312.32). White acicular crystals, mp 260°C (dec). **Source:** MA SANG *Coriaria sinica* [Syn. *Coriaria nepalensis*]. **Ref:** 413.

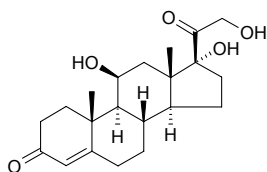


**9936 2 $\beta$ -Hydroxycoronopilin**

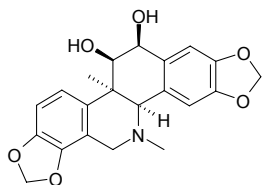
C<sub>15</sub>H<sub>20</sub>O<sub>5</sub> (280.32). Colorless needles (EtOAc), mp 185–187°C. Source: YIN JIAO JU *Parthenium hysterophorus* (aerial parts). Ref: 5106.

**9937 17-Hydroxycorticosterone**

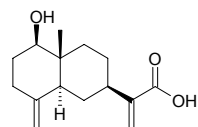
17-Oxycorticosterone C<sub>21</sub>H<sub>30</sub>O<sub>5</sub> (362.47). mp 220°C. Source: NIU SHEN *Bos taurus domesticus*; *Bubalus bubalis*, REN NIAO *Homo sapiens*, ZHI XIE MU *PI Holarrhena antidysenterica*. Ref: 6.

**9938 12-Hydroxycorynoline**

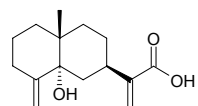
C<sub>21</sub>H<sub>21</sub>NO<sub>6</sub> (383.40). Source: KU DI DING *Corydalis bungeana*, ZI HUA YU DENG CAO *Corydalis incisa* Ref: 660.

**9939 1 $\beta$ -Hydroxycostic acid**

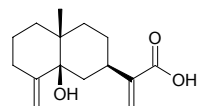
C<sub>15</sub>H<sub>22</sub>O<sub>3</sub> (250.34). Source: LIU LENG JU *Laggera alata* (aerial parts: yield = 0.00076%dw). Ref: 4709.

**9940 5 $\alpha$ -Hydroxycostic acid**

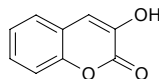
C<sub>15</sub>H<sub>22</sub>O<sub>3</sub> (250.34). Source: LIU LENG JU *Laggera alata* (aerial parts: yield = 0.00055%dw). Ref: 4709.

**9941 5 $\beta$ -Hydroxycostic acid**

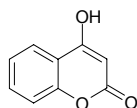
C<sub>15</sub>H<sub>22</sub>O<sub>3</sub> (250.34). Source: LIU LENG JU *Laggera alata* (aerial parts: yield = 0.00038%dw). Ref: 4709.

**9942 3-Hydroxycoumarin**

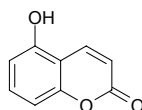
[1939-19-5] C<sub>9</sub>H<sub>6</sub>O<sub>3</sub> (162.15). Source: SANG YE *Morus alba*. Ref: 6.

**9943 4-Hydroxycoumarin**

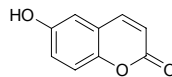
[1076-38-6] C<sub>9</sub>H<sub>6</sub>O<sub>3</sub> (162.15). Source: SANG YE *Morus alba*. Ref: 6.

**9944 5-Hydroxycoumarin**

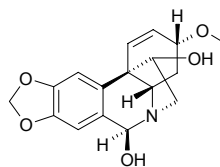
[6093-67-0] C<sub>9</sub>H<sub>6</sub>O<sub>3</sub> (162.15). Pharm: Cytotoxic inactive (*in vitro*, HONE-1 and NUGC cancer cell lines, no significant activity)<sup>[3069]</sup>. Source: SANG YE *Morus alba*, ZHONG GUO XIU QIU *Hydrangea chinensis* (root)<sup>[3069]</sup>. Ref: 6, 3069.

**9945 6-Hydroxycoumarin**

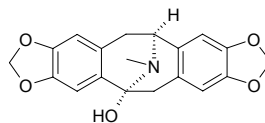
C<sub>9</sub>H<sub>6</sub>O<sub>3</sub> (162.15). Source: SANG YE *Morus alba*. Ref: 6.

**9946 6-Hydroxycrinamine**

C<sub>17</sub>H<sub>19</sub>NO<sub>5</sub> (317.34). Pharm: AChE inhibitor (IC<sub>50</sub> = (490±7)μmol/L, control Galanthamine, IC<sub>50</sub> = (1.9±0.2)μmol/L)<sup>[4952]</sup>. Source: LIN JING ZHONG ZI WEN SHU LAN *Crinum bulbispermum*. Ref: 4952.

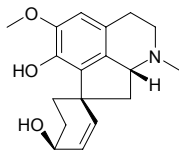
**9947 (-)-12-Hydroxycrychine**

C<sub>19</sub>H<sub>17</sub>NO<sub>5</sub> (339.35). Colorless needles (MeOH), mp 173–174°C, [α]<sub>D</sub> = -143.0° (c = 0.2764, MeOH). Source: HOU KE GUI *Cryptocarya chinensis* (wood). Ref: 3092.

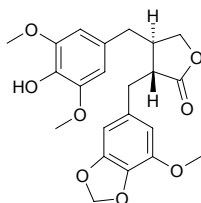


**9948 1-Hydroxycryptochine**

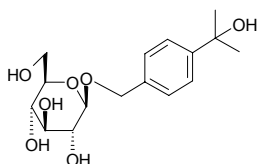
$C_{18}H_{23}NO_3$  (301.39). Colorless needles (acetone), mp 117–119°C,  $[\alpha]_D = +65.32^\circ$  ( $c = 0.322$ , MeOH). Source: HOU KE GUI *Cryptocarya chinensis* (leaf). Ref: 4129.

**9949 (8R,8'R)-4-Hydroxycubebinone**

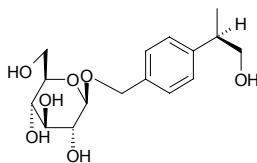
$C_{22}H_{24}O_8$  (416.43). Pale yellow oil,  $[\alpha]_D^{25} = -30.0^\circ$  ( $c = 0.08$ ,  $CHCl_3$ ). Pharm: CYP3A4 inhibitor and CYP2D6 inhibitor (*in vitro*, CYP3A4,  $IC_{50} = 7.4\mu\text{mol/L}$ ; CYP2D6,  $IC_{50} > 100\mu\text{mol/L}$ ; control Ketoconazole, CYP3A4,  $IC_{50} = 0.72\mu\text{mol/L}$ ; control Quinidine, CYP2D6,  $IC_{50} = 0.082\mu\text{mol/L}$ )<sup>[4797]</sup>. Source: BI CHENG QIE *Piper cubeba* (fruit: yield = 0.00011%dw). Ref: 4797.

**9950 8-Hydroxycuminyl β-D-glucopyranoside**

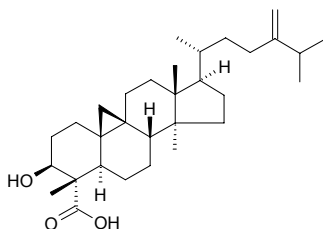
$C_{16}H_{24}O_7$  (328.37). Amorphous powder,  $[\alpha]_D^{24} = -40^\circ$  ( $c = 0.5$ , MeOH). Source: ZI RAN QIN *Cuminum cyminum* (fruit). Ref: 4243.

**9951 (8R)-9-Hydroxycuminyl β-D-glucopyranoside**

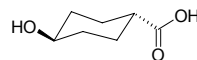
$C_{16}H_{24}O_7$  (328.37). Amorphous powder,  $[\alpha]_D^{24} = -44^\circ$  ( $c = 1.5$ , MeOH). Source: ZI RAN QIN *Cuminum cyminum* (fruit). Ref: 4243.

**9952 3β-Hydroxy-5α-cycloart-24(31)-en-28-oic acid**

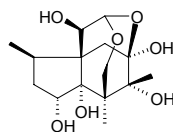
$C_{31}H_{50}O_3$  (470.74). Pharm: Anti-HIV-1 (syncytium assay:  $IC_{50} = 120.1\mu\text{g/mL}$ ,  $EC_{50} = 58.1\mu\text{g/mL}$ ; HIV-1 RT assay:  $200\mu\text{g/mL}$ ,  $\text{InRt} = 93.6\%$ ,  $IC_{50} = 43.5\mu\text{g/mL}$ , Fagaronine chloride  $IC_{50} = 10.9\mu\text{g/mL}$ , Nevirapine  $IC_{50} = 1.8\mu\text{g/mL}$ ). Source: TAI GUO ZHI ZI *Gardenia thailandica* (leaf and twig). Ref: 4963.

**9953 trans-4-Hydroxycyclohexane-1-carboxylic acid**

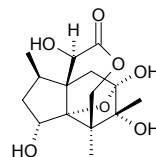
$C_7H_{12}O_3$  (144.17). Source: DU ZHONG YE *Eucommia ulmoides*. Ref: 660.

**9954 3α-Hydroxycycloparvifloralone**

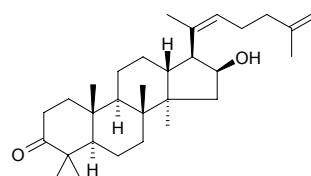
$C_{15}H_{24}O_7$  (316.35). Colorless amorphous powder,  $[\alpha]_D^{19} = +11^\circ$  ( $c = 1.35$ ,  $CH_3OH$ ). Pharm: Neurotrophic bioassay inactive (primary culture of rat cortical neurons, 0.1–10 $\mu\text{mol/L}$ ). Source: *Illicium merrillianum* (pericarp: yield = 0.034%dw). Ref: 3046.

**9955 10β-Hydroxycyclopseudoanisatin**

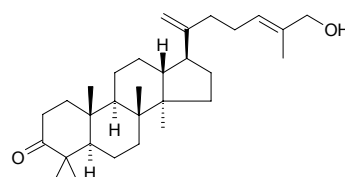
$C_{15}H_{22}O_7$  (314.34). Source: *Illicium merrillianum* (pericarp). Ref: 4257.

**9956 16β-Hydroxy-dammara-20(22),25-dien-3-one**

$C_{30}H_{48}O_2$  (440.72). Colorless acicular crystals (MeOH), mp 182°C,  $[\alpha]_D^{21.5} = +58^\circ$  ( $c = 1.0$ ,  $CHCl_3$ ). Source: XIANG GANG JIAN MU *Dysoxylum hongkongense*. Ref: 422.

**9957 26-Hydroxy-dammara-20,24-dien-3-one**

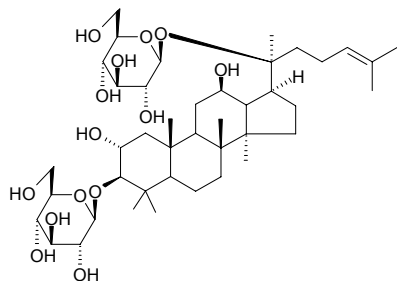
$C_{30}H_{48}O_2$  (440.72). Colorless acicular crystals (MeOH), mp 69°C,  $[\alpha]_D^{21.5} = +58^\circ$  ( $c = 1.0$ ,  $CHCl_3$ ). Source: XIANG GANG JIAN MU *Dysoxylum hongkongense*. Ref: 422.



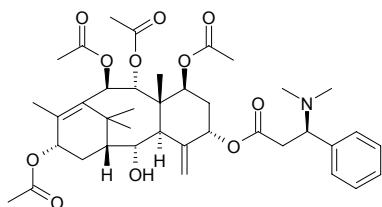


**9958 2 $\alpha$ ,3 $\beta$ ,12 $\beta$ ,20(S)-3-Hydroxydammar-24-en-20-O- $\beta$ -D-glucopyranoside**

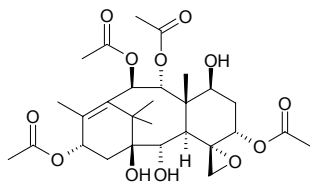
C<sub>42</sub>H<sub>72</sub>O<sub>14</sub> (801.03). White powder, mp 207–209°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +3.8° (*c* = 0.1, MeOH). Source: JIAO GU LAN *Gynostemma pentaphyllum*. Ref: 2516.

**9959 2 $\alpha$ -Hydroxy-2' $\beta$ -Deacetylaustrospicatine**

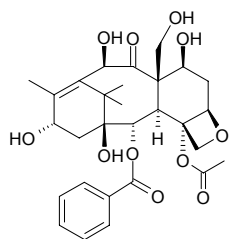
C<sub>39</sub>H<sub>53</sub>NO<sub>11</sub> (711.86). Source: AO DA LI YA HONG DOU SHAN *Austrotaxus spicata*. Ref: 662.

**9960 1 $\beta$ -Hydroxy-2 $\alpha$ ,7 $\beta$ -deacetylbaccatin I**

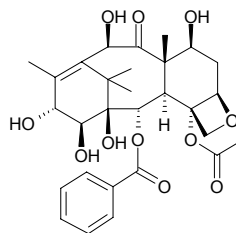
C<sub>28</sub>H<sub>40</sub>O<sub>12</sub> (568.62). Amorphous solid, [ $\alpha$ ]<sub>D</sub><sup>21.7</sup> = +63.83° (*c* = 0.047, acetone). Source: HONG DOU SHAN *Taxus chinensis*. Ref: 2490.

**9961 19-Hydroxy-10-deacetylbaccatin III**

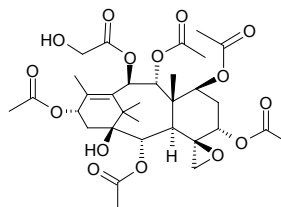
C<sub>29</sub>H<sub>36</sub>O<sub>11</sub> (560.60). Pharm: Cytotoxic (*in vitro*, 30 μg/mL: A498, InRt = 16.6%; NCI-H226, InRt = 32.0%; A549, InRt = 0%; PC3, InRt = 2.3%; control Taxol, 30 μg/mL: A498, InRt = 98.2%; NCI-H226, InRt = 71.2%; A549, InRt = 79.7%; PC3, InRt = 91.7%). Source: SU MEN DA LA HONG DOU SHAN *Taxus sumatrana* (leaf and twig). Ref: 4800.

**9962 14 $\beta$ -Hydroxy-10-deacetylbaccatin III**

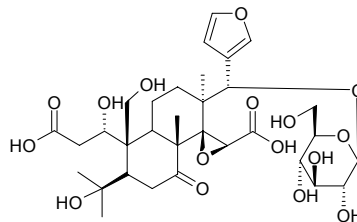
C<sub>29</sub>H<sub>36</sub>O<sub>11</sub> (560.60). Source: XI MA LA YA HONG DOU SHAN *Taxus wallichiana*. Ref: 662.

**9963 1 $\beta$ -Hydroxy-10-deacetyl-10-glycolylbaccatin I**

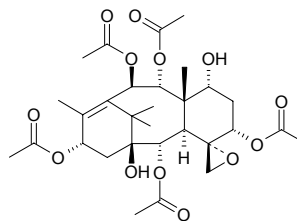
C<sub>32</sub>H<sub>44</sub>O<sub>15</sub> (668.70). Gum. Source: JIA NA DA HONG DOU SHAN *Taxus canadensis* (needle leaf). Ref: 3958.

**9964 19-Hydroxydeacetylnomilinic acid-17- $\beta$ -D-glucopyranoside**

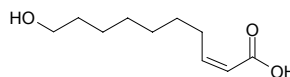
C<sub>32</sub>H<sub>46</sub>O<sub>16</sub> (686.71). Source: ZHI SHI *Citrus aurantium*. Ref: 660.

**9965 1 $\beta$ -Hydroxy-7 $\beta$ -deacetyoxy-7 $\alpha$ -hydroxybaccatin I**

C<sub>30</sub>H<sub>42</sub>O<sub>13</sub> (610.66). Source: JIANG GUO ZI SHAN *Taxus baccata*. Ref: 662.

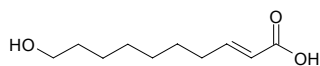
**9966  $\omega$ -cis-Hydroxy- $\Delta^2$ -decenoic acid**

C<sub>10</sub>H<sub>18</sub>O<sub>3</sub> (186.25). mp (*trans*) 64–65°C. Source: FENG RU *Apis cerana*. Ref: 6.

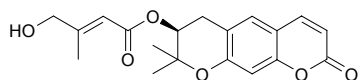


**9967 *ω*-trans-Hydroxy-Δ<sup>2</sup>-decanoic acid**

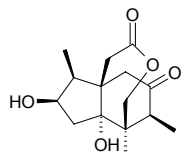
[765-01-5] C<sub>10</sub>H<sub>18</sub>O<sub>3</sub> (186.25). Source: FENG JIAO *Apis mellifera ligustica* (bee glue: content = 0.22%<sup>[5508]</sup>), FENG RU *Apis cerana*. Ref: 6, 5508.

**9968 4''-Hydroxydecursin**

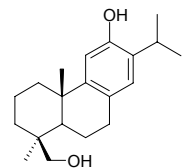
C<sub>19</sub>H<sub>20</sub>O<sub>6</sub> (344.37). Colorless needles (MeOH), mp 101~103°C, [α]<sub>D</sub> = +59° (c = 0.5, CHCl<sub>3</sub>). Pharm: Neuroprotective (primary cultures of rat cortical cells, control, cell viability = 100%, injured by glutamate, cell viability = 0%, 0.1 μmol/L, cell viability = (38.4±4.0)%, p<0.05, 1 μmol/L, cell viability = (34.1±3.5)%, p<0.05, 10 μmol/L, cell viability = (35.1±4.5)%, p<0.05). Source: CHAO XIAN DANG GUI *Angelica gigas* (root: yield = 0.001%dw). Ref: 4796.

**9969 2β-Hydroxy-3,6-dedioxypseudoanisatin**

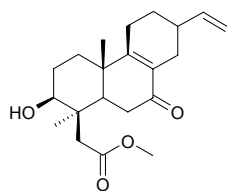
C<sub>15</sub>H<sub>22</sub>O<sub>5</sub> (282.34). [α]<sub>D</sub><sup>22</sup> = -22.0° (c = 1.08, MeOH). Source: *Illicium merrillianum* (pericarp). Ref: 4257.

**9970 12-Hydroxydehydroabietinol**

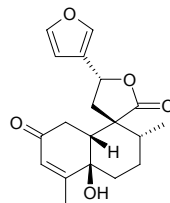
C<sub>20</sub>H<sub>30</sub>O<sub>2</sub> (302.46). Source: YUN NAN FEI SHU *Torreya yunnanensis* (leaf and twig: yield = 0.0012%dw). Ref: 4707.

**9971 3β-Hydroxy-cis-dehydrocrotonin**

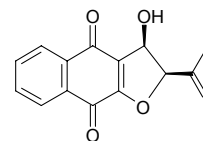
C<sub>21</sub>H<sub>30</sub>O<sub>4</sub> (346.47). Source: *Croton joufra*. Ref: 4552.

**9972 5β-Hydroxy-cis-dehydrocrotonin**

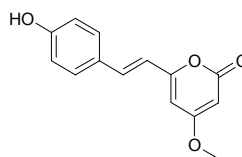
C<sub>19</sub>H<sub>22</sub>O<sub>5</sub> (330.38). Colorless needles, mp 182~183°C (MeOH-ether), [α]<sub>D</sub> = +14.6° (c = 0.8, CHCl<sub>3</sub>). Source: GE LUN BI YA BA DOU *Croton schiedeanus*. Ref: 2049.

**9973 3-Hydroxydehydro-iso-α-lapachone**

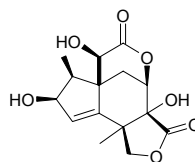
C<sub>15</sub>H<sub>12</sub>O<sub>4</sub> (256.26). Source: CAI DOU SHU *Radermachera sinica*. Ref: 660.

**9974 4'-Hydroxy-5,6-dehydrokawain**

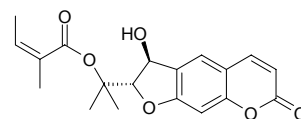
C<sub>14</sub>H<sub>12</sub>O<sub>4</sub> (244.25). Pharm: Cytotoxic (Colon26-L5, ED<sub>50</sub> = 20.7 μmol/L; HT1080, ED<sub>50</sub> = 20.1 μmol/L)<sup>[3042]</sup>. Source: YUN NAN CAO KOU *Alpinia blepharocalyx* (seed: yield = 0.00185%). Ref: 3042.

**9975 (2S)-Hydroxy-3,4-dehydronomajucin**

C<sub>15</sub>H<sub>18</sub>O<sub>7</sub> (310.31). Pharm: Neurotrophic (primary cultures of fetal rat cortical neuron, 0.1-10 μmol/L, significantly promotes neurite outgrowth)<sup>[4621]</sup>. Source: JIA DI FENG PI *Illicium jiadifengpi* (pericarp: yield = 0.0049%dw). Ref: 4621.

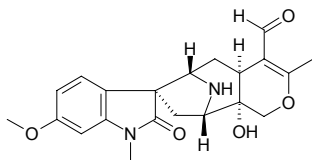
**9976 (3'S)-Hydroxydeltoin**

C<sub>19</sub>H<sub>20</sub>O<sub>6</sub> (344.37). White powder, [α]<sub>589nm</sub> = -45°. Source: FANG FENG *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*]. Ref: 3508.

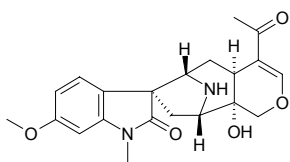


**9977 16-Hydroxy-N(4)-demethylalstophyllal oxindole**

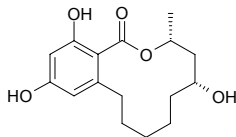
$C_{21}H_{24}N_2O_5$  (384.44). White amorphous powder,  $[\alpha]_D^{25} = +203^\circ$  ( $c = 0.11$ ,  $CHCl_3$ ). Source: DA YE TANG JIAO SHU *Alstonia macrophylla* (leaf: yield = 0.0016%). Ref: 3020.

**9978 16-Hydroxy-N(4)-demethylalstophylline oxindole**

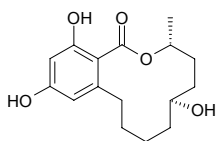
$C_{21}H_{24}N_2O_5$  (384.44). Source: DA YE TANG JIAO SHU *Alstonia macrophylla* (leaf: yield = 0.0019%). Ref: 3020.

**9979 (3R),(5R)-5-Hydroxy-de-O-methylasiodiplodin**

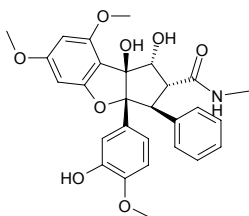
$C_{16}H_{22}O_5$  (294.35). Colorless powder, mp 158–160°C,  $[\alpha]_D^{25} = +19.6^\circ$  ( $c = 0.5$ , MeOH). Pharm: Potato micro-tuber inducer (100 μmol/L, control Jasmonic acid, 1 μmol/L, Theobroxide, 10 μmol/L). Source: *Lasiodiplodia theobromae*. Ref: 3966.

**9980 (3R),(6R)-6-Hydroxy-de-O-methylasiodiplodin**

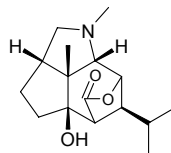
$C_{16}H_{22}O_5$  (294.35). Colorless powder, mp 200–201°C,  $[\alpha]_D^{25} = -5.36^\circ$  ( $c = 0.4$ , MeOH). Pharm: Potato micro-tuber inducer (100 μmol/L, control Jasmonic acid, 1 μmol/L, Theobroxide, 10 μmol/L). Source: *Lasiodiplodia theobromae*. Ref: 3966.

**9981 3'-Hydroxy-N-demethylrocaglamide**

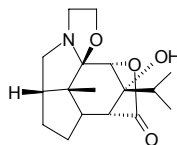
[222854-53-7]  $C_{28}H_{29}NO_8$  (507.55).  $[\alpha]_D^{20} = -59.5^\circ$  ( $c = 0.25$ ,  $CHCl_3$ ). Source: MI ZI LAN *Aglaia odorata*. Ref: 2289.

**9982 6-Hydroxydendrobine**

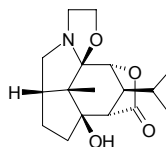
Dendramine  $C_{16}H_{25}NO_3$  (279.38). Source: SHI HU<sup>(4)</sup> *Dendrobium nobile*. Ref: 660.

**9983 4-Hydroxydendroxine**

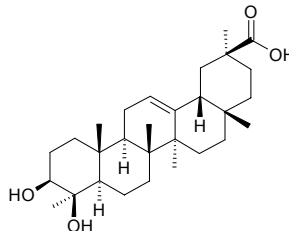
$C_{17}H_{25}NO_4$  (307.39). Source: SHI HU<sup>(4)</sup> *Dendrobium nobile*. Ref: 660.

**9984 6-Hydroxydendroxine**

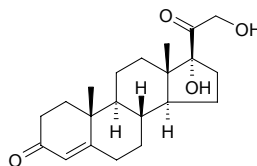
$C_{17}H_{25}NO_4$  (307.39). Source: SHI HU<sup>(4)</sup> *Dendrobium nobile*. Ref: 6.

**9985 24-Hydroxy-11-deoxoglycyrrhetic acid**

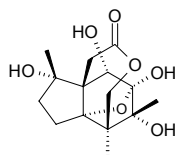
$C_{29}H_{46}O_4$  (458.69). Source: GUANG GUO GAN CAO *Glycyrrhiza glabra*. Ref: 2, 660.

**9986 17-Hydroxy-11-deoxy-corticosterone**

$C_{21}H_{30}O_4$  (346.47). mp 207–208°C. Source: NIU SHEN *Bos taurus domesticus*; *Bubalus bubalis*. Ref: 6.

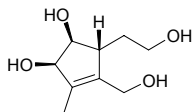
**9987 8α-Hydroxy-10-deoxycyclomerrillianolide**

$C_{15}H_{22}O_7$  (314.34).  $[\alpha]_D^{20} = -49.0^\circ$  ( $c = 1.55$ , MeOH). Source: *Illicium merrillianum* (pericarp). Ref: 4257.

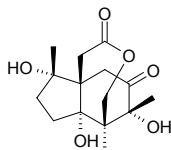


**9988 7-Hydroxy-10-deoxyeucommiol**

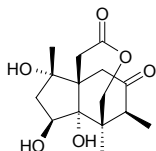
$C_9H_{16}O_4$  (188.23). Yellow oil,  $[\alpha]_D^{17} = -53.44^\circ$  ( $c = 1.06$ , MeOH). Source: DIAO DENG SHU *Kigelia pinnata*. Ref: 3418.

**9989 1 $\alpha$ -Hydroxy-3-deoxypseudoanisatin**

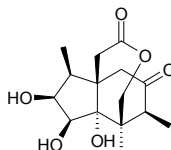
1 $\alpha$ -Hydroxy-3-deoxypseudoanisatin  $C_{15}H_{22}O_6$  (298.34). Source: MIN WAN BA JIAO *Illicium minwanense* (pericarp: yield = 0.00055%dw), *Illicium merrillianum* (pericarp: yield = 0.00025%dw). Ref: 3046, 4697.

**9990 1 $\alpha$ -Hydroxy-6-deoxypseudoanisatin**

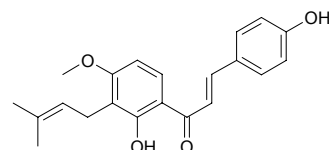
$C_{15}H_{22}O_6$  (298.34).  $[\alpha]_D^{21} = 7.6^\circ$  ( $c = 1.50$ , MeOH). Source: MIN WAN BA JIAO *Illicium minwanense* (pericarp: yield = 0.00095%dw). Ref: 4697.

**9991 (2S)-Hydroxy-6-deoxypseudoanisatin**

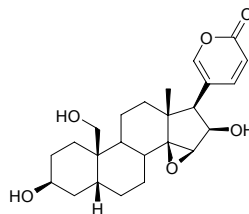
$C_{15}H_{22}O_6$  (298.34). mp 223~224°C,  $[\alpha]_D^{20} = -23.3^\circ$  ( $c = 0.38$ , MeOH). Source: MIN WAN BA JIAO *Illicium minwanense* (pericarp: yield = 0.0013%dw). Ref: 4697.

**9992 4-Hydroxyderricin**

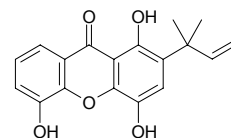
$C_{21}H_{22}O_4$  (338.41). Pharm: Antineoplastic and antimetastatic (25mg/kg or 50mg/kg bid, inhibits tumor growth on 8 to 14days, prolongs survival time and increased the survival rate compared to those in mouse after the removal of tumors and inhibits metastasis to the lung in tumor-removed mouse and the increase of lung weight; 50mg/kg bid orl, reduces tumor weight at 15days was of 4-hydroxyderricin). Source: BIN HAI DANG GUI *Angelica keiskei* (root). Ref: 4945.

**9993 19-Hydroxydesacetylcinobufagin**

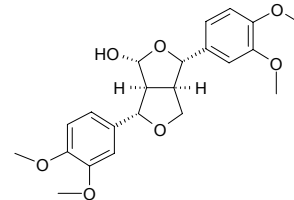
Desacetylcinobufaginol  $C_{24}H_{32}O_6$  (416.52). Pharm: Cytotoxic (*in vitro*, KB,  $IC_{50} = 3.9\mu\text{g/mL}$ ; HL-60,  $IC_{50} = 0.49\mu\text{g/mL}$ ; MH-60,  $IC_{50} > 25\mu\text{g/mL}$ ). Source: CHAN SU *Bufo bufo gargarizans*; *Bufo melanostictus*. Ref: 3082.

**9994 12b-Hydroxy-des-D-ring-garcigerin A**

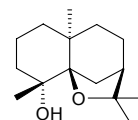
$C_{18}H_{16}O_5$  (312.33). Pharm: Neurite outgrowth activity (NGF-mediated, PC12D cells,  $EC = 10\mu\text{mol/L}$ )<sup>[3473]</sup>. Source: DA YE TENG HUANG *Garcinia xanthochymus* (wood), *Garcinia vilsersiana* (bark). Ref: 3473, 3902.

**9995 (+)-4-Hydroxy-2,6-di(3,4-dimethoxy)phenyl-3,7-dioxabicyclo[3.3.0]octane**

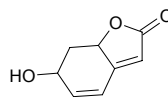
$C_{22}H_{26}O_7$  (402.45). White powder (MeOH), mp 171~173°C,  $[\alpha]_D^{22} = +29.5^\circ$  ( $c = 0.45$ ,  $\text{CHCl}_3$ ). Source: JU DA LAN CI TOU *Echinops giganteus* (root). Ref: 3828.

**9996 4-Hydroxydihydroagarofuran**

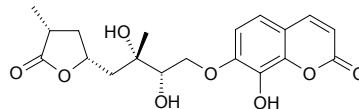
$C_{15}H_{26}O_2$  (238.37). mp 130~131°C. Source: CHEN XIANG *Aquilaria agallocha*. Ref: 6, 13.

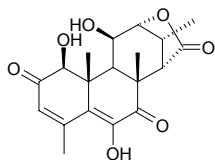
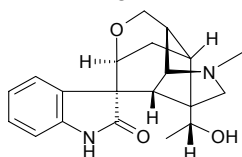
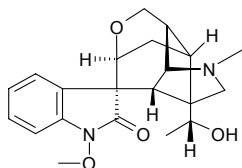
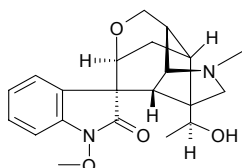
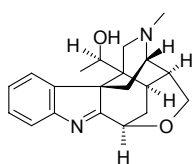
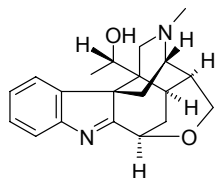
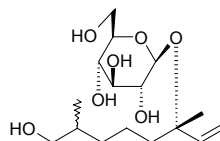
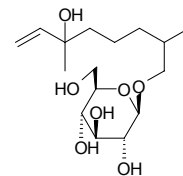
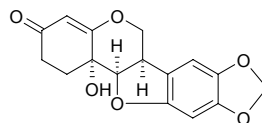
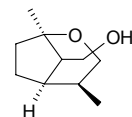
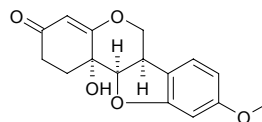
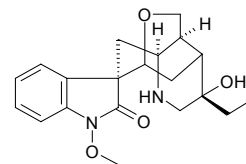
**9997 6-Hydroxy-7,7 $\alpha$ -dihydro-2(6H)-benzofuranone**

$C_8H_8O_3$  (152.15). Colorless needles (*n*-hexane), mp 112~114°C,  $[\alpha]_D^{25} = +69.4^\circ$  ( $c = 0.036$ , MeOH). Source: MA YE QIAN LI GUANG *Senecio cannabifolius*. Ref: 4809.

**9998 8-Hydroxy-3'',4''-dihydrocapnolactone-2',3'-diol**

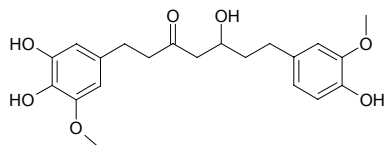
$C_{19}H_{22}O_8$  (378.38). Colorless semisolid. Source: JI XIAO XIAO YUN XIANG MU *Micromelum minutum* (leaf). Ref: 3467.



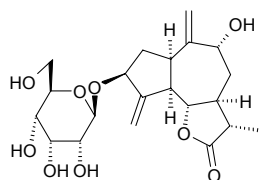
**9999 6-Hydroxy-5,6-dihydroeurycomalactone**C<sub>19</sub>H<sub>22</sub>O<sub>7</sub> (362.38). Source: *Eurycoma* sp. Ref: 4556.**10000 19-(R)-Hydroxydihydrogelsemine**C<sub>20</sub>H<sub>24</sub>N<sub>2</sub>O<sub>3</sub> (340.43). mp 230–232°C, [α]<sub>D</sub> = –20°. Source: GOU WEN *Gelsemium elegans*. Ref: 14.**10001 19-(R)-Hydroxydihydrogelsevirine**C<sub>21</sub>H<sub>26</sub>N<sub>2</sub>O<sub>4</sub> (370.45). mp 210–212°C, [α]<sub>D</sub> = –34°. Source: GOU WEN *Gelsemium elegans*. Ref: 14.**10002 19-(S)-Hydroxydihydrogelsevirine**C<sub>21</sub>H<sub>26</sub>N<sub>2</sub>O<sub>4</sub> (370.45). Amorphous, [α]<sub>D</sub> = –68°. Source: GOU WEN *Gelsemium elegans*. Ref: 14.**10003 19-(R)-Hydroxydihydrokoumine**C<sub>20</sub>H<sub>24</sub>N<sub>2</sub>O<sub>2</sub> (324.43). mp 198–200°C, [α]<sub>D</sub> = –232.7°. Source: GOU WEN *Gelsemium elegans*. Ref: 14.**10004 19-(S)-Hydroxydihydrokoumine**C<sub>20</sub>H<sub>24</sub>N<sub>2</sub>O<sub>2</sub> (324.43). mp 270–272°C, [α]<sub>D</sub> = –184.6°. Source: GOU WEN *Gelsemium elegans*. Ref: 14.**10005 (3S)-8-Hydroxy-6,7-dihydrolinalol 3-O-β-D-glucopyranoside**C<sub>16</sub>H<sub>30</sub>O<sub>7</sub> (334.41). Amorphous powder, [α]<sub>D</sub><sup>21</sup> = –8° (c = 0.5, MeOH). Source: HU SUI ZI *Coriandrum sativum*. Ref: 4302.**10006 8-Hydroxy-6,7-dihydrolinalool 8-O-glucopyranoside**C<sub>16</sub>H<sub>30</sub>O<sub>7</sub> (334.41). Gum. Source: XIANG SI CAO *Comyza bonariensis* [Syn. *Erigeron bonariensis*; *Erigeron linifolius*; *Erigeron crispus*] (aerial parts). Ref: 5206.**10007 11b-Hydroxy-11b,1-dihydromaackiain**C<sub>16</sub>H<sub>14</sub>O<sub>6</sub> (302.29). Pharm: Hepatoprotective (mus primary cultured hepatocytes, antihepatotoxin induced by *D*-galactosamine (GalN), 100μmol/L, InRt = (8.4±0.5)%, inactive, control Silybin, 100μmol/L, InRt = (77.0±5.5)%). Source: GUANG BU DING GONG TENG *Erycibe expansa*. Ref: 4095.**10008 7-Hydroxydihydromatatabiether**C<sub>10</sub>H<sub>18</sub>O<sub>2</sub> (170.25). Source: MU TIAN LIAO *Actinidia polygama*. Ref: 6.**10009 11b-Hydroxy-11b,1-dihydromedicarpin**C<sub>16</sub>H<sub>16</sub>O<sub>5</sub> (288.30). Pharm: Hepatoprotective (mus primary cultured hepatocytes, antihepatotoxin induced by *D*-galactosamine (GalN), 100μmol/L, InRt = (6.5±0.8)%, inactive, control Silybin, 100μmol/L, InRt = (77.0±5.5)%). Source: GUANG BU DING GONG TENG *Erycibe expansa*. Ref: 4095.**10010 20-Hydroxydihydromedicarpin**[135626-62-9] C<sub>20</sub>H<sub>26</sub>N<sub>2</sub>O<sub>4</sub> (358.44). mp 173–174°C, [α]<sub>D</sub> = –165°. Source: GOU WEN *Gelsemium elegans*. Ref: 14.

**10011 5-Hydroxy-1-(3,4-dihydroxy-5-methoxyphenyl)-7-(4-hydroxy-3-methoxyphenyl)heptan-3-one**

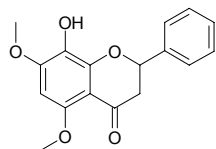
$C_{21}H_{26}O_7$  (390.44). Colorless oil. Source: SHENG JIANG *Zingiber officinale*. Ref: 3803.

**10012 9 $\alpha$ -Hydroxy-11 $\beta$ ,13-dihydrozaluzanin C 3-O- $\beta$ -allopyranoside**

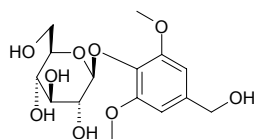
$C_{21}H_{30}O_9$  (426.47). Solid. Source: KAN CHA JIA MAO LIAN CAI *Picris kamschatica*. Ref: 1932.

**10013 2'-Hydroxy-3',5'-diimethoxyflavanone**

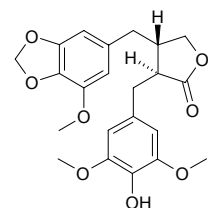
$C_{17}H_{16}O_5$  (300.31). Pale yellow crystals, mp 166~168°C. Source: TIAN ZI YU PAN *Uvaria dulcis* (leaf). Ref: 3928.

**10014 4-Hydroxy-3,5-dimethoxybenzyl alcohol 4-O- $\beta$ -D-glucopyranoside**

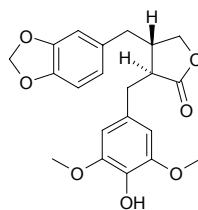
*Di-O-Methylcrenatin*  $C_{15}H_{22}O_9$  (346.34). White powder, mp 175~177°,  $[\alpha]_D^{21} = -21^\circ$ . Source: HU SUI ZI *Coriandrum sativum*, XIAO YE SHI NAN *Photinia parvifolia* (stem). Ref: 4302, 4553.

**10015 (2S,3S)-2-(4-Hydroxy-3,5-dimethoxybenzyl)-3-(5-methoxy-3,4-methylenedioxybenzyl)butyrolactone**

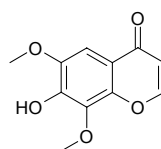
$C_{22}H_{24}O_8$  (416.43). Pale yellow gum,  $[\alpha]_D^{25} = +30.5^\circ$  ( $c = 0.38$ ,  $CHCl_3$ ). Source: MENG ZI CAO HU JIAO *Peperomia duclouxii* (whole herb: yield = 0.00036%). Ref: 4733.

**10016 (2S,3S)-2-(4-Hydroxy-3,5-dimethoxybenzyl)-3-(3,4-methylenedioxybenzyl)butyrolactone**

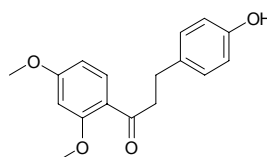
$C_{21}H_{22}O_7$  (386.41). Pale yellow gum,  $[\alpha]_D^{25} = +34.8^\circ$  ( $c = 0.253$ ,  $CHCl_3$ ). Source: MENG ZI CAO HU JIAO *Peperomia duclouxii* (whole herb: yield = 0.00024%). Ref: 4733.

**10017 7-Hydroxy-6,8-dimethoxy coumarin**

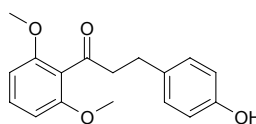
[486-21-5]  $C_{11}H_{10}O_5$  (222.20). Yellowish acicular crystals, mp 146~148°C. Source: MAO LIAN HAO *Artemisia vestita*, HUANG HUA HAO *Artemisia annua*. Ref: 474, 660.

**10018 4-Hydroxy-2',4'-dimethoxydihydrochalcone**

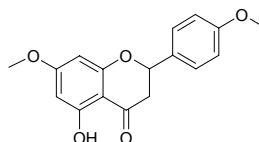
$C_{17}H_{18}O_4$  (286.33). Amorphous powder. Source: LIN JING ZHONG ZI WEN SHU LAN *Crinum bulbispermum* (bulb). Ref: 3997.

**10019 4-Hydroxy-2',6'-dimethoxydihydrochalcone**

$C_{17}H_{18}O_4$  (286.33). White columnar crystals, mp 129~130°C (EtOH). Source: JIAN YE LONG XUE SHU *Dracaena cochinchinensis*. Ref: 414.

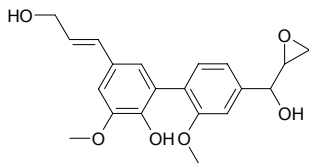
**10020 5-Hydroxy-4',7-dimethoxydihydroflavone**

$C_{17}H_{16}O_5$  (300.31). Pharm: Cytotoxic (*in vitro*, SMMC-7721,  $IC_{50} > 200\mu g/mL$ ; HO-8910,  $IC_{50} > 200\mu g/mL$ ; control Vincristine, SMMC-7721,  $IC_{50} = 30.35\mu g/mL$ ; HO-8910,  $IC_{50} = 20.74\mu g/mL$ ). Source: CHANG YE TIAN MING JING *Carpesium longifolium* (aerial parts: yield = 0.0008%dw). Ref: 4736.

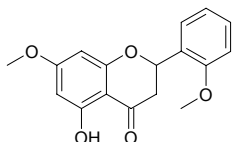


**10021 2-Hydroxy-3,2'-dimethoxy-4'-(2,3-epoxy-1-hydroxypropyl)-5-(3-hydroxy-1-propenyl) biphenyl**

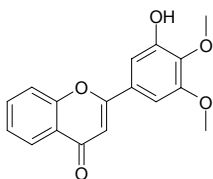
$C_{20}H_{22}O_6$  (358.39). Source: *Eurycoma* sp. Ref: 4556.

**10022 5-Hydroxy-7,2'-dimethoxyflavone**

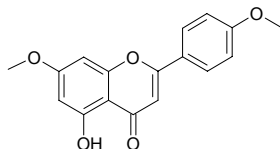
$C_{17}H_{14}O_5$  (300.31). Pale yellow amorphous solid (MeOH), mp 222–224°C. Source: *Andrographis rothii* (whole herb). Ref: 4311.

**10023 3'-Hydroxy-4',5'-dimethoxyflavone**

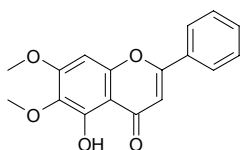
$C_{17}H_{14}O_5$  (298.30). White crystalline solid ( $CHCl_3$ ). Source: HUANG HUA JIU LUN CAO *Primula veris* [Syn. *Primula officinalis*] (leaf). Ref: 5275.

**10024 5-Hydroxy-4',7-dimethoxy-flavone**

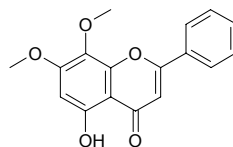
Apigenin-4',7-dimethyl ether [5128-44-9]  $C_{17}H_{14}O_5$  (298.30). mp 171–172°C. Source: CHUAN XIN LIAN *Andrographis paniculata* [Syn. *Justicia paniculata*], MI DIE XIANG *Rosmarinus officinalis*, WU JU LOU DOU CAI *Aquilegia ecalcarata* (whole herb: yield = 0.00014%dw)<sup>[3029]</sup>, XIONG RUI ZHUANG SHU WEI CAO *Salvia staminea*, YE TAI *Trocholejeunea sandvicensis*, *Nuxia sphaerocephala* (leaf). Ref: 6, 660, 3029, 3909, 4419, 5400.

**10025 5-Hydroxy-6,7-dimethoxyflavone**

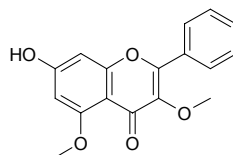
$C_{17}H_{14}O_5$  (298.30). Source: BAN BIAN SU *Elsholtzia ciliata*, SHI XIANG RU *Mosla chinensis* [Syn. *Orthodon chinensis*]. Ref: 660.

**10026 5-Hydroxy-7,8-dimethoxyflavone**

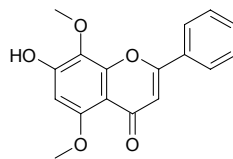
7-O-Methylwogonin [3570-62-5]  $C_{17}H_{14}O_5$  (298.30). Source: HUANG QIN *Scutellaria baicalensis*, SHEN CHANG CHUAN XIN LIAN *Andrographis elongata* (whole herb). Ref: 2, 4149.

**10027 7-Hydroxy-3,5-dimethoxyflavone**

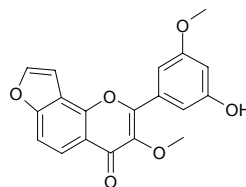
$C_{17}H_{14}O_5$  (298.30). Source: GAO LIANG JIANG *Alpinia officinarum*. Ref: 660.

**10028 7-Hydroxy-5,8-dimethoxyflavone**

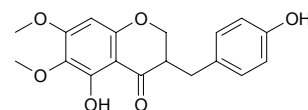
$C_{17}H_{14}O_5$  (298.30). Source: BAN ZHI LIAN *Scutellaria barbata* [Syn. *Scutellaria rivularis*], ZI BEI HUANG QIN *Scutellaria discolor*. Ref: 660.

**10029 3'-Hydroxy,3,5'-dimethoxy furo[8,7:4'',5'']flavone**

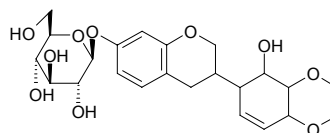
$C_{19}H_{14}O_6$  (338.32). White crystals (MeOH), mp 230°C. Source: SHUI LIU DOU *Pongamia pinnata* (fruit). Ref: 3767.

**10030 5-Hydroxy-6,7-dimethoxy-3-(4'-hydroxybenzyl)-4-chromanone**

$C_{18}H_{18}O_6$  (330.34). Yellow powder, mp 74–76°C (dec),  $[\alpha]_D^{25} = +345.3^\circ$  ( $c = 0.43$ , MeOH). Source: HE CAO YE JIA BEI FANG FENG *Ledebouria graminifolia* (tuber). Ref: 3368.

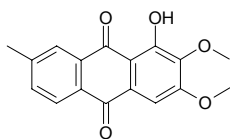
**10031 2'-Hydroxy-3',4'-dimethoxy-isoflavane-7-O-β-D-glucoside**

$C_{23}H_{32}O_{10}$  (468.51). Source: HUANG QI *Astragalus membranaceus*. Ref: 2.

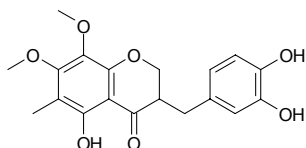


**10032 1-Hydroxy-2,3-dimethoxy-7-methyl-9,10-anthraquinone**

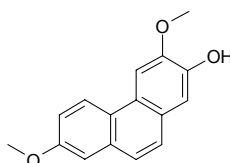
$C_{17}H_{14}O_5$  (298.30). Red needles (acetone), mp 159~161°C. Source: NAN SHAN HUA *Prismatomeris tetrandra* (root). Ref: 4521.

**10033 5-Hydroxy-7,8-dimethoxy-6-methyl-3-(3',4'-dihydroxybenzyl)chroman-4-one**

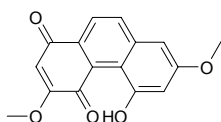
$C_{19}H_{20}O_7$  (360.37). Source: MAI DONG *Ophiopogon japonicus*. Ref: 660.

**10034 2-Hydroxy-3,7-dimethoxyphenanthrene**

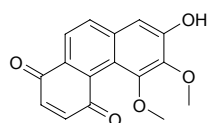
$C_{16}H_{14}O_3$  (254.29). Source: DI SUO LUO *Marchantia polymorpha*. Ref: 660.

**10035 5-Hydroxy-3,7-dimethoxy-1,4-phenanthrenequinone**

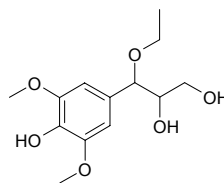
$C_{16}H_{12}O_5$  (284.27). Pharm: VHR DS-PTPase inhibitor ( $IC_{50} > 200 \mu\text{mol/L}$ , control RK-682,  $IC_{50} = 11.6 \mu\text{mol/L}$ ); PTP1B inhibitor ( $IC_{50} > 200 \mu\text{mol/L}$ ); Ppase1 inhibitor ( $IC_{50} > 200 \mu\text{mol/L}$ ). Source: XI JING SHI HU *Dendrobium moniliforme* (stem). Ref: 5025.

**10036 7-Hydroxy-5,6-dimethoxy-1,4-phenanthrene-quinone**

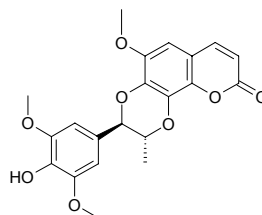
$C_{16}H_{12}O_5$  (284.27). Pharm: VHR DS-PTPase inhibitor ( $IC_{50} = (3.0 \pm 0.2) \mu\text{mol/L}$ , control RK-682,  $IC_{50} = 11.6 \mu\text{mol/L}$ )<sup>[5025]</sup>; PTP1B inhibitor ( $IC_{50} = (38.0 \pm 1.5) \mu\text{mol/L}$ ); Ppase1 inhibitor ( $IC_{50} > 200 \mu\text{mol/L}$ ). Source: XI JING SHI HU *Dendrobium moniliforme* (stem). Ref: 5025.

**10037 threo-3-(4-Hydroxy-3,5-dimethoxyphenyl)-3-ethoxypropane-1,2-diol**

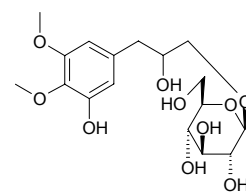
$C_{13}H_{20}O_6$  (272.3). Amorphous white powder,  $[\alpha]_D^{25} = +28^\circ$  ( $c = 0.10$ ,  $\text{CHCl}_3$ ). Source: TIAN XIAN GUO *Ficus beecheyana* [Syn. *Ficus erecta* var. *beecheyana*] (root; yield = 0.0037%dw). Ref: 4657.

**10038 2-(4-Hydroxy-3,5-dimethoxy-phenyl)-10-methoxy-3-methyl-2,3-dihydro-1,4,5-trioxaphenanthren-6-one**

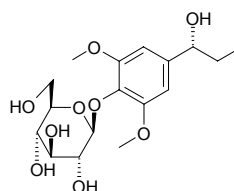
$C_{21}H_{20}O_8$  (400.39). Pale yellow solid, mp 240~244°C,  $[\alpha]_D = -6.4^\circ$  ( $c = 0.7$ ,  $\text{CHCl}_3:\text{MeOH} = 1:1$ ). Pharm: Antioxidant (*in vitro*, rat liver microsomes lipid peroxidation,  $IC_{50} = 1.4 \mu\text{g/mL}$ ); MAO inhibitor inactive ( $70 \mu\text{g/mL}$ ). Source: MU JIN HUA *Hibiscus syriacus*. Ref: 3088.

**10039 1'-(3-Hydroxy-4,5-dimethoxyphenyl)propane-2',3'-diol 3'-O-β-D-glucopyranoside**

$C_{17}H_{26}O_{10}$  (390.39). Amorphous powder,  $[\alpha]_D^{23} = -6^\circ$  ( $c = 0.1$ , MeOH). Source: YIN DU ZANG HUI XIANG *Carum ajowan* (fruit). Ref: 3547.

**10040 (1'R)-1'-(4-Hydroxy-3,5-dimethoxyphenyl)propan-1'-ol 4-O-β-D-glucopyranoside**

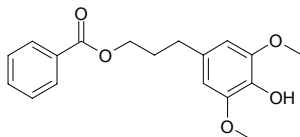
$C_{17}H_{26}O_9$  (374.39). Amorphous powder,  $[\alpha]_D^{23} = -10^\circ$  ( $c = 1.0$ , MeOH). Source: HU SUI ZI *Coriandrum sativum*. Ref: 4302.



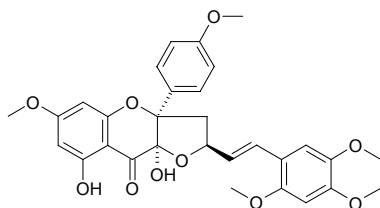


**10041 3'-(4''-Hydroxy-3'',5'-dimethoxyphenyl)-propyl benzoate**

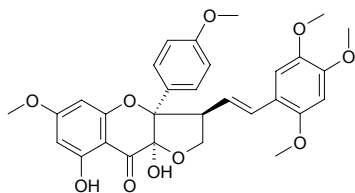
$C_{18}H_{20}O_5$  (316.36). Pale yellow amorphous mass. Pharm: Antifungal (*Candida albicans*,  $IC_{50} = (11.41 \pm 1.44) \mu\text{g/mL}$ , control Amphotericin B,  $IC_{50} = (0.04 \pm 0.00) \mu\text{g/mL}$ ); Anti-inflammatory (COX-1 inhibitor,  $IC_{50} = (4.95 \pm 0.58) \mu\text{g/mL}$ , control Aspirin,  $IC_{50} = (4.22 \pm 0.48) \mu\text{g/mL}$ ; COX-2 inhibitor,  $IC_{50} = (2.11 \pm 0.12) \mu\text{g/mL}$ , Aspirin,  $IC_{50} = (13.66 \pm 0.59) \mu\text{g/mL}$ ). Source: *Croton hutchinsonianus* (branche: yield = 0.0031%dw). Ref: 1571.

**10042 *rel*-5-Hydroxy-7,4'-dimethoxy-2''*S*-(2,4,5-trimethoxy-*E*-styryl)-tetrahydrofuro[4''*R*,5''*R*:2,3]flavanonol**

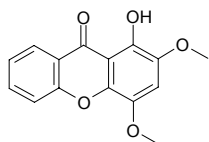
$C_{30}H_{30}O_{10}$  (550.57). Amorphous yellow powder,  $[\alpha]_D^{21} = 0^\circ$  ( $c = 0.3$ ,  $\text{CHCl}_3$ ). Source: SHAN SHAN JIANG *Alpinia flabellata* (leaf: yield = 0.00040%dw). Ref: 4614.

**10043 *rel*-5-Hydroxy-7,4'-dimethoxy-3''*S*-(2,4,5-trimethoxy-*E*-styryl)-tetrahydrofuro[4''*R*,5''*R*:2,3]flavanonol**

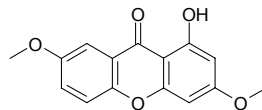
$C_{30}H_{30}O_{10}$  (550.57). Amorphous yellow powder,  $[\alpha]_D^{21} = +5.1^\circ$  ( $c = 0.2$ ,  $\text{CHCl}_3$ ). Source: SHAN SHAN JIANG *Alpinia flabellata* (leaf: yield = 0.00031%dw). Ref: 4614.

**10044 1-Hydroxy-2,4-dimethoxyxanthone**

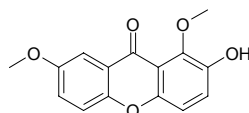
$C_{15}H_{12}O_5$  (272.26). Yellow needles, with yellow fluorescence, mp 165~169°C. Source: JIA HUANG HUA YUAN ZHI *Polygala fallax* [Syn. *Polygala aureocauda*]. Ref: 2517.

**10045 1-Hydroxy-3,7-dimethoxyxanthone**

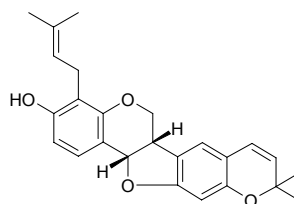
$C_{15}H_{12}O_5$  (272.26). Source: YUAN ZHI *Polygala tenuifolia*. Ref: 660.

**10046 2-Hydroxy-1,7-dimethoxyxanthone**

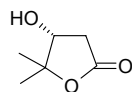
$C_{15}H_{12}O_5$  (272.26). Source: CHAN YI TENG *Securidaca inappendiculata* (stem). Ref: 5238.

**10047 3-Hydroxy-4-(3,3-dimethylallyl)-4'',5''-dehydropyrano [8,9:2'',3''][6*aR*,11*aR*]-pterocarpane**

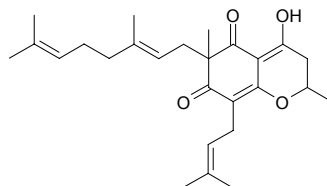
$C_{25}H_{26}O_4$  (390.48). White amorphous powder, mp 74~75°C,  $[\alpha]_D^{25} = -36.1^\circ$  ( $c = 0.3$ , MeOH). Pharm: Cytotoxic (KB,  $IC_{50} = (52.3 \pm 4.1) \mu\text{mol/L}$ , control Helenalin,  $IC_{50} = (0.64 \pm 0.08) \mu\text{mol/L}$ , Melphalan,  $IC_{50} = (6.0 \pm 0.5) \mu\text{mol/L}$ ; Mono-Mac-6,  $IC_{50} > 75 \mu\text{mol/L}$ , Helenalin,  $IC_{50} = (3.1 \pm 0.3) \mu\text{mol/L}$ ; Jurkat-T,  $IC_{50} = (53.6 \pm 1.1) \mu\text{mol/L}$ , Helenalin,  $IC_{50} = (1.14 \pm 0.08) \mu\text{mol/L}$ , Melphalan,  $IC_{50} = (9.1 \pm 0.8) \mu\text{mol/L}$ )<sup>[5077]</sup>. Source: *Bituminaria morisiana* (leaf). Ref: 5077.

**10048 (+)-(3*R*)-3-Hydroxy-4,4-dimethyl-4-butyrolactone**

$C_6H_{10}O_3$  (130.14). Colorless oil,  $[\alpha]_D^{25} = 53^\circ$  ( $c = 0.34$ ,  $\text{CHCl}_3$ ). Source: DA YE BAI TOU WENG *Anaphalis margaritacea*. Ref: 3853.

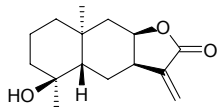
**10049 4-Hydroxy-2,6-dimethyl-6-(3,7-dimethyl-2,6-octadienyl)-8-(3-methyl-2-butenyl)-2*H*-1-benzopyran-5,7(3*H*,6*H*)-dione**

$C_{26}H_{36}O_4$  (412.57). Yellow oil,  $[\alpha]_D^{25} = -1.31^\circ$  ( $c = 0.57$ ,  $\text{CHCl}_3$ ). Source: BAI BEI YE *Mallous apelta*. Ref: 755.

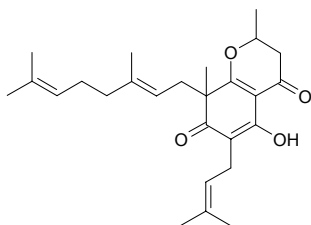


**10050 4 $\beta$ -Hydroxy-4,10 $\alpha$ -dimethyl-7 $\alpha$ H,8 $\alpha$ H-eudesman-11-ene-8,12-olide**

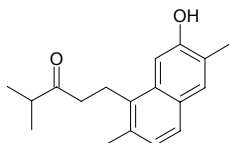
C<sub>15</sub>H<sub>22</sub>O<sub>3</sub> (250.34). Gum. Source: HE AN FU LAO JU *Flourensia riparia* (aerial parts). Ref: 3820.

**10051 5-Hydroxy-2,8-dimethyl-6-(3-methyl-2-butenyl)-8-(3,7-dimethyl-2,6-octadienyl)-2H-1-benzopyran-4,7(3H,8H)-dione**

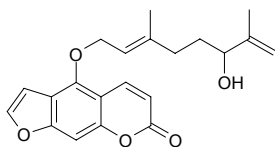
C<sub>26</sub>H<sub>36</sub>O<sub>4</sub> (412.57). Yellow oil,  $[\alpha]_D^{25} = -22^\circ$  ( $c = 0.29$ , CHCl<sub>3</sub>). Source: BAI BEI YE *Mallotus apelta*. Ref: 755.

**10052 1-(7-Hydroxy-2,6-dimethyl-1-naphthyl)-4-methyl-3-pentanone**

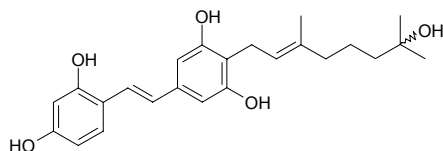
20(10→5)-Abeo-4,5-seco-5(10),6,8,11,13-podocarpapentaen-3-one C<sub>18</sub>H<sub>22</sub>O<sub>2</sub> (270.37). White amorphous solid, mp 98~102°C. Pharm: Cytotoxic (*in vitro*, pulmonary adenocarcinoma A549 cells, IC<sub>50</sub> > 100 μmol/L; hepatocarcinoma Bel7402 cells, IC<sub>50</sub> = 34.7 μmol/L; gastric carcinoma BGC823 cells, IC<sub>50</sub> = 35.2 μmol/L; colorectal adenocarcinoma HCT8 cells, IC<sub>50</sub> = 23.1 μmol/L; ovarian cancer A2780 cells, IC<sub>50</sub> > 100 μmol/L). Source: YI YE QIU *Securinega suffruticosa* (callus). Ref: 4544.

**10053 5-(6-Hydroxy-3,7-dimethylocta-2,7-dienyloxy)psoralen**

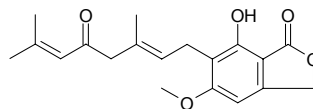
C<sub>21</sub>H<sub>22</sub>O<sub>5</sub> (354.41). White solid. Pharm: Insect antifeedant (larvae of *Spodoptera littoralis*, Feeding Index = (25±19)% at 0.001 mol/L; larvae of *Heliothis virescens*, Feeding Index = (13±10)% at 0.001 mol/L). Source: *Tetradium daniellii* (dried fruit). Ref: 3370.

**10054 4-[(2''E)-7''-Hydroxy-3'',7''-dimethyloct-2''-enyl]-2'',3,4',5-tetrahydroxy-trans-stilbene**

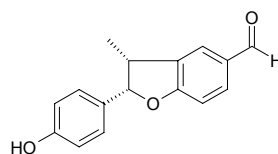
C<sub>24</sub>H<sub>30</sub>O<sub>5</sub> (398.50). Yellowish powder. Pharm: Tyrosinase inhibitor (IC<sub>50</sub> = 96 μmol/L). Source: GAO HUANG LU SANG *Chlorophora excelsa* (heartwood). Ref: 4326.

**10055 3-Hydroxy-4-(3,7-dimethyl-5-oxo-2,6-octadienyl)-5-methoxybenzo[1,2-c]furan-2-one**

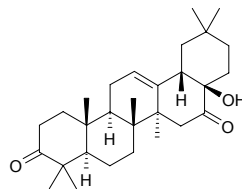
C<sub>19</sub>H<sub>22</sub>O<sub>5</sub> (330.38). Source: HOU TOU JUN *Hericium erinaceus* [Syn. *Hydnum erinaceus*]. Ref: 660.

**10056 (7S,8R)-4-Hydroxy-8',9'-dinor-4',7-epoxy-8,3'-neolignan-7'-aldehyde**

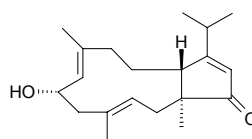
C<sub>16</sub>H<sub>14</sub>O<sub>3</sub> (254.29). Yellow oil,  $[\alpha]_D^{21} = -30.1^\circ$  ( $c = 0.10$ , MeOH). Source: *Piper regnelli* (root). Ref: 2358.

**10057 17β-Hydroxy-3,16-dioxo-28-norolean-12-ene**

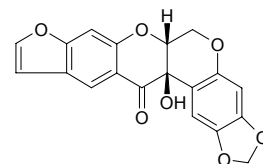
C<sub>29</sub>H<sub>44</sub>O<sub>3</sub> (440.67). Glassy amorphous solid,  $[\alpha]_D^{20} = +39^\circ$  ( $c = 0.12$ , CHCl<sub>3</sub>). Source: XIAO SHE JU GEN *Microglossa pyriformis*. Ref: 5374.

**10058 (1S\*,6S\*,11S\*)-6-Hydroxydolabella-3E,7E,12-trien-14-one**

C<sub>20</sub>H<sub>30</sub>O<sub>2</sub> (302.46). Clear film,  $[\alpha]_D^{20} = -142^\circ$  ( $c = 0.23$ , CHCl<sub>3</sub>). Source: fungus *Stachybotrys chartarum*. Ref: 5104.

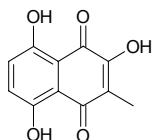
**10059 12 $\alpha$ -Hydroxydoloneone**

C<sub>19</sub>H<sub>12</sub>O<sub>7</sub> (352.30). Needles (CHCl<sub>3</sub>-MeOH), mp 14~195°C, mp 180~181°C,  $[\alpha]_D = +42^\circ$ . Pharm: Antiviral (HSV-1, IC<sub>50</sub> = 25.5 μg/mL, HSV-2, 50 μg/mL, InRt = 42.5%)<sup>[4180]</sup>. Source: DI GUA ZI *Pachyrrhizus erosus*, *Neorautanenia edulis*, DOU SHU *Pachyrrhizus erosus* (seed). Ref: 6, 1521, 4180.

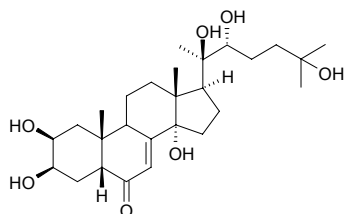


**10060 Hydroxydroserone**

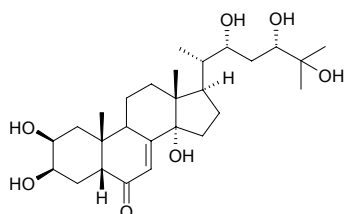
$C_{11}H_8O_5$  (220.18). Red plates (AcOH), mp 192~193°C. Source: MAO GAO CAI *Drosera peltata* var. *lunata*, HUI TE KE MAO GAO CAI *Drosera whittakeri*. Ref: 621, 1521.

**10061 20-Hydroxyecdysone**

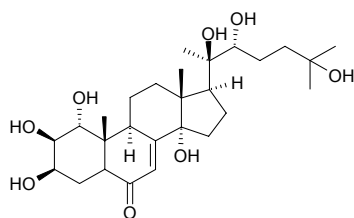
$C_{27}H_{44}O_7$  (480.65). Source: GUAN HUA ROU CONG RONG *Cistanche tubulosa*, YING ZI CAO *Silene fortunei* (root: yield = 0.0032%dw). Ref: 2448, 4658.

**10062 24-Hydroxyecdysone**

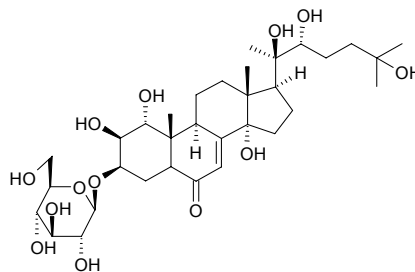
$C_{27}H_{44}O_7$  (480.65). Source: DUO ZU JUE *Polypodium vulgare*. Ref: 1521.

**10063 1 $\alpha$ ,20R-Hydroxyecdysone**

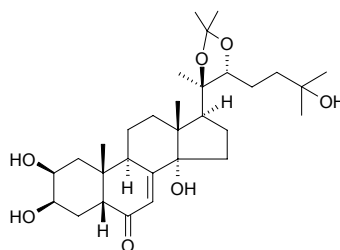
1 $\alpha$ ,20R-Dihydroxyecdysone  $C_{27}H_{44}O_8$  (496.65). White powder. Pharm: Ecdysteroid agonist (*Drosophila melanogaster* B<sub>11</sub> cell line, EC<sub>50</sub> = 7.5nmol/L)<sup>[5142]</sup>. Source: MAO JIAN QIU LUO *Lychnis coronaria*, NIU QU TI GEN CAO *Helleborus torquatus* [Syn. *Helleborus serbicus*] (seed). Ref: 2189, 5142.

**10064 20-Hydroxyecdysone 3-O- $\beta$ -D-glucoside**

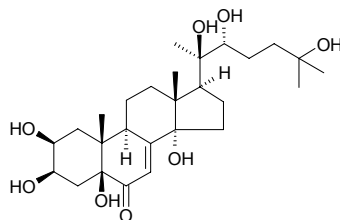
1 $\alpha$ ,20R-Dihydroxyecdysone 3-O- $\beta$ -D-glucoside  $C_{33}H_{54}O_{13}$  (658.79). Pharm: Ecdysteroid agonist (*Drosophila melanogaster* B<sub>11</sub> cell line, EC<sub>50</sub> = 13 $\mu$ mol/L). Source: NIU QU TI GEN CAO *Helleborus torquatus* [Syn. *Helleborus serbicus*] (seed). Ref: 5142.

**10065 20-Hydroxyecdysone-20,22-monoacetonide**

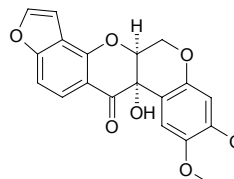
$C_{30}H_{48}O_7$  (520.71). Source: YI BAO MA HUA TOU *Serratula strangulata* (root stem). Ref: 5244.

**10066 5 $\beta$ -Hydroxyecdysterone**

5 $\beta$ ,20R-Dihydroxyecdysone  $C_{27}H_{44}O_8$  (496.65). mp 256°C. Source: SHUI LONG GU *Polypodium niponicum*. Ref: 6.

**10067 6 $\alpha$ ,12 $\alpha$ ,12 $\alpha$ -Hydroxyelliptone**

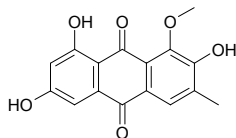
$C_{20}H_{16}O_7$  (368.35). Colorless oil,  $[\alpha]_D^{25} = -4.4^\circ$  ( $c = 0.068$ ,  $CHCl_3$ ). Pharm: Anti-tumor promotor (*in vivo*, mouse skin tumor, inhibits TPA-induced EBV-EA activation, 100 mol ratio/32pmol TPA, EBV-EA positive cells = 66.4% viability, positive control  $\beta$ -Carotene, EBV-EA positive cells = 82.7% viability). Source: YU TENG *Derris trifoliata* (stem). Ref: 4982.



**10068 2-Hydroxyemodin 1-methyl ether**

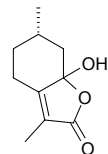
$C_{16}H_{12}O_6$  (300.27). Yellow needles (EtOAc-*n*-hexane), mp 292~294°C.

**Pharm:** Cytotoxic (*in vitro*, Calu1,  $IC_{50} = (21 \pm 5) \mu\text{mol/L}$ ; HeLa,  $IC_{50} = (50 \pm 6) \mu\text{mol/L}$ ; K562,  $IC_{50} > 100 \mu\text{mol/L}$ ; Raji,  $IC_{50} < 6.25 \mu\text{mol/L}$ ; Vero,  $IC_{50} = (32.5 \pm 4.5) \mu\text{mol/L}$ ; Wish,  $IC_{50} = (55 \pm 6) \mu\text{mol/L}$ ). **Source:** YI HE GUO *Ventilago leiocarpa* (stem). **Ref:** 3057.

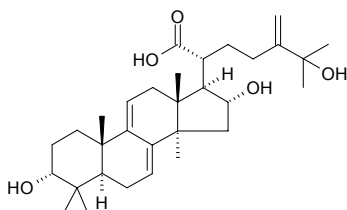
**10069 3-Hydroxy-4(8)-ene-*p*-menthane-3(9)-lactone**

$C_{10}H_{14}O_3$  (182.22). Colorless plate crystals,  $[\alpha]_D^{18} = +60.21^\circ$  ( $c = 0.68$ , MeOH).

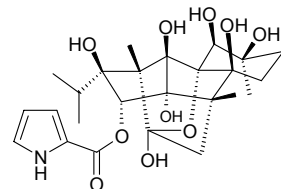
**Source:** JING JIE *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*]. **Ref:** 2158.

**10070 25-Hydroxy-3-epidehydrotumulosic acid**

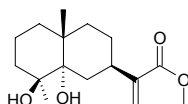
$C_{31}H_{48}O_5$  (500.73). **Pharm:** Antineoplastic (EBV-EA induced by TPA, mol ratio/TPA = 1000, relative percentage of EBV-EA = 0% (positive control value 32pmol, 20ng TPA = 100%), viability of Raji cells = 70%; reference compound  $\beta$ -Carotene, relative percentage = 8.6%). **Source:** FU LING *Poria cocos* (sclerotium: yield = 0.00011%dw). **Ref:** 4616.

**10071 9-Hydroxy-9-epi-10-epi-ryanodine**

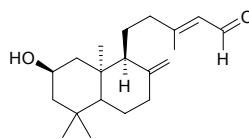
$C_{25}H_{35}NO_{10}$  (509.56). Crystals ( $\text{CHCl}_3:\text{Me}_2\text{CO} = 3:1$ ), mp 178°C,  $[\alpha]_D = +11^\circ$  ( $c = 1.0$ ). **Pharm:** Cardiac contraction inhibitor (guinea-pig papillary muscle, causes a prolongation of the latency time and decrease of contraction force,  $EC_{50} = 1800 \text{nmol/L}$ ). **Source:** QU CHONG CAO *Spigelia anthelmia* (aerial parts). **Ref:** 5139.

**10072 5 $\alpha$ -Hydroxy-4-epi-ilicic acid methyl ester**

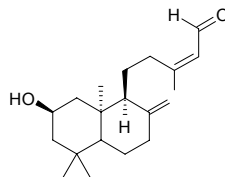
$C_{16}H_{26}O_4$  (292.38). Colorless needles (MeOH), mp 120~121°C,  $[\alpha]_D^{20} = +13.4^\circ$  ( $c = 0.49$ , MeOH). **Source:** LIU LENG JU *Laggera alata* (aerial parts: yield = 0.0009%dw). **Ref:** 4709.

**10073 2 $\beta$ -Hydroxy-9-epi-ent-labda-8(17),13(E)-dien-15-al**

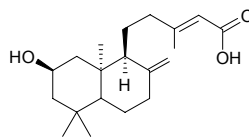
$C_{20}H_{32}O_2$  (304.48). **Source:** BU MEI HE BAO HUA *Calceolaria inamoena* (aerial parts). **Ref:** 3788.

**10074 2 $\beta$ -Hydroxy-9-epi-ent-labda-8(17),13(Z)-dien-15-al**

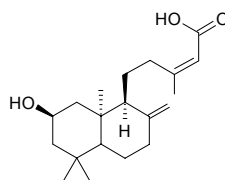
$C_{20}H_{32}O_2$  (304.48). **Source:** BU MEI HE BAO HUA *Calceolaria inamoena* (aerial parts). **Ref:** 3788.

**10075 2 $\beta$ -Hydroxy-9-epi-ent-labda-8(17),13(E)-dien-15-oic acid**

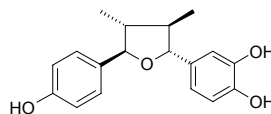
$C_{20}H_{32}O_3$  (320.48). **Source:** BU MEI HE BAO HUA *Calceolaria inamoena* (aerial parts). **Ref:** 3788.

**10076 2 $\beta$ -Hydroxy-9-epi-ent-labda-8(17),13(Z)-dien-15-oic acid**

$C_{21}H_{34}O_3$  (334.50). **Source:** BU MEI HE BAO HUA *Calceolaria inamoena* (aerial parts). **Ref:** 3788.

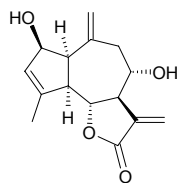
**10077 3''-Hydroxy-4-epi-larreatricin**

3-Hydroxy-8-epi-larreatricin  $C_{18}H_{20}O_4$  (300.36). **Pharm:** Antioxidant (Takamatsu DCFH method, myelomonocytic HL-60 cells,  $IC_{50} = (1.3 \pm 0.3) \mu\text{g/mL}$ ; control NDGA,  $IC_{50} = (0.7 \pm 0.3) \mu\text{g/mL}$ , Vitamin C,  $IC_{50} = (1.9 \pm 0.7) \mu\text{g/mL}$ , Trolox,  $IC_{50} = (1.4 \pm 0.5) \mu\text{g/mL}$ )<sup>[3850]</sup>; cytotoxic (XTT assay, HL-60 cells,  $IC_{50} = (13.6 \pm 0.8) \mu\text{g/mL}$ ; control NDGA,  $IC_{50} = (2.6 \pm 0.2) \mu\text{g/mL}$ , Vitamin C,  $IC_{50} > 10.0 \mu\text{g/mL}$ , Trolox,  $IC_{50} > 10.0 \mu\text{g/mL}$ )<sup>[3850]</sup>. **Source:** SAN CHI LA RUI A *Larrea tridentata* (leaf). **Ref:** 1521, 3850.

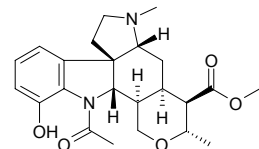


**10078 2 $\beta$ -Hydroxyepiligustrin**

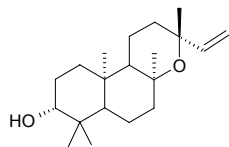
C<sub>15</sub>H<sub>18</sub>O<sub>4</sub> (262.31). Source: *Anthemis carpatica* (aerial parts). Ref: 3974.

**10079 12-Hydroxy-19-epi-malagashanine**

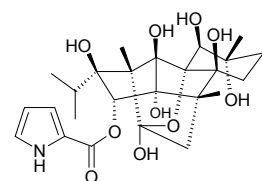
C<sub>23</sub>H<sub>30</sub>N<sub>2</sub>O<sub>5</sub> (414.51). Crystals (*n*-hexane), mp 93–95°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = –69.4° (*c* = 0.3, CHCl<sub>3</sub>). Source: *Strychnos myrtoides*. Ref: 2297.

**10080 ent-3 $\beta$ -Hydroxy-13-epi-manoyl oxide**

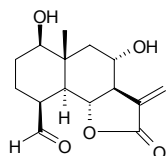
C<sub>20</sub>H<sub>34</sub>O<sub>2</sub> (306.49). Colorless needles (MeOH), mp 82–84°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = –15.2° (*c* = 1.3, CHCl<sub>3</sub>). Source: HAI QI *Excoecaria agallocha* (root). Ref: 5114.

**10081 9-Hydroxy-10-epi-ryanodine**

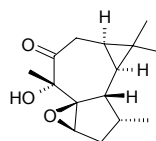
C<sub>25</sub>H<sub>35</sub>NO<sub>10</sub> (509.56). Crystals (CHCl<sub>3</sub>:Me<sub>2</sub>CO = 3:1), mp 169°C, [ $\alpha$ ]<sub>D</sub> = +2° (*c* = 0.1). Source: QU CHONG CAO *Spigelia anthelmia* (aerial parts). Ref: 5139.

**10082 8 $\alpha$ -Hydroxy-4-epi-sonchucarpolide**

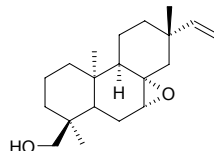
C<sub>15</sub>H<sub>20</sub>O<sub>5</sub> (280.32). Oil, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +7.1° (*c* = 0.18, CHCl<sub>3</sub>). Pharm: Antifungal (*Aspergillus niger*, MIC = 0.25 $\mu$ g/mL, control Miconazole, MIC = 1.5 $\mu$ g/mL; *Aspergillus ochraceus*, MIC = 0.25 $\mu$ g/mL, Miconazole, MIC = 1.5 $\mu$ g/mL; *Aspergillus versicolor*, MIC = 0.125 $\mu$ g/mL, Miconazole, MIC = 2 $\mu$ g/mL; *Aspergillus flavus*, MIC = 0.25 $\mu$ g/mL, Miconazole, MIC = 0.5 $\mu$ g/mL; *Penicillium ochrochloron*, MIC = 0.25 $\mu$ g/mL, Miconazole, MIC = 2 $\mu$ g/mL; *Penicillium funiculosum*, MIC = 1 $\mu$ g/mL, Miconazole, MIC = 2 $\mu$ g/mL; *Trichoderma viride*, MIC = 0.25 $\mu$ g/mL, Miconazole, MIC = 2 $\mu$ g/mL; *Cladosporium cladosporioides*, MIC = 0.5 $\mu$ g/mL, Miconazole, MIC = 0.03 $\mu$ g/mL; *Alternaria alternata*, MIC = 0.5 $\mu$ g/mL, Miconazole, MIC = 0.5 $\mu$ g/mL). Source: *Centaurea thessala* ssp. *drakiensis* (aerial parts). Ref: 5115.

**10083 10 $\alpha$ -Hydroxy-1,2-epoxyaromadendran-9-one**

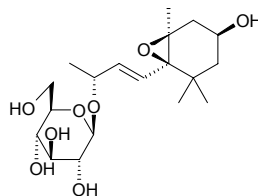
C<sub>15</sub>H<sub>22</sub>O<sub>3</sub> (250.34). Oil, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = –12° (*c* = 0.85, CHCl<sub>3</sub>). Source: *Curvularia lunata*. Ref: 5140.

**10084 18-Hydroxy-7 $\alpha$ ,8 $\alpha$ -epoxy-9-epi-ent-pimara-15-ene**

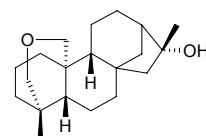
C<sub>20</sub>H<sub>32</sub>O<sub>2</sub> (304.48). Source: TENG CANG CHI MEI *Gibberella fujikuroi*. Ref: 3916.

**10085 (3S,5S,6R,9R)-3-Hydroxy-5,6-epoxy- $\beta$ -ionol-9-O- $\beta$ -glucopyranoside**

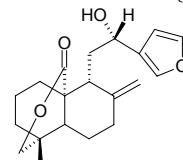
C<sub>19</sub>H<sub>32</sub>O<sub>8</sub> (388.46). [ $\alpha$ ]<sub>D</sub><sup>21</sup> = –52.5° (*c* = 0.8, MeOH). Source: JIN HUANG CAO SU *Phlomis aurea* (leaf). Ref: 5093.

**10086 16-Hydroxy-19,20-epoxy-kaurane**

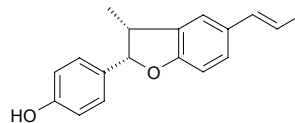
C<sub>20</sub>H<sub>32</sub>O<sub>2</sub> (304.48). Colorless acicular crystals (CHCl<sub>3</sub>), mp 177–179°C. Source: LEI GONG TENG *Tripterygium wilfordii*. Ref: 683.

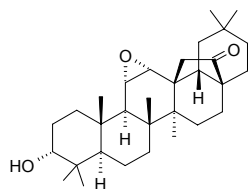
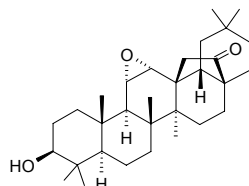
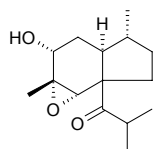
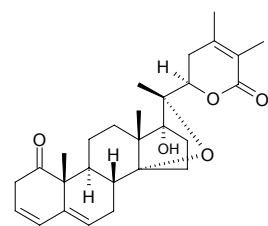
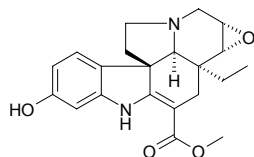
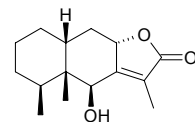
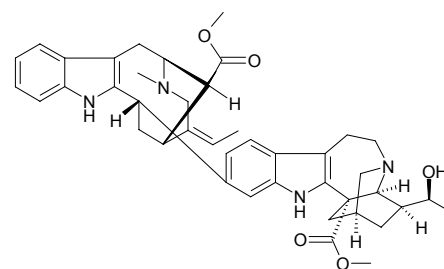
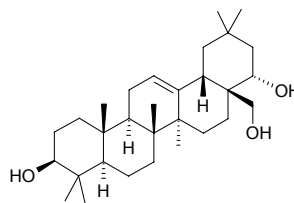
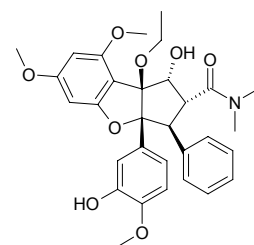
**10087 12(S)-Hydroxy-15,16-epoxy-8(17),13(16),14-ent-labdatrien-20,19-olide**

C<sub>20</sub>H<sub>26</sub>O<sub>4</sub> (330.43). Colorless oil, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = –25.7° (*c* = 0.31, CHCl<sub>3</sub>). Pharm: Phytotoxin (*Raphidocelis subcapitata*, IC<sub>50</sub> = 4.40 $\mu$ mol/L). Source: FU YE YAN ZI CAI *Potamogeton natans*. Ref: 5184.

**10088 (7S,8R)-4-Hydroxy-4',7-epoxy-8,3'-neolignan-(7E)-ene**

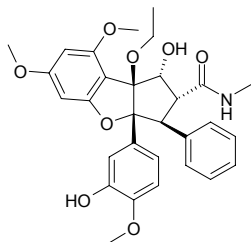
C<sub>18</sub>H<sub>18</sub>O<sub>2</sub> (266.34). White amorphous, [ $\alpha$ ]<sub>D</sub><sup>21</sup> = +85.5° (*c* = 0.06, MeOH). Source: *Piper regnellii* (root). Ref: 2358.



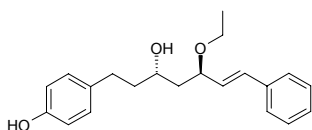
**10089 3 $\alpha$ -Hydroxy-11 $\alpha$ ,12 $\alpha$ -epoxy-oleanane-28,13 $\beta$ -olide**C<sub>31</sub>H<sub>48</sub>O<sub>3</sub> (468.73). **Pharm:** Cytotoxic (leukemia cells L<sub>1210</sub>, IC<sub>50</sub> = 30 $\mu$ g/mL).**Source:** *Juliania adstringens* (bark). **Ref:** 3786.**10090 3 $\beta$ -Hydroxy-11 $\alpha$ ,12 $\alpha$ -epoxy-oleanane-28,13 $\beta$ -olide**C<sub>31</sub>H<sub>48</sub>O<sub>3</sub> (468.73). **Source:** *Juliania adstringens* (bark). **Ref:** 3786.**10091 3 $\alpha$ -Hydroxy-4 $\alpha$ ,5 $\alpha$ -epoxy-7-oxo-(8[7 $\rightarrow$ 6]-abeoamorphane**C<sub>15</sub>H<sub>24</sub>O<sub>3</sub> (252.36). Colorless oil, [ $\alpha$ ]<sub>D</sub> = -9.3° (*c* = 0.9, CHCl<sub>3</sub>). **Source:**HUANG HUA HAO *Artemisia annua* (seed). **Ref:** 3435.**10092 17 $\beta$ -Hydroxy-14 $\alpha$ ,20 $\alpha$ -epoxy-1-oxo-(22*R*)-witha-3,5,24-trienolide**C<sub>28</sub>H<sub>36</sub>O<sub>5</sub> (452.60). [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -11° (*c* = 0.0062, CHCl<sub>3</sub>-MeOH). **Source:** NINGGU SHUI QIE *Withania coagulans*. **Ref:** 3378.**10093 11-Hydroxy-14,15 $\alpha$ -epoxytabersonine**[140680-64-4] C<sub>21</sub>H<sub>24</sub>N<sub>2</sub>O<sub>4</sub> (368.43). White crystals, mp 216°C (dec), [ $\alpha$ ]<sub>D</sub> =-350° (*c* = 1.0, chloroform). **Pharm:** Antineoplastic (P<sub>388</sub>); spermaticidal (*in vitro*, 0.2mg/mL). **Source:** CHUAN SHAN CHENG *Melodinus hemsleyanus*.**Ref:** 1093, 1183.**10094 6-Hydroxyeremophilinolide**[10250-03-0] C<sub>15</sub>H<sub>22</sub>O<sub>3</sub> (250.34). Crystals (Et<sub>2</sub>O), mp 208°C, [ $\alpha$ ]<sub>D</sub> = +205.8°(*c* = 1.0, chloroform). **Source:** FENG DOU CAI *Petasites japonicus*, BAI HUA FENG DOU CAI *Petasites albus*, HU LU QI *Ligularia fischeri*. **Ref:** 6, 1521.**10095 19'(S)-Hydroxyervahanine A**C<sub>42</sub>H<sub>50</sub>N<sub>4</sub>O<sub>5</sub> (690.89). Light yellowish oil, [ $\alpha$ ]<sub>D</sub> = -105° (*c* = 0.16, CHCl<sub>3</sub>).**Source:** SAN FANG HUA XU HONG YUE GUI *Tabernaemontana corymbosa*. **Ref:** 3403.**10096 22 $\alpha$ -Hydroxyerythrodiol**12-Oleanene-3,22,28-triol; Sapogenin ST-I [20475-26-7] C<sub>30</sub>H<sub>50</sub>O<sub>3</sub> (458.73).Crystals (MeOH), mp 279~282°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +37° (*c* = 1, pyridine). **Source:**CHA MEI *Camellia sasanqua*, CHA ZI XIN *Camellia oleifera*, HU ZHI ZI *Lespedeza bicolor*. **Ref:** 6, 1521.**10097 3'-Hydroxy-8 $\beta$ -ethyl ether-rocaglic acid dimethylamide**[259143-55-0] C<sub>31</sub>H<sub>35</sub>NO<sub>8</sub> (549.63). **Pharm:** Insecticidal inactive (neonatelarvae of *Spodoptera littoralis*)<sup>[2376]</sup>. **Source:** *Aglaiia duperreana* **Ref:** 2376.

**10098 3'-Hydroxy-8b-ethyl ether-rocaglic acid methylamide**

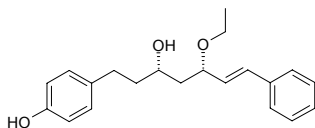
[259143-56-1] C<sub>30</sub>H<sub>33</sub>NO<sub>8</sub> (535.60). **Pharm:** Insecticidal inactive (neonate larvae of *Spodoptera littoralis*). **Source:** *Aglaia duperreana*. **Ref:** 2376.

**10099 (3S,5R)-3-Hydroxy-5-ethoxy-1-(4-hydroxyphenyl)-7-phenyl-6E-heptene**

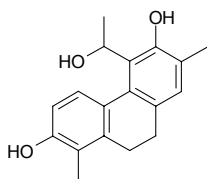
C<sub>21</sub>H<sub>26</sub>O<sub>3</sub> (326.44). Light yellow amorphous solid, [α]<sub>D</sub><sup>25</sup> = +49.5° (c = 0.10, MeOH). **Pharm:** Cytotoxic inactive (Colon26-L5, HT1080, 100μmol/L). **Source:** YUN NAN CAO KOU *Alpinia blepharocalyx* (seed: yield = 0.000093%). **Ref:** 3042.

**10100 (3S,5S)-3-Hydroxy-5-ethoxy-1-(4-hydroxyphenyl)-7-phenyl-6E-heptene**

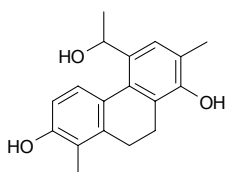
C<sub>21</sub>H<sub>26</sub>O<sub>3</sub> (326.44). Light yellow amorphous solid, [α]<sub>D</sub><sup>25</sup> = +73.9° (c = 0.04, MeOH). **Pharm:** Cytotoxic (Colon26-L5, ED<sub>50</sub> = 94.6μmol/L; HT1080, ED<sub>50</sub> > 100μmol/L). **Source:** YUN NAN CAO KOU *Alpinia blepharocalyx* (seed: yield = 0.000093%). **Ref:** 3042.

**10101 5-(1-Hydroxyethyl)-2,6-dihydroxy-1,7-dimethyl-9,10-dihydro-phenanthrene**

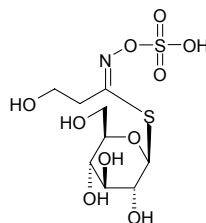
C<sub>18</sub>H<sub>20</sub>O<sub>3</sub> (284.36). **Source:** DENG XIN CAO *Juncus effusus*. **Ref:** 660.

**10102 5-(1-Hydroxyethyl)-2,8-dihydroxy-1,7-dimethyl-9,10-dihydro-phenanthrene**

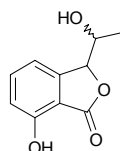
C<sub>18</sub>H<sub>20</sub>O<sub>3</sub> (284.36). **Source:** DENG XIN CAO *Juncus effusus*. **Ref:** 660.

**10103 2-Hydroxyethyl glucosinolate**

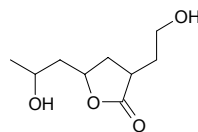
C<sub>9</sub>H<sub>17</sub>NO<sub>10</sub>S<sub>2</sub> (363.36). **Source:** MA BING LANG *Capparis masaikai*. **Ref:** 660.

**10104 3ξ-(1ξ-Hydroxyethyl)-7-hydroxy-1-isobenzofuranone**

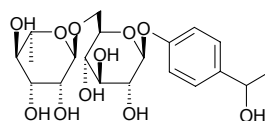
C<sub>10</sub>H<sub>10</sub>O<sub>4</sub> (194.19). Brown solid, mp 102–103°C, [α]<sub>D</sub><sup>20</sup> = –50.0° (c = 0.08, CHCl<sub>3</sub>). **Pharm:** Antibacterial (*Staphylococcus aureus*, MIC = 100μg/mL, MIC = 0.474μmol/L, control Kanamycin, MIC = 3.13μg/mL; *Bacillus subtilis*, MIC = 50μg/mL, MIC = 0.237μmol/L, Kanamycin, MIC = 6.25μg/mL; *Escherichia coli*, MIC = 50μg/mL, MIC = 0.237μmol/L, Kanamycin, MIC = 12.5μg/mL; *Proteus vulgaris*, MIC = 50μg/mL, MIC = 0.237μmol/L, Kanamycin, MIC = 12.5μg/mL); antifungal (*Aspergillus niger*, MIC = 100μg/mL, MIC = 0.474μmol/L; *Candida albicans*, MIC = 100μg/mL, MIC = 0.474μmol/L, control Fluconazole, MIC = 25μg/mL, MIC = 0.082μmol/L). **Source:** YIN DU JIU LI XIANG *Murraya koenigii* (stem cortex). **Ref:** 5299.

**10105 3-(2'-Hydroxyethyl)-5-(2''-hydroxypropyl)-dihydrofuran-2(3H)-one**

C<sub>9</sub>H<sub>16</sub>O<sub>4</sub> (188.23). Yellow oil, [α]<sub>D</sub><sup>23</sup> = +77.94° (c = 1.36, MeOH). **Source:** DIAO DENG SHU *Kigelia pinnata*. **Ref:** 3418.

**10106 1-(1-Hydroxyethyl)-4β-rutinosyloxybenzene**

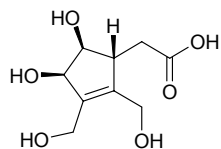
C<sub>20</sub>H<sub>30</sub>O<sub>11</sub> (446.46). **Source:** MANG QI GU *Dicranopteris pedata* [Syn. *Polypodium pedatum*; *Dicranopteris dichotoma*]. **Ref:** 660.



**10107 7-Hydroxy eucommic acid**

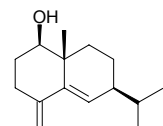
C<sub>9</sub>H<sub>14</sub>O<sub>6</sub> (218.21). Yellowish-brown oil,  $[\alpha]_D^{17} = -73.16^\circ$  ( $c = 1.45$ , MeOH).

Source: DIAO DENG SHU *Kigelia pinnata*. Ref: 3418.

**10108 1β-Hydroxy-4(15),5-eudesmadiene**

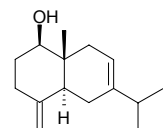
C<sub>15</sub>H<sub>24</sub>O (220.36). Colorless oil,  $[\alpha]_D = +6.9^\circ$  ( $c = 0.3$ , CHCl<sub>3</sub>). Source:

HUANG HUA HAO *Artemisia annua* (seed). Ref: 3435.

**10109 1β-Hydroxy-4(15),7-eudesmadiene**

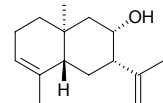
C<sub>15</sub>H<sub>24</sub>O (220.36). Colorless oil;  $[\alpha]_D^{17} = +5^\circ$  ( $c = 0.30$ , CHCl<sub>3</sub>); colorless needles (petroleum ether–EtOAc),  $[\alpha]_D^{20} = -18^\circ$  ( $c = 0.1$ , CHCl<sub>3</sub>). Source:

HUANG HUA HAO *Artemisia annua* (seed), YI NIAN PENG *Erigeron annuus* (aerial parts), ZHONG JIAN JIN JI ER *Caragana intermedia* (aerial parts). Ref: 3435, 4786, 5073.

**10110 (+)-8α-Hydroxy-eudesma-3,11-diene**

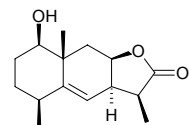
C<sub>15</sub>H<sub>24</sub>O (220.36). Colorless oil. Source: *Tritomaria polita* (essential oil).

Ref: 3446.

**10111 1β-Hydroxy-4α,11α-eudesma-5-en-12,8β-olide**

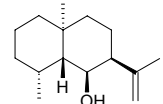
C<sub>15</sub>H<sub>22</sub>O<sub>3</sub> (250.34). Colorless gum,  $[\alpha]_D^{20} = +17.2^\circ$  ( $c = 0.58$ , CHCl<sub>3</sub>). Source:

JIN FEI CAO *Inula japonica*. Ref: 5422.

**10112 (+)-6β-Hydroxy-eudesm-11-ene**

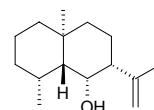
C<sub>15</sub>H<sub>26</sub>O (222.37). Colorless oil. Source: *Tritomaria polita* (essential oil).

Ref: 3446.

**10113 (–)-6α-Hydroxy-eudesm-11-ene**

C<sub>15</sub>H<sub>26</sub>O (222.37). Colorless oil. Source: *Tritomaria polita* (essential oil).

Ref: 3446.

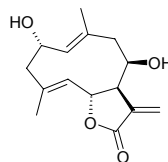
**10114 2α-Hydroxyeupatolide**

C<sub>15</sub>H<sub>20</sub>O<sub>4</sub> (264.32). Source: CHENG GAN SHENG MA *Eupatorium*

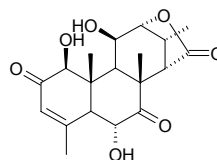
*lindleyanum* (whole herb: yield = 0.00091%dw)<sup>[4762]</sup>, HUA ZE LAN

*Eupatorium chinense* (whole herb: yield = 0.0314%)<sup>[4739]</sup>. Ref: 4739,

4762.

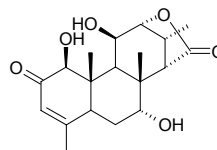
**10115 6α-Hydroxyeurycomalactone**

C<sub>19</sub>H<sub>24</sub>O<sub>7</sub> (364.40). Source: *Eurycoma* sp. Ref: 4556.

**10116 7α-Hydroxyeurycomalactone**

C<sub>19</sub>H<sub>26</sub>O<sub>6</sub> (350.42). Pharm: Cytotoxic (P<sub>388</sub> cells, IC<sub>50</sub> = 0.11 μg/mL)<sup>[4556]</sup>.

Source: *Eurycoma* sp. Ref: 4556.

**10117 Hydroxyevodiamine**

Rhetsinine [526-43-2] C<sub>19</sub>H<sub>17</sub>N<sub>3</sub>O<sub>2</sub> (319.37). Yellow crystals (CHCl<sub>3</sub>–EtOH),

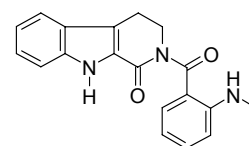
mp 206–207°C (192°C dec). Source: HUA NAN WU ZHU YU *Evodia*

*austrosinensis* (dried and almost ripe fruit: content = 0.08%)<sup>[5508]</sup>, WU ZHU YU

*Evodia rutaecarpa* (dried and almost ripe fruit: content scope of 2 origins =

0.35%–0.55%, mean content = 0.45%)<sup>[5508]</sup>, *Zanthoxylum rhesta* (trunk bark).

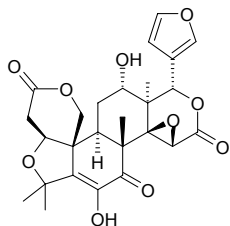
Ref: 2, 347, 1521, 5508.



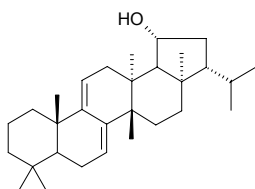


**10118 12 $\alpha$ -Hydroxyevodol**

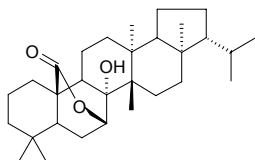
C<sub>26</sub>H<sub>28</sub>O<sub>10</sub> (500.51). Source: WU ZHU YU *Evodia rutaecarpa*. Ref: 2, 877.

**10119 19 $\alpha$ -Hydroxyferna-7,9(11)-diene**

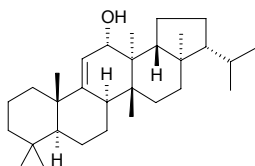
C<sub>30</sub>H<sub>48</sub>O (424.72). mp 213~214°C. Source: BIAN YE TIE XIAN JUE *Adiantum caudatum* (fresh frond). Ref: 5187.

**10120 8 $\alpha$ -Hydroxyfernan-25,7 $\beta$ -olide**

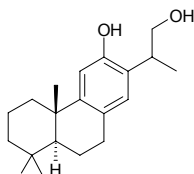
C<sub>30</sub>H<sub>48</sub>O<sub>3</sub> (456.72). mp 268~271°C. Source: BIAN YE TIE XIAN JUE *Adiantum caudatum* (fresh frond). Ref: 5187.

**10121 12 $\alpha$ -Hydroxyfern-9(11)-ene**

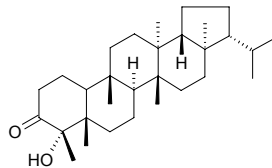
C<sub>30</sub>H<sub>50</sub>O (426.73). mp 110~113°C. Source: BING YE SUO LUO *Yathea podophylla* (fresh frond). Ref: 4401.

**10122 16-Hydroxy ferruginol**

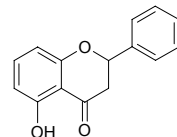
C<sub>20</sub>H<sub>30</sub>O<sub>2</sub> (302.46). mp 83~85°C, [ $\alpha$ ]<sub>D</sub><sup>22</sup> = +55.9° (*c* = 0.54, CHCl<sub>3</sub>). Source: DAN HUANG XIANG CHA CAI *Isodon flavidus*. Ref: 4067.

**10123 4 $\alpha$ -Hydroxyfilican-3-one**

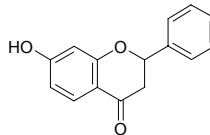
C<sub>30</sub>H<sub>50</sub>O<sub>2</sub> (442.73). Source: ZHU ZONG CAO *Adiantum capillus-veneris* (fresh frond). Ref: 4230.

**10124 5-Hydroxyflavanone**

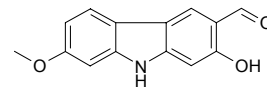
C<sub>15</sub>H<sub>12</sub>O<sub>3</sub> (240.26). Pale yellow needles (MeOH), mp 124°C, [ $\alpha$ ]<sub>D</sub><sup>18</sup> = -11.0° (*c* = 0.1, CHCl<sub>3</sub>). Pharm: MAO-A inhibitor (rat brain mitochondrial enzyme, IC<sub>50</sub> = 39.6 $\mu$ g/mol/L); MAO-B inhibitor (rat brain mitochondrial enzyme, IC<sub>50</sub> = 3.8 $\mu$ g/mol/L). Source: HUANG LONG DAN *Gentiana lutea*. Ref: 3838.

**10125 7-Hydroxyflavanone**

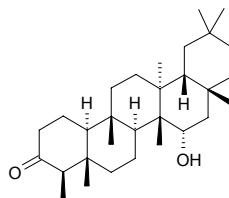
C<sub>15</sub>H<sub>12</sub>O<sub>3</sub> (240.26). Source: JIAO ZHI HUANG TAN *Dalbergia cochinchinensis* (stem: yield = 0.0013%dw). Ref: 4716.

**10126 2-Hydroxy-3-formyl-7-methoxycarbazole**

[119736-83-3] C<sub>14</sub>H<sub>11</sub>NO<sub>4</sub> (241.25). Crystals (acetone), mp 226~227°C. Pharm: Cytotoxic (BST, LC<sub>50</sub> 35.1mg/L, 9KB, ED<sub>50</sub> = 5.7 $\mu$ g/mL, KBMRI, ED<sub>50</sub> = 4.48 $\mu$ g/mL, A549, ED<sub>50</sub> = 2.74 $\mu$ g/mL, HT29, ED<sub>50</sub> = 4.00 $\mu$ g/mL); antibacterial (*Mycobacterium tuberculosis*, MIC = 100 $\mu$ g/mL, control Isoniazide, MIC = 0.040~0.090 $\mu$ g/mL, kanamycin sulfate, MIC = 2.0~5.0 $\mu$ g/mL)<sup>[5367]</sup>; antifungal (*Candida albicans*, IC<sub>50</sub> = 2.8 $\mu$ g/mL, control Amphotericin, IC<sub>50</sub> = 0.01 $\mu$ g/mL)<sup>[5367]</sup>. Source: SHAN HUANG PI *Clausena excavata*, YUAN DONG JIU LI XIANG *Murraya siamensis*. Ref: 1065, 1073, 5367.

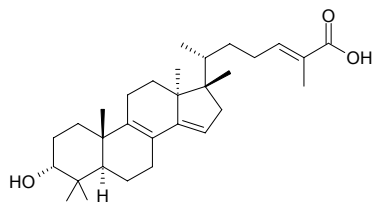
**10127 15 $\alpha$ -Hydroxyfriedelane-3-one**

C<sub>30</sub>H<sub>50</sub>O<sub>2</sub> (442.73). Pharm: DPPH scavenger inactive (for 40 $\mu$ mol/L DPPH radical, SC<sub>50</sub> > 40 $\mu$ mol/L). Source: SUO LA MU *Salacia prinoides* [Syn. *Salacia chinensis*] (stem). Ref: 4378.

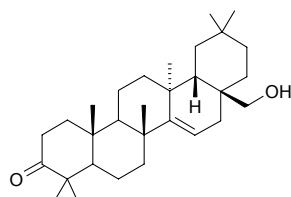


**10128 (24E)-3 $\alpha$ -Hydroxy-17,14-friedo-lanostan-8,14,24-trien-26-oic acid**

C<sub>30</sub>H<sub>46</sub>O<sub>3</sub> (454.70). White solid, mp 231~232°C, [ $\alpha$ ]<sub>D</sub><sup>29</sup> = -59° (c = 0.84, MeOH). Source: SHAN FENG GUO *Garcinia hombroniana* (pericarp). Ref: 5085.

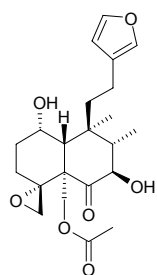
**10129 28-Hydroxy-D-friedo-olean-14-en-3-one**

C<sub>30</sub>H<sub>48</sub>O<sub>2</sub> (440.72). Source: YANG MEI SHU PI *Myrica rubra*. Ref: 660.

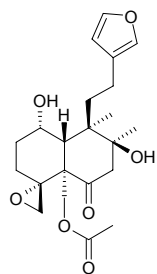
**10130 7 $\beta$ -Hydroxyfruticolone**

C<sub>22</sub>H<sub>30</sub>O<sub>7</sub> (406.48). White amorphous solid, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +22.0° (c = 0.11, CHCl<sub>3</sub>).

Pharm: Insect antifeedant (fifth instar larvae of *Spodoptera littoralis*, dual-choice feeding assays, dose = 10 $\mu$ g/cm<sup>2</sup>, FR<sub>50</sub> = 0.57 $\pm$ 0.04). Source: GUAN CONG XIANG KE KE *Teucrium fruticans*. Ref: 3761.

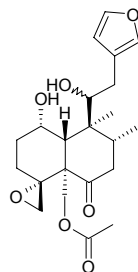
**10131 8 $\beta$ -Hydroxyfruticolone**

C<sub>22</sub>H<sub>30</sub>O<sub>7</sub> (406.48). Pharm: Insect antifeedant (fifth instar larvae of *Spodoptera littoralis*, dual-choice feeding assays, dose = 10 $\mu$ g/cm<sup>2</sup>, FR<sub>50</sub> = 0.57 $\pm$ 0.17). Source: GUAN CONG XIANG KE KE *Teucrium fruticans*. Ref: 3761.

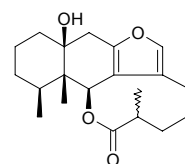
**10132 11-Hydroxyfruticolone**

C<sub>22</sub>H<sub>30</sub>O<sub>7</sub> (406.48). White amorphous solid, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +45.0° (c = 0.12, CHCl<sub>3</sub>).

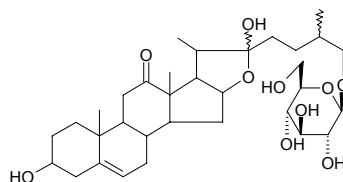
Pharm: Insect antifeedant (fifth instar larvae of *Spodoptera littoralis*, dual-choice feeding assays, dose = 10 $\mu$ g/cm<sup>2</sup>, FR<sub>50</sub> = 0.45 $\pm$ 0.07). Source: GUAN CONG XIANG KE KE *Teucrium fruticans*. Ref: 3761.

**10133 10 $\beta$ -Hydroxyfuranocremophilan-6 $\beta$ -yl-2' $\xi$ -methylbutanoate**

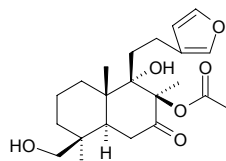
C<sub>20</sub>H<sub>30</sub>O<sub>4</sub> (334.46). Source: LIAN PENG CAO *Farfugium japonicum*. Ref: 6.

**10134 22-Hydroxy-25(R,S)-furost-5-en-12-on-3 $\beta$ ,22,26-triol 26-O- $\beta$ -D-glucopyranoside**

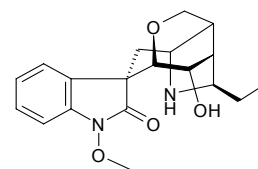
C<sub>33</sub>H<sub>52</sub>O<sub>10</sub> (608.79). Colorless needles, mp 142~143°C, [ $\alpha$ ]<sub>D</sub><sup>17</sup> = -0.024° (c = 0.11, MeOH). Source: YU ZHU *Polygonatum odoratum* [Syn. *Polygonatum officinale*] (rhizome). Ref: 4813.

**10135 19-Hydroxygaleopsin**

C<sub>20</sub>H<sub>30</sub>O<sub>6</sub> (392.50). White powder. Source: WEI YI MU CAO *Leonurus cardiaca*. Ref: 2499.

**10136 14-Hydroxygelsedine**

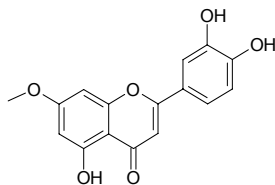
C<sub>19</sub>H<sub>24</sub>N<sub>2</sub>O<sub>4</sub> (344.41). mp 214~216°C. Source: GOU WEN *Gelsemium elegans*. Ref: 14.



**10137 Hydroxygenkwainin**

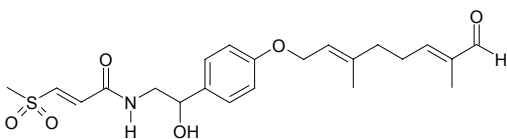
$C_{16}H_{12}O_6$  (300.27). mp 283~285°C. **Pharm:** Antitussive (dispels phlegm).

**Source:** YUAN HUA *Daphne genkwa* (dried bud: mean content of 19 origins = 0.221%<sup>[5535]</sup>, content = 0.24%<sup>[5508]</sup>, leaf: mean content = 0.32%<sup>[5508]</sup>). **Ref:** 6, 5508, 5535.

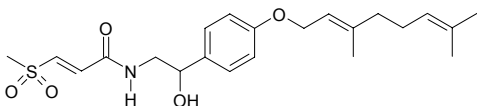
**10138  $\beta$ -Hydroxygerambullal**

(*E*)-3-(Methylsulfonyl)-propenoic acid (2*E*,6*E*)-2-[4-(3,7-dimethyl-8-oxo-2,6-octadienyloxy)-phenyl]-2-hydroxyethyl amide  $C_{22}H_{29}NO_6S$  (435.54).

Colorless oil,  $[\alpha]_D^{20} = +21^\circ$  ( $c = 0.4$ ,  $CHCl_3$ ). **Source:** LV ZI SHAN XIAO JU *Glycosmis chlorosperma* (leaf). **Ref:** 3956.

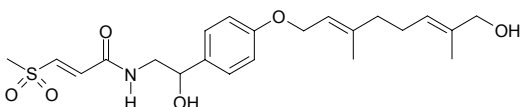
**10139  $\beta$ -Hydroxygerambullin**

(*E*)-3-(Methylsulfonyl)-propenoic acid (*E*)-2-[4-(3,7-dimethyl-2,6-octadienyloxy)-phenyl]-2-hydroxyethyl amide  $C_{22}H_{31}NO_5S$  (421.56). Colorless crystals ( $Et_2O$ ), mp 126~128°C,  $[\alpha]_D^{20} = +25^\circ$  ( $c = 0.2$ ,  $CHCl_3$ ). **Source:** LV ZI SHAN XIAO JU *Glycosmis chlorosperma* (leaf). **Ref:** 3956.

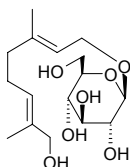
**10140  $\beta$ -Hydroxygerambullol**

(*E*)-3-(Methylsulfonyl)-propenoic acid (2*E*,6*E*)-2-[4-(8-hydroxy-3,7-dimethyl-2,6-octadienyloxy)-phenyl]-2-hydroxyethyl amide  $C_{22}H_{31}NO_6S$  (437.56).

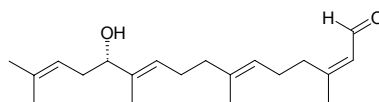
Colorless crystals ( $Et \odot$ ), mp 131~133°C,  $[\alpha]_D^{20} = +38^\circ$  ( $c = 0.2$ ,  $CHCl_3$ ). **Source:** LV ZI SHAN XIAO JU *Glycosmis chlorosperma* (leaf). **Ref:** 3956.

**10141 8-Hydroxygeraniol-1- $\beta$ -D-glucopyranoside**

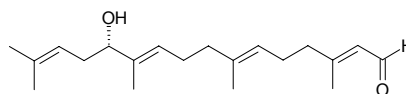
$C_{16}H_{28}O_7$  (332.40). **Source:** ROU CONG RONG *Cistanche deserticola*, GUAN HUA ROU CONG RONG *Cistanche tubulosa*. **Ref:** 2448.

**10142 *cis*-(*S*)-12-Hydroxygeranylgeranial**

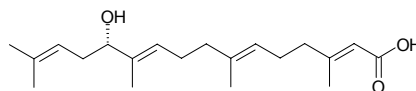
$C_{20}H_{32}O_2$  (304.48). Oil. **Source:** SHUANG CHA ZAO *Bifurcaria bifurcata*. **Ref:** 5146.

**10143 *trans*-(*S*)-12-Hydroxygeranylgeranial**

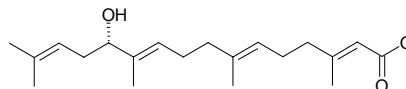
$C_{20}H_{32}O_2$  (304.48). Oil,  $[\alpha]_D^{25} = -3^\circ$  ( $c = 1.0$ ,  $CH_2Cl_2$ ). **Source:** SHUANG CHA ZAO *Bifurcaria bifurcata*. **Ref:** 5146.

**10144 (*S*)-12-Hydroxygeranylgeranic acid**

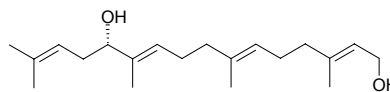
$C_{20}H_{32}O_3$  (320.48). **Source:** SHUANG CHA ZAO *Bifurcaria bifurcata*. **Ref:** 5146.

**10145 (*S*)-12-Hydroxygeranylgeranic acid methyl ester**

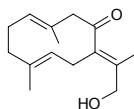
$C_{21}H_{34}O_3$  (334.50). Oil,  $[\alpha]_D^{25} = -7.7^\circ$  ( $c = 5.5$ ,  $CH_2Cl_2$ ). **Source:** SHUANG CHA ZAO *Bifurcaria bifurcata*. **Ref:** 5146.

**10146 (*S*)-12-Hydroxygeranylgeraniol**

$C_{20}H_{34}O_2$  (306.49). **Source:** SHUANG CHA ZAO *Bifurcaria bifurcata*. **Ref:** 5146.

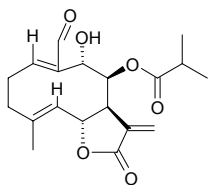
**10147 13-Hydroxygermacrone**

$C_{15}H_{22}O_2$  (234.34). **Pharm:** NO production inhibitor (mus peritoneal macrophages, induced by LPS, 100 $\mu$ mol/L, InRt = (50.7 $\pm$ 1.9)%), control *L*-NMMA, 100 $\mu$ mol/L, InRt = (79.2 $\pm$ 0.9)%,  $p < 0.01$ )<sup>[4150]</sup>. **Source:** PING E SHU *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*]. **Ref:** 1521, 4150.

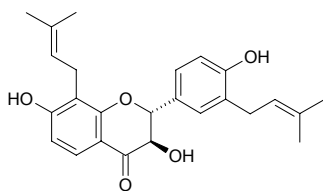


**10148 9-Hydroxyglabratolide**

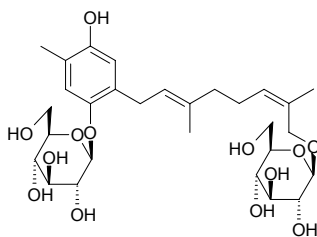
[75744-68-2] C<sub>19</sub>H<sub>24</sub>O<sub>6</sub> (348.40). Amorphous gum. **Pharm:** Antineoplastic (mus, P<sub>388</sub>, *in vivo*); cytotoxic (hmn nasopharyngeal carcinoma cells, *in vitro*, ED<sub>50</sub> = 2.0 μg/mL). **Source:** GUANG CI BAO JU *Acanthospermum glabratum*. **Ref:** 661.

**10149 3-Hydroxyglabrol**

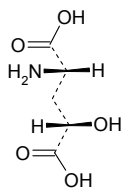
[74148-41-7] C<sub>25</sub>H<sub>28</sub>O<sub>5</sub> (408.50). White crystals (benzene–ethyl acetate), mp 117–119°C, [α]<sub>D</sub><sup>20</sup> = –17.65° (*c* = 1.02, chloroform). **Pharm:** Antibacterial (*Staphylococcus aureus* ATCC 13709, *Mycobacterium smegmatis* ATCC 607, MIC = 6.25 mg/mL for both). **Source:** GAN CAO *Glycyrrhiza uralensis*, GUANG GUO GAN CAO *Glycyrrhiza glabra*, OU YA GAN CAO *Glycyrrhiza glabra* var. *typica*. **Ref:** 2, 661, 2431.

**10150 4-Hydroxy-2-[(2*E*,6*Z*)-8-β-*D*-glucopyranosyloxy-3,7-dimethylocta-2,6-dien-1-yl]-5-methylphenyl β-*D*-glucopyranoside**

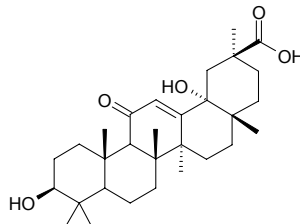
C<sub>29</sub>H<sub>44</sub>O<sub>13</sub> (600.67). mp 106–111°C, [α]<sub>D</sub><sup>31</sup> = –29.4° (*c* = 0.1, MeOH). **Source:** RI BEN LU TI CAO *Pyrola japonica* (whole herb). **Ref:** 4294.

**10151 γ-Hydroxy glutamic acid**

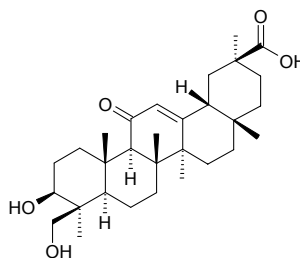
[3913-68-6] C<sub>5</sub>H<sub>9</sub>NO<sub>5</sub> (163.13). mp (L~) 183–185°C. **Source:** XUAN CAO GEN *Hemerocallis fulva*. **Ref:** 6.

**10152 18α-Hydroxy glycyrrhetic acid**

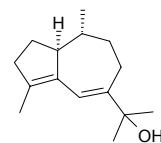
C<sub>30</sub>H<sub>46</sub>O<sub>5</sub> (486.70). **Source:** GUANG GUO GAN CAO *Glycyrrhiza glabra*. **Ref:** 660.

**10153 24-Hydroxyglycyrrhetic acid**

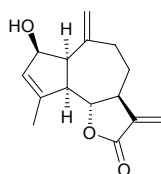
[20528-69-2] C<sub>30</sub>H<sub>46</sub>O<sub>5</sub> (486.70). **Source:** GUANG GUO GAN CAO *Glycyrrhiza glabra*. **Ref:** 2, 660.

**10154 11-Hydroxyguaia-4,6-diene**

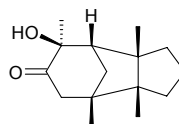
C<sub>15</sub>H<sub>24</sub>O (220.36). Colorless oil, [α]<sub>D</sub> = –55° (*c* = 0.25). **Source:** *Letowianthus stellatus* (root cortex). **Ref:** 3944.

**10155 5α*H*-2β-Hydroxyguaia-3(4),10(14),11(13)-trien-6α,12-olide**

C<sub>15</sub>H<sub>18</sub>O<sub>3</sub> (246.31). **Pharm:** Cytotoxic (KB ATCC CCL17, IC<sub>50</sub> = 2.6 μg/mL). **Source:** *Warionia saharae*. **Ref:** 5399.

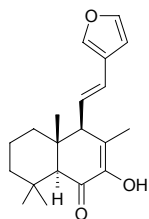
**10156 8β-Hydroxy gymnomitrian-9-one**

C<sub>13</sub>H<sub>24</sub>O<sub>2</sub> (236.36). **Source:** SHI DI QIAN *Reboulia hemisphaerica*. **Ref:** 660.

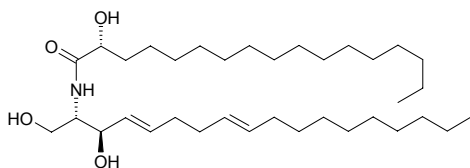


**10157 7-Hydroxyhedychenone**

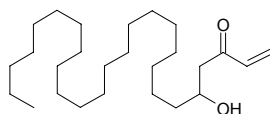
$C_{20}H_{26}O_3$  (314.43). Source: TU QIANG HUO *Hedychium coronarium* (rhizome). Ref: 4221.

**10158 (2*S*,3*R*,4*E*,8*E*)-(2'*R*)-2'-Hydroxyheptadecanoylamino]-4,8-octadecadiene-1,3-diol**

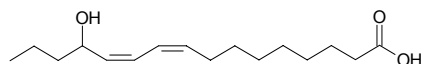
$C_{35}H_{67}NO_4$  (565.93). Colorless solid, mp 111~112°C,  $[\alpha]_D^{28} = -11.0^\circ$  ( $c = 0.5$ ,  $CHCl_3$ ). Source: *Lobophytum* sp. Ref: 4432.

**10159 5-Hydroxy-hexacos-1-en-3-one**

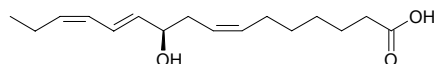
$C_{26}H_{50}O_2$  (394.69). White waxy solid. Pharm: Antibacterial (*Bacillus cereus*, MIC = 32µg/mL, control Chloramphenicol, MIC = 4µg/mL; *Escherichia coli*, MIC = 64µg/mL, Chloramphenicol, MIC = 2µg/mL; *Staphylococcus epidermidis*, MIC = 16µg/mL, Chloramphenicol, MIC = 4µg/mL); cytotoxic inactive (KB, L-6); antimalarial inactive (*Plasmodium falciparum* K1, *Plasmodium falciparum* NF54); antitrypanosomal inactive (*Trypanosoma brucei rhodesiense*, *Trypanosoma cruzi*); antifungal inactive (*Candida albicans*). Source: CI DOU KOU *Amomum aculeatum* (rhizome). Ref: 5176.

**10160 13-Hydroxy-9,11-hexadecadienoic acid**

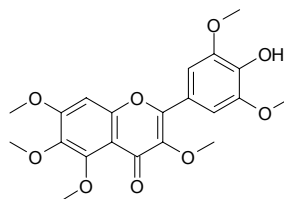
$C_{16}H_{28}O_3$  (268.40). Source: CU LIU GUO *Hippophae rhamnoides*. Ref: 2.

**10161 (10*R*)-Hydroxyhexadeca-7*Z*,11*E*,13*Z*-trienoic acid**

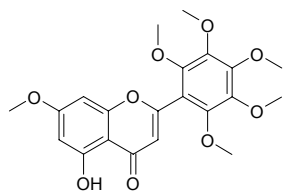
$C_{16}H_{26}O_3$  (266.38). Source: FU PING *Lemna minor*. Ref: 660.

**10162 4'-Hydroxy-3,5,6,7,3',5'-hexamethoxyflavone**

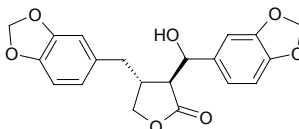
$C_{21}H_{22}O_9$  (418.40). Source: JIU LI XIANG GEN *Murraya paniculata* [Syn. *Chalcas paniculata*]. Ref: 660.

**10163 5-Hydroxy-7,2',3',4',5',6'-hexamethoxyflavone**

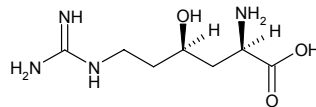
$C_{21}H_{22}O_9$  (418.40). Pale yellow rods, mp 176.0~176.4°C (EtOAc). Pharm: Anti-HIV-1 inactive. Source: TAI GUO ZHI ZI *Gardenia thailandica* (leaf and twig). Ref: 4963.

**10164 7-Hydroxyhinokinin**

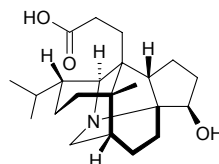
$C_{20}H_{18}O_7$  (370.36). Source: QIANG DAO YAO *Hypoestes purpurea* [Syn. *Justicia purpurea*; *Hypoestes sinica*] (aerial parts: yield = 0.000021%dw). Ref: 4783.

**10165 (+)-γ-Hydroxy-L-homoarginine**

[1616-99-5]  $C_7H_{16}N_4O_3$  (204.23). Pharm: Involves in many plant metabolism processes. Source: BING DOU *Lens culinaris*, WAN DOU *Pisum sativum*, *Lathyrus* sp., *Vicia* sp. Ref: 658.

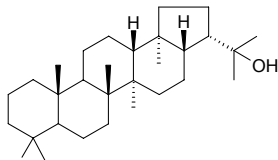
**10166 17-Hydroxyhomodaphniphylic acid**

$C_{22}H_{33}NO_3$  (361.53). Microcrystals (MeOH), mp 97~99°C,  $[\alpha]_D = -17^\circ$  ( $c = 0.2$ , MeOH). Source: NIU ER FENG ZI *Daphniphyllum calycinum* (fruit: yield = 0.00013%). Ref: 4754.

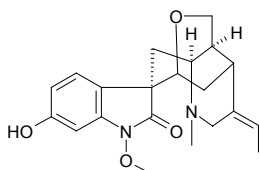


**10167 Hydroxyhopane**

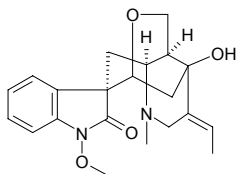
Diplopterol [1721-59-1] C<sub>30</sub>H<sub>52</sub>O (428.75). mp 254–256°C. Source: GUAN ZHONG *Dryopteris crassirhizoma*. Ref: 6.

**10168 11-Hydroxyhumantenine**

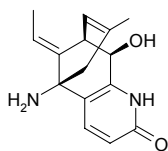
C<sub>21</sub>H<sub>26</sub>N<sub>2</sub>O<sub>4</sub> (370.45). mp 176–177°C, [α]<sub>D</sub> = –130°. Source: GOU WEN *Gelsemium elegans*. Ref: 14.

**10169 15-Hydroxyhumantenine**

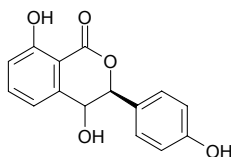
C<sub>21</sub>H<sub>26</sub>N<sub>2</sub>O<sub>4</sub> (370.45). mp 213–215°C, [α]<sub>D</sub> = –82.2°. Source: GOU WEN *Gelsemium elegans*. Ref: 14.

**10170 6β-Hydroxyhuperzine A**

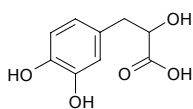
C<sub>15</sub>H<sub>18</sub>N<sub>2</sub>O<sub>2</sub> (258.32). Source: XIAO JIE JIN CAO *Huperzia selago* [Syn. *Lycopodium selago*]. Ref: 660.

**10171 4-Hydroxyhydrangenol**

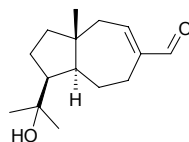
C<sub>15</sub>H<sub>12</sub>O<sub>5</sub> (272.26). Source: CHANG SHAN *Dichroa febrifuga*. Ref: 660.

**10172 α-Hydroxyhydrocaffeic acid**

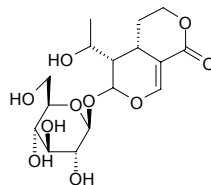
C<sub>9</sub>H<sub>10</sub>O<sub>5</sub> (198.18). Source: MI DIE XIANG *Rosmarinus officinalis*. Ref: 6.

**10173 11-Hydroxy-12-hydroisodaucenal**

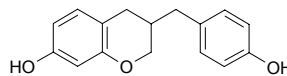
C<sub>15</sub>H<sub>24</sub>O<sub>2</sub> (236.36). Source: MEI GUI HUA *Rosa rugosa*. Ref: 660.

**10174 8-Hydroxy-10-hydrosweroside**

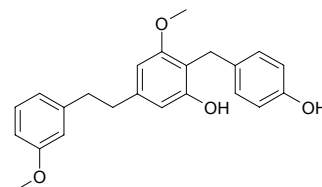
C<sub>16</sub>H<sub>24</sub>O<sub>10</sub> (376.36). Source: XI ZANG QIN JIAO *Gentiana tibetica*. Ref: 702.

**10175 7-Hydroxy-3-(4-hydroxybenzyl)chromane**

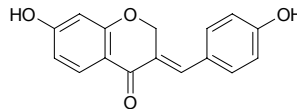
C<sub>16</sub>H<sub>16</sub>O<sub>3</sub> (256.30). Source: LONG XUE SHU *Dracaena draco* (stem cortex). Ref: 4696.

**10176 5-Hydroxy-4-(p-hydroxybenzyl)-3',3'-dimethoxybibenzyl**

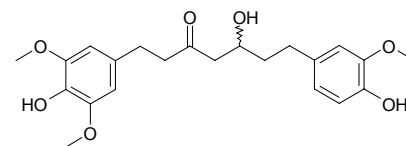
C<sub>23</sub>H<sub>24</sub>O<sub>4</sub> (364.45). White powder, soluble in methanol, mp 173–174°C. Source: BAI JI *Bletilla striata*. Ref: 2223.

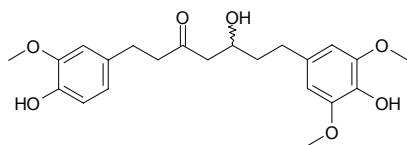
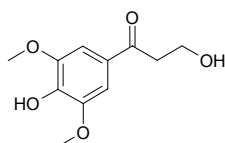
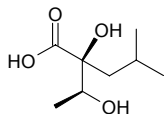
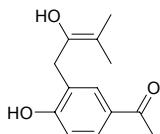
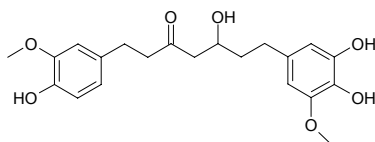
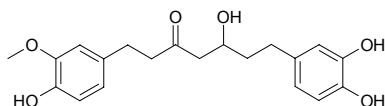
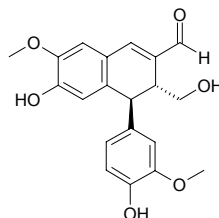
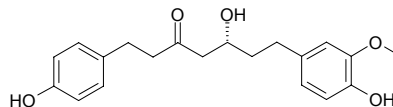
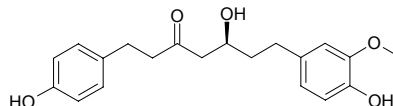
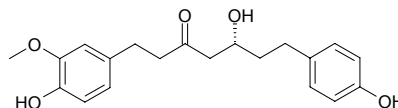
**10177 7-Hydroxy-3-(4'-hydroxybenzylidene)-chroman-4-one**

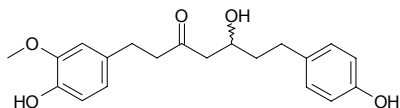
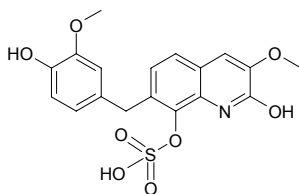
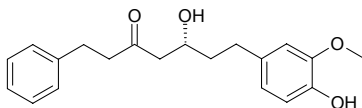
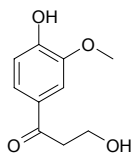
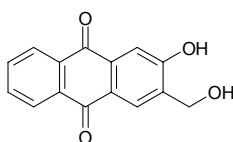
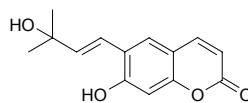
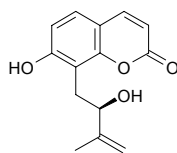
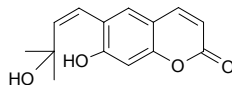
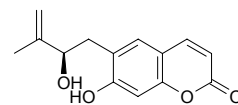
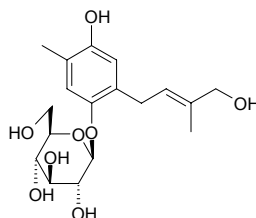
C<sub>16</sub>H<sub>12</sub>O<sub>4</sub> (268.27). Source: SU MU *Caesalpinia sappan*. Ref: 660.

**10178 5ξ-Hydroxy-1-(4-hydroxy-3,5-dimethoxyphenyl)-7-(4-hydroxy-3-methoxyphenyl)-3-heptanone**

C<sub>22</sub>H<sub>28</sub>O<sub>7</sub> (404.46). Source: GAN JIANG *Zingiber officinale*. Ref: 660.



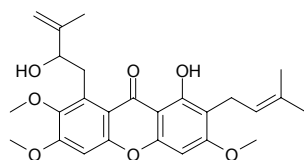
**10179 5 $\zeta$ -Hydroxy-7-(4-hydroxy-3,5-dimethoxyphenyl)-1-(4-hydroxy-3-methoxyphenyl)-3-heptanone**C<sub>22</sub>H<sub>28</sub>O<sub>7</sub> (404.46). Source: GAN JIANG *Zingiber officinale*. Ref: 660.**10180 3-Hydroxy-1-(4-hydroxy-3,5-dimethoxyphenyl)-1-propanone**C<sub>11</sub>H<sub>14</sub>O<sub>5</sub> (226.23). Source: TIAN XIAN GUO *Ficus beecheyana* [Syn. *Ficus erecta* var. *beecheyana*] (root: yield = 0.0086%dw). Ref: 4657.**10181 erythro-2-Hydroxy-2-(1-hydroxyethyl)-4-methylpentanoic acid**C<sub>8</sub>H<sub>16</sub>O<sub>4</sub> (176.21). White oil, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -2.0° (c = 0.1, MeOH). Source: CU MAO NIU SHE CAO *Anchusa strigosa*. Ref: 5441.**10182 4-Hydroxy-3-(2-hydroxy-3-isopentenyl)acetophenone**C<sub>13</sub>H<sub>16</sub>O<sub>3</sub> (220.27). Pharm: Anti-inflammatory (inhibits arachidonic acid metabolism, calcium ionophore-stimulated leukocytes, inhibits LTB<sub>4</sub> production, concentration-dependent manner, IC<sub>50</sub> = 111 μmol/L). Source: YI DA LI LA JU *Helichrysum italicum* Ref: 4415.**10183 5-Hydroxy-1-(4-hydroxy-3-methoxyphenyl)-7-(3,4-dihydroxy-5-methoxyphenyl)heptan-3-one**C<sub>21</sub>H<sub>26</sub>O<sub>7</sub> (390.44). Colorless oil. Source: SHENG JIANG *Zingiber officinale*. Ref: 3803.**10184 5-Hydroxy-1-(4-hydroxy-3-methoxyphenyl)-7-(3,4-dihydroxyphenyl)heptan-3-one**C<sub>20</sub>H<sub>24</sub>O<sub>6</sub> (360.41). Colorless needles, mp 163~164°C, [ $\alpha$ ]<sub>D</sub><sup>16</sup> = 0 (c = 0.74, EtOH). Source: SHENG JIANG *Zingiber officinale*. Ref: 3803.**10185 6-Hydroxy-4-(4-hydroxy-3-methoxyphenyl)-3-hydroxymethyl-7-methoxy-3,4-dihydro-2-naphthaldehyde**C<sub>20</sub>H<sub>20</sub>O<sub>6</sub> (356.38). Pharm: Antioxidant (ferric thiocyanate method, 0.5mmol/L, stronger than control Vitamin E; DPPH radical scavenger, DPPH 0.1mmol/L, 0.02mmol/L, stronger than control L-Cysteine). Source: HUANG JING ZHONG ZI *Vitex negundo* (seed: yield = 0.022%). Ref: 4791.**10186 5R-Hydroxy-7-(4-hydroxy-3-methoxyphenyl)-1-(4-hydroxyphenyl)-3-heptanone**C<sub>20</sub>H<sub>24</sub>O<sub>5</sub> (344.41). Pale yellow liquid, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +1.05° (c = 0.80, EtOH); [ $\alpha$ ]<sub>D</sub><sup>26</sup> = +1.3° (c = 0.06, EtOH). Pharm: Antiemetic (young male chicks, copper sulfate induced emesis assay, 50mg/kg, lnRt = 38.3%, p < 0.001)<sup>[4649]</sup>. Source: GAO LIANG JIANG *Alpinia officinarum* (rhizome: yield = 0.0022%dw)<sup>[4649]</sup>, HUANG QI II *Engelhardia roxburghiana* (root). Ref: 4649, 5059.**10187 5S-Hydroxy-7-(4-hydroxy-3-methoxyphenyl)-1-(4-hydroxyphenyl)-3-heptanone**C<sub>20</sub>H<sub>24</sub>O<sub>5</sub> (344.41). Yellow oil, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -2.52° (c = 0.09, MeOH). Pharm: Cytotoxic inactive (MTT assay, HT29 cell line, MCF7 cell line)<sup>[4321]</sup>. Source: HU TAO QIU *Juglans mandshurica* (root). Ref: 4321.**10188 5R-Hydroxy-1-(4-hydroxy-3-methoxyphenyl)-7-(4-hydroxyphenyl)-3-heptanone**C<sub>20</sub>H<sub>24</sub>O<sub>5</sub> (344.41). Pharm: Antiemetic inactive (young male chicks, copper sulfate induced emesis assay, 50mg/kg, lnRt = 12.4%)<sup>[4649]</sup>. Source: GAO LIANG JIANG *Alpinia officinarum* (rhizome: yield = 0.00068%dw). Ref: 4649.

**10189 5 $\xi$ -Hydroxy-1-(4-hydroxy-3-methoxyphenyl)-7-(4-hydroxyphenyl)-3-heptanone**C<sub>20</sub>H<sub>24</sub>O<sub>5</sub> (344.41). Source: GAN JIANG *Zingiber officinale*. Ref: 660.**10190 2-Hydroxy-7-[(4-hydroxy-3-methoxyphenyl)methyl]-3-methoxy-8-quinolyl sulfate**C<sub>18</sub>H<sub>17</sub>NO<sub>8</sub>S (407.40). Yellow powder, mp 192–194°C. Source: WU GONG *Scelopendra subspinipes mutilans* (whole body). Ref: 4104.**10191 5-Hydroxy-7-(4''-hydroxy-3''-methoxy-phenyl)-1-phenyl-3-heptanone**C<sub>20</sub>H<sub>24</sub>O<sub>4</sub> (328.41). Colorless oleaginous liquid, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -13.9° (c = 1.15, CHCl<sub>3</sub>); yellow oil, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +6° (c = 1.0, MeOH). Pharm: 5 $\alpha$ -Reductase inhibitor (rat prostate 5 $\alpha$ -Reductase, IC<sub>50</sub> = (220±40)μmol/L, control Curcumin, IC<sub>50</sub> > 1000μmol/L, Finasteride, IC<sub>50</sub> = 0.01μmol/L)<sup>[5345]</sup>. Source: GAO LIANG JIANG *Alpinia officinarum*. Ref: 435, 5345.**10192 3-Hydroxy-1-(4'-hydroxy-3'-methoxyphenyl) propan-1-one**C<sub>10</sub>H<sub>12</sub>O<sub>4</sub> (196.20). Source: *Eurycoma* sp. Ref: 4556.**10193 2-Hydroxy-3-hydroxymethyl anthraquinone**C<sub>15</sub>H<sub>10</sub>O<sub>4</sub> (254.24). Source: BA JI TIAN *Morinda officinalis*. Ref: 660.**10194 (E)-7-Hydroxy-6-(3-hydroxy-methyl-1-butenyl)-2H-1-benzopyran-2-one**C<sub>14</sub>H<sub>14</sub>O<sub>4</sub> (246.27). mp 156–160°C. Source: RI BEN BAI SONG FENG CAO *Boenninghausenia albiflora* var. *japonica*, YAN JIAO CAO *Boenninghausenia albiflora*. Ref: 2495.**10195 (R)-(+)-7-Hydroxy-8-(2-hydroxy-3-methyl-3-butenyl)-2H-1-benzopyran-2-one**C<sub>14</sub>H<sub>14</sub>O<sub>4</sub> (246.27). Source: TAI WAN HUANG BO *Phellodendron amurense* var. *wilsonii* (leaf; yield = 0.00015%dw). Ref: 4722.**10196 (Z)-7-Hydroxy-6-(3-hydroxy-methyl-1-butenyl)-2H-1-benzopyran-2-one**C<sub>14</sub>H<sub>14</sub>O<sub>4</sub> (246.27). mp 139.0–140.5°C. Source: RI BEN BAI SONG FENG CAO *Boenninghausenia albiflora* var. *japonica*, YAN JIAO CAO *Boenninghausenia albiflora*. Ref: 2495.**10197 7-Hydroxy-6-(2-(R)-hydroxy-3-methylbut-3-enyl)coumarin**C<sub>14</sub>H<sub>14</sub>O<sub>4</sub> (246.27). Pharm: AChE inhibitor (*in vitro*, IC<sub>50</sub> = 130μmol/L)<sup>[3058]</sup>. Source: CHAO XIAN DANG GUI *Angelica gigas* (underground part). Ref: 3058.**10198 4-Hydroxy-2-[(E)-4-hydroxy-3-methyl-2-butenyl]-5-methyl-phenyl β-D- glucopyranoside**C<sub>18</sub>H<sub>26</sub>O<sub>8</sub> (370.40). mp 121–123°C, [ $\alpha$ ]<sub>D</sub><sup>19</sup> = -27.2° (c = 0.13, MeOH). Source: RI BEN LU TI CAO *Pyrola japonica* (whole herb). Ref: 4294.



**10199 1-Hydroxy-8-(2-hydroxy-3-methylbut-3-enyl)-3,6,7-trimethoxy-2-(3-methylbut-2-enyl)-xanthone**

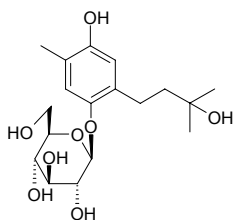
$C_{26}H_{30}O_7$  (454.52). Pale yellow gum.  $[\alpha]_D^{25} = +26$  ( $c = 0.2$ ,  $CHCl_3$ ). Source: DAO NIAN ZI *Garcinia mangostana*. Ref: 1964.



**10200 4-Hydroxy-2-[3-hydroxy-3-methylbutyl]-5-methylphenyl**

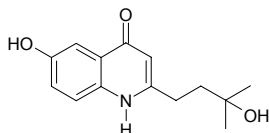
**$\beta$ -D-glucopyranoside**

$C_{18}H_{28}O_8$  (372.42). mp 100–105°C,  $[\alpha]_D^{31} = -36.4^\circ$  ( $c = 0.1$ , MeOH). Source: RI BEN LU TI CAO *Pyrola japonica* (whole herb). Ref: 4294.



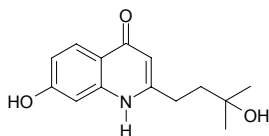
**10201 6-Hydroxy-2-(3-hydroxy-3-methylbutyl)-4-quinolone**

$C_{14}H_{17}NO_3$  (247.30). Yellow powder. Source: *Spathelia excelsa* (leaf). Ref: 5297.



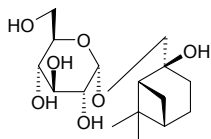
**10202 7-Hydroxy-2-(3-hydroxy-3-methylbutyl)-4-quinolone**

$C_{14}H_{17}NO_3$  (247.30). Yellow powder. Source: *Spathelia excelsa* (leaf). Ref: 5297.



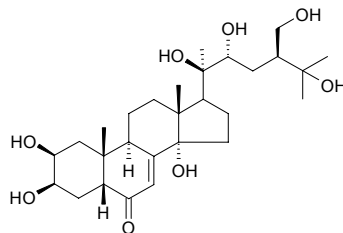
**10203 2 $\beta$ -Hydroxy-2 $\alpha$ -hydroxymethyl-6,6-dimethyl bicyclo[3.1.1]heptane-2 $\alpha$ -O-glucoside**

$C_{16}H_{28}O_7$  (332.40). Source: YI ZHU QIAN MA *Urtica dioica*. Ref: 660.



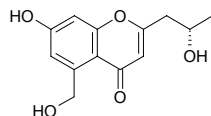
**10204 20-Hydroxy 24-hydroxymethyl ecdysone**

$C_{28}H_{46}O_8$  (510.67). Faint yellow amorphous solid. Source: DUO CI HUANG HUA REN *Sida spinosa*. Ref: 2043.



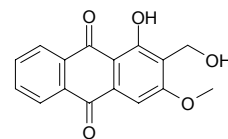
**10205 (2'S)-7-Hydroxy-5-hydroxymethyl-2-(2'-hydroxypropyl) chromone**

$C_{13}H_{14}O_5$  (250.25). mp 208–210°C,  $[\alpha]_D^{28} = +38.4^\circ$  ( $c = 0.8$ , MeOH). Source: PO LUO MEN ZAO JIA *Cassia fistula* (seed; yield = 0.00026%). Ref: 4642.



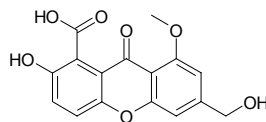
**10206 1-Hydroxy-2-hydroxymethyl-3-methoxyanthraquinone**

$C_{16}H_{12}O_5$  (284.27). Pharm: Cytotoxic (KB,  $ED_{50} > 25\mu\text{g/mL}$ , control Doxorubicin,  $ED_{50} = 0.12\mu\text{g/mL}$ ; Hep3B,  $ED_{50} = 0.60\mu\text{g/mL}$ , Doxorubicin,  $ED_{50} = 0.14\mu\text{g/mL}$ ; Colon205,  $ED_{50} = 0.58\mu\text{g/mL}$ , Doxorubicin,  $ED_{50} = 0.10\mu\text{g/mL}$ ; HeLa,  $ED_{50} = 9.15\mu\text{g/mL}$ , Doxorubicin,  $ED_{50} = 0.11\mu\text{g/mL}$ ). Source: GUANG JING QIAN CAO *Rubia wallichiana* (stem). Ref: 4369.



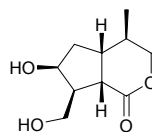
**10207 2-Hydroxy-6-hydroxymethyl-8-methoxy-9-oxo-9H-xanthen-1-carboxylic acid**

$C_{16}H_{12}O_7$  (316.27). Stable pale yellow amorphous solid Pharm: Cytotoxic inactive (brine shrimp *Artemia salina* lethality assay,  $20\mu\text{g/mL}$  or  $200\mu\text{g/mL}$ ). Source: *Xylaria* sp. Ref: 3845.



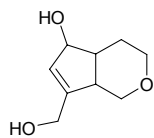
**10208 (4R,5R,7S,8S,9S)-7-Hydroxy-8-hydroxymethyl-4-methyl-perhydrocyclopenta[c]pyran-1-one**

$C_{10}H_{16}O_4$  (200.24). Pharm: Antitubercular (*Mycobacterium tuberculosis*, MIC  $> 128\mu\text{g/mL}$ , cytotoxic, Vero cells,  $IC_{50} > 102\mu\text{g/mL}$ , positive control Rifampin, MIC =  $0.03\mu\text{g/mL}$ ,  $IC_{50} = 98.3\mu\text{g/mL}$ , SI = 3300). Source: SHU HUA JIE CAO *Valeriana laxiflora* (aerial parts and root). Ref: 4986.

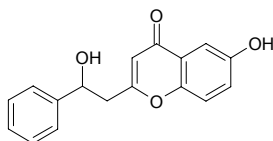


**10209 7-Hydroxy-9-hydroxymethy-3-oxo-bicyclo[4.3.0]-8-nonene**

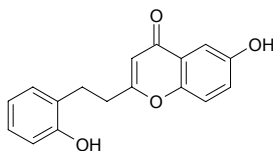
C<sub>9</sub>H<sub>14</sub>O<sub>3</sub> (170.21). Source: XUAN SHEN *Scrophularia ningpoensis*. Ref: 660.

**10210 6-Hydroxy-2-(2-hydroxy-2-phenylethyl)chromone**

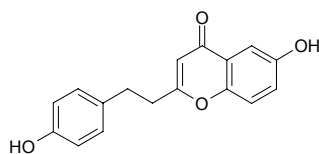
C<sub>17</sub>H<sub>14</sub>O<sub>4</sub> (282.30). White powder, mp 96–98°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = –3.0° (c = 0.66, MeOH). Source: BAI MU XIANG *Aquilaria sinensis* (Withered wood). Ref: 4339.

**10211 6-Hydroxy-2-[2-(2-hydroxyphenyl) ethyl]chromone**

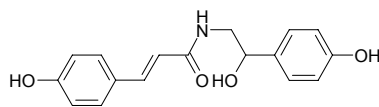
C<sub>17</sub>H<sub>14</sub>O<sub>4</sub> (282.30). Colorless needles, mp 185–186°C (MeOH). Source: CHEN XIANG *Aquilaria agallocha*. Ref: 4173.

**10212 6-Hydroxy-2-[2-(4-hydroxyphenyl) ethyl]chromone**

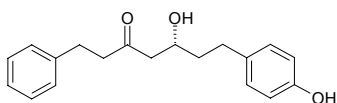
C<sub>17</sub>H<sub>14</sub>O<sub>4</sub> (282.30). Colorless needles, mp 215–218°C (MeOH). Source: CHEN XIANG *Aquilaria agallocha*. Ref: 4173.

**10213 N-[β-Hydroxy-β-(4-hydroxyphenyl)]ethyl-4-hydroxy cinnamide**

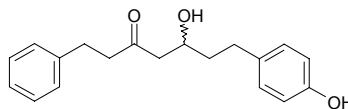
C<sub>17</sub>H<sub>17</sub>NO<sub>4</sub> (299.33). Source: MAI DONG *Ophiopogon japonicus*. Ref: 660.

**10214 5R-Hydroxy-7-(4''-hydroxyphenyl)-1-phenyl-3-heptanone**

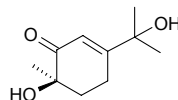
C<sub>19</sub>H<sub>22</sub>O<sub>3</sub> (298.39). Yellow oil, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = –13° (c = 1.0, CHCl<sub>3</sub>). Pharm: 5 $\alpha$ -Reductase inhibitor (rat prostate 5 $\alpha$ -Reductase, IC<sub>50</sub> = (220±60) $\mu$ mol/L, control Curcumin, IC<sub>50</sub> > 1000 $\mu$ mol/L, Finasteride, IC<sub>50</sub> = 0.01 $\mu$ mol/L)<sup>[5345]</sup>. Source: GAO LIANG JIANG *Alpinia officinarum*. Ref: 5345.

**10215 5-Hydroxy-7-(4''-hydroxyphenyl)-1-phenyl-3-heptanone**

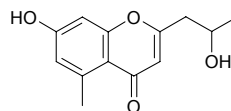
C<sub>19</sub>H<sub>22</sub>O<sub>3</sub> (298.39). Pharm: Antiemetic (young male chicks, copper sulfate induced emesis assay, 20mg/kg, InRt = 71.0%, p < 0.001)<sup>[4649]</sup>. Source: GAO LIANG JIANG *Alpinia officinarum* (rhizome: yield = 0.041%dw<sup>[4649]</sup>). Ref: 660, 4649.

**10216 (R)-6-Hydroxy-3-hydroxypropan-2-yl)-6-methylcyclohex-2-enone**

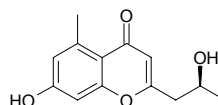
C<sub>10</sub>H<sub>16</sub>O<sub>3</sub> (184.24). White solid. Source: TIAN SHAN LING ZI QIN *Pleurospermum lindleyanum* (whole herb). Ref: 4558.

**10217 7-Hydroxy-2-(2-hydroxy)propyl-5-methyl-benzopyran-γ-one**

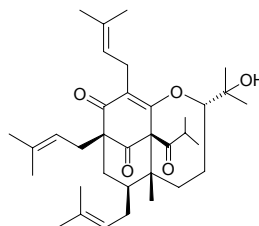
C<sub>13</sub>H<sub>14</sub>O<sub>4</sub> (234.25). Source: DA HUANG *Rheum officinale*. Ref: 2.

**10218 (2'S)-7-Hydroxy-2-(2'-hydroxypropyl)-5-methylchromone**

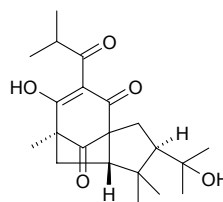
C<sub>13</sub>H<sub>14</sub>O<sub>4</sub> (234.25). Source: PO LUO MEN ZAO JIA *Cassia fistula* (seed: yield = 0.00029%). Ref: 4642.

**10219 8-Hydroxyhyperforin-8,1-hemiacetal**

[262857-89-6] C<sub>35</sub>H<sub>52</sub>O<sub>5</sub> (552.80). Viscous oil, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +34° (c = 1, CHCl<sub>3</sub>). Source: GUAN YE LIAN QIAO *Hypericum perforatum* (aerial parts: yield = 0.0012%dw). Ref: 1521, 3032.

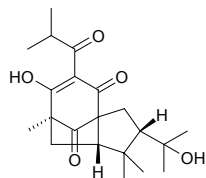
**10220 1'-Hydroxyialibinone A**

C<sub>21</sub>H<sub>30</sub>O<sub>5</sub> (362.47). Pharm: Antioxidant inactive (PMN cellular chemiluminescence assay, FMLP-induced and OZ-induced oxidative burst)<sup>[5371]</sup>. Source: *Hypericum papuanum* Ref: 5371.

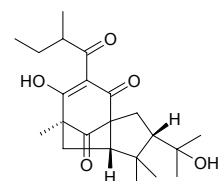


**10221 1'-Hydroxyialbinone B**

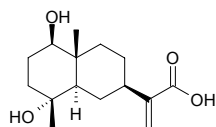
$C_{21}H_{30}O_5$  (362.47). **Pharm:** Antioxidant inactive (PMN cellular chemiluminescence assay, FMLP-induced and OZ-induced oxidative burst). **Source:** *Hypericum papuanum* **Ref:** 5371.

**10222 1'-Hydroxyialbinone D**

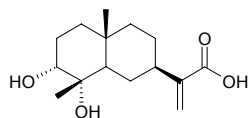
$C_{22}H_{32}O_5$  (376.50). **Pharm:** Antioxidant inactive (PMN cellular chemiluminescence assay, FMLP-induced and OZ-induced oxidative burst). **Source:** *Hypericum papuanum* **Ref:** 5371.

**10223 1β-Hydroxyilicic acid**

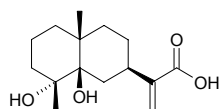
$C_{15}H_{24}O_4$  (268.36). **Source:** LIU LENG JU *Laggetera alata* (aerial parts: yield = 0.0006%dw). **Ref:** 4709.

**10224 3α-Hydroxyilicic acid**

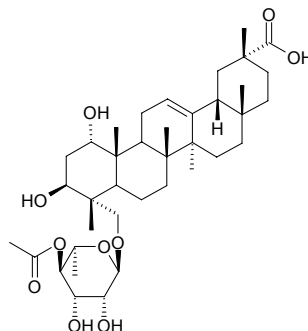
$C_{15}H_{24}O_4$  (268.36). Colorless needles, mp 177~178°C,  $[\alpha]_D^{20} = -48^\circ$  ( $c = 0.3$ ,  $CHCl_3$ ). **Source:** LIU LENG JU *Laggetera alata* (aerial parts: yield = 0.00117%dw). **Ref:** 4709.

**10225 5β-Hydroxyilicic acid**

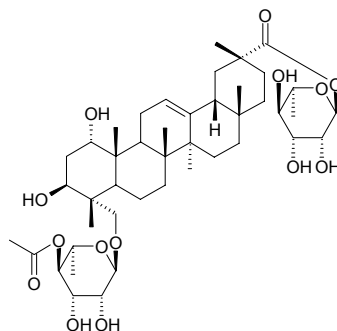
$C_{15}H_{24}O_4$  (268.36). Colorless needles ( $Me_2CO$ ), mp 160~161.5°C,  $[\alpha]_D^{20} = +5.39^\circ$  ( $c = 0.8$ , MeOH). **Source:** LIU LENG JU *Laggetera alata* (aerial parts: yield = 0.0011%dw). **Ref:** 4709.

**10226 1α,3β-Hydroxyimberbic acid-23-O-α-L-4-acetyl-rhamnopyranoside**

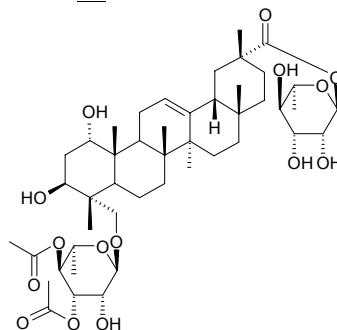
1α,3β,23-Trihydroxy-olean-12-en-29-oate-23-O-α-L-4-acetyl-rhamnopyranoside  $C_{38}H_{60}O_{10}$  (676.90). White amorphous solid, mp 198°C,  $[\alpha]_D^{21} = +41.8^\circ$  ( $c = 0.311$ , MeOH). **Source:** A KA XI A LAN REN *Terminalia stuhlmannii*. **Ref:** 2068.

**10227 1α,3β-Hydroxyimberbic acid-23-O-α-[L-4-acetyl-rhamnopyranosyl]-29-O-α-rhamnopyranoside**

1α,3β,23-Trihydroxy-olean-12-en-29-oate-23-O-α-L-4-acetyl-29-dirhamnopyranoside  $C_{44}H_{70}O_{14}$  (823.04). Peach amorphous solid, mp 196°C,  $[\alpha]_D^{22} = +15.0^\circ$  ( $c = 0.133$ , MeOH). **Source:** WU MAO FENG CHE ZI *Combretum imberbe*. **Ref:** 2068.

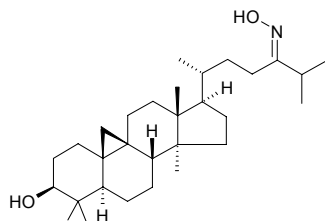
**10228 1α,3β-Hydroxyimberbic acid-23-α-L-[3,4-diacetyl-rhamnopyranosyl]-29-O-α-rhamnopyranoside**

1α,3β,23-Trihydroxy-olean-12-en-29-oate-23-O-α-L-3,4-diacetyl-29-dirhamnopyranoside  $C_{46}H_{72}O_{15}$  (865.08). Yellow amorphous solid, mp 178°C,  $[\alpha]_D^{22} = +16.2^\circ$  ( $c = 0.401$ , MeOH). **Source:** WU MAO FENG CHE ZI *Combretum imberbe*. **Ref:** 2068.

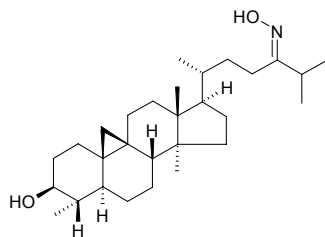


**10229 24-Hydroxyiminocycloart-3-ol**

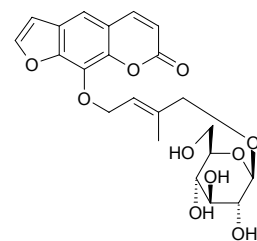
$C_{30}H_{51}NO_2$  (457.75). Amorphous powder. **Pharm:** Cytotoxic (Meth-A sarcoma cell line,  $ED_{50} = 9.5\mu\text{g/mL}$ , LLC cell line,  $ED_{50} = 7.4\mu\text{g/mL}$ ). **Source:** QING HAO *Artemisia apiacea* [Syn. *Artemisia carvifolia*; *Artemisia caruifolia*] (aerial parts). **Ref:** 3510.

**10230 24-Hydroxyimino-29-norcycloart-3-ol**

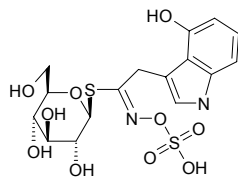
$C_{29}H_{49}NO_2$  (443.72). Amorphous powder,  $[\alpha]_D^{24} = +35.4^\circ$  ( $c = 0.35$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (Meth-A sarcoma cell line,  $ED_{50} = 5.5\mu\text{g/mL}$ , LLC cell line,  $ED_{50} = 6.4\mu\text{g/mL}$ ). **Source:** QING HAO *Artemisia apiacea* [Syn. *Artemisia carvifolia*; *Artemisia caruifolia*] (aerial parts). **Ref:** 3510.

**10231 4''-Hydroxyimperatorin 4''-O-β-D-glucopyranoside**

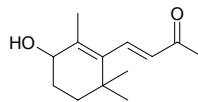
$C_{22}H_{24}O_{10}$  (448.43). **Pharm:** Antioxidant (DPPH scavenger,  $EC_{50} > 50\mu\text{g/mL}$ ,  $50\mu\text{g/mL}$  InRt = 42%, control Ascorbic acid,  $EC_{50} = 1.6\mu\text{g/mL} = 9.1\mu\text{mol/L}$ ). **Source:** BEI SHA SHEN *Glehnia littoralis* (underground part). **Ref:** 4154.

**10232 4-Hydroxy-3-indolyl methyl glucosinolate**

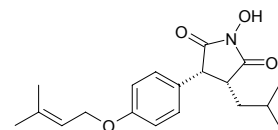
$C_{16}H_{20}N_2O_{10}S_2$  (464.47). **Source:** JIE ZI *Brassica juncea*. **Ref:** 660.

**10233 3-Hydroxy-β-ionone**

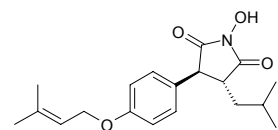
$C_{13}H_{20}O_2$  (208.30). **Source:** GOU QI ZI *Lycium chinense*. **Ref:** 660.

**10234 3R\*,4R\*-1-Hydroxy-3-isobutyl-4-[4-(3-methyl-2-butenyloxy)phenyl]pyrrolidine-2,5-dione**

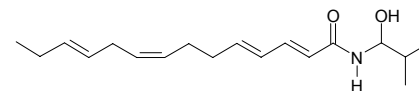
$C_{19}H_{25}NO_4$  (331.42). Colorless oil,  $[\alpha]_D^{23} = +3.0^\circ$  ( $c = 0.2$ , MeOH). **Source:** *Antrodia camphorata* (fruit). **Ref:** 3003.

**10235 3R\*,4S\*-1-Hydroxy-3-isobutyl-4-[4-(3-methyl-2-butenyloxy)phenyl]pyrrolidine-2,5-dione**

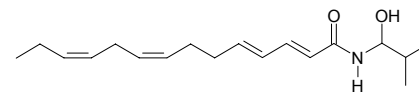
$C_{19}H_{25}NO_4$  (331.42). Colorless oil,  $[\alpha]_D^{23} = +2.5^\circ$  ( $c = 0.2$ , MeOH). **Pharm:** Cytotoxic (*in vitro*, LLC cell line,  $ED_{50} > 10\mu\text{g/mL}$ ; control Adriamycin,  $ED = 0.14\mu\text{g/mL}$ ). **Source:** *Antrodia camphorata* (fruit). **Ref:** 3003.

**10236 (2E,4E,8Z,11E)-2'-Hydroxy-N-isobutyl-2,4,8,11-tetradecatetra-enamide**

$C_{18}H_{29}NO_2$  (291.44). **Pharm:** Platelet aggregation inhibitor. **Source:** QUAN YUAN YE HUA JIAO *Zanthoxylum integrifolium*. **Ref:** 2176.

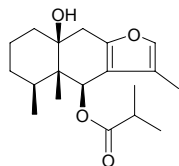
**10237 (2E,4E,8Z,11Z)-2'-Hydroxy-N-isobutyl-2,4,8,11-tetradecatetra-enamide**

$C_{18}H_{29}NO_2$  (291.44). **Pharm:** Platelet aggregation inhibitor. **Source:** QUAN YUAN YE HUA JIAO *Zanthoxylum integrifolium*. **Ref:** 2176.

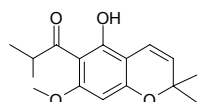


**10238 10 $\beta$ -Hydroxy-6 $\beta$ -isobutyryl furanoeremophilane**

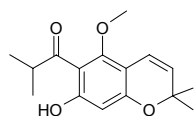
C<sub>19</sub>H<sub>28</sub>O<sub>4</sub> (320.43). Pharm: Toxin (mus, ip, LD<sub>50</sub> = 400mg/kg); hepatotoxin.  
Source: GUANG SI SHI JU *Tetradymia glabrata*. Ref: 658.

**10239 5-Hydroxy-6-isobutyryl-7-methoxy-2,2-dimethylbenzopyran**

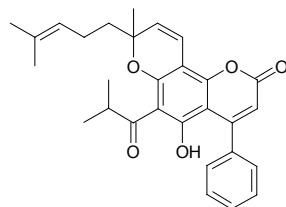
C<sub>16</sub>H<sub>20</sub>O<sub>4</sub> (276.34). Viscous oil. Source: *Hypericum polyanthemum* (aerial parts). Ref: 5168.

**10240 7-Hydroxy-6-isobutyryl-5-methoxy-2,2-dimethylbenzopyran**

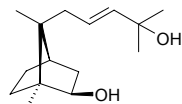
C<sub>16</sub>H<sub>20</sub>O<sub>4</sub> (276.34). Viscous oil. Source: *Hypericum polyanthemum* (aerial parts). Ref: 5168.

**10241 5-Hydroxy-6-isobutyryl-8-methyl-8-(4-methylpent-3-enyl)-4-phenyl-2H-pyrano[2,3-*h*]chromen-2-one**

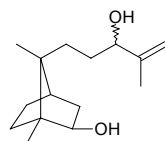
C<sub>29</sub>H<sub>30</sub>O<sub>5</sub> (458.56). Yellow gum. Source: TIE LI MU *Mesua ferrea* (blossom).  
Ref: 3870.

**10242 11-Hydroxy-isocampheren-9-ene**

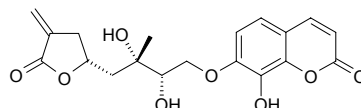
C<sub>15</sub>H<sub>26</sub>O<sub>2</sub> (238.37). Oil, [ $\alpha$ ]<sub>D</sub> = +18.4° (*c* = 0.46, CHCl<sub>3</sub>). Source: DU AI BA JIAO *Illicium tsangii*. Ref: 1866.

**10243 10ξ-Hydroxy-isocampheren-11-ene**

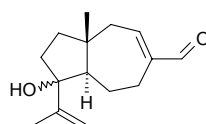
11-Campherenene-4,10-diol C<sub>15</sub>H<sub>26</sub>O<sub>2</sub> (238.37). Oil, [ $\alpha$ ]<sub>D</sub> = -11.6° (*c* = 0.1, CHCl<sub>3</sub>). Source: DU AI BA JIAO *Illicium tsangii*. Ref: 1866.

**10244 8-Hydroxyisocapnolactone-2',3'-diol**

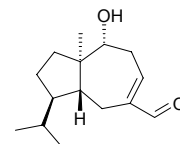
C<sub>19</sub>H<sub>20</sub>O<sub>8</sub> (376.37). White needles, mp 72~73°C. Source: JI XIAO XIAO YUN XIANG MU *Micromelum minutum* (leaf). Ref: 3467.

**10245 Hydroxyisodaucenal**

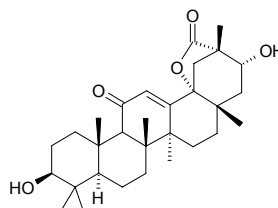
C<sub>15</sub>H<sub>22</sub>O<sub>2</sub> (234.34). Source: MEI GUI HUA *Rosa rugosa*. Ref: 660.

**10246 1 $\alpha$ -Hydroxyisodauc-4-en-15-al**

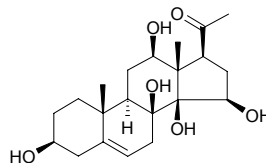
C<sub>15</sub>H<sub>24</sub>O<sub>2</sub> (236.36). Source: YI NIAN PENG *Erigeron annuus* (aerial parts), SU MEN BAI JIU CAO *Erigeron sumatrensis* (aerial parts). Ref: 4338.

**10247 21 $\alpha$ -Hydroxyisoglabrolide**

C<sub>30</sub>H<sub>44</sub>O<sub>5</sub> (484.68). Source: GUANG GUO GAN CAO *Glycyrrhiza glabra*. Ref: 2, 660.

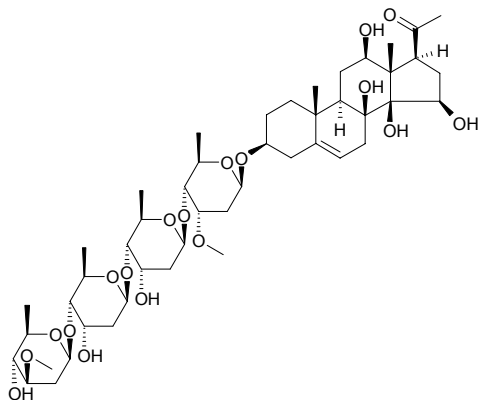
**10248 15 $\beta$ -Hydroxyisolineolon**

15 $\beta$ -Hydroxyisolineolon C<sub>21</sub>H<sub>32</sub>O<sub>6</sub> (380.49). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>21</sup> = +55.9° (*c* = 0.47, MeOH). Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.



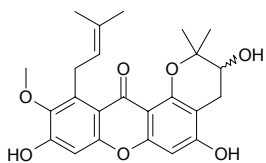
**10249 15- $\beta$ -Hydroxyisolinecolon 3-O- $\beta$ -D-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-cymaropyranoside**

C<sub>47</sub>H<sub>76</sub>O<sub>18</sub> (929.12). Amorphous powder,  $[\alpha]_D^{27} = +25.4^\circ$  ( $c = 0.40$ , MeOH). Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.



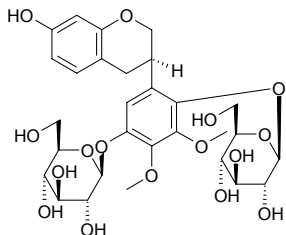
**10250 11-Hydroxy-1-isomangostin**

C<sub>24</sub>H<sub>26</sub>O<sub>7</sub> (426.47). Pharm: Cytotoxic (KB cancer cell lines, IC<sub>50</sub> = 13.14 μg/mL, control Ellipticine, IC<sub>50</sub> = 1.33 μg/mL; BC-1, IC<sub>50</sub> = 18.53 μg/mL, Ellipticine, IC<sub>50</sub> = 1.46 μg/mL; NCI-H187, inactive). Source: DAO NIAN ZI *Garcinia mangostana* (young fruit; yield = 0.080% dw). Ref: 1619.



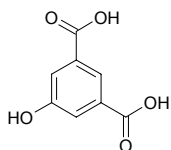
**10251 5'-Hydroxy-isomucronulatol-2',5'-di-O-glucoside**

C<sub>29</sub>H<sub>38</sub>O<sub>16</sub> (642.62). Source: MENG GU HUANG QI *Astragalus mongholicus*. Ref: 660.



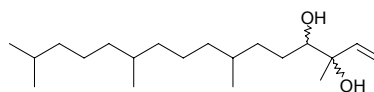
**10252 5-Hydroxyisophthalic acid**

5-Hydroxy-1,3-benzenedicarboxylic acid [618-83-7] C<sub>8</sub>H<sub>6</sub>O<sub>5</sub> (182.13). mp 284–285°C. Source: HUANG JING YE *Vitex negundo*. Ref: 6.



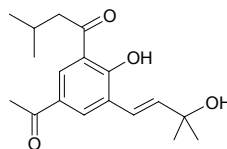
**10253 (4R)-4-Hydroxyisophytol**

C<sub>20</sub>H<sub>40</sub>O<sub>2</sub> (312.54). Source: FU PING *Lemma minor*. Ref: 660.



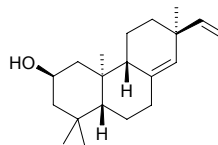
**10254 Hydroxyisopiloselloidone**

[54963-60-9] C<sub>18</sub>H<sub>24</sub>O<sub>4</sub> (304.39). mp 97°C. Source: MAO DA DING CAO *Gerbera piloselloides*. Ref: 6.



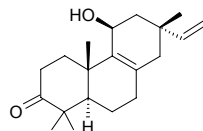
**10255 (2R)-ent-2-Hydroxyisopimara-8(14),15-diene**

C<sub>20</sub>H<sub>32</sub>O (288.48). Crystals, mp 104–105°C,  $[\alpha]_D = -9.6^\circ$  ( $c = 0.81$ ). Source: JI RUAN RONG TAI *Trichoclea mollissima*. Ref: 3489.



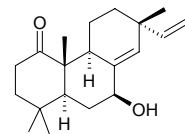
**10256 11 $\beta$ -Hydroxy-8,15-isopimaradiene-3-one**

C<sub>20</sub>H<sub>30</sub>O<sub>2</sub> (302.46). Resinous substance,  $[\alpha]_D^{22} = +22.8^\circ$  ( $c = 0.34$ , CHCl<sub>3</sub>). Source: XIA JI XIAN WEN XIANG CHA CAI *Isodon lophanthoides* var. *gerardiana*. Ref: 4067.



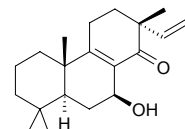
**10257 7 $\beta$ -Hydroxyisopimara-8(14),15-dien-1-one**

C<sub>20</sub>H<sub>30</sub>O<sub>2</sub> (302.46). Amorphous powder,  $[\alpha]_D = -3.1^\circ$  ( $c = 0.7$ , CHCl<sub>3</sub>). Pharm: Antifungal (TLC bioautographic assay, plant pathogenic fungus *Cladosporium cucumerinum*, MA=0.5 μg, yeast *Candida albicans*, MA=0.5 μg). Source: PU FU QIANG DAO YAO *Hypoestes serpens*. Ref: 3438.



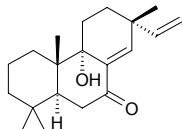
**10258 7 $\beta$ -Hydroxyisopimara-8,15-dien-14-one**

C<sub>20</sub>H<sub>30</sub>O<sub>2</sub> (302.46). Amorphous powder,  $[\alpha]_D = +55.5^\circ$  ( $c = 0.8$ , CHCl<sub>3</sub>). Pharm: Antifungal (TLC bioautographic assay, plant pathogenic fungus *Cladosporium cucumerinum*, MA=1 μg, yeast *Candida albicans*, MA=1 μg); AChE inhibitor (TLC bioautographic assay, MA=0.5 μg). Source: PU FU QIANG DAO YAO *Hypoestes serpens*. Ref: 3438.

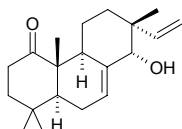


**10259 9 $\alpha$ -Hydroxyisopimara-8(14),15-dien-7-one**

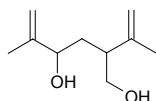
C<sub>20</sub>H<sub>30</sub>O<sub>2</sub> (302.46). Amorphous solid, [ $\alpha$ ]<sub>D</sub><sup>23</sup> = -30.0° (c = 0.6, CHCl<sub>3</sub>). [Source](#): TAI WAN SHAN *Taiwania cryptomerioides* (bark). [Ref](#): 4443.

**10260 14 $\alpha$ -Hydroxyisopimara-7,15-dien-1-one**

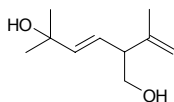
C<sub>20</sub>H<sub>30</sub>O<sub>2</sub> (302.46). Amorphous powder, [ $\alpha$ ]<sub>D</sub> = +18.0° (c = 0.9, CHCl<sub>3</sub>). [Pharm](#): Antifungal (TLC bioautographic assay, plant pathogenic fungus *Cladosporium cucumerinum*, MA = 0.5  $\mu$ g, yeast *Candida albicans*, MA = 0.5  $\mu$ g); AChE inhibitor (TLC bioautographic assay, MA = 0.2  $\mu$ g). [Source](#): PU FU QIANG DAO YAO *Hypoestes serpens*. [Ref](#): 3438.

**10261 4-Hydroxy-2-isopropenyl-5-methylene-hexan-1-ol**

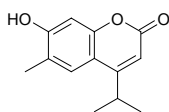
C<sub>10</sub>H<sub>18</sub>O<sub>2</sub> (170.25). Colorless oil, [ $\alpha$ ]<sub>D</sub> = -9.3° (c = 0.3, CHCl<sub>3</sub>). [Source](#): HUANG HUA HAO *Artemisia annua* (seed). [Ref](#): 3435.

**10262 trans-5-Hydroxy-2-isopropenyl-5-methylhex-3-en-1-ol**

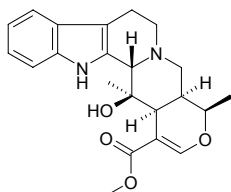
C<sub>10</sub>H<sub>18</sub>O<sub>2</sub> (170.25). Oil. [Source](#): HUANG HUA HAO *Artemisia annua* (aerial parts). [Ref](#): 5224.

**10263 7-Hydroxy-4-isopropyl-6-methyl coumarin**

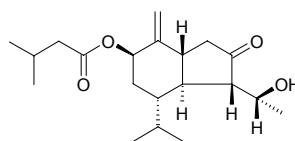
C<sub>13</sub>H<sub>14</sub>O<sub>3</sub> (218.25). [Source](#): JIN JI WEI BA CAO GEN *Macrothelypteris oligophlebia*. [Ref](#): 660.

**10264 14- $\beta$ -Hydroxy-3-isoraunicine**

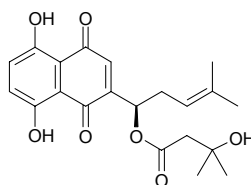
C<sub>22</sub>H<sub>26</sub>N<sub>2</sub>O<sub>4</sub> (382.46). [Source](#): TUO YUAN GOU TENG *Uncaria elliptica*. [Ref](#): 5341.

**10265 14(R)-Hydroxy-7 $\beta$ -isovaleryloxyoplop-8(10)-en-2-one**

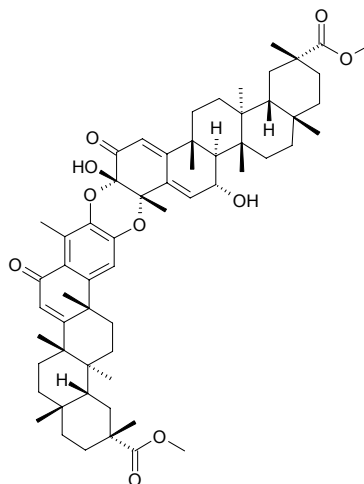
C<sub>20</sub>H<sub>32</sub>O<sub>4</sub> (336.48). Colorless oil, [ $\alpha$ ]<sub>D</sub><sup>19</sup> = -57.6° (c = 0.2, CHCl<sub>3</sub>). [Source](#): KUAN DONG HUA *Tussilago farfara* (flower bud). [Ref](#): 3531.

**10266  $\beta$ -Hydroxyisovalerylshikonin**

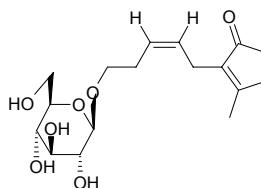
C<sub>21</sub>H<sub>24</sub>O<sub>7</sub> (388.42). [Source](#): DIAN ZI CAO *Onosma paniculatum* (root: content = 0.009%<sup>[5508]</sup>), JIA ZI CAO *Arnebia guttata* (root: content = 0.042%<sup>[5508]</sup>), XIN ZANG JIA ZI CAO *Arnebia euchroma* (root: mean content of 3 origins = 0.158%<sup>[5508]</sup>), ZI CAO *Lithospermum erythrorhizon* (root: content = 0.131%<sup>[5508]</sup>). [Ref](#): 2, 660, 5508.

**10267 7 $\alpha$ -Hydroxyisoxuxuarine Ea**

C<sub>60</sub>H<sub>80</sub>O<sub>10</sub> (961.30). Yellow amorphous solid. [Source](#): QIU SHI MEI DENG MU *Maytenus chuchuhuasca* (bark). [Ref](#): 4295.

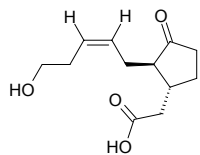
**10268 (Z)-5'-Hydroxyjasmane 5'-O- $\beta$ -D-glucopyranoside**

C<sub>17</sub>H<sub>26</sub>O<sub>7</sub> (342.39). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>22</sup> = -24°. [Source](#): SHE XIANG CAO *Thymus vulgaris*. [Ref](#): 2592.

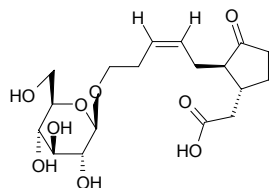


**10269 (1R,2R)-5'-Hydroxyjasmonic acid**

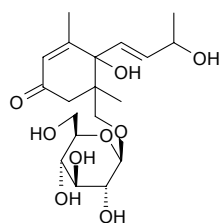
$C_{12}H_{18}O_4$  (226.27). Amorphous powder,  $[\alpha]_D^{24} = -67^\circ$ . Source: SHE XIANG CAO *Thymus vulgaris*, fungus *Botryodiplodia theobromae*. Ref: 2592.

**10270 (1R,2R)-5'-Hydroxyjasmonic acid 5'-O-β-D-glucopyranoside**

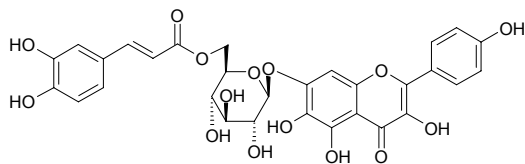
$C_{18}H_{28}O_9$  (388.42). Amorphous powder,  $[\alpha]_D^{24} = -72^\circ$ . Source: SHE XIANG CAO *Thymus vulgaris*, BAI SU YE *Perilla frutescens*. Ref: 2592.

**10271 6-Hydroxy-junipeinolside**

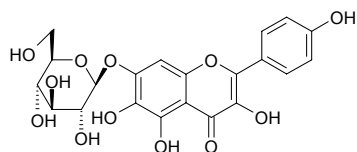
$C_{19}H_{30}O_9$  (402.45). Source: SHAN YANG DOU *Galega officinalis*, FEI NI JI CI BAI *Juniperus phoenicea*. Ref: 1867.

**10272 6-Hydroxykaempferol-7-O-(6-O-caffeoyl-β-D-glucopyranoside)**

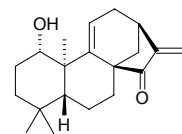
$C_{30}H_{26}O_{15}$  (626.53). Pharm: Antioxidant (DPPH scavenger,  $IC_{50} = (5.27 \pm 0.12) \mu\text{mol/L}$ , control Quercetin,  $IC_{50} = (6.11 \pm 0.53) \mu\text{g/mL}$ ). Source: ZUI DA WAN SHOU JU *Tagetes maxima* (aerial parts). Ref: 5318.

**10273 6-Hydroxykaempferol-7-O-glucoside**

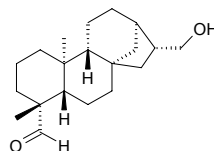
[70056-55-2]  $C_{21}H_{20}O_{12}$  (464.39). Yellow acicular crystals. Source: HONG HUA *Carthamus tinctorius*, WAN SHOU JU *Tagetes erecta*. Ref: 644, 1521.

**10274 ent-1β-Hydroxy-9(11),16-kauradien-15-one**

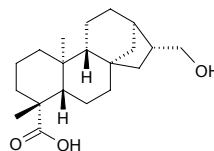
$C_{20}H_{28}O_2$  (300.44). mp 138–140°C,  $[\alpha]_D^{20} = +238.7^\circ$  ( $c = 6.05$ ,  $CHCl_3$ ). Pharm: Cytotoxic (hmn leukemia cell line HL-60,  $IC_{50} = 7.0 \mu\text{mol/L}$ ). Source: XIN XI LAN YE TAI *Jungermannia* sp. Ref: 4390.

**10275 17-Hydroxy-16β-ent-kauran-19-al**

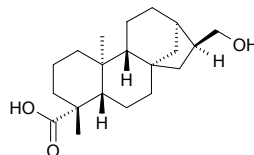
$C_{20}H_{30}O_2$  (304.48). Pharm: Platelet aggregation inhibitor inactive (washed rabbit platelets, 200  $\mu\text{mol/L}$ : 100  $\mu\text{mol/L}$  AA induced,  $\text{InRt} = 0.5\%$ ; 10  $\mu\text{g/mL}$  collagen induced,  $\text{InRt} = 4.9\%$ ; 1 ng/mL PAF induced,  $\text{InRt} = 10.3\%$ ; 0.05 U/mL thrombin induced,  $\text{InRt} = 3.2\%$ ). Source: FAN LI ZHI *Annona squamosa* (stem: yield = 0.00040%fw). Ref: 4654.

**10276 17-Hydroxy-16β-ent-kauran-19-oic acid**

$C_{20}H_{32}O_3$  (320.48). Pharm: Platelet aggregation selected inhibitor (washed rabbit platelets, 200  $\mu\text{mol/L}$ : 100  $\mu\text{mol/L}$  AA induced,  $\text{InRt} = 4.1\%$ ; 10  $\mu\text{g/mL}$  collagen induced,  $\text{InRt} = 23.8\%$ ; 1 ng/mL PAF induced,  $\text{InRt} = 7.4\%$ ; 0.05 U/mL thrombin induced,  $\text{InRt} = 2.8\%$ )<sup>[4654]</sup>; antioxidant (inhibits superoxide anion generation, fMLP/CB,  $IC_{50} = (3.6 \pm 0.8) \mu\text{g/mL}$ ,  $p < 0.001$ , control DPI,  $IC_{50} = (0.13 \pm 0.06) \mu\text{g/mL}$ ,  $p < 0.001$ )<sup>[4950]</sup>. Source: FAN LI ZHI *Annona squamosa* (stem: yield = 0.00053%fw). Ref: 4654, 4950.

**10277 (-)-17-Hydroxy-16β-kauran-19-oic acid**

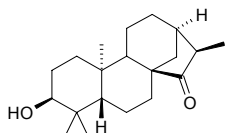
16*aH*-17-Hydroxy-*ent*-kauran-19-oic acid  $C_{20}H_{32}O_3$  (320.48). Pharm: Antiproliferative and cytotoxic (*in vitro*, L-929,  $GI_{50} = 42.4 \mu\text{g/mL}$ ; K562,  $GI_{50} = 32.8 \mu\text{g/mL}$ ; HeLa,  $CC_{50} = 43 \mu\text{g/mL}$ ; control Paclitaxel, L-929,  $GI_{50} = 0.1 \mu\text{g/mL}$ ; K562,  $GI_{50} = 0.01 \mu\text{g/mL}$ ; HeLa,  $CC_{50} = 0.01 \mu\text{g/mL}$ )<sup>[4770]</sup>. Source: FAN LI ZHI *Annona squamosa* (stem: yield = 0.00040%fw)<sup>[4654]</sup>, MU LAN<sup>(3)</sup> *Bruguiera gymnorrhiza* (stem: yield = 0.00015%), XIAN GENG XI XIAN *Siegesbeckia orientalis* var. *pubescens* [Syn. *Siegesbeckia pubescens*]. Ref: 2, 660, 4654, 4770.



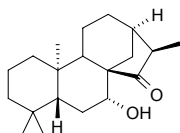


**10278 (16R)-ent-3 $\alpha$ -Hydroxykauran-15-one**

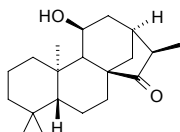
$C_{22}H_{32}O_2$  (304.48). Oil,  $[\alpha]_D^{19} = -45.1^\circ$  ( $c = 0.96$ ). Source: JIE XING YE TAI *Jungermannia truncata*. Ref: 4201.

**10279 (16R)-ent-7 $\beta$ -Hydroxykauran-15-one**

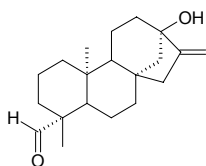
$C_{22}H_{32}O_2$  (304.48). Pharm: Cytotoxic inactive (hmn leukemia cell HL-60,  $10\mu\text{mol/L}$ ). Source: JIE XING YE TAI *Jungermannia truncata*. Ref: 4201.

**10280 (16R)-ent-11 $\alpha$ -Hydroxykauran-15-one**

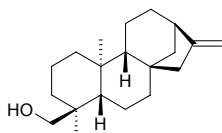
$C_{22}H_{32}O_2$  (304.48). Pharm: Cytotoxic inactive (hmn leukemia cell HL-60,  $10\mu\text{mol/L}$ ). Source: JIE XING YE TAI *Jungermannia truncata*. Ref: 4201.

**10281 13-Hydroxy-16-ent-kauran-19-al**

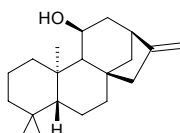
$C_{20}H_{30}O_2$  (302.46). Pharm: Antiproliferative and cytotoxic (*in vitro*, L-929,  $GI_{50} = 11.5\mu\text{g/mL}$ ; K562,  $GI_{50} = 10.5\mu\text{g/mL}$ ; HeLa,  $CC_{50} = 42.3\mu\text{g/mL}$ ; control Paclitaxel, L-929,  $GI_{50} = 0.1\mu\text{g/mL}$ ; K562,  $GI_{50} = 0.01\mu\text{g/mL}$ ; HeLa,  $CC_{50} = 0.01\mu\text{g/mL}$ ). Source: MU LAN<sup>(3)</sup> *Bruguiera gymnorrhiza* (stem; yield = 0.00015%). Ref: 4770.

**10282 ent-18-Hydroxykaur-16-ene**

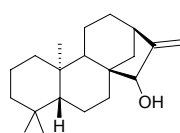
$C_{20}H_{32}O$  (288.48). Source: DONG JIN BA DOU *Croton tonkinensis* (leaf). Ref: 4444.

**10283 ent-11 $\alpha$ -Hydroxy-16-karene**

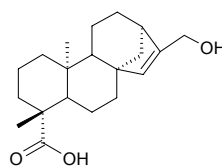
$C_{20}H_{32}O$  (288.48). Source: JIE XING YE TAI *Jungermannia truncata*. Ref: 4201.

**10284 ent-15 $\alpha$ -Hydroxy-16-karene**

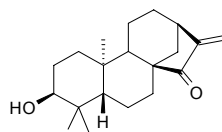
$C_{20}H_{32}O$  (288.48). Source: JIE XING YE TAI *Jungermannia truncata*. Ref: 4201.

**10285 (-)-17-Hydroxy-kaur-15-en-19-oic acid**

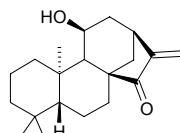
$C_{20}H_{30}O_3$  (318.46). White solid, mp  $187\sim 188^\circ\text{C}$ ,  $[\alpha]_D^{20} = -101.6^\circ$  ( $c = 1$ ,  $\text{CHCl}_3$ ). Pharm:  $\text{Na}^+, \text{K}^+$ -ATP inhibitor (crude enzyme  $\text{Na}^+, \text{K}^+$ -ATPase from rat brain,  $IC_{50} = 600\mu\text{mol/L}$ ). Source: GUANG YE BA DOU *Croton oblongifolius* [Syn. *Croton laevigatus*] (semi-synthetic derivative). Ref: 5404.

**10286 ent-3 $\alpha$ -Hydroxy-16-karene-15-one**

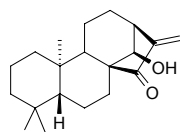
$C_{20}H_{30}O_2$  (302.46). Source: JIE XING YE TAI *Jungermannia truncata*. Ref: 4201.

**10287 ent-11 $\alpha$ -Hydroxy-16-karene-15-one**

$C_{20}H_{30}O_2$  (302.46). Pharm: Cytotoxic (hmn leukemia cell HL-60,  $IC_{50} = 0.82\mu\text{mol/L}$ , induces apoptosis<sup>[4201]</sup>); cytotoxic (hmn leukemia cell line HL-60,  $IC_{50} = 0.49\mu\text{mol/L}$ )<sup>[4390]</sup>; apoptosis enhancer (hmn leukemia cells, TNF- $\alpha$  and CPT-induced apoptosis, selectively inhibits NF- $\kappa$ B-dependent anti-apoptotic proteins)<sup>[5011]</sup>. Source: JIE XING YE TAI *Jungermannia truncata*, XIN XI LAN YE TAI *Jungermannia* sp. Ref: 4201, 4390, 5011.

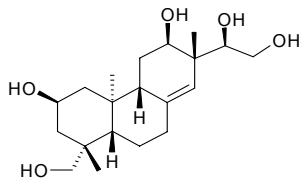
**10288 ent-14 $\alpha$ -Hydroxy-16-karene-15-one**

$C_{20}H_{30}O_2$  (302.46). Source: JIE XING YE TAI *Jungermannia truncata*. Ref: 4201.

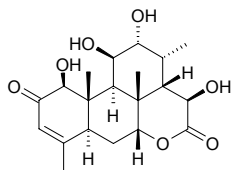


**10289 12-Hydroxykirenon**

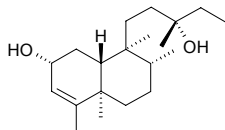
$C_{20}H_{34}O_5$  (354.49). White grain crystals, mp 217~219°C. Source: XIAN GENG XI XIAN *Siegesbeckia orientalis* var. *pubescens* [Syn. *Siegesbeckia pubescens*]. Ref: 800.

**10290 15β-Hydroxyklaineanon**

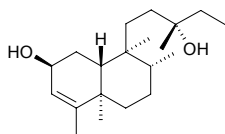
$C_{20}H_{28}O_7$  (380.44). Pharm: Plant growth inhibitor (Cucumber seedling, root growth,  $IC_{50} = (10.5 \pm 0.5) \mu\text{mol/L}$ , shoot growth,  $IC_{50} = (23.7 \pm 0.5) \mu\text{mol/L}$ ; Rice seedling, root growth,  $IC_{50} > 200 \mu\text{mol/L}$ , shoot growth,  $IC_{50} > 200 \mu\text{mol/L}$ )<sup>[5215]</sup>. Source: CHANG YE KUAN MU *Eurycoma longifolia* (leaf), *Eurycoma* sp. Ref: 4556, 5215.

**10291 (+)-2α-Hydroxykolavelool**

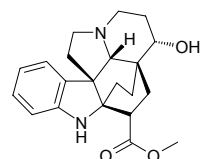
13-Epi-roseosta-chenol  $C_{20}H_{34}O_2$  (306.49). Colorless amorphous solid,  $[\alpha]_D^{25} = +10.0^\circ$  ( $c = 0.10$ ,  $\text{CHCl}_3$ ). Source: BA XI MA DOU LING *Aristolochia chamissonis*. Ref: 1904.

**10292 (-)-2β-Hydroxykolavelool**

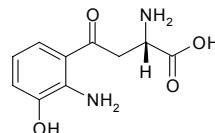
$C_{20}H_{34}O_2$  (306.49). Colorless amorphous solid,  $[\alpha]_D^{25} = -38.5^\circ$  ( $c = 0.09$ ,  $\text{CHCl}_3$ ). Source: BA XI MA DOU LING *Aristolochia chamissonis*. Ref: 1904.

**10293 15α-Hydroxykopsinine**

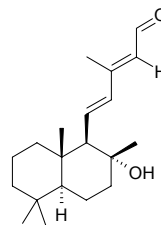
$C_{21}H_{26}N_2O_3$  (354.45). Source: HONG HUA RUI MU *Kopsia fruticosa* (leaf). Ref: 3830.

**10294 3-Hydroxykynurenine**

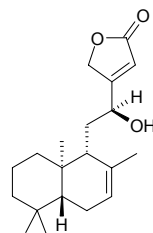
[606-14-4]  $C_{10}H_{12}N_2O_4$  (224.22). mp (-) 185~190°C, ( $\pm$ ) 223°C (dec). Source: YUAN CAN ZI *Bombyx mori*. Ref: 6.

**10295 8α-Hydroxy-11E,13Z-labdadien-15-al**

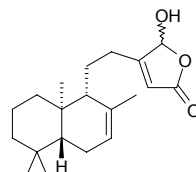
$C_{20}H_{32}O_2$  (304.48). Amorphous,  $[\alpha]_D^{27} = +87.5^\circ$  ( $c = 0.20$ ,  $\text{CHCl}_3$ ). Source: TAI WAN SHAN MU *Cunninghamia konishii* (wood). Ref: 4176.

**10296 ent-12R-Hydroxylabda-7,13-dien-15,16-olide**

$C_{20}H_{30}O_3$  (318.46). White crystals ( $\text{MeOH-H}_2\text{O}$ ), mp 108~110°C,  $[\alpha]_D = -5.4^\circ$  ( $\text{CHCl}_3$ ,  $c = 0.19$ ). Pharm: Antitrypanosomal (protozoan parasite *Trypanosoma cruzi*, *in vitro*, 250  $\mu\text{g/mL}$ , 100% lysis); cytotoxic inactive (Lu1, 20  $\mu\text{g/mL}$ , control Ellipticine,  $ED_{50} = 0.02 \mu\text{g/mL}$ ; Col2, 20  $\mu\text{g/mL}$ , Ellipticine,  $ED_{50} = 0.3 \mu\text{g/mL}$ ; KB, 20  $\mu\text{g/mL}$ , Ellipticine,  $ED_{50} = 0.04 \mu\text{g/mL}$ ; LN CaP, 20  $\mu\text{g/mL}$ , Ellipticine,  $ED_{50} = 0.8 \mu\text{g/mL}$ ; KB in absence of 1  $\mu\text{g/mL}$  vinblastine, 20  $\mu\text{g/mL}$ , Ellipticine,  $ED_{50} = 0.3 \mu\text{g/mL}$ ; KB in presence of 1  $\mu\text{g/mL}$  vinblastine, 20  $\mu\text{g/mL}$ , Ellipticine,  $ED_{50} = 0.2 \mu\text{g/mL}$ ; BC1, 20  $\mu\text{g/mL}$ , Ellipticine,  $ED_{50} = 0.5 \mu\text{g/mL}$ ). Source: *Alomia myriadenia* (aerial parts). Ref: 3479.

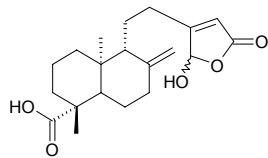
**10297 ent-16-Hydroxylabda-7,13-dien-15,16-olide**

$C_{20}H_{30}O_3$  (318.46). White crystals ( $\text{MeOH-H}_2\text{O}$ ), mp 128~129°C,  $[\alpha]_D = +40.9^\circ$  ( $\text{MeOH}$ ,  $c = 0.21$ ). Pharm: Cytotoxic (Lu1,  $ED_{50} = 0.3 \mu\text{g/mL}$ , control Ellipticine,  $ED_{50} = 0.02 \mu\text{g/mL}$ ; Col2,  $ED_{50} = 1.2 \mu\text{g/mL}$ , Ellipticine,  $ED_{50} = 0.3 \mu\text{g/mL}$ ; KB,  $ED_{50} = 1.7 \mu\text{g/mL}$ , Ellipticine,  $ED_{50} = 0.04 \mu\text{g/mL}$ ; LNCaP,  $ED_{50} = 4.2 \mu\text{g/mL}$ , Ellipticine,  $ED_{50} = 0.8 \mu\text{g/mL}$ ; KB in absence of 1  $\mu\text{g/mL}$  vinblastine,  $ED_{50} = 1.4 \mu\text{g/mL}$ , Ellipticine,  $ED_{50} = 0.3 \mu\text{g/mL}$ ; KB in presence of 1  $\mu\text{g/mL}$  vinblastine,  $ED_{50} = 9.9 \mu\text{g/mL}$ , Ellipticine,  $ED_{50} = 0.2 \mu\text{g/mL}$ ; BC1,  $ED_{50} = 2.6 \mu\text{g/mL}$ , Ellipticine,  $ED_{50} = 0.5 \mu\text{g/mL}$ ); antitrypanosomal (protozoan parasite *Trypanosoma cruzi*, *in vitro*, 250  $\mu\text{g/mL}$ , 100% lysis). Source: *Alomia myriadenia* (aerial parts). Ref: 3479.

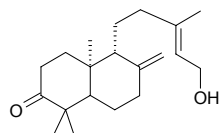


**10298 16-Hydroxy-8(17),13-*ent*-labdadien-15,16-olide-19-oic acid**

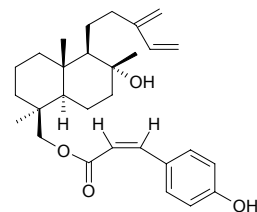
$C_{20}H_{28}O_5$  (348.44). Pale-yellow gum,  $[\alpha]_D^{25} = -36.6^\circ$  ( $c = 0.32$ , MeOH).  
 Source: BI CHI YAN ZI CAI *Potamogeton pectinatus* (whole herb). Ref: 3488.

**10299 *ent*-15-Hydroxyabda-8(17),13*E*-dien-3-one**

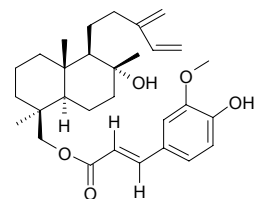
$C_{20}H_{32}O_2$  (304.48). Colorless needles (MeOH), mp 117–118°C,  $[\alpha]_D^{25} = -9.2^\circ$  ( $c = 0.8$ ,  $CHCl_3$ ). Source: HAI QI *Excoecaria agallocha* (root). Ref: 5114.

**10300 8 $\alpha$ -Hydroxyabda-13(16),14-dien-19-yl-(*Z*)-4-hydroxycinnamate**

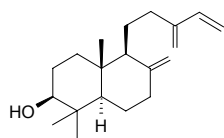
$C_{29}H_{40}O_4$  (452.64). Solid, mp = 206–208°C,  $[\alpha]_D^{25} = +6.5^\circ$  ( $c = 1.65$ , MeOH).  
 Source: HONG GUI *Chamaecyparis formosensis*. Ref: 2315.

**10301 8 $\alpha$ -Hydroxyabda-13(16),14-dien-19-yl-(*E*)-4-hydroxy-3-methoxy-cinnamate**

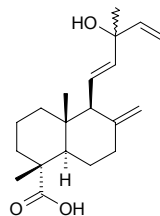
$C_{30}H_{42}O_5$  (482.67). Solid, mp = 110–112°C,  $[\alpha]_D^{25} = +6.2^\circ$  ( $c = 0.7$ , MeOH).  
 Source: HONG GUI *Chamaecyparis formosensis*. Ref: 2315.

**10302 3 $\beta$ -Hydroxy-labda-8(17),13(16),14-triene**

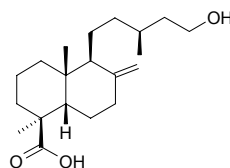
$C_{20}H_{32}O$  (288.48).  $[\alpha]_D^{20} = +12.1^\circ$  ( $c = 1.3$ ,  $CHCl_3$ ). Source: YUAN YE TAI *Jamesoniella colorata*. Ref: 3375.

**10303 (13*R*)-13-Hydroxy-8(17),11*E*,14-labdatrien-18-oic acid**

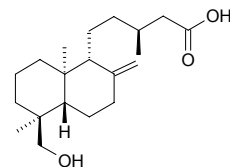
$C_{20}H_{30}O_3$  (318.46). Amorphous,  $[\alpha]_D^{26} = +51.7^\circ$  ( $c = 0.17$ ,  $CHCl_3$ ). Source: TAI WAN SHAN MU *Cunninghamia konishii* (wood). Ref: 4176.

**10304 *ent*-15-Hydroxy-8(17)-labden-19-oic acid**

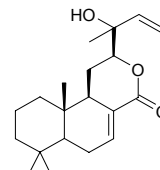
$C_{20}H_{34}O_3$  (322.49). Source: *Nuxia sphaerocephala* (leaf). Ref: 4419.

**10305 *ent*-18-Hydroxy-8(17)-labden-15-oic acid**

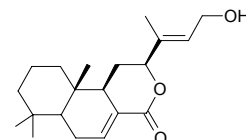
$C_{20}H_{34}O_3$  (322.49). Source: *Nuxia sphaerocephala* (leaf). Ref: 4419.

**10306 13-Hydroxylabta-7,14-diene-17,12-olide**

$C_{20}H_{30}O_3$  (318.46). mp 105–107°C,  $[\alpha]_D^{20} = +19.826^\circ$  ( $c = 1.1$ ,  $CHCl_3$ ).  
 Pharm: Cytotoxic inactive (*in vitro*, BT474, CHAGO, HepG2, Kato3, SW620: > 10 μg/mL). Source: GUANG YE BA DOU *Croton oblongifolius* [Syn. *Croton laevigatus*]. Ref: 5363.

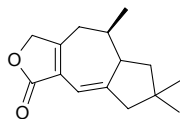
**10307 15-Hydroxylabta-7,13(*E*)-diene-17,12-olide**

$C_{20}H_{30}O_3$  (318.46). mp 128–130°C,  $[\alpha]_D^{20} = -3.44^\circ$  ( $c = 1.31$ ,  $CHCl_3$ ). Pharm: Cytotoxic (*in vitro*, BT474, IC<sub>50</sub> = 5.9 μg/mL, control Doxorubicin hydrochloride, IC<sub>50</sub> = 0.08 μg/mL; CHAGO, IC<sub>50</sub> = 6.0 μg/mL, Doxorubicin hydrochloride, IC<sub>50</sub> = 2.3 μg/mL; HepG2, IC<sub>50</sub> > 10 μg/mL, Doxorubicin hydrochloride, IC<sub>50</sub> = 0.9 μg/mL; Kato3, IC<sub>50</sub> = 7.6 μg/mL, Doxorubicin hydrochloride, IC<sub>50</sub> = 1.7 μg/mL; SW620, IC<sub>50</sub> = 6.0 μg/mL, Doxorubicin hydrochloride, IC<sub>50</sub> = 1.1 μg/mL). Source: GUANG YE BA DOU *Croton oblongifolius* [Syn. *Croton laevigatus*]. Ref: 5363.

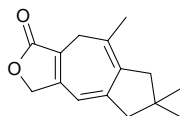


**10308 5-Hydroxy-lactara-6,8-dien-13-oic acid  $\gamma$ -lactone**

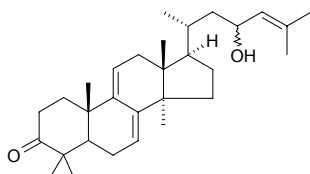
$C_{15}H_{20}O_2$  (232.33). Source: RONG BAI RU GU *Lactarius vellereus*. Ref: 660.

**10309 13-Hydroxy-lactara-2,6,8-trien-5-oic acid  $\gamma$ -lactone**

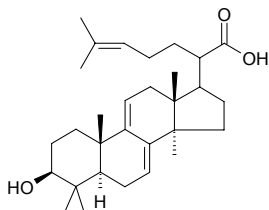
$C_{15}H_{18}O_2$  (230.31). Source: RONG BAI RU GU *Lactarius vellereus*. Ref: 660.

**10310 23-Hydroxy-5 $\alpha$ -lanosta-7,9(11),24-triene-3-one**

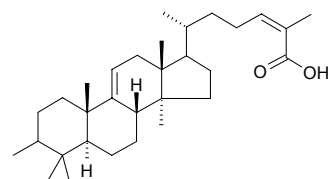
$C_{30}H_{46}O_2$  (438.70). Colorless needles (methanol), mp 95°C,  $[\alpha]_D = -32.25^\circ$  ( $c = 0.01$ ,  $CHCl_3$ ). Pharm: Antileishmanial (*Leishmania donovani* promastigotes,  $IC_{50} = 7.2\mu\text{mol/L}$ , SI = 4.19; control Pentamidine,  $IC_{50} = 0.40\mu\text{mol/L}$ , SI = 0.42, amastigotes,  $IC_{50} = 74.4\mu\text{mol/L}$ , SI = 0.40; control Pentostam,  $IC_{50} = 9.75\mu\text{g/mL}$ , SI = 34.90); antimalarial (*Plasmodium falciparum* K1,  $IC_{50} = 95\mu\text{mol/L}$ , SI = 0.32; control Chloroquine,  $IC_{50} = 0.59\mu\text{mol/L}$ , SI = 272); antitrypanosomal (*Trypanosoma brucei brucei* blood stream trypomastigotes,  $IC_{50} = 5\mu\text{mol/L}$ , SI = 6.0; control Pentamidine,  $IC_{50} = 0.00034\mu\text{mol/L}$ , SI = 500); cytotoxic (KB cells,  $IC_{50} = 30.2\mu\text{mol/L}$ , control Pentamidine,  $IC_{50} = 0.17\mu\text{mol/L}$ ). Source: *Guarea rhopalocarpa* (leaf). Ref: 5127.

**10311 3 $\beta$ -Hydroxylanosta-7,9(11),24-trien-21-oic acid**

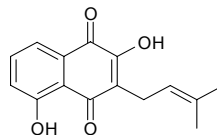
$C_{30}H_{46}O_3$  (454.70). mp 257~259°C. Source: FU LING *Poria cocos*. Ref: 2, 6.

**10312 3 $\beta$ -Hydroxy-lanost-9(11),24(25)-dien-26-oic acid**

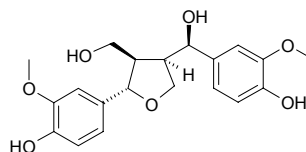
$C_{31}H_{50}O_2$  (454.74). Source: XIAO HUA WU WEI ZI *Schisandra micrantha* (stem and leaf). Ref: 4389.

**10313 5-Hydroxylapachol**

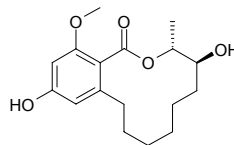
$C_{15}H_{14}O_4$  (258.28). orange needles, mp 142~144°C. Source: YOU MU *Tectona grandis*. Ref: 1902.

**10314 (7'R)-7'-Hydroxylariciresinol**

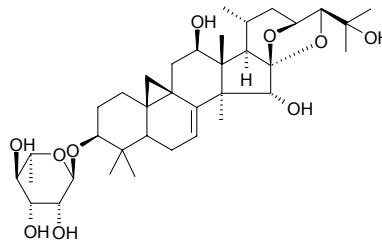
$C_{20}H_{24}O_7$  (376.41). Pharm: Hepatoprotective (mouse, 50mg/kg, TNF- $\alpha$  level =  $(288\pm 187)\text{pg/mL}$ , 10 mg/kg, TNF- $\alpha$  level =  $(310\pm 179)\text{pg/mL}$ )<sup>[4917]</sup>; antioxidant (DPPH free radical scavenger,  $IC_{50} = 44.7\mu\text{mol/L}$ , control Caffeic acid,  $IC_{50} = 25.5\mu\text{mol/L}$ )<sup>[5407]</sup>; NO production inhibitor ( $IC_{50} = 178\mu\text{mol/L}$ , control L-NMMA,  $IC_{50} = 28.5\mu\text{mol/L}$ )<sup>[5407]</sup>. Source: YUN NAN HONG DOU SHAN *Taxus yunnanensis* (wood). Ref: 4917, 5407.

**10315 (3R),(4S)-4-Hydroxylasiodiopodin**

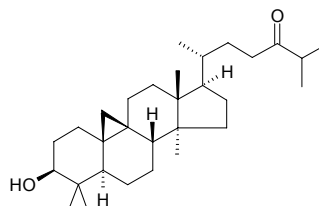
$C_{17}H_{24}O_5$  (308.38). White powder, mp 217~218°C,  $[\alpha]_D^{25} = +2.0^\circ$  ( $c = 1.0$ , MeOH). Pharm: Potato micro-tuber inducer (100 $\mu\text{mol/L}$ , control Jasmonic acid, 1 $\mu\text{mol/L}$ , Theobroxide, 10 $\mu\text{mol/L}$ ). Source: *Lasiodiopodia theobromae*. Ref: 3966.

**10316 12 $\beta$ -Hydroxylcimigenol 3-O- $\alpha$ -L-arabinopyranoside**

$C_{36}H_{56}O_{10}$  (648.84). Source: XING AN SHENG MA *Cimicifuga dahurica* (rhizome). Ref: 4140.

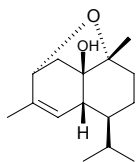
**10317 3 $\beta$ -Hydroxyleycloart-24-one**

$C_{30}H_{50}O_2$  (442.73). Pharm: Cytotoxic (Meth-A sarcoma cell line,  $ED_{50} = 9.0\mu\text{g/mL}$ , LLC cell line,  $ED_{50} = 9.0\mu\text{g/mL}$ ). Source: QING HAO *Artemisia apiacea* [Syn. *Artemisia carvifolia*; *Artemisia caruifolia*] (aerial parts). Ref: 3510.



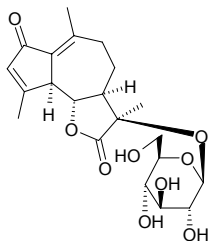
**10318 10-Hydroxylentideusether**

$C_{15}H_{24}O_2$  (236.36). Source: BAO PI GU *Lentinus lepideus*. Ref: 660.

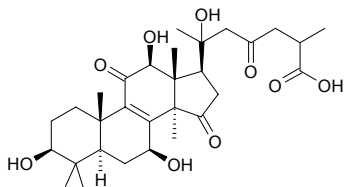
**10319 11β-Hydroxyleukodin 11-O-β-glucopyranoside**

$C_{21}H_{28}O_9$  (424.45). Colorless gum,  $[\alpha]_D^{28} = +25.2^\circ$  ( $c = 0.33$ , MeOH).

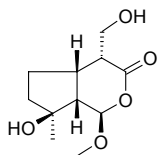
Source: DAO LUAN YE PU GONG YING GEN *Taraxacum obovatum*. Ref: 5357.

**10320 20-Hydroxylganoderic acid G**

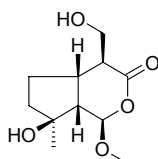
$C_{30}H_{44}O_9$  (548.68). Pale yellow needles (MeOH–H<sub>2</sub>O), mp 175–177°C,  $[\alpha]_D^{25} = +42^\circ$  ( $c = 0.12$ , MeOH). Source: LING ZHI *Ganoderma lucidum* (dried sporocarp; yield = 0.0004%). Ref: 4603.

**10321 (1R,4R,4aS,7S,7aS)-7-Hydroxyl-4-hydroxymethyl-7-methyl-1-methoxyl-1,4,4a,7a-tetrahydrocyclopenta[e]-pyran-3-one**

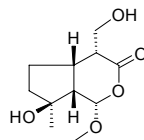
$C_{11}H_{18}O_5$  (230.26). Colorless gum,  $[\alpha]_D^{25} = +23.9$  ( $c = 0.45$ , CHCl<sub>3</sub>). Source: GUANG YAO DA HUANG HUA *Cymbaria mongolica*. Ref: 2001.

**10322 (1R,4S,4aS,7S,7aS)-7-hydroxyl-4-hydroxymethyl-7-methyl-1-methoxyl-1,4,4a,7a-tetrahydrocyclopenta[e]-pyran-3-one**

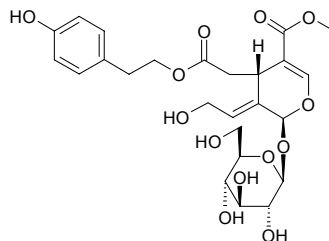
$C_{11}H_{18}O_5$  (230.26). White amorphous powder,  $[\alpha]_D^{25} = +33.5$  ( $c = 0.35$ , CHCl<sub>3</sub>). Source: GUANG YAO DA HUANG HUA *Cymbaria mongolica*. Ref: 2001.

**10323 (1S,4R,4aS,7S,7aS)-7-Hydroxyl-4-hydroxymethyl-7-methyl-1-methoxyl-1,4,4a,7a-tetrahydrocyclopenta[e]-pyran-3-one**

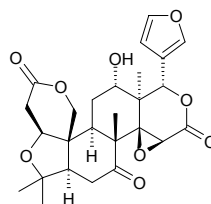
$C_{11}H_{18}O_5$  (230.26). Colorless gum,  $[\alpha]_D^{25} = +23.7^\circ$  ( $c = 0.25$ , CHCl<sub>3</sub>). Source: GUANG YAO DA HUANG HUA *Cymbaria mongolica*. Ref: 2001.

**10324 10-Hydroxyligustroside**

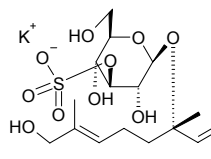
$C_{25}H_{32}O_{13}$  (540.53). Source: NV ZHEN ZI *Ligustrum lucidum*. Ref: 660.

**10325 12α-Hydroxylimonin**

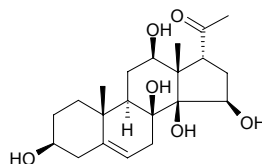
$C_{26}H_{30}O_9$  (486.52). Source: WU ZHU YU *Evodia rutaecarpa*. Ref: 2, 877.

**10326 (3S,6E)-8-Hydroxylinalool 3-O-β-D-(3-O-Potassium sulfo) glucopyranoside**

$C_{16}H_{27}KO_{10}S$  (450.55). Amorphous powder,  $[\alpha]_D^{21} = -12^\circ$  ( $c = 0.9$ , MeOH). Source: HU SUI ZI *Coriandrum sativum*. Ref: 4302.

**10327 15β-Hydroxylineolon**

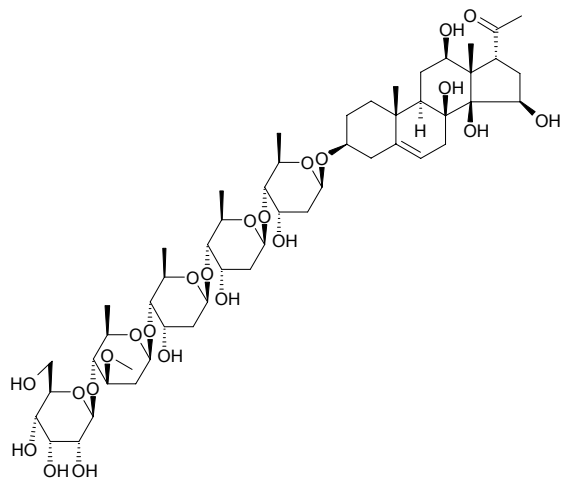
15β-Hydroxylineolone  $C_{21}H_{32}O_6$  (380.49). Amorphous powder,  $[\alpha]_D^{21} = -3.4^\circ$  ( $c = 0.85$ , MeOH). Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.



**10328 15- $\beta$ -Hydroxylineolon 3-O- $\beta$ -D-allopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-digitoxopyranoside**

C<sub>52</sub>H<sub>84</sub>O<sub>23</sub> (1077.24). Amorphous powder,  $[\alpha]_D^{27} = +1.6^\circ$  ( $c = 0.41$ , MeOH).

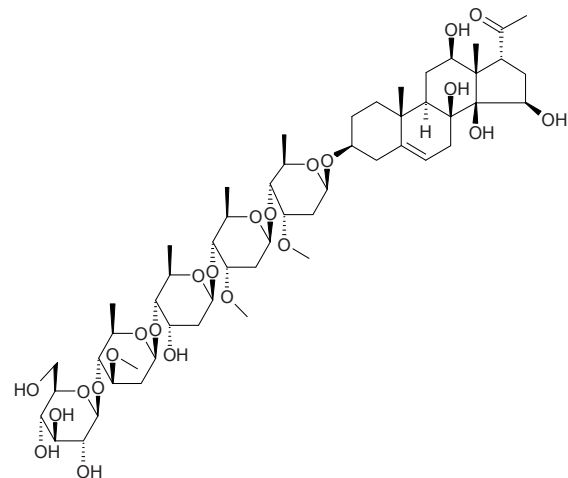
Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.



**10329 15- $\beta$ -Hydroxylineolon 3-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-cymaropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-cymaropyranoside**

C<sub>54</sub>H<sub>88</sub>O<sub>23</sub> (1105.29). Amorphous powder,  $[\alpha]_D^{21} = +7.9^\circ$  ( $c = 0.63$ , MeOH).

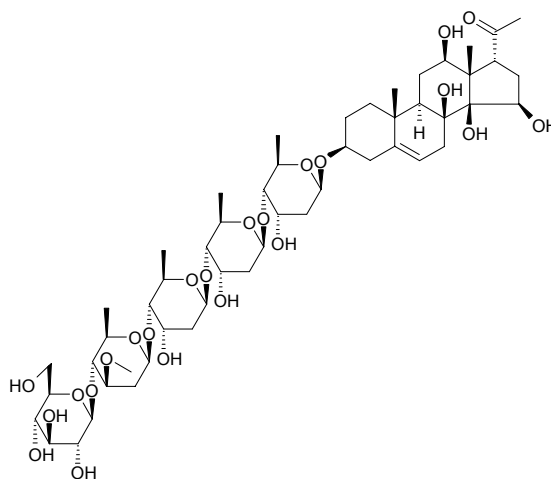
Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.



**10330 15- $\beta$ -Hydroxylineolon 3-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-digitoxopyranoside**

C<sub>52</sub>H<sub>84</sub>O<sub>23</sub> (1077.24). Amorphous powder,  $[\alpha]_D^{21} = +1.9^\circ$  ( $c = 0.84$ , MeOH).

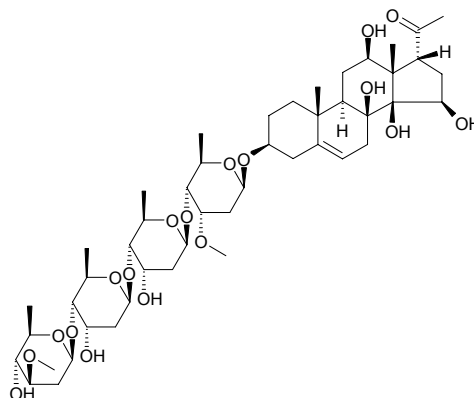
Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.



**10331 15- $\beta$ -Hydroxylineolon 3-O- $\beta$ -D-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-cymaropyranoside**

C<sub>47</sub>H<sub>76</sub>O<sub>18</sub> (929.12). Amorphous powder,  $[\alpha]_D^{27} = +3.7^\circ$  ( $c = 0.79$ , MeOH).

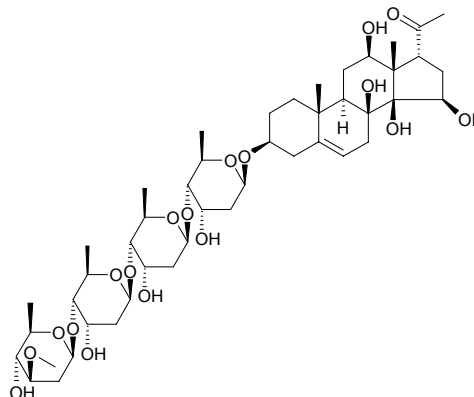
Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.



**10332 15- $\beta$ -Hydroxylineolon 3-O- $\beta$ -D-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-digitoxopyranoside**

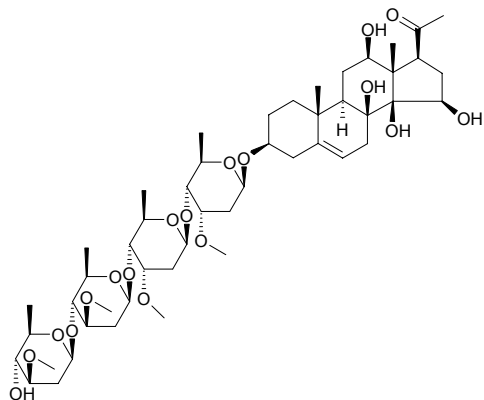
C<sub>46</sub>H<sub>74</sub>O<sub>18</sub> (915.09). Amorphous powder,  $[\alpha]_D^{27} = -0.53^\circ$  ( $c = 1.23$ , MeOH).

Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.



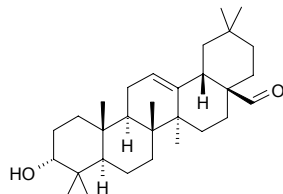
**10333 15- $\beta$ -Hydroxylineolon 3-O- $\beta$ -D-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-cymaropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-cymaropyranoside**

C<sub>49</sub>H<sub>80</sub>O<sub>18</sub> (957.17). Amorphous powder,  $[\alpha]_D^{27} = -2.2^\circ$  ( $c = 0.80$ , MeOH).  
 Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.



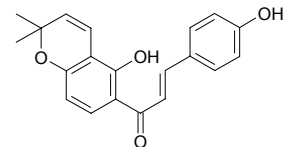
**10334 3 $\beta$ -Hydroxy-olean-12-en-28-al**

C<sub>30</sub>H<sub>48</sub>O<sub>2</sub> (440.72). Source: XIA KU CAO *Prunella vulgaris*. Ref: 2508.



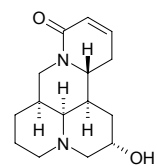
**10335 4-Hydroxyonchocarpin**

C<sub>20</sub>H<sub>18</sub>O<sub>4</sub> (322.36). Source: *Glycyrrhiza* sp. Ref: 2431.



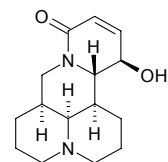
**10336 (-)-9 $\alpha$ -Hydroxylsophocarpine**

C<sub>15</sub>H<sub>22</sub>N<sub>2</sub>O<sub>2</sub> (262.35). Colorless crystals (benzene), mp 120°C,  $[\alpha]_D^{25} = -44.2^\circ$  ( $c = 0.36$ , EtOH). Source: BAI CI HUA *Sophora viciifolia*. Ref: 1888.



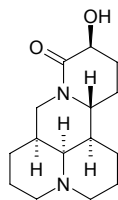
**10337 (-)-12 $\beta$ -Hydroxylsophocarpine**

C<sub>15</sub>H<sub>22</sub>N<sub>2</sub>O<sub>2</sub> (262.35). Colorless crystals (benzene), mp 146°C,  $[\alpha]_D^{25} = -215.1^\circ$  ( $c = 0.22$ , EtOH). Source: BAI CI HUA *Sophora viciifolia*. Ref: 1888.



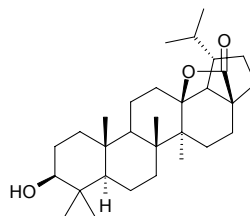
**10338 (-)-14 $\beta$ -Hydroxylsophoridine**

C<sub>15</sub>H<sub>24</sub>N<sub>2</sub>O<sub>2</sub> (264.37). Colorless needles (CH<sub>2</sub>Cl<sub>2</sub>-*n*-hexane), mp. 90°C,  $[\alpha]_D^{25} = -94.8^\circ$  ( $c = 0.47$ , EtOH). Source: BAI CI HUA *Sophora viciifolia*. Ref: 1888.



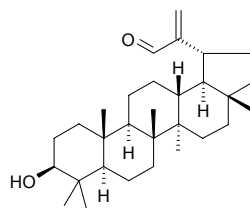
**10339 3 $\beta$ -Hydroxylupane-13 $\beta$ ,28-lactone**

C<sub>30</sub>H<sub>48</sub>O<sub>3</sub> (456.72). Source: WU YA GUO *Dillenia indica*. Ref: 660.



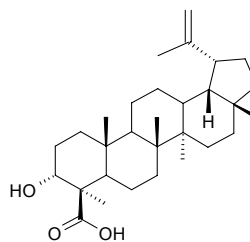
**10340 3 $\beta$ -Hydroxy-lup-20(29)-en-30-al**

C<sub>30</sub>H<sub>48</sub>O<sub>2</sub> (440.72). Pharm: Cytotoxic (NSCLC-N6 cell line, IC<sub>50</sub> = (11 $\pm$ 0.02) $\mu$ g/mL)<sup>[3806]</sup>; antimalarial (*Plasmodium falciparum* FcB1, IC<sub>50</sub> = (3.15 $\pm$ 0.07) $\mu$ g/mL, control Chloroquine, IC<sub>50</sub> = (0.05 $\pm$ 0.002) $\mu$ g/mL; *Plasmodium falciparum* FcM29, IC<sub>50</sub> = (4.06 $\pm$ 0.53) $\mu$ g/mL)<sup>[4419]</sup>. Source: JU MI JIN HE HUAN *Acacia mellifera* (stem cortex), *Nuxia sphaerocephala* (leaf). Ref: 3806, 4419.



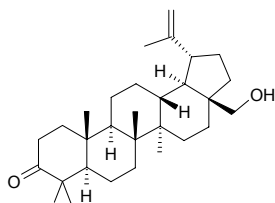
**10341 3 $\alpha$ -Hydroxy-lup-20(29)-en-24-oic acid**

C<sub>30</sub>H<sub>48</sub>O<sub>3</sub> (456.72). Colorless crystals (MeOH),  $[\alpha]_D^{25} = +16^\circ$  ( $c = 1.15$ , CHCl<sub>3</sub>). Source: RU XIANG *Boswellia carterii*. Ref: 2050.

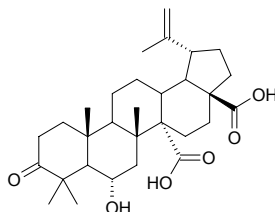


**10342 28-Hydroxy-lup-20(29)-en-3-one**

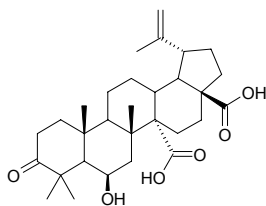
$C_{30}H_{48}O_2$  (440.72). **Pharm:** Cytotoxic (NSCLC-N6 cell line,  $IC_{50} = (30 \pm 0.04) \mu\text{g/mL}$ ). **Source:** JU MI JIN HE HUAN *Acacia mellifera* (stem cortex). **Ref:** 3806.

**10343 6 $\alpha$ -Hydroxylup-20(29)-en-3-oxo-27,28-dioic acid**

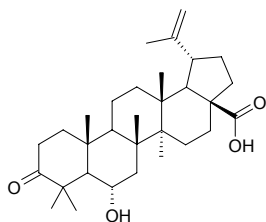
$C_{30}H_{44}O_6$  (500.68). Amorphous powder,  $[\alpha]_D^{26} = +70.6^\circ$  ( $c = 0.05$ ,  $\text{CHCl}_3$ ). **Pharm:** Cytotoxic inactive (*in vitro*, gastric tumour NUGC,  $10 \mu\text{mol/L}$ ,  $\text{InRt} < 50\%$ ; control Antinomycin D,  $10 \mu\text{mol/L}$ ,  $\text{InRt} = (98\sim 100)\%$ ). **Source:** XIANG QI JIA MI *Viburnum odoratissimum* (leaf and flower: yield = 0.0055%). **Ref:** 4638.

**10344 6 $\beta$ -Hydroxylup-20(29)-en-3-oxo-27,28-dioic acid**

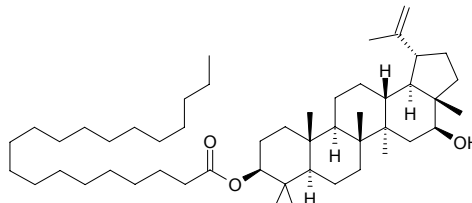
$C_{30}H_{44}O_6$  (500.68). Amorphous powder,  $[\alpha]_D^{26} = -17.5^\circ$  ( $c = 0.05$ ,  $\text{CHCl}_3$ ). **Pharm:** Cytotoxic (*in vitro*, gastric tumour NUGC,  $10 \mu\text{mol/L}$ ,  $\text{InRt} = 80\%$ ; control Antinomycin D,  $10 \mu\text{mol/L}$ ,  $\text{InRt} = (98\sim 100)\%$ ). **Source:** XIANG QI JIA MI *Viburnum odoratissimum* (leaf and flower: yield = 0.009%). **Ref:** 4638.

**10345 6 $\alpha$ -Hydroxylup-20(29)-en-3-oxo-28-oic acid**

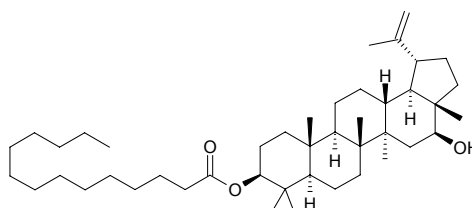
$C_{31}H_{48}O_4$  (484.73). **Source:** XIANG QI JIA MI *Viburnum odoratissimum* (leaf and flower). **Ref:** 4638.

**10346 16 $\beta$ -Hydroxylupeol 3-O-eicosanoate**

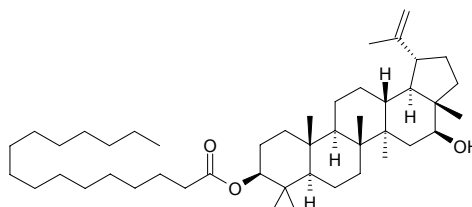
$C_{50}H_{88}O_3$  (737.26). mp  $90\sim 91^\circ\text{C}$ ,  $[\alpha]_D = +31.2^\circ$  ( $c = 0.1$ ,  $\text{CHCl}_3$ ). **Source:** SAI ER WEI YA SHI CAO *Achillea alexandri-regis* (dried aerial parts). **Ref:** 2545.

**10347 16 $\beta$ -Hydroxylupeol 3-O-myristate**

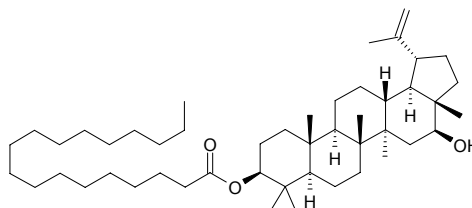
$C_{44}H_{76}O_3$  (653.09). **Source:** SAI ER WEI YA SHI CAO *Achillea alexandri-regis* (dried aerial parts). **Ref:** 2545.

**10348 16 $\beta$ -Hydroxylupeol 3-O-palmitate**

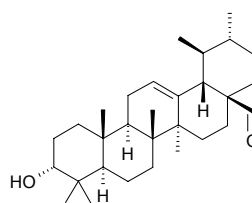
$C_{46}H_{80}O_3$  (681.15). Colorless powder. **Source:** SAI ER WEI YA SHI CAO *Achillea alexandri-regis* (dried aerial parts). **Ref:** 2545.

**10349 16 $\beta$ -Hydroxylupeol 3-O-stearate**

$C_{48}H_{84}O_3$  (709.20). mp  $90\sim 91^\circ\text{C}$ ,  $[\alpha]_D = +33.2^\circ$  ( $c = 0.1$ ,  $\text{CHCl}_3$ ). **Source:** SAI ER WEI YA SHI CAO *Achillea alexandri-regis* (dried aerial parts). **Ref:** 2545.

**10350 3 $\beta$ -Hydroxy-urs-12-en-28-al**

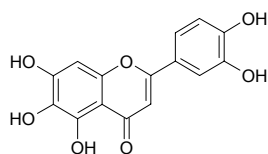
$C_{30}H_{48}O_2$  (440.72). **Source:** XIA KU CAO *Prunella vulgaris*. **Ref:** 2508.



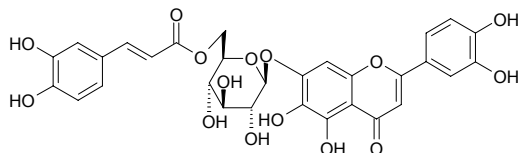


**10351 6-Hydroxyluteolin**

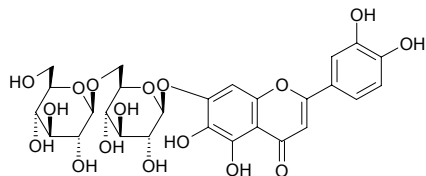
Demethylpedalitin; 6-Hydroxyluteolol; 5,6,7,3',4'-Pentahydroxyflavone [18003-33-3] C<sub>15</sub>H<sub>10</sub>O<sub>7</sub> (302.24). Plates (EtOAc), mp 284°C. **Pharm:** Antibacterial (*Staphylococcus aureus*, MIC = 0.01%; *Corynebacterium acnes*, MIC = 0.02%; *Bacillus pyocyaneus*, MIC = 0.01%; *Staphylococcus epidermidis*, MIC = 0.0025%; *S. thomophilus*, MIC = 0.02%); antifungal (*Trichophyton rubrum*, MIC = 0.01%); antioxidant; α-glucosidase inhibitor (mus small intestines, IC<sub>50</sub> = 29 μmol/L, 50 μmol/L, InRt = 60%); invertase inhibitor (IC<sub>50</sub> = 13 μmol/L, 50 μmol/L, InRt = 82%); aldose reductase inhibitor (ox eye lens, IC<sub>50</sub> = 0.46 μmol/L, rat eye lens, IC<sub>50</sub> = 0.2 μmol/L, 10 μmol/L, InRt = 86.7%, 1 μmol/L, InRt = 53.3%); LD<sub>50</sub> (mus, orl) ≥ 3000 mg/kg. **Source:** CHE QIAN *Plantago asiatica*, DA CHE QIAN *Plantago major*, CHOU MO LI *Clerodendron fragrans*, YI ZHI XIANG *Veronica spuria*, MAO HUA MAO DI HUANG *Digitalis lanata*. **Ref:** 6, 660, 900, 1521.

**10352 6-Hydroxyluteolin 7-O-(6''-O-(E)-caffeoyl)-β-glucopyranoside**

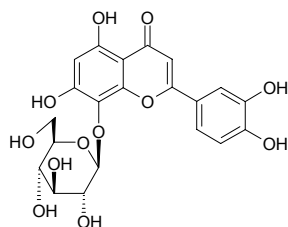
C<sub>30</sub>H<sub>26</sub>O<sub>15</sub> (626.53). Pale yellow solid (MeOH). **Source:** CHANG WEI PO PO NA *Veronica longifolia*, *Veronica liwanensis*. **Ref:** 3486.

**10353 6-Hydroxyluteolin-7-diglucoside**

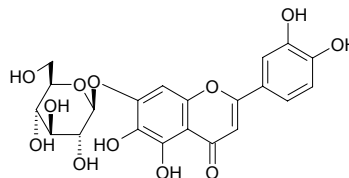
C<sub>27</sub>H<sub>30</sub>O<sub>17</sub> (626.53). **Source:** A LA BO PO PO NA *Veronica persica*, BEI SHUI KU MAI *Veronica anagallis-aquatica*, DA HUA XUAN FU HUA CAO *Inula britannica*. **Ref:** 660.

**10354 8-Hydroxyluteolin-8-β-D-glucopyranoside**

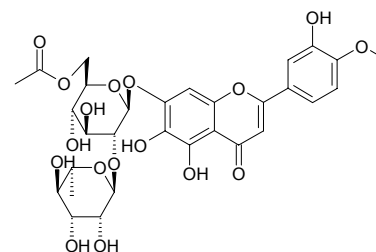
C<sub>21</sub>H<sub>20</sub>O<sub>12</sub> (464.39). mp 269–271°C. **Source:** FU PING *Lemna minor*. **Ref:** 6.

**10355 6-Hydroxyluteolin-7-O-glucoside**

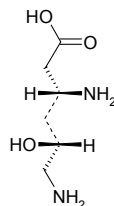
C<sub>21</sub>H<sub>20</sub>O<sub>12</sub> (464.39). **Source:** BEI SHUI KU MAI *Veronica anagallis-aquatica*, **Ref:** 660.

**10356 6-Hydroxyluteolin 4'-methyl ether 7-O-α-rhamnopyranosyl (1'''→2'')[6''-O-acetyl-β-glucopyranoside]**

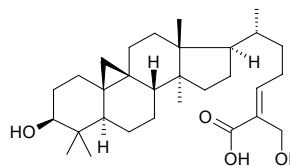
C<sub>30</sub>H<sub>34</sub>O<sub>17</sub> (666.60). Yellow solid (MeOH). **Source:** CHANG WEI PO PO NA *Veronica longifolia*, *Veronica liwanensis*. **Ref:** 3486.

**10357 δ-Hydroxyllysine**

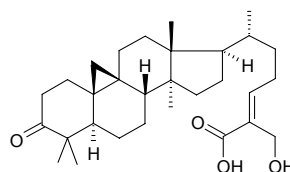
C<sub>6</sub>H<sub>14</sub>N<sub>2</sub>O<sub>3</sub> (162.19). **Source:** MO GU *Agaricus campestris*. **Ref:** 6, 1521.

**10358 Hydroxymangiferolic acid**

C<sub>30</sub>H<sub>48</sub>O<sub>4</sub> (472.71). mp 201–204°C. **Source:** MANG GUO SHU PI *Mangifera indica*. **Ref:** 6.

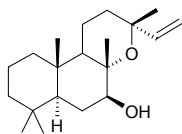
**10359 Hydroxymangiferonic acid**

C<sub>30</sub>H<sub>46</sub>O<sub>4</sub> (470.70). mp 190–192°C. **Source:** MANG GUO SHU PI *Mangifera indica*. **Ref:** 6.

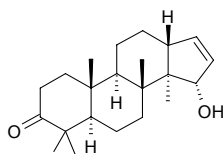


**10360 7 $\beta$ -Hydroxymanoyl oxide**

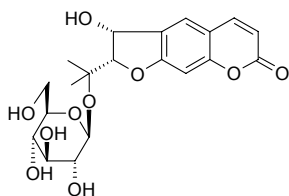
C<sub>20</sub>H<sub>34</sub>O<sub>2</sub> (306.49). Amorphous solid,  $[\alpha]_D^{23} = +35.2^\circ$  ( $c = 0.5$ , CHCl<sub>3</sub>). Source: TAI WAN SHAN *Taiwania cryptomerioides* (bark). Ref: 4443.

**10361 15 $\alpha$ -Hydroxymansumbinone**

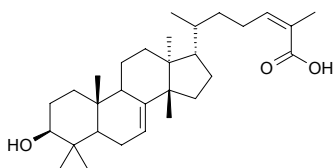
C<sub>22</sub>H<sub>34</sub>O<sub>2</sub> (330.52). Colorless crystals (*n*-hexane:CH<sub>2</sub>Cl<sub>2</sub> = 4:1), mp 149~150°,  $[\alpha]_D^{22} = +18^\circ$  ( $c = 0.8$ , CHCl<sub>3</sub>). Source: KEN NI YA MO YAO *Commiphora kua* var. *gowllo*. Ref: 1991.

**10362 (3*R'*)-Hydroxymarmesin 4'-*O*- $\beta$ -D-glucopyranoside**

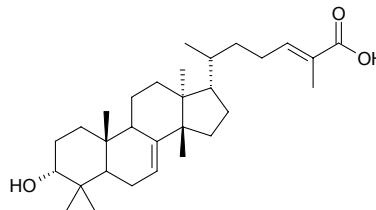
C<sub>20</sub>H<sub>24</sub>O<sub>10</sub> (424.41). mp 267~269°C,  $[\alpha]_D^{22} = -19^\circ$ . Pharm: Antioxidant (DPPH scavenger, EC<sub>50</sub> > 50  $\mu$ g/mL, 50  $\mu$ g/mL InRt = 24%, control Ascorbic acid, EC<sub>50</sub> = 1.6  $\mu$ g/mL = 9.1  $\mu$ mol/L)<sup>[4154]</sup>. Source: BEI SHA SHEN *Glehnia littoralis* (underground part), BEI SHA SHEN *Glehnia littoralis* (fruit). Ref: 3525, 4154.

**10363 3 $\beta$ -Hydroxy-masticadienolic acid**

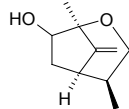
Masticadienolic acid C<sub>30</sub>H<sub>48</sub>O<sub>3</sub> (456.72). Pharm: Anti-inflammatory (*in vivo*, prevents ear oedema formation caused by PMA and synthesis of LOX products, especially LTC<sub>4</sub> and COX metabolites derived from arachidonic acid)<sup>[4415]</sup>. Source: RU DU XIANG *Pistacia terebinthus*, *Juliania adstringens* (bark). Ref: 3786, 4415.

**10364 3 $\alpha$ -Hydroxymasticadienonic acid**

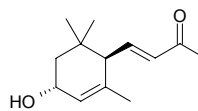
Schinol C<sub>30</sub>H<sub>48</sub>O<sub>3</sub> (456.72). mp 143~145°C,  $[\alpha]_D^{25} = -95.5^\circ$  ( $c = 0.13$ , CHCl<sub>3</sub>). Pharm: Gastroprotective (30 mg/kg, Gp = (69.8 $\pm$ 5.8)%; control Carbenoxolone, Gp = (88.4 $\pm$ 5.4)%),  $p < 0.05$ )<sup>[5461]</sup>; cytotoxic (leukemia cells L<sub>1210</sub>, IC<sub>50</sub> = 20  $\mu$ g/mL)<sup>[3786]</sup>. Source: SHOU LIAN LIANG YI MU *Amphipterygium adstringens* (stem cortex), *Juliania adstringens* (bark). Ref: 3786, 5461.

**10365 5-Hydroxymatatabiether**

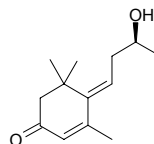
C<sub>10</sub>H<sub>16</sub>O<sub>2</sub> (168.24). Source: MU TIAN LIAO *Actinidia polygama*. Ref: 6.

**10366 (3*R*,6*R*,7*E*)-3-Hydroxy-4,7-megastigmadien-9-one**

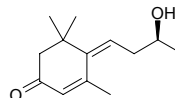
C<sub>13</sub>H<sub>20</sub>O<sub>2</sub> (208.30). Colorless oil,  $[\alpha]_D^{25} = +37.1^\circ$  ( $c = 0.21$ , CH<sub>2</sub>Cl<sub>2</sub>). Pharm: Phytotoxin (inhibits germination and growth of *Lactuca sativa*). Source: PA KE YE XIANG SHU *Cestrum parqui* (leaf). Ref: 3776.

**10367 (6*Z*,9*S*)-9-Hydroxy-4,6-megastigmadien-3-one**

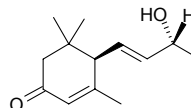
C<sub>13</sub>H<sub>20</sub>O<sub>2</sub> (208.30). Colorless oil,  $[\alpha]_D^{25} = +4.7^\circ$  ( $c = 0.42$ , CH<sub>2</sub>Cl<sub>2</sub>). Pharm: Phytotoxin (inhibits germination and growth of *Lactuca sativa*). Source: PA KE YE XIANG SHU *Cestrum parqui* (leaf). Ref: 3776.

**10368 (6*Z*,9*S*)-9-Hydroxy-4,6-megastigmadien-3-one**

C<sub>13</sub>H<sub>20</sub>O<sub>2</sub> (208.30). Colorless oil,  $[\alpha]_D^{25} = +28.5^\circ$  ( $c = 0.37$ , CH<sub>2</sub>Cl<sub>2</sub>). Pharm: Phytotoxin (inhibits germination and growth of *Lactuca sativa*). Source: PA KE YE XIANG SHU *Cestrum parqui* (leaf). Ref: 3776.

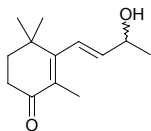
**10369 (6*R*,7*E*,9*R*)-9-Hydroxy-4,7-megastigmadien-3-one**

C<sub>13</sub>H<sub>20</sub>O<sub>2</sub> (208.30). Colorless oil,  $[\alpha]_D^{25} = +292.0^\circ$  ( $c = 0.42$ , CH<sub>2</sub>Cl<sub>2</sub>). Pharm: Phytotoxin (inhibits germination and growth of *Lactuca sativa*). Source: PA KE YE XIANG SHU *Cestrum parqui* (leaf). Ref: 3776.

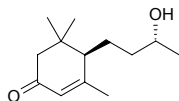


**10370 (7E,9Z)-9-Hydroxy-5,7-megastigmadien-4-one**

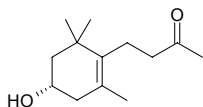
$C_{13}H_{20}O_2$  (208.30). Colorless oil,  $[\alpha]_D^{25} = +101.1^\circ$  ( $c = 0.39$ ,  $CH_2Cl_2$ ). Source: PA KE YE XIANG SHU *Cestrum parqui* (leaf). Ref: 3776.

**10371 (6R,9R)-9-Hydroxy-4-megastigmen-3-one**

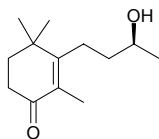
$C_{13}H_{22}O_2$  (210.32). Colorless oil,  $[\alpha]_D^{25} = +83.6^\circ$  ( $c = 0.61$ ,  $CH_2Cl_2$ ). Pharm: Phytotoxin (inhibits germination and growth of *Lactuca sativa*). Source: PA KE YE XIANG SHU *Cestrum parqui* (leaf). Ref: 3776.

**10372 3-Hydroxymegastigm-5-en-9-one**

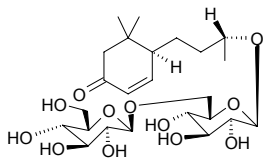
$C_{13}H_{22}O_2$  (210.32). Oil,  $[\alpha]_D^{25} = +34.5^\circ$  ( $c = 0.5$ ,  $CHCl_3$ ). Source: HONG GUI *Chamaecyparis formosensis*. Ref: 2315.

**10373 (S)-9-Hydroxymegastigm-5-en-4-one**

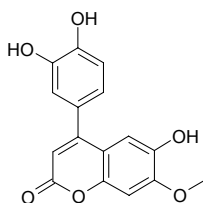
$C_{13}H_{22}O_2$  (210.32). Oil,  $[\alpha]_D^{25} = +8.1^\circ$  ( $c = 0.4$ ,  $CHCl_3$ ). Source: HONG GUI *Chamaecyparis formosensis*. Ref: 2315.

**10374 (6R,9R)-9-Hydroxy-4-megastigmen-3-one 9-O-β-D-glucopyranosyl-(1→6)-β-D-glucopyranoside**

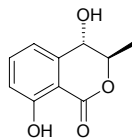
$C_{24}H_{40}O_{12}$  (520.58). Pharm: Cytotoxic (*in vitro*, HeLa,  $IC_{50} = 20.05\mu g/mL$ ; control Cisplatin, HeLa,  $IC_{50} = 0.75\mu g/mL$ ). Source: HU BEI HUANG JING *Polygonatum zanlanscianense* (rhizome: yield = 0.00140%dw). Ref: 4788.

**10375 3'-Hydroxymelanettin**

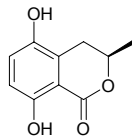
[200391-95-3]  $C_{16}H_{12}O_6$  (300.27). Source: JIANG ZHEN XIANG *Dalbergia odorifera*. Ref: 716.

**10376 (-)-(3R,4S)-4-Hydroxymellein**

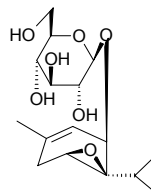
$C_{10}H_{10}O_4$  (194.19).  $[\alpha]_D^{23} = -26.3^\circ$  ( $c = 0.05$ ,  $CHCl_3$ ). Pharm: Antioxidant inactive (DPPH scavenger,  $25\mu g/mL$ , ScRt = 5.7%, control BHT  $25\mu g/mL$ , ScRt = 18.6%); antioxidant (TBARS assay, inhibits peroxidation of linolenic acid,  $37mg/mL$ , InRt = 18.4%, BHT  $37mg/mL$ , InRt = 73.9%). Source: fungus *Epicoccum* sp. Ref: 5445.

**10377 (-)-(3R)-5-Hydroxymellein**

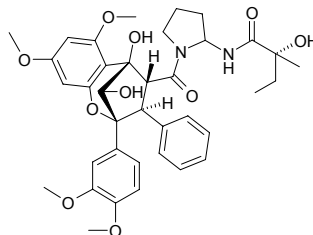
$C_{10}H_{10}O_4$  (194.19). Amorphous powder,  $[\alpha]_D^{23} = -19.8^\circ$  ( $c = 0.05$ ,  $CH_2Cl_2$ ). Pharm: Antioxidant (DPPH scavenger,  $25\mu g/mL$ , ScRt = 22.4%, control BHT  $25\mu g/mL$ , ScRt = 18.6%); antioxidant (TBARS assay, inhibits peroxidation of linolenic acid,  $37mg/mL$ , InRt = 30.4%, BHT  $37mg/mL$ , InRt = 73.9%). Source: fungus *Epicoccum* sp. Ref: 5445.

**10378 3β-Hydroxy-p-menth-1-en-4β,5β-oxide 3-O-β-D-glucopyranoside**

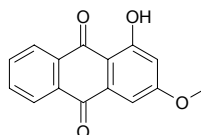
$C_{16}H_{26}O_7$  (330.38). Amorphous powder,  $[\alpha]_D^{24} = +45^\circ$  ( $c = 0.5$ , MeOH). Source: YIN DU ZANG HUI XIANG *Carum ajowan* (fruit). Ref: 3547.

**10379 19-Hydroxy-3'-methoxyaglaïne C**

$C_{37}H_{44}N_2O_{10}$  (676.77).  $[\alpha]_D^{20} = -111.1^\circ$  ( $c = 0.18$ ,  $CHCl_3$ ). Source: MI ZI LAN *Aglaia odorata*. Ref: 2289.

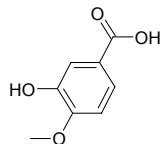
**10380 1-Hydroxy-3-methoxyanthraquinone**

$C_{15}H_{10}O_4$  (254.24). Pharm: Cytotoxic (KB,  $ED_{50} > 25\mu g/mL$ , control Doxorubicin,  $ED_{50} = 0.12\mu g/mL$ ; Hep3B,  $ED_{50} > 25\mu g/mL$ , Doxorubicin,  $ED_{50} = 0.14\mu g/mL$ ; Colon205,  $ED_{50} > 25\mu g/mL$ , Doxorubicin,  $ED_{50} = 0.10\mu g/mL$ ; HeLa,  $ED_{50} > 25\mu g/mL$ , Doxorubicin,  $ED_{50} = 0.11\mu g/mL$ ). Source: GUANG JING QIAN CAO *Rubia wallichiana* (stem). Ref: 4369.

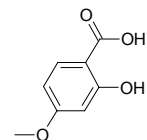


**10381 3-Hydroxy-4-methoxy benzoic acid**

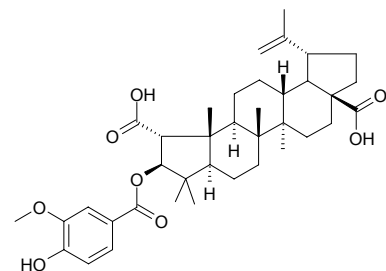
Isovanillic acid  $C_8H_8O_4$  (168.15). **Pharm:** Cytotoxic inactive (MCF7,  $IC_{50} > 100\mu\text{mol/L}$ , control Adriamycin,  $IC_{50} = (1.5\pm 0.2)\mu\text{mol/L}$ ; K562,  $IC_{50} > 100\mu\text{mol/L}$ , Adriamycin,  $IC_{50} = (0.07\pm 0.01)\mu\text{mol/L}$ ; Bowes,  $IC_{50} > 100\mu\text{mol/L}$ , Adriamycin,  $IC_{50} = (0.45\pm 0.01)\mu\text{mol/L}$ ; T24S,  $IC_{50} > 100\mu\text{mol/L}$ , Adriamycin,  $IC_{50} = (5.8\pm 0.6)\mu\text{mol/L}$ ; A549,  $IC_{50} > 100\mu\text{mol/L}$ , Adriamycin,  $IC_{50} = (15.8\pm 6.7)\mu\text{mol/L}$ ). **Source:** KAI KOU JIAN *Tupistra chinensis* (underground part), XUAN SHEN *Scrophularia ningpoensis*. **Ref:** 4676, 5288.

**10382 2-Hydroxy-4-methoxybenzoic acid**

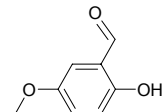
$C_8H_8O_4$  (168.15). **Source:** DIAN NAN HONG HOU KE *Calophyllum polyanthum* (seed: yield = 0.010%dw). **Ref:** 4767.

**10383 3-O-(4-Hydroxy-3-methoxybenzoyl)ceanothic acid**

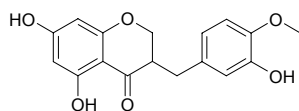
3-O-Vanillylceanothic acid  $C_{38}H_{52}O_8$  (636.83). Colorless solid, mp 183~185°C.  $[\alpha]_D^{27} = -22.0^\circ$  ( $c = 0.229$ , MeOH). **Pharm:** Antimalarial (antiplasmodial *in vitro*, *Plasmodium falciparum*,  $IC_{50} = 3.7\mu\text{g/mL}$ ); antibacterial (*Mycobacterium tuberculosis*, MIC = 25 $\mu\text{g/mL}$ ). **Source:** JIAN PU ZHAI ZAO *Ziziphus cambodiana* (root cortex: yield = 0.0002%dw). **Ref:** 2091.

**10384 2-Hydroxy-5-methoxy-benzyldehyde**

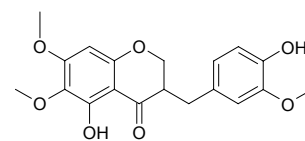
$C_8H_8O_3$  (152.15). **Source:** MAO GUO QI *Acer nikoense* (stem cortex). **Ref:** 4304.

**10385 3-(3-Hydroxy-4-methoxybenzyl)-5,7-dihydroxychroman-4-one**

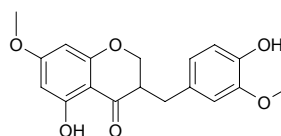
$C_{17}H_{16}O_6$  (316.31). White powder, mp 140~142°C. **Source:** *Scilla nervosa* (bulb). **Ref:** 2381.

**10386 3-(4-Hydroxy-3-methoxybenzyl)-5-hydroxy-6,7-dimethoxychroman-4-one**

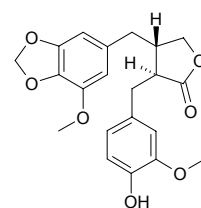
$C_{19}H_{20}O_7$  (360.37). Yellow oil,  $[\alpha]_D^{25} = -10.7^\circ$  ( $c = 0.56$ , MeOH). **Source:** *Scilla nervosa* (bulb). **Ref:** 2381.

**10387 3-(4-Hydroxy-3-methoxybenzyl)-5-hydroxy-7-methoxychroman-4-one**

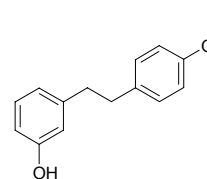
$C_{18}H_{18}O_6$  (330.34). Colorless oil. **Source:** *Scilla nervosa* (bulb). **Ref:** 2381.

**10388 (2S,3S)-2-(4-Hydroxy-3-methoxybenzyl)-3-(5-methoxy-3,4-methylenedioxybenzyl)butyrolactone**

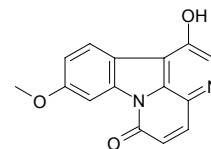
$C_{21}H_{22}O_7$  (386.41). Colorless gum,  $[\alpha]_D^{25} = +26.4^\circ$  ( $c = 0.293$ ,  $CHCl_3$ ). **Source:** MENG ZI CAO HU JIAO *Peperomia duclouxii* (whole herb: yield = 0.0003%). **Ref:** 4733.

**10389 3-Hydroxy-4'-methoxybibenzyl**

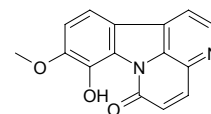
$C_{15}H_{16}O_2$  (228.29). **Source:** *Plagiochila rutilans*. **Ref:** 5144.

**10390 1-Hydroxy-9-methoxycanthin-6-one**

$C_{15}H_{10}N_2O_3$  (266.26). Yellow powder (MeOH), mp 235~237°C. **Source:** CHANG YE KUAN MU *Eurycoma longifolia* (root: yield = 0.000036%dw), *Eurycoma* sp. **Ref:** 4556, 4728.

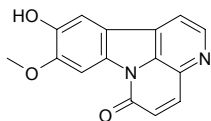
**10391 8-Hydroxy-9-methoxycanthin-6-one**

$C_{15}H_{10}N_2O_3$  (266.26). **Source:** CHANG YE KUAN MU *Eurycoma longifolia* (root: yield = 0.000024%dw), *Eurycoma* sp. **Ref:** 4556, 4728.

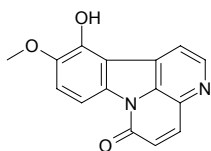


**10392 10-Hydroxy-9-methoxycanthin-6-one**

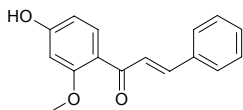
$C_{15}H_{10}N_2O_3$  (266.26). Source: *Eurycoma* sp. Ref: 4556.

**10393 11-Hydroxy-10-methoxycanthin-6-one**

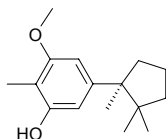
$C_{15}H_{10}N_2O_3$  (266.26). Source: *Eurycoma* sp. Ref: 4556.

**10394 4'-Hydroxy-2'-methoxychalcone**

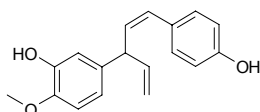
$C_{16}H_{14}O_3$  (254.29). Pharm: Testosterone 5 $\alpha$ -reductase inhibitor (25 $\mu$ g/mL, InRt = 19.5%, 50 $\mu$ g/mL, InRt = 20.7%, 100 $\mu$ g/mL, InRt = 22.8%; control Glycyrrhetic acid, 25 $\mu$ g/mL, InRt = 31.7%, 50 $\mu$ g/mL, InRt = 64.7%, 100 $\mu$ g/mL, InRt = 87.1%). Source: JIAO ZHI HUANG TAN *Dalbergia cochinchinensis* (stem: yield = 0.0013%dw). Ref: 4716.

**10395 2-Hydroxy-4-methoxycuparene**

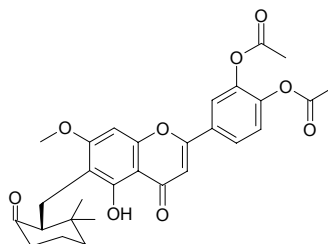
$C_{16}H_{24}O_2$  (248.37). Oil,  $[\alpha]_D^{20} = -52.2^\circ$  ( $c = 1.8$ , MeOH). Source: *Bazzania decrescens*. Ref: 4458.

**10396 3'-Hydroxy-4'-methoxy-4'-dehydroxynyasol**

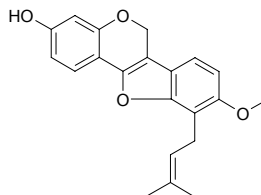
1-[4-Hydroxyphenoxy]-3-[3-hydroxy-4-methoxyphenyl]penta-1,4-diene  
 $C_{18}H_{18}O_3$  (282.34). White powder,  $[\alpha]_D^{20} = +85.8^\circ$  ( $c = 0.09$ , MeOH). Pharm: Cytotoxic (*in vitro*, Lu1,  $IC_{50} = 7.2\mu$ g/mL (25.5 $\mu$ mol/L), LNCaP,  $IC_{50} = 11.6\mu$ g/mL (41.1 $\mu$ mol/L), Col2,  $IC_{50} = 11.7\mu$ g/mL (41.4 $\mu$ mol/L), HUVEC,  $IC_{50} = 16.4\mu$ g/mL (58.1 $\mu$ mol/L), KB,  $IC_{50} = 9\mu$ g/mL (31.9 $\mu$ mol/L), HOG.R5,  $IC_{50} = 3.4\mu$ g/mL (12 $\mu$ mol/L), control Ellipticine: Lu1,  $IC_{50} = 0.02\mu$ g/mL (0.08 $\mu$ mol/L), LNCaP,  $IC_{50} = 0.8\mu$ g/mL (3.25 $\mu$ mol/L), Col2,  $IC_{50} = 0.3\mu$ g/mL (1.22 $\mu$ mol/L), HUVEC,  $IC_{50} = 0.09\mu$ g/mL (0.37 $\mu$ mol/L), KB,  $IC_{50} = 0.04\mu$ g/mL (0.16 $\mu$ mol/L), HOG.R5,  $IC_{50} = 0.02\mu$ g/mL (0.08 $\mu$ mol/L)). Source: TIAN MEN DONG *Asparagus cochinchinensis* [Syn. *Asparagus lucidus*] (dried root: yield = 0.00005%dw). Ref: 3009.

**10397 5-Hydroxy-7-methoxy-3',4'-diacetoxy-6-(6,6-dimethyl-2-oxocyclohexylmethyl)flavone**

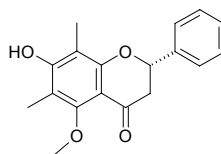
$C_{29}H_{30}O_9$  (522.56). Pale yellow powder. Source: RU DI WU GONG *Helminthostachys zeylanica* (rhizome). Ref: 3484.

**10398 3-Hydroxy-9-methoxy-10-(3,3-dimethylallyl)pteroicarpene**

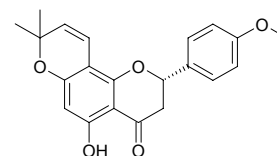
$C_{21}H_{20}O_4$  (336.39). Amorphous powder. Pharm: Antimalarial (antiplasmodial *in vitro*, *Plasmodium falciparum*, W2 strain,  $IC_{50} = (20.6\pm 3.2)\mu$ mol/L, control Quinine,  $IC_{50} = ((0.21\pm 0.01)\mu$ mol/L; D6 strain,  $IC_{50} = (21.9\pm 3.3)\mu$ mol/L, Quinine,  $IC_{50} = ((0.042\pm 0.002)\mu$ mol/L). Source: A BI XI NI YA CI TONG *Erythrina abyssinica* (root cortex). Ref: 5420.

**10399 7-Hydroxy-5-methoxy-6,8-dimethylflavanone**

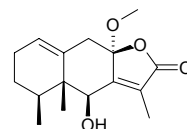
$C_{18}H_{18}O_4$  (298.34).  $[\alpha]_D^{25} = -2.1^\circ$  ( $c = 0.4$ , acetone). Source: YANG PU TAO YE *Syzygium samarangense*. Ref: 4100.

**10400 5-Hydroxy-4'-methoxy-2'',2''-dimethylpyrano-(7,8:6'',5'')flavanone**

$C_{21}H_{20}O_5$  (352.39). Colorless powder, mp 153~155°C,  $[\alpha]_D^{20} = -48^\circ$  ( $c = 0.1$ ,  $CHCl_3$ ). Source: ZHEN YE XUE TONG *Macaranga conifera*. Ref: 1929.

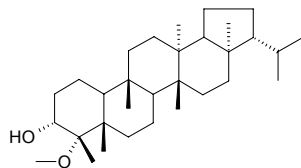
**10401 6 $\beta$ -Hydroxy-8 $\alpha$ -methoxyeremophila-1(10),7(11)-dien-12,8 $\beta$ -olide**

$C_{16}H_{22}O_4$  (278.35). Source: *Ligularia virgaurea* ssp. *oligocephala* (whole herb). Ref: 4981.

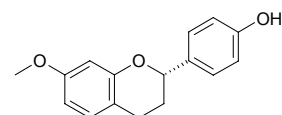


**10402 3 $\alpha$ -Hydroxy-4-methoxyfilicane**

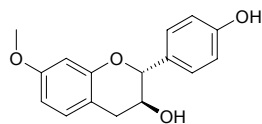
C<sub>31</sub>H<sub>54</sub>O<sub>2</sub> (458.77). mp 198–204°C. Source: BIAN YE TIE XIAN JUE *Adiantum caudatum* (fresh frond). Ref: 5187.

**10403 4'-Hydroxy-7-methoxyflavan**

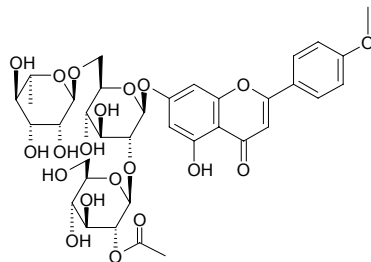
C<sub>16</sub>H<sub>16</sub>O<sub>3</sub> (256.30). Colorless prisms (hexane–acetone), mp 115–117°C, [ $\alpha$ ]<sub>D</sub><sup>26</sup> = –12° (*c* = 0.1, MeOH). Pharm: Cytotoxic (Meth-A cell, ED<sub>50</sub> > 10 μg/mL, control Adriamycin, ED<sub>50</sub> < 0.09 μg/mL; LLC cell, ED<sub>50</sub> > 10 μg/mL, control Adriamycin, ED<sub>50</sub> = 0.1 μg/mL). Source: RI BEN WEN SHU LAN *Crinum asiaticum* var. *japonicum* (bulb). Ref: 4125.

**10404 4'-Hydroxy-7-methoxyflavan-3-ol**

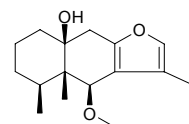
C<sub>16</sub>H<sub>16</sub>O<sub>4</sub> (272.30). Amorphous powder. Source: LIN JING ZHONG ZI WEN SHU LAN *Crinum bulbispermum* (bulb). Ref: 3997.

**10405 5-Hydroxy-4-methoxy-flavone-7-O- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 6)[2-O-acetyl- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -D-glucopyranoside**

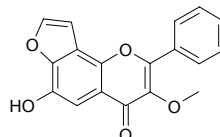
C<sub>36</sub>H<sub>44</sub>O<sub>20</sub> (796.74). White powder crystals, mp 246–248°C. Source: YAN XIANG JU *Chrysanthemum lavandulifolium*. Ref: 388.

**10406 10 $\beta$ -Hydroxy-6 $\beta$ -methoxy-furanoeremophilane**

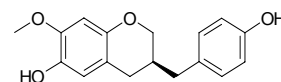
C<sub>16</sub>H<sub>24</sub>O<sub>3</sub> (264.37). Source: LIAN PENG CAO *Farfugium japonicum*. Ref: 6.

**10407 6-Hydroxy,3-methoxy furo[8,7:4'',5'']flavone**

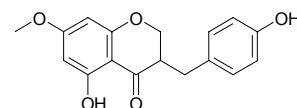
C<sub>18</sub>H<sub>12</sub>O<sub>5</sub> (308.29). Yellow crystals (DMSO), mp 283°C. Source: SHUI LIU DOU *Pongamia pinnata* (fruit). Ref: 3767.

**10408 6-Hydroxy-7-methoxy-3-(4'-hydroxybenzyl) chroman**

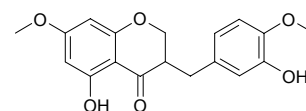
C<sub>17</sub>H<sub>18</sub>O<sub>4</sub> (286.33). Colorless short columnar crystals, mp 195–197°C (CHCl<sub>3</sub>). Source: JIAN YE LONG XUE SHU *Dracaena cochinchinensis*. Ref: 414.

**10409 5-Hydroxy-7-methoxy-3-(4'-hydroxybenzyl)-4-chromanone**

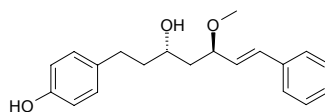
C<sub>17</sub>H<sub>16</sub>O<sub>5</sub> (300.31). White powder, mp 160–162°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = –54.6° (*c* = 0.78, MeOH). Source: HE CAO YE JIA BEI FANG FENG *Ledebouria graminifolia* (tuber). Ref: 3368.

**10410 5-Hydroxy-7-methoxy-3-(3-hydroxy-4-methoxybenzyl)-chroman-4-one**

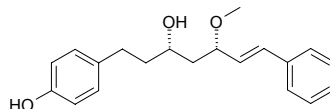
C<sub>18</sub>H<sub>18</sub>O<sub>6</sub> (330.34). Pale-yellow crystals, [ $\alpha$ ]<sub>D</sub> = –36° (*c* = 0.55, MeOH). Source: *Scilla nervosa*. Ref: 2328.

**10411 (3S,5R)-3-Hydroxy-5-methoxy-1-(4-hydroxyphenyl)-7-phenyl-6E-heptene**

C<sub>20</sub>H<sub>24</sub>O<sub>3</sub> (312.41). Light brown amorphous solid, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +21.3° (*c* = 0.13, MeOH). Pharm: Cytotoxic inactive (Colon26-L5, HT1080, 100 μmol/L). Source: YUN NAN CAO KOU *Alpinia blepharocalyx* (seed: yield = 0.00018%). Ref: 3042.

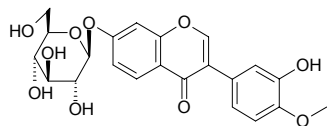
**10412 (3S,5S)-3-Hydroxy-5-methoxy-1-(4-hydroxyphenyl)-7-phenyl-6E-heptene**

C<sub>20</sub>H<sub>24</sub>O<sub>3</sub> (312.41). Light brown amorphous solid, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +21.0° (*c* = 0.08, MeOH). Pharm: Cytotoxic (Colon26-L5, ED<sub>50</sub> = 86.4 μmol/L; HT1080, ED<sub>50</sub> > 100 μmol/L). Source: YUN NAN CAO KOU *Alpinia blepharocalyx* (seed: yield = 0.00015%). Ref: 3042.

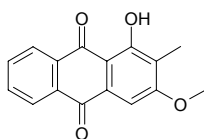


**10413 3'-Hydroxy-4'-methoxyisoflavone-7-O- $\beta$ -D-glucoside**

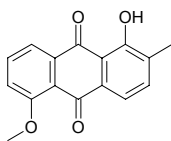
$C_{22}H_{22}O_{10}$  (446.41). Source: MENG GU HUANG QI *Astragalus mongholicus*.  
Ref: 2, 660.

**10414 1-Hydroxy-3-methoxy-2-methylanthraquinone**

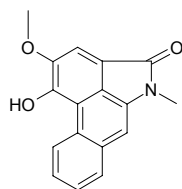
$C_{16}H_{12}O_4$  (268.27). Pharm: Cytotoxic (KB,  $ED_{50} > 25\mu\text{g/mL}$ , control Doxorubicin,  $ED_{50} = 0.12\mu\text{g/mL}$ ; Hep3B,  $ED_{50} > 25\mu\text{g/mL}$ , Doxorubicin,  $ED_{50} = 0.14\mu\text{g/mL}$ ; Colon205,  $ED_{50} > 25\mu\text{g/mL}$ , Doxorubicin,  $ED_{50} = 0.10\mu\text{g/mL}$ ; HeLa,  $ED_{50} = 24.5\mu\text{g/mL}$ , Doxorubicin,  $ED_{50} = 0.11\mu\text{g/mL}$ ).  
Source: GUANG JING QIAN CAO *Rubia wallichiana* (stem). Ref: 4369.

**10415 1-Hydroxy-5-methoxy-2-methylanthraquinone**

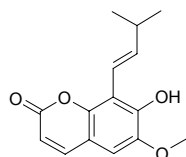
$C_{16}H_{12}O_4$  (268.27). Source: GUANG JING QIAN CAO *Rubia wallichiana* (stem). Ref: 4369.

**10416 4-Hydroxy-3-methoxy-N-methylaristolactam**

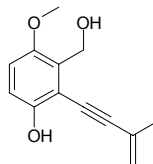
$C_{17}H_{13}NO_3$  (279.30). Source: TAI WAN HU JIAO *Piper taiwanense* (stem).  
Ref: 4938.

**10417 7-Hydroxy-6-methoxy-8-(3-methylbut-2-enyl)coumarin**

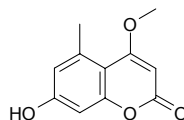
$C_{15}H_{16}O_4$  (260.29). Source: GUANG JING QIAN CAO *Rubia wallichiana* (stem). Ref: 4369.

**10418 2-Hydroxy-5-methoxy-6-(3-methylbut-3-en-1-ynyl)benzylalcohol**

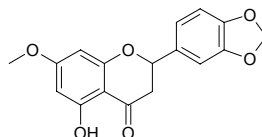
$C_{13}H_{14}O_3$  (218.25). Source: MAO REN GE JUN *Stereum hirsutum*. Ref: 3930.

**10419 7-Hydroxy-4-methoxy-5-methylcoumarin**

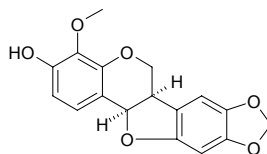
[41680-12-0]  $C_{11}H_{10}O_4$  (206.20). Source: HU ZHANG *Polygonum cuspidatum*. Ref: 2.

**10420 5-Hydroxy-7-methoxy-3',4'-methylenedioxy isoflavone**

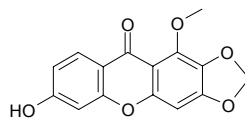
$C_{17}H_{14}O_6$  (314.30). Colorless needles (MeOH), mp 232–234°C. Source: JIN QUE GEN *Caragana sinica*. Ref: 489.

**10421 (-)-3-Hydroxy-4-methoxy-8-9-methylenedioxy pterocarpan**

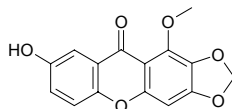
[69626-65-9]  $C_{17}H_{14}O_6$  (314.29). Acicular crystals (methanol), mp 156–159°C,  $[\alpha]_D^{20} = -166.6^\circ$  ( $c = 0.12$ , chloroform). Pharm: Induces quinone reductase (mus hepatic cells Hepalcic  $7\mu\text{mol/L}$ , CD 14.7  $\mu\text{mol/L}$ ). Source: HUI YE GEN *Tephrosia purpurea*. Ref: 1057, 1101.

**10422 6-Hydroxy-1-methoxy-2,3-methylenedioxyxanthone**

$C_{15}H_{10}O_6$  (286.24). Yellow needles, mp 228–230°C. Source: JIA HUANG HUA YUAN ZHI *Polygala fallax* [Syn. *Polygala aureocauda*]. Ref: 2517.

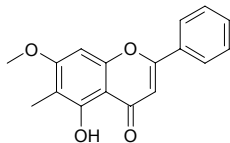
**10423 7-Hydroxy-1-methoxy-2,3-methylenedioxy xanthone**

$C_{15}H_{10}O_6$  (286.24). Light yellow acicular crystals (chloroform–methanol), mp 228–230°C. Source: HUANG HUA YUAN ZHI *Polygala arillata*. Ref: 382.

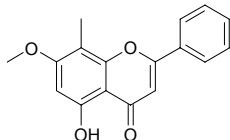


**10424 5-Hydroxy-7-methoxy-6-methylflavone**

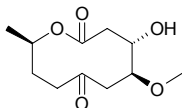
[55969-57-8] C<sub>17</sub>H<sub>14</sub>O<sub>4</sub> (282.30). Source: YUAN ZHI YE AO ZHOU CHA *Leptospermum polygalifolium* ssp. *polygalifolium* (foliage). Ref: 3485.

**10425 5-Hydroxy-7-methoxy-8-methylflavone**

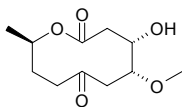
[14004-48-9] C<sub>17</sub>H<sub>14</sub>O<sub>4</sub> (282.30). Source: YUAN ZHI YE AO ZHOU CHA *Leptospermum polygalifolium* ssp. *polygalifolium* (foliage). Ref: 3485.

**10426 4-Hydroxy-5-methoxy-10-methyl-oxecane-2,7-dione A**

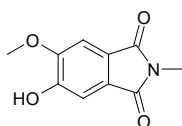
C<sub>11</sub>H<sub>18</sub>O<sub>5</sub> (230.26). Colorless gum, [ $\alpha$ ]<sub>D</sub><sup>29</sup> = +59° (c 0.017, MeOH). Pharm: Antimalarial inactive (*Plasmodium falciparum* K1, 20 $\mu$ g/mL; control Dihydroartemisinin, IC<sub>50</sub> = 1.2ng/mL). Source: YONG CHONG CAO *Cordyceps militaris*. Ref: 4784.

**10427 4-Hydroxy-5-methoxy-10-methyl-oxecane-2,7-dione B**

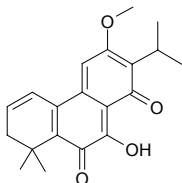
C<sub>11</sub>H<sub>18</sub>O<sub>5</sub> (230.26). Colorless gum, [ $\alpha$ ]<sub>D</sub><sup>29</sup> = -67° (c 0.015, MeOH). Pharm: Antimalarial inactive (*Plasmodium falciparum* K1, 20 $\mu$ g/mL; control Dihydroartemisinin, IC<sub>50</sub> = 1.2ng/mL). Source: YONG CHONG CAO *Cordyceps militaris*. Ref: 4784.

**10428 6-Hydroxy-5-methoxy-N-methylphthalimide**

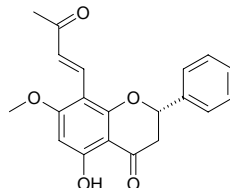
C<sub>10</sub>H<sub>9</sub>NO<sub>4</sub> (207.19). Light yellow needles (CHCl<sub>3</sub>), mp 213~215°C. Source: BIAN FU GE GEN *Menispermum dauricum*. Ref: 3792.

**10429 7-Hydroxy-12-methoxy-20-nor-abieta-1,5(10),7,9,12-pentaen-6,14-dione**

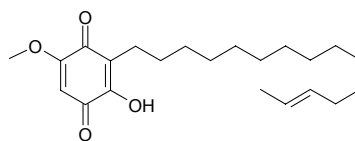
C<sub>20</sub>H<sub>22</sub>O<sub>4</sub> (326.40). Source: TU ER QI SHU WEI CAO *Salvia cilicica*. Ref: 1930.

**10430 (2S)-5-Hydroxy-7-methoxy-8-[(E)-3-oxo-1-butenyl]flavanone**

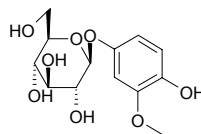
Anticancer Flavonoid PMV70P691-019 C<sub>20</sub>H<sub>18</sub>O<sub>5</sub> (338.36). White amorphous powder, mp 156~157°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -98° (c = 0.1, CHCl<sub>3</sub>). Pharm: Antineoplastic (Inhibition of DMBA-induced preneoplastic lesions *in vitro*, MMOC assay, IC<sub>50</sub> = 14.9 $\mu$ mol/L; control Sulforaphane, IC<sub>50</sub> = 11 $\mu$ mol/L)<sup>[4718]</sup>; cytotoxic (quinone reductase induction assay in cultured Hepa1c17 mouse hepatoma cells)<sup>[5038]</sup>. Source: DU HUI MAO DOU *Tephrosia toxicaria* (stem: yield = 0.00019%dw). Ref: 4718, 5038.

**10431 2-Hydroxy-5-methoxy-3-pentadecenyl benzoquinone**

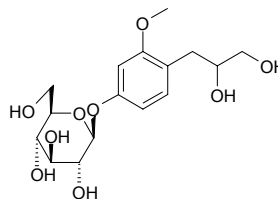
[82380-21-0] C<sub>22</sub>H<sub>34</sub>O<sub>4</sub> (362.51). mp 67°C. Source: ZI JIN NIU *Ardisia japonica*. Ref: 6.

**10432 4-Hydroxy-3-methoxyphenol  $\beta$ -D-glucopyranoside**

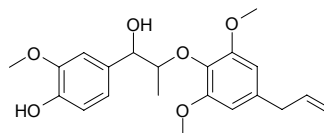
Tachioside C<sub>13</sub>H<sub>18</sub>O<sub>8</sub> (302.28). Source: GUAN CANG ZHU *Atractylodes japonica* (fresh rhizome), HU ZHANG *Polygonum cuspidatum*. Ref: 4186, 4310.

**10433 1'-(4-Hydroxy-2-methoxyphenyl)propane-2',3-diol 4-O- $\beta$ -D-glucopyranoside**

C<sub>16</sub>H<sub>24</sub>O<sub>9</sub> (360.36). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>24</sup> = -29° (c = 1.1, MeOH). Source: SHI LUO ZI *Anethum graveolens* (fruit). Ref: 4177.

**10434 erythro-1-(4-Hydroxy-3-methoxyphenyl)-2-(4-allyl-2,6-dimethoxyphenoxy) propan-1-ol**

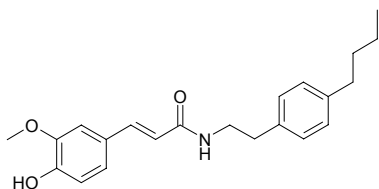
C<sub>21</sub>H<sub>26</sub>O<sub>6</sub> (374.44). Colorless amorphous, [ $\alpha$ ]<sub>D</sub><sup>24</sup> = +3° (c = 0.05, CHCl<sub>3</sub>). Pharm: Antioxidant (DPPH scavenger). Source: FENG CHAO CAO *Leucas aspera* (whole herb). Ref: 4344.



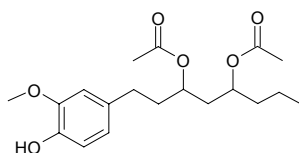


**10435 7'-[4'-Hydroxy,3'-methoxyphenyl]-N-[4-butylphenyl]ethyl]propanamide**

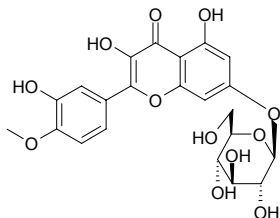
$C_{22}H_{27}NO_3$  (353.47). Colorless solid. **Pharm:**  $\alpha$ -Glucosidase inhibitor (type VI,  $IC_{50} = 45.67\mu\text{mol/L}$ , control 1-Deoxyojirimycin,  $IC_{50} = 300\mu\text{mol/L}$ ); thrombin inhibitor inactive;  $\beta$ -glucuronidase inhibitor inactive. **Source:** YUN NAN TU SI ZI *Cuscuta reflexa*. **Ref:** 4155.

**10436 1-(4-Hydroxy-3-methoxyphenyl)-3,5-diacetoxyoctane**

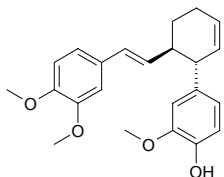
$C_{19}H_{28}O_6$  (352.43). **Source:** SHENG JIANG *Zingiber officinale*. **Ref:** 2.

**10437 2-(3-Hydroxy-4-methoxyphenyl)-3,5-dihydroxy-7-O- $\beta$ -D-glucopyranoside-4H-1-benzopyran-4-one**

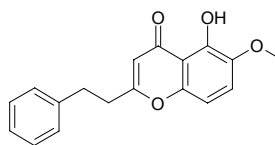
$C_{22}H_{22}O_{12}$  (478.41). **Pharm:**  $\alpha$ -Glucosidase inhibitor (type VI,  $IC_{50} = 0.24\text{mmol/L}$ , control 1-Deoxyojirimycin,  $IC_{50} = 0.3\text{mmol/L}$ ); thrombin inhibitor inactive;  $\beta$ -glucuronidase inhibitor inactive. **Source:** YUN NAN TU SI ZI *Cuscuta reflexa*. **Ref:** 4155.

**10438 (±)-trans-3-(4-Hydroxy-3-methoxyphenyl)-4-[(E)-3,4-dimethoxystyryl]cyclohex-1-ene**

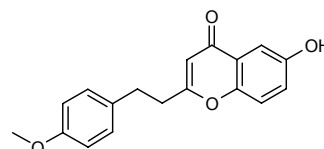
$C_{23}H_{26}O_4$  (366.46). **Pharm:** Cytotoxic (A549,  $IC_{50} = 23.0\mu\text{mol/L}$ , control Ellipticine,  $IC_{50} = 0.8\mu\text{mol/L}$ ; Col2,  $IC_{50} = 30.6\mu\text{mol/L}$ , Ellipticine,  $IC_{50} = 1.6\mu\text{mol/L}$ ; SNU638,  $IC_{50} = 18.0\mu\text{mol/L}$ , Ellipticine,  $IC_{50} = 1.6\mu\text{mol/L}$ ; HT1080,  $IC_{50} = 21.3\mu\text{mol/L}$ , Ellipticine,  $IC_{50} = 1.2\mu\text{mol/L}$ )<sup>[4081]</sup>, COX-2 inhibitor (RAW264.7 cells, LPS-induced PGE<sub>2</sub> production,  $IC_{50} = 3.64\mu\text{mol/L}$ , control Celecoxib,  $IC_{50} = 0.52\text{nmol/L}$ )<sup>[4532]</sup>. **Source:** YE JIANG *Zingiber cassumunar* (rhizome). **Ref:** 4081, 4532.

**10439 5-Hydroxy-6-methoxy-2-(2-phenylethyl)chromone**

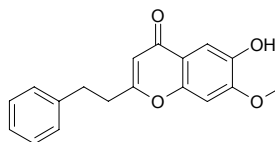
$C_{18}H_{16}O_4$  (296.33). Yellow needles, mp 129°C. **Source:** BAI MU XIANG *Aquilaria sinensis* (Withered wood). **Ref:** 4339.

**10440 6-Hydroxy-2-[2-(4'-methoxyphenyl)ethyl] chromone**

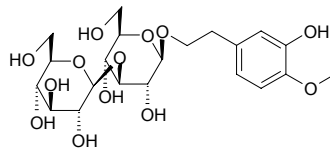
$C_{18}H_{16}O_4$  (296.33). Colorless lump crystals, mp 167~168°C. **Source:** BAI MU XIANG *Aquilaria sinensis*. **Ref:** 13, 140, 660.

**10441 6-Hydroxy-7-methoxy-2-(2-phenylethyl)chromone**

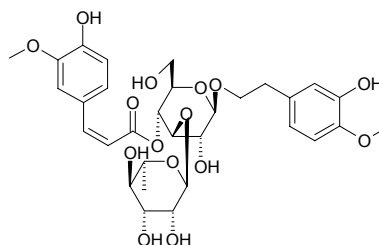
$C_{18}H_{16}O_4$  (296.33). Colorless needles, mp 187~188°C (MeOH). **Source:** CHEN XIANG *Aquilaria agallocha*. **Ref:** 4173.

**10442 2-(3-Hydroxy-4-methoxyphenyl)-ethyl-O- $\beta$ -D-glucopyranosyl (1→3)- $\beta$ -D-glucopyranoside**

$C_{21}H_{32}O_{13}$  (492.48). White amorphous powder, mp 202~204°C. **Pharm:** Antioxidant (hydroxyl radical scavenger,  $IC_{50} = 112.5\mu\text{mol/L}$ , control Ascorbic acid,  $IC_{50} = 51.8\mu\text{mol/L}$ , superoxide anion radical scavenger,  $IC_{50} = 195.0\mu\text{mol/L}$ , control Ascorbic acid,  $IC_{50} = 86.2\mu\text{mol/L}$ )<sup>[4289]</sup>. **Source:** XI ZANG HU HUANG LIAN *Picrorhiza scrophulariiflora* (root). **Ref:** 4289, 4817.

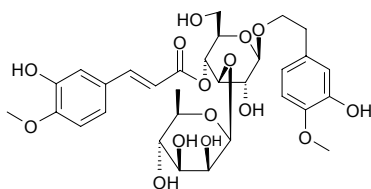
**10443 2-(3-Hydroxy-4-methoxyphenyl) ethyl O- $\alpha$ -L-rhamnopyranosyl-(1→3)-(4-O-cis-feruloyl)- $\beta$ -D-glucopyranoside**

$C_{31}H_{40}O_{15}$  (652.66). **Source:** ZI YE *Catalpa ovata* (fallen leaf). **Ref:** 4290.



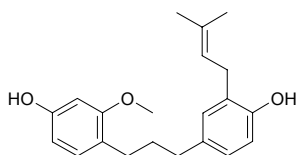
**10444 2-(3-Hydroxy-4-methoxyphenyl)-ethyl-1-O- $\alpha$ -L-rhamnosyl-(1 $\rightarrow$ 3)- $\beta$ -D-(4-feruloyl)-glucoside**

C<sub>31</sub>H<sub>40</sub>O<sub>15</sub> (652.66). Source: HUANG QIN *Scutellaria baicalensis*. Ref: 2.



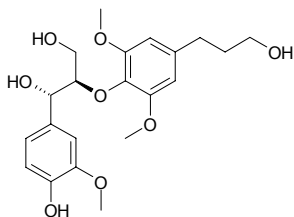
**10445 1-(4-Hydroxy-2-methoxyphenyl)-3-(4-hydroxy-3-prenylphenyl)propane**

C<sub>21</sub>H<sub>26</sub>O<sub>3</sub> (326.44). Brown powder, mp 85–86°C. Pharm: Aromatase inhibitor inactive (*in vitro*, IC<sub>50</sub> > 40 μmol/L; control Aminoglutethimide, IC<sub>50</sub> = 6.4 μmol/L)<sup>[3090]</sup>. Source: GOU SHU *Broussonetia papyrifera*. Ref: 3090.



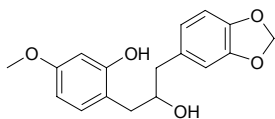
**10446 1-(4'-Hydroxy-3'-methoxyphenyl)-2-[4''-(3-hydroxypropyl)-2'',6''-dimethoxyphenoxy]propane-1,3-diol**

C<sub>21</sub>H<sub>28</sub>O<sub>8</sub> (408.45). [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +3.3° (c = 0.61, MeOH). Pharm: Cytotoxic inactive (100 μg/mL: KB, LNCaP, and Col2 cells)<sup>[5336]</sup>. Source: YUE NAN LIE LAN *Bursera tonkinensis* (root). Ref: 5336.



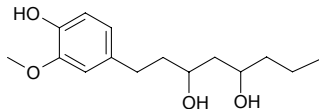
**10447 1-(2-Hydroxy-4-methoxyphenyl)-3-(3,4-methylenedioxyphenyl)propan-2-ol**

C<sub>17</sub>H<sub>18</sub>O<sub>5</sub> (302.33). Light yellow crystals (C<sub>6</sub>H<sub>6</sub>-EtOAc), mp 116°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -4.8° (c = 1.043, MeOH). Source: MENG MAI ROU DOU KOU *Myristica malabarica* (heartwood). Ref: 3906.



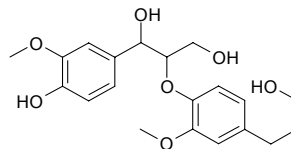
**10448 1-(4-Hydroxy-3-methoxyphenyl)-3,5-octane-diol**

C<sub>15</sub>H<sub>24</sub>O<sub>4</sub> (268.36). Source: SHENG JIANG *Zingiber officinale*. Ref: 2.



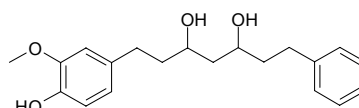
**10449 1-(4-Hydroxy-3-methoxyphenyl)-2-[4-( $\omega$ -hydroxypropyl)-2-methoxyphenoxy]propane-1,3-diol**

C<sub>20</sub>H<sub>26</sub>O<sub>7</sub> (378.43). Source: HOU PO *Magnolia officinalis*. Ref: 2.



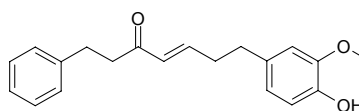
**10450 1-(4-Hydroxy-3-methoxyphenyl)-7-phenyl-3,5-heptanediol**

C<sub>20</sub>H<sub>26</sub>O<sub>4</sub> (330.43). Yellow liquid, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +6.87° (c = 0.40, CHCl<sub>3</sub>). Pharm: Antiemetic (young male chicks, copper sulfate induced emesis assay, 50mg/kg, InRt = 45.7%, p < 0.001)<sup>[4649]</sup>. Source: GAO LIANG JIANG *Alpinia officinarum* (rhizome: yield = 0.00031%dw). Ref: 4649.



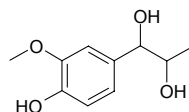
**10451 7-(4''-Hydroxy-3''-methoxyphenyl)-1-phenyl-hept-4-en-3-one**

C<sub>20</sub>H<sub>22</sub>O<sub>3</sub> (310.40). Colorless oleaginous liquid. Source: GAO LIANG JIANG *Alpinia officinarum*. Ref: 435.



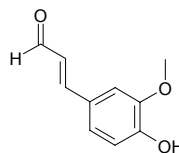
**10452 1-(4-Hydroxy-3-methoxyphenyl)propan-1,2-diol**

C<sub>10</sub>H<sub>14</sub>O<sub>4</sub> (198.22). Colorless oil. Source: SHENG JIANG *Zingiber officinale*. Ref: 3803.



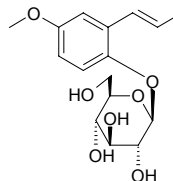
**10453 3-(4-Hydroxy-3-methoxyphenyl)-2-propenal**

Coniferaldehyde [20649-42-7] C<sub>10</sub>H<sub>10</sub>O<sub>3</sub> (178.19). Light-yellow needles (pet. ether), mp 84°C. Source: Occurs in wood. Ref: 1521.



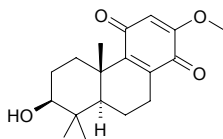
**10454 (E)-1'-(2-Hydroxy-5-methoxyphenyl)propene  $\beta$ -D-glucopyranoside**

C<sub>16</sub>H<sub>22</sub>O<sub>7</sub> (326.35). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -34° (c = 0.2, MeOH). Source: HUI QIN *Pimpinella anisum* (fruit). Ref: 3402.

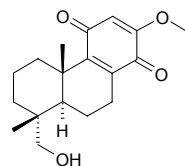


**10455 3 $\beta$ -Hydroxy-13-methoxy-8,12-podocarpadiene-11,14-dione**

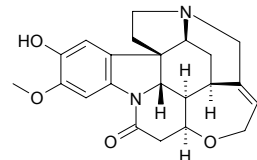
C<sub>18</sub>H<sub>24</sub>O<sub>4</sub> (304.39). Yellow powder, mp 184~186°C, [ $\alpha$ ]<sub>D</sub><sup>24</sup> = +11.1° (c = 0.45, CHCl<sub>3</sub>). Source: TAI WAN SHAN *Taiwania cryptomerioides* (bark). Ref: 4113.

**10456 18-Hydroxy-13-methoxy-8,12-podocarpadiene-11,14-dione**

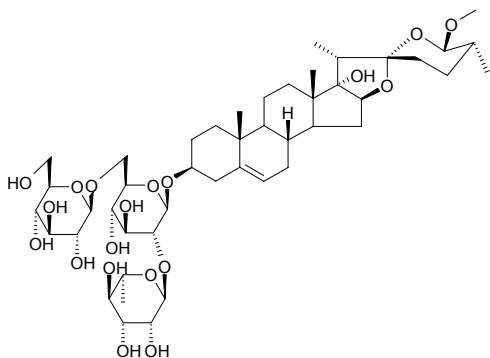
C<sub>18</sub>H<sub>24</sub>O<sub>4</sub> (304.39). Yellow powder, [ $\alpha$ ]<sub>D</sub><sup>24</sup> = +11.5° (c = 0.40, CHCl<sub>3</sub>). Source: TAI WAN SHAN *Taiwania cryptomerioides* (bark). Ref: 4113.

**10457 2-Hydroxy-3-methoxystrychnine**

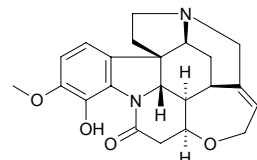
C<sub>22</sub>H<sub>24</sub>N<sub>2</sub>O<sub>4</sub> (380.45). Source: MA QIAN ZI *Strychnos nux-vomica*. Ref: 2.

**10458 (25R,26R)-17 $\alpha$ -Hydroxy-26-methoxyspirost-5-en-3 $\beta$ -yl-O- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)]- $\beta$ -D-glucopyranoside**

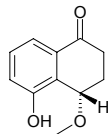
[244160-63-2] C<sub>46</sub>H<sub>74</sub>O<sub>19</sub> (931.09). Amorphous solid, [ $\alpha$ ]<sub>D</sub><sup>27</sup> = -42.1° (c = 0.14, MeOH:H<sub>2</sub>O = 1:1). Source: QING LIANG BAI HE *Lilium candidum*. Ref: 2303.

**10459 4-Hydroxy-3-methoxystrychnine**

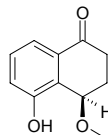
C<sub>22</sub>H<sub>24</sub>N<sub>2</sub>O<sub>4</sub> (380.45). Source: CHANG ZI MA QIAN *Strychnos wallichiana*, MA QIAN ZI *Strychnos nux-vomica*. Ref: 2, 660.

**10460 (-)-5-Hydroxy-4-methoxy-1-tetralone**

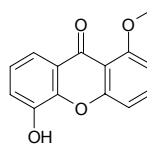
(4S)-5-Hydroxy-4-methoxy- $\alpha$ -tetralone C<sub>11</sub>H<sub>12</sub>O<sub>3</sub> (192.22). Colorless needles (CH<sub>2</sub>Cl<sub>2</sub>-MeOH), mp 110~112°C, [ $\alpha$ ]<sub>D</sub><sup>26</sup> = -27.8° (c = 0.088, EtOH); amorphous powder, [ $\alpha$ ]<sub>D</sub> = 0° (CHCl<sub>3</sub>). Source: DONG BEI HU TAO *Juglans mandshurica* var. *sieboldiana* (fruit), HUANG QI II *Engelhardia roxburghiana* (root). Ref: 4492, 5059.

**10461 (4R)-5-Hydroxy-4-methoxy- $\alpha$ -tetralone**

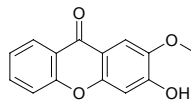
C<sub>11</sub>H<sub>12</sub>O<sub>3</sub> (192.22). Amorphous powder, [ $\alpha$ ]<sub>D</sub> = 0° (CHCl<sub>3</sub>). Source: DONG BEI HU TAO *Juglans mandshurica* var. *sieboldiana* (fruit). Ref: 4492.

**10462 5-Hydroxy-1-methoxyxanthone**

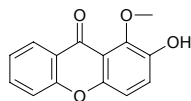
C<sub>14</sub>H<sub>10</sub>O<sub>4</sub> (242.23). Pharm: Cytotoxic (P<sub>388</sub> ED<sub>50</sub> = 7.28 $\mu$ g/mL, control Mithramycin ED<sub>50</sub> = 0.06 $\mu$ g/mL, HT29 ED<sub>50</sub> = 4.74 $\mu$ g/mL, control Mithramycin ED<sub>50</sub> = 0.08 $\mu$ g/mL). Source: TAI WAN LV DAO TENG HUANG *Garcinia linii*. Ref: 4094.

**10463 6-Hydroxy-7-methoxyxanthone**

C<sub>14</sub>H<sub>10</sub>O<sub>4</sub> (242.23). Pharm: Antifungal (*Aspergillus fumigatus* CBS113.26, MIC<sub>80</sub> = 16 $\mu$ g/mL, control Amphotericin B, MIC<sub>80</sub> = 8 $\mu$ g/mL; *Aspergillus flavus* IHEM37.19, MIC<sub>80</sub> = 16 $\mu$ g/mL, Amphotericin B, MIC<sub>80</sub> = 8 $\mu$ g/mL; *Aspergillus niger* IHEM2951, MIC<sub>80</sub> = 31 $\mu$ g/mL, Amphotericin B, MIC<sub>80</sub> = 16 $\mu$ g/mL; *Aspergillus terreus* 5029.2000, MIC<sub>80</sub> = 125 $\mu$ g/mL; Amphotericin B, MIC<sub>80</sub> = 16 $\mu$ g/mL; *Candida albicans* ATCC663.90, MIC<sub>80</sub> = 31 $\mu$ g/mL; Amphotericin B, MIC<sub>80</sub> = 1 $\mu$ g/mL). Source: SU GE LAN HU TONG *Calophyllum caledonicum* (stem cortex). Ref: 4995.

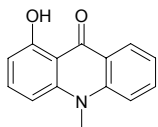
**10464 7-Hydroxy-8-methoxyxanthone**

C<sub>14</sub>H<sub>10</sub>O<sub>4</sub> (242.23). Pharm: Antifungal (*Aspergillus fumigatus* CBS113.26, MIC<sub>80</sub> = 31 $\mu$ g/mL, control Amphotericin B, MIC<sub>80</sub> = 8 $\mu$ g/mL; *Aspergillus flavus* IHEM37.19, MIC<sub>80</sub> = 31 $\mu$ g/mL, Amphotericin B, MIC<sub>80</sub> = 8 $\mu$ g/mL; *Aspergillus niger* IHEM2951, MIC<sub>80</sub> = 62 $\mu$ g/mL, Amphotericin B, MIC<sub>80</sub> = 16 $\mu$ g/mL; *Aspergillus terreus* 5029.2000, MIC<sub>80</sub> = 250 $\mu$ g/mL; Amphotericin B, MIC<sub>80</sub> = 16 $\mu$ g/mL; *Candida albicans* ATCC663.90, MIC<sub>80</sub> = 62 $\mu$ g/mL; Amphotericin B, MIC<sub>80</sub> = 1 $\mu$ g/mL). Source: SU GE LAN HU TONG *Calophyllum caledonicum* (stem cortex). Ref: 4995.

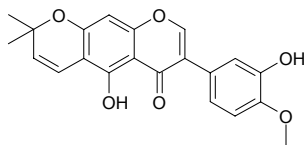


**10465 1-Hydroxy-10-methylacridone**

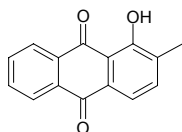
$C_{14}H_{11}NO_2$  (225.25). Yellow amorphous powder. **Pharm:** Antileishmanial (*Leishmania major* promastigote, 10 $\mu$ mol/L, survival = (90.0 $\pm$ 5.0)%, 1 $\mu$ mol/L, survival = (95.5 $\pm$ 3.8)%, control Amphotericin B, 10 $\mu$ mol/L, survival = (0.2 $\pm$ 0.04)%, 1 $\mu$ mol/L, survival = (71.9 $\pm$ 4.4)%); antifungal (silica gel TLC, *Cladosporium cucumerinum*, MIA = 10 $\mu$ g, control Nystatin, MIA = 0.2 $\mu$ g). **Source:** *Thamnosma rhodesica* (root). **Ref:** 3797.

**10466 3'-Hydroxy-4'-O-methylalpinumisoflavone**

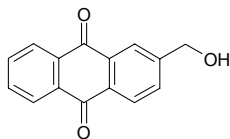
$C_{21}H_{18}O_6$  (366.37). Yellowish crystals (petrol), mp 151~153°C. **Source:** *Millettia thonningii*. **Ref:** 2326.

**10467 1-Hydroxy-2-methyl-anthraquinone**

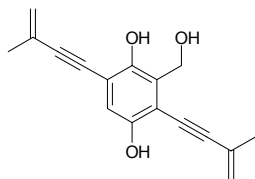
[6268-09-3]  $C_{15}H_{10}O_3$  (238.25). mp 184~185°C. **Pharm:** Cytotoxic (KB,  $ED_{50}$  > 25 $\mu$ g/mL, control Doxorubicin,  $ED_{50}$  = 0.12 $\mu$ g/mL; Hep3B,  $ED_{50}$  > 25 $\mu$ g/mL, control Doxorubicin,  $ED_{50}$  = 0.14 $\mu$ g/mL; Colon205,  $ED_{50}$  > 25 $\mu$ g/mL, control Doxorubicin,  $ED_{50}$  = 0.10 $\mu$ g/mL; HeLa,  $ED_{50}$  > 25 $\mu$ g/mL, control Doxorubicin,  $ED_{50}$  = 0.11 $\mu$ g/mL)<sup>[4369]</sup>. **Source:** BA JI TIAN *Morinda officinalis*, GUANG JING QIAN CAO *Rubia wallichiana* (stem), YANG JIAO TENG *Morinda umbellata*. **Ref:** 6, 228, 4369.

**10468 2-Hydroxymethylanthraquinone**

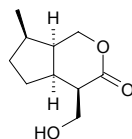
[17241-59-7]  $C_{15}H_{10}O_3$  (238.25). **Pharm:** Cytotoxic (mus,  $P_{388}$ ). **Source:** BAI YAN TENG *Morinda parvifolia*. **Ref:** 658.

**10469 3-(Hydroxymethyl)-2,5-bis(3-methylbut-3-en-1-ynyl)benzene-1,4-diol**

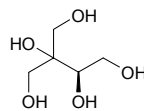
$C_{17}H_{16}O_3$  (268.33). **Source:** MAO REN GE JUN *Stereum hirsutum*. **Ref:** 3930.

**10470 (4R)-4-Hydroxymethylboschnialactone**

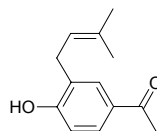
$C_{10}H_{16}O_3$  (184.24). Colorless needles; mp 46~47 °C (CHCl<sub>3</sub>),  $[\alpha]_D^{23}$  = -35.8° ( $c$  = 0.1, MeOH) **Source:** CAO CONG RONG *Boschniakia rossica* (whole herb). **Ref:** 4266.

**10471 (3R)-2-Hydroxymethylbutane-1,2,3,4-tetrol**

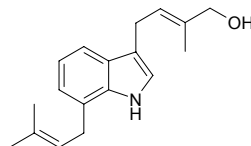
$C_5H_{12}O_5$  (152.15). Colorless syrup,  $[\alpha]_D^{22}$  = +4°. **Source:** BEI SHA SHEN *Glehnia littoralis* (fruit), SHI LUO ZI *Anethum graveolens* (fruit). **Ref:** 3525, 4177.

**10472 4-Hydroxy-3-(3-methyl-2-butenyl)acetophenone**

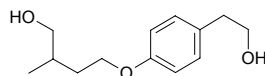
$C_{13}H_{16}O_2$  (204.27). **Pharm:** Anti-inflammatory (inhibits arachidonic acid metabolism, calcium ionophore-stimulated leukocytes, inhibits LTB<sub>4</sub> production, concentration-dependent manner,  $IC_{50}$  = 24 $\mu$ mol/L). **Source:** YI DA LI LA JU *Helichrysum italicum* **Ref:** 4415.

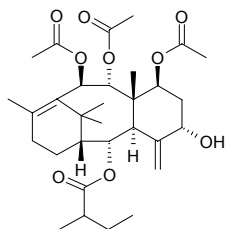
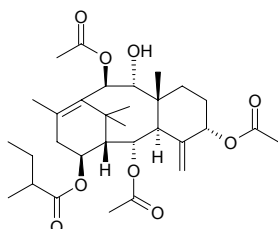
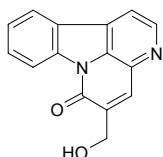
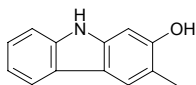
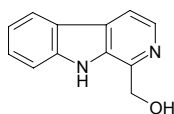
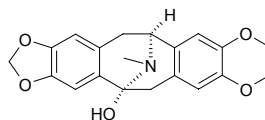
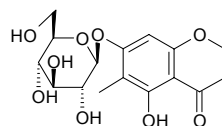
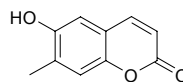
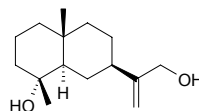
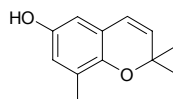
**10473 (E)-3-(3-Hydroxymethyl-2-butenyl)-7-(3-methyl-2-butenyl)-1H-indole**

$C_{18}H_{23}NO$  (269.39). Colorless oil. **Pharm:** Anti-HIV ( $CC_{50}$  = 13.66 $\mu$ g/mL,  $IC_{50}$  = 1.17 $\mu$ g/mL, SI = 11.68; control AZT,  $CC_{50}$  = 794.2 $\mu$ g/mL,  $IC_{50}$  = 0.131 $\mu$ g/mL, SI = 6100)<sup>[5266]</sup>. **Source:** MENG DA NA SHAN XIAO JU *Glycosmis montana* (twig and leaf). **Ref:** 5266.

**10474 4'-(4''-Hydroxy-3''-methylbutyloxy)-2-phenylethanol**

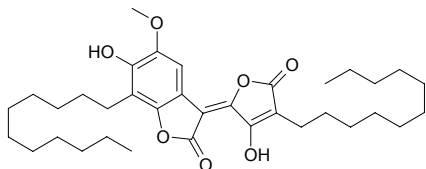
$C_{13}H_{20}O_3$  (224.30). White amorphous powder,  $[\alpha]_D^{23}$  = -37° ( $c$  = 0.1, MeOH). **Source:** *Fagara xanthoxyloides*. **Ref:** 5385.



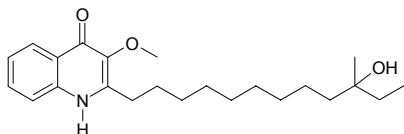
**10475 5 $\alpha$ -Hydroxy-2 $\alpha$ -( $\alpha$ -methylbutyryl)-oxy-7 $\beta$ ,9 $\alpha$ ,10 $\beta$ -triacetoxy-4(20),11-taxadiene**C<sub>31</sub>H<sub>46</sub>O<sub>9</sub> (562.71). [Source](#): JIANG GUO ZI SHAN *Taxus baccata*. [Ref](#): 662.**10476 9 $\alpha$ -Hydroxy-14 $\beta$ -(2-methylbutyryl)-oxy-2 $\alpha$ ,5 $\alpha$ ,10 $\beta$ -tri acetoxy-taxa-4(20),11-diene**C<sub>31</sub>H<sub>46</sub>O<sub>9</sub> (562.71). [Source](#): MEI LI HONG DOU SHAN *Taxus mairei*. [Ref](#): 662.**10477 5-Hydroxymethylcanthin-6-one**C<sub>15</sub>H<sub>10</sub>N<sub>2</sub>O<sub>2</sub> (250.26). [Source](#): CHANG YE KUAN MU *Eurycoma longifolia* (root: yield = 0.000014%dw), *Eurycoma* sp. [Ref](#): 4556, 4728.**10478 2-Hydroxy-3-methylcarbazole**3-Methylcarbazol-2-ol [24224-30-4] C<sub>13</sub>H<sub>11</sub>NO (197.34). [Source](#): SHAN HUANG PI *Clausena excavata*. [Ref](#): 703.**10479 1-Hydroxymethyl- $\beta$ -carboline**[17337-22-3] C<sub>12</sub>H<sub>10</sub>N<sub>2</sub>O (198.23). [Source](#): KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. [Ref](#): 12.**10480 (-)-12-Hydroxy-O-methylcaryachine**C<sub>20</sub>H<sub>21</sub>NO<sub>5</sub> (355.39). Colorless needles (MeOH), mp 201~202°C, [ $\alpha$ ]<sub>D</sub> = -171.5° (c = 0.1284, MeOH). [Source](#): HOU KE GUI *Cryptocarya chinensis* (wood). [Ref](#): 3092.**10481 5-Hydroxy-6-methylchromone-7-O- $\beta$ -D-glucoside**C<sub>16</sub>H<sub>20</sub>O<sub>9</sub> (356.33). Colorless acicular crystals, mp 194~196°C. [Source](#): HUANG SHAN *Pseudotsuga sinensis*. [Ref](#): 2229.**10482 6-Hydroxy-7-methylcoumarin**C<sub>10</sub>H<sub>8</sub>O<sub>3</sub> (176.17). [Source](#): YIN CHEN HAO *Artemisia capillaris*. [Ref](#): 2.**10483 4 $\alpha$ -Hydroxy-4 $\beta$ -methylidihydrocostol**C<sub>15</sub>H<sub>26</sub>O<sub>2</sub> (238.37). [Pharm](#): Cytotoxic (*in vitro*, HepG<sub>2</sub>, CD<sub>50</sub> > 100 $\mu$ g/mL; HeLa, CD<sub>50</sub> > 100 $\mu$ g/mL; OVCAR-3, CD<sub>50</sub> > 100 $\mu$ g/mL; control Cisplatin, HepG<sub>2</sub>, CD<sub>50</sub> = 2.8 $\mu$ g/mL; HeLa, CD<sub>50</sub> = 5.2 $\mu$ g/mL; OVCAR-3, CD<sub>50</sub> = 3 $\mu$ g/mL). [Source](#): MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*] (root: yield = 0.0048%dw). [Ref](#): 4720.**10484 6-Hydroxy-8-methyl-2,2-dimethyl-2H-benzopyran**C<sub>12</sub>H<sub>14</sub>O<sub>2</sub> (190.24). [Pharm](#): Antibacterial (*Escherichia coli* ATCC 11775, MIC > 750 $\mu$ g/mL, control Ciprofloxacin, MIC = 0.63 $\mu$ g/mL; *Klebsiella pneumoniae* NCTC 9633, MIC > 187 $\mu$ g/mL, Ciprofloxacin, MIC = 0.20 $\mu$ g/mL; *Enterococcus faecalis* ATCC 29212, MIC = 375 $\mu$ g/mL, Ciprofloxacin, MIC = 6.25 $\mu$ g/mL; *Staphylococcus aureus* ATCC 6538, MIC = 131 $\mu$ g/mL, Ciprofloxacin, MIC = 0.31 $\mu$ g/mL; *Bacillus cereus* ATCC 11778, MIC = 75 $\mu$ g/mL, Ciprofloxacin, MIC = 2.5 $\mu$ g/mL; *Staphylococcus epidermidis* ATCC 2223, MIC = 187 $\mu$ g/mL, Ciprofloxacin, MIC = 1.25 $\mu$ g/mL; *Cryptococcus neoformans* ATCC 90112, MIC = 75 $\mu$ g/mL, Ciprofloxacin, MIC = 2.5 $\mu$ g/mL); antifungal (*Candida albicans* ATCC10231, MIC = 37 $\mu$ g/mL, control Amphotericin B, MIC = 1.25 $\mu$ g/mL). [Source](#): XUAN CHUI GEN NAI LA CAO *Gunnera perpensa* (stem and leaf). [Ref](#): 5314.

**10485 10-Hydroxy-4-O-methyl-2,11-diundecylgomphilactone**

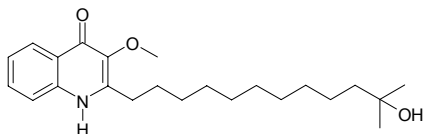
$C_{35}H_{52}O_7$  (584.8). Orange solid ( $CHCl_3$ ), mp 103~105°C. **Pharm:** Cytotoxic inactive (*in vitro*, HL-60,  $IC_{50} > 100\mu g/mL$ ; Bel7402,  $IC_{50} > 100\mu g/mL$ ; HeLa,  $IC_{50} > 100\mu g/mL$ ; U937,  $IC_{50} > 100\mu g/mL$ ; control Colchicine, HL-60,  $IC_{50} = 1.6\mu g/mL$ ; Bel7402,  $IC_{50} = 0.4\mu g/mL$ ; HeLa,  $IC_{50} = 0.1\mu g/mL$ ; U937,  $IC_{50} = 0.1\mu g/mL$ ). **Source:** LA ZHU GUO *Aegiceras corniculatum* (stem and twig; yield = 0.000033%). **Ref:** 4746.

**10486 2-(10-Hydroxy-10-methyldodecanyl)-3-methoxy-4-quinolone**

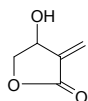
$C_{23}H_{35}NO_3$  (373.54). Colorless oil,  $[\alpha]_D = +5.4^\circ$  ( $c = 0.02$ ,  $CHCl_3$ ). **Source:** *Spathelia excelsa* (leaf). **Ref:** 5297.

**10487 2-(11-Hydroxy-11-methyldodecanyl)-3-methoxy-4-quinolone**

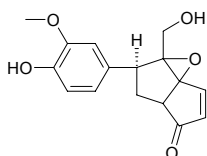
$C_{23}H_{35}NO_3$  (373.54). Colorless oil. **Source:** *Spathelia excelsa* (leaf). **Ref:** 5297.

**10488 β-Hydroxy-α-methylene-γ-butyrolactone**

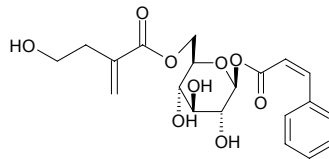
$C_5H_6O_3$  (114.10). **Source:** XIAO YE HUA *Spiraea prunifolia*. **Ref:** 6.

**10489 5-Hydroxymethyl-6-endo-(3'-methoxy-4'-hydroxyphenyl)-8-oxabicyclo[3.2.1]oct-3-en-2-one**

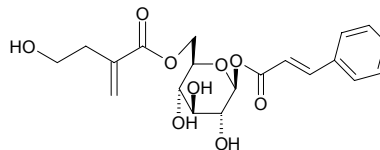
$C_{16}H_{16}O_5$  (288.30). **Source:** CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*]. **Ref:** 2.

**10490 6-O-(4'-Hydroxy-2'-methylene-butyryl)-1-O-cis-cinnamoyl-β-D-glucopyranose**

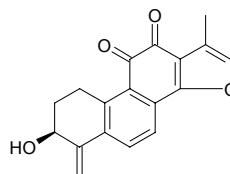
$C_{20}H_{24}O_9$  (408.41). **Source:** ZHEN ZHU XIU XIAN JU *Spiraea thunbergii*. **Ref:** 3782.

**10491 6-O-(4'-Hydroxy-2'-methylene-butyryl)-1-O-trans-cinnamoyl-β-D-glucopyranose**

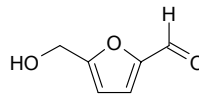
$C_{20}H_{24}O_9$  (408.41). **Source:** ZHEN ZHU XIU XIAN JU *Spiraea thunbergii*. **Ref:** 3782.

**10492 3-β-Hydroxymethylenetanshiquinone**

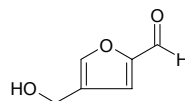
$C_{18}H_{14}O_4$  (294.31). Red acicular crystals (MeOH), mp 185~190°C,  $[\alpha]_D = 0^\circ$  ( $c = 0.05$ , MeOH). **Source:** DAN SHEN *Salvia miltiorrhiza*. **Ref:** 721.

**10493 5-Hydroxymethyl furaldehyde**

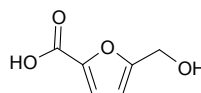
[67-47-0]  $C_6H_6O_3$  (126.11). Brownish red liquid. **Source:** BEI CANG ZHU *Atractylodes chinensis*, DANG SHEN *Codonopsis pilosula*, DU ZHONG *Eucommia ulmoides*, PO LUO MEN ZAO JIA *Cassia fistula* (seed: yield = 0.00017%)<sup>[4642]</sup>, SHU DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*] (tuberoid: mean content of 3 origins = 0.032%)<sup>[5508]</sup>. **Ref:** 2, 2510, 4642, 5508.

**10494 4-Hydroxymethyl-2-furaldehyde**

$C_6H_6O_3$  (126.11). Yellowish oleaginous substance. **Source:** CAO SU *Phlomis umbrosa*. **Ref:** 672.

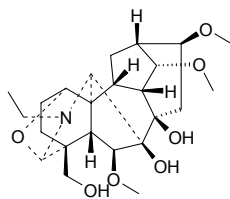
**10495 5-(Hydroxymethyl)-furan-2-carboxylic acid**

$C_6H_6O_4$  (142.11). **Source:** fungus *Epicoccum* sp. **Ref:** 5445.

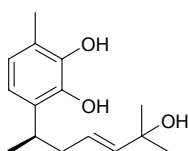


**10496 18-Hydroxy-14-O-methylgadesine**

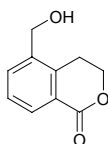
C<sub>24</sub>H<sub>37</sub>NO<sub>7</sub> (451.56). Colorless needles (*n*-hexane–ethyl acetate), mp 108–110°C, [α]<sub>D</sub><sup>25</sup> = +50.0° (*c* = 0.8, CHCl<sub>3</sub>). Source: DONG FANG FEI YAN CAO *Consolida orientalis* (aerial parts). Ref: 4283.

**10497 6-Hydroxy-2-methyl-5-(5'-hydroxy-1'(R),5'-dimethylhex-3'-enyl)-phenol**

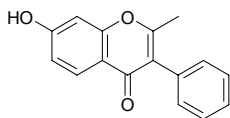
C<sub>15</sub>H<sub>22</sub>O<sub>3</sub> (250.34). Yellow oil, [α]<sub>D</sub><sup>25</sup> = –35° (*c* = 1.0, CH<sub>2</sub>Cl<sub>2</sub>). Source: KU A MO YAO *Commiphora kua* (resin). Ref: 4334.

**10498 5-Hydroxymethylisochroman-1-one**

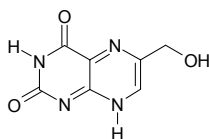
C<sub>10</sub>H<sub>10</sub>O<sub>3</sub> (178.19). Source: RI BEN ZHANG YA CAI *Swertia japonica*. Ref: 2528.

**10499 7-Hydroxy-2-methyl isoflavone**

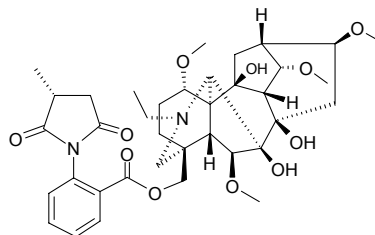
C<sub>16</sub>H<sub>12</sub>O<sub>3</sub> (252.27). Source: GUANG GUO GAN CAO *Glycyrrhiza glabra*. Ref: 660.

**10500 6-Hydroxymethylumazin**

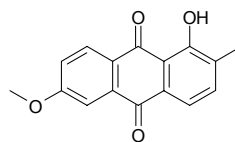
[10129-99-4] C<sub>7</sub>H<sub>6</sub>N<sub>4</sub>O<sub>3</sub> (194.15). mp 260–262°C (dec). Source: BO CAI *Spinacia oleracea*. Ref: 6, 1521.

**10501 10-Hydroxy-methyllycaconitine**

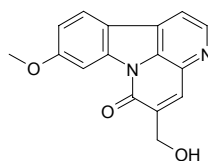
C<sub>37</sub>H<sub>50</sub>N<sub>2</sub>O<sub>11</sub> (698.82). Amorphous, [α]<sub>D</sub><sup>20</sup> = +51.0° (CHCl<sub>3</sub>). Source: SHEN LIE CUI QUE HUA *Delphinium dissectum*, GAO DA CUI QUE HUA *Delphinium excelsum*. Ref: 2055.

**10502 1-Hydroxy-2-methyl-6-methoxyanthraquinone**

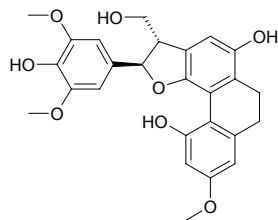
C<sub>16</sub>H<sub>12</sub>O<sub>4</sub> (268.27). Source: QIAN CAO GEN *Rubia cordifolia*. Ref: 660.

**10503 5-Hydroxymethyl-9-methoxycanthin-6-one**

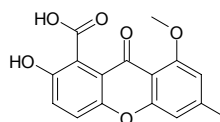
C<sub>16</sub>H<sub>12</sub>N<sub>2</sub>O<sub>3</sub> (280.29). Yellow powder (MeOH), mp 235°C (dec). Source: CHANG YE KUAN MU *Eurycoma longifolia* (root: yield = 0.000033%dw), *Eurycoma* sp. Ref: 4556, 4728.



**10504 (2*R*\*,3*S*\*)-3-Hydroxymethyl-9-methoxy-2-(4'-hydroxy-3',5'-dimethoxyphenyl)-2,3,6,7-tetrahydrophenanthro[4,3-*b*]furan-5,11-diol**  
C<sub>26</sub>H<sub>26</sub>O<sub>8</sub> (466.49). Gum, [α]<sub>D</sub><sup>27</sup> = –3.5° (*c* = 0.85, CHCl<sub>3</sub>). Source: QIAO SHI DOU LAN *Bulbophyllum vaginatum* (whole herb). Ref: 4768.

**10505 2-Hydroxy-6-methyl-8-methoxy-9-oxo-9*H*-xanthene-1-carboxylic acid**

C<sub>16</sub>H<sub>12</sub>O<sub>6</sub> (300.27). Stable pale yellow amorphous solid. Pharm: Cytotoxic inactive (brine shrimp *Artemia salina* lethality assay, 20μg/mL or 200μg/mL). Source: *Xylaria* sp. Ref: 3845.



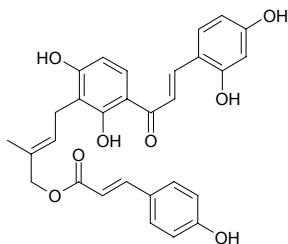
**10506 3'-[ $\gamma$ -Hydroxymethyl-(*E*)- $\gamma$ -methylallyl]-2,4,2',4'-tetrahydroxy-chalcone 11'-*O*-coumarate**

Anticancer Flavonoid PMV70P691-021 C<sub>29</sub>H<sub>26</sub>O<sub>8</sub> (502.53). Orange powder.

**Pharm:** Aromatase inhibitor (*in vitro*, IC<sub>50</sub> = 0.5  $\mu$ mol/L; control

Aminoglutethimide, IC<sub>50</sub> = 6.4  $\mu$ mol/L). **Source:** GOU SHU

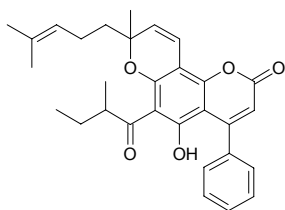
*Broussonetia papyrifera*. **Ref:** 3090, 5038.



**10507 5-Hydroxy-8-methyl-6-(2-methylbutanoyl)-8-(4-methylpent-3-enyl)-4-phenyl-2*H*-pyrano[2,3-*h*]chromen-2-one**

C<sub>30</sub>H<sub>32</sub>O<sub>5</sub> (472.59). Yellow gum. **Source:** TIE LI MU *Mesua ferrea* (blossom).

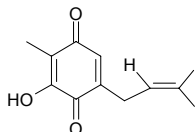
**Ref:** 3870.



**10508 3-Hydroxy-2-methyl-5-(3-methyl-2-butenyl)benzo-1,4-quinone**

C<sub>12</sub>H<sub>14</sub>O<sub>3</sub> (206.24). **Source:** XUAN CHUI GEN NAI LA CAO *Gunnera*

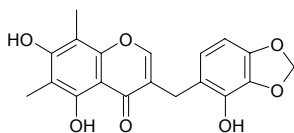
*perpensa* (stem and leaf). **Ref:** 5314.



**10509 2'-Hydroxymethylphopogonone A**

C<sub>19</sub>H<sub>16</sub>O<sub>7</sub> (356.34). **Source:** MAI DONG *Ophiopogon japonicus* (tuber). **Ref:**

4663.



**10510 5-Hydroxy-2-methyl-6-(11'-oxododecyl)-pyridine**

C<sub>18</sub>H<sub>29</sub>NO<sub>2</sub> (291.44). Pale oil. **Pharm:** Cytotoxic inactive (P<sub>388</sub>, IC<sub>50</sub> > 20  $\mu$ g/mL,

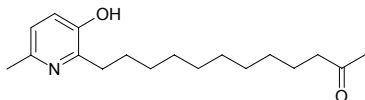
control 5-FU, IC<sub>50</sub> = 0.99  $\mu$ g/mL; KB, IC<sub>50</sub> > 20  $\mu$ g/mL, Doxorubicin, IC<sub>50</sub> =

0.57  $\mu$ g/mL; BC-1, IC<sub>50</sub> > 20  $\mu$ g/mL, Doxorubicin, IC<sub>50</sub> = 0.21  $\mu$ g/mL); cytotoxic

(brine shrimp lethality, IC<sub>50</sub> = 56.0  $\mu$ g/mL, control Monocrotophos, IC<sub>50</sub> =

0.24  $\mu$ g/mL). **Source:** ZHUANG GUAN FAN XIE *Senna spectabilis* (flower).

**Ref:** 5480.



**10511 5-Hydroxy-2-methyl-6-(11'-oxododecyl)-pyridine *N*-oxide**

C<sub>18</sub>H<sub>29</sub>NO<sub>3</sub> (307.44). White crystals, mp 71~72°C. **Pharm:** Cytotoxic (P<sub>388</sub>,

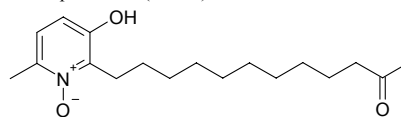
IC<sub>50</sub> = 4.8  $\mu$ g/mL, control 5-FU, IC<sub>50</sub> = 0.99  $\mu$ g/mL; KB, IC<sub>50</sub> = 2.0  $\mu$ g/mL,

Doxorubicin, IC<sub>50</sub> = 0.57  $\mu$ g/mL; BC-1, IC<sub>50</sub> = 4.1  $\mu$ g/mL, Doxorubicin, IC<sub>50</sub> =

0.21  $\mu$ g/mL); cytotoxic (brine shrimp lethality, IC<sub>50</sub> = 9.7  $\mu$ g/mL, control

Monocrotophos, IC<sub>50</sub> = 0.24  $\mu$ g/mL). **Source:** ZHUANG GUAN FAN XIE

*Senna spectabilis* (flower). **Ref:** 5480.



**10512 10 $\alpha$ -Hydroxy-9 $\alpha$ -methyl-15-oxo-20-nor-kauran-19-oic acid methyl ester-16 $\alpha$ -yl-14' $\alpha$ ,16' $\alpha$ ,17'-trihydroxy-15'-oxo-*ent*-kaur-11'-*en*-19'-oate**

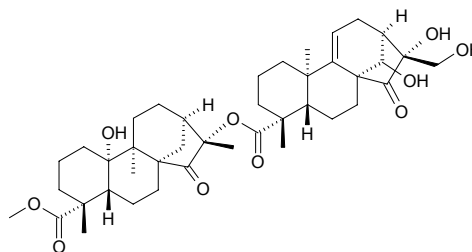
C<sub>41</sub>H<sub>58</sub>O<sub>10</sub> (710.91). White crystals, mp 100~105°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +35.0° (*c* = 0.1,

MeOH). **Pharm:** Cytotoxic inactive (Lu1, Col2, KB, LNCaP, hTERT-RPE1,

HUVEC; control Taxol, ED<sub>50</sub> = 0.002  $\mu$ g/mL, 0.003  $\mu$ g/mL, 0.0005  $\mu$ g/mL,

0.001  $\mu$ g/mL, 0.004  $\mu$ g/mL and 0.008  $\mu$ g/mL, respectively). **Source:** *Parinari*

*sprucei* (leaf). **Ref:** 4991.

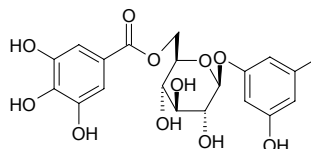


**10513 3-Hydroxy-5-methylphenol 1-*O*- $\beta$ -D-(6'-galloyl)glucopyranoside**

C<sub>20</sub>H<sub>22</sub>O<sub>11</sub> (438.39). Off-white amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>26</sup> = -20.3° (*c* = 0.22,

MeOH). **Source:** YANG TONG *Cleyera ochracea* [Syn. *Cleyera japonica*]

(leaf and branch). **Ref:** 4148.

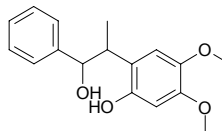


**10514 2-(2-Hydroxy-1-methyl-2-phenylethyl)-4,5-dimethoxyphenol**

C<sub>17</sub>H<sub>20</sub>O<sub>4</sub> (288.35). Amorphous solid; mp 37~45°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -44.9° (*c* = 0.25,

CHCl<sub>3</sub>). **Source:** JIAO ZHI HUANG TAN *Dalbergia cochinchinensis* (stem;

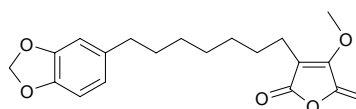
yield = 0.0011% dw). **Ref:** 4716.



**10515 3-Hydroxy-4-methyl-2-(7'-piperonyl-*n*-heptyl)-butenolide**

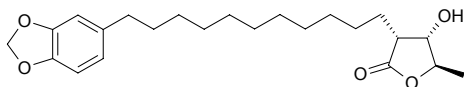
Iryelliptin B C<sub>20</sub>H<sub>24</sub>O<sub>5</sub> (344.41). Viscous oil. **Source:** SU LI NAN ROU DOU

KOU *Virola surinamensis* [Syn. *Myristica surinamensis*]. **Ref:** 2580.



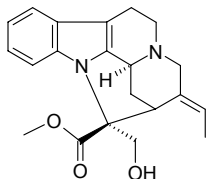


**10516 (2S,3R,4S)-3-Hydroxy-4-methyl-2-(11'-piperonyl-n-undecyl)butanolid**  
Juruenolide E C<sub>23</sub>H<sub>34</sub>O<sub>5</sub> (390.52). Viscous oil, [α]<sub>D</sub> = +7°, (c = 0.10, MeOH).  
Source: SU LI NAN ROU DOU KOU *Virola surinamensis* [Syn. *Myristica surinamensis*]. Ref: 2580.



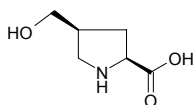
**10517 16-Hydroxymethylpleiocarpamine**

C<sub>21</sub>H<sub>24</sub>N<sub>2</sub>O<sub>3</sub> (352.44). Source: HONG HUA RUI MU *Kopsia fruticosa* (leaf).  
Ref: 3830.



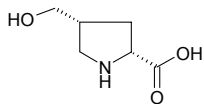
**10518 cis-4-Hydroxymethylproline**

[2370-39-0] C<sub>6</sub>H<sub>11</sub>NO<sub>3</sub> (145.16). mp 257~258°C (dec). Source: PI PA HE *Eriobotrya japonica*. Ref: 6.



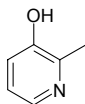
**10519 trans-4-Hydroxymethylproline**

C<sub>6</sub>H<sub>11</sub>NO<sub>3</sub> (145.16). mp 227.5~229.0°C. Source: PI PA HE *Eriobotrya japonica*. Ref: 6.



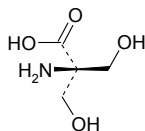
**10520 3-Hydroxy-2-methylpyridine**

C<sub>6</sub>H<sub>7</sub>NO (109.13). Source: MENG GU HUANG QI *Astragalus mongholicus*, ZHANG YE BAN XIA *Pinellia pedatisecta*. Ref: 660, 1400.



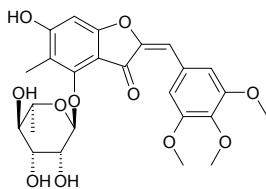
**10521 α-Hydroxymethylserine**

C<sub>4</sub>H<sub>9</sub>NO<sub>4</sub> (135.12). Source: TIAN HUA FEN *Trichosanthes kirilowii*. Ref: 2.



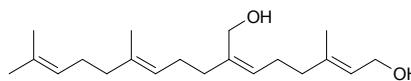
**10522 6-Hydroxy-5-methyl-3',4',5'-trimethoxyaurone 4-O-α-L-rhamnopyranoside**

C<sub>25</sub>H<sub>28</sub>O<sub>11</sub> (504.50). Source: SI ZI TAN *Pterocarpus santalinus* (wood). Ref: 3889.



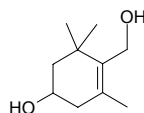
**10523 (E,Z,E)-7-Hydroxymethyl-3,11,15-trimethyl-2,6,10,14-hexadecatetraen-1-ol**

C<sub>20</sub>H<sub>34</sub>O<sub>2</sub> (306.49). Oil. Source: JIN QIN ZHUANG BA DOU *Croton sublyratus*. Ref: 661.



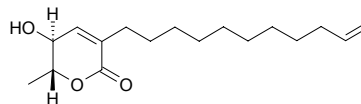
**10524 4-Hydroxymethyl-3,5,5-trimethylcyclohex-3-enol**

C<sub>10</sub>H<sub>18</sub>O<sub>2</sub> (170.25). Source: ZANG HONG HUA *Crocus sativus* (stigma; yield = 0.00011%dw). Ref: 4653.



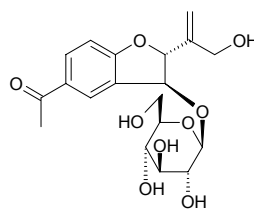
**10525 5-Hydroxy-6-methyl-3-(undec-10-enyl)-5,6-dihydropyran-2-one**

C<sub>17</sub>H<sub>28</sub>O<sub>3</sub> (280.41). Colorless oily liquid, [α]<sub>D</sub> = +10.75° (c = 0.002, CHCl<sub>3</sub>).  
Source: QING XIANG MU JIANG ZI *Litsea euosma* (twig and leaf). Ref: 4576.



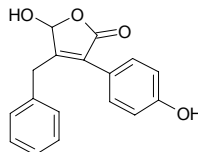
**10526 (2R\*,3S\*)-1-(2-[1-(Hydroxymethyl)viny]-3-[β-D-glucosyloxy]-2,3-dihydrobenzo[b]furan-5-yl)-1-ethanone**

C<sub>19</sub>H<sub>24</sub>O<sub>9</sub> (396.40). Pharm: Anti-Inflammatory (anti-oedema, control oedema = (7.8±0.3)mg, 100µg/cm<sup>2</sup>, oedema = (5.6±0.5)mg, p<0.05, reduction = 28%, Indomethacin oedema = (3.4±0.3)mg, p<0.05, reduction = 56%). Source: GAO SHAN HUO RONG CAO *Leontopodium alpinum* (root). Ref: 4985.



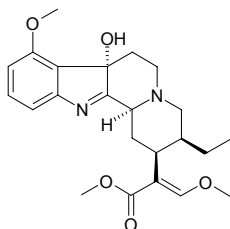
**10527 9-Hydroxymicroperforanone**

EQ-8 C<sub>17</sub>H<sub>14</sub>O<sub>4</sub> (232.30). White powder, [α]<sub>D</sub><sup>25</sup> = 0° (c = 0.030, MeOH).  
Source: *Gelasinospora santi-florii*. Ref: 2103.

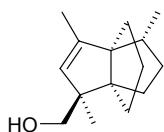


**10528 7-Hydroxymitragynine**

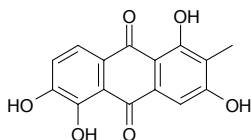
$C_{23}H_{30}N_2O_5$  (414.51). **Pharm:** Opioid agonist (gpg ileum,  $pEC_{50} = 8.38 \pm 0.12$ , control Morphine,  $pEC_{50} = 7.15 \pm 0.05$ ). **Source:** MEI LI MAO ZHU MU *Mitragyna speciosa* (leaf). **Ref:** 5069.

**10529 14-Hydroxymodhephene**

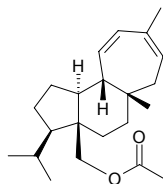
$C_{15}H_{24}O$  (220.36). Colorless oil,  $[\alpha]_{589nm} = -13^\circ$ ,  $[\alpha]_{578nm} = -13^\circ$ ,  $[\alpha]_{546nm} = -15^\circ$ ,  $[\alpha]_{436nm} = -27^\circ$ ,  $[\alpha]_{365nm} = -44^\circ$  ( $c = 1.37$ ,  $CHCl_3$ ). **Source:** JUAN MAO KUO BAO JU *Pluchea sericea*. **Ref:** 2277.

**10530 3-Hydroxymorindone**

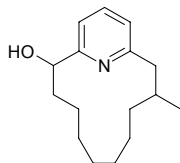
$C_{15}H_{10}O_6$  (286.24). **Source:** HONG YA DA JI *Knoxia valerianoides*. **Ref:** 660.

**10531 20-Hydroxymulin-11,13-dienyl acetate**

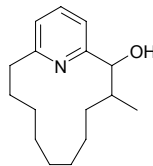
$C_{22}H_{34}O_2$  (330.52). Colorless oil,  $[\alpha]_D^{25} = +89.28^\circ$  ( $c = 0.168$ ,  $CHCl_3$ ). **Pharm:** Antimalarial (*in vivo Plasmodium berghei* NK65 on infected mouse, ip 10mg/(kg·d), growth InRt on parasite erythrocytic life cycle = 29%; control Chloroquine,  $IC_{50} = 2.5mg/(kg·d)$ ). **Source:** MI XIAO YING QIN *Azorella compacta* (aerial parts). **Ref:** 3815.

**10532 Hydroxymuscovopyridine A**

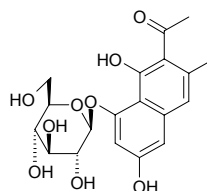
[89368-39-8]  $C_{16}H_{25}NO$  (247.38). **Source:** SHE XIANG *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*. **Ref:** 2.

**10533 Hydroxymuscovopyridine B**

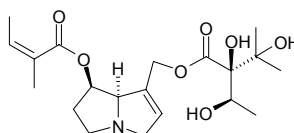
[89368-40-1]  $C_{16}H_{25}NO$  (247.38). **Source:** SHE XIANG *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*. **Ref:** 2.

**10534 6-Hydroxymusizin-8-O-β-D-glucoside**

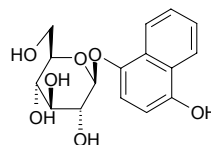
$C_{19}H_{22}O_9$  (394.38). **Source:** DA HUANG *Rheum officinale*. **Ref:** 2.

**10535 Hydroxymyoscorpine**

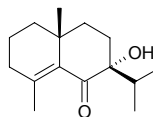
[126642-92-0]  $C_{20}H_{31}NO_7$  (397.47).  $[\alpha]_D = +2.2^\circ$  ( $c = 0.2$ , EtOH). **Source:** ZI CAO *Lithospermum erythrorhizon*. **Ref:** 2193.

**10536 4-Hydroxy-1-naphthalenyl-β-D-glucopyranoside**

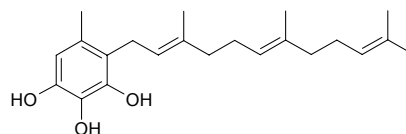
$C_{16}H_{18}O_7$  (322.32). **Source:** HU TAO REN *Juglans regia*. **Ref:** 660.

**10537 7α-Hydroxyneocalamone**

$C_{15}H_{24}O_2$  (236.36). **Source:** JI JI *Chloranthus serratus*. **Ref:** 660.

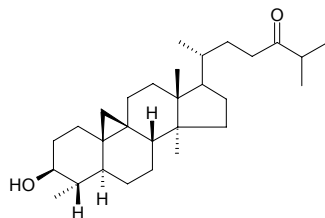
**10538 3-Hydroxyneogrifolin**

$C_{22}H_{32}O_3$  (344.50). White amorphous powder. **Source:** RE BEN MO GU *Albatrellus ovinus*. **Ref:** 2005.

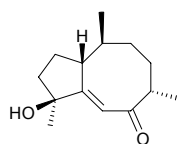


**10539 3 $\beta$ -Hydroxy-29-norcycloart-24-one**

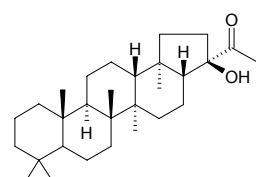
C<sub>29</sub>H<sub>48</sub>O<sub>2</sub> (428.70). Amorphous powder,  $[\alpha]_D^{24} = +42.6^\circ$  ( $c = 0.19$ , CHCl<sub>3</sub>). **Pharm:** Cytotoxic (Meth-A sarcoma cell line, ED<sub>50</sub> > 10  $\mu$ g/mL, LLC cell line, ED<sub>50</sub> > 10  $\mu$ g/mL). **Source:** QING HAO *Artemisia apiacea* [Syn. *Artemisia carvifolia*; *Artemisia caruifolia*] (aerial parts). **Ref:** 3510.

**10540 4-Hydroxy-14-nor-5-dumorten-7-one**

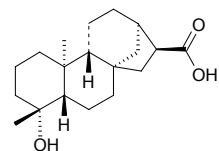
C<sub>14</sub>H<sub>22</sub>O<sub>2</sub> (222.33). Oil. **Source:** MAO DI QIAN *Dumortiera hirsuta*. **Ref:** 2283.

**10541 21-Hydroxy-30-norhopan-22-one**

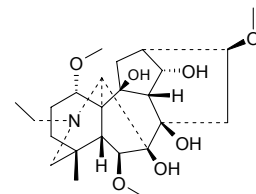
C<sub>29</sub>H<sub>48</sub>O<sub>2</sub> (428.70). mp 281~284°C. **Source:** ZHU ZONG CAO *Adiantum capillus-veneris*. **Ref:** 6.

**10542 4 $\alpha$ -Hydroxy-19-nor-ent-kauran-17-oic acid**

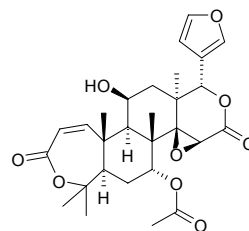
C<sub>19</sub>H<sub>30</sub>O<sub>3</sub> (306.45). **Pharm:** Platelet aggregation selected inhibitor (washed rabbit platelets, 200  $\mu$ mol/L: 100  $\mu$ mol/L AA induced, InRt = 4.5%; 10  $\mu$ g/mL collagen induced, InRt = 30.5%; 1 ng/mL PAF induced, InRt = 13.3%; 0.05 U/mL thrombin induced, InRt = 2.0%)<sup>[4654]</sup>, antioxidant (inhibits superoxide anion generation, fMLP/CB, IC<sub>50</sub> = (1.14  $\pm$  0.31)  $\mu$ g/mL,  $p < 0.001$ , control DPI, IC<sub>50</sub> = (0.13  $\pm$  0.06)  $\mu$ g/mL,  $p < 0.001$ )<sup>[4950]</sup>. **Source:** FAN LI ZHI *Annona squamosa* (stem; yield = 0.067%fw). **Ref:** 4654, 4950.

**10543 10-Hydroxynudicaulidine**

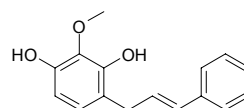
C<sub>24</sub>H<sub>39</sub>NO<sub>7</sub> (453.58). Amorphous,  $[\alpha]_D^{20} = +26.3^\circ$  (CHCl<sub>3</sub>). **Source:** GAO DA CUI QUE HUA *Delphinium excelsum*. **Ref:** 2055.

**10544 11 $\beta$ -Hydroxy-7 $\alpha$ -obacunyl acetate**

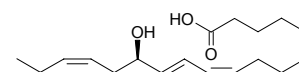
C<sub>28</sub>H<sub>34</sub>O<sub>9</sub> (514.58). Colorless prisms (CHCl<sub>3</sub>/MeOH), mp 245~248°C,  $[\alpha]_D^{23} = +21.2^\circ$  ( $c = 0.1$ , CHCl<sub>3</sub>). **Source:** ZHONG GUO YANG CHUN *Cedrela sinensis* (leaf). **Ref:** 3883.

**10545 Hydroxyobtustylene**

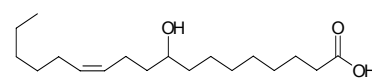
C<sub>16</sub>H<sub>16</sub>O<sub>3</sub> (256.30). **Pharm:** Platelet aggregation inhibitor (induced by arachidonic acid); prostaglandin biosynthesis inhibitor. **Source:** JIANG ZHEN XIANG *Dalbergia odorifera*. **Ref:** 660.

**10546 13(R)-Hydroxy-octadeca-(9Z,11E,15Z)-trien-oic acid**

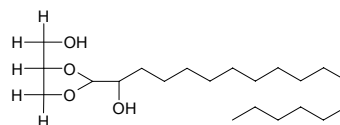
C<sub>18</sub>H<sub>30</sub>O<sub>3</sub> (294.44). Yellow oil,  $[\alpha]_D^{25} = -4.3^\circ$  ( $c = 0.37$ , CHCl<sub>3</sub>). **Source:** GUANG YE YAN ZI CAI *Potamogeton lucens* (whole herb). **Ref:** 3795.

**10547 9-D-Hydroxy-cis-12-octadecenoic acid**

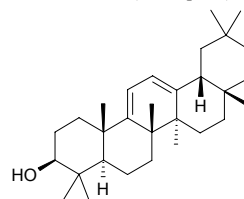
[38231-95-7] C<sub>18</sub>H<sub>34</sub>O<sub>3</sub> (298.47). mp (+) 30~32°C. **Source:** ZHI XIE MU PI *Holarhena antidysenterica*. **Ref:** 6.

**10548 1,2-O-[2'-Hydroxyoctadecyl]-glycerol**

C<sub>21</sub>H<sub>42</sub>O<sub>4</sub> (358.57). White powder. **Source:** DENG XIN LIU SHAN HU *Junceella juncea*. **Ref:** 2547.

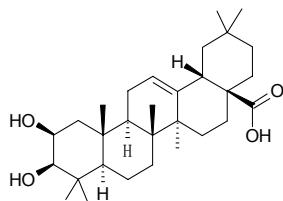
**10549 3 $\beta$ -Hydroxy-olean-9(11),12-diene**

C<sub>30</sub>H<sub>48</sub>O (424.72). White crystals (EtOAc), easily soluble in CHCl<sub>3</sub> and MeOH, mp 280~282°C. **Source:** SI CHUAN QING FENG TENG *Sabia schumanniana* (aerial parts). **Ref:** 4883.

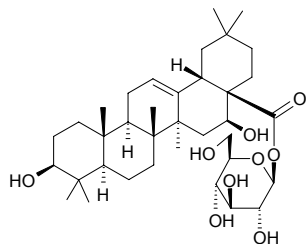


**10550 2 $\beta$ -Hydroxyoleanolic acid**

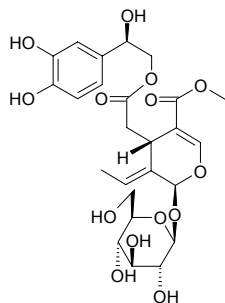
C<sub>30</sub>H<sub>48</sub>O<sub>4</sub> (472.71). Source: MI DIE XIANG *Rosmarinus officinalis*. Ref: 6.

**10551 16 $\beta$ -Hydroxy-18 $\beta$ H-oleanolic acid-28-O- $\beta$ -D-glucopyranoside**

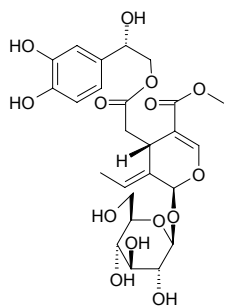
C<sub>36</sub>H<sub>58</sub>O<sub>9</sub> (634.86). White powder, mp 274~276°C. Source: TOU XU CONG MU *Aralia dasyphylla*. Ref: 398.

**10552 (2''R)-2''-Hydroxyoleuropein**

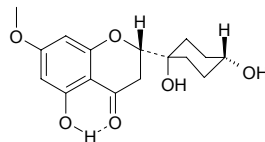
C<sub>25</sub>H<sub>32</sub>O<sub>14</sub> (556.53). Colorless amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>28</sup> = -152° (c = 0.30, MeOH). Source: MEI GUO BAI CEN *Fraxinus americana* (leaf). Ref: 5091.

**10553 (2''S)-2''-Hydroxyoleuropein**

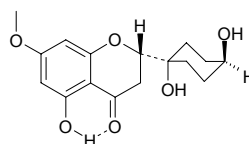
C<sub>25</sub>H<sub>32</sub>O<sub>14</sub> (556.53). Colorless amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>29</sup> = -140° (c = 0.24, MeOH). Source: MEI GUO BAI CEN *Fraxinus americana* (leaf). Ref: 5091.

**10554 (2S)-cis-4'-Hydroxy-ongokein**

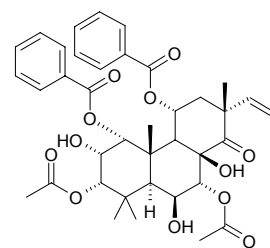
(2S)-5-Hydroxy-2-(cis-1',4'-dihydroxycyclohexyl)-7-methoxychroman-4-one C<sub>16</sub>H<sub>20</sub>O<sub>6</sub> (308.33). White crystals, mp 105~108°C, [ $\alpha$ ]<sub>D</sub> = +47° (c = 1.7). Source: EN GE MU *Ongokea gore* (stem cortex and root). Ref: 5308.

**10555 (2S)-trans-4'-Hydroxy-ongokein**

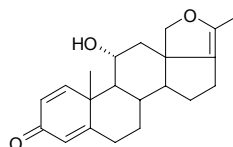
(2S)-5-Hydroxy-2-(trans-1',4'-dihydroxycyclohexyl)-7-methoxychroman-4-one C<sub>16</sub>H<sub>20</sub>O<sub>6</sub> (308.33). White amorphous powder, mp 68~71°C, [ $\alpha$ ]<sub>D</sub> = +68° (c = 0.69). Source: EN GE MU *Ongokea gore* (stem cortex and root). Ref: 5308.

**10556 6-Hydroxyorthosiphon B**

C<sub>38</sub>H<sub>44</sub>O<sub>12</sub> (692.77). Colorless amorphous solid, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -53.4° (c = 0.027, CHCl<sub>3</sub>). Source: XIONG RUI ZHUANG ZHI GUAN CAO *Orthosiphon stamineus* [Syn: *Orthosiphon aristatus*; *Orthosiphon grandiflorus*; *Orthosiphon spicatus*] (aerial parts). Ref: 4322.

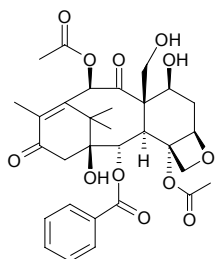
**10557 11 $\alpha$ -Hydroxy 18,20-oxido-3-oxo-pregna-1,4,17(20)-triene**

C<sub>21</sub>H<sub>26</sub>O<sub>3</sub> (326.44). Orange red plates (MeOH), mp 108~110°C. Source: DUAN ROU MAO ZHI XIE MU *Holarrhena pubescens* (bark). Ref: 5231.

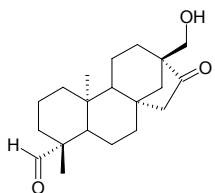


**10558 19-Hydroxy-13-oxobaccatin III**

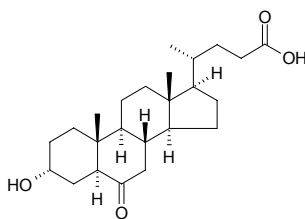
$C_{31}H_{36}O_{12}$  (600.63). **Pharm:** Cytotoxic (*in vitro*, 30 $\mu$ g/mL: A498, InRt = 79.8%; NCI-H226, InRt = 84.7%; A549, InRt = 45.4%; PC3, InRt = 88.2%; control Taxol, 30 $\mu$ g/mL: A498, InRt = 98.2%; NCI-H226, InRt = 71.2%; A549, InRt = 79.7%; PC3, InRt = 91.7%)<sup>[4800]</sup>. **Source:** SU MEN DA LA HONG DOU SHAN *Taxus sumatrana*. **Ref:** 662, 4800.

**10559 (4R,5S,8R,9R,10S,13S)-ent-17-Hydroxy-16-oxobeyeran-19-al**

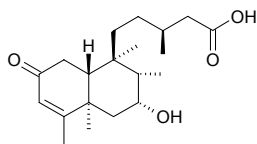
$C_{20}H_{30}O_3$  (318.46). White amorphous solid,  $[\alpha]_D^{20} = -35.0^\circ$  ( $c = 0.3$ ,  $CHCl_3$ ). **Pharm:** Antiproliferative and cytotoxic (*in vitro*, L-929,  $GI_{50} = 45.4\mu$ g/mL; K562,  $GI_{50} = 50\mu$ g/mL; HeLa,  $CC_{50} = 37.7\mu$ g/mL; control Paclitaxel, L-929,  $GI_{50} = 0.1\mu$ g/mL; K562,  $GI_{50} = 0.01\mu$ g/mL; HeLa,  $CC_{50} = 0.01\mu$ g/mL). **Source:** MU LAN<sup>(3)</sup> *Bruguiera gymnorrhiza* (stem, yield = 0.00046%). **Ref:** 4770.

**10560 3 $\alpha$ -Hydroxy-6-oxo-5 $\alpha$ -cholic acid**

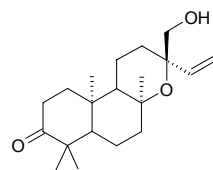
$C_{24}H_{38}O_4$  (390.57). mp 194°C. **Source:** YE ZHU DAN *Sus scrofa*, ZHU DAN *Sus scrofa domestica*. **Ref:** 6.

**10561 ent-7 $\beta$ -Hydroxy-2-oxo-3-cleroden-15-oic acid**

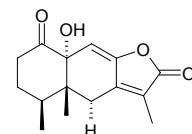
$C_{20}H_{32}O_4$  (336.48). Colorless oil,  $[\alpha]_D^{20} = -30^\circ$  ( $c = 0.195$ ,  $CHCl_3$ ). **Pharm:** Antimalarial (*Plasmodium falciparum* FcB1,  $IC_{50} = (4.3 \pm 0.9)\mu$ g/mL, control Chloroquine,  $IC_{50} = (0.05 \pm 0.002)\mu$ g/mL). **Source:** *Nuxia sphaerocephala* (leaf). **Ref:** 4419.

**10562 ent-16-Hydroxy-3-oxo-13-epi-manoyl oxide**

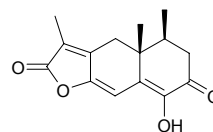
$C_{20}H_{32}O_3$  (320.48). Colorless needles (MeOH), mp 134–136°C,  $[\alpha]_D^{25} = -20.2^\circ$  ( $c = 0.3$ ,  $CHCl_3$ ). **Source:** HAI QI *Excoecaria agallocha* (root). **Ref:** 5114.

**10563 10 $\alpha$ -Hydroxy-1-oxoeremophila-7(11),8(9)-dien-12, 8-olide**

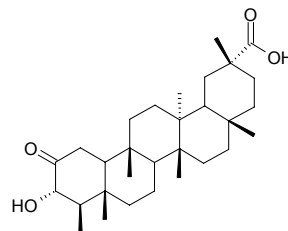
$C_{15}H_{18}O_4$  (262.31). **Source:** *Ligularia virgaurea* ssp. *oligocephala* (whole herb). **Ref:** 4981.

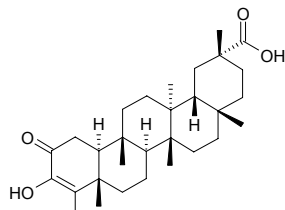
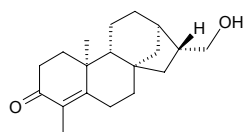
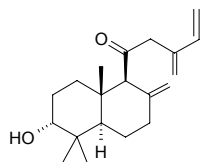
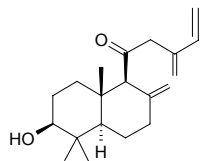
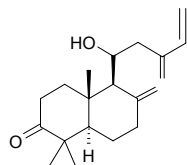
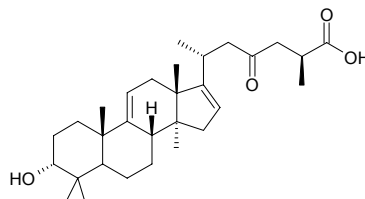
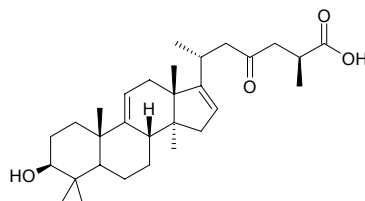
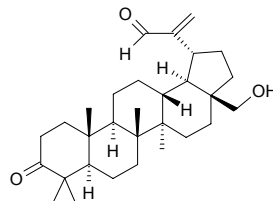
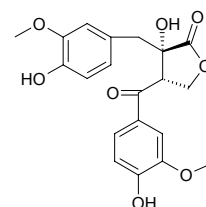
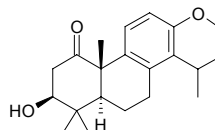
**10564 1-Hydroxy-2-oxoeremophil-1(10),7(11),8(9)-trien-12(8)-olide**

$C_{15}H_{16}O_4$  (260.29). Crystalline yellow solid, mp 198–200°C,  $[\alpha]_D = -187^\circ$  ( $c = 1$ ,  $CH_2Cl_2$ ). **Pharm:** Phytogrowth inhibitor (inhibits radicle growth of *Amaranthus hypochondriacus*,  $IC_{50} = 6.57\mu$ mol/L); calmodulin-dependent cAMP phosphodiesterase inhibitor ( $IC_{50} = (10.2 \pm 7.6)\mu$ mol/L, control Chlorpromazine,  $IC_{50} = (18.4 \pm 2.7)\mu$ mol/L). **Source:** *Malbranchea aurantiaca*. **Ref:** 5273.

**10565 3 $\alpha$ -Hydroxy-2-oxofriedelane-20 $\alpha$ -carboxylic acid**

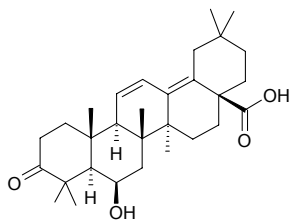
$C_{30}H_{48}O_4$  (472.71). Needles, mp 305–307°C (lit. mp 313–315°C),  $[\alpha]_D = +90^\circ$  ( $c = 1.0$ ,  $CHCl_3$ ). **Pharm:** Antibacterial (*Staphylococcus aureus*,  $IC_{50} > 12.5\mu$ g/mL, control MA,  $IC_{50} = 12.5\mu$ g/mL; *Pseudomonas aeruginosa*,  $IC_{50} > 25\mu$ g/mL, MA,  $C_{50} = 12.5\mu$ g/mL; *Cryptococcus neoformans*,  $IC_{50} > 50\mu$ g/mL, MA,  $IC_{50} > 12.5\mu$ g/mL); antifungal inactive (*Candida albicans*,  $IC_{50} > 50\mu$ g/mL, control MA,  $IC_{50} > 12.5\mu$ g/mL). **Source:** YI YE MEI DENG MU *Maytenus heterophylla*. **Ref:** 5189.



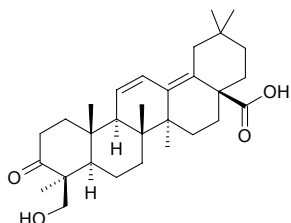
**10566 3-Hydroxy-2-oxo-3-friedelen-20 $\alpha$ -carboxylic acid**C<sub>30</sub>H<sub>46</sub>O<sub>4</sub> (470.70). Colorless acicular crystals, mp 318~320°C (MeOH).Source: LEI GONG TENG *Tripterygium wilfordii*. Ref: 670.**10567 16 $\beta$ H,17-Hydroxy-3-oxo-19-nor-ent-kaur-4-ene**C<sub>19</sub>H<sub>28</sub>O<sub>2</sub> (288.43). Colorless oil, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -72.0° (*c* = 0.47, CHCl<sub>3</sub>). Pharm:Antibacterial (*Staphylococcus aureus*, MIC < 1.5mg/mL; *Bacillus cereus*, *Pseudomonas aeruginosa* and *Escherichia coli*, MIC = 2.0~2.5mg/mL).Source: *Antennaria geyeri* (aerial parts). Ref: 3853.**10568 3 $\alpha$ -Hydroxy-11-oxo-labda-8(17),13(16),14-triene**C<sub>20</sub>H<sub>30</sub>O<sub>2</sub> (302.46). [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +9.8° (*c* = 1.5, CHCl<sub>3</sub>). Source: YUAN YE TAI*Jamesoniella colorata*. Ref: 3375.**10569 3 $\beta$ -Hydroxy-11-oxo-labda-8(17),13(16),14-triene**C<sub>20</sub>H<sub>30</sub>O<sub>2</sub> (302.46). [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +47.0° (*c* = 1.5, CHCl<sub>3</sub>). Source: YUAN YE TAI*Jamesoniella colorata*. Ref: 3375.**10570 11-Hydroxy-3-oxo-labda-8(17),13(16),14-triene**C<sub>20</sub>H<sub>30</sub>O<sub>2</sub> (302.46). [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +8.14° (*c* = 1.2, CHCl<sub>3</sub>). Source: YUAN YE TAI*Jamesoniella colorata*. Ref: 3375.**10571 (25R)-3 $\alpha$ -Hydroxy-23-oxo-9,16-lanostadien-26-oic-acid**C<sub>30</sub>H<sub>46</sub>O<sub>4</sub> (470.70). Gum, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +17.5° (*c* = 0.013, CHCl<sub>3</sub>). Source: MEI LITENG HUANG *Garcinia speciosa* (bark). Ref: 3762.**10572 (25R)-3 $\beta$ -Hydroxy-23-oxo-9,16-lanostadien-26-oic acid**C<sub>30</sub>H<sub>46</sub>O<sub>4</sub> (470.70). White powder, mp 218~220°C, [ $\alpha$ ]<sub>D</sub><sup>29</sup> = +58° (*c* = 0.34,MeOH); mp 220~222°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -61° (*c* = 0.013, MeOH). Source: SHANFENG GUO *Garcinia hombroniana* (pericarp), MEI LI TENG HUANG*Garcinia speciosa* (bark). Ref: 3762, 5085.**10573 28-Hydroxy-3-oxo-lup-20-(29)-en-30-al**C<sub>30</sub>H<sub>46</sub>O<sub>3</sub> (454.70). Colorless gummy substance, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +9.62° (*c* = 1.0,CHCl<sub>3</sub>). Pharm: Cytotoxic (NSCLC-N6 cell line, IC<sub>50</sub> = (15±0.06)μg/mL).Source: JU MI JIN HE HUAN *Acacia mellifera* (stem cortex). Ref: 3806.**10574 (8S,8'S)-(+)-8-Hydroxy-oxomatairesinol**C<sub>20</sub>H<sub>20</sub>O<sub>8</sub> (388.38). Pale yellow amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +97.3° (*c* = 0.83,MeOH); [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +95.1° (*c* = 0.83, THF). Source: YI YE TIE SHAN *Tsuga**heterophylla* (sapwood). Ref: 3965.**10575 3 $\beta$ -Hydroxy-1-oxo-13-O-methyltotarol**C<sub>21</sub>H<sub>30</sub>O<sub>3</sub> (330.47). Solid, mp = 179~180.6°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +3.5° (*c* = 1.3, MeOH).Source: HONG GUI *Chamaecyparis formosensis*. Ref: 2315.

**10576 6 $\beta$ -Hydroxy-3-oxo-11,13(18)-oleanadien-28-oic acid**

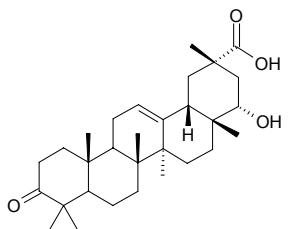
C<sub>30</sub>H<sub>44</sub>O<sub>4</sub> (468.68). Colorless prisms; mp 235~237°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -60.4° (c = 0.31, CHCl<sub>3</sub>). Source: XUAN CHUI JIA MI *Viburnum suspensum*. Ref: 1966.

**10577 24-Hydroxy-3-oxo-11,13(18)-oleanadien-28-oic acid**

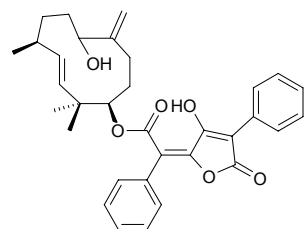
C<sub>30</sub>H<sub>44</sub>O<sub>4</sub> (468.68). Colorless prisms, mp 217~218°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -86.5° (c = 0.38, CHCl<sub>3</sub>). Source: XUAN CHUI JIA MI *Viburnum suspensum*. Ref: 1966.

**10578 22 $\alpha$ -Hydroxy-3-oxoolean-12-en-29-oic acid**

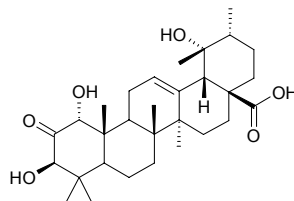
C<sub>30</sub>H<sub>46</sub>O<sub>4</sub> (470.70). Pharm: DPPH scavenger inactive (for 40 $\mu$ mol/L DPPH radical, SC<sub>50</sub> > 40 $\mu$ mol/L). Source: SUO LA MU *Salacia prinoides* [Syn. *Salacia chinensis*] (stem). Ref: 4378.

**10579 (3-Hydroxy-5-oxo-4-phenyl-5H-furan-2-ylidene)-phenylacetic Acid 6-hydroxy-1,7(11)-humuladienyl-10-yl ester**

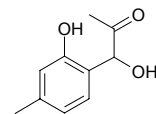
C<sub>33</sub>H<sub>36</sub>O<sub>6</sub> (528.65). Oil, [ $\alpha$ ]<sub>D</sub> = -87.5° (c = 0.4, CHCl<sub>3</sub>). Source: Tylimanthus *tenellus*. Ref: 4280.

**10580 1 $\alpha$ -Hydroxy-2-oxopomolic acid**

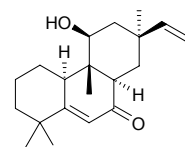
C<sub>30</sub>H<sub>46</sub>O<sub>6</sub> (502.70). Pharm: Immunosuppressant (hmn mononuclear cells antiproliferation, involving T lymphocytes, B lymphocytes, and macrophages isolated from peripheral blood, IC<sub>50</sub> = 32.5 $\mu$ mol/L; control Cyclosporine A, IC<sub>50</sub> = 0.012 $\mu$ mol/L). Source: TAI WAN PI PA *Eriobotrya deflexa* (leaf). Ref: 3064.

**10581 2-(1'-Hydroxy-2'-oxopropyl)-5-methylphenol**

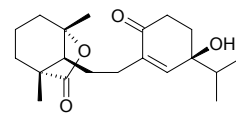
C<sub>10</sub>H<sub>12</sub>O<sub>3</sub> (180.21). [ $\alpha$ ]<sub>D</sub><sup>21</sup> = -13.1° (c = 0.64, CHCl<sub>3</sub>). Source: PEI LAN *Eupatorium fortunei* (aerial parts). Ref: 3077.

**10582 11 $\beta$ -Hydroxy-7-oxo-rosa-5,15-diene**

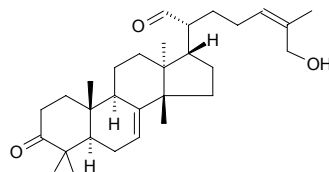
C<sub>20</sub>H<sub>30</sub>O<sub>2</sub> (302.46). [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +76° (c = 0.41, CHCl<sub>3</sub>). Source: *Gackstroemia decipiens*. Ref: 3907.

**10583 13S-Hydroxy-9-oxo-9,10-seco-abiet-8(14)-en-18,10 $\alpha$ -olide**

C<sub>20</sub>H<sub>30</sub>O<sub>4</sub> (334.46). Colorless oil, [ $\alpha$ ]<sub>D</sub><sup>23</sup> = -4.8° (c = 0.46, CHCl<sub>3</sub>). Pharm: EBV-EA inhibitor (TPA-induced, IC<sub>50</sub> = 273mol ratio/32pmol TPA, control Curcumin, IC<sub>50</sub> = 341mol ratio/32pmol TPA). Source: SA HA LIN YUN SHAN *Picea glehnii* (stem cortex). Ref: 5028.

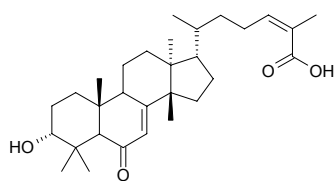
**10584 (24Z)-26-Hydroxy-3-oxo-7,24-tirucalladien-21-al**

(24Z)-26-Hydroxy-3-oxo-7,24-euphadien-21-al [121063-65-8] C<sub>30</sub>H<sub>46</sub>O<sub>3</sub> (454.70). Source: KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. Ref: 12.

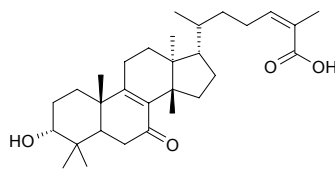


**10585 3 $\alpha$ -Hydroxy-6-oxo-7,24Z-tirucalladien-26-oic acid**

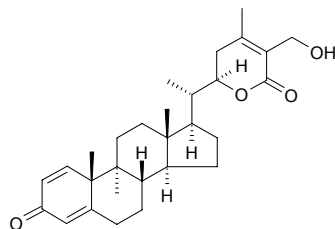
C<sub>30</sub>H<sub>46</sub>O<sub>4</sub> (470.70). Colorless powder, mp 233~234°C, [ $\alpha$ ]<sub>D</sub> = -29.9° (*c* = 0.5, MeOH). Source: *Juliania adstringens* (bark). Ref: 3786.

**10586 3 $\alpha$ -Hydroxy-7-oxo-8,24Z-tirucalladien-26-oic acid**

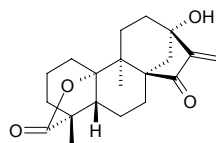
C<sub>30</sub>H<sub>46</sub>O<sub>4</sub> (470.70). Colorless powder, mp 235~240°C, [ $\alpha$ ]<sub>D</sub> = -45.1° (*c* = 0.1, MeOH). Source: *Juliania adstringens* (bark). Ref: 3786.

**10587 27-Hydroxy-3-oxo-witha-1,4,24-trienolide**

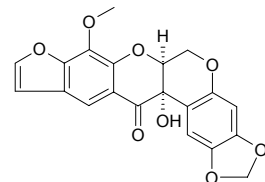
C<sub>28</sub>H<sub>38</sub>O<sub>4</sub> (438.61). Source: CUI MIAN SHUI QIE *Withania somnifera* (leaf). Ref: 5329.

**10588 13-Hydroxy-15-oxozoapatlin**

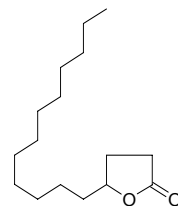
C<sub>20</sub>H<sub>26</sub>O<sub>4</sub> (330.43). Pharm: Antineoplastic (*in vivo* hollow fiber test, 25~100mg/kg, active with KB and LNCaP cells); cytotoxic (cultured KB, ED<sub>50</sub> = 1.2μg/mL, LNCaP, ED<sub>50</sub> = 1.5μg/mL, Lu1, ED<sub>50</sub> = 5.2μg/mL). Source: *Parinari sprucei* (leaf). Ref: 4991.

**10589 12 $\alpha$ -Hydroxypachyrrhizone**

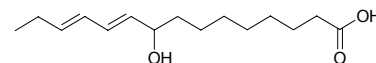
12 $\alpha$ -Hydroxypachyrrhizone C<sub>20</sub>H<sub>14</sub>O<sub>8</sub> (382.33). mp 214°C. Pharm: Antiviral (HSV-1, IC<sub>50</sub> = 18.0μg/mL; HSV-2, IC<sub>50</sub> = 18.5μg/mL)<sup>[4180]</sup>. Source: DI GUA ZI *Pachyrrhizus erosus*. Ref: 6, 4180.

**10590  $\gamma$ -Hydroxypalmitic acid lactone**

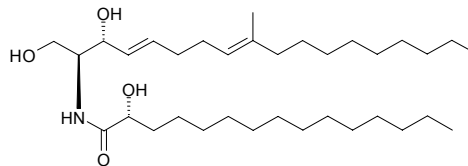
C<sub>16</sub>H<sub>30</sub>O<sub>2</sub> (254.42). mp 40.7~41.3°C. Source: HONG MU JI CAO *Desmodium gangeticum*. Ref: 6.

**10591 9-Hydroxy-10,12-pentadecadienoic acid**

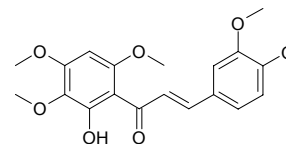
C<sub>15</sub>H<sub>26</sub>O<sub>3</sub> (254.37). Source: CU LIU GUO *Hippophae rhamnoides*. Ref: 2.

**10592 (2S,2'R,3R,4E,8E)-N-2'-Hydroxypentadecanoyl-2-amino-9-methyl-4,8-octadecadiene-1,3-diol**

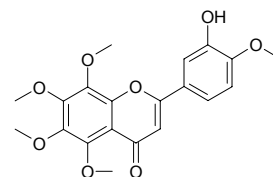
C<sub>34</sub>H<sub>65</sub>NO<sub>4</sub> (551.90). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>21</sup> = +7.0° (*c* = 0.1, CHCl<sub>3</sub>). Source: BAO BAN E GAO *Amanita pantherina*, *Sarcodon aspratus*. Ref: 4195.

**10593 2'-Hydroxy-3,4,3',4',6'-pentamethoxychalcone**

C<sub>20</sub>H<sub>22</sub>O<sub>7</sub> (374.39). Pale yellow needles, mp 134~136°C. Source: RU JU *Citrus kinokuni* (peel). Ref: 4132.

**10594 3'-Hydroxy-5,6,7,8,4'-pentamethoxyflavone**

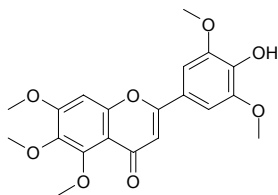
[112448-39-2] C<sub>20</sub>H<sub>20</sub>O<sub>8</sub> (388.37). Colorless rhombic crystals (hexane-ethyl acetate), mp 139~140°C. Pharm: Cytotoxic (mus myelocytic leukemia cells, strongly induces cell differentiation, 50μmol/L, growing rate = 37%, activity of macrophages > 25%, 5μmol/L, growing rate = 50%, activity of macrophages > 10%). Source: JU PI *Citrus reticulata*. Ref: 997, 1063.



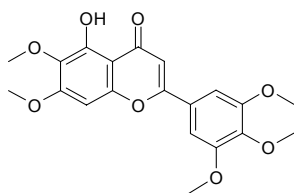


**10595 4'-Hydroxy-5,6,7,3',5'-pentamethoxyflavone**

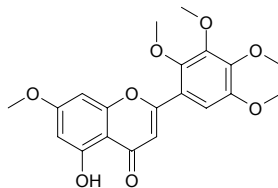
$C_{20}H_{20}O_8$  (388.38). **Pharm:** Cytotoxic (HeLa,  $IC_{50} = 51.2\mu\text{g/mL}$ , control Mitomycin C,  $IC_{50} = 1.7\mu\text{g/mL}$ ). **Source:** TUAN JI AI NA XIANG *Blumea glomerata*. **Ref:** 4092.

**10596 5-Hydroxy-6,7,3',4',5'-pentamethoxyflavone**

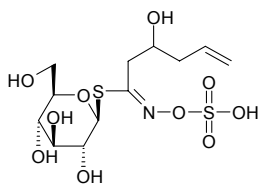
$C_{20}H_{20}O_8$  (388.38). **Source:** ZHI ZI *Gardenia jasminoides* [Syn. *Gardenia florida*]. **Ref:** 626.

**10597 5-Hydroxy-7,2',3',4',5'-pentamethoxyflavone**

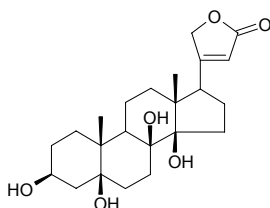
$C_{20}H_{20}O_8$  (388.38). **Pharm:** Anti-HIV-1 inactive. **Source:** TAI GUO ZHI ZI *Gardenia thailandica* (leaf and twig). **Ref:** 4963.

**10598 2-Hydroxypent-4-enylglucosinate**

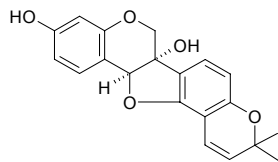
$C_{12}H_{21}NO_{10}S_2$  (403.43). **Source:** JIE CAI *Brassica juncea*. **Ref:** 660.

**10599 8-Hydroxy-periplogenin**

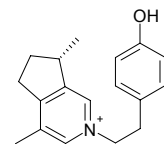
$C_{23}H_{34}O_6$  (406.52). mp 234–236°C,  $[\alpha]_D = +32.4^\circ$ . **Source:** XI NAN GANG LIU *Periploca forrestii*. **Ref:** 2498.

**10600 Hydroxyphaseollin**

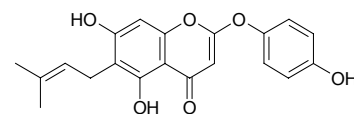
6 $\alpha$ -Hydroxyphaseollin  $C_{20}H_{18}O_5$  (338.36). Adhesive oil,  $[\alpha]_D^{20} = -207^\circ$  (ethyl acetate). **Pharm:** Antifungal (*Botrytis cinerea*). **Source:** HEI DA DOU *Glycine max*. **Ref:** 661.

**10601 N-(p-Hydroxyphenethyl)actinidine**

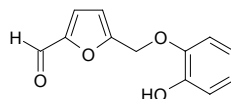
Valerianae alkaloid A [15794-92-0]  $C_{18}H_{22}NO^+$  (268.38). mp 201–203°C (dec). **Pharm:** Cholinesterase inhibitor. **Source:** XIE CAO *Valeriana officinalis*. **Ref:** 6, 658, 660.

**10602 2-(p-Hydroxyphenoxy)-5,7-dihydroxy-6-isopentenylchromone**

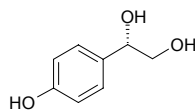
$C_{20}H_{18}O_6$  (354.36). Yellow-white powder. **Source:** CHAO XIAN YIN YANG HUO *Epimedium koreanum*. **Ref:** 417.

**10603 5-(2-Hydroxyphenoxy)methylfurfural**

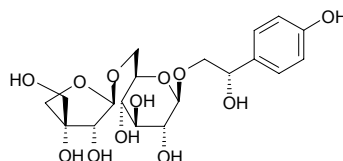
$C_{12}H_{10}O_4$  (218.21). mp 102–103°C. **Source:** PO LUO MEN ZAO JIA *Cassia fistula* (seed: yield = 0.00070%). **Ref:** 4642.

**10604 1'-(4-Hydroxyphenyl)ethane-1',2'-diol**

$C_8H_{10}O_3$  (154.17). mp 128–132°C,  $[\alpha]_D^{24} = +10^\circ$ . **Source:** HU SUI ZI *Coriandrum sativum* (whole herb). **Ref:** 4302.

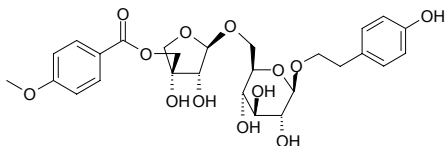
**10605 (1'S)-1'-(4-Hydroxyphenyl)ethane-1',2'-diol 2'-O- $\beta$ -D-Apiofuranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside**

$C_{19}H_{28}O_{12}$  (448.43). Amorphous powder,  $[\alpha]_D^{22} = -38^\circ$  ( $c = 0.5$ , MeOH). **Source:** HU SUI ZI *Coriandrum sativum*. **Ref:** 4302.



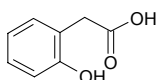
**10606 2-(4-Hydroxyphenyl)ethyl-1-O- $\beta$ -D-[5-O-(4-methoxybenzoyl)]-apiofuranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside**

$C_{27}H_{34}O_{13}$  (566.56). Amorphous powder,  $[\alpha]_D^{22} = -55.4^\circ$  ( $c = 1.93$ , MeOH). **Pharm:** NO production inhibitor (LPS-activated macrophage-like J774.1 cells,  $IC_{50} = 55.1 \mu\text{g/mL}$ , control *L*-NMMA,  $IC_{50} = 27.4 \mu\text{g/mL}$ )<sup>[4473]</sup>. **Source:** BAN ZHEN ZHONG HUA SHU *Tabebuia impetiginosa* (bark), HE SE ZHONG HUA SHU *Tabebuia avellanedae* (inner bark). **Ref:** 3817, 4473.



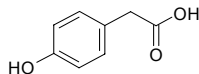
**10607 2-Hydroxyphenyl acetic acid**

[614-75-5]  $C_8H_8O_3$  (152.15). mp 147~149°C. **Source:** LUO XIN FU *Astilbe chinensis*. **Ref:** 6.



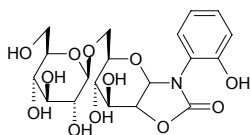
**10608 p-Hydroxyphenyl acetic acid**

[156-38-7]  $C_8H_8O_3$  (152.15). mp 148~150°C. **Source:** QIAN LI GUANG *Senecio scandens* [Syn. *Senecio chinensis*], LI MENG YE *Citrus limonia*, LI MENG GEN *Citrus limonia*. **Ref:** 6.



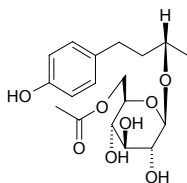
**10609 1-(2-Hydroxyphenylamino)-1-deoxy-beta-gentiobioside 1,2-carbamate**

$C_{19}H_{25}NO_{12}$  (459.41). **Source:** YU SHU SHU *Zea mays* (root). **Ref:** 5212.



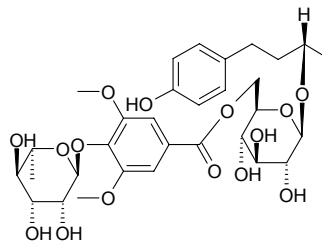
**10610 (S)-4-(4-Hydroxyphenyl)-2-butanol 2-O-(6-O-acetyl)-beta-D-glucopyranoside**

$C_{18}H_{26}O_8$  (370.40). Colorless powder,  $[\alpha]_D^{25} = -40.2^\circ$  ( $c = 0.8$ , MeOH). **Source:** MA SHI DA HUANG *Rheum maximowiczii* (root). **Ref:** 5136.



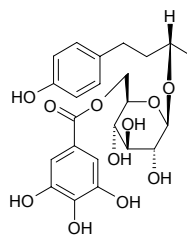
**10611 (S)-4-(4-Hydroxyphenyl)-2-butanol 2-O-[6-O-(3,5-dimethoxy-4-O-alpha-L-rhamnopyranosylgalloyl)-beta-D-glucopyranoside]**

$C_{31}H_{42}O_{15}$  (654.67). Pale yellow oil,  $[\alpha]_D^{25} = -13.8^\circ$  ( $c = 1.3$ , MeOH). **Source:** MA SHI DA HUANG *Rheum maximowiczii* (root). **Ref:** 5136.



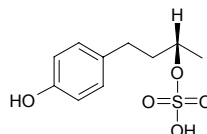
**10612 (S)-4-(4-Hydroxyphenyl)-2-butanol 2-O-(6-O-galloyl)-beta-D-glucopyranoside**

$C_{23}H_{28}O_{11}$  (480.47). Pale orange oil,  $[\alpha]_D^{25} = -41.6^\circ$  ( $c = 1.0$ , MeOH). **Source:** MA SHI DA HUANG *Rheum maximowiczii* (root). **Ref:** 5136.



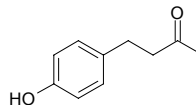
**10613 (S)-4-(4-Hydroxyphenyl)-2-butanol 2-O-sulfate**

$C_{10}H_{14}O_5S$  (246.28). Hygroscopic white amorphous powder,  $[\alpha]_D^{25} = +20.9^\circ$  ( $c = 1.3$ , MeOH). **Source:** MA SHI DA HUANG *Rheum maximowiczii* (root). **Ref:** 5136.



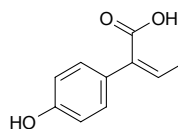
**10614 4-(4-Hydroxyphenyl)-2-butanone**

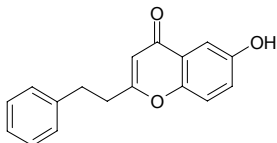
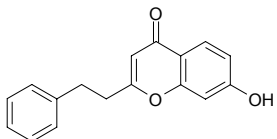
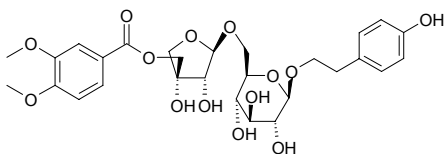
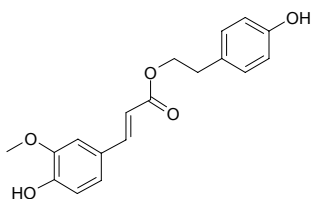
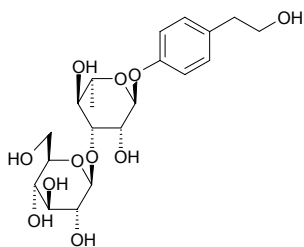
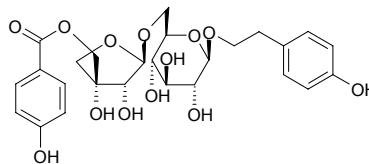
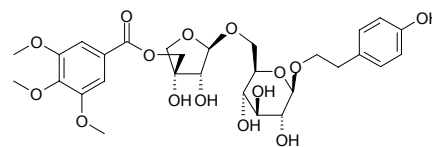
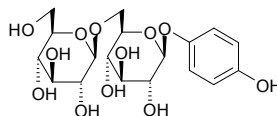
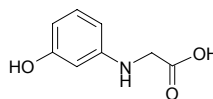
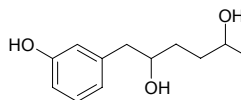
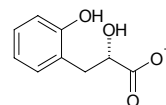
$C_{10}H_{12}O_2$  (164.21). **Source:** MAO GUO QI *Acer nikoense* (stem cortex). **Ref:** 4304.



**10615 p-Hydroxyphenyl crotonic acid**

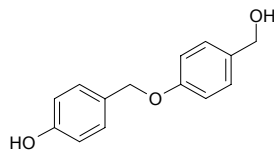
$C_{10}H_{10}O_3$  (178.19). **Source:** ZHI MU *Anemarrhena asphodeloides*. **Ref:** 660.



**10616 6-Hydroxy-2-(2-phenylethyl) chromone**[84294-90-6] C<sub>17</sub>H<sub>14</sub>O<sub>3</sub> (266.30). Colorless acicular crystals, mp 214~215°C.Source: BAI MU XIANG *Aquilaria sinensis*. Ref: 13, 660.**10617 7-Hydroxy-2-(2-phenylethyl)chromone**C<sub>17</sub>H<sub>14</sub>O<sub>3</sub> (266.30). Colorless needles, mp 163~164°C (MeOH). Source:CHEN XIANG *Aquilaria agallocha*. Ref: 4173.**10618 2-(4-Hydroxyphenyl)ethyl 1-O-β-D-[5-O-(3,4-dimethoxybenzoyl)]-apiofuranosyl-(1→6)-β-D-glucopyranoside**C<sub>28</sub>H<sub>36</sub>O<sub>14</sub> (596.59). Amorphous powder, [α]<sub>D</sub><sup>22</sup> = -51.6° (c = 2.15, MeOH).Pharm: NO production inhibitor (LPS-activated macrophage-like J774.1 cells, IC<sub>50</sub> = 31.1 μg/mL, control *L*-NMMA, IC<sub>50</sub> = 27.4 μg/mL)<sup>[4473]</sup>. Source: BAN ZHEN ZHONG HUA SHU *Tabebuia impetiginosa* (bark), HE SE ZHONG HUA SHU *Tabebuia avellanedae* (inner bark). Ref: 3817, 4473.**10619 (4-Hydroxyphenyl)ethyl trans-ferulate**C<sub>18</sub>H<sub>18</sub>O<sub>5</sub> (314.34). Source: XIONG RUI ZHUANG ZHI GUAN CAO*Orthosiphon stamineus* [Syn: *Orthosiphon aristatus*; *Orthosiphon grandiflorus*; *Orthosiphon spicatus*] (aerial parts: yield = 0.0010%dw). Ref: 3053.**10620 4-Hydroxyphenylethyl 4-O-β-D-glucopyranosyl-(1→3)-O-α-L-rhamnopyranoside**C<sub>20</sub>H<sub>30</sub>O<sub>11</sub> (446.16). Amorphous powder, [α]<sub>D</sub><sup>27</sup> = -25.1° (c = 3.07, MeOH).Source: CAO MAO JIA DU JUAN *Barleria strigosa*. Ref: 4288.**10621 2-(4-Hydroxyphenyl)ethyl-1-O-β-D-[5-O-(4-hydroxybenzoyl)]-apiofuranosyl-(1→6)-β-D-glucopyranoside**C<sub>26</sub>H<sub>32</sub>O<sub>13</sub> (552.54). Colorless amorphous solid, [α]<sub>D</sub><sup>25</sup> = -26.2° (c = 0.029, MeOH). Pharm: NO production inhibitor (LPS-activated macrophage-like J774.1 cells, IC<sub>50</sub> = 22.0 μg/mL, control *L*-NMMA, IC<sub>50</sub> = 27.4 μg/mL). Source: HE SE ZHONG HUA SHU *Tabebuia avellanedae* (inner bark). Ref: 4473.**10622 2-(4-Hydroxyphenyl)ethyl 1-O-β-D-[5-O-(3,4,5-trimethoxybenzoyl)]-apiofuranosyl-(1→6)-β-D-glucopyranoside**C<sub>29</sub>H<sub>38</sub>O<sub>15</sub> (626.62). Amorphous powder, [α]<sub>D</sub><sup>22</sup> = -54° (c = 0.51, MeOH). Source: BAN ZHEN ZHONG HUA SHU *Tabebuia impetiginosa* (bark). Ref: 3817.**10623 4-Hydroxyphenyl-β-gentiobioside**C<sub>18</sub>H<sub>26</sub>O<sub>12</sub> (434.40). Source: YUE JU YE *Vaccinium vitis-idaea*. Ref: 6.**10624 m-Hydroxyphenylglycine**C<sub>8</sub>H<sub>9</sub>NO<sub>3</sub> (167.17). Source: ZE QI *Euphorbia helioscopia*. Ref: 6.**10625 1-(3-Hydroxyphenyl)-hexane-2,5-diol**C<sub>12</sub>H<sub>18</sub>O<sub>3</sub> (210.28). White solid, [α]<sub>D</sub><sup>20</sup> = -5.7° (c = 0.40, MeOH). Source: MU LAN<sup>(3)</sup> *Bruguiera gymnorrhiza* (stem). Ref: 5057.**10626 (2S)-(O-Hydroxyphenyl)lactate**C<sub>9</sub>H<sub>9</sub>O<sub>4</sub><sup>-</sup> (181.17). Colorless powder, [α]<sub>D</sub> = +77° (c = 0.07, MeOH). Pharm: Tyrosinase inhibitor (333.3 μmol/L, InRt = 7.5%; control Kojic acid, 333.3 μmol/L, InRt = 59.8%). Source: ZANG HONG HUA *Crocus sativus* (pollen). Ref: 4233.

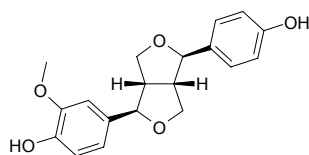
**10627 4-[(4-hydroxyphenyl)methoxy]benzenemethanol**

$C_{14}H_{14}O_3$  (230.27). Colorless flake crystals, mp 132~134°C. Source: AO SHE LAN *Coeloglossum viride* [Syn. *Coeloglossum viride* var. *bracteatum*]. Ref: 2248.

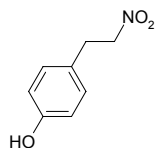
**10628 (1S,2R,5S,6R)-2-(4-Hydroxyphenyl)-6-(3-methoxy-4-hydroxyphenyl)-3,7-dioxabicyclo[3.3.0]octane**

$C_{19}H_{20}O_5$  (328.37). White amorphous solid,  $[\alpha]_D^{23} = -66.9^\circ$  ( $c = 0.28$ ,  $CHCl_3$ ).

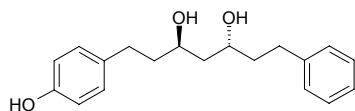
Pharm: Inhibits inducible nitric oxide synthase (iNOS) expression (lipopolysaccharide (LPS)-induced, RAW264.7 cells). Source: DUAN SHE GU *Balanophora abbreviata*. Ref: 2582.

**10629 2-(4-Hydroxyphenyl)-1-nitroethane**

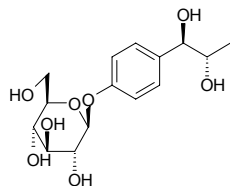
$C_8H_9NO_3$  (167.17). Pale yellow oil. Pharm: Antibacterial inactive (TLC, *Bacillus subtilis*, *Staphylococcus aureus*, *Escherichia coli*, 31.4 $\mu$ g/cm<sup>2</sup>); antifungal inactive (TLC, *Candida albicans*, *Fusarium oxysporum*, *Cladosporium herbarum*, 31.4 $\mu$ g/cm<sup>2</sup>). Source: MEI ZHOU GUAN YIN LIAN *Lysichitum americanum* (leaf). Ref: 3897.

**10630 (3R,5R)-1-(4-Hydroxyphenyl)-7-phenyl-3,5-heptanediol**

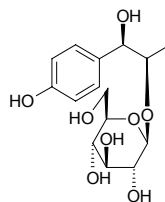
$C_{19}H_{24}O_3$  (300.4). Pharm: Antiemetic (young male chicks, copper sulfate induced emesis assay, 50mg/kg, InRt = 37.7%,  $p < 0.001$ ). Source: GAO LIANG JIANG *Alpinia officinarum* (rhizome: yield = 0.0017%dw). Ref: 4649.

**10631 erythro-1'-(4-Hydroxyphenyl)propane-1',2'-diol-4-O-β-D-glucopyranoside**

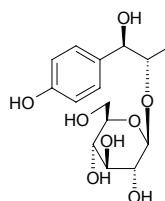
$C_{15}H_{22}O_8$  (330.34). Amorphous powder,  $[\alpha]_D^{22} = -38^\circ$  ( $c = 0.7$ , MeOH). Source: HUI QIN *Pimpinella anisum* (fruit). Ref: 4242.

**10632 (1'R,2'R)-1'-(4-Hydroxyphenyl)propane-1',2'-diol-2'-O-β-D-glucopyranoside**

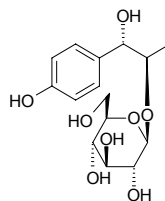
$C_{15}H_{22}O_8$  (330.34). Amorphous powder,  $[\alpha]_D^{22} = -51^\circ$  ( $c = 0.8$ , MeOH). Source: HUI QIN *Pimpinella anisum* (fruit). Ref: 4242.

**10633 (1'R,2'S)-1'-(4-Hydroxyphenyl)propane-1',2'-diol-2'-O-β-D-glucopyranoside**

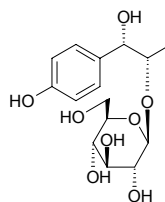
$C_{15}H_{22}O_8$  (330.34). Amorphous powder,  $[\alpha]_D^{21} = -33^\circ$  ( $c = 0.3$ , MeOH). Source: HUI QIN *Pimpinella anisum* (fruit). Ref: 4242.

**10634 (1'S,2'R)-1'-(4-Hydroxyphenyl)propane-1',2'-diol-2'-O-β-D-glucopyranoside**

$C_{15}H_{22}O_8$  (330.34). Amorphous powder,  $[\alpha]_D^{21} = -16^\circ$  ( $c = 0.2$ , MeOH). Source: HUI QIN *Pimpinella anisum* (fruit). Ref: 4242.

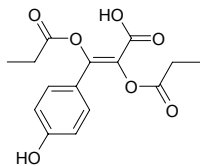
**10635 (1'S,2'S)-1'-(4-Hydroxyphenyl)propane-1',2'-diol-2'-O-β-D-glucopyranoside**

$C_{15}H_{22}O_8$  (330.34). Amorphous powder,  $[\alpha]_D^{22} = +21^\circ$  ( $c = 1.0$ , MeOH). Source: HUI QIN *Pimpinella anisum* (fruit). Ref: 4242.

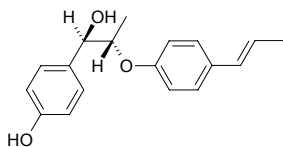


**10636 3-(4-Hydroxyphenyl)-trans-propenoic acid-2,3-dihydroxypropyl ester**

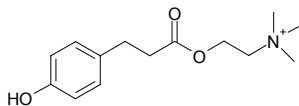
$C_{15}H_{16}O_7$  (308.29). Source: PU HUANG *Typha angustata*. Ref: 2.

**10637 threo-(7S,8R)-1-(4-Hydroxyphenyl)-2-[4-(E)-propenylphenoxy]-propan-1-ol**

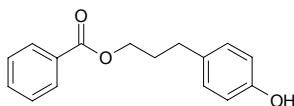
$C_{18}H_{20}O_3$  (284.36). Yellow oil;  $[\alpha]_D^{20} = +24.99^\circ$  ( $c = 0.5$ ,  $CHCl_3$ ). Pharm: Inhibitory activity against NFAT transcription ( $IC_{50} = (15.6 \pm 0.4) \mu\text{mol/L}$ , control Cyclosporin A,  $IC_{50} = (0.29 \pm 0.01) \mu\text{mol/L}$ ). Source: HUA CHA BIAO *Ribes fasciculatum* var. *chinense*. Ref: 2536.

**10638 3-(4-Hydroxyphenyl)propionyl choline**

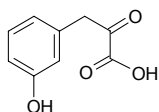
$C_{14}H_{22}NO_3^+$  (252.34). Amorphous solid. Pharm: Tyrosine kinase inhibitor ( $IC_{50} = 508 \mu\text{mol/L}$ , interleukin-2 inducible T-cell kinase). Source: MO LEI NAN YANG SHEN *Polyscias murrayi*. Ref: 5252.

**10639 3'-(4''-Hydroxyphenyl)-propyl benzoate**

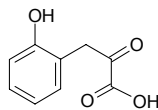
$C_{16}H_{16}O_3$  (256.30). Pale yellow oil. Pharm: Antifungal (*Candida albicans*,  $IC_{50} = (5.36 \pm 0.01) \mu\text{g/mL}$ , control Amphotericin B,  $IC_{50} = (0.04 \pm 0.00) \mu\text{g/mL}$ ); Anti-inflammatory (COX-1 inhibitor, inactive, control Aspirin,  $IC_{50} = (4.22 \pm 0.48) \mu\text{g/mL}$ ; COX-2 inhibitor,  $IC_{50} = (1.88 \pm 0.17) \mu\text{g/mL}$ , Aspirin,  $IC_{50} = (13.66 \pm 0.59) \mu\text{g/mL}$ ). Source: *Croton hutchinsonianus* (branche: yield = 0.0005%dw). Ref: 1571.

**10640 m-Hydroxyphenylpyruvic acid**

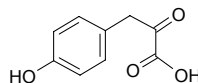
$C_9H_8O_4$  (180.16). Source: NING MENG GEN *Citrus limon*. Ref: 6.

**10641 o-Hydroxyphenylpyruvic acid**

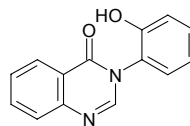
$C_9H_8O_4$  (180.16). Source: NING MENG GEN *Citrus limon*. Ref: 6.

**10642 p-Hydroxyphenylpyruvic acid**

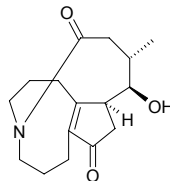
[156-39-8]  $C_9H_8O_4$  (180.16). mp  $220^\circ\text{C}$ . Source: LI MENG GEN *Citrus limonia*. Ref: 6.

**10643 3-(2'-Hydroxyphenyl)-4-(3H)-quinazolinone**

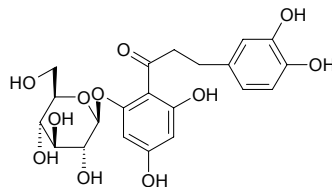
$C_{14}H_{10}N_2O_2$  (238.25). White granular solid. Source: BAN LAN GEN *Isatis indigotica*. Ref: 2161.

**10644 8β-Hydroxy phlegmariurine B**

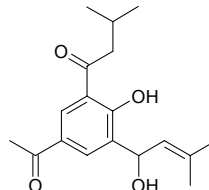
$C_{15}H_{21}NO_3$  (263.34). Colorless needles (alcohol), mp  $281\sim 283^\circ\text{C}$ ,  $[\alpha]_D^{25} = -205^\circ$  ( $c = 0.20$ , alcohol). Source: QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*]. Ref: 2471.

**10645 3-Hydroxyphlorizin**

$C_{21}H_{24}O_{11}$  (452.42). Source: DUO SUI SHI KE YE *Lithocarpus polystachyus*. Ref: 660.

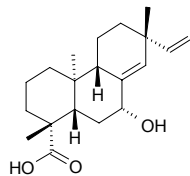
**10646 Hydroxypiloselloidone**

[54963-61-0]  $C_{18}H_{24}O_4$  (304.39). Oil,  $[\alpha]_D^{24} = -50.4^\circ$  ( $c = 4.46$ ,  $CHCl_3$ ). Source: MAO DA DING CAO *Gerbera piloselloides* (root). Ref: 6, 660.

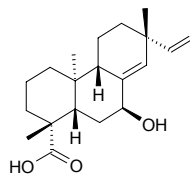


**10647 7 $\alpha$ -Hydroxy-L-pimara-8(14),15-dien-19-oic acid**

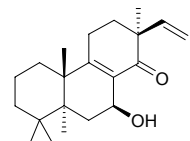
[23807-89-8] C<sub>20</sub>H<sub>30</sub>O<sub>3</sub> (318.46). mp 292~294°C (dec), [ $\alpha$ ]<sub>D</sub> = -70.4° (pyridine). Source: TU DANG GUI *Aralia cordata*. Ref: 6, 1521.

**10648 7 $\beta$ -Hydroxy-L-pimara-8(14),15-dien-19-oic acid**

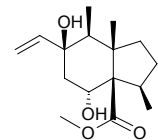
[23807-91-2] C<sub>20</sub>H<sub>30</sub>O<sub>3</sub> (318.46). mp 218°C, [ $\alpha$ ]<sub>D</sub> = -62.8° (pyridine). Source: TU DANG GUI *Aralia cordata*. Ref: 6, 1521.

**10649 7 $\beta$ -Hydroxypimara-8,15-dien-14-one**

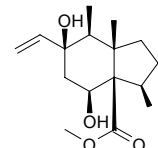
C<sub>20</sub>H<sub>30</sub>O<sub>2</sub> (302.46). Viscous oil, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +77° (c = 0.2, MeOH). Source: *Strychnos vanprukii* (stem). Ref: 3471.

**10650 7 $\alpha$ -Hydroxypinguisenol-12-methyl ester**

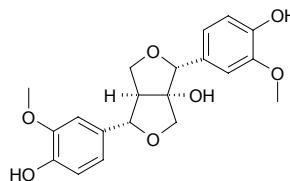
C<sub>16</sub>H<sub>26</sub>O<sub>4</sub> (282.38). Colorless amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>22</sup> = -72.1° (c = 0.51, CHCl<sub>3</sub>). Source: SHANG ZUO JIAN YE GUANG E TAI *Porella acutifolia* ssp. *tosana*. Ref: 3932.

**10651 7 $\beta$ -Hydroxypinguisenol-12-methyl ester**

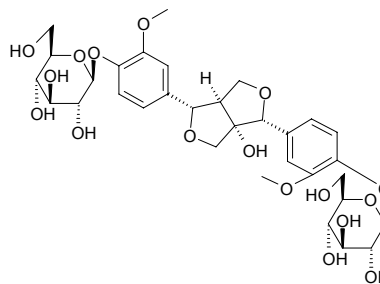
C<sub>16</sub>H<sub>26</sub>O<sub>4</sub> (282.38). Colorless amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>22</sup> = -44.2° (c = 0.52, CHCl<sub>3</sub>). Source: SHANG ZUO JIAN YE GUANG E TAI *Porella acutifolia* ssp. *tosana*. Ref: 3932.

**10652 (+)-1-Hydroxypinoresinol**

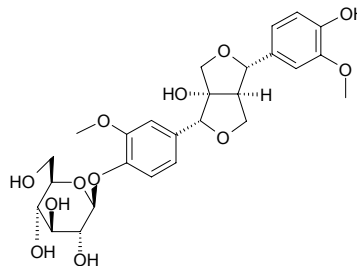
8'-Hydroxypinoresinol C<sub>20</sub>H<sub>22</sub>O<sub>7</sub> (374.39). Pharm: Antitubercular (*Mycobacterium tuberculosis*, MIC > 128μg/mL, cytotoxic, Vero cells, IC<sub>50</sub> = 96.9μg/mL, positive control Rifampin, MIC = 0.03μg/mL, IC<sub>50</sub> = 98.3μg/mL, SI = 3300)<sup>[4986]</sup>. Source: SHU HUA JIE CAO *Valeriana laxiflora* (aerial parts and root), XIE CAO *Valeriana officinalis* (root). Ref: 4656, 4986.

**10653 (+)-1-Hydroxypinoresinol-4',4''-di-O- $\beta$ -D-glucopyranoside**

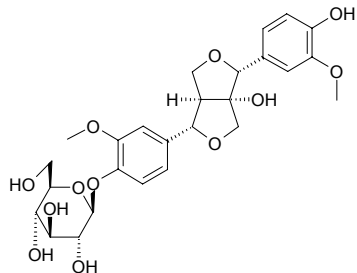
C<sub>32</sub>H<sub>42</sub>O<sub>17</sub> (698.68). Source: DU ZHONG *Eucommia ulmoides*. Ref: 2.

**10654 (+)-1-Hydroxypinoresinol-4'-O- $\beta$ -D-glucopyranoside**

8'-Hydroxypinoresinol-4'-O- $\beta$ -D-glucoside C<sub>26</sub>H<sub>32</sub>O<sub>12</sub> (536.54). Source: DU ZHONG *Eucommia ulmoides*, XIE CAO *Valeriana officinalis* (root)<sup>[4656]</sup>. Ref: 2, 4656.

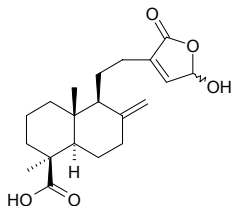
**10655 (+)-1-Hydroxypinoresinol-4''-O- $\beta$ -D-glucopyranoside**

8-Hydroxypinoresinol-4''-O- $\beta$ -D-glucoside C<sub>26</sub>H<sub>32</sub>O<sub>12</sub> (536.54). Source: DU ZHONG *Eucommia ulmoides*, XIE CAO *Valeriana officinalis* (root)<sup>[4656]</sup>. Ref: 2, 4656.

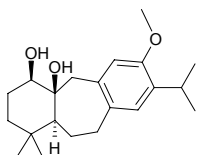


**10656 15 $\xi$ -Hydroxypinusolidic acid**

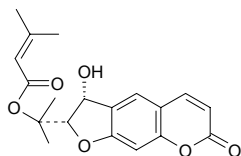
$C_{20}H_{28}O_5$  (348.44). Colorless oil,  $[\alpha]_D^{25} = +30^\circ$  ( $c = 0.65$ ,  $CHCl_3$ ),  $[\alpha]_D^{25} = +30.5^\circ$  ( $c = 1.0$ ,  $CHCl_3$ ). **Pharm:** Antimalarial (*in vitro*, *Plasmodium falciparum* strain 3D7,  $IC_{50} = (51 \pm 3) \mu g/mL = (145 \pm 9) \mu mol/L$ ). **Source:** CE BAI YE *Thuja orientalis* [Syn. *Platyclusus orientalis*; *Biota orientalis*]. **Ref:** 3022.

**10657 1 $\beta$ -Hydroxypisiferanol**

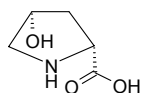
$C_{21}H_{32}O_3$  (332.49). Needles,  $[\alpha]_D^{25} = +30.5^\circ$  ( $c = 0.35$ , MeOH). **Source:** HONG GUI *Chamaecyparis formosensis*. **Ref:** 2315.

**10658 (+)-(2'S,3'R)-3'-Hydroxyprantschimgin**

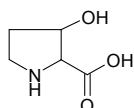
$C_{19}H_{20}O_6$  (344.37). mp 177~179°C ( $CCl_4$ ),  $[\alpha]_D^{20} = +15^\circ$  ( $c = 1.2$ ,  $CHCl_3$ ). **Source:** DUAN LIE PIAN LEI A WEI *Ferulago brachyloba* (root), JU MAO LEI A WEI *Ferulago capillaries* (root). **Ref:** 3938.

**10659 cis-4-Hydroxyproline**

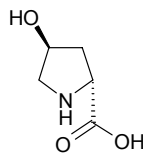
$C_5H_9NO_3$  (131.13). mp D(+) 237~241°C, L(-) 238~241°C, DL 250°C. **Source:** TAN XIANG *Santalum album*. **Ref:** 6.

**10660 3-Hydroxyproline**

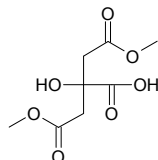
4-Hydroxy-2-pyrrolidinecarboxylic acid  $C_5H_9NO_3$  (131.13). mp (*L-trans*) 228~235°C (dec), (*DL-trans*) 224~230°C, (*L-cis*) 245~255°C (dec), (*DL-cis*) 225~235°C (dec). **Source:** HUANG MING JIAO *Bos taurus domesticus*, WU LI *Ophiocephalus argus*, XIANG GU *Elephas maximus*. **Ref:** 6.

**10661 trans-4-Hydroxyproline**

[51-35-4]  $C_5H_9NO_3$  (131.13). mp D(+) 274°C, L(-) 274°C, DL 261°C. **Source:** TAN XIANG *Santalum album*. **Ref:** 6.

**10662 2-Hydroxy-1,2,3-propanetricarboxylic acid-1,3-dimethylester**

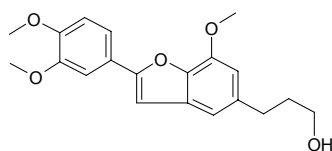
$C_8H_{12}O_7$  (220.18). **Source:** TIAN SHAN ZHU ZI *Garcinia dulcis* (fruit). **Ref:** 5319.

**10663 2-Hydroxy-propylene**

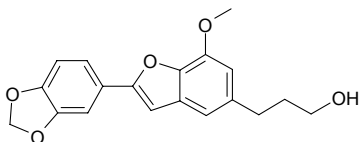
$C_3H_6O$  (58.08). **Source:** DA SUAN *Allium sativum*. **Ref:** 2.

**10664 5-(3''-Hydroxypropyl)-7-methoxy-2-(3',4'-dimethoxyphenyl) benzofuran**

$C_{20}H_{22}O_5$  (342.40). White powder. **Pharm:** Antibacterial (*Staphylococcus aureus*, MIC = 10  $\mu g/mL$ ; control Chloramphenicol, MIC = 5  $\mu g/mL$ ); antifungal (*Candida albicans*, MIC = 12  $\mu g/mL$ , control Chloramphenicol, MIC = 5  $\mu g/mL$ ; *Cladosporium sphaerospermum*, MIA = 5  $\mu g$ , control Nystatin, MIA = 1  $\mu g$ ). **Source:** XIU SE AN XI XIANG *Styrax ferrugineus* (leaf). **Ref:** 5100.

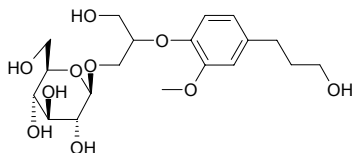
**10665 5-(3''-Hydroxypropyl)-7-methoxy-2-(3',4'-methylenedioxyphenyl) benzofuran**

Egonol [530-22-3]  $C_{19}H_{18}O_5$  (326.35). White amorphous powder, plates (butanol), mp 117.5~118°C. **Pharm:** Anticomplement activity ( $IC_{50} = 33 \mu mol/L$ , control Rosmarinic acid  $IC_{50} = 182 \mu mol/L$ )<sup>[4096]</sup>; antibacterial (*Staphylococcus aureus*, MIC = 10  $\mu g/mL$ ; control Chloramphenicol, MIC = 5  $\mu g/mL$ )<sup>[5100]</sup>; antifungal (*Candida albicans*, MIC = 10  $\mu g/mL$ , control Chloramphenicol, MIC = 5  $\mu g/mL$ ; *Cladosporium sphaerospermum*, MIA = 5  $\mu g$ , control Nystatin, MIA = 1  $\mu g$ )<sup>[5100]</sup>. **Source:** RI BEN AN XI XIANG JING PI *Styrax japonica*, TAI WAN AN XI XIANG *Styrax formosanus*, XIU SE AN XI XIANG *Styrax ferrugineus* (leaf), YU LING HUA *Styrax obassia*. **Ref:** 1521, 4096, 5100.



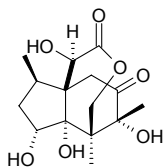
**10666 2-[4-(3-Hydroxypropyl)-2-methoxyphenoxy]-1,3-propanediol 1-O-glucoside**

$C_{19}H_{30}O_{10}$  (418.44).  $[\alpha]_D^{25} = -2.0^\circ$  ( $c = 0.10$ , MeOH). Source: SHAN FAN GEN *Symplocos caudata*. Ref: 2535.



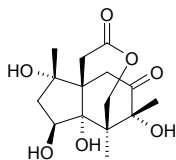
**10667 10 $\beta$ -Hydroxypseudoanisatin**

$C_{15}H_{22}O_7$  (314.34). Source: *Illicium merrillianum* (pericarp). Ref: 4257.



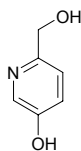
**10668 1 $\alpha$ -Hydroxypseudoanisatin**

$C_{15}H_{22}O_7$  (314.34). Source: MIN WAN BA JIAO *Illicium minwanense* (pericarp; yield = 0.00065%dw). Ref: 4697.



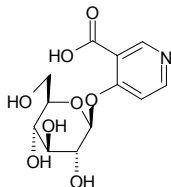
**10669 5-Hydroxy-2-pyridinemethanol**

$C_6H_7NO_2$  (125.13). Source: DANG SHEN *Codonopsis pilosula*. Ref: 2.



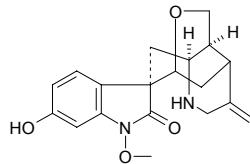
**10670 4-Hydroxypyridyl-3-oic acid 4-O-glucopyranoside**

$C_{12}H_{15}NO_8$  (301.26). Colorless needles, mp 203–205°C,  $[\alpha]_D^{25} = -250.4^\circ$  ( $c = 1.35$ , MeOH). Source: XIANG SI CAO *Conyza bonariensis* [Syn. *Erigeron bonariensis*; *Erigeron linifolius*; *Erigeron crispus*] (aerial parts). Ref: 5206.



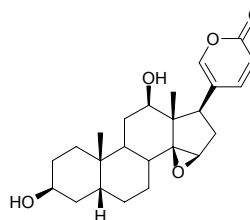
**10671 11-Hydroxyrankinidine**

[122590-03-8]  $C_{20}H_{24}N_2O_4$  (356.43). mp 212–214°C,  $[\alpha]_D = -135^\circ$ . Source: GOU WEN *Gelsemium elegans*. Ref: 14.



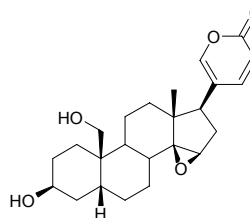
**10672 12 $\beta$ -Hydroxyresibufogenin**

$C_{24}H_{32}O_5$  (400.52). Pharm: Cytotoxic (*in vitro*, KB,  $IC_{50} = 0.97\mu\text{g/mL}$ ; HL-60,  $IC_{50} = 0.045\mu\text{g/mL}$ ; MH-60,  $IC_{50} > 25\mu\text{g/mL}$ ; BXPC3,  $IC_{50} = 0.12\mu\text{g/mL}$ ; MCF7,  $IC_{50} = 0.066\mu\text{g/mL}$ ; SF268,  $IC_{50} = 0.046\mu\text{g/mL}$ ; NCI-H460,  $IC_{50} = 0.017\mu\text{g/mL}$ ; KM20L2,  $IC_{50} = 0.012\mu\text{g/mL}$ ; DU145,  $IC_{50} = 0.041\mu\text{g/mL}$ ). Source: CHAN SU *Bufo bufo gargarizans*; *Bufo melanostictus*. Ref: 3082.



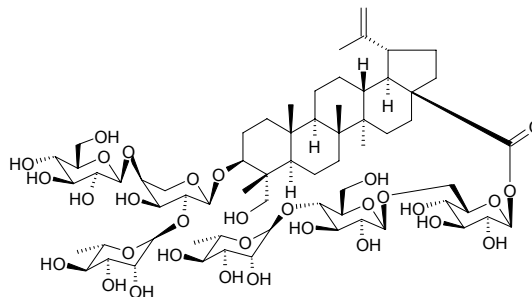
**10673 19-Hydroxyresibufogenin**

Resibufaginol  $C_{24}H_{32}O_5$  (400.52). Pharm: Cytotoxic (*in vitro*, KB,  $IC_{50} = 1.2\mu\text{g/mL}$ ; HL-60,  $IC_{50} = 0.48\mu\text{g/mL}$ ; MH-60,  $IC_{50} > 25\mu\text{g/mL}$ ; BXPC3,  $IC_{50} = 0.63\mu\text{g/mL}$ ; MCF7,  $IC_{50} = 0.33\mu\text{g/mL}$ ; SF268,  $IC_{50} = 0.25\mu\text{g/mL}$ ; NCI-H460,  $IC_{50} = 0.44\mu\text{g/mL}$ ; KM20L2,  $IC_{50} = 0.45\mu\text{g/mL}$ ; DU145,  $IC_{50} = 0.38\mu\text{g/mL}$ ). Source: CHAN SU *Bufo bufo gargarizans*; *Bufo melanostictus*. Ref: 3082.



**10674 23-Hydroxy-3 $\beta$ -[(*O*- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)]- $\alpha$ -L-arabinopyranosyl]oxy]lup-20(29)-en-28-oic acid 28-*O*- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl ester**

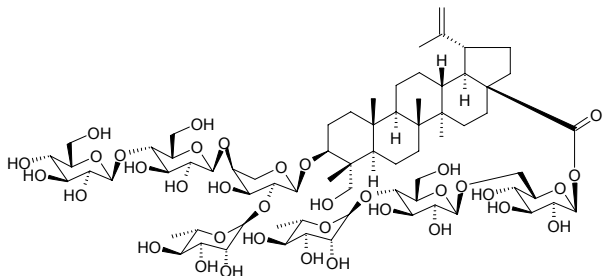
$C_{65}H_{106}O_{31}$  (1383.55). Amorphous solid,  $[\alpha]_D^{26} = -38.4^\circ$  ( $c = 0.10$ , MeOH). Source: BAI TOU WENG *Pulsatilla chinensis*. Ref: 3086.





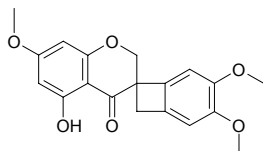
**10675 23-Hydroxy-3β-[(O-α-L-rhamnopyranosyl-(1→2)-O-[O-β-D-glucopyranosyl-(1→4)-β-D-glucopyranosyl-(1→4)]-α-L-arabinopyranosyl)oxy]lup-20(29)-en-28-oic acid 28-O-α-L-rhamnopyranosyl-(1→4)-O-β-D-glucopyranosyl-(1→6)-β-D-glucopyranosyl ester**

C<sub>71</sub>H<sub>116</sub>O<sub>36</sub> (1545.69). Amorphous solid,  $[\alpha]_D^{26} = -38.0^\circ$  ( $c = 0.10$ , MeOH). Source: BAI TOU WENG *Pulsatilla chinensis*. Ref: 3086.



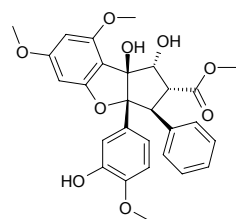
**10676 5-Hydroxy-3',4',7-trimethoxyspiro[2H-1-benzopyran-7'-bicyclo[4.2.0]octa[1,3,5]-trien]-4-one**

C<sub>19</sub>H<sub>18</sub>O<sub>6</sub> (342.35). White powder, mp 150~153°C,  $[\alpha]_D^{25} = +60.0^\circ$  ( $c = 0.033$ , MeOH). Source: HE CAO YE JIA BEI FANG FENG *Ledebouria graminifolia* (tuber). Ref: 3368.



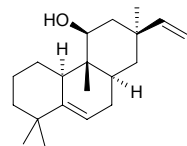
**10677 3'-Hydroxyrocaglate**

Methyl 3'-hydroxyaglafolin [222854-54-8] C<sub>28</sub>H<sub>28</sub>O<sub>9</sub> (508.53).  $[\alpha]_D^{20} = -54.9^\circ$  ( $c = 0.18$ , CHCl<sub>3</sub>). Pharm: Insecticidal (neonate larvae of *Spodoptera littoralis*, EC<sub>50</sub> = 0.27mg/L, LC<sub>50</sub> = 1.1mg/L, control Azadirachtin, EC<sub>50</sub> = 0.06mg/L, LC<sub>50</sub> = 0.7mg/L)<sup>[3978]</sup>. Source: MI ZI LAN *Aglaia odorata*, *Aglaia spectabilis* (bark), *Aglaia duperreana*. Ref: 2289, 3978.



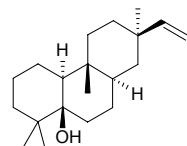
**10678 11β-Hydroxy-rosa-5,15-diene**

C<sub>20</sub>H<sub>32</sub>O (288.48). Source: *Gackstroemia decipiens*. Ref: 3907.



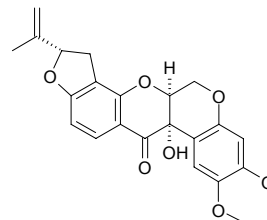
**10679 5β-Hydroxy-ros-15-ene**

C<sub>20</sub>H<sub>34</sub>O (290.49). Source: *Gackstroemia decipiens*. Ref: 3907.



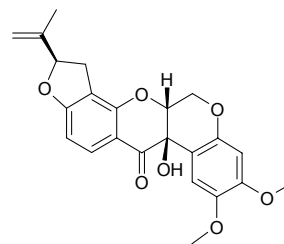
**10680 12α-Hydroxyrotenone**

Rotenolone [509-96-6] C<sub>23</sub>H<sub>22</sub>O<sub>7</sub> (410.43). Yellowish solid, mp 88°C. Pharm: Cytotoxic (KB, ED<sub>50</sub> = 0.01~0.30μg/mL); pesticide; acaricide; nematocide (0.1mg/mL cultured with larva of *Toxocara canis*, 3 hours later RM = 33, 6 hours later RM = 0, MLC = 5μmol/L). Source: DI GUA ZI *Pachyrhizus erosus*, HUI YE GEN *Tephrosia purpurea*, KU TAN ZI *Milletia pachycarpa*, *Tephrosia* sp. Ref: 658, 900, 1521.



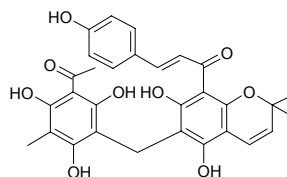
**10681 12a-Hydroxyrotenone**

C<sub>23</sub>H<sub>22</sub>O<sub>7</sub> (410.43). Pharm: Antiviral (HSV-1, 50μg/mL, inactive; HSV-2, 50μg/mL, inactive). Source: DI GUA ZI *Pachyrhizus erosus*. Ref: 4180.



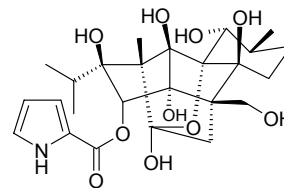
**10682 4-Hydroxyrottlerin**

[23693-75-7] C<sub>30</sub>H<sub>28</sub>O<sub>9</sub> (532.55). mp 208~210°C. Source: LV SONG QIU *Mallotus philippinensis*. Ref: 6, 1521.



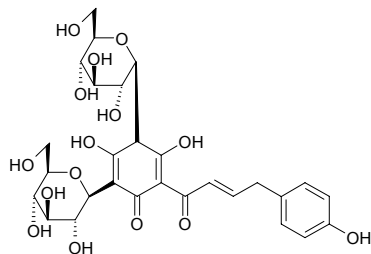
**10683 20-Hydroxyryanodine**

C<sub>25</sub>H<sub>35</sub>NO<sub>10</sub> (509.56). Crystals (CHCl<sub>3</sub>:MeOH = 3:1), mp 188°C,  $[\alpha]_D = +8^\circ$  ( $c = 1.0$ ). Pharm: Cardiac contraction inhibitor (guinea-pig papillary muscle, causes a prolongation of the latency time and decrease of contraction force, EC<sub>50</sub> = 1100nmol/L). Source: QU CHONG CAO *Spigelia anthelmia* (aerial parts). Ref: 5139.

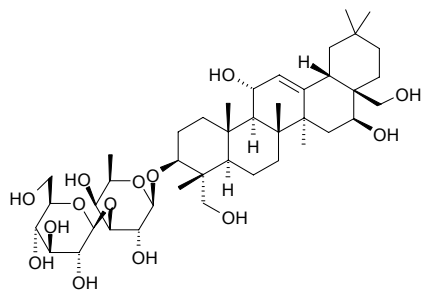


**10684 Hydroxysafflor yellow A**

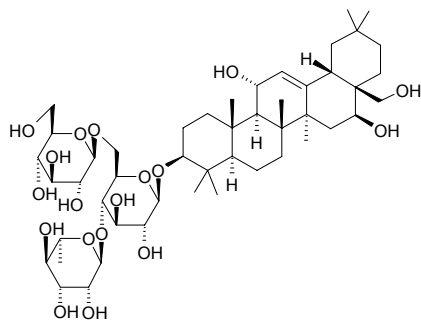
HSYA  $C_{28}H_{34}O_{15}$  (610.57). Yellow amorphous powder,  $[\alpha]_D^{25} = -54.3^\circ$  ( $c = 0.1$ , MeOH). **Pharm:** Antithrombotic (markedly extends coagulation time in mouse); neuroprotective (potential exists for development of new agents for treating stroke; *in vivo*: male Wistar-Kyoto (WKY) rats with middle cerebral artery occlusion, sublingual vein injection of HSYA at doses of 3.0mg/kg, HSYA exerts significant neuroprotective effects by significantly decreasing neurological deficit scores and reducing infarct area compared with the saline group; at a dose of 6.0mg/kg, HSYA shows similar potency as 0.2mg/kg Nimodipine; *in vitro*: cultured fetal cortical cells, inhibits neuron damage glutamate-induced and NaCN-induced, for glutamate-induced case, effect is much better than that of NaCN-induced neuron damage). **Source:** HONG HUA *Carthamus tinctorius*. **Ref:** 5395.

**10685 Hydroxysaikosaponin A**

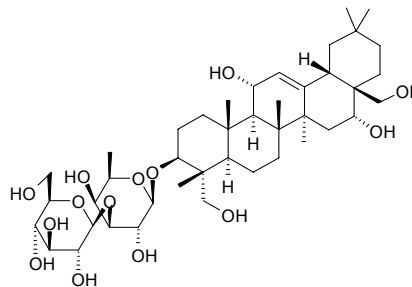
$C_{42}H_{70}O_{14}$  (799.02). **Source:** ZI HU *Bupleurum falcatum*. **Ref:** 2247.

**10686 Hydroxysaikosaponin C**

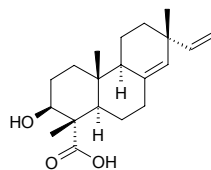
$C_{48}H_{80}O_{18}$  (945.16). **Source:** ZI HU *Bupleurum falcatum*. **Ref:** 2247.

**10687 Hydroxysaikosaponin D**

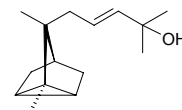
$C_{42}H_{70}O_{14}$  (799.02). **Source:** ZI HU *Bupleurum falcatum*. **Ref:** 2247.

**10688 3β-Hydroxysandara copimarinic acid**

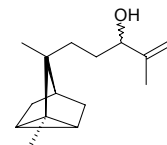
[59219-64-6]  $C_{20}H_{30}O_3$  (318.46). mp 261°C. **Pharm:** Anti-HIV-1 inactive (*in vitro*)<sup>[4234]</sup>. **Source:** DU SONG SHI *Juniperus rigida*, XI FANG CI BAI *Juniperus occidentalis* (leaf). **Ref:** 6, 1521, 4234.

**10689 11-Hydroxy-α-santal-9-ene**

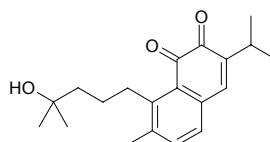
α-Photosantalol A  $C_{15}H_{24}O$  (220.36). Oil,  $[\alpha]_D = +22.4^\circ$  ( $c = 4.8$ ,  $CHCl_3$ ). **Source:** DU AI BA JIAO *Illicium tsangii*. **Ref:** 1866.

**10690 10ξ-Hydroxy-α-santal-11-ene**

α-Photosantalol B diastereoisomer  $C_{15}H_{24}O$  (220.36). Oil,  $[\alpha]_D = +0.9^\circ$  ( $c = 6.0$ ,  $CHCl_3$ ). **Source:** DU AI BA JIAO *Illicium tsangii*. **Ref:** 1866.

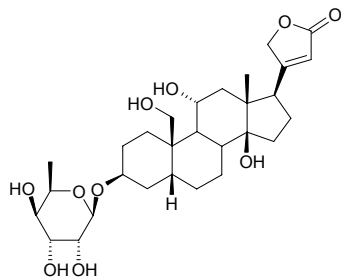
**10691 4-Hydroxysaporthoquinone**

$C_{20}H_{26}O_3$  (314.43). Red syrup. **Pharm:** Topoisomerase I inhibitor (*in vitro*,  $IC_{50} = 0.8 \mu\text{mol/L}$ ). **Source:** HONG GEN CAO *Salvia prionitis* (root; yield = 0.0012%dw). **Ref:** 4635.

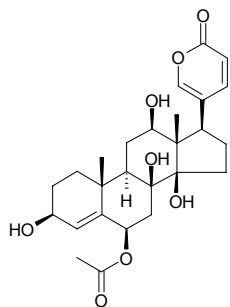


**10692 19-Hydroxy-sarmentogenin-3 $\beta$ -O- $\beta$ -6-deoxyglucoside**

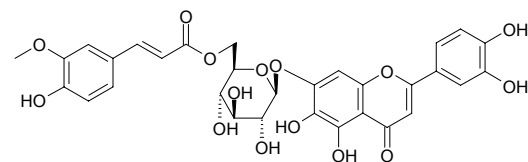
C<sub>29</sub>H<sub>44</sub>O<sub>10</sub> (552.67). White powder,  $[\alpha]_D^{24} = -36.0^\circ$  ( $c = 1.0$ , MeOH). **Pharm:** Cytotoxic (KB, IC<sub>50</sub> = (0.199 $\pm$ 0.008) $\mu$ mol/L, control Podophyllotoxin, IC<sub>50</sub> = 0.014 $\mu$ mol/L). **Source:** GAO MEI YING BAN *Crossopetalum gaumeri* (root). **Ref:** 3969.

**10693 12 $\beta$ -Hydroxyscillirosidin**

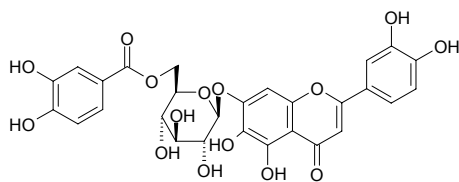
6 $\beta$ -Acetoxy-3 $\beta$ ,8 $\beta$ ,12 $\beta$ ,14 $\beta$ -tetrahydroxybufa-4,20,22-trienolide C<sub>26</sub>H<sub>34</sub>O<sub>8</sub> (474.56). Powdery solid. **Source:** GAO HAI CONG *Urginea altissima* (bulb), *Drimia robusta* (bulb). **Ref:** 5193.

**10694 3'-Hydroxyscutellarein 7-O-(6''-O-trans-feruloyl)- $\beta$ -glucopyranoside**

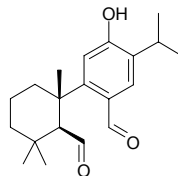
C<sub>31</sub>H<sub>28</sub>O<sub>15</sub> (640.56). Pale yellow amorphous powder,  $[\alpha]_D^{23} = -151.2^\circ$  ( $c = 0.16$ , MeOH). **Pharm:** Antioxidant (DPPH scavenger, DPPH radical 15 $\mu$ mol/L: 10 $\mu$ mol/L, ScRt = 49.1%; control BHA, 10 $\mu$ mol/L, ScRt = 23.0%; Vitamin E, 10 $\mu$ mol/L, ScRt = 41.1%). **Source:** JIA HUI SE JIU LI XIANG PO PO NA *Veronica thymoides* ssp. *pseudocinerea*. **Ref:** 3846.

**10695 3'-Hydroxyscutellarein 7-O-(6''-O-protocatechuoyl)- $\beta$ -glucopyranoside**

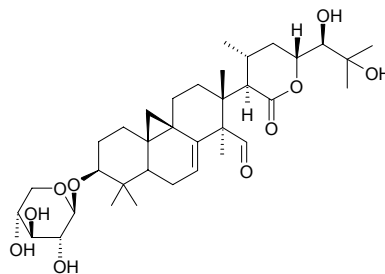
C<sub>28</sub>H<sub>24</sub>O<sub>15</sub> (600.49). Pale yellow amorphous powder,  $[\alpha]_D^{23} = -199.3^\circ$  ( $c = 0.43$ , pyridine). **Pharm:** Antioxidant (DPPH scavenger, DPPH radical 15 $\mu$ mol/L: 10 $\mu$ mol/L, ScRt = 50.0%; control BHA, 10 $\mu$ mol/L, ScRt = 23.0%; Vitamin E, 10 $\mu$ mol/L, ScRt = 41.1%). **Source:** JIA HUI SE JIU LI XIANG PO PO NA *Veronica thymoides* ssp. *pseudocinerea*. **Ref:** 3846.

**10696 12-Hydroxy-6,7-secoabieta-8,11,13-triene-6,7-dial**

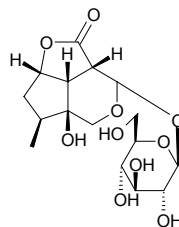
[28767-65-9] C<sub>20</sub>H<sub>28</sub>O<sub>3</sub> (316.44). **Source:** TAI WAN CUI BAI *Calocedrus macrolepis* var. *formosana* (leaf). **Ref:** 4298.

**10697 24-Hydroxy-15,16-seco-cycloart-7-en 3-O-xyloside**

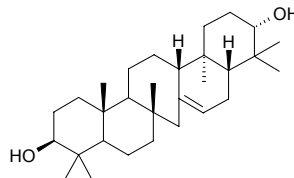
C<sub>35</sub>H<sub>54</sub>O<sub>10</sub> (634.81). White needles,  $[\alpha]_D = -39.8^\circ$  (MeOH). **Source:** *Cimicifuga* sp. (rhizome). **Ref:** 4396.

**10698 9-Hydroxysemperoside**

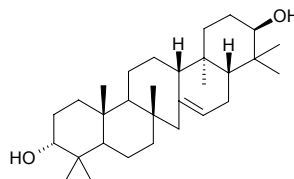
C<sub>16</sub>H<sub>24</sub>O<sub>10</sub> (376.36). Colorless needles, mp 132~134°C. **Source:** CHANG LV GOU WEN *Gelsemium sempervirens*, MA BIAN CAO *Verbena officinalis* (while herb). **Ref:** 1521, 4902.

**10699 21 $\alpha$ -Hydroxyserrat-14-en-3 $\beta$ -ol**

C<sub>30</sub>H<sub>50</sub>O<sub>2</sub> (442.73). **Source:** QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*] (whole herb: yield = 0.0017%dw). **Ref:** 4729.

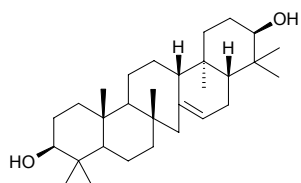
**10700 21 $\beta$ -Hydroxyserrat-14-en-3 $\alpha$ -ol**

C<sub>30</sub>H<sub>50</sub>O<sub>2</sub> (442.73). **Source:** QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*] (whole herb: yield = 0.00027%dw). **Ref:** 4729.

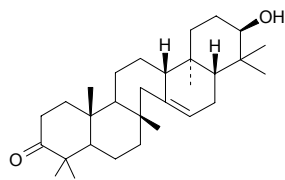


**10701 21 $\beta$ -Hydroxyserrat-14-en-3 $\beta$ -ol**

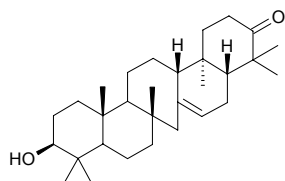
C<sub>30</sub>H<sub>50</sub>O<sub>2</sub> (442.73). Source: QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*] (whole herb: yield = 0.0048%dw). Ref: 4729.

**10702 21 $\beta$ -Hydroxyserrat-14-en-3-one**

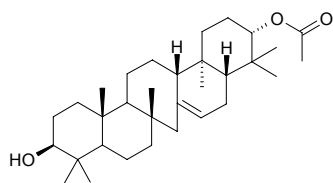
C<sub>30</sub>H<sub>48</sub>O<sub>2</sub> (440.72). Source: RI BEN YU LIN SONG *Picea jezoensis* (cuticle). Ref: 3076.

**10703 3 $\beta$ -Hydroxyserrat-14-en-21-one**

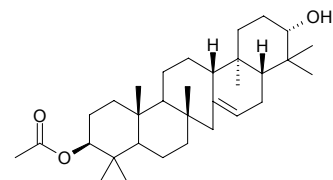
C<sub>30</sub>H<sub>48</sub>O<sub>2</sub> (440.72). Source: QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*] (whole herb: yield = 0.00033%dw). Ref: 4729.

**10704 3 $\beta$ -Hydroxyserrat-14-en-21 $\alpha$ -yl acetate**

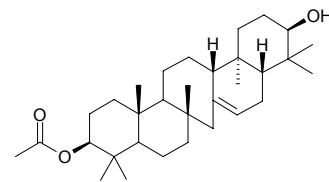
C<sub>32</sub>H<sub>52</sub>O<sub>3</sub> (484.77). Source: QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*] (whole herb: yield = 0.00096%dw). Ref: 4729.

**10705 21 $\alpha$ -Hydroxyserrat-14-en-3 $\beta$ -yl acetate**

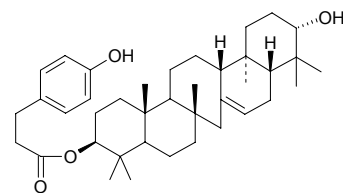
C<sub>32</sub>H<sub>52</sub>O<sub>3</sub> (484.77). Source: QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*] (whole herb: yield = 0.00006%dw). Ref: 4729.

**10706 21 $\beta$ -Hydroxyserrat-14-en-3 $\beta$ -yl acetate**

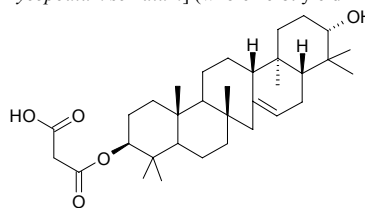
C<sub>32</sub>H<sub>52</sub>O<sub>3</sub> (484.77). Source: QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*] (whole herb: yield = 0.00014%dw). Ref: 4729.

**10707 21 $\alpha$ -Hydroxyserrat-14-en-3 $\beta$ -yl *p*-dihydrocoumarate**

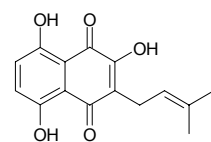
C<sub>39</sub>H<sub>58</sub>O<sub>4</sub> (590.89). Colorless needles (CHCl<sub>3</sub>-CH<sub>3</sub>OH), mp 296-298°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -20.5° (c = 0.47, C<sub>5</sub>D<sub>5</sub>N). Source: QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*] (whole herb: yield = 0.000092%dw). Ref: 4729.

**10708 21 $\alpha$ -Hydroxyserrat-14-en-3 $\beta$ -yl propanedioic acid monoester**

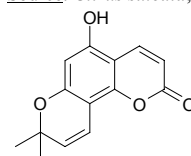
C<sub>33</sub>H<sub>52</sub>O<sub>5</sub> (528.78). White powder (CHCl<sub>3</sub>-CH<sub>3</sub>OH), mp 306-310°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -19° (c = 0.23, C<sub>5</sub>D<sub>5</sub>N). Source: QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*] (whole herb: yield = 0.0001%dw). Ref: 4729.

**10709 Hydroxysesamone**

2,5,8-Trihydroxy-3-(3-methyl-2-butenyl)-1,4-naphthoquinone C<sub>15</sub>H<sub>14</sub>O<sub>5</sub> (274.28). Red needles (*n*-hexane-CHCl<sub>3</sub>), mp 145-146°C. Pharm: Antifungal (*Cladosporium fulvum*, 1 $\mu$ g/spot). Source: HU MA GEN *Sesamum indicum*. Ref: 5234.

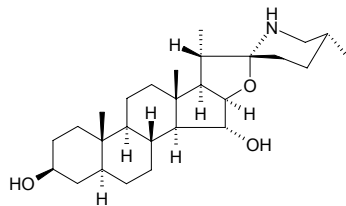
**10710 5-Hydroxyseselin**

C<sub>14</sub>H<sub>12</sub>O<sub>4</sub> (244.25). Pharm: Antineoplastic (Raji cells, antitumor promotor, *in vivo*, inhibits TPA-induced EBV-EA activation, compound concentration = 500mol ratio/32 pmol TPA: EBV-EA-positive cells = (43.7 $\pm$ 1.6)% (viability > 80%),  $\beta$ -Carotene, EBV-EA-positive cells = (34.3 $\pm$ 1.1)% (viability > 80%), Curcumin, EBV-EA-positive cells = (22.8 $\pm$ 1.8)% (viability > 80%), compound IC<sub>50</sub> = 430mol ratio/32 pmol TPA,  $\beta$ -Carotene, IC<sub>50</sub> = 400mol ratio/32 pmol TPA, Curcumin, IC<sub>50</sub> = 341mol ratio/32 pmol TPA). Source: *Citrus sulcata*, *Citrus tamarana*. Ref: 5048.

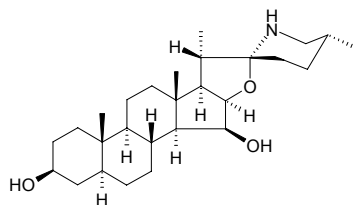


**10711 15 $\alpha$ -Hydroxysoladulcidine**

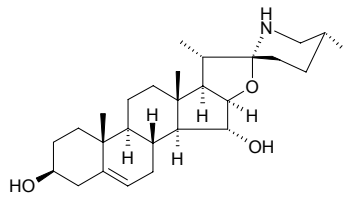
[16137-74-9] C<sub>27</sub>H<sub>45</sub>NO<sub>3</sub> (431.66). mp 167~168°C, mp 209~212 °C (double mp). Source: QIAN NIAN BU LAN XIN *Solanum dulcamara*. Ref: 6, 660.

**10712 15 $\beta$ -Hydroxysoladulcidine**

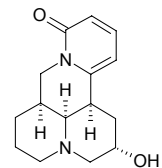
[16137-76-1] C<sub>27</sub>H<sub>45</sub>NO<sub>3</sub> (431.66). Source: QIAN NIAN BU LAN XIN *Solanum dulcamara*. Ref: 1521.

**10713 15 $\alpha$ -Hydroxysolasodine**

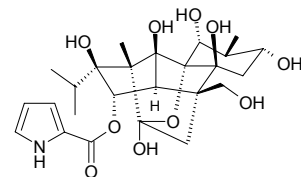
C<sub>27</sub>H<sub>43</sub>NO<sub>3</sub> (429.65). Prisms, mp 212~216°C, [ $\alpha$ ]<sub>D</sub><sup>21</sup> = -84.5° (c = 0.68, CHCl<sub>3</sub>). Source: QIAN NIAN BU LAN XIN *Solanum dulcamara*. Ref: 6, 1521.

**10714 9 $\alpha$ -Hydroxysophoramine**

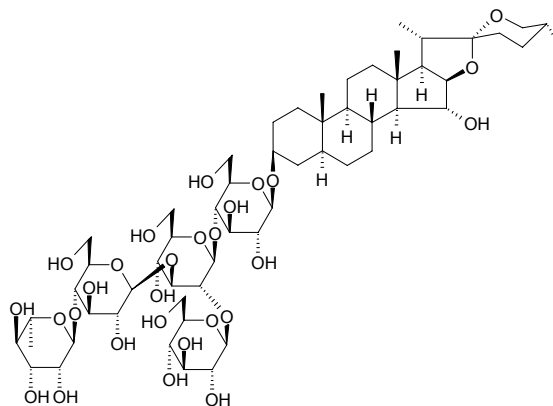
C<sub>15</sub>H<sub>20</sub>N<sub>2</sub>O<sub>2</sub> (260.34). Source: KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. Ref: 2, 1521.

**10715 8 $\alpha$ -Hydroxyspiganthine**

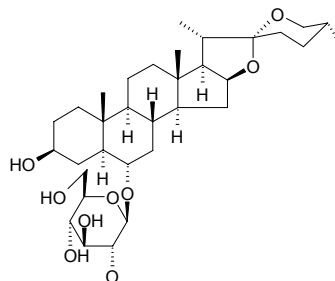
C<sub>25</sub>H<sub>35</sub>NO<sub>10</sub> (509.56). Crystals (CHCl<sub>3</sub>:Me<sub>2</sub>CO = 3:1), mp 255~257°C, [ $\alpha$ ]<sub>D</sub> = +26° (c = 0.1). Source: QU CHONG CAO *Spigelia anthelmia* (aerial parts). Ref: 5139.

**10716 (25R)-15 $\alpha$ -Hydroxy-5 $\alpha$ -spirostan-3 $\beta$ -yl O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)-O- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-galactopyranoside**

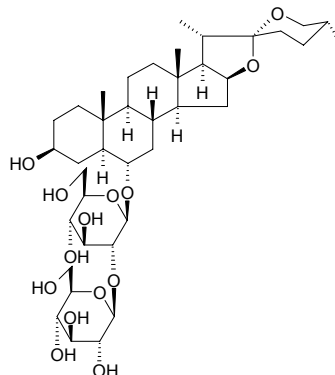
C<sub>57</sub>H<sub>94</sub>O<sub>28</sub> (1227.37). Amorphous solid, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -36.0° (c = 0.10, MeOH). Pharm: Cytotoxic (hmn oral squamous cell HSC-2, LD<sub>50</sub> = 7.7 $\mu$ g/mL; normal hmn gingival fibroblast HGF cell, LD<sub>50</sub> = 43 $\mu$ g/mL). Source: *Camassia leichtlinii* (bulb). Ref: 3535.

**10717 (25R)-3 $\beta$ -Hydroxy-5 $\alpha$ -spirostan-6 $\alpha$ -yl O- $\beta$ -D-glucopyranoside**

C<sub>33</sub>H<sub>54</sub>O<sub>9</sub> (594.79). Pharm: Cytotoxic (hmn oral squamous cell HSC-2, LD<sub>50</sub> = 70 $\mu$ g/mL; normal hmn gingival fibroblast HGF cell, LD<sub>50</sub> = 148 $\mu$ g/mL). Source: *Camassia leichtlinii* (bulb). Ref: 3535.

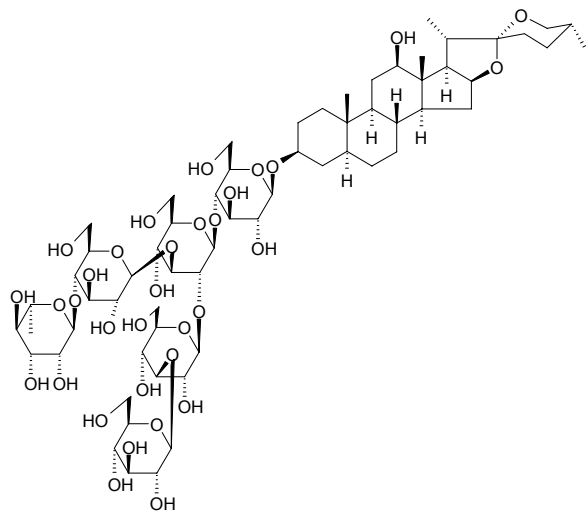
**10718 (25R)-3 $\beta$ -Hydroxy-5 $\alpha$ -spirostan-6 $\alpha$ -yl O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranoside**

C<sub>39</sub>H<sub>64</sub>O<sub>14</sub> (756.94). Pharm: Cytotoxic (hmn oral squamous cell HSC-2, LD<sub>50</sub> = 102 $\mu$ g/mL; normal hmn gingival fibroblast HGF cell, LD<sub>50</sub> = 183 $\mu$ g/mL). Source: *Camassia leichtlinii* (bulb). Ref: 3535.



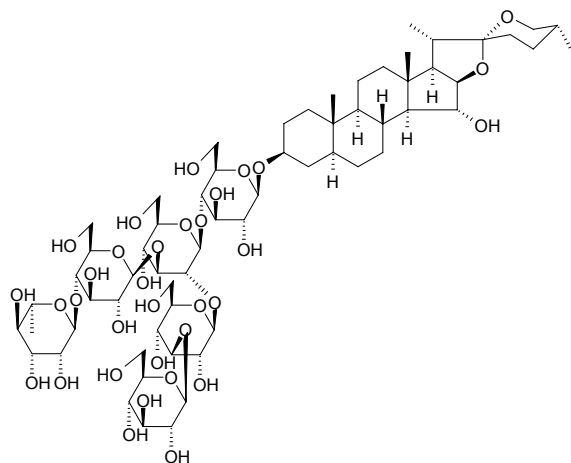
**10719 (25R)-12 $\beta$ -Hydroxy-5 $\alpha$ -spirostan-3 $\beta$ -yl O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)-O-[O- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)]-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-galactopyranoside**

C<sub>63</sub>H<sub>104</sub>O<sub>33</sub> (1389.51). Amorphous solid,  $[\alpha]_D^{25} = -44.0^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Cytotoxic (hmn oral squamous cell HSC-2, LD<sub>50</sub> = 17 $\mu$ g/mL; normal hmn gingival fibroblast HGF cell, LD<sub>50</sub> = 19 $\mu$ g/mL). **Source:** *Camassia leichtlinii* (bulb). **Ref:** 3535.



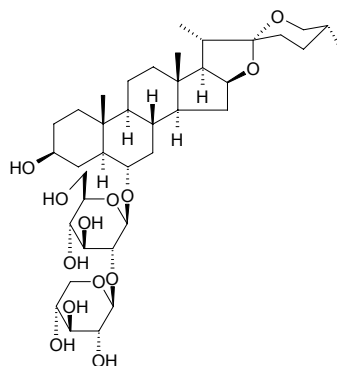
**10720 (25R)-15 $\alpha$ -Hydroxy-5 $\alpha$ -spirostan-3 $\beta$ -yl O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)-O-[O- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)]-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-galactopyranoside**

C<sub>63</sub>H<sub>104</sub>O<sub>33</sub> (1389.51). Amorphous solid,  $[\alpha]_D^{25} = -40.0^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Cytotoxic (hmn oral squamous cell HSC-2, LD<sub>50</sub> = 8.8 $\mu$ g/mL; normal hmn gingival fibroblast HGF cell, LD<sub>50</sub> = 12 $\mu$ g/mL). **Source:** *Camassia leichtlinii* (bulb). **Ref:** 3535.



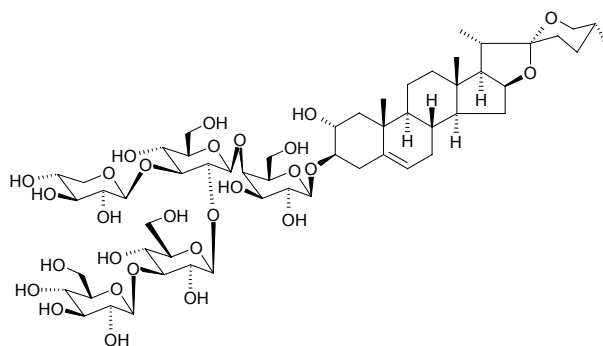
**10721 (25R)-3 $\beta$ -Hydroxy-5 $\alpha$ -spirostan-6 $\alpha$ -yl O- $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranoside**

C<sub>38</sub>H<sub>62</sub>O<sub>13</sub> (726.91). Amorphous solid,  $[\alpha]_D^{25} = -28.0^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Cytotoxic (hmn oral squamous cell HSC-2, LD<sub>50</sub> = 120 $\mu$ g/mL; normal hmn gingival fibroblast HGF cell, LD<sub>50</sub> = 135 $\mu$ g/mL). **Source:** *Camassia leichtlinii* (bulb). **Ref:** 3535.



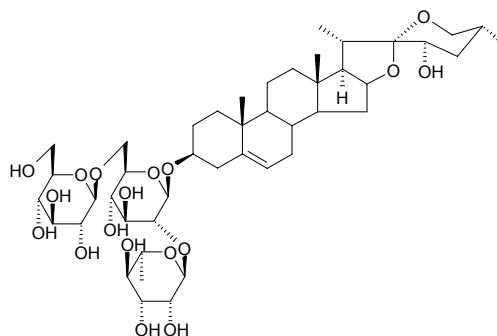
**10722 (25R)-2 $\alpha$ -Hydroxyspirost-5-en-3 $\beta$ -yl O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)-O-[ $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 3)]-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-galactopyranoside**

C<sub>56</sub>H<sub>90</sub>O<sub>28</sub> (1211.32). **Pharm:** Cytotoxic (HSC-2 cells, LD<sub>50</sub> = 2.7 $\mu$ g/mL; HGF, LD<sub>50</sub> = 31 $\mu$ g/mL). **Source:** YE XIANG SHU *Cestrum nocturnum* (leaf; yield = 0.112%fw). **Ref:** 3023.

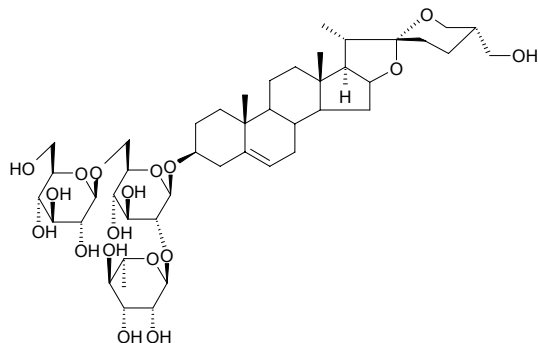


**10723 (23S,25R)-23-Hydroxyspirost-5-en-3 $\beta$ -yl-O- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)-O-[ $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)]- $\beta$ -D-glucopyranoside**

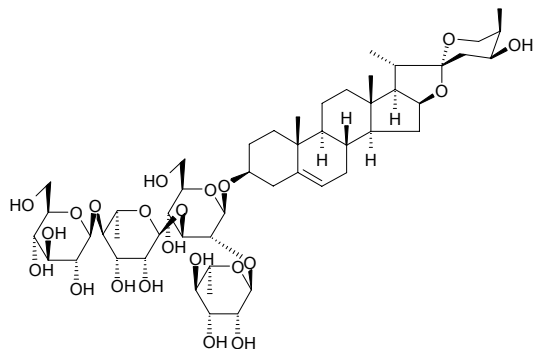
[244160-61-0] C<sub>45</sub>H<sub>72</sub>O<sub>18</sub> (901.06). Amorphous solid,  $[\alpha]_D^{26} = -41.5^\circ$  ( $c = 0.23$ , pyridine). **Source:** QING LIANG BAI HE *Lilium candidum*. **Ref:** 2303.



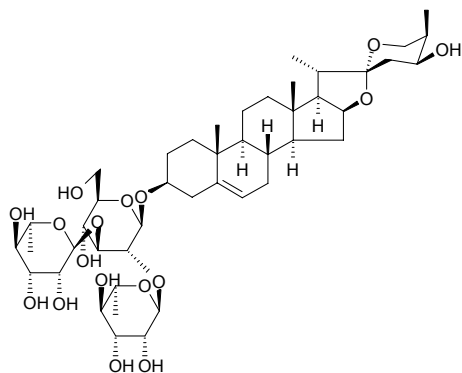
**10724 (25S)-27-Hydroxyspirost-5-en-3 $\beta$ -yl-O- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)]- $\beta$ -D-glucopyranoside**  
 [244160-60-9] C<sub>45</sub>H<sub>72</sub>O<sub>18</sub> (901.06). Amorphous solid,  $[\alpha]_D^{27} = -44.2^\circ$  ( $c = 0.12$ , MeOH:H<sub>2</sub>O = 1:1) Source: QING LIANG BAI HE *Lilium candidum*. Ref: 2303.



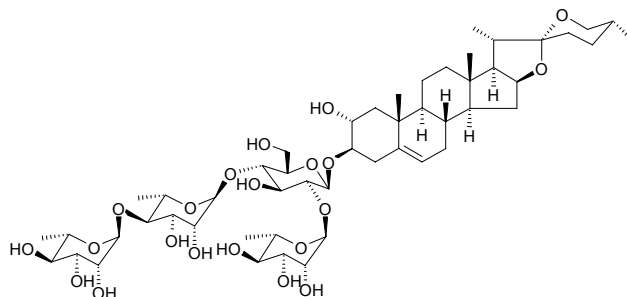
**10725 (24S,25R)-24-Hydroxyspirost-5-en-3 $\beta$ -yl O- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -D-glucopyranoside**  
 C<sub>51</sub>H<sub>82</sub>O<sub>22</sub> (1047.21). Amorphous solid,  $[\alpha]_D^{25} = -108.0^\circ$  ( $c = 0.10$ , CHCl<sub>3</sub>:MeOH = 1:1). Pharm: Cytotoxic (hmn, HL-60 promyelocytic leukemia cells, 10 $\mu$ g/mL, InRt > 50%). Source: JIAN GEN SHU *Tacca chantrieri* [Syn. *Tacca minor*; *Tacca esquirolii*]. Ref: 2026.



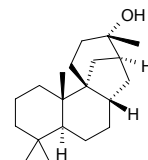
**10726 (24S,25R)-24-Hydroxyspirost-5-en-3 $\beta$ -yl O- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)-O- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -D-glucopyranoside**  
 C<sub>45</sub>H<sub>72</sub>O<sub>17</sub> (885.07). Amorphous solid,  $[\alpha]_D^{25} = -112.0^\circ$  ( $c = 0.10$ , CHCl<sub>3</sub>:MeOH = 1:1). Pharm: Cytotoxic (hmn, HL-60 promyelocytic leukemia cells, 10 $\mu$ g/mL, InRt > 50%). Source: JIAN GEN SHU *Tacca chantrieri* [Syn. *Tacca minor*; *Tacca esquirolii*]. Ref: 2026.



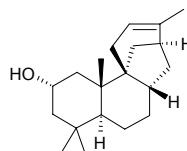
**10727 (25R)-2 $\alpha$ -Hydroxyspirost-5-en-3 $\beta$ -yl O- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)-O-[O- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)]- $\beta$ -D-glucopyranoside**  
 C<sub>51</sub>H<sub>82</sub>O<sub>21</sub> (1031.21). Amorphous powder,  $[\alpha]_D^{24} = -93.3^\circ$  ( $c = 0.12$ , CHCl<sub>3</sub>:MeOH = 1:1). Pharm: Cytotoxic (HSC-2 cells, LD<sub>50</sub> = 5.5 $\mu$ g/mL; HGF, LD<sub>50</sub> = 9.1 $\mu$ g/mL). Source: YE XIANG SHU *Cestrum nocturnum* (leaf; yield = 0.00073%fw). Ref: 3023.



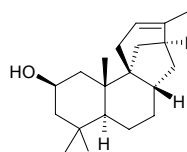
**10728 13 $\beta$ -Hydroxystemodane**  
 C<sub>20</sub>H<sub>34</sub>O (290.49). Amorphous crystals, mp 126~130°C,  $[\alpha]_D^{27} = +2.8^\circ$  ( $c = 0.56$ , MeOH). Source: DAO GEN MEI *Rhizopus oryzae*. Ref: 3781.



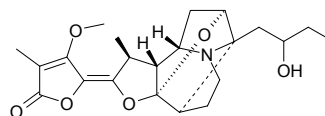
**10729 2 $\alpha$ -Hydroxystemod-12-ene**  
 C<sub>20</sub>H<sub>32</sub>O (288.48). Prisms, mp 132~133°C,  $[\alpha]_D^{27} = +18.0^\circ$  ( $c = 0.75$ , MeOH). Source: DAO GEN MEI *Rhizopus oryzae*. Ref: 3781.



**10730 2 $\beta$ -Hydroxystemod-12-ene**  
 C<sub>20</sub>H<sub>32</sub>O (288.48). Amorphous crystals, mp 82~85°C,  $[\alpha]_D^{27} = +20.9^\circ$  ( $c = 1.63$ , MeOH). Source: DAO GEN MEI *Rhizopus oryzae*. Ref: 3781.

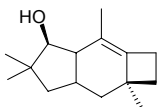


**10731 2'-Hydroxystemofoline**  
 C<sub>22</sub>H<sub>29</sub>NO<sub>6</sub> (403.48). Pharm: Insecticidal (neonate larvae of *Spodoptera littoralis*, LC<sub>50</sub> = 30mg/L, EC<sub>50</sub> = 38mg/L). Source: YIN DU ZHI NA BAI BU *Stemona cochinchinensis*, *Stemona curtisii*. Ref: 3409.

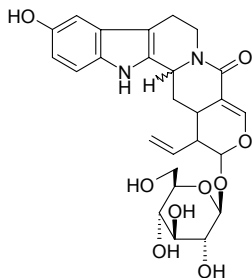


**10732 1-Hydroxy-3-sterpuren**

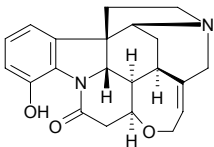
$C_{15}H_{24}O$  (220.36). Colorless oil,  $[\alpha]_D = -28^\circ$  ( $c = 0.3$ ,  $CHCl_3$ ). **Pharm:** Antifungal (*Mucor miehei*, *Penicillium notatum*, 50 $\mu$ g/filter disc, weak activity); antibacterial (*Bacillus subtilis*, *Bacillus brevis*, 50 $\mu$ g/filter disc, weak activity); cytotoxic (HeLa-S3,  $IC_{50} = 50\mu$ g/mL, HL-60,  $IC_{50} = 50\mu$ g/mL, COS-7,  $IC_{50} = 50\sim 100\mu$ g/mL). **Source:** *Gloeophyllum* sp. **Ref:** 3968.

**10733 10-Hydroxystriostosamide**

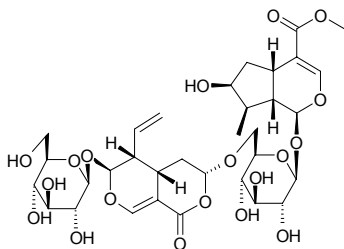
$C_{26}H_{30}N_2O_9$  (514.54).  $[\alpha]_D = -24.2^\circ$  ( $c = 0.43$ , MeOH). **Pharm:** Antibacterial (*in vitro*: *Staphylococcus aureus*, *Bacillus subtilis*, *Bacillus coli*, *Bacillus diphtheriae*, *Streptococcus* sp., *Streptobacillus* sp., *Salmonella* sp., *Bacillus proteus*, *Bacillus lactis*, *Klebsiella pneumoniae*); antileishmanial; antifungal (*Aspergillus niger*). **Source:** DONG FANG WU TAN *Nauclea orientalis*, KUAN YE WU TAN *Nauclea latifolia* (bark and wood: yield = 0.008%). **Ref:** 2178, 4303.

**10734 4-Hydroxystrychnine**

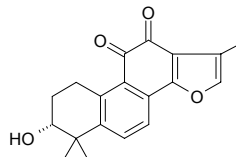
$C_{21}H_{22}N_2O_3$  (350.42). Crystals (EtOH),  $[\alpha]_D^{20} = -8^\circ$  ( $c = 0.7$ ,  $CHCl_3$ ). **Pharm:** Eclamptogenic (mus, sc,  $CD_{50} = 0.545$ mg/kg); similar action with strychnine; CNS stimulant;  $LD_{50} = 0.556$ mg/kg. **Source:** CHANG ZI MA QIAN *Strychnos wallichiana*, MA QIAN ZI *Strychnos nux-vomica*, ZHONG FEI MA QIAN *Strychnos icaja*. **Ref:** 2, 658, 1521.

**10735 6'-O-(7 $\alpha$ -Hydroxyswersoyloxy)loganin**

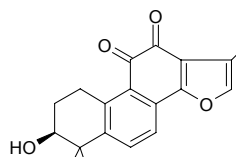
$C_{33}H_{46}O_{19}$  (746.72). Amorphous powder,  $[\alpha]_D^{26} = -150.7^\circ$  ( $c = 0.146$ , MeOH). **Source:** JIN YIN HUA *Lonicera japonica* (stem and leaf). **Ref:** 4220.

**10736 3 $\alpha$ -Hydroxytanshinone IIA**

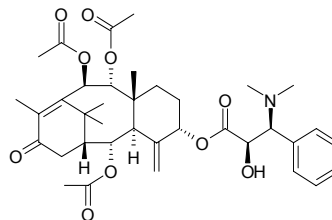
[97399-71-8]  $C_{19}H_{18}O_4$  (310.35). mp 187°C, mp 205~206°C. **Pharm:** Antibacterial (*Staphylococcus aureus* and its drug-resistant strain, hmn *Mycobacterium tuberculosis* H37Rv and hemolytic streptococcus); one of effective components in danshen, *Salvia miltiorrhiza* DAN SHEN. **Source:** DAN SHEN *Salvia miltiorrhiza*. **Ref:** 2, 6, 658, 1521.

**10737 3 $\beta$ -Hydroxytanshinone IIA**

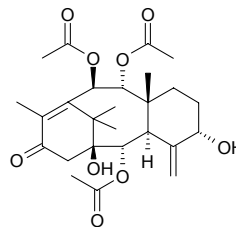
$C_{19}H_{18}O_4$  (310.35). Red acicular crystals (MeOH), mp 202°C. **Source:** DAN SHEN *Salvia miltiorrhiza*. **Ref:** 721.

**10738 2'-Hydroxytaxine II**

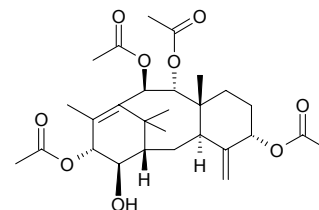
$C_{37}H_{49}NO_{10}$  (667.80). **Source:** ZI SHAN *Taxus cuspidata*. **Ref:** 662.

**10739 1-Hydroxytaxinine A**

Triacetyl-5-decinnamoyltaxicin I  $C_{26}H_{36}O_9$  (492.57). mp 206~207°C,  $[\alpha]_D = +54^\circ$  ( $CH_2Cl_2$ ). **Source:** HONG DOU SHAN *Taxus chinensis*, JIANG GUO ZI SHAN *Taxus baccata*. **Ref:** 662.

**10740 14 $\beta$ -Hydroxytaxusin**

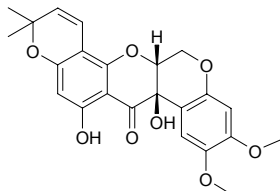
5 $\alpha$ ,9 $\alpha$ ,10 $\beta$ ,13 $\alpha$ -Tetraacetoxytaxa-4(20),11-dien-14 $\beta$ -ol  $C_{28}H_{40}O_9$  (520.63). **Source:** MEI LI HONG DOU SHAN *Taxus mairei*. **Ref:** 662.



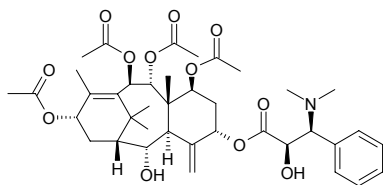


**10741 11-Hydroxytephrosin**

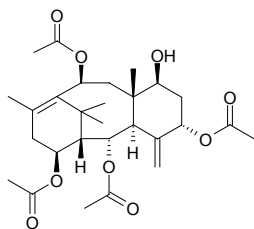
$C_{23}H_{22}O_8$  (426.43). **Pharm:** Antineoplastic (Inhibition of DMBA-induced preneoplastic lesions *in vitro*, MMOC assay,  $IC_{50} > 47 \mu\text{mol/L}$ ; control Sulforaphane,  $IC_{50} = 11 \mu\text{mol/L}$ )<sup>[4718]</sup>; cytotoxic (mouse mammary organ culture assay, 60% at  $10 \mu\text{g/mL}$ )<sup>[5038]</sup>. **Source:** DU HUI MAO DOU *Tephrosia toxicaria*, DU HUI MAO DOU *Tephrosia toxicaria* (stem: yield = 0.0065%dw). **Ref:** 4718, 5038.

**10742 2 $\alpha$ -Hydroxy-7 $\beta$ ,9 $\alpha$ ,10 $\beta$ ,13 $\alpha$ -tetraacetoxy-5 $\alpha$ -(2'-hydroxy-3'-N,N-dimethylamino-3'-phenyl)-propionyloxytaxa-4(20),11-diene**

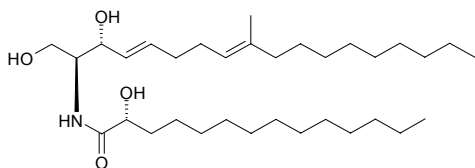
$C_{39}H_{53}NO_{12}$  (727.86). Gum,  $[\alpha]_D^{22} = +76^\circ$  ( $c = 0.21$ ,  $\text{CHCl}_3$ ). **Source:** JIA NA DA HONG DOU SHAN *Taxus canadensis* (needle leaf). **Ref:** 3886.

**10743 7 $\beta$ -Hydroxy-2 $\alpha$ ,5 $\alpha$ ,10 $\beta$ ,14 $\beta$ -tetraacetoxytaxa-4(20),11-diene**

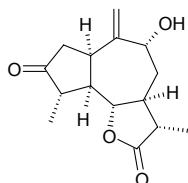
$C_{28}H_{40}O_9$  (520.63). **Source:** ZI SHAN *Taxus cuspidata*. **Ref:** 662.

**10744 (2S,2'R,3R,4E,8E)-N-2'-Hydroxytetradecanoyl-2-amino-9-methyl-4,8-octadecadiene-1,3-diol**

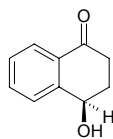
$C_{33}H_{63}NO_4$  (537.87). Amorphous powder,  $[\alpha]_D^{20} = +6.3^\circ$  ( $c = 0.2$ ,  $\text{CHCl}_3$ ). **Source:** BAO BAN E GAO *Amanita pantherina*. **Ref:** 4195.

**10745 9 $\alpha$ -Hydroxy-4 $\beta$ ,15,11 $\beta$ ,13-tetrahydro-dehydrozalanin C**

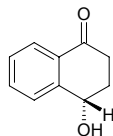
$C_{15}H_{20}O_4$  (264.32). Solid. **Source:** ROU SE HUAN YANG SHEN *Crepis mollis* (root). **Ref:** 3982.

**10746 (4R)-4-Hydroxy- $\alpha$ -tetralone**

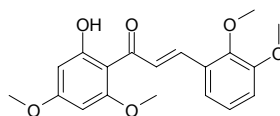
$C_{10}H_{10}O_2$  (162.19). **Source:** DONG BEI HU TAO *Juglans mandshurica* var. *sieboldiana* (fruit). **Ref:** 4492.

**10747 (4S)-4-Hydroxy- $\alpha$ -tetralone**

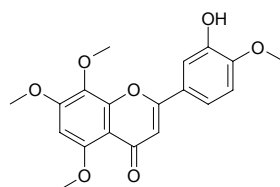
(-)-4-Hydroxy-1-tetralone  $C_{10}H_{10}O_2$  (162.19).  $[\alpha]_D^{26} = -41.5^\circ$  ( $c = 0.17$ ,  $\text{CHCl}_3$ ). **Pharm:** Antitubercular (*Mycobacterium tuberculosis* 90-221387, MIC =  $3.125 \mu\text{g/mL}$ ; *Mycobacterium tuberculosis* H37Rv, MIC =  $0.2 \mu\text{g/mL}$ )<sup>[5059]</sup>; cytotoxic inactive (MTT assay, HT29 cell line, MCF7 cell line)<sup>[4321]</sup>. **Source:** DONG BEI HU TAO *Juglans mandshurica* var. *sieboldiana* (fruit), HU TAO QIU *Juglans mandshurica* (root), HUANG QI II *Engelhardia roxburghiana* (root). **Ref:** 4321, 4492, 5059.

**10748 2'-Hydroxy-2,3,4,6'-tetramethoxychalcone**

$C_{19}H_{20}O_6$  (344.37). Yellow needles, mp  $120\sim 122^\circ\text{C}$ . **Pharm:** Antibacterial (gram-positive bacteria: *Staphylococcus aureus*,  $30 \mu\text{g/mL}$ , DIZ = 7mm, *Bacillus subtilis*,  $30 \mu\text{g/mL}$ , DIZ = 6mm, *Bacillus sphaericus*,  $30 \mu\text{g/mL}$ , DIZ = 7mm, control Penicillin G,  $30 \mu\text{g/mL}$ , DIZ = 12, 15, 14mm, respectively; gram-negative bacteria: *Pseudomonas aeruginosa*,  $30 \mu\text{g/mL}$ , DIZ = 7mm, *Klebsiella aerogenes*,  $30 \mu\text{g/mL}$ , DIZ = 6mm, *Chromobacterium violaceum*,  $30 \mu\text{g/mL}$ , DIZ = 7mm, control Penicillin G,  $30 \mu\text{g/mL}$ , DIZ = 24, 23, 24mm, respectively); antifungal (*Aspergillus niger*,  $100 \mu\text{g/mL}$ , DIZ = 7mm, *Candida albicans*,  $100 \mu\text{g/mL}$ , DIZ = 7mm, *Rhizopus oryzae*,  $150 \mu\text{g/mL}$ , inactive, control Clotrimazole,  $100 \mu\text{g/mL}$ , DIZ = 22, 25, 24mm, respectively). **Source:** JI MEI YUN SHI *Caesalpinia pulcherrima*. **Ref:** 3407.

**10749 3'-Hydroxy-5,7,8,4'-tetramethoxyflavone**

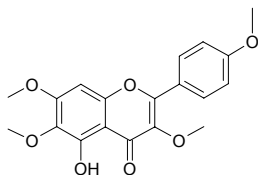
$C_{19}H_{18}O_7$  (358.35). Yellow crystals. **Source:** BAI YE XIANG CHA CAI *Isodon leucophyllus*. **Ref:** 2489.



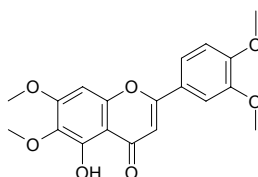
**10750 5-Hydroxy-3,6,7,4'-tetramethoxyflavone**

[14787-34-9] C<sub>19</sub>H<sub>18</sub>O<sub>7</sub> (358.35). **Pharm:** Prolyl endopeptidase inhibitor (flavobacterium origin, IC<sub>50</sub> = 860 μmol/L, control Z-pro-prolinal, IC<sub>50</sub> = (0.884±0.025) μmol/L)<sup>[4179]</sup>; thrombin inhibitor inactive (bovine source, IC<sub>50</sub> = 665 μmol/L control Leupeptin, IC<sub>50</sub> = 45.4 μmol/L)<sup>[4179]</sup>.

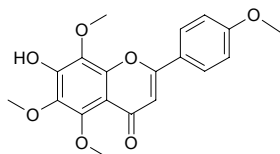
**Source:** HUANG HUA HAO *Artemisia annua*, JIA LIAN QIAO *Duranta repens* (whole herb). **Ref:** 2, 660, 4179.

**10751 5-Hydroxy-6,7,3',4'-tetramethoxyflavone**

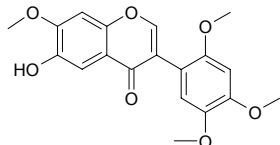
[21763-80-4] C<sub>19</sub>H<sub>18</sub>O<sub>7</sub> (358.35). Yellowish slender crystals, mp 188~189°C (95% ethanol); pale yellow powder, mp 242~245°C. **Pharm:** Antibacterial (gram-positive and gram-negative bacteria); cytotoxic (mus myelocytic leukemia cells, strongly induces cell differentiation, 50 μmol/L, growing rate 63%, activity of macrophages > 10%, 5 μmol/L, growing rate 93%); cytotoxic inactive (hmn breast cancer cell lines: MDA-MB-231, MCF7, T47D, 20 μg/mL)<sup>[5378]</sup>; angiogenesis inhibitor inactive (chicken embryo chorioallantoic membrane (CAM) assay, 10 μg)<sup>[5378]</sup>; antioxidant (ferric thiocyanate method, 0.5 mmol/L, peroxidation value = 77.9%, control BHA, 0.5 mmol/L, peroxidation value = 4.5%, control Vitamin E, 0.5 mmol/L, peroxidation value = 14.7%)<sup>[4508]</sup>; PFase inhibitor (100 μg/mL, InRt = 35%)<sup>[5378]</sup>. **Source:** AI YE *Artemisia argyi*, BAI YE XIANG CHA CAI *Isodon leucophyllus*, JU PI *Citrus reticulata*, TIAN SHE CAO *Lippia dulcis* (aerial parts). **Ref:** 900, 2489, 4508, 5378.

**10752 7-Hydroxy-5,6,8,4'-tetramethoxyflavone**

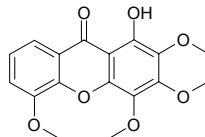
[73213-66-8] C<sub>19</sub>H<sub>18</sub>O<sub>7</sub> (358.35). Oil. **Pharm:** Cytotoxic (mus myelocytic leukemia cells, strongly induces cell differentiation, 50 μmol/L, growing rate 22%, activity of macrophages > 50%, 5 μmol/L, growing rate 56%, activity of macrophages > 10%). **Source:** JU PI *Citrus reticulata*. **Ref:** 997, 1091.

**10753 6-Hydroxy-7,2',4',5'-tetramethoxyisoflavone**

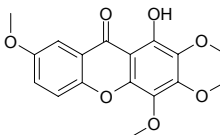
C<sub>19</sub>H<sub>18</sub>O<sub>7</sub> (358.35). Colorless amorphous powder (CHCl<sub>3</sub>-MeOH), mp 173~175°C. **Source:** SI ZI TAN *Pterocarpus santalinus* (heartwood). **Ref:** 3933.

**10754 1-Hydroxy-2,3,4,5-tetramethoxyxanthone**

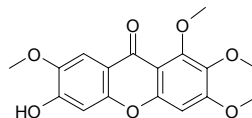
[22961-79-1] C<sub>17</sub>H<sub>16</sub>O<sub>7</sub> (332.31). **Source:** HUA MAO *Halenia corniculata*. **Ref:** 6.

**10755 1-Hydroxy-2,3,4,7-tetramethoxyxanthone**

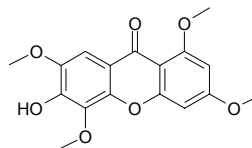
[14103-09-4] C<sub>17</sub>H<sub>16</sub>O<sub>7</sub> (332.31). mp 117.8~118.8°C. **Source:** HUA MAO *Halenia corniculata*. **Ref:** 6.

**10756 6-Hydroxy-1,2,3,7-tetramethoxyxanthone**

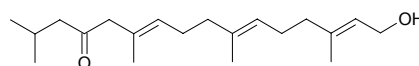
C<sub>17</sub>H<sub>16</sub>O<sub>7</sub> (332.31). **Source:** YUAN ZHI *Polygala tenuifolia* (cortex). **Ref:** 4507.

**10757 6-Hydroxy-1,3,5,7-tetramethoxyxanthone**

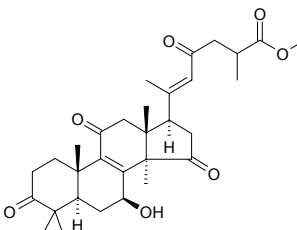
C<sub>17</sub>H<sub>16</sub>O<sub>7</sub> (332.31). mp 284~286°C (MeOH). **Source:** TE SI MAN NI HU TONG BIAN ZHONG *Calophyllum teysmannii* var. *inophylloide* (wood). **Ref:** 3937.

**10758 16-Hydroxy-2,6,10,14-tetramethyl-6,10,14-hexadecatrien-4-one**

C<sub>20</sub>H<sub>34</sub>O<sub>2</sub> (306.49). Oil. **Source:** SHUANG CHA ZAO *Bifurcaria bifurcata*. **Ref:** 2405.

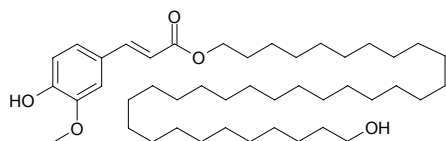
**10759 7β-Hydroxy-3,11,15,23-tetraoxolanosta-8,20E(22)-dien-26-oic acid methyl ester**

C<sub>31</sub>H<sub>42</sub>O<sub>7</sub> (526.68). Colorless amorphous solid, [α]<sub>D</sub><sup>27</sup> = +106.8° (c = 0.5, MeOH). **Source:** SHU SHE *Ganoderma applanatum* (sporocarp; yield = 0.00048%). **Ref:** 4756.

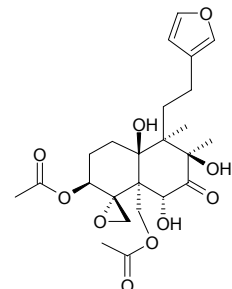


**10760 34-Hydroxytetracontanylferulate**

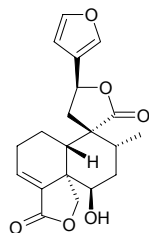
$C_{44}H_{78}O_5$  (687.11). Colorless compound, mp 95–96°C. Source: SHUANG SE JI DAN HUA *Plumeria bicolor*. Ref: 2286.

**10761 8β-Hydroxy-teucrolivin B**

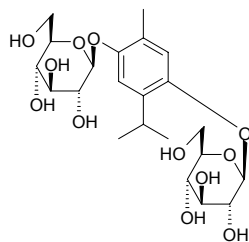
$C_{24}H_{32}O_{10}$  (480.52). Amorphous solid,  $[\alpha]_D^{25} = +7.47^\circ$  ( $c = 1.52$ ,  $CHCl_3$ ). Source: DONG FANG XIANG KE KE *Teucrium orientale*. Ref: 2552.

**10762 6β-Hydroxyteuscordin**

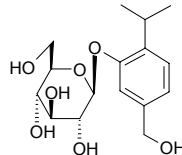
$C_{20}H_{22}O_6$  (358.39). Pharm: Insect antifeedant (*Spodoptera litura*, 10 μg/cm<sup>2</sup>, antifeedant activity = (73.0±3.9%), control Azadirachtin A, 0.5 μg/cm<sup>2</sup>, antifeedant activity = (79±2%); *Plutella xylostella*, 10 μg/cm<sup>2</sup>, antifeedant activity = (80±3%), control Azadirachtin A, 0.5 μg/cm<sup>2</sup>, antifeedant activity = (71±2%)). Source: RONG MAO XIANG KE KE *Teucrium tomentosum* (aerial parts), SUAN WEI XIANG KE KE *Teucrium scordium*. Ref: 3478.

**10763 6-Hydroxythymol 3,6-di-O-β-D-glucopyranoside**

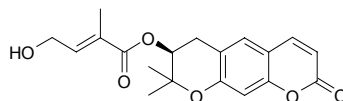
Thymoquinol 2,5-O-β-diglucopyranoside  $C_{22}H_{34}O_{12}$  (490.51). Amorphous powder,  $[\alpha]_D^{23} = -62^\circ$  ( $c = 0.3$ , MeOH);  $[\alpha]_D^{25} = -12.5^\circ$  ( $c = 1.20$ , MeOH). Source: XU LI YA NIU ZHI *Origanum syriacum* (aerial parts), YIN DU ZANG HUI XIANG *Carum ajowan* (fruit). Ref: 3547, 5223.

**10764 7-Hydroxythymol 3-O-β-D-glucopyranoside**

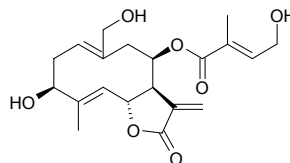
$C_{16}H_{24}O_7$  (328.37). Amorphous powder,  $[\alpha]_D^{25} = -60^\circ$  ( $c = 1.9$ , MeOH). Source: YIN DU ZANG HUI XIANG *Carum ajowan* (fruit). Ref: 3547.

**10765 4'-Hydroxytigloyldecurisinol**

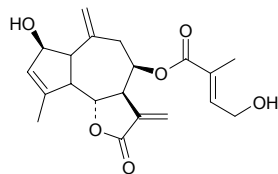
$C_{19}H_{20}O_6$  (344.37). Colorless needles (MeOH), mp 104–106°C,  $[\alpha]_D^{20} = +56^\circ$  ( $c = 0.5$ ,  $CHCl_3$ ). Pharm: Neuroprotective (primary cultures of rat cortical cells, control, cell viability = 100%, injured by glutamate, cell viability = 0%, 0.1 μmol/L, cell viability = (33.2±3.5)%,  $p < 0.05$ , 1 μmol/L, cell viability = (19.9±2.0)%, 10 μmol/L, cell viability = (1.2±4.0)%). Source: CHAO XIAN DANG GUI *Angelica gigas* (root: yield = 0.00075%dw). Ref: 4796.

**10766 8β-(4'-Hydroxytigloyloxy)-3β,14-dihydroxy-6βH,7αH-germacra-1(10)Z,4E,-11(13)-trien-6,12-olide**

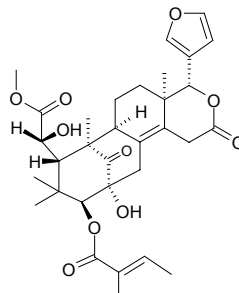
$C_{20}H_{26}O_7$  (378.43). Source: CHENG GAN SHENG MA *Eupatorium lindleyanum* (whole herb: yield = 0.00032%dw). Ref: 4762, 4762b.

**10767 8β-(4'-Hydroxytigloyloxy)-2β-hydroxy-1αH,5αH,6βH,7αH-guai-3,10(14),11(13)-trien-6,12-olide**

$C_{20}H_{24}O_6$  (360.41). Source: HUA ZE LAN *Eupatorium chinense* (whole herb: yield = 0.0014%). Ref: 4739.

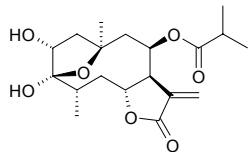
**10768 2-Hydroxy-3-O-tigloylswietenolide**

$C_{32}H_{40}O_{10}$  (584.67). White amorphous powder. Source: TAO HUA XIN MU *Swietenia mahogany* (leaf). Ref: 4420.

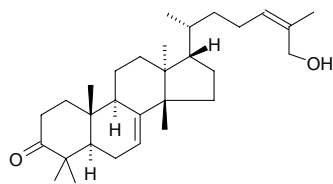


**10769 2 $\alpha$ -Hydroxytirotondin**

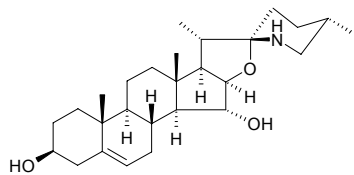
(2R)-Dihydroxy-3,10-epoxy-8-isobutyloxygermacra-11-(13)-en-6,12-olide  
 $C_{19}H_{28}O_7$  (368.43). Light yellowish solid,  $[\alpha]_D^{25} = -78.0^\circ$  ( $c = 0.11$ , MeOH).  
**Pharm:** Cytotoxic (antiproliferative, Col2 cells,  $IC_{50} > 20\mu\text{g/mL}$ ); cytotoxic  
 (cellular differentiation inducer, hmn promyelocytic leukemia HL-60 cells,  
 $4\mu\text{g/mL}$ , activity denotes percentage of cells differentiated  $< 10\%$ ); cytotoxic  
 (MMOC model, inhibits DMBA-induced preneoplastic lesion formation, not  
 tested). **Source:** ZHONG BIN JU *Tithonia diversifolia* (aerial parts: yield =  
 0.00078%dw). **Ref:** 4622.

**10770 (24Z)-27-Hydroxy-7,24-tirucalladien-3-one**

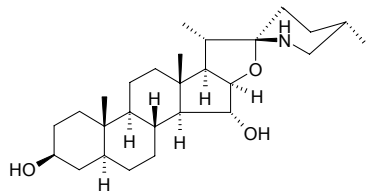
(24Z)-26-Hydroxy-7,24-euphadien-3-one [121063-66-9]  $C_{30}H_{48}O_2$  (440.72).  
**Source:** KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. **Ref:** 12.

**10771 15 $\alpha$ -Hydroxytomatidenol**

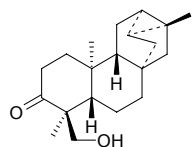
[7755-31-9]  $C_{27}H_{43}NO_3$  (429.65). mp 237–240°C. **Source:** QIAN NIAN BU  
 LAN XIN *Solanum dulcamara*. **Ref:** 6, 1521.

**10772 15 $\alpha$ -Hydroxytomatidine**

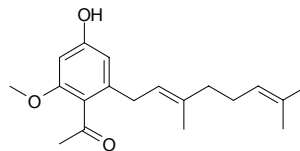
[4828-39-1]  $C_{27}H_{43}NO_3$  (431.66). mp 150–155°C,  $[\alpha]_D^{18} = +17.8^\circ$  ( $c = 0.8$ ,  
 $CHCl_3$ ). **Source:** QIAN NIAN BU LAN XIN *Solanum dulcamara*. **Ref:** 6, 1521.

**10773 ent-18-Hydroxy-trachyloban-3-one**

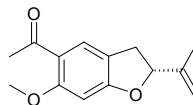
$C_{20}H_{30}O_2$  (302.46). White crystals ( $CH_2Cl_2$ ),  $[\alpha]_D^{22} = -77^\circ$  ( $c = 0.1$ ,  $CH_2Cl_2$ ). **Pharm:**  
 Cytotoxic (HeLa,  $IC_{50} = (12.2 \pm 2.1)\mu\text{g/mL}$ , control Camptothecin,  $IC_{50} =$   
 $0.5\mu\text{mol/mL}$ ; HL-60,  $IC_{50} = (12.7 \pm 1.2)\mu\text{g/mL}$ , Camptothecin,  $IC_{50} = 0.1\mu\text{mol/mL}$ ;  
 WI-38,  $IC_{50} = (18.3 \pm 2.7)\mu\text{g/mL}$ , Camptothecin,  $IC_{50} = 0.6\mu\text{mol/mL}$ ). **Source:** ZAN  
 BI XI BA DOU *Croton zambesicus* (leaf). **Ref:** 3807.

**10774 4-Hydroxy-[2-trans-3',7'-dimethyl-octa-2',6'-dienyl]-6-methoxyacetophenone**

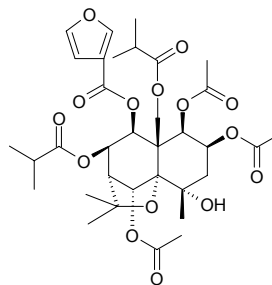
$C_{19}H_{26}O_3$  (302.42). **Source:** HUANG YAO ZI *Dioscorea bulbifera*. **Ref:** 660.

**10775 6-Hydroxytremetone**

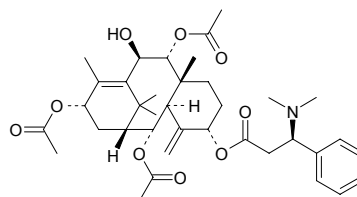
[21491-62-3]  $C_{13}H_{14}O_3$  (218.25). mp 70–71°C,  $[\alpha]_D^{24} = -50.7^\circ$  (EtOH). **Pharm:**  
 Fish toxin (goldfish). **Source:** XIA BAO TUO WU *Ligularia intermedia*,  
 ZHAI TOU TUO WU *Ligularia stenocephala* (root), QIAN MA YE ZE LAN  
*Eupatorium urticaefolium*, ZHOU YE ZE LAN *Eupatorium rugosum*, *Senecio*  
 sp., *Helichrysum* sp., *Tagetes* sp. **Ref:** 658, 1521, 4536.

**10776 4 $\alpha$ -Hydroxy-1 $\beta$ ,2 $\beta$ ,5 $\alpha$ -triacetoxy-7 $\beta$ ,11-diisobutyryloxy-8 $\alpha$ -furanoyl-dihydroagarofuran**

$C_{34}H_{46}O_{15}$  (694.74). **Pharm:** Immunosuppressant inactive (inhibits lymphocyte  
 transformation,  $80\mu\text{g/mL}$ , InRt = 4%, control Dexamethasone,  $50\mu\text{g/mL}$ , InRt =  
 61%). **Source:** LEI GONG TENG *Tripterygium wilfordii* (xylem). **Ref:** 4466.

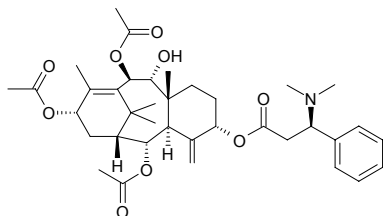
**10777 10 $\beta$ -Hydroxy-2 $\alpha$ ,9 $\alpha$ ,13 $\alpha$ -triacetoxy-5 $\alpha$ -(3'-(dimethylamino)-3'-phenyl)butanoatetaxa-4(20),11-diene**

$C_{37}H_{51}NO_9$  (653.82). Gum,  $[\alpha]_D^{22} = +37^\circ$  ( $c = 0.1$ ,  $CHCl_3$ ). **Source:** JIA NA  
 DA HONG DOU SHAN *Taxus canadensis* (needle leaf: yield = 0.00005%dw).  
**Ref:** 4734.

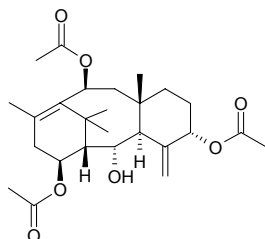


**10778 9 $\alpha$ -Hydroxy-2 $\alpha$ ,10 $\beta$ ,13 $\alpha$ -triacetoxy-5 $\alpha$ -(3'-N,N-dimethylamino-3'-phenyl)-propionyloxytaxa-4(20),11-diene**

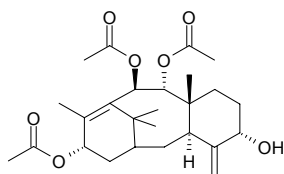
C<sub>37</sub>H<sub>51</sub>NO<sub>9</sub> (653.82). Gum, [ $\alpha$ ]<sub>D</sub><sup>22</sup> = +53° (c = 0.21, CHCl<sub>3</sub>); amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>22</sup> = +49° (c = 0.1, CHCl<sub>3</sub>). Source: JIA NA DA HONG DOU SHAN *Taxus canadensis* (needle leaf; yield = 0.00015%dw). Ref: 3886, 4734.

**10779 2 $\alpha$ -Hydroxy-5 $\alpha$ ,10 $\beta$ ,14 $\beta$ -triacetoxytaxa-4(20),11-diene**

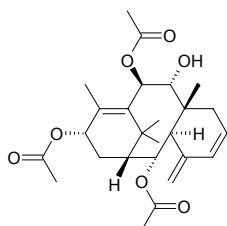
C<sub>26</sub>H<sub>38</sub>O<sub>7</sub> (462.59). Source: YUN NAN HONG DOU SHAN *Taxus yunnanensis*. Ref: 662.

**10780 Hydroxytriacetoxytaxadiene**

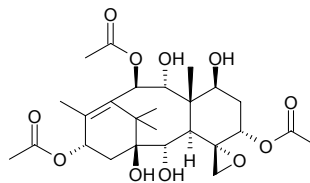
5 $\alpha$ -Hydroxy-9 $\alpha$ ,10 $\beta$ ,13 $\alpha$ -triacetoxytaxa-4(20),11-diene C<sub>26</sub>H<sub>38</sub>O<sub>7</sub> (462.59). mp 204~206°C, [ $\alpha$ ]<sub>D</sub> = +266° (CHCl<sub>3</sub>). Source: MEI LI HONG DOU SHAN *Taxus mairei*. Ref: 662.

**10781 9 $\alpha$ -Hydroxy-2 $\alpha$ ,10 $\beta$ ,13 $\alpha$ -triacetoxytaxa-4(20),5(6),11(12)-triene**

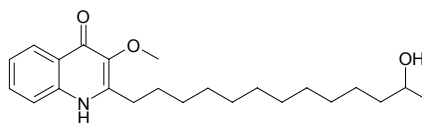
C<sub>26</sub>H<sub>36</sub>O<sub>7</sub> (460.57). Gum, [ $\alpha$ ]<sub>D</sub><sup>22</sup> = +47° (c = 0.21, CHCl<sub>3</sub>). Source: JIA NA DA HONG DOU SHAN *Taxus canadensis* (needle leaf; yield = 0.000075%dw). Ref: 4734.

**10782 1-Hydroxy-2,7,9-trideacetylaccatin I**

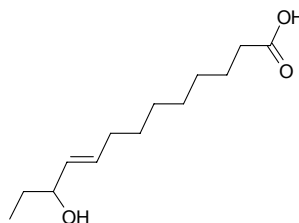
C<sub>26</sub>H<sub>38</sub>O<sub>11</sub> (526.59). White granular crystals, mp 232~235°C (methanol), [ $\alpha$ ]<sub>D</sub><sup>12</sup> = -52.94° (c = 0.043, methanol). Source: YUN NAN HONG DOU SHAN *Taxus yunnanensis*. Ref: 296, 662.

**10783 2-(12-Hydroxytridecanyl)-3-methoxy-4-quinolone**

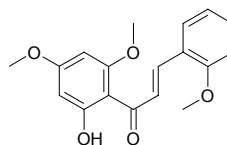
C<sub>23</sub>H<sub>35</sub>NO<sub>3</sub> (373.54). Colorless oil, [ $\alpha$ ]<sub>D</sub> = +20.7° (c = 0.02, CHCl<sub>3</sub>). Source: *Spathelia excelsa* (leaf). Ref: 5297.

**10784 11-Hydroxy-9-tridecenoic acid**

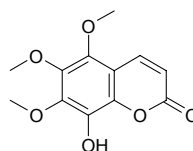
C<sub>13</sub>H<sub>24</sub>O<sub>3</sub> (228.33). Source: CU LIU GUO *Hippophae rhamnoides*. Ref: 2.

**10785 2'-Hydroxy-2,4,6'-trimethoxychalcone**

C<sub>18</sub>H<sub>18</sub>O<sub>5</sub> (314.34). Yellow needles (CHCl<sub>3</sub>), mp 171~173°C. Source: TIAO WEN CHUAN XIN LIAN *Andrographis lineata*. Ref: 3390.

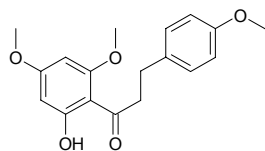
**10786 8-Hydroxy-5,6,7-trimethoxycoumarin**

C<sub>12</sub>H<sub>12</sub>O<sub>6</sub> (252.23). Pale yellow solid, mp 153~156°C. Pharm: Antioxidant inactive (*in vitro*, rat liver microsomes lipid peroxidation); MAO inhibitor (IC<sub>50</sub> = 44.5 $\mu$ g/mL). Source: MU JIN HUA *Hibiscus syriacus*. Ref: 3088.

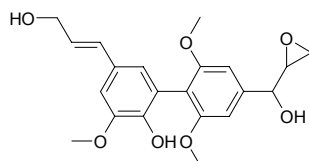


**10787 2'-Hydroxy-4,4',6'-trimethoxydihydrochalcone**

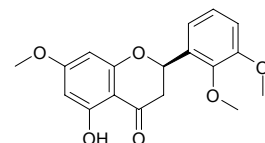
$C_{18}H_{20}O_5$  (316.36). Colorless plates (EtOH), mp 108~110°C, mp 110~112°C. Source: CHANG YE GE NA XIANG *Goniothalamus gardneri* (aerial parts). Ref: 5096.

**10788 2-Hydroxy-3,2',6'-trimethoxy-4'-(2,3-epoxy-1-hydroxypropyl)-5-(3-hydroxy-1-propenyl) biphenyl**

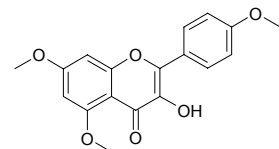
$C_{21}H_{24}O_7$  (388.42). Source: *Eurycoma* sp. Ref: 4556.

**10789 (2R)-5-Hydroxy-7,2',3'-trimethoxyflavanone**

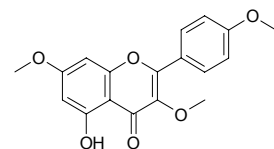
$C_{18}H_{18}O_6$  (330.34). Colorless solid (MeOH), mp 148~150°C,  $[\alpha]_D^{25} = -16.6^\circ$  ( $c = 0.1$ , MeOH). Source: NAN YIN DU CHUAN XIN LIAN *Andrographis viscosula* (whole herb). Ref: 4406.

**10790 3-Hydroxy-5,7,4'-trimethoxyflavone**

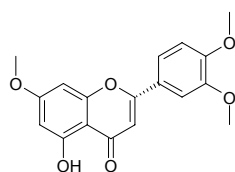
$C_{18}H_{16}O_6$  (328.32). Source: DA YE SHU LAN *Aglaiia elliptifolia* (leaf: yield = 0.00025%dw). Ref: 3031.

**10791 5-Hydroxy-3,7,4'-trimethoxyflavone**

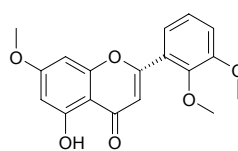
$C_{18}H_{16}O_6$  (328.32). Source: SHAN SHAN JIANG *Alpinia flabellata* (leaf: yield = 0.00069%dw), TU QIANG HUO *Hedychium coronarium* (rhizome). Ref: 4221, 4614.

**10792 5-Hydroxy-7,3',4'-trimethoxyflavone**

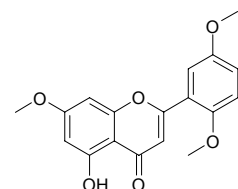
$C_{18}H_{16}O_6$  (328.32). Yellow needles (EtOH), mp 171~192°C, mp 161~163°C. Source: *Arnica* spp., *Piper* spp., *Salvia* spp. Ref: 1521.

**10793 5-Hydroxy-7,2',3'-trimethoxyflavone**

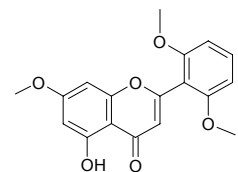
$C_{18}H_{16}O_6$  (328.32). Yellow amorphous solid ( $CHCl_3$ ), mp 191~192°C. Source: CHUAN XIN LIAN *Andrographis paniculata* [Syn. *Justicia paniculata*] (whole herb). Ref: 3841.

**10794 5-Hydroxy-7,2',5'-trimethoxyflavone**

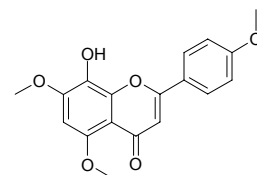
$C_{18}H_{16}O_6$  (328.32). Pale yellow solid (MeOH), mp 196~198°C. Source: *Andrographis neesiana* (whole herb). Ref: 4357.

**10795 5-Hydroxy-7,2',6'-trimethoxyflavone**

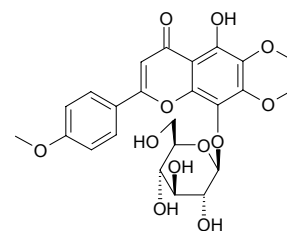
$C_{18}H_{16}O_6$  (328.32). Colorless solid (MeOH), mp 196~198°C. Source: CHUAN XIN LIAN *Andrographis paniculata* [Syn. *Justicia paniculata*]. Ref: 2036.

**10796 8-Hydroxy-5,7,4'-trimethoxyflavone**

[21919-71-1]  $C_{18}H_{16}O_6$  (328.32). Yellowish rhombic crystals, mp 233~234°C (methanol). Pharm: Cytotoxic (mus myelocytic leukemia cells, strongly induces cell differentiation, 50 μmol/L, growing rate 42%, activity of macrophages > 25%, 5 μmol/L, growing rate 80%). Source: JU PI *Citrus reticulata*. Ref: 936, 997.

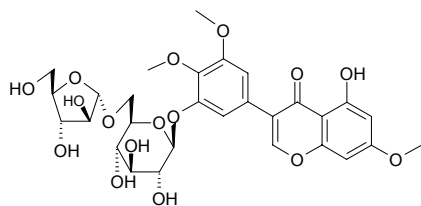
**10797 5-Hydroxy-6,7,3'-trimethoxyflavone-8-O-β-D-glucoside**

$C_{24}H_{26}O_{12}$  (506.47). Pale yellow needles (MeOH), mp 203~205°C,  $[\alpha]_D^{25} = -39.0^\circ$  ( $c = 0.250$ , pyridine). Source: ZI MAO XIANG CHA CAI *Isodon enanderianus*. Ref: 2254.

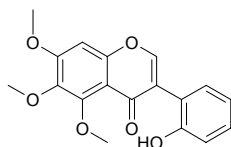


**10798 5-Hydroxy-7,4',5'-trimethoxyisoflavone 3'-O- $\alpha$ -L-arabinofuranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside**

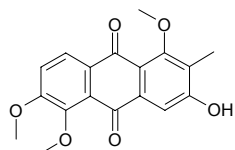
$C_{29}H_{34}O_{16}$  (638.58). White amorphous powder (MeOH), mp 213~214°C,  $[\alpha]_D^{20} = -71.6^\circ$  ( $c = 0.1$ , pyridine). Source: JI BEI *Ceiba pentandra* (bark). Ref: 4171.

**10799 2'-Hydroxy-5,6,7-trimethoxyisoflavonoid**

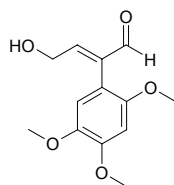
$C_{18}H_{16}O_6$  (328.32). Oil. Source: YAN SHENG JIA MU ZEI *Anabasis salsa*, DUAN YE JIA MU ZEI *Anabasis brevifolia*. Ref: 4861.

**10800 3-Hydroxy-1,5,6-trimethoxy-2-methyl-9,10-anthraquinone**

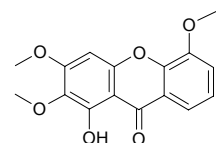
$C_{18}H_{16}O_6$  (328.32). Yellow needles (acetone), mp 256~258°C. Source: NAN SHAN HUA *Prismatomeris tetrandra* (root). Ref: 4521.

**10801 4-Hydroxy-2-(2,4,5-trimethoxyphenyl)-2E-butenal**

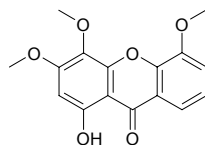
$C_{13}H_{16}O_5$  (252.27). Yellow oil. Source: SHAN SHAN JIANG *Alpinia flabellata* (leaf; yield = 0.00124%dw). Ref: 3051.

**10802 1-Hydroxy-2,3,5-trimethoxyxanthone**

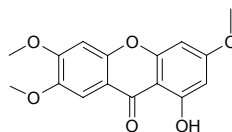
$C_{16}H_{14}O_6$  (302.29). Yellowish powder, mp 227~228°C, mp 189~190°C. Source: DENG ZHAN XI XIN *Erigeron breviscapus*, HUA MAO *Halenia corniculata*. Ref: 6, 2115.

**10803 1-Hydroxy-3,4,5-trimethoxyxanthone**

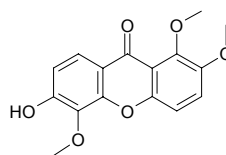
$C_{16}H_{14}O_6$  (302.29). Pharm: Antioxidant inactive (DPPH scavenger, 10 $\mu$ mol/L, ScRt = 2%; control BHT, 10 $\mu$ mol/L, ScRt = 43%, IC<sub>50</sub> = 19.00 $\mu$ mol/L). Source: TIAN SHAN ZHU ZI *Garcinia dulcis* (flower). Ref: 4422.

**10804 1-Hydroxy-3,6,7-trimethoxy xanthone**

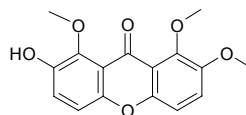
[2054-36-6]  $C_{16}H_{14}O_6$  (302.29). Source: YUAN ZHI *Polygala tenuifolia*. Ref: 2.

**10805 6-Hydroxy-1,2,5-trimethoxyxanthone**

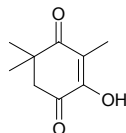
$C_{16}H_{14}O_6$  (302.29). Brown semisolid. Source: TE SI MAN NI HU TONG BIAN ZHONG *Calophyllum teysmannii* var. *inophylloide* (wood). Ref: 5112.

**10806 7-Hydroxy-1,2,8-trimethoxyxanthone**

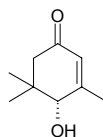
$C_{16}H_{14}O_6$  (302.29). Brown solid, mp 73~75°C. Source: TE SI MAN NI HU TONG BIAN ZHONG *Calophyllum teysmannii* var. *inophylloide* (wood). Ref: 5112.

**10807 2-Hydroxy-3,5,5-trimethylcyclohex-2-ene-1,4-dione**

3,5,5-Trimethyl-2-hydroxy-1,4-cyclohexadion-2-ene  $C_9H_{12}O_3$  (168.19). Pharm: Tyrosinase inhibitor (333.3 $\mu$ mol/L, InRt = 11.3%; control Kojic acid, 333.3 $\mu$ mol/L, InRt = 59.8%)<sup>[4233]</sup>. Source: ZANG HONG HUA *Crocus sativus* (pollen), ZANG HONG HUA *Crocus sativus* (stigma; yield = 0.00039%dw). Ref: 4233, 4653.

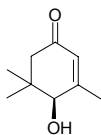
**10808 (4R)-Hydroxy-3,5,5-trimethylcyclohex-2-enone**

$C_9H_{14}O_2$  (154.21). Source: ZANG HONG HUA *Crocus sativus* (stigma). Ref: 1521, 4653.

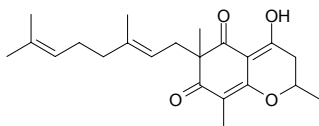


**10809 (4S)-Hydroxy-3,5,5-trimethylcyclohex-2-enone**

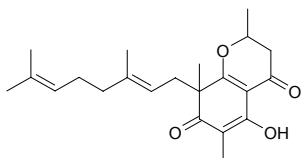
$C_9H_{14}O_2$  (154.21). Source: ZANG HONG HUA *Crocus sativus* (stigma). Ref: 1521, 4653.

**10810 4-Hydroxy-2,6,8-trimethyl-6-(3,7-dimethyl-2,6-octadienyl)-2H-1-benzopyran-5,7(3H,6H)-dione**

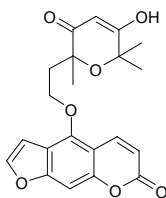
$C_{22}H_{30}O_4$  (358.48). Yellow oil,  $[\alpha]_D^{25} = 0.71^\circ$  ( $c = 0.42$ ,  $CHCl_3$ ). Source: BAI BEI YE *Mallotus apelta*. Ref: 755.

**10811 5-Hydroxy-2,6,8-trimethyl-8-(3,7-dimethyl-2,6-octadienyl)-2H-1-benzopyran-4,7(3H,8H)-dione**

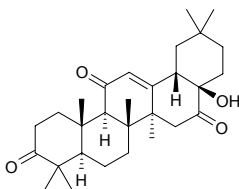
$C_{22}H_{30}O_4$  (358.48). Yellow oil,  $[\alpha]_D^{25} = -152^\circ$  ( $c = 0.59$ ,  $CHCl_3$ ). Source: BAI BEI YE *Mallotus apelta*. Ref: 755.

**10812 2-O-[2-(5-Hydroxy-2,6,6-trimethyl-3-oxo-2H-pyran-2-yl)ethyl] bergaptol**

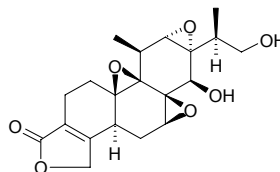
$C_{21}H_{20}O_7$  (384.39). Colorless plates (hexane-EtOAc), mp 144~145°C,  $[\alpha]_D = -4.1^\circ$  ( $c = 0.11$ , MeOH). Source: TUO YUAN DUO TAN CAO *Dorstenia elliptica* (twig). Ref: 3754.

**10813 17β-Hydroxy-3,11,16-trioxo-28-norolean-12-ene**

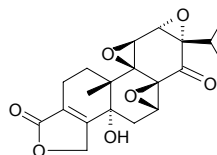
$C_{29}H_{42}O_4$  (454.66). Glassy amorphous solid,  $[\alpha]_D^{20} = +65^\circ$  ( $c = 0.04$ ,  $CHCl_3$ ). Source: XIAO SHE JU GEN *Microglossa pyrifolia*. Ref: 5374.

**10814 16-Hydroxytriptolide**

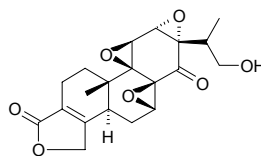
[139713-80-7]  $C_{20}H_{24}O_7$  (376.41). White crystals, mp 232.0~233.5°C. Pharm: Anti-inflammatory (mus, edema on ears caused by oleum crotonis,  $ED_{50} = 0.12\text{mg/kg}$ ,  $ED_{99} = 0.39\text{mg/kg}$ ); immunosuppressant (mus, formation test of hemolysin antibody,  $ED_{50} = 0.05\text{mg/kg}$ ,  $ED_{99} = 0.14\text{mg/kg}$ , ConA-induced proliferation of splenic cells,  $IC_{50} = 2.4\text{pg/mL}$ , lipopolysaccharide LPS-induced proliferation of splenic cells,  $IC_{50} = 3.9\text{pg/mL}$ ); anti-fertility agent (male mus, orl,  $MED = 0.027\text{mg/kg}$ , 33d);  $LD_{50}$  (mus, ip) =  $(0.79 \pm 0.10)\text{mg/kg}$ . Source: LEI GONG TENG *Tripterygium wilfordii*. Ref: 204, 1579, 1580.

**10815 5α-Hydroxytriptonide**

$C_{20}H_{22}O_7$  (374.39). Colorless crystals, mp 269~271°C,  $[\alpha]_D^{25} = -157^\circ$  ( $c = 0.14$ , MeOH). Pharm: Cytotoxic (Bel7402 cell lines,  $IC_{50} > 100\text{μmol/L}$ , control Paclitaxel,  $IC_{50} = 0.52\text{μmol/L}$ ; BGC823,  $IC_{50} = 17.50\text{μmol/L}$ , Paclitaxel,  $IC_{50} > 500\text{μmol/L}$ ; HeLa,  $IC_{50} = 3.07\text{μmol/L}$ , Paclitaxel,  $IC_{50} = 34.25\text{μmol/L}$ ; HL-60,  $IC_{50} = 4.82\text{μmol/L}$ , Paclitaxel,  $IC_{50} = 3.5E-4\text{μmol/L}$ ; KB,  $IC_{50} = 4.16\text{μmol/L}$ , Paclitaxel, not tested; MCF7,  $IC_{50} = 9.37\text{μmol/L}$ , Paclitaxel,  $IC_{50} = 12.64\text{μmol/L}$ ). Source: LEI GONG TENG *Tripterygium wilfordii* (structural modification of triptonide by *Aspergillus niger*). Ref: 5454.

**10816 16-Hydroxytriptonide**

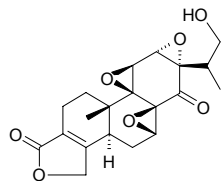
$C_{20}H_{22}O_7$  (374.39). Colorless crystals, mp 216~218°C,  $[\alpha]_D^{25} = -210^\circ$  ( $c = 0.1$ , MeOH). Pharm: Cytotoxic (Bel7402 cell lines,  $IC_{50} > 100\text{μmol/L}$ , control Paclitaxel,  $IC_{50} = 0.52\text{μmol/L}$ ; BGC823,  $IC_{50} = 2.44\text{μmol/L}$ , Paclitaxel,  $IC_{50} > 500\text{μmol/L}$ ; HeLa,  $IC_{50} = 0.33\text{μmol/L}$ , Paclitaxel,  $IC_{50} = 34.25\text{μmol/L}$ ; HL-60,  $IC_{50} = 0.34\text{μmol/L}$ , Paclitaxel,  $IC_{50} = 3.5E-4\text{μmol/L}$ ; KB,  $IC_{50} = 0.32\text{μmol/L}$ , Paclitaxel, not tested; MCF7,  $IC_{50} = 0.68\text{μmol/L}$ , Paclitaxel,  $IC_{50} = 12.64\text{μmol/L}$ ). Source: LEI GONG TENG *Tripterygium wilfordii* (structural modification of triptonide by *Aspergillus niger*). Ref: 5454.



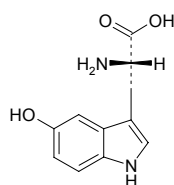


**10817 17-Hydroxytriptonide**

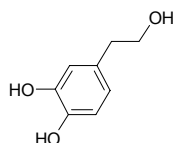
$C_{20}H_{22}O_7$  (374.39). Colorless crystals, mp 219–221°C,  $[\alpha]_D^{25} = -180^\circ$  ( $c = 0.1$ , MeOH). **Pharm:** Cytotoxic (Bel7402 cell lines,  $IC_{50} > 100\mu\text{mol/L}$ , control Paclitaxel,  $IC_{50} = 0.52\mu\text{mol/L}$ ; BGC823,  $IC_{50} = 2.87\mu\text{mol/L}$ , Paclitaxel,  $IC_{50} > 500\mu\text{mol/L}$ ; HeLa,  $IC_{50} = 0.34\mu\text{mol/L}$ , Paclitaxel,  $IC_{50} = 34.25\mu\text{mol/L}$ ; HL-60,  $IC_{50} = 0.34\mu\text{mol/L}$ , Paclitaxel,  $IC_{50} = 3.5E-4\mu\text{mol/L}$ ; KB,  $IC_{50} = 0.37\mu\text{mol/L}$ , Paclitaxel, not tested; MCF7,  $IC_{50} = 0.85\mu\text{mol/L}$ , Paclitaxel,  $IC_{50} = 12.64\mu\text{mol/L}$ ). **Source:** LEI GONG TENG *Tripterygium wilfordii* (structural modification of triptonide by *Aspergillus niger*). **Ref:** 5454.

**10818 5-Hydroxy-L-tryptophan**

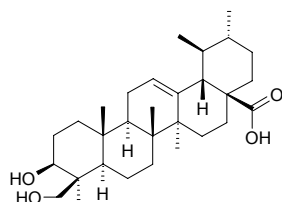
$C_{11}H_{12}N_2O_3$  (220.23). **Pharm:** Precursor to biosynthesis of 5-HT; toxin (insects). **Source:** CI YANG LI DOU *Mucuna pruriens*. **Ref:** 658.

**10819 Hydroxytyrosol**

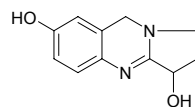
[10597-60-1]  $C_8H_{10}O_3$  (154.17). **Pharm:** Antibacterial (*Staphylococcus aureus*, *Bacillus coli* and *Bacillus pyocyaneus*); antitussive (dispels phlegm). **Source:** BAO MA ZI *Syringa amurensis* [Syn. *Syringa reticulata* var. *amurensis*]. **Ref:** 658.

**10820 23-Hydroxyursolic acid**

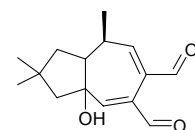
$C_{30}H_{48}O_4$  (472.71). mp 280–281°C  $[\alpha]_D^{25} = +64^\circ$  ( $c = 0.27$ , MeOH). **Pharm:** Antitubercular (*Mycobacterium tuberculosis*, MIC = 15.5  $\mu\text{g/mL}$ , cytotoxic, Vero cells,  $IC_{50} = 33.7\mu\text{g/mL}$ , SI ( $IC_{50}/\text{MIC}$ ) = 2.17, positive control Rifampin, MIC = 0.03  $\mu\text{g/mL}$ ,  $IC_{50} = 98.3\mu\text{g/mL}$ , SI = 3300)<sup>[4986]</sup>; anti-inflammatory (*in vitro*, murine macrophage RAW264.7 Cells, inhibits LPS-induced NO ( $IC_{50} = 2.4\mu\text{mol/L}$ ) and PGE2 release; inhibits protein and mRNA expression levels of iNOS and COX-2 enzymes; inhibits LPS-induced DNA binding activity of NF- $\kappa$ B which is associated with a decrease of p65 protein levels in the nucleus)<sup>[5016]</sup>. **Source:** SHU HUA JIE CAO *Valeriana laxiflora* (aerial parts and root), *Cussonia bancoensis*. **Ref:** 4986, 5016.

**10821 7-hydroxy vasicine**

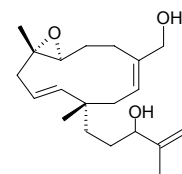
$C_{11}H_{12}N_2O_2$  (204.23). Colorless needles (MeOH), mp 260°C (dec),  $[\alpha]_D^{18} = -35.5^\circ$  ( $c = 0.013$ , MeOH). **Source:** LIU CHUAN YU *Linaria vulgaris*. **Ref:** 4237.

**10822 9-Hydroxyvelleral**

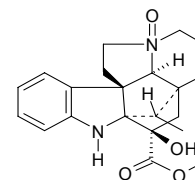
$C_{15}H_{20}O_3$  (248.32). **Source:** RONG BAI RU GU *Lactarius vellereus*. **Ref:** 660.

**10823 14-Hydroxyvibsanin F**

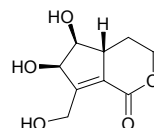
$C_{20}H_{32}O_3$  (320.48). Colorless oil,  $[\alpha]_D^{20} = +9.1^\circ$  ( $c = 0.18$ ,  $\text{CHCl}_3$ ). **Source:** XIANG QI JIA MI *Viburnum odoratissimum* (leaf). **Ref:** 3512.

**10824 16β-Hydroxy-19S-vindolinine N-oxide**

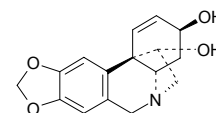
$C_{21}H_{24}N_2O_4$  (368.44). White block crystals, mp 200°C. **Source:** CHUAN SHAN CHENG *Melodinus hemsleyanus*. **Ref:** 819.

**10825 7-Hydroxy viteoid II**

$C_9H_{11}O_5$  (200.19). Yellowish-brown oil,  $[\alpha]_D^{17} = -76.14^\circ$  ( $c = 0.66$ , MeOH). **Source:** DIAO DENG SHU *Kigelia pinnata*. **Ref:** 3418.

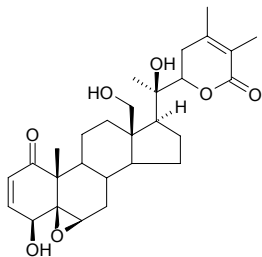
**10826 (+)-11-Hydroxyvittatine**

$C_{16}H_{17}NO_4$  (287.32). **Pharm:** Antibacterial (*Staphylococcus aureus*, IZD = 17mm, MIC = 219  $\mu\text{g/mL}$ )<sup>[3829]</sup>; antifungal (*Candida albicans*, IZD = 20mm, MIC = 156  $\mu\text{g/mL}$ )<sup>[3829]</sup>. **Source:** GU TING HUA *Amaryllis belladonna* (bulb). **Ref:** 3829.

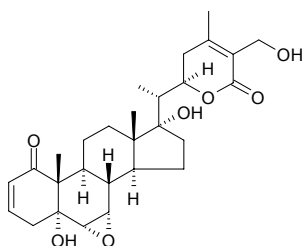


**10827 18-Hydroxywithanolide D**

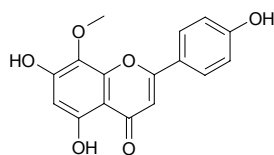
$C_{28}H_{38}O_7$  (486.61). **Pharm:** Cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells,  $IC_{50} = 0.029\mu\text{g/mL}$ ); cytotoxic (soft agar transformation assay with JB6 cells,  $IC_{50} = 0.31\mu\text{g/mL}$ ); cytotoxic (mouse mammary organ culture assay, 63% at  $10\mu\text{g/mL}$ ). **Source:** FEI CHENG SUAN JIANG *Physalis philadelphica*. **Ref:** 5038.

**10828 27-Hydroxy withanone**

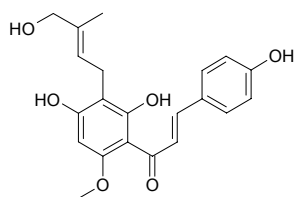
$C_{28}H_{38}O_7$  (486.61). **Source:** CUI MIAN SHUI QIE *Withania somnifera* (leaf). **Ref:** 5329.

**10829 4'-Hydroxywogonin**

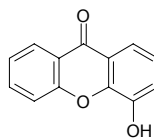
5,7,4'-Trihydroxy-8-methoxyflavone; Isoscutellarein-8-methyl ether  $C_{16}H_{12}O_6$  (300.27). **Source:** BAN ZHI LIAN *Scutellaria barbata* [Syn. *Scutellaria rivularis*], HONG CHAI HU *Bupleurum scorzoniferifolium* (root), HUANG QIN *Scutellaria baicalensis*. **Ref:** 2, 660, 3498, 5501.

**10830 trans-Hydroxyxanthohumol**

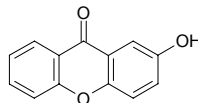
1-[2,4-Dihydroxy-3-(4-hydroxy-3-methyl-2-butenyl)-6-methoxyphenyl]-3-(4-hydroxyphenyl)-2-propen-1-one  $C_{21}H_{22}O_6$  (370.41). Yellow-orange solid. **Source:** PI JIU HUA *Humulus lupulus* (strobile). **Ref:** 4789.

**10831 5-Hydroxyxanthone**

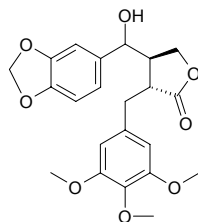
$C_{13}H_8O_3$  (212.21). **Pharm:** Antifungal (*Aspergillus fumigatus* CBS113.26,  $MIC_{80} = 31\mu\text{g/mL}$ , control Amphotericin B,  $MIC_{80} = 8\mu\text{g/mL}$ ; *Aspergillus flavus* IHEM37.19,  $MIC_{80} = 16\mu\text{g/mL}$ , Amphotericin B,  $MIC_{80} = 8\mu\text{g/mL}$ ; *Aspergillus niger* IHEM2951,  $MIC_{80} = 62\mu\text{g/mL}$ , Amphotericin B,  $MIC_{80} = 16\mu\text{g/mL}$ ; *Aspergillus terreus* 5029.2000,  $MIC_{80} = 125\mu\text{g/mL}$ ; Amphotericin B,  $MIC_{80} = 16\mu\text{g/mL}$ ; *Candida albicans* ATCC663.90,  $MIC_{80} = 62\mu\text{g/mL}$ ; Amphotericin B,  $MIC_{80} = 1\mu\text{g/mL}$ ). **Source:** SU GE LAN HU TONG *Calophyllum caledonicum* (stem cortex). **Ref:** 4995.

**10832 7-Hydroxyxanthone**

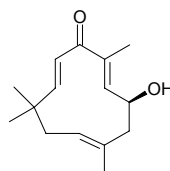
$C_{13}H_8O_3$  (212.21). **Pharm:** Antifungal (*Aspergillus fumigatus* CBS113.26,  $MIC_{80} = 31\mu\text{g/mL}$ , control Amphotericin B,  $MIC_{80} = 8\mu\text{g/mL}$ ; *Aspergillus flavus* IHEM37.19,  $MIC_{80} = 16\mu\text{g/mL}$ , Amphotericin B,  $MIC_{80} = 8\mu\text{g/mL}$ ; *Aspergillus niger* IHEM2951,  $MIC_{80} = 62\mu\text{g/mL}$ , Amphotericin B,  $MIC_{80} = 16\mu\text{g/mL}$ ; *Aspergillus terreus* 5029.2000,  $MIC_{80} > 250\mu\text{g/mL}$ ; Amphotericin B,  $MIC_{80} = 16\mu\text{g/mL}$ ; *Candida albicans* ATCC663.90,  $MIC_{80} > 250\mu\text{g/mL}$ ; Amphotericin B,  $MIC_{80} = 1\mu\text{g/mL}$ ). **Source:** SU GE LAN HU TONG *Calophyllum caledonicum* (stem cortex). **Ref:** 4995.

**10833 7-Hydroxyatein**

$C_{22}H_{24}O_8$  (416.43). **Source:** E SHEN *Anthriscus sylvestris*. **Ref:** 5499.

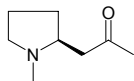
**10834 5-Hydroxyzerumbone**

5-Hydroxy-2E,6E,9E-humulatrien-8-one  $C_{15}H_{22}O_2$  (234.34). Colorless oil,  $[\alpha]_D^{20} = 0.0^\circ$  ( $c = 0.25$ ,  $\text{CHCl}_3$ ). **Pharm:** NO production inhibitor (cultured RAW264.7 macrophages, induced by LPS,  $IC_{50} = 14.1\mu\text{mol/L}$ , control L-NMMA,  $IC_{50} = 21.3\mu\text{mol/L}$ ). **Source:** HONG QIU JIANG *Zingiber zerumbet* (rhizome). **Ref:** 4481.

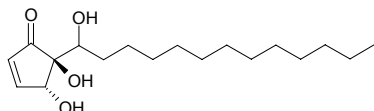


**10835 Hygrine**

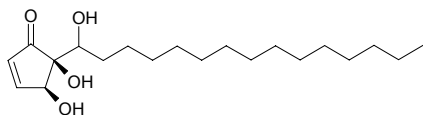
[65941-22-2] C<sub>8</sub>H<sub>15</sub>NO (141.21). bp (-) 193~195°C. Source: JIA SUAN JIANG *Nicandra physaloides*, SHU HUA SHI HU *Dendrobium chrysanthum*. Ref: 6, 660.

**10836 Hygrophorone A<sup>12</sup>**

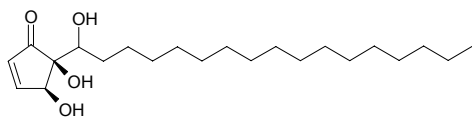
4,5-*trans*-4,5-Dihydroxy-5-(1-hydroxytridecyl)-2-cyclopenten-1-one C<sub>18</sub>H<sub>32</sub>O<sub>4</sub> (312.45). Source: *Hygrophorus persoonii*. Ref: 3800.

**10837 Hygrophorone B<sup>14</sup>**

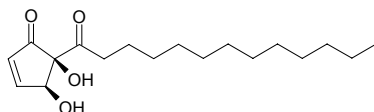
4,5-*cis*-4,5-Dihydroxy-5-(1-hydroxypentadecyl)-2-cyclopenten-1-one C<sub>20</sub>H<sub>36</sub>O<sub>4</sub> (340.51). White amorphous solid, [α]<sub>D</sub><sup>23</sup> = +10.5° (c = 0.640, MeOH). Source: *Hygrophorus olivaceoalbus*. Ref: 3800.

**10838 Hygrophorone B<sup>16</sup>**

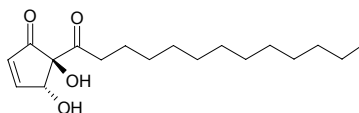
4,5-*cis*-4,5-Dihydroxy-5-(1-hydroxyheptadecyl)-2-cyclopenten-1-one C<sub>22</sub>H<sub>40</sub>O<sub>4</sub> (368.56). White amorphous solid. Source: *Hygrophorus olivaceoalbus*. Ref: 3800.

**10839 Hygrophorone C<sup>12</sup>**

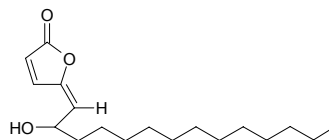
*cis*-4,5-Dihydroxy-5-tridecanoyl-2-cyclopenten-1-one C<sub>18</sub>H<sub>30</sub>O<sub>4</sub> (310.44). White solid. Pharm: Antifungal (*Cladosporium cucumerinum*, 20μg, IZA = 55mm<sup>2</sup>, 40μg, IZA = 90mm<sup>2</sup>). Source: *Hygrophorus pustulatus*. Ref: 3800.

**10840 Hygrophorone D<sup>12</sup>**

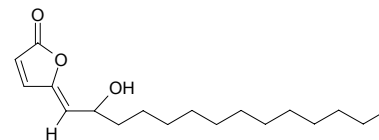
*trans*-4,5-Dihydroxy-5-tridecanoyl-2-cyclopenten-1-one C<sub>18</sub>H<sub>30</sub>O<sub>4</sub> (310.44). Colorless oil. Pharm: Antifungal (*Cladosporium cucumerinum*, 20μg, IZA = 83mm<sup>2</sup>, 40μg, IZA = 170mm<sup>2</sup>). Source: *Hygrophorus latitabundus*. Ref: 3800.

**10841 Hygrophorone F<sup>12</sup>**

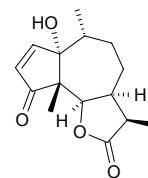
(5*E*)-5-(2-Hydroxytetradexylidene)-furan-2(5*H*)-one C<sub>18</sub>H<sub>30</sub>O<sub>3</sub> (294.44). White amorphous solid. Pharm: Antifungal (*Cladosporium cucumerinum*, 20μg, IZA = 43mm<sup>2</sup>, 40μg, IZA = 64mm<sup>2</sup>). Source: *Hygrophorus persoonii*. Ref: 3800.

**10842 Hygrophorone G<sup>12</sup>**

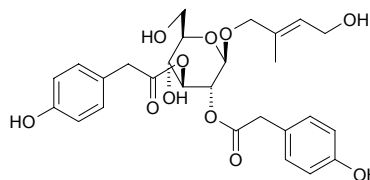
(5*Z*)-5-(2-Hydroxytetradexylidene)-furan-2(5*H*)-one C<sub>18</sub>H<sub>30</sub>O<sub>3</sub> (294.44). Colorless oil. Source: *Hygrophorus persoonii*. Ref: 3800.

**10843 Hymenolin**

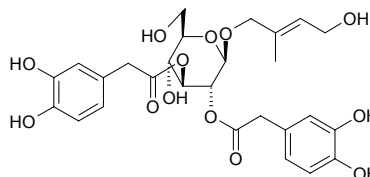
C<sub>15</sub>H<sub>20</sub>O<sub>4</sub> (264.32). Pharm: Larvacide (mosquito larva). Source: MEI GUO HAI MO JU *Hymenoclea salsola*. Ref: 658.

**10844 Hymenoside A**

C<sub>27</sub>H<sub>32</sub>O<sub>11</sub> (532.55). Oil, [α]<sub>D</sub><sup>20</sup> = 21.8° (c = 4.8, MeOH). Source: MO JUE *Hymenophyllum barbatum*. Ref: 3506, 4151.

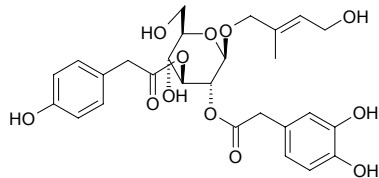
**10845 Hymenoside B**

C<sub>27</sub>H<sub>32</sub>O<sub>13</sub> (564.55). Oil, [α]<sub>D</sub><sup>17</sup> = -24.0° (c = 2.92, MeOH). Source: MO JUE *Hymenophyllum barbatum*. Ref: 3506.

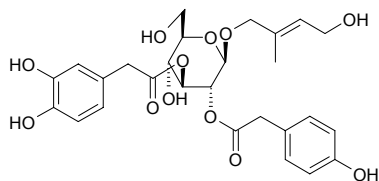


**10846 Hymenoside C**

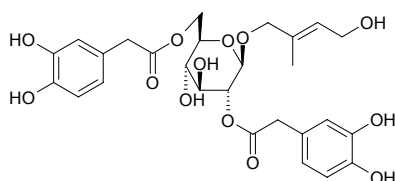
$C_{27}H_{32}O_{12}$  (548.55). Oil,  $[\alpha]_D^{21} = -26.1^\circ$  ( $c = 2.38$ , MeOH). Source: MO JUE  
*Hymenophyllum barbatum*. Ref: 3506.

**10847 Hymenoside D**

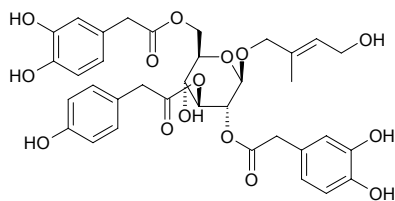
$C_{27}H_{32}O_{12}$  (548.55). Oil,  $[\alpha]_D^{21} = -20.0^\circ$  ( $c = 1.18$ , MeOH). Source: MO JUE  
*Hymenophyllum barbatum*. Ref: 3506.

**10848 Hymenoside E**

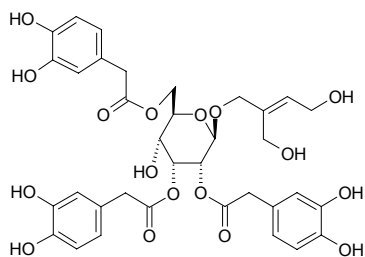
$C_{27}H_{32}O_{13}$  (564.55). Oil,  $[\alpha]_D^{22} = -8.2^\circ$  ( $c = 0.66$ , MeOH). Source: MO JUE  
*Hymenophyllum barbatum*. Ref: 3506.

**10849 Hymenoside F**

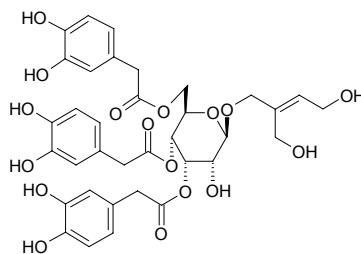
$C_{35}H_{38}O_{15}$  (698.68). Oil,  $[\alpha]_D^{20} = -10.2^\circ$  ( $c = 2.37$ , MeOH). Source: MO JUE  
*Hymenophyllum barbatum*. Ref: 3506.

**10850 Hymenoside G**

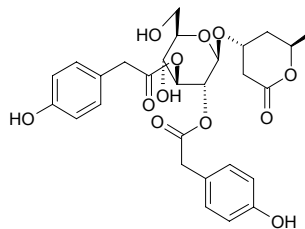
$C_{35}H_{38}O_{17}$  (730.68). Oil,  $[\alpha]_D^{22} = -26.3^\circ$  ( $c = 1.0$ , MeOH). Source: MO JUE  
*Hymenophyllum barbatum*. Ref: 4151.

**10851 Hymenoside H**

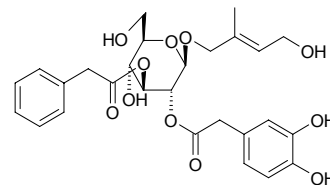
$C_{35}H_{38}O_{17}$  (730.68). Oil,  $[\alpha]_D^{22} = +10.9^\circ$  ( $c = 1.4$ , MeOH). Source: MO JUE  
*Hymenophyllum barbatum*. Ref: 4151.

**10852 Hymenoside I**

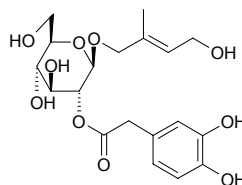
$C_{28}H_{32}O_{12}$  (560.56). Oil,  $[\alpha]_D^{22} = -20.9^\circ$  ( $c = 0.64$ , MeOH). Source: MO JUE  
*Hymenophyllum barbatum*. Ref: 4151.

**10853 Hymenoside J**

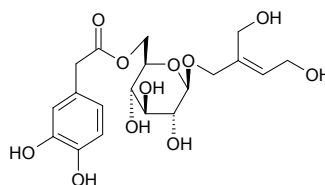
$C_{27}H_{32}O_{11}$  (532.55). Oil,  $[\alpha]_D^{22} = -38.7^\circ$  ( $c = 2.82$ , MeOH). Source: MO JUE  
*Hymenophyllum barbatum*. Ref: 4151.

**10854 Hymenoside K**

2-(3,4-Dihydroxyphenylacetyl)- $\beta$ -D-glucopyranosyl  
(*E*)-2-methyl-but-2-en-4-ol  $C_{19}H_{26}O_{10}$  (414.41). Oil,  $[\alpha]_D^{22} = -18.5^\circ$  ( $c = 3.84$ , MeOH). Source: MO JUE *Hymenophyllum barbatum*. Ref: 4178.

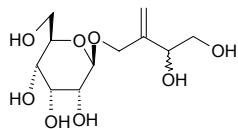
**10855 Hymenoside L**

$C_{19}H_{26}O_{11}$  (430.41). Oil,  $[\alpha]_D^{20} = -30.8^\circ$  ( $c = 1.40$ , MeOH). Source: MO JUE  
*Hymenophyllum barbatum*. Ref: 4178.

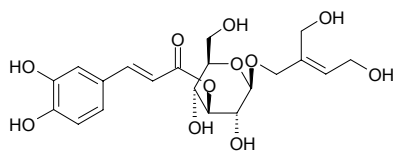


**10856 Hymenoside M**

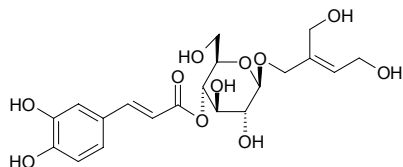
$C_{11}H_{20}O_8$  (280.28). Oil,  $[\alpha]_D^{22} = -34.4^\circ$  ( $c = 0.98$ , MeOH). Source: MO JUE  
*Hymenophyllum barbatum*. Ref: 4178.

**10857 Hymenoside N**

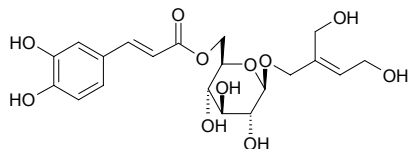
$C_{20}H_{26}O_{11}$  (442.42). Oil,  $[\alpha]_D^{22} = -34.0^\circ$  ( $c = 4.4$ , MeOH). Source: MO JUE  
*Hymenophyllum barbatum*. Ref: 4178.

**10858 Hymenoside O**

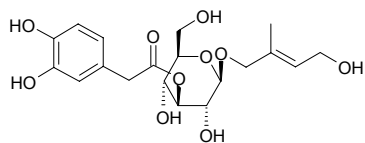
$C_{20}H_{26}O_{11}$  (442.42). Oil,  $[\alpha]_D^{22} = -4.7^\circ$  ( $c = 2.8$ , MeOH). Source: MO JUE  
*Hymenophyllum barbatum*. Ref: 4178.

**10859 Hymenoside P**

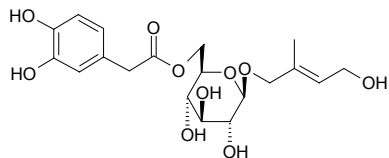
$C_{20}H_{26}O_{11}$  (442.42). Amorphous powder,  $[\alpha]_D^{22} = -50.9^\circ$  ( $c = 1.5$ , MeOH).  
Source: MO JUE *Hymenophyllum barbatum*. Ref: 4178.

**10860 Hymenoside Q**

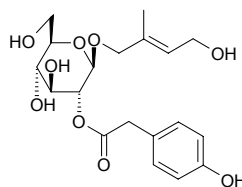
$C_{19}H_{26}O_{10}$  (414.41). Oil,  $[\alpha]_D^{20} = -16.7^\circ$  ( $c = 1.6$ , MeOH). Source: MO JUE  
*Hymenophyllum barbatum*. Ref: 4178.

**10861 Hymenoside R**

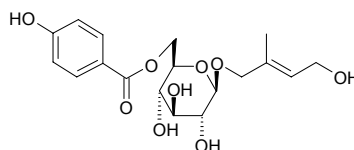
$C_{19}H_{26}O_{10}$  (414.41). Oil,  $[\alpha]_D^{20} = -18.3^\circ$  ( $c = 1.2$ , MeOH). Source: MO JUE  
*Hymenophyllum barbatum*. Ref: 4178.

**10862 Hymenoside S**

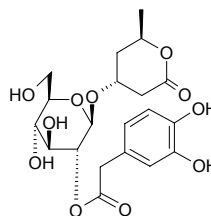
$C_{19}H_{26}O_9$  (398.41). Oil,  $[\alpha]_D^{20} = -21.6^\circ$  ( $c = 1.1$ , MeOH). Source: MO JUE  
*Hymenophyllum barbatum*. Ref: 4178.

**10863 Hymenoside T**

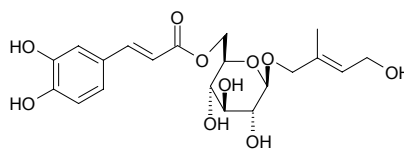
$C_{19}H_{26}O_9$  (384.39). Oil,  $[\alpha]_D^{20} = -37.3^\circ$  ( $c = 3.1$ , MeOH). Source: MO JUE  
*Hymenophyllum barbatum*. Ref: 4178.

**10864 Hymenoside U**

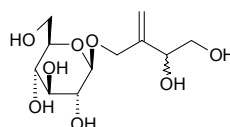
$C_{20}H_{26}O_{11}$  (442.42). Oil,  $[\alpha]_D^{20} = -29.0^\circ$  ( $c = 2.8$ , MeOH). Source: MO JUE  
*Hymenophyllum barbatum*. Ref: 4178.

**10865 Hymenoside V**

$C_{20}H_{26}O_{10}$  (426.42). Oil,  $[\alpha]_D^{20} = +20.6^\circ$  ( $c = 2.4$ , MeOH). Source: MO JUE  
*Hymenophyllum barbatum*. Ref: 4178.

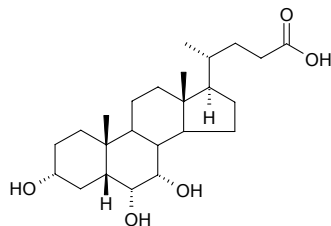
**10866 Hymenoside W**

$C_{11}H_{20}O_8$  (280.28). Oil,  $[\alpha]_D^{22} = -37.2^\circ$  ( $c = 1.36$ , MeOH). Source: MO JUE  
*Hymenophyllum barbatum*. Ref: 4178.

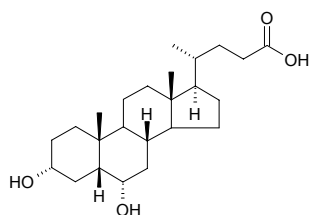


**10867 Hyocholic acid**

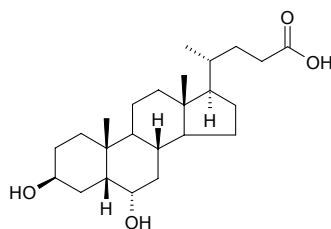
[547-75-1] C<sub>24</sub>H<sub>40</sub>O<sub>5</sub> (408.58). mp 188~189°C. Source: ZHU DAN *Sus scrofa domestica*. Ref: 6.

**10868  $\alpha$ -Hyodeoxycholic acid**

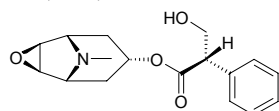
[83-49-8] C<sub>24</sub>H<sub>40</sub>O<sub>4</sub> (392.58). mp 196~197°C. Source: ZHU DAN *Sus scrofa domestica*. Ref: 6.

**10869  $\beta$ -Hyodeoxycholic acid**

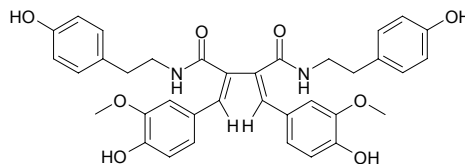
C<sub>24</sub>H<sub>40</sub>O<sub>4</sub> (392.58). mp 189~190°C. Source: ZHU DAN *Sus scrofa domestica*. Ref: 6.

**10870 Hyoscine**

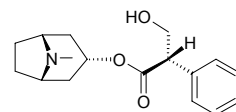
Scopolamine [51-34-3] C<sub>17</sub>H<sub>21</sub>NO<sub>4</sub> (303.36). [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -28° (water), easily soluble in hot water, ethanol, ether, chloroform, acetone, insoluble in petroleum spirit.<sup>[5507]</sup> Pharm: Vasodilator (dilates blood capillaries to improve microcirculation); inhibits glandular secretion; mydriatic; similar action with atropine; respiratory stimulant (central), but inhibits cerebral cortex; used in treatment of seasickness and carsickness. Source: DIAN QIE *Atropa belladonna* (dried whole herb: content scope = 0.45%~0.85%)<sup>[5501]</sup>, DONG LANG DANG *Scopolia japonica*, LANG DANG YE *Hyoscyamus niger* (leaf: content = 0.038%<sup>[5508]</sup>); LANG DANG ZI *Hyoscyamus niger* (dried ripe seed: mean content of 5 origins = 0.0356%<sup>[5508]</sup>); MAN TUO LUO GEN *Datura metel*, MAN TUO LUO YE *Datura metel*, MAO MAN TUO LUO GEN *Datura innoxia*, MAO MAN TUO LUO YE *Datura innoxia*, OU LANG DANG *Scopolia carniolica*, YANG JIN HUA *Datura metel* (flower: content scope of 3 origins = 0.27%~0.56%, mean content = 0.37%<sup>[5508]</sup>), ZANG QIE *Anisodus tanguticus* [Syn. *Scopolia tangutica*] (root: content scope of 2 origins = 0.016%~0.023%, mean content = 0.020%<sup>[5508]</sup>); *Atropa* spp., *Datura* spp., *Hyoscyamus* spp., *Scopolia* spp., occurs in many plants. Ref: 2, 658, 660, 5501, 5507, 5508.

**10871 Hyoscyamide**

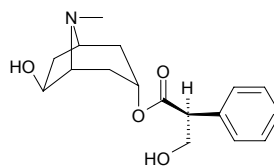
C<sub>36</sub>H<sub>36</sub>N<sub>2</sub>O<sub>8</sub> (624.70). Pharm: Cytotoxic inactive (*in vitro*, LNCaP, IC<sub>50</sub> > 100µmol/L). Source: LANG DANG ZI *Hyoscyamus niger* (seed: yield = 0.00014%dw). Ref: 4607.

**10872 Hyoscyamine**

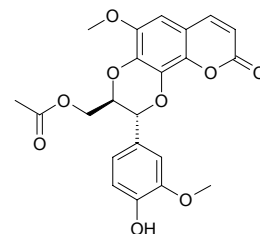
[101-31-5] C<sub>17</sub>H<sub>23</sub>NO<sub>3</sub> (289.38). Square tiny acicular crystals (ethanol), mp 108.5°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -21° (ethanol). Pharm: Anticholinergic (blocks M-cholinergic receptor); antispasmodic (smooth muscle, blood vessel); inhibits glandular secretion; mydriatic. Source: DIAN QIE *Atropa belladonna* (leaf: content = 0.07%~1.17%, root: content = 0.35%~0.74%)<sup>[5501]</sup>, GOU QI ZI *Lycium chinense*, LANG DANG YE *Hyoscyamus niger* (leaf: content = 0.020%<sup>[5508]</sup>), LANG DANG ZI *Hyoscyamus niger* (dried ripe seed: content scope = 0.02%~0.17%)<sup>[5508]</sup>, MA NIAO PAO *Przewalskia tangutica*, MAN TUO LUO GEN *Datura metel*, MAN TUO LUO YE *Datura metel*, MAN TUO LUO ZI *Datura metel*, MAO MAN TUO LUO GEN *Datura innoxia*, MAO MAN TUO LUO HUA *Datura innoxia*, MAO MAN TUO LUO YE *Datura innoxia*, MAO MAN TUO LUO ZI *Datura innoxia*, NING XIA GOU QI ZI *Lycium barbarum*, OU MAN TUO LUO GEN *Datura stramonium*, YANG JIN HUA *Datura metel* (flower: content scope of 3 origins = 0.052%~0.073%, mean content = 0.061%<sup>[5508]</sup>), ZANG QIE *Anisodus tanguticus* [Syn. *Scopolia tangutica*] (root: content scope of 3 origins = 0.200%~1.300%, mean content = 0.730%<sup>[5508]</sup>). Ref: 658, 5501, 5507, 5508.

**10873 Hyoscyamine 6 $\beta$ -hydroxylase**

C<sub>17</sub>H<sub>13</sub>NO<sub>4</sub> (305.38). Source: ZANG QIE *Anisodus tanguticus* [Syn. *Scopolia tangutica*] (Hairy Root). Ref: 5071.

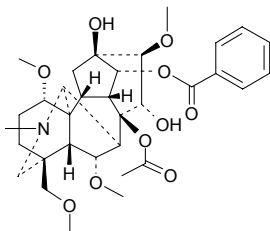
**10874 Hyosgerin**

C<sub>22</sub>H<sub>20</sub>O<sub>9</sub> (428.40). Yellow crystals (MeOH), mp 198~199°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -65.4° (c = 0.38, CHCl<sub>3</sub>). Source: LANG DANG ZI *Hyoscyamus niger* (seed: yield = 0.00025%dw). Ref: 2096.

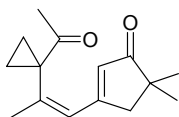


**10875 Hypaconitine**

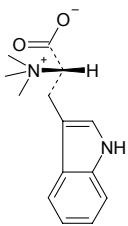
[6900-87-4]  $C_{33}H_{45}NO_{10}$  (615.73). White granular crystals, mp 197.5~198.5°C,  $[\alpha]_D^{26} = +21.6^\circ$  ( $c = 0.607$ ,  $CHCl_3$ ). **Pharm:** Analgesic; anti-inflammatory; causes arrhythmia (animal model); similar action with aconitine (and mesaconitine);  $LD_{50}$  (mus, ip) = 0.50mg/kg. **Source:** BAO SHAN WU TOU *Aconitum bullatifolium* var. *homotrichum* [Syn. *Aconitum nagarum*], BEI WU TOU *Aconitum kusnezoffii* (dried tuberoid: content = 0.067%)<sup>[5508]</sup>, FU ZI *Aconitum carmichaeli* (daughter root: content = 0.029%)<sup>[5508]</sup>, HUANG HUA WU TOU *Aconitum coreanum* (tuberoid: content = 0.043%)<sup>[5508]</sup>, OU WU TOU *Aconitum napellus*, WU TOU *Aconitum carmichaeli* (dried tuberoid: content = 0.030%)<sup>[5508]</sup>. **Ref:** 2, 6, 460, 658, 5501, 5508.

**10876 Hypacrone**

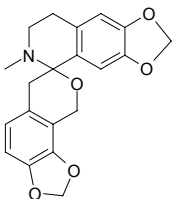
$C_{15}H_{20}O_2$  (232.33). **Source:** JI JUE *Hypolepis punctata* [Syn. *Polypodium punctatum*]. **Ref:** 660.

**10877 Hypaphorine**

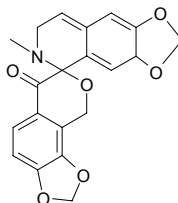
$\alpha$ -Carboxy-*N,N,N*-trimethyl-1H-indole-3-ethanaminium hydroxide inner salt [487-58-1]  $C_{14}H_{18}N_2O_2$  (246.31). mp 255°C (dec). **Pharm:** Rodentine antifeedant; eclamptogenic. **Source:** YAO YONG ZI TAN *Pterocarpus officinalis*, HONG MU JI CAO *Desmodium gangeticum*, XIANG SI ZI *Abrus precatorius*. **Ref:** 6, 658.

**10878 Hypecorine**

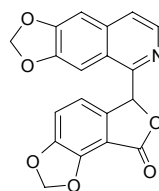
$C_{20}H_{19}NO_5$  (353.38). **Source:** XI GUO JIAO HUI XIANG *Hypecoum leptocarpum*, ZHI LI JIAO HUI XIANG *Hypecoum erectum*. **Ref:** 660.

**10879 Hypecorinine**

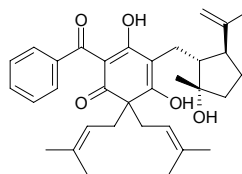
$C_{20}H_{17}NO_6$  (367.36). **Source:** ZHI LI JIAO HUI XIANG *Hypecoum erectum*. **Ref:** 660.

**10880 Hypecoumine**

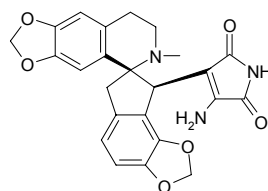
[100163-16-4]  $C_{19}H_{11}NO_6$  (349.30). Colorless acicular crystals, mp 202~204°C,  $[\alpha]_D^{32} = +45.06^\circ$  ( $c = 0.07$ ,  $CHCl_3$ ). **Source:** XI GUO JIAO HUI XIANG *Hypecoum leptocarpum*. **Ref:** 37, 1521.

**10881 Hypercalin B**

$C_{33}H_{42}O_5$  (518.70). **Pharm:** Antineoplastic (hmn, Co115 cancer cell line); molluscicide (*Oncomelania* infecting schistosomiasis and kills shellfish). **Source:** DA E JIN SI TAO *Hypericum calycinum*. **Ref:** 658.

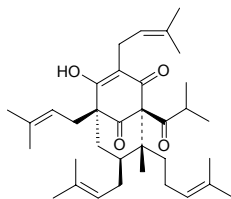
**10882 Hyperectine**

$C_{24}H_{21}N_3O_6$  (447.45). **Source:** ZHI LI JIAO HUI XIANG *Hypecoum erectum*. **Ref:** 660.

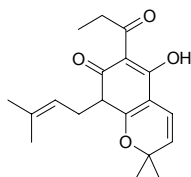


**10883 Hyperforin**

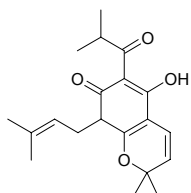
[11079-53-1] C<sub>35</sub>H<sub>52</sub>O<sub>4</sub> (536.80). Crystals, mp 79–80°C, [ $\alpha$ ]<sub>D</sub><sup>18</sup> = +41° (C<sub>2</sub>H<sub>5</sub>OH). **Pharm:** Inhibits [<sup>125</sup>I]suvagine binding to CRH-1 receptor (IC<sub>50</sub> = 10 μmol/L)<sup>[5119]</sup>; antioxidant (PMN cellular chemiluminescence assay, reduces oxidative burst FMLP-induced, IC<sub>50</sub> = (1.8±0.2) μmol/L, control Quercetin, IC<sub>50</sub> = (0.5±0.1) μmol/L; OZ-induced, inactive)<sup>[5371]</sup>; DPPH scavenger inactive<sup>[5371]</sup>; antidepressant<sup>[1521]</sup>; inhibits reuptake of neurotransmitters (synapses)<sup>[1521]</sup>; cytochrome P450 (CYP3A4) inducer (hepatocytes)<sup>[1521]</sup>; antibacterial (gram-positive and gram-negative bacteria)<sup>[1521]</sup>. **Source:** BIAN DI JIN *Hypericum wightianum* (dried whole herb: content = 0.0375%)<sup>[5508]</sup>, DI ER CAO *Hypericum japonicum* (dried whole herb: content = 0.0897%)<sup>[5508]</sup>, GUAN YE LIAN QIAO *Hypericum perforatum* (whole herb: mean content of 5 origins = 1.87%)<sup>[5508]</sup>, HUANG HAI TANG *Hypericum ascyron* (dried whole herb: content = 0.0972%)<sup>[5508]</sup>, JI WU BING JIN SI TAO *Hypericum subsessile* (dried whole herb: content = 0.1724%)<sup>[5508]</sup>, JIN SI MEI *Hypericum patulum* (dried whole herb: content = 0.1777%)<sup>[5508]</sup>, TING JING BIAN DI JIN *Hypericum elodeoides* (dried whole herb: content = 0.0353%)<sup>[5508]</sup>, WAN E JIN SI TAO *Hypericum curvisepalum* (dried whole herb: content = 0.0309%)<sup>[5508]</sup>, YANG ZI XIAO LIAN QIAO *Hypericum faberi* (dried whole herb: content = 0.4822%)<sup>[5508]</sup>, YUAN BAO CAO *Hypericum sampsonii* (dried whole herb: content = 0.1816%)<sup>[5508]</sup>, ZHAN E JIN SI TAO *Hypericum lancasteri* (dried whole herb: content = 0.7269%)<sup>[5508]</sup>. **Ref:** 660, 1521, 3032, 5119, 5371, 5508.

**10884 Hyperguinone A**

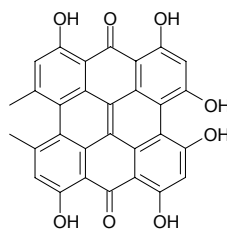
C<sub>19</sub>H<sub>24</sub>O<sub>4</sub> (316.40). **Pharm:** Antioxidant (PMN cellular chemiluminescence assay, reduces oxidative burst FMLP-induced, IC<sub>50</sub> = (7.0±1.0) μmol/L, control Quercetin, IC<sub>50</sub> = (0.5±0.1) μmol/L; OZ-induced, inactive). **Source:** *Hypericum papuanum* **Ref:** 5371.

**10885 Hyperguinone B**

C<sub>20</sub>H<sub>26</sub>O<sub>4</sub> (330.43). **Pharm:** Antioxidant (PMN cellular chemiluminescence assay, reduces oxidative burst FMLP-induced, IC<sub>50</sub> = (3.3±0.4) μmol/L, control Quercetin, IC<sub>50</sub> = (0.5±0.1) μmol/L; OZ-induced, inactive); DPPH scavenger inactive; antioxidant (H<sub>2</sub>O<sub>2</sub>/horseradish peroxidase assay, inactive); superoxide scavenger inactive (cytochrome C assay). **Source:** *Hypericum papuanum* **Ref:** 5371.

**10886 Hypericin**

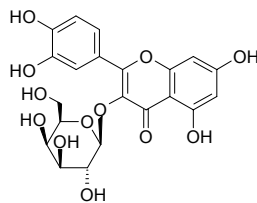
Cyclosan; Hypericum red [548-04-9] C<sub>30</sub>H<sub>16</sub>O<sub>8</sub> (504.46). mp 320°C (dec), easily soluble in pyridine, almost insoluble in other organic solvent.<sup>[5507]</sup> **Pharm:** Antimelancholic; antidepressant; antiviral (reverse transcriptase virus, *in vitro* and *in vivo*); CNS depressant; photosensitizer (mammal); anti-inflammatory (IL-12 production inhibitor, LPS-activated macrophages, IC<sub>50</sub> = 1.45 μg/mL; inhibits activation of IL-12 gene promoter; inhibits activation of NF-κB, PMA- and TNF-α-induced, mechanism not involving antioxidant pathways)<sup>[4416]</sup>; antirheumatic<sup>[4416]</sup>; inhibits [<sup>125</sup>I]suvagine binding to CRH-1 receptor (IC<sub>50</sub> = 6 μmol/L)<sup>[5119]</sup>. **Source:** BIAN DI JIN *Hypericum wightianum* (dried whole herb: content = 0.0228%)<sup>[5508]</sup>, GUAN YE LIAN QIAO *Hypericum perforatum* (whole herb: mean content of 7 origins = 0.023%)<sup>[5508]</sup>; the compound was isolated from the plant for the first time in 1942<sup>[5507]</sup>, XIAO LIAN QIAO *Hypericum erectum*, YANG ZI XIAO LIAN QIAO *Hypericum faberi* (dried whole herb: content = 0.0533%)<sup>[5508]</sup>, YUAN BAO CAO *Hypericum sampsonii* (dried whole herb: content = 0.0396%)<sup>[5508]</sup>. **Ref:** 6, 661, 4416, 5119, 5507, 5508.

**10887 Hyperin**

Hyperoside; Quercetin-3-*O*-β-*D*-galactoside; 3',4',5,7-Tetrahydroxyflavonol-3-β-*D*-galactoside [482-36-0] C<sub>21</sub>H<sub>20</sub>O<sub>12</sub> (464.39). Yellowish acicular crystals (ethanol), mp 227–230°C (dec), [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -83° (*c* = 0.2, pyridine). **Pharm:** Analgesic (peripheral); antibacterial (*Pseudomonas maltophilia*); anti-inflammatory (rat, induced by embedding woolball, 20mg/(kg·d) ip, 7 days); antitussive (cat, ip, model of electrostimulating nervi laryngeus superior; 100mg/kg, mus, ip, ammonia fog method, 100mg/kg, EDT<sub>50</sub> prolonged 54% compared with control); aldose reductase inhibitor (eye lens); low toxin (mus, orl, 10g/kg, not death; mus, ip, LD<sub>50</sub> = 0.5g/kg); antioxidant (A cDNA microarray study, up-regulates 50 genes and down-regulates many others in SNU-668 hmn gastric cancer cells, many of which are associated with mechanisms of antioxidation)<sup>[5341]</sup>; ACE inhibitor (IC<sub>50</sub> = 200 μmol/L, control Lisinopril, IC<sub>50</sub> = 1 nmol/L); NEP inhibitor (IC<sub>50</sub> > 500 μmol/L, control Phosphoramidon, IC<sub>50</sub> = 9 nmol/L); APN inhibitor inactive; antioxidant (DPPH scavenger, 10 μmol/L, ScRt = 57%, IC<sub>50</sub> = 10.50 μmol/L; control BHT, 10 μmol/L, ScRt = 43%, IC<sub>50</sub> = 19.00 μmol/L)<sup>[4422]</sup>. **Source:** BIAN DI JIN *Hypericum wightianum* (dried whole herb: mean content = 0.431%)<sup>[5508]</sup>, CHA YU BIAN DI JIN *Hypericum wightianum* subsp. *axillare* (dried whole herb: mean content = 0.349%)<sup>[5508]</sup>, CHAO XIAN YIN YANG HUO *Epimedium koreanum* (aerial parts: content = 0.133%)<sup>[5508]</sup>, CHENG GAN SHENG MA *Eupatorium lindleyanum* (whole herb: content scope = 0.001%–0.012%, mean content = 0.007%)<sup>[5508]</sup>, CHUAN DIAN JIN SI TAO *Hypericum forrestii* (dried whole herb: mean content = 0.461%)<sup>[5508]</sup>, DI ER CAO *Hypericum japonicum* (dried whole herb: content = 0.5044%)<sup>[5508]</sup>, DI YU *Sanguisorba officinalis* (dried root: mean content = 0.13%)<sup>[5508]</sup>, GAN SU

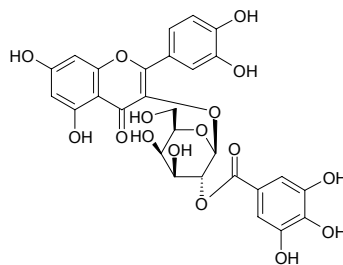


SHAN ZHA *Crataegus kansuensis* (dried ripe fruit: content = 0.010%)<sup>[5508]</sup>, GOU TENG *Uncaria rhynchophylla* [Syn. *Nauclea rhynchophylla*], GUAN YE LIAN QIAO *Hypericum perforatum*, GUAN YE LIAN QIAO *Hypericum perforatum* (dried whole herb: content = 1.005%)<sup>[5508]</sup>, HE YE *Nelumbo nucifera* (content scope of 46 origins = 0.35%–1.47%, mean content = 0.72%)<sup>[5515]</sup>, HEI MU JIN HE HUAN *Acacia melanoxylon*, HONG KUAI ZI *Chamaenerion angustifolium* [Syn. *Epilobium angustifolium*], HU BEI SHAN ZHA *Crataegus hupehensis* (dried ripe fruit: mean content of 5 origins = 0.064%)<sup>[5508]</sup>, HU ZHANG YE *Polygonum cuspidatum*, HUANG HAI TANG *Hypericum ascyron* (dried whole herb: content = 0.1015%)<sup>[5508]</sup>, HUANG SHU KUI HUA *Abelmoschus manihot* (dried flower: mean content of 4 origins = 1.23%)<sup>[5508]</sup>, JI WU BING JIN SI TAO *Hypericum subsessile* (dried whole herb: content = 0.7195%)<sup>[5508]</sup>, JI ZI MU *Sinoadina Racemosa* [Syn. *Adina racemosa*] (leaf, flower and twig: yield = 0.0093%dw)<sup>[4723]</sup>, JIN SI MEI *Hypericum patulum* (dried whole herb: content = 0.0980%)<sup>[5508]</sup>, KUAN DONG HUA *Tussilago farfara* (flower bud: content = 0.28%)<sup>[5501]</sup>, LAO GUAN CAO *Geranium wilfordii*, LIAO NING SHAN ZHA *Crataegus sanguinea* (dried ripe fruit: content = 0.037%)<sup>[5508]</sup>, LING LAN *Convallaria keiskei* [Syn. *Convallaria majalis*], LIU QIU SHE GEN CAO *Ophiorrhiza liukuiensis* (whole herb), LONG YA CAO *Agrimonia pilosa*, LU XIAN CAO *Pyrola calliantha* [Syn. *Pyrola rotundifolia* ssp. *chinensis*] (whole herb: content = 0.017%)<sup>[5508]</sup>, LUO BU MA *Apocynum venetum* (leaf: yield = 0.98%)<sup>[5501]</sup>, MAN SHAN HONG *Rhododendron dauricum* (branchlet-leaf or flower: content = 0.42%)<sup>[5508]</sup>, MAN SHAN HONG *Rhododendron dauricum* (leaf: mean content of 8 origins = 0.229%)<sup>[5527]</sup>, MAO GOU TENG *Uncaria hirsuta*, MAO SHAN ZHA *Crataegus maximowiczii* (dried ripe fruit: content = 0.169%)<sup>[5508]</sup>, MAO YAN CAO *Euphorbia lunulata* (whole herb), MAO YE WEI MAO *Euonymus sacrosancta*, PU TONG LU TI CAO *Pyrola decorata* (whole herb: content = 0.059%)<sup>[5508]</sup>, SAN BAI CAO *Saururus chinensis* (whole herb: content = 0.35%)<sup>[5501]</sup>, SHAN LI HONG *Crataegus pinnatifida* var. *major* (dried ripe fruit: mean content of 4 origins = 0.055%)<sup>[5508]</sup>, SHAN ZHA *Crataegus pinnatifida* (dried ripe fruit: mean content of 3 origins = 0.086%)<sup>[5508]</sup>, TIAN SHAN ZHU ZI *Garcinia dulcis* (flower), TING JING BIAN DI JIN *Hypericum elodeoides* (dried whole herb: content = 0.8986%)<sup>[5508]</sup>, TU SI ZI *Cuscuta chinensis*, WAN E JIN SI TAO *Hypericum curvisepalum* (dried whole herb: content = 0.1022%)<sup>[5508]</sup>, WU MAO SHAN ZHA *Crataegus pinnatifida* var. *psilosa* (dried ripe fruit: content = 0.318%)<sup>[5508]</sup>, XI SHU *Camptotheca acuminata*, XIA KU CAO *Prunella vulgaris*, XIAN HE CAO *Agrimonia pilosa* var. *japonica*, XIAO YE PI PA *Rhododendron anthopogonoides*, YANG ZI XIAO LIAN QIAO *Hypericum faberi* (dried whole herb: content = 0.4647%)<sup>[5508]</sup>, YE SHAN ZHA *Crataegus cuneata* (dried ripe fruit: mean content of 2 origins = 0.053%)<sup>[5508]</sup>, YIN CHEN HAO *Artemisia capillaris*, YIN YANG HUO *Epimedium brevicornum*, YU XING CAO *Houttuynia cordata*, YUAN BAO CAO *Hypericum sampsonii* (dried whole herb: content = 0.2062%)<sup>[5508]</sup>, YUN NAN SHAN ZHA *Crataegus scabrifolia* (dried ripe fruit: content = 0.069%)<sup>[5508]</sup>, ZHAN E JIN SI TAO *Hypericum lancasteri* (dried whole herb: content = 0.0396%)<sup>[5508]</sup>, ZHAO SHAN BAI *Rhododendron micranthum* (leaf: content scope from Feb. to Nov. 0.16%–1.17%, mean content = 0.72%)<sup>[5508]</sup>, ZI BEI LU TI CAO *Pyrola atropurpurea* (whole herb: content = 0.090%)<sup>[5508]</sup>, occurs in many plants (family Polygonaceae spp., *Betula* spp., *Juglans* spp.). Ref: 2, 4, 658, 660, 661, 1521, 2508, 4013, 4097, 4422, 4445, 4527, 4723, 5034, 5341, 5501, 5508, 5527.



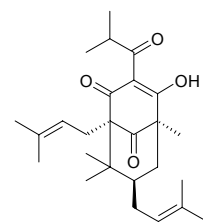
#### 10888 Hyperin-2''-O-gallate

Quercetin-3-*O*-(2''-galloyl)- $\beta$ -*D*-galactopyranoside C<sub>28</sub>H<sub>24</sub>O<sub>16</sub> (616.49). Pharm: Insulin-like activity (proliferation assay, dose-dependent, maximal at 30 $\mu$ g/mL)<sup>[4445]</sup>. Source: HONG HUA LU TI CAO *Pyrola incarnata*, MAO YAN CAO *Euphorbia lunulata* (whole herb). Ref: 660, 4445.



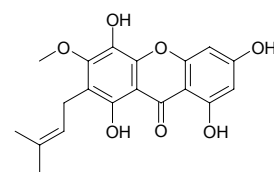
#### 10889 Hyperpapanone

C<sub>26</sub>H<sub>38</sub>O<sub>4</sub> (414.59). Pharm: Antioxidant inactive (PMN cellular chemiluminescence assay, FMLP-induced and OZ-induced oxidative burst). Source: *Hypericum papuanum* Ref: 5371.



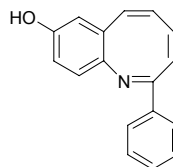
#### 10890 Hyperxanthone

C<sub>19</sub>H<sub>18</sub>O<sub>7</sub> (358.39). Yellow amorphous powder. Source: YUAN BAO CAO *Hypericum sampsonii* (whole herb). Ref: 4055.



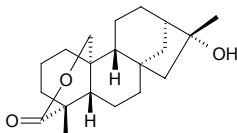
#### 10891 Hypodematine

[134746-11-5] C<sub>17</sub>H<sub>13</sub>NO (247.30). Yellowish acicular crystals, mp 156–158°C. Source: SHAN DONG ZHONG ZU JUE *Hypodematium sinense*. Ref: 180.

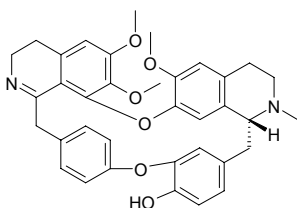


**10892 Hypodiolide A**

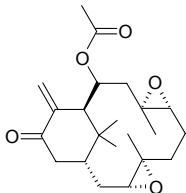
$C_{20}H_{30}O_3$  (318.46). White acicular crystals, mp 205~206°C. Source: KUN MING SHAN HAI TANG *Tripterygium hypoglaucum*. Ref: 252.

**10893 Hypoepistephanine**

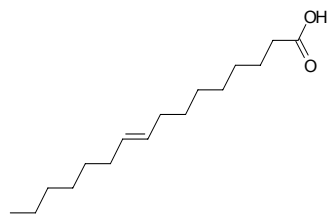
[33116-41-5]  $C_{36}H_{36}N_2O_6$  (592.70). mp 257°C. Pharm: Cytotoxic (HeLa,  $ED_{50}$  = 12  $\mu$ g/mL); antioxidant (peroxide formed from polymorph, InRt = 34.1%). Source: QIAN JIN TENG *Stephania japonica*. Ref: 6, 660, 1791, 1792.

**10894 Hypoestoxide**

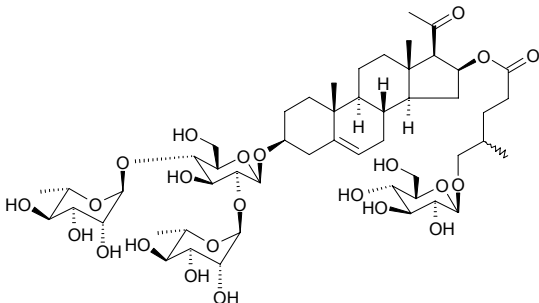
$C_{22}H_{32}O_5$  (376.50). Pharm: Anti-inflammatory (NO production inhibitor)<sup>[4415]</sup>. Source: DAN HONG QIANG DAO YAO *Hypoestes rosea*. Ref: 1521,4415.

**10895 Hypogaic acid**

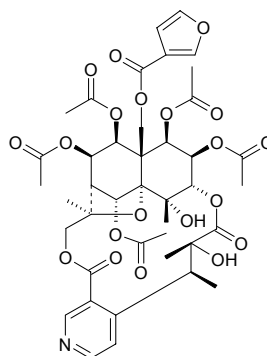
[10030-73-6]  $C_{16}H_{30}O_2$  (254.42). mp 33°C. Source: LUO HUA SHENG YOU *Arachis hypogaea*, MI LA *Apis cerana*. Ref: 6, 1521.

**10896 Hypoglaucin G**

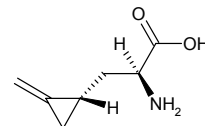
$C_{51}H_{82}O_{23}$  (1063.21). Pharm: Bone resorption inhibitor (PTH-induced in a bone organ culture system). Source: HAI JIN BI XIE *Dioscorea spongiosa* (Rhizome: yield = 0.00024%). Ref: 4692.

**10897 Hypoglaucine**

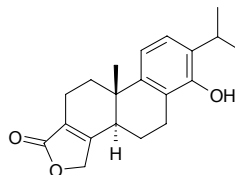
$C_{41}H_{47}NO_{20}$  (873.83). Amorphous powder. Source: KUN MING SHAN HAI TANG *Tripterygium hypoglaucum*. Ref: 1861.

**10898 L-Hypoglycin**

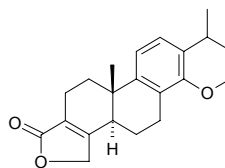
$C_7H_{11}NO_2$  (141.17). Pharm: Toxin (causes glucopenia and "vomiting sickness"). Source: XI FEI LI ZHI GUO *Blighia sapida*. Ref: 658.

**10899 Hypolide**

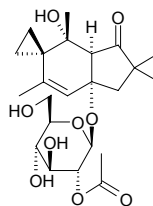
Triptophenolide  $C_{20}H_{24}O_3$  (312.41). Source: HEI MAN *Tripterygium regelii*, KUN MING SHAN HAI TANG *Tripterygium hypoglaucum*, LEI GONG TENG *Tripterygium wilfordii*. Ref: 660.

**10900 Hypolide methyl ether**

Triptophenolide methyl ether  $C_{21}H_{26}O_3$  (326.44). Source: LEI GONG TENG *Tripterygium wilfordii*. Ref: 2.

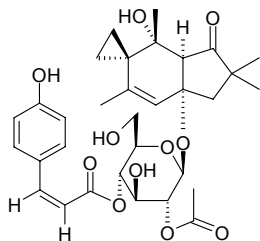
**10901 Hypolide A**

$C_{23}H_{34}O_9$  (454.52). Source: JI JUE *Hypolepis punctata* [Syn. *Polypodium punctatum*]. Ref: 660.

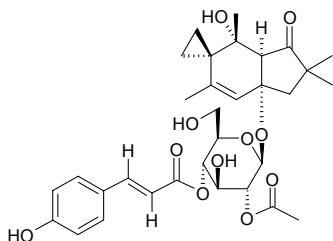


**10902 Hypoloside B**

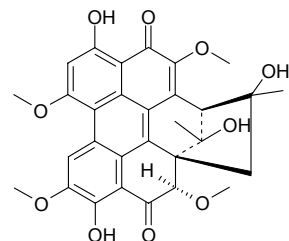
$C_{32}H_{40}O_{11}$  (600.67). Source: JI JUE *Hypolepis punctata* [Syn. *Polypodium punctatum*]. Ref: 660.

**10903 Hypoloside C**

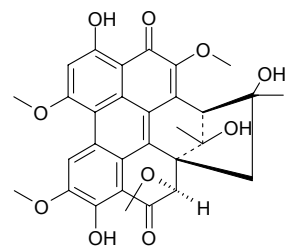
$C_{32}H_{40}O_{11}$  (600.67). Source: JI JUE *Hypolepis punctata* [Syn. *Polypodium punctatum*]. Ref: 660.

**10904 Hypomycin C**

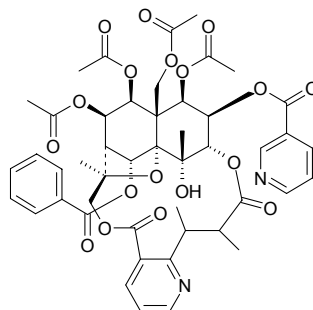
$C_{30}H_{28}O_{10}$  (548.66). Orange fine needles (MeOH), mp 245~248°C. Source: fungus *Hypomyces* sp. Ref: 2477.

**10905 Hypomycin D**

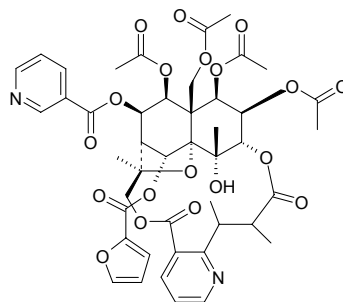
$C_{30}H_{28}O_{10}$  (548.66). Orange-red plate crystals, mp 302~307°C. Source: fungus *Hypomyces* sp. Ref: 2477.

**10906 Hyponine D**

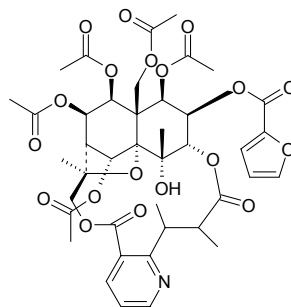
7-(Acetyloxy)-*O*<sup>2</sup>-nicotinoyl-*O*<sup>5</sup>-deacetyl-*O*<sup>5</sup>-benzoyl-7-deoxo-evonine  $C_{47}H_{50}N_2O_{18}$  (930.93). Amorphous powder,  $[\alpha]_D^{25} = +5.2^\circ$  ( $c = 0.11$ , MeOH). Source: KUN MING SHAN HAI TANG *Tripterygium hypoglaucum*. Ref: 2426.

**10907 Hyponine E**

7-(Nicotinoyloxy)-*O*<sup>5</sup>-furanoyl-*O*<sup>5</sup>-deacetyl-7-deoxo-evonine  $C_{45}H_{48}N_2O_{19}$  (920.89). Amorphous powder,  $[\alpha]_D^{25} = -4.2^\circ$  ( $c = 1.0$ , MeOH). Source: KUN MING SHAN HAI TANG *Tripterygium hypoglaucum*. Ref: 2426.

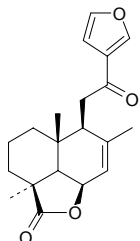
**10908 Hyponine F**

7-(Acetyloxy)-*O*<sup>2</sup>-furanoyl-*O*<sup>2</sup>-deacetyl-7-deoxo-evonine  $C_{41}H_{47}NO_{19}$  (857.83). Amorphous powder,  $[\alpha]_D^{25} = +7.0^\circ$  ( $c = 1.0$ , MeOH). Source: KUN MING SHAN HAI TANG *Tripterygium hypoglaucum*. Ref: 2426.

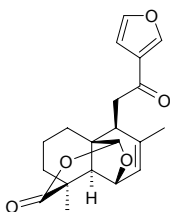


**10909 Hypopurin A**

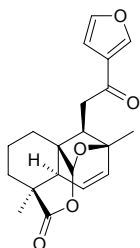
$C_{20}H_{24}O_4$  (328.41). Colorless powder, mp 125~127°C (MeOH),  $[\alpha]_D^{25} = +43.3^\circ$  ( $c = 0.3$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (*in vitro*, KB,  $IC_{50} = 9.4\mu\text{mol/L}$ , moderate activity). **Source:** QIANG DAO YAO *Hypoestes purpurea* [Syn. *Justicia purpurea*; *Hypoestes sinica*] (aerial parts: yield = 0.00015%dw). **Ref:** 4783.

**10910 Hypopurin B**

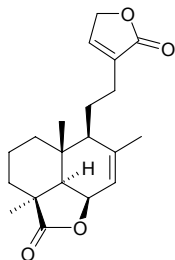
$C_{20}H_{22}O_5$  (342.4). Colorless powder, mp 120~122°C (MeOH),  $[\alpha]_D^{25} = +30.3^\circ$  ( $c = 0.3$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic inactive (*in vitro*, KB,  $IC_{50} > 100\mu\text{mol/L}$ ). **Source:** QIANG DAO YAO *Hypoestes purpurea* [Syn. *Justicia purpurea*; *Hypoestes sinica*] (aerial parts: yield = 0.00014%dw). **Ref:** 4783.

**10911 Hypopurin C**

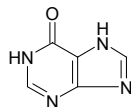
$C_{20}H_{22}O_5$  (342.4). Colorless powder, mp 165~168°C (MeOH),  $[\alpha]_D^{25} = +13.3^\circ$  ( $c = 0.3$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic inactive (*in vitro*, KB,  $IC_{50} > 100\mu\text{mol/L}$ ). **Source:** QIANG DAO YAO *Hypoestes purpurea* [Syn. *Justicia purpurea*; *Hypoestes sinica*] (aerial parts: yield = 0.000095%dw). **Ref:** 4783.

**10912 Hypopurin D**

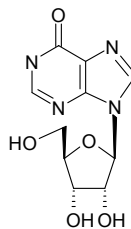
$C_{20}H_{26}O_4$  (330.43). Colorless prisms, mp 173~175°C (MeOH),  $[\alpha]_D^{25} = +15^\circ$  ( $c = 0.2$ , MeOH). **Pharm:** Cytotoxic inactive (*in vitro*, KB,  $IC_{50} > 100\mu\text{mol/L}$ ). **Source:** QIANG DAO YAO *Hypoestes purpurea* [Syn. *Justicia purpurea*; *Hypoestes sinica*] (aerial parts: yield = 0.000087%dw). **Ref:** 4783.

**10913 Hypoxanthine**

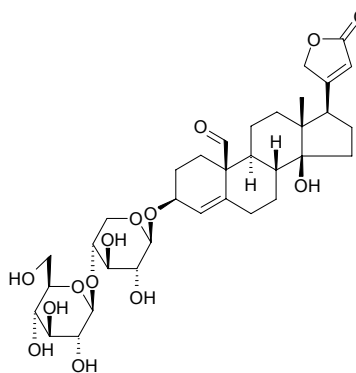
[68-94-0]  $C_5H_4N_4O$  (136.11). mp 150°C (dec). **Pharm:** Plays a key role in pathology of gout. (When hypoxanthine decomposes, uric acid is formed. The basic method for treating gout is to inhibit this process.) **Source:** DONG CHONG XIA CAO *Cordyceps sinensis* (dried fungal stroma growing on larva of a caterpillar: content = 0.012%)<sup>[5512]</sup>, GOU QI YE *Lycium chinense*, GUI GAI *Coprinus atramentarius*, HAI XIA *Penaeus orientalis*, LU RONG *Cervus nippon*; *Cervus elaphus*, QIU YIN *Pheretima aspergillum*; *Allolobophora caliginosa trapezoides*, XIA TIAN GAO *Bos taurus domesticus*, ZHANG YE BAN XIA *Pinellia pedatisecta*. **Ref:** 2, 6, 586, 658, 5501, 5512.

**10914 Hypoxanthine nucleoside**

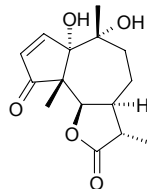
$C_{10}H_{12}N_4O_5$  (268.23). **Source:** DONG CHONG XIA CAO *Cordyceps sinensis*. **Ref:** 660.

**10915 Hyrcanoside**

[15001-93-1]  $C_{34}H_{48}O_{14}$  (680.75). Crystals (methanol), mp 205~208°C. **Pharm:** Antineoplastic (mus,  $P_{388}$ , 1.25mg/kg, biotic prolonged rate = 33%, mus colon carcinoma, 0.31mg/kg, biotic prolonged rate = 69%, mus colon carcinoma, 2.5mg/kg, biotic prolonged rate = 43%); cardiotoxic; cytotoxic (KB). **Source:** DUO BIAN XIAO GUAN HUA *Coronilla varia*. **Ref:** 661.

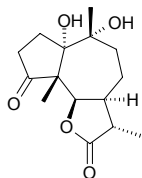
**10916 Hysterone A**

$C_{15}H_{20}O_5$  (280.32). Colorless crystals, mp 198~201°C,  $[\alpha]_D^{25} = -14.84^\circ$  ( $c = 1.0$ , MeOH). **Source:** YIN JIAO JU *Parthenium hysterophorus* (flower). **Ref:** 3462.

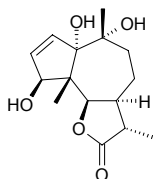


**10917 Hysterone B**

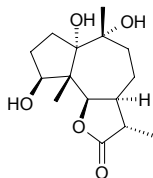
$C_{15}H_{22}O_5$  (282.34). Colorless viscous mass,  $[\alpha]_D^{25} = +3.40^\circ$  ( $c = 1.25$ , MeOH). Source: YIN JIAO JU *Parthenium hysterophorus* (flower). Ref: 3462.

**10918 Hysterone C**

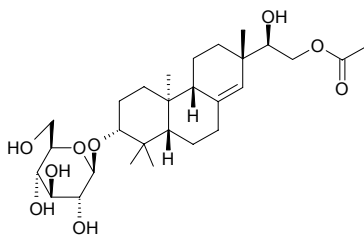
$C_{15}H_{22}O_5$  (282.34). Colorless crystals, mp 186~188°C,  $[\alpha]_D^{25} = +30.54^\circ$  ( $c = 1.25$ , MeOH). Source: YIN JIAO JU *Parthenium hysterophorus* (flower). Ref: 3462, 4489.

**10919 Hysterone D**

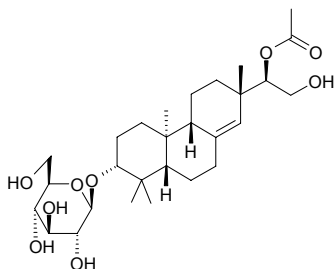
$C_{15}H_{24}O_5$  (284.36). Colorless viscous mass,  $[\alpha]_D^{25} = -12.04^\circ$  ( $c = 1.25$ , MeOH). Source: YIN JIAO JU *Parthenium hysterophorus* (flower). Ref: 3462.

**10920 Hythiemoside A**

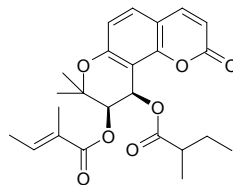
$C_{28}H_{46}O_9$  (526.67). Source: XI XIAN *Siegesbeckia orientalis* (aerial parts). Ref: 4438.

**10921 Hythiemoside B**

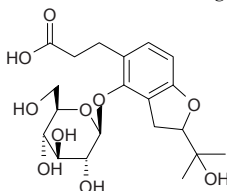
$C_{28}H_{46}O_9$  (526.67). White amorphous powder,  $[\alpha]_D^{25} = -110^\circ$  ( $c = 0.10$ , MeOH). Source: XI XIAN *Siegesbeckia orientalis* (aerial parts). Ref: 4438.

**10922 Hyuganin A**

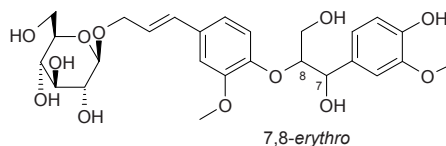
$C_{24}H_{28}O_7$  (428.49). Pharm: NO production inhibitor. Source: FEN CHA DANG GUI *Angelica furcijuga*. Ref: 1521.

**10923 Hyuganoside II**

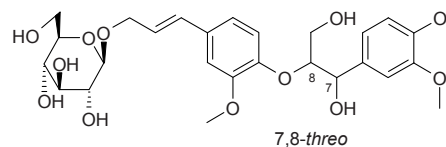
$C_{20}H_{28}O_{10}$  (428.44). White powder,  $[\alpha]_D^{25} = +8.7^\circ$  ( $c = 1.11$ , MeOH). Source: FEN CHA DANG GUI *Angelica furcijuga*. Ref: 2567.

**10924 Hyuganoside IIIa**

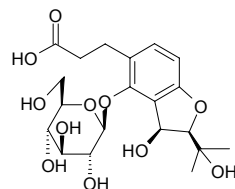
$C_{26}H_{34}O_{12}$  (538.55). White powder,  $[\alpha]_D^{25} = -6.1^\circ$  ( $c = 0.22$ , MeOH). Source: FEN CHA DANG GUI *Angelica furcijuga*. Ref: 2567.

**10925 Hyuganoside IIIb**

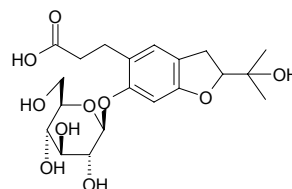
$C_{26}H_{34}O_{12}$  (538.55). White powder,  $[\alpha]_D^{25} = -16.9^\circ$  ( $c = 0.51$ , MeOH). Source: FEN CHA DANG GUI *Angelica furcijuga*. Ref: 2567.

**10926 Hyuganoside IV**

$C_{20}H_{28}O_{11}$  (444.44). White powder,  $[\alpha]_D^{27} = -5.5^\circ$  ( $c = 1.00$ , MeOH). Source: FEN CHA DANG GUI *Angelica furcijuga* (flower). Ref: 4454.

**10927 Hyuganoside V**

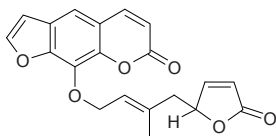
$C_{20}H_{28}O_{10}$  (428.44). White powder,  $[\alpha]_D^{27} = -43.1^\circ$  ( $c = 1.20$ , MeOH). Source: FEN CHA DANG GUI *Angelica furcijuga* (flower). Ref: 4454.



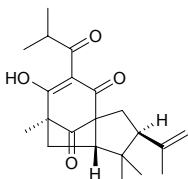
## I

**10928 I-23**

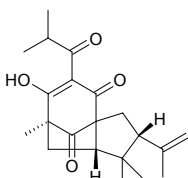
$C_{20}H_{16}O_6$  (352.35). Source: JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*]. Ref: 11.

**10929 Ialibinone A**

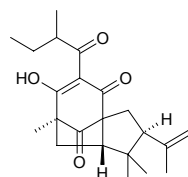
$C_{21}H_{28}O_4$  (344.45). Pharm: Antioxidant (PMN cellular chemiluminescence assay, reduces oxidative burst FMLP-induced,  $IC_{50} = (10 \pm 1) \mu\text{mol/L}$ , increase of radical production = 100%, control Quercetin,  $IC_{50} = (0.5 \pm 0.1) \mu\text{mol/L}$ ; OZ-induced, inactive). Source: *Hypericum papuanum*. Ref: 5371.

**10930 Ialibinone B**

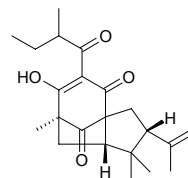
$C_{21}H_{28}O_4$  (344.45). Pharm: Antioxidant (PMN cellular chemiluminescence assay, reduces oxidative burst FMLP-induced,  $IC_{50} = (15 \pm 1) \mu\text{mol/L}$ , max. effect 60%, control Quercetin,  $IC_{50} = (0.5 \pm 0.1) \mu\text{mol/L}$ ; OZ-induced, inactive). Source: *Hypericum papuanum*. Ref: 5371.

**10931 Ialibinone C**

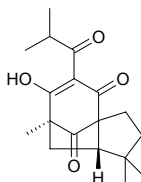
$C_{22}H_{30}O_4$  (358.48). Pharm: Antioxidant inactive (PMN cellular chemiluminescence assay, FMLP-induced and OZ-induced oxidative burst). Source: *Hypericum papuanum*. Ref: 5371.

**10932 Ialibinone D**

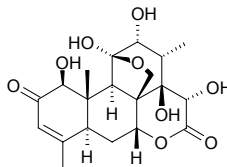
$C_{22}H_{30}O_4$  (358.48). Pharm: Antioxidant (PMN cellular chemiluminescence assay, reduces oxidative burst FMLP-induced,  $IC_{50} = (15 \pm 1) \mu\text{mol/L}$ , max. effect 60%, control Quercetin,  $IC_{50} = (0.5 \pm 0.1) \mu\text{mol/L}$ ; OZ-induced, inactive). Source: *Hypericum papuanum*. Ref: 5371.

**10933 Ialibinone E**

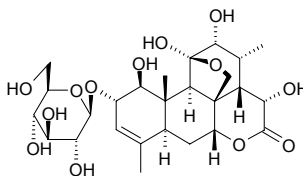
$C_{18}H_{24}O_4$  (304.39). Pharm: Antioxidant (PMN cellular chemiluminescence assay, reduces oxidative burst FMLP-induced,  $IC_{50} = (2.5 \pm 0.3) \mu\text{mol/L}$ , control Quercetin,  $IC_{50} = (0.5 \pm 0.1) \mu\text{mol/L}$ ; OZ-induced, inactive); DPPH scavenger inactive; antioxidant ( $H_2O_2$ /horseradish peroxidase assay,  $IC_{50} = 1.0 \mu\text{mol/L}$ ); superoxide scavenger (cytochrome C assay)<sup>[5371]</sup>. Source: *Hypericum papuanum*. Ref: 5371.

**10934 Iandonone**

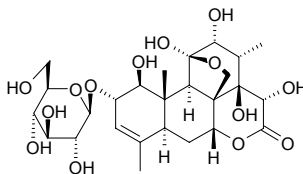
$C_{20}H_{26}O_9$  (410.42). Amorphous powder,  $[\alpha]_D^{20} = +4.6^\circ$  ( $c = 0.4$ , MeOH). Source: *Eurycoma harmandiana* (root). Ref: 5164.

**10935 Iandonoside A**

$C_{26}H_{38}O_{13}$  (558.58). Amorphous powder,  $[\alpha]_D^{20} = +19.1^\circ$  ( $c = 0.3$ , MeOH). Source: *Eurycoma harmandiana* (root). Ref: 5164.

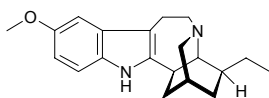
**10936 Iandonoside B**

$C_{26}H_{38}O_{14}$  (574.58). Amorphous powder,  $[\alpha]_D^{20} = +4.1^\circ$  ( $c = 0.7$ , MeOH). Source: *Eurycoma harmandiana* (root). Ref: 5164.

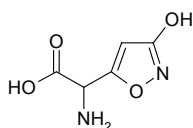


**10937 Ibogaine**

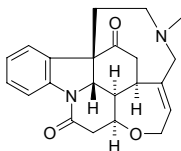
$C_{20}H_{26}N_2O$  (310.44). Source: LUO SHI TENG *Trachelospermum jasminoides*. Ref: 660.

**10938 Ibotenic acid**

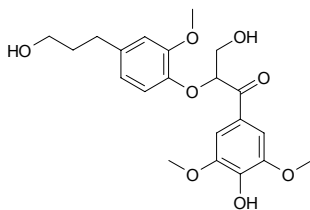
[2552-55-8]  $C_5H_6N_2O_4$  (158.11). mp 151~152°C (dec). Pharm: Insecticidal. Source: *Amanita* spp. (the compound was isolated in 1964)<sup>[5505]</sup> Ref: 5, 658, 1521, 5505.

**10939 Icajine**

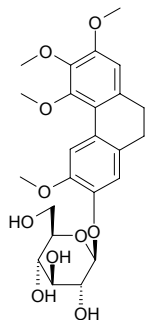
[5525-31-5]  $C_{22}H_{24}N_2O_3$  (364.45). mp 271~272°C (dec),  $[\alpha]_D = -10^\circ$  ( $c = 1$ ,  $CHCl_3$ ). Source: MA QIAN ZI *Strychnos nux-vomica*, ZHONG FEI MA QIAN *Strychnos icaja*, CHANG ZI MA QIAN *Strychnos wallichiana*. Ref: 2, 542, 1521.

**10940 Icarinol A<sub>1</sub>**

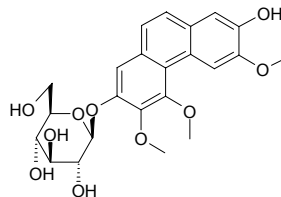
$C_{21}H_{26}O_8$  (406.44). Source: JIAN YE YIN YANG HUO *Epimedium sagittatum*. Ref: 660.

**10941 Icariside A<sub>1</sub>**

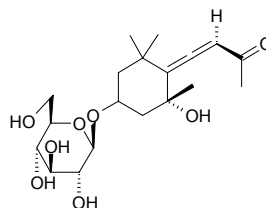
$C_{24}H_{30}O_{10}$  (478.50). Source: JIAN YE YIN YANG HUO *Epimedium sagittatum*. Ref: 660.

**10942 Icariside A<sub>7</sub>**

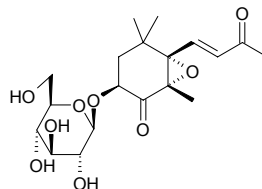
$C_{23}H_{26}O_{10}$  (462.46). White powder. Source: CHAO XIAN YIN YANG HUO *Epimedium koreanum*. Ref: 417.

**10943 Icariside B<sub>1</sub>**

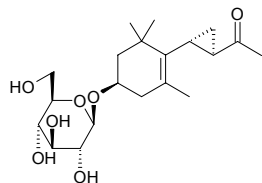
$C_{19}H_{30}O_8$  (386.45). White amorphous powder,  $[\alpha]_D = -73.5^\circ$  (MeOH). Source: DUO LIE WEI LING CAI *Potentilla multifida* (whole herb), HUA NAN WU ZHU YU *Evodia austrosinensis*. Ref: 4821, 5052.

**10944 Icariside B<sub>2</sub>**

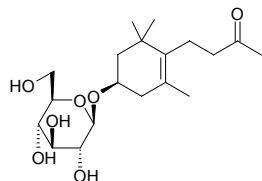
$C_{19}H_{28}O_9$  (400.43). mp 173~174°,  $[\alpha]_D^{25} = -51^\circ$ . Pharm: Inhibits cancer cell invasion (MM1 cells, *in vitro*, 10µg/mL, InRt = 19.4%)<sup>[4329]</sup>. Source: DA HUA YIN YANG HUO *Epimedium grandiflorum*, HEI ZI LI GUO JI SHENG *Scurrura atropurpurea* (yield = 0.0051%), HU SUI ZI *Coriandrum sativum*, SHENG GU YOU *Staphylea bumalda* (leaf). Ref: 4302, 4329, 4478.

**10945 Icariside B<sub>2</sub>**

$C_{20}H_{32}O_7$  (384.47). Source: JIAN YE YIN YANG HUO *Epimedium sagittatum*. Ref: 660, 1521.

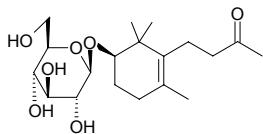
**10946 Icariside B<sub>6</sub>**

$C_{19}H_{32}O_7$  (372.46). Source: JIAN YE YIN YANG HUO *Epimedium sagittatum*. Ref: 660.

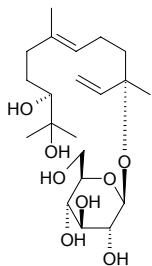


**10947 Icariside B<sub>9</sub>**

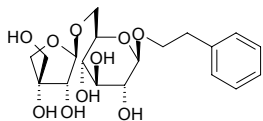
[135743-11-2] C<sub>19</sub>H<sub>32</sub>O<sub>7</sub> (372.46). Amorphous powder,  $[\alpha]_D^{23} = -42.9^\circ$  ( $c = 0.14$ , MeOH). Source: JIAN YE YIN YANG HUO *Epimedium sagittatum*. Ref: 2, 660, 1521.

**10948 Icariside C<sub>3</sub>**

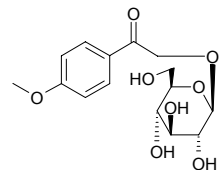
C<sub>21</sub>H<sub>38</sub>O<sub>8</sub> (418.53). Source: JIN ZHAN JU *Calendula officinalis* (flower). Ref: 3551.

**10949 Icariside D<sub>1</sub>**

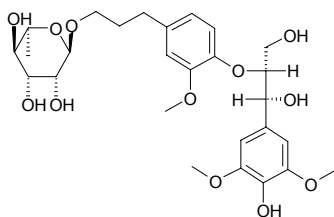
C<sub>19</sub>H<sub>28</sub>O<sub>10</sub> (416.43). Source: SHI LIU ZHONG ZI *Punica granatum* (seed: yield = 0.0002%), ZHONG HUA QING NIU DAN *Tinospora sinensis* (stem). Ref: 4292, 4792.

**10950 Icariside D<sub>3</sub>**

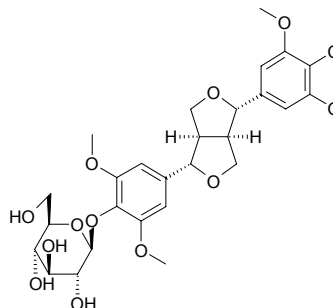
[135743-08-7] C<sub>15</sub>H<sub>20</sub>O<sub>8</sub> (328.32). Source: JIAN YE YIN YANG HUO *Epimedium sagittatum*. Ref: 1521.

**10951 Icariside E<sub>6</sub>**

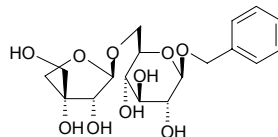
[135774-83-3] C<sub>27</sub>H<sub>38</sub>O<sub>12</sub> (554.60). Amorphous powder,  $[\alpha]_D^{23} = -12.5^\circ$  ( $c = 0.3$ , MeOH). Source: JIAN YE YIN YANG HUO *Epimedium sagittatum*. Ref: 660, 1521.

**10952 Icariside E<sub>7</sub>**

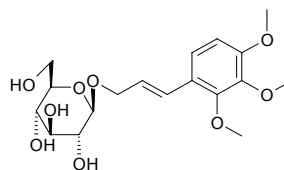
C<sub>29</sub>H<sub>38</sub>O<sub>13</sub> (594.62). Source: JIAN YE YIN YANG HUO *Epimedium sagittatum*. Ref: 2, 660.

**10953 Icariside F<sub>2</sub>**

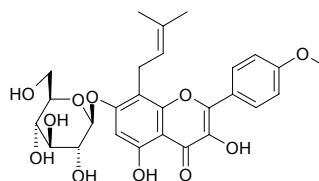
Benzyl  $\beta$ -D-apiofuranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside C<sub>18</sub>H<sub>26</sub>O<sub>10</sub> (402.40). mp 133–135°C,  $[\alpha]_D^{22} = -98^\circ$ ; mp 133–135°C,  $[\alpha]_D^{21} = -98^\circ$ ;  $[\alpha]_D^{25} = -84^\circ$ , ( $c = 0.1$ , MeOH). Pharm: Plant growth stimulatory or inhibitory activity (radicle length: *Lactuca sativa*, 1  $\mu$ mol/L, StRt or InRt < 10%, 10  $\mu$ mol/L, StRt or InRt < 10%, 100  $\mu$ mol/L, StRt or InRt < 10%, 1 mmol/L, StRt or InRt < 10%; *Raphanus sativus*, 1  $\mu$ mol/L, StRt or InRt < 10%, 10  $\mu$ mol/L, StRt or InRt < 10%, 100  $\mu$ mol/L, StRt or InRt < 10%, 1 mmol/L, StRt or InRt < 10%; *Allium cepa*, 1  $\mu$ mol/L, StRt = (10–30)%, 10  $\mu$ mol/L, StRt = (10–30)%, 100  $\mu$ mol/L, InRt = (10–30)%, 1 mmol/L, InRt = (10–30)%)<sup>[5217]</sup>. Source: BEI SHA SHEN *Glehnia littoralis* (fruit), CANG ZHU *Atractylodes lancea*, HU SUI ZI *Coriandrum sativum*, SHI LUO ZI *Anethum graveolens* (fruit), XI YANG JIE GU MU *Sambucus nigra*, YUAN YE E ZHANG CHAI *Schefflera rotundifolia* (aerial parts). Ref: 3525, 4177, 4302, 4348, 5036, 5217.

**10954 Icariside H<sub>1</sub>**

[135743-09-8] C<sub>18</sub>H<sub>26</sub>O<sub>9</sub> (386.40). Amorphous powder,  $[\alpha]_D^{23} = -47.6^\circ$  ( $c = 0.62$ , MeOH). Source: JIAN YE YIN YANG HUO *Epimedium sagittatum*. Ref: 2, 660, 1521.

**10955 Icariside I**

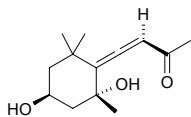
[56725-99-6] C<sub>27</sub>H<sub>30</sub>O<sub>11</sub> (530.53). Yellow needles (MeOH), mp 256°C, mp 248°C (dec),  $[\alpha]_D^{15} = -28.4^\circ$  (pyridine). Source: JIAN YE YIN YANG HUO *Epimedium sagittatum*, DA HUA YIN YANG HUO *Epimedium grandiflorum*. Ref: 2, 660, 1521.



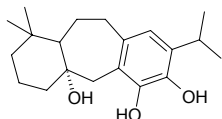


**10956 Icarisidin B<sub>1</sub>**

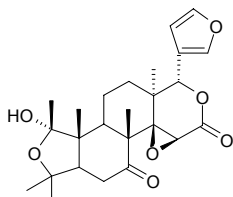
$C_{13}H_{20}O_3$  (224.30). Source: JIAN YE YIN YANG HUO *Epimedium sagittatum*. Ref: 660.

**10957 8,11,13-Icetexantrien-10,11,12-triol**

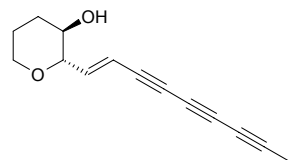
$C_{21}H_{30}O_3$  (318.46). Source: GAN XI SHU WEI CAO *Salvia przewalskii*. Ref: 4538.

**10958 Ichangensin**

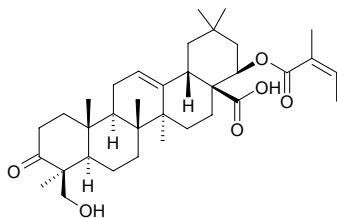
$C_{25}H_{32}O_7$  (444.53). Source: SU DA QI GAN JU *Citrus sudachii* (seed). Ref: 3532.

**10959 Ichthyothereol**

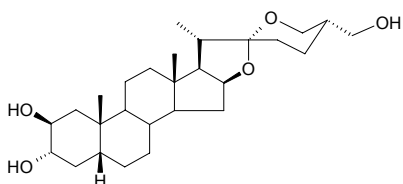
[2294-61-3]  $C_{14}H_{14}O_2$  (214.27). Pharm: Supertoxic agent. Source: HONG DA LI HUA *Dahlia coccinea*. Ref: 1521.

**10960 Icterogenin**

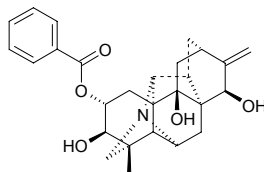
$C_{35}H_{52}O_6$  (568.80). Pharm: Anti-androgenic (testosterone-5 $\alpha$ -reductase inhibitor, 50 $\mu$ g/mL, InRt = 78.55%, control Glabridine, 50 $\mu$ g/mL, InRt = 48.20%). Source: DUO SUI PO BU MU *Cordia multispicata* (leaf). Ref: 4106.

**10961 Igagenin**

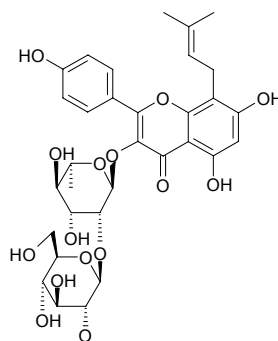
[21152-89-6]  $C_{27}H_{44}O_5$  (448.65). mp 248~249°C,  $[\alpha]_D = -43.6^\circ$  (CHCl<sub>3</sub>). Source: SHAN BI XIE *Dioscorea tokoro*. Ref: 6, 660, 1521.

**10962 Ignavine**

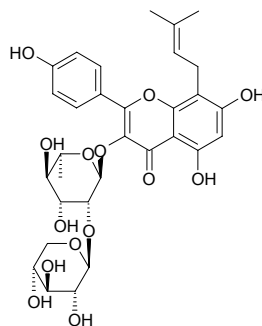
Hetisan-2,3,9,15-tetrol 2-benzoate  $C_{27}H_{31}NO_5$  (449.55). Source: WU TOU *Aconitum carmichaeli*. Ref: 660.

**10963 Ikariside B**

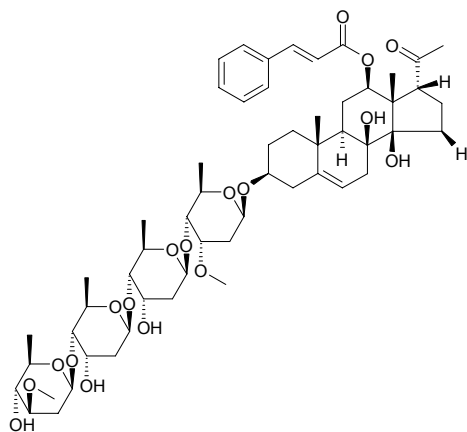
[113558-10-4]  $C_{32}H_{38}O_{15}$  (662.65). mp 180~182°C. Source: CU MAO YIN YANG HUO *Epimedium acuminatum*, WAN SHAN YIN YANG HUO *Epimedium wanshanense*. Ref: 574, 599.

**10964 Ikariside F**

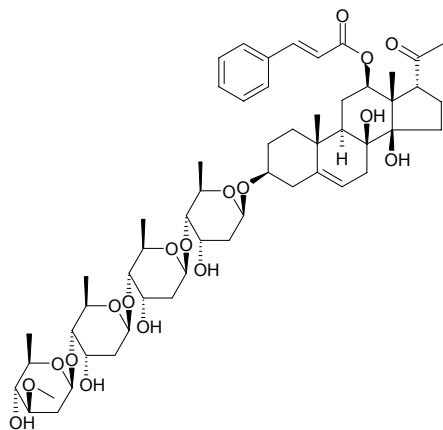
[113558-14-8]  $C_{31}H_{36}O_{14}$  (632.62). Source: CHAO XIAN YIN YANG HUO *Epimedium koreanum* (aerial parts: content = 0.072%)<sup>[5508]</sup>, JIAN YE YIN YANG HUO *Epimedium sagittatum* (aerial parts: content = 0.108%)<sup>[5508]</sup>, ROU MAO YIN YANG HUO *Epimedium pubescens* (aerial parts: content = 0.068%)<sup>[5508]</sup>, WU SHAN YIN YANG HUO *Epimedium wushanense* (aerial parts: content = 0.096%)<sup>[5508]</sup>, YIN YANG HUO *Epimedium brevicornum* (aerial parts: content = 0.065%)<sup>[5508]</sup>. Ref: 565, 5508.



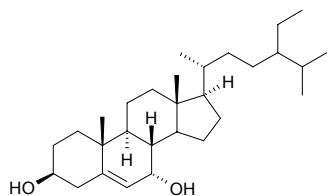
**10965 Ikemagenin 3-O- $\beta$ -D-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-cymaropyranoside**  
 $C_{56}H_{82}O_{18}$  (1043.27). Amorphous powder,  $[\alpha]_D^{27} = +14.4^\circ$  ( $c = 0.89$ , MeOH).  
 Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.



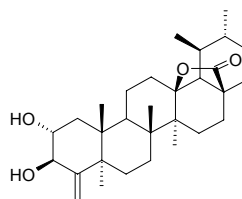
**10966 Ikemagenin 3-O- $\beta$ -D-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-digitoxopyranoside**  
 $C_{55}H_{80}O_{18}$  (1029.24). Amorphous powder,  $[\alpha]_D^{27} = +12.1^\circ$  ( $c = 0.52$ , MeOH).  
 Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.



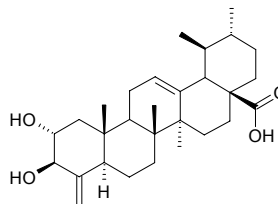
**10967 Ikshusterol**  
 Stigmast-5-ene-3 $\beta$ ,7 $\alpha$ -diol [34427-61-7]  $C_{29}H_{50}O_2$  (430.72). Crystals (MeOH),  
 mp 129–133°C, mp 202–204°C,  $[\alpha]_D = -27^\circ$  (CHCl<sub>3</sub>). Pharm:  
 Anti-inflammatory (mus, inflammation caused by TPA, 1.0mg/ear, InRt =  
 36%); dissolves fibrin (*in vitro*, fibrin plate test, 1mg/mL, dissolving activity  
 = 18.0mm). Source: HONG HUA PI *Betula platyphylla* var. *japonica*, KUAN  
 YE XIANG PU *Typha latifolia*, KUN MING JI XUE TENG *Milletia  
 dielsiana*, MI HUA DOU *Spatholobus suberectus*, YAO YONG GAN ZHE  
*Saccharum officinarum*, YI ZHU QIAN MA *Urtica dioica*, FENG LI *Ananas  
 comosus*. Ref: 900, 1521.



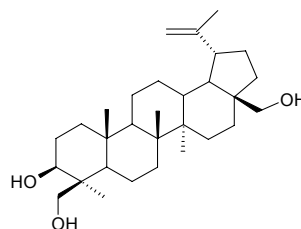
**10968 Ilekudinol A**  
 $C_{30}H_{46}O_4$  (470.70). Source: KU DING CHA DONG QING *Ilex kudingcha*.  
 Ref: 2160.



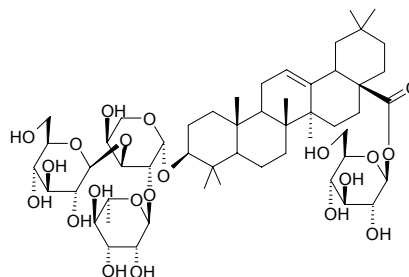
**10969 Ilekudinol B**  
 $C_{29}H_{44}O_4$  (456.67). Source: KU DING CHA DONG QING *Ilex kudingcha*.  
 Ref: 2160.

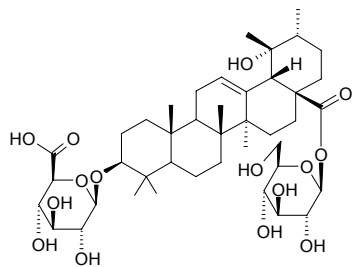
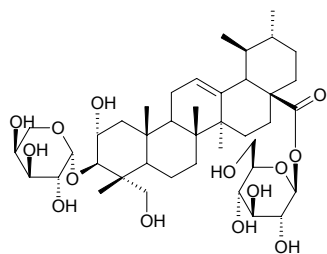
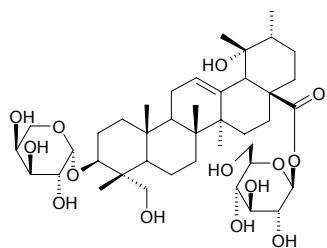
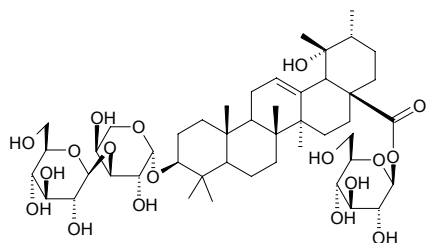
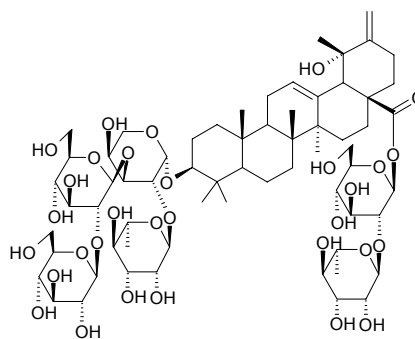
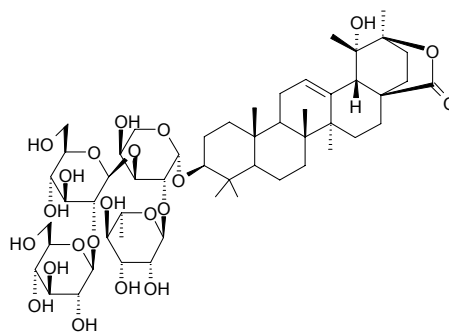
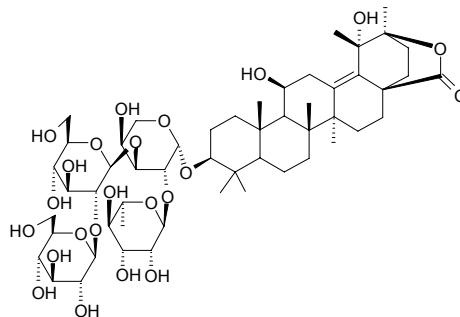


**10970 Ilekudinol C**  
 $C_{30}H_{50}O_3$  (458.73). Source: KU DING CHA DONG QING *Ilex kudingcha*.  
 Ref: 2160.



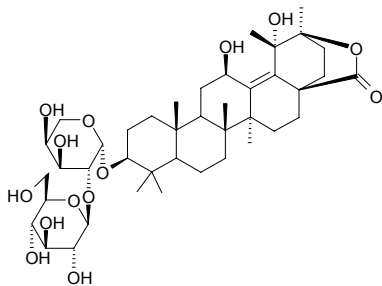
**10971 Ilekudinoside A**  
 $C_{53}H_{86}O_{21}$  (1059.26). Source: KU DING CHA DONG QING *Ilex kudingcha*.  
 Ref: 5504.



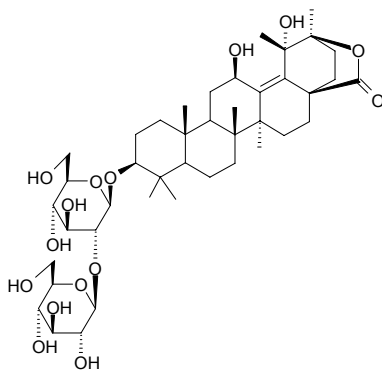
**10972 Ilekudinoside B**C<sub>42</sub>H<sub>66</sub>O<sub>15</sub> (810.99). Source: KU DING CHA DONG QING *Ilex kudingcha*.Ref: 5504.**10973 Ilekudinoside C**C<sub>41</sub>H<sub>66</sub>O<sub>14</sub> (782.97). Source: KU DING CHA DONG QING *Ilex kudingcha*.Ref: 5504.**10974 Ilekudinoside D**C<sub>41</sub>H<sub>66</sub>O<sub>14</sub> (782.97). Source: KU DING CHA DONG QING *Ilex kudingcha*.Ref: 5504.**10975 Ilekudinoside E**C<sub>47</sub>H<sub>76</sub>O<sub>18</sub> (929.12). Source: KU DING CHA DONG QING *Ilex kudingcha*.Ref: 5504.**10976 Ilekudinoside F**C<sub>65</sub>H<sub>104</sub>O<sub>31</sub> (1381.54). Source: KU DING CHA DONG QING *Ilex kudingcha*.Ref: 5504.**10977 Ilekudinoside G**3-*O*-β-*D*-Glucopyranosyl(1→2)-β-*D*-glucopyranosyl-[α-*L*-rhamnopyranosyl(1→2)]-α-*L*-arabinopyranosyl 3β,19α-dihydroxy-urs-12-en-28,20β-olideC<sub>53</sub>H<sub>84</sub>O<sub>22</sub> (1073.25). Source: KU DING CHA DONG QING *Ilex kudingcha*.Ref: 5504.**10978 Ilekudinoside H**3-*O*-β-*D*-Glucopyranosyl(1→2)-β-*D*-glucopyranosyl-[α-*L*-rhamnopyranosyl(1→2)]-α-*L*-arabinopyranosyl γ-kudinlactone C<sub>53</sub>H<sub>84</sub>O<sub>23</sub> (1089.25). Source: KU DING CHA DONG QING *Ilex kudingcha*.Ref: 5504.

**10979 Ilexudinoside I**

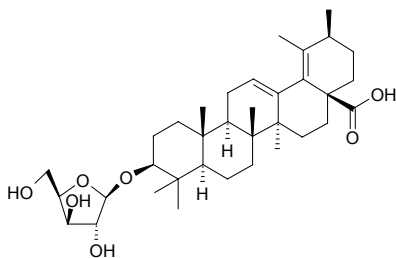
3-*O*- $\beta$ -*D*-Glucopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl  $\beta$ -kudinlactone  
 $C_{41}H_{64}O_{14}$  (780.96). Source: KU DING CHA DONG QING *Ilex kudingcha*.  
Ref: 5504.

**10980 Ilexudinoside J**

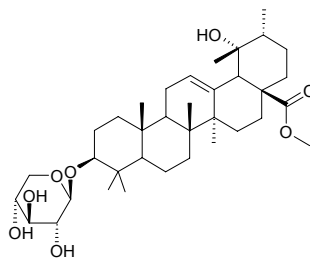
3-*O*- $\beta$ -*D*-Glucopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl  $\beta$ -kudinlactone  
 $C_{42}H_{66}O_{15}$  (810.99). Source: KU DING CHA DONG QING *Ilex kudingcha*.  
Ref: 5504.

**10981 Ilexolide A**

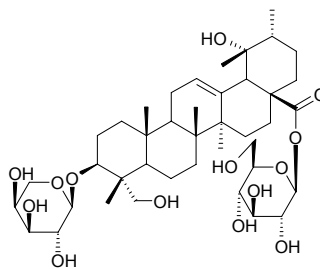
Ilexolide [85344-31-6]  $C_{35}H_{54}O_7$  (586.82). Pharm: Cardiotonic. Source: MAO DONG QING *Ilex pubescens*. Ref: 658.

**10982 Ilexoside B methyl ester**

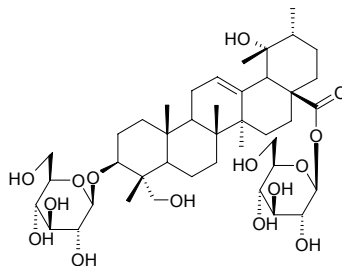
3 $\beta$ -*O*-( $\beta$ -*D*-Xylopyranosyl) pomolic acid methyl ester  $C_{36}H_{58}O_8$  (618.86).  
Source: SI JI QING *Ilex chinensis* [Syn. *Ilex purpurea*]. Ref: 660.

**10983 Ilexoside XXVII**

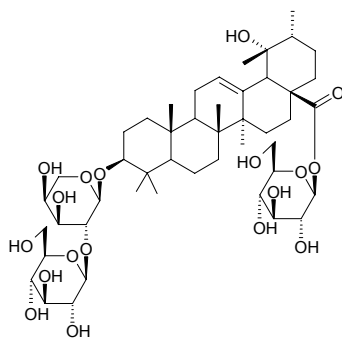
$C_{41}H_{66}O_{14}$  (782.97). Source: BA NA MA SHAN SHI LIU *Randia formosa* (leaf). Ref: 3951.

**10984 Ilexoside XXXVII**

$C_{42}H_{68}O_{15}$  (813.00). Source: BA NA MA SHAN SHI LIU *Randia formosa* (leaf). Ref: 3951.

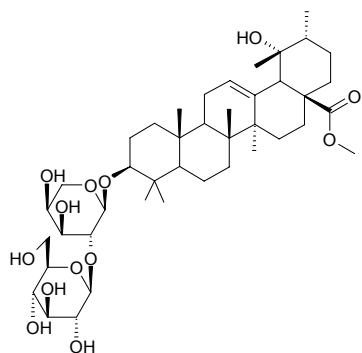
**10985 Ilexside II**

$C_{47}H_{76}O_{18}$  (929.12). Source: GOU GU YE *Ilex cornuta*. Ref: 660.

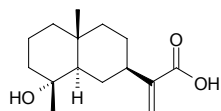


**10986 Ilexside I methyl ester**

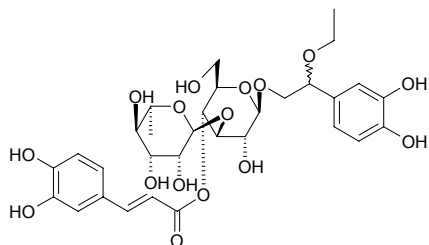
$C_{42}H_{68}O_{13}$  (781.00). Source: GOU GU YE *Ilex cornuta*. Ref: 660.

**10987 Ilicic acid**

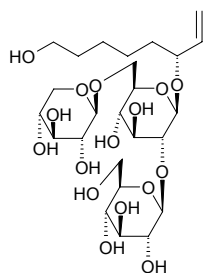
$C_{15}H_{24}O_3$  (252.36). Source: LIU LENG JU *Laggera alata* (aerial parts: yield = 0.09%dw). Ref: 4709.

**10988 Ilicifolioside A**

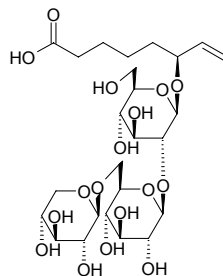
$C_{31}H_{40}O_{16}$  (668.65). Amorphous powder,  $[\alpha]_D^{25} = -72^\circ$  ( $c = 0.8$ , MeOH). Source: LAO SHU LE *Acanthus ilicifolius*. Ref: 3397.

**10989 Ilicifolioside B**

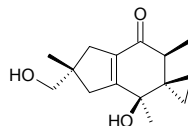
$C_{25}H_{44}O_{16}$  (600.62). Amorphous powder,  $[\alpha]_D^{25} = -51^\circ$  ( $c = 0.6$ , MeOH). Source: LAO SHU LE *Acanthus ilicifolius*. Ref: 3397.

**10990 Ilicifolioside C**

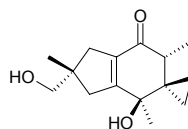
(6*R*)-6-Hydroxyl-7-octenoic acid  
6-*O*- $\beta$ -*D*-xylopyranosyl-(1"<sup>'''</sup>- $\rightarrow$ 6")-*O*- $\beta$ -*D*-glucopyranosyl-(1"<sup>''</sup>- $\rightarrow$ 2')-*O*- $\beta$ -*D*-glucopyranoside  $C_{25}H_{42}O_{17}$  (614.60). Amorphous powder,  $[\alpha]_D^{25} = -48^\circ$  ( $c = 0.6$ , MeOH). Source: LAO SHU LE *Acanthus ilicifolius* (aerial parts). Ref: 4392.

**10991 Illudin I**

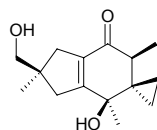
$C_{15}H_{22}O_3$  (250.34). Oil,  $[\alpha]_D = -41^\circ$  ( $c = 0.09$ , MeOH). Source: fungus *Coprinopsis episcopalis*. Ref: 3760.

**10992 Illudin I<sub>2</sub>**

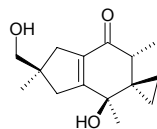
$C_{15}H_{22}O_3$  (250.34). Oil,  $[\alpha]_D = +22.5^\circ$  ( $c = 0.08$ , MeOH). Source: fungus *Coprinopsis episcopalis*. Ref: 3760.

**10993 Illudin J**

$C_{15}H_{22}O_3$  (250.34). Oil. Source: fungus *Coprinopsis episcopalis*. Ref: 3760.

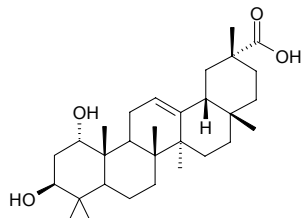
**10994 Illudin J<sub>2</sub>**

$C_{15}H_{22}O_3$  (250.34). Oil,  $[\alpha]_D = -26^\circ$  ( $c = 0.034$ , MeOH). Source: fungus *Coprinopsis episcopalis*. Ref: 3760.

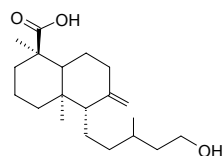


**10995 Imberbic acid**

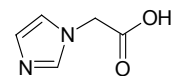
$C_{30}H_{48}O_4$  (472.71). Source: WU MAO FENG CHE ZI *Combretum imberbe*.  
Ref: 1521.

**10996 Imbricatolic acid**

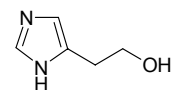
$C_{20}H_{34}O_3$  (322.49). Source: MA WEI SONG YE *Pinus massoniana*,  
*Araucaria imbricata*. Ref: 660, 1521.

**10997 1-Imidazolylacetic acid**

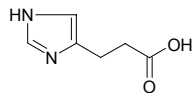
$C_5H_6N_2O_2$  (126.12). mp 268–269°C (dec). Source: GUI GAI *Coprinus atramentarius*. Ref: 6.

**10998 2-(4'-Imidazolylethanol)**

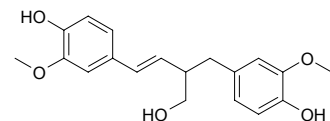
$C_5H_8N_2O$  (112.13). Source: GUI GAI *Coprinus atramentarius*. Ref: 6.

**10999 Imidazolylpropionic acid**

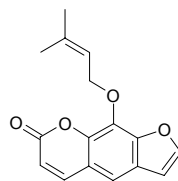
[1074-59-5]  $C_6H_8N_2O_2$  (140.14). mp 206–208°C. Source: GUI GAI *Coprinus atramentarius*. Ref: 6, 1521.

**11000 Imperanene**

$C_{19}H_{22}O_5$  (330.38). Pharm: Platelet aggregation inhibitor (rbt, induced by thrombase, 0.3mmol/L, InRt = 100%). Source: BAI MAO GEN<sup>(1)</sup> *Imperata cylindrica* var. *major*. Ref: 5501.

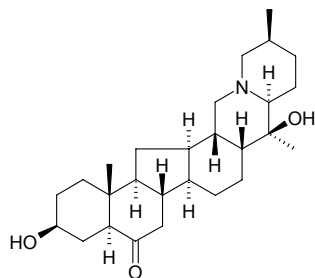
**11001 Imperatorin**

[482-44-0]  $C_{16}H_{14}O_4$  (270.29). Yellow amorphous powder, mp 102–104°C.  
Pharm: NO Production inhibitor (LPS-activated mouse peritoneal macrophages,  $IC_{50} = 60\mu\text{mol/L}$ , control *L*-NMMA,  $IC_{50} = 28\mu\text{mol/L}$ )<sup>[4454]</sup>; reversing MDR of KBV200 cells (obviously)<sup>[2787]</sup>; PGE<sub>2</sub> production inhibitor (rat peritoneal macrophages, LPS-induced, 0.1 $\mu\text{mol/L}$ ; inhibits LPS-induced expression of COX-2 and mPGES, not directly inhibits COX-1 and COX-2)<sup>[5392]</sup>; T-cell Proliferation inhibitor<sup>[4071]</sup>; cytotoxic (24h: HL-60,  $IC_{50} = 18.8\mu\text{g/mL}$ , control Adriamycin  $IC_{50} < 0.10\mu\text{g/mL}$ ; P<sub>388</sub>,  $IC_{50} = 20.2\mu\text{g/mL}$ , Adriamycin  $IC_{50} < 0.10\mu\text{g/mL}$ ; Colon205,  $IC_{50} > 50\mu\text{g/mL}$ , Adriamycin  $IC_{50} = 0.63\mu\text{g/mL}$ ; HeLa,  $IC_{50} > 50\mu\text{g/mL}$ , Adriamycin  $IC_{50} = 0.15\mu\text{g/mL}$ )<sup>[5486]</sup>; cytotoxic (12h: HL-60,  $IC_{50} = 26.9\mu\text{g/mL}$ , control Adriamycin  $IC_{50} = 0.18\mu\text{g/mL}$ ; primary culture hmn PBMCs,  $IC_{50} = 68.1\mu\text{g/mL}$ , SI = 2.5, Adriamycin  $IC_{50} = 0.54\mu\text{g/mL}$ , SI = 3.3)<sup>[5486]</sup>; antileishmanial (*Leishmania major* promastigote, 10 $\mu\text{mol/L}$ , survival = (70.5±5.0)%, 1 $\mu\text{mol/L}$ , survival = (83.0±1.9)%, control Amphotericin B, 10 $\mu\text{mol/L}$ , survival = (0.20±0.04)%, 1 $\mu\text{mol/L}$ , survival = (71.9±4.4%))<sup>[3797]</sup>; antifungal inactive (silica gel TLC, *Cladosporium cucumerinum*, control Nystatin, MIA = 0.2 $\mu\text{g}$ )<sup>[3797]</sup>. Source: AO PA CAO *Oppopanax chironium* (root), BAI ZHI *Angelica dahurica* [Syn. *Angelica porphyrocaulis*] (dried root: content scope of 6 origins = 0.065%–0.141%, mean content = 0.104%)<sup>[5508]</sup>, BEI SHA SHEN *Glehnia littoralis* (root: mean content of 6 origins = 0.00109%)<sup>[5508]</sup>, CHOU SHAN YANG *Orixa japonica* (stem: yield = 0.001%dw)<sup>[4774]</sup>, FANG FENG *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*], FEN CHA DANG GUI *Angelica furcijuga* (flower), HANG BAI ZHI *Angelica taiwaniana* (dried root: content scope of 19 origins = 0.042%–0.168%, mean content = 0.103%)<sup>[5508]</sup>, JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*], OU QIAN HU *Peucedanum ostruthium* (in 1933 the compound was isolated from the plant by E.Spath)<sup>[5505]</sup>, QI BAI ZHI *Angelica dahurica* cv. *Qibaizhi* (sundried root: content scope of 10 origins = 0.142%–0.296%, mean content = 0.213%)<sup>[5516]</sup>, SHE CHUANG ZI *Cnidium monnieri* (ripe seed: content scope = 1.8%–2.2%)<sup>[5501]</sup>, mean content = 1.30%)<sup>[5508]</sup>, SONG YE FANG FENG *Seseli yunnanense*, YUN NAN QIANG HUO *Pleurospermum rivulorum*, YUN QIAN HU *Peucedanum rubricaulis*, *Niphogeton ternata*, *Thamnosma rhodesica* (root). Ref: 2, 11, 177, 549, 551, 660, 2787, 3797, 4071, 4156, 4454, 4774, 5392, 5486, 5501, 5505, 5508, 5516.

**11002 Imperialine**

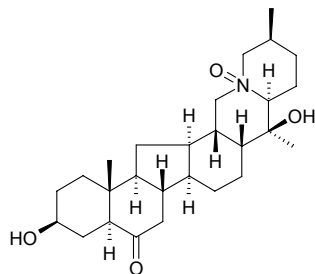
Sipeimine<sup>+</sup>; Kashmirine; Raddeanine [61825-98-7]  $C_{27}H_{43}NO_3$  (429.65). Colorless hexagonal–prisms (EtOH), mp 273–275°C (dec),  $[\alpha]_D^{23} = -32^\circ$  ( $c = 0.5$ ,  $CHCl_3$ ), mp 267–269°C; Colorless prismatic crystals (ethanol), mp 269°C,  $[\alpha]_D^{18} = -33.8^\circ$  ( $c = 0.696$ , chloroform);  $[\alpha]_D^{19} = -39.4^\circ$  ( $c = 0.838$ , absolute ethanol). Pharm: AChE inhibitor ( $IC_{50} > 500\mu\text{mol/L}$ , control Eserine,  $IC_{50} = (0.41\pm 0.001)\mu\text{mol/L}$ )<sup>[4217]</sup>; BChE inhibitor ( $IC_{50} = (121.5\pm 6.6)\mu\text{mol/L}$ , control Eserine,  $IC_{50} = (0.857\pm 0.008)\mu\text{mol/L}$ )<sup>[4217]</sup>; antispasmodic (spasm

caused by acetylcholine chloride, di-*p*-octylphenylphosphoric acid histamine and BaCl<sub>2</sub>); smooth muscle relaxant (gpg ileum *in vitro*, rbt duodenum *in vitro*, rat uterus *in vitro*, rat small intestine *in vivo*); vasodilator (peripheral, anesthetic dog, causes low blood pressure); LD<sub>50</sub> (rat) = 90mg/kg, (rat, chloride) = 50mg/kg. **Source:** AN ZI BEI MU *Fritillaria unibracteata* (bulb: mean content = 0.00245%)<sup>[5508]</sup>, CHUAN BEI MU *Fritillaria cirrhosa* (bulb: mean content = 0.056%)<sup>[5508]</sup>, GAN SU BEI MU *Fritillaria przewalskii*, LENG SHA BEI MU *Fritillaria delavayi*, NING XIA BEI MU *Fritillaria taipaiensis* var. *ningxiaensis*, XI BEI MU *Fritillaria imperialis* (bulb), XIN JIANG BEI MU *Fritillaria walujewii*, YI BEI MU *Fritillaria pallidiflora*. **Ref:** 4, 6, 271, 658, 660, 1521, 4217, 5508.



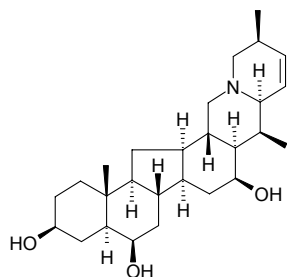
#### 11003 Imperialine N-oxide

C<sub>27</sub>H<sub>43</sub>NO<sub>4</sub> (445.65). **Source:** YI BEI MU *Fritillaria pallidiflora*. **Ref:** 660.



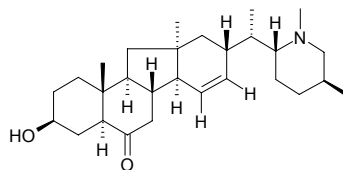
#### 11004 Impericine

(20*R*,22*S*,25*S*)-5α-Cevanin-23-ene-3β,6β,16β-triol C<sub>27</sub>H<sub>43</sub>NO<sub>3</sub> (429.65). Needle-like crystals, mp 195~197°C (dec), [α]<sub>D</sub><sup>25</sup> = -28° (*c* = 0.5, CHCl<sub>3</sub>). **Pharm:** AChE inhibitor (IC<sub>50</sub> = (67.97±2.46)μmol/L, control Eserine, IC<sub>50</sub> = (0.41±0.001)μmol/L); BChE inhibitor (IC<sub>50</sub> = 1.607μmol/L, control Eserine, IC<sub>50</sub> = (0.857±0.008)μmol/L). **Source:** XI BEI MU *Fritillaria imperialis* (bulb). **Ref:** 4217.



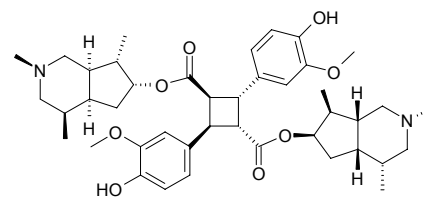
#### 11005 Impranine

3*S*,17*R*,20*S*,22*R*)-5α-Impra-15,16-ene-6-one C<sub>28</sub>H<sub>45</sub>NO<sub>2</sub> (427.68). Amorphous powder, [α]<sub>D</sub><sup>25</sup> = +28° (*c* = 0.05, MeOH). **Source:** XI BEI MU *Fritillaria imperialis*. **Ref:** 3372.



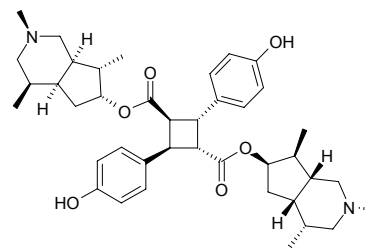
#### 11006 Incarvilleine

C<sub>42</sub>H<sub>58</sub>N<sub>2</sub>O<sub>8</sub> (718.94). **Source:** JIAO HAO *Incarvillea sinensis* (aerial parts). **Ref:** 4509.



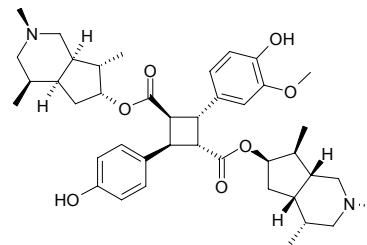
#### 11007 Incarvilleine C

C<sub>40</sub>H<sub>54</sub>N<sub>2</sub>O<sub>6</sub> (658.89). White powder, [α]<sub>D</sub><sup>17</sup> = -3.2° (*c* = 0.30, CHCl<sub>3</sub>). **Source:** JIAO HAO *Incarvillea sinensis*. **Ref:** 2305.



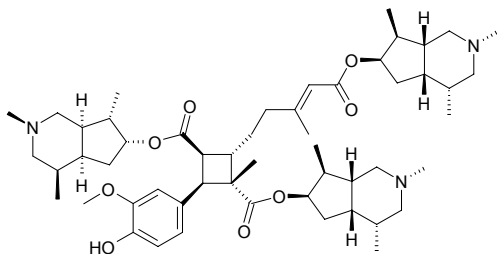
#### 11008 Incarvilleine D

C<sub>41</sub>H<sub>56</sub>N<sub>2</sub>O<sub>7</sub> (688.91). White powder, [α]<sub>D</sub><sup>16</sup> = -5.1° (*c* = 0.30, CHCl<sub>3</sub>). **Source:** JIAO HAO *Incarvillea sinensis*. **Ref:** 2305.

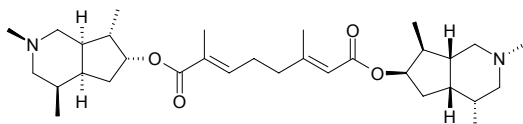


**11009 Incarvillateine E**

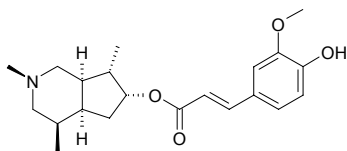
$C_{53}H_{81}N_3O_8$  (888.25). White powder,  $[\alpha]_D^{23} = -6.4^\circ$  ( $c = 0.32$ ,  $CHCl_3$ ). Source: JIAO HAO *Incarvillea sinensis* (aerial parts). Ref: 4509.

**11010 Incarvine A**

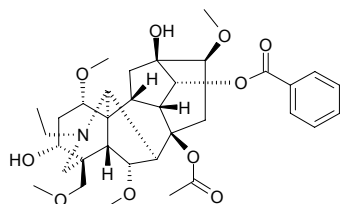
$C_{32}H_{52}N_2O_4$  (528.78). Source: JIAO HAO *Incarvillea sinensis* (aerial parts). Ref: 4509.

**11011 Incarvine C**

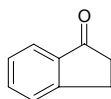
$C_{21}H_{29}NO_4$  (359.47). Source: JIAO HAO *Incarvillea sinensis* (aerial parts). Ref: 4509.

**11012 Indaconitine**

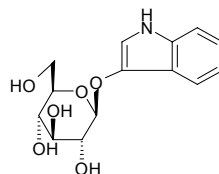
[4491-19-4]  $C_{34}H_{47}NO_{10}$  (629.75). Crystals ( $Et_2O$ ), mp 200–203°C, mp 190–191°C,  $[\alpha]_D = +18.3^\circ$  ( $c = 2.0$ ,  $EtOH$ ). Pharm: Toxin. Source: FA KANG WU TOU *Aconitum falconeri*, GUA YE WU TOU *Aconitum hemsleyanum*, NI BO ER WU TOU *Aconitum ferox*, ZHAN HUA WU TOU *Aconitum chasmanthum*, ZI WU TOU *Aconitum violaceum*. Ref: 658, 1521, 3171.

**11013 1-Indanone**

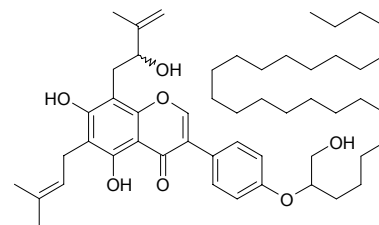
Indan-1-one;  $\alpha$ -Indanone [83-33-0]  $C_9H_8O$  (132.16). mp 42°C. Source: JUE *Pteridium aquilinum* var. *latiusculum*. Ref: 6.

**11014 Indican glucoside**

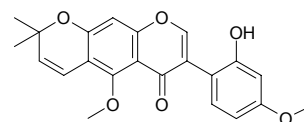
$C_{14}H_{17}NO_6$  (295.29). mp 178–180°C (anhydride). Source: BAN LAN GEN *Isatis indigotica* (dried root: content = 0.0145%)<sup>[5508]</sup>, DA QING YE *Isatis indigotica* (dried leaf: content = 0.0305%)<sup>[5508]</sup>, GANG BAN GUI GEN *Polygonum perfoliatum*, LIAO LAN YE *Polygonum tinctorium* (dried leaf: content = 4.069% (period of dense leaves))<sup>[5508]</sup>, MU LAN<sup>(2)</sup> *Indigofera tinctoria*. Ref: 6, 5508.

**11015 Indicanine D**

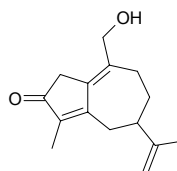
5,7-Dihydroxy-6( $\gamma,\gamma$ -dimethylallyl)-8-(2''-hydroxy-3''-methylbut-3''-enyl)-4'-(1''-hydroxymethylpenta cosanyl)isoflavone  $C_{51}H_{78}O_7$  (803.19). Yellow needles, mp 212–214°C,  $[\alpha]_D^{20} = +8.5^\circ$  ( $c = 0.045$ ,  $MeOH$ ). Pharm: Cytotoxic (KB,  $EC_{50} = 12.5\mu g/mL$ ). Source: CI TONG *Erythrina variegata* [Syn. *Erythrina indica*] (stem cortex). Ref: 5220.

**11016 Indicanine E**

2'-Hydroxy-5,4'-dimethoxy-2''-2''-dimethylpyran-[5''-6'':6,7]isoflavone  $C_{22}H_{20}O_6$  (380.40). Brown crystals, mp 138–139°C. Source: CI TONG *Erythrina variegata* [Syn. *Erythrina indica*] (stem cortex). Ref: 5220.

**11017 Indicanone**

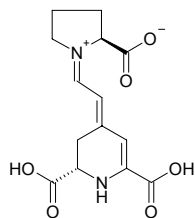
$C_{15}H_{20}O_2$  (232.33). Colorless oil,  $[\alpha]_D^{25} = +14.3^\circ$ , ( $c = 0.11$ ,  $MeOH$ ). Pharm: NO production inhibitor (mus, macrophage-like cell line, RAW264.7, activated by LPS and recombinant mouse IFN- $\gamma$ ,  $IC_{50} = 9.3\mu mol/L$ , control Quercetin,  $IC_{50} = 24.8\mu mol/L$ )<sup>[2541]</sup>; inhibits the inducible nitric oxide synthase (iNOS) gene expression (LPS/IFN- $\gamma$  treatment increased the level of iNOS mRNA expression, and indicanone (a sesquiterpene of guanine type) inhibits this increase); cytotoxic inactive (MTT assay, 3–30 $\mu mol/L$  didn't show any cytotoxic effect)<sup>[2541]</sup>; anti-inflammatory (may be useful for the treatment of various inflammatory diseases). Source: LIAO GE WANG GEN *Wikstroemia indica*. Ref: 2541.



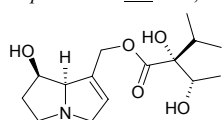


**11018 Indicaxanthin**

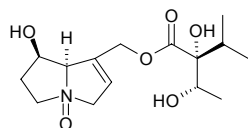
[2181-75-1]  $C_{14}H_{16}N_2O_6$  (308.29). Orange crystals ( $H_2O$ ), mp 160~162°C (dec). **Pharm:** Yellow pigment. **Source:** LI GUO XIAN REN ZHANG *Opuntia ficus-indica*, ZI MO LI GEN *Mirabilis jalapa*, DA HUA MA CHI XIAN *Portulaca grandiflora*. **Ref:** 6, 658, 1521.

**11019 Indicine**

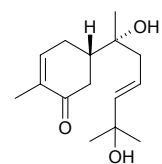
[480-82-0]  $C_{15}H_{25}NO_5$  (299.37). **Pharm:** Antineoplastic (mus leukemia, its N-oxide being more effective); hepatotoxin (animal model). **Source:** DA WEI YAO *Heliotropium indicum*, BAO JING TIAN JIE CAI *Heliotropium amplexicaule*. **Ref:** 658, 1521.

**11020 Indicine N-oxide**

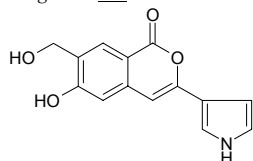
$C_{15}H_{25}NO_6$  (315.37). Combining with one methanol (methanol-acetone), colorless acicular crystals, easy decomposing under moisture, mp 130~131°C (decomposition point 165~166°C). **Pharm:** Antineoplastic (mus,  $P_{388}$ , 50~800mg/kg, continuous ip administration produces good treatment results, inefficient by oral or sc); CVS activity (dog, ip, 500mg/kg, electrocardiogram changed); supertoxic agent (ip, 2000~3000mg/kg, supertoxic agent to heart, spleen, kidney and duodenum). **Source:** DA WEI YAO *Heliotropium indicum*. **Ref:** 661.

**11021 Indicumenone**

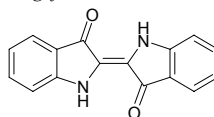
$C_{15}H_{24}O_3$  (252.36). **Source:** YE JU HUA *Chrysanthemum indicum*. **Ref:** 660.

**11022 Indigotiisocoumarin A**

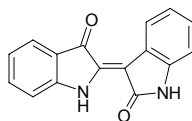
3-(3-Pyrrol)-6-hydroxy-7-hydroxymethyl-isocoumarin  $C_{14}H_{11}NO_4$  (257.25). Red crystals (MeOH), mp 130~131°C. **Source:** BAN LAN GEN *Isatis indigotica*. **Ref:** 4905.

**11023 Indigotin**

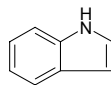
Indigo [482-89-3]  $C_{16}H_{10}N_2O_2$  (262.27). Blue powder, mp 390~392°C. **Pharm:** Cytotoxic (mus, Lewis lung carcinoma, W256 sarcoma)<sup>[5369]</sup>, cyclin-dependent kinase inhibitor<sup>[5369]</sup>. **Source:** BAN LAN GEN *Isatis indigotica*, DA QING YE *Isatis indigotica* (leaf: content scope = 2.21%~8.00%<sup>[5501]</sup>), LIAO LAN YE *Polygonum tinctorium*, MU LAN<sup>(2)</sup> *Indigofera tinctoria*. **Ref:** 2, 660, 1521, 5369, 5501.

**11024 Indirubin**

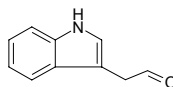
Courouptine B [479-41-4]  $C_{16}H_{10}N_2O_2$  (262.27). mp 356~358°C. **Pharm:** Antineoplastic (mus leukemia L<sub>1712</sub>, rat W<sub>256</sub>); digestive tract irritant; treatment of chronic granulocytic leukemia (total effective rate > 90%); LD<sub>50</sub> (mus, iv) = 1.1~2.0g/kg. **Source:** BAN LAN GEN *Isatis indigotica* (root: content = 0.0058%<sup>[5501]</sup>), DA QING YE *Isatis indigotica* (dried leaf: mean content = 0.14%<sup>[5508]</sup>), LIAO LAN YE *Polygonum tinctorium* (dried leaf: content = 0.0063%), MA LAN GEN *Baphicacanthus cusia* [Syn. *Strobilanthes cusia*] (root: content = 0.0036%<sup>[5501]</sup>), MU LAN<sup>(2)</sup> *Indigofera tinctoria*. **Ref:** 4, 658, 660, 5501, 5508.

**11025 Indole**

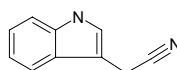
2,3-Benzopyrrole [120-72-9]  $C_8H_7N$  (117.15). mp 52°C, bp 253~254°C. **Pharm:** Insect attractant. **Source:** KU BAO *Sauromatum guttatum*, CHA YE *Camellia sinensis* [Syn. *Thea sinensis*], LA MEI HUA *Chimonanthus fragrans* [Syn. *Chimonanthus praecox*], LING MAO XIANG *Viverra zibetha*, SHUI XIAN HUA *Narcissus tazetta* var. *chinensis*, *Amorphophallus* sp., *Jasminum* sp., *Citrus* sp. **Ref:** 6, 658.

**11026 Indole-3-acetaldehyde**

[2591-98-2]  $C_{10}H_9NO$  (159.19). **Source:** GAN LAN *Brassica oleracea* var. *capitata*. **Ref:** 6.

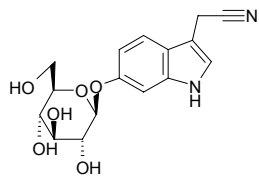
**11027 Indole-3-acetonitrile**

[771-51-7]  $C_{10}H_8N_2$  (156.19). mp 36.0~36.5°C. **Source:** FENG XIAN *Impatiens balsamina*. **Ref:** 6, 660.

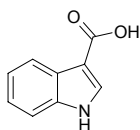


**11028 Indole-3-acetonitrile-6-O-β-D-glucopyranoside**

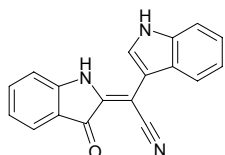
$C_{16}H_{18}N_2O_6$  (334.33). Brown yellow powder, mp 240~242°C. Source: BAN LAN GEN *Isatis indigotica*. Ref: 855.

**11029 Indole-3-carboxylic acid**

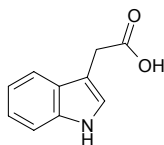
$C_9H_7NO_2$  (161.16). Pharm: Anti-HIV (inhibits HIV replication, H9 Lymphocytic Cells,  $IC_{50}$  (concentration that inhibits uninfected H9 cell growth by 50%) = 14.40 μg/mL,  $EC_{50}$  = 2.41 μg/mL, TI = 6.79 μg/mL, control AZT,  $IC_{50}$  = 500 μg/mL,  $EC_{50}$  = 0.0007 μg/mL, TI = 710000); cytotoxic (hmn cancer lines A549,  $EC_{50}$  = 4.6 μg/mL, hmn cancer lines MCF7,  $EC_{50}$  = 12.9 μg/mL). Source: NAN TOU QIU HAI TANG *Begonia nantoensis* (rhizome). Ref: 4267.

**11030 (E)-2-[(3'-Indole)cyanomethylene]-3-indolinone**

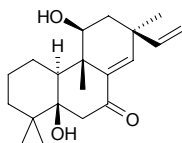
$C_{18}H_{11}N_3O$  (285.31). Purple powder, mp 213~215°C. Source: BAN LAN GEN *Isatis indigotica*. Ref: 2465.

**11031 3-Indolylacetic acid**

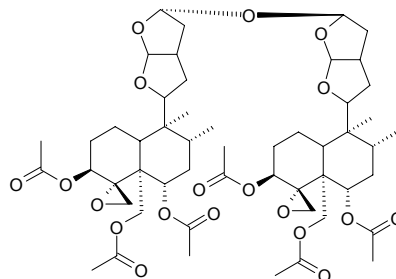
Heteroauxin; Rhizopin [87-51-4]  $C_{10}H_9NO_2$  (175.19). Crystals ( $CHCl_3$ ), mp 164~165°C. Pharm: Plant growth hormone. Source: LV SUN PIAN *Sinocalamus oldhami*, PING GUO *Malus pumila*, WU HUA GUO *Ficus carica*, YUAN CAN SHA *Bombyx mori*, occurs in many plants. Ref: 6, 660, 1521.

**11032 Ineketone**

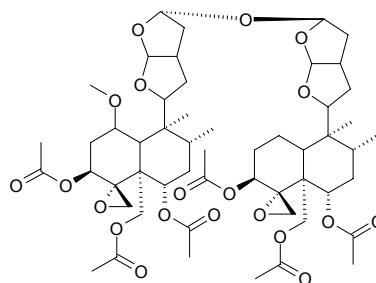
[62574-18-9]  $C_{20}H_{30}O_3$  (318.46). Crystals (EtOH-hexane), mp 206~209°C. Pharm: Germination inhibitor. Source: NUO DAO *Oryza sativa* var. *glutinosa*. Ref: 658.

**11033 Inerme A**

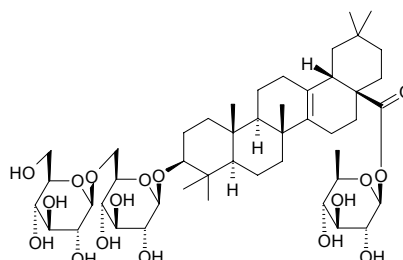
$C_{52}H_{74}O_{19}$  (1003.16). Viscous mass,  $[\alpha]_D = -18.6^\circ$  ( $CHCl_3$ ). Source: KU LANG SHU *Clerodendrum inerme* (leaf). Ref: 5261.

**11034 Inerme B**

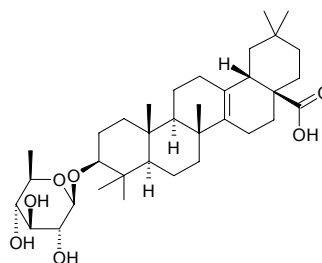
$C_{53}H_{76}O_{20}$  (1033.18). Viscous mass,  $[\alpha]_D = -12.6^\circ$  ( $CHCl_3$ ). Source: KU LANG SHU *Clerodendrum inerme* (leaf). Ref: 5261.

**11035 Inermiside I**

6-Deoxy-β-D-glucopyranosyl-[3-O-β-D-glucopyranosyl-(1→6)-β-D-glucopyranosyl]-pyrocincholate  $C_{47}H_{76}O_{17}$  (913.12). Needles (MeOH:H<sub>2</sub>O = 3:2), mp 226~228°C,  $[\alpha]_D^{25} = -32.52^\circ$  ( $c = 1$ , MeOH). Source: WU CI MAO ZHU MU *Mitragyna inermis*. Ref: 2154.

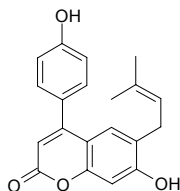
**11036 Inermiside II**

6-Deoxy-β-D-glucopyranosyl-pyrocincholate  $C_{35}H_{56}O_7$  (588.83). Needles (MeOH), mp 211~213°C,  $[\alpha]_D^{25} = -0.125^\circ$  ( $c = 0.001$ , MeOH). Source: WU CI MAO ZHU MU *Mitragyna inermis*. Ref: 2154.

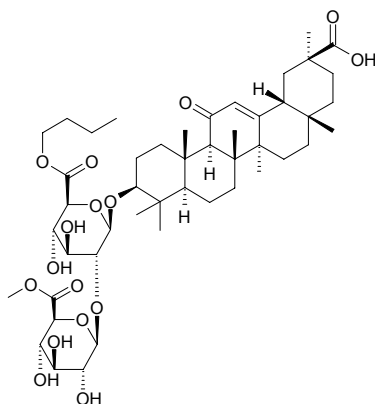


**11037 Inflatocoumarin A**

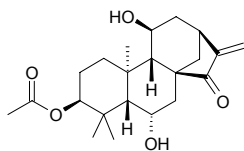
4-(4'-Hydroxy-phenyl)-6-prenyl-7-hydroxy-coumarin [158446-33-4]  
 $C_{20}H_{18}O_4$  (322.36). Colorless acicular crystals, mp 232~233°C. Source:  
 ZHANG GUO GAN CAO *Glycyrrhiza inflata*. Ref: 302.

**11038 Inflasaponin I**

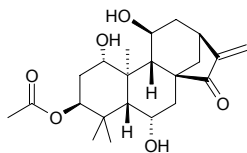
Glycyrrhetic acid-3-O- $\beta$ -D-6"-n-methyl-glucuronopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-6'-  
 n-butyl-glucuronopyranoside  $C_{47}H_{72}O_{16}$  (893.09). Colorless amorphous  
 powder, mp 256~258°C. Source: ZHANG GUO GAN CAO *Glycyrrhiza*  
*inflata*. Ref: 301.

**11039 Inflexanin A**

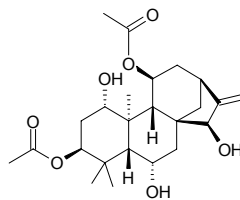
$C_{22}H_{32}O_5$  (376.50). Amorphous powder,  $[\alpha]_D^{22} = -108.3^\circ$  ( $c = 0.12$ , MeOH).  
Source: NEI ZHE XIANG CHA CAI *Isodon inflexa* [Syn. *Rabdosia inflexa*].  
Ref: 4067.

**11040 Inflexanin B**

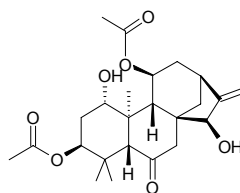
$C_{22}H_{32}O_6$  (392.50). Amorphous powder,  $[\alpha]_D^{26} = -46.2^\circ$  ( $c = 1.04$ , MeOH).  
Source: NEI ZHE XIANG CHA CAI *Isodon inflexa* [Syn. *Rabdosia inflexa*].  
Ref: 4067.

**11041 Inflexarabdonin A**

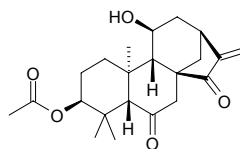
$C_{24}H_{36}O_7$  (436.55). mp 118~120°C,  $[\alpha]_D^{27.5} = -5.5^\circ$  ( $c = 1.95$ , MeOH). Source:  
 NEI ZHE XIANG CHA CAI *Isodon inflexa* [Syn. *Rabdosia inflexa*]. Ref: 4067.

**11042 Inflexarabdonin B**

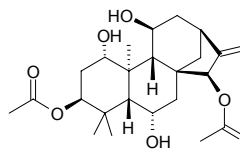
$C_{24}H_{36}O_7$  (434.53). Amorphous powder,  $[\alpha]_D^{24} = -16.9^\circ$  ( $c = 0.83$ , MeOH).  
Source: NEI ZHE XIANG CHA CAI *Isodon inflexa* [Syn. *Rabdosia inflexa*].  
Ref: 4067.

**11043 Inflexarabdonin C**

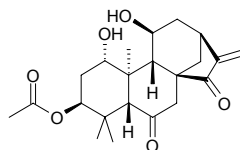
$C_{22}H_{30}O_5$  (374.48). mp 179~181°C,  $[\alpha]_D^{24} = -55.2^\circ$  ( $c = 0.87$ , MeOH). Source:  
 NEI ZHE XIANG CHA CAI *Isodon inflexa* [Syn. *Rabdosia inflexa*]. Ref: 4067.

**11044 Inflexarabdonin D**

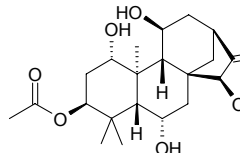
$C_{24}H_{36}O_7$  (436.55). mp 210~212°C,  $[\alpha]_D^{24} = -17.1^\circ$  ( $c = 0.82$ , MeOH). Source:  
 NEI ZHE XIANG CHA CAI *Isodon inflexa* [Syn. *Rabdosia inflexa*]. Ref: 4067.

**11045 Inflexarabdonin E**

$C_{22}H_{30}O_6$  (390.48). mp 234~237°C,  $[\alpha]_D^{25.5} = -42.8^\circ$  ( $c = 0.80$ , MeOH).  
Source: NEI ZHE XIANG CHA CAI *Isodon inflexa* [Syn. *Rabdosia inflexa*].  
Ref: 4067.

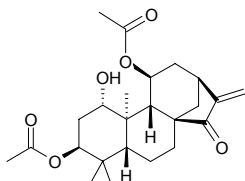
**11046 Inflexarabdonin F**

$C_{22}H_{34}O_6$  (394.51). mp 263~266°C,  $[\alpha]_D^{27} = +13.4^\circ$  ( $c = 1.10$ , MeOH). Source:  
 NEI ZHE XIANG CHA CAI *Isodon inflexa* [Syn. *Rabdosia inflexa*]. Ref: 4067.

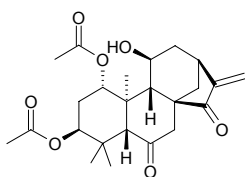


**11047 Inflexarabdonin G**

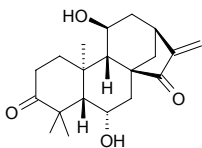
$C_{24}H_{34}O_6$  (418.53). Amorphous powder,  $[\alpha]_D^{25.5} = -54.9^\circ$  ( $c = 0.97$ , MeOH).  
**Source:** NEI ZHE XIANG CHA CAI *Isodon inflexa* [Syn. *Rabdosia inflexa*].  
**Ref:** 4067.

**11048 Inflexarabdonin B**

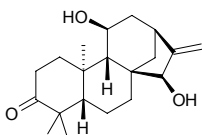
$C_{24}H_{32}O_7$  (432.52). mp 125~128°C,  $[\alpha]_D^{24} = -64.2^\circ$  ( $c = 0.30$ , MeOH). **Source:**  
 NEI ZHE XIANG CHA CAI *Isodon inflexa* [Syn. *Rabdosia inflexa*]. **Ref:** 4067.

**11049 Inflexarabdonin I**

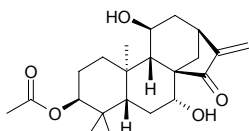
$C_{20}H_{28}O_4$  (332.44). mp 232~234°C,  $[\alpha]_D^{23.5} = -106.4^\circ$  ( $c = 0.87$ , MeOH).  
**Source:** NEI ZHE XIANG CHA CAI *Isodon inflexa* [Syn. *Rabdosia inflexa*].  
**Ref:** 4067.

**11050 Inflexarabdonin J**

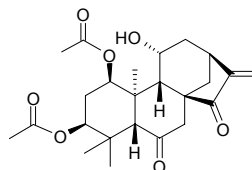
$C_{20}H_{30}O_3$  (318.46). Amorphous powder,  $[\alpha]_D^{27} = -63.4^\circ$  ( $c = 0.56$ , MeOH).  
**Source:** NEI ZHE XIANG CHA CAI *Isodon inflexa* [Syn. *Rabdosia inflexa*].  
**Ref:** 4067.

**11051 Inflexarabdonin K**

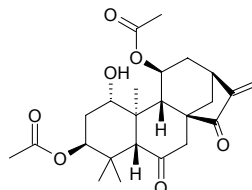
$C_{22}H_{32}O_5$  (376.50). mp 208~210°C,  $[\alpha]_D^{26} = -73.7^\circ$  ( $c = 0.57$ , MeOH). **Source:**  
 NEI ZHE XIANG CHA CAI *Isodon inflexa* [Syn. *Rabdosia inflexa*]. **Ref:** 4067.

**11052 Inflexin**

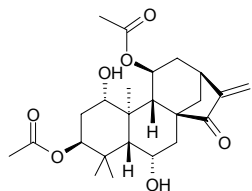
[39388-66-4]  $C_{24}H_{32}O_7$  (432.52). Crystals, mp 203~205°C,  $[\alpha]_D^{19} = -47^\circ$  ( $c = 1$ , EtOH). **Pharm:** Cytotoxic; insect antifeedant. **Source:** NEI ZHE XIANG CHA CAI *Isodon inflexa* [Syn. *Rabdosia inflexa*]. **Ref:** 658, 1521.

**11053 Inflexin II**

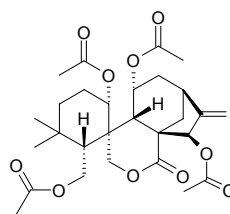
$C_{24}H_{32}O_7$  (432.52). mp 202~204°C,  $[\alpha]_D^{29} = -57.1^\circ$  ( $c = 1.0$ , MeOH). **Source:**  
 LONG SHENG XIANG CHA CAI *Isodon lungshengensis*, NEI ZHE XIANG CHA CAI *Isodon inflexa* [Syn. *Rabdosia inflexa*]. **Ref:** 690, 4067.

**11054 Inflexinol**

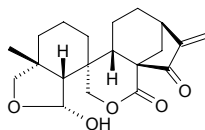
$C_{24}H_{34}O_7$  (434.53). mp 202~204°C,  $[\alpha]_D^{29} = -57.1^\circ$  ( $c = 1.0$ , MeOH). **Source:**  
 NEI ZHE XIANG CHA CAI *Isodon inflexa* [Syn. *Rabdosia inflexa*]. **Ref:** 4067.

**11055 Inflexusin**

$C_{28}H_{38}O_{10}$  (534.61). mp 217~219°C,  $[\alpha]_D^{25} = -100^\circ$  ( $c = 0.08$ , MeOH). **Source:** LU SHAN XIANG CHA CAI *Isodon rubescens* var. *lushanensis* (leaf), NEI ZHE XIANG CHA CAI *Isodon inflexa* [Syn. *Rabdosia inflexa*]. **Ref:** 4067, 4353.

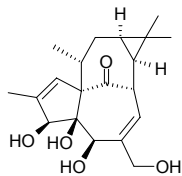
**11056 Inflexusin B**

Macrocalyxofornin C [182266-57-5]  $C_{20}H_{26}O_5$  (346.43). Colorless rhomboid crystals (acetone), mp 221~223°C,  $[\alpha]_D^{18} = -187.6^\circ$  ( $c = 0.5$ , MeOH); mp 220~222°C,  $[\alpha]_D^6 = -186.7^\circ$  ( $c = 0.5$ , MeOH). **Pharm:** Cytotoxic (EAC, *in vitro*); antibacterial (*Staphylococcus aureus*, *Bacillus subtilis*); antifungal (*Candida albicans*). **Source:** DA E BIAN XING XIANG CHA CAI *Isodon macrocalyx*, NEI ZHE XIANG CHA CAI *Isodon inflexa* [Syn. *Rabdosia inflexa*]. **Ref:** 491, 4067.

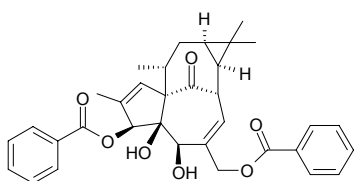


**11057 Ingenol**

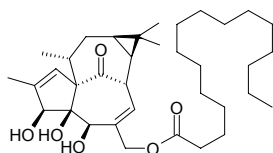
[30220-46-3] C<sub>20</sub>H<sub>28</sub>O<sub>5</sub> (348.44). Source: JI CHANG LANG DU *Euphorbia esula*. Ref: 658.

**11058 Ingenol-3,20-dibenzoate**

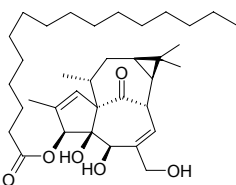
C<sub>34</sub>H<sub>36</sub>O<sub>7</sub> (556.66). [ $\alpha$ ]<sub>D</sub><sup>28</sup> = +268° (*c* = 0.0026, ethanol). Pharm: Antineoplastic (mus P<sub>388</sub>, 130–360 μg/kg). Source: JI CHANG LANG DU *Euphorbia esula*. Ref: 661.

**11059 Ingenol-20-hexadecanoate**

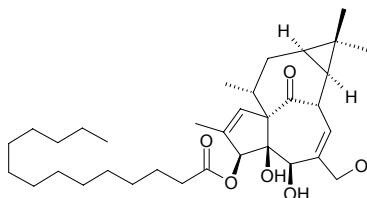
C<sub>36</sub>H<sub>58</sub>O<sub>6</sub> (586.86). Source: QIAN JIN ZI *Euphorbia lathyris*. Ref: 660.

**11060 Ingenol-3-hexadecanoate**

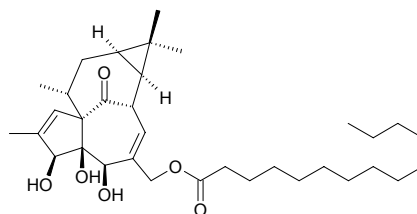
C<sub>36</sub>H<sub>58</sub>O<sub>6</sub> (586.86). Source: QIAN JIN ZI *Euphorbia lathyris*. Ref: 660.

**11061 Ingenol-3-myristinate**

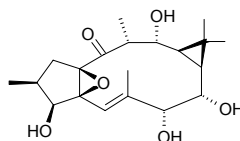
C<sub>34</sub>H<sub>54</sub>O<sub>6</sub> (558.81). Yellowish colloid, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +22° (*c* = 0.2, MeOH). Source: DA GUO DA JI *Euphorbia wallichii* (root). Ref: 4811.

**11062 Ingenol-20-myristinate**

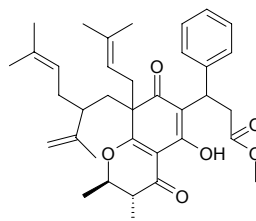
C<sub>34</sub>H<sub>54</sub>O<sub>6</sub> (558.81). Yellowish colloid, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -14° (*c* = 0.1, MeOH). Source: DA GUO DA JI *Euphorbia wallichii* (root). Ref: 4811.

**11063 Ingol**

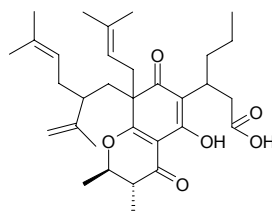
C<sub>20</sub>H<sub>30</sub>O<sub>6</sub> (366.46). Source: JU DA JI *Euphorbia ingens*, *Euphorbia kamerunica* Ref: 1521.

**11064 Inocalophyllin A methyl ester**

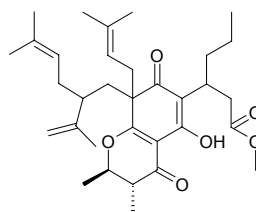
C<sub>36</sub>H<sub>46</sub>O<sub>6</sub> (574.76). Amorphous solid, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -122° (*c* = 0.05, CH<sub>2</sub>Cl<sub>2</sub>). Source: HAI TANG GUO *Calophyllum inophyllum*. Ref: 4354.

**11065 Inocalophyllin B**

C<sub>32</sub>H<sub>46</sub>O<sub>6</sub> (526.72). Amorphous solid, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -95° (*c* = 0.05, CH<sub>2</sub>Cl<sub>2</sub>). Source: HAI TANG GUO *Calophyllum inophyllum*. Ref: 4354.

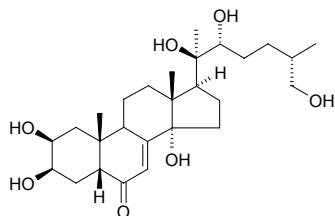
**11066 Inocalophyllin B methyl ester**

C<sub>33</sub>H<sub>48</sub>O<sub>6</sub> (540.75). Amorphous solid, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -138° (*c* = 0.05, CH<sub>2</sub>Cl<sub>2</sub>). Source: HAI TANG GUO *Calophyllum inophyllum*. Ref: 4354.

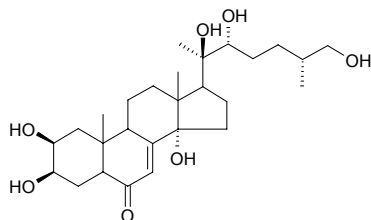


**11067 Inokosterone**

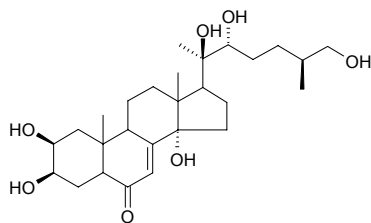
[15130-85-5]  $C_{27}H_{44}O_7$  (480.65). Crystals (MeOH–EtOAc), mp 255°C (dec). **Pharm:** Hypoglycemic (rat, hyperglycemia due to glucagon, 0.1–10mg/kg iv or 1–100mg/kg orl); insect ecdysone (molting hormone); low toxin. **Source:** NIU XI *Achyranthes bidentata*, RI BEN NIU XI *Achyranthes fauriei* (the compound was isolated from the plant by Tsunematsu Takemoto et al. in 1967)<sup>[5505]</sup>, SANG YE *Morus alba*, DONG FANG GOU JI *Woodwardia orientalis*. **Ref:** 2, 658, 5501, 5505.

**11068 (25R)-Inokosterone**

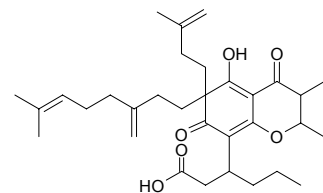
$C_{27}H_{44}O_7$  (480.65). White needles, mp 242–244°C,  $[\alpha]_D^{20} = +78.3^\circ$  ( $c = 0.007$ , MeOH). **Source:** NIU XI *Achyranthes bidentata*. **Ref:** 4854.

**11069 (25S)-Inokosterone**

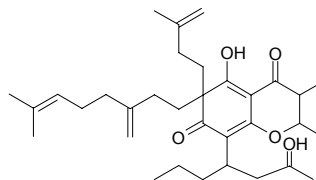
$C_{27}H_{44}O_7$  (480.65). White needles, mp 242–244°C,  $[\alpha]_D^{20} = +90.0^\circ$  ( $c = 0.006$ , MeOH). **Source:** NIU XI *Achyranthes bidentata*. **Ref:** 4854.

**11070 Inophylloic acid**

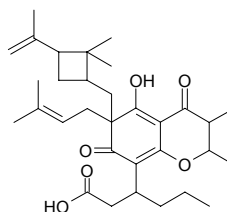
$C_{32}H_{46}O_6$  (526.72). **Source:** HAI TANG GUO *Calophyllum inophyllum*. **Ref:** 1521.

**11071 Inophylloic acid**

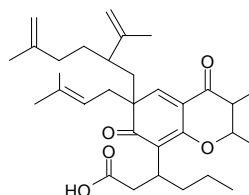
$C_{34}H_{50}O_4$  (522.78). **Pharm:** Cytotoxic (KB,  $IC_{50} = 9.7\mu\text{g/mL}$ ); antibacterial (*Staphylococcus aureus*, 20 $\mu\text{g/disk}$ , DIZ = 9.0mm; *Escherichia coli*, 20 $\mu\text{g/disk}$ , inactive; *Vibrio anguillarum*, 20 $\mu\text{g/disk}$ , inactive); antifungal inactive (*Candida tropicalis*, 20 $\mu\text{g/disk}$ ). **Source:** HAI TANG GUO *Calophyllum inophyllum* (root cortex and nut). **Ref:** 3866.

**11072 Inophylloic acid A<sub>1</sub>**

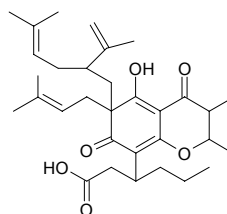
$C_{32}H_{46}O_6$  (526.72). **Source:** HAI TANG GUO *Calophyllum inophyllum*. **Ref:** 660.

**11073 Inophylloic acid A<sub>2</sub>**

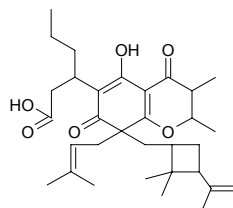
$C_{32}H_{46}O_5$  (510.72). **Source:** HAI TANG GUO *Calophyllum inophyllum*. **Ref:** 660.

**11074 Inophylloic acid A<sub>3</sub>**

$C_{32}H_{46}O_6$  (526.72). **Source:** HAI TANG GUO *Calophyllum inophyllum*. **Ref:** 660.

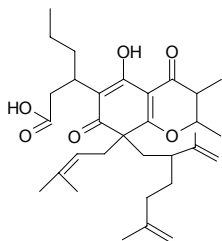
**11075 Inophylloic acid B<sub>1</sub>**

$C_{32}H_{46}O_6$  (526.72). **Source:** HAI TANG GUO *Calophyllum inophyllum*. **Ref:** 660.

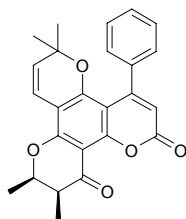


**11076 Inophylloic acid B<sub>2</sub>**

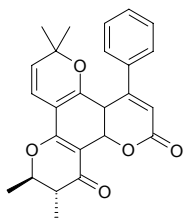
C<sub>32</sub>H<sub>46</sub>O<sub>6</sub> (526.72). Source: HAI TANG GUO *Calophyllum inophyllum*.  
Ref: 660.

**11077 Inophyllolide**

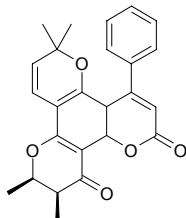
C<sub>25</sub>H<sub>22</sub>O<sub>5</sub> (402.45). mp (±) 186~188°C, (+)10, 11-*trans*-: crystals (benzene-hexane or ethyl acetate), mp 188~191°C, [α]<sub>D</sub><sup>20</sup> = +13° (c = 1.1, chloroform); (+)10, 11-*cis*: crystals (benzene-hexane), mp 149~151°C, [α]<sub>D</sub><sup>20</sup> = +70° (c = 1.2, chloroform). Pharm: Anticonvulsant; anti-inflammatory; fish toxin. Source: HAI TANG GUO *Calophyllum inophyllum*. Ref: 661.

**11078 Inophyllum C**

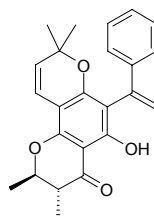
C<sub>25</sub>H<sub>24</sub>O<sub>5</sub> (404.47). Pharm: Antibacterial (*Staphylococcus aureus*, 20μg/disk, DIZ = 10.0mm; *Escherichia coli*, 20μg/disk, inactive; *Vibrio anguillarum*, 20μg/disk, inactive); antifungal inactive (*Candida tropicalis*, 20μg/disk). Source: HAI TANG GUO *Calophyllum inophyllum* (root cortex and nut). Ref: 3866.

**11079 Inophyllum E**

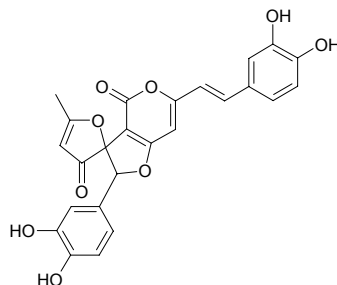
C<sub>25</sub>H<sub>24</sub>O<sub>5</sub> (404.47). Pharm: Cytotoxic inactive (KB, IC<sub>50</sub> = 36.1μg/mL); antibacterial (*Staphylococcus aureus*, 20μg/disk, DIZ = 13.0mm; *Escherichia coli*, 20μg/disk, inactive; *Vibrio anguillarum*, 20μg/disk, inactive); antifungal inactive (*Candida tropicalis*, 20μg/disk). Source: HAI TANG GUO *Calophyllum inophyllum* (root cortex and nut). Ref: 3866.

**11080 Inophynone**

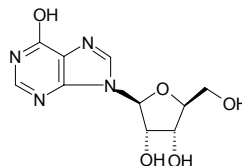
C<sub>24</sub>H<sub>24</sub>O<sub>4</sub> (376.46). Fine crystals, mp 115°C. Source: HAI TANG GUO *Calophyllum inophyllum*. Ref: 1878.

**11081 Inoscavin A**

C<sub>25</sub>H<sub>18</sub>O<sub>9</sub> (462.42). Pharm: Cytotoxic (*in vitro*, A549, IC<sub>50</sub> > 0.108μmol/L; BGC823, IC<sub>50</sub> > 0.108μmol/L; MCF7, IC<sub>50</sub> > 0.108μmol/L; Bel7402, IC<sub>50</sub> = 0.088μmol/L; Ketr3, IC<sub>50</sub> > 0.108μmol/L; HCT8, IC<sub>50</sub> > 0.108μmol/L; control Topotecan, A549, IC<sub>50</sub> = 0.0032μmol/L; BGC823, IC<sub>50</sub> = 0.0043μmol/L; MCF7, IC<sub>50</sub> = 0.0018μmol/L; Bel7402, IC<sub>50</sub> = 0.0012μmol/L; Ketr3, IC<sub>50</sub> = 0.0049μmol/L; HCT8, IC<sub>50</sub> = 0.0015μmol/L). Source: SANG HUANG *Phellinus igniarius* (sporocarp: yield = 0.0017%dw). Ref: 4747.

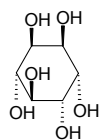
**11082 Inosine**

Aminosin; Inosine; Ribonosine [58-63-9] C<sub>10</sub>H<sub>12</sub>N<sub>4</sub>O<sub>5</sub> (268.23). mp 215°C<sup>[6]</sup>, [α]<sub>D</sub><sup>18</sup> = -49.2° (c = 0.9, H<sub>2</sub>O)<sup>[5507]</sup>. Pharm: Normal component in human body (participator of metabolism of nucleic acid, energy metabolism and protein synthesis)<sup>[5507]</sup>. Source: DONG CHONG XIA CAO *Cordyceps sinensis* (dried fungal stroma growing on larva of a caterpillar: content = 0.067%)<sup>[5512]</sup>, GOU QI YE *Lycium chinense*<sup>[6]</sup>, REN GONG YONG CHONG CAO *Cordyceps militaris* cv. (sclerotium and stroma: content = 0.010%)<sup>[5512]</sup>, TIAN CAI *Beta vulgaris*<sup>[5507]</sup>. Ref: 6, 5507, 5512.

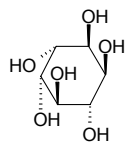


**11083 Inositol**

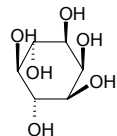
*Chiro*-Inositol C<sub>6</sub>H<sub>12</sub>O<sub>6</sub> (180.16). mp 247°C. **Pharm:** Growth factor for animals and microorganisms; antihypercholesterolemic, used in treatment of arteriosclerosis and hyperlipidemia; promotes lipometabolism (treatment of hepatic adipose infiltration). **Source:** AI YE *Artemisia argyi*, BAI JIANG *Patrinia villosa*, BEI MEI E ZHANG QIU *Liriodendron tulipifera*, CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochera rosea*], CHANG CHUN TENG *Hedera nepalensis* var. *sinensis*, DI JIN CAO *Euphorbia humifusa*, FENG RU *Apis cerana*, FENG XIANG JI SHENG *Viscum articulatum*, JIN YIN HUA *Lonicera japonica*, MU TONG *Akebia quinata*, NIU RU *Bos taurus domesticus*; *Bubalus bubalis*, NIU SHE TOU *Sonchus arvensis*, SHAN FAN GEN *Symplocos caudata*, WU TOU *Aconitum carmichaeli*, YANG YI *Capra hircus*; *Ovis aries*, YU BAI FU *Typhonium giganteum*, YU MI XU *Zea mays*. **Ref:** 2, 6, 658, 660, 2535.

**11084 Inositol b**

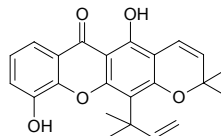
C<sub>6</sub>H<sub>12</sub>O<sub>6</sub> (180.16). mp 238°C. **Source:** AI YE *Artemisia argyi*, WU TOU *Aconitum carmichaeli*, CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochera rosea*], CHANG CHUN TENG *Hedera nepalensis* var. *sinensis*, DI JIN CAO *Euphorbia humifusa*, FENG RU *Apis cerana*, FENG XIANG JI SHENG *Viscum articulatum*, JIN YIN HUA *Lonicera japonica*, NIU RU *Bos taurus domesticus*; *Bubalus bubalis*, NIU SHE TOU *Sonchus arvensis*, YANG YI *Capra hircus*; *Ovis aries*, YU BAI FU *Typhonium giganteum*, YU MI XU *Zea mays*. **Ref:** 2, 6, 660.

**11085 Inositol c**

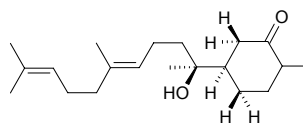
Myoinositol [87-89-8] C<sub>6</sub>H<sub>12</sub>O<sub>6</sub> (180.16). mp 218–219°C. **Source:** AI YE *Artemisia argyi*, CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochera rosea*], CHANG CHUN TENG *Hedera nepalensis* var. *sinensis*, DI JIN Heteropogon contortus, DI JIN CAO *Euphorbia humifusa*, FENG RU *Apis cerana*, FENG XIANG JI SHENG *Viscum articulatum*, JIN YIN HUA *Lonicera japonica*, LI MU *Lyonia ovalifolia*, MAO XU CAO *Clerodendranthus spicatus*, NAN ZHU ZI *Vaccinium bracteatum*, NIU RU *Bos taurus domesticus*; *Bubalus bubalis*, NIU SHE TOU *Sonchus arvensis*, SANG YE *Morus alba*, WU TOU *Aconitum carmichaeli*, YANG MEI *Myrica rubra*, YANG YI *Capra hircus*; *Ovis aries*, YING SU KE *Papaver somniferum*, YU BAI FU *Typhonium giganteum*, YU MI XU *Zea mays*, occurs in many plants. **Ref:** 2, 6, 660.

**11086 Inoxanthone**

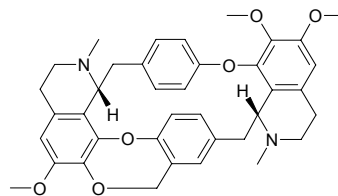
Blancoxanthone C<sub>23</sub>H<sub>22</sub>O<sub>5</sub> (378.43). Yellow needles (cyclohexane–EtOAc), mp 217°C; yellowish powder. **Pharm:** Antibacterial inactive (*Staphylococcus aureus*, 20µg/disk; *Escherichia coli*, 20µg/disk; *Vibrio anguillarum*, 20µg/disk)<sup>[3866]</sup>; antifungal inactive (*Candida tropicalis*, 20µg/disk)<sup>[3866]</sup>; Antivirus (hmn coronavirus strain 229E (HCoV-229E), 3µg/mL)<sup>[4441]</sup>. **Source:** HAI TANG GUO *Calophyllum inophyllum* (root cortex and nut), *Calophyllum blancoi* (root). **Ref:** 3866, 4441.

**11087 Insecticidea diterpene**

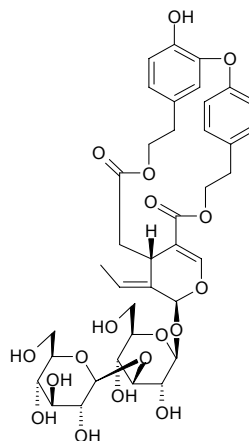
C<sub>20</sub>H<sub>34</sub>O<sub>2</sub> (306.49). **Source:** XIAN YE BA DOU *Croton linearis*. **Ref:** 4552.

**11088 Insularine**

[549-07-5] C<sub>38</sub>H<sub>40</sub>N<sub>2</sub>O<sub>6</sub> (620.75). mp 160°C. **Source:** QIAN JIN TENG *Stephania japonica*. **Ref:** 6.

**11089 Insularoside-3'-O-β-D-glucoside**

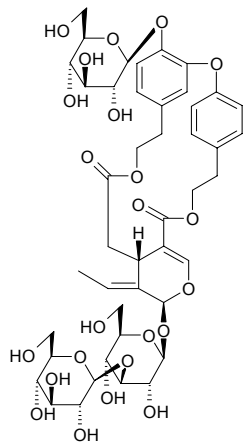
Insularoside-3'-O-β-D-glucoside C<sub>38</sub>H<sub>46</sub>O<sub>18</sub> (790.78). Amorphous powder (CH<sub>3</sub>OH). **Source:** KU LI MU YE *Fraxinus insularis*. **Ref:** 804.



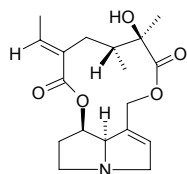


**11090 Insularoside-6'''-O-β-glucosi-(3'→1)-β-D-glucoside**

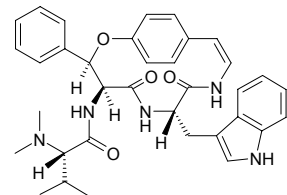
C<sub>44</sub>H<sub>56</sub>O<sub>23</sub> (952.92). Amorphous powder (CH<sub>3</sub>OH). Source: KU LI MU YE *Fraxinus insularis*. Ref: 804.

**11091 Integerrimine**

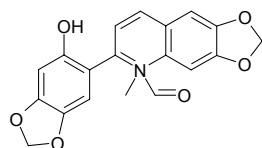
Squalidine [480-79-5] C<sub>18</sub>H<sub>25</sub>NO<sub>5</sub> (335.40). mp 168~170°C, 172.5°C. Pharm: Antineoplastic (transplant tumor of 6 animals); antihypertensive (dog, iv, 1~3mg/kg, anesthetic cat); antispasmodic (caused by histamine, acetylcholine and BaCl<sub>2</sub>); hepatotoxic; inhibits intestinal movement (rbt, *in vitro*); muscle relaxant; mutagen (drosophila experiments); promotes uterine contraction (gpg); LD<sub>50</sub> (mus, iv) = 75mg/kg. Source: BA XI QIAN LI GUANG *Senecio brasiliensis*, DUAN HUA ZHU SHI DOU *Crotalaria breviflora*, GUANG YE ZHU SHI DOU *Crotalaria incana*, MI SAN QIAN LI GUANG *Senecio faberi* (whole herb: mean content = 10.2%)<sup>[5508]</sup>, NIU JIN QIAN LI GUANG *Senecio squalidus*, QUAN YUAN QIAN LI GUANG *Senecio integerrimus*, YA KE BEI QIAN LI GUANG *Senecio alpinus*. Ref: 4, 658, 5508.

**11092 Integerrine**

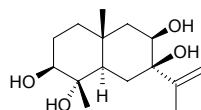
[18397-13-2] C<sub>35</sub>H<sub>39</sub>N<sub>5</sub>O<sub>4</sub> (593.73). Needles (CHCl<sub>3</sub>-petroleum ether), mp 258°C. Pharm: Antibacterial (gram-positive bacteria and lower fungi). Source: QUAN YUAN YE MEI ZHOU CHA *Ceanothus integerrimus*. Ref: 658.

**11093 Integriamide**

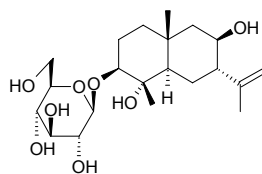
C<sub>19</sub>H<sub>15</sub>NO<sub>6</sub> (353.33). Source: RU DI JIN NIU *Zanthoxylum nitidum*. Ref: 660.

**11094 Integrifonol A**

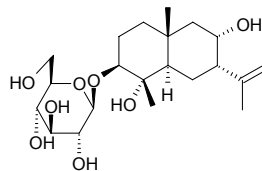
C<sub>15</sub>H<sub>26</sub>O<sub>4</sub> (270.37). Powder, [α]<sub>D</sub><sup>19</sup> = +43.0° (c = 0.5, MeOH). Source: QUAN YUAN YE TE SA JU *Tessaria integrifolia* (aerial parts). Ref: 3924.

**11095 Integrifoside A**

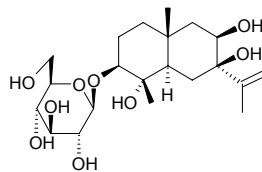
C<sub>21</sub>H<sub>36</sub>O<sub>8</sub> (416.52). Powder, [α]<sub>D</sub><sup>19</sup> = -12.7° (c = 5.9, MeOH). Pharm: Antiallergic (hyaluronidase inhibitor (activated hyaluronidase by compound 48/80 (Kakegawa et al., 1985), 0.2mmol/L, InRt = 3%, control DSCG). Source: QUAN YUAN YE TE SA JU *Tessaria integrifolia* (aerial parts). Ref: 3924.

**11096 Integrifoside B**

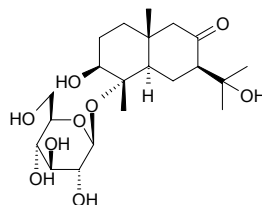
C<sub>21</sub>H<sub>36</sub>O<sub>8</sub> (416.52). Powder, [α]<sub>D</sub><sup>19</sup> = -16.0° (c = 1.9, MeOH). Source: QUAN YUAN YE TE SA JU *Tessaria integrifolia* (aerial parts). Ref: 3924.

**11097 Integrifoside C**

C<sub>21</sub>H<sub>36</sub>O<sub>9</sub> (432.52). Powder, [α]<sub>D</sub><sup>19</sup> = 0° (c = 1.0, MeOH). Source: QUAN YUAN YE TE SA JU *Tessaria integrifolia* (aerial parts). Ref: 3924.

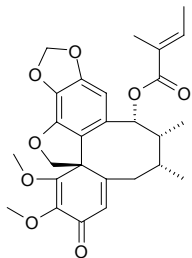
**11098 Integrifoside D**

C<sub>21</sub>H<sub>36</sub>O<sub>9</sub> (432.52). Powder, [α]<sub>D</sub><sup>19</sup> = +39.4° (c = 0.8, MeOH). Source: QUAN YUAN YE TE SA JU *Tessaria integrifolia* (aerial parts). Ref: 3924.

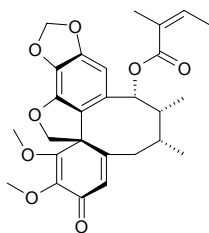


**11099 Interiorin A**

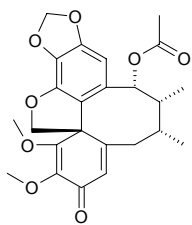
$C_{27}H_{30}O_8$  (482.54). Source: NEI NAN WU WEI ZI *Kadsura interior*. Ref: 2436.

**11100 Interiorin B**

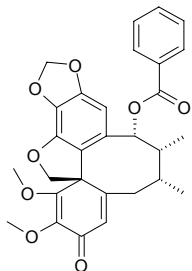
[133442-66-7]  $C_{27}H_{30}O_8$  (482.54). Pharm: Antineoplastic (screened as potential antitumor promoters, EBV-EA induced by TPA, mol ratio/TPA = 1000, relative percentage of EBV-EA =  $(13.5 \pm 0.6)\%$  (positive control value 32pmol, 20ng TPA = 100%), viability of Raji cells = 60%)<sup>[4644]</sup>. Source: NEI NAN WU WEI ZI *Kadsura interior* (stem: yield = 0.0155%dw). Ref: 2436, 4644.

**11101 Interiorin C**

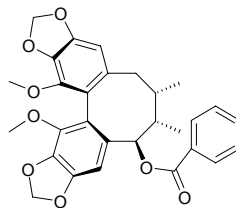
[133360-39-1]  $C_{24}H_{26}O_8$  (442.47). Source: NEI NAN WU WEI ZI *Kadsura interior*. Ref: 2436.

**11102 Interiorin D**

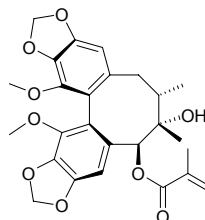
[133360-40-4]  $C_{29}H_{28}O_8$  (504.54). Source: NEI NAN WU WEI ZI *Kadsura interior*. Ref: 2436.

**11103 Interiotherin A**

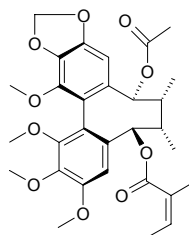
[181701-06-4]  $C_{29}H_{28}O_8$  (504.54). Pharm: Antineoplastic (screened as potential antitumor promoters, EBV-EA induced by TPA, mol ratio/TPA = 1000, relative percentage of EBV-EA =  $(18.3 \pm 1.0)\%$  (positive control value 32pmol, 20ng TPA = 100%), viability of Raji cells = 60%)<sup>[4644]</sup>. Source: NEI NAN WU WEI ZI *Kadsura interior* (stem), NEI NAN WU WEI ZI *Kadsura interior*. Ref: 2436, 4644.

**11104 Interiotherin B**

[181701-07-5]  $C_{27}H_{30}O_9$  (498.53). Pharm: Antineoplastic (screened as potential antitumor promoters, EBV-EA induced by TPA, mol ratio/TPA = 1000, relative percentage of EBV-EA =  $(11.6 \pm 0.4)\%$  (positive control value 32pmol, 20ng TPA = 100%), viability of Raji cells = 60%)<sup>[4644]</sup>. Source: NEI NAN WU WEI ZI *Kadsura interior* (stem), NEI NAN WU WEI ZI *Kadsura interior*. Ref: 2436, 4644.

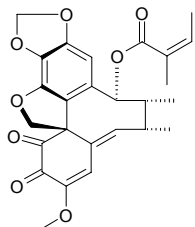
**11105 Interiotherin C**

$C_{30}H_{36}O_{10}$  (556.62). Colorless needles (MeOH), mp 179~181°C,  $[\alpha]_D = +127.66^\circ$  ( $c = 1.175$ ,  $CHCl_3$ ). Pharm: Antineoplastic (screened as potential antitumor promoters, EBV-EA induced by TPA, mol ratio/TPA = 1000, relative percentage of EBV-EA =  $(16.0 \pm 0.6)\%$  (positive control value 32pmol, 20ng TPA = 100%), viability of Raji cells = 60%). Source: NEI NAN WU WEI ZI *Kadsura interior* (stem: yield = 0.0062%dw). Ref: 4644.

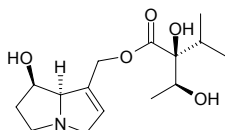


**11106 Interiotherin D**

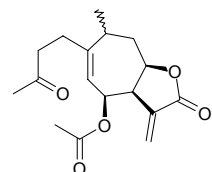
$C_{26}H_{26}O_8$  (466.49). Yellow prisms (MeOH), mp 148–151°C,  $[\alpha]_D^{20} = -271.19^\circ$  ( $c = 1.180$ ,  $CHCl_3$ ). **Pharm:** Antineoplastic (screened as potential antitumor promoters, EBV-EA induced by TPA, mol ratio/TPA = 1000, relative percentage of EBV-EA =  $(11.5 \pm 0.5)\%$  (positive control value 32pmol, 20ng TPA = 100%), viability of Raji cells = 60%). **Source:** NEI NAN WU WEI ZI *Kadsura interior* (stem: yield = 0.00083%dw). **Ref:** 4644.

**11107 Intermedine**

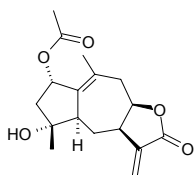
$C_{15}H_{25}NO_5$  (299.37). **Source:** ZI CAO *Lithospermum erythrorhizon*. **Ref:** 2193.

**11108 Inuchinenolide A**

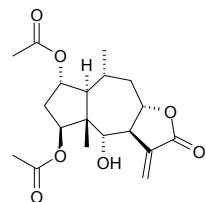
$C_{17}H_{22}O_5$  (306.36). **Source:** JIN FEI CAO *Inula japonica*. **Ref:** 660.

**11109 Inuchinenolide B**

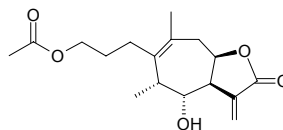
$C_{17}H_{22}O_5$  (306.36). **Source:** JIN FEI CAO *Inula japonica*. **Ref:** 660.

**11110 Inuchinenolide C**

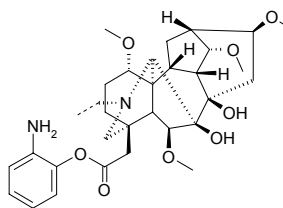
$C_{19}H_{26}O_7$  (366.41). **Source:** JIN FEI CAO *Inula japonica*. **Ref:** 660.

**11111 Inulicin**

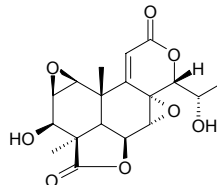
[33627-41-7]  $C_{17}H_{24}O_5$  (308.38). mp 125.5–126.5°C,  $[\alpha]_D = +90^\circ$ . **Pharm:** CNS stimulant; intestinal smooth muscle stimulant. **Source:** XUAN FU HUA *Inula britannica*, XIAN YE XUAN FU HUA *Inula linariaefolia*, JIN FEI CAO *Inula japonica*, ZHONG GUO XUAN FU HUA *Inula britannica* var. *chinensis*. **Ref:** 6, 658, 660, 1521.

**11112 Inuline**

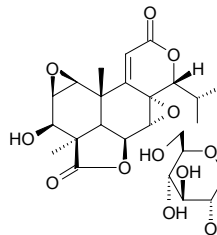
$C_{32}H_{46}N_2O_8$  (586.73). **Source:** GAN WAN WU TOU *Aconitum finetianum*. **Ref:** 660.

**11113 Inumakilactone A**

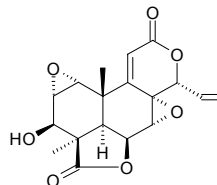
[19885-83-7]  $C_{18}H_{20}O_8$  (364.36). mp 251–253°C (dec),  $[\alpha]_D = 0^\circ$ . **Pharm:** Plant growth inhibitor. **Source:** LUO HAN SONG SHI *Podocarpus macrophyllus*. **Ref:** 6, 1521.

**11114 Inumakilactone A glucoside**

$C_{24}H_{30}O_{13}$  (526.50). **Pharm:** Plant growth inhibitor. **Source:** LUO HAN SONG SHI *Podocarpus macrophyllus*. **Ref:** 6, 658.

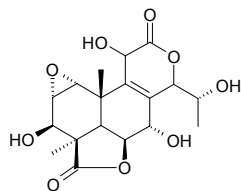
**11115 Inumakilactone B**

[31323-76-9]  $C_{18}H_{18}O_7$  (346.34). mp 295°C (dec). **Pharm:** Plant growth inhibitor. **Source:** LUO HAN SONG SHI *Podocarpus macrophyllus*. **Ref:** 6.

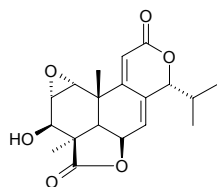


**11116 Inumakilactone C**

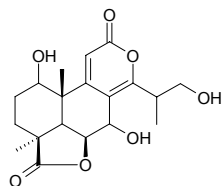
$C_{18}H_{22}O_9$  (382.37). mp 263~265°C (dec). Source: LUO HAN SONG SHI *Podocarpus macrophyllus*. Ref: 6.

**11117 Inumakilactone D**

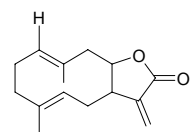
$C_{19}H_{22}O_6$  (346.38). Source: LUO HAN SONG SHI *Podocarpus macrophyllus*. Ref: 660.

**11118 Inumakilactone E**

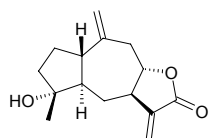
[37886-71-8]  $C_{19}H_{24}O_7$  (364.40). mp 220~225°C. Source: LUO HAN SONG SHI *Podocarpus macrophyllus*. Ref: 6, 660, 1521.

**11119 Inunolide**

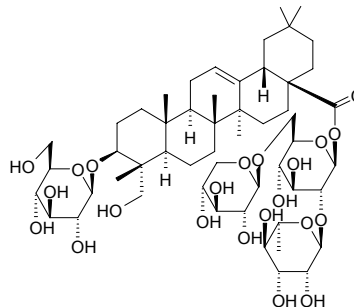
$C_{15}H_{20}O_2$  (232.31). Source: LUO HAN SONG SHI *Podocarpus macrophyllus*. Ref: 6.

**11120 Inuviscolide**

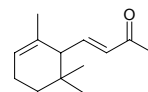
$C_{15}H_{20}O_3$  (248.32). Source: JIN FEI CAO *Inula japonica*. Ref: 1521, 5422.

**11121 Ioniceroside C**

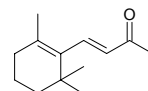
3-*O*- $\beta$ -*D*-Glucopyranosyl hederagenin 28-*O*- $\alpha$ -*L*-rhamnopyranosyl (1 $\rightarrow$ 2)-[ $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 6)]- $\beta$ -*D*-glucopyranosyl ester  $C_{53}H_{86}O_{22}$  (1075.26). Pharm: Anti-inflammatory (*in vivo*, mouse ear edema induced by croton oil, 100mg/kg, orl, InRt = 31%). Source: JIN YIN HUA *Lonicera japonica* (aerial parts). Ref: 4327.

**11122  $\alpha$ -Ionone**

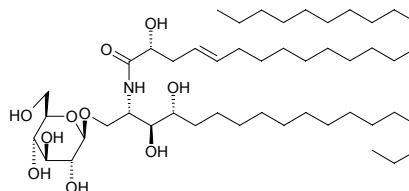
[24190-29-2]  $C_{13}H_{20}O$  (192.30). bp ( $\pm$ ) 146.5~147.5°C/28mmHg. Source: MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*]. Ref: 2.

**11123  $\beta$ -Ionone**

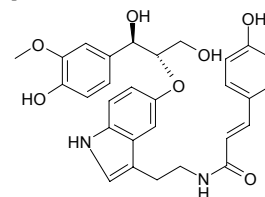
[14901-07-6]  $C_{13}H_{20}O$  (192.30). bp 150~151°C/24mmHg. Source: GOU QI ZI *Lycium chinense*, MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*], QUN DAI CAI *Undaria pinnatifida* (dried thallus: yield = 0.00012%)<sup>[4602]</sup>, XING REN *Prunus armeniaca*. Ref: 2, 660, 4602.

**11124 Iotrroidoside B**

$C_{48}H_{93}NO_{10}$  (844.28).  $[\alpha]_D^{28} = +12.0^\circ$  ( $c = 0.15$ , pyridine). Source: XIAO BANG XIYOU QIOU HAI MIAN *Istrochota baculifera*. Ref: 4391.

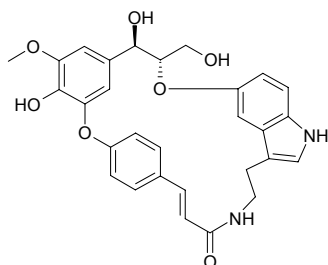
**11125 Ipobscurine B**

*N*-[2-[5-[2-[(4-Hydroxy-3-methoxyphenyl)-2-hydroxy-1-hydroxymethyl]ethoxy]indol-3-yl]ethyl]-4-hydroxycinnamoyl amide  $C_{29}H_{30}N_2O_7$  (518.57). Yellow solid,  $[\alpha]_D^{20} = -35^\circ$  ( $c = 0.28$ , MeOH). Source: XIAO XIN YE SHU *Ipomoea obscura*. Ref: 2039.

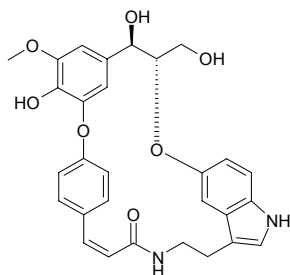


**11126 Ipobscurine C**

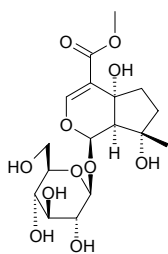
$C_{29}H_{28}N_2O_7$  (516.56). White crystals, mp 193–195°C,  $[\alpha]_D^{20} = -44^\circ$  ( $c = 0.16$ ,  $CHCl_3$ ). Source: XIAO XIN YE SHU *Ipomoea obscura*. Ref: 2039.

**11127 Ipobscurine D**

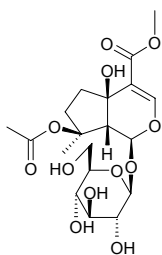
$C_{29}H_{28}N_2O_7$  (516.56). Yellow solid, mp 245–247°C. Source: XIAO XIN YE SHU *Ipomoea obscura*. Ref: 2039.

**11128 Ipolamiide**

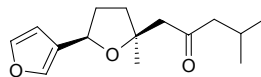
[27934-98-1]  $C_{17}H_{26}O_{11}$  (406.39). Crystals ( $Me_2CO$  aq.), mp 144–145°C,  $[\alpha]_D^{13} = -136^\circ$  ( $c = 0.5$ , dioxan). Source: LUO HAN SONG SHI *Podocarpus macrophyllus*, BAO GAI CAO *Lamium amplexicaule*, ZONG KUI CAO SU *Phlomis brunneogaleata*. Ref: 6, 1521, 5009.

**11129 Ipolamiidoside**

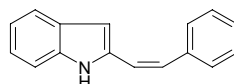
$C_{19}H_{28}O_{12}$  (448.23).  $[\alpha]_D^{28} = -70.6^\circ$  ( $c = 0.15$ , MeOH). Pharm: Antiviral (anti-HSV-1); cytotoxic inactive (vero cells); COX-2 inhibitor inactive. Source: HUA YE JIA DU JUAN *Barleria lupulina* (flower). Ref: 5456.

**11130 Ipomeamarone**

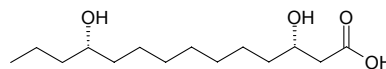
[494-23-5]  $C_{15}H_{22}O_3$  (250.34). Pharm: Antifungal; inhibits cytochrome b5 reductase (rat, *in vitro*, inhibits electron-transfer and oxidative phosphorylation); toxin. Source: GAN SHU *Ipomoea batatas* [Syn. *Convolvulus batatas*]. Ref: 658.

**11131 Ipolamine A**

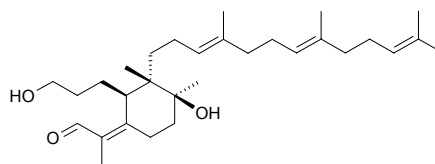
$C_{16}H_{13}N$  (219.29). White needles (cyclohexane–acetone), mp 110°C. Source: GAN SHU *Ipomoea batatas* [Syn. *Convolvulus batatas*] (root). Ref: 4852.

**11132 Ipurolic acid**

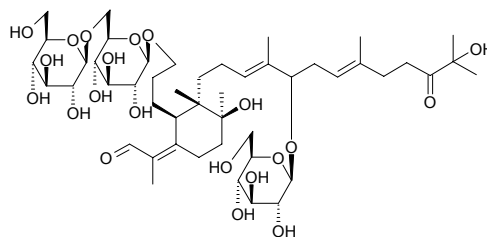
$C_{14}H_{28}O_4$  (260.38). Source: FEI E TENG *Porana racemosa*. Ref: 660.

**11133 Iridal**

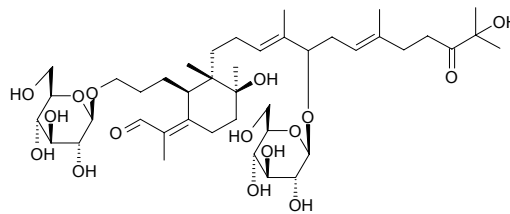
21-Desoxy-iridogermanal  $C_{30}H_{50}O_3$  (458.73). Glassy solid,  $[\alpha]_D^{20} = +34.4^\circ$  ( $c = 0.9$ ,  $CH_2Cl_2$ ). Pharm: Antimalarial (hmn malaria strain, *in vitro*  $IC_{50} = 1.8$ – $26.0$  mg/mL, *in vivo*  $ED_{50} = 85$  mg/(kg·d) ip; MIC > 50 μg/mL). Source: DE GUO YUAN WEI *Iris germanica*. Ref: 2033.

**11134 Iridalglycoside 5a**

22-Oxo-23-hydroxyiridal-3- $\beta$ -D-glucopyranosyl-(1→6)- $\beta$ -D-glucopyranoside]-16- $\beta$ -D-glucopyranoside  $C_{48}H_{80}O_{21}$  (993.16). Source: JIA YUAN WEI *Iris spuria*. Ref: 1951.

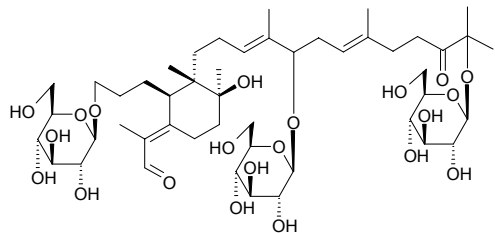
**11135 Iridalglycoside 5b**

22-Oxo-23-hydroxy-iridal-3,16-di- $\beta$ -D-glucopyranoside  $C_{42}H_{70}O_{16}$  (831.02). Source: JIA YUAN WEI *Iris spuria*. Ref: 1951.

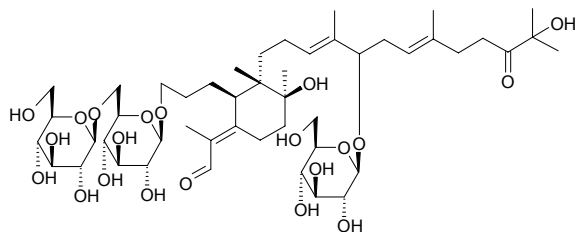


**11136 Iridalglycoside 6a**

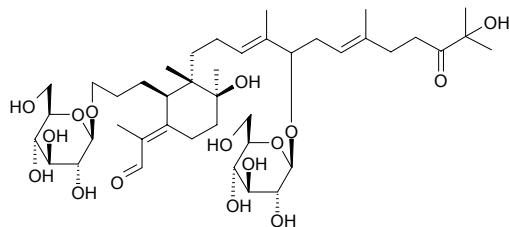
22-Oxo-isoiridal-3,16,23-tri- $\beta$ -D-glucopyranoside C<sub>48</sub>H<sub>80</sub>O<sub>21</sub> (993.16). Source: JIA YUAN WEI *Iris spuria*. Ref: 1951.

**11137 Iridalglycoside 6b**

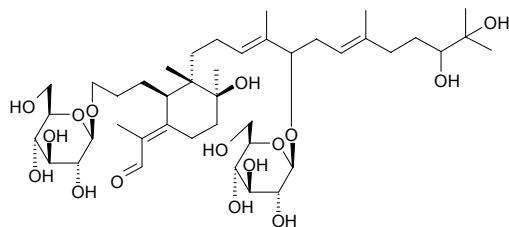
C<sub>48</sub>H<sub>80</sub>O<sub>21</sub> (993.16). Source: JIA YUAN WEI *Iris spuria*. Ref: 1951.

**11138 Iridalglycoside 6c**

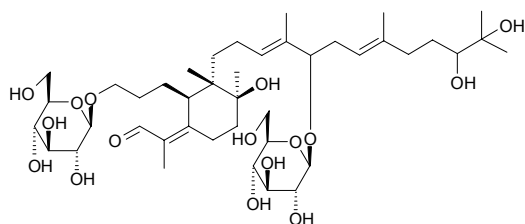
22-Oxo-23-hydroxy-isoiridal-3,16-di- $\beta$ -D-glucopyranoside C<sub>42</sub>H<sub>70</sub>O<sub>16</sub> (831.03). Source: JIA YUAN WEI *Iris spuria*. Ref: 1951.

**11139 Iridalglycoside 7**

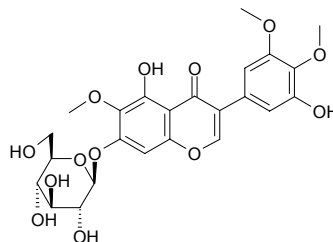
22,23-Dihydroxy-isoiridal-3,16-di- $\beta$ -D-glucopyranoside C<sub>42</sub>H<sub>72</sub>O<sub>16</sub> (833.03). Source: JIA YUAN WEI *Iris spuria*. Ref: 1951.

**11140 Iridalglycoside 8**

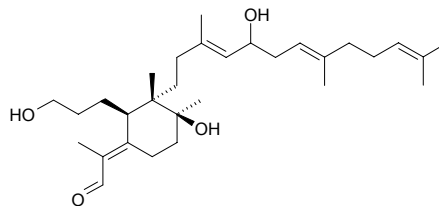
22,23-Dihydroxy-iridal-3,16-di- $\beta$ -D-glucopyranoside C<sub>42</sub>H<sub>72</sub>O<sub>16</sub> (833.03). Source: JIA YUAN WEI *Iris spuria*. Ref: 1951.

**11141 Iridin**

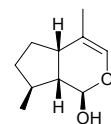
[491-74-7] C<sub>24</sub>H<sub>26</sub>O<sub>13</sub> (522.47). mp 208°C. Pharm: Diuretic (rbt, sc, 25mg/kg); improves osmosis of capillary blood vessels (inhibits adenosine diphosphate transfer to adenosine triphosphate); LD (rbt, sc) = 8~10g/kg. Source: A ER JI LI YA YUAN WEI *Iris unguicularis*, BAI HUA SHE GAN *Iris dichotoma*, CHANG BING YUAN BAI *Juniperus macropoda*, DE GUO YUAN WEI *Iris germanica* (rhizome), RI BEN YUAN WEI *Iris komonoensis*, SHE GAN *Belamcanda chinensis* (dried rhizome: content scope of 6 origins = 0.36%~1.31%, mean content = 0.83%<sup>[5508]</sup>), XI OU YUAN WEI *Iris florentina*, XI OU YUAN WEI *Iris florentina*. Ref: 6, 658, 4128, 4223, 5501, 5508.

**11142 Iridobelamal A**

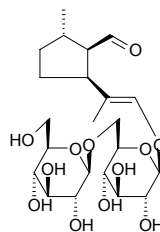
C<sub>30</sub>H<sub>50</sub>O<sub>4</sub> (474.73). Colorless viscous oil, [ $\alpha$ ]<sub>D</sub> = 51° (c = 0.08, EtOH). Source: SHE GAN *Belamcanda chinensis*. Ref: 767.

**11143 (+)-Iridodial**

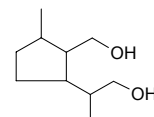
[550-45-8] C<sub>10</sub>H<sub>16</sub>O<sub>2</sub> (168.24). Pharm: Insect repellent. Source: *Myoporium* sp. Ref: 658.

**11144 Iridodial- $\beta$ -D-gentiobioside**

C<sub>22</sub>H<sub>36</sub>O<sub>12</sub> (492.53). Source: MU TIAN LIAO *Actinidia polygama*. Ref: 660.

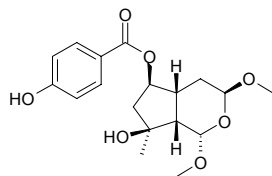
**11145 Iridodiol**

C<sub>10</sub>H<sub>20</sub>O<sub>2</sub> (172.27). Source: MU TIAN LIAO *Actinidia polygama*. Ref: 6.

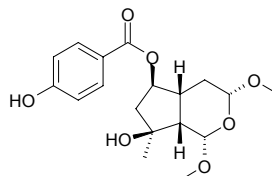


**11146 Iridoid CPB-53-710-1**

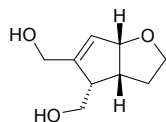
$C_{18}H_{24}O_7$  (352.39). Colorless amorphous solid,  $[\alpha]_D^{25} = -110.2^\circ$  ( $c = 0.033$ , MeOH). **Pharm:** NO production inhibitor (LPS-activated macrophage-like J774.1 cells,  $IC_{50} = 17.4\mu\text{g/mL}$ , control *L*-NMMA,  $IC_{50} = 27.4\mu\text{g/mL}$ ). **Source:** HE SE ZHONG HUA SHU *Tabebuia avellanadae* (inner bark). **Ref:** 4473.

**11147 Iridoid CPB-53-710-2**

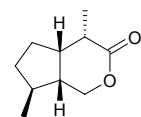
$C_{18}H_{24}O_7$  (352.39). Colorless amorphous solid,  $[\alpha]_D^{25} = -56.4^\circ$  ( $c = 0.035$ , MeOH). **Pharm:** NO production inhibitor (LPS-activated macrophage-like J774.1 cells,  $IC_{50} = 34.6\mu\text{g/mL}$ , control *L*-NMMA,  $IC_{50} = 27.4\mu\text{g/mL}$ ). **Source:** HE SE ZHONG HUA SHU *Tabebuia avellanadae* (inner bark). **Ref:** 4473.

**11148 Iridoid-related aglycone**

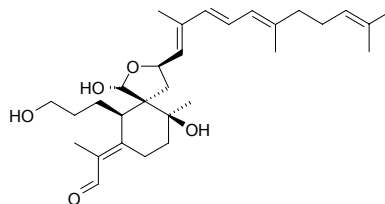
$C_9H_{14}O_3$  (170.21). Colorless oil,  $[\alpha]_D^{22} = -6^\circ$  ( $c = 0.1$ , MeOH). **Pharm:** Antitrypanosomal (*Trypanosoma brucei rhodesiense*,  $IC_{50} = 58.5\mu\text{g/mL}$ , control Melarsoprol,  $IC_{50} = 0.0033\mu\text{g/mL}$ ; *Trypanosoma cruzi*,  $IC_{50} > 90\mu\text{g/mL}$ , control Benznidazole,  $IC_{50} = 0.70\mu\text{g/mL}$ ); antileishmanial (*Leishmania donovani*,  $IC_{50} > 100\mu\text{g/mL}$ , control Miltefosine,  $IC_{50} = 0.32\mu\text{g/mL}$ ); antimalarial (*Plasmodium falciparum*,  $IC_{50} = 40.6\mu\text{g/mL}$ , control Artemisinin,  $IC_{50} = 0.002\mu\text{g/mL}$ ); cytotoxic (L6 cells,  $IC_{50} > 90\mu\text{g/mL}$ , control Podophyllotoxin,  $IC_{50} = 0.0075\mu\text{g/mL}$ ). **Source:** LIN PIAN XUAN SHEN *Scrophularia lepidota* (root). **Ref:** 5251.

**11149 Iridomyrmecin**

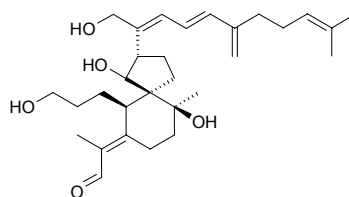
[485-43-8]  $C_{10}H_{16}O_2$  (168.24). mp 60–61°C. **Pharm:** Antibacterial; insecticidal. **Source:** MU TIAN LIAO *Actinidia polygama*. **Ref:** 6, 658, 1521.

**11150 Iridotectoral A**

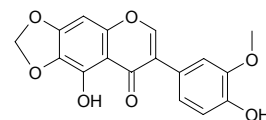
$C_{30}H_{46}O_5$  (486.70). White glassy substance. **Source:** YUAN WEI *Iris tectorum*. **Ref:** 767.

**11151 Iridotectoral B**

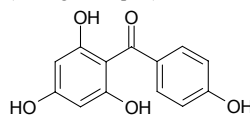
$C_{30}H_{46}O_5$  (486.70). White glassy substance,  $[\alpha]_D = 67^\circ$  ( $c = 0.12$ , EtOH). **Source:** YUAN WEI *Iris tectorum*. **Ref:** 767.

**11152 Iriflogenin**

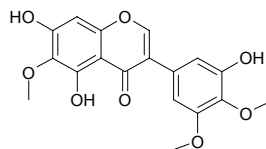
5,4'-Dihydroxy-3'-methoxy-6,7-methylenedioxyisoflavone; 3'-Methoxy-4',5'-dihydroxy-6,7-methylenedioxyisoflavone  $C_{17}H_{12}O_7$  (328.28). **Pharm:** CyP1A inhibitor ( $IC_{50} = (1.4 \pm 0.6)\mu\text{mol/L}$ )<sup>[5347]</sup>; QR inhibitor (cultured mouse Hepa1c1c7 cells,  $CD > 50\mu\text{mol/L}$ ,  $50\mu\text{mol/L}$  InRt = 1.9%,  $IC_{50} > 50\mu\text{mol/L}$ )<sup>[5347]</sup>; DPPH scavenger ( $SC_{50} = (89.6 \pm 4.4)\mu\text{mol/L}$ )<sup>[5347]</sup>. **Source:** DE GUO YUAN WEI *Iris germanica* (rhizome), JUAN QIAO YUAN WEI *Iris potaninii* (underground part). **Ref:** 4235, 5347.

**11153 Iriflophenone**

$C_{13}H_{10}O_5$  (246.22). **Source:** JUAN QIAO YUAN WEI *Iris potaninii* (underground part), XI OU YUAN WEI *Iris florentina*. **Ref:** 1521, 4235.

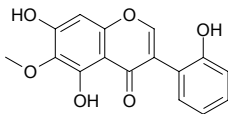
**11154 Irigenin**

5,7,3'-Trihydroxy-6,4',5'-trimethoxyisoflavone  $C_{18}H_{16}O_8$  (360.32). **Pharm:** CyP1A inhibitor ( $IC_{50} = (1.2 \pm 0.3)\mu\text{mol/L}$ )<sup>[5347]</sup>; QR inhibitor (cultured mouse Hepa1c1c7 cells,  $CD = (7.8 \pm 0.1)\mu\text{mol/L}$ ,  $IC_{50} > 50\mu\text{mol/L}$ )<sup>[5347]</sup>; DPPH scavenger ( $SC_{50} > 250\mu\text{mol/L}$ ,  $250\mu\text{mol/L}$  scavenging rate = 15%)<sup>[5347]</sup>. **Source:** BAI HUA SHE GAN *Iris dichotoma* (dried rhizome: content = 1.21%)<sup>[5508]</sup>, DE GUO YUAN WEI *Iris germanica* (rhizome), SHE GAN *Belamcanda chinensis* (dried rhizome: content = 1.45%)<sup>[5508]</sup>, YUAN WEI *Iris tectorum* (dried rhizome: content = 0.68%)<sup>[5508]</sup>. **Ref:** 4128, 5347, 5508.

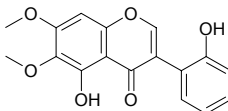


**11155 Irilin A**

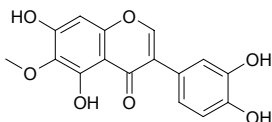
$C_{16}H_{12}O_6$  (300.27). Source: BENG GE YUAN WEI *Iris bungei* (underground part). Ref: 3063.

**11156 Irilin B**

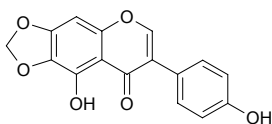
$C_{17}H_{14}O_6$  (314.3). Source: BENG GE YUAN WEI *Iris bungei* (underground part). Ref: 3063.

**11157 Irilin D**

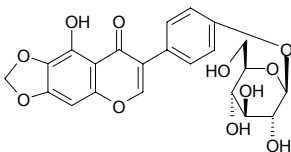
3',4',5',7-Tetrahydroxy-6-methoxyisoflavone  $C_{16}H_{12}O_7$  (316.27). Amorphous powder. Source: BENG GE YUAN WEI *Iris bungei* (underground part). Ref: 3063.

**11158 Irlone**

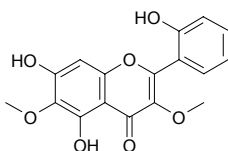
5,4'-Dihydroxy-6,7-methylenedioxyisoflavone  $C_{16}H_{10}O_6$  (298.25). Pharm: CyP1A inhibitor ( $IC_{50} = (0.3 \pm 0.1) \mu\text{mol/L}$ ); QR inhibitor (cultured mouse Hepa1c1c7 cells,  $CD = (16.7 \pm 2.3) \mu\text{mol/L}$ ,  $IC_{50} = (17.6 \pm 1.6) \mu\text{mol/L}$ ); DPPH radical scavenger ( $SC_{50} > 250 \mu\text{mol/L}$ , 250  $\mu\text{mol/L}$  scavenging rate = 2%)<sup>[5347]</sup>; germination inhibitor (embryo sheath of wheat, *in vitro*). Source: DE GUO YUAN WEI *Iris germanica* (rhizome), HONG CHE ZHOU CAO *Trifolium pratense*. Ref: 658, 5347.

**11159 Irlone 4'-O-β-D-glucoside**

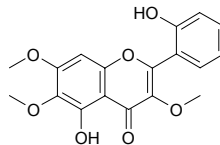
$C_{22}H_{20}O_{11}$  (460.40). Amorphous solid, mp 157°C,  $[\alpha]_D^{24} = +47.6^\circ$  ( $c = 0.63$ , MeOH). Source: DE GUO YUAN WEI *Iris germanica* (rhizome). Ref: 4223.

**11160 Irisflavone A**

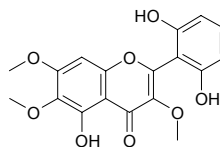
5,7,2'-Trihydroxy-3,6-dimethoxyflavone  $C_{17}H_{14}O_7$  (330.3). Yellow needles. Source: BENG GE YUAN WEI *Iris bungei* (underground part). Ref: 3063.

**11161 Irisflavone B**

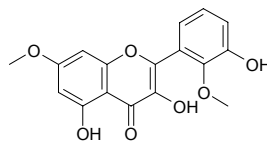
2',5-Dihydroxy-3,6,7-trimethoxyflavone  $C_{18}H_{16}O_7$  (344.32). Yellow needles, mp 205–206°C. Source: BENG GE YUAN WEI *Iris bungei* (underground part). Ref: 3063.

**11162 Irisflavone C**

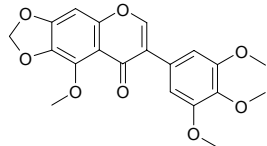
5,2',6'-Trihydroxy-3,6,7-trimethoxyflavone  $C_{18}H_{16}O_8$  (360.32). Yellow needles. Source: BENG GE YUAN WEI *Iris bungei* (underground part). Ref: 3063.

**11163 Irisflavone D**

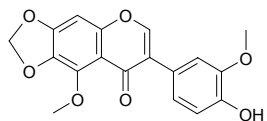
3,5,3'-Trihydroxy-7,2'-dimethoxyflavone  $C_{17}H_{14}O_7$  (330.3). Amorphous powder. Source: BENG GE YUAN WEI *Iris bungei* (underground part). Ref: 3063.

**11164 Irisfloreutin**

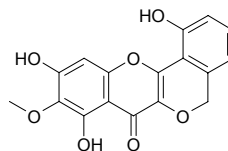
$C_{20}H_{18}O_8$  (386.36). Source: BAI HUA SHE GAN *Iris dichotoma*, SHE GAN *Belamcanda chinensis*, SHE GAN *Belamcanda chinensis* (rhizome). Ref: 660, 4128.

**11165 Iriskashmirianin**

4'-Hydroxy-5,3'-dimethoxy-6,7-methylenedioxyisoflavone  $C_{18}H_{14}O_7$  (342.31). Pharm: CyP1A inhibitor ( $IC_{50} > 5 \mu\text{mol/L}$ , 5  $\mu\text{mol/L}$  InRt = 0%); QR inhibitor (cultured mouse Hepa1c1c7 cells,  $CD (+3.5 \pm 1.5) \mu\text{mol/L}$ ,  $IC_{50} > 50 \mu\text{mol/L}$ ); DPPH scavenger ( $SC_{50} = (120.3 \pm 7.4) \mu\text{mol/L}$ ). Source: DE GUO YUAN WEI *Iris germanica* (rhizome). Ref: 5347.

**11166 Irisoid A**

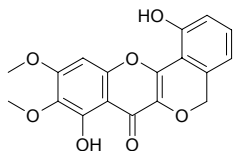
1,8,10-Trihydroxy-9-methoxy-[1]benzopyrano-[3,2-c][2]-benzopyran-7(5H)-one  $C_{17}H_{12}O_7$  (328.28). Amorphous powder. Source: BENG GE YUAN WEI *Iris bungei* (underground part). Ref: 4130.



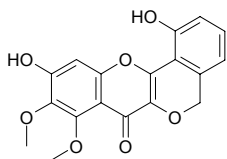


**11167 Irisoid B**

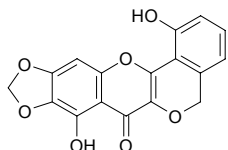
1,8-Dihydroxy-9,10-dimethoxy-[1]benzopyrano-[3,2-c][2]-benzopyran-7(5H)-one C<sub>18</sub>H<sub>14</sub>O<sub>7</sub> (342.31). Yellow needles, mp 329~330°C. Source: BENG GE YUAN WEI *Iris bungei* (underground part). Ref: 4130.

**11168 Irisoid C**

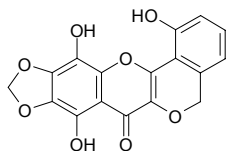
1,10-Dihydroxy-8,9-dimethoxy-[1]benzopyrano-[3,2-c][2]-benzopyran-7(5H)-one C<sub>18</sub>H<sub>14</sub>O<sub>7</sub> (342.31). Amorphous powder. Source: BENG GE YUAN WEI *Iris bungei* (underground part). Ref: 4130.

**11169 Irisoid D**

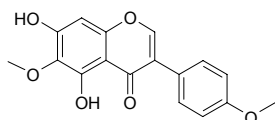
1,8-Dihydroxy-9,10-methylenedioxy-[1]benzopyrano-[3,2-c][2]-benzopyran-7(5H)-one C<sub>17</sub>H<sub>10</sub>O<sub>7</sub> (326.27). Amorphous powder. Source: BENG GE YUAN WEI *Iris bungei* (underground part). Ref: 4130.

**11170 Irisoid E**

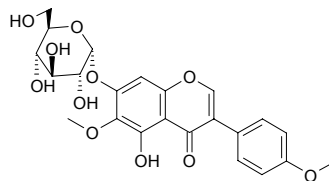
1,8,11-Trihydroxy-9,10-methylenedioxy-[1]benzopyrano-[3,2-c][2]-benzopyran-7(5H)-one C<sub>17</sub>H<sub>10</sub>O<sub>8</sub> (342.26). Amorphous powder. Source: BENG GE YUAN WEI *Iris bungei* (underground part). Ref: 4130.

**11171 Irisolidone**

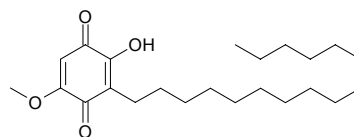
5,7-Dihydroxy-6,4'-dimethoxyisoflavone C<sub>17</sub>H<sub>14</sub>O<sub>6</sub> (314.30). Pharm: CyP1A inhibitor (IC<sub>50</sub> = (4.9±0.5)μmol/L); QR inhibitor (cultured mouse Hepa1c1c7 cells, CD > 50μmol/L, 50μmol/L InRt = 1.4%, IC<sub>50</sub> > 50μmol/L); DPPH scavenger (SC<sub>50</sub> > 250μmol/L, 250μmol/L scavenging rate = 8%). Source: DE GUO YUAN WEI *Iris germanica* (rhizome). Ref: 5347.

**11172 Irisolidone-7-O-α-D-glucoside**

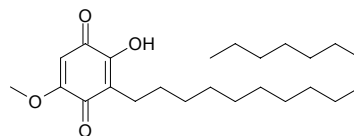
5,7-Dihydroxy-6,4'-dimethoxyisoflavone-7-O-α-D-glucopyranoside C<sub>23</sub>H<sub>24</sub>O<sub>11</sub> (476.44). Pharm: CyP1A inhibitor (IC<sub>50</sub> > 5μmol/L, 5μmol/L InRt = 38%); QR inhibitor (cultured mouse Hepa1c1c7 cells, CD > 50μmol/L, 50μmol/L InRt = 1.2, IC<sub>50</sub> > 50μmol/L); DPPH scavenger (SC<sub>50</sub> > 250μmol/L, 250μmol/L scavenging rate = 1%). Source: DE GUO YUAN WEI *Iris germanica* (rhizome). Ref: 5347.

**11173 Irisoquin A**

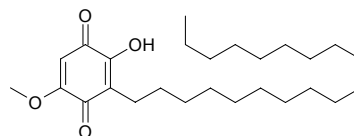
2-Hydroxy-3-hexadecyl-5-methoxy-1,4-benzoquinone C<sub>23</sub>H<sub>38</sub>O<sub>4</sub> (378.56). Orange coloured powder, mp 81.5°C. Source: XI MA LA YA YUAN WEI *Iris kumaonensis*. Ref: 1935.

**11174 Irisoquin B**

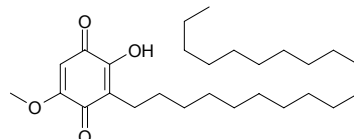
2-Hydroxy-3-heptadecyl-5-methoxy-1,4-benzoquinone C<sub>24</sub>H<sub>40</sub>O<sub>4</sub> (392.58). Source: XI MA LA YA YUAN WEI *Iris kumaonensis*. Ref: 1935.

**11175 Irisoquin C**

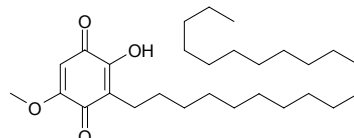
2-Hydroxy-3-nonadecyl-5-methoxy-1,4-benzoquinone C<sub>26</sub>H<sub>44</sub>O<sub>4</sub> (420.64). Source: XI MA LA YA YUAN WEI *Iris kumaonensis*. Ref: 1935.

**11176 Irisoquin D**

2-Hydroxy-3-eicosanyl-5-methoxy-1,4-benzoquinone C<sub>27</sub>H<sub>46</sub>O<sub>4</sub> (434.67). Source: XI MA LA YA YUAN WEI *Iris kumaonensis*. Ref: 1935.

**11177 Irisoquin E**

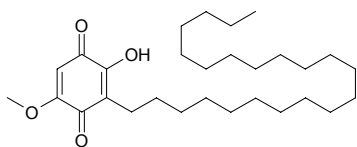
C<sub>28</sub>H<sub>48</sub>O<sub>4</sub> (448.69). Source: XI MA LA YA YUAN WEI *Iris kumaonensis*. Ref: 1935.



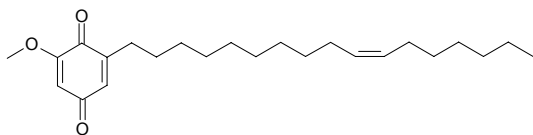
**11178 Irisoquin F**

2-Hydroxy-3-docosanyl-5-methoxy-1,4-benzoquinone C<sub>29</sub>H<sub>50</sub>O<sub>4</sub> (462.72).

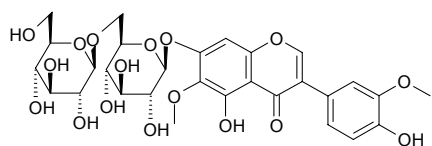
Source: XI MA LA YA YUAN WEI *Iris kumaonensis*. Ref: 1935.

**11179 Irisquinone A**

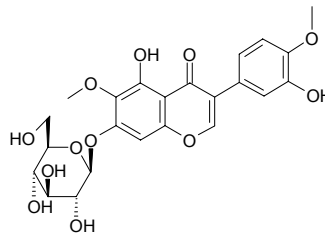
Pallasone A; Irisquinone [56495-82-0] C<sub>24</sub>H<sub>38</sub>O<sub>3</sub> (374.57). Yellow needles (MeOH), mp 42.5–43.5°C. Pharm: Antineoplastic (acute leukemia and solid tumor, mus tumor U14, 3~7mg/kg ip, InRt = (44.0~55.5)%, mus lymphatic sarcoma, 3mg/kg, InRt = 33.3%, liver cancer in solid tumor, 7mg/kg, InRt = 38%, liver cancer with ascites, 5mg/kg, biotic prolonged rate = 150%, EAC, 5mg/kg, biotic prolonged rate = 38%); immunoenhancer; cytotoxic (radiosensitizing agent, *in vitro*, U<sub>14</sub>, S-180V, HeLa, mus Ma7373 breast cancer cell, hmn intestinal mucoadenocarcinoma in nude mouse, mechanism was considered to be an inhibition of oxygen consumption and depletion of glutathione in tumor cells)<sup>[5369]</sup>; antineoplastic (mus tumor xenografts, U<sub>14</sub> cervical cancer and Ehrlich carcinoma, ip, lymphosarcoma, ip and oral administration, inhibits cancer growth)<sup>[5369]</sup>; antineoplastic (mus bearing U<sub>14</sub> tumor, orl 100mg/kg or iv 5mg/kg, once every other day for 5 cycles, starting 24h after implantation of the tumor, tumor inhibition rate = (35~55)%<sup>[5369]</sup>; antineoplastic (clinical trial, given orl to 558 patients with cancer of lung and esophagus, or with superficial metastatic cancer during radiotherapy, significantly reduction of tumor size and prolongation of survival time of the patients)<sup>[5369]</sup>; LD<sub>50</sub> (mus, ip) = 28mg/kg (25.4mg/kg), LD<sub>50</sub> (mus, orl) = 2.8g/kg. Source: HUANG CHANG PU *Iris pseudacorus*, MA LIN *Iris pallasii* var. *chinensis*, MA LIN ZI *Iris lactea* var. *chinensis* [Syn. *Iris pallasii* var. *chinensis*] (spermoderm: mean content = 0.81%<sup>[5508]</sup>). Ref: 658, 3124, 3125, 3126, 5369, 5508.

**11180 Iristectorigenin B 7-glucosyl(1→6)glucoside**

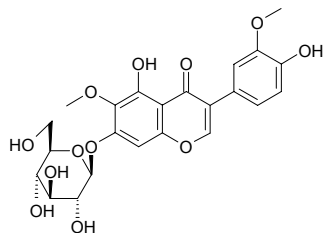
C<sub>29</sub>H<sub>34</sub>O<sub>17</sub> (654.58). Yellow amorphous powder. Source: AI JI ZHONG ZHI YUAN WEI *Iris carthaliniae*. Ref: 1880.

**11181 Iristectorin A**

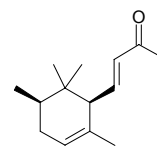
[37744-61-9] C<sub>23</sub>H<sub>24</sub>O<sub>12</sub> (492.44). mp 212~214°C. Source: MU TIAN LIAO *Actinidia polygama*, YUAN WEI *Iris tectorum*. Ref: 6, 660.

**11182 Iristectorin B**

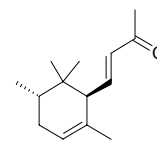
C<sub>23</sub>H<sub>24</sub>O<sub>12</sub> (492.44). mp 153~155°C. Source: YUAN WEI *Iris tectorum*. Ref: 6.

**11183 cis-α-Irone**

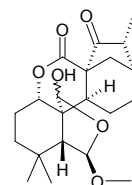
C<sub>14</sub>H<sub>22</sub>O (206.33). Pharm: Flavorant. Source: XI OU YUAN WEI *Iris florentina*, *Viola* sp. Ref: 658.

**11184 trans-α-Irone**

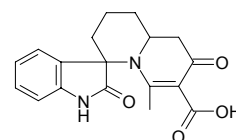
C<sub>14</sub>H<sub>22</sub>O (206.33). Source: XI OU YUAN WEI *Iris florentina*, *Viola* sp. Ref: 658.

**11185 Irroratin A**

C<sub>21</sub>H<sub>30</sub>O<sub>6</sub> (378.47). mp 185~187°C, [α]<sub>D</sub> = -194.8° (c = 0.40, MeOH). Source: LU ZHU XIANG CHA CAI *Isodon irrorata*. Ref: 4067.

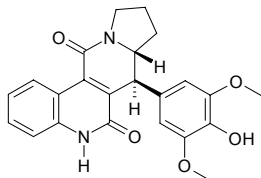
**11186 Isaindigodione**

C<sub>18</sub>H<sub>18</sub>N<sub>2</sub>O<sub>4</sub> (326.36). White powdery solid. Source: BAN LAN GEN *Isatis indigotica*. Ref: 2161.

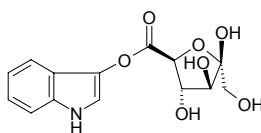


**11187 Isaindigotidione**

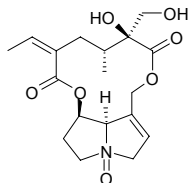
$C_{23}H_{22}N_2O_5$  (406.44). White powder mp 242°C. Source: BAN LAN GEN *Isatis indigotica*. Ref: 2119.

**11188 Isatan B**

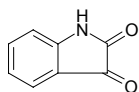
$C_{14}H_{15}NO_7$  (309.28). Source: DA QING YE *Isatis indigotica*. Ref: 2.

**11189 Isatidine**

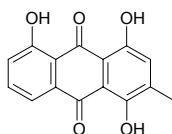
[15503-86-3]  $C_{18}H_{25}NO_7$  (367.40). mp 145°C,  $[\alpha]_D = -8.2^\circ$  (water). Pharm: Carcinogen (animal model); toxin (horse orl, 14~15g, feeding 2 or 3 times to death); LD<sub>50</sub> (rat, orl) = 48mg/kg, (rat, ip) = 250mg/kg. Source: CHAI HU ZHUANG QIAN LI GUANG *Senecio bupleuroides*, SHAO FU E QIAN LI GUANG *Senecio paucicazyculatus*, CHANG YE QIAN LI GUANG *Senecio longifolius*. Ref: 658.

**11190 Isatin**

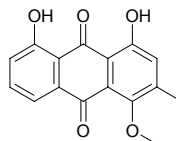
2,3-Indolinedione [91-56-5]  $C_8H_5NO_2$  (147.13). mp 203.5°C. Source: BAN LAN GEN *Isatis indigotica*. Ref: 6.

**11191 Islandicin**

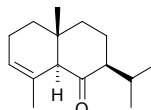
$C_{15}H_{10}O_5$  (270.24). Pharm: Cytotoxic inactive (*in vitro*, HeLa, Vero, K562, Raji, Wish, and Calu1 tumor cell lines, IC<sub>50</sub> > 100μmol/L). Source: YI HE GUO *Ventilago leiocarpa* (stem). Ref: 3057.

**11192 Islandicin 4-methyl ether**

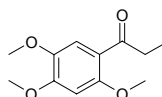
$C_{16}H_{12}O_5$  (284.27). Red needles (EtOAc-*n*-hexane), mp 184~186°C. Pharm: Cytotoxic inactive (*in vitro*, HeLa, Vero, K562, Raji, Wish, and Calu1 tumor cell lines, IC<sub>50</sub> > 100μmol/L). Source: YI HE GUO *Ventilago leiocarpa* (stem). Ref: 3057.

**11193 Isoacolamone**

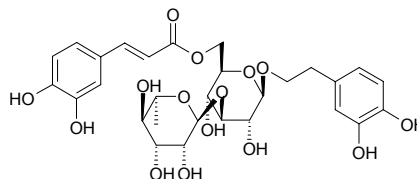
$C_{15}H_{24}O$  (220.36). Oil. Source: BAI CHANG *Acorus calamus*. Ref: 6.

**11194 Isoacoramone**

$C_{12}H_{16}O_4$  (224.26). Yellowish ropy liquid. Source: SHI CHANG PU *Acorus tatarinowii*. Ref: 8.

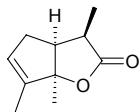
**11195 Isoacteoside**

Isoverbascoside  $C_{29}H_{36}O_{15}$  (624.60). Pharm: Antioxidant (ferric thiocyanate method, 0.5mmol/L, peroxidation value = 7.2%, control BHA, 0.5mmol/L, peroxidation value = 4.5%, control Vitamin E, 0.5mmol/L, peroxidation value = 14.7%)<sup>[4508]</sup>; antioxidant (relative potency = 5.8, compared with resveratrol, relative potency = 1)<sup>[4920]</sup>; elastase inhibitor (hmn leukocyte *in vitro*, IC<sub>50</sub> = 179μg/mL = 286μmol/L; control Caffeic acid, IC<sub>50</sub> = 86μg/mL = 475μmol/L)<sup>[5458]</sup>; antitrypanosomal (*Trypanosoma b. rhodesiense*, IC<sub>50</sub> = 6.2μg/mL, control Melarsoprol, IC<sub>50</sub> = 0.00098μg/mL; *Trypanosoma cruzi*, IC<sub>50</sub> > 90μg/mL, control Benzimidazole, IC<sub>50</sub> = 1.06μg/mL)<sup>[5009]</sup>; antileishmanial (*Leishmania donovani*, IC<sub>50</sub> = 9.2μg/mL, control Miltefosine, IC<sub>50</sub> = 0.102μg/mL)<sup>[5009]</sup>; antimalarial (*Plasmodium falciparum*, IC<sub>50</sub> = 37.5μg/mL, control Artemisinin, IC<sub>50</sub> = 0.0022μg/mL)<sup>[5009]</sup>; cytotoxic (L6, IC<sub>50</sub> = 55.4μg/mL, control Podophyllotoxin, IC<sub>50</sub> = 0.008μg/mL)<sup>[5009]</sup>. Source: A LA BO PO PO NA *Veronica persica* (aerial parts), CHE QIAN *Plantago asiatica*, GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], LIE DANG *Orobanchae coerulea* (whole herb), NAN FEI GOU MA *Harpagophytum procumbens*, TIAN SHE CAO *Lippia dulcis* (aerial parts), ZONG KUI CAO SU *Phlomis brunneogaleata*. Ref: 2, 660, 4211, 4508, 4920, 5009, 5458.

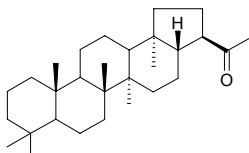


**11196 Isoactinidialactone**

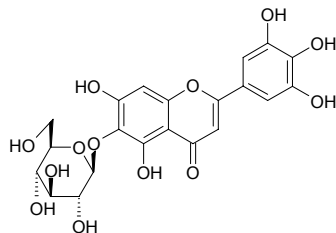
C<sub>10</sub>H<sub>14</sub>O<sub>2</sub> (166.22). Source: MU TIAN LIAO *Actinidia polygama*. Ref: 660.

**11197 Isoadiantone**

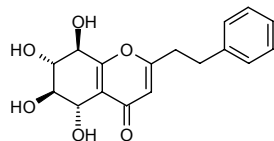
[58260-74-5] C<sub>29</sub>H<sub>48</sub>O (412.71). mp 232~233°C. Source: BIAN YE TIE XIAN JUE *Adiantum caudatum*, TIE SI QI *Adiantum pedatum*. Ref: 6.

**11198 Isoaffinetin**

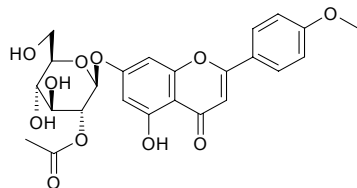
5,7,3',4',5'-Pentahydroxyflavone-6-C-glucoside [60476-24-6] C<sub>21</sub>H<sub>20</sub>NO<sub>13</sub> (480.39). Pharm: Aldose reductase inhibitor (porcine lens, IC<sub>50</sub> = (4.6±0.4)μmol/L; rat lens, IC<sub>50</sub> = (1.2±0.2)μmol/L; recombinant hm, IC<sub>50</sub> = (1.0±0.1)μmol/L). Source: IN DU TIE XIAN ZI *Manilkara indica*. Ref: 5452.

**11199 Isoagarotretrol**

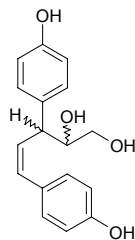
AH2 [104060-61-9] C<sub>17</sub>H<sub>18</sub>O<sub>6</sub> (318.33). Colorless lamellar crystals, mp 174~175°C (dec), [α]<sub>D</sub> = -58.6° (c = 1.19, MeOH). Source: CHEN XIANG *Aquilaria agallocha*. Ref: 13, 1521.

**11200 Isoagastachoside**

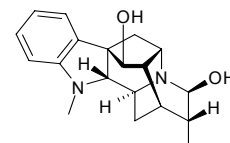
[78886-64-3] C<sub>24</sub>H<sub>24</sub>O<sub>11</sub> (488.45). Source: HUO XIANG *Agastache rugosus*. Ref: 2.

**11201 Isoagatharesinol**

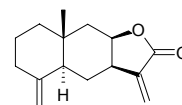
C<sub>17</sub>H<sub>18</sub>O<sub>4</sub> (286.33). Colorless gum, [α]<sub>D</sub><sup>21</sup> = +49.7° (c = 5.40, Me<sub>2</sub>CO). Pharm: Cytotoxic (*in vitro*, HO-8910, IC<sub>50</sub> > 658μmol/L, Vincristine, IC<sub>50</sub> = (25.1±1.9)μmol/L; Bel7405, IC<sub>50</sub> > 658μmol/L, Vincristine, IC<sub>50</sub> = (31.4±3.4)μmol/L). Source: GE BI TIAN MEN *Asparagus gobicus* (root). Ref: 4975.

**11202 Isoajmaline**

[6989-79-3] C<sub>20</sub>H<sub>26</sub>N<sub>2</sub>O<sub>2</sub> (326.44). Prisms (MeOH aq.), plates (Et<sub>2</sub>O), mp 265 (dec), [α]<sub>D</sub><sup>18</sup> = +72° (c = 0.7, CHCl<sub>3</sub>). Pharm: Bidirectional action to CNS (first stimulates, then inhibits); uterine stimulant; antihypertensive. Source: YIN DU LUO FU MU *Rauwolfia serpentina*. Ref: 658.

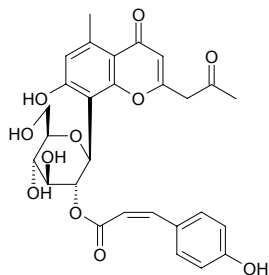
**11203 Isoalantolactone**

Isohenin; 5αH-Eudesma-4(15),11(13)-dien-12,8β-olide [470-17-7] C<sub>15</sub>H<sub>20</sub>O<sub>2</sub> (232.33). Crystals (EtOH aq.), mp 115°C, mp 109~110°C, [α]<sub>D</sub> = +172° (CHCl<sub>3</sub>). Pharm: Antifungal (*Epidermophyton*, MIC = 35μg/mL, *Trichophyton mentagrophytes*, MIC = 25μg/mL); anthelmintic (ascarid, protozoan, *Australorbis glabratus*); antiprotozoal (*Amoeba dysenteriae*, and *Trichomonas vaginalis*); insect antifeedant; anti-inflammatory (NO production inhibitor, cultured rat aortic smooth muscle cells treated with LPS and interferon-γ)<sup>[4415]</sup>; cytotoxic (SMMC-7721 IC<sub>50</sub> = (6.21±1.63)μg/mL, Vincristine IC<sub>50</sub> = (30.35±2.23)μg/mL; HO-8910 IC<sub>50</sub> = (5.28±0.78)μg/mL, Vincristine IC<sub>50</sub> = (20.74±1.91)μg/mL; LO2 hm hepatocytes cell IC<sub>50</sub> = (9.77±1.91)μg/mL, Vincristine IC<sub>50</sub> = (17.25±0.91)μg/mL)<sup>[5422]</sup>; MLD (mus, sc) = 2000mg/kg. Source: CHANG YE TIAN MING JING *Carpesium longifolium* (aerial parts: yield = 0.0015%dw)<sup>[4736]</sup>, DA YE TU MU XIANG *Inula grandis*, JIA NA DA CANG ER *Xanthium canadense*, JIN FEI CAO *Inula japonica*, MEI LI TE LE JU *Telekia speciosa*, MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*], TU MU XIANG *Inula helenium* (root: mean content of 2 batch samples = 1.00%<sup>[5508]</sup>), XI MA XUAN FU HUA *Inula royleana*, ZONG ZHUANG TU MU XIANG *Inula racemosa*, ZONG ZHUANG TU MU XIANG *Inula racemosa* (root: mean content of 4 batch samples = 1.90%<sup>[5508]</sup>). Ref: 4, 658, 1521, 4415, 4736, 5422, 5508.

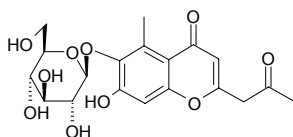


**11204 Isoaloesin A**

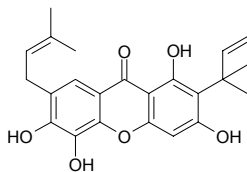
$C_{28}H_{28}O_{11}$  (540.53). Source: HAO WANG JIAO LU HUI *Aloe ferox*. Ref: 660.

**11205 Isoaloesin**

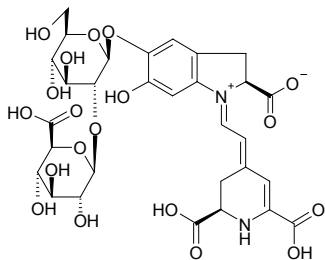
2-Acetyl-6-C- $\beta$ -D-glucopyranosyl-7-hydroxy-5-methyl-chromone  $C_{19}H_{22}O_{10}$  (410.38). Source: LU HUI *Aloe vera* [Syn. *Aloe barbadensis*]. Ref: 534.

**11206 Isoalvaxanthone**

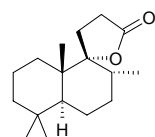
$C_{23}H_{24}O_6$  (396.44). Pharm: Cytotoxic (HSC-2 cells,  $CC_{50} = 0.035$ mmol/L; HGF,  $CC_{50} = 0.058$ mmol/L). Source: GOU JI *Cudrania cochinchinensis* (root; yield = 0.00164%dw). Ref: 3025.

**11207 Isoamaranthin**

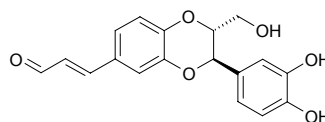
[15229-42-2]  $C_{30}H_{34}N_2O_{19}$  (726.61). Source: QIAN RI HONG *Gomphrena globosa*. Ref: 15.

**11208 Isoambreinolide**

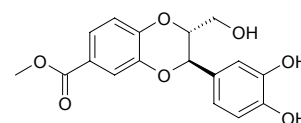
$C_{17}H_{28}O_2$  (264.41). Source: DAN YE MAN JING ZI *Vitex rotundifolia* [Syn. *Vitex trifolia* var. *simplicifolia*] (seed; yield = 0.0018%dw). Ref: 4623.

**11209 Isoamericanin A**

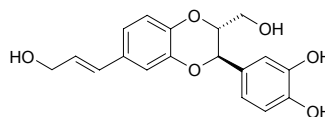
[109063-85-6]  $C_{18}H_{16}O_6$  (328.32). mp 177~178°C,  $[\alpha]_D = \pm 0^\circ$  ( $c = 1.01$ ). Pharm: Stimulates release of PGI<sub>2</sub> (10 $\mu$ mol/L, makes PGI<sub>2</sub> releasing 149.8%); nourishes nerve (10 $\mu$ mol/L, increases activity of choline acetyltransferase in rat cerebrum). Source: MEI SHANG LU *Phytolacca americana* [Syn. *Phytolacca decandra*]. Ref: 954, 1022.

**11210 Isoamericanoic acid A methyl ester**

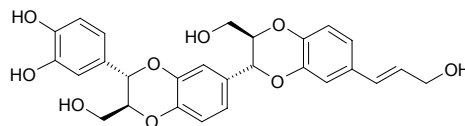
$C_{17}H_{16}O_7$  (332.31).  $[\alpha]_D^{20} = 0^\circ$  ( $c = 0.71$ , MeOH). Source: MEI SHANG LU *Phytolacca americana* [Syn. *Phytolacca decandra*] (seed). Ref: 4407.

**11211 Isoamericanol A**

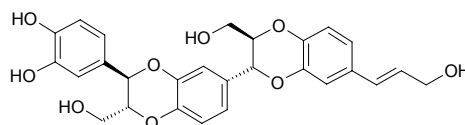
[121620-06-2]  $C_{18}H_{18}O_6$  (330.34). Colorless rhombic crystals, mp 157~159°C (ethyl acetate-acetone),  $[\alpha]_D^{27} = \pm 0^\circ$  ( $c = 1.05$ , ethanol). Pharm: Nourishes nerve (10 $\mu$ mol/L, increases activity of choline acetyltransferase in rat cerebrum). Source: MEI SHANG LU *Phytolacca americana* [Syn. *Phytolacca decandra*]. Ref: 1022, 1521.

**11212 Isoamericanol B<sub>1</sub>**

*rel*-(7<sup>n</sup>E)-(7 $\alpha$ ,8 $\beta$ ,7 $\alpha$ ,8 $\beta$ )-3,4,9,9',9''-Pentahydroxy-3',7:3'',7'-diepoxy-8,4':8',4''-bisoxysesquieolign-7<sup>n</sup>-ene  $C_{27}H_{26}O_9$  (494.50). Colorless amorphous solid. Source: BA XI QIAO AN MU *Joannesia princeps* (seed). Ref: 3369.

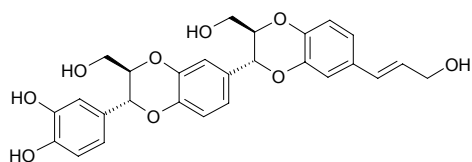
**11213 Isoamericanol B<sub>2</sub>**

*rel*-(7<sup>n</sup>E)-(7 $\alpha$ ,8 $\beta$ ,7 $\beta$ ,8 $\alpha$ )-3,4,9,9',9''-Pentahydroxy-3',7:3'',7'-diepoxy-8,4':8',4''-bisoxysesquieolign-7<sup>n</sup>-ene  $C_{27}H_{26}O_9$  (494.50). Colorless amorphous solid. Source: BA XI QIAO AN MU *Joannesia princeps* (seed). Ref: 3369.

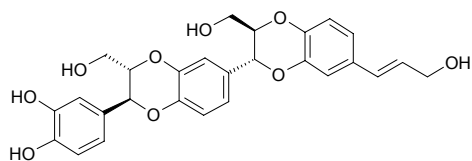


**11214 Isoamericanol C<sub>1</sub>**

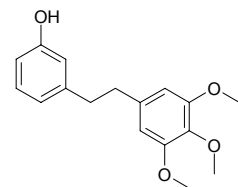
*rel*-(7''*E*)-(7 $\alpha$ ,8 $\beta$ ,7' $\alpha$ ,8' $\beta$ )-3,4,9,9',9''-Pentahydroxy-4',7:3'',7'-diepoxy-8,3':8',4''-bisoxysesquieolign-7''-ene C<sub>27</sub>H<sub>26</sub>O<sub>9</sub> (494.50). Colorless amorphous solid. Source: BA XI QIAO AN MU *Joannesia princeps* (seed). Ref: 3369.

**11215 Isoamericanol C<sub>2</sub>**

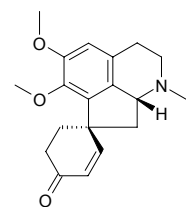
*rel*-(7''*E*)-(7 $\alpha$ ,8 $\beta$ ,7' $\beta$ ,8' $\alpha$ )-3,4,9,9',9''-Pentahydroxy-4',7:3'',7'-diepoxy-8,3':8',4''-bisoxysesquieolign-7''-ene C<sub>27</sub>H<sub>26</sub>O<sub>9</sub> (494.50). Colorless amorphous solid. Source: BA XI QIAO AN MU *Joannesia princeps* (seed). Ref: 3369.

**11216 Isoamoenylin**

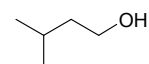
C<sub>17</sub>H<sub>20</sub>O<sub>4</sub> (288.35). Source: KE AI SHI HU *Dendrobium amoenum*. Ref: 2397.

**11217 Isoamuronine**

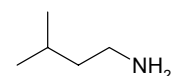
C<sub>19</sub>H<sub>23</sub>NO<sub>3</sub> (313.4). Yellow powder. Source: HOU KE GUI *Cryptocarya chinensis* (wood). Ref: 3092.

**11218 Isoamyl alcohol**

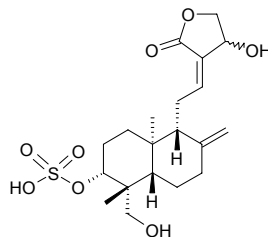
Isopentanol [123-51-3] C<sub>5</sub>H<sub>12</sub>O (88.15). bp 132°C. Source: SHAN ZHU YU *Cornus officinalis* [Syn. *Macrocarpum officinale*], MEI GUI HUA *Rosa rugosa*. Ref: 2, 1445.

**11219 Isoamylamine**

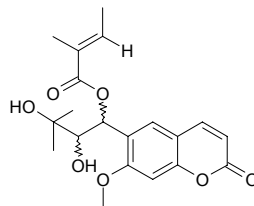
[107-85-7] C<sub>5</sub>H<sub>13</sub>N (87.17). bp 95°C. Source: GUI GAI *Coprinus atramentarius*. Ref: 6.

**11220 Isoandrographolide-3-O-sulfate**

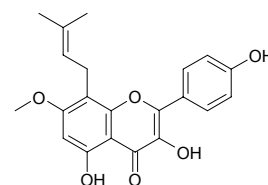
C<sub>20</sub>H<sub>30</sub>O<sub>8</sub>S (430.52). White amorphous powder. Source: REN NIAO *Homo sapiens*. Ref: 4300.

**11221 Isoangelol**

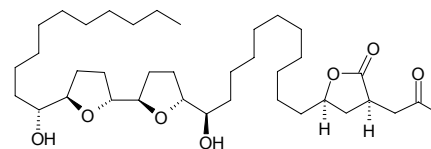
[110115-58-7] C<sub>20</sub>H<sub>24</sub>O<sub>7</sub> (376.41). Colorless transparent substance, [α]<sub>D</sub><sup>20</sup> = -138.5° (c = 0.33, chloroform). Source: DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*]. Ref: 8, 79.

**11222 Isoanhydrocaritin**

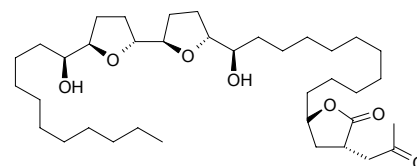
3,4',5-Trihydroxy-7-methoxy-8-isopentenylflavone C<sub>21</sub>H<sub>20</sub>O<sub>6</sub> (368.39). Source: KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. Ref: 6, 660, 4430.

**11223 Isoannonarectin**

C<sub>37</sub>H<sub>66</sub>O<sub>7</sub> (622.93). Source: NIU XIN FAN LI ZHI *Annona reticulata*. Ref: 401.

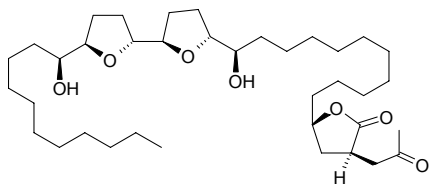
**11224 2,4-cis-Isoannonarectin**

C<sub>37</sub>H<sub>66</sub>O<sub>7</sub> (622.93). Source: NIU XIN FAN LI ZHI *Annona reticulata*. Ref: 432.

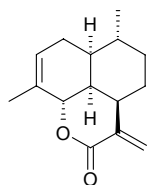


**11225 2,4-trans-Isoannonarecticin**

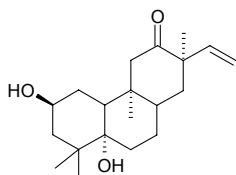
$C_{37}H_{66}O_7$  (622.93). Source: NIU XIN FAN LI ZHI *Annona reticulata*. Ref: 432.

**11226 Isoannulide**

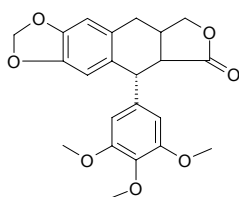
$C_{15}H_{20}O_2$  (232.33). Source: HUANG HUA HAO *Artemisia annua* (aerial parts). Ref: 5224.

**11227 Isoanomallotusin**

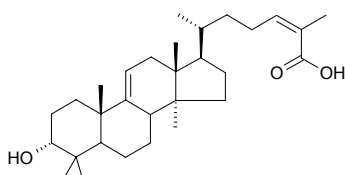
[141374-89-2]  $C_{20}H_{32}O_3$  (320.47). White acicular crystals, mp 213~215°C (acetone–diethyl ether),  $[\alpha]_D^{25} = +101.20^\circ$  ( $c = 0.045$ , methanol). Pharm: Inhibits leukemia cells *in vitro* (1  $\mu\text{g}/\text{mL}$ , InRt = 98%, *in vivo* no effect). Source: XIU MAO YE TONG *Mallotus anomalus*. Ref: 1184.

**11228 Isoanthricin**

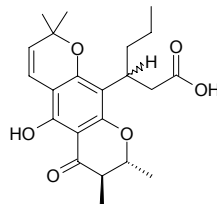
$C_{22}H_{22}O_7$  (398.24). mp 170°C. Source: E SHEN *Anthriscus sylvestris*. Ref: 6.

**11229 Isoanwuweizic acid**

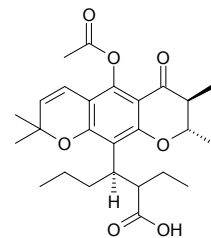
$C_{30}H_{48}O_3$  (456.72). Source: LENG FAN TUAN *Kadsura coccinea* [syn. *Kadsura chenensis*; *Kadsura hainanensis*]. Ref: 2436.

**11230 Isoapetalic acid**

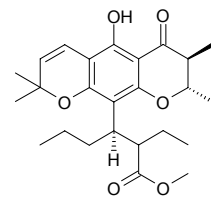
$C_{22}H_{28}O_6$  (388.46). Yellow oil,  $[\alpha]_D^{25} = -23.0^\circ$  ( $c = 1.0$ ,  $\text{CH}_2\text{Cl}_2$ ). Pharm: Cytotoxic (KB,  $\text{ED}_{50} = 11.29\mu\text{g}/\text{mL}$ , HeLa,  $\text{ED}_{50} = 12.77\mu\text{g}/\text{mL}$ , hmn medulloblastoma,  $\text{ED}_{50} > 20\mu\text{g}/\text{mL}$ , control Doxorubicin,  $\text{ED}_{50} = 0.15\mu\text{g}/\text{mL}$ ,  $0.14\mu\text{g}/\text{mL}$ ,  $0.19\mu\text{g}/\text{mL}$  respectively)<sup>[4274]</sup>; antifungal inactive (*Aspergillus fumigatus*,  $\text{MIC}_{80} > 250\mu\text{g}/\text{mL}$ , Amphotericin B,  $\text{MIC}_{80} = 8\mu\text{g}/\text{mL}$ )<sup>[5489]</sup>. Source: SU GE LAN HU TONG *Calophyllum caledonicum* (seed), *Calophyllum blancoi* (seed). Ref: 4274, 5489.

**11231 Isoapetalic acid 5-O-acetate**

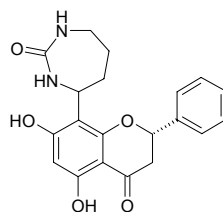
$C_{24}H_{30}O_7$  (430.50). Yellow oil,  $[\alpha]_D^{25} = -37.6^\circ$  ( $c = 1.0$ ,  $\text{CH}_2\text{Cl}_2$ ). Pharm: Cytotoxic (KB,  $\text{ED}_{50} = 13.15\mu\text{g}/\text{mL}$ , HeLa,  $\text{ED}_{50} = 16.79\mu\text{g}/\text{mL}$ , hmn medulloblastoma,  $\text{ED}_{50} = 13.37\mu\text{g}/\text{mL}$ , control Doxorubicin,  $\text{ED}_{50} = 0.15\mu\text{g}/\text{mL}$ ,  $0.14\mu\text{g}/\text{mL}$ ,  $0.19\mu\text{g}/\text{mL}$  respectively). Source: *Calophyllum blancoi* (seed). Ref: 4274.

**11232 Isoapetalic methyl ester**

$C_{23}H_{30}O_6$  (402.49). Yellow oil,  $[\alpha]_D^{25} = -83.7^\circ$  ( $c = 1.0$ ,  $\text{CH}_2\text{Cl}_2$ ). Pharm: Cytotoxic (KB,  $\text{ED}_{50} = 6.37\mu\text{g}/\text{mL}$ , HeLa,  $\text{ED}_{50} = 7.79\mu\text{g}/\text{mL}$ , hmn medulloblastoma,  $\text{ED}_{50} = 8.69\mu\text{g}/\text{mL}$ , control Doxorubicin,  $\text{ED}_{50} = 0.15\mu\text{g}/\text{mL}$ ,  $0.14\mu\text{g}/\text{mL}$ ,  $0.19\mu\text{g}/\text{mL}$  respectively). Source: *Calophyllum blancoi* (seed). Ref: 4274.

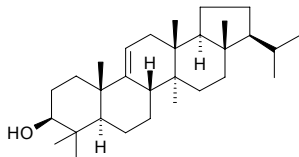
**11233 Isoaquileidine**

(2*S*)-8-(1,4-Ureylenebutyl)-5,7-dihydroxyflavanone  $C_{20}H_{20}N_2O_5$  (368.39). White amorphous powder ( $\text{CH}_3\text{OH}$ ), mp 232~233°C,  $[\alpha]_D^{25} = +19^\circ$  ( $c = 0.43$ ,  $\text{CH}_3\text{OH}$ ). Source: WU JU LOU DOU CAI *Aquilegia ecalcarata* (whole herb: yield = 0.000078%dw). Ref: 3029.

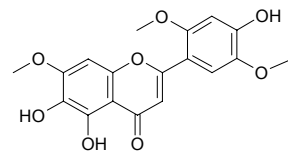


**11234 Isoarborinol**

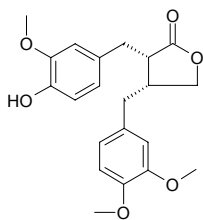
[5532-41-2]  $C_{30}H_{50}O$  (426.73). Crystals ( $CHCl_3$ -MeOH), mp 294.0~294.5°C,  $[\alpha]_D = +47^\circ$  ( $c = 0.53$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic inactive (*in vitro*, HONE-1 and NUGC cancer cell lines, no significant activity)<sup>[3069]</sup>. **Source:** CHOU SHAN YANG *Orixa japonica*, GOU MAO QIAN CAO *Rubia oncotricha*, JIN CAO *Hedyotis acutangula*, YIN DU BAI MAO *Imperata cylindrica*, ZHONG GUO XIU QIU *Hydrangea chinensis* (root)<sup>[3069]</sup>. **Ref:** 6, 1521, 3069.

**11235 Isoarcapillin**

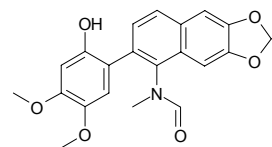
$C_{18}H_{16}O_8$  (360.32). **Source:** YIN CHEN HAO *Artemisia capillaris*. **Ref:** 2.

**11236 Isoartigenin**

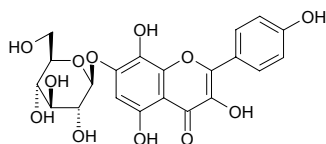
$C_{21}H_{24}O_6$  (372.42). mp *cis*- (+) 92~93°C. **Source:** NIU BANG ZI *Arctium lappa*. **Ref:** 6.

**11237 Isoarnottianamide**

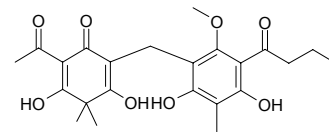
$C_{21}H_{19}NO_6$  (381.39). **Source:** HUA JIAO LE *Zanthoxylum cuspidatum*, RU DI JIN NIU *Zanthoxylum nitidum*. **Ref:** 660.

**11238 Isoarticulatin**

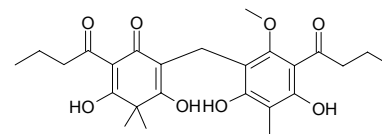
Herbacitrin [35815-07-7]  $C_{21}H_{20}O_{12}$  (464.39). Yellow needles (pyridine aq.), mp 247~249°C. **Source:** MU ZEI *Equisetum hiemale*, WEN JING *Equisetum arvense*, MIAN HUA *Gossypium herbaceum*, YIN DU MIAN *Gossypium indicum*. **Ref:** 2, 660, 1521.

**11239 Isoaspidin AB**

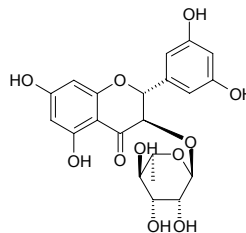
$C_{23}H_{28}O_8$  (432.47). **Source:** CHANG WEI FU YE ER JUE *Arachniodes simplicior*, CI TOU FU YE ER JUE *Arachniodes exilis*, *Arachniodes dimorphophylla*, *Arachniodes nipponica*. **Ref:** 660, 1521.

**11240 Isoaspidin BB**

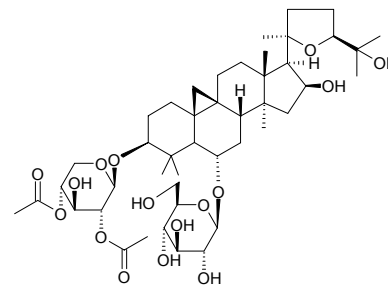
$C_{23}H_{32}O_8$  (460.53). **Source:** CHANG WEI FU YE ER JUE *Arachniodes simplicior*, CI TOU FU YE ER JUE *Arachniodes exilis*, *Arachniodes dimorphophylla*, *Arachniodes nipponica*. **Ref:** 660, 1521.

**11241 Isoastilbin B**

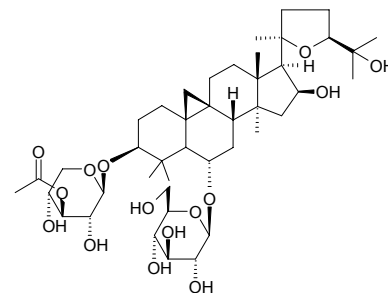
$C_{21}H_{22}O_{11}$  (450.40). Yellowish acicular crystals (methanol), mp 186~187°C; pale yellow needles (MeOH), mp 191~193°C,  $[\alpha]_D^{34} = -3.0^\circ$  ( $c = 1.06$ , MeOH). **Source:** HAI QI *Excoecaria agallocha* (fresh stem), TU FU LING *Smilax glabra*. **Ref:** 366, 568, 4386.

**11242 Isoastragaloside I**

$C_{45}H_{72}O_{16}$  (869.07). **Source:** HUANG QI *Astragalus membranaceus*. **Ref:** 660.

**11243 Isoastragaloside II**

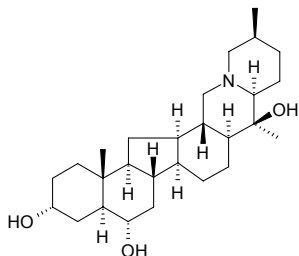
$C_{43}H_{70}O_{15}$  (827.03). **Source:** HUANG QI *Astragalus membranaceus*. **Ref:** 660.



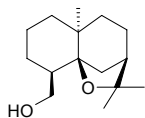


**11244 Isobaimonidine**

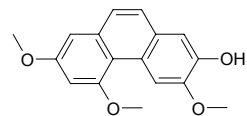
[74184-79-5]  $C_{27}H_{45}NO_3$  (431.66). Crystals ( $Me_2CO-CHCl_3$ ), mp 238~239°C,  $[\alpha]_D^{22} = -12^\circ$  ( $c = 0.5, CHCl_3$ ),  $[\alpha]_D = -59.2^\circ$  ( $c = 0.25, CHCl_3$ ). **Source:** ZHE BEI MU *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*], XI BEI MU *Fritillaria imperialis*. **Ref:** 660, 2201.

**11245 Isobaimuxinol**

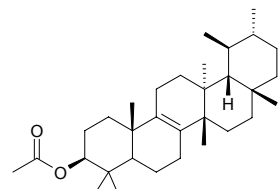
[122798-42-9]  $C_{15}H_{26}O_2$  (238.37). Crystals, mp 73~75°C,  $[\alpha]_D^{12} = -68^\circ$  ( $c = 0.1, CHCl_3$ ). **Source:** BAI MU XIANG *Aquilaria sinensis*. **Ref:** 13, 1521.

**11246 Isobatatin I**

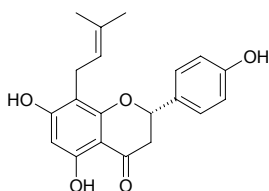
$C_{17}H_{16}O_4$  (284.31). **Pharm:** Antifungal (*Aspergillus niger* and *Botrytis cinerea*). **Source:** YUAN SHU YU *Dioscorea rotundata* [Syn. *Dioscorea cayenensis*], JIANG GUO SHU YU *Tamus communis*. **Ref:** 658.

**11247 Isobauerenyl acetate**

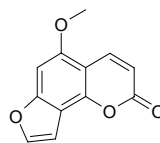
$C_{32}H_{52}O_2$  (468.77). **Source:** LIAN QIAO *Forsythia suspensa*. **Ref:** 660.

**11248 Isobavachin**

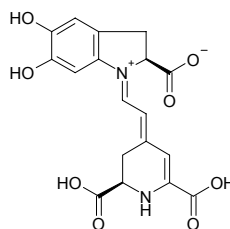
8-Prenylnaringenin; Sophoraflavanone B [31524-62-6]  $C_{20}H_{20}O_5$  (340.38). Crystals (MeOH), mp 187~188°C, mp 200~202°C,  $[\alpha]_D^{22} = -46^\circ$  ( $c = 0.13, EtOH$ ). **Pharm:** Cytotoxic (cyclooxygenase-1 inhibitor)<sup>[5038]</sup>, cytotoxic (HSC-2 cells,  $CC_{50} = 0.13\text{mmol/L}$ ; HGF,  $CC_{50} = 0.19\text{mmol/L}$ )<sup>[3025]</sup>. **Source:** BU GU ZHI *Psoralea corylifolia*, GOU JI *Cudrania cochinchinensis* (root: yield = 0.00143%dw), LING NAN HUAI SHU *Sophora tomentosa*, PI JIU HUA *Humulus lupulus* (strobile), SHA SHENG HUAI *Sophora moorcroftiana*, ZHEN YE XUE TONG *Macaranga confera*. **Ref:** 2, 545, 1521, 3025, 4789, 5038.

**11249 Isobergapten**

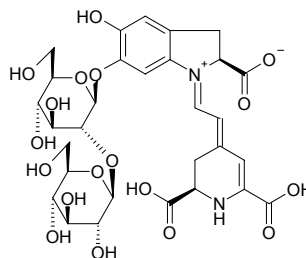
[482-48-4]  $C_{12}H_8O_4$  (216.20). mp 222~224°C. **Source:** DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*], LANG DU *Stellera chamaejasme*, DA HUI QIN *Pimpinella magna*, HU ER CAO YE HUI QIN *Pimpinella saxifraga*, YONG NING DU HUO *Heracleum yungningense*, YU ZHUANG YUN XIANG *Ruta pinnata*. **Ref:** 6, 541, 1521.

**11250 Isobetandin**

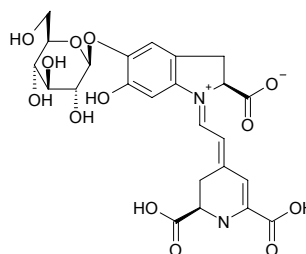
$C_{18}H_{16}N_2O_8$  (388.34). **Source:** DA HUA MA CHI XIAN *Portulaca grandiflora*, MA CHI XIAN *Portulaca oleracea*, MAO MA CHI XIAN *Portulaca pilosa*. **Ref:** 660.

**11251 Isobetandin-6-O-β-sophoroside**

$C_{30}H_{36}N_2O_{18}$  (712.62). **Source:** GUANG YE ZI HUA *Bougainvillea glabra*. **Ref:** 6.

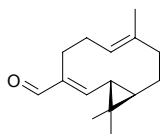
**11252 Isobetandin**

[15121-53-6]  $C_{24}H_{26}N_2O_{13}$  (550.48). **Source:** LV XIAN REN ZHANG *Opuntia vulgaris*, SHI YONG RI ZHONG HUA *Mesembryanthemum edule*, DA HUA MA CHI XIAN *Portulaca grandiflora*, MA CHI XIAN *Portulaca oleracea*, MAO MA CHI XIAN *Portulaca pilosa*. **Ref:** 660, 658.

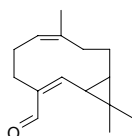


**11253 (+)-Isobicyclogermacrenal**

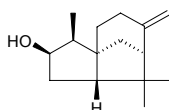
[110268-36-5] C<sub>15</sub>H<sub>22</sub>O (218.34). Source: GUAN MU TONG *Aristolochia manshuriensis*, MIAN MAO MA DOU LING *Aristolochia mollissima* (dried root and stem: yield = 0.0074%dw). Ref: 660, 3026.

**11254 (-)-Isobicyclogermacrenal**

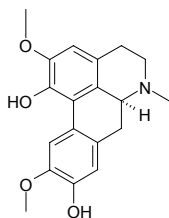
[73256-82-3] C<sub>15</sub>H<sub>22</sub>O (218.34). Source: YING ZHI YE TAI *Lepidozia vitrea*. Ref: 1521.

**11255 β-Isobiotol**

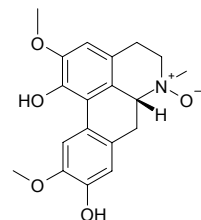
[24048-41-7] C<sub>15</sub>H<sub>24</sub>O (220.36). Crystals, mp 76.5°C, [α]<sub>D</sub><sup>20</sup> = -7.8°. Source: CE BAI ZHI JIE *Thuja orientalis* [Syn. *Platycladus orientalis*; *Biota orientalis*]. Ref: 6, 1521.

**11256 Isoboldine**

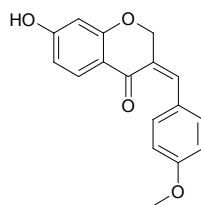
C<sub>19</sub>H<sub>21</sub>NO<sub>4</sub> (327.38). mp 178~180°C (dec), [α]<sub>D</sub><sup>13</sup> = +54° (c = 0.20, EtOH). Pharm: Insect antifeedant. Source: AO XIAN ZI JIN *Corydalis cava*, BO LU DU SHU *Peumus boldus*, CE BAI ZHI JIE *Thuja orientalis* [Syn. *Platycladus orientalis*; *Biota orientalis*], HOU KE GUI *Cryptocarya chinensis* (leaf), WU MAO CHAN GAO SHU *Litsea glutinosa* var. *glabrata*, XIANG TANG SONG CAO *Thalictrum foetidum*. Ref: 6, 658, 660, 4129.

**11257 Isoboldine-β-N-oxide**

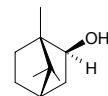
C<sub>19</sub>H<sub>21</sub>NO<sub>5</sub> (343.38). Brown powder, mp 177~179°C, [α]<sub>D</sub> = -90.32° (c = 0.1395, MeOH). Source: HOU KE GUI *Cryptocarya chinensis* (leaf). Ref: 4129.

**11258 Isobonducellin**

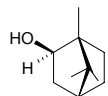
C<sub>17</sub>H<sub>14</sub>O<sub>4</sub> (282.30). Yellow needles, mp 156~158°C. Pharm: Antibacterial (gram-positive bacteria: *Staphylococcus aureus*, 30μg/mL, DIZ = 8mm; *Bacillus subtilis*, 30μg/mL, DIZ = 9mm; *Bacillus sphaericus*, 30μg/mL, DIZ = 8mm; control Penicillin G, 30μg/mL, DIZ = 12, 15, 14mm, respectively; gram-negative bacteria: *Pseudomonas aeruginosa*, 30μg/mL, DIZ = 9mm; *Klebsiella aerogenes*, 100μg/mL, inactive, *Chromobacterium violaceum*, 100μg/mL, inactive, control Penicillin G, 30μg/mL, DIZ = 24, 23, 24mm, respectively); antifungal (*Aspergillus niger*, 100μg/mL DIZ = 7mm; *Candida albicans*, 100μg/mL DIZ = 8mm; *Rhizopus oryzae*, 150μg/mL inactive; control Clotrimazole, 100μg/mL DIZ = 22, 25, 24mm, respectively). Source: JI MEI YUN SHI *Caesalpinia pulcherrima*. Ref: 3407.

**11259 D-Isoborneol**

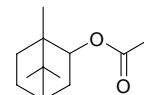
C<sub>10</sub>H<sub>18</sub>O (154.25). Pharm: Analgesic (mouse, hot plate)<sup>[5501]</sup>; increases tolerance to anoxia (mouse)<sup>[5501]</sup>; hypnotic (mouse, extends sleeping time due to pentobarbital)<sup>[5501]</sup>; antibacterial (*Staphylococcus aureus*, β-hemolytic streptococcus, *Streptococcus pneumoniae*, *Streptococcus viridans*, *Escherichia coli*)<sup>[5501]</sup>; anti-Inflammatory (mouse ear edema induced by croton oil)<sup>[5501]</sup>; LD<sub>50</sub> = 2269mg/kg<sup>[5501]</sup>. Source: BING PIAN *Dryobalanops aromatica* (37.52%~38.98%), SHENG JIANG *Zingiber officinale*, HUANG HUA HAO *Artemisia annua*. Ref: 2, 660, 5501.

**11260 L-Isoborneol**

C<sub>10</sub>H<sub>18</sub>O (154.25). Pharm: Analgesic (mouse, hot plate)<sup>[5501]</sup>; increases tolerance to anoxia (mouse)<sup>[5501]</sup>; hypnotic (mouse, extends sleeping time due to pentobarbital)<sup>[5501]</sup>; antibacterial (*Staphylococcus aureus*, β-hemolytic streptococcus, *Streptococcus pneumoniae*, *Streptococcus viridans*, *Escherichia coli*)<sup>[5501]</sup>; anti-Inflammatory (mouse ear edema induced by croton oil)<sup>[5501]</sup>; LD<sub>50</sub> = 2269mg/kg<sup>[5501]</sup>. Source: BING PIAN *Dryobalanops aromatica* (37.52%~38.98%), SHENG JIANG *Zingiber officinale*, HUANG HUA HAO *Artemisia annua*. Ref: 2, 660, 5501.

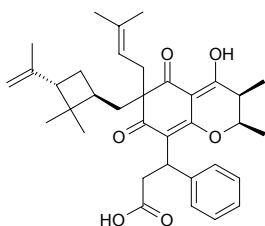
**11261 Isobornyl acetate**

C<sub>12</sub>H<sub>20</sub>O<sub>2</sub> (196.29). Source: BEI AI *Artemisia vulgaris*, HUANG HUA HAO *Artemisia annua*. Ref: 660.

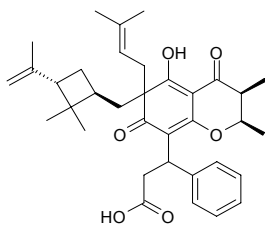


**11262 Isobrasiliensophyllic acid A**

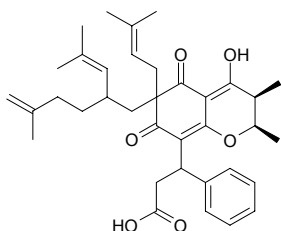
3-[*rel*-(2*S*,3*R*)-4-Hydroxy-6-(3-*isopropenyl*-2,2-dimethylcyclobutyl- $\beta$ -methyl)-2,3-dimethyl-6-(3-methylbut-2-enyl)-5,7-dioxo-3,5,6,7-tetrahydro-2*H*-chromen-8-yl]-3-phenylpropionic acid C<sub>35</sub>H<sub>44</sub>O<sub>6</sub> (560.74). Green gum,  $[\alpha]_D^{20} = -12^\circ$  ( $c = 0.1$ , MeOH). **Pharm:** Antibacterial (*Bacillus cereus*, MIC = 1 $\mu$ g/mL, control Chloramphenicol, MIC = 4 $\mu$ g/mL; *Staphylococcus epidermidis*, MIC = 16 $\mu$ g/mL, Chloramphenicol, MIC = 4 $\mu$ g/mL); cytotoxic inactive (KB, Jurkat-T, and myosarcoma, 20 $\mu$ g/mL). **Source:** BA XI HU TONG *Calophyllum brasiliense* (Bark: yield = 0.0018%dw). **Ref:** 3019.

**11263 Isobrasiliensophyllic acid B**

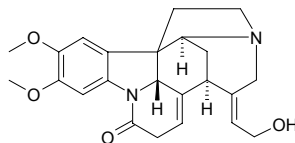
3-[*rel*-(2*S*,3*R*)-5-Hydroxy-6-(3-*isopropenyl*-2,2-dimethylcyclobutyl- $\beta$ -methyl)-2,3-dimethyl-6-(3-methylbut-2-enyl)-4,7-dioxo-3,4,6,7-tetrahydro-2*H*-chromen-8-yl]-3-phenylpropionic acid C<sub>35</sub>H<sub>44</sub>O<sub>6</sub> (560.74). Yellow gum,  $[\alpha]_D^{20} = -49^\circ$  ( $c = 0.1$ , MeOH). **Pharm:** Antibacterial (*Bacillus cereus*, MIC = 4 $\mu$ g/mL, control Chloramphenicol, MIC = 4 $\mu$ g/mL; *Staphylococcus epidermidis*, MIC = 16 $\mu$ g/mL, Chloramphenicol, MIC = 4 $\mu$ g/mL); cytotoxic inactive (KB, Jurkat-T, and myosarcoma, 20 $\mu$ g/mL). **Source:** BA XI HU TONG *Calophyllum brasiliense* (Bark: yield = 0.0005%dw). **Ref:** 3019.

**11264 Isobrasiliensophyllic acid C**

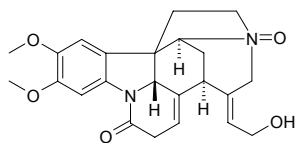
3-[*rel*-(2*S*,3*R*)-4-Hydroxy-2,3-dimethyl-6-(3-methylbut-2-enyl)-6-[5-methyl-2-(2-methylpropenyl)hex-5-enyl]-5,7-dioxo-3,5,6,7-tetrahydro-2*H*-chromen-8-yl]-3-phenylpropionic acid C<sub>36</sub>H<sub>46</sub>O<sub>6</sub> (574.76). Green gum,  $[\alpha]_D^{20} = -56^\circ$  ( $c = 0.1$ , MeOH). **Pharm:** Antibacterial (*Bacillus cereus*, MIC = 16 $\mu$ g/mL, control Chloramphenicol, MIC = 4 $\mu$ g/mL; *Staphylococcus epidermidis*, MIC = 16 $\mu$ g/mL, Chloramphenicol, MIC = 4 $\mu$ g/mL); cytotoxic inactive (KB, Jurkat-T, and myosarcoma, 20 $\mu$ g/mL). **Source:** BA XI HU TONG *Calophyllum brasiliense* (Bark: yield = 0.0005%dw). **Ref:** 3019.

**11265 Isobrucine**

[129724-78-3] C<sub>23</sub>H<sub>26</sub>N<sub>2</sub>O<sub>4</sub> (394.47). Colorless rhombic crystals, mp 197–199°C (acetone),  $[\alpha]_D = -31.1^\circ$  ( $c = 0.3$ , chloroform). **Pharm:** Cytotoxic (*in vitro*, HeLa, IC<sub>50</sub> = 23 $\mu$ mol/L; K562, IC<sub>50</sub> = 23 $\mu$ mol/L; Hep2, IC<sub>50</sub> = 34 $\mu$ mol/L). **Source:** MA QIAN ZI *Strychnos nux-vomica*. **Ref:** 2, 542, 1186, 1187.

**11266 Isobrucine N-oxide**

[130641-43-9] C<sub>23</sub>H<sub>26</sub>N<sub>2</sub>O<sub>5</sub> (410.47). White powder,  $[\alpha]_D = +34.2^\circ$  ( $c = 0.0017$ , methanol). **Pharm:** Cytotoxic (*in vitro*, HeLa, IC<sub>50</sub> = 26 $\mu$ mol/L; K562, IC<sub>50</sub> = 15 $\mu$ mol/L; Hep2, IC<sub>50</sub> = 4.3 $\mu$ mol/L); antioxidant; inhibits damage of myocardial cells caused by free radicals; free radical scavenger (inhibits formation of superoxide anion, X-XOD, IC<sub>50</sub> = 86.5 $\mu$ mol/L, NADH, IC<sub>50</sub> = 8.9 $\mu$ mol/L); xanthinoxidase inhibitor (IC<sub>50</sub> = (13.3 $\pm$ 6.0) $\mu$ mol/L). **Source:** MA QIAN ZI *Strychnos nux-vomica*. **Ref:** 2, 542, 1180, 1186, 1187.

**11267 Isobutanol**

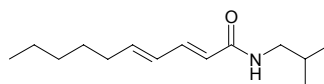
[78-84-2] C<sub>4</sub>H<sub>8</sub>O (72.11). bp 63–64°C/757mmHg. **Source:** NIU BANG GEN *Arctium lappa*. **Ref:** 6.

**11268 Isobutyl alcohol**

2-Methyl-1-propanol; Isobutanol [78-83-1] C<sub>4</sub>H<sub>10</sub>O (74.12). **Source:** SHAN ZHU YU *Cornus officinalis* [Syn. *Macrocarpum officinale*]. **Ref:** 2.

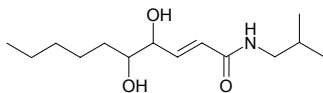
**11269 N-Isobutyldeca-trans-2-trans-4-dienamide**

Pellitorine; Pyretrin [18836-52-7] C<sub>14</sub>H<sub>25</sub>NO (223.36). Needles (pet. ether), mp 69°C, mp 75°C, mp 90–90.5°C. **Pharm:** Antifungal (TLC-based assay, *Cladosporium cucumerinum*, MIQ = 0.1 $\mu$ g, control Moiconazole, MIQ = 1 $\mu$ g; *Candida albicans*, MIQ = 10 $\mu$ g, Moiconazole, MIQ = 0.1 $\mu$ g)<sup>[5385]</sup>; antibacterial (TLC-based assay, *Bacillus subtilis*, MIQ = 10 $\mu$ g; control Chloramphenicol, MIQ = 1 $\mu$ g)<sup>[5385]</sup>; insecticide; phyto-growth inhibitor (100 $\mu$ g/mL, *Amaranthus hypochondriacus*, InRt = (20.3 $\pm$ 0.7)% $\pm$ 0.05; *E. crusgalli*, InRt = (55.6 $\pm$ 2.2)% $\pm$ 0.05)<sup>[5253]</sup>; cytotoxic (*in vitro*, A549, ED<sub>50</sub> = 16.3 $\mu$ g/mL, control Adriamycin, ED<sub>50</sub> = 0.0322 $\mu$ g/mL; MCF7, ED<sub>50</sub> = 9.3 $\mu$ g/mL, Adriamycin, ED<sub>50</sub> = 0.0204 $\mu$ g/mL; HT29, ED<sub>50</sub> = 3.5 $\mu$ g/mL, Adriamycin, ED<sub>50</sub> = 0.0421 $\mu$ g/mL; A498, ED<sub>50</sub> = 3.9 $\mu$ g/mL, Adriamycin, ED<sub>50</sub> = 0.00348 $\mu$ g/mL; PC3, ED<sub>50</sub> = 4.8 $\mu$ g/mL, Adriamycin, ED<sub>50</sub> = 0.241 $\mu$ g/mL; PACA-2, ED<sub>50</sub> = 2.2 $\mu$ g/mL, Adriamycin, ED<sub>50</sub> = 0.0120 $\mu$ g/mL)<sup>[5253]</sup>. **Source:** BI BA *Piper longum*, HAI FENG TENG *Piper kadsura* [Syn. *Piper futokadsura*], HU JIAO *Piper nigrum* (root: yield = 0.00014%dw)<sup>[4753]</sup>, *Fagara xanthoxyloides*, *Stauranthus perforatus* (root). **Ref:** 6, 1521, 2537, 4753, 5253, 5385.

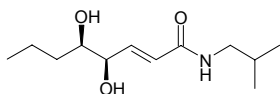


**11270 N-Isobutyl-4,5-dihydroxy-2E-decaenamide**

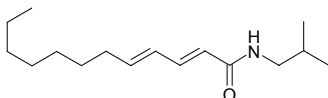
C<sub>14</sub>H<sub>27</sub>NO<sub>3</sub> (257.38). Source: HU JIAO *Piper nigrum* (root: yield = 0.0008%dw). Ref: 4753.

**11271 (±)-threo-N-Isobutyl-4,5-dihydroxy-2E-octaenamide**

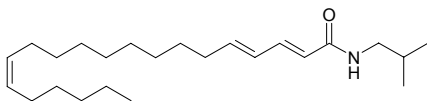
C<sub>12</sub>H<sub>23</sub>NO<sub>3</sub> (229.32). Colorless oil, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = 0° (c = 0.3, CHCl<sub>3</sub>). Source: HU JIAO *Piper nigrum* (root: yield = 0.000043%dw). Ref: 4753.

**11272 N-Isobutyl-2E,4E-dodecadienamide**

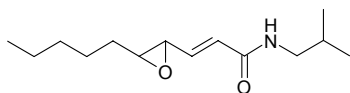
C<sub>16</sub>H<sub>29</sub>NO (251.42). Source: HU JIAO *Piper nigrum* (root: yield = 0.00031%dw). Ref: 4753.

**11273 N-Isobutyl-(2E,4E,14Z)-eicosatrienamide**

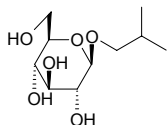
C<sub>24</sub>H<sub>43</sub>NO (361.62). Colorless oil. Pharm: Protective gastric lesions (rat, ethanol-induced, 25mg/kg orl, length = (31.9±9.6)mm, control, length = (118.6±16.2)mm, InRt = 73.1%; indomethacin-induced in rats, dose, 25mg/kg orl, length = (29.0±12.0)mm, control, length = (89.5±9.8)mm, InRt = 67.6%). Source: *Piper chaba* (fruit). Ref: 4935.

**11274 N-Isobutyl-4,5-epoxy-2E-decaenamide**

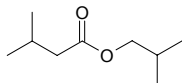
C<sub>14</sub>H<sub>25</sub>NO<sub>2</sub> (239.36). Source: HU JIAO *Piper nigrum* (root: yield = 0.00031%dw). Ref: 4753.

**11275 Isobutyl β-D-glucopyranoside**

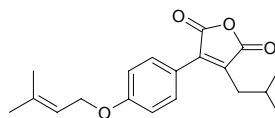
C<sub>10</sub>H<sub>20</sub>O<sub>6</sub> (236.27). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>24</sup> = -19° (c = 0.1, MeOH). Source: BEI SHA SHEN *Glehnia littoralis* (fruit). Ref: 3525.

**11276 Isobutylisovalerate**

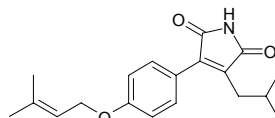
[589-59-3] C<sub>9</sub>H<sub>18</sub>O<sub>2</sub> (158.24). bp 170–172°C/757.5mmHg. Source: BAN BIAN SU *Elsholtzia ciliata*. Ref: 6.

**11277 3-Isobutyl-4-[4-(3-methyl-2-butenyloxy)phenyl]furan-2,5-dione**

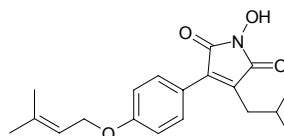
C<sub>19</sub>H<sub>22</sub>O<sub>4</sub> (314.38). Yellow oil. Pharm: Cytotoxic (*in vitro*, LLC cell line, ED<sub>50</sub> > 20μg/mL; control Adriamycin, ED = 0.14μg/mL). Source: *Antrodia camphorata* (fruit: yield = 0.0145%dw). Ref: 3003.

**11278 3-Isobutyl-4-[4-(3-methyl-2-butenyloxy)phenyl]-1H-pyrrole-2,5-dione**

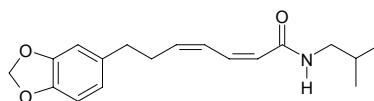
C<sub>19</sub>H<sub>23</sub>NO<sub>3</sub> (313.40). Yellow needles (*n*-hexane–EtOAc), mp 110–111°C. Pharm: Cytotoxic (*in vitro*, LLC cell line, ED<sub>50</sub> = 3.6μg/mL; control Adriamycin, ED = 0.14μg/mL). Source: *Antrodia camphorata* (fruit: yield = 0.0227%dw). Ref: 3003.

**11279 3-Isobutyl-4-[4-(3-methyl-2-butenyloxy)phenyl]-1H-pyrrol-1-ol-2,5-dione**

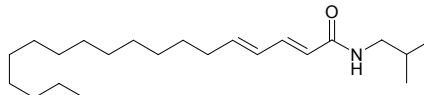
C<sub>19</sub>H<sub>23</sub>NO<sub>4</sub> (329.40). Yellow oil. Pharm: Cytotoxic (*in vitro*, LLC cell line, ED<sub>50</sub> = 7.6μg/mL; control Adriamycin, ED = 0.14μg/mL). Source: *Antrodia camphorata* (fruit: yield = 0.0243%dw). Ref: 3003.

**11280 (3Z,5Z)-N-Isobutyl-8-(3',4'-methylenedioxy-phenyl)-heptadienamide**

C<sub>18</sub>H<sub>23</sub>NO<sub>3</sub> (301.39). Amorphous solid. Pharm: Antifungal (*Cladosporium sphaerospermum*, MIA = 5.0μg, control Nystatin, MIA = 0.5μg). Source: YING MAO HU JIAO *Piper hispidum* (stem). Ref: 5102.

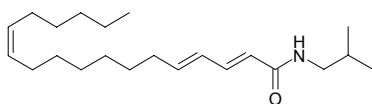
**11281 N-Isobutyl-(2E,4E)-octadecadienamide**

C<sub>22</sub>H<sub>41</sub>NO (335.58). Colorless oil. Pharm: Protective gastric lesions (rat, ethanol-induced, 25mg/kg orl, length = (44.8±13.5)mm, control, length = (118.6±16.2)mm, InRt = 33.2%; indomethacin-induced in rats, dose, 25mg/kg orl, length = (41.1±7.4)mm, control, length = (89.5±9.8)mm, InRt = 54.1%). Source: *Piper chaba* (fruit). Ref: 4935.

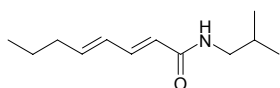


**11282 N-Isobutyl-2E,4E,12Z-octadecatrienamide**

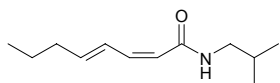
C<sub>22</sub>H<sub>39</sub>NO (333.56). Source: HU JIAO *Piper nigrum* (root: yield = 0.00011%dw). Ref: 4753.

**11283 N-Isobutyl-(2E,4E)-octadienamide**

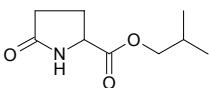
C<sub>12</sub>H<sub>21</sub>NO (195.31). Source: HU JIAO *Piper nigrum* (root: yield = 0.00029%dw). Ref: 4753.

**11284 N-Isobutyl-(2Z,4E)-octa-2,4-dienamide**

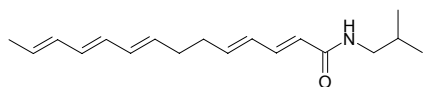
C<sub>12</sub>H<sub>21</sub>NO (195.31). Source: *Fagara xanthoxyloides*. Ref: 5385.

**11285 Isobutyl pyroglutamate**

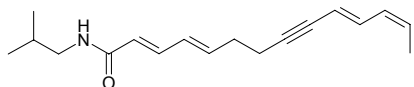
C<sub>9</sub>H<sub>15</sub>NO<sub>3</sub> (185.22). Source: SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. Ref: 2487.

**11286 (2E,4E,8E,10E,12E)-N-Isobutyl-2,4,8,10,12-tetradecapentaenamide**

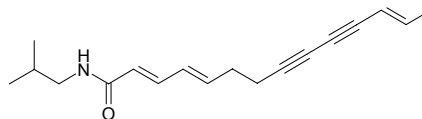
C<sub>18</sub>H<sub>27</sub>NO (273.42). Pharm: Anti-PAF. Source: *Zanthoxylum* sp. Ref: 2176.

**11287 N-Isobutyl-2E,4E,10E,12Z-tetradecatetraen-8-ynamide**

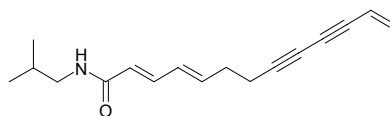
C<sub>18</sub>H<sub>25</sub>NO (271.41). Colorless oil. Source: JU HUA *Chrysanthemum morifolium* [Syn. *Dendranthema morifolium*] (leaf and flower). Ref: 4725.

**11288 N-Isobutyl-2E,4E,12E-tetradecatrien-8,10-diynamide**

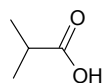
C<sub>18</sub>H<sub>23</sub>NO (269.39). Source: JU HUA *Chrysanthemum morifolium* [Syn. *Dendranthema morifolium*] (leaf and flower). Ref: 4725.

**11289 N-Isobutyl-2E,4E,12Z-tetradecatrien-8,10-diynamide**

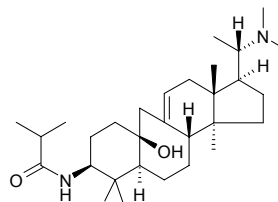
C<sub>18</sub>H<sub>23</sub>NO (269.39). Colorless oil. Source: JU HUA *Chrysanthemum morifolium* [Syn. *Dendranthema morifolium*] (leaf and flower). Ref: 4725.

**11290 Isobutyric acid**

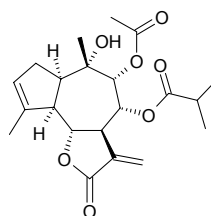
2-Methylpropanoic acid [79-31-2] C<sub>4</sub>H<sub>8</sub>O<sub>2</sub> (88.11). mp -47°C, bp 154.3°C. Source: SANG YE *Morus alba*. Ref: 6.

**11291 N-Isobutyrylbuxahyrcanine**

C<sub>30</sub>H<sub>52</sub>N<sub>2</sub>O<sub>2</sub> (472.76). Colorless amorphous powder, mp 234-235°C, [α]<sub>D</sub><sup>29</sup> = +14° (c = 0.124, CHCl<sub>3</sub>). Pharm: AChE inhibitor (*in vitro*, IC<sub>50</sub> > 1000 μmol/L; control Eserine, IC<sub>50</sub> = 0.041 μmol/L); BChE inhibitor (*in vitro*, IC<sub>50</sub> = 53.7 μmol/L; control Eserine, IC<sub>50</sub> = 0.0857 μmol/L). Source: HE KA NI YA HUANG YANG *Buxus hyrcana* (leaf). Ref: 4694.

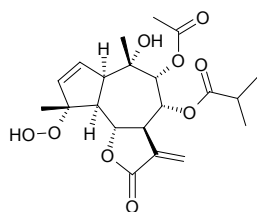
**11292 8-O-Isobutyryl-9a-acetoxycumambrin B**

C<sub>21</sub>H<sub>28</sub>O<sub>7</sub> (392.45). Amorphous solid, [α]<sub>D</sub><sup>25</sup> = +21° (c = 0.16, CHCl<sub>3</sub>). Source: *Anthemis carpatica* (aerial parts). Ref: 3974.

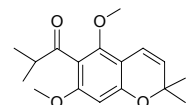


**11293 8-O-Isobutyryl-9-O-acetylanthemolide B**

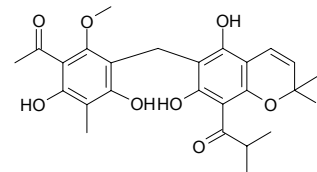
$C_{21}H_{28}O_9$  (424.45). Source: *Anthemis carpatica* (aerial parts). Ref: 3974.

**11294 6-Isobutyryl-5,7-dimethoxy-2,2-dimethylbenzopyran**

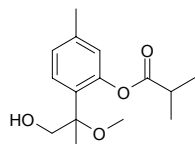
$C_{17}H_{22}O_4$  (290.36). Viscous oil. Source: *Hypericum polyanthemum* (aerial parts). Ref: 5168.

**11295 Isobutyrylmallotochromene**

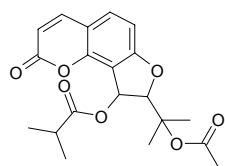
$C_{26}H_{30}O_8$  (470.52). Pharm: Antineoplastic; cytotoxic (KB); treatment of ulcer. Source: YE WU TONG *Mallotus japonicus*. Ref: 658.

**11296 3-O-Isobutyryl-8-methoxy-9-hydroxythymol**

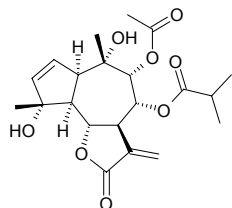
$C_{15}H_{22}O_4$  (266.34).  $[\alpha]_D^{24} = 0^\circ$  ( $c = 1.9$ ,  $CHCl_3$ ). Source: PEI LAN *Eupatorium fortunei* (aerial parts). Ref: 3077.

**11297 3'-Isobutyryloxy-O-acetyl-2',3'-dihydro-oroselol**

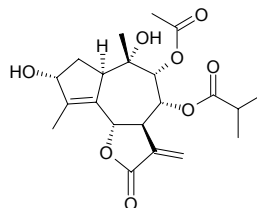
$C_{20}H_{22}O_7$  (374.39). mp 153~154°C. Source: SHE CHUANG ZI *Cnidium monnieri*. Ref: 6.

**11298 8α-Isobutyryloxyanthemolide A**

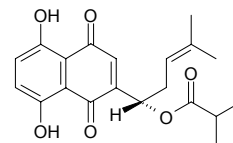
$C_{21}H_{28}O_8$  (408.45). Colorless gum,  $[\alpha]_D^{25} = -13.6^\circ$  ( $c = 0.11$ ,  $CH_2Cl_2$ ). Source: *Anthemis carpatica* (aerial parts). Ref: 3974.

**11299 8α-Isobutyryloxyanthemolide C**

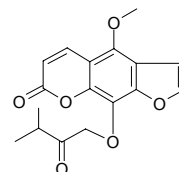
$C_{21}H_{28}O_8$  (408.45). Colorless gum,  $[\alpha]_D^{25} = +51^\circ$  ( $c = 0.14$ , MeOH). Source: *Anthemis carpatica* (aerial parts). Ref: 3974.

**11300 Isobutyryl shikonin**

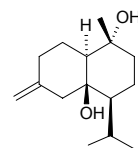
$C_{20}H_{22}O_6$  (358.39). mp 89~90°C. Source: ZI CAO *Lithospermum erythrorhizon*, XIN ZANG JIA ZI CAO *Arnebia euchroma*. Ref: 2, 6, 2193.

**11301 Isobyakangelicol**

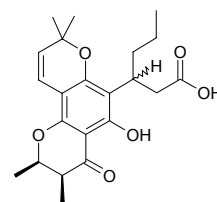
Anhydrobyakangelicin [35214-81-4]  $C_{17}H_{16}O_6$  (316.31). mp 108~109°C. Source: HANG BAI ZHI *Angelica taiwaniana*. Ref: 2, 660.

**11302 Isocalamendiol**

[25330-21-6]  $C_{15}H_{26}O_2$  (238.37). mp 72.5~73.5°C. Source: BAI CHANG *Acorus calamus*. Ref: 6.

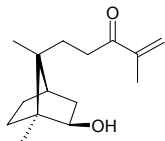
**11303 Isocalolongic acid**

$C_{22}H_{28}O_6$  (388.46).  $[\alpha]_D^{25} = -13.9^\circ$ . Pharm: Antifungal (*Aspergillus fumigatus*,  $MIC_{80} = 2\mu g/mL$ , control Amphotericin B,  $MIC_{80} = 8\mu g/mL$ ). Source: SU GE LAN HU TONG *Calophyllum caledonicum* (seed). Ref: 5489.

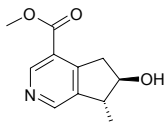


**11304 Isocampheren-11-ene-10-one**

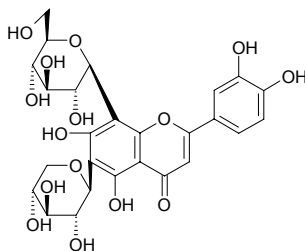
$C_{15}H_{24}O_2$  (236.36). Oil,  $[\alpha]_D = -4.4^\circ$  ( $c = 0.37$ ,  $CHCl_3$ ). Source: DU AI BA JIAO *Illicium tsangii*. Ref: 1866.

**11305 Isocantleyine**

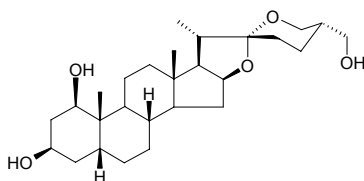
$C_{11}H_{13}NO_3$  (207.23). White feathery crystals, mp 124–125°C. Source: YIN XING CAO *Siphonostegia chinensis*. Ref: 217.

**11306 Isocarlinoside**

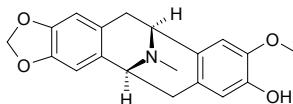
Luteolin 6-*C*- $\alpha$ -*L*-arabinopyranosyl-8-*C*- $\beta$ -*D*-glucopyranoside  $C_{26}H_{28}O_{15}$  (580.50). Source: ZI HUA DI DING *Viola yedoensis* (whole herb). Ref: 4393.

**11307 Isocarneagenin**

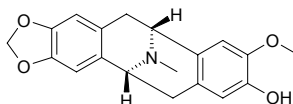
[17634-26-3]  $C_{27}H_{44}O_5$  (448.65). Crystals, mp 242–244°C,  $[\alpha]_D = -63.4^\circ$  ( $c = 1.1$ , MeOH/ $CHCl_3$ ). Source: JI XIANG CAO *Reineckea carnea*. Ref: 6.

**11308 (+)-Isocaryachine**

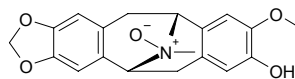
$C_{19}H_{19}NO_4$  (325.37). Source: HOU KE GUI *Cryptocarya chinensis* (leaf). Ref: 4129.

**11309 (-)-Isocaryachine**

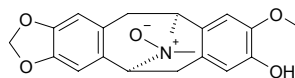
$C_{19}H_{19}NO_4$  (325.37). Source: HOU KE GUI *Cryptocarya chinensis* (leaf). Ref: 4129.

**11310 (+)-Isocaryachine-N-oxide**

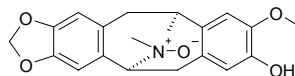
$C_{19}H_{19}NO_5$  (341.37). Colorless needles (acetone), mp >280°C,  $[\alpha]_D = +72.60^\circ$  ( $c = 0.073$ , MeOH). Source: HOU KE GUI *Cryptocarya chinensis* (stem cortex). Ref: 4160.

**11311 (-)-Isocaryachine-N-oxide**

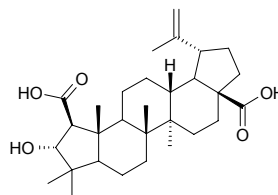
$C_{19}H_{19}NO_5$  (341.37). Colorless needles (acetone), mp >280°C,  $[\alpha]_D = -245.08^\circ$  ( $c = 0.1076$ , MeOH). Source: HOU KE GUI *Cryptocarya chinensis* (leaf). Ref: 4129.

**11312 (-)-Isocaryachine-N-oxide B**

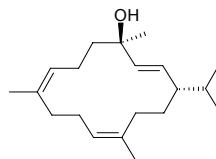
$C_{19}H_{19}NO_5$  (341.37). Colorless needles (acetone), mp >280°C,  $[\alpha]_D = -26.2^\circ$  ( $c = 0.2175$ , MeOH). Source: HOU KE GUI *Cryptocarya chinensis* (stem cortex). Ref: 4160.

**11313 Isoceanothic acid**

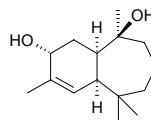
$C_{30}H_{46}O_5$  (486.70). Source: *Zizyphus xylopyrus*. Ref: 660.

**11314 Isocembrol**

[25269-17-4]  $C_{20}H_{34}O$  (290.49). Oil,  $[\alpha]_D = +74.4^\circ$  ( $c = 0.3$ ,  $CHCl_3$ ). Source: HAI SONG ZI *Pinus koraiensis*, XI BO LI YA HONG SONG *Pinus sibirica*, XI BO LI YA YUN SHAN *Picea obovata*. Ref: 6, 1521.

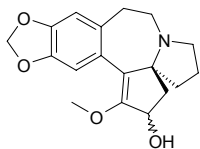
**11315 Isocentdarol**

$C_{15}H_{26}O_2$  (238.37). Source: XUE SONG *Cedrus deodara*. Ref: 660.

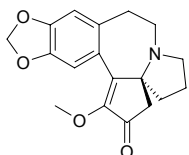


**11316 Isocephalotaxine**

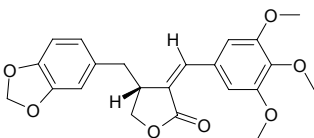
$C_{18}H_{21}NO_4$  (315.37). Amorphous solid,  $[\alpha]_D^{21} = -47^\circ$  ( $c = 0.5$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (*in vitro*, nasopharynx KB cells,  $IC_{50} = 15\mu g/mL$ , weak activity). **Source:** SAN JIAN SHAN *Cephalotaxus fortunei* (drupe: yield = 0.00010%). **Ref:** 4675.

**11317 Isocephalotaxinone**

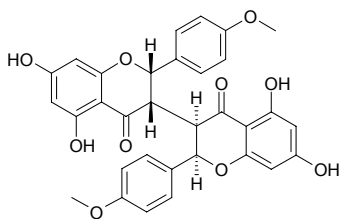
[50908-91-3]  $C_{18}H_{19}NO_4$  (313.35). **Source:** SAN JIAN SHAN *Cephalotaxus fortunei*. **Ref:** 2, 1521.

**11318 Isochaihulactone**

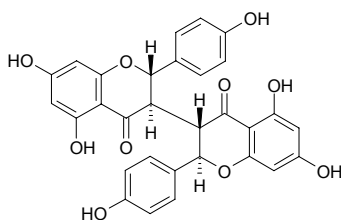
$C_{22}H_{22}O_7$  (398.42). White needle crystals, mp 137~138°C,  $[\alpha]_D^{25} = -29.0^\circ$  ( $c = 0.5$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (hmn peripheral blood T cells, dose = 2.0 $\mu g/mL$ , T cell survival rate = 73%); immunosuppressant (inhibits IL-2 secretion costimulated by CD28, dose = 2.0 $\mu g/mL$ , InRt = 54%). **Source:** HONG CHAI HU *Bupleurum scorzonrifolium* (root). **Ref:** 3498.

**11319 Isochamaejasmenin B**

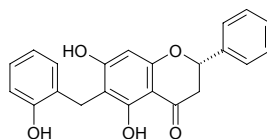
$C_{32}H_{26}O_{10}$  (570.56). Brown amorphous powder,  $[\alpha]_D^{20} = +307^\circ$  ( $c = 0.01$ , MeOH). **Pharm:** Antimitotic and antifungal (*Pyricularia oryzae*, 50 $\mu g/mL$ , middle inhibition, 100 $\mu g/mL$ , complete inhibition). **Source:** LANG DU *Stellera chamaejasme*. **Ref:** 4476.

**11320 Isochamaejasmin**

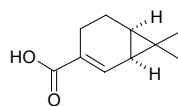
[93859-63-3]  $C_{30}H_{22}O_{10}$  (542.50). Amorphous powder,  $[\alpha]_D = 0^\circ$  ( $c = 0.4$ , methanol). **Pharm:** Inhibits promotor of cancer; prevents action of chemical carcinogens. **Source:** LANG DU *Stellera chamaejasme*. **Ref:** 658, 953, 980, 1103.

**11321 Isochamanetin**

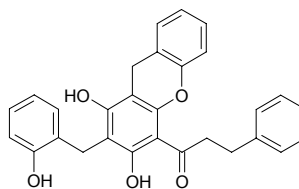
[58777-17-6]  $C_{22}H_{18}O_5$  (362.39). mp 215~217°C. **Pharm:** Antibacterial (*Staphylococcus aureus*, MIC = 1.6 $\mu g/mL$ ; *Mycobacterium smegmatis*, MIC = 3.1 $\mu g/mL$ ; *Bacillus subtilis*, MIC = 6.3 $\mu g/mL$ ). **Source:** AN ZI YU PAN *Uvaria chamae*. **Ref:** 5, 658.

**11322 (-)-Isochaminic acid**

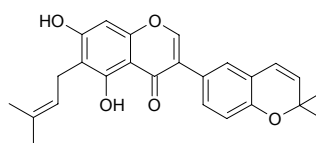
Isochamic acid  $C_{10}H_{14}O_2$  (166.22). mp 60°C  $[\alpha]_D^{25} = -10.2^\circ$  ( $c = 1.3$ , ether). **Pharm:** Antifungal (TLC bioautography method at very low concentration). **Source:** SI LI LAN KA TU MI SHU *Bridelia retusa*. **Ref:** 2021.

**11323 Isochamuaritin**

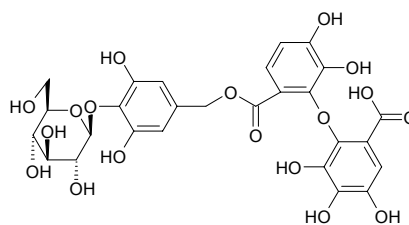
$C_{29}H_{24}O_5$  (452.51). White crystals, mp 157~159°C ( $CHCl_3/Me_2CO$ ). **Pharm:** Cytotoxic (hmn promyelocytic leukemia HL-60 cells,  $IC_{50} = 8.2\mu mol/L$ ). **Source:** JIAN ZI YU PAN *Uvaria acuminata* (root). **Ref:** 4261.

**11324 Isochandalone**

$C_{25}H_{24}O_5$  (404.47). **Pharm:** Antioxidant (DPPH scavenger, ScRt = 10.53%, control BHT, ScRt = 71.5%); antibacterial (*Staphylococcus aureus* ATCC 25923, MIC > 256 $\mu g/mL$ , Vancomycin, MIC = 0.5 $\mu g/mL$ ; MRSA SK1, MIC > 256 $\mu g/mL$ , Vancomycin, MIC = 1.0 $\mu g/mL$ ). **Source:** PAN YUAN YU TENG *Derris scandens* (stem). **Ref:** 3810.

**11325 Isochesnatin**

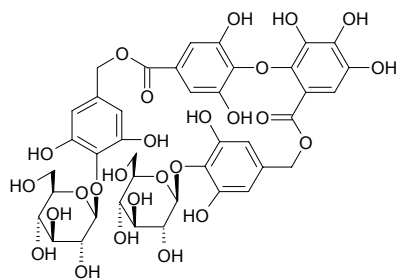
$C_{27}H_{26}O_{18}$  (638.50). **Source:** LI YE *Pyrus bretschneideri*. **Ref:** 660.





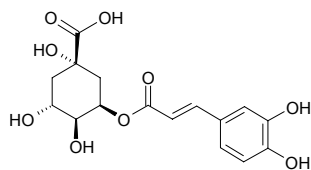
**11326 Isochestanin**

$C_{40}H_{42}O_{26}$  (938.77). Source: LI YE *Pyrus bretschneideri*. Ref: 660.

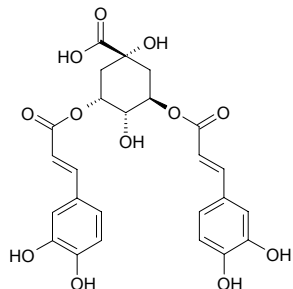
**11327 Isochlorogenic acid**

[534-61-2]  $C_{16}H_{18}O_9$  (354.31). Pharm: Antibacterial; antioxidant (mus hepatic homogenate, inhibits *t*-BuOOH induced luminescence  $IC_{50} = 30\mu\text{mol/L}$ ).

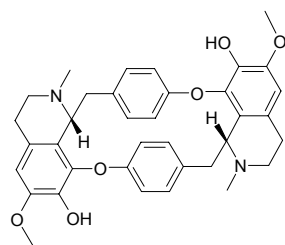
Source: JIN YIN HUA *Lonicera japonica*, SHI CHE JU *Centaurea cyanus*, CAI JI *Cynara scolymus*, YAO SHUI SU *Betonica officinalis*. Ref: 900.

**11328 Isochlorogenic acid A**

3,5-Di-*O*-caffeoylquinic acid  $C_{25}H_{24}O_{12}$  (516.46). Source: JIN YIN HUA *Lonicera japonica* (flower bud: mean content = 2.50%)<sup>[5508]</sup>, XI ZHAN MAO REN DONG *Lonicera similis* (flower bud: mean content = 4.50%)<sup>[5508]</sup>, *Coffea* sp. Ref: 660, 5508.

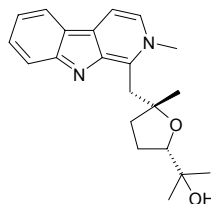
**11329 Isochondrodendrin**

$C_{36}H_{38}N_2O_6$  (594.71). mp 316°C (dec). Pharm: Muscle relaxant. Source: WA SHI DU HUO *Heracleum wallichii*, RU LAN *Stephania hernandifolia*, XI SHENG TENG *Cissampelos pareira*, YIN BU HUAN *Cyclea barbata*. Ref: 6, 658.

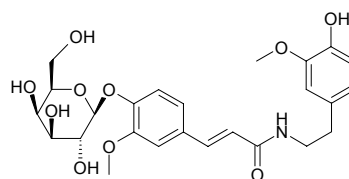
**11330 Isochrysotricine**

$C_{21}H_{26}N_2O_2$  (338.45). Yellow amorphous solids,  $[\alpha]_D = -110^\circ$  ( $c = 0.50$ , MeOH).

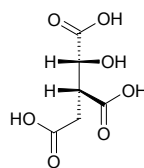
Source: XIAO TOU LIANG HOU CHA *Hedyotis capitellata*. Ref: 2424.

**11331 Isocimicifugamide**

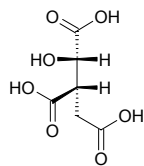
*N*-(3'-Methoxy-4'-hydroxyphenethyl)-4-*O*-β-*D*-galactopyranosyl-isoferulamid e  $C_{25}H_{31}NO_{10}$  (505.53). White amorphous powder, mp 97~100°C,  $[\alpha]_D^{20} = -46.2^\circ$  ( $c = 0.13$ , methanol). Source: XING AN SHENG MA *Cimicifuga dahurica*. Ref: 294.

**11332 Isocitric acid**

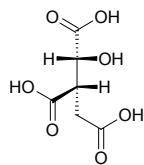
$C_6H_8O_7$  (192.13). Source: REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. Ref: 2.

**11333 Isocitric acid b**

$C_6H_8O_7$  (192.13). Source: REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. Ref: 2.

**11334 Isocitric acid c**

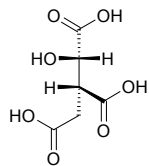
$C_6H_8O_7$  (192.13). Source: REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. Ref: 2.



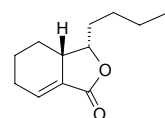
**11335 Isocitric acid d**

$C_6H_8O_7$  (192.13). Source: REN SHEN *Panax ginseng* [Syn. *Panax schinseng*].

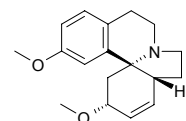
Ref: 2.

**11336 Isocnidilide**

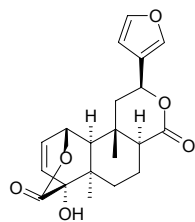
$C_{12}H_{18}O_2$  (194.28). Source: DANG GUI *Angelica sinensis*. Ref: 6.

**11337 Isococculidine**

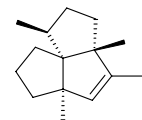
[60229-91-6]  $C_{18}H_{23}NO_2$  (285.39). mp 95–96°C (benzene–hexane),  $[\alpha]_D = +124^\circ$  ( $c = 1.2$ , methanol). Pharm: Neuromuscular blocker (rat, ia, 250 $\mu$ g); LD<sub>50</sub> (mus, ip) = 50mg/kg. Source: HENG ZHOU WU YAO *Cocculus laurifolius*. Ref: 661.

**11338 Isocolumbin**

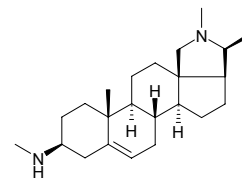
$C_{20}H_{22}O_6$  (358.39). Source: QING NIU DAN *Tinospora sagittata*. Ref: 660.

**11339 Isocomene**

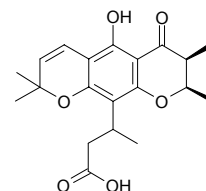
$C_{15}H_{24}$  (204.36). Pharm: Anti-Inflammatory (anti-oedema, control oedema = (7.8 $\pm$ 0.3)mg, 100 $\mu$ g/cm<sup>2</sup> mixture with silphinene and modhephene, oedema = (4.9 $\pm$ 0.4)mg,  $p < 0.05$ , reduction = 37%, Indomethacin oedema = (3.4 $\pm$ 0.3)mg,  $p < 0.05$ , reduction = 56%). Source: GAO SHAN HUO RONG CAO *Leontopodium alpinum* (root). Ref: 4985.

**11340 Isoconessimine**

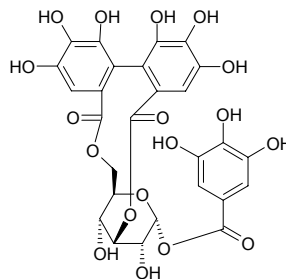
[468-36-0]  $C_{23}H_{38}N_2$  (342.57). mp 92°C. Source: ZHI XIE MU PI *Holarhena antidysenterica*, TUI RE ZHI XIE MU *Holarhena febrifuga*, YAN MU *Wrightia tomentosa*. Ref: 6, 1521.

**11341 Isocordatooblongic acid**

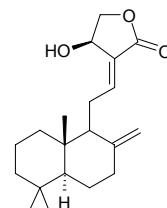
$C_{20}H_{24}O_6$  (360.41). Source: CHANG YUAN XIN XING HU TONG *Calophyllum cordato-oblongum*. Ref: 2280.

**11342 Isocorilagin**

$C_{27}H_{12}O_{18}$  (634.47).  $[\alpha]_D^{20} = -53.6^\circ$  ( $c = 0.11$ , MeOH). Source: SHEN YE TIAN ZHU KUI *Pelargonium reniforme* (aerial parts). Ref: 3975.

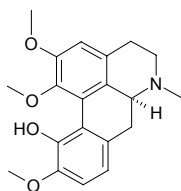
**11343 Isocoronarin D**

$C_{20}H_{30}O_3$  (318.46). Colorless lamellar crystals, mp 187–188°C. Source: YUAN BAN JIANG HUA *Hedychium forrestii* (root). Ref: 4886.

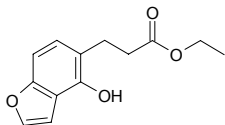


**11344 Isocorydine**

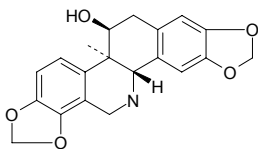
(+)-Isocorydine [475-67-2]  $C_{20}H_{23}NO_4$  (341.41). mp 185~186°C. **Pharm:** Adrenergic antagonist; antiarrhythmic (animal model); increases coronary flow and cerebral blood flow; cytotoxic inactive (yeast assay: RS321NYCp50(gal), RS321NpRAD52(gal), RS321NpRAD52(glu))<sup>[5457]</sup>; LD<sub>50</sub> (rat, ip) = 10.9mg/kg. **Source:** AO XIAN ZI JIN *Corydalis cava*, BAI XIAN SHU *Stephania brachyandra*, CHENG QIE ZI *Litsea cubeba*, DING KE LA QIAN JIN TENG *Stephania dinklagei* (stem), JIAN YE SHI DA GONG LAO *Mahonia aquifolium*, KUAI JING ZI JIN *Corydalis tuberosa*, LI CHUN HUA *Papaver commutatum* [Syn. *Papaver rhoeas*], NAN TIAN ZHU ZI *Nandina domestica*, SHEN HUANG ZI JIN *Corydalis lutea*, TAI WAN TANG SONG CAO *Thalictrum urbainii*, XIANG YING ZHAO *Artabotrys suaveolens*, YAN HU SUO *Corydalis yanhusuo* [Syn. *Corydalis turtschaninovii* f. *yanhusuo*], YOU GOU YING ZHAO *Artabotrys uncinatus* (root)<sup>[3083]</sup>. **Ref:** 6, 658, 1521, 3083, 5457.

**11345 Isocorylifonol**

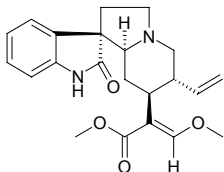
$C_{13}H_{14}O_4$  (234.25). **Source:** BU GU ZHI *Psoralea corylifolia*. **Ref:** 660.

**11346 Isocorynoline**

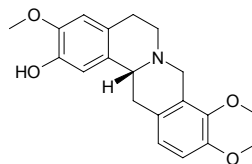
[51151-82-7]  $C_{20}H_{19}NO_5$  (353.38). mp 234~235°C. **Source:** YUN QIAN HU *Peucedanum rubricaulae*, ZI HUA YU DENG CAO *Corydalis incisa*. **Ref:** 6, 436, 1521.

**11347 Isocorynoxine**

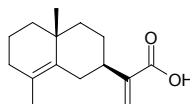
[51014-29-0]  $C_{22}H_{26}N_2O_4$  (382.46). **Source:** CHANG HUA GOU TENG *Uncaria longiflora*, GOU TENG *Uncaria rhynchophylla* [Syn. *Nauclea rhynchophylla*], HUA GOU TENG *Uncaria sinensis*, MIAN MAO GOU TENG *Uncaria lanosa*, PO LUO ZHOU GOU TENG *Uncaria borneensis*, XIA GOU TENG *Uncaria attenuata*. **Ref:** 2, 1521, 5341.

**11348 Isocorypalmine**

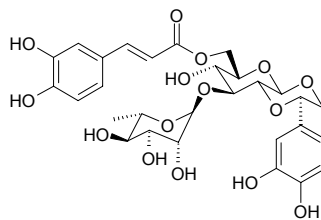
(-)-Tetrahydrocolumbamine; Casealutine [53447-14-6]  $C_{20}H_{23}NO_4$  (341.41). mp (+) 239~241°C, (-) 241~242°C, (±) 221~222°C; mp 241~242°C,  $[\alpha]_D^{20} = -302.0$  ( $c = 0.1$ ,  $CHCl_3$ ). **Pharm:** Antibacterial (oral pathogens: *Streptococcus mutans*, MIC > 125µg/mL, control Chlorhexidine gluconate, MIC = 1.25µg/mL; *Fusobacterium nucleatum*, MIC > 125µg/mL, Chlorhexidine gluconate, MIC = 2.5µg/mL)<sup>[5418]</sup>. **Source:** AO XIAN ZI JIN *Corydalis cava*, BAI MAO GEN<sup>(4)</sup> *Hydrastis canadensis* (root), YA PIAN *Papaver somniferum*, YAN HU SUO *Corydalis yanhusuo* [Syn. *Corydalis turtschaninovii* f. *yanhusuo*] (rhizome: mean content of 7 origins = 0.067%<sup>[5508]</sup>). **Ref:** 2, 6, 660, 1521, 5418, 5508.

**11349 Isocostic acid**

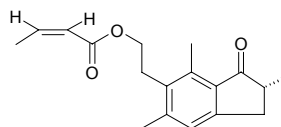
$C_{15}H_{22}O_2$  (234.34). **Source:** LIU LENG JU *Laggera alata* (aerial parts: yield = 0.0026%dw). **Ref:** 4709.

**11350 Isocrenatoside**

$C_{29}H_{34}O_{15}$  (622.59). **Pharm:** Antiviral inactive (Vero cell lines infected with HSV-2 strain 333, 250µg/mL); ACE inhibitor (1.0mg/mL, InRt = 99.3%; 0.1mg/mL, InRt = 71.4%; 0.01mg/mL, InRt = 35.2%; control Captopril, 0.01mg/mL, InRt = 97.7%). **Source:** NAN CHUAN GUAN CHUN HUA *Microtoena prainiana* (stem: yield = 0.00014%dw). **Ref:** 4752.

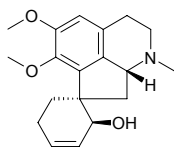
**11351 Isocrotonoylpterosin B**

$C_{18}H_{22}O_3$  (286.37). Oil,  $[\alpha]_D = -3.5^\circ$  ( $CHCl_3$ ). **Source:** JUE *Pteridium aquilinum* var. *latiusculum*. **Ref:** 6, 1521.

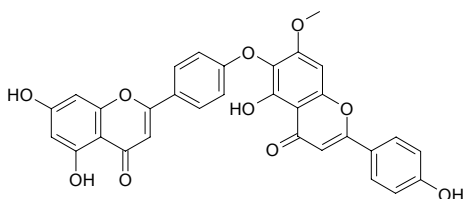


**11352 Isocryprochine**

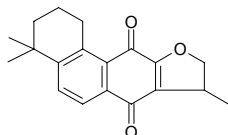
$C_{19}H_{25}NO_3$  (315.42). Colorless needles (acetone), mp 186–187°C,  $[\alpha]_D = -22.2^\circ$  ( $c = 0.0336$ , MeOH). Source: HOU KE GUI *Cryptocarya chinensis* (wood). Ref: 3092.

**11353 Isocryptomerin**

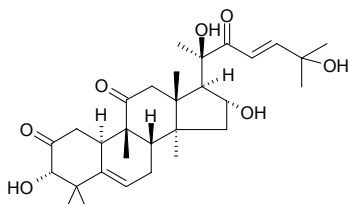
7"-Monomethylhinoliflavone [20931-58-2]  $C_{31}H_{20}O_{10}$  (552.50). Yellowish rhombic crystals (methanol–pyridine), mp 308–310°C (dec). Pharm: Cytotoxic (*in vitro*, BC1 ED<sub>50</sub> = 1.5 μg/mL, HT1080 ED<sub>50</sub> = 0.6 μg/mL, Lu1 ED<sub>50</sub> = 0.9 μg/mL, Col2 ED<sub>50</sub> = 1.8 μg/mL, KB ED<sub>50</sub> = 1.6 μg/mL, KB-V+ ED<sub>50</sub> = 1.5 μg/mL, KB-V- ED<sub>50</sub> = 2.1 μg/mL, LNCaP ED<sub>50</sub> = 2.1 μg/mL, U373 ED<sub>50</sub> = 3.5 μg/mL, and ZR-75-1 ED<sub>50</sub> = 0.58 μg/mL). Source: JUAN BAI *Selaginella tamariscina*, RI BEN BIAN BAI *Chamaecyparis obtusa*, RI BEN HUA BAI *Chamaecyparis pisifera*. Ref: 6, 900, 1521.

**11354 Isocryptotanshinone**

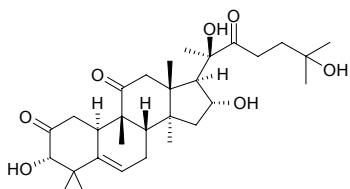
[22550-15-8]  $C_{19}H_{20}O_3$  (296.37). mp 121°C. Source: DAN SHEN *Salvia miltiorrhiza*. Ref: 2, 6.

**11355 Isocurbitacin D**

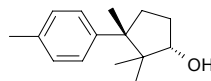
[68422-20-8]  $C_{30}H_{44}O_7$  (516.68). mp 188–191 (ether),  $[\alpha]_D = +37^\circ$  ( $c = 0.8$ , chloroform). Pharm: Cytotoxic (KB, ED<sub>50</sub> = 0.024 μg/mL). Source: XIN XI LAN MA *Phormium tenax*. Ref: 661.

**11356 Isocurbitacin R**

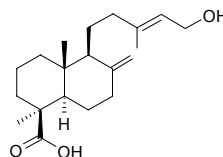
$C_{30}H_{48}O_7$  (518.70). White prisms (methanol), mp 187–190°C. Source: *Dendrosicyos socotrana* (stem). Ref: 3855.

**11357 α-Isocuparenenol**

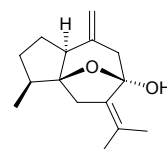
[21730-87-0]  $C_{15}H_{22}O$  (218.34). mp 78.5°C. Source: CE BAI ZHI JIE *Thuja orientalis* [Syn. *Platycladus orientalis*; *Biota orientalis*]. Ref: 6.

**11358 Isocupressic acid**

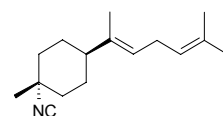
$C_{20}H_{32}O_3$  (320.48). Colorless oil,  $[\alpha]_D^{25} = +43^\circ$  ( $c = 0.27$ ,  $CHCl_3$ ),  $[\alpha]_D^{25} = +42^\circ$  ( $c = 2.5$ ,  $CHCl_3$ );  $[\alpha]_D^{25} = +51.0^\circ$  ( $c = 0.90$ ,  $CHCl_3$ );  $[\alpha]_D^{25} = +52.9^\circ$ . Pharm: Antimalarial (*in vitro*, *Plasmodium falciparum* strain 3D7, IC<sub>50</sub> = (33.5±1.7) μg/mL = (104.5±5.3) μmol/L)<sup>[3022]</sup>; cytotoxic (EBV-EA inhibitor TPA-induced, mol ratio/TPA = 1000, InRt = 96.8%)<sup>[5352]</sup>. Source: CE BAI YE *Thuja orientalis* [Syn. *Platycladus orientalis*; *Biota orientalis*], RI BEN XIANG BAI JING PI *Thuja standishii*. Ref: 3022, 5352.

**11359 Isocurcumenol**

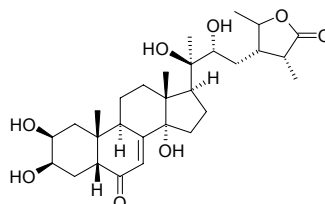
[24063-71-6]  $C_{15}H_{22}O_2$  (234.34). mp 139–141°C. Pharm: NO production inhibitor (mus peritoneal macrophages, induced by LPS, 100 μmol/L, InRt = (65.8±2.8)%, control *L*-NMMA, 100 μmol/L, InRt = (79.2±0.9)%,  $p < 0.01$ )<sup>[4150]</sup>. Source: PING E SHU *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*]. Ref: 6, 4150.

**11360 (E)-3-Isocyanobisabolane-7,10-diene**

$C_{16}H_{25}N$  (231.38). Colorless oil,  $[\alpha]_D^{25} = 0.0^\circ$  ( $c = 0.75$ ,  $CHCl_3$ ). Source: Sponge *Axinyssa* sp. Ref: 4231.

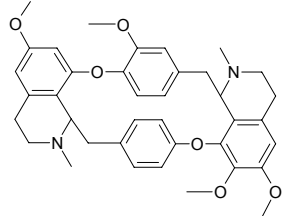
**11361 Isocyasterone**

[54082-42-7]  $C_{29}H_{44}O_8$  (520.67). Source: MA NIU XI *Cyathula capitata*, TAI WAN JIN GU CAO *Ajuga taiwanensis* (whole herb). Ref: 6, 660, 4483.

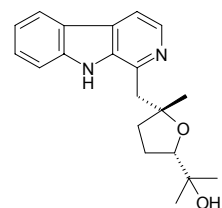


**11362 Isocycleanine**

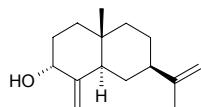
$C_{38}H_{42}N_2O_6$  (622.77). Colorless powder,  $[\alpha]_D^{25} = 0^\circ$  ( $c = 0.10$ ,  $CHCl_3$ ). Source: SI CHUAN LUN HUAN TENG *Cyclea sutchuenensis*. Ref: 274.

**11363 Isocyclocapitelline**

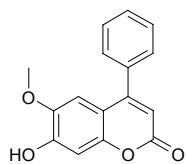
$C_{20}H_{24}N_2O_2$  (324.43). Yellow prisms, mp 199–200°C (acetone),  $[\alpha]_D = -75^\circ$  ( $c = 0.50$ ,  $CHCl_3$ ). Source: XIAO TOU LIANG HOU CHA *Hedyotis capitellata*. Ref: 2424.

**11364 Isocyperol**

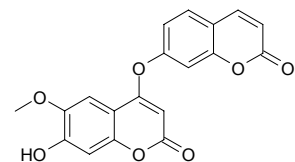
[20085-00-1]  $C_{15}H_{24}O$  (220.36). Pharm: NO production Inhibitor (*in vitro*, LPS-activated mouse peritoneal macrophages,  $IC_{50} = 21 \mu\text{mol/L}$ ; control *L*-NMMA,  $IC_{50} = 28 \mu\text{mol/L}$ )<sup>[4655]</sup>;  $\beta$ -hexosaminidase release inhibitor (RBL-2H3 Cells,  $100 \mu\text{mol/L}$ ,  $\text{InRt} = -28.9\%$ ; control Curcumin,  $\text{InRt} = 62.6\%$ )<sup>[4655]</sup>. Source: XIANG FU *Cyperus rotundus*, YI ZHI REN *Alpinia oxyphylla* (fruit: yield = 0.0020%dw)<sup>[4655]</sup>. Ref: 6, 1521, 4655.

**11365 Isodalbergin**

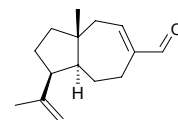
[605-09-4]  $C_{16}H_{12}O_4$  (268.27). Source: JIANG ZHEN XIANG *Dalbergia odorifera*. Ref: 6.

**11366 Isodaphnoretin**

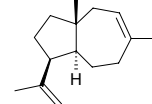
$C_{19}H_{12}O_7$  (352.30). Yellowish crystals, mp 246–248°C. Source: YUAN HUA GEN *Daphne genkwa*. Ref: 4855.

**11367 Isodaucenal**

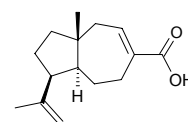
$C_{15}H_{22}O$  (218.34). Source: MEI GUI HUA *Rosa rugosa*. Ref: 660.

**11368 Isodaucene**

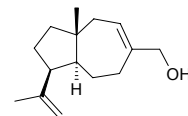
$C_{15}H_{24}$  (204.36). Source: MEI GUI HUA *Rosa rugosa*. Ref: 660.

**11369 Isodaucenoic acid**

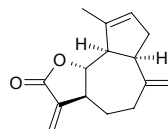
$C_{15}H_{22}O_2$  (234.34). Source: MEI GUI HUA *Rosa rugosa*. Ref: 660.

**11370 Isodaucenol**

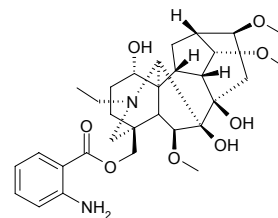
$C_{15}H_{24}O$  (220.36). Source: MEI GUI HUA *Rosa rugosa*. Ref: 660.

**11371 Isodehydrocostus lactone**

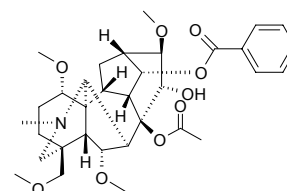
[68151-26-8]  $C_{15}H_{18}O_2$  (230.31). Source: MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*]. Ref: 2.

**11372 Isodelectine**

[133034-09-0]  $C_{31}H_{44}N_2O_8$  (572.70). White amorphous powder. Source: E MEI CUI QUE HUA *Delphinium omeiense*. Ref: 2190, 1521.

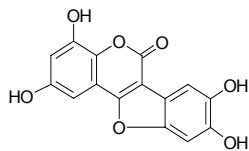
**11373 Isodelphinine**

$C_{33}H_{45}NO_9$  (599.73). Source: FU ZI *Aconitum carmichaeli*, WU TOU *Aconitum carmichaeli*. Ref: 660.

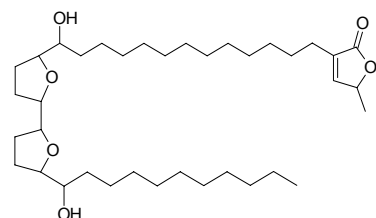


**11374 Isodemethylwedelolactone**

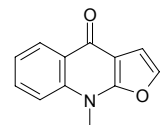
$C_{15}H_8O_7$  (300.23). Light gray amorphous powder, mp > 360°C (dec). Source: MO HAN LIAN *Eclipta prostrata* [Syn. *Eclipta alba*]. Ref: 865.

**11375 Isodesacetylvaricin**

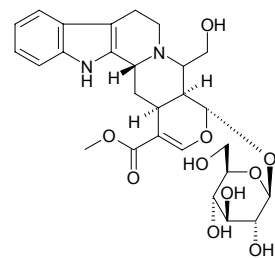
4-Deoxyasimicin [136033-39-1]  $C_{37}H_{66}O_6$  (606.93). Lardaceous solid, mp > 30°C. Pharm: Cytotoxic (BST LD<sub>50</sub> = 0.201 μg/mL, A549 ED<sub>50</sub> = 0.000183 μg/mL, HT29 ED<sub>50</sub> < 0.0001 μg/mL). Source: DA HUA ZI YU PAN *Uvaria grandiflora*, NA ER ZI YU PAN *Uvaria narum*. Ref: 1027, 1082, 1171, 1202, 1521.

**11376 Isodictamine**

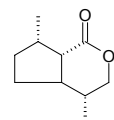
[484-74-2]  $C_{12}H_9NO_2$  (199.21). Pharm: Phototoxic (yeast and bacteria). Source: BAI SE BAI XIAN *Dictamnus albus*. Ref: 658, 1521.

**11377 3β-Isodihydrocadambine**

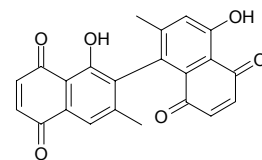
[62014-69-1]  $C_{27}H_{34}N_2O_{10}$  (546.58). Pharm: Antihypertensive<sup>[5341]</sup>. Source: GOU TENG *Uncaria rhynchophylla* [Syn. *Nauclea rhynchophylla*], HUA GOU TENG *Uncaria sinensis*. Ref: 2, 5341.

**11378 Isodihydroepinepetalactone**

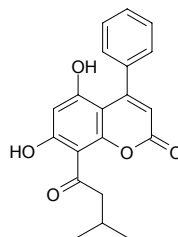
[17672-96-7]  $C_{10}H_{16}O_2$  (168.24). Source: JIA JING JIE *Nepeta cataria*, MU TIAN LIAO *Actinidia polygama*. Ref: 6, 660, 1521.

**11379 Isodiospyrin**

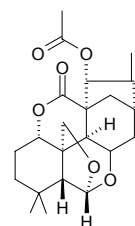
[20175-84-2]  $C_{22}H_{14}O_6$  (374.35). mp 226–228°C. Pharm: Antifungal; cytotoxic; molluscicide (kills shellfish). Source: JUN QIAN ZI *Diospyros lotus*. Ref: 6, 658.

**11380 Isodispar B**

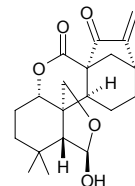
5,7-Dihydroxy-8-(2-methyl-1-oxobutyl)-4-phenyl-2H-[1]benzopyran-2-one  $C_{20}H_{18}O_5$  (338.36). Pharm: Cytotoxic (KB, EC<sub>50</sub> = 8 μg/mL). Source: BU DENG HONG HOU KE *Calophyllum dispar* (fruit and stem cortex). Ref: 5196.

**11381 Isooacetal**

$C_{22}H_{28}O_6$  (388.46). mp > 300°C,  $[\alpha]_D^{17} = -134^\circ$  ( $c = 1.0$ ,  $CHCl_3$ ). Source: MAO YE XIANG CHA CAI *Isodon japonica* [Syn. *Rabdosia japonica*]. Ref: 4067.

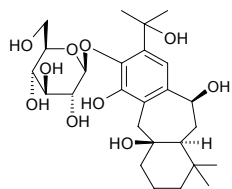
**11382 Isodocarpin**

[10391-08-9]  $C_{20}H_{26}O_5$  (346.43). mp 270–273°C,  $[\alpha]_D^{17} = -172^\circ$  ( $c = 1.0$ ,  $CHCl_3$ ). Source: HEI HUA YAN MING CAO *Isodon trichocarpus*, MAO YE XIANG CHA CAI *Isodon japonica* [Syn. *Rabdosia japonica*]. Ref: 1521, 4067.

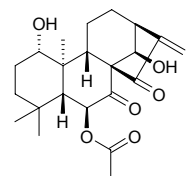


**11383 Isodoforrestin**

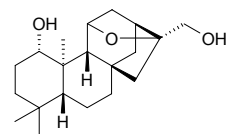
Abieferrestin C<sub>26</sub>H<sub>40</sub>O<sub>10</sub> (512.60). Amorphous substance,  $[\alpha]_D^{24.7} = -25.05^\circ$  ( $c = 0.29$ , C<sub>5</sub>H<sub>5</sub>N). Source: ZI E XIANG CHA CAI *Isodon forrestii*. Ref: 2139, 4067.

**11384 Isodoglutinosin A**

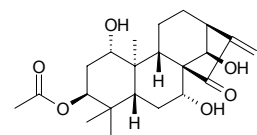
C<sub>22</sub>H<sub>30</sub>O<sub>6</sub> (390.48). mp 144~146°C. Source: JIAO NIAN XIANG CHA CAI *Isodon glutinosa*. Ref: 4067.

**11385 Isodoglutinosin B**

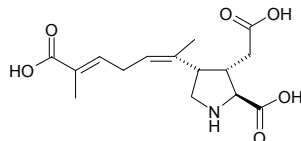
C<sub>20</sub>H<sub>32</sub>O<sub>3</sub> (320.48). mp 144~146°C. Source: JIAO NIAN XIANG CHA CAI *Isodon glutinosa*. Ref: 4067.

**11386 Isodomedin**

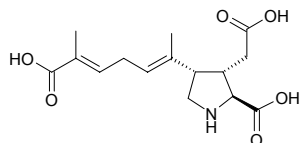
[39388-61-9] C<sub>22</sub>H<sub>32</sub>O<sub>6</sub> (392.50). mp 217~218°C,  $[\alpha]_D = -59^\circ$  ( $c = 1.0$ , EtOH). Pharm: Antibacterial; cytotoxic; larvacide, insect antifeedant (larva of *Spodoptera exempta*). Source: JIAN XING SI GUO XIANG CHA CAI *Isodon shikokiana* var. *intermedius*. Ref: 658, 4067.

**11387 Isodomoic acid A**

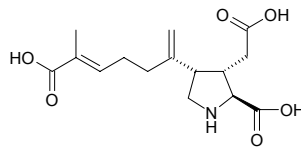
C<sub>15</sub>H<sub>21</sub>NO<sub>6</sub> (311.34). Source: RUAN GU ZAO *Chondria armata* [Syn. *Lophura armata*]. Ref: 660.

**11388 Isodomoic acid B**

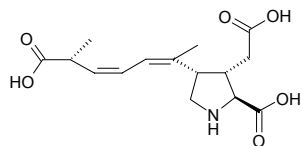
C<sub>15</sub>H<sub>21</sub>NO<sub>6</sub> (311.34). Source: RUAN GU ZAO *Chondria armata* [Syn. *Lophura armata*]. Ref: 660.

**11389 Isodomoic acid C**

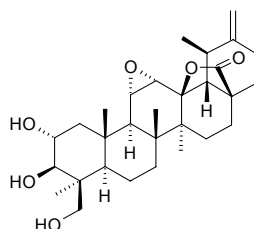
C<sub>15</sub>H<sub>21</sub>NO<sub>6</sub> (311.34). Source: RUAN GU ZAO *Chondria armata* [Syn. *Lophura armata*]. Ref: 660.

**11390 Isodomoic acid D**

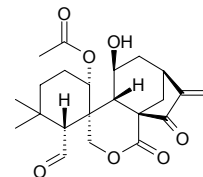
C<sub>15</sub>H<sub>21</sub>NO<sub>6</sub> (311.34). Source: RUAN GU ZAO *Chondria armata* [Syn. *Lophura armata*]. Ref: 660.

**11391 Isodonadenanthin**

C<sub>30</sub>H<sub>44</sub>O<sub>6</sub> (500.68). White amorphous powder. Source: XIAN HUA XIANG CHA CAI *Rabdosia adenantha*. Ref: 2260.

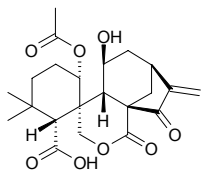
**11392 Isodonal**

[16964-56-0] C<sub>22</sub>H<sub>28</sub>O<sub>7</sub> (404.46). mp 245~247°C (dec); mp 219~221°C,  $[\alpha]_D^{25} = +102.7^\circ$  ( $c = 0.3$ , C<sub>5</sub>H<sub>5</sub>N). Pharm: Cytotoxic (K562, IC<sub>50</sub> = 2.29 μmol/L, control Cisplatin IC<sub>50</sub> = 3.84 μmol/L; Bcap37, IC<sub>50</sub> = 28.64 μmol/L, control Cisplatin IC<sub>50</sub> = 1.54 μmol/L; BGC823, IC<sub>50</sub> = 79.87 μmol/L, control Cisplatin IC<sub>50</sub> = 2.54 μmol/L; CA, IC<sub>50</sub> = 9.04 μmol/L, control Cisplatin IC<sub>50</sub> = 0.88 μmol/L; HeLa, IC<sub>50</sub> > 100 μmol/L, control Cisplatin IC<sub>50</sub> = 3.60 μmol/L)<sup>[4353]</sup>; cytotoxic (liver cancer cells, *in vitro*); antibacterial (*Bacillus subtilis*, *Bacillus coli* and *Staphylococcus aureus*, EC = 1 : 10000). Source: DA YE XIANG CHA CAI *Rabdosia macrophylla*, LU SHAN XIANG CHA CAI *Isodon rubescens* var. *lushanensis* (leaf), MAO YE XIANG CHA CAI *Isodon japonica* [Syn. *Rabdosia japonica*]. Ref: 5, 658, 4067, 4353.

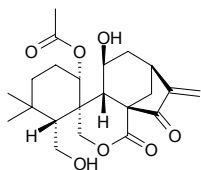


**11393 Isodonoic acid**

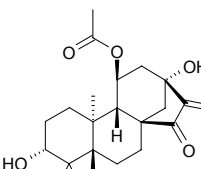
$C_{22}H_{28}O_8$  (420.46). mp 291~294°C,  $[\alpha]_D^{25} = +42.6^\circ$  ( $c = 0.09$ , MeOH). Source: NIU WEI CAO *Isodon ternifolia*. Ref: 4067.

**11394 Isodonoiol**

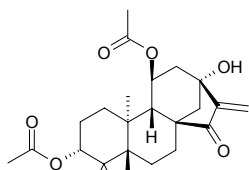
Rabdosin C; Rabdophyllin G  $C_{22}H_{30}O_7$  (406.48). mp 271.8~272.3°C,  $[\alpha]_D^{25} = +98.6^\circ$  ( $c = 0.57$ ,  $C_5H_5N$ ). Pharm: Cytotoxic (K562,  $IC_{50} = 10.15\mu\text{mol/L}$ , control Cisplatin  $IC_{50} = 3.84\mu\text{mol/L}$ ; Bcap37,  $IC_{50} = 101.32\mu\text{mol/L}$ , control Cisplatin  $IC_{50} = 1.54\mu\text{mol/L}$ )<sup>[4353]</sup>. Source: LU SHAN XIANG CHA CAI *Isodon rubescens* var. *lushanensis*, MAO YE XIANG CHA CAI *Isodon japonica* [Syn. *Rabdosia japonica*]. Ref: 4067, 4353.

**11395 Isodopharicin A**

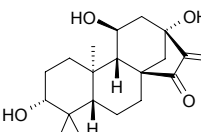
$C_{22}H_{32}O_5$  (376.50). mp 213~215°C,  $[\alpha]_D^{28} = -154^\circ$  ( $c = 0.5$ , EtOH). Source: CHUAN ZANG XIANG CHA CAI *Isodon pharicus*. Ref: 4067.

**11396 Isodopharicin B**

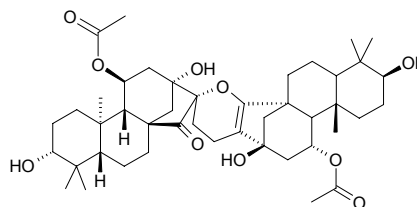
$C_{24}H_{34}O_6$  (418.53). mp 266~268°C,  $[\alpha]_D^{16} = -190^\circ$  ( $c = 0.5$ , EtOH). Source: CHUAN ZANG XIANG CHA CAI *Isodon pharicus*. Ref: 4067.

**11397 Isodopharicin D**

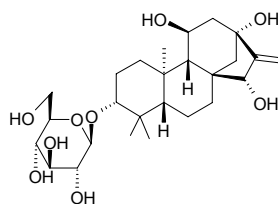
3 $\alpha$ ,11 $\beta$ ,13 $\alpha$ -Trihydroxy-entkaur-16-en-15-one  $C_{20}H_{30}O_4$  (334.46). White crystals, mp 245~247°C. Source: CHUAN ZANG XIANG CHA CAI *Isodon pharicus*. Ref: 405, 4067.

**11398 Isodopharicin E**

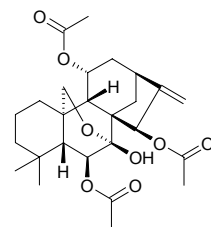
$C_{44}H_{64}O_{10}$  (752.99). mp 240~241°C,  $[\alpha]_D = -144^\circ$  ( $c = 0.25$ , EtOH). Source: CHUAN ZANG XIANG CHA CAI *Isodon pharicus*. Ref: 4067.

**11399 Isodopharicin F**

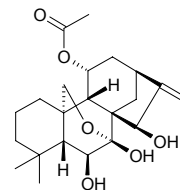
11 $\beta$ ,13 $\alpha$ ,15 $\alpha$ -Trihydroxy-entkaur-16-en-3 $\alpha$ - $\beta$ -D-glucoside  $C_{26}H_{42}O_9$  (498.62). White crystals, mp 252~254°C, mp 254~256°C. Source: CHUAN ZANG XIANG CHA CAI *Isodon pharicus*. Ref: 405, 4067.

**11400 Isodoternifolin A**

$\beta$ ,11 $\alpha$ ,15 $\beta$ -Triacetoxo-7 $\beta$ -hydroxy-7 $\alpha$ ,20-epoxy-entkaur-16-ene  $C_{26}H_{36}O_8$  (476.57). Colorless acicular crystals, mp 249~251°C,  $[\alpha]_D^{20} = -122.9^\circ$  (chloroform). Source: CHONG YA YAO *Isodon ternifolius*, NIU WEI CAO *Isodon ternifolia*. Ref: 367, 4067.

**11401 Isodoternifolin B**

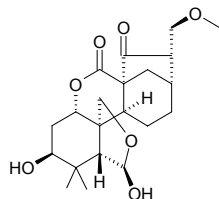
11 $\alpha$ -Acetoxo-6 $\beta$ ,7 $\beta$ ,15 $\beta$ -trihydroxy-7 $\alpha$ ,20-epoxy-entkaur-16-ene  $C_{22}H_{32}O_6$  (392.50). Colorless prismatic crystals, mp 236~238°C (chloroform). Source: CHONG YA YAO *Isodon ternifolius*, NIU WEI CAO *Isodon ternifolia*. Ref: 367, 4067.



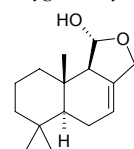


**11402 Isodotricin**

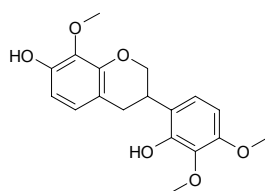
$C_{21}H_{30}O_7$  (394.47). mp 240~245°C,  $[\alpha]_D^{17} = -114^\circ$  ( $c = 1.0$ ,  $C_5H_5N$ ). Source: MAO YE XIANG CHA CAI *Isodon japonica* [Syn. *Rabdosia japonica*]. Ref: 4067.

**11403 Isodrimeninol**

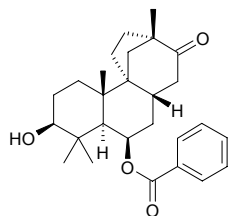
$C_{15}H_{24}O_2$  (236.36). Source: LIAO SHI *Polygonum hydropiper*, SHUI LIAO *Polygonum hydropiper*. Ref: 660.

**11404 Isoduartin**

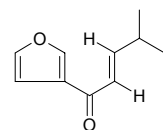
$C_{18}H_{20}O_6$  (332.36). Source: JIANG ZHEN XIANG *Dalbergia odorifera*. Ref: 660.

**11405 Isodulcinol**

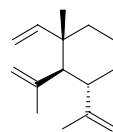
$C_{27}H_{36}O_4$  (424.59). Gum,  $[\alpha]_D^{25} = -21.4^\circ$  ( $c = 0.45$ ,  $CHCl_3$ ). Pharm: Cytotoxic (*in vitro*, SCL,  $ED_{50} = 19.5\mu\text{mol/L}$ ; SCL-6,  $ED_{50} = 62.9\mu\text{mol/L}$ ; SCL-376,  $ED_{50} = 45.8\mu\text{mol/L}$ ; SCL-9,  $ED_{50} = 58.9\mu\text{mol/L}$ ; Kato3,  $ED_{50} = 71.7\mu\text{mol/L}$ ; NUGC-4,  $ED_{50} = 122.9\mu\text{mol/L}$ ; control Vinblastine Sulfate: SCL,  $ED_{50} = 5.9\mu\text{mol/L}$ ; SCL-6,  $ED_{50} = 6.1\mu\text{mol/L}$ ; SCL-376,  $ED_{50} = 5.3\mu\text{mol/L}$ ; SCL-9,  $ED_{50} = 5.3\mu\text{mol/L}$ ; Kato3,  $ED_{50} = 6.1\mu\text{mol/L}$ ; NUGC-4,  $ED_{50} = 5.3\mu\text{mol/L}$ ). Source: YE GAN CAO *Scoparia dulcis* (aerial parts: yield = 0.00138%dw). Ref: 4703.

**11406 Isoegomaketone**

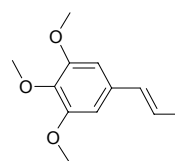
[34348-59-9]  $C_{10}H_{12}O_2$  (164.21). mp 179~180°C. Source: JIAN ZI SU YE *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*], ZI SU YE *Perilla frutescens* var. *arguta*. Ref: 2, 660.

**11407 (-)-(5S,6S,10S)-Iso-β-elemene**

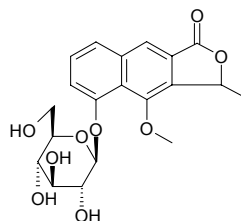
(-)-(1S,2S,3S)-1-Ethenyl-1-methyl-2,3-di(1-methylethenyl)-cyclohexane  $C_{15}H_{24}$  (204.36). Colorless oil. Source: *Saccogyna viticulosa* (essential oil). Ref: 3839.

**11408 trans-Isoelemicin**

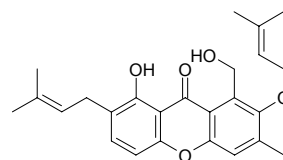
*trans*-Isoelemicine [5273-85-8]  $C_{12}H_{16}O_3$  (208.26). bp 153~156°C/10mmHg. Pharm: Antifungal (*Cladosporium cucumerinum*); hypnotic (strong action); larvacide (*Stegomyia calopus*). Source: BAI CHANG *Acorus calamus*, YE XIANG MAO *Cymbopogon goeringii*, ROU DOU KOU *Myristica fragrans*. Ref: 6, 900, 1521.

**11409 Isoeuletherol glucoside**

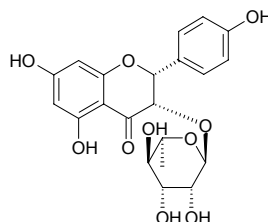
$C_{20}H_{22}O_9$  (406.39). Source: LU HUI *Aloe vera* [Syn. *Aloe barbadensis*]. Ref: 2.

**11410 Isoemicellin**

$C_{25}H_{28}O_5$  (408.50). Source: BIAN SE HE KE BAO *Emericella varicolor*. Ref: 3386.

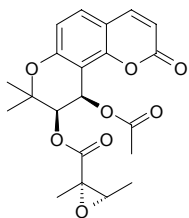
**11411 Isoengelitin**

[30987-58-7]  $C_{21}H_{22}O_{10}$  (434.40). mp 295~296°C. Source: DING XIANG *Syzygium aromaticum* [Syn. *Eugenia caryophyllata*], TU FU LING *Smilax glabra*. Ref: 6, 568, 1521.

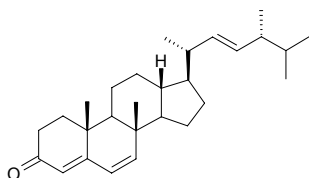


**11412 Isoepoxypteryxin**

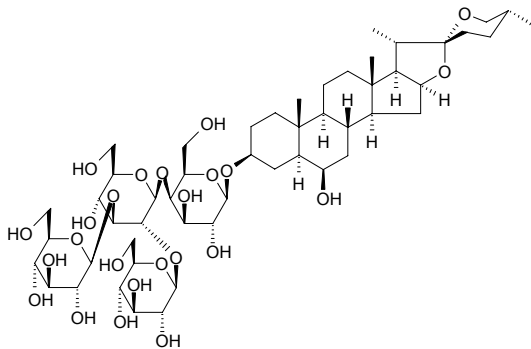
$C_{21}H_{22}O_8$  (402.40). **Pharm:** NO Production inhibitor (LPS-activated mouse peritoneal macrophages,  $IC_{50} = 53\mu\text{mol/L}$ , control *L*-NMMA,  $IC_{50} = 28\mu\text{mol/L}$ ). **Source:** FEN CHA DANG GUI *Angelica furcijuga* (flower). **Ref:** 4454.

**11413 Isoergosterone**

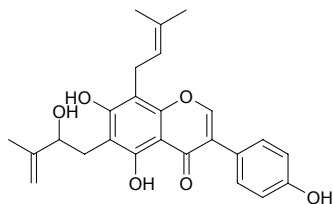
$C_{28}H_{42}O$  (394.65). **Source:** SANG HUANG *Phellinus igniarius* (sporocarp; yield = 0.00046%dw). **Ref:** 4747.

**11414 Isoerubioside B**

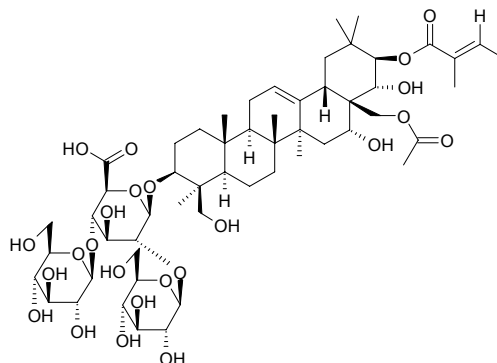
[186545-52-8]  $C_{51}H_{84}O_{24}$  (1081.22). White acicular crystals, mp 310~312°C,  $[\alpha]_D^{20} = -32.8^\circ$  ( $c = 1.0$ ,  $C_3H_5N$ ). **Pharm:** Enhances fibrinolytic activity; platelet aggregation inhibitor; anticoagulant (extends time of coagulation). **Source:** DA SUAN *Allium sativum*. **Ref:** 362, 658.

**11415 Isoerysenegalensein E**

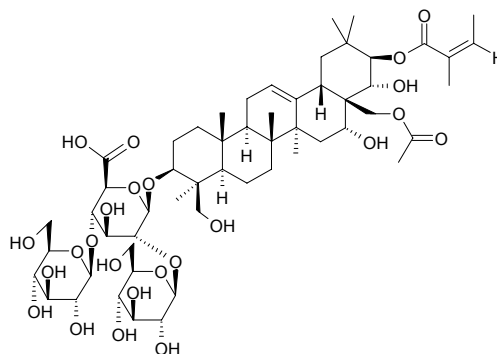
5,7,4'-Trihydroxy-8-(3''-methylbut-2''-enyl)-6-(2''-hydroxy-3''-methylbut-3''-enyl) isoflavone  $C_{25}H_{26}O_6$  (422.48). Yellow crystals ( $CHCl_3$ ), mp 155~156°C. **Source:** AI JI ZAI PEI CI TONG *Erythrina lysistemon*. **Ref:** 1971.

**11416 Isoescsin Ia**

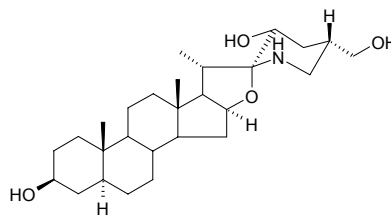
21-*O*-Tigloyl-28-*O*-acetylprotoaescigenin-3-*O*-[ $\beta$ -*D*-glucopyranosyl(1→2)]-[ $\beta$ -*D*-glucopyranosyl(1→4)]- $\beta$ -*D*-glucopyranosiduronic acid  $C_{55}H_{86}O_{24}$  (1131.28). **Pharm:** Anti-inflammatory (mus, assay of Dimethyl benzene-induced inflammation, dose 30mg/kg, InRt = 78.8%, control Dexamethasone, dose 1mg/kg, InRt = 55.6%). **Source:** QI YE SHU *Aesculus chinensis* (seeds). **Ref:** 2578.

**11417 Isoescsin Ib**

21-*O*-Angeloyl-28-*O*-acetylprotoaescigenin-3-*O*-[ $\beta$ -*D*-glucopyranosyl(1→2)]-[ $\beta$ -*D*-glucopyranosyl(1→4)]- $\beta$ -*D*-glucopyranosiduronic acid  $C_{55}H_{86}O_{24}$  (1131.28). **Pharm:** Anti-inflammatory (mus, assay of Dimethyl benzene-induced inflammation, dose 30mg/kg, InRt = 67.3%, control Dexamethasone, dose 1mg/kg, InRt = 55.6%). **Source:** QI YE SHU *Aesculus chinensis* (seeds). **Ref:** 2578.

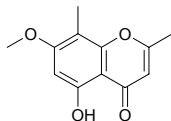
**11418 Isoesculeogenin A**

(5 $\alpha$ ,22*R*,23*R*,25*S*)-3 $\beta$ ,23,27-Trihydroxyspirosolane  $C_{27}H_{45}NO_4$  (447.66). Colorless needles, mp 206~213°C,  $[\alpha]_D = -87.2^\circ$  ( $c = 0.64$ , pyridine). **Source:** FAN QIE *Lycopersicon esculentum*. **Ref:** 4484.

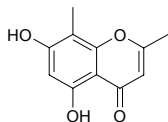


**11419 Isoeugenitin**

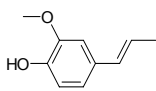
$C_{12}H_{12}O_4$  (220.23). Source: DING XIANG *Syzygium aromaticum* [Syn. *Eugenia caryophyllata*]. Ref: 660.

**11420 Isoeugenitol**

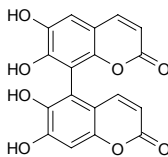
[479-06-1]  $C_{11}H_{10}O_4$  (206.20). mp 229~230°C. Source: DING XIANG *Syzygium aromaticum* [Syn. *Eugenia caryophyllata*]. Ref: 6.

**11421 Isoeugenol**

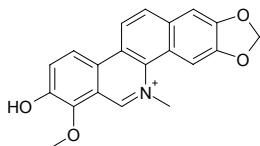
2-Methoxy-4-propenyl phenol [97-54-1]  $C_{10}H_{12}O_2$  (164.21). bp (*cis*-) 134~135°C/13mmHg, mp (*trans*-) 33~34°C, bp (*trans*-) 141~142°C/13mmHg. Pharm: Platelet aggregation inhibitor (rbt). Source: DANG GUI *Angelica sinensis*, HUANG HAO *Artemisia scoparia* [Syn. *Artemisia capillaris* var. *scoparia*], LUO JI SHAN YUAN BAI *Juniperus scopulorum*, ROU DOU KOU *Myristica fragrans*, SHANG LU *Phytolacca esculenta* [Syn. *Phytolacca acinosa*], XI YANG SHEN *Panax quinquefolium*, YI LAN *Cananga odorata*. Ref: 2, 6, 658, 660, 1439.

**11422 Isoeuphorbetin**

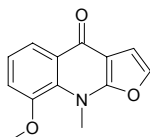
$C_{18}H_{10}O_8$  (354.28). Source: QIAN JIN ZI *Euphorbia lathyris*. Ref: 660.

**11423 Isofagaridine**

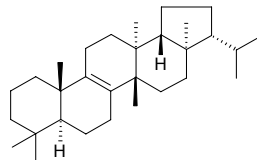
$C_{20}H_{16}NO_4^+$  (334.35). Pharm: Platelet aggregation inhibitor; DNA isomerase inhibitor; antibacterial; cytotoxic. Source: RU DI JIN NIU *Zanthoxylum nitidum*, *Zanthoxylum* sp. Ref: 660, 2176.

**11424 Iso-γ-fagarine**

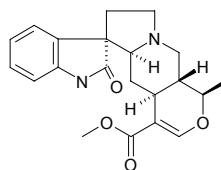
$C_{13}H_{11}NO_3$  (229.24). Colorless needles (Me<sub>2</sub>CO), mp 160~161°C. Source: XIA YE BAI XIAN *Dictamnus angustifolius*. Ref: 1912.

**11425 Isofernene**

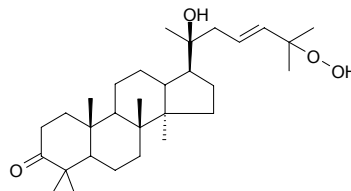
[1750-35-2]  $C_{30}H_{50}$  (410.73). mp 189~190°C. Source: TIE SI QI *Adiantum pedatum*. Ref: 6.

**11426 Isoformosanine**

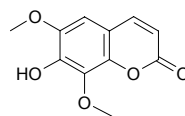
Uncarine A  $C_{21}H_{24}N_2O_4$  (368.44). Source: HUA GOU TENG *Uncaria sinensis*. Ref: 660.

**11427 Isofouquierone peroxide**

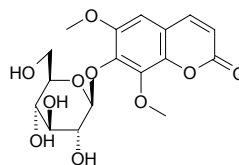
$C_{30}H_{50}O_4$  (474.73). White powder,  $[\alpha]_D^{25} = +35^\circ$  ( $c = 0.29$ , CHCl<sub>3</sub>). Source: YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*] (stem cortex). Ref: 4111.

**11428 Isofraxidin**

6,8-Dimethoxy-7-hydroxycoumarin [486-21-5]  $C_{11}H_{10}O_5$  (222.20). mp 148~149°C. Pharm: Antineoplastic (mus vaccinal S<sub>180</sub>, *in vivo*); choleric (rat); cytotoxic (P<sub>388</sub> *in vitro*, ED<sub>50</sub> = 1.7 μg/mL). Source: CI WU JIA *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*] (root and rhizome: content = 0.011%<sup>[5508]</sup>), DA JI<sup>(3)</sup> *Euphorbia pekinensis*, HUANG HUA HAO *Artemisia annua*, HUI SE OU SHI NAN *Erica cinerea*, JIU JIE CHA *Sarcandra glabra* [Syn. *Chloranthus glaber*] (dried whole herb: content scope of 8 origins = 0.022%~0.088%, mean content = 0.056%<sup>[5508]</sup>), *Fraxinus* sp. Ref: 2, 5, 658, 660, 5508.

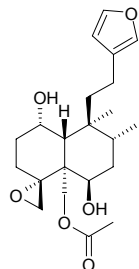
**11429 Isofraxidin glucoside**

$C_{17}H_{20}O_{10}$  (384.34). Source: CI WU JIA *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*]. Ref: 2.

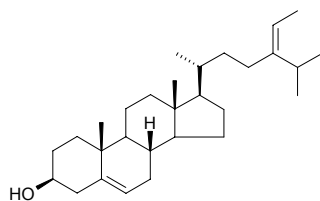


**11430 Isofruticolone**

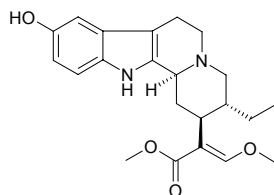
$C_{22}H_{32}O_6$  (392.50). **Pharm:** Insect antifeedant (fifth instar larvae of *Spodoptera littoralis*, dual-choice feeding assays, dose =  $10\mu\text{g}/\text{cm}^2$ ,  $\text{FR}_{50} = 0.78 \pm 0.11$ ). **Source:** GUAN CONG XIANG KE KE *Teucrium fruticans*. **Ref:** 3761.

**11431 Isofucosterol**

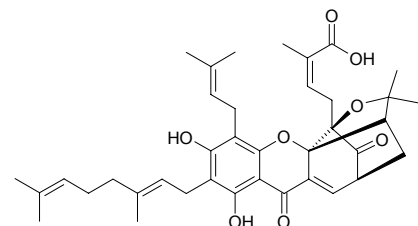
28-Isofucosterol  $C_{29}H_{48}O$  (412.71). mp  $133\sim 135^\circ\text{C}$ . **Source:** SHI CHUN *Ulva lactuca*, KONG SHI CHUN *Ulva pertusa*. **Ref:** 6, 660.

**11432 Isogambirine**

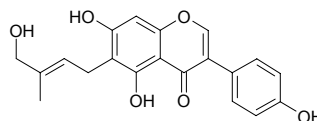
$C_{22}H_{28}N_2O_4$  (384.48). **Source:** HOU YE GOU TENG *Uncaria callophylla*. **Ref:** 5341.

**11433 Isogambogenic acid**

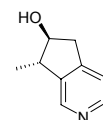
$C_{38}H_{46}O_8$  (630.79). Bright yellow amorphous powder,  $[\alpha]_D^{20} = -488^\circ$ , ( $c = 0.290$ ,  $\text{CHCl}_3$ ). **Pharm:** Cytotoxic (hmn leukemia: doxorubicin-resistant K562,  $\text{IC}_{50} = (2.86 \pm 0.16)\mu\text{g}/\text{mL}$ , control Adriamycin,  $\text{IC}_{50} = (1.79 \pm 0.17)\mu\text{g}/\text{mL}$ ; drug-sensitive K562,  $\text{IC}_{50} = (2.10 \pm 0.14)\mu\text{g}/\text{mL}$ , Adriamycin,  $\text{IC}_{50} = (0.11 \pm 0.01)\mu\text{g}/\text{mL}$ ). **Source:** TENG HUANG SHU *Garcinia hanburyi* (resin). **Ref:** 1583.

**11434 Isogancaonin C**

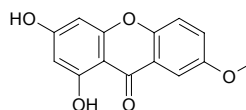
5,7,4'-Trihydroxy-6-[1-hydroxy-2-methylbuten-2-yl]isoflavone  $C_{20}H_{18}O_6$  (354.36). Creamy solid, mp  $259\sim 260^\circ\text{C}$ . **Pharm:** Antibacterial (*Escherichia coli*, MIA =  $0.10\mu\text{g}$ , control Chloramphenicol, MIA =  $0.001\mu\text{g}$ ; *Bacillus subtilis*, MIA =  $0.05\mu\text{g}$ , Chloramphenicol, MIA =  $0.001\mu\text{g}$ ; *Staphylococcus aureus*, MIA =  $0.05\mu\text{g}$ , Chloramphenicol, MIA =  $0.001\mu\text{g}$ ); antifungal (*Candida mycoderma*, MIA =  $0.05\mu\text{g}$ , Miconazole, MIA =  $0.0001\mu\text{g}$ ); antioxidant (DPPH scavenger, TLC detection limit =  $0.5\mu\text{g}$ ,  $\text{IC}_{50} = 650\mu\text{g}/\text{mL}$ ; control Quercetin, TLC detection limit  $< 0.05\mu\text{g}$ ,  $\text{IC}_{50} = 7\mu\text{g}/\text{mL}$ ; Gallic acid, TLC detection limit  $< 0.05\mu\text{g}$ ,  $\text{IC}_{50} = 4\mu\text{g}/\text{mL}$ ; Ascorbic acid, TLC detection limit  $< 0.10\mu\text{g}$ ,  $\text{IC}_{50} = 18\mu\text{g}/\text{mL}$ ). **Source:** *Bolusanthus speciosus* (root wood). **Ref:** 3785.

**11435 Isogentialutine**

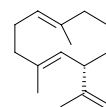
$C_9H_{11}NO$  (149.19). **Source:** XI ZANG QIN JIAO *Gentiana tibetica*. **Ref:** 660.

**11436 Isogentisin**

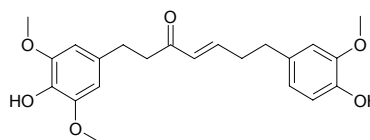
[491-64-5]  $C_{14}H_{10}O_5$  (258.23). **Pharm:** Monoamine oxidase inhibitor; mutagen (*Salmonella typhimurium*). **Source:** HUANG LONG DAN *Gentiana lutea*, QI RUI TA ZHANG YA CAI *Swertia chirata*. **Ref:** 658.

**11437 (+)-(-)-Isogermaacrene A**

(+)-(-)-1,5-Dimethyl-7-(1-methylethenyl)-cyclodeca-1E,5E-diene  $C_{15}H_{24}$  (204.36). Colorless oil. **Source:** *Saccogyna viticulosa* (essential oil). **Ref:** 3839.

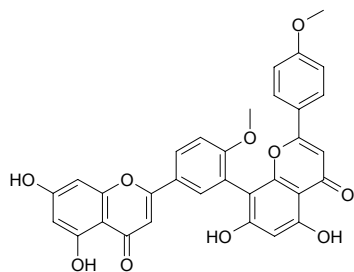
**11438 Isogingerenone B**

[128700-99-2]  $C_{22}H_{26}O_6$  (386.45). **Source:** GAN JIANG *Zingiber officinale*, SHENG JIANG *Zingiber officinale*. **Ref:** 2.

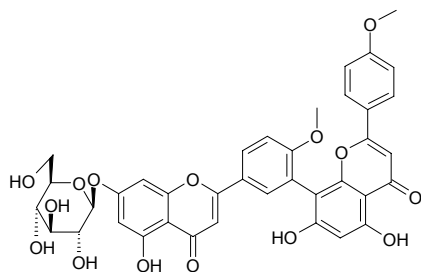


**11439 Isoginkgetin**

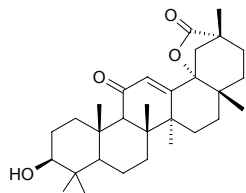
[548-19-6] C<sub>32</sub>H<sub>22</sub>O<sub>10</sub> (566.53). Yellow powder, mp 210°C. Source: BAI GUO YE *Ginkgo biloba* (leaf: mean content = 2.29%<sup>[5508]</sup>); the compound was isolated from the plant by Kôichi Nakazawa in 1959)<sup>[5505]</sup>, CHAO XIAN YIN YANG HUO *Epimedium koreanum*. Ref: 6, 442, 5505, 5508.

**11440 Isoginkgetin-7-O-β-D-glucopyranoside**

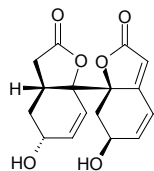
C<sub>38</sub>H<sub>32</sub>O<sub>15</sub> (728.67). Yellow amorphous powder, [α]<sub>D</sub><sup>20</sup> = +0.77° (c = 0.003, MeOH). Source: BAI GUO YE *Ginkgo biloba*. Ref: 4512.

**11441 Isoglabrolide**

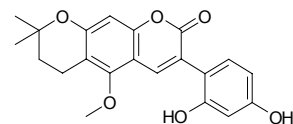
C<sub>30</sub>H<sub>44</sub>O<sub>4</sub> (468.68). Source: GUANG GUO GAN CAO *Glycyrrhiza glabra*. Ref: 660.

**11442 Isoglochidiolide**

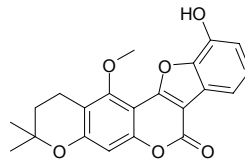
C<sub>16</sub>H<sub>16</sub>O<sub>6</sub> (304.30). Off-white syrup, [α]<sub>D</sub><sup>23</sup> = +26.6° (c = 2.33, MeOH). Source: JIAN JIAN SUAN PAN ZI *Glochidion acuminatum* (leaf). Ref: 4286.

**11443 Isoglycycoumarin**

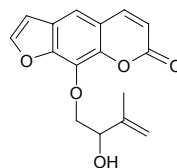
C<sub>21</sub>H<sub>20</sub>O<sub>6</sub> (368.39). Source: CU MAO GAN CAO *Glycyrrhiza aspera*. Ref: 660.

**11444 Isoglycyrol**

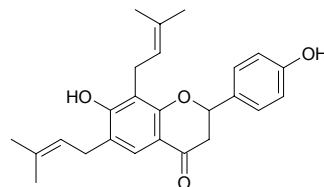
[23013-86-7] C<sub>21</sub>H<sub>18</sub>O<sub>6</sub> (366.37). mp 298~300°C (dec). Source: CU MAO GAN CAO *Glycyrrhiza aspera*, GAN CAO *Glycyrrhiza uralensis*. Ref: 660, 1521.

**11445 Isogosferol**

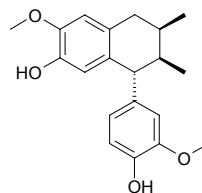
[53319-52-1] C<sub>16</sub>H<sub>14</sub>O<sub>5</sub> (286.29). mp 76~78°C. Source: YUN NAN QIANG HUO *Pleurospermum rivulorum*. Ref: 551.

**11446 Isograbrol**

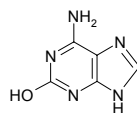
C<sub>25</sub>H<sub>28</sub>O<sub>4</sub> (392.50). Source: *Glycyrrhiza* sp. Ref: 2431.

**11447 (-)-Isoguaiacin**

C<sub>20</sub>H<sub>24</sub>O<sub>4</sub> (328.41). Pharm: Neuroprotective (glutamate-induced neurotoxicity in primary cultures of cortical cells, 0.1 μmol/L, protection rate = (33.6±2.7)%, p<0.05, MK-801: 1.0 μmol/L, protection rate = (83.6±2.0)%, p<0.001, CNQX: 1.0 μmol/L, protection rate = (70.5±1.5)%, p<0.001). Source: HONG NAN PI *Machilus thunbergii*. Ref: 4927.

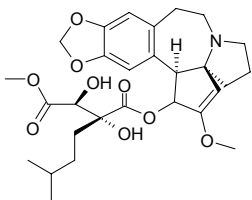
**11448 Isoguanine**

C<sub>5</sub>H<sub>5</sub>N<sub>5</sub>O (151.13). Source: BA DOU *Croton tiglium*. Ref: 660.

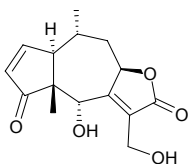


**11449 Isoharringtonine**

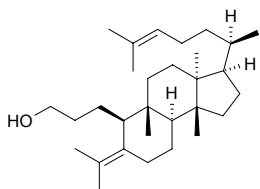
[26833-86-3]  $C_{28}H_{37}NO_9$  (531.61). **Pharm:** Antineoplastic (mus  $L_{1210}$ , 7.5mg/kg ip, biotic prolonged rate = 26%,  $P_{388}$ , biotic prolonged rate = 172%). **Source:** HAI NAN CU FEI *Cephalotaxus hainanensis* [Syn. *Cephalotaxus manii*] (branchlet and bark: mean content of 2 samples = 0.14%<sup>[5508]</sup>), RI BEN CU FEI *Cephalotaxus harringtonia*, SAN JIAN SHAN *Cephalotaxus fortunei* (branchlet and bark: mean content of 2 origins = 0.0027%<sup>[5508]</sup>), SAN JIAN SHAN *Cephalotaxus fortunei* (drupe: yield = 0.00018%<sup>[4675]</sup>), TAI WAN CU FEI *Cephalotaxus wilsoniana*, ZHONG GUO CU FEI ZHI YE *Cephalotaxus sinensis* [Syn. *Cephalotaxus harringtonia* var. *sinensis*], ZHONG GUO CU FEI ZI *Cephalotaxus sinensis* [Syn. *Cephalotaxus harringtonia* var. *sinensis*]. **Ref:** 5, 658, 660, 1521, 4675, 5508.

**11450 Isohelenol**

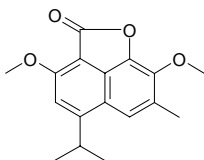
$C_{15}H_{18}O_5$  (278.31). Crystals (chloroform-methanol), mp 190~192°C. **Pharm:** Antineoplastic (mus  $P_{388}$  *in vivo*, biotic prolonged rate = 33%). **Source:** XIAO TOU DUI XIN JU *Helenium microcephalum*. **Ref:** 661.

**11451 Isohelianol**

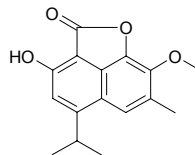
$C_{30}H_{52}O$  (428.75). **Pharm:** Antineoplastic (EBV-EA induced by TPA, mol ratio/TPA = 1000, relative percentage of EBV-EA = 0% (positive control value 32pmol, 20ng TPA=100%), viability of Raji cells = 70%; reference compound  $\beta$ -Carotene, relative percentage = 8.6%). **Source:** HUO YANG LE *Euphorbia antiquorum* (latex). **Ref:** 4606.

**11452 Isohemigossylic acid lactone-2, 7-dimethyl ether**

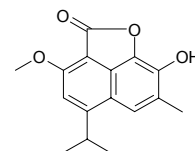
$C_{17}H_{18}O_4$  (286.33). **Source:** JI BEI *Ceiba pentandra*. **Ref:** 3040.

**11453 Isohemigossylic acid lactone-2-methyl ether**

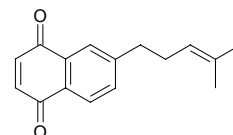
$C_{16}H_{16}O_4$  (272.3). mp 209~210°C, with a phase change from cubes to needles at 153~155°C (ether/cyclohexane). **Source:** MU MIAN HUA *Bombax malabaricum* [Syn. *Gossampinus malabarica*] (root: yield = 0.0042%<sub>dw</sub>). **Ref:** 3040.

**11454 Isohemigossylic acid lactone- 7-methyl ether**

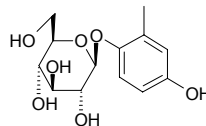
$C_{16}H_{16}O_4$  (272.3). **Source:** JI BEI *Ceiba pentandra*. **Ref:** 3040.

**11455 6-Isohexenyl- $\alpha$ -naphthoquinone**

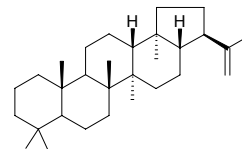
$C_{16}H_{16}O_2$  (240.36). **Pharm:** Antibacterial (gram-positive bacteria). **Source:** CAI DOU SHU *Radermachera sinica*. **Ref:** 658.

**11456 Isohomoarbutin**

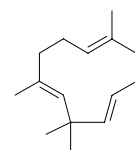
[25162-30-5]  $C_{13}H_{18}O_7$  (286.28). mp 175~176°C. **Source:** HONG HUA LU TI CAO *Pyrola incarnata*, YUAN YE LU TI CAO *Pyrola rotundifolia*. **Ref:** 6, 660.

**11457 Isohop-22-(29)-ene**

$C_{30}H_{50}$  (410.73). **Source:** HAI ZHOU GU SUI BU *Davallia mariesii*. **Ref:** 660.

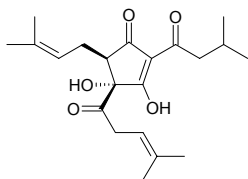
**11458 Iso- $\alpha$ -humulene**

1,3,3,8-Tetramethylcycloundeca-1,4,8-triene  $C_{15}H_{24}$  (204.36). Colorless oil. **Source:** *Saccogyna viticulosa* (essential oil). **Ref:** 3839.

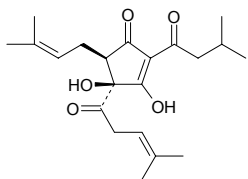


**11459 Isohumulone A**

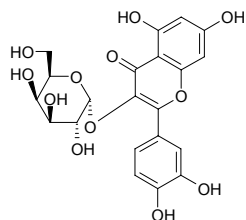
$C_{21}H_{30}O_5$  (362.47). Source: PI JIU HUA *Humulus lupulus*. Ref: 660.

**11460 Isohumulone B**

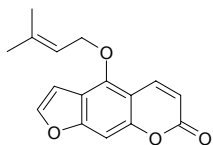
$C_{21}H_{30}O_5$  (362.47). Source: PI JIU HUA *Humulus lupulus*. Ref: 660.

**11461 Isohyperoside**

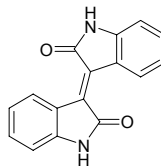
[65549-68-0]  $C_{21}H_{20}O_{12}$  (464.39). mp 242–245°C. Source: MAN SHAN HONG *Rhododendron dauricum*. Ref: 6, 1521.

**11462 Isoimperatorin**

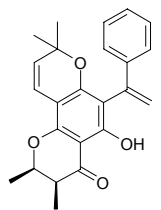
Ausraptin [482-45-1]  $C_{16}H_{14}O_4$  (270.29). mp 109–101°C. Pharm: Antioxidant (DPPH free radical scavenger,  $EC_{50} = 34.6 \mu\text{g/mL} = 171 \mu\text{mol/L}$ , control Ascorbic acid,  $EC_{50} = 1.6 \mu\text{g/mL} = 9.1 \mu\text{mol/L}$ )<sup>[4154]</sup>; NO Production inhibitor (LPS-activated mouse peritoneal macrophages, 100  $\mu\text{mol/L}$ , InRt = (82.5±4.5)%), control *L*-NMMA, 100  $\mu\text{mol/L}$ , InRt = (79.2±0.9)%<sup>[4454]</sup>; PGE<sub>2</sub> production inhibitor (rat peritoneal macrophages, LPS-induced, 30  $\mu\text{mol/L}$ ; inhibits LPS-induced expression of COX-2 and mPGES, not directly inhibits COX-1 and COX-2)<sup>[5392]</sup>; AChE inhibitor (*in vitro*,  $IC_{50} = 69 \mu\text{mol/L}$ )<sup>[3058]</sup>. Source: BAI ZHI *Angelica dahurica* [Syn. *Angelica porphyrocaulis*] (dried root: content scope of 6 origins = 0.042%–0.069%, mean content = 0.052%<sup>[5508]</sup>), BEI SHA SHEN *Glehnia littoralis* (root: mean content of 6 origins = 0.00798%<sup>[5508]</sup>), CHAO XIAN DANG GUI *Angelica gigas* (underground part)<sup>[3058]</sup>, DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*], FEN CHA DANG GUI *Angelica furcijuga* (flower), HANG BAI ZHI *Angelica taiwaniana* (dried root: content scope of 19 origins = 0.032%–0.070%, mean content = 0.053%<sup>[5508]</sup>), KUAN YE QIANG HUO *Notopterygium forbesii* [Syn. *Notopterygium franchetii*], QI BAI ZHI *Angelica dahurica* cv. *Qibaizhi* (sundried root: content scope of 10 origins = 0.060%–0.216%, mean content = 0.110%<sup>[5516]</sup>), QIANG HUO *Notopterygium incisum*, *Niphogeton ternata*. Ref: 4, 325, 344, 507, 566, 660, 3058, 4154, 4156, 4454, 5392, 5501, 5508, 5516.

**11463 Isoindigo**

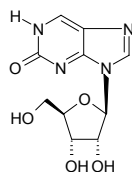
[476-34-6]  $C_{16}H_{10}N_2O_2$  (262.27). Source: MA LAN GEN *Baphicacanthus cusia* [Syn. *Strobilanthes cusia*]. Ref: 7, 701.

**11464 Isoinophynone**

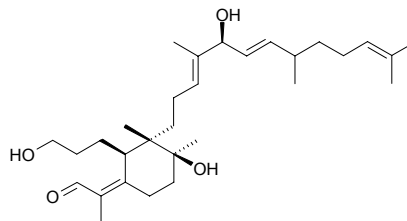
$C_{24}H_{24}O_4$  (376.46). Crystals, mp 185°C. Source: HAI TANG GUO *Calophyllum inophyllum*. Ref: 1878.

**11465 6-Isoinosine**

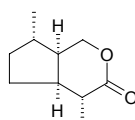
[72346-26-0]  $C_{10}H_{12}N_4O_5$  (268.23). Source: MAO GENG HONG MAO WU JIA *Acanthopanax giraldii* var. *hispidus*. Ref: 525.

**11466 Isoiridogermanal**

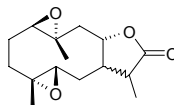
$C_{30}H_{50}O_4$  (474.73). Source: HU DIE HUA *Iris japonica* (root), SHE GAN *Belamcanda chinensis*. Ref: 660.

**11467 Isoiridomyrmecin**

[573-94-4]  $C_{10}H_{16}O_2$  (168.24). mp 58–59°C. Source: MU TIAN LIAO *Actinidia polygama*. Ref: 6.

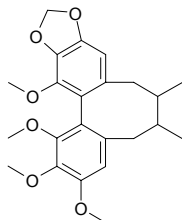
**11468 Isoivaxillin**

$C_{15}H_{22}O_4$  (266.34). Source: TIAN MING JING *Carpesium abrotanoides*. Ref: 660.

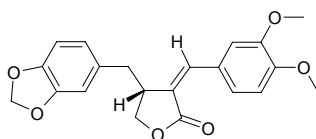


**11469 Isokadsuranin**

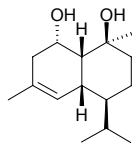
$C_{23}H_{28}O_6$  (400.48). Source: LENG FAN TUAN *Kadsura coccinea* [Syn. *Kadsura chenensis*; *Kadsura hainanensis*]. Ref: 660.

**11470 Isokaerophyllin**

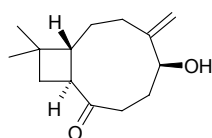
$C_{21}H_{20}O_6$  (368.39). Source: HONG CHAI HU *Bupleurum scorzonerifolium* (root). Ref: 3498.

**11471 Isokhusinodiol**

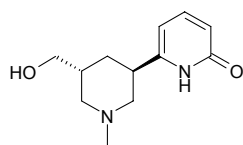
Iso-4-cadinene-2 $\alpha$ ,10 $\beta$ -diol  $C_{15}H_{26}O_2$  (238.37). mp 105~107°C,  $[\alpha]_D^{27} = -5.9^\circ$  ( $c = 0.26$ ,  $CHCl_3$ ). Source: TAI WAN SHAN *Taiwania cryptomerioides* (root). Ref: 4371.

**11472 Isokobusone**

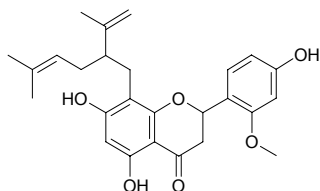
[24173-72-6]  $C_{14}H_{22}O_2$  (222.33). Crystals ( $Et_2O$ ), mp 108~109°C,  $[\alpha]_D = -40.1^\circ$  ( $c = 3.1$ ,  $CHCl_3$ ). Source: XIANG FU *Cyperus rotundus*. Ref: 6.

**11473 Isokuraramine**

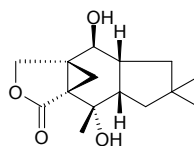
[85799-36-6]  $C_{12}H_{18}N_2O_2$  (222.29). Source: KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. Ref: 2.

**11474 Isokurarinone**

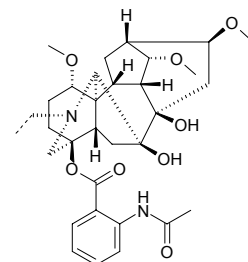
[52483-02-0]  $C_{26}H_{30}O_6$  (438.53). Source: KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. Ref: 2.

**11475 Isolactarorufin**

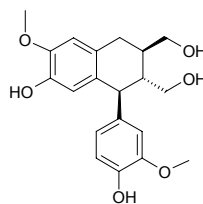
$C_{15}H_{22}O_4$  (266.34). Source: RONG BAI RU GU *Lactarius vellereus*. Ref: 660.

**11476 Isolappaconitine**

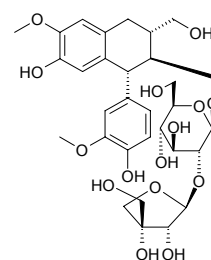
9-Deoxysanaconitine  $C_{32}H_{44}N_2O_8$  (584.72). Source: GAN WAN WU TOU *Aconitum finetianum*. Ref: 660.

**11477 Isolariciresinol**

(+)-Isolariciresinol [548-29-8]  $C_{20}H_{24}O_6$  (360.41). Colorless acicular crystals (methanol-chloroform), mp 158~160°C; 114~115°C (water-methanol),  $[\alpha]_D^{20} = +64.6^\circ$  ( $c = 1.5$ , acetone),  $[\alpha]_D^{20} = +34.0^\circ$  ( $c = 0.10$ , MeOH). Pharm: CNS depressant (mus);  $\beta$ -Hexosaminidase inhibitor inactive (RBL-2H3 cells, inhibits release of  $\beta$ -hexosaminidase, 100 $\mu$ mol/L, InRt = (6.0 $\pm$ 8.5)%)<sup>[4347]</sup>; antioxidant (DPPH free radical scavenger, for 40 $\mu$ mol/L DPPH radical,  $SC_{50} = 12\mu$ mol/L)<sup>[4378]</sup>; cytotoxic inactive (100 $\mu$ g/mL: KB, LNCaP, and Col2 cells)<sup>[5336]</sup>; NO production inhibitor (*in vitro*, LPS-activated mouse peritoneal macrophages, 3 $\mu$ mol/L, 10 $\mu$ mol/L, 30 $\mu$ mol/L, 100 $\mu$ mol/L, InRt = -0.6%, 0.6%, 5.1%, 7.5%, respectively; control *L*-NMMA, 3 $\mu$ mol/L, 10 $\mu$ mol/L, 30 $\mu$ mol/L, 100 $\mu$ mol/L, InRt = 10.3%, 15%, 34.1%, 63.1%, respectively)<sup>[4691]</sup>. Source: SUO LA MU *Salacia prinoides* [Syn. *Salacia chinensis*] (stem), XIAO HONG SHEN *Rubia yunnanensis* (root: yield = 0.0050%dw)<sup>[4691]</sup>, ZI SHAN *Taxus cuspidata*, YI ZHU QIAN MA *Urtica dioica*, YUE NAN LIE LAN *Bursera tonkinensis* (root). Ref: 900, 1521, 4347, 4378, 4691, 5336.

**11478 (-)-Isolariciresinol-3 $\alpha$ -O- $\beta$ -apiofuranosyl-(1 $\rightarrow$ 2)-O- $\beta$ -glucopyranoside**

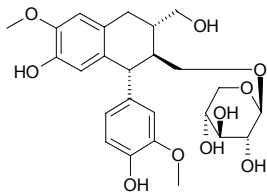
$C_{31}H_{42}O_{15}$  (654.67). Amorphous powder,  $[\alpha]_D^{28} = -48.0^\circ$  ( $c = 1.71$ , MeOH). Source: TONG XU SHOU GONG MU *Sauropus androgynus*. Ref: 3432.



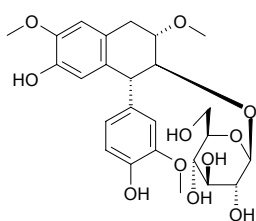


**11479 (-)-Isolariciresinol-2 $\alpha$ -O- $\beta$ -D-xylopyranoside**

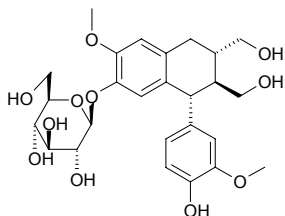
C<sub>25</sub>H<sub>32</sub>O<sub>10</sub> (492.53). White powder, mp 209–210°C. Source: DIAN BAI ZHU SHU *Gaultheria yunnanensis*. Ref: 666.

**11480 (-)-Isolariciresinol-3 $\alpha$ -O- $\beta$ -D-glucopyranoside**

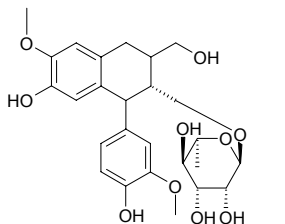
C<sub>25</sub>H<sub>32</sub>O<sub>11</sub> (508.53). Source: ZHONG HUA QING NIU DAN *Tinospora sinensis* (stem). Ref: 4292.

**11481 (-)-Isolariciresinol-4-O- $\beta$ -D-glucopyranoside**

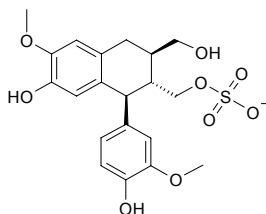
C<sub>26</sub>H<sub>34</sub>O<sub>11</sub> (522.55). Pale yellow amorphous powder,  $[\alpha]_D^{15} = -33.0^\circ$  ( $c = 0.2$ , CHCl<sub>3</sub>). Source: GE XUN *Balanophora japonica* (fresh aboveground part), SUO YANG *Cynomorium songaricum* (stem). Ref: 4114, 4451.

**11482 (+)-Isolariciresinol-9'-O- $\alpha$ -L-rhamnoside**

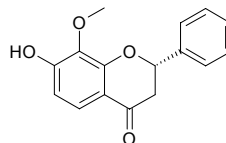
C<sub>26</sub>H<sub>34</sub>O<sub>10</sub> (506.55). White granular crystals (CHCl<sub>3</sub>-MeOH), mp 211–214°C,  $[\alpha]_D^{25} = +38.6^\circ$  ( $c = 0.32$ , MeOH). Source: BAN LI *Castanea mollissima* (flower). Ref: 4844.

**11483 (+)-Isolariciresinol-2 $\alpha$ -sulfate**

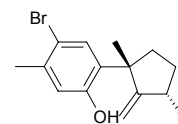
C<sub>20</sub>H<sub>23</sub>O<sub>9</sub>S (439.46). Amorphous powder,  $[\alpha]_D^{25} = +34.0^\circ$  ( $c = 0.11$ , MeOH). Source: HU ZHANG *Polygonum cuspidatum*. Ref: 4186.

**11484 Isolarrien**

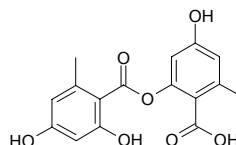
7-Hydroxy-8-methoxyflavanone C<sub>16</sub>H<sub>14</sub>O<sub>4</sub> (270.29). Amorphous powder. Source: LIN JING ZHONG ZI WEN SHU LAN *Crinum bulbispermum* (bulb). Ref: 3997.

**11485 Isolaurinterol**

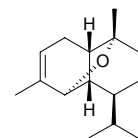
C<sub>15</sub>H<sub>19</sub>BrO (295.22). Pharm: Antibacterial (marine bacteria: *Alteromonas* sp., MIC = 10 μg/disc; *Azomonas agilis*, MIC = 5 μg/disc; *Erwinia amylovora*, MIC = 5 μg/disc; *Escherichia coli*, MIC = 10 μg/disc; *Alcaligenes aquamarinus*, *Azobacter beijerinckii*, *Halobacterium* sp., *Halococcus* sp., no inhibition). Source: CHAO AO DING CAO *Laurencia nidifica*. Ref: 5191.

**11486 Isolecanoric acid**

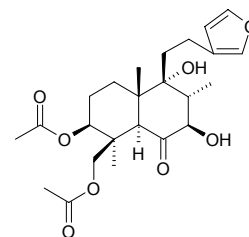
C<sub>16</sub>H<sub>14</sub>O<sub>7</sub> (318.29). Source: MEI YI *Parmelia tinctorum*. Ref: 660.

**11487 Isolentideusether**

C<sub>15</sub>H<sub>24</sub>O (220.36). Source: BAO PI GU *Lentinus lepideus*. Ref: 660.

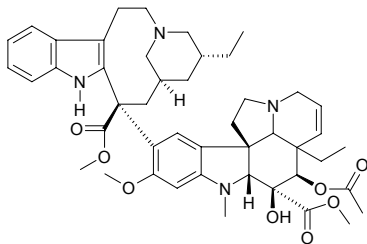
**11488 Isoleoisibirin**

[86575-86-2] C<sub>24</sub>H<sub>34</sub>O<sub>8</sub> (450.53). Oil liquid,  $[\alpha]_D^{28} = +7.1^\circ$  ( $c = 0.63$ , CHCl<sub>3</sub>). Source: XI YE YI MU CAO *Leonurus sibiricus*. Ref: 660, 2499.

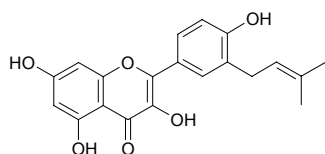


**11489 Isoleurosine**

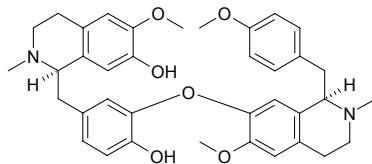
[20072-25-7] C<sub>46</sub>H<sub>58</sub>N<sub>4</sub>O<sub>8</sub> (795.00). mp 202–206°C. Source: CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochnera rosea*]. Ref: 2, 1521.

**11490 Isolicoflaronol**

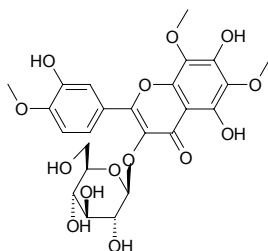
[94805-83-1] C<sub>20</sub>H<sub>18</sub>O<sub>6</sub> (354.36). Pharm: Inhibits onset of senility (free radical scavenger, EC<sub>50</sub> = 40μmol/L); anti-HIV; cytotoxic (cyclooxygenase-2 inhibitor, a promising lead as potential cancer chemopreventive agents)<sup>[5038]</sup>; cytotoxic (aromatase inhibitor)<sup>[5038]</sup>; aromatase inhibitor (*in vitro*, IC<sub>50</sub> = 0.1μmol/L; control Aminoglutethimide, IC<sub>50</sub> = 6.4μmol/L)<sup>[3090]</sup>. Source: GAN CAO *Glycyrrhiza uralensis*, GOU SHU *Broussonetia papyrifera*<sup>[3090]</sup>, ZHEN YE XUE TONG *Macaranga confiera*. Ref: 2, 1001, 1678, 3090, 5038.

**11491 Isoliensinine**

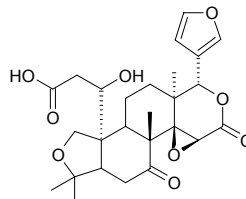
[6817-41-0] C<sub>37</sub>H<sub>42</sub>N<sub>2</sub>O<sub>6</sub> (610.76). Oil, [α]<sub>D</sub><sup>22</sup> = +49.3° (Me<sub>2</sub>CO), [α]<sub>D</sub><sup>29</sup> = -43.3° (CHCl<sub>3</sub>). Pharm: Pulmonary fibrosis inhibitor (BLM-induced, significant inhibitory effect, probably due to its antioxidant and/or anti-inflammatory activities and inhibitory overexpressing TNF-α and TGF-β<sub>1</sub> induced by BLM)<sup>[5068]</sup>. Source: LIAN ZI XIN *Nelumbo nucifera* (dried plumule and radicle in seed: mean content of 7 origins = 0.125%<sup>[5508]</sup>). Ref: 6, 1521, 5068, 5508.

**11492 Isolimocitrol-3-β-D-glucoside**

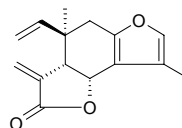
C<sub>24</sub>H<sub>26</sub>O<sub>14</sub> (538.47). mp 220–225°C. Source: NING MENG *Citrus limon*. Ref: 6.

**11493 Isolimononic acid (16→17)lactone**

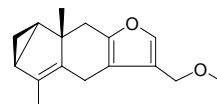
C<sub>26</sub>H<sub>32</sub>O<sub>9</sub> (488.54). Source: CHENG ZI *Citrus junos*, ZHI SHI *Citrus aurantium*. Ref: 660.

**11494 Isolinderalactone**

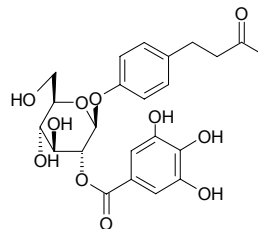
[957-66-4] C<sub>15</sub>H<sub>16</sub>O<sub>3</sub> (244.29). mp 118–121°C. Pharm: Cytotoxic (*in vitro*: KB ED<sub>50</sub> = 2.990mg/L, P<sub>388</sub> ED<sub>50</sub> = 0.816mg/L, A549 ED<sub>50</sub> = 1.420mg/L, HT29 ED<sub>50</sub> = 1.528mg/L). Source: WU YAO *Lindera strychnifolia* [Syn. *Lindera aggregata*]. Ref: 6, 1647.

**11495 Isolinderoxide**

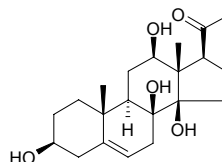
[15004-40-7] C<sub>16</sub>H<sub>20</sub>O<sub>2</sub> (244.34). bp 97–100°C/0.3mmHg. Source: WU YAO *Lindera strychnifolia* [Syn. *Lindera aggregata*]. Ref: 6, 1521.

**11496 Isolindleyin**

[87075-18-1] C<sub>23</sub>H<sub>26</sub>O<sub>11</sub> (478.46). Source: TANG GU TE DA HUANG *Rheum tanguticum*. Ref: 2, 660, 1521.

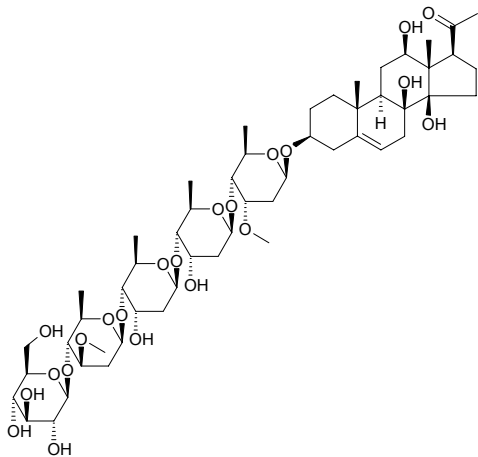
**11497 Isolineolone**

C<sub>21</sub>H<sub>32</sub>O<sub>5</sub> (364.49). Source: FU SHOU CAO *Adonis amurensis*, ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 6, 1521, 3925.



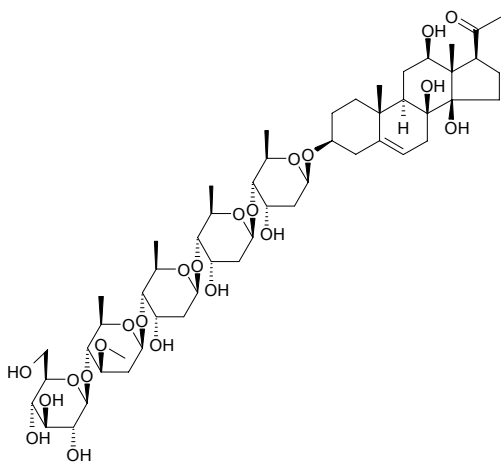
**11498 Isolineolon 3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-cymaropyranoside**

C<sub>53</sub>H<sub>86</sub>O<sub>22</sub> (1075.26). Amorphous powder,  $[\alpha]_D^{21} = +32.1^\circ$  ( $c = 0.90$ , MeOH). Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.



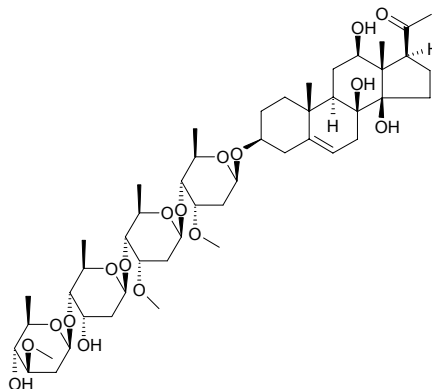
**11499 Isolineolon 3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranoside**

C<sub>52</sub>H<sub>84</sub>O<sub>22</sub> (1061.24). Amorphous powder,  $[\alpha]_D^{27} = +28.3^\circ$  ( $c = 1.12$ , MeOH). Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.



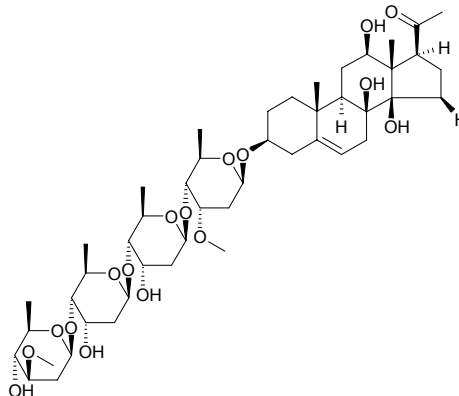
**11500 Isolineolon 3-*O*- $\beta$ -*D*-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-cymaropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-cymaropyranoside**

C<sub>48</sub>H<sub>78</sub>O<sub>17</sub> (927.15). Amorphous powder,  $[\alpha]_D^{27} = +46.2^\circ$  ( $c = 0.50$ , MeOH). Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.



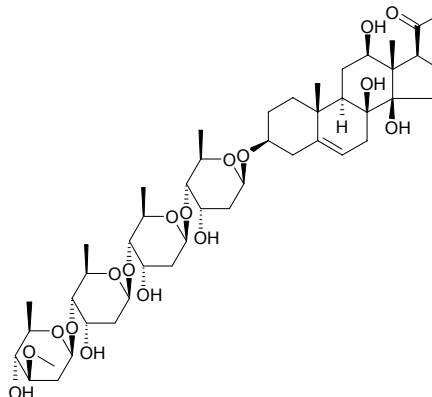
**11501 Isolineolon 3-*O*- $\beta$ -*D*-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-cymaropyranoside**

C<sub>47</sub>H<sub>76</sub>O<sub>17</sub> (913.12). Amorphous powder,  $[\alpha]_D^{20} = +35.5^\circ$  ( $c = 0.78$ , MeOH). Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.



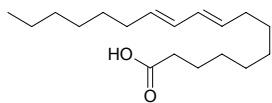
**11502 Isolineolon 3-*O*- $\beta$ -*D*-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranoside**

C<sub>46</sub>H<sub>74</sub>O<sub>17</sub> (899.09). Amorphous powder,  $[\alpha]_D^{24} = +30.9^\circ$  ( $c = 1.14$ , MeOH). Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.

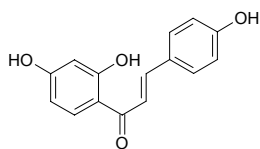


**11503 Isololinic acid**

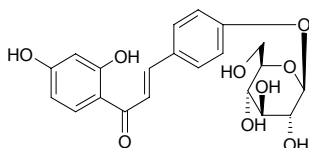
9,11-Octadecadienoic acid C<sub>18</sub>H<sub>32</sub>O<sub>2</sub> (280.45). mp 54°C. Source: BIAN JING HUANG QI *Astragalus complanatus*, CI WU JIA *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*], MING DANG SHEN *Changium smyrnioides*, SAN LENG *Sparganium stoloniferum*, SHU MI *Panicum miliaceum*. Ref: 6, 2655, 2882, 2883, 2885.

**11504 Isoliquiritigenin**

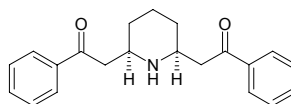
4,2',4'-Trihydroxychalcone [961-29-5] C<sub>15</sub>H<sub>12</sub>O<sub>4</sub> (256.26). mp 185~186°C (dec), 199.5~200.5°C. Pharm: Cytotoxic (quinone reductase induction assay in cultured Hepa1c7 mouse hepatoma cells, CD = 1.4µg/mL)<sup>[5038]</sup>; cytotoxic (mouse mammary organ culture assay, 76% at 10µg/mL, a promising lead as potential cancer chemopreventive agents)<sup>[5038]</sup>; cytotoxic (HT1080 cell line, IC<sub>50</sub> = 96.8µmol/L)<sup>[4470]</sup>; antineoplastic (Inhibition of DMBA-induced preneoplastic lesions *in vitro*, MMOC assay, IC<sub>50</sub> = 36.3µmol/L; control Sulforaphane, IC<sub>50</sub> = 11µmol/L)<sup>[4718]</sup>; inhibits cell proliferation (HepG2, IC<sub>50</sub> = 10.51µg/mL, induces apoptosis)<sup>[5055]</sup>; monoamine oxidase inhibitor (mitochondrion in mus liver cells); antispasmodic (zoic intestinal canal *in vitro*, inhibits intestinal spasm caused by acetylcholine, histamine or BaCl<sub>2</sub>); antiulcerative (pylorus-ligated rat). Source: CI HUAI HUA *Robinia pseudoacacia*, DU HUI MAO DOU *Tephrosia toxicaria* (stem: yield = 0.00015%dw)<sup>[4718]</sup>, GAN CAO *Glycyrrhiza uralensis*, GUANG GUO GAN CAO *Glycyrrhiza glabra*, HU CONG *Allium ascalonicum*, HUI HUI DOU *Cicer arietinum*, JUAN MAO HUANG TAN *Dalbergia sericea*, LING NAN HUAI SHU *Sophora tomentosa*, LONG XUE SHU *Dracaena draco* (stem cortex)<sup>[4696]</sup>, LV DOU *Onobrychis viciifolia*, SI TE WEN HUANG TAN *Dalbergia stevensonii*, YA MAI JIA YING TAO *Muntingia calabura*, YUN NAN GAN CAO *Glycyrrhiza yunnanensis*, ZHANG GUO GAN CAO *Glycyrrhiza inflata*. Ref: 2, 6, 658, 660, 4470, 4696, 4718, 5038, 5055.

**11505 Isoliquiritin**

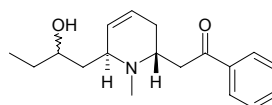
[5401-81-6] C<sub>21</sub>H<sub>22</sub>O<sub>9</sub> (418.40). mp 185~186°C. Pharm: Anti-angiogenic (*in vitro*, 1~100µmol/L, IC<sub>50</sub> = 28.3 mol/L); anti-inflammatory (mus, 0.31~1.3mg/kg, inhibits content of carmine in granulation tissue, IC<sub>50</sub> = 1.46mg/kg, inhibits weight of diffulate in granulation gasbag, IC<sub>50</sub> = 771mg/kg); anti-complication of diabetes (hmn red cell, inhibits aggregation of sorbol, IC<sub>50</sub> = 29µmol/L); aldose reductase inhibitor (rat eye lens, 1.0µg/mL, InRt = 75.4%, IC<sub>50</sub> = 0.72µmol/L). Source: CU MAO GAN CAO *Glycyrrhiza aspera*, GAN CAO *Glycyrrhiza uralensis* (root and rhizome: content = 0.289%<sup>[5508]</sup>), GUANG GUO GAN CAO *Glycyrrhiza glabra* (root and rhizome: content = 0.723%<sup>[5508]</sup>), HUANG GAN CAO *Glycyrrhiza kansuensis*, ZHANG GUO GAN CAO *Glycyrrhiza inflata* (root and rhizome: content = 0.849%<sup>[5508]</sup>). Ref: 2, 660, 1765, 1766, 5508.

**11506 Isolobelanine**

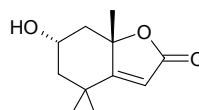
Norlobelanine C<sub>21</sub>H<sub>23</sub>NO<sub>2</sub> (321.42). mp 120~121°C. Source: BAN BIAN LIAN *Lobelia chinensis* [Syn. *Lobelia radicans*]. Ref: 2, 1521.

**11507 Isolobinine**

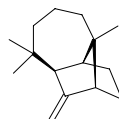
C<sub>18</sub>H<sub>25</sub>NO<sub>2</sub> (287.41). Pharm: Antitussive; antiasthmatic; increases blood pressure. Source: BEI MEI ZHOU SHAN GENG CAI *Lobelia inflata*. Ref: 658, 1521.

**11508 Isololiolide**

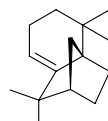
C<sub>11</sub>H<sub>16</sub>O<sub>3</sub> (196.25). Source: QUN DAI CAI *Undaria pinnatifida* (dried thallus: yield = 0.00052%). Ref: 4602.

**11509 (+)-β-Isolongibornene**

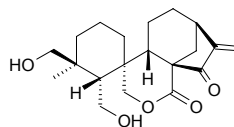
C<sub>15</sub>H<sub>24</sub> (204.36). Colorless oil. Source: BO BAN HE YE TAI *Scapania undulata* (essential oil). Ref: 3752.

**11510 Isolongifolene**

(-)-Isolongifolene; (2*S*,4*R*)-(-)-1,3,4,5,6,7-Hexahydro-1,1,5,5-tetramethyl-2*H*-2,4a-methanonaphthalene [1135-66-6] C<sub>15</sub>H<sub>24</sub> (204.36). Source: WU WEI ZI *Schisandra chinensis*. Ref: 2, 1521.

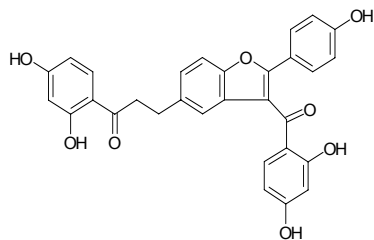
**11511 Isolongirabdiol**

C<sub>20</sub>H<sub>28</sub>O<sub>5</sub> (348.44). Amorphous powder, [α]<sub>D</sub><sup>26</sup> = +37.7° (c = 0.69, MeOH). Source: CHANG GUAN XIANG CHA CAI *Rabdosia longituba*. Ref: 4067.

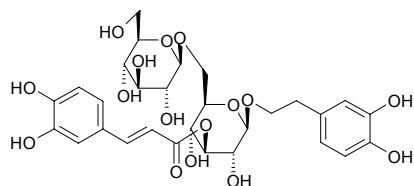


**11512 Isolophirone C**

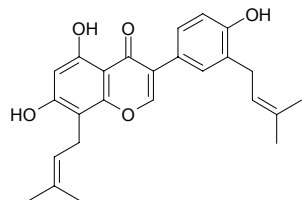
$C_{30}H_{22}O_8$  (510.51). Yellow crystals, mp 194–195°C (Me<sub>2</sub>CO). Source: *Ochna afzelii* (stem cortex). Ref: 5153.

**11513 Isolugrandoside**

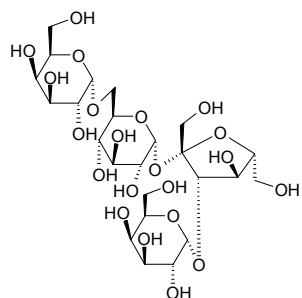
2-(3,4-dihydroxyphenyl)-ethyl-*O*-β-*D*-glucopyranosyl-(1→6)-3-*O*-*trans*-caffeoyl-*l*-β-*D*-glucopyranoside  $C_{29}H_{35}O_{16}$  (640.60). Amorphous powder,  $[\alpha]_D^{25} = 16.6^\circ$  ( $c = 0.06$ , MeOH). Source: HUA BAI LA SHU *Fraxinus ornus*. Ref: 1894.

**11514 Isolupalbigenin**

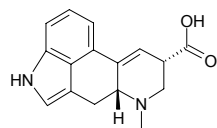
$C_{25}H_{26}O_5$  (406.48). Pharm: Antioxidant (DPPH scavenger, 10 μmol/L, ScRt = 16%, control BHT, 10 μmol/L, ScRt = 43%)<sup>[5319]</sup>. Source: HUANG YU SHAN *Lupinus luteus*, TIAN SHAN ZHU ZI *Garcinia dulcis* (fruit), XIAO JING DOU *Ulex minor*. Ref: 1521, 5319.

**11515 Isolychnose**

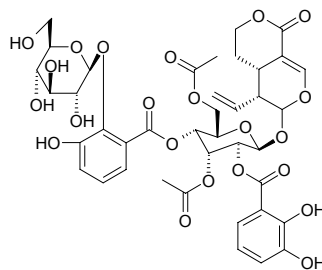
$C_{24}H_{42}O_{21}$  (666.59). Source: BAI NIU XI *Cucubalus baccifer*. Ref: 6.

**11516 Isolysergic acid**

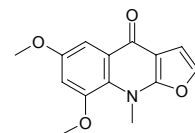
$C_{16}H_{16}N_2O_2$  (268.32). Source: MAI JIAO *Claviceps purpurea*, QUE BAI MAI JIAO *Claviceps paspali*. Ref: 660.

**11517 Isomacrophyllside**

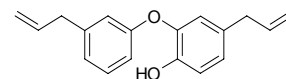
$C_{40}H_{44}O_{22}$  (876.78). Source: XI ZANG QIN JIAO *Gentiana tibetica*. Ref: 702.

**11518 Isomaculosidine**

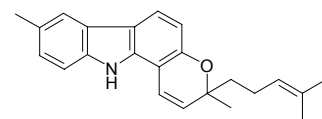
$C_{14}H_{13}NO_4$  (259.26). Source: BAI XIAN PI *Dictamnus dasycarpus*. Ref: 660.

**11519 Isomagnolol**

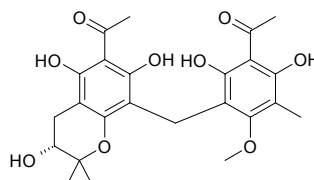
Hydromagnolol [87688-90-2]  $C_{18}H_{18}O_2$  (366.34). mp 143.5°C. Source: HOU PO *Magnolia officinalis*, AO YE HOU PO *Magnolia biloba*. Ref: 2, 660.

**11520 Isomahanimbine**

Mahanimbicine [28305-77-3]  $C_{23}H_{25}NO$  (331.46). Source: XIAO YE JIU LI XIANG *Murraya paniculata* var. *exotica*, YIN DU JIU LI XIANG *Murraya koenigii*. Ref: 11.

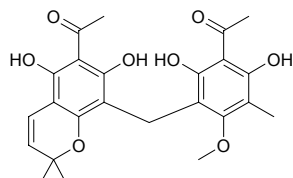
**11521 Isomallotochromanol**

$C_{24}H_{28}O_9$  (460.49). Pharm: Anti-inflammatory (modulator of cytokine network: inhibits mRNA expression and production of TNF-α or IL-6 in RAW264.7 cells (IC<sub>50</sub> = 0.7–30 μmol/L)). Source: YE WU TONG *Mallotus japonicus*. Ref: 4416.

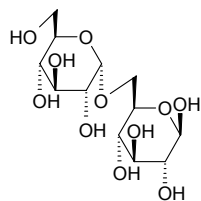


**11522 Isomallotochromene**

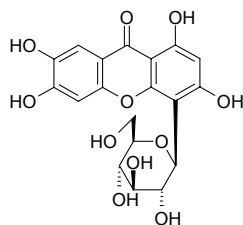
$C_{24}H_{26}O_8$  (442.47). **Pharm:** Anti-inflammatory (modulator of cytokine network; inhibits mRNA expression and production of TNF- $\alpha$  or IL-6 in RAW264.7 cells,  $IC_{50} = 0.7\sim 30\mu\text{mol/L}$ ). **Source:** YE WU TONG *Mallotus japonicus*. **Ref:** 4416.

**11523 Isomaltose**

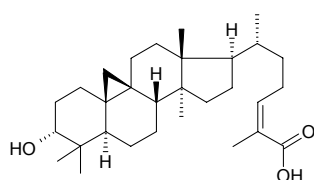
[499-40-1]  $C_{12}H_{22}O_{11}$  (342.30). **Source:** DU ZHONG *Eucommia ulmoides*. **Ref:** 2, 1521.

**11524 Isomangiferin**

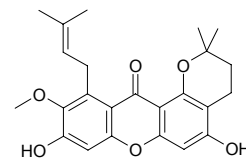
[24699-16-9]  $C_{19}H_{18}O_{11}$  (422.35). mp > 260°C (dec). **Pharm:** Antitussive (dispels phlegm); antiviral (HSV); cardiotoxic; diuretic; antidepressant. **Source:** GUANG SHI WEI *Pyrrhosia calvata* (dried leaf: content = 7.84%<sup>[5508]</sup>), LU SHAN SHI WEI *Pyrrhosia sheareri* (dried leaf: mean content = 0.16%<sup>[5508]</sup>), NI GUANG SHI WEI *Pyrrhosia pseudocalvata* (dried leaf: content = 0.17%<sup>[5508]</sup>), SHI WEI *Pyrrhosia lingua* (dried leaf: content scope = 0.01%~0.24%<sup>[5501]</sup>, mean content = 0.014%<sup>[5508]</sup>), YOU BING SHI WEI *Pyrrhosia petiolosa* (dried leaf: mean content = 0.011%<sup>[5508]</sup>), ZHI MU *Anemarrhena asphodeloides* (dried rhizome: content scope of 8 origins = 0.35%~2.80%, mean content = 1.17%<sup>[5508]</sup>). **Ref:** 2, 660, 5501, 5508.

**11525 Isomangiferolic acid**

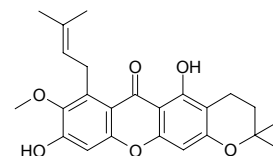
*Isoschizandrolic acid* [13878-92-7]  $C_{30}H_{48}O_3$  (456.72). mp 168~170°C. **Pharm:** Antineoplastic<sup>[2523]</sup>; anti-HIV<sup>[2523]</sup>. **Source:** MANG GUO *Mangifera indica*, MANG GUO SHU PI *Mangifera indica*, LIU LI CAO *Cynoglossum zeylanicum* [Syn. *Anchusa zeylanica*; *Cynoglossum furcatum*; *Cynoglossum formosanum*]. **Ref:** 6, 1521, 2523.

**11526 1-Isomangostin**

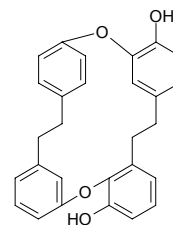
[19275-44-6]  $C_{24}H_{26}O_6$  (410.47). **Pharm:** Antibacterial; antifungal. **Source:** DAO NIAN ZI *Garcinia mangostana*, DAO NIAN ZI *Garcinia mangostana* (fruit hull)<sup>[3066]</sup>. **Ref:** 658, 3066.

**11527 3-Isomangostin**

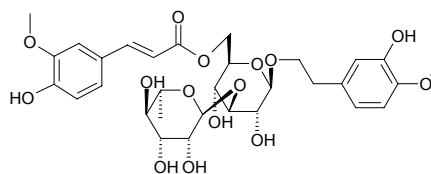
$C_{24}H_{26}O_6$  (410.47). **Pharm:** Antioxidant inactive (DPPH scavenger, 10 $\mu\text{mol/L}$ , ScRt = 3%; control BHT, 10 $\mu\text{mol/L}$ , ScRt = 43%,  $IC_{50} = 19.00\mu\text{mol/L}$ )<sup>[4422]</sup>. **Source:** DAO NIAN ZI *Garcinia mangostana* (fruit hull), TIAN SHAN ZHU ZI *Garcinia dulcis* (flower). **Ref:** 3066, 4422.

**11528 Isomarchantin C**

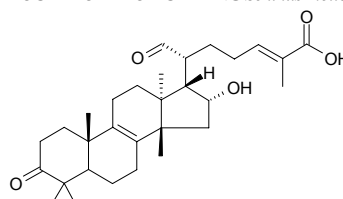
$C_{28}H_{24}O_4$  (424.50). **Source:** DI SUO LUO *Marchantia polymorpha*. **Ref:** 660.

**11529 Isomartynoside**

$C_{31}H_{40}O_{15}$  (652.66). **Source:** DA YE ZUI YU CAO *Buddleja davidii*, CHE QIAN *Plantago asiatica*. **Ref:** 660.

**11530 Isomasticadienonic acid**

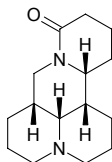
$C_{30}H_{44}O_5$  (484.68).  $[\alpha]_D^{25} = +29.9^\circ$  ( $c = 0.5$ ,  $\text{CHCl}_3$ ). **Pharm:** Anti-inflammatory (acute inflammation model, PLA<sub>2</sub>-induced mouse paw oedema, 30mg/kg, InRt = 66% at 60min); anti-inflammatory (chronic inflammation model, in the form of eczema, provoked by repeated administration of TPA to the ears of mouse, swelling reduction = 48%, control Dexamethasone, swelling reduction = 85%; reduces leukocyte infiltration, measured as tissue peroxidase activity, InRt = 50%, Dexamethasone, InRt = 55%); toxic (rat peritoneal polymorphonuclear leukocytes, 100 $\mu\text{mol/L}$ ). **Source:** ROU MAO XIAO RU XIANG *Schinus molle* (fruit). **Ref:** 5459.



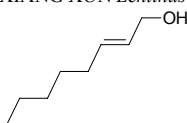
**11531 Isomatrine**

[17801-36-4] C<sub>15</sub>H<sub>24</sub>N<sub>2</sub>O (248.37). mp 132~134°C, [α]<sub>D</sub><sup>25</sup> = +44° (CHCl<sub>3</sub>).

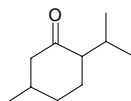
Source: KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*] (dried root: content scope of 5 origins = 0%~0.022%, mean content = 0.004%<sup>[5508]</sup>). Ref: 2, 1521, 5508.

**11532 Isomatsutakeol**

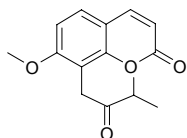
(E)-2-Octen-1-ol C<sub>8</sub>H<sub>16</sub>O (128.22). bp 87~89°C/11mmHg. Source: BING CHI XIAN *Tetraplodon mnioides* [Syn. *Tetraplodon bryoides*; *Splachnum mnioides*], SONG XUN *Tricholoma matsutake* [Syn. *Armillaria matsutake*], XIANG XUN *Lentinus edodes*. Ref: 6, 660.

**11533 Isomenthone**

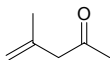
C<sub>10</sub>H<sub>18</sub>O (154.25). mp (+) -35°C, bp (+) 212°C, (±) 210°C. Source: BO HE *Mentha haplocalyx* [Syn. *Mentha canadensis*; *Mentha arvensis* var. *haplocalyx*; *Mentha arvensis*], HUA DONG LAN CI TOU *Echinops grijsii*. Ref: 2, 660.

**11534 Isomeramazin**

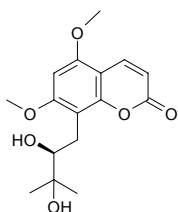
C<sub>15</sub>H<sub>16</sub>O<sub>4</sub> (260.29). Source: JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*]. Ref: 11.

**11535 Isomesityl oxide**

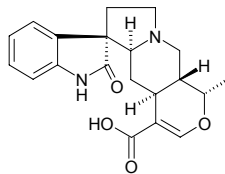
4-Methyl-4-penten-2-one [3744-02-3] C<sub>6</sub>H<sub>10</sub>O (98.15). mp 135~145°C (dec). Source: YA ER QIN *Cryptotaenia japonica*. Ref: 6.

**11536 Isomexoticin**

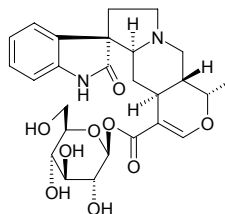
C<sub>16</sub>H<sub>20</sub>O<sub>6</sub> (308.33). Source: JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*]. Ref: 660.

**11537 Isomitraphyllic acid**

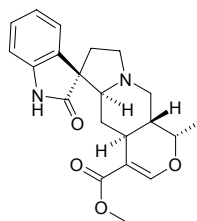
C<sub>20</sub>H<sub>22</sub>N<sub>2</sub>O<sub>4</sub> (354.41). White thin acicular crystals, mp 184~186°C. Source: HUA GOU TENG *Uncaria sinensis*. Ref: 287.

**11538 Isomitraphyllic acid (16→1)-β-D-glucopyranosyl ester**

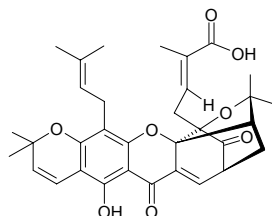
C<sub>26</sub>H<sub>32</sub>N<sub>2</sub>O<sub>9</sub> (516.55). White powder crystals, mp 206~209°C, [α]<sub>D</sub> = 0° (MeOH). Source: HUA GOU TENG *Uncaria sinensis*. Ref: 287.

**11539 Isomitraphylline**

C<sub>21</sub>H<sub>24</sub>N<sub>2</sub>O<sub>4</sub> (368.44). Pharm: Immunostimulant (maybe by increasing phagocytosis of hmn granulocytes and macrophages and blocking proliferation of myeloid cell lines). Source: BAI GOU TENG *Uncaria sessilifrutus* [Syn. *Nauclea sessilifrutus*], BEI YUE GOU TENG *Uncaria homomalla* [Syn. *Uruparia homomalla*; *Uruparia tonkinensis*; *Uruparia lanosa* var. *parviflora*], BI LU GOU TENG *Uncaria tomentosa*, CHANG HUA GOU TENG *Uncaria longiflora*, DONG FANG GOU TENG *Uncaria orientalis*, DUAN RONG MAO GOU TENG *Uncaria veluntina*, FEI ZHOU GOU TENG *Uncaria africana*, GUI YA NA GOU TENG *Uncaria guianensis*, HOU YE GOU TENG *Uncaria callophylla*, MAO GOU TENG *Uncaria hirsuta*, MIAN MAO GOU TENG *Uncaria lanosa*, PAN ZHI GOU TENG *Uncaria scandens* [Syn. *Nauclea pilosa*; *Uruparia pilosa*; *Uncaria pilosa*], PI ZHEN YE GOU TENG *Uncaria lancifolia*, PING HUA FA LIANG GOU TENG *Uncaria laevigata*, TUO YUAN GOU TENG *Uncaria elliptica*, *Uncaria bernaysii*, *Uncaria perrottetii*, *Uncaria sterrophylla*. Ref: 5341.

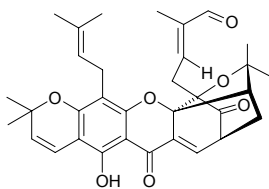
**11540 Isomorellic acid**

C<sub>33</sub>H<sub>36</sub>O<sub>8</sub> (560.65). Source: TENG HUANG *Garcinia morella*. Ref: 6.

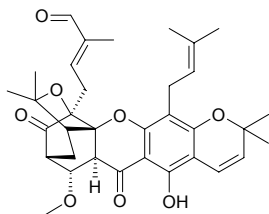


**11541 Isomorellin**

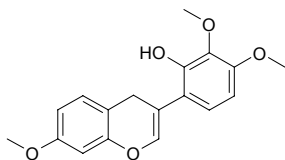
[1064-71-7]  $C_{33}H_{36}O_7$  (544.65). Acicular crystals (methanol), mp 120–121°C,  $[\alpha]_D = -623^\circ$  (chloroform). **Pharm:** Cytotoxic (*in vitro*, hm cervical carcinoma cells, MIC = 25.0  $\mu\text{g/mL}$ , hm embryo lung cells, MIC = 25.0  $\mu\text{g/mL}$ ); antiprotozoal. **Source:** TENG HUANG *Garcinia morella*. **Ref:** 6, 900.

**11542 Isomorellin B**

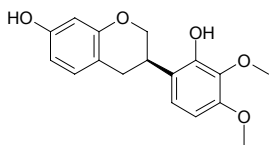
$C_{34}H_{40}O_8$  (576.69). **Source:** TENG HUANG SHU *Garcinia hanburyi* (fresh fruit). **Ref:** 4487.

**11543 Iso-mucromatol**

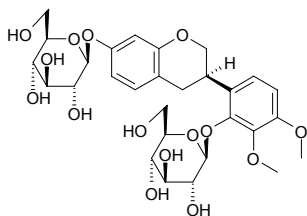
$C_{18}H_{18}O_5$  (314.34). **Source:** KUN MING JI XUE TENG *Milletia dielsiana*. **Ref:** 2205.

**11544 Isomucronulatol**

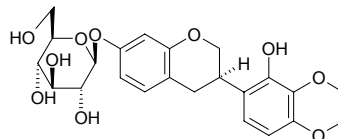
$C_{17}H_{18}O_5$  (302.33).  $[\alpha]_D^{20.6} = -13.0^\circ$  ( $c = 0.3$ ,  $\text{CHCl}_3$ ). **Source:** DIAN HUANG JING *Polygonatum kingianum* (dried rhizome), MENG GU HUANG QI *Astragalus mongholicus*. **Ref:** 660, 5484.

**11545 Isomucronulatol-7,2'-di-O-glucoside**

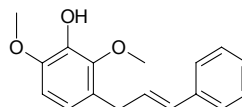
$C_{29}H_{38}O_{15}$  (626.62). **Source:** MENG GU HUANG QI *Astragalus mongholicus*. **Ref:** 660.

**11546 Isomucronulatol-7-O-glucoside**

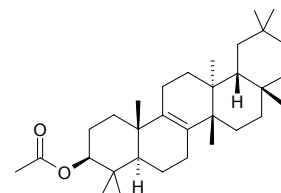
$C_{23}H_{28}O_{10}$  (464.47). **Source:** MENG GU HUANG QI *Astragalus mongholicus*. **Ref:** 660.

**11547 Isomucronustyrene**

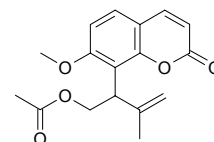
$C_{17}H_{18}O_3$  (270.33). **Pharm:** Platelet aggregation inhibitor (induced by arachidonic acid); prostaglandin biosynthesis inhibitor. **Source:** JIANG ZHEN XIANG *Dalbergia odorifera*. **Ref:** 660, 5501.

**11548 Isomultiflorenyl acetate**

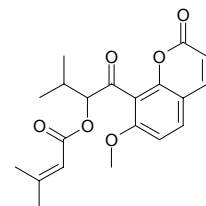
$C_{32}H_{52}O_2$  (468.77). **Source:** DONG GUA PI *Benincasa hispida*. **Ref:** 660.

**11549 Isomurralonginol acetate**

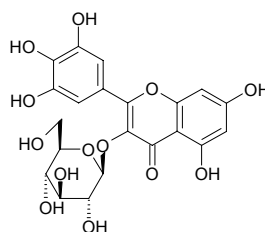
$C_{17}H_{18}O_5$  (302.33). **Source:** XIAO YE JIU LI XIANG *Murraya paniculata* var. *exotica*. **Ref:** 660.

**11550 Isomurranganone seneciolate**

$C_{20}H_{22}O_6$  (358.39). **Source:** XIAO YE JIU LI XIANG *Murraya paniculata* var. *exotica*. **Ref:** 660.

**11551 Isomyricitrin**

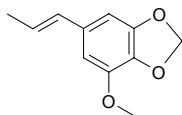
Myricetin-3-glucoside [19833-12-6]  $C_{21}H_{20}O_{13}$  (480.39). **Source:** BAI FAN DOU *Phaseolus vulgaris*, HENG GEN FEI CAI *Sedum kamschaticum*. **Ref:** 6.



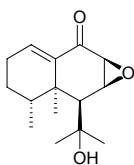


**11552 Isomyristicin**

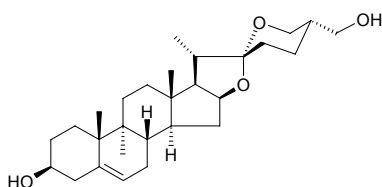
$C_{11}H_{12}O_3$  (192.22). Source: GAO BEN *Ligusticum sinense*, SHI JI NING *Mosla scabra* [Syn. *Mosla punctata*], XIN JIANG GAO BEN *Conioselinum vaginatum*. Ref: 660.

**11553 Isonardosinone**

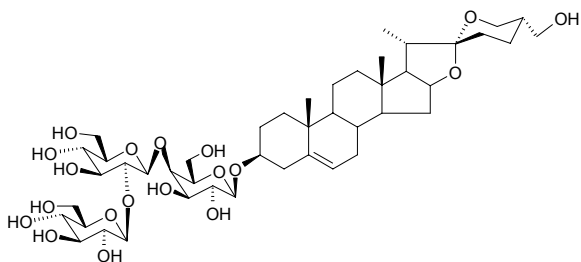
$C_{15}H_{22}O_3$  (250.34). Source: GAN SONG *Nardostachys chinensis*. Ref: 660.

**11554 Isonarthogenin**

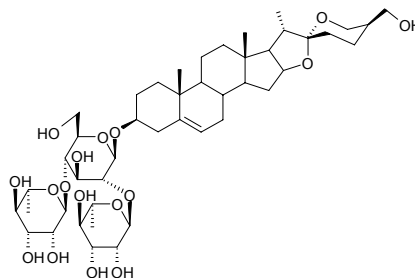
[7050-40-0]  $C_{27}H_{42}O_4$  (430.63). Source: CHA RUI SHU YU *Dioscorea collettii*. Ref: 10.

**11555 Isonarthogenin 3-O-β-D-glucopyranosyl-(1→2)-β-D-glucopyranosyl-(1→4)-β-D-galactopyranoside**

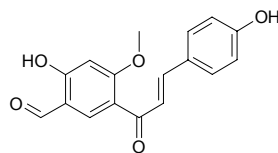
$C_{45}H_{72}O_{19}$  (917.06). Pharm: Cytotoxic (*in vitro*, HeLa,  $IC_{50} = 5.24\mu g/mL$ ; control Cisplatin, HeLa,  $IC_{50} = 0.75\mu g/mL$ ). Source: HU BEI HUANG JING *Polygonatum zanlanscianense* (rhizome: yield = 0.00006%dw). Ref: 4788.

**11556 Isonarthogenin-3-O-α-L-rhamnopyranosyl-(1→2)-O-[α-L-rhamnopyranosyl-(1→4)]-β-D-glucopyranoside**

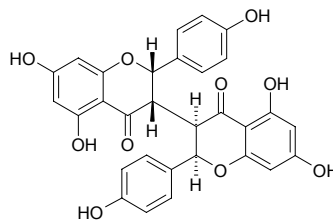
$C_{45}H_{72}O_{17}$  (885.07). Pharm: Cytotoxic (*in vitro*, HeLa,  $IC_{50} = 3.62\mu g/mL$ ; control Cisplatin, HeLa,  $IC_{50} = 0.75\mu g/mL$ )<sup>[4788]</sup>. Source: HAI JIN BI XIE *Dioscorea spongiosa* (Rhizome: yield = 0.00016%), HU BEI HUANG JING *Polygonatum zanlanscianense* (rhizome: yield = 0.00014%dw). Ref: 4692, 4788.

**11557 Isonobavachalcone**

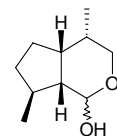
[76444-57-0]  $C_{17}H_{14}O_5$  (298.30). Source: BU GU ZHI *Psoralea corylifolia*. Ref: 2.

**11558 Isonochamaejasmin A**

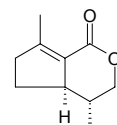
$C_{30}H_{22}O_{10}$  (542.50). Yellowish powder, mp 233–235°C (MeOH). Source: LANG DU *Stellera chamaejasme*. Ref: 4577.

**11559 Isonematatabiol**

Isodihydronepetalactol [34258-02-1]  $C_{10}H_{18}O_2$  (170.25). Source: MU TIAN LIAO *Actinidia polygama*. Ref: 6, 1521.

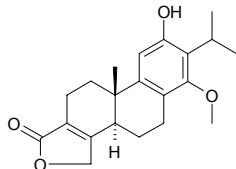
**11560 Isononepetalactone**

$C_{10}H_{14}O_2$  (166.22). Source: MU TIAN LIAO *Actinidia polygama*. Ref: 660.



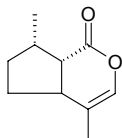
**11561 Isonetriptophenolide**

$C_{21}H_{26}O_4$  (342.44). Source: LEI GONG TENG *Tripterygium wilfordii*. Ref: 2.

**11562 Isonepetalactone**

$C_{10}H_{14}O_2$  (166.22). mp 27.5–29.0°C. Source: JIA JING JIE *Nepeta cataria*.

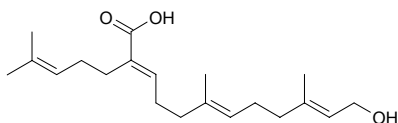
Ref: 6.

**11563 Isonerylgeraniol-18-oic acid**

(2*E*,6*E*,10*Z*)-1-Hydroxy-2,6,10,14-phytatetraen-18-oic Acid  $C_{20}H_{32}O_3$

(320.48). Amorphous solid. Source: TAI WAN CUI BAI *Calocedrus*

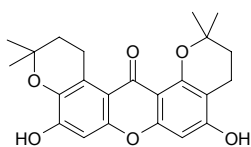
*macrolepis* var. *formosana* (leaf). Ref: 4297.

**11564 Isonormangostin**

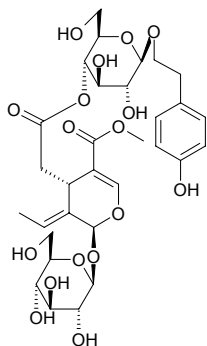
$C_{23}H_{24}O_6$  (396.44). Pharm: Antioxidant (DPPH scavenger, 10μmol/L, ScRt =

10%, control BHT, 10μmol/L, ScRt = 43%). Source: TIAN SHAN ZHU

*ZI Garcinia dulcis* (fruit). Ref: 5319.

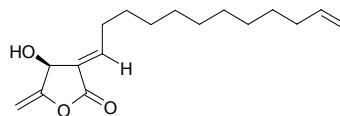
**11565 Isonuezhenide**

$C_{31}H_{42}O_{17}$  (686.67). Source: NV ZHEN ZI *Ligustrum lucidum*. Ref: 3545.

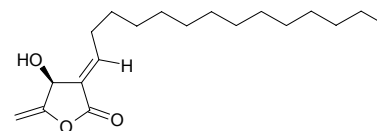
**11566 Isoobtusilactone**

[56522-14-6]  $C_{17}H_{26}O_3$  (278.39). Oil,  $[\alpha]_D^{20} = -43^\circ$  ( $c = 0.003$ , chloroform).

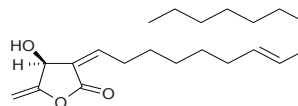
Pharm: Cytotoxic (cultured hmn MCF7,  $ED_{50} = 4.60\mu\text{g/mL}$ , HT29,  $ED_{50} = 2.92\mu\text{g/mL}$ , BST,  $LC_{50} = 0.065\text{mg/L}$ ). Source: ZHANG MU *Cinnamomum camphora*, SAN ZUAN FENG *Lindera obtusiloba*. Ref: 938, 1053, 1119.

**11567 Isoobtusilactone A**

$C_{19}H_{32}O_3$  (308.47). Source: SAN ZUAN FENG *Lindera obtusiloba*. Ref: 660.

**11568 Isoobtusilactone B**

$C_{21}H_{34}O_3$  (334.50). Source: SAN ZUAN FENG *Lindera obtusiloba*. Ref: 660.

**11569 Isoobtusitin**

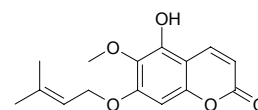
5-Hydroxy-6-methoxy-7-(3-methyl-but-2-enyloxy)-2*H*-1-benzopyran-2-one

$C_{15}H_{16}O_5$  (276.29). Pale yellow needles (MeOH), mp 127–130°C. Pharm:

Antiviral (*in vitro*, poliovirus, moderate activity; HIV, very weak activity;

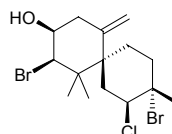
HSV1, VSV, and murine tumoral cell lines 3LL, L1210, inactive). Source:

*Psiadia dentata* (aerial parts). Ref: 3527.

**11570 Isoobtusol**

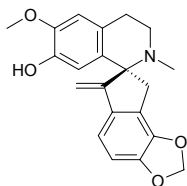
$C_{15}H_{23}Br_2ClO$  (414.61). mp 109–113°C,  $[\alpha]_D^{26} = +24.8^\circ$  ( $c = 0.48$ ,  $CHCl_3$ ).

Pharm: Antibacterial (*Clostridium cellobioparum*, MIC = 10μg/disc; *Proteus mirabilis*, MIC = 15μg/disc; *Chromobacterium violaceum*, *Escherichia coli*, *Flavobacterium helmiphilum*, *Vibrio parahaemolyticus*, MIC = 40–60μg/disc; *Clostridium fallax*, *Clostridium novyi*, *Clostridium sordellii*, *Enterobacter aerogenes*, *Shigella flexneri*, *Vibrio cholerae*, *Vibrio vulnificus*, no inhibition). Source: LUE DAO DING ZAO *Laurencia majuscula*. Ref: 5183.

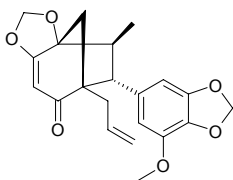


**11571 Isoochotensine**

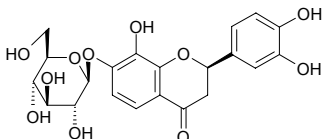
$C_{21}H_{21}NO_4$  (351.41). Source: HUANG ZI JIN *Corydalis ochotensis*. Ref: 660.

**11572 Isoocobullenone**

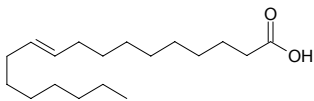
$C_{21}H_{22}O_6$  (370.41). Pharm: Anti-inflammatory (5-LOX inhibitor,  $IC_{50} > 100 \mu\text{mol/L}$ ; COX-1 inhibitor,  $> 500 \mu\text{mol/L}$ , inactive, control Indomethacin,  $IC_{50} = 3.1 \mu\text{mol/L}$ , COX-2 inhibitor,  $> 500 \mu\text{mol/L}$ , inactive, Indomethacin,  $IC_{50} = 188 \mu\text{mol/L}$ ). Source: NAN FEI ZHANG GUI *Ocotea bullata* (stem cortex). Ref: 3971.

**11573 Isookanin-7-O-β-D-glucoside**

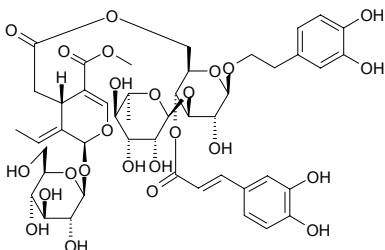
$C_{21}H_{22}O_{11}$  (450.40). Source: GUI ZHEN CAO *Bidens bipinnata*, LANG PA CAO *Bidens tripartita*. Ref: 660.

**11574 Isooleic acid**

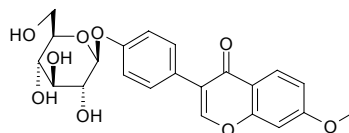
*10-Octadecenoic acid* [5684-82-2]  $C_{18}H_{34}O_2$  (282.47). mp 52.5°C. Source: HUI XIANG *Foeniculum vulgare*, HUI XIANG JING YE *Foeniculum vulgare*, MING DANG SHEN *Changium smyrnioides*, WEN PO *Cydonia oblonga*. Ref: 6, 1521, 2940, 2941.

**11575 Isooleoacteoside**

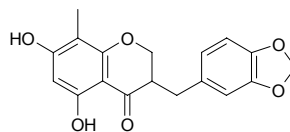
$C_{46}H_{58}O_{25}$  (1010.96). Colorless amorphous powder,  $[\alpha]_D^{23} = -124^\circ$  ( $c = 0.28$ , MeOH). Source: YING CHUN HUA *Jasminum nudiflorum* (leaf). Ref: 4169.

**11576 Isoononin**

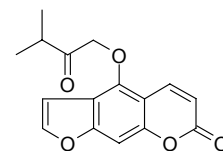
Isoformononetin-4'-glucoside  $C_{22}H_{22}O_9$  (430.42). White acicular crystals, mp 216–218°C. Source: GAN CAO *Glycyrrhiza uralensis*. Ref: 305, 660.

**11577 Isoophiopogonone A**

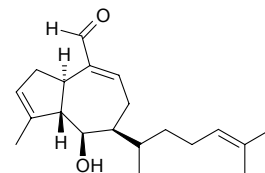
$C_{18}H_{16}O_6$  (328.32). Source: MAI DONG *Ophiopogon japonicus*. Ref: 660.

**11578 Isooxypeucedanin**

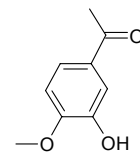
[5058-15-1]  $C_{16}H_{14}O_5$  (286.29). Crystals (Et<sub>2</sub>O), mp 146–148°C, mp 131–132°C. Source: HANG BAI ZHI *Angelica taiwaniana*, LIN BAI ZHI *Angelica sylvestris*, *Niphogeton ternata*. Ref: 2, 660, 4156.

**11579 Isopachydictyolal**

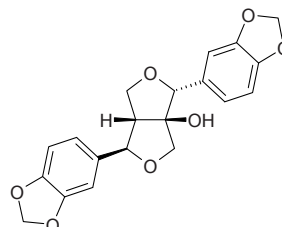
$C_{20}H_{30}O_2$  (302.46). Colorless oil,  $[\alpha]_D^{20} = -85.8^\circ$  ( $c = 0.30$ , CH<sub>2</sub>Cl<sub>2</sub>). Source: WANG DI ZAO *Dictyota dichotoma*. Ref: 3818.

**11580 Isopaconol**

$C_9H_{10}O_3$  (166.18). Pharm: Analgesic (mus); intestinal smooth muscle relaxant. Source: XU CHANG QING *Cynanchum paniculatum*. Ref: 660, 5501.

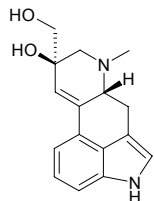
**11581 Isopaulownin**

[10590-41-7]  $C_{20}H_{18}O_7$  (370.36). mp 132°C,  $[\alpha]_D = +127^\circ$  ( $c = 0.80$ , CHCl<sub>3</sub>). Source: MAO PAO TONG *Paulownia tomentosa*. Ref: 6, 660.

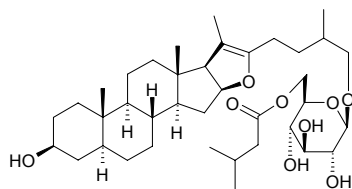


**11582 Isopenniclavine**

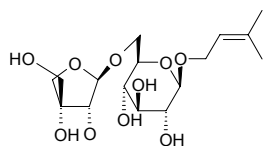
[478-92-2]  $C_{16}H_{18}N_2O_2$  (270.33). mp 163~165°C (dec). Source: QIAN NIU ZI *Pharbitis nil*. Ref: 6.

**11583 26-O-(3'-Isopentanoyl)-β-D-glucopyranosyl-5α-furost-20(22)-ene-3β,26-diol**

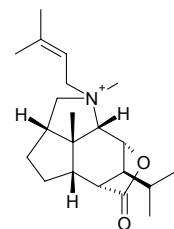
$C_{38}H_{62}O_9$  (662.91). White powder. Source: PA KE YE XIANG SHU *Cestrum parqui* (fresh leaf). Ref: 5327.

**11584 Isopentenol-1-O-β-D-apiofuranosyl-(1→6)-β-D-glucopyranoside**

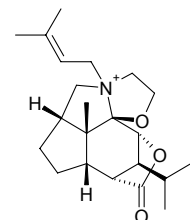
[198832-70-1]  $C_{16}H_{28}O_{10}$  (380.40). Powder,  $[\alpha]_D^{26} = -66.2^\circ$  ( $c = 2.0$ , MeOH). Source: ZI HU *Bupleurum falcatum*. Ref: 2317.

**11585 N-Isopentenyl dendrobine**

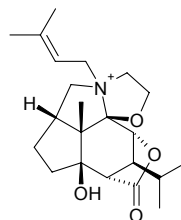
$C_{21}H_{34}NO_2^+$  (332.51). Source: SHI HU<sup>(4)</sup> *Dendrobium nobile*. Ref: 660.

**11586 N-Isopentenyl dendroxine**

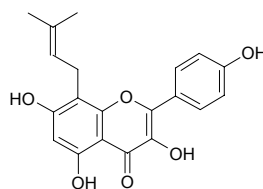
$C_{22}H_{34}NO_3$  (360.52). Source: SHI HU<sup>(4)</sup> *Dendrobium nobile*. Ref: 660.

**11587 N-Isopentenyl-6-hydroxydendroxine**

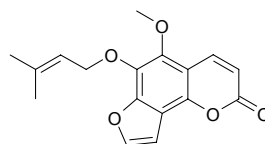
$C_{22}H_{34}NO_4^+$  (376.52). Source: SHI HU<sup>(4)</sup> *Dendrobium nobile*. Ref: 660.

**11588 8-Isopentenyl-kaempferol**

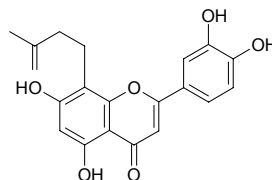
Noranhydrocaritin [28610-31-3]  $C_{20}H_{18}O_6$  (354.36). Yellow crystals (EtOAc-pet. ether), mp 226°C. Source: KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. Ref: 6, 1521, 2703, 4430.

**11589 6-Isopentenylxoyisobergaptin**

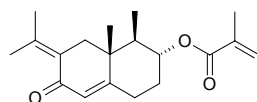
[24099-29-4]  $C_{17}H_{16}O_5$  (300.31). mp 96~97°C. Source: YONG NING DU HUO *Heracleum yungningense*. Ref: 541.

**11590 8-(4'-Isopentenyl)-5,7,3',4'-tetrahydroxyflavone**

$C_{20}H_{18}O_6$  (354.36). mp 100°C. Source: CANG ER *Xanthium sibiricum* [Syn. *Xanthium strumarium*]. Ref: 6.

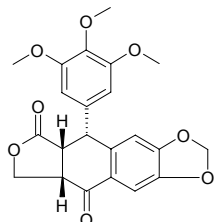
**11591 Isopetasin**

$C_{20}H_{28}O_3$  (316.44). mp 95~96°C. Pharm: Antispasmodic. Source: ZI FENG DOU CAI *Petasites officinalis* [Syn. *Petasites hybridu*], FENG DOU CAI *Petasites japonicus*, KA BU LI FENG DOU *Petasites kablikianus*, DUO CHI QIAN LI GUANG *Senecio polyodon*. Ref: 6, 658.

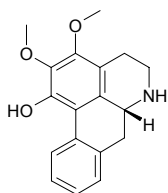


**11592 Isopropodophyllone**

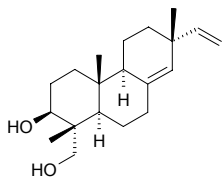
[55515-07-6] C<sub>22</sub>H<sub>20</sub>O<sub>8</sub> (412.40). Needles (MeOH), mp 170~172°C, [α]<sub>D</sub> = -273° (CHCl<sub>3</sub>). **Source:** LIU JIAO LIAN *Dysosma pleiantha* [Syn. *Podophyllum pleianthum*], WO ER QI *Diphylleia sinensis* (rhizome: content scope of 4 origins = 0.015%~0.109%, mean content = 0.063%). **Ref:** 5, 5508.

**11593 (-)-Isopiline**

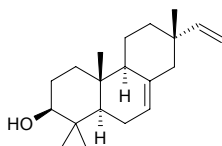
C<sub>18</sub>H<sub>19</sub>NO<sub>3</sub> (297.36). **Source:** YOU GOU YING ZHAO *Artabotrys uncinatus* (root, stem). **Ref:** 3083.

**11594 8(14),15-Isopimaradien-3β,19-diol**

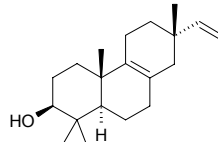
C<sub>20</sub>H<sub>32</sub>O<sub>2</sub> (304.48). Colorless oil, [α]<sub>D</sub><sup>25</sup> = -23° (c = 1.18, CHCl<sub>3</sub>), [α]<sub>D</sub><sup>23</sup> = -17 (CHCl<sub>3</sub>). **Pharm:** Antimalarial (*in vitro*, *Plasmodium falciparum* strain 3D7, IC<sub>50</sub> = (28.4±1.4)μg/mL = (93.3±4.6)μmol/L). **Source:** CE BAI YE *Thuja orientalis* [Syn. *Platyclusus orientalis*; *Biota orientalis*]. **Ref:** 3022.

**11595 Isopimara-7,15-dien-3β-ol**

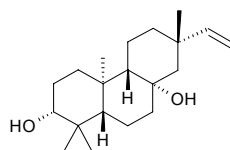
C<sub>20</sub>H<sub>32</sub>O (288.48). Amorphous powder, [α]<sub>D</sub><sup>22</sup> = +15° (c = 0.1, CH<sub>2</sub>Cl<sub>2</sub>). **Pharm:** Cytotoxic (HeLa, IC<sub>50</sub> = (25.3±3.3)μg/mL, control Camptothecin, IC<sub>50</sub> = 0.5μmol/mL; HL-60, IC<sub>50</sub> = (28.9±4.0)μg/mL, Camptothecin, IC<sub>50</sub> = 0.1μmol/mL; WI-38, IC<sub>50</sub> = (32.6±3.6)μg/mL, Camptothecin, IC<sub>50</sub> = 0.6μmol/mL). **Source:** ZAN BI XI BADOU *Croton zambesicus* (leaf). **Ref:** 3807.

**11596 8(9),15-Isopimaradien-3β-ol**

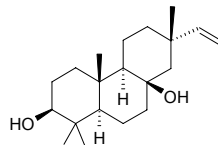
C<sub>20</sub>H<sub>32</sub>O (288.48). Colorless oil, [α]<sub>D</sub><sup>25</sup> = +105° (c = 0.36, CHCl<sub>3</sub>), [α]<sub>D</sub><sup>25</sup> = +92° (c = 0.82, CHCl<sub>3</sub>). **Pharm:** Antimalarial (*in vitro*, *Plasmodium falciparum* strain 3D7, IC<sub>50</sub> = (7.1±0.6)μg/mL = (24.6±2.1)μmol/L). **Source:** CE BAI YE *Thuja orientalis* [Syn. *Platyclusus orientalis*; *Biota orientalis*]. **Ref:** 3022.

**11597 ent-Isopimara-15-en-α,α-diol**

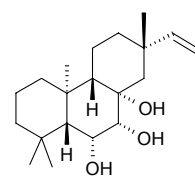
C<sub>20</sub>H<sub>34</sub>O<sub>2</sub> (306.49). White amorphous powder, [α]<sub>D</sub><sup>25</sup> = +3° (c = 1.0, CHCl<sub>3</sub>). **Source:** BAI ZI REN *Biota orientalis* [Syn. *Thuja orientalis*; *Platyclusus orientalis*] (leaf). **Ref:** 4203.

**11598 15-Isopimaren-3β,8β-diol**

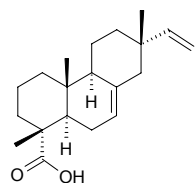
C<sub>20</sub>H<sub>34</sub>O<sub>2</sub> (306.49). Colorless oil, [α]<sub>D</sub><sup>25</sup> = -9° (c = 0.36, CHCl<sub>3</sub>), [α]<sub>D</sub><sup>25</sup> = +3° (c = 1.0, CHCl<sub>3</sub>). **Pharm:** Antimalarial (*in vitro*, *Plasmodium falciparum* strain 3D7, IC<sub>50</sub> = (24.8±2.1)μg/mL = (80.9±6.9)μmol/L). **Source:** CE BAI YE *Thuja orientalis* [Syn. *Platyclusus orientalis*; *Biota orientalis*]. **Ref:** 3022.

**11599 ent-Isopimar-15-en-6α,7α,8α-triol**

C<sub>20</sub>H<sub>34</sub>O<sub>3</sub> (322.49). mp 169.5~170°C, [α]<sub>D</sub><sup>20</sup> = +7.7° (c = 0.40, MeOH). **Source:** XIAO YE XIANG CHA CAI *Isodon parvifolia*. **Ref:** 4067.

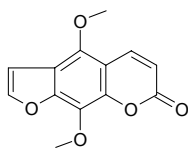
**11600 Isopimaric acid**

Isodextropimaric acid; Micropinic acid [5835-26-7] C<sub>20</sub>H<sub>30</sub>O<sub>2</sub> (302.46). **Pharm:** Cytotoxic inactive (KB oral epidermoid carcinoma, ED<sub>50</sub> > 10μg/mL, Hep3B hepatoma cells, ED<sub>50</sub> > 10μg/mL, HeLa, ED<sub>50</sub> > 10μg/mL, Colon205, ED<sub>50</sub> > 10μg/mL)<sup>[4253]</sup>. **Source:** CE BAI YE *Thuja orientalis* [Syn. *Platyclusus orientalis*; *Biota orientalis*], TAI WAN CU FEI *Cephalotaxus wilsoniana* (twig), CHANG YE SONG *Pinus palustris*, JIAN YE LONG XUE SHU *Dracaena cochinchinensis*. **Ref:** 660, 1521, 4253.

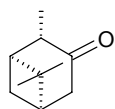


**11601 Isopimpinellin**

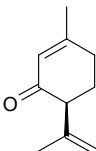
5,8-Dimethoxy-6,7-furanocoumarin [482-27-9] C<sub>13</sub>H<sub>10</sub>O<sub>5</sub> (246.22). Golden~yellow needles (MeOH), mp 151°C, mp 147~148°C; yellow amorphous powder. **Pharm:** Antineoplastic (inhibits proliferation of HeLa cell); cytotoxic (24h: HL-60, IC<sub>50</sub> > 50µg/mL, control Adriamycin IC<sub>50</sub> < 0.10µg/mL; P<sub>388</sub>, IC<sub>50</sub> > 50µg/mL, Adriamycin IC<sub>50</sub> < 0.10µg/mL; Colon205, IC<sub>50</sub> = 39.2µg/mL, Adriamycin IC<sub>50</sub> = 0.63µg/mL; HeLa, IC<sub>50</sub> > 50µg/mL, Adriamycin IC<sub>50</sub> = 0.15µg/mL)<sup>[5486]</sup>; antileishmanial (*Leishmania major* promastigote, 10µmol/L, survival = (99.1±1.8)%, 1µmol/L, survival = (97.6±3.2)%, control Amphotericin B, 10µmol/L, survival = (0.2±0.04)%, 1µmol/L, survival = (71.9±4.4)%; *Leishmania major* amastigote, 10µmol/L, survival = (79.0±4.2)%, 1µmol/L, survival = (91.7±4.5)%, control Amphotericin B, 10µmol/L, survival = (0.4±0.02)%, 1µmol/L, survival = (0.5±0.03)%)<sup>[3797]</sup>; antifungal inactive (silica gel TLC, *Cladosporium cucumerinum*, control Nystatin, MIA = 0.2µg)<sup>[3797]</sup>. **Source:** CHOU CAO *Ruta graveolens*, DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*], FEI LONG ZHANG XUE *Toddalia asiatica* [Syn. *Toddalia aculeata*; *Paullinia asiatica*], JU YUAN YE *Citrus medica*, LANG DU *Stellera chamaejasme*, SHE CHUANG ZI *Cnidium monnieri* (ripe seed: mean content of 14 origins = 0.121%<sup>[5508]</sup>), YONG NING DU HUO *Heracleum yungningense*, *Niphogeton ternata*, *Thamnosma rhodesica* (root). **Ref:** 6, 541, 1521, 1851, 3797, 4156, 5486, 5508.

**11602 Isopinocampnone**

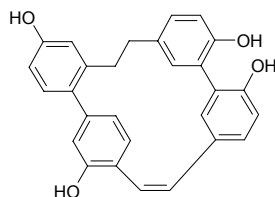
[14575-93-0] C<sub>10</sub>H<sub>16</sub>O (152.24). bp (+) 213.4~215.0°C, (-) 81°C/5mmHg. **Source:** JIN XIAN CAO *Glechoma longituba*. **Ref:** 6, 1521.

**11603 Isopiperitenone**

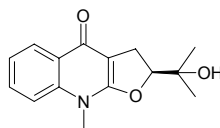
C<sub>10</sub>H<sub>14</sub>O (150.22). **Source:** AI YE *Artemisia argyi*. **Ref:** 660.

**11604 Isoplagiochin C**

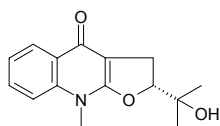
C<sub>28</sub>H<sub>22</sub>O<sub>4</sub> (422.49). [α]<sub>D</sub><sup>20</sup> = +42.5° (c = 0.2, MeOH). **Source:** WAN QU ZHI YE TAI *Lepidozia incurvata*. **Ref:** 3456.

**11605 (S)-(+)-Isoplatydesmine**

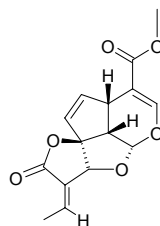
C<sub>15</sub>H<sub>17</sub>NO<sub>3</sub> (259.31). **Pharm:** Cytotoxic (P<sub>388</sub> cell line, ED<sub>50</sub> = 4.1µg/mL, control Mithramycin, ED<sub>50</sub> = 0.06µg/mL; HT29, ED<sub>50</sub> = 9.8µg/mL, Mithramycin, ED<sub>50</sub> = 0.07µg/mL; A549, ED<sub>50</sub> = 1.5µg/mL, Mithramycin, ED<sub>50</sub> = 0.08µg/mL). **Source:** SI ROU TUO GUO YE MI ZHU YU *Melicope semecarpifolia*. **Ref:** 5405.

**11606 Isoplatydesmine**

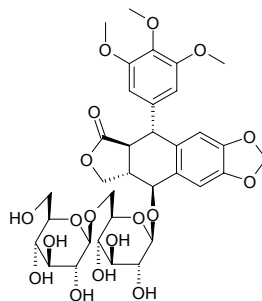
C<sub>15</sub>H<sub>17</sub>NO<sub>3</sub> (259.31). **Source:** CHOU SHAN YANG *Orixa japonica*, SAN CHA KU *Evodia lepta* [Syn. *Ilex lepta*]. **Ref:** 660.

**11607 Isoplumericin**

[31298-76-7] C<sub>15</sub>H<sub>14</sub>O<sub>6</sub> (290.28). mp 200.5~201.5°C (dec), [α]<sub>D</sub> = +216.4°±2° (c = 1.01, chloroform). **Pharm:** Antibacterial (*Mycobacterium tuberculosis*); antifungal. **Source:** RUAN ZHI HUANG CHAN *Allenmanda cathartica*. **Ref:** 658.

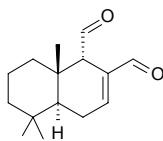
**11608 Isopodophyllotoxin 7'-O-β-D-glucopyranosyl-(1→6)-β-D-glucopyranoside**

C<sub>34</sub>H<sub>42</sub>O<sub>18</sub> (738.70). Colorless needles, [α]<sub>D</sub><sup>29</sup> = -45.67° (c = 0.6, MeOH). **Source:** TAO ER QI *Podophyllum emodii* [Syn. *Podophyllum emodii* var. *chinense*; *Podophyllum sikkimensis*; *Sinopodophyllum emodii*] (root and rhizome). **Ref:** 3543.

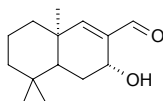


**11609 Isopolygodial**

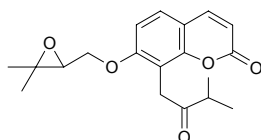
Isotadeonal C<sub>15</sub>H<sub>22</sub>O<sub>2</sub> (234.34). Source: SHUI LIAO *Polygonum hydropiper*. Ref: 6, 660.

**11610 Isopolygonal**

C<sub>14</sub>H<sub>22</sub>O<sub>2</sub> (222.33). Source: SHUI LIAO *Polygonum hydropiper*. Ref: 660.

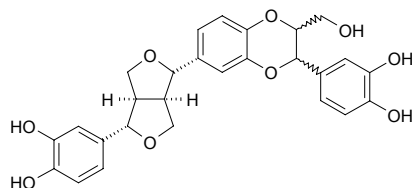
**11611 Isoponceimarín**

C<sub>19</sub>H<sub>22</sub>O<sub>5</sub> (330.38). Source: GOU JU *Poncirus trifoliata* (unripe fruit). Ref: 660.

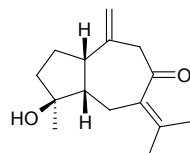
**11612 Isoprincepin**

*rel*-(7 $\alpha$ ,7 $\alpha$ ,8 $\alpha$ ,8 $\alpha$ ,7 $\alpha$ ,8 $\beta$ )-3',7':7,9':7,9-triepoxo-4'8"-oxy-8,8'-sesquieolignan-3,3',4,4',9"-pentaol and *rel*-(7 $\alpha$ ,7 $\alpha$ ,8 $\alpha$ ,8 $\alpha$ ,7 $\beta$ ,8 $\alpha$ )-3',7':7,9':7,9-Triepoxo-4'8"-oxy-8,8'-sesquieolignan-3,3',4,4',9"-pentaol) C<sub>27</sub>H<sub>26</sub>O<sub>9</sub> (494.50). Colorless amorphous solid.

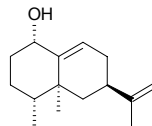
Source: BA XI QIAO AN MU *Joannesia princeps* (seed). Ref: 3369.

**11613 Isoprocurcumenol**

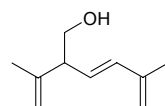
C<sub>15</sub>H<sub>22</sub>O<sub>2</sub> (234.34). Pharm: NO production inhibitor inactive (mus peritoneal macrophages, induced by LPS, 100 $\mu$ mol/L, InRt = (20.6 $\pm$ 2.9)%), control *L*-NMMA, 100 $\mu$ mol/L, InRt = (79.2 $\pm$ 0.9)%,  $p < 0.05$ )<sup>[4150]</sup>. Source: JIANG HUANG *Curcuma longa*, PING E SHU *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*]. Ref: 660, 4150.

**11614 6-Isopropenyl-4,4a-dimethyl-1,2,3,4,4a,5,6,7-octahydro-naphthalen-1-ol**

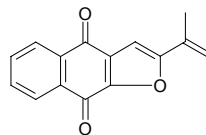
C<sub>15</sub>H<sub>24</sub>O (220.36). Pharm: NO production Inhibitor (*in vitro*, LPS-activated mouse peritoneal macrophages, IC<sub>50</sub> = 48 $\mu$ mol/L; control *L*-NMMA, IC<sub>50</sub> = 28 $\mu$ mol/L);  $\beta$ -hexosaminidase release inhibitor (RBL-2H3 Cells, 100 $\mu$ mol/L, InRt = -8.0%; control Curcumin, InRt = 62.6%). Source: YI ZHI REN *Alpinia oxyphylla* (fruit: yield = 0.0020%dw). Ref: 4655.

**11615 2-Isopropenyl-5-methylhexa-trans-3,5-dien-1-ol**

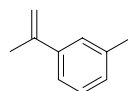
C<sub>10</sub>H<sub>16</sub>O (152.24). Colorless oil. Source: WA SI YA NA SAN CHI HAO *Artemisia tridentata* ssp. *vaseyana*, NIAN HAO *Artemisia cana* ssp. *viscidula*. Ref: 1980.

**11616 2-Isopropenyl naphtho[2,3-b]furan-4,9-quinone**

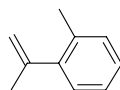
C<sub>15</sub>H<sub>10</sub>O<sub>3</sub> (238.25). Source: CAI DOU SHU *Radermachera sinica*. Ref: 660.

**11617 m-Isopropenyl toluene**

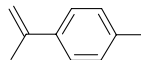
C<sub>10</sub>H<sub>12</sub> (132.21), bp 185~186°C. Source: JU PI *Citrus reticulata*. Ref: 6.

**11618 o-Isopropenyl toluene**

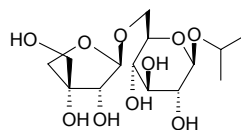
[7399-49-7] C<sub>10</sub>H<sub>12</sub> (132.21), bp 172~173°C. Source: JU PI *Citrus reticulata*. Ref: 6.

**11619 p-Isopropenyl toluene**

[1195-32-0] C<sub>10</sub>H<sub>12</sub> (132.21), mp -20°C, bp 184~185°C. Source: JU PI *Citrus reticulata*. Ref: 6.

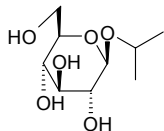
**11620 Isopropyl  $\beta$ -D-apiofuranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside**

C<sub>14</sub>H<sub>26</sub>O<sub>10</sub> (354.36). Amorphous powder,  $[\alpha]_D^{24} = -66^\circ$ . Source: BEI SHA SHEN *Glehnia littoralis* (fruit). Ref: 3525.

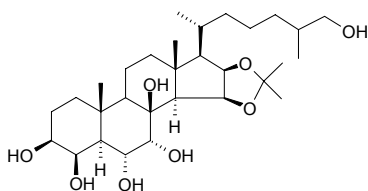


**11621 Isopropyl  $\beta$ -D-glucopyranoside**

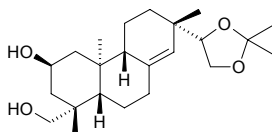
$C_9H_{18}O_6$  (222.24). mp 129~131°C,  $[\alpha]_D^{21} = -36^\circ$ . Source: BEI SHA SHEN *Glehnia littoralis* (fruit). Ref: 3525.

**11622 15 $\beta$ ,16 $\beta$ -Isopropylidenedioxy-5 $\alpha$ -cholest-3 $\beta$ ,4 $\beta$ ,6 $\alpha$ ,7 $\alpha$ ,8 $\beta$ ,26-hexaol**

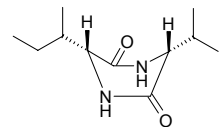
$C_{30}H_{52}O_8$  (540.74). Yellowish amorphous powder, mp 140~145°C,  $[\alpha]_D^{18} = +8.5^\circ$  ( $c = 1.06$ , MeOH). Source: HAI YAN *Asterina pectinifera*. Ref: 4887.

**11623 Isopropyl idenekirenol**

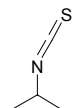
$C_{23}H_{38}O_4$  (378.56). Source: XI XIAN *Siegesbeckia orientalis* (aerial parts: yield = 0.0008%). Ref: 4764.

**11624 3-Isopropyl-6-isobutyl-2,5-dioxopiperazine**

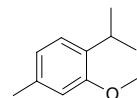
$C_{11}H_{20}N_2O_2$  (212.29). White amorphous powder (MeOH). Source: DONG CHONG XIA CAO *Cordyceps sinensis* (whole herb). Ref: 4462.

**11625 Isopropyl isothiocyanate**

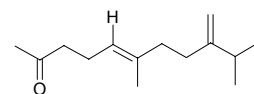
[2253-73-8]  $C_4H_7NS$  (101.17). bp 137.0~137.5°C. Source: JIE ZI *Brassica juncea*. Ref: 6.

**11626 2-Isopropyl-5-methylanisole**

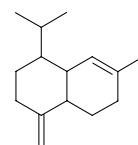
5-Methyl thymol ether [1076-56-8]  $C_{11}H_{16}O$  (164.25). bp 216°C. Source: FENG DOU CAI *Petasites japonicus*, PEI LAN *Eupatorium fortunei*, XI XIN *Asarum sieboldii*, WU WEI ZI *Schisandra chinensis*. Ref: 2, 6, 1466, 1467, 1468.

**11627 (E)-9-Isopropyl-6-methyl-5,9-decadiene-2-one**

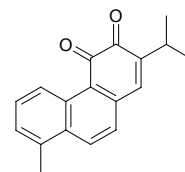
[64854-44-0]  $C_{14}H_{24}O$  (208.35). Source: MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*]. Ref: 2.

**11628 1-Isopropyl-4-methylene-7-methyl-1,2,3,4,4a,5,6,8a-octahydronaphthalene**

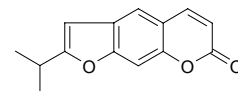
$C_{15}H_{24}$  (204.36). Source: DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*]. Ref: 2.

**11629 2-Isopropyl-8-methylphenanthrene-3,4-dione (R<sub>0</sub>-090680)**

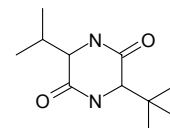
$C_{18}H_{16}O_2$  (264.33). Source: DAN SHEN *Salvia miltiorrhiza*. Ref: 660.

**11630 2'-Isopropyl-psoralen**

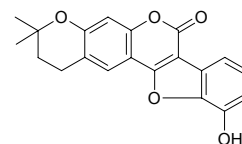
Anhydromarmesin  $C_{14}H_{12}O_3$  (228.25). Source: *Stauranthus perforatus* (root). Ref: 5253.

**11631 3-Isopropyl-6-tert-butyl-2,5-piperazinedione**

$C_{11}H_{20}N_2O_2$  (212.29). Source: ZHANG YE BAN XIA *Pinellia pedatisecta*. Ref: 660.

**11632 Isopsoralidin**

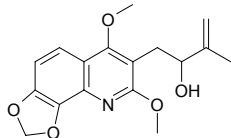
[3564-61-21]  $C_{20}H_{16}O_5$  (336.35). Source: BU GU ZHI *Psoralea corylifolia*. Ref: 2, 545.



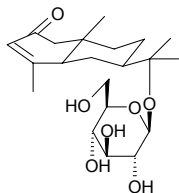


**11633 Isoptelefolidine**

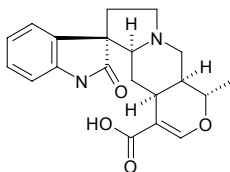
$C_{17}H_{19}NO_5$  (317.34). Source: CHOU SHAN YANG *Orixa japonica* (stem: yield = 0.0004%dw). Ref: 4774.

**11634 (5R,7R,10S)-Isoptercarpolon  $\beta$ -D-glucopyranoside**

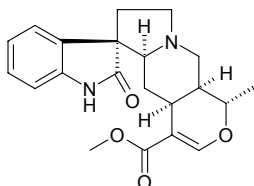
$C_{21}H_{35}O_7$  (398.50). Amorphous powder,  $[\alpha]_D^{24} = +43^\circ$  ( $c = 1.6$ , MeOH). Source: CANG ZHU *Atractylodes lancea*. Ref: 4348.

**11635 Isopteropodic acid**

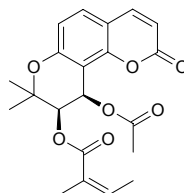
$C_{20}H_{22}N_2O_4$  (354.41). Source: HUA GOU TENG *Uncaria sinensis*. Ref: 660, 5341.

**11636 Isopteropodine**

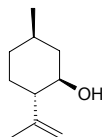
Uncarine E [5171-37-9]  $C_{21}H_{24}N_2O_4$  (368.43). mp 204–209°C,  $[\alpha]_D^{24} = -85.1^\circ$  ( $c = 0.554$ , chloroform). Pharm: Cytotoxic (SK-MEL,  $IC_{50} > 50\mu\text{g/mL}$ , control doxorubicin,  $IC_{50} < 1.1\mu\text{g/mL}$ ; SK-OV-3,  $IC_{50} > 50\mu\text{g/mL}$ , doxorubicin,  $IC_{50} = 1.9\mu\text{g/mL}$ ; KB, BT549, Vero, inactive)<sup>[5161]</sup>, cytotoxic (SK-MEL, KB, BT549, SK-OV-3 and Vero cell lines)<sup>[5341]</sup>; cytotoxic (mammalian cell lines,  $IC_{50} = 17\text{--}51\mu\text{g/mL}$ )<sup>[5341]</sup>; cytotoxic and DNA damaging activity (RS321 yeast assay,  $IC_{12} = 140\mu\text{g/mL}$ ; RS322 yeast assay,  $IC_{12} = 120\mu\text{g/mL}$ )<sup>[5341]</sup>; immunostimulant (maybe by increasing phagocytosis of hmn granulocytes and macrophages and blocking proliferation of myeloid cell lines)<sup>[5341]</sup>; CNS activity (positively modulates both 5-HT2 receptor and muscarinic M1 receptor)<sup>[5341]</sup>. Source: BEI YUE GOU TENG *Uncaria homomalla* [Syn. *Uruparia homomalla*; *Uruparia tonkinensis*; *Uruparia lanosa* var. *parviflora*], BI LU GOU TENG *Uncaria tomentosa*, CHANG HUA GOU TENG *Uncaria longiflora*, DONG FANG GOU TENG *Uncaria orientalis*, DUAN RONG MAO GOU TENG *Uncaria velutina*, GOU TENG *Uncaria rhynchophylla* [Syn. *Nauclea rhynchophylla*], GUI YA NA GOU TENG *Uncaria guianensis*, HUA GOU TENG *Uncaria sinensis*, MIAN MAO GOU TENG *Uncaria lanosa*, PAN ZHI GOU TENG *Uncaria scandens* [Syn. *Nauclea pilosa*; *Uruparia pilosa*; *Uncaria pilosa*], PING HUA FA LIANG GOU TENG *Uncaria laevigata*, *Uncaria bernaysii*, *Uncaria donisii*, *Uncaria roxburghiana*, *Uncaria sterrophylla*. Ref: 660, 900, 5161, 5341.

**11637 Isopteryxin**

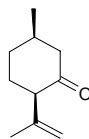
$C_{21}H_{22}O_7$  (386.41). Pharm: NO Production inhibitor (LPS-activated mouse peritoneal macrophages,  $IC_{50} = 8.8\mu\text{mol/L}$ , control *L*-NMMA,  $IC_{50} = 28\mu\text{mol/L}$ ). Source: FEN CHA DANG GUI *Angelica furcujuga* (flower). Ref: 4454.

**11638 Isopulegol**

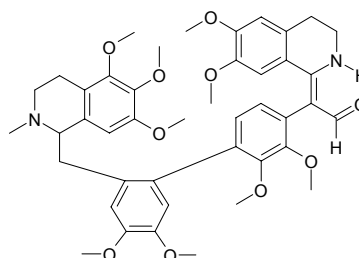
[7786-67-6]  $C_{10}H_{18}O$  (154.25). bp (-) 94°C/14mmHg. Source: NING MENG AN YE *Eucalyptus citriodora*. Ref: 6.

**11639 Isopulegone**

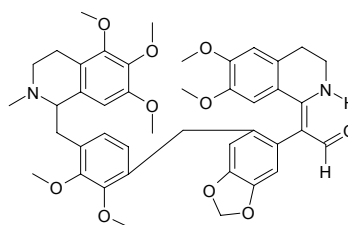
[529-00-0]  $C_{10}H_{16}O$  (152.24). Source: JING JIE *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*]. Ref: 2.

**11640 Isopyruthaldine**

$C_{44}H_{52}N_2O_{10}$  (768.91). Yellow amorphous solid,  $[\alpha]_D = 0^\circ$  ( $c = 0.16$ ,  $CHCl_3$ ). Source: TANG SONG CAO ZHUANG BIAN GUO CAO *Isopyrum thalictroides* (root and rhizome). Ref: 5078.

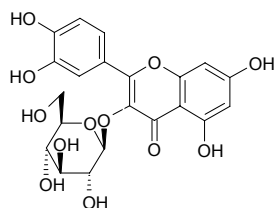
**11641 Isopythaldine**

$C_{43}H_{48}N_2O_{10}$  (752.87). Yellow amorphous solid,  $[\alpha]_D = 0^\circ$  ( $c = 0.21$ ,  $CHCl_3$ ). Source: TANG SONG CAO ZHUANG BIAN GUO CAO *Isopyrum thalictroides* (root and rhizome). Ref: 5078.

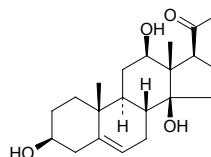


**11642 Isoquercitrin**

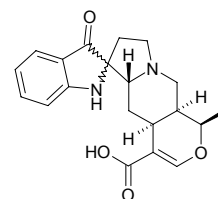
Isoquercitrin; Isoquercetin; Hirsutrin; Quercetin-3-*O*- $\beta$ -D-glucopyranoside C<sub>21</sub>H<sub>20</sub>O<sub>12</sub> (464.39). Yellow crystals, mp 234–236°C. **Pharm:** Antibacterial (*Pseudomonas maltophilia*); diuretic; antihypertensive (rat); anti-inflammatory; phagostimulant (silkworm); antihepatotoxin (one of effective components in *Hypericum japonicum* DI ER CAO for curing hepatitis); antioxidant (DPPH free radical scavenger, EC<sub>50</sub> = 3.1  $\mu$ g/mL = 6.7  $\mu$ mol/L, control Ascorbic acid, EC<sub>50</sub> = 1.6  $\mu$ g/mL = 9.1  $\mu$ mol/L)<sup>[4154]</sup>; antioxidant (DPPH scavenger, IC<sub>50</sub> = (17.3 $\pm$ 0.6)  $\mu$ mol/L, control Trolox, IC<sub>50</sub> = (25.4 $\pm$ 0.8)  $\mu$ mol/L)<sup>[4244]</sup>; antioxidant (DPPH scavenger, IC<sub>50</sub> = 33.2  $\mu$ mol/L; control Vitamin E, IC<sub>50</sub> = 8.3  $\mu$ mol/L)<sup>[4722]</sup>; ACE inhibitor (IC<sub>50</sub> = 300  $\mu$ mol/L, control Lisinopril, IC<sub>50</sub> = 1 nmol/L); NEP inhibitor (IC<sub>50</sub> = 480  $\mu$ mol/L, control Phosphoramidon, IC<sub>50</sub> = 9 nmol/L); APN inhibitor inactive; aldose reductase inhibitor (IC<sub>50</sub> = 4.5  $\mu$ mol/L, control Epalrestat, IC<sub>50</sub> = 0.072  $\mu$ mol/L)<sup>[4530]</sup>; antioxidant (DPPH scavenger, IC<sub>50</sub> = 12.1  $\mu$ g/mL, control Gallic acid, IC<sub>50</sub> = 3.6  $\mu$ g/mL; Cytochrome-C reduction, IC<sub>50</sub> = 11.1  $\mu$ g/mL, control Gallic acid, IC<sub>50</sub> = 3.0  $\mu$ g/mL)<sup>[5239]</sup>. **Source:** BAI GUO YE *Ginkgo biloba*, BAI YE XIANG CHA CAI *Isodon leucophyllus*, BEI SHA SHEN *Glehnia littoralis* (underground part), BO NIANG HAO *Descurainia Sophia* (seeds), CHA YE *Camellia sinensis* [Syn. *Thea sinensis*], CHAI HU *Bupleurum chinense*, DA CHAO CAI *Vicia sativa*, DA JIN QIAN CAO *Lysimachia christinae*, DI ER CAO *Hypericum japonicum*, DUO SUI LIAO *Polygonum polystachyum*, GAN CAO *Glycyrrhiza uralensis*, GUANG GUO GAN CAO *Glycyrrhiza glabra*, HE YE *Nelumbo nucifera* (content scope of 46 origins = 0.10%–0.69%, mean content = 0.35%)<sup>[5515]</sup>, HONG KUAI ZI *Chamaenerion angustifolium* [Syn. *Epilobium angustifolium*], HONG MA *Apocynum lancifolium*, HU ZHANG YE *Polygonum cuspidatum*, HU ZHI ZI *Lespedeza bicolor*, HUAI *Sophora japonica* (pericarp)<sup>[3080]</sup>, HUANG GUA *Cucumis sativus*, HUANG HAI TANG *Hypericum ascyron*, HUANG HUA HAO *Artemisia annua*, HUANG SHU KUI HUA *Abelmoschus manihot*, JIN QUE ER *Cytisus scoparius* [Syn. *Spartium scoparium*], JIN ZHONG HUA *Forsythia viridissima*, LAN YU LUO YE RONG *Ficus ruficalulis* var. *antaoensis* (leaf: yield = 0.00025%fw)<sup>[4794]</sup>, LAO SHU LE *Acanthus ilicifolius*, LAO YA SHI *Diospyros rhombifolia* (leaf), LIN WEN JING *Equisetum sylvaticum*, LING LAN *Convallaria keiskei* [Syn. *Convallaria majalis*], LUO BU MA *Apocynum venetum* (dried leaf: content scope of 6 origins = 0.082%–0.299%, mean content = 0.177%)<sup>[5529]</sup>, LUO LE *Ocimum basilicum*, MEI GUI HUA *Rosa rugosa*, MIAN HUA *Gossypium herbaceum*, MU MA HUANG *Casuarina equisetifolia*, MU ZEI *Equisetum hiemale* (aerial parts: mean content of 3 origins = 0.051%)<sup>[5508]</sup>, OU DANG GUI *Levisticum officinale*, PU TONG LU TI CAO *Pyrola decorata*, SAN BAI CAO *Saururus chinensis*, SANG YE *Morus alba* (leaf: content = 0.018%)<sup>[5501]</sup>, SHAN WO JU *Lactuca indica* (Fresh whole herb: yield = 0.0018%fw)<sup>[4689]</sup>, SHI DI *Diospyros kaki*, SHI WEI *Pyrrrosia lingua*, SHUI MU XUE LIAN HUA *Saussurea medusa* (whole herb), TAI WAN HUANG BO *Phellodendron amurense* var. *wilsonii* (leaf: yield = 0.06%dw)<sup>[4722]</sup>, TAO YE LIAO *Polygonum persicaria*, WEN JING *Equisetum arvense*, XI SHU *Camptotheca acuminata*, XIA YE BAI XIAN *Dictamnus angustifolius*, XIU MAO JI SHENG *Taxillus levinei*, XUAN FU HUA *Inula britannica*, YOU GAN YE *Phyllanthus emblica* (leaf and branch), YOU SE ZI JIN NIU *Ardisia colorata* (fruit), YU XING CAO *Houttuynia cordata*, YUAN YE CHAI HU *Bupleurum rotundifolium*, occurs in many plants. **Ref:** 2, 658, 660, 1521, 2080, 2489, 2548, 3080, 3507, 4013, 4097, 4154, 4205, 4244, 4464, 4530, 4689, 4722, 4794, 5034, 5239, 5501, 5508, 5515, 5529.

**11643 Isoramanone**

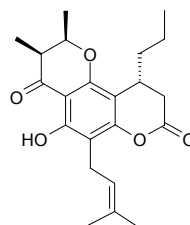
[4644-99-9] C<sub>21</sub>H<sub>32</sub>O<sub>4</sub> (348.49). mp 220.0–223.4°C. **Source:** FU SHOU CAO *Adonis amurensis*, LUO MO *Metaplexis japonica*. **Ref:** 6.

**11644 3-Isoraunicine pseudoindoxyl**

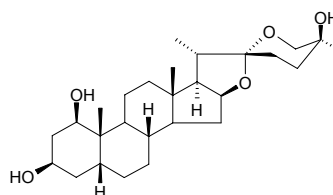
C<sub>20</sub>H<sub>22</sub>N<sub>2</sub>O<sub>4</sub> (354.41). **Source:** TUO YUAN GOU TENG *Uncaria elliptica*. **Ref:** 5341.

**11645 Isorecedensolide**

C<sub>22</sub>H<sub>28</sub>O<sub>5</sub> (372.47). Yellow oil, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +47.0° (c = 1.0, CH<sub>2</sub>Cl<sub>2</sub>). **Pharm:** Cytotoxic (KB, ED<sub>50</sub> = 9.37  $\mu$ g/mL, HeLa, ED<sub>50</sub> = 9.89  $\mu$ g/mL, hmn medulloblastoma, ED<sub>50</sub> = 11.79  $\mu$ g/mL, control Doxorubicin, ED<sub>50</sub> = 0.15  $\mu$ g/mL, 0.14  $\mu$ g/mL, 0.19  $\mu$ g/mL respectively)<sup>[4274]</sup>. **Source:** *Calophyllum blancoi* (seed). **Ref:** 4274.

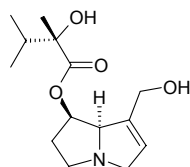
**11646 Isoleineckiagenin**

C<sub>27</sub>H<sub>44</sub>O<sub>5</sub> (448.65). mp 240–242°C. **Source:** JI XIANG CAO *Reineckea carnea*. **Ref:** 6.

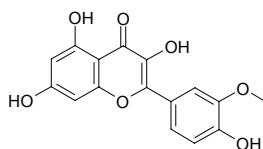


**11647 Isoretrohoustine**

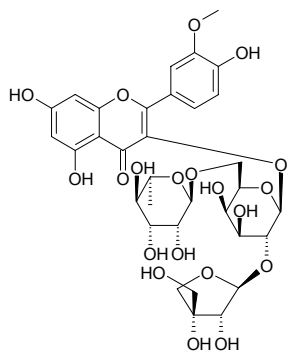
*O*<sup>7</sup>-(2*S*-2-Hydroxy-2,3-dimethyl-butanoyl) C<sub>14</sub>H<sub>23</sub>NO<sub>4</sub> (269.34). Source: XIONG ER CAO *Ageratum houstonianum* (aerial parts). Ref: 5173.

**11648 Isorhamnetin**

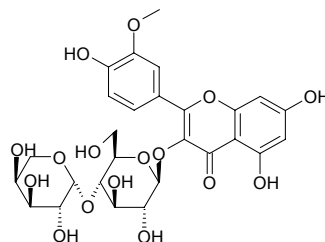
Quercetin 3'-methyl ether [480-19-3] C<sub>16</sub>H<sub>12</sub>O<sub>7</sub> (316.27). Yellowish rhombic crystals (dilute methanol), mp 305°C (dec), 312°C. Pharm: Antihepatotoxin (rat liver damage caused by CCl<sub>4</sub>); coronary vasodilator; antihypercholesterolemic (rat serum and liver, reduces the level of cholesterol in serum); antioxidant (lipid peroxidation inhibitor); antioxidant (*in vitro*, PEP inhibitor, IC<sub>50</sub> = (18.94±0.25)μmol/L, control Bacitracin, IC<sub>50</sub> = (129.26±3.28)μmol/L)<sup>[4923]</sup>; platelet aggregation inhibitor (*in vitro*). Source: BAI GUO *Ginkgo biloba*, BAI GUO YE *Ginkgo biloba* (leaf: mean content collected in Apr., May and Sep. = 0.055%)<sup>[5508]</sup>, BO NIANG HAO *Descurainia Sophia* (seeds), CHE SANG ZI YE *Dodonaea viscosa*, CHENG LIU *Tamarix chinensis*, CU LIU GUO *Hippophae rhamnoides* (leaf: content = 0.005%)<sup>[5508]</sup>, GANG MAO CHENG LIU *Tamarix hispida* (aerial parts), HONG CHE ZHOU CAO *Trifolium pratense*, HUAI JIAO *Sophora japonica*, HUANG HUA HAO *Artemisia annua*, HUI GUO JIAO GU LAN *Gynostemma yixingense*, KUAN YE XIANG PU *Typha latifolia*, LAN YU BAI JI *Bletilla formosana* (whole herb), PU HUANG *Typha angustata*, SHI ZHI JIA *Sedum sarmentosum* (whole herb: mean content of 10 origins = 0.028%)<sup>[5532]</sup>, SHUI QIN *Oenante javanica*, XIA YE XIANG PU *Typha angustifolia*, YIN CHEN HAO *Artemisia capillaris*, ZHONG GUO SHA JI *Hippophae rhamnoides* subsp. *sinensis* (leaf: content = 0.002%)<sup>[5508]</sup>. Ref: 2, 660, 900, 2548, 4500, 4923, 5508, 5532.

**11649 Isorhamnetin 3-O-β-D-apiofuranosyl-(1'''→2'')[α-L-rhamnopyranosyl-(1''''→6'')]-β-D-galactopyranoside**

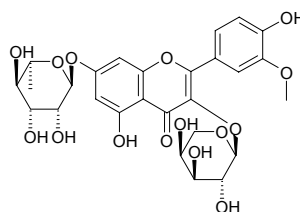
C<sub>33</sub>H<sub>40</sub>O<sub>20</sub> (756.67). Source: *Hammada scoparia* [syn. *Arthrophytum scoparium*; *Haloxylon articulatum* ssp. *scoparium*; *Haloxylon scoparium*] (leaf). Ref: 4228.

**11650 Isorhamnetin-3-arabinoglucoside**

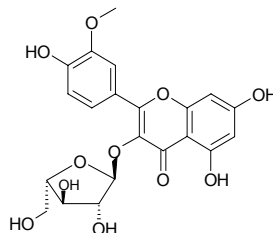
C<sub>27</sub>H<sub>30</sub>O<sub>16</sub> (610.53). Source: NING MENG PI *Citrus limon*. Ref: 6, 660.

**11651 Isorhamnetin-3-arabino-7-rhamnoside**

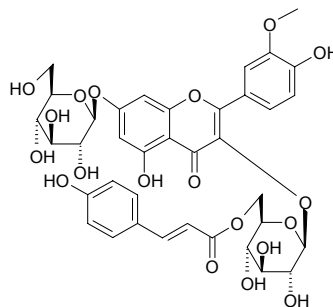
C<sub>27</sub>H<sub>30</sub>O<sub>15</sub> (594.53). Source: GUI ZHU XIANG *Cheiranthus cheiri*. Ref: 660.

**11652 Isorhamnetin-3-α-L-arabofuranoside**

C<sub>21</sub>H<sub>20</sub>O<sub>11</sub> (448.39). Source: GUI JIAN JIN JI ER *Caragana jubata*. Ref: 6.

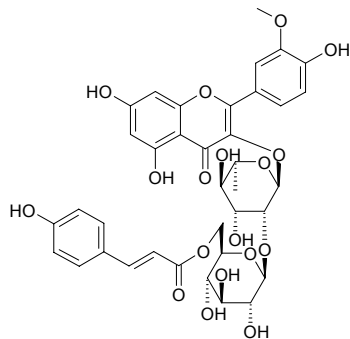
**11653 Isorhamnetin 3-O-β-(6''-E-p-coumaroylglucopyranoside)-7-O-β-glucopyranoside**

C<sub>37</sub>H<sub>38</sub>O<sub>19</sub> (786.70). Dull yellow amorphous powder. Source: DUO YE BAI MAI GEN *Lotus polyphyllus*. Ref: 1973.



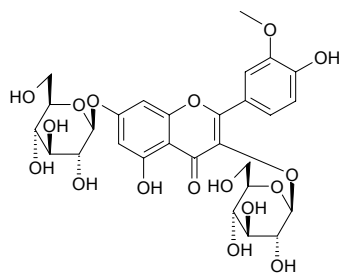
**11654 Isorhamnetin 3-O- $\alpha$ -L-[6'''-p-coumaroyl- $\beta$ -D-glucopyranosyl-(1,2)-rhamnopyranoside]**

$C_{37}H_{38}O_{18}$  (770.70). Pale yellow amorphous powder. **Pharm:** Antioxidant (DPPH scavenger,  $IC_{50} = 17.9\mu\text{g/mL}$ , control Gallic acid,  $IC_{50} = 3.6\mu\text{g/mL}$ ; Cytochrome-C reduction,  $IC_{50} = 17.5\mu\text{g/mL}$ , control Gallic acid,  $IC_{50} = 3.0\mu\text{g/mL}$ ). **Source:** BAI GUO YE *Ginkgo biloba*. **Ref:** 5239.



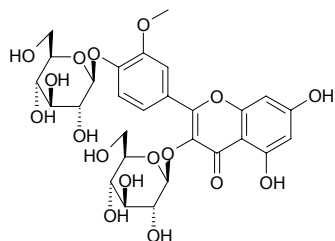
**11655 Isorhamnetin 3,7-O-di- $\beta$ -D-glucopyranoside**

$C_{28}H_{32}O_{17}$  (640.56). **Source:** SHI ZHI JIA *Sedum sarmentosum* (whole herb: mean content of 2 origins = 0.031%)<sup>[5508]</sup>, WU QING *Brassica rapa*<sup>[191]</sup>. **Ref:** 191, 5508.



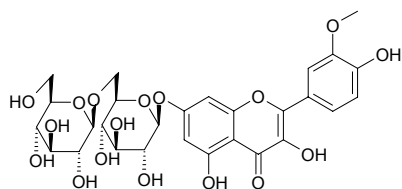
**11656 Isorhamnetin-3,4'-diglucoside**

$C_{28}H_{32}O_{17}$  (640.56). **Pharm:** Tyrosinase inhibitor ( $IC_{50} = 1.84\text{mmol/L}$ ; control Kojic acid,  $IC_{50} = 235.2\mu\text{mol/L}$ ). **Source:** ZANG HONG HUA *Crocus sativus* (pollen). **Ref:** 4233.



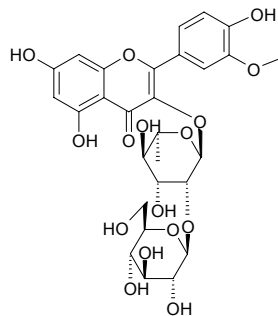
**11657 Isorhamnetin-7- $\beta$ -D-gentiobioside**

$C_{28}H_{32}O_{17}$  (640.56). Yellowish grained powder (MeOH), mp 216~218°C. **Source:** BO NIANG HAO *Descurainia Sophia* (seed). **Ref:** 4829.



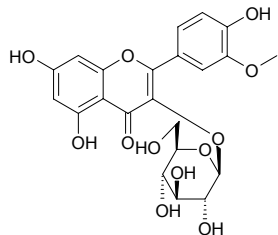
**11658 Isorhamnetin 3-O- $\beta$ -D-glucopyranosyl-(1-2)- $\alpha$ -L-rhamnopyranoside**

$C_{28}H_{32}O_{16}$  (624.56). Yellow powder, mp 170~172°C. **Pharm:** Antioxidant (DPPH scavenger,  $IC_{50} > 100\mu\text{g/mL}$ , control Gallic acid,  $IC_{50} = 3.6\mu\text{g/mL}$ ; Cytochrome-C reduction,  $IC_{50} > 50\mu\text{g/mL}$ , control Gallic acid,  $IC_{50} = 3.0\mu\text{g/mL}$ )<sup>[5239]</sup>. **Source:** BAI GUO YE *Ginkgo biloba*. **Ref:** 850, 5239.



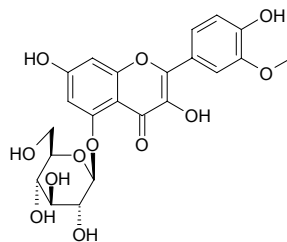
**11659 Isorhamnetin-3-O-glucoside**

[5041-82-7]  $C_{22}H_{22}O_{12}$  (478.41). mp 177~179°C. **Pharm:** Cytotoxic (*in vitro*, HL-60  $IC_{50} = 2.24\mu\text{g/mL}$ , PC-3M-1E8  $IC_{50} > 10\mu\text{g/mL}$ , BGC823  $IC_{50} > 10\mu\text{g/mL}$ , MDA-MB-435  $IC_{50} > 10\mu\text{g/mL}$ , Bel7402  $IC_{50} > 10\mu\text{g/mL}$ , HeLa  $IC_{50} > 10\mu\text{g/mL}$ ). **Source:** BO NIANG HAO *Descurainia Sophia* (seeds), JIN ZHAN JU *Calendula officinalis* (flower), TIAN CONG *Philydrum lanuginosum*, YIN CHEN HAO *Artemisia capillaris*, ZHEN ZHU MEI *Sorbaria sorbifolia*, TENG HUANG *Garcinia morella*, ZANG HONG HUA *Crocus sativus* (pollen). **Ref:** 2, 6, 2548, 3551, 4233.



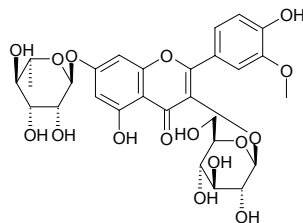
**11660 Isorhamnetin-5-O-glucoside**

[34199-20-7]  $C_{22}H_{22}O_{12}$  (478.41). **Source:** LU CAO *Rhaponticum carthamoides*. **Ref:** 1521.



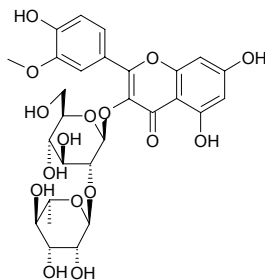
**11661 Isorhamnetin-3-O-glucosyl-7-O-rhamnoside**

$C_{28}H_{32}O_{16}$  (624.56). **Source:** GUI ZHU XIANG *Cheiranthus cheiri*. **Ref:** 660.

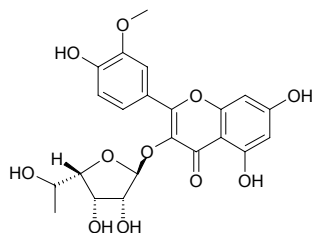


**11662 Isorhamnetin-3-O-neohesperidoside**

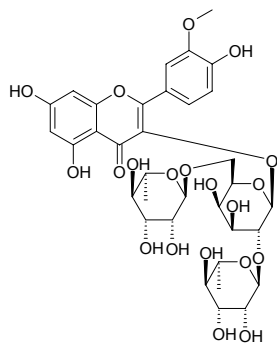
$C_{28}H_{32}O_{16}$  (624.56). Source: JIN ZHAN JU *Calendula officinalis* (flower), KUAN YE XIANG PU *Typha latifolia* (dried pollen: content = 0.331%<sup>[5508]</sup>), PU HUANG *Typha angustata* (dried pollen: content = 0.426%<sup>[5508]</sup>). Ref: 2, 660, 3551, 5508.

**11663 Isorhamnetin-3- $\alpha$ -L-rhamnofuranoside**

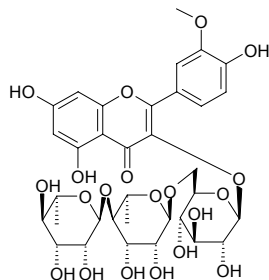
$C_{22}H_{22}O_{11}$  (462.41). Source: GUI JIAN JIN JI ER *Caragana jubata*. Ref: 6.

**11664 Isorhamnetin 3-O- $\alpha$ -L-rhamnopyranosyl-(1'''' $\rightarrow$ 2'')]- $\alpha$ -L-rhamnopyranosyl-(1'''' $\rightarrow$ 6'')]- $\beta$ -D-galactopyranoside**

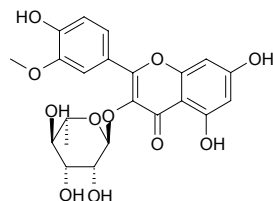
$C_{34}H_{42}O_{20}$  (770.70). Source: *Hammada scoparia* [syn. *Arthrophytum scoparium*; *Haloxylon articulatum* ssp. *scoparium*; *Haloxylon scoparium*] (leaf). Ref: 4228.

**11665 Isorhamnetin 3-O-[ $\alpha$ -rhamnopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -rhamnopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -glucopyranoside]**

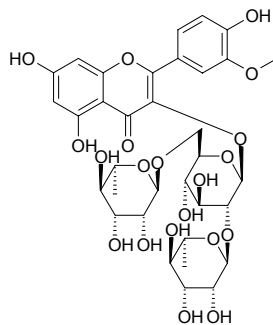
$C_{34}H_{42}O_{20}$  (770.70). Source: HUA LING CAO *Eschscholzia californica*. Ref: 1898.

**11666 Isorhamnetin 3-O-rhamnoside**

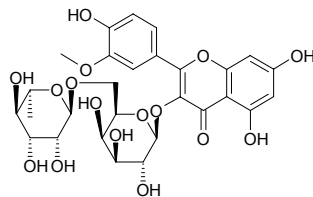
$C_{22}H_{22}O_{11}$  (462.41). Pharm: Aldose reductase inhibitor (*in vitro*, rat lens aldose reductase,  $IC_{50}$  = 19 $\mu$ mol/L; control Epalrestat,  $IC_{50}$  = 0.072 $\mu$ mol/L). Source: BAI MEI HUA *Prunus mume* (flower: yield = 0.0013%fw). Ref: 4641.

**11667 Isorhamnetin 3-O-2<sup>G</sup>-rhamnosylrutinoside**

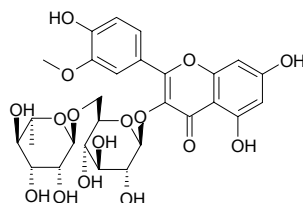
$C_{34}H_{42}O_{20}$  (770.70). Source: JIN ZHAN JU *Calendula officinalis* (flower). Ref: 3551.

**11668 Isorhamnetin-3-O-robinobioside**

[107740-46-5]  $C_{28}H_{32}O_{16}$  (624.56). Source: ZANG HONG HUA *Crocus sativus* (pollen). Ref: 4233.

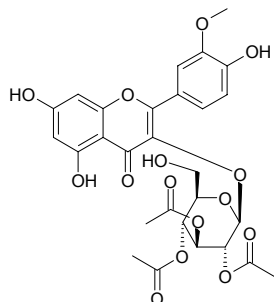
**11669 Isorhamnetin-3-O-rutinoside**

Isorhamnetin 3-O-(6''-O- $\alpha$ -L-rhamnopyranosyl)- $\beta$ -D-glucopyranoside  $C_{28}H_{32}O_{16}$  (624.56). Pharm: Antioxidant (DPPH scavenger,  $IC_{50}$  > 100 $\mu$ g/mL, control Gallic acid,  $IC_{50}$  = 3.6 $\mu$ g/mL; Cytochrome-C reduction,  $IC_{50}$  > 50 $\mu$ g/mL, control Gallic acid,  $IC_{50}$  = 3.0 $\mu$ g/mL)<sup>[5239]</sup>. Source: BAI GUO YE *Ginkgo biloba*, JIN ZHAN JU *Calendula officinalis* (flower), LV DOU *Onobrychis viciifolia* (leaf), KUAN YE XIANG PU *Typha latifolia*, MIAN MAO MA DOU LING *Aristolochia mollissima* (dried root and stem: yield = 0.0012%dw)<sup>[3026]</sup>. Ref: 2, 3026, 3551, 5084, 5239.

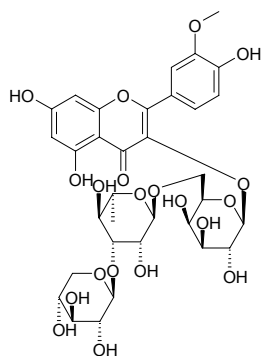


**11670 Isorhamnetin 3-O-β-D-2'',3'',4''-triacetylglucopyranoside**

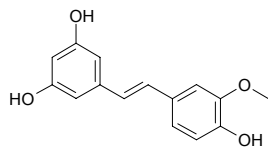
$C_{28}H_{28}O_{15}$  (604.53). Yellow amorphous powder. Source: *Warburgia stuhlmannii* (leaf). Ref: 3398.

**11671 Isorhamnetin 3-O-β-D-xylopyranosyl-(1''''→3''')-α-L-rhamnopyranosyl-(1''''→6''')-β-D-galactopyranoside**

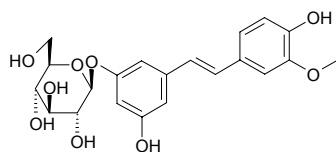
$C_{33}H_{40}O_{20}$  (756.67). Source: *Hammada scoparia* [syn. *Arthrophytum scoparium*; *Haloxylon articulatum* ssp. *scoparium*; *Haloxylon scoparium*] (leaf). Ref: 4228.

**11672 Isorhapontigenin**

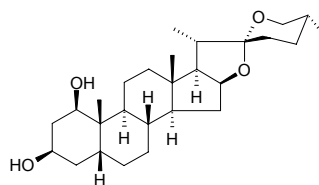
Anticancer Stilbenoid PMV70P691-140 [32507-66-7]  $C_{15}H_{14}O_4$  (258.28). mp 182~183°C. Pharm: Antioxidant (superoxide anion scavenger (100μmol/L, InRt = (45.7±0.7)%), positive control (+)-Catechin, IC<sub>50</sub> = (3.67±0.14)μmol/L)<sup>[4514]</sup>; cytotoxic (cyclooxygenase-1 inhibitor)<sup>[5038]</sup>. Source: MAO CI JIN JI ER *Caragana tibetica* (stem), XIAO YE MAI MA TENG *Gnetum parvifolium* [Syn. *Gnetum indicum*], CI JI NU ZONG LV *Aiphanes aculeata*. Ref: 660, 2233, 2234, 4514, 5038.

**11673 Isorhapontin**

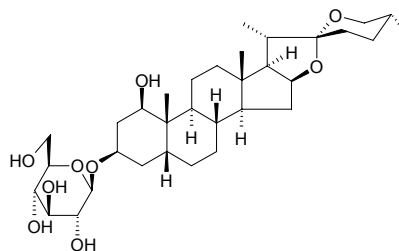
[32727-29-0]  $C_{21}H_{24}O_9$  (420.42). Pharm: Antifungal (for protecting heartwood and bark). Source: OU ZHOU YUN SHAN *Picea abies*. Ref: 658.

**11674 Isorhodeasapogenin**

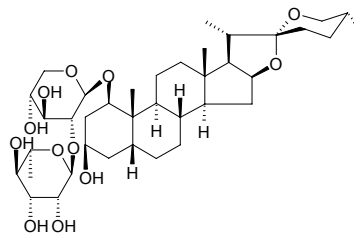
[472-10-6]  $C_{27}H_{44}O_4$  (432.65). mp 239~240°C. Source: JI XIANG CAO *Reineckea carnea*, LING LAN *Convallaria keiskei* [Syn. *Convallaria majalis*]. Ref: 6.

**11675 Isorhodeasapogenin-3-O-β-D-glucopyranoside**

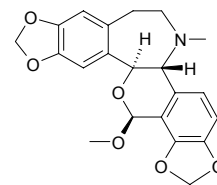
$C_{33}H_{54}O_9$  (594.79). Source: WAN NIAN QING GEN *Rohdea japonica* [Syn. *Orontium japonicum*]. Ref: 660.

**11676 Isorhodeasapogenin-1-O-α-L-rhamnopyranosyl(1→2)-β-D-xylopyranoside**

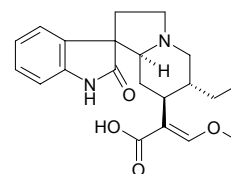
$C_{38}H_{62}O_{12}$  (710.91). Source: WAN NIAN QING GEN *Rohdea japonica* [Syn. *Orontium japonicum*]. Ref: 660.

**11677 Isorhoeadine**

[4046-21-3]  $C_{21}H_{21}NO_6$  (383.40). mp 165~167°C. Source: LI CHUN HUA *Papaver commutatum* [Syn. *Papaver rhoeas*]. Ref: 6.

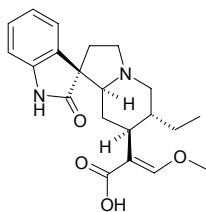
**11678 Isorhynchophyllic acid**

$C_{21}H_{26}N_2O_4$  (370.45). Source: HUA GOU TENG *Uncaria sinensis* Ref: 660, 5341.

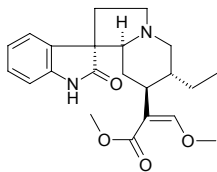


**11679 Isorhynchophylline**

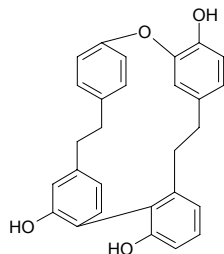
$C_{21}H_{26}N_2O_4$  (370.45). **Pharm:** Hypnosis (100mg/kg, prolongation of thiopental-induced hypnosis); CNS activity (significantly depresses locomotion response, may be central dopaminergic receptor antagonist); immunostimulant inactive. **Source:** BAI GOU TENG *Uncaria sessilifructus* [Syn. *Nauclea sessilifructus*], BI LU GOU TENG *Uncaria tomentosa*, CHANG HUA GOU TENG *Uncaria longiflora*, DA YE GOU TENG *Uncaria macrophylla*, FEI ZHOU GOU TENG *Uncaria africana*, GOU TENG *Uncaria rhynchophylla* [Syn. *Nauclea rhynchophylla*], GUI YA NA GOU TENG *Uncaria guianensis*, HOU YE GOU TENG *Uncaria callophylla*, HUA GOU TENG *Uncaria sinensis*, PO LUO ZHOU GOU TENG *Uncaria borneensis*, SUAN GOU TENG *Uncaria acida*, TUO YUAN GOU TENG *Uncaria elliptica*, XIA GOU TENG *Uncaria attenuata*, XIN XING GOU TENG *Uncaria cordata*, *Uncaria bernaysii*, *Uncaria kunstleri*, *Uncaria sterrophylla*, *Uncaria talbotii*. **Ref:** 5341.

**11680 Isorhynchophylline**

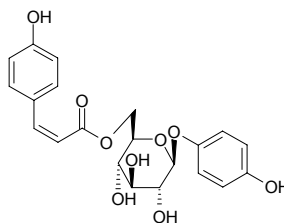
7-Isorhynchophylline [6859-01-4]  $C_{22}H_{28}N_2O_4$  (384.48). mp 138–141°C,  $[\alpha]_D^{24} = +7.8^\circ$  ( $c = 0.42$ , chloroform). **Pharm:** Calcium antagonist (potential dependent); immunoenhancer (promotes phagocytic function); antihypertensive (long acting); vasodilator (relaxes blood vessels and reduces consumption of oxygen in myocardium); slows heart rate (anesthetic rbt, inhibits heart conduction). **Source:** GOU TENG *Uncaria rhynchophylla* [Syn. *Nauclea rhynchophylla*] (hooked stem-branch: content = 0.049%), DA YE GOU TENG *Uncaria macrophylla*, HUA GOU TENG *Uncaria sinensis*. **Ref:** 2, 6, 660, 900, 1521, 5501.

**11681 Isoricardin C**

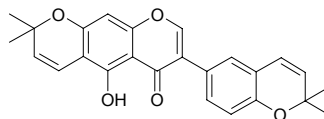
$C_{28}H_{24}O_4$  (424.50). **Source:** DI SUO LUO *Marchantia polymorpha*. **Ref:** 660.

**11682 Isorobustaside A**

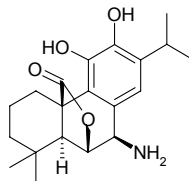
$C_{21}H_{22}O_9$  (418.40). Amorphous powder,  $[\alpha]_D = -51.4^\circ$ . **Source:** YAO YONG HEI MIAN SHEN YE *Breynia officinalis* (leaf). **Ref:** 2583.

**11683 Isorobustone**

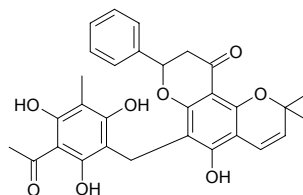
$C_{25}H_{22}O_5$  (402.45). **Pharm:** Antioxidant (DPPH scavenger, ScRt = 13.16%, control BHT, ScRt = 71.5%); antibacterial (*Staphylococcus aureus* ATCC 25923, MIC > 128µg/mL, control Vancomycin, MIC = 0.5µg/mL; MRSA SK1, MIC > 128µg/mL, Vancomycin, MIC = 1.0µg/mL). **Source:** PAN YUAN YU TENG *Derris scandens* (stem). **Ref:** 3810.

**11684 Isorosmaricine**

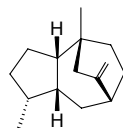
[33947-58-9]  $C_{20}H_{27}NO_4$  (345.44). **Source:** MI DIE XIANG *Rosmarinus officinalis*. **Ref:** 6.

**11685 Isorottlerin**

$C_{30}H_{28}O_8$  (516.55). mp 180°C. **Source:** LV SONG QIU MAO *Mallotus philippinensis*. **Ref:** 6.

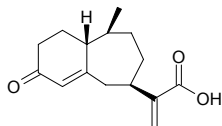
**11686 (–)-Isorotundene**

$C_{15}H_{24}$  (204.36). **Source:** XIANG FU *Cyperus rotundus* (essential oil). **Ref:** 5210.

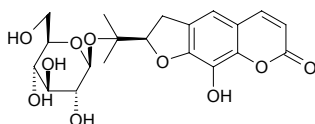


**11687 Isorupestonic acid**

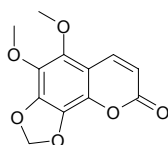
$C_{15}H_{20}O_3$  (248.32). Colorless bar crystals, mp 192~193°C,  $[\alpha]_D^{14} = 11^\circ$  ( $c = 0.62$ , methanol). Source: XIN JIANG YI ZHI HAO *Artemisia rupestris* [Syn. *Artemisia dentata*; *Artemisia viridis*; *Artemisia viridifolia*]. Ref: 196.

**11688 Isorutarin**

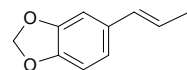
$C_{20}H_{24}O_{10}$  (424.41). Source: BAI HUA QIAN HU *Peucedanum praeruptorum*. Ref: 660.

**11689 Isosabandin**

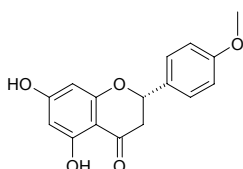
$C_{15}H_{10}O_6$  (250.21). Yellow fine needles (petroleum ether–EtOAc), mp 126~128°C. Source: BIN HAO *Artemisia maritima* (aerial parts). Ref: 4910.

**11690 Isosafrole**

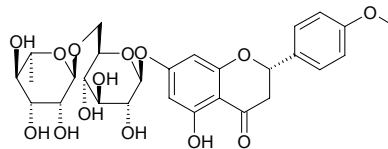
$C_{10}H_{10}O_2$  (161.19). Pharm: antihepatotoxin (promotes regeneration of liver tissue); toxin (hmn). Source: DONG DANG GUI *Angelica acutiloba* [Syn. *Ligusticum acutilobum*], YIN DU JIU LI XIANG *Murraya koenigii*, YI LAN *Cananga odorata*. Ref: 658.

**11691 Isosakuranetin**

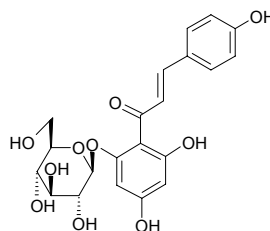
Ponciretin  $C_{16}H_{14}O_5$  (286.29). Pharm: Passive cutaneous anaphylaxis inhibitor (inhibits IgE-induced  $\beta$ -hexosaminidase release from RBL-2H3 cells,  $IC_{50} = (105 \pm 6.6) \mu\text{mol/L}$ , control Azelastine,  $IC_{50} = (35 \pm 2) \mu\text{mol/L}$ ; PCA reaction inhibitor, 5mg/kg orl,  $\text{InRt} = (62 \pm 2\%)^{[5041]}$ . Source: FEI JI CAO *Eupatorium odoratum*, FENG LUN CAI *Clinopodium chinense*, WU HE MI JU *Citrus unshiu* (pericarp). Ref: 660, 5041.

**11692 Isosakuranetin-7-rutinoside**

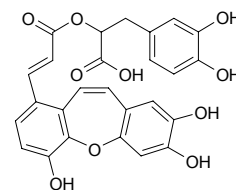
$C_{28}H_{34}O_{14}$  (594.57). mp 211~213°C. Source: TIAN CHENG *Citrus sinensis*. Ref: 6.

**11693 Isosalipurposide**

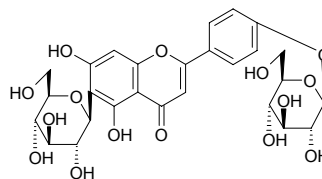
[4547-85-7]  $C_{21}H_{22}O_{10}$  (434.40). mp 172~173°C. Source: SHUI YANG MU BAI PI *Salix purpurea*. Ref: 6.

**11694 Isosalvianolic acid C**

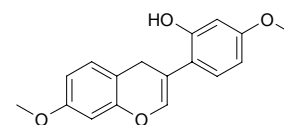
$C_{26}H_{20}O_{10}$  (492.44). Pharm: Antioxidant (*in vitro*,  $\text{Cu}^{2+}$  induced LDL peroxidation assay,  $IC_{50} = 2.72 \mu\text{mol/L}$ ; control Probuco,  $IC_{50} = 4.7 \mu\text{mol/L}$ ). Source: ZI DAN TENG *Tournefortia sarmentosa* (stem: yield = 0.0026%). Ref: 4628.

**11695 Isosaponarin**

[19416-87-6]  $C_{27}H_{30}O_{15}$  (594.53). mp 236~237°C. Source: WANG BU LIU XING *Vaccaria segetalis* [Syn. *Vaccaria pyramidata*]. Ref: 6.

**11696 Isosativan**

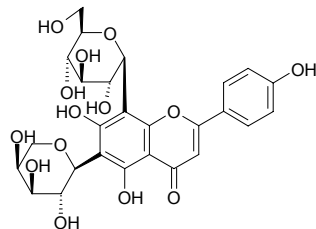
[60102-29-6]  $C_{17}H_{16}O_4$  (284.31). Source: KUN MING JI XUE TENG *Millettia dielsiana*. Ref: 2205.



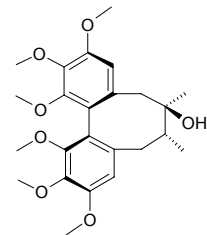


**11697 Isoschaftoside**5,7,4'-Trihydroxy-6-C-arabinoside-8-C-glucoside flavone C<sub>26</sub>H<sub>28</sub>O<sub>14</sub> (564.50).

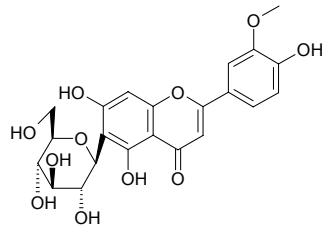
**Source:** GAN CAO *Glycyrrhiza uralensis* (root and rhizome: mean content of 4 origins = 0.061%)<sup>[5508]</sup>, GUANG GUO GAN CAO *Glycyrrhiza glabra* (root and rhizome: content = 0.12%)<sup>[5508]</sup>, HUANG QIN *Scutellaria baicalensis*, TIAN NAN XING *Arisaema consanguineum* (dried tuber: content scope of 3 origins = 0.0069%–0.0177%, mean content = 0.0105%)<sup>[5508]</sup>, YI YE TIAN NAN XING *Arisaema heterophyllum* (dried tuber: content scope of 7 origins = 0.0081%–0.0263%, mean content = 0.0193%)<sup>[5508]</sup>, ZHANG GUO GAN CAO *Glycyrrhiza inflata* (root and rhizome: content = 0.085%)<sup>[5508]</sup>, *Glycyrrhiza* sp. **Ref:** 1557, 2431, 5508.

**11698 Isoschizandrin**

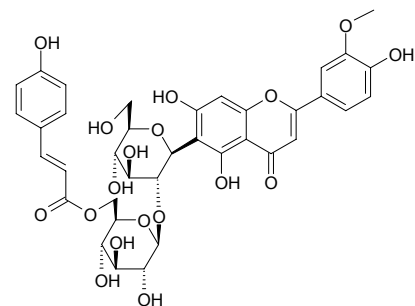
[114422-18-3] C<sub>24</sub>H<sub>32</sub>O<sub>7</sub> (432.52). Amorphous powder, [α]<sub>D</sub><sup>25</sup> = +92° (c = 1.22, CHCl<sub>3</sub>). **Pharm:** Antiulcer agent. **Source:** WU WEI ZI *Schisandra chinensis*. **Ref:** 2, 1521.

**11699 Isoscoparin**

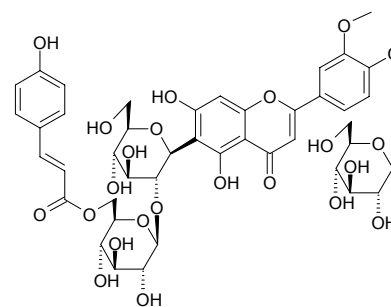
[20013-23-4] C<sub>22</sub>H<sub>22</sub>O<sub>11</sub> (462.41). **Pharm:** Phagostimulant (insect). **Source:** FU PING *Lemna minor*, FU YE YAN ZI CAI *Potamogeton natans*. **Ref:** 658.

**11700 Isoscoparin 2''-O-(6'''-(E)-p-coumaroyl)glucoside**

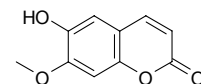
3'-Methoxyisovitexin 2''-O-(6'''-(E)-p-coumaroyl)-β-glucopyranoside C<sub>37</sub>H<sub>38</sub>O<sub>18</sub> (770.70). **Source:** HUANG GUA *Cucumis sativus* (leaf). **Ref:** 5181.

**11701 Isoscoparin 2''-O-(6'''-(E)-coumaroyl)glucoside-4'-O-glucoside**

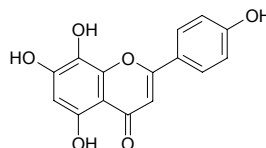
3'-Methoxyisovitexin 2''-O-(6'''-(E)-p-coumaroyl)-β-glucopyranoside-4'-O-β-glucopyranoside C<sub>43</sub>H<sub>48</sub>O<sub>23</sub> (932.85). **Source:** HUANG GUA *Cucumis sativus* (leaf). **Ref:** 5181.

**11702 Isoscooletin**

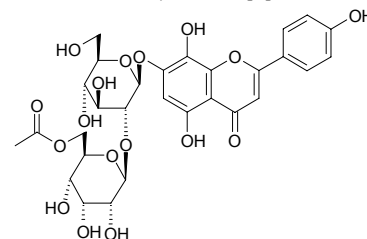
7-O-Methylesculetin C<sub>10</sub>H<sub>8</sub>O<sub>4</sub> (192.17). **Source:** HUANG HAO *Artemisia scoparia* [Syn. *Artemisia capillaris* var. *scoparia*], HUANG YANG MU YE *Buxus microphylla* var. *sinica*, YIN XIAN CAO *Chloranthus japonicus*. **Ref:** 660, 1385.

**11703 Isoscutellarein**

8-Hydroxyapigenin; 5,7,8,4'-Tetrahydroxyflavone [41440-05-5] C<sub>15</sub>H<sub>10</sub>O<sub>6</sub> (286.24). Yellow acicular crystals (ethanol), mp 300–301°C. **Pharm:** Inhibits influenza virus (inhibits replication of influenza virus A/WSN/33, IC<sub>50</sub> = 16nmol/L well); antioxidant (inhibits lipid peroxidation strongly, induced by Fe in mitochondria of rat hepatic cells, 0.5nmol/mg prot, MDA yielding rate = 43.5%, 5.0nmol/mg prot, MDA yielding rate = 0%, ED<sub>50</sub> < 0.5nmol/mg prot); aldose reductase inhibitor (IC<sub>50</sub> = 3.2μmol/L); α-glucosidase inhibitor (small intestine, 50μmol/L, InRt = 14%); AMV-reverse transcriptase inhibitor (0.1mmol/L, InRt = 22%); influenza virus sialoma inhibitor (91μg/mL, InRt = 91%). **Source:** HUANG QIN *Scutellaria baicalensis*, HAN XIN CAO *Scutellaria indica*. **Ref:** 900.

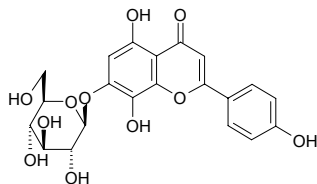
**11704 Isoscutellarein 7-O-(6'''-O-acetyl)-β-allopyranosyl(1'''→2'')-β-glucopyranoside**

C<sub>29</sub>H<sub>32</sub>O<sub>17</sub> (652.57). **Pharm:** Antioxidant (DPPH scavenger, DPPH radical 15μmol/L: 10μmol/L, ScRt = 40.5%; control BHA, 10μmol/L, ScRt = 23.0%; Vitamin E, 10μmol/L, ScRt = 41.1%). **Source:** JIA HUI SE JIU LI XIANG PO PO NA *Veronica thymoides* ssp. *pseudocinerea*. **Ref:** 3846.

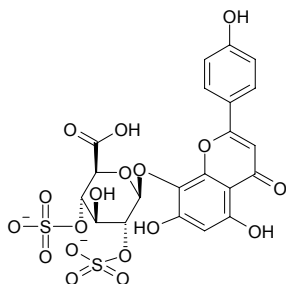


**11705 Isoscutellarein 7-O-β-D-glucopyranoside**

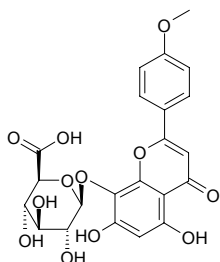
$C_{21}H_{20}O_{11}$  (448.39). Source: ZHEN XIAN *Bryum argenteum*. Ref: 660.

**11706 Isoscutellarein 8-O-β-D-glucuronide 2'',4''-disulfate**

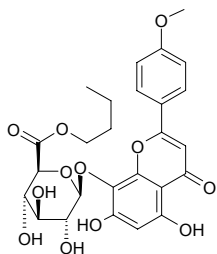
$C_{21}H_{16}O_{18}S_2^{2-}$  (620.48). Yellow amorphous powder,  $[\alpha]_D^{21} = -82.4^\circ$  ( $c = 0.43$ ,  $H_2O$ ). Source: HUO SUO MA *Helicteres isora*. Ref: 756.

**11707 Isoscutellarein 4'-methyl ether 8-O-β-D-glucuronide**

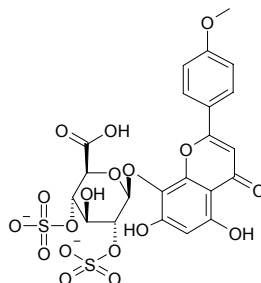
$C_{22}H_{20}O_{12}$  (476.40). Yellow amorphous powder,  $[\alpha]_D^{21} = 10.5^\circ$  ( $c = 0.4$ ,  $H_2O$ ). Source: HUO SUO MA *Helicteres isora*. Ref: 756.

**11708 Isoscutellarein 4'-methyl ether 8-O-β-D-glucuronide 6''-n-butyl ester**

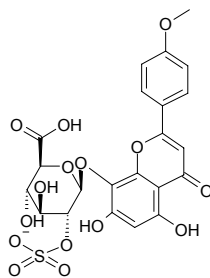
$C_{26}H_{28}O_{12}$  (532.51). Yellow amorphous powder,  $[\alpha]_D^{21} = 73.2^\circ$  ( $c = 0.13$ ,  $MeOH$ ). Source: HUO SUO MA *Helicteres isora*. Ref: 756.

**11709 Isoscutellarein 4'-methyl ether 8-O-β-D-glucuronide 2'',4''-disulfate**

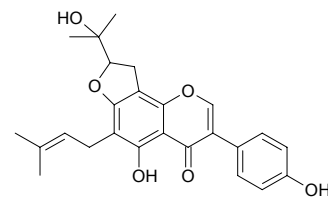
$C_{22}H_{18}O_{18}S_2^{2-}$  (634.51). Yellow amorphous powder,  $[\alpha]_D^{21} = -98.4^\circ$  ( $c = 1.22$ ,  $H_2O$ ). Source: HUO SUO MA *Helicteres isora*. Ref: 756.

**11710 Isoscutellarein 4'-methyl ether 8-O-β-D-glucuronide 2''-sulfate**

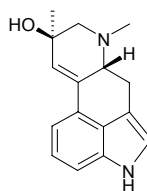
$C_{22}H_{19}O_{15}S^-$  (555.45). Yellow amorphous powder,  $[\alpha]_D^{21} = -38.4^\circ$  ( $c = 1.09$ ,  $H_2O$ ). Source: HUO SUO MA *Helicteres isora*. Ref: 756.

**11711 Isosenegalensin**

5,4'-Dihydroxy-6-(3'''-methylbut-2'''-enyl)-2''-hydroxyisopropyl dihydrofuran[4'',5'':8,7]isoflavone  $C_{25}H_{26}O_6$  (422.48). Yellow crystals ( $CHCl_3$ ), mp  $158^\circ C$ . Source: AI JI ZAI PEI CI TONG *Erythrina lysistemon*. Ref: 1971.

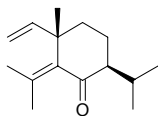
**11712 Isoetoclavine**

$C_{16}H_{18}N_2O$  (254.33). Source: MAI JIAO *Claviceps purpurea*. Ref: 660.

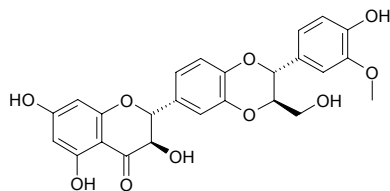


**11713 Isoshyobunone**

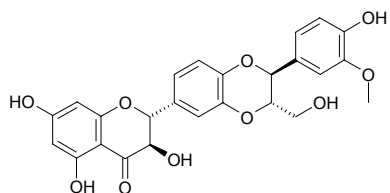
$C_{15}H_{24}O$  (220.36). Source: BAI CHANG *Acorus calamus*. Ref: 6.

**11714 Isosilybin A**

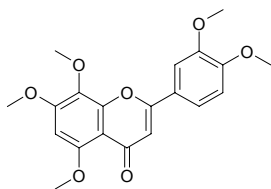
$C_{25}H_{22}O_{10}$  (482.45). Colorless needle crystals (MeOH–H<sub>2</sub>O), mp 201–203°C,  $[\alpha]_D = +48.15^\circ$  ( $c = 0.27$ , acetone). Source: SHUI FEI JI *Silybum marianum* (seed). Ref: 4719.

**11715 Isosilybin B**

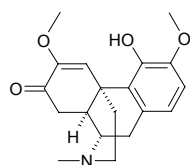
$C_{25}H_{22}O_{10}$  (482.45). Colorless needle crystals (MeOH–H<sub>2</sub>O), mp 236–238°C,  $[\alpha]_D = -23.55^\circ$  ( $c = 0.31$ , acetone). Source: SHUI FEI JI *Silybum marianum* (seed). Ref: 4719.

**11716 Isosinensetin**

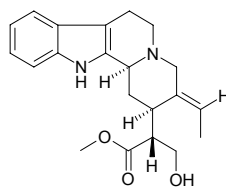
5,7,8,3',4'-Pentamethoxyflavone [17290-70-9]  $C_{20}H_{20}O_7$  (372.37). Colorless rhombic crystals (methanol), mp 197.5–198.5°C; crystals (EtOH), mp 206–207°C. Pharm: Induces cell differentiation (mus myelocytic leukemia cells, 50 μmol/L, growing rate = 78%, 5 μmol/L, =89%, activity of macrophage of the former > 25%, HL-60 cells, 100 μmol/L, growing rate = 42%, 50 μmol/L, =62%, activity of macrophage of both > 10%). Source: HUA ZHOU YOU *Citrus grandis* var. *tomentosa*, JIAO GAN *Citrus tankan*, JIN GAN *Fortunella japonica*, JIN JU *Fortunella margarita*, JU PI *Citrus reticulata*, LAI MENG *Citrus aurantifolia*, OU *Nelumbo nucifera*, ZHI SHI *Citrus aurantium*. Ref: 6, 969, 979, 997, 2867, 2992.

**11717 Isosinomenine**

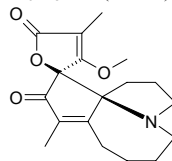
[510-42-9]  $C_{19}H_{23}NO_4$  (329.40). mp (+) 198–202°C. Source: BAI CHANG *Acorus calamus*, QING FENG TENG *Sinomenium acutum*. Ref: 6, 660.

**11718 Isositsirikine**

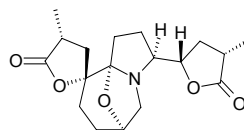
[6519-27-3]  $C_{21}H_{26}N_2O_3$  (354.45).  $[\alpha]_D^{25} = -20^\circ$  (CHCl<sub>3</sub>). Source: CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochera rosea*], *Aspidosperma marcgravianum*. Ref: 6, 1521.

**11719 Isostemonamine**

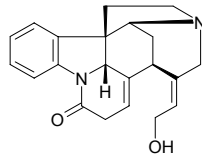
$C_{18}H_{23}NO_4$  (317.39). Source: ZHI LI BAI BU *Stemona sessilifolia*. Ref: 660.

**11720 Isostemetinine**

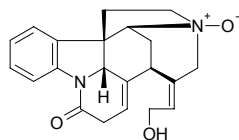
$C_{18}H_{23}NO_5$  (335.40). Source: BAI BU *Stemona tuberosa*. Ref: 660.

**11721 Isostrychnine**

[467-16-3]  $C_{21}H_{22}N_2O_2$  (334.42). Source: MA QIAN ZI *Strychnos nux-vomica*. Ref: 2, 542.

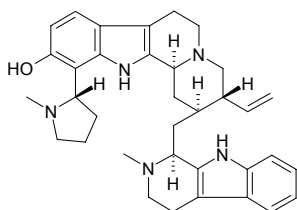
**11722 Isostrychnine N-oxide**

[130641-44-0]  $C_{21}H_{22}N_2O_3$  (350.42). White powder,  $[\alpha]_D = +15.1^\circ$  ( $c = 0.002$ , methanol). Pharm: Cytotoxic (*in vitro*, HeLa, IC<sub>50</sub> = 9.0 μmol/L, hmN K562, IC<sub>50</sub> = 9.7 μmol/L, hmN Hep2, IC<sub>50</sub> = 49 μmol/L). Source: MA QIAN ZI *Strychnos nux-vomica*. Ref: 2, 1186, 1187.

**11723 Isostrychnopentamine**

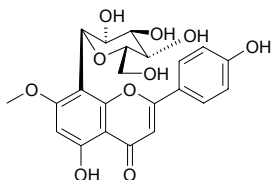
$C_{33}H_{43}N_5O$  (549.77). Pharm: Antiplasmodial (chloroquine-sensitive line: IC<sub>50</sub> = (120±42) nmol/L, IC<sub>90</sub> = 450 nmol/L, Quinine: IC<sub>50</sub> = (269±6) nmol/L, IC<sub>90</sub> = 1910 nmol/L; chloroquine-resistant line: IC<sub>50</sub> = (104±36) nmol/L, IC<sub>90</sub> = 386 nmol/L, Quinine: IC<sub>50</sub> = (200±33) nmol/L, IC<sub>90</sub> = 2740 nmol/L; moderately chloroquine-resistant line: IC<sub>50</sub> = (152±9) nmol/L, IC<sub>90</sub> = 628 nmol/L, Quinine: IC<sub>50</sub> = (413±11) nmol/L, IC<sub>90</sub> = 1720 nmol/L)<sup>[4925]</sup>; antimalarial and cytotoxic (antiplasmodial, 5 kinds of *Plasmodium falciparum*: FCA 20 GHANA (CQS), IC<sub>50</sub> = (0.120±0.042) μmol/L, control Chloroquine IC<sub>50</sub> = (0.020±0.002) μmol/L; W2INDOCHINA (CQR), IC<sub>50</sub> = (0.152±0.009) μmol/L; FCB1 COLOMBIA (CQR-), IC<sub>50</sub> = (0.104±0.036) μmol/L, Chloroquine IC<sub>50</sub> =

(0.032±0.019)μmol/L; PFB(CQR+), IC<sub>50</sub> = (0.163±0.056)μmol/L, Chloroquine IC<sub>50</sub> = (0.540±0.330)μmol/L; F32(CQS), IC<sub>50</sub> = (0.046±0.005)μmol/L, Chloroquine IC<sub>50</sub> = (0.014±0.004)μmol/L; 4 kinds of hmn cell line: HCT116, IC<sub>50</sub> = (6.68±2.1)μmol/L, SI = 41~145; HCT15, IC<sub>50</sub> = (13.57±3.1)μmol/L, SI = 83~295; WI-38, IC<sub>50</sub> = 2.31μmol/L, SI = 15~50; KB, IC<sub>50</sub> = (19.4±3.5)μmol/L, SI = 119~421<sup>[4987]</sup>. Source: DONG FEI MA QIAN *Strychnos usambarensis* (leaf). Ref: 4925, 4987.



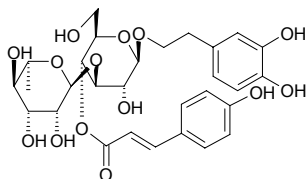
#### 11724 Isoswertisin

5,4'-Dihydroxy-7-methoxyflavone 8-C-glucopyranoside; Vitexin 7-methyl ether; 8-C-Glucosylgenkwanin; Genkwanin 8-C-glucoside C<sub>22</sub>H<sub>22</sub>O<sub>10</sub> (446.41). Source: DUAN BAN JIN LIAN HUA *Trollius ledebourii* (flower: yield = 0.00039%dw). Ref: 4743.



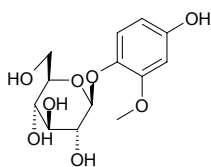
#### 11725 Isosyringalide 3'-α-L-rhamnopyranoside

C<sub>29</sub>H<sub>36</sub>O<sub>14</sub> (608.60). Source: GUAN HUA ROU CONG RONG *Cistanche tubulosa*. Ref: 2448.



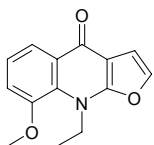
#### 11726 Isotachioside

C<sub>13</sub>H<sub>18</sub>O<sub>8</sub> (302.28). White powder. Source: XIAO YE SHI NAN *Photinia parvifolia* (stem). Ref: 4553.



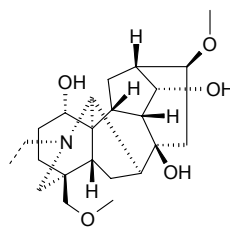
#### 11727 Isotaifine

[84323-09-1] C<sub>14</sub>H<sub>13</sub>NO<sub>3</sub> (243.26). Needles (pet. ether), mp 123-125°C. Source: SUI ZHUANG YUN XIANG *Ruta chalepensis*. Ref: 1521.



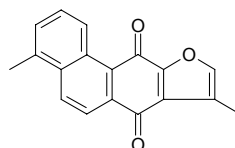
#### 11728 Isotalatizidine

C<sub>23</sub>H<sub>37</sub>NO<sub>5</sub> (407.56). Source: LU CUI QUE *Delphinium denudatum*, FU ZI *Aconitum carmichaeli*, RI BEN WU TOU *Aconitum japonicum*, TA LA WU TOU *Aconitum talassicum*, WU TOU *Aconitum carmichaeli*, ZI SHAN *Taxus cuspidata*. Ref: 660, 1521.



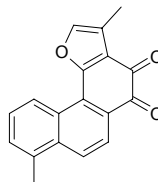
#### 11729 Isotanshinone I

[20958-17-2] C<sub>18</sub>H<sub>12</sub>O<sub>3</sub> (276.29). mp 219°C. Source: DAN SHEN *Salvia miltiorrhiza*. Ref: 2.



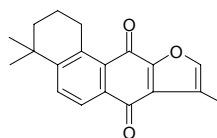
#### 11730 Isotanshinone II

11,16-Oxy-18,20-dinor-1,3,5(10),6,8,11,15-abietaheptaene-13,14-dione [98249-39-9] C<sub>18</sub>H<sub>12</sub>O<sub>3</sub> (276.29). Orange crystals (CHCl<sub>3</sub>), mp 291~293°C. Source: JIAO ZHI SHU WEI CAO *Salvia glutinosa* (dried root). Ref: 2384.



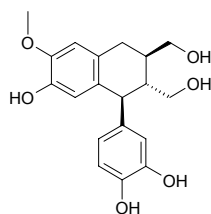
#### 11731 Isotanshinone IIA

[20958-15-0] C<sub>19</sub>H<sub>18</sub>O<sub>3</sub> (294.35). mp 208°C. Source: DAN SHEN *Salvia miltiorrhiza*. Ref: 2.



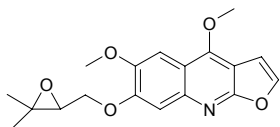
#### 11732 Isotaxiresinol

C<sub>19</sub>H<sub>22</sub>O<sub>6</sub> (346.38). Pharm: Antioxidant (DPPH scavenger, IC<sub>50</sub> = 21.7μmol/L, control Caffeic acid, IC<sub>50</sub> = 25.5μmol/L)<sup>[5407]</sup>; NO production inhibitor (IC<sub>50</sub> = 148μmol/L, control L-NMMA, IC<sub>50</sub> = 28.5μmol/L)<sup>[5407]</sup>. Source: ZI SHAN *Taxus cuspidata*, YUN NAN HONG DOU SHAN *Taxus yunnanensis* (wood: yield = 0.918%dw). Ref: 660, 4661, 5407.

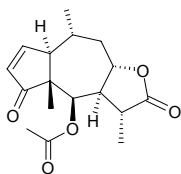


**11733 Isotecleoxine**

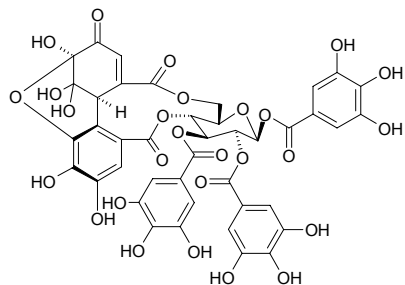
$C_{18}H_{19}NO_5$  (329.36). Solid,  $[\alpha]_D = -13.3^\circ$  ( $c = 0.06$ , MeOH). **Source:** GAO GUI YOU MU YUN XIANG *Teclia nobilis* (aerial parts). **Ref:** 3503.

**11734 Isotenulin**

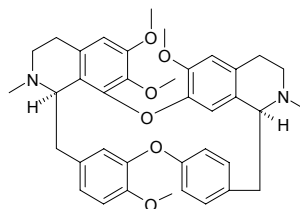
[10092-04-3]  $C_{17}H_{22}O_5$  (306.36). **Pharm:** Analgesic (ip, weak). **Source:** YA LI SANG NA DUI XIN JU *Helenium arizonicum*, BI SHI DUI XIN JU *Helenium bigelovii*. **Ref:** 658.

**11735 Isoterchebin**

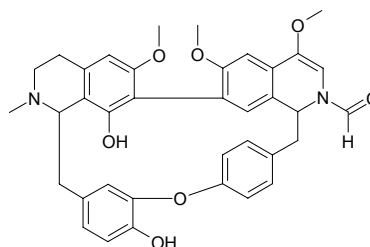
[58690-20-3]  $C_{41}H_{30}O_{27}$  (954.68). **Pharm:** Antioxidant (rat cytoblast in liver cells, inhibits lipid peroxidation). **Source:** SHAN ZHU YU *Cornus officinalis* [Syn. *Macrocarpum officinale*]. **Ref:** 658.

**11736 Isotetrandrine**

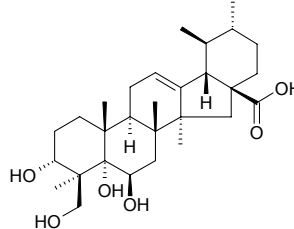
[477-57-6]  $C_{38}H_{42}N_2O_6$  (622.77). mp  $182^\circ C$ . **Pharm:** Antibacterial (*Staphylococcus aureus* and *Bacillus pyocyaneus*, MIC =  $100\mu g/mL$ ); anti-inflammatory; tuberculostatic (*Mycobacterium tuberculosis*, animal model); cytotoxic (KB); LD<sub>50</sub> (mus, ip) =  $160mg/kg$ , (rat, ip) =  $2700mg/kg$ , (rat, orl) =  $6400mg/kg$ . **Source:** BAI YAO ZI *Stephania cepharantha*, BAN RUI TANG SONG CAO *Thalictrum petaloideum* (root: content < 0.001%)<sup>[5508]</sup>, DA YE TANG SONG CAO *Thalictrum faberi* (root: content < 0.001%)<sup>[5508]</sup>, HUA NAN GONG LAO MU *Mahonia japonica*, HUA NAN GONG LAO YE *Mahonia japonica*, HUA NAN GONG LAO ZI *Mahonia japonica*, JIN SI MA WEI LIAN *Thalictrum glandulosissimum* (root: content < 0.001%)<sup>[5508]</sup>, MA WEI LIAN *Thalictrum foliolosum* (root: content < 0.001%)<sup>[5508]</sup>, RI BEN XIAO BO *Berberis thunbergii*, XIA XU TANG SONG CAO *Thalictrum atriplex* (root: content < 0.001%)<sup>[5508]</sup>, XIANG TANG SONG CAO *Thalictrum foetidum*, XIAO GUO TANG SONG CAO *Thalictrum microgynum* (root: content < 0.001%)<sup>[5508]</sup>, YAN GUO CAO *Thalictrum thunbergii* (root: content < 0.001%)<sup>[5508]</sup>, YIN BU HUAN *Cyclea barbata*, YING SHUI HUANG LIAN *Thalictrum simplex* [Syn. *Thalictrum simplex* var. *brevipes*] (root: content = 0.35%)<sup>[5508]</sup>. **Ref:** 6, 658, 5508.

**11737 Isothalamidine**

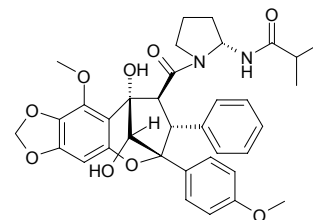
$C_{37}H_{36}N_2O_7$  (620.71). Pale yellow solid,  $[\alpha]_D = 14^\circ$  ( $c = 0.46$ ,  $CHCl_3$ ). **Source:** TANG SONG CAO ZHUANG BIAN GUO CAO *Isopyrum thalictroides* (root and rhizome). **Ref:** 5078.

**11738 Isothankunic acid**

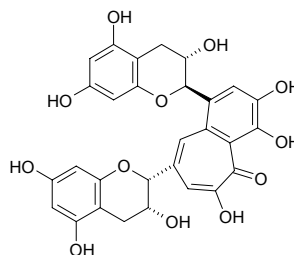
$C_{29}H_{46}O_6$  (490.69). **Source:** JI XUE CAO *Centella asiatica*. **Ref:** 660.

**11739 Isothapsakin B**

(-)-(2*R*,3*R*,4*S*,5*R*,10*R*,2*S*)-1-[2,3,4,5-Tetrahydro-5,10-dihydroxy-2-(4-methoxyphenyl)-6-methoxy-7,8-methylenedioxy-3-phenyl-2,5-methano-1-benzoxepin-4-carbonyl]-2-(2-methylpropanoylamino)-pyrrolidine  $C_{35}H_{38}N_2O_9$  (630.70).  $[\alpha]_D^{20} = -54^\circ$  ( $c = 0.2$ ,  $CHCl_3$ ). **Source:** KE SHI MI ZI LAN *Aglaia edulis*. **Ref:** 2355.

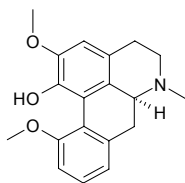
**11740 Isotheaflavin**

$C_{29}H_{24}O_{12}$  (564.51). **Source:** CHAYE *Camellia sinensis* [Syn. *Thea sinensis*]. **Ref:** 660.

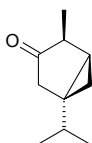


**11741 Isothebaine**

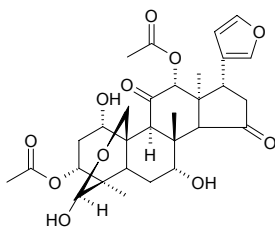
[568-21-8]  $C_{19}H_{21}NO_3$  (311.38). **Pharm:** Analgesic; anti-inflammatory; respiratory depressant; sedative; inhibits autonomic movement. **Source:** JIN DONG YING SU *Papaver orientale*, JIA JIN DONG YING SU *Papaver pseudorientale*. **Ref:** 658.

**11742 Isothujone**

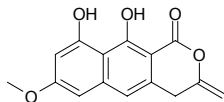
$C_{10}H_{16}O$  (152.24). **Source:** BEI AI *Artemisia vulgaris*. **Ref:** 660.

**11743 Isootoosendanin**

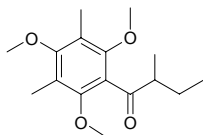
$C_{30}H_{38}O_{11}$  (574.63). **Source:** CHUAN LIAN PI *Melia toosendan*. **Ref:** 660.

**11744 Isotoralactone**

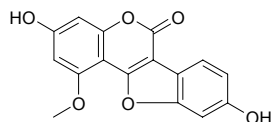
$C_{15}H_{12}O_5$  (272.26). **Source:** DUN YE JUE MING *Cassia obtusifolia*. **Ref:** 660.

**11745 Isotorquatone**

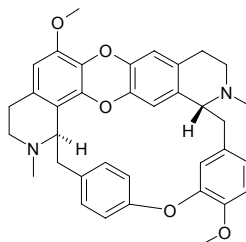
Torquatone in *Eucalyptus torquata* var. *grandiflora*  $C_{16}H_{24}O_4$  (280.37). **Source:** WU BING YE AN *Eucalyptus apodophylla*. **Ref:** 2331.

**11746 Isotrifoliol**

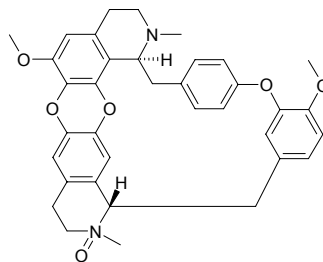
$C_{16}H_{10}O_6$  (298.25). Pale-yellow acicular crystals, mp > 300°C. **Source:** GAN CAO *Glycyrrhiza uralensis*. **Ref:** 748.

**11747 Isotrilobine**

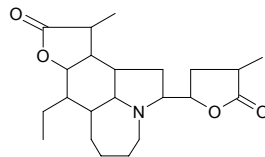
Homotrilobine [26195-62-0]  $C_{36}H_{36}N_2O_5$  (576.70). mp 213–215°C. **Pharm:** Antibacterial (six *Bacillus* and *Coccus* spp., MIC = 7.8–500 µg/mL); antineoplastic (HeLa, mus EAC, S<sub>180</sub>); anti-inflammatory (rat, tampon granuloma model and swollen foot model caused by carrageenan); platelet aggregation inhibitor. **Source:** MU FANG JI *Cocculus trilobus* [Syn. *Cocculus sarmentosus*], RU LAN *Stephania hernandifolia*. **Ref:** 6, 658.

**11748 Isotrilobine-2-N-oxide**

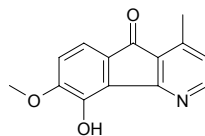
[139953-39-2]  $C_{36}H_{36}N_2O_6$  (592.70). Yellowish crystalline powder, mp 178–179°C (methanol),  $[\alpha]_D^{20.5} = +150.9^\circ$  ( $c = 0.91$ , chloroform). **Pharm:** Antineoplastic (P<sub>388</sub>). **Source:** MU FANG JI *Cocculus trilobus* [Syn. *Cocculus sarmentosus*]. **Ref:** 203, 658.

**11749 Isotuberostemonine**

$C_{22}H_{33}NO_4$  (375.51). mp 123–125°C. **Source:** BAI BU *Stemona tuberosa*. **Ref:** 6.

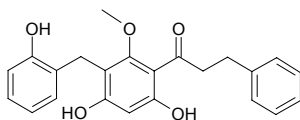
**11750 Isoursuline**

$C_{14}H_{11}NO_3$  (241.25). **Source:** BIAN ZHONG CHANG YE AN LUO *Polyalthia longifolia* var. *pendula*. **Ref:** 5386.

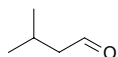


**11751 Isoouvaretin**

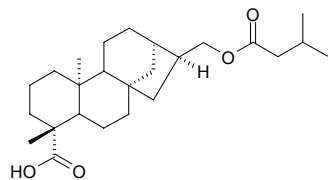
[61463-03-4] C<sub>23</sub>H<sub>22</sub>O<sub>5</sub> (378.43). Resin. **Pharm:** Antibacterial (*Staphylococcus aureus*, MIC = 3.1 μg/mL; *Bacillus subtilis*, MIC = 0.8 μg/mL; *Mycobacterium smegmatis*, MIC = 12.5 μg/mL); cytotoxic (hmn promyelocytic leukemia HL-60 cells, IC<sub>50</sub> = 24.7 μmol/L). **Source:** AN ZI YU PAN *Uvaria chamae*, GUAN ZI YU PAN *Uvaria angolensis*, JIAN ZI YU PAN *Uvaria acuminata* (root). **Ref:** 661, 4261.

**11752 Isovaleraldehyde**

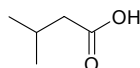
Isopentanal; Isovaleral [590-86-3] C<sub>5</sub>H<sub>10</sub>O (86.13). mp 92.5°C. **Source:** SHENG JIANG *Zingiber officinale*, XI GUA *Citrullus vulgaris* [Syn. *Citrullus lanatus*]. **Ref:** 2.

**11753 16αH,17-Isovalerate-ent-kauran-19-oic acid**

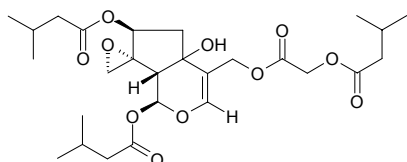
C<sub>25</sub>H<sub>40</sub>O<sub>4</sub> (404.60). White crystals, mp 168–171°C, [α]<sub>D</sub><sup>20</sup> = –32° (c = 0.50, CHCl<sub>3</sub>). **Pharm:** COX-1 inhibitor (*in vitro*, IC<sub>50</sub> = 0.21 mmol/L). **Source:** CI SAN JIA *Acanthopanax trifoliatum* (stem cortex). **Ref:** 4957.

**11754 Isovaleric acid**

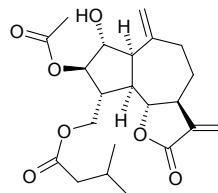
3-Methylbutanoic acid [503-74-2] C<sub>5</sub>H<sub>10</sub>O<sub>2</sub> (102.13). mp –37.6°C, bp 176.7°C. **Pharm:** Raw material for synthesis. **Source:** BAN BIAN SU *Elsholtzia ciliata*, FAN QIE *Lycopersicon esculentum*, HONG HUA *Carthamus tinctorius*, GAN SONG *Nardostachys chinensis*, HAI TUN YU *Delphinus delphis*, NIU BANG GEN *Arctium lappa*, PI JIU HUA *Humulus lupulus*, SANG YE *Morus alba*, TIAO JING CAO *Euonymus japonicus*, XIE CAO *Valeriana officinalis*, YAN CAO *Nicotiana tabacum*, YANG SHI CAO *Achillea millefolium*, *Valeriana* sp. **Ref:** 1460, 1461.

**11755 Isovaleroxy-hydroxy dihydrovaltrate**

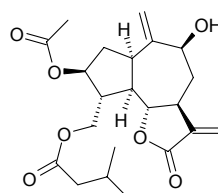
C<sub>27</sub>H<sub>40</sub>O<sub>11</sub> (540.61). **Source:** XIE CAO *Valeriana officinalis*, SHE CHUANG ZI *Cnidium monnieri*. **Ref:** 6.

**11756 15-O-Isovaleroyl-3β-O-acetyl-2α-hydroxyamphoricarpolide**

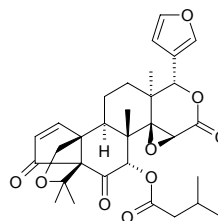
C<sub>20</sub>H<sub>30</sub>O<sub>7</sub> (406.48). Colorless gum, [α]<sub>D</sub><sup>25</sup> = +14° (c = 0.25, CHCl<sub>3</sub>). **Source:** *Amphoricarpus neumayeri* ssp. *neumayeri* (aerial parts), *Amphoricarpus neumayeri* ssp. *murbeckii* (aerial parts). **Ref:** 3842.

**11757 15-O-Isovaleroyl-3β-O-acetyl-9β-hydroxyamphoricarpolide**

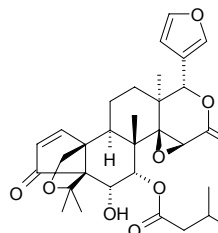
C<sub>22</sub>H<sub>30</sub>O<sub>7</sub> (406.48). Viscous oil, [α]<sub>D</sub><sup>25</sup> = +7.9° (c = 0.9, CHCl<sub>3</sub>). **Source:** *Amphoricarpus neumayeri* ssp. *neumayeri* (aerial parts), *Amphoricarpus neumayeri* ssp. *murbeckii* (aerial parts). **Ref:** 3842.

**11758 7-Isovaleroyleyclopiatalantin**

C<sub>31</sub>H<sub>36</sub>O<sub>9</sub> (552.63). Colorless plates, mp 208–210°C, [α]<sub>D</sub> = +22.3° (c = 0.85, CHCl<sub>3</sub>). **Source:** DONG FENG JU GEN *Atalantia buxifolia* [Syn. *Severinia buxifolia*] (root cortex). **Ref:** 3075.

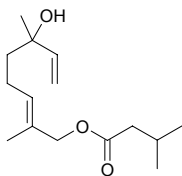
**11759 7-Isovaleroyleycloeverinolide**

C<sub>31</sub>H<sub>38</sub>O<sub>9</sub> (554.64). Colorless plates, mp 242–244°C, [α]<sub>D</sub> = +73° (c = 0.63, CHCl<sub>3</sub>). **Source:** DONG FENG JU GEN *Atalantia buxifolia* [Syn. *Severinia buxifolia*] (root cortex). **Ref:** 3075.

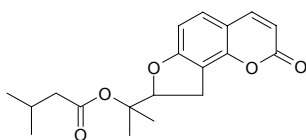


**11760 Isovaleroyloxylinalool**

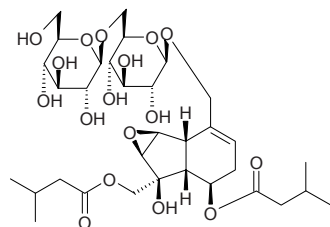
$C_{15}H_{26}O_3$  (254.37). Colorless oil,  $[\alpha]_D = -1.4^\circ$  ( $c = 0.3$ ,  $CH_2Cl_2$ ). Source: FEI NI JI CI BAI *Juniperus phoenicea* (leaf), XIANG CI BAI FEI ZHOU BIAN ZHONG *Juniperus thurifera* var. *africana* (leaf). Ref: 3851.

**11761 O-Isovalerylcolum bianetin**

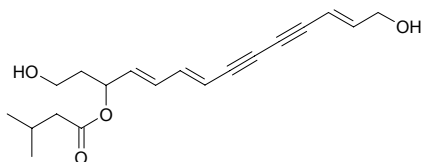
$C_{19}H_{22}O_5$  (330.38). Source: SHE CHUANG ZI *Cnidium monnieri*. Ref: 6.

**11762 10-Isovaleryl kanokoside C**

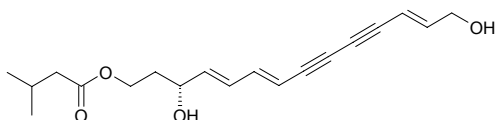
$C_{33}H_{52}O_{17}$  (720.77). Amorphous colorless solid. Source: XIE CAO *Valeriana officinalis* (rhizome and root: yield = 0.0002%). Ref: 915.

**11763 (4E,6E,12E)-3-Isovaleryloxy-tetradeca-4,6,12-triene-8,10-diyne-1,14-diol**

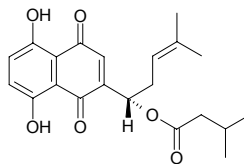
$C_{19}H_{24}O_4$  (316.40). Source: BEI CANG ZHU *Atractylodes chinensis* (rhizome). Ref: 4540.

**11764 (3S,4E,6E,12E)-1-Isovaleryloxy-tetradeca-4,6,12-triene-8,10-diyne-3,14-diol**

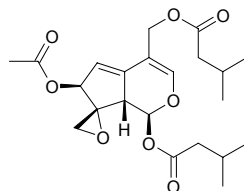
$C_{19}H_{24}O_4$  (316.40). Pale yellow oil,  $[\alpha]_D^{22} = +45^\circ$  ( $c = 0.139$ , MeOH). Source: BEI CANG ZHU *Atractylodes chinensis* (rhizome). Ref: 4540.

**11765 Isovalerylshikonin**

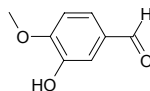
$C_{21}H_{24}O_6$  (372.42). Source: ZI CAO *Lithospermum erythrorhizon*. Ref: 2.

**11766 Isovaltrate**

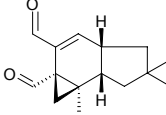
$C_{22}H_{30}O_8$  (422.48). Source: ZHI ZHU XIANG *Valeriana jatamansii* [Syn. *Valeriana wallichii*]. (rhizome and root: yield = 0.000019%dw). Ref: 4672.

**11767 Isovanillin**

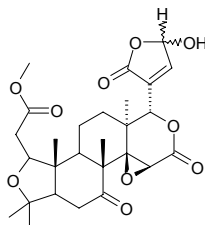
3-Hydroxy-*p*-anisaldehyde [621-59-0]  $C_8H_8O_3$  (152.15). mp 116–117°C, bp 179°C/15mmHg. Source: KONG SHI CHUN *Ulva pertusa*. Ref: 6, 660.

**11768 Isovelleral**

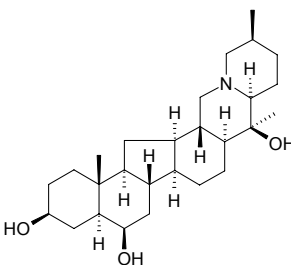
$C_{15}H_{20}O_2$  (232.33). Source: RONG BAI RU GU *Lactarius vellereus*. Ref: 660.

**11769 Isoveprisonic acid**

21-Oxo-23 $\xi$ -hydroxy-21,23-dihydroveprisonone  $C_{27}H_{34}O_{10}$  (518.57). White amorphous solid. Source: *Bouchardatia neurococca*. Ref: 3445.

**11770 Isoverticine**

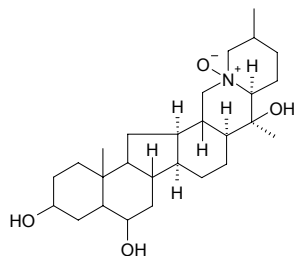
$C_{27}H_{45}NO_3$  (431.66). Source: ZHE BEI MU *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*]. Ref: 660.



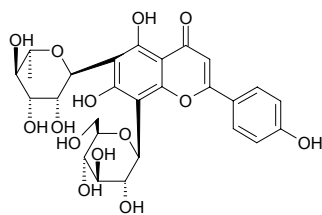


**11771 Isoverticine- $\beta$ -N-oxide**

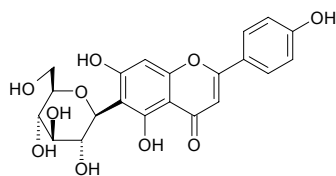
$C_{27}H_{45}NO_4$  (447.66). White crystals, mp 207~210°C. Source: WA BU BEI MU *Fritillaria wabuensis* (bulb). Ref: 4838.

**11772 Isoviolanthin**

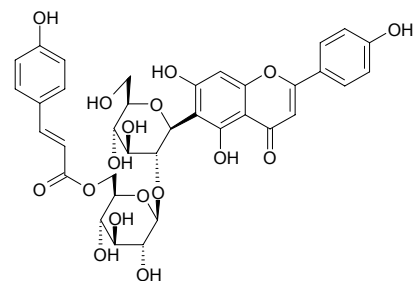
$C_{27}H_{30}O_{14}$  (578.53). Source: HUANG GAN CAO *Glycyrrhiza kansuensis*, *Glycyrrhiza* spp. Ref: 660, 2431.

**11773 Isovitexin**

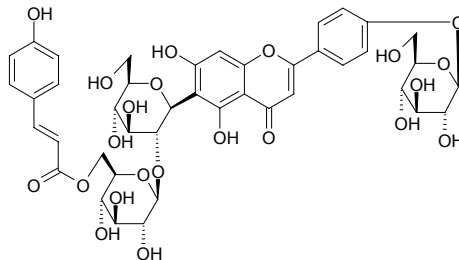
Homovitexin; Saponaretin; Apigenin-6-*C*- $\beta$ -D-glucopyranoside [38953-85-4]  $C_{21}H_{20}O_{10}$  (432.39). mp 265°C, mp 239°C,  $[\alpha]_D^{22} = -9.2^\circ$  ( $c = 0.72$ , pyridine). Pharm: Antineoplastic (of 60 tested flavones, 10 showed antineoplastic activity, and isovitexin was one of the strongest three compounds); pytoalexin<sup>[4727]</sup>. Source: BIN MU JING *Vitex littoralis*, HUANG GUA *Cucumis sativus* (leaf)<sup>[4727]</sup>, ER RUI HE LIAN DOU *Drymaria diandra* [Syn. *Drymaria cordata* ssp. *diandra*] (whole herb: yield = 0.00018%dw)<sup>[4758]</sup>, RI BEN SHUANG HU DIE *Tripterospermum japonicum*, SUAN JIAO *Tamarindus indica*, XIN XI LAN MU JING *Vitex lucens*, YA MA *Linum usitatissimum*, ZAO JIA *Gleditsia sinensis* [Syn. *Gleditsia horrida*], ZHANG YA CAI *Swertia pseudochinensis*. Ref: 658, 3533, 4758.

**11774 Isovitexin 2''-O-(6'''-(E)-p-coumaroyl)glucoside**

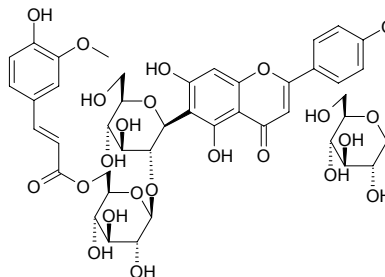
$C_{36}H_{36}O_{17}$  (740.68). Yellow solid. Source: HUANG GUA *Cucumis sativus* (leaf). Ref: 5181.

**11775 Isovitexin 2''-O-(6'''-(E)-p-coumaroyl)glucoside-4'-O-glucoside**

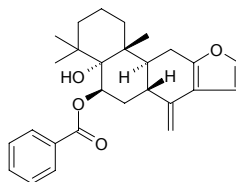
$C_{42}H_{46}O_{22}$  (902.82). Yellow solid. Source: HUANG GUA *Cucumis sativus* (leaf). Ref: 5181.

**11776 Isovitexin 2''-O-(6'''-(E)-feruloyl)glucoside-4'-O-glucoside**

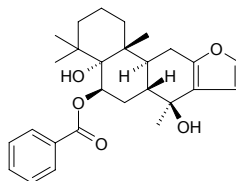
Isovitexin 2''-O-(6'''-(E)-feruloyl)- $\beta$ -glucopyranoside-4'-O- $\beta$ -glucopyranoside  $C_{43}H_{48}O_{23}$  (932.85). Source: HUANG GUA *Cucumis sativus* (leaf). Ref: 5181.

**11777 Isovouacapenol A**

(4 $\alpha$ ,5 $\beta$ ,6 $\alpha\beta$ ,11 $\alpha$ ,11 $\beta$ )-1,2,3,4,4a,5,6,6a,7,11,11a,11b-Dodecahydro-4,4,11b-trimethyl-7-methylenephenanthro[3,2-*b*]furan-4a,5-diol-5-benzoate  $C_{27}H_{32}O_4$  (420.55). Colorless crystals, mp 163~165°C (petroleum ether),  $[\alpha]_D^{20} = -25.5^\circ$  ( $c = 0.0092$ ,  $CDCl_3$ ). Pharm: Antibacterial (*Staphylococcus aureus*, *Escherichia coli*, *Pseudomonas aeruginosa*, and *Bacillus subtilis*); antifungal (*Candida albicans* and *Trichophyton mentagrophytes*). Source: JI MEI YUN SHI *Caesalpinia pulcherrima* (leaf: yield = 0.00087%dw). Ref: 4639.

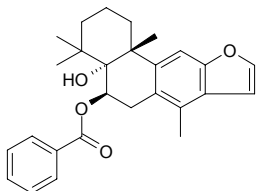
**11778 Isovouacapenol B**

(4 $\alpha$ ,5 $\beta$ ,6 $\alpha\beta$ ,7 $\beta$ ,11 $\alpha$ ,11 $\beta$ )-1,2,3,4,4a,5,6,6a,7,11,11a,11b-Dodecahydro-4,4,7,11b-tetramethylphenanthro[3,2-*b*]furan-4a,5,7-triol-5-benzoate  $C_{27}H_{34}O_5$  (438.57). Colorless crystals, mp 108~110°C (petroleum ether),  $[\alpha]_D^{20} = +12.6^\circ$  ( $c = 0.0082$ ,  $CDCl_3$ ). Pharm: Antibacterial (*Staphylococcus aureus*, *Escherichia coli*, *Pseudomonas aeruginosa*, and *Bacillus subtilis*); antifungal (*Candida albicans*, *Aspergillus niger* and *Trichophyton mentagrophytes*). Source: JI MEI YUN SHI *Caesalpinia pulcherrima* (leaf: yield = 0.00044%dw). Ref: 4639.

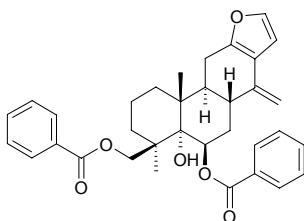


**11779 Isovouacapenol D**

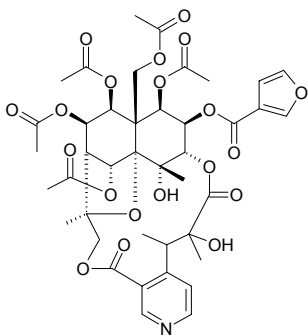
(4 $\alpha$ ,5 $\beta$ ,11 $\beta$ )-1,2,3,4,4a,5,6,11b-Octahydro-4,4,7,11b-tetramethyl-phenanthro [3,2-*b*]furan-4a,5-diol-5-benzoate C<sub>27</sub>H<sub>30</sub>O<sub>4</sub> (418.54). Colorless crystals, mp 211~213°C (petroleum ether), [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -71.6° (*c* = 0.0031, CDCl<sub>3</sub>). **Pharm:** Antibacterial (*Staphylococcus aureus*, *Escherichia coli*, *Pseudomonas aeruginosa*, and *Bacillus subtilis*); antifungal (*Candida albicans* and *Trichophyton mentagrophytes*). **Source:** JI MEI YUN SHI *Caesalpinia pulcherrima* (leaf: yield = 0.00009%dw). **Ref:** 4639.

**11780 Isovouacapenol E**

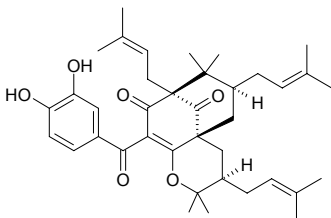
C<sub>34</sub>H<sub>36</sub>O<sub>6</sub> (540.66). Colorless gum, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -7° (*c* = 0.001, CHCl<sub>3</sub>). **Source:** JI MEI YUN SHI *Caesalpinia pulcherrima* (leaf). **Ref:** 4394.

**11781 Isowilfortrine**

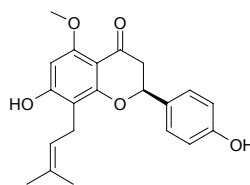
C<sub>41</sub>H<sub>47</sub>NO<sub>20</sub> (873.83). Colorless lamellar crystals, mp 329~331°C. **Source:** LEI GONG TENG *Tripterygium wilfordii*. **Ref:** 310.

**11782 Isoxanthochymol**

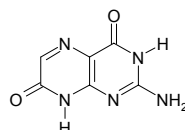
C<sub>38</sub>H<sub>50</sub>O<sub>6</sub> (602.82). **Source:** DA YE TENG HUANG *Garcinia xanthochymus*. **Ref:** 660.

**11783 Isoxanthohumol**

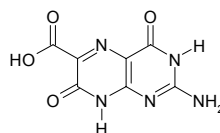
[70872-29-6] C<sub>21</sub>H<sub>22</sub>O<sub>5</sub> (354.41). mp 198°C. **Pharm:** Cytotoxic (inhibits cellular hyperplasia of mammary cancer, colon cancer and ovary cancer A2780). **Source:** KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*], PI JIU HUA *Humulus lupulus* (strobile)<sup>[4789]</sup>. **Ref:** 6, 1582, 4789.

**11784 Isoxanthopterin**

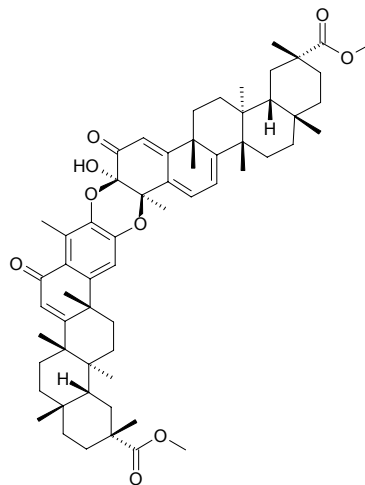
2-Amino-4,7-pteridinediol; Ranachrome 4 [529-69-1] C<sub>6</sub>H<sub>5</sub>N<sub>5</sub>O<sub>2</sub> (179.14). mp > 300°C (dec). **Source:** DIE DA LAO *Litsea verticillata*, JIN YU *Carassius auratus*, QING WA *Rana nigromaculata*; *Rana plancyi*. **Ref:** 6.

**11785 Isoxanthopterin-6-carboxylic acid**

C<sub>7</sub>H<sub>5</sub>N<sub>5</sub>O<sub>4</sub> (223.15). **Source:** JIN YU *Carassius auratus*. **Ref:** 6.

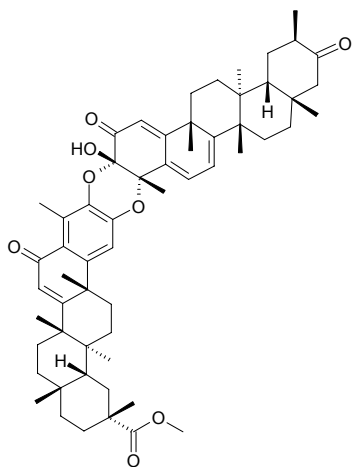
**11786 Isoxuxuarine E $\beta$** 

C<sub>60</sub>H<sub>78</sub>O<sub>9</sub> (943.29). Yellow amorphous solid. **Source:** QIU SHI MEI DENG MU *Maytenus chuchuhuasca*(bark). **Ref:** 4295.

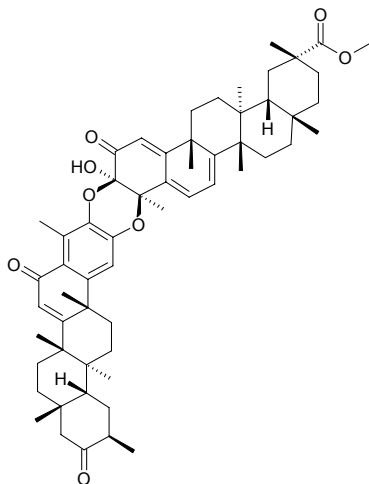


**11787 Isoxuxuarine Fa**

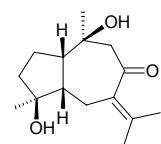
$C_{58}H_{74}O_8$  (899.23). Yellow amorphous solid. Source: QIU SHI MEI DENG *MU Maytenus chuchuhuasca* (bark). Ref: 4295.

**11788 Isoxuxuarine Gβ**

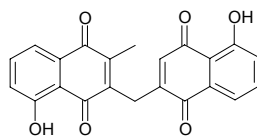
$C_{58}H_{74}O_8$  (899.23). Yellow amorphous solid. Source: QIU SHI MEI DENG *MU Maytenus chuchuhuasca* (bark). Ref: 4295.

**11789 Isozedoarondiol**

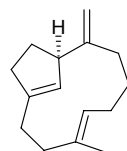
$C_{15}H_{24}O_3$  (252.36). Pharm: NO production inhibitor inactive (mus peritoneal macrophages, induced by LPS, 100 μmol/L, InRt = (11.4±2.5)%, control *L*-NMMA, 100 μmol/L, InRt = (79.2±0.9)%,  $p < 0.05$ ). Source: PING E SHU *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*]. Ref: 4150.

**11790 Isozeylanone**

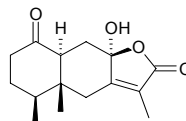
$C_{22}H_{14}O_6$  (374.35). Red powder. Source: BAI HUA DAN *Plumbago zeylanica*, HAI SHI *Diospyros maritima* (fruit). Ref: 1521, 4185.

**11791 (+)-Isozierene**

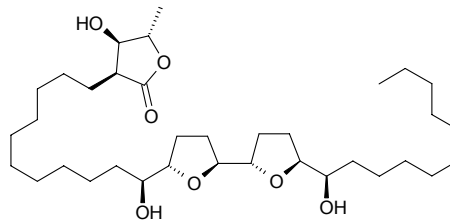
(+)-4-Methyl-9-methylene-bicyclo[8.2.1]trideca-1(13),4-diene  $C_{15}H_{22}$  (202.34). Colorless oil. Source: *Saccogyna viticulosa* (essential oil). Ref: 3839.

**11792 (-)-Istanbulin A**

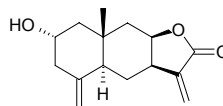
$C_{15}H_{20}O_4$  (264.32). Colorless granular crystals, mp 245°C,  $[\alpha]_D^{17.5} = -110^\circ$  ( $c = 0.6035$ , methanol). Source: JIU JIE CHA *Sarcandra glabra* [Syn. *Chloranthus glaber*]. Ref: 94.

**11793 Itrabin**

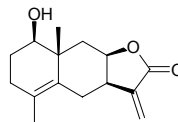
$C_{35}H_{64}O_7$  (596.90). Pharm: Mitochondrial complex I selective inhibitor (NADH oxidase  $IC_{50} = (0.21 \pm 0.03)$  nmol/L,  $p < 0.001$ , control Rotenone,  $IC_{50} = (5.10 \pm 0.09)$  nmol/L). Source: MAO YE FAN LI ZHI *Annona cherimolia* (seed). Ref: 5024.

**11794 Ivalin**

$C_{15}H_{20}O_3$  (248.32). Pharm: Toxin (mammal). Source: *Inula* sp., *Wedelia* sp. Ref: 658.

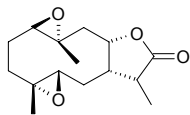
**11795 Ivangustin**

$C_{15}H_{20}O_3$  (248.32). Source: JIN FEI CAO *Inula japonica*. Ref: 5422.

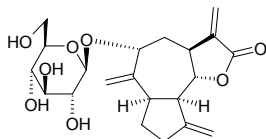


**11796 Ivaxillin**

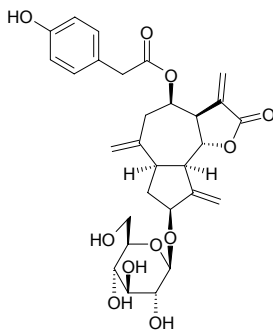
$C_{15}H_{22}O_4$  (266.34). Source: TIAN MING JING *Carpesium abrotanoides*. Ref: 660.

**11797 Ixeriside**

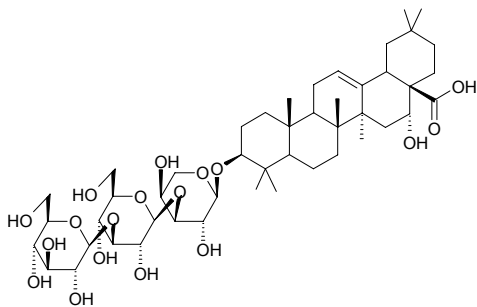
$C_{21}H_{28}O_8$  (408.45). Source: JU QU *Cichorium intybus*. Ref: 736.

**11798 Ixeriside A**

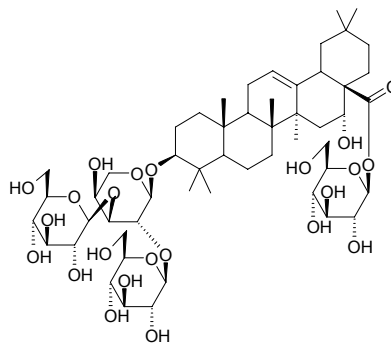
$C_{29}H_{34}O_{11}$  (558.59). Source: SHAN KU MAI *Ixeris chinensis*. Ref: 1521.

**11799 Ixerissaponin A**

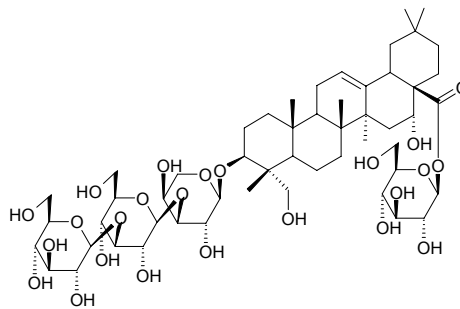
Echinocystic acid 3-*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 3)- $\alpha$ -*L*-arabinopyranoside  $C_{47}H_{76}O_{18}$  (929.12). White amorphous powder,  $[\alpha]_D^{25} = +16.0^\circ$  ( $c = 0.23$ , pyridine). Pharm: Cytotoxic inactive (*in vitro*, cultured A375,  $IC_{50} > 50\mu\text{mol/L}$ , control Mithramycin,  $IC_{50} = (0.35\pm 0.03)\mu\text{mol/L}$ ; L-929,  $IC_{50} > 50\mu\text{mol/L}$ , Mithramycin,  $IC_{50} = (0.32\pm 0.02)\mu\text{mol/L}$ ; HeLa,  $IC_{50} > 50\mu\text{mol/L}$ , Mithramycin,  $IC_{50} = (0.23\pm 0.02)\mu\text{mol/L}$ ). Source: BAO JING KU MAI CAI *Ixeris sonchifolia* (whole herb). Ref: 5476.

**11800 Ixerissaponin B**

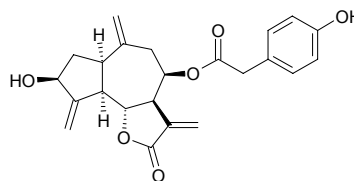
3-*O*-{Bis[ $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 2 and 1 $\rightarrow$ 3)- $\alpha$ -*L*-arabinopyranosyl]} echinocystic acid 28-*O*- $\beta$ -*D*-glucopyranosyl ester  $C_{53}H_{86}O_{23}$  (1093.26). White amorphous powder,  $[\alpha]_D^{25} = +22.4^\circ$  ( $c = 0.21$ , pyridine). Pharm: Cytotoxic (*in vitro*, cultured A375,  $IC_{50} = (8.83\pm 2.78)\mu\text{mol/L}$ , control Mithramycin,  $IC_{50} = (0.35\pm 0.03)\mu\text{mol/L}$ ; L-929,  $IC_{50} = (12.10\pm 4.69)\mu\text{mol/L}$ , Mithramycin,  $IC_{50} = (0.32\pm 0.02)\mu\text{mol/L}$ ; HeLa,  $IC_{50} = (15.83\pm 3.65)\mu\text{mol/L}$ , Mithramycin,  $IC_{50} = (0.23\pm 0.02)\mu\text{mol/L}$ ). Source: BAO JING KU MAI CAI *Ixeris sonchifolia* (whole herb). Ref: 5476.

**11801 Ixerissaponin C**

3-*O*-[ $\beta$ -*D*-Glucopyranosyl(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 3)- $\alpha$ -*L*-arabinopyranosyl]-16 $\alpha$ ,23-dihydroxyolean-12-ene 28-*O*- $\beta$ -*D*-glucopyranosyl ester  $C_{53}H_{86}O_{24}$  (1107.26). White amorphous powder,  $[\alpha]_D^{25} = +28.6^\circ$  ( $c = 0.25$ , pyridine). Pharm: Cytotoxic (*in vitro*, cultured A375,  $IC_{50} = (10.32\pm 3.12)\mu\text{mol/L}$ , control Mithramycin,  $IC_{50} = (0.35\pm 0.03)\mu\text{mol/L}$ ; L-929,  $IC_{50} = (13.2\pm 5.02)\mu\text{mol/L}$ , Mithramycin,  $IC_{50} = (0.32\pm 0.02)\mu\text{mol/L}$ ; HeLa,  $IC_{50} = (9.49\pm 2.36)\mu\text{mol/L}$ , Mithramycin,  $IC_{50} = (0.23\pm 0.02)\mu\text{mol/L}$ ). Source: BAO JING KU MAI CAI *Ixeris sonchifolia* (whole herb). Ref: 5476.

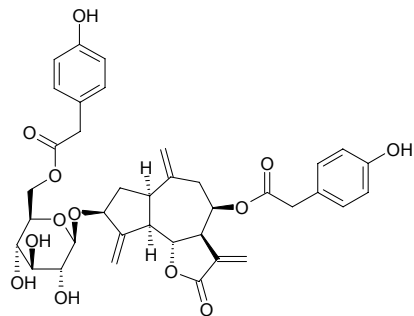
**11802 Ixerochinolide**

$C_{23}H_{24}O_6$  (396.44). Pharm: Cytotoxic (hmn, *in vitro*, PC3 prostate cancer cells,  $IC_{50} = 1.6\mu\text{g/mL}$ ). Source: SHAN KU MAI CAI *Ixeris chinensis*. Ref: 2527.

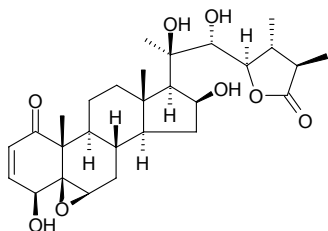


**11803 Ixerochinoside**

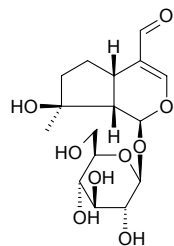
3 $\beta$ -(6"-Phenylacetyloxyb-D-glucopyranosyloxy)-8 $\beta$ -(p-hydroxyphenylacetyloxy)-guaia-4(15),10(14),11(13)-trien-1 $\alpha$ ,5 $\alpha$ ,6 $\beta$ ,7 $\alpha$ H-12,6-olide C<sub>37</sub>H<sub>40</sub>O<sub>13</sub> (692.72). Source: SHAN KU MAI *Ixeris chinensis*. Ref: 2527.

**11804 Ixocarpalactone A**

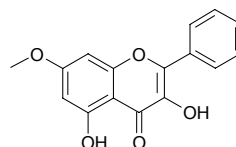
5,6-Epoxy-4,16,20,22-tetrahydroxy-1-oxoergost-2-eno-26,23-lactone [71801-45-1] C<sub>28</sub>H<sub>40</sub>O<sub>8</sub> (504.63). Crystals, mp 294~295°C, [ $\alpha$ ]<sub>D</sub> = +84°. Pharm: Quinone reductase inducer (mus Hepa1c1c7 cells, CD = (0.22±0.08) $\mu$ mol/L, IC<sub>50</sub> = (4.1±2.9) $\mu$ mol/L, CI = 19, positive control Sulforaphane, CD = (0.36±0.17) $\mu$ mol/L, IC<sub>50</sub> = (9.9±2.1) $\mu$ mol/L, CI = 28)<sup>[4337]</sup>; cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells, IC<sub>50</sub> = 0.16 $\mu$ g/mL)<sup>[5038]</sup>; cytotoxic (soft agar transformation assay with JB6 cells, IC<sub>50</sub> = 0.13 $\mu$ g/mL)<sup>[5038]</sup>; cytotoxic (mouse mammary organ culture assay, ca. 60% at 10 $\mu$ g/mL, a promising lead as potential cancer chemopreventive agents)<sup>[5038]</sup>. Source: FEI CHENG SUAN JIANG *Physalis philadelphica* (stem and leaf), NIAN XING GUO SHI SUAN JIANG *Physalis ixocarpa*. Ref: 1521, 4337, 5038.

**11805 Ixoroside**

C<sub>16</sub>H<sub>24</sub>O<sub>9</sub> (360.36). Source: DA CHE QIAN *Plantago major*. Ref: 660.

**11806 Izalpinin**

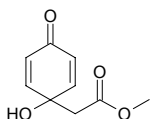
3,5-Dihydroxy-7-methoxy-2-phenyl-4H-1-benzopyran-4-one [480-14-8] C<sub>16</sub>H<sub>12</sub>O<sub>5</sub> (284.27). Yellow acicular crystals (CH<sub>2</sub>Cl<sub>2</sub>), mp 192~195°C. Pharm: NO production Inhibitor (*in vitro*, LPS-activated mouse peritoneal macrophages, IC<sub>50</sub> > 30 $\mu$ mol/L; control L-NMMA, IC<sub>50</sub> = 28 $\mu$ mol/L)<sup>[4655]</sup>;  $\beta$ -hexosaminidase release inhibitor (RBL-2H3 Cells, 100 $\mu$ mol/L, InRt = 27.5%; control Curcumin, InRt = 62.6%)<sup>[4655]</sup>. Source: FENG JIAO *Apis mellifera ligustica*, JIN YU *Carassius auratus*, LIAN JIANG *Alpinia chinensis*, YI ZHI REN *Alpinia oxyphylla* (fruit: yield = 0.0006%dw)<sup>[4655]</sup>. Ref: 6, 463, 4655.



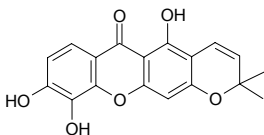
## J

**11807 Jacaranone**

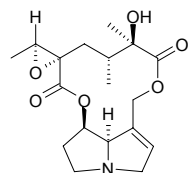
[60263-07-2] C<sub>9</sub>H<sub>10</sub>O<sub>4</sub> (182.18). mp 76~77°C, 80~81°C. **Pharm:** Antineoplastic (mus P<sub>388</sub> *in vivo*, 2mg/kg, biotic prolonged rate = 65%); cytotoxic (KB *in vitro*, ED<sub>50</sub> = 2.1µg/mL). **Source:** SONG YE QIAN LI GUANG *Senecio abrotanifolius*, FEI YI DIAN HONG *Emilia coccinea*, YI DIAN HONG *Emilia sonchifolia*. **Ref:** 5, 658, 1521.

**11808 Jacareubin**

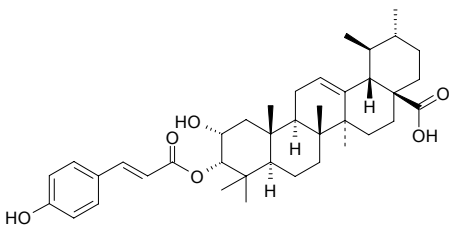
[3811-29-8] C<sub>18</sub>H<sub>14</sub>O<sub>6</sub> (326.31). **Pharm:** Anti-inflammatory; antimicrobial; antiulcerative. **Source:** BA XI HU TONG *Calophyllum brasiliense*, HAI TANG GUO *Calophyllum inophyllum* (in 1971, the compound was isolated from the plant by F.S.AL-Jeboury, et al.)<sup>[5505]</sup>, *Calophyllum* sp. **Ref:** 658, 5505.

**11809 Jacobine**

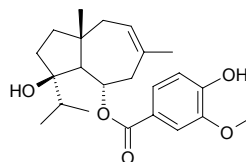
[6870-67-3] C<sub>18</sub>H<sub>25</sub>NO<sub>6</sub> (351.40). **Pharm:** Anticholinergic; mutagen (chromosome in plant cells). **Source:** CAO DIAN QIAN LI GUANG *Senecio jacobaea*, YA KE BEI QIAN LI GUANG *Senecio alpinus*, YIN BAI QIAN LI GUANG *Senecio cineraria*. **Ref:** 658.

**11810 Jacoumaric acid**

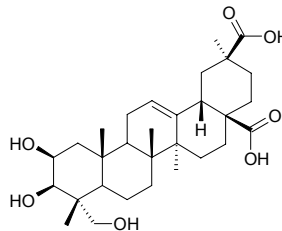
[63303-42-4] C<sub>39</sub>H<sub>54</sub>O<sub>6</sub> (618.86). **Source:** WU LING ZHI *Trogopteris xanthipes*; *Pteromys volans*. **Ref:** 637.

**11811 Jaeschkeanadiol vanillate**

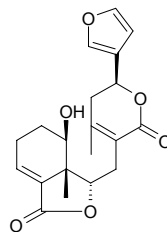
C<sub>23</sub>H<sub>32</sub>O<sub>5</sub> (388.51). **Pharm:** Antibacterial (MSSA, MIC = 16µg/mL, control Ampicillin, MIC = 1µg/mL; MRSA, MIC = 16µg/mL, Ampicillin, MIC = 2µg/mL; *Staphylococcus epidermidis* IFO 3762, MIC = 31µg/mL, Ampicillin, MIC < 0.125µg/mL; *Enterococcus faecalis* ATCC 21212, MIC = 31µg/mL, Ampicillin, MIC = 1µg/mL; *Bacillus subtilis* IFO 3134, MIC = 31µg/mL, Ampicillin, MIC < 0.125µg/mL; *Salmonella typhimurium* IFO 13245, MIC > 250µg/mL, Ampicillin, MIC = 1µg/mL; *Proteus mirabilis* IFO 3849, MIC > 250µg/mL, Ampicillin, MIC = 2µg/mL; *Escherichia coli* NIHJ JC-2, MIC > 250µg/mL, Ampicillin, MIC = 4µg/mL)<sup>[5207]</sup>. **Source:** YI LANG A WEI *Ferula kuhistanica* (root), YI LANG A WEI *Ferula kuhistanica* (fruit). **Ref:** 3977, 5207.

**11812 Jaligonic acid**

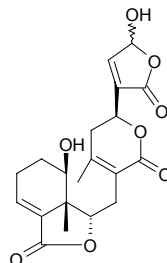
2-Hydroxyesculentic acid C<sub>30</sub>H<sub>46</sub>O<sub>7</sub> (518.70). **Source:** BA XIAN CAO *Galium aparine*, SHANG LU *Phytolacca esculenta* [Syn. *Phytolacca acinosa*]. **Ref:** 660.

**11813 Jamesoniellide I**

C<sub>20</sub>H<sub>22</sub>O<sub>6</sub> (358.39). **Source:** YUAN YE TAI *Jamesoniella colorata*. **Ref:** 3375.

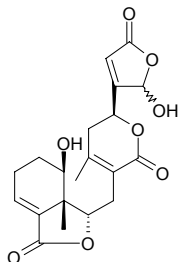
**11814 Jamesoniellide K**

C<sub>20</sub>H<sub>22</sub>O<sub>8</sub> (390.39). [α]<sub>D</sub><sup>20</sup> = -15.4° (c = 0.9, CHCl<sub>3</sub>). **Source:** YUAN YE TAI *Jamesoniella colorata*. **Ref:** 3375.

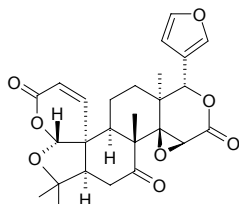


**11815 Jamesoniellide L**

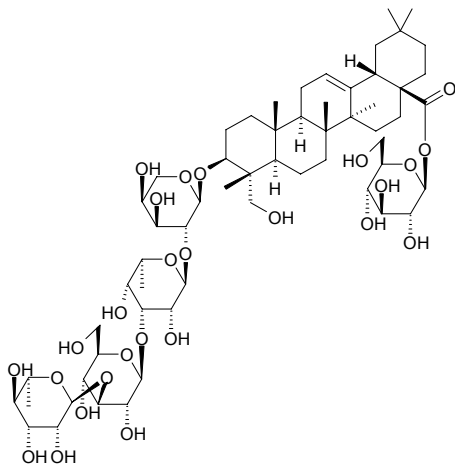
$C_{20}H_{22}O_8$  (390.39).  $[\alpha]_D^{20} = -11.8^\circ$  ( $c = 0.25$ ,  $CHCl_3$ ). Source: YUAN YE TAI *Jamesoniella colorata*. Ref: 3375.

**11816 Jangomolide**

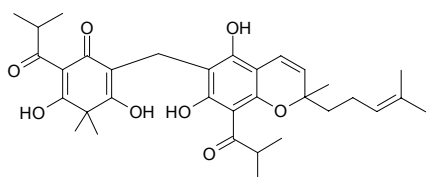
$C_{26}H_{28}O_8$  (468.51). Source: WU ZHU YU *Evodia rutaecarpa*. Ref: 660.

**11817 Japondipsaponin E<sub>1</sub>**

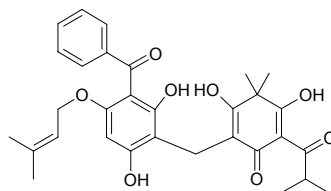
3-*O*- $\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranosyl-hederagenin 28-*O*- $\beta$ -D-glucopyranoside  $C_{59}H_{96}O_{26}$  (1221.41). White powder, mp 223–226°C, soluble in methanol, pyridine and water. Source: XU DUAN *Dipsacus japonicus*. Ref: 339.

**11818 Japonicin B**

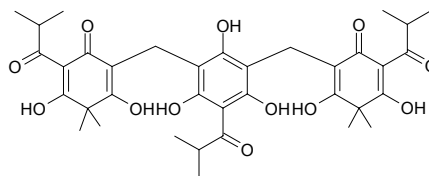
Sarothralen B  $C_{33}H_{42}O_8$  (566.70). Source: DI ER CAO *Hypericum japonicum*. Ref: 660.

**11819 Japonicin C**

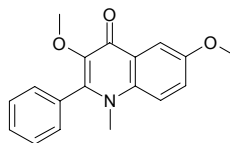
Sarothralin [96624-40-7]  $C_{31}H_{34}O_8$  (534.61). Pharm: Antimicrobial. Source: DI ER CAO *Hypericum japonicum*. Ref: 658, 660.

**11820 Japonicin D**

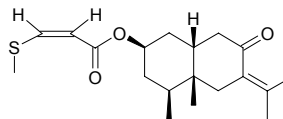
$C_{36}H_{44}O_{12}$  (668.74). Source: DI ER CAO *Hypericum japonicum*. Ref: 660.

**11821 Japonine**

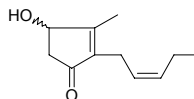
[30426-61-0]  $C_{18}H_{17}NO_3$  (295.34). mp 143°C. Source: CHOU SHAN YANG *Orixa japonica*. Ref: 6.

**11822 S-Japonine**

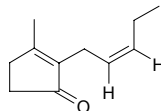
[36031-35-3]  $C_{19}H_{28}O_3S$  (336.50). mp 116.5~117.0°C. Source: FENG DOU CAI *Petasites japonicus*. Ref: 6.

**11823 Jasmololone**

$C_{11}H_{16}O_2$  (180.25). Source: MAI DONG *Ophiopogon japonicus*. Ref: 660.

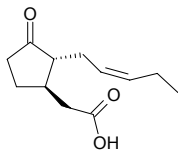
**11824 Jasmone**

[488-10-8]  $C_{11}H_{16}O$  (164.25). bp 134–135°C/12mmHg. Source: SU FANG HUA *Jasminum officinale*, CHA YE *Camellia sinensis* [Syn. *Thea sinensis*], DAI DAI HUA *Citrus aurantium* var. *amara*, MO LI HUA *Jasminum sambac*, SU XIN HUA *Jasminum grandiflorum*. Ref: 6, 658, 1521.

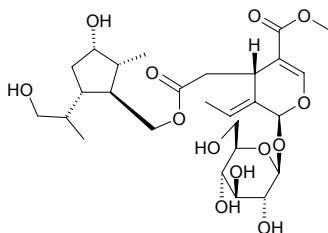


**11825 (-)-Jasmonic acid**

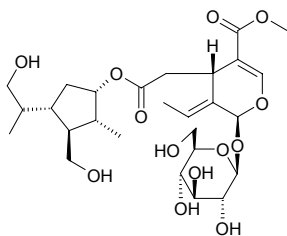
[6894-38-8] C<sub>12</sub>H<sub>18</sub>O<sub>3</sub> (210.28). Viscous oil, bp 125°C/0.001mmHg, [ $\alpha$ ]<sub>D</sub> = -83.5° (*c* = 0.97, CHCl<sub>3</sub>). **Pharm:** Inhibits biosynthesis of chlorophyll; promotes aging of leaves; potato micro-tuber inducer (1 μmol/L)<sup>[3966]</sup>. **Source:** CAN DOU *Vicia faba*, SU XIN HUA *Jasminum grandiflorum*, *Lasiodiplodia theobromae*. **Ref:** 658, 1521, 3966.

**11826 Jasnudifloside F**

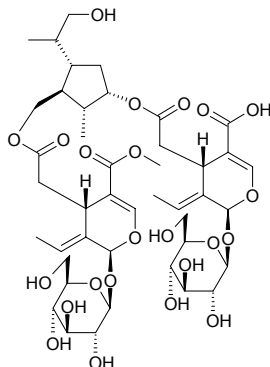
C<sub>27</sub>H<sub>42</sub>O<sub>13</sub> (574.63). Colorless amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>28</sup> = -145° (*c* = 0.52, MeOH). **Source:** YING CHUN HUA *Jasminum nudiflorum* (leaf). **Ref:** 4169.

**11827 Jasnudifloside G**

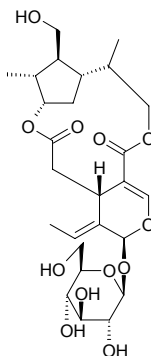
C<sub>27</sub>H<sub>42</sub>O<sub>13</sub> (574.63). Colorless amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>23</sup> = -161° (*c* = 0.89, MeOH). **Source:** YING CHUN HUA *Jasminum nudiflorum* (leaf). **Ref:** 4169.

**11828 Jasnudifloside H**

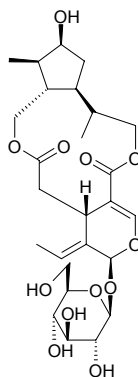
C<sub>43</sub>H<sub>62</sub>O<sub>23</sub> (946.96). Colorless amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>24</sup> = -183° (*c* = 1.02, MeOH). **Source:** YING CHUN HUA *Jasminum nudiflorum* (leaf). **Ref:** 4169.

**11829 Jasnudifloside I**

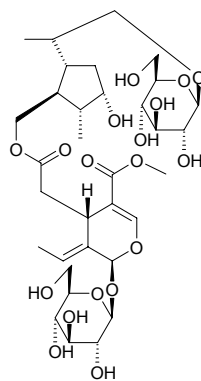
C<sub>26</sub>H<sub>38</sub>O<sub>12</sub> (542.59). Colorless amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>26</sup> = -186° (*c* = 0.39, MeOH). **Source:** YING CHUN HUA *Jasminum nudiflorum* (leaf). **Ref:** 4169.

**11830 Jasnudifloside J**

C<sub>26</sub>H<sub>38</sub>O<sub>12</sub> (542.59). Colorless amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>23</sup> = -189° (*c* = 0.17, MeOH). **Source:** YING CHUN HUA *Jasminum nudiflorum* (leaf). **Ref:** 4169.

**11831 Jasnudifloside K**

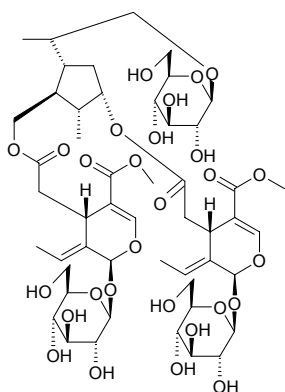
C<sub>33</sub>H<sub>52</sub>O<sub>18</sub> (736.77). Colorless amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>24</sup> = -135° (*c* = 0.55, MeOH). **Source:** YING CHUN HUA *Jasminum nudiflorum* (leaf). **Ref:** 4169.



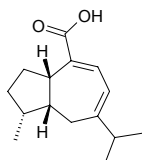


**11832 Jasnudifloside L**

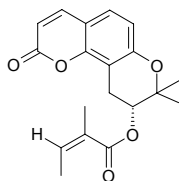
$C_{50}H_{74}O_{28}$  (1123.13). Colorless amorphous powder,  $[\alpha]_D^{24} = -173^\circ$  ( $c = 0.73$ , MeOH). Source: YING CHUN HUA *Jasminum nudiflorum* (leaf). Ref: 4169.

**11833 Jatamansic acid**

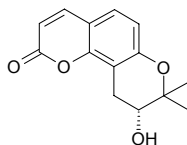
$C_{15}H_{22}O_2$  (234.34). Source: SHI YE GAN SONG *Nardostachys jatamansi*. Ref: 660.

**11834 Jatamansin**

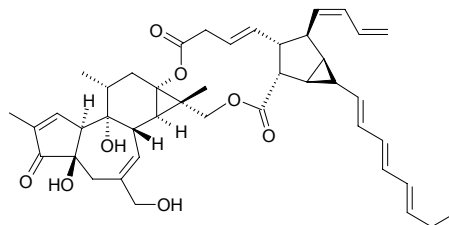
Selinidin [19427-82-8]  $C_{19}H_{20}O_5$  (328.37). Crystals (Et<sub>2</sub>O–petroleum ether), mp 100–102.5°C, mp 97–98°C,  $[\alpha]_D^{29} = +20.3^\circ$  ( $c = 1.474$ , dioxin),  $[\alpha]_D = -24^\circ$  (CHCl<sub>3</sub>),  $[\alpha]_D^{16} = -41.4^\circ$  ( $c = 1.6$ , CHCl<sub>3</sub>). Pharm: Anti-atherosclerotic; antispasmodic (peripheral blood vessel and small intestine); vasodilator. Source: GAN SONG *Nardostachys chinensis*, SHI YE GAN SONG *Nardostachys jatamansi*, GAO DANG GUI *Ligusticum elatum*, YAN FENG *Libanotis buchtormensis*, *Niphogeton ternata*. Ref: 6, 661, 1521, 4156.

**11835 Jatamansinol**

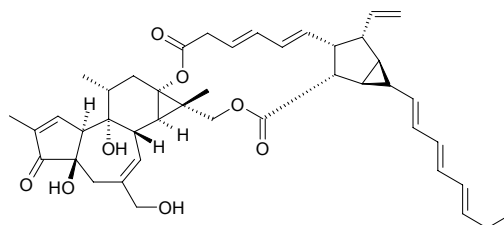
Lomatin [19380-05-3]  $C_{14}H_{14}O_4$  (246.27). mp 182–183°C,  $[\alpha]_D^{23} = +74.8^\circ$  (EtOH). Source: GAN SONG *Nardostachys chinensis*, SHI YE GAN SONG *Nardostachys jatamansi*, YAN FENG *Libanotis buchtormensis*. Ref: 6, 1521.

**11836 Jatropa factor C<sub>1</sub>**

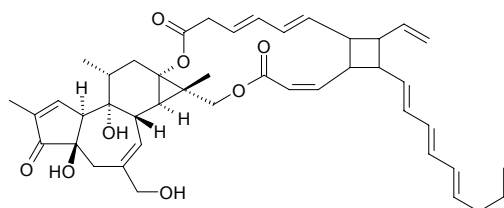
$C_{44}H_{54}O_8$  (710.92). Amorphous white powder,  $[\alpha]_D^{20} = +20.9^\circ$  ( $c = 0.35$ , MeOH). Source: MA FENG SHU *Jatropha curcas* (seed). Ref: 4652.

**11837 Jatropa factor C<sub>2</sub>**

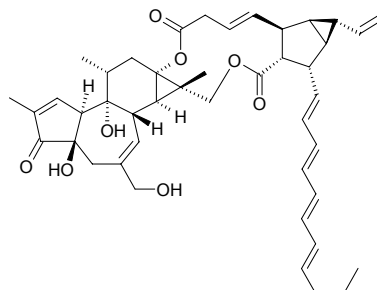
$C_{44}H_{54}O_8$  (710.92). Amorphous white powder,  $[\alpha]_D^{20} = +0.6^\circ$  ( $c = 0.17$ , MeOH), unstable. Source: MA FENG SHU *Jatropha curcas* (seed). Ref: 4652.

**11838 Jatropa factor C<sub>3</sub>**

$C_{44}H_{54}O_8$  (710.92). Amorphous white powder,  $[\alpha]_D^{20} = +130.0^\circ$  ( $c = 0.07$ , MeOH), unstable. Source: MA FENG SHU *Jatropha curcas* (seed). Ref: 4652.

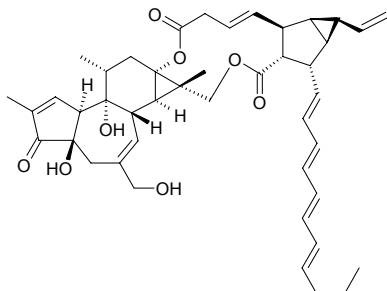
**11839 Jatropa factor C<sub>4</sub>**

$C_{44}H_{54}O_8$  (710.92). Amorphous white powder,  $[\alpha]_D^{20} = +113.0^\circ$  ( $c = 0.23$ , MeOH). Source: MA FENG SHU *Jatropha curcas* (seed). Ref: 4652.

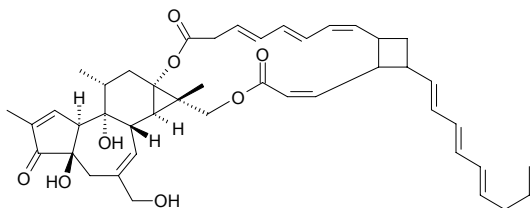


**11840 Jatropa factor C<sub>5</sub>**

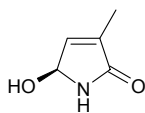
C<sub>44</sub>H<sub>54</sub>O<sub>8</sub> (710.92). Amorphous white powder,  $[\alpha]_D^{20} = +113.0^\circ$  ( $c = 0.23$ , MeOH). Source: MA FENG SHU *Jatropha curcas* (seed). Ref: 4652.

**11841 Jatropa factor C<sub>6</sub>**

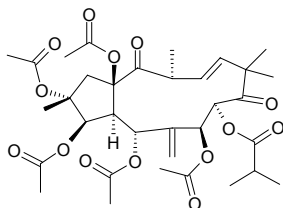
C<sub>44</sub>H<sub>54</sub>O<sub>8</sub> (710.92). Amorphous white powder,  $[\alpha]_D^{20} = +69.3^\circ$  ( $c = 0.14$ , MeOH), unstable. Source: MA FENG SHU *Jatropha curcas* (seed). Ref: 4652.

**11842 Jatropham**

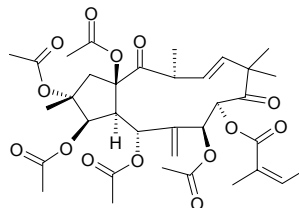
Jatrophalactam [50656-76-3] C<sub>5</sub>H<sub>7</sub>NO<sub>2</sub> (113.12). mp 131~132°C, mp 119~123°C. Pharm: Cytotoxic (P<sub>338</sub>, marginally active). Source: MA FENG SHU *Jatropha curcas*, HUANG BAI HE *Litium hansonii*. Ref: 5, 1521.

**11843 Jatrophane 7**

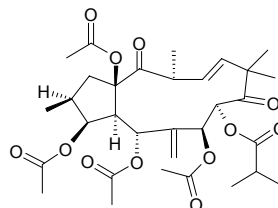
C<sub>34</sub>H<sub>46</sub>O<sub>14</sub> (678.74). Pharm: Antifeedant (*Spodopetra littoralis*, 500~1000mg/L); anti-HIV-1 (inhibition of virus-induced cytopathicity in MT-4 cells, EC<sub>50</sub> = 69µg/mL); cytotoxic (MT-4, CC<sub>50</sub> = 69µg/mL). Source: HAI YANG DA JI *Euphorbia paralias* (aerial parts). Ref: 5221.

**11844 Jatrophane 8**

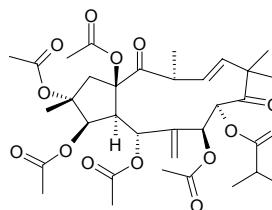
C<sub>35</sub>H<sub>46</sub>O<sub>14</sub> (690.75). Pharm: Antifeedant (*Spodopetra littoralis*, 500mg/L); anti-HIV-1 (inhibition of virus-induced cytopathicity in MT-4 cells, EC<sub>50</sub> > 100µg/mL); cytotoxic (MT-4, CC<sub>50</sub> > 100µg/mL). Source: HAI YANG DA JI *Euphorbia paralias* (aerial parts). Ref: 5221.

**11845 Jatrophane 9**

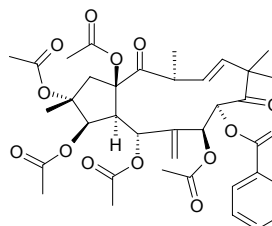
C<sub>32</sub>H<sub>44</sub>O<sub>12</sub> (620.70). Pharm: Antifeedant (*Spodopetra littoralis*, 500~1000mg/L); anti-HIV-1 (inhibition of virus-induced cytopathicity in MT-4 cells, EC<sub>50</sub> = 45µg/mL); cytotoxic (MT-4, CC<sub>50</sub> = 45µg/mL). Source: HAI YANG DA JI *Euphorbia paralias* (aerial parts). Ref: 5221.

**11846 Jatrophane 10**

C<sub>35</sub>H<sub>48</sub>O<sub>14</sub> (692.76). Pharm: Anti-HIV-1 (inhibition of virus-induced cytopathicity in MT-4 cells, EC<sub>50</sub> = 40µg/mL); cytotoxic (MT-4, CC<sub>50</sub> = 40µg/mL). Source: HAI YANG DA JI *Euphorbia paralias* (aerial parts). Ref: 5221.

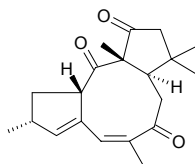
**11847 Jatrophane 11**

C<sub>37</sub>H<sub>44</sub>O<sub>14</sub> (712.75). Pharm: Anti-HIV-1 (inhibition of virus-induced cytopathicity in MT-4 cells, EC<sub>50</sub> = 79µg/mL); cytotoxic (MT-4, CC<sub>50</sub> = 79µg/mL). Source: HAI YANG DA JI *Euphorbia paralias* (aerial parts). Ref: 5221.

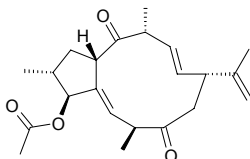


**11848 Jatrophatrione**

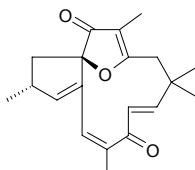
[58298-76-3] C<sub>20</sub>H<sub>26</sub>O<sub>3</sub> (314.43). mp 148–150°C. **Pharm:** Antineoplastic (mus, P<sub>388</sub>, 3PS, 1.0–0.5mg/kg, biotic prolonged rate = 41%). **Source:** MA FENG SHU *Jatropha curcas*. **Ref:** 5, 658, 1521.

**11849 Jatrophene**

C<sub>22</sub>H<sub>30</sub>O<sub>4</sub> (358.48). mp, 204–205°C, [α]<sub>D</sub><sup>25</sup> = –4.5° (c = 0.5, MeOH). **Pharm:** Antibacterial (*Staphylococcus aureus*, comparable activity with Penicillin G). **Source:** MIAN YE MA FENG SHU *Jatropha gossypifolia* (whole herb). **Ref:** 4360.

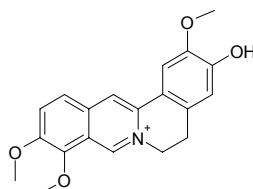
**11850 Jatrophone**

[29444-03-9] C<sub>20</sub>H<sub>24</sub>O<sub>3</sub> (312.41). mp 152–153°C. **Pharm:** Antineoplastic (mus, P<sub>388</sub>, ED = 27mg/kg and 12mg/kg); cytotoxic (KB, *in vitro*, ED<sub>50</sub> = 0.17μg/mL). **Source:** MA FENG SHU *Jatropha curcas*. **Ref:** 5, 658.

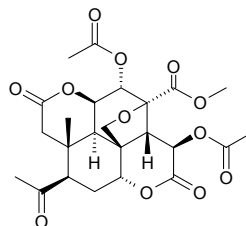
**11851 Jatrorrhizine**

Yatrorrhizine [3621-38-3] C<sub>20</sub>H<sub>20</sub>NO<sub>4</sub><sup>+</sup> (338.39). Iodine: yellow lamellar crystals, mp 208–210°C. **Pharm:** Antiarrhythmic (caused by myocardial ischemia and reperfusion); antibacterial (broad spectrum); antifungal (broad spectrum); antiprotozoal; bidirectional action to heart (frog heart *in vitro*, inhibits first and then stimulates); antihypertensive (anesthetic rbt, iv); inhibits adrenaline (anesthetic rbt, iv); sedative (animal model); treatment of myocardial infarction (in coronary artery-ligated rbt). **Source:** BAN RUI TANG SONG CAO *Thalictrum petaloideum* (root: content = 0.33%)<sup>[5508]</sup>, CHENG KOU SHI DA GONG LAO *Mahonia shenii* (stem: content = 0.09%)<sup>[5510]</sup>, CHUAN DIAN SHI DA GONG LAO *Mahonia veitchiorum* (stem: content = 0.45%)<sup>[5510]</sup>, DA YE TANG SONG CAO *Thalictrum faberi* (root: content = 0.23%)<sup>[5508]</sup>, DUAN E HUANG LIAN *Coptis chinensis* var. *brevisepala* (rhizome: content = %) <sup>[5508]</sup>, E MEI YE HUANG LIAN *Coptis*

*omeiensis* (rhizome: content = 1.09%)<sup>[5508]</sup>, FANG JI *Stephania tetrandra*, GU LIN YE LIAN *Coptis gulinensis* (rhizome: content = 0.92%)<sup>[5508]</sup>, HAI NAN QING NIU DAN *Tinospora hainanensis*, HE NAN TANG SONG CAO *Thalictrum honanense*, HU BEI SHI DA GONG LAO *Mahonia confusa* (stem: content = 0.17%)<sup>[5510]</sup>, HUA NAN GONG LAO MU *Mahonia japonica* (stem: content = 0.10%)<sup>[5510]</sup>, HUANG BAI *Phellodendron amurense*, HUANG LIAN *Coptis chinensis* (rhizome: mean content = 0.94%)<sup>[5508]</sup>, HUANG YE DI BU RONG *Stephania viridiflavens*, JIN SI MA WEI LIAN *Thalictrum glandulosissimum* (root: content < 0.001%)<sup>[5508]</sup>, KUAN BAO SHI DA GONG LAO *Mahonia eurybracteata* (stem: mean content of 3 origins = 0.29%)<sup>[5510]</sup>, MA WEI LIAN *Thalictrum foliolosum* (root: content = 0.09%)<sup>[5508]</sup>, RI BEN XIAO BO *Berberis thunbergii*, SAN JIAO YE HUANG LIAN *Coptis deltoidea* (rhizome: mean content = 1.32%)<sup>[5508]</sup>, SHAO CHI XIAO BO *Berberis potaninii* (root, stem: mean content = 0.930%)<sup>[5508]</sup>, SHEN HUANG ZI JIN *Corydalis lutea*, SHI DA GONG LAO MU *Mahonia bealei* (stem: mean content of 4 origins 0.26%)<sup>[5510]</sup>, TIAN XIAN TENG *Fibraurea recisa* (dried lianoid stem: content = 0.76%), TOU MING TANG SONG CAO *Thalictrum lucidum*, TU HUANG LIAN *Berberis julianae*, WANG CHUN YU LAN *Magnolia biondii* [Syn. *Magnolia fargesii*] (stem: mean content of 2 origins = 0.18%)<sup>[5510]</sup>, XI BING SHI DA GONG LAO *Mahonia gracilipes* (stem: mean content of 4 origins = 0.38%)<sup>[5510]</sup>, XI YE GONG LAO MU *Mahonia fortunei* (stem: mean content of 4 origins = 0.52%)<sup>[5510]</sup>, XI YE XIAO BO *Berberis poiretii*, XIA XU TANG SONG CAO *Thalictrum atriplex* (root: content < 0.001%)<sup>[5508]</sup>, XIAN E HUANG LIAN *Coptis linearisepala* (rhizome: content = 0.79%)<sup>[5508]</sup>, XIAN HUANG XIAO BO *Berberis diaphana* (root, stem: mean content = 0.200%)<sup>[5508]</sup>, XIAO BO *Berberis amurensis*, XIAO GUO SHI DA GONG LAO *Mahonia bodinieri* (stem: content = 0.26%)<sup>[5510]</sup>, XIAO GUO TANG SONG CAO *Thalictrum microgynum* (root: content = 0.13%)<sup>[5508]</sup>, YAN GUO CAO *Thalictrum thunbergii* (root: content < 0.001%)<sup>[5508]</sup>, YING SHUI HUANG LIAN *Thalictrum simplex* [Syn. *Thalictrum simplex* var. *brevipes*] (root: content = 0.18%)<sup>[5508]</sup>, YUN NAN HUANG LIAN *Coptis teetoides* [Syn. *Coptis teeta*] (rhizome: mean content = 1.10%)<sup>[5508]</sup>, ZHI YI XIAO BO *Berberis dubia* (root, stem: mean content = 0.249%)<sup>[5508]</sup>. **Ref:** 2, 4, 537, 658, 687, 5501, 5508, 5510.

**11852 Javanicin**

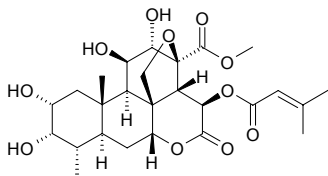
C<sub>24</sub>H<sub>28</sub>O<sub>12</sub> (508.48). Crystals, mp 167–168°C, [α]<sub>D</sub> = –30° (c = 0.02, MeOH). **Source:** YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*]. **Ref:** 2.



**11853 Javanicolide C**

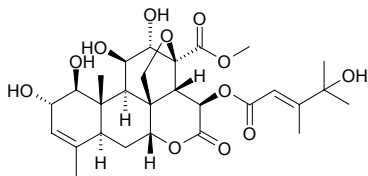
$C_{26}H_{36}O_{11}$  (524.57). Amorphous powder,  $[\alpha]_D^{26} = +60.0^\circ$  ( $c = 0.07$ , MeOH).

**Pharm:** Cytotoxic inactive (*in vitro*,  $P_{388}$ ,  $IC_{50} > 100\mu\text{g/mL}$ ). **Source:** YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*] (seed: yield = 0.000019%dw). **Ref:** 4748.

**11854 Javanicolide D**

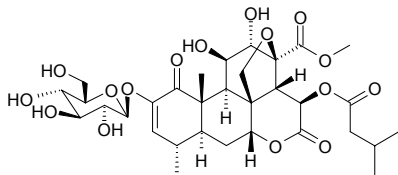
$C_{28}H_{38}O_{12}$  (566.61). Amorphous powder,  $[\alpha]_D^{26} = +60.0^\circ$  ( $c = 0.06$ , MeOH).

**Pharm:** Cytotoxic (*in vitro*,  $P_{388}$ ,  $IC_{50} = 18\mu\text{g/mL}$ , weak activity). **Source:** YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*] (seed: yield = 0.00005%dw). **Ref:** 4748.

**11855 Javanicoside B**

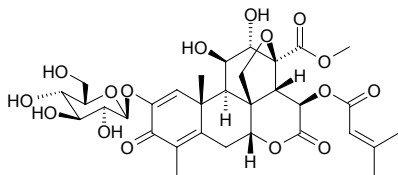
$C_{32}H_{44}O_{16}$  (684.7). Amorphous powder,  $[\alpha]_D^{26} = -20.0^\circ$  ( $c = 0.10$ , MeOH).

**Pharm:** Cytotoxic (*in vitro*,  $P_{388}$ ,  $IC_{50} = 5.6\mu\text{g/mL}$ ). **Source:** YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*] (seed: yield = 0.00012%dw). **Ref:** 4748.

**11856 Javanicoside C**

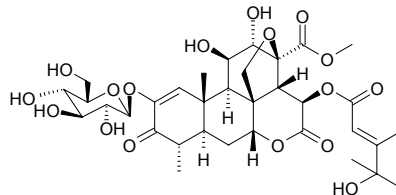
$C_{32}H_{40}O_{16}$  (680.67). Amorphous powder,  $[\alpha]_D^{26} = -34.0^\circ$  ( $c = 0.10$ , MeOH).

**Pharm:** Cytotoxic (*in vitro*,  $P_{388}$ ,  $IC_{50} = 18\mu\text{g/mL}$ , weak activity). **Source:** YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*] (seed: yield = 0.000026%dw). **Ref:** 4748.

**11857 Javanicoside D**

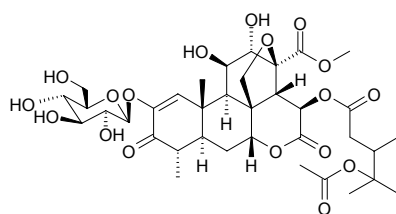
$C_{35}H_{48}O_{17}$  (740.76). Amorphous powder,  $[\alpha]_D^{24} = +4.2^\circ$  ( $c = 0.24$ , MeOH).

**Pharm:** Cytotoxic (*in vitro*,  $P_{388}$ ,  $IC_{50} = 89\mu\text{g/mL}$ , weak activity). **Source:** YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*] (seed: yield = 0.000059%dw). **Ref:** 4748.

**11858 Javanicoside E**

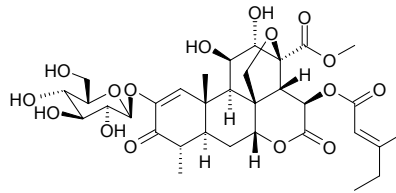
$C_{36}H_{50}O_{18}$  (770.79). Amorphous powder,  $[\alpha]_D^{24} = -2.3^\circ$  ( $c = 0.44$ , MeOH).

**Pharm:** Cytotoxic (*in vitro*,  $P_{388}$ ,  $IC_{50} = 16\mu\text{g/mL}$ , weak activity). **Source:** YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*] (seed: yield = 0.00011%dw). **Ref:** 4748.

**11859 Javanicoside F**

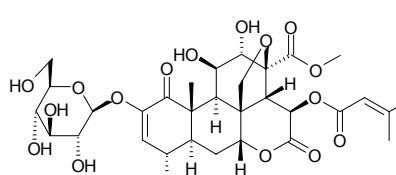
$C_{33}H_{44}O_{16}$  (696.71). Amorphous powder,  $[\alpha]_D^{24} = +10.4^\circ$  ( $c = 0.24$ , MeOH).

**Pharm:** Cytotoxic (*in vitro*,  $P_{388}$ ,  $IC_{50} = 50\mu\text{g/mL}$ , weak activity). **Source:** YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*] (seed: yield = 0.00006%dw). **Ref:** 4748.

**11860 Javanicoside I**

$C_{32}H_{42}O_{16}$  (682.68). Amorphous powder,  $[\alpha]_D^{26} = -2.0^\circ$  ( $c = 0.65$ , MeOH).

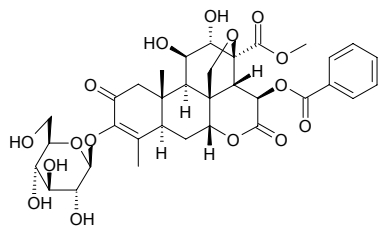
**Pharm:** Cytotoxic ( $P_{388}$ ,  $IC_{50} = 7.5\mu\text{g/mL}$ ). **Source:** KU YA DAN ZI *Brucea amarissima* (seed). **Ref:** 3893.



**11861 Javanicoside J**

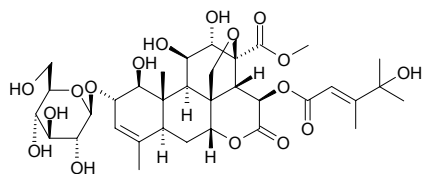
$C_{34}H_{40}O_{16}$  (704.69). Amorphous powder,  $[\alpha]_D^{26} = +1.3^\circ$  ( $c = 0.24$ , MeOH).

**Pharm:** Cytotoxic ( $P_{388}$ ,  $IC_{50} = 2.3\mu\text{g/mL}$ ). **Source:** KU YA DAN ZI *Brucea amarissima* (seed). **Ref:** 3893.

**11862 Javanicoside K**

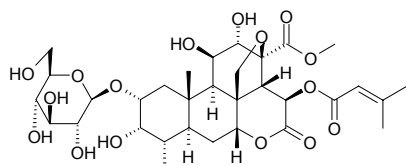
$C_{34}H_{48}O_{17}$  (728.75). Amorphous powder,  $[\alpha]_D^{26} = +31^\circ$  ( $c = 0.12$ , MeOH).

**Pharm:** Cytotoxic ( $P_{388}$ ,  $IC_{50} = 1.6\mu\text{g/mL}$ ). **Source:** KU YA DAN ZI *Brucea amarissima* (seed). **Ref:** 3893.

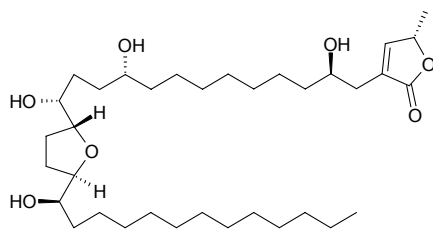
**11863 Javanicoside L**

$C_{32}H_{46}O_{16}$  (686.71). Amorphous powder,  $[\alpha]_D^{26} = -5.8^\circ$  ( $c = 0.31$ , MeOH).

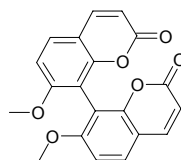
**Pharm:** Cytotoxic ( $P_{388}$ ,  $IC_{50} = 2.9\mu\text{g/mL}$ ). **Source:** KU YA DAN ZI *Brucea amarissima* (seed). **Ref:** 3893.

**11864 Javoricin**

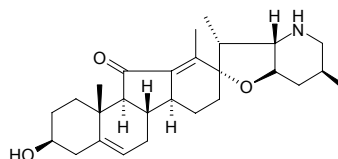
[172588-18-0]  $C_{35}H_{64}O_7$  (596.90). White amorphous powder (hexane), mp  $70^\circ\text{C}$ ,  $[\alpha]_D^{25} = +13.6^\circ$  ( $c = 0.1$ , chloroform). **Pharm:** Antineoplastic (A549,  $IC_{50} = 0.017\mu\text{g/mL}$ , MCF7,  $IC_{50} = 0.23\mu\text{g/mL}$ , HT29,  $IC_{50} = 1.8\mu\text{g/mL}$ ); cytotoxic (BST,  $IC_{50} = 4.9\mu\text{g/mL}$ , PD, InRt = 47%). **Source:** CI GUO FAN LI ZHI *Annona muricata*. **Ref:** 1062.

**11865 Jayantinin**

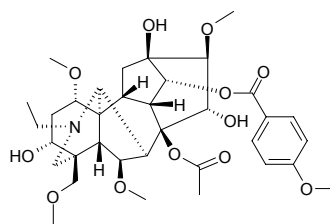
7,7'-Dimethoxy-8,8'-bicooumarin  $C_{20}H_{14}O_6$  (350.33). mp  $255\sim 256^\circ\text{C}$ . **Source:** SHI JIAO CAO *Boenninghausenia sessilicarpa*, YAN JIAO CAO *Boenninghausenia albiflora*. **Ref:** 2495.

**11866 Jervine**

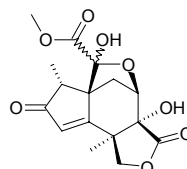
[469-59-0]  $C_{27}H_{39}NO_3$  (425.62). mp  $237\sim 238^\circ\text{C}$ . **Pharm:** Antibacterial; teratogen (sheep). **Source:** BAI LI LU *Veratrum album*, LV LI LU *Veratrum viride*, MAO YE LI LU *Veratrum grandiflorum*, LI LU *Veratrum nigrum*. **Ref:** 658.

**11867 Jesaconitine**

[16298-90-1]  $C_{35}H_{49}NO_{12}$  (675.78). Amorphous, mp  $128\sim 131^\circ\text{C}$ . **Pharm:** Intestinal smooth muscle stimulant (mammal, in low dose); similar action with aconitine; toxin (mammal). **Source:** BO YE WU TOU *Aconitum fischeri*, XIE XING WU TOU *Aconitum subcuneatum*, KU YE WU TOU *Aconitum sachalinense*. **Ref:** 658.

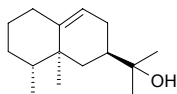
**11868 Jiadifenin**

$C_{16}H_{18}O_8$  (338.32). Colorless amorphous,  $[\alpha]_D^{22} = -152.9^\circ$  ( $c = 0.24$ , EtOH). **Pharm:** Neurotrophic (primary cultures of fetal rat cortical neuron,  $0.1\sim 10\mu\text{mol/L}$ , significantly promotes neurite outgrowth). **Source:** JIA DI FENG PI *Illicium jiadifengpi* (pericarp; yield = 0.00014%dw). **Ref:** 4621.

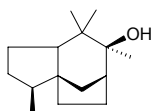


**11869 Jinkoheremol**

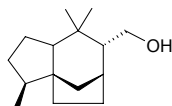
[86747-08-2] C<sub>15</sub>H<sub>26</sub>O (222.37). Pharm: CNS depressant (mus, inhibits spontaneous motion induced by pervitine and apomorphine, increases content of homovanillic acid in cerebrum). Source: BAI MU XIANG *Aquilaria sinensis*, CHEN XIANG *Aquilaria agallocha*. Ref: 13, 1789.

**11870 Jinkohol I**

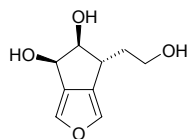
C<sub>15</sub>H<sub>26</sub>O (222.37). Source: CHEN XIANG *Aquilaria agallocha*. Ref: 13.

**11871 Jinkohol II**

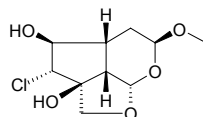
[86703-03-9] C<sub>15</sub>H<sub>26</sub>O (222.37). Crystals (CHCl<sub>3</sub>), mp 79–81°C, [α]<sub>D</sub><sup>20</sup> = +32.4° (c = 0.26, CHCl<sub>3</sub>). Source: CHEN XIANG *Aquilaria agallocha*. Ref: 13, 1521.

**11872 Jiofuran**

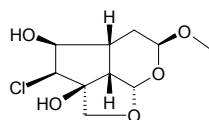
[124902-19-8] C<sub>9</sub>H<sub>12</sub>O<sub>4</sub> (184.19). Amorphous powder, [α]<sub>D</sub><sup>24</sup> = –30.4° (c = 0.19, MeOH). Source: GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*]. Ref: 2, 1521.

**11873 Jioglutin A**

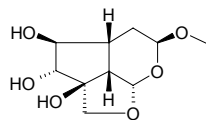
[124902-16-5] C<sub>10</sub>H<sub>15</sub>ClO<sub>5</sub> (250.68). Amorphous powder, [α]<sub>D</sub><sup>20</sup> = +63.3° (c = 1, MeOH). Source: GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*]. Ref: 2, 1521.

**11874 Jioglutin B**

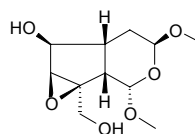
[124989-76-0] C<sub>10</sub>H<sub>15</sub>ClO<sub>5</sub> (250.68). Amorphous powder, [α]<sub>D</sub><sup>20</sup> = –63.2° (c = 0.94, MeOH). Source: GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*]. Ref: 2, 1521.

**11875 Jioglutin C**

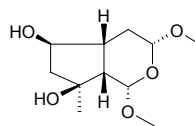
[124902-17-6] C<sub>10</sub>H<sub>16</sub>O<sub>6</sub> (232.24). Amorphous powder, [α]<sub>D</sub><sup>20</sup> = +58.1° (c = 0.89, MeOH). Source: GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*]. Ref: 2, 1521.

**11876 Jioglutin D**

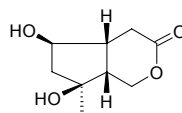
[128443-55-0] C<sub>11</sub>H<sub>18</sub>O<sub>6</sub> (246.26). Amorphous powder, [α]<sub>D</sub><sup>20</sup> = +54.9° (c = 1.23, MeOH). Source: GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*]. Ref: 2, 1521.

**11877 Jioglutin E**

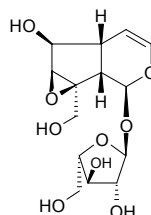
[128397-37-5] C<sub>11</sub>H<sub>20</sub>O<sub>5</sub> (232.28). Amorphous powder, [α]<sub>D</sub><sup>20</sup> = –118.2° (c = 0.95, MeOH). Source: GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*]. Ref: 2, 1521.

**11878 Jioglutolide**

C<sub>9</sub>H<sub>14</sub>O<sub>4</sub> (186.21). Needles (Me<sub>2</sub>CO), mp 141–142°C, [α]<sub>D</sub><sup>20</sup> = –8.4° (c = 1.19, MeOH). Source: GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*]. Ref: 2, 1521.

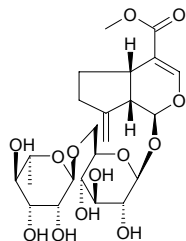
**11879 Jioglutoside A**

[124167-99-3] C<sub>14</sub>H<sub>20</sub>O<sub>9</sub> (332.31). Amorphous powder, [α]<sub>D</sub><sup>20</sup> = –158.8° (c = 1.65, MeOH). Source: GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*]. Ref: 2, 1521.

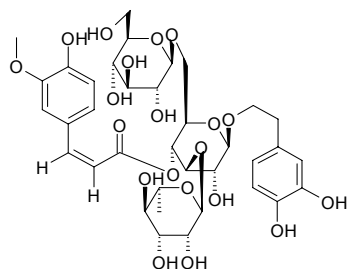


**11880 Jioglutoside B**

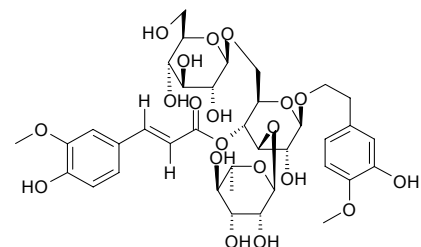
$C_{23}H_{34}O_{13}$  (518.52). Source: GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingsensis*]. Ref: 2.

**11881 Jionoside A<sub>2</sub>**

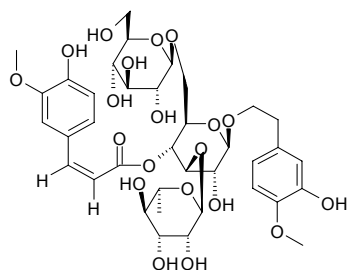
[120406-36-2]  $C_{36}H_{48}O_{20}$  (800.77). Amorphous powder,  $[\alpha]_D^{24} = -40.3^\circ$  ( $c = 0.36$ , MeOH). Source: GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingsensis*]. Ref: 2, 1521.

**11882 Jionoside B<sub>1</sub>**

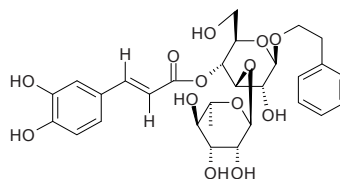
[120406-37-3]  $C_{37}H_{50}O_{20}$  (814.80). Amorphous powder,  $[\alpha]_D^{24} = -62.8^\circ$  ( $c = 0.31$ , MeOH). Pharm: Immunosuppressant (mus, 100mg/kg, orl, inhibits formation of the lemlytic spots formation cells, HPFC ,cells in spleen, InRt = 36.1%); tonic, antianemic and antipyretic (in Adhesive Rehmannia Dried Root, GAN DI HUANG, *Rehmannia glutinosa*). Source: GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingsensis*]. Ref: 658, 660, 1521, 1785.

**11883 Jionoside B<sub>2</sub>**

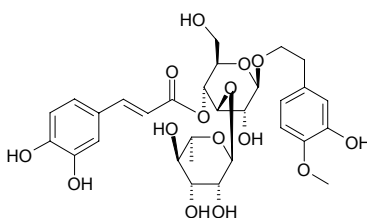
[120445-12-7]  $C_{37}H_{50}O_{20}$  (814.80). Amorphous powder,  $[\alpha]_D^{24} = -42.5^\circ$  ( $c = 0.34$ , MeOH). Source: GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingsensis*]. Ref: 2, 1521.

**11884 Jionoside C**

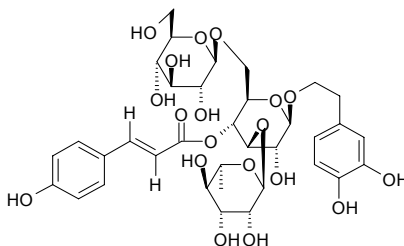
[120406-33-9]  $C_{29}H_{36}O_{13}$  (592.60). Amorphous powder,  $+2H_2O$ ,  $[\alpha]_D^{25} = -86.9^\circ$  ( $c = 0.72$ , MeOH). Source: GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingsensis*]. Ref: 2, 1521.

**11885 Jionoside D**

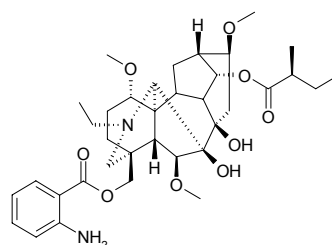
[120406-34-0]  $C_{30}H_{38}O_{15}$  (638.63). Off-white powder,  $+1H_2O$ ,  $[\alpha]_D^{28} = -95.7^\circ$  ( $c = 0.22$ , MeOH). Source: GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingsensis*], DA YE ZUI YU CAO *Buddleja davidii*. Ref: 2, 1521.

**11886 Jionoside E**

[120406-35-1]  $C_{35}H_{46}O_{19}$  (770.75). Amorphous powder,  $+2.5H_2O$ ,  $[\alpha]_D^{28} = -64.6^\circ$  ( $c = 0.11$ , MeOH). Source: GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingsensis*]. Ref: 2, 1521.

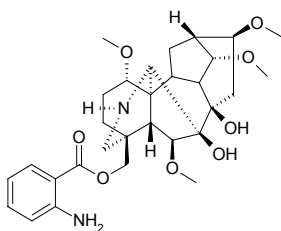
**11887 Jiufengdine**

$C_{36}H_{52}N_2O_9$  (656.82). White amorphous powder,  $[\alpha]_D = +63.8^\circ$  ( $c = 0.5$ ,  $CHCl_3$ ). Source: HEI SHUI CUI QUE HUA BIAN ZHONG *Delphinium potaninii* var. *jiufengshanense* (root). Ref: 4227.

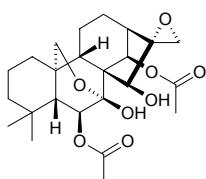


**11888 Jiufengtine**

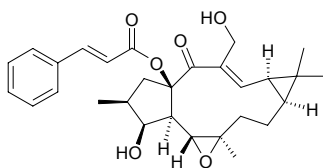
$C_{30}H_{42}N_2O_8$  (558.68). White amorphous powder,  $[\alpha]_D^{25} = +46.0^\circ$  ( $c = 0.5$ ,  $CHCl_3$ ). **Source:** HEI SHUI CUI QUE HUA BIAN ZHONG *Delphinium potaninii* var. *jiufengshanense* (root). **Ref:** 4227.

**11889 Jiuhuanin A**

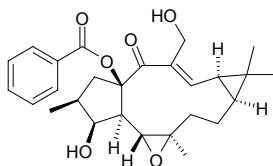
$C_{24}H_{34}O_8$  (450.53). mp 203~205°C,  $[\alpha]_D^{25} = -98.6^\circ$  ( $c = 0.2$ , MeOH). **Source:** JIU HUA DA E XIANG CHA CAI *Isodon macrocalyx* var. *jiuhua*. **Ref:** 4067.

**11890 Jolkinol A**

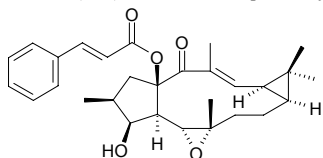
$C_{29}H_{36}O_6$  (480.61). White amorphous powder,  $[\alpha]_D^{25} = -120^\circ$  ( $c = 0.18$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (*in vitro* MCF7 cell lines,  $GI_{50} = (95.3 \pm 2.7) \mu\text{mol/L}$ , Doxorubicin,  $GI_{50} = (42.8 \pm 8.2) \mu\text{mol/L}$ ; NCI-H460 cell lines,  $GI_{50} = (57.3 \pm 7.6) \mu\text{mol/L}$ , Doxorubicin,  $GI_{50} = (94.0 \pm 8.7) \mu\text{mol/L}$ ; SF268 cell lines,  $GI_{50} > 100 \mu\text{mol/L}$ , Doxorubicin,  $GI_{50} = (93.0 \pm 7.0) \mu\text{mol/L}$ ). **Source:** DUAN ROU MAO DA JI *Euphorbia pubescens* (whole herb). **Ref:** 4949.

**11891 Jolkinol A'**

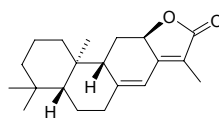
$C_{27}H_{34}O_6$  (454.57). White amorphous powder,  $[\alpha]_D^{25} = -78^\circ$  ( $c = 0.10$ ,  $CHCl_3$ ). **Source:** DUAN ROU MAO DA JI *Euphorbia pubescens* (whole herb). **Ref:** 4949.

**11892 Jolkinol B**

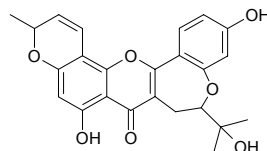
$C_{29}H_{36}O_5$  (464.61). Colorless oil. **Source:** DA GUO DA JI *Euphorbia wallichii* (root), NAN DA JI *Euphorbia jolkini*. **Ref:** 1521, 4585.

**11893 Jolkinolide E**

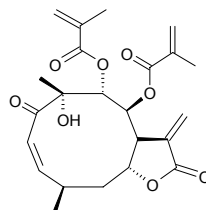
[54494-34-7]  $C_{20}H_{28}O_2$  (300.44). Crystals, mp 181~182°C, mp 182~183°C,  $[\alpha]_D^{20} = +340^\circ$  ( $c = 0.45$ , chloroform). **Source:** DA LANG DU *Euphorbia nematocypa*, NAN DA JI *Euphorbia jolkini*. **Ref:** 547, 1521.

**11894 JSPC0305368-18**

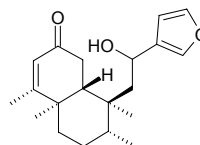
$C_{24}H_{22}O_7$  (422.44). **Source:** *Morus* sp. **Ref:** 2513.

**11895 Juanislamin**

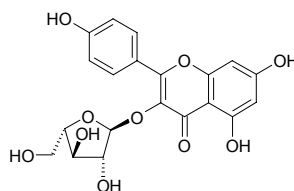
$C_{23}H_{28}O_8$  (432.47). White powder. **Pharm:** Cytotoxic (U937,  $IC_{50} = 3.0 \mu\text{mol/L}$ ; control Parthenolide,  $IC_{50} = 1.9 \mu\text{mol/L}$ ). **Source:** YOU KA MEI JU *Calea urticifolia* (leaf). **Ref:** 3887.

**11896 (12R)-Judrpxucascainone**

$C_{20}H_{28}O_3$  (316.44). **Source:** GE LUN BI YA BA DOU *Croton schiedeanus*. **Ref:** 4552.

**11897 Juglanin**

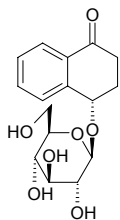
Kaempferol 3-*O*- $\alpha$ -L-arabinofuranoside [5041-67-8]  $C_{20}H_{18}O_{10}$  (418.36) mp 224~225°C (containing 1.5H<sub>2</sub>O). **Pharm:** Aldose reductase inhibitor (rat, eye lens, 10  $\mu\text{mol/L}$  InRt = 64.8%, 1  $\mu\text{mol/L}$  InRt = 6.3%); hepatoprotective (primary cultures of rat hepatocytes, H<sub>2</sub>O<sub>2</sub>-induced toxicity, 50  $\mu\text{mol/L}$ , relative protection = 39.7% (H<sub>2</sub>O<sub>2</sub>-treated, relative protection = 0.0%, control, relative protection = 100%), positive control Silibinin, Relative protection = 74.9%)<sup>[4996]</sup>. **Source:** HU TAO YE *Juglans regia*, HUI XIANG JING YE *Foeniculum vulgare*, TOU GU CAO *Speranskia tuberculata*, RI BEN GUI DENG QING *Rodgersia podophylla* (aerial parts), ZHEN ZHU MEI *Sorbaria sorbifolia*. **Ref:** 6, 1631, 4996.



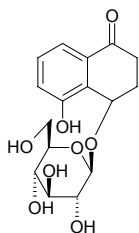


**11898 Juglanoside A**

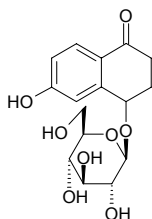
(4S)-4-Hydroxy- $\alpha$ -tetralone 4-*O*- $\beta$ -D-glucopyranoside C<sub>16</sub>H<sub>20</sub>O<sub>7</sub> (324.33). Amorphous powder,  $[\alpha]_D^{25} = -77^\circ$  ( $c = 0.9$ , MeOH). Source: DONG BEI HU TAO *Juglans mandshurica* var. *sieboldiana* (Fruit). Ref: 4285.

**11899 Juglanoside B**

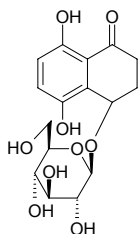
(4S)-4,5-Dihydroxy- $\alpha$ -tetralone 4-*O*- $\beta$ -D-glucopyranoside C<sub>16</sub>H<sub>20</sub>O<sub>8</sub> (340.33). Amorphous powder,  $[\alpha]_D^{25} = -13^\circ$  ( $c = 0.5$ , MeOH). Source: DONG BEI HU TAO *Juglans mandshurica* var. *sieboldiana* (Fruit). Ref: 4285.

**11900 Juglanoside C**

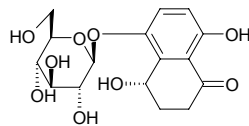
(4S)-4,6-Dihydroxy- $\alpha$ -tetralone 4-*O*- $\beta$ -D-glucopyranoside C<sub>16</sub>H<sub>20</sub>O<sub>8</sub> (340.33). Amorphous powder,  $[\alpha]_D^{25} = -36^\circ$  ( $c = 0.4$ , MeOH). Source: DONG BEI HU TAO *Juglans mandshurica* var. *sieboldiana* (Fruit). Ref: 4285.

**11901 Juglanoside D**

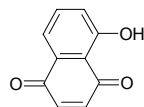
(4S)-4,5,8-Trihydroxy- $\alpha$ -tetralone 4-*O*- $\beta$ -D-glucopyranoside C<sub>16</sub>H<sub>20</sub>O<sub>9</sub> (356.33). Amorphous powder,  $[\alpha]_D^{25} = -45^\circ$  ( $c = 0.2$ , MeOH). Source: DONG BEI HU TAO *Juglans mandshurica* var. *sieboldiana* (Fruit). Ref: 4285.

**11902 Juglanoside E**

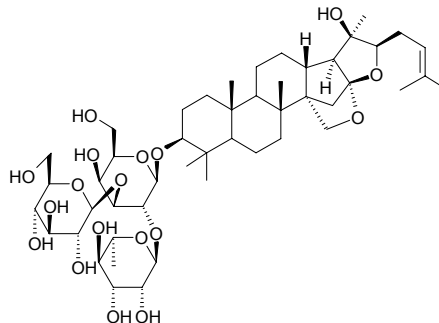
(4S)-4,5,8-Trihydroxy- $\alpha$ -tetralone 5-*O*- $\beta$ -D-glucopyranoside C<sub>16</sub>H<sub>20</sub>O<sub>9</sub> (356.33). Amorphous powder,  $[\alpha]_D^{25} = -65^\circ$  ( $c = 1.1$ , MeOH). Source: DONG BEI HU TAO *Juglans mandshurica* var. *sieboldiana* (Fruit). Ref: 4285.

**11903 Juglone**

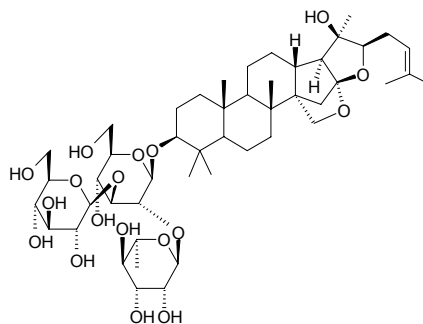
5-Hydroxy-1,4-naphthoquinone; Yuglon [481-39-0] C<sub>10</sub>H<sub>6</sub>O<sub>3</sub> (174.16). mp 153–155°C. Pharm: Allelopathic agent (produced from walnut tree *Juglans regia*); antibacterial (broad spectrum); antineoplastic (animal model); antifungal (*Aspergillus flavus*); antiviral (influenza virus A and B); insect antifeedant (*Scolytus multistriatus*); sedative (mammal and fish); molluscicide; ichthyotoxin (MLC =  $0.2 \times 10^{-6}$ )<sup>[4185]</sup>. Source: HEI HU TAO *Juglans nigra*, HU TAO REN *Juglans regia*, CU PI SHAN HE TAO *Carya ovata*, MEI GUO SHAN HE TAO *Carya illinoensis*, HUA XIANG SHU YE *Platycarya strobilacea*. Ref: 658, 4185.

**11904 Jujubasaponin IV**

[146445-93-4] C<sub>48</sub>H<sub>78</sub>O<sub>18</sub> (943.15). Amorphous powder, mp 185–187°C,  $[\alpha]_D = -3.64^\circ$  ( $c = 5.0$ , methanol). Pharm: Anti-sweetener (1mmol/L, inhibits sweet taste of 0.2mol/L sugar). Source: DA ZAO *Ziziphus jujuba*. Ref: 970.

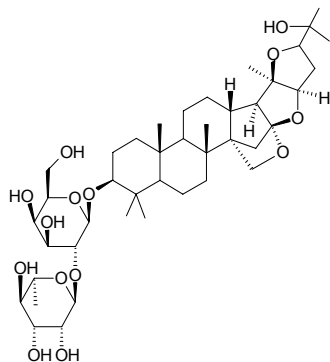
**11905 Jujubasaponin V**

[146503-31-3] C<sub>48</sub>H<sub>78</sub>O<sub>18</sub> (943.15). Amorphous powder, mp 210–212°C,  $[\alpha]_D = -14.2^\circ$  ( $c = 4.3$ , methanol). Pharm: Anti-sweetener (1mmol/L, inhibits sweet taste of 0.2mol/L sugar). Source: DA ZAO *Ziziphus jujuba*. Ref: 970.

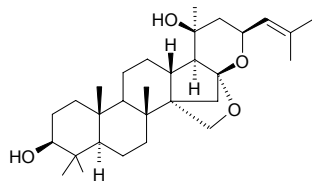


**11906 Jujubasaponin VI**

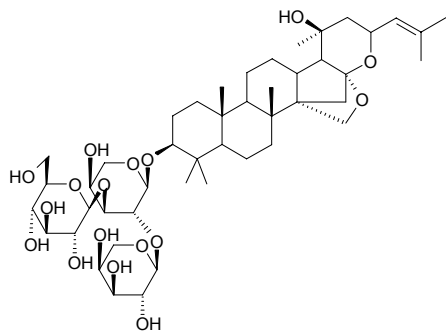
[146445-94-5] C<sub>42</sub>H<sub>68</sub>O<sub>14</sub> (797.00). Amorphous powder, mp 199–201°C, [ $\alpha$ ]<sub>D</sub> = 28.1° (c = 4.5, methanol). **Pharm:** Anti-sweetener (1mmol/L, inhibits sweet taste of 0.2mol/L sugar). **Source:** DA ZAO *Ziziphus jujuba*. **Ref:** 970.

**11907 Jujubogenin**

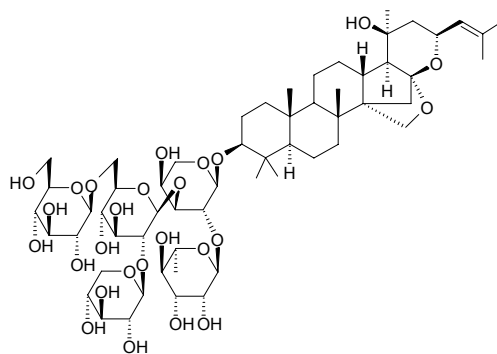
[54815-36-0] C<sub>30</sub>H<sub>48</sub>O<sub>4</sub> (472.71). **Source:** SUAN ZAO REN *Ziziphus jujuba* var. *spinosa*. **Ref:** 2.

**11908 Jujubogenin 3-O- $\alpha$ -L-arabinofuranosyl-(1→2)-[ $\beta$ -D-glucopyranosyl(1→3)]- $\alpha$ -L-arabinopyranoside**

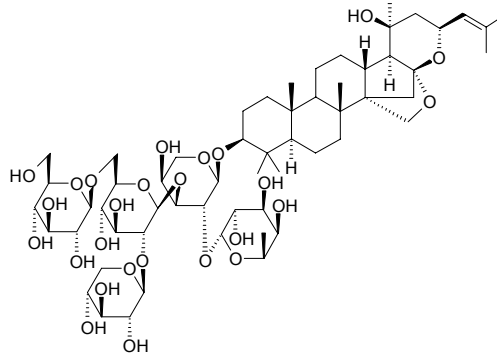
C<sub>46</sub>H<sub>74</sub>O<sub>17</sub> (899.09). **Source:** JIA MA CHI XIAN *Bacopa monniera* (aerial parts). **Ref:** 4316.

**11909 Jujuboside A**

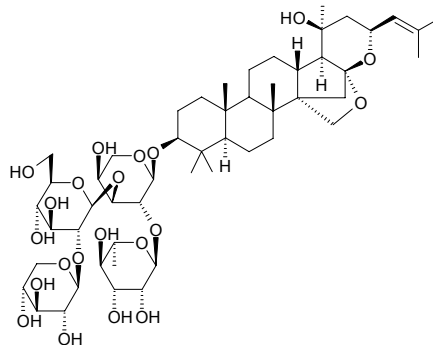
3-O-[ $\alpha$ -L-Rhamnopyranosyl-(1→2)-[ $\beta$ -D-glucopyranosyl-(1→6)-[ $\beta$ -D-xylopyranosyl-(1→2)]- $\beta$ -D-glucopyranosyl-(1→3)]- $\alpha$ -L-arabinopyranoside] [55466-04-1] C<sub>58</sub>H<sub>94</sub>O<sub>26</sub> (1207.38). **Pharm:** Inhibits hippocampal formation (*in vitro* and *in vivo*); inhibits Glu-mediated excitatory signal pathway (in hippocampus and probably acts through its anti-calmodulin action, similar effect with TFP)<sup>[5433]</sup>. **Source:** DA ZAO *Ziziphus jujuba*, SUAN ZAO REN *Ziziphus jujuba* var. *spinosa* (seed: mean content of 4 origins = 0.062%<sup>[5508]</sup>). **Ref:** 2, 5433, 5508.

**11910 Jujuboside A<sub>1</sub>**

3-O-[ $\beta$ -D-Glucopyranosyl-(1→6)-[ $\beta$ -D-xylopyranosyl-(1→2)]- $\beta$ -D-glucopyranosyl-(1→3)-[ $\alpha$ -D-fucopyranosyl-(1→2)]- $\alpha$ -L-arabinopyranoside] [194851-84-8] C<sub>58</sub>H<sub>94</sub>O<sub>26</sub> (1207.38). Amorphous powder (water–methanol), mp 223–225°C, [ $\alpha$ ]<sub>D</sub><sup>29</sup> = -47.6° (c = 0.3, methanol). **Pharm:** Antihistamine (inhibits histamine release, rat peritoneum oozing cells, caused by antigen-antibody reaction, 100 $\mu$ mol/L, InRt = 30.3%). **Source:** SUAN ZAO REN *Ziziphus jujuba* var. *spinosa*. **Ref:** 971.

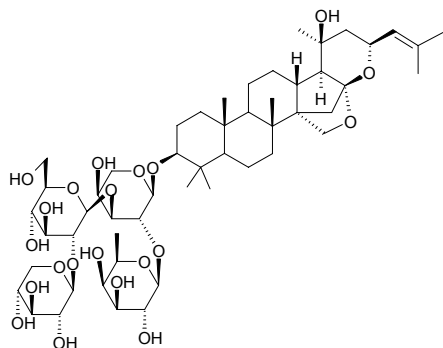
**11911 Jujuboside B**

[55466-05-2] C<sub>52</sub>H<sub>84</sub>O<sub>21</sub> (1045.24). **Pharm:** Anti-sweetener (1mmol/L, inhibits sweet taste of 0.2mol/L sugar). **Source:** DA ZAO *Ziziphus jujuba*, SUAN ZAO REN *Ziziphus jujuba* var. *spinosa* (seed: mean content of 4 origins = 0.037%<sup>[5508]</sup>). **Ref:** 2, 1754, 5508.

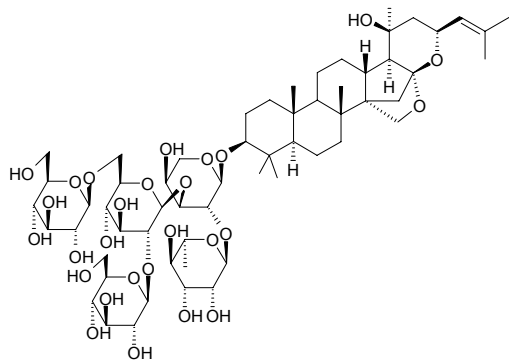


**11912 Jujuboside B<sub>1</sub>**

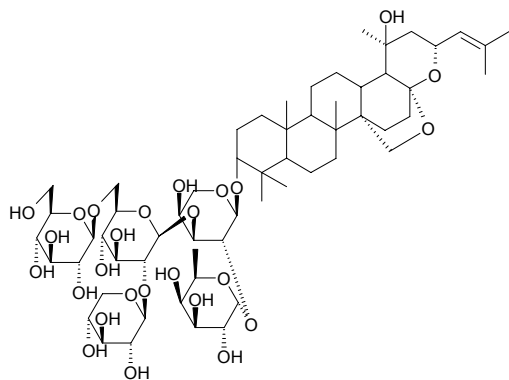
$C_{52}H_{84}O_{21}$  (1045.24). Source: DA ZAO *Ziziphus jujuba*. Ref: 660.

**11913 Jujuboside C**

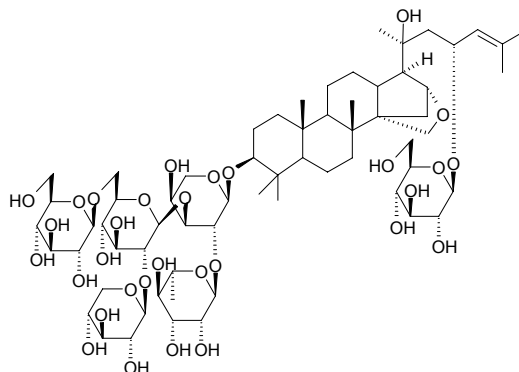
[194852-14-7]  $C_{59}H_{96}O_{27}$  (1237.41). Colorless thin crystals (water–methanol), mp 229–231°C,  $[\alpha]_D^{29} = -32.8^\circ$  ( $c = 0.3$ , methanol). Pharm: Antihistamine (inhibits histamine release, rat peritoneum oozing cells, caused by antigen-antibody reaction, 100  $\mu\text{mol/L}$ , InRt = 71.4%). Source: SUAN ZAO REN *Ziziphus jujuba* var. *spinosa*. Ref: 971.

**11914 Jujuboside D**

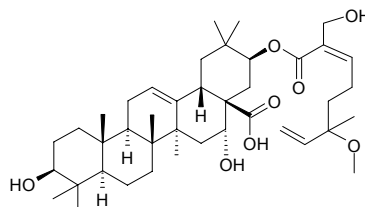
$C_{59}H_{96}O_{26}$  (1221.41). White powder, mp 171–174°C. Source: SUAN ZAO REN *Ziziphus jujuba* var. *spinosa*. Ref: 4847.

**11915 Jujuboside E**

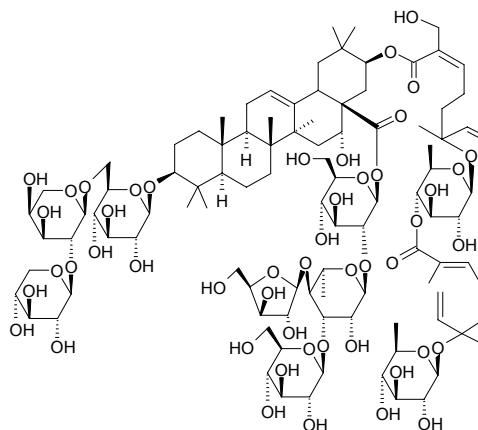
3 $\beta$ ,20,23-Trihydroxy-16,30-epoxy-dammar-24-ene-23-*O*- $\beta$ -*D*-glucopyranosyl-3-*O*- $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 2)-[ $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 6)]- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 3)-[ $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)]- $\alpha$ -*L*-arabinopyranoside  $C_{64}H_{106}O_{31}$  (1371.54). White powder, mp 171–174°C. Source: SUAN ZAO REN *Ziziphus jujuba* var. *spinosa*. Ref: 2481.

**11916 Julibrogenin A**

21-*O*-(2-Hydroxymethyl-6-methyl-6-methoxy-2,7-octadienyl)acacic acid  $C_{41}H_{64}O_8$  (684.96). White powder, mp 244–246°C. Source: HE HUAN PI *Albizia julibrissin*. Ref: 375.

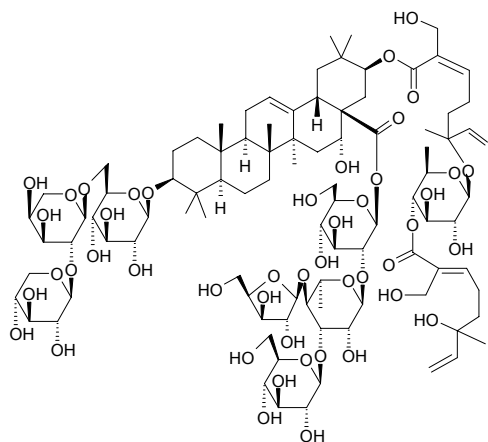
**11917 Julibroside**

3-*O*-[ $\beta$ -*D*-Xylopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl-(1 $\rightarrow$ 6)]- $\beta$ -*D*-glucopyranosyl]-21-*O*-{(6*S*)-2-*trans*-2-hydroxymethyl-6-methyl-6-*O*-[4-*O*-((6*S*)-2-*trans*-2,6-dimethyl-6-*O*-(6-deoxy- $\beta$ -*D*-glucopyranosyl)-2,7-octadienyl]-6-deoxy- $\beta$ -*D*-glucopyranosyl]-2,7-octadienyl}-acacic acid 28-*O*- $\beta$ -glucopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -*L*-arabinofuranosyl-(1 $\rightarrow$ 4)]- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -*D*-glucopyranosyl ester  $C_{101}H_{160}O_{49}$  (2158.37). White powder, mp 170–172°C. Source: HE HUAN PI *Albizia julibrissin*. Ref: 374.

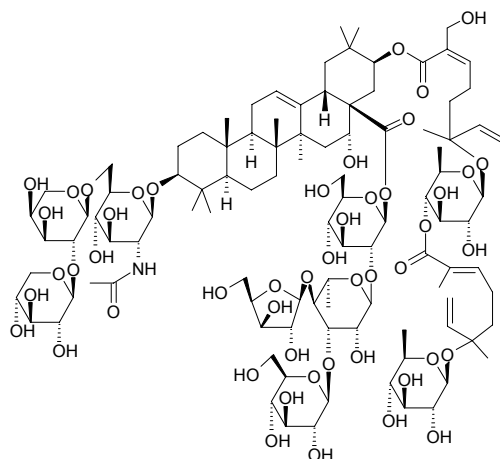


**11918 Julibroside J<sub>2</sub>**

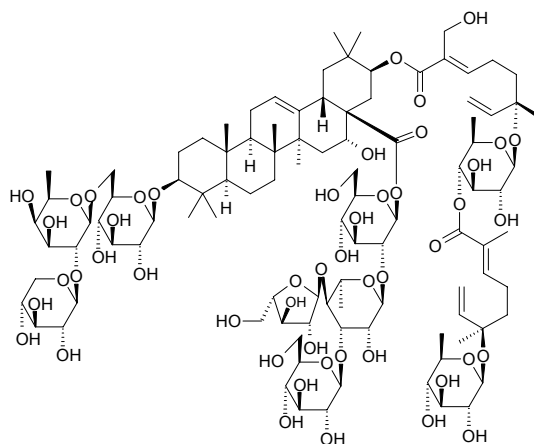
3-*O*-[ $\beta$ -*D*-Xylopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl]-21-*O*-{(6*S*)-2-*trans*-2-hydroxymethyl-6-methyl-6-*O*-[4-*O*-((6*S*)-2-*trans*-2-hydroxymethyl-6-methyl-6-hydroxy-2,7-octadienyl)-6-deoxy- $\beta$ -*D*-glucopyranosyl]-2,-7-octadienyl}-acacic acid 28-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -*L*-arabinofuranosyl-(1 $\rightarrow$ 4)]- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl ester C<sub>95</sub>H<sub>150</sub>O<sub>46</sub> (2028.23). White powder, mp 202–204°C. Source: HE HUAN PI *Albizzia julibrissin*. Ref: 374.

**11919 Julibroside J<sub>3</sub>**

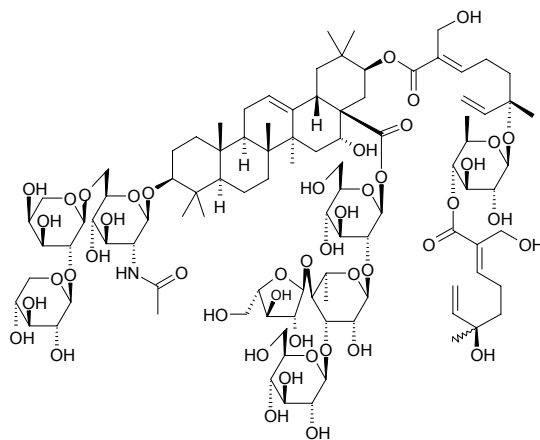
3-*O*-[ $\beta$ -*D*-Xylopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl-(1 $\rightarrow$ 6)-2-acetamido-2-deoxy- $\beta$ -*D*-glucopyranosyl]-21-*O*-{(6*S*)-2-*trans*-2-hydroxymethyl-6-methyl-6-*O*-[4-*O*-((6*S*)-2-*trans*-2,6-dimethyl-6-*O*-(6-deoxy- $\beta$ -*D*-glucopyranosyl)-2,7-octadienyl)-6-deoxy- $\beta$ -*D*-glucopyranosyl]-2,-7-octadienyl}-acacic acid 28-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -*L*-arabinofuranosyl-(1 $\rightarrow$ 4)]- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl ester C<sub>103</sub>H<sub>163</sub>NO<sub>49</sub> (2199.42). White powder, mp 204–206°C. Source: HE HUAN PI *Albizzia julibrissin*. Ref: 374.

**11920 Julibroside J<sub>5</sub>**

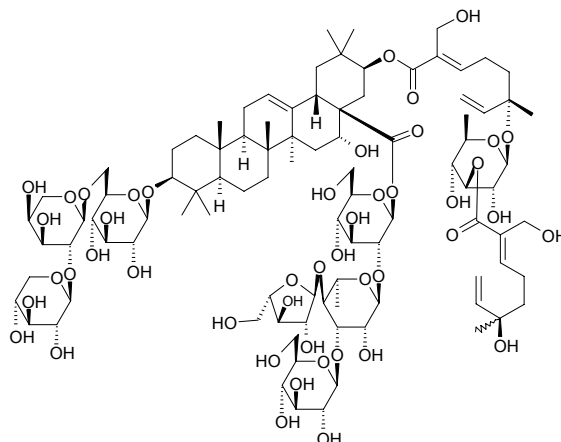
3-*O*-[ $\beta$ -*D*-Xylopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -*L*-fucopyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl]-21-*O*-{(6*S*)-2-*trans*-2-hydroxymethyl-6-methyl-6-*O*-[4-*O*-[(6*R*)-2-*trans*-2,6-dimethyl-6-*O*-( $\beta$ -*D*-quinovopyranosyl)-2,7-octadienyl]- $\beta$ -*D*-quinovopyranosyl-2,7-octadienyl}-acacic acid 28-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)-[ $\alpha$ -*L*-arabinofuranosyl(1 $\rightarrow$ 4)]- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl ester C<sub>101</sub>H<sub>160</sub>O<sub>49</sub> (2172.40). White powder,  $[\alpha]_D^{14} = -35.0^\circ$  ( $c = 0.050$ , 70% MeOH). Source: HE HUAN PI *Albizzia julibrissin*. Ref: 8.

**11921 Julibroside J<sub>6</sub>**

3-*O*-[ $\beta$ -*D*-Xylopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-2-deoxy-2-acetamido-glucopyranosyl]-21-*O*-{(6*S*)-2-*trans*-2-hydroxymethyl-6-methyl-6-*O*-[4-*O*-((6*S*)-2-*trans*-2-hydroxymethyl-6-methyl-6-hydroxy-2,7-octadienyl)- $\beta$ -*D*-quinovopyranosyl-2,7-octadienyl]-acacic acid 28-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)-[ $\alpha$ -*L*-arabinofuranosyl(1 $\rightarrow$ 4)]- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl ester C<sub>97</sub>H<sub>153</sub>NO<sub>46</sub> (2069.28). White powder,  $[\alpha]_D^{17} = -34.9^\circ$  ( $c = 0.042$ , 70% MeOH). Source: HE HUAN PI *Albizzia julibrissin*. Ref: 8.

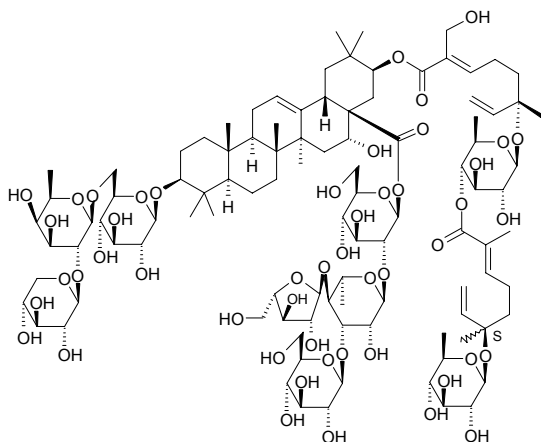
**11922 Julibroside J<sub>7</sub>**

C<sub>95</sub>H<sub>150</sub>O<sub>46</sub> (2028.23). White powder. Source: HE HUAN PI *Albizzia julibrissin*. Ref: 8.

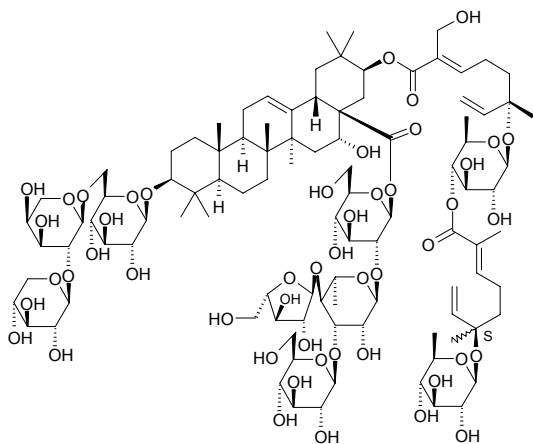


**11923 Julibroside J<sub>8</sub>**

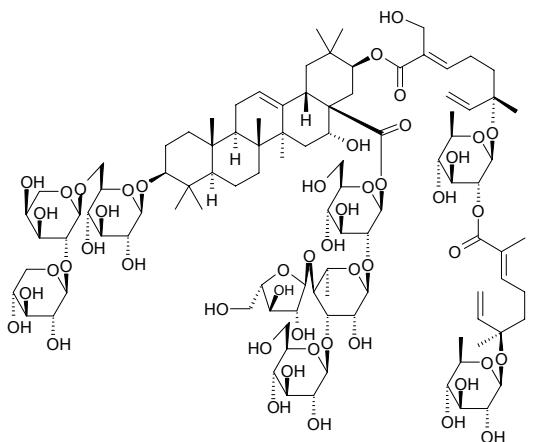
C<sub>102</sub>H<sub>162</sub>O<sub>49</sub> (2172.40). White powder,  $[\alpha]_D^{14} = -28.6^\circ$  ( $c = 0.035$ , 70% MeOH). Source: HE HUAN PI *Albizzia julibrissin*. Ref: 8.

**11924 Julibroside J<sub>9</sub>**

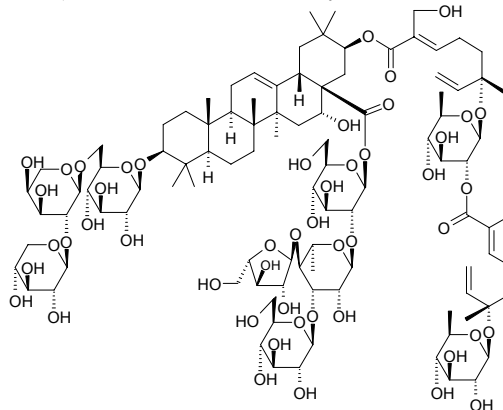
C<sub>101</sub>H<sub>160</sub>O<sub>49</sub> (2158.37). White powder,  $[\alpha]_D^{14} = -32.5^\circ$  ( $c = 0.11$ , 70% MeOH). Source: HE HUAN PI *Albizzia julibrissin*. Ref: 8.

**11925 Julibroside J<sub>10</sub>**

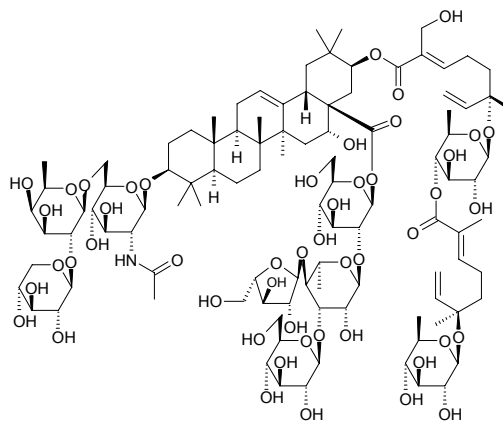
C<sub>101</sub>H<sub>160</sub>O<sub>49</sub> (2158.37). White powder,  $[\alpha]_D^{17} = -57.1^\circ$  ( $c = 0.018$ , 70% MeOH). Source: HE HUAN PI *Albizzia julibrissin*. Ref: 8.

**11926 Julibroside J<sub>11</sub>**

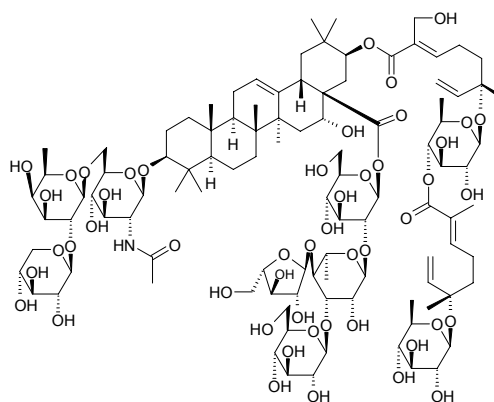
3-*O*-[ $\beta$ -*D*-Xylopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl]-21-*O*-[(6*S*)-2-*trans*-2-hydroxymethyl-6-methyl-6-*O*-(2-*O*-[(6*S*)-2-*trans*-2,6-dimethyl-6-*O*- $\beta$ -*D*-quinovopyranosyl-2,7-octadienyl]- $\beta$ -*D*-quinovopyranosyl-2,7-octadienyl)-acacic acid 28-*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 3)-[ $\alpha$ -*L*-arabinofuranosyl(1 $\rightarrow$ 4)]- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl ester C<sub>101</sub>H<sub>160</sub>O<sub>49</sub> (2158.37). White powder,  $[\alpha]_D^{17} = -78.6^\circ$  ( $c = 0.014$ , 70% MeOH). Source: HE HUAN PI *Albizzia julibrissin*. Ref: 8.

**11927 Julibroside J<sub>12</sub>**

C<sub>104</sub>H<sub>165</sub>NO<sub>49</sub> (2213.45). White powder,  $[\alpha]_D^{17} = +7.7^\circ$  ( $c = 0.078$ , 70% MeOH). Source: HE HUAN PI *Albizzia julibrissin*. Ref: 8.

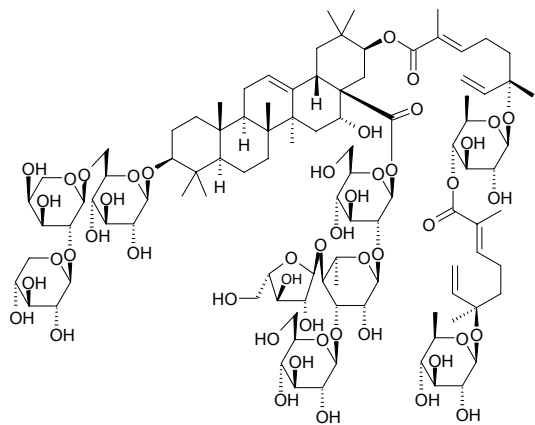
**11928 Julibroside J<sub>13</sub>**

C<sub>104</sub>H<sub>165</sub>NO<sub>49</sub> (2213.45). White powder,  $[\alpha]_D^{17} = +23.8^\circ$  ( $c = 0.11$ , 70% MeOH). Source: HE HUAN PI *Albizzia julibrissin*. Ref: 8.

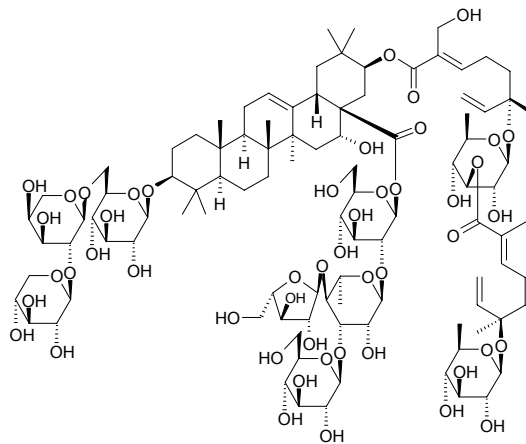


**11929 Julibroside J<sub>14</sub>**

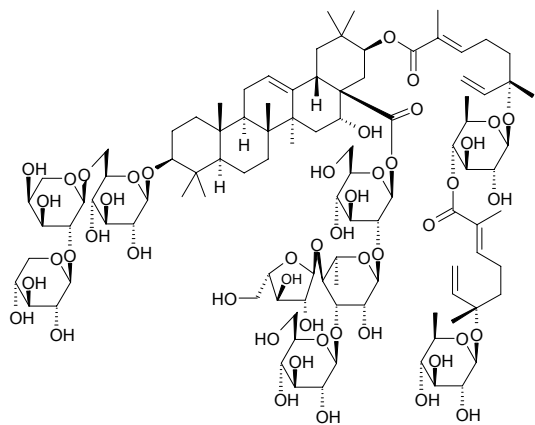
C<sub>101</sub>H<sub>160</sub>O<sub>48</sub> (2142.37). White powder,  $[\alpha]_D^{17} = -35.7^\circ$  ( $c = 0.070$ , 70% MeOH). Source: HE HUAN PI *Albizia julibrissin*. Ref: 8.

**11932 Julibroside J<sub>17</sub>**

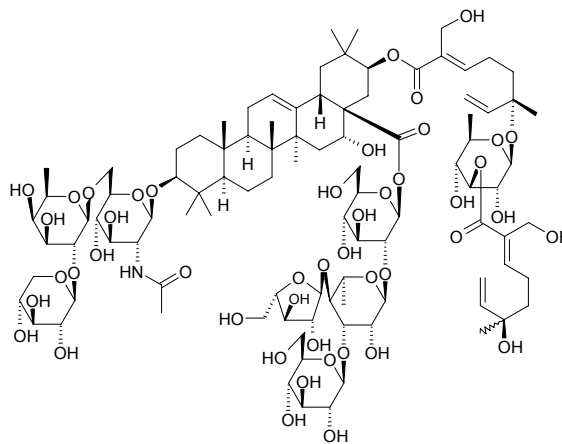
C<sub>101</sub>H<sub>160</sub>O<sub>49</sub> (2158.37). White powder. Source: HE HUAN PI *Albizia julibrissin*. Ref: 8.

**11930 Julibroside J<sub>15</sub>**

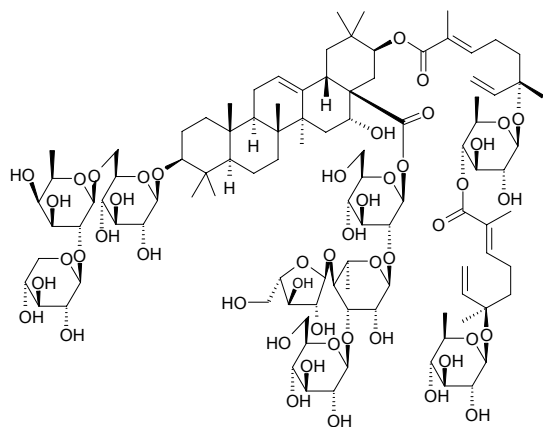
C<sub>101</sub>H<sub>160</sub>O<sub>48</sub> (2142.37). White powder,  $[\alpha]_D^{17} = -28.0^\circ$  ( $c = 0.070$ , 70% MeOH). Source: HE HUAN PI *Albizia julibrissin*. Ref: 8.

**11933 Julibroside J<sub>18</sub>**

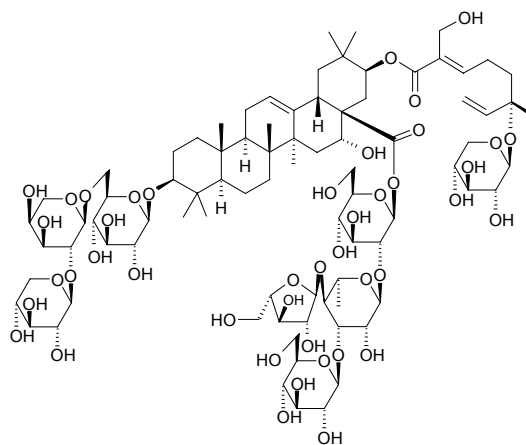
C<sub>98</sub>H<sub>155</sub>NO<sub>46</sub> (2083.31). White powder. Source: HE HUAN PI *Albizia julibrissin*. Ref: 8.

**11931 Julibroside J<sub>16</sub>**

C<sub>102</sub>H<sub>162</sub>O<sub>48</sub> (2156.40). White powder,  $[\alpha]_D^{17} = 0.0^\circ$  ( $c = 0.081$ , 70% MeOH). Source: HE HUAN PI *Albizia julibrissin*. Ref: 8.

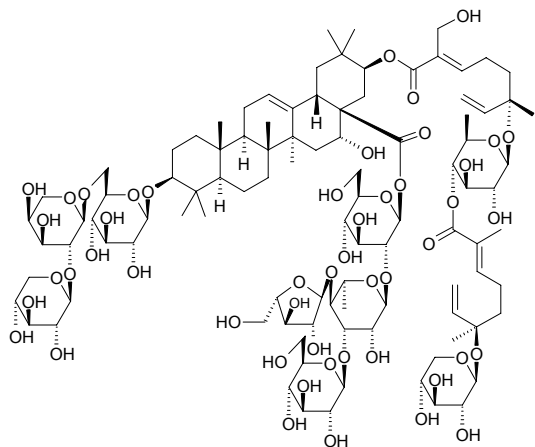
**11934 Julibroside J<sub>20</sub>**

C<sub>84</sub>H<sub>134</sub>O<sub>43</sub> (1831.98). White powder. Source: HE HUAN PI *Albizia julibrissin*. Ref: 8.

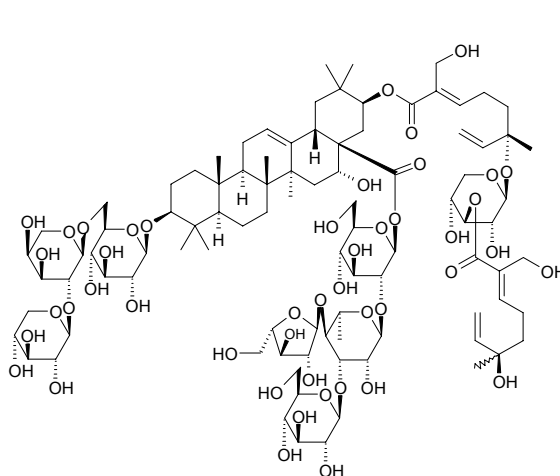


**11935 Julibroside J<sub>21</sub>**

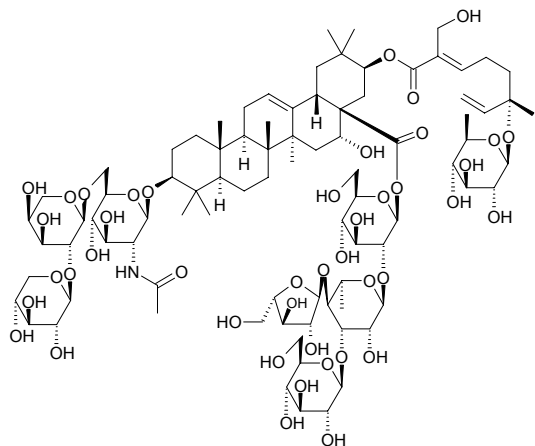
C<sub>100</sub>H<sub>158</sub>O<sub>49</sub> (2144.34). White powder. Source: HE HUAN PI *Albizzia julibrissin*. Ref: 8.

**11938 Julibroside J<sub>24</sub>**

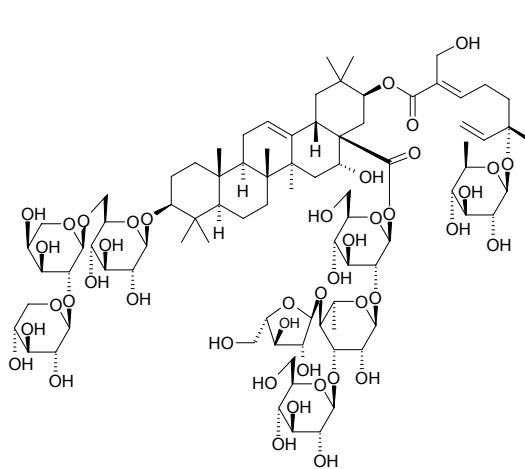
C<sub>94</sub>H<sub>148</sub>O<sub>46</sub> (2014.20). White powder. Source: HE HUAN PI *Albizzia julibrissin*. Ref: 8.

**11936 Julibroside J<sub>22</sub>**

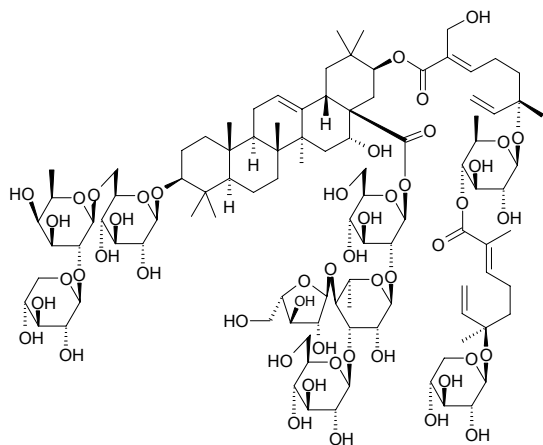
C<sub>87</sub>H<sub>139</sub>NO<sub>43</sub> (1887.06). White powder. Source: HE HUAN PI *Albizzia julibrissin*. Ref: 8.

**11939 Julibroside J<sub>25</sub>**

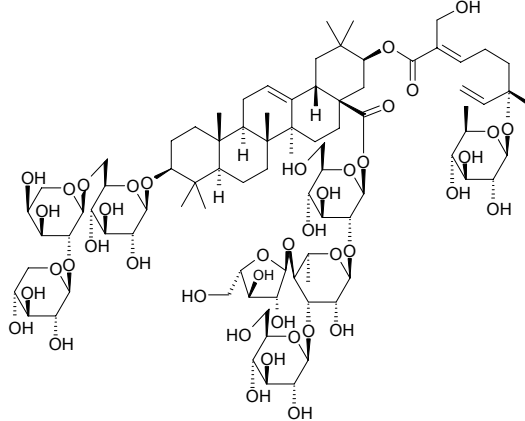
C<sub>85</sub>H<sub>136</sub>O<sub>43</sub> (1846.01). White powder. Source: HE HUAN PI *Albizzia julibrissin*. Ref: 8.

**11937 Julibroside J<sub>23</sub>**

C<sub>101</sub>H<sub>160</sub>O<sub>49</sub> (2158.37). White powder. Source: HE HUAN PI *Albizzia julibrissin*. Ref: 8.

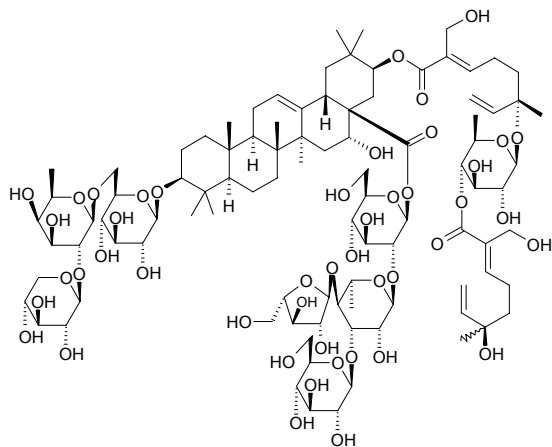
**11940 Julibroside J<sub>26</sub>**

C<sub>85</sub>H<sub>136</sub>O<sub>42</sub> (1830.01). White powder. Source: HE HUAN PI *Albizzia julibrissin*. Ref: 8.

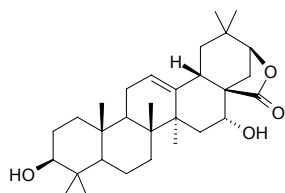


**11941 Julibroside J<sub>27</sub>**

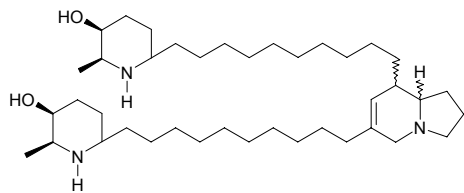
C<sub>96</sub>H<sub>152</sub>O<sub>46</sub> (2042.25). White powder. Source: HE HUAN PI *Albizia julibrissin*. Ref: 8.

**11942 Julibrotriterpenoidal lactone A**

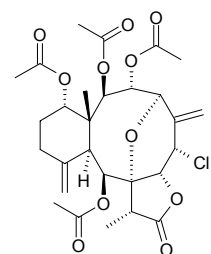
C<sub>30</sub>H<sub>46</sub>O<sub>4</sub> (470.70). Source: HE HUAN PI *Albizia julibrissin*. Ref: 660.

**11943 Juliflorine**

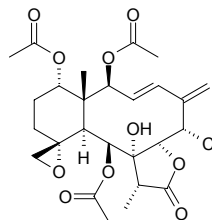
C<sub>40</sub>H<sub>75</sub>N<sub>3</sub>O<sub>2</sub> (630.06). Pharm: Antibacterial; antifungal. Source: MU DOU SHU *Prosopis juliflora*. Ref: 658.

**11944 Junceellin**

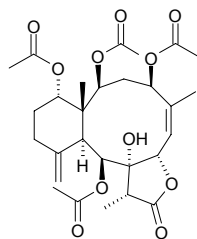
C<sub>28</sub>H<sub>35</sub>ClO<sub>11</sub> (583.04). White powder, mp 271~272°C, [α]<sub>D</sub><sup>25</sup> = -10° (c = 1.8, CHCl<sub>3</sub>). Source: CUI DENG XIN LIU SHAN HU *Junceella fragilis*. Ref: 4411.

**11945 Junceollolide C**

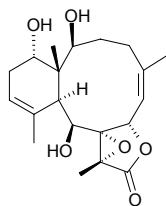
C<sub>26</sub>H<sub>33</sub>ClO<sub>10</sub> (541.00). Pharm: Cytotoxic inactive (*in vitro*, Hepa59T/VGH, KB16). Source: DENG XIN LIU SHAN HU *Junceella juncea* (outer red layer: yield = 0.0012%ww). Ref: 4680.

**11946 Junceollolide D**

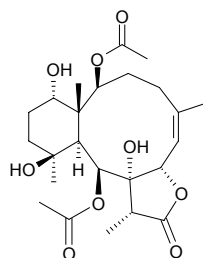
C<sub>28</sub>H<sub>38</sub>O<sub>11</sub> (550.61). Source: DENG XIN LIU SHAN HU *Junceella juncea* (yield = 0.00021%). Ref: 4781.

**11947 Junceollolide H**

C<sub>20</sub>H<sub>28</sub>O<sub>6</sub> (364.44). White powder, mp 207~209°C, [α]<sub>D</sub><sup>25</sup> = -22° (c = 0.8, CHCl<sub>3</sub>). Source: CUI DENG XIN LIU SHAN HU *Junceella fragilis*. Ref: 4411.

**11948 Junceollolide I**

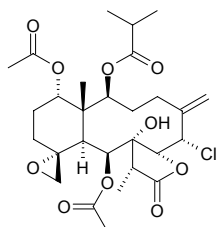
C<sub>24</sub>H<sub>36</sub>O<sub>9</sub> (468.55). White powder, mp 210~212°C, [α]<sub>D</sub><sup>25</sup> = -77° (c = 0.7, CHCl<sub>3</sub>). Source: CUI DENG XIN LIU SHAN HU *Junceella fragilis*. Ref: 2554.



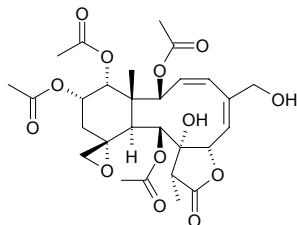


**11949 Juncenolide A**

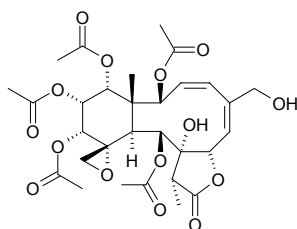
$C_{28}H_{39}ClO_{10}$  (571.07). Colorless prisms, mp 203~205°C,  $[\alpha]_D^{25} = -25.5^\circ$  ( $c = 0.05$ ,  $CH_2Cl_2$ ). **Pharm:** Cytotoxic (*in vitro*, hm colon adenocarcinoma DLD, 3.4 $\mu$ g/mL; KB16, 5.9 $\mu$ g/mL). **Source:** DENG XIN LIU SHAN HU *Junceella juncea* (outer red layer: yield = 0.012%ww). **Ref:** 4601.

**11950 Juncenolide B**

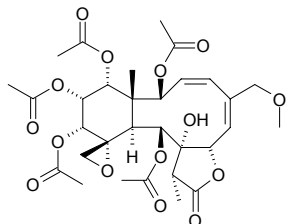
$C_{28}H_{36}O_{13}$  (580.59). Amorphous solid,  $[\alpha]_D^{25} = -12.4^\circ$  ( $c = 0.4$ , MeOH). **Pharm:** Cytotoxic inactive (*in vitro*, Hepa59T/VGH, KB16). **Source:** DENG XIN LIU SHAN HU *Junceella juncea* (outer red layer: yield = 0.0005%ww). **Ref:** 4680.

**11951 Juncenolide C**

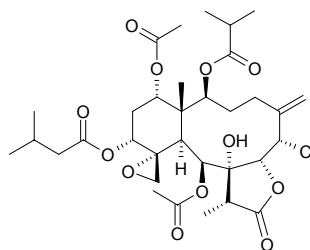
$C_{30}H_{38}O_{15}$  (638.63). Amorphous solid,  $[\alpha]_D^{25} = -24.4^\circ$  ( $c = 0.05$ ,  $CH_2Cl_2$ ). **Pharm:** Cytotoxic (*in vitro*, Hepa59T/VGH, 6.6 $\mu$ g/mL, mild activity; KB16, 7.8 $\mu$ g/mL, mild activity). **Source:** DENG XIN LIU SHAN HU *Junceella juncea* (outer red layer: yield = 0.00013%ww). **Ref:** 4680.

**11952 Juncenolide D**

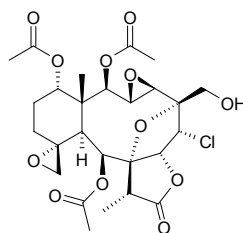
$C_{31}H_{40}O_{15}$  (652.66). Amorphous solid,  $[\alpha]_D^{25} = -10.3^\circ$  ( $c = 0.2$ ,  $CH_2Cl_2$ ). **Pharm:** Cytotoxic inactive (*in vitro*, Hepa59T/VGH, KB16). **Source:** DENG XIN LIU SHAN HU *Junceella juncea* (outer red layer: yield = 0.0007%ww). **Ref:** 4680.

**11953 Juncenolide F**

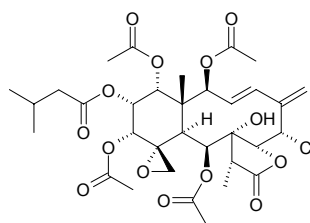
$C_{33}H_{47}ClO_{12}$  (671.19). Colorless crystals,  $[\alpha]_D = +9.7^\circ$  ( $c = 0.2$ ,  $CH_2Cl_2$ ). **Source:** DENG XIN LIU SHAN HU *Junceella juncea*. **Ref:** 2539.

**11954 Juncenolide G**

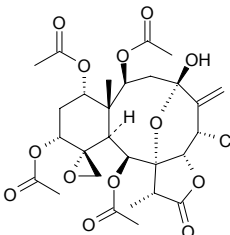
$C_{26}H_{33}ClO_{12}$  (573.00). Colorless crystals,  $[\alpha]_D = +6.5^\circ$  ( $c = 0.2$ ,  $CH_2Cl_2$ ). **Source:** DENG XIN LIU SHAN HU *Junceella juncea*. **Ref:** 2539.

**11955 Juncin O**

$C_{33}H_{43}ClO_{14}$  (699.19). White powder,  $[\alpha]_D = +36^\circ$  ( $c = 1.0$ ,  $CHCl_3$ ). **Source:** DENG XIN LIU SHAN HU *Junceella juncea* (yield = 0.00015%). **Ref:** 4781.

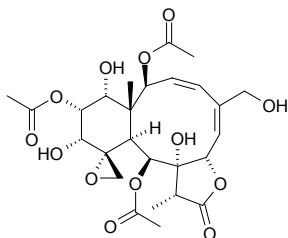
**11956 Juncin P**

$C_{28}H_{35}ClO_{13}$  (615.04). White powder,  $[\alpha]_D = -6.8^\circ$  ( $c = 0.24$ ,  $CHCl_3$ ). **Source:** DENG XIN LIU SHAN HU *Junceella juncea* (yield = 0.00013%). **Ref:** 4781.

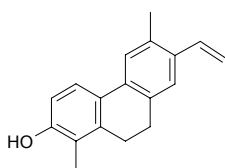


**11957 Juncin Q**

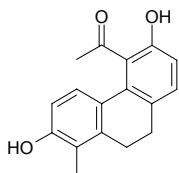
$C_{26}H_{34}O_{13}$  (554.55). White powder,  $[\alpha]_D = -14^\circ$  ( $c = 0.4$ , pyridine). Source: DENG XIN LIU SHAN HU *Junceella juncea* (yield = 0.00022%). Ref: 4781.

**11958 Juncunol**

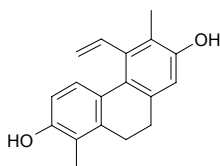
$C_{18}H_{18}O$  (250.34). Source: DENG XIN CAO *Juncus effusus*. Ref: 660.

**11959 Juncunone**

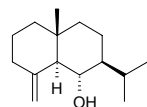
$C_{17}H_{16}O_3$  (268.32). Source: DENG XIN CAO *Juncus effusus*. Ref: 660.

**11960 Juncusol**

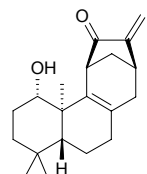
$C_{18}H_{18}O_2$  (266.34). Source: DENG XIN CAO *Juncus effusus*. Ref: 660.

**11961 Junenol**

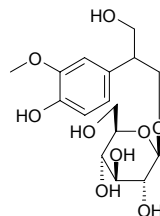
$C_{15}H_{26}O$  (222.37). Crystals, mp 62.5~63.0°C,  $[\alpha]_D = +52^\circ$  ( $c = 3.35$ ,  $CHCl_3$ ) Source: OU ZHOU CI BAI *Juniperus communis*. Ref: 1521.

**11962 Jungermannone A**

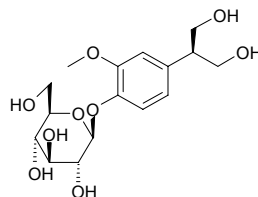
$C_{20}H_{28}O_2$  (300.44). mp 105~106°C,  $[\alpha]_D^{20} = -265.5^\circ$  ( $c = 1.97$ ,  $CHCl_3$ ). Pharm: Cytotoxic (hmn leukemia cell line HL-60,  $IC_{50} = 0.28 \mu\text{mol/L}$ )<sup>[4390]</sup>. Source: XIN XI LAN YE TAI *Jungermannia* sp. Ref: 4390.

**11963 Junipediol A 29-O-β-D-glucopyranoside**

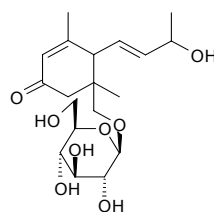
$C_{16}H_{24}O_9$  (360.36). Amorphous powder,  $[\alpha]_D^{22} = -18^\circ$ . Source: BEI SHA SHEN *Glehnia littoralis* (fruit). Ref: 3525.

**11964 Junipediol A 4-O-β-D-glucopyranoside**

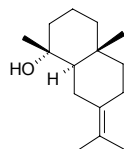
$C_{16}H_{24}O_9$  (360.36). Amorphous powder,  $[\alpha]_D^{25} = -34^\circ$  ( $c = 0.8$ , MeOH). Source: GE LU ZI *Carum carvi*. Ref: 1926.

**11965 Junipeionoside**

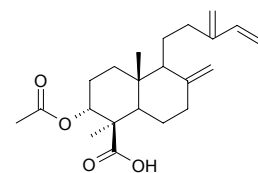
$C_{19}H_{30}O_8$  (386.45). Source: SHAN YANG DOU *Galega officinalis*, FEI NI JI CI BAI *Juniperus phoenicea*. Ref: 1867.

**11966 Juniper camphor**

$C_{15}H_{26}O$  (222.37). White acicular crystals (petroleum ether–ethyl acetate), mp 164~166°C; crystals (methanol), mp 155~156°C. Pharm: Antitussive (dispels phlegm). Source: BAI ZHU *Atractylodes macrocephala* [Syn. *Atractylis macrocephala*], MI ZI LAN *Aglaia odorata*, OU ZHOU CI BAI *Juniperus communis*, TOU HUA DU JUAN *Rhododendron capitatum*, WAN YAN XIANG MAO *Cymbopogon flexuosus*, XIANG YANG MEI *Myrica gale*, XIAO YE PI PA *Rhododendron anthopogonoides*. Ref: 661.

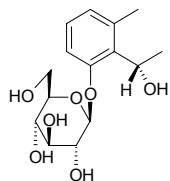
**11967 Juniperexcelsic acid**

3α-Acetoxyabda-8(17),13(16),14-trien-19-oic acid  $C_{22}H_{32}O_4$  (360.50). Source: GAO DA CI BAI *Juniperus excelsa*. Ref: 1864.

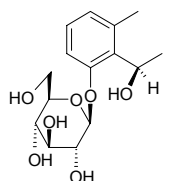


**11968 Juniperoside I**

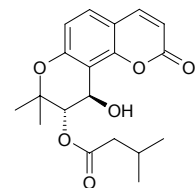
$C_{15}H_{22}O_7$  (314.34). Colorless needles (MeOH), mp 89–91°C,  $[\alpha]_D = -26.3^\circ$  ( $c = 1.0$ , pyridine). **Pharm:** Anti-HIV-1 inactive (*in vitro*). **Source:** XI FANG CI BAI *Juniperus occidentalis* (leaf). **Ref:** 4234.

**11969 Juniperoside II**

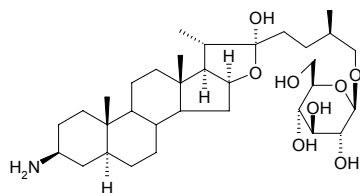
$C_{15}H_{22}O_7$  (314.34). Colorless needles (MeOH), mp 97–99°C,  $[\alpha]_D = -8.4^\circ$  ( $c = 1.0$ , pyridine). **Pharm:** Anti-HIV-1 inactive (*in vitro*). **Source:** XI FANG CI BAI *Juniperus occidentalis* (leaf). **Ref:** 4234.

**11970 Junosmarin**

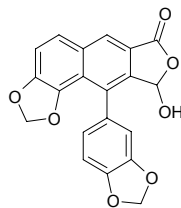
$C_{19}H_{22}O_6$  (346.38). **Pharm:** Antineoplastic (Raji cells, antitumor promotor, *in vivo*, inhibits TPA-induced EBV-EA activation, compound concentration = 500mol ratio/32 pmol TPA: EBV-EA-positive cells = (42.2±1.4)% (viability > 80%),  $\beta$ -Carotene, EBV-EA-positive cells = (34.3±1.1)% (viability > 80%), Curcumin, EBV-EA-positive cells = (22.8±1.8)% (viability > 80%), compound  $IC_{50} = 351$ mol ratio/32 pmol TPA,  $\beta$ -Carotene,  $IC_{50} = 400$ mol ratio/32 pmol TPA, Curcumin,  $IC_{50} = 341$ mol ratio/32 pmol TPA). **Source:** *Citrus medica* var. *etrog*, LI HUA JU *Citrus tachibana*, *Citrus rugulosa*, *Citrus hassaku*. **Ref:** 5048.

**11971 Jurubine**

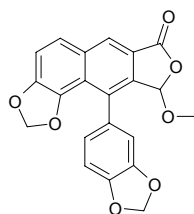
[14256-61-2]  $C_{33}H_{57}NO_8$  (595.82). **Source:** SHUI QIE *Solanum torvum*. **Ref:** 6.

**11972 Jsmicranthin**

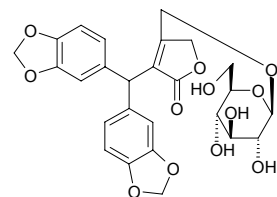
$C_{20}H_{12}O_7$  (364.31). **Source:** QIANG DAO YAO *Hypoestes purpurea* [Syn. *Justicia purpurea*; *Hypoestes sinica*] (whole herb: yield = 0.00073%dw). **Ref:** 4712.

**11973 Jsmicranthin methyl ether**

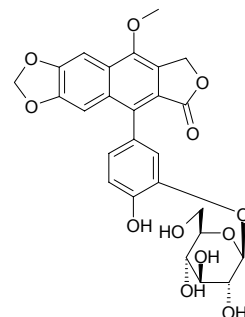
$C_{21}H_{14}O_7$  (378.34). **Source:** QIANG DAO YAO *Hypoestes purpurea* [Syn. *Justicia purpurea*; *Hypoestes sinica*] (whole herb: yield = 0.017%dw). **Ref:** 4712.

**11974 Juspurpurin**

3-[Bis(3,4-methylenedioxyphenyl)methyl]-4-( $\beta$ -D-glucopyranosyloxy-methyl)-2(5H)-furanone  $C_{26}H_{26}O_{12}$  (530.49). Colorless oil,  $[\alpha]_D^{25} = -17.5^\circ$  ( $c = 0.75$ , acetone). **Source:** QIANG DAO YAO *Hypoestes purpurea* [Syn. *Justicia purpurea*; *Hypoestes sinica*] (whole herb: yield = 0.00091%dw). **Ref:** 4712.

**11975 Justalakonin**

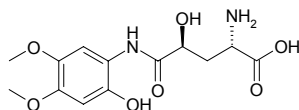
1-(3'- $\beta$ -D-Glucosyloxy-4'-hydroxyphenyl)-3-hydroxymethyl-4-methoxy-6,7-methylenedioxy-2-naphthoic acid lactone  $C_{26}H_{24}O_{12}$  (528.47). Amorphous solid; mp 205–207°C,  $[\alpha]_D^{25} = -31.0^\circ$  ( $c = 0.25$ , MeOH). **Source:** QIANG DAO YAO *Hypoestes purpurea* [Syn. *Justicia purpurea*; *Hypoestes sinica*] (whole herb: yield = 0.0065%dw). **Ref:** 4712.



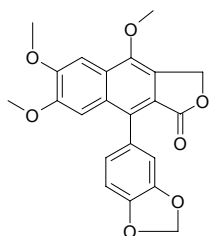
**11976 Justiciamide**

$C_{13}H_{18}N_2O_7$  (314.30). Non-crystalline solid,  $[\alpha]_D = 2.7^\circ$  ( $c = 0.07$ ,  $H_2O$ ).

Source: *Justicia ghiesbreghtiana*. Ref: 2346.

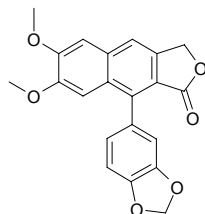
**11977 Justicidin A**

[25001-57-4]  $C_{22}H_{18}O_7$  (394.38). mp 263°C. Pharm: Cytotoxic (KB  $ED_{50} < 1.0\mu g/mL$ , HeLa  $ED_{50} = 10\mu g/mL$ ); cytotoxic (*in vitro*, 212,  $ED_{50} = 0.0227\mu g/mL$ , control Cisplatin,  $ED_{50} = 1.3\mu g/mL$ ; CaSKi,  $ED_{50} = 0.0030\mu g/mL$ , control Actinomycin D,  $ED_{50} = 0.0019\mu g/mL$ ; Hep3B,  $ED_{50} = 0.029\mu g/mL$ , control 5-Fluorouracil,  $ED_{50} = 0.0715\mu g/mL$ ; SiHa,  $ED_{50} = 0.0074\mu g/mL$ , control Actinomycin D,  $ED_{50} = 0.00081\mu g/mL$ ; HepG2,  $ED_{50} = 0.020\mu g/mL$ , control 5-Fluorouracil,  $ED_{50} = 0.033\mu g/mL$ ; HT29, not determined, control 5-Fluorouracil,  $ED_{50} = 0.074\mu g/mL$ ; HCT116, not determined, control 5-Fluorouracil,  $ED_{50} = 0.48\mu g/mL$ ; MCF7,  $ED_{50} = 0.39\mu g/mL$ ; MCF7-ras,  $ED_{50} = 0.074\mu g/mL$ )<sup>[4612]</sup>; TNF- $\alpha$  formation enhancer (mouse macrophage-like RAW264.7, stimulated by LPS, strong activity)<sup>[4612]</sup>; antimalarial (*Plasmodium falciparum*,  $IC_{50} = 1.9\mu g/mL$ ,  $IC_{90} = 4.5\mu g/mL$ ); fish toxin (action matches rotenone). Source: JUE CHUANG *Rostellularia procumbens* [Syn. *Justicia procumbens*] (whole herb: yield = 0.004%dw)<sup>[4612]</sup>; the compound was isolated from the plant by M.Okigawa, et al. in 1972<sup>[5505]</sup>. Ref: 6, 1848, 1849, 1850, 4612, 5505.

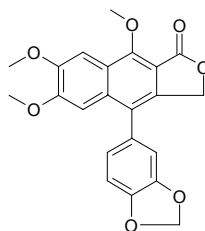
**11978 Justicidin B**

[17951-19-8]  $C_{21}H_{16}O_6$  (364.36). mp 240°C. Pharm: Antiviral (vesicular stomatitis virus VSV,  $MIC \geq 0.06\mu g/mL$ , mus cytomegalovirus, Sindbis virus); cytotoxic (P388  $ED_{50} = 3.3\mu g/mL$ , 9KB  $ED_{50} = 0.073\mu g/mL$ , NSCLC-N6  $IC_{50} = 28\mu g/mL$ , RL33 MTC = 31.0 $\mu g/mL$ , BST  $LC_{50} = 1.1\mu g/mL$ ); antifungal (*Aspergillus fumigatus*,  $MIC \geq 1\mu g/mL$ , Miconazole nitrate,  $MIC \geq 0.5\mu g/mL$ ; *Candida albicans*,  $MIC \geq 4\mu g/mL$ , Miconazole nitrate,  $MIC \geq 0.2\mu g/mL$ ; *Aspergillus flavus*,  $MIC \geq 16\mu g/mL$ , Miconazole nitrate,  $MIC \geq 0.2\mu g/mL$ ; *Blastoschizomyces capitatus*,  $MIC \geq 128\mu g/mL$ , Miconazole nitrate,  $MIC \geq 1\mu g/mL$ ; *Cryptococcus neoformans*,  $MIC \geq 128\mu g/mL$ )<sup>[5393]</sup>; antiprotozoal (*Trypanosoma brucei rhodesiense*,  $IC_{50} = 0.2\mu g/mL$ , control Melarsoprol,  $IC_{50} = 0.003\mu g/mL$ ; *Trypanosoma cruzi*,  $IC_{50} = 2.6\mu g/mL$ , control Benznidazol,  $IC_{50} = 0.27\mu g/mL$ ; *Plasmodium falciparum* (strain K1),  $IC_{50} \geq 5\mu g/mL$ , control Chloroquine,  $IC_{50} = 0.12\mu g/mL$ ); cytotoxic (Jurkat-T,  $IC_{50} = 3.2\mu g/mL$ , control Helenalin,  $IC_{50} = 0.03\mu g/mL$ ; KB,  $IC_{50} = 0.2\mu g/mL$ , control Helenalin,  $IC_{50} = 0.2\mu g/mL$ ; L-6,  $IC_{50} = 3.3\mu g/mL$ ; PBMC,  $IC_{50} = 4.7\mu g/mL$ , control Helenalin,  $IC_{50} = 0.03\mu g/mL$ )<sup>[5393]</sup>; piscicide (adult zebra fishes *Brachydanio rerio*,  $LC_{100} = 1.5\mu g/mL$ , time = 25–40min; positive control Rotenone,  $LC_{100} = 1.0\mu g/mL$ , time = 20–30min; negative control Catechin,  $LC_{100} > 200\mu g/mL$ , time > 120min)<sup>[5393]</sup>; fish toxin

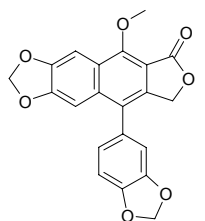
(action matches rotenone). Source: JIAN YE YE XIA ZHU *Phyllanthus acuminatus*, YAN JIAO CAO *Boenninghausenia albiflora*, JUE CHUANG *Rostellularia procumbens* [Syn. *Justicia procumbens*] (in 1972, the compound was isolated from the plant by M.Okigawa, et al.)<sup>[5505]</sup>, QIANG DAO YAO *Hypoestes purpurea* [Syn. *Justicia purpurea*; *Hypoestes sinica*] (whole herb: yield = 0.0036%dw)<sup>[4712]</sup>, YU FU YE XIA ZHU *Phyllanthus piscatorum*, *Haplophyllum patavinum* (shoot). Ref: 658, 1778, 1793, 1794, 1795, 4206, 4712, 5393, 5505.

**11979 Justicidin C**

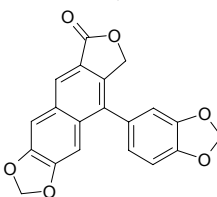
Neojusticin B [17803-12-2]  $C_{22}H_{18}O_7$  (394.38). mp 266°C, 262–265°C. Source: JUE CHUANG *Rostellularia procumbens* [Syn. *Justicia procumbens*], BAI HUA JUE CHUANG *Justicia procumbens* var. *leucantha*, DAN JUE CHUANG *Justicia simplex*. Ref: 6, 658.

**11980 Justicidin D**

Neojusticin A [27041-98-1]  $C_{21}H_{14}O_7$  (378.34). mp 272°C, 273–275°C. Pharm: Antiviral (vesicular stomatitis virus VSV,  $MIC = 16.0\mu g/mL$ ); cytotoxic (rbt, lung cancer cell RL33, MTC = 63.0 $\mu g/mL$ , KB,  $ED_{50} = 9.0\mu g/mL$ ). Source: JUE CHUANG *Rostellularia procumbens* [Syn. *Justicia procumbens*]. Ref: 6, 1521, 1778, 1779.

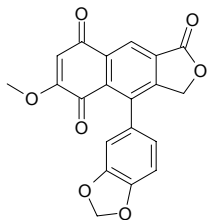
**11981 Justicidine E**

Justicidin E  $C_{20}H_{12}O_6$  (348.32). Source: QIANG DAO YAO *Hypoestes purpurea* [Syn. *Justicia purpurea*; *Hypoestes sinica*] (aerial parts: yield = 0.000025%dw). Ref: 4783.

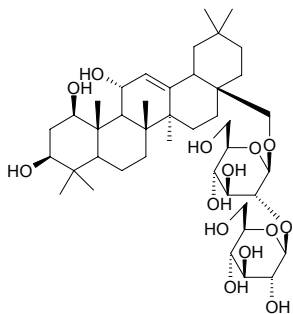


**11982 Justicidone**

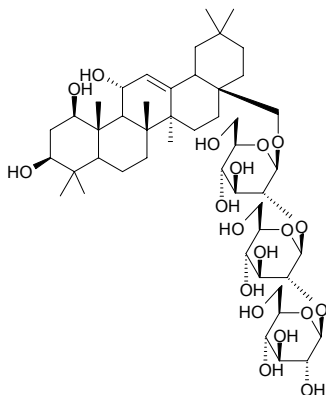
4-(1,3-Benzodioxol-5-yl)-6-methoxynaphtho[2,3-*c*]furan-1,5,8(3*H*)-trione  
 $C_{20}H_{12}O_7$  (364.31). Red crystals (EtOAc-*n*-hexane), mp 114~115°C. Source:  
*Justicia hyssopifolia* (aerial parts). Ref: 4259.

**11983 Justicoside A**

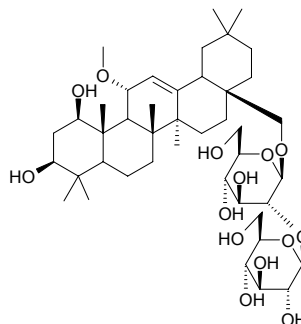
Olean-12-ene-1 $\beta$ ,3 $\beta$ ,11 $\alpha$ ,28-tetraol  
 28-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranoside  $C_{42}H_{70}O_{14}$  (799.02).  
 Amorphous powder,  $[\alpha]_D^{27} = -1.9^\circ$  ( $c = 2.65$ , MeOH). Source: YAO SHUI SU  
 JUE CHUANG *Justicia betonica* (aerial parts). Ref: 3863.

**11984 Justicoside B**

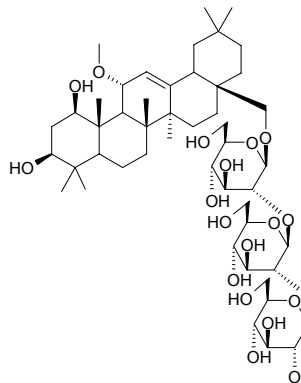
Olean-12-ene-1 $\beta$ ,3 $\beta$ ,11 $\alpha$ ,28-tetraol 28-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-  
 glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranoside  $C_{48}H_{80}O_{19}$  (961.16). Amorphous  
 powder,  $[\alpha]_D^{27} = -4.2^\circ$  ( $c = 2.61$ , MeOH). Source: YAO SHUI SU JUE  
 CHUANG *Justicia betonica* (aerial parts). Ref: 3863.

**11985 Justicoside C**

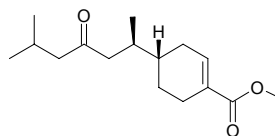
11 $\alpha$ -Methoxy-olean-12-ene-1 $\beta$ ,3 $\beta$ ,28-triol 28-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)-  
 $\beta$ -D-glucopyranoside  $C_{43}H_{72}O_{14}$  (813.04). Amorphous powder,  $[\alpha]_D^{27} = +10.1^\circ$   
 ( $c = 3.57$ , MeOH). Source: YAO SHUI SU JUE CHUANG *Justicia betonica*  
 (aerial parts). Ref: 3863.

**11986 Justicoside D**

11 $\alpha$ -Methoxy-olean-12-ene-1 $\beta$ ,3 $\beta$ ,28-triol 28-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)-  
 $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranoside  $C_{49}H_{82}O_{19}$  (975.19).  
 Amorphous powder,  $[\alpha]_D^{27} = +46.7^\circ$  ( $c = 0.71$ , MeOH). Source: YAO SHUI  
 SU JUE CHUANG *Justicia betonica* (aerial parts). Ref: 3863.

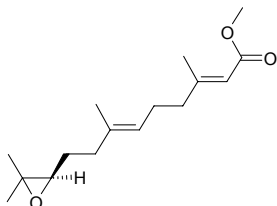
**11987 Juvabione**

[17904-27-7]  $C_{16}H_{26}O_3$  (266.38). Crystals (EtOAc), mp 273~275°C, 272°C.  
Pharm: Insect juvenile hormone. Source: XIANG ZHI LENG SHAN *Abies*  
*balsamea*. Ref: 658.

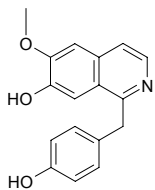


**11988 Juvenile hormone III**

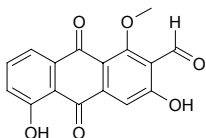
Methyl (2*E*,6*E*,10*R*)-10,11-epoxy-3,7,11-trimethyl-2,6-dodecadien-oate  
 [22963-93-5] C<sub>16</sub>H<sub>26</sub>O<sub>3</sub> (266.38). Colorless oil, [ $\alpha$ ]<sub>D</sub> = +4.5° (c = 0.7), [ $\alpha$ ]<sub>D</sub> = +6.7° (c = 0.6, MeOH). **Pharm:** Insect juvenile hormone<sup>[658]</sup>; antimalarial (*in vitro*, *Plasmodium falciparum* K1 multidrug-resistant strain and chloroquine sensitive NF54 strain, weak activity)<sup>[3944]</sup>. **Source:** SUI MI SHA CAO *Cyperus iria*, *Lettowianthus stellatus* (root cortex). **Ref:** 658, 3944.

**11989 Juzirine**

[64069-53-0] C<sub>17</sub>H<sub>15</sub>NO<sub>3</sub> (281.31). Crystals (Me<sub>2</sub>CO), mp 203–205°C. **Source:** SUAN ZAO REN *Ziziphus jujuba* var. *spinosa*. **Ref:** 583.

**11990 Juzunal**

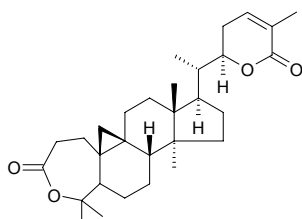
[4430-68-6] C<sub>16</sub>H<sub>10</sub>O<sub>6</sub> (298.25). mp 248°C. **Source:** HU CI *Damnacanthus indicus*, *Damnacanthus major*. **Ref:** 6, 1521.



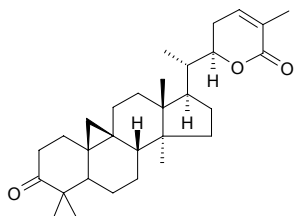
## K

**11991 Kadsulactone**

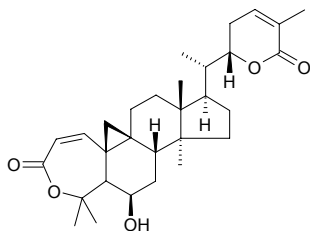
[137348-14-2]  $C_{30}H_{44}O_4$  (468.68). Source: CHANG GENG NAN WU WEI ZI *Kadsura peltigera* [Syn. *Kadsura longipedunculata*]. Ref: 1539, 2523.

**11992 Kadsulactone**

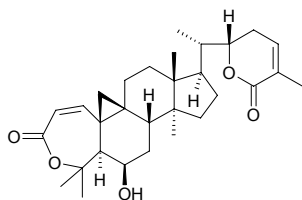
[137348-13-1]  $C_{30}H_{44}O_3$  (452.68). Crystals (EtOAc), mp 230~232°C,  $[\alpha]_D^{18} = +57.7^\circ$  ( $c = 0.09$ ,  $CHCl_3$ ). Pharm: Antineoplastic<sup>[2523]</sup>; anti-HIV<sup>[2523]</sup>. Source: CHANG GENG NAN WU WEI ZI *Kadsura peltigera* [Syn. *Kadsura longipedunculata*], LENG FAN TUAN *Kadsura coccinea* [Syn. *Kadsura chenensis*; *Kadsura hainanensis*]. Ref: 1521, 2436, 2523.

**11993 Kadsulactone A**

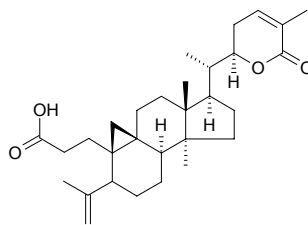
$C_{30}H_{42}O_5$  (482.67). Crystals (MeOH), mp 195~197°C,  $[\alpha]_D^{23} = +70.65^\circ$  ( $c = 0.552$ , MeOH). Pharm: Antineoplastic<sup>[2523]</sup>; anti-HIV<sup>[2523]</sup>. Source: CHANG GENG NAN WU WEI ZI *Kadsura peltigera* [Syn. *Kadsura longipedunculata*], YI XING NAN WU WEI ZI *Kadsura heteroclita* [Syn. *Uvaria heteroclita*]. Ref: 1521, 2436, 2523.

**11994 Kadsulactone A'**

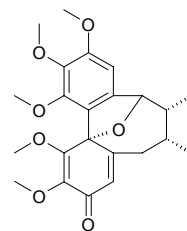
$C_{30}H_{42}O_5$  (482.67). Source: YI XING NAN WU WEI ZI *Kadsura heteroclita* [Syn. *Uvaria heteroclita*]. Ref: 660.

**11995 Kadsulactone acid**

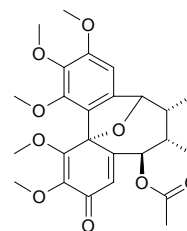
$C_{30}H_{44}O_4$  (468.68). Colorless massive crystals, mp 180~182°C. Source: CHANG GENG NAN WU WEI ZI *Kadsura peltigera* [Syn. *Kadsura longipedunculata*]. Ref: 389.

**11996 Kadsulignan A**

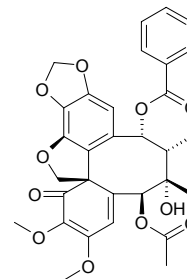
[122350-74-7]  $C_{23}H_{28}O_7$  (416.48). Source: LENG FAN TUAN *Kadsura coccinea* [Syn. *Kadsura chenensis*; *Kadsura hainanensis*]. Ref: 660, 2436.

**11997 Kadsulignan B**

[122350-75-8]  $C_{25}H_{30}O_9$  (474.51). Source: LENG FAN TUAN *Kadsura coccinea* [Syn. *Kadsura chenensis*; *Kadsura hainanensis*]. Ref: 660, 2436.

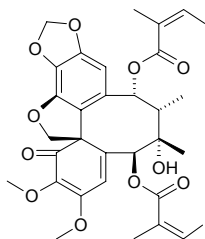
**11998 Kadsulignan C**

[137637-49-1]  $C_{31}H_{30}O_{11}$  (578.58). Source: CHANG GENG NAN WU WEI ZI *Kadsura peltigera* [Syn. *Kadsura longipedunculata*]. Ref: 2436.

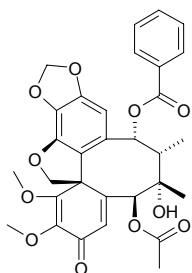


**11999 Kadsulignan D**

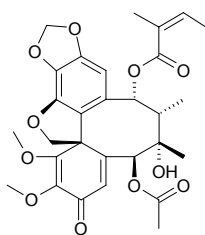
[137637-50-4] C<sub>32</sub>H<sub>36</sub>O<sub>11</sub> (596.64). Source: CHANG GENG NAN WU WEI ZI *Kadsura peltigera* [Syn. *Kadsura longipedunculata*]. Ref: 2436.

**12000 Kadsulignan E**

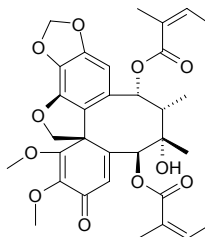
C<sub>31</sub>H<sub>30</sub>O<sub>11</sub> (578.58). Source: CHANG GENG NAN WU WEI ZI *Kadsura peltigera* [Syn. *Kadsura longipedunculata*]. Ref: 2436.

**12001 Kadsulignan F**

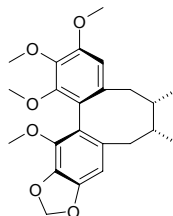
C<sub>29</sub>H<sub>32</sub>O<sub>11</sub> (556.57). Source: CHANG GENG NAN WU WEI ZI *Kadsura peltigera* [Syn. *Kadsura longipedunculata*]. Ref: 2436.

**12002 Kadsulignan G**

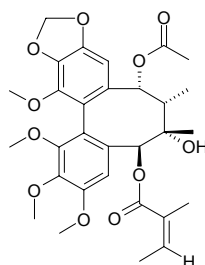
C<sub>32</sub>H<sub>36</sub>O<sub>11</sub> (596.64). Source: CHANG GENG NAN WU WEI ZI *Kadsura peltigera* [Syn. *Kadsura longipedunculata*]. Ref: 2436.

**12003 Kadsuranin**

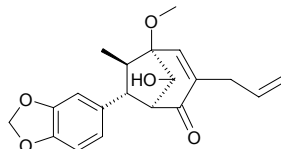
Rubschisandrin C<sub>23</sub>H<sub>28</sub>O<sub>6</sub> (400.48). Source: CHANG GENG NAN WU WEI ZI *Kadsura peltigera* [Syn. *Kadsura longipedunculata*], HONG HUA WU WEI ZI *Schisandra rubriflora* (fruit), LENG FAN TUAN *Kadsura coccinea* [Syn. *Kadsura chenensis*; *Kadsura hainanensis*], RI BEN NAN WU WEI ZI *Kadsura japonica*. Ref: 660, 2436.

**12004 Kadsurarin**

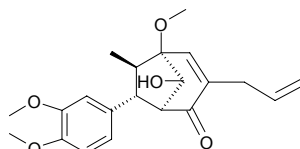
C<sub>30</sub>H<sub>36</sub>O<sub>11</sub> (572.61). Pharm: Antihepatitis inactive (anti-HBsAg, 100µg/mL, InRt < 25%, inactive; anti-HBeAg, 100µg/mL, InRt < 25%, inactive). Source: *Kadsura matsudai* (stem). Ref: 4397.

**12005 Kadsurenin B**

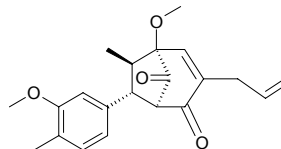
[145701-13-9] C<sub>20</sub>H<sub>22</sub>O<sub>5</sub> (342.39). Colorless oil, [α]<sub>D</sub><sup>18</sup> = -29.5° (c = 0.112, chloroform). Pharm: PAF receptor antagonist (IC<sub>50</sub> = 4.4µmol/L). Source: HAI FENG TENG *Piper kadsura* [Syn. *Piper futokadsura*]. Ref: 930.

**12006 Kadsurenin C**

[145722-88-9] C<sub>21</sub>H<sub>26</sub>O<sub>5</sub> (358.43). Colorless oil, [α]<sub>D</sub><sup>18</sup> = -24.0° (c = 0.067, chloroform). Pharm: PAF receptor antagonist. Source: HAI FENG TENG *Piper kadsura* [Syn. *Piper futokadsura*]. Ref: 930.

**12007 Kadsurenin K**

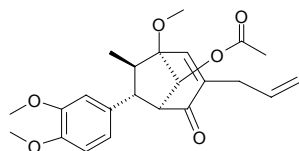
[149560-83-8] C<sub>20</sub>H<sub>22</sub>O<sub>5</sub> (342.39). Colorless oil, [α]<sub>D</sub><sup>18</sup> = -54.6° (c = 0.048, chloroform). Pharm: PAF receptor antagonist. Source: HAI FENG TENG *Piper kadsura* [Syn. *Piper futokadsura*]. Ref: 930.



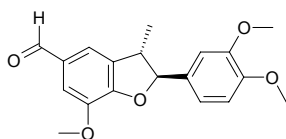


**12008 Kadsurenin L**

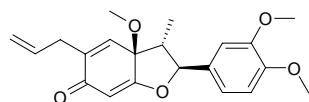
[149438-61-9] C<sub>23</sub>H<sub>28</sub>O<sub>6</sub> (400.47). Colorless rhombic crystals (acetone), [ $\alpha$ ]<sub>D</sub><sup>18</sup> = -36.9° (*c* = 0.086, chloroform). **Pharm:** PAF receptor antagonist. **Source:** HAI FENG TENG *Piper kadsura* [Syn. *Piper futokadsura*]. **Ref:** 930.

**12009 Kadsurenin M**

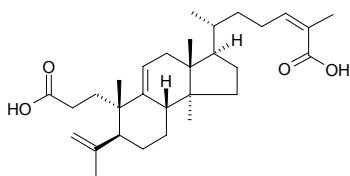
[150133-00-9] C<sub>19</sub>H<sub>20</sub>O<sub>5</sub> (328.37). Colorless oleaginous substance, [ $\alpha$ ]<sub>D</sub><sup>15</sup> = -24.6° (CHCl<sub>3</sub>). **Source:** HAI FENG TENG *Piper kadsura* [Syn. *Piper futokadsura*]. **Ref:** 267.

**12010 Kadsurenone**

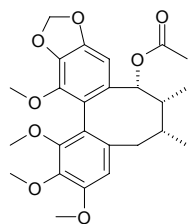
[95851-37-9] C<sub>21</sub>H<sub>24</sub>O<sub>5</sub> (356.42). **Pharm:** Inhibits PAF. **Source:** HAI FENG TENG *Piper kadsura* [Syn. *Piper futokadsura*]. **Ref:** 658.

**12011 Kadsuric acid**

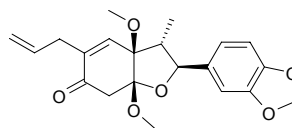
C<sub>30</sub>H<sub>46</sub>O<sub>4</sub> (470.70). **Pharm:** Antineoplastic<sup>[2523]</sup>; anti-HIV<sup>[2523]</sup>. **Source:** LENG FAN TUAN *Kadsura coccinea* [Syn. *Kadsura chenensis*; *Kadsura hainanensis*], XIAO HUA WU WEI ZI *Schisandra micrantha* (leaf and stem), YI GENG WU WEI ZI *Schisandra henryi*. **Ref:** 660, 2523, 4389.

**12012 Kadsurin**

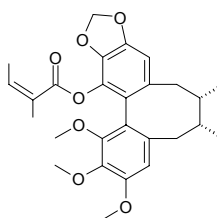
[51670-40-7] C<sub>25</sub>H<sub>30</sub>O<sub>8</sub> (458.51). White acicular crystals (ethanol), mp 157-158°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -39° (*c* = 0.13, chloroform). **Pharm:** Antineoplastic (potential antitumor promoter, EBV-EA induced by TPA, mol ratio/TPA = 1000, relative percentage of EBV-EA = (15.0±0.7)% (positive control value 32pmol, 20ng TPA = 100%), viability of Raji cells = 60%)<sup>[4644]</sup>; synergist of pesticides. **Source:** NEI NAN WU WEI ZI *Kadsura interior* (stem)<sup>[4644]</sup>, RI BEN NAN WU WEI ZI *Kadsura japonica* (in 1973, the compound was isolated from the plant by Y.P.Chen et al.)<sup>[5505]</sup>. **Ref:** 658, 2436, 4644, 5055.

**12013 Kadsurin A**

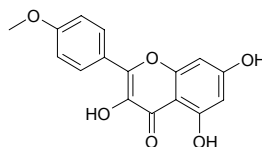
C<sub>21</sub>H<sub>24</sub>O<sub>6</sub> (372.42). **Pharm:** Inhibits PAF. **Source:** CHANG GENG NAN WU WEI ZI *Kadsura peltigera* [Syn. *Kadsura longipedunculata*], HAI FENG TENG *Piper kadsura* [Syn. *Piper futokadsura*]. **Ref:** 658.

**12014 Kadsutherin**

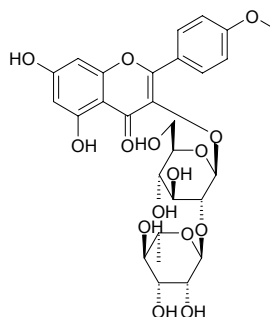
[99481-39-7] C<sub>27</sub>H<sub>32</sub>O<sub>7</sub> (468.55). **Source:** LENG FAN TUAN *Kadsura coccinea* [Syn. *Kadsura chenensis*; *Kadsura hainanensis*]. **Ref:** 660, 2436.

**12015 Kaempferide**

Kaempferol-4'-methylether [491-54-3] C<sub>16</sub>H<sub>12</sub>O<sub>6</sub> (300.27). mp 227-229°C. **Pharm:** Anti-inflammatory (induced by 12-O-tetradecanoyl phorbol-13-acetate); antiemetic (young male chicks, copper sulfate induced emesis assay, 20mg/kg, InRt = 63.3%, *p* < 0.001)<sup>[4649]</sup>. **Source:** CHENG LIU *Tamarix chinensis*, DA ER MA WEI YA LIU CHUAN YU *Linaria dalmatica*, GAO LIANG JIANG *Alpinia officinarum* (rhizome: yield = 0.076%dw)<sup>[4649]</sup>, JI CAI *Capsella bursa-pastoris*, SHAN NAI *Kaempferia galanga*, SHI ZHI JIA *Sedum sarmentosum* (whole herb: mean content of 10 origins = 0.026%)<sup>[5532]</sup>, ZANG HONG HUA *Crocus sativus* (pollen). **Ref:** 6, 660, 658, 4233, 4649, 5532.

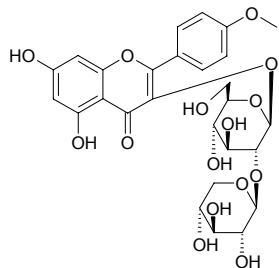
**12016 Kaempferide-3-O-neohesperidoside**

3-[[2-O-(6-Deoxy- $\alpha$ -L-man-nopyranosyl)- $\beta$ -D-glucopyranosyl]oxy]-5,7-dihydroxy-2-(4-methoxyphenyl)-4H-1-benzopyran-4-one C<sub>28</sub>H<sub>32</sub>O<sub>15</sub> (608.56). Yellow amorphous powder (MeOH), mp 170-180°C (dec), [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -85° (*c* = 0.001, DMSO). **Pharm:** Nitric oxide production inhibitor inactive (IC<sub>50</sub> > 100 $\mu$ g/mL). **Source:** SUI ZHUANG BI QIAO JIANG *Costus spicatus* (leaf) **Ref:** 3898.

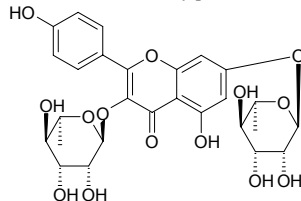


**12017 Kaempferide-3-O- $\beta$ -xylosyl (1 $\rightarrow$ 2)- $\beta$ -glucoside**

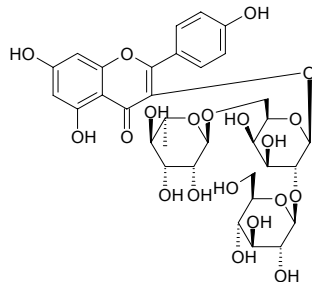
C<sub>27</sub>H<sub>30</sub>O<sub>15</sub> (594.53). Amorphous yellow powder. Source: *Warburgia ugandensis* (leaf). Ref: 3470.

**12018 Kaempferitrin**

Kaempferol 3,7-di-O- $\alpha$ -rhamnopyranoside [482-38-2] C<sub>27</sub>H<sub>30</sub>O<sub>14</sub> (578.53). mp 201~203°C. Pharm: Anti-inflammatory (induced by woolball-embedding, reduces blood capillary permeability); similar action with vitamin P; treatment of renal insufficiency; antioxidant (DPPH scavenger, IC<sub>50</sub> = (35.7 $\pm$ 0.3) $\mu$ mol/L, control Trolox, IC<sub>50</sub> = (25.4 $\pm$ 0.8) $\mu$ mol/L)<sup>[4244]</sup>; antioxidant (DPPH free radical scavenger, 10 $\mu$ mol/L, ScRt = 11%, control BHT, 10 $\mu$ mol/L, ScRt = 43%)<sup>[5319]</sup>; antibacterial (*Staphylococcus aureus* ATCC 25923, MIC > 128 $\mu$ g/mL, control Vancomycin, MIC = 2 $\mu$ g/mL; *Staphylococcus aureus* MRSA SK1, MIC > 128 $\mu$ g/mL, Vancomycin, MIC = 2 $\mu$ g/mL)<sup>[5319]</sup>. Source: BAI DUAN *Tilia alburnum*, CHAI HU *Bupleurum chinense*, DA JIN QIAN CAO *Lysimachia christinae*, DUAN GENG HU ZHI ZI *Lespedeza cyrtobotrya*, MIAN TENG *Celastrus hypoleucus*, NI BO ER LAO GUAN CAO *Geranium nepalense*, SHAN MA HUANG *Desmodium racemosum* [Syn. *Podocarpium podocarpum* var. *oxyphyllum*], TIAN SHAN ZHU ZI *Garcinia dulcis* (fruit), WAN SHOU JU 叶 *Tagetes erecta*, WANG GUA *Trichosanthes cucumeroides*, YIN YANG HUO *Epimedium brevicornum*, YOU SE ZI JIN NIU *Ardisia colorata* (fruit), YU LI REN *Prunus japonica* [Syn. *Cerasus japonica*], ZHI LI DIAN LAN *Indigofera arrecta*, occurs in many plants. Ref: 4, 6, 623, 658, 660, 1521, 4244, 5319, 5501.

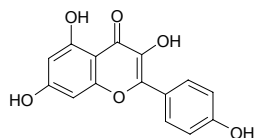
**12019 Kaempferol 3-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -L-rhamnonopyranosyl-(1 $\rightarrow$ 6)]- $\beta$ -D-galactopyranoside**

C<sub>33</sub>H<sub>40</sub>O<sub>20</sub> (756.67). Pharm: Anti-HIV-1 (RT (RDDP) inhibitor, IC<sub>50</sub> = 38 $\mu$ mol/L, positive control Adriamycin, IC<sub>50</sub> = 27 $\mu$ mol/L; DDDP inhibitor, IC<sub>50</sub> > 100 $\mu$ mol/L, Adriamycin, IC<sub>50</sub> = 6 $\mu$ mol/L; HIV-1 IN inhibitor, IC<sub>50</sub> = 43 $\mu$ mol/L, Suramin, IC<sub>50</sub> = 2.4 $\mu$ mol/L). Source: HUANG HUA JIA ZHU TAO *Thevetia nerifolia* [Syn. *Thevetia peruviana*] (leaf). Ref: 4187.

**12020 Kaempferol**

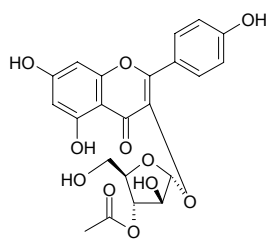
3,5,7,4'-Tetrahydroxyflavone [520-18-3] C<sub>15</sub>H<sub>10</sub>O<sub>6</sub> (286.24). Yellow acicular crystals (methanol), mp 274~278°C. Pharm: Anti-HIV-1 (RT (RDDP) inhibitor, IC<sub>50</sub> = 110 $\mu$ mol/L, positive control Adriamycin, IC<sub>50</sub> = 46 $\mu$ mol/L; DDDP inhibitor, IC<sub>50</sub> = 75 $\mu$ mol/L, Adriamycin, IC<sub>50</sub> = 6 $\mu$ mol/L; RnaseH inhibitor, IC<sub>50</sub> > 500 $\mu$ mol/L, Illimaquinone, IC<sub>50</sub> = 50 $\mu$ mol/L; HIV-1 IN inhibitor, IC<sub>50</sub> = 40 $\mu$ mol/L, Suramin, IC<sub>50</sub> = 2.4 $\mu$ mol/L)<sup>[3522, 4187]</sup>; antibacterial; anti-inflammatory (rat, woolball-embedded model); antitussive to cure trachitis;  $\Delta^5$ -lipoxygenase inhibitor; iodinate thyronine deiodinase inhibitor; aldose reductase inhibitor (eye lens, may cure cataract due to diabetes mellitus); antioxidant (*in vitro*, DPPH scavenger, 0.1mg/mL, ScRt = 89.9%)<sup>[3015]</sup>; anti-inflammatory (IL-5 inhibitor, concentration-dependent manner, mean IC<sub>50</sub> = 30.0 $\mu$ mol/L)<sup>[4416]</sup>; DPPH scavenger (SC<sub>50</sub> = 10 $\mu$ mol/L)<sup>[4247]</sup>; antioxidant (superoxide anion radical scavenger, superoxide dismutase method, IC<sub>50</sub> for Formazan formation activity = 11 $\mu$ mol/L)<sup>[4247]</sup>. Source: BAI GUO *Ginkgo biloba*, BAI GUO YE *Ginkgo biloba* (leaf: mean content collected in Apr., May and Sep. = 0.179%)<sup>[5508]</sup>, BAI RUI CAO *Thesium chinense*, CU LIU GUO *Hippophae rhamnoides*, DA JIN QIAN CAO *Lysimachia christinae*, DA TU SI ZI *Cuscuta japonica* (ripe fruit: mean content = 0.0015%)<sup>[5508]</sup>, DU ZHONG *Eucommia ulmoides*, FAN XIE YE *Cassia angustifolia*, FEN CHA DANG GUI *Angelica furcijuga* (flower), FENG JIAO *Apis mellifera ligustica* (bee glue: mean content of 5 beach samples = 0.67%)<sup>[5508]</sup>, HONG HUA *Carthamus tinctorius* (flower: mean content of 4 origins = 0.35%)<sup>[5508]</sup>, HUANG HAI TANG *Hypericum ascyron*, HUANG HUA HAO *Artemisia annua*, HUANG QI *Astragalus membranaceus* (dried root: content scope of 5 origins = 0.0008%~0.0034%, mean content = 0.0018%)<sup>[5519]</sup>, JI YAN CAO *Kummerowia striata*, JI ZI MU *Sinoadina Racemosa* [Syn. *Adina racemosa*] (leaf, flower and twig: yield = 0.0064%dw<sup>[3014]</sup>; yield = 0.0017%dw)<sup>[4723]</sup>, JIAN YE FAN XIE YE *Cassia acutifolia*, LAN YU BAI JI *Bletilla formosana* (whole herb), LIANG SHAN DU JUAN *Rhododendron huianum* (leaf: content = 0.006%)<sup>[5508]</sup>, LUO BU MA *Apocynum venetum* (dried leaf: content scope of 6 origins = 0.0%~0.0098%, mean content = 0.0033%)<sup>[5529]</sup>, MA HUANG *Ephedra sinica*, MAN SHAN HONG *Rhododendron dauricum* (leaf: mean content of 8 origins = 0.030%)<sup>[5527]</sup>, MAO YAN CAO *Euphorbia lunulata*, MENG GU HUANG QI *Astragalus mongholicus* (dried root: mean content of 3 origins = 0.44%)<sup>[5508]</sup>, MU ZEI *Equisetum hiemale* (aerial parts: mean content of 5 origins = 0.69%)<sup>[5508]</sup>, NAN FANG TU SI ZI *Cuscuta australis* (ripe fruit: mean content = 0.0148%)<sup>[5508]</sup>, PI JIU HUA TU SI ZI *Cuscuta lupuliformis* (ripe fruit: mean content = 0.0005%)<sup>[5508]</sup>, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], SAN LENG *Sparganium stoloniferum*, SHAN HE YE *Diphylleia grayi*, SHAN NAI *Kaempferia galanga*, SHAN YE WAN DOU *Vicia amoena*, SHE PU TAO *Ampelopsis brevipedunculata*, SHENG DI HONG JING TIAN *Rhodiola sacra*, SHI WEI *Pyrosia lingua*, SHU LI *Rhamnus davurica*, TAI WAN HUANG BO *Phellodendron amurense* var. *wilsonii* (leaf: yield = 0.00014%dw)<sup>[4722]</sup>, TAI WAN JIN GU CAO *Ajuga taiwanensis* (whole herb), TU SI ZI *Cuscuta chinensis* (ripe seed: content = 0.198%)<sup>[5501]</sup>, WEI LING CAI *Potentilla chinensis*, WO ER QI *Diphylleia sinensis*, XI GENG XIANG CAO *Lysimachia capillipes* (dried whole herb: mean content of 3 origins = 0.054%)<sup>[5508]</sup>, XIA YE XIANG PU *Typha angustifolia*, XUAN FU HUA *Inula britannica*, YE XIA ZHU *Phyllanthus urinaria*, YI ZHU QIAN MA *Urtica dioica*, YOU GAN YE *Phyllanthus emblica* (leaf and branch), ZANG HONG HUA *Crocus sativus* (petal: yield =

0.00036%), ZHAI YE BAN FENG HE *Pterospermum lanceaefolium*, ZHAO SHAN BAI *Rhododendron micranthum* (leaf: content scope from Feb. to Nov. 0.01%–0.12%, mean content = 0.05%)<sup>[5508]</sup>, ZHONG GUO XUAN FU HUA *Inula britannica* var. *chinensis*, occurs in many plants (family Brassicaceae spp., family Apocynaceae spp., family Dilleniaceae spp., family Ranunculaceae spp., family Fabaceae spp.). Ref: 2, 4, 279, 283, 397, 463, 468, 552, 573, 658, 660, 1521, 3014, 3015, 3522, 4187, 4205, 4247, 4416, 4454, 4483, 4500, 4722, 4723, 5501, 5508, 5519, 5527, 5529.



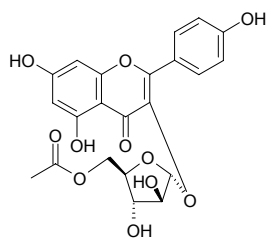
**12021 Kaempferol-3-O- $\alpha$ -L-3''-acetyl-arabinofuranoside**

$C_{22}H_{20}O_{11}$  (460.40). Dark yellow powder,  $[\alpha]_D^{20} = -231.6^\circ$  ( $c = 0.01$ , MeOH). Source: RI BEN GUI DENG QING *Rodgersia podophylla* (aerial parts: yield = 0.00017%dw). Ref: 1179.



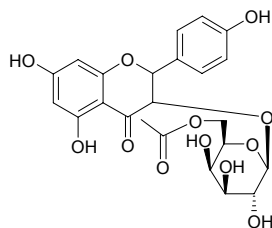
**12022 Kaempferol-3-O- $\alpha$ -L-5''-acetyl-arabinofuranoside**

$C_{22}H_{20}O_{11}$  (460.40). Dark yellow powder,  $[\alpha]_D^{20} = -91.3^\circ$  ( $c = 0.03$ , MeOH). Source: RI BEN GUI DENG QING *Rodgersia podophylla* (aerial parts: yield = 0.0002%dw). Ref: 1179.



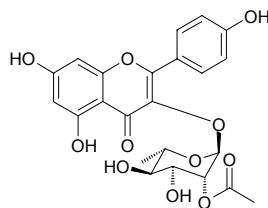
**12023 Kaempferol 3-O-(6''-acetyl)- $\beta$ -D-galactopyranoside**

$C_{23}H_{24}O_{12}$  (492.44). Source: SAN XIAO CAO *Trifolium repens* (flower). Ref: 3970.



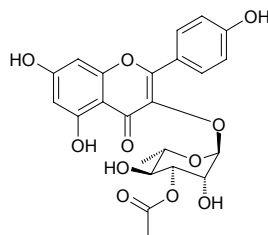
**12024 Kaempferol-3-O-(2-O-acetyl- $\alpha$ -L-rhamnopyranoside)**

$C_{23}H_{22}O_{11}$  (474.43). Pharm: CYP3A4 inhibitor ( $IC_{50} = 59.0\mu\text{mol/L}$ , control Ketoconazole,  $IC_{50} = 0.245\mu\text{mol/L}$ ); CYP2D6 inhibitor inactive ( $IC_{50} > 100\mu\text{mol/L}$ , control Quinidine,  $IC_{50} = 0.078\mu\text{mol/L}$ ). Source: FANG XIANG JIANG *Zingiber aromaticum* (rhizome: yield = 0.00044%dw). Ref: 4669.



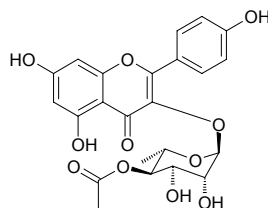
**12025 Kaempferol-3-O-(3-O-acetyl- $\alpha$ -L-rhamnopyranoside)**

$C_{23}H_{22}O_{11}$  (474.43). Pharm: CYP3A4 inhibitor ( $IC_{50} = 98.3\mu\text{mol/L}$ , control Ketoconazole,  $IC_{50} = 0.245\mu\text{mol/L}$ ); CYP2D6 inhibitor inactive ( $IC_{50} > 100\mu\text{mol/L}$ , control Quinidine,  $IC_{50} = 0.078\mu\text{mol/L}$ ). Source: FANG XIANG JIANG *Zingiber aromaticum* (rhizome: yield = 0.00044%dw). Ref: 4669.



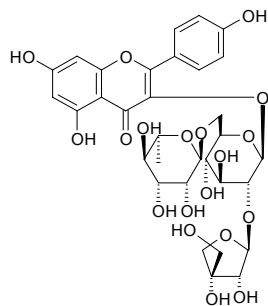
**12026 Kaempferol-3-O-(4-O-acetyl- $\alpha$ -L-rhamnopyranoside)**

$C_{23}H_{22}O_{11}$  (474.43). Pharm: CYP3A4 inhibitor ( $IC_{50} = 90.0\mu\text{mol/L}$ , control Ketoconazole,  $IC_{50} = 0.245\mu\text{mol/L}$ ); CYP2D6 inhibitor inactive ( $IC_{50} > 100\mu\text{mol/L}$ , control Quinidine,  $IC_{50} = 0.078\mu\text{mol/L}$ ). Source: FANG XIANG JIANG *Zingiber aromaticum* (rhizome: yield = 0.00036%dw). Ref: 4669.

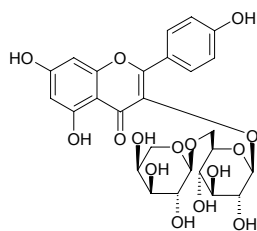


**12027 Kaempferol 3-O- $\beta$ -D-apiosyl-(1→2)-[ $\alpha$ -L-rhamnosyl(1→6)]- $\beta$ -D-glucoside**

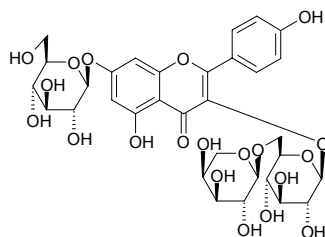
$C_{32}H_{38}O_{19}$  (726.65). Yellowish powder mp 174–175°C,  $[\alpha]_D^{25} = -37^\circ$  ( $c = 0.0015$ , H<sub>2</sub>O). Source: MIAN HUA *Gossypium herbaceum*. Ref: 2130.



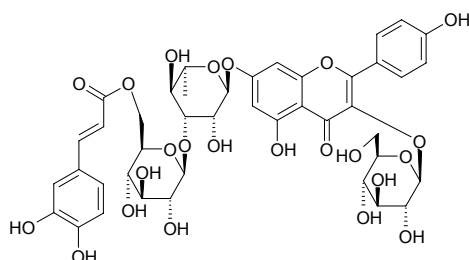
**12028 Kaempferol 3-*O*- $\alpha$ -arabinopyranosyl(1'''' $\rightarrow$ 6'')- $\beta$ -glucopyranoside**  
 $C_{26}H_{28}O_{15}$  (580.50). Yellow solid (MeOH). Source: KU DI DING *Corydalis bungeana* (whole herb). Ref: 3880.



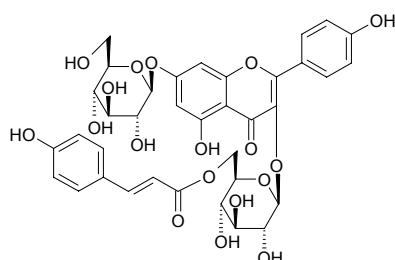
**12029 Kaempferol 3-*O*- $\alpha$ -arabinopyranosyl(1'''' $\rightarrow$ 6'')- $\beta$ -glucopyranoside 7-*O*- $\beta$ -glucopyranoside**  
 $C_{32}H_{38}O_{20}$  (742.65). Yellow solid (MeOH). Source: KU DI DING *Corydalis bungeana* (whole herb). Ref: 3880.



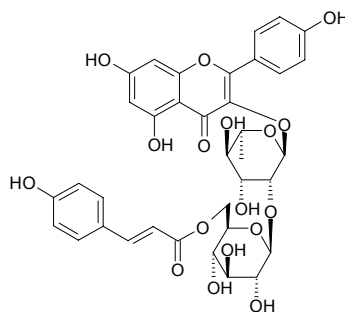
**12030 Kaempferol 7-*O*-(6-*trans*-caffeoyl)- $\beta$ -glucopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -rhamnopyranoside-3-*O*- $\beta$ -glucopyranoside**  
 $C_{42}H_{46}O_{23}$  (918.82). Amorphous yellow powder, mp 180~182°C,  $[\alpha]_D^{25} = -84.7^\circ$  ( $c = 0.1$ , MeOH). Source: *Aconitum napellus* ssp. *neomontanum* (flower). Ref: 5148.



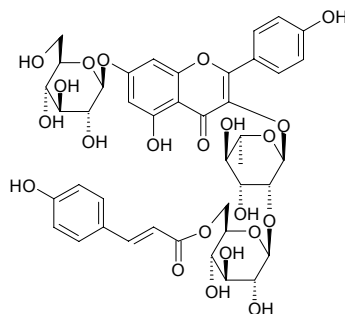
**12031 Kaempferol 3-*O*- $\beta$ -(6''-*E*-*p*-coumaroylglucopyranoside)-7-*O*- $\beta$ -glucopyranoside**  
 $C_{36}H_{36}O_{18}$  (756.68). Yellow amorphous powder. Source: DUO YE BAI MAI GEN *Lotus polyphyllus*. Ref: 1973.



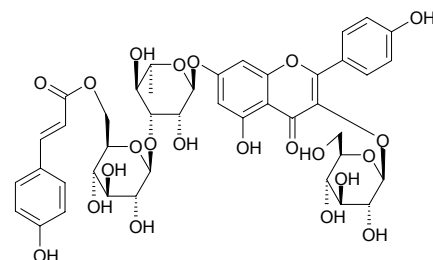
**12032 Kaempferol 3-*O*- $\alpha$ -L-[6''''-*p*-coumaroyl-( $\beta$ -D)-glucopyranosyl-(1,2)-rhamnopyranoside]**  
 $C_{36}H_{36}O_{17}$  (740.68). Pharm: Antioxidant (DPPH scavenger,  $IC_{50} = 18.1\mu\text{g/mL}$ , control Gallic acid,  $IC_{50} = 3.6\mu\text{g/mL}$ ; Cytochrome-C reduction,  $IC_{50} = 17.7\mu\text{g/mL}$ , control Gallic acid,  $IC_{50} = 3.0\mu\text{g/mL}$ ). Source: BAI GUO YE *Ginkgo biloba*. Ref: 5239.



**12033 Kaempferol 3-*O*- $\alpha$ -L-[6''''-*p*-coumaroyl-( $\beta$ -D)-glucopyranosyl-(1,2)-rhamnopyranoside]-7-*O*- $\beta$ -D-glucopyranoside**  
 $C_{42}H_{46}O_{22}$  (902.82). Yellow amorphous powder. Pharm: Antioxidant (DPPH scavenger,  $IC_{50} = 18.4\mu\text{g/mL}$ , control Gallic acid,  $IC_{50} = 3.6\mu\text{g/mL}$ ; Cytochrome-C reduction,  $IC_{50} = 17.9\mu\text{g/mL}$ , control Gallic acid,  $IC_{50} = 3.0\mu\text{g/mL}$ ). Source: BAI GUO YE *Ginkgo biloba*. Ref: 5239.

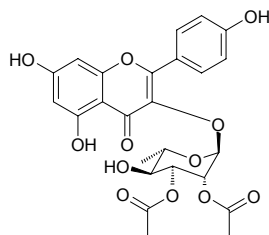


**12034 Kaempferol 7-*O*-(6-*trans*-*p*-coumaroyl)- $\beta$ -glucopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -rhamnopyranoside-3-*O*- $\beta$ -glucopyranoside**  
 $C_{42}H_{46}O_{22}$  (902.82). Amorphous yellow powder, mp 175~177°C,  $[\alpha]_D^{25} = -52.0^\circ$  ( $c = 0.1$ , MeOH). Source: *Aconitum napellus* ssp. *neomontanum* (flower). Ref: 5148.

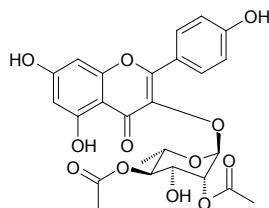


**12035 Kaempferol-3-O-(2,3-di-O-acetyl- $\alpha$ -L-rhamnopyranoside)**

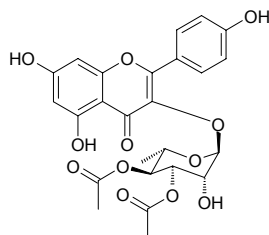
$C_{25}H_{24}O_{12}$  (516.46). **Pharm:** CYP3A4 inhibitor ( $IC_{50}$  = 55.8 $\mu$ mol/L, control Ketoconazole,  $IC_{50}$  = 0.245 $\mu$ mol/L); CYP2D6 inhibitor inactive ( $IC_{50}$  > 100 $\mu$ mol/L, control Quinidine,  $IC_{50}$  = 0.078 $\mu$ mol/L). **Source:** FANG XIANG JIANG *Zingiber aromaticum* (rhizome: yield = 0.00059%dw). **Ref:** 4669.

**12036 Kaempferol-3-O-(2,4-di-O-acetyl- $\alpha$ -L-rhamnopyranoside)**

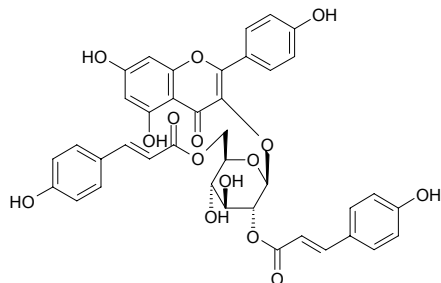
$C_{25}H_{24}O_{12}$  (516.46). **Pharm:** CYP3A4 inhibitor ( $IC_{50}$  = 31.6 $\mu$ mol/L, control Ketoconazole,  $IC_{50}$  = 0.245 $\mu$ mol/L); CYP2D6 inhibitor inactive ( $IC_{50}$  > 100 $\mu$ mol/L, control Quinidine,  $IC_{50}$  = 0.078 $\mu$ mol/L). **Source:** FANG XIANG JIANG *Zingiber aromaticum* (rhizome: yield = 0.00031%dw). **Ref:** 4669.

**12037 Kaempferol-3-O-(3,4-di-O-acetyl- $\alpha$ -L-rhamnopyranoside)**

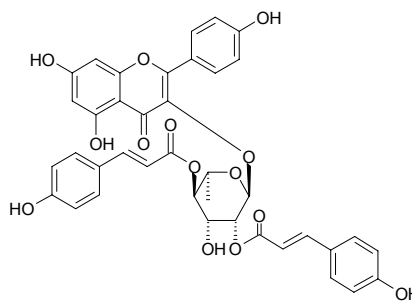
$C_{25}H_{24}O_{12}$  (516.46). **Pharm:** CYP3A4 inhibitor ( $IC_{50}$  = 20.6 $\mu$ mol/L, control Ketoconazole,  $IC_{50}$  = 0.245 $\mu$ mol/L); CYP2D6 inhibitor ( $IC_{50}$  = 50.5 $\mu$ mol/L, control Quinidine,  $IC_{50}$  = 0.078 $\mu$ mol/L). **Source:** FANG XIANG JIANG *Zingiber aromaticum* (rhizome: yield = 0.00029%dw). **Ref:** 4669.

**12038 Kaempferol-3-O-(2'',6''-di-O-(E)-p-coumaroyl- $\beta$ -D-glucopyranoside)**

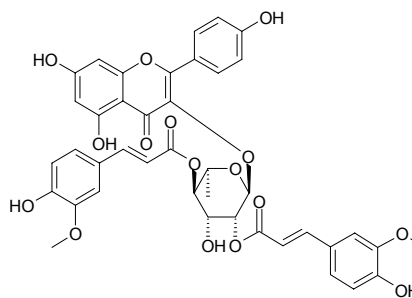
$C_{39}H_{32}O_{15}$  (740.68). **Source:** HU YE *Quercus dentata* **Ref:** 660.

**12039 Kaempferol 3-O- $\alpha$ -L-(2',4'-di-Z-p-coumaroyl)-rhamnoside**

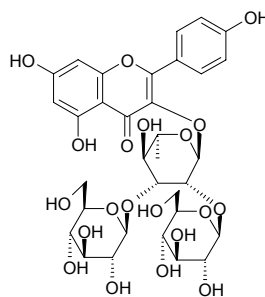
$C_{39}H_{32}O_{14}$  (724.68). **Source:** PI PA YE *Eriobotrya japonica*. **Ref:** 4255.

**12040 Kaempferol 3-O- $\alpha$ -L-(2'',4''-di-E-feruloyl)-rhamnoside**

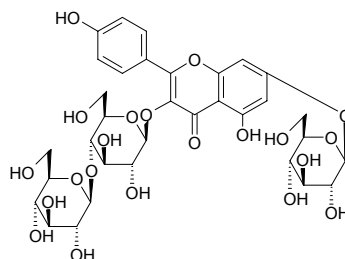
$C_{41}H_{37}O_{16}$  (784.73). Pale yellow amorphous powder,  $[\alpha]_D^{23}$  = -19.4° (c = 0.16, MeOH). **Source:** PI PA YE *Eriobotrya japonica*. **Ref:** 4255.

**12041 Kaempferol 3-O- $\alpha$ -(2,3-di-O- $\beta$ -D-glucopyranosyl)rhamnopyranoside**

$C_{33}H_{40}O_{20}$  (756.67). **Source:** MEI LI FAN HONG HUA *Crocus speciosus*, *Crocus antalyensis*. **Ref:** 2341.

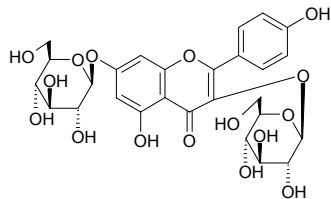
**12042 Kaempferol-3-diglucose-7-glucoside**

Kaempferol-3-glucose-7-diglucoside  $C_{33}H_{40}O_{21}$  (772.67). **Source:** MU ZEI *Equisetum hiemale*. **Ref:** 2.

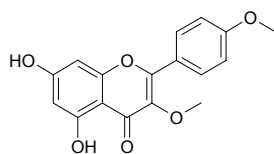


**12043 Kaempferol-3,7-diglucoside**

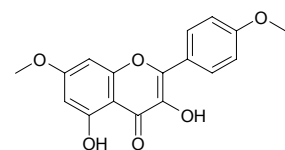
$C_{27}H_{30}O_{16}$  (610.53). mp 233°C. Source: CAO WEN JING *Equisetum pratense*, GU JIE CAO *Equisetum palustre*, LIN WEN JING *Equisetum sylvaticum*, MU ZEI *Equisetum hiemale* (aerial parts: mean content of 3 origins = 0.016%<sup>[5508]</sup>), WEN JING *Equisetum arvense*. Ref: 2, 660, 5508.

**12044 Kaempferol-3,4-di-O-methyl ether**

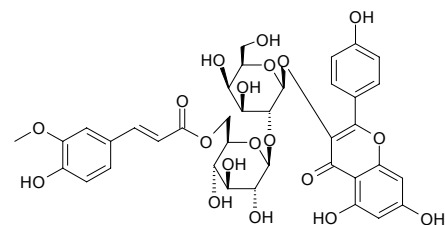
Eemanin  $C_{17}H_{14}O_6$  (314.30). Pharm: CYP3A4 inhibitor ( $IC_{50}$  = 21.8  $\mu$ mol/L, control Ketoconazole,  $IC_{50}$  = 0.245  $\mu$ mol/L)<sup>[4669]</sup>; CYP2D6 inhibitor ( $IC_{50}$  = 45.5  $\mu$ mol/L, control Quinidine,  $IC_{50}$  = 0.078  $\mu$ mol/L)<sup>[4669]</sup>; NO production inhibitor (LPS-induced, concentration-dependent manner,  $IC_{50}$  = 8.9  $\mu$ mol/L or 6.6  $\mu$ mol/L)<sup>[4918]</sup>; PGE<sub>2</sub> production inhibitor (LPS-induced, concentration-dependent manner,  $IC_{50}$  = 9.6  $\mu$ mol/L or 5.1  $\mu$ mol/L)<sup>[4918]</sup>. Source: FANG XIANG JIANG *Zingiber aromaticum* (rhizome: yield = 0.00012%dw), XIAO YE JU HAO *Tanacetum microphyllum* (aerial parts). Ref: 4669, 4918.

**12045 Kaempferol-7,4'-dimethyl ether**

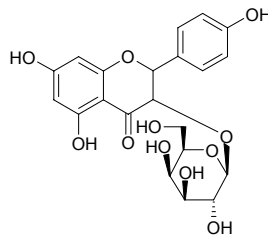
$C_{17}H_{14}O_6$  (314.30). Source: CHENG LIU *Tamarix chinensis*, YUE HUA *Betula ermanii*. Ref: 660.

**12046 Kaempferol 3-O-[(6-O-feruloyl)-β-D-glucopyranosyl-(1→2)-β-D-galactopyranoside]**

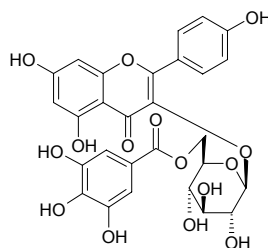
$C_{37}H_{38}O_{19}$  (786.70). Dark yellow amorphous powder, mp 210–212°C,  $[\alpha]_D^{25}$  = -0.026° ( $c$  = 0.1, MeOH). Pharm: Anti-HIV-1 (RT (RDDP) inhibitor,  $IC_{50}$  = 52  $\mu$ mol/L, positive control Adriamycin,  $IC_{50}$  = 27  $\mu$ mol/L; DDDP inhibitor,  $IC_{50}$  > 100  $\mu$ mol/L, positive control Adriamycin,  $IC_{50}$  = 6  $\mu$ mol/L; HIV-1 IN inhibitor,  $IC_{50}$  = 31  $\mu$ mol/L, positive control Suramin,  $IC_{50}$  = 2.4  $\mu$ mol/L)<sup>[4187]</sup>; Neuroprotective (primary cultures of rat cortical cells, induced by *L*-glutamate, 0.1  $\mu$ mol/L, cell viability = (25.2±3.2)%,  $p$  < 0.05, 1.0  $\mu$ mol/L, cell viability = (66.9±5.8)%,  $p$  < 0.001, 10  $\mu$ mol/L, cell viability = (25.2±3.6)%,  $p$  < 0.05)<sup>[3027]</sup>. Source: HUANG HUA JIA ZHU TAO *Thevetia nerifolia* [Syn. *Thevetia peruviana*] (leaf), BAI HUA SHE SHE CAO *Oldenlandia diffusa* [Syn. *Hedyotis diffusa*] (whole herb: yield = 0.00076%). Ref: 3027, 4187.

**12047 Kaempferol 3-O-β-D-galactopyranoside**

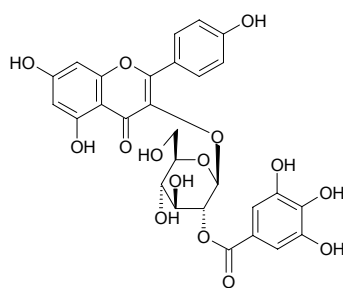
$C_{21}H_{22}O_{11}$  (450.40). Source: SAN XIAO CAO *Trifolium repens* (flower). Ref: 3970.

**12048 Kaempferol 3-O-(6''-galloyl)-β-D-glucopyranoside**

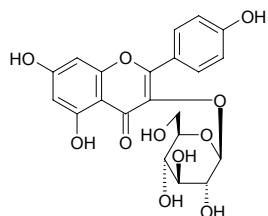
$C_{28}H_{24}O_{15}$  (600.49).  $[\alpha]_D^{25}$  = -36.3° ( $c$  = 0.1, MeOH). Pharm: Antifungal (*Candida albicans* ATCC2091, MIC > 200  $\mu$ g/mL, control Amphotericin B, MIC = 1  $\mu$ g/mL; *Candida albicans* 32, MIC > 200  $\mu$ g/mL, Amphotericin B, MIC = 4  $\mu$ g/mL; *Candida albicans* 19, MIC = 200  $\mu$ g/mL, Amphotericin B, MIC = 2  $\mu$ g/mL); cytotoxic inactive (MIC > 200  $\mu$ g/mL); antibacterial inactive. Source: *Baseonema acuminatum* (leaf). Ref: 5021.

**12049 Kaempferol-3-O-(2''-O-galloyl)-β-D-glucoside**

$C_{28}H_{24}O_{15}$  (600.49). Source: DI JIN CAO *Euphorbia humifusa*, JIE LIAO *Polygonum nodosum*, YU LIAO *Polygonum lapathifolium*. Ref: 660.

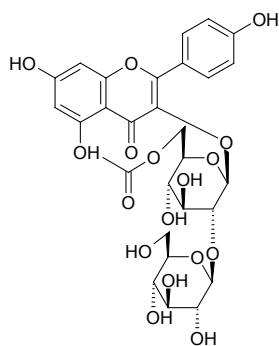
**12050 Kaempferol 3-O-β-D-glucopyranoside**

Astragalol [480-10-4]  $C_{21}H_{20}O_{11}$  (448.39). Yellow needles, mp 178,  $[\alpha]_D^{18}$  = +16.9° ( $c$  = 0.62, MeOH). Source: Astragalus sp. Ref: 1521.



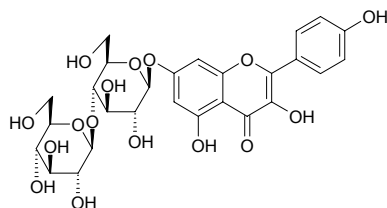
**12051 Kaempferol-3-O-β-D-glucopyranosyl(1→2)-β-D-6-acetylglucopyranoside**

C<sub>29</sub>H<sub>32</sub>O<sub>17</sub> (652.57). Source: ZANG HONG HUA *Crocus sativus*. Ref: 660.



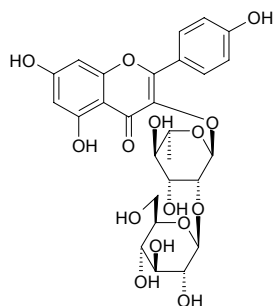
**12052 Kaempferol 7-O-β-D-glucopyranosyl-(1→4)-β-D-glucopyranoside**

C<sub>27</sub>H<sub>30</sub>O<sub>16</sub> (610.53). Yellow powder,  $[\alpha]_D^{28} = -49.0^\circ$  ( $c = 0.5$ , MeOH). Pharm: DPPH scavenger ( $SC_{50} = 13\mu\text{mol/L}$ )<sup>[4247]</sup>, antioxidant (superoxide anion radical scavenger, superoxide dismutase method,  $IC_{50}$  for Formazan formation activity =  $24\mu\text{mol/L}$ )<sup>[4247]</sup>. Source: XIAN REN ZHANG *Opuntia dillenii* (fresh stem: yield = 0.0001%). Ref: 4247, 4912.



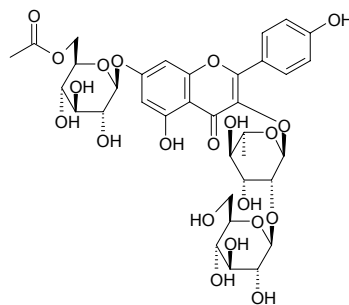
**12053 Kaempferol 3-O-β-D-glucopyranosyl-(1-2)-α-L-rhamnopyranoside**

C<sub>27</sub>H<sub>30</sub>O<sub>15</sub> (594.53). Pharm: Antioxidant (DPPH scavenger,  $IC_{50} > 100\mu\text{g/mL}$ , control Gallic acid,  $IC_{50} = 3.6\mu\text{g/mL}$ ; Cytochrome-C reduction,  $IC_{50} > 50\mu\text{g/mL}$ , control Gallic acid,  $IC_{50} = 3.0\mu\text{g/mL}$ ). Source: BAI GUO YE *Ginkgo biloba*. Ref: 5239.



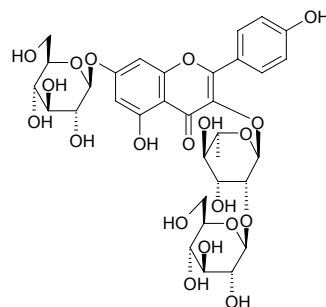
**12054 Kaempferol 3-O-α-L-(2-O-β-D-glucopyranosyl)rhamnopyranoside-7-O-β-D-(6-O-acetyl)glucopyranoside**

C<sub>35</sub>H<sub>42</sub>O<sub>21</sub> (798.71). Source: SHUANG HUA FAN HONG HUA *Crocus chrysanthus-biflorus*. Ref: 2343.



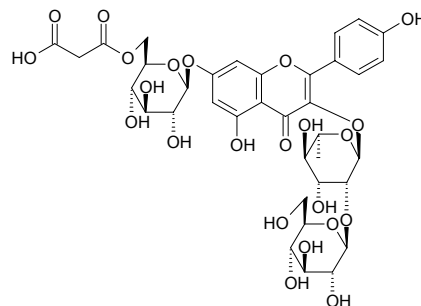
**12055 Kaempferol 3-O-α-L-(2-O-β-D-glucopyranosyl)rhamnopyranoside-7-O-β-D-glucopyranoside**

C<sub>33</sub>H<sub>40</sub>O<sub>20</sub> (756.67). Source: SHUANG HUA FAN HONG HUA *Crocus chrysanthus-biflorus*. Ref: 2343.



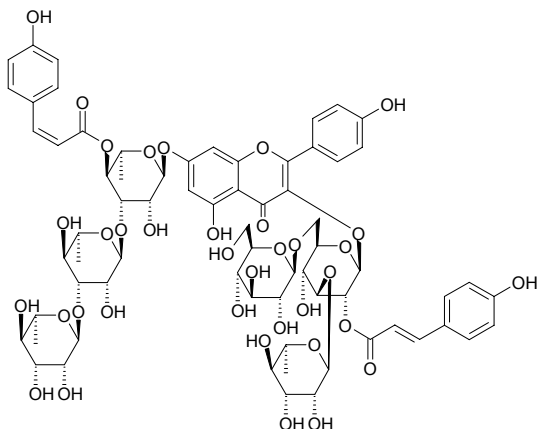
**12056 Kaempferol 3-O-α-L-(2-O-β-D-glucopyranosyl)rhamnopyranoside-7-O-β-D-(6-O-malonyl)glucopyranoside**

C<sub>36</sub>H<sub>42</sub>O<sub>23</sub> (842.72). Source: SHUANG HUA FAN HONG HUA *Crocus chrysanthus-biflorus*. Ref: 2343.



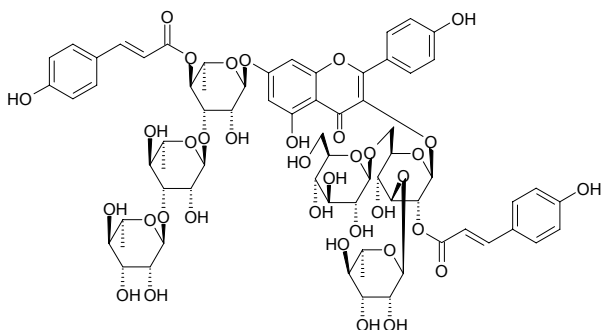
**12057 Kaempferol-3-O- $\beta$ -D-glucopyranosyl (1 $\rightarrow$ 6)- $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 3)-(2-O-trans-p-coumaroyl)- $\beta$ -D-glucopyranoside-7-O-[ $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 3)- $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 3)-(4-O-cis-p-coumaroyl)- $\alpha$ -L-rhamnopyranoside]**

C<sub>69</sub>H<sub>82</sub>O<sub>36</sub> (1487.40). [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +342° (*c* = 0.045, MeOH). Source: GAO DA SHAN LAN *Planchonia grandis* (leaf). Ref: 3443.



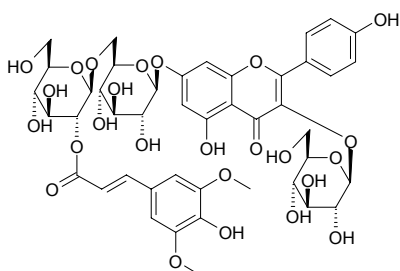
**12058 Kaempferol-3-O- $\beta$ -D-glucopyranosyl (1 $\rightarrow$ 6)- $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 3)-(2-O-trans-p-coumaroyl)- $\beta$ -D-glucopyranoside-7-O-[ $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 3)- $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 3)-(4-O-trans-p-coumaroyl)- $\alpha$ -L-rhamnopyranoside]**

C<sub>69</sub>H<sub>82</sub>O<sub>36</sub> (1487.40). [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +228.7° (*c* = 0.167, MeOH). Source: GAO DA SHAN LAN *Planchonia grandis* (leaf). Ref: 3443.



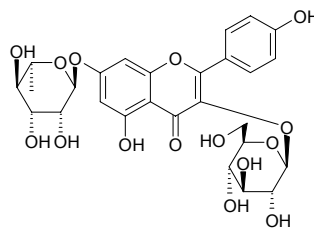
**12059 Kaempferol-3- $\beta$ -D-glucopyranosyl-7-O-[(2-O-trans-sinapoyl)- $\beta$ -D-glucopyranosyl (1 $\rightarrow$ 6)]- $\beta$ -D-glucopyranoside**

C<sub>44</sub>H<sub>50</sub>O<sub>25</sub> (978.87). Yellowish grain (MeOH), mp 215°C (dec). Source: BO NIANG HAO *Descurainia Sophia* (seed). Ref: 4829.



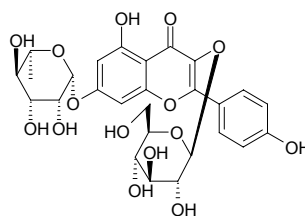
**12060 Kaempferol-3- $\beta$ -D-gluco-7- $\alpha$ -L-rhamnoside**

C<sub>27</sub>H<sub>30</sub>O<sub>15</sub> (594.53). mp 249~251°C, mp 231~234°C. Pharm: Antioxidant (DPPH scavenger, 10 $\mu$ mol/L, ScRt = 15%, control BHT, 10 $\mu$ mol/L, ScRt = 43%)<sup>[5319]</sup>; antibacterial (*Staphylococcus aureus* ATCC 25923, MIC = 64 $\mu$ g/mL, control Vancomycin, MIC = 2 $\mu$ g/mL; *Staphylococcus aureus* MRSA SK1, MIC = 64 $\mu$ g/mL, Vancomycin, MIC = 2 $\mu$ g/mL)<sup>[5319]</sup>. Source: CAN DOU YE *Vicia faba*, NAN SHE TENG YE *Celastrus orbiculatus* [Syn. *Celastrus articulatus*], TIAN SHAN ZHU ZI *Garcinia dulcis* (fruit). Ref: 6, 5319.



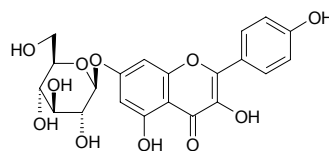
**12061 Kaempferol-3- $\beta$ -D-gluco-7- $\beta$ -L-rhamnoside**

C<sub>27</sub>H<sub>30</sub>O<sub>15</sub> (594.53). Source: TIAO JING CAO *Euonymus japonicus*. Ref: 6.



**12062 Kaempferol-7-O-glucoside**

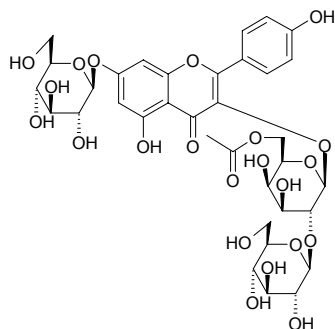
Populnin C<sub>21</sub>H<sub>20</sub>O<sub>11</sub> (448.39). Pharm: DPPH scavenger (SC<sub>50</sub> = 12 $\mu$ mol/L)<sup>[4247]</sup>; antioxidant (superoxide anion radical scavenger, superoxide dismutase method, IC<sub>50</sub> for Formazan formation activity = 32 $\mu$ mol/L)<sup>[4247]</sup>; antioxidant (*in vitro*, DPPH radical scavenger, 0.1mg/mL, ScRt = 91.2%)<sup>[3015]</sup>. Source: CE BAI YE *Thuja orientalis* [Syn. *Platyclusus orientalis*; *Biota orientalis*], LAN YU BAI JI *Bletilla formosana* (whole herb), XIAN REN ZHANG *Opuntia dillenii* (fresh stem: yield = 0.00019%), HUO TAN MU CAO *Polygonum chinense*, ZANG HONG HUA *Crocus sativus* (petal: yield = 0.00012%)<sup>[3015]</sup>. Ref: 660, 3015, 4247, 4500.





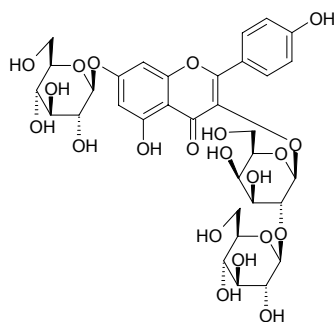
**12063 Kaempferol 3-O-β-D-glucosyl(1→2)-(6''-O-acetyl)-β-D-galactoside 7-O-β-D-glucoside**

C<sub>35</sub>H<sub>42</sub>O<sub>22</sub> (814.71). Amorphous powder, mp 200–203°C, [α]<sub>D</sub><sup>26</sup> = -76° (c = 0.08, MeOH). Source: HU LU BA *Trigonella foenum-graecum* (stem). Ref: 5197.



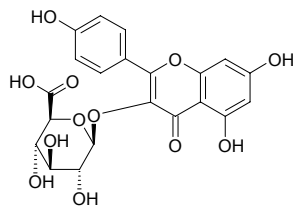
**12064 Kaempferol 3-O-β-D-glucosyl(1→2)-β-D-galactoside 7-O-β-D-glucoside**

C<sub>33</sub>H<sub>40</sub>O<sub>21</sub> (772.67). Amorphous powder, mp 220–222°C, [α]<sub>D</sub><sup>26</sup> = -37° (c = 0.09, H<sub>2</sub>O). Source: HU LU BA *Trigonella foenum-graecum* (stem). Ref: 5197.



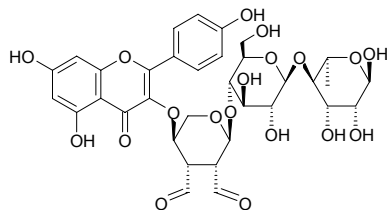
**12065 Kaempferol-3-β-D-glucuronide**

C<sub>21</sub>H<sub>18</sub>O<sub>12</sub> (462.37). mp 189–190.5°C. Source: JI CHANG LANG DU *Euphorbia esula*, LAO YA SHI *Diospyros rhombifolia* (leaf). Ref: 6, 4464.



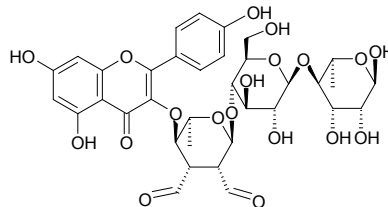
**12066 Kaempferol-3-O-lysimachiatrioside**

C<sub>34</sub>H<sub>38</sub>O<sub>19</sub> (750.67). Source: DA JIN QIAN CAO *Lysimachia christinae*. Ref: 660.



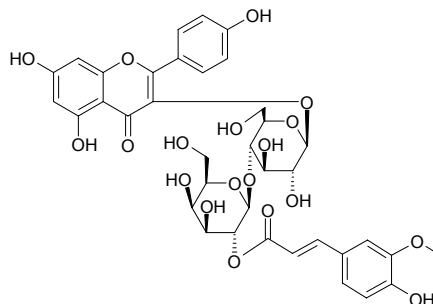
**12067 Kaempferol-3-O-lysimachiatrioside**

C<sub>35</sub>H<sub>40</sub>O<sub>19</sub> (764.70). Source: DA JIN QIAN CAO *Lysimachia christinae*. Ref: 2.



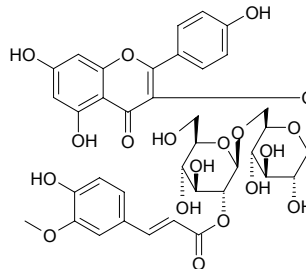
**12068 Kaempferol 3-O-[2-O-(trans-3-methoxy-4-hydroxycinnamoyl)]-β-D-galactopyranosyl(1→4)-O-β-D-glucopyranoside**

C<sub>37</sub>H<sub>38</sub>O<sub>19</sub> (786.70). Yellowish amorphous solid, [α]<sub>D</sub><sup>25</sup> = -9° (c = 0.02, MeOH). Source: JIU CONG *Allium porrum* (bulb). Ref: 5152.



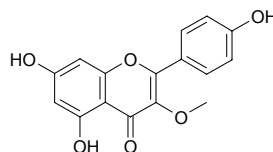
**12069 Kaempferol 3-O-[2-O-(trans-3-methoxy-4-hydroxycinnamoyl)]-β-D-glucopyranosyl(1→6)-O-β-D-glucopyranoside**

C<sub>37</sub>H<sub>38</sub>O<sub>19</sub> (786.70). Yellowish amorphous solid, [α]<sub>D</sub><sup>25</sup> = -13° (c = 0.02, MeOH). Source: JIU CONG *Allium porrum* (bulb). Ref: 5152.



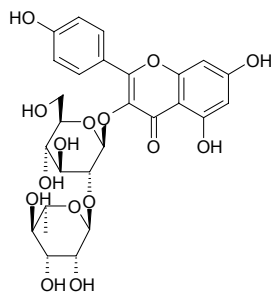
**12070 Kaempferol 3-methyl ether**

Isokempferide C<sub>16</sub>H<sub>12</sub>O<sub>6</sub> (300.27). Pharm: Antioxidant (Takamatsu DCFH method, myelomonocytic HL-60 cells, IC<sub>50</sub> = (50.7±3.0)μg/mL; control NDGA, IC<sub>50</sub> = (0.7±0.3)μg/mL, Vitamin C, IC<sub>50</sub> = (1.9±0.7)μg/mL, Trolox, IC<sub>50</sub> = (1.4±0.5)μg/mL)<sup>[3850]</sup>; cytotoxic (XTT assay, HL-60 cells, IC<sub>50</sub> = (28.3±3.5)μg/mL; control NDGA, IC<sub>50</sub> = (2.6±0.2)μg/mL, Vitamin C, IC<sub>50</sub> > 10.0μg/mL, Trolox, IC<sub>50</sub> > 10.0μg/mL)<sup>[3850]</sup>; antiviral; CYP3A4 inhibitor (IC<sub>50</sub> = 36.2μmol/L, control Ketoconazole, IC<sub>50</sub> = 0.245μmol/L)<sup>[4669]</sup>; CYP2D6 inhibitor (IC<sub>50</sub> = 4.63μmol/L, control Quinidine, IC<sub>50</sub> = 0.078μmol/L)<sup>[4669]</sup>. Source: SAN CHI LA RUI A *Larrea tridentata* (leaf), YE GUO QIE *Solanum sarrachoides*, FANG XIANG JIANG *Zingiber aromaticum* (rhizome: yield = 0.00021%dw). Ref: 658, 3850, 4669.

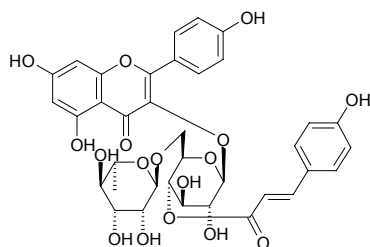


**12071 Kaempferol-3-O-neohesperidoside**

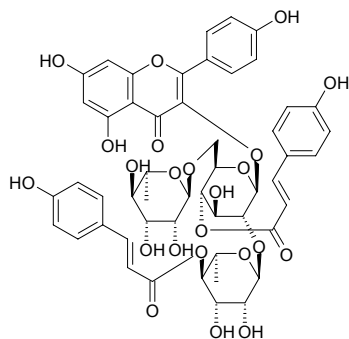
Kaempferol 3-O-(2"-O- $\alpha$ -rhamnopyranosyl)- $\beta$ -glucopyranoside C<sub>27</sub>H<sub>30</sub>O<sub>15</sub> (594.53). Source: LAO YA SHI *Diospyros rhombifolia* (leaf), PU HUANG *Typha angustata*, KUAN YE XIANG PU *Typha latifolia*. Ref: 2, 660, 4464.

**12072 Kaempferol 3-O- $\alpha$ -L-rhamnopyranosyl(1→6)-(4-O-*trans*-p-coumaroyl)- $\beta$ -D-galactopyranoside**

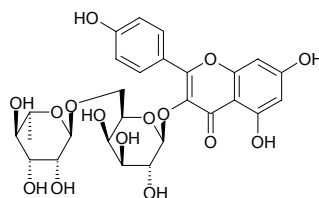
C<sub>36</sub>H<sub>36</sub>O<sub>17</sub> (740.68). Source: JI ZI MU *Sinoadina Racemosa* [Syn. *Adina racemosa*] (dried leaf, flower and twig: yield = 0.0044%dw). Ref: 3014.

**12073 Kaempferol 3-O- $\alpha$ -L-rhamnopyranosyl(1→6)-[(4-O-*trans*-p-coumaroyl)- $\alpha$ -L-rhamnopyranosyl(1→2)]-(4-O-*trans*-p-coumaroyl)- $\beta$ -D-galactopyranoside**

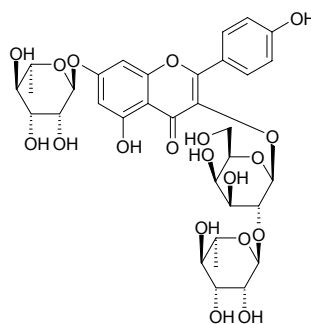
C<sub>51</sub>H<sub>52</sub>O<sub>23</sub> (1032.97). Yellow powder,  $[\alpha]_D^{25} = -274^\circ$  ( $c = 0.3$ , MeOH). Source: JI ZI MU *Sinoadina Racemosa* [Syn. *Adina racemosa*] (dried leaf, flower and twig: yield = 0.0022%dw). Ref: 3014.

**12074 Kaempferol 3-O- $\alpha$ -L-rhamnopyranosyl(1→6)- $\beta$ -D-galactopyranoside**

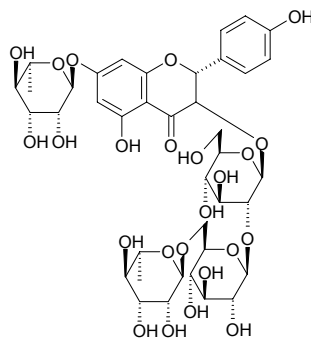
C<sub>27</sub>H<sub>30</sub>O<sub>15</sub> (594.53). Source: JI ZI MU *Sinoadina Racemosa* [Syn. *Adina racemosa*] (dried leaf, flower and twig: yield = 0.0013%dw). Ref: 3014.

**12075 Kaempferol 3-O- $\alpha$ -L-rhamnopyranosyl(1→2)- $\beta$ -D-galactopyranosyl-7-O- $\alpha$ -L-rhamnopyranoside**

C<sub>33</sub>H<sub>40</sub>O<sub>19</sub> (740.68). Source: SI GUO HUANG QI *Astragalus shikokianus* (aerial parts). Ref: 3922.

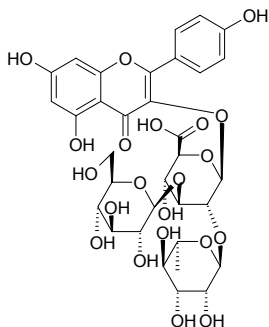
**12076 Kaempferol 3-O- $\alpha$ -L-rhamnopyranosyl(1→6)- $\beta$ -D-glucopyranosyl(1→2)- $\beta$ -D-glucopyranoside-7-O- $\alpha$ -L-rhamnopyranoside**

C<sub>39</sub>H<sub>52</sub>O<sub>24</sub> (904.83). Yellow amorphous powder. Source: HUIAI *Sophora japonica* (seed). Ref: 3391.



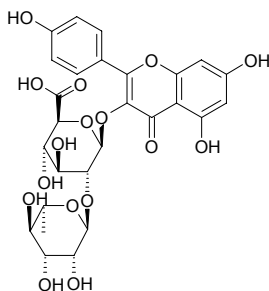
**12077 Kaempferol 3-O-(2''-O- $\alpha$ -rhamnopyranosyl-3''-O- $\beta$ -glucopyranosyl)- $\beta$ -glucuronopyranoside**

C<sub>33</sub>H<sub>38</sub>O<sub>21</sub> (770.66). Pale yellow solid,  $[\alpha]_D = -59^\circ$  ( $c = 0.1$ , MeOH). Source: LAO YA SHI *Diospyros rhombifolia* (leaf). Ref: 4464.



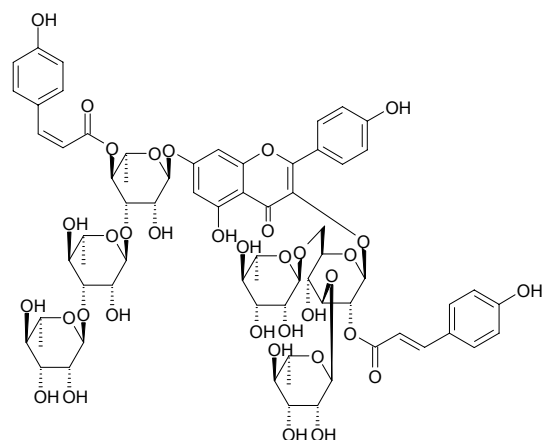
**12078 Kaempferol 3-O-(2''- $\alpha$ -rhamnopyranosyl)- $\beta$ -glucuronopyranoside**

C<sub>27</sub>H<sub>28</sub>O<sub>16</sub> (608.51). Source: LAO YA SHI *Diospyros rhombifolia* (leaf). Ref: 4464.



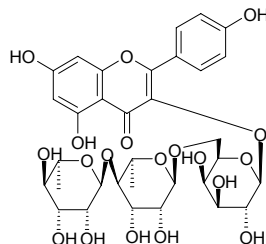
**12079 Kaempferol-3-O-[ $\alpha$ -L-rhamnopyranosyl (1→6)-{ $\alpha$ -L-rhamnopyranosyl(1→3)}-(2-O-*trans*-*p*-coumaroyl)]- $\beta$ -D-glucopyranoside-7-O-[ $\alpha$ -L-rhamnopyranosyl(1→3)- $\alpha$ -L-rhamnopyranosyl(1→3)-(4-O-*trans*-*p*-coumaroyl)]- $\alpha$ -L-rhamnopyranoside**

C<sub>69</sub>H<sub>82</sub>O<sub>35</sub> (1471.40).  $[\alpha]_D^{20} = -122.8^\circ$  ( $c = 0.464$ , MeOH). Source: GAO DA SHAN LAN *Planchonia grandis* (leaf). Ref: 3443.



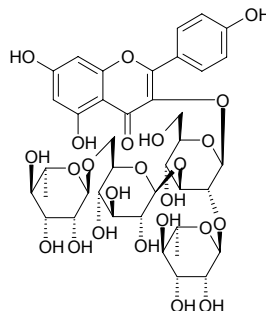
**12080 Kaempferol-3-O-[ $\alpha$ -rhamnopyranosyl-(1→4)-rhamnopyranosyl-(1→6)- $\beta$ -galactopyranoside]**

C<sub>33</sub>H<sub>40</sub>O<sub>19</sub> (740.68). Source: MI HOU LI GEN *Actinidia arguta*, MU TIAN LIAO *Actinidia polygama*. Ref: 660.



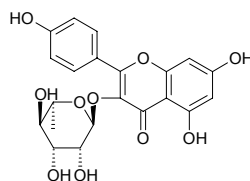
**12081 Kaempferol 3-O-[2''-O- $\alpha$ -rhamnopyranosyl-3''-O-(6'''-O- $\alpha$ -rhamnopyranosyl)- $\beta$ -glucopyranosyl]- $\beta$ -glucopyranoside**

C<sub>39</sub>H<sub>50</sub>O<sub>24</sub> (902.82). Pale-yellow solid,  $[\alpha]_D = -36^\circ$  ( $c = 0.1$ , MeOH). Source: LAO YA SHI *Diospyros rhombifolia* (leaf). Ref: 4464.



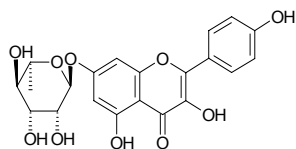
**12082 Kaempferol-3-rhamnoside**

Kaempferol 3-O- $\alpha$ -L-rhamnopyranoside; 3,4',5,7-Tetrahydroxyflavone-3-L-rhamnoside [482-39-3] C<sub>21</sub>H<sub>20</sub>O<sub>10</sub> (432.39). mp 172–174°C. Pharm: Antioxidant (6.25  $\mu$ g/mL, superoxide radical scavenging activity = 5.5 %, control Curcumin 16.1%; 6.25  $\mu$ g/mL, DPPH radical scavenging activity = 9.4 %, control Curcumin 50.0%)<sup>[4535]</sup>; hepatoprotective (primary cultures of rat hepatocytes, H<sub>2</sub>O<sub>2</sub>-induced toxicity, 50  $\mu$ mol/L, relative protection = 50.8% (H<sub>2</sub>O<sub>2</sub>-treated, relative protection = 0.0%, control, relative protection = 100%), positive control Silibinin, Relative protection = 74.9%)<sup>[4996]</sup>; CYP3A4 inhibitor inactive (IC<sub>50</sub> > 100  $\mu$ mol/L, control Ketoconazole, IC<sub>50</sub> = 0.245  $\mu$ mol/L)<sup>[4669]</sup>; CYP2D6 inhibitor inactive (IC<sub>50</sub> > 100  $\mu$ mol/L, control Quinidine, IC<sub>50</sub> = 0.078  $\mu$ mol/L)<sup>[4669]</sup>. Source: BAI GUO YE *Ginkgo biloba*, CHI YANG *Alnus japonica* (leaf), DA JIN NIU CAO *Polygala chinensis* [Syn. *Polygala glomerata*], FANG XIANG JIANG *Zingiber aromaticum* (rhizome: yield = 0.00066%dw), LV BEI GUI HUA *Excoecaria cochinchinensis* var. *viridis*, MA HUANG *Ephedra sinica*, MANG QI GU *Dicranopteris pedata* [Syn. *Polypodium pedatum*; *Dicranopteris dichotoma*], MAO YAN CAO *Euphorbia lunulata*, RI BEN GUI DENG QING *Rodgersia podophylla* (aerial parts), YOU GAN YE *Phyllanthus emblica* (leaf and branch), YU XING CAO *Houttuynia cordata*. Ref: 2, 6, 603, 660, 4205, 4535, 4544, 4669, 4996.

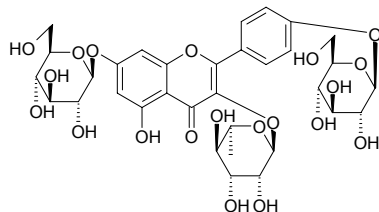


**12083 Kaempferol-7-rhamnoside**

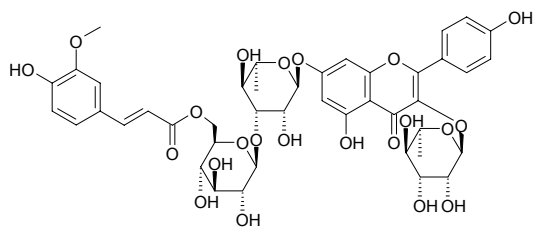
Kaempferol-7-*O*- $\alpha$ -L-rhamnoside [20196-89-8] C<sub>21</sub>H<sub>20</sub>O<sub>10</sub> (432.39). Yellow acicular crystals, mp 232~234°C (chloroform-methanol); mp 239~342°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -180 (methanol). **Pharm:** Ileal smooth muscle relaxant (gpg *in vitro*, nicotine antagonist, ED<sub>50</sub> = 9.0 $\mu$ g/mL, histamine antagonist, ED<sub>50</sub> = 13 $\mu$ g/mL, acetylcholine antagonist, ED<sub>50</sub> = 15~21 $\mu$ g/mL); aldose reductase inhibitor (rat eye lens, 10 $\mu$ mol/L, InRt = 40.9%). **Source:** BAI FAN DOU *Phaseolus vulgaris*, DA HUA HONG JING TIAN *Rhodiola crenulata* [Syn. *Rhodiola euryphylla*], GU JIE CAO *Equisetum palustre*, NAN SHE TENG YE *Celastrus orbiculatus* [Syn. *Celastrus articulatus*], TU JING JIE *Chenopodium ambrosioides*, ZI HUA JING TIAN *Hylotelephium mingjiniatum*. **Ref:** 6, 900.

**12084 Kaempferol 3-O-alpha-rhamnoside-7,4'-di-O-beta-galactoside**

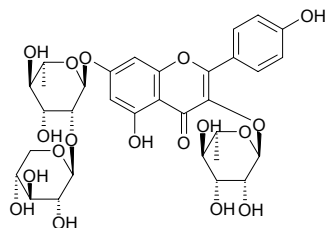
C<sub>33</sub>H<sub>40</sub>O<sub>20</sub> (756.67). Amorphous yellow powder. **Source:** *Warburgia ugandensis* (leaf). **Ref:** 3470.

**12085 Kaempferol-3-rhamnoside-7-O-[6-feruloylglucosyl(1-3)-rhamnoside]**

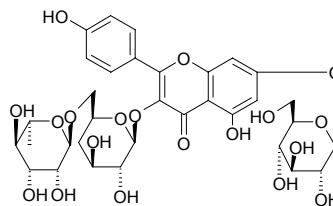
C<sub>43</sub>H<sub>48</sub>O<sub>22</sub> (916.85). **Source:** CHANG SHENG TIE JIAO JUE *Asplenium prolongatum*. **Ref:** 660.

**12086 Kaempferol-3-rhamnoside-7-xylosyl(1-2)-rhamnoside**

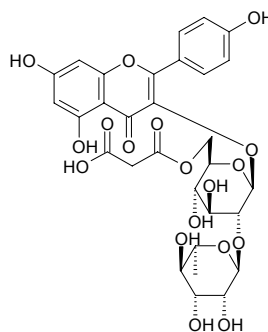
C<sub>32</sub>H<sub>38</sub>O<sub>18</sub> (710.65). Yellow amorphous powder. **Source:** BI SHENG LI *Chenopodium murale*. **Ref:** 2304.

**12087 Kaempferol-3-rhamnosyl glucoside-7-glucoside**

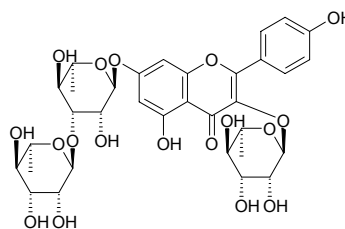
Kaempferol-3-rutinoside-7-glucoside C<sub>33</sub>H<sub>40</sub>O<sub>20</sub> (756.67). **Source:** MU ZEI *Equisetum hiemale* (aerial parts: mean content of 3 origins = 0.017%). **Ref:** 5508.

**12088 Kaempferol-3-O-(2''-O-alpha-rhamnosyl-6''-O-malonyl)-beta-glucoside**

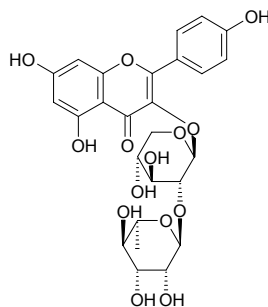
C<sub>30</sub>H<sub>32</sub>O<sub>18</sub> (680.58). Light-yellow amorphous powder. **Source:** HU DIE HUA DOU *Clitoria ternatea*. **Ref:** 2064.

**12089 Kaempferol-3-O-rhamnosyl-(1-3)-rhamnoside**

C<sub>33</sub>H<sub>40</sub>O<sub>18</sub> (724.68). **Source:** DA JIN QIAN CAO *Lysimachia christinae*. **Ref:** 660.

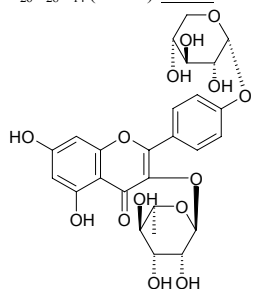
**12090 Kaempferol-3-O-alpha-L-rhamnosyl(1-2)-beta-D-xyloside**

C<sub>26</sub>H<sub>28</sub>O<sub>14</sub> (564.50). Yellow crystals, mp 186~188°C. **Source:** DA JIN QIAN CAO *Lysimachia christinae*. **Ref:** 2461.

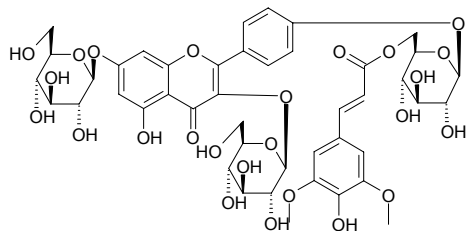


**12091 Kaempferol-3-rhamno-4'-xyloside**

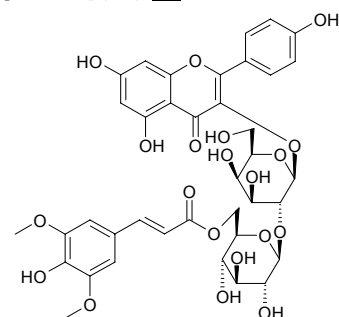
$C_{26}H_{28}O_{14}$  (564.50). Source: TU JING JIE *Chenopodium ambrosioides*. Ref: 660.

**12092 Kaempferol-4'-(6-O-E-sinapoyl-β-glucopyranoside)-3,7-di-O-β-glucopyranoside**

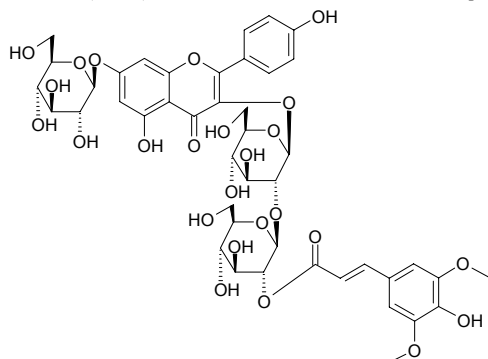
$C_{44}H_{50}O_{25}$  (978.87). Source: OU ZHOU YOU CAI *Brassica napus* (seed). Ref: 5289.

**12093 Kaempferol-3-O-[(6-O-sinapoyl)-β-D-glucopyranosyl-(1→2)-β-D-galactopyranoside]**

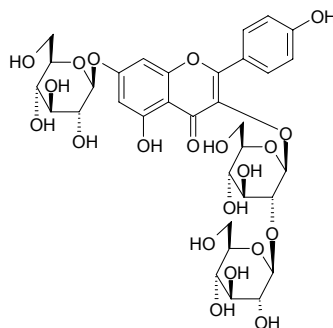
$C_{38}H_{40}O_{20}$  (816.73). Pharm: Anti-HIV-1 (RT (RDDP) inhibitor,  $IC_{50} > 100\mu\text{mol/L}$ , positive control Adriamycin,  $IC_{50} = 27\mu\text{mol/L}$ ; DDDP inhibitor,  $IC_{50} > 100\mu\text{mol/L}$ , positive control Adriamycin,  $IC_{50} = 6\mu\text{mol/L}$ ; HIV-1 IN inhibitor,  $IC_{50} = 30\mu\text{mol/L}$ , positive control Suramin,  $IC_{50} = 2.4\mu\text{mol/L}$ ). Source: HUANG HUA JIA ZHU TAO *Thevetia nerifolia* [Syn. *Thevetia peruviana*] (leaf). Ref: 4187.

**12094 Kaempferol-3-(2''-O-E-sinapoylsophoroside)-7-O-β-glucopyranoside**

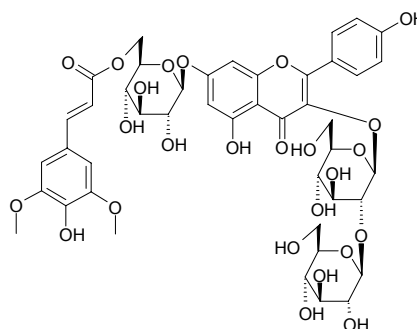
$C_{44}H_{50}O_{25}$  (978.87). Source: OU ZHOU YOU CAI *Brassica napus* (seed). Ref: 5289.

**12095 Kaempferol-3-O-sophoroside-7-O-β-glucopyranoside**

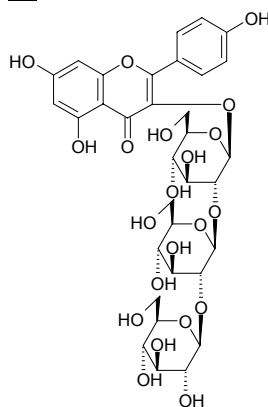
$C_{33}H_{40}O_{21}$  (772.67). Source: OU ZHOU YOU CAI *Brassica napus* (seed). Ref: 5289.

**12096 Kaempferol-3-O-sophoroside-7-O-(2-O-E-sinapoyl-β-glucopyranoside)**

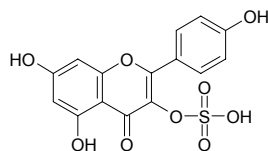
$C_{44}H_{50}O_{25}$  (978.87). Source: OU ZHOU YOU CAI *Brassica napus* (seed). Ref: 5289.

**12097 Kaempferol-3-sophorotrioside**

$C_{33}H_{40}O_{21}$  (772.67). Pharm: Hepatoprotective (*in vitro*, mus primary cultured hepatocytes, inhibits liver cytotoxicity induced by GalN,  $100\mu\text{mol/L}$ ,  $InRt = (27.0 \pm 3.6)\%$ ,  $p < 0.01$ ). Source: WAN DOU *Pisum sativum* (young seedpot). Ref: 4110.

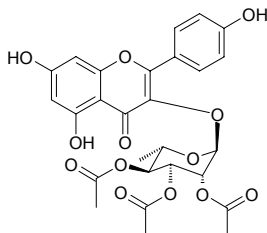
**12098 Kaempferol-3-sulphate**

$C_{15}H_{10}O_9S$  (366.31). Source: ZHU ZONG CAO *Adiantum capillus-veneris*. Ref: 660.

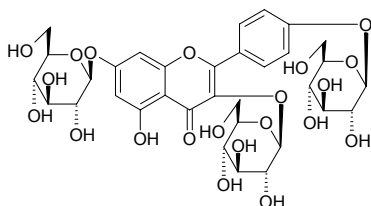


**12099 Kaempferol-3-O-(2,3,4-tri-O-acetyl- $\alpha$ -L-rhamnopyranoside)**

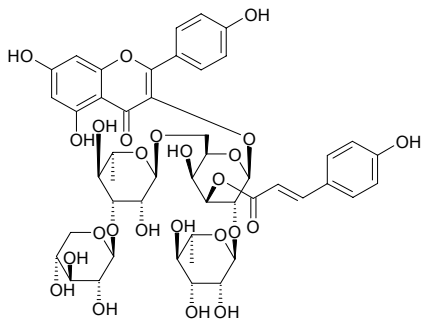
$C_{27}H_{26}O_{13}$  (558.50). **Pharm:** CYP3A4 inhibitor ( $IC_{50}$  = 14.4  $\mu$ mol/L, control Ketoconazole,  $IC_{50}$  = 0.245  $\mu$ mol/L); CYP2D6 inhibitor ( $IC_{50}$  = 43.3  $\mu$ mol/L, control Quinidine,  $IC_{50}$  = 0.078  $\mu$ mol/L). **Source:** FANG XIANG JIANG *Zingiber aromaticum* (rhizome: yield = 0.00013%dw). **Ref:** 4669.

**12100 Kaempferol-3,7,4'-tri-O- $\beta$ -glucoside**

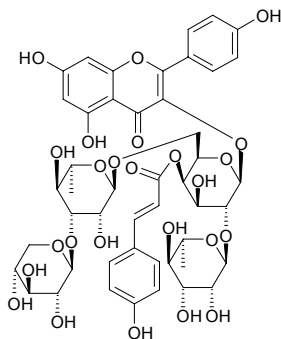
$C_{33}H_{40}O_{21}$  (772.67). Amorphous yellow powder. **Source:** *Warburgia ugandensis* (leaf). **Ref:** 3470.

**12101 Kaempferol-3-O- $\{\beta$ -D-xylopyranosyl(1 $\rightarrow$ 3)- $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 6) $\}$ [ $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 2)]- $\beta$ -D-3-trans-p-coumaroylgalactopyranoside**

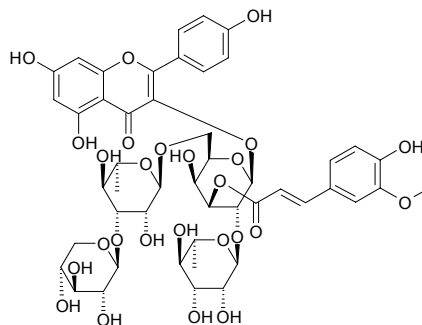
$C_{47}H_{54}O_{25}$  (1018.94).  $[\alpha]_D^{20}$  = -94.4° ( $c$  = 0.09, MeOH). **Source:** SHAN YANG HUANG QI *Astragalus caprinus* (leaf). **Ref:** 4215.

**12102 Kaempferol-3-O- $\{\beta$ -D-xylopyranosyl(1 $\rightarrow$ 3)- $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 6) $\}$ [ $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 2)]- $\beta$ -D-4-trans-p-coumaroylgalactopyranoside**

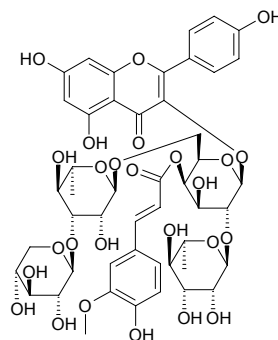
$C_{47}H_{54}O_{25}$  (1018.94).  $[\alpha]_D^{20}$  = +149.0° ( $c$  = 0.50, MeOH). **Source:** SHAN YANG HUANG QI *Astragalus caprinus* (leaf). **Ref:** 4215.

**12103 Kaempferol-3-O- $\{\beta$ -D-xylopyranosyl(1 $\rightarrow$ 3)- $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 6) $\}$ [ $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 2)]- $\beta$ -D-3-trans-feruloylgalactopyranoside**

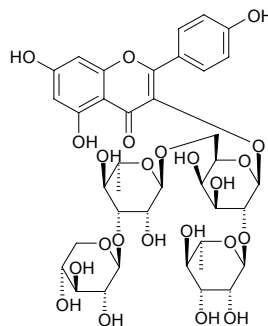
$C_{48}H_{56}O_{26}$  (1048.97).  $[\alpha]_D^{20}$  = -87.5° ( $c$  = 0.40, MeOH). **Source:** SHAN YANG HUANG QI *Astragalus caprinus* (leaf). **Ref:** 4215.

**12104 Kaempferol-3-O- $\{\beta$ -D-xylopyranosyl(1 $\rightarrow$ 3)- $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 6) $\}$ [ $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 2)]- $\beta$ -D-4-trans-feruloylgalactopyranoside**

$C_{48}H_{56}O_{26}$  (1048.97).  $[\alpha]_D^{20}$  = -146.6° ( $c$  = 0.09, MeOH). **Source:** SHAN YANG HUANG QI *Astragalus caprinus* (leaf). **Ref:** 4215.

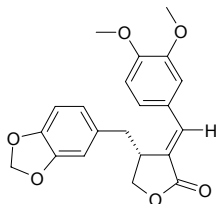
**12105 Kaempferol-3-O- $\{\beta$ -D-xylopyranosyl(1 $\rightarrow$ 3)- $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 6) $\}$ [ $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 2)]- $\beta$ -D-galactopyranoside**

$C_{38}H_{48}O_{23}$  (872.79).  $[\alpha]_D^{20}$  = -97.3° ( $c$  = 0.38, MeOH). **Source:** SHAN YANG HUANG QI *Astragalus caprinus* (leaf). **Ref:** 4215.

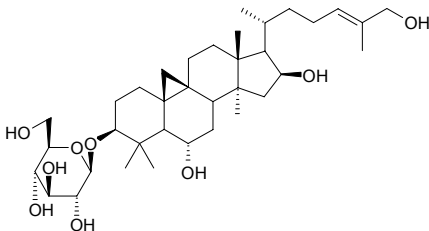


**12106 Kaerophyllin**

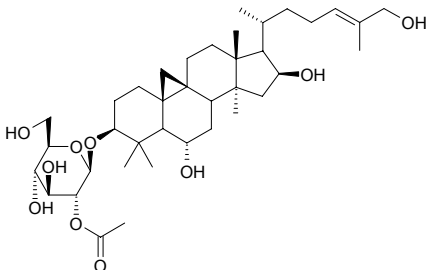
Chaerophyllin [75590-33-9]  $C_{21}H_{20}O_6$  (368.39). **Pharm:** Cytotoxic (hmn peripheral blood T cells, dose = 2.0  $\mu\text{g}/\text{mL}$ , T cell survival rate = 71%); immunosuppressant (inhibits IL-2 secretion costimulated by CD28, dose = 2.0  $\mu\text{g}/\text{mL}$ , InRt = 49%). **Source:** HONG CHAI HU *Bupleurum scorzonrifolium* (root). **Ref:** 3498.

**12107 Kahircoside II**

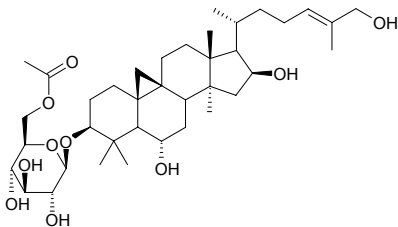
9 $\beta$ ,19-Cyclolanost-24E-ene-3 $\beta$ ,6 $\alpha$ ,16 $\beta$ ,27-tetraol-3-O- $\beta$ -D-glucopyranoside  $C_{36}H_{60}O_9$  (636.87). Colorless needles, mp 118°C,  $[\alpha]_D^{25} = +12.3^\circ$  ( $c = 0.06$ , MeOH). **Pharm:** Cytotoxic (A2780,  $IC_{50} = 23.0 \mu\text{g}/\text{mL}$ , weak activity). **Source:** KAI LUO HUANG QI *Astragalus kahircicus* (aerial parts). **Ref:** 3873.

**12108 Kahircoside III**

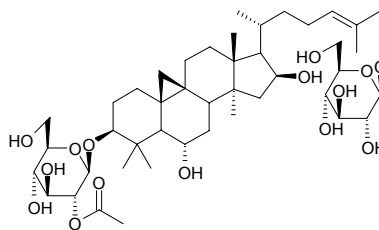
9 $\beta$ ,19-Cyclolanost-24E-ene-3 $\beta$ ,6 $\alpha$ ,16 $\beta$ ,27-tetraol-3-O-(2'-O-acetyl)- $\beta$ -D-glucopyranoside  $C_{38}H_{62}O_{10}$  (678.91). Colorless needles, mp 140°C,  $[\alpha]_D^{25} = +49^\circ$  ( $c = 0.065$ , MeOH). **Pharm:** Cytotoxic (A2780,  $IC_{50} = 16.0 \mu\text{g}/\text{mL}$ , weak activity). **Source:** KAI LUO HUANG QI *Astragalus kahircicus* (aerial parts). **Ref:** 3873.

**12109 Kahircoside IV**

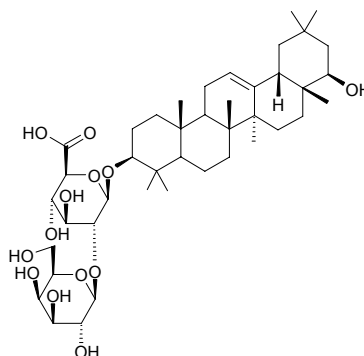
9 $\beta$ ,19-Cyclolanost-24E-ene-3 $\beta$ ,6 $\alpha$ ,16 $\beta$ ,27-tetraol-3-O-(6'-O-acetyl)- $\beta$ -D-glucopyranoside  $C_{38}H_{62}O_{10}$  (678.91). Colorless needles, mp 165°C,  $[\alpha]_D^{25} = +175^\circ$  ( $c = 0.02$ , MeOH). **Pharm:** Cytotoxic (A2780,  $IC_{50} = 17.0 \mu\text{g}/\text{mL}$ , weak activity). **Source:** KAI LUO HUANG QI *Astragalus kahircicus* (aerial parts). **Ref:** 3873.

**12110 Kahircoside V**

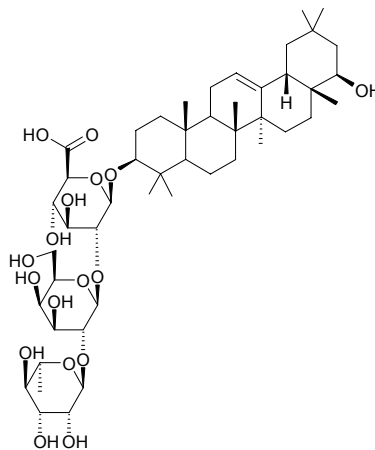
9 $\beta$ ,19-Cyclolanost-24E-ene-3 $\beta$ ,6 $\alpha$ ,16 $\beta$ ,27-tetraol-3-O- $\beta$ -D-glucopyranosyl-27-O- $\beta$ -D-glucopyranoside  $C_{44}H_{72}O_{15}$  (841.06). Colorless needles, mp 157–158°C,  $[\alpha]_D^{25} = +86.7^\circ$  ( $c = 0.015$ , MeOH). **Pharm:** Cytotoxic (A2780,  $IC_{50} = 17.0 \mu\text{g}/\text{mL}$ , weak activity). **Source:** KAI LUO HUANG QI *Astragalus kahircicus* (aerial parts). **Ref:** 3873.

**12111 Kaikasaponin I**

$C_{42}H_{68}O_{13}$  (781.00). **Source:** HUAI *Sophora japonica*. **Ref:** 660.

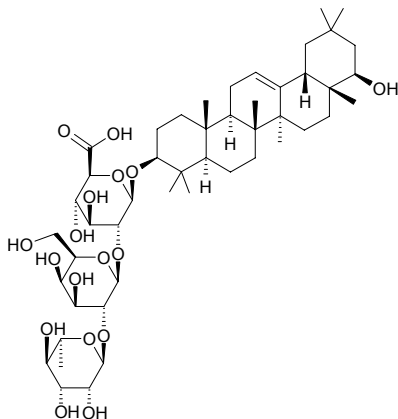
**12112 Kaikasaponin II**

$C_{48}H_{78}O_{17}$  (927.15). **Source:** HUAI *Sophora japonica*. **Ref:** 660.

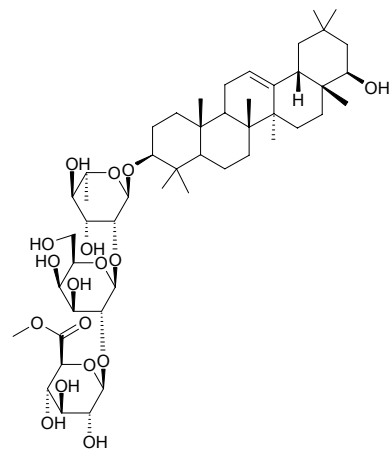


**12113 Kaikasaponin III**

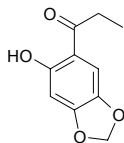
[115330-90-0]  $C_{48}H_{78}O_{17}$  (927.15). Source: GE GEN *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*], HUAI *Sophora japonica*, HUANG HUA DI DING *Crotalaria albida*, JI GU CAO *Abrus fruticulosus* [Syn. *Abrus cantoniensis*]. Ref: 718, 1521.

**12114 Kaikasaponin III methyl ester**

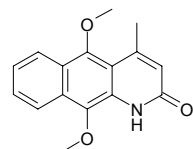
$C_{49}H_{80}O_{17}$  (941.17). Source: XIANG SI ZI *Abrus precatorius*. Ref: 660.

**12115 Kakuol**

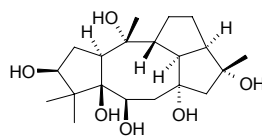
$C_{10}H_{10}O_4$  (194.19). Source: DU HENG *Asarum forbesii*, LIAO XI XIN *Asarum heterotropoides* var. *mandshuricum*. Ref: 660.

**12116 Kalasinamide**

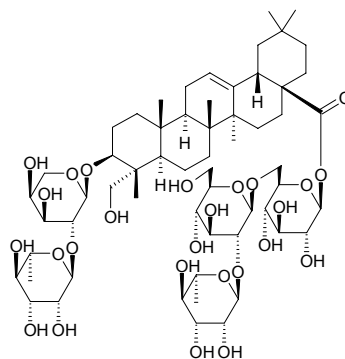
1-Aza-9,10-dimethoxy-4-methyl-2-oxo-1,2-dihydroanthracene  $C_{16}H_{15}NO_3$  (269.30). Orange needles (EtOH- $CH_2Cl_2$ ), mp 233.8~235.5°C. Source: AN LUO *Polyalthia suberosa* (stem). Ref: 3946.

**12117 Kalmanol**

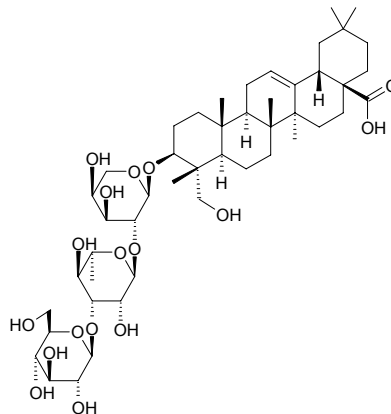
$C_{20}H_{34}O_6$  (370.49). Source: NAO YANG HUA *Rhododendron molle* (flower; yield = 0.00042% $dw^{[4780]}$ ). Ref: 660, 4780.

**12118 Kalopanax saponin C**

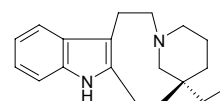
3-O-[ $\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranosyl]-hedragenin-28-[ $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranosyl(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl] ester  $C_{59}H_{96}O_{26}$  (1221.41). White crystals (methanol), mp 226~228°C,  $[\alpha]_D^{14} = +14.2^\circ$  ( $c = 0.005$ , methanol). Source: CI QIU SHU PI *Kalopanax septemlobus*. Ref: 148.

**12119 Kalopanax saponin H**

$C_{47}H_{76}O_{17}$  (913.12). White powder,  $[\alpha]_D^{20} = +8.6^\circ$  ( $c = 0.5$ ,  $H_2O$ ). Source: CI QIU SHU PI *Kalopanax septemlobus*. Ref: 457.

**12120 Kamassine**

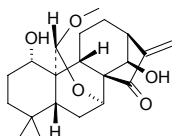
Quebrachamine [14430-17-2]  $C_{19}H_{26}N_2$  (282.43). Crystals (MeOH), mp 147~149°C,  $[\alpha]_D = +98^\circ$  ( $CHCl_3$ ),  $[\alpha]_D = +108.9^\circ$  ( $Me_2CO$ ). Source: LA BA ZHUANG DUO GUO SHU *Pleiocarpa tubicina* (leaf), ZHI LI CHANG CHUN HUA *Vinca erecta*. Ref: 1521.



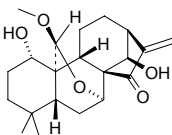


**12121 Kamebacetal A**

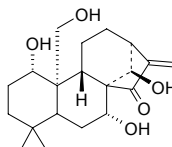
$C_{21}H_{30}O_5$  (362.47). mp 241~243°C,  $[\alpha]_D^{26} = -37.5^\circ$  ( $c = 0.11$ , MeOH). Source: KA MEI XIANG CHA CAI *Isodon kameba*, YIN DI KUAN YE XIANG CHA CAI *Isodon umbrosa* var. *latifolia*. Ref: 4067.

**12122 Kamebacetal B**

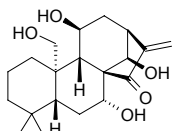
$C_{21}H_{30}O_5$  (362.47). mp 230~232°C,  $[\alpha]_D^{26} = -58^\circ$  ( $c = 0.43$ , MeOH). Source: KA MEI XIANG CHA CAI *Isodon kameba*, YIN DI KUAN YE XIANG CHA CAI *Isodon umbrosa* var. *latifolia*. Ref: 4067.

**12123 Kamebakaurin**

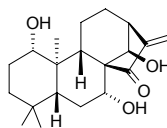
$C_{20}H_{30}O_5$  (350.46). mp 232~234°C,  $[\alpha]_D^{21.5} = -107^\circ$  ( $c = 1.0$ , MeOH). Pharm: Cytotoxic (*in vitro*,  $P_{388}$ ,  $ED_{50} = 0.82\mu\text{g/mL}$ )<sup>[3012]</sup>; anti-inflammatory (specific NF- $\kappa$ B inhibitor of DNA-binding activity of p50 subunit, valuable candidate for intervention in NF- $\kappa$ B-dependent pathological condition such as inflammation)<sup>[4988]</sup>; anti-inflammatory (*in vivo* animal models, induced by carrageenan, oral administration of 20mg/kg resulted in 75% decrease of paw edema volume)<sup>[4988]</sup>; anti-inflammatory (LPS-stimulated RAW264.7 cells, inhibits not only expression of inflammatory NF- $\kappa$ B target genes such as iNOS, COX-2 and TNF- $\alpha$  but also production of PGE<sub>2</sub> and TNF- $\alpha$ )<sup>[4988]</sup>; anti-inflammatory (adjuvant arthritis model, suppresses recruitment of neutrophils, production of TNF- $\alpha$  as well as PGE<sub>2</sub> in pouch exudates induced by carrageenan)<sup>[4988]</sup>. Source: CHANG GUAN XIANG CHA CAI *Rabdosia longituba*, KA MEI XIANG CHA CAI *Isodon kameba*, MAO YE XIANG CHA CAI *Isodon japonica* [Syn. *Rabdosia japonica*], WEI YE XIANG CHA CAI *Rabdosia excisa* (aerial parts: yield = 0.020%dw), YIN DI KUAN YE XIANG CHA CAI *Isodon umbrosa* var. *latifolia*. Ref: 660, 3012, 4067, 4988.

**12124 Kamebakaurinin**

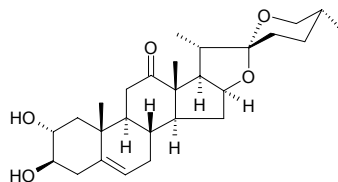
$C_{20}H_{30}O_5$  (350.46). mp 267~269°C,  $[\alpha]_D^{25} = -101^\circ$  ( $c = 0.92$ , MeOH). Source: KA MEI XIANG CHA CAI *Isodon kameba*, YIN DI KUAN YE XIANG CHA CAI *Isodon umbrosa* var. *latifolia*. Ref: 4067.

**12125 Kamebanin**

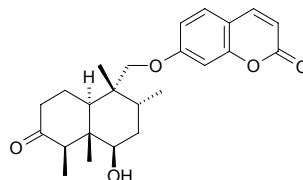
1 $\alpha$ ,7 $\alpha$ ,14 $\beta$ -Trihydroxy-*ent*-kaur-16-en-15-one  $C_{20}H_{30}O_4$  (334.46). mp 266~267°C,  $[\alpha]_D^{19} = -108^\circ$  ( $c = 1.0$ , dioxane). Pharm: Cytotoxic (*in vitro*,  $P_{388}$ ,  $ED_{50} = 0.69\mu\text{g/mL}$ )<sup>[3012]</sup>. Source: KA MEI XIANG CHA CAI *Isodon kameba*, WEI YE XIANG CHA CAI *Rabdosia excisa* (aerial parts: yield = 0.0023%dw), YIN DI KUAN YE XIANG CHA CAI *Isodon umbrosa* var. *latifolia*. Ref: 3012, 4067.

**12126 Kammogenin**

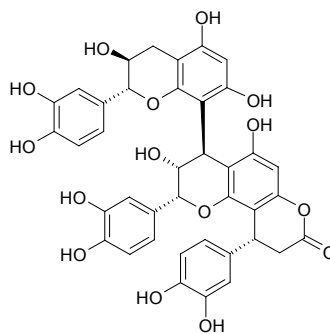
$C_{27}H_{40}O_5$  (444.62). mp 240~241°C. Source: WU CI FAN MA *Agave americana* var. *marginata* [Syn. *Agave americana* var. *variegata*]. Ref: 6.

**12127 Kamolonol**

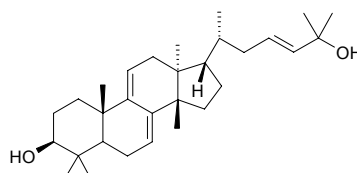
$C_{24}H_{30}O_5$  (398.50). Source: A WEI *Ferula assafoetida*. Ref: 660.

**12128 Kandelin A<sub>1</sub>**

[88903-77-9]  $C_{39}H_{32}O_{15}$  (740.68). Pharm: Tanning agent. Source: QIU QIE SHU *Kandelia candel*. Ref: 658.

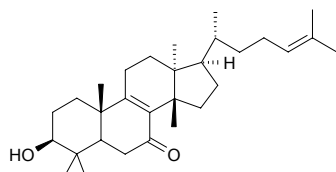
**12129 Kansanol**

$C_{30}H_{48}O_2$  (440.72). Colorless gum,  $[\alpha]_D^{23} = -50.2^\circ$  ( $c = 0.18$ , MeOH)., Source: GAN SUI *Euphorbia kansui* (dried root). Ref: 4690.

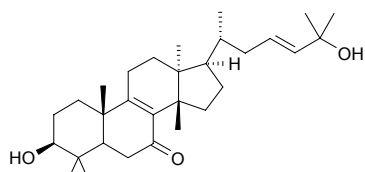


**12130 Kansone**

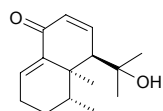
Eupha-8,24-diene-3 $\beta$ -ol-7-one C<sub>30</sub>H<sub>48</sub>O<sub>2</sub> (440.72). Colorless gum,  $[\alpha]_D^{23} = +14.1^\circ$  ( $c = 0.41$ , MeOH). **Pharm:** Cell division arrester (cultured individual *Xenopus laevis* cells at blastular stage, 10 $\mu$ g/mL, >50% cleavage arrest). **Source:** GAN SUI *Euphorbia kansui* (dried root: yield = 0.00034%). **Ref:** 4690.

**12131 Kansenolol**

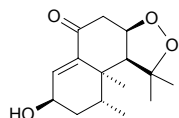
(23*E*)-Eupha-8,23-diene-3 $\beta$ ,25-diol-7-one C<sub>30</sub>H<sub>48</sub>O<sub>3</sub> (456.72). Colorless gum,  $[\alpha]_D^{23} = +14.3^\circ$  ( $c = 0.21$ , MeOH). **Pharm:** Cell division arrester (cultured individual *Xenopus laevis* cells at blastular stage, 10 $\mu$ g/mL, >50% cleavage arrest). **Source:** GAN SUI *Euphorbia kansui* (dried root: yield = 0.00007%). **Ref:** 4690.

**12132 Kanshone A**

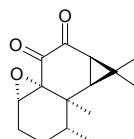
C<sub>15</sub>H<sub>22</sub>O<sub>2</sub> (234.34). **Source:** GAN SONG *Nardostachys chinensis*. **Ref:** 660.

**12133 Kanshone B**

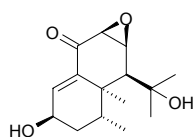
C<sub>15</sub>H<sub>22</sub>O<sub>4</sub> (266.34). **Source:** GAN SONG *Nardostachys chinensis*. **Ref:** 660.

**12134 Kanshone C**

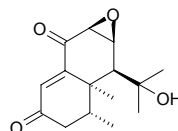
C<sub>15</sub>H<sub>20</sub>O<sub>3</sub> (248.32). **Source:** GAN SONG *Nardostachys chinensis*. **Ref:** 660.

**12135 Kanshone D**

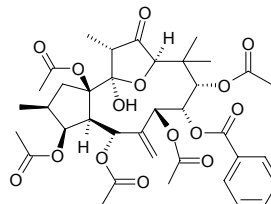
C<sub>15</sub>H<sub>22</sub>O<sub>4</sub> (266.34). **Source:** GAN SONG *Nardostachys chinensis*. **Ref:** 660.

**12136 Kanshone E**

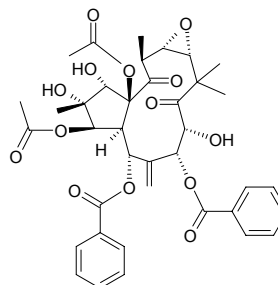
C<sub>15</sub>H<sub>20</sub>O<sub>4</sub> (264.32). **Source:** GAN SONG *Nardostachys chinensis*. **Ref:** 660.

**12137 Kansuinin A**

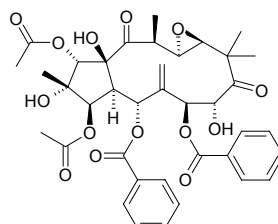
C<sub>37</sub>H<sub>46</sub>O<sub>15</sub> (730.77). **Pharm:** Cytotoxic inactive (*in vitro* animal cap assay to screen for inhibitors of cell division, treatment of cultured individual *Xenopus* cells from the early *Xenopus laevis* embryo at the blastular stage, 50 $\mu$ g/mL)<sup>[4645]</sup>. **Source:** GAN SUI *Euphorbia kansui* (tuberoid: yield = 0.00037%dw<sup>[4645]</sup>; yield = 0.005%dw<sup>[4766]</sup>). **Ref:** 4645, 4766.

**12138 Kansuinin B**

[57685-46-8] C<sub>38</sub>H<sub>42</sub>O<sub>14</sub> (722.75). **Pharm:** Cytotoxic (*in vitro* animal cap assay to screen for inhibitors of cell division, treatment of cultured individual *Xenopus* cells from the early *Xenopus laevis* embryo at the blastular stage, 50 $\mu$ g/mL, cleavage arrest 87%)<sup>[4645]</sup>; toxin. **Source:** GAN SUI *Euphorbia kansui* (tuberoid: yield = 0.00008%dw)<sup>[4645]</sup>. **Ref:** 658, 4645.

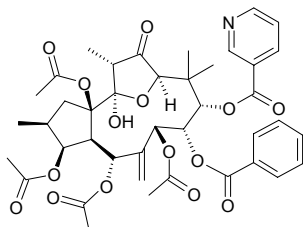
**12139 Kansuinin C**

C<sub>38</sub>H<sub>42</sub>O<sub>14</sub> (722.75). Colorless crystals (MeOH), mp 287~289°C,  $[\alpha]_D^{23} = 37.0^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Cytotoxic inactive (*in vitro* animal cap assay to screen for inhibitors of cell division, treatment of cultured individual *Xenopus* cells from the early *Xenopus laevis* embryo at the blastular stage, 50 $\mu$ g/mL). **Source:** GAN SUI *Euphorbia kansui* (tuberoid: yield = 0.00009%dw). **Ref:** 4645.

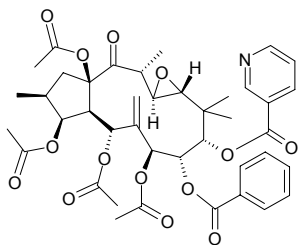


**12140 Kansuinin D**

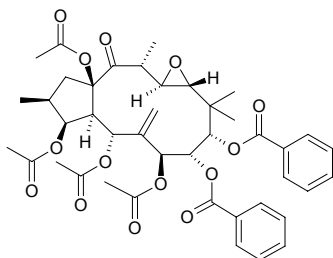
$C_{41}H_{47}NO_{15}$  (793.83). Colorless crystals (MeOH), mp 175–177°C,  $[\alpha]_D^{23} = +76.5^\circ$  ( $c = 0.40$ , MeOH). **Pharm:** Induces cell cleavage arrest inactive (*Xenopus laevis* embryo cells at the blastular stage)<sup>[4368]</sup>. **Source:** GAN SUI *Euphorbia kansui* (tuberoid: yield = 0.001%dw). **Ref:** 4368, 4766.

**12141 Kansuinin E**

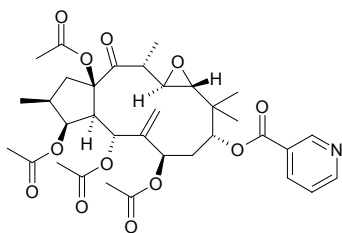
$C_{41}H_{47}NO_{14}$  (777.83). White crystals (MeOH), mp 126–128°C,  $[\alpha]_D^{23} = +43.6^\circ$  ( $c = 0.48$ , MeOH). **Pharm:** Survival effect on fibroblasts that expressed (TrkA is a high-affinity receptor for nerve growth factor)<sup>[4766]</sup>. **Source:** GAN SUI *Euphorbia kansui* (tuberoid: yield = 0.0004%dw). **Ref:** 4368, 4766.

**12142 Kansuinin F**

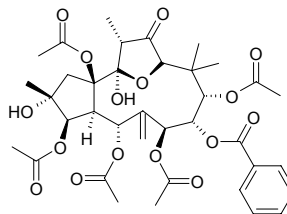
$C_{42}H_{48}O_{14}$  (776.84). Colorless needles (petroleum ether–ethyl acetate), mp 222–225°C,  $[\alpha]_D^{25} = +41.0^\circ$  ( $c = 0.322$ ,  $CHCl_3$ ). **Source:** GAN SUI *Euphorbia kansui* (tuberoid: yield = 0.00015%dw). **Ref:** 4766.

**12143 Kansuinin G**

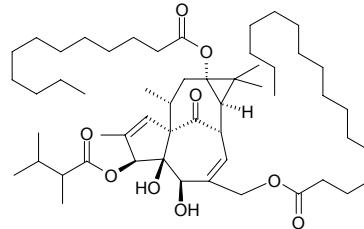
$C_{34}H_{43}NO_{12}$  (657.72). Colorless needles (petroleum ether–ethyl acetate), mp 220–223°C,  $[\alpha]_D^{25} = -107.8^\circ$  ( $c = 0.372$ ,  $CHCl_3$ ). **Source:** GAN SUI *Euphorbia kansui* (tuberoid: yield = 0.00009%dw). **Ref:** 4766.

**12144 Kansuinin H**

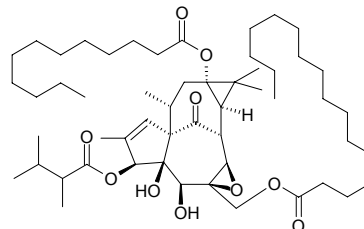
$C_{37}H_{46}O_{16}$  (746.77). Colorless needles (petroleum ether–acetone), mp 206–208°C,  $[\alpha]_D^{25} = +28.4^\circ$  ( $c = 0.081$ ,  $CHCl_3$ ). **Source:** GAN SUI *Euphorbia kansui* (tuberoid: yield = 0.0002%dw). **Ref:** 4766.

**12145 Kansuiphorin A**

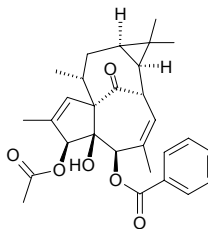
$C_{54}H_{90}O_9$  (883.31). **Pharm:** Antineoplastic. **Source:** GAN SUI *Euphorbia kansui*. **Ref:** 660, 4368.

**12146 Kansuiphorin B**

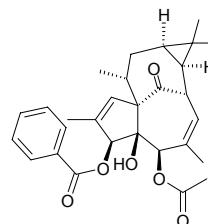
$C_{54}H_{90}O_{10}$  (899.31). **Pharm:** Antineoplastic. **Source:** GAN SUI *Euphorbia kansui*. **Ref:** 660.

**12147 Kansuiphorin C**

$C_{29}H_{34}O_6$  (478.59). Colorless oil. **Source:** GAN SUI *Euphorbia kansui*. **Ref:** 660, 2450.

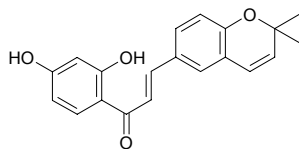
**12148 Kansuiphorin D**

$C_{29}H_{34}O_6$  (478.59). **Source:** GAN SUI *Euphorbia kansui*. **Ref:** 660.

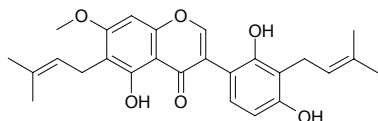


**12149 Kanzonol B**

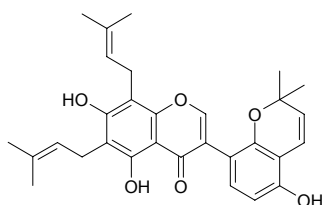
$C_{20}H_{18}O_4$  (322.36). Source: HUANG GAN CAO *Glycyrrhiza kansuensis*.  
Ref: 2431.

**12150 Kanzonol K**

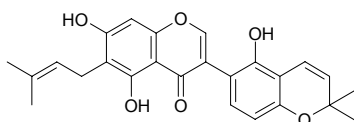
$C_{26}H_{28}O_6$  (436.51). Source: GAN CAO *Glycyrrhiza Uralensis*. Ref: 2431.

**12151 Kanzonol L**

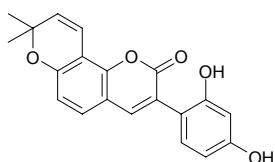
$C_{30}H_{32}O_6$  (488.59). Source: GAN CAO *Glycyrrhiza Uralensis*. Ref: 2431.

**12152 Kanzonol T**

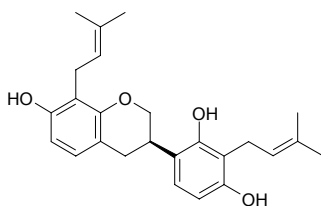
$C_{25}H_{24}O_6$  (420.47). Source: GUANG GUO GAN CAO *Glycyrrhiza glabra*.  
Ref: 2431.

**12153 Kanzonol W**

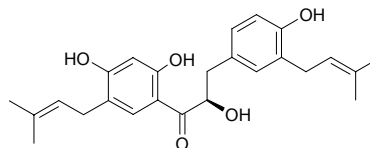
$C_{20}H_{16}O_5$  (336.35). Source: GUANG GUO GAN CAO *Glycyrrhiza glabra*.  
Ref: 2431.

**12154 Kanzonol X**

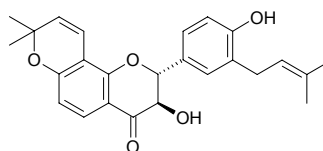
$C_{25}H_{30}O_4$  (394.52). Source: GUANG GUO GAN CAO *Glycyrrhiza glabra*.  
Ref: 2431.

**12155 Kanzonol Y**

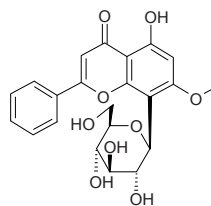
$C_{25}H_{30}O_5$  (410.51). Source: GUANG GUO GAN CAO *Glycyrrhiza glabra*.  
Ref: 2431.

**12156 Kanzonol Z**

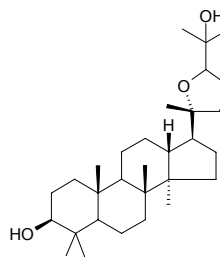
$C_{25}H_{26}O_5$  (406.48). Source: GUANG GUO GAN CAO *Glycyrrhiza glabra*.  
Ref: 2431.

**12157 Kaplanin**

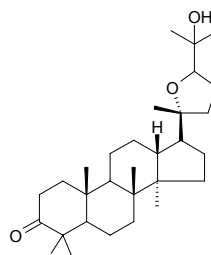
5-Hydroxy-7-methoxy-8-C- $\beta$ -glucosylflavone  $C_{22}H_{22}O_9$  (430.42). Yellow amorphous solid ( $CH_2Cl_2$ -MeOH 20%). Source: *Piper lhotzkyanum* (leaf).  
Ref: 5107.

**12158 Kapurool**

$C_{30}H_{52}O_3$  (460.75). Source: LONG NAO GAO XIANG *Dryobalanops aromatica*. Ref: 660.

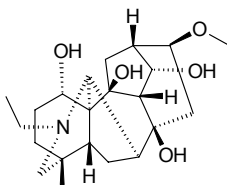
**12159 Kapurone**

$C_{30}H_{50}O_3$  (458.73). Source: LONG NAO GAO XIANG *Dryobalanops aromatica*. Ref: 660.

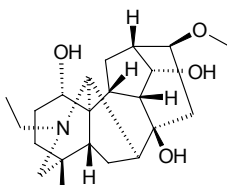


**12160 Karacolidine**

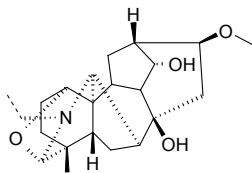
[41655-13-4]  $C_{22}H_{35}NO_5$  (393.53). Source: DUO GEN WU TOU *Aconitum karakolicum*. Ref: 6, 660.

**12161 Karacoline**

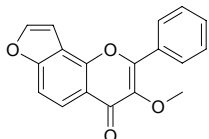
[39089-30-0]  $C_{22}H_{35}NO_4$  (377.53). Source: WU TOU *Aconitum carmichaeli*, FU ZI *Aconitum carmichaeli*. Ref: 6, 239, 660.

**12162 Karakanine**

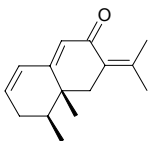
$C_{22}H_{33}NO_4$  (375.51). White needles, mp 193~195°C. Source: ZHONG BA E ZHANG YE FU ZI *Aconitum carmichaeli* cv. Ref: 2502.

**12163 Karanjin**

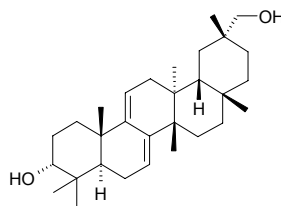
[521-88-0]  $C_{18}H_{12}O_4$  (292.29). mp 158.5°C. Pharm: Antibacterial (*Mycobacterium tuberculosis*). Source: GAN HUA DOU *Fordia cauliflora* (root: content scope of 11 origins = 0.12%~1.48%, mean content = 0.48%)<sup>[5508]</sup>, SHUI LIU DOU *Pongamia pinnata*, MO LI YU TENG *Derris mollis*. Ref: 6, 658, 5508.

**12164 (+)-Karanone**

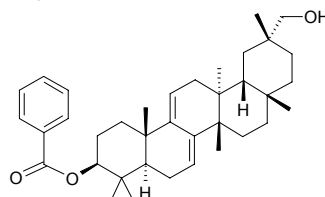
$C_{15}H_{20}O$  (216.33). Source: CHEN XIANG *Aquilaria agallocha*. Ref: 13.

**12165 Karoundiol**

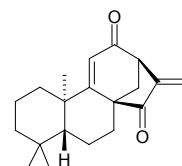
[118117-31-0]  $C_{30}H_{48}O_2$  (440.72). mp 201~203°C. Pharm: Inhibits promotor of cancer (mus, inflammation caused by TPA,  $ID_{50} = 0.4\text{mg/ear}$ ; mus skin cancer caused by DMBA and TPA). Source: GUA LOU *Trichosanthes kirilowii*. Ref: 2, 933, 998, 1041.

**12166 Karoundiol 3-benzoate**

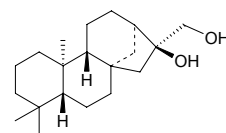
Karoundiol 3-*O*-benzoate [118117-32-1]  $C_{37}H_{52}O_3$  (544.82). mp 119~122°C. Pharm: Inhibits promotor of cancer (mus, inflammation caused by TPA of  $1\mu\text{g/ear}$ ,  $ID_{50} = 0.2\text{mg/ear}$ ). Source: GUA LOU *Trichosanthes kirilowii*. Ref: 933, 1041.

**12167 ent-9(11),16-Kauradiene-12,15-dione**

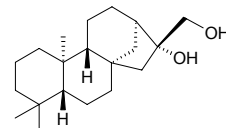
$C_{20}H_{26}O_2$  (298.43). mp 114~116°C,  $[\alpha]_D^{20} = +386.6^\circ$  ( $c = 0.41$ ,  $\text{CHCl}_3$ ). Pharm: Cytotoxic (hmn leukemia cell line HL-60,  $IC_{50} = 0.59\mu\text{mol/L}$ ). Source: XIN XI LAN YE TAI *Jungermannia* sp. Ref: 4390.

**12168 ent-Kauran-16α,17-diol**

[84711-16-0]  $C_{20}H_{34}O_2$  (306.49). mp 174.0~176.5°C,  $[\alpha]_D^{25} = -45.9^\circ$  ( $c = 0.18$ ,  $\text{CHCl}_3$ ). Source: HU BEI BEI MU *Fritillaria hupehensis*, ZI HUA E BEI BEI MU *Fritillaria ebeiensis* var. *purpurea*, ZHE BEI MU *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*]. Ref: 2182.

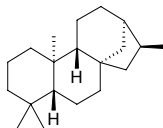
**12169 ent-Kauran-16β,17-diol**

[16836-31-0]  $C_{20}H_{34}O_2$  (306.49). mp 187~190°C,  $[\alpha]_D^{25} = -48.2^\circ$  ( $c = 0.23$ ,  $\text{CHCl}_3$ ). Source: HU BEI BEI MU *Fritillaria hupehensis*, ZHE BEI MU *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*]. Ref: 2182.

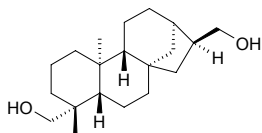


**12170 Kaurane**

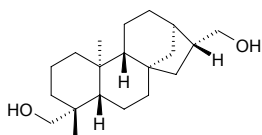
$C_{20}H_{34}$  (274.49). **Pharm:** Anti-inflammatory (NO production inhibitor)<sup>[4415]</sup>. **Source:** SAN JIAO MA DOU LING *Aristolochia triangularis*. **Ref:** 1521, 4415.

**12171 16 $\alpha$ H-17,19-ent-Kauranediol**

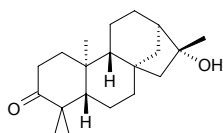
$C_{20}H_{34}O_2$  (306.49). **Pharm:** Antiproliferative and cytotoxic (*in vitro*, L-929,  $GI_{50} = 12.8\mu\text{g/mL}$ ; K562,  $GI_{50} = 13.6\mu\text{g/mL}$ ; HeLa,  $CC_{50} = 35.7\mu\text{g/mL}$ ; control Paclitaxel, L-929,  $GI_{50} = 0.1\mu\text{g/mL}$ ; K562,  $GI_{50} = 0.01\mu\text{g/mL}$ ; HeLa,  $CC_{50} = 0.01\mu\text{g/mL}$ ). **Source:** MU LAN<sup>(3)</sup> *Bruguiera gymnorrhiza* (stem: yield = 0.00011%). **Ref:** 4770.

**12172 16 $\beta$ H-17,19-ent-Kauranediol**

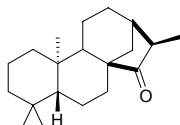
[74365-75-6]  $C_{20}H_{34}O_2$  (306.49). **Source:** SI MIAN MAO JIA MI YE ZE LAN *Eupatorium tinifolium* **Ref:** 1521.

**12173 ent-Kauran-16 $\beta$ -ol-3-one**

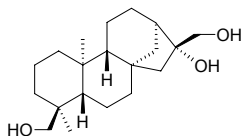
$C_{20}H_{32}O_2$  (304.48). Colorless needles (MeOH), mp 155–160°C,  $[\alpha]_D^{25} = -65.2^\circ$  ( $c = 0.32$ ,  $\text{CHCl}_3$ ). **Source:** HAI QI *Excoecaria agallocha* (root: yield = 0.00063%dw). **Ref:** 4613.

**12174 (16R)-ent-Kauran-15-one**

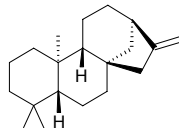
$C_{20}H_{32}O$  (288.48). **Source:** JIE XING YE TAI *Jungermannia truncata*. **Ref:** 4201.

**12175 ent-Kauran-16 $\beta$ ,17,18-triol**

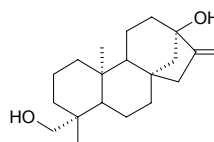
$C_{20}H_{34}O_3$  (322.49). **Source:** XIAN GENG XI XIAN *Siegesbeckia orientalis* var. *pubescens* [Syn. *Siegesbeckia pubescens*]. **Ref:** 660.

**12176 Kaurene**

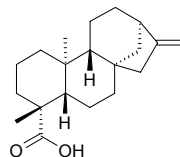
Podocarprene  $C_{20}H_{32}$  (272.48). mp (+) 49°C, (–) 50°C, (±) 44–47°C. **Source:** LUO HAN SONG YE *Podocarpus macrophyllus*, LIU SHAN *Cryptomeria fortunei*. **Ref:** 6.

**12177 16-ent-Kaurene-13,19-diol**

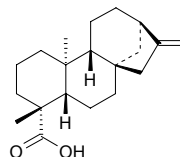
$C_{20}H_{32}O_2$  (304.48). **Pharm:** Antiproliferative and cytotoxic (*in vitro*, L-929,  $GI_{50} = 50\mu\text{g/mL}$ ; K562,  $GI_{50} = 50\mu\text{g/mL}$ ; HeLa,  $CC_{50} = 50\mu\text{g/mL}$ ; control Paclitaxel, L-929,  $GI_{50} = 0.1\mu\text{g/mL}$ ; K562,  $GI_{50} = 0.01\mu\text{g/mL}$ ; HeLa,  $CC_{50} = 0.01\mu\text{g/mL}$ ). **Source:** MU LAN<sup>(3)</sup> *Bruguiera gymnorrhiza* (stem: yield = 0.00012%). **Ref:** 4770.

**12178 L-Kaur-16-en-19-oic acid**

Kaurenoic acid; Cunabic acid [6730-83-2]  $C_{20}H_{30}O_2$  (302.46). Colorless crystals, mp 171–172°C,  $[\alpha]_D^{20} = -109.6^\circ$  ( $c = 1.0$ ,  $\text{CHCl}_3$ ); mp 179–181°C; white cubic crystals, mp 176–178 °C,  $[\alpha]_D^{25} = -97.0^\circ$  ( $c = 0.55$ ,  $\text{CHCl}_3$ ). **Pharm:** Platelet aggregation selected inhibitor (washed rabbit platelets, 200 $\mu\text{mol/L}$ : 100 $\mu\text{mol/L}$  AA induced, InRt = 24.8%; 10 $\mu\text{g/mL}$  collagen induced, InRt = 100%; 1ng/mL PAF induced, InRt = 12.6%; 0.05U/mL thrombin induced, InRt = 5.6%)<sup>[4654]</sup>; antioxidant (inhibits superoxide anion generation, fMLP/CB,  $IC_{50} = (96.28 \pm 4.32)\mu\text{g/mL}$ ,  $p < 0.001$ , control DPI,  $IC_{50} = (0.13 \pm 0.06)\mu\text{g/mL}$ ,  $p < 0.001$ )<sup>[4950]</sup>; COX-1 inhibitor (*in vitro*,  $IC_{50} = 0.15\text{ mmol/L}$ )<sup>[4957]</sup>;  $\text{Na}^+$ ,  $\text{K}^+$ -ATP inhibitor (crude enzyme  $\text{Na}^+$ ,  $\text{K}^+$ -ATPase from rat brain,  $IC_{50} = 22\mu\text{mol/L}$ )<sup>[5404]</sup>. **Source:** TU DANG GUI *Aralia cordata*, FAN LI ZHI *Annona squamosa* (stem: 2.00%fw)<sup>[4654]</sup>, CI SAN JIA *Acanthopanax trifoliatum* (stem cortex), GAO SHAN HUO RONG CAO *Leontopodium alpinum* (root), GUANG YE BA DOU *Croton oblongifolius* [Syn. *Croton laevigatus*]. **Ref:** 6, 4654, 4950, 4957, 5037, 5404.

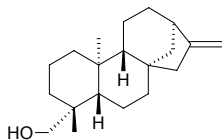
**12179 ent-Kaur-16-en-19-oic acid**

$C_{20}H_{30}O_2$  (302.46). **Pharm:** Cytotoxic inactive (Lu1, Col2, KB, LNCaP, hTERT-RPE1, HUVEC; control Taxol,  $ED_{50} = 0.002\mu\text{g/mL}$ , 0.003 $\mu\text{g/mL}$ , 0.0005 $\mu\text{g/mL}$ , 0.001 $\mu\text{g/mL}$ , 0.004 $\mu\text{g/mL}$ , 0.008 $\mu\text{g/mL}$ , respectively). **Source:** *Parinari sprucei* (leaf). **Ref:** 4991.

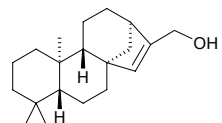


**12180 (-)-Kaur-16-en-19-ol**

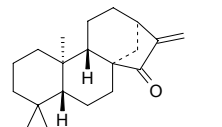
16-*ent*-Kaur-19-ol C<sub>20</sub>H<sub>32</sub>O (288.48). White solid, mp 133~134°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -51.6° (*c* = 1.0, CHCl<sub>3</sub>). **Pharm:** Antiproliferative and cytotoxic (*in vitro*, L-929, GI<sub>50</sub> = 18.2µg/mL; K562, GI<sub>50</sub> = 6.80µg/mL; HeLa, CC<sub>50</sub> = 32.8µg/mL; control Paclitaxel, L-929, GI<sub>50</sub> = 0.1µg/mL; K562, GI<sub>50</sub> = 0.01µg/mL; HeLa, CC<sub>50</sub> = 0.01µg/mL)<sup>[4770]</sup>; Na<sup>+</sup>,K<sup>+</sup>-ATP inhibitor (crude enzyme Na<sup>+</sup>,K<sup>+</sup>-ATPase from rat brain, IC<sub>50</sub> = 500µmol/L)<sup>[5404]</sup>. **Source:** GUANG YE BA DOU *Croton oblongifolius* [Syn. *Croton laevigatus*] (semi-synthetic derivative), MU LAN<sup>(3)</sup> *Bruguiera gymnorrhiza* (stem: yield = 0.00016%). **Ref:** 4770, 5404.

**12181 *ent*-Kaur-15-en-17-ol**

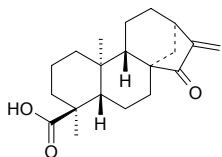
[14696-33-4] C<sub>20</sub>H<sub>32</sub>O (288.48). mp 136~137°C. **Source:** AN HUI BEI MU *Fritillaria anhuiensis*, ZHE BEI MU *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*]. **Ref:** 660, 2182.

**12182 *ent*-16-Kauren-15-one**

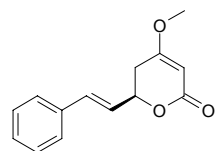
C<sub>20</sub>H<sub>30</sub>O (286.46). **Source:** JIE XING YE TAI *Jungmannia truncata*. **Ref:** 4201.

**12183 *ent*-Kaur-16-en-15-one 18-oic acid**

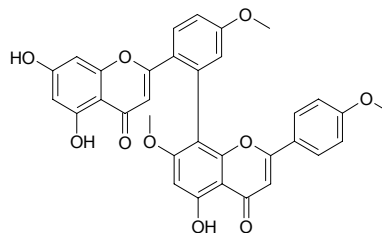
C<sub>20</sub>H<sub>28</sub>O<sub>3</sub> (316.44). **Source:** DONG JIN BA DOU *Croton tonkinensis* (leaf). **Ref:** 4444.

**12184 Kawain**

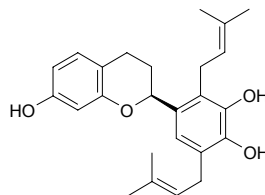
[500-64-1] C<sub>14</sub>H<sub>14</sub>O<sub>3</sub> (230.27). **Pharm:** Antifungal; anti-inflammatory; antispasmodic; detumescent; local anesthetic. **Source:** KA WA HU JIAO *Piper methysticum*. **Ref:** 658.

**12185 Kayaflavone**

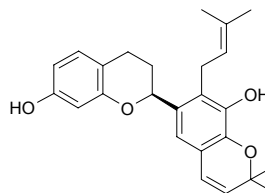
[481-45-8] C<sub>33</sub>H<sub>24</sub>O<sub>10</sub> (580.55). mp 335°C (dec). **Source:** LIU SHAN *Cryptomeria fortunei*. **Ref:** 6.

**12186 Kazinol A**

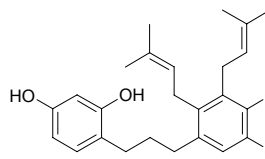
C<sub>25</sub>H<sub>30</sub>O<sub>4</sub> (394.52). **Source:** GOU SHU BAI PI *Broussonetia papyrifera*. **Ref:** 660.

**12187 Kazinol B**

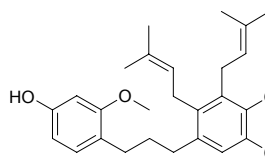
C<sub>25</sub>H<sub>28</sub>O<sub>4</sub> (392.50). **Source:** GOU SHU BAI PI *Broussonetia papyrifera*. **Ref:** 660.

**12188 Kazinol F**

C<sub>25</sub>H<sub>32</sub>O<sub>4</sub> (396.53). Colorless needles, mp 108~109°C. **Pharm:** Cytotoxic (*in vitro*, MTT Method, A549, ED<sub>50</sub> > 10µg/mL; HCT8, ED<sub>50</sub> > 10µg/mL; KB, ED<sub>50</sub> > 10µg/mL). **Source:** XIAO GOU SHU *Broussonetia kazinoki* (leaf). **Ref:** 3085.

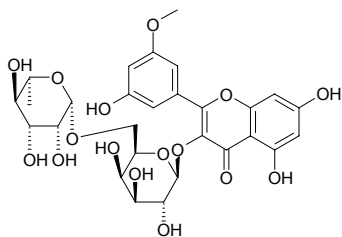
**12189 Kazinol J**

C<sub>26</sub>H<sub>34</sub>O<sub>4</sub> (410.56). Colorless needles. **Pharm:** Cytotoxic (*in vitro*, MTT Method, A549, ED<sub>50</sub> > 10µg/mL; HCT8, ED<sub>50</sub> > 10µg/mL; KB, ED<sub>50</sub> > 10µg/mL). **Source:** XIAO GOU SHU *Broussonetia kazinoki* (leaf). **Ref:** 3085.

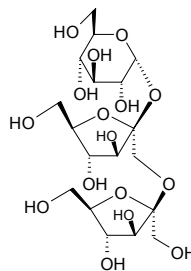


**12190 Keioside**

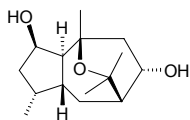
[53584-69-3] C<sub>28</sub>H<sub>32</sub>O<sub>16</sub> (624.56). mp 183~186°C. Source: LING LAN *Convallaria keiskei* [Syn. *Convallaria majalis*]. Ref: 6.

**12195 1-Kestose**

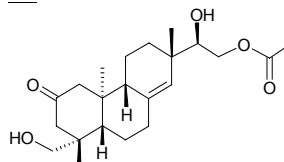
[470-69-9] C<sub>18</sub>H<sub>32</sub>O<sub>16</sub> (504.45). Source: GE CONG *Allium victorialis*. Ref: 6.

**12191 Kessoglycol**

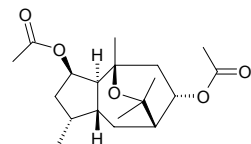
[6894-57-1] C<sub>15</sub>H<sub>26</sub>O<sub>3</sub> (254.37). mp 128°C. Source: KUO YE XIE CAO *Valeriana officinalis* var. *latifolia*. Ref: 6.

**12196 2-Keto-16-acetyl-kirenol**

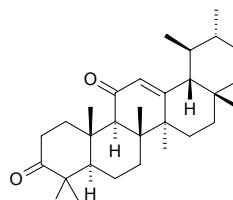
C<sub>22</sub>H<sub>34</sub>O<sub>5</sub> (378.51). White crystals, mp 223~224°C. Source: XIAN GENG XI XIAN *Siegesbeckia orientalis* var. *pubescens* [Syn. *Siegesbeckia pubescens*]. Ref: 800.

**12192 Kessoglycol diacetate**

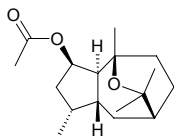
C<sub>19</sub>H<sub>30</sub>O<sub>5</sub> (338.45). mp 117°C. Source: KUO YE XIE CAO *Valeriana officinalis* var. *latifolia*. Ref: 6.

**12197 11-Keto-α-amyrenone**

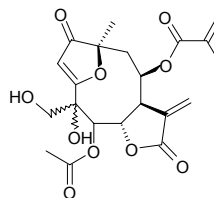
C<sub>30</sub>H<sub>46</sub>O<sub>2</sub> (438.70). Source: RU XIANG *Boswellia carterii*. Ref: 660.

**12193 Kessyl acetate**

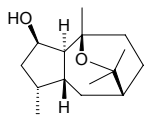
C<sub>17</sub>H<sub>28</sub>O<sub>3</sub> (280.41). mp 60~61°C. Source: KUO YE XIE CAO *Valeriana officinalis* var. *latifolia*. Ref: 6.

**12198 1-Keto-3,10-epoxy-8β-O-methacryloyl-4,15-dihydroxy-5-acetoxy-2,11-germacradiene,6α,12-olide**

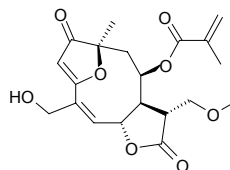
C<sub>21</sub>H<sub>24</sub>O<sub>10</sub> (436.42). Source: *Viguiera eriophora* ssp. *eriophora* (aerial parts). Ref: 5090.

**12194 Kessyl alcohol**

[3321-65-1] C<sub>15</sub>H<sub>26</sub>O<sub>2</sub> (238.37). mp 85°C. Source: KUO YE XIE CAO *Valeriana officinalis* var. *latifolia*. Ref: 6.

**12199 1-Keto-3,10-epoxy-11α-methoxymethyl-8β-O-methacryloyl-15-hydroxy-2,4-germacradiene,6α,12-olide**

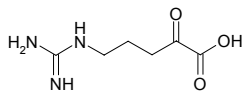
C<sub>20</sub>H<sub>24</sub>O<sub>8</sub> (392.41). Source: *Viguiera eriophora* ssp. *eriophora* (aerial parts). Ref: 5090.



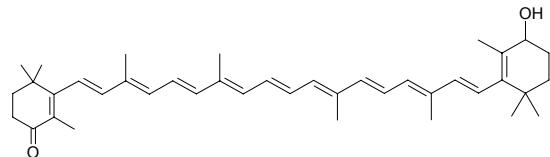


**12200  $\alpha$ -Keto- $\delta$ -guanidino-valeric acid**

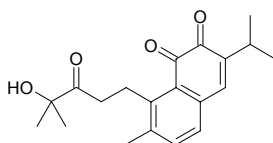
[3715-10-4] C<sub>6</sub>H<sub>11</sub>N<sub>3</sub>O<sub>3</sub> (173.17). Source: XI SHUAI *Gryllulus chinensis*. Ref: 6.

**12201 4-Keto-4'-hydroxy- $\beta$ -carotene**

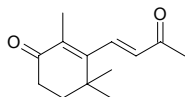
C<sub>40</sub>H<sub>54</sub>O<sub>2</sub> (566.88). Source: JIN YU *Carassius auratus*. Ref: 6.

**12202 3-Keto-4-hydroxysaprorthoquinone**

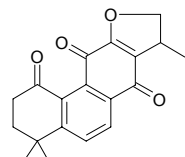
C<sub>20</sub>H<sub>24</sub>O<sub>4</sub> (328.41). Red syrup. Pharm: Cytotoxic (*in vitro*, HL-60, IC<sub>50</sub> = 4.6  $\mu$ mol/L; SGC7901, IC<sub>50</sub> = 0.2  $\mu$ mol/L; MKN28, IC<sub>50</sub> = 0.3  $\mu$ mol/L). Source: HONG GEN CAO *Salvia prionitis* (root: yield = 0.00030%dw). Ref: 4635.

**12203 3-Keto- $\beta$ -ionone**

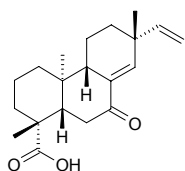
C<sub>13</sub>H<sub>18</sub>O<sub>2</sub> (206.29). Source: CHA YE *Camellia sinensis* [Syn. *Thea sinensis*]. Ref: 660.

**12204 1-Keto-isocryptotanshinone**

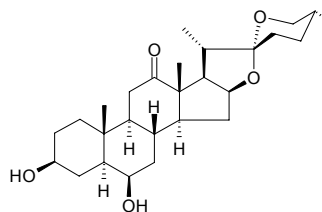
C<sub>19</sub>H<sub>18</sub>O<sub>4</sub> (310.35). Source: DAN SHEN *Salvia miltiorrhiza*. Ref: 660.

**12205 7-Keto-L-pimara-8(14),15-dien-19-oic acid**

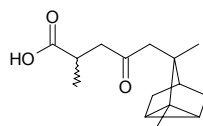
C<sub>20</sub>H<sub>28</sub>O<sub>3</sub> (316.44). mp 241–245°C. Source: TU DANG GUI *Aralia cordata*. Ref: 6.

**12206 12-Ketoporrigenin**

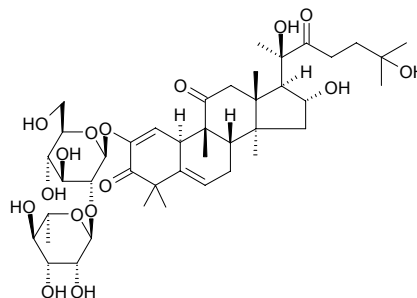
C<sub>27</sub>H<sub>42</sub>O<sub>5</sub> (426.63). Pharm: Cytotoxic (inhibits cancer cell proliferation, *in vitro*). Source: JIU CONG *Allium porrum*. Ref: 2165.

**12207 Ketosantallic acid**

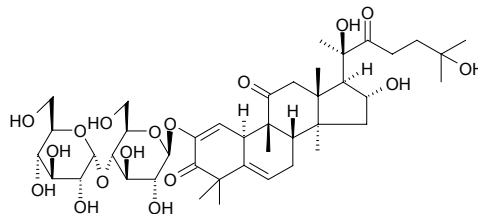
C<sub>15</sub>H<sub>22</sub>O<sub>3</sub> (250.34). Source: TAN XIANG *Santalum album*. Ref: 660.

**12208 Khekadaengoside A**

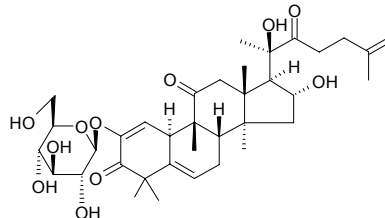
Cucurbitacin L 2-*O*- $\alpha$ -rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -glucopyranoside C<sub>42</sub>H<sub>64</sub>O<sub>16</sub> (824.97). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>23</sup> = -109.4° (*c* = 3.1, MeOH). Source: SAN YING JIAN GUA LOU *Trichosanthes tricuspidata*. Ref: 1982.

**12209 Khekadaengoside B**

Cucurbitacin L 2-*O*- $\alpha$ -glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -glucopyranoside C<sub>42</sub>H<sub>64</sub>O<sub>17</sub> (840.97). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>23</sup> = -37.0° (*c* = 2.7, MeOH). Source: SAN YING JIAN GUA LOU *Trichosanthes tricuspidata*. Ref: 1982.

**12210 Khekadaengoside C**

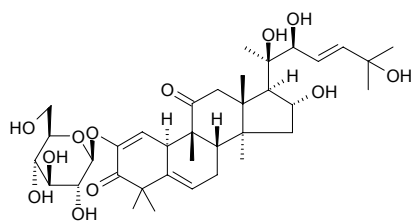
C<sub>36</sub>H<sub>52</sub>O<sub>11</sub> (660.81). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>23</sup> = -42.3° (*c* = 4.9, MeOH). Source: SAN YING JIAN GUA LOU *Trichosanthes tricuspidata*. Ref: 1982.



**12211 Khekadaengoside D**

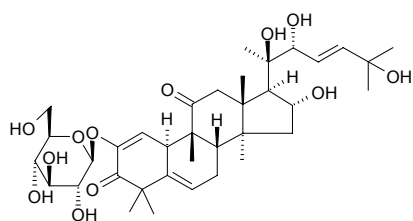
$C_{36}H_{54}O_{12}$  (678.82). Amorphous powder,  $[\alpha]_D^{23} = -71.1^\circ$  ( $c = 0.6$ , MeOH).

Source: SAN YING JIAN GUA LOU *Trichosanthes tricuspidata*. Ref: 1982.

**12212 Khekadaengoside E**

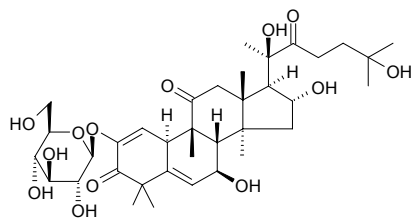
$C_{36}H_{54}O_{12}$  (678.82). Amorphous powder,  $[\alpha]_D^{23} = -43.8^\circ$  ( $c = 3.7$ , MeOH).

Source: SAN YING JIAN GUA LOU *Trichosanthes tricuspidata*. Ref: 1982.

**12213 Khekadaengoside F**

$C_{36}H_{54}O_{13}$  (694.82). Amorphous powder,  $[\alpha]_D^{23} = -12.7^\circ$  ( $c = 0.8$ , MeOH).

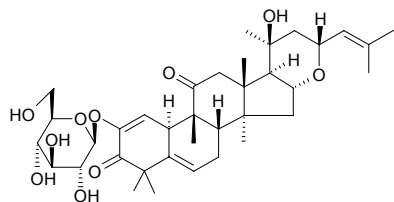
Source: SAN YING JIAN GUA LOU *Trichosanthes tricuspidata*. Ref: 1982.

**12214 Khekadaengoside G**

Aoibaclin;

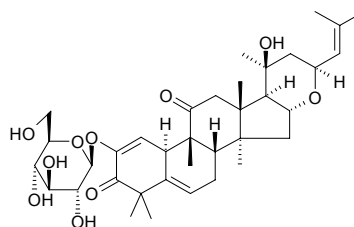
2,20(S)-dihydroxy-16 $\alpha$ ,23(R)-epoxycucurbita-5,24-diene-3,11-dione

2-O- $\beta$ -glucopyranoside  $C_{36}H_{52}O_{10}$  (644.81). Amorphous powder,  $[\alpha]_D^{23} = -31.2^\circ$  ( $c = 2.5$ , MeOH); pale yellow amorphous solid,  $[\alpha]_D = +3.5^\circ$  ( $c = 0.78$ ,  $CHCl_3$ ). Source: FENG GUA *Gymnopetalum integrifolium* (fruit), SAN YING JIAN GUA LOU *Trichosanthes tricuspidata*. Ref: 1982, 4189.

**12215 Khekadaengoside H**

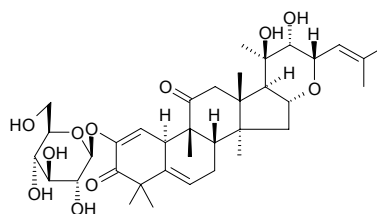
2,20(S)-dihydroxy-16 $\alpha$ ,23(S)-epoxycucurbita-5,24-diene-3,11-dione

2-O- $\beta$ -glucopyranoside  $C_{36}H_{52}O_{10}$  (644.81). Amorphous powder,  $[\alpha]_D^{23} = +5.4^\circ$  ( $c = 1.0$ , MeOH). Source: SAN YING JIAN GUA LOU *Trichosanthes tricuspidata*. Ref: 1982.

**12216 Khekadaengoside I**

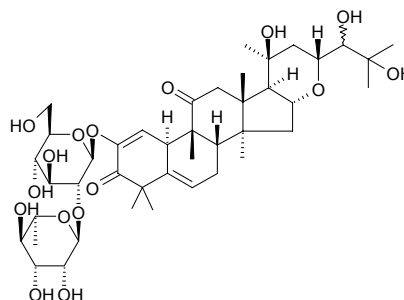
2,20(S),22-trihydroxy-16 $\alpha$ ,23(S)-epoxycucurbita-5,24-diene-3,11-dione

2-O- $\beta$ -glucopyranoside  $C_{36}H_{52}O_{11}$  (660.81). Amorphous powder,  $[\alpha]_D^{23} = -10.5^\circ$  ( $c = 0.5$ , MeOH). Source: SAN YING JIAN GUA LOU *Trichosanthes tricuspidata*. Ref: 1982.

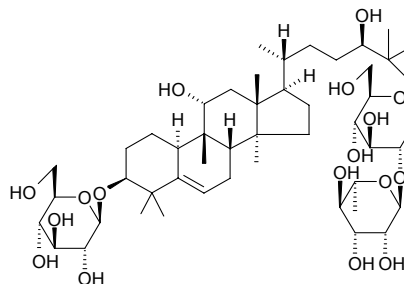
**12217 Khekadaengoside J**

2,20S,24 $\zeta$ -Trihydroxy-16 $\alpha$ ,23R-epoxycucurbita-5-ene-3,11-dione

2-O- $\alpha$ -rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -glucopyranoside  $C_{42}H_{64}O_{16}$  (824.97). Amorphous powder,  $[\alpha]_D^{23} = -38.9^\circ$  ( $c = 1.0$ , MeOH). Source: SAN YING JIAN GUA LOU *Trichosanthes tricuspidata*. Ref: 1982.

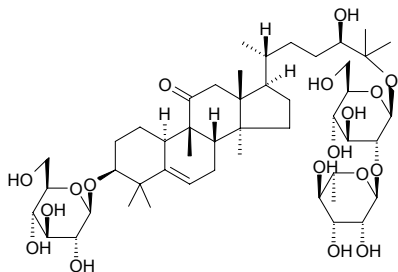
**12218 Khekadaengoside M**

Mogrol 3-O- $\beta$ -glucopyranosyl-26-O- $\alpha$ -rhamnopyranosyl(1 $\rightarrow$ 2)-O- $\beta$ -glucopyranoside  $C_{48}H_{82}O_{18}$  (947.18). Amorphous powder,  $[\alpha]_D^{23} = +6.4^\circ$  ( $c = 1.7$ , MeOH). Source: SAN YING JIAN GUA LOU *Trichosanthes tricuspidata*. Ref: 1982.

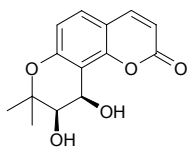


**12219 Khekadaengoside N**

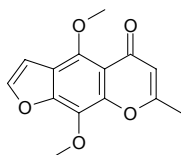
Bryodulcosigenin 3-*O*- $\beta$ -glucopyranosyl-26-*O*- $\alpha$ -rhamnopyranosyl-(1 $\rightarrow$ 2)-*O*- $\beta$ -glucopyranoside C<sub>48</sub>H<sub>80</sub>O<sub>18</sub> (945.16). Amorphous powder,  $[\alpha]_D^{23} = +26.1^\circ$  ( $c = 2.8$ , MeOH). Source: SAN YING JIAN GUA LOU *Trichosanthes tricuspidata*. Ref: 1982.

**12220 Khellactone**

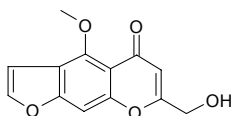
C<sub>14</sub>H<sub>14</sub>O<sub>5</sub> (262.26). Pharm: Antineoplastic (Raji cells, antitumor promotor, *in vivo*, inhibits TPA-induced EBV-EA activation, compound concentration = 500mol ratio/32 pmol TPA: EBV-EA-positive cells = (36.9 $\pm$ 1.2)% (viability > 80%),  $\beta$ -Carotene, EBV-EA-positive cells = (34.3 $\pm$ 1.1)% (viability >80), Curcumin, EBV-EA-positive cells = (22.8 $\pm$ 1.8)% (viability > 80%), compound IC<sub>50</sub> = 341mol ratio/32 pmol TPA,  $\beta$ -Carotene, IC<sub>50</sub> = 400mol ratio/32 pmol TPA, Curcumin, IC<sub>50</sub> = 341mol ratio/32 pmol TPA). Source: LI HUA JU *Citrus tachibana*. Ref: 5048.

**12221 Khellin**

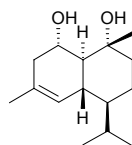
[82-02-0] C<sub>14</sub>H<sub>12</sub>O<sub>5</sub> (260.25). Crystals (methanol), bitter, mp 154–155°C, bp 180–200°C/0.05mmHg. Pharm: Anthelmintic; anti-phage (phage T4, phage M13); antispasmodic; phototoxic (virus); coronary vasodilator; LD<sub>50</sub> (rat, orl) = 80mg/kg. Source: CHI A MI *Ammi visnaga*. Ref: 661.

**12222 Khellol**

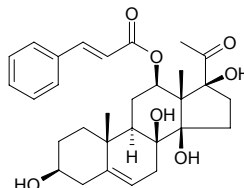
[478-79-5] C<sub>13</sub>H<sub>10</sub>O<sub>5</sub> (246.22). mp 176–178°C. Source: YE SHENG MA *Cimicifuga simplex*. Ref: 6.

**12223 Khusinodiol**

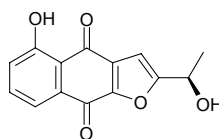
4-Cadinene-2 $\alpha$ ,10 $\alpha$ -diol C<sub>15</sub>H<sub>26</sub>O<sub>2</sub> (238.37). Source: TAI WAN SHAN *Taiwania cryptomerioides* (root). Ref: 4371.

**12224 Kidjolanin**

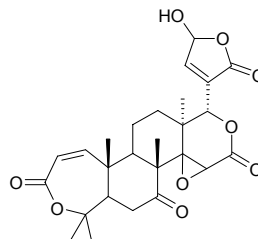
[38395-01-6] C<sub>30</sub>H<sub>38</sub>O<sub>7</sub> (510.63). mp 148–149°C. Source: BAI SHOU WU *Cynanchum bungei*. Ref: 6.

**12225 Kigelinone**

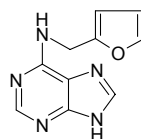
[80931-34-6] C<sub>14</sub>H<sub>10</sub>O<sub>5</sub> (270.25). Pharm: Cytotoxic. Source: DIAO DENG SHU *Kigelia pinnata*, PAO DAN GUO *Crescentia cujete*. Ref: 658.

**12226 Kihadanin B**

[73793-68-7] C<sub>26</sub>H<sub>30</sub>O<sub>9</sub> (486.52). White granular solid, soluble in hot acetone, mp 268–269°C. Source: BAI XIAN PI *Dictamnus dasycarpus*, HUANG BAI *Phellodendron amurense*. Ref: 1521, 4825.

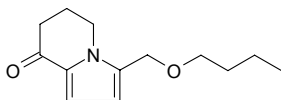
**12227 Kinetin**

6-Furfurylamino-purine C<sub>10</sub>H<sub>9</sub>N<sub>5</sub>O (215.22). mp 266–267°C. Pharm: Plant growth regulator. Source: BAN LAN GEN *Isatis indigotica*. Ref: 6, 658.

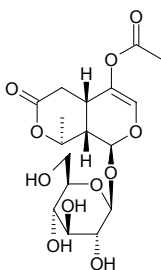


**12228 Kinganone**

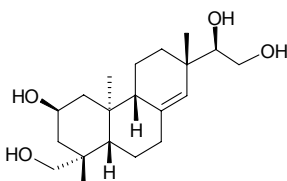
$C_{13}H_{19}NO_2$  (221.30). Yellow oil. **Pharm:** Antifungal (*Penicillium avellaneum* UC-4376, MIA = 100.0 $\mu$ g/disk, control Amphotericin B, MIA = 0.08 $\mu$ g/disk); antibacterial (*Staphylococcus aureus*, MIA = 300.0 $\mu$ g/disk, control Rifampicin, MIA = 1.0 $\mu$ g/disk; *Mycobacterium tuberculosis*, MIA = 200.0 $\mu$ g/disk, Rifampicin, MIA = 1.0 $\mu$ g/disk; *Streptococcus pneumoniae*, MIA = 200.0 $\mu$ g/disk, Rifampicin, MIA = 1.0 $\mu$ g/disk). **Source:** DIAN HUANG JING *Polygonatum kingianum* (dried rhizome). **Ref:** 5484.

**12229 Kingside**

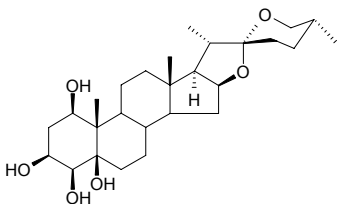
[25406-67-1]  $C_{17}H_{24}O_{11}$  (404.37).  $[\alpha]_D = -91^\circ$  ( $c = 0.7$ , ethanol); tetra-acetate, mp 165~166°C,  $[\alpha]_D = -80^\circ$  ( $c = 1$ , chloroform). **Pharm:** Stomachic. **Source:** MO LUO SHI REN DONG *Lonicera morrowii* (the compound was separated from the plant by I. Souza et al. in 1969)<sup>[5505]</sup>. **Ref:** 658, 5505.

**12230 Kirenol**

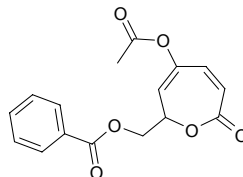
[52659-56-0]  $C_{20}H_{34}O_4$  (338.49). mp 190~192°C. **Source:** XIAN GENG XI XIAN *Siegesbeckia orientalis* var. *pubescens* [Syn. *Siegesbeckia pubescens*], XI XIAN *Siegesbeckia orientalis* (aerial parts: yield = 0.00018%)<sup>[4764]</sup>. **Ref:** 6, 377, 660, 4764.

**12231 Kitigenin**

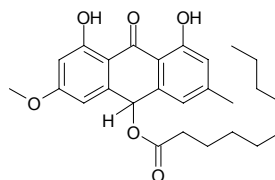
$C_{27}H_{44}O_6$  (464.65). **Source:** JI XIANG CAO *Reineckea carnea*. **Ref:** 660.

**12232 Klaivanolide**

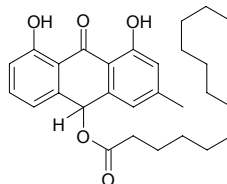
$C_{16}H_{14}O_6$  (302.29). Colorless powder. **Pharm:** Antileishmanial (*in vitro*, inhibits both sensitive and amphotericin B-resistant promastigote formation of *Leishmania donovani*, IC<sub>50</sub> = 1.75mmol/L and 3.12 mmol/L, respectively); antitrypanosomal (*in vitro*, inhibits trypomastigote formation of *Trypanosoma brucei brucei* GVR 35). **Source:** JIA PENG ZI YU PAN *Uvaria klaineana*. **Ref:** 2027.

**12233 Kleinioxanthrone 1**

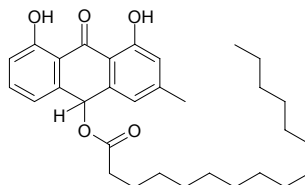
1,8-Dihydroxy-3-methyl-6-methoxy-9(10*H*)-anthracenone-10-oxydecanoate  $C_{26}H_{32}O_6$  (440.54).  $[\alpha]_D^{25} = -5.6^\circ$  ( $c = 1.04$ ,  $CHCl_3$ ). **Source:** KE LEI NI JUE MING *Cassia kleinii* (aerial parts). **Ref:** 5154.

**12234 Kleinioxanthrone 2**

1,8-Dihydroxy-3-methyl-9(10*H*)-anthracenone-10-oxytetradecanoate  $C_{29}H_{38}O_5$  (466.62).  $[\alpha]_D^{25} = -16^\circ$  ( $c = 1.40$ ,  $CHCl_3$ ). **Source:** KE LEI NI JUE MING *Cassia kleinii* (aerial parts). **Ref:** 5154.

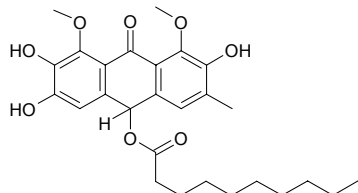
**12235 Kleinioxanthrone 3**

1,8-Dihydroxy-3-methyl-9(10*H*)-anthracenone-10-oxyhexadecanoate  $C_{31}H_{42}O_5$  (494.68). Yellow needles (hexane), mp 177~178°C,  $[\alpha]_D^{25} = -8^\circ$  ( $c = 1.20$ ,  $CHCl_3$ ). **Source:** KE LEI NI JUE MING *Cassia kleinii*. **Ref:** 1993.

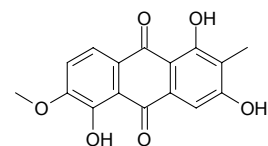


**12236 Kleinioxanthrone 4**

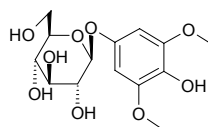
2,6,7-Trihydroxy-1,8-dimethoxy-3-methyl-9(10*H*)-anthracenone-10-oxydecanoate C<sub>27</sub>H<sub>34</sub>O<sub>8</sub> (486.57). Orangeneedles mp 196–198°C,  $[\alpha]_D^{25} = -21.5^\circ$  ( $c = 1.01$ , CHCl<sub>3</sub>). Source: KE LEI NI JUE MING *Cassia kleinii*. Ref: 1993.

**12237 Knoxiadin**

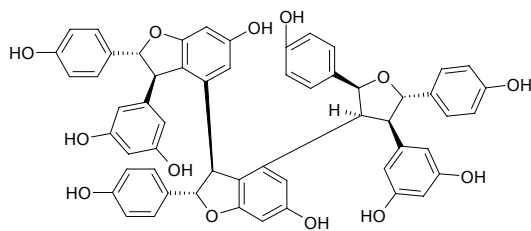
1,3,5-Trihydroxy-2-methyl-6-methoxyanthraquinone C<sub>16</sub>H<sub>12</sub>O<sub>6</sub> (300.27). Yellow acicular crystals, mp > 310°C. Source: HONG YA DA JI *Knoxia valerianoides*. Ref: 35.

**12238 Koaburaside**

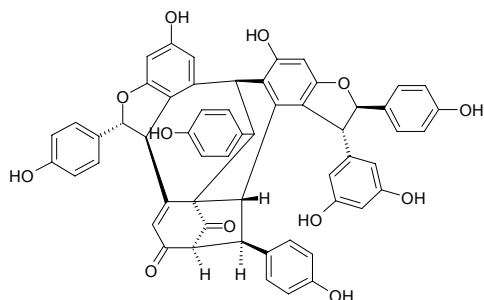
C<sub>14</sub>H<sub>20</sub>O<sub>9</sub> (332.31). Source: DU ZHONG *Eucommia ulmoides*. Ref: 2.

**12239 Kobophenol A**

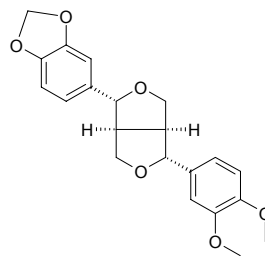
[124027-58-3] C<sub>56</sub>H<sub>44</sub>O<sub>13</sub> (924.97). Pale yellow oil or a morphous solid, mp 233.5–235°C (dec),  $[\alpha]_D^{20} = +227^\circ$  ( $c = 0.17$ , MeOH). Source: SHA ZUAN TAI CAO *Carex kobomugi*, XIA YE JIN JI ER *Caragana stenophylla*. (root). Ref: 2557, 2558.

**12240 Kobophenol B**

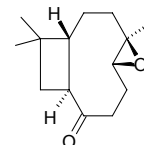
C<sub>56</sub>H<sub>40</sub>O<sub>12</sub> (904.94). Pale-yellow needles. Pharm: Ecdysteroid antagonist (*Drosophila melanogaster* B<sub>11</sub> cell line, IC<sub>50</sub> = 37 μmol/L). Source: XIA CHUI TAI CAO *Carex pendula* (seed). Ref: 5141.

**12241 Kobusin**

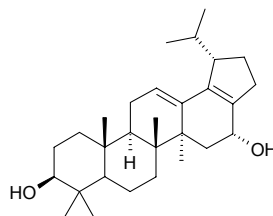
C<sub>21</sub>H<sub>22</sub>O<sub>6</sub> (370.41). Source: ZHOU YE MU LAN *Magnolia praecocissima* (seed). Ref: 4181.

**12242 Kobusone**

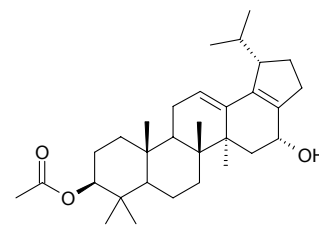
[24173-71-5] C<sub>14</sub>H<sub>22</sub>O<sub>2</sub> (222.33). Source: XIANG FU *Cyperus rotundus*. Ref: 6.

**12243 Koelpinin A**

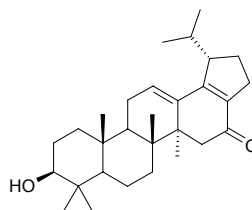
28-Nor-lup-12,17-dien-3β,16α-diol C<sub>29</sub>H<sub>46</sub>O<sub>2</sub> (426.69). mp 235–237°C (MeOH-C<sub>6</sub>H<sub>6</sub>),  $[\alpha]_D^{25} = +21.2^\circ$ . Source: XIE WEI JU *Koelpinia linearis* (aerial parts). Ref: 3912.

**12244 Koelpinin B**

3β-Acetoxy-28-nor-lup-12,17-dien-16α-ol C<sub>31</sub>H<sub>48</sub>O<sub>3</sub> (468.73). mp 222–223°C,  $[\alpha]_D^{25} = +13.8^\circ$ . Source: XIE WEI JU *Koelpinia linearis* (aerial parts). Ref: 3912.

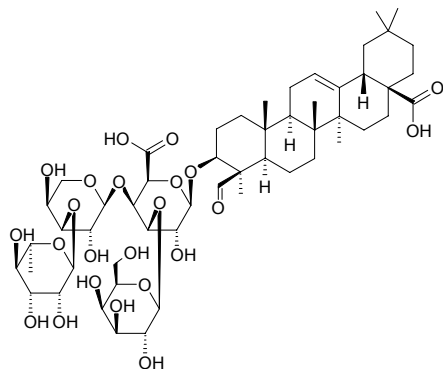
**12245 Koelpinin C**

28-Nor-lup-12,17-dien-3β-ol-16-one C<sub>29</sub>H<sub>44</sub>O<sub>2</sub> (424.67). mp 208–209°C (C<sub>6</sub>H<sub>6</sub>-MeOH),  $[\alpha]_D^{25} = +6.5^\circ$ . Source: XIE WEI JU *Koelpinia linearis* (aerial parts). Ref: 3912.

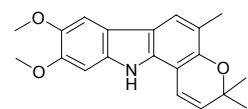


**12246 Koelreuteriasaponin B**

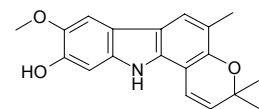
$C_{53}H_{82}O_{23}$  (1087.23). Source: LUAN HUA *Koelreuteria paniculata*. Ref: 6.

**12247 Koenigicine**

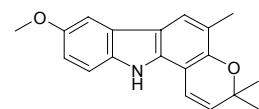
Koenidine [24123-92-0]  $C_{20}H_{21}NO_3$  (323.4). Source: YIN DU JIU LI XIANG *Murraya koenigii*. Ref: 11.

**12248 Koenigine**

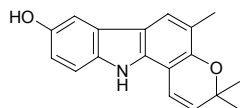
[28513-33-9]  $C_{19}H_{19}NO_3$  (309.37). Source: YIN DU JIU LI XIANG *Murraya koenigii*. Ref: 11, 4681.

**12249 Koenimbine**

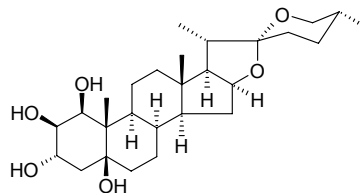
[21087-98-9]  $C_{19}H_{19}NO_2$  (293.37). Source: YIN DU JIU LI XIANG *Murraya koenigii*. Ref: 11.

**12250 Koenine**

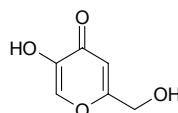
[28200-63-7]  $C_{18}H_{17}NO_2$  (279.34). Source: YIN DU JIU LI XIANG *Murraya koenigii*. Ref: 11.

**12251 Kogagenin**

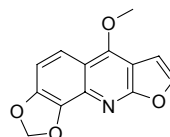
Spirostan-1,2,3,5-tetrol [639-93-0]  $C_{27}H_{44}O_6$  (464.65). mp 318~322°C (dec). Source: SHAN BI XIE *Dioscorea tokoro*. Ref: 6, 660.

**12252 Kojic acid**

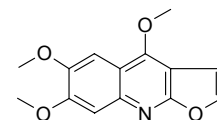
[501-30-4]  $C_6H_6O_4$  (142.11). mp 152°C. Pharm: Tyrosinase inhibitor ( $IC_{50} = 235.2 \mu\text{mol/L}$ ;  $IC_{50} = (16.67 \pm 0.52) \mu\text{mol/L}$ ;  $IC_{50} = 7.7 \mu\text{mol/L}$ ;  $IC_{50} = 11.3 \mu\text{mol/L}$ <sup>[5409]</sup>). Source: JIANG *Glycine max*. Ref: 6, 2544, 4233, 4457, 5409.

**12253 Kokusagine**

[482-32-6]  $C_{13}H_9NO_4$  (243.22). mp 195~197°C. Pharm: NO production inhibitor inactive (RAW264.7 cells, LPS/IFN- $\gamma$ -induced,  $30 \mu\text{mol/L}$ )<sup>[4774]</sup>. Source: CHOU SHAN YANG *Orixa japonica* (stem: yield = 0.019%dw)<sup>[4774]</sup>. Ref: 6, 4774.

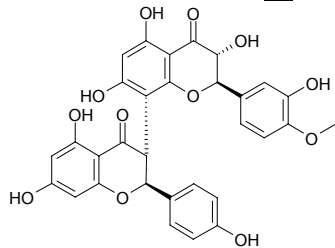
**12254 Kokusagineine**

[484-08-2]  $C_{14}H_{13}NO_4$  (259.26). mp 171°C. Pharm: Increases level of arterenol and dopamine (murine cerebra); insect antifeedant; phototoxic (*Saccharomyces cerevisiae*, *Candida albicans*); photo-activated antibacterial (*Staphylococcus aureus*)<sup>[4989]</sup>; photo-activated antifungal (*Candida albicans* weak)<sup>[4989]</sup>; photo-activated DNA binding (16 restriction enzymes)<sup>[4989]</sup>; cytotoxic (P<sub>388</sub> cell line,  $ED_{50} = 12.0 \mu\text{g/mL}$ , control Mithramycin,  $ED_{50} = 0.06 \mu\text{g/mL}$ ; HT29,  $ED_{50} = 16.8 \mu\text{g/mL}$ , Mithramycin,  $ED_{50} = 0.07 \mu\text{g/mL}$ ; A549,  $ED_{50} = 1.4 \mu\text{g/mL}$ , Mithramycin,  $ED_{50} = 0.08 \mu\text{g/mL}$ )<sup>[5405]</sup>. Source: CHOU CAO *Ruta graveolens*, CHOU SHAN YANG *Orixa japonica*, SI ROU TUO GUO YE MI ZHU YU *Melicope semecarpifolia*, *Orixa* sp., *Acronychia* sp., *Evodia* sp., *Haplophyllum* sp., *Melicope* sp., *Sarcomelicope glauca*. Ref: 6, 658, 4989, 5405.

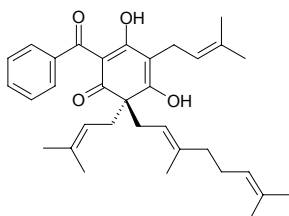


**12255 Kolaflavanone**

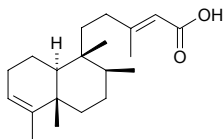
[68705-66-8]  $C_{31}H_{24}O_{12}$  (588.53). **Pharm:** Anti-inflammatory; hypoglycemic (rat, caused by alloxan); reduces blood capillary brittleness. **Source:** KE LE TENG HUANG *Garcinia kola*. **Ref:** 658.

**12256 Kolanone**

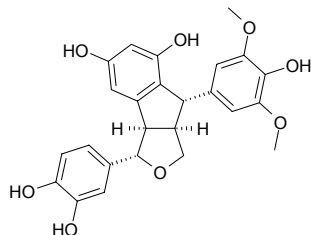
$C_{33}H_{42}O_4$  (502.70). **Pharm:** Antimicrobial (broad spectrum). **Source:** KE LE TENG HUANG *Garcinia kola*. **Ref:** 5386.

**12257 Kolavenic acid**

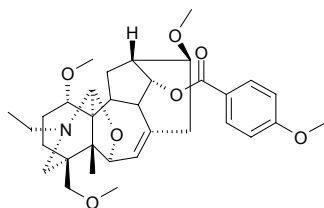
$C_{20}H_{32}O_2$  (304.48). **Source:** BIAN ZHONG CHANG YE AN LUO *Polyalthia longifolia* var. *pendula*. **Ref:** 5386.

**12258 Kompasinol A**

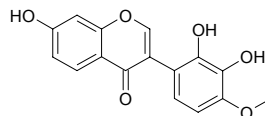
Maackolin [170663-51-1]  $C_{25}H_{24}O_8$  (452.47). **Pharm:** Antioxidant (superoxide anion scavenger,  $IC_{50} = (2.99 \pm 0.05) \mu\text{mol/L}$ , control (+)-Catechin,  $IC_{50} = (3.67 \pm 0.14) \mu\text{mol/L}$ )<sup>[4514]</sup>. **Source:** CHAO XIAN HUAI *Maackia amurensis*, MAO CI JIN JI ER *Caragana tibetica* (stem). **Ref:** 1521, 4514.

**12259 Kongboendine**

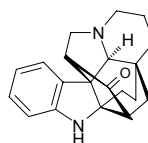
$C_{33}H_{45}NO_7$  (567.73). White amorphous powder, mp 68~70°C,  $[\alpha]_D = -35^\circ$  ( $c = 0.50$ ,  $CHCl_3$ ). **Source:** GONG BU WU TOU *Aconitum kongboense*. **Ref:** 2207.

**12260 Koparin**

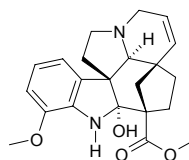
[65048-75-1]  $C_{16}H_{12}O_6$  (300.27). **Source:** JIANG ZHEN XIANG *Dalbergia odorifera*. **Ref:** 716.

**12261 Kopsanone**

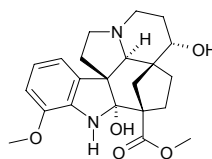
$C_{20}H_{22}N_2O$  (306.41). **Source:** HONG HUA RUI MU *Kopsia fruticosa* (leaf). **Ref:** 3830.

**12262 Kopsifoline A**

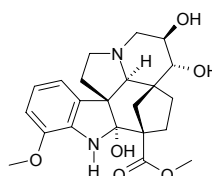
$C_{22}H_{26}N_2O_4$  (382.46). **Source:** HONG HUA RUI MU *Kopsia fruticosa* (leaf). **Ref:** 3830.

**12263 Kopsifoline B**

$C_{22}H_{28}N_2O_5$  (400.48). **Source:** HONG HUA RUI MU *Kopsia fruticosa* (leaf). **Ref:** 3830.

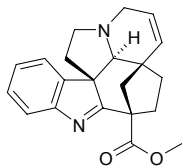
**12264 Kopsifoline C**

$C_{22}H_{28}N_2O_6$  (416.48). **Source:** HONG HUA RUI MU *Kopsia fruticosa* (leaf). **Ref:** 3830.

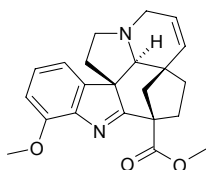


**12265 Kopsifoline D**

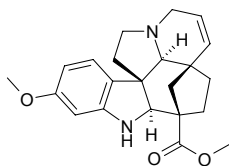
$C_{21}H_{22}N_2O_2$  (334.42). Source: HONG HUA RUI MU *Kopsia fruticosa* (leaf).  
Ref: 3830.

**12266 Kopsifoline E**

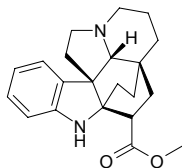
$C_{22}H_{24}N_2O_3$  (364.45). Source: HONG HUA RUI MU *Kopsia fruticosa* (leaf).  
Ref: 3830.

**12267 Kopsifoline F**

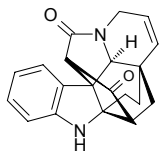
$C_{22}H_{26}N_2O_3$  (366.46). Source: HONG HUA RUI MU *Kopsia fruticosa* (leaf).  
Ref: 3830.

**12268 Kopsinine**

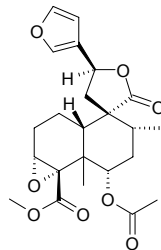
$C_{21}H_{26}N_2O_2$  (338.45). Source: CHANG HUA RUI MU *Kopsia longiflora*, CU SHENG HUA DUO GUO SHU *Pleiocarpa pycnantha* var. *tubicina*, DA CHANG CHUN HUA *Vinca herbacea* [Syn. *Vinca major*], DUO GUO SHU *Pleiocarpa mutica*, DUO HUA BAI JIAN MU *Aspidosperma multiflorum*, HONG HUA RUI MU *Kopsia fruticosa* (leaf), LA BA ZHUANG DUO GUO SHU *Pleiocarpa tubicina*, SI YANG SHU YE BAI JIAN MU *Aspidosperma populifolium*, YIN DU YA JIAO SHU *Alstonia venenata*, ZHI LI CHANG CHUN HUA *Vinca erecta*, ZI LAN SHU *Hunteria zeylanica*, *Hunteria elliotii*.  
Ref: 1521, 3830.

**12269 Kopsorinine**

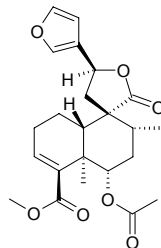
$C_{20}H_{18}N_2O_2$  (318.38). Light yellowish oil,  $[\alpha]_D^{20} = +14^\circ$  ( $c = 0.35$ ,  $CHCl_3$ ).  
Source: HONG HUA RUI MU *Kopsia fruticosa* (leaf). Ref: 3830.

**12270 Korberin A**

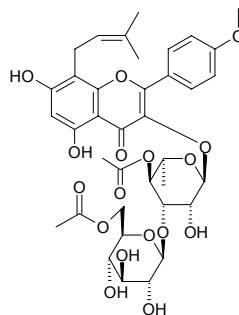
[152220-99-0]  $C_{23}H_{28}O_8$  (432.47). Source: LAI KE BA DOU *Croton lechleri*. Ref: 4552.

**12271 Korberin B**

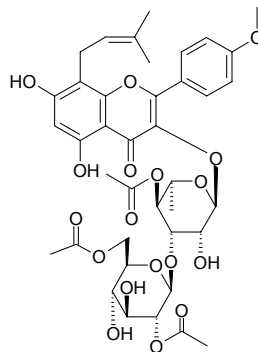
$C_{23}H_{28}O_7$  (416.48). Source: LAI KE BA DOU *Croton lechleri*. Ref: 4552.

**12272 Korepimedeside A**

Anhydroicaritin 3-*O*- $\beta$ -D-(6-acetyl) glucopyranosyl-(1 $\rightarrow$ 3)-*a*-L-(4-acetyl) rhamnopyranoside  $C_{37}H_{44}O_{17}$  (760.75). Yellow powder, mp 170–171°C.  
Source: CHAO XIAN YIN YANG HUO *Epimedium koreanum*. Ref: 361.

**12273 Korepimedeside B**

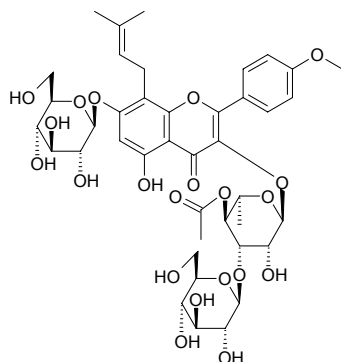
Anhydroicaritin 3-*O*- $\beta$ -D-(2,6-diacetyl)glucopyranosyl-(1 $\rightarrow$ 3)-*a*-L-(4-acetyl) rhamnopyranoside-7-*O*- $\beta$ -D-glucopyranosyl  $C_{39}H_{46}O_{18}$  (802.79). Yellow powder, mp 170–171°C. Source: CHAO XIAN YIN YANG HUO *Epimedium koreanum*. Ref: 361.



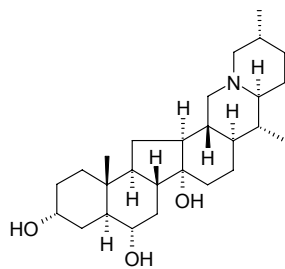


**12274 Korpemedoside C**

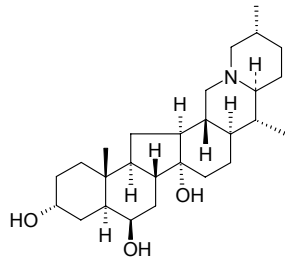
$C_{41}H_{52}O_{21}$  (880.86). Yellow powder. Source: CHAO XIAN YIN YANG HUO *Epimedium koreanum*. Ref: 417.

**12275 Korseveramine**

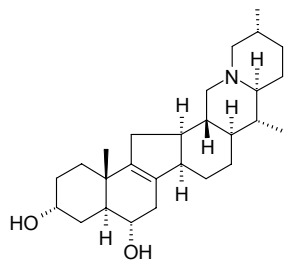
[30506-67-9]  $C_{27}H_{45}NO_3$  (431.66). Source: CHUAN BEI MU *Fritillaria cirrhosa*. Ref: 6.

**12276 Korseveriline**

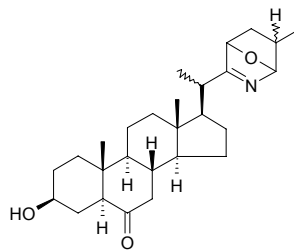
[21851-05-8]  $C_{27}H_{45}NO_3$  (431.66). mp 240~242°C. Source: CHUAN BEI MU *Fritillaria cirrhosa*. Ref: 6.

**12277 Korseverinine**

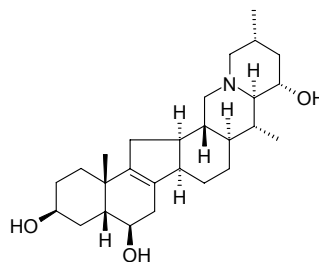
[36506-64-6]  $C_{27}H_{43}NO_2$  (413.65). Source: CHUAN BEI MU *Fritillaria cirrhosa*. Ref: 6.

**12278 Korsevine**

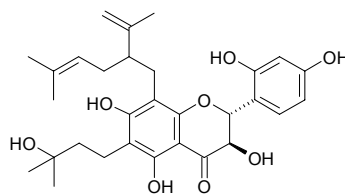
[27336-00-1]  $C_{27}H_{41}NO_3$  (427.63). mp 224~245°C. Source: CHUAN BEI MU *Fritillaria cirrhosa*. Ref: 6.

**12279 Korsine**

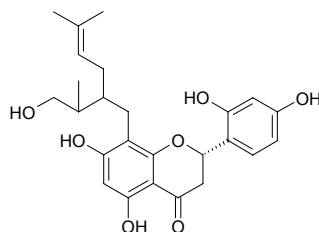
[20321-59-9]  $C_{27}H_{43}NO_3$  (429.65). Source: CHUAN BEI MU *Fritillaria cirrhosa*. Ref: 6.

**12280 Kosamol A**

[182556-80-5]  $C_{30}H_{38}O_8$  (526.63). Yellowish amorphous powder,  $[\alpha]_D = +36^\circ$  ( $c = 1.0$ , methanol). Pharm: Phospholipase  $C_7$  inhibitor ( $IC_{50} = 10.2 \mu\text{mol/L}$ ); tyrosinase inhibitor ( $IC_{50} = 36.9 \mu\text{mol/L}$ , control Kojic acid,  $IC_{50} = 11.3 \mu\text{mol/L}$ )<sup>[5409]</sup>. Source: KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. Ref: 1135, 1156, 5409.

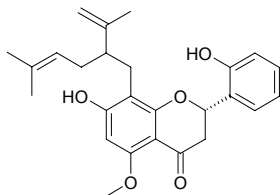
**12281 Kosamol Q**

$C_{25}H_{30}O_7$  (442.51). Source: KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. Ref: 4430.

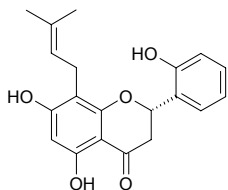


**12282 Kosamol R**

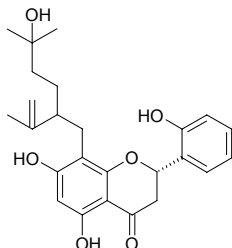
$C_{26}H_{30}O_5$  (422.53). Source: KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. Ref: 4430.

**12283 Kosamol S**

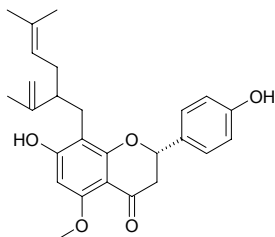
$C_{20}H_{20}O_5$  (340.38). Source: KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. Ref: 4430.

**12284 Kosamol T**

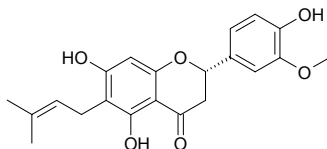
$C_{25}H_{30}O_6$  (426.51). Source: KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. Ref: 4430.

**12285 Kosamol U**

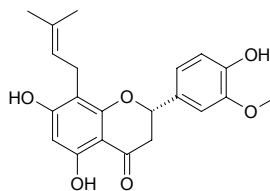
$C_{26}H_{30}O_5$  (422.53). Source: KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. Ref: 4430.

**12286 Kosamol V**

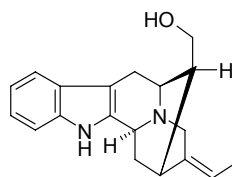
$C_{21}H_{22}O_6$  (370.41). Source: KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. Ref: 4430.

**12287 Kosamol W**

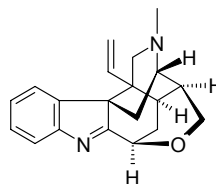
$C_{21}H_{22}O_6$  (370.41). Source: KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. Ref: 4430.

**12288 Koumidine**

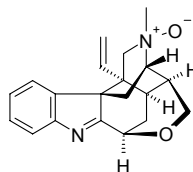
[1358-75-4]  $C_{19}H_{22}N_2O$  (294.40). mp 200~201°C. Source: GOU WEN *Gelsemium elegans*. Ref: 14.

**12289 Koumine**

(-)-Koumine [1358-76-5]  $C_{20}H_{22}N_2O$  (306.41). mp 170°C,  $[\alpha]_D = -254^\circ$ . Source: GOU WEN *Gelsemium elegans*. Ref: 14, 1521.

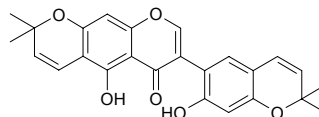
**12290 Koumine N-oxide**

$C_{20}H_{22}N_2O_2$  (322.41). mp 111~113°C. Source: GOU WEN *Gelsemium elegans*. Ref: 14.

**12291 Kraussianone 1**

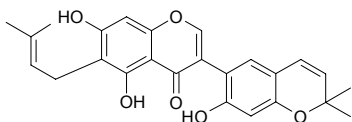
5,2'-Dihydroxy-[(6'',6''-dimethylpyrano(2'',3''-4',5'))][(6''',6'''-dimethylpyrano(2''',3''':7,6)]-isoflavone  $C_{25}H_{22}O_6$  (418.45). Yellow crystals mp 185~187°C.

Pharm: Treatment of impotence (the erectile dysfunction test on rabbit penile smooth muscle, 78ng/mL, activity of 85% of that found in Viagra). Source: NAN FEI JI TOU SHU *Eriosema kraussianum*. Ref: 2034.

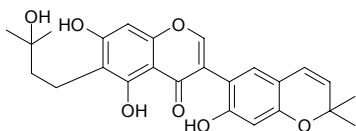


**12292 Kraussianone 2**

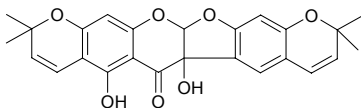
5,7,2'-Trihydroxy-6-(3,3-dimethylallyl)-[(6'',6''-dimethylpyrano(2'',3'':4',5'))]-isoflavone C<sub>25</sub>H<sub>24</sub>O<sub>6</sub> (420.47). White crystals, mp 162~168°C. **Pharm:** Treatment of impotence (the erectile dysfunction test on rabbit penile smooth muscle, 78ng/mL, activity of 65% of that found in Viagra). **Source:** NAN FEI JI TOU SHU *Eriosema kraussianum*. **Ref:** 2034.

**12293 Kraussianone 3**

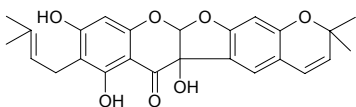
5,7,2'-Trihydroxy-6-(3-hydroxy-3-methylbutyl)-[(6'',6''-dimethylpyrano(2'',3'':4',5'))]-isoflavone C<sub>25</sub>H<sub>26</sub>O<sub>7</sub> (438.48). Orange yellow crystals, softening 156°C, melting 218~220°C. **Source:** NAN FEI JI TOU SHU *Eriosema kraussianum*. **Ref:** 2034.

**12294 Kraussianone 4**

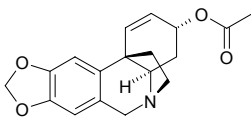
5b,7-Dihydroxy-2,2,10,10-tetramethyl-5b,13a-dihydro-2*H*,6*H*,10*H*-chromeno[6',7':4,5]furo[2,3-*b*]pyrano[3,2-*g*]chromene-6-one C<sub>25</sub>H<sub>22</sub>O<sub>7</sub> (434.45). Pale yellow oil. **Source:** NAN FEI JI TOU SHU *Eriosema kraussianum*. **Ref:** 2034.

**12295 Kraussianone 5**

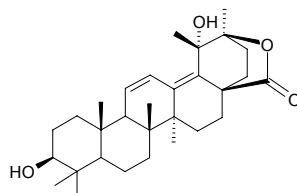
5b,7,9-Trihydroxy-2,2-dimethyl-8-(3-methyl-2-butenyl)-5b,11a-dihydro-2*H*,6*H*-chromeno[6',7':4,5]furo[2,3-*b*]chromen-6-one C<sub>25</sub>H<sub>24</sub>O<sub>7</sub> (436.47). Oil. **Source:** NAN FEI JI TOU SHU *Eriosema kraussianum*. **Ref:** 2034.

**12296 Krepowine**

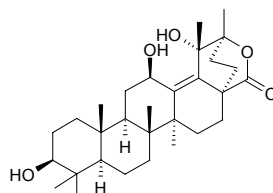
C<sub>18</sub>H<sub>19</sub>NO<sub>4</sub> (313.36). **Source:** GUAN MU WEN SHU LAN *Crinum macowanii* (bulb). **Ref:** 4000.

**12297 α-Kudinlactone**

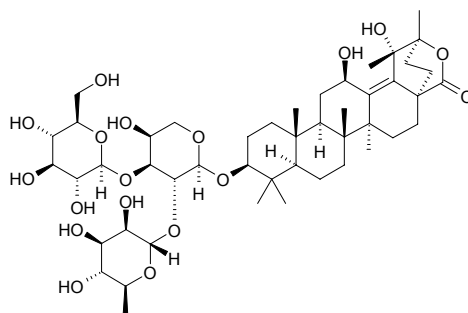
C<sub>30</sub>H<sub>44</sub>O<sub>4</sub> (468.68). **Source:** KU DING CHA DONG QING *Ilex kudingcha*. **Ref:** 5503.

**12298 β-Kudinlactone**

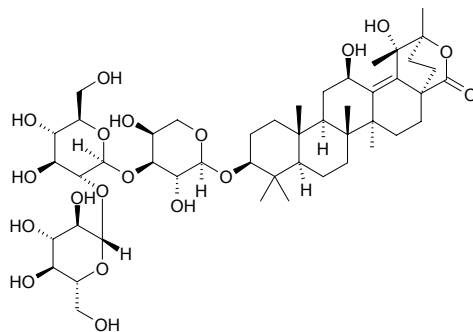
[173792-60-4] C<sub>30</sub>H<sub>46</sub>O<sub>5</sub> (486.70). **Source:** KU DING CHA DONG QING *Ilex kudingcha*. **Ref:** 5503.

**12299 Kudinoside A**

3-*O*-β-*D*-Glucopyranosyl-(1→3)-[α-*L*-rhamnopyranosyl-(1→2)]-α-*L*-arabino pyranosyl-β-kudinlactone [181362-75-4] C<sub>47</sub>H<sub>74</sub>O<sub>18</sub> (927.1). **Source:** KU DING CHA DONG QING *Ilex kudingcha*. **Ref:** 705.

**12300 Kudinoside B**

3-*O*-β-*D*-Glucopyranosyl-(1→2)-β-*D*-glucopyranosyl-(1→3)-α-*L*-arabino pyranosyl-β-kudinlactone [181362-76-5] C<sub>47</sub>H<sub>74</sub>O<sub>19</sub> (943.1). **Source:** KU DING CHA DONG QING *Ilex kudingcha*. **Ref:** 705.

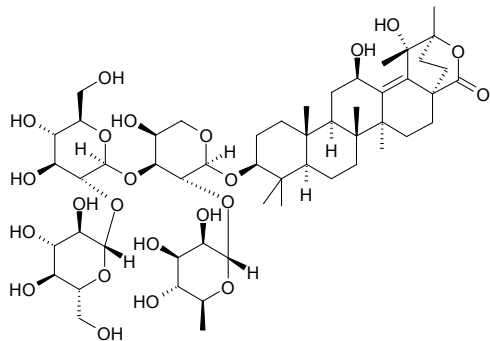


**12301 Kudinoside C**

3-*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)-[ $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)]- $\alpha$ -*L*-arabinopyranosyl- $\beta$ -kudinlactone [181362-77-6]

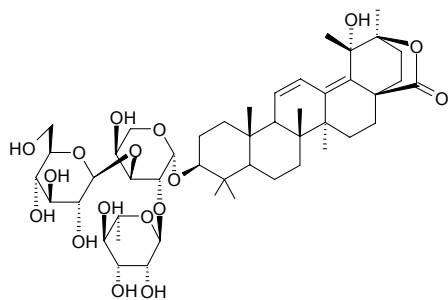
$C_{53}H_{84}O_{23}$  (1089.25). Source: KU DING CHA DONG QING *Ilex kudingcha*.

Ref: 705.

**12302 Kudinoside D**

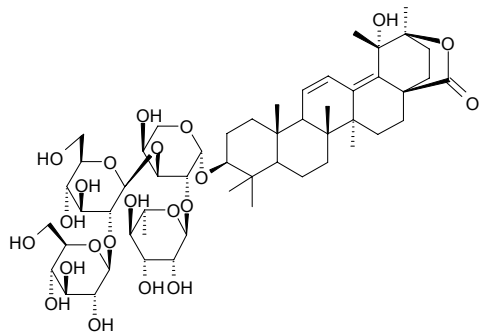
$C_{47}H_{72}O_{17}$  (909.09). Source: KU DING CHA DONG QING *Ilex kudingcha*.

Ref: 5503.

**12303 Kudinoside E**

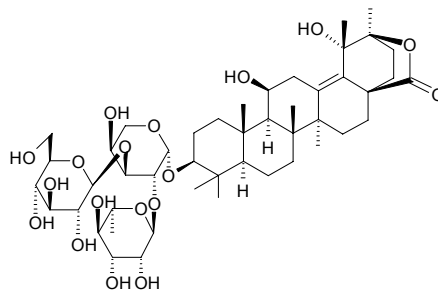
$C_{53}H_{82}O_{22}$  (1071.23). Source: KU DING CHA DONG QING *Ilex kudingcha*.

Ref: 5503.

**12304 Kudinoside F**

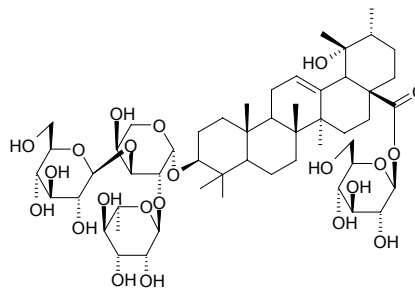
[173792-63-7]  $C_{47}H_{74}O_{18}$  (927.10). Source: KU DING CHA DONG QING

*Ilex kudingcha*. Ref: 5503.

**12305 Kudinoside G**

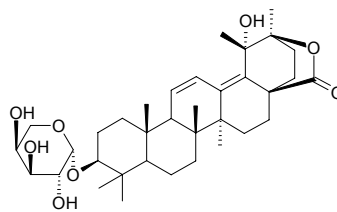
$C_{53}H_{86}O_{22}$  (1075.26). Source: KU DING CHA DONG QING *Ilex kudingcha*.

Ref: 5503.

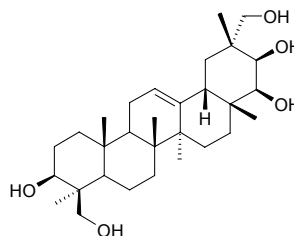
**12306 Kudinoside J**

$C_{35}H_{52}O_8$  (600.80). Source: KU DING CHA DONG QING *Ilex kudingcha*.

Ref: 5503.

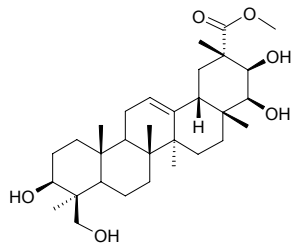
**12307 Kudzusapogenol A**

$C_{30}H_{50}O_5$  (490.73). Source: JI GU CAO *Abrus fruticulosus* [Syn. *Abrus cantoniensis*]. Ref: 660.

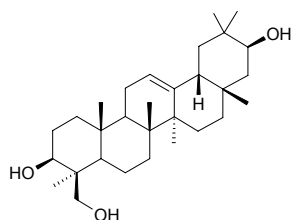


**12308 Kudzusapogenol B methyl ester**

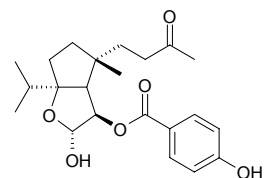
$C_{31}H_{50}O_6$  (518.74). Source: GE GEN *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*]. Ref: 660.

**12309 Kudzusapogenol C**

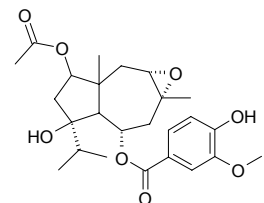
$C_{30}H_{50}O_3$  (458.73). Source: GE GEN *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*]. Ref: 660.

**12310 Kuhistaferone**

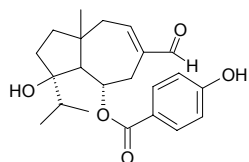
$C_{22}H_{30}O_6$  (390.48). Yellowish oil,  $[\alpha]_D^{25} = +10.1^\circ$  ( $c = 0.77$ , MeOH). Pharm: Cytotoxic (*in vitro*, HCT116,  $IC_{50} = 181 \mu\text{mol/L}$ ); antibacterial inactive (methicillin-resistant *Staphylococcus aureus* MRSA and methicillin-sensitive *Staphylococcus aureus* MSSA). Source: YI LANG A WEI *Ferula kuhistanica* (fruit: yield = 0.0016%dw). Ref: 4650.

**12311 Kuhistanicaol A**

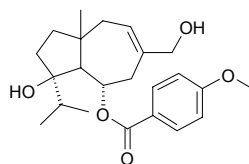
$C_{25}H_{34}O_8$  (462.54). Amorphous,  $[\alpha]_D^{25} = +82.6^\circ$  ( $c = 1.0$ , MeOH). Source: YI LANG A WEI *Ferula kuhistanica* (root). Ref: 3977.

**12312 Kuhistanicaol B**

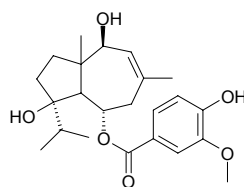
$C_{22}H_{28}O_5$  (372.47). Amorphous,  $[\alpha]_D^{25} = +123.6^\circ$  ( $c = 0.5$ , MeOH). Source: YI LANG A WEI *Ferula kuhistanica* (root). Ref: 3977.

**12313 Kuhistanicaol C**

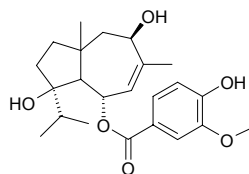
$C_{23}H_{32}O_5$  (388.51). Amorphous,  $[\alpha]_D^{25} = +29.3^\circ$  ( $c = 0.45$ , MeOH). Source: YI LANG A WEI *Ferula kuhistanica* (root). Ref: 3977.

**12314 Kuhistanicaol D**

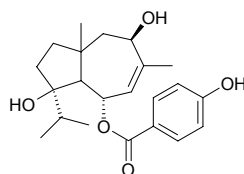
$C_{23}H_{32}O_6$  (404.51). Amorphous,  $[\alpha]_D^{25} = -26.3^\circ$  ( $c = 1.2$ , MeOH). Source: YI LANG A WEI *Ferula kuhistanica* (root). Ref: 3977.

**12315 Kuhistanicaol E**

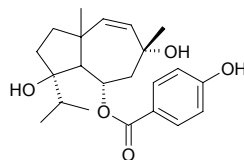
$C_{23}H_{32}O_6$  (404.51). Amorphous,  $[\alpha]_D^{25} = +17.2^\circ$  ( $c = 1.2$ , MeOH). Source: YI LANG A WEI *Ferula kuhistanica* (stem). Ref: 3977.

**12316 Kuhistanicaol F**

$C_{23}H_{32}O_5$  (388.51). Amorphous,  $[\alpha]_D^{25} = +87.1^\circ$  ( $c = 1.1$ , MeOH). Source: YI LANG A WEI *Ferula kuhistanica* (stem). Ref: 3977.

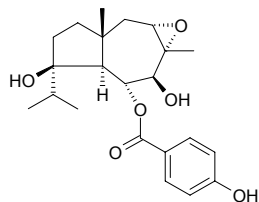
**12317 Kuhistanicaol G**

$C_{22}H_{30}O_5$  (374.48). Amorphous,  $[\alpha]_D^{25} = -68.9^\circ$  ( $c = 0.8$ , MeOH). Source: YI LANG A WEI *Ferula kuhistanica* (root). Ref: 3977.

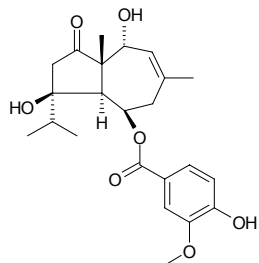


**12318 Kuhistanicol H**

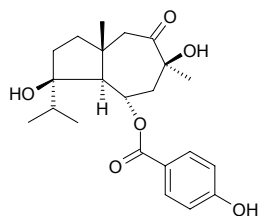
$C_{22}H_{30}O_6$  (390.48).  $[\alpha]_D^{25} = +115.6^\circ$  ( $c = 0.30$ , MeOH). Source: YI LANG A WEI *Ferula kuhistanica* (fruit). Ref: 5207.

**12319 Kuhistanicol I**

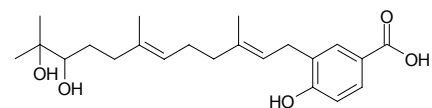
$C_{23}H_{30}O_7$  (418.49).  $[\alpha]_D^{25} = +44.3^\circ$  ( $c = 0.50$ , MeOH). Source: YI LANG A WEI *Ferula kuhistanica* (fruit). Ref: 5207.

**12320 Kuhistanicol J**

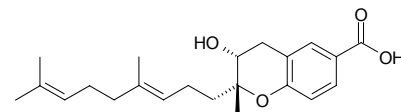
$C_{22}H_{30}O_6$  (390.48).  $[\alpha]_D^{25} = +41.6^\circ$  ( $c = 0.30$ , MeOH). Source: YI LANG A WEI *Ferula kuhistanica* (fruit). Ref: 5207.

**12321 Kuhistanol A**

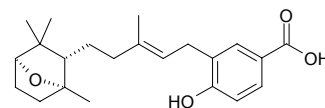
$C_{22}H_{32}O_5$  (376.50). Pharm: Antibacterial (MSSA, MIC = 63 μg/mL, control Ampicillin, MIC = 1 μg/mL; MRSA, MIC = 63 μg/mL, Ampicillin, MIC = 2 μg/mL; *Staphylococcus epidermidis* IFO 3762, MIC > 250 μg/mL, Ampicillin, MIC < 0.125 μg/mL; *Enterococcus faecalis* ATCC 21212, MIC > 250 μg/mL, Ampicillin, MIC = 1 μg/mL; *Bacillus subtilis* IFO 3134, MIC > 250 μg/mL, Ampicillin, MIC < 0.125 μg/mL; *Salmonella typhimurium* IFO 13245, MIC > 250 μg/mL, Ampicillin, MIC = 1 μg/mL; *Proteus mirabilis* IFO 3849, MIC > 250 μg/mL, Ampicillin, MIC = 2 μg/mL; *Escherichia coli* NIHJ JC-2, MIC > 250 μg/mL, Ampicillin, MIC = 4 μg/mL). Source: YI LANG A WEI *Ferula kuhistanica* (root and stem). Ref: 5207.

**12322 Kuhistanol D**

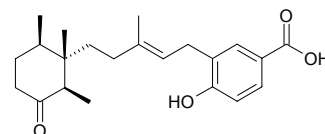
$C_{22}H_{30}O_4$  (358.48). Pharm: Antibacterial (MSSA, MIC = 31 μg/mL, control Ampicillin, MIC = 1 μg/mL; MRSA, MIC = 63 μg/mL, Ampicillin, MIC = 2 μg/mL; *Staphylococcus epidermidis* IFO 3762, MIC = 125 μg/mL, Ampicillin, MIC < 0.125 μg/mL; *Enterococcus faecalis* ATCC 21212, MIC = 125 μg/mL, Ampicillin, MIC = 1 μg/mL; *Bacillus subtilis* IFO 3134, MIC = 63 μg/mL, Ampicillin, MIC < 0.125 μg/mL; *Salmonella typhimurium* IFO 13245, MIC > 250 μg/mL, Ampicillin, MIC = 1 μg/mL; *Proteus mirabilis* IFO 3849, MIC > 250 μg/mL, Ampicillin, MIC = 2 μg/mL; *Escherichia coli* NIHJ JC-2, MIC > 250 μg/mL, Ampicillin, MIC = 4 μg/mL). Source: YI LANG A WEI *Ferula kuhistanica* (root and stem). Ref: 5207.

**12323 Kuhistanol E**

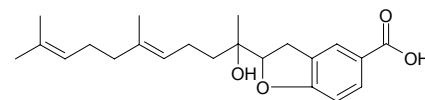
$C_{22}H_{30}O_4$  (358.48).  $[\alpha]_D^{25} = 4.4^\circ$  ( $c = 1.0$ , MeOH). Source: YI LANG A WEI *Ferula kuhistanica* (root). Ref: 3534.

**12324 Kuhistanol F**

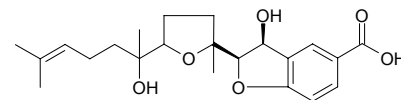
$C_{22}H_{30}O_4$  (358.48).  $[\alpha]_D^{25} = 4.7^\circ$  ( $c = 0.7$ , MeOH). Source: YI LANG A WEI *Ferula kuhistanica* (root). Ref: 3534.

**12325 Kuhistanol G**

$C_{22}H_{30}O_4$  (358.48).  $[\alpha]_D^{25} = 0^\circ$  ( $c = 0.8$ , MeOH). Source: YI LANG A WEI *Ferula kuhistanica* (root). Ref: 3534.

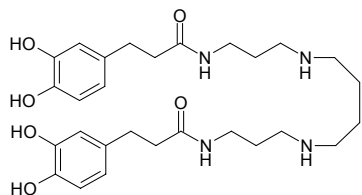
**12326 Kuhistanol H**

$C_{22}H_{30}O_6$  (390.48).  $[\alpha]_D^{25} = 0^\circ$  ( $c = 0.6$ , MeOH). Source: YI LANG A WEI *Ferula kuhistanica* (root). Ref: 3534.

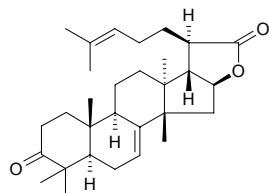


**12327 Kukoamine A**

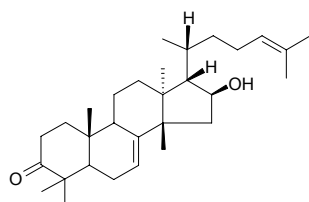
[75288-96-9] C<sub>28</sub>H<sub>42</sub>N<sub>4</sub>O<sub>6</sub> (530.67). **Pharm:** Antihypertensive (rat, iv, 5mg/kg, strong action). **Source:** GOU QI GEN PI *Lycium chinense*. **Ref:** 2, 1700, 5501.

**12328 Kulactone**

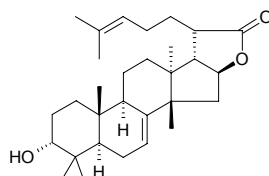
[22611-36-5] C<sub>30</sub>H<sub>44</sub>O<sub>3</sub> (452.68). mp 163.0~164.5°C. **Source:** KU LIAN PI *Melia azedarach*. **Ref:** 6.

**12329 Kulinone**

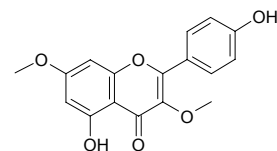
[21688-61-9] C<sub>30</sub>H<sub>48</sub>O<sub>2</sub> (440.72). mp 138°C. **Source:** KU LIAN PI *Melia azedarach*. **Ref:** 6.

**12330 Kulolactone**

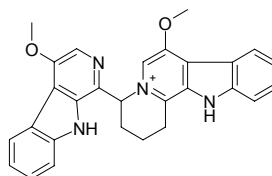
C<sub>30</sub>H<sub>46</sub>O<sub>3</sub> (454.70). **Source:** KU LIAN PI *Melia azedarach*. **Ref:** 6.

**12331 Kumatakenin**

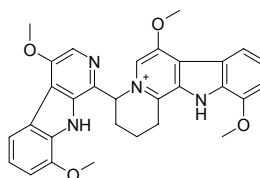
4',5-Dihydroxy-3,7-dimethoxyflavone [3301-49-3] C<sub>17</sub>H<sub>14</sub>O<sub>6</sub> (314.30). mp 246°C. **Source:** HUANG QI *Astragalus membranaceus*, NAN CHUAN GUAN CHUN HUA *Microtoena prainiana* (stem: yield = 0.00001%dw)<sup>[4752]</sup>, TU SHA REN *Alpinia japonica*, *Glycyrrhiza* sp. **Ref:** 2, 6, 2431, 4752.

**12332 Kumujansine A**

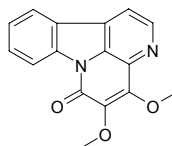
[116064-72-3] C<sub>28</sub>H<sub>25</sub>N<sub>4</sub>O<sub>2</sub><sup>+</sup> (449.54). Yellowish granular crystals, mp 249~250°C (dec). **Source:** KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. **Ref:** 101.

**12333 Kumujansine B**

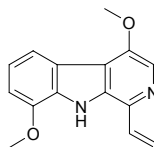
Picrasidine S [112503-87-4] C<sub>30</sub>H<sub>29</sub>N<sub>4</sub>O<sub>4</sub><sup>+</sup> (509.59). Yellowish granular crystals, mp 270°C (dec); yellowish acicular crystals (methanol), mp 215~217°C (dec). **Pharm:** cAMP phosphodiesterase inhibitor (*in vitro*, hydrochloride IC<sub>50</sub> = 30μmol/L). **Source:** KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. **Ref:** 101, 1011, 1521.

**12334 Kumujian D**

Methylnigakinone; 4,5-Dimethoxycanthin-6-one C<sub>16</sub>H<sub>12</sub>N<sub>2</sub>O<sub>3</sub> (280.29). Yellowish needle crystals, mp 148~149°C; mp 145~146°C. **Pharm:** Antibacterial (*in vitro*, *Diplococcus pneumoniae*, *Bacillus subtilis*, EC = 1mg/mL). **Source:** CHANG YE KUAN MU *Eurycoma longifolia* (root: yield = 0.000011%dw)<sup>[4728]</sup>, KU MU *Picrasma quassioides* [Syn. *Picrasma ailanthoides*] (powder: content scope of 5 origins = 0.005%~0.167%, mean content = 0.053%<sup>[5508]</sup>), KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. **Ref:** 6, 12, 658, 4728, 5501, 5508.

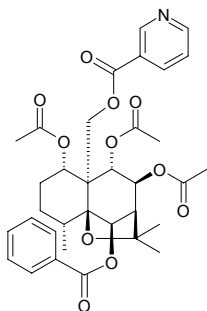
**12335 Kumujian G**

1-Vinyl-4,8-dimethoxy-β-carboline [65236-62-6] C<sub>15</sub>H<sub>14</sub>N<sub>2</sub>O<sub>2</sub> (254.29). Yellowish prismatic crystals (methanol), mp 158~159°C. **Pharm:** Antibacterial (*Staphylococcus aureus* and its drug-resistant strain, *in vitro*). **Source:** KU MU *Picrasma quassioides* [Syn. *Picrasma ailanthoides*] (powder: content scope of 5 origins = 0.002%~0.033%, mean content = 0.016%<sup>[5508]</sup>; content scope = 0.0%~2.72%<sup>[5501]</sup>), KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. **Ref:** 12, 661, 5501, 5508.

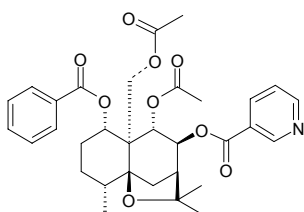


**12336 Kupitengester 1**

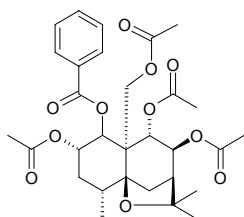
[135063-89-7]  $C_{34}H_{39}NO_{11}$  (637.68). Rhombic crystals (petroleum ether–ethyl acetate), mp 238°C. **Pharm:** Insect antifeedant. **Source:** DIAO GAN MA *Celastrus angulatus*. **Ref:** 1185, 1205.

**12337 Kupitengester 2**

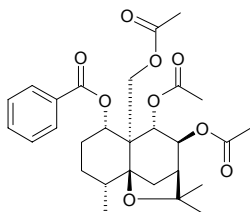
[149183-64-2]  $C_{32}H_{37}NO_9$  (579.65). Rhombic crystals, mp 185–187°C. **Pharm:** Insect antifeedant. **Source:** DIAO GAN MA *Celastrus angulatus*. **Ref:** 1205.

**12338 Kupitengester 3**

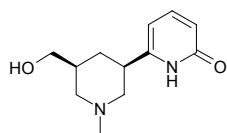
[149252-08-4]  $C_{30}H_{38}O_{11}$  (574.62). Rhombic crystals, mp 224°C. **Pharm:** Insect antifeedant. **Source:** DIAO GAN MA *Celastrus angulatus*. **Ref:** 1205.

**12339 Kupitengester 4**

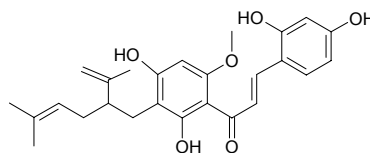
[132185-62-7]  $C_{28}H_{36}O_9$  (516.59). Rhombic crystals, mp 214°C. **Pharm:** Insect antifeedant. **Source:** DIAO GAN MA *Celastrus angulatus*. **Ref:** 1205.

**12340 Kuraramine**

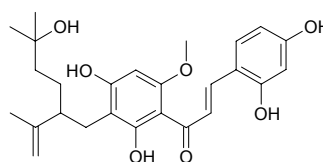
[In DNP]  $C_{12}H_{18}N_2O_2$  (222.29). **Source:** KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. **Ref:** 2.

**12341 Kuraridin**

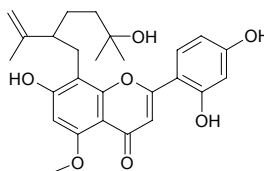
$C_{26}H_{30}O_6$  (438.53). **Pharm:** Tyrosinase inhibitor ( $IC_{50} = 0.6 \mu\text{mol/L}$ )<sup>[4430]</sup>, tyrosinase inhibitor ( $IC_{50} = 1.1 \mu\text{mol/L}$ , control Kojic acid,  $IC_{50} = 11.3 \mu\text{mol/L}$ )<sup>[5409]</sup>; DGAT inhibitor (*in vitro*,  $IC_{50} = 9.8 \mu\text{mol/L}$ )<sup>[4951]</sup>. **Source:** KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. **Ref:** 4430, 4951, 5409.

**12342 Kuraridinol**

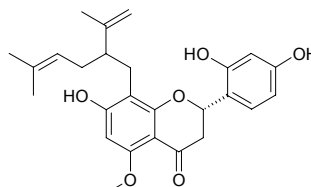
[52482-98-1]  $C_{26}H_{32}O_7$  (456.54). **Source:** KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. **Ref:** 2.

**12343 Kurarinol**

[52482-99-2]  $C_{26}H_{30}O_7$  (454.52). **Pharm:** DGAT inhibitor (*in vitro*,  $IC_{50} = 8.6 \mu\text{mol/L}$ )<sup>[4951]</sup>; tyrosinase inhibitor ( $IC_{50} = 10.6 \mu\text{mol/L}$ , control Kojic acid,  $IC_{50} = 11.3 \mu\text{mol/L}$ )<sup>[5409]</sup>. **Source:** KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. **Ref:** 2, 4951, 5409.

**12344 Kurarinone**

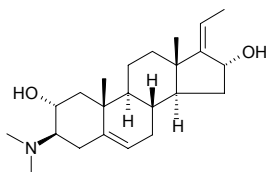
[34981-26-5]  $C_{26}H_{30}O_6$  (438.53). **Pharm:** Estrogenic (yeast screen,  $EC_{50} = 4.6 \mu\text{mol/L}$ ; Ishikawa Var-I assay,  $EC_{50} = 1.66 \mu\text{mol/L}$ )<sup>[4776]</sup>; cytotoxic (*in vitro* sulforhodamine-B assay, MCF7/6,  $IC_{50} = 22.2 \mu\text{mol/L}$ )<sup>[4776]</sup>; cAMP phosphodiesterase inhibitor ( $IC_{50} = 25 \mu\text{mol/L}$ ); antifungal (various saprobic mold, 12.5  $\mu\text{g/mL}$ , *Cladosporium cucumerinum* and *Candida albicans*, minimum dose on TLC chromatoplate = 5  $\mu\text{g}$ ); DGAT inhibitor (*in vitro*,  $IC_{50} = 10.9 \mu\text{mol/L}$ )<sup>[4951]</sup>; tyrosinase inhibitor ( $IC_{50} = 1.3 \mu\text{mol/L}$ , control Kojic acid,  $IC_{50} = 11.3 \mu\text{mol/L}$ )<sup>[5409]</sup>. **Source:** QIN JIAO *Gentiana macrophylla*, KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]<sup>[4776]</sup>. **Ref:** 707, 1007, 1333, 4776, 4951, 5409.



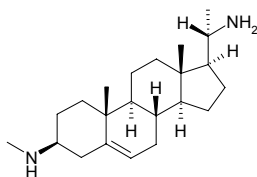


**12345 Kurchaline**

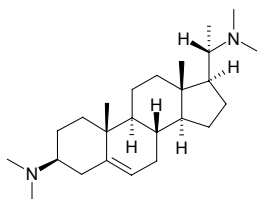
3-Aminopregna-5,17(20)-diene-2,16-diol [In DNP]  $C_{23}H_{37}NO_2$  (359.56). mp 185°C. Source: ZHI XIE MU PI *Holarrhena antidysenterica*. Ref: 6.

**12346 Kurchamine**

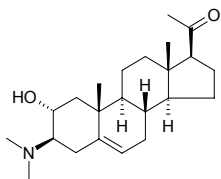
[3734-04-1]  $C_{22}H_{38}N_2$  (330.56). mp 115~117°C. Source: ZHI XIE MU PI *Holarrhena antidysenterica*. Ref: 1521.

**12347 Kurchessine**

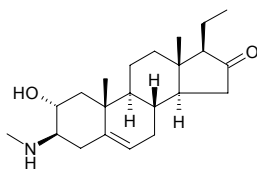
[6869-45-0]  $C_{25}H_{44}N_2$  (372.64). mp 140~141°C. Pharm: Antiamebic (treatment of amebic dysentery). Source: DUAN ROU MAO ZHI XIE MU *Holarrhena pubescens*, ZHI XIE MU PI *Holarrhena antidysenterica*. Ref: 6, 658.

**12348 Kurchiline**

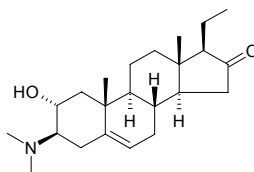
3β-Dimethylamino-2α-hydroxypregn-5-en-20-one [In DNP]  $C_{23}H_{37}NO_2$  (359.56). Source: ZHI XIE MU PI *Holarrhena antidysenterica*. Ref: 6.

**12349 Kurchiphyllamine**

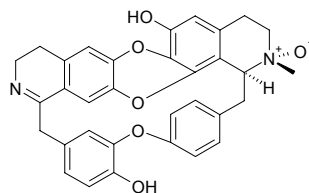
2α-Hydroxy-3β-methylaminopregn-5-en-16-one  $C_{22}H_{35}NO_2$  (345.53). mp 161°C. Source: ZHI XIE MU PI *Holarrhena antidysenterica*. Ref: 6.

**12350 Kurchiphylline**

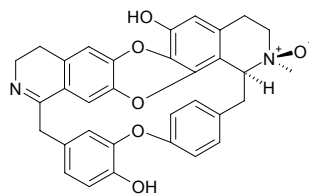
2α-Hydroxy-3β-dimethylaminopregn-5-en-16-one  $C_{23}H_{37}NO_2$  (359.56). mp 184°C. Source: ZHI XIE MU PI *Holarrhena antidysenterica*. Ref: 6.

**12351 Kurramine-2'-α-N-oxide**

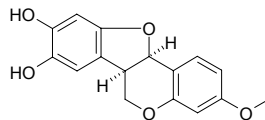
$C_{33}H_{28}N_2O_6$  (548.60). Yellow amorphous powder,  $[\alpha]_D^{25} = +50^\circ$  ( $c = 0.012$ , MeOH). Pharm: AChE inhibitor (*in vitro*,  $IC_{50} = (150.0 \pm 2.5) \mu\text{mol/L}$ , control Galanthamine,  $IC_{50} = (0.5 \pm 0.001) \mu\text{mol/L}$ ). Source: CHUI MU FANG JI *Cocculus pendulus*. Ref: 4051.

**12352 Kurramine-2'-β-N-oxide**

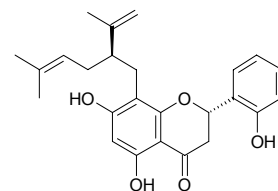
$C_{33}H_{28}N_2O_6$  (548.60). Yellow amorphous powder,  $[\alpha]_D^{25} = +60^\circ$  ( $c = 0.01$ , MeOH). Pharm: AChE inhibitor (*in vitro*,  $IC_{50} = (10.0 \pm 0.5) \mu\text{mol/L}$ , control Galanthamine,  $IC_{50} = (0.5 \pm 0.001) \mu\text{mol/L}$ ). Source: CHUI MU FANG JI *Cocculus pendulus*. Ref: 4051.

**12353 Kushenin**

[99217-66-0]  $C_{16}H_{14}O_5$  (286.29). Source: KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. Ref: 2.

**12354 Kushenol A**

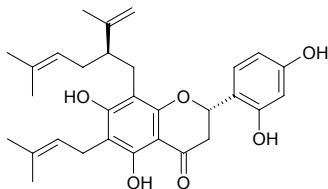
[99217-63-7]  $C_{25}H_{28}O_5$  (408.50). Source: KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. Ref: 2.



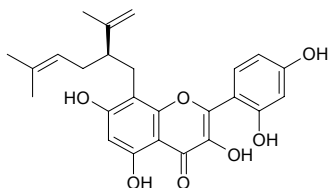
**12355 Kushenol B**

[99217-64-8] C<sub>30</sub>H<sub>36</sub>O<sub>6</sub> (492.61). Yellowish acicular crystals (benzene–acetone), mp 147–150°C, [ $\alpha$ ]<sub>D</sub><sup>21</sup> = –40.2° (*c* = 0.39, methanol).

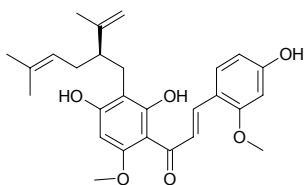
**Pharm:** cAMP phosphodiesterase inhibitor (*in vitro*, IC<sub>50</sub> = 31 μmol/L); phospholipase C<sub>γ</sub> inhibitor (IC<sub>50</sub> = 7.5 μmol/L); tyrosinase inhibitor (IC<sub>50</sub> = 38.3 μmol/L, control Kojic acid, IC<sub>50</sub> = 11.3 μmol/L)<sup>[5409]</sup>. **Source:** KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. **Ref:** 2, 972, 1007, 1135, 1156, 5409.

**12356 Kushenol C**

[99119-73-0] C<sub>25</sub>H<sub>26</sub>O<sub>7</sub> (438.48). **Source:** KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. **Ref:** 2.

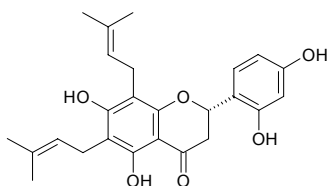
**12357 Kushenol D**

[99217-65-9] C<sub>27</sub>H<sub>32</sub>O<sub>6</sub> (452.55). **Source:** KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. **Ref:** 2.

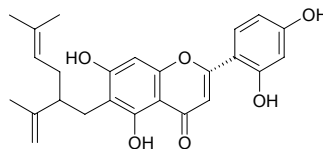
**12358 Kushenol E**

Flemiphilippin D [99119-72-9] C<sub>25</sub>H<sub>28</sub>O<sub>6</sub> (424.50). White solid, mp 161–163°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = –15.2° (*c* = 0.5, ethanol), [ $\alpha$ ]<sub>D</sub><sup>25</sup> = –47° (*c* = 0.21, MeOH).

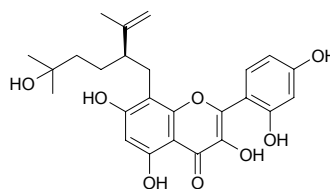
**Pharm:** cAMP phosphodiesterase inhibitor (*in vitro*, IC<sub>50</sub> = 40 μmol/L); phospholipase C<sub>γ</sub> inhibitor (IC<sub>50</sub> = 11.8 μmol/L); tyrosinase inhibitor (IC<sub>50</sub> = 55.4 μmol/L, control Kojic acid, IC<sub>50</sub> = 11.3 μmol/L)<sup>[5409]</sup>. **Source:** MAN XING QIAN JIN BA *Flemingia philippinensis* [Syn. *Moghania philippinensis*], KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. **Ref:** 2, 179, 900, 5409.

**12359 Kushenol F**

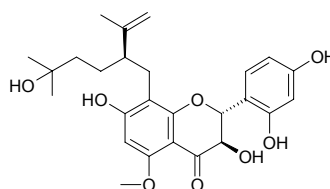
[99211-14-0] C<sub>25</sub>H<sub>26</sub>O<sub>6</sub> (422.48). **Source:** KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. **Ref:** 2.

**12360 Kushenol G**

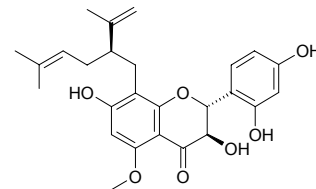
[99119-71-8] C<sub>25</sub>H<sub>28</sub>O<sub>8</sub> (456.50). **Source:** KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. **Ref:** 2.

**12361 Kushenol H**

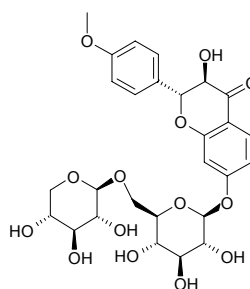
[99119-70-7] C<sub>26</sub>H<sub>32</sub>O<sub>8</sub> (472.54). **Pharm:** DGAT inhibitor (*in vitro*, IC<sub>50</sub> = 142.0 μmol/L)<sup>[4951]</sup>; tyrosinase inhibitor (IC<sub>50</sub> = 40.0 μmol/L, control Kojic acid, IC<sub>50</sub> = 11.3 μmol/L)<sup>[5409]</sup>. **Source:** KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. **Ref:** 2, 4951, 5409.

**12362 Kushenol I**

[99119-69-4] C<sub>26</sub>H<sub>30</sub>O<sub>7</sub> (454.53). **Source:** KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. **Ref:** 2.

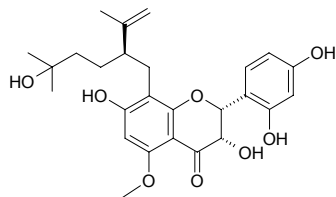
**12363 Kushenol J**

[101236-48-0] C<sub>27</sub>H<sub>32</sub>O<sub>14</sub> (580.55). **Source:** KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. **Ref:** 2.

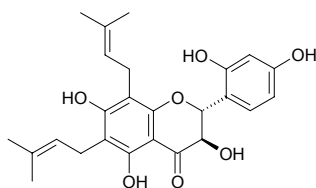


**12364 Kushenol K**

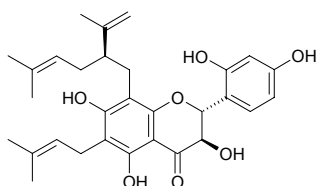
[101236-49-1] C<sub>26</sub>H<sub>32</sub>O<sub>8</sub> (472.54). Yellowish amorphous powder, [ $\alpha$ ]<sub>D</sub> = -81° (*c* = 1.0, methanol). **Pharm:** Phospholipase C<sub>7</sub> inhibitor (IC<sub>50</sub> = 34.9 μmol/L); DGAT inhibitor (*in vitro*, IC<sub>50</sub> = 250 μmol/L)<sup>[4951]</sup>. **Source:** KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. **Ref:** 2, 1135, 1156, 4951.

**12365 Kushenol L**

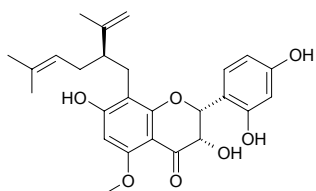
[101236-50-4] C<sub>25</sub>H<sub>28</sub>O<sub>7</sub> (440.49). Yellowish amorphous powder, [ $\alpha$ ]<sub>D</sub> = +12° (*c* = 0.1, methanol). **Pharm:** Phospholipase C<sub>7</sub> inhibitor (IC<sub>50</sub> = 11.6 μmol/L); tyrosinase inhibitor (IC<sub>50</sub> = 43.3 μmol/L, control Kojic acid, IC<sub>50</sub> = 11.3 μmol/L)<sup>[5409]</sup>. **Source:** KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. **Ref:** 2, 1135, 1156, 5409.

**12366 Kushenol M**

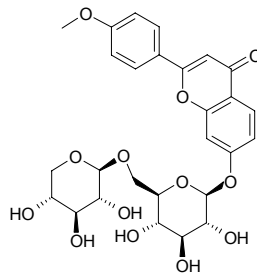
[101236-51-5] C<sub>30</sub>H<sub>36</sub>O<sub>7</sub> (508.61). Yellowish amorphous powder, [ $\alpha$ ]<sub>D</sub> = +18° (*c* = 0.1, methanol). **Pharm:** Phospholipase C<sub>7</sub> inhibitor (IC<sub>50</sub> = 12.2 μmol/L); tyrosinase inhibitor (IC<sub>50</sub> = 37.5 μmol/L, control Kojic acid, IC<sub>50</sub> = 11.3 μmol/L)<sup>[5409]</sup>. **Source:** KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. **Ref:** 2, 1135, 1156, 5409.

**12367 Kushenol N**

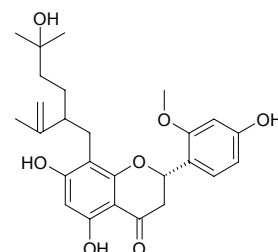
[102490-65-3] C<sub>26</sub>H<sub>30</sub>O<sub>7</sub> (454.52). Colorless amorphous, [ $\alpha$ ]<sub>D</sub> = -52° (*c* = 0.1, methanol). **Pharm:** Phospholipase C<sub>7</sub> inhibitor (IC<sub>50</sub> = 31.2 μmol/L); tyrosinase inhibitor (IC<sub>50</sub> = 21.0 μmol/L, control Kojic acid, IC<sub>50</sub> = 11.3 μmol/L)<sup>[5409]</sup>. **Source:** KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. **Ref:** 2, 1135, 1156, 1196, 5409.

**12368 Kushenol O**

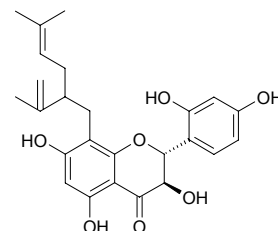
[102390-91-0] C<sub>27</sub>H<sub>30</sub>O<sub>13</sub> (562.53). **Source:** KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. **Ref:** 2.

**12369 Kushenol P**

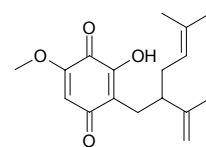
C<sub>26</sub>H<sub>32</sub>O<sub>7</sub> (456.54). **Source:** KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. **Ref:** 4430.

**12370 Kushenol X**

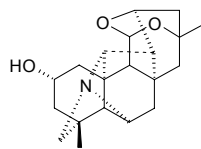
C<sub>25</sub>H<sub>28</sub>O<sub>7</sub> (440.50). **Source:** KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. **Ref:** 4430.

**12371 Kushenquinone A**

[102390-90-9] C<sub>17</sub>H<sub>22</sub>O<sub>4</sub> (290.34). **Source:** KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. **Ref:** 2.

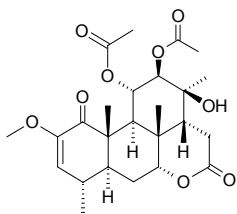
**12372 Kusnesoline**

C<sub>20</sub>H<sub>27</sub>NO<sub>3</sub> (329.44). Colorless needle crystals. **Source:** E MEI CUI QUE HUA *Delphinium omeiense*. **Ref:** 2190.

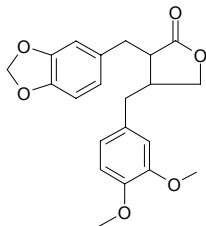


**12373 Kusulactone**

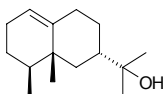
$C_{25}H_{34}O_9$  (478.54). Source: KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. Ref: 12.

**12374 Kusunokinin**

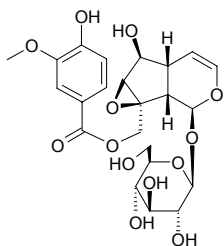
$C_{21}H_{22}O_6$  (370.41). Source: JIAN YE YUN XIANG CAO *Haplophyllum acutifolium*. Ref: 5175.

**12375 Kusunol**

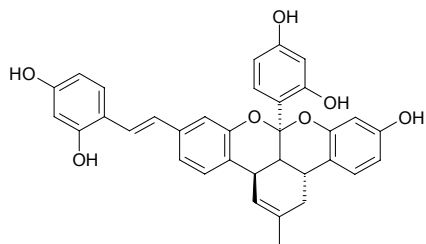
Valerianol [20489-45-6]  $C_{15}H_{26}O$  (222.37). Source: CHEN XIANG *Aquilaria agallocha*, ZHANG MU *Cinnamomum camphora*. Ref: 6, 13, 660.

**12376 Kutkoside**

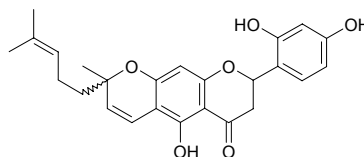
$C_{23}H_{28}O_{13}$  (512.47). Source: HU HUANG LIAN *Picrorhiza kurroa*. Ref: 660.

**12377 Kuwanol A**

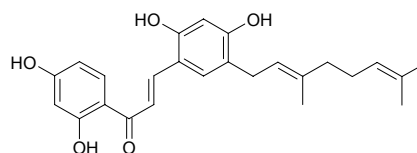
$C_{34}H_{28}O_7$  (548.60). Source: CAN SANG *Morus bombycis*. Ref: 2513.

**12378 Kuwanol C**

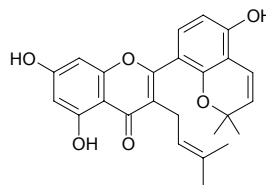
$C_{25}H_{26}O_6$  (422.48). Source: MENG SANG *Morus mongolica* (root cortex: yield = 0.00018%semi-dw). Ref: 3034.

**12379 Kuwanol D**

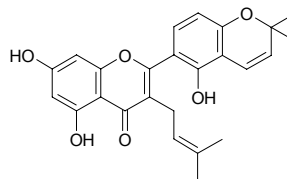
[123702-93-2]  $C_{25}H_{28}O_5$  (408.50). Yellow amorphous powder. Source: SANG BAI PI *Morus alba*. Ref: 2513.

**12380 Kuwanon A**

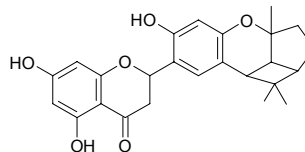
$C_{25}H_{24}O_6$  (420.47). Pharm: Antibacterial (*Staphylococcus aureus*, *Bacillus subtilis*, *Streptococcus faecalis*, *Mycobacterium smegmatis*). Source: SANG BAI PI *Morus alba*. Ref: 2513.

**12381 Kuwanon B**

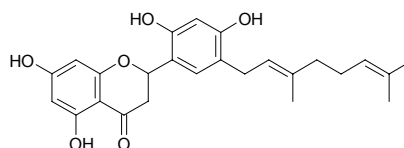
$C_{25}H_{24}O_6$  (420.47). Source: SANG BAI PI *Morus alba*. Ref: 660.

**12382 Kuwanon D**

$C_{25}H_{26}O_6$  (422.48). Source: SANG BAI PI *Morus alba*. Ref: 660.

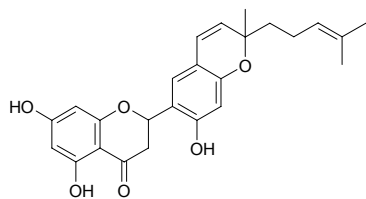
**12383 Kuwanon E**

$C_{25}H_{28}O_6$  (424.50). Source: SANG BAI PI *Morus alba*. Ref: 660.

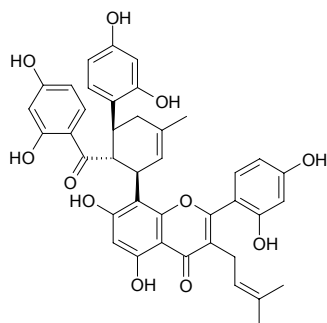


**12384 Kuwanon F**

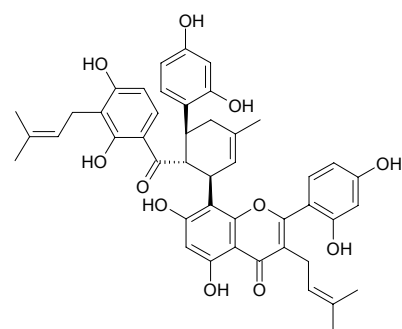
$C_{25}H_{26}O_6$  (422.48). Source: SANG BAI PI *Morus alba*. Ref: 660.

**12385 Kuwanon G**

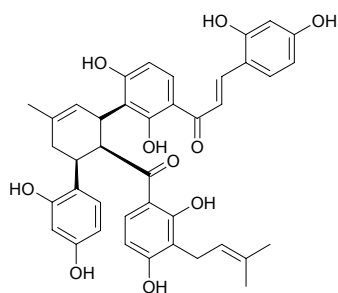
Moracenin B; Albanin F [75629-19-5]  $C_{40}H_{36}O_{11}$  (692.73). Pharm: Antihypertensive (rbt, 1.0mg/kg iv). Source: MENG SANG *Morus mongolica* (root cortex: yield = 0.0014%semi-dw), SANG YE *Morus alba*. Ref: 658, 3034.

**12386 Kuwanon H**

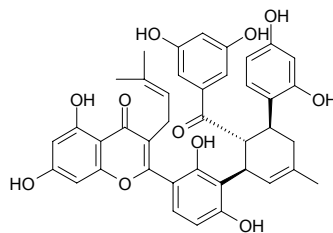
Moracenin A; Albanin G [76472-87-2]  $C_{45}H_{44}O_{11}$  (760.85). Pharm: Antihypertensive. Source: MENG SANG *Morus mongolica* (root cortex: yield = 0.0036%semi-dw)<sup>[3034]</sup>, SANG YE *Morus alba*. Ref: 658, 3034.

**12387 Kuwanon I**

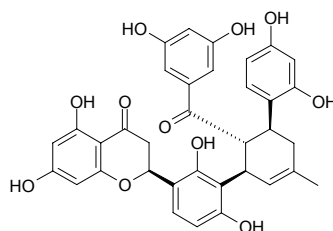
$C_{40}H_{38}O_{10}$  (678.74). Source: SANG BAI PI *Morus alba*. Ref: 660.

**12388 Kuwanon K**

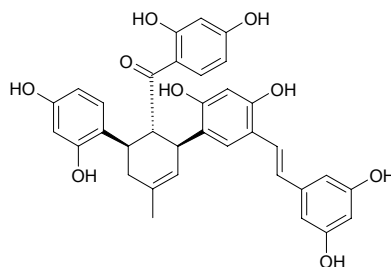
$C_{40}H_{36}O_{11}$  (692.73). Source: SANG BAI PI *Morus alba*. Ref: 660.

**12389 Kuwanon L**

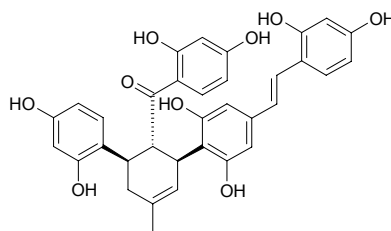
$C_{35}H_{30}O_{11}$  (626.62). Pharm: Antibacterial (*Staphylococcus aureus*, *Bacillus subtilis*, *Streptococcus faecalis*, *Mycobacterium smegmatis*)<sup>[2513]</sup>. Source: SANG BAI PI *Morus alba*. Ref: 660, 2513.

**12390 Kuwanon P**

$C_{34}H_{30}O_9$  (582.61).  $[\alpha]_D^{29} = -451.9^\circ$  ( $c = 0.12$ , MeOH). Source: NAI SANG *Morus macroura* (stem cortex). Ref: 5013.

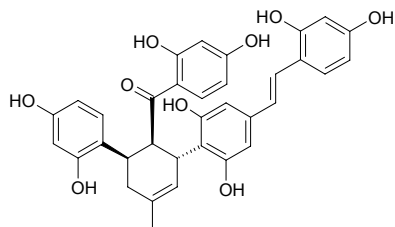
**12391 Kuwanon X**

$C_{34}H_{30}O_9$  (582.61).  $[\alpha]_D^{29} = -351.6^\circ$  ( $c = 0.11$ , MeOH). Pharm: Antioxidant (100 $\mu$ mol/L, InRt of MDA = 101.7%, control Vitamin E, InRt of MDA = 81.5%; 10 $\mu$ mol/L, InRt of MDA = 80.8%, Vitamin E, InRt of MDA = 33.9%). Source: NAI SANG *Morus macroura* (stem cortex). Ref: 5013.

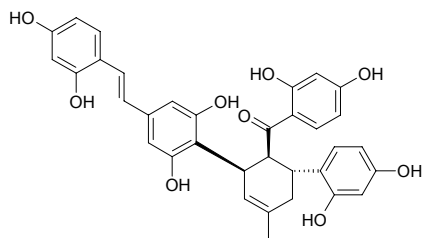


**12392 Kuwanon Y**

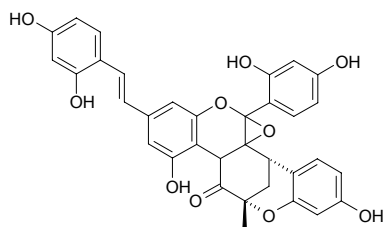
$C_{34}H_{30}O_9$  (582.61).  $[\alpha]_D^{29} = +211.0^\circ$  ( $c = 0.12$ , MeOH). **Pharm:** Antioxidant (100 $\mu$ mol/L, InRt of MDA = 94.5%, control Vitamin E, InRt of MDA = 81.5%; 10 $\mu$ mol/L, InRt of MDA = 70.9%, Vitamin E, InRt of MDA = 33.9%). **Source:** NAI SANG *Morus macrourea* (stem cortex). **Ref:** 5013.

**12393 Kuwanon Y**

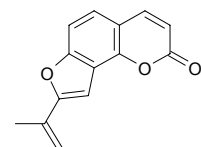
$C_{34}H_{30}O_9$  (582.61). **Source:** SANG BAI PI *Morus alba*. **Ref:** 660.

**12394 Kuwanon Z**

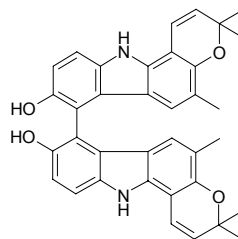
$C_{34}H_{26}O_{10}$  (594.58). **Source:** SANG BAI PI *Morus alba*. **Ref:** 660.

**12395 Kvannin**

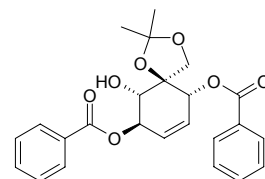
Oroselone [1760-27-6]  $C_{14}H_{10}O_3$  (226.23). Crystals, mp 188~189°C, 170~174°C. **Source:** YUAN DANG GUI *Angelica archangelica*. **Ref:** 2071.

**12396 Kwangsine**

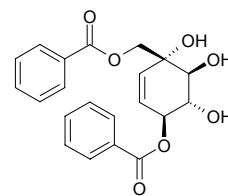
$C_{36}H_{32}N_2O_4$  (556.67). Yellow crystals, mp 263~273°C,  $[\alpha]_D^{19} = -33.3^\circ$  ( $c = 0.101$ ,  $CHCl_3$ ). **Source:** GUANG XI JIU LI XIANG *Murraya kwangsiensis*. **Ref:** 863.

**12397 Kweichowenol A**

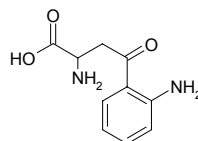
$C_{24}H_{24}O_7$  (424.45). White needles, mp 51~53°C,  $[\alpha]_D^{20} = -95.8^\circ$  ( $c = 0.011$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (MTT assay, A549 bronchogenic carcinoma cell,  $IC_{50} = 65\mu$ g/mL, SK-MES-1 bronchogenic carcinoma cell,  $IC_{50} = 56\mu$ g/mL, NCI-H446 bronchogenic carcinoma cell,  $IC_{50} = 50\mu$ g/mL). **Source:** LIU GUO ZI YU PAN *Uvaria kweichowensis* (leaf). **Ref:** 4480.

**12398 Kweichowenol B**

$C_{21}H_{20}O_7$  (384.39). White solid, mp 166~167°C,  $[\alpha]_D^{20} = -5.78^\circ$  ( $c = 0.019$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (MTT assay, A549 bronchogenic carcinoma cell,  $IC_{50} = 20\mu$ g/mL, SK-MES-1 bronchogenic carcinoma cell,  $IC_{50} = 18\mu$ g/mL, NCI-H446 bronchogenic carcinoma cell,  $IC_{50} = 23\mu$ g/mL). **Source:** LIU GUO ZI YU PAN *Uvaria kweichowensis* (leaf). **Ref:** 4480.

**12399 Kynurenine**

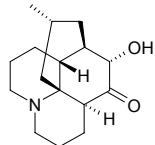
$C_{10}H_{12}N_2O_3$  (208.22). mp (+) 191°C, (-) 191°C, ( $\pm$ ) 219°C (dec). **Source:** FENG RU *Apis cerana*, MO GU *Agaricus campestris*. **Ref:** 6.



## L

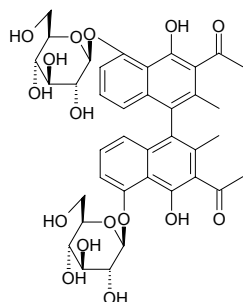
## 12400 L20

$C_{16}H_{25}NO_2$  (263.38). Source: QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*]. Ref: 4388.



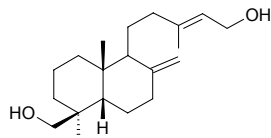
## 12401 Labadoside

4,4''-Binaphthalene-8,8''-*O,O*-di- $\beta$ -*D*-glucopyranoside  $C_{38}H_{42}O_{16}$  (754.75). Amorphous. Source: NIU XI XI *Rumex patientia*. Ref: 5138.

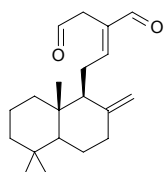


## 12402 Labdadiene

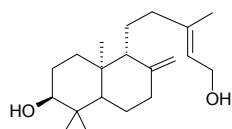
15,19-Dihydroxyl 8(17)-13(*E*)-labdatriene  $C_{20}H_{34}O_2$  (306.49). White powder, mp 93–94°C (dec),  $[\alpha]_D^{22} = -36.2^\circ$  ( $c = 0.20$ ,  $CHCl_3$ ). Source: CI BAI *Juniperus formosana* (fruit). Ref: 4581.

12403 (*E*)-Labda-8(17),12-diene-15,16-dial

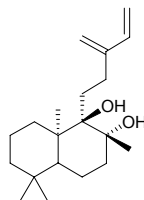
$C_{20}H_{30}O_2$  (302.46). Pharm: NO production Inhibitor (*in vitro*, LPS-activated mouse peritoneal macrophages,  $IC_{50} = 22\mu\text{mol/L}$ ; control *L*-NMMA,  $IC_{50} = 28\mu\text{mol/L}$ );  $\beta$ -hexosaminidase release inhibitor (RBL-2H3 Cells,  $100\mu\text{mol/L}$ , InRt = 42.0%; control Curcumin, InRt = 62.6%). Source: YI ZHI REN *Alpinia oxyphylla* (fruit: yield = 0.0011%dw). Ref: 4655.

12404 Labda-8(17),13*E*-diene-3 $\beta$ ,15-diol

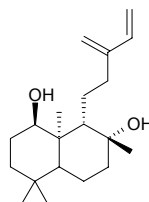
$C_{20}H_{34}O_2$  (306.49). Colorless needles (MeOH), mp 158–159°C,  $[\alpha]_D^{25} = -24.3^\circ$  ( $c = 0.5$ ,  $CHCl_3$ ). Source: HAI QI *Excoecaria agallocha* (root). Ref: 5114.

12405 *ent*-Labda-13(16),14-diene-8 $\alpha$ ,9 $\beta$ -diol

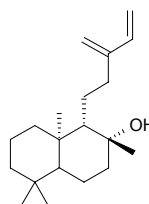
$C_{20}H_{34}O_2$  (306.49). Colorless oil,  $[\alpha]_D^{20} = -2.8^\circ$  ( $c = 0.51$ ,  $CHCl_3$ ). Source: JIE MAO TAI *Blepharostoma trichophyllum*. Ref: 3843.

12406 *ent*-Labda-13(16),14-diene-1 $\beta$ ,8 $\alpha$ ,9 $\beta$ -diol

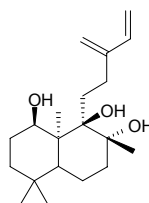
$C_{20}H_{34}O_2$  (306.49). Colorless oil,  $[\alpha]_D^{20} = -14.7^\circ$  ( $c = 0.21$ ,  $CHCl_3$ ). Source: JIE MAO TAI *Blepharostoma trichophyllum*. Ref: 3843.

12407 *ent*-Labda-13(16),14-diene-8 $\alpha$ -ol

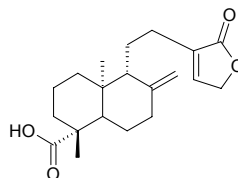
$C_{20}H_{34}O$  (290.49). Colorless oil,  $[\alpha]_D^{20} = -15.7^\circ$  ( $c = 0.19$ ,  $CHCl_3$ ). Source: JIE MAO TAI *Blepharostoma trichophyllum*. Ref: 3843.

12408 *ent*-Labda-13(16),14-diene-1 $\beta$ ,8 $\alpha$ ,9 $\beta$ -triol

$C_{20}H_{34}O_3$  (322.49). Colorless needles, mp 114°C (*n*-hexane),  $[\alpha]_D^{20} = -58.8^\circ$  ( $c = 0.16$ ,  $CHCl_3$ ). Source: JIE MAO TAI *Blepharostoma trichophyllum*. Ref: 3843.

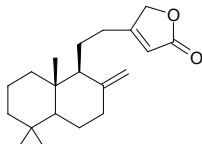
12409 8(17),13-*ent*-Labdadien-15 $\rightarrow$ 16-lactone-19-oic acid

$C_{20}H_{28}O_4$  (332.44). Yellow oil,  $[\alpha]_D^{25} = -33.0^\circ$  ( $c = 0.74$ , MeOH). Pharm: Anticidal (inhibits growth of alga *Raphidocelis subcapitata*, 72h  $IC_{50} = 47.1\mu\text{mol/L}$ ). Source: BI CHI YAN ZI CAI *Potamogeton pectinatus* (whole herb). Ref: 3488.

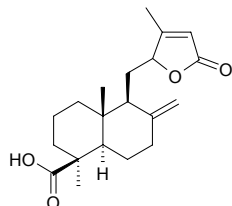


**12410 Labda-8(17),13(14)-dien-15,16-olide**

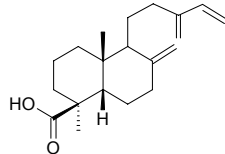
$C_{20}H_{30}O_2$  (302.46). Source: TU QIANG HUO *Hedychium coronarium* (rhizome). Ref: 4221.

**12411 8(17),13-Labdadien-12,15-olid-19-oic acid**

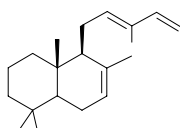
$C_{20}H_{28}O_4$  (332.44). Amorphous,  $[\alpha]_D^{27} = +8.1^\circ$  ( $c = 0.32$ ,  $CHCl_3$ ). Source: TAI WAN SHAN MU *Cunninghamia konishii* (wood). Ref: 4176.

**12412 Labdatriene**

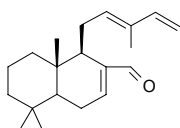
19-Carboxy 8(17)-13(16)-14-labdatriene  $C_{20}H_{30}O_2$  (302.46). Yellowish solid, mp 107~108°C (dec),  $[\alpha]_D^{22} = -19.1^\circ$  ( $c = 0.30$ ,  $CHCl_3$ ). Source: CI BAI *Juniperus formosana* (fruit). Ref: 4581.

**12413 Labda-7,12(E),14-triene**

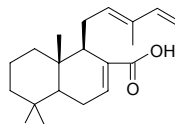
$C_{20}H_{32}$  (272.48). Viscous transparent oil,  $[\alpha]_D^{30} = +3.77^\circ$  ( $c = 1.76$ ,  $CHCl_3$ ). Pharm: Cytotoxic inactive (*in vitro*, BT474, CHAGO, HepG2, Kato3, SW620:  $> 10\mu\text{g/mL}$ ). Source: GUANG YE BA DOU *Croton oblongifolius* [Syn. *Croton laevigatus*]. Ref: 1903, 5363.

**12414 Labda-7,12(E),14-triene-17-ol**

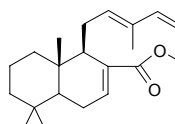
$C_{20}H_{30}O$  (286.46). Colorless needle crystals, mp 72~74°C,  $[\alpha]_D^{30} = +37.48^\circ$  ( $c = 1.51$ ,  $CHCl_3$ ). Pharm: Cytotoxic (*in vitro*, BT474, IC<sub>50</sub> = 5.0 $\mu\text{g/mL}$ , control Doxorubicin hydrochloride, IC<sub>50</sub> = 0.08 $\mu\text{g/mL}$ ; CHAGO, IC<sub>50</sub> = 4.8 $\mu\text{g/mL}$ , control Doxorubicin hydrochloride, IC<sub>50</sub> = 2.3 $\mu\text{g/mL}$ ; HepG2, IC<sub>50</sub> = 5.2 $\mu\text{g/mL}$ , control Doxorubicin hydrochloride, IC<sub>50</sub> = 0.9 $\mu\text{g/mL}$ ; Kato3, IC<sub>50</sub> = 4.2 $\mu\text{g/mL}$ , control Doxorubicin hydrochloride, IC<sub>50</sub> = 1.7 $\mu\text{g/mL}$ ; SW620, IC<sub>50</sub> = 5.5 $\mu\text{g/mL}$ , control Doxorubicin hydrochloride, IC<sub>50</sub> = 1.1 $\mu\text{g/mL}$ ). Source: GUANG YE BA DOU *Croton oblongifolius* [Syn. *Croton laevigatus*]. Ref: 1903, 5363.

**12415 Labda-7,12(E),14-triene-17-oic acid**

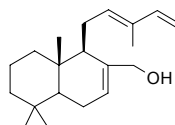
$C_{20}H_{30}O_2$  (302.46). Colorless needle crystals, mp 118~120°C,  $[\alpha]_D^{30} = -15.93^\circ$  ( $c = 1.67$ ,  $CHCl_3$ ). Pharm: Cytotoxic inactive (*in vitro*, BT474, CHAGO, HepG2, Kato3, SW620:  $> 10\mu\text{g/mL}$ )<sup>[5363]</sup>. Source: GUANG YE BA DOU *Croton oblongifolius* [Syn. *Croton laevigatus*]. Ref: 1903, 5363.

**12416 Labda-7,12(E),14-triene-17-oic acid methyl ester**

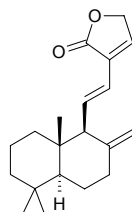
$C_{21}H_{32}O_2$  (316.49). Pharm: Cytotoxic inactive (*in vitro*, BT474, CHAGO, HepG2, Kato3, SW620:  $> 10\mu\text{g/mL}$ ). Source: GUANG YE BA DOU *Croton oblongifolius* [Syn. *Croton laevigatus*]. Ref: 5363.

**12417 Labda-7,12(E),14-triene-17-ol**

$C_{20}H_{32}O$  (288.48). Colorless needle crystals, mp 90~92°C,  $[\alpha]_D^{30} = +12.02^\circ$  ( $c = 1.63$ ,  $CHCl_3$ ). Pharm: Cytotoxic (*in vitro*, BT474, IC<sub>50</sub> = 5.4 $\mu\text{g/mL}$ , control Doxorubicin hydrochloride, IC<sub>50</sub> = 0.08 $\mu\text{g/mL}$ ; CHAGO, IC<sub>50</sub> = 5.8 $\mu\text{g/mL}$ , control Doxorubicin hydrochloride, IC<sub>50</sub> = 2.3 $\mu\text{g/mL}$ ; HepG2, IC<sub>50</sub> = 6.3 $\mu\text{g/mL}$ , control Doxorubicin hydrochloride, IC<sub>50</sub> = 0.9 $\mu\text{g/mL}$ ; Kato3, IC<sub>50</sub> = 5.8 $\mu\text{g/mL}$ , control Doxorubicin hydrochloride, IC<sub>50</sub> = 1.7 $\mu\text{g/mL}$ ; SW620, IC<sub>50</sub> = 5.7 $\mu\text{g/mL}$ , control Doxorubicin hydrochloride, IC<sub>50</sub> = 1.1 $\mu\text{g/mL}$ )<sup>[5363]</sup>. Source: GUANG YE BA DOU *Croton oblongifolius* [Syn. *Croton laevigatus*]. Ref: 1903, 5363.

**12418 Labda-8(17),11,13-trien-15(16)-olide**

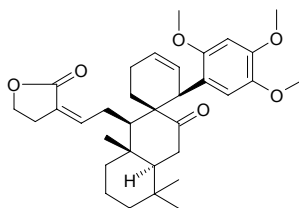
$C_{20}H_{28}O_2$  (300.44). Colorless needles, mp 118~120°C. Source: YUAN BAN JIANG HUA *Hedychium forrestii* (root). Ref: 4886.





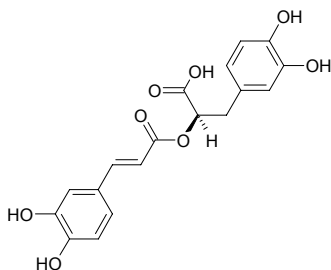
**12419 rel-Labd-12-en-15(16)-olid-7-one-8R-spiro-1'-[2S-(2,4,5-trimethoxyphenyl)-3-cyclohexene]**

C<sub>33</sub>H<sub>44</sub>O<sub>6</sub> (536.72). Colorless oil,  $[\alpha]_D^{25} = -107.1^\circ$  ( $c = 0.10$ , CHCl<sub>3</sub>). Source: SHAN SHAN JIANG *Alpinia flabellata* (leaf: yield = 0.00017%*dw*). Ref: 3051.



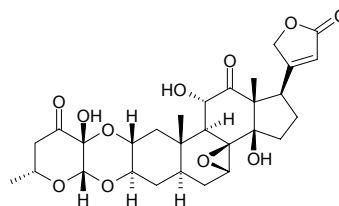
**12420 Labiatic acid**

Rosmarinic acid [537-15-5] C<sub>18</sub>H<sub>16</sub>O<sub>8</sub> (360.32). Crystals, +2H<sub>2</sub>O, mp 204°C (dec),  $[\alpha]_D^{20} = +145^\circ$ . Pharm: Antithrombotic (rat, *in vivo*, inhibits venous thrombosis); platelet aggregation inhibitor (rat, *in vivo*, induced by collagen); anti-inflammatory; stimulates fibrinolysis; antiviral (herpes simplex virus); antioxidant (lipid peroxidation inhibitor, microsomes of murine cerebral, hepatic and renal cells, induced by vitamin C-nicotinamide ADP and Fe<sup>2+</sup>-cysteine, superoxide anion scavenger); antioxidant (DPPH scavenger, IC<sub>50</sub> = 0.0801mmol/L, control Propyl gallate, IC<sub>50</sub> = 0.03mol/L; superoxide radical inhibitor, IC<sub>50</sub> = 0.282mmol/L, control Propyl gallate, IC<sub>50</sub> = 0.106mmol/L; iron chelating assay, IC<sub>50</sub> = 0.034mmol/L, control Propyl gallate, IC<sub>50</sub> = 0.064mmol/L)<sup>[4533]</sup>; antioxidant (*in vitro*, Cu<sup>2+</sup> induced LDL peroxidation assay, IC<sub>50</sub> = 1.81μmol/L; control Probucol, IC<sub>50</sub> = 4.7μmol/L)<sup>[4628]</sup>; antioxidant (enzyme-independent lipid peroxidation, IC<sub>50</sub> = 4.40μmol/L; enzyme-dependent lipid peroxidation, IC<sub>50</sub> = 0.39μmol/L)<sup>[5494]</sup>; inhibits pathogenic bacteria; adenyl cyclase inhibitor. Source: BO HE *Mentha haplocalyx* [Syn. *Mentha canadasensis*; *Mentha arvensis* var. *haplocalyx*; *Mentha arvensis*], DA XING QIN *Astrantia major*, DAN SHEN *Salvia miltiorrhiza* (dried root: content = 0.166%<sup>[5508]</sup>), HUI HUI SU GENG *Perilla frutescens* var. *crispa*, JIAN ZI SU YE *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*], LA BO HE *Mentha piperita*, LIN SHI CAN *Teucrium scorodonia*, MI DIE XIANG *Rosmarinus officinalis*, MING XIAN HUA ZHU CHANG ZHU LIU LI CAO *Lindelofia stylosa* (地上部分), SHE XIANG CAO *Thymus vulgaris*, XI MEN FEI CAO *Symphytum officinale*, XIANG FENG HUA *Melissa officinalis*, YAO YONG DAN SHEN *Salvia officinalis*, ZI DAN TENG *Tournefortia sarmentosa* (stem: yield = 0.0625%<sup>[4628]</sup>), *Anethum* sp., *Levisticum* sp., *Sanicula* sp. Ref: 2, 658, 660, 1521, 2592, 4533, 4628, 5494, 5508.



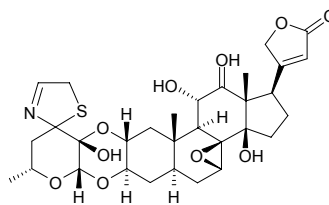
**12421 Labriformidin**

[66419-08-7] C<sub>29</sub>H<sub>36</sub>O<sub>11</sub> (560.60). Powder, mp 206~210°C. Pharm: Toxin (vertebrate); LD<sub>50</sub> (male Swiss Webster mus, ip) = 3.1mg/kg. Source: MAO GUO MA LI JIN *Asclepias eriocarpa*. Ref: 658.



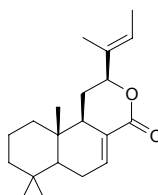
**12422 Labriformine**

[66419-07-6] C<sub>31</sub>H<sub>39</sub>NO<sub>10</sub>S (617.72). Crystals (Me<sub>2</sub>CO-hexane), mp 222~225°C, mp 213~215°C. Pharm: Toxin (vertebrate); LD<sub>50</sub> (male Swiss Webster mus, ip) = 9.2mg/kg. Source: MAO GUO MA LI JIN *Asclepias eriocarpa*. Ref: 658, 1521.



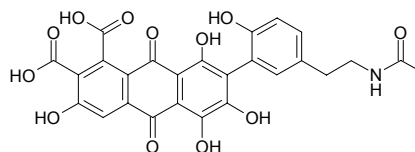
**12423 Labta-7,13(E)-diene-17,12-olide**

C<sub>20</sub>H<sub>30</sub>O<sub>2</sub> (302.46). mp 104~106°C,  $[\alpha]_D^{20} = -9.836^\circ$  ( $c = 1.2$ , CHCl<sub>3</sub>). Pharm: Cytotoxic (*in vitro*, BT474, IC<sub>50</sub> = 4.9μg/mL, control Doxorubicin hydrochloride, IC<sub>50</sub> = 0.08μg/mL; CHAGO, IC<sub>50</sub> = 6.4μg/mL, Doxorubicin hydrochloride, IC<sub>50</sub> = 2.3μg/mL; HepG2, IC<sub>50</sub> = 6.0μg/mL, Doxorubicin hydrochloride, IC<sub>50</sub> = 0.9μg/mL; Kato3, IC<sub>50</sub> = 4.6μg/mL, Doxorubicin hydrochloride, IC<sub>50</sub> = 1.7μg/mL; SW620, IC<sub>50</sub> = 5.0μg/mL, Doxorubicin hydrochloride, IC<sub>50</sub> = 1.1μg/mL). Source: GUANG YE BA DOU *Croton oblongifolius* [Syn. *Croton laevigatus*]. Ref: 5363.



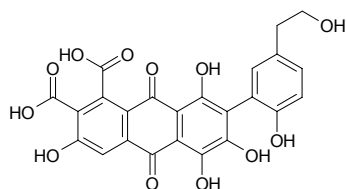
**12424 Laccaic acid A**

C<sub>26</sub>H<sub>19</sub>NO<sub>12</sub> (537.44). Source: SHENG QI *Rhus verniciflua* [Syn. *Toxicadendron verniciflum*]. Ref: 660.

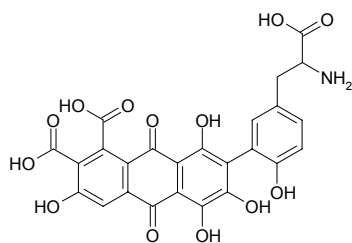


**12425 Laccaic acid B**

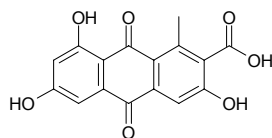
$C_{24}H_{16}O_{12}$  (496.39). Source: SHENG QI *Rhus verniciflua* [Syn. *Toxicodendron verniciflum*]. Ref: 660.

**12426 Laccaic acid C**

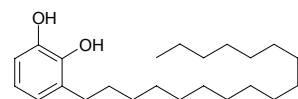
$C_{25}H_{17}NO_{13}$  (539.41). Source: SHENG QI *Rhus verniciflua* [Syn. *Toxicodendron verniciflum*]. Ref: 660.

**12427 Laccaic acid D**

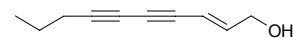
$C_{16}H_{10}O_7$  (314.25). Source: SHENG QI *Rhus verniciflua* [Syn. *Toxicodendron verniciflum*]. Ref: 660.

**12428 Laccol**

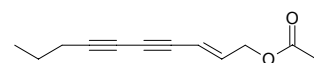
$C_{23}H_{40}O_2$  (348.57). mp 23°C. Source: LIN BEI ZI *Toxicodendron succedaneum* [Syn. *Rhus succedanea*]. Ref: 6.

**12429 Lachnophyllol**

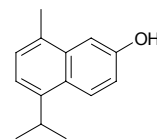
[23180-62-3]  $C_{10}H_{12}O$  (148.21). Crystals (petroleum ether), mp 39~40°C. Source: ZI WAN *Aster tataricus*. Ref: 6.

**12430 Lachnophyllol acetate**

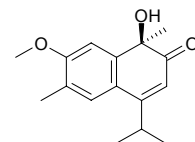
$C_{12}H_{14}O_2$  (190.24). bp 90°C/0.001mmHg. Source: ZI WAN *Aster tataricus*. Ref: 6.

**12431 Lacinilene A**

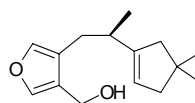
$C_{14}H_{16}O$  (200.28). Source: LANG YU PI *Ulmus parvifolia*. Ref: 660.

**12432 Lacinilene C 7-methyl ether**

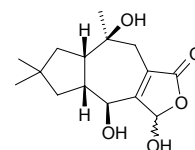
$C_{16}H_{20}O_3$  (260.34). Source: LU DI MIAN *Gossypium hirsutum* [Syn. *Gossypium mexicanum*]. Ref: 658.

**12433 Lactarol**

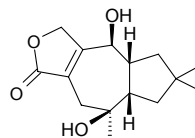
$C_{15}H_{22}O_2$  (234.34). Source: RONG BAI RU GU *Lactarius vellereus*. Ref: 660.

**12434 Lactarolide A**

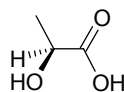
$C_{15}H_{22}O_5$  (282.34). Source: MEI WEI HONG GU *Russula delica* (sporocarp). Ref: 4374.

**12435 Lactarorufin A**

$C_{15}H_{22}O_4$  (266.34). Source: RONG BAI RU GU *Lactarius vellereus*. Ref: 660.

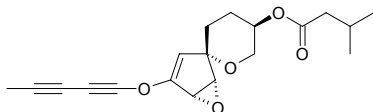
**12436 Lactic acid**

2-Hydroxypropanoic acid [50-21-5]  $C_3H_6O_3$  (90.08). Pharm: Antiseptic (*L*-Lactic acid). Source: KUAN YE XIANG PU *Typha latifolia*, LU HUI *Aloe vera* [Syn. *Aloe barbadensis*], MAO DI HUANG *Digitalis purpurea*. Ref: 2, 658, 660.

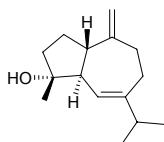


**12437 Lactiflorasyn**

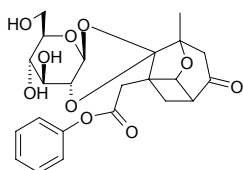
$C_{15}H_{22}O_5$  (330.38). White granular crystals, mp 92.5–93.5°C,  $[\alpha]_D^{29} = +3^\circ$  ( $c = 0.37$ , chloroform). Source: YA JIAO AI *Artemisia lactiflora*. Ref: 66.

**12438 Lactifloreol**

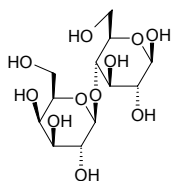
$C_{15}H_{24}O$  (220.36). Colorless oil,  $[\alpha]_D^{20} = +15.8^\circ$  ( $c = 0.09$ , ethanol). Pharm: Antiasthmatic; antibacterial; antispasmodic. Source: YA JIAO AI *Artemisia lactiflora*. Ref: 661.

**12439 Lactiflorin**

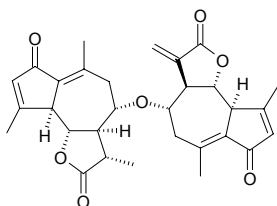
$C_{23}H_{26}O_{10}$  (462.46). Crystals (CHCl<sub>3</sub>-MeOH), mp 207–209°C,  $[\alpha]_D^{23} = +37.2^\circ$  ( $c = 0.01$ , EtOH). Source: CHI SHAO *Paeonia lactiflora* wild. Ref: 2, 1521.

**12440 Lactose**

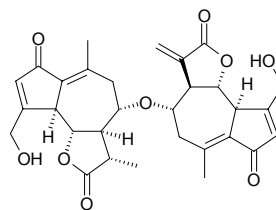
$C_{12}H_{22}O_{11}$  (342.30). Pharm: Treatment of hepatic coma and constipation. Source: LIAN QIAO *Forsythia suspensa*. Ref: 658.

**12441 Lactuain A**

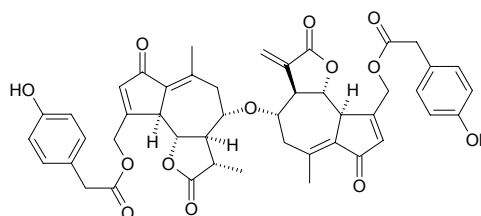
$C_{30}H_{32}O_7$  (504.59). Amorphous powder,  $[\alpha]_D^{25} = -20.5^\circ$  ( $c = 0.2$ , MeOH). Source: SHAN WO JU *Lactuca indica* (Fresh whole herb: yield = 0.0027%fw). Ref: 4689.

**12442 Lactuain B**

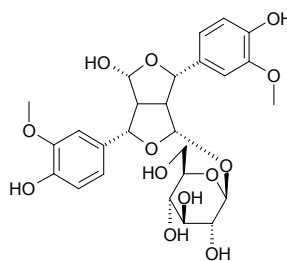
$C_{30}H_{32}O_9$  (536.58). Amorphous powder,  $[\alpha]_D^{25} = -68.6^\circ$  ( $c = 0.5$ , MeOH). Source: SHAN WO JU *Lactuca indica* (Fresh whole herb: yield = 0.00027%fw). Ref: 4689.

**12443 Lactuain C**

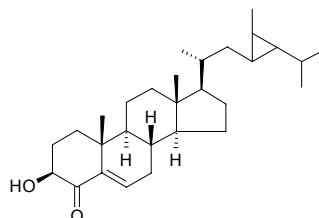
$C_{46}H_{44}O_{13}$  (804.86). Amorphous powder,  $[\alpha]_D^{25} = +38.0^\circ$  ( $c = 0.2$ , MeOH). Pharm: Antidiabetic (STZ-induced diabetic rats *in vivo*, antihyperglycemic test, 1mmol/kg,  $\Delta = (-22.74 \pm 12.53)\%$ ). Source: SHAN WO JU *Lactuca indica* (Fresh whole herb: yield = 0.0025%fw). Ref: 4689.

**12444 Lactucaside**

9 $\alpha$ -Hydroxy-9 $\alpha$ -O- $\beta$ -D-glucopyranosylpinoresinol  $C_{26}H_{32}O_{13}$  (552.54). Off-white amorphous powder,  $[\alpha]_D^{25} = -44.3^\circ$  ( $c = 0.4$ , MeOH). Pharm: Antidiabetic (STZ-induced diabetic rats *in vivo*, antihyperglycemic test, 1mmol/kg,  $\Delta = (-17.95 \pm 5.63)\%$ ). Source: SHAN WO JU *Lactuca indica* (Fresh whole herb: yield = 0.0018%fw). Ref: 4689.

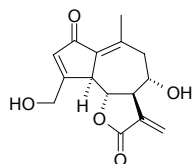
**12445 Lactuasterol**

$C_{29}H_{46}O_2$  (426.69). White powder, mp 148–150°C. Source: SHI CHUN *Ulva lactuca*. Ref: 837.

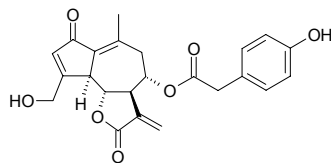


**12446 Lactucin**

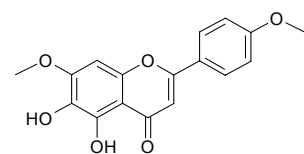
8 $\beta$ ,15-Dihydroxy-2-oxo-guaia-1(10),3,11(13)-trien-5 $\alpha$ ,6 $\beta$ ,7 $\alpha$ H-12,6-olide [1891-29-8] C<sub>15</sub>H<sub>16</sub>O<sub>5</sub> (276.29). Crystals (Me<sub>2</sub>CO), mp 224–228°C, [ $\alpha$ ]<sub>D</sub> = +49° (*c* = 0.9, MeOH). **Pharm:** Cytotoxic (hmn, *in vitro*, PC3 prostate cancer cells, IC<sub>50</sub> = 10.7 $\mu$ g/mL)<sup>[2527]</sup>; cytotoxic (hmn tumor cells HeLa); antitussive; sedative; LD (mus, orl) = 800–1000mg/kg, (mus, sc) = 50mg/kg, (mus, iv) = 15mg/kg. **Source:** DU WO JU *Lactuca virosa*, JU QU *Cichorium intybus*, SHAN KU MAI *Ixeris chinensis*, SA LI LA WO JU *Lactuca sariola*, SUI BIAN WO JU *Lactuca laciniata*, WO JU *Lactuca sativa*. **Ref:** 5, 658, 2527.

**12447 Lactucopicrin**

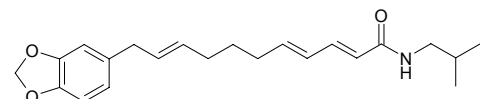
[65725-11-3] C<sub>23</sub>H<sub>22</sub>O<sub>7</sub> (410.43). **Pharm:** Hypoglycemic **Source:** DU WO JU *Lactuca virosa*, JIA NA DA WO JU *Lactuca canadensis*, JU QU *Cichorium intybus*, YE WO JU *Lactuca serriola*. **Ref:** 6, 658.

**12448 Ladanein**

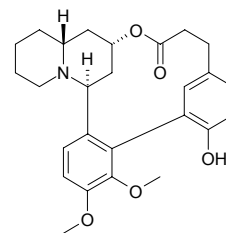
5,6-Dihydroxy-7,4'-dimethoxyflavone C<sub>17</sub>H<sub>14</sub>O<sub>6</sub> (314.30). Pale yellow powder, mp 213–216°C. **Pharm:** PFase inhibitor (100 $\mu$ g/mL, InRt = 63%)<sup>[5378]</sup>; cytotoxic inactive (hmn breast cancer cell lines: MDA-MB-231, MCF7, T47D, 20 $\mu$ g/mL)<sup>[5378]</sup>; angiogenesis inhibitor inactive (chicken embryo chorioallantoic membrane (CAM) assay, 10 $\mu$ g)<sup>[5378]</sup>. **Source:** AI YE *Artemisia argyi*, XIONG RUI ZHUANG ZHI GUAN CAO *Orthosiphon stamineus* [Syn: *Orthosiphon aristatus*; *Orthosiphon grandiflorus*; *Orthosiphon spicatus*] (aerial parts: yield = 0.0058%dw). **Ref:** 3053, 5378.

**12449 Laetispicine**

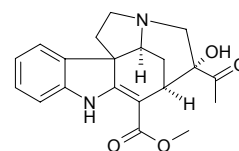
C<sub>22</sub>H<sub>29</sub>NO<sub>3</sub> (355.48). White needles, mp 93–94°C. **Source:** DA YE JU *Piper laetispicum*. **Ref:** 4865.

**12450 Lagerstremine**

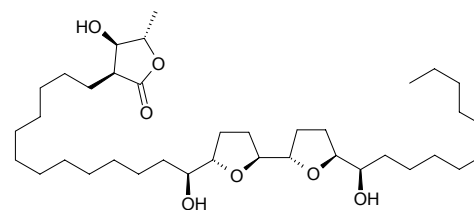
Lagerstroemine [10247-53-7] C<sub>26</sub>H<sub>31</sub>NO<sub>5</sub> (437.54). mp 226–228°C. **Source:** ZI WEI YE *Lagerstroemia indica*. **Ref:** 6.

**12451 Lagumicine**

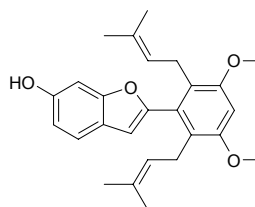
C<sub>20</sub>H<sub>22</sub>N<sub>2</sub>O<sub>4</sub> (354.41). Light yellowish oil, [ $\alpha$ ]<sub>D</sub> = –552° (*c* = 0.07, CHCl<sub>3</sub>). **Source:** XIA YE JI GU CHANG SHAN *Alstonia angustifolia* (leaf). **Ref:** 3780.

**12452 Laherradurin**

C<sub>37</sub>H<sub>68</sub>O<sub>7</sub> (624.95). **Pharm:** Mitochondrial complex I selective inhibitor (NADH oxidase IC<sub>50</sub> = (0.18±0.02)nmol/L, *p* < 0.001, control Rotenone, IC<sub>50</sub> = (5.10±0.09)nmol/L). **Source:** MAO YE FAN LI ZHI *Annona cherimolia* (seed). **Ref:** 5024.

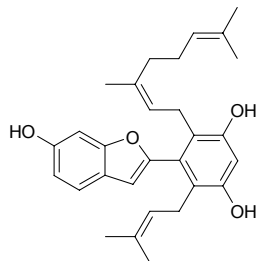
**12453 Lakoochin A**

C<sub>26</sub>H<sub>30</sub>O<sub>4</sub> (406.53). Off-white semisolid. **Pharm:** Antitubercular (*in vitro*, *Mycobacterium tuberculosis* H37Ra, MIC = 12.5 $\mu$ g/mL); cytotoxic (*in vitro*, BC, IC<sub>50</sub> = 6.1 $\mu$ g/mL; KB, inactive at 20 $\mu$ g/mL). **Source:** LA KOU SHA MIAN BAO GUO *Artocarpus lakoocha* (root: yield = 0.00050%dw). **Ref:** 3017.

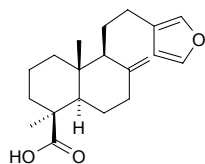


**12454 Lakoochin B**

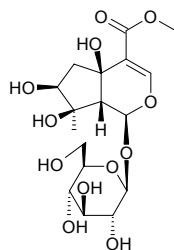
$C_{29}H_{34}O_4$  (446.59). Off-white semisolid. **Pharm:** Antitubercular (*in vitro*, *Mycobacterium tuberculosis* H37Ra, MIC = 50  $\mu\text{g}/\text{mL}$ ); cytotoxic (*in vitro*, BC, IC<sub>50</sub> = 3.1  $\mu\text{g}/\text{mL}$ ; KB, IC<sub>50</sub> = 6.1  $\mu\text{g}/\text{mL}$ ). **Source:** LA KOU SHA MIAN BAO GUO *Artocarpus lakoocha* (root; yield = 0.0011%dw). **Ref:** 3017.

**12455 Lambertianic acid**

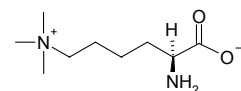
[4966-13-6]  $C_{20}H_{28}O_3$  (316.44). Colorless oil, mp 126.5~127.5°C,  $[\alpha]_D^{25} = +53^\circ$  ( $c = 0.26$ ,  $\text{CHCl}_3$ ),  $[\alpha]_D^{25} = +55^\circ$  ( $c = 0.69$ , EtOH). **Pharm:** Antimalarial (*in vitro*, *Plasmodium falciparum* strain 3D7, IC<sub>50</sub> = (41.2±4)  $\mu\text{g}/\text{mL}$  ((130.2±12.6)  $\mu\text{mol}/\text{L}$ ))<sup>[3022]</sup>. **Source:** CE BAI YE *Thuja orientalis* [Syn. *Platycladus orientalis*; *Biota orientalis*], HAI SONG ZI *Pinus koraiensis*. **Ref:** 6, 3022.

**12456 Lamiide**

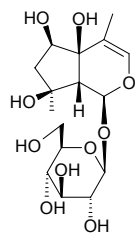
[27856-54-8]  $C_{17}H_{26}O_{12}$  (422.39). **Source:** BAO GAI CAO *Lamium amplexicaule*, TIAN SHE CAO *Lippia dulcis* (aerial parts). **Ref:** 6, 4508.

**12457 Laminine**

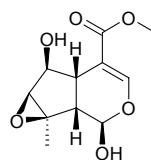
6-*N*-Trimethyl-*L*-lysine betaine [2408-79-9]  $C_9H_{20}N_2O_2$  (188.27). **Source:** KUN BU *Laminaria japonica*. **Ref:** 5, 6, 5501.

**12458 Lamiol**

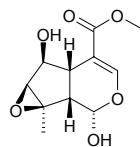
[30987-52-1]  $C_{16}H_{26}O_{10}$  (378.38). **Source:** BAO GAI CAO *Lamium amplexicaule*. **Ref:** 6.

**12459 Lamiophlomiol A**

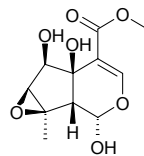
[134107-56-5]  $C_{11}H_{14}O_6$  (242.23). Colorless prismatic crystals (acetic ester-methanol), mp 159~163°C,  $[\alpha]_D^{22} = +43.2^\circ$  ( $c = 1.325$ , methanol). **Source:** DU YI WEI *Lamiophlomis rotata* [Syn. *Phlomis rotata*]. **Ref:** 178.

**12460 Lamiophlomiol B**

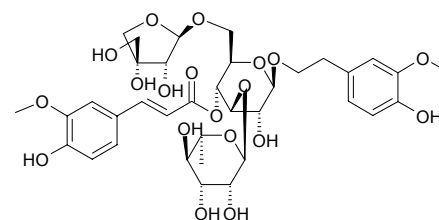
$C_{11}H_{14}O_6$  (242.23). **Source:** DU YI WEI *Lamiophlomis rotata* [Syn. *Phlomis rotata*]. **Ref:** 178.

**12461 Lamiophlomiol C**

$C_{11}H_{14}O_7$  (258.23). Colorless prismatic crystals, mp 155~157°C,  $[\alpha]_D^{22} = +66.7^\circ$  ( $c = 2.11$ , methanol). **Source:** DU YI WEI *Lamiophlomis rotata* [Syn. *Phlomis rotata*]. **Ref:** 223.

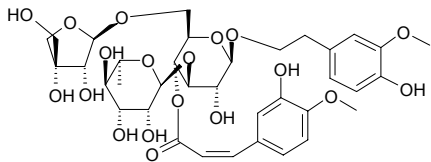
**12462 Lamiophlomoside A**

3-Methoxy-4-hydroxy-phenethyl-*O*-[ $\alpha$ -*L*-rhamno-pyranosyl-(1→3)]-*O*-[ $\beta$ -*D*-apiofuranosyl-(1→6)]-4-*O*-feruloyl- $\beta$ -*D*-glucopyranoside  $C_{36}H_{48}O_{19}$  (784.77). Yellowish powder, mp 107~108°C. **Source:** DU YI WEI *Lamiophlomis rotata* [Syn. *Phlomis rotata*]. **Ref:** 323.

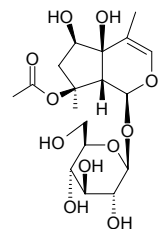


**12463 cis-Lamiophlomiside A**

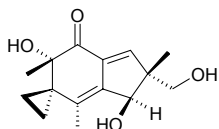
[239467-64-2] C<sub>36</sub>H<sub>48</sub>O<sub>19</sub> (784.77). Off-white amorphous powder. Source: DU YI WEI *Lamiophlomis rotata* [Syn. *Phlomis rotata*]. Ref: 2318.

**12464 Lamioside**

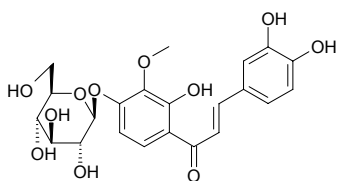
[19228-19-4] C<sub>18</sub>H<sub>28</sub>O<sub>11</sub> (420.42). Source: BAO GAI CAO *Lamium amplexicaule*, YE ZHI MA *Lamium barbatum*. Ref: 6.

**12465 Lampterol**

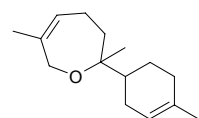
C<sub>15</sub>H<sub>20</sub>O<sub>4</sub> (264.32). mp 124~125°C. Pharm: Antineoplastic. Source: RI BEN CE ER *Lamptreomyces japonicus* (the compound was isolated from the plant by Masaru Tada et al. in 1964). Ref: 5505.

**12466 Lanceolin**

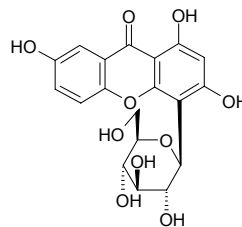
[64181-95-9] C<sub>22</sub>H<sub>24</sub>O<sub>11</sub> (464.43). mp 215~220°C. Source: XIAN YE JIN JU *Coreopsis lanceolata*. Ref: 6.

**12467 Lanceoloxide**

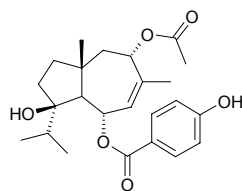
1,5-Dimethyl-1-(4-methylhexenyl)-4-cycloheptenylether C<sub>15</sub>H<sub>24</sub>O (220.36). Colorless oil. Source: XIAO HUA SHA ZHEN *Osyris tenuifolia* (essential oil). Ref: 3821.

**12468 Lancerin**

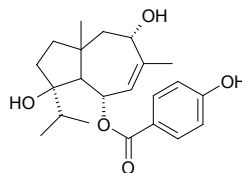
[81991-99-3] C<sub>19</sub>H<sub>18</sub>O<sub>10</sub> (406.35). Amorphous powder. Pharm: CNS stimulant (rat, sc, strengthens ephedrine-induced spontaneous motion). Source: XI BO LI YA YUAN ZHI *Polygala sibirica*. Ref: 691, 1829.

**12469 Lancerotriol 9-acetate-6-p-hydroxybenzoate**

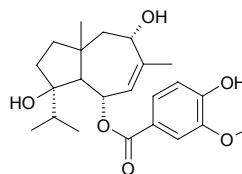
C<sub>24</sub>H<sub>32</sub>O<sub>6</sub> (416.52). Source: *Ferula sinaica* (leaf). Ref: 5145.

**12470 Lancerotriol 9α-(p-hydroxybenzoate)**

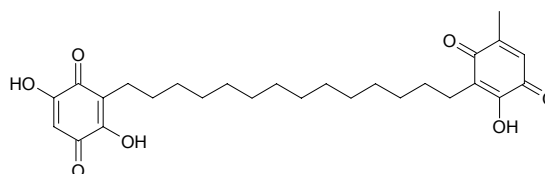
C<sub>22</sub>H<sub>30</sub>O<sub>5</sub> (374.48). Source: YI LANG A WEI *Ferula kuhistanica* (root), YI LANG A WEI *Ferula kuhistanica* (fruit). Ref: 3977, 5207.

**12471 Lancerotriol 6-vanillate**

C<sub>23</sub>H<sub>32</sub>O<sub>6</sub> (404.51). Source: YI LANG A WEI *Ferula kuhistanica* (root). Ref: 3977.

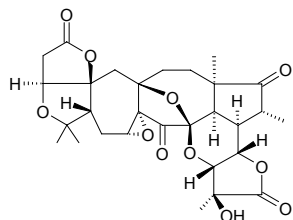
**12472 Lanciaquinone**

C<sub>27</sub>H<sub>36</sub>O<sub>7</sub> (472.58). Yellow brown crystals (MeOH), mp 141~143°C, [α]<sub>D</sub><sup>25</sup> = +29° (c = 0.5, CH<sub>2</sub>Cl<sub>2</sub>). Source: PI ZHEN DU JING SHAN *Maesa lanceolata* (fruit). Ref: 3464.

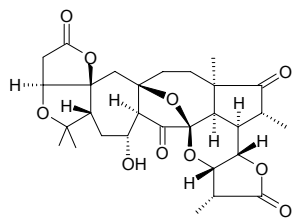


**12473 Lancifodilactone B**

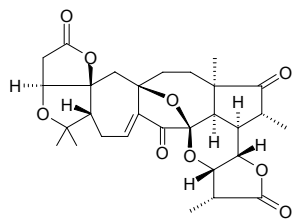
$C_{29}H_{34}O_{11}$  (558.59). Colorless needles (acetone), mp 222~224°C,  $[\alpha]_D = +55.12^\circ$  ( $c = 0.25$ ,  $C_5H_5N$ ). [Source](#): XIA YE WU WEI ZI *Schisandra lancifolia* (stem and leaf: yield = 0.00068%dw). [Ref](#): 3006.

**12474 Lancifodilactone C**

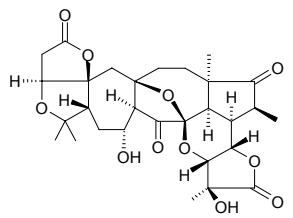
$C_{29}H_{36}O_{10}$  (544.6). Colorless prisms (MeOH), mp 209~211°C,  $[\alpha]_D = +47.74^\circ$  ( $c = 0.20$ ,  $C_5H_5N$ ). [Source](#): XIA YE WU WEI ZI *Schisandra lancifolia* (stem and leaf: yield = 0.00095%dw). [Ref](#): 3006.

**12475 Lancifodilactone D**

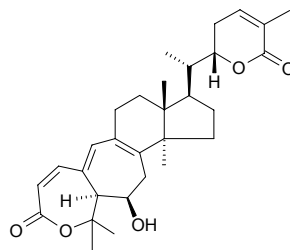
$C_{29}H_{34}O_9$  (526.59). Colorless prisms (MeOH), mp 230~232°C,  $[\alpha]_D = +80.77^\circ$  ( $c = 0.26$ ,  $C_5H_5N$ ). [Source](#): XIA YE WU WEI ZI *Schisandra lancifolia* (stem and leaf: yield = 0.0018%dw). [Ref](#): 3006.

**12476 Lancifodilactone E**

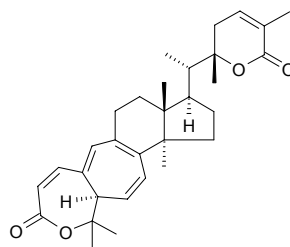
21 $\beta$ -Methyl-20,22-dideoxy-25-hydroxymicrandilactone A  $C_{29}H_{36}O_{11}$  (560.6). Colorless prisms (acetone), mp 200°C,  $[\alpha]_D +70.42^\circ$  ( $c = 0.21$ , MeOH). [Source](#): XIA YE WU WEI ZI *Schisandra lancifolia* (stem and leaf: yield = 0.00074%dw). [Ref](#): 3006.

**12477 Lancilactone A**

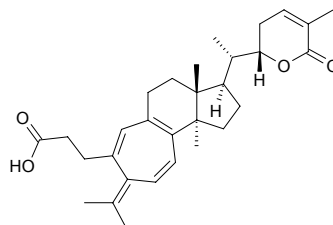
[218915-15-2]  $C_{30}H_{40}O_5$  (480.65). [Source](#): PI ZHEN YE NAN WU WEI ZI *Kadsura lancilimba*. [Ref](#): 2436.

**12478 Lancilactone B**

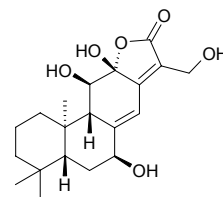
[218915-16-3]  $C_{30}H_{38}O_4$  (462.63). [Source](#): PI ZHEN YE NAN WU WEI ZI *Kadsura lancilimba*. [Ref](#): 2436.

**12479 Lancilactone C**

$C_{30}H_{40}O_4$  (464.65). [Pharm](#): Anti-HIV (inhibits HIV replication). [Source](#): PI ZHEN YE NAN WU WEI ZI *Kadsura lancilimba*. [Ref](#): 928, 2268.

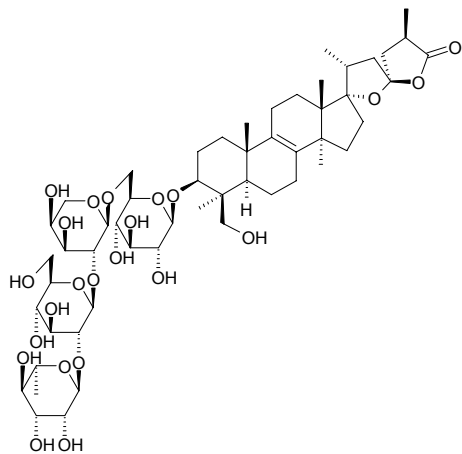
**12480 Languin B**

$C_{20}H_{28}O_6$  (364.44). Colorless crystals, mp 220~222°C,  $[\alpha]_D^{26} = -143^\circ$  ( $c = 0.002$ , EtOH). [Source](#): LANG DU DA JI *Euphorbia fischeriana*. [Ref](#): 2350.

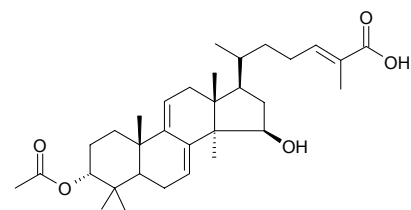


**12481 Lanostane glycoside**

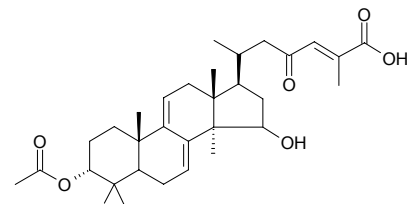
$C_{53}H_{84}O_{23}$  (1089.25). **Pharm:** Cytotoxic (HSC-2 hm oral squamous cell carcinoma cells,  $IC_{50} = 42\mu\text{g/mL}$ , control Etoposide,  $IC_{50} = 24\mu\text{g/mL}$ ). **Source:** QI YI PU TAO FENG XIN ZI *Muscari paradoxum* (bulb). **Ref:** 3495.

**12482 Lanosta-7,9(11),24-trien-3 $\alpha$ -acetoxy-15 $\alpha$ ,22 $\beta$ -dihydroxy-26-oic acid**

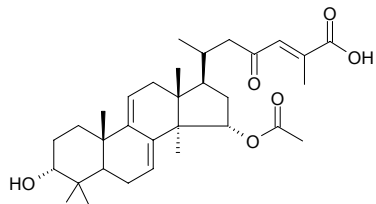
$C_{32}H_{48}O_5$  (512.74). **Source:** LING ZHI *Ganoderma lucidum*. **Ref:** 660.

**12483 Lanosta-7,9(11),24-trien-3 $\alpha$ -acetoxy-15 $\alpha$ -hydroxy-23-oxo-26-oic acid**

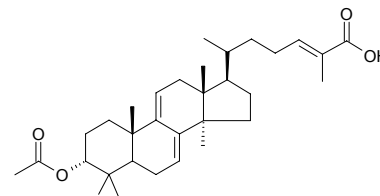
$C_{32}H_{46}O_6$  (526.72). **Source:** LING ZHI *Ganoderma lucidum*. **Ref:** 660.

**12484 Lanosta-7,9(11),24-trien-15 $\alpha$ -acetoxy-3 $\alpha$ -hydroxy-23-oxo-26-oic acid**

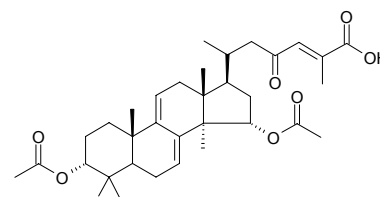
$C_{32}H_{46}O_6$  (526.72). **Source:** LING ZHI *Ganoderma lucidum*. **Ref:** 660.

**12485 Lanosta-7,9(11),24-trien-3 $\alpha$ -acetoxy-26-oic acid**

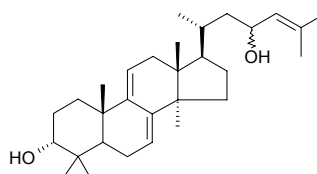
$C_{32}H_{48}O_4$  (496.74). **Source:** LING ZHI *Ganoderma lucidum*. **Ref:** 660.

**12486 Lanosta-7,9(11),24-trien-3 $\alpha$ ,15 $\alpha$ -diacetoxy-23-oxo-26-oic acid**

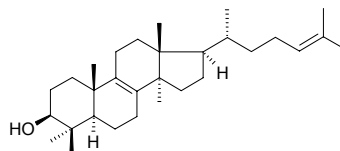
$C_{34}H_{48}O_7$  (568.76). **Source:** LING ZHI *Ganoderma lucidum*. **Ref:** 660.

**12487 5 $\alpha$ -Lanosta-7,9(11),24-triene-3 $\alpha$ ,23-diol**

$C_{30}H_{48}O_2$  (440.72). Colorless needles (MeOH), mp 105°C,  $[\alpha]_D = -20^\circ$  ( $c = 0.01$ ,  $\text{CHCl}_3$ ). **Pharm:** Antileishmanial (*Leishmania donovani* promastigotes,  $IC_{50} = 20\mu\text{mol/L}$ , SI = 1.06, control Pentamidine,  $IC_{50} = 0.40\mu\text{mol/L}$ , SI = 0.42, amastigotes,  $IC_{50} = 20\mu\text{mol/L}$ , SI = 1.06, control Pentostam,  $IC_{50} = 9.75\mu\text{g/mL}$ , SI = 34.90); antimalarial (*Plasmodium falciparum* K1,  $IC_{50} = 69.6\mu\text{mol/L}$ , SI = 0.30; control Chloroquine,  $IC_{50} = 0.59\mu\text{mol/L}$ , SI = 272.20); antitrypanosomal (*Trypanosoma brucei brucei* blood stream trypomastigotes,  $IC_{50} = 1.75\mu\text{mol/L}$ , SI = 12.11, control Pentamidine,  $IC_{50} = 0.00034\mu\text{mol/L}$ , SI = 500); cytotoxic (KB cells,  $IC_{50} = 21.2\mu\text{mol/L}$ , control Pentamidine,  $IC_{50} = 0.17\mu\text{mol/L}$ ). **Source:** *Guarea rhopalocarpa* (leaf). **Ref:** 5127.

**12488 Lanosterol**

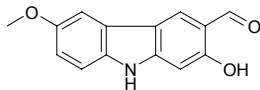
Lanosta-8,24-dien-3 $\beta$ -ol [79-63-0]  $C_{30}H_{50}O$  (426.73). mp 140–141°C. **Pharm:** Precursor to biosynthesis of sterol (in animals and in non-photosynthetic plants). **Source:** GOU QI ZI *Lycium chinense*, HOU PI SHU *Lansea grandis* [Syn. *Lansea coromandelica*], YI PIN HONG *Euphorbia pulcherrima*, A LI HONG *Fomes officinalis*, GUA JIN DENG *Physalis alkekengi* var. *franchetii*, LUO TUO PENG ZI *Peganum harmala*, QIE ZI *Solanum melongena*, SAN JIAO YE SHU YU *Dioscorea deltoidea*, TIAN QIE ZI *Solanum indicum*, YOU GAN LAN *Olea europaea*, YU MI HEI MEI *Ustilago maydis*, ZHANG LIU TOU *Costus speciosus*. **Ref:** 6, 658, 660.



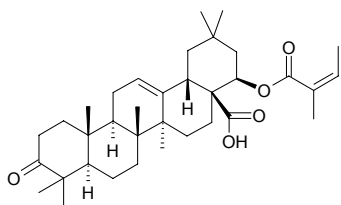


**12489 Lansine**

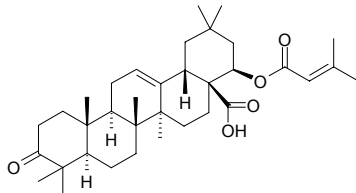
$C_{14}H_{11}NO_3$  (241.25). Yellow needles. **Pharm:** Antitubercular (MIC =  $(31.5 \pm 0.2) \mu\text{g/mL}$ , control Rifampin, MIC =  $(0.040 \pm 0.017) \mu\text{g/mL}$ ); cytotoxic (vero,  $IC_{50} > 102 \mu\text{g/mL}$ , Rifampin,  $IC_{50} = 100 \mu\text{g/mL}$ ). **Source:** YING MAO XIAO YUN MU *Micromelum hirsutum* (stem cortex). **Ref:** 5072.

**12490 Lantadene A**

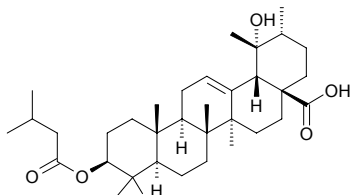
[467-81-2]  $C_{35}H_{52}O_5$  (552.80). mp 282~286°C. **Pharm:** Anti-androgenic (testosterone  $5\alpha$ -reductase inhibitor,  $50 \mu\text{g/mL}$ , InRt = 75.08%, control Glabridine,  $50 \mu\text{g/mL}$ , InRt = 48.20%)<sup>[4106]</sup>. **Source:** DUO SUI PO BU MU *Cordia multispicata* (leaf), WU SE MEI *Lantana camara*. **Ref:** 6, 253, 4106.

**12491 Lantadene B**

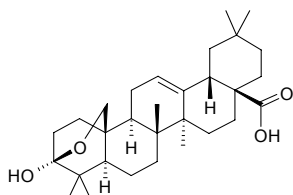
[467-82-3]  $C_{35}H_{52}O_5$  (552.80). mp 295~300°C (dec). **Pharm:** Anti-androgenic (testosterone  $5\alpha$ -reductase inhibitor,  $50 \mu\text{g/mL}$ , InRt = 72.49%, control Glabridine,  $50 \mu\text{g/mL}$ , InRt = 48.20%)<sup>[4106]</sup>. **Source:** DUO SUI PO BU MU *Cordia multispicata* (leaf), WU SE MEI *Lantana camara*. **Ref:** 6, 253, 4106.

**12492 Lantaiursolic acid**

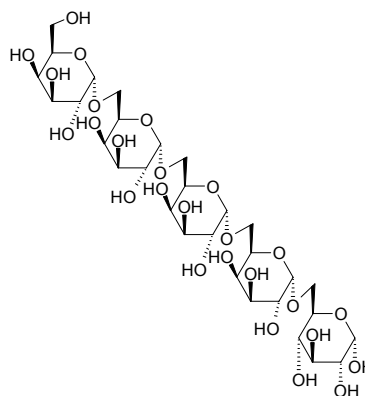
$C_{35}H_{56}O_5$  (556.83). **Source:** WU SE MEI *Lantana camara*. **Ref:** 254.

**12493 Lantanolic acid**

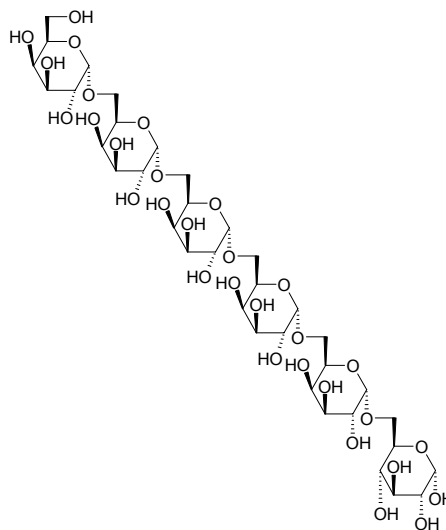
[32303-26-7]  $C_{30}H_{46}O_4$  (470.70). mp 306~309°C. **Pharm:** Anti-androgenic (testosterone  $5\alpha$ -reductase inhibitor,  $50 \mu\text{g/mL}$ , InRt = 95.83%, control Glabridine,  $50 \mu\text{g/mL}$ , InRt = 48.20%)<sup>[4106]</sup>. **Source:** DUO SUI PO BU MU *Cordia multispicata* (leaf), WU SE MEI *Lantana camara*. **Ref:** 6, 254, 4106, 4309.

**12494 Lantanose A**

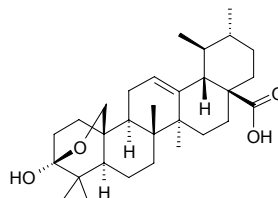
$C_{30}H_{52}O_{26}$  (828.73). White powder,  $[\alpha]_D = +166$  ( $c = 1.04$ ,  $H_2O$ ). **Source:** WU SE MEI *Lantana camara*. **Ref:** 234.

**12495 Lantanose B**

$C_{36}H_{62}O_{31}$  (990.88). White powder,  $[\alpha]_D = +114.2^\circ$  ( $c = 1.06$ ,  $H_2O$ ). **Source:** WU SE MEI *Lantana camara*. **Ref:** 234.

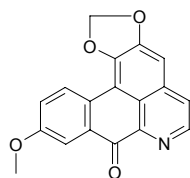
**12496 Lantic acid**

[22626-26-2]  $C_{30}H_{46}O_4$  (470.70). Crystals, mp 256~259°C  $[\alpha]_D^{35} = +152^\circ$  ( $CHCl_3$ ). **Pharm:** Anti-androgenic (testosterone  $5\alpha$ -reductase inhibitor,  $50 \mu\text{g/mL}$ , InRt = 86.16%, control Glabridine,  $50 \mu\text{g/mL}$ , InRt = 48.20%)<sup>[4106]</sup>. **Source:** DUO SUI PO BU MU *Cordia multispicata* (leaf), WU SE MEI *Lantana camara*. **Ref:** 6, 1521, 4106.

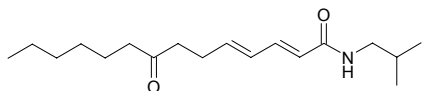


**12497 Lanuginosine**

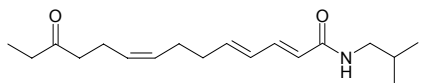
[23740-25-2] C<sub>18</sub>H<sub>11</sub>NO<sub>4</sub> (305.29). mp 302~303°C (dec). **Pharm:** Platelet aggregation inhibitor inactive (rat blood: 2~5μmol/L ADP-induced, IC<sub>50</sub> > 1000μmol/L, control Acetylsalicylic acid, IC<sub>50</sub> > 1000μmol/L; 2~5μg/mL collagen-induced, IC<sub>50</sub> > 500μmol/L, Acetylsalicylic acid, IC<sub>50</sub> = 420μmol/L; 1~4μmol/L epinephrine-induced with threshold concentration of collagen (0.8~1.0μg/mL), IC<sub>50</sub> > 100μmol/L, Acetylsalicylic acid, IC<sub>50</sub> = 53μmol/L; 10~40μmol/L AA-induced with threshold concentration of collagen (0.8~1.0μg/mL), IC<sub>50</sub> > 100μmol/L, Acetylsalicylic acid, IC<sub>50</sub> = 66μmol/L; 1~5μmol/L U46619-induced with threshold concentration of collagen (0.8~1.0μg/mL), IC<sub>50</sub> > 100μmol/L, Acetylsalicylic acid, IC<sub>50</sub> = 340μmol/L)<sup>[5381]</sup>; antitrypanosomal (inhibits trypomastigote form of *Trypanosoma cruzi*, strain Y, IC<sub>50</sub> > 250μg/mL, IC<sub>90</sub> > 250μg/mL)<sup>[3976]</sup>. **Source:** RI BEN HOU PO *Magnolia obovata* (leaf), XIN YI *Magnolia liliflora*, *Gutteria boliviana* (stem cortex). **Ref:** 6, 3976, 5381.

**12498 Lanyuamide I**

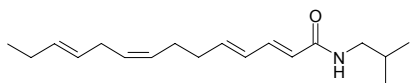
C<sub>18</sub>H<sub>31</sub>NO<sub>2</sub> (293.45). Colorless oil. **Pharm:** Platelet aggregation inhibitor. **Source:** QUAN YUAN YE HUA JIAO *Zanthoxylum integrifoliolum*. **Ref:** 2176, 2360.

**12499 Lanyuamide II**

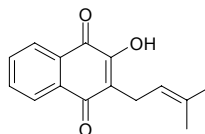
C<sub>18</sub>H<sub>29</sub>NO<sub>2</sub> (291.44). Colorless oil. **Pharm:** Platelet aggregation inhibitor. **Source:** QUAN YUAN YE HUA JIAO *Zanthoxylum integrifoliolum*. **Ref:** 2176, 2360.

**12500 Lanyuamide III**

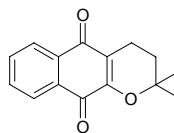
C<sub>18</sub>H<sub>29</sub>NO (275.44). Colorless oil. **Pharm:** Platelet aggregation inhibitor. **Source:** QUAN YUAN YE HUA JIAO *Zanthoxylum integrifoliolum*. **Ref:** 2176, 2360.

**12501 Lapachol**

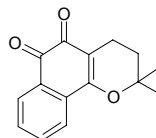
Greenhartin [84-79-7] C<sub>15</sub>H<sub>14</sub>O<sub>3</sub> (242.28). mp 140°C. **Pharm:** Antineoplastic (rat Walker sarcoma and mus P<sub>388</sub>); antimalarial; antitrypanosomal; cytotoxic (high dose); immunoenhancer (low dose); herbicide (*Chlorella fytisca*)<sup>[4467]</sup>; antifungal (*Ustilago violacea*)<sup>[4467]</sup>; antibacterial (gram-positive bacteria *Bacillus megaterium*)<sup>[4467]</sup>. **Source:** DIAO DENG SHU *Kigelia pinnata*, FEI ZHOU ZI WEI *Newbouldia laevis* (seed, root cortex and stem cortex), HUANG JIN *Hibiscus tiliaceus*. **Ref:** 5, 658, 4467.

**12502 α-Lapachone**

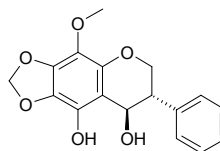
[4707-33-9] C<sub>15</sub>H<sub>14</sub>O<sub>3</sub> (242.28). mp 117°C. **Source:** ZI MU *Catalpa ovata*. **Ref:** 6.

**12503 β-Lapachone**

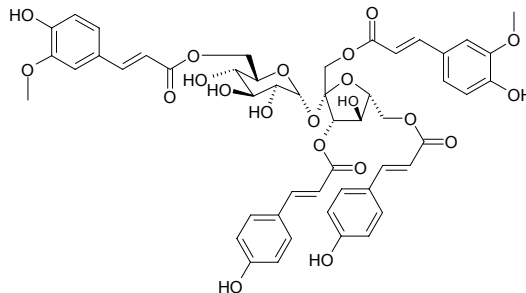
[4707-32-8] C<sub>15</sub>H<sub>14</sub>O<sub>3</sub> (242.28). **Pharm:** Antimicrobial; reverse transcriptase inhibitor; antineoplastic. **Source:** YOU MU *Tectona grandis*. **Ref:** 658.

**12504 Lapathinol**

C<sub>17</sub>H<sub>16</sub>O<sub>6</sub> (316.31). **Source:** YU LIAO *Polygonum lapathifolium*. **Ref:** 660.

**12505 Lapathoside A**

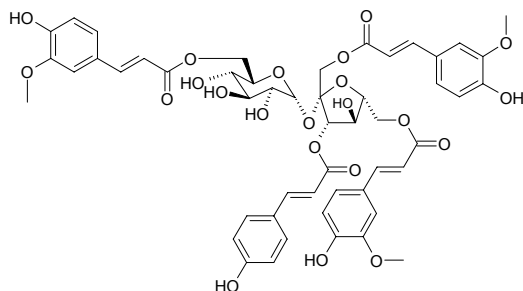
C<sub>50</sub>H<sub>50</sub>O<sub>21</sub> (986.94). Amorphous powder, [α]<sub>D</sub> = 22.68° (c = 0.26, MeOH). **Source:** YU LIAO *Polygonum lapathifolium* (aerial parts). **Ref:** 3091.



**12506 Lapatioside B**

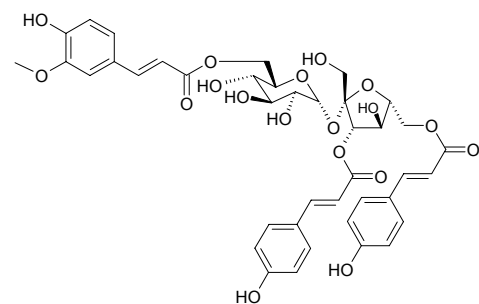
$C_{51}H_{52}O_{22}$  (1016.97). Amorphous powder,  $[\alpha]_D = 18.56^\circ$  ( $c = 0.20$ , MeOH).

Source: YU LIAO *Polygonum lapathifolium* (aerial parts). Ref: 3091.

**12507 Lapatioside C**

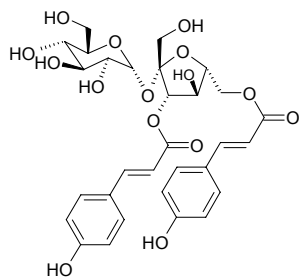
$C_{40}H_{42}O_{18}$  (810.77). Amorphous powder,  $[\alpha]_D = -14.66^\circ$  ( $c = 0.23$ , MeOH).

Source: YU LIAO *Polygonum lapathifolium* (aerial parts). Ref: 3091.

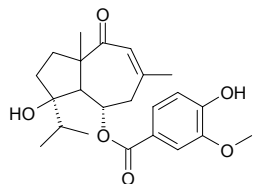
**12508 Lapatioside D**

$C_{30}H_{34}O_{15}$  (634.6). Amorphous powder,  $[\alpha]_D = 10.30^\circ$  ( $c = 0.15$ , MeOH).

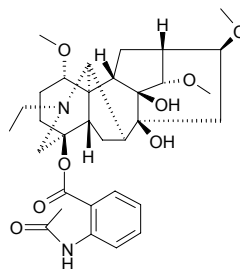
Source: YU LIAO *Polygonum lapathifolium* (aerial parts). Ref: 3091.

**12509 Lapidol vanillate**

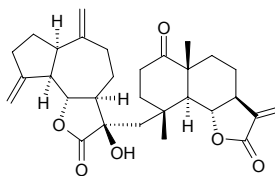
$C_{23}H_{30}O_6$  (402.49). Source: YI LANG A WEI *Ferula kuhistanica* (root). Ref: 3977.

**12510 Lappaconitine**

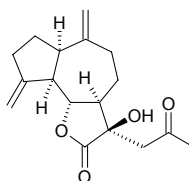
$C_{32}H_{44}N_2O_8$  (584.72). White columnar crystals (acetone), mp 224–225°C,  $[\alpha]_D = +29.90^\circ$  ( $c = 0.7$ , chloroform). Pharm: Analgesic (hot plate model, murine writhing model and murine tail-swing model); antiarrhythmic (rat, caused by 0.07mg/kg 3-acetylaconitine, ED = 0.5mg/kg); anti-inflammatory (rat, caused by formaldehyde); antipyretic (mus with artificial fever by triad-vaccine); local anesthetic; anti-inflammatory (modified assay of Berridge, 100µg/mL, InRt = 29.34%)<sup>[5271]</sup>; tyrosinase inhibitor (IC<sub>50</sub> = (93.33±0.16)µmol/L, control Kojic acid, IC<sub>50</sub> = (16.67±0.52)µmol/L, L-Mimosine, IC<sub>50</sub> = (3.68±0.02)µmol/L)<sup>[5271]</sup>; antioxidant (DPPH scavenger, 1µmol/L, ScRt = 12.0%; control 3-*t*-Butyl-4-hydroxyanisole, 1µmol/L, ScRt = 92.5%)<sup>[5271]</sup>; LD<sub>50</sub> (mus, iv) = 6.9mg/kg, (mus, ip) = 9.1mg/kg, (mus, orl) = 20mg/kg. Source: BEI FANG WU TOU *Aconitum septentrionale*, GAN WAN WU TOU *Aconitum finetianum*, GAO JIA SUO WU TOU *Aconitum orientale*, GAO WU TOU *Aconitum sinomontanum*, KE SHEN MI ER CUI QUE *Delphinium cashmerianum*, NIU BIAN *Aconitum barbatum* var. *puberulum* [Syn. *Aconitum ochranthum*], ZI HUA GAO WU TOU *Aconitum excelsum*, *Aconitum leave* (aerial parts). Ref: 658, 660, 846, 5271.

**12511 Lappadilactone**

$C_{30}H_{38}O_6$  (494.63). Colorless needles, mp 260°C (dec),  $[\alpha]_D^{25} = +32.2^\circ$  ( $c = 1.0$ , CHCl<sub>3</sub>). Pharm: Cytotoxic (*in vitro*, HepG<sub>2</sub>, CD<sub>50</sub> = 2.4µg/mL; HeLa, CD<sub>50</sub> = 1.8µg/mL; OVCAR-3, CD<sub>50</sub> = 2.5µg/mL; control Cisplatin, HepG<sub>2</sub>, CD<sub>50</sub> = 2.8µg/mL; HeLa, CD<sub>50</sub> = 5.2µg/mL; OVCAR-3, CD<sub>50</sub> = 3µg/mL; without significant antibacterial effect). Source: MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*] (root: yield = 0.0002%dw). Ref: 4720.

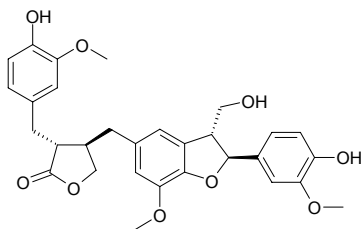
**12512 Lappalone**

$C_{17}H_{22}O_4$  (290.36). Pharm: Cytotoxic (*in vitro*, HepG<sub>2</sub>, CD<sub>50</sub> > 100µg/mL; HeLa, CD<sub>50</sub> > 100µg/mL; OVCAR-3, CD<sub>50</sub> > 100µg/mL; control Cisplatin, HepG<sub>2</sub>, CD<sub>50</sub> = 2.8µg/mL; HeLa, CD<sub>50</sub> = 5.2µg/mL; OVCAR-3, CD<sub>50</sub> = 3µg/mL). Source: MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*] (root: yield = 0.00018%dw). Ref: 4720.

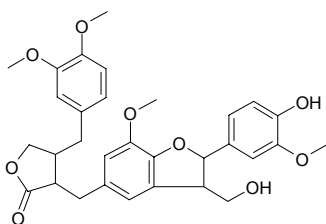


**12513 Lappaol A**

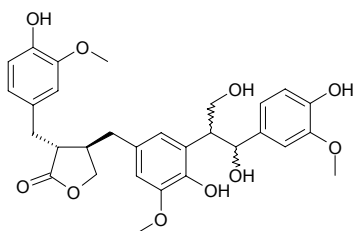
$C_{30}H_{32}O_9$  (536.58). Source: NIU BANG ZI *Arctium lappa* (dried ripe fruit: content scope of 11 origins = 0.024%~0.389%, mean content = 0.205%<sup>[5508]</sup>). Ref: 660, 5508.

**12514 Lappaol B**

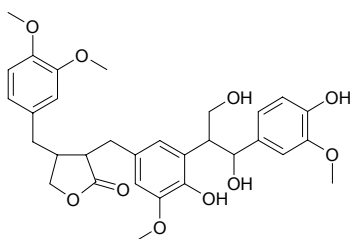
$C_{31}H_{34}O_9$  (550.61). Source: NIU BANG ZI *Arctium lappa*. Ref: 660.

**12515 Lappaol C**

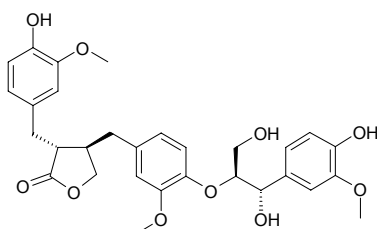
$C_{30}H_{34}O_{10}$  (554.60). Source: NIU BANG ZI *Arctium lappa*. Ref: 660.

**12516 Lappaol D**

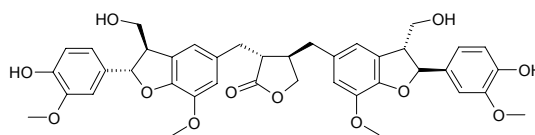
$C_{31}H_{36}O_{10}$  (568.63). Source: NIU BANG ZI *Arctium lappa*. Ref: 660.

**12517 Lappaol E**

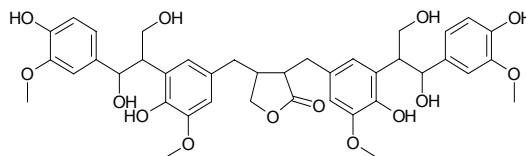
$C_{30}H_{34}O_{10}$  (554.60). Source: NIU BANG ZI *Arctium lappa*. Ref: 660.

**12518 Lappaol F**

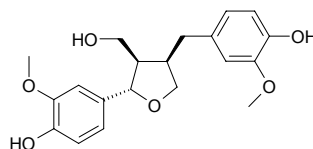
$C_{40}H_{42}O_{12}$  (714.77). Source: NIU BANG ZI *Arctium lappa* (dried ripe fruit: content scope of 11 origins = 0.004%~0.226%, mean content = 0.094%<sup>[5508]</sup>). Ref: 660, 5508.

**12519 Lappaol H**

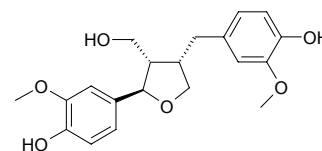
$C_{40}H_{46}O_{14}$  (750.80). Source: NIU BANG ZI *Arctium lappa*. Ref: 660.

**12520 (+)-Lariciresinol**

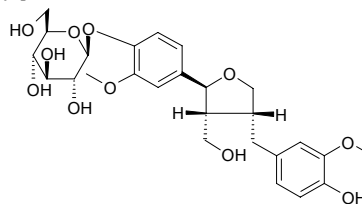
(7*S*,8*R*,8'*R*)-(+)-Lariciresinol [27003-73-2]  $C_{20}H_{24}O_6$  (360.41). Colorless amorphous powder. Pharm: NO production inhibitor (*in vitro*, LPS-activated mouse peritoneal macrophages, 3μmol/L, 10μmol/L, 30μmol/L, 100μmol/L, InRt = 3%, 5.5%, -8.2%, 11.9%, respectively; control *L*-NMMA, 3μmol/L, 10μmol/L, 30μmol/L, 100μmol/L, InRt = 10.3%, 15%, 34.1%, 63.1%, respectively)<sup>[4691]</sup>, β-hexosaminidase release inhibitor (RBL-2H3 cells, 100μmol/L, InRt = (14.0±4.8)%)<sup>[4347]</sup>. Source: HONG HAI JIAO *Capsicum annuum* (stem and root: yield = 0.00014%dw)<sup>[4779]</sup>, MENG GU HUANG QI *Astragalus mongholicus*, XIAO HONG SHEN *Rubia yunnanensis* (root: yield = 0.018%dw)<sup>[4691]</sup>, YI YE TIE SHAN *Tsuga heterophylla* (sapwood), ZHAI YE NAN YANG SHAN *Araucaria angustifolia*. Ref: 660, 3965, 4347, 4691, 4779.

**12521 (-)-Lariciresinol**

$C_{20}H_{24}O_6$  (360.41). Source: RUI XIANG GEN *Daphne odora*, SHAN GAN RUI XIANG *Daphne tangutica*, *Eurycoma* sp. Ref: 1521, 4556.

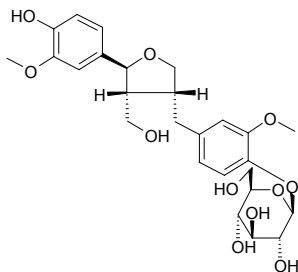
**12522 (+)-1-Lariciresinol-4'-β-D-glucopyranoside**

$C_{26}H_{34}O_{11}$  (522.55). Amorphous powder. Source: FENG MAO JU *Saussurea japonica*. Ref: 2179.

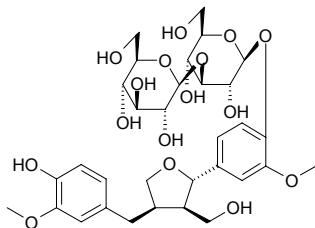


**12523 (+)-Lariciresinol-4- $\beta$ -D-glucopyranoside**

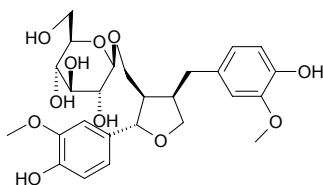
$C_{26}H_{34}O_{11}$  (522.55). Yellowish amorphous powder. **Pharm:** Anti-inflammatory (modulator of cytokine network: inhibits LPS-activated production of TNF- $\alpha$  in RAW264.7 cells,  $IC_{50}$  = 50~100  $\mu$ mol/L)<sup>[4416]</sup>. **Source:** FENG MAO JU *Saussurea japonica*, RI BEN HUANG LIAN *Coptis japonica* (rhizome). **Ref:** 2179, 4416.

**12524 (+)-Lariciresinol-4'-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -D-glucopyranoside**

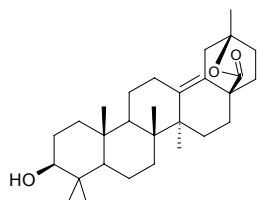
$C_{32}H_{44}O_{16}$  (684.70). Amorphous powder,  $[\alpha]_D^{25}$  = -20.0° ( $c$  = 0.252, MeOH). **Source:** BAO MA ZI *Syringa amurensis* [Syn. *Syringa reticulata* var. *amurensis*] (leaf). **Ref:** 4363.

**12525 Lariciresinol-9-O- $\beta$ -D-glucoside**

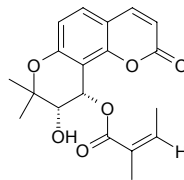
$C_{26}H_{34}O_{11}$  (522.55). **Source:** WU GONG CAO *Pteris vittata*, YI DA LI JIASNG NAN XING *Arum italicum* **Ref:** 660, 1521.

**12526 Larreagenin A**

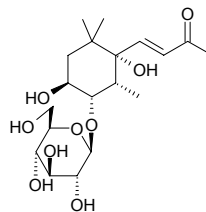
$C_{29}H_{44}O_3$  (440.67). **Source:** JI CHA KAI LA RUI A *Larrea divaricata*, LUO KUI SHU *Anredera cordifolia* [Syn. *Baussingaultia cordifolia*; *Baussingaultia gracilis* f. *pseudobaselloides*; *Baussingaultia gracilis* var. *pseudobaselloides*] **Ref:** 660.

**12527 D-Laserpitin**

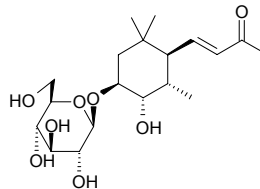
$C_{19}H_{20}O_6$  (344.37). Yellowish hyaloid,  $[\alpha]_D^{20}$  = +92.3° ( $c$  = 0.53,  $CHCl_3$ ). **Source:** QIAN HU *Angelica decursiva* [Syn. *Peucedanum decursivum*]. **Ref:** 9.

**12528 Lasianthionoside A**

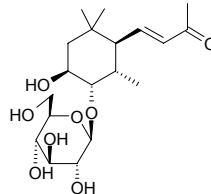
$C_{19}H_{32}O_9$  (404.46). Colorless needles, mp 209~210°C,  $[\alpha]_D^{25}$  = -76° ( $c$  = 0.87,  $C_5H_5N$ ). **Source:** *Lasianthus fordii* (leaf). **Ref:** 3774.

**12529 Lasianthionoside B**

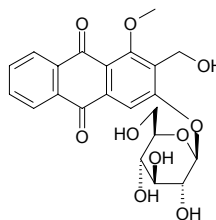
$C_{19}H_{32}O_8$  (388.46). Amorphous powder,  $[\alpha]_D^{25}$  = -54.0° ( $c$  = 0.55, MeOH). **Source:** *Lasianthus fordii* (leaf). **Ref:** 3774.

**12530 Lasianthionoside C**

(3*S*,4*S*,6*S*,7*E*)-3,4-Dihydroxymegastigman-7-en-9-one-4-O- $\beta$ -D-glucopyranoside  $C_{19}H_{32}O_8$  (388.46). Colorless needles, mp 180~181°C,  $[\alpha]_D^{25}$  = -55.7° ( $c$  = 0.26, MeOH). **Source:** *Lasianthus fordii* (leaf). **Ref:** 3774.

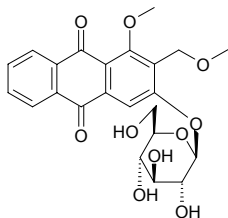
**12531 Lasianthuoside A**

3-Hydroxy-1-methoxy-2-hydroxymethyl-9,10-anthraquinone-3-O- $\beta$ -D-glucopyranoside  $C_{22}H_{22}O_{10}$  (446.41). Yellow needles, mp 223~225°C (MeOH). **Pharm:** Cytotoxic (hmn OVCAR-2780 Cells,  $IC_{50}$  = 0.84  $\mu$ g/mL); TNF- $\alpha$  release inhibitor (cultured mouse peritoneal macrophages,  $IC_{50}$  > 10  $\mu$ g/mL). **Source:** CHANG WEI CU YE MU *Lasianthus acuminatissimus* (root: yield = 0.00073%dw). **Ref:** 1605.

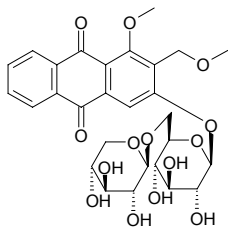


**12532 Lasianthuoid B**

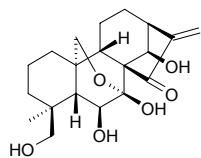
3-Hydroxy-1-methoxy-2-methoxymethylanthraquinone-3-*O*- $\beta$ -D-glucopyranoside C<sub>23</sub>H<sub>24</sub>O<sub>10</sub> (460.44). Yellow needles, mp 224–226°C (MeOH). **Pharm:** Cytotoxic (hmn OVCAR-2780 Cells, IC<sub>50</sub> = 1  $\mu$ g/mL); TNF- $\alpha$  release inhibitor (cultured mouse peritoneal macrophages, IC<sub>50</sub> > 10  $\mu$ g/mL). **Source:** CHANG WEI CU YE MU *Lasianthus acuminatissimus* (root: yield = 0.00055%dw). **Ref:** 1605.

**12533 Lasianthuoid C**

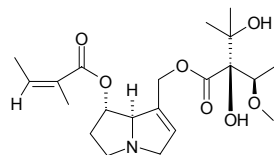
3-Hydroxy-1-methoxy-2-methoxymethylanthraquinone-3-*O*- $\beta$ -D-primeveroside C<sub>28</sub>H<sub>32</sub>O<sub>14</sub> (592.56). Yellow needles, mp 238–240°C (MeOH). **Pharm:** Cytotoxic (hmn OVCAR-2780 Cells, IC<sub>50</sub> < 0.1  $\mu$ g/mL); TNF- $\alpha$  release inhibitor (cultured mouse peritoneal macrophages, IC<sub>50</sub> > 10  $\mu$ g/mL). **Source:** CHANG WEI CU YE MU *Lasianthus acuminatissimus* (root: yield = 0.00025%dw). **Ref:** 1605.

**12534 Lasiocarpinin**

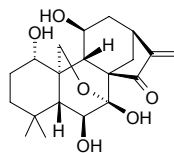
C<sub>20</sub>H<sub>28</sub>O<sub>6</sub> (364.44). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>27</sup> = -59.4° (c = 0.4, MeOH). **Source:** CU GUO XIANG CHA CAI *Isodon lasiocarpa*. **Ref:** 4067.

**12535 Lasiocarpine**

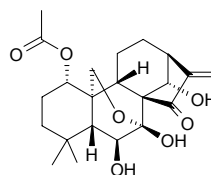
[303-34-4] C<sub>21</sub>H<sub>33</sub>NO<sub>7</sub> (411.50). mp 95°C. **Pharm:** Antineoplastic (rat, Walker carcinoma, liver cancer and sarcoma S45); antispasmodic (gpg, inhibits ileal contraction caused by BaCl<sub>2</sub> and *N*-formyl sinkaline); carcinogen (rat liver, skin, and small intestine); mutagen (Ames, drosophila, DNA recondition, cell culture experiments). **Source:** CU XI MEN FEI CAO *Symphytum asperum*, DA BAI DING CAO *Senecio oryzetorum*, MAO GUO TIAN JIE CAI *Heliotropium lasiocarpum*, OU ZHOU TIAN JIE CAI *Heliotropium europaeum*, XI MEN FEI CAO *Symphytum officinale*, YAN TIAN JIE CAI *Heliotropium curassavicum*, YAO YONG DAO TI HU *Cynoglossum officinale*, YING MAO TIAN JIE CAI *Heliotropium hirsutum*, ZHONG JIAN HE SHI *Lappula intermedia*. **Ref:** 5, 6, 658.

**12536 Lasiodonin**

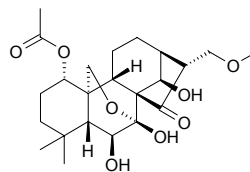
[38602-52-7] C<sub>20</sub>H<sub>28</sub>O<sub>6</sub> (364.44). mp 252–254°C (dec), [ $\alpha$ ]<sub>D</sub><sup>17</sup> = -100° (c = 1.0, C<sub>5</sub>H<sub>5</sub>N). **Pharm:** Cytotoxic (K562, IC<sub>50</sub> = 5.35  $\mu$ mol/L, control Cisplatin IC<sub>50</sub> = 3.84  $\mu$ mol/L; Bcap37, IC<sub>50</sub> = 112.53  $\mu$ mol/L, control Cisplatin IC<sub>50</sub> = 1.54  $\mu$ mol/L) [4353]. **Source:** LU SHAN XIANG CHA CAI *Isodon rubescens* var. *lushanensis* (leaf), CU GUO XIANG CHA CAI *Isodon lasiocarpa*. **Ref:** 4067, 4353.

**12537 Lasiokaurin**

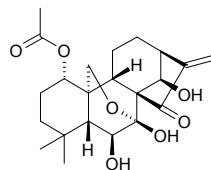
[28957-08-6] C<sub>22</sub>H<sub>30</sub>O<sub>7</sub> (406.48). Colorless needles (MeOH), mp 237–241°C, [ $\alpha$ ]<sub>D</sub><sup>23</sup> = -57° (c = 0.2, EtOH); mp 223–226°C, [ $\alpha$ ]<sub>D</sub> = -68° (c = 0.05, EtOH); mp 226–229°C. **Pharm:** Cytotoxic (DNA-damaging activity, mutant yeast strain RAD 52Y, IC<sub>12</sub> = 90  $\mu$ g/mL, control Streptonigrin, IC<sub>12</sub> = 0.4  $\mu$ g/mL; wild type yeast strain RAD+, IC<sub>12</sub> > 100  $\mu$ g/mL, control Streptonigrin, IC<sub>12</sub> = 1.0  $\mu$ g/mL) [5348]; antineoplastic (EAC *in vivo*, 10mg/(kg-d), 7 days ip, biotic prolonged rate = 70.6%; HAC *in vivo*, 10mg/(kg-d), 7 days ip, biotic prolonged rate = 109.7%); antibacterial (*Staphylococcus aureus*, MIC = 15.6  $\mu$ g/mL; *Sarcina gamboge*, MIC = 7.8  $\mu$ g/mL; *Bacillus coli*, MIC  $\geq$  250  $\mu$ g/mL; *Bacillus termo*, MIC  $\geq$  250  $\mu$ g/mL); LD<sub>50</sub> (mus, ip) > 70mg/kg. **Source:** MAO YE XIANG CHA CAI *Isodon japonica* [Syn. *Rabdosia japonica*], MIAN MAO GUO XIANG CHA CAI *Isodon lasiocarpus*, XIAN MAI XIANG CHA CAI *Rabdosia nervosa*, ZHOU YE XIANG CHA CAI *Isodon rugosus* [Syn. *Rabdosia rugosa*]. **Ref:** 4, 504, 661, 5348.

**12538 Lasiokaurinin**

C<sub>23</sub>H<sub>34</sub>O<sub>8</sub> (438.52). mp 219–222°C (dec), [ $\alpha$ ]<sub>D</sub><sup>27</sup> = -14° (c = 0.032, MeOH). **Source:** CU GUO XIANG CHA CAI *Isodon lasiocarpa*. **Ref:** 4067.

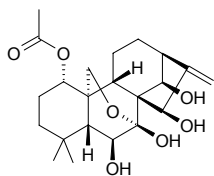
**12539 Lasiokaurin (Lasiodin)**

C<sub>22</sub>H<sub>30</sub>O<sub>7</sub> (406.48). mp 228–229°C, [ $\alpha$ ]<sub>D</sub><sup>17</sup> = -94° (c = 1.0, C<sub>5</sub>H<sub>5</sub>N). **Source:** CU GUO XIANG CHA CAI *Isodon lasiocarpa*. **Ref:** 4067.

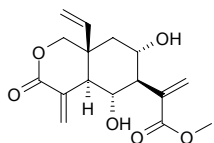


**12540 Lasiokaurinol**

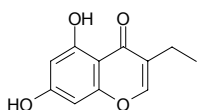
$C_{22}H_{32}O_7$  (408.50). mp 143~147°C, 218~221°C (dec),  $[\alpha]_D^{27} = -12^\circ$  ( $c = 0.085$ , MeOH). Source: CU GUO XIANG CHA CAI *Isodon lasiocarpa*. Ref: 4067.

**12541 Lasiopulide**

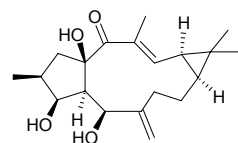
$C_{16}H_{20}O_6$  (308.33). mp 141°C,  $[\alpha]_D^{25} = +56.3^\circ$  ( $c = 0.3$ ,  $CHCl_3$ ). Pharm: Cytotoxic (*in vitro*, hmn colon carcinoma cell lines HCT15,  $IC_{50} = (109.79 \pm 4.06) \mu\text{mol/L}$ , control 5-Fluorouracil,  $IC_{50} = 66 \mu\text{mol/L}$ ; colon carcinoma HT29,  $IC_{50} = (6.5 \pm 0.3) \mu\text{mol/L}$ , control 5-Fluorouracil,  $IC_{50} = 49 \mu\text{mol/L}$ ; breast carcinoma T47D,  $IC_{50} = (43.5 \pm 1.7) \mu\text{mol/L}$ , control Adriamycin,  $IC_{50} = 0.075 \mu\text{mol/L}$ ; cervix carcinoma SiHa,  $97.4 \mu\text{mol/L}$ , InRt = 18%, control 5-Fluorouracil,  $IC_{50} = 0.034 \mu\text{mol/L}$ ). Source: *Vernonia lasiopus*. Ref: 5359.

**12542 Lathodoratin**

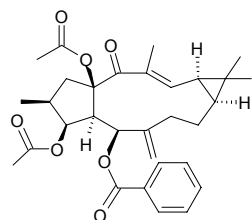
[76693-50-0]  $C_{11}H_{10}O_4$  (206.20). Pharm: Antifungal (*Cladosporium herbarum*). Source: XIANG WAN DOU *Lathyrus odoratus*. Ref: 658.

**12543 Lathyrol**

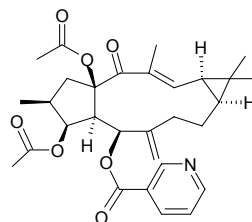
[34420-19-4]  $C_{20}H_{30}O_4$  (334.46). Pharm: Carcinogen; irritant. Source: QIAN JIN ZI *Euphorbia lathyris*. Ref: 658.

**12544 Lathyrol-3,15-diacetate-5-benzoate**

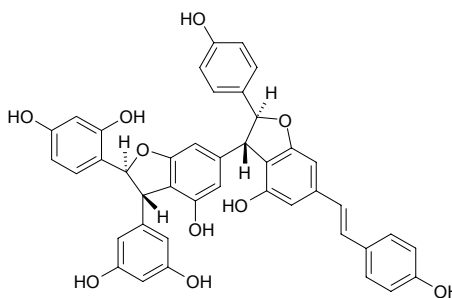
$C_{31}H_{38}O_7$  (522.64). Source: QIAN JIN ZI *Euphorbia lathyris*. Ref: 660.

**12545 Lathyrol-3,15-diacetate-5-nicotinate**

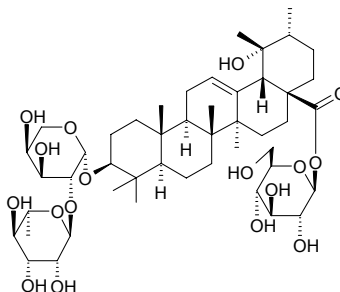
$C_{30}H_{37}NO_7$  (523.63). Source: QIAN JIN ZI *Euphorbia lathyris*. Ref: 660.

**12546 Latifolol**

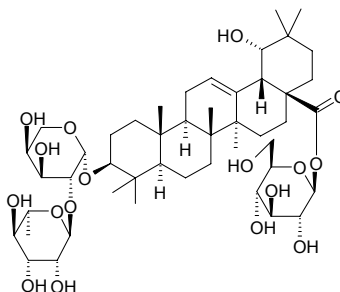
$C_{42}H_{32}O_{10}$  (692.72). Brown amorphous powder. Source: KUAN YE MAI MA TENG *Gnetum latifolium*. Ref: 1940.

**12547 Latifoloside A**

$C_{47}H_{76}O_{17}$  (913.12). Source: DA YE DONG QING *Ilex latifolia*. Ref: 2160.

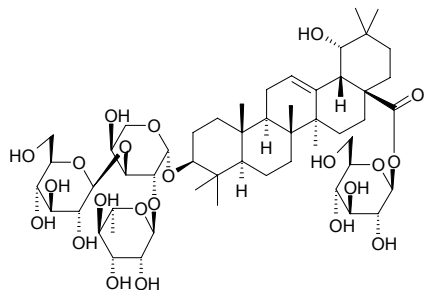
**12548 Latifoloside B**

$C_{47}H_{76}O_{17}$  (913.12). Source: DA YE DONG QING *Ilex latifolia*. Ref: 2160.

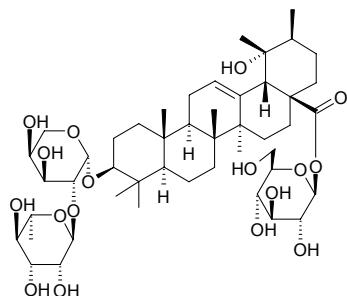


**12549 Latifolioside C**

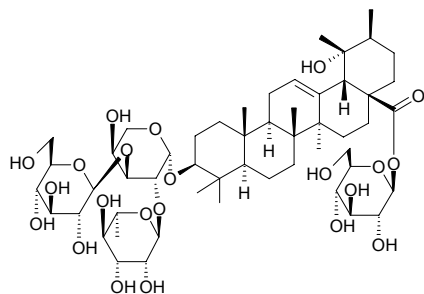
$C_{53}H_{86}O_{22}$  (1075.26). Source: DA YE DONG QING *Ilex latifolia*. Ref: 2160.

**12550 Latifolioside D**

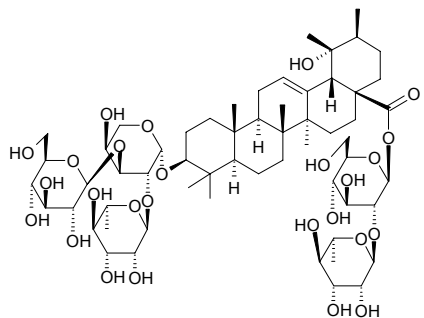
$C_{47}H_{76}O_{17}$  (913.12). Source: DA YE DONG QING *Ilex latifolia*. Ref: 2160.

**12551 Latifolioside E**

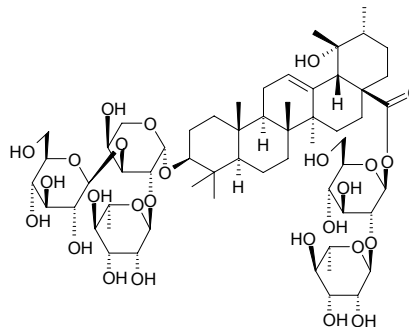
$C_{53}H_{86}O_{22}$  (1075.26). Source: DA YE DONG QING *Ilex latifolia*. Ref: 2160.

**12552 Latifolioside F**

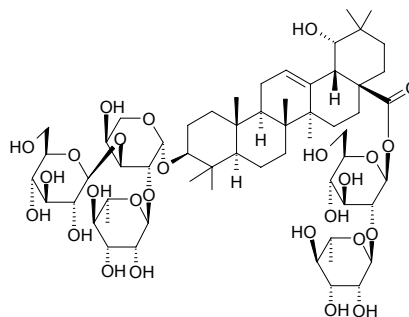
$C_{59}H_{96}O_{26}$  (1221.41). Source: DA YE DONG QING *Ilex latifolia*. Ref: 2160.

**12553 Latifolioside G**

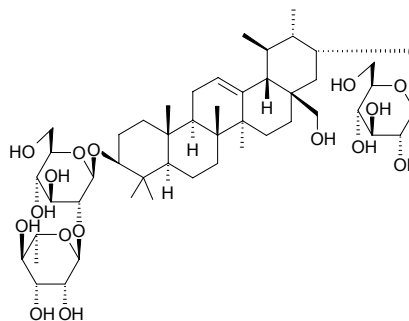
$C_{59}H_{96}O_{26}$  (1221.41). Source: DA YE DONG QING *Ilex latifolia*. Ref: 2160.

**12554 Latifolioside H**

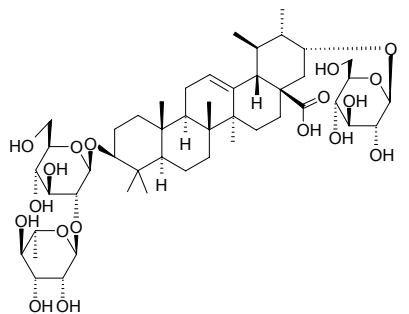
$C_{59}H_{96}O_{26}$  (1221.41). Source: DA YE DONG QING *Ilex latifolia*. Ref: 2160.

**12555 Latifolioside I**

3-*O*- $\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranosyl-3 $\beta$ ,21 $\alpha$ ,28-trihydroxy-urs-12-ene 21-*O*- $\beta$ -D-glucopyranoside  $C_{48}H_{80}O_{17}$  (929.16).  $[\alpha]_D^{25} = +36.7^\circ$  ( $c = 0.21$ , MeOH). Source: DA YE DONG QING *Ilex latifolia* (bark). Ref: 3511.

**12556 Latifolioside J**

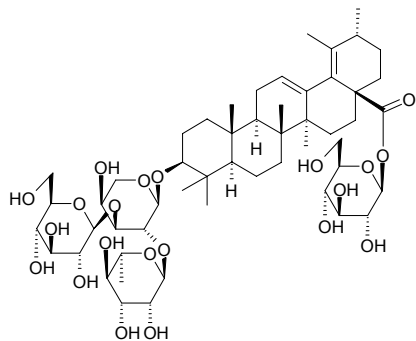
3-*O*- $\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranosyl-3 $\beta$ ,21 $\alpha$ -dihydroxy-ursolic acid 21-*O*- $\beta$ -D-glucopyranoside  $C_{48}H_{78}O_{18}$  (943.15).  $[\alpha]_D^{25} = +7.4^\circ$  ( $c = 0.67$ , MeOH). Source: DA YE DONG QING *Ilex latifolia* (bark). Ref: 3511.



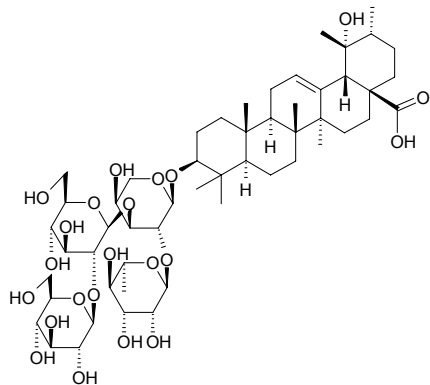


**12557 Latifoloside K**

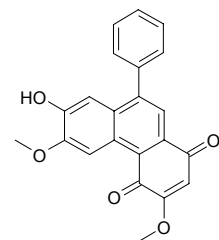
3-*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 3)-[ $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)]- $\alpha$ -*L*-arabinopyranosyl 3 $\beta$ -hydroxy-urs-12,18-dien-28-oic acid 28-*O*- $\beta$ -*D*-glucopyranosyl ester C<sub>53</sub>H<sub>84</sub>O<sub>21</sub> (1057.25). Colorless powder,  $[\alpha]_D^{25} = +0.74^\circ$  ( $c = 0.78$ , MeOH). Source: DA YE DONG QING *Ilex latifolia* (bark). Ref: 3540.

**12558 Latifoloside L**

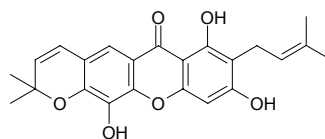
3-*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)-[ $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)]- $\alpha$ -*L*-arabinopyranosyl 3 $\beta$ ,19 $\alpha$ -dihydroxyursolic acid C<sub>53</sub>H<sub>86</sub>O<sub>22</sub> (1075.26). Colorless powder,  $[\alpha]_D^{25} = +7.46^\circ$  ( $c = 0.35$ , MeOH). Source: DA YE DONG QING *Ilex latifolia* (bark). Ref: 3540.

**12559 Latinone**

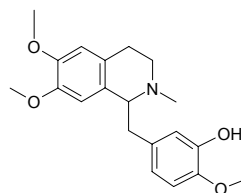
C<sub>22</sub>H<sub>16</sub>O<sub>5</sub> (360.37). Pharm: Testosterone 5 $\alpha$ -reductase inhibitor (25 $\mu$ g/mL, InRt = 42.8%, 50 $\mu$ g/mL, InRt = 52.0%, 100 $\mu$ g/mL, InRt = 65.6%; control Glycyrrhetic acid, 25 $\mu$ g/mL, InRt = 31.7%, 50 $\mu$ g/mL, InRt = 64.7%, 100 $\mu$ g/mL, InRt = 87.1%). Source: JIAO ZHI HUANG TAN *Dalbergia cochinchinensis* (stem: yield = 0.0014%dw). Ref: 4716.

**12560 Latisxanthone D**

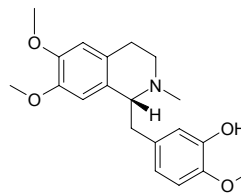
C<sub>23</sub>H<sub>22</sub>O<sub>6</sub> (394.43). Source: HEI XIAN TIAO TENG HUANG *Garcinia nigrolineata* (stam bark). Ref: 3482.

**12561 dl-Laudanidine**

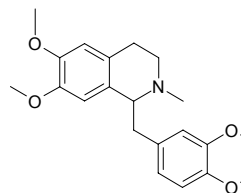
C<sub>20</sub>H<sub>25</sub>NO<sub>4</sub> (343.43). Source: YING SU *Papaver somniferum*, CU GUO TANG SONG CAO *Thalictrum dasycarpum*. Ref: 658.

**12562 Laudanine**

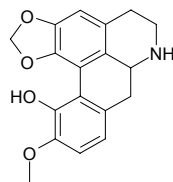
[301-21-3] C<sub>20</sub>H<sub>25</sub>NO<sub>4</sub> (343.43). mp 181~182°C, mp 184~185°C,  $[\alpha]_D^{28} = -101^\circ$  (EtOH). Pharm: Causes convulsion and paralysis (L-isomer, high dose). Source: YA PIAN *Papaver somniferum*. Ref: 6, 1521.

**12563 Laudanosine**

[2688-77-9] C<sub>21</sub>H<sub>27</sub>NO<sub>4</sub> (357.45). mp (+) 89°C. Pharm: Supertoxic agent (strong, tetanic spasm activity). Source: YING SU *Papaver somniferum*, YA PIAN *Papaver somniferum*. Ref: 6, 658.

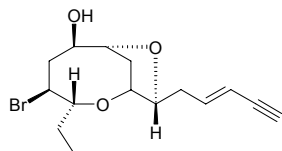
**12564 Launobine**

[20497-21-6] C<sub>18</sub>H<sub>17</sub>NO<sub>4</sub> (311.34). mp 214~215°C (dec). Pharm: Platelet aggregation inhibitor (rbt, 100 $\mu$ g/mL, induced by ADP, arachidonic acid, collagen and PAF); inhibits growth of green algae (< 10mmol/L). Source: DIAO ZHANG GEN PI *Lindera umbellata* [Syn. *Lindera erythrocarpa*], YUE GUI ZI *Laurus nobilis*, ZHEN CAI *Litsea pungens*. Ref: 6, 1751, 1752.

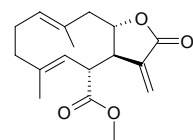


**12565 Laurencin**

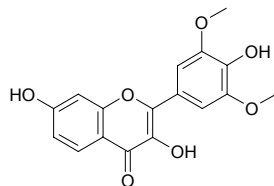
$C_{15}H_{21}BrO_3$  (329.24). Source: HUANG SE AO DING ZAO *Laurencia nipponica* (the compound was isolated from the plant by E.Fukuzawa, et al. in 1973). Ref: 5505.

**12566 Laurenbiolide**

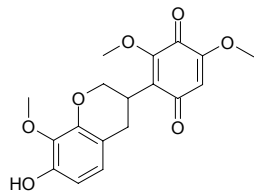
$C_{17}H_{22}O_4$  (290.36). Source: YUE GUI YE *Laurus nobilis*, YUE GUI ZI *Laurus nobilis*. Ref: 660.

**12567 Laurentinol**

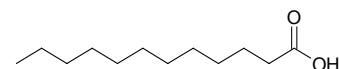
3,7,4'-Trihydroxy-3',5'-dimethoxyflavone  $C_{17}H_{14}O_7$  (330.30). Green prisms, mp 206~208°C. Source: *Millettia laurentii*. Ref: 2319.

**12568 Laurentiquinone**

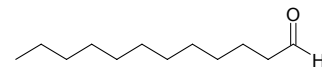
3',6'-Diketo-7-hydroxy-8,2',4'-trimethoxyisoflavan  $C_{18}H_{18}O_7$  (346.34). Orange prisms (acetone), mp 205~207°C. Source: *Millettia laurentii*. Ref: 2319.

**12569 Lauric acid**

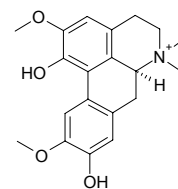
Lauric acid [143-07-7]  $C_{12}H_{24}O_2$  (200.32). Pharm: Raw material for flavorant. Source: BA DOU *Croton tiglium*, BAN WEN LU HUI *Aloe vera* var. *chinensis*, BING LANG *Areca catechu*, CU LIU GUO *Hippophae rhamnoides*, DANG SHEN *Codonopsis pilosula*, FU LING *Portia cocos*, GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *Huechingensis*], GUA LOU *Trichosanthes kirilowii*, HONG HUA *Carthamus tinctorius*, JI GUAN ZI *Celosia cristata* (seed), SHUANG BIAN GUA LOU *Trichosanthes rosthornii* [Syn. *Trichosanthes uniflora*], YE ZI RANG *Cocos nucifera*, YIN MIAN YU *Holoptelea integrifolia*, YOU ZONG *Elaeis guineensis*. Ref: 2, 658, 660.

**12570 Lauric aldehyde**

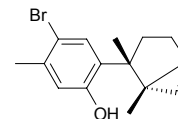
Dodecanal [112-54-9]  $C_{12}H_{24}O$  (184.32). mp 44.5°C, bp 184~185°C/100mmHg. Source: YU XING CAO *Houttuynia cordata*. Ref: 6.

**12571 Laurifoline**

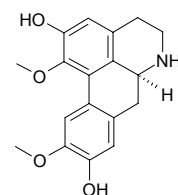
[7224-61-5]  $C_{20}H_{24}NO_4^+$  (342.42). Pharm: Ganglionic blocker (curariform action); LD<sub>50</sub> (mus, ip) = 14mg/kg. Source: HENG ZHOU WU YAO *Cocculus laurifolius*, CHU YE HUA JIAO *Zanthoxylum ailanthoides*, HOU PI HUA JIAO *Zanthoxylum elephantiasis*, CHU YE HUA JIAO PI *Zanthoxylum ailanthoides*. Ref: 6, 658.

**12572 Laurinterol**

$C_{15}H_{19}BrO$  (295.22). Pharm: Antibacterial (marine bacteria: *Alteromonas* sp., MIC = 5µg/disc; *Azomonas agilis*, MIC = 5µg/disc; *Azotobacter beijerinckii*, MIC = 15µg/disc; *Erwinia amylovora*, MIC = 5µg/disc; *Escherichia coli*, MIC = 5µg/disc; *Alcaligenes aquamarinus*, *Halobacterium* sp., *Halococcus* sp., no inhibition). Source: CHAO AO DING CAO *Laurencia nidifica*. Ref: 5191.

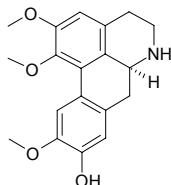
**12573 Laurolitsine**

(+)-Norboldine [5890-18-6]  $C_{18}H_{19}NO_4$  (313.36). Maple amorphous powder, mp 113~115°C, 138~140°C,  $[\alpha]_D^{20} = +101^\circ$  ( $c = 0.69$ , ethanol). Pharm: Antibacterial (*Staphylococcus aureus*, MIC = 250µg/mL); antimalarial (*Plasmodium falciparum* D<sub>2</sub>, IC<sub>50</sub> = 1240ng/mL; W<sub>2</sub>, IC<sub>50</sub> = 1680ng/mL); anti-HIV-1 (HIV-1 IN inhibitor, IC<sub>50</sub> = 7.7µmol/L; positive control Suramin, IC<sub>50</sub> = 2.4µmol/L)<sup>[4224]</sup>; antimalarial (antiplasmodial, *Plasmodium falciparum* PoW, IC<sub>50</sub> = 3.1µg/mL; *Plasmodium falciparum* Dd2, IC<sub>50</sub> = 5.4µg/mL). Source: CHENG QIE ZI *Litsea cubeba*, DIAO ZHANG GEN PI *Lindera umbellata* [Syn. *Lindera erythrocarpa*], WU YAO *Lindera strychnifolia* [Syn. *Lindera aggregata*], ZHANG MU *Cinnamomum camphora*, DING HU DIAO ZHANG *Lindera chunii* (root), SHAO HUA XI PA MU *Siparuna pauciflora*. Ref: 6, 900, 1521, 3376, 4224.

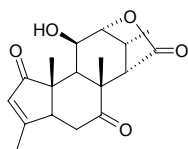


**12574 Laurotetanine**

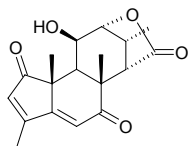
[128-76-7]  $C_{19}H_{21}NO_4$  (327.38). mp 125°C. **Pharm:** Platelet aggregation inhibitor (rbt, 100µg/mL, strongly inhibits platelet aggregation induced by ADP); vasodilator (relaxes blood vessels, rat, 100µg/mL, inhibits aortal contraction induced by 80mmol/L potassium ion and 3µmol/L arterenol); antihypertensive (normal rat, 1.0µg/kg, blood pressure lowers by 29% in average, action holds 2min). **Source:** BI BA *Piper longum*, WU YE TENG *Cassytha filiformis*, ZHEN CAI *Litsea pungens*. **Ref:** 6, 1749, 1750.

**12575 Laurycolactone A**

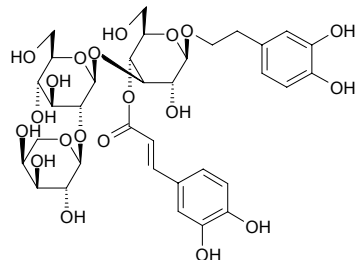
$C_{18}H_{22}O_5$  (318.37). **Source:** *Eurycoma* sp. **Ref:** 4556.

**12576 Laurycolactone B**

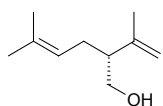
$C_{18}H_{20}O_5$  (316.36). **Source:** *Eurycoma* sp. **Ref:** 4556.

**12577 Lavandulifolioside**

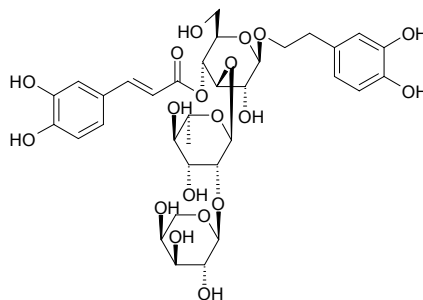
$C_{34}H_{44}O_{20}$  (772.72). **Source:** A LA BO PO PO NA *Veronica persica* (aerial parts), CHANG YE CHE QIAN *Plantago lanceolata*. **Ref:** 4211, 5020.

**12578 Lavandulol**

$C_{10}H_{18}O$  (154.25). **Source:** GAO BEN *Ligusticum sinense*. **Ref:** 660.

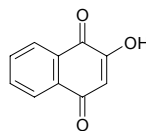
**12579 Lavansulifoliside**

$C_{34}H_{44}O_{19}$  (756.72). Amorphous powder. **Source:** HUI BAI YI MU CAO *Leonurus glaucescens*. **Ref:** 2499.

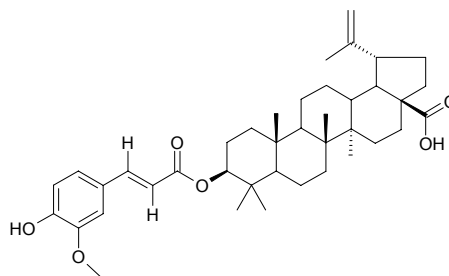
**12580 Lawsone**

2-Hydroxy-1,4-naphthalenedione [83-72-7]  $C_{10}H_6O_3$  (174.16). mp 192°C.

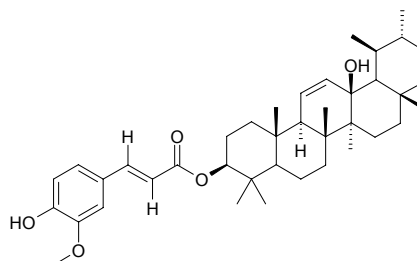
**Pharm:** Antifungal; hemostatic; stimulates cerebra. **Source:** BAI SAN MO HUA *Lawsonia alba*, FENG XIAN HUA *Impatiens balsamina*, JI XING ZI *Impatiens balsamina*, ZHI JIA HUA YE *Lawsonia inermis*. **Ref:** 6, 658.

**12581 Lawsonic acid**

3α-E-Ferulyloxy-lup-20(29)-en-28-oic acid  $C_{40}H_{56}O_6$  (632.89). Amorphous powder,  $[\alpha]_D^{26} = +7.8^\circ$  ( $c = 0.76$ , MeOH). **Source:** BAI SAN MO HUA *Lawsonia alba* (aerial parts). **Ref:** 5230.

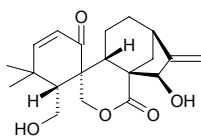
**12582 Lawsonin**

3α-E-Ferulyloxy-urs-11-en-13β-ol  $C_{40}H_{58}O_5$  (618.91). Amorphous powder,  $[\alpha]_D^{25} = +36.4^\circ$  ( $c = 0.245$ , MeOH). **Source:** BAI SAN MO HUA *Lawsonia alba* (aerial parts). **Ref:** 5230.

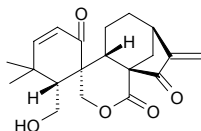


**12583 Laxiflorin A**

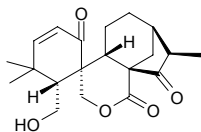
$C_{20}H_{26}O_5$  (346.43). mp 165~167°C,  $[\alpha]_D^{27} = +71.3^\circ$  ( $c = 0.06$ , MeOH). Source: SHU HUA MAO E XIANG CHA CAI *Isodon eriocalyx* var. *laxiflora*. Ref: 4067.

**12584 Laxiflorin B**

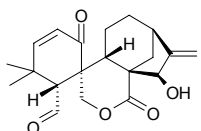
$C_{20}H_{24}O_5$  (344.41). mp 171~173°C,  $[\alpha]_D = +75.3^\circ$  ( $c = 0.09$ , MeOH). Source: SHU HUA MAO E XIANG CHA CAI *Isodon eriocalyx* var. *laxiflora*. Ref: 4067.

**12585 Laxiflorin C**

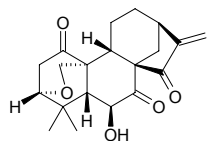
$C_{20}H_{26}O_5$  (346.43). mp 178~180°C,  $[\alpha]_D = +95.9^\circ$  ( $c = 0.14$ , MeOH). Source: SHU HUA MAO E XIANG CHA CAI *Isodon eriocalyx* var. *laxiflora*. Ref: 4067.

**12586 Laxiflorin D**

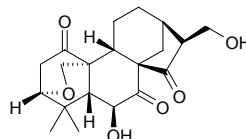
$C_{20}H_{24}O_5$  (344.41). mp 242~244°C,  $[\alpha]_D^{23.0} = +137.6^\circ$  ( $c = 0.616$ ,  $C_5H_5N$ ). Source: SHU HUA MAO E XIANG CHA CAI *Isodon eriocalyx* var. *laxiflora*. Ref: 899, 4067.

**12587 Laxiflorin J**

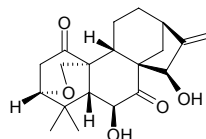
6 $\beta$ -Hydroxy-3 $\alpha$ ,20-epoxy-*ent*-kaur-16-en-1,7,15-trione  $C_{20}H_{24}O_5$  (344.41). Colorless crystals (Me<sub>2</sub>CO), mp 180.5~182.5°C,  $[\alpha]_D^{23.9} = -167.93^\circ$  ( $c = 0.40$ , CHCl<sub>3</sub>). Pharm: Cytotoxic (*in vitro*, K562, IC<sub>50</sub> = 0.47 $\mu$ g/mL; A549, IC<sub>50</sub> = 49.1 $\mu$ g/mL; T24, IC<sub>50</sub> = 0.314 $\mu$ g/mL; control cis-Platin: K562, IC<sub>50</sub> = 2.02 $\mu$ g/mL; A549, IC<sub>50</sub> = 11.94 $\mu$ g/mL; T24, IC<sub>50</sub> = 1.16 $\mu$ g/mL). Source: SHU HUA MAO E XIANG CHA CAI *Isodon eriocalyx* var. *laxiflora* (leaf: yield = 0.00021%dw). Ref: 4668.

**12588 Laxiflorin K**

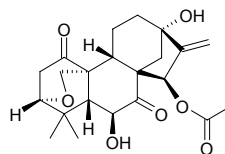
16(*S*)-6 $\beta$ ,17-Dihydroxy-3 $\alpha$ ,20-epoxy-*ent*-kaur-1,7,15-trione  $C_{20}H_{26}O_6$  (362.43). White powder,  $[\alpha]_D^{11.7} = -65.17^\circ$  ( $c = 0.29$ , MeOH). Pharm: Cytotoxic (*in vitro*, K562, IC<sub>50</sub> = 11.9 $\mu$ g/mL; T24, IC<sub>50</sub> = 1753 $\mu$ g/mL; control cis-Platin: K562, IC<sub>50</sub> = 2.02 $\mu$ g/mL; T24, IC<sub>50</sub> = 1.16 $\mu$ g/mL). Source: SHU HUA MAO E XIANG CHA CAI *Isodon eriocalyx* var. *laxiflora* (leaf: yield = 0.000048%dw). Ref: 4668.

**12589 Laxiflorin L**

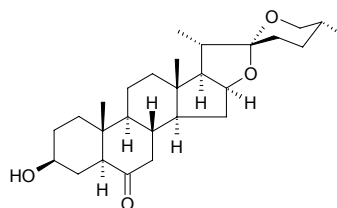
6 $\beta$ ,15 $\beta$ -Dihydroxy-3 $\alpha$ ,20-epoxy-*ent*-kaur-16-en-1,7-dione  $C_{20}H_{26}O_5$  (346.43). Colorless needles (Me<sub>2</sub>CO), mp 302.5~304°C,  $[\alpha]_D^{15.1} = -131.84^\circ$  ( $c = 0.20$ , MeOH). Pharm: Cytotoxic (*in vitro*, K562, IC<sub>50</sub> = 1.13 $\mu$ g/mL; A549, IC<sub>50</sub> = 24.7 $\mu$ g/mL; T24, IC<sub>50</sub> = 5.16 $\mu$ g/mL; control cis-Platin: K562, IC<sub>50</sub> = 2.02 $\mu$ g/mL; A549, IC<sub>50</sub> = 11.94 $\mu$ g/mL; T24, IC<sub>50</sub> = 1.16 $\mu$ g/mL). Source: SHU HUA MAO E XIANG CHA CAI *Isodon eriocalyx* var. *laxiflora* (leaf: yield = 0.000092%dw). Ref: 4668.

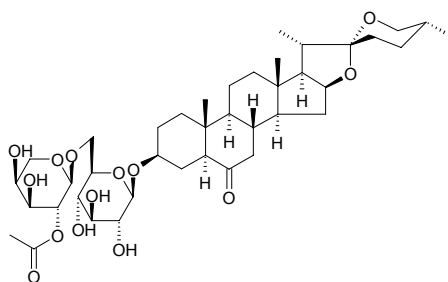
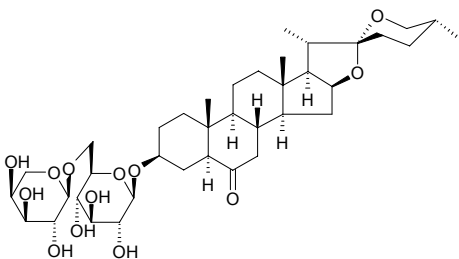
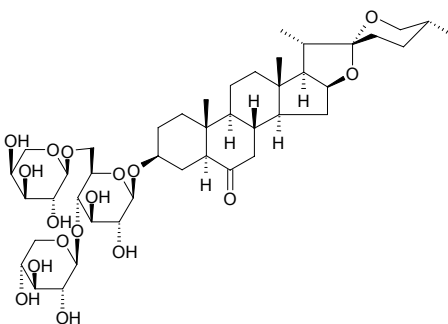
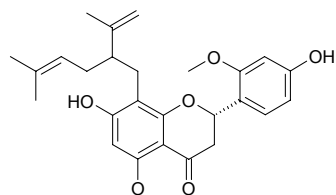
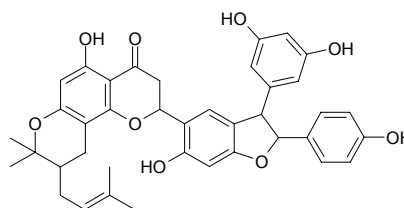
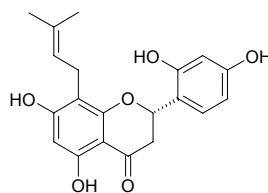
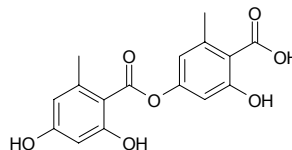
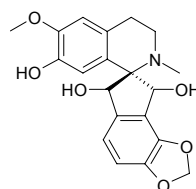
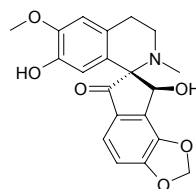
**12590 Laxiflorin M**

15 $\beta$ -Acetoxy-6 $\beta$ ,13 $\alpha$ -dihydroxy-3 $\alpha$ ,20-epoxy-*ent*-kaur-16-en-1,7-dione  $C_{22}H_{28}O_7$  (404.46). Colorless needles (Me<sub>2</sub>CO), mp 179.5~180.5°C,  $[\alpha]_D^{15.2} = -56^\circ$  ( $c = 0.25$ , MeOH). Pharm: Cytotoxic (*in vitro*, K562, IC<sub>50</sub> = 219 $\mu$ g/mL; control cis-Platin: K562, IC<sub>50</sub> = 2.02 $\mu$ g/mL). Source: SHU HUA MAO E XIANG CHA CAI *Isodon eriocalyx* var. *laxiflora* (leaf: yield = 0.00019%dw). Ref: 4668.

**12591 Laxogenin**

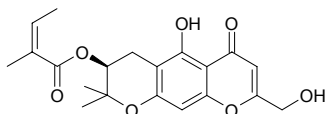
$C_{27}H_{42}O_4$  (430.63). mp 210°C. Pharm: Inhibits promotor of cancer (*in vitro*, lung cancer *in vivo*). Source: NIAN YU XU *Smilax sieboldii*, QIAO TOU *Allium chinense*. Ref: 6, 2165.



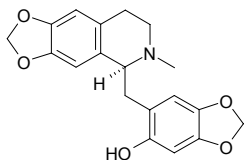
**12592 Laxogenin 3-O-[O-(2-O-acetyl- $\alpha$ -L-arabinopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside)]**C<sub>40</sub>H<sub>62</sub>O<sub>14</sub> (766.93). Amorphous solid,  $[\alpha]_D^{30} = -62.9^\circ$  ( $c = 0.1$ , MeOH).Source: QIAO TOU *Allium chinense*. Ref: 710.**12593 Laxogenin 3-O-[O- $\alpha$ -L-arabinopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside]**(25*R*)-3- $\beta$ -Hydroxy-5 $\alpha$ -spirostan-6-one 3-O-[O- $\alpha$ -L-arabinopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside] C<sub>38</sub>H<sub>60</sub>O<sub>13</sub> (724.89). Amorphous solid,  $[\alpha]_D^{30} = -98.7^\circ$  ( $c = 0.25$ , MeOH). Source: QIAO TOU *Allium chinense*. Ref: 710.**12594 Laxogenin 3-O-{O- $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 4)-O-[ $\alpha$ -L-arabinopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside]}**C<sub>43</sub>H<sub>68</sub>O<sub>17</sub> (857.01). Amorphous solid,  $[\alpha]_D^{27} = -71^\circ$  ( $c = 0.12$ , MeOH).Source: QIAO TOU *Allium chinense*. Ref: 710.**12595 Leachianone A**C<sub>26</sub>H<sub>30</sub>O<sub>6</sub> (438.53). Pharm: Cytotoxic (HL-60 cells)<sup>[4430]</sup>. Source: KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*], LI QI HUIAI *Sophora leachiana*. Ref: 1521, 4430.**12596 Leachianone C**C<sub>39</sub>H<sub>38</sub>O<sub>9</sub> (650.73). Source: LI QI HUIAI *Sophora leachiana*. Ref: 1521.**12597 Leachianone G**C<sub>20</sub>H<sub>20</sub>O<sub>6</sub> (356.38). Pharm: Antibacterial (flabelline-resistance *Staphylococcus aureus*(MSRA), IC<sub>50</sub> = 12.5 $\mu$ g/mL); cytotoxic (hmn myeloid leukemia HL-60 cells, IC<sub>50</sub> = 11.3 $\mu$ mol/L; hmn hepatocarcinoma HepG2 cells, IC<sub>50</sub> = 13.3 $\mu$ mol/L). Source: KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. Ref: 4430.**12598 Lecanoric acid**C<sub>16</sub>H<sub>14</sub>O<sub>7</sub> (318.29). Source: LIAN ZUO GE JUN *Thelephora vialis*, MEI YI *Parmelia tinctorum*, SHI ER *Umbilicaria esculenta* [Syn. *Gyrophora esculenta*]. Ref: 660.**12599 Ledeboridine**Ledebouridine C<sub>20</sub>H<sub>21</sub>NO<sub>6</sub> (371.39). Source: DUI YE YUAN HU *Corydalis ledebouriana*. Ref: 660.**12600 Ledeborine**Ledebourine C<sub>20</sub>H<sub>19</sub>NO<sub>6</sub> (369.38). Source: DUI YE YUAN HU *Corydalis ledebouriana*. Ref: 660.

**12601 Ledebouriellol**

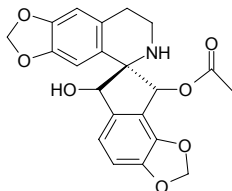
[84272-83-3] C<sub>20</sub>H<sub>22</sub>O<sub>7</sub> (374.39). Source: FANG FENG *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*]. Ref: 2, 660, 1521.

**12602 Ledecorine**

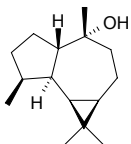
C<sub>19</sub>H<sub>19</sub>NO<sub>5</sub> (341.37). Source: DUI YE YUAN HU *Corydalis ledebouriana*, WEI LAN QIU GUO ZI JIN *Fumaria vaillantii*. Ref: 660, 1521.

**12603 Lederine**

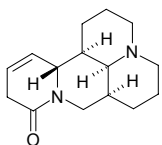
C<sub>21</sub>H<sub>19</sub>NO<sub>7</sub> (397.39). Source: DUI YE YUAN HU *Corydalis ledebouriana*, YI YANG HE BAO MU DAN *Dicentra peregrina*. Ref: 660, 1521.

**12604 Ledol**

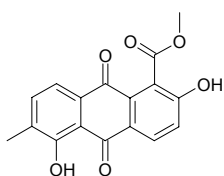
[577-27-5] C<sub>15</sub>H<sub>26</sub>O (222.37). Crystals (petroleum ether), mp 105°C, bp 282~283°C, [α]<sub>D</sub> = +8° (EtOH). Source: HONG CHAI HU *Bupleurum scorzonerifolium*, XIE CAO *Valeriana officinalis*, YIN DU MA DOU LING *Aristolochia indica*. Ref: 2, 1521.

**12605 Lehmannine**

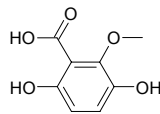
C<sub>15</sub>H<sub>22</sub>N<sub>2</sub>O (246.36). Source: KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. Ref: 660.

**12606 Leiocarpaquinone**

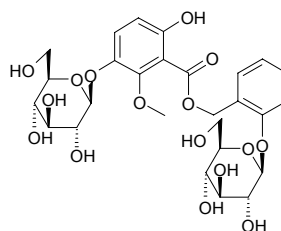
C<sub>17</sub>H<sub>12</sub>O<sub>6</sub> (312.28). Orange yellow lamellar crystals, mp 175~178°C. Source: YI HE GUO *Ventilago leiocarpa*. Ref: 97.

**12607 Leiocarpic acid**

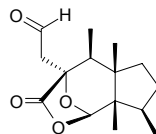
C<sub>8</sub>H<sub>8</sub>O<sub>5</sub> (184.15). Source: TE SI MAN NI HU TONG BIAN ZHONG *Calophyllum teysmannii* var. *inophylloide* (wood). Ref: 3937.

**12608 Leiocarposide**

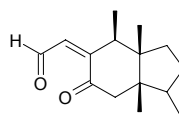
C<sub>27</sub>H<sub>34</sub>O<sub>16</sub> (614.56). Pharm: Analgesic; anti-inflammatory. Source: MAO GUO YI ZHI HUANG HUA *Solidago virgaurea*. Ref: 658.

**12609 Lejeuneapinguisanolid**

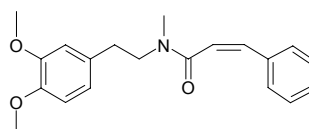
C<sub>15</sub>H<sub>22</sub>O<sub>4</sub> (266.34). mp 180~197°C, [α]<sub>D</sub><sup>25</sup> = +23° (c = 0.1, CHCl<sub>3</sub>). Source: YE TAI *Trocholejeunea sandvicensis*. Ref: 3909.

**12610 Lejeuneapinguisenone**

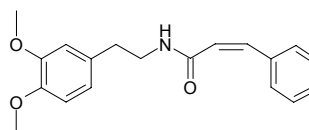
C<sub>15</sub>H<sub>22</sub>O<sub>2</sub> (234.34). Source: YE TAI *Trocholejeunea sandvicensis*. Ref: 3909.

**12611 Lemairamide**

C<sub>20</sub>H<sub>25</sub>NO<sub>3</sub> (325.41). Pharm: Anti-PAF. Source: *Zanthoxylum* sp. Ref: 2176.

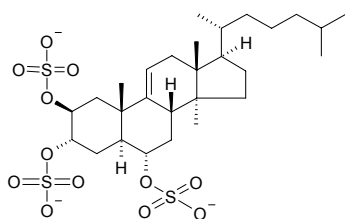
**12612 Lemairamin**

C<sub>19</sub>H<sub>21</sub>NO<sub>3</sub> (311.38). Pharm: Anti-PAF. Source: *Zanthoxylum* sp. Ref: 2176.

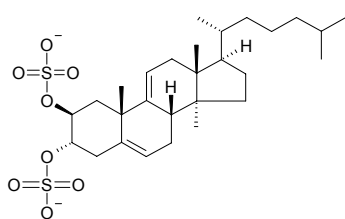


**12613 Lembehsterol A**

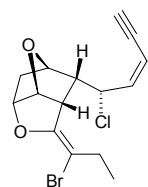
$C_{28}H_{45}O_{12}S_3^{3-}$  (669.86).  $[\alpha]_D = +50.1^\circ$  ( $c = 0.41$ , MeOH). **Pharm:** Thymidine phosphorylase (TP) inhibitor ( $IC_{50} = 41\mu\text{mol/L}$ ). **Source:** *Petrosia strongylata*. **Ref:** 4202.

**12614 Lembehsterol B**

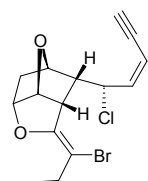
$C_{28}H_{44}O_8S_2^{2-}$  (572.79).  $[\alpha]_D = +39.0^\circ$  ( $c = 0.32$ , MeOH). **Pharm:** Thymidine phosphorylase (TP) inhibitor ( $IC_{50} = 45\mu\text{mol/L}$ ). **Source:** *Petrosia strongylata*. **Ref:** 4202.

**12615 Lembyne A**

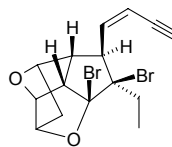
$C_{15}H_{16}BrClO_2$  (343.65). mp 95–96°C,  $[\alpha]_D^{24} = +197.6^\circ$  ( $c = 0.70$ ,  $CHCl_3$ ). **Pharm:** Antibacterial (*Chromobacterium violaceum*, *Clostridium cellobioparum*, *Flavobacterium helmiphilum*, *Proteus mirabilis*, *Vibrio parahaemolyticus*, MIC = 40–60µg/disc; *Clostridium fallax*, *Clostridium novyi*, *Clostridium sordellii*, *Enterobacter aerogenes*, *Escherichia coli*, *Shigella flexneri*, *Vibrio cholerae*, *Vibrio vulnificus*, no inhibition). **Source:** *Laurencia* sp. **Ref:** 5183.

**12616 (12E)-Lembyne A**

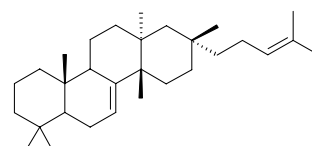
$C_{15}H_{16}BrClO_2$  (343.65). Oil,  $[\alpha]_D^{24} = +42^\circ$  ( $c = 0.02$ ,  $CHCl_3$ ). **Pharm:** Antibacterial (marine bacteria: *Alcaligenes aquamarinus*, MIC = 20µg/disc; *Azomonas agilis*, MIC = 30µg/disc; *Erwinia amylovora*, MIC = 30µg/disc; *Escherichia coli*, MIC = 30µg/disc; *Alteromonas* sp., *Azobacter beijerinckii*, *Halobacterium* sp., *Halococcus* sp., no inhibition). **Source:** *Laurencia mariannensis*. **Ref:** 5191.

**12617 Lembyne B**

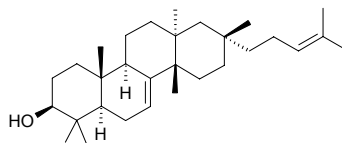
$C_{15}H_{16}Br_2O_2$  (388.10). Oil,  $[\alpha]_D^{24} = +157.1^\circ$  ( $c = 0.10$ ,  $CHCl_3$ ). **Source:** *Laurencia* sp. **Ref:** 5183.

**12618 Lemmaphylla-7,21-diene**

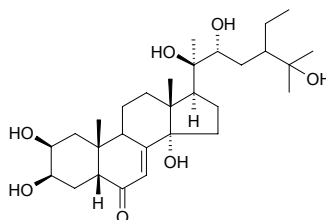
$C_{30}H_{50}$  (410.73). **Source:** DAO LUAN YE FU SHI JUE *Lemmaphyllum microphyllum* var. *obovatum*. **Ref:** 660.

**12619 Lemmaphylla-7,21-dien-3β-ol**

$C_{30}H_{50}O$  (426.73). **Pharm:** Antineoplastic (EBV-EA induced by TPA, mol ratio/TPA = 1000, relative percentage of EBV-EA = 2.2% (positive control value 32pmol, 20ng TPA = 100%), viability of Raji cells = 70%; reference compound β-Carotene, relative percentage = 8.6%). **Source:** HUO YANG LE *Euphorbia antiquorum* (latex). **Ref:** 4606.

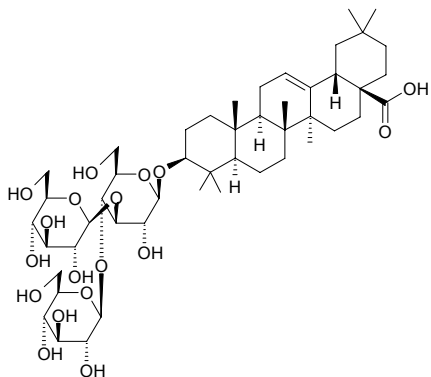
**12620 Lemmasterone**

Makisterone C [19974-41-5]  $C_{29}H_{48}O_7$  (508.70). mp 263–265°C (dec). **Source:** LUO YAN CAO *Lemmaphyllum microphyllum*, LUO HAN SONG YE *Podocarpus macrophyllus*. **Ref:** 6.

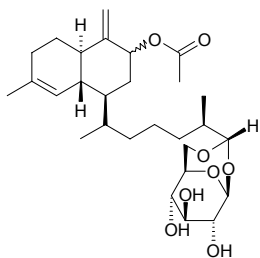


**12621 Lemmatoxin**

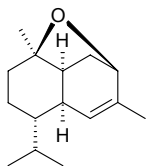
$C_{48}H_{78}O_{18}$  (943.15). **Pharm:** Spermaticidal (50mg/L); molluscicide (*Biomphalaria glabrata* snail, 1.5mg/L, 90% killed). **Source:** SHI ER RUI SHANG LU *Phytolacca dodecandra*. **Ref:** 658.

**12622 Lemnabourside D**

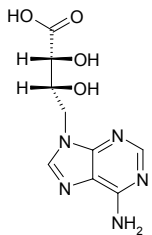
$C_{28}H_{44}O_8$  (508.66). Yellowish solid. **Pharm:** Cytotoxic (HepA  $IC_{50}$  = 39.3  $\mu$ g/mL, S<sub>180</sub>A  $IC_{50}$  = 39.3  $\mu$ g/mL, EAC  $IC_{50}$  = 30.4  $\mu$ g/mL). **Source:** BO LUN LIN HUA RUAN SHAN HU *Lemna lia bournei*. **Ref:** 2505.

**12623 Lentideusether**

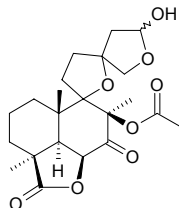
$C_{15}H_{24}O$  (220.36). **Source:** BAO PI GU *Lentinus lepidus*. **Ref:** 660.

**12624 Lentysine**

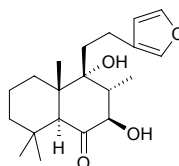
[23918-98-1]  $C_9H_{11}N_5O_4$  (253.22). mp 261~263°C (dec). **Pharm:** Antihepatotoxin (liver toxicosis due to  $CeCl_3$ ); antihypercholesterolemic (rat, reduces the level of cholesterol in serum). **Source:** XIANG XUN *Lentinus edodes*. **Ref:** 6, 658.

**12625 Leocardin**

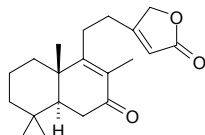
$C_{22}H_{30}O_8$  (422.48). Crystals. **Source:** WEI YI MU CAO *Leonurus cardiaca*. **Ref:** 2499.

**12626 Leoheterin**

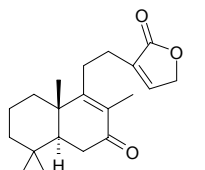
$C_{20}H_{30}O_4$  (334.46). White powder. **Source:** YI MU CAO *Leonurus heterophyllus* [Syn. *Leonurus artemisia*]. **Ref:** 2499, 4493.

**12627 Leoheteronin A**

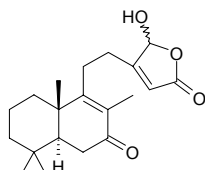
$C_{20}H_{28}O_3$  (316.44). White amorphous powder,  $[\alpha]_D^{25} = +8.4^\circ$  ( $c = 1.19$ ,  $CHCl_3$ ). **Source:** YI MU CAO *Leonurus heterophyllus* [Syn. *Leonurus artemisia*] (aerial parts). **Ref:** 4493.

**12628 Leoheteronin B**

$C_{20}H_{28}O_3$  (316.44). White amorphous powder,  $[\alpha]_D^{25} = -10.7^\circ$  ( $c = 1.77$ ,  $CHCl_3$ ). **Source:** YI MU CAO *Leonurus heterophyllus* [Syn. *Leonurus artemisia*] (aerial parts). **Ref:** 4493.

**12629 Leoheteronin C**

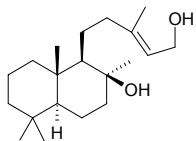
$C_{20}H_{28}O_4$  (332.44). White amorphous powder,  $[\alpha]_D^{25} = +57.8^\circ$  ( $c = 1.35$ ,  $CHCl_3$ ). **Source:** YI MU CAO *Leonurus heterophyllus* [Syn. *Leonurus artemisia*] (aerial parts). **Ref:** 4493.



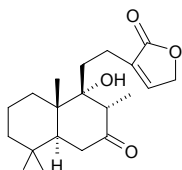


**12630 Leoheteronin D**

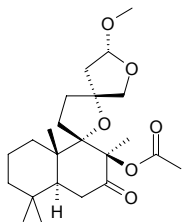
$C_{20}H_{30}O_2$  (308.51). Colorless needles, mp 134–135°C,  $[\alpha]_D^{25} = 0.0^\circ$  ( $c = 0.20$ ,  $CHCl_3$ ). Source: YI MU CAO *Leonurus heterophyllus* [Syn. *Leonurus artemisia*] (aerial parts). Ref: 4493.

**12631 Leoheteronin E**

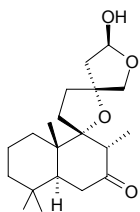
$C_{20}H_{30}O_4$  (334.46). White amorphous powder,  $[\alpha]_D^{25} = -9.3^\circ$  ( $c = 2.91$ ,  $CHCl_3$ ). Source: YI MU CAO *Leonurus heterophyllus* [Syn. *Leonurus artemisia*] (aerial parts). Ref: 4493.

**12632 Leoheteronone A**

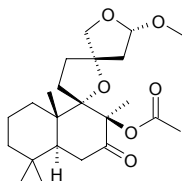
$C_{23}H_{36}O_6$  (408.54). Yellowish oil,  $[\alpha]_D^{25} = -42.5^\circ$  ( $c = 3.51$ ,  $CHCl_3$ ). Source: YI MU CAO *Leonurus heterophyllus* [Syn. *Leonurus artemisia*] (aerial parts). Ref: 4534.

**12633 Leoheteronone B**

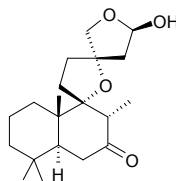
$C_{20}H_{32}O_4$  (336.48). White amorphous powder. Source: YI MU CAO *Leonurus heterophyllus* [Syn. *Leonurus artemisia*] (aerial parts). Ref: 4534.

**12634 Leoheteronone C**

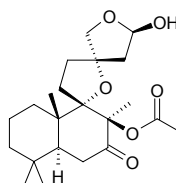
$C_{23}H_{36}O_6$  (408.54). White amorphous powder,  $[\alpha]_D^{25} = +24.1^\circ$  ( $c = 0.83$ ,  $CHCl_3$ ). Source: YI MU CAO *Leonurus heterophyllus* [Syn. *Leonurus artemisia*] (aerial parts). Ref: 4534.

**12635 Leoheteronone D**

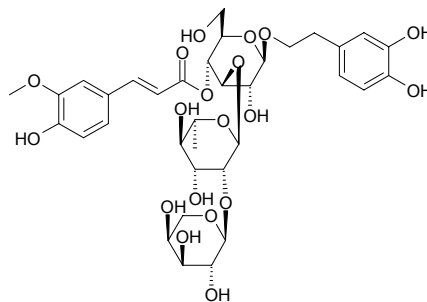
$C_{20}H_{32}O_4$  (336.48). White amorphous powder. Source: YI MU CAO *Leonurus heterophyllus* [Syn. *Leonurus artemisia*] (aerial parts). Ref: 4534.

**12636 Leoheteronone E**

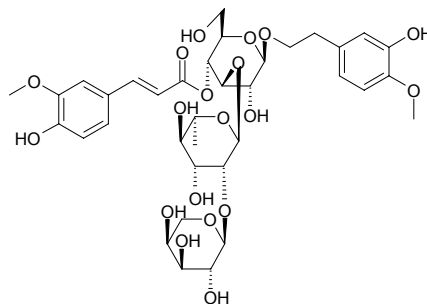
$C_{22}H_{34}O_6$  (394.51). White amorphous powder. Source: YI MU CAO *Leonurus heterophyllus* [Syn. *Leonurus artemisia*] (aerial parts). Ref: 4534.

**12637 Leonoside A**

$C_{35}H_{46}O_{19}$  (770.75). Amorphous powder. Source: HUI BAI YI MU CAO *Leonurus glaucescens*. Ref: 2499.

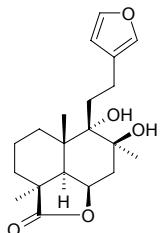
**12638 Leonoside B**

$C_{36}H_{48}O_{19}$  (784.77). Amorphous powder. Source: HUI BAI YI MU CAO *Leonurus glaucescens*. Ref: 2499.

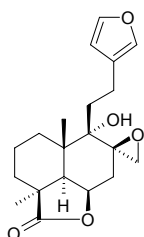


**12639 Leonotin**

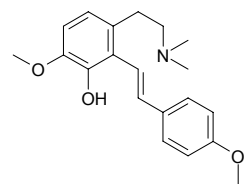
$C_{20}H_{28}O_5$  (348.44). **Pharm:** Cytotoxic (leukemia cells L<sub>1210</sub> in tissue culture, IC<sub>50</sub> = 50–60 μg/mL). **Source:** XI YE YI MU CAO *Leonurus sibiricus* (aerial parts). **Ref:** 4328.

**12640 Leonotinin**

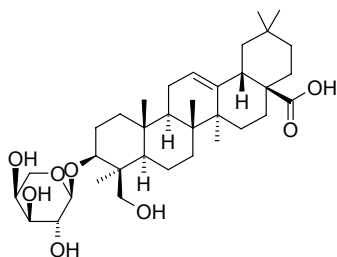
$C_{20}H_{26}O_5$  (346.43). **Pharm:** Cytotoxic (leukemia cells L<sub>1210</sub> in tissue culture, IC<sub>50</sub> = 50–60 μg/mL). **Source:** XI YE YI MU CAO *Leonurus sibiricus* (aerial parts). **Ref:** 4328.

**12641 Leonticine**

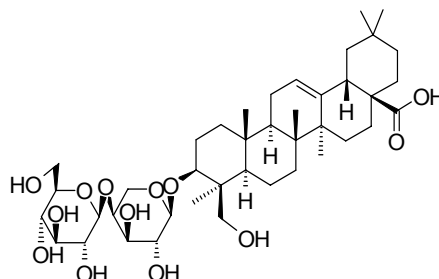
$C_{20}H_{25}NO_3$  (327.43). **Source:** BANG ZHUANG ZI JIN *Corydalis claviculata*, HUA BAN SHI ZU CAO *Leontice leontopetalum*, YAN HU SUO *Corydalis yanhusuo* [Syn. *Corydalis turtschaninovii* f. *yanhusuo*], *Alphonsea sclerocarpa*. **Ref:** 660, 1521.

**12642 Leontoside A**

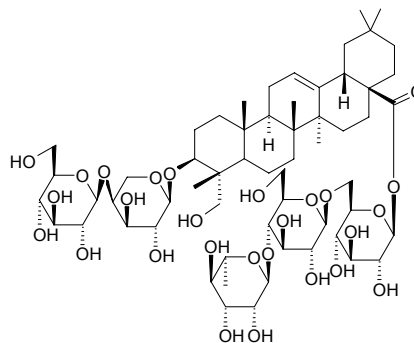
Scabioside A  $C_{35}H_{56}O_8$  (604.83). mp 216–219°C. **Source:** HUANG HUA BAI JIANG *Patrinia scabiosaefolia*, XING AN BAI TOU WENG *Pulsatilla dahurica*, ZHONG E BAI TOU WENG *Pulsatilla campanella*, *Akebia* spp., *Fatsia* spp., *Caulophyllum* spp., *Patrinia* spp., *Phytolacca* spp., *Schefflera* spp., *Hedera* spp., *Leontice* spp., *Koelreuteria* spp. **Ref:** 2, 6, 660, 1521.

**12643 Leontoside B**

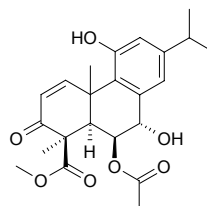
Scabioside C  $C_{41}H_{66}O_{13}$  (766.98). mp 216–219°C. **Source:** HUANG HUA BAI JIANG *Patrinia scabiosaefolia*, ZHONG E BAI TOU WENG *Pulsatilla campanella*. **Ref:** 2, 660, 1521.

**12644 Leontoside D**

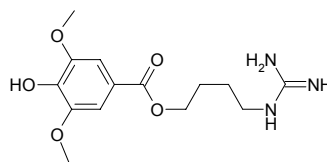
$C_{59}H_{96}O_{27}$  (1237.41). **Source:** XING AN BAI TOU WENG *Pulsatilla dahurica*. **Ref:** 660, 1521.

**12645 Leonubiastrin**

$C_{23}H_{28}O_7$  (416.48). Crystals. **Source:** XI YE YI MU CAO *Leonurus sibiricus*. **Ref:** 2499.

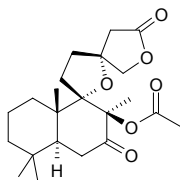
**12646 Leonurine**

[24697-74-3]  $C_{14}H_{21}N_3O_5$  (311.34). mp 238°C (dec). **Pharm:** Uterine stimulant (rat, *in vitro*, 0.4g/mL); Antihypertensive. **Source:** XI YE YI MU CAO *Leonurus sibiricus* (the compound was isolated from the plant by Natsuki Kato et al. in 1962)<sup>[5505]</sup>, YI MU CAO *Leonurus heterophyllum* [Syn. *Leonurus artemisia*] (dried aerial parts: content = 0.218%<sup>[5508]</sup>). **Ref:** 4, 658, 5505, 5508.

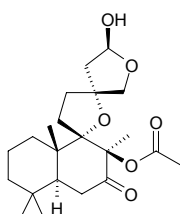


**12647 Leopersin A**

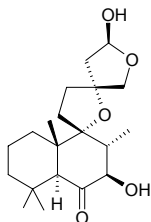
$C_{22}H_{32}O_6$  (392.50). White powder. [Source](#): BO SI YI MU CAO *Leonurus persicus*. [Ref](#): 2499.

**12648 Leopersin B**

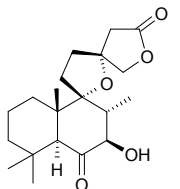
$C_{22}H_{34}O_6$  (394.51). White powder. [Source](#): BO SI YI MU CAO *Leonurus persicus*, YI MU CAO *Leonurus heterophyllum* [Syn. *Leonurus artemisia*] (aerial parts). [Ref](#): 2499, 4534.

**12649 Leopersin C**

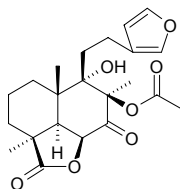
$C_{20}H_{32}O_5$  (352.48). Oil liquid. [Source](#): BO SI YI MU CAO *Leonurus persicus*, YI MU CAO *Leonurus heterophyllum* [Syn. *Leonurus artemisia*] (aerial parts). [Ref](#): 2499, 4534.

**12650 Leopersin D**

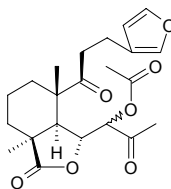
$C_{20}H_{30}O_5$  (350.46). White powder. [Source](#): BO SI YI MU CAO *Leonurus persicus*. [Ref](#): 2499.

**12651 Leopersin E**

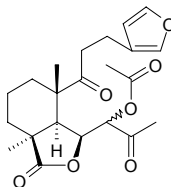
$C_{22}H_{38}O_7$  (404.46). White powder. [Source](#): BO SI YI MU CAO *Leonurus persicus*. [Ref](#): 2499.

**12652 7-epi-Leopersin F**

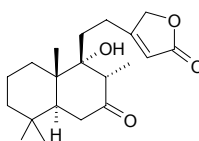
$C_{22}H_{38}O_7$  (404.46). Oil liquid. [Source](#): BO SI YI MU CAO *Leonurus persicus*. [Ref](#): 2499.

**12653 Leopersin F**

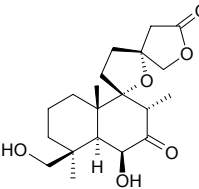
$C_{22}H_{38}O_7$  (404.46). White powder. [Source](#): BO SI YI MU CAO *Leonurus persicus*. [Ref](#): 2499.

**12654 Leopersin G**

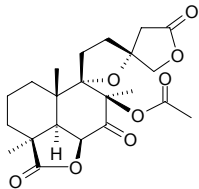
$C_{20}H_{30}O_4$  (334.46). Oil liquid. [Source](#): BO SI YI MU CAO *Leonurus persicus*. [Ref](#): 1521, 2499.

**12655 Leopersin H**

$C_{20}H_{30}O_6$  (366.46). White powder. [Source](#): BO SI YI MU CAO *Leonurus persicus*. [Ref](#): 2499.

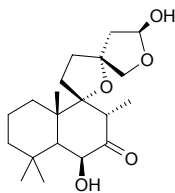
**12656 Leopersin I**

$C_{20}H_{28}O_8$  (420.46). Oil liquid. [Source](#): BO SI YI MU CAO *Leonurus persicus*. [Ref](#): 2499.

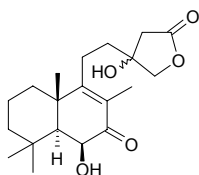


**12657 Leopersin J**

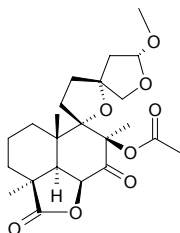
$C_{20}H_{32}O_5$  (352.48). Oil liquid. Source: BO SI YI MU CAO *Leonurus persicus*.  
Ref: 2499.

**12658 Leopersin L**

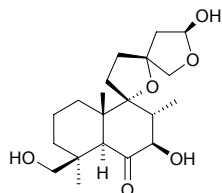
$C_{20}H_{30}O_5$  (350.46). Oil liquid. Source: BO SI YI MU CAO *Leonurus persicus*.  
Ref: 2499.

**12659 Leopersin N**

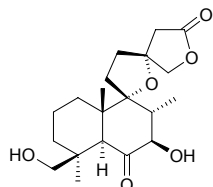
$C_{23}H_{32}O_8$  (436.51). Oil liquid. Source: BO SI YI MU CAO *Leonurus persicus*.  
Ref: 2499.

**12660 Leopersin O**

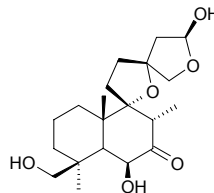
$C_{20}H_{32}O_6$  (368.47). Oil liquid. Source: BO SI YI MU CAO *Leonurus persicus*.  
Ref: 2499.

**12661 Leopersin P**

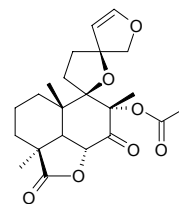
$C_{20}H_{30}O_6$  (366.46). White powder. Source: BO SI YI MU CAO *Leonurus persicus*. Ref: 2499.

**12662 Leopersin Q**

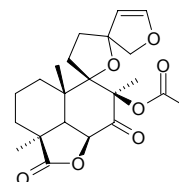
$C_{20}H_{32}O_6$  (368.47). Oil liquid. Source: BO SI YI MU CAO *Leonurus persicus*.  
Ref: 2499.

**12663 (+)-Leosibiricin**

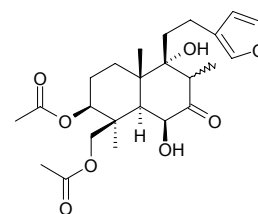
$C_{22}H_{28}O_7$  (404.46). Source: XI YE YI MU CAO *Leonurus sibiricus*. Ref: 660.

**12664 Leosibiricin**

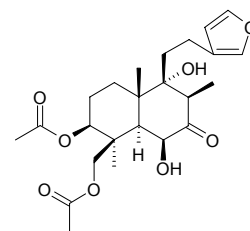
[86575-85-1]  $C_{22}H_{28}O_7$  (404.46). Oil liquid,  $[\alpha]_D^{19} = +33^\circ$  ( $c = 0.09$ ,  $CHCl_3$ ).  
Source: BO SI YI MU CAO *Leonurus persicus*. Ref: 2499.

**12665 Leosibirin**

$C_{24}H_{32}O_8$  (450.53). Source: XI YE YI MU CAO *Leonurus sibiricus*. Ref: 660.

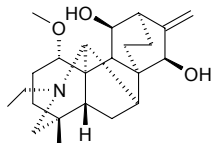
**12666 Leosibirin**

[86575-87-3]  $C_{24}H_{34}O_8$  (450.53). Oil liquid,  $[\alpha]_D^{20} = 0.7^\circ$  ( $c = 0.3$ ,  $CHCl_3$ ).  
Source: XI YE YI MU CAO *Leonurus sibiricus*. Ref: 2499.



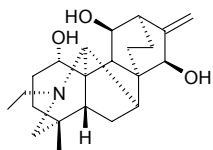
**12667 Lepadine**

$C_{22}H_{35}NO_3$  (373.54). Source: LEI BO WU TOU *Aconitum pseudohuiliense*. Ref: 660.

**12668 Lepenine**

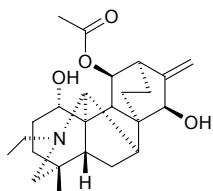
$C_{22}H_{33}NO_3$  (359.51). Colorless needles, mp 203–204°C (acetone). Source:

BAI HOU WU TOU *Aconitum leucostomum*, BEI WU TOU *Aconitum kusnezoffii*, JI LIN WU TOU *Aconitum kirinense*, LEI BO WU TOU *Aconitum pseudohuiliense*. Ref: 660, 1521, 2515.

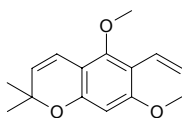
**12669 Lepetine**

$C_{24}H_{35}NO_4$  (401.55). Colorless needles, mp 134–136°C (acetone). Source: JI

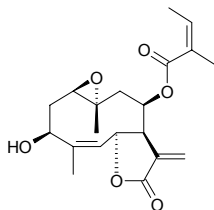
LIN WU TOU *Aconitum kirinense*, LEI BO WU TOU *Aconitum pseudohuiliense*. Ref: 660, 2515.

**12670 Leptene B**

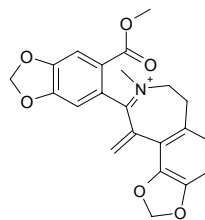
$C_{15}H_{18}O_3$  (246.31). Yellowish oleaginous substances. Source: SAN CHA KU *Evodia lepta* [Syn. *Ilex lepta*]. Ref: 393.

**12671 Leptocarpin**

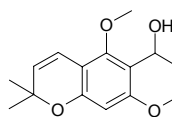
$C_{20}H_{26}O_6$  (362.43). Source: *Viguiera eriophora* ssp. *eriophora* (aerial parts), *Viguiera puruana* (aerial parts). Ref: 5090.

**12672 Leptocarpinine**

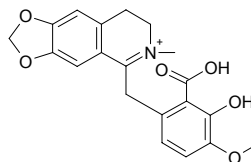
$C_{22}H_{20}NO_6^+$  (394.41). Amorphous powder, mp > 350°C (MeOH). Source: XI GUO JIAO HUI XIANG *Hypecoum leptocarpum*. Ref: 1899.

**12673 Leptol B**

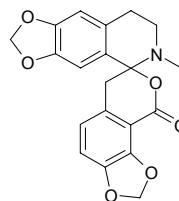
$C_{15}H_{20}O_4$  (264.32). Colorless oleaginous substances,  $[\alpha]_D^{26} = -0.6$  ( $c = 1.12$ , Me<sub>2</sub>CO). Source: SAN CHA KU *Evodia lepta* [Syn. *Ilex lepta*]. Ref: 393.

**12674 Leptopidine**

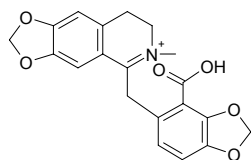
$C_{20}H_{20}NO_6^+$  (370.39). Yellow powder, mp. 235–239°C (MeOH). Source: XI GUO JIAO HUI XIANG *Hypecoum leptocarpum*. Ref: 1899.

**12675 Leptopidinine**

$C_{20}H_{17}NO_6$  (367.36). Yellow needles (MeOH–CHCl<sub>3</sub>), mp. 345–350°C (CHCl<sub>3</sub>),  $[\alpha]_D^{20} = 0^\circ$  ( $c = 1.5$ , MeOH). Source: XI GUO JIAO HUI XIANG *Hypecoum leptocarpum*. Ref: 1899.

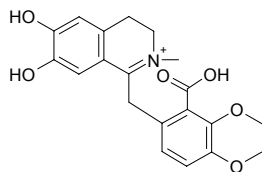
**12676 Leptopine**

$C_{20}H_{18}NO_6^+$  (368.37). Yellow cubic crystals, mp. 158–161°C (MeOH). Source: XI GUO JIAO HUI XIANG *Hypecoum leptocarpum*. Ref: 1899.

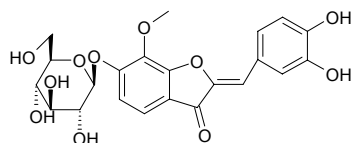


**12677 Leptopinine**

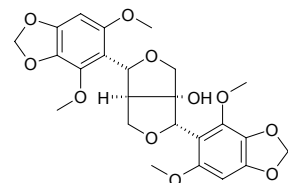
$C_{20}H_{22}NO_6^+$  (372.40). Yellow powder. mp. 207~210°C (MeOH). Source: XI GUO JIAO HUI XIANG *Hypecoum leptocarpum*. Ref: 1899.

**12678 Leptosin**

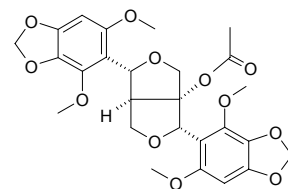
[486-23-7]  $C_{22}H_{22}O_{11}$  (462.41). Orange needles, mp 229~231°C (dec). Source: XIAN YE JIN JI JU *Coreopsis lanceolata*. Ref: 6.

**12679 Leptostachyol**

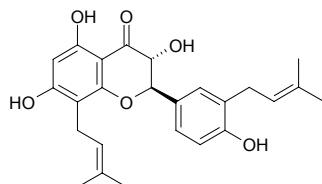
$C_{24}H_{26}O_{11}$  (490.47). Source: TOU GU CAO *Speranskia tuberculata*. Ref: 660.

**12680 Leptostachyol acetate**

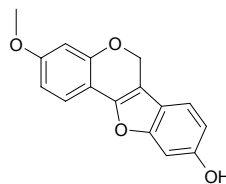
$C_{26}H_{28}O_{12}$  (532.51). Source: LAO PO ZI ZHEN XIAN *Phryma leptostachya*. Ref: 6.

**12681 (2R,3R)-Lespedezaflavanone C**

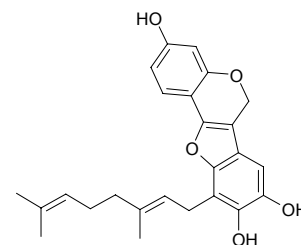
Anticancer Flavonoid PMV70P691-99  $C_{25}H_{28}O_6$  (424.50). Pharm: Aromatase inhibitor inactive (*in vitro*,  $IC_{50} > 40 \mu\text{mol/L}$ ; control Aminoglutethimide,  $IC_{50} = 6.4 \mu\text{mol/L}$ )<sup>[3090]</sup>; cytotoxic (cyclooxygenase-1 inhibitor)<sup>[5038]</sup>. Source: GOU SHU *Broussonetia papyrifera*. Ref: 3090, 5038.

**12682 Lespedezol A<sub>1</sub>**

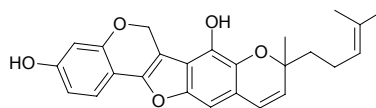
$C_{16}H_{12}O_4$  (268.27). Amorphous powder. Pharm: Antioxidant (rat brain homogenate lipid peroxidation test,  $IC_{50} = 0.2 \mu\text{mol/L}$ , control EGCg,  $IC_{50} = 0.07 \mu\text{mol/L}$ ). Source: TONG XING LIE PIAN HU ZHI ZI *Lespedeza homoloba*. Ref: 2356.

**12683 Lespedezol A<sub>2</sub>**

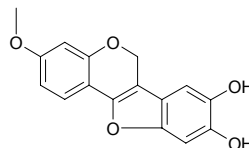
$C_{25}H_{26}O_5$  (406.48). Amorphous powder. Pharm: Antioxidant (rat brain homogenate lipid peroxidation test,  $IC_{50} = 0.2 \mu\text{mol/L}$ , control EGCg,  $IC_{50} = 0.07 \mu\text{mol/L}$ ); Antiallergic (50mg/kg, InRt = 39.9%, control EGCg, InRt = 12.8%). Source: TONG XING LIE PIAN HU ZHI ZI *Lespedeza homoloba*. Ref: 2356.

**12684 Lespedezol A<sub>3</sub>**

$C_{25}H_{24}O_5$  (404.47). Amorphous powder. Pharm: Antioxidant (rat brain homogenate lipid peroxidation test,  $IC_{50} = 0.3 \mu\text{mol/L}$ , control EGCg,  $IC_{50} = 0.07 \mu\text{mol/L}$ ). Source: TONG XING LIE PIAN HU ZHI ZI *Lespedeza homoloba*. Ref: 2356.

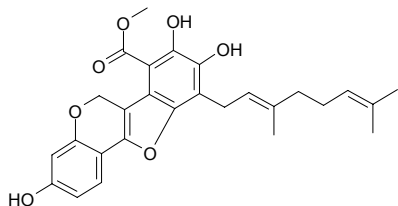
**12685 Lespedezol A<sub>4</sub>**

$C_{16}H_{12}O_5$  (284.27). Amorphous powder. Pharm: Antioxidant (rat brain homogenate lipid peroxidation test,  $IC_{50} = 0.2 \mu\text{mol/L}$ , control EGCg,  $IC_{50} = 0.07 \mu\text{mol/L}$ ). Source: TONG XING LIE PIAN HU ZHI ZI *Lespedeza homoloba*. Ref: 2357.

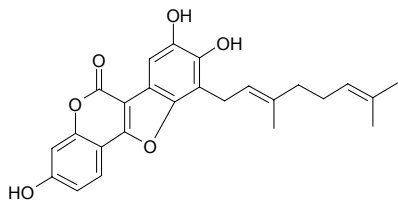


**12686 Lespedezol A<sub>5</sub>**

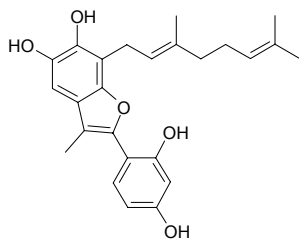
C<sub>27</sub>H<sub>28</sub>O<sub>7</sub> (464.52). Amorphous powder. **Pharm:** Antioxidant (rat brain homogenate lipid peroxidation test, IC<sub>50</sub> = 0.4 μmol/L, control EGCg, IC<sub>50</sub> = 0.07 μmol/L). **Source:** TONG XING LIE PIAN HU ZHI ZI *Lespedeza homoloba*. **Ref:** 2357.

**12687 Lespedezol A<sub>6</sub>**

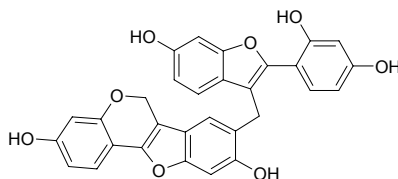
C<sub>25</sub>H<sub>24</sub>O<sub>6</sub> (420.47). Amorphous powder. **Pharm:** Antioxidant (rat brain homogenate lipid peroxidation test, IC<sub>50</sub> = 0.4 μmol/L, control EGCg, IC<sub>50</sub> = 0.07 μmol/L). **Source:** TONG XING LIE PIAN HU ZHI ZI *Lespedeza homoloba*. **Ref:** 2357.

**12688 Lespedezol B<sub>1</sub>**

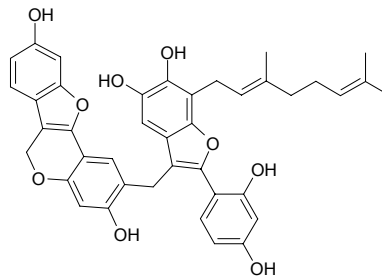
C<sub>25</sub>H<sub>28</sub>O<sub>5</sub> (408.50). Amorphous powder. **Pharm:** Antioxidant (rat brain homogenate lipid peroxidation test, IC<sub>50</sub> = 0.3 μmol/L, control EGCg, IC<sub>50</sub> = 0.07 μmol/L). **Source:** TONG XING LIE PIAN HU ZHI ZI *Lespedeza homoloba*. **Ref:** 2356.

**12689 Lespedezol B<sub>2</sub>**

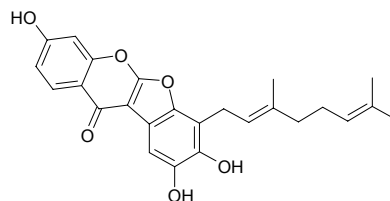
C<sub>30</sub>H<sub>20</sub>O<sub>8</sub> (508.49). Amorphous powder. **Pharm:** Antioxidant (rat brain homogenate lipid peroxidation test, IC<sub>50</sub> = 0.2 μmol/L, control EGCg, IC<sub>50</sub> = 0.07 μmol/L). **Source:** TONG XING LIE PIAN HU ZHI ZI *Lespedeza homoloba*. **Ref:** 2356.

**12690 Lespedezol B<sub>3</sub>**

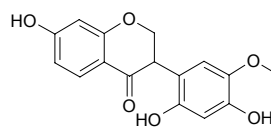
C<sub>40</sub>H<sub>36</sub>O<sub>9</sub> (660.73). Amorphous powder. **Pharm:** Antioxidant (rat brain homogenate lipid peroxidation test, IC<sub>50</sub> = 0.3 μmol/L, control EGCg, IC<sub>50</sub> = 0.07 μmol/L). **Source:** TONG XING LIE PIAN HU ZHI ZI *Lespedeza homoloba*. **Ref:** 2356.

**12691 Lespedezol C<sub>1</sub>**

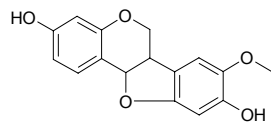
C<sub>25</sub>H<sub>24</sub>O<sub>6</sub> (420.47). Amorphous powder. **Pharm:** Antioxidant (rat brain homogenate lipid peroxidation test, IC<sub>50</sub> = 0.3 μmol/L, control EGCg, IC<sub>50</sub> = 0.07 μmol/L). **Source:** TONG XING LIE PIAN HU ZHI ZI *Lespedeza homoloba*. **Ref:** 2356.

**12692 Lespedezol D**

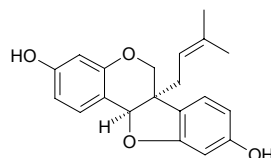
C<sub>16</sub>H<sub>14</sub>O<sub>6</sub> (302.29). Amorphous powder, [α]<sub>D</sub> = 0° (c = 0.71, MeOH). **Source:** TONG XING LIE PIAN HU ZHI ZI *Lespedeza homoloba*. **Ref:** 2357.

**12693 Lespedezol D<sub>1</sub>**

C<sub>16</sub>H<sub>14</sub>O<sub>5</sub> (286.29). Amorphous powder, [α]<sub>D</sub> = -97.1° (c = 0.46, MeOH). **Source:** TONG XING LIE PIAN HU ZHI ZI *Lespedeza homoloba*. **Ref:** 2357.

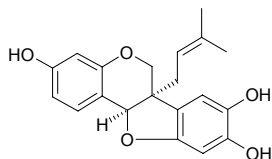
**12694 Lespedezol D<sub>2</sub>**

C<sub>20</sub>H<sub>20</sub>O<sub>4</sub> (324.38). Amorphous powder, [α]<sub>D</sub> = -136.9° (c = 0.16, MeOH). **Source:** TONG XING LIE PIAN HU ZHI ZI *Lespedeza homoloba*. **Ref:** 2357.

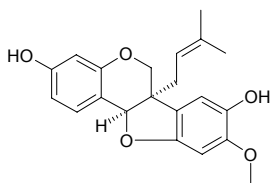


**12695 Lespedezol D<sub>3</sub>**

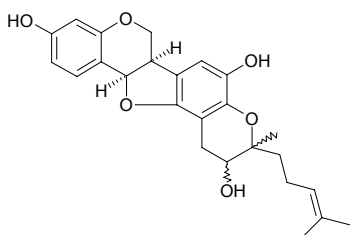
C<sub>20</sub>H<sub>20</sub>O<sub>5</sub> (340.38). Amorphous powder,  $[\alpha]_D = -113.2^\circ$  ( $c = 0.70$ , MeOH).  
**Pharm:** Antioxidant (rat brain homogenate lipid peroxidation test, IC<sub>50</sub> = 0.5 μmol/L, control EGCg, IC<sub>50</sub> = 0.07 μmol/L). **Source:** TONG XING LIE PIAN HU ZHI ZI *Lespedeza homoloba*. **Ref:** 2357.

**12696 Lespedezol D<sub>4</sub>**

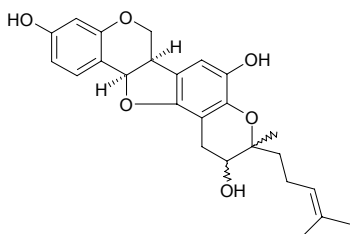
C<sub>21</sub>H<sub>22</sub>O<sub>5</sub> (354.41). Amorphous powder,  $[\alpha]_D = -156.9^\circ$  ( $c = 0.88$ , MeOH).  
**Pharm:** Antioxidant (rat brain homogenate lipid peroxidation test, IC<sub>50</sub> = 0.1 μmol/L, control EGCg, IC<sub>50</sub> = 0.07 μmol/L). **Source:** TONG XING LIE PIAN HU ZHI ZI *Lespedeza homoloba*. **Ref:** 2357.

**12697 Lespedezol D<sub>5</sub>**

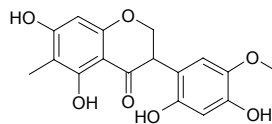
C<sub>25</sub>H<sub>28</sub>O<sub>6</sub> (424.50). Amorphous powder,  $[\alpha]_D = -49.9^\circ$  ( $c = 1.03$ , MeOH).  
**Pharm:** Antioxidant (rat brain homogenate lipid peroxidation test, IC<sub>50</sub> = 0.2 μmol/L, control EGCg, IC<sub>50</sub> = 0.07 μmol/L). **Source:** TONG XING LIE PIAN HU ZHI ZI *Lespedeza homoloba*. **Ref:** 2357.

**12698 Lespedezol D<sub>6</sub>**

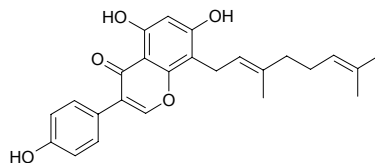
C<sub>25</sub>H<sub>28</sub>O<sub>6</sub> (424.50). Amorphous powder,  $[\alpha]_D = -120.90^\circ$  ( $c = 1.23$ , MeOH).  
**Pharm:** Antioxidant (rat brain homogenate lipid peroxidation test, IC<sub>50</sub> = 0.1 μmol/L, control EGCg, IC<sub>50</sub> = 0.07 μmol/L). **Source:** TONG XING LIE PIAN HU ZHI ZI *Lespedeza homoloba*. **Ref:** 2357.

**12699 Lespedezol E**

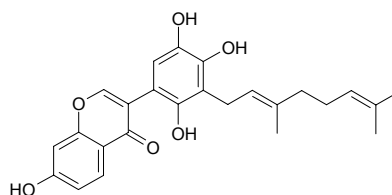
C<sub>17</sub>H<sub>16</sub>O<sub>7</sub> (332.31). Amorphous powder,  $[\alpha]_D = 0^\circ$  ( $c = 1.21$ , MeOH). **Source:** TONG XING LIE PIAN HU ZHI ZI *Lespedeza homoloba*. **Ref:** 2357.

**12700 Lespedezol E<sub>1</sub>**

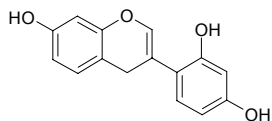
C<sub>25</sub>H<sub>26</sub>O<sub>5</sub> (406.48). Amorphous powder. **Source:** TONG XING LIE PIAN HU ZHI ZI *Lespedeza homoloba*. **Ref:** 2357.

**12701 Lespedezol E<sub>2</sub>**

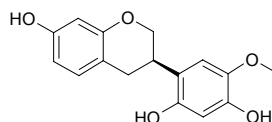
C<sub>25</sub>H<sub>26</sub>O<sub>6</sub> (422.48). Amorphous powder. **Pharm:** Antioxidant (rat brain homogenate lipid peroxidation test, IC<sub>50</sub> = 0.4 μmol/L, control EGCg, IC<sub>50</sub> = 0.07 μmol/L). **Source:** TONG XING LIE PIAN HU ZHI ZI *Lespedeza homoloba*. **Ref:** 2357.

**12702 Lespedezol F<sub>1</sub>**

C<sub>15</sub>H<sub>12</sub>O<sub>4</sub> (256.26). Amorphous powder. **Pharm:** Antioxidant (rat brain homogenate lipid peroxidation test, IC<sub>50</sub> = 0.4 μmol/L, control EGCg, IC<sub>50</sub> = 0.07 μmol/L). **Source:** TONG XING LIE PIAN HU ZHI ZI *Lespedeza homoloba*. **Ref:** 2357.

**12703 Lespedezol G<sub>1</sub>**

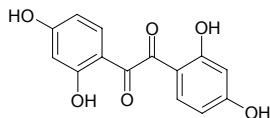
C<sub>16</sub>H<sub>16</sub>O<sub>5</sub> (288.30). Amorphous powder,  $[\alpha]_D = -16.7^\circ$  ( $c = 0.98$ , MeOH). **Source:** TONG XING LIE PIAN HU ZHI ZI *Lespedeza homoloba*. **Ref:** 2357.



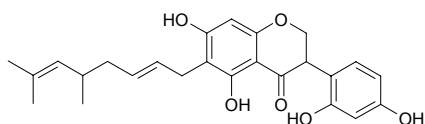


**12704 Lespedezol H<sub>1</sub>**

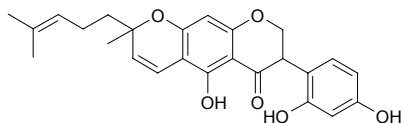
C<sub>14</sub>H<sub>10</sub>O<sub>6</sub> (274.23). Amorphous powder. Source: TONG XING LIE PIAN HU ZHI ZI *Lespedeza homoloba*. Ref: 2357.

**12705 Lespedol A**

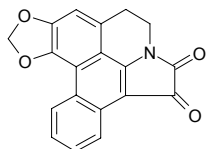
C<sub>25</sub>H<sub>28</sub>O<sub>6</sub> (424.50). mp 146.5~150°C. Source: TONG XING LIE PIAN HU ZHI ZI *Lespedeza homoloba* (the compound was isolated from the plant by Akira Ueno et al. in 1973). Ref: 5505.

**12706 Lespedol B**

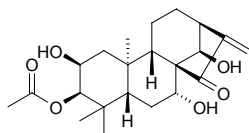
C<sub>25</sub>H<sub>28</sub>O<sub>6</sub> (422.48). mp 165~166°C. Source: TONG XING LIE PIAN HU ZHI ZI *Lespedeza homoloba* (the compound was isolated from the plant by Akira Ueno et al. in 1973). Ref: 5505.

**12707 Lettowianthine**

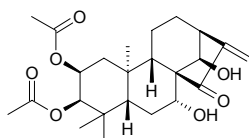
C<sub>19</sub>H<sub>11</sub>NO<sub>4</sub> (317.30). Dark red solid, mp 314~317°C (dec, CHCl<sub>3</sub>). Source: *Lettowianthus stellatus* (root cortex). Ref: 3944.

**12708 Leucamenin A**

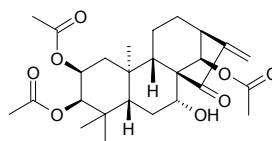
C<sub>22</sub>H<sub>32</sub>O<sub>6</sub> (392.50). mp 228~230°C, [α]<sub>D</sub><sup>21</sup> = -63.8° (c = 1.04, MeOH). Source: KA MEI XIANG CHA CAI *Isodon kameba*. Ref: 4067.

**12709 Leucamenin B**

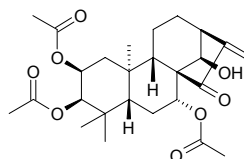
C<sub>24</sub>H<sub>34</sub>O<sub>7</sub> (434.53). mp 240~241°C, [α]<sub>D</sub><sup>21</sup> = -32.5° (c = 1.17, CHCl<sub>3</sub>). Source: KA MEI XIANG CHA CAI *Isodon kameba*. Ref: 4067.

**12710 Leucamenin C**

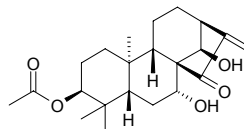
C<sub>26</sub>H<sub>36</sub>O<sub>8</sub> (476.57). Amorphous powder, [α]<sub>D</sub><sup>21</sup> = -21.2° (c = 0.90, CHCl<sub>3</sub>). Source: KA MEI XIANG CHA CAI *Isodon kameba*. Ref: 4067.

**12711 Leucamenin D**

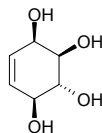
C<sub>26</sub>H<sub>36</sub>O<sub>8</sub> (476.57). mp 182~184°C, [α]<sub>D</sub><sup>21</sup> = -27.3° (c = 1.32, CHCl<sub>3</sub>). Source: KA MEI XIANG CHA CAI *Isodon kameba*. Ref: 4067.

**12712 Leucamenin E**

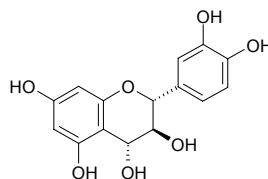
C<sub>22</sub>H<sub>32</sub>O<sub>5</sub> (376.50). mp 148~149°C, [α]<sub>D</sub><sup>21</sup> = -55.8° (c = 0.39, MeOH). Source: KA MEI XIANG CHA CAI *Isodon kameba*, YIN DI KUAN YE XIANG CHA CAI *Isodon umbrosa* var. *latifolia*. Ref: 4067.

**12713 Leucanthemitol**

C<sub>6</sub>H<sub>10</sub>O<sub>4</sub> (146.14). Source: BAI SHOU WU *Cynanchum bungei*. Ref: 660.

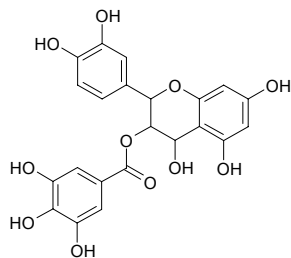
**12714 Leucocyanidin**

[480-17-1] C<sub>15</sub>H<sub>14</sub>O<sub>7</sub> (306.27). Monohydrate crystals (ethyl acetate-petroleum ether), mp 355°C; mp (+) > 355°C. Pharm: Platelet aggregation inhibitor; aldose reductase inhibitor (eye lens); similar action with vitamin P. Source: A LA BO JIN HE HUAN *Acacia arabica*, BAI FAN DOU *Phaseolus vulgaris*, CHANG YE AN LUO *Polyalthia longifolia*, FAN SHI LIU GAN *Psidium guajava*, FAN SHI LIU PI *Psidium guajava*, FAN SHI LIU YE *Psidium guajava*, HOU PI SHU *Lannea grandis* [Syn. *Lannea coromandelica*], JI YE SUAN MO *Rumex hastatus*, LUO HUA SHENG *Arachis hypogaea*, MO E SUAN MO *Rumex hymenosepalus*, OU *Nelumbo nucifera*, PI JIU HUA *Humulus lupulus*, SHAN ZHA YE *Crataegus pinnatifida*. Ref: 661.

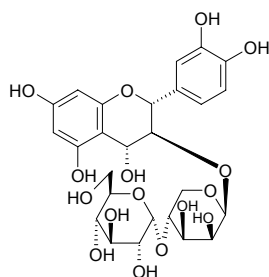


**12715 (+)-Leucocyanidin gallate**

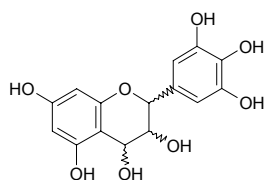
$C_{22}H_{18}O_{11}$  (458.38). Source: A LA BO JIAO JIN HE HUAN *Acacia nilotica*.  
Ref: 5375.

**12716 Leucocyanidin-3-O- $\alpha$ -D-glucopyranosyl-(1 $\rightarrow$ 4)-O- $\beta$ -D-arabinopyranoside**

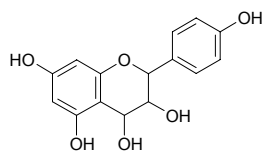
$C_{26}H_{32}O_{16}$  (600.54). Source: DUI YE RONG *Ficus hispida*. Ref: 660.

**12717 Leucodelphinidin**

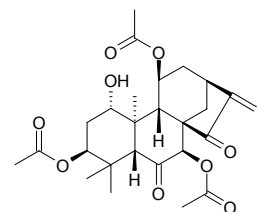
[491-52-1]  $C_{15}H_{14}O_8$  (322.27). Source: MA HUANG *Ephedra sinica*. Ref: 2.

**12718 Leucopelargonidin**

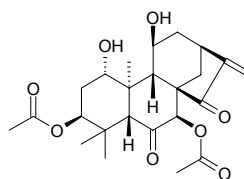
[520-17-2]  $C_{15}H_{14}O_6$  (290.28). Source: BAI FAN DOU *Phaseolus vulgaris*. Ref: 6.

**12719 Leucophyllin A**

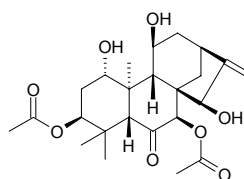
$C_{26}H_{34}O_9$  (490.56). mp 287~289°C,  $[\alpha]_D^{12} = -47.5^\circ$  ( $c = 0.58$ ,  $CHCl_3$ ). Source:  
 BAI YE XIANG CHA CAI *Isodon leucophyllus*. Ref: 4067.

**12720 Leucophyllin B**

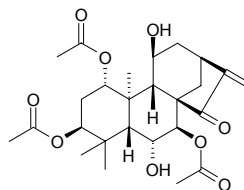
$C_{24}H_{32}O_8$  (448.52). mp 241~243°C,  $[\alpha]_D^{12} = -36.3^\circ$  ( $c = 0.40$ ,  $Me_2CO$ ). Source:  
 BAI YE XIANG CHA CAI *Isodon leucophyllus*. Ref: 4067.

**12721 Leucophyllin C**

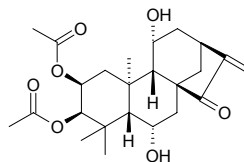
$C_{24}H_{34}O_8$  (450.53). mp 244~246°C,  $[\alpha]_D^{12} = +27.4^\circ$  ( $c = 0.19$ ,  $Me_2CO$ ). Source:  
 BAI YE XIANG CHA CAI *Isodon leucophyllus*. Ref: 4067.

**12722 Leucophyllin D**

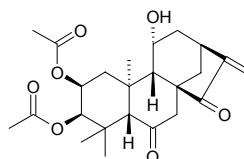
$C_{26}H_{36}O_9$  (492.57). mp 231~233°C,  $[\alpha]_D^{12} = +2.3^\circ$  ( $c = 0.51$ ,  $Me_2CO$ ). Source:  
 BAI YE XIANG CHA CAI *Isodon leucophyllus*. Ref: 4067.

**12723 Leucophyllin E**

$C_{24}H_{34}O_7$  (434.53). mp 218~220°C,  $[\alpha]_D^{12} = -53.6^\circ$  ( $c = 0.60$ ,  $Me_2CO$ ). Source:  
 BAI YE XIANG CHA CAI *Isodon leucophyllus*. Ref: 4067.

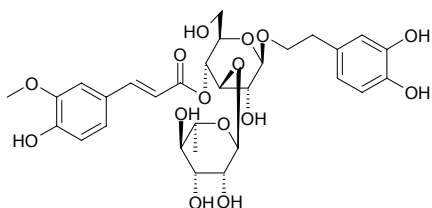
**12724 Leucophyllin F**

$C_{24}H_{32}O_7$  (432.52). mp 236~238°C,  $[\alpha]_D^{12} = -55.2^\circ$  ( $c = 0.58$ ,  $CHCl_3$ ). Source:  
 BAI YE XIANG CHA CAI *Isodon leucophyllus*. Ref: 4067.

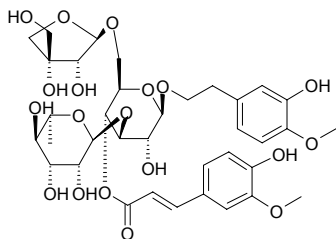


**12725 Leucosceptoside A**

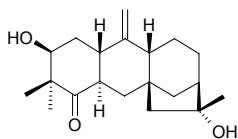
$C_{30}H_{38}O_{15}$  (638.63). Yellow powder. Source: BO SI YI MU CAO *Leonurus persicus*, CHANG YE CHE QIAN *Plantago lanceolata*, *Sideritis ozturkii* (aerial parts), CHE QIAN *Plantago asiatica*, DA YE ZUI YU CAO *Buddleja davidii*, SONG HAO *Phtheirospermum japonicum* [Syn. *Gerardia japonica*]. Ref: 660, 2499, 5020 3827.

**12726 Leucosceptoside B**

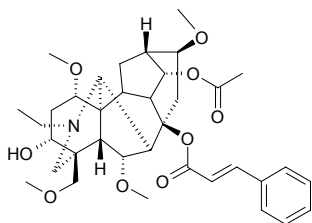
$C_{36}H_{48}O_{19}$  (784.77). Colorless amorphous powder,  $[\alpha]_D^{20} = -82^\circ$  ( $c = 0.1$ , MeOH). Source: ZI HUA GUAN MAO RUI HUA *Verbascum wiedemannianum*. Ref: 5449.

**12727 Leucothol A**

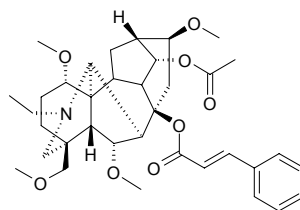
$C_{20}H_{30}O_3$  (318.46). White solid. Source: JIN YE ZI *Craibiodendron yunnanese* (leaf). Ref: 4575.

**12728 Leueantine A**

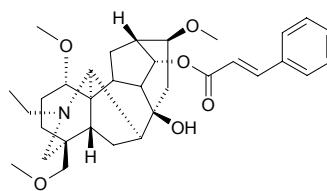
$C_{36}H_{49}NO_9$  (639.79). Amorphous powder,  $[\alpha]_D^{20} +13.4^\circ$  ( $c = 0.5$ ,  $CHCl_3$ ). Source: ZHUA KUI GUA YE WU TOU *Aconitum hemsleyanum* var. *leueanthus* (root: yield = 0.0036%dw). Ref: 4678.

**12729 Leueantine B**

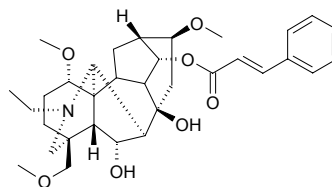
$C_{36}H_{49}NO_8$  (623.79). Amorphous powder,  $[\alpha]_D^{20} = +19^\circ$  ( $c = 0.5$ ,  $CHCl_3$ ). Source: ZHUA KUI GUA YE WU TOU *Aconitum hemsleyanum* var. *leueanthus* (root: yield = 0.0027%dw). Ref: 4678.

**12730 Leueantine C**

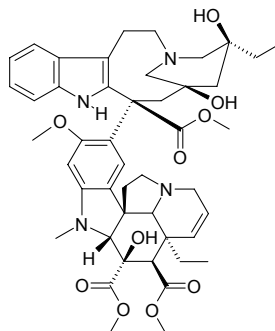
$C_{33}H_{45}NO_6$  (551.73). Amorphous powder,  $[\alpha]_D^{20} = +34.6^\circ$  ( $c = 0.5$ ,  $CHCl_3$ ). Source: ZHUA KUI GUA YE WU TOU *Aconitum hemsleyanum* var. *leueanthus* (root: yield = 0.00040%dw). Ref: 4678.

**12731 Leueantine D**

$C_{33}H_{45}NO_7$  (567.73). Amorphous powder,  $[\alpha]_D^{20} = +34.0^\circ$  ( $c = 0.5$ ,  $CHCl_3$ ). Source: ZHUA KUI GUA YE WU TOU *Aconitum hemsleyanum* var. *leueanthus* (root: yield = 0.0025%dw). Ref: 4678.

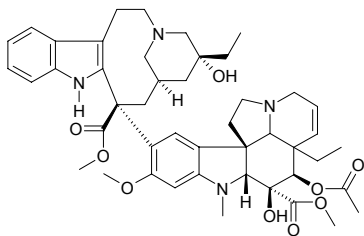
**12732 Leurocolumbine**

14'-Hydroxyvincalcoloblastine [56974-17-5]  $C_{46}H_{58}N_4O_{10}$  (827.00). Pharm: Antineoplastic; antimitotic agent. Source: CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochnera rosea*]. Ref: 2, 1521.

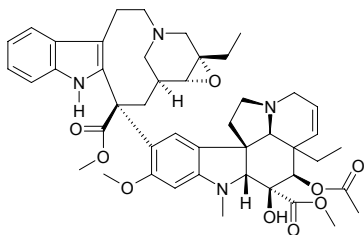


**12733 Leurosidine**

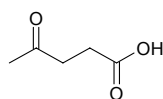
Inrosidine; Vinrosidine [15228-71-4]  $C_{46}H_{58}N_4O_9$  (811.00). mp 208–211°C (dec). **Pharm:** Antineoplastic (mus, transplanted leukemia P1534, EAC); antiviral (poliomyelitis virus *in vitro*, vaccinia virus *in vitro*). **Source:** CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochnera rosea*]. **Ref:** 2, 5, 658, 1521.

**12734 Leurosine**

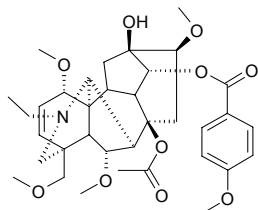
Vinleurosine [23360-92-1]  $C_{46}H_{56}N_4O_9$  (808.98). Octa-hydrate: white crystals (nitrile-ethyl or methanol), mp 202–205°C (dec),  $[\alpha]_D^{26} = +72$  (chloroform), Sulfate: mp 238–242°C,  $[\alpha]_D^{26} = -8.3^\circ$  (methanol). **Pharm:** Antineoplastic (mus P<sub>388</sub>, 45mg/kg, biotic prolonged rate = 39%, hmn chorion cell carcinoma, lymphatic dyscrasia and EAC); hypoglycemic; LD<sub>50</sub> (rat, ip) = 15.2mg/kg, (mus, ip) = 80mg/kg, (mus, iv) = 10.5mg/kg. **Source:** CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochnera rosea*], CHANG YE CHANG CHUN HUA *Catharanthus longifolius*, JIAN ZHUANG CHANG CHUN HUA *Catharanthus lanceus*, LUAN YUAN CHANG CHUN HUA *Catharanthus ovalis*, XI XIAO CHANG CHUN HUA *Catharanthus pusillus*. **Ref:** 661, 1521.

**12735 Levulinic acid**

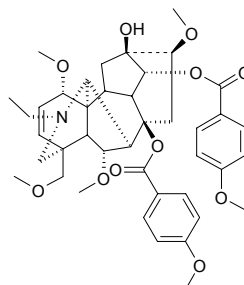
4-Oxopentanoic acid [123-76-2]  $C_5H_8O_3$  (116.12). mp 33–35°C, bp 245–246°C. **Source:** HEI DA DOU PI *Glycine max*. **Ref:** 6.

**12736 Liaconitine A**

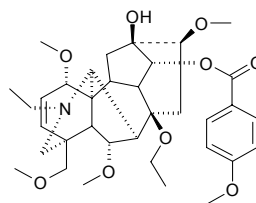
*N*-Ethyl-1 $\alpha$ ,6 $\alpha$ ,16 $\beta$ ,18-tetramethoxy-13 $\beta$ -ol-2,3-dehydroaconitane-8-acetate-1-4-anisoylate  $C_{35}H_{47}NO_{10}$  (641.77). **Source:** *Aconitum* sp. **Ref:** 1900.

**12737 Liaconitine B**

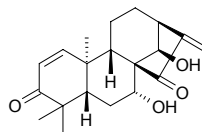
*N*-Ethyl-1 $\alpha$ ,6 $\alpha$ ,16 $\beta$ ,18-tetramethoxy-13 $\beta$ -ol-2,3-dehydroaconitane-8,14-dianisoylate  $C_{41}H_{51}NO_{11}$  (733.86). **Source:** *Aconitum* sp. **Ref:** 1900.

**12738 Liaconitine C**

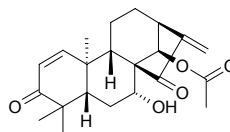
*N*-Ethyl-1 $\alpha$ ,6 $\alpha$ ,16 $\beta$ ,18-tetramethoxy-8-ethoxy-13 $\beta$ -ol-2,3-dehydroaconitane-1-4-anisoylate  $C_{35}H_{49}NO_9$  (627.78). **Source:** *Aconitum* sp. **Ref:** 1900.

**12739 Liangshanin A**

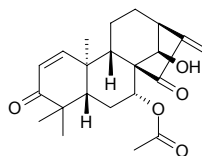
$C_{20}H_{26}O_4$  (330.43). mp 238–240°C,  $[\alpha]_D = -192.5^\circ$  ( $c = 0.517$ , MeOH). **Source:** LIANG SHAN XIANG CHA CAI *Isodon liangshanica*. **Ref:** 4067.

**12740 Liangshanin B**

$C_{22}H_{28}O_5$  (372.47). mp 204–210°C. **Source:** LIANG SHAN XIANG CHA CAI *Isodon liangshanica*. **Ref:** 4067.

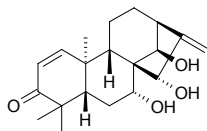
**12741 Liangshanin C**

$C_{22}H_{28}O_5$  (372.47). mp 204–210°C. **Source:** LIANG SHAN XIANG CHA CAI *Isodon liangshanica*. **Ref:** 4067.

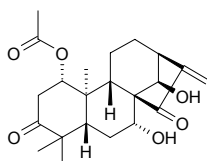


**12742 Liangshanin D**

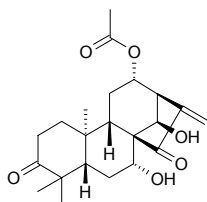
$C_{20}H_{28}O_4$  (332.44). mp 302~305°C. Source: LIANG SHAN XIANG CHA  
CAI *Isodon liangshanica*. Ref: 4067.

**12743 Liangshanin E**

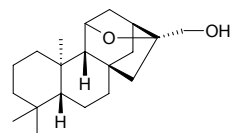
$C_{22}H_{30}O_6$  (390.48). mp 138~140°C. Source: LIANG SHAN XIANG CHA  
CAI *Isodon liangshanica*. Ref: 4067.

**12744 Liangshanin F**

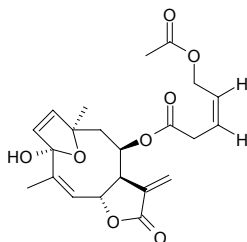
$C_{22}H_{30}O_6$  (390.48). mp 220~222°C. Source: LIANG SHAN XIANG CHA  
CAI *Isodon liangshanica*. Ref: 4067.

**12745 Liangshanin G**

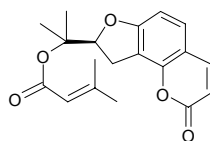
$C_{20}H_{32}O_2$  (304.48). mp 146~151°C. Source: LIANG SHAN XIANG CHA  
CAI *Isodon liangshanica*. Ref: 4067.

**12746 Liatrin**

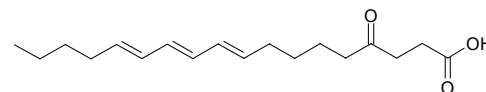
$C_{22}H_{26}O_8$  (418.45). Colorless acicular crystals (dichloromethane cyclohexane),  
mp 130~132°C,  $[\alpha]_D^{24} = -142^\circ$  ( $c = 1.93$ , chloroform). Pharm: Antineoplastic  
(mus  $P_{388}$ , 5mg/kg, biotic prolonged rate = 57%); cytotoxic (KB). Source:  
CHA SHI SHE BIAN JU *Liatris champmanii*. Ref: 661.

**12747 Libanorin**

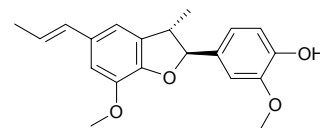
$C_{19}H_{20}O_5$  (328.37). Crystals (pet. ether), mp 79°C,  $[\alpha]_D^{24} = +197^\circ$  ( $c = 1.66$ ,  
 $CHCl_3$ ). Pharm: Antispasmodic; coronary vasodilator. Source: SHAN QIAN  
HU *Peucedanum oreoselinum*. Ref: 658, 1521.

**12748 Licanic acid**

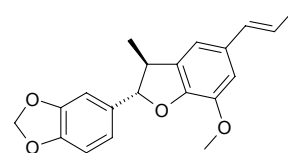
$C_{18}H_{28}O_3$  (292.42). Source: YI KOU KE MEI *Chrysobalanus icaco*. Ref: 658.

**12749 Licarin A**

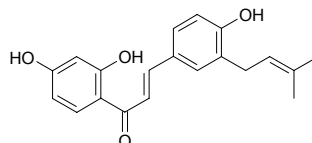
$C_{20}H_{22}O_4$  (326.40). Pharm: Antimicrobial; neuroprotective (glutamate-induced  
neurotoxicity in primary cultures of cortical cells, 0.1  $\mu\text{mol/L}$ , protection rate =  
(45.3±3.6)%,  $p < 0.01$ , MK-801: 1.0  $\mu\text{mol/L}$ , protection rate = (83.6±2.0)%,  
 $p < 0.001$ , CNQX: 1.0  $\mu\text{mol/L}$ , protection rate = (70.5±1.5)%,  $p < 0.001$ )<sup>[4927]</sup>. Source:  
DA MA DOU LING *Aristolochia maxima*, HONG NAN PI *Machilus thunbergii*,  
ROU DOU KOU *Myristica fragrans*. Ref: 658, 4927.

**12750 Licarin B**

$C_{20}H_{20}O_4$  (324.38). Source: ROU DOU KOU *Myristica fragrans*, YU LAN  
*Magnolia denudata* [Syn. *Magnolia heptapata*]. Ref: 660, 4439.

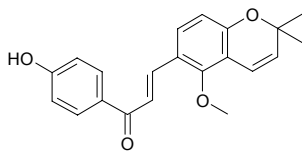
**12751 Licoagrochalcone A**

Licoagrochalcone; 2',4,4'-Trihydroxy-3-prenylchalcone  $C_{20}H_{20}O_4$  (324.38).  
Pharm: Antimalarial (*Plasmodium falciparum* D6,  $IC_{50} = (12.7 \pm 3.2) \mu\text{g/mL}$ ,  
control Chloroquine,  $IC_{50} = (0.009 \pm 0.002) \mu\text{g/mL}$ , Quinine,  $IC_{50} =$   
(0.04±0.01)  $\mu\text{g/mL}$ ; *Plasmodium falciparum* W2,  $IC_{50} = (12.0 \pm 2.6) \mu\text{g/mL}$ ,  
Chloroquine,  $IC_{50} = (0.08 \pm 0.003) \mu\text{g/mL}$ , Quinine,  $IC_{50} =$   
(0.21±0.01)  $\mu\text{g/mL}$ )<sup>[3879]</sup>; antimalarial (antiplasmodial *in vitro*, *Plasmodium*  
*falciparum*, W2 strain,  $IC_{50} = (12.8 \pm 2.5) \mu\text{mol/L}$ , control Quinine,  $IC_{50} =$   
(0.21±0.01)  $\mu\text{mol/L}$ ; D6 strain,  $IC_{50} = (19.5 \pm 1.2) \mu\text{mol/L}$ , Quinine,  $IC_{50} =$   
(0.042±0.002)  $\mu\text{mol/L}$ )<sup>[5420]</sup>. Source: A BI XI NI YA CI TONG *Erythrina*  
*abyssinica* (stem cortex), GUANG GUO GAN CAO *Glycyrrhiza glabra*,  
*Glycyrrhiza* sp. Ref: 1521, 2431, 3879, 5420.

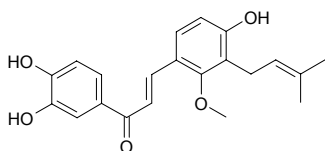


**12752 Licoagrochalcone B**

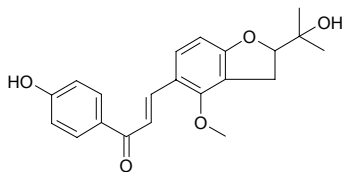
$C_{21}H_{20}O_4$  (336.39). Yellow powder. Source: GUANG GUO GAN CAO  
*Glycyrrhiza glabra*. Ref: 761.

**12753 Licoagrochalcone C**

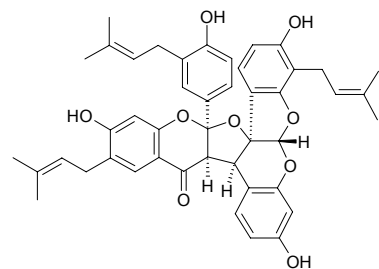
$C_{21}H_{22}O_5$  (354.41). Yellow powder. Source: GUANG GUO GAN CAO  
*Glycyrrhiza glabra*. Ref: 761.

**12754 Licoagrochalcone D**

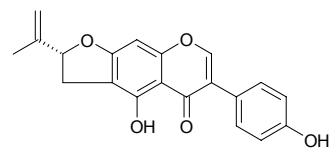
$C_{21}H_{22}O_5$  (354.41). Yellow powder,  $[\alpha]_D^{24} = -8.7^\circ$  ( $c = 0.23$ ,  $CHCl_3$ ). Source:  
GUANG GUO GAN CAO *Glycyrrhiza glabra*. Ref: 761.

**12755 Licoagrodin**

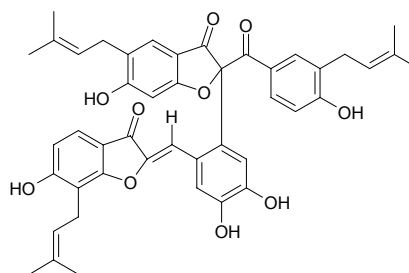
$C_{45}H_{44}O_9$  (728.85). Yellow powder,  $[\alpha]_D^{24} = 0^\circ$  ( $c = 1.12$ , MeOH). Source:  
GUANG GUO GAN CAO *Glycyrrhiza glabra*. Ref: 761.

**12756 Licoagroisoflavone**

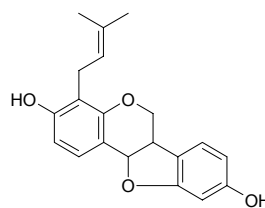
$C_{20}H_{16}O_5$  (336.35). Pale yellow powder, mp 196~198°C,  $[\alpha]_D = -68.1^\circ$  ( $c = 0.81$ , MeOH). Source: CI GUO GAN CAO *Glycyrrhiza pallidiflora* (root),  
*Glycyrrhiza* sp. Ref: 2431, 5200.

**12757 Licoagrone**

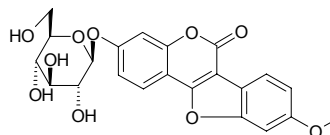
$C_{45}H_{42}O_{10}$  (742.83). Orange powder,  $[\alpha]_D^{24} = \pm 0.13^\circ$  ( $c = 1.01$ , MeOH).  
Source: GUANG GUO GAN CAO *Glycyrrhiza glabra*. Ref: 1856.

**12758 Licoagropin**

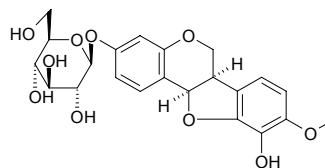
$C_{20}H_{20}O_4$  (324.38). Source: *Glycyrrhiza* sp. Ref: 2431.

**12759 Licoagroside C**

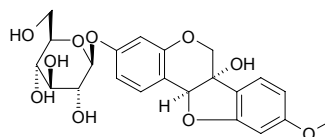
*Licoagroside*  $C_{22}H_{20}O_{10}$  (444.40). Colorless needles (MeOH), mp 245~247°C,  
 $[\alpha]_D = -23.1^\circ$  ( $c = 0.40$ , MeOH). Source: CI GUO GAN CAO *Glycyrrhiza pallidiflora* (root),  
*Glycyrrhiza* sp. Ref: 2431, 5200.

**12760 Licoagroside D**

$C_{22}H_{24}O_{10}$  (448.43). Powder,  $[\alpha]_D = -117.4^\circ$  ( $c = 1.09$ , MeOH, 22°C). Source:  
CI GUO GAN CAO *Glycyrrhiza pallidiflora*. Ref: 1954.

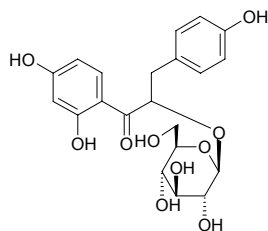
**12761 Licoagroside E**

$C_{22}H_{24}O_{10}$  (448.43). Powder,  $[\alpha]_D = -176.4^\circ$  ( $c = 0.66$ , MeOH). Source: CI  
GUO GAN CAO *Glycyrrhiza pallidiflora*. Ref: 1954.

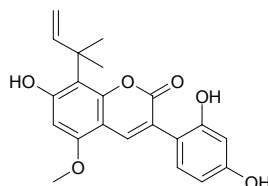


**12762 Licoagroside F**

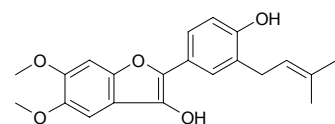
$C_{21}H_{24}O_{10}$  (436.42). Powder,  $[\alpha]_D = 2.6^\circ$  ( $c=0.91$ , MeOH). Source: CI GUO GAN CAO *Glycyrrhiza pallidiflora*. Ref: 1954.

**12763 Licoarylcoumarin**

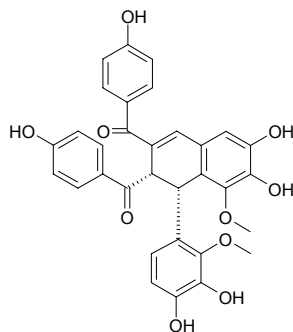
$C_{21}H_{20}O_6$  (368.39). Source: *Glycyrrhiza* sp. Ref: 2431.

**12764 Licobenzofuran**

Liconeolignan [82209-75-4]  $C_{21}H_{22}O_5$  (354.41). White lamellar crystals, mp 80–81°C, 109–110°C. Pharm: Antibacterial (*Staphylococcus aureus* 20, 50, 109, 295µg/mL). Source: GAN CAO *Glycyrrhiza uralensis*. Ref: 658, 660.

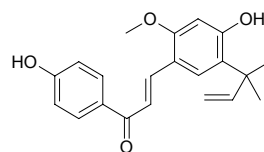
**12765 Licobichalcone**

$C_{32}H_{26}O_{10}$  (570.56). Yellow powder,  $[\alpha]_D^{24} = 0^\circ$  ( $c = 0.7$ , MeOH). Source: GAN CAO *Glycyrrhiza uralensis* (root). Ref: 4382.

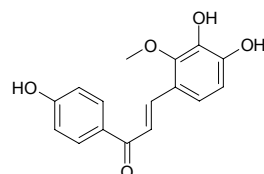
**12766 Licochalcone A**

[58749-22-7]  $C_{21}H_{22}O_4$  (338.41). Yellow needles, mp 101–102°C. Pharm: Cytotoxic (HT1080 cell line,  $IC_{50} = 57.0\mu\text{mol/L}$ )<sup>[4470]</sup>; anti-inflammatory (mus, 0.5mg/ear, inhibits edema on ears induced by TPA and arachidonic acid); antineoplastic (mus, *in vitro* inhibits TPA-induced  $^{32}\text{P}$  combines with phospholipid in HeLa cells,  $ID_{50} = 5.3\mu\text{g/mL}$ ; *in vivo* inhibits papillary epithelioma induced by DMBA and TPA); anti-HIV (20µg/mL, inhibits HIV-induced formation of giant-cell); antiallergic (inhibits synthesis of

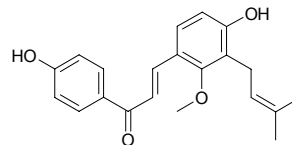
leukotriene in polymorphonuclear neutrocyte); xanthinoxidase inhibitor ( $IC_{50} = 56\mu\text{mol/L}$ ); antibacterial (*Staphylococcus aureus*, MIC = 1.95µg/mL; *Bacillus subtilis*, MIC = 3.91µg/mL; methicillin-resistant *Staphylococcus aureus* MIC = 0.01µg/mL); antioxidant (antihemolysis induced by  $\text{H}_2\text{O}_2$ , free radical scavenger); anticoagulant (hmn platelet, inhibits formation of COX metabolite TXB<sub>2</sub> induced by arachidonic acid,  $IC_{50} = 3.9\mu\text{mol/L}$ ; 12(S)-HETE Production inhibitor ( $IC_{50} = 82.3\mu\text{mol/L}$ ); antimarial (*Plasmodium falciparum* strain 3D7, Dd2 *in vitro*; mouse, ip or orl, 3-6d, against *P. yoelii* plasmodial lethal infection). Source: ZHANG GUO GAN CAO *Glycyrrhiza inflata*, HUANG GAN CAO *Glycyrrhiza kansuensis*. Ref: 2, 591, 1521, 1679, 1681, 1690, 1691, 1692, 1693, 1694, 1695, 1696, 4470.

**12767 Licochalcone B**

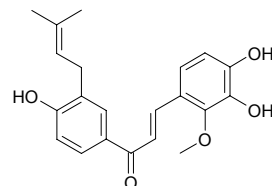
[58749-23-8]  $C_{16}H_{14}O_5$  (286.29). Yellow needles, mp 195–197°C. Pharm: Antibacterial (*Staphylococcus aureus* MIC = 31.3µg/mL; *Bacillus subtilis* MIC = 31.3µg/mL); xanthinoxidase inhibitor ( $IC_{50} = 30\mu\text{mol/L}$ ); antiallergic (hmn, inhibits synthesis of leukotriene in polymorphonuclear neutrocyte, enhances level of cAMP); platelet aggregation inhibitor; inhibits activation of leucocyte; used in treatment of arteriosclerosis, hyperlipidemia, thrombus and coronary heart disease. Source: GUANG GUO GAN CAO *Glycyrrhiza glabra*, ZHANG GUO GAN CAO *Glycyrrhiza inflata*. Ref: 2, 1521, 1681, 1691, 1695, 1842.

**12768 Licochalcone C**

$C_{21}H_{22}O_4$  (338.41). Pharm: Cytotoxic (HT1080 cell line,  $IC_{50} = 72.8\mu\text{mol/L}$ )<sup>[4470]</sup>. Source: ZHANG GUO GAN CAO *Glycyrrhiza inflata*. Ref: 660, 2431, 4470.

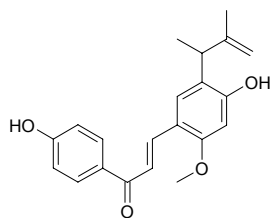
**12769 Licochalcone D**

$C_{21}H_{22}O_5$  (354.41). Source: ZHANG GUO GAN CAO *Glycyrrhiza inflata*. Ref: 2431.

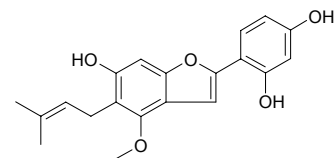


**12770 Licochalcone E**

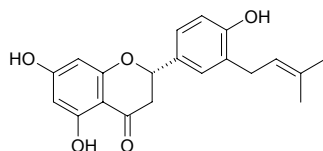
$C_{21}H_{22}O_4$  (338.41). amorphous powder,  $[\alpha]_D = -10.0^\circ$  ( $c = 0.2$ , acetone).  
**Pharm:** Cytotoxic (HT1080 cell line,  $IC_{50} = 45.2 \mu\text{mol/L}$ ). **Source:** ZHANG GUO GAN CAO *Glycyrrhiza inflata* (root). **Ref:** 4470.

**12771 Licocoumarone**

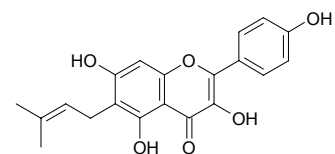
[118524-14-4]  $C_{20}H_{20}O_5$  (340.38). Needles (EtOH aq.), mp 183–185°C.  
**Pharm:** Antibacterial (*Streptococcus* sp. MIC = 12.5  $\mu\text{g/mL}$ ; *Staphylococcus aureus* MIC = 6.25  $\mu\text{g/mL}$ ; *Bacillus subtilis* MIC = 6.25  $\mu\text{g/mL}$ ; microzyme MIC = 25  $\mu\text{g/mL}$ ); antioxidant; xanthinoxidase inhibitor; monoamine oxidase inhibitor. **Source:** CU MAO GAN CAO *Glycyrrhiza aspera*, GAN CAO *Glycyrrhiza uralensis*. **Ref:** 2, 1521, 1681, 1682, 1701.

**12772 Licoflavanone**

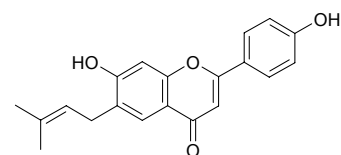
$C_{20}H_{20}O_5$  (340.38). **Source:** GUANG GUO GAN CAO *Glycyrrhiza glabra*. **Ref:** 2431.

**12773 Licoflavonal**

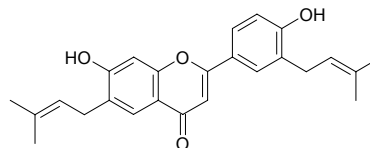
$C_{20}H_{18}O_6$  (354.36). **Source:** *Glycyrrhiza* sp. **Ref:** 2431.

**12774 Licoflavone A**

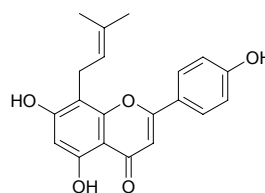
Licoflavone [61153-77-3]  $C_{20}H_{18}O_4$  (322.36). **Source:** JI GAN CAO *Glycyrrhiza echinata* (cultured cell), ZHANG GUO GAN CAO *Glycyrrhiza inflata*. **Ref:** 2, 660, 1521.

**12775 Licoflavone B**

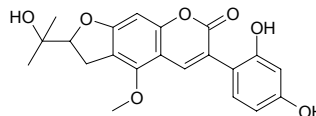
$C_{25}H_{26}O_4$  (390.48). **Source:** CU MAO GAN CAO *Glycyrrhiza aspera*. **Ref:** 2431.

**12776 Licoflavone C**

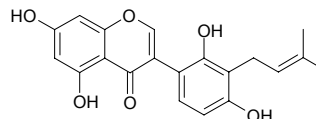
$C_{20}H_{18}O_5$  (338.36). **Source:** ZHANG GUO GAN CAO *Glycyrrhiza inflata*. **Ref:** 2431.

**12777 Licofuranocoumarin**

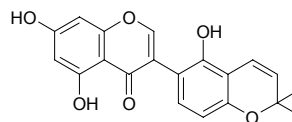
$C_{21}H_{20}O_7$  (384.39). Pale-yellow acicular crystals, mp 242°C,  $[\alpha]_D = -4.2^\circ$  ( $c = 1$ , EtOH). **Source:** GAN CAO *Glycyrrhiza uralensis*. **Ref:** 748.

**12778 Licoisoflavone**

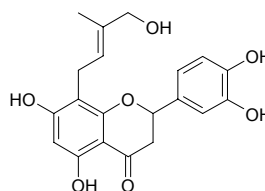
Licoisoflavone A [66056-19-7]  $C_{20}H_{18}O_6$  (354.36). Pale-yellow prisms. **Pharm:** Antifungal. **Source:** GAN CAO *Glycyrrhiza uralensis*. **Ref:** 2, 658, 1521.

**12779 Licoisoflavone B**

$C_{20}H_{16}O_6$  (352.35). **Source:** *Glycyrrhiza* spp. **Ref:** 2431.

**12780 Licoleafol**

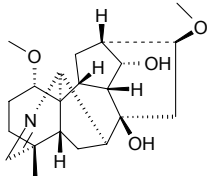
$C_{20}H_{20}O_7$  (372.38). Amorphous powder,  $[\alpha]_D^{24} = -34^\circ$  ( $c = 1.0$ , MeOH). **Source:** GAN CAO *Glycyrrhiza uralensis* (leaf). **Ref:** 4387.



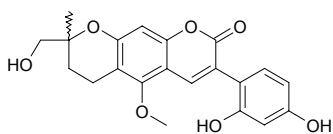


**12781 Liconosine A**

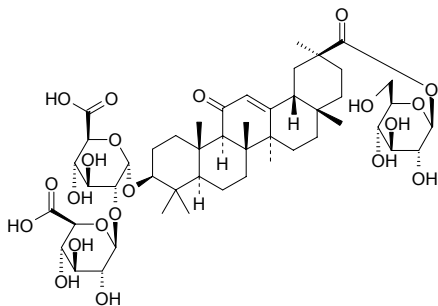
$C_{21}H_{31}NO_4$  (361.49). Source: LI JIANG WU TOU *Aconitum forrestii* [Syn. *Aconitum likiangense*]. Ref: 660.

**12782 Licopyranocoumarin**

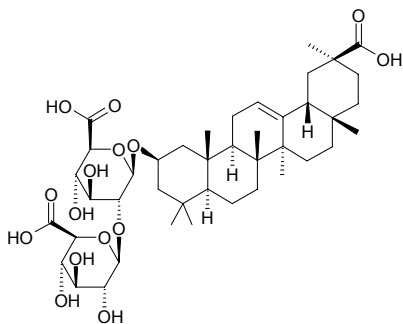
[117038-80-9]  $C_{21}H_{20}O_7$  (384.39). Yellow crystals, mp 137°C,  $[\alpha]_D^{25} = +14^\circ$  ( $c = 1$ , Me<sub>2</sub>CO). Pharm: Anti-HIV (hmn, 20µg/mL, inhibits formation of giant-cell without cytotoxicity); monoamine oxidase inhibitor ( $IC_{50} = 140\mu\text{mol/L}$ ). Source: GAN CAO *Glycyrrhiza uralensis*. Ref: 2, 1521, 1679, 1682.

**12783 Licoricesaponin A<sub>3</sub>**

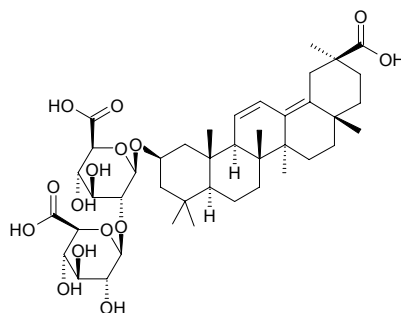
[118325-22-7]  $C_{48}H_{72}O_{21}$  (985.10). Trihydrate, mp 196–199°C,  $[\alpha]_D^{23} = +69^\circ$  (MeOH). Source: GAN CAO *Glycyrrhiza uralensis*, ZHANG GUO *Glycyrrhiza inflata*. Ref: 2, 1521.

**12784 Licoricesaponin B<sub>2</sub>**

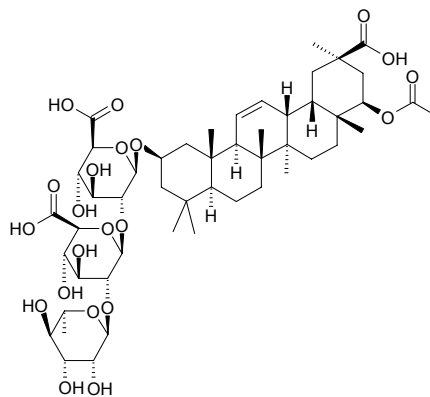
[118536-86-0]  $C_{42}H_{64}O_{15}$  (808.97). Monohydrate, mp 209–210°C,  $[\alpha]_D^{19} = +54^\circ$  (MeOH). Pharm: Antihepatotoxin (rat, *in vivo* and *in vitro*, liver damage caused by CCl<sub>4</sub>). Source: GAN CAO *Glycyrrhiza uralensis*. Ref: 2, 1521, 1781, 1782.

**12785 Licoricesaponin C<sub>2</sub>**

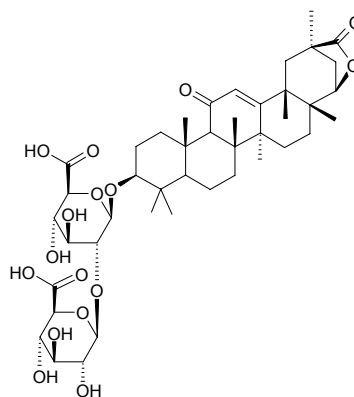
[120711-08-2]  $C_{42}H_{62}O_{15}$  (806.95). Trihydrate, mp 249–251°C,  $[\alpha]_D^{21} = -120^\circ$  (MeOH). Source: GAN CAO *Glycyrrhiza uralensis*. Ref: 2, 1521.

**12786 Licoricesaponin D<sub>3</sub>**

[118536-87-1]  $C_{50}H_{76}O_{21}$  (1013.15). Powder,  $[\alpha]_D^{20} = -5^\circ$  (MeOH). Source: GAN CAO *Glycyrrhiza uralensis*. Ref: 2, 1521.

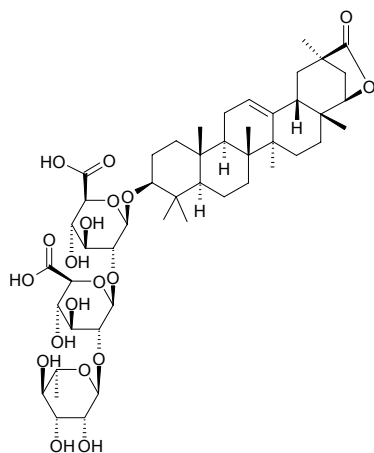
**12787 Licoricesaponin E<sub>2</sub>**

$C_{42}H_{60}O_{16}$  (820.94). Source: GAN CAO *Glycyrrhiza uralensis*. Ref: 660.

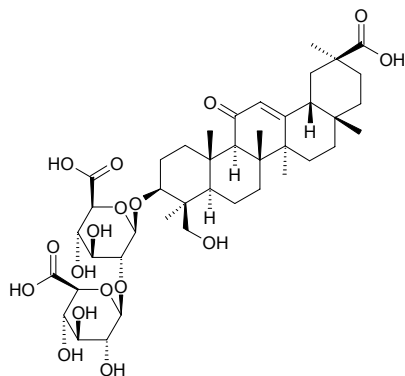


**12788 Licoricesaponin F<sub>3</sub>**

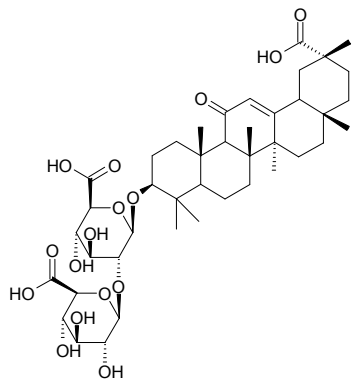
C<sub>48</sub>H<sub>72</sub>O<sub>19</sub> (953.10). Source: GAN CAO *Glycyrrhiza uralensis*. Ref: 2.

**12789 Licoricesaponin G<sub>2</sub>**

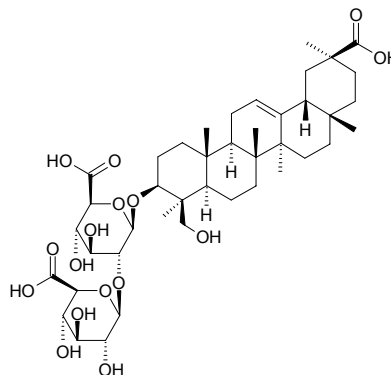
C<sub>42</sub>H<sub>62</sub>O<sub>17</sub> (838.95). mp 229–230°C,  $[\alpha]_D^{20} = +34^\circ$  (MeOH). Source: GAN CAO *Glycyrrhiza uralensis*, ZHANG GUO GAN CAO *Glycyrrhiza inflata*. Ref: 2, 1521.

**12790 Licoricesaponin H<sub>2</sub>**

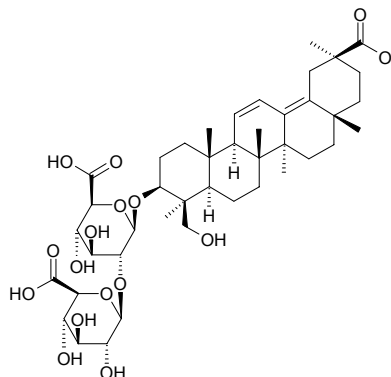
C<sub>42</sub>H<sub>62</sub>O<sub>16</sub> (822.95). mp 209–210°C,  $[\alpha]_D^{25} = +31^\circ$  (MeOH). Source: GAN CAO *Glycyrrhiza uralensis*, ZHANG GUO GAN CAO *Glycyrrhiza inflata*. Ref: 2, 1521.

**12791 Licoricesaponin J<sub>2</sub>**

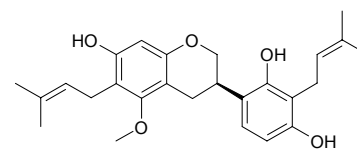
C<sub>42</sub>H<sub>64</sub>O<sub>16</sub> (824.97). Source: GAN CAO *Glycyrrhiza uralensis*. Ref: 2.

**12792 Licoricesaponin K<sub>2</sub>**

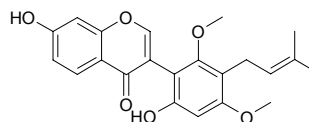
C<sub>42</sub>H<sub>62</sub>O<sub>16</sub> (822.95). mp 207–209°C,  $[\alpha]_D^{25} = +28^\circ$  (MeOH). Source: GAN CAO *Glycyrrhiza uralensis*. Ref: 2, 1521.

**12793 Licoricidin**

[30508-27-1] C<sub>26</sub>H<sub>32</sub>O<sub>5</sub> (424.54). Crystals (CHCl<sub>3</sub>–Et<sub>2</sub>O), mp 154–156°C,  $[\alpha]_D^{22.5} = +20^\circ$  ( $c = 1$ , MeOH). Source: GAN CAO *Glycyrrhiza uralensis*, GUANG GUO GAN CAO *Glycyrrhiza glabra*. Ref: 2, 1521.

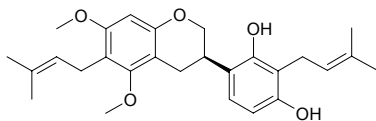
**12794 Licoricone**

C<sub>22</sub>H<sub>22</sub>O<sub>6</sub> (382.42). mp 250–251°C. Source: GAN CAO *Glycyrrhiza uralensis*. Ref: 2, 1521.

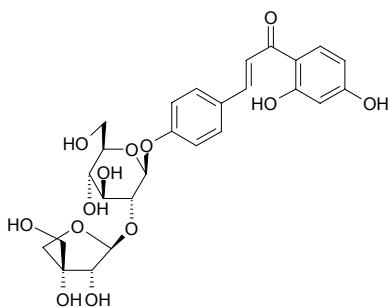


**12795 Licorisoflavan A**

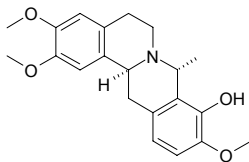
5-O-Methyl licoricidin C<sub>27</sub>H<sub>34</sub>O<sub>5</sub> (438.57). Source: CU MAO GAN CAO *Glycyrrhiza aspera*, GAN CAO *Glycyrrhiza uralensis*. Ref: 2, 660.

**12796 Licuroside**

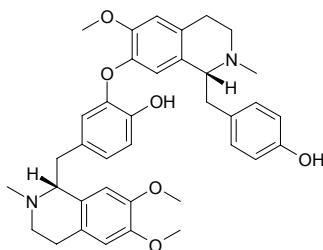
C<sub>26</sub>H<sub>30</sub>O<sub>13</sub> (550.52). Source: *Glycyrrhiza* sp. Ref: 2431.

**12797 Lienkonine**

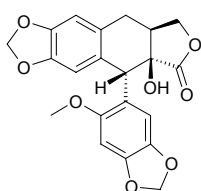
C<sub>21</sub>H<sub>25</sub>NO<sub>4</sub> (355.44). Source: HUANG ZI JIN *Corydalis ochotensis*. Ref: 660.

**12798 Liensinine**

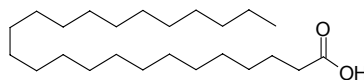
[2586-96-1] C<sub>37</sub>H<sub>42</sub>N<sub>2</sub>O<sub>6</sub> (610.76). mp 95–99°C, [α]<sub>D</sub><sup>31</sup> = +15.85° (c = 0.883, Me<sub>2</sub>CO). Pharm: Antihypertensive; antiarrhythmic (gpg, 3mg/kg); LD<sub>50</sub> = (mus, iv) = (34.9±5.5)mg/kg. Source: LIAN ZI *Nelumbo nucifera*, LIAN ZI XIN *Nelumbo nucifera* (dried plumule and radicle in seed: mean content of 7 origins = 0.793%<sup>[5508]</sup>). Ref: 6, 658, 1521, 5501, 5508.

**12799 Lignan from *Justicia heterocarpa***

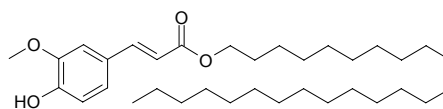
C<sub>21</sub>H<sub>18</sub>O<sub>8</sub> (398.37). Colorless crystals; mp 215 °C, [α]<sub>D</sub><sup>22</sup> = +75.0° (c = 0.33, CHCl<sub>3</sub>). Source: *Justicia heterocarpa*. Ref: 4282.

**12800 Lignoceric acid**

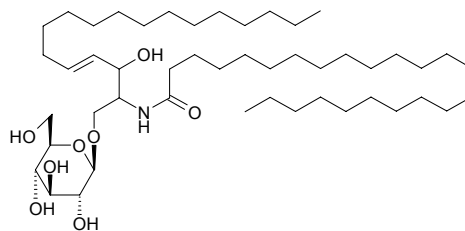
*n*-Tetracosanoic acid [557-59-5] C<sub>24</sub>H<sub>48</sub>O<sub>2</sub> (368.65). Crystals (AcOH), mp 87.5–88°C. Source: CHAI HU *Bupleurum chinense*, DANG GUI *Angelica sinensis*, FANG FENG *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*], GUA LOU *Trichosanthes kirilowii*, HAI HONG DOU *Adenantha pavonina*, LI JIANG QIAN HU *Peucedanum govanianum* var. *bicolor*, MAO ZHU MA QIAN *Strychnos nitida*, QIANG HUO *Notopterygium incisum*, YI ZHI REN *Alpinia oxyphylla* (fruit: yield = 0.040%dw)<sup>[4655]</sup>. Ref: 2, 557, 576, 658, 1521, 4655.

**12801 Lignoceryl ferulate**

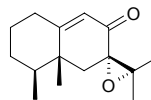
C<sub>34</sub>H<sub>58</sub>O<sub>4</sub> (530.84). Source: TAI WAN FU RONG *Hibiscus taiwanensis*. Ref: 2529.

**12802 *N*-Lignoceryl sphingosyl glucose**

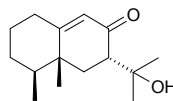
C<sub>48</sub>H<sub>93</sub>NO<sub>8</sub> (812.28). Pharm: Reagent used in biochemistry research. Source: JING MI *Oryza sativa*. Ref: 6, 658.

**12803 Ligudicin A**

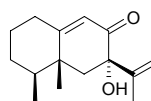
C<sub>15</sub>H<sub>22</sub>O<sub>2</sub> (234.34). Colorless oil. Source: WANG MAI TOU WU *Ligularia dictyoneura* [Syn. *Senecio dictyoneurus*]. Ref: 2478.

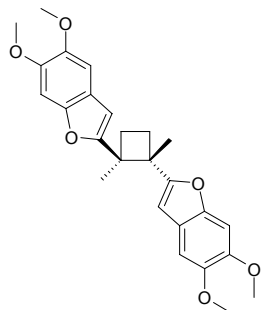
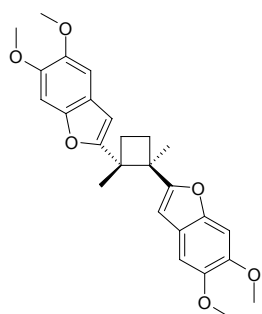
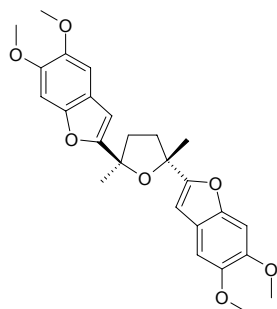
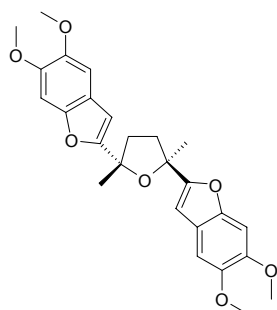
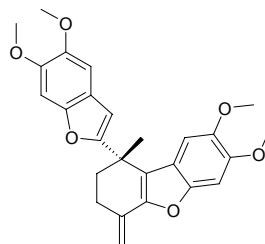
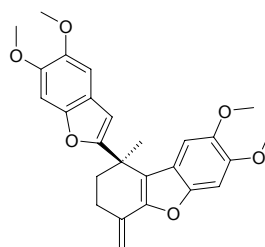
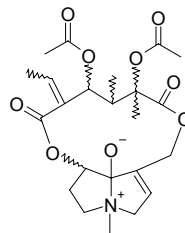
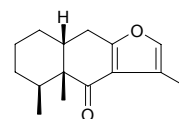
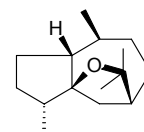
**12804 Ligudicin C**

C<sub>15</sub>H<sub>24</sub>O<sub>2</sub> (236.36). Colorless oleaginous liquid. Source: WANG MAI TOU WU *Ligularia dictyoneura* [Syn. *Senecio dictyoneurus*]. Ref: 2478.

**12805 Ligudicin D**

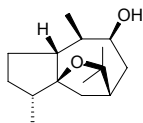
C<sub>15</sub>H<sub>22</sub>O<sub>2</sub> (234.34). Colorless oleaginous liquid. Source: WANG MAI TOU WU *Ligularia dictyoneura* [Syn. *Senecio dictyoneurus*]. Ref: 2478.



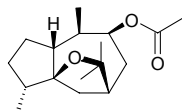
**12806 (+)-(10S,10'S)-Ligulacephalin A**C<sub>26</sub>H<sub>28</sub>O<sub>6</sub> (436.51). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +146.1° (*c* = 0.05, MeOH).Source: ZHAI TOU TUO WU *Ligularia stenocephala* (root). Ref: 4536.**12807 (-)-(10R,10'R)-Ligulacephalin A**C<sub>26</sub>H<sub>28</sub>O<sub>6</sub> (436.51). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>26</sup> = -151.2° (*c* = 0.05, MeOH).Source: ZHAI TOU TUO WU *Ligularia stenocephala* (root). Ref: 4536.**12808 (+)-(10R,10'R)-Ligulacephalin B**C<sub>26</sub>H<sub>28</sub>O<sub>7</sub> (452.51). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>27</sup> = +65.5° (*c* = 0.06, MeOH).Source: ZHAI TOU TUO WU *Ligularia stenocephala* (root). Ref: 4536.**12809 (-)-(10S,10'S)-Ligulacephalin B**C<sub>26</sub>H<sub>28</sub>O<sub>7</sub> (452.51). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>28</sup> = -67.6° (*c* = 0.05, MeOH).Source: ZHAI TOU TUO WU *Ligularia stenocephala* (root). Ref: 4536.**12810 (+)-(10S)-Ligulacephalin C**C<sub>26</sub>H<sub>26</sub>O<sub>6</sub> (434.49). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>22</sup> = +89.3° (*c* = 0.06, MeOH).Source: ZHAI TOU TUO WU *Ligularia stenocephala* (root). Ref: 4536.**12811 (-)-(10S)-Ligulacephalin C**C<sub>26</sub>H<sub>26</sub>O<sub>6</sub> (434.49). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>24</sup> = -80.8° (*c* = 0.05, MeOH).Source: ZHAI TOU TUO WU *Ligularia stenocephala* (root). Ref: 4536.**12812 Ligularine**[34429-54-4] C<sub>23</sub>H<sub>31</sub>NO<sub>9</sub> (465.50). Noncrystal, [ $\alpha$ ]<sub>D</sub><sup>24</sup> = -34° (*c* = 0.82,CHCl<sub>3</sub>). Source: CHI YE TUO WU *Ligularia dentata*, HU LU QI *Ligularia fischeri*, YA ZHI TUO WU *Ligularia elegans*. Ref: 6, 1521.**12813 Ligularone**[4234-94-0] C<sub>15</sub>H<sub>20</sub>O<sub>2</sub> (232.33). mp 64-65°C, [ $\alpha$ ]<sub>D</sub><sup>27</sup> = -57.7° (*c* = 1, CHCl<sub>3</sub>).Source: FENG DOU CAI *Petasites japonicus*, HU LU QI *Ligularia fischeri*, XI BO LI YA TOU WU *Ligularia sibirica*. Ref: 6, 1521.**12814 Liguloxide**[21764-22-7] C<sub>15</sub>H<sub>26</sub>O (222.37). Crystals, mp 36°C, [ $\alpha$ ]<sub>D</sub><sup>23</sup> = -58.2° (*c* = 1,CHCl<sub>3</sub>). Source: HU LU QI *Ligularia fischeri*. Ref: 6, 1521.

**12815 Liguloxidol**

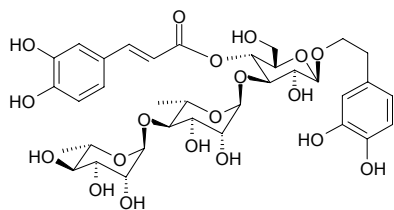
[21764-23-8] C<sub>15</sub>H<sub>26</sub>O<sub>2</sub> (238.37). Oil,  $[\alpha]_D^{22} = -36.8^\circ$  ( $c = 1$ , CHCl<sub>3</sub>). Source: HU LU QI *Ligularia fischeri*. Ref: 6, 1521.

**12816 Liguloxidol acetate**

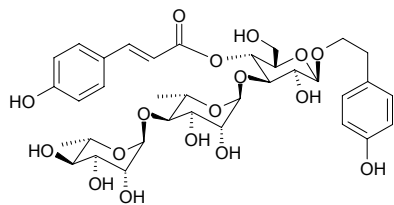
[18680-79-0] C<sub>17</sub>H<sub>28</sub>O<sub>3</sub> (280.41). mp 85°C. Source: HU LU QI *Ligularia fischeri*. Ref: 6.

**12817 Ligupurpuroside A**

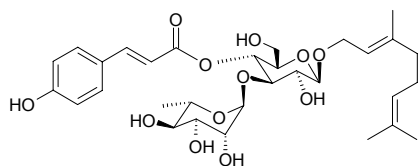
[147396-01-8] C<sub>35</sub>H<sub>46</sub>O<sub>19</sub> (770.75). Pharm: Antioxidant (antihemolysis, *in vitro*, AAPH-induced hemolysis of RBC, IC<sub>50</sub> = 26.3 μmol/L; control Trolox, IC<sub>50</sub> = 101 μmol/L). Source: CU ZHUANG NV ZHEN *Ligustrum robustum* (leaf: yield = 0.124%dw). Ref: 4698.

**12818 Ligupurpuroside B**

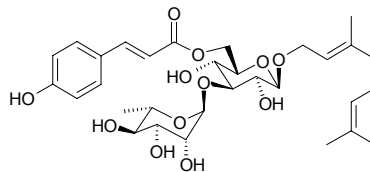
C<sub>35</sub>H<sub>46</sub>O<sub>17</sub> (738.75). Pharm: Antioxidant (antihemolysis, *in vitro*, AAPH-induced hemolysis of RBC, IC<sub>50</sub> = 80.4 μmol/L; control Trolox, IC<sub>50</sub> = 101 μmol/L). Source: CU ZHUANG NV ZHEN *Ligustrum robustum* (leaf: yield = 0.019%dw). Ref: 4698.

**12819 Ligurobustoside C**

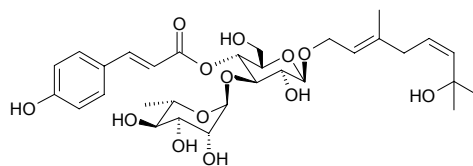
C<sub>31</sub>H<sub>44</sub>O<sub>12</sub> (608.69). Pharm: Antioxidant inactive (antihemolysis inactive, *in vitro*, AAPH-induced hemolysis of RBC; control Trolox, IC<sub>50</sub> = 101 μmol/L). Source: CU ZHUANG NV ZHEN *Ligustrum robustum* (leaf: yield = 0.594%dw). Ref: 4698.

**12820 Ligurobustoside E**

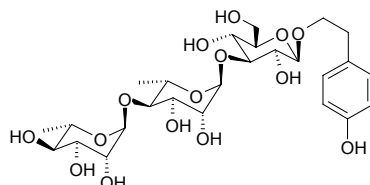
C<sub>31</sub>H<sub>44</sub>O<sub>12</sub> (608.69). Pharm: Antioxidant inactive (antihemolysis inactive, *in vitro*, AAPH-induced hemolysis of RBC; control Trolox, IC<sub>50</sub> = 101 μmol/L). Source: CU ZHUANG NV ZHEN *Ligustrum robustum* (leaf: yield = 0.013%dw). Ref: 4698.

**12821 Ligurobustoside I**

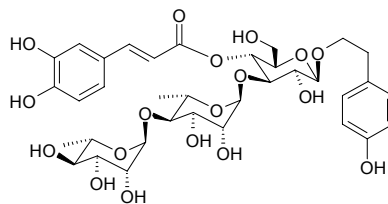
C<sub>31</sub>H<sub>44</sub>O<sub>13</sub> (624.69). Pharm: Antioxidant (antihemolysis, *in vitro*, AAPH-induced hemolysis of RBC, IC<sub>50</sub> = 340.1 μmol/L; control Trolox, IC<sub>50</sub> = 101 μmol/L). Source: CU ZHUANG NV ZHEN *Ligustrum robustum* (leaf: yield = 0.032%dw). Ref: 4698.

**12822 Ligurobustoside M**

C<sub>26</sub>H<sub>40</sub>O<sub>15</sub> (592.6). Amorphous powder,  $[\alpha]_D^{24} = -67.4^\circ$  ( $c = 0.03$ , MeOH). Pharm: Antioxidant (antihemolysis, *in vitro*, AAPH-induced hemolysis of RBC, IC<sub>50</sub> = 134.1 μmol/L; control Trolox, IC<sub>50</sub> = 101 μmol/L). Source: CU ZHUANG NV ZHEN *Ligustrum robustum* (leaf: yield = 0.020%dw). Ref: 4698.

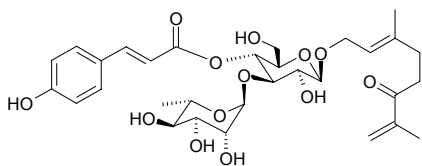
**12823 Ligurobustoside N**

C<sub>35</sub>H<sub>46</sub>O<sub>18</sub> (754.75). Amorphous powder,  $[\alpha]_D^{24} = -109^\circ$  ( $c = 0.06$ , MeOH). Pharm: Antioxidant (antihemolysis, *in vitro*, AAPH-induced hemolysis of RBC, IC<sub>50</sub> = 21.8 μmol/L; control Trolox, IC<sub>50</sub> = 101 μmol/L). Source: CU ZHUANG NV ZHEN *Ligustrum robustum* (leaf: yield = 0.260%dw). Ref: 4698.

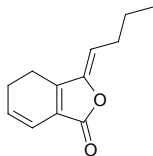


**12824 Ligurobustoside O**

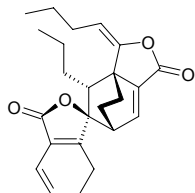
$C_{31}H_{42}O_{13}$  (622.67). Amorphous powder,  $[\alpha]_D^{24} = -77.3^\circ$  ( $c = 0.05$ , MeOH). **Pharm:** Antioxidant inactive (antihemolysis inactive, *in vitro*, AAPH-induced hemolysis of RBC; control Trolox,  $IC_{50} = 101 \mu\text{mol/L}$ ). **Source:** CU ZHUANG NV ZHEN *Ligustrum robustum* (leaf: yield = 0.028%dw). **Ref:** 4698.

**12825 Ligustilide**

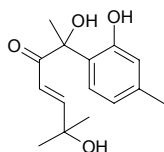
[4431-01-0]  $C_{12}H_{14}O_2$  (190.24). **Pharm:** Anticholinergic; the strongest active component in Chinese Angelica, DANG GUI, *Angelica sinensis*; uterine relaxant (mus, caused by  $PGF_{2\alpha}$ ). **Source:** CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*] (root and rhizome: content = 1.233%<sup>[5508]</sup>), DANG GUI *Angelica sinensis* (root: content = 0.5%)<sup>[5501]</sup>, DONG DANG GUI *Angelica acutiloba* [Syn. *Ligusticum acutilobum*], DUAN PIAN GAO BEN *Ligusticum brachylobum* (root and rhizome: content = 0.05%)<sup>[5508]</sup>, GAO BEN *Ligusticum sinense* (root and rhizome: content = 0.04%)<sup>[5508]</sup>, LIAO GAO BEN *Ligusticum jeholense* (root and rhizome: content = 0.87%<sup>[5508]</sup>), OU DANG GUI *Levisticum officinale*, YAO YONG SHE CHUANG *Cnidium officinale* [Syn. *Ligusticum officinale*] (the highest content found), XIN JIANG GAO BEN *Conioselinum vaginatum* (root and rhizome: content = 0.48%<sup>[5508]</sup>). **Ref:** 2, 343, 601, 658, 5501, 5508.

**12826 Ligustilide dimer**

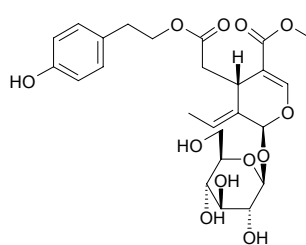
$C_{24}H_{28}O_4$  (380.49). **Source:** CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*] (root and rhizome: content = 0.15%)<sup>[5508]</sup>, DANG GUI *Angelica sinensis*, LIAO GAO BEN *Ligusticum jeholense* (root and rhizome: content = 0.15%)<sup>[5508]</sup>, OU DANG GUI *Levisticum officinale*, XIN JIANG GAO BEN *Conioselinum vaginatum* (root and rhizome: content = 0.03%)<sup>[5508]</sup>. **Ref:** 660, 5508.

**12827 Ligustilone**

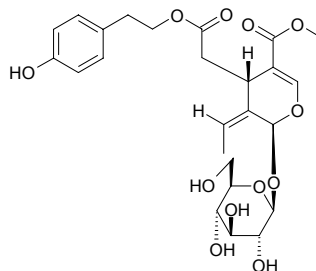
$C_{15}H_{20}O_4$  (264.32). **Pharm:** Immunosuppressant. **Source:** GAO BEN *Ligusticum sinense* (root and rhizome: content = 0.166%<sup>[5508]</sup>). **Ref:** 5501, 5508.

**12828 (8E)-Ligustroside**

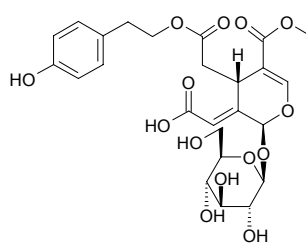
$C_{25}H_{32}O_{12}$  (524.53). **Pharm:** Antiviral (Hep2 cells, Para-3,  $IC_{50} = 15.6 \mu\text{g/mL}$ ,  $TI = 24.0$ ; MDCK cells, Flu-A, inactive; Vero cells, HSV-1, inactive)<sup>[4141]</sup>, anti-hemolysis inactive (rat, red blood cell *in vitro*, AAPH-induced,  $IC_{50} > 200 \mu\text{mol/L}$ , control Trolox,  $IC_{50} = 55.0 \mu\text{mol/L}$ )<sup>[4141]</sup>. **Source:** NV ZHEN ZI *Ligustrum lucidum*. **Ref:** 660, 3545, 4141.

**12829 (8Z)-Ligustroside**

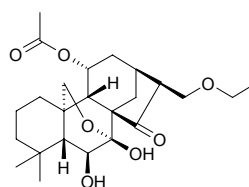
$C_{25}H_{32}O_{12}$  (524.53). Amorphous powder,  $[\alpha]_D^{26} = -81.3^\circ$  ( $c = 0.2$ , MeOH). **Source:** BAO MA ZI *Syringa amurensis* [Syn. *Syringa reticulata* var. *amurensis*] (leaf). **Ref:** 4175.

**12830 Ligustrosidic acid**

$C_{25}H_{30}O_{14}$  (554.51). **Source:** NV ZHEN ZI *Ligustrum lucidum*. **Ref:** 660.

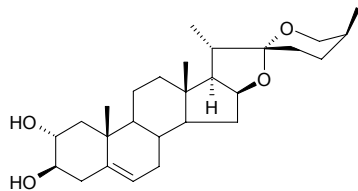
**12831 Lihsienin A**

$C_{24}H_{36}O_7$  (436.55). Amorphous powder,  $[\alpha]_D = -76.9^\circ$  ( $c = 0.09$ , MeOH). **Source:** LI XIAN XIANG CHA CAI *Isodon lihsienensis*. **Ref:** 4067.

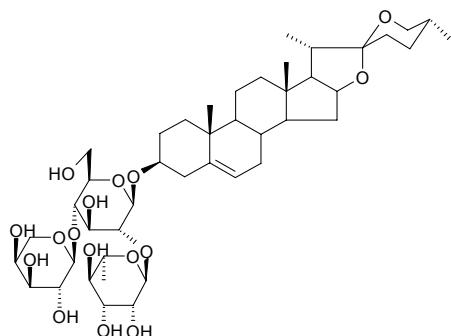


**12832 Lilagenin**

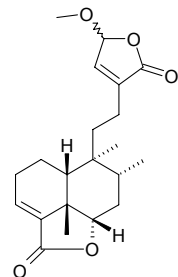
[469-99-8] C<sub>27</sub>H<sub>42</sub>O<sub>4</sub> (430.63). Source: HU LU BA *Trigonella foenum-graecum*. Ref: 2458.

**12833 Lililancifolioside A**

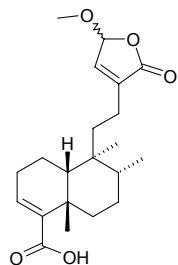
C<sub>44</sub>H<sub>70</sub>O<sub>16</sub> (855.04). White powder. Source: JUAN DAN *Lilium tigrinum* [Syn. *Lilium lancifolium*]. Ref: 2243.

**12834 Limbatolide A**

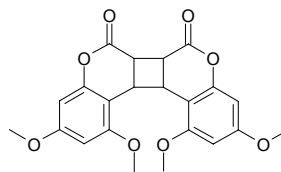
C<sub>21</sub>H<sub>28</sub>O<sub>5</sub> (360.45). Gummy solid,  $[\alpha]_D^{23} = -85.79^\circ$  ( $c = 0.25$ , CHCl<sub>3</sub>). Pharm: AChE inhibitor (*in vitro*, IC<sub>50</sub> = (38.5±0.2)μmol/L, positive control Galanthamine, IC<sub>50</sub> = (0.5±0.1)μmol/L); BChE inhibitor (*in vitro*, IC<sub>50</sub> = (22.3±0.5)μmol/L, positive control Galanthamine, IC<sub>50</sub> = (8.5±0.1)μmol/L). Source: YOU YAN AO TUO SI TE CAO *Otostegia limbata* (root). Ref: 4453.

**12835 Limbatolide B**

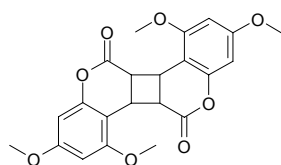
C<sub>21</sub>H<sub>30</sub>O<sub>5</sub> (362.47). Gummy solid,  $[\alpha]_D^{23} = -32.80^\circ$  ( $c = 0.16$ , CHCl<sub>3</sub>). Pharm: AChE inhibitor (*in vitro*, IC<sub>50</sub> = (47.2±0.3)μmol/L, positive control Galanthamine, IC<sub>50</sub> = (0.5±0.1)μmol/L); BChE inhibitor (*in vitro*, IC<sub>50</sub> = (17.5±0.6)μmol/L, positive control Galanthamine, IC<sub>50</sub> = (8.5±0.1)μmol/L). Source: YOU YAN AO TUO SI TE CAO *Otostegia limbata* (root). Ref: 4453.

**12836 (cis-head-to-head)-Limettin dimer**

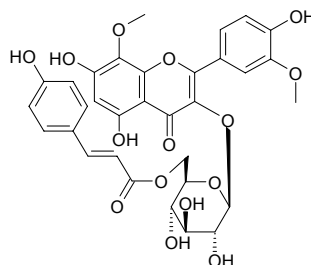
C<sub>22</sub>H<sub>20</sub>O<sub>8</sub> (412.40). Source: FO SHOU *Citrus medica* var. *sarcodactylis*. Ref: 660.

**12837 (cis-head-to-tail)-Limettin dimer**

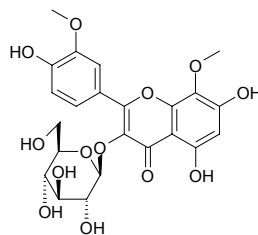
C<sub>22</sub>H<sub>20</sub>O<sub>8</sub> (412.40). Source: FO SHOU *Citrus medica* var. *sarcodactylis*. Ref: 660.

**12838 Limocitrin-3-O-(6''-O-p-coumaryl)-β-D-glucopyranoside**

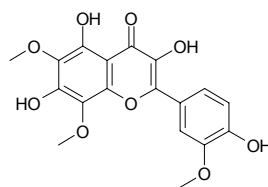
C<sub>32</sub>H<sub>30</sub>O<sub>15</sub> (654.59). Source: DONG NAN JING TIAN *Sedum alfredii* [Syn. *Sedum formosanum*]. Ref: 660.

**12839 Limocitrin-β-D-glucoside**

[38836-51-0] C<sub>23</sub>H<sub>24</sub>O<sub>13</sub> (508.44). Crystals (H<sub>2</sub>O), mp 150°C. Pharm: Antihypertensive. Source: NING MENG *Citrus limon*, TIAN CHENG *Citrus sinensis*. Ref: 6, 1521.

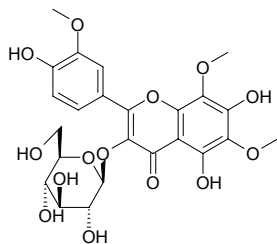
**12840 Limocitrol**

6-Hydroxy-limocitrin C<sub>18</sub>H<sub>16</sub>O<sub>9</sub> (376.32). Source: *Citrus* spp. Ref: 660.

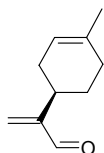


**12841 Limocitrol- $\beta$ -D-glucoside**

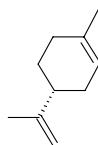
[77133-42-7] C<sub>24</sub>H<sub>26</sub>O<sub>14</sub> (538.47). mp 163°C, 203~204°C. Source: NING MENG *Citrus limon*. Ref: 6, 1521.

**12842 Limonene-10-al**

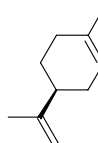
C<sub>10</sub>H<sub>14</sub>O (150.22). Colorless oil,  $[\alpha]_D^{25} = +88^\circ$  ( $c = 0.03$ , CHCl<sub>3</sub>). Pharm: Antitrypanosomal (epimastigotes of *Trypanosoma cruzi*, MLC = 3.1  $\mu$ mol/L, control Gentian violet, MLC = 6.2  $\mu$ mol/L). Source: YI LANG QING LAN *Dracocephalum kotschyi*. Ref: 2579.

**12843 D-Limonene**

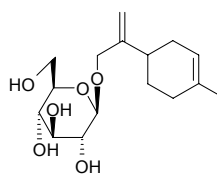
(R)-(+)-Limonene [5989-27-5] C<sub>10</sub>H<sub>16</sub> (136.24). bp 178°C. Pharm: Antibacterial (*Diplococcus pneumoniae*, *Diplococcus catarrhal*, *Staphylococcus aureus* and  $\alpha$ -Streptococcus); antitussive (dispels phlegm); irritant (to skin); sedative; antineoplastic (mus, skin cancer, lung cancer). Source: BAI PI SONG *Pinus bungeana*, BO HE *Mentha haplocalyx* [Syn. *Mentha canadensis*; *Mentha arvensis* var. *haplocalyx*; *Mentha arvensis*], CHAI HU *Bupleurum chinense*, DA YE XIANG RU *Mosla dianthera*, DONG LING CAO *Rabdosia rubescens*, FENG XIANG SHU *Liquidambar formosana* [Syn. *Liquidambar taiwaniana*], GAN JIANG *Zingiber officinale*, GANG SONG *Baeckea frutescens*, GE LU ZI *Carum carvi*, HAI SONG ZI *Pinus koraiensis*, HOU PO *Magnolia officinalis*, HU SUI ZI *Coriandrum sativum*, HUA DONG LAN CI TOU *Echinops grijsii*, HUANG HUA HAO *Artemisia annua*, HUI HUI SU GENG *Perilla frutescens* var. *crispa*, HUI XIANG *Foeniculum vulgare*, HUO XIANG *Agastache rugosus*, JIAN ZI SU YE *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*], JING JIE *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*], JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*], JU PI *Citrus reticulata*, JU YUAN *Citrus medica*, KUAN YE QIANG HUO *Notopterygium forbesii* [Syn. *Notopterygium franchetii*], KUO YE XIE CAO *Valeriana officinalis* var. *latifolia*, LIAN QIAO *Forsythia suspensa*, LIAO XI XIN *Asarum heterotropoides* var. *mandshuricum*, LU DOU LE HUA *Pandanus tectorius*, MU XU *Medicago sativa*, NAN HE SHI *Daucus carota*, OU ZHOU LENG SHAN *Abies alba*, QIANG HUO *Notopterygium incisum*, RU XIANG *Boswellia carterii*, SHENG JIANG *Zingiber officinale*, SHI LUO ZI *Anethum graveolens*, WU WEI ZI *Schisandra chinensis*, WU ZHU YU *Evodia rutaecarpa*, XI XIN *Asarum sieboldii*, XIAO YE PI PA *Rhododendron anthopogonoides*, YA ER QIN *Cryptotaenia japonica*, YIN CHEN HAO *Artemisia capillaris*, ZHI ZHU XIANG *Valeriana jatamansii* [Syn. *Valeriana wallichii*], *Mentha* sp., occurs in many plants. Ref: 2, 11, 658, 660, 1582, 5501.

**12844 L-Limonene**

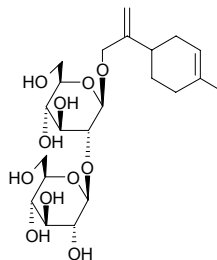
(S)-(-)-Limonene [5989-54-8] C<sub>10</sub>H<sub>16</sub> (136.24). Source: ZI SU YE *Perilla frutescens* var. *arguta*. Ref: 2.

**12845 Limonene-10-ol 10-O- $\beta$ -D-glucopyranoside**

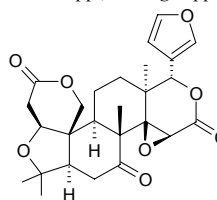
C<sub>16</sub>H<sub>26</sub>O<sub>6</sub> (314.38). Colorless gum,  $[\alpha]_D^{24} = -7.6^\circ$  ( $c = 0.26$ , MeOH). Pharm: Antitrypanosomal inactive (epimastigotes of *Trypanosoma cruzi*, 400  $\mu$ mol/L). Source: YI LANG QING LAN *Dracocephalum kotschyi*. Ref: 2579.

**12846 Limonene-10-ol 10-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranoside**

C<sub>22</sub>H<sub>36</sub>O<sub>11</sub> (476.53). Colorless powder,  $[\alpha]_D^{24} = -8.3^\circ$  ( $c = 0.03$ , MeOH). Pharm: Antitrypanosomal inactive (epimastigotes of *Trypanosoma cruzi*, 400  $\mu$ mol/L). Source: YI LANG QING LAN *Dracocephalum kotschyi*. Ref: 2579.

**12847 Limonin**

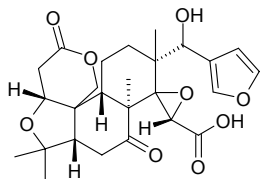
[1180-71-8] C<sub>26</sub>H<sub>30</sub>O<sub>8</sub> (470.52). White needles (EtOAc), mp 272~274°C. Pharm: Tyrosinase inhibitor (333  $\mu$ mol/L, InRt = 3.6%; control Kojic acid, IC<sub>50</sub> = 125  $\mu$ mol/L)<sup>[4722]</sup>; Anti-HIV-1 (40  $\mu$ mol/L, InRt = (61 $\pm$ 9)%, control Indinavir, 100nmol/L, InRt = 100%)<sup>[5462]</sup>. Source: BEI CANG ZHU *Atractylodes chinensis*, SU DA QI GAN JU *Citrus sudachii* (seed), TAI WAN HUANG BO *Phellodendron amurense* var. *wilsonii* (leaf: yield = 0.00039%dw)<sup>[4722]</sup>, YIN DU LIAN *Azadiractia indica*, CHENG ZI *Citrus junos*, CHENG ZI HE *Citrus junos*, HUANG LIAN *Coptis chinensis*, JU PI *Citrus reticulata*, ZHI SHI *Citrus aurantium*, *Citrus* spp., *Dictamnus* spp., *Evodia* spp., *Luvunga* spp. Ref: 660, 1521, 2510, 3532, 4722, 5462.



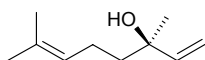


**12848 Limonoic acid A ring lactone**

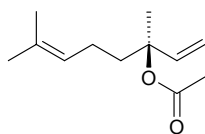
$C_{26}H_{32}O_9$  (488.54). Source: TIAN CHENG *Citrus sinensis*. Ref: 6.

**12849 Linalool**

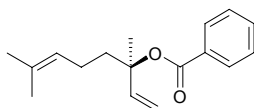
[78-70-6]  $C_{10}H_{18}O$  (154.25). Pharm: Antibacterial; antifungal; antiviral (chicken ES4 virus, 1mg/day, orl, *in vivo*, biotic prolonged rate = (50~80)%); antiseptic; sedative (mus, orl, inhibits spontaneous movement). Source: CHAI HU *Bupleurum chinense*, HOU PO *Magnolia officinalis*, HUANG HUA HAO *Artemisia annua*, HUI HUI SU GENG *Perilla frutescens* var. *crispa*, HUO XIANG *Agastache rugosus*, JIAN ZI SU YE *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*], JIN YIN HUA *Lonicera japonica*, JU PI *Citrus reticulata*, LIAN QIAO *Forsythia suspensa*, MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*], MU XU *Medicago sativa*, NAN HE SHI *Daucus carota*, SHAN XING REN *Prunus armeniaca* var. *ansu*, SHENG JIANG *Zingiber officinale*, WU WEI ZI *Schisandra chinensis*, XING REN *Prunus armeniaca*, YU XING CAO *Houttuynia cordata*, ZI SU YE *Perilla frutescens* var. *arguta*. Ref: 2, 638, 658, 660.

**12850 Linalyl acetate**

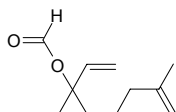
Linalool acetate [115-95-7]  $C_{12}H_{20}O_2$  (196.29). bp 115~116°C/25mmHg. Pharm: Antineoplastic (mouse S<sub>180</sub>, 1mg/kg ip, InRt = 45.3%). Source: HOU PO *Magnolia officinalis*, HU TAO REN *Juglans regia*, HUANG HUA HAO *Artemisia annua*, JU YUAN *Citrus medica*, NING MENG *Citrus limon*, SHE XIANG CAO *Thymus vulgaris*, YE HUA JIAO YE *Zanthoxylum simulans*. Ref: 2, 6, 658, 660.

**12851 Linalyl benzoate**

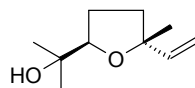
[126-64-7]  $C_{17}H_{22}O_2$  (258.36). Source: MO LI HUA *Jasminum sambac*. Ref: 6.

**12852 Linalylformate**

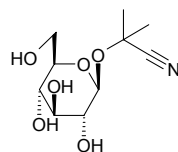
$C_{11}H_{18}O_2$  (182.26). Source: MEI GUI HUA *Rosa rugosa*. Ref: 660.

**12853 Linalyl oxide**

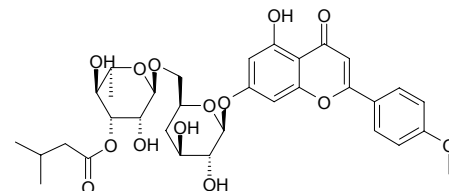
Epoxylinalool [60047-17-8]  $C_{10}H_{18}O_2$  (170.25). Source: GUI HUA *Osmanthus fragrans*, JIN YIN HUA *Lonicera japonica*, MA HUA *Cannabis sativa*, PI PA YE *Eriobotrya japonica*, XIANG YE *Pelargonium graveolens*. Ref: 6, 660.

**12854 Linamarin**

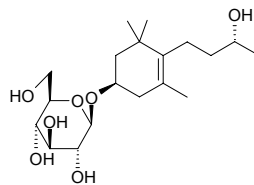
[554-35-8]  $C_{10}H_{17}NO_6$  (247.25). mp 142~143°C. Pharm: Toxin (main active component in Cassava). Source: MU SHU DI SHANG BU FEN *Manihot esculenta*, YA MA *Linum usitatissimum*, YA MA ZI *Linum usitatissimum*, Ref: 6, 658, 5509.

**12855 Linarin isovalerate**

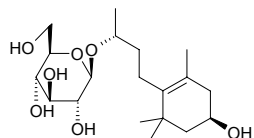
$C_{33}H_{40}O_{14}$  (660.68). mp 138~140°C. Source: ZHI ZHU XIANG *Valeriana jatamansii* [Syn. *Valeriana wallichii*]. Ref: 6.

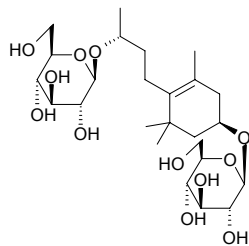
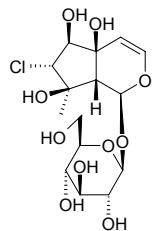
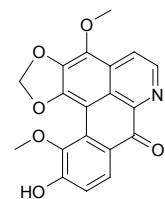
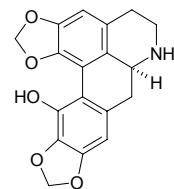
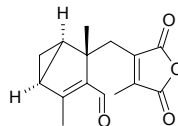
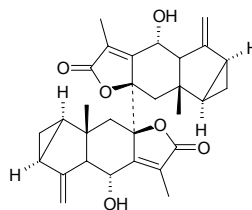
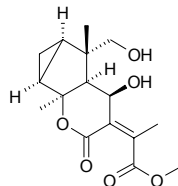
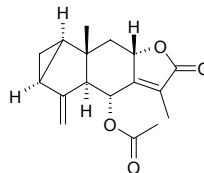
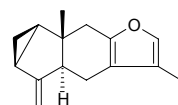
**12856 Linarionoside A**

[160169-57-3]  $C_{19}H_{34}O_7$  (374.48). White powder, mp 108~110°C. Source: HAI BIN LIU CHUAN YU *Linaria japonica*, XI YANG SHEN *Panax quinquefolium*. Ref: 445, 652.

**12857 Linarionoside B**

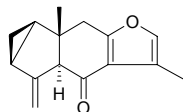
[160169-58-4]  $C_{19}H_{34}O_7$  (374.48). Source: HAI BIN LIU CHUAN YU *Linaria japonica*. Ref: 652.



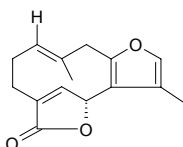
**12858 Linarionoside C**[160098-75-9] C<sub>25</sub>H<sub>44</sub>O<sub>12</sub> (536.62). Source: HAI BIN LIU CHUAN YU*Linaria japonica*. Ref: 652.**12859 Linarioside**C<sub>15</sub>H<sub>23</sub>ClO<sub>10</sub> (398.80). Source: HAI BIN LIU CHUAN YU *Linaria japonica* (the compound was isolated from the plant by I.Kitagawa et al. in 1972). Ref: 5505.**12860 Lindechunine A**C<sub>19</sub>H<sub>13</sub>NO<sub>6</sub> (351.32). Yellow powder, [α]<sub>D</sub><sup>26</sup> = 0° (c = 0.1, MeOH). Pharm: Anti-HIV-1 (HIV-1 IN inhibitor, IC<sub>50</sub> = 21.1 μmol/L, positive control Suramin, IC<sub>50</sub> = 2.4 μmol/L). Source: DING HU DIAO ZHANG *Lindera chunii* (root). Ref: 4224.**12861 Lindechunine B**C<sub>18</sub>H<sub>15</sub>NO<sub>5</sub> (325.32). Grayish amorphous powder, [α]<sub>D</sub><sup>26.5</sup> = +43.0° (c = 0.01, MeOH). Pharm: Anti-HIV-1 inactive (HIV-1 IN inhibitor, IC<sub>50</sub> > 100 μmol/L, positive control Suramin, IC<sub>50</sub> = 2.4 μmol/L). Source: DING HU DIAO ZHANG *Lindera chunii* (root). Ref: 4224.**12862 Lindenanolide E**C<sub>15</sub>H<sub>16</sub>O<sub>4</sub> (260.29). Colorless needles (hexane–acetone), mp151–153°C, [α]<sub>D</sub><sup>26</sup> = –70.1° (c = 1.01, CHCl<sub>3</sub>). Pharm: Anti-HIV-1 inactive (HIV-1 IN inhibitor, IC<sub>50</sub> > 100 μmol/L, positive control Suramin, IC<sub>50</sub> = 2.4 μmol/L). Source: DING HU DIAO ZHANG *Lindera chunii* (root). Ref: 4224.**12863 Lindenanolide F**C<sub>30</sub>H<sub>34</sub>O<sub>6</sub> (490.60). Amorphous powder, [α]<sub>D</sub><sup>26</sup> = –303.5° (c = 0.21, CHCl<sub>3</sub>).Pharm: Anti-HIV-1 inactive (HIV-1 IN inhibitor, IC<sub>50</sub> > 100 μmol/L, positive control Suramin, IC<sub>50</sub> = 2.4 μmol/L). Source: DING HU DIAO ZHANG *Lindera chunii* (root). Ref: 4224.**12864 Lindenanolide G**C<sub>16</sub>H<sub>22</sub>O<sub>6</sub> (310.35). Oil, [α]<sub>D</sub><sup>26</sup> = –250° (c = 0.2, MeOH). Pharm: Anti-HIV-1 inactive (HIV-1 IN inhibitor, IC<sub>50</sub> > 100 μmol/L, positive control Suramin, IC<sub>50</sub> = 2.4 μmol/L). Source: DING HU DIAO ZHANG *Lindera chunii* (root). Ref: 4224.**12865 Lindenanolide H**C<sub>17</sub>H<sub>20</sub>O<sub>4</sub> (288.35). Pharm: Anti-HIV-1 inactive (HIV-1 IN inhibitor, IC<sub>50</sub> > 100 μmol/L, positive control Suramin, IC<sub>50</sub> = 2.4 μmol/L). Source: DING HU DIAO ZHANG *Lindera chunii* (root). Ref: 4224.**12866 Lindenene**[24173-83-9] C<sub>15</sub>H<sub>18</sub>O (214.31). Source: WU YAO *Lindera strychnifolia* [Syn. *Lindera aggregata*]. Ref: 6.

**12867 Lindenenone**

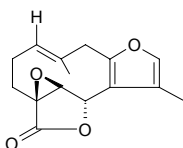
[26379-19-1] C<sub>15</sub>H<sub>16</sub>O<sub>2</sub> (228.29). mp 108°C. Source: WU YAO *Lindera strychnifolia* [Syn. *Lindera aggregata*]. Ref: 6, 1521.

**12868 Linderalactone**

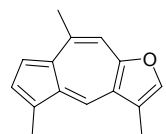
Neolinderalactone [728-61-0] C<sub>15</sub>H<sub>16</sub>O<sub>3</sub> (244.29). mp 140°C. Pharm: Anti-HIV-1 inactive (HIV-1 IN inhibitor, IC<sub>50</sub> > 100 μmol/L, positive control Suramin, IC<sub>50</sub> = 2.4 μmol/L)<sup>[4224]</sup>. Source: DING HU DIAO ZHANG *Lindera chunii* (root), WU YAO *Lindera strychnifolia* [Syn. *Lindera aggregata*] (root): content scope of 10 origins = 0.0198%~0.1460%, mean content = 0.0624%<sup>[5508]</sup>. Ref: 6, 1521, 4224, 5508.

**12869 Linderane**

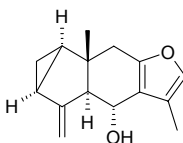
[13476-25-0] C<sub>15</sub>H<sub>16</sub>O<sub>4</sub> (260.29). mp 190~191°C (dec). Source: WU YAO *Lindera strychnifolia* [Syn. *Lindera aggregata*] (root): content scope of 39 origins = 0.0283%~0.222%, mean content = 0.083%<sup>[5508]</sup>. Ref: 6, 5508.

**12870 Linderazulene**

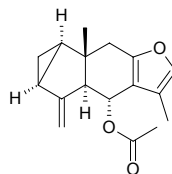
[489-79-2] C<sub>15</sub>H<sub>14</sub>O (210.28). mp 106~107°C. Source: WU YAO *Lindera strychnifolia* [Syn. *Lindera aggregata*]. Ref: 6.

**12871 Linderene**

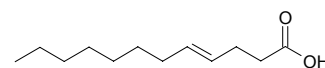
Lindeneol [26146-27-0] C<sub>15</sub>H<sub>18</sub>O<sub>2</sub> (230.31). mp 145°C. Pharm: Anti-HIV-1 inactive (HIV-1 IN inhibitor, IC<sub>50</sub> > 100 μmol/L, positive control Suramin, IC<sub>50</sub> = 2.4 μmol/L)<sup>[4224]</sup>. Source: DING HU DIAO ZHANG *Lindera chunii* (root), WU YAO *Lindera strychnifolia* [Syn. *Lindera aggregata*]. Ref: 6, 1521, 4224.

**12872 Linderene acetate**

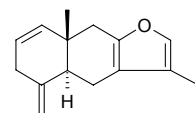
Lindeneol acetate C<sub>17</sub>H<sub>20</sub>O<sub>3</sub> (272.35). mp 82°C. Pharm: Anti-HIV-1 inactive (HIV-1 IN inhibitor, IC<sub>50</sub> > 100 μmol/L, positive control Suramin, IC<sub>50</sub> = 2.4 μmol/L)<sup>[4224]</sup>. Source: WU YAO *Lindera strychnifolia* [Syn. *Lindera aggregata*], DING HU DIAO ZHANG *Lindera chunii* (root). Ref: 6, 660, 4224.

**12873 Linderic acid**

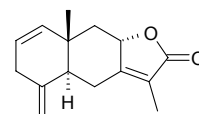
C<sub>12</sub>H<sub>22</sub>O<sub>2</sub> (198.31). Source: MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*]. Ref: 2.

**12874 Lindestrene**

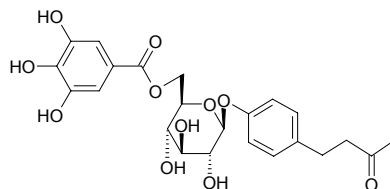
[2221-88-7] C<sub>15</sub>H<sub>18</sub>O (214.31). bp 100~102°C/2mmHg. Source: WU YAO *Lindera strychnifolia* [Syn. *Lindera aggregata*]. Ref: 6.

**12875 Lindestrenolide**

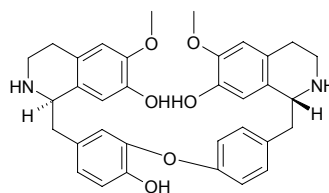
[20267-90-7] C<sub>15</sub>H<sub>18</sub>O<sub>2</sub> (230.31). bp 100~105°C/0.2mmHg. Source: WU YAO *Lindera strychnifolia* [Syn. *Lindera aggregata*]. Ref: 6.

**12876 Lindleyin**

[59282-56-3] C<sub>23</sub>H<sub>26</sub>O<sub>11</sub> (478.46). Source: TANG GU TE DA HUANG *Rheum tanguticum*. Ref: 2, 660, 1521.

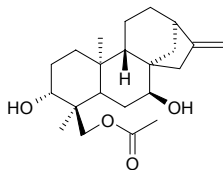
**12877 Lindoldhamine**

C<sub>34</sub>H<sub>36</sub>N<sub>2</sub>O<sub>6</sub> (568.68). Source: HEI KE NAN *Lindera megaphylla*. Ref: 660.

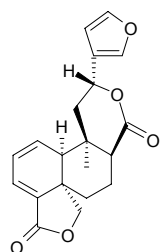


**12878 Linearol**

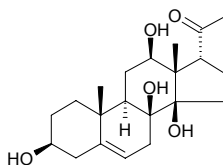
$C_{22}H_{34}O_4$  (362.51). Colorless needles ( $CHCl_3$ ). Source: *Sideritis ozturkii* (aerial parts). Ref: 3827.

**12879 Linearolactone**

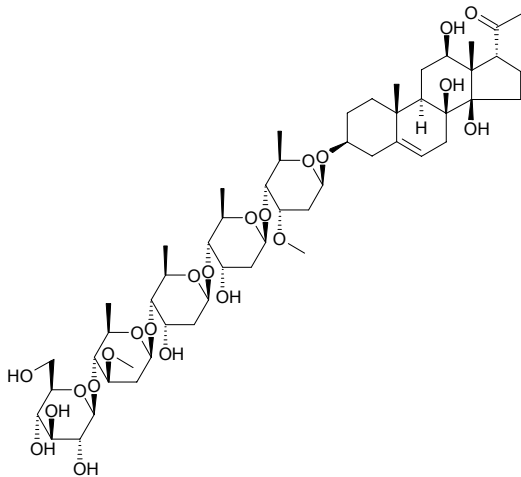
$C_{20}H_{20}O_5$  (340.38). Source: DUO SUI SHU WEI CAO *Salvia polystachya* (aerial parts), TIAO WEN SHU WEI CAO *Salvia lineata*. Ref: 1521, 3901.

**12880 Lineolone**

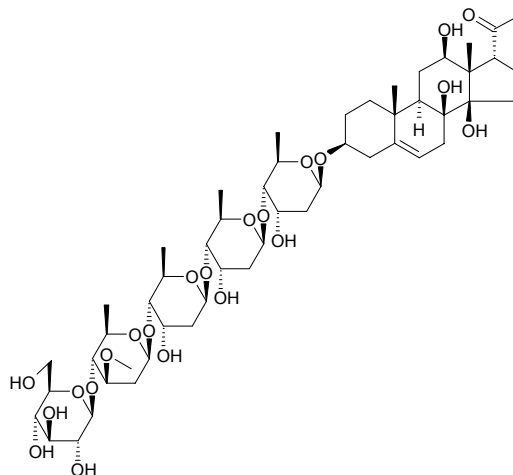
Deacylcynanchogenin  $C_{21}H_{32}O_5$  (364.49). mp 240~244°C. Source: BAI SHOU WU *Cynanchum bungei*, FU SHOU CAO *Adonis amurensis*, LUO MO *Metaplexis japonica*, XU CHANG QING *Cynanchum paniculatum*, ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 6, 1521, 3925.

**12881 Lineolon-3-O-β-D-glucopyranosyl-(1→4)-β-D-oleandropyranosyl-(1→4)-β-D-digitoxopyranosyl-(1→4)-β-D-digitoxopyranosyl-(1→4)-β-D-cymaropyranoside**

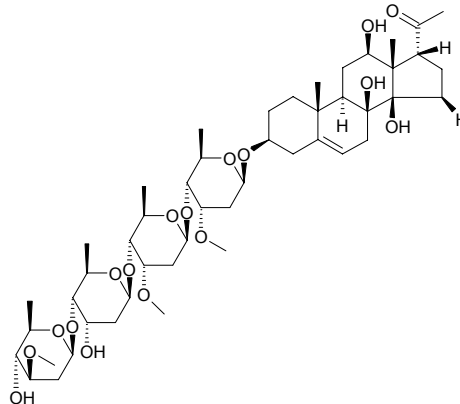
$C_{53}H_{86}O_{22}$  (1075.26). Amorphous powder,  $[\alpha]_D^{27} = +18.7^\circ$  ( $c = 0.78$ , MeOH). Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.

**12882 Lineolon-3-O-β-D-glucopyranosyl-(1→4)-β-D-oleandropyranosyl-(1→4)-β-D-digitoxopyranosyl-(1→4)-β-D-digitoxopyranosyl-(1→4)-β-D-digitoxopyranoside**

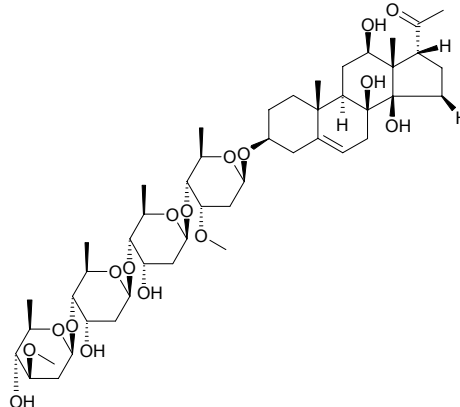
$C_{52}H_{84}O_{22}$  (1061.24). Amorphous powder,  $[\alpha]_D^{27} = +6.5^\circ$  ( $c = 0.73$ , MeOH). Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.

**12883 Lineolon-3-O-β-D-oleandropyranosyl-(1→4)-β-D-digitoxopyranosyl-(1→4)-β-D-cymaropyranosyl-(1→4)-β-D-cymaropyranoside**

$C_{48}H_{78}O_{17}$  (927.15). Amorphous powder,  $[\alpha]_D^{27} = +14.2^\circ$  ( $c = 0.46$ , MeOH). Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.

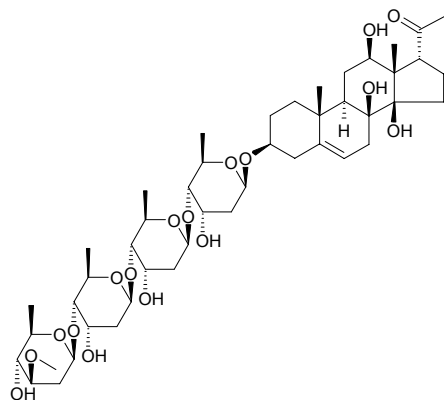
**12884 Lineolon-3-O-β-D-oleandropyranosyl-(1→4)-β-D-digitoxopyranosyl-(1→4)-β-D-digitoxopyranosyl-(1→4)-β-D-cymaropyranoside**

$C_{47}H_{76}O_{17}$  (913.12). Amorphous powder,  $[\alpha]_D^{27} = +8.9^\circ$  ( $c = 0.97$ , MeOH). Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.



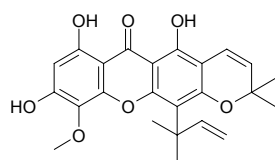
**12885 Lineolon-3-O- $\beta$ -D-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-digitoxopyranoside**

C<sub>46</sub>H<sub>74</sub>O<sub>17</sub> (899.09). Amorphous powder,  $[\alpha]_D^{24} = +3.2^\circ$  ( $c = 1.24$ , MeOH).  
**Source:** ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). **Ref:** 3925.



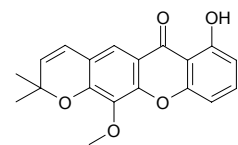
**12886 Linixanthone A**

C<sub>24</sub>H<sub>24</sub>O<sub>7</sub> (424.45). Light yellow needles (*n*-hexane-EtOAc), mp 174–176°C.  
**Pharm:** Cytotoxic (P<sub>388</sub> ED<sub>50</sub> = 4.88 $\mu$ g/mL, control Mithramycin ED<sub>50</sub> = 0.06 $\mu$ g/mL, HT29 ED<sub>50</sub> = 5.34 $\mu$ g/mL, control Mithramycin ED<sub>50</sub> = 0.08 $\mu$ g/mL).  
**Source:** TAI WAN LV DAO TENG HUANG *Garcinia linii*. **Ref:** 4094.



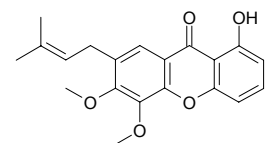
**12887 Linixanthone B**

C<sub>19</sub>H<sub>16</sub>O<sub>5</sub> (324.34). Colorless needles (EtOAc), mp 171–172°C. **Pharm:** Cytotoxic (P<sub>388</sub> ED<sub>50</sub> = 1.43 $\mu$ g/mL, control Mithramycin ED<sub>50</sub> = 0.06 $\mu$ g/mL, HT29 ED<sub>50</sub> = 3.14 $\mu$ g/mL, control Mithramycin ED<sub>50</sub> = 0.08 $\mu$ g/mL). **Source:** TAI WAN LV DAO TENG HUANG *Garcinia linii*. **Ref:** 4094.



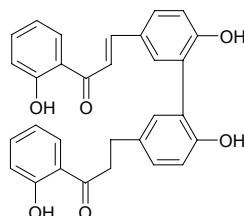
**12888 Linixanthone C**

C<sub>20</sub>H<sub>20</sub>O<sub>5</sub> (340.38). Light yellow needles (*n*-hexane-acetone), mp 127–129°C.  
**Pharm:** Cytotoxic (P<sub>388</sub> ED<sub>50</sub> = 1.44 $\mu$ g/mL, control Mithramycin ED<sub>50</sub> = 0.06 $\mu$ g/mL, HT29 ED<sub>50</sub> = 1.54 $\mu$ g/mL, control Mithramycin ED<sub>50</sub> = 0.08 $\mu$ g/mL).  
**Source:** TAI WAN LV DAO TENG HUANG *Garcinia linii*. **Ref:** 4094.



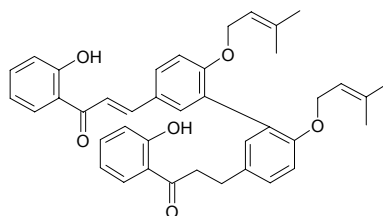
**12889 3-3''Linked-(2'-hydroxy-4-hydroxychalcone)-(2'''-hydroxy-4'''-hydroxy dihydrochalcone)**

C<sub>30</sub>H<sub>24</sub>O<sub>6</sub> (480.52). mp 107–109°C, hydrolysis product. **Pharm:** MAO-A inhibitor (rat brain mitochondrial enzyme, IC<sub>50</sub> = 12.5 $\mu$ g/mol/L); MAO-B inhibitor (rat brain mitochondrial enzyme, IC<sub>50</sub> = 6.2 $\mu$ g/mol/L). **Source:** HUANG LONG DAN *Gentiana lutea*. **Ref:** 3838.



**12890 3-3''Linked-(2'-hydroxy-4-O-isoprenylchalcone)-(2'''-hydroxy-4'''-O-isoprenyl dihydrochalcone)**

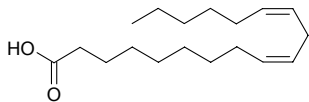
C<sub>40</sub>H<sub>40</sub>O<sub>6</sub> (616.76). Yellow needles (MeOH), mp 86–89°C. **Pharm:** MAO-A inhibitor (rat brain mitochondrial enzyme, IC<sub>50</sub> > 100 $\mu$ g/mol/L); MAO-B inhibitor (rat brain mitochondrial enzyme, IC<sub>50</sub> = 48.7 $\mu$ g/mol/L). **Source:** HUANG LONG DAN *Gentiana lutea*. **Ref:** 3838.



**12891 cis-9,cis-12-Linoleic acid**

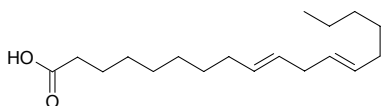
*cis*-9,*cis*-12-Octadecadienoic acid [60-33-3] C<sub>18</sub>H<sub>32</sub>O<sub>2</sub> (280.45). Yellowish oil, insoluble in water, soluble in absolute alcohol, diethyl ether, etc. **Pharm:** Antiallergic (rat, passive skin allergy, 300mg/kg orl, InRt = 60.9%); antihypercholesterolemic; nutrient; inhibits cancer cell invasion (MM1 cells, *in vitro*, 10 $\mu$ g/mL, InRt = 15.7%)<sup>[4329]</sup>; COX-1 and COX-2 inhibitor (IC<sub>50</sub> = 3.9–180 $\mu$ mol/L, lacking selectivity)<sup>[4415]</sup>. **Source:** BAI GUO *Ginkgo biloba*, BAN WEN LU HUI *Aloe vera* var. *chinensis*, BING LANG *Areca catechu*, CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*], CU LIU GUO *Hippophae rhamnoides*, DA CHE QIAN *Plantago major*, DA ZAO *Ziziphus jujuba*, DONG CHONG XIA CAO *Cordyceps sinensis*, DU HENG *Asarum forbesii*, GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *Huechingensis*], GOU QI GEN PI *Lycium chinense*, GOU QI ZI *Lycium chinense*, GUA LOU *Trichosanthes kirilowii*, HEI ZI LI GUO JI SHENG *Scurrula atropurpurea*, HONG HUA *Carthamus tinctorius*, HUA DONG LAN CI TOU *Echinops grijsii*, JI GUAN ZI *Celosia cristata* (seed), JIAN YE YIN YANG HUO *Epimedium sagittatum*, MAN JING ZI *Vitex trifolia*, MAN TUO LUO ZI *Datura metel*, MAO MAN TUO LUO ZI *Datura innoxia*, MENG GU HUANG QI *Astragalus mongholicus*, MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*], QIANG HUO *Notopterygium incisum*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], SHAN ZHA *Crataegus pinnatifida*, SHAN ZHU YU *Cornus officinalis* [Syn. *Macrocarpium officinale*], SHUANG BIAN GUA LOU *Trichosanthes rosthornii* [Syn. *Trichosanthes uniflora*], TIAN HUA FEN *Trichosanthes kirilowii*, XI YANG SHEN *Panax quinquefolium*, XING REN *Prunus armeniaca*, YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus*

*javanica*], YA MA *Linum usitatissimum*, YAO YONG PU GONG YING *Taraxacum officinale*, YI ZHI REN *Alpinia oxyphylla* (fruit: yield = 0.020%dw)<sup>[4655]</sup>, YIN CHEN HAO *Artemisia capillaris*, YU XING CAO *Houttuynia cordata*, ZI SU *Perilla frutescens* var. *arguta*, occurs in many plants. Ref: 2, 500, 660, 900, 4329, 4415, 4655.



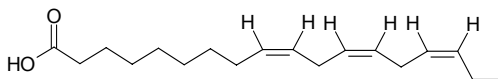
#### 12892 *trans*-9,*trans*-12-Linoleic acid

*trans,trans*-Linoleic acid [506-21-8] C<sub>18</sub>H<sub>32</sub>O<sub>2</sub> (280.45). mp -5°C, bp 229-232°C/16mmHg. Source: LUO HUA SHENG *Arachis hypogaea*, XIANG RI KUI ZI *Helianthus annuus*. Ref: 6.



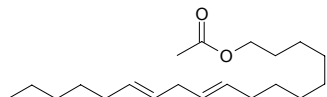
#### 12893 Linolenic acid

(*Z,Z,Z*)-9,12,15-Octadecatrienoic acid [463-40-1] C<sub>18</sub>H<sub>30</sub>O<sub>2</sub> (278.44). Pharm: Nutrient; inhibits cancer cell invasion (MM1 cells, *in vitro*, 10µg/mL, InRt = 19.3%)<sup>[4329]</sup>; 5α-reductase inhibitor (IC<sub>50</sub> = (160.3±24.6)µmol/L; control Finasteride, IC<sub>50</sub> = (0.38±0.06)µmol/L)<sup>[5398]</sup>. Source: BA DOU *Croton tiglium*, BAN WEN LU HUI *Aloe vera* var. *chinensis*, CHAI HU *Bupleurum chinense*, CU LIU GUO *Hippophae rhamnoides*, DONG CHONG XIA CAO *Cordyceps sinensis*, GOU QI GEN PI *Lycium chinense*, GUA LOU *Trichosanthes kirilowii*, HEI ZI LI GUO JI SHENG *Scurrula atropurpurea*, HONG HUA *Carthamus tinctorius*, JI GUAN ZI *Celosia cristata* (seed), MENG GU HUANG QI *Astragalus mongholicus*, SHAN ZHA *Crataegus pinnatifida*, SHUANG BIAN GUA LOU *Trichosanthes rosthornii* [Syn. *Trichosanthes uniflora*], TIAN HUA FEN *Trichosanthes kirilowii*, WU JIA PI *Acanthopanax gracilistylus*, XING REN *Prunus armeniaca*, YA MA *Linum usitatissimum*, YI ZHI REN *Alpinia oxyphylla* (fruit: yield = 0.0015%dw)<sup>[4655]</sup>, YIN YANG HUO *Epimedium brevicornum*, ZI SU *Perilla frutescens* var. *arguta*, ZI SU GENG *Perilla frutescens* var. *arguta*, occurs in many plants. Ref: 2, 658, 660, 4329, 4655, 5398.



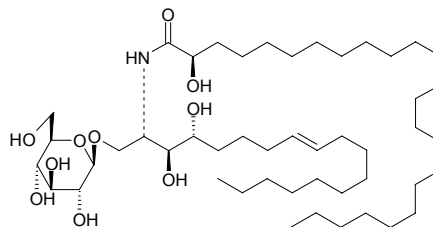
#### 12894 Linoleyl acetate

[18266-22-3] C<sub>20</sub>H<sub>36</sub>O<sub>2</sub> (308.51). Source: QI ZHOU YI ZHI HAO *Conyza canadensis* [Syn. *Erigeron canadensis*]. Ref: 6.



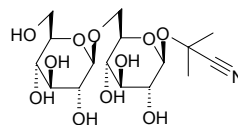
#### 12895 Linum cerebroside

C<sub>48</sub>H<sub>93</sub>NO<sub>10</sub> (844.28). White amorphous powder, [α]<sub>D</sub><sup>15</sup> = +5.0° (c = 0.002, MeOH-C<sub>5</sub>H<sub>5</sub>N). Source: YA MA *Linum usitatissimum* (root). Ref: 4562.



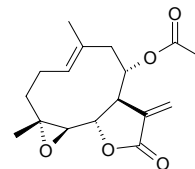
#### 12896 Linustatin

[72229-40-4] C<sub>16</sub>H<sub>27</sub>NO<sub>11</sub> (409.39). Pharm: Toxin. Source: YA MA *Linum usitatissimum*. Ref: 658.



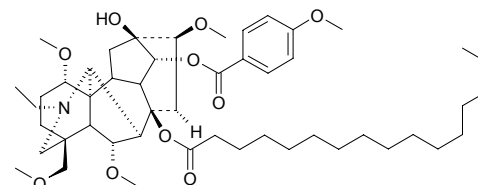
#### 12897 Lipiferolide

[41059-80-7] C<sub>17</sub>H<sub>22</sub>O<sub>5</sub> (306.36). Crystals (ethanol-propane), mp 118-119°C, [α]<sub>D</sub><sup>22</sup> = -125° (c = 0.06, methanol). Pharm: Cytotoxic (KB, ED<sub>50</sub> = 0.16µg/mL); insect antifeedant. Source: BEI MEI E ZHANG QIU *Liriodendron tulipifera*. Ref: 661.



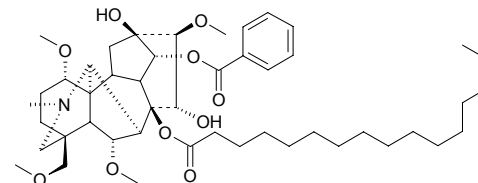
#### 12898 Lipo-14-O-anisoylbikhaconine

C<sub>49</sub>H<sub>77</sub>NO<sub>10</sub> (840.16). Colorless oil (MeOH), [α]<sub>D</sub><sup>23</sup> = +18.7° (c = 0.135, CHCl<sub>3</sub>). Source: FU ZI *Aconitum carmichaeli* (tuber). Ref: 4373.



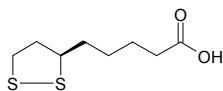
#### 12899 Lipohyaconitine

C<sub>47</sub>H<sub>73</sub>NO<sub>10</sub> (812.11). Source: FU ZI *Aconitum carmichaeli* (tuber). Ref: 4373.

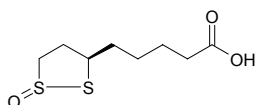


**12900  $\alpha$ -Lipoic acid**

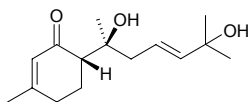
[62-46-4] C<sub>8</sub>H<sub>14</sub>O<sub>2</sub>S<sub>2</sub> (206.33). mp (+) 46~48°C, (-) 45.0~47.5°C, ( $\pm$ ) 59~61°C. Source: ZI CAI *Porphyra tenera*. Ref: 6.

**12901  $\beta$ -Lipoic acid**

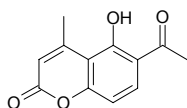
[6992-30-9] C<sub>8</sub>H<sub>14</sub>O<sub>3</sub>S<sub>2</sub> (222.33). Source: ZI CAI *Porphyra tenera*. Ref: 6.

**12902 Lippidulcine A**

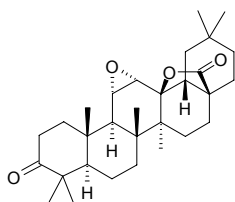
C<sub>15</sub>H<sub>24</sub>O<sub>3</sub> (252.36). Colorless oil, [ $\alpha$ ]<sub>D</sub><sup>31</sup> = +123.6° (c = 0.1, CHCl<sub>3</sub>). Source: TIAN SHE CAO *Lippia dulcis* (aerial parts). Ref: 4508.

**12903 Licooumarin**

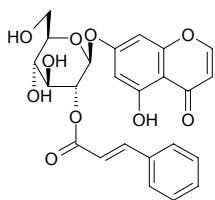
6-Acetyl-5-hydroxy-4-methyl coumarin [36695-19-9] C<sub>12</sub>H<sub>10</sub>O<sub>4</sub> (218.21). Source: GUANG GUO GAN CAO *Glycyrrhiza glabra*. Ref: 660.

**12904 Liquidambaric lactone**

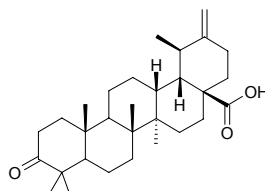
C<sub>30</sub>H<sub>44</sub>O<sub>4</sub> (468.68). White acicular crystals, mp > 300°C. Source: LU LU TONG *Liquidambar formosana* [Syn. *Liquidambar taiwaniana*]. Ref: 356, 1521.

**12905 Liquidamboside**

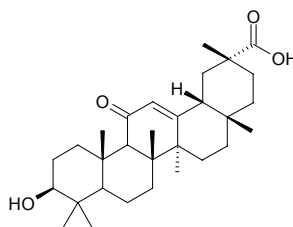
C<sub>24</sub>H<sub>22</sub>O<sub>10</sub> (470.44). Yellowish needles (Me<sub>2</sub>CO), mp 210~212°C. Source: FENG XIANG JI SHENG *Viscum articulatum* (whole herb). Ref: 4864.

**12906 Liquidambronic acid**

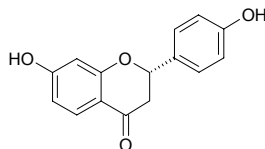
C<sub>30</sub>H<sub>46</sub>O<sub>3</sub> (454.70). Source: LU LU TONG *Liquidambar formosana* [Syn. *Liquidambar taiwaniana*] (resin). Ref: 660.

**12907 Liquiritic acid**

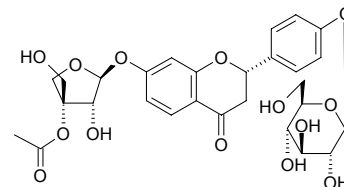
C<sub>30</sub>H<sub>46</sub>O<sub>4</sub> (470.70). Pharm: Anti-inflammatory. Source: GUANG GUO GAN CAO *Glycyrrhiza glabra*. Ref: 660, 1521.

**12908 Liquiritigenin**

4,7-Dihydroxyflavanone [578-86-9] C<sub>15</sub>H<sub>12</sub>O<sub>4</sub> (256.26). White powder, mp 210~212°C. Pharm: Antispasmodic (releases intestinal spasm induced by histamine, acetylcholine and BaCl<sub>2</sub>); antiulcerative (inhibits ulcer in pylorus-ligated rat); CNS activity; monoamine oxidase inhibitor (mitochondria in rat hepatic cells, *in vitro*). Source: CHAO XIAN YIN YANG HUO *Epimedium koreanum*, CI HUAI HUA *Robinia pseudoacacia*, GAN CAO *Glycyrrhiza uralensis*, GUANG GUO GAN CAO *Glycyrrhiza glabra*, HUI HUI DOU *Cicer arietinum*, JIANG ZHEN XIANG *Dalbergia odorifera*, MAO MAN TUO LUO YE *Datura innoxia*, SI TE WEN HUANG TAN *Dalbergia stevensonii*, ZHANG GUO GAN CAO *Glycyrrhiza inflata*, *Cicer* spp., *Dalbergia* spp., *Glycyrrhiza* spp., *Medicago* spp., *Myroxylon* spp., *Onobrychis* spp. Ref: 2, 458, 658, 660, 1521.

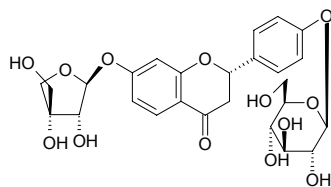
**12909 Liquiritigenin-7-O- $\beta$ -D-(3-O-acetyl)-apiofuranosyl-4'-O- $\beta$ -D-glucopyranoside**

C<sub>28</sub>H<sub>32</sub>O<sub>14</sub> (592.56). White powder, mp 201~202°C. Source: ZHANG GUO GAN CAO *Glycyrrhiza inflata*. Ref: 376.

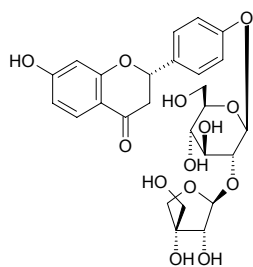


**12910 Liquiritigenin-7-*O*- $\beta$ -D-apiofuranosyl)-4'-*O*- $\beta$ -D-glucopyranoside**

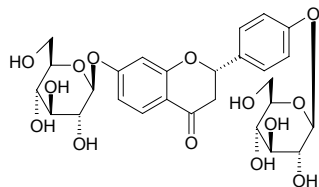
$C_{26}H_{30}O_{13}$  (550.52). White powder, mp 214–215°C. Source: ZHANG GUO GAN CAO *Glycyrrhiza inflata*. Ref: 376.

**12911 Liquiritigenin 4'-*O*- $\beta$ -D-apio-D-furanosyl(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranoside**

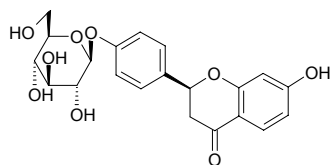
$C_{26}H_{30}O_{13}$  (550.52). Source: GAN CAO *Glycyrrhiza uralensis*. Ref: 660.

**12912 Liquiritigenin-7,4'-diglucoside**

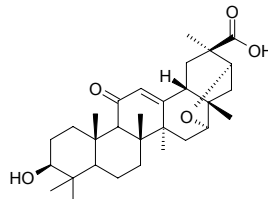
$C_{27}H_{32}O_{14}$  (580.55). Source: GAN CAO *Glycyrrhiza uralensis*. Ref: 2, 660.

**12913 Liquiritin**

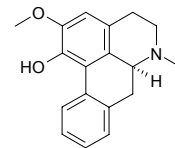
[551-15-5]  $C_{21}H_{22}O_9$  (418.40). Source: CU MAO GAN CAO *Glycyrrhiza aspera*, GAN CAO *Glycyrrhiza uralensis* (root and rhizome: content = 0.492%<sup>[5508]</sup>), GUANG GUO GAN CAO *Glycyrrhiza glabra* (root and rhizome: content = 0.220%<sup>[5508]</sup>), HUANG GAN CAO *Glycyrrhiza kansuensis*, ZHANG GUO GAN CAO *Glycyrrhiza inflata* (root and rhizome: content = 0.915%<sup>[5508]</sup>). Ref: 2, 660, 5508.

**12914 Licoiric acid**

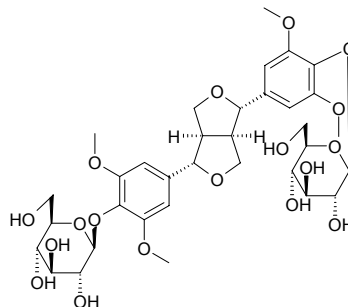
$C_{30}H_{44}O_5$  (484.68). Source: GUANG GUO GAN CAO *Glycyrrhiza glabra*. Ref: 2, 660.

**12915 Lirinidine**

$C_{18}H_{19}NO_2$  (281.36). Source: HE YE *Nelumbo nucifera*. Ref: 660.

**12916 Liriodendrin**

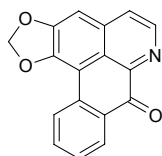
(+)-Syringaresinol-di-*O*- $\beta$ -D-glucoside [573-44-4]  $C_{34}H_{46}O_{18}$  (742.73). Crystals (EtOH), mp 269–270°C,  $[\alpha]_D^{18} = -18.5^\circ$  ( $c = 0.2$ , pyridine). Pharm: Calcium antagonist (frog, single heart cell); cytotoxic; Gonad stimulating principle; tonicity (mus, extends swimming time); inhibits fatigue and promotes interferon inducing formation; angiotensin I-converting enzyme inhibitor; antihepatotoxin; analgesic (mus, acetic acid-induced writhing model); antitrypanosomal (*Trypanosoma brucei rhodesiense*,  $IC_{50} = 34.4\mu\text{g/mL}$ , control Melarsoprol,  $IC_{50} = 0.00098\mu\text{g/mL}$ ; *Trypanosoma cruzi*,  $IC_{50} > 90\mu\text{g/mL}$ , control Benzimidazole,  $IC_{50} = 1.06\mu\text{g/mL}$ )<sup>[5009]</sup>; antileishmanial (*Leishmania donovani*,  $IC_{50} = 11.6\mu\text{g/mL}$ , control Miltefosine,  $IC_{50} = 0.102\mu\text{g/mL}$ )<sup>[5009]</sup>; antimalarial (*Plasmodium falciparum*,  $IC_{50} > 50\mu\text{g/mL}$ , control Artemisinin,  $IC_{50} = 0.0022\mu\text{g/mL}$ )<sup>[5009]</sup>; cytotoxic (L6,  $IC_{50} > 90\mu\text{g/mL}$ , control Podophyllotoxin,  $IC_{50} = 0.008\mu\text{g/mL}$ )<sup>[5009]</sup>; anti-inflammatory (*in vivo*, carrageenan-induced edema of the hind paw in rats, 5mg/kg, 90min, InRt = 40%); analgesic (mouse *in vivo*, acetic acid-induced writhing and hotplate method, 5mg/kg)<sup>[5425]</sup>. Source: CI WU JIA *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*], DU ZHONG *Eucommia ulmoides*, LIU CHUAN YU *Linaria vulgaris*, ROU CONG RONG *Cistanche deserticola*, ZONG KUI CAO SU *Phlomis brunneogaleata*. Ref: 2, 660, 1521, 1711, 1712, 1713, 1714, 1715, 1716, 1717, 4237, 5009, 5425.



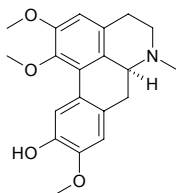


**12917 Liriodenine**

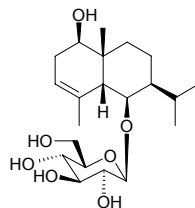
Oxoushinsunine; Spermatheridine [475-75-2]  $C_{17}H_9NO_3$  (275.27). Green acicular crystals ( $CHCl_3$ ), mp 275–277°C; Yellow solid, mp 280–281°C ( $CHCl_3$ ); mp 289°C (dec). **Pharm:** Antifungal; cytotoxic (KB); platelet aggregation inhibitor (rat blood: 2-5  $\mu\text{mol/L}$  ADP-induced,  $IC_{50} > 1000 \mu\text{mol/L}$ , control Acetylsalicylic acid,  $IC_{50} > 1000 \mu\text{mol/L}$ ; 2-5  $\mu\text{g/mL}$  collagen-induced,  $IC_{50} > 1000 \mu\text{mol/L}$ , Acetylsalicylic acid,  $IC_{50} = 420 \mu\text{mol/L}$ ; 1-4  $\mu\text{mol/L}$  epinephrine-induced with threshold concentration of collagen (0.8-1.0  $\mu\text{g/mL}$ ),  $IC_{50} = 67 \mu\text{mol/L}$ , Acetylsalicylic acid,  $IC_{50} = 53 \mu\text{mol/L}$ ; 10-40  $\mu\text{mol/L}$  AA-induced with threshold concentration of collagen (0.8-1.0  $\mu\text{g/mL}$ ),  $IC_{50} = 44 \mu\text{mol/L}$ , Acetylsalicylic acid,  $IC_{50} = 66 \mu\text{mol/L}$ ; 1-5  $\mu\text{mol/L}$  U46619-induced with threshold concentration of collagen (0.8-1.0  $\mu\text{g/mL}$ ),  $IC_{50} > 100 \mu\text{mol/L}$ , Acetylsalicylic acid,  $IC_{50} = 340 \mu\text{mol/L}$ )<sup>[5381]</sup>; cytotoxic (inhibits growth of yeasts: values of RS321NYCp50(gal),  $IC_{50} = 0.6 \mu\text{g/mL}$ ; RS321NpRAD52(gal),  $IC_{50} = 1.5 \mu\text{g/mL}$ ; RS321NpRAD52(glu),  $IC_{50} = 0.5 \mu\text{g/mL}$ ; Did not show selective DNA-damaging activity in the yeast assay)<sup>[5457]</sup>; Reduces isolation-induced aggression (mouse). **Source:** BAI LAN HUA *Michelia alba*, BAI YE GUA FU MU *Fissistigma glaucescens* [Syn. *Melodorum glaucescens*], BEI MEI E ZHANG QIU *Liriodendron tulipifera* (heartwood; the compound was isolated from the plant by M.A.Buchanan et al. in 1961)<sup>[5505]</sup>, CHEN XIANG *Aquilaria agallocha*, DING KE LA QIAN JIN TENG *Stephania dinklagei* (stem), FAN LI ZHI *Annona squamosa* (root), GUAN GUANG MU *Tsoongiodendron odorum*, HE HUA YU LAN *Magnolia grandiflora*, HE YE *Nelumbo nucifera*, HUA JIAO LE *Zanthoxylum cuspidatum*, HUANG MIAN GUI *Michelia champaca*, LIAN ZI *Nelumbo nucifera*, NIU XIN FAN LI ZHI *Annona reticulata*, RI BEN HOU PO *Magnolia obovata*, RI BEN HOU PO *Magnolia obovata* (leaf), RU DI JIN NIU *Zanthoxylum nitidum*, TAI WAN GE NA XIANG *Goniotalamus amuyon* (fresh leaf: yield = 0.00027%fw)<sup>[4686]</sup>, YE HE HUA *Magnolia coco*, YING ZHAO *Artabotrys hexapetalus* [Syn. *Annona hexapetalus*], YOU GOU YING ZHAO *Artabotrys uncinatus* (root, stem and leaf)<sup>[3083]</sup>, *Lettowianthus stellatus* (root cortex), occurs in many plants. **Ref:** 6, 658, 660, 2177, 1521, 3083, 3944, 4686, 5381, 5457, 5505.

**12918 Lirioferine**

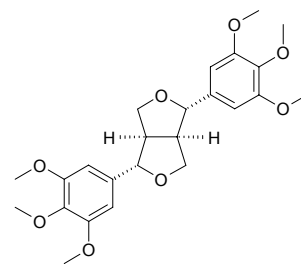
$C_{20}H_{23}NO_4$  (341.41). **Source:** YAN HU SUO *Corydalis yanhusuo* [Syn. *Corydalis turtschaninovii* f. *yanhusuo*]. **Ref:** 660.

**12919 Liriopeoside A**

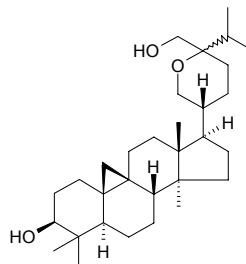
1 $\beta$ ,6 $\beta$ -Dihydroxy-*cis*-eudesm-3-ene-6-*O*- $\beta$ -D-glucopyranoside  $C_{21}H_{36}O_7$  (400.52). Colorless needles (MeOH), mp 169–171°C,  $[\alpha]_D^{25} = -7.3^\circ$  ( $c = 1.00$ , MeOH). **Source:** DUAN TING SHAN MAI DONG *Liriope muscari* (tuber: yield = 0.000064%). **Ref:** 4772.

**12920 Lirioresinol B dimethyl ether**

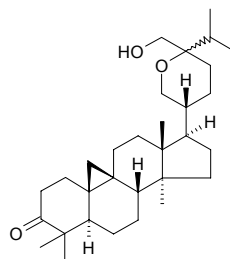
Yangambin  $C_{24}H_{30}O_8$  (446.50). mp 122–123°C. **Source:** WANG CHUN YU LAN *Magnolia biondii* [Syn. *Magnolia fargesii*], ZHONG YA KU HAO *Artemisia absinthium*. **Ref:** 6, 543, 658.

**12921 Lithocarpdiol**

[54300-84-4]  $C_{31}H_{52}O_3$  (472.76). mp 179–180°C. **Source:** DUO SUI SHI KE YE *Lithocarpus polystachyus*. **Ref:** 6.

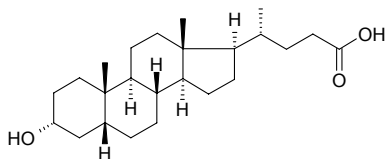
**12922 Lithocarpolone**

[54300-83-3]  $C_{31}H_{50}O_3$  (470.74). mp 190–192°C. **Source:** DUO SUI SHI KE YE *Lithocarpus polystachyus*. **Ref:** 6.

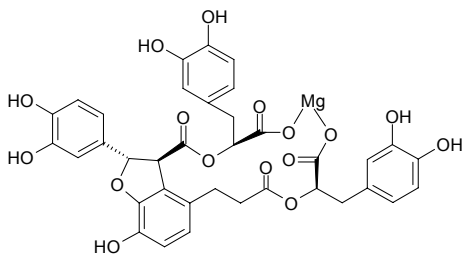


**12923 Lithocholic acid**

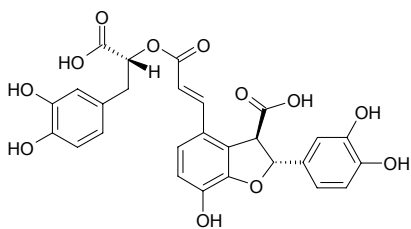
3 $\alpha$ -Hydroxy-5 $\beta$ -cholan-24-oic acid [434-13-9] C<sub>24</sub>H<sub>40</sub>O<sub>3</sub> (376.58). Prisms (EtOH aq.), mp 186°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +33.7° (c = 1.5, EtOH). Source: NIU HUANG *Bos taurus domesticus*; *Bubalus bubalis*. Ref: 2, 1521.

**12924 Lithospermate B**

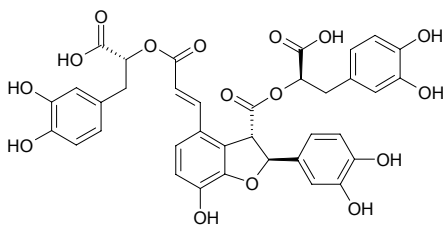
[122021-74-3] C<sub>36</sub>H<sub>30</sub>MgO<sub>16</sub> (742.94). [ $\alpha$ ]<sub>D</sub> = +130.9° (c = 0.1, 50% aqueous MeOH). Source: DAN SHEN *Salvia miltiorrhiza*. Ref: 724.

**12925 Lithospermic acid**

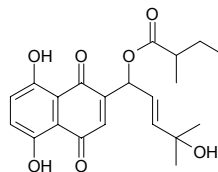
[28831-65-4] C<sub>27</sub>H<sub>22</sub>O<sub>12</sub> (538.47). Pharm: Antioxidant (*in vitro*, Cu<sup>2+</sup> induced LDL peroxidation assay, IC<sub>50</sub> = 1  $\mu$ mol/L; control Probuocol, IC<sub>50</sub> = 4.7  $\mu$ mol/L)<sup>[4628]</sup>; contraceptive. Source: BAI GUO ZI CAO *Lithospermum officinale*, FU JI NI YA DI SUN *Lycopus virginicus*, LAN JI *Echium vulgare*, LU BIAN ZI CAO *Lithospermum ruderales*, OU DI SUN *Lycopus europaeus*, YAO YONG NIU SHE CAO *Anchusa officinalis*, ZI DAN TENG *Tournefortia sarmentosa* (stem: yield = 0.625%)<sup>[4628]</sup>. Ref: 658, 4628.

**12926 Lithospermic acid B**

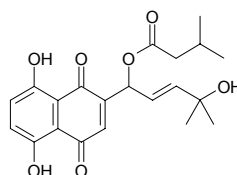
C<sub>36</sub>H<sub>30</sub>O<sub>16</sub> (718.63). Source: DAN SHEN *Salvia miltiorrhiza* (dried root: content = 2.87%)<sup>[5508]</sup>. Ref: 660, 5508.

**12927 Lithospermidin A**

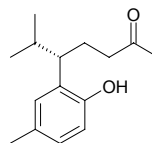
C<sub>21</sub>H<sub>24</sub>O<sub>7</sub> (388.42). Source: ZI CAO *Lithospermum erythrorhizon*. Ref: 2.

**12928 Lithospermidin B**

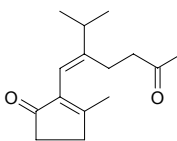
C<sub>21</sub>H<sub>24</sub>O<sub>7</sub> (388.42). Source: ZI CAO *Lithospermum erythrorhizon*. Ref: 2.

**12929 Litseachromolaevane A**

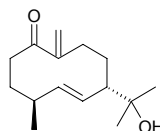
C<sub>15</sub>H<sub>22</sub>O<sub>2</sub> (234.34). Colorless gum, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +6.7° (c = 0.23, CHCl<sub>3</sub>). Pharm: Anti-HIV-1 inactive (*in vitro*, HOG.R5). Source: DIE DA LAO *Litsea verticillata* (leaf and twig: yield = 0.00012%dw). Ref: 4688.

**12930 Litseachromolaevane B**

C<sub>15</sub>H<sub>22</sub>O<sub>2</sub> (234.34). Colorless gum, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +0° (c = 0.05, CHCl<sub>3</sub>). Pharm: Anti-HIV-1 (HIV-1 replication inhibitor *in vitro*, HOG.R5, IC<sub>50</sub> = 28  $\mu$ g/mL (120  $\mu$ mol/L), cytotoxic, 20  $\mu$ g/mL, inactive). Source: DIE DA LAO *Litsea verticillata* (leaf and twig: yield = 0.00002%dw). Ref: 4688.

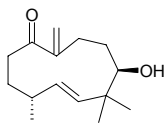
**12931 Litseagermacrane**

C<sub>15</sub>H<sub>24</sub>O<sub>2</sub> (236.36). Colorless gum, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +11.1° (c = 0.14, CHCl<sub>3</sub>). Pharm: Anti-HIV-1 (HIV-1 replication inhibitor *in vitro*, HOG.R5, IC<sub>50</sub> = 6.5  $\mu$ g/mL (27.5  $\mu$ mol/L), cytotoxic, CC<sub>50</sub> = 15.9  $\mu$ g/mL (63.4  $\mu$ mol/L)). Source: DIE DA LAO *Litsea verticillata* (leaf and twig: yield = 0.00008%dw). Ref: 4688.

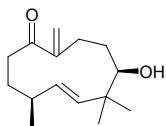


**12932 Litseahumulane A**

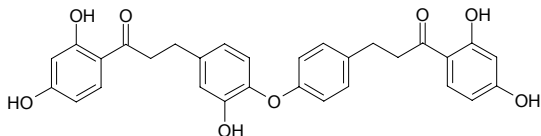
$C_{15}H_{24}O_2$  (236.36). Colorless gum,  $[\alpha]_D^{20} = -34.1^\circ$  ( $c = 0.09$ ,  $CHCl_3$ ). **Pharm:** Anti-HIV-1 inactive (*in vitro*, HOG.R5). **Source:** DIE DA LAO *Litsea verticillata* (leaf and twig; yield = 0.00003%dw). **Ref:** 4688.

**12933 Litseahumulane B**

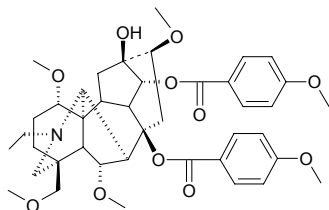
$C_{15}H_{24}O_2$  (236.36). Colorless gum,  $[\alpha]_D^{20} = -23.8^\circ$  ( $c = 0.02$ ,  $CHCl_3$ ). **Pharm:** Anti-HIV-1 inactive (*in vitro*, HOG.R5). **Source:** DIE DA LAO *Litsea verticillata* (leaf and twig; yield = 0.00002%dw). **Ref:** 4688.

**12934 Littoralchalcone**

2',4',3'',2''',4''-Pentahydroxy-4-O-4''-tetrahydrobichalcone  $C_{30}H_{26}O_8$  (514.54). Yellow powder (MeOH), mp 178–180°C. **Pharm:** Neurite outgrowth enhancer (PC12D cells, NGF-mediated neurite outgrowth, to enhance the ability of NGF, may be useful in the treatment of neurological disorders, such as Parkinson's disease (PD), Alzheimer's disease (AD), Huntington's disease (HD), amyotrophic lateral sclerosis (ALS), and hmn immunodeficiency virus associated dementia (HAD)). **Source:** HAI BIAN MA BIAN CAO *Verbena littoralis* (aerial parts). **Ref:** 4361.

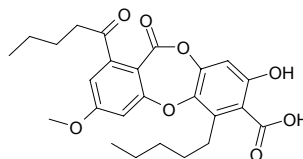
**12935 Liwaconitine**

$C_{41}H_{53}NO_{11}$  (735.88). **Source:** LI JIANG WU TOU *Aconitum forrestii* [Syn. *Aconitum likiangense*]. **Ref:** 660.

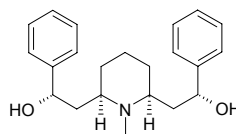
**12936 Lobaric acid**

$C_{25}H_{28}O_8$  (456.50). **Pharm:** 5-LOX inhibitor (porcine leucocytes, *in vitro*,  $IC_{50} = 7.3\mu\text{mol/L}$ , control Zileuton,  $IC_{50} = 0.4\mu\text{mol/L}$ , LOX has been implicated in carcinogenesis in various types); 12-LOX inhibitor (hmn platelet, *in vitro*); cytotoxic (acute promyelocytic leukemia (HL-60),  $EC_{50} = (52.1\pm 9.9)\mu\text{g/mL}$ , Zileuton,  $EC_{50} = (38.8\pm 12.3)\mu\text{g/mL}$ ; colorectal adenocarcinoma (WiDr),  $EC_{50} = (63.9\pm 2.2)\mu\text{g/mL}$ , Zileuton,  $EC_{50} > 80\mu\text{g/mL}$ ; erythro-leukemia (K562),  $EC_{50} = (19.7\pm 1.2)\mu\text{g/mL}$ , Zileuton,  $EC_{50} = (38.5\pm 5.4)\mu\text{g/mL}$ ; gastric adenocarcinoma (AGS),  $EC_{50} = (38.5\pm 2.7)\mu\text{g/mL}$ , Zileuton,  $EC_{50} = (70.5\pm 3.1)\mu\text{g/mL}$ ; mammary carcinoma (T47D),  $EC_{50} = (21.4\pm 9.8)\mu\text{g/mL}$ ,

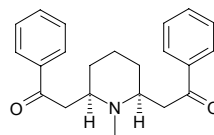
Zileuton,  $EC_{50} = (23.9\pm 4.1)\mu\text{g/mL}$ ; ovarian adenocarcinoma (OVCAR-3),  $EC_{50} = (36.7\pm 10.5)\mu\text{g/mL}$ , Zileuton,  $EC_{50} = (53.1\pm 7.7)\mu\text{g/mL}$ ; pancreas cancer (Capan1),  $EC_{50} = (15.2\pm 3.5)\mu\text{g/mL}$ , Zileuton,  $EC_{50} = (12.9\pm 11.7)\mu\text{g/mL}$ ; pancreas cancer (Capan2),  $EC_{50} = (34.4\pm 2.5)\mu\text{g/mL}$ , Zileuton,  $EC_{50} > 80\mu\text{g/mL}$ ; pancreas cancer (PANC1),  $EC_{50} = (35.9\pm 7.7)\mu\text{g/mL}$ , Zileuton,  $EC_{50} = (46.6\pm 5.4)\mu\text{g/mL}$ ; prostatic cancer PC3,  $EC_{50} = (28.0\pm 5.6)\mu\text{g/mL}$ , Zileuton,  $EC_{50} = (49.9\pm 9.0)\mu\text{g/mL}$ ; small cell lung cancer (NCI-H1417),  $EC_{50} = (27.5\pm 3.8)\mu\text{g/mL}$ , Zileuton,  $EC_{50} > 80\mu\text{g/mL}$ ; T-cell leukemia (Jurkat-T),  $EC_{50} = (35.5\pm 9.4)\mu\text{g/mL}$ , Zileuton,  $EC_{50} = (78.3\pm 5.0)\mu\text{g/mL}$ . **Source:** Lichen *Stereocaulon alpinum*. **Ref:** 4082.

**12937 Lobelanidine**

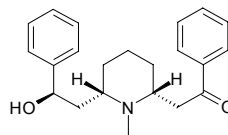
[552-72-7]  $C_{22}H_{29}NO_2$  (339.48). **Pharm:** Toxin. **Source:** BAN BIAN LIAN *Lobelia chinensis* [Syn. *Lobelia radicans*], BEI MEI ZHOU SHAN GENG CAI *Lobelia inflata*, HA SHI SHAN GENG CAI *Lobelia hassleri*, TAI JING TIAN *Sedum acre*, TONG BAN CAO *Isotoma longiflora* [Syn. *Laurentia longiflora*]. **Ref:** 2, 658.

**12938 Lobelanine**

[579-21-5]  $C_{22}H_{25}NO_2$  (335.45). **Source:** BAN BIAN LIAN *Lobelia chinensis* [Syn. *Lobelia radicans*]. **Ref:** 2, 1521.

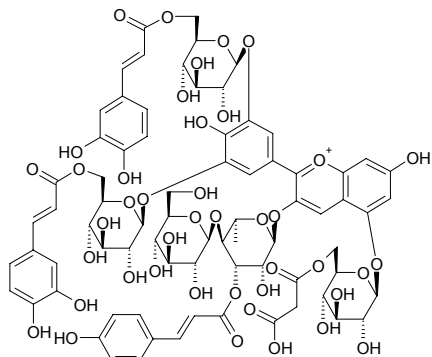
**12939 Lobeline**

Inflatine;  $\alpha$ -Lobeline [90-69-7]  $C_{22}H_{27}NO_2$  (337.47). Acicular crystals, mp 130–131°C,  $[\alpha]_D^{15} = -42.85^\circ$  (ethanol), slightly soluble in water, petroleum ether, soluble in hot ethanol, benzene, ether, chloroform.<sup>[5507]</sup> **Pharm:** Central stimulant (due to reflectivity, used in treatment of newborn asphyxia, toxicosis from opium, barbital, carbon monoxide, and respiratory failure induced by pneumonia and diphtheria). **Source:** BAN BIAN LIAN *Lobelia chinensis* [Syn. *Lobelia radicans*], BEI MEI ZHOU SHAN GENG CAI *Lobelia inflata* (in 1921, isolated from the plant for the first time<sup>[5507]</sup>), FENG LING CAO *Campanula medium*, HA SHI SHAN GENG CAI *Lobelia hassleri*, YAN CAO HUA SHAN GENG CAI *Lobelia nicotianaefolia*. **Ref:** 2, 4, 658, 5501, 5507.

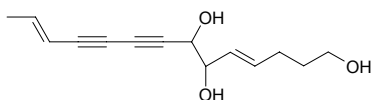


**12940 Lobelinin A**

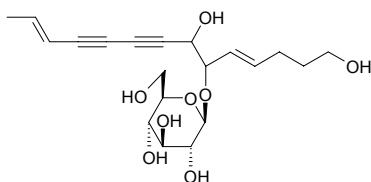
[127201-68-7]  $C_{75}H_{81}O_{42}^+$  (1654.46). Source: BAN BIAN LIAN *Lobelia chinensis* [Syn. *Lobelia radicans*]. Ref: 2, 1521.

**12941 Lobetyol**

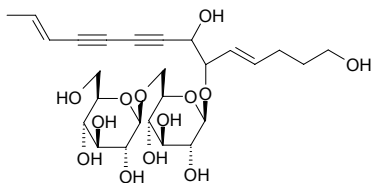
$C_{14}H_{18}O_3$  (234.30). Source: TONG CHUI YU DAI CAO *Pratia nummularia*. Ref: 3362.

**12942 Lobetyolin**

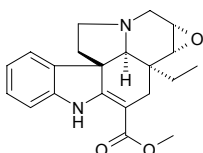
$C_{20}H_{28}O_8$  (396.44). Source: TONG CHUI YU DAI CAO *Pratia nummularia*. Ref: 3362.

**12943 Lobetyolinin**

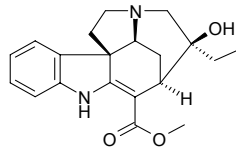
$C_{26}H_{38}O_{13}$  (558.58). Source: TONG CHUI YU DAI CAO *Pratia nummularia*. Ref: 3362.

**12944 Lochnericine**

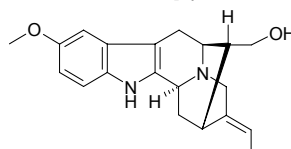
[72058-36-7]  $C_{21}H_{24}N_2O_3$  (352.44). mp 188~191°C,  $[\alpha]_D^{25} = +473^\circ$  ( $c = 0.37$ , EtOH). Pharm: Cytotoxic (KB, strong). Source: CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochera rosea*]. Ref: 2, 1521.

**12945 Lochneridine**

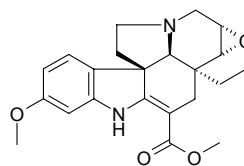
[5980-01-8]  $C_{20}H_{24}N_2O_3$  (340.43). Source: CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochera rosea*]. Ref: 2, 1521.

**12946 Lochnerine**

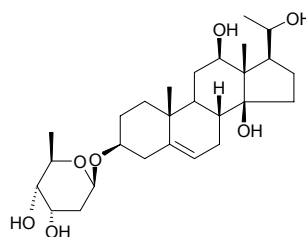
[482-68-8]  $C_{20}H_{24}N_2O_2$  (324.43). Source: CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochera rosea*]. Ref: 2, 1521.

**12947 Lochnerinine**

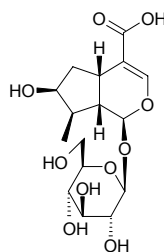
[22255-04-5]  $C_{22}H_{26}N_2O_4$  (382.46). Source: CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochera rosea*]. Ref: 2, 1521.

**12948 Locin**

[102071-99-8]  $C_{27}H_{44}O_7$  (480.65). mp 110~115°C,  $[\alpha]_D = +20^\circ$ . Source: QING SHE TENG *Periploca calophylla*. Ref: 2498.

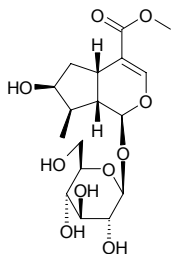
**12949 Loganic acid**

$C_{16}H_{24}O_{10}$  (376.36).  $[\alpha]_D^{21} = -72.7^\circ$  ( $c = 0.55$ , MeOH). Source: CU JING QIN JIAO *Gentiana crassicaulis* (root: mean content = 1.53%)<sup>[5534]</sup>, JI ZI MU *Sinoadina Racemosa* [Syn. *Adina racemosa*] (dried leaf, flower and twig: yield = 0.015%dw)<sup>[3014]</sup>, JIN YIN HUA *Lonicera japonica*, LIU QIU SHE GEN CAO *Ophiorrhiza liukiensis* (whole herb), LONG DAN *Gentiana scabra*, RI BEN SHUANG HU DIE *Tripterospermum japonicum*. Ref: 2, 638, 3014, 3533, 4527, 5534.

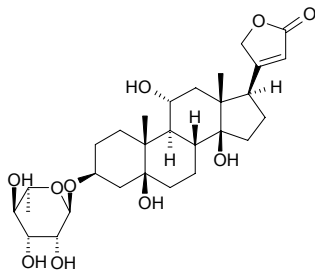


**12950 loganin**

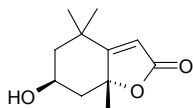
Loganin [18524-94-2]  $C_{17}H_{26}O_{10}$  (390.39). **Pharm:** Laxative. **Source:** BAI JIANG *Patrinia villosa*, CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochera rosea*], CHUAN XU DUAN *Dipsacus asperoides*, JI ZI MU *Sinoadina Racemosa* [Syn. *Adina racemosa*] (leaf, flower and twig: yield = 0.0157%dw)<sup>[4723]</sup>, JIN YIN HUA *Lonicera japonica*, LIU QIU SHE GEN CAO *Ophiorrhiza liukiensis* (whole herb), LV SONG GUO *Strychnos ignatii*, MA QIAN ZI *Strychnos nux-vomica*, SHAN ZHU YU *Cornus officinalis* [Syn. *Macrocarpium officinale*] (dried ripe fruit: mean content of 16 origins = 0.66%<sup>[5508]</sup>), SHUI CAI *Menyanthes trifoliata* (the compound was isolated from the plant by Battersby et al. in 1968)<sup>[5505]</sup>, WU SHI REN DONG *Lonicera quinquelocularis* (root), *Hydrangea* sp. **Ref:** 2, 638, 658, 660, 3926, 4527, 4723, 5505, 5508.

**12951 Lokundjoxide**

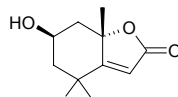
[6869-51-8]  $C_{29}H_{44}O_{10}$  (552.67). **Pharm:** Toxin (vertebrate). **Source:** YANG JIAO AO ZI *Strophanthus divaricatus*, *Strophanthus* sp. **Ref:** 658, 1521.

**12952 (6S,7aR)-Loliolide**

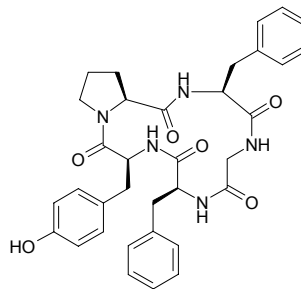
Digiprolactone  $C_{11}H_{16}O_3$  (196.25). mp 149°C. **Pharm:** Antineoplastic (inhibits EBV-EA induction strongly). **Source:** BAI MAO XIA KU CAO *Ajuga decumbens*, DA CHE QIAN *Plantago major* (leaf), KU LIAN PI *Melia azedarach*, MAO DI HUANG *Digitalis purpurea*, MAO HUA MAO DI HUANG *Digitalis lanata*, MI HUA MEI DENG MU *Maytenus confertiflorus*, QIAN QU CAI *Lythrum salicaria*, QUN DAI CAI *Undaria pinnatifida* (dried thallus: yield = 0.0014%<sup>[4602]</sup>), SHUI CAI *Menyanthes trifoliata*, XIANG RI KUI HUA *Helianthus annuus*, YA ZHI CAO *Commelina communis*, YAO YONG QIU GUO ZI JIN *Fumaria officinalis*, YIN XING CAO *Siphonostegia chinensis*. **Ref:** 6, 660, 693, 1521, 4602.

**12953 Loliolide isomer**

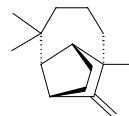
Anticancer Monoterpene PMV70P691-127  $C_{11}H_{16}O_3$  (196.25). **Pharm:** Cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells). **Source:** HUANG HUA REN *Sida acuta*. **Ref:** 5038.

**12954 Longicalycinin A**

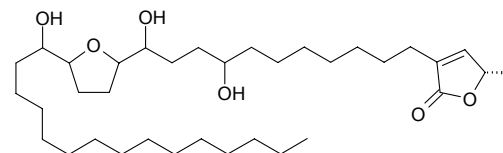
$C_{34}H_{37}N_5O_6$  (611.70). Pale-yellow powder,  $[\alpha]_D^{25} = -12^\circ$  ( $c = 0.01$ , MeCN). **Pharm:** Cytotoxic (hmn hepatocellular carcinoma HepG2 cancer cell line,  $IC_{50} = 13.52\mu\text{g/mL}$ ). **Source:** CHANG E QU MAI *Dianthus superbus* var. *longicalycinus*. **Ref:** 4450.

**12955 Longifolene**

[1S-(1 $\alpha$ ,3 $\beta$ ,4 $\alpha$ ,8 $\beta$ )]-Decahydro-9-methylene-4,8,8-trimethyl-1,4-methanoazulene [475-20-7]  $C_{15}H_{24}$  (204.36). **Source:** CHANG YE SONG *Pinus palustris*, CHAI HU *Bupleurum chinense*, WU WEI ZI *Schisandra chinensis*, *Pinus* sp. **Ref:** 2.

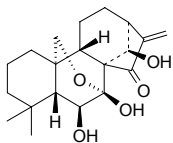
**12956 Longifolicin**

$C_{35}H_{64}O_6$  (580.9). Colorless oil,  $[\alpha]_D^{25} = +8.3^\circ$  ( $c = 0.12$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (*in vitro*, HepG2,  $IC_{50} = 0.000404\mu\text{g/mL}$ , Hep2,2,15,  $IC_{50} = 0.0049\mu\text{g/mL}$ ; control Adriamycin, HepG2,  $IC_{50} = 0.241\mu\text{g/mL}$ , Hep2,2,15,  $IC_{50} = 0.45\mu\text{g/mL}$ ). **Source:** CI GUO FAN LI ZHI *Annona muricata* (seed). **Ref:** 3067.

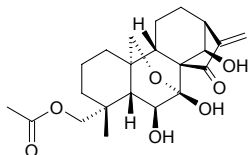


**12957 Longikaurin A**

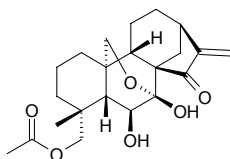
[75207-67-9] C<sub>20</sub>H<sub>28</sub>O<sub>5</sub> (348.44). mp 223~225°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -91.1° (*c* = 0.21, C<sub>5</sub>H<sub>5</sub>N). **Pharm:** Antibacterial (*Staphylococcus aureus*, MIC = 12.5µg/mL; *Bacillus coli*, MIC > 200µg/mL); cytotoxic (mammary cancer cells in rat, *in vitro*, 1µg/mL, InRt = 74%). **Source:** CHANG GUAN XIANG CHA CAI *Rabdosia longituba*. **Ref:** 5, 658, 4067.

**12958 Longikaurin B**

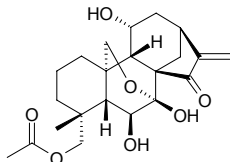
[75207-66-8] C<sub>22</sub>H<sub>30</sub>O<sub>7</sub> (406.48). mp 238~239.5°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -115.9° (*c* = 0.12, C<sub>5</sub>H<sub>5</sub>N). **Pharm:** Cytotoxic (K562, IC<sub>50</sub> = 0.30µg/mL, control Mitoxantrone, IC<sub>50</sub> = 0.29µg/mL; HL-60, IC<sub>50</sub> = 0.44µg/mL, Mitoxantrone, IC<sub>50</sub> = 0.29µg/mL; HCT, IC<sub>50</sub> = 8.61µg/mL, Mitoxantrone, IC<sub>50</sub> = 1.54µg/mL; MKN28, IC<sub>50</sub> = 0.46µg/mL, Mitoxantrone, IC<sub>50</sub> = 0.02µg/mL)<sup>[5182]</sup>; cytotoxic (rat mammary cancer cells *in vitro*); antibacterial (*Staphylococcus aureus*, MIC = 25µg/mL; *Bacillus coli*, MIC ≥ 200µg/mL). **Source:** CHANG GUAN XIANG CHA CAI *Rabdosia longituba*, HAN SHENG XIANG CHA CAI *Isodon xerophilus* (leaf). **Ref:** 5, 658, 4067, 5182.

**12959 Longikaurin C**

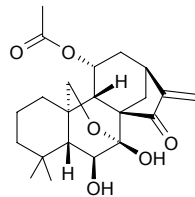
C<sub>22</sub>H<sub>30</sub>O<sub>6</sub> (390.48). mp 248~250°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -137.5° (*c* = 0.12, C<sub>5</sub>H<sub>5</sub>N). **Source:** CHANG GUAN XIANG CHA CAI *Rabdosia longituba*. **Ref:** 4067.

**12960 Longikaurin D**

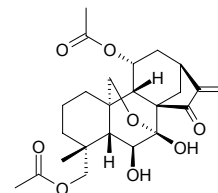
C<sub>22</sub>H<sub>30</sub>O<sub>7</sub> (406.48). mp 225~227°C, [ $\alpha$ ]<sub>D</sub><sup>19</sup> = -150.0°. **Source:** CHANG GUAN XIANG CHA CAI *Rabdosia longituba*. **Ref:** 4067.

**12961 Longikaurin E**

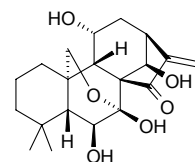
C<sub>22</sub>H<sub>30</sub>O<sub>6</sub> (390.48). mp 251~253°C, [ $\alpha$ ]<sub>D</sub><sup>19</sup> = -76° (CHCl<sub>3</sub>). **Source:** CHANG GUAN XIANG CHA CAI *Rabdosia longituba*. **Ref:** 4067.

**12962 Longikaurin F**

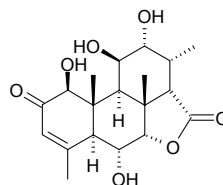
C<sub>24</sub>H<sub>32</sub>O<sub>8</sub> (448.52). mp 249~251°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -120.4° (*c* = 0.11, C<sub>5</sub>H<sub>5</sub>N). **Source:** CHANG GUAN XIANG CHA CAI *Rabdosia longituba*. **Ref:** 4067.

**12963 Longikaurin G**

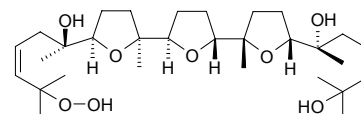
C<sub>20</sub>H<sub>28</sub>O<sub>6</sub> (364.44). mp 281~282°C, [ $\alpha$ ]<sub>D</sub><sup>22</sup> = -82.0° (*c* = 0.85, MeOH). **Source:** CHANG GUAN XIANG CHA CAI *Rabdosia longituba*. **Ref:** 4067.

**12964 Longilactone**

C<sub>19</sub>H<sub>26</sub>O<sub>7</sub> (366.41). **Pharm:** Cytotoxic (KB, IC<sub>50</sub> = 3.4µg/mL; P<sub>388</sub>, IC<sub>50</sub> = 1.3µg/mL; A549, remarkable activity)<sup>[4556]</sup>; plant growth inhibitor (Cucumber seedling, root growth, IC<sub>50</sub> = (66±10)µmol/L; shoot growth, IC<sub>50</sub> = (95.0±1.0)µmol/L; Rice seedling, root growth, IC<sub>50</sub> > 200µmol/L; shoot growth, IC<sub>50</sub> > 200µmol/L)<sup>[5215]</sup>. **Source:** CHANG YE KUAN MU *Eurycoma longifolia* (leaf), *Eurycoma* sp. **Ref:** 4556, 5215.

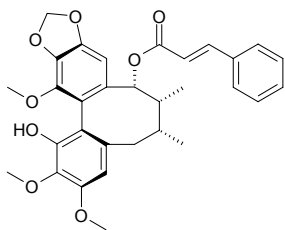
**12965 Longilene peroxide**

C<sub>30</sub>H<sub>52</sub>O<sub>8</sub> (540.74). **Source:** CHANG YE KUAN MU *Eurycoma longifolia*. **Ref:** 1521, 4556.

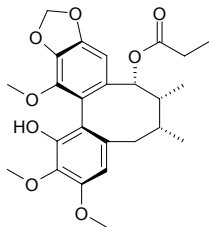


**12966 Longipedunin A**

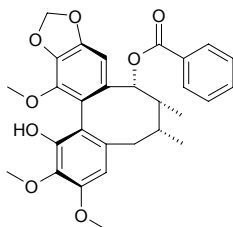
$C_{31}H_{32}O_8$  (532.60). Colorless prisms (MeOH); mp 176–178°C,  $[\alpha]_D = 52.2^\circ$  ( $c = 0.2$ , MeOH). **Pharm:** HIV-1 protease inhibitor (100mg/mL, InRt = (77.8±3.3)%),  $IC_{50} = 50\mu\text{g/mL}$ ; control Acetyl pepstatin, InRt = 100%,  $IC_{50} = 0.15\mu\text{g/mL}$ . **Source:** CHANG GENG NAN WU WEI ZI *Kadsura peltigera* [Syn. *Kadsura longipedunculata*] (stem and root: yield = 0.00023%dw). **Ref:** 918.

**12967 Longipedunin B**

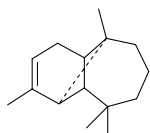
$C_{25}H_{30}O_8$  (458.51). Amorphous powder,  $[\alpha]_D = 8.3^\circ$  ( $c = 0.1$ , MeOH). **Pharm:** HIV-1 protease inhibitor (100mg/mL, InRt = (40.1±12.6)%),  $IC_{50} > 100\mu\text{g/mL}$ ; control Acetyl pepstatin, InRt = 100%,  $IC_{50} = 0.15\mu\text{g/mL}$ . **Source:** CHANG GENG NAN WU WEI ZI *Kadsura peltigera* [Syn. *Kadsura longipedunculata*] (stem and root: yield = 0.00005%dw). **Ref:** 918.

**12968 Longipedunin C**

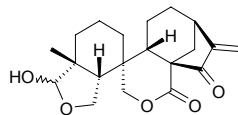
$C_{29}H_{30}O_8$  (506.56). Amorphous powder,  $[\alpha]_D = 25.4^\circ$  ( $c = 0.2$ , MeOH). **Pharm:** HIV-1 protease inhibitor (100mg/mL, InRt = (47.3±1.4)%),  $IC_{50} > 100\mu\text{g/mL}$ ; control Acetyl pepstatin, InRt = 100%,  $IC_{50} = 0.15\mu\text{g/mL}$ . **Source:** CHANG GENG NAN WU WEI ZI *Kadsura peltigera* [Syn. *Kadsura longipedunculata*] (stem and root: yield = 0.00008%dw). **Ref:** 918.

**12969  $\alpha$ -Longipinene**

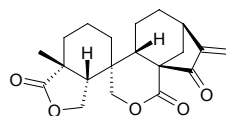
[5989-08-2]  $C_{15}H_{24}$  (204.36). **Source:** CHAI HU *Bupleurum chinense*, WU WEI ZI *Schisandra chinensis*. **Ref:** 2, 1521.

**12970 Longirabdacetal**

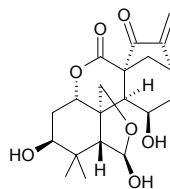
$C_{20}H_{26}O_5$  (346.43). mp 202–208°C,  $[\alpha]_D^{22.5} = -160.6^\circ$  ( $c = 1.23$ , MeOH). **Source:** CHANG GUAN XIANG CHA CAI *Rabdosia longituba*. **Ref:** 4067.

**12971 Longirabdolactone**

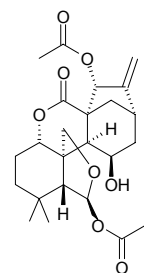
$C_{20}H_{24}O_5$  (344.41). mp 244–246°C,  $[\alpha]_D^{22} = -121.6^\circ$  ( $c = 0.51$ , MeOH). **Source:** CHANG GUAN XIANG CHA CAI *Rabdosia longituba*. **Ref:** 4067.

**12972 Longirabdolide C**

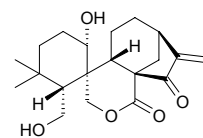
$C_{20}H_{26}O_7$  (378.43). mp 204–206°C,  $[\alpha]_D^{22} = -120.6^\circ$  ( $c = 0.80$ , MeOH). **Source:** CHANG GUAN XIANG CHA CAI *Rabdosia longituba*. **Ref:** 4067.

**12973 Longirabdolide D**

$C_{24}H_{32}O_8$  (448.52). mp 257–260°C,  $[\alpha]_D^{22} = -156.3^\circ$  ( $c = 0.45$ ,  $CHCl_3$ ). **Source:** CHANG GUAN XIANG CHA CAI *Rabdosia longituba*. **Ref:** 4067.

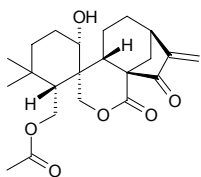
**12974 Longirabdolide E**

$C_{20}H_{28}O_5$  (348.44). mp 258–260°C,  $[\alpha]_D^{21} = +24.8^\circ$  ( $c = 1.02$ ,  $C_5H_5N$ ). **Source:** CHANG GUAN XIANG CHA CAI *Rabdosia longituba*. **Ref:** 4067.

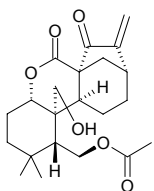


**12975 Longirabdolide F**

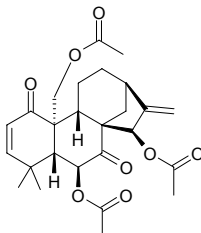
$C_{22}H_{30}O_6$  (390.48). Source: CHANG GUAN XIANG CHA CAI *Rabdosia longituba*. Ref: 4067.

**12976 Longirabdolide G**

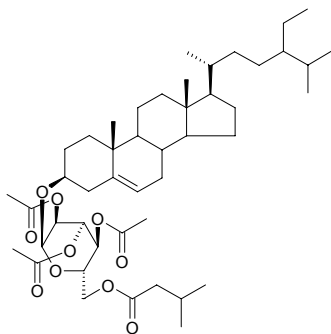
$C_{22}H_{30}O_6$  (390.48). Source: CHANG GUAN XIANG CHA CAI *Rabdosia longituba*. Ref: 4067.

**12977 Longirabdosin**

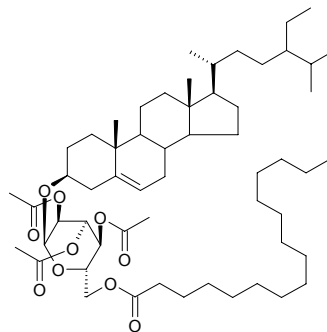
$C_{26}H_{32}O_8$  (472.54).  $[\alpha]_D = -150^\circ$  (MeOH). Source: CHANG GUAN XIANG CHA CAI *Rabdosia longituba*. Ref: 4067.

**12978 Longiside A**

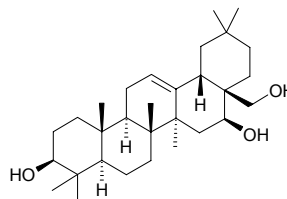
$C_{46}H_{74}O_{10}$  (787.10).  $[\alpha]_D = +79.90^\circ$  ( $c = 0.082$ , chloroform). Source: OU BO HE *Mentha longifolia*. Ref: 2012.

**12979 Longiside B**

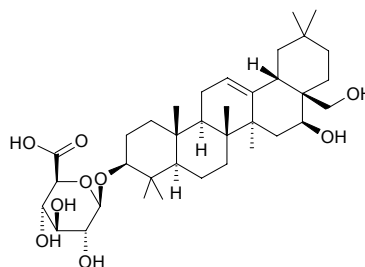
$C_{57}H_{96}O_{10}$  (941.39).  $[\alpha]_D = +61.9^\circ$  ( $c = 0.069$ , chloroform). Source: OU BO HE *Mentha longifolia*. Ref: 2012.

**12980 Longispinogenin**

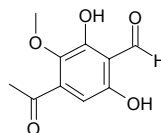
[465-94-1]  $C_{30}H_{50}O_3$  (458.73). Crystals (Me<sub>2</sub>CO), mp 247~249°C,  $[\alpha]_D^{25} = +51^\circ$  (CHCl<sub>3</sub>). Source: CHAI HU *Bupleurum chinense*, JIN ZHAN JU *Calendula officinalis*. Ref: 2, 1521.

**12981 Longispinogenin 3-O-β-D-glucuronopyranoside**

$C_{36}H_{58}O_9$  (634.86). Amorphous powder, mp 198~202°C,  $[\alpha]_D^{20} = 16^\circ$  ( $c = 0.1$ , MeOH). Source: CHI GENG TENG *Gymnema sylvestre*. Ref: 766.

**12982 Longissiminone A**

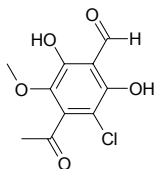
$C_{10}H_{10}O_5$  (210.19). White amorphous solid, mp 132°C. Pharm: Anti-inflammatory (modified assay of Tan and Berridge, 400μg/mL, InRt = 72.13%, IC<sub>50</sub> = (165.1±0.8)μg/mL; control Aspirin, InRt = 70.45%, IC<sub>50</sub> = (50.30±4.42)μg/mL); cell viability (hmn isolated neutrophils, 12.5μg/mL, cell viability = 89.68%, 50μg/mL, cell viability = 90.05%, 100μg/mL, cell viability = 52.91%). Source: SONG LUO *Usnea longissima*. Ref: 5316.



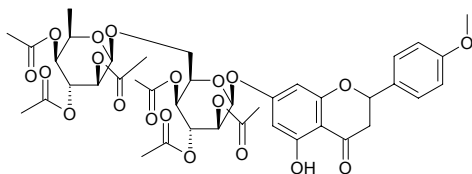


**12983 Longissiminone B**

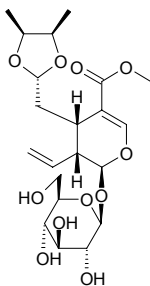
$C_{10}H_9ClO_5$  (244.63). White amorphous material, mp 113°C. **Pharm:** Anti-inflammatory (modified assay of Tan and Berridge, 400 $\mu$ g/mL, InRt = 34.34%, control Aspirin, InRt = 70.45%); cell viability (hmn isolated neutrophils, 12.5 $\mu$ g/mL, cell viability = 78.81%, 50 $\mu$ g/mL, cell viability = 100%, 200 $\mu$ g/mL, cell viability = 68.85%). **Source:** SONG LUO *Usnea longissima*. **Ref:** 5316.

**12984 Longitin**

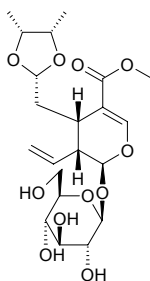
$C_{40}H_{46}O_{20}$  (846.80).  $[\alpha]_D^{20} = +81^\circ$  ( $c = 0.071$ , chloroform). **Source:** OU BO HE *Mentha longifolia*. **Ref:** 2012.

**12985 Loniceracetalide A**

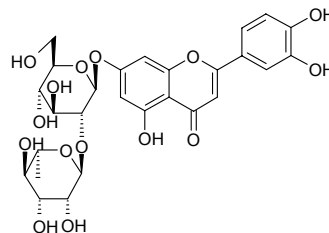
$C_{21}H_{32}O_{11}$  (460.48). Amorphous powder,  $[\alpha]_D^{20} = -106^\circ$  ( $c = 0.1$ , MeOH). **Source:** JIN YIN HUA *Lonicera japonica*. **Ref:** 747.

**12986 Loniceracetalide B**

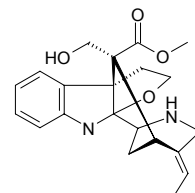
$C_{21}H_{32}O_{11}$  (460.48). Amorphous powder,  $[\alpha]_D^{20} = -115^\circ$  ( $c = 0.3$ , MeOH). **Source:** JIN YIN HUA *Lonicera japonica*. **Ref:** 747.

**12987 Lonicerin**

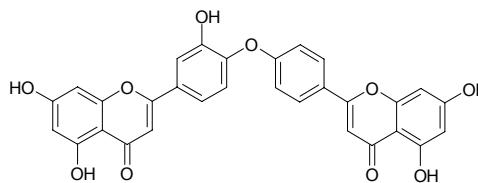
Luteolin-7-O- $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranoside [25694-72-8]  $C_{27}H_{30}O_{15}$  (594.53). Crystals (MeOH), mp 249~251°C. **Pharm:** Xanthinioxidase inhibitor (50 $\mu$ g/mL, InRt = 20.1%); aldose reductase inhibitor (rat eye lens, 10 $\mu$ mol/L InRt = 91.5%, 1 $\mu$ mol/L InRt = 55.6%); anti-inflammatory (activity matches with aspirin). **Source:** JIN YIN HUA *Lonicera japonica*, ZHAN LONG JIAN *Veronicastrum sibiricum*, ZHI SHI *Citrus aurantium*, JU HUA *Chrysanthemum morifolium* [Syn. *Dendranthema morifolium*], REN DONG TENG *Lonicera japonica*, SHUI MU XUE LIAN HUA *Saussurea medusa*, XIANG MAO *Cymbopogon citratus*. **Ref:** 2, 660, 1632, 1631, 1671.

**12988 Lonicerine**

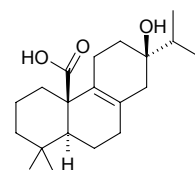
$C_{21}H_{26}N_2O_4$  (370.45). **Source:** HONG HUA RUI MU *Kopsia fruticosa* (leaf). **Ref:** 3830.

**12989 Loniflavone**

5,5',7,7',3'-Pentahydroxy 4',4''-biflavonyl ether  $C_{30}H_{18}O_{10}$  (538.47). Yellowish powder, mp 212~214°C. **Source:** JIN YIN HUA *Lonicera japonica* (leaf). **Ref:** 5335.

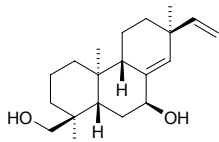
**12990 Lophanic acid**

$C_{20}H_{32}O_3$  (320.48). mp 163.0~165.0°C,  $[\alpha]_D^{22} = +260.26^\circ$  ( $c = 0.54$ , MeOH). **Source:** XIAN WEN XIANG CHA CAI *Isodon lophanthoides*. **Ref:** 4067.

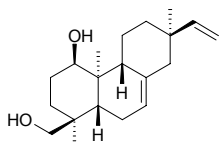


**12991 Lophanthin A**

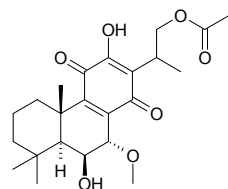
$C_{20}H_{32}O_2$  (304.48). mp 79~81°C,  $[\alpha]_D = -4.1^\circ$  ( $c = 0.98$ ,  $C_5H_5N$ ). Source: XIA JI XIAN WEN XIANG CHA CAI *Isodon lophanthoides* var. *gerardiana*. Ref: 4067.

**12992 Lophanthin B**

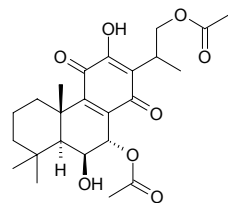
$C_{20}H_{32}O_2$  (304.48). mp 174~176°C,  $[\alpha]_D = -37.5^\circ$  ( $c = 0.8$ ,  $C_5H_5N$ ). Source: XIA JI XIAN WEN XIANG CHA CAI *Isodon lophanthoides* var. *gerardiana*. Ref: 4067.

**12993 Lophanthoidin A**

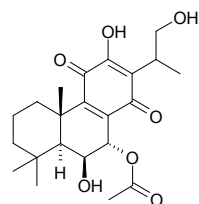
$C_{23}H_{32}O_7$  (420.51). mp 198~202°C. Source: XI HUA XIAN WEN XIANG CHA CAI *Isodon lophanthoides* [Syn. *Rabdosia lophanthoides*; *Hyssopus lophanthoides*; *Plectranthus striatus*; *Isodon striatus*]. Ref: 660, 4067.

**12994 Lophanthoidin B**

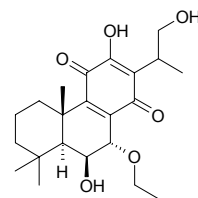
$C_{24}H_{32}O_8$  (448.52). mp 138~139°C. Source: XI HUA XIAN WEN XIANG CHA CAI *Isodon lophanthoides* [Syn. *Rabdosia lophanthoides*; *Hyssopus lophanthoides*; *Plectranthus striatus*; *Isodon striatus*]. Ref: 660, 4067.

**12995 Lophanthoidin C**

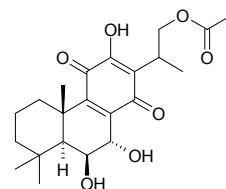
$C_{22}H_{30}O_7$  (406.48). mp 167~169.5°C. Source: XI HUA XIAN WEN XIANG CHA CAI *Isodon lophanthoides* [Syn. *Rabdosia lophanthoides*; *Hyssopus lophanthoides*; *Plectranthus striatus*; *Isodon striatus*]. Ref: 660, 4067.

**12996 Lophanthoidin D**

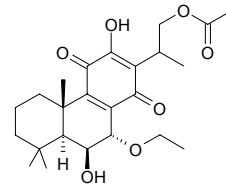
$C_{22}H_{32}O_6$  (392.50). mp 205~210°C. Source: XI HUA XIAN WEN XIANG CHA CAI *Isodon lophanthoides* [Syn. *Rabdosia lophanthoides*; *Hyssopus lophanthoides*; *Plectranthus striatus*; *Isodon striatus*]. Ref: 660, 4067.

**12997 Lophanthoidin E**

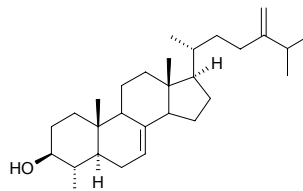
$C_{22}H_{30}O_7$  (406.48). mp 152.5~154°C. Source: XI HUA XIAN WEN XIANG CHA CAI *Isodon lophanthoides* [Syn. *Rabdosia lophanthoides*; *Hyssopus lophanthoides*; *Plectranthus striatus*; *Isodon striatus*]. Ref: 660, 4067.

**12998 Lophanthoidin F**

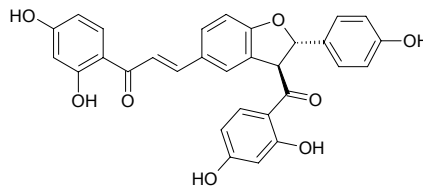
6 $\beta$ -Hydroxy-7- $\alpha$ -ethoxy-16-acetoxy royleanone  $C_{24}H_{34}O_7$  (434.53). Yellow crystals, mp 184~185°C. Source: XI HUA XIAN WEN XIANG CHA CAI *Isodon lophanthoides* [Syn. *Rabdosia lophanthoides*; *Hyssopus lophanthoides*; *Plectranthus striatus*; *Isodon striatus*]. Ref: 646, 660, 4067.

**12999 24-Lophenolmethylene**

$C_{29}H_{48}O$  (412.71). Source: DUO ZU JUE *Polypodium vulgare*. Ref: 660.

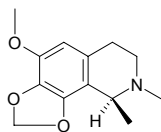
**13000 Lophirone C**

$C_{30}H_{22}O_8$  (510.51). Yellow crystals, mp 190~191°C ( $Me_2CO$ ), mp 191~193°C,  $[\alpha]_D^{25} = -16.4^\circ$  ( $c = 0.5$ ,  $Me_2CO$ ). Source: *Ochna afzelii* (stem cortex). Ref: 5153.

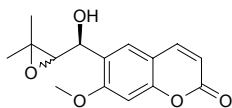


**13001 Lophophorine**

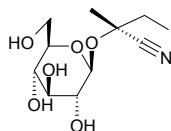
[17627-78-0] C<sub>13</sub>H<sub>17</sub>NO<sub>3</sub> (235.29). Oil, bp 140~145°C/0.05mmHg, [α]<sub>D</sub><sup>25</sup> = -47.3° (CHCl<sub>3</sub>). **Pharm:** Eclamptogenic; respiratory stimulant; LD<sub>50</sub> (rbt, iv) = 15~20mg/kg. **Source:** AN LU LONG SHE LAN *Lophophora williamsii*. **Ref:** 658.

**13002 Lophoptrol**

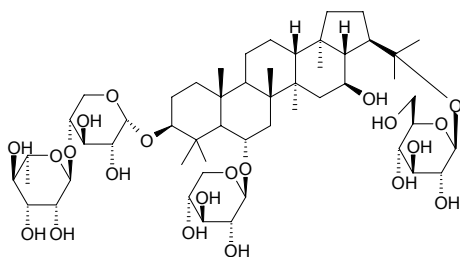
C<sub>15</sub>H<sub>16</sub>O<sub>5</sub> (276.29). **Pharm:** Antineoplastic (Raji cells, antitumor promotor, *in vivo*, inhibits TPA-induced EBV-EA activation, compound concentration = 500mol ratio/32 pmol TPA: EBV-EA-positive cells = (17.9±2.1)% (viability > 80%), β-Carotene, EBV-EA-positive cells = (34.3±1.1)% (viability > 80%), Curcumin, EBV-EA-positive cells = (22.8±1.8)% (viability > 80%), compound IC<sub>50</sub> = 205mol ratio/32 pmol TPA, β-Carotene, IC<sub>50</sub> = 400mol ratio/32 pmol TPA, Curcumin, IC<sub>50</sub> = 341mol ratio/32 pmol TPA). **Source:** PU TAO YOU DA HONG JU ZA JIAO ZHONG *Citrus paradisi* x *Citrus tangerina*. **Ref:** 5048.

**13003 Lotaustralin**

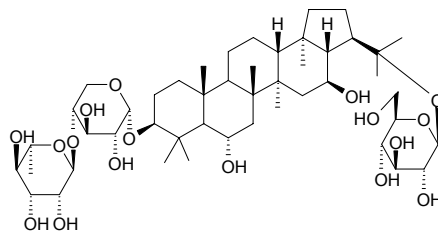
[534-67-8] C<sub>11</sub>H<sub>19</sub>NO<sub>6</sub> (261.28). mp 121°C. **Pharm:** Similar action with linamarin. **Source:** AO ZHOU BAI MAI GEN *Lotus australis*, DAN LI XIAO MAI *Triticum monococcum*, SAN XIAO CAO *Trifolium repens*, XIA YE HONG JING TIAN *Rhodiola kirilowii*, YA MA *Linum usitatissimum*, *Passiflora* sp., *Triticum* sp. **Ref:** 516, 658.

**13004 Lotoideside A**

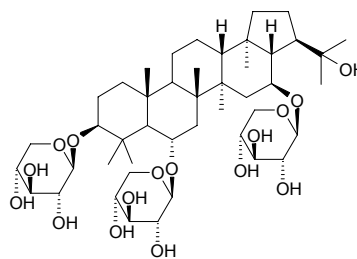
3-*O*-β-*D*-Xylopyranosyl (1→2)-α-*L*-rhamnopyranosyl-6α-*O*-β-*D*-xylopyranosyl-22-*O*-β-*D*-glucopyranosyl-16β-hydroxy hopane C<sub>52</sub>H<sub>88</sub>O<sub>21</sub> (1049.27). White amorphous solid, [α]<sub>D</sub><sup>27.6</sup> = -7.5° (c = 3.9, MeOH). **Source:** XING SU CAO *Glinus lotoides* [Syn. *Mollugo lotoides*] (whole herb). **Ref:** 5258.

**13005 Lotoideside B**

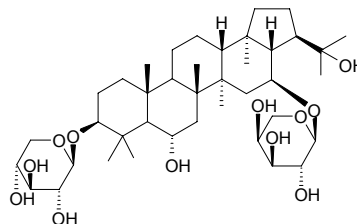
3-*O*-β-*D*-Xylopyranosyl (1→2)-α-*L*-rhamnopyranosyl-22β-*O*-β-*D*-glucopyranosyl-6α,16β-dihydroxyhopane C<sub>47</sub>H<sub>80</sub>O<sub>17</sub> (917.15). White amorphous solid, [α]<sub>D</sub><sup>27.6</sup> = -10.4° (c = 1.18, MeOH). **Source:** XING SU CAO *Glinus lotoides* [Syn. *Mollugo lotoides*] (whole herb). **Ref:** 5258.

**13006 Lotoideside C**

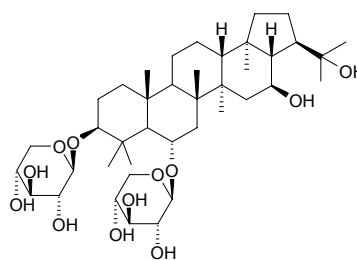
3-*O*-β-*D*-Xylopyranosyl-6α-*O*-β-*D*-xylopyranosyl-16β-*O*-β-*D*-xylopyranosyl-22β-hydroxyhopane C<sub>45</sub>H<sub>76</sub>O<sub>16</sub> (873.10). White crystalline solid, mp 240°C, [α]<sub>D</sub><sup>27.6</sup> = +6.4° (c = 1.00, pyridine). **Source:** XING SU CAO *Glinus lotoides* [Syn. *Mollugo lotoides*] (whole herb). **Ref:** 5258.

**13007 Lotoideside D**

3-*O*-β-*D*-Xylopyranosyl-16β-*O*-α-*L*-arabinopyranosyl-6α,22β-dihydroxyhopane C<sub>40</sub>H<sub>68</sub>O<sub>12</sub> (740.98). White crystalline solid, mp 222~223°C, [α]<sub>D</sub><sup>27.6</sup> = +15.5° (c = 1.42, MeOH). **Source:** XING SU CAO *Glinus lotoides* [Syn. *Mollugo lotoides*] (whole herb). **Ref:** 5258.

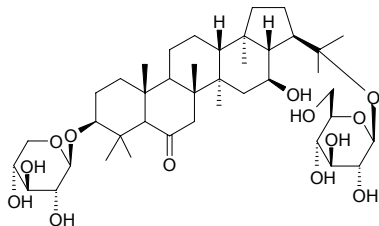
**13008 Lotoideside E**

3-*O*-β-*D*-Xylopyranosyl-6α-*O*-β-*D*-xylopyranosyl-16β,22β-dihydroxyhopane C<sub>40</sub>H<sub>68</sub>O<sub>12</sub> (740.98). White crystalline solid, mp 225~226°C, [α]<sub>D</sub><sup>27.6</sup> = +17.5° (c = 0.73, MeOH). **Source:** XING SU CAO *Glinus lotoides* [Syn. *Mollugo lotoides*] (whole herb). **Ref:** 5258.

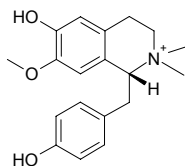


**13009 Lotoideside F**

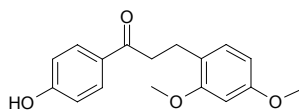
3-*O*- $\beta$ -*D*-Xylopyranosyl-22 $\beta$ -*O*- $\beta$ -*D*-glucopyranosyl-16 $\beta$ -hydroxyhopan-6-one C<sub>41</sub>H<sub>68</sub>O<sub>13</sub> (768.99). White crystalline solid, mp 205~206°C,  $[\alpha]_D^{27.6} = -22.3^\circ$  ( $c = 1.19$ , pyridine). Source: XING SU CAO *Glinus lotoides* [Syn. *Mollugo lotoides*] (whole herb). Ref: 5258.

**13010 Lotusine**

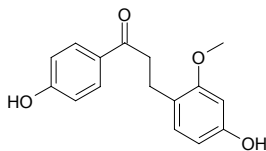
[6871-67-6] C<sub>19</sub>H<sub>24</sub>NO<sub>3</sub> (314.41). Source: LIAN ZI XIN *Nelumbo nucifera*. Ref: 6.

**13011 Loureirin A**

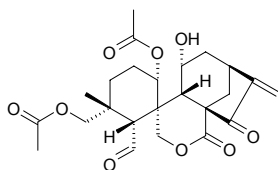
[119425-89-7] C<sub>17</sub>H<sub>18</sub>O<sub>4</sub> (286.33). Yellow rhombus crystals (chloroform-methanol), mp 124°C,  $[\alpha]_D^{21} = 0^\circ$  ( $c = 0.082$ , ethanol). Pharm: Antifungal. Source: JIAN YE LONG XUE SHU *Dracaena cochinchinensis*. Ref: 904, 1046.

**13012 Loureirin C**

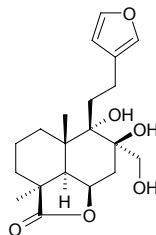
C<sub>16</sub>H<sub>16</sub>O<sub>4</sub> (272.30). Source: LONG XUE SHU *Dracaena draco* (stem cortex). Ref: 4696.

**13013 Loxothyrisin A**

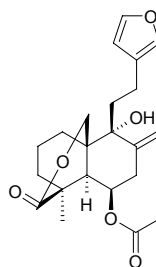
C<sub>24</sub>H<sub>30</sub>O<sub>9</sub> (462.50). mp 242~244°C,  $[\alpha]_D = -76.3^\circ$  ( $c = 0.05$ , MeOH). Source: WAN ZHUI XIANG CHA CAI *Isodon loxothyrsa*. Ref: 4067.

**13014 LS-1(furanoditerpenolactone)**

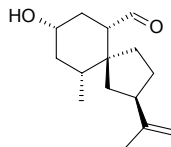
C<sub>20</sub>H<sub>28</sub>O<sub>6</sub> (364.44). Amorphous,  $[\alpha]_D^{20} = +22.0^\circ$  ( $c = 0.6$ , MeOH). Pharm: Cytotoxic (leukemia cells L<sub>1210</sub> in tissue culture, IC<sub>50</sub> = 50~60μg/mL). Source: XI YE YI MU CAO *Leonurus sibiricus* (aerial parts). Ref: 4328.

**13015 LS-2(furanoditerpenolactone)**

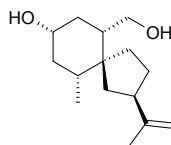
C<sub>22</sub>H<sub>28</sub>O<sub>6</sub> (388.46). Amorphous,  $[\alpha]_D^{20} = +18.0^\circ$  ( $c = 0.5$ , MeOH). Pharm: Cytotoxic (leukemia cells L<sub>1210</sub> in tissue culture, IC<sub>50</sub> = 50~60μg/mL). Source: XI YE YI MU CAO *Leonurus sibiricus* (aerial parts). Ref: 4328.

**13016 Lubimin**

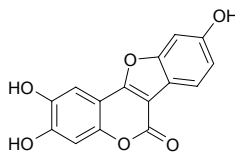
[35951-50-9] C<sub>15</sub>H<sub>24</sub>O<sub>2</sub> (236.36). Pharm: Antifungal. Source: MA LING SHU *Solanum tuberosum*, QIE ZI *Solanum melongena*. Ref: 658.

**13017 Lubiminol**

C<sub>15</sub>H<sub>26</sub>O<sub>2</sub> (238.37). Source: HONG HAI JIAO *Capsicum annuum* (stem and root: yield = 0.0003%dw). Ref: 4779.

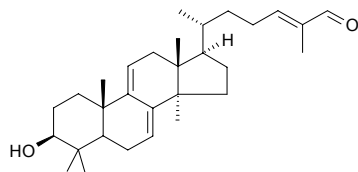
**13018 Lucernol**

[15402-22-9] C<sub>15</sub>H<sub>8</sub>O<sub>6</sub> (284.23). mp > 350°C. Source: MU XU *Medicago sativa*. Ref: 6, 1521.

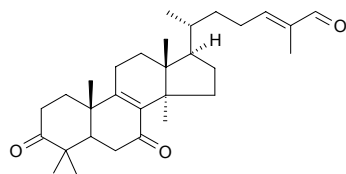


**13019 Lucialdehyde A**

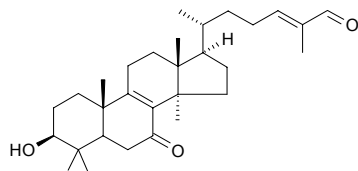
(24E)-3 $\beta$ -Hydroxy-5 $\alpha$ -lanosta-7,9(11),24-trien-26-al C<sub>31</sub>H<sub>46</sub>O<sub>2</sub> (438.70). Amorphous powder (MeOH-H<sub>2</sub>O), [ $\alpha$ ]<sub>D</sub> = +32° (c = 0.097, CHCl<sub>3</sub>). **Pharm:** Cytotoxic (mus lung carcinoma LLC cell, ED<sub>50</sub> > 20 $\mu$ g/mL; hmn carcinoma T-47D, ED<sub>50</sub> > 20 $\mu$ g/mL; mus sarcoma S<sub>180</sub>, ED<sub>50</sub> > 20 $\mu$ g/mL; mus sarcoma Meth-A, ED<sub>50</sub> = 10.4 $\mu$ g/mL; control Adriamycin, ED<sub>50</sub> = 0.06 $\mu$ g/mL, 0.02 $\mu$ g/mL, 0.11 $\mu$ g/mL, 0.13 $\mu$ g/mL, respectively). **Source:** LING ZHI *Ganoderma lucidum*. **Ref:** 4204.

**13020 Lucialdehyde B**

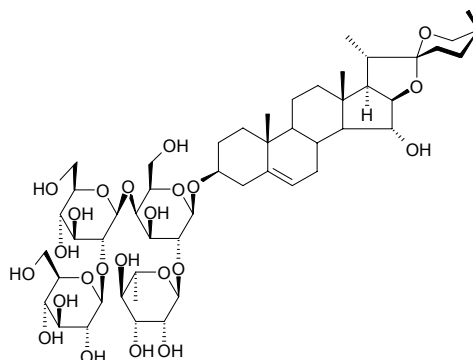
(24E)-3,7-Dioxo-5 $\alpha$ -lanosta-8,24-dien-26-al C<sub>30</sub>H<sub>44</sub>O<sub>3</sub> (452.68). Amorphous powder (MeOH-H<sub>2</sub>O), [ $\alpha$ ]<sub>D</sub> = +31° (c = 0.105, CHCl<sub>3</sub>). **Pharm:** Cytotoxic (mus lung carcinoma LLC cell, ED<sub>50</sub> = 14.3 $\mu$ g/mL; hmn breast carcinoma T47D, ED<sub>50</sub> = 15.0 $\mu$ g/mL; mus sarcoma S<sub>180</sub>, ED<sub>50</sub> > 20 $\mu$ g/mL; mus sarcoma Meth-A, ED<sub>50</sub> = 4.0 $\mu$ g/mL; control Adriamycin, ED<sub>50</sub> = 0.06 $\mu$ g/mL, 0.02 $\mu$ g/mL, 0.11 $\mu$ g/mL, 0.13 $\mu$ g/mL, respectively). **Source:** LING ZHI *Ganoderma lucidum*. **Ref:** 4204.

**13021 Lucialdehyde C**

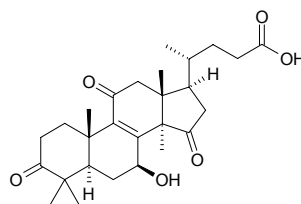
(24E)-3 $\beta$ -Hydroxy-7-oxo-5 $\alpha$ -lanosta-8,24-dien-26-al C<sub>30</sub>H<sub>46</sub>O<sub>3</sub> (454.70). Amorphous powder (MeOH-H<sub>2</sub>O), [ $\alpha$ ]<sub>D</sub> = +18° (c = 0.092, CHCl<sub>3</sub>). **Pharm:** Cytotoxic (mus lung carcinoma LLC cell, ED<sub>50</sub> = 10.7 $\mu$ g/mL; hmn breast carcinoma T47D, ED<sub>50</sub> = 4.7 $\mu$ g/mL; mus sarcoma S<sub>180</sub>, ED<sub>50</sub> = 7.1 $\mu$ g/mL; mus sarcoma Meth-A, ED<sub>50</sub> = 3.8 $\mu$ g/mL; control Adriamycin, ED<sub>50</sub> = 0.06 $\mu$ g/mL, 0.02 $\mu$ g/mL, 0.11 $\mu$ g/mL, 0.13 $\mu$ g/mL, respectively). **Source:** LING ZHI *Ganoderma lucidum*. **Ref:** 4204.

**13022 Luciamin**

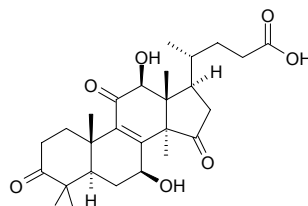
(22*R*,25*S*)-Spirost-5-en-3 $\beta$ ,15 $\alpha$ -diol 3-*O*-[ $\beta$ -*D*-glucopyranosyl (1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)-[ $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -*D*-galactopyranoside) C<sub>51</sub>H<sub>82</sub>O<sub>23</sub> (1063.21). Pale yellow powder, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -65° (c = 0.3, MeOH). **Pharm:** Insecticidal (aphid *Schizaphis graminum*). **Source:** XI SHU QIE *Solanum laxum* (aerial parts). **Ref:** 5086.

**13023 Lucidenic acid A**

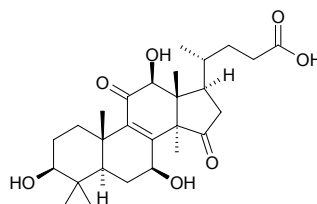
C<sub>27</sub>H<sub>38</sub>O<sub>6</sub> (458.60). **Pharm:** Cytotoxic (*in vitro*, HepG2, IC<sub>50</sub> = 0.164nmol/L; Hep2,2,15, IC<sub>50</sub> = 0.205nmol/L; KB, IC<sub>50</sub> = 17 $\mu$ mol/L; CCM2, IC<sub>50</sub> = 27.5 $\mu$ mol/L; P<sub>388</sub>, IC<sub>50</sub> = 0.017 $\mu$ mol/L)<sup>[3081]</sup>; EBV-EA activation inhibitor (Raji cells, *in vitro*, TPA-induced, IC<sub>50</sub> = 280mol ratio/32pmol TPA, control  $\beta$ -Carotene, IC<sub>50</sub> = 400mol ratio/32pmol TPA)<sup>[4737]</sup>. **Source:** LING ZHI *Ganoderma lucidum* (dried sporocarp: mean content of 2 origins = 0.06%<sup>[5508]</sup>). **Ref:** 660, 3081, 4737, 5508.

**13024 Lucidenic acid B**

C<sub>27</sub>H<sub>38</sub>O<sub>7</sub> (474.60). **Source:** LING ZHI *Ganoderma lucidum*. **Ref:** 660.

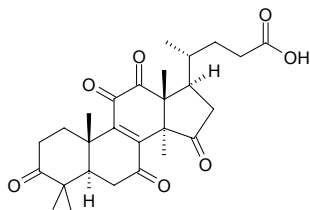
**13025 Lucidenic acid C**

C<sub>27</sub>H<sub>40</sub>O<sub>7</sub> (476.62). **Pharm:** EBV-EA activation inhibitor (Raji cells, *in vitro*, TPA-induced, IC<sub>50</sub> = 284mol ratio/32pmol TPA, control  $\beta$ -Carotene, IC<sub>50</sub> = 400mol ratio/32pmol TPA)<sup>[4737]</sup>. **Source:** LING ZHI *Ganoderma lucidum* (dried sporocarp: yield = 0.011%dw). **Ref:** 660, 3081, 4737.

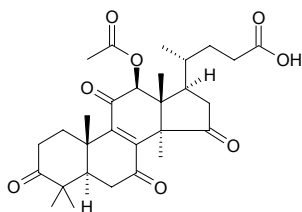


**13026 Lucidenic acid D<sub>1</sub>**

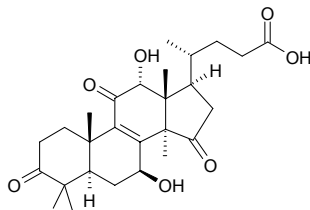
$C_{27}H_{34}O_7$  (470.57). Source: LING ZHI *Ganoderma lucidum*. Ref: 660.

**13027 Lucidenic acid D<sub>2</sub>**

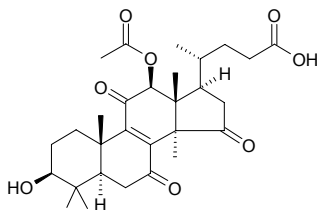
Lucidenic acid D  $C_{29}H_{38}O_8$  (514.62). Pharm: EBV-EA activation inhibitor (Raji cells, *in vitro*, TPA-induced,  $IC_{50}$  = 287mol ratio/32pmol TPA, control  $\beta$ -Carotene,  $IC_{50}$  = 400mol ratio/32pmol TPA)<sup>[4737]</sup>. Source: LING ZHI *Ganoderma lucidum* (dried sporocarp: yield = 0.054%dw). Ref: 660, 4737.

**13028 Lucidenic acid E<sub>1</sub>**

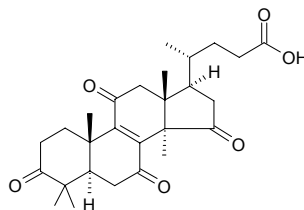
$C_{27}H_{38}O_7$  (474.60). Source: LING ZHI *Ganoderma lucidum*. Ref: 660.

**13029 Lucidenic acid E<sub>2</sub>**

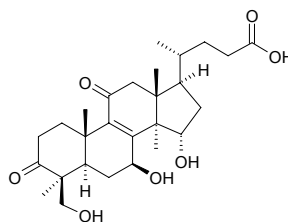
$C_{29}H_{40}O_8$  (516.64). Pharm: EBV-EA activation inhibitor (Raji cells, *in vitro*, TPA-induced,  $IC_{50}$  = 280mol ratio/32pmol TPA, control  $\beta$ -Carotene,  $IC_{50}$  = 400mol ratio/32pmol TPA)<sup>[4737]</sup>. Source: LING ZHI *Ganoderma lucidum* (dried sporocarp: yield = 0.034%dw). Ref: 660, 4737.

**13030 Lucidenic acid F**

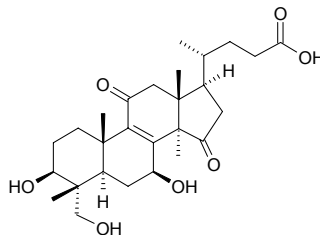
$C_{27}H_{36}O_6$  (456.58). Source: LING ZHI *Ganoderma lucidum* (dried sporocarp: yield = 0.0033%dw). Ref: 660, 4737.

**13031 Lucidenic acid G**

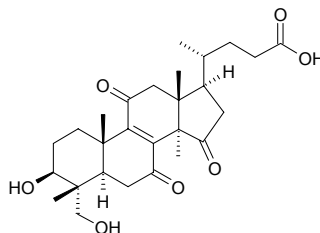
$C_{28}H_{42}O_7$  (490.64). Source: LING ZHI *Ganoderma lucidum*. Ref: 660.

**13032 Lucidenic acid H**

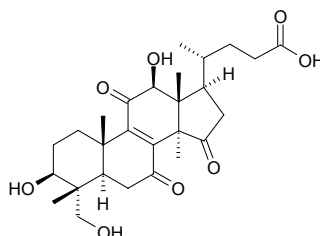
$C_{27}H_{40}O_7$  (476.62). Source: LING ZHI *Ganoderma lucidum*. Ref: 660.

**13033 Lucidenic acid I**

$C_{27}H_{38}O_7$  (474.60). Source: LING ZHI *Ganoderma lucidum*. Ref: 660.

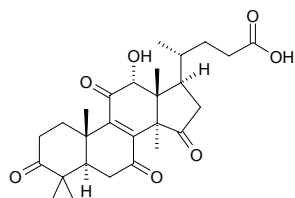
**13034 Lucidenic acid J**

$C_{27}H_{38}O_8$  (490.60). Source: LING ZHI *Ganoderma lucidum*. Ref: 660.

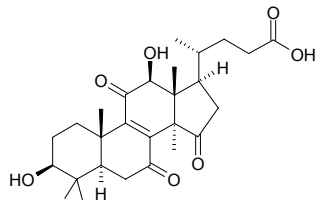


**13035 Lucidenic acid K**

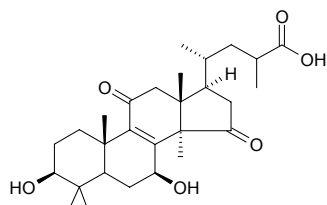
$C_{27}H_{36}O_7$  (472.58). Source: LING ZHI *Ganoderma lucidum*. Ref: 660.

**13036 Lucidenic acid L**

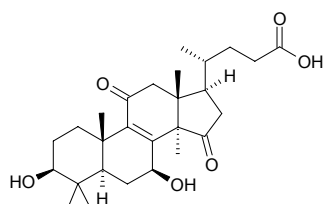
$C_{27}H_{38}O_7$  (474.60). Source: LING ZHI *Ganoderma lucidum*. Ref: 660.

**13037 Lucidenic acid LM<sub>1</sub>**

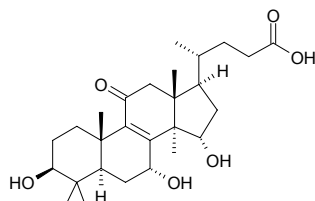
$C_{28}H_{42}O_6$  (474.64). mp 130~131°C,  $[\alpha]_D = +140^\circ$ . Source: LING ZHI *Ganoderma lucidum*. Ref: 2235.

**13038 Lucidenic acid LW<sub>1</sub>**

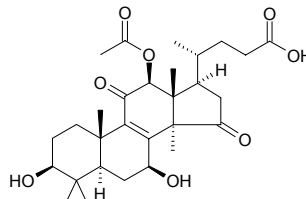
3 $\beta$ ,7 $\beta$ -Dihydroxy-4,4,14 $\alpha$ -trimethyl-11,15-dioxo-5 $\alpha$ -chol-8-en-24-oic acid  
 $C_{27}H_{40}O_6$  (460.62). White amorphous mp 130~131°C (Me<sub>2</sub>CO),  $[\alpha]_D^{25} = +140^\circ$  ( $c = 0.014$ , Me<sub>2</sub>CO); Colorless powder (CHCl<sub>3</sub>), mp 202~204°C,  $[\alpha]_D = +119.5^\circ$  ( $c = 0.23$ , CHCl<sub>3</sub>). Pharm: Cytotoxic (*in vitro*, HepG2, IC<sub>50</sub> = 0.206nmol/L; Hep2,2,15, IC<sub>50</sub> = 1.66nmol/L; KB, IC<sub>50</sub> = 26.7 $\mu$ mol/L; CCM2, IC<sub>50</sub> = 35.5 $\mu$ mol/L; P<sub>388</sub>, IC<sub>50</sub> = 0.012 $\mu$ mol/L)<sup>[3081]</sup>. Source: LING ZHI *Ganoderma lucidum*. Ref: 2123, 3081.

**13039 Lucidenic acid M**

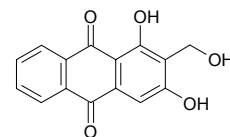
$C_{27}H_{42}O_6$  (462.63). Source: LING ZHI *Ganoderma lucidum*. Ref: 660.

**13040 Lucidenic acid P**

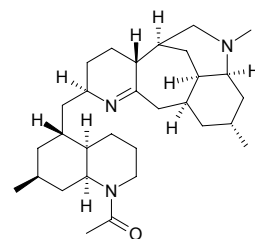
$C_{29}H_{42}O_8$  (518.65). Colorless needles (acetone-MeOH), mp 135~137°C,  $[\alpha]_D^{25} = +14.7^\circ$  ( $c = 0.38$ , CHCl<sub>3</sub>). Pharm: EBV-EA activation inhibitor (Raji cells, *in vitro*, TPA-induced, IC<sub>50</sub> = 286mol ratio/32pmol TPA, control  $\beta$ -Carotene, IC<sub>50</sub> = 400mol ratio/32pmol TPA). Source: LING ZHI *Ganoderma lucidum*. Ref: 4737.

**13041 Lucidin**

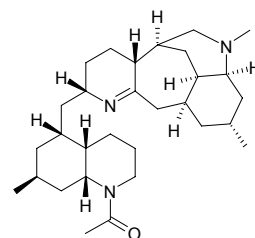
[478-08-0]  $C_{15}H_{10}O_5$  (270.24). mp > 330°C. Pharm: Antibacterial (*Salmonella typhimurium*); cytotoxic (KB, ED<sub>50</sub> > 25 $\mu$ g/mL, control Doxorubicin, ED<sub>50</sub> = 0.12 $\mu$ g/mL; Hep3B, ED<sub>50</sub> > 25 $\mu$ g/mL, control Doxorubicin, ED<sub>50</sub> = 0.14 $\mu$ g/mL; Colon205, ED<sub>50</sub> > 25 $\mu$ g/mL, control Doxorubicin, ED<sub>50</sub> = 0.10 $\mu$ g/mL; HeLa, ED<sub>50</sub> > 25 $\mu$ g/mL, control Doxorubicin, ED<sub>50</sub> = 0.11 $\mu$ g/mL)<sup>[4369]</sup>. Source: GUANG JING QIAN CAO *Rubia wallichiana* (stem), TU LIAN QIAO *Hymenodictyon excelsum*, XIANG CHE YE CAO *Asperula odorata*, YANG JIAO TENG *Morinda umbellata*, YANG QIAN CAO *Rubia tinctorum*, *Galium* sp. Ref: 6, 658, 4369.

**13042 Lucidine A**

$C_{30}H_{49}N_3O$  (467.74). Source: GUANG LIANG SHI SONG *Lycopodium lucidulum*. Ref: 3927.

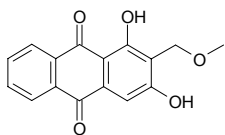
**13043 Lucidine B**

$C_{30}H_{49}N_3O$  (467.74). Source: GUANG LIANG SHI SONG *Lycopodium lucidulum*. Ref: 3927.

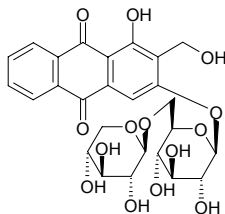


**13044 Lucidin  $\omega$ -methyl ether**

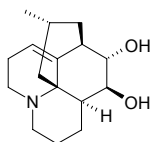
$C_{16}H_{12}O_5$  (284.27). **Pharm:** Cytotoxic (*in vitro* leukemia). **Source:** BAI YAN TENG *Morinda parvifolia*. **Ref:** 658.

**13045 Lucidin primeveroside**

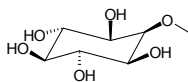
$C_{26}H_{28}O_{14}$  (564.50). **Source:** GUANG JING QIAN CAO *Rubia wallichiana* (stem). **Ref:** 4369.

**13046 Lucidioline**

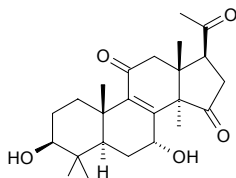
$C_{16}H_{25}NO_2$  (263.38). **Source:** GUANG LIANG SHI SONG *Lycopodium lucidulum*, QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*]. **Ref:** 660, 1521, 4388.

**13047 Lucidol**

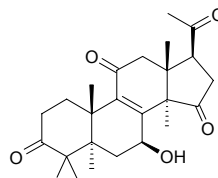
1 $\beta$ -Methoxy-2 $\beta$ ,3 $\alpha$ ,4 $\beta$ ,5 $\alpha$ ,6 $\beta$ -pentahydroxycyclohexane  $C_7H_{14}O_6$  (194.19). White amorphous crystals, white amorphous crystals (MeOH). **Source:** LI BING JIN FEN JUE *Onychium lucidum*. **Ref:** 881.

**13048 Lucidone A**

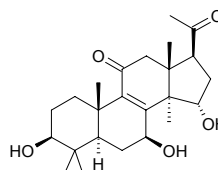
$C_{24}H_{34}O_5$  (402.54). **Source:** LING ZHI *Ganoderma lucidum* (dried sporocarp; yield = 0.00025%). **Ref:** 660, 4603.

**13049 Lucidone B**

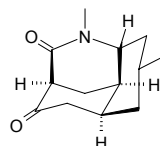
$C_{24}H_{32}O_5$  (400.52). **Source:** LING ZHI *Ganoderma lucidum*. **Ref:** 660.

**13050 Lucidone C**

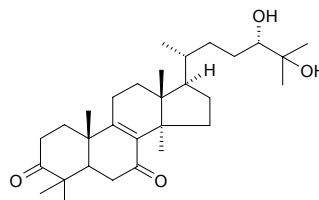
$C_{24}H_{36}O_5$  (404.55). **Source:** LING ZHI *Ganoderma lucidum*. **Ref:** 660.

**13051 Lucidulinone**

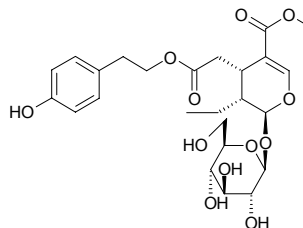
$C_{13}H_{19}NO_2$  (221.30).  $[\alpha]_D^{21.5} = +185.0^\circ$  ( $c = 1.1$ ,  $CHCl_3$ ). **Source:** GUANG LIANG SHI SONG *Lycopodium lucidulum*. **Ref:** 3927.

**13052 Lucidumol A**

$C_{30}H_{48}O_4$  (472.71). mp 185–187°C,  $[\alpha]_D = +35^\circ$ . **Source:** LING ZHI *Ganoderma lucidum*. **Ref:** 2235.

**13053 Lucidumoside A**

$C_{25}H_{34}O_{12}$  (526.54). Colorless powder,  $[\alpha]_D^{15} = -90^\circ$  ( $c = 0.41$ , MeOH). **Pharm:** Antiviral (Hep2 cells, Para-3,  $IC_{50} = 41.7\mu g/mL$ , TI = 6.0; MDCK cells, Flu-A, inactive; Vero cells, HSV-1, inactive)<sup>[4141]</sup>; anti-hemolysis inactive (rat, red blood cell *in vitro*, AAPH-induced,  $IC_{50} > 200\mu mol/L$ , control Trolox,  $IC_{50} = 55.0\mu mol/L$ )<sup>[4141]</sup>. **Source:** NV ZHEN ZI *Ligustrum lucidum*. **Ref:** 757, 4141.

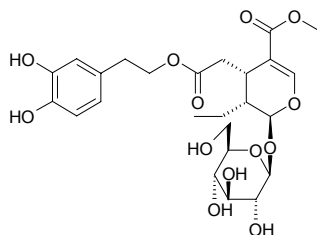




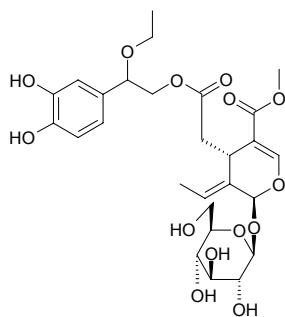
**13054 Lucidumside B**

$C_{25}H_{34}O_{13}$  (542.54). Colorless powder,  $[\alpha]_D^{15} = -103^\circ$  ( $c = 0.21$ , MeOH).

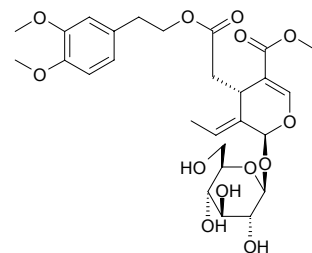
**Pharm:** Antioxidant (against hemolysis of red blood cells induced by free radicals). **Source:** NV ZHEN ZI *Ligustrum lucidum*. **Ref:** 757, 3545.

**13055 Lucidumside C**

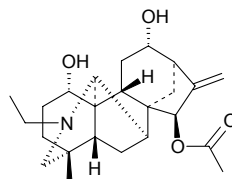
$C_{27}H_{36}O_{14}$  (584.58). Powder,  $[\alpha]_D^{15} = -112^\circ$  ( $c = 0.22$ , MeOH). **Pharm:** Antiviral (Hep2 cells, Para-3,  $IC_{50} = 20.8\mu\text{g/mL}$ ,  $TI = 12.0$ ; MDCK cells, Flu-A, inactive; Vero cells, HSV-1, inactive)<sup>[4141]</sup>; anti-hemolysis (rat, red blood cell *in vitro*, AAPH-induced,  $IC_{50} = 9.3\mu\text{mol/L}$ , control Trolox,  $IC_{50} = 55.0\mu\text{mol/L}$ )<sup>[4141]</sup>; anti-hemolysis (against hemolysis of red blood cells induced by AAPH free radicals,  $IC_{50} = 9.3\mu\text{mol/L}$ )<sup>[3545]</sup>. **Source:** NV ZHEN ZI *Ligustrum lucidum*. **Ref:** 3545, 4141.

**13056 Lucidumside D**

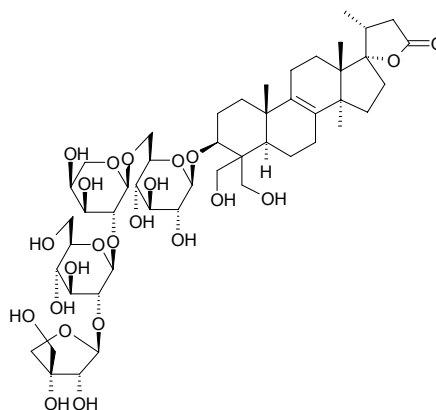
$C_{27}H_{36}O_{13}$  (568.58). Powder,  $[\alpha]_D^{15} = -143^\circ$  ( $c = 0.32$ , MeOH). **Source:** NV ZHEN ZI *Ligustrum lucidum*. **Ref:** 3545.

**13057 Lucidusculine**

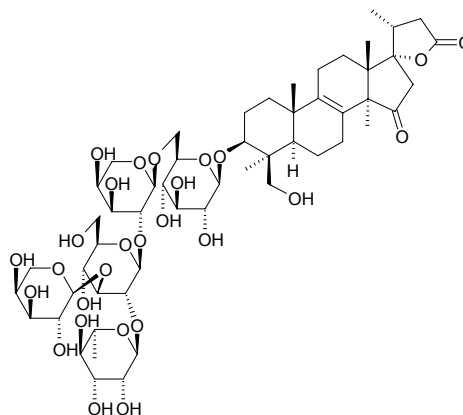
$C_{24}H_{35}NO_4$  (401.55). Lamellar crystals (methanol), mp  $170\sim 171^\circ\text{C}$ ,  $[\alpha]_D = -95.5^\circ$  (chloroform); hydrochloride crystals, containing 3.5 hydrous water, mp  $98\sim 115^\circ\text{C}$ , absolute substance mp  $245\sim 265^\circ\text{C}$  (dec). **Pharm:** Anti-diuretic (caused by purine group). **Source:** GUANG ZE WU TOU *Aconitum lucidusculum*. **Ref:** 6, 658.

**13058 Lucilianoside C**

$3\beta$ -[(*O*- $\beta$ -D-Apiofuranosyl-(1 $\rightarrow$ 2)-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)-*O*- $\alpha$ -L-arabinopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl)oxy]-28,29-dihydroxy-24,25,26,27-tetranorlanost-8-en-17 $\alpha$ ,23-olide  $C_{48}H_{76}O_{23}$  (1021.13). Amorphous solid,  $[\alpha]_D^{27} = 48.0^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Cytotoxic inactive (HSC-2 hmn oral squamous cell carcinoma cells,  $IC_{50} > 100\mu\text{g/mL}$ ; control Etoposide,  $IC_{50} = 24\mu\text{g/mL}$ ). **Source:** QI YI PU TAO FENG XIN ZI *Muscari paradoxum* (bulb). **Ref:** 3495.

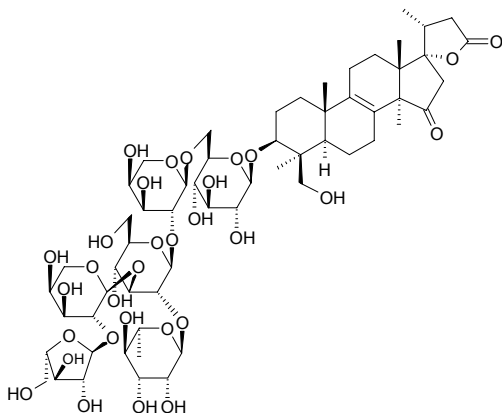
**13059 Lucilianoside D**

$3\beta$ -[(*O*- $\alpha$ -L-Arabinopyranosyl-(1 $\rightarrow$ 3)-*O*-[ $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)]-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)-*O*- $\alpha$ -L-arabinopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl)oxy]-29-hydroxy-15-oxo-24,25,26,27-tetranorlanost-8-en-17 $\alpha$ ,23-olide  $C_{54}H_{84}O_{27}$  (1165.26). Amorphous solid,  $[\alpha]_D^{26} = 32.0^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Cytotoxic inactive (HSC-2 hmn oral squamous cell carcinoma cells,  $IC_{50} > 100\mu\text{g/mL}$ ; control Etoposide,  $IC_{50} = 24\mu\text{g/mL}$ ). **Source:** QI YI PU TAO FENG XIN ZI *Muscari paradoxum* (bulb). **Ref:** 3495.

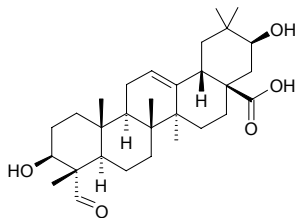


**13060 Lucilianoside E**

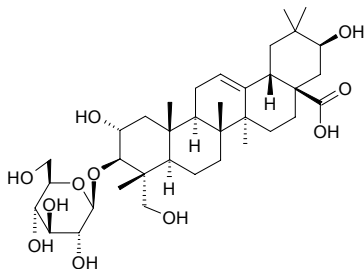
3 $\beta$ -[(*O*- $\alpha$ -L-Arabinofuranosyl-(1 $\rightarrow$ 2)-*O*- $\alpha$ -L-arabinopyranosyl-(1 $\rightarrow$ 3)-*O*-[ $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)]-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)-*O*- $\alpha$ -L-arabinopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl)oxy]-29-hydroxy-15-oxo-24,25,26,27-tetranorlanost-8-en-17 $\alpha$ ,23-olide C<sub>59</sub>H<sub>92</sub>O<sub>31</sub> (1297.37). Amorphous solid, [ $\alpha$ ]<sub>D</sub><sup>26</sup> = 38.5° (*c* = 0.13, MeOH). **Pharm:** Cytotoxic inactive (HSC-2 hmn oral squamous cell carcinoma cells, IC<sub>50</sub> > 100 $\mu$ g/mL; control Etoposide, IC<sub>50</sub> = 24 $\mu$ g/mL). **Source:** QI YI PU TAO FENG XIN ZI *Muscari paradoxum* (bulb). **Ref:** 3495.

**13061 Lucyin**

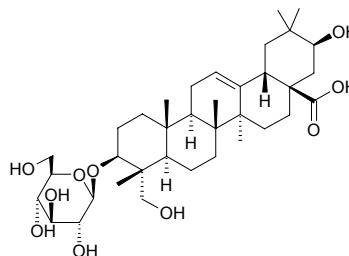
21 $\beta$ -Hydroxy-gypsogenin C<sub>30</sub>H<sub>46</sub>O<sub>5</sub> (486.70). Colorless claviform crystals, mp 240–242°C. **Source:** SI GUA *Luffa cylindrica*. **Ref:** 284.

**13062 Lucyoside R**

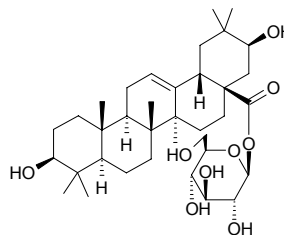
2 $\alpha$ ,21 $\beta$ -Dihydroxyhederagenin-3-*O*- $\beta$ -D-glucopyranoside C<sub>36</sub>H<sub>58</sub>O<sub>11</sub> (666.86). Colorless granular crystals, mp 234–236°C, [ $\alpha$ ]<sub>D</sub> = +35.7° (*c* = 0.40, methanol). **Source:** SI GUA *Luffa cylindrica*. **Ref:** 396.

**13063 Lucyoside N**

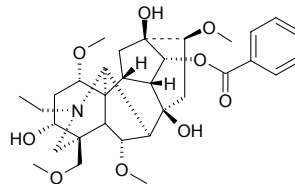
3-*O*- $\beta$ -D-Glucopyranosyl-21- $\beta$ -hydroxyhederagenin C<sub>36</sub>H<sub>58</sub>O<sub>10</sub> (650.86). Colorless granular crystals, mp 221–223°C. **Source:** SI GUA *Luffa cylindrica*. **Ref:** 284.

**13064 Lucyoside Q**

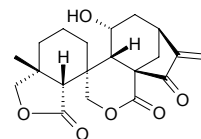
21 $\beta$ -Hydroxyloleanoic acid-28-*O*- $\beta$ -D-glucopyranoside C<sub>36</sub>H<sub>58</sub>O<sub>9</sub> (634.86). White powder, mp 238–240°C, [ $\alpha$ ]<sub>D</sub><sup>15</sup> = +23.5° (*c* = 0.40, methanol). **Source:** SI GUA *Luffa cylindrica*. **Ref:** 346.

**13065 Ludaconitine**

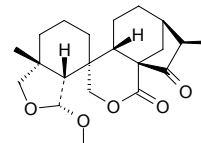
[82144-72-7] C<sub>32</sub>H<sub>45</sub>NO<sub>9</sub> (587.72). White amorphous powder. **Source:** GONG GA SHAN WU TOU *Aconitum liljestrandii*. **Ref:** 2191.

**13066 Ludongnin A**

C<sub>20</sub>H<sub>24</sub>O<sub>6</sub> (360.41). mp 265–267°C, [ $\alpha$ ]<sub>D</sub><sup>12</sup> = –94.1° (*c* = 0.68, C<sub>5</sub>H<sub>5</sub>N). **Source:** LU SHI DONG LING CAO *Isodon rubescens* var. *lushiensis*. **Ref:** 4067.

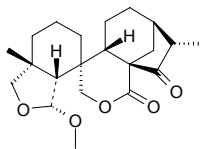
**13067 Ludongnin F**

(16*R*)-6 $\alpha$ -Methoxy-6,7-seco-6,19-epoxy-7,20-olide-*ent*-kaur-15-one C<sub>21</sub>H<sub>30</sub>O<sub>5</sub> (362.47). Colorless cube crystals (MeOH), mp 214–215°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = –281.9° (*c* = 0.26, MeOH). **Pharm:** Cytotoxic inactive (*in vitro*, K562, IC<sub>50</sub> > 50 $\mu$ g/mL; control *cis*-Platin, IC<sub>50</sub> = 0.52 $\mu$ g/mL). **Source:** LU SHI DONG LING CAO *Isodon rubescens* var. *lushiensis* (leaf: yield = 0.00014%dw). **Ref:** 4732.

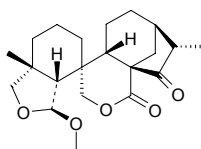


**13068 Ludongnin G**

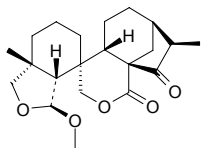
(16*S*)-6 $\alpha$ -Methoxy-6,7-seco-6,19-epoxy-7,20-olide-*ent*-kaur-15-one C<sub>21</sub>H<sub>30</sub>O<sub>5</sub> (362.47). Colorless diamond crystals (MeOH), mp 203~204°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -183.6° (*c* = 0.31, MeOH). **Pharm:** Cytotoxic inactive (*in vitro*, K562, IC<sub>50</sub> > 50  $\mu$ g/mL; control *cis*-Platin, IC<sub>50</sub> = 0.52  $\mu$ g/mL). **Source:** LU SHI DONG LING CAO *Isodon rubescens* var. *lushiensis* (leaf: yield = 0.00011%dw). **Ref:** 4732.

**13069 Ludongnin H**

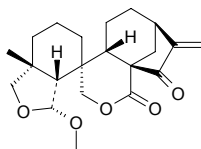
(16*S*)-6 $\beta$ -Methoxy-6,7-seco-6,19-epoxy-7,20-olide-*ent*-kaur-15-one C<sub>21</sub>H<sub>30</sub>O<sub>5</sub> (362.47). White amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +2.7° (*c* = 0.92, acetone). **Pharm:** Cytotoxic inactive (*in vitro*, K562, IC<sub>50</sub> > 50  $\mu$ g/mL; control *cis*-Platin, IC<sub>50</sub> = 0.52  $\mu$ g/mL). **Source:** LU SHI DONG LING CAO *Isodon rubescens* var. *lushiensis* (leaf: yield = 0.000053%dw). **Ref:** 4732.

**13070 Ludongnin I**

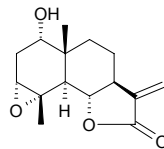
(16*R*)-6 $\beta$ -Methoxy-6,7-seco-6,19-epoxy-7,20-olide-*ent*-kaur-15-one C<sub>21</sub>H<sub>30</sub>O<sub>5</sub> (362.47). White amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -16.7° (*c* = 0.12, acetone). **Pharm:** Cytotoxic inactive (*in vitro*, K562, IC<sub>50</sub> > 50  $\mu$ g/mL; control *cis*-Platin, IC<sub>50</sub> = 0.52  $\mu$ g/mL). **Source:** LU SHI DONG LING CAO *Isodon rubescens* var. *lushiensis* (leaf: yield = 0.00004%dw). **Ref:** 4732.

**13071 Ludongnin J**

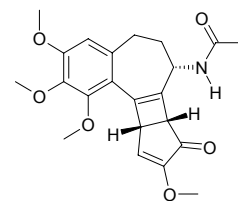
6 $\alpha$ -Methoxy-6,7-seco-6,19-epoxy-7,20-olide-*ent*-kaur-16(17)-en-15-one C<sub>21</sub>H<sub>28</sub>O<sub>5</sub> (360.45). Colorless cube crystals (MeOH), mp 164~165°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -233.9° (*c* = 0.93, MeOH). **Pharm:** Cytotoxic (*in vitro*, K562, IC<sub>50</sub> = 0.18  $\mu$ g/mL; CA, IC<sub>50</sub> = 0.09  $\mu$ g/mL; HeLa, IC<sub>50</sub> = 0.7  $\mu$ g/mL; control *cis*-Platin: K562, IC<sub>50</sub> = 0.52  $\mu$ g/mL; CA, IC<sub>50</sub> = 0.88  $\mu$ g/mL; HeLa, IC<sub>50</sub> = 3.6  $\mu$ g/mL). **Source:** LU SHI DONG LING CAO *Isodon rubescens* var. *lushiensis* (leaf: yield = 0.00026%dw). **Ref:** 4732.

**13072 Ludovicin A**

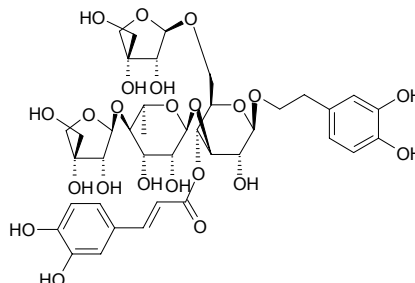
[27740-13-2] C<sub>15</sub>H<sub>20</sub>O<sub>4</sub> (264.32). Crystals (Et<sub>2</sub>O-CH<sub>2</sub>Cl<sub>2</sub>), mp 215°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +128° (CHCl<sub>3</sub>). **Pharm:** Antineoplastic; cytotoxic. **Source:** LU DE WEI HAO *Artemisia ludoviciana*, MO XI GE HAO *Artemisia mexicana* var. *angustifolia*. **Ref:** 658.

**13073  $\beta$ -Lumicolchicine**

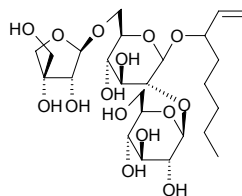
[6901-13-9] C<sub>22</sub>H<sub>25</sub>NO<sub>6</sub> (399.45). mp 184~186°C. **Source:** CAO BEI MU *Iphigenia indica*. **Ref:** 6, 1521.

**13074 Lunariifolioside**

2-(3,4-Dihydroxyphenyl)ethyl *O*- $\beta$ -apiofuranosyl-(1 $\rightarrow$ 6)-*O*-[*O*- $\beta$ -apiofuranosyl-(1 $\rightarrow$ 4)- $\alpha$ -rhamnopyranosyl-(1 $\rightarrow$ 3)]-4-*O*-(*E*)-caffeoyl- $\beta$ -glucopyranoside C<sub>39</sub>H<sub>52</sub>O<sub>23</sub> (888.84). Amorphous pale yellow solid, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -88° (*c* = 0.1, MeOH). **Source:** XIN YUE XING YE CAO SU *Phlomis lunariifolia* (aerial parts). **Ref:** 3864.

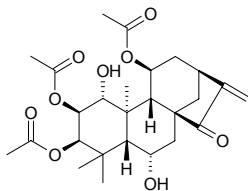
**13075 Lunaroside**

1-Octen-3-yl *O*- $\beta$ -apiofuranosyl-(1 $\rightarrow$ 6)-*O*-[ $\beta$ -glucopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -glucopyranoside C<sub>25</sub>H<sub>44</sub>O<sub>15</sub> (584.62). Amorphous colorless solid, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -54° (*c* = 0.1, MeOH). **Source:** XIN YUE XING YE CAO SU *Phlomis lunariifolia* (aerial parts). **Ref:** 3864.

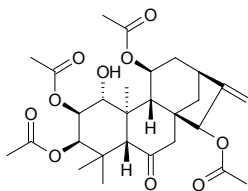


**13076 Lungshengenin A**

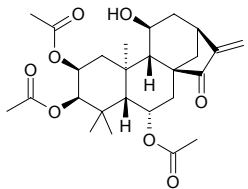
$C_{26}H_{36}O_9$  (492.57). mp 138~140°C,  $[\alpha]_D^{21} = -21.9^\circ$  ( $c = 1.2$ ,  $C_5H_5N$ ). **Pharm:** Antineoplastic ( $IC_{50} \leq 10\mu\text{g/kg}$ ); cytotoxic (K562). **Source:** LONG SHENG XIANG CHA CAI *Isodon lungshengensis*. **Ref:** 690, 4067.

**13077 Lungshengenin B**

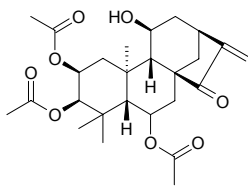
$C_{28}H_{38}O_{10}$  (354.64). Colorless cubes (cyclohexane); mp 166~167°C,  $[\alpha]_D^{22} = -66.5^\circ$  ( $c = 0.57$ ,  $CHCl_3$ ); mp 166.3~167.8°C,  $[\alpha]_D^{22.5} = -65.47^\circ$  ( $c = 0.57$ ,  $CHCl_3$ ). **Source:** LONG SHENG XIANG CHA CAI *Isodon lungshengensis*. **Ref:** 690, 4067.

**13078 Lungshengenin C**

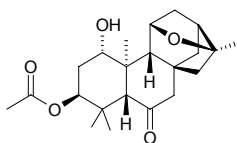
$C_{26}H_{36}O_8$  (476.57). Colorless acicular crystals ( $Me_2CO$ ); mp 199~201°C,  $[\alpha]_D^{22} = -53.7^\circ$  ( $c = 0.39$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (K562). **Source:** LONG SHENG XIANG CHA CAI *Isodon lungshengensis*. **Ref:** 690.

**13079 Lungshengenin C**

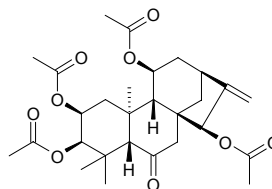
$C_{26}H_{36}O_8$  (476.57). mp 199.3~201.1°C,  $[\alpha]_D^{22.5} = -53.71^\circ$  ( $c = 0.39$ ,  $CHCl_3$ ). **Source:** LONG SHENG XIANG CHA CAI *Isodon lungshengensis*. **Ref:** 4067.

**13080 Lungshengenin D**

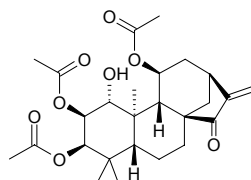
$C_{22}H_{32}O_5$  (376.50). Colorless prisms ( $Me_2CO$ ); mp 199~200°C,  $[\alpha]_D^{22} = +26.4^\circ$  ( $c = 0.27$ ,  $CHCl_3$ ). **Source:** LONG SHENG XIANG CHA CAI *Isodon lungshengensis*. **Ref:** 690, 4067.

**13081 Lungshengenin E**

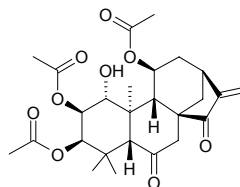
$C_{28}H_{38}O_9$  (518.61). Colorless cubes, mp 241~243,  $[\alpha]_D^{22} = -44.5^\circ$  ( $c = 0.25$ ,  $MeOH$ ). **Source:** LONG SHENG XIANG CHA CAI *Isodon lungshengensis*. **Ref:** 690.

**13082 Lungshengenin F**

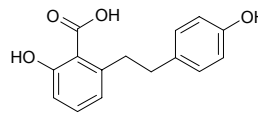
$C_{26}H_{36}O_8$  (476.57). Colorless cubes, mp 95~96°C,  $[\alpha]_D^{22} = -94.9^\circ$  ( $c = 0.47$ ,  $CHCl_3$ ); mp 94.7~96.1°C,  $[\alpha]_D^{22} = +26.42^\circ$  ( $c = 0.27$ ,  $CHCl_3$ ). **Source:** LONG SHENG XIANG CHA CAI *Isodon lungshengensis*. **Ref:** 690, 4067.

**13083 Lungshengenin G**

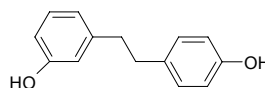
$C_{26}H_{34}O_9$  (490.56). Amorphous powder,  $[\alpha]_D^{27} = -80.4^\circ$  ( $c = 0.34$ ,  $MeOH$ ). **Pharm:** Antineoplastic ( $IC_{50} \leq 10\mu\text{g/kg}$ ); cytotoxic (K562). **Source:** LONG SHENG XIANG CHA CAI *Isodon lungshengensis*. **Ref:** 690, 4067.

**13084 Lunularic acid**

[23255-59-6]  $C_{15}H_{14}O_4$  (258.28). mp 192°C. **Pharm:** Controls growth of *Hepatica lunularia*; dormancy factor; germination inhibitor (fungi spores); used to resist aridity in agriculture. **Source:** BA XIAN HUA *Hydrangea macrophylla*, *Marchantia* sp. **Ref:** 6, 658.

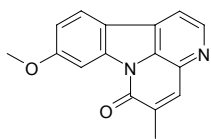
**13085 Lunularin**

[37116-80-6]  $C_{14}H_{14}O_2$  (214.27). **Pharm:** Antifungal (*Uromyces fabae*, germination inhibitor of spore). **Source:** BA XIAN HUA *Hydrangea macrophylla*, PING HUA SANG *Morus laevigata*. **Ref:** 658.

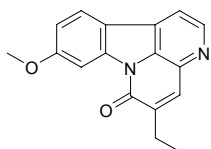


**13086 Luotonin C**

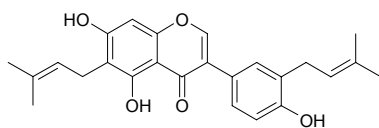
$C_{16}H_{12}N_2O_2$  (264.29). Pale yellow needles (acetone), mp 166–168°C. Source: LUO TUO HAO *Peganum nigellastrum* (aerial parts). Ref: 3945.

**13087 Luotonin D**

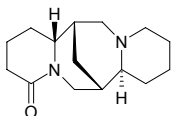
$C_{17}H_{14}N_2O_2$  (278.31). Pale yellow needles (acetone), mp 141–143°C. Source: LUO TUO HAO *Peganum nigellastrum* (aerial parts). Ref: 3945.

**13088 Lupalbigenin**

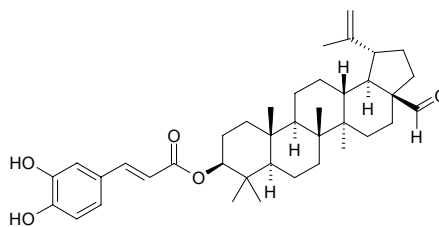
5,7,4'-Trihydroxy-6,5'-diprenylisoflavone  $C_{25}H_{26}O_5$  (406.48). Pale yellow amorphous. Pharm: Antifungal (dermatophyte *Trichophyton mentagrophytes*, 250 $\mu$ g/mL)<sup>[2347]</sup>; antioxidant (DPPH scavenger, ScRt = 26.32%; control BHT, ScRt = 71.5%)<sup>[3810]</sup>; antioxidant (DPPH scavenger, 10 $\mu$ mol/L, ScRt = 20%; control BHT, 10 $\mu$ mol/L, ScRt = 43%)<sup>[5319]</sup>; antibacterial (*Staphylococcus aureus* ATCC 25923, MIC = 2 $\mu$ g/mL, Vancomycin, MIC = 0.5 $\mu$ g/mL; MRSA SK1, MIC = 4 $\mu$ g/mL, Vancomycin, MIC = 1.0 $\mu$ g/mL)<sup>[3810]</sup>; antibacterial (*Staphylococcus aureus* ATCC 25923, MIC = 8 $\mu$ g/mL, control Vancomycin, MIC = 2 $\mu$ g/mL; *Staphylococcus aureus* MRSA SK1, MIC = 8 $\mu$ g/mL, Vancomycin, MIC = 2 $\mu$ g/mL)<sup>[5319]</sup>; anti-inflammatory (inhibit brain liposomal peroxidation, 50 $\mu$ g/mL, optical density of DMSO control = (19.3 $\pm$ 0.3)%,  $p < 0.001$ ; positive control Propyl gallate, 7.5 $\mu$ mol/mL, optical density of DMSO control = (20.6 $\pm$ 0.2)%)<sup>[4984]</sup>. Source: BAI YU SHAN DOU *Lupinus albus*, KU TAN ZI *Millettia pachycarpa*, PAN YUAN YU TENG *Derris scandens* (stem), TIAN SHAN ZHU ZI *Garcinia dulcis* (fruit). Ref: 1521, 2347, 3810, 4984, 5319.

**13089 Lupanine**

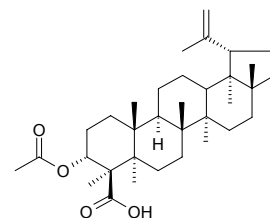
[550-90-3]  $C_{15}H_{24}N_2O$  (248.37). mp (+) 44°C, (–) 44°C. Pharm: Antiarrhythmic; antihypertensive; uterine stimulant (rbt, *in vitro*); MLD (gpg, ip) = 200–225mg/kg. Source: BAI YU SHAN DOU *Lupinus albus*, JIN QUE ER *Cytisus scoparius* [Syn. *Spartium scoparium*], HONG MAO QI *Leontice robustum*, KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*], MU MA DOU *Thermopsis lanceolata*. Ref: 2, 6, 658.

**13090 Lup-20(29)en-28-al-3 $\beta$ -yl-caffeate**

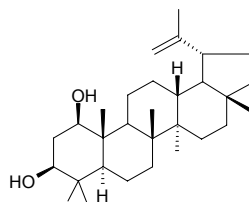
Betunaldehyde-3 $\beta$ -yl-caffeate  $C_{39}H_{54}O_5$  (602.86). Amorphous powder,  $[\alpha]_D^{25} = +48^\circ$  ( $c = 1.0$ , MeOH). Source: NAN SHE TENG GEN *Celastrus orbiculatus* [Syn. *Celastrus articulatus*], *Celastrus stephanotifolius*. Ref: 2310, 2511.

**13091 Lup-20(29)ene-3 $\alpha$ -acetoxy-24-oic acid**

$C_{32}H_{50}O_4$  (498.75). Colorless needles, mp 271–173°C,  $[\alpha]_D^{15} = +15.5^\circ$  ( $c = 0.12$ , CH<sub>3</sub>OH). Source: RU XIANG *Boswellia carterii*. Ref: 2238.

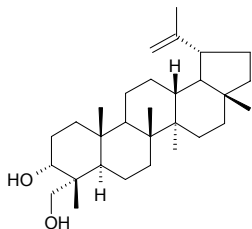
**13092 Lup-20(29)ene-1 $\beta$ ,3 $\beta$ -diol**

$C_{30}H_{50}O_2$  (442.73). mp 245–246.5°C,  $[\alpha]_D^{23} = +11^\circ$  ( $c = 0.25$ , CHCl<sub>3</sub>); mp 248–249°C (hexane),  $[\alpha]_D^{20} = +30.2^\circ$  ( $c = 0.7$ g/100mL, CHCl<sub>3</sub>). Pharm: Antineoplastic (EBV-EA induced by TPA, IC<sub>50</sub> = 300(mol ratio/32pmol TPA); control Curcumin IC<sub>50</sub> = 343(mol ratio/32pmol TPA))<sup>[4099]</sup>; cytotoxic (inhibition growth of hmn tumor cell lines, MCF7 (breast), GI<sub>50</sub> = (79.2 $\pm$ 2.4) $\mu$ mol/L, control Doxorubicin, GI<sub>50</sub> = (42.8 $\pm$ 8.2) $\mu$ mol/L; NCI-H460 (lung), GI<sub>50</sub> > 100 $\mu$ mol/L, Doxorubicin, GI<sub>50</sub> = (94.0 $\pm$ 8.7) $\mu$ mol/L; SF268(CNS), GI<sub>50</sub> > 100 $\mu$ mol/L, Doxorubicin, GI<sub>50</sub> = (93.0 $\pm$ 7.0) $\mu$ mol/L)<sup>[5065]</sup>. Source: CHUI ZHU SUAN PAN ZI *Glochidion zeylanicum* (stem cortex), MAO GUO SUAN PAN ZI *Glochidion eriocarpum* (root and stem wood). Ref: 4099, 5065.

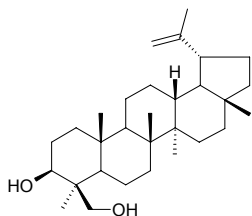


**13093 Lup-20(29)-ene-3 $\alpha$ ,23-diol**

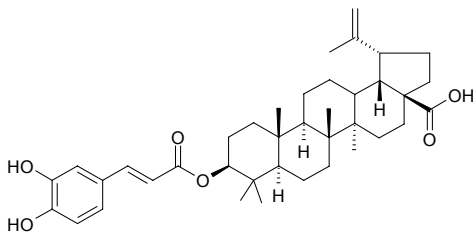
$C_{30}H_{50}O_2$  (442.73). mp 213~214°C (hexane),  $[\alpha]_D^{20} = +16.3^\circ$  ( $c = 0.6g/100mL$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (inhibition growth of hmn tumor cell lines, MCF7 (breast),  $GI_{50} = (12.7 \pm 1.6)\mu mol/L$ , control Doxorubicin,  $GI_{50} = (42.8 \pm 8.2)\mu mol/L$ ; NCI-H460 (lung),  $GI_{50} = (17.9 \pm 1.1)\mu mol/L$ , Doxorubicin,  $GI_{50} = (94.0 \pm 8.7)\mu mol/L$ ; SF268(CNS),  $GI_{50} = (17.9 \pm 0.5)\mu mol/L$ , Doxorubicin,  $GI_{50} = (93.0 \pm 7.0)\mu mol/L$ ). **Source:** MAO GUO SUAN PAN ZI *Glochidion eriocarpum* (root and stem wood). **Ref:** 5065.

**13094 Lup-20(29)-ene-3 $\beta$ ,24-diol**

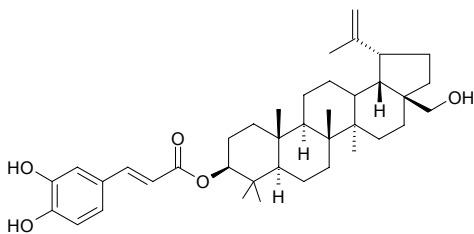
$C_{30}H_{50}O_2$  (442.73). mp 249~250°C,  $[\alpha]_D^{23} = +41^\circ$  ( $c = 0.58$ ,  $CHCl_3$ ). **Pharm:** Antineoplastic (EBV-EA induced by TPA,  $IC_{50} = 350$ (mol ratio/32pmol TPA); control Curcumin  $IC_{50} = 343$ (mol ratio/32pmol TPA)). **Source:** LUO E YE XIA ZHU *Phyllanthus flexuosus* (stem cortex). **Ref:** 4099.

**13095 Lup-20(29)-en-28-*oic*-3 $\beta$ -yl caffeate**

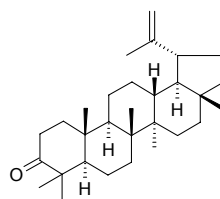
$C_{39}H_{54}O_6$  (618.86). **Source:** NAN SHE TENG GEN *Celastrus orbiculatus* [Syn. *Celastrus articulatus*]. **Ref:** 2511.

**13096 Lup-20(29)-en-28-*ol*-3 $\beta$ -yl caffeate**

$C_{39}H_{56}O_5$  (604.88). **Source:** NAN SHE TENG GEN *Celastrus orbiculatus* [Syn. *Celastrus articulatus*]. **Ref:** 2511.

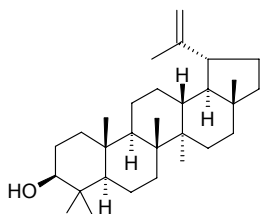
**13097 Lupenone**

$C_{30}H_{48}O$  (424.72). mp 170°C;  $[\alpha]_D^{20} = +60.6^\circ$  ( $c = 0.5$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic inactive (NSCLC-N6 cell line)<sup>[3806]</sup>; cytotoxic inactive (A2780 ovarian cancer cell line,  $IC_{50} = 30.8mg/mL$ )<sup>[5379]</sup>; 15-Lipoxygenase inhibitor ( $IC_{50} = (22 \pm 3)\mu mol/L$ )<sup>[4953]</sup>; tyrosinase inhibitor (333 $\mu mol/L$ , InRt = -2.4%; control Kojic acid,  $IC_{50} = 125\mu mol/L$ )<sup>[4722]</sup>. **Source:** CHI YANG *Alnus japonica*, DU HUI MAO DOU *Tephrosia toxicaria* (stem: yield = 0.00074%dw)<sup>[4718]</sup>, JU MI JIN HE HUAN *Acacia mellifera* (stem cortex), MU SHU DI SHANG BU FEN *Manihot esculenta*, RI BEN HUANG BAI *Phellodendron japonicum* (leaf), SHUI LIU DOU *Pongamia pinnata* (stem cortex: yield = 0.00053%)<sup>[4721]</sup>, TAI WAN HUANG BO *Phellodendron amurense* var. *wilsonii* (leaf: yield = 0.055%dw)<sup>[4721]</sup>, WU TONG BAI PI *Firmiana simplex*, XIAO HUA MU LAN GUO *Bruguiera parviflora*, XI CHANG NAN MEI DOU *Anadenanthera colubrine* (aerial parts). **Ref:** 6, 2532, 3806, 4502, 4718, 4721, 4722, 4953, 5379.

**13098 Lupeol**

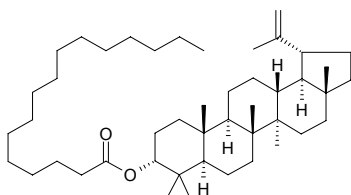
[545-47-1]  $C_{30}H_{50}O$  (426.73). Colorless acicular crystals, mp 214~216°C,  $[\alpha]_D^{18} = +20^\circ$  ( $c = 0.101$ ,  $CHCl_3$ ); white amorphous powder,  $[\alpha]_D^{23} = +23^\circ$  ( $c = 0.1$ ,  $CHCl_3$ );  $[\alpha]_D^{20} = +26.4^\circ$  ( $c = 1$ ,  $CHCl_3$ ). mp 212~214°C,  $[\alpha]_D^{23} = +28^\circ$  ( $c = 0.55$ ,  $CHCl_3$ ); mp 199~200°C (EtOH),  $[\alpha]_D^{20} = +14.2^\circ$  ( $c = 0.08g/mL$ ,  $CHCl_3$ ). **Pharm:** Antineoplastic (rat W<sub>256</sub>); cytotoxic (hmn fibrosarcoma cells HT1080,  $ED_{50} = 16.7\mu g/mL$ ; control Adriamycin,  $ED_{50} = 0.1\mu g/mL$ )<sup>[4437]</sup>; antihypertensive; hypoglycemic; anti-HSV-1 ( $EC_{50} = 11.7\mu mol/L$ ,  $IC_{50} = 49.3\mu mol/L$ , SI = 4.20, control Acyclovir,  $EC_{50} = 1.72\mu mol/L$ ,  $IC_{50} = 15860\mu mol/L$ , SI = 9220)<sup>[2577]</sup>; 15-Lipoxygenase inhibitor ( $IC_{50} = (35 \pm 9)\mu mol/L$ )<sup>[4953]</sup>; antineoplastic (EBV-EA induced by TPA,  $IC_{50} = 380$ (mol ratio/32pmol TPA), control Curcumin  $IC_{50} = 343$ (mol ratio/32pmol TPA))<sup>[4099]</sup>; anti-inflammatory (mouse, inhibits TPA-induced ear oedema; myeloperoxidase inhibitor)<sup>[4415]</sup>; cytotoxic (inhibition growth of hmn tumor cell lines, MCF7 (breast),  $GI_{50} = (75.6 \pm 11.7)\mu mol/L$ , control Doxorubicin,  $GI_{50} = (42.8 \pm 8.2)\mu mol/L$ ; NCI-H460 (lung),  $GI_{50} = (86.1 \pm 12.4)\mu mol/L$ , Doxorubicin,  $GI_{50} = (94.0 \pm 8.7)\mu mol/L$ ; SF268(CNS),  $GI_{50} = (80.9 \pm 2.6)\mu mol/L$ , Doxorubicin,  $GI_{50} = (93.0 \pm 7.0)\mu mol/L$ )<sup>[5065]</sup>; platelet aggregation inhibitor (100 $\mu mol/L$  AA-induced, 20 $\mu g/mL$ , InRt = (12.2 $\pm$ 4.5)%; control Aspirin, 50 $\mu g/mL$ , InRt = (100 $\pm$ 0.0)%; 10 $\mu g/mL$  collagen-induced, 20 $\mu g/mL$ , InRt = (10.3 $\pm$ 3.0)%,  $p < 0.001$ , Aspirin, 50 $\mu g/mL$ , InRt = (12.2 $\pm$ 1.7)%; 2nmol/L PAF-induced, 20 $\mu g/mL$ , InRt = (3.1 $\pm$ 2.1)%,  $p < 0.001$ , Aspirin, 50 $\mu g/mL$ , InRt = (9.6 $\pm$ 1.2)%; 0.1 $\mu g/mL$  thrombin-induced, 20 $\mu g/mL$ , InRt = (0.5 $\pm$ 0.3)%); cytotoxic (NSCLC-N6 cell line,  $IC_{50} > 30\mu g/mL$ )<sup>[3806]</sup>; cytotoxic inactive (*in vitro*, HeLa, Vero, K562, Raji, Wish, and Calu1 tumor cell lines,  $IC_{50} > 100\mu mol/L$ )<sup>[3057]</sup>. **Source:** AN MO LE *Phyllanthus emblica*, BAI JIANG CAN *Bombyx mori*, BO TE LAN DA JI *Euphorbia portlandica* (whole herb), CAN JIAN *Bombyx mori*, DA YE DONG QING *Ilex latifolia*, *Fagara xanthoxyloides*, GOU GU SHU PI *Ilex cornuta*, GOU QI ZI *Lycium chinense*, GUI GAI *Coprinus atramentarius*, HUANG LONG DAN *Gentiana*

*lutea* (rhizome and root), HUO YAN HUA *Phlogacanthus curviflorus* (root: yield = 0.0231%dw)<sup>[4799]</sup>, JIAN YE TOU WU GEN *Ligularia sagitta*, JU MI JIN HE HUAN *Acacia mellifera* (stem cortex), JUN QIAN ZI *Diospyros lotus*, KU DI DAN *Elephantopus scaber*, LIE WEI LIE LAN *Bursera graveolens* (stem), LUO E YE XIA ZHU *Phyllanthus flexuosus* (stem cortex), MA LAN GEN *Baphicacanthus cusia* [Syn. *Strobilanthes cusia*], MAO GUO SUAN PAN ZI *Glochidion eriocarpum* (root and stem wood), QIANG DAO YAO *Hypoestes purpurea* [Syn. *Justicia purpurea*; *Hypoestes sinica*] (aerial parts: yield = 0.00069%dw)<sup>[4783]</sup>, SANG JI SHENG *Loranthus parasiticus* [Syn. *Loranthus chinensis*; *Taxillus chinensis*], SANG YE *Morus alba*, SHAN DOU GEN *Sophora subprostrata* [Syn. *Sophora tonkinensis*], SHAN REN YE *Rhodomlyrtus tomentosa*, SHUI LIU DOU *Pongamia pinnata* (stem cortex: yield = 0.0028%)<sup>[4721]</sup>, TAI WAN FENG DOU CAI *Petasites formosanus*, WU HUA GUO *Ficus carica*, WU HUA GUO YE *Ficus carica*, XI CHANG NAN MEI DOU *Anadenanthera colubrine* (aerial parts), XIAO HUA MU LAN GUO *Bruguiera parviflora*, YANG MEI *Myrica rubra*, YI HE GUO *Ventilago leiocarpa* (stem)<sup>[3057]</sup>, YOU GAN GEN *Phyllanthus emblica*, YOU GAN MU PI *Phyllanthus emblica*, YOU GAN YE *Phyllanthus emblica*, YUAN CAN SHA *Bombyx mori*, YUN SHI *Caesalpinia decapetala* (leaf), occurs in many plants (*Ficus* spp.; *Achras* spp.; *Raucheria* spp.). Ref: 6, 453, 658, 660, 2377, 2532, 2577, 3806, 4099, 4307, 4415, 4437, 4456, 4953, 5019, 5065, 5382, 5385.



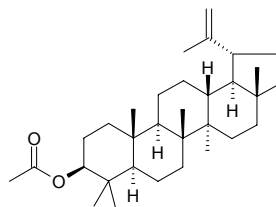
### 13099 Lupeol palmitate

Balanophorin B [32214-80-5] C<sub>46</sub>H<sub>80</sub>O<sub>2</sub> (665.15). White amorphous powder (Me<sub>2</sub>CO), mp 68–69°C. Source: YIN DU SHE GU *Balanophora indica* [Syn. *Langodoffia indica*]. Ref: 633.



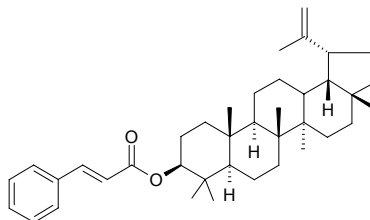
### 13100 Lupeol acetate

Lupenyl acetate C<sub>32</sub>H<sub>52</sub>O<sub>2</sub> (468.77). Crystals, mp 206–209°C, mp 217–218°C. Pharm: Antineoplastic; hypoglycemic; inhibitory activity against NFAT Transcription (IC<sub>50</sub> > 100 μmol/L, positive control Cyclosporin A, IC<sub>50</sub> = (0.29±0.01) μmol/L)<sup>[2536]</sup>. Source: HUA CHA BIAO *Ribes fasciculatum* var. *chinense*, HUANG HUA JIA ZHU TAO *Thevetia nerifolia* [Syn. *Thevetia peruviana*], KU DI DAN *Elephantopus scaber*, MANG GUO SHU PI *Mangifera indica*, SU KU BA DOU HUA *Himatanthus sucuuba*, WU LOU ZI *Phoenix dactylifera*, XIANG PI MU *Alstonia scholaris*. Ref: 6, 658, 2536, 4143.



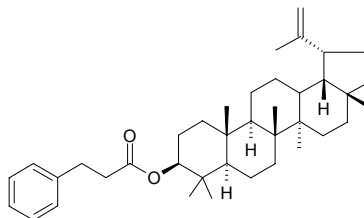
### 13101 Lupeol cinnamate

C<sub>39</sub>H<sub>56</sub>O<sub>2</sub> (556.88). Amorphous solid. Source: SU KU BA DOU HUA *Himatanthus sucuuba*. Ref: 4143.



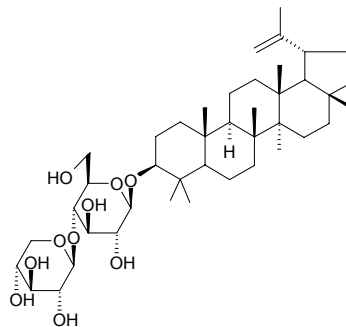
### 13102 Lupeol β-phenyl propionate

C<sub>39</sub>H<sub>58</sub>O<sub>2</sub> (558.90). Amorphous solid. Source: SU KU BA DOU HUA *Himatanthus sucuuba*. Ref: 4143.



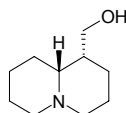
### 13103 Lupeol-3-O-β-D-xylopyranosyl(1→4)-O-β-D-glucopyranoside

C<sub>41</sub>H<sub>68</sub>O<sub>10</sub> (720.99). Source: YANG DAO DOU *Canavalia ensiformis*. Ref: 660.



### 13104 Lupinine

C<sub>10</sub>H<sub>19</sub>NO (169.27). Pharm: Insect antifeedant; insect growth inhibitor (grasshoppers). Source: WU YE JIA MU ZEII *Anabasis aphylla*, HUANG YU SHAN DOU *Lupinus luteus*. Ref: 658.

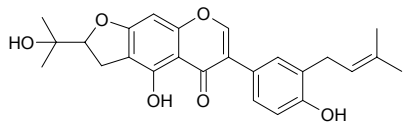


**13105 Lupinisoflavone G**

$C_{25}H_{26}O_6$  (422.48). Pale yellow amorphous,  $[\alpha]_D = -8.2^\circ$  ( $c = 0.14$ , EtOH).

**Pharm:** Antifungal (dermatophyte *Trichophyton mentagrophytes*,

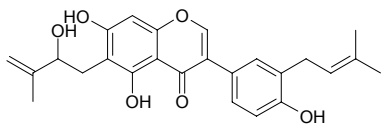
500~1000 $\mu$ g/mL). **Source:** PAN YUAN YU TENG *Derris scandens*. **Ref:** 2347.

**13106 Lupinisol A**

$C_{25}H_{26}O_6$  (422.48). Pale yellow amorphous,  $[\alpha]_D = +36.1^\circ$  ( $c = 0.056$ , EtOH).

**Pharm:** Antifungal (dermatophyte *Trichophyton mentagrophytes*,

500~1000 $\mu$ g/mL). **Source:** PAN YUAN YU TENG *Derris scandens*. **Ref:** 2347.

**13107 Lupiwighteone**

5,7,4'-Trihydroxy-8-prenylisoflavone [104691-86-3]  $C_{20}H_{18}O_5$  (338.36).

**Pharm:** Antibacterial (*Escherichia coli*, MIA = 10.0 $\mu$ g, control

Chloramphenicol, MIA = 0.001 $\mu$ g; *Bacillus subtilis*, MIA = 0.50 $\mu$ g,

Chloramphenicol, MIA = 0.001 $\mu$ g; *Staphylococcus aureus*, MIA = 0.5 $\mu$ g,

Chloramphenicol, MIA = 0.001 $\mu$ g)<sup>[3785]</sup>; antifungal (*Candida mycoderma*,

MIA = 0.05 $\mu$ g, Miconazole, MIA = 0.0001 $\mu$ g)<sup>[3785]</sup>; antioxidant (DPPH

scavenger, TLC detection limit = 1.0 $\mu$ g, IC<sub>50</sub> = 670 $\mu$ g/mL; control Quercetin,

TLC detection limit < 0.05 $\mu$ g, IC<sub>50</sub> = 7 $\mu$ g/mL; Gallic acid, TLC detection

limit < 0.05 $\mu$ g, IC<sub>50</sub> = 4 $\mu$ g/mL; Ascorbic acid, TLC detection limit < 0.10 $\mu$ g,

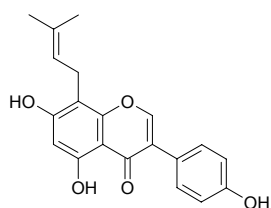
IC<sub>50</sub> = 18 $\mu$ g/mL)<sup>[3785]</sup>; antioxidant (DPPH scavenger, ScRt = 15.79%, control

BHT, ScRt = 71.5%)<sup>[3810]</sup>. **Source:** CHI DOU *Vigna angularis* [Syn. *Dolichus*

*angularis*; *Phaseolus angularis*], GAN CAO *Glycyrrhiza uralensis*, HUANG

YU SHAN DOU *Lupinus luteus*, *Bolusanthus speciosus* (root wood), PAN

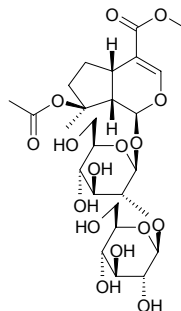
YUAN YU TENG *Derris scandens* (stem). **Ref:** 660, 1521, 3785, 3810.

**13108 Lupuloside**

$C_{25}H_{38}O_{16}$  (594.57). Colorless amorphous solid,  $[\alpha]_D^{29} = -41.6^\circ$  ( $c = 0.125$ ,

MeOH). **Pharm:** Cytotoxic inactive (vero cells); COX-2 inhibitor inactive.

**Source:** HUA YE JIA DU JUAN *Barleria lupulina* (flower). **Ref:** 5456.

**13109 Lupulone**

$\beta$ -Bitter acid [468-28-0]  $C_{26}H_{38}O_4$  (414.59). Prismatic crystals (90%

methanol), mp 92~94°C. **Pharm:** Anti-inflammatory (NO production inhibitor,

*in vitro*, macrophage RAW264.7 cells, induced by LPS/IFN- $\gamma$ , IC<sub>50</sub> =

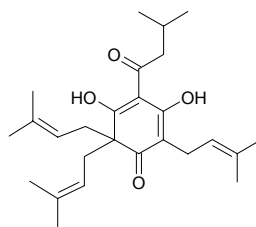
17 $\mu$ mol/L, but with very strong cytotoxicity)<sup>[4795]</sup>; antibacterial

(*Staphylococcus aureus*, MIC = 0.60~1.25 $\mu$ g/mL; *Mycobacterium*

*tuberculosis*, IC = 1~10 $\mu$ g/mL; gram-positive bacteria, *Bacillus subtilis*); LD<sub>50</sub>

(rat, orl) = 1.8g/kg. **Source:** LV CAO *Humulus japonicus* [Syn. *Humulus*

*scandens*], PI JIU HUA *Humulus lupulus* (strobile)<sup>[4795]</sup>. **Ref:** 4, 6, 661, 4795.

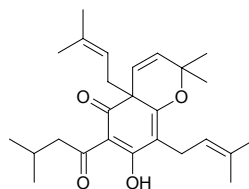
**13110 Lupulone A**

$C_{26}H_{36}O_4$  (412.57). Yellow oil,  $[\alpha]_D^{25} = 0^\circ$  ( $c = 0.3$ , MeOH). **Pharm:**

Anti-inflammatory (NO production inhibitor, *in vitro*, macrophage RAW264.7

cells, induced by LPS/IFN- $\gamma$ , IC<sub>50</sub> = 20 $\mu$ mol/L, but with very strong cytotoxicity).

**Source:** PI JIU HUA *Humulus lupulus* (strobile). **Ref:** 4795.

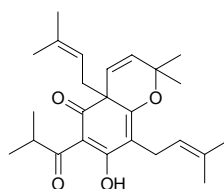
**13111 Lupulone B**

$C_{25}H_{34}O_4$  (398.55). Yellow oil,  $[\alpha]_D^{25} = 0^\circ$  ( $c = 0.4$ , MeOH). **Pharm:**

Anti-inflammatory (NO production inhibitor, *in vitro*, macrophage RAW264.7

cells, induced by LPS/IFN- $\gamma$ , IC<sub>50</sub> = 14 $\mu$ mol/L, but with very strong cytotoxicity).

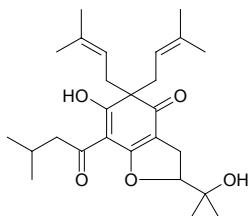
**Source:** PI JIU HUA *Humulus lupulus* (strobile). **Ref:** 4795.



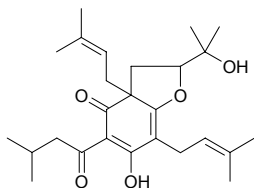


**13112 Lupulone C**

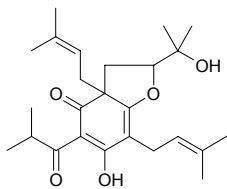
$C_{26}H_{38}O_5$  (430.59). Yellow oil,  $[\alpha]_D^{25} = 0^\circ$  ( $c = 0.4$ , MeOH). **Pharm:** Anti-inflammatory (NO production inhibitor, *in vitro*, macrophage RAW264.7 cells, induced by LPS/IFN- $\gamma$ ,  $IC_{50} = 63\mu\text{mol/L}$ , but with very strong cytotoxicity). **Source:** PI JIU HUA *Humulus lupulus* (strobile). **Ref:** 4795.

**13113 Lupulone D**

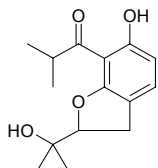
$C_{26}H_{38}O_5$  (430.59). Yellow oil,  $[\alpha]_D^{25} = 0^\circ$  ( $c = 0.4$ , MeOH). **Pharm:** Anti-inflammatory (NO production inhibitor, *in vitro*, macrophage RAW264.7 cells, induced by LPS/IFN- $\gamma$ ,  $IC_{50} = 11\mu\text{mol/L}$ , but with very strong cytotoxicity,  $2\mu\text{mol/L}$ ,  $80\% < \text{cell viability} < 95\%$ ). **Source:** PI JIU HUA *Humulus lupulus* (strobile). **Ref:** 4795.

**13114 Lupulone E**

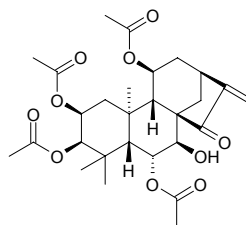
$C_{25}H_{36}O_5$  (416.56). Yellow oil,  $[\alpha]_D^{25} = 0^\circ$  ( $c = 0.5$ , MeOH). **Pharm:** Anti-inflammatory (NO production inhibitor, *in vitro*, macrophage RAW264.7 cells, induced by LPS/IFN- $\gamma$ ,  $IC_{50} = 15\mu\text{mol/L}$ , but with very strong cytotoxicity,  $2\mu\text{mol/L}$ ,  $80\% < \text{cell viability} < 95\%$ ). **Source:** PI JIU HUA *Humulus lupulus* (strobile). **Ref:** 4795.

**13115 Lupulone F**

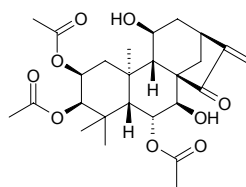
$C_{15}H_{20}O_4$  (264.32). Yellow oil,  $[\alpha]_D^{25} = 0^\circ$  ( $c = 0.7$ , MeOH). **Pharm:** NO production Inhibitor inactive (*in vitro*, macrophage RAW264.7 cells, induced by LPS/IFN- $\gamma$ ,  $IC_{50} > 100\mu\text{mol/L}$ ). **Source:** PI JIU HUA *Humulus lupulus* (strobile). **Ref:** 4795.

**13116 Lushanrubescensin A**

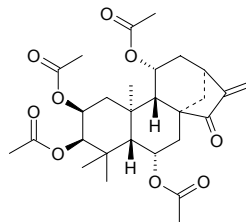
$C_{28}H_{38}O_{10}$  (534.61). mp 185–186°C,  $[\alpha]_D^{22} = -49.10^\circ$  ( $c = 0.54$ , MeOH). **Source:** LU SHAN XIANG CHA CAI *Isodon rubescens* var. *lushanensis*. **Ref:** 4067.

**13117 Lushanrubescensin B**

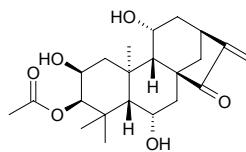
$C_{26}H_{36}O_9$  (492.57). mp 182–184°C,  $[\alpha]_D^{22} = -78.5^\circ$  ( $c = 0.52$ , MeOH). **Source:** LU SHAN XIANG CHA CAI *Isodon rubescens* var. *lushanensis*. **Ref:** 4067.

**13118 Lushanrubescensin C**

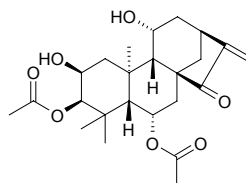
[110325-78-5]  $C_{28}H_{38}O_9$  (518.61). mp 190–192°C,  $[\alpha]_D^{19} = -51.25^\circ$  ( $c = 0.17$ , MeOH). **Source:** LONG SHENG XIANG CHA CAI *Isodon lungshengensis*, LU SHAN XIANG CHA CAI *Isodon rubescens* var. *lushanensis*. **Ref:** 690, 1521, 4067.

**13119 Lushanrubescensin D**

$C_{22}H_{32}O_6$  (392.50). mp 238°C. **Source:** LU SHAN XIANG CHA CAI *Isodon rubescens* var. *lushanensis*. **Ref:** 4067.

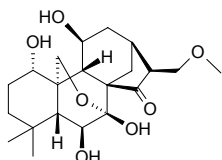
**13120 Lushanrubescensin E**

$C_{24}H_{34}O_7$  (434.53). mp 215–217.5°C,  $[\alpha]_D^{19} = -77.5^\circ$  ( $c = 0.1$ , MeOH). **Source:** LU SHAN XIANG CHA CAI *Isodon rubescens* var. *lushanensis*. **Ref:** 4067.

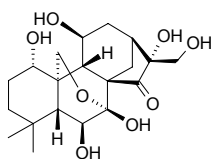


**13121 Lushanrubescensin F**

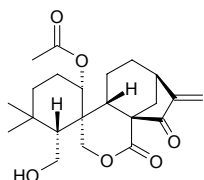
$C_{21}H_{32}O_7$  (396.48). Colorless needles, mp 202~203°C,  $[\alpha]_D^{20} = -77.3^\circ$  ( $c = 0.11$ , acetone). Source: LU SHAN XIANG CHA CAI *Isodon rubescens* var. *lushanensis* (leaf). Ref: 4353.

**13122 Lushanrubescensin G**

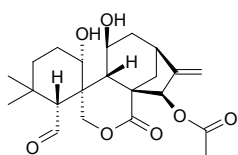
$C_{20}H_{30}O_8$  (398.46). White amorphous powder,  $[\alpha]_D^{20} = -40.2^\circ$  ( $c = 0.06$ , acetone). Source: LU SHAN XIANG CHA CAI *Isodon rubescens* var. *lushanensis* (leaf). Ref: 4353.

**13123 Lushanrubescensin H**

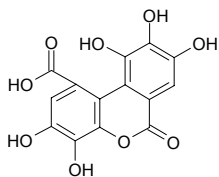
$C_{22}H_{30}O_6$  (390.48). Colorless needles, mp 201~202°C,  $[\alpha]_D^{20} = +31.8^\circ$  ( $c = 0.32$ , acetone). Pharm: Cytotoxic (K562,  $IC_{50} = 3.56\mu\text{mol/L}$ , control Cisplatin  $IC_{50} = 3.84\mu\text{mol/L}$ ; Beap37,  $IC_{50} = 13.42\mu\text{mol/L}$ , control Cisplatin  $IC_{50} = 1.54\mu\text{mol/L}$ ; BGC823,  $IC_{50} = 8.91\mu\text{mol/L}$ , control Cisplatin  $IC_{50} = 2.54\mu\text{mol/L}$ ; CA,  $IC_{50} = 8.25\mu\text{mol/L}$ , control Cisplatin  $IC_{50} = 0.88\mu\text{mol/L}$ ; HeLa,  $IC_{50} > 100\mu\text{mol/L}$ , control Cisplatin  $IC_{50} = 3.60\mu\text{mol/L}$ ). Source: LU SHAN XIANG CHA CAI *Isodon rubescens* var. *lushanensis* (leaf). Ref: 4353.

**13124 Lushanrubescensin I**

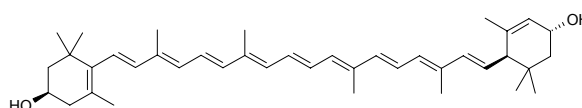
$C_{22}H_{30}O_7$  (406.48). amorphous powder,  $[\alpha]_D^{20} = +45.2^\circ$  ( $c = 1.99$ , MeOH). Source: LU SHAN XIANG CHA CAI *Isodon rubescens* var. *lushanensis* (leaf). Ref: 4353.

**13125 Luteic acid**

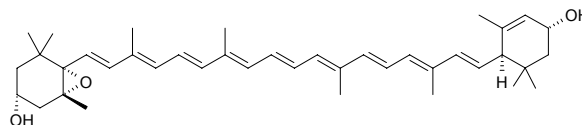
$C_{14}H_8O_9$  (320.21). mp 338~342°C (dec). Source: FAN SHI LIU PI *Psidium guajava*. Ref: 6.

**13126 Lutein**

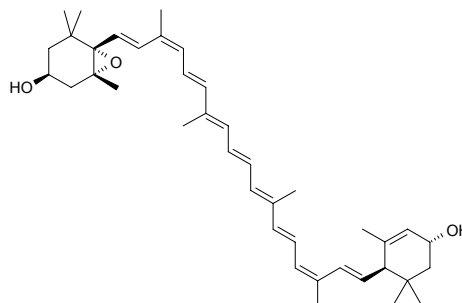
[127-40-2]  $C_{40}H_{56}O_2$  (568.89). mp 196°C. Source: DA TU SI ZI *Cuscuta japonica*, DAO CAO *Oryza sativa*, FENG LI *Ananas comosus*, HAI XIA *Panaeus orientalis*, HUO SUO MA *Helicteres isora*, JI ZI BAI *Gallus gallus domesticus*, JI ZI HUANG *Gallus gallus domesticus*, JIA LIAN QIAO YE *Duranta repens*, JIN YU *Carassius auratus*, JING MI *Oryza sativa*, LI MENG *Citrus limonia*, LI MENG YE *Citrus limonia*, LI YU PI *Cyprinus carpio*, MEI ZHOU SUAN GUO LUO *Vaccinium macrocarpon*, NAN FANG TU SI ZI *Cuscuta australis*, NING MENG *Citrus limon*, SU MI *Setaria italica*, SUAN SHUI CAO *Potamogeton perfoliatus*, WAN SHOU JU *Tagetes erecta*, YAO YONG PU GONG YING *Taraxacum officinale*, YUN NAN SUI HUA SHAN *Amentotaxus yunnanensis* (twig and leaf: yield = 0.00015%dw)<sup>[4707]</sup>, ZI CAI *Porphyrus tenera*, *Citrus* sp., *Prunus* sp., *Malus* sp., occurs in many plants. Ref: 6, 660, 4707.

**13127 Lutein epoxide**

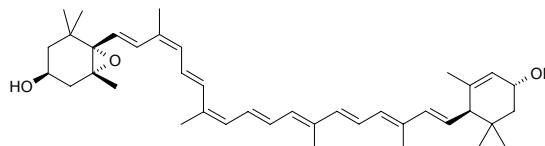
Taraxanthin  $C_{40}H_{56}O_3$  (584.89). mp 184~185°C. Source: DAO CAO *Oryza sativa*, KUAN DONG HUA *Tussilago farfara*, NAN FANG TU SI ZI *Cuscuta australis*, NI TAN XIAN *Sphagnum palustre* [Syn. *Sphagnum obtusifolium*; *Sphagnum cymbifolium*], SHUI JIN FENG *Impatiens nolitangere*, WENG CAI *Ipomoea aquatica* [Syn. *Convolvulus repens*; *Ipomoea reptans*], XIANG YUAN *Citrus wilsonii*, YI ZHU QIAN MA *Urtica dioica*. Ref: 6, 660.

**13128 (9Z,9'Z)-Lutein-5,6-epoxide**

$C_{40}H_{56}O_3$  (584.89). Source: DA HUA JU *Dendranthema grandiflorum* (petal). Ref: 3865.

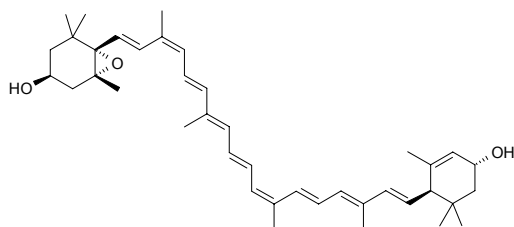
**13129 (9Z,13Z)-Lutein-5,6-epoxide**

$C_{40}H_{56}O_3$  (584.89). Source: DA HUA JU *Dendranthema grandiflorum* (petal). Ref: 3865.

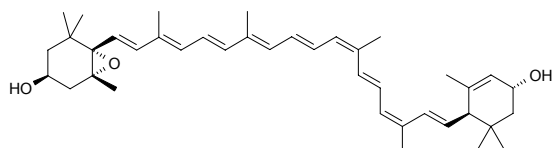


**13130 (9Z,13'Z)-Lutein-5,6-epoxide**

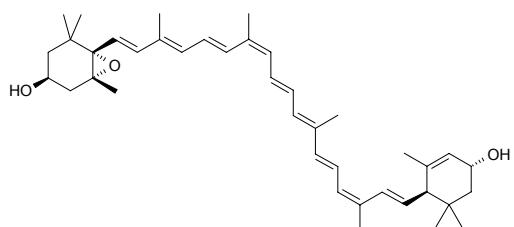
C<sub>40</sub>H<sub>56</sub>O<sub>3</sub> (584.89). Source: DA HUA JU *Dendranthema grandiflorum* (petal). Ref: 3865.

**13131 (9'Z,13'Z)-Lutein-5,6-epoxide**

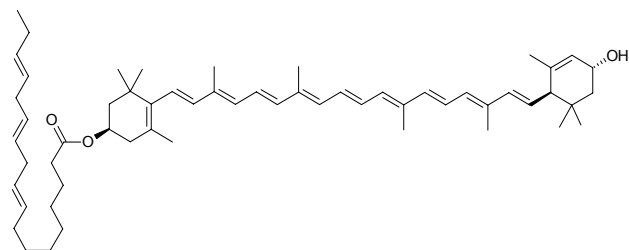
C<sub>40</sub>H<sub>56</sub>O<sub>3</sub> (584.89). Source: DA HUA JU *Dendranthema grandiflorum* (petal). Ref: 3865.

**13132 (13Z,9'Z)-Lutein-5,6-epoxide**

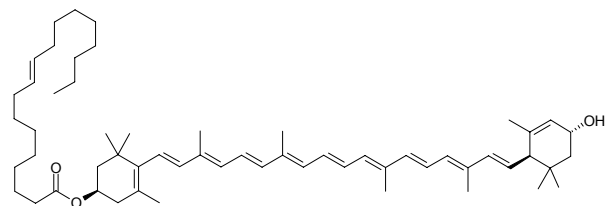
C<sub>40</sub>H<sub>56</sub>O<sub>3</sub> (584.89). Source: DA HUA JU *Dendranthema grandiflorum* (petal). Ref: 3865.

**13133 Lutein-3-linolenate**

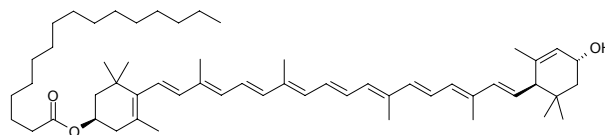
C<sub>58</sub>H<sub>84</sub>O<sub>3</sub> (829.31). Source: XIANG RI KUI YE *Helianthus annuus*. Ref: 6.

**13134 Lutein oleic acid ester**

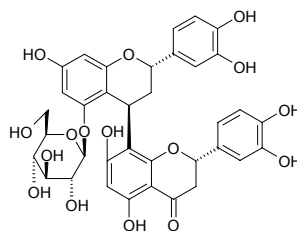
C<sub>58</sub>H<sub>88</sub>O<sub>3</sub> (833.35). Source: DI TANG HUA *Kerria japonica*. Ref: 6.

**13135 Lutein-3-palmitate**

C<sub>56</sub>H<sub>86</sub>O<sub>3</sub> (807.31). Source: XIANG RI KUI YE *Helianthus annuus*. Ref: 6.

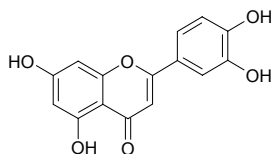
**13136 Luteoilflavan-(4β→8)-eriodictyol-5-glucoside**

C<sub>36</sub>H<sub>36</sub>O<sub>16</sub> (724.66). Pharm: Tanning agent. Source: GAO LIANG *Sorghum vulgare*. Ref: 658.

**13137 Luteolin**

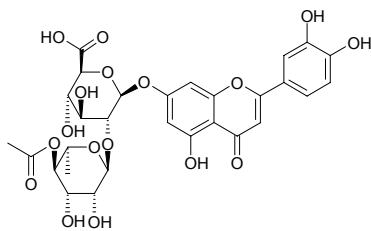
5,7,3',4'-Tetrahydroxyflavone [491-70-3] C<sub>15</sub>H<sub>10</sub>O<sub>6</sub> (286.24). Yellow needles, mp 328–330°C (dec). Pharm: Antiallergic; antibacterial (*Staphylococcus aureus* and *Bacillus subtilis*, EC = 1:35000, *Diplococcus pneumoniae*, *Coccus catarrhalis*, *Bacillus typhosus*, *Bacillus dysenteriae*, *Bacillus pyocyaneus* and *Bacillus termo*); antifungal (*Candida albicans*); cytotoxic (NK/LY ascites cancer *in vitro*); anti-inflammatory (rat, caused by woolball-embedding, 20mg/(kg·d), 7 days); antispasmodic (rbt intestine *in vitro*, gpg trachea smooth muscle and ileum); antitussive (inhibits coughing center); dispels phlegm (rat capillary tube method, mus P.S.P. method); antiviral (*H. suis* virus); enhances arterial tension and lowers intravenous tension (dog heart *in vitro*, 5~10mg); enhances blood capillary permeability (rat, 0.5g/kg sc); immunoenhancer; increases coronary flow; dihydrocoenzyme I (NADH) oxidase inhibitor; iodine-induced thyronine deiodinase inhibitor; aldose reductase inhibitor (eye lens, IC<sub>50</sub> = 0.45μmol/L, control Epalrestat, IC<sub>50</sub> = 0.072μmol/L)<sup>[4214,4530]</sup>; protein kinase C inhibitor; succinic oxidase inhibitor; antihypercholesterolemic (rbt, reduces the level of cholesterol and triglyceride in serum); anti-inflammatory (modulator of cytokine network: inhibits LPS-stimulated TNF-α and IL-6 release in RAW264.7 macrophages, IC<sub>50</sub> < 1μmol/L)<sup>[4416]</sup>; anti-inflammatory (*in vivo*, inhibits production of TNF-α and decreases both PMA and oxazolone-induced allergic ear oedema)<sup>[4416]</sup>; anti-inflammatory (significantly reduces LPS-stimulated ICAM-1 expression in liver of LPS-treated mouse)<sup>[4416]</sup>; anti-inflammatory (treatment of airway bronchoconstriction and bronchial hyperreactivity, reduces level of both IL-4 and IL-5, a suggested lead compound to treat asthma)<sup>[4416]</sup>; anti-inflammatory (IL-5 inhibitor, concentration-dependent manner, mean IC<sub>50</sub> = 18.7μmol/L)<sup>[4416]</sup>; anti-inflammatory (COX-2 inhibitor, rat renal medulla, moderate activity)<sup>[4415]</sup>; 15-lipoxygenase inhibitor<sup>[4415]</sup>; anti-inflammatory (NO production inhibitor)<sup>[4415]</sup>; anti-HIV; LD<sub>50</sub> (mus, ip) = 180mg/kg. Source: DA CHE QIAN *Plantago major*, DAN HUANG MU XI CAO *Reseda luteola* (first isolated in 1832), HEI SHUI XIE CAO *Valeriana amurensis*, HUANG HE MAO REN DONG *Lonicera fulvotomentosa*, HUANG HUA HAO

*Artemisia annua*, JI YAN CAO *Kummerowia striata*, JIA MA CHI XIAN *Bacopa monniera* (whole herb: yield = 0.0001%fw)<sup>[4664]</sup>, JIN FEI CAO *Inula japonica*, JIN YIN HUA *Lonicera japonica* (flower bud: content scope = 0.45%–5.18%), JING JIE *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*], JU HUA *Chrysanthemum morifolium* [Syn. *Dendranthema morifolium*] (dried capitulum: content scope of 24 origins = 0.002%–0.105%, mean content = 0.0563%<sup>[5508]</sup>), LANG PA CAO *Bidens tripartita* (whole herb: mean content = 0.171%<sup>[5508]</sup>), LUO HUA SHENG *Arachis hypogaea*, MI MENG HUA *Buddleja officinalis*, NAN CHUAN GUAN CHUN HUA *Microtoena prainiana* (stem: yield = 0.00007%dw)<sup>[4752]</sup>, SHAN WO JU *Lactuca indica* (fresh whole herb: yield = 0.0024%fw)<sup>[4689]</sup>, SHI SHENG BIAN LEI *Gentianopsis paludosa*, SHUI MU XUE LIAN HUA *Saussurea medusa* (whole herb), WU JU LOU DOU CAI *Aquilegia ecalcarata* (whole herb: yield = 0.00017%dw)<sup>[3029]</sup>, XIA KU CAO *Prunella vulgaris*, XIONG RUI ZHUANG SHU WEI CAO *Salvia staminea*, YAO YONG PU GONG YING *Taraxacum officinale*, YE JU HUA *Chrysanthemum indicum*, YUAN HUA *Daphne genkwa* (dried bud: mean content of 19 origins = 0.048%<sup>[5535]</sup>), occurs in many plants (Fabaceae spp., Resedaceae spp., Euphorbiaceae spp., Apiaceae spp., Scrophulariaceae spp., Asteraceae spp., Cistaceae spp. and Passifloraceae spp.). Ref: 2, 4, 369, 602, 658, 660, 1521, 3029, 4214, 4415, 4416, 4530, 4664, 4689, 4752, 5400, 5501, 5508, 5535.



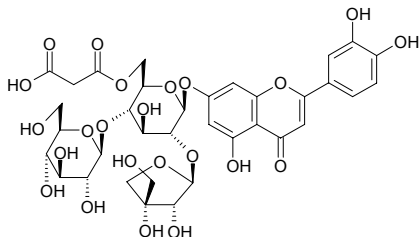
**13138 Luteolin 7-O-[2''-O-(4'''-O-acetyl- $\alpha$ -L-rhamnopyranosyl)]- $\beta$ -D-glucuronopyranoside**

$C_{29}H_{30}O_{17}$  (650.55). Amorphous yellow solid,  $[\alpha]_D^{20} = -87^\circ$  ( $c = 0.1$ , MeOH). Source: XIN YUE XING YE CAO SU *Phlomis lunariifolia* (aerial parts). Ref: 3864.



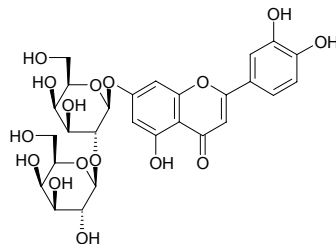
**13139 Luteolin 7-O-[2-( $\beta$ -D-apiofuranosyl)-4-( $\beta$ -D-glucopyranosyl)-6-malonyl]- $\beta$ -D-glucopyranoside**

$C_{35}H_{40}O_{23}$  (828.70). Yellow amorphous powder. Source: HONG HAI JIAO *Capsicum annuum* (fruit). Ref: 3419.



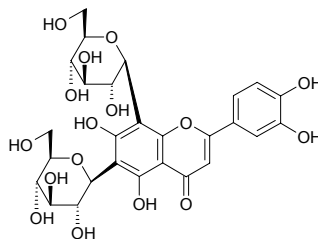
**13140 Luteolin-7-O-digalactoside**

$C_{27}H_{30}O_{16}$  (610.53). Source: REN DONG TENG *Lonicera japonica*. Ref: 660.



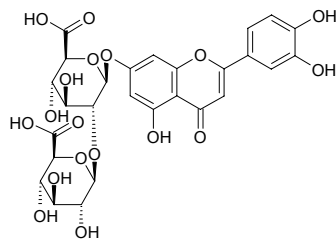
**13141 Luteolin-6,8-C-diglucoside**

$C_{27}H_{30}O_{16}$  (610.53). Source: BAI CHANG *Acorus calamus*. Ref: 660.



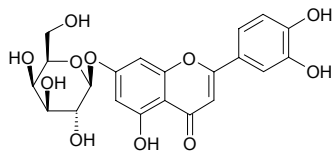
**13142 Luteolin-7-O-diglucuronide**

$C_{27}H_{26}O_{18}$  (638.50). Source: HUI HUI SU GENG *Perilla frutescens* var. *crispa*. Ref: 660.



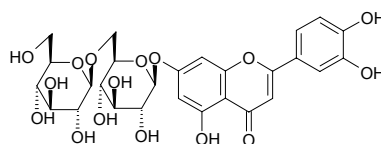
**13143 Luteolin 7-O- $\beta$ -D-galactoside**

$C_{21}H_{20}O_{11}$  (448.39). Source: NIU SHE TOU *Sonchus arvensis*, YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*]. Ref: 2, 521.



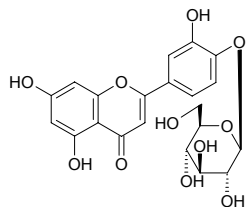
**13144 Luteolin-7-O-gentiobioside**

$C_{27}H_{30}O_{16}$  (610.53). Source: LUO SHI TENG *Trachelospermum jasminoides*. Ref: 660.

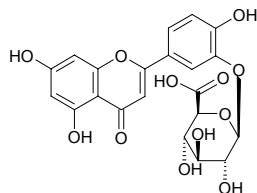


**13145 Luteolin-4'-O-glucoside**

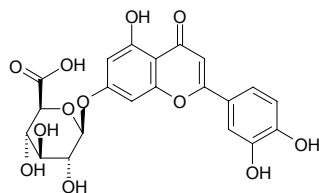
[6920-38-3] C<sub>21</sub>H<sub>20</sub>O<sub>11</sub> (448.39). mp 168~178°C. **Pharm:** Anti-inflammatory (IL-5 inhibitor, concentration-dependent manner, mean IC<sub>50</sub> = 3.7 μmol/L)<sup>[4416]</sup>; Xanthinoxidase inhibitor (IC<sub>50</sub> = 2.0 μmol/L); cAMP phosphodiesterase inhibitor (IC<sub>50</sub> = 79 μmol/L); aldose reductase inhibitor (IC<sub>50</sub> = 4.8 μmol/L, control Epalrestat, IC<sub>50</sub> = 0.072 μmol/L)<sup>[4530]</sup>. **Source:** JI YAN CAO *Kummerowia striata*, LUO SHI TENG *Trachelospermum jasminoides*, MU DI XIANG WAN DOU *Lathyrus pratensis*, SHU QU CAO *Gnaphalium affine* [Syn. *Gnaphalium multiceps*], SHUI MU XUE LIAN HUA *Saussurea medusa* (whole herb). **Ref:** 6, 660, 1652, 1699, 4416, 4530.

**13146 Luteolin-3'-O-glucuronide**

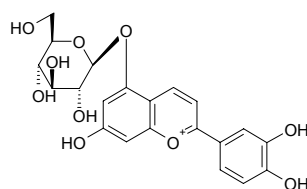
C<sub>21</sub>H<sub>18</sub>O<sub>12</sub> (462.37). **Source:** MI DIE XIANG *Rosmarinus officinalis*, SHE TAI *Conocephalum conicum*. **Ref:** 660.

**13147 Luteolin-7-O-β-D-glucuronide**

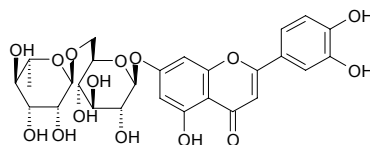
Luteolin 7-O-β-D-glucopyranosiduronic acid C<sub>21</sub>H<sub>18</sub>O<sub>12</sub> (462.37). mp 182~182°C. **Source:** SHAN WO JU *Lactuca indica* (Fresh whole herb: yield = 0.0030%fw)<sup>[4689]</sup>, WO JU *Lactuca sativa*, YE JU HUA *Chrysanthemum indicum*. **Ref:** 6, 4214, 4689.

**13148 Luteolinidin-5-glucoside**

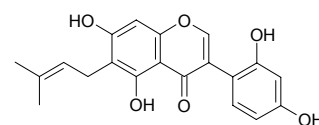
C<sub>21</sub>H<sub>21</sub>O<sub>10</sub><sup>+</sup> (433.40). **Source:** MAN JIANG HONG *Azolla imbricata* [Syn. *Salvinia imbricata*] **Ref:** 660.

**13149 Luteolin-7-rutinoside**

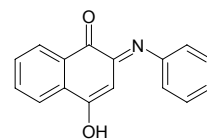
Luteolin 7-O-rutinoside C<sub>27</sub>H<sub>30</sub>O<sub>15</sub> (594.53). **Pharm:** Aldose reductase inhibitor (IC<sub>50</sub> = 0.92 μmol/L, control Epalrestat, IC<sub>50</sub> = 0.072 μmol/L)<sup>[4530]</sup>. **Source:** JI CAI *Capsella bursa-pastoris*, SHUI MU XUE LIAN HUA *Saussurea medusa* (whole herb). **Ref:** 6, 4530.

**13150 Luteone**

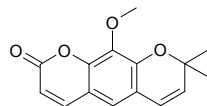
[41743-56-0] C<sub>20</sub>H<sub>18</sub>O<sub>6</sub> (354.36). **Pharm:** Antifungal. **Source:** BAI YU SHAN DOU *Lupinus albus*. **Ref:** 658.

**13151 Lutine**

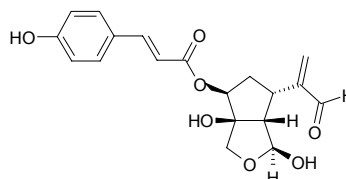
2-Anilino-1,4-naphthoquinone [66855-47-8] C<sub>16</sub>H<sub>11</sub>NO<sub>2</sub> (249.27). **Source:** DAN HUANG MU XI CAO *Reseda luteola*, NAN CHUAN GUAN CHUN HUA *Microtoena prainiana* (stem: yield = 0.00001%dw). **Ref:** 1521, 4752.

**13152 Luvangetin**

[483-92-1] C<sub>15</sub>H<sub>14</sub>O<sub>4</sub> (258.28). mp 108~109°C. **Source:** YAN JIAO CAO *Boenninghausenia albiflora*. **Ref:** 2495.

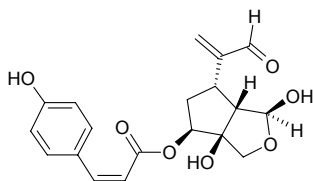
**13153 Luzonial A**

C<sub>19</sub>H<sub>20</sub>O<sub>7</sub> (360.37). Yellow oil; [α]<sub>D</sub><sup>21</sup> = -7.1° (c = 1.04, MeOH). **Pharm:** Cytotoxic (HeLa-S3 cancer cells, moderate, IC<sub>50</sub> = 3.5 μmol/L, control 5-Fluorouracil IC<sub>50</sub> = 5.4 μmol/L, Cisplatin IC<sub>50</sub> = 2.46 μmol/L). **Source:** LV SONG JIA MI *Viburnum luzonicum*. **Ref:** 2538.

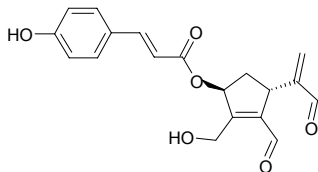


**13154 Luzonial B**

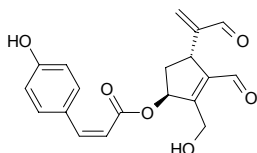
$C_{19}H_{20}O_7$  (360.37). Yellow oil;  $[\alpha]_D^{21} = -1.9^\circ$  ( $c = 1.17$ , MeOH). **Pharm:** Cytotoxic (HeLa-S3 cancer cells, moderate,  $IC_{50} = 1.93\mu\text{mol/L}$ , control 5-Fluorouracil  $IC_{50} = 5.4\mu\text{mol/L}$ , Cisplatin  $IC_{50} = 2.46\mu\text{mol/L}$ ). **Source:** LV SONG JIA MI *Viburnum luzonicum*. **Ref:** 2538.

**13155 Luzonidial A**

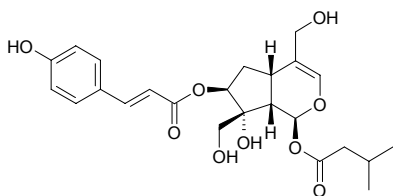
$C_{19}H_{18}O_6$  (342.35). Yellow oil;  $[\alpha]_D^{21} = -183.4^\circ$  ( $c = 0.94$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (HeLa-S3 cancer cells, moderate,  $IC_{50} = 24.5\mu\text{mol/L}$ , control 5-Fluorouracil  $IC_{50} = 5.4\mu\text{mol/L}$ , Cisplatin  $IC_{50} = 2.46\mu\text{mol/L}$ ). **Source:** LV SONG JIA MI *Viburnum luzonicum*. **Ref:** 2538.

**13156 Luzonidial B**

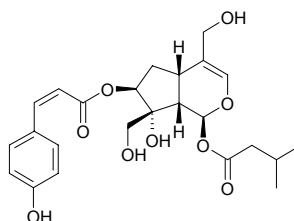
$C_{19}H_{18}O_6$  (342.35). Yellow oil;  $[\alpha]_D^{21} = -32.4^\circ$  ( $c = 0.54$ ,  $CHCl_3$ ). **Source:** LV SONG JIA MI *Viburnum luzonicum*. **Ref:** 2538.

**13157 Luzonoid A**

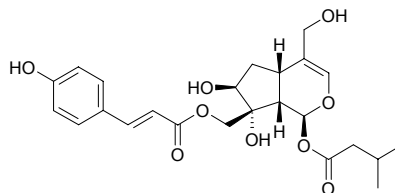
$C_{24}H_{30}O_9$  (462.5). Yellow oil,  $[\alpha]_D^{21} = +41.0^\circ$  ( $c = 0.64$ , MeOH). **Pharm:** Cytotoxic (*in vitro*, HeLa-S3,  $IC_{50} = 2.89\mu\text{mol/L}$ ; control Cisplatin,  $IC_{50} = 2.46\mu\text{mol/L}$ ). **Source:** LV SONG JIA MI *Viburnum luzonicum* (leaf: yield = 0.0033%). **Ref:** 4777.

**13158 Luzonoid B**

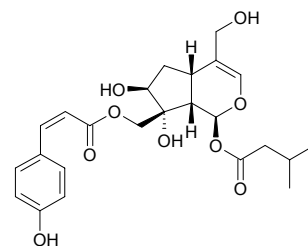
$C_{24}H_{30}O_9$  (462.5). Yellow oil,  $[\alpha]_D^{21} = -53.7^\circ$  ( $c = 2.11$ , MeOH). **Pharm:** Cytotoxic (*in vitro*, HeLa-S3,  $IC_{50} = 3.11\mu\text{mol/L}$ ; control Cisplatin,  $IC_{50} = 2.46\mu\text{mol/L}$ ). **Source:** LV SONG JIA MI *Viburnum luzonicum* (leaf: yield = 0.0020%). **Ref:** 4777.

**13159 Luzonoid C**

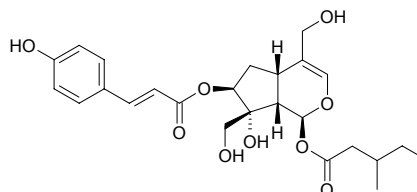
$C_{24}H_{30}O_9$  (462.5). Yellow oil,  $[\alpha]_D^{21} = -54.1^\circ$  ( $c = 0.35$ , MeOH). **Pharm:** Cytotoxic (*in vitro*, HeLa-S3,  $IC_{50} = 3.57\mu\text{mol/L}$ ; control Cisplatin,  $IC_{50} = 2.46\mu\text{mol/L}$ ). **Source:** LV SONG JIA MI *Viburnum luzonicum* (leaf: yield = 0.00069%). **Ref:** 4777.

**13160 Luzonoid D**

$C_{24}H_{30}O_9$  (462.5). Yellow oil,  $[\alpha]_D^{21} = -43.3^\circ$  ( $c = 1.03$ , MeOH). **Pharm:** Cytotoxic (*in vitro*, HeLa-S3,  $IC_{50} = 4.56\mu\text{mol/L}$ ; control Cisplatin,  $IC_{50} = 2.46\mu\text{mol/L}$ ). **Source:** LV SONG JIA MI *Viburnum luzonicum* (leaf: yield = 0.00026%). **Ref:** 4777.

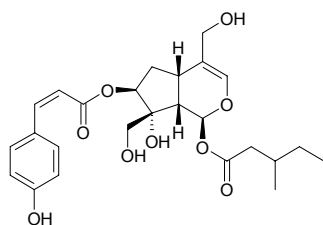
**13161 Luzonoid E**

1-*O*-Deisovaeroyl-1-*O*-3-methylvaleroylluzonoid A  $C_{25}H_{32}O_9$  (476.53). Yellow oil,  $[\alpha]_D^{21} = +54.1^\circ$  ( $c = 0.21$ , MeOH). **Pharm:** Cytotoxic (*in vitro*, HeLa-S3,  $IC_{50} = 7.4\mu\text{mol/L}$ ; control Cisplatin,  $IC_{50} = 2.46\mu\text{mol/L}$ ). **Source:** LV SONG JIA MI *Viburnum luzonicum* (leaf: yield = 0.00061%). **Ref:** 4777.

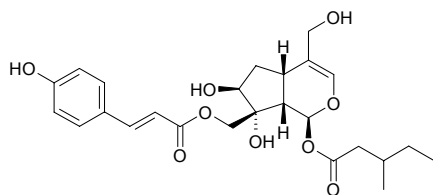


**13162 Luzonoid F**

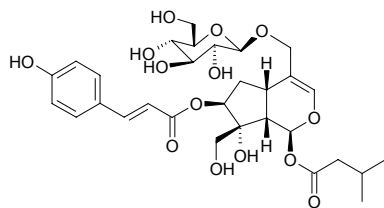
$C_{25}H_{32}O_9$  (476.53). Colorless oil,  $[\alpha]_D^{21} = -32.1^\circ$  ( $c = 2.10$ , MeOH). **Source:** LV SONG JIA MI *Viburnum luzonicum* (leaf: yield = 0.00012%). **Ref:** 4777.

**13163 Luzonoid G**

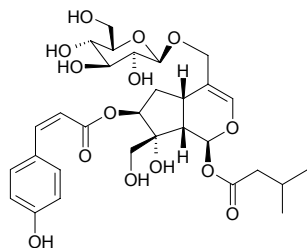
$C_{25}H_{32}O_9$  (476.53). Colorless oil,  $[\alpha]_D^{21} = -36.1^\circ$  ( $c = 0.80$ , MeOH). **Source:** LV SONG JIA MI *Viburnum luzonicum* (leaf: yield = 0.00011%). **Ref:** 4777.

**13164 Luzonoside A**

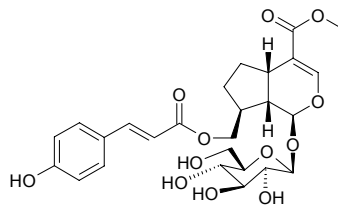
7-*O*-(*E*)-*p*-Coumaroylsuspensolide F  $C_{30}H_{40}O_{14}$  (624.64). Yellow paste,  $[\alpha]_D^{21} = -18.6^\circ$  ( $c = 0.60$ , MeOH). **Pharm:** Cytotoxic (*in vitro*, HeLa-S3,  $IC_{50} = 3.39\mu\text{mol/L}$ ; control Cisplatin,  $IC_{50} = 2.46\mu\text{mol/L}$ ). **Source:** LV SONG JIA MI *Viburnum luzonicum* (leaf: yield = 0.00016%). **Ref:** 4777.

**13165 Luzonoside B**

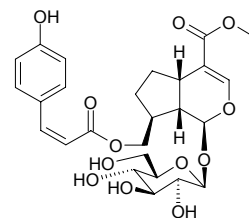
7-*O*-(*Z*)-*p*-Coumaroylsuspensolide F  $C_{30}H_{40}O_{14}$  (624.64). Yellow paste,  $[\alpha]_D^{21} = -41.1^\circ$  ( $c = 0.45$ , MeOH). **Pharm:** Cytotoxic (*in vitro*, HeLa-S3,  $IC_{50} = 4.67\mu\text{mol/L}$ ; control Cisplatin,  $IC_{50} = 2.46\mu\text{mol/L}$ ). **Source:** LV SONG JIA MI *Viburnum luzonicum* (leaf: yield = 0.00022%). **Ref:** 4777.

**13166 Luzonoside C**

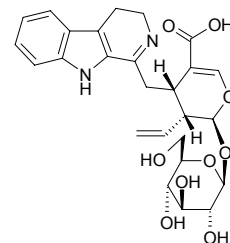
10-*O*-(*E*)-*p*-Coumaroyladoxoside  $C_{26}H_{32}O_{12}$  (536.54). Yellow paste,  $[\alpha]_D^{21} = -9.6^\circ$  ( $c = 0.31$ , MeOH). **Pharm:** Cytotoxic (*in vitro*, HeLa-S3,  $IC_{50} > 100\mu\text{mol/L}$ ; control Cisplatin,  $IC_{50} = 2.46\mu\text{mol/L}$ ). **Source:** LV SONG JIA MI *Viburnum luzonicum* (leaf: yield = 0.00021%). **Ref:** 4777.

**13167 Luzonoside D**

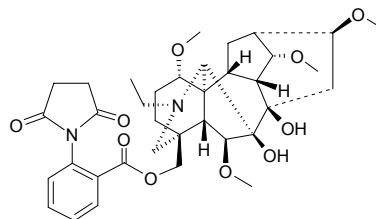
10-*O*-(*Z*)-*p*-Coumaroyladoxoside  $C_{26}H_{32}O_{12}$  (536.54). Yellow paste,  $[\alpha]_D^{21} = +32.6^\circ$  ( $c = 0.27$ , MeOH). **Pharm:** Cytotoxic (*in vitro*, HeLa-S3,  $IC_{50} > 100\mu\text{mol/L}$ ; control Cisplatin,  $IC_{50} = 2.46\mu\text{mol/L}$ ). **Source:** LV SONG JIA MI *Viburnum luzonicum* (leaf: yield = 0.00021%). **Ref:** 4777.

**13168 Lyalosidic acid**

$C_{26}H_{30}N_2O_9$  (514.54). **Source:** LIU QIU SHE GEN CAO *Ophiorrhiza liukiensis* (whole herb). **Ref:** 4527.

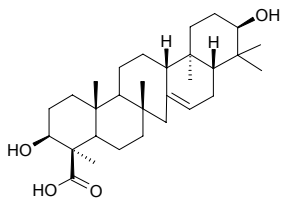
**13169 Lycaconitine**

[25867-19-0]  $C_{36}H_{48}N_2O_{10}$  (668.79). **Pharm:** Increases blood pressure (anesthetic rbt, dose  $> 0.25\text{mg/kg}$ , blood pressure rises slightly). **Source:** KE SHEN MI ER CUI QUE *Delphinium cashmerianum*, LANG DU WU TOU *Aconitum lycoctonum*, NIU BIAN *Aconitum barbatum* var. *puberulum* [Syn. *Aconitum ochranthum*]. **Ref:** 658, 660.

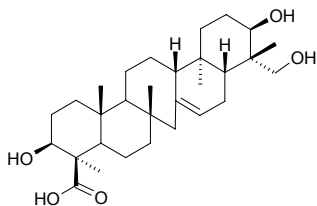


**13170 Lycerenuic acid A**

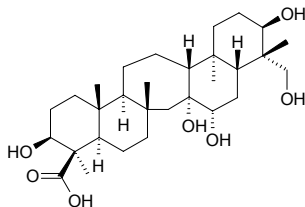
$C_{30}H_{48}O_4$  (472.71). Colorless powder, mp 322–324°C (MeOH/CHCl<sub>3</sub>),  $[\alpha]_D^{26} = -21.0^\circ$  ( $c = 0.10$ , MeOH). Source: PU DI WU GONG *Lycopodium cernuum* (root, stem and leaf: yield = 0.0030%dw). Ref: 660, 4633.

**13171 Lycerenuic acid B**

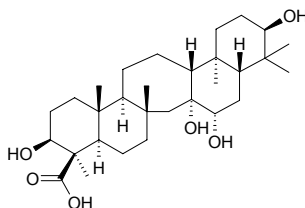
$C_{30}H_{48}O_5$  (488.71). Colorless powder, mp 304–305°C (MeOH/CHCl<sub>3</sub>),  $[\alpha]_D^{26} = -31.0^\circ$  ( $c = 0.10$ , MeOH). Source: PU DI WU GONG *Lycopodium cernuum* (root, stem and leaf: yield = 0.0013%dw). Ref: 660, 4633.

**13172 Lycerenuic acid C**

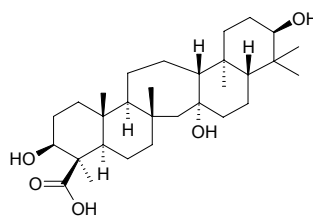
$C_{30}H_{50}O_7$  (522.73). Colorless powder, mp 265–266°C (MeOH/CHCl<sub>3</sub>),  $[\alpha]_D^{22} = -42.0^\circ$  ( $c = 0.20$ , MeOH). Source: PU DI WU GONG *Lycopodium cernuum* (root, stem and leaf: yield = 0.0022%dw). Ref: 4633.

**13173 Lycerenuic acid D**

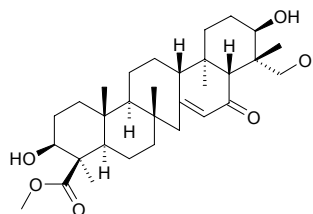
$C_{30}H_{50}O_6$  (506.73). Colorless powder, mp 289–290°C (MeOH/CHCl<sub>3</sub>),  $[\alpha]_D^{26} = -35.0^\circ$  ( $c = 0.10$ , MeOH). Source: PU DI WU GONG *Lycopodium cernuum* (root, stem and leaf: yield = 0.00058%dw). Ref: 4633.

**13174 Lycerenuic acid E**

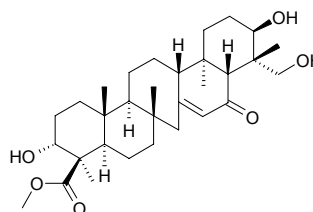
$C_{30}H_{50}O_5$  (490.73). Colorless powder, mp 245–246°C (MeOH/CHCl<sub>3</sub>),  $[\alpha]_D^{26} = -46.0^\circ$  ( $c = 0.10$ , MeOH). Source: PU DI WU GONG *Lycopodium cernuum* (root, stem and leaf: yield = 0.00067%dw). Ref: 4633.

**13175 Lycerenuic ketone A**

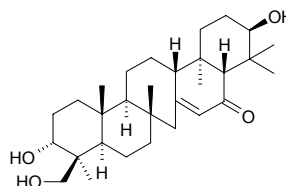
$C_{31}H_{48}O_6$  (516.72). Colorless powder, mp 176–177°C (MeOH/CHCl<sub>3</sub>),  $[\alpha]_D^{26} = -22.5^\circ$  ( $c = 0.20$ , MeOH). Source: PU DI WU GONG *Lycopodium cernuum* (root, stem and leaf: yield = 0.00067%dw). Ref: 4633.

**13176 Lycerenuic ketone B**

$C_{31}H_{48}O_6$  (516.72). Colorless powder, mp 189–190°C (MeOH/CHCl<sub>3</sub>),  $[\alpha]_D^{26} = +51.7^\circ$  ( $c = 0.30$ , MeOH). Source: PU DI WU GONG *Lycopodium cernuum* (root, stem and leaf: yield = 0.0027%dw). Ref: 4633.

**13177 Lycerenuic ketone C**

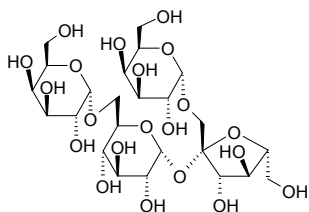
3 $\alpha$ ,21 $\beta$ ,24-Trihydroxyserrat-14-en-16-one  $C_{30}H_{48}O_4$  (472.71). Colorless powder, mp 235–236°C (MeOH/CHCl<sub>3</sub>),  $[\alpha]_D^{26} = +28.3^\circ$  ( $c = 0.30$ , MeOH). Source: QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*] (whole herb: yield = 0.00017%dw), PU DI WU GONG *Lycopodium cernuum* (root, stem and leaf: yield = 0.0031%dw). Ref: 4633, 4729.



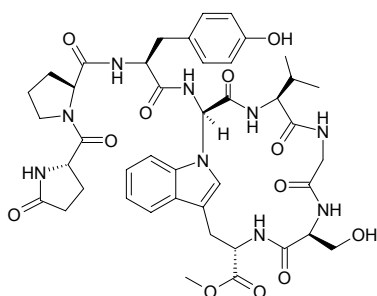


**13178 Lychnose**

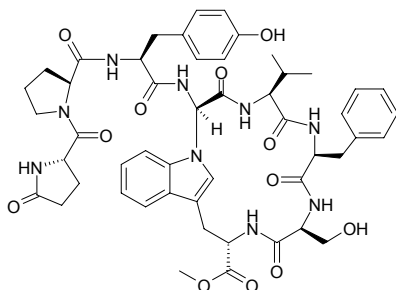
$C_{24}H_{42}O_{21}$  (666.59). Source: BAI NIU XI *Cucubalus baccifer*. Ref: 6.

**13179 Lyciumin A methylate**

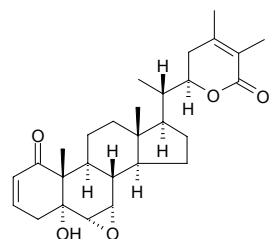
$C_{43}H_{53}N_9O_{12}$  (887.95). Source: QIANG XIANG *Celosia argentea* (seed; yield = 0.00001%). Ref: 4771.

**13180 Lyciumin C methylate**

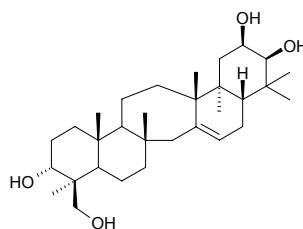
$C_{50}H_{59}N_9O_{12}$  (978.08). Source: QIANG XIANG *Celosia argentea* (seed; yield = 0.00003%). Ref: 4771.

**13181 Lycium substance B**

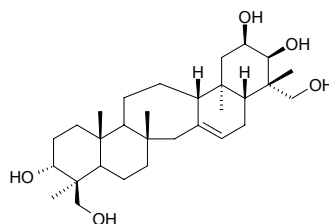
$C_{28}H_{38}O_5$  (454.61). Source: CUI MIAN SHUI QIE *Withania somnifera* (root). Ref: 4198.

**13182 Lyclaninol**

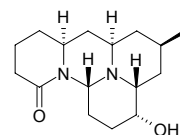
$C_{30}H_{50}O_4$  (474.73). Source: SHEN JIN CAO *Lycopodium japonicum* [Syn. *Lycopodium clavatum*]. Ref: 660.

**13183 Lyclanitin**

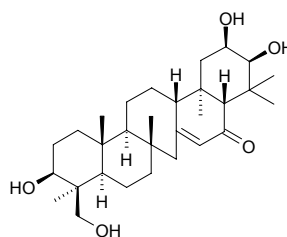
$C_{30}H_{50}O_5$  (490.73). Source: GUO JIANG LONG *Lycopodium complanatum*. Ref: 660.

**13184 Lycocernuine**

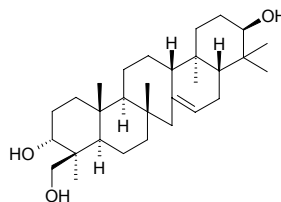
[6871-55-2]  $C_{16}H_{26}N_2O_2$  (278.40). mp 230°C. Source: PU DI WU GONG *Lycopodium cernuum*. Ref: 6, 1521.

**13185 Lycoclavanin**

[27832-90-2]  $C_{30}H_{48}O_5$  (488.71). mp 344–346°C. Source: SHEN JIN CAO *Lycopodium japonicum* [Syn. *Lycopodium clavatum*]. Ref: 6, 1521.

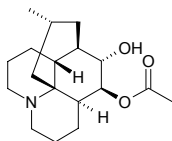
**13186 Lycoclavanol**

[13956-51-9]  $C_{30}H_{50}O_3$  (458.73). mp 308–310°C. Source: SHEN JIN CAO *Lycopodium japonicum* [Syn. *Lycopodium clavatum*]. Ref: 6, 1521.

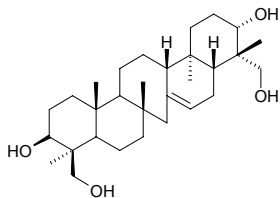


**13187 Lycoclavine**

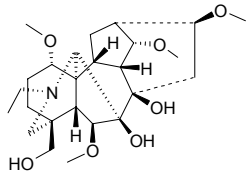
$C_{18}H_{29}NO_3$  (307.44). Source: GAO SHAN BIAN ZHI SHI SONG  
*Lycopodium alpinum* [Syn. *Diphasiastrum alpinum*], QIAN CENG TA  
*Huperzia serrata* [Syn. *Lycopodium serratum*]. Ref: 660.

**13188 Lycocryptol**

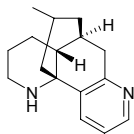
$C_{30}H_{50}O_4$  (474.73). Source: MA WEI SHAN *Phlegmariurus phlegmaria* [Syn.  
*Lycopodium phlegmaria*]. Ref: 660.

**13189 Lycoctonine**

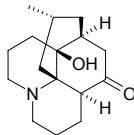
Methyl-1-cyclohexen-1-yl-1,3,5,7,9,11,13-tetradecaheptaene [26000-17-9]  
 $C_{25}H_{41}NO_7$  (476.61). Pharm: Antihypertensive (cat, iv, 2~5mg/kg; anesthetic  
cat, iv, 5~15mg/kg). Source: E MEI CUI QUE HUA *Delphinium omeiense*,  
LANG DU WU TOU *Aconitum lycoctonum*, QIANG GU FEI YAN CAO  
*Delphinium consolida*, XI MA XUAN FU HUA *Inula royleana*, XUE  
SHANG YI ZHI HAO *Aconitum brachypodium*. Ref: 618, 658, 2190.

**13190 Lycodine**

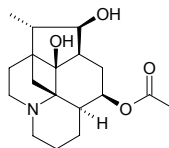
[20316-18-1]  $C_{16}H_{22}N_2$  (242.37). mp 118°C. Source: QIAN CENG TA  
*Huperzia serrata* [Syn. *Lycopodium serratum*]. Ref: 6.

**13191 Lycodoline**

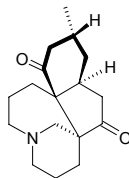
[6900-92-1]  $C_{16}H_{25}NO_2$  (263.38). mp 180°C;  $[\alpha]_D^{25} = -123^\circ$  (MeOH). Source:  
DONG BEI SHI SHAN *Huperzia miyoshiana*, QIAN CENG TA *Huperzia*  
*serrata* [Syn. *Lycopodium serratum*], SHEN JIN CAO *Lycopodium japonicum*  
[Syn. *Lycopodium clavatum*], XIAO JIE JIN CAO *Huperzia selago* [Syn.  
*Lycopodium selago*]. Ref: 6, 5412.

**13192 Lycofawcine**

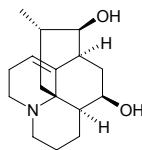
$C_{18}H_{27}NO_4$  (321.42). Source: DAN SUI SHI SONG *Lycopodium annotinum*.  
Ref: 660.

**13193 Lycoflexine**

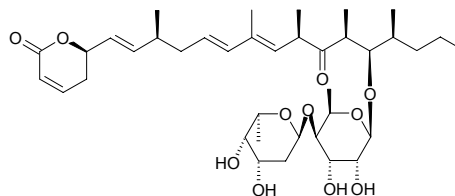
Lycobergine  $C_{17}H_{25}NO_2$  (275.39). Source: MA WEI SHAN *Phlegmariurus*  
*phlegmaria* [Syn. *Lycopodium phlegmaria*]. Ref: 660.

**13194 Lycofoline**

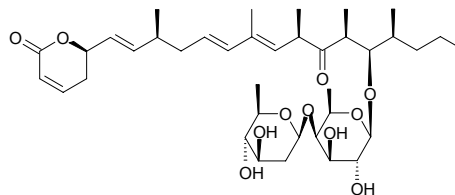
$C_{16}H_{25}NO_2$  (263.38). Source: YU BAI SHI SONG *Lycopodium obscurum*.  
Ref: 660.

**13195 Lycogalinoside A**

$C_{38}H_{60}O_{11}$  (692.90). White powder,  $[\alpha]_D^{23} = -19^\circ$  ( $c = 0.09$ , MeOH). Pharm:  
Antibacterial (gram-positive bacteria: 10µg sample were applied on 6.35mm  
paper disks, *Staphylococcus aureus*, DIZ = 52mm; *Bacillus subtilis*, DIZ =  
12mm; *Escherichia coli*, DIZ = 8mm); antifungal (*Candida albicans*, DIZ =  
2mm; *Saccharomyces cerevisiae*, DIZ = 7mm). Source: FEN LIU JUN  
*Lycogala epidendrum*. Ref: 3427.

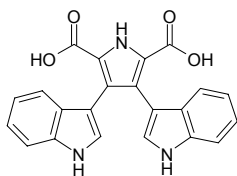
**13196 Lycogalinoside B**

$C_{38}H_{60}O_{11}$  (692.90). White powder,  $[\alpha]_D^{23} = -41^\circ$  ( $c = 0.08$ , MeOH). Pharm:  
Antibacterial (gram-positive bacteria: 10µg sample were applied on 6.35mm  
paper disks, *Staphylococcus aureus*, DIZ = 6.4mm; *Bacillus subtilis*, DIZ =  
1.6mm, *Escherichia coli*, DIZ = 2mm); antifungal (*Candida albicans*, DIZ =  
9mm; *Saccharomyces cerevisiae*, DIZ = 32mm). Source: FEN LIU JUN  
*Lycogala epidendrum*. Ref: 3427.

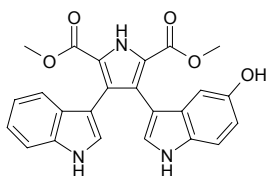


**13197 Lycogarinic acid A**

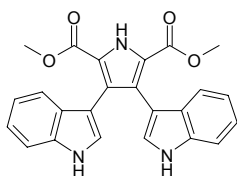
$C_{22}H_{15}N_3O_4$  (385.38). **Pharm:** Cytotoxic inactive (HeLa cells,  $IC_{50} > 100\mu\text{g/mL}$ ). **Source:** FEN LIU JUN *Lycogala epidendrum* (wild sporocarp). **Ref:** 4465.

**13198 Lycogarubi B**

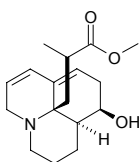
$C_{24}H_{19}N_3O_5$  (429.44). **Pharm:** Cytotoxic inactive (HeLa cells,  $IC_{50} > 100\mu\text{g/mL}$ ). **Source:** FEN LIU JUN *Lycogala epidendrum* (wild sporocarp). **Ref:** 4465.

**13199 Lycogarubin C**

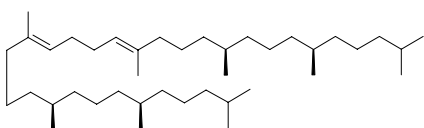
$C_{24}H_{19}N_3O_4$  (413.44). **Pharm:** Cytotoxic (HeLa cells,  $IC_{50} = 24.0\mu\text{g/mL}$ ). **Source:** FEN LIU JUN *Lycogala epidendrum* (wild sporocarp). **Ref:** 4465.

**13200 Lyconnotine**

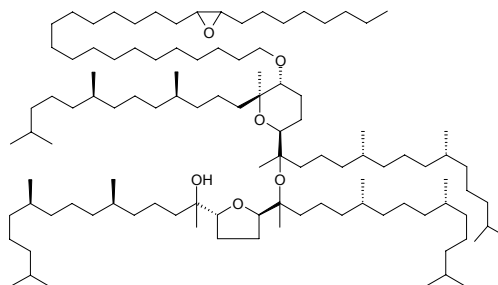
$C_{17}H_{25}NO_3$  (291.39). **Source:** DAN SUI SHI SONG *Lycopodium annotinum*. **Ref:** 660.

**13201 Lycopadiene**

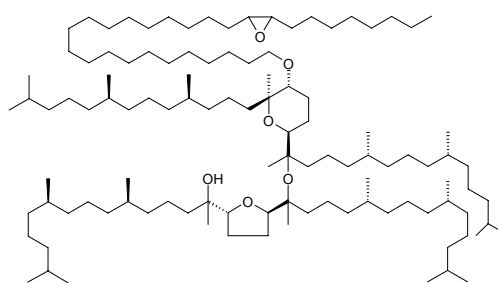
$C_{40}H_{78}$  (559.07). **Source:** CONG LI ZAO *Botryococcus braunii*. **Ref:** 3964.

**13202 Lycopanero B1**

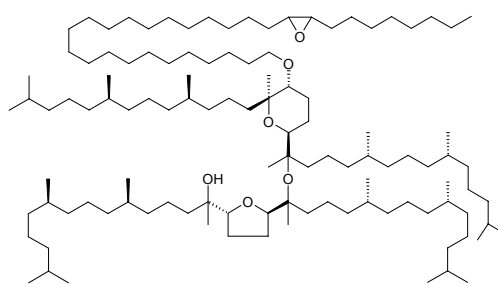
$C_{108}H_{212}O_6$  (1606.89). Clear oil. **Source:** CONG LI ZAO *Botryococcus braunii*. **Ref:** 3964.

**13203 Lycopanero B2**

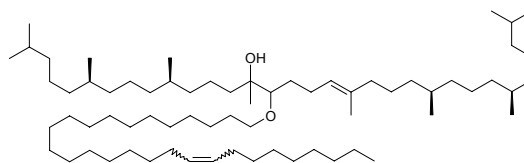
$C_{110}H_{216}O_6$  (1634.94). Clear oil. **Source:** CONG LI ZAO *Botryococcus braunii*. **Ref:** 3964.

**13204 Lycopanero B3**

$C_{112}H_{220}O_6$  (1663.00). Clear oil. **Source:** CONG LI ZAO *Botryococcus braunii*. **Ref:** 3964.

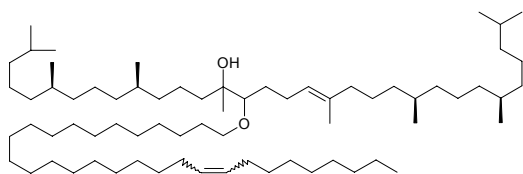
**13205 Lycopanero C1**

$C_{68}H_{134}O_2$  (983.82). Clear oil. **Source:** CONG LI ZAO *Botryococcus braunii*. **Ref:** 3964.

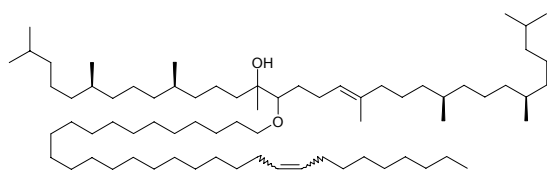


**13206 LycopaneroL C<sub>2</sub>**

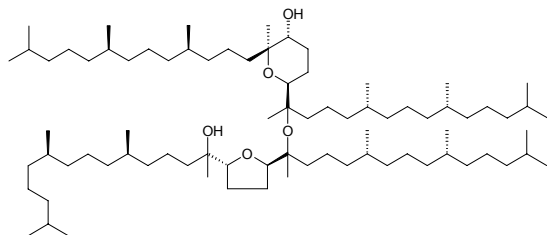
C<sub>70</sub>H<sub>138</sub>O<sub>2</sub> (1011.88). Clear oil. Source: CONG LI ZAO *Botryococcus braunii*. Ref: 3964.

**13207 LycopaneroL C<sub>3</sub>**

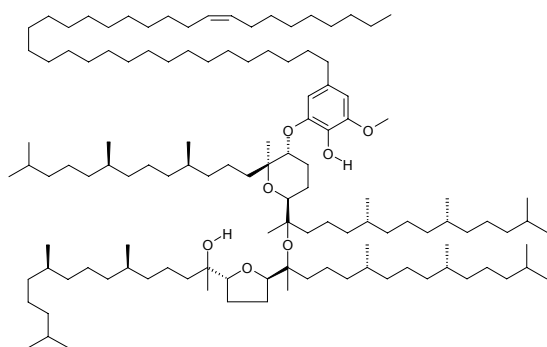
C<sub>72</sub>H<sub>142</sub>O<sub>2</sub> (1039.93). Clear oil. Source: CONG LI ZAO *Botryococcus braunii*. Ref: 3964.

**13208 LycopaneroL D**

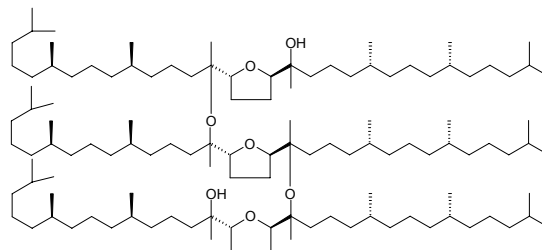
C<sub>80</sub>H<sub>158</sub>O<sub>5</sub> (1200.15). Clear oil,  $[\alpha]_D^{20} = -1.7^\circ$  ( $c = 7.5$ , CHCl<sub>3</sub>). Source: CONG LI ZAO *Botryococcus braunii*. Ref: 3964.

**13209 LycopaneroL E**

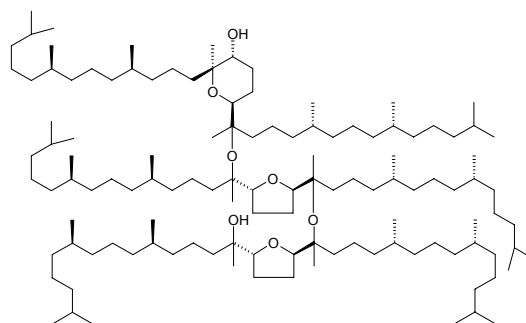
C<sub>122</sub>H<sub>232</sub>O<sub>7</sub> (1811.21). Source: CONG LI ZAO *Botryococcus braunii*. Ref: 3964.

**13210 LycopaneroL F**

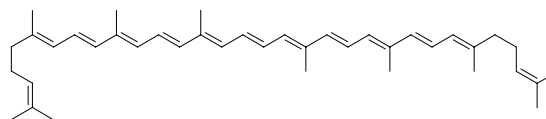
C<sub>120</sub>H<sub>236</sub>O<sub>7</sub> (1791.21). Clear oil,  $[\alpha]_D^{20} = -2.4^\circ$  ( $c = 5$ , CHCl<sub>3</sub>). Source: CONG LI ZAO *Botryococcus braunii*. Ref: 3964.

**13211 LycopaneroL G**

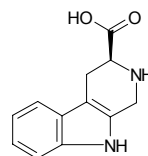
C<sub>120</sub>H<sub>236</sub>O<sub>7</sub> (1791.21). Clear oil,  $[\alpha]_D^{20} = -7.4^\circ$  ( $c = 6.3$ , CHCl<sub>3</sub>). Source: CONG LI ZAO *Botryococcus braunii*. Ref: 3964.

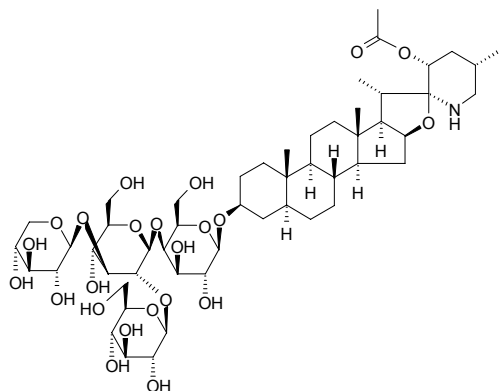
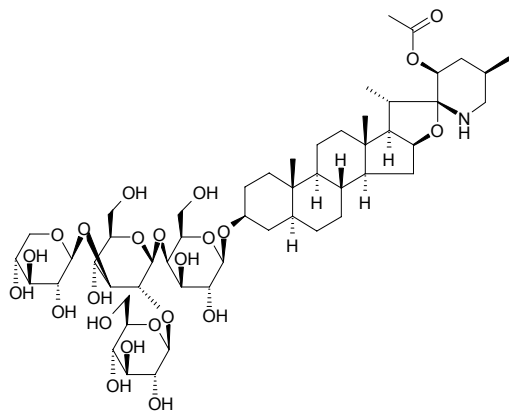
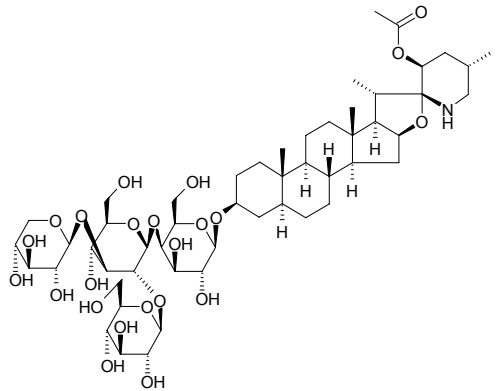
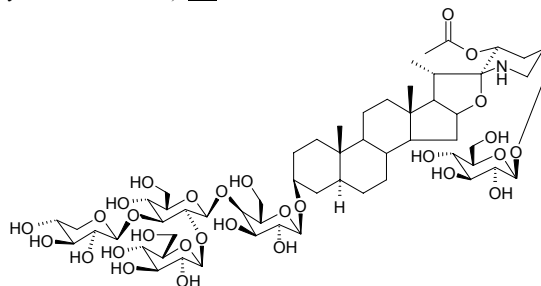
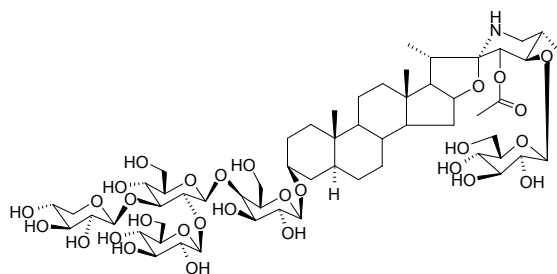
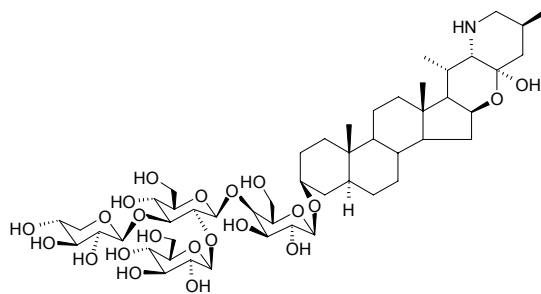
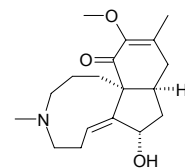
**13212 Lycopene**

[502-65-8] C<sub>40</sub>H<sub>56</sub> (536.89). Pharm: Antioxidant (LDL oxidation inhibitor, free radical scavenger); cytotoxic (*in vitro*, *in vivo*); anti-atherosclerotic; used in treatment of sterilitas virilis (sterile male, orl, 2mg/d for three weeks, effective rate = 60%); antineoplastic (mus B6C3F1, bladder carcinoma). Source: FAN QIE *Lycopersicon esculentum*, JIN ZHAN JU *Calendula officinalis*, KU GUA *Momordica charantia*, NAN HE SHI *Daucus carota*, QUAN CHI QIANG WEI *Rosa canina*, RUI DIAN GAN LAN *Brassica rutabaga*, SHI DI *Diospyros kaki*, *Citrus* sp. Ref: 658, 1582, 1834, 1835, 1836, 1837, 1838, 1839, 1840.

**13213 Lycoperodine 1**

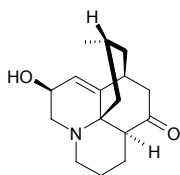
C<sub>12</sub>H<sub>12</sub>N<sub>2</sub>O<sub>2</sub> (216.24). Pale yellow amorphous powder,  $[\alpha]_D^{19} = -30.3^\circ$  ( $c = 0.26$ , MeOH). Source: FAN QIE *Lycopersicon esculentum* (ripe fruit: yield = 0.0003%fw). Ref: 3018.



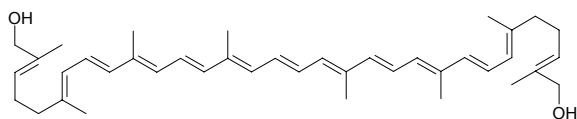
**13214 Lycoperside A**23*R*-Acetoxytomatine [23*R*-Acetoxytomatine] C<sub>52</sub>H<sub>85</sub>NO<sub>23</sub> (1092.25).Source: FAN QIE *Lycopersicon esculentum* (ripe fruit: yield = 0.00005%fw). Ref: 3018.**13215 Lycoperside B**C<sub>52</sub>H<sub>85</sub>NO<sub>23</sub> (1092.25). Source: FAN QIE *Lycopersicon esculentum* (ripe fruit: yield = 0.00015%fw). Ref: 3018.**13216 Lycoperside C**C<sub>52</sub>H<sub>85</sub>NO<sub>23</sub> (1092.25). Source: FAN QIE *Lycopersicon esculentum* (ripe fruit: yield = 0.00045%fw). Ref: 3018.**13217 Lycoperside F**3-*O*-β-Lycotetraosyl-(23*R*)-23-acetoxy-27-hydroxy-27-*O*-β-*D*-glucopyranosyl tomatidine C<sub>58</sub>H<sub>95</sub>NO<sub>29</sub> (1270.39). White amorphous powder, [α]<sub>D</sub><sup>29</sup> = -38.5° (*c* = 0.80, MeOH). Source: FAN QIE *Lycopersicon esculentum* (ripe fruit: yield = 0.00013%fw). Ref: 3018.**13218 Lycoperside G**3-*O*-β-Lycotetraosyl-(23*S*,24*R*)-23-acetoxy-24-*O*-β-*D*-glucopyranosylsoladulidene-24-ol C<sub>58</sub>H<sub>95</sub>NO<sub>29</sub> (1270.39). White amorphous powder, [α]<sub>D</sub><sup>20</sup> = -44.1° (*c* = 0.68, MeOH). Source: FAN QIE *Lycopersicon esculentum* (ripe fruit: yield = 0.00011%fw). Ref: 3018.**13219 Lycoperside H**3-*O*-β-Lycotetraosyl-22-isopimpifolidine C<sub>50</sub>H<sub>83</sub>NO<sub>22</sub> (1050.21). White amorphous powder, [α]<sub>D</sub><sup>20</sup> = -29.8° (*c* = 1.20, MeOH). Source: FAN QIE *Lycopersicon esculentum* (ripe fruit: yield = 0.0006%fw). Ref: 3018.**13220 Lycophlegmarine**C<sub>18</sub>H<sub>27</sub>NO<sub>3</sub> (305.42). Source: MA WEI SHAN *Phlegmariusus phlegmaria* [Syn. *Lycopodium phlegmaria*]. Ref: 660.

**13221 Lycophlegmine**

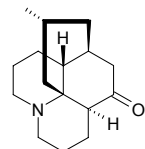
$C_{16}H_{23}NO_2$  (261.37). Source: MA WEI SHAN *Phlegmariurus phlegmaria* [Syn. *Lycopodium phlegmaria*]. Ref: 660.

**13222 Lycophyll**

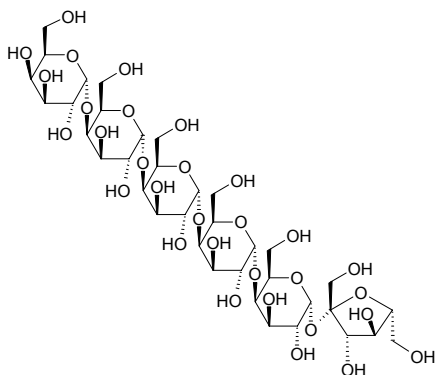
[19891-75-9]  $C_{40}H_{56}O_2$  (568.89). mp 179°C. Source: FAN QIE *Lycopersicon esculentum*, QIAN NIAN BU LAN XIN *Solanum dulcamara*. Ref: 6, 660, 1521.

**13223 Lycopodine**

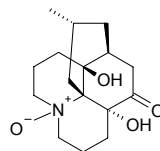
[466-61-5]  $C_{16}H_{25}NO$  (247.38). mp 116°C, bp 125°C/0.2mmHg;  $[\alpha]_D^{25} = -26^\circ$  (MeOH). Pharm: Uterine stimulant; paralysis (frog); promotes small intestinal motion (rbt, rat and gpg); treatment of dermatosis. Source: DONG BEI SHI SHAN *Huperzia miyoshiana*, GUO JIANG LONG *Lycopodium complanatum*, SHEN JIN CAO *Lycopodium japonicum* [Syn. *Lycopodium clavatum*], XIAO JIE JIN CAO *Huperzia selago* [Syn. *Lycopodium selago*]. Ref: 6, 658, 5412.

**13224 Lycopose**

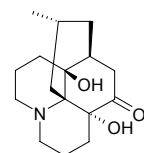
$C_{36}H_{62}O_{31}$  (990.88). mp 270°C. Source: ZE LAN GEN *Lycopus lucidus*, ZE LAN *Lycopus lucidus*. Ref: 6.

**13225 Lycoserramine F**

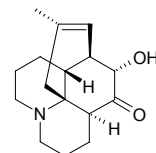
Miyoshianine A  $C_{16}H_{25}NO_4$  (295.38). Colorless prisms, mp >300°C (MeOH–AcOEt),  $[\alpha]_D^{24} = -15.2^\circ$  ( $c = 0.06$ , MeOH); colorless prisms (Me<sub>2</sub>CO–CH<sub>3</sub>OH), mp 216–218°C,  $[\alpha]_D^{25} = -85^\circ$  ( $c = 0.083$ , CH<sub>3</sub>OH). Source: DONG BEI SHI SHAN *Huperzia miyoshiana*, QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*]. Ref: 5412, 4388.

**13226 Lycoserramine G**

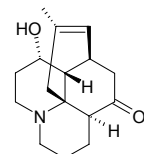
$C_{16}H_{23}NO_3$  (279.38). Colorless amorphous powder. Source: QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*]. Ref: 4388.

**13227 Lycoserramine H**

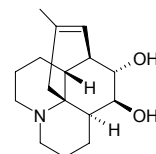
$C_{16}H_{23}NO_2$  (261.37). Colorless prisms, mp 227–228°C. Source: QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*]. Ref: 4388.

**13228 Lycoserramine I**

$C_{16}H_{23}NO_2$  (261.37). Colorless amorphous powder. Source: QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*]. Ref: 4388.

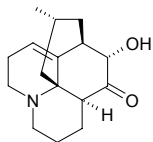
**13229 Lycoserramine J**

Miyoshianine B  $C_{16}H_{25}NO_2$  (263.38). Colorless prisms (Me<sub>2</sub>CO–CH<sub>3</sub>OH), mp 264–266°C,  $[\alpha]_D^{25} = -117^\circ$  ( $c = 0.250$ , CH<sub>3</sub>OH); colorless solid,  $[\alpha]_D^{22} = -67.7^\circ$  ( $c = 0.11$ , CHCl<sub>3</sub>). Source: DONG BEI SHI SHAN *Huperzia miyoshiana*, QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*]. Ref: 4388, 5412.

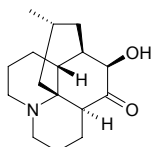


**13230 Lycoposerramine K**

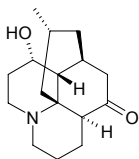
$C_{16}H_{23}NO_2$  (261.37). Colorless amorphous powder. Source: QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*]. Ref: 4388.

**13231 Lycoposerramine L**

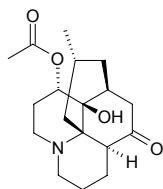
$C_{16}H_{25}NO_2$  (263.38). Yellowish amorphous powder. Source: QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*]. Ref: 4388.

**13232 Lycoposerramine M**

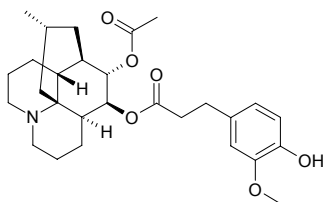
$C_{16}H_{25}NO_2$  (263.38). Colorless solid. Source: QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*]. Ref: 4388.

**13233 Lycoposerramine N**

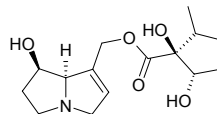
$C_{18}H_{27}NO_4$  (321.42). Colorless amorphous powder. Source: QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*]. Ref: 4388.

**13234 Lycoposerramine O**

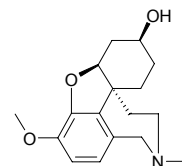
$C_{28}H_{39}NO_6$  (485.63). Colorless amorphous powder,  $[\alpha]_D^{23} = -27.8^\circ$  ( $c = 0.06$ ,  $CHCl_3$ ). Source: QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*]. Ref: 4388.

**13235 Lycopsamine**

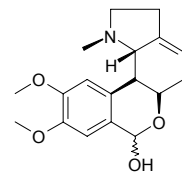
[10285-07-1]  $C_{15}H_{25}NO_5$  (299.37). Pharm: Hepatotoxin. Source: E GUO XI MEN FEI CAO *Symphytum x uplandicum*, FU YE ZE LAN *Eupatorium compositifolium*, LIU LI JU *Borago officinalis*, SI SHI TIAN JIE CAI *Heliotropium steudneri*. Ref: 658.

**13236 Lycoramine**

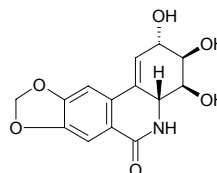
[21133-52-8]  $C_{17}H_{23}NO_3$  (289.38). mp  $121^\circ C$ . Pharm: Cholinesterase inhibitor;  $LD_{50}$  (mus, orl) = 131mg/kg, (mus, sc) = 112mg/kg, (mus, ip) = 103mg/kg, (mus, iv) = 16.65mg/kg. Source: BAI SHUI XIAN *Narcissus papyraceus*, DA YI ZHI JIAN *Lycoris aurea*, SHI SUAN *Lycoris radiata* [Syn. *Amaryllis radiata*], SHUI XIAN GEN *Narcissus tazetta* var. *chinensis*, TIE SE JIAN *Lycoris sanguinea*. Ref: 4, 658.

**13237 Lycorenine**

[477-19-0]  $C_{18}H_{23}NO_4$  (317.39). mp  $198\text{--}200^\circ C$ . Pharm: Insect antifeedant (*Eurema hecabe mandarina*); bidirectional action to heart (toad heart, *in vitro*, first stimulates and then inhibits); increases blood pressure (dog, iv); antihypertensive (anesthetic rat, iv); vasodilator (rbt ear, perfusion); smooth muscle stimulant (rbt small intestinal, *in vitro*); uterine stimulant (gpg and rbt, *in vivo* and *in vitro*);  $LD_{50}$  (mus, sc) = 270mg/kg. Source: DA YI ZHI JIAN *Lycoris aurea*, SHI SUAN *Lycoris radiata* [Syn. *Amaryllis radiata*], XIA XUE PIAN LIAN *Leucjum aestivum*. Ref: 6, 658.

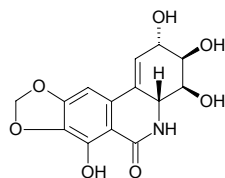
**13238 Lycoricidine**

Margetine [19622-83-4]  $C_{14}H_{13}NO_6$  (291.26). mp  $214.5\text{--}215.5^\circ C$ . Pharm: Insect antifeedant (*Eurema hecabe mandarina*); cytotoxic (EAC cells); plant growth inhibitor. Source: SHI SUAN *Lycoris radiata* [Syn. *Amaryllis radiata*], TIE SE JIAN *Lycoris sanguinea*. Ref: 5, 658.

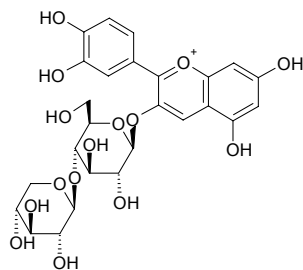


**13239 Lycoricidinol**

Narciclasine [29477-83-6]  $C_{14}H_{13}NO_7$  (307.26). mp 260°C (dec). **Pharm:** Antibacterial (*Bacillus coli*,  $IC_{50} = 5\mu\text{g/mL}$ ); antineoplastic (HeLa and EAC *in vivo*); insect antifeedant (larva of *Eurema hecabe mandarina*); prevents cell division, (inhibits mitosis by immediately stopping protein synthesis in eukaryotic cells); antiviral (inhibits biosynthesis of RNA in endomyocarditis virus);  $LD_{50}$  (mus) = 5mg/kg. **Source:** HUANG SHUI XIAN *Narcissus pseudonarcissus*, SHI SUAN *Lycoris radiata* [Syn. *Amaryllis radiata*], TIE SE JIAN *Lycoris sanguinea*. **Ref:** 5, 658.

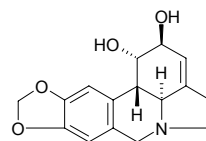
**13240 Lycoricyanin**

$C_{26}H_{29}O_{15}^+$  (581.51). **Source:** SHI SUAN *Lycoris radiata* [Syn. *Amaryllis radiata*], SHUI MA TIAO *Polygonum thunbergii*. **Ref:** 660.

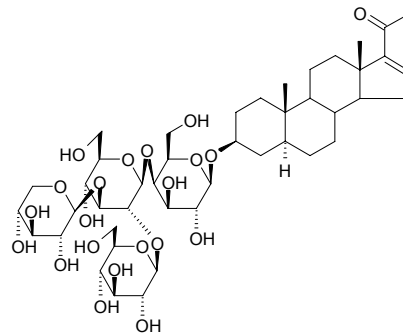
**13241 Lycorine**

Amarylline; Belamarine; Narcissine; Galanthidine [476-28-8]  $C_{16}H_{17}NO_4$  (287.32). Colorless prismatic crystals (ethanol), mp 275–278°C (dec),  $[\alpha]_D^{15} = -129^\circ$  ( $c = 0.16$ , 98% ethanol), slightly soluble in ethanol, chloroform, petroleum ether, almost insoluble in water.<sup>[5507]</sup> **Pharm:** Cytotoxic (*in vitro*, inhibits a number of human tumor cell lines including LXFL529L, Molt4, HL-60, K562, U937, GXF251L, and CXF94L)<sup>[5369]</sup>; cytotoxic (Meth-A cell,  $ED_{50} = 0.3\mu\text{g/mL}$ , control Adriamycin,  $ED_{50} < 0.09\mu\text{g/mL}$ ; LLC cell,  $ED_{50} = 0.5\mu\text{g/mL}$ , control Adriamycin,  $ED_{50} = 0.1\mu\text{g/mL}$ )<sup>[4125]</sup>; antineoplastic (mus, *in vivo*, LLC tumor, number of mouse = 6, control tumor size =  $(9089 \pm 545)\text{mm}^3$ ; dose = 10mg/(kg·d), tumor size =  $(7321 \pm 587)\text{mm}^3$  (on day 19), T/C = 80.5%,  $p < 0.05$ ; positive control Adriamycin, dose = 2mg/(kg·d), tumor size =  $(3566 \pm 168)\text{mm}^3$ ,  $p < 0.001$ ); antineoplastic (mus, ascites lymphoma and sarcoma S37, rat lymphatic sarcoma and hepatocarcinoma, HeLa, S<sub>180</sub>, EAC, ascites liver cancer and Kichita sarcoma); antiviral (poliomyelitis virus, Cocksackie virus and herpes virus A); inhibits mitosis of plant cells; uterine stimulant (rat, gpg and rbt, *in vivo* and *in vitro*, slow and persistent action); emetic; AChE inhibitor ( $IC_{50} = (213 \pm 1)\mu\text{mol/L}$ , control Galanthamine,  $IC_{50} = (1.9 \pm 0.2)\mu\text{mol/L}$ )<sup>[4952]</sup>; antiretroviral and cytotoxic ( $ID_{50} = 0.4\mu\text{g/mL}$ ,  $TC_{50} = 0.75\mu\text{g/mL}$ ,  $TI_{50} (TC_{50}/ID_{50}) = 1.9$ )<sup>[5026]</sup>; antimalarial (*Plasmodium falciparum* strain NF-54, stage IEF,  $IC_{50} =$

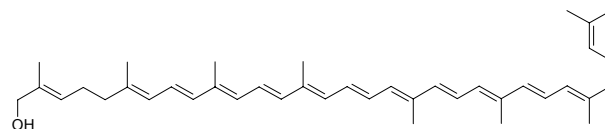
$0.34\mu\text{g/mL}$ )<sup>[4000]</sup>; antiplasmodial (strain D10,  $IC_{50} = 0.6\mu\text{g/mL}$ , control Hamayne,  $IC_{50} = 15.6\mu\text{g/mL}$ , Chloroquine,  $IC_{50} = 0.002\mu\text{g/mL}$ ; strain FAC8,  $IC_{50} = 0.7\mu\text{g/mL}$ , Hamayne,  $IC_{50} = 18.2\mu\text{g/mL}$ , Chloroquine,  $IC_{50} = 0.01\mu\text{g/mL}$ ; cytotoxic, BL6,  $IC_{50} = 1.8\mu\text{g/mL}$ , Hamayne,  $IC_{50} = 9.4\mu\text{g/mL}$ , Chloroquine,  $IC_{50} = 20.9\mu\text{g/mL}$ , Daunomycin,  $IC_{50} = 0.43\mu\text{g/mL}$ )<sup>[3931]</sup>; antifungal (*Candida albicans*, IZD = 40mm, MIC = 39 $\mu\text{g/mL}$ )<sup>[3829]</sup>; toxin (in genus *Narcissus* plants);  $LD_{50}$  (dog) = 41mg/kg, (mouse, orl) = 230mg/kg, (mouse, sc) = 145mg/kg, (mouse, ip) = 117mg/kg, (mouse, iv) = 123mg/kg. **Source:** DA YI ZHI JIAN *Lycoris aurea*, GAN FENG CAO *Zephyranthes candida*, JUN ZI LAN *Clivia miniata*, RI BEN WEN SHU LAN *Crinum asiaticum* var. *japonicum* (bulb), SHI SUAN *Lycoris radiata* [Syn. *Amaryllis radiata*], SHUI GUI JIAO YE *Hymenocallis littoralis* [Syn. *Hymenocallis americana*; *Pancreatium littoralis*], SHUI XIAN GEN *Narcissus tazetta* var. *chinensis*, SHUI XIAN HUA *Narcissus tazetta* var. *chinensis*, WEN SHU LAN *Crinum asiaticum* var. *sinicum*, GU TING HUA *Amaryllis belladonna* (bulb)<sup>[3829]</sup>, GUAN MU WEN SHU LAN *Crinum macowanii* (bulb), XI NAN WEN SHU LAN *Crinum latifolium*<sup>[5507]</sup>, XIAN MAO *Curculigo orchoides*, XUE PIAN LIAN *Leucojum vernum* (bulb), *Ammocharis coranica* (bulb). **Ref:** 4, 658, 3829, 3931, 3952, 4000, 4125, 4952, 5026, 5369, 5501, 5507.

**13242 3-O-β-Lycotetraosyl 3β-hydroxy-5α-pregn-16-en-20-one**

$C_{44}H_{70}O_{21}$  (935.04). **Source:** YING TAO FAN QIE *Lycopersicon esculentum* var. *cerasiforme* (fruit). **Ref:** 4463.

**13243 Lycoxanthin**

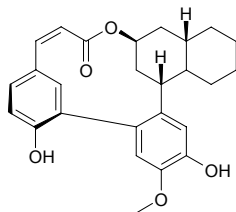
[19891-74-8]  $C_{40}H_{56}O$  (552.89). mp 168°C. **Pharm:** Pigment. **Source:** FAN QIE *Lycopersicon esculentum*, JIANG GUO SHU YU *Tamus communis*, QIAN NIAN BU LAN XIN *Solanum dulcamara*. **Ref:** 6, 658.



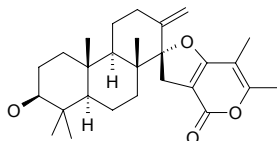


**13244 Lyfoline**

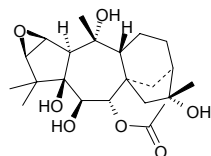
$C_{26}H_{28}O_5$  (420.51). Source: DAN SUI SHI SONG *Lycopodium annotinum*. Ref: 660.

**13245 Lygodinolide**

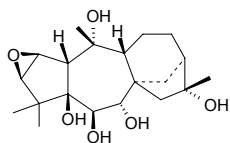
$C_{27}H_{38}O_4$  (426.60). Source: QU ZHOU HAI JIN SHA *Lygodium flexuosum* [*Syn. Lygodium pinnatifidum; Ophioglossum flexuosum*]. Ref: 660.

**13246 Lyoniol A**

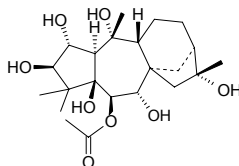
[31136-61-5]  $C_{22}H_{34}O_7$  (410.51). mp 250~253°C. Pharm: Antihypertensive (rat, 2mg/kg iv); spasmogenic (produces spasm in rbt, iv, leads to Parkinson's disease in sheep orl, causes muscular tremor in mus, ip, causes ileal contraction in gpg iv *in vivo*); used in treatment of tinea and sarcoptidosis (main effective component in *Lyonia ovalifolia* LI MU); LD<sub>50</sub> (mus, ip) = 3.01mg/kg. Source: XIAO GUO NAN ZHU *Lyonia ovalifolia* var. *elliptica*, LI MU *Lyonia ovalifolia*. Ref: 6, 658.

**13247 Lyoniol B**

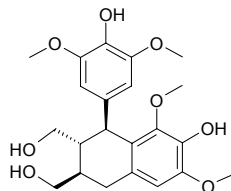
[28894-74-8]  $C_{20}H_{32}O_6$  (368.47). mp 280~283°C. Pharm: Used in treatment of tinea and sarcoptidosis (main effective component in *Lyonia ovalifolia* LI MU); LD<sub>50</sub> (mus, ip) = 0.61mg/kg. Source: XIAO GUO NAN ZHU *Lyonia ovalifolia* var. *elliptica*, LI MU *Lyonia ovalifolia*. Ref: 6, 658.

**13248 Lyoniol D**

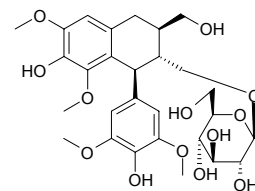
$C_{22}H_{36}O_8$  (428.53). Source: LI MU *Lyonia ovalifolia*, XIAO GUO NAN ZHU *Lyonia ovalifolia* var. *elliptica*. Ref: 660.

**13249 (+)-Lyoniresinol**

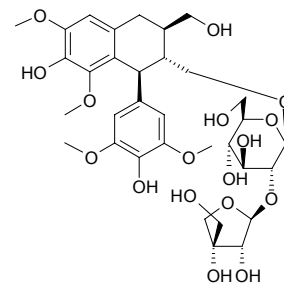
$C_{22}H_{28}O_8$  (420.46). Pharm: Antioxidant (DPPH scavenger, for 40μmol/L DPPH radical, SC<sub>50</sub> = 6.6μmol/L). Source: SUO LA MU *Salacia prinoides* [*Syn. Salacia chinensis*] (stem). Ref: 4378.

**13250 (+)-Lyoniresinol-2α-O-β-D-glucopyranoside (D<sub>4</sub>)**

(+)-9-*O*-β-D-Glucopyranosyl lyoniresinol  $C_{28}H_{38}O_{13}$  (582.61). White granular crystals, mp 119~120°C; white amorphous powder (MeOH), [α]<sub>D</sub> = +24.8° (*c* = 0.1, MeOH). Pharm: Antioxidant (DPPH scavenger, IC<sub>50</sub> = (42.6±3.1)μmol/L, control BHT, IC<sub>50</sub> = (15.3±0.6)μmol/L; superoxide radical inhibitor, IC<sub>50</sub> > 100μmol/L, control BHT, IC<sub>50</sub> = (48.9±2.5)μmol/L; lipid peroxidation scavenger, IC<sub>50</sub> = (39.1±3.1)μmol/L, control BHT, IC<sub>50</sub> = (0.11±0.02)μmol/L)<sup>[4402]</sup>; anti-HSV-1 inactive (EC<sub>50</sub> > 172μmol/L)<sup>[2577]</sup>. Source: BAI ZHU SHU *Gaultheria leucocarpa* var. *cumingiana* (root: content = 0.142%)<sup>[5508]</sup>, DIAN BAI ZHU SHU *Gaultheria yunnanensis* (root: content scope of 3 origins = 0.022%~0.082%, mean content = 0.047%)<sup>[5508]</sup>, FANG XIANG BAI ZHU *Gaultheria fragrantissima* (root: content = 0.356%)<sup>[5508]</sup>, MA LAN GEN *Baphicanthus cusia* [*Syn. Strobilanthes cusia*], MAO MAI LIAO *Pleuropterus ciliinervis* (root), SI LIE BAI ZHU *Gaultheria tetramera* (root: content = 0.061%)<sup>[5508]</sup>, WEI YE BAI ZHU *Gaultheria griffithiana* (root: content = 0.014%)<sup>[5508]</sup>. Ref: 664, 2577, 4402, 5508.

**13251 (+)-Lyoniresinol-3α-O-β-D-apiofuranosyl-(1→2)-β-D-glucopyranoside**

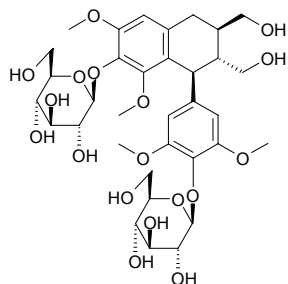
$C_{33}H_{46}O_{17}$  (714.72). White amorphous powder, [α]<sub>D</sub> = -2.5° (MeOH). Pharm: Anti-HSV-1 inactive (EC<sub>50</sub> > 172μmol/L). Source: MA LAN GEN *Baphicanthus cusia* [*Syn. Strobilanthes cusia*]. Ref: 2577.



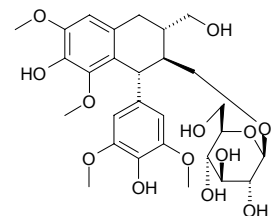
**13252 (+)-Lyoniresinol-4,4'-bis-*O*- $\beta$ -D-glucopyranoside**

$C_{34}H_{48}O_{18}$  (744.75). Colorless gummy solid,  $[\alpha]_D^{25} = +18.2^\circ$  ( $c = 0.21$ , MeOH).

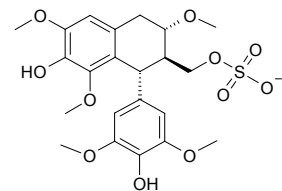
**Pharm:** Lipoxygenase inhibitor (lipoxygenase (1.13.11.12) type I-B,  $IC_{50} = (41.5 \pm 1.7) \mu\text{mol/L}$ , control Baicalein,  $IC_{50} = (22.6 \pm 0.1) \mu\text{mol/L}$ ). **Source:** YI HUA MU LAN *Indigofera heterantha* (Whole plant). **Ref:** 4442.

**13253 (-)-Lyoniresinol-3 $\alpha$ -*O*- $\beta$ -D-glucopyranoside**

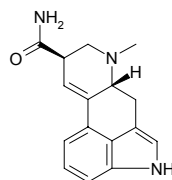
$C_{28}H_{38}O_{13}$  (582.61). White amorphous powder (MeOH),  $[\alpha]_D = -23.4^\circ$  ( $c = 0.1$ , MeOH). **Pharm:** Antioxidant (DPPH scavenger,  $IC_{50} = (45.7 \pm 4.0) \mu\text{mol/L}$ , control BHT,  $IC_{50} = (15.3 \pm 0.6) \mu\text{mol/L}$ ; superoxide radical inhibitor,  $IC_{50} > 100 \mu\text{mol/L}$ , control BHT,  $IC_{50} = (48.9 \pm 2.5) \mu\text{mol/L}$ ; lipid peroxidation scavenger,  $IC_{50} = (37.4 \pm 2.1) \mu\text{mol/L}$ , control BHT,  $IC_{50} = (0.11 \pm 0.02) \mu\text{mol/L}$ ). **Source:** MAO MAI LIAO *Pleuropterus ciliinervis* (root). **Ref:** 4402.

**13254 (-)-Lyoniresinol-2a-sulfate**

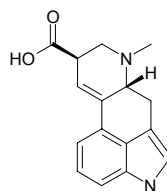
(-)-1*R*-3-Hydroxymethyl-1-(4'-hydroxy-3',5'-dimethoxyphenyl)-7-hydroxy-6,8-dimethoxy-1,2,3,4-tetrahydro-2-naphthalenylmethanol sulfate  $C_{22}H_{27}O_{11}S$  (499.52). Amorphous powder,  $[\alpha]_D^{25} = -17.0^\circ$  ( $c = 0.13$ , MeOH). **Source:** HU ZHANG *Polygonum cuspidatum*. **Ref:** 4186.

**13255 Lysergamide**

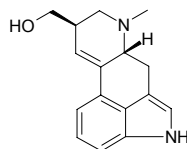
$C_{16}H_{17}N_3O$  (267.33). Prismatic crystals (methanol), mp 242°C (dec). **Pharm:** 5-HT inhibitor; hallucinogen; cholinesterase inhibitor (hmn serum); CNS stimulant (causes mania); toxin (embryo of gravid mus). **Source:** QING ZI QIAN NIU *Ipomoea violacea*, SAN SE QIAN NIU *Ipomoea tricolor*, YIN YE SHU *Ipomoea argyrophylla*. **Ref:** 658.

**13256 Lysergic acid**

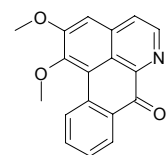
$C_{16}H_{16}N_2O_2$  (268.32). **Source:** MAI JIAO *Claviceps purpurea*. **Ref:** 660.

**13257 Lysergol**

[602-85-7]  $C_{16}H_{18}N_2O$  (254.33). **Source:** QIAN NIU ZI *Pharbitis nil*. **Ref:** 6.

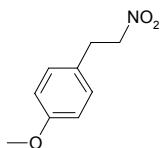
**13258 Lysicamine**

[15444-20-9]  $C_{18}H_{13}NO_3$  (291.31). **Source:** BEI MA DOU LING GEN *Aristolochia contorta*, SUAN ZAO REN *Ziziphus jujuba* var. *spinosa*, TAI WAN GE NA XIANG *Goniothalamus amuyon* (fresh leaf: yield = 0.00010%fw)<sup>[4686]</sup>. **Ref:** 583, 660, 4686.

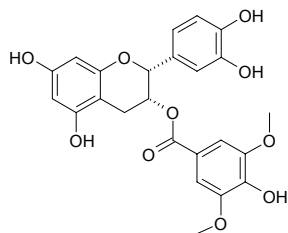


**13259 Lysichitalexin**

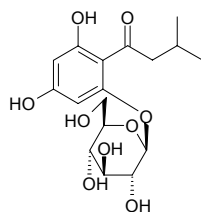
2-(4-Methoxyphenyl)-1-nitroethane C<sub>9</sub>H<sub>11</sub>NO<sub>3</sub> (181.19). Pale yellow oil. **Pharm:** Antifungal (TLC, *Candida albicans*, 31.4μg/cm<sup>2</sup>, IZD = 0mm; *Fusarium oxysporum*, 31.4μg/cm<sup>2</sup>, IZD = 9mm, 15.7μg/cm<sup>2</sup>, IZD = 9mm, 7.9μg/cm<sup>2</sup>, slight inhibition; *Cladosporium herbarum*, 31.4μg/cm<sup>2</sup>, IZD < 9mm, 15.7μg/cm<sup>2</sup>, IZD < 9mm, 7.9μg/cm<sup>2</sup>, slight inhibition); antibacterial inactive (TLC, *Bacillus subtilis*, *Staphylococcus aureus*, *Escherichia coli*, 31.4μg/cm<sup>2</sup>). **Source:** MEI ZHOU GUAN YIN LIAN *Lysichitum americanum* (leaf). **Ref:** 3897.

**13260 Lysidicichin**

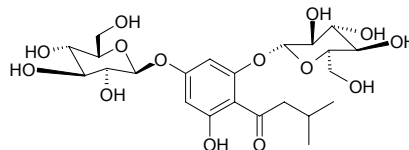
C<sub>24</sub>H<sub>22</sub>O<sub>10</sub> (470.44). Yellow powder, mp 138~141°C; [α]<sub>D</sub><sup>25</sup> = -173.1° (c = 0.5, C<sub>2</sub>H<sub>5</sub>OH). **Pharm:** Vasodilator (rat aortic rings, inhibits Phenylephrine (Phe)-induced vasoconstriction in the presences of Indomethacin (Indo) and N<sup>0</sup>-L-nitroarginine (L-NA) at 10μmol/L Ach, 10μmol/L, relaxation = (39±1)%, control Sodium nitroprusside, relaxation = (109±5)%). **Source:** YI HUA *Lysidice rhodostegia* (root). **Ref:** 4086.

**13261 Lysidiside A**

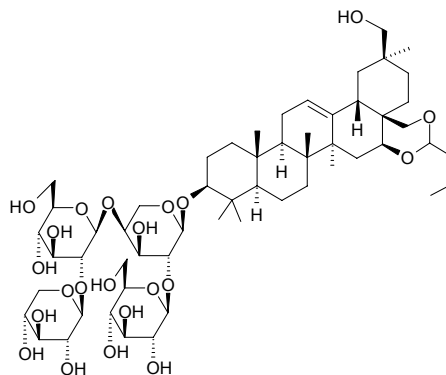
2-β-D-Glucopyranosyloxy-4,6-dihydroxyisovalerophenone; 1-[(3-Methylbutanoyl)phloroglucynyl]-β-D-glucopyranoside C<sub>17</sub>H<sub>24</sub>O<sub>9</sub> (372.38). Light yellow amorphous powder, mp 112~115°C; [α]<sub>D</sub><sup>25</sup> = -63.48° (c = 0.1, Me<sub>2</sub>CO); [α]<sub>D</sub><sup>26</sup> = -55° (c = 0.14, MeOH); colorless gummy solid, [α]<sub>D</sub><sup>25</sup> = -62.2° (c = 0.11, MeOH). **Pharm:** Vasodilator (rat aortic rings, inhibits Phenylephrine (Phe)-induced vasoconstriction in the presences of Indomethacin (Indo) and N<sup>0</sup>-L-nitroarginine (L-NA) at 10μmol/L Ach, 10μmol/L, relaxation = (78±1)%, control Sodium nitroprusside, relaxation = (109±5)%<sup>[4086]</sup>; CYP3A4 inhibitor (hmn CYP3A4, enzyme activity was monitored by nifedipine oxidation, IC<sub>50</sub> = 120μmol/L<sup>[4778]</sup>); lipoxygenase inhibitor (lipoxygenase (1.13.11.12) type I-B, IC<sub>50</sub> = (45.5±0.3)μmol/L, control Baicalein, IC<sub>50</sub> = (22.6±0.1)μmol/L<sup>[4442]</sup>). **Source:** CAO MEI *Fragaria ananassa* (fruit: yield = 0.00013%), YI HUA *Lysidice rhodostegia* (root), YI HUA MU LAN *Indigofera heteranthazha* (Whole plant). **Ref:** 4086, 4442, 4778.

**13262 Lysidiside B**

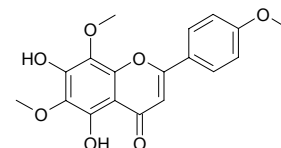
C<sub>23</sub>H<sub>34</sub>O<sub>14</sub> (534.52). Yellow amorphous powder, mp 142~144°C; [α]<sub>D</sub><sup>25</sup> = -86.0° (c = 0.3, Me<sub>2</sub>CO). **Pharm:** Vasodilator (rat aortic rings, inhibits Phenylephrine (Phe)-induced vasoconstriction in the presences of Indomethacin (Indo) and N<sup>0</sup>-L-nitroarginine (L-NA) at 10μmol/L Ach, 10μmol/L, relaxation = (66±5)%, control Sodium nitroprusside, relaxation = (109±5)%). **Source:** YI HUA *Lysidice rhodostegia* (root). **Ref:** 4086.

**13263 Lysimachoside**

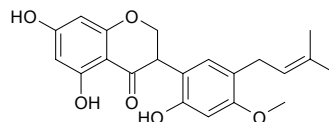
C<sub>56</sub>H<sub>92</sub>O<sub>22</sub> (1117.34). White powder. **Source:** JU HUA GUO LU HUANG *Lysimachia congestiflora*. **Ref:** 834.

**13264 Lysionotin**

Nevadensin [10176-66-6] C<sub>18</sub>H<sub>16</sub>O<sub>7</sub> (344.32). mp 195~196°C. **Pharm:** Antibacterial (*Mycobacterium tuberculosis*, 20μg/mL, *in vitro* and *in vivo*); antitussive (dispels phlegm); antihypertensive (dog, iv); treatment of bronchitis, scrofula, pulmonary tuberculosis and basal tuberculosis. **Source:** AI XIANG RI KUI *Helianthus pumilus*, CI SAN JIA *Acanthopanax trifoliatum*, JIAO ZHI ZI *Gardenia gummifera*, SHI DIAO LAN *Lysionotus pauciflorus*, XIANG RI KUI YE *Helianthus annuus*, ZHANG NAO LUO LE *Ocimum canum*. **Ref:** 4, 658, 660.

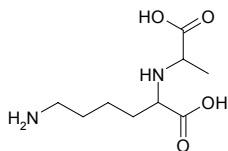
**13265 Lysisteisoflavanone**

5,7,2'-Trihydroxy-4'-methoxy-5'-(3''-methylbut-2''-enyl)isoflavanone C<sub>21</sub>H<sub>22</sub>O<sub>6</sub> (370.41). Dark yellow amorphous solid, mp 98°C, [α]<sub>D</sub><sup>25</sup> = 0.0° (c = 1.0, MeOH). **Source:** AI JI ZAI PEI CI TONG *Erythrina lysitemon*. **Ref:** 1971.

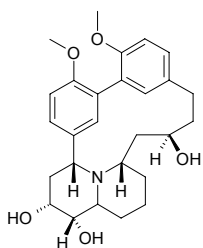


**13266 Lysopine**

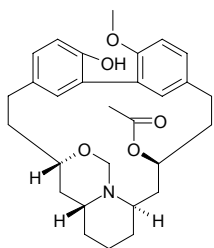
[34522-31-1]  $C_9H_{18}N_2O_4$  (218.25). Source: DI JIN *Parthenocissus tricuspidata*. Ref: 6.

**13267 Lythracine I**

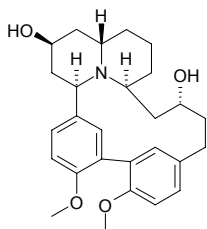
$C_{27}H_{35}NO_5$  (453.58). Source: RI BEN QIAN QU CAI *Lythrum anceps* (the compound was isolated from the plant by Japanese scientists in 1971). Ref: 5505.

**13268 Lythramine**

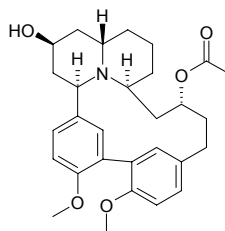
$C_{27}H_{37}NO_5$  (479.62). Source: QIAN QU CAI *Lythrum salicaria*. Ref: 6.

**13269 Lythrancepine I**

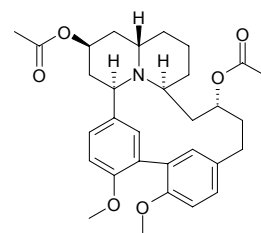
[32209-75-9]  $C_{27}H_{35}NO_4$  (437.58). mp 149~151°C. Source: QIAN QU CAI *Lythrum salicaria*. Ref: 6.

**13270 Lythrancepine II**

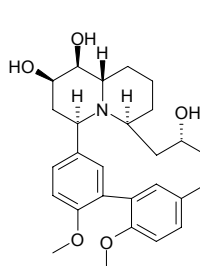
[32209-76-0]  $C_{29}H_{37}NO_5$  (479.62). mp 187~189°C. Source: QIAN QU CAI *Lythrum salicaria*. Ref: 6.

**13271 Lythrancepine III**

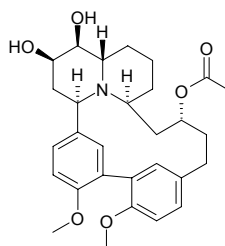
[32209-77-1]  $C_{31}H_{39}NO_6$  (521.66). mp 174~178°C. Source: QIAN QU CAI *Lythrum salicaria*. Ref: 6.

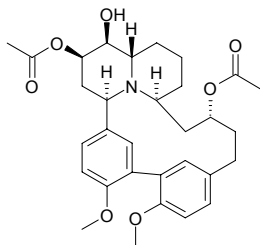
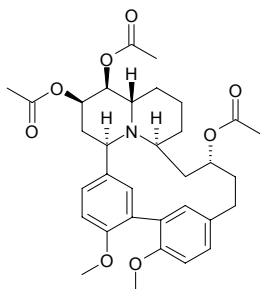
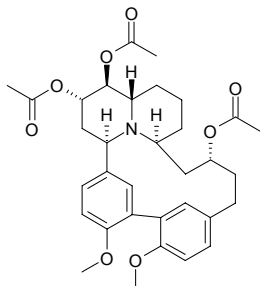
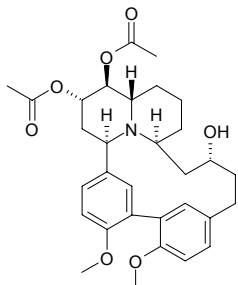
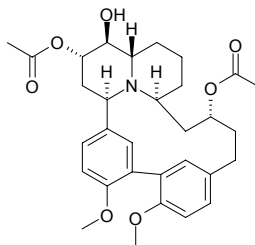
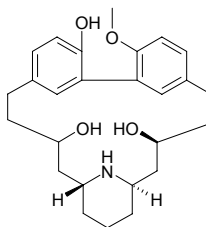
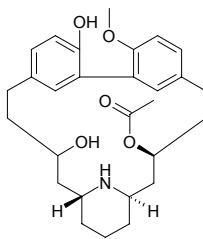
**13272 Lythracine I**

[32209-71-5]  $C_{27}H_{35}NO_5$  (453.58). Source: QIAN QU CAI *Lythrum salicaria*. Ref: 6.

**13273 Lythrancepine II**

[32209-72-6]  $C_{29}H_{37}NO_6$  (495.62). mp 274~275°C. Source: QIAN QU CAI *Lythrum salicaria*. Ref: 6.

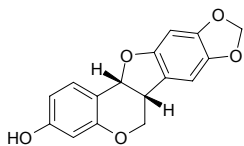


**13274 Lythrancine III**[32209-73-3] C<sub>31</sub>H<sub>39</sub>NO<sub>7</sub> (537.66). mp 134~136°C. Source: QIAN QU CAI*Lythrum salicaria*. Ref: 6.**13275 Lythrancine IV**[32209-74-8] C<sub>33</sub>H<sub>41</sub>NO<sub>8</sub> (579.70). mp 237~238°C. Source: QIAN QU CAI*Lythrum salicaria*. Ref: 6.**13276 Lythrancine V**[40179-98-4] C<sub>33</sub>H<sub>41</sub>NO<sub>8</sub> (579.70). mp 133~134°C. Source: QIAN QU CAI*Lythrum salicaria*. Ref: 6.**13277 Lythrancine VI**[40175-99-5] C<sub>31</sub>H<sub>39</sub>NO<sub>7</sub> (537.66). Source: QIAN QU CAI *Lythrum salicaria*.Ref: 6.**13278 Lythrancine VII**[40180-00-5] C<sub>31</sub>H<sub>39</sub>NO<sub>7</sub> (537.66). Source: QIAN QU CAI *Lythrum salicaria*.Ref: 6.**13279 Lythranidine**[17812-78-1] C<sub>26</sub>H<sub>35</sub>NO<sub>4</sub> (425.57). Source: QIAN QU CAI *Lythrum salicaria*.Ref: 6.**13280 Lythranine**[32420-54-5] C<sub>28</sub>H<sub>37</sub>NO<sub>5</sub> (467.61). Source: QIAN QU CAI *Lythrum salicaria*.Ref: 6.

# M

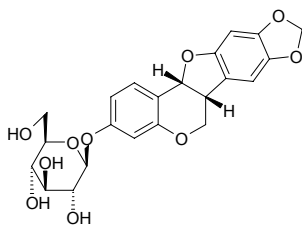
## 13281 Maackiain

[2035-15-6] C<sub>16</sub>H<sub>12</sub>O<sub>5</sub> (284.27). mp (–) 195–196°C, (±) 199–200°C. **Pharm.**: Antifungal (EC = 10 μg/mL); hepatoprotective (mus primary cultured hepatocytes, antihepatotoxin induced by *D*-galactosamine (GalN), 100 μmol/L, InRt = (35.2±3.0)%, weak, control Silybin, 100 μmol/L, InRt = (77.0±5.5)%<sup>[4095]</sup>); antibacterial (*Staphylococcus aureus* ATCC 25923, MIC > 512 μg/mL, Vancomycin, MIC = 0.5 μg/mL; MRSA SK1, MIC > 512 μg/mL, Vancomycin, MIC = 1.0 μg/mL)<sup>[3810]</sup>; increases blood pressure (anesthetized rats, increases in mean arterial blood pressure, 0.4 mg/kg, 8.3 mmHg)<sup>[3810]</sup>. **Source**: CHAO XIAN HUAI *Maackia amurensis*, GUANG BU DING GONG TENG *Erycibe expansa*, HUAI GEN *Sophora japonica* (the compound was isolated from the plant by Shoji Kuwada, et al. in 1962)<sup>[5505]</sup>, KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*] (dried root: content scope of 7 origins = 0.01%–0.15%, mean content = 0.06%)<sup>[5508]</sup>, LING NAN HUAI SHU *Sophora tomentosa*, PAN YUAN YU TENG *Derris scandens* (stem), SHAN DOU GEN *Sophora subprostrata* [Syn. *Sophora tonkinensis*], WU CI KE YA SHU *Andira inermis*, *Glycyrrhiza* sp. **Ref.**: 6, 658, 2431, 3810, 4095, 5505, 5508.



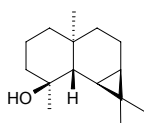
## 13282 α-Maackiain-β-D-glucoside

Trifolirhizin [6807-83-6] C<sub>22</sub>H<sub>22</sub>O<sub>10</sub> (446.41). mp 202–204°C (dec); mp 142–144°C (dec). **Source**: HONG CHE ZHOU CAO *Trifolium pratense*, HUAI GEN *Sophora japonica*, KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*] (dried root: content scope of 7 origins = 0.04%–0.28%, mean content = 0.13%)<sup>[5508]</sup>, SHAN DOU GEN *Sophora subprostrata* [Syn. *Sophora tonkinensis*]. **Ref.**: 5, 6, 5508.



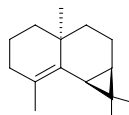
## 13283 Maaliol

Maaliol [527-90-2] C<sub>15</sub>H<sub>26</sub>O (222.37). Crystals (EtOH), mp 103.5–105.0°C, [α]<sub>D</sub> = +18.4° (c = 1.1, EtOH). **Source**: SHI YE GAN SONG *Nardostachys jatamansi*, XIE CAO *Valeriana officinalis*, ZHI ZHU XIANG *Valeriana jatamansi* [Syn. *Valeriana wallichii*]. **Ref.**: 6, 1521.



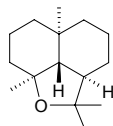
## 13284 β-Maaliene

C<sub>15</sub>H<sub>24</sub> (204.36). **Source**: CANG ZHU *Atractylodes lancea*, HUANG HUA HAO *Artemisia annua*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. **Ref.**: 2, 660.



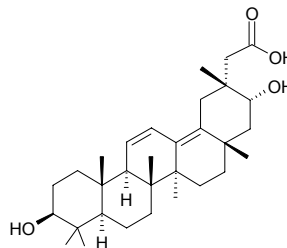
## 13285 (+)-Maalioid

C<sub>15</sub>H<sub>26</sub>O (222.37). mp 66°C, [α]<sub>D</sub> = +33.3° (c = 4, CHCl<sub>3</sub>). **Source**: ZHI ZHU XIANG *Valeriana jatamansi* [Syn. *Valeriana wallichii*]. **Ref.**: 1521.



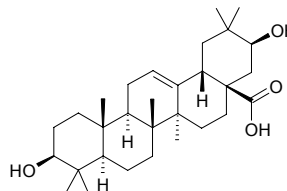
## 13286 Macedonic acid

[39022-00-9] C<sub>31</sub>H<sub>48</sub>O<sub>4</sub> (484.73). mp 340–343°C. **Source**: CI GUO GAN CAO *Glycyrrhiza pallidiflora*, YUN NAN GAN CAO *Glycyrrhiza yunnanensis*, YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*]. **Ref.**: 660, 1222, 1521.



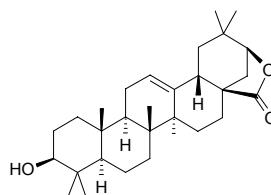
## 13287 Machaerinic acid

C<sub>30</sub>H<sub>48</sub>O<sub>4</sub> (472.71). **Source**: JIN ZHAN JU *Calendula officinalis* (flower). **Ref.**: 3551.



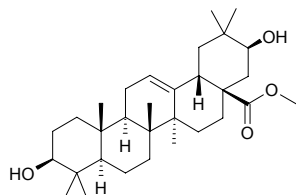
## 13288 Machaerinic acid lactone

C<sub>30</sub>H<sub>46</sub>O<sub>3</sub> (454.70). **Source**: HE HUAN PI *Albizia julibrissin*, SI GUA *Luffa cylindrica*. **Ref.**: 1223, 1224.

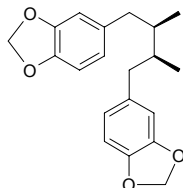


**13289 Machaerinic acid methyl ester**

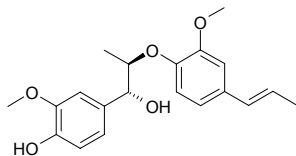
C<sub>31</sub>H<sub>50</sub>O<sub>4</sub> (486.74). Source: HE HUAN PI *Albizia julibrissin*. Ref: 1225.

**13290 Machilin A**

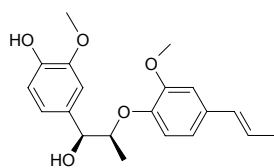
C<sub>20</sub>H<sub>22</sub>O<sub>4</sub> (326.40). Pharm: Neuroprotective (glutamate-induced neurotoxicity in primary cultures of cortical cells, 0.1 μmol/L, protection rate = (15.1±4.1)%, MK-801: 1.0 μmol/L, protection rate = (83.6±2.0)%, *p*<0.001, CNQX: 1.0 μmol/L, protection rate = (70.5±1.5)%, *p*<0.001). Source: HONG NAN PI *Machilus thunbergii*. Ref: 4927.

**13291 Machilin C**

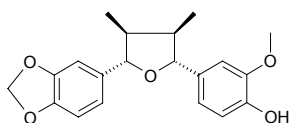
C<sub>20</sub>H<sub>24</sub>O<sub>5</sub> (344.41). Colorless amorphous, [α]<sub>D</sub><sup>23</sup> = -30° (*c* = 0.07, CHCl<sub>3</sub>). Pharm: Antioxidant (DPPH scavenger). Source: FENG CHAO CAO *Leucas aspera* (whole herb). Ref: 4344.

**13292 Machilin D**

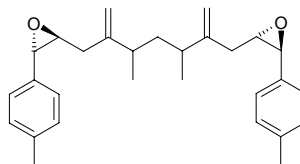
C<sub>20</sub>H<sub>24</sub>O<sub>5</sub> (344.41). Colorless oil, [α]<sub>D</sub><sup>25</sup> = -88° (*c* = 4.0, CHCl<sub>3</sub>); colorless oil, [α]<sub>D</sub> = -160° (*c* = 0.7, CHCl<sub>3</sub>). Pharm: Antioxidant (*in vitro*, low-density lipoprotein peroxidation, IC<sub>50</sub> = 2.9 μmol/L; control Probucol, IC<sub>50</sub> = 1.3 μmol/L)<sup>[3096]</sup>. Source: SAN BAI CAO *Saururus chinensis*. (underground part). Ref: 3096, 4122.

**13293 Machilin F**

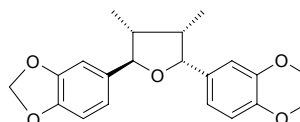
[114488-90-3] C<sub>20</sub>H<sub>22</sub>O<sub>5</sub> (342.40). Pharm: NO production inhibitor (mus, macrophage-like cell line RAW264.7 activated by LPS/IFN, IC<sub>50</sub> = 85.9 μmol/L, control Quercetin, IC<sub>50</sub> = 26.8 μmol/L)<sup>[2537]</sup>. Source: HAI FENG TENG *Piper kadsura* [Syn. *Piper futokadsura*], HONG NAN PI *Machilus thunbergii*. Ref: 1521, 2537.

**13294 Machillene**

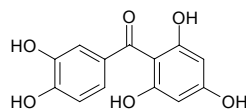
C<sub>29</sub>H<sub>36</sub>O<sub>2</sub> (416.61). Colorless oil, [α]<sub>D</sub><sup>25</sup> = +22.2° (*c* = 0.094, CHCl<sub>3</sub>). Pharm: Cytotoxic (*in vitro*, 20 μg/mL, NUGC-3 cell line, survival percent = 0%, HONE-1 cancer cell line, survival percent = 5%). Source: TAI WAN RUI FANG RUN NAN *Machilus zuihoensis* (stem wood). Ref: 5287.

**13295 (-)-Machilusin**

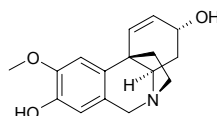
[61989-57-9] C<sub>21</sub>H<sub>24</sub>O<sub>5</sub> (356.42). Pharm: NO production inhibitor (mus, macrophage-like cell line RAW264.7 activated by LPS/IFN, IC<sub>50</sub> = 39.2 μmol/L, control Quercetin, IC<sub>50</sub> = 26.8 μmol/L)<sup>[2537]</sup>. Source: HAI FENG TENG *Piper kadsura* [Syn. *Piper futokadsura*], RI BEN NAN *Machilus japonica*. Ref: 1521, 2537.

**13296 Maclurin**

2,3',4,4',6-Pentahydroxy benzophenone [519-34-6] C<sub>13</sub>H<sub>10</sub>O<sub>6</sub> (262.22). Yellowish prisms (H<sub>2</sub>O), mp 220~222°C. Pharm: Cytotoxic (BST, LD<sub>50</sub> = 43.1 μmol/L; control Berberine, LD<sub>50</sub> = 67 μmol/L); antioxidant (DPPH scavenger, IC<sub>50</sub> = 5.3 μmol/L; control Catechin, IC<sub>50</sub> = 2.53 μmol/L)<sup>[4708]</sup>. Source: DAO NIAN ZI *Garcinia mangostana*, JIA HONG SHU *Laguncularia racemosa*, SANG YE *Morus alba*, SANG ZHI *Morus alba*, SHAN ZHU ZI *Garcinia multiflora* (stem: yield = 0.000083%<sup>[4708]</sup>), HUANG YAN MU *Chlorophora tinctoria*, *Acacia* sp. Ref: 6, 1521, 4708.

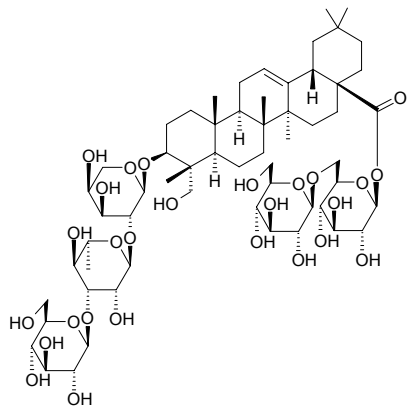
**13297 Macowine**

C<sub>16</sub>H<sub>19</sub>NO<sub>3</sub> (273.33). mp 115~117°C, [α]<sub>D</sub><sup>20</sup> = -34° (*c* = 0.235, CHCl<sub>3</sub>). Pharm: Antitrypanosomal (*Trypanosoma brucei rhodesiense* strain STIB-900, stage trypomastigotes); antimalarial inactive (*Plasmodium falciparum* strain NF-54, stage IEF). Source: GUAN MU WEN SHU LAN *Crinum macowanii* (bulb). Ref: 4000.

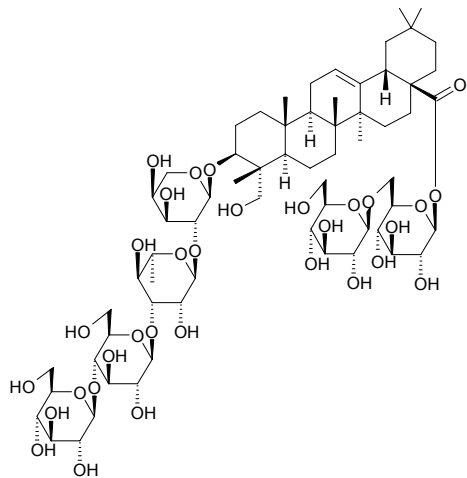


**13298 Macranthoidin A**

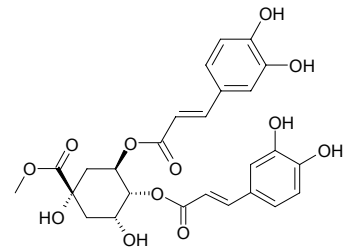
3-*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl hederagenin 28-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl ester C<sub>59</sub>H<sub>96</sub>O<sub>27</sub> (1237.41). White clustered crystals, mp 229~232°C,  $[\alpha]_D^{16} = -12.0^\circ$  ( $c = 3.2$ , MeOH); white granular Crystals (methanol), mp 218~220°C,  $[\alpha]_D^{21} = -3.3^\circ$  ( $c = 0.3$ , pyridine). **Source:** CHUAN XU DUAN *Dipsacus asperoides*, JIN YIN HUA *Lonicera japonica*, HUI ZHAN MAO REN DONG *Lonicera macranthoides*. **Ref:** 211, 263, 638.

**13299 Macranthoidin B**

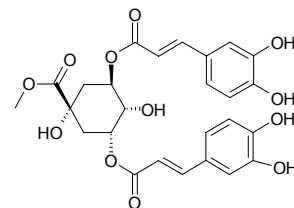
3-*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl-hederagenin-28-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl ester C<sub>65</sub>H<sub>106</sub>O<sub>32</sub> (1399.55). White acicular crystals, mp 230~233°C,  $[\alpha]_D^{22} = -13.4^\circ$  ( $c = 1.5$ , MeOH); white powder, mp 223~225°C. **Source:** HUI ZHAN MAO REN DONG *Lonicera macranthoides*, JIN YIN HUA *Lonicera japonica*. **Ref:** 263, 638, 895.

**13300 Macranthoin F**

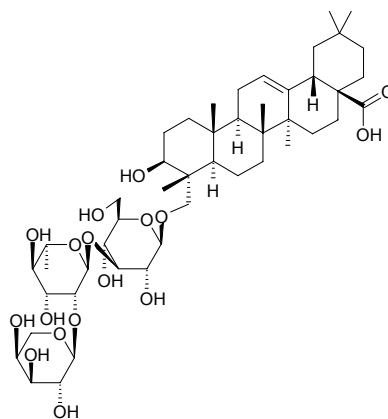
C<sub>26</sub>H<sub>26</sub>O<sub>12</sub> (530.49). Yellowish powder, mp 115~116°C. **Source:** HUI ZHAN MAO REN DONG *Lonicera macranthoides*. **Ref:** 311.

**13301 Macranthoin G**

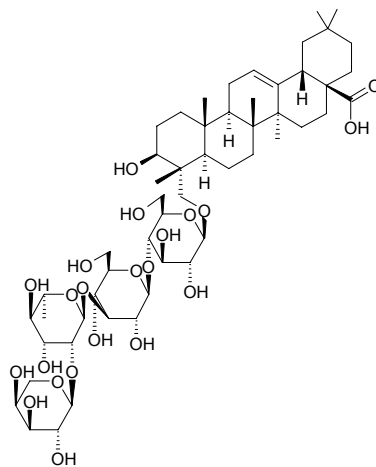
C<sub>26</sub>H<sub>26</sub>O<sub>12</sub> (530.49). Yellowish powder, mp 123~124°C. **Source:** HUI ZHAN MAO REN DONG *Lonicera macranthoides*. **Ref:** 311.

**13302 Macranthoside A**

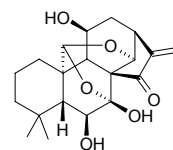
C<sub>47</sub>H<sub>76</sub>O<sub>17</sub> (913.12). **Source:** JIN YIN HUA *Lonicera japonica*. **Ref:** 638.

**13303 Macranthoside B**

C<sub>53</sub>H<sub>86</sub>O<sub>22</sub> (1075.26). **Source:** JIN YIN HUA *Lonicera japonica*. **Ref:** 638.

**13304 Macrocalin B**

C<sub>20</sub>H<sub>26</sub>O<sub>6</sub> (362.43). mp 208~210°C,  $[\alpha]_D^{12.5} = -42.5^\circ$  ( $c = 1.0$ , C<sub>5</sub>H<sub>5</sub>N). **Source:** DA E XIANG CHA CAI *Isodon macrocalyx*. **Ref:** 4067.

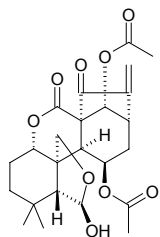




**13305 Macrocalyxin A (Macrocalin A)**

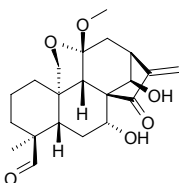
$C_{24}H_{30}O_9$  (462.50). mp 316–318°C,  $[\alpha]_D^{26} = -189.97^\circ$  ( $c = 0.5$ ,  $CHCl_3$ ).

Source: DA E XIANG CHA CAI *Isodon macrocalyx*. Ref: 4067.

**13306 Macrocalyxin B**

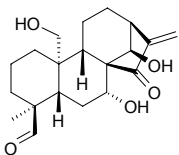
$C_{21}H_{28}O_6$  (376.45). mp > 300°C,  $[\alpha]_D^{22} = -62.8^\circ$  ( $c = 0.07$ , MeOH). Source:

DA E XIANG CHA CAI *Isodon macrocalyx*. Ref: 4067.

**13307 Macrocalyxin D**

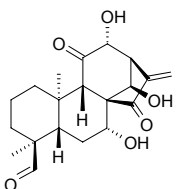
$C_{20}H_{28}O_5$  (348.44). mp 237–238°C. Source: DA E XIANG CHA CAI *Isodon*

*macrocalyx*. Ref: 4067.

**13308 Macrocalyxin E**

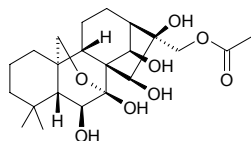
$C_{20}H_{26}O_6$  (362.43). mp 232–234°C,  $[\alpha]_D^{25} = +17.75^\circ$  ( $c = 0.50$ , EtOH). Source:

DA E XIANG CHA CAI *Isodon macrocalyx*. Ref: 4067.

**13309 Macrocalyxin G**

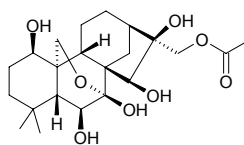
$C_{22}H_{34}O_8$  (426.51). mp 130–133°C,  $[\alpha]_D^{25} = -38.66^\circ$  ( $c = 0.45$ , MeOH).

Source: DA E XIANG CHA CAI *Isodon macrocalyx*. Ref: 4067.

**13310 Macrocalyxin H**

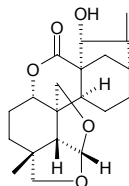
$C_{22}H_{34}O_8$  (426.51). mp 230°C,  $[\alpha]_D^{25} = -41.8^\circ$  ( $c = 0.22$ , MeOH). Source: DA

E XIANG CHA CAI *Isodon macrocalyx*. Ref: 4067.

**13311 Macrocalyxoformin A**

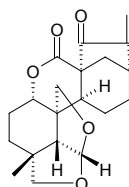
$C_{20}H_{26}O_5$  (346.43). mp 273–275°C,  $[\alpha]_D^{27} = -79.8^\circ$  ( $c = 0.30$ ,  $C_5H_5N$ ). Source:

DA E BIAN XING XIANG CHA CAI *Isodon macrocalyx*. Ref: 4067.

**13312 Macrocalyxoformin B**

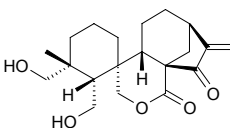
$C_{20}H_{24}O_5$  (344.41). mp 320–323°C,  $[\alpha]_D^{16} = -164.9^\circ$  ( $c = 1.0$ ,  $CHCl_3$ ). Source:

DA E BIAN XING XIANG CHA CAI *Isodon macrocalyx*. Ref: 4067.

**13313 Macrocalyxoformin D**

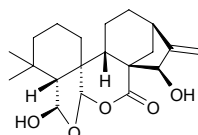
$C_{20}H_{28}O_5$  (348.44). mp 194–196°C,  $[\alpha]_D^{25} = -20.4^\circ$  ( $c = 4.7$ ,  $CHCl_3$ ). Source:

DA E BIAN XING XIANG CHA CAI *Isodon macrocalyx*. Ref: 4067.

**13314 Macrocalyxoformin E**

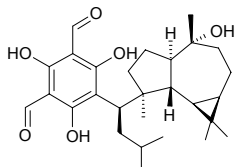
$C_{20}H_{28}O_5$  (348.44). mp 298–300°C. Source: DA E BIAN XING XIANG CHA

CAI *Isodon macrocalyx*. Ref: 4067.

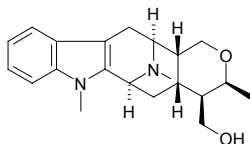


**13315 Macrocarpal A**

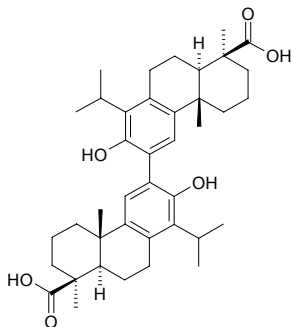
[132951-90-7] C<sub>28</sub>H<sub>40</sub>O<sub>6</sub> (472.63). Colorless crystals, mp 191~192°C, [ $\alpha$ ]<sub>D</sub><sup>24</sup> = -61.7° (*c* = 1.1, ethanol). **Pharm:** Antibacterial (pathogenic bacteria in mouth, MIC = 0.39~6.25µg/mL); aldose reductase inhibitor; glucose transferase inhibitor (10µg/mL, InRt = 75.4%, 100µg/mL, InRt = 97.1%); HIV reverse transcriptase inhibitor (IC<sub>50</sub> = 10.0µmol/L). **Source:** AN YE *Eucalyptus globulus*. **Ref:** 944, 1074, 1176.

**13316 Macrocarpine A**

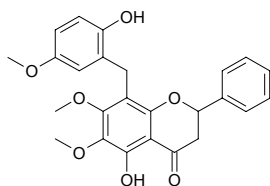
C<sub>21</sub>H<sub>28</sub>N<sub>2</sub>O<sub>2</sub> (340.47). **Source:** DA YE TANG JIAO SHU *Alstonia macrophylla* (leaf: yield = 0.0002%). **Ref:** 3020.

**13317 Macrophylllic acid**

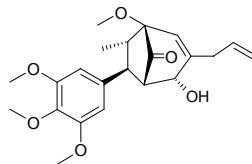
[2785-58-2] C<sub>40</sub>H<sub>54</sub>O<sub>6</sub> (630.87). mp 237~238°C (dec). **Source:** LUO HAN SONG YE *Podocarpus macrophyllus*. **Ref:** 6.

**13318 Macrophyllin**

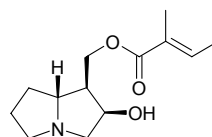
C<sub>25</sub>H<sub>24</sub>O<sub>7</sub> (436.47). Yellow plate crystals, mp 132~133°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +4.92 (*c* = 0.06, MeOH). **Source:** DA YE ZI YU PAN *Uvaria macrophylla*. **Ref:** 2220.

**13319 Macrophyllin B**

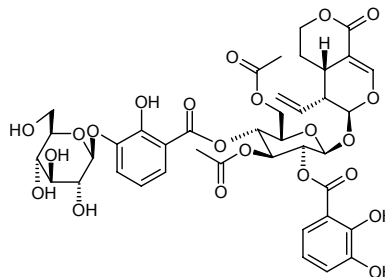
[74944-98-2] C<sub>22</sub>H<sub>28</sub>O<sub>6</sub> (388.46). **Source:** MAO YE XIANG CHA CAI *Isodon japonica* [Syn. *Rabdosia japonica*]. **Ref:** 575.

**13320 Macrophylline**

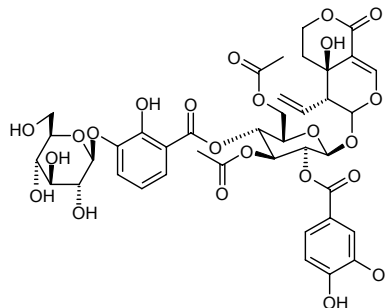
[27814-97-0] C<sub>13</sub>H<sub>21</sub>NO<sub>3</sub> (239.32). mp 42~44°C, bp 100°C/0.2mmHg. **Source:** HUANG WAN *Senecio nemorensis*. **Ref:** 6.

**13321 Macrophylliside A**

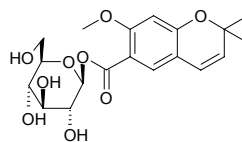
[179457-66-0] C<sub>40</sub>H<sub>44</sub>O<sub>22</sub> (876.78). **Source:** XI ZANG QIN JIAO *Gentiana tibetica*. **Ref:** 702.

**13322 Macrophylliside B**

[179457-67-1] C<sub>40</sub>H<sub>44</sub>O<sub>23</sub> (892.78). Amorphous powder, mp 127~133°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -9° (*c* = 0.385, MeOH). **Source:** QIN JIAO *Gentiana macrophylla*. **Ref:** 707.

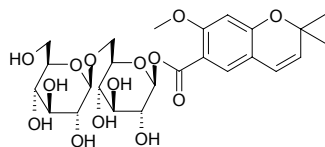
**13323 Macrophylliside C**

[179457-68-2] C<sub>19</sub>H<sub>24</sub>O<sub>9</sub> (396.40). Amorphous powder, mp 72~75°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -23° (*c* = 0.037, MeOH). **Source:** QIN JIAO *Gentiana macrophylla*. **Ref:** 707.

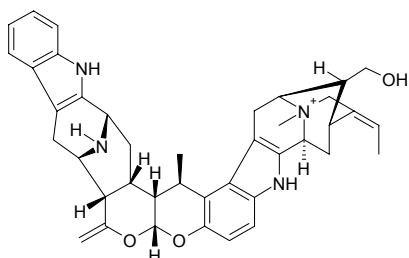


**13324 Macrophyllaside D**

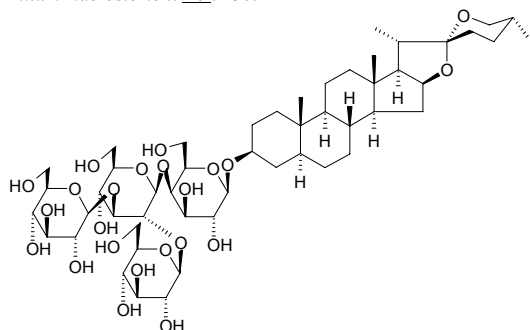
[179457-69-3] C<sub>25</sub>H<sub>34</sub>O<sub>14</sub> (558.54). Amorphous powder, mp 132~134°C, [α]<sub>D</sub><sup>20</sup> = -4° (c = 0.511, MeOH). Source: QIN JIAO *Gentiana macrophylla*. Ref: 707.

**13325 Macropegatrine**

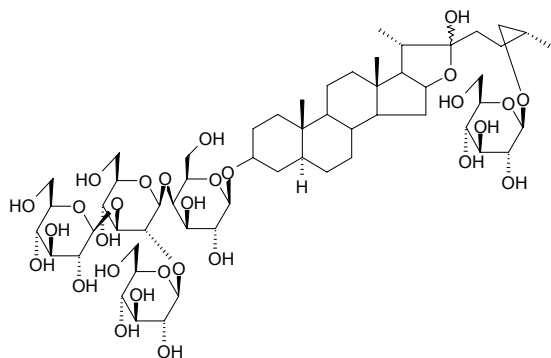
[113775-81-8] C<sub>40</sub>H<sub>45</sub>N<sub>4</sub>O<sub>3</sub> (629.83). Colorless rhomboid crystals, mp 300°C (changing into black), [α]<sub>D</sub><sup>17</sup> = +215° (chloroform). Source: HAI NAN LUO FU MU *Rauvolfia verticillata* var. *hainanensis*. Ref: 89.

**13326 Macrostemnoside A**

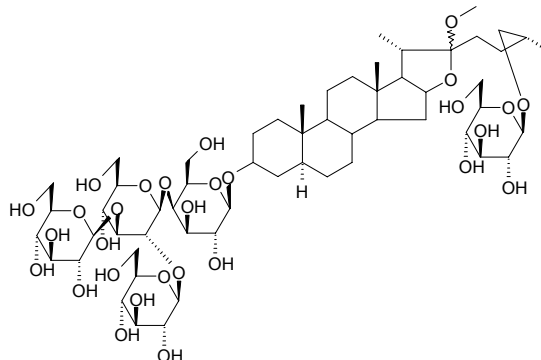
Tigogenin-3-*O*-β-*D*-glucopyranosyl-(1→2)[β-*D*-glucopyranosyl-(1→3)]-β-*D*-glucopyranosyl-(1→4)-β-*D*-galactopyranoside C<sub>51</sub>H<sub>84</sub>O<sub>23</sub> (1065.22). White powder, mp 276~278°C, [α]<sub>D</sub><sup>20</sup> = 0° (c = 0.1, pyridine). Source: XIE BAI *Allium macrostemon*. Ref: 250.

**13327 Macrostemnoside B**

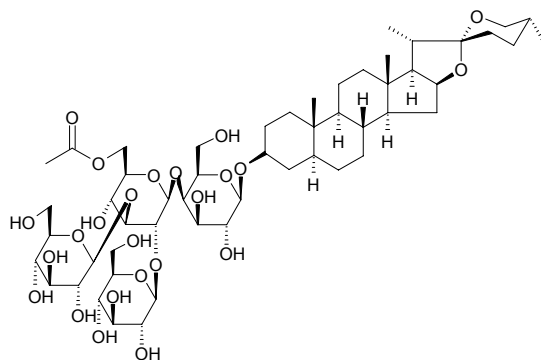
C<sub>57</sub>H<sub>96</sub>O<sub>29</sub> (1245.38). White powder. Source: XIE BAI *Allium macrostemon*. Ref: 4897.

**13328 Macrostemnoside C**

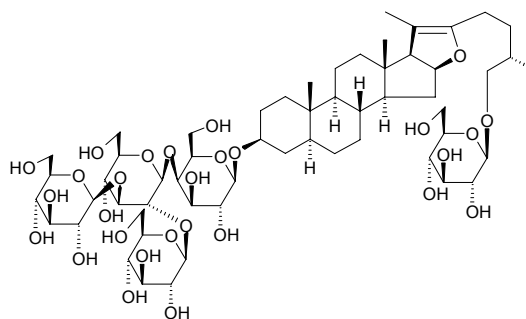
C<sub>58</sub>H<sub>98</sub>O<sub>29</sub> (1257.44). White powder. Pharm: Cytotoxic (SF268 cells, EC = 25μg/mL, NCI-H460 cells, EC = 25μg/mL, HepG2 cells, inactive). Source: XIE BAI *Allium macrostemon*. Ref: 4897.

**13329 Macrostemnoside D**

Tigogenin-3-*O*-β-*D*-glucopyranosyl-(1→2)[β-*D*-glucopyranosyl-(1→3)(6-*O*-acetyl-β-*D*-glucopyranosyl)]-(1→4)-β-*D*-galactopyranoside C<sub>53</sub>H<sub>86</sub>O<sub>24</sub> (1107.26). White powder, mp 270~273°C, [α]<sub>D</sub><sup>20</sup> = 0° (c = 0.1, pyridine). Source: XIE BAI *Allium macrostemon*. Ref: 250.

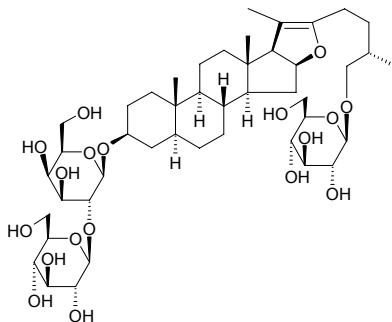
**13330 Macrostemnoside E**

[151140-39-5] C<sub>57</sub>H<sub>94</sub>O<sub>28</sub> (1227.37). White amorphous powder, mp 227.5~230.0°C, mp 209~212°C [α]<sub>D</sub><sup>25</sup> = -32.7° (c = 0.101, H<sub>2</sub>O). Pharm: Platelet aggregation inhibitor (hmn *in vitro*, induced by ADP, IC<sub>50</sub> = 0.417mmol/L). Source: XIE BAI *Allium macrostemon*. Ref: 273, 4897.

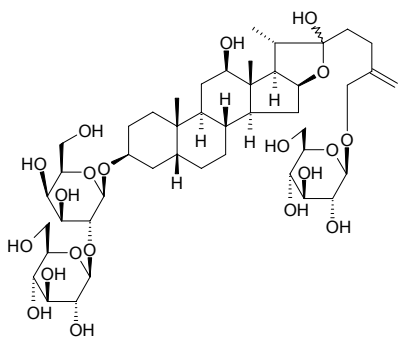


**13331 Macrostemoside F**

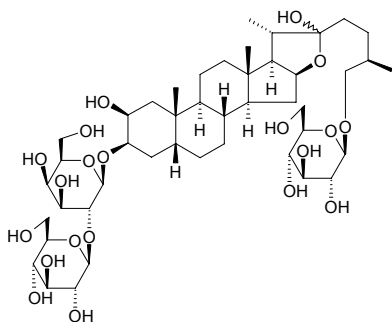
[151215-11-1] C<sub>45</sub>H<sub>74</sub>O<sub>18</sub> (903.08). White amorphous powder, mp 196.0~198.5°C; white powder, mp 180~184°C [ $\alpha$ ]<sub>D</sub><sup>27</sup> = -22.9° (c = 0.131, H<sub>2</sub>O). **Pharm:** Platelet aggregation inhibitor (hmn *in vitro*, induced by ADP, IC<sub>50</sub> = 0.020mmol/L); free radical scavenger (·OH free radical). **Source:** ZHI MU *Anemarrhena asphodeloides*, XIE BAI *Allium macrostemon*. **Ref:** 273, 2165, 4897.

**13332 Macrostemoside G**

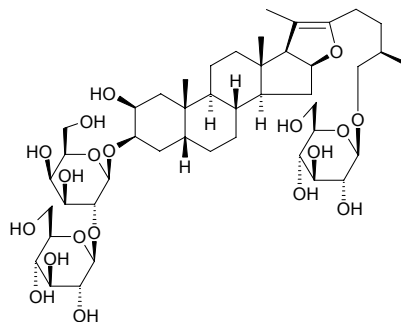
[162413-62-9] C<sub>45</sub>H<sub>74</sub>O<sub>20</sub> (935.08). White amorphous powder, mp 198~200°C. **Pharm:** Platelet aggregation inhibitor (hmn *in vitro*, induced by ADP, IC<sub>50</sub> = 0.871mmol/L). **Source:** XIE BAI *Allium macrostemon*. **Ref:** 1153.

**13333 Macrostemoside J**

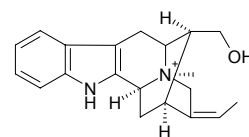
(25*R*)-26-*O*-β-*D*-glucopyranosyl-22-hydroxy-5β-furost-2β,3β,26-triol-3-*O*-β-*D*-glucopyranosyl-(1→2)-β-*D*-galactopyranoside C<sub>45</sub>H<sub>76</sub>O<sub>20</sub> (937.10). White amorphous powder, mp 230~232°C. **Source:** XIE BAI *Allium macrostemon*. **Ref:** 309.

**13334 Macrostemoside L**

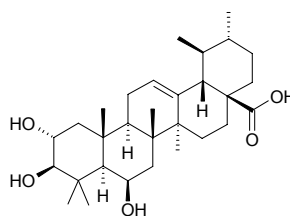
(25*R*)-26-*O*-β-*D*-Glucopyranosyl-22-methoxy-5β-furost-2β,3β,26-triol-3-*O*-β-*D*-glucopyranosyl-(1→2)-β-*D*-galactopyranoside C<sub>45</sub>H<sub>74</sub>O<sub>19</sub> (919.08). White amorphous powder, mp 206~208°C. **Source:** XIE BAI *Allium macrostemon*. **Ref:** 309.

**13335 Macusine B**

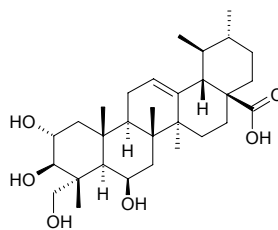
C<sub>20</sub>H<sub>25</sub>N<sub>2</sub>O (309.44). **Source:** *Strychnos guianensis* (stem cortex). **Ref:** 3943.

**13336 Madasiatic acid**

[26532-66-1] C<sub>30</sub>H<sub>48</sub>O<sub>5</sub> (488.71). Crystals, mp 248~250°C (dec). **Source:** JI XUE CAO *Centella asiatica*. **Ref:** 6.

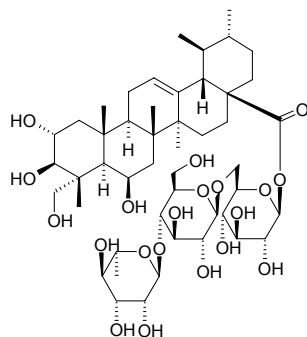
**13337 Madecassic acid**

C<sub>30</sub>H<sub>48</sub>O<sub>6</sub> (504.71). **Pharm:** Induces gene expression changes (hmn fibroblast, IC<sub>90</sub> = (175±20)μg/mL)<sup>[5430]</sup>. **Source:** JI XUE CAO *Centella asiatica* (dried whole herb: content scope of 3 origins = 0.26%~0.72%, mean content = 0.454%<sup>[5508]</sup>). **Ref:** 5430, 5508.

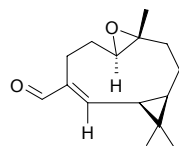


**13338 Madecassoside**

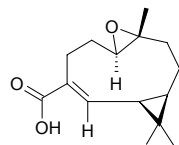
$C_{48}H_{78}O_{20}$  (975.14). **Pharm:** Induces gene expression changes (hmn fibroblast,  $IC_{90} > 400 \mu\text{g/mL}$ )<sup>[5430]</sup>. **Source:** JI XUE CAO *Centella asiatica* (dried whole herb: content scope of 9 origins = trace~1.59%, mean content = 0.603%<sup>[5508]</sup>). **Ref:** 6, 4135, 5430, 5508.

**13339 Madolin A**

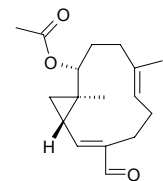
$C_{15}H_{22}O_2$  (234.34). **Source:** MIAN MAO MA DOU LING *Aristolochia mollissima* (dried root and stem: yield = 0.0019%dw). **Ref:** 3026.

**13340 Madolin B**

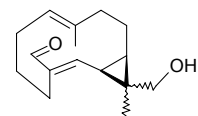
$C_{15}H_{22}O_3$  (250.34). **Source:** MIAN MAO MA DOU LING *Aristolochia mollissima* (dried root and stem: yield = 0.00031%dw). **Ref:** 3026.

**13341 Madolin H**

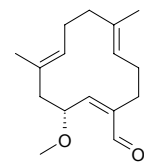
$C_{17}H_{24}O_3$  (276.38). **Source:** MIAN MAO MA DOU LING *Aristolochia mollissima* (dried root and stem: yield = 0.0012%dw). **Ref:** 3026.

**13342 Madolin K**

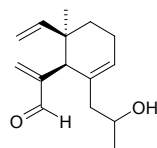
$C_{16}H_{24}O_2$  (248.37). **Source:** MIAN MAO MA DOU LING *Aristolochia mollissima* (dried root and stem: yield = 0.00031%dw). **Ref:** 3026.

**13343 Madolin M**

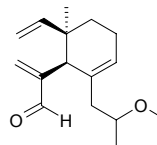
$C_{16}H_{24}O_2$  (248.37). **Source:** MIAN MAO MA DOU LING *Aristolochia mollissima* (dried root and stem: yield = 0.0012%dw). **Ref:** 3026.

**13344 Madolin R**

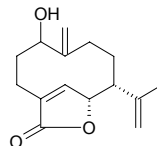
$C_{15}H_{22}O_2$  (234.34). Colorless oil,  $[\alpha]_D = -63^\circ$  ( $c = 0.07$ ,  $\text{CHCl}_3$ ). **Source:** MIAN MAO MA DOU LING *Aristolochia mollissima* (dried root and stem: yield = 0.00062%dw). **Ref:** 3026.

**13345 Madolin S**

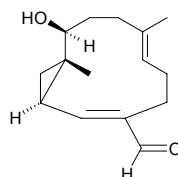
$C_{16}H_{24}O_2$  (248.37). Colorless oil,  $[\alpha]_D = -41.7^\circ$  ( $c = 0.06$ ,  $\text{CHCl}_3$ ). **Source:** MIAN MAO MA DOU LING *Aristolochia mollissima* (dried root and stem: yield = 0.00062%dw). **Ref:** 3026.

**13346 Madolin U**

$C_{15}H_{20}O_3$  (248.32). Colorless oil,  $[\alpha]_D = +84.9^\circ$  ( $c = 0.08$ ,  $\text{CHCl}_3$ ). **Source:** MIAN MAO MA DOU LING *Aristolochia mollissima* (dried root and stem: yield = 0.00092%dw). **Ref:** 3026.

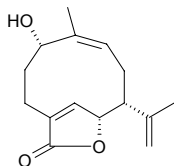
**13347 Madolin W**

$C_{15}H_{22}O_2$  (234.34). Colorless oil,  $[\alpha]_D = -83.4^\circ$  ( $c = 0.1$ ,  $\text{CHCl}_3$ ). **Source:** MIAN MAO MA DOU LING *Aristolochia mollissima* (dried root and stem: yield = 0.0012%dw). **Ref:** 3026.

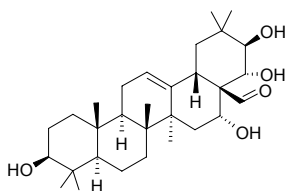


**13348 Madolin X**

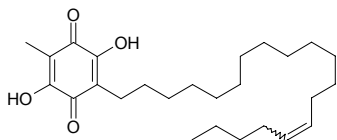
$C_{15}H_{20}O_3$  (248.32). Colorless oil,  $[\alpha]_D^{20} = +32.6^\circ$  ( $c = 0.05$ ,  $CHCl_3$ ). Source: MIAN MAO MA DOU LING *Aristolochia mollissima* (dried root and stem): yield = 0.00062% dw). Ref: 3026.

**13349 Maesagenin A**

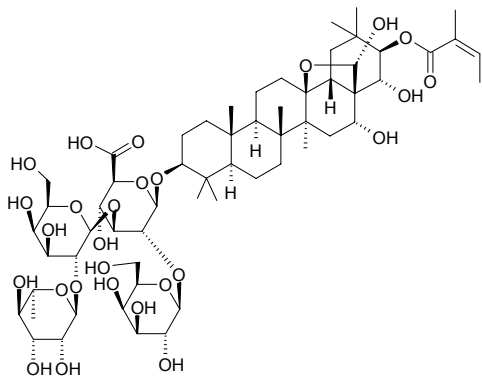
$C_{30}H_{48}O_5$  (488.71). White acicular crystals, mp 248–250°C. Source: JI YU DAN *Maesa perlaris*. Ref: 840.

**13350 Maesaquinone**

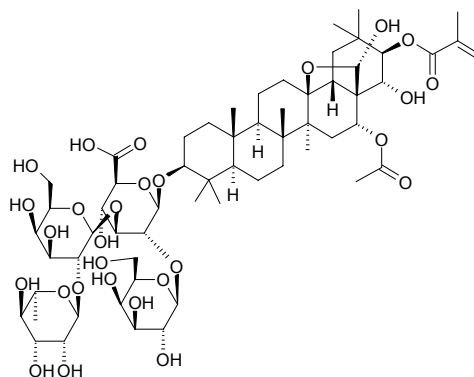
[19833-20-6]  $C_{26}H_{42}O_4$  (418.62). mp 123°C. Source: DU JING SHAN *Maesa japonica*, LIANG MIAN QING *Maesa indica*. Ref: 6, 1521.

**13351 Maesasaponin I**

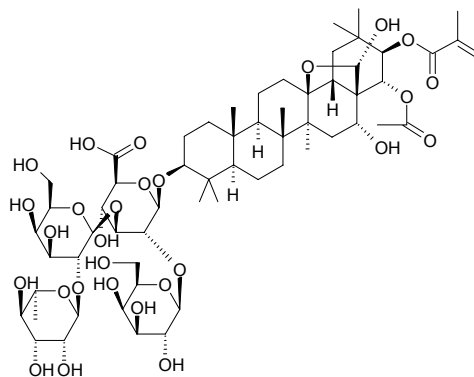
3 $\beta$ -O- $\{[\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-galactopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -D-galactopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -D-glucuronopyranosyl}-21-angeloyloxy-13,28-oxidoolean-16 $\alpha$ ,22 $\alpha$ ,28 $\alpha$ -triol  $C_{59}H_{94}O_{27}$  (1235.39).  $[\alpha]_D^{31.4} = -27.7^\circ$  ( $c = 0.84$ , pyridine). Source: PI ZHEN DU JING SHAN *Maesa lanceolata*. Ref: 2386.

**13352 Maesasaponin II**

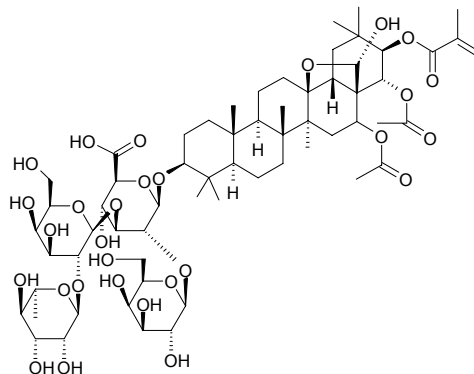
3 $\beta$ -O- $\{[\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-galactopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -D-galactopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -D-glucuronopyranosyl}-16 $\alpha$ -acetoxy-21 $\beta$ -angeloyloxy-13 $\beta$ ,28-oxidoolean-22 $\alpha$ ,28 $\alpha$ -diol  $C_{61}H_{96}O_{28}$  (1277.43).  $[\alpha]_D^{32.5} = -29.7^\circ$  ( $c = 0.69$ , pyridine). Source: PI ZHEN DU JING SHAN *Maesa lanceolata*. Ref: 2386.

**13353 Maesasaponin III**

3 $\beta$ -O- $\{[\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-galactopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -D-galactopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -D-glucuronopyranosyl}-22 $\alpha$ -acetoxy-21 $\beta$ -angeloyloxy-13 $\beta$ ,28-oxidoolean-16 $\alpha$ ,28 $\alpha$ -diol  $C_{61}H_{96}O_{28}$  (1277.43).  $[\alpha]_D^{33.7} = -45.5^\circ$  ( $c = 1.0$ , pyridine). Source: PI ZHEN DU JING SHAN *Maesa lanceolata*. Ref: 2386.

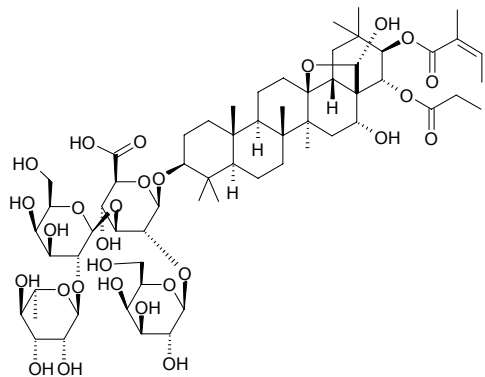
**13354 Maesasaponin IV<sub>2</sub>**

3 $\beta$ -O- $\{[\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-galactopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -D-galactopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -D-glucuronopyranosyl}-16 $\alpha$ ,22 $\alpha$ -diacetoxy-21 $\beta$ -angeloyloxy-13 $\beta$ ,28-oxidoolean-28 $\alpha$ -ol  $C_{63}H_{98}O_{29}$  (1319.47).  $[\alpha]_D^{35} = -19.5^\circ$  ( $c = 1.0$ , pyridine). Source: PI ZHEN DU JING SHAN *Maesa lanceolata*. Ref: 2386.

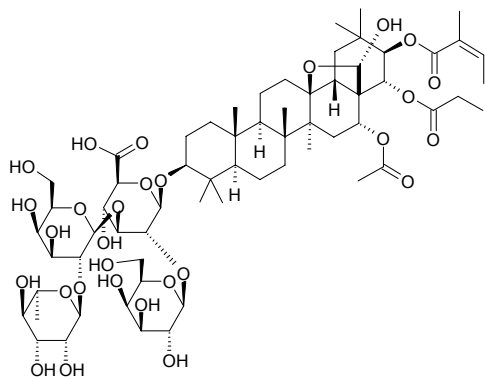


**13355 Maesasaponin IV<sub>3</sub>**

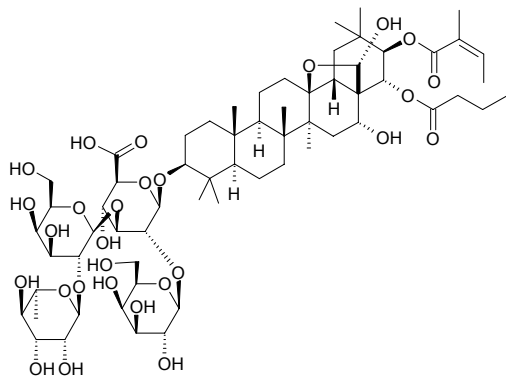
3 $\beta$ -O- $\{[\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -D-galactopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -D-galactopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -D-glucuronopyranosyl}-21 $\beta$ -angeloyloxy-22 $\alpha$ -propanoyloxy-13 $\beta$ ,28-oxidoolean-16 $\alpha$ ,28 $\alpha$ -diol C<sub>64</sub>H<sub>98</sub>O<sub>28</sub> (1291.46). [ $\alpha$ ]<sub>D</sub><sup>28</sup> = -41.5° (c = 1.0, pyridine). Source: PI ZHEN DU JING SHAN *Maesa lanceolata*. Ref: 2386.

**13356 Maesasaponin V<sub>2</sub>**

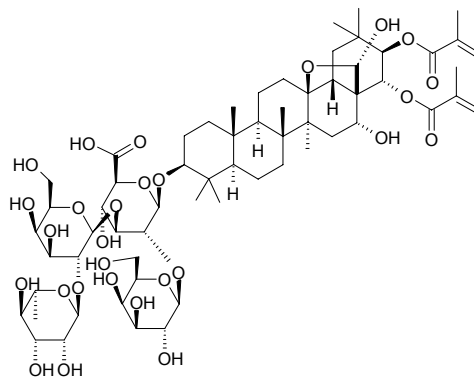
3 $\beta$ -O- $\{[\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -D-galactopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -D-galactopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -D-glucuronopyranosyl}-21 $\beta$ -angeloyloxy-22 $\alpha$ -butanoyloxy-13 $\beta$ ,28-oxidoolean-16 $\alpha$ ,28 $\alpha$ -diol C<sub>64</sub>H<sub>100</sub>O<sub>29</sub> (1333.49). [ $\alpha$ ]<sub>D</sub><sup>32</sup> = -30.0° (c = 0.5, pyridine). Source: PI ZHEN DU JING SHAN *Maesa lanceolata*. Ref: 2386.

**13357 Maesasaponin V<sub>3</sub>**

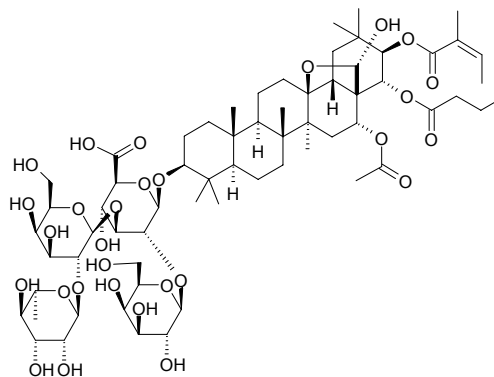
3 $\beta$ -O- $\{[\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -D-galactopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -D-galactopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -D-glucuronopyranosyl}-16 $\alpha$ -acetoxy-21 $\beta$ -angeloyloxy-22 $\alpha$ -propanoyloxy-13 $\beta$ ,28-oxidoolean-28 $\alpha$ -ol C<sub>63</sub>H<sub>100</sub>O<sub>28</sub> (1305.48). [ $\alpha$ ]<sub>D</sub><sup>29.5</sup> = -47.0° (c = 1.0, pyridine). Source: PI ZHEN DU JING SHAN *Maesa lanceolata*. Ref: 2386.

**13358 Maesasaponin VI<sub>2</sub>**

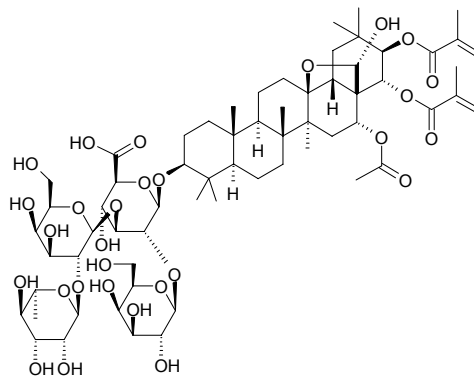
Maesasaponin; 3 $\beta$ -O- $\{[\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -D-galactopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -D-galactopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -D-glucuronopyranosyl}-21 $\beta$ ,22 $\alpha$ -diangeloyloxy-13 $\beta$ ,28-oxidoolean-16 $\alpha$ ,28 $\alpha$ -diol C<sub>64</sub>H<sub>100</sub>O<sub>28</sub> (1317.49). Yellow powder, mp 250°C; [ $\alpha$ ]<sub>D</sub><sup>33</sup> = -33.0° (c = 1.0, pyridine). Source: JI YU DAN *Maesa perlaris*, PI ZHEN DU JING SHAN *Maesa lanceolata*. Ref: 840, 2386.

**13359 Maesasaponin VI<sub>3</sub>**

3 $\beta$ -O- $\{[\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -D-galactopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -D-galactopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -D-glucuronopyranosyl}-16 $\alpha$ -acetoxy-21 $\beta$ -angeloyloxy-22 $\alpha$ -butanoyloxy-13 $\beta$ ,28-oxidoolean-28 $\alpha$ -ol C<sub>65</sub>H<sub>102</sub>O<sub>29</sub> (1347.52). [ $\alpha$ ]<sub>D</sub><sup>34</sup> = -44.5° (c = 1.0, pyridine). Source: PI ZHEN DU JING SHAN *Maesa lanceolata*. Ref: 2386.

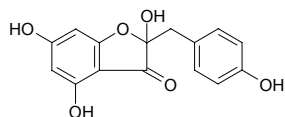
**13360 Maesasaponin VII<sub>1</sub>**

3 $\beta$ -O- $\{[\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -D-galactopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -D-galactopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -D-glucuronopyranosyl}-16 $\alpha$ -acetoxy-21 $\beta$ ,22 $\alpha$ -diangeloyloxy-13 $\beta$ ,28-oxidoolean-28 $\alpha$ -ol C<sub>66</sub>H<sub>102</sub>O<sub>29</sub> (1359.53). [ $\alpha$ ]<sub>D</sub><sup>34.5</sup> = -41.5° (c = 0.59, pyridine). Source: PI ZHEN DU JING SHAN *Maesa lanceolata*. Ref: 2386.

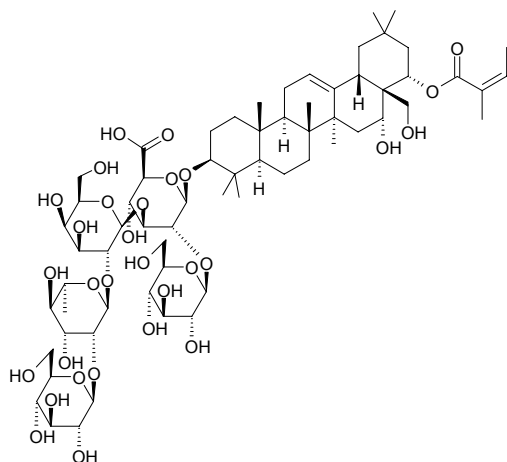


**13361 Maesopsin**

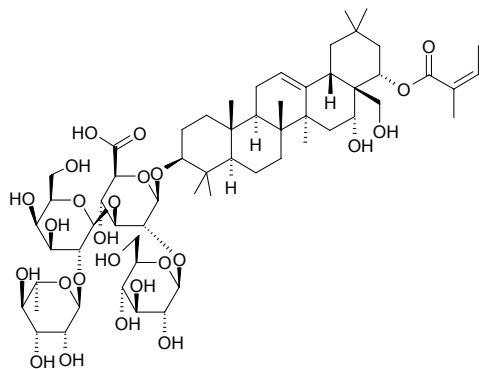
$C_{15}H_{12}O_6$  (288.26). Whitegranular substance ( $CHCl_3$ -acetone), mp 184–185°C. **Pharm:** Antioxidant (DPPH radical scavenger,  $IC_{50} = 5.3\mu g/mL$ ; control Ascorbic acid,  $IC_{50} = 3.9\mu g/mL$ )<sup>[4711]</sup>. **Source:** AI DA HUANG *Rheum nanum*, ZANG BIAN DA HUANG *Rheum emodi* [Syn. *Rheum australe*] (root: yield = 0.0067%dw)<sup>[4711]</sup>. **Ref:** 4711, 4807.

**13362 Maetenoside A**

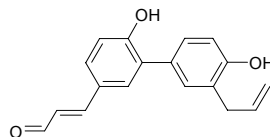
3-*O*-[ $\beta$ -*D*-Glucopyranosyl-(1→2)- $\alpha$ -*L*-rhamnopyranosyl-(1→2)- $\beta$ -*D*-galactopyranosyl-(1→3)] [ $\beta$ -*D*-glucopyranosyl-(1→2)]- $\beta$ -*D*-glucuronopyranosyl camelliagenin A 22-*O*-angelate  $C_{65}H_{104}O_{30}$  (1365.54). Amorphous solid,  $[\alpha]_D^{22} = -15.0^\circ$  ( $c = 0.7$ , MeOH). **Source:** RUAN RUO DU JING SHAN *Maesa tenera* (aerial parts). **Ref:** 3539.

**13363 Maetenoside B**

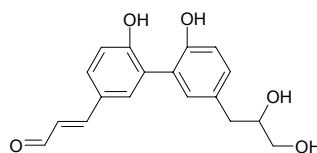
3-*O*-[ $\alpha$ -*L*-Rhamnopyranosyl-(1→2)- $\beta$ -*D*-galactopyranosyl-(1→3)] [ $\beta$ -*D*-glucopyranosyl-(1→2)]- $\beta$ -*D*-glucuronopyranosyl camelliagenin A 22-*O*-angelate  $C_{59}H_{94}O_{25}$  (1203.39). Amorphous solid,  $[\alpha]_D^{22} = -21.3^\circ$  ( $c = 0.6$ , MeOH). **Source:** RUAN RUO DU JING SHAN *Maesa tenera* (aerial parts). **Ref:** 3539.

**13364 Magnaldehyde B**

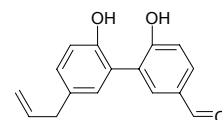
$C_{18}H_{16}O_3$  (280.33). **Source:** HOU PO *Magnolia officinalis*. **Ref:** 2.

**13365 Magnaldehyde C**

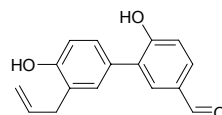
$C_{18}H_{18}O_5$  (314.34). **Source:** HOU PO *Magnolia officinalis*. **Ref:** 2.

**13366 Magnaldehyde D**

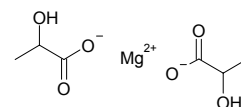
[93753-33-4]  $C_{16}H_{14}O_3$  (254.29). Pale yellow needles ( $CHCl_3$ - $C_6H_6$ ), mp 140–143°C. **Source:** HOU PO *Magnolia officinalis*. **Ref:** 2.

**13367 Magnaldehyde E**

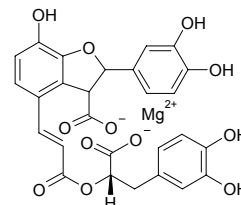
[138591-09-9]  $C_{16}H_{14}O_3$  (254.29). Pale yellow needles ( $CHCl_3$ - $C_6H_6$ ), mp 160–162°C. **Source:** HOU PO *Magnolia officinalis*. **Ref:** 2.

**13368 Magnesium lactate**

[18917-93-6]  $C_6H_{10}MgO_6$  (202.46). **Source:** LU HUI *Aloe vera* [Syn. *Aloe barbadensis*]. **Ref:** 2.

**13369 Magnesium lithospermate**

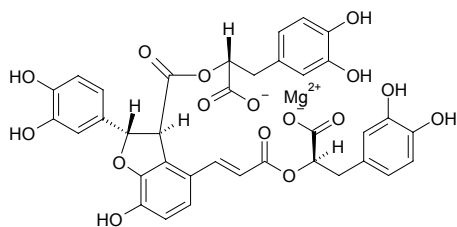
$C_{27}H_{20}MgO_{12}$  (560.76). **Pharm:** Anti-HIV (non-competitively inhibits enzymatic substrates). **Source:** YOU CI PO BU MU *Cordia spinescens*. **Ref:** 2268.



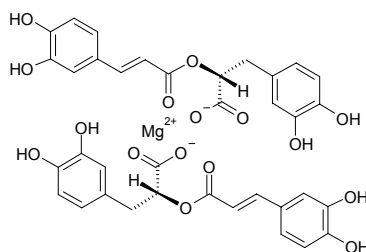


**13370 Magnesium lithospermate B**

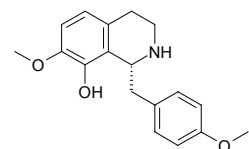
$C_{36}H_{28}MgO_{16}$  (740.92). **Pharm:** Antioxydant. **Source:** DAN SHEN *Salvia multiorrhiza*. **Ref:** 4933.

**13371 Magnesium rosmarinat**

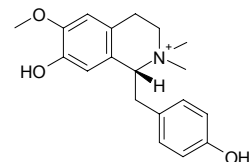
$C_{36}H_{30}MgO_{16}$  (742.95). **Source:** YOU CI PO BU MU *Cordia spinescens*. **Ref:** 2268.

**13372 Magnococline**

$C_{18}H_{21}NO_3$  (299.37). **Source:** YE HE HUA *Magnolia coco*. **Ref:** 6.

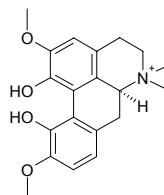
**13373 Magnocurarine**

[6801-40-7]  $C_{19}H_{24}NO_3^+$  (314.41). mp (+)(S) 198~199°C (dec), (-)(R) 199~200°C. **Pharm:** Ganglionic blocker (curariform action, rbt, nutation experiment,  $ED_{50}$  = 6mg/kg); antihypertensive (anesthetic dog, cat, and rbt);  $LD_{50}$  (mus ip) = 3mg/kg. **Source:** CHENG QIE ZI *Litsea cubeba*, DA YE HOU PO *Magnolia rostrata*, HOU PO *Magnolia officinalis*, RI BEN HOU PO *Magnolia obovata*, WU DANG MU LAN *Magnolia sprengeri*. **Ref:** 2, 4, 6, 625, 658.

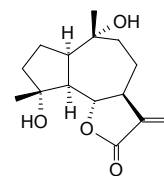
**13374 Magnoflorine**

Escholine; Thalictrine [2141-09-5]  $C_{20}H_{24}NO_4$  (342.42). mp 169~170°C. **Pharm:** Ganglionic blocker (curariform action); antihypertensive (rodents and anesthetic cat, 2mg/kg iv, reduces blood pressure by (30~50)% for 90~120min, renal hypertensive dog, 6mg/kg iv, particularly diastolic pressure). **Source:** BEI JIA ER TANG SONG CAO *Thalictrum baicalense*, BEI MA DOU LING

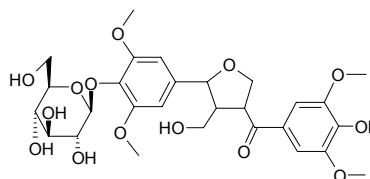
*Aristolochia contorta*, BEI MA DOU LING GEN *Aristolochia contorta*, CU GUO TANG SONG CAO *Thalictrum dasycarpum*, DONG YA TANG SONG CAO *Thalictrum minus* var. *hypoleucum*<sup>[5507]</sup>, FAN BAI CAO *Potentilla discolor*<sup>[5507]</sup>, GUAN MU TONG *Aristolochia manshuriensis*, GUANG FANG JI *Aristolochia fangchi*, HAN FANG JI *Aristolochia heterophylla*, HE HUA YU LAN *Magnolia grandiflora*, HOU PO *Magnolia officinalis*, HUA NAN GONG LAO MU *Mahonia japonica*, HUA NAN GONG LAO YE *Mahonia japonica*, HUAI TONG *Aristolochia moupinensis*, HUANG BAI *Phellodendron amurense*, HUANG LIAN *Coptis chinensis*, HUANG PI SHU *Phellodendron chinense*, KA MING BA DOU *Croton cuningii*, MA DOU LING *Aristolochia debilis* [Syn. *Aristolochia longa*], MA TI YE *Caltha palustris*, MA WEI LIAN *Thalictrum foliolosum*, MU FANG JI *Cocculus trilobus* [Syn. *Cocculus sarmentosus*], OU ZHOU MA DOU LING *Aristolochia siphon*<sup>[5507]</sup>, QING FENG TENG *Sinomenium acutum*, QING MU XIANG *Aristolochia debilis* [Syn. *Aristolochia longa*], RI BEN XIAO BO *Berberis thunbergii*, SAN JIAO YE HUANG LIAN *Coptis deltoidea*, TAI WAN XIAO BO *Berberis kawakamii*<sup>[5507]</sup>, TU YE HUANG PI SHU *Phellodendron chinense* var. *glabriusculum*, XI YE GONG LAO MU *Mahonia fortunei*, XI YE GONG LAO YE *Mahonia fortunei*, XIANG TANG SONG CAO *Thalictrum foetidum*, XIAO BO *Berberis amurensis*, XIAO TANG SONG CAO *Thalictrum minus*<sup>[5507]</sup>, YAN GUO CAO *Thalictrum thunbergii*, YIN YANG HUO *Epimedium brevicornum*, YU LAN *Magnolia denudata* [Syn. *Magnolia heptapata*], YUN NAN HUANG LIAN *Coptis teetoides* [Syn. *Coptis teeta*], occurs in many plants. **Ref:** 2, 4, 6, 306, 625, 658, 660, 5501, 5507.

**13375 Magnograndiolide**

[92618-98-9]  $C_{15}H_{22}O_4$  (266.34). Prisms, mp 176~177°C. **Source:** HE HUA YU LAN *Magnolia grandiflora*. **Ref:** 1226.

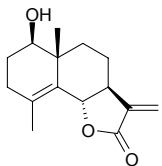
**13376 Magnolenin C**

[66779-67-7]  $C_{28}H_{36}O_{14}$  (596.59). **Source:** HE HUA YU LAN *Magnolia grandiflora*. **Ref:** 1228.

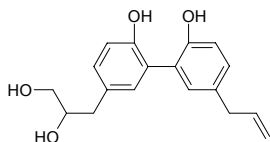


**13377 Magnolialide**

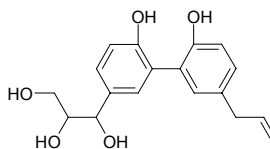
[72145-13-2] C<sub>15</sub>H<sub>20</sub>O<sub>3</sub> (248.32). Crystals (hexane-Et<sub>2</sub>O), mp 152–153°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +74° (c = 0.23, EtOH). Source: JU QU *Cichorium intybus*, HE HUA YU LAN *Magnolia grandiflora*. Ref: 736, 1229, 1521.

**13378 Magnolignan A**

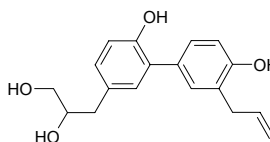
[93673-81-5] C<sub>18</sub>H<sub>20</sub>O<sub>4</sub> (300.36). Powder, [ $\alpha$ ]<sub>D</sub><sup>17</sup> = -0.8° (c = 1.5, MeOH). Source: HOU PO *Magnolia officinalis*. Ref: 2, 6, 1521.

**13379 Magnolignan B**

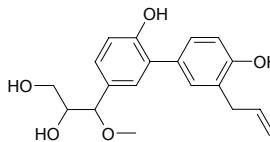
[138591-07-8] C<sub>18</sub>H<sub>20</sub>O<sub>5</sub> (316.36). Powder, [ $\alpha$ ]<sub>D</sub><sup>28</sup> = +0.3° (c = 2.5, MeOH). Source: HOU PO *Magnolia officinalis*. Ref: 2, 6, 1521.

**13380 Magnolignan C**

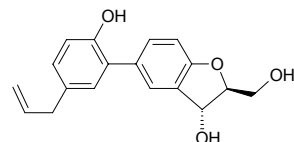
[93697-42-8] C<sub>18</sub>H<sub>20</sub>O<sub>4</sub> (300.36). Powder, [ $\alpha$ ]<sub>D</sub><sup>22</sup> = -6.8° (c = 0.9, MeOH). Source: HOU PO *Magnolia officinalis*. Ref: 2, 6, 1521.

**13381 Magnolignan D**

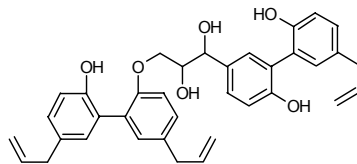
[138749-67-4] C<sub>19</sub>H<sub>22</sub>O<sub>5</sub> (330.38). Powder, [ $\alpha$ ]<sub>D</sub><sup>17</sup> = +3.0° (c = 0.9, MeOH). Source: HOU PO *Magnolia officinalis*. Ref: 2, 1521.

**13382 Magnolignan E**

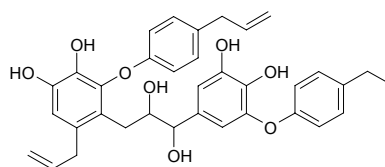
[138591-08-9] C<sub>18</sub>H<sub>18</sub>O<sub>4</sub> (298.34). Powder, [ $\alpha$ ]<sub>D</sub><sup>29</sup> = -2.0° (c = 2.1, MeOH). Source: HOU PO *Magnolia officinalis*. Ref: 2, 1521.

**13383 Magnolignan F**

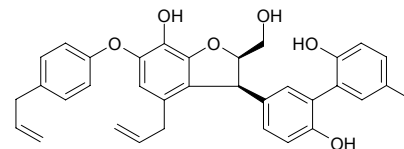
[138591-10-3] C<sub>36</sub>H<sub>36</sub>O<sub>6</sub> (564.68). Pale brown powder, [ $\alpha$ ]<sub>D</sub><sup>28</sup> = -1.5° (c = 1.04, MeOH). Source: HOU PO *Magnolia officinalis*. Ref: 2, 1521.

**13384 Magnolignan G**

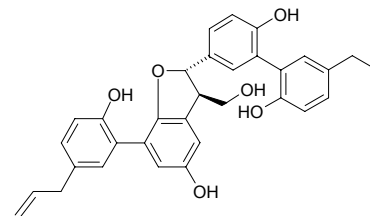
[138591-11-4] C<sub>36</sub>H<sub>36</sub>O<sub>8</sub> (596.68). Pale brown powder, [ $\alpha$ ]<sub>D</sub><sup>29</sup> = +0.1° (c = 1.25, MeOH). Source: HOU PO *Magnolia officinalis*. Ref: 2, 1521.

**13385 Magnolignan H**

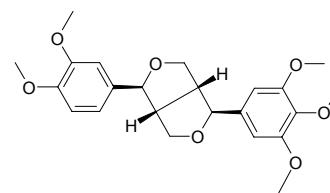
[138591-12-5] C<sub>35</sub>H<sub>34</sub>O<sub>6</sub> (550.66). Source: HOU PO *Magnolia officinalis*. Ref: 2, 1521.

**13386 Magnolignan I**

[138591-13-6] C<sub>33</sub>H<sub>30</sub>O<sub>6</sub> (522.60). Pale brown powder, [ $\alpha$ ]<sub>D</sub><sup>28</sup> = +2.1° (c = 1, MeOH). Source: HOU PO *Magnolia officinalis*. Ref: 2, 1521.

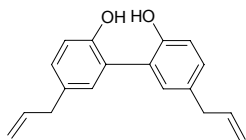
**13387 Magnolin**

[31008-18-1] C<sub>23</sub>H<sub>28</sub>O<sub>7</sub> (416.48). mp 96–97°C, [ $\alpha$ ]<sub>D</sub> = +55.7° (CHCl<sub>3</sub>). Pharm: Platelet aggregation inhibitor (induced by PAF, IC<sub>50</sub> = 10 μmol/L, PAF receptor antagonist, ED<sub>50</sub> = 4.4 μmol/L). Source: WANG CHUN YU LAN *Magnolia biondii* [Syn. *Magnolia fargesii*], XIN YI *Magnolia liliflora*. Ref: 6, 543, 1577.

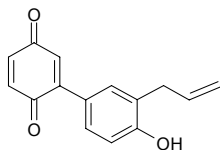


**13388 Magnolol**

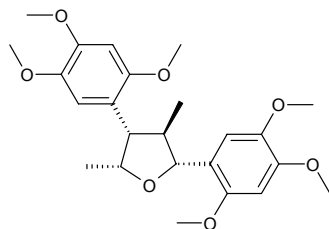
[528-43-8] C<sub>18</sub>H<sub>18</sub>O<sub>2</sub> (266.34). Crystals (Et<sub>2</sub>O–hexane), mp 101.5–102°C. **Pharm:** Antibacterial (*Streptococcus* sp., MIC = 0.63 μg/mL); antiulcerative (rat, prevents stress ulcer due to waterlogging, 5–20 mg/kg); muscle relaxant (MED = 90 mg/kg); hepatoprotective (inhibits cellular leakage of LDH and AST, and cell death, induced by 1.5 μmol/L tBH for 1h, effective dose = 40 μmol/L; induced by 30 μmol/L GalN, effective dose = 1, 5, and 20 μmol/L)<sup>[5344]</sup>; Hepatoprotective (inhibits tBH-induced lipid peroxidation, primary cultured rat hepatocytes, thiobarbituric acid reactive substance (TBARS) assay, effective dose = 20 and 40 μmol/L)<sup>[5344]</sup>; Hepatoprotective (inhibits GSH depletion, GSH concentration in tBH-treated hepatocytes was significantly reduced to 17 % of that of normal hepatocytes, effective dose = 20, and 40 μmol/L; induced by GalN, effective dose = 5 and 20 μmol/L)<sup>[5344]</sup>. **Source:** DA YE HOU PO *Magnolia rostrata*, HE HUA YU LAN *Magnolia grandiflora*, HOU PO *Magnolia officinalis* (bark: content scope = 2.622%–6.415%<sup>[5501]</sup>; content scope of 5 origins = 3.25%–6.13%, mean content = 4.96%<sup>[5508]</sup>), RI BEN HOU PO *Magnolia obovata*, TAI WAN CHA MU *Sassafras randainense*. **Ref:** 4, 625, 658, 660, 5344, 5501, 5508.

**13389 Magnoquinone**

C<sub>15</sub>H<sub>12</sub>O<sub>3</sub> (240.26). Red powder, mp 73–76°C. **Source:** DA YE HOU PO *Magnolia rostrata*. **Ref:** 2134.

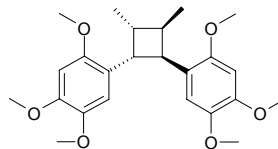
**13390 Magnosalicin**

[93376-03-5] C<sub>24</sub>H<sub>32</sub>O<sub>7</sub> (432.52). Crystals (MeOH), mp 134.5–135°C. **Pharm:** PAF antagonist; used in treatment of allergy and empyema in nose. **Source:** LIU YE MU LAN *Magnolia salicifolia*. **Ref:** 658, 1521.

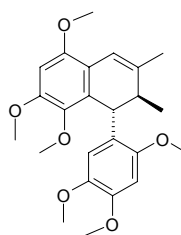
**13391 Magnosalin**

[81861-74-7] C<sub>24</sub>H<sub>32</sub>O<sub>6</sub> (416.52). Crystals (Et<sub>2</sub>O–hexane), mp 98–99°C, [α]<sub>D</sub> = 0° (CHCl<sub>3</sub>). **Pharm:** Anti-angiogenic (rat, inhibits formation of vaso-endothelial cell induced by fetal bovine serum FBS and IL-1α); Anti-inflammatory (mus, 50 μg/d, remarkably reduces weight of granuloma and volume of diffuse in granulation gasbag); antirheumatic (remarkably inhibits IL-1α-induced proliferation of synovial cells); CYP3A4 inhibitor and CYP2D6 inhibitor (*in vitro*, CYP3A4, IC<sub>50</sub> = 85.4 μmol/L; CYP2D6, IC<sub>50</sub> >

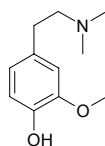
100 μmol/L; control Ketoconazole, CYP3A4, IC<sub>50</sub> = 0.72 μmol/L; control Quinidine, CYP2D6, IC<sub>50</sub> = 0.082 μmol/L)<sup>[4797]</sup>. **Source:** SHI JI NING *Mosla scabra* [Syn. *Mosla punctata*], BI CHENG QIE *Piper cubeba* (fruit: yield = 0.00011% dw)<sup>[4797]</sup>. **Ref:** 740, 1208, 1744, 1745, 1746, 4797.

**13392 Magnoshinin**

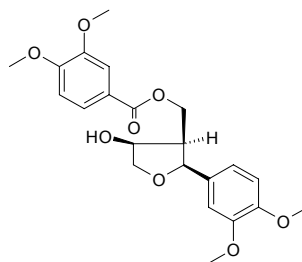
[86702-02-5] C<sub>24</sub>H<sub>30</sub>O<sub>6</sub> (414.50). Crystals (Et<sub>2</sub>O), mp 113.5–115°C. **Pharm:** Anti-inflammatory; sedative; treatment of headache and diseases of the nasal cavity. **Source:** LIU YE MU LAN *Magnolia salicifolia*. **Ref:** 658, 1521.

**13393 Magnosprengerine**

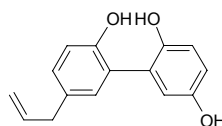
[35266-63-8] C<sub>11</sub>H<sub>17</sub>NO<sub>2</sub> (195.26). mp 258–260°C. **Source:** HOU PO *Magnolia officinalis*, WU DANG MU LAN *Magnolia sprengeri*. **Ref:** 625, 1521.

**13394 Magnostellin B**

C<sub>22</sub>H<sub>26</sub>O<sub>8</sub> (418.45). **Source:** ZHOU YE MU LAN *Magnolia praecocissima* (seed). **Ref:** 4181.

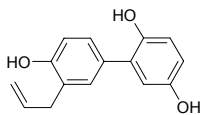
**13395 Magnotriol A**

[87562-14-9] C<sub>15</sub>H<sub>14</sub>O<sub>3</sub> (242.28). **Source:** HOU PO *Magnolia officinalis*. **Ref:** 2, 1521.

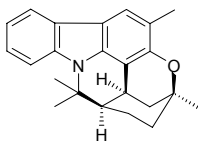


**13396 Magnotriol B**

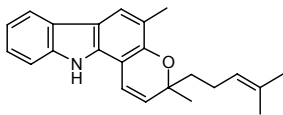
$C_{15}H_{14}O_3$  (242.28). Source: HOU PO *Magnolia officinalis*. Ref: 2.

**13397 Mahanimbidine**

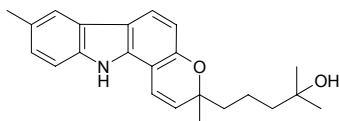
Murrayazoline  $C_{23}H_{25}NO$  (331.46). Needles (Me<sub>2</sub>CO), mp 276–278°C,  $[\alpha]_D^{25} = +2.25^\circ$  ( $c = 0.4$ , CHCl<sub>3</sub>). Source: DOU YE JIU LI XIANG *Murraya euchrestifolia* [Syn. *Clausena euchrestifolia*], JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*], XIAO YE JIU LI XIANG *Murraya paniculata* var. *exotica*. Ref: 11, 1339, 1521.

**13398 (+)-Mahanimbine**

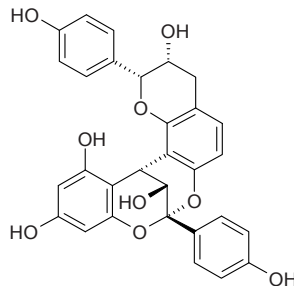
[21104-28-9]  $C_{23}H_{25}NO$  (331.46). Crystals (hexane), mp 94–95°C,  $[\alpha]_D = +40.6^\circ$  ( $c = 2.1$ , CHCl<sub>3</sub>),  $[\alpha]_D = +52^\circ$  (CHCl<sub>3</sub>). Pharm: Antibacterial (*Staphylococcus aureus*, MIC = 50 μg/mL, MIC = 0.151 μmol/L, control Kanamycin, MIC = 3.13 μg/mL; *Bacillus subtilis*, MIC = 25 μg/mL, MIC = 0.076 μmol/L, Kanamycin, MIC = 6.25 μg/mL; *Escherichia coli*, MIC = 50 μg/mL, MIC = 0.151 μmol/L, Kanamycin, MIC = 12.5 μg/mL; *Proteus vulgaris*, MIC = 25 μg/mL, MIC = 0.076 μmol/L, Kanamycin, MIC = 12.5 μg/mL)<sup>[5299]</sup>; antifungal (*Aspergillus niger*, MIC = 50 μg/mL, MIC = 0.151 μmol/L; *Candida albicans*, MIC = 100 μg/mL, MIC = 0.392 μmol/L, control Fluconazole, MIC = 25 μg/mL, MIC = 0.082 μmol/L)<sup>[5299]</sup>. Source: DOU YE JIU LI XIANG *Murraya euchrestifolia* [Syn. *Clausena euchrestifolia*], XIAO YE JIU LI XIANG *Murraya paniculata* var. *exotica*, YIN DU JIU LI XIANG *Murraya koenigii*, ZHONG HUA JIU LI XIANG *Murraya exotica*. Ref: 11, 1211, 1212, 5299.

**13399 Mahanimbinine**

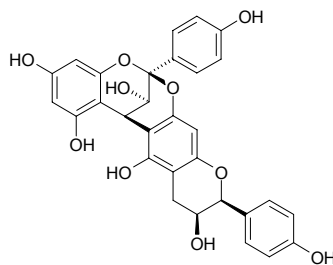
$C_{22}H_{25}NO_2$  (335.45). Source: YIN DU JIU LI XIANG *Murraya koenigii*, XIAO YE JIU LI XIANG *Murraya paniculata* var. *exotica*. Ref: 11, 1212.

**13400 Mahuangnin B**

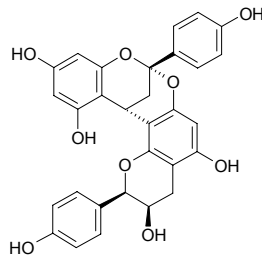
$C_{30}H_{24}O_9$  (528.52). Source: MA HUANG GEN *Ephedra sinica*. Ref: 1230.

**13401 Mahuangnin C**

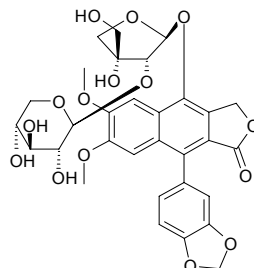
$C_{30}H_{24}O_{10}$  (544.52). Source: MA HUANG GEN *Ephedra sinica*. Ref: 1230.

**13402 Mahuangnin D**

*ent*-Apigeninflavan-(2 $\alpha$ →7,4 $\alpha$ →8)-epiafzelechin  $C_{30}H_{24}O_9$  (528.52). Pharm: Tanning agent. Source: MA HUANG GEN *Ephedra sinica*. Ref: 1230.

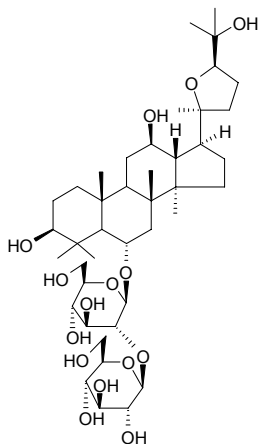
**13403 Majidine**

$C_{31}H_{32}O_{15}$  (644.59). Pharm: Cytotoxic (hmn LoVo Cell Line *in vitro*, IC<sub>50</sub> = (20.22±1.88) μl/mL). Source: *Haplophyllum patavinum* (shoot). Ref: 4206.

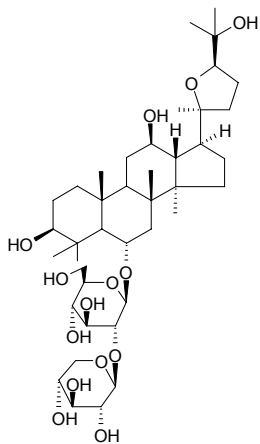


**13404 Majonoside R<sub>1</sub>**

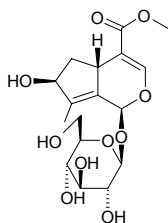
[81534-62-5] C<sub>42</sub>H<sub>72</sub>O<sub>15</sub> (817.03). Amorphous powder,  $[\alpha]_D^{15} = +1.0^\circ$  ( $c = 1.13$ , MeOH). Source: YU YE SAN QI *Panax japonicus* var. *bipinnatifidus*, QIN LING ZHU ZI SHEN *Panax japonicus* var. *major*. Ref: 660, 1521.

**13405 Majonoside R<sub>2</sub>**

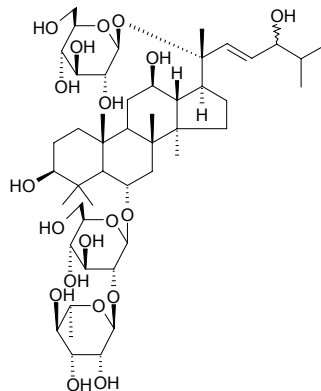
[81534-63-6] C<sub>41</sub>H<sub>70</sub>O<sub>14</sub> (787.01). Amorphous powder,  $[\alpha]_D^{15} = -2.4^\circ$  ( $c = 1.13$ , MeOH). Source: QIN LING ZHU ZI SHEN *Panax japonicus* var. *major*, YU YE SAN QI *Panax japonicus* var. *bipinnatifidus*, ZHU JIE SAN QI *Panax pseudo-ginseng* var. *japonicus* (underground part: yield = 0.26%dw)<sup>[4610]</sup>. Ref: 660, 1521, 4610.

**13406 Majoroside**

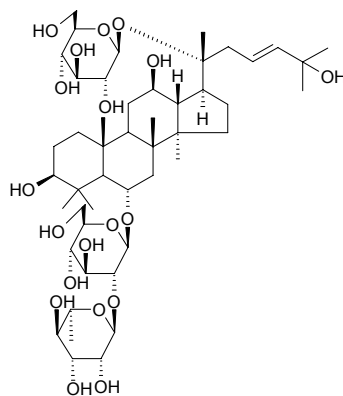
[134140-02-6] C<sub>17</sub>H<sub>24</sub>O<sub>10</sub> (388.37). Source: DA CHE QIAN *Plantago major*. Ref: 1231.

**13407 Majoroside F<sub>5</sub>**

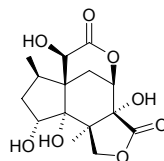
Dammar-22(32)-ene-3 $\beta$ ,6 $\alpha$ ,12 $\beta$ ,20S,24 $\zeta$ -pentaol-(20-O- $\beta$ -D-glucopyranosyl-6-O- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranoside) [125309-99-1] C<sub>48</sub>H<sub>82</sub>O<sub>19</sub> (963.18). White powder, mp 192~194°C. Source: QIN LING ZHU ZI SHEN *Panax japonicus* var. *major*. Ref: 137.

**13408 Majoroside F<sub>6</sub>**

Dammar-23(24)-ene-3 $\beta$ ,6 $\alpha$ ,12 $\beta$ ,20(S),25-pentaol-(20-O- $\beta$ -D-glucopyranosyl-6-O- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranoside) C<sub>48</sub>H<sub>82</sub>O<sub>19</sub> (963.18). White powder, mp 182.5~184.0°C. Source: QIN LING ZHU ZI SHEN *Panax japonicus* var. *major*. Ref: 137.

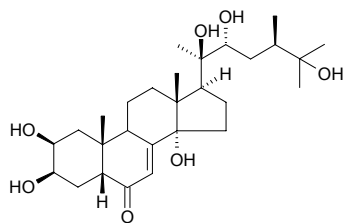
**13409 Majucin**

C<sub>15</sub>H<sub>20</sub>O<sub>8</sub> (328.32). Source: JIA DI FENG PI *Illicium jiadifengpi* (pericarp). Ref: 4621.

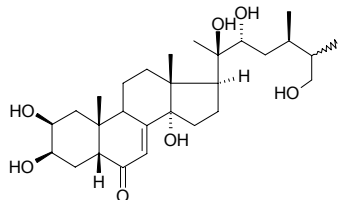


**13410 Makisterone A**

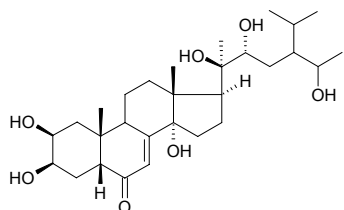
[20137-14-8] C<sub>28</sub>H<sub>46</sub>O<sub>7</sub> (494.67). Crystals, mp 263~265°C (dec). Source: LUO HAN SONG YE *Podocarpus macrophyllus*. Ref: 6, 408, 1521.

**13411 Makisterone B**

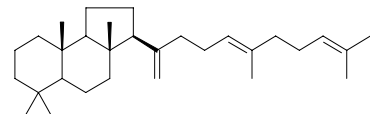
[20512-31-6] C<sub>28</sub>H<sub>46</sub>O<sub>7</sub> (494.67). Crystals, mp 172~173°C (dec). Pharm: Insect ecdysone (Steroidal compound). Source: CANG BAI CHENG GOU FENG *Diploclisia glaucescens*, HUANG JIN GU CAO *Ajuga chamaepitys*, LUO HAN SONG SHI *Podocarpus macrophyllus*, LUO HAN SONG YE *Podocarpus macrophyllus*. Ref: 6, 658, 1521.

**13412 Makisterone D**

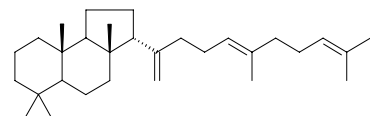
[20137-11-5] C<sub>29</sub>H<sub>48</sub>O<sub>7</sub> (508.70). Noncrystals. Source: LUO HAN SONG YE *Podocarpus macrophyllus*. Ref: 6, 1521.

**13413 13aH-Malabaricatriene**

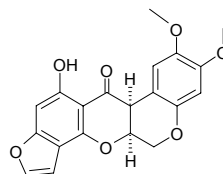
C<sub>30</sub>H<sub>50</sub> (410.73). Source: DAO LUAN YE FU SHI JUE *Lemmaphyllum microphyllum* var. *obovatum*. Ref: 1232.

**13414 13βH-Malabaricatriene**

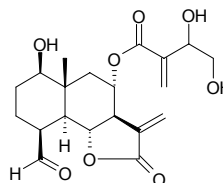
C<sub>30</sub>H<sub>50</sub> (410.73). Source: DAO LUAN YE FU SHI JUE *Lemmaphyllum microphyllum* var. *obovatum*. Ref: 1232.

**13415 (+)-Malaccol**

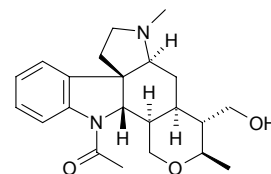
[478-07-9] C<sub>20</sub>H<sub>16</sub>O<sub>7</sub> (368.35). Yellow prisms or acicular crystals (CHCl<sub>3</sub>-EtOH), mp 225°C, mp 249°C (double mp), [α]<sub>D</sub><sup>18</sup> = +190° (c = 1.02, CHCl<sub>3</sub>). Source: MA LIU JIA YU TENG *Derris malaccensis*. Ref: 1521.

**13416 Malacitanolide**

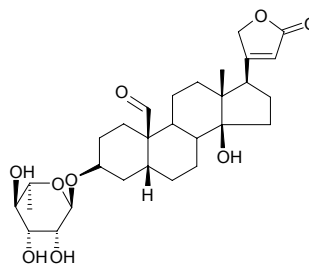
C<sub>20</sub>H<sub>26</sub>O<sub>8</sub> (394.43). Pharm: Antifungal (*Aspergillus niger*, MIC = 0.5 μg/mL, control Miconazole, MIC = 1.5 μg/mL; *Aspergillus ochraceus*, MIC = 0.5 μg/mL, Miconazole, MIC = 1.5 μg/mL; *Aspergillus versicolor*, MIC = 1 μg/mL, Miconazole, MIC = 2 μg/mL; *Aspergillus flavus*, MIC = 0.25 μg/mL, Miconazole, MIC = 0.5 μg/mL; *Penicillium ochrochloron*, MIC = 0.5 μg/mL, Miconazole, MIC = 2 μg/mL; *Penicillium funiculosum*, MIC = 1 μg/mL, Miconazole, MIC = 2 μg/mL; *Trichoderma viride*, MIC = 1 μg/mL, Miconazole, MIC = 2 μg/mL; *Cladosporium cladosporioides*, MIC = 0.5 μg/mL, Miconazole, MIC = 0.03 μg/mL; *Alternaria alternata*, MIC = 0.5 μg/mL, Miconazole, MIC = 0.5 μg/mL). Source: *Centaurea attica* ssp. *attica* (aerial parts). Ref: 5115.

**13417 Malagashanol**

C<sub>22</sub>H<sub>30</sub>N<sub>2</sub>O<sub>3</sub> (370.50). Crystals (EtOAc-*n*-hexane which char without melting), [α]<sub>D</sub><sup>20</sup> = +23.3° (c = 0.3, CH<sub>2</sub>Cl<sub>2</sub>). Source: *Strychnos myrtoides*. Ref: 2297.

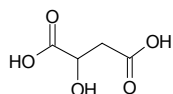
**13418 Malayoside**

C<sub>29</sub>H<sub>42</sub>O<sub>9</sub> (534.65). Needles (MeOH-Et<sub>2</sub>O), mp 220~230°C, [α]<sub>D</sub> = -44.2° (MeOH). Source: JIAN XUE FENG HOU *Antiaris toxicaria* [Syn. *Ambora toxicaria*], HUANG HUA JIA ZHU TAO *Thevetia nerifolia* [Syn. *Thevetia peruviana*]. Ref: 1233, 1234.

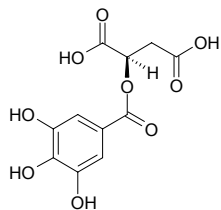


**13419 Malic acid**

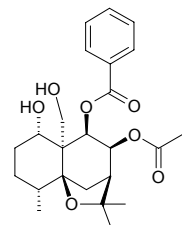
Hydroxysuccinic acid; Hydroxybutanedioic acid  $C_4H_6O_5$  (134.09). mp (+) 98–99°C, (–) 100°C, ( $\pm$ ) 133°C, 125–126°C. Source: BAI BU *Stemona tuberosa*, CU LIU GUO *Hippophae rhamnoides*, DA ZAO *Ziziphus jujuba*, DUO ZU JUE *Polypodium vulgare*, HU ZHANG YE *Polygonum cuspidatum*, JU YUAN *Citrus medica*, KUAN YE XIANG PU *Typha latifolia*, MU ZEI MA HUANG *Ephedra equisetina*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], SHAN ZHU YU *Cornus officinalis* [Syn. *Macrocarpium officinale*], WU MEI *Prunus mume* (closing-ripe fruit: content = 8.84%)<sup>[5508]</sup>, YE SHAN ZHA *Crataegus cuneata*, YI ZHU QIAN MA *Urtica dioica*. Ref: 2, 660, 5508.

**13420 L-Malic acid 2-O-gallate**

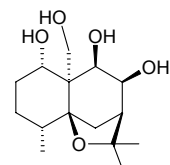
$C_{11}H_{10}O_9$  (286.20). White amorphous powder,  $[\alpha]_D^{22} = -0.4^\circ$  ( $c = 0.24$ , MeOH). Source: AN MO LE *Phyllanthus emblica* (fruit juice). Ref: 3521.

**13421 Malkangunin**

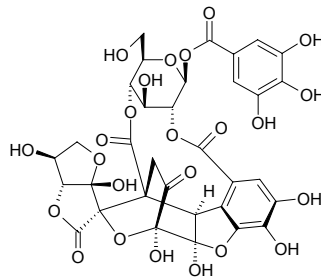
[52691-06-2]  $C_{24}H_{32}O_7$  (432.52). Crystals (Et<sub>2</sub>O–petroleum ether), mp 240–245°C,  $[\alpha]_D = -58.8^\circ$  ( $c = 1$ , CHCl<sub>3</sub>). Source: DENG YOU TENG ZI *Celastrus paniculatus*. Ref: 1235, 1521.

**13422 Malkanguniol**

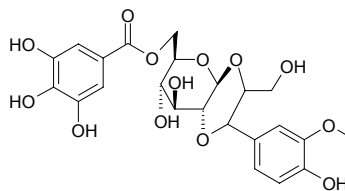
[41719-36-8]  $C_{15}H_{26}O_5$  (286.37). Crystals, mp 171–172°C,  $[\alpha]_D = -32.94^\circ$  ( $c = 3$ , dioxane). Source: DENG YOU TENG ZI *Celastrus paniculatus*. Ref: 1236, 1521.

**13423 Mallonin**

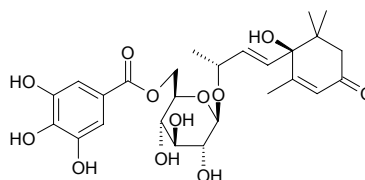
$C_{33}H_{28}O_{24}$  (808.58). Source: AN MO LE *Phyllanthus emblica* (fruit juice, leaf, branch). Ref: 3094.

**13424 Mallophenol A**

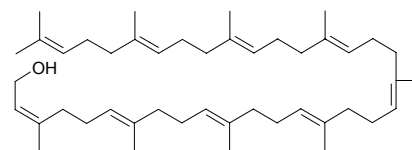
$C_{23}H_{26}O_{13}$  (510.46). Colorless oil,  $[\alpha]_D^{25} = +19.4^\circ$  ( $c = 0.968$ , MeOH). Source: *Mallotus furetiatus* (leaf). Ref: 4301.

**13425 Mallophenol B**

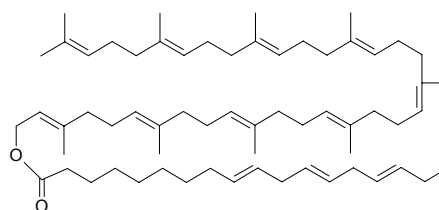
$C_{26}H_{34}O_{12}$  (538.55). Colorless oil,  $[\alpha]_D^{25} = +54.1^\circ$  ( $c = 1.127$ , MeOH). Source: *Mallotus furetiatus* (leaf). Ref: 4301.

**13426 Malloprenol**

$C_45H_{74}O$  (631.09). Source: YE WU TONG *Mallotus japonicus*. Ref: 6.

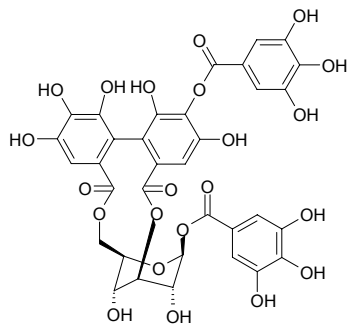
**13427 Malloprenyl linolenate**

$C_{63}H_{102}O_2$  (891.51). Source: YE WU TONG *Mallotus japonicus*. Ref: 6.

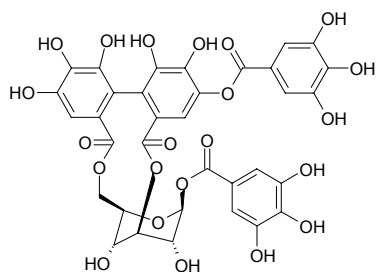


**13428 Mallorepanin**

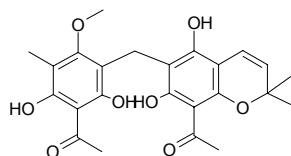
$C_{34}H_{26}O_{22}$  (786.57). Pale brown. **Pharm:** Antibacterial (*Erwinia carotovora*, IZD = 15mm/100 $\mu$ g, control Quercetin sulfate, IZD = 21mm/10 $\mu$ g; *Staphylococcus aureus*, IZD = 10mm/100 $\mu$ g, Quercetin sulfate, IZD = 14mm/10 $\mu$ g; *Corynebacterium accolens*, IZD = 10mm/100 $\mu$ g, Quercetin sulfate, IZD = 28mm/10 $\mu$ g); antifungal (*Candida albicans*, IZD = 10mm/100 $\mu$ g, control Nystatin, IZD = 11mm/20 $\mu$ g); xanthine oxidase inhibitor (IC<sub>50</sub> > 100 $\mu$ g/mL, IC<sub>50</sub> > 100 $\mu$ mol/L; control Quercetin, IC<sub>50</sub> = 3.4 $\mu$ g/mL, IC<sub>50</sub> = 10 $\mu$ mol/L). **Source:** DA YE KU NUO NI *Cunonia macrophylla* (leaf). **Ref:** 5250.

**13429 Mallotinic acid**

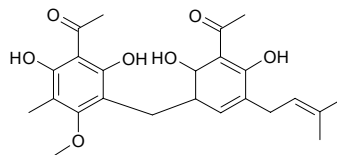
$C_{34}H_{26}O_{22}$  (786.57). Pale brown. **Pharm:** Antibacterial (*Erwinia carotovora*, IZD = 13mm/100 $\mu$ g, control Quercetin sulfate, IZD = 21mm/10 $\mu$ g; *Staphylococcus aureus*, IZD = 9mm/100 $\mu$ g, Quercetin sulfate, IZD = 14mm/10 $\mu$ g; *Corynebacterium accolens*, IZD = 9mm/100 $\mu$ g, Quercetin sulfate, IZD = 28mm/10 $\mu$ g); antifungal (*Candida albicans*, IZD = 9mm/100 $\mu$ g, control Nystatin, IZD = 11mm/20 $\mu$ g); xanthine oxidase inhibitor (IC<sub>50</sub> > 100 $\mu$ g/mL, IC<sub>50</sub> > 100 $\mu$ mol/L; control Quercetin, IC<sub>50</sub> = 3.4 $\mu$ g/mL, IC<sub>50</sub> = 10 $\mu$ mol/L). **Source:** DA YE KU NUO NI *Cunonia macrophylla* (leaf). **Ref:** 5250.

**13430 Mallotchromene**

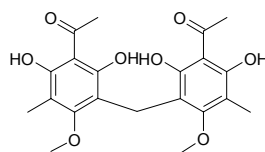
[98569-62-1]  $C_{24}H_{26}O_8$  (442.47). Yellow crystals (MeOH), mp 216–218°C, [ $\alpha$ ]<sub>D</sub><sup>23</sup> = -0.74° (c = 1, CHCl<sub>3</sub>). **Pharm:** Antineoplastic (leukemia); cytotoxic (KB). **Source:** YE WU TONG *Mallotus japonicus*. **Ref:** 658.

**13431 Mallotojaponin**

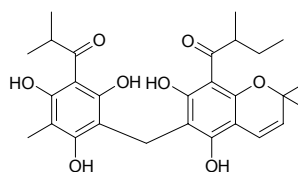
$C_{24}H_{30}O_7$  (359.32). **Pharm:** Anti-HIV (HIV-RT inhibitor). **Source:** YE WU TONG *Mallotus japonicus*. **Ref:** 2268.

**13432 Mallotphenone**

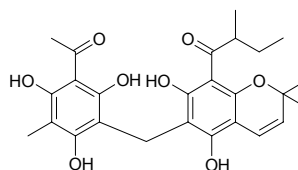
$C_{21}H_{24}O_8$  (404.42). Yellow crystals (MeOH), mp 223–225°C. **Pharm:** Cytotoxic (mus L5178Y and KB cells, *in vitro*). **Source:** YE WU TONG *Mallotus japonicus*. **Ref:** 658.

**13433 Mallotophilippen A**

1-[5,7-Dihydroxy-2,2-dimethyl-6-(2,4,6-trihydroxy-3-isobutyryl-5-methylbenzyl)-2H-chromen-8-yl]-2-methyl-butan-1-one  $C_{28}H_{34}O_8$  (498.58). Yellow powder, [ $\alpha$ ]<sub>D</sub><sup>23</sup> = 0° (c = 0.1, MeOH). **Pharm:** Anti-inflammatory (NO production inhibitor, murine macrophage-like cell line RAW264.7, IC<sub>50</sub> = 4.2 $\mu$ mol/L, inhibits NO production and inducible NO synthase (iNOS) gene expression activated by LPS and recombinant mus interferon- $\gamma$  (IFN- $\gamma$ ), furthermore, inhibits histamine release from rat peritoneal mast cells). **Source:** CU KANG CHAI *Mallotus philippinensis* (fruit). **Ref:** 4251.

**13434 Mallotophilippen B**

1-[6-(3-Acetyl-2,4,6-trihydroxy-5-methylbenzyl)-5,7-dihydroxy-2,2-dimethyl-1-2H-chromen-8-yl]-2-methyl-butan-1-one  $C_{26}H_{30}O_8$  (470.52). Yellow powder, [ $\alpha$ ]<sub>D</sub><sup>23</sup> = 0° (c = 0.1, MeOH). **Pharm:** Anti-inflammatory (NO production inhibitor, murine macrophage-like cell line RAW264.7, IC<sub>50</sub> = 3.2 $\mu$ mol/L, inhibits NO production and inducible NO synthase (iNOS) gene expression activated by LPS and recombinant mus interferon- $\gamma$  (IFN- $\gamma$ ), furthermore, inhibits histamine release from rat peritoneal mast cells). **Source:** CU KANG CHAI *Mallotus philippinensis* (fruit). **Ref:** 4251.

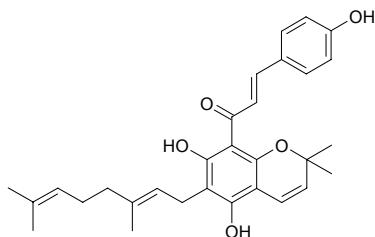




**13435 Mallotophilippen C**

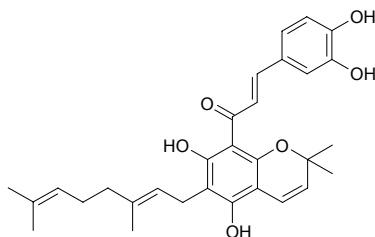
1-[6-(3,7-Dimethyl-octa-2,6-dienyl)-5,7-dihydroxy-2,2-dimethyl-2H-chromen-8-yl]-3-(4-hydroxy-phenyl)-propenone C<sub>30</sub>H<sub>34</sub>O<sub>5</sub> (474.60). Reddish-yellow plate.

**Pharm:** NO production inhibitor (mus, macrophage-like cell line, RAW264.7, activated by LPS and recombinant mouse IFN- $\gamma$ , IC<sub>50</sub> = 7.6  $\mu$ mol/L, control Quercetin, IC<sub>50</sub> = 26.8  $\mu$ mol/L); inhibits the inducible nitric oxide synthase (iNOS) gene expression; downregulates cyclooxygenase-2 (COX-2) gene expression; downregulates interleukin-6 (IL-6) gene expression; downregulates interleukin-1b (IL-1b) gene expression; anti-inflammatory; immunomodulator. **Source:** LV SONG QIU MAO *Mallotus philippinensis*. **Ref:** 2556.

**13436 Mallotophilippen D**

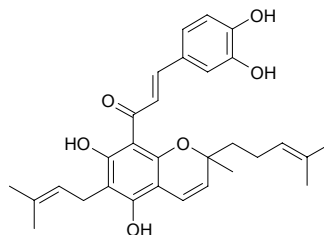
3-(3,4-Dihydroxy-phenyl)-1-[6-(3,7-dimethyl-octa-2,6-dienyl)-5,7-dihydroxy-2,2-dimethyl-2H-chromen-8-yl]-propenone C<sub>30</sub>H<sub>34</sub>O<sub>6</sub> (490.60). Reddish-yellow plate.

**Pharm:** NO production inhibitor (mus, macrophage-like cell line, RAW264.7, activated by LPS and recombinant mouse IFN- $\gamma$ , IC<sub>50</sub> = 9.5  $\mu$ mol/L, control Quercetin, IC<sub>50</sub> = 26.8  $\mu$ mol/L); inhibits the inducible nitric oxide synthase (iNOS) gene expression; downregulates cyclooxygenase-2 (COX-2) gene expression; downregulates interleukin-6 (IL-6) gene expression; downregulates interleukin-1b (IL-1b) gene expression; anti-inflammatory; immunomodulator. **Source:** LV SONG QIU MAO *Mallotus philippinensis*. **Ref:** 2556.

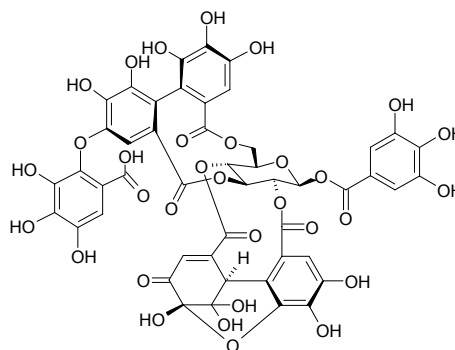
**13437 Mallotophilippen E**

1-[5,7-Dihydroxy-2-methyl-6-(3-methyl-but-2-enyl)-2-(4-methyl-pent-3-enyl)-2H-chromen-8-yl]-3-(3,4-dihydroxy-phenyl)-propenone C<sub>30</sub>H<sub>34</sub>O<sub>6</sub> (490.60).

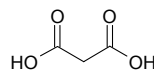
Reddish-yellow plate,  $[\alpha]_D^{22} = \pm 0^\circ$  ( $c = 0.5$ , MeOH). **Pharm:** NO production inhibitor (mus, macrophage-like cell line, RAW264.7, activated by LPS and recombinant mouse IFN- $\gamma$ , IC<sub>50</sub> = 38.6  $\mu$ mol/L, control Quercetin, IC<sub>50</sub> = 26.8  $\mu$ mol/L); inhibits the inducible nitric oxide synthase (iNOS) gene expression; downregulates cyclooxygenase-2 (COX-2) gene expression; downregulates interleukin-6 (IL-6) gene expression; downregulates interleukin-1b (IL-1b) gene expression; anti-inflammatory; immunomodulator. **Source:** LV SONG QIU MAO *Mallotus philippinensis*. **Ref:** 2556.

**13438 Mallotusinic acid**

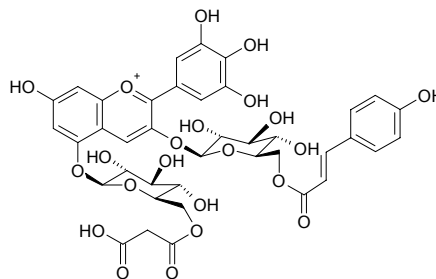
[66421-47-4] C<sub>48</sub>H<sub>32</sub>O<sub>32</sub> (1120.77). **Pharm:** Antioxidant (lipid peroxidation inhibitor, rat microsome in liver cells); promotes lipolysis (rat fat cells, induced by adrenal cortex hormone). **Source:** HONG BEI SHAN MA GAN *Alchornea trewioides*, TONG YOU *Aleurites cordata* [Syn. *Aleurites fordii*], YE WU TONG *Mallotus japonicus*, *Euphorbia* spp. **Ref:** 658.

**13439 Malonic acid**

Propanedioic acid [141-82-2] C<sub>3</sub>H<sub>4</sub>O<sub>4</sub> (104.06). mp 135.6°C. **Pharm:** Irritant. **Source:** DUO HUA CAI DOU *Phaseolus coccineus*, HAN QIN *Apium graveolens*, JIAO GU LAN *Gynostemma pentaphyllum*, MAI YA *Hordeum vulgare*, TIAN CAI *Beta vulgaris*. **Ref:** 2, 658.

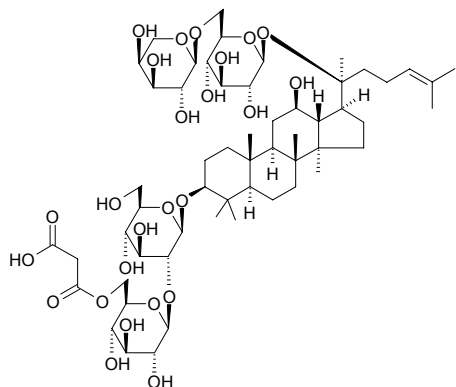
**13440 Malonylawobanin**

[88399-23-9] C<sub>39</sub>H<sub>30</sub>O<sub>22</sub><sup>+</sup> (859.73). **Source:** YA ZHI CAO *Commelina communis*. **Ref:** 658.

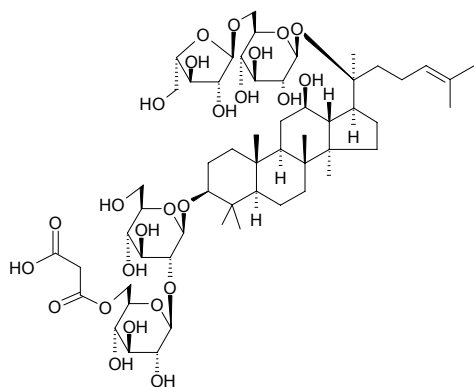


**13441 Malonylginsenoside Rb<sub>2</sub>**

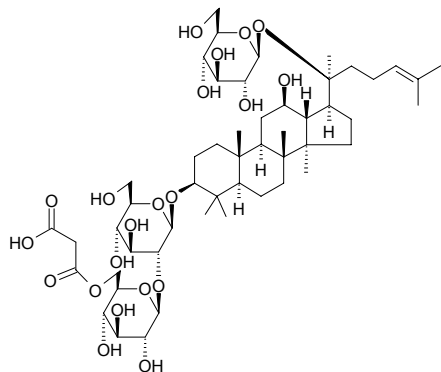
C<sub>56</sub>H<sub>92</sub>O<sub>25</sub> (1165.34). mp 148~150°C. **Source:** REN SHEN *Panax ginseng* [Syn. *Panax schinseng*] (rhizome: content = 0.42%<sup>[5508]</sup>), XI YANG SHEN *Panax quinquefolium* (rhizome: content = 0.21%<sup>[5508]</sup>). **Ref:** 2, 524, 5508.

**13442 Malonylginsenoside Rc**

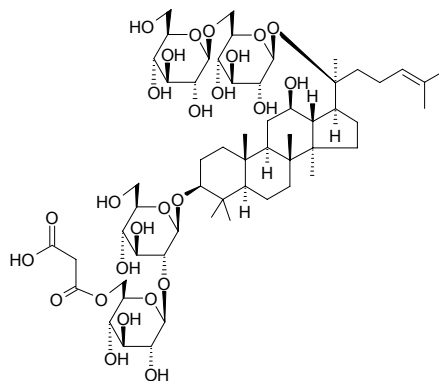
C<sub>56</sub>H<sub>92</sub>O<sub>25</sub> (1165.34). **Source:** REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. **Ref:** 2.

**13443 Malonylginsenoside Rd**

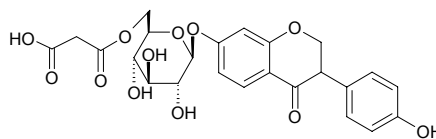
C<sub>51</sub>H<sub>84</sub>O<sub>21</sub> (1033.23). **Source:** JIAO GU LAN *Gynostemma pentaphyllum*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*] (rhizome: content = 0.35%<sup>[5508]</sup>), XI YANG SHEN *Panax quinquefolium* (rhizome: content = 0.27%<sup>[5508]</sup>), ZHU JIE SAN QI *Panax pseudo-ginseng* var. *japonicus* (rhizome: content ≈ 0.001%<sup>[5508]</sup>). **Ref:** 2, 524, 5508.

**13444 6''-Malonylginsenoside Rd<sub>1</sub>**

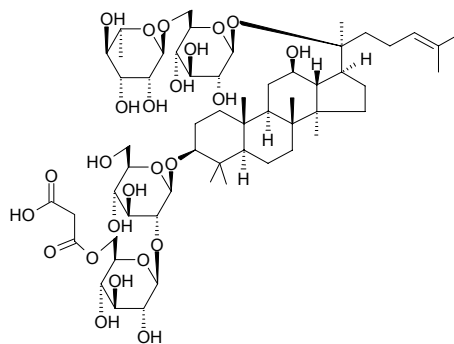
Malonylginsenoside Rb<sub>1</sub> C<sub>57</sub>H<sub>94</sub>O<sub>26</sub> (1195.37). mp 150~152°C. **Source:** JIAO GU LAN *Gynostemma pentaphyllum*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], XI YANG SHEN *Panax quinquefolium*, JIAO GU LAN *Gynostemma pentaphyllum*. **Ref:** 2, 524, 613.

**13445 7-(6-O-Malonyl-β-D-glucopyransyloxy)-3-(4-hydroxyphenyl)-4H-1-benzopyran-4-one**

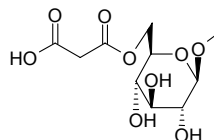
C<sub>24</sub>H<sub>24</sub>O<sub>12</sub> (504.45). **Source:** GE GEN *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*]. **Ref:** 2.

**13446 6''-Malonylgypenoside V**

C<sub>57</sub>H<sub>94</sub>O<sub>25</sub> (1179.37). **Source:** JIAO GU LAN *Gynostemma pentaphyllum*. **Ref:** 2.

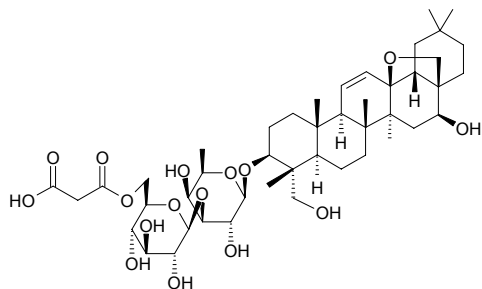
**13447 6-O-malonyl-β-methyl-D-glucopyranoside**

C<sub>10</sub>H<sub>16</sub>O<sub>9</sub> (280.23). **Source:** DUN YE SUAN MO *Rumex obtusifolius*. **Ref:** 660.

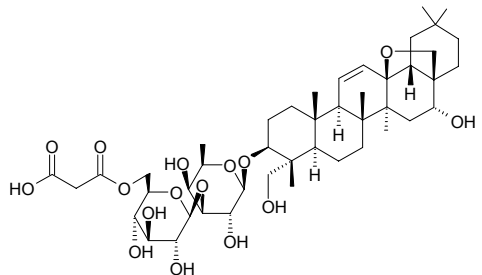


**13448 Malonylsaikosaponin A**

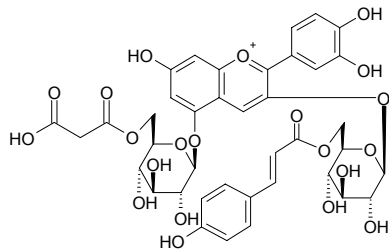
$C_{45}H_{70}O_{16}$  (867.05). Source: ZI HU *Bupleurum falcatum*. Ref: 2247.

**13449 Malonylsaikosaponin D**

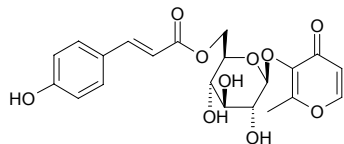
$C_{45}H_{70}O_{16}$  (867.05). Source: ZI HU *Bupleurum falcatum*. Ref: 2247.

**13450 Malonyl shisonin**

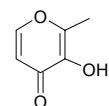
3-*O*-(6-*O*-*p*-coumaryl- $\beta$ -*D*-glucopyranosyl)-5-*O*-(6-*O*-malonyl- $\beta$ -*D*-glucopyranosyl)cyanidin  $C_{39}H_{39}O_{21}^+$  (843.73). Source: HUI HUI SU GENG *Perilla frutescens* var. *crispa*. Ref: 1237.

**13451 Malto-3-*O*-[6'-*O*-(4''-hydroxy-*trans*-cinnamoyl)]- $\beta$ -*D*-glucopyranoside**

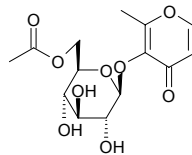
$C_{21}H_{22}O_{10}$  (434.40). Source: HUAI *Sophora japonica* (bud). Ref: 4823.

**13452 Maltol**

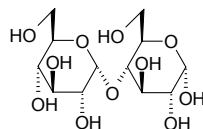
Larixinic acid [118-71-8]  $C_6H_6O_3$  (126.11). Source: JIN JI WEI BA CAO GEN *Macrothelypteris oligophlebia*. Ref: 1238.

**13453 Maltol-(6-*O*-acetyl)- $\beta$ -*D*-glucopyranoside**

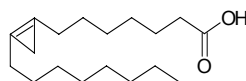
$C_{14}H_{18}O_9$  (330.29).  $[\alpha]_D^{25} = -31.9^\circ$  ( $c = 0.27$ , MeOH). Source: SHUAN CHI QIN *Prangos pabularia*. Ref: 2004.

**13454 Maltose**

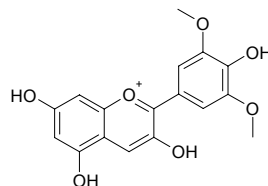
4-*O*- $\alpha$ -*D*-Glucopyranosyl-*D*-glucose; *D*-(+)-Maltose; *D*-Maltose; Finetose; Maltobiose; Maltodiose [69-79-4]  $C_{12}H_{22}O_{11}$  (342.30). Source: REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. Ref: 2.

**13455 Malvic acid**

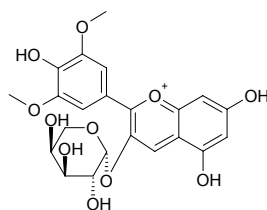
Malvic acid [503-05-9]  $C_{18}H_{32}O_2$  (280.45). Oil, mp 10.3~10.5°C. Source: MU JIN ZI *Hibiscus syriacus*. Ref: 6.

**13456 Malvidin**

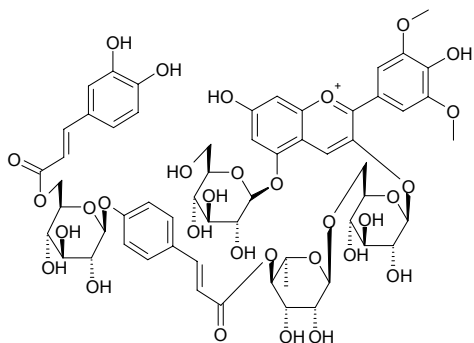
[10463-84-0]  $C_{17}H_{15}O_7$  (331.30). Pharm: Pigment (amaranth phytochrome). Source: FENG XIAN HUA *Impatiens balsamina*, JIU Liquor, MU XU *Medicago sativa*, PU<sup>(3)</sup> TAO *Syzygium jambos*. Ref: 6, 658.

**13457 Malvidin-3-arabinoside**

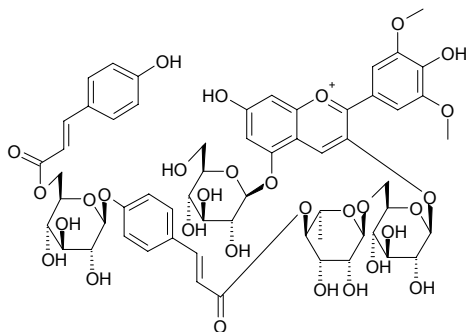
[28500-04-1]  $C_{22}H_{23}O_{11}^+$  (463.42). Source: ZI BEI TIAN KUI CAO *Senecio nudicaulis*. Ref: 6.



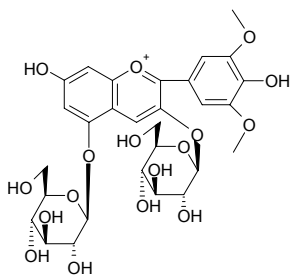
**13458 Malvidin 3-O-(6-O-(4-O-(4-O-(6-O-caffeoyl- $\beta$ -D-glucopyranosyl)-E-p-coumaroyl)- $\alpha$ -rhamnosyl)- $\beta$ -D-glucopyranoside)-5-O- $\beta$ -D-glucopyranoside**  
 $C_{59}H_{67}O_{31}^+$  (1272.17). Source: BI DONG QIE *Petunia hybrida* (flower). Ref: 5240.



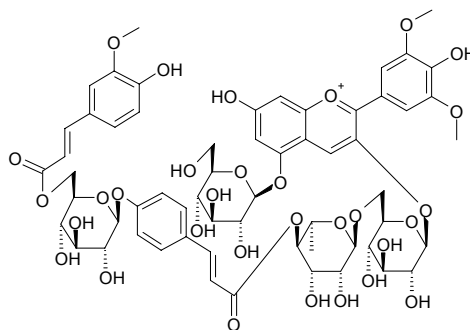
**13459 Malvidin 3-O-(6-O-(4-O-(4-O-(6-O-E-p-coumaroyl- $\beta$ -D-glucopyranosyl)-E-p-coumaroyl)- $\alpha$ -rhamnosyl)- $\beta$ -D-glucopyranoside)-5- $\beta$ -D-glucopyranoside**  
 $C_{59}H_{67}O_{30}^+$  (1256.17). Source: BI DONG QIE *Petunia hybrida* (flower). Ref: 5240.



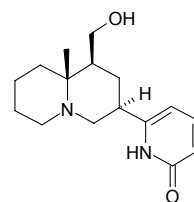
**13460 Malvidin-3,5-diglucoside**  
 Malvin [16727-30-3]  $C_{29}H_{35}O_{17}^+$  (655.59). mp 165°C. Pharm: Pigment (amaranth phytochrome). Source: DU JUAN HUA *Rhododendron simsii*, OU JIN KUI *Malva sylvestris*, QIAN QU CAI *Lythrum salicaria*, *Vitis* sp. Ref: 6, 658, 1239.



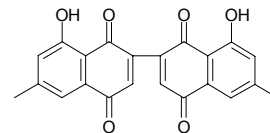
**13461 Malvidin 3-O-(6-O-(4-O-(4-O-(6-O-feruloyl- $\beta$ -D-glucopyranosyl)-E-p-coumaroyl)- $\alpha$ -rhamnosyl)- $\beta$ -D-glucopyranoside)-5- $\beta$ -D-glucopyranoside**  
 $C_{60}H_{69}O_{31}^+$  (1286.20). Source: BI DONG QIE *Petunia hybrida* (flower). Ref: 5240.



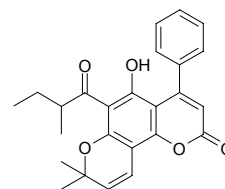
**13462 Mamanine**  
 [60394-92-5]  $C_{15}H_{22}N_2O_2$  (262.35). mp 100°C (remelts 171~172°C),  $[\alpha]_D^{20} = +31.7^\circ$  ( $c = 2.32$ , EtOH). Source: KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. Ref: 2, 1521.



**13463 Mamegakinone**  
 [17734-93-9]  $C_{22}H_{14}O_6$  (374.35). mp 253°C (dec). Source: JUN QIAN ZI *Diospyros lotus* (the compound was isolated from the plant by K.yoshihira, et al. in 1970)<sup>[5505]</sup>. Ref: 6, 5505.

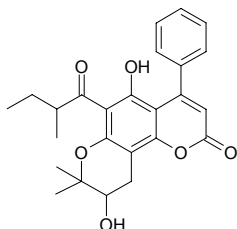


**13464 Mamea A/AB cyclo D**  
 $C_{25}H_{24}O_5$  (404.47). Pharm: Cytotoxic ( $P_{388}$ ,  $ED_{50} > 20\mu\text{g/mL}$ , control Ellipticine  $ED_{50} = 0.61\mu\text{g/mL}$ ; KB,  $ED_{50} = 15.1\mu\text{g/mL}$ , Ellipticine  $ED_{50} = 0.54\mu\text{g/mL}$ ; Col2,  $ED_{50} > 20\mu\text{g/mL}$ , Ellipticine  $ED_{50} = 0.60\mu\text{g/mL}$ ; Lu1,  $ED_{50} > 20\mu\text{g/mL}$ , Ellipticine  $ED_{50} = 0.61\mu\text{g/mL}$ ; BCA-1,  $ED_{50} > 20\mu\text{g/mL}$ , Ellipticine  $ED_{50} = 0.52\mu\text{g/mL}$ )<sup>[5478]</sup>. Source: FEI ZHOU HUANG GUO MU *Mamea africana*, *Mamea harmandii* (leaf and twig), *Mesua thwaitesii*. Ref: 1521, 5478.

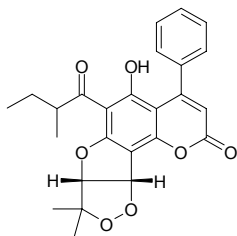


**13465 Mammea A/AB cyclo E**

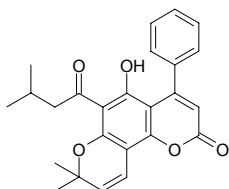
9,10-Dihydro-5,9-dihydroxy-8,8-dimethyl-6-(2-methyl-1-oxobutyl)-4-phenyl-2*H*,8*H*-benzo[1,2-*b*:5,6-*b'*]dipyran-2-one C<sub>25</sub>H<sub>26</sub>O<sub>6</sub> (422.48). [ $\alpha$ ]<sub>D</sub><sup>25</sup> = 0° (*c* = 0.2, CHCl<sub>3</sub>). **Source:** BU DENG HONG HOU KE *Calophyllum dispar* (fruit and stem cortex). **Ref:** 5196.

**13466 Mammea A/AB dioxalanocyclo F**

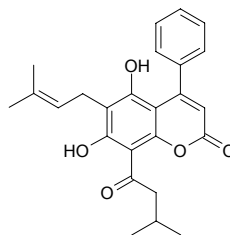
7*a*,10*a*-Dihydro-5-hydroxy-8,8-dimethyl-6-(2-methyl-1-oxobutyl)-4-phenyl-2*H*-8*H*-[1,2]-dioxolano[4",5":4',5']furo[2',3':5,6]benzo[1,2-*b*]pyran-2-one C<sub>25</sub>H<sub>24</sub>O<sub>7</sub> (436.47). [ $\alpha$ ]<sub>D</sub><sup>25</sup> = 0° (*c* = 0.06, CHCl<sub>3</sub>). **Source:** BU DENG HONG HOU KE *Calophyllum dispar* (fruit and stem cortex). **Ref:** 5196.

**13467 Mammea A/A cyclo D**

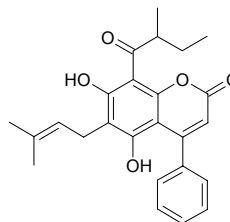
Mammeigin [2289-11-4] C<sub>25</sub>H<sub>24</sub>O<sub>5</sub> (404.47). **Pharm:** Cytotoxic inactive (P<sub>388</sub>, ED<sub>50</sub> > 20μg/mL, control Ellipticine ED<sub>50</sub> = 0.61μg/mL; KB, ED<sub>50</sub> > 20μg/mL, Ellipticine ED<sub>50</sub> = 0.54μg/mL; Col2, ED<sub>50</sub> > 20μg/mL, Ellipticine ED<sub>50</sub> = 0.60μg/mL; Lu1, ED<sub>50</sub> > 20μg/mL, Ellipticine ED<sub>50</sub> = 0.61μg/mL; BCA-1, ED<sub>50</sub> > 20μg/mL, Ellipticine ED<sub>50</sub> = 0.52μg/mL)<sup>[5478]</sup>. **Source:** FEI ZHOU HUANG GUO MU *Mammea africana*, MEI ZHOU MAN MI PING GUO *Mammea americana*, *Mammea harmandii* (leaf and twig), TIE LI MU *Mesua ferrea*. **Ref:** 1240, 1521, 5478.

**13468 Mammea A/BA**

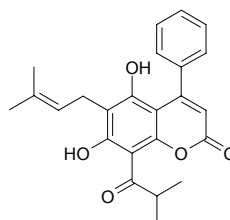
C<sub>25</sub>H<sub>26</sub>O<sub>5</sub> (406.48). **Pharm:** Cytotoxic (P<sub>388</sub>, ED<sub>50</sub> = 1.94μg/mL, control Ellipticine ED<sub>50</sub> = 0.61μg/mL; KB, ED<sub>50</sub> = 2.80μg/mL, Ellipticine ED<sub>50</sub> = 0.54μg/mL; Col2, ED<sub>50</sub> = 3.37μg/mL, Ellipticine ED<sub>50</sub> = 0.60μg/mL; Lu1, ED<sub>50</sub> = 2.95μg/mL, Ellipticine ED<sub>50</sub> = 0.61μg/mL; BCA-1, ED<sub>50</sub> = 2.99μg/mL, Ellipticine ED<sub>50</sub> = 0.52μg/mL). **Source:** MEI ZHOU MAN MI PING GUO *Mammea Americana* (seeds), *Mammea harmandii* (leaf and twig). **Ref:** 1521, 5478.

**13469 Mammea A/BB**

Isomammeisin C<sub>25</sub>H<sub>26</sub>O<sub>5</sub> (406.48). **Pharm:** Cytotoxic (P<sub>388</sub>, ED<sub>50</sub> = 2.22μg/mL, control Ellipticine ED<sub>50</sub> = 0.61μg/mL; KB, ED<sub>50</sub> = 2.58μg/mL, Ellipticine ED<sub>50</sub> = 0.54μg/mL; Col2, ED<sub>50</sub> = 2.99μg/mL, Ellipticine ED<sub>50</sub> = 0.60μg/mL; Lu1, ED<sub>50</sub> = 2.14μg/mL, Ellipticine ED<sub>50</sub> = 0.61μg/mL; BCA-1, ED<sub>50</sub> = 3.19μg/mL, Ellipticine ED<sub>50</sub> = 0.52μg/mL)<sup>[5478]</sup>; antibacterial (*Enterococcus faecalis* 18292, MIC = 8μg/mL; *Enterococcus faecalis* 19250, MIC = 8μg/mL)<sup>[3870]</sup>; antibacterial (*Staphylococcus aureus* 18268, MIC = 16μg/mL; *Staphylococcus aureus* 17380, MIC = 32μg/mL; *Staphylococcus aureus* 17592, MIC = 2μg/mL; *Staphylococcus aureus* 18110, MIC = 2μg/mL; *Staphylococcus aureus* 17547, MIC = 4μg/mL; *Staphylococcus aureus* 17728, MIC = 2μg/mL; *Staphylococcus aureus* 3012, MIC = 2μg/mL; *Staphylococcus aureus* 414, MIC = 4μg/mL; *Staphylococcus epidermidis* 3112, MIC = 2μg/mL; *Staphylococcus epidermidis* 2515, MIC = 4μg/mL; *Staphylococcus saprophyticus* 3010, MIC = 16μg/mL; *Staphylococcus simulans* 214, MIC = 2μg/mL)<sup>[3870]</sup>. **Source:** MEI ZHOU MAN MI PING GUO *Mammea Americana* (seeds), TIE LI MU *Mesua ferrea* (blossom), *Mammea harmandii* (leaf and twig). **Ref:** 1521, 3870, 5478.

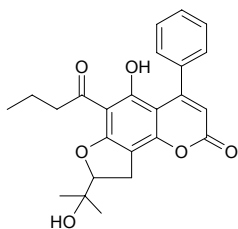
**13470 Mammea A/BD**

Isomesuol C<sub>24</sub>H<sub>24</sub>O<sub>5</sub> (392.46). White powder, mp 167~169°C (CH<sub>2</sub>Cl<sub>2</sub>-hexane). **Pharm:** Cytotoxic (P<sub>388</sub>, ED<sub>50</sub> = 2.53μg/mL, control Ellipticine ED<sub>50</sub> = 0.61μg/mL; KB, ED<sub>50</sub> = 2.48μg/mL, Ellipticine ED<sub>50</sub> = 0.54μg/mL; Col2, ED<sub>50</sub> = 3.42μg/mL, Ellipticine ED<sub>50</sub> = 0.60μg/mL; Lu1, ED<sub>50</sub> = 2.33μg/mL, Ellipticine ED<sub>50</sub> = 0.61μg/mL; BCA-1, ED<sub>50</sub> = 6.51μg/mL, Ellipticine ED<sub>50</sub> = 0.52μg/mL)<sup>[5478]</sup>. **Source:** TIE LI MU *Mesua ferrea*, *Mammea harmandii* (leaf and twig). **Ref:** 1521, 5478.

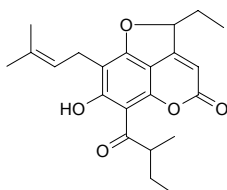


**13471 Mammea A/AC cyclo F**

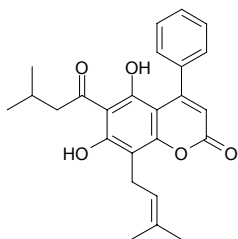
$C_{24}H_{24}O_6$  (408.46). Yellow prisms ( $C_6H_{14}$ :EtOAc = 9:1), mp 119.0°C,  $[\alpha]_D = 0^\circ$  ( $c = 4.5$ ,  $CHCl_3$ ). Source: ZONG ZHUANG TIE LI MU *Mesua racemosa*. Ref: 1871.

**13472 Mammearin A**

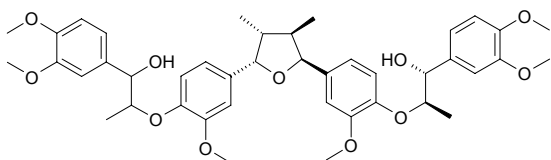
$C_{22}H_{26}O_5$  (370.45). White powder, mp 110~111°C ( $CH_2Cl_2$ :hexane),  $[\alpha]_D^{29} = +14.0^\circ$  ( $c = 0.1$ ,  $CHCl_3$ ). Pharm: Cytotoxic ( $P_{388}$ ,  $ED_{50} > 20\mu g/mL$ , control Ellipticine  $ED_{50} = 0.61\mu g/mL$ ; KB,  $ED_{50} = 14.49\mu g/mL$ , Ellipticine  $ED_{50} = 0.54\mu g/mL$ ; Col2,  $ED_{50} = 16.79\mu g/mL$ , Ellipticine  $ED_{50} = 0.60\mu g/mL$ ; Lu1,  $ED_{50} > 20\mu g/mL$ , Ellipticine  $ED_{50} = 0.61\mu g/mL$ ; BCA-1,  $ED_{50} > 20\mu g/mL$ , Ellipticine  $ED_{50} = 0.52\mu g/mL$ ). Source: *Mammea harmandii* (leaf and twig). Ref: 5478.

**13473 Mammeisin**

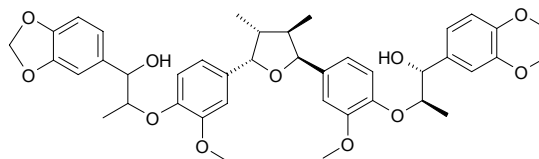
[18483-64-2]  $C_{25}H_{26}O_5$  (406.48). Pharm: Cytotoxic (*in vitro*). Source: FEI ZHOU HUANG GUO MU *Mammea africana*. Ref: 658.

**13474 Manassantin A**

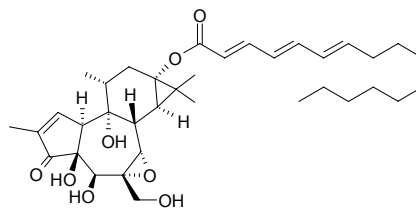
$C_{42}H_{52}O_{11}$  (732.88). Colorless powder, mp 82~85°C,  $[\alpha]_D^{25} = -102.1^\circ$  ( $c = 0.5$ ,  $CHCl_3$ ). Pharm: Anti-inflammatory (NF- $\kappa$ B inhibitor,  $IC_{50} = 2.5\mu mol/L$ )<sup>[3453]</sup>; inhibits PMA-induced ICAM-1 expression (MIC = 1.0nmol/L)<sup>[5492]</sup>. Source: SAN BAI CAO *Saururus chinensis* (root), YU XING CAO *Houttuynia cordata*, *Saururus* sp. Ref: 3453, 5492, 2428.

**13475 Manassantin B**

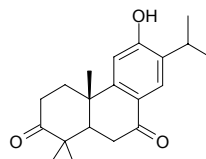
$C_{41}H_{48}O_{11}$  (716.83). Colorless powder, mp 83~86°C,  $[\alpha]_D^{25} = -99.8^\circ$  ( $c = 0.5$ ,  $CHCl_3$ ). Pharm: Anti-inflammatory (NF- $\kappa$ B inhibitor,  $IC_{50} = 2.7\mu mol/L$ )<sup>[3453]</sup>; inhibits PMA-induced ICAM-1 expression (MIC = 5.5nmol/L)<sup>[5492]</sup>. Source: SAN BAI CAO *Saururus chinensis* (root), YU XING CAO *Houttuynia cordata*, *Saururus* sp. Ref: 3453, 5492, 2428.

**13476 Mancinellin**

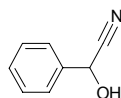
[57672-76-1]  $C_{36}H_{52}O_8$  (612.81). Pharm: Carcinogen promotor; irritant; supertoxic agent. Source: MA FENG MU *Hippomane mancinella*. Ref: 658.

**13477 Mandarone A**

(5*R*,10*S*)-12-Hydroxy-8,11,13-abietatriene-3,7-dione  $C_{20}H_{26}O_3$  (314.43). Yellowish rectangles, mp 212~214°C ( $CHCl_3$ ). Source: HAI TONG *Clerodendrum mandarinorum*. Ref: 2333.

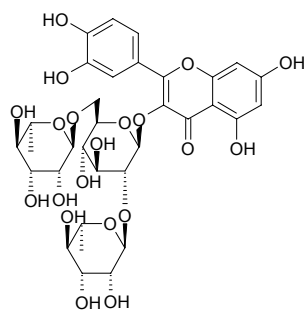
**13478 Mandelonitrile**

2-Hydroxy-2-phenylacetone nitrile [532-28-5]  $C_8H_7NO$  (133.15). mp (+) 28.5~29.5°C. Source: XING REN *Prunus armeniaca*. Ref: 2, 660.

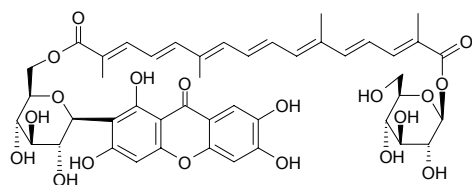


**13479 Manghaslin**

Quercetin-3-*O*- $\alpha$ -L-rhamnopyranosyl (1 $\rightarrow$ 2)-[ $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 6)]- $\beta$ -D-glucopyranoside [55696-57-6] C<sub>33</sub>H<sub>40</sub>O<sub>20</sub> (756.67). **Pharm:** Antioxidant (DPPH scavenger, SC<sub>50</sub> = 5.6  $\mu$ mol/L, positive control Vitamin E, SC<sub>50</sub> = 5.2 mmol/L)<sup>[4464]</sup>; DPPH scavenger (SC<sub>50</sub> = 13  $\mu$ mol/L)<sup>[4247]</sup>; antioxidant (superoxide anion radical scavenger, superoxide dismutase method, IC<sub>50</sub> for Formazan formation activity = 3.9  $\mu$ mol/L)<sup>[4247]</sup>. **Source:** JIN ZHAN JU *Calendula officinalis* (flower), KUAN YE XIANG PU *Typha latifolia*, LAO YA SHI *Diospyros rhombifolia* (leaf), LV DOU *Onobrychis viciifolia* (leaf), NIU XIN QIE ZI *Cerbera manghas*, PU HUANG *Typha angustata*, XIAN REN ZHANG *Opuntia dillenii* (fresh stem: yield = 0.003%). **Ref:** 1521, 3551, 4041, 4247, 4464, 5084.

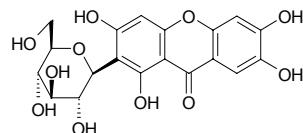
**13480 Mangicrocin**

[122575-51-3] C<sub>45</sub>H<sub>50</sub>O<sub>19</sub> (894.89). [ $\alpha$ ]<sub>D</sub><sup>28</sup> = +17.5° (*c* = 0.53, MeOH) **Source:** ZANG HONG HUA *Crocus sativus*. **Ref:** 1521.

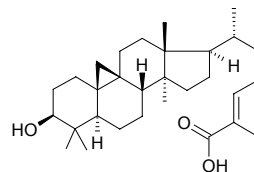
**13481 Mangiferin**

Chimonin; Euxanthogen; 2- $\beta$ -D-Glucosyl-1,3,6,7-tetrahydroxyxanthone [4773-96-0] C<sub>19</sub>H<sub>18</sub>O<sub>11</sub> (422.35). mp 271~273°C. **Pharm:** Antihepatotoxic; anti-inflammatory (rat, tampon granuloma model and swollen foot model caused by carrageenan, orl or ip, 50mg/kg); tuberculostatic (*Mycobacterium tuberculosis*, MIC = 200  $\mu$ g/mL); antiviral (herpes simplex virus); choleric and antihepatotoxic (main effective component in Tibet Wormwood, ZANG YIN CHEN, used to treat hepatitis); CNS depressant (rat and mus, 50~200mg/kg ip); antioxidant (DPPH scavenger, for 40  $\mu$ mol/L DPPH radical, SC<sub>50</sub> = 5.9  $\mu$ mol/L)<sup>[4378]</sup>. **Source:** AN SHI JIN SI TAO *Hypericum ancherii*, BEI JING SHI WEI *Pyrrosia davidii*, BIAN TAO *Mangifera persiciformis*, CHUAN XI ZHANG YA CAI *Swertia mussotii*, DI TAO HUA *Urena lobata*, GUANG SHI WEI *Pyrrosia calvata* (dried leaf: content = 11.4%)<sup>[5508]</sup>, LU SHAN SHI WEI *Pyrrosia sheareri* (dried leaf: mean content = 0.16%)<sup>[5508]</sup>, MANG GUO *Mangifera indica*, MANG GUO YE *Mangifera indica* (leaf: mean content of 3 origins = 1.76%)<sup>[5508]</sup>, MU MIAN HUA *Bombax malabaricum* [Syn. *Gossampinus malabarica*], NI GUANG SHI WEI

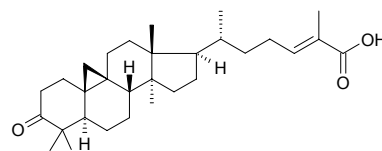
*Pyrrosia pseudocalvata* (dried leaf: content = 0.19%)<sup>[5508]</sup>, SHE GAN *Belamcanda chinensis* (dried rhizome), SHI WEI *Pyrrosia lingua* (dried leaf: content scope = 0.01%~0.34%)<sup>[5501]</sup>, mean content = 0.029%<sup>[5508]</sup>, SUO LA MU *Salacia prinoides* [Syn. *Salacia chinensis*] (stem), YOU BING SHI WEI *Pyrrosia petiolosa* (dried leaf: content = 0.035%)<sup>[5508]</sup>, ZHI MU *Anemarrhena asphodeloides* (dried rhizome: content scope of 8 origins = 0.60%~2.38%, mean content = 1.48%)<sup>[5508]</sup>. **Ref:** 4, 6, 550, 658, 660, 4378, 5485, 5501, 5508.

**13482 Mangiferolic acid**

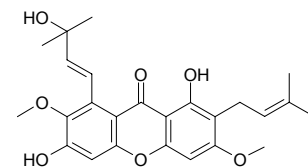
[4184-34-3] C<sub>30</sub>H<sub>48</sub>O<sub>3</sub> (456.72). mp 181~183°C. **Source:** DI FENG PI *Illicium difengpi*, MANG GUO SHU PI *Mangifera indica*. **Ref:** 6, 395.

**13483 Mangiferonic acid**

[13878-90-5] C<sub>30</sub>H<sub>46</sub>O<sub>3</sub> (454.70). mp 184~187°C. **Source:** DI FENG PI *Illicium difengpi*, MANG GUO SHU PI *Mangifera indica*. **Ref:** 6, 395.

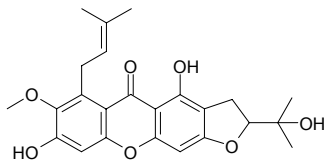
**13484 Mangostanin**

C<sub>25</sub>H<sub>28</sub>O<sub>7</sub> (440.50). Yellow solid, mp 215~217°C, [ $\alpha$ ]<sub>D</sub> = -0.7° (*c* = 1.17, CHCl<sub>3</sub>). **Pharm:** Cytotoxic (KB cancer cell lines, inactive; BC-1, inactive; NCI-H187, IC<sub>50</sub> = 8.04  $\mu$ g/mL Ellipticine, IC<sub>50</sub> = 0.39  $\mu$ g/mL)<sup>[1619]</sup>. **Source:** DAO NIAN ZI *Garcinia mangostana* (young fruit: yield = 0.0021%dw)<sup>[1619]</sup>. **Ref:** 1619, 1964.

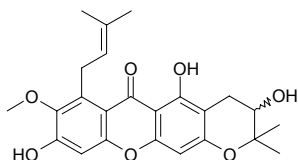


**13485 Mangostanin A**

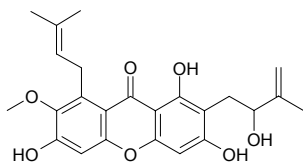
$C_{24}H_{26}O_7$  (426.47). **Pharm:** Antitubercular (*Mycobacterium tuberculosis*, MIC = 25 $\mu$ g/mL). **Source:** DAO NIAN ZI *Garcinia mangostana* (fruit). **Ref:** 4358.

**13486 Mangostanol**

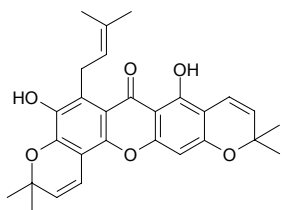
$C_{24}H_{26}O_7$  (426.47). **Pharm:** Antitubercular (*Mycobacterium tuberculosis*, MIC = 200 $\mu$ g/mL)<sup>[4358]</sup>. **Source:** DAO NIAN ZI *Garcinia mangostana* (fruit, fruit hull). **Ref:** 3066, 4358.

**13487 Mangostenol**

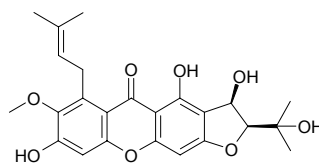
$C_{24}H_{26}O_7$  (426.47). **Pharm:** Cytotoxic (KB cancer cell lines, inactive; BC-1, inactive; NCI-H187, IC<sub>50</sub> = 1.15 $\mu$ g/mL Ellipticine, IC<sub>50</sub> = 0.39 $\mu$ g/mL)<sup>[1619]</sup>; antitubercular (*Mycobacterium tuberculosis*, MIC = 100 $\mu$ g/mL)<sup>[4358]</sup>. **Source:** DAO NIAN ZI *Garcinia mangostana* (young fruit: yield = 0.0030%dw)<sup>[1619]</sup>. **Ref:** 1619, 4358.

**13488 Mangostenone A**

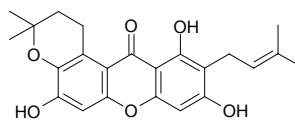
$C_{28}H_{28}O_6$  (460.53). **Pharm:** Antitubercular (*Mycobacterium tuberculosis*, MIC = 25 $\mu$ g/mL). **Source:** DAO NIAN ZI *Garcinia mangostana* (fruit). **Ref:** 4358.

**13489 Mangostenone C**

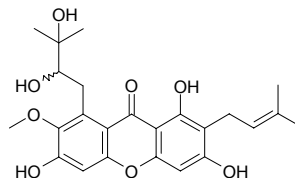
$C_{24}H_{26}O_8$  (442.47). Yellow solid, mp 126–127°C,  $[\alpha]_D^{27} = -28.3^\circ$  ( $c = 0.12$ , MeOH). **Pharm:** Cytotoxic (KB cancer cell lines, IC<sub>50</sub> = 2.8 $\mu$ g/mL, control Ellipticine, IC<sub>50</sub> = 1.33 $\mu$ g/mL; BC-1, IC<sub>50</sub> = 3.53 $\mu$ g/mL, Ellipticine, IC<sub>50</sub> = 1.46 $\mu$ g/mL; NCI-H187, IC<sub>50</sub> = 3.72 $\mu$ g/mL, Ellipticine, IC<sub>50</sub> = 0.39 $\mu$ g/mL). **Source:** DAO NIAN ZI *Garcinia mangostana* (young fruit: yield = 0.0014%dw). **Ref:** 1619.

**13490 Mangostenone D**

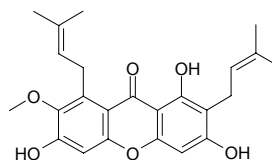
$C_{23}H_{24}O_6$  (396.44). Yellow solid, mp 208–210°C. **Pharm:** Cytotoxic (KB cancer cell lines, IC<sub>50</sub> = 9.79 $\mu$ g/mL, control Ellipticine, IC<sub>50</sub> = 1.33 $\mu$ g/mL; BC-1, IC<sub>50</sub> = 3.88 $\mu$ g/mL, Ellipticine, IC<sub>50</sub> = 1.46 $\mu$ g/mL; NCI-H187, IC<sub>50</sub> = 9.07 $\mu$ g/mL, Ellipticine, IC<sub>50</sub> = 0.39 $\mu$ g/mL). **Source:** DAO NIAN ZI *Garcinia mangostana* (young fruit: yield = 0.002%dw). **Ref:** 1619.

**13491 Mangostenone E**

$C_{24}H_{28}O_8$  (444.49). Yellow amorphous solid,  $[\alpha]_D^{28} = 0.0^\circ$  ( $c = 0.13$ , MeOH). **Pharm:** Cytotoxic (KB cancer cell lines, IC<sub>50</sub> = 19.96 $\mu$ g/mL, control Ellipticine, IC<sub>50</sub> = 1.33 $\mu$ g/mL; BC-1, IC<sub>50</sub> = 17.53 $\mu$ g/mL, Ellipticine, IC<sub>50</sub> = 1.46 $\mu$ g/mL; NCI-H187, inactive). **Source:** DAO NIAN ZI *Garcinia mangostana* (young fruit: yield = 0.003%dw). **Ref:** 1619.

**13492 Mangostin**

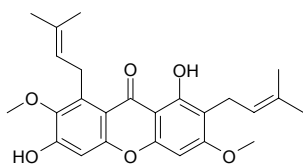
$\alpha$ -Mangostin [6147-11-1]  $C_{24}H_{26}O_6$  (410.47). **Pharm:** Anti-inflammatory; antimicrobial; antiulcerative (*in vitro*); antioxidant (DPPH scavenger, 10 $\mu$ mol/L, ScRt = 18%, control BHT, 10 $\mu$ mol/L, ScRt = 43%)<sup>[5319]</sup>; antioxidant inactive (DPPH scavenger, 50 $\mu$ mol/L, ScRt = 5.2%; control BHT, 50 $\mu$ mol/L, ScRt = 51.7%, IC<sub>50</sub> = 28.9 $\mu$ mol/L)<sup>[4423]</sup>; antibacterial (*Staphylococcus aureus* ATCC 25923, MIC = 4 $\mu$ g/mL, control Vancomycin, MIC = 2 $\mu$ g/mL; *Staphylococcus aureus* MRSA SK1, MIC = 4 $\mu$ g/mL, Vancomycin, MIC = 2 $\mu$ g/mL)<sup>[5319]</sup>; antitubercular (*Mycobacterium tuberculosis*, MIC = 6.25 $\mu$ g/mL)<sup>[4358]</sup>; cytotoxic (*in vitro*, HL-60, IC<sub>50</sub> = 6.8 $\mu$ mol/L, 10 $\mu$ mol/L, InRt = 100%, through the induction of apoptosis)<sup>[4715]</sup>; cytotoxic (KB cancer cell lines, IC<sub>50</sub> = 2.08 $\mu$ g/mL, control Ellipticine, IC<sub>50</sub> = 1.33 $\mu$ g/mL; BC-1, IC<sub>50</sub> = 0.92 $\mu$ g/mL, Ellipticine, IC<sub>50</sub> = 1.46 $\mu$ g/mL; NCI-H187, IC<sub>50</sub> = 2.87 $\mu$ g/mL Ellipticine, IC<sub>50</sub> = 0.39 $\mu$ g/mL)<sup>[1619]</sup>. **Source:** DAO NIAN ZI *Garcinia mangostana* (young fruit: yield = 2.32%dw)<sup>[1619]</sup>, DAO NIAN ZI *Garcinia mangostana* (fruit hull)<sup>[3066]</sup>, DAO NIAN ZI *Garcinia mangostana* (pericarp)<sup>[4715]</sup>, HUANG NIU MU *Cratoxylum cochinchinense* (root), TIAN SHAN ZHU ZI *Garcinia dulcis* (fruit), TIAN SHAN ZHU ZI *Garcinia dulcis* (flower). **Ref:** 658, 1619, 3066, 4358, 4422, 4423, 4715, 5319.



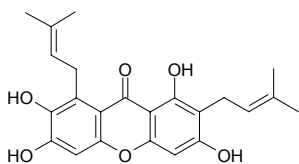


**13493  $\beta$ -Mangostin**

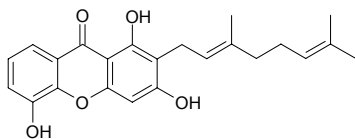
$C_{23}H_{28}O_6$  (424.50). **Pharm:** Cytotoxic (KB cancer cell lines,  $IC_{50} = 2.5\mu\text{g/mL}$ , control Ellipticine,  $IC_{50} = 1.33\mu\text{g/mL}$ ; BC-1,  $IC_{50} = 2.04\mu\text{g/mL}$ , Ellipticine,  $IC_{50} = 1.46\mu\text{g/mL}$ ; NCI-H187,  $IC_{50} = 2.88\mu\text{g/mL}$  Ellipticine,  $IC_{50} = 0.39\mu\text{g/mL}$ )<sup>[1619]</sup>; cytotoxic (*in vitro*, HL-60,  $IC_{50} = 7.6\mu\text{mol/L}$ )<sup>[4715]</sup>; antitubercular (*Mycobacterium tuberculosis*, MIC =  $6.25\mu\text{g/mL}$ )<sup>[4358]</sup>; antioxidant inactive (DPPH scavenger,  $10\mu\text{mol/L}$ , ScRt = 2%; control BHT,  $10\mu\text{mol/L}$ , ScRt = 43%,  $IC_{50} = 19.00\mu\text{mol/L}$ )<sup>[4422]</sup>; antioxidant inactive (DPPH scavenger,  $50\mu\text{mol/L}$ , ScRt = 1.7%; control BHT,  $50\mu\text{mol/L}$ , ScRt = 51.7%,  $IC_{50} = 28.9\mu\text{mol/L}$ )<sup>[4423]</sup>. **Source:** DAO NIAN ZI *Garcinia mangostana* (fruit hull), DAO NIAN ZI *Garcinia mangostana* (young fruit: yield = 0.0017%dw)<sup>[1619]</sup>, HUANG NIU MU *Cratogeomys cochinchinense* (root), TIAN SHAN ZHU ZI *Garcinia dulcis* (flower). **Ref:** 1619, 3066, 4358, 4422, 4423, 4715.

**13494  $\gamma$ -Mangostin**

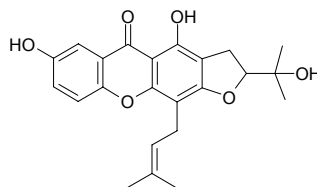
$C_{23}H_{24}O_6$  (396.44). **Pharm:** Cytotoxic (KB cancer cell lines,  $IC_{50} = 4.69\mu\text{g/mL}$ , control Ellipticine,  $IC_{50} = 1.33\mu\text{g/mL}$ ; BC-1,  $IC_{50} = 1.6\mu\text{g/mL}$ , Ellipticine,  $IC_{50} = 1.46\mu\text{g/mL}$ ; NCI-H187,  $IC_{50} = 2.55\mu\text{g/mL}$  Ellipticine,  $IC_{50} = 0.39\mu\text{g/mL}$ )<sup>[1619]</sup>; cytotoxic (*in vitro*, HL-60,  $IC_{50} = 6.1\mu\text{mol/L}$ )<sup>[4715]</sup>; antitubercular (*Mycobacterium tuberculosis*, MIC =  $25\mu\text{g/mL}$ )<sup>[4358]</sup>. **Source:** DAO NIAN ZI *Garcinia mangostana* (fruit, fruit hull), DAO NIAN ZI *Garcinia mangostana* (young fruit: yield = 0.30%dw)<sup>[1619]</sup>. **Ref:** 1619, 3066, 4358, 4715.

**13495 Mangostinone**

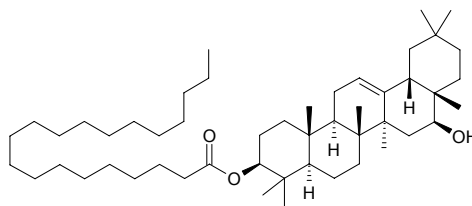
$C_{23}H_{24}O_5$  (380.44). **Pharm:** Cytotoxic (KB cancer cell lines,  $IC_{50} = 12.79\mu\text{g/mL}$ , control Ellipticine,  $IC_{50} = 1.33\mu\text{g/mL}$ ; BC-1,  $IC_{50} = 7.26\mu\text{g/mL}$ , Ellipticine,  $IC_{50} = 1.46\mu\text{g/mL}$ ; NCI-H187,  $IC_{50} = 17.88\mu\text{g/mL}$  Ellipticine,  $IC_{50} = 0.39\mu\text{g/mL}$ )<sup>[1619]</sup>; cytotoxic (*in vitro*, HL-60,  $IC_{50} = 19.0\mu\text{mol/L}$ )<sup>[4715]</sup>; antitubercular (*Mycobacterium tuberculosis*, MIC =  $200\mu\text{g/mL}$ )<sup>[4358]</sup>. **Source:** DAO NIAN ZI *Garcinia mangostana* (young fruit: yield = 0.0042%dw)<sup>[1619]</sup>, YUN NAN SHAN ZHU ZI *Garcinia cowa* (latex). **Ref:** 1619, 4358, 4715, 5281.

**13496 Mangoxanthone**

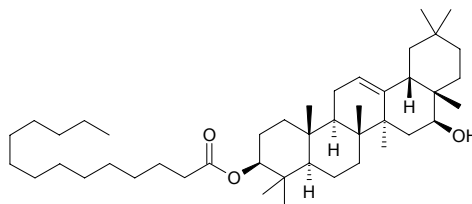
$C_{23}H_{24}O_6$  (396.44). Yellow needles, mp 195–197°C (acetone–hexane),  $[\alpha]_D = -40.0^\circ$  ( $c = 0.62$ , acetone). **Source:** DAO NIAN ZI *Garcinia mangostana* (heartwood). **Ref:** 5311.

**13497 Maniladiol 3-O-eicosanoate**

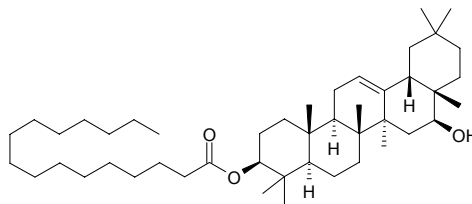
$C_{50}H_{88}O_3$  (737.26). mp 93–94°C,  $[\alpha]_D = +39.2^\circ$  ( $c = 0.1$ ,  $\text{CHCl}_3$ ). **Source:** SAI ER WEI YA SHI CAO *Achillea alexandri-regis* (dried aerial parts). **Ref:** 2545.

**13498 Maniladiol 3-O-myristate**

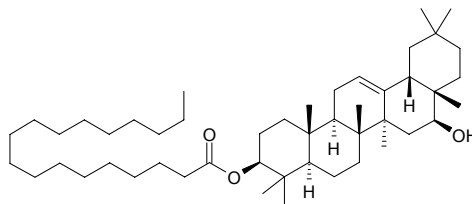
$C_{44}H_{76}O_3$  (653.09). **Source:** SAI ER WEI YA SHI CAO *Achillea alexandri-regis* (dried aerial parts). **Ref:** 2545.

**13499 Maniladiol 3-O-palmitate**

$C_{46}H_{80}O_3$  (681.15). Colorless powder. **Source:** SAI ER WEI YA SHI CAO *Achillea alexandri-regis* (dried aerial parts). **Ref:** 2545.

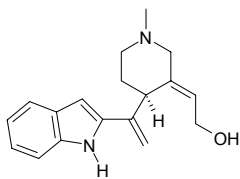
**13500 Maniladiol 3-O-stearate**

$C_{48}H_{84}O_3$  (709.20). **Source:** SAI ER WEI YA SHI CAO *Achillea alexandri-regis* (dried aerial parts). **Ref:** 2545.

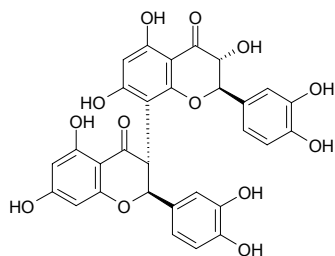


**13501 (+)-Manilamine**

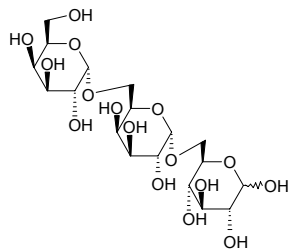
2-{4-[1-(1*H*-Indol-2-yl)-vinyl]-1-methyl-piperidin-3-ylidene} ethanol  
 $C_{18}H_{22}N_2O$  (282.39). Flesh-colored (beige) amorphous solid, mp 88–92°C,  
 $[\alpha]_D = +15.5^\circ$  ( $c = 0.50$ , MeOH). Source: XIANG PI MU *Alstonia scholaris*  
 (leaf). Ref: 5283.

**13502 Manniflavanone**

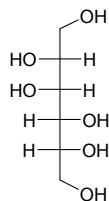
[73428-17-8]  $C_{30}H_{22}O_{13}$  (590.50). Pharm: Aldose reductase inhibitor (eye lens); used in treatment of diseases due to maladjustment of blood capillary permeability. Source: MAN TENG HUANG *Garcinia mannii*. Ref: 658.

**13503 Mannitriose**

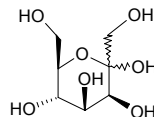
[13382-86-0]  $C_{18}H_{32}O_{16}$  (504.45). Source: XIAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *Huechingensis*]. Ref: 1241.

**13504 D-Mannitol**

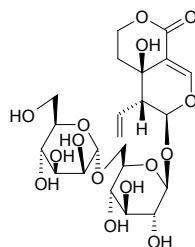
[69-65-8]  $C_6H_{14}O_6$  (182.17). mp (–) 166°C. Pharm: Diuretic (administered by injection to supplement other diuretics in the treatment of edema, to treat some kidney disorders and to relieve intracranial pressure in brain injuries). Source: DONG CHONG XIA CAO *Cordyceps sinensis* (dried fungal stroma growing on larva of a caterpillar: content scope = 0.37%~14.45%<sup>[5501]</sup>), FA GUO CHENG LIU *Tamarix gallica*, GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *Huechingensis*], HU HUANG LIAN *Picrorhiza kurrooa*, HUA BAI LA SHU *Fraxinus ornus*, KUN BU *Laminaria japonica* (dried thallus: content = 7.21%<sup>[5501]</sup>), NIU SHE TOU *Sonchus arvensis*, NV ZHEN ZI *Ligustrum lucidum*, PU HUANG *Typha angustata*, SAN TAI HONG HUA *Clerodendron serratum*, SHUI ZHI *Gardenia jasminoides* var. *grandiflora*, TIAN NAN XING *Arisaema consanguineum*, XI ZANG HU HUANG LIAN *Picrorhiza scrophulariiflora*, YA ZHI CAO *Commelina communis*, YI ZHI XIANG *Veronica spuria*, ZHAN LONG JIAN *Veronicastrum sibiricum*, ZHI Phasianus *colchicus*. Ref: 2, 373, 502, 658, 660, 5501.

**13505 D-Mannoheptulose**

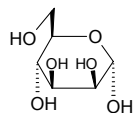
[3615-44-9]  $C_7H_{14}O_7$  (210.19). mp 152°C. Source: YING SU KE *Papaver somniferum*. Ref: 6, 1521.

**13506 6'-O-α-D-Mannopyranosylwertiamarin**

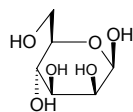
$C_{22}H_{32}O_{15}$  (536.49). Amorphous powder,  $[\alpha]_D^{25} = -28.1^\circ$  ( $c = 0.09$ , MeOH). Source: RI BEN ZHANG YA CAI *Swertia japonica*. Ref: 2573.

**13507 Mannose**

$C_6H_{12}O_6$  (180.16). Pharm: Reagent used in biochemistry research. Source: CHUAN DANG SHEN *Codonopsis tangshen*, DANG SHEN *Codonopsis pilosula*, GUAN HUA DANG SHEN *Codonopsis tubulosa*, HUANG JING *Polygonatum sibiricum*, HUI MAO DANG SHEN *Codonopsis canescens*, LU HUI *Aloe vera* [Syn. *Aloe barbadensis*], QIU HUA DANG SHEN *Codonopsis subglobosa*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. Ref: 2, 658, 660.

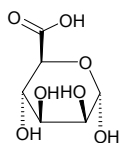
**13508 Mannose-b**

$C_6H_{12}O_6$  (180.16). Source: LU HUI *Aloe vera* [Syn. *Aloe barbadensis*], REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. Ref: 2.

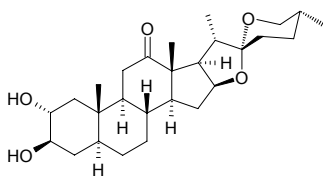


**13509 D-Mannuronic acid**

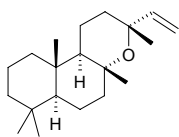
[6814-36-4] C<sub>6</sub>H<sub>10</sub>O<sub>7</sub> (194.14). mp ( $\alpha$ ) 120~130°C, ( $\beta$ ) 165~167°C. Source: LUO LE ZI *Ocimum basilicum*. Ref: 6.

**13510 Manogenin**

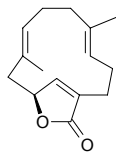
[564-43-2] C<sub>27</sub>H<sub>42</sub>O<sub>5</sub> (446.63). Crystals (Me<sub>2</sub>CO), mp 245~247°C, [ $\alpha$ ]<sub>D</sub> = -5° (CHCl<sub>3</sub>). Source: DONG YI HAO JIAN MA *Agave east-one*, DUAN YE LONG SHE LAN *Agave angustifolia*, FAN MA *Agave americana*, WU CI FAN MA *Agave americana* var. *marginata* [Syn. *Agave americana* var. *variegata*], XIA YE LONG SHE LAN *Agave cantala*. Ref: 10.

**13511 Manoyloxide**

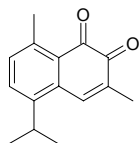
C<sub>20</sub>H<sub>34</sub>O (290.49). [ $\alpha$ ]<sub>D</sub><sup>26</sup> = +22° (c = 1.0, CHCl<sub>3</sub>). Source: XIONG RUI ZHUANG SHU WEI CAO *Salvia staminea*. Ref: 5400.

**13512 Manshuriolide**

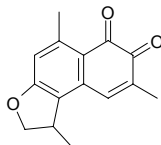
C<sub>15</sub>H<sub>22</sub>O<sub>2</sub> (232.33). Source: GUAN MU TONG *Aristolochia manshuriensis*, MIAN MAO MA DOU LING *Aristolochia mollissima* (dried root and stem; yield = 0.0049%dw). Ref: 1521, 3026.

**13513 Mansonone C**

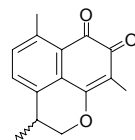
[5574-34-5] C<sub>15</sub>H<sub>16</sub>O<sub>2</sub> (228.29). Crystals (hexane), mp 134~138°C. Pharm: Antifungal; plant antitoxin from seeds and seedling of elm. Source: SHAN YU *Ulmus glabra*, LANG YU PI *Ulmus parvifolia*, YANG YE XIAO JIN *Thespesia populnea* [Syn. *Hibiscus populneus*]. Ref: 6, 658, 660, 2069.

**13514 Mansonone D**

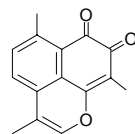
[5090-86-8] C<sub>15</sub>H<sub>14</sub>O<sub>3</sub> (242.28). mp 73~75°C. Pharm: Antineoplastic (hmn thymocyte MCF7); inhibits cytochrome C and P450; antioxidant, inhibits lipid peroxidation. Source: YANG YE XIAO JIN *Thespesia populnea* [Syn. *Hibiscus populneus*]. Ref: 2069, 2074.

**13515 Mansonone E**

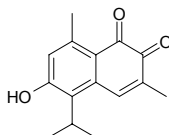
[5090-87-9] C<sub>15</sub>H<sub>14</sub>O<sub>3</sub> (242.28). mp 148~149°C. Source: LANG YU PI *Ulmus parvifolia*, SHAN ZHI MA *Helicteres angustifolia*, TAI WAN FU RONG *Hibiscus taiwanensis*, YANG YE XIAO JIN *Thespesia populnea* [Syn. *Hibiscus populneus*]. Ref: 660, 2069, 2529.

**13516 Mansonone F**

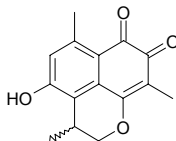
[5090-88-0] C<sub>15</sub>H<sub>12</sub>O<sub>3</sub> (240.26). mp 214~215°C. Source: YANG YE XIAO JIN *Thespesia populnea* [Syn. *Hibiscus populneus*]. Ref: 2069.

**13517 Mansonone G**

[7715-96-0] C<sub>15</sub>H<sub>16</sub>O<sub>3</sub> (244.29). mp 210~213°C. Source: LANG YU PI *Ulmus parvifolia*. Ref: 6, 660.

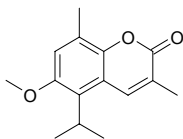
**13518 Mansonone H**

C<sub>15</sub>H<sub>14</sub>O<sub>4</sub> (258.28). Pharm: Anti-HIV (H9 lymphocytic cells, inhibits replication, IC<sub>50</sub> (concentration that inhibits uninfected H9 cell growth by 50%) > 25µg/mL, EC<sub>50</sub> (concentration that inhibits viral replication by 50%) = 16.58µg/mL, TI(IC<sub>50</sub>/EC<sub>50</sub>) = 1.50, control AZT IC<sub>50</sub> = 500µg/mL, EC<sub>50</sub> = 0.0007µg/mL, TI = 740000); cytotoxic (hmn, A549 EC<sub>50</sub> = 10.5µg/mL, MCF7 EC<sub>50</sub> = 10.7µg/mL). Source: TAI WAN FU RONG *Hibiscus taiwanensis*. Ref: 2529.

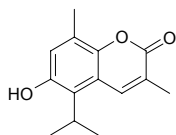


**13519 Mansonrin A**

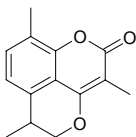
3,8-Dimethyl-5-isopropyl-6-methoxycoumarin C<sub>15</sub>H<sub>18</sub>O<sub>3</sub> (246.31). Pale yellow crystals, mp 135~137°C. Source: MAN SUO NI YA XIN CAI *Mansonia gagei*. Ref: 1969.

**13520 Mansonrin B**

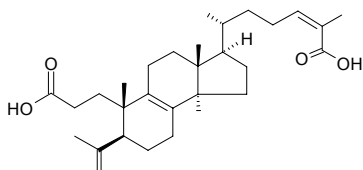
3,8-Dimethyl-5-isopropyl-6-hydroxycoumarin C<sub>14</sub>H<sub>16</sub>O<sub>3</sub> (232.28). Pale yellow crystals, mp 202~204°C. Source: MAN SUO NI YA XIN CAI *Mansonia gagei*. Ref: 1969.

**13521 Mansonrin C**

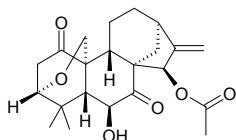
2,3-Dihydro-3,6,9-trimethyl naphtho[1,8-bc]pyran-7-oxa-8-one C<sub>14</sub>H<sub>14</sub>O<sub>3</sub> (230.27). White crystals, mp 150~151°C. Source: MAN SUO NI YA XIN CAI *Mansonia gagei*. Ref: 1969.

**13522 Manwuweizic acid**

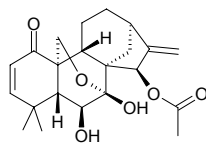
[116963-87-2] C<sub>30</sub>H<sub>46</sub>O<sub>4</sub> (470.70). Needles (MeOH), crystals (CHCl<sub>3</sub>-petroleum ether), mp 182~184°C, mp 191~193°C, [α]<sub>D</sub><sup>17</sup> = +62.7° (c = 0.08, CHCl<sub>3</sub>), [α]<sub>D</sub><sup>15</sup> = +54.3° (c = 0.291, CHCl<sub>3</sub>). Pharm: Cytotoxic. Source: YI XING NAN WU WEI ZI *Kadsura heteroclita* [Syn. *Uvaria heteroclita*], ZHONG JIAN WU WEI ZI *Schisandra propinqua* var. *intermedia*. Ref: 1242, 1521.

**13523 Maoecrystal A**

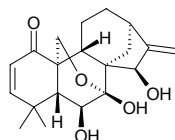
C<sub>22</sub>H<sub>28</sub>O<sub>6</sub> (388.46). mp 168~170°C, [α]<sub>D</sub><sup>15</sup> = -68° (c = 1.0, C<sub>5</sub>H<sub>5</sub>N). Source: MAO E XIANG CHA CAI *Rabdosia eriocalyx*, SHU HUA MAO E XIANG CHA CAI *Isodon eriocalyx* var. *laxiflora* (leaf: yield = 0.046%dw). Ref: 4067, 4668.

**13524 Maoecrystal B**

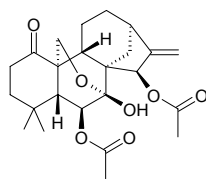
Rabdosianone II C<sub>22</sub>H<sub>28</sub>O<sub>6</sub> (388.46). mp 196~199°C, [α]<sub>D</sub><sup>15</sup> = -94° (c = 1.0, C<sub>5</sub>H<sub>5</sub>N). Source: MAO E XIANG CHA CAI *Rabdosia eriocalyx*. Ref: 4067.

**13525 Maoecrystal C**

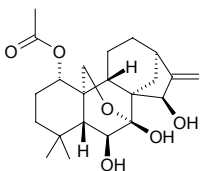
C<sub>20</sub>H<sub>26</sub>O<sub>5</sub> (346.43). mp 204~206°C, [α]<sub>D</sub><sup>15</sup> = -95.5° (c = 1.0, C<sub>5</sub>H<sub>5</sub>N). Source: MAO E XIANG CHA CAI *Rabdosia eriocalyx*. Ref: 4067.

**13526 Maoecrystal D**

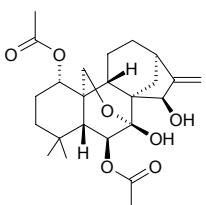
Rabdolongin B C<sub>24</sub>H<sub>32</sub>O<sub>7</sub> (432.52). mp 178~180°C, [α]<sub>D</sub><sup>15</sup> = +13° (c = 1.0, C<sub>5</sub>H<sub>5</sub>N). Source: MAO E XIANG CHA CAI *Rabdosia eriocalyx*. Ref: 660, 1521, 4067.

**13527 Maoecrystal E**

C<sub>22</sub>H<sub>32</sub>O<sub>6</sub> (392.50). mp 236~238°C. Source: MAO E XIANG CHA CAI *Rabdosia eriocalyx*. Ref: 4067.

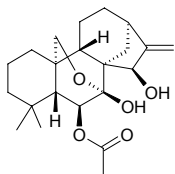
**13528 Maoecrystal F**

C<sub>24</sub>H<sub>34</sub>O<sub>7</sub> (434.53). mp 218~219°C. Source: MAO E XIANG CHA CAI *Rabdosia eriocalyx*. Ref: 4067.

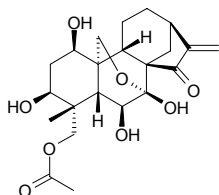


**13529 Maoecrystal G**

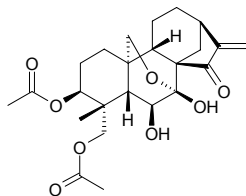
$C_{22}H_{32}O_5$  (376.50). mp 205~207°C. Source: MAO E XIANG CHA CAI *Rabdosia eriocalyx*, SHAN DI XIANG CHA CAI *Isodon oresbia* (aerial parts). Ref: 3808, 4067.

**13530 Maoecrystal I**

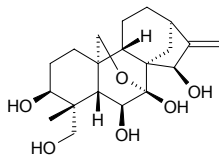
$C_{22}H_{30}O_8$  (422.48). mp 205~206°C. Source: MAO E XIANG CHA CAI *Rabdosia eriocalyx*. Ref: 4067.

**13531 Maoecrystal J**

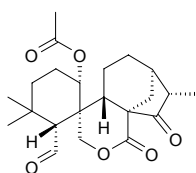
$C_{24}H_{32}O_8$  (448.52). mp 249~250°C,  $[\alpha]_D = -49.2^\circ$  ( $c = 1.0$ , MeOH). Source: MAO E XIANG CHA CAI *Rabdosia eriocalyx*. Ref: 4067.

**13532 Maoecrystal K**

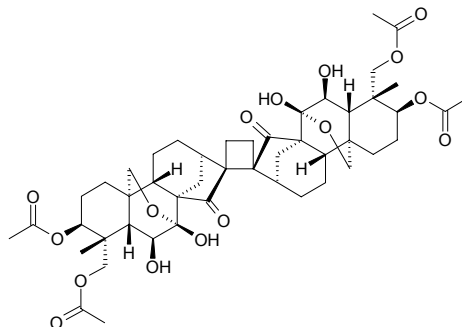
$C_{20}H_{30}O_6$  (366.46). mp 191.5~193°C,  $[\alpha]_D^{26.5} = -1.3^\circ$  ( $c = 1.0$ , MeOH). Source: MAO E XIANG CHA CAI *Rabdosia eriocalyx*. Ref: 4067.

**13533 Maoecrystal L**

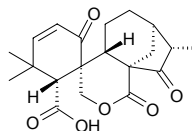
$C_{22}H_{30}O_6$  (390.48). mp 217°C. Source: MAO E XIANG CHA CAI *Rabdosia eriocalyx*. Ref: 4067.

**13534 Maoecrystal M**

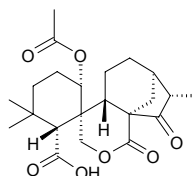
[156250-60-1]  $C_{48}H_{64}O_{16}$  (897.04). mp > 300°C,  $[\alpha]_D^{22} = +44^\circ$  ( $c = 0.2$ ,  $C_5H_5N$ ). Source: MAO E XIANG CHA CAI *Rabdosia eriocalyx*. Ref: 4067.

**13535 Maoecrystal N**

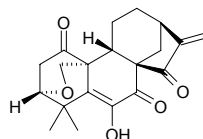
$C_{20}H_{24}O_6$  (360.41). mp 290~292°C,  $[\alpha]_D^{25} = +167.83^\circ$  ( $c = 0.36$ ,  $C_5H_5N$ ). Source: MAO E XIANG CHA CAI *Rabdosia eriocalyx*. Ref: 4067.

**13536 Maoecrystal O**

$C_{22}H_{30}O_7$  (406.48). mp 268.5~270°C,  $[\alpha]_D^{25} = -3.66^\circ$  ( $c = 0.41$ ,  $CHCl_3$ ). Source: MAO E XIANG CHA CAI *Rabdosia eriocalyx*. Ref: 4067.

**13537 Maoecrystal P**

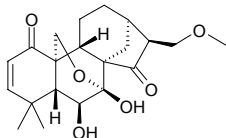
$C_{20}H_{22}O_5$  (342.4). mp 234~236°C,  $[\alpha]_D^{25} = -141.7^\circ$  ( $c = 0.30$ ,  $CHCl_3$ ). Pharm: Cytotoxic (*in vitro*, K562,  $IC_{50} = 0.132\mu g/mL$ ; A549,  $IC_{50} = 69.5\mu g/mL$ ; T24,  $IC_{50} = 0.051\mu g/mL$ ; control *cis*-Platin: K562,  $IC_{50} = 2.02\mu g/mL$ ; A549,  $IC_{50} = 11.94\mu g/mL$ ; T24,  $IC_{50} = 1.16\mu g/mL$ )<sup>[4668]</sup>. Source: MAO E XIANG CHA CAI *Rabdosia eriocalyx*, SHU HUA MAO E XIANG CHA CAI *Isodon eriocalyx* var. *laxiflora* (leaf: yield = 0.00040%dw). Ref: 4067, 4668.



**13538 Maocrystal Q**

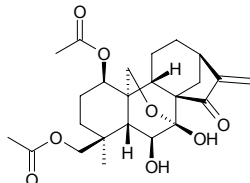
$C_{21}H_{28}O_6$  (376.45). mp 180.0~182.5°C,  $[\alpha]_D^{25} = -117.5^\circ$  ( $c = 0.283$ ,  $CHCl_3$ ).

Source: MAO E XIANG CHA CAI *Rabdosia eriocalyx*. Ref: 4067.

**13539 Maocrystal R**

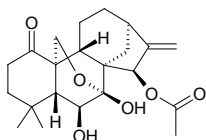
$C_{24}H_{32}O_8$  (448.52). mp 97.5~100°C,  $[\alpha]_D^{25} = -22.3^\circ$  ( $c = 0.382$ ,  $CHCl_3$ ).

Source: MAO E XIANG CHA CAI *Rabdosia eriocalyx*. Ref: 4067.

**13540 Maocrystal S**

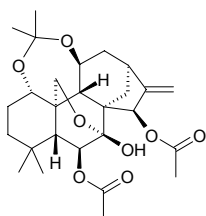
$C_{22}H_{30}O_6$  (390.48). mp 170.5~172.0°C,  $[\alpha]_D^{25} = +43.5^\circ$  ( $c = 0.506$ ,  $CHCl_3$ ).

Source: MAO E XIANG CHA CAI *Rabdosia eriocalyx*. Ref: 4067.

**13541 Maocrystal T**

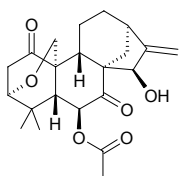
$C_{27}H_{38}O_8$  (490.60). mp 237.5~239°C,  $[\alpha]_D^{25} = -129.3^\circ$  ( $c = 0.379$ ,  $CHCl_3$ ).

Source: MAO E XIANG CHA CAI *Rabdosia eriocalyx*. Ref: 4067.

**13542 Maocrystal U**

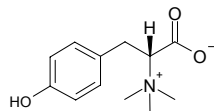
$C_{22}H_{28}O_6$  (388.46). mp 250~252.5°C,  $[\alpha]_D^{18} = -112.9^\circ$  ( $c = 0.62$ ,  $CHCl_3$ ).

Source: MAO E XIANG CHA CAI *Rabdosia eriocalyx*. Ref: 4067.

**13543 Maokonine**

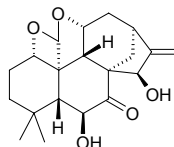
$C_{12}H_{17}NO_3$  (232.27). Colorless prismatic crystals (methanol), mp 257~259°C,

$[\alpha]_D = +68.2^\circ$  ( $c = 0.44$ , water). Pharm: Increases blood pressure (anesthetic rat). Source: MA HUANG *Ephedra sinica*. Ref: 661.

**13544 Maoyecrystal I**

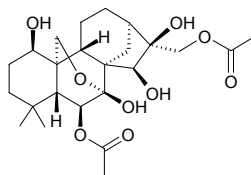
$C_{20}H_{26}O_5$  (346.43). White amorphous powder,  $[\alpha]_D^{25.2} = -32.47^\circ$  ( $c = 0.15$ ,

MeOH). Pharm: Cytotoxic (K562 cells,  $IC_{50} = 7.30\mu g/mL$ , positive control *cis*-Platinum,  $IC_{50} = 1.14\mu g/mL$ ). Source: MAO YE XIANG CHA CAI *Isodon japonica* [Syn. *Rabdosia japonica*]. Ref: 4998.

**13545 Maoyerabdosin**

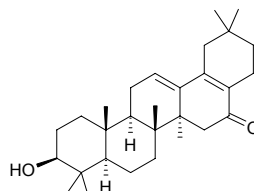
$C_{24}H_{36}O_9$  (468.55). mp 243~245°C,  $[\alpha]_D^{22} = -30^\circ$  ( $c = 0.1$ , MeOH). Source:

MAO YE XIANG CHA CAI *Isodon japonica* [Syn. *Rabdosia japonica*]. Ref: 4067.

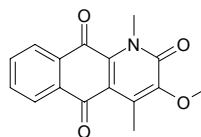
**13546 Maragenin II**

[71545-20-5]  $C_{29}H_{44}O_2$  (424.67). Source: SHAN CHA *Camellia japonica*.

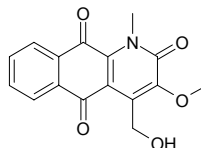
Ref: 1243.

**13547 Marcanine B**

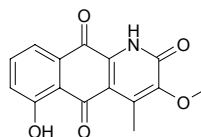
$C_{16}H_{13}NO_4$  (283.29). Source: *Goniothalamus* sp. Ref: 2447.

**13548 Marcanine C**

$C_{16}H_{13}NO_5$  (299.29). Source: *Goniothalamus* sp. Ref: 2447.

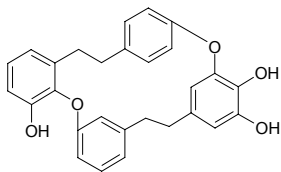
**13549 Marcanine D**

$C_{15}H_{11}NO_5$  (285.26). Source: *Goniothalamus* sp. Ref: 2447.

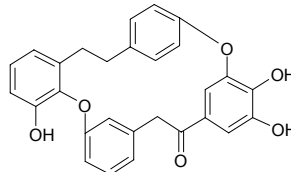


**13550 Marchantin A**

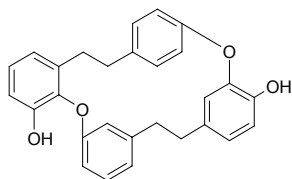
[88418-46-6] C<sub>28</sub>H<sub>24</sub>O<sub>5</sub> (440.50). Source: DI SUO LUO *Marchantia polymorpha*. Ref: 1244.

**13555 Marchantin G**

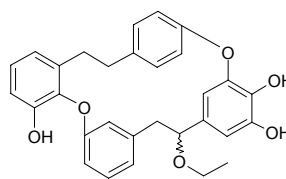
[98093-89-1] C<sub>28</sub>H<sub>22</sub>O<sub>6</sub> (454.48). Source: DI SUO LUO *Marchantia polymorpha*. Ref: 1244.

**13551 Marchantin B**

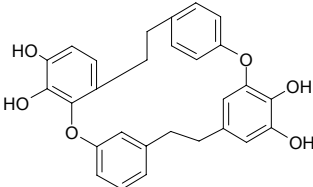
[88418-47-7] C<sub>28</sub>H<sub>24</sub>O<sub>4</sub> (424.50). Source: DI SUO LUO *Marchantia polymorpha*. Ref: 1244.

**13556 Marchantin J**

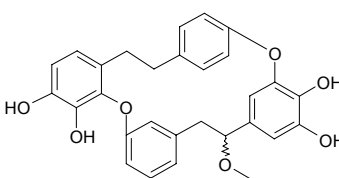
[107110-23-6] C<sub>30</sub>H<sub>28</sub>O<sub>6</sub> (484.55). Source: DI SUO LUO *Marchantia polymorpha*. Ref: 1244.

**13552 Marchantin C**

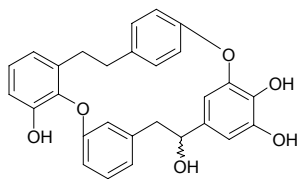
[88418-48-8] C<sub>28</sub>H<sub>24</sub>O<sub>6</sub> (456.50). Source: DI SUO LUO *Marchantia polymorpha*. Ref: 1244.

**13557 Marchantin K**

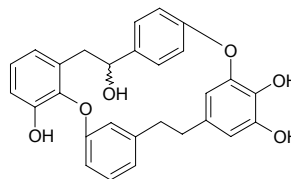
[107110-24-7] C<sub>29</sub>H<sub>26</sub>O<sub>7</sub> (486.53). Source: DI SUO LUO *Marchantia polymorpha*. Ref: 1244.

**13553 Marchantin D**

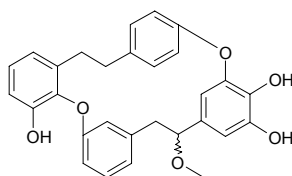
[98093-92-6] C<sub>28</sub>H<sub>24</sub>O<sub>6</sub> (456.50). Source: DI SUO LUO *Marchantia polymorpha*. Ref: 1244.

**13558 Marchantin L**

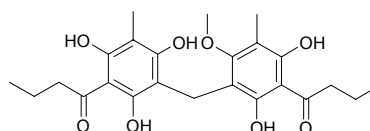
[107110-25-8] C<sub>28</sub>H<sub>24</sub>O<sub>6</sub> (456.50). Source: DI SUO LUO *Marchantia polymorpha*. Ref: 1244.

**13554 Marchantin E**

[98093-91-5] C<sub>29</sub>H<sub>26</sub>O<sub>6</sub> (470.53). Source: DI SUO LUO *Marchantia polymorpha*. Ref: 1244.

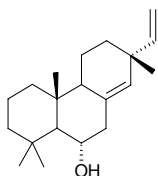
**13559 Margaspidin**

Margaspidin BB [1867-82-9] C<sub>24</sub>H<sub>30</sub>O<sub>8</sub> (446.50). Yellowish acicular crystals (ethanol), mp 189~191°C. Pharm: Anthelmintic; anti-inflammatory (rat, tampon granuloma model, 50mg/kg orl); LD<sub>50</sub> (mus iv) = 11.8mg/kg. Source: BIAN BAO LIN MAO JUE *Dryopteris marginalis*, BIAN YUAN LIN MAO JUE *Dryopteris marginata*, RI BEN LIN MAO JUE *Dryopteris sacrosancta*, TAI PING YANG LIN MAO JUE *Dryopteris pacifica*. Ref: 661.

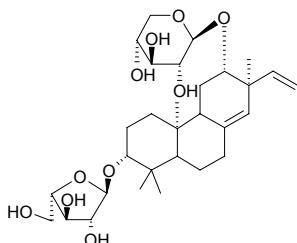


**13560 Marginatol**

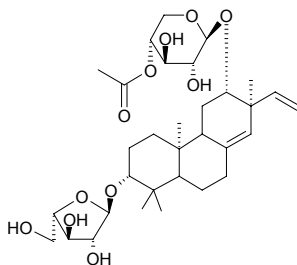
8(14),15-Isopimaradi-ene-6 $\alpha$ -ol C<sub>20</sub>H<sub>32</sub>O (288.48). Colorless massa crystals mp 77~78°C. Source: KU SHAN NAI *Kaempferia marginata*. Ref: 861.

**13561 Marginoside A**

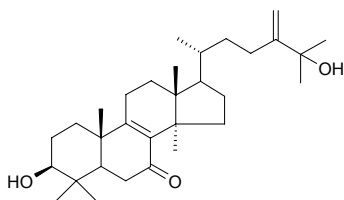
C<sub>30</sub>H<sub>48</sub>O<sub>10</sub> (568.71). Source: BIAN YUAN LIN GAI JUE *Microlepia marginata*. Ref: 1245.

**13562 Marginoside B**

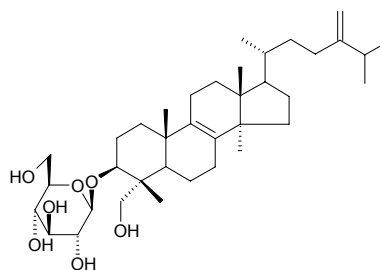
C<sub>32</sub>H<sub>50</sub>O<sub>11</sub> (610.75). Source: BIAN YUAN LIN GAI JUE *Microlepia marginata*. Ref: 1245.

**13563 Marianine**

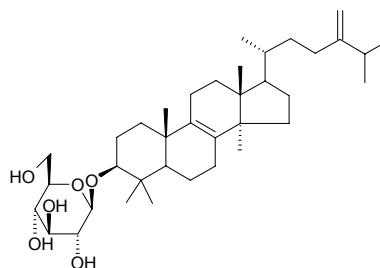
C<sub>31</sub>H<sub>50</sub>O<sub>3</sub> (470.74). Colorless crystals mp 160~161°C,  $[\alpha]_D^{20} = 73^\circ$  ( $c = 1.0$ , CHCl<sub>3</sub>). Pharm: Chymotrypsin inhibitor (*in vitro*, IC<sub>50</sub> = (9.4±0.02) $\mu$ mol/L, control Chymostatin, IC<sub>50</sub> = (7.01±0.1) $\mu$ mol/L). Source: SHUI FEI JI *Silybum marianum* (whole herb: yield = 0.0025%). Ref: 53.

**13564 Marianoside A**

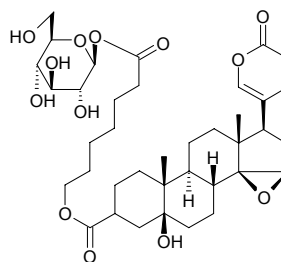
C<sub>37</sub>H<sub>62</sub>O<sub>7</sub> (618.90). White amorphous powder, mp 271~273°C,  $[\alpha]_D^{25} = -28^\circ$  ( $c = 1.0$ , MeOH). Pharm: Chymotrypsin inhibitor (*in vitro*, IC<sub>50</sub> = (22.6±0.1) $\mu$ mol/L, control Chymostatin, IC<sub>50</sub> = (7.01±0.1) $\mu$ mol/L). Source: SHUI FEI JI *Silybum marianum* (whole herb: yield = 0.0029%). Ref: 53.

**13565 Marianoside B**

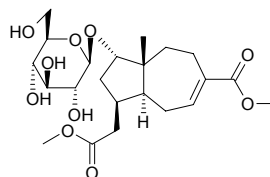
C<sub>37</sub>H<sub>62</sub>O<sub>6</sub> (602.90). Amorphous solid, mp 240~242°C,  $[\alpha]_D^{25} = -45.5^\circ$  ( $c = 0.1$ , MeOH). Pharm: Chymotrypsin inhibitor (*in vitro*, IC<sub>50</sub> = (28.2±0.8) $\mu$ mol/L, control Chymostatin, IC<sub>50</sub> = (7.01±0.1) $\mu$ mol/L). Source: SHUI FEI JI *Silybum marianum* (whole herb: yield = 0.0037%). Ref: 53.

**13566 Marinobufagin 3-suberoyl-L-glutamine ester**

[75093-30-1] C<sub>38</sub>H<sub>54</sub>O<sub>13</sub> (718.85). mp 166~170°C. Source: CHAN SU *Bufo gargarizans*; *Bufo melanostictus*. Ref: 2.

**13567 Marioside**

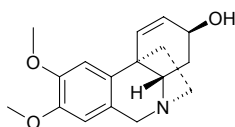
[146713-93-1] C<sub>22</sub>H<sub>34</sub>O<sub>10</sub> (458.51). Powder,  $[\alpha]_D^{27} = +25.6^\circ$  ( $c = 1.1$ , CH<sub>3</sub>OH). Source: HAI ZHOU GU SUI BU *Davallia mariesii*. Ref: 1246.



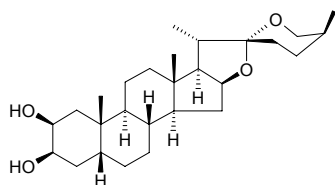


**13568 Maritidine**

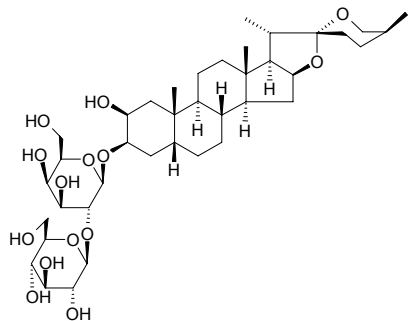
$C_{17}H_{21}NO_3$  (287.36). Source: *Cyrtanthus falcatus*. Ref: 4952.

**13569 Markogenin**

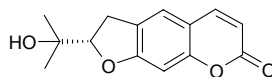
Texogenin; Neosamogenin [562-35-6]  $C_{27}H_{44}O_4$  (432.65). Crystals (MeOH), mp 255~257°C, mp 171~172°C,  $[\alpha]_D^{25} = -70.3^\circ$  (CHCl<sub>3</sub>). Source: ZHI MU *Anemarrhena asphodeloides*. Ref: 2, 1521.

**13570 Markogenin-3-O-β-D-glucopyranosyl-(1→2)-β-D-galactopyranoside**

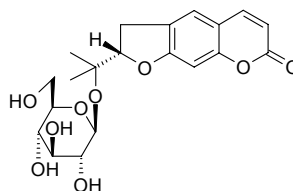
$C_{39}H_{64}O_{14}$  (756.94). Source: ZHI MU *Anemarrhena asphodeloides*. Ref: 2.

**13571 Marmesin**

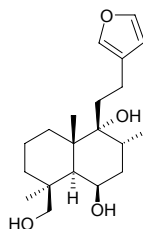
$C_{14}H_{14}O_4$  (246.27). Lamellar crystals (acetone, ethanol, benzene or ethyl acetate), mp 189.5°C,  $[\alpha]_D = +26.8^\circ$  (chloroform); yellow amorphous powder,  $[\alpha]_D = -15.8^\circ$  ( $c = 0.1$ , MeOH)<sup>[3797]</sup>. Pharm: Antispasmodic (*in vitro*, rat, intestinal spasm caused by BaCl<sub>2</sub>); antihypertensive (cat); antileishmanial (*Leishmania major* promastigote, 10 μmol/L, survival = (97.7±1.7)%, 1 μmol/L, survival = (96.5±1.1)%, control Amphotericin B, 10 μmol/L, survival = (0.2±0.04)%, 1 μmol/L, survival = (71.9±4.4)%)<sup>[3797]</sup>; antifungal inactive (silica gel TLC, *Cladosporium cucumerinum*, control Nystatin, MIA = 0.2 μg)<sup>[3797]</sup>; AChE inhibitor (*in vitro*, IC<sub>50</sub> = 67 μmol/L)<sup>[3058]</sup>; aromatase inhibitor inactive (*in vitro*, IC<sub>50</sub> > 40 μmol/L; control Aminoglutethimide, IC<sub>50</sub> = 6.4 μmol/L)<sup>[3090]</sup>. Source: A NUO TI HUA JIAO *Zanthoxylum arnotianum*, BAI YUN HUA *Heraclium rapula*, BAI ZHI *Angelica dahurica* [Syn. *Angelica porphyrocaulis*], DU HUI MAO DOU *Tephrosia toxicaria* (stem: yield = 0.00023% dw)<sup>[4718]</sup>, GOU SHU *Broussonetia papyrifera*<sup>[3090]</sup>, HOU GUO DANG GUI *Angelica pachycarpa*, JU MAO LEI A WEI *Ferulago capillaries* (root), MU<sup>(4)</sup> JU *Aegle marmelos*, SHI FANG FENG *Peucedanum terebinthaceum*, BAI ZHI *Angelica dahurica* [Syn. *Angelica porphyrocaulis*], QIANG HUO *Notopterygium incisum*, CHAO XIAN DANG GUI *Angelica gigas* (underground part)<sup>[3058]</sup>, YUN NAN QIANG HUO *Pleurospermum rivulorum*, YUN QIAN HU *Peucedanum rubricaula*, *Thamnosma rhodesica* (root)<sup>[3797]</sup>. Ref: 2, 177, 551, 661, 1521, 3058, 3090, 3797, 3938, 4718.

**13572 Marmesinin**

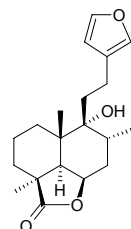
[495-30-7]  $C_{20}H_{24}O_9$  (408.41). Amorphous powder, mp 259~260°C,  $[\alpha]_D^{24} = -44^\circ$ ; mp 129°C. Pharm: Antioxidant (DPPH scavenger, EC<sub>50</sub> > 25 μg/mL, 25 μg/mL InRt = 24%, control Ascorbic acid, EC<sub>50</sub> = 1.6 μg/mL = 9.1 μmol/L)<sup>[4154]</sup>. Source: BEI SHA SHEN *Glehnia littoralis* (underground part), CHOU CAO *Ruta graveolens*, DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*]. Ref: 6, 344, 3525, 4154.

**13573 Marrubenol**

$C_{20}H_{32}O_4$  (336.48). Pharm: Vascular relaxant (inhibits 100 μmol/L KCl-induced contraction of rat aorta, IC<sub>50</sub> = (7.7±1.9) μmol/L, P<0.05). Source: OU XIA ZHI CAO *Marrubium vulgare*. Ref: 5355.

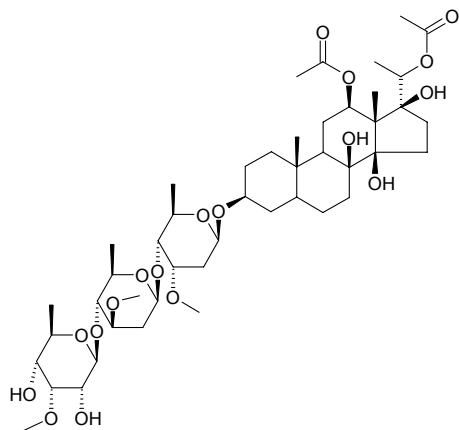
**13574 Marrubiin**

[465-92-9]  $C_{20}H_{28}O_4$  (332.44). Crystals (EtOH), mp 160°C,  $[\alpha]_D = +33.3^\circ$  ( $c = 1$ , CHCl<sub>3</sub>). Pharm: Antitussive (dispels phlegm); vascular relaxant (inhibits 100 μmol/L KCl-induced contraction of rat aorta, IC<sub>50</sub> = (24±2) μmol/L,  $p < 0.05$ )<sup>[5355]</sup>. Source: OU XIA ZHI CAO *Marrubium vulgare*. Ref: 658, 5355.

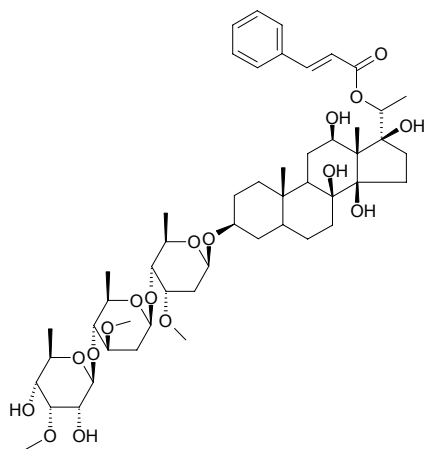


**13575 Marsdekoiside C**

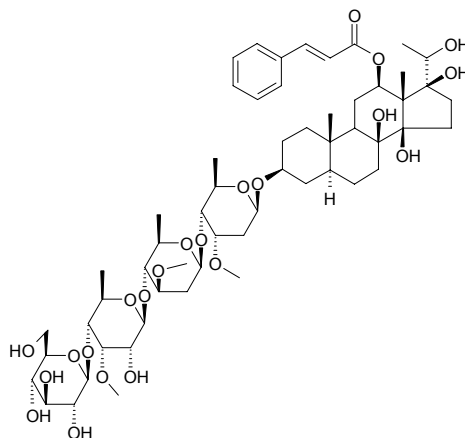
[139502-16-2] C<sub>46</sub>H<sub>76</sub>O<sub>18</sub> (917.11). White amorphous powder, mp 156~158°C,  $[\alpha]_D^{19} = +25^\circ$  ( $c = 0.20$ , methanol). **Pharm:** Anti-fertility agent (female SD rat, without estrogen's action). **Source:** DA YE NIU NAI CAI *Marsdenia koi*. **Ref:** 200.

**13576 Marsdekoiside E**

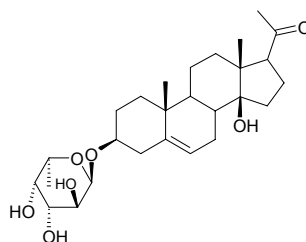
C<sub>51</sub>H<sub>78</sub>O<sub>17</sub> (963.18). White amorphous powder, mp 154~160°C. **Source:** DA YE NIU NAI CAI *Marsdenia koi*. **Ref:** 449.

**13577 Marsdeoreophiside B**

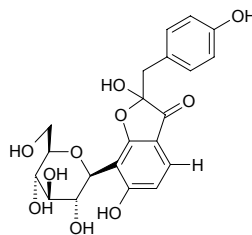
12-*O*-Cinnamylidihydrosarcostin-3-*O*-β-*D*-glucopyranosyl-(1→4)-*O*-3-*O*-methyl-6-deoxy-β-*D*-allopypyranosyl-(1→4)-*O*-β-*D*-oleandropyranosyl-(1→4)-β-*D*-cymaropyranoside C<sub>57</sub>H<sub>88</sub>O<sub>22</sub> (1125.32). White amorphous powder, mp 183~184°C,  $[\alpha]_D^{19} = +49.2^\circ$  ( $c = 0.065$ , methanol). **Source:** HUI ZHU NIU NAI CAI *Marsdenia oreophila*. **Ref:** 298.

**13578 Marsin**

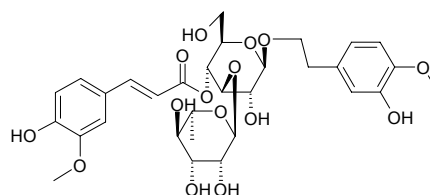
Ketocalogenin-3-*O*-α-*L*-fucopyranoside C<sub>27</sub>H<sub>47</sub>O<sub>7</sub> (478.63). White amorphous powder, mp 142°C,  $[\alpha]_D = +6.70^\circ$  ( $c = 0.03$ , CHCl<sub>3</sub>). **Source:** ROU LEI NIU NAI CAI *Marsdenia roylei* (aerial parts). **Ref:** 3490.

**13579 Marsuposide**

2-Hydroxy-2-*p*-hydroxybenzyl-3(2*H*)-6-hydroxybenzofuranone-7-*C*-β-*D*-glucopyranoside C<sub>21</sub>H<sub>22</sub>O<sub>10</sub> (434.40). Light yellow crystals, mp 156~158°C,  $[\alpha]_D^{26} = +8.4^\circ$  ( $c = 0.225$ , MeOH). **Source:** NANG ZHUANG ZI TAN *Pterocarpus marsupium* (heartwood). **Ref:** 3789.

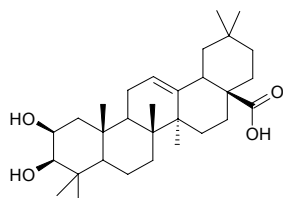
**13580 Martynoside**

[67884-12-2] C<sub>31</sub>H<sub>40</sub>O<sub>15</sub> (652.66). **Source:** CHANG YE CHE QIAN *Plantago lanceolata*, GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *Huechingensis*], JIA MA CHI XIAN *Bacopa monniera* (whole herb: yield = 0.0010%fw)<sup>[4664]</sup>, MAO PAO TONG *Paulownia tomentosa*, SI CHI SI LENG CAO *Schnabelia tetradonta* (aerial parts: yield = 0.0016%dw)<sup>[4665]</sup>, ZI HUA GUAN MAO RUI HUA *Verbascum wiedemannianum*, *Sideritis ozurkii* (aerial parts). **Ref:** 2, 660, 3827, 4664, 4665, 5020, 5449.

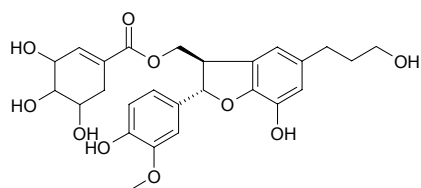


**13581 (2 $\beta$ ,3 $\beta$ )-Maslinic acid**

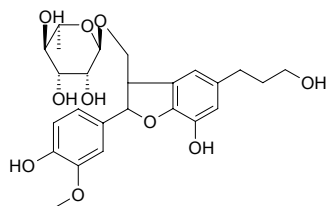
$C_{30}H_{48}O_4$  (472.71). **Pharm:** Antioxidant (anti-lipid peroxidation, effects on plasma oxidation in basal state and after incubation with  $Fe^{2+}/H_2O_2$ : blank, lipid peroxidation(basal) =  $(2.88 \pm 0.71) \mu\text{mol/L}$ , lipid peroxidation( $Fe^{2+}/H_2O_2$ ) =  $(22.23 \pm 2.41) \mu\text{mol/L}$ ; control(1mL/kg  $CCl_4$  to generate  $CCl_3^*$ ), lipid peroxidation(basal) =  $(9.83 \pm 1.37) \mu\text{mol/L}$ , lipid peroxidation( $Fe^{2+}/H_2O_2$ ) =  $(34.09 \pm 8.36) \mu\text{mol/L}$ ; MA(100mg/kg)+ $CCl_4$ , lipid peroxidation(basal) =  $(8.05 \pm 0.27) \mu\text{mol/L}$ , lipid peroxidation( $Fe^{2+}/H_2O_2$ ) =  $(27.51 \pm 2.10) \mu\text{mol/L}$ ; MA(50mg/kg)+ $CCl_4$ , lipid peroxidation(basal) =  $(8.15 \pm 0.61) \mu\text{mol/L}$ , lipid peroxidation( $Fe^{2+}/H_2O_2$ ) =  $(31.86 \pm 1.81) \mu\text{mol/L}$ ; MA(100mg/kg), lipid peroxidation(basal) =  $(2.47 \pm 0.30) \mu\text{mol/L}$ , lipid peroxidation( $Fe^{2+}/H_2O_2$ ) =  $(23.71 \pm 2.58) \mu\text{mol/L}$ ; MA(50mg/kg), lipid peroxidation(basal) =  $(2.51 \pm 0.16) \mu\text{mol/L}$ , lipid peroxidation( $Fe^{2+}/H_2O_2$ ) =  $(22.91 \pm 1.89) \mu\text{mol/L}$ ; Silymarin(35mg/kg)+ $CCl_4$ , lipid peroxidation(basal) =  $(6.46 \pm 0.95) \mu\text{mol/L}$ , lipid peroxidation( $Fe^{2+}/H_2O_2$ ) =  $(27.06 \pm 2.37) \mu\text{mol/L}$ ); antioxidant (anti-lipid peroxidation, effects on  $Fe^{+3}$ /ascorbate-induced lipid peroxidation in rat hepatocyte membrane: MA(10mg/mL), InRt = 51%; Silymarin(0.7mg/mL), InRt = 53%). **Source:** YOU GAN LAN *Ole<sup>a</sup> europaea*. **Ref:** 5389.

**13582 Massonianoid A**

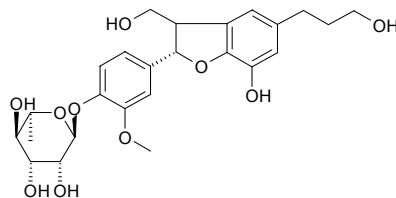
(7*S*,8*R*)-3',4,9-Trihydroxy-4-methoxy-9-*O*-shikimoyl-7,8-dihydrobenzofuran-1'-propylneolignan  $C_{26}H_{30}O_{10}$  (502.52). Yellow-white cream, mp 124~144°C,  $[\alpha]_D^{25} = -60.19^\circ$  ( $c = 0.05$ , MeOH). **Source:** MA WEI SONG YE *Pinus massoniana*. **Ref:** 2479.

**13583 Massonianoside A**

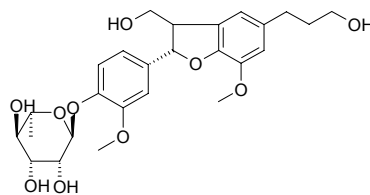
(7*S*,8*R*)-3,4,9'-Trihydroxyl-3-methoxyl-7,8-dihydrobenzofuran-1'-propanolne oligan-9-*O*- $\alpha$ -*L*-rhamnopyranoside  $C_{25}H_{32}O_{10}$  (492.53). White-liked amorphous powder, mp 130~131°C,  $[\alpha]_D = -14.8^\circ$  ( $c = 3.29$ ,  $CH_3OH$ ). **Source:** MA WEI SONG YE *Pinus massoniana*. **Ref:** 2236.

**13584 Massonianoside B**

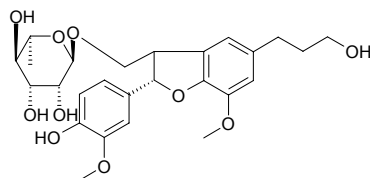
(7*S*,8*R*)-3,9,9'-Trihydroxyl-3-methoxyl-7,8-dihydrobenzofuran-1'-propanolne oligan-4-*O*- $\alpha$ -*L*-rhamnopyranoside  $C_{25}H_{32}O_{10}$  (492.53). White-like amorphous powder, mp 127~128°C,  $[\alpha]_D = -26.4^\circ$ . **Source:** MA WEI SONG YE *Pinus massoniana*. **Ref:** 2131.

**13585 Massonianoside C**

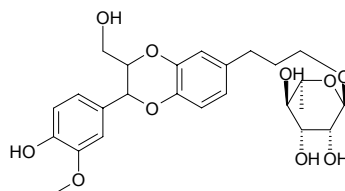
(7*S*,8*R*)-9,9'-Dihydroxyl-3,3'-dimethoxyl-7,8-dihydrobenzofuran-1'-propanolne oligan-4-*O*- $\alpha$ -*L*-rhamnopyranoside  $C_{26}H_{34}O_{10}$  (506.55). White-liked amorphous powder, mp 97~99°C,  $[\alpha]_D = -24.5^\circ$  ( $c = 4.80$ ,  $CH_3OH$ ). **Source:** MA WEI SONG YE *Pinus massoniana*. **Ref:** 2236.

**13586 Massonianoside D**

(7*S*,8*R*)-4,9'-Dihydroxy-3,3'-dimethoxyl-7,8-dihydrobenzofuran-1'-propanolne oligan-9-*O*- $\alpha$ -*L*-rhamnopyranoside  $C_{26}H_{34}O_{10}$  (506.55). White-like amorphous powder, soluble in water, methanol and acetone,  $[\alpha]_D^{25} = -10.3^\circ$  ( $c = 3.09$ , MeOH). **Source:** MA WEI SONG YE *Pinus massoniana*. **Ref:** 2462.

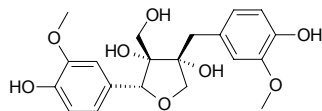
**13587 Massonianoside E**

3-Methoxyl-9'- $\alpha$ -*L*-rhamnopyranosyl-4':7,5':8-diepoxyneolignan-4,9-diol  $C_{25}H_{32}O_{10}$  (492.53). White amorphous powder, mp 146~148°C,  $[\alpha]_D^{25} = -41.95^\circ$  ( $c = 0.18$ , MeOH). **Source:** MA WEI SONG YE *Pinus massoniana*. **Ref:** 4833.

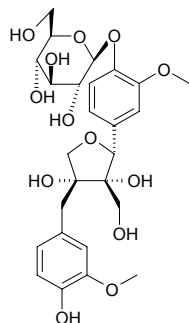


**13588 Massoniresinol**

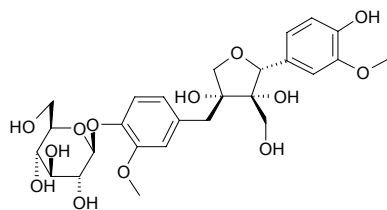
Vladinol A [96087-10-4] C<sub>20</sub>H<sub>24</sub>O<sub>8</sub> (392.41). Amorphous,  $[\alpha]_D^{25} = -31.4^\circ$  ( $c = 0.79$ , MeOH). **Source:** CHUAN MU XIANG *Vladimiria souliei* [Syn. *Jurinea souliei*], MA WEI SONG YE *Pinus massoniana*. **Ref:** 1248, 1521.

**13589 (-)-Massoniresinol 4'-O-β-D-glucopyranoside**

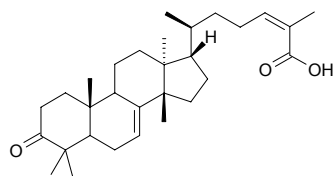
C<sub>26</sub>H<sub>34</sub>O<sub>13</sub> (554.55). Amorphous powder,  $[\alpha]_D^{26} = -63.8^\circ$  ( $c = 0.19$ , MeOH). **Source:** LAN SHAI PIAO *Sambucus sieboldiana* (leaf). **Ref:** 4192.

**13590 (-)-Massoniresinol 4''-O-β-D-glucopyranoside**

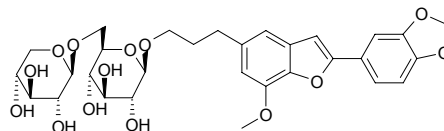
C<sub>26</sub>H<sub>34</sub>O<sub>13</sub> (554.55). Amorphous powder,  $[\alpha]_D^{26} = -70.0^\circ$  ( $c = 0.20$ , MeOH). **Source:** LAN SHAI PIAO *Sambucus sieboldiana* (leaf), XIE CAO *Valeriana officinalis* (root; yield = 0.012%dw). **Ref:** 4192, 4656.

**13591 Masticadienonic acid**

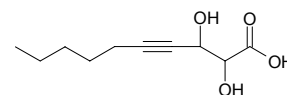
[514-49-8] C<sub>30</sub>H<sub>46</sub>O<sub>3</sub> (454.70). **Pharm:** Cytotoxic (leukemia cells L<sub>1210</sub>, IC<sub>50</sub> = 20 μg/mL)<sup>[3786]</sup>, Anti-inflammatory (*in vivo*, prevents ear oedema formation caused by PMA and synthesis of LOX products, especially LTC<sub>4</sub> and COX metabolites derived from arachidonic acid)<sup>[4415]</sup>. **Source:** RU DU XIANG *Pistacia terebinthus*, *Juliania adstringens* (bark). **Ref:** 3786, 4415.

**13592 Masutakeside I**

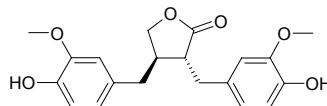
C<sub>30</sub>H<sub>36</sub>O<sub>14</sub> (620.61). Amorphous powder,  $[\alpha]_D^{25} = -19.9^\circ$  ( $c = 2.6$ , MeOH); white amorphous powder,  $[\alpha]_D^{22} = -41.3^\circ$  ( $c = 0.1$ , MeOH). **Pharm:** Anticomplement activity (IC<sub>50</sub> = 166 μmol/L, control Rosmarinic acid IC<sub>50</sub> = 182 μmol/L)<sup>[4096]</sup>. **Source:** RI BEN AN XI XIANG JING PI *Styrax japonica*, ZHU HONG LIU HUANG SE XUN KONG JUN *Laetiporus sulphureus* var. *miniatus*. **Ref:** 3515, 4096.

**13593 Masutakic acid A**

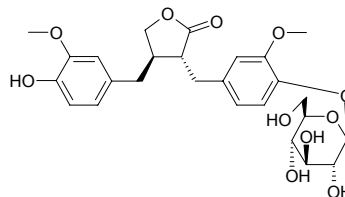
C<sub>10</sub>H<sub>16</sub>O<sub>4</sub> (200.24). Amorphous powder,  $[\alpha]_D^{25} = -13.2^\circ$  ( $c = 0.7$ , MeOH). **Source:** ZHU HONG LIU HUANG SE XUN KONG JUN *Laetiporus sulphureus* var. *miniatus*. **Ref:** 3515.

**13594 Matairesinol**

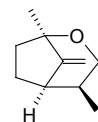
[580-72-3] C<sub>20</sub>H<sub>22</sub>O<sub>6</sub> (358.39). Colorless amorphous powder. **Pharm:** cAMP phosphodiesterase inhibitor; synergist of pesticides. **Source:** SUI HUA LUO HAN SONG *Podocarpus spicatus*, YI YE TIE SHAN *Tsuga heterophylla* (sapwood), *Abies* sp., *Picea* sp., *Heliopsis* sp. **Ref:** 658, 3965.

**13595 Matairesinoside**

[23202-85-9] C<sub>26</sub>H<sub>32</sub>O<sub>11</sub> (520.54). Crystals (EtOAc), mp 93°C,  $[\alpha]_D^{12} = -46^\circ$  (EtOH); White powder, mp mp 93~96°C (dec),  $[\alpha]_D^{25} = -46^\circ$  ( $c = 0.68$ , alcohol). **Source:** JIN ZHONG HUA *Forsythia viridissima*, LIAN QIAO *Forsythia suspensa*, RI BEN AN XI XIANG JING PI *Styrax japonica*. **Ref:** 2, 1521, 2546.

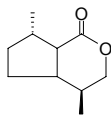
**13596 Matatabiether**

1,4-Dimethyl-8-methylene-2-oxabicyclo[3.2.1]octane [21700-60-7] C<sub>10</sub>H<sub>16</sub>O (152.24). Oil, bp 67°C/16mmHg,  $[\alpha]_D^{23} = -147.3^\circ$  ( $c = 1.03$ , CHCl<sub>3</sub>). **Source:** MU TIAN LIAO *Actinidia polygama*. **Ref:** 1249, 1521.

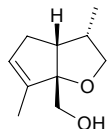


**13597 Matatabilactone**

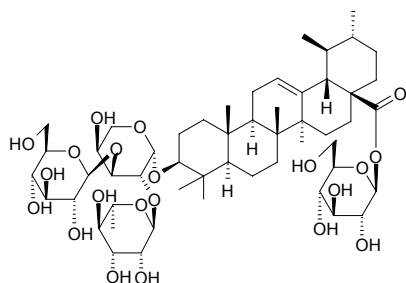
$C_{10}H_{16}O_2$  (168.24). Source: MU TIAN LIAO *Actinidia polygama*. Ref: 1250.

**13598 Matatabiol**

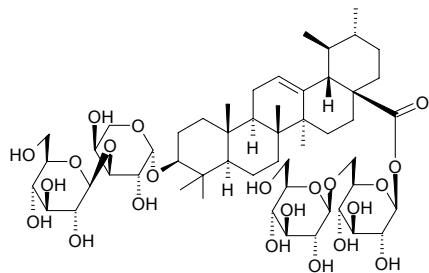
$C_{10}H_{16}O_2$  (168.24). Source: MU TIAN LIAO *Actinidia polygama*. Ref: 1251.

**13599 Matesaponin 2**

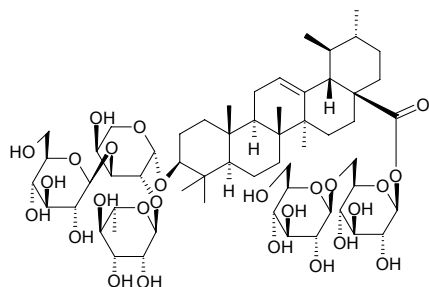
$C_{53}H_{86}O_{21}$  (1059.26). Source: BA LA GUI CHA *Ilex paraguariensis*. Ref: 2160.

**13600 Matesaponin 3**

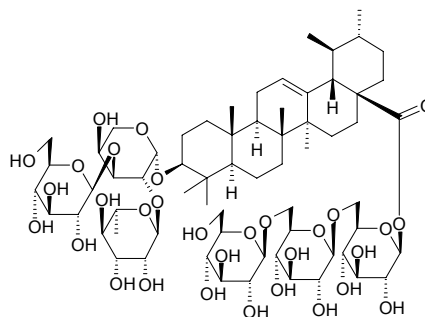
$C_{53}H_{86}O_{22}$  (1075.26). Source: BA LA GUI CHA *Ilex paraguariensis*. Ref: 2160.

**13601 Matesaponin 4**

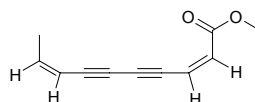
$C_{59}H_{96}O_{26}$  (1221.41). Source: BA LA GUI CHA *Ilex paraguariensis*. Ref: 2160.

**13602 Matesaponin 5**

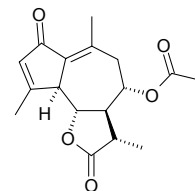
$C_{65}H_{106}O_{31}$  (1383.55). Source: BA LA GUI CHA *Ilex paraguariensis*. Ref: 2160.

**13603 Matricaria ester**

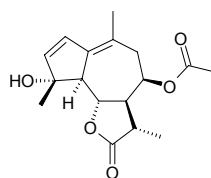
Methyl(2Z,8Z)-decadien-4,6-dienoate [928-36-9]  $C_{11}H_{10}O_2$  (174.20). mp 37°C. Source: QI ZHOU YI ZHI HAO *Conyza canadensis* [Syn. *Erigeron canadensis*], YI ZHI HUANG HUA *Solidago virgaurea* var. *leiocarpa* [Syn. *Solidago decurrens*]. Ref: 6, 1281.

**13604 Matricarin**

Artesin A [5989-43-5]  $C_{17}H_{20}O_5$  (304.35). mp 193–195°C. Source: MU<sup>(3)</sup> JU *Matricaria chamomilla* [Syn. *Matricaria recutita*]. Ref: 6.

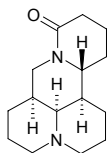
**13605 Matricin**

Prochamazulene [29041-35-8]  $C_{17}H_{22}O_5$  (306.36). mp 158–160°C. Pharm: Precursor to biosynthesis of chamazulene. Source: MU<sup>(3)</sup> JU *Matricaria chamomilla* [Syn. *Matricaria recutita*], KA SI HAO *Artemisia caruthii*, *Achillea* sp. Ref: 6, 658.

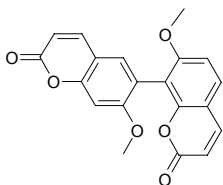


**13606 Matrine**

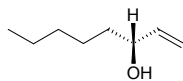
*cis*-Matrine; lupanidine; Sophocarpidine [519-02-8] C<sub>15</sub>H<sub>24</sub>N<sub>2</sub>O (248.37). mp (α) 76°C, (β) 87°C, (δ) 84°C, bp (γ) 223°C/6mmHg, [α]<sub>D</sub> = +38° (β, ethanol), soluble in water, benzene, chloroform, ether, CS<sub>2</sub>, slightly soluble in petroleum spirit.<sup>[5507]</sup> **Pharm:** Analgesic (mus, chemical and heat stimulation models); antibacterial (15 strains of dysentery); antineoplastic (mus EAC *in vitro* and *in vivo*, mus Lewis lung cancer, S<sub>180</sub>); used in treatment of bacillary dysentery (cure rate = (64–95)%); LD<sub>50</sub> (mus ip) = 150mg/kg, (rat ip) = 125mg/kg. **Source:** BAI CI HUA *Sophora viciifolia*, HUANG YE HUAI *Sophora chrysophylla*, KU DOU ZI *Sophora alopecuroides* (seed: content = 0.149%<sup>[5508]</sup>), KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*] (dried root: content scope of 7 origins = trace–0.64%, mean content = 0.20%<sup>[5508]</sup>), SHAN DOU GEN *Sophora subprostrata* [Syn. *Sophora tonkinensis*] (root and rhizome: mean content of 12 origins = 0.276%<sup>[5508]</sup>), SI CHI HUAI *Sophora tetraptera*. **Ref:** 4, 546, 564, 593, 658, 5501, 5507, 5508.

**13607 Matsukaze lactone**

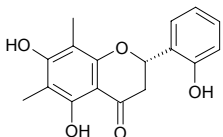
[3153-73-9] C<sub>20</sub>H<sub>14</sub>O<sub>6</sub> (350.33). Platelets (MeOH), mp 266.5–267.5°C. **Pharm:** Antibacterial (*Bacillus subtilis* ATCC1633 and *Staphylococcus aureus* 209P, EC = 1 mg/mL). **Source:** RI BEN CHOU JIE CAO *Boenninghausenia japonica*, YAN JIAO CAO *Boenninghausenia albiflora*. **Ref:** 6, 1521, 1581.

**13608 Matsutake alcohol**

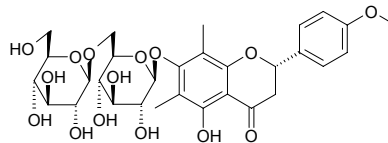
Matsutakeol; 1-Octen-3-ol [22658-80-6] C<sub>8</sub>H<sub>16</sub>O (128.22). **Source:** KUN BU *Laminaria japonica*, SHE TAI *Conocephalum conicum*, SHUANG BAO MO GU *Agaricus bisporus*, SONG XUN *Tricholoma matsutake* [Syn. *Armillaria matsutake*], XIANG XUN *Lentinus edodes*. **Ref:** 660, 1252, 1490, 1491, 1492.

**13609 Matteucin**

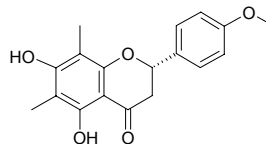
[77744-53-7] C<sub>17</sub>H<sub>16</sub>O<sub>5</sub> (300.31). mp 198–200°C. **Source:** DONG FANG JIA GUO JUE *Matteuccia orientalis*. **Ref:** 1253.

**13610 Matteucinin**

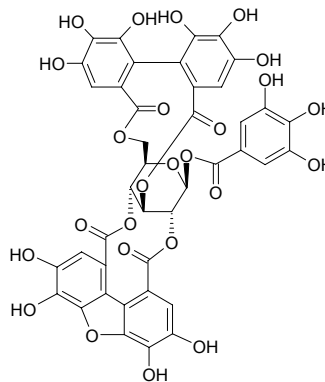
C<sub>30</sub>H<sub>38</sub>O<sub>15</sub> (638.63). Colorless or yellowish acicular crystals (methanol–water), mp 140–141°C, [α]<sub>D</sub><sup>13</sup> = –29.4° (c = 0.32, acetone). **Pharm:** Antitussive (dispels phlegm); treatment of chronic bronchitis. **Source:** DU JUAN HUA YE *Rhododendron simsii*, DU JUAN HUA *Rhododendron simsii*. **Ref:** 6, 658.

**13611 Matteucinol**

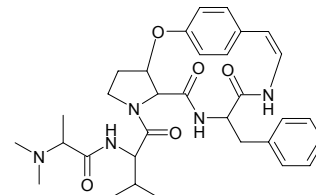
[489-38-3] C<sub>18</sub>H<sub>18</sub>O<sub>5</sub> (314.34). mp 173–174°C. **Pharm:** Antitussive (dispels phlegm); treatment of chronic bronchitis. **Source:** DONG FANG JIA GUO JUE *Matteuccia orientalis*, DU JUAN HUA *Rhododendron simsii*. **Ref:** 658, 1253.

**13612 Mauotusin**

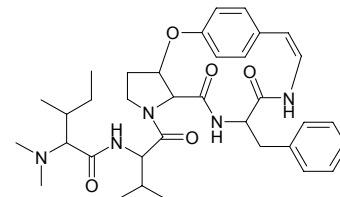
C<sub>41</sub>H<sub>26</sub>O<sub>25</sub> (918.65). **Source:** ZE QI *Euphorbia helioscopia*. **Ref:** 1254.

**13613 Mauritine A**

[38478-72-7] C<sub>32</sub>H<sub>41</sub>N<sub>5</sub>O<sub>5</sub> (575.71). mp 104°C. **Source:** MIAN ZAO *Ziziphus mauritiana*. **Ref:** 6.

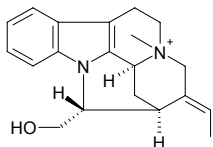
**13614 Mauritine B**

[38478-73-8] C<sub>33</sub>H<sub>47</sub>N<sub>5</sub>O<sub>5</sub> (617.81). **Source:** MIAN ZAO *Ziziphus mauritiana*. **Ref:** 6.

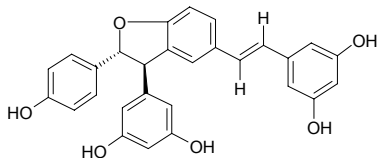


**13615 Mavacurine**

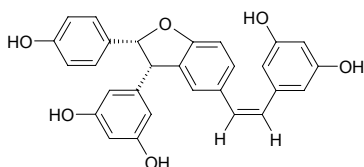
[6801-19-0]  $C_{20}H_{25}N_2O^+$  (309.44). Source: DU MA QIAN *Strychnos toxifera*, FEN CHA MA QIAN ZI *Strychnos divaricans*, MA QIAN ZI *Strychnos nux-vomica*, MI SHI MA QIAN ZI *Strychnos mitschelinii*, YA MA XUN MA QIAN ZI *Strychnos amazonica*, *Strychnos guianensis* (stem cortex). Ref: 6, 1521.

**13616 Maximol A**

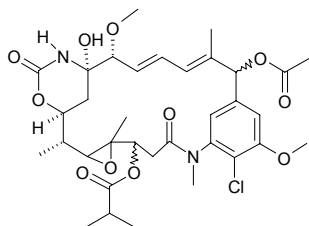
$C_{28}H_{22}O_6$  (454.48). Brown amorphous powder,  $[\alpha]_D^{25} = -16.3^\circ$  ( $c = 0.75$ , MeOH). Source: MA SHI DA HUANG *Rheum maximowiczii* (root). Ref: 5136.

**13617 Maximol B**

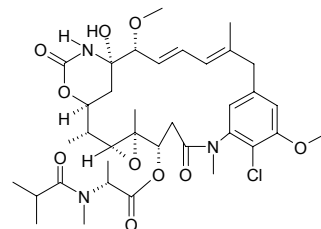
$C_{28}H_{22}O_6$  (454.48). Brown amorphous powder,  $[\alpha]_D^{25} = +99.4^\circ$  ( $c = 0.34$ , MeOH). Source: MA SHI DA HUANG *Rheum maximowiczii* (root). Ref: 5136.

**13618 Maytanbutacine**

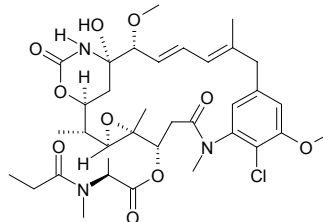
[62414-95-3]  $C_{34}H_{45}ClN_2O_{11}$  (693.20). Crystals (dichloromethane-ether), mp 253–255°C,  $[\alpha]_D^{33} = -90^\circ$  ( $c = 0.055$ , ethanol). Pharm: Antineoplastic (mus  $P_{388}$ , optimum dose 12.5 µg/kg, biotic prolonged rate = 79%); cytotoxic (KB,  $ED_{50} = 0.0015$  ng/mL). Source: CHI YE MEI DENG MU *Maytenus serrata*. Ref: 661.

**13619 Maytanbutine**

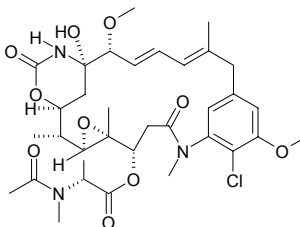
[38997-10-3]  $C_{36}H_{50}ClN_3O_{10}$  (720.27). mp 170–171°C,  $[\alpha]_D^{30} = -122$  ( $c = 0.0492$ , chloroform). Pharm: Antineoplastic (mus  $P_{388}$ , optimum dose 0.8 mg/kg, biotic prolonged rate = 90%); cytotoxic (KB,  $ED_{50} = 0.0036$  ng/mL). Source: CHI YE MEI DENG MU *Maytenus serrata*, LUAN YE MEI DENG MU *Maytenus ovatus*, BU CHANG NAN MEI DENG MU *Maytenus buchananii*. Ref: 661.

**13620 Maytanprine**

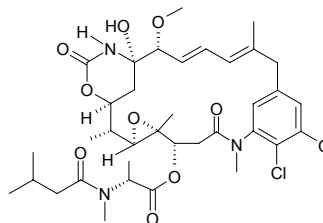
[38997-09-0]  $C_{35}H_{48}ClN_3O_{10}$  (706.24). mp 178°C. Pharm: Antineoplastic (mus,  $P_{388}$ , optimum dose 1.6 µg/kg *in vivo*, biotic prolonged rate = 54%); cytotoxic (KB *in vitro*,  $ED_{50} = 0.00014$  ng/mL). Source: MI HUA MEI DENG MU *Maytenus confertiflorus*, BU CHANG NAN MEI DENG MU *Maytenus buchananii*, YUN NAN MEI DENG MU *Maytenus hookeri*. Ref: 5, 658.

**13621 Maytansine**

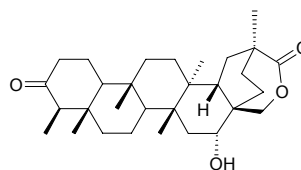
[35846-53-8]  $C_{34}H_{46}ClN_3O_{10}$  (692.21). mp 182°C. Pharm: Antineoplastic ( $P_{388}$   $ED_{50} = 6.0$  µmol/L, KB  $ED_{50} = 10^{-5}$  µg/mL, mus EAC, 0.01 mg/kg, biotic prolonged rate = 132%,  $S_{180}$ , Lewis lung cancer, B16 melanoma, and  $L_{1210}$  *in vitro* and *in vivo*); LD (dog) = 0.09–0.12 mg/(kg·d) for 3–4 days, leads to death, (monkey) = 0.18–0.24 mg/(kg·d) for 5–6 day, leads to death. Source: CHI YE MEI DENG MU *Maytenus serrata*, GUANG XI MEI DENG MU *Maytenus guangsiensis*, LUAN YE MEI DENG MU *Maytenus ovatus* (the compound was isolated from the plant by S.M.Kupchan et al. in 1972)<sup>[5505]</sup>, MI HUA MEI DENG MU *Maytenus confertiflorus*, BU CHANG NAN MEI DENG MU *Maytenus buchananii*, YUN NAN MEI DENG MU *Maytenus hookeri*. Ref: 4, 658, 5505.

**13622 Maytanvaline**

[52978-27-5]  $C_{37}H_{52}ClN_3O_{10}$  (734.29). mp 175.0–176.5°C,  $[\alpha]_D^{26} = -135^\circ$  ( $c = 0.950$ , chloroform). Pharm: Antineoplastic (mus  $P_{388}$ , optimum dose 12.5 mg/kg, biotic prolonged rate = 87%); cytotoxic (KB,  $ED_{50} = 0.00023$  ng/mL). Source: BU CHANG NAN MEI DENG MU *Maytenus buchananii*. Ref: 661.

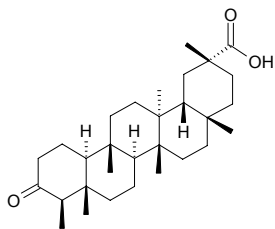
**13623 Maytenfolone A**

$C_{30}H_{46}O_4$  (470.70). Source: NAN SHE TENG GEN *Celastrus orbiculatus* [Syn. *Celastrus articulatus*]. Ref: 2511.

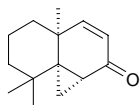


**13624 Maytenoic acid**

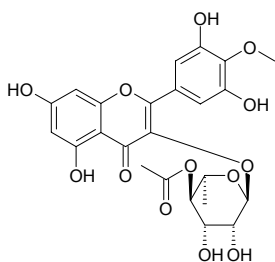
$C_{30}H_{48}O_3$  (456.72). **Pharm:** DPPH scavenger inactive (for  $40\mu\text{mol/L}$  DPPH radical,  $SC_{50} > 40\mu\text{mol/L}$ ). **Source:** SUO LA MU *Salacia prinoides* [Syn. *Salacia chinensis*] (stem). **Ref:** 4378.

**13625 Mayurone**

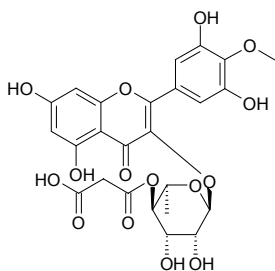
[4677-90-1]  $C_{14}H_{20}O$  (204.31). mp  $69.5\sim 70.0^\circ\text{C}$ . **Source:** CE BAI ZHI JIE *Thuja orientalis* [Syn. *Platycladus orientalis*; *Biota orientalis*]. **Ref:** 6.

**13626 Mearnsetin 3-O-(4''-O-acetyl)- $\alpha$ -L-<sup>1</sup>C<sub>r</sub>-rhamnopyranoside**

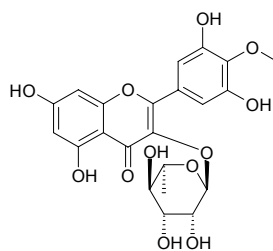
$C_{24}H_{24}O_{13}$  (520.45). Yellow amorphous powder. **Source:** WU MO *Eugenia jambolana* [Syn. *Syzygium cumini*; *Myrtus cumini*] (leaf). **Ref:** 5237.

**13627 Mearnsetin 3-O-(4''-O-malonyl)- $\alpha$ -L-rhamnopyranoside**

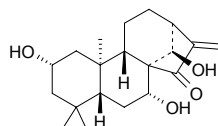
$C_{25}H_{24}O_{15}$  (564.46). **Source:** GAO SHAN CHA BIAO *Ribes alpinum* (leaf). **Ref:** 3541.

**13628 Mearnsitrin**

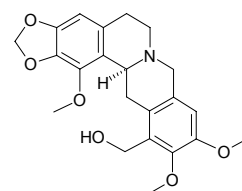
Mearnsetin-3-O- $\alpha$ -rhamnopyranoside; Myricetin-4'-O-methyl ether-3-O- $\alpha$ -L-rhamnopyranoside  $C_{22}H_{22}O_{12}$  (478.41). Amorphous solid,  $[\alpha]_D^{23.2} = -76.8^\circ$  ( $c = 0.69$ , MeOH). **Source:** WU MO *Eugenia jambolana* [Syn. *Syzygium cumini*; *Myrtus cumini*] (leaf), YANG PU TAO YE *Syzygium samarangense*, *Goniothalamus thwaitesii* (aerial parts). **Ref:** 4100, 5096, 5237.

**13629 Mebadonin**

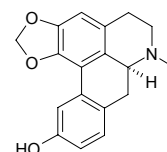
$C_{20}H_{30}O_4$  (334.46). mp  $271\sim 273^\circ\text{C}$  (dec),  $[\alpha]_D = -158^\circ$  ( $c = 1.0$ , dioxane). **Source:** YIN DI KUAN YE XIANG CHA CAI *Isodon umbrosa* var. *latifolia*. **Ref:** 4067.

**13630 Mecambridine**

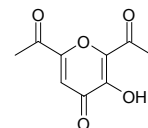
[31098-60-9]  $C_{22}H_{25}NO_6$  (399.45). mp  $179\sim 180^\circ\text{C}$ . **Pharm:** Analgesic (mus); CNS depressant (mus). **Source:** HONG HUA LV RONG HAO *Meconopsis punicea*, WEI ER SHI LV RONG HAO *Meconopsis cambrica*. **Ref:** 1255, 1521.

**13631 L-Mecambroline**

$C_{18}H_{17}NO_3$  (295.34). **Pharm:** Antihypertensive (order *Rodentia*). **Source:** CHE SHI NAN *Phoebe chemensii*, WEI ER SHI LV RONG HAO *Meconopsis cambrica*, YI XIAN YING SU *Papaver fugax*. **Ref:** 658.

**13632 Meconic acid**

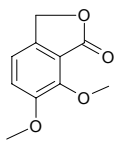
3-Hydroxy-4-oxo-4H-pyran-2,6-dicarboxylic acid [497-59-6]  $C_9H_8O_5$  (196.16). mp  $120^\circ\text{C}$  (dec). **Source:** LI CHUN HUA *Papaver commutatum* [Syn. *Papaver rhoeas*]. **Ref:** 6.



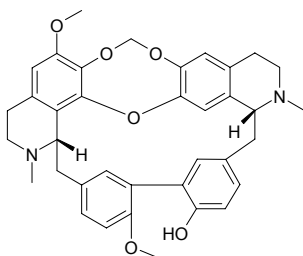


**13633 Meconine**

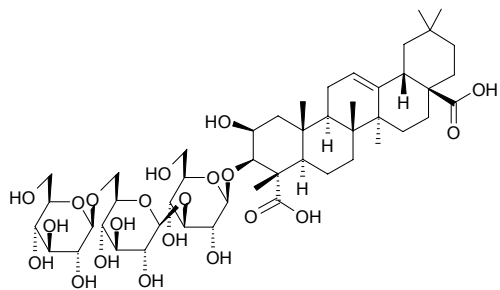
[569-31-3] C<sub>10</sub>H<sub>10</sub>O<sub>4</sub> (194.19). mp 102.5°C. Source: YA PIAN *Papaver somniferum*. Ref: 6.

**13634 (-)-Medelline**

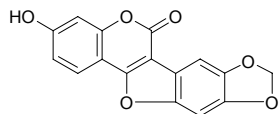
C<sub>37</sub>H<sub>38</sub>N<sub>2</sub>O<sub>6</sub> (606.73). Pharm: Mitochondrial respiratory chain complex I inhibitor (IC<sub>50</sub> = (2.01±0.29)μmol/L, Rolliniastatin-1, IC<sub>50</sub> = (0.6±0.04)nmol/L, Rotenone, IC<sub>50</sub> = (5.10±0.90)nmol/L). Source: GE LUN BI YA MU BAN SHU *Xylopia columbiana* (fruit). Ref: 4954.

**13635 Medicagenic acid 3-O-triglucoside**

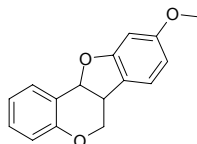
C<sub>48</sub>H<sub>76</sub>O<sub>21</sub> (989.13). Powder, mp 257~258°C, [α]<sub>D</sub><sup>23</sup> = +24° (c = 0.02, EtOH). Pharm: Hemolytic; inhibits production of *Trichoderma viride*. Source: MU XU *Medicago sativa*. Ref: 658.

**13636 Medicagol**

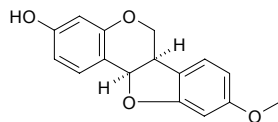
[1983-72-8] C<sub>16</sub>H<sub>8</sub>O<sub>6</sub> (296.24). mp 324~325°C. Source: HUI HUI DOU *Cicer arietinum*. Ref: 6.

**13637 Medicarpan**

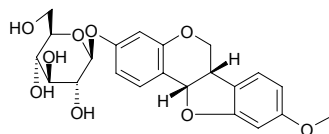
3-Hydroxy-9-methoxypterocarpan C<sub>16</sub>H<sub>14</sub>O<sub>3</sub> (254.29). Pharm: Antibacterial (*Escherichia coli*, inactive, control Chloramphenicol, MIA = 0.001μg; *Bacillus subtilis*, MIA = 100.0μg, Chloramphenicol, MIA = 0.001μg; *Staphylococcus aureus*, MIA = 10.0μg, Chloramphenicol, MIA = 0.001μg); antifungal (*Candida mycoderma*, MIA = 1.00μg, Miconazole MIA = 0.0001μg); antioxidant (DPPH scavenger, TLC detection limit = 1.0μg, IC<sub>50</sub> = 1100μg/mL; control Quercetin, TLC detection limit < 0.05μg, IC<sub>50</sub> = 7μg/mL; Gallic acid, TLC detection limit < 0.05μg, IC<sub>50</sub> = 4μg/mL; Ascorbic acid, TLC detection limit < 0.10μg, IC<sub>50</sub> = 18μg/mL). Source: *Bolusanthus speciosus* (root wood). Ref: 3785.

**13638 (-)-Medicarpin**

L-3-Hydroxy-9-methoxypterocarpan [32383-76-9] C<sub>16</sub>H<sub>14</sub>O<sub>4</sub> (270.29). Colorless columnar crystals (benzene), mp 131~132°C, [α]<sub>D</sub><sup>29</sup> = -220° (c = 1.4, chloroform), mp 127.5~128.5°C, [α]<sub>D</sub><sup>22</sup> = -226° (chloroform). Pharm: Antibacterial (*Mycobacterium tuberculosis* H37Rv *in vitro*, MIC = 10μg/mL, other testing strains, MIC ≥ 50μg/mL); antifungal (*Trichophyton mentagrophytes in vitro*, MIC = 30μg/mL); hepatoprotective (mus primary cultured hepatocytes, antihepatotoxin induced by D-galactosamine (GalN), 100μmol/L, InRt = (7.9±0.8)%, inactive, control Silybin, 100μmol/L, InRt = (77.0±5.5%)<sup>[4095]</sup>). Source: HONG CHE ZHOU CAO *Trifolium pratense*, HUANG QI *Astragalus membranaceus*, MA DAO SI WO CI DOU *Swartzia madagascariensis*, MENG GU HUANG QI *Astragalus mongholicus*, SI TE WEN HUANG TAN *Dalbergia stevensonii*, WU CI KE YA SHU *Andira inermis*, YI BIAN HUANG TAN *Dalbergia variabilis*, GUANG BU DING GONG TENG *Erycibe expansa*, *Lathyrus* sp., *Medicago* sp., *Trigonella* sp. Ref: 2, 660, 661, 1521, 4095.

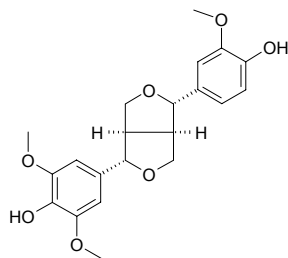
**13639 Medicarpin-3-O-glucoside**

C<sub>22</sub>H<sub>24</sub>O<sub>9</sub> (432.43). Source: HUANG GAN CAO *Glycyrrhiza kansuensis*. Ref: 1256.

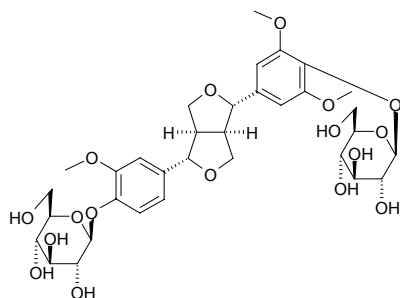


**13640 (+)-Medioresinol**

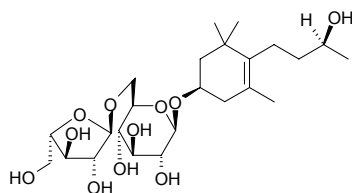
Medioresinol [40957-99-1]  $C_{21}H_{24}O_7$  (388.42). Colorless granular crystals (CH<sub>3</sub>OH), mp 169~171°C,  $[\alpha]_D^{24} = +11.30$  ( $c = 0.3$ , CHCl<sub>3</sub>). **Pharm:** CYP3A4 inhibitor and CYP2D6 inhibitor (*in vitro*, CYP3A4, IC<sub>50</sub> = 13.7 μmol/L; CYP2D6, IC<sub>50</sub> > 100 μmol/L; control Ketoconazole, CYP3A4, IC<sub>50</sub> = 0.72 μmol/L; control Quinidine, CYP2D6, IC<sub>50</sub> = 0.082 μmol/L)<sup>[4797]</sup>; plant growth stimulatory or inhibitory activity (radicle length: *Lactuca sativa*, 1 μmol/L, StRt = (30~60)%, 10 μmol/L, StRt > 61%, 100 μmol/L, StRt > 61%, 1 mmol/L, StRt > 61%; *Raphanus sativus*, 1 μmol/L, StRt = (10~30)%, 10 μmol/L, StRt = (30~60)%, 100 μmol/L, StRt = (30~60)%, 1 mmol/L, StRt = (10~30)%; *Allium cepa*, 1 μmol/L, InRt = (10~30)%, 10 μmol/L, StRt or InRt < 10%, 100 μmol/L, StRt or InRt < 10%, 1 mmol/L, InRt = (10~30)%)<sup>[5217]</sup>. **Source:** BI CHENG QIE *Piper cubeba* (fruit: yield = 0.000056% dw)<sup>[4797]</sup>, DU ZHONG *Eucommia ulmoides*, GUANG JING QIAN CAO *Rubia wallichiana* (stem), LEI GONG TENG *Tripterygium wilfordii*, XI YANG JIE GU MU *Sambucus nigra*. **Ref:** 683, 1209, 4369, 4797, 5217.

**13641 (+)-Medioresinol di-O-β-D-glucopyranoside**

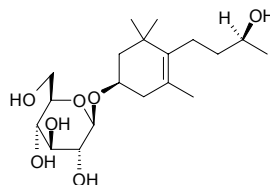
$C_{33}H_{44}O_{17}$  (712.71). **Source:** DU ZHONG *Eucommia ulmoides*, CI WU JIA *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*]. **Ref:** 2.

**13642 (3R,9S)-Megastigman-5-en-3,9-diol-3-O-[α-L-arabinofuranosyl-(1→6)]-β-D-glucopyranoside**

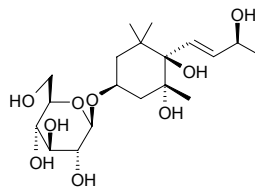
$C_{24}H_{42}O_{11}$  (506.60). White powder,  $[\alpha]_D = -47.1^\circ$  ( $c = 0.23$ , MeOH). **Source:** OU ZHOU CI BAI BIAN ZHONG *Juniperus communis* var. *depressa* (twig with leaf). **Ref:** 4477.

**13643 (3R,9S)-Megastigman-5-en-3,9-diol-3-O-β-D-glucopyranoside**

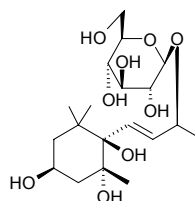
$C_{19}H_{34}O_7$  (374.48). White powder,  $[\alpha]_D = -48.5^\circ$  ( $c = 1.05$ , MeOH). **Pharm:** Antibacterial (*Helicobacter pylori* NCTC11637, MIC = 50 μg/mL, NCTC11916, MIC = 50 μg/mL, OCO1, MIC = 50 μg/mL, Hinokitiol (Nat. or Syn.), MIC = 100 μg/mL, 100 μg/mL, 50 μg/mL, respectively). **Source:** OU ZHOU CI BAI BIAN ZHONG *Juniperus communis* var. *depressa* (twig with leaf). **Ref:** 4477.

**13644 (3S,5R,6R,7E,9S)-Megastigman-7-ene-3,5,6,9-tetrol-3-O-β-D-glucopyranoside**

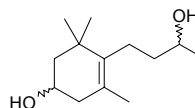
$C_{19}H_{34}O_9$  (406.48). Amorphous powder,  $[\alpha]_D^{24} = -38.0^\circ$  ( $c = 1.00$ , MeOH). **Source:** CHUI ZHU SUAN PAN ZI *Glochidion zeylanicum*, JIAN PU ZHAI GU KE *Erythroxylum cambodianum* (aerial parts), *Alangium premnifolium*. **Ref:** 2046, 4461.

**13645 (3S,5R,6R,7E,9S)-Megastigman-7-ene-3,5,6,9-tetrol-9-O-β-D-glucopyranoside**

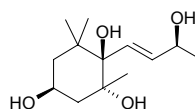
$C_{19}H_{34}O_9$  (406.48). Amorphous powder,  $[\alpha]_D^{24} = -56.3^\circ$  ( $c = 0.65$ , MeOH). **Source:** CHUI ZHU SUAN PAN ZI *Glochidion zeylanicum*, SHENG GU YOU *Staphylea bumalda* (leaf), *Alangium premnifolium*. **Ref:** 2046, 4478.

**13646 Megastigm-5-ene-3,9-diol**

$C_{13}H_{24}O_2$  (212.34). Oil,  $[\alpha]_D^{25} = -33.8^\circ$  ( $c = 0.5$ , CHCl<sub>3</sub>). **Source:** HONG GUI *Chamaecyparis formosensis*. **Ref:** 2315.

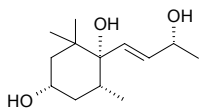
**13647 Megastigmenetetrol**

$C_{13}H_{24}O_4$  (244.33). Colorless needles, mp 183~185°C,  $[\alpha]_D^{26} = -25.7^\circ$ . **Source:** YI MU CAO *Leonurus heterophyllus* [Syn. *Leonurus artemisia*]. **Ref:** 2522.

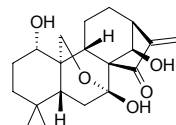


**13648 7-Megastigmene-3,6,9-triol**

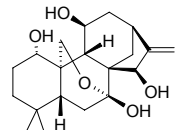
$C_{13}H_{24}O_3$  (228.33). Colorless oil. Source: XIAO YE HONG GUANG SHU *Knema globularia*. Ref: 2209.

**13649 Megathyrin A**

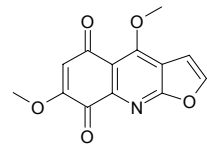
$C_{20}H_{28}O_5$  (348.44).  $[\alpha]_D^{20} = -21.5^\circ$  ( $c = 0.10$ , MeOH); mp 180–182°C.  $[\alpha]_D = -22.5^\circ$  ( $c = 0.082$ , MeOH). Source: ZI MAO XIANG CHA CAI *Isodon enanderianus* (aerial parts), DA ZHUI XIANG CHA CAI *Isodon megathyrus*. Ref: 4067, 5475.

**13650 Megathyrin B**

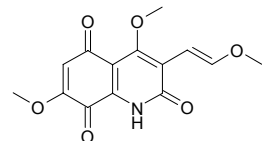
$C_{20}H_{30}O_5$  (350.46). mp 224–226°C,  $[\alpha]_D = -36^\circ$  ( $c = 0.05$ , MeOH);  $[\alpha]_D^{20} = -35.2^\circ$  ( $c = 0.06$ , MeOH). Source: DA ZHUI XIANG CHA CAI *Isodon megathyrus*, ZI MAO XIANG CHA CAI *Isodon enanderianus* (aerial parts). Ref: 4067, 5475.

**13651 Megistoquinone I**

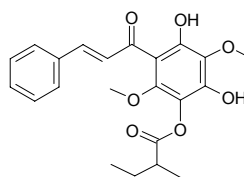
$C_{13}H_9NO_5$  (259.22). Pharm: Antibacterial (*Staphylococcus aureus* MIC = 2.35mg/mL, control Amoxysillin, MIC = 2.0μg/mL; *Staphylococcus epidermidis* MIC = 2.77mg/mL; *Pseudomonas aeruginosa* MIC = 3.24mg/mL; *Enterobacter cloacae* MIC = 3.12mg/mL; *Klebsiella pneumoniae* MIC = 5.25mg/mL; *Escherichia coli* MIC = 4.75mg/mL). Source: *Sarcomelicope megistophylla* (bark). Ref: 4172.

**13652 Megistoquinone II**

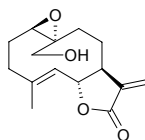
$C_{14}H_{13}NO_6$  (291.26). Pharm: Antibacterial (*Staphylococcus aureus* MIC = 0.75mg/mL, control Amoxysillin, MIC = 2.0μg/mL; *Staphylococcus epidermidis* MIC = 0.73mg/mL; *Pseudomonas aeruginosa* MIC = 0.97mg/mL; *Enterobacter cloacae* MIC = 0.89mg/mL; *Klebsiella pneumoniae* MIC = 1.23mg/mL; *Escherichia coli* MIC = 1.02mg/mL). Source: *Sarcomelicope megistophylla* (bark). Ref: 4172.

**13653 Melafolone**

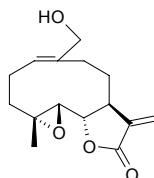
[129724-42-1]  $C_{22}H_{24}O_7$  (400.43). Gum. Source: YU LIAO *Polygonum lapathifolium*. Ref: 1257.

**13654 Melampomagnolide A**

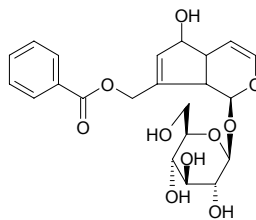
[93930-16-6]  $C_{15}H_{20}O_4$  (264.32). Crystals (Et<sub>2</sub>O), mp 177–178°C.  $[\alpha]_D = -19^\circ$  ( $c = 0.12$ , CHCl<sub>3</sub>). Source: HE HUA YU LAN *Magnolia grandiflora*. Ref: 1258, 1521.

**13655 Melampomagnolide B**

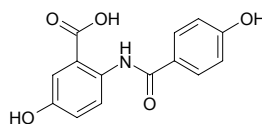
[93930-15-5]  $C_{15}H_{20}O_4$  (264.32). Crystals (Et<sub>2</sub>O), mp 174–175°C.  $[\alpha]_D = -40^\circ$  ( $c = 0.18$ , CHCl<sub>3</sub>). Source: HE HUA YU LAN *Magnolia grandiflora*. Ref: 1258, 1521.

**13656 Melampyroside**

[55785-60-9]  $C_{22}H_{26}O_{10}$  (450.45). Source: DA CHE QIAN *Plantago major*. Ref: 1259.

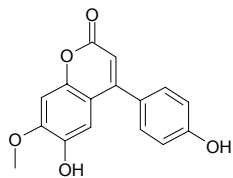
**13657 Melandrin**

*N-p*-Hydroxybenzoyl-5-hydroxy anthranilic acid  $C_{14}H_{11}NO_5$  (273.25). Source: YING YE NV LOU CAI *Silene firma*. Ref: 1260.

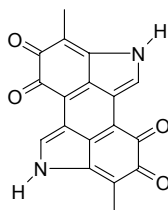


**13658 Melanettin**

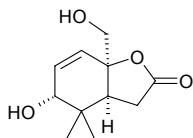
[58115-08-5] C<sub>16</sub>H<sub>12</sub>O<sub>5</sub> (284.27). Source: FEI ZHOU HUANG TAN *Dalbergia melanoxylon*, JIANG ZHEN XIANG *Dalbergia odorifera*. Ref: 716, 1521.

**13659 Melanin**

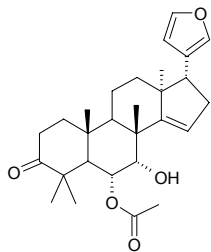
C<sub>18</sub>H<sub>10</sub>N<sub>2</sub>O<sub>4</sub> (318.29). Source: SI GUA ZI *Luffa cylindrica*, WANG BU LIU XING *Vaccaria segetalis* [Syn. *Vaccaria pyramidata*], XUE YU *Homo sapiens*, YANG PI *Capra hircus*; *Ovis aries*. Ref: 6.

**13660 Melazolide A**

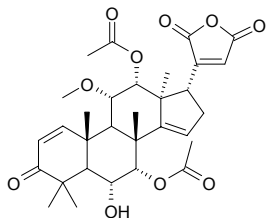
(-)-(3a*S*,5*R*,7a*R*)-4,4-Dimethyl-7a-hydroxymethyl-5-hydroxy-2,3,3a,4,5,7a-hexahydrobenzo[*b*]furan-2-one C<sub>11</sub>H<sub>16</sub>O<sub>4</sub> (212.25). [ $\alpha$ ]<sub>D</sub> = -94° (c = 0.033, EtOH). Source: KU LIAN PI *Melia azedarach*. Ref: 1962.

**13661 Meldenin**

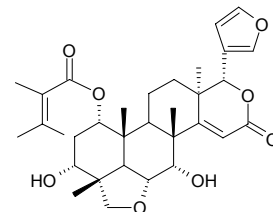
[19865-83-9] C<sub>28</sub>H<sub>38</sub>O<sub>5</sub> (454.61). Crystals, mp 240~244°C. Source: KU LIAN PI *Melia azedarach*, *Melia azadirachta*. Ref: 1261.

**13662 Meliacinanhydride**

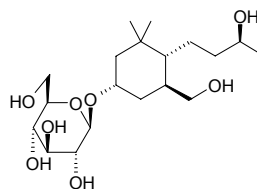
[24,25,26,27-Tetranorapotirucalla-(apoeupha)-6 $\alpha$ -hydroxy,11 $\alpha$ -methoxy-7 $\alpha$ ,12 $\alpha$ -diacetoxyl,1,14,20(22)-trien-3-one] C<sub>31</sub>H<sub>38</sub>O<sub>10</sub> (570.64). Crystalline, mp 114~115°C, [ $\alpha$ ]<sub>D</sub><sup>27</sup> = -30.0° (c = 0.02, CHCl<sub>3</sub>). Source: YIN DU LIAN *Azadiractica indica* (leaf). Ref: 3844.

**13663 Meliacinol**

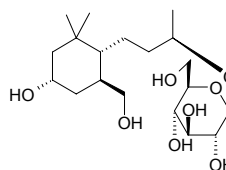
24,25,26,27-Tetranorapotirucalla-(apoeupha)-1 $\alpha$ -trimethylacryloxy-21,23-6 $\alpha$ ,28-diepoxy-16-oxo-17-oxa-14,20,22-trien-3 $\alpha$ ,7 $\alpha$ -diol C<sub>32</sub>H<sub>42</sub>O<sub>8</sub> (554.69). Fine needles, mp 178~179°C, [ $\alpha$ ]<sub>D</sub><sup>27</sup> = +7.78° (c = 0.18, CHCl<sub>3</sub>). Pharm: Insecticidal inactive (*Aedes aegypti*, LC<sub>50</sub> > 100mg/L). Source: YIN DU LIAN *Azadiractica indica* (fresh leaf). Ref: 3914.

**13664 Meliaionoside A**

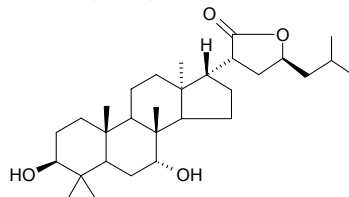
[128533-20-2] C<sub>19</sub>H<sub>36</sub>O<sub>8</sub> (392.49). Powder (C<sub>6</sub>H<sub>6</sub>/MeOH), [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -35.1° (c = 0.43, pyridine). Source: KU LIAN PI *Melia azedarach*, CHUAN LIAN PI *Melia toosendan*. Ref: 1262.

**13665 Meliaionoside B**

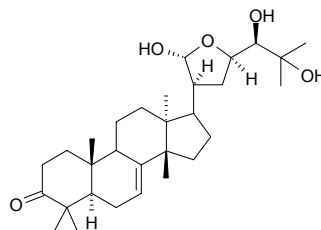
[128533-21-1] C<sub>19</sub>H<sub>36</sub>O<sub>8</sub> (392.49). Powder (C<sub>6</sub>H<sub>6</sub>/MeOH), [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -9.0° (c = 0.15, pyridine). Source: KU LIAN PI *Melia azedarach*, CHUAN LIAN PI *Melia toosendan*. Ref: 1263.

**13666 Melialactone**

C<sub>30</sub>H<sub>50</sub>O<sub>4</sub> (474.73). Source: KU LIAN PI *Melia azedarach*. Ref: 1264.

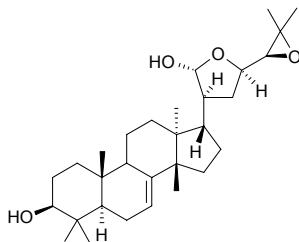
**13667 Melianodiol**

[32764-64-0] C<sub>30</sub>H<sub>48</sub>O<sub>5</sub> (488.71). mp 219~220°C. Source: KU LIAN PI *Melia azedarach*. Ref: 648.

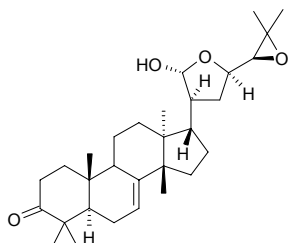


**13668 Melianol**

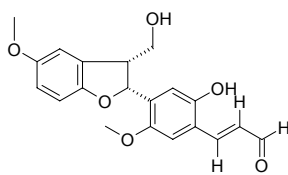
[16838-01-0]  $C_{30}H_{48}O_4$  (472.71). Crystals (Me<sub>2</sub>CO–pentane), mp 194–195°C,  $[\alpha]_D = -38^\circ$  ( $c = 1$ , CHCl<sub>3</sub>). Source: KU LIAN PI *Melia azedarach*. Ref: 6, 648.

**13669 Melianone**

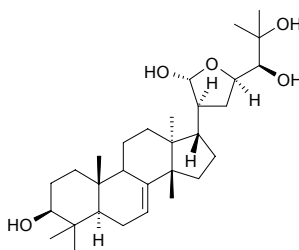
[6553-27-1]  $C_{30}H_{46}O_4$  (470.70). mp 223–224°C (acetone–pentane), 232–233°C (chloroform–pentane). Source: CHANG YE KUAN MU *Eurycoma longifolia*, KU LIAN PI *Melia azedarach*, RI BEN KU LIAN *Melia azedarach* var. *japonica*. Ref: 6, 648, 660.

**13670 Melianoninol**

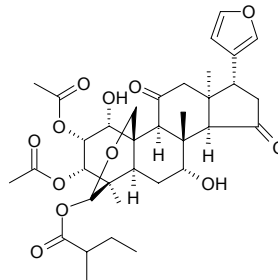
[136880-81-4]  $C_{20}H_{20}O_6$  (356.38). Yellowish prismatic crystals, mp 150–152°C,  $[\alpha]_D^{18} = -4.28^\circ$  ( $c = 0.46$ , methanol). Pharm: Insect antifeedant (green vegetable worm). Source: KU LIAN PI *Melia azedarach*. Ref: 648.

**13671 Melianotriol**

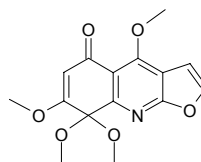
$C_{30}H_{50}O_5$  (490.73). mp 176–178°C. Source: KU LIAN PI *Melia azedarach*. Ref: 6.

**13672 Meliatoxin B<sub>1</sub>**

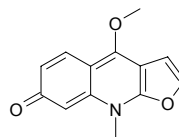
$C_{35}H_{46}O_{12}$  (658.75). Pharm: Cytotoxic (inhibits KB cell's growth, IC<sub>50</sub> > 10 μg/mL, control Adriamycin, IC<sub>50</sub> = 0.066 μg/mL). Source: CHUAN LIAN PI *Melia toosendan*. Ref: 2314.

**13673 Melicarpine**

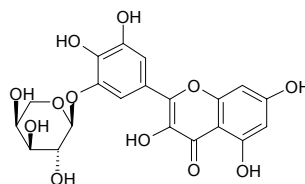
$C_{15}H_{15}NO_6$  (305.29). Colorless needles (MeOH), mp 211–213°C. Pharm: Cytotoxic (P<sub>388</sub> cell line, ED<sub>50</sub> = 8.1 μg/mL, control Mithramycin, ED<sub>50</sub> = 0.06 μg/mL; HT29, ED<sub>50</sub> = 11.2 μg/mL, Mithramycin, ED<sub>50</sub> = 0.07 μg/mL; A549, ED<sub>50</sub> = 2.5 μg/mL, Mithramycin, ED<sub>50</sub> = 0.08 μg/mL). Source: SI ROU TUO GUO YE MI ZHU YU *Melicope semecarpifolia*. Ref: 5405.

**13674 Melicarpinone**

$C_{13}H_{11}NO_3$  (229.24). Pharm: Cytotoxic (P<sub>388</sub> cell line, ED<sub>50</sub> = 20.6 μg/mL, control Mithramycin, ED<sub>50</sub> = 0.06 μg/mL; HT29, ED<sub>50</sub> > 50 μg/mL, Mithramycin, ED<sub>50</sub> = 0.07 μg/mL; A549, ED<sub>50</sub> = 30.5 μg/mL, Mithramycin, ED<sub>50</sub> = 0.08 μg/mL). Source: SI ROU TUO GUO YE MI ZHU YU *Melicope semecarpifolia*. Ref: 5405.

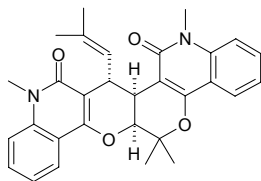
**13675 Melicitrin**

[38888-63-0]  $C_{20}H_{18}O_{12}$  (450.36). Source: LIAN HUA *Melia azedarach*. Ref: 6.

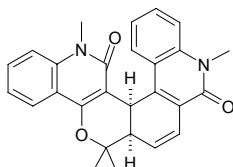


**13676 Melicobisquinolinone A**

$C_{30}H_{30}N_2O_4$  (482.58). Amorphous. [Source](#): *Melicope ptelefolia*. [Ref](#): 1886.

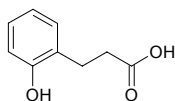
**13677 Melicobisquinolinone B**

$C_{27}H_{24}N_2O_3$  (424.50). Amorphous. [Source](#): *Melicope ptelefolia*. [Ref](#): 1886.

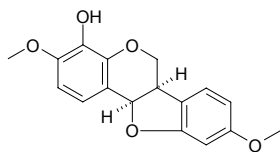
**13678 Melilotic acid**

Hydrocoumaric acid; 3-(2-Hydroxyphenyl)propanoic acid [495-78-3]

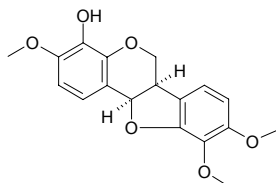
$C_9H_{10}O_3$  (166.18). Colorless lamellar crystals (benzene), mp 87–89°C; mp 82–83°C. [Pharm](#): Antiulcerative; inhibits gastric ulcer (rat oral, intraperitoneal or intravenous, 40 µg/kg, increases blood flow in stomach). [Source](#): ROU GUI *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*], GUI ZHI *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*], PI HAN CAO *Melilotus suaveolens*, SI ZI TAN *Pterocarpus santalinus*. [Ref](#): 2, 6, 658, 940, 1155.

**13679 Melilotocarpin A**

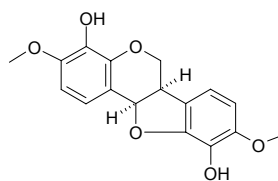
4-Homopterocarpinol; 4-Hydroxyhomopterocarpin; Melilotocarpin A [61135-95-3]  $C_{17}H_{16}O_5$  (300.31). [Source](#): JIANG ZHEN XIANG *Dalbergia odorifera*. [Ref](#): 716.

**13680 Melilotocarpin C**

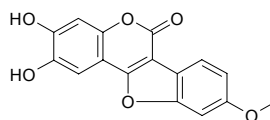
[83013-82-5]  $C_{18}H_{18}O_6$  (330.34). [Source](#): JIANG ZHEN XIANG *Dalbergia odorifera*. [Ref](#): 1266.

**13681 Melilotocarpin D**

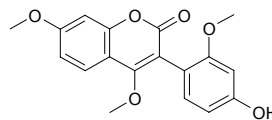
[83013-81-4]  $C_{17}H_{16}O_6$  (316.31). [Source](#): JIANG ZHEN XIANG *Dalbergia odorifera*. [Ref](#): 1266.

**13682 Melimessanol A**

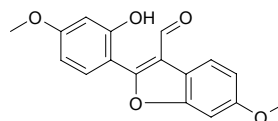
$C_{10}H_{16}O_6$  (298.25). White amorphous solid. [Source](#): XI XI LI CAO MU XI *Melilotus messanensis*. [Ref](#): 1852.

**13683 Melimessanol B**

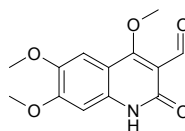
$C_{18}H_{16}O_6$  (328.32). White amorphous solid. [Source](#): XI XI LI CAO MU XI *Melilotus messanensis*. [Ref](#): 1852.

**13684 Melimessanol C**

$C_{17}H_{14}O_5$  (298.32). White amorphous solid. [Source](#): XI XI LI CAO MU XI *Melilotus messanensis*. [Ref](#): 1852.

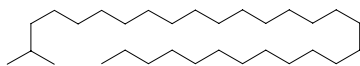
**13685 Melisemine**

$C_{13}H_{13}NO_5$  (263.25). [Pharm](#): Cytotoxic (P<sub>388</sub> cell line, ED<sub>50</sub> = 13.2 µg/mL, control Mithramycin, ED<sub>50</sub> = 0.06 µg/mL; HT29, ED<sub>50</sub> = 46.0 µg/mL, Mithramycin, ED<sub>50</sub> = 0.07 µg/mL; A549, ED<sub>50</sub> = 4.0 µg/mL, Mithramycin, ED<sub>50</sub> = 0.08 µg/mL). [Source](#): SI ROU TUO GUO YE MI ZHU YU *Melicope semecarpifolia*. [Ref](#): 5405.

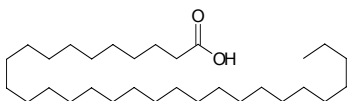


**13686 Melissane**

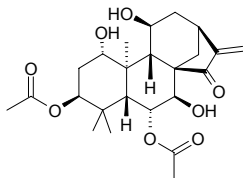
C<sub>30</sub>H<sub>62</sub> (422.83). mp 73~74°C, bp 222°C/0.3mmHg. Source: TU DING GUI *Evolvulus alsinoides*. Ref: 6.

**13687 Melissic acid**

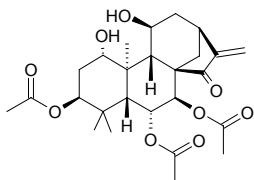
*n*-Triacontanoic acid [506-50-3] C<sub>30</sub>H<sub>60</sub>O<sub>2</sub> (452.81). Colorless crystals powder (ethanol), mp 82~83°C; mp 93°C. Source: HUA DONG LAN CI TOU *Echinops grijssii*, SHUANG BIAN GUA LOU *Trichosanthes rosthornii* [Syn. *Trichosanthes uniflora*], XIAO HUA SUAN TENG ZI *Embelia parviflora*, YAO YONG PU GONG YING *Taraxacum officinale*, YUN QIAN HU *Peucedanum rubricaula*. Ref: 2, 177, 437, 660.

**13688 Melissoidesin A**

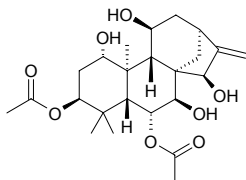
C<sub>24</sub>H<sub>34</sub>O<sub>8</sub> (450.53). mp 245~246°C, [α]<sub>D</sub><sup>22</sup> = -24.4° (*c* = 0.44, CHCl<sub>3</sub>). Source: BAO YE XIANG CHA CAI *Isodon melissoides*. Ref: 4067.

**13689 Melissoidesin B**

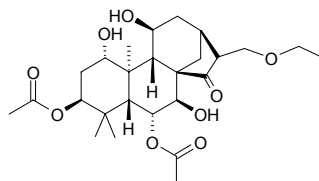
C<sub>26</sub>H<sub>36</sub>O<sub>9</sub> (492.57). mp 231~232°C, [α]<sub>D</sub><sup>22</sup> = -11.9° (*c* = 0.13, CHCl<sub>3</sub>). Source: BAO YE XIANG CHA CAI *Isodon melissoides*. Ref: 4067.

**13690 Melissoidesin C**

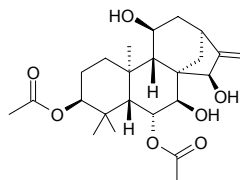
C<sub>24</sub>H<sub>36</sub>O<sub>8</sub> (452.55). mp 235~236°C, [α]<sub>D</sub><sup>22</sup> = +16.36° (*c* = 0.38, MeOH). Source: BAO YE XIANG CHA CAI *Isodon melissoides*. Ref: 4067.

**13691 Melissoidesin D**

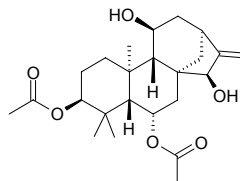
C<sub>26</sub>H<sub>40</sub>O<sub>9</sub> (496.60). mp 215~216°C, [α]<sub>D</sub><sup>22</sup> = -4.20° (*c* = 0.50, MeOH). Source: BAO YE XIANG CHA CAI *Isodon melissoides*. Ref: 4067.

**13692 Melissoidesin E**

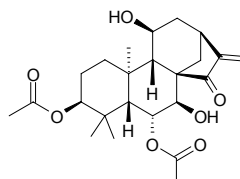
C<sub>24</sub>H<sub>36</sub>O<sub>7</sub> (436.55). Amorphous powder, [α]<sub>D</sub><sup>22</sup> = +19.3° (*c* = 0.46, CHCl<sub>3</sub>). Source: BAO YE XIANG CHA CAI *Isodon melissoides* (aerial parts: yield = 0.00066%dw). Ref: 4067, 4760.

**13693 Melissoidesin F**

C<sub>24</sub>H<sub>36</sub>O<sub>6</sub> (420.55). Amorphous powder, [α]<sub>D</sub><sup>22</sup> = +17.7° (*c* = 0.47, CHCl<sub>3</sub>). Pharm: Cytotoxic inactive (*in vitro*, BGC823 hmn tumor cells, control VCR, IC<sub>50</sub> = 0.066μg/mL)<sup>[4760]</sup>. Source: BAO YE XIANG CHA CAI *Isodon melissoides* (aerial parts: yield = 0.0022%dw). Ref: 4067, 4760.

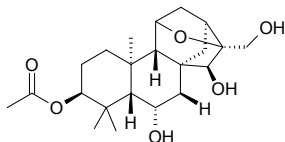
**13694 Melissoidesin G**

C<sub>24</sub>H<sub>34</sub>O<sub>7</sub> (434.53). Amorphous powder, [α]<sub>D</sub><sup>22</sup> = -35.3° (*c* = 0.52, CHCl<sub>3</sub>); [α]<sub>D</sub><sup>25.6</sup> = -32.6° (*c* = 0.369, MeOH). Pharm: Cytotoxic (*in vitro*, BGC823 hmn tumor cells, IC<sub>50</sub> = 6.62μg/mL, control VCR, IC<sub>50</sub> = 0.066μg/mL)<sup>[4760]</sup>; cytotoxic (hmn tumor K562 cells, IC<sub>50</sub> = 0.3μg/mL, control *cis*-Platin IC<sub>50</sub> = 1.1μg/mL)<sup>[4955]</sup>. Source: BAO YE XIANG CHA CAI *Isodon melissoides* (aerial parts: yield = 0.00066%dw), DONG LING CAO *Rabdosia rubescens* (leaf). Ref: 4067, 4299, 4955, 4760.

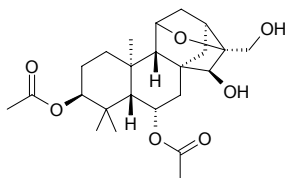


**13695 Melissoidesin I**

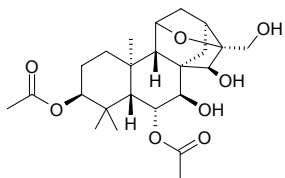
3 $\beta$ -Acetoxy-6 $\alpha$ ,15 $\beta$ ,17-trihydroxy-11 $\beta$ ,16 $\beta$ -epoxy-*ent*-kaurane C<sub>22</sub>H<sub>34</sub>O<sub>6</sub> (394.51). Colorless crystals, mp 124~126°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +27.27° (*c* = 0.11, MeOH). **Source:** BAO YE XIANG CHA CAI *Isodon melissoides* (aerial parts). **Ref:** 4355.

**13696 Melissoidesin J**

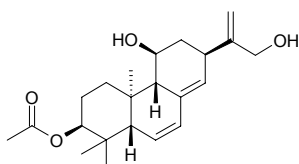
3 $\beta$ ,6 $\alpha$ -Diacetoxy-15 $\beta$ ,17-dihydroxy-11 $\beta$ ,16 $\beta$ -epoxy-*ent*-kaurane C<sub>24</sub>H<sub>36</sub>O<sub>7</sub> (436.55). Colorless crystals, mp 130~132°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +38.39° (*c* = 0.25, MeOH). **Source:** BAO YE XIANG CHA CAI *Isodon melissoides* (aerial parts). **Ref:** 4355.

**13697 Melissoidesin K**

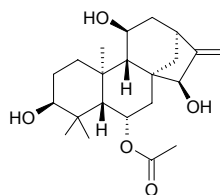
3 $\beta$ ,6 $\alpha$ -Diacetoxy-7 $\beta$ ,15 $\beta$ ,17-trihydroxy-11 $\beta$ ,16 $\beta$ -epoxy-*ent*-kaurane C<sub>24</sub>H<sub>36</sub>O<sub>8</sub> (452.55). Colorless crystals, mp 185~187°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +45.45° (*c* = 0.09, MeOH). **Source:** BAO YE XIANG CHA CAI *Isodon melissoides* (aerial parts). **Ref:** 4355.

**13698 Melissoidesin L**

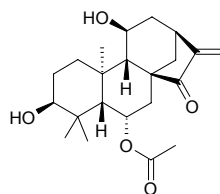
3 $\beta$ -Acetoxy-11 $\beta$ ,17-dihydroxy-*ent*-abieta-6(7),8(14),15(16)-triene C<sub>22</sub>H<sub>32</sub>O<sub>4</sub> (360.50). Colorless crystals, mp 90~92°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -14.71° (*c* = 0.11, MeOH). **Source:** BAO YE XIANG CHA CAI *Isodon melissoides* (aerial parts). **Ref:** 4355.

**13699 Melissoidesin M**

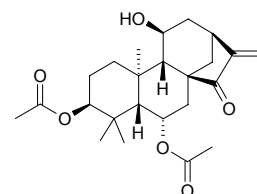
3 $\beta$ ,11 $\beta$ ,15 $\beta$ -Trihydroxy-6 $\alpha$ -acetoxy-*ent*-kaur-16-ene C<sub>22</sub>H<sub>34</sub>O<sub>5</sub> (378.51). Colorless needles (acetone), mp<sup>21</sup> 0~214°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +9.6° (*c* = 0.05, MeOH). **Pharm:** Cytotoxic inactive (*in vitro*, BGC823 hmn tumor cells, control VCR, IC<sub>50</sub> = 0.066 $\mu$ g/mL). **Source:** BAO YE XIANG CHA CAI *Isodon melissoides* (aerial parts: yield = 0.00078%dw). **Ref:** 4760.

**13700 Melissoidesin N**

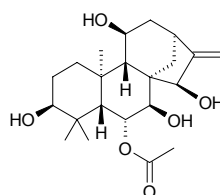
3 $\beta$ ,11 $\beta$ -Dihydroxy-6 $\alpha$ -acetoxy-*ent*-kaur-16-en-15-one C<sub>22</sub>H<sub>32</sub>O<sub>5</sub> (376.5). Colorless crystals (acetone), mp 248~250°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -68.18° (*c* = 0.07, MeOH). **Pharm:** Cytotoxic (*in vitro*, BGC823 hmn tumor cells, IC<sub>50</sub> = 0.036 $\mu$ g/mL, control VCR, IC<sub>50</sub> = 0.066 $\mu$ g/mL). **Source:** BAO YE XIANG CHA CAI *Isodon melissoides* (aerial parts: yield = 0.00056%dw). **Ref:** 4760.

**13701 Melissoidesin O**

11 $\beta$ -Hydroxy-3 $\beta$ ,6 $\alpha$ -diacetoxy-*ent*-kaur-16-en-15-one C<sub>24</sub>H<sub>34</sub>O<sub>6</sub> (418.53). Colorless crystals (acetone), mp 226~228°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -51.52° (*c* = 0.30, MeOH). **Pharm:** Cytotoxic (*in vitro*, BGC823 hmn tumor cells, IC<sub>50</sub> = 7.83 $\mu$ g/mL, control VCR, IC<sub>50</sub> = 0.066 $\mu$ g/mL). **Source:** BAO YE XIANG CHA CAI *Isodon melissoides* (aerial parts: yield = 0.0013%dw). **Ref:** 4760.

**13702 Melissoidesin P**

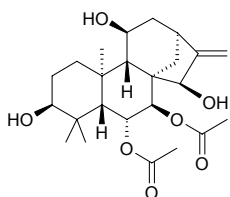
3 $\beta$ ,7 $\beta$ ,11 $\beta$ ,15 $\beta$ -Tetrahydroxy-6 $\alpha$ -acetoxy-*ent*-kaur-16-ene C<sub>22</sub>H<sub>34</sub>O<sub>6</sub> (394.51). Colorless crystals, mp 232~234°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -8.42° (*c* = 0.21, MeOH). **Pharm:** Cytotoxic inactive (*in vitro*, BGC823 hmn tumor cells, control VCR, IC<sub>50</sub> = 0.066 $\mu$ g/mL). **Source:** BAO YE XIANG CHA CAI *Isodon melissoides* (aerial parts: yield = 0.0016%dw). **Ref:** 4760.



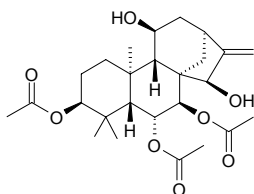


**13703 MelissoidesinQ**

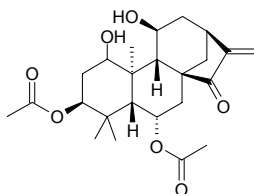
3 $\beta$ ,11 $\beta$ ,15 $\beta$ -Trihydroxy-6 $\alpha$ ,7 $\beta$ -diacetoxy-*ent*-kaur-16-ene C<sub>24</sub>H<sub>37</sub>O<sub>7</sub> (436.55). Colorless crystals (acetone), mp 115–118°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = –52.17° (c = 0.12, MeOH). **Pharm:** Cytotoxic inactive (*in vitro*, BGC823 hmn tumor cells, control VCR, IC<sub>50</sub> = 0.066 $\mu$ g/mL). **Source:** BAO YE XIANG CHA CAI *Isodon melissoides* (aerial parts: yield = 0.012%dw). **Ref:** 4760.

**13704 Melissoidesin R**

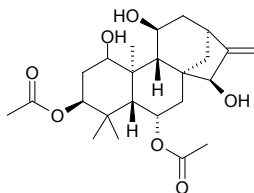
11 $\beta$ ,15 $\beta$ -Dihydroxy-3 $\beta$ ,6 $\alpha$ ,7 $\beta$ -triacetoxy-*ent*-kaur-16-ene C<sub>26</sub>H<sub>38</sub>O<sub>8</sub> (478.59). Colorless crystals (acetone), mp 234–235°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = –20.62° (c = 0.09, MeOH). **Pharm:** Cytotoxic inactive (*in vitro*, BGC823 hmn tumor cells, control VCR, IC<sub>50</sub> = 0.066 $\mu$ g/mL). **Source:** BAO YE XIANG CHA CAI *Isodon melissoides* (aerial parts: yield = 0.00056%dw). **Ref:** 4760.

**13705 MelissoidesinS**

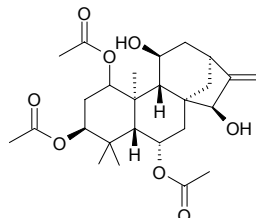
1 $\alpha$ ,11 $\beta$ -Dihydroxy-3 $\beta$ ,6 $\alpha$ -diacetoxy-*ent*-kaur-16-en-15-one C<sub>24</sub>H<sub>34</sub>O<sub>7</sub> (434.53). Colorless crystals (acetone), mp 238–240°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = –53.4° (c = 0.21, MeOH). **Pharm:** Cytotoxic (*in vitro*, BGC823 hmn tumor cells, IC<sub>50</sub> = 7.71 $\mu$ g/mL, control VCR, IC<sub>50</sub> = 0.066 $\mu$ g/mL). **Source:** BAO YE XIANG CHA CAI *Isodon melissoides* (aerial parts: yield = 0.031%dw). **Ref:** 4760.

**13706 MelissoidesinT**

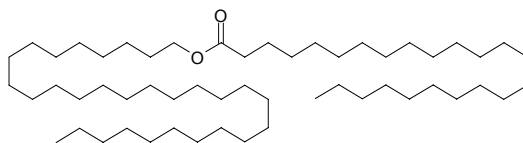
1 $\alpha$ ,11 $\beta$ ,15 $\beta$ -Trihydroxy-3 $\beta$ ,6 $\alpha$ -diacetoxy-*ent*-kaur-16-ene C<sub>24</sub>H<sub>36</sub>O<sub>7</sub> (436.55). Colorless crystals (acetone), mp 246–248°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +19.9° (c = 0.23, MeOH). **Pharm:** Cytotoxic inactive (*in vitro*, BGC823 hmn tumor cells, control VCR, IC<sub>50</sub> = 0.066 $\mu$ g/mL). **Source:** BAO YE XIANG CHA CAI *Isodon melissoides* (aerial parts: yield = 0.00038%dw). **Ref:** 4760.

**13707 Melissoidesin U**

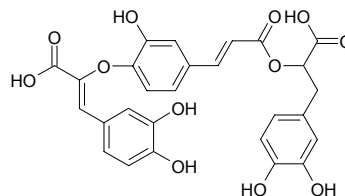
11 $\beta$ ,15 $\beta$ -Dihydroxy-1 $\alpha$ ,3 $\beta$ ,6 $\alpha$ -triacetoxy-*ent*-kaur-16-ene C<sub>26</sub>H<sub>38</sub>O<sub>8</sub> (478.59). Colorless crystals, mp 96–98°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +20.1° (c = 0.50, MeOH). **Pharm:** Cytotoxic inactive (*in vitro*, BGC823 hmn tumor cells, control VCR, IC<sub>50</sub> = 0.066 $\mu$ g/mL). **Source:** BAO YE XIANG CHA CAI *Isodon melissoides* (aerial parts: yield = 0.0072%dw). **Ref:** 4760.

**13708 Melissyl lignocerate**

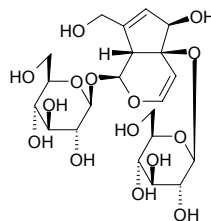
C<sub>54</sub>H<sub>108</sub>O<sub>2</sub> (789.46). **Source:** CHONG BAI LA *Ericerus pela*. **Ref:** 6.

**13709 Melitric acid A**

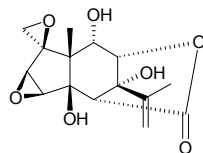
C<sub>27</sub>H<sub>22</sub>O<sub>12</sub> (538.47). Freeze-dried light-brown powder, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +41° (c = 0.2, MeOH). **Source:** YAO YONG DAN SHEN *Salvia officinalis*. **Ref:** 2388.

**13710 Melittoside**

[19467-03-9] C<sub>21</sub>H<sub>32</sub>O<sub>15</sub> (524.48). **Source:** GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *Huechingensis*], LONG TU ZHU *Clerodendrum thomsonae*. **Ref:** 2, 660.

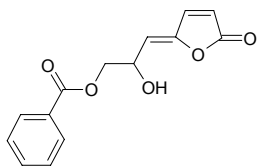
**13711 Mellitoxin**

C<sub>15</sub>H<sub>18</sub>O<sub>7</sub> (310.31). **Pharm:** Causes excitation to the peripheral nervous system; toxin. **Source:** CAI SHI MU MA SANG *Coriaria arborea*. **Ref:** 658.

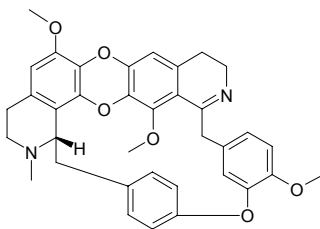


**13712 Melodorinol**

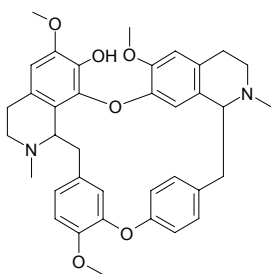
$C_{14}H_{12}O_5$  (260.25). Source: *Melodorum fruticosum* (flower). Ref: 5245.

**13713 Menisarine**

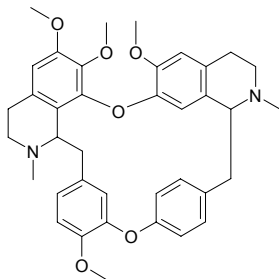
$C_{36}H_{34}N_2O_6$  (590.68). Source: MU FANG JI *Cocculus trilobus* [Syn. *Cocculus sarmentosus*]. Ref: 660.

**13714 Menisidine**

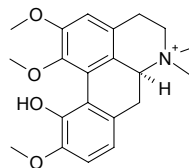
$C_{37}H_{40}N_2O_6$  (608.74). Source: FANG JI *Stephania tetrandra*. Ref: 2.

**13715 Menisine**

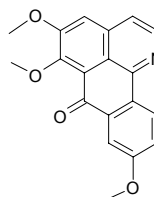
(+)-Isotetrandrine  $C_{38}H_{42}N_2O_6$  (622.77). Pharm: Mitochondrial respiratory chain complex I inhibitor ( $IC_{50} > 10 \mu\text{mol/L}$ , Rolliniastatin-1,  $IC_{50} = (0.6 \pm 0.04) \text{nmol/L}$ , Rotenone,  $IC_{50} = (5.10 \pm 0.90) \text{nmol/L}$ )<sup>[4954]</sup>. Source: FANG JI *Stephania tetrandra*, GE LUN BI YA MU BAN SHU *Xylopi colombiana* (fruit). Ref: 2, 4954.

**13716 Menisperine**

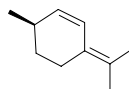
$C_{21}H_{26}NO_4^+$  (356.45). mp 233°C. Pharm: Ganglionic blocker (curariform action, particularly for submandibular ganglions); antihypertensive (dog, cat and rbt); muscle relaxant (rat and rbt). Source: BIAN FU GE GEN *Menispermum dauricum* (rhizome: mean content of 12 origins = 0.658%<sup>[5508]</sup>), HU JIAO HUA JIAO *Zanthoxylum piperitum*, HUANG BAI *Phellodendron amurense*, NAN TIAN ZHU ZI *Nandina domestica*, TU CHUANG HUA *Dicranostigma franchetianum* [Syn. *Dicranostigma leptopodum*], XIA TIAN WU *Corydalis decumbens* [Syn. *Corydalis amabilis*]. Ref: 2, 512, 658, 5508.

**13717 Menisporphine**

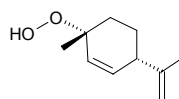
Menisporohine [83287-02-9]  $C_{19}H_{15}NO_4$  (321.34). Source: BIAN FU GE GEN *Menispermum dauricum*. Ref: 1267.

**13718 2,4(8)-p-Menthadiene**

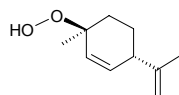
[586-63-0]  $C_{10}H_{16}$  (136.24). Source: AI YE *Artemisia argyi*. Ref: 1268.

**13719 (-)-(1R,4S)-p-Mentha-2,8-dien-1-hydroperoxide**

$C_{10}H_{16}O_2$  (168.24). Colorless oil,  $[\alpha]_D^{20} = -49.6^\circ$  ( $c = 0.9$ ,  $\text{CHCl}_3$ ). Pharm: Antitrypanosomal (*in vitro*, epimastigotes of *Trypanosoma cruzi*, MLC =  $3.1 \mu\text{mol/L}$ ; HeLa cell infection assay, at  $1 \mu\text{g/mL}$ , InRt of infection of HeLa cells by the trypomastigotes = 88%). Source: TU JING JIE *Chenopodium ambrosioides* (fresh aerial part including immature seed: yield = 0.00085%fw). Ref: 4619.

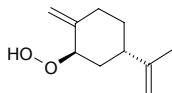
**13720 (-)-(1S,4S)-p-Mentha-2,8-dien-1-hydroperoxide**

$C_{10}H_{16}O_2$  (168.24). Colorless oil,  $[\alpha]_D^{20} = -164.2^\circ$  ( $c = 1.0$ ,  $\text{CHCl}_3$ ). Pharm: Antitrypanosomal (*in vitro*, epimastigotes of *Trypanosoma cruzi*, MLC =  $3.1 \mu\text{mol/L}$ ; HeLa cell infection assay, at  $1 \mu\text{g/mL}$ , InRt of infection of HeLa cells by the trypomastigotes = 100%). Source: TU JING JIE *Chenopodium ambrosioides* (fresh aerial part including immature seed: yield = 0.00067%fw). Ref: 4619.

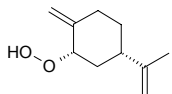


**13721 (-)-(2*R*,4*S*)-*p*-Mentha-1(7),8-dien-2-hydroperoxide**

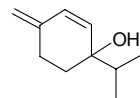
C<sub>10</sub>H<sub>16</sub>O<sub>2</sub> (168.24). Colorless oil,  $[\alpha]_D^{20} = -78.1^\circ$  ( $c = 2.5$ , CHCl<sub>3</sub>). **Pharm:** Antitrypanosomal (*in vitro*, epimastigotes of *Trypanosoma cruzi*, MLC = 1.6 μmol/L; HeLa cell infection assay, at 1 μg/mL, InRt of infection of HeLa cells by the trypomastigotes = 63%). **Source:** TU JING JIE *Chenopodium ambrosioides* (fresh aerial part including immature seed: yield = 0.0015%fw). **Ref:** 4619.

**13722 (-)-(2*S*,4*S*)-*p*-Mentha-1(7),8-dien-2-hydroperoxide**

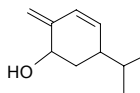
C<sub>10</sub>H<sub>16</sub>O<sub>2</sub> (168.24). Colorless oil,  $[\alpha]_D^{20} = -18.7^\circ$  ( $c = 4.7$ , CHCl<sub>3</sub>). **Pharm:** Antitrypanosomal (*in vitro*, epimastigotes of *Trypanosoma cruzi*, MLC = 1.2 μmol/L). **Source:** TU JING JIE *Chenopodium ambrosioides* (fresh aerial part including immature seed: yield = 0.00064%fw). **Ref:** 4619.

**13723 1(7),2-*p*-Menthadien-4-ol**

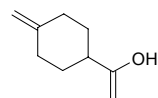
C<sub>10</sub>H<sub>16</sub>O (152.24). **Source:** HU JIAO *Piper nigrum*. **Ref:** 1521.

**13724 1(7),2-*p*-Menthadien-6-ol**

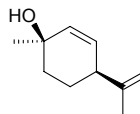
C<sub>10</sub>H<sub>16</sub>O (152.24). **Source:** HU JIAO *Piper nigrum*. **Ref:** 1269.

**13725 1(7),8(10)-*p*-Menthadien-9-ol**

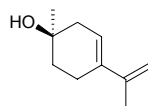
C<sub>9</sub>H<sub>14</sub>O (138.21). **Source:** SHE CHUANG ZI *Cnidium monnieri*. **Ref:** 1270.

**13726 *cis-p*-2,8-Menthadien-1-ol**

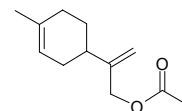
C<sub>10</sub>H<sub>16</sub>O (152.24). **Source:** HU JIAO *Piper nigrum*. **Ref:** 6.

**13727 3,8(9)-*p*-Menthadien-1-ol**

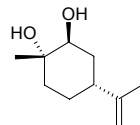
*p*-3,8(9)-Menthadien-1-ol C<sub>10</sub>H<sub>16</sub>O (152.24). **Source:** HU JIAO *Piper nigrum*. **Ref:** 1269.

**13728 1,8-Menthadien-10-ol acetate**

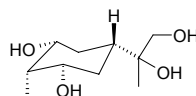
C<sub>12</sub>H<sub>18</sub>O<sub>2</sub> (194.28). **Source:** JU PI *Citrus reticulata*. **Ref:** 6.

**13729 *p*-Mentha-8-en-1,2-diol**

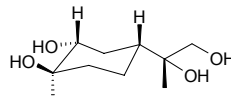
C<sub>10</sub>H<sub>18</sub>O<sub>2</sub> (170.25). Amorphous powder,  $[\alpha]_D^{21} = +34^\circ$ . **Pharm:** Antitrypanosomal inactive (epimastigotes of *Trypanosoma cruzi*, 400 μmol/L)<sup>[2579]</sup>. **Source:** GE LU ZI *Carum carvi* (fruit), YI LANG QING LAN *Dracocephalum kotschyi*. **Ref:** 2579, 4153.

**13730 4β*H*-*cis-p*-Menthane-2α,6α,8,9-tetrol**

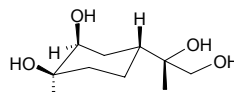
C<sub>10</sub>H<sub>20</sub>O<sub>4</sub> (204.27). Amorphous powder,  $[\alpha]_D^{21} = +4^\circ$  ( $c = 1.6$ , MeOH). **Source:** GE LU ZI *Carum carvi* (fruit). **Ref:** 4153.

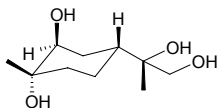
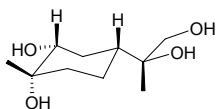
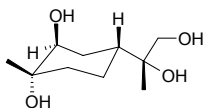
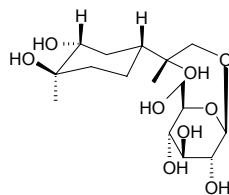
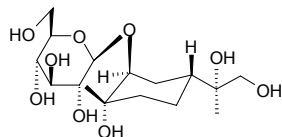
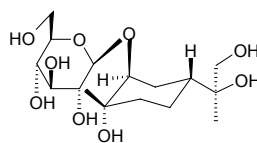
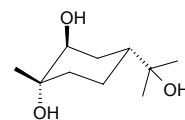
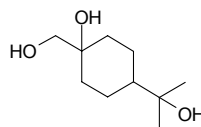
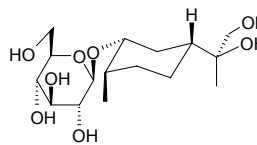
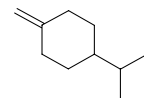
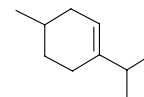
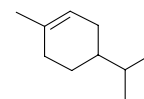
**13731 *rel*-(1*R*,2*R*,4*R*,8*S*)-*p*-Menthane-1,2,8,9-tetrol**

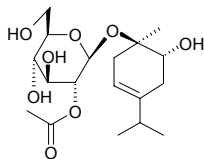
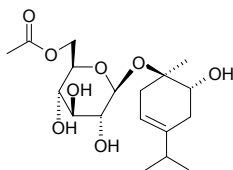
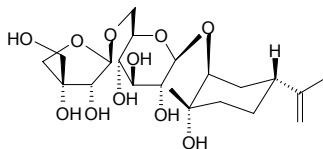
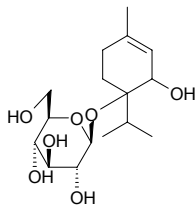
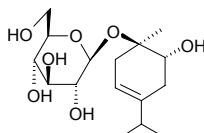
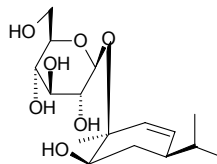
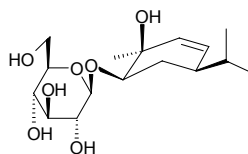
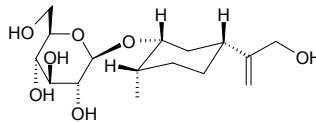
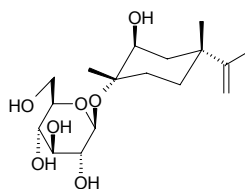
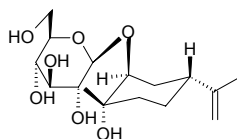
C<sub>10</sub>H<sub>20</sub>O<sub>4</sub> (204.27). Amorphous powder,  $[\alpha]_D^{21} = -3^\circ$  ( $c = 0.2$ , MeOH). **Source:** GE LU ZI *Carum carvi* (fruit). **Ref:** 4153.

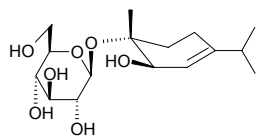
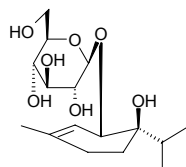
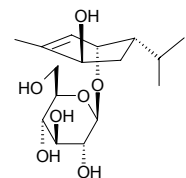
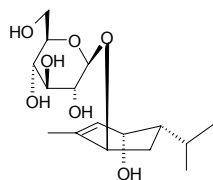
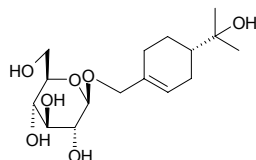
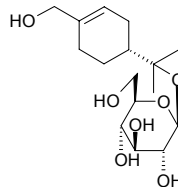
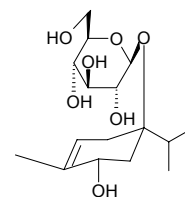
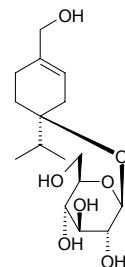
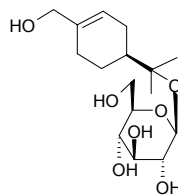
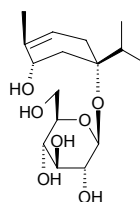
**13732 (1*R*,2*S*,4*R*,8*R*)-*p*-Menthane-1,2,8,9-tetrol**

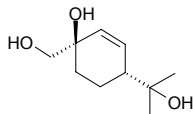
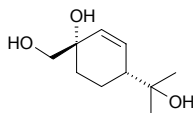
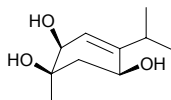
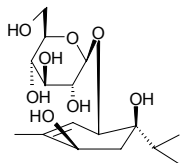
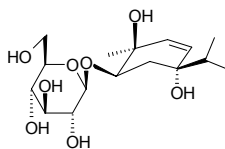
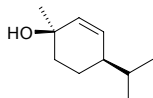
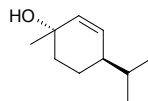
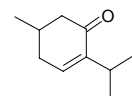
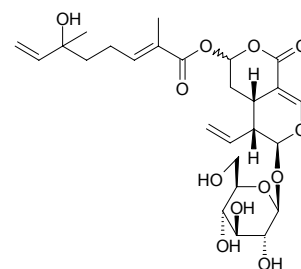
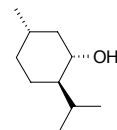
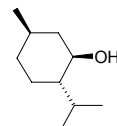
C<sub>10</sub>H<sub>20</sub>O<sub>4</sub> (204.27). Amorphous powder,  $[\alpha]_D^{22} = +27^\circ$  ( $c = 0.8$ , MeOH). **Source:** GE LU ZI *Carum carvi* (fruit). **Ref:** 4153.



**13733** *rel*-(1*S*,2*R*,4*R*,8*R*)-*p*-Menthane-1,2,8,9-tetrolC<sub>10</sub>H<sub>20</sub>O<sub>4</sub> (204.27). Amorphous powder, [α]<sub>D</sub><sup>23</sup> = +26° (c = 0.1, MeOH).Source: GE LU ZI *Carum carvi* (fruit). Ref: 4153.**13734** *rel*-(1*S*,2*R*,4*R*,8*S*)-*p*-Menthane-1,2,8,9-tetrolC<sub>10</sub>H<sub>20</sub>O<sub>4</sub> (204.27). Amorphous powder, [α]<sub>D</sub><sup>23</sup> = +11° (c = 0.1, MeOH).Source: GE LU ZI *Carum carvi* (fruit). Ref: 4153.**13735** (1*S*,2*S*,4*R*,8*S*)-*p*-Menthane-1,2,8,9-tetrolC<sub>10</sub>H<sub>20</sub>O<sub>4</sub> (204.27). Amorphous powder, [α]<sub>D</sub><sup>22</sup> = +30° (c = 0.4, MeOH).Source: GE LU ZI *Carum carvi* (fruit). Ref: 4153.**13736** *rel*-(1*R*,2*R*,4*R*,8*S*)-*p*-Menthane-1,2,8,9-tetrol 9-*O*-β-*D*-glucopyranosideC<sub>16</sub>H<sub>30</sub>O<sub>9</sub> (366.41). Amorphous powder, [α]<sub>D</sub><sup>23</sup> = -15° (c = 0.2, MeOH).Source: GE LU ZI *Carum carvi* (fruit). Ref: 4153.**13737** (1*S*,2*S*,4*R*,8*R*)-*p*-Menthane-1,2,8,9-tetrol 2-*O*-β-*D*-glucopyranosideC<sub>16</sub>H<sub>30</sub>O<sub>9</sub> (366.41). Amorphous powder, [α]<sub>D</sub><sup>24</sup> = +17° (c = 0.7, MeOH).Source: GE LU ZI *Carum carvi* (fruit). Ref: 4153.**13738** (1*S*,2*S*,4*R*,8*S*)-*p*-Menthane-1,2,8,9-tetrol 2-*O*-β-*D*-glucopyranosideC<sub>16</sub>H<sub>30</sub>O<sub>9</sub> (366.41). Colorless needles(MeOH), mp 137~138°C, [α]<sub>D</sub><sup>24</sup> = +22°(c = 1.3, MeOH). Source: GE LU ZI *Carum carvi* (fruit). Ref: 4153.**13739** *trans*-*p*-Menthane-1α,2β,8-triolC<sub>10</sub>H<sub>20</sub>O<sub>3</sub> (188.27). Amorphous powder, [α]<sub>D</sub><sup>25</sup> = +21° (c = 0.1, MeOH).Source: BEI SHA SHEN *Glehnia littoralis* (fruit). Ref: 3525.**13740** 4-*p*-Menthane-1,7,8-triolC<sub>10</sub>H<sub>20</sub>O<sub>3</sub> (188.27). Colorless prismatic crystals (chloroform), mp 149~151°C.Source: HUA BEI BAI QIAN *Cynanchum hancockianum*. Ref: 244.**13741** (1*S*,2*R*,4*R*,8*S*)-*p*-Menthane-2,8,9-triol 2-*O*-β-*D*-glucopyranosideC<sub>16</sub>H<sub>30</sub>O<sub>8</sub> (350.41). Source: SHI LUO ZI *Anethum graveolens* (fruit). Ref: 4177.**13742** Δ<sup>1(7)</sup>-MentheneC<sub>10</sub>H<sub>18</sub> (138.26). Source: SHENG JIANG *Zingiber officinale*. Ref: 2.**13743** Δ<sup>3</sup>-Menthene[500-00-5] C<sub>10</sub>H<sub>18</sub> (138.26). Source: SHENG JIANG *Zingiber officinale*. Ref: 2.**13744** *p*-1-MentheneC<sub>10</sub>H<sub>18</sub> (138.25). mp (+) 175~177°C. Source: MEI GUI HUA *Rosa rugosa*. Ref: 6.

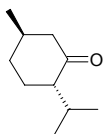
**13745 (1R,2R)-p-Menth-4(5)-ene-1,2-diol 1-O-β-D-(2-O-acetyl)glucopyranoside**C<sub>18</sub>H<sub>30</sub>O<sub>8</sub> (374.44). Amorphous powder, [α]<sub>D</sub><sup>22</sup> = -32° (c = 0.4, MeOH).Source: SHE XIANG CAO *Thymus vulgaris* (leaf). Ref: 3895.**13746 (1R,2R)-p-Menth-4(5)-ene-1,2-diol 1-O-β-D-(6-O-acetyl)glucopyranoside**C<sub>18</sub>H<sub>30</sub>O<sub>8</sub> (374.44). Amorphous powder, [α]<sub>D</sub><sup>24</sup> = -38° (c = 0.4, MeOH).Source: SHE XIANG CAO *Thymus vulgaris* (leaf). Ref: 3895.**13747 (1S,2S,4R)-p-Menth-8-ene-1,2-diol 2-O-β-D-apiofuranosyl-(1→6)-β-D-glucopyranoside**C<sub>21</sub>H<sub>36</sub>O<sub>11</sub> (464.51). Amorphous powder, [α]<sub>D</sub><sup>22</sup> = -33° (c = 0.8, MeOH).Source: SHI LUO ZI *Anethum graveolens* (fruit). Ref: 4177.**13748 p-Menth-1-ene-3,4-diol 4-O-β-glucopyranoside**C<sub>16</sub>H<sub>28</sub>O<sub>7</sub> (332.40). [α]<sub>D</sub><sup>25</sup> = -18.9° (c = 1.50, MeOH). Source: XU LI YA NIUZHI *Origanum syriacum* (aerial parts). Ref: 5223.**13749 (1R,2R)-p-Menth-4(5)-ene-1,2-diol 1-O-β-D-glucopyranoside**C<sub>16</sub>H<sub>28</sub>O<sub>7</sub> (332.40). Colorless needles (MeOH), mp 137~139°C, [α]<sub>D</sub><sup>24</sup> = -42° (c = 2.0, MeOH). Source: SHE XIANG CAO *Thymus vulgaris* (leaf).Ref: 3895.**13750 (1S,2R,4R)-p-Menth-5-ene-1,2-diol 1-O-β-D-glucopyranoside**C<sub>16</sub>H<sub>28</sub>O<sub>7</sub> (332.40). Amorphous powder, [α]<sub>D</sub><sup>21</sup> = -23° (c = 0.6, MeOH).Source: ZI RAN QIN *Cuminum cyminum* (fruit). Ref: 4243.**13751 (1S,2R,4R)-p-Menth-5-ene-1,2-diol 2-O-β-D-glucopyranoside**C<sub>16</sub>H<sub>28</sub>O<sub>7</sub> (332.40). Amorphous powder, [α]<sub>D</sub><sup>23</sup> = +8° (c = 1.8, MeOH). Source:ZI RAN QIN *Cuminum cyminum* (fruit). Ref: 4243.**13752 (1S,2R,4R)-p-Menth-8-ene-2,10-diol 2-O-β-D-glucopyranoside**C<sub>16</sub>H<sub>28</sub>O<sub>7</sub> (332.40). Amorphous powder, [α]<sub>D</sub><sup>25</sup> = -26° (c = 0.9, MeOH).Source: GE LU ZI *Carum carvi* (fruit). Ref: 4153.**13753 (1S,2S,4R)-p-Menth-8-ene-1,2-diol 1-O-β-D-glucopyranoside**C<sub>16</sub>H<sub>28</sub>O<sub>7</sub> (332.40). Amorphous powder, [α]<sub>D</sub><sup>24</sup> = +7° (c = 0.3, MeOH). Source:SHI LUO ZI *Anethum graveolens* (fruit). Ref: 4177.**13754 (1S,2S,4R)-p-Menth-8-ene-1,2-diol 2-O-β-D-glucopyranoside**C<sub>16</sub>H<sub>28</sub>O<sub>7</sub> (332.40). Colorless needles (MeOH), mp 154~156°C, [α]<sub>D</sub><sup>25</sup> = +13°(c = 1.7, MeOH). Source: GE LU ZI *Carum carvi* (fruit), SHI LUO ZI*Anethum graveolens* (fruit). Ref: 4153, 4177.

**13755 (1R,2R)-p-Menth-3-ene-1,2-diol 2-O-β-D-glucopyranoside**C<sub>16</sub>H<sub>28</sub>O<sub>7</sub> (332.40). Amorphous powder, [α]<sub>D</sub><sup>22</sup> = -23° (c = 1.7, MeOH).Source: SHE XIANG CAO *Thymus vulgaris* (leaf). Ref: 3895.**13756 (3R,4R)-p-Menth-1-ene-3,4-diol 3-O-β-D-glucopyranoside**C<sub>16</sub>H<sub>28</sub>O<sub>7</sub> (332.40). Amorphous powder, [α]<sub>D</sub><sup>21</sup> = -86° (c = 0.6, MeOH).Source: ZI RAN QIN *Cuminum cyminum* (fruit). Ref: 4243.**13757 (3R,4S,6R)-p-Menth-1-ene-3,6-diol 3-O-β-D-glucopyranoside**C<sub>16</sub>H<sub>28</sub>O<sub>7</sub> (332.40). Colorless needles, mp 215~217 °C, [α]<sub>D</sub><sup>23</sup> = +126° (c = 0.2,MeOH). Source: ZI RAN QIN *Cuminum cyminum* (fruit). Ref: 4243.**13758 (3R,4S,6R)-p-Menth-1-ene-3,6-diol 6-O-β-D-glucopyranoside**C<sub>16</sub>H<sub>28</sub>O<sub>7</sub> (332.40). Colorless needles, mp 215~217 °C, [α]<sub>D</sub><sup>23</sup> = +89° (c = 0.5,MeOH). Source: ZI RAN QIN *Cuminum cyminum* (fruit). Ref: 4243.**13759 (4R)-p-Menth-1-ene-7,8-diol 7-O-β-D-glucopyranoside**C<sub>16</sub>H<sub>28</sub>O<sub>7</sub> (332.40). Amorphous powder, [α]<sub>D</sub><sup>24</sup> = -6° (c = 0.3, MeOH). Source:ZI RAN QIN *Cuminum cyminum* (fruit). Ref: 4243.**13760 (4R)-p-Menth-1-ene-7,8-diol 8-O-β-D-glucopyranoside**C<sub>16</sub>H<sub>28</sub>O<sub>7</sub> (332.40). Amorphous powder, [α]<sub>D</sub><sup>24</sup> = +8°. Source: BEI SHASHEN *Glehnia littoralis* (fruit). Ref: 3525.**13761 (4R,6S)-p-Menth-1-ene-4,6-diol 4-O-β-D-glucopyranoside**C<sub>16</sub>H<sub>28</sub>O<sub>7</sub> (332.40). Amorphous powder, [α]<sub>D</sub><sup>24</sup> = -29° (c = 1.8, MeOH).Source: YIN DU ZANG HUI XIANG *Carum ajowan* (fruit). Ref: 3547.**13762 (4S)-p-Menth-1-ene-4,7-diol 4-O-β-D-glucopyranoside**C<sub>16</sub>H<sub>28</sub>O<sub>7</sub> (332.40). Amorphous powder, [α]<sub>D</sub><sup>24</sup> = -15° (c = 0.5, MeOH).Source: YIN DU ZANG HUI XIANG *Carum ajowan* (fruit). Ref: 3547.**13763 (4S)-p-Menth-1-ene-7,8-diol 8-O-β-D-glucopyranoside**C<sub>16</sub>H<sub>28</sub>O<sub>7</sub> (332.40). Amorphous powder, [α]<sub>D</sub><sup>25</sup> = -50°. Source: GE LU ZI*Carum carvi* (fruit). Ref: 4153.**13764 (4S,6S)-p-Menth-1-ene-4,6-diol 4-O-β-D-glucopyranoside**C<sub>16</sub>H<sub>28</sub>O<sub>7</sub> (332.40). Colorless needles, mp 78~81°C, [α]<sub>D</sub><sup>21</sup> = -2° (c = 0.7,MeOH). Source: ZI RAN QIN *Cuminum cyminum* (fruit). Ref: 4243.

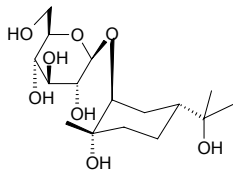
**13765 cis-p-Menth-2-ene-1 $\alpha$ ,7,8-triol**C<sub>10</sub>H<sub>18</sub>O<sub>3</sub> (186.25). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>24</sup> = +26° (c = 0.1, MeOH).Source: BEI SHA SHEN *Glehnia littoralis* (fruit). Ref: 3525.**13766 trans-p-Menth-2-ene-1 $\alpha$ ,7,8-triol**C<sub>10</sub>H<sub>18</sub>O<sub>3</sub> (186.25). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>24</sup> = +13° (c = 0.3, MeOH).Source: BEI SHA SHEN *Glehnia littoralis* (fruit). Ref: 3525.**13767 p-Menth-3-ene-1 $\beta$ ,2 $\beta$ ,5 $\beta$ -triol**C<sub>10</sub>H<sub>18</sub>O<sub>3</sub> (186.25). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>23</sup> = +2° (c = 0.2, MeOH). Source:YIN DU ZANG HUI XIANG *Carum ajowan* (fruit). Ref: 3547.**13768 (3R,4R,6R)-p-Menth-1-ene-3,4,6-triol 3-O- $\beta$ -D-glucopyranoside**C<sub>16</sub>H<sub>28</sub>O<sub>8</sub> (348.40). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>22</sup> = -97° (c = 0.1, MeOH).Source: ZI RAN QIN *Cuminum cyminum* (fruit). Ref: 4243.**13769 (1S,2R,4S)-p-Menth-5-ene-1,2,4-triol 2-O- $\beta$ -D-glucopyranoside**C<sub>16</sub>H<sub>28</sub>O<sub>8</sub> (348.40). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>23</sup> = -60° (c = 1.1, MeOH).Source: ZI RAN QIN *Cuminum cyminum* (fruit). Ref: 4243.**13770 cis-p-2-Menthen-1-ol**C<sub>10</sub>H<sub>18</sub>O (154.25). bp (-) 110~115°C/25mmHg. Source: HU JIAO *Piper nigrum*. Ref: 6.**13771 trans-p-2-Menthen-1-ol**C<sub>10</sub>H<sub>18</sub>O (154.25). Source: BAI DOU KOU *Amomum kravanh* [Syn. *Amomum cardamomum*]. Ref: 6.**13772 p-Menth-4-en-3-one**C<sub>10</sub>H<sub>16</sub>O (152.24). Source: RU XIANG *Boswellia carterii*, DENG XIN CAO *Juncus effusus*. Ref: 1271, 1520.**13773 Menthiafolin**[19351-64-5] C<sub>26</sub>H<sub>36</sub>O<sub>12</sub> (540.57). mp 186°C. Source: SHUI CAI *Menyanthes trifoliata* (the compound was isolated from the plant by Battersby et al. in 1968)<sup>[5505]</sup>, SHUI CAI GEN *Menyanthes trifoliata*. Ref: 6, 5505.**13774 Menthol**C<sub>10</sub>H<sub>20</sub>O (156.27). mp (+) 42°C, (±) 35~36°C. Pharm: Analgesic; anesthetic; anti-inflammatory; relieves itching; used in treatment of headache, neuralgia, itching, respiratory tract inflammation, atrophic rhinitis and celostomia (alalia). Source: BO HE *Mentha haplocalyx* [Syn. *Mentha canadaensis*; *Mentha arvensis* var. *haplocalyx*; *Mentha arvensis*] (dried aerial parts: content scope = 0.77%~0.87%)<sup>[5501]</sup>, HUI HUI SU GENG *Perilla frutescens* var. *crispa*, JIAN ZI SU *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*], JIAN ZI SU YE *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*], JIN XIAN CAO *Glechoma longituba*. Ref: 2, 4, 6, 658, 660, 5501.**13775 Menthol-b**C<sub>10</sub>H<sub>20</sub>O (156.27). mp (-) 43°C, (±) 35~36°C. Source: BO HE *Mentha haplocalyx* [Syn. *Mentha canadaensis*; *Mentha arvensis* var. *haplocalyx*; *Mentha arvensis*], JIN XIAN CAO *Glechoma longituba*, ZI SU YE *Perilla frutescens* var. *arguta*, HUI HUI SU GENG *Perilla frutescens* var. *crispa*. Ref: 2, 4, 6, 660.

**13776 Menthone**

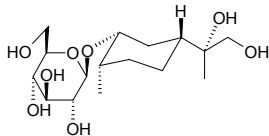
$C_{10}H_{18}O$  (154.25). bp (+) 204°C, (-) 207°C, ( $\pm$ ) 205°C. **Pharm:** Analgesic ((+)Menthone shows strong action, as the effective component in *Schizonepeta tenuifolia* (JING JIE) to settle pain); inhibits intestinal movement (*in vitro* rabbit intestine). **Source:** BO HE *Mentha haplocalyx* [Syn. *Mentha canadaensis*; *Mentha arvensis* var. *haplocalyx*; *Mentha arvensis*] (dried aerial parts: content scope = 0.08%–0.12%)<sup>[5501]</sup>, JING JIE *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*], JIAN ZI SU YE *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*], HUA DONG LAN CI TOU *Echinops grijsii*, *Mentha* sp. **Ref:** 2, 658, 660, 5501.

**13777 (1S,2S,4R)-p-Menth-1,2,8-triol 2-O-β-D-glucopyranoside**

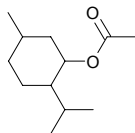
$C_{16}H_{30}O_8$  (350.41). Amorphous powder,  $[\alpha]_D^{21} = +9^\circ$  ( $c = 0.3$ , MeOH). **Source:** SHI LUO ZI *Anethum graveolens* (fruit). **Ref:** 4177.

**13778 (1R,2R,4R,8R)-p-Menth-2,8,9-triol 2-O-β-D-glucopyranoside**

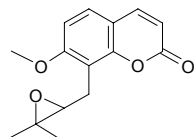
$C_{16}H_{30}O_8$  (350.41). Amorphous powder,  $[\alpha]_D^{22} = -50^\circ$  ( $c = 0.2$ , MeOH). **Source:** SHI LUO ZI *Anethum graveolens* (fruit). **Ref:** 4177.

**13779 Menthyl acetate**

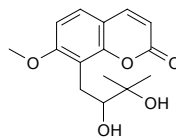
$C_{12}H_{22}O_2$  (198.31). bp 227°C. **Pharm:** Flavorant. **Source:** LA BO HE *Mentha piperita*, BO HE *Mentha haplocalyx* [Syn. *Mentha canadaensis*; *Mentha arvensis* var. *haplocalyx*; *Mentha arvensis*]. **Ref:** 2, 658.

**13780 Meranzin**

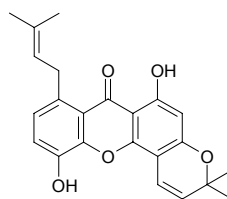
$C_{15}H_{16}O_4$  (260.29). **Source:** XIAO YE JIU LI XIANG *Murraya paniculata* var. *exotica*. **Ref:** 1272.

**13781 Meranzin hydrate**

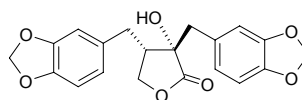
7-Methoxy-8-(2',3'-dihydroxy-3'-methylbutyl)coumarin  $C_{15}H_{18}O_5$  (278.31). **Source:** JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*], DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*], XIAO YE JIU LI XIANG *Murraya paniculata* var. *exotica*. **Ref:** 11, 344, 1291.

**13782 Merguenone**

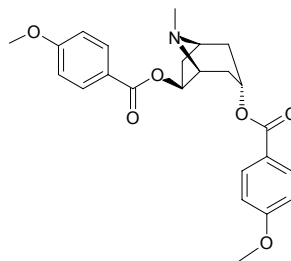
$C_{23}H_{22}O_5$  (378.43). **Source:** *Garcinia merguensis*. **Ref:** 3392.

**13783 Meridinol**

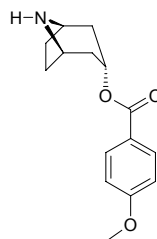
$C_{20}H_{18}O_7$  (370.36). **Source:** YUN NAN FEI SHU *Torreya yunnanensis* (leaf and twig: yield = 0.050%dw). **Ref:** 4707.

**13784 Merredissine**

3 $\alpha$ ,6 $\beta$ -Di-(4-methoxybenzoyloxy)tropane  $C_{24}H_{27}NO_6$  (425.49). Oil,  $[\alpha]_D^{20} = -8.6^\circ$  ( $c = 0.2$ , MeOH). **Source:** SHEN LIE YU HUANG CAO *Merremia dissecta* (ground root). **Ref:** 5292.

**13785 Merresectine A**

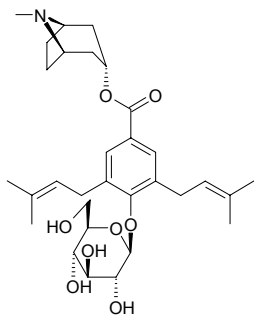
3 $\alpha$ -(4-Methoxybenzoyloxy)nortropane  $C_{15}H_{19}NO_3$  (261.32). Yellow solid. **Source:** SHEN LIE YU HUANG CAO *Merremia dissecta* (ground root). **Ref:** 5292.



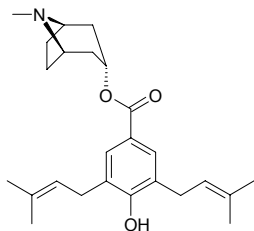


**13786 Merresectine B**

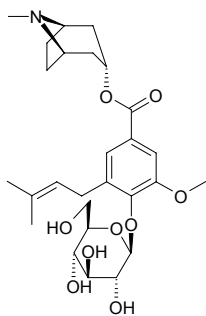
3 $\alpha$ -Kurameroyloxytropine C<sub>31</sub>H<sub>45</sub>NO<sub>8</sub> (559.71). Oil, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -10.2° (c = 0.1, MeOH). Source: SHEN LIE YU HUANG CAO *Merremia dissecta* (ground root). Ref: 5292.

**13787 Merresectine C**

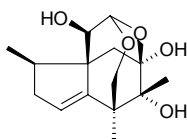
3 $\alpha$ -Nervogenoyloxytropine C<sub>25</sub>H<sub>35</sub>NO<sub>3</sub> (397.56). Oil. Source: SHEN LIE YU HUANG CAO *Merremia dissecta* (ground root). Ref: 5292.

**13788 Merresectine D  $\beta$ -D-glucoside**

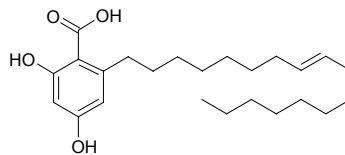
3 $\alpha$ -[4-( $\beta$ -D-Glucopyranosyloxy)-3-methoxy-5-(3-methyl-2-butenyl)benzoyloxy]tropine C<sub>27</sub>H<sub>39</sub>NO<sub>9</sub> (521.61). Oil. Source: SHEN LIE YU HUANG CAO *Merremia dissecta* (ground root). Ref: 5292.

**13789 Merrillanone**

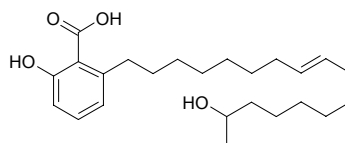
C<sub>15</sub>H<sub>22</sub>O<sub>5</sub> (282.34). Pharm: Neurotrophic bioassay inactive (primary culture of rat cortical neurons, 0.1-10  $\mu$ mol/L). Source: *Illicium merrillianum* (pericarp: yield = 0.00006% dw). Ref: 3046.

**13790 Merulinic acid A**

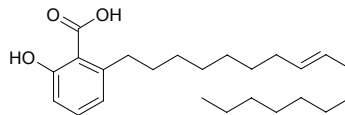
[69506-63-4] C<sub>24</sub>H<sub>38</sub>O<sub>4</sub> (390.57). Source: LIAN ZUO GE JUN *Thelephora vialis*. Ref: 660.

**13791 Merulinic acid B**

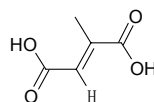
[69506-64-5] C<sub>24</sub>H<sub>38</sub>O<sub>4</sub> (390.57). Source: LIAN ZUO GE JUN *Thelephora vialis*. Ref: 660.

**13792 Merulinic acid C**

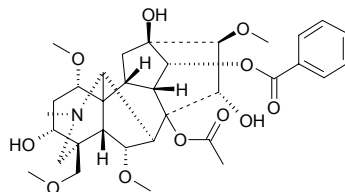
[69506-65-6] C<sub>24</sub>H<sub>38</sub>O<sub>3</sub> (374.57). Source: LIAN ZUO GE JUN *Thelephora vialis*. Ref: 660.

**13793 Mesaconic acid**

[498-24-8] C<sub>5</sub>H<sub>6</sub>O<sub>4</sub> (130.10). mp 240.5°C. Source: GAN ZHE *Saccharum sinensis*. Ref: 6.

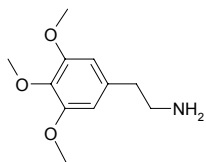
**13794 Mesaconitine**

[2752-64-9] C<sub>33</sub>H<sub>45</sub>NO<sub>11</sub> (631.73). White granular crystals, [ $\alpha$ ]<sub>D</sub><sup>26</sup> = +22.4° (c = 1.511, CHCl<sub>3</sub>). Pharm: Analgesic (mouse, tail pressure test, ED<sub>50</sub> = 0.02mg/kg, LD<sub>50</sub>/ED<sub>50</sub> = 19.0); acute toxicity (mouse, LD<sub>50</sub> = 0.38mg/kg)<sup>[5451]</sup>; similar action with aconitine (weaker than that of aconitine). Source: BEI WU TOU *Aconitum kusnezoffii* (dried tuberoid: content = 0.11%)<sup>[5508]</sup>, FU ZI *Aconitum carmichaeli* (daughter root: content = 0.027%)<sup>[5508]</sup>, OU WU TOU *Aconitum napellus*, WU TOU *Aconitum carmichaeli* (dried tuberoid: content = 0.023%)<sup>[5508]</sup>. Ref: 2, 460, 658, 5451, 5508.

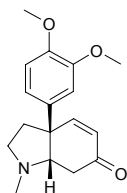


**13795 Mescaline**

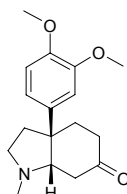
[54-04-6] C<sub>11</sub>H<sub>17</sub>NO<sub>3</sub> (211.26). **Pharm:** Causes mental illness; hallucinogen (high dose); CNS depressant. **Source:** AN LU LONG SHE LAN *Lophophora williamsii*. **Ref:** 658.

**13796 Mesembrenone**

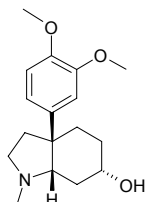
C<sub>17</sub>H<sub>21</sub>NO<sub>3</sub> (287.36). **Pharm:** Anesthetic; stimulant. **Source:** KUO ZHANG SONG YE JU *Mesembryanthemum expansum*, MING SONG YE JU *Mesembryanthemum anatomicum*, NIU QU SONG YE JU *Mesembryanthemum tortuosum*. **Ref:** 658.

**13797 Mesembrine**

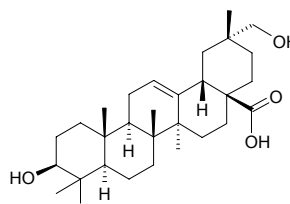
C<sub>17</sub>H<sub>23</sub>NO<sub>3</sub> (289.38). White or yellowish powder, mp 90, [ $\alpha$ ]<sub>D</sub><sup>17</sup> = -54.0° (methanol). **Pharm:** Anesthetic; CNS stimulant. **Source:** KUO ZHANG SONG YE JU *Mesembryanthemum expansum*, MING SONG YE JU *Mesembryanthemum anatomicum*, NIU QU SONG YE JU *Mesembryanthemum tortuosum*. **Ref:** 661.

**13798 Mesembrinol**

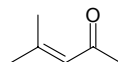
C<sub>17</sub>H<sub>25</sub>NO<sub>3</sub> (291.39). **Pharm:** Anesthetic; stimulant. **Source:** KUO ZHANG SONG YE JU *Mesembryanthemum expansum*, NIU QU SONG YE JU *Mesembryanthemum tortuosum*, MING SONG YE JU *Mesembryanthemum anatomicum*. **Ref:** 658.

**13799 Mesembryanthemoidigenic acid**

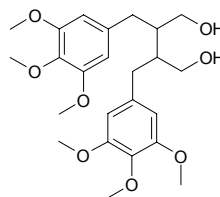
29-Hydroxy oleanic acid; 3 $\beta$ ,29-Dihydroxyolean-12-en-28-oic acid [4871-87-8] C<sub>30</sub>H<sub>48</sub>O<sub>4</sub> (472.71). **Source:** MU TONG *Akebia quinata*, NA TENG *Stauntonia hexaphylla*. **Ref:** 1273, 1274.

**13800 Mesityl oxide**

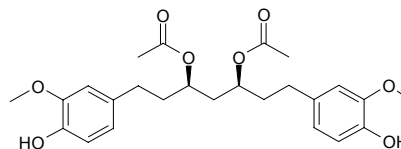
[141-79-7] C<sub>6</sub>H<sub>10</sub>O (98.15). bp 130~131°C. **Source:** YA ER QIN *Cryptotaenia japonica*. **Ref:** 6.

**13801 Meso-2,3-bis(3,4,5-trimethoxybenzyl)-1,4-butanediol**

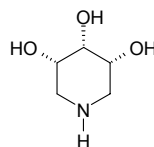
C<sub>24</sub>H<sub>34</sub>O<sub>8</sub> (450.53). **Pharm:** Antineoplastic; cathartic; sthenic; pesticide; ichthyotoxin; muscle relaxant. **Source:** *Zanthoxylum* sp. **Ref:** 2176.

**13802 Meso-3,5-diacetoxy-1,7-bis-(4-hydroxy-3-methoxyphenyl) heptane**

C<sub>25</sub>H<sub>32</sub>O<sub>8</sub> (460.53). **Source:** GAN JIANG *Zingiber officinale*, SHENG JIANG *Zingiber officinale*. **Ref:** 2.

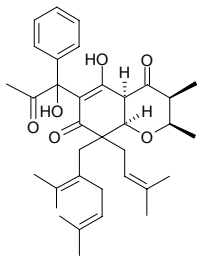
**13803 Mesotrihydroxypiperidine**

[172588-13-5] C<sub>5</sub>H<sub>11</sub>NO<sub>3</sub> (133.15). Colorless oil, [ $\alpha$ ]<sub>D</sub> = ±0° (c = 0.3, methanol). **Pharm:**  $\alpha$ -Glucosidase inhibitor (IC<sub>50</sub> = 3.70  $\mu$ mol/L);  $\alpha$ -mannosidase inhibitor (IC<sub>50</sub> = 1.88  $\mu$ mol/L). **Source:** PEI LAN *Eupatorium fortunei*. **Ref:** 1192.

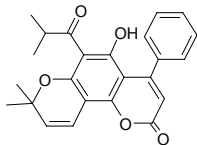


**13804 Mesuaferrol**

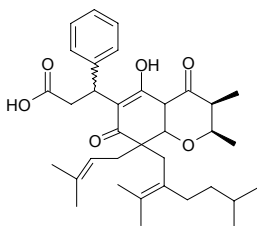
$C_{35}H_{46}O_6$  (562.75). Source: TIE LI MU *Mesua ferrea*. Ref: 1275.

**13805 Mesuagin**

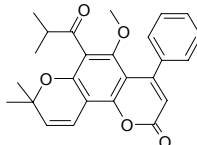
[21721-08-4]  $C_{24}H_{22}O_5$  (390.44). Source: TIE LI MU *Mesua ferrea*. Ref: 1276.

**13806 Mesuanic acid**

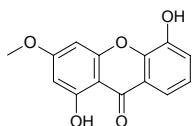
[55303-94-1]  $C_{35}H_{48}O_6$  (564.77). Source: TIE LI MU *Mesua ferrea*. Ref: 1277.

**13807 Mesuarin**

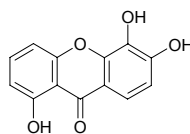
[21721-10-8]  $C_{25}H_{24}O_5$  (404.47). Source: TIE LI MU *Mesua ferrea*. Ref: 1278.

**13808 Mesuaxanthone A**

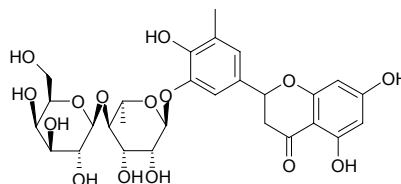
[3561-81-7]  $C_{14}H_{10}O_5$  (258.23). Pharm: Anti-inflammatory; antifungal (*Aspergillus fumigatus* CBS113.26, MIC<sub>80</sub> = 31 μg/mL, control Amphotericin B, MIC<sub>80</sub> = 8 μg/mL; *Aspergillus flavus* IHEM37.19, MIC<sub>80</sub> = 31 μg/mL, Amphotericin B, MIC<sub>80</sub> = 8 μg/mL; *Aspergillus niger* IHEM2951, MIC<sub>80</sub> = 125 μg/mL, Amphotericin B, MIC<sub>80</sub> = 16 μg/mL; *Aspergillus terreus* 5029.2000, MIC<sub>80</sub> > 250 μg/mL; Amphotericin B, MIC<sub>80</sub> = 16 μg/mL; *Candida albicans* ATCC663.90, MIC<sub>80</sub> > 250 μg/mL; Amphotericin B, MIC<sub>80</sub> = 1 μg/mL)<sup>[4995]</sup>; cytotoxic (P<sub>388</sub> ED<sub>50</sub> = 2.76 μg/mL, control Mithramycin ED<sub>50</sub> = 0.06 μg/mL, HT29 ED<sub>50</sub> = 7.51 μg/mL, control Mithramycin ED<sub>50</sub> = 0.08 μg/mL)<sup>[4094]</sup>. Source: DA YE TENG HUANG *Garcinia xanthochymus*, SU GE LAN HU TONG *Calophyllum caledonicum* (stem cortex), TIE LI MU *Mesua ferrea*, TAI WAN LV DAO TENG HUANG *Garcinia linii*, *Vismia* sp. Ref: 658, 4094, 4995.

**13809 Mesuaxanthone B**

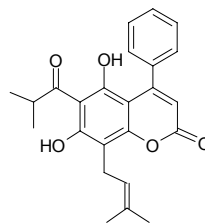
1,5,6-Trihydroxyxanthone  $C_{13}H_8O_5$  (244.21). Pharm: Anti-inflammatory. Source: TIE LI MU *Mesua ferrea*, FEI ZHOU HUANG GUO MU *Mammea africana*, HAI TANG GUO *Calophyllum inophyllum*, *Garcinia* sp. Ref: 658, 660, 1210.

**13810 Mesuein**

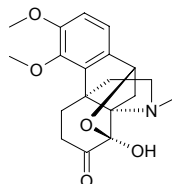
[111128-08-6]  $C_{28}H_{34}O_{15}$  (610.57). Source: TIE LI MU *Mesua ferrea*. Ref: 1279.

**13811 Mesuol**

$C_{24}H_{24}O_5$  (392.46). Pharm: Antibacterial (*Enterococcus faecalis* 18292, MIC = 16 μg/mL; *Enterococcus faecalis* 19250, MIC = 16 μg/mL; *Enterococcus faecalis* 11268, MIC = 16 μg/mL; *Enterococcus faecium* 5, MIC = 16 μg/mL; *Streptococcus durans* 23, MIC = 16 μg/mL)<sup>[3870]</sup>; antibacterial (*Staphylococcus aureus* 17380, MIC = 4 μg/mL; *Staphylococcus aureus* 17592, MIC = 2 μg/mL; *Staphylococcus aureus* 18110, MIC = 2 μg/mL; *Staphylococcus aureus* 17728, MIC = 4 μg/mL; *Staphylococcus epidermidis* 3112, MIC = 2 μg/mL; *Staphylococcus simulans* 214, MIC = 2 μg/mL)<sup>[3870]</sup>; antimalarial (*Plasmodium falciparum* D10 (CQ-S), IC<sub>50</sub> = (10.75±0.14) μg/mL, control Chloroquine, IC<sub>50</sub> = (0.011±0.004) μg/mL; W2 (CQ-R), IC<sub>50</sub> = (8.91±0.27) μg/mL, control Chloroquine, IC<sub>50</sub> = (0.229±0.090) μg/mL)<sup>[3870]</sup>. Source: TIE LI MU *Mesua ferrea*. Ref: 1240, 3870.

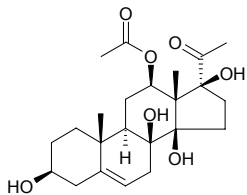
**13812 Metaphanine**

[1805-86-3]  $C_{19}H_{23}NO_5$  (345.40). mp 233°C. Source: QIAN JIN TENG *Stephania japonica*. Ref: 6.

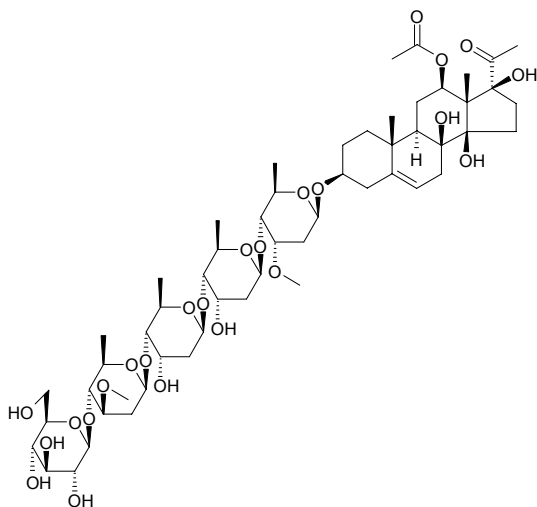


**13813 Metaplexigenin**

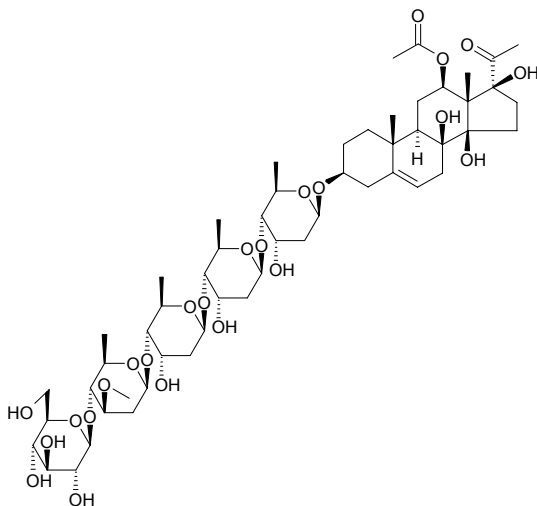
$C_{23}H_{34}O_7$  (422.52). mp 268–275°C. Source: LUO MO *Metaplexis japonica*, ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 6, 3925.

**13814 Metaplexigenin-3-O-β-D-glucopyranosyl-(1→4)-β-D-oleandropyranosyl-(1→4)-β-D-digitoxopyranosyl-(1→4)-β-D-digitoxopyranosyl-(1→4)-β-D-cymaropyranoside**

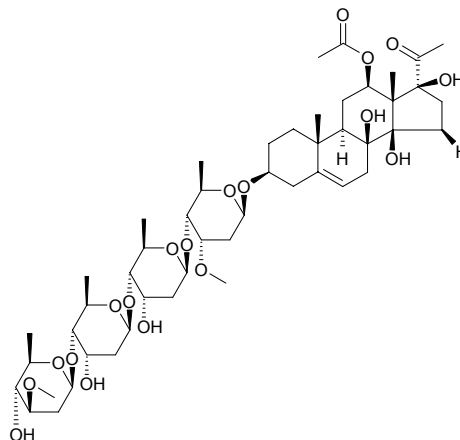
$C_{55}H_{88}O_{24}$  (1133.30). Amorphous powder,  $[\alpha]_D^{27} = +1.3^\circ$  ( $c = 0.65$ , MeOH). Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.

**13815 Metaplexigenin-3-O-β-D-glucopyranosyl-(1→4)-β-D-oleandropyranosyl-(1→4)-β-D-digitoxopyranosyl-(1→4)-β-D-digitoxopyranosyl-(1→4)-β-D-digitoxopyranoside**

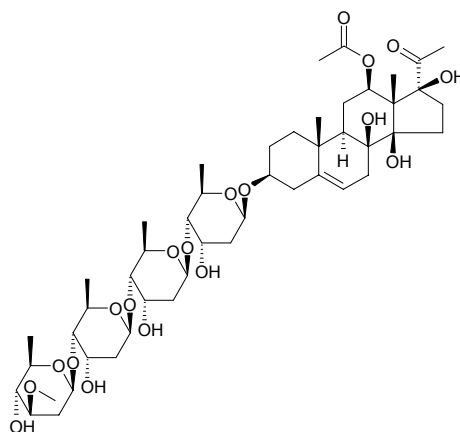
$C_{54}H_{86}O_{24}$  (1119.27). Amorphous powder,  $[\alpha]_D^{27} = -0.83^\circ$  ( $c = 1.03$ , MeOH). Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.

**13816 Metaplexigenin-3-O-β-D-oleandropyranosyl-(1→4)-β-D-digitoxopyranosyl-(1→4)-β-D-digitoxopyranosyl-(1→4)-β-D-cymaropyranoside**

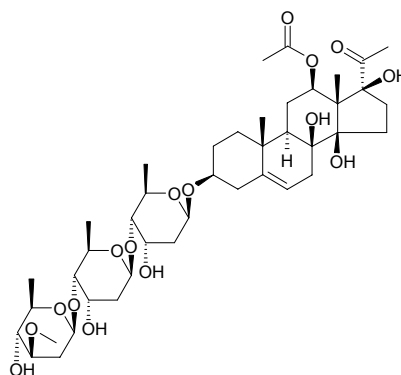
$C_{49}H_{78}O_{19}$  (971.16). Amorphous powder,  $[\alpha]_D^{27} = +2.2^\circ$  ( $c = 0.74$ , MeOH). Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.

**13817 Metaplexigenin-3-O-β-D-oleandropyranosyl-(1→4)-β-D-digitoxopyranosyl-(1→4)-β-D-digitoxopyranosyl-(1→4)-β-D-digitoxopyranoside**

$C_{48}H_{76}O_{19}$  (957.13). Amorphous powder,  $[\alpha]_D^{24} = -4.5^\circ$  ( $c = 1.04$ , MeOH). Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.

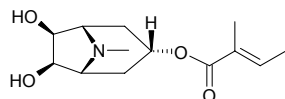
**13818 Metaplexigenin-3-O-β-D-oleandropyranosyl-(1→4)-β-D-digitoxopyranosyl-(1→4)-β-D-digitoxopyranoside**

$C_{42}H_{66}O_{16}$  (826.98). Amorphous powder,  $[\alpha]_D^{23} = -9.7^\circ$  ( $c = 1.02$ , MeOH). Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.

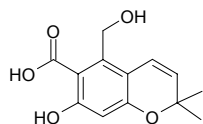


**13819 Meteloidine**

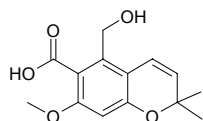
3-(3,6,7-Tropanetriol)triglate; 6,7-Dihydroxy-3-tiglyloxytropane [526-13-6]  $C_{13}H_{21}NO_4$  (255.32). Acicular crystals (benzene), mp 141~142°C, easily soluble in ethanol, chloroform, acetone, slightly soluble in water, ether, benzene.<sup>[5507]</sup> **Pharm:** Hallucinogen<sup>[5507]</sup>; aphrodisiac<sup>[5507]</sup>. **Source:** MAO MAN TUO LUO YE *Datura innoxia*, MAO MAN TUO LUO GEN *Datura innoxia*, MAO MAN TUO LUO ZI *Datura innoxia*, XIANG MAN TUO LUO *Datura metaloides*<sup>[5509]</sup> (in 1908, isolated from the plant for the first time<sup>[5507]</sup>). **Ref:** 6, 660, 5507, 5509.

**13820 5-Methanol-7-hydroxy-2,2-dimethyl-2H-1-chromene-6-carboxylic acid**

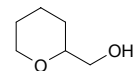
$C_{13}H_{14}O_5$  (250.25). Amorphous solid. **Pharm:** Antifungal (*Cladosporium sphaerospermum*, 100µg, weak activity; *Cladosporium cladosporioides*, 100µg, weak activity). **Source:** *Peperomia villipetiola* (stem). **Ref:** 5256.

**13821 5-Methanol-7-methoxy-2,2-dimethyl-2H-1-chromene-6-carboxylic acid**

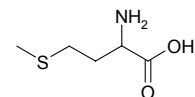
$C_{14}H_{16}O_5$  (264.28). Amorphous solid. **Pharm:** Antifungal (*Cladosporium sphaerospermum*, 100µg, moderate activity; *Cladosporium cladosporioides*, 100µg, strong activity). **Source:** *Peperomia villipetiola* (stem). **Ref:** 5256.

**13822 2-Methanol tetrahydropyran**

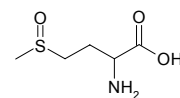
$C_6H_{12}O_2$  (116.16). **Source:** AI YE *Artemisia argyi*. **Ref:** 1280.

**13823 Methionine**

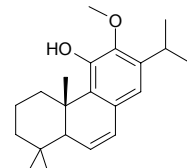
2-Amino-4-(methylthio)butanoic acid  $C_5H_{11}NO_2S$  (149.21). **Pharm:** Acts against hepatic adipose infiltration; promotes biosynthesis of glutathione. **Source:** BAI GUO *Ginkgo biloba*, BAN XIA *Pinellia ternata* (dried tuber: content scope of 4 origins = 0.13%~0.99%, mean content = 0.44%)<sup>[5521]</sup>, CHUAN DANG SHEN *Codonopsis tangshen*, DANG SHEN *Codonopsis pilosula*, NING XIA GOU QI ZI *Lycium barbarum*, QIU HUA DANG SHEN *Codonopsis subglobosa*, SU HUA DANG SHEN *Codonopsis pilosula* var. *modesta* [Syn. *Codonopsis modesta*]. **Ref:** 2, 658, 660, 5521.

**13824 Methionine sulfoxide**

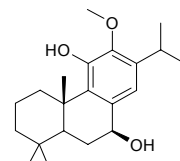
[62697-73-8]  $C_5H_{11}NO_3S$  (165.21). mp 230~231°C (dec). **Source:** YUAN CAN ZI *Bombyx mori*. **Ref:** 6.

**13825 12-Methoxy-6,8,11,13-abietatraen-11-ol**

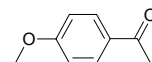
[34327-31-6]  $C_{21}H_{30}O_2$  (314.47). **Source:** DU SONG SHI *Juniperus rigida*. **Ref:** 6.

**13826 12-Methoxy-8,11,13-abietatriene-7β,11-diol**

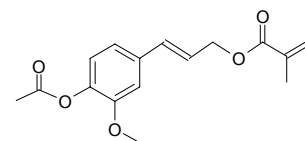
[34327-30-5]  $C_{21}H_{32}O_3$  (332.49). **Source:** DU SONG SHI *Juniperus rigida*. **Ref:** 6.

**13827 4-Methoxy-acetophenone**

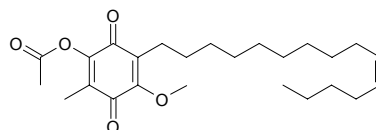
[100-06-1]  $C_9H_{10}O_2$  (150.18). **Source:** DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*]. **Ref:** 2.

**13828 3-Methoxy-4-acetoxycinnamyl angelate**

$C_{17}H_{20}O_5$  (304.35). **Source:** YI ZHI HUANG HUA *Solidago virgaurea* var. *leiocarpa* [Syn. *Solidago decurrens*]. **Ref:** 1281.

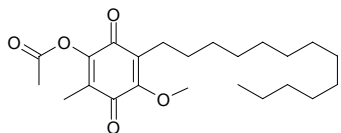
**13829 2-Methoxy-5-acetoxy-6-methyl-3-[(z)-10'-pentadecenyl]-1,4-benzoquinone**

$C_{25}H_{38}O_5$  (418.58). Yellow gum. **Source:** PI ZHEN DU JING SHAN *Maesa lanceolata*. **Ref:** 1860.

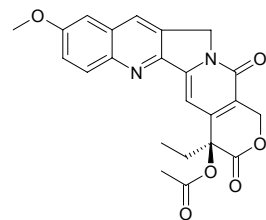


**13830 2-Methoxy-5-acetoxy-6-methyl-3-tridecyl-1,4-benzoquinone**

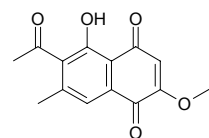
$C_{23}H_{36}O_5$  (392.54). Pale-yellow needles (hot *n*-hexane), mp 45~46°C. Source: PI ZHEN DU JING SHAN *Maesa lanceolata*. Ref: 1860.

**13831 10-Methoxy-20-O-acetylcampthothecin**

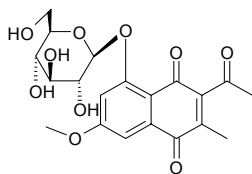
$C_{23}H_{20}N_2O_6$  (420.43). Source: XI SHU *Camptotheca acuminata*. Ref: 4097.

**13832 2-Methoxy-6-acetyl-7-methyljuglone**

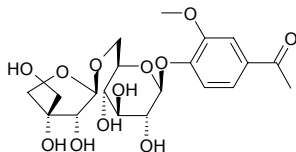
$C_{14}H_{12}O_5$  (260.25). Source: HU ZHANG *Polygonum cuspidatum*. Ref: 2.

**13833 6-Methoxy-2-acetyl-3-methyl-1,4-naphthoquinone-8-O-beta-D-glucopyranoside**

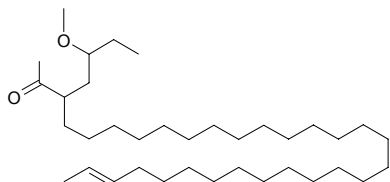
$C_{20}H_{22}O_{10}$  (422.39). Yellow acicular crystals mp 164~165°C. Source: HE SHOU WU *Polygonum multiflorum*. Ref: 847.

**13834 2-Methoxy-4-acetylphenyl-1-O-beta-D-apiofuranosyl-(1''->6')-beta-glucopyranoside**

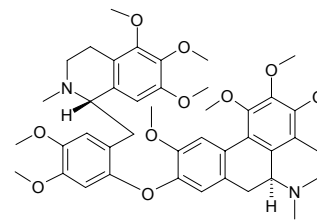
$C_{20}H_{28}O_{12}$  (460.44). Source: DA XUE TENG *Sargentodoxa cuneata* (stem). Ref: 5337.

**13835 3-Methoxy-5-acetyl-31-tritriacontene**

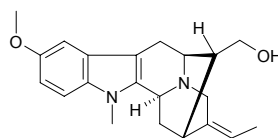
$C_{36}H_{70}O_2$  (534.96). Source: XIAN MAO *Curculigo orchoides*. Ref: 1282.

**13836 Methoxyadiantifoline**

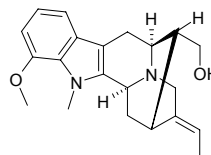
[115452-09-0]  $C_{43}H_{52}N_2O_{10}$  (756.90). White acicular crystals (mineral ether), mp 153~155°C,  $[\alpha]_D^{13} = +77^\circ$  ( $c = 0.3$ , methanol). Pharm: Antiarrhythmic (rat and gpg arrhythmia cordis caused by aconitine, 10mg/kg); calcium antagonist (ileal smooth muscle relaxant in gpg,  $IC_{50} = 2.53\mu\text{mol/L}$ ); coronary vasodilator (gpg heart *in vitro*, enhances blood flow through coronary arteries); inhibits myocardial automatic rhythmicity and contractile power to prolong the effective refractory period. Source: XIANG TANG SONG CAO *Thalictrum foetidum*, E MEI TANG SONG CAO *Thalictrum omeiense*. Ref: 900, 1477.

**13837 10-Methoxyaffinisine**

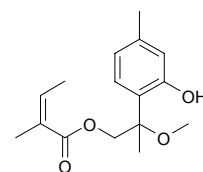
$C_{21}H_{26}N_2O_2$  (338.45). mp 205~206°C,  $[\alpha]_D = +75^\circ$  ( $c = 0.62$ ,  $CHCl_3$ ). Source: DA YE TANG JIAO SHU *Alstonia macrophylla*. Ref: 2320.

**13838 12-Methoxyaffinisine**

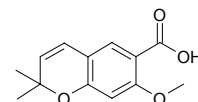
$C_{21}H_{26}N_2O_2$  (338.45). Yellow amorphous solid. Source: BA XI LUO FU MU *Rauvolfia bahiensis*. Ref: 1952.

**13839 8-Methoxy-9-O-angeloylthymol**

$C_{16}H_{22}O_4$  (278.35).  $[\alpha]_D^{20} = 0^\circ$  ( $c = 0.97$ ,  $CHCl_3$ ). Source: PEI LAN *Eupatorium fortunei* (aerial parts). Ref: 3077.

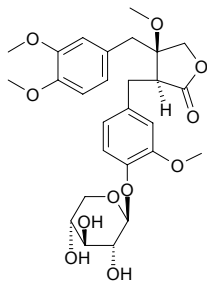
**13840 7-Methoxyanofinic acid**

7-Methoxy-2,2-dimethyl-2H-1-benzopyran-6-carboxylic acid [179457-70-6]  $C_{13}H_{14}O_4$  (234.25). Source: QIN JIAO *Gentiana macrophylla*. Ref: 707.

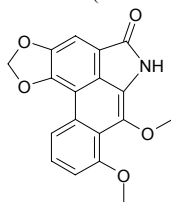


**13841 3-Methoxyartemisinin-4''-O-β-D-xyloside**

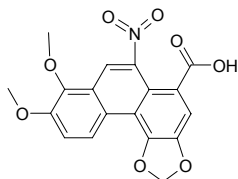
$C_{27}H_{34}O_{11}$  (534.57). Colorless lamellar crystals, mp 166–168°C. Source: NIU XI XI *Rumex patientia*. Ref: 2164.

**13842 9-Methoxyaristolactam I**

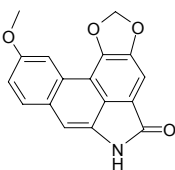
$C_{18}H_{13}NO_5$  (323.31). Source: GUAN MU TONG *Aristolochia manshuriensis* (stem: yield = 0.00071%)<sup>[4706]</sup>, MIAN MAO MA DOU LING *Aristolochia mollissima* (dried root and stem: yield = 0.00062%dw)<sup>[3026]</sup>. Ref: 3026, 4706.

**13843 7-Methoxy-aristolochiac acid**

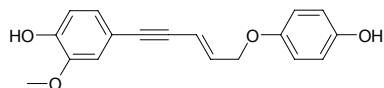
[79185-74-3]  $C_{18}H_{13}NO_8$  (371.31). Source: QING MU XIANG *Aristolochia debilis* [Syn. *Aristolochia longa*]. Ref: 517.

**13844 6-Methoxy-aristolactam**

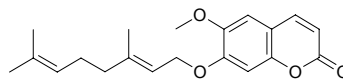
$C_{17}H_{11}NO_4$  (293.28). Source: MIAN MAO MA DOU LING *Aristolochia mollissima*. Ref: 1283.

**13845 3''-Methoxyasparenndiol**

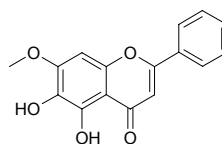
1-[4-Hydroxyphenoxy]-5-[3-methoxy-4-hydroxyphenyl]pent-2-en-3-yne  $C_{18}H_{16}O_4$  (296.33). Yellowish powder. Pharm: Cytotoxic (*in vitro*, KB,  $IC_{50}$  = 12 μg/mL (40.5 μmol/L), Lu1,  $IC_{50}$  = 19.7 μg/mL (66.5 μmol/L), control Ellipticine: KB,  $IC_{50}$  = 0.04 μg/mL (0.16 μmol/L), Lu1,  $IC_{50}$  = 0.02 μg/mL (0.08 μmol/L), HOG.R5,  $IC_{50}$  = 0.02 μg/mL (0.08 μmol/L)), HOG.R5,  $IC_{50}$  < 5 μg/mL (< 17 μmol/L), cytotoxic inactive (Col2, LNCaP, HUVEC,  $IC_{50}$  > 20 μg/mL). Source: TIAN MEN DONG *Asparagus cochinchinensis* [Syn. *Asparagus lucidus*] (dried root: yield = 0.00019%dw). Ref: 3009.

**13846 6-Methoxy auraptin**

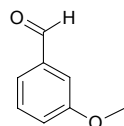
7-Geranyloxy-6-methoxycoumarin  $C_{20}H_{24}O_4$  (328.41). Pharm: EBV-EA inhibitor (TPA-induced,  $IC_{50}$  = 312 Mol ratio/32 pmol TPA, control β-Carotene,  $IC_{50}$  = 400 Mol ratio/32 pmol TPA)<sup>[5255]</sup>. Source: GOU JU HE *Poncirus trifoliata*, YUAN DONG JIU LI XIANG *Murraya siamensis* (leaf). Ref: 6, 5255.

**13847 7-Methoxybaicalein**

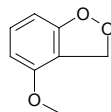
[29550-13-8]  $C_{16}H_{12}O_5$  (284.27). Source: GUANG YE SHUI SU *Stachys palustris*, HUANG QIN *Scutellaria baicalensis*. Ref: 6, 660.

**13848 m-Methoxybenzaldehyde**

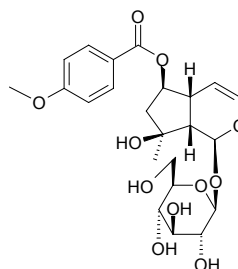
[591-31-1]  $C_8H_8O_2$  (136.15). bp 230°C. Source: DING XIANG *Syzygium aromaticum* [Syn. *Eugenia caryophyllata*]. Ref: 6.

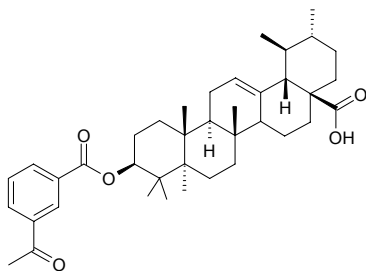
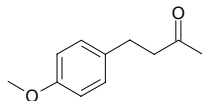
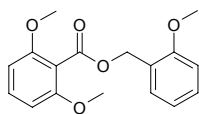
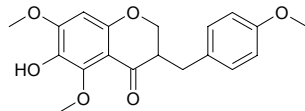
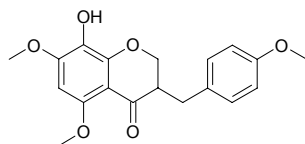
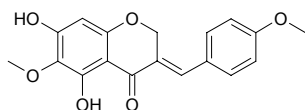
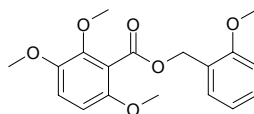
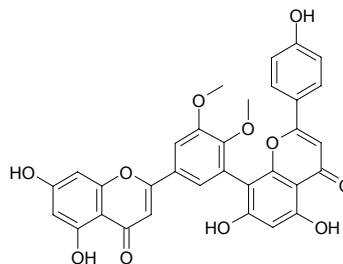
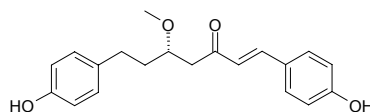
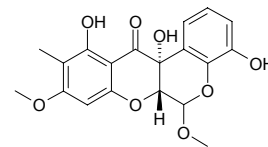
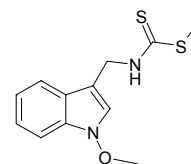
**13849 4-Methoxy-1,2-benzodioxole**

$C_8H_8O_3$  (152.15). Source: SHAN ZHU YU *Cornus officinalis* [Syn. *Macrocarpum officinale*]. Ref: 1284.

**13850 6-O-(4-Methoxybenzoyl)-ajugol**

$C_{23}H_{30}O_{11}$  (482.49). Pharm: NO production inhibitor (LPS-activated macrophage-like J774.1 cells,  $IC_{50}$  = 13.8 μg/mL, control L-NMMA,  $IC_{50}$  = 27.4 μg/mL). Source: HE SE ZHONG HUA SHU *Tabebuia avellanedae* (inner bark). Ref: 4473.

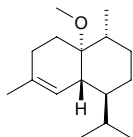


**13851 3β-[(*m*-Methoxybenzoyl)oxyl]urs-12-en-28-oic acid**C<sub>39</sub>H<sub>54</sub>O<sub>5</sub> (602.86). Source: *Morus* sp. Ref: 2513.**13852 *p*-Methoxybenzylacetone**[104-20-1] C<sub>11</sub>H<sub>14</sub>O<sub>2</sub> (178.23). bp 277°C. Source: BAI MU XIANG *Aquilaria sinensis*, CHEN XIANG *Aquilaria agallocha*. Ref: 6, 13.**13853 2-Methoxybenzyl-2,6-dimethoxybenzoate**C<sub>17</sub>H<sub>18</sub>O<sub>5</sub> (302.33). Source: YI ZHI HUANG HUA *Solidago virgaurea* var. *leiocarpa* [Syn. *Solidago decurrens*]. Ref: 1281.**13854 3-(4-Methoxybenzyl)-6-hydroxy-5,7-dimethoxychroman-4-one**C<sub>19</sub>H<sub>20</sub>O<sub>6</sub> (344.37). Yellow oil, [α]<sub>D</sub><sup>25</sup> = -68.7° (c = 0.26, MeOH). Source: *Scilla nervosa* (bulb). Ref: 2381.**13855 3-(4-Methoxybenzyl)-8-hydroxy-5,7-dimethoxychroman-4-one**C<sub>19</sub>H<sub>20</sub>O<sub>6</sub> (344.37). Yellow oil, [α]<sub>D</sub><sup>25</sup> = -109.9° (c = 0.23, MeOH). Source: *Scilla nervosa* (bulb). Ref: 2381.**13856 3-(4-Methoxybenzylidene)-5,7-dihydroxy-6-methoxychroman-4-one**C<sub>18</sub>H<sub>16</sub>O<sub>6</sub> (328.32). Yellow gum. Source: *Scilla nervosa* (bulb). Ref: 2381.**13857 2-Methoxybenzyl-2,3,6-trimethoxybenzoate**C<sub>18</sub>H<sub>20</sub>O<sub>6</sub> (332.36). Source: YI ZHI HUANG HUA *Solidago virgaurea* var. *leiocarpa* [Syn. *Solidago decurrens*]. Ref: 1281.**13858 5'-Methoxybilobetin**[77053-35-1] C<sub>32</sub>H<sub>22</sub>O<sub>11</sub> (582.53). Yellow crystals, mp 251°C. Source: BAI GUO *Ginkgo biloba*. Ref: 2.**13859 (3*S*)-Methoxy-1,7-bis(4-hydroxyphenyl)-6*E*-hepten-5-one**C<sub>20</sub>H<sub>22</sub>O<sub>4</sub> (326.4). Yellow amorphous solid, [α]<sub>D</sub><sup>25</sup> = +17.5° (c = 0.13, MeOH). Pharm: Cytotoxic (Colon26-L5, ED<sub>50</sub> = 5.2 μmol/L; HT1080, ED<sub>50</sub> = 10.1 μmol/L). Source: YUN NAN CAO KOU *Alpinia blepharocalyx* (seed; yield = 0.00012%). Ref: 3042.**13860 6-Methoxyboeravinone C**C<sub>19</sub>H<sub>18</sub>O<sub>8</sub> (374.35). White amorphous powder. Pharm: Antifungal inactive (*Candida albicans* DSY1024, 200 μg/mL). Source: ZI MO LI GEN *Mirabilis jalapa* (Plant cell culture). Ref: 3043.**13861 Methoxybrassinin**[105748-59-2] C<sub>12</sub>H<sub>14</sub>N<sub>2</sub>OS<sub>2</sub> (266.39). Pharm: Antifungal. Source: YUN TAI ZI *Brassica campestris* [Syn. *Brassica campestris* var. *oleifera*], OU ZHOU YOU CAI *Brassica napus*. Ref: 658.

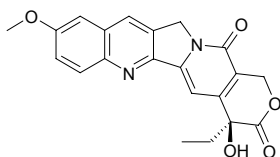


**13862 1-Methoxy-4-cadinene**

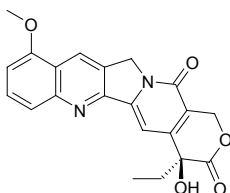
$C_{16}H_{28}O$  (236.40). Colorless oil,  $[\alpha]_D^{25} = -65.2^\circ$  ( $c = 0.11$ ,  $CHCl_3$ ). Source: RI BEN LIU SHAN *Cryptomeria japonica* (black heartwood). Ref: 4279.

**13863 10-Methoxycamptothecin**

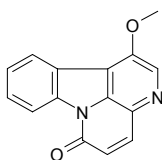
[19685-10-0]  $C_{21}H_{18}N_2O_5$  (378.39). Yellow crystals ( $Me_2CO$ ), mp 255–256°C (dec). Pharm: Antineoplastic (mus  $L_{1210}$ , 0.19mg/kg, biotic prolonged rate = 125%); antiviral (herpesvirus, 10 $\mu$ g/mL, InRt = 89%, 20 $\mu$ g/mL, InRt = 100%). Source: LIU QIU SHE GEN CAO *Ophiorrhiza liukuensis* (whole herb), SHE GEN CAO *Ophiorrhiza mungos*, XI SHU *Camptotheca acuminata*. Ref: 6, 658, 1521, 4527.

**13864 9-Methoxycamptothecin**

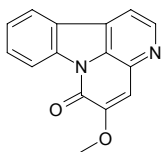
[39026-92-1]  $C_{21}H_{18}N_2O_5$  (378.39). mp 254–255°C, mp 258–260°C. Pharm: Antineoplastic (mus  $P_{388}$ , 0.5mg/kg, biotic prolonged rate = 145%, cultured  $P_{388}$ ,  $ED_{50} = 0.0036\mu$ g/mL). Source: HAI SHI GOU YA HUA *Ervatamia heyneana*, LIU QIU SHE GEN CAO *Ophiorrhiza liukuensis* (whole herb), SHE GEN CAO *Ophiorrhiza mungos*, XI SHU *Camptotheca acuminata*. Ref: 5, 6, 658, 4527.

**13865 1-Methoxycanthin-6-one**

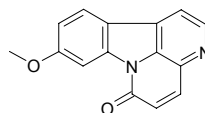
$C_{15}H_{10}N_2O_2$  (250.26). Pharm: Anti-HIV ( $TI > 391$ )<sup>[4758]</sup>. Source: CHU BAI PI *Ailanthus altissima*, GAO CHU *Ailanthus excelsa*. Ref: 1521, 4758.

**13866 5-Methoxycanthin-6-one**

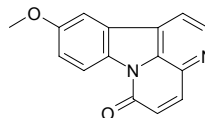
$C_{15}H_{10}N_2O_2$  (250.26). Source: CHANG YE KUAN MU *Eurycoma longifolia* (root: yield = 0.000014%dw), *Eurycoma* sp. Ref: 4556, 4728.

**13867 9-Methoxycanthin-6-one**

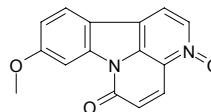
$C_{15}H_{10}N_2O_2$  (250.26). Pharm: Cytotoxic (*in vitro*, A549,  $ED_{50} < 2.5\mu$ g/mL; MCF7,  $ED_{50} = 4.5\mu$ g/mL; HIV, no significant effect)<sup>[4728]</sup>; antimalarial inactive (*Plasmodium falciparum* clones W2, D6, and TM91C235)<sup>[4728]</sup>. Source: CHANG YE KUAN MU *Eurycoma longifolia* (root: yield = 0.0012%dw), *Eurycoma harmandiana* (root). Ref: 4728, 5137.

**13868 10-Methoxycanthin-6-one**

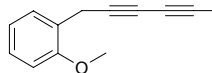
$C_{15}H_{10}N_2O_2$  (250.26). Source: CHANG YE KUAN MU *Eurycoma longifolia* (root: yield = 0.00001%dw), *Eurycoma* sp. Ref: 4556, 4728.

**13869 9-Methoxycanthin-6-one 3-N-oxide**

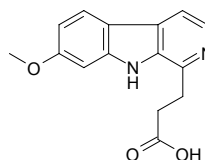
$C_{15}H_{10}N_2O_3$  (266.26). Pharm: Cytotoxic (*in vitro*, A549,  $ED_{50} = 18.5\mu$ g/mL; MCF7,  $ED_{50} = 18.9\mu$ g/mL; HIV, no significant effect)<sup>[4728]</sup>; antimalarial inactive (*Plasmodium falciparum* clones W2, D6, and TM91C235)<sup>[4728]</sup>. Source: CHANG YE KUAN MU *Eurycoma longifolia* (root: yield = 0.0001%dw), *Eurycoma* sp. Ref: 4556, 4728.

**13870 Methoxycapillen**

$C_{13}H_{12}O$  (184.24). Source: YIN CHEN HAO *Artemisia capillaris*. Ref: 2.

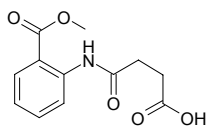
**13871 7-Methoxy- $\beta$ -carboline-1-Propionic acid**

$C_{15}H_{14}N_2O_3$  (270.29). Pharm: Cytotoxic (*in vitro*, A549,  $ED_{50} > 20\mu$ g/mL; MCF7,  $ED_{50} > 20\mu$ g/mL; HIV, no significant effect)<sup>[4728]</sup>; antimalarial inactive (*Plasmodium falciparum* clones W2, D6, and TM91C235)<sup>[4728]</sup>. Source: CHANG YE KUAN MU *Eurycoma longifolia* (root: yield = 0.0001%dw), *Eurycoma harmandiana* (root), *Eurycoma* sp. Ref: 4556, 4728, 5137.

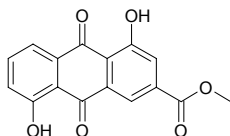


**13872 4-[2-(Methoxycarbonyl)anilino]-4-oxobutanoic acid**

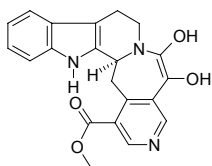
C<sub>12</sub>H<sub>13</sub>NO<sub>5</sub> (251.24). Amorphous powder. **Pharm:** Antioxidant (DPPH scavenger, 1μmol/L, ScRt = 13.4%; control 3-*t*-Butyl-4-hydroxyanisole, 1μmol/L, ScRt = 92.5%). **Source:** *Aconitum leave* (aerial parts). **Ref:** 5271.

**13873 3-Methoxycarbonyl-1,5-dihydroxyanthraquinone**

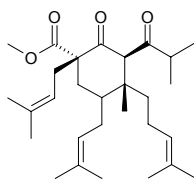
C<sub>16</sub>H<sub>10</sub>O<sub>6</sub> (298.25). Yellow needles (CH<sub>2</sub>Cl<sub>2</sub>-MeOH), mp 216–218°C. **Source:** HUANG QI II *Engelhardia roxburghiana* (root). **Ref:** 5059.

**13874 16-Methoxycarbonyl-18,19-dihydroxynaufoline**

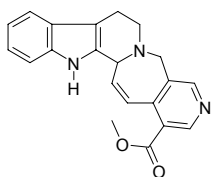
C<sub>21</sub>H<sub>19</sub>N<sub>3</sub>O<sub>4</sub> (377.40). **Pharm:** Antibacterial (*in vitro*: *Staphylococcus aureus*, *Bacillus subtilis*, *Bacillus coli*, *Bacillus diphtheriae*, *Streptococcus* sp., *Streptobacillus* sp., *Salmonella* sp., *Bacillus proteus*, *Bacillus lactis*, *Klebsiella pneumoniae*); antileishmanial (*Leishmania* sp.); antifungal (*Aspergillus niger*). **Source:** KUAN YE WU TAN *Nauclea latifolia*. **Ref:** 2178, 1521.

**13875 (2R,3R,4S,6R)-6-Methoxycarbonyl-3-methyl-4,6-di(3-methyl-2-butenyl)-2-(2-methyl-1-oxopropyl)-3-(4-methyl-3-pentenyl)cyclohexanone**

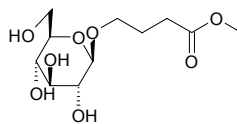
C<sub>29</sub>H<sub>46</sub>O<sub>4</sub> (458.69). Colorless viscous oil, [α]<sub>D</sub><sup>26</sup> = +95.5° (c = 1.1, CHCl<sub>3</sub>). **Source:** GUAN YE LIAN QIAO *Hypericum perforatum* (aerial parts: yield = 0.00024%dw). **Ref:** 3032.

**13876 16-Methoxycarbonyl naufoline**

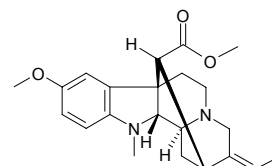
C<sub>21</sub>H<sub>19</sub>N<sub>3</sub>O<sub>2</sub> (345.40). **Pharm:** Antibacterial (*in vitro*: *Staphylococcus aureus*, *Bacillus subtilis*, *Bacillus coli*, *Bacillus diphtheriae*, *Streptococcus* sp., *Streptobacillus* sp., *Salmonella* sp., *Bacillus proteus*, *Bacillus lactis*, *Klebsiella pneumoniae*); antileishmanial (*Leishmania* sp.); antifungal (*Aspergillus niger*). **Source:** KUAN YE WU TAN *Nauclea latifolia*. **Ref:** 2178.

**13877 3-(Methoxycarbonyl)propyl-β-D-glucopyranoside**

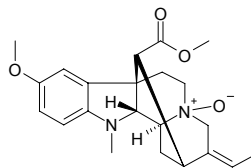
C<sub>11</sub>H<sub>20</sub>O<sub>8</sub> (280.28). Amorphous powder, [α]<sub>D</sub><sup>24</sup> = -19° (c = 0.4, MeOH). **Source:** SHI LUO ZI *Anethum graveolens* (fruit). **Ref:** 4177.

**13878 10-Methoxycathafoline**

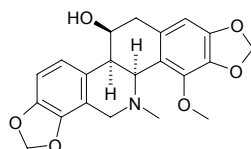
C<sub>22</sub>H<sub>28</sub>N<sub>2</sub>O<sub>3</sub> (338.45). [α]<sub>D</sub> = -57° (c = 0.08, CHCl<sub>3</sub>). **Source:** DA YE TANG JIAO SHU *Alstonia macrophylla*. **Ref:** 2320.

**13879 10-Methoxycathafoline N(4)-oxide**

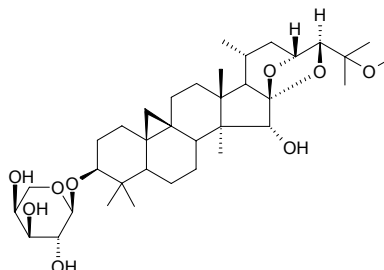
C<sub>22</sub>H<sub>28</sub>N<sub>2</sub>O<sub>4</sub> (384.48). Light yellowish oil, [α]<sub>D</sub> = -32° (c = 0.14, CHCl<sub>3</sub>). **Source:** XIA YE JI GU CHANG SHAN *Alstonia angustifolia* (leaf). **Ref:** 3780.

**13880 Methoxychelidonine**

[26446-58-2] C<sub>21</sub>H<sub>21</sub>NO<sub>6</sub> (383.40). Stout prisms, mp 221°C, [α]<sub>D</sub> = +115.48°. **Source:** BAI QU CAI *Chelidonium majus*. **Ref:** 6.

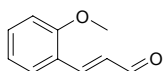
**13881 25-O-Methoxycimigenol 3-O-α-L-arabinopyranoside**

C<sub>36</sub>H<sub>58</sub>O<sub>9</sub> (634.86). **Pharm:** Cytotoxic (HSC-2 cells, IC<sub>50</sub> = 30μmol/L, control Etoposide, IC<sub>50</sub> = 24μmol/L; HGF cells, IC<sub>50</sub> = 54μmol/L). **Source:** ZONG ZHUANG SHENG MA *Cimicifuga racemosa* (rhizome). **Ref:** 4158.

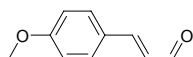


**13882 2-Methoxycinnamaldehyde**

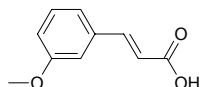
$C_{10}H_{10}O_2$  (162.19). **Pharm:** NF- $\kappa$ B inhibitor (LPS-induced NF- $\kappa$ B transcriptional activity,  $IC_{50}$  = 31  $\mu$ mol/L, positive control Caffeic acid phenethyl ester (CAPE),  $IC_{50}$  = 2  $\mu$ mol/L; NF- $\kappa$ B is a transcription factor regulating expression of inflammatory and immune genes)<sup>[5018]</sup>. **Source:** GUI ZHI *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*] (stem cortex)<sup>[5018]</sup>, GUI ZHI *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*] (twig: content scope of 9 origins = 0.100%–0.175%, mean content = 0.142%)<sup>[5508]</sup>. **Ref:** 5018, 5508.

**13883 p-Methoxycinnamaldehyde**

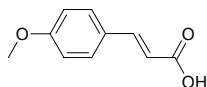
[1963-36-6]  $C_{10}H_{10}O_2$  (162.19). Yellow needles (EtOH aq.), mp 58–59°C, bp 171°C/15mmHg; mp 134°C. **Pharm:** Herbicide, germination inhibitor of seed (*Abutilon avicennae*). **Source:** BA JIAO HUI XIANG *Illicium verum*, HUO XIANG *Agastache rugosus*, JIN QIAN PU *Acorus gramineus*, LUO LE *Ocimum basilicum*, RONG MAO DAI XING CAO *Sphaeranthus indicus*, SHUI HUI XIANG *Limnophila rugosa*, XIA YE QING HAO *Artemisia dracuncululus*. **Ref:** 2, 658.

**13884 m-Methoxycinnamic acid**

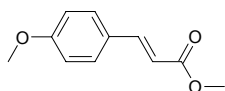
[6099-04-3]  $C_{10}H_{10}O_3$  (178.19). **Source:** MU ZEI *Equisetum hiemale*. **Ref:** 2.

**13885 p-Methoxycinnamic acid**

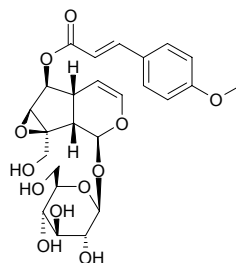
[830-09-1]  $C_{10}H_{10}O_3$  (178.19). mp 170 (174)°C. **Pharm:** Neuroprotectant (primary cultures of rat cortical cells injured by glutamate, 0.1  $\mu$ mol/L, cell viability = (66.4±2.6)%,  $p$ <0.001, control MK-801, 0.1  $\mu$ mol/L, cell viability = (31.8±7.1)%, APV, 0.1  $\mu$ mol/L, cell viability = (5.7±1.9)%, XNQX, 0.1  $\mu$ mol/L, cell viability = (28.1±5.6)%)<sup>[3967]</sup>. **Source:** BEI XUAN SHEN *Scrophularia buergeriana* (root), MU ZEI *Equisetum hiemale*. **Ref:** 2, 3967.

**13886 (E)-p-Methoxycinnamic acid methyl ester**

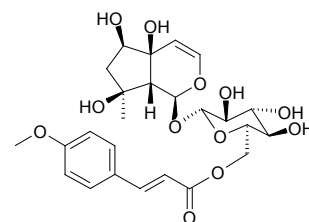
$C_{11}H_{12}O_3$  (192.22). **Pharm:** Neuroprotectant (primary cultures of rat cortical cells injured by glutamate, 0.1  $\mu$ mol/L, cell viability = (25.4±0.8)%, control MK-801, 0.1  $\mu$ mol/L, cell viability = (31.8±7.1)%, APV, 0.1  $\mu$ mol/L, cell viability = (5.7±1.9)%, XNQX, 0.1  $\mu$ mol/L, cell viability = (28.1±5.6)%). **Source:** BEI XUAN SHEN *Scrophularia buergeriana* (root). **Ref:** 3967.

**13887 6-p-Methoxycinnamoyl catalpol**

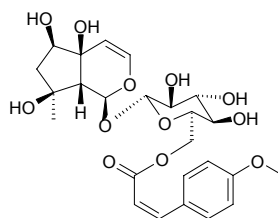
$C_{25}H_{30}O_{12}$  (522.51). **Source:** MI MENG HUA *Buddleja officinalis*. **Ref:** 1286.

**13888 6'-O-E-p-Methoxycinnamoylharpagide**

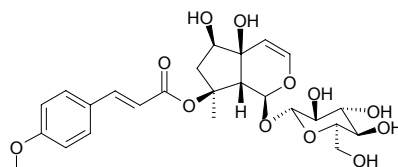
$C_{25}H_{32}O_{12}$  (524.53). Pale brown amorphous powder,  $[\alpha]_D^{15}$  = -26.7° ( $c$  = 0.5, MeOH). **Pharm:** Neuroprotective (primary cultures of rat cortical cells injured by 50  $\mu$ mol/L glutamate, 0.1  $\mu$ mol/L, cell viability = 39.1%; control MK-801, cell viability = 31.8%; APV, cell viability = 5.7%; CNQX, cell viability = 28.1%). **Source:** BEI XUAN SHEN *Scrophularia buergeriana* (root: yield = 0.00003%). **Ref:** 4660.

**13889 6'-O-Z-p-Methoxycinnamoylharpagide**

$C_{25}H_{32}O_{12}$  (524.53). Pale brown amorphous powder,  $[\alpha]_D^{15}$  = -29.09° ( $c$  = 0.5, MeOH). **Pharm:** Neuroprotective (primary cultures of rat cortical cells injured by 50  $\mu$ mol/L glutamate, 0.1  $\mu$ mol/L, cell viability = 33.3%; control MK-801, cell viability = 31.8%; APV, cell viability = 5.7%; CNQX, cell viability = 28.1%). **Source:** BEI XUAN SHEN *Scrophularia buergeriana* (root: yield = 0.00002%). **Ref:** 4660.

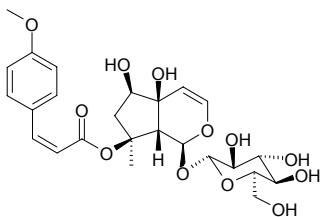
**13890 8-O-E-p-Methoxycinnamoylharpagide**

$C_{25}H_{32}O_{12}$  (524.53). Pale brown amorphous powder,  $[\alpha]_D^{15}$  = -37.4° ( $c$  = 0.5, MeOH). **Pharm:** Neuroprotective (primary cultures of rat cortical cells injured by 50  $\mu$ mol/L glutamate, 0.1  $\mu$ mol/L, cell viability = 54.9%; control MK-801, cell viability = 31.8%; APV, cell viability = 5.7%; CNQX, cell viability = 28.1%). **Source:** BEI XUAN SHEN *Scrophularia buergeriana* (root: yield = 0.00060%). **Ref:** 4660.

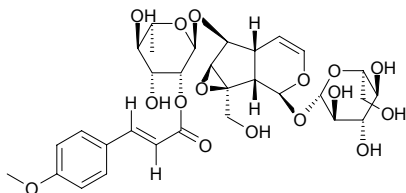


**13891 8-O-Z-p-Methoxycinnamoylharpagide**

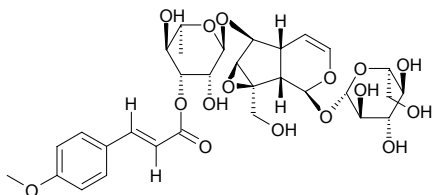
$C_{25}H_{32}O_{12}$  (524.53). Pale brown amorphous powder,  $[\alpha]_D^{15} = -54.3^\circ$  ( $c = 0.5$ , MeOH). **Pharm:** Neuroprotective (primary cultures of rat cortical cells injured by  $50\mu\text{mol/L}$  glutamate,  $0.1\mu\text{mol/L}$ , cell viability = 40.7%; control MK-801, cell viability = 31.8%; APV, cell viability = 5.7%; CNQX, cell viability = 28.1%). **Source:** BEI XUAN SHEN *Scrophularia buergeriana* (root: yield = 0.00042%). **Ref:** 4660.

**13892 6-O-α-L-(2''-O-trans-p-Methoxycinnamoyl)rhamnopyranosylcatalpol**

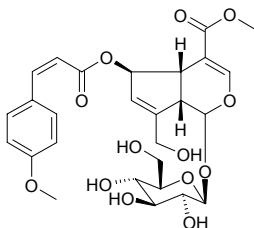
$C_{31}H_{40}O_{16}$  (668.65). **Source:** FEI LV BIN SHI ZI *Gmelina philippensis* (aerial parts). **Ref:** 3954.

**13893 6-O-α-L-(3''-O-trans-p-Methoxycinnamoyl)rhamnopyranosylcatalpol**

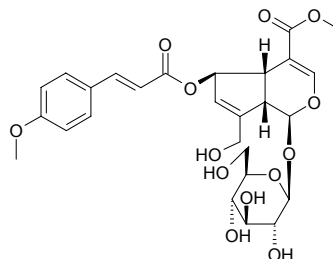
$C_{31}H_{40}O_{16}$  (668.65). **Source:** FEI LV BIN SHI ZI *Gmelina philippensis* (aerial parts). **Ref:** 3954.

**13894 6-O-Z-p-Methoxycinnamoyl scandoside methyl ester**

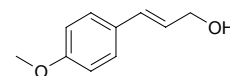
$C_{27}H_{32}O_{13}$  (564.55). **Pharm:** Neuroprotective (primary cultures of rat cortical cells, induced by L-glutamate,  $0.1\mu\text{mol/L}$ , cell viability =  $(28.8\pm 4.6)\%$ ,  $p < 0.05$ ,  $1.0\mu\text{mol/L}$ , cell viability =  $(54.6\pm 2.9)\%$ ,  $p < 0.01$ ,  $10\mu\text{mol/L}$ , cell viability =  $(23.7\pm 4.4)\%$ ,  $p < 0.05$ ). **Source:** BAI HUA SHE SHE CAO *Oldenlandia diffusa* [Syn. *Hedyotis diffusa*] (whole herb: yield = 0.00096%). **Ref:** 3027.

**13895 5-O-p-Methoxy cinnamoyl scandoside methyl ester**

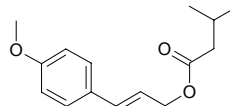
6-O-E-p-Methoxycinnamoyl scandoside methyl ester  $C_{27}H_{32}O_{13}$  (564.55). **Pharm:** Neuroprotective (primary cultures of rat cortical cells, induced by L-glutamate,  $0.1\mu\text{mol/L}$ , cell viability =  $(65.4\pm 4.1)\%$ ,  $p < 0.001$ ,  $1.0\mu\text{mol/L}$ , cell viability =  $(71.8\pm 2.8)\%$ ,  $p < 0.001$ ,  $10\mu\text{mol/L}$ , cell viability =  $(52.8\pm 3.9)\%$ ,  $p < 0.01$ )<sup>[3027]</sup>. **Source:** BAI HUA SHE SHE CAO *Oldenlandia diffusa* [Syn. *Hedyotis diffusa*] (whole herb: yield = 0.00036%)<sup>[3027]</sup>. **Ref:** 660, 3027.

**13896 trans-4-Methoxycinnamoyl alcohol**

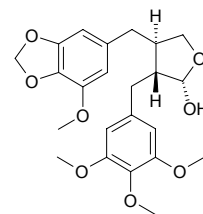
$C_{10}H_{12}O_2$  (164.21). **Source:** DA LIANG JIANG *Alpinia galanga*. **Ref:** 660, 1287.

**13897 4'-Methoxycinnamoyl isovalerate**

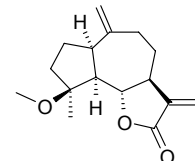
$C_{15}H_{20}O_3$  (248.32). Colorless oil. **Source:** FEI NI JI CI BAI *Juniperus phoenicea* (leaf), XIANG CI BAI FEI ZHOU BIAN ZHONG *Juniperus thurifera* var. *africana* (leaf). **Ref:** 3851.

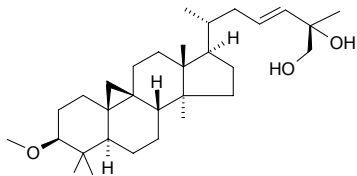
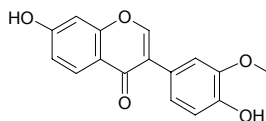
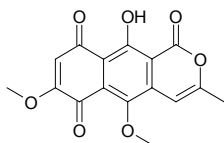
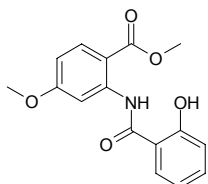
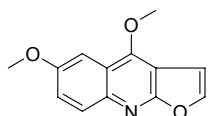
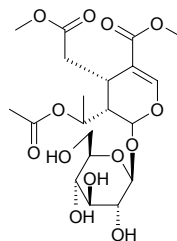
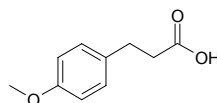
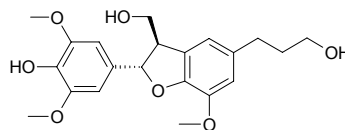
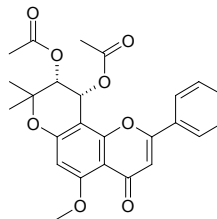
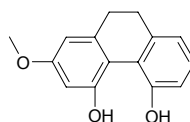
**13898 (8R,8'R,9'S)-5-Methoxyclusin**

$C_{23}H_{28}O_8$  (432.47). Pale yellow oil,  $[\alpha]_D^{25} = -53.4^\circ$  ( $c = 0.3$ ,  $\text{CHCl}_3$ ). **Pharm:** CYP3A4 inhibitor and CYP2D6 inhibitor (*in vitro*, CYP3A4,  $\text{IC}_{50} = 0.083\mu\text{mol/L}$ ; CYP2D6,  $\text{IC}_{50} > 100\mu\text{mol/L}$ ; control Ketoconazole, CYP3A4,  $\text{IC}_{50} = 0.72\mu\text{mol/L}$ ; control Quinidine, CYP2D6,  $\text{IC}_{50} = 0.082\mu\text{mol/L}$ ). **Source:** BI CHENG QIE *Piper cubeba* (fruit: yield = 0.00013%dw). **Ref:** 4797.

**13899 4β-Methoxycostuslactone**

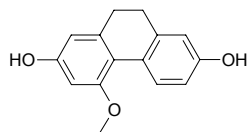
$C_{16}H_{22}O_3$  (262.35). **Source:** MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*]. **Ref:** 1387.



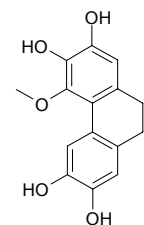
**13900 3 $\beta$ -Methoxy-9 $\beta$ ,19-cyclolanost-23(E)-en-25,26-diol**C<sub>31</sub>H<sub>52</sub>O<sub>3</sub> (472.76). [Source](#): AI YE *Artemisia argyi*. [Ref](#): 1288.**13901 3'-Methoxydaidzein**[21913-98-4] C<sub>16</sub>H<sub>12</sub>O<sub>5</sub> (284.27). mp 262°C. [Source](#): CHAO XIAN HUI *Maackia amurensis*, JIANG ZHEN XIANG *Dalbergia odorifera*. [Ref](#): 1289.**13902 5-Methoxy-3,4-dehydroxanthomegnin**C<sub>16</sub>H<sub>12</sub>O<sub>7</sub> (316.27). Red powder, mp 141~144°C, (toluene:EtOAc = 9:1).[Pharm](#): Cytotoxic (*in vitro*, McCoy cells, CI<sub>50</sub> = 35.8 μg/mL, control *cis*-Platin CI<sub>50</sub> = 41.9 μg/mL). [Source](#): *Paepalanthus latipes*. [Ref](#): 2549.**13903 4-Methoxydianthramide B**C<sub>16</sub>H<sub>15</sub>NO<sub>5</sub> (301.3). White powder. [Pharm](#): Cytotoxic (*in vitro*, HepG2, IC<sub>50</sub> = 4.08 μg/mL; Hep3B, IC<sub>50</sub> = 16.02 μg/mL; MCF7, IC<sub>50</sub> > 20 μg/mL; A549, IC<sub>50</sub> > 20 μg/mL; MDA-MB-231, IC<sub>50</sub> > 20 μg/mL; control Doxorubicin, HepG2, IC<sub>50</sub> = 0.19 μg/mL; Hep3B, IC<sub>50</sub> = 0.31 μg/mL; MCF7, IC<sub>50</sub> = 1.21 μg/mL; A549, IC<sub>50</sub> = 0.19 μg/mL; MDA-MB-231, IC<sub>50</sub> = 0.73 μg/mL). [Source](#): QU MAI *Dianthus superbus* (aerial parts: yield = 0.0017%dw). [Ref](#): 4765.**13904 6-Methoxy dictamnine**[2221-41-2] C<sub>13</sub>H<sub>11</sub>NO<sub>3</sub> (229.24). mp 134~135°C. [Source](#): CHOU CAO *Ruta graveolens*, YU JU *Ptelea trifoliata*. [Ref](#): 6.**13905 7-Methoxydideroside**Dideroside methyl ester C<sub>20</sub>H<sub>30</sub>O<sub>13</sub> (478.45). Amorphous powder, [α]<sub>D</sub><sup>25</sup> = -36.0° (c = 1.4, MeOH). [Pharm](#): Antitrypanosomal (trypomastigotes of *Trypanosoma cruzi*, *in vitro*, IC<sub>50</sub> = 59.0 μg/mL, control Gentian violet, IC<sub>50</sub> = 7.5 μg/mL). [Source](#): *Cabycophyllum spruceanum*. [Ref](#): 3439.**13906 p-Methoxydihydrocinnamic acid**[25173-37-9] C<sub>10</sub>H<sub>12</sub>O<sub>3</sub> (180.21). mp 104~105°C. [Source](#): CHEN XIANG *Aquilaria agallocha*. [Ref](#): 6.**13907 5-Methoxy-trans-dihydrodehydroconiferyl alcohol**C<sub>21</sub>H<sub>26</sub>O<sub>7</sub> (390.44). [α]<sub>D</sub><sup>20</sup> = +4.7° (c = 0.34, MeOH). [Source](#): YUE NAN LIE LAN *Bursera tonkinensis* (root). [Ref](#): 5336.**13908 5-Methoxy-(3'',4''-dihydro-3'',4''-diacetoxy)-2'',2''-dimethylpyrano-(7,8:5'',6'')-flavone**C<sub>25</sub>H<sub>24</sub>O<sub>8</sub> (452.47). Yellowish gum, [α]<sub>D</sub> = -26.0° (c = 0.1, MeOH). [Source](#): SHUI LIU DOU *Pongamia pinnata* (stem cortex: yield = 0.00082%). [Ref](#): 4721, 4721b.**13909 2-Methoxy-9,10-dihydrophenanthrene-4,5-diol**C<sub>15</sub>H<sub>14</sub>O<sub>3</sub> (242.28). White powder. [Pharm](#): Antiallergic β-Hexosaminidase inhibitor (rat basophilic RBL-2H3 cells, inhibits release of β-hexosaminidase, 100 μmol/L, InRt = (-16.3 ± 3.8) μmol/L; 300 μmol/L control Ketotifen fumarate, InRt = (72.5 ± 0.9) μmol/L, p < 0.01). [Source](#): SHOU ZHANG SHEN *Gymnadenia conopsea* (tuber). [Ref](#): 5022.

**13910 4-Methoxy-9,10-dihydrophenanthrene-2,7-diol**

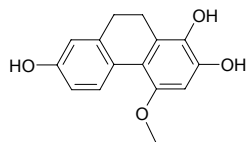
$C_{15}H_{14}O_3$  (242.28). Colorless needles. **Pharm:** Antiallergic  $\beta$ -Hexosaminidase inhibitor (rat basophilic RBL-2H3 cells, inhibits release of  $\beta$ -hexosaminidase,  $100\mu\text{mol/L}$ ,  $\text{InRt} = (80.4 \pm 3.3)\mu\text{mol/L}$ ,  $p < 0.01$ ;  $300\mu\text{mol/L}$  control Ketotifen fumarate,  $\text{InRt} = (72.5 \pm 0.9)\mu\text{mol/L}$ ,  $p < 0.01$ ). **Source:** SHOU ZHANG SHEN *Gymnadenia conopsea* (tuber). **Ref:** 5022.

**13911 4-Methoxy-9,10-dihydrophenanthrene-2,3,6,7-tetrol**

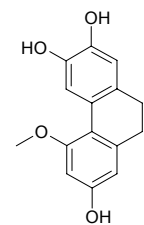
$C_{15}H_{14}O_5$  (274.28). Brown oil. **Source:** QIAO SHI DOU LAN *Bulbophyllum vaginatum*. **Ref:** 1870.

**13912 4-Methoxy-9,10-dihydrophenanthrene-1,2,7-triol**

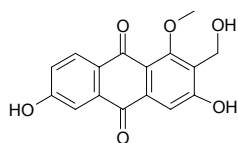
$C_{15}H_{14}O_4$  (258.28). Pale yellow amorphous powder. **Source:** LAN YU BAI JI *Bletilla formosana* (whole herb). **Ref:** 4500.

**13913 4-Methoxy-9,10-dihydrophenanthrene-2,3,7-triol**

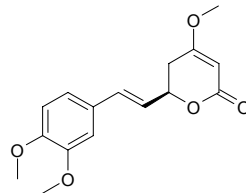
$C_{15}H_{14}O_4$  (258.28). Brown gum. **Source:** QIAO SHI DOU LAN *Bulbophyllum vaginatum*. **Ref:** 1870.

**13914 1-Methoxy-3,6-dihydroxy-2-hydroxymethyl-9,10-anthraquinone**

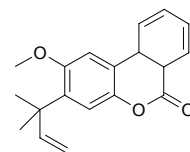
$C_{16}H_{12}O_6$  (300.27). Orange powder. **Source:** MA LAI BAN DAO RAN MU SHU *Saprosma scortechinii* (stem and leaf). **Ref:** 4219.

**13915 11-Methoxy-5,6-dihydroyangonin**

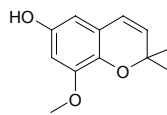
$C_{16}H_{18}O_5$  (290.32). Yellow semi-solid (0.01%),  $[\alpha]_D^{25} = +70.0^\circ$  ( $c = 0.025$ ,  $\text{CHCl}_3$ ). **Source:** KA WA HU JIAO *Piper methysticum*. **Ref:** 1995.

**13916 Methoxy-3-(1,1'-dimethylallyl)-6a,10a-dihydrobenzo(1,2-c)chroman-6-one**

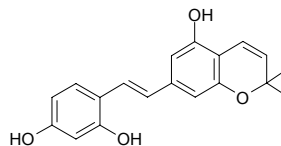
$C_{19}H_{20}O_3$  (296.37). mp  $183\text{--}184^\circ\text{C}$ ,  $[\alpha]_D^{18} = +58.0^\circ$  ( $c = 0.5$ ,  $\text{CHCl}_3$ ). **Pharm:** MAO-A inhibitor (rat brain mitochondrial enzyme,  $\text{IC}_{50} > 100\mu\text{g/mol/L}$ ); MAO-B inhibitor (rat brain mitochondrial enzyme,  $\text{IC}_{50} = 2.9\mu\text{g/mol/L}$ ). **Source:** HUANG LONG DAN *Gentiana lutea*. **Ref:** 3838.

**13917 8-Methoxy-2,2-dimethyl-2H-chromen-6-ol**

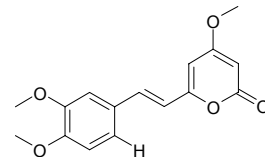
$C_{12}H_{14}O_3$  (206.24). **Source:** *Plagiochila rutilans*. **Ref:** 5144.

**13918 4-Methoxy-2,2-dimethyl-6-(2-(2,4-dihydroxy)phenyl-trans-ethenyl)chromene**

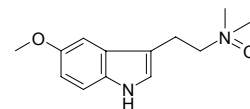
$C_{19}H_{18}O_4$  (310.35). **Pharm:** Antimalarial (*Plasmodium falciparum*,  $\text{EC}_{50} = 9.4\mu\text{g/mL}$ , control Chloroquine diphosphate,  $\text{EC}_{50} = 0.16\mu\text{g/mL}$ ,  $\text{EC}_{50} = 3.1\mu\text{mol/L}$ ). **Source:** QUAN YUAN GUI MU *Artocarpus integra* (aerial parts). **Ref:** 3963.

**13919 4-Methoxy-6-(11,12-dimethylstyryl)-2-pyrone**

$C_{16}H_{16}O_5$  (288.30). mp  $147\text{--}149^\circ\text{C}$  (EtOAc). **Source:** SHA DI YUAN ZHI *Polygala sabulosa*. **Ref:** 5110.

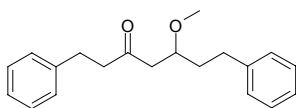
**13920 5-Methoxy-N,N-dimethyl-tryptamine N<sub>b</sub>-oxide**

$C_{13}H_{18}N_2O_2$  (234.30). **Source:** HONG MU JI CAO *Desmodium gangeticum*, PAI QIAN CAO *Desmodium pulchellum* [Syn. *Phyllodium pulchellum*]. **Ref:** 6.

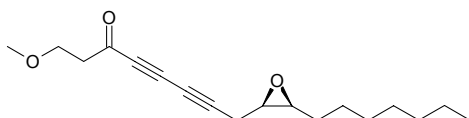


**13921 5-Methoxy-1,7-diphenyl-3-heptanone**

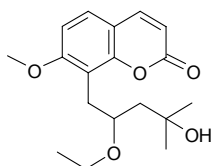
$C_{20}H_{24}O_2$  (296.41). Source: GAO LIANG JIANG *Alpinia officinarum*.  
Ref: 1403.

**13922 1-Methoxy-(9R,10S)-epoxyheptadecan-4,6-diyne-3-one**

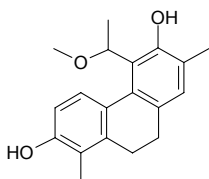
$C_{18}H_{26}O_3$  (290.41). Light yellow oil,  $[\alpha]_D^{25} = -75.5^\circ$  ( $c = 0.5$ ,  $CHCl_3$ ). Pharm:  
DGAT inhibitor ( $IC_{50} = 32\mu g/mL$ , control Evocarpine,  $IC_{50} = 8.1\mu g/mL$ ).  
Source: REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. Ref: 4943.

**13923 7-Methoxy-8-(2'-ethoxy-3'-hydroxy-3'-methylbutyl)coumarin**

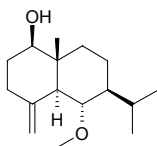
$C_{17}H_{22}O_5$  (306.36). Source: XIAO YE JIU LI XIANG *Murraya paniculata* var.  
*exotica*. Ref: 1292.

**13924 5-(1-Methoxyethyl)-2,6-dihydroxy-1,7-dimethyl-9,10-dihydrophenanthrene**

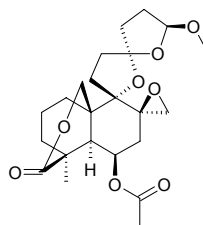
$C_{19}H_{22}O_3$  (298.39). Source: DENG XIN CAO *Juncus effusus*. Ref: 1516.

**13925 6α-Methoxyeudesm-4(15)-en-1β-ol**

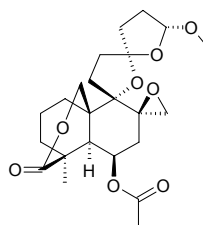
$C_{16}H_{28}O_2$  (252.40). Source: YI NIAN PENG *Erigeron annuus* (aerial parts),  
SU MEN BAI JIU CAO *Erigeron sumatrensis* (aerial parts). Ref: 4338.

**13926 15β-Methoxyfaciculatin**

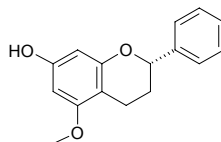
$C_{23}H_{32}O_8$  (436.51). Colorless plate, mp 230–232°C,  $[\alpha]_D^{21} = -16.3^\circ$  ( $c = 0.82$ ,  
 $CHCl_3$ ). Source: CU SHENG SHAN XIANG *Hyptis fasciculata* (aerial parts).  
Ref: 4539.

**13927 15α-Methoxyfaciculatin B**

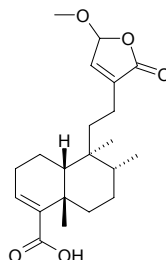
$C_{23}H_{32}O_8$  (436.51). Colorless plate, mp 238–240°C,  $[\alpha]_D^{21} = +72.9^\circ$  ( $c = 1.31$ ,  
 $CHCl_3$ ). Source: CU SHENG SHAN XIANG *Hyptis fasciculata* (aerial parts).  
Ref: 4539.

**13928 (2S)-5-Methoxy flavan-7-ol**

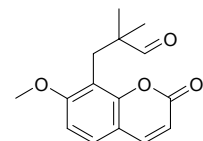
$C_{16}H_{16}O_3$  (256.30). Source: JIAN YE LONG XUE SHU *Dracaena*  
*cochinchinensis*. Ref: 1518.

**13929 (+)-15-Methoxyfloridolide A**

$C_{21}H_{30}O_5$  (362.47).  $[\alpha]_D = +50.6^\circ$  ( $c = 1.35$ ,  $CHCl_3$ ). Source: GE LUN BI YA  
BA DOU *Croton schiedeanus* (aerial parts). Ref: 4447.

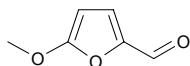
**13930 7-Methoxy-8-(2'-formyl-2'-methylpropyl) coumarin**

$C_{15}H_{16}O_4$  (260.29). Source: JIU LI XIANG *Murraya paniculata* [Syn.  
*Chalcas paniculata*]. Ref: 11, 1295.

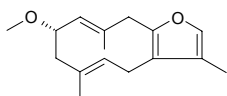


**13931 5-Methoxyfuraldehyde**

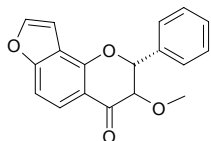
2-Formyl-5-methoxyfuran C<sub>6</sub>H<sub>6</sub>O<sub>3</sub> (126.11). Source: DANG SHEN  
*Condonopsis pilosula*, ZANG HONG HUA *Crocus sativus* (stigma: yield =  
0.00027%dw). Ref: 2, 4653.

**13932 8α-Methoxyfuranodiene**

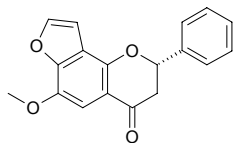
C<sub>18</sub>H<sub>22</sub>O<sub>2</sub> (246.35). Source: MO YAO *Commiphora myrrha* [Syn.  
*Commiphora molmol*]. Ref: 1293.

**13933 3-Methoxy-(2'',3'':7,8)-furanoflavanone**

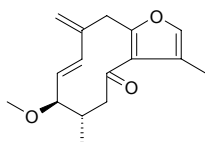
C<sub>18</sub>H<sub>14</sub>O<sub>4</sub> (294.31). Colorless amorphous powder. Source: *Lonchocarpus*  
*latifolius* (root). Ref: 5108.

**13934 (-)-(2S)-6-Methoxy-[2'',3'':7,8]-furanoflavanone**

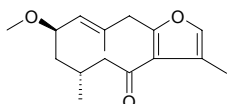
C<sub>18</sub>H<sub>14</sub>O<sub>4</sub> (294.31). Colorless needles, mp 190~192°C, [α]<sub>D</sub><sup>28</sup> = -55.8° (c = 0.1,  
MeOH). Source: HONG E JI XUE TENG *Milletia erythrocalyx*. Ref: 1937.

**13935 rel-3R-Methoxy-4S-furanogermacra-1E,10(15)-dien-6-one**

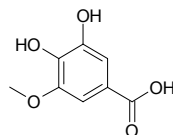
C<sub>16</sub>H<sub>20</sub>O<sub>3</sub> (260.34). Colorless oil, [α]<sub>D</sub> = 74.4° (c = 0.80, CHCl<sub>3</sub>). Pharm:  
Cytotoxic inactive (*in vitro*, MCF7). Source: MO YAO *Commiphora myrrha*  
[Syn. *Commiphora molmol*]. Ref: 3093.

**13936 rel-2R-Methoxy-4R-furanogermacra-1(10)E-en-6-one**

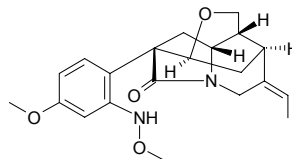
C<sub>16</sub>H<sub>22</sub>O<sub>3</sub> (262.35). Crystals (CHCl<sub>3</sub>), [α]<sub>D</sub> = -174.0° (c = 1.0, CHCl<sub>3</sub>). Pharm:  
Cytotoxic inactive (*in vitro*, MCF7). Source: MO YAO *Commiphora myrrha*  
[Syn. *Commiphora molmol*]. Ref: 3093.

**13937 3-Methoxygallic acid**

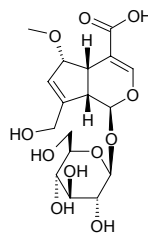
[3934-84-7] C<sub>8</sub>H<sub>8</sub>O<sub>5</sub> (184.15). mp 220(131~132)°C. Source: SHUI JIE GU  
DAN *Epilobium hirsutum*. Ref: 6.

**13938 11-Methoxygelsemamide**

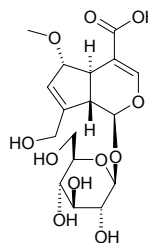
[122297-35-2] C<sub>21</sub>H<sub>26</sub>N<sub>2</sub>O<sub>4</sub> (370.45). mp 140°C, [α]<sub>D</sub> = +215.5°. Source: GOU  
WEN *Gelsemium elegans*. Ref: 14.

**13939 6-Methoxygeniposidic acid**

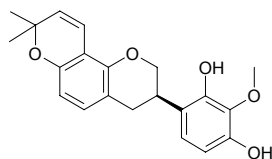
C<sub>17</sub>H<sub>24</sub>O<sub>11</sub> (404.37). Source: QIAN CAO GEN *Rubia cordifolia*. Ref: 1364.

**13940 6-Methoxyginiposidic acid**

C<sub>17</sub>H<sub>24</sub>O<sub>11</sub> (404.37). White powder. Source: QIAN CAO GEN *Rubia*  
*cordifolia*. Ref: 8.

**13941 3'-Methoxyglabridin**

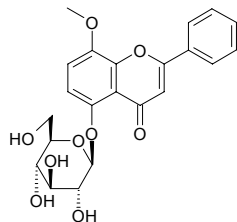
[74046-05-2] C<sub>21</sub>H<sub>22</sub>O<sub>5</sub> (354.41). mp 104~105°C. Pharm: Antibacterial  
(*Staphylococcus aureus* ATCC13709, MIC = 50µg/mL). Source: OU YA  
GAN CAO *Glycyrrhiza glabra* var. *typica*, GAN CAO *Glycyrrhiza*  
*uralensis*. Ref: 2, 658.



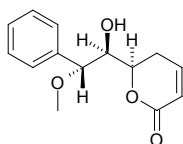


**13942 8-Methoxy-5-O-glucoside flavone**

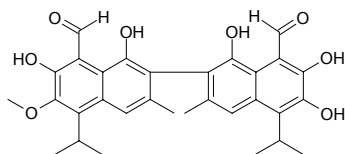
$C_{22}H_{22}O_9$  (430.42). Source: HUANG QIN *Scutellaria baicalensis*. Ref: 2.

**13943 (6R,7R,8R)-8-Methoxygoniodiol**

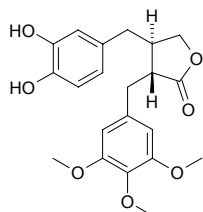
6*R*-(7*R*-Hydroxy-8*R*-methoxy-8-phenyl)-5,6-dihydro-2-pyrone  $C_{14}H_{16}O_4$  (248.28). Colorless prism crystals, mp 99~101°C,  $[\alpha]_D^{25} = +24.2^\circ$  ( $c = 0.68$ ,  $CHCl_3$ ). Pharm: Cytotoxic (*in vitro*, NUGC,  $IC_{50} = 168\mu g/mL$ ; HONE-1,  $IC_{50} = 240\mu g/mL$ ; control Actinomycin, NUGC,  $IC_{50} = 6.61\mu g/mL$ ; HONE-1,  $IC_{50} = 4.53\mu g/mL$ )<sup>[4686]</sup>; cytotoxic (HepG2,  $IC_{50} = 4.63\mu g/mL$ , control Doxorubicin,  $IC_{50} = 0.38\mu g/mL$ ; Hep3B,  $IC_{50} = 6.15\mu g/mL$ , Doxorubicin,  $IC_{50} = 0.36\mu g/mL$ ; MDA-MB-231, inactive; MCF7, inactive)<sup>[5056]</sup>. Source: TAI WAN GE NA XIANG *Goniothalamus amuyon* (fresh leaf: yield = 0.00009%fw; stem: yield = 0.00040%fw). Ref: 4686, 5056.

**13944 6-Methoxygossypol**

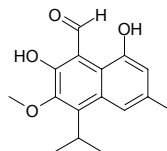
$C_{31}H_{32}O_8$  (532.60). mp 146~149°C. Source: MIAN HUA GEN *Gossypium herbaceum*, MIAN ZI YOU *Gossypium herbaceum*. Ref: 6, 1213.

**13945 (2R,3R)-5'-Methoxyguayarol**

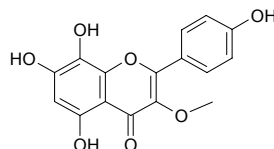
(2*R*,3*R*)-5'-Methoxyguayarol [(2*R*,3*R*)-3-(3,4-dihydroxybenzyl)-2-(3,4,5-trimethoxybenzyl)-butyrolactone]  $C_{21}H_{24}O_7$  (388.42). Pale yellow solid,  $[\alpha]_D^{20} = -63.8^\circ$  ( $c = 0.5$ ,  $CHCl_3$ ). Source: LIAN YE TONG *Hernandia Sonora* [Syn. *Hernandia ovigera*] (seed). Ref: 5030.

**13946 6-Methoxyhemigossypol**

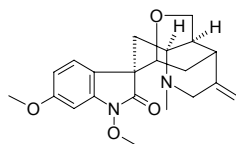
[50399-95-6]  $C_{16}H_{18}O_4$  (274.32). Source: MIAN HUA GEN *Gossypium herbaceum*. Ref: 6.

**13947 3-Methoxyherbacetin**

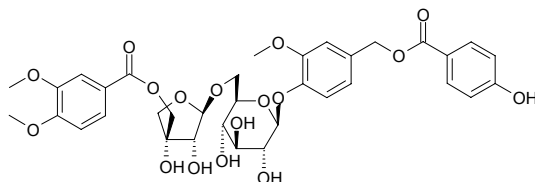
$C_{16}H_{12}O_7$  (316.27). Source: MA HUANG *Ephedra sinica*. Ref: 2.

**13948 11-Methoxyhumantenine**

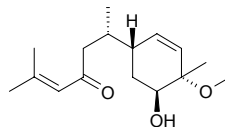
$C_{22}H_{28}N_2O_4$  (384.48). Powder,  $[\alpha]_D = -146.5^\circ$ . Source: GOU WEN *Gelsemium elegans*. Ref: 14.

**13949 2-Methoxy-4-[(4-hydroxybenzoyl)phenol] 1-O-β-D-[5-O-(3,4-dimethoxybenzoyl)]-apiofuranosyl-(1→6)-β-D-glucopyranoside**

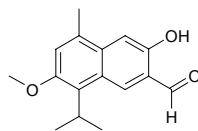
$C_{35}H_{40}O_{17}$  (732.70). Amorphous powder,  $[\alpha]_D^{22} = -61^\circ$  ( $c = 0.79$ , MeOH). Source: BAN ZHEN ZHONG HUA SHU *Tabebuia impetiginosa* (bark). Ref: 3817.

**13950 4-Methoxy-5-hydroxybisabola-2,10-diene-9-one**

$C_{16}H_{26}O_3$  (266.38). Source: JIANG HUANG *Curcuma longa*. Ref: 1405.

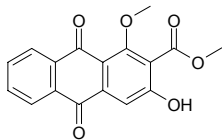
**13951 3-Methoxy-7-hydroxcadalenal**

$C_{16}H_{18}O_3$  (258.32). mp 137~139°C. Source: LANG YU PI *Ulmus parvifolia*. Ref: 6.

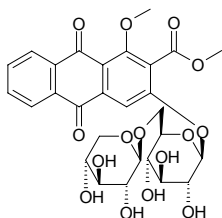


**13952 1-Methoxy-3-hydroxy-2-carbomethoxy-9,10-anthraquinone**

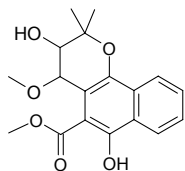
$C_{17}H_{12}O_6$  (312.28). Yellow powder. Source: MA LAI BAN DAO RAN MU SHU *Saprosma scortechinii* (stem and leaf). Ref: 4219.

**13953 1-Methoxy-3-hydroxy-2-carbomethoxy-9,10-anthraquinone 3-O-β-primeveroside**

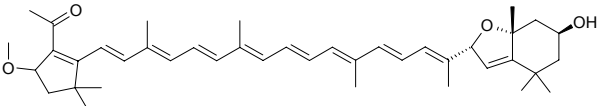
$C_{28}H_{30}O_{15}$  (606.54). Orange powder,  $[\alpha]_D^{23} = -78.7^\circ$  ( $c = 0.13$ , MeOH). Source: MA LAI BAN DAO RAN MU SHU *Saprosma scortechinii* (stem and leaf). Ref: 4219.

**13954 1'-Methoxy-2'-hydroxydihydromollugin**

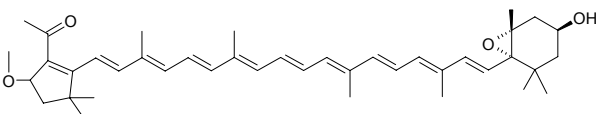
$C_{18}H_{20}O_6$  (332.36). Source: QIAN CAO GEN *Rubia cordifolia*. Ref: 1361.

**13955 3-Methoxy-3'-hydroxy-5',8'-epoxy-5',8'-dihydro-5,6-seco-4,6-cyclo-β-β-caroten-5-one**

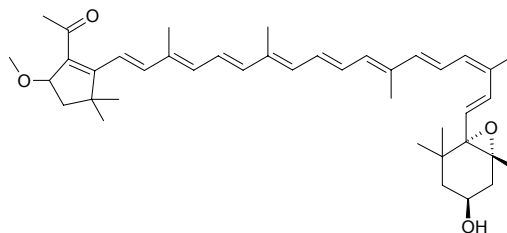
$C_{41}H_{56}O_4$  (612.90). Red amorphous powder. Source: HAI TONG *Pittosporum tobira* (seed). Ref: 4108.

**13956 (all-E)-3-Methoxy-3'-hydroxy-5',6'-epoxy-5',6'-dihydro-5,6-seco-4,6-cyclo-β-β-caroten-5-one**

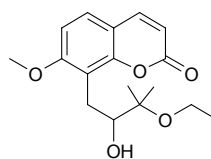
$C_{41}H_{56}O_4$  (612.90). Red amorphous powder. Source: HAI TONG *Pittosporum tobira* (seed). Ref: 4108.

**13957 (9'Z)-3-Methoxy-3'-hydroxy-5',6'-epoxy-5',6'-dihydro-5,6-seco-4,6-cyclo-β-β-caroten-5-one**

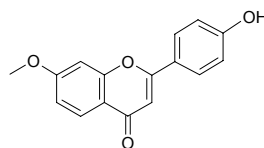
$C_{41}H_{56}O_4$  (612.90). Red amorphous powder. Source: HAI TONG *Pittosporum tobira* (seed). Ref: 4108.

**13958 7-Methoxy-8-(2'-hydroxy-3'-ethoxy-3'-methylbutyl)coumarin**

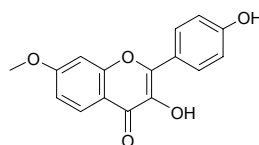
$C_{17}H_{22}O_5$  (306.36). Source: XIAO YE JIU LI XIANG *Murraya paniculata* var. *exotica*. Ref: 1294.

**13959 7-Methoxy-4'-hydroxyflavone**

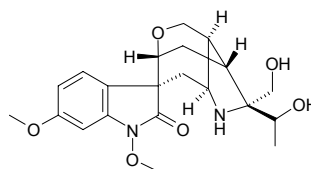
$C_{16}H_{12}O_4$  (268.27). Source: YUN NAN GAN CAO *Glycyrrhiza yunnanensis*. Ref: 1330.

**13960 7-Methoxy-4'-hydroxyflavonol**

$C_{16}H_{12}O_5$  (284.27). Source: YUN NAN GAN CAO *Glycyrrhiza yunnanensis*. Ref: 1330.

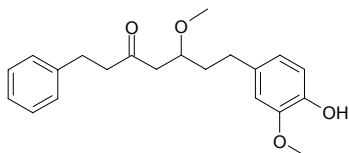
**13961 11-Methoxy-19-(R)-hydroxygelsegine**

$C_{21}H_{28}N_2O_6$  (404.47). mp 234–236°C,  $[\alpha]_D = -110^\circ$ . Source: GOU WEN *Gelsemium elegans*. Ref: 14.

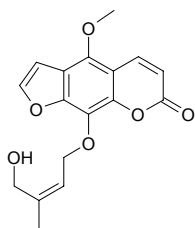


**13962 5-methoxy-7-(4''-hydroxy-3''-methoxy phenyl)-1-phenyl-3-heptanone**

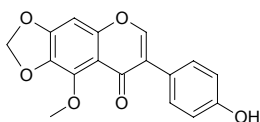
[83161-95-9] C<sub>21</sub>H<sub>26</sub>O<sub>4</sub> (328.41). Colorless oleaginous liquid,  $[\alpha]_D^{20} = -11.6^\circ$  ( $c = 0.43$ , CHCl<sub>3</sub>). **Pharm:** Anti-inflammatory; prostaglandin biosynthesis inhibitor (IC<sub>50</sub> = 2.3 μmol/L, IC<sub>50</sub> of indometacin control = 4.9 μmol/L). **Source:** GAO LIANG JIANG *Alpinia officinarum*. **Ref:** 435, 1814.

**13963 Methoxy-8-(3''-hydroxymethyl-but-2-enyloxy)-psoralen**

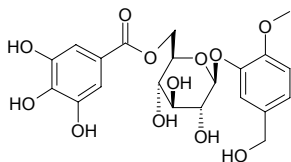
5-Methoxy-8-(3''-hydroxymethyl-but-2-enyloxy)-psoralen C<sub>17</sub>H<sub>16</sub>O<sub>6</sub> (316.31). Colorless amorphous solid. **Source:** SI JI XIANG ROU GUO *Casimiroa tetrameria* (leaf). **Ref:** 5262.

**13964 5-Methoxy-4'-hydroxy-6,7-methylenedioxyisoflavone**

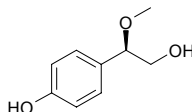
C<sub>17</sub>H<sub>12</sub>O<sub>6</sub> (312.28). **Source:** JUAN QIAO YUAN WEI *Iris potaninii* (underground part). **Ref:** 4235.

**13965 2-Methoxy-5-hydroxymethyl-phenyl-1-O-(6''-galloyl)-β-D-glucopyranoside**

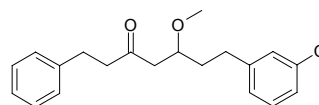
C<sub>21</sub>H<sub>24</sub>O<sub>12</sub> (468.42). Yellow powder, mp 125°C (dec),  $[\alpha]_D^{25} = +14^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Antifungal (*Candida albicans* ATCC2091, MIC = 25 μg/mL, control Amphotericin B, MIC = 1 μg/mL; *Candida albicans* 32, MIC = 100 μg/mL, Amphotericin B, MIC = 4 μg/mL; *Candida albicans* 19, MIC = 50 μg/mL, Amphotericin B, MIC = 2 μg/mL); cytotoxic inactive (MIC > 200 μg/mL); antibacterial inactive. **Source:** *Baseonema acuminatum* (leaf). **Ref:** 5021.

**13966 2-Methoxy-2-(4'-hydroxyphenyl)ethanol**

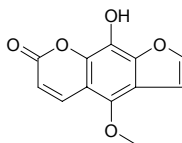
C<sub>9</sub>H<sub>12</sub>O<sub>3</sub> (168.19). Amorphous powder,  $[\alpha]_D^{21} = -15^\circ$  ( $c = 0.2$ , MeOH). **Source:** GE LU ZI *Carum carvi*. **Ref:** 1926.

**13967 5-Methoxy-7-(4''-hydroxyphenyl)-1-phenyl-3-heptanone**

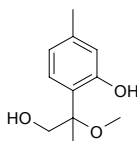
C<sub>21</sub>H<sub>26</sub>O<sub>3</sub> (326.44). **Source:** GAO LIANG JIANG *Alpinia officinarum*. **Ref:** 1403.

**13968 5-Methoxy-8-hydroxy-psoralen**

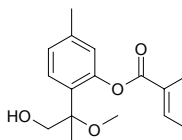
C<sub>12</sub>H<sub>8</sub>O<sub>5</sub> (232.19). **Source:** HANG BAI ZHI *Angelica taiwaniana*. **Ref:** 2, 660.

**13969 8-Methoxy-9-hydroxythymol**

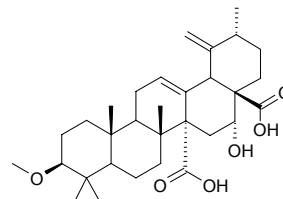
C<sub>11</sub>H<sub>16</sub>O<sub>3</sub> (196.25).  $[\alpha]_D^{24} = 0^\circ$  ( $c = 1.71$ , CHCl<sub>3</sub>). **Source:** PEI LAN *Eupatorium fortunei* (aerial parts). **Ref:** 3077.

**13970 8-Methoxy-9-hydroxythymol 3-O-tiglate**

C<sub>16</sub>H<sub>22</sub>O<sub>4</sub> (278.35).  $[\alpha]_D^{20} = 0^\circ$  ( $c = 1.1$ , CHCl<sub>3</sub>). **Source:** PEI LAN *Eupatorium fortunei* (aerial parts). **Ref:** 3077.

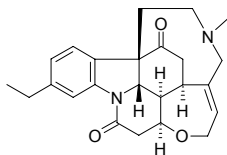
**13971 3β-Methoxy-16α-hydroxyursa-12,19(29)-dien-27,28-dioic acid**

C<sub>31</sub>H<sub>46</sub>O<sub>6</sub> (514.71). **Source:** BI LU GOU TENG *Uncaria tomentosa*. **Ref:** 5341.

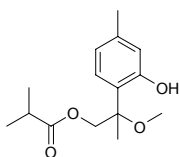


**13972 3-Methoxycajine**

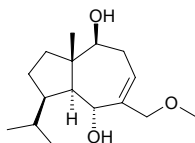
$C_{23}H_{26}N_2O_4$  (394.47). Source: MA QIAN ZI *Strychnos nux-vomica*. Ref: 2.

**13973 8-Methoxy-9-O-isobutyrylthymol**

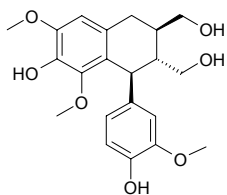
$C_{15}H_{22}O_4$  (266.34).  $[\alpha]_D^{20} = 0^\circ$  ( $c = 1.1$ ,  $CHCl_3$ ). Source: PEI LAN *Eupatorium fortunei* (aerial parts). Ref: 3077.

**13974 15-Methoxysodauc-3-ene-1 $\beta$ ,5 $\alpha$ -diol**

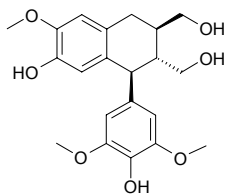
$C_{16}H_{28}O_3$  (268.40). Colorless amorphous solid,  $[\alpha]_D^{27} = -57.2^\circ$  ( $c = 0.3$ ,  $CHCl_3$ ). Source: YI NIAN PENG *Erigeron annuus* (aerial parts), SU MEN BAI JIU CAO *Erigeron sumatrensis* (aerial parts). Ref: 4338.

**13975 (-)-8-Methoxysolariciresinol**

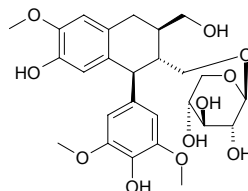
$C_{21}H_{26}O_7$  (390.44). Pharm: Antioxidant (DPPH scavenger, for 40 μmol/L DPPH radical,  $SC_{50} = 15 \mu\text{mol/L}$ ). Source: SUO LA MU *Salacia prinoides* [Syn. *Salacia chinensis*] (stem). Ref: 4378.

**13976 (-)-5'-Methoxysolariciresinol**

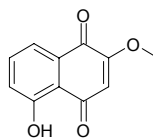
$C_{21}H_{26}O_7$  (390.44). White filariform solid, mp 129~130°C. Source: DIAN BAI ZHU SHU *Gaultheria yunnanensis*. Ref: 815.

**13977 (-)-5'-Methoxysolariciresinol-2 $\alpha$ -O- $\beta$ -D-xylopyranoside (D<sub>2</sub>)**

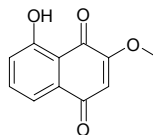
$C_{26}H_{34}O_{11}$  (522.55). White powder, mp 203~204°C. Source: BAI ZHU SHU *Gaultheria leucocarpa* var. *cumingiana* (root: content = 0.014%)<sup>[5508]</sup>, DIAN BAI ZHU SHU *Gaultheria yunnanensis* (root: content scope of 3 origins = 0.019%~0.065%, mean content = 0.042%)<sup>[5508]</sup>, FANG XIANG BAI ZHU *Gaultheria fragrantissima* (root: content = 0.020%)<sup>[5508]</sup>, SI LIE BAI ZHU *Gaultheria tetramera* (root: content = 0.023%)<sup>[5508]</sup>, WEI YE BAI ZHU *Gaultheria griffithiana* (root: content = 0.023%)<sup>[5508]</sup>. Ref: 664, 5508.

**13978 2-Methoxyjuglone**

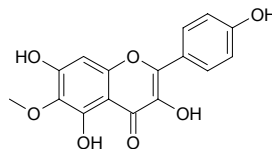
$C_{11}H_8O_4$  (204.18). Source: HUANG QI II *Engelhardia roxburghiana* (root). Ref: 5059.

**13979 3-Methoxyjuglone**

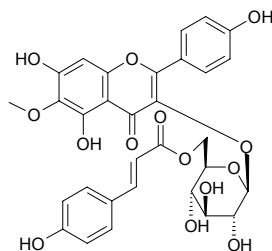
$C_{11}H_8O_4$  (204.18). Pharm: Antitubercular (*Mycobacterium tuberculosis* 90-221387, MIC = 6.25 μg/mL; *Mycobacterium tuberculosis* H37Rv, MIC = 4.0 μg/mL). Source: HUANG QI II *Engelhardia roxburghiana* (root). Ref: 5059.

**13980 6-Methoxykaempferol**

$C_{16}H_{12}O_7$  (316.27). Source: LAN YU BAI JI *Bletilla formosana* (whole herb). Ref: 4500.

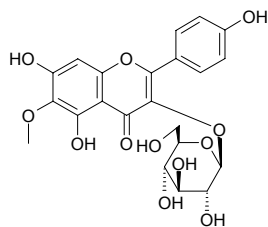
**13981 6-Methoxykaempferol-3-O- $\beta$ -D-6''(p-coumaroyl)glucopyranoside**

$C_{31}H_{28}O_{14}$  (624.56). Source: *Paepalanthus polyanthus*, *Paepalanthus hilairei*, *Paepalanthus robustus*, *Paepalanthus ramosus*, *Paepalanthus denudatus*. Ref: 2291.

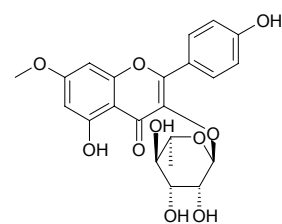


**13982 6-Methoxykaempferol 3-O-glycoside**

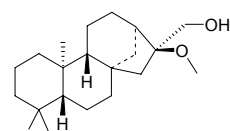
$C_{22}H_{22}O_{12}$  (478.41). Source: HUANG HUA HAO *Artemisia annua*. Ref: 2, 660.

**13983 7-Methoxykaempferol 3-O- $\alpha$ -L-rhamnopyranoside**

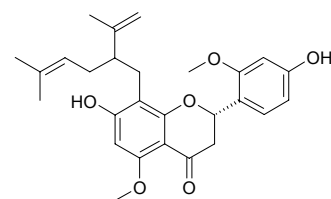
$C_{22}H_{22}O_{10}$  (446.41). Source: MENG GU FENG MAO JU *Saussurea mongolica*. Ref: 4958.

**13984 ent-16 $\alpha$ -Methoxy-kauran-17-ol**

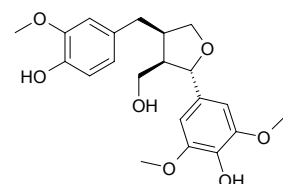
$C_{21}H_{36}O_2$  (320.52). Source: ZHE BEI MU *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*]. Ref: 1396, 2182.

**13985 2'-Methoxykurarinone**

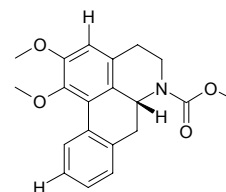
$C_{27}H_{32}O_6$  (452.55). Source: KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. Ref: 4430.

**13986 5'-Methoxylaricresinol**

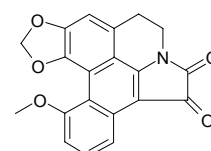
$C_{21}H_{26}O_7$  (390.44). Pharm: Anti-inflammatory (inhibits nitric oxide production, LPS-activated mouse peritoneal macrophages, 100  $\mu$ mol/L, InRt = (63.3  $\pm$  4.0)%, IC<sub>50</sub> = 78  $\mu$ mol/L, control L-NMMA, IC<sub>50</sub> = 57  $\mu$ mol/L);  $\beta$ -hexosaminidase release inhibitor (RBL-2H3 cells, 100  $\mu$ mol/L, InRt = (15.4  $\pm$  1.7)%,  $p$  < 0.01). Source: XIAO HONG SHEN *Rubia yunnanensis* (root). Ref: 4347.

**13987 N-Methoxycarbonyl-nornuciferine**

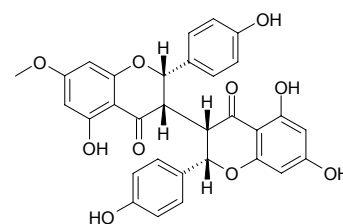
$C_{20}H_{21}NO_4$  (339.39). White amorphous powder,  $[\alpha]_D^{25} = +165^\circ$  ( $c = 0.05$ ,  $CHCl_3$ ). Pharm: Platelet aggregation inhibitor (washed rabbit platelets, 100  $\mu$ g: 0.1 U/mL thrombin-induced, AggRt = (88.7  $\pm$  0.6)%,  $p$  < 0.001; 10  $\mu$ mol/L AA-induced, AggRt = (58.3  $\pm$  6.1)%,  $p$  < 0.001; 10  $\mu$ mol/L collagen-induced, AggRt = (56.5  $\pm$  13.9)%,  $p$  < 0.05; 2 ng/mL PAF-induced, AggRt = (83.8  $\pm$  2.5)%,  $p$  < 0.05). Source: NIAN ZHI LUO LIN *Rollinia mucosa* (stem). Ref: 5143.

**13988 11-Methoxylettowianthine**

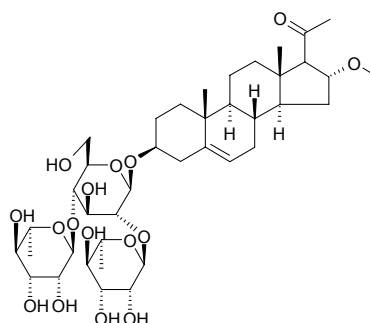
$C_{20}H_{13}NO_5$  (347.33). Dark red amorphous solid. Source: *Lettowianthus stellatus* (root cortex). Ref: 3944.

**13989 7-Methoxylneochaejasmin A**

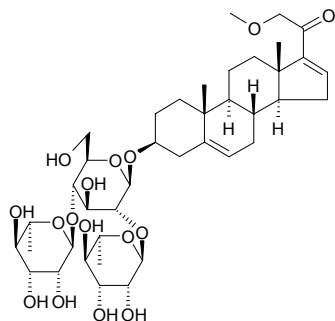
$C_{31}H_{24}O_{10}$  (556.53). Pale yellow amorphous powder,  $[\alpha]_D^{26} = +153.2^\circ$  ( $c = 0.3$ , MeOH). Source: LANG DU *Stellera chamaejasme*. Ref: 4159.

**13990 16 $\alpha$ -Methoxyl-3 $\beta$ -[(O- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)-O-[ $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)]- $\beta$ -D-glucopyranosyl)oxy]pregn-5-en-20-one**

$C_{40}H_{64}O_{16}$  (800.95). Amorphous powder,  $[\alpha]_D^{24} = -47.8^\circ$  ( $c = 0.2$ , pyridine). Pharm: Antifungal (plant pathogenic fungus *Pyricularia oryzae*, MMDC = 250  $\mu$ mol/L); osteoblastic proliferation stimulator (UMR106 cell line, 1  $\mu$ mol/L, increase in cell proliferation = 16.7%, 10  $\mu$ mol/L, 4.4%). Source: FU ZHOU SHU YU *Dioscorea futschauensis* (rhizome). Ref: 4381.

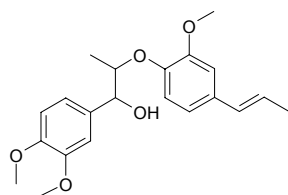


**13991 21-Methoxyl-3 $\beta$ -[(*O*- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)-*O*-[ $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)]- $\beta$ -D-glucopyranosyl)oxy]pregn-5,16-en-20-one**  
 C<sub>40</sub>H<sub>62</sub>O<sub>16</sub> (798.93). Amorphous powder,  $[\alpha]_D^{24} = -40.5^\circ$  ( $c = 0.2$ , pyridine).  
**Pharm:** Antifungal (plant pathogenic fungus *Pyricularia oryzae*, MMDC = 265 $\mu$ mol/L); osteoblastic proliferation stimulator (UMR106 cell line, 1 $\mu$ mol/L, increase in cell proliferation = 9.9%, 10 $\mu$ mol/L, 34.4%, 100 $\mu$ mol/L, 17.6%).  
**Source:** FU ZHOU SHU YU *Dioscorea futschauensis* (rhizome). **Ref:** 4381.



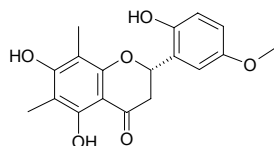
**13992 4-Methoxymachilin D**

C<sub>21</sub>H<sub>26</sub>O<sub>5</sub> (358.44). Colorless oil,  $[\alpha]_D = -160^\circ$  ( $c = 0.7$ , CHCl<sub>3</sub>). **Source:** SAN BAI CAO *Saururus chinensis* (underground part). **Ref:** 4122.



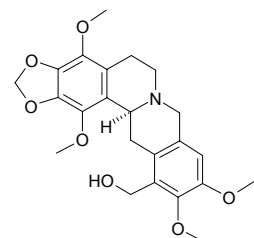
**13993 Methoxymatteucin**

C<sub>18</sub>H<sub>18</sub>O<sub>6</sub> (330.34). **Source:** DONG FANG JIA GUO JUE *Matteuccia orientalis*. **Ref:** 1253.



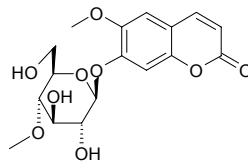
**13994 Methoxymecamidrine**

C<sub>23</sub>H<sub>27</sub>NO<sub>7</sub> (429.47). **Source:** HONG HUA LV RONG HAO *Meconopsis punicea*. **Ref:** 1255.



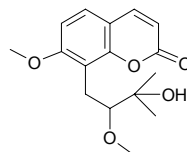
**13995 6-Methoxy-7-O- $\beta$ -D-(4'-methoxy) glucopyranosyl coumarin**

C<sub>17</sub>H<sub>20</sub>O<sub>9</sub> (368.34). White needles (MeOH), mp 257~259°C. **Source:** JIANG CAN *Bombyx batryticatus*. **Ref:** 4591.



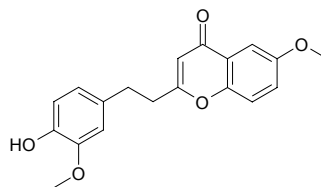
**13996 7-Methoxy-8-(2'-Methoxy-3'-hydroxy-3'-methylbutyl)coumarin**

C<sub>16</sub>H<sub>20</sub>O<sub>5</sub> (292.33). **Source:** XIAO YE JIU LI XIANG *Murraya paniculata var. exotica*. **Ref:** 1291.



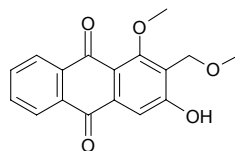
**13997 6-Methoxy-2-[2-(3-methoxy-4-hydroxyphenyl)ethyl]chromone**

C<sub>19</sub>H<sub>18</sub>O<sub>5</sub> (326.35). Colorless needles, mp 152~153°C (MeOH). **Source:** CHEN XIANG *Aquilaria agallocha*. **Ref:** 4173.



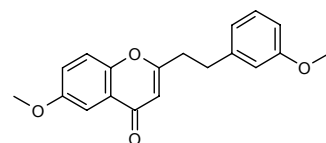
**13998 1-Methoxy-2-methoxymethyl-3-hydroxyanthraquinone**

C<sub>17</sub>H<sub>14</sub>O<sub>5</sub> (298.30). **Source:** QIAN CAO GEN *Rubia cordifolia*. **Ref:** 1362.



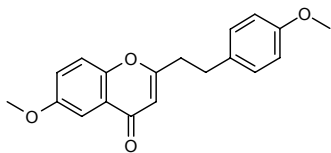
**13999 6-Methoxy-2-[2-(3'-methoxyphenyl) ethyl] chromone**

AH<sub>b1</sub> C<sub>19</sub>H<sub>18</sub>O<sub>4</sub> (310.35). Colorless acicular crystals, mp 97~99°C. **Source:** BAI MU XIANG *Aquilaria sinensis*. **Ref:** 13, 660.

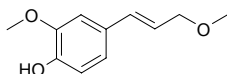


**14000 6-Methoxy-2-[2-(4'-methoxyphenyl) ethyl] chromone**

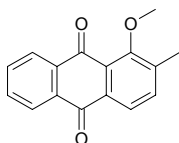
$C_{19}H_{18}O_4$  (310.35). Colorless fine acicular crystals, mp 84–85°C. Source: BAI MU XIANG *Aquilaria sinensis*. Ref: 13, 660.

**14001 2-Methoxy-4-(3-methoxy-1-propenyl)-phenol**

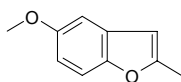
$C_{11}H_{14}O_3$  (194.23). Source: CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*]. Ref: 1353.

**14002 1-Methoxy-2-methylanthraquinone**

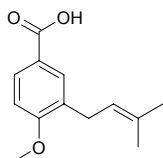
$C_{16}H_{12}O_3$  (252.27). mp 150–157°C. Source: YANG JIAO TENG *Morinda umbellata*. Ref: 6.

**14003 5-Methoxy-2-methylbenzofuran**

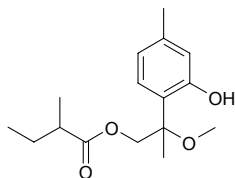
$C_{10}H_{10}O_2$  (162.19). Colorless liquid. Source: YANG HONG SHAN *Pimpinella thelungiana*. Ref: 780.

**14004 4-Methoxy-3-(3-methyl-2-butenyl)-benzoic acid**

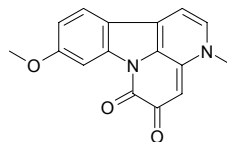
$C_{13}H_{16}O_3$  (220.27). Oil. Pharm: Anti-HIV-1 (binds to chemokine receptor CCR5,  $IC_{50} = 26\mu\text{mol/L}$ ). Source: *Wigandia urens* (stem). Ref: 3474.

**14005 8-Methoxy-9-(2-methylbutyryloxy)thymol**

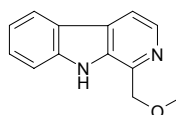
$C_{16}H_{24}O_4$  (280.37).  $[\alpha]_D^{20} = 0^\circ$  ( $c = 0.9$ ,  $\text{CHCl}_3$ ). Source: PEI LAN *Eupatorium fortunei* (aerial parts). Ref: 3077.

**14006 9-Methoxy-3-methylcanthin-5,6-dione**

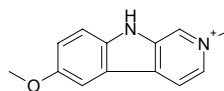
[8]  $C_{16}H_{12}N_2O_3$  (280.29). Source: *Eurycoma* sp. Ref: 4556.

**14007 1-Methoxymethyl-β-carboline**

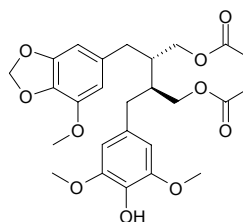
$C_{13}H_{12}N_2O$  (212.25). Source: *Eurycoma* sp. Ref: 4556.

**14008 6-Methoxy-2-methyl-β-carbolineium (cation)**

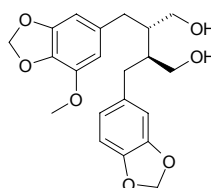
$C_{13}H_{13}N_2O^+$  (213.26). Source: HONG MU JI CAO *Desmodium gangeticum*. Ref: 6, 1214.

**14009 (2S,3S)-2-(5-Methoxy-3,4-methylenedioxybenzyl)-3-(4-hydroxy-3,5-dimethoxybenzyl)butane-1,4-diol diacetate**

$C_{26}H_{32}O_{10}$  (504.54). Colorless gum,  $[\alpha]_D^{25} = +23.6^\circ$  ( $c = 0.267$ ,  $\text{CHCl}_3$ ). Source: MENG ZI CAO HU JIAO *Peperomia duclouxii* (whole herb: yield = 0.00024%). Ref: 4733.

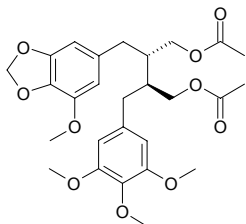
**14010 (2S,3S)-2-(5-Methoxy-3,4-methylenedioxybenzyl)-3-(3,4-methylenedioxybenzyl)butane-1,4-diol**

$C_{21}H_{24}O_7$  (388.42). Colorless gum,  $[\alpha]_D^{25} = +19.0^\circ$  ( $c = 0.127$ ,  $\text{CHCl}_3$ ). Source: MENG ZI CAO HU JIAO *Peperomia duclouxii* (whole herb: yield = 0.00016%). Ref: 4733.



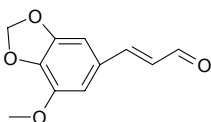
**14011 (2*S*,3*S*)-2-(5-Methoxy-3,4-methylenedioxybenzyl)-3-(3,4,5-trimethoxybenzyl)butane-1,4-diol diacetate**

$C_{27}H_{34}O_{10}$  (518.57). Colorless gum,  $[\alpha]_D^{25} = +19.8^\circ$  ( $c = 0.313$ ,  $CHCl_3$ ).  
**Source:** MENG ZI CAO HU JIAO *Peperomia duclouxii* (whole herb: yield = 0.00036%). **Ref:** 4733.



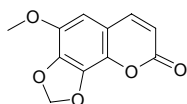
**14012 (*E*)-3-Methoxy-4,5-methylenedioxcinnamaldehyde**

[74683-19-5]  $C_{11}H_{10}O_4$  (206.20). Yellowish rhombic crystals (hexane-ethyl acetate), mp 135~136°C. **Pharm:** Antihepatotoxin (mus, reduces amino transferase increased by  $CCl_4$  and immunodamage of liver caused by *Propionibacterium*). **Source:** XIN JIANG GAO BEN *Conioselinum vaginatum*, GAO BEN *Ligusticum sinense*. **Ref:** 333, 1189.



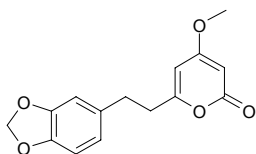
**14013 6-Methoxy-7,8-methylenedioxcoumarin**

$C_{11}H_8O_5$  (220.18). **Source:** BEI AI *Artemisia vulgaris*. **Ref:** 1383.



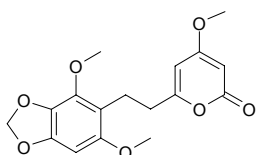
**14014 4-Methoxy-6-(11,12-methylenedioxydihydrostyryl)-2-pyrone**

$C_{15}H_{14}O_5$  (274.28). mp 138~140°C ( $Me_2CO$ ). **Source:** SHA DI YUAN ZHI *Polygala sabulosa* **Ref:** 5110.



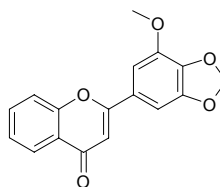
**14015 4-Methoxy-6-(11,12-methylenedioxy-10,14-dimethoxydihydrostyryl)-2-pyrone**

$C_{17}H_{18}O_7$  (334.33). mp 166~168°C ( $Me_2CO$ ). **Source:** SHA DI YUAN ZHI *Polygala sabulosa* **Ref:** 5110.



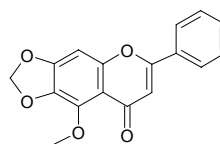
**14016 3'-Methoxy-4',5'-methylenedioxyflavone**

2-(3-Methoxy-4,5-methylenedioxyphenyl)-4*H*-1-benzopyran-4-one  $C_{17}H_{12}O_5$  (296.28). White crystalline solid ( $CHCl_3$ ). **Source:** HUANG HUA JIU LUN CAO *Primula veris* [Syn. *Primula officinalis*] (leaf). **Ref:** 5275.



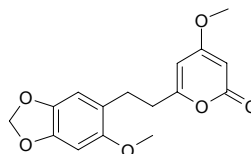
**14017 5-Methoxy-6,7-methylenedioxyflavone**

$C_{17}H_{12}O_5$  (296.28). **Source:** YU LIAO *Polygonum lapathifolium*. **Ref:** 1436.



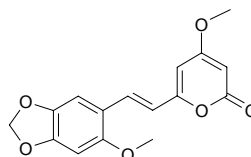
**14018 4-Methoxy-6-(11,12-methylenedioxy-14-methoxydihydrostyryl)-2-pyrone**

$C_{16}H_{16}O_6$  (304.30). mp 149~151°C ( $Me_2CO$ ). **Source:** SHA DI YUAN ZHI *Polygala sabulosa* **Ref:** 5110.



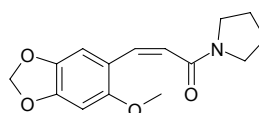
**14019 4-Methoxy-6-(11,12-methylenedioxy-14-methoxystyryl)-2-pyrone**

$C_{16}H_{14}O_6$  (302.29). mp 189~191°C ( $Me_2CO$ ). **Source:** SHA DI YUAN ZHI *Polygala sabulosa* **Ref:** 5110.



**14020 *N*-[3-(6'-Methoxy-3',4'-methylenedioxyphenyl)-2(*Z*)-propenoyl]pyrrolidine**

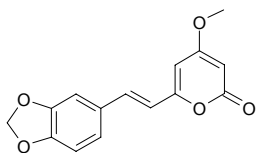
$C_{15}H_{17}NO_4$  (275.31). **Pharm:** Antifungal (*Cladosporium sphaerospermum*, MIA = 5.0µg, control Nystatin, MIA = 0.5µg). **Source:** YING MAO HU JIAO *Piper hispidum* (stem). **Ref:** 5102.



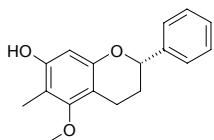


**14021 4-Methoxy-6-(11,12-methylenedioxyethyl)-2-pyrone**

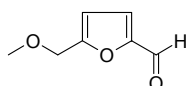
$C_{15}H_{12}O_5$  (272.26). mp 200–203°C (EtOAc). Source: SHA DI YUAN ZHI *Polygala sabulosa* Ref: 5110.

**14022 (2S)-5-Methoxy-6-methylflavan-7-ol**

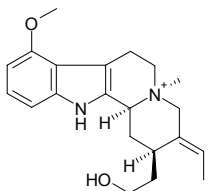
$C_{17}H_{18}O_3$  (270.33). Source: JIAN YE LONG XUE SHU *Dracaena cochinchinensis*. Ref: 1518.

**14023 5-Methoxymethyl furfural**

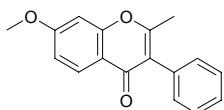
$C_7H_8O_3$  (140.14). bp 98°C/7mmHg. Source: TIAN MEN DONG *Asparagus cochinchinensis* [Syn. *Asparagus lucidus*], DANG SHEN *Codonopsis pilosula*. Ref: 6, 1215, 1216.

**14024 9-Methoxy-N<sub>6</sub>-methylgeissoschizol**

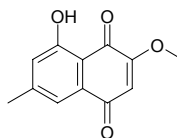
$C_{21}H_{29}N_2O_2$  (341.48). Pharm: Nicotinic acetylcholine receptor competitive inhibitor (6.298 μmol/L, endplate potential amplitude is reduced to 49%, 40.65 μmol/L, reduced this amplitude to 5%)<sup>[3943]</sup>; toxic inactive (12mg/kg injection, did not seem toxic)<sup>[3943]</sup>; neuromuscular toxicity (neuromuscular transmission inhibitor,  $IC_{50}$  = 120 μmol/L; Venezuelan calabash curare,  $IC_{50}$  = 6.5 μmol/L)<sup>[5202]</sup>. Source: *Strychnos guianensis* (stem cortex). Ref: 3943, 5202.

**14025 7-Methoxy-2-methyl isoflavone**

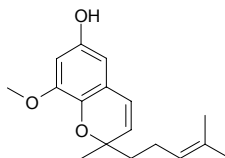
$C_{17}H_{14}O_3$  (266.30). Source: GUANG GUO GAN CAO *Glycyrrhiza glabra*. Ref: 1296.

**14026 3-Methoxy-7-methyljuglone**

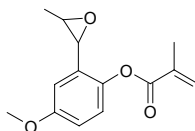
$C_{12}H_{10}O_4$  (218.21). Source: SHI GEN *Diospyros kaki*. Ref: 6.

**14027 8-Methoxy-2-methyl-2-(4-methyl-3-pentenyl)-2H-1-benzopyran-6-ol**

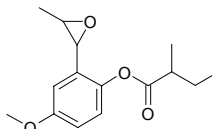
$C_{17}H_{22}O_3$  (274.36). Oil,  $[\alpha]_D^{25}$  = -26° ( $c$  = 0.026, EtOH). Pharm: Anti-HIV-1 (binds to chemokine receptor CCR5,  $IC_{50}$  = 46 μmol/L). Source: *Wigandia urens* (stem). Ref: 3474.

**14028 (+)-4-Methoxy-2-(3-methyloxiranyl)-phenyl angelate**

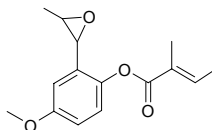
*cis*-Epoxy-pseudoisoeugenyl tiglate  $C_{15}H_{18}O_4$  (262.31). Colorless oil,  $[\alpha]_D^{25}$  = +22.0° ( $c$  = 0.5,  $CHCl_3$ ). Pharm: Antimycobacterial (*Mycobacterium intracellulare*,  $IC_{50}$  = 2.5 μg/mL, control Ciprofloxacin,  $IC_{50}$  = 0.25 μg/mL). Source: *Pimpinella isaurica*. Ref: 5465.

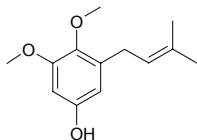
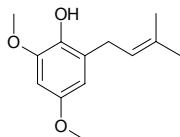
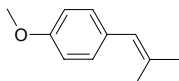
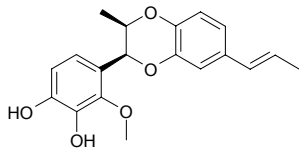
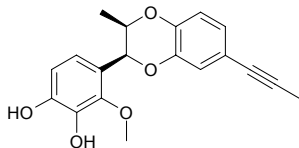
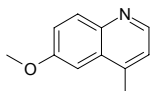
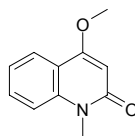
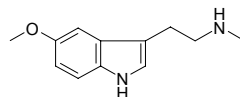
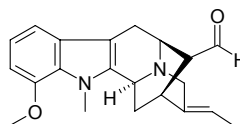
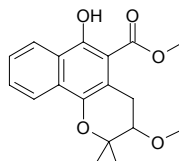
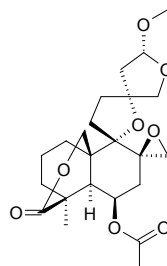
**14029 (+)-4-Methoxy-2-(3-methyloxiranyl)-phenyl-2-methylbutanoate**

Epoxy-pseudoisoeugenyl 2-methylbutyrate  $C_{15}H_{20}O_4$  (264.32). Colorless oil,  $[\alpha]_D^{25}$  = +26.0° ( $c$  = 1.0,  $CHCl_3$ ). Pharm: Antimycobacterial (*Mycobacterium intracellulare*,  $IC_{50}$  = 1.5 μg/mL, control Ciprofloxacin,  $IC_{50}$  = 0.25 μg/mL; *Mycobacterium fortuitum*,  $IC_{50}$  = 3.0 μg/mL, Ciprofloxacin,  $IC_{50}$  = 0.04 μg/mL; *Mycobacterium aurum*,  $IC_{50}$  = 1.5 μg/mL, Ciprofloxacin,  $IC_{50}$  = 0.03 μg/mL; *Mycobacterium phlei*,  $IC_{50}$  = 0.85 μg/mL, Ciprofloxacin,  $IC_{50}$  = 0.25 μg/mL); antifungal (*Aspergillus fumigatus*, active concentration = 50.0 μg/mL, control Amphotericin B, active concentration = 0.6 μg/mL); antimalarial (*Plasmodium falciparum* D6,  $IC_{50}$  = 3.0 μg/mL, SI > 3.3, control Artemisinin,  $IC_{50}$  = 0.006 μg/mL; *Plasmodium falciparum* W2,  $IC_{50}$  = 1.3 μg/mL, SI > 7.6, control Artemisinin,  $IC_{50}$  = 0.007 μg/mL). Source: *Pimpinella corymbosa*. Ref: 5465.

**14030 (+)-4-Methoxy-2-(3-methyloxiranyl)-phenyl tiglate**

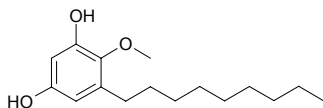
*trans*-Epoxy-pseudoisoeugenyl tiglate  $C_{15}H_{18}O_4$  (262.31). Colorless oil  $[\alpha]_D^{25}$  = +29.4° ( $c$  = 0.2,  $CHCl_3$ ). Source: *Pimpinella isaurica*. Ref: 5465.



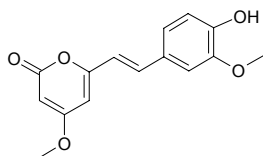
**14031 2-Methoxy-1-O-methyl-6-prenylhydroquinone**C<sub>13</sub>H<sub>18</sub>O<sub>3</sub> (222.29). [Source](#): *Plagiochila rutilans*. [Ref](#): 5144.**14032 2-Methoxy-4-O-methyl-6-prenylhydroquinone**C<sub>13</sub>H<sub>18</sub>O<sub>3</sub> (222.29). [Source](#): *Plagiochila rutilans*. [Ref](#): 5144.**14033 1-Methoxy-4-(2-methylpropenyl)benzene**C<sub>11</sub>H<sub>14</sub>O (162.23). Colorless oil. [Source](#): NING BIAN E TAI *Radula perrottetii* (essential oil). [Ref](#): 5272.**14034 3-Methoxy-4-[(2S,3R)-3-methyl-7-(E)-1-propenyl]-2,3-dihydro-1,4-benzodioxin-2-yl]-1,2-benzenediol**C<sub>19</sub>H<sub>20</sub>O<sub>5</sub> (328.37).  $[\alpha]_D^{20} = +24.23^\circ$  ( $c = 0.06$ , MeOH). [Source](#): RI BEN GUI DENG QING *Rodgersia podophylla* (aerial parts). [Ref](#): 2534.**14035 3-Methoxy-4-[(2S,3R)-3-methyl-7-(1-propynyl)-2,3-dihydro-1,4-benzodioxin-2-yl]-1,2-benzenediol**C<sub>19</sub>H<sub>18</sub>O<sub>5</sub> (326.35).  $[\alpha]_D^{20} = +48.3^\circ$  ( $c = 0.08$ , MeOH). [Source](#): RI BEN GUI DENG QING *Rodgersia podophylla* (aerial parts). [Ref](#): 2534.**14036 6-Methoxy-4-methylquinoline**C<sub>11</sub>H<sub>11</sub>NO (173.22). [Source](#): DA YE TANG JIAO SHU *Alstonia macrophylla* (leaf: yield = 0.0001%). [Ref](#): 3020.**14037 4-Methoxy-1-methyl-2-quinolone**C<sub>11</sub>H<sub>11</sub>NO<sub>2</sub> (189.22). [Pharm](#): Platelet aggregation inhibitor (selectively inhibits platelet aggregation induced by AA). [Source](#): YE HUA JIAO YE *Zanthoxylum simulans*. [Ref](#): 2176.**14038 5-Methoxy-N-methyltryptamine**C<sub>12</sub>H<sub>16</sub>N<sub>2</sub>O (204.27). bp 150°C/0.05mmHg. [Source](#): LU ZHU GEN *Arundo donax*, PAI QIAN CAO *Desmodium pulchellum* [Syn. *Phyllodium pulchellum*]. [Ref](#): 6.**14039 12-Methoxy-N<sub>α</sub>-methyl-vellosimine**C<sub>21</sub>H<sub>24</sub>N<sub>2</sub>O<sub>2</sub> (336.44). Yellow amorphous solid. [Source](#): BA XI LUO FU MU *Rauvolfia bahiensis*. [Ref](#): 1952.**14040 2'-Methoxymollugin**C<sub>18</sub>H<sub>20</sub>O<sub>5</sub> (316.36). [Source](#): QIAN CAO GEN *Rubia cordifolia*. [Ref](#): 1361.**14041 Methoxynepetaefolin**C<sub>23</sub>H<sub>32</sub>O<sub>8</sub> (436.51). [Source](#): CU SHENG SHAN XIANG *Hyptis fasciculata* (aerial parts). [Ref](#): 4539.

**14042 2-Methoxy-3-nonylresorcinol**

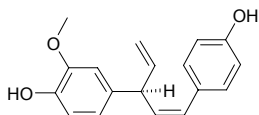
$C_{16}H_{26}O_3$  (266.38). White powder, mp > 300°C. **Pharm:** Cytotoxic inactive (*in vitro*, HL-60,  $IC_{50}$  > 100  $\mu\text{g/mL}$ ; Bel7402,  $IC_{50}$  > 100  $\mu\text{g/mL}$ ; HeLa,  $IC_{50}$  > 100  $\mu\text{g/mL}$ ; U937,  $IC_{50}$  > 100  $\mu\text{g/mL}$ ; control Colchicine, HL-60,  $IC_{50}$  = 1.6  $\mu\text{g/mL}$ ; Bel7402,  $IC_{50}$  = 0.4  $\mu\text{g/mL}$ ; HeLa,  $IC_{50}$  = 0.1  $\mu\text{g/mL}$ ; U937,  $IC_{50}$  = 0.1  $\mu\text{g/mL}$ ). **Source:** LA ZHU GUO *Aegiceras corniculatum* (stem and twig; yield = 0.000067%). **Ref:** 4746.

**14043 11-Methoxynoryangonin**

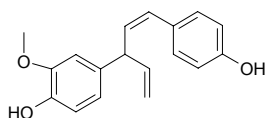
$C_{15}H_{14}O_5$  (274.28). **Source:** SHUANG BIAN GUA LOU *Trichosanthes rosthornii* [Syn. *Trichosanthes uniflora*]. **Ref:** 2, 660.

**14044 3'-Methoxynyasin**

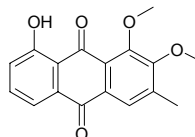
$C_{18}H_{18}O_3$  (282.34). Colorless gum,  $[\alpha]_D^{21} = +55.8^\circ$  ( $c = 4.80$ ,  $\text{Me}_2\text{CO}$ ). **Pharm:** Cytotoxic (*in vitro*, HO-8910,  $IC_{50}$  = (84.0  $\pm$  7.0)  $\mu\text{mol/L}$ , Vincristine,  $IC_{50}$  = (25.1  $\pm$  1.9)  $\mu\text{mol/L}$ ; Bel7405,  $IC_{50}$  = (26.2  $\pm$  2.9)  $\mu\text{mol/L}$ , Vincristine,  $IC_{50}$  = (31.4  $\pm$  3.4)  $\mu\text{mol/L}$ ). **Source:** GE BI TIAN MEN *Asparagus gobicus* (root). **Ref:** 4975.

**14045 3''-Methoxynyasol**

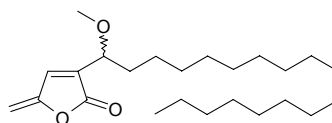
$C_{18}H_{18}O_3$  (282.34). **Pharm:** Cytotoxic (*in vitro*, Lu1,  $IC_{50}$  = 4.5  $\mu\text{g/mL}$  (15.9  $\mu\text{mol/L}$ ), LNCaP,  $IC_{50}$  = 6.6  $\mu\text{g/mL}$  (23.4  $\mu\text{mol/L}$ ), Col2,  $IC_{50}$  = 6.3  $\mu\text{g/mL}$  (22.3  $\mu\text{mol/L}$ ), HUVEC,  $IC_{50}$  = 6.7  $\mu\text{g/mL}$  (23.7  $\mu\text{mol/L}$ ), KB,  $IC_{50}$  = 9  $\mu\text{g/mL}$  (31.9  $\mu\text{mol/L}$ ), HOG.R5,  $IC_{50}$  = 6.8  $\mu\text{g/mL}$  (24.1  $\mu\text{mol/L}$ ), control Ellipticine: Lu1,  $IC_{50}$  = 0.02  $\mu\text{g/mL}$  (0.08  $\mu\text{mol/L}$ ), LNCaP,  $IC_{50}$  = 0.8  $\mu\text{g/mL}$  (3.25  $\mu\text{mol/L}$ ), Col2,  $IC_{50}$  = 0.3  $\mu\text{g/mL}$  (1.22  $\mu\text{mol/L}$ ), HUVEC,  $IC_{50}$  = 0.09  $\mu\text{g/mL}$  (0.37  $\mu\text{mol/L}$ ), KB,  $IC_{50}$  = 0.04  $\mu\text{g/mL}$  (0.16  $\mu\text{mol/L}$ ), HOG.R5,  $IC_{50}$  = 0.02  $\mu\text{g/mL}$  (0.08  $\mu\text{mol/L}$ ). **Source:** TIAN MEN DONG *Asparagus cochinchinensis* [Syn. *Asparagus lucidus*] (dried root; yield = 0.00011% dw). **Ref:** 3009.

**14046 2-Methoxy-obtusifolin**

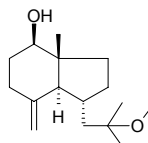
$C_{17}H_{14}O_5$  (298.30). **Source:** XUAN CAO GEN *Hemerocallis fulva*. **Ref:** 6.

**14047 3-(1-Methoxyoctadecyl)-5-methylene-5H-furan-2-one**

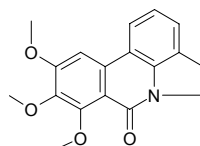
$C_{24}H_{42}O_3$  (378.60). Colorless oil,  $[\alpha]_D^{25} = -13.7^\circ$  ( $c = 0.0091$ ,  $\text{CHCl}_3$ ). **Source:** TAI WAN RUI FANG RUN NAN *Machilus zuihoensis* (stem wood). **Ref:** 5287.

**14048 11-Methoxyopposit-4(15)-en-1β-ol**

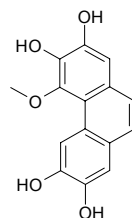
$C_{16}H_{28}O_2$  (252.40). Colorless amorphous solid,  $[\alpha]_D^{26} = +48.8^\circ$  ( $c = 0.04$ ,  $\text{CHCl}_3$ ). **Source:** YI NIAN PENG *Erigeron annuus* (aerial parts). **Ref:** 4338.

**14049 7-Methoxyoxoassoanine**

$C_{18}H_{17}NO_4$  (311.34). White amorphous solid, mp 245–247°C. **Source:** YA MA XUN BAI HE *Eucharis amazonica* (dried bulb and leaf). **Ref:** 4325.

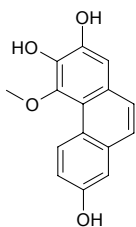
**14050 4-Methoxyphenanthrene-2,3,6,7-tetrol**

$C_{15}H_{12}O_5$  (272.26). Gum. **Source:** QIAO SHI DOU LAN *Bulbophyllum vaginatum*. **Ref:** 1870.

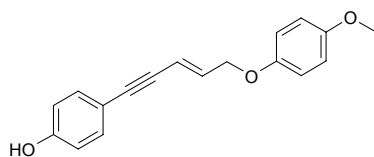


**14051 4-Methoxyphenanthrene-2,3,7-triol**

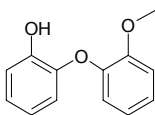
$C_{15}H_{12}O_4$  (256.26). mp 208~210°C (CHCl<sub>3</sub>). Source: QIAO SHI DOU LAN *Bulbophyllum vaginatum*. Ref: 1870.

**14052 4-[5-(4-Methoxyphenoxy)-3-penten-1-ynyl]-phenol**

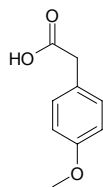
$C_{18}H_{16}O_3$  (280.33).  $[\alpha]_D^{21} = -50.2^\circ$  ( $c = 0.60$ , CHCl<sub>3</sub>). Source: GE BI TIAN MEN *Asparagus gobicus* (root). Ref: 4975.

**14053 *o*-(*o*-Methoxyphenoxy)phenol**

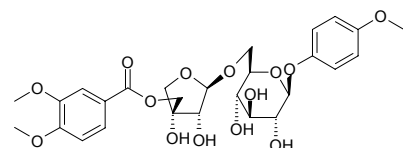
$C_{13}H_{12}O_3$  (216.24). Source: DANG SHEN *Codonopsis pilosula*. Ref: 1380.

**14054 4-Methoxyphenylacetic acid**

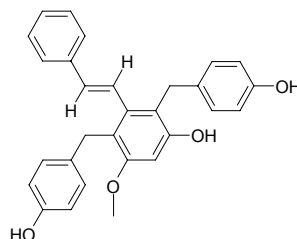
$C_9H_{10}O_3$  (166.18). Amorphous colorless solid, mp 80~83°C. Source: *Gloeophyllum odoratum*. Ref: 3972.

**14055 4-Methoxyphenyl 1-*O*- $\beta$ -*D*-[5-*O*-(3,4-dimethoxybenzoyl)]-apio-furanosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside**

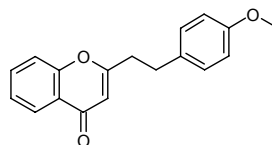
$C_{27}H_{34}O_{14}$  (582.56). Amorphous powder,  $[\alpha]_D^{25} = -83^\circ$  ( $c = 0.39$ , MeOH). Source: BAN ZHEN ZHONG HUA SHU *Tabebuia impetiginosa* (bark). Ref: 3817.

**14056 5-Methoxy-3-(2-phenyl-*E*-ethenyl)-2,4-bis(4-hydroxybenzyl)phenol**

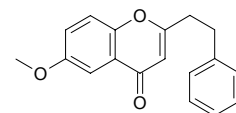
$C_{29}H_{26}O_4$  (438.53). White acicular crystals, mp 193~196°C. Source: SHAN HU LAN *Galeola faberi*. Ref: 280.

**14057 2-[2-(4'-Methoxyphenyl) ethyl] chromone**

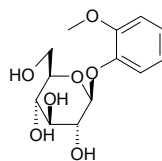
$C_{18}H_{16}O_3$  (280.33). Yellowish lamellar crystals, mp 60~61°C. Pharm: Aphrodisiac; diuretic; stimulant (the resin of the source plant CHEN XIANG is used). Source: CHEN XIANG *Aquilaria agallocha*, *Aquilaria* sp. Ref: 13, 658.

**14058 6-Methoxy-2-(2-phenylethyl) chromone**

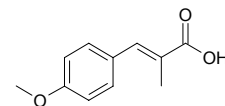
$C_{18}H_{16}O_3$  (280.33). Colorless acicular crystals, mp 68~70°C. Source: BAI MU XIANG *Aquilaria sinensis*, CHEN XIANG *Aquilaria agallocha*. Ref: 13.

**14059 2-Methoxyphenyl  $\beta$ -*D*-glucopyranoside**

$C_{13}H_{18}O_7$  (286.28). Colorless needles(MeOH), mp 65~68°C,  $[\alpha]_D^{23} = -38^\circ$  ( $c = 0.5$ , MeOH). Source: HUI QIN *Pimpinella anisum* (fruit). Ref: 3402.

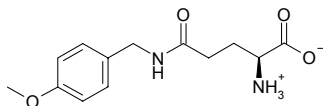
**14060 3-(4-Methoxyphenyl)-2-methyl-2-acrylic acid**

$C_{11}H_{12}O_3$  (192.22). Source: SHAN NAI *Kaempferia galanga*. Ref: 1344.

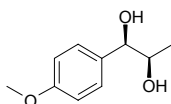


**14061** *N*<sup>5</sup>-(4-Methoxyphenyl)methyl-*L*-glutamine

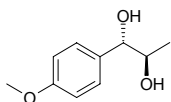
C<sub>13</sub>H<sub>18</sub>N<sub>2</sub>O<sub>4</sub> (266.30). mp 214–215°C, [α]<sub>D</sub><sup>22</sup> = +23° (c = 0.1, HCl). Source: NAN GUA *Cucurbita moschata* (root). Ref: 2293.

**14062** 1-(4'-Methoxyphenyl)-(1*R*,2*R*)-propanediol

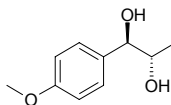
C<sub>10</sub>H<sub>14</sub>O<sub>3</sub> (182.22). Pharm: Anti-sepsis inactive (mouse, TNF-*α*/*D*-GalN-induced lethality, 50mg/kg, SuRt = 40%, control SuRt = 40%, Dexamethasone, 10mg/kg, SuRt = 100%). Source: BA JIAO HUI XIANG *Illicium verum*. Ref: 5446.

**14063** 1-(4'-Methoxyphenyl)-(1*R*,2*S*)-propanediol

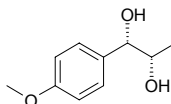
C<sub>10</sub>H<sub>14</sub>O<sub>3</sub> (182.22). Pharm: Anti-sepsis (with (1*S*,2*R*) isomer together, mouse, TNF-*α*/*D*-GalN-induced lethality, 50mg/kg, SuRt = 88.8%, control SuRt = 40%, Dexamethasone, 10mg/kg, SuRt = 100%). Source: BA JIAO HUI XIANG *Illicium verum*. Ref: 5446.

**14064** 1-(4'-Methoxyphenyl)-(1*S*,2*R*)-propanediol

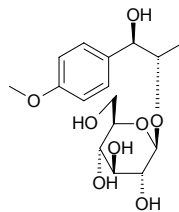
C<sub>10</sub>H<sub>14</sub>O<sub>3</sub> (182.22). Pharm: Anti-sepsis (with (1*R*,2*S*) isomer together, mouse, TNF-*α*/*D*-GalN-induced lethality, 50mg/kg, SuRt = 88.8%, control SuRt = 40%, Dexamethasone, 10mg/kg, SuRt = 100%). Source: BA JIAO HUI XIANG *Illicium verum*. Ref: 5446.

**14065** 1-(4'-Methoxyphenyl)-(1*S*,2*S*)-propanediol

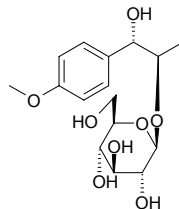
C<sub>10</sub>H<sub>14</sub>O<sub>3</sub> (182.22). Pharm: Anti-sepsis inactive (mouse, TNF-*α*/*D*-GalN-induced lethality, 50mg/kg, SuRt = 40%, control SuRt = 40%, Dexamethasone, 10mg/kg, SuRt = 100%). Source: BA JIAO HUI XIANG *Illicium verum*. Ref: 5446.

**14066** 1-(4'-Methoxyphenyl)-(1*R*,2*S*)-propan-1-ol 2-*O*-β-*D*-glucopyranoside

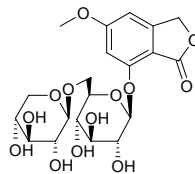
C<sub>16</sub>H<sub>24</sub>O<sub>8</sub> (344.36). Source: BA JIAO HUI XIANG *Illicium verum*. Ref: 5446.

**14067** 1-(4'-Methoxyphenyl)-(1*S*,2*R*)-propan-1-ol 2-*O*-β-*D*-glucopyranoside

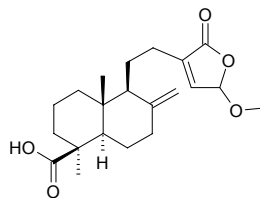
C<sub>16</sub>H<sub>24</sub>O<sub>8</sub> (344.36). Source: BA JIAO HUI XIANG *Illicium verum*. Ref: 5446.

**14068** 5-Methoxyphthalide 7-*O*-β-xylopyranosyl-(1→6)-β-glucopyranoside

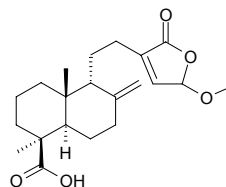
C<sub>20</sub>H<sub>26</sub>O<sub>13</sub> (474.42). Amorphous powder, [α]<sub>D</sub><sup>20</sup> = -51.5° (c = 0.51, MeOH). Source: NAO YANG HUA *Rhododendron molle*. Ref: 5396.

**14069** (10*R*)-15-Methoxypinusolidic acid

(10*R*)-15-Methoxy-8(17),13-labdadien-16,15-olide-19-oic acid C<sub>21</sub>H<sub>30</sub>O<sub>5</sub> (362.47). Yellow oil, [α]<sub>D</sub><sup>24</sup> = +39.0° (c = 0.4, CHCl<sub>3</sub>). Source: TAI WAN CUI BAI *Calocedrus macrolepis* var. *formosana* (leaf). Ref: 4297.

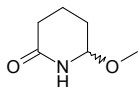
**14070** (10*S*)-15-Methoxypinusolidic acid

(10*S*)-15-Methoxy-8(17),13-labdadien-16,15-olide-19-oic acid C<sub>21</sub>H<sub>30</sub>O<sub>5</sub> (362.47). Yellowish oil, [α]<sub>D</sub><sup>25</sup> = +43° (c = 0.83, CHCl<sub>3</sub>). Pharm: Neuroprotective (primary cultures of rat cortical cells, induced by glutamate, 0.1 μmol/L, cell viability = (35.3±3.5)%, *p*<0.05, 1.0 μmol/L, cell viability = (48.3±3.9)%, *p*<0.01, 10 μmol/L, cell viability = (72.7±4.7)%, *p*<0.001). Source: BAI ZI REN *Biota orientalis* [Syn. *Thuja orientalis*; *Platyclusus orientalis*] (leaf). Ref: 4203.

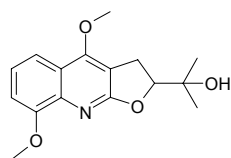


**14071 6 $\xi$ -Methoxypiperidin-2-one**

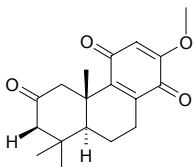
C<sub>6</sub>H<sub>11</sub>NO<sub>2</sub> (129.16). Colorless oil, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +0° (*c* = 0.5, CHCl<sub>3</sub>). Source: BAI NIU XI *Cucubalus baccifer*. Ref: 2168.

**14072 (±)-8-Methoxyplatydesmine**

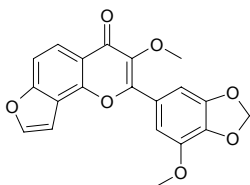
C<sub>16</sub>H<sub>19</sub>NO<sub>4</sub> (289.33). Colorless prisms (CHCl<sub>3</sub>-Me<sub>2</sub>CO), mp 166–168°C, [ $\alpha$ ]<sub>D</sub><sup>24</sup> = ±0 (*c* = 0.12, CHCl<sub>3</sub>). Pharm: Cytotoxic (P<sub>388</sub> cell line, ED<sub>50</sub> = 27.5 μg/mL, control Mithramycin, ED<sub>50</sub> = 0.06 μg/mL; HT29, ED<sub>50</sub> > 50 μg/mL, Mithramycin, ED<sub>50</sub> = 0.07 μg/mL; A549, ED<sub>50</sub> > 50 μg/mL, Mithramycin, ED<sub>50</sub> = 0.08 μg/mL). Source: SI ROU TUO GUO YE MI ZHU YU *Melicope semecarpifolia*. Ref: 5405.

**14073 13-Methoxy-8,12-podocarpadiene-2,11,14-trione**

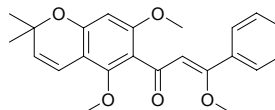
C<sub>18</sub>H<sub>22</sub>O<sub>4</sub> (302.37). Yellow powder, [ $\alpha$ ]<sub>D</sub><sup>24</sup> = +104.0° (*c* = 0.37, CHCl<sub>3</sub>). Source: TAI WAN SHAN *Taiwania cryptomerioides* (bark). Ref: 4113.

**14074 3'-Methoxypongapin**

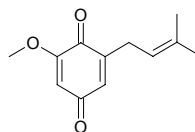
5'-Methoxypongapin; Anticancer Flavonoid PMV70P691-102 C<sub>20</sub>H<sub>14</sub>O<sub>7</sub> (366.33). Pharm: Cytotoxic (*in vitro*, Hepa1c1c7 mouse hepatoma cells, IC<sub>50</sub> = 18.9 μg/mL, CD = 1.1 μg/mL, CI = 17.2; control Sulforaphane, IC<sub>50</sub> = 2.1 μg/mL, CD = 0.087 μg/mL, CI = 24.1)<sup>[4721]</sup>; cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells)<sup>[5038]</sup>. Source: SHUI LIU DOU *Pongamia pinnata* (stem cortex: yield = 0.00019%). Ref: 1521, 4721, 5038.

**14075 7-O-Methoxypraecansone B**

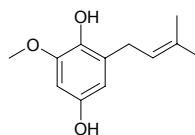
7,2',6'-Trimethoxy-6'',6''-dimethylpyrano-(3',4':2'',3'')-chalcone; Anticancer Flavonoid PMV70P691-023 C<sub>23</sub>H<sub>24</sub>O<sub>5</sub> (380.44). Yellow oil. Pharm: Cytotoxic (*in vitro*, Hepa1c1c7 mouse hepatoma cells, IC<sub>50</sub> = 9.6 μg/mL, CD = 1.2 μg/mL, CI = 8; control Sulforaphane, IC<sub>50</sub> = 2.1 μg/mL, CD = 0.087 μg/mL, CI = 24.1)<sup>[4721]</sup>; cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells)<sup>[5038]</sup>. Source: SHUI LIU DOU *Pongamia pinnata* (stem cortex: yield = 0.0012%). Ref: 4721, 5038.

**14076 2-Methoxy-6-prenyl-1,4-benzoquinone**

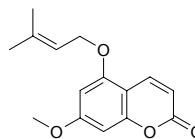
C<sub>12</sub>H<sub>14</sub>O<sub>3</sub> (206.24). Source: *Plagiochila rutilans*. Ref: 5144.

**14077 2-Methoxy-6-prenylhydroquinone**

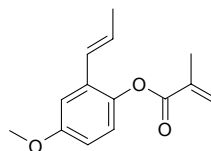
C<sub>12</sub>H<sub>16</sub>O<sub>3</sub> (208.26). Source: *Plagiochila rutilans*. Ref: 5144.

**14078 7-Methoxy-5-prenyloxycoumarin**

C<sub>15</sub>H<sub>16</sub>O<sub>4</sub> (260.29). Pharm: AChE inhibitor (*in vitro*, IC<sub>50</sub> = 240 μmol/L). Source: CHAO XIAN DANG GUI *Angelica gigas* (underground part). Ref: 3058.

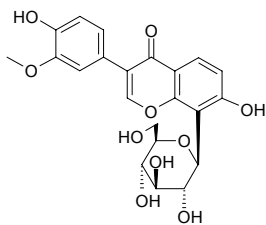
**14079 4-Methoxy-2-(1-propenyl)-phenyl angelate**

*cis*-Pseudoisoeugenyl angelate C<sub>15</sub>H<sub>18</sub>O<sub>3</sub> (246.31). Colorless oil. Source: *Pimpinella isaurica*. Ref: 5465.

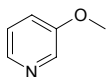


**14080 3'-Methoxypuerarin**

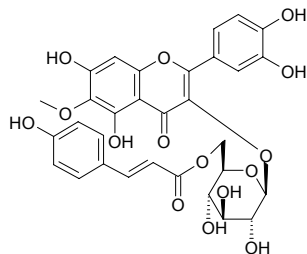
PG-3 C<sub>22</sub>H<sub>22</sub>O<sub>10</sub> (446.41). Source: GE GEN *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*]. Ref: 1298.

**14081 3-Methoxypyridine**

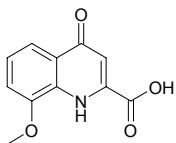
[7295-76-3] C<sub>6</sub>H<sub>7</sub>NO (109.13). Source: WEN JING *Equisetum arvense*. Ref: 6.

**14082 6-Methoxyquercetin-3-O-β-D-6''(p-coumaroyl)glucopyranoside**

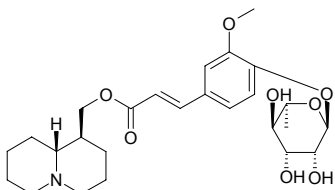
C<sub>31</sub>H<sub>28</sub>O<sub>15</sub> (640.56). Source: *Paepalanthus polyanthus*, *Paepalanthus hilairei*, *Paepalanthus robustus*, *Paepalanthus ramosus*, *Paepalanthus denudatus*. Ref: 2291.

**14083 8-Methoxy-4-quinolone-2-carboxylic acid**

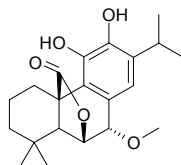
C<sub>11</sub>H<sub>9</sub>NO<sub>4</sub> (219.20). Yellowish powder. Pharm: Antibacterial (gram-positive bacteria, gram-negative bacteria). Source: DONG BEI HE SHI *Lappula echinata* (fruit). Ref: 4802.

**14084 (-)-(trans-3'-Methoxy-4'-α-L-rhamnosyloxy cinnamoyl)epilupinine**

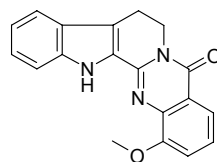
Epilupinyl rhamnosylferulate C<sub>26</sub>H<sub>37</sub>NO<sub>8</sub> (491.59). Amorphous solid, [α]<sub>D</sub><sup>24</sup> = -80° (c = 0.28, EtOH). Source: *Lupinus varius*. Ref: 2275.

**14085 7-Methoxyrosmanol**

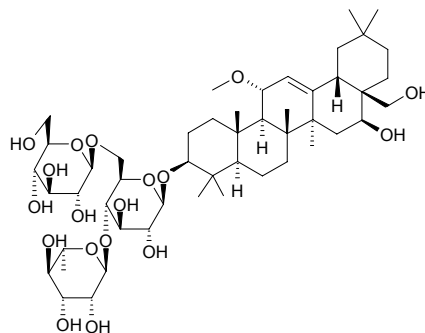
C<sub>21</sub>H<sub>28</sub>O<sub>5</sub> (360.45). Pharm: Binding activity to benzodiazepine receptor (IC<sub>50</sub> = (7.2±0.7) μmol/L, control Diazepam, IC<sub>50</sub> = (0.05±0.01) μmol/L). Source: YAO YONG DAN SHEN YE *Salvia officinalis*. Ref: 5366.

**14086 1-Methoxyrutaecarpine**

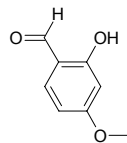
C<sub>19</sub>H<sub>15</sub>N<sub>3</sub>O<sub>2</sub> (317.35). Pharm: Platelet aggregation inhibitor; DNA isomerase inhibitor; antibacterial; cytotoxic. Source: *Zanthoxylum* sp. Ref: 2176.

**14087 11α-Methoxysaikosaponin f**

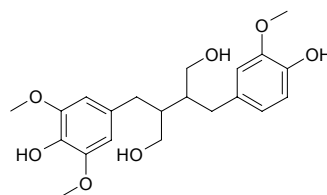
C<sub>49</sub>H<sub>82</sub>O<sub>18</sub> (959.19). Source: ZHU YE CHAI HU *Bupleurum marginatum*, ZHAI ZHU YE CHAI HU *Bupleurum marginatum* var. *stenophyllum*. Ref: 1348, 1349.

**14088 4-Methoxysalicylaldehyde**

[673-22-3] C<sub>8</sub>H<sub>8</sub>O<sub>3</sub> (152.15). mp 40–42°C. Source: SHENG TENG *Stelmatocrypton khasianum*, XIANG JIA PI *Periploca sepium* (dried root cortex: mean content of 4 origins = 0.637%<sup>[5508]</sup>). Ref: 6, 5508.

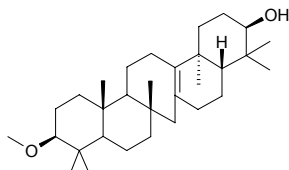
**14089 3'-Methoxysecoisolaricresinol**

C<sub>21</sub>H<sub>28</sub>O<sub>7</sub> (392.45). Source: YI ZHU QIAN MA *Urtica dioica*. Ref: 1432.

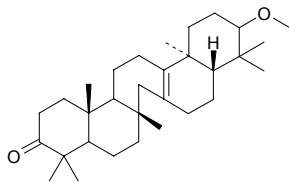


**14090 3 $\beta$ -Methoxyserrat-13-en-21 $\beta$ -ol**

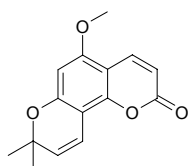
$C_{31}H_{52}O_2$  (456.76). Colorless prisms, mp 257~259°C,  $[\alpha]_D^{23.5} = +59.1^\circ$  ( $c = 0.28$ ,  $CHCl_3$ ). **Pharm:** Antineoplastic promoter (mouse skin carcinogenesis, TPA-induced EBV-EA activation assay, compound concentration (mol ratio/32 pmol TPA) = 500, EBV-EA viability = 20.3%,  $IC_{50}$ (mol ratio/32 pmol TPA) = 271; control Oleanolic acid, compound concentration (mol ratio/32 pmol TPA) = 500, EBV-EA viability = 30.0%,  $IC_{50}$ (mol ratio/32 pmol TPA) = 360). **Source:** YU LIN YUN SHAN *Picea jezoensis* var. *jezoensis* (stem cortex). **Ref:** 5477.

**14091 21 $\alpha$ -Methoxyserrat-13-en-3-one**

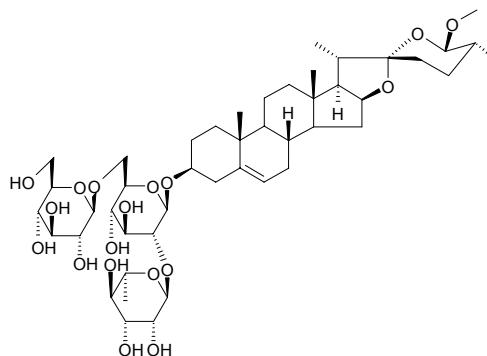
$C_{31}H_{50}O_2$  (454.74). **Source:** RI BEN YU LIN SONG *Picea jezoensis* (cuticle). **Ref:** 3076.

**14092 5-Methoxyseselin**

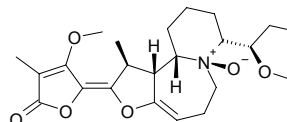
$C_{15}H_{14}O_4$  (258.28). **Pharm:** Antineoplastic (Raji cells, antitumor promoter, *in vivo*, inhibits TPA-induced EBV-EA activation, compound concentration = 500mol ratio/32 pmol TPA: EBV-EA-positive cells = (44.3±1.3)% (viability > 80%),  $\beta$ -Carotene, EBV-EA-positive cells = (34.3±1.1)% (viability > 80%), Curcumin, EBV-EA-positive cells = (22.8±1.8)% (viability > 80%), compound  $IC_{50} = 453$ mol ratio/32 pmol TPA,  $\beta$ -Carotene,  $IC_{50} = 400$ mol ratio/32 pmol TPA, Curcumin,  $IC_{50} = 341$ mol ratio/32 pmol TPA). **Source:** *Citrus tamurana*, *Citrus hassaku*. **Ref:** 5048.



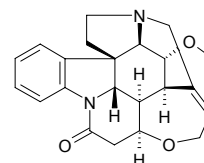
**14093 (25R,26R)-26-Methoxyspirost-5-en-3 $\beta$ -yl-O- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)]-D-glucopyranoside**  
[244160-62-1]  $C_{46}H_{74}O_{18}$  (915.09). Amorphous solid,  $[\alpha]_D^{27} = -47.1^\circ$  ( $c = 0.14$ ,  $MeOH:H_2O = 1:1$ ). **Pharm:**  $Na^+$ ,  $K^+$ -ATPase inhibitor ( $IC_{50} = 47\mu mol/L$ , control Ouabain,  $IC_{50} = 1.0\mu mol/L$ ). **Source:** QING LIANG BAI HE *Lilium candidum*. **Ref:** 2303.

**14094 Methoxystemokerrin-N-oxide**

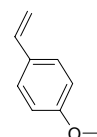
4-Methoxy-3-methyl-5-[(2Z,11aS)-8*t*-(1*R*)-1-methoxypropyl]-1*c*-methyl-(11*ar*,11*bc*)-1,2,5,6,8,9,10,11,11*a*,11*b*-decahydrofuro[3,2-*c*]pyrido[1,2-*a*]azepin-2-ylidene]-5*H*-furan-2-one-*N*-oxide  $C_{23}H_{33}NO_6$  (419.52). Amorphous,  $[\alpha]_D^{20} = +255^\circ$  ( $c = 0.2$ ,  $MeOH$ ). **Pharm:** Insecticidal (neonate larvae of *Spodoptera littoralis*,  $LC_{50} > 100$ mg/L,  $EC_{50} = 16.3$ mg/L). **Source:** DI TANG BAI BU *Stemona kerrii*. **Ref:** 3409.

**14095 16-Methoxystrychnine**

$C_{22}H_{24}N_2O_3$  (364.45). mp 214~218°C. **Source:** LV SONG GUO *Strychnos ignatii*. **Ref:** 6.

**14096 *p*-Methoxystyrene**

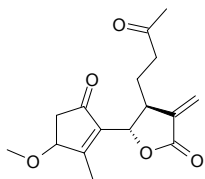
[637-69-4]  $C_9H_{10}O$  (134.18). bp 204~205°C/756mmHg. **Source:** SHAN NAI *Kaempferia galanga*. **Ref:** 6.



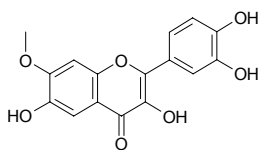


**14097 3-Methoxytanapartholide**

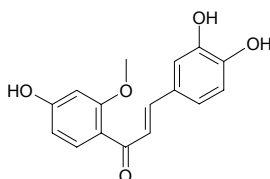
$C_{16}H_{20}O_5$  (292.33). **Pharm:** Anti-inflammatory (RAW264.7 cells, LPS-induced: NF- $\kappa$ B inhibitor,  $IC_{50}$  = (5.89 $\pm$ 0.14) $\mu$ mol/L, control PTN,  $IC_{50}$  = (3.42 $\pm$ 0.08) $\mu$ mol/L; NO production inhibitor,  $IC_{50}$  = (5.68 $\pm$ 0.16) $\mu$ mol/L, PTN,  $IC_{50}$  = (2.41 $\pm$ 0.06) $\mu$ mol/L, AG,  $IC_{50}$  = (34.18 $\pm$ 0.98) $\mu$ mol/L; TNF- $\alpha$  production inhibitor,  $IC_{50}$  = (15.78 $\pm$ 0.56) $\mu$ mol/L, PTN,  $IC_{50}$  = (2.68 $\pm$ 0.11) $\mu$ mol/L). **Source:** LIN DI HAO *Artemisia sylvatica* (aerial parts). **Ref:** 3837.

**14098 7-Methoxy-3,3',4',6-tetrahydroxyflavone**

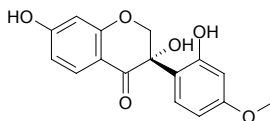
$C_{16}H_{12}O_7$  (316.27). Yellow crystals (water-methanol), mp 315~318°C. **Source:** JIANG ZHEN XIANG *Dalbergia odorifera*. **Ref:** 716.

**14099 2'-Methoxy-3,4,4'-trihydroxychalcone**

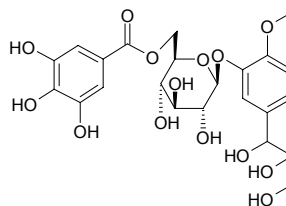
Sappanchalcone  $C_{16}H_{14}O_5$  (286.29). **Pharm:** Xanthine oxidase inhibitor (competitive inhibitory activity in concentration-dependent manner,  $IC_{50}$  = 3.9 $\mu$ mol/L,  $K_i$  = 2.60 $\mu$ mol/L, control Allopurinol,  $IC_{50}$  = 2.5 $\mu$ mol/L,  $K_i$  = 1.80 $\mu$ mol/L)<sup>[4494]</sup>. **Source:** SU MU *Caesalpinia sappan* (heartwood). **Ref:** 1299, 4494.

**14100 (3R)-4'-Methoxy-2',3,7-trihydroxyisoflavanone**

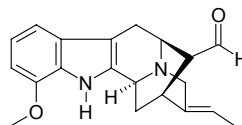
$C_{16}H_{14}O_6$  (302.29). White crystals (methanol), mp 145~147°C. **Source:** JIANG ZHEN XIANG *Dalbergia odorifera*. **Ref:** 716.

**14101 2-Methoxy-5-(1',2',3'-trihydroxypropyl)-phenyl-1-O-(6''-galloyl)- $\beta$ -D-glucopyranoside**

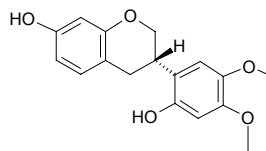
$C_{23}H_{28}O_{14}$  (528.47). Yellow powder, mp 174°C (dec),  $[\alpha]_D^{25}$  = +22° (c = 0.10, MeOH). **Pharm:** Antifungal (*Candida albicans* ATCC2091, MIC = 50 $\mu$ g/mL, control Amphotericin B, MIC = 1 $\mu$ g/mL; *Candida albicans* 32, MIC = 100 $\mu$ g/mL, Amphotericin B, MIC = 4 $\mu$ g/mL; *Candida albicans* 19, MIC = 50 $\mu$ g/mL, Amphotericin B, MIC = 2 $\mu$ g/mL); cytotoxic inactive (MIC > 200 $\mu$ g/mL); antibacterial inactive. **Source:** *Baseonema acuminatum* (leaf). **Ref:** 5021.

**14102 12-Methoxyvellosimine**

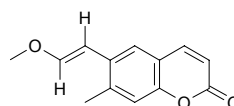
$C_{20}H_{22}N_2O_2$  (322.41). Yellow amorphous solid. **Source:** BA XI LUO FU MU *Rauvolfia bahiensis*. **Ref:** 1952.

**14103 (3R)-5'-Methoxyvestitol**

$C_{17}H_{18}O_5$  (302.33). **Source:** JIANG ZHEN XIANG *Dalbergia odorifera*. **Ref:** 1289.

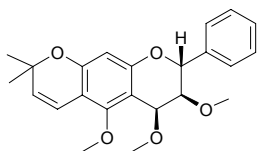
**14104 6-(2-methoxy-Z-vinyl)-7-methyl-pyranocoumarin**

$C_{13}H_{12}O_3$  (216.24). Yellow powder. **Source:** WU HUA GUO *Ficus carica*. **Ref:** 794.

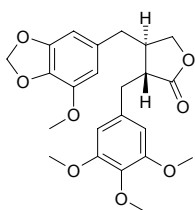


**14105 3 $\beta$ -Methoxyxuanlinin**

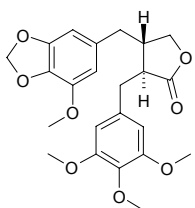
3 $\beta$ ,4 $\beta$ ,5-Trimethoxy-6",6"-dimethyl-2*H*-pyrano-(2",3":7,6)-flavan C<sub>23</sub>H<sub>26</sub>O<sub>5</sub> (382.46). Oil. Source: *Lonchocarpus xul* (stem cortex). Ref: 3973.

**14106 5'-Methoxyyatein**

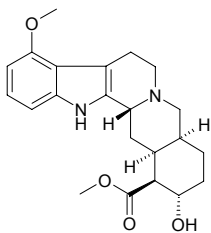
Anticancer Lignan PMV70P691-125 C<sub>23</sub>H<sub>26</sub>O<sub>8</sub> (430.46). Pharm: COX-2 inhibitor (weak but selective, IC<sub>50</sub> = 247 μmol/L, 100 μg/mL, InRt = 57%; control Resveratrol, IC<sub>50</sub> = 1.3 μmol/L)<sup>[3869]</sup>; COX-1 inhibitor (100 μg/mL, InRt = 17%, control Resveratrol, IC<sub>50</sub> = 1.1 μmol/L)<sup>[3869, 5038]</sup>. Source: *Macrocculus pomiferus* (stem). Ref: 3869, 5038.

**14107 (2*S*,3*S*)-(+)-5'-Methoxyyatein**

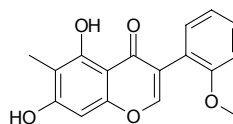
C<sub>23</sub>H<sub>26</sub>O<sub>8</sub> (430.46). Pale yellow gum, [α]<sub>D</sub><sup>25</sup> = +24.8° (c = 0.393, CHCl<sub>3</sub>). Source: MENG ZI CAO HU JIAO *Peperomia duclouxii* (whole herb: yield = 0.0081%). Ref: 4733.

**14108 9-Methoxy-3-epi- $\alpha$ -yohimbine**

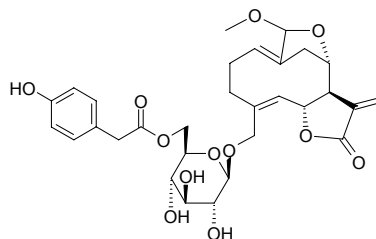
C<sub>22</sub>H<sub>28</sub>N<sub>2</sub>O<sub>4</sub> (384.48). Colorless amorphous powder. Source: FEI ZHOU MAO ZHU MU *Mitragyna africana* (stem cortex). Ref: 4269.

**14109 2'-*O*-Methylabronisoflavone**

C<sub>17</sub>H<sub>14</sub>O<sub>5</sub> (298.3). Amorphous solid. Pharm: Antifungal (*Candida albicans* DSY1024, IC<sub>50</sub> = 25 μg/mL). Source: ZI MO LI GEN *Mirabilis jalapa* (Plant cell culture). Ref: 3043.

**14110 14-*O*-Methylacetal-15-*O*-[6'-(*p*-hydroxyphenylacetyl)]- $\beta$ -*D*-glucopyranosylurospermal A**

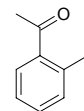
C<sub>30</sub>H<sub>36</sub>O<sub>12</sub> (588.61). Oil. Source: XU DUAN JU *Sonchus asper* [Syn. *Sonchus oleraceus* var. *asper*] (root). Ref: 3923.

**14111 Methylacetate**

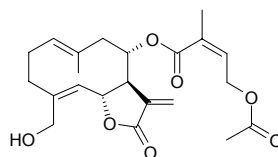
Acetic acid methyl ester [79-20-9] C<sub>3</sub>H<sub>6</sub>O<sub>2</sub> (74.08). Source: SHENG JIANG *Zingiber officinale*, GUANG HUO XIANG *Pogostemon cablin* [Syn. *Mentha cablin*]. Ref: 2, 660.

**14112 *o*-Methylacetophenone**

C<sub>9</sub>H<sub>10</sub>O (134.18). Source: QING JIAO *Zanthoxylum schinifolium*, RU XIANG *Boswellia carterii*. Ref: 1271, 1297.

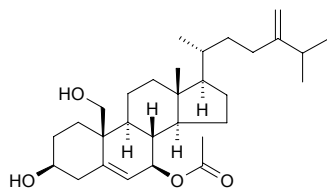
**14113 8 $\alpha$ -(*Z*-2-Methyl-4-acetoxybut-2-enoyloxy)-15-hydroxygermacra-1(10),*E*,4*Z*,11(13)-trien-12,6 $\alpha$ -olide**

C<sub>22</sub>H<sub>28</sub>O<sub>7</sub> (404.46). Colorless oil, [α]<sub>D</sub> = +54° (c = 3.26, CHCl<sub>3</sub>). Source: CU CAO SHI CHE JU *Centaurea aspera* ssp. *aspera* (aerial parts), XIA YE CU CAO SHI CHE JU *Centaurea aspera* subsp. *stenophylla* (aerial parts). Ref: 5300.

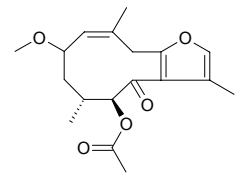


**14114 24-Methyl-7 $\beta$ -acetoxycholesta-5,24(28)-diene-3 $\beta$ ,19-diol**

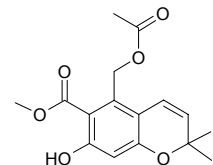
$C_{30}H_{48}O_4$  (472.71). **Pharm:** Cytotoxic inactive (hmn prostate cancer LNCaP cell line,  $EC_{50} = 15.5\mu\text{g/mL}$ ). **Source:** *Nephthea chabroli*. **Ref:** 4375.

**14115 rel-2R-Methyl-5S-acetoxy-4R-furanogermacr-1(10)Z-en-6-one**

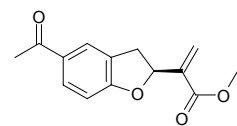
$C_{18}H_{24}O_5$  (320.39). Colorless oil,  $[\alpha]_D^{20} = +113.6^\circ$  ( $c = 2.3$ ,  $\text{CHCl}_3$ ). **Pharm:** Cytotoxic inactive (*in vitro*, MCF7). **Source:** MO YAO *Commiphora myrrha* [Syn. *Commiphora molmol*]. **Ref:** 3093.

**14116 Methyl 5-acetoxymethanol-7-hydroxy-2,2-dimethyl-2H-1-chromene-6-carboxylate**

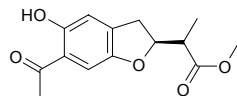
$C_{16}H_{18}O_6$  (306.32). Amorphous solid. **Pharm:** Antifungal (*Cladosporium sphaerospermum*, 100 $\mu\text{g}$ , strong activity; *Cladosporium cladosporioides*, 100 $\mu\text{g}$ , strong activity). **Source:** *Peperomia villipetiola* (stem). **Ref:** 5256.

**14117 Methyl-2-(5-acetyl-2,3-dihydrobenzofuran-2-yl)propenoate**

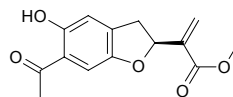
$C_{14}H_{14}O_4$  (246.27). Glassy amorphous solid,  $[\alpha]_D^{20} = +8^\circ$  ( $c = 0.36$ , MeOH). **Source:** XIAO SHE JU GEN *Microglossa pyrifolia*. **Ref:** 5374.

**14118 Methyl-2-(6-acetyl-5-hydroxy-2,3-dihydrobenzofuran-2-yl)propanoate**

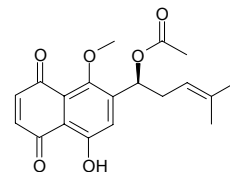
$C_{14}H_{16}O_5$  (264.28). Glassy amorphous solid. **Source:** XIAO SHE JU GEN *Microglossa pyrifolia*. **Ref:** 5374.

**14119 Methyl-2-(6-acetyl-5-hydroxy-2,3-dihydrobenzofuran-2-yl)propenoate**

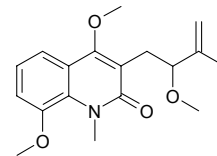
$C_{14}H_{14}O_5$  (262.26). Glassy amorphous solid,  $[\alpha]_D^{20} = +15^\circ$  ( $c = 0.98$ , MeOH). **Source:** XIAO SHE JU GEN *Microglossa pyrifolia*, DUO ZHI KUO BAO JU *Baccharis ramosissima*. **Ref:** 5374.

**14120 1-Methyl-acetylshikonin**

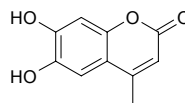
$C_{19}H_{20}O_6$  (344.37). **Source:** ZI CAO *Lithospermum erythrorhizon*, XIN ZANG JIA ZI CAO *Arnebia euchroma*. **Ref:** 2193.

**14121 O-Methylacutifolin**

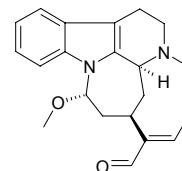
$C_{18}H_{23}NO_4$  (317.39). **Pharm:** Platelet aggregation inhibitor; DNA isomerase inhibitor; antibacterial; cytotoxic. **Source:** *Zanthoxylum* sp. **Ref:** 2176.

**14122  $\beta$ -Methyлаesculetin**

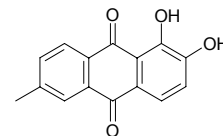
[529-84-0]  $C_{10}H_8O_4$  (192.17). mp 272~274 $^\circ\text{C}$ . **Source:** TIAN XUAN HUA *Convolvulus arvensis*. **Ref:** 6.

**14123 17-O-Methylakagerine**

[69241-17-4]  $C_{21}H_{26}N_2O_2$  (338.45). **Source:** *Strychnos dale*, *Strychnos elaeocarpa*, *Strychnos vanprukii* (stem). **Ref:** 1521, 3471.

**14124 6-Methylalizarin**

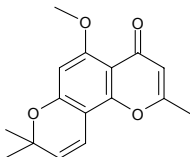
$C_{15}H_{10}O_4$  (254.24). mp 220 $^\circ\text{C}$ . **Source:** TU LIAN QIAO *Hymenodictyon excelsum*. **Ref:** 6.



**14125 5-O-Methylalloptaeroxylin**

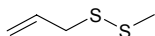
Perforatin A [35930-31-5] C<sub>16</sub>H<sub>16</sub>O<sub>4</sub> (272.30). Crystals (EtOAc–petroleum ether), mp 152.5–154°C; colorless prisms, mp 153–155°C. **Pharm:**

Antihypertensive (rat, 150mg/kg, lowers systolic pressure by 16.6% in average); Irritant (causes sneezing); stimulant. **Source:** A BI XI NI YA NIU JIN GUO *Harrisonia abyssinica*, NIU JIN GUO *Harrisonia perforata*, *Ptaeroxylon obliquum*. **Ref:** 658, 1521, 3604, 3605, 3606, 3607.

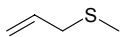
**14126 Methyl allyl disulfide**

[2179-58-0] C<sub>4</sub>H<sub>8</sub>S<sub>2</sub> (120.24). **Pharm:** Antineoplastic (mus, inhibits cardiac sinus cancer and pulmonary adenoma induced by carcinogens

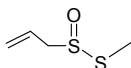
N-nitrosodiethylamine, NDEA or benzopyrene. **Source:** GE CONG *Allium victorialis*, JIU CAI *Allium tuberosum*, DA SUAN *Allium sativum*. **Ref:** 2, 6, 1684, 1844.

**14127 Methyl allyl sulfide**

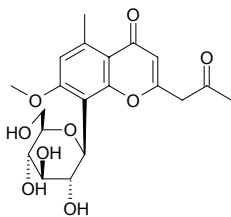
[10152-76-8] C<sub>4</sub>H<sub>8</sub>S (88.17). **Source:** DA SUAN *Allium sativum*, SHENG JIANG *Zingiber officinale*. **Ref:** 2, 6.

**14128 Methyl allyl thiosulfinate**

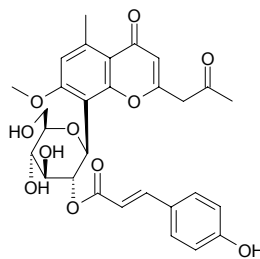
C<sub>4</sub>H<sub>8</sub>OS<sub>2</sub> (136.24). **Source:** DA SUAN *Allium sativum*. **Ref:** 1392.

**14129 7-O-Methylaloesin**

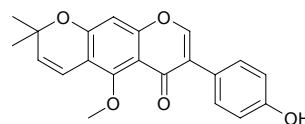
C<sub>20</sub>H<sub>24</sub>O<sub>9</sub> (408.41). **Source:** MA SHI LU HUI *Aloe marlothii*. **Ref:** 726.

**14130 7-O-Methylaloesin A**

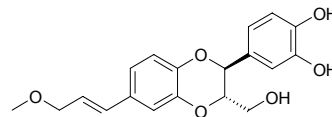
C<sub>29</sub>H<sub>30</sub>O<sub>11</sub> (554.56). **Source:** MA SHI LU HUI *Aloe marlothii*. **Ref:** 726.

**14131 5-O-Methylalpinumisoflavone**

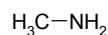
C<sub>21</sub>H<sub>18</sub>O<sub>5</sub> (350.37). White granules (petrol), mp 199–200°C. **Source:** *Millettia thonningii*. **Ref:** 2326.

**14132 9'-O-Methylamericanol A**

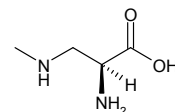
C<sub>19</sub>H<sub>20</sub>O<sub>6</sub> (344.37). [α]<sub>D</sub><sup>20</sup> = 0° (c = 0.12, MeOH). **Source:** MEI SHANG LU *Phytolacca americana* [Syn. *Phytolacca decandra*] (seed). **Ref:** 4407.

**14133 Methylamine**

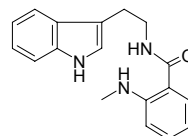
[74-89-5] CH<sub>3</sub>N (31.06). mp –92.5°C, bp –6.5°C. **Source:** BAI QU CAI *Chelidonium majus*, HAI XIA *Penaeus orientalis*, MAI JIAO *Claviceps purpurea*. **Ref:** 6.

**14134 3-Methylamino-L-alanine**

C<sub>4</sub>H<sub>10</sub>N<sub>2</sub>O<sub>2</sub> (118.14). **Pharm:** Growth retardant (rat, orl); toxin. **Source:** QUAN YE SU TIE *Cycas circinalis*. **Ref:** 658.

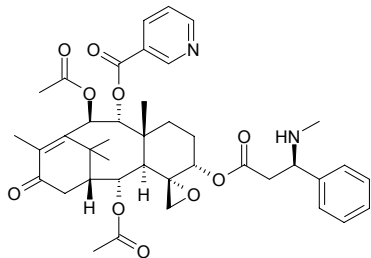
**14135 N-(2-Methylaminobenzoyl)tryptamine**

C<sub>18</sub>H<sub>19</sub>N<sub>3</sub>O (293.37). **Source:** WU ZHU YU *Evodia rutaecarpa*. **Ref:** 1301.

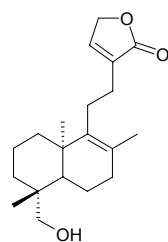


**14136 5 $\alpha$ -O-(3'-Methylamino-3'-phenylpropionyl)nicotaxine**

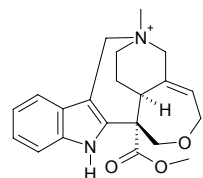
C<sub>40</sub>H<sub>48</sub>N<sub>2</sub>O<sub>10</sub> (716.84). Source: AO DA LI YA HONG DOU SHAN *Austrotaxus spicata*. Ref: 662.

**14137 8-Methylandrograpanin**

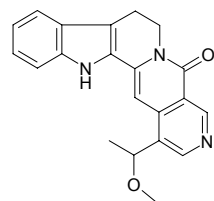
C<sub>20</sub>H<sub>30</sub>O<sub>3</sub> (318.46). Colorless crystals, mp 127~129°C. Source: CHUAN XIN LIAN *Andrographis paniculata* [Syn. *Justicia paniculata*] (leaf). Ref: 4913.

**14138 N4-Methyl angustilobine B**

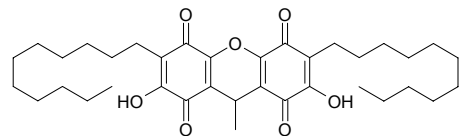
C<sub>21</sub>H<sub>25</sub>N<sub>3</sub>O<sub>3</sub> (353.44). Source: XIANG PI MU *Alstonia scholaris* (leaf). Ref: 5283.

**14139 19-O-Methylangustoline**

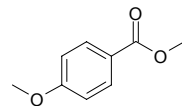
[132074-99-8] C<sub>21</sub>H<sub>19</sub>N<sub>3</sub>O<sub>2</sub> (345.40). Yellowish crystals (acetone), mp 222~225°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -6.3° (c = 0.008, methanol). Pharm: Cytotoxic (P<sub>388</sub> *in vitro*, ED<sub>50</sub> = 2.32 μg/mL). Source: XI SHU *Camptotheca acuminata*. Ref: 1110, 1521.

**14140 Methylanhydrovilangin**

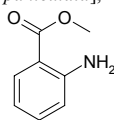
C<sub>36</sub>H<sub>52</sub>O<sub>7</sub> (596.81). Orange crystals (petroleum ether:dichloromethane = 9:1), mp 157~158°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +47° (c = 1.0, CH<sub>2</sub>Cl<sub>2</sub>). Source: TIE ZI *Myrsine africana* (fruit). Ref: 3464.

**14141 Methyl p-anisate**

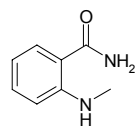
C<sub>9</sub>H<sub>10</sub>O<sub>3</sub> (166.18). Source: RI BEN HUANG BAI *Phellodendron japonicum* (leaf). Ref: 4502.

**14142 Methylanthranilate**

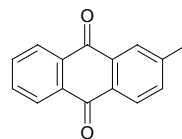
[134-20-3] C<sub>8</sub>H<sub>9</sub>NO<sub>2</sub> (151.17). mp 24~25°C. Source: DAI DAI HUA *Citrus aurantium* var. *amara*, JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*], YOU<sup>(4)</sup> *Citrus grandis*. Ref: 6, 11.

**14143 N-Methylanthranilamide**

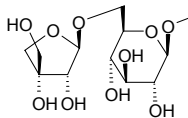
[7505-81-9] C<sub>8</sub>H<sub>10</sub>N<sub>2</sub>O (150.18). Source: WU ZHU YU *Evodia rutaecarpa*. Ref: 2, 347.

**14144 2-Methylanthraquinone**

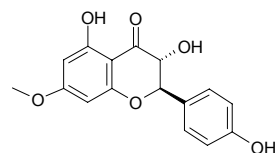
Tectoquinone [84-54-8] C<sub>15</sub>H<sub>10</sub>O<sub>2</sub> (222.25). Faint yellow needles, mp 175~176°C, mp 177~179°C. Pharm: Insecticidal (termites and other insects). Source: GUANG ZE BA JI *Morinda lucida*, MAN JIU JIE *Psychotria serpens*, QI YE HUANG PI *Clausena heptaphylla*, QIAN CAO GEN *Rubia cordifolia*, QU ZHOU HAI JIN SHA *Lygodium flexuosum* [Syn. *Lygodium pinnatifidum*; *Ophioglossum flexuosum*], YANG JIAO TENG *Morinda umbellata* (root and stem), YOU MU *Tectona grandis*, YUAN WEI *Iris tectorum*, *Diospyros sylvatica* (root). Ref: 6, 658, 660, 3811.

**14145 Methyl β-D-apiofuranosyl-(1→6)-β-D-glucopyranoside**

C<sub>12</sub>H<sub>22</sub>O<sub>10</sub> (326.30). Colorless syrup, [ $\alpha$ ]<sub>D</sub><sup>21</sup> = -81° (c = 0.4, MeOH). Source: ZI RAN QIN *Cuminum cyminum* (fruit). Ref: 3395.

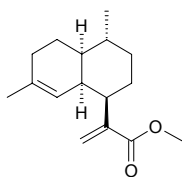
**14146 7-O-Methylaromadendrin**

C<sub>16</sub>H<sub>14</sub>O<sub>6</sub> (302.29). Source: HUANG HAO *Artemisia scoparia* [Syn. *Artemisia capillaris* var. *scoparia*]. Ref: 1385.

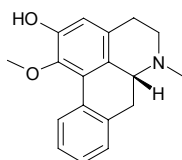


**14147 Methylarteannuate**

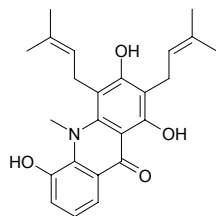
$C_{16}H_{24}O_2$  (248.37). Source: HUANG HUA HAO *Artemisia annua*. Ref: 2, 660.

**14148 N-Methylasimilobine**

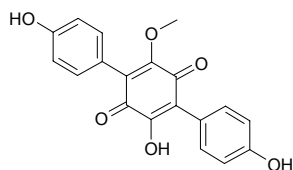
O-Normuciferine [3153-55-7]  $C_{18}H_{19}NO_2$  (281.36). mp 195–196°C. Source: HE YE *Nelumbo nucifera*, HE GENG *Nelumbo nucifera*, HE YE DI *Nelumbo nucifera*, SUAN ZAO REN *Ziziphus jujuba* var. *spinosa*. Ref: 6, 1480, 1481, 1521.

**14149 N-Methylalaphylline**

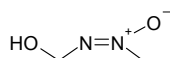
$C_{24}H_{27}NO_4$  (393.49). Source: DONG FENG JU GEN *Atalantia buxifolia* [Syn. *Severinia buxifolia*] (root cortex). Ref: 3075.

**14150 2-O-Methylatromentin**

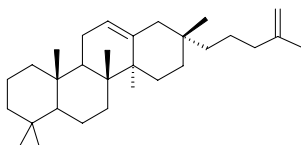
$C_{19}H_{14}O_6$  (338.32). Source: JIN HUANG GE JUN *Thelephora aurantiotincta*. Ref: 3423.

**14151 Methylazoxymethanol**

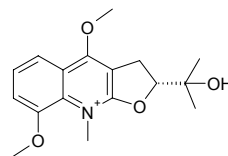
[590-96-5]  $C_2H_6N_2O_2$  (90.08). Source: SU TIE SHU GUO *Cycas revoluta*. Ref: 1416.

**14152 21-Methyl bacchara-12,22(29)-diene**

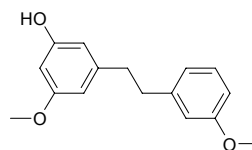
$C_{30}H_{50}$  (410.73). Source: XING JUE *Microsorium punctatum*. Ref: 1506.

**14153 O-Methylbalfourodinium (salt)**

$C_{17}H_{22}NO_4^+$  (304.37). Source: CHOU SHAN YANG *Orixa japonica*. Ref: 6.

**14154 3'-O-Methylbatatasin III**

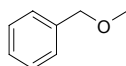
$C_{16}H_{18}O_3$  (258.32). White powder. Pharm: Antibacterial (*Streptococci* sp.); antiallergic  $\beta$ -Hexosaminidase inhibitor (rat basophilic RBL-2H3 cells, inhibits release of  $\beta$ -hexosaminidase, 100  $\mu$ mol/L, InRt = (70.0 $\pm$ 2.1)  $\mu$ mol/L,  $p < 0.01$ ; 300  $\mu$ mol/L control Ketotifen fumarate, InRt = (72.5 $\pm$ 0.9)  $\mu$ mol/L,  $p < 0.01$ )<sup>[5022]</sup>. Source: BAI JI *Bletilla striata*, SHOU ZHANG SHEN *Gymnadenia conopsea* (tuber). Ref: 658, 5022.

**14155 Methylbenzene**

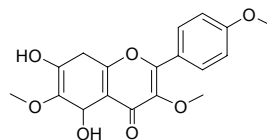
Toluene; Toluol [108-88-3]  $C_7H_8$  (92.14). Source: SHAN ZHA *Crataegus pinnatifida*. Ref: 2.

**14156 Methyl benzyl ether**

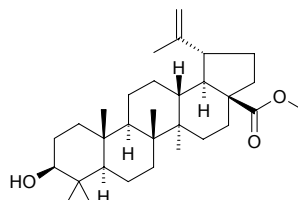
[538-86-3]  $C_8H_{10}O$  (122.17). Source: WU WEI ZI *Schisandra chinensis*. Ref: 2.

**14157 3-Methyl betuletol**

3,6-Dimethoxy kaempferide  $C_{18}H_{18}O_7$  (346.34). Source: YUE HUA *Betula ermanii*. Ref: 1507.

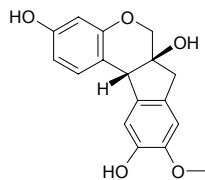
**14158 Methylbetulinat**

Methyl betulinate  $C_{31}H_{50}O_3$  (470.74). Needles, mp 220–221°C, 223–224°C,  $[\alpha]_D^{27} = +10.3^\circ$  ( $c = 1.55$ ,  $CH_2Cl_2$ ). Source: DAO GEN MEI *Rhizopus oryzae*, QIAO MU ZI ZHU *Callicarpa arborea*, QIU FENG MU *Bischofia javanica* [Syn. *Bischofia trifoliata*], XIA KU CAO *Prunella vulgaris*. Ref: 6, 2508, 3781.

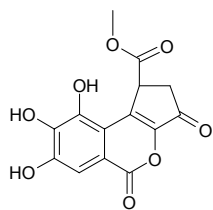


**14159 3'-O-Methylbrazilin**

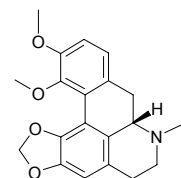
[111254-30-9] C<sub>17</sub>H<sub>16</sub>O<sub>5</sub> (300.31). [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +113.2° (c = 0.21, MeOH). Source: SU MU *Caesalpinia sappan* (heartwood). Ref: 1302, 1521, 4494.

**14160 Methyl brevifolin carboxylate**

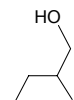
C<sub>14</sub>H<sub>10</sub>O<sub>8</sub> (306.23). Yellowish acicular crystals, mp 200°C. Source: YE XIA ZHU *Phyllanthus urinaria*. Ref: 283, 607.

**14161 O-Methylbulbocapnine**

[2490-83-7] C<sub>20</sub>H<sub>21</sub>NO<sub>4</sub> (339.39). mp 129~130°C, [ $\alpha$ ]<sub>D</sub> = +248° (c = 0.67, CHCl<sub>3</sub>). Source: HEI KE NAN *Lindera megaphylla*. Ref: 1508, 1521.

**14162 2-Methyl-1-butanol**

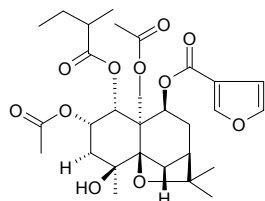
C<sub>5</sub>H<sub>12</sub>O (88.15). Source: JIN YIN HUA *Lonicera japonica*. Ref: 1378.

**14163 3-Methyl butanone**

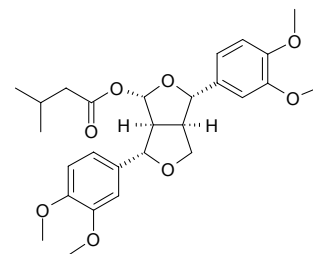
C<sub>5</sub>H<sub>10</sub>O (86.31). Source: YOU GAN LAN *Olea europaea*, FAN QIE *Lycopersicon esculentum*. Ref: 1455, 1456.

**14164 1 $\alpha$ -( $\alpha$ -Methyl)-butanoyl-2 $\alpha$ ,15-diacetoxy-4 $\beta$ -hydroxy-9 $\beta$ -( $\beta$ -)furoxyloxy- $\beta$ -dihydroagarofuran**

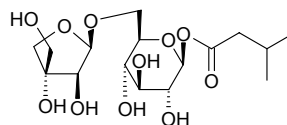
C<sub>29</sub>H<sub>40</sub>O<sub>11</sub> (564.64). Colorless gum, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +38° (c = 1.17, CHCl<sub>3</sub>). Source: *Euonymus nanoides* (seed). Ref: 4962.

**14165 (+)-4-(3-Methylbutanoyl)-2,6-di(3,4-dimethoxy)phenyl-3,7-dioxabicyclo[3.3.0]octane**

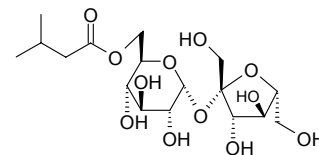
C<sub>27</sub>H<sub>34</sub>O<sub>8</sub> (486.57). White powder (MeOH), mp 94~95°C, [ $\alpha$ ]<sub>D</sub><sup>22</sup> = +9.7° (c = 0.35, CHCl<sub>3</sub>). Source: JU DA LAN CI TOU *Echinops giganteus* (root). Ref: 3828.

**14166 3-Methylbutanoyl-1-O- $\beta$ -D-glucopyranosyl- $\beta$ -D-apiofuranoside**

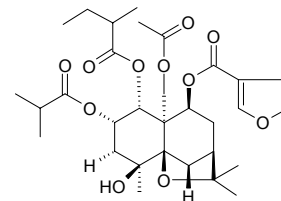
C<sub>16</sub>H<sub>28</sub>O<sub>11</sub> (396.39). Source: XIAO GUO KA FEI *Coffea arabica*. Ref: 1960.

**14167 3-Methylbutanoyl-6-O- $\alpha$ -D-glucopyranosyl- $\beta$ -D-fructofuranoside and**

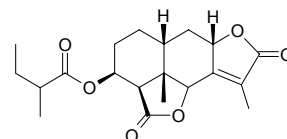
C<sub>17</sub>H<sub>30</sub>O<sub>12</sub> (426.42). Source: XIAO GUO KA FEI *Coffea arabica*. Ref: 1960.

**14168 1 $\alpha$ -( $\alpha$ -Methyl)-butanoyl-2 $\alpha$ -( $\alpha$ -methyl)-propynoyloxy-4 $\beta$ -hydroxy-9 $\beta$ -( $\beta$ -)furoxyloxy-15-acetoxy- $\beta$ -dihydroagarofuran**

C<sub>31</sub>H<sub>44</sub>O<sub>11</sub> (592.69). Colorless gum, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +38° (c = 1.03, CHCl<sub>3</sub>). Pharm: Cytotoxic (*in vitro*, Bel7402 liver carcinoma, IC<sub>50</sub> = 27.71  $\mu$ g/mL, control Etoposide, IC<sub>50</sub> = 7.00  $\mu$ g/mL). Source: *Euonymus nanoides* (seed). Ref: 4962.

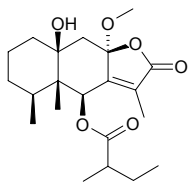
**14169 3 $\beta$ -(2'-Methylbutanoyloxy)-8 $\beta$ H-eremophil-7(11)-ene-12,8 $\alpha$ -(14,6 $\alpha$ )-diolide**

C<sub>20</sub>H<sub>26</sub>O<sub>6</sub> (362.43). Colorless plates, mp 190~191°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +125.5° (c = 0.40, CHCl<sub>3</sub>). Source: DONG E LUO DU WU *Ligularia tongolensis* (root). Ref: 4523.

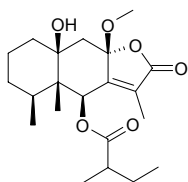


**14170 6 $\beta$ -(2'-Methylbutanoyloxy)-10 $\beta$ -hydroxy-8 $\alpha$ -methoxyeremophil-7(11)-en-12,8 $\beta$ -olide**

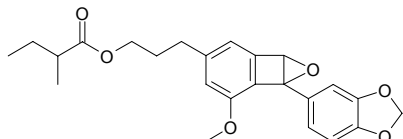
C<sub>21</sub>H<sub>32</sub>O<sub>6</sub> (380.49). Pale gel,  $[\alpha]_D^{20} = -93^\circ$  ( $c = 0.83$ , Me<sub>2</sub>CO). **Pharm:** Antibacterial (*Staphylococcus aureus*, antibacterial circle < 12mm; *Bacillus subtilis*, antibacterial circle = 13–16mm; *Escherichia coli*, antibacterial circle < 12mm). **Source:** JIAN YE TOU WU GEN *Ligularia sagitta*. **Ref:** 5382.

**14171 6 $\beta$ -(2'-Methylbutanoyloxy)-10 $\beta$ -hydroxy-8 $\beta$ -methoxyeremophil-7(11)-en-12,8 $\alpha$ -olide**

C<sub>21</sub>H<sub>32</sub>O<sub>6</sub> (380.49). White gel,  $[\alpha]_D^{20} = +34^\circ$  ( $c = 0.21$ , Me<sub>2</sub>CO). **Source:** JIAN YE TOU WU GEN *Ligularia sagitta*. **Ref:** 5382.

**14172 4-[3'-(1c-Methylbutanoyloxy)propyl]-2-methoxy-(3',4'-methylenedioxyphenyl)-1a,5b-dihydrobenzo-[3,4]-cyclobutaoxirene**

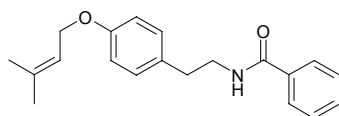
C<sub>24</sub>H<sub>26</sub>O<sub>6</sub> (410.47). **Source:** YAO YONG AN XI XIANG *Styrax officinalis*. **Ref:** 3426.

**14173 2-Methyl-2-butene**

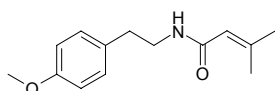
C<sub>5</sub>H<sub>10</sub> (70.14). **Source:** MENG GU HAO *Artemisia mongolica*. **Ref:** 1384.

**14174 4-(3'-Methyl-but-2'-ene)oxy, N-benzoyl phenethyl amine**

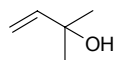
C<sub>20</sub>H<sub>23</sub>NO<sub>2</sub> (309.41). Yellow acicular crystals, mp 103.5–104.5°C. **Source:** DONG FENG JU YE *Atalantia buxifolia* [Syn. *Severinia buxifolia*]. **Ref:** 67.

**14175 3-Methyl-but-2-enoic acid-[2-(4-methoxy phenyl)-ethyl]-amide**

C<sub>14</sub>H<sub>19</sub>NO<sub>2</sub> (233.31). Oil. **Source:** YAN SHENG JIA MU ZEI *Anabasis salsa*, DUAN YE JIA MU ZEI *Anabasis brevifolia*. **Ref:** 4861.

**14176 2-Methylbut-3-en-2-ol**

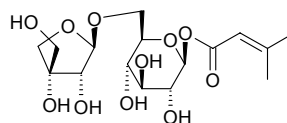
[115-18-4] C<sub>5</sub>H<sub>10</sub>O (86.13). **Source:** FANG FENG *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*], PI JIU HUA *Humulus lupulus*. **Ref:** 2, 1217.

**14177 3-Methyl-3-butenone**

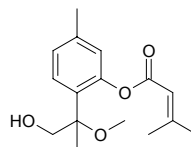
C<sub>5</sub>H<sub>8</sub>O (84.12). **Source:** GUANG HUO XIANG *Pogostemon cablin* [Syn. *Mentha cablin*]. **Ref:** 1367.

**14178 3-Methylbut-2-enoyl-1-O-β-D-glucopyranosyl-β-D-apiofuranoside**

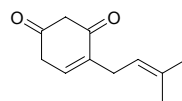
C<sub>16</sub>H<sub>26</sub>O<sub>11</sub> (394.38). **Source:** XIAO GUO KA FEI *Coffea arabica*. **Ref:** 1960.

**14179 3-O-(3-Methyl-2-butenoyl)-8-methoxy-9-hydroxythymol**

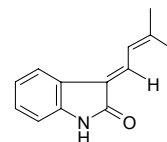
C<sub>16</sub>H<sub>22</sub>O<sub>4</sub> (278.35).  $[\alpha]_D^{23} = +18.2^\circ$  ( $c = 0.8$ , CHCl<sub>3</sub>). **Source:** PEI LAN *Eupatorium fortunei* (aerial parts). **Ref:** 3077.

**14180 4-(3-Methyl-2-butenyl)-4-cyclohexene-1,3-dione**

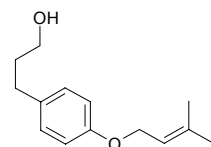
C<sub>11</sub>H<sub>14</sub>O<sub>2</sub> (178.23). **Source:** CHUAN XU DUAN *Dipsacus asperoides*. **Ref:** 1379.

**14181 (E)-3-(3'-Methyl-2'-butenylidene)-2-indolinone**

C<sub>13</sub>H<sub>13</sub>NO (199.25). **Source:** XING AN SHENG MA *Cimicifuga dahurica*. **Ref:** 1309, 1310.

**14182 4'-(3''-Methylbut-2''-enyloxy)-3-phenylpropanol**

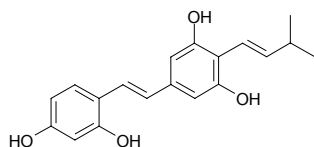
C<sub>14</sub>H<sub>20</sub>O<sub>2</sub> (220.31). **Pharm:** Antifungal (TLC-based assay, *Cladosporium cucumerinum*, MIQ = 0.1μg; control Miconazole, MIQ = 1μg). **Source:** *Fagara xanthoxyloides*. **Ref:** 5385.



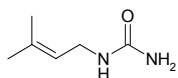


**14183 trans-4-(3-Methyl-E-but-1-enyl)-3,5,2',4'-tetrahydroxystilbene**

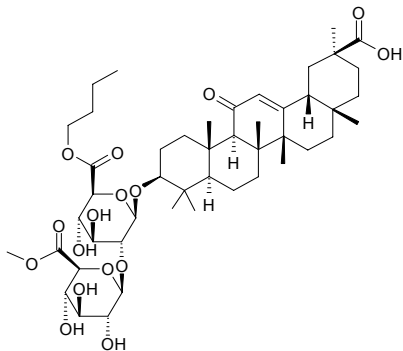
$C_{19}H_{20}O_4$  (312.37). Pale orange powder, mp 191~193°C. **Pharm:** Antimalarial (*Plasmodium falciparum*,  $EC_{50} = 1.7\mu\text{g/mL}$ , control Chloroquine diphosphate,  $EC_{50} = 0.16\mu\text{g/mL}$ ,  $EC_{50} = 3.1\mu\text{mol/L}$ ). **Source:** QUAN YUAN GUI MI *Artocarpus integra* (aerial parts). **Ref:** 3963.

**14184 N-3-methyl-2-butenyl urea**

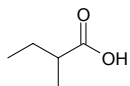
$C_6H_{12}N_2O$  (128.18). Colorless acicular crystals, mp 104~105°C. **Pharm:** Analgesic (*in vivo*, 10mg/kg); calcium antagonist (screening model of blood vessel strip, *in vitro*, 30 $\mu\text{g/mL}$ ); antihypertensive. **Source:** XUN DAO NIU *Biebersteinia heterostemon*. **Ref:** 324, 658.

**14185 Methyl-n-butyl-uralsaponin A esters**

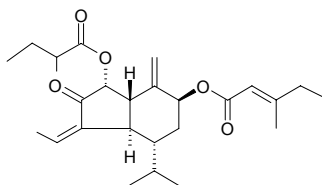
3 $\beta$ -Hydroxy-11-oxo-olean-12-en-30-oic acid 3-O- $\beta$ -D-(n-butyl)-glucuronopyranosyl ester)-(1 $\rightarrow$ 2)- $\beta$ -D-(methyl)-glucuronopyranosyl ester  $C_{47}H_{72}O_{16}$  (893.09). Colorless powder, mp 257°C. **Source:** GAN CAO *Glycyrrhiza uralensis*. **Ref:** 2148.

**14186 2-Methyl butyric acid**

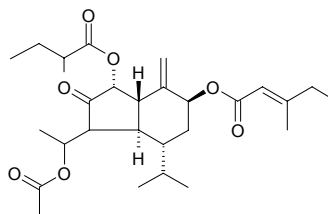
[116-53-0]  $C_5H_{10}O_2$  (102.13). bp 177°C. **Source:** XING ZI *Prunus armeniaca*. **Ref:** 6.

**14187 Methyl butyric acid 3,14-dehydro-Z-tussilagin ester**

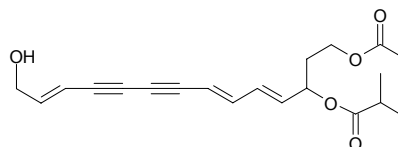
[80514-14-3]  $C_{26}H_{38}O_5$  (430.59). Colorless jelly,  $[\alpha]_{589\text{nm}}^{24} = -125^\circ$ ,  $[\alpha]_{578\text{nm}}^{24} = -135^\circ$ ,  $[\alpha]_{546\text{nm}}^{24} = -164^\circ$ ,  $[\alpha]_{436\text{nm}}^{24} = -494^\circ$  ( $c = 1.0$ , chloroform). **Pharm:** Platelet aggregation inhibitor (due to PAF). **Source:** KUAN DONG HUA *Tussilago farfara*. **Ref:** 976, 1092, 1178.

**14188 Methyl butyric acid tussilagin ester**

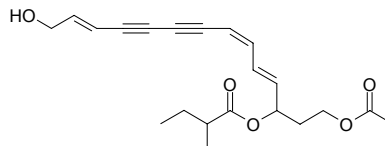
[80489-87-8]  $C_{28}H_{42}O_7$  (490.46). Colorless jelly,  $[\alpha]_{589\text{nm}}^{24} = -124^\circ$ ,  $[\alpha]_{578\text{nm}}^{24} = -133^\circ$ ,  $[\alpha]_{546\text{nm}}^{24} = -159^\circ$ ,  $[\alpha]_{436\text{nm}}^{24} = -390^\circ$  ( $c = 4.0$ , chloroform). **Pharm:** Platelet aggregation inhibitor (due to PAF). **Source:** KUAN DONG HUA *Tussilago farfara*. **Ref:** 1086, 1178.

**14189 12-( $\alpha$ -Methyl butyryl)-14-acetyl-2E,8E,10E-atractylentriol**

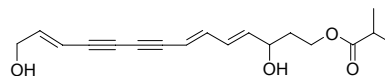
$C_{21}H_{26}O_5$  (358.44). **Source:** BAI ZHU *Atractylodes macrocephala* [Syn. *Atractylis macrocephala*]. **Ref:** 1386.

**14190 12-( $\alpha$ -Methyl butyryl)-14-acetyl-2E,8Z,10E-atractylentriol**

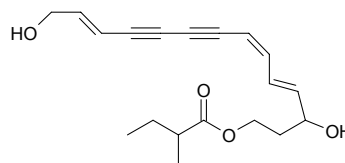
$C_{21}H_{26}O_5$  (358.44). **Source:** BAI ZHU *Atractylodes macrocephala* [Syn. *Atractylis macrocephala*]. **Ref:** 1386.

**14191 14( $\alpha$ -Methyl butyryl)-2E,8E,10E-atractylentriol**

$C_{19}H_{24}O_4$  (316.40). **Source:** BAI ZHU *Atractylodes macrocephala* [Syn. *Atractylis macrocephala*]. **Ref:** 1386.

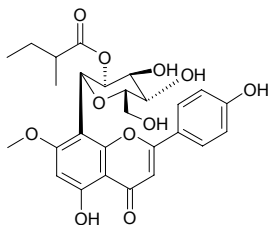
**14192 14( $\alpha$ -Methyl butyryl)-2E,8Z,10E-atractylentriol**

$C_{19}H_{24}O_4$  (316.40). **Source:** BAI ZHU *Atractylodes macrocephala* [Syn. *Atractylis macrocephala*]. **Ref:** 1386.

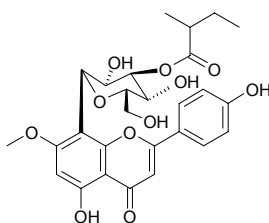


**14193 2''-O-(2'''-Methylbutyryl)isowertisin**

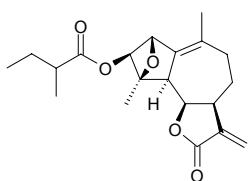
$C_{27}H_{30}O_{11}$  (530.53). Yellow powder, mp 155~157°C,  $[\alpha]_D^{20} = -21.2^\circ$  ( $c = 0.066$ ,  $CH_3OH$ ). Source: DUAN BAN JIN LIAN HUA *Trollius ledebourii* (flower: yield = 0.014%dw). Ref: 4743.

**14194 3''-O-(2'''-Methylbutyryl)isowertisin**

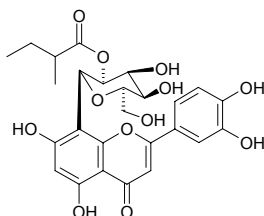
$C_{27}H_{30}O_{11}$  (530.53). Yellow powder, mp 231~233°C,  $[\alpha]_D^{20} = -41.1^\circ$  ( $c = 0.036$ ,  $CH_3OH$ ). Source: DUAN BAN JIN LIAN HUA *Trollius ledebourii* (flower: yield = 0.00018%dw). Ref: 4743.

**14195 3β-O-(2-Methylbutyryl)moroccolide A**

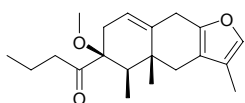
5*α*H-2β,4-Epoxy-3β-(2-methylbutyryloxy)guaia-1(10),-11(13)-dien-6β,12-olide  $C_{20}H_{26}O_5$  (346.43). Colorless gum,  $[\alpha]_D^{22} = +102^\circ$  ( $c = 0.1$ , EtOH). Pharm: Cytotoxic (*in vitro*, KB,  $IC_{50} = 1\mu g/mL$ ). Source: *Warionia saharae* (leaf: yield = 0.0046%dw). Ref: 4620.

**14196 2''-O-(2'''-Methylbutyryl)orientin**

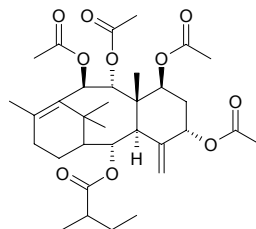
$C_{26}H_{28}O_{12}$  (532.51). Yellow powder, mp 185~187°C,  $[\alpha]_D^{20} = -16.8^\circ$  ( $c = 0.054$ ,  $CH_3OH$ ). Source: DUAN BAN JIN LIAN HUA *Trollius ledebourii* (flower: yield = 0.00097%dw). Ref: 4743.

**14197 3-Methylbutyryloxyeurypsins**

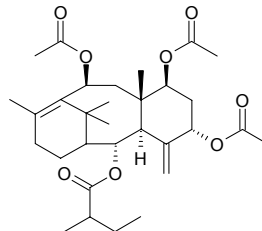
$C_{20}H_{28}O_3$  (316.44).  $[\alpha]_D = -45.9^\circ$  ( $c = 1$ ,  $CHCl_3$ ). Source: HUANG SE QIAN LI GUANG *Senecio flavus*. Ref: 2409.

**14198 2α-(α-Methylbutyryl)-oxy-5α,7β,9α,10β-tetraacetoxy-4(20),11-taxadiene**

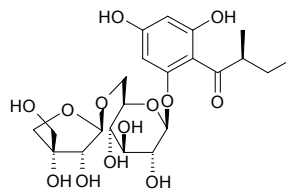
$C_{33}H_{48}O_{10}$  (604.74). mp 155~156°C,  $[\alpha]_D = +56^\circ$ . Source: JIANG GUO ZI SHAN *Taxus baccata*. Ref: 662.

**14199 2α-(α-Methylbutyryl)-oxy-5α,7β,10β-triacetoxy-4(20),11-taxadiene**

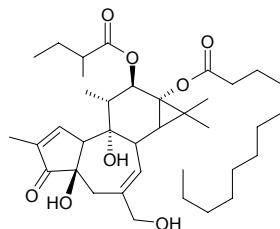
$C_{31}H_{46}O_8$  (546.71). mp 115°C,  $[\alpha]_D = +45^\circ$ . Source: JIANG GUO ZI SHAN *Taxus baccata*, MEI LI HONG DOU SHAN *Taxus mairei*. Ref: 662.

**14200 2-(2-Methylbutyryl)phloroglucinol 1-O-(6''-O-β-D-apiofuranosyl)-β-D-glucopyranoside**

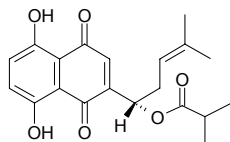
$C_{22}H_{32}O_{13}$  (504.49). Yellow amorphous powder,  $[\alpha]_D^{18} = -60.3^\circ$  ( $c = 0.30$ , MeOH). Source: YOU GAN YE *Phyllanthus emblica* (leaf and branch). Ref: 4205.

**14201 12-O-(2-Methylbutyryl)phorbol-13-dodecanoate**

$C_{37}H_{58}O_8$  (630.87). Pharm: Anti-HIV-1 (MT-4 cells, HIV-1-induced cytopathic effect inhibitor,  $IC_{100} = 15.76\mu g/mL$ ,  $CC_0 = 62.5\mu g/mL$ , control DS8000,  $IC_{100} = 3.9\mu g/mL$ ,  $CC_0 > 1000\mu g/mL$ ); PKC activator (10ng/mL, activity rate = 16%). Source: BA DOU *Croton tiglium*. Ref: 3921.

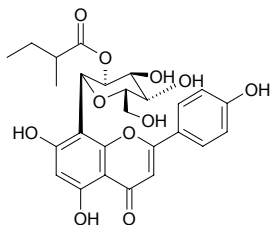
**14202 α-Methyl-n-butyrylshikonin**

$C_{21}H_{24}O_6$  (372.42). Source: ZI CAO *Lithospermum erythrorhizon*. Ref: 2.

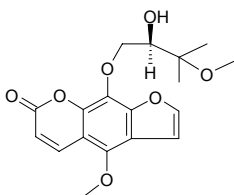


**14203 2''-O-(2'''-Methylbutyryl)vitexin**

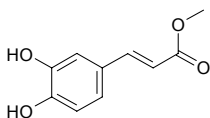
$C_{26}H_{28}O_{11}$  (516.51). Yellow powder, mp 179~181°C,  $[\alpha]_D^{20} = -22.0^\circ$  ( $c = 0.064$ ,  $CH_3OH$ ). **Source:** DUAN BAN JIN LIAN HUA *Trollius ledebourii* (flower: yield = 0.00033%dw). **Ref:** 4743.

**14204 tert-O-Methyl byakangelicin**

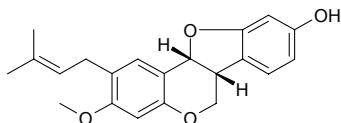
$C_{18}H_{20}O_7$  (348.36). Crystals, mp 95~96°C,  $[\alpha]_D^{14} = -17.8^\circ$  (EtOH). **Source:** HOU GUO DANG GUI *Angelica pachycarpa*, QI BAI ZHI *Angelica dahurica* cv. *qibaizhi*. **Ref:** 1347.

**14205 Methyl caffeate**

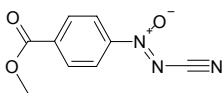
[3843-74-1]  $C_{10}H_{10}O_4$  (194.19). **Pharm:** Antineoplastic ( $S_{180}$ ). **Source:** QING HAO *Artemisia apiacea* [Syn. *Artemisia carvifolia*; *Artemisia caruifolia*], RI BEN HUANG BAI *Phellodendron japonicum* (leaf), TAI WAN FU RONG *Hibiscus taiwanensis*, TAI WAN HUANG BO *Phellodendron amurense* var. *wilsonii* (leaf: yield = 0.00051%dw)<sup>[4722]</sup>, TIAN REN JU *Gaillardia pulchella*. **Ref:** 658, 2529, 4502, 4722.

**14206 3-O-Methylcalopocarpin**

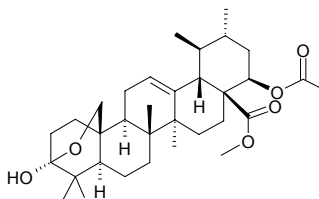
$C_{21}H_{22}O_4$  (338.41). **Pharm:** Anti-HIV (inhibits cell denaturalization affected by HIV). **Source:** HUI CI TONG *Erythrina glauca*. **Ref:** 2268.

**14207 Methyl calvatate**

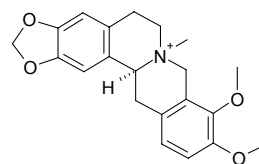
$C_9H_7N_3O_3$  (205.17). **Source:** LI XING MA BO *Lycoperdon pyriforme*. **Ref:** 1308.

**14208 Methylcamaralate**

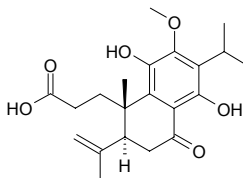
Methyl 22β-acetoxy-3,25-epoxy-3α-hydroxy-urs-12-en-28-oate  $C_{33}H_{50}O_6$  (542.76). Amorphous powder,  $[\alpha]_D = +171^\circ$  ( $c = 0.12$ ,  $CHCl_3$ ). **Source:** WU SE MEI *Lantana camara* (aerial parts). **Ref:** 4309.

**14209 N-Methyl canadine**

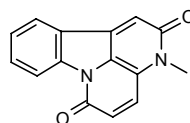
$C_{21}H_{24}NO_4$  (354.43). **Source:** DUAN CI HUA JIAO *Zanthoxylum brachyacanthum*, DU HUA JIAO *Zanthoxylum veneficium*, ZHI LI JIAO HUI XIANG *Hypecoum erectum*. **Ref:** 1512, 1521.

**14210 12-O-Methylcandesalvone B**

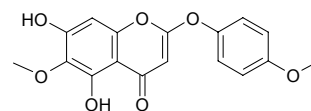
$C_{21}H_{28}O_6$  (376.45). Pale-yellow solid,  $[\alpha]_D^{24.5} = +45^\circ$  ( $c = 0.08$ ,  $CHCl_3$ ). **Pharm:** Antioxidant (enzyme-independent lipid peroxidation,  $IC_{50} = 13.40\mu mol/L$ , Rosmarinic acid,  $IC_{50} = 4.40\mu mol/L$ ; enzyme-dependent lipid peroxidation,  $IC_{50} = 10.42\mu mol/L$ , Rosmarinic acid,  $IC_{50} = 0.39\mu mol/L$ )<sup>[5494]</sup>. **Source:** ZHU TAI SHU WEI CAO *Salvia candelebrum* (aerial parts). **Ref:** 5376, 5494.

**14211 3-Methyl-canthin-2,6-dione**

$C_{15}H_{10}N_2O_2$  (250.26). Orange-red needles, mp > 330°C. **Source:** KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. **Ref:** 12.

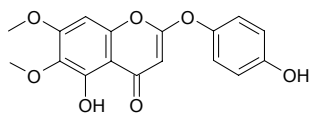
**14212 4'-Methylcapillarisin**

$C_{17}H_{14}O_7$  (330.30). **Source:** YIN CHEN HAO *Artemisia capillaris*. **Ref:** 2.

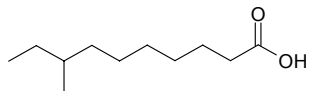


**14213 7-Methylcapillarisin**

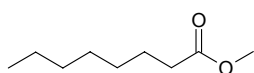
$C_{17}H_{14}O_7$  (330.30). Source: YIN CHEN HAO *Artemisia capillaris*. Ref: 2.

**14214 8-Methyl capric acid**

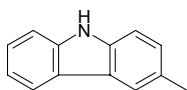
$C_{11}H_{22}O_2$  (186.30). Source: XI YANG SHEN *Panax quinquefolium*. Ref: 2.

**14215 Methyl caprylate**

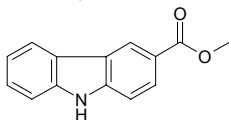
Octanoic acid methyl ester [111-11-5]  $C_9H_{18}O_2$  (158.24). Source: DANG SHEN *Codonopsis pilosula*. Ref: 2.

**14216 3-Methylcarbazole**

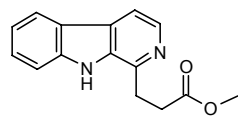
3-Methyl-9H-carbazole [4630-20-0]  $C_{13}H_{11}N$  (181.24). Plates ( $CH_2Cl_2$ /hexane), mp 206~208°C. Pharm: Anti-tuberculosis (MIC =  $(14.3 \pm 0.9) \mu\text{g/mL}$ , control Rifampine, MIC =  $(0.040 \pm 0.017) \mu\text{g/mL}$ ; cytotoxic, Vero,  $IC_{50} > 102 \mu\text{g/mL}$ , Rifampine,  $IC_{50} = 100 \mu\text{g/mL}$ )<sup>[5072]</sup>. Source: QI YE HUANG PI *Clausena heptaphylla*, SHAN HUANG PI *Clausena excavata*, YING MAO XIAO YUN MU *Micromelum hirsutum* (stem cortex). Ref: 703, 1521, 5072.

**14217 Methyl carbazole-3-carboxylate**

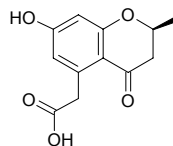
3-Methoxycarbonylcarbazole  $C_{14}H_{11}NO_2$  (225.25). Pharm: Antitubercular (MIC  $> 128 \mu\text{g/mL}$ ; control Rifampin, MIC =  $(0.040 \pm 0.017) \mu\text{g/mL}$ )<sup>[5072]</sup>; cytotoxic (Vero,  $IC_{50} > 102 \mu\text{g/mL}$ ; control Rifampin,  $IC_{50} = 100 \mu\text{g/mL}$ )<sup>[5072]</sup>; antibacterial (*Mycobacterium tuberculosis*, MIC =  $50 \mu\text{g/mL}$ , control Isoniazide, MIC =  $0.040\text{--}0.090 \mu\text{g/mL}$ , kanamycin sulfate, MIC =  $2.0\text{--}5.0 \mu\text{g/mL}$ )<sup>[5367]</sup>; antifungal (*Candida albicans*,  $IC_{50} = 9.5 \mu\text{g/mL}$ ; control Amphotericin,  $IC_{50} = 0.01 \mu\text{g/mL}$ )<sup>[5367]</sup>. Source: SHAN HUANG PI *Clausena excavata*, YING MAO XIAO YUN MU *Micromelum hirsutum* (stem cortex). Ref: 5072, 5367.

**14218 Methyl-3-(β-carboline-1-yl) propionate**

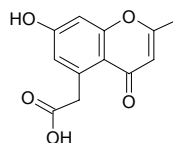
Infracine [91147-07-8]  $C_{15}H_{14}N_2O_2$  (254.29). Crystals (toluene), mp 145~146°C. Source: KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. Ref: 12, 1521.

**14219 2-Methyl-5-carboxymethyl-7-hydroxychromanone**

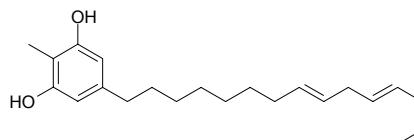
$C_{12}H_{12}O_5$  (236.23). Source: DA HUANG *Rheum officinale*. Ref: 1437.

**14220 2-Methyl-5-carboxymethyl-7-hydroxychromone**

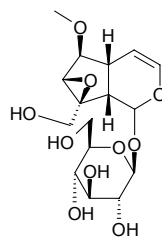
$C_{12}H_{10}O_5$  (234.21). Source: DA HUANG *Rheum officinale*. Ref: 1437.

**14221 2-Methylcardol**

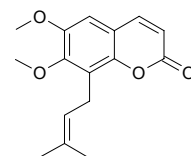
$C_{22}H_{34}O_2$  (330.52). Source: ZI JIN NIU *Ardisia japonica*. Ref: 1355.

**14222 6-O-Methyl catalpol**

$C_{16}H_{24}O_{10}$  (376.36). Crystals ( $H_2O$ ), mp 236~238°C,  $[\alpha]_D^{22.5} = -122^\circ$  ( $c = 1.64$ , 90% EtOH). Pharm: Antitrypanosomal (*Trypanosoma brucei rhodesiense*,  $IC_{50} = 32.5 \mu\text{g/mL}$ , control Melarsoprol,  $IC_{50} = 0.0033 \mu\text{g/mL}$ ; *Trypanosoma cruzi*,  $IC_{50} > 90 \mu\text{g/mL}$ , control Benznidazole,  $IC_{50} = 0.70 \mu\text{g/mL}$ )<sup>[5251]</sup>; antileishmanial (*Leishmania donovani*,  $IC_{50} = 8.3 \mu\text{g/mL}$ , control Miltefosine,  $IC_{50} = 0.32 \mu\text{g/mL}$ )<sup>[5251]</sup>; antimalarial (*Plasmodium falciparum*,  $IC_{50} > 50 \mu\text{g/mL}$ , control Artemisinin,  $IC_{50} = 0.002 \mu\text{g/mL}$ )<sup>[5251]</sup>; cytotoxic (L6 cells,  $IC_{50} > 90 \mu\text{g/mL}$ , control Podophyllotoxin,  $IC_{50} = 0.0075 \mu\text{g/mL}$ )<sup>[5251]</sup>. Source: LIN PIAN XUAN SHEN *Scrophularia lepidota* (root), QIU HUA ZUI YU CAO *Buddleja globosa*, XUAN SHEN *Scrophularia ningpoensis*. Ref: 1376, 1521, 5251.

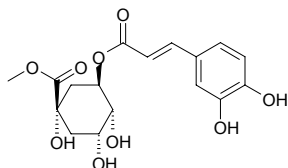
**14223 Methyl-O-cedrelopsin**

$C_{16}H_{18}O_4$  (274.32). Source: *Cedrelopsis grevei* (trunk bark). Ref: 5368.

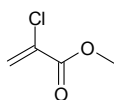


**14224 Methyl chlorogenate**

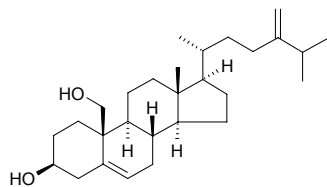
5-*O*-Caffeoylquinic acid methyl ester C<sub>17</sub>H<sub>20</sub>O<sub>9</sub> (368.34). **Pharm:** Aldose reductase inhibitor (IC<sub>50</sub> = 1.3 μmol/L, control Epalrestat, IC<sub>50</sub> = 0.072 μmol/L)<sup>[4530]</sup>. **Source:** DU ZHONG *Eucommia ulmoides*, JI ZI MU *Sinoadina Racemosa* [Syn. *Adina racemosa*] (leaf, flower and twig: yield = 0.085% dw)<sup>[4723]</sup>, SHUI MU XUE LIAN HUA *Saussurea medusa* (whole herb). **Ref:** 1209, 4530, 4723.

**14225 Methyl 2-chloropropenoate**

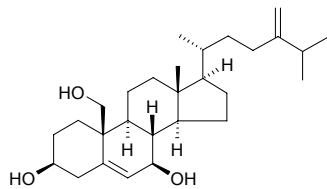
C<sub>4</sub>H<sub>5</sub>ClO<sub>2</sub> (120.54). **Source:** BAN XIA *Pinellia ternata*. **Ref:** 1401.

**14226 24-Methylcholesta-5,24(28)-diene-3β,19-diol**

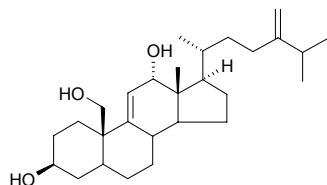
C<sub>28</sub>H<sub>46</sub>O<sub>2</sub> (414.68). **Pharm:** Cytotoxic inactive (hmn prostate cancer LNCaP cell line, EC<sub>50</sub> = 56.7 μg/mL). **Source:** *Nephthea chabroli*. **Ref:** 4375.

**14227 24-Methylcholesta-5,24(28)-diene-3β,7β,19-triol**

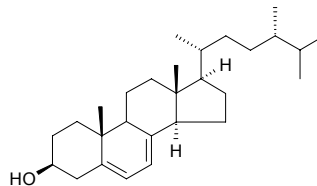
C<sub>28</sub>H<sub>46</sub>O<sub>3</sub> (430.68). **Pharm:** Cytotoxic inactive (hmn prostate cancer LNCaP cell line, EC<sub>50</sub> = 4.9 μg/mL). **Source:** *Nephthea chabroli*. **Ref:** 4375.

**14228 24-Methylcholesta-9(11),24(28)-diene-3β,12α,19-triol**

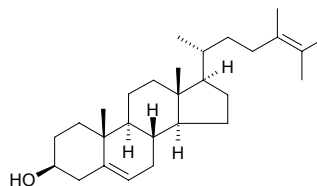
C<sub>28</sub>H<sub>46</sub>O<sub>3</sub> (430.68). Colorless solid, mp 163–164°C, [α]<sub>D</sub><sup>25</sup> = -141.9° (c = 0.031, MeOH). **Pharm:** Cytotoxic inactive (hmn prostate cancer LNCaP cell line, EC<sub>50</sub> = 23.4 μg/mL). **Source:** *Nephthea chabroli*. **Ref:** 4375.

**14229 24-Methylcholesta-5,7-dien-3β-ol‡**

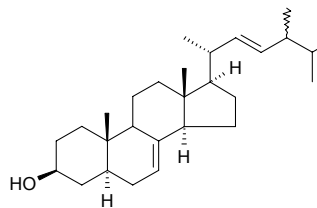
Ergosta-5,7-dien-3-ol; 22,23-Dihydroergosterol; Provitamin D<sub>4</sub> [516-79-0] C<sub>28</sub>H<sub>46</sub>O (398.68). Crystals + 1 H<sub>2</sub>O (EtOAc/MeOH), mp 152–153°C, [α]<sub>D</sub> = -128.7° (c = 0.4, CHCl<sub>3</sub>). **Source:** CAO GU *Volvariella volvacea*, E CHANG CAI *Endarachne binghamiae*, PU<sup>(2)</sup> TAO *Vitis vinifera* (seed oil). **Ref:** 1502, 1521. ‡Note: see compound 3039.

**14230 24-Methylcholesta-5,24-dien-3β-ol**

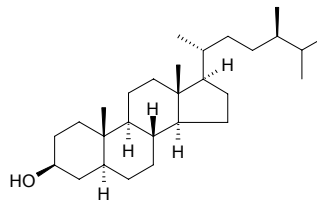
[20780-41-0] C<sub>28</sub>H<sub>46</sub>O (398.68). Crystals (MeOH), mp 141.5–142.5°C, [α]<sub>D</sub> = -46.7° (CHCl<sub>3</sub>). **Source:** CUI MIAN SHUI QIE *Withania somnifera*, GOU QI ZI *Lycium chinense*. **Ref:** 1371, 1521.

**14231 24-Methylcholesta-7,22-dien-3β-ol**

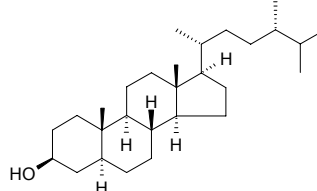
C<sub>28</sub>H<sub>46</sub>O (398.68). 24S: mp 173.5–174°C, 24R: mp 159.5–161°C. **Source:** LING ZHI *Ganoderma lucidum*, SHU SHE *Ganoderma applanatum*. **Ref:** 1407, 1521.

**14232 (24R)-Methyl cholestanol**

C<sub>28</sub>H<sub>50</sub>O (402.71). **Source:** SHAN YAO *Dioscorea batatas* [Syn. *Dioscorea opposita*]. **Ref:** 1399.

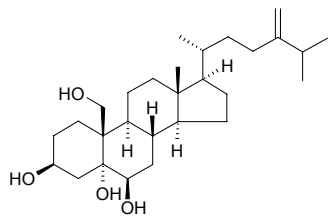
**14233 (24S)-Methyl cholestanol**

C<sub>28</sub>H<sub>50</sub>O (402.71). mp 144–145°C. **Source:** JIN ZHAN JU *Calendula officinalis*, SHAN YAO *Dioscorea batatas* [Syn. *Dioscorea opposita*]. **Ref:** 1399, 1521.

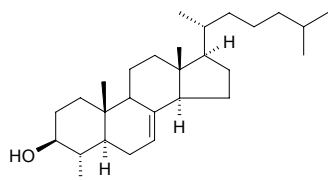


**14234 24-Methylcholest-24(28)-ene-3 $\beta$ ,5 $\alpha$ ,6 $\beta$ ,19-tetraol**

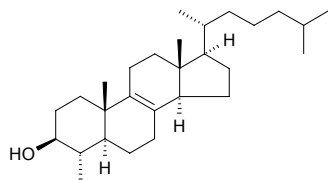
$C_{28}H_{48}O_4$  (448.69). **Pharm:** Cytotoxic (hmn prostate cancer LNCaP cell line,  $EC_{50} = 7.4\mu\text{g/mL}$ ). **Source:** *Nephthea chabroli*. **Ref:** 4375.

**14235 4 $\alpha$ -Methyl-cholest-7-en-3 $\beta$ -ol**

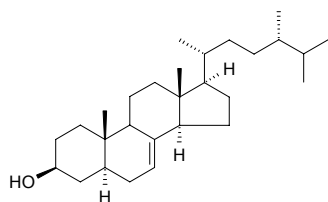
Lophenol [481-25-4]  $C_{28}H_{48}O$  (400.69). mp 149~151°C,  $[\alpha]_D = +5^\circ$  ( $\text{CHCl}_3$ ). **Source:** AI QIE *Solanum demissum*, DUO ZU JUE *Polypodium vulgare*, JIAN YE LONG XUE SHU *Dracaena cochinchinensis*, MA LING SHU *Solanum tuberosum* (leaf). **Ref:** 616, 1415, 1521.

**14236 4 $\alpha$ -Methyl-cholest-8-en-3 $\beta$ -ol**

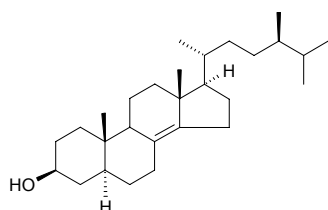
[5241-22-5]  $C_{28}H_{48}O$  (400.69). **Source:** GOU QI ZI *Lycium chinense*. **Ref:** 1371, 1372, 1373, 1374.

**14237 (24S)-Methylcholest-7-en-3 $\beta$ -ol**

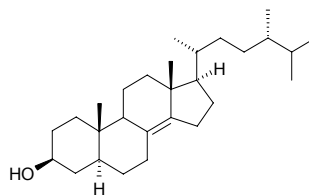
24-Methyl lathosterol [516-78-9]  $C_{28}H_{48}O$  (400.69). **Source:** HUANG GUA *Cucumis sativus*, LING ZHI *Ganoderma lucidum*, CAO GU *Volvariella volvacea*. **Ref:** 1345, 1407, 1502.

**14238 (24R)-Methyl cholest-8(14)-enol**

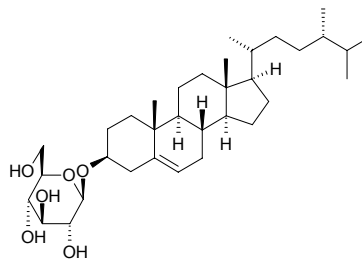
$C_{28}H_{48}O$  (400.69). **Source:** SHAN YAO *Dioscorea batatas* [Syn. *Dioscorea opposita*]. **Ref:** 1399.

**14239 (24S)-Methyl cholest-8(14)-enol**

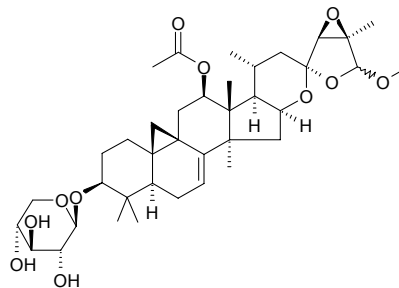
[632-32-6]  $C_{28}H_{48}O$  (400.69). mp 130~131°C. **Source:** SHAN YAO *Dioscorea batatas* [Syn. *Dioscorea opposita*]. **Ref:** 1399.

**14240 24-Methylcholest-5-enyl-3 $\beta$ -O-glucopyranoside**

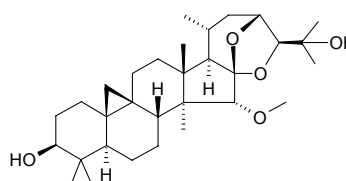
$C_{34}H_{58}O_6$  (562.84). **Source:** QIAN SHI GEN *Euryale ferox*. **Ref:** 1509.

**14241 Methylcimicifugoside**

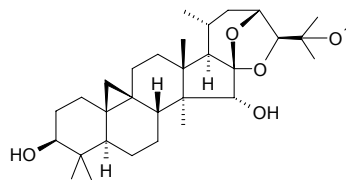
$C_{38}H_{56}O_{11}$  (688.86). **Source:** YE SHENG MA *Cimicifuga simplex*. **Ref:** 6.

**14242 15-O-Methylcimigenol**

[24399-56-2]  $C_{31}H_{50}O_5$  (502.74). Crystals, mp 199.5~200.5°C,  $[\alpha]_D = +38.9^\circ$  ( $\text{CHCl}_3$ ). **Source:** SAN MIAN DAO *Cimicifuga acerina*. **Ref:** 6, 1521.

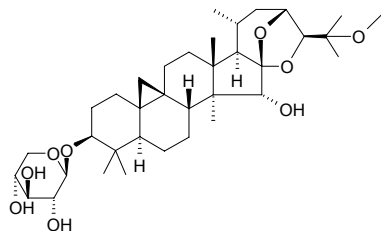
**14243 25-O-Methylcimigenol**

[20528-90-9]  $C_{31}H_{50}O_5$  (502.74). Crystals, mp 218~219°C,  $[\alpha]_D = +39.25^\circ$  ( $\text{CHCl}_3$ ). **Source:** SAN MIAN DAO *Cimicifuga acerina*, YE SHENG MA *Cimicifuga simplex*. **Ref:** 1521, 2215.

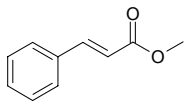


**14244 25-O-Methylcimigenoside**

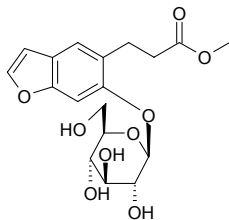
[27994-13-4] C<sub>36</sub>H<sub>58</sub>O<sub>9</sub> (634.86). Crystals, mp 268~270°C. Source: RI BEN SHENG MA *Cimicifuga japonica*, SAN MIAN DAO *Cimicifuga acerina*, YE SHENG MA *Cimicifuga simplex*. Ref: 6, 1521.

**14245 Methylcinnamate**

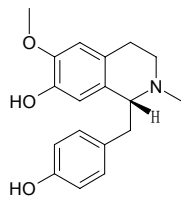
[103-26-4] C<sub>10</sub>H<sub>10</sub>O<sub>2</sub> (162.19). mp 36.5°C, bp 261°C/750mmHg. Source: DA CAO KOU *Alpinia speciosa*, DA LIANG JIANG *Alpinia galanga*, GAO LIANG JIANG *Alpinia officinarum*, LUO LE *Ocimum basilicum*, SONG XUN *Tricholoma matsutake* [Syn. *Armillaria matsutake*]. Ref: 6.

**14246 Methylnidioside A**

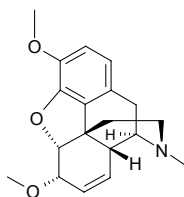
C<sub>18</sub>H<sub>22</sub>O<sub>9</sub> (382.37). Glassy powder, mp 146~147°C, [α]<sub>D</sub><sup>25</sup> = -46.87° (c = 0.32, MeOH). Source: CHOU CAO *Ruta graveolens* (dried aerial parts). Ref: 3073.

**14247 D-N-Methyl coclaurine**

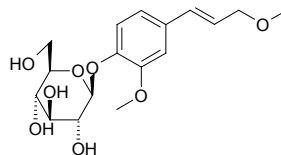
C<sub>18</sub>H<sub>21</sub>NO<sub>3</sub> (299.37). mp 94.5~95.0°C. Source: HE YE *Nelumbo nucifera*, HENG ZHOU WU YAO *Cocculus laurifolius*. Ref: 6.

**14248 6-Methylcodeine**

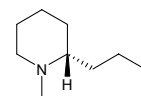
C<sub>19</sub>H<sub>23</sub>NO<sub>3</sub> (313.40). Source: YA PIAN *Papaver somniferum*. Ref: 6.

**14249 Methylconiferin**

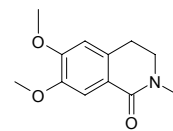
3'-O-Methylconiferin C<sub>17</sub>H<sub>24</sub>O<sub>8</sub> (356.38). White acicular crystals, mp 167~169°C, [α]<sub>D</sub><sup>21</sup> = -69.5° (c = 0.1, H<sub>2</sub>O). Source: TONG QIAO SHE GU *Balanophora involucrata*. Ref: 490.

**14250 (+)-N-Methylconiine**

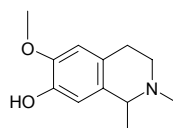
C<sub>9</sub>H<sub>19</sub>N (141.26). Pharm: Toxin. Source: DU SHEN *Conium maculatum*. Ref: 658.

**14251 N-Methylcorydaldine**

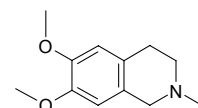
C<sub>12</sub>H<sub>13</sub>NO<sub>3</sub> (221.26). Source: BIAN FU GE GEN *Menispermum dauricum*, DA HONG YING SU *Papaver bracteatum*, FEN SHI TANG SONG CAO *Thalictrum fendleri*, LIAN YE TONG *Hernandia Sonora* [Syn. *Hernandia ovigera*], *Papaver urbanianum*. Ref: 1521, 3792.

**14252 1-Methyl-corypalline**

1,2,3,4-Tetrahydro-6-methoxy-7-hydroxy-1,2-dimethylisoquinoline C<sub>12</sub>H<sub>17</sub>NO<sub>2</sub> (207.27). Source: LIAN ZI XIN *Nelumbo nucifera*, DONG BEI YAN HU SUO *Corydalis ambigua* var. *amurensis* [Syn. *Corydalis ambigua*]. Ref: 1478, 1479.

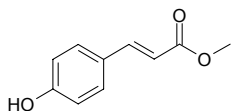
**14253 O-Methyl-corypalline**

1,2,3,4 Tetrahydro-6,7-dimethoxy-2-methylisoquinoline [16620-96-5] C<sub>12</sub>H<sub>17</sub>NO<sub>2</sub> (207.27). Source: LIAN ZI XIN *Nelumbo nucifera*. Ref: 6.

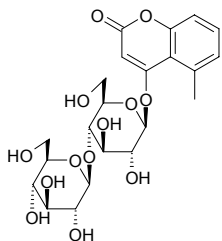


**14254 trans-Methyl p-coumarate**

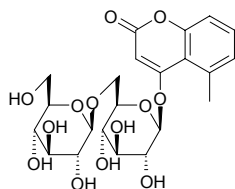
Methyl-*p*-hydroxycinnamate [3943-97-3] C<sub>10</sub>H<sub>10</sub>O<sub>3</sub> (178.19). Colorless acicular crystals, mp 216~220°C (Me<sub>2</sub>CO). **Pharm:** Cytotoxic (P<sub>388</sub> cell line, ED<sub>50</sub> = 10.5 μg/mL, control Mithramycin, ED<sub>50</sub> = 0.06 μg/mL; HT29, ED<sub>50</sub> = 8.9 μg/mL, Mithramycin, ED<sub>50</sub> = 0.07 μg/mL; A549, ED<sub>50</sub> = 15.1 μg/mL, Mithramycin, ED<sub>50</sub> = 0.08 μg/mL)<sup>[5405]</sup>; cytotoxic (Colon26-L5, ED<sub>50</sub> = 84.2 μmol/L; HT1080, ED<sub>50</sub> > 100 μmol/L)<sup>[3042]</sup>; cytotoxic inactive (*in vitro*, HONE-1 and NUGC cancer cell lines, no significant activity)<sup>[3069]</sup>; phytoalexin<sup>[4727]</sup>. **Source:** HUANG GUA *Cucumis sativus* (leaf)<sup>[4727]</sup>, JIA BAI HE *Notholirion hyacinthinum* [Syn. *Notholirion bulbuliferum*], KAI KOU JIAN *Tupistra chinensis* (underground part)<sup>[4676]</sup>, RI BEN HUANG BAI *Phellodendron japonicum* (leaf), SHAN HUANG PI *Clausena excavata*, SI ROU TUO GUO YE MI ZHU YU *Melicope semecarpifolia*, TAI WAN FU RONG *Hibiscus taiwanensis*, TAI WAN HUANG BO *Phellodendron amurense* var. *wilsonii* (leaf: yield = 0.00017%dw)<sup>[4722]</sup>, YUN NAN CAO KOU *Alpinia blepharocalyx* (seed: yield = 0.00076%<sup>[3042]</sup>), ZHONG GUO XIU QIU *Hydrangea chinensis* (root)<sup>[3069]</sup>. **Ref:** 663, 703, 2529, 3042, 3069, 4502, 4676, 4722, 4727, 5405.

**14255 5-Methylcoumarin-4-cellobioside**

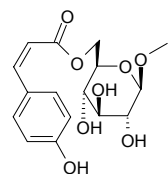
[109974-31-4] C<sub>22</sub>H<sub>28</sub>O<sub>13</sub> (500.46). Acicular crystals, mp 217~219°C, [α]<sub>D</sub><sup>21</sup> = -94° (c = 0.515, methanol). **Pharm:** Antibacterial (*Bacillus coli* and *Staphylococcus aureus*, EC = 500 μg/mL). **Source:** DA DING CAO *Gerbera anandria* [Syn. *Leibnitzia anandria*]. **Ref:** 77, 921.

**14256 5-Methylcoumarin-4-gentiobioside**

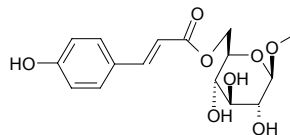
[109974-32-5] C<sub>22</sub>H<sub>28</sub>O<sub>13</sub> (500.46). Acicular crystals, mp 155~157°C, [α]<sub>D</sub><sup>21</sup> = -80° (c = 0.902, methanol). **Pharm:** Antibacterial (*Staphylococcus aureus*, 500 μg/mL). **Source:** DA DING CAO *Gerbera anandria* [Syn. *Leibnitzia anandria*]. **Ref:** 77.

**14257 Methyl 6-O-p-cis-coumaroyl-β-D-glucopyranoside**

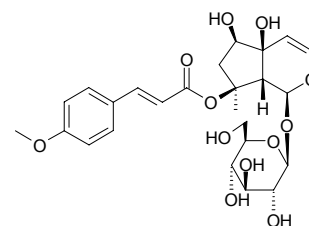
C<sub>16</sub>H<sub>20</sub>O<sub>8</sub> (340.33). **Source:** LV DOU *Onobrychis viciifolia* (leaf). **Ref:** 5084.

**14258 Methyl 6-O-p-trans-coumaroyl-β-D-glucopyranoside**

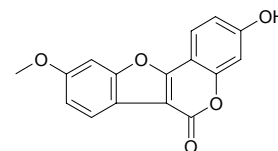
C<sub>16</sub>H<sub>20</sub>O<sub>8</sub> (340.33). **Source:** LV DOU *Onobrychis viciifolia* (leaf). **Ref:** 5084.

**14259 8-(O-Methyl-p-coumaroyl)harpagide**

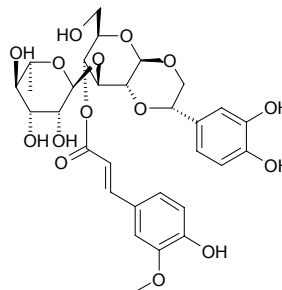
C<sub>25</sub>H<sub>32</sub>O<sub>12</sub> (524.53). **Source:** BEI XUAN SHEN *Scrophularia buergeriana*. **Ref:** 1377.

**14260 12-O-Methylcoumestrol**

C<sub>16</sub>H<sub>10</sub>O<sub>5</sub> (282.2). **Source:** HUI HUI DOU *Cicer arietinum*. **Ref:** 6.

**14261 3'''-O-Methylcrenatoside**

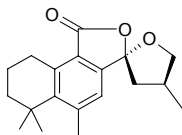
3'-Methyl crenatoside; 1,2-*O*-[2*S*-(3,4-Dihydroxyphenyl)-1,2-ethanediyl]-3-*O*-*α*-*L*-rhamnopyranosyl-4-*O*-feruloyl-β-*D*-glucopyranoside C<sub>30</sub>H<sub>36</sub>O<sub>15</sub> (636.61). White amorphous powder, mp 224~226°C, [α]<sub>D</sub><sup>20</sup> = -53.2° (c = 0.37, MeOH); [α]<sub>D</sub><sup>26</sup> = -23° (c = 0.44, MeOH). **Pharm:** Antioxidant (relative potency = 1.4, compared with resveratrol, relative potency = 1)<sup>[4920]</sup>; antiviral inactive (Vero cell lines infected with HSV-2 strain 333, 250 μg/mL)<sup>[4752]</sup>; ACE inhibitor (1.0 mg/mL, InRt = 99.8%; 0.1 mg/mL, InRt = 67.5%; 0.01 mg/mL, InRt = 32.5%; control Captopril, 0.01 mg/mL, InRt = 97.7%)<sup>[4752]</sup>. **Source:** LIE DANG *Orobanche coerulea* (whole herb), NAN CHUAN GUAN CHUN HUA *Microtoena prainiana* (stem: yield = 0.0014%dw). **Ref:** 4752, 4920.



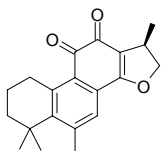


**14262 6-Methylcryptoacetalide**

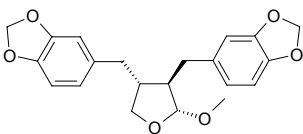
$C_{19}H_{24}O_3$  (300.40). Source: AI JI SHU WEI CAO *Salvia aegyptiaca*. Ref: 1919.

**14263 6-Methylcryptotanshinone**

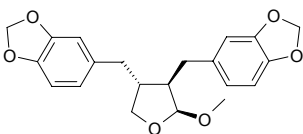
14,16-Epoxy-6-methyl-5(10),6,8,13-abietatetraene-11,12-dione  $C_{20}H_{22}O_3$  (310.40). Source: AI JI SHU WEI CAO *Salvia aegyptiaca*. Ref: 1919.

**14264  $\alpha$ -O-Methylcubebin**

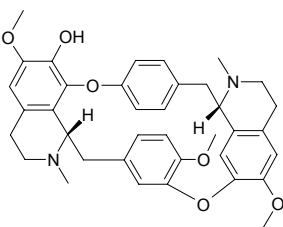
$C_{21}H_{22}O_6$  (370.41). Pharm: CYP3A4 inhibitor and CYP2D6 inhibitor (*in vitro*, CYP3A4,  $IC_{50} = 7.7 \mu\text{mol/L}$ ; CYP2D6,  $IC_{50} > 100 \mu\text{mol/L}$ ; control Ketoconazole, CYP3A4,  $IC_{50} = 0.72 \mu\text{mol/L}$ ; control Quinidine, CYP2D6,  $IC_{50} = 0.082 \mu\text{mol/L}$ )<sup>[4797]</sup>. Source: BI CHENG QIE *Piper cubeba* (fruit: yield = 0.00012%dw), QIANG DAO YAO *Hypoestes purpurea* [Syn. *Justicia purpurea*; *Hypoestes sinica*] (aerial parts: yield = 0.0001%dw). Ref: 4783, 4797.

**14265  $\beta$ -O-Methylcubebin**

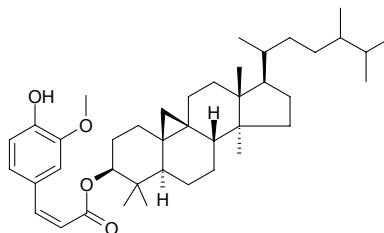
$C_{21}H_{22}O_6$  (370.41). Source: QIANG DAO YAO *Hypoestes purpurea* [Syn. *Justicia purpurea*; *Hypoestes sinica*] (aerial parts: yield = 0.000055%dw). Ref: 4783.

**14266 (+)-4''-O-Methylcurine**

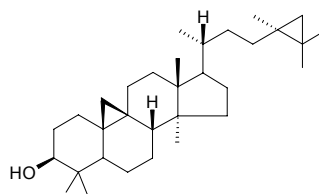
$C_{37}H_{40}N_2O_6$  (608.74). mp 164°C. Source: XI SHENG TENG *Cissampelos pareira*. Ref: 6.

**14267 24-Methylcycloartanol ferulate**

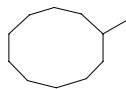
$C_{41}H_{62}O_4$  (618.95). Source: MI PI KANG *Oryza sativa*. Ref: 6.

**14268 (24S)-24-Methyl-25,32-cyclo-cycloartane-3 $\beta$ -ol**

$C_{32}H_{54}O$  (454.79). Amorphous powder,  $[\alpha]_D^{20} = +38.8^\circ$  ( $c = 0.54$ ,  $CHCl_3$ ). Source: *Pandanus boninensis* (leaf). Ref: 5333.

**14269 Methyl cyclodecane**

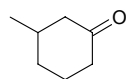
$C_{11}H_{22}$  (154.30). Source: BAI ZHI *Angelica dahurica* [Syn. *Angelica porphyrocaulis*]. Ref: 2.

**14270 Methylcyclohexane**

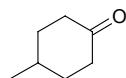
Hexahydrodoluene [108-87-2]  $C_7H_{14}$  (98.19). Source: SHAN ZHA *Crataegus pinnatifida*. Ref: 2.

**14271 3-Methylcyclohexanone**

[591-24-2]  $C_7H_{12}O$  (112.17). Source: JING JIE *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*]. Ref: 2.

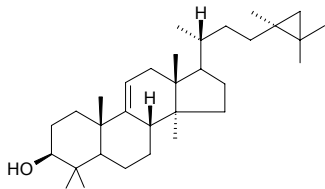
**14272 4-Methylcyclohexanone**

[589-92-4]  $C_7H_{12}O$  (112.17). Source: DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*]. Ref: 2.

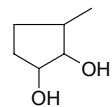


**14273 (24S)-24-Methyl-25,32-cyclo-5 $\alpha$ -lanosta-9(11)-en-3 $\beta$ -ol**

C<sub>32</sub>H<sub>54</sub>O (454.79). Colorless fine crystals, mp 211~212°C (MeOH), [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +69.6° (c = 1.00, CHCl<sub>3</sub>). Source: *Pandanus boninensis* (leaf). Ref: 5333.

**14274 3-Methyl-1,2-cyclopentenediol**

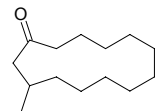
[27583-37-5] C<sub>6</sub>H<sub>12</sub>O<sub>2</sub> (116.16). Source: SHAN ZHA *Crataegus pinnatifida*. Ref: 2.

**14275 2-Methylcyclopentanone**

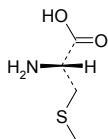
[1120-72-5] C<sub>6</sub>H<sub>10</sub>O (98.15). Source: CHAI HU *Bupleurum chinense*. Ref: 2.

**14276 3-Methylcyclotridecan-1-one**

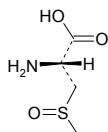
C<sub>14</sub>H<sub>26</sub>O (210.36). Source: SHE XIANG *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*. Ref: 2.

**14277 S-Methyl cysteine**

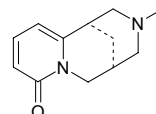
C<sub>4</sub>H<sub>9</sub>NO<sub>2</sub>S (135.19). Source: YANG CONG *Allium cepa*. Ref: 1469.

**14278 S-Methyl-L-cysteine sulfoxide**

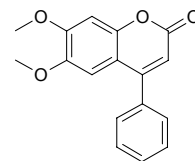
C<sub>4</sub>H<sub>9</sub>NO<sub>3</sub>S (151.19). mp (+) 164°C (dec). Source: DA SUAN *Allium sativum*, YANG CONG *Allium cepa*. Ref: 6, 1470.

**14279 N-Methylcytisine**

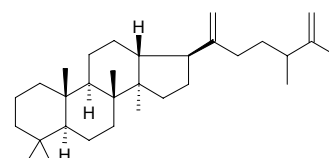
(-)-N-Methylcytisine; Caulophyllin; (1R)-1,2,3,4,5,6-Hexahydro-3-methyl-1,5-methano-8H-pyrido[1,2-a][1,5]diazocin-8-one [486-86-2] C<sub>12</sub>H<sub>16</sub>N<sub>2</sub>O (204.27). mp (-) 137°C. Pharm: Molluscicide (toxic to snails). Source: KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*], LIAN HUA JIN QUE ER *Cytisus laburnum*, YING ZHAO DOU *Spartium junceum*. Ref: 2, 658.

**14280 O-Methyldalbergin**

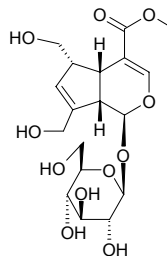
C<sub>17</sub>H<sub>14</sub>O<sub>4</sub> (282.30). mp 145~146°C. Source: JIANG ZHEN XIANG *Dalbergia odorifera*. Ref: 6.

**14281 21-Methyldammara-18(28),22(29)-diene**

C<sub>31</sub>H<sub>52</sub> (424.76). Source: XING JUE *Microsorium punctatum*. Ref: 1506.

**14282 6-O-Methyldeacetylasperulosidic acid methyl ester**

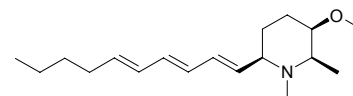
C<sub>18</sub>H<sub>26</sub>O<sub>11</sub> (418.40). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +49.0° (c = 1.09, MeOH), artifact. Source: ZHI ZI *Gardenia jasminoides* [Syn. *Gardenia florida*] (leaf). Ref: 4408.

**14283 Methyl(2E,8Z)-decadien-4,6-dienoate**

C<sub>11</sub>H<sub>16</sub>O<sub>2</sub> (174.20). Source: YI ZHI HUANG HUA *Solidago virgaurea* var. *leiocarpa* [Syn. *Solidago decurrens*]. Ref: 1281.

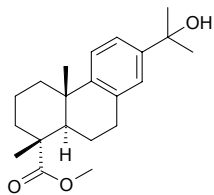
**14284 N-Methyl-6 $\beta$ -(deca-1',3',5'-trienyl)-3 $\beta$ -methoxy-2 $\beta$ -methylpiperidine**

C<sub>18</sub>H<sub>31</sub>NO (277.45). mp 52~53°C, [ $\alpha$ ]<sub>D</sub><sup>22</sup> = +29.2°. Pharm: Insecticidal (*Aedes aegypti* second instar larvae, MC<sub>50</sub> = 1.0mg/L, LC<sub>50</sub> = 2.1mg/L at 24h). Source: PO BU YE *Microcos paniculata* [Syn. *Grewia microcos*] (stem cortex). Ref: 3948.

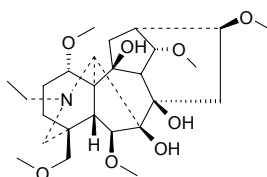


**14285 Methyl dehydro-15-hydroxy-abietan-18-oate**

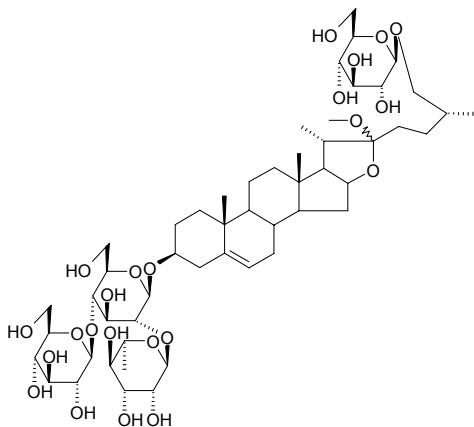
$C_{21}H_{30}O_3$  (330.47). Source: HAI SONG ZI *Pinus koraiensis*. Ref: 6.

**14286 18-O-Methyldeleterine**

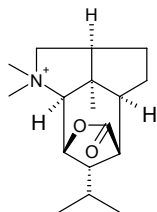
$C_{26}H_{43}NO_8$  (497.63). Source: GAO DA CUI QUE HUA *Delphinium excelsum*. Ref: 2055.

**14287 Methyl deltoside**

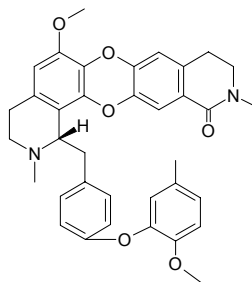
$C_{52}H_{86}O_{23}$  (1079.25). White powder, mp 220~224°C,  $[\alpha]_D^{26.6} = -64.44^\circ$  ( $c = 0.225$ , pyridine). Source: XIAO HUA DUN YE SHU YU *Dioscorea parviflora* (fresh rhizome). Ref: 4858.

**14288 N-Methyldendrobium**

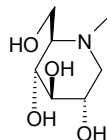
*N*-Methyldendrobine  $C_{17}H_{28}NO_2^+$  (278.42). Source: SHI HU<sup>(4)</sup> *Dendrobium nobile*, SHI SUAN *Lycoris radiata* [Syn. *Amaryllis radiata*]. Ref: 6, 1521.

**14289 O-Methyldeoxopunjabine**

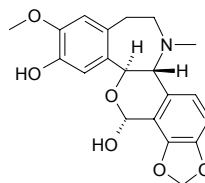
[89503-80-8]  $C_{36}H_{36}N_2O_6$  (592.70). Source: TAI WAN QIAN JIN TENG *Stephania sasakii*. Ref: 1314.

**14290 N-Methyl-1-deoxynojirimycin**

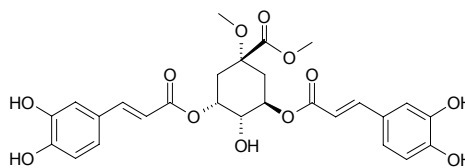
[69567-10-8]  $C_7H_{15}NO_4$  (177.20). Pharm: Hypoglycemic (mus diabetes mellitus induced by SIZ, distinct effect). Source: SANG ZHI *Morus alba*. Ref: 2170.

**14291 N-Methyl-14-O-desmethyl-epiporphyroxine**

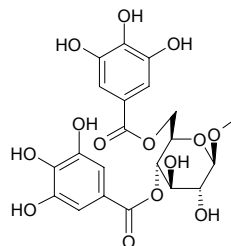
$C_{20}H_{21}NO_6$  (371.39). Source: YA PIAN *Papaver somniferum*. Ref: 6.

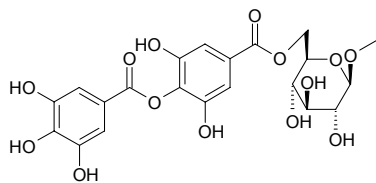
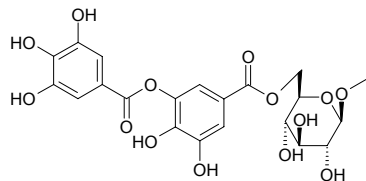
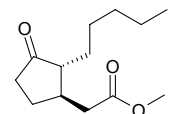
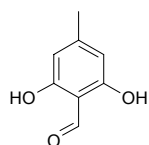
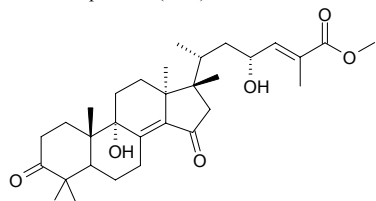
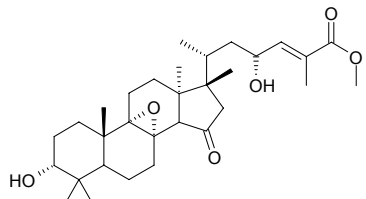
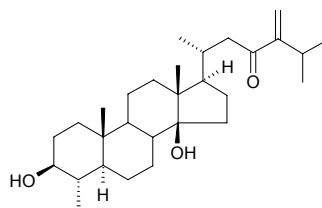
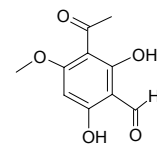
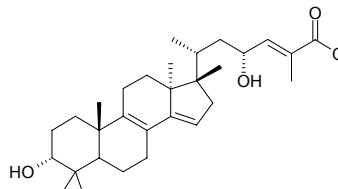
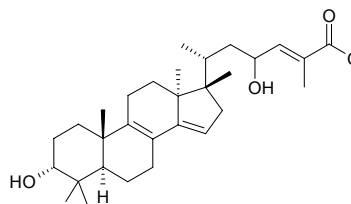
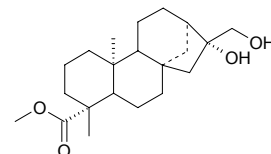
**14292 1-O-Methyl-3,5-O-dicaffeoyl quinic acid methyl ester**

$C_{27}H_{28}O_{12}$  (544.52). Yellowish powder, mp 132~134°C,  $[\alpha]_D^{20} = -34.7^\circ$  (MeOH). Source: DENG ZHAN XI XIN *Erigeron breviscapus*. Ref: 875, 2083.

**14293 Methyl 4,6-di-O-galloyl-β-D-glucopyranoside**

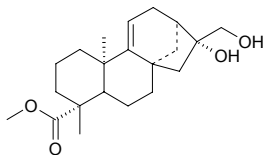
$C_{21}H_{22}O_{14}$  (498.40). Source: DI YU *Sanguisorba officinalis*. Ref: 1327.



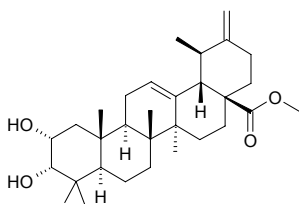
**14294 Methyl 6-O-digalloyl-β-D-glucopyranoside I**C<sub>21</sub>H<sub>22</sub>O<sub>14</sub> (498.40). Source: DI YU *Sanguisorba officinalis*. Ref: 1327.**14295 Methyl 6-O-digalloyl-β-D-glucopyranoside II**C<sub>21</sub>H<sub>22</sub>O<sub>14</sub> (498.40). Source: DI YU *Sanguisorba officinalis*. Ref: 1327.**14296 Methyl dihydrojasmonate**[2630-39-9] C<sub>13</sub>H<sub>22</sub>O<sub>3</sub> (226.32). Source: ZHI ZI *Gardenia jasminoides* [Syn. *Gardenia florida*]. Ref: 1360.**14297 4-Methyl-2,6-dihydroxy-benzaldehyde**C<sub>8</sub>H<sub>8</sub>O<sub>3</sub> (152.15). Yellow needles. Source: JIN SI SHUA *Lethariella cladonioides*. Ref: 4582.**14298 Methyl (24E)-9α,23α-dihydroxy-3,15-dioxo-17,15-friedo-lanostan-8(14),24-dien-26-oate**C<sub>31</sub>H<sub>46</sub>O<sub>6</sub> (514.71). Yellowish gum. Source: MEI LI TENG HUANG *Garcinia speciosa* (bark). Ref: 4790.**14299 Methyl (24E)-3α,23α-dihydroxy-8α,9α-epoxy-15-oxo-17,14-friedo-lanostan-24-en-26-oate**C<sub>31</sub>H<sub>48</sub>O<sub>6</sub> (516.72). Gum, [α]<sub>D</sub><sup>25</sup> = -3° (c = 0.018, CHCl<sub>3</sub>). Source: MEI LI TENG HUANG *Garcinia speciosa* (bark). Ref: 3762.**14300 4α-Methyl-3β,14β-dihydroxy-5α-ergost-24(28)-en-23-one**C<sub>29</sub>H<sub>48</sub>O<sub>3</sub> (444.70). White solid, mp 150~151°C, [α]<sub>D</sub><sup>25</sup> = +66.2° (c = 0.09, MeOH). Pharm: Cytotoxic inactive (hmn prostate cancer LNCaP cell line, EC<sub>50</sub> = 38.4 μg/mL). Source: *Nephthea chabroli*. Ref: 4375.**14301 Methyl(2,4-dihydroxy-3-formyl-6-methoxy)phenylketone**C<sub>10</sub>H<sub>10</sub>O<sub>5</sub> (210.19). Source: GAN SUI *Euphorbia kansui*. Ref: 1303.**14302 Methyl (24E)-3α,23α(=R)-dihydroxy-17,14-friedo-lanostan-8,14,24-trien-26-oate**C<sub>31</sub>H<sub>48</sub>O<sub>4</sub> (484.73). Source: MEI LI TENG HUANG *Garcinia speciosa* (bark). Ref: 3762.**14303 Methyl (24E)-3α,23-dihydroxy-17,14-friedolanstan-8,14,24-trien-26-oate**C<sub>31</sub>H<sub>48</sub>O<sub>4</sub> (484.73). White powder, mp 112~113°C, [α]<sub>D</sub><sup>29</sup> = -35° (c = 0.28, MeOH). Source: SHAN FENG GUO *Garcinia hombroniana* (pericarp). Ref: 5085.**14304 Methyl 16α,17-dihydroxy-ent-kauran-19-oate**C<sub>21</sub>H<sub>34</sub>O<sub>4</sub> (350.50). Pharm: Antiproliferative and cytotoxic (*in vitro*, L-929, GI<sub>50</sub> = 39.5 μg/mL; K562, GI<sub>50</sub> = 27.7 μg/mL; HeLa, CC<sub>50</sub> = 40.5 μg/mL; control Paclitaxel, L-929, GI<sub>50</sub> = 0.1 μg/mL; K562, GI<sub>50</sub> = 0.01 μg/mL; HeLa, CC<sub>50</sub> = 0.01 μg/mL). Source: MU LAN<sup>(3)</sup> *Bruguiera gymnorrhiza* (stem: yield = 0.00019%). Ref: 4770.

**14305 Methyl 16 $\alpha$ ,17-dihydroxy-ent-9(11)-kauren-19-oate**

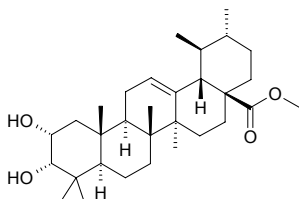
$C_{21}H_{32}O_4$  (348.49). **Pharm:** Antiproliferative and cytotoxic (*in vitro*, L-929,  $GI_{50} = 41.9 \mu\text{g/mL}$ ; K562,  $GI_{50} = 26.7 \mu\text{g/mL}$ ; HeLa,  $CC_{50} = 38.7 \mu\text{g/mL}$ ; control Paclitaxel, L-929,  $GI_{50} = 0.1 \mu\text{g/mL}$ ; K562,  $GI_{50} = 0.01 \mu\text{g/mL}$ ; HeLa,  $CC_{50} = 0.01 \mu\text{g/mL}$ ). **Source:** MU LAN<sup>(3)</sup> *Bruguiera gymnorrhiza* (stem; yield = 0.00046%). **Ref:** 4770.

**14306 Methyl 2 $\alpha$ ,3 $\alpha$ -dihydroxyursa-12,20(30)-dien-28-oate**

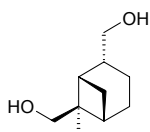
$C_{31}H_{48}O_4$  (484.73). **Source:** XIA KU CAO *Prunella vulgaris*. **Ref:** 2508.

**14307 Methyl 2 $\alpha$ ,3 $\alpha$ -dihydroxyursa-12-en-28-oate**

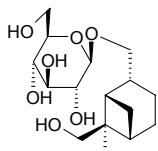
$C_{31}H_{50}O_4$  (486.74). **Source:** XIA KU CAO *Prunella vulgaris*. **Ref:** 2508.

**14308 6 $\alpha$ -Methyl-2 $\alpha$ ,6 $\beta$ -dihydroxymethylbicyclo[3.1.1]heptane**

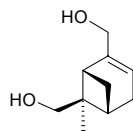
$C_{10}H_{18}O_2$  (170.25). **Source:** YI ZHU QIAN MA *Urtica dioica*. **Ref:** 1433.

**14309 6 $\alpha$ -Methyl-2 $\alpha$ ,6 $\beta$ -dihydroxymethylbicyclo[3.1.1]heptane-2 $\alpha$ -O-glucoside**

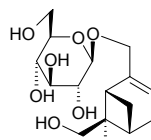
$C_{16}H_{28}O_7$  (332.40). **Source:** YI ZHU QIAN MA *Urtica dioica*. **Ref:** 1433.

**14310 6 $\alpha$ -Methyl-2,6 $\beta$ -dihydroxymethylbicyclo[3.1.1]hept-2-ene**

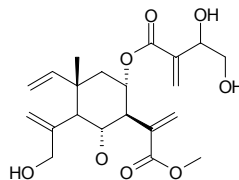
$C_{10}H_{16}O_2$  (168.24). **Source:** YI ZHU QIAN MA *Urtica dioica*. **Ref:** 1433.

**14311 6 $\alpha$ -Methyl-2,6 $\beta$ -dihydroxymethylbicyclo[3.1.1]hept-2-ene-2 $\beta$ -O-glucoside**

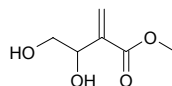
$C_{16}H_{26}O_7$  (330.38). **Source:** YI ZHU QIAN MA *Urtica dioica*. **Ref:** 1433.

**14312 Methyl 8 $\alpha$ -(3,4-dihydroxy-2-methylene-butanoyloxy)-6 $\alpha$ ,15-dihydroxyelema-1,3,11(13)-trien-12-oate**

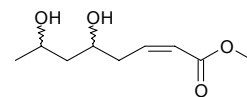
$C_{21}H_{30}O_8$  (410.47). **Source:** *Centaurea thessala* ssp. *drakiensis* (aerial parts), *Centaurea attica* ssp. *attica* (aerial parts). **Ref:** 5115.

**14313 Methyl  $\beta$ , $\gamma$ -dihydroxy- $\alpha$ -methylene butylate**

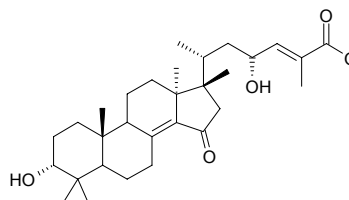
$C_6H_{10}O_4$  (146.14). **Source:** XIAO YE HUA *Spiraea prunifolia*. **Ref:** 6.

**14314 Methyl-5,7-dihydroxy-2(Z)-octenoate**

$C_9H_{16}O_4$  (188.23). **Source:** YE YA CHUN *Euscaphis japonica*. **Ref:** 2204.

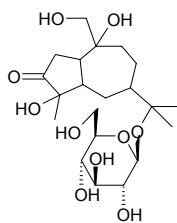
**14315 Methyl (24E)-3 $\alpha$ ,23 $\alpha$ -dihydroxy-15-oxo-17,14-friedo-lanostan-8(14),24-dien-26-oate**

$C_{31}H_{48}O_5$  (500.73). Gum,  $[\alpha]_D^{28} = -34^\circ$  ( $c = 0.021$ ,  $\text{CHCl}_3$ ). **Source:** MEI LI TENG HUANG *Garcinia speciosa* (bark). **Ref:** 3762.



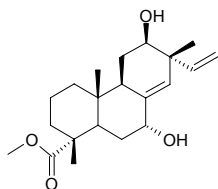
**14316 2-(8-Methyl-2,8-dihydroxy-9-oxo-2-hydroxymethylbicyclo[5.3.0]decan-7-yl)isopropanol glucoside**

$C_{21}H_{36}O_{10}$  (448.52). Source: CANG ZHU *Atractylodes lancea*. Ref: 660.



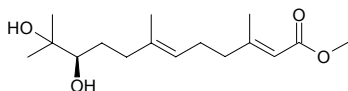
**14317 Methyl 7 $\alpha$ ,12 $\beta$ -dihydroxysandaracopimarate**

$C_{21}H_{32}O_4$  (348.49). Colorless oil,  $[\alpha]_D = +14.3^\circ$  ( $c = 1.2$ ,  $CHCl_3$ ). Source: FEI NI JI CI BAI *Juniperus phoenicea* (leaf), XIANG CI BAI FEI ZHOU BIAN ZHONG *Juniperus thurifera* var. *africana* (leaf). Ref: 3851.



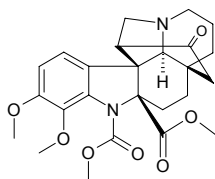
**14318 Methyl (2E,6E,10R)-10,11-dihydroxy-3,7,11-trimethyl-2,6-dodecadienoate**

$C_{16}H_{28}O_4$  (284.40). Colorless oil,  $[\alpha]_D = +8^\circ$  ( $c = 1.3$ ),  $[\alpha]_D = +18.9^\circ$  ( $c = 0.1$ , MeOH). Source: *Lettowianthus stellatus* (root cortex). Ref: 3944.



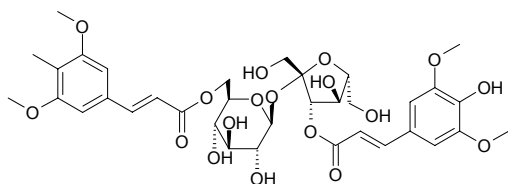
**14319 Methyl 11,12-dimethoxychanofrucosinate**

$C_{25}H_{30}N_2O_7$  (470.53). Source: HUANG HONG SE RUI MU *Kopsia flavida* (leaf). Ref: 5157.



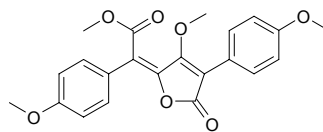
**14320  $\alpha$ -D-(6-O-4-Methyl-3,5-dimethoxycinnamoyl)-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-(3-O-sinapoyl)-fructofuranose**

$C_{35}H_{44}O_{18}$  (752.73). Yellowish amorphous powder (MeOH). Source: YUAN ZHI *Polygala tenuifolia* (root). Ref: 4896.



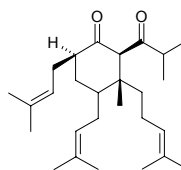
**14321 Methyl 4,4'-dimethoxyvulpinate**

$C_{22}H_{20}O_7$  (396.40). mp 172~173°C. Pharm: Anti-HSV-1 inactive; cytotoxic inactive (Hmn lung cancer cells NCI-H187). Source: HUANG YING PI MA BO *Scleroderma citrinum*. Ref: 5406.



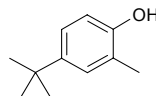
**14322 (2R,3R,4S,6S)-3-Methyl-4,6-di(3-methyl-2-butenyl)-2-(2-methyl-1-oxopropyl)-3-(4-methyl-3-pentenyl)-cyclohexanone**

$C_{27}H_{44}O_2$  (400.65). Colorless viscous oil,  $[\alpha]_D^{22} = +18.3^\circ$  ( $c = 1.8$ ,  $CHCl_3$ ). Source: GUAN YE LIAN QIAO *Hypericum perforatum* (aerial parts: yield = 0.00020%dw). Ref: 3032.



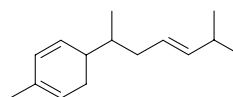
**14323 2-Methyl-4-(1,1-dimethylethyl) phenol**

[98-27-1]  $C_{11}H_{16}O$  (164.25). Source: DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*]. Ref: 2.



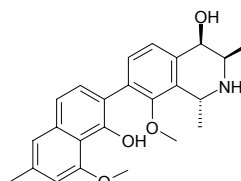
**14324 2-Methyl-5-(1,5-dimethyl-3-hexenyl)-1,3-cyclohexadiene**

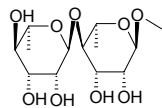
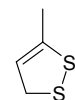
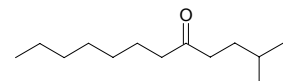
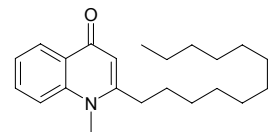
$C_{15}H_{24}$  (204.36). Source: DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*]. Ref: 2.



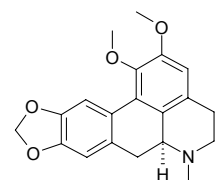
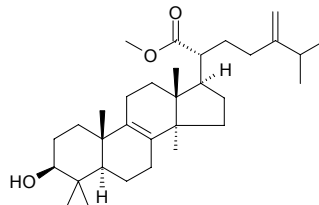
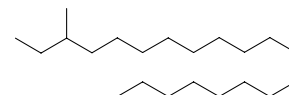
**14325 8-O-Methylidioncophyllinol B**

$C_{24}H_{27}NO_4$  (393.49). Yellow solid,  $[\alpha]_D^{25} = -12.8^\circ$  ( $c = 0.7$ ,  $CHCl_3$ ). Pharm: Antimalarial (*Plasmodium falciparum* K1,  $IC_{50} = 654$ ng/mL, NF54,  $IC_{50} = 245$ ng/mL, MIC = 90 $\mu$ g/mL). Source: SAN YE MU *Triphyophyllum peltatum* (leaf). Ref: 3962.

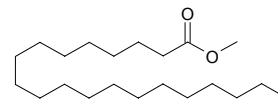


**14326 Methyl di- $\alpha$ -L-rhamnoside**C<sub>13</sub>H<sub>24</sub>O<sub>9</sub> (324.33). Source: LI CAI *Ulva conglobata*. Ref: 1497.**14327 3-Methyl-1,2-dithia-3-cyclopentene**C<sub>4</sub>H<sub>6</sub>S<sub>2</sub> (118.22). Source: DA SUAN *Allium sativum*. Ref: 1394.**14328 4-Methyl-1,2-dithio-3-cyclopentene**C<sub>4</sub>H<sub>6</sub>S<sub>2</sub> (118.22). Source: DA SUAN *Allium sativum*. Ref: 2.**14329 5-Methyl-1,2-dithio-3-cyclopentene**C<sub>4</sub>H<sub>6</sub>S<sub>2</sub> (118.22). Source: DA SUAN *Allium sativum*. Ref: 2.**14330 2-Methyl-dodecane-5-one**C<sub>13</sub>H<sub>26</sub>O (198.35). Source: DANG GUI *Angelica sinensis*. Ref: 2.**14331 1-Methyl-2-dodecyl-4(1H)-quinolone**C<sub>22</sub>H<sub>33</sub>NO (327.51). Source: WU ZHU YU *Evodia rutaecarpa*. Ref: 877, 2085.**14332 O-Methyl domesticine**

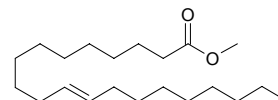
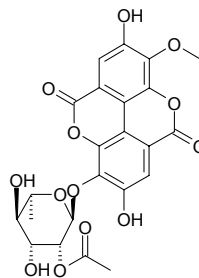
(+)-Nantenine [2565-01-7] C<sub>20</sub>H<sub>21</sub>NO<sub>4</sub> (339.39). mp (+) 138~139°C, mp 139~141°C, [α]<sub>D</sub> = +93° (c = 0.17, CHCl<sub>3</sub>). Source: NAN TIAN ZHU ZI *Nandina domestica*, NAN TIAN ZHU GEN *Nandina domestica*, NAN TIAN ZHU GENG *Nandina domestica*. Ref: 6, 1521, 2780.

**14333 Methyl eburicoate**C<sub>32</sub>H<sub>52</sub>O<sub>3</sub> (484.77). Source: BAO PI GU *Lentinus lepideus*. Ref: 1501.**14334 3-Methyl eicosane**C<sub>21</sub>H<sub>44</sub> (296.58). Source: BAN XIA *Pinellia ternata*. Ref: 1401.**14335 Methyl eicosanoate**

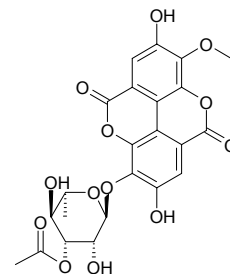
C<sub>21</sub>H<sub>42</sub>O<sub>2</sub> (326.57). Source: LIAO DONG CONG MU *Aralia elata*, QIANG HUO *Notopterygium incisum*, ZHI ZHU XIANG *Valeriana jatamansii* [Syn. *Valeriana wallichii*]. Ref: 1450, 1354, 1451, 1452.

**14336 Methyl 11-eicosenoate**

Methyl eicos-11-enoate C<sub>21</sub>H<sub>40</sub>O<sub>2</sub> (324.55). Source: QIANG HUO *Notopterygium incisum*, WU JING GAN LAN *Brassica napus* var. *napobrassica*, XI MING ZI *Thlaspi arvense*. Ref: 1484, 1354.

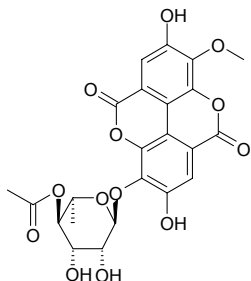
**14337 3-O-Methylellagic acid 3'-O- $\alpha$ -2''-O-acetylramnopyranoside**C<sub>23</sub>H<sub>20</sub>O<sub>13</sub> (504.41). Yellow powder. Source: AN YE *Eucalyptus globulus*. Ref: 737.**14338 3-O-Methylellagic acid 3'-O- $\alpha$ -3''-O-acetylramnopyranoside**

C<sub>23</sub>H<sub>20</sub>O<sub>13</sub> (504.41). Yellow powder. Source: AN YE *Eucalyptus globulus*. Ref: 737.

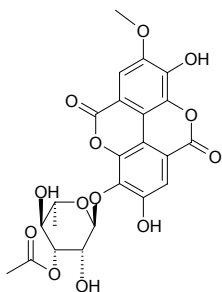


**14339 3-O-Methylellagic acid 3'-O-4''-O-acetyl-rhamnopyranoside**

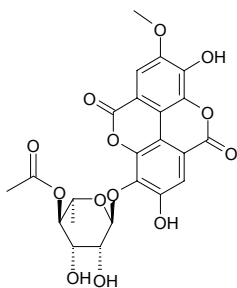
$C_{23}H_{20}O_{13}$  (504.41). Yellow powder. Source: AN YE *Eucalyptus globulus*. Ref: 737.

**14340 4-O-Methylellagic acid 3'-(3''-O-acetyl)- $\alpha$ -rhamnoside**

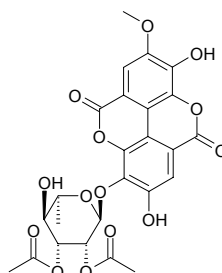
$C_{23}H_{20}O_{13}$  (504.41). Yellow amorphous solid,  $[\alpha]_D^{25} = -57.9^\circ$  ( $c = 0.011$ , MeOH). Pharm: Antibacterial (*in vitro*, *Babesia gibsoni*,  $IC_{50} = 52.1 \mu\text{g/mL}$ ; control Diminazene aceturate,  $IC_{50} = 0.60 \mu\text{g/mL}$ ). Source: XIAO YE DU YING *Elaeocarpus parvifolius* (bark). Ref: 5324.

**14341 4-O-Methylellagic acid 3'-(4''-O-acetyl)- $\alpha$ -rhamnoside**

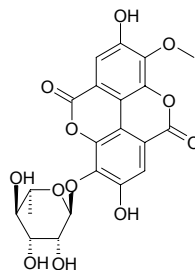
$C_{23}H_{20}O_{13}$  (504.41). Yellow amorphous solid,  $[\alpha]_D^{25} = -20.7^\circ$  ( $c = 0.19$ , MeOH). Pharm: Antibacterial (*in vitro*, *Babesia gibsoni*,  $IC_{50} > 180 \mu\text{g/mL}$ ; control Diminazene aceturate,  $IC_{50} = 0.60 \mu\text{g/mL}$ ). Source: XIAO YE DU YING *Elaeocarpus parvifolius* (bark). Ref: 5324.

**14342 4'-O-Methylellagic acid 3-(2'',3''-di-O-acetyl)- $\alpha$ -L-rhamnoside**

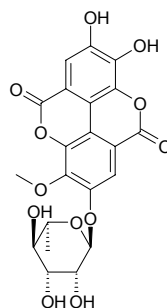
4-O-Methylellagic acid 3'-(2'',3''-di-O-acetyl)-3'- $\alpha$ -rhamnoside  $C_{25}H_{22}O_{14}$  (546.45). Needles (MeOH), mp 217~218°C,  $[\alpha]_D = -24.0^\circ$  ( $c = 0.1$ , MeOH); yellow amorphous solid,  $[\alpha]_D^{25} = -25.9^\circ$  ( $c = 0.32$ , MeOH). Pharm: Cytotoxic ( $ED_{50} > 5 \text{mg/mL}$ , inactive according to the protocols established by Likitwitayawuid et al., 1993 and Seo et al., 2001); antibacterial (*in vitro*, *Babesia gibsoni*,  $IC_{50} = 28.5 \mu\text{g/mL}$ ; control Diminazene aceturate,  $IC_{50} = 0.60 \mu\text{g/mL}$ )<sup>[5324]</sup>. Source: MA SI TE SI DU YING *Elaeocarpus mastersii*, XIAO YE DU YING *Elaeocarpus parvifolius* (bark). Ref: 2020, 5324.

**14343 3-O-methylellagic acid 3'-O- $\alpha$ -L-rhamnopyranoside**

$C_{21}H_{18}O_{12}$  (462.34). Yellow powder. Source: AN YE *Eucalyptus globulus*. Ref: 737.

**14344 3-O-Methylellagic acid 4-O- $\alpha$ -L-rhamnopyranoside**

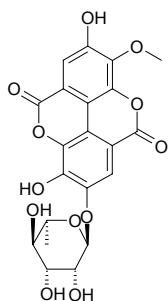
$C_{21}H_{18}O_{12}$  (462.37).  $[\alpha]_D = -30^\circ$  ( $c = 0.1$ , MeOH). Source: SHI LIU XIN CAI *Punica granatum*. Ref: 5415.



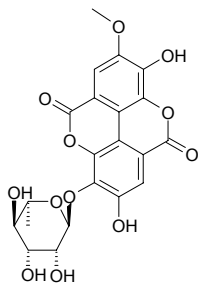


**14345 3-O-Methylellagic acid 4'-O- $\alpha$ -L-rhamnopyranoside**

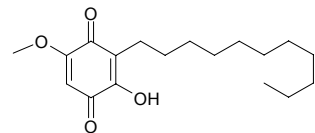
$C_{21}H_{18}O_{12}$  (462.37). Source: YOU GAN YE *Phyllanthus emblica* (leaf and branch). Ref: 4205.

**14346 4-O-Methylellagic acid 3'- $\alpha$ -rhamnoside**

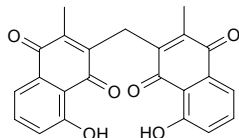
$C_{21}H_{18}O_{12}$  (462.32). Pale yellow needle-shaped crystals,  $[\alpha]_D^{25} = -30.8^\circ$  ( $c = 0.036$ , MeOH). Pharm: Antibacterial (*in vitro*, *Babesia gibsoni*,  $IC_{50} > 180 \mu\text{g/mL}$ ; control Diminazene aceturate,  $IC_{50} = 0.60 \mu\text{g/mL}$ ). Source: XIAO YE DU YING *Elaeocarpus parvifolius* (bark). Ref: 5324.

**14347 5-O-Methylembelin**

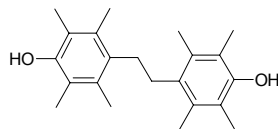
$C_{18}H_{28}O_4$  (308.42). Pharm: Cytotoxic (*in vitro*, HL-60,  $IC_{50} = 3 \mu\text{g/mL}$ ; Bel7402,  $IC_{50} = 3.6 \mu\text{g/mL}$ ; HeLa,  $IC_{50} = 9 \mu\text{g/mL}$ ; U937,  $IC_{50} = 1.5 \mu\text{g/mL}$ ; control Colchicine, HL-60,  $IC_{50} = 1.6 \mu\text{g/mL}$ ; Bel7402,  $IC_{50} = 0.4 \mu\text{g/mL}$ ; HeLa,  $IC_{50} = 0.1 \mu\text{g/mL}$ ; U937,  $IC_{50} = 0.1 \mu\text{g/mL}$ )<sup>[4746]</sup>; antifungal (*Pythium ultimum*); fish toxin. Source: LA ZHU GUO *Aegiceras corniculatum*, LA ZHU GUO *Aegiceras corniculatum* (stem and twig: yield = 0.0017%)<sup>[4746]</sup>. Ref: 658, 4746.

**14348 Methylene-3,3'-biplumbagin**

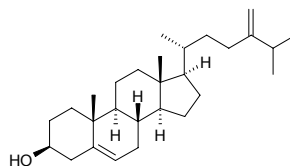
$C_{23}H_{16}O_6$  (388.88). Orange needles ( $C_6H_6$ ), mp 230–233°C, 208–210°C. Pharm: Ichthyotoxin (MLC > 10mg/L, control Juglone, MLC = 0.2mg/L). Source: HAI SHI *Diospyros maritima* (fruit). Ref: 4185.

**14349 4,4'-Methylene bis[2,3,5,6-tetramethyl phenol]**

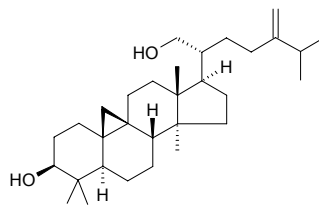
$C_{22}H_{30}O_2$  (326.48). Source: DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*]. Ref: 2.

**14350 24-Methylene cholesterol**

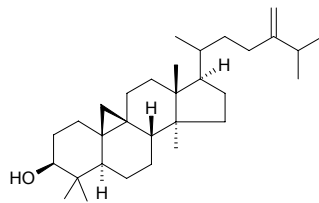
$C_{28}H_{46}O$  (398.68). mp 142°C. Source: GOU QI ZI *Lycium chinense*, LUO HUA SHENG *Arachis hypogaea*, ZHI XIE MU PI *Holarrhena antidysenterica*. Ref: 6, 660.

**14351 24-Methylene cycloartan-3 $\beta$ ,21-diol**

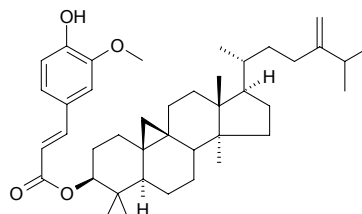
$C_{31}H_{52}O_2$  (456.76). mp 105–108°C. Source: DUO SUI SHI KE YE *Lithocarpus polystachyus*. Ref: 6.

**14352 24-Methylene cycloartan-3 $\beta$ -ol**

$C_{31}H_{52}O$  (440.76). mp 122.0–122.5°C. Pharm: Intermediate in phytosterol biosynthesis. Source: GOU QI ZI *Lycium chinense*, JI CHANG LANG DU *Euphorbia esula*, SHI CHUN *Ulva lactuca*, XI YE DA JI *Euphorbia esula* var. *cyparissoides*, *Ammocharis coranica* (bulb). Ref: 6, 658, 660, 3952.

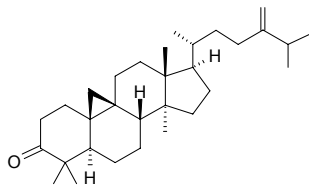
**14353 24-Methylene cycloartanol ferulate**

$C_{41}H_{60}O_4$  (616.93). mp 162–164°C; 193–194°C. Source: MI PI KANG *Oryza sativa*. Ref: 6.

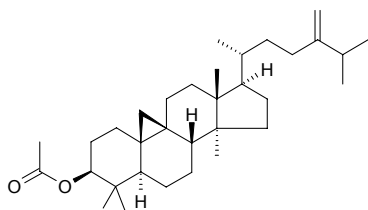


**14354 24-Methylene cycloartanone**

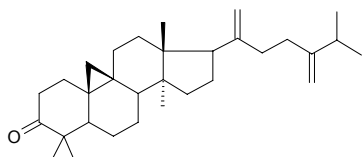
$C_{33}H_{50}O$  (438.74). Source: AI YE *Artemisia argyi*. Ref: 1288.

**14355 24-Methylenecycloartanyl acetate**

$C_{31}H_{48}O_2$  (482.80). Source: SHUI LONG GU *Polypodium niponicum*. Ref: 1413.

**14356 24-Methylenecycloartenone**

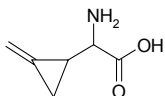
$C_{31}H_{48}O$  (436.73). Pharm: Antineoplastic; anti-HIV. Source: LENG FAN TUAN *Kadsura coccinea* [syn. *Kadsura chenensis*; *Kadsura hainanensis*]. Ref: 2523.

**14357 Methylene cyclopentane**

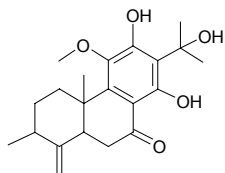
$C_6H_{10}$  (82.15). Source: MENG GU HAO *Artemisia mongolica*. Ref: 1384.

**14358  $\alpha$ -(Methylenecyclopropyl) glycine**

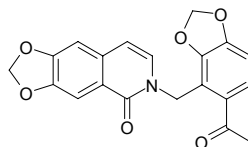
$C_6H_9NO_2$  (127.14). mp 202°C (dec). Pharm: Causes hypoglycemia; toxin (similar toxicity to *L*-hypoglucin). Source: OU YA QI *Acer pseudoplatanus*, LI ZHI HE *Litchi chinensis*. Ref: 6, 658.

**14359 1-Methylene-2,4a-dimethyl-6,8-dihydroxy-5-methoxy-7-(1,1-dimethyl hydroxy methyl)-1,2,3,4,9,10,10a-heptahydro-9-phenanthrone**

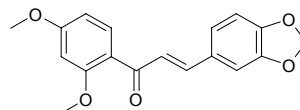
$C_{21}H_{28}O_5$  (360.45). Source: HUO XIANG *Agastache rugosus*. Ref: 1365.

**14360 6,7-Methylenedioxy-2-(6-acetyl-2,3-methylenedioxybenzyl)-1(2H)-isoquinolinone**

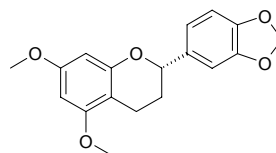
$C_{20}H_{15}NO_6$  (365.35). White crystals (MeOH). Source: KU DI DING *Corydalis bungeana* (whole herb). Ref: 3880.

**14361 3,4-Methylenedioxy-2',4'-dimethoxychalcone**

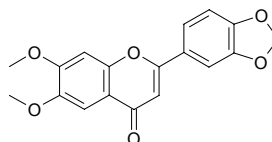
$C_{18}H_{16}O_5$  (312.33). Yellow powder, mp 123~125°C. Source: HONG E JI XUE TENG *Millettia erythrocalyx*. Ref: 1937.

**14362 (2S)-3',4'-Methylenedioxy-5,7-dimethoxyflavane**

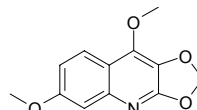
$C_{18}H_{18}O_5$  (314.34). Pale yellow oil,  $[\alpha]_D^{25} = -7.4^\circ$  ( $c = 0.5$ ,  $CDCl_3$ ). Source: GU JING CAO *Eriocaulon buergerianum*. Ref: 1923.

**14363 3',4'-Methylenedioxy-6,7-dimethoxyflavone**

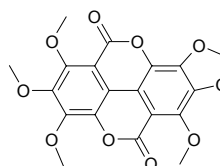
6,7-Dimethoxy-3',4'-methylenedioxyflavone  $C_{18}H_{14}O_6$  (326.31). Source: HONG E JI XUE TENG *Millettia erythrocalyx* (stem cortex: yield = 0.0016%dw). Ref: 4624.

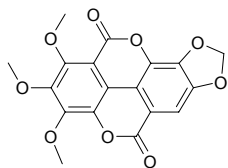
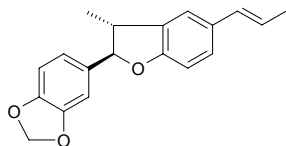
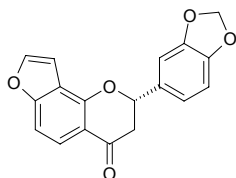
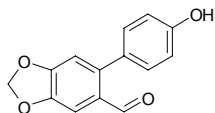
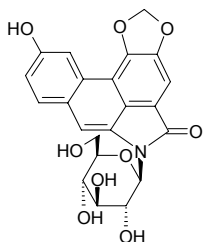
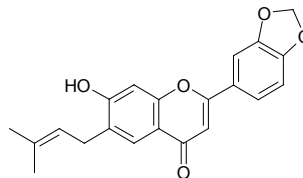
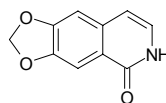
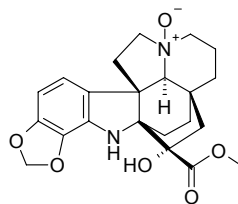
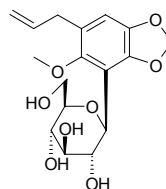
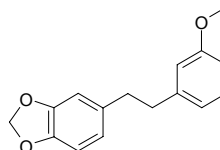
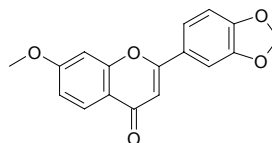
**14364 2,3-Methylenedioxy-4,7-dimethoxyquinoline**

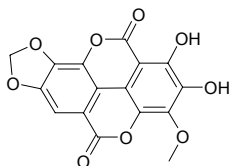
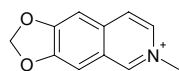
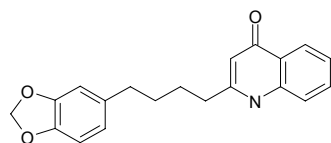
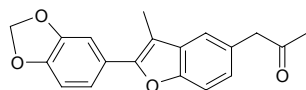
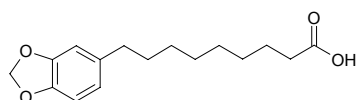
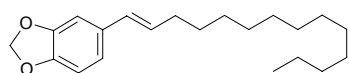
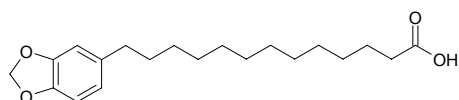
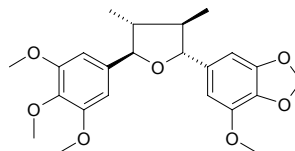
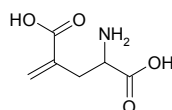
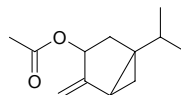
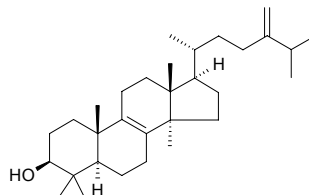
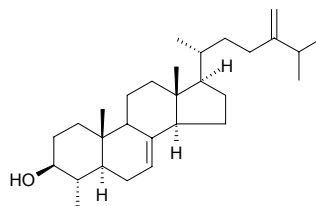
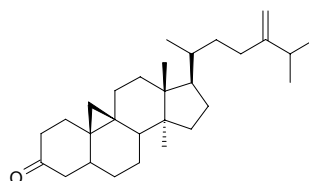
$C_{12}H_{11}NO_4$  (233.23). Plates, mp 176~178°C. Source: YUE GUI YE SHAN YOU GAN *Acronychia laurifolia*. Ref: 2348.

**14365 3,4-Methylenedioxy-3',4'-O-dimethyl-5,5'-dimethoxyellagic acid**

$C_{19}H_{14}O_{10}$  (402.32). Source: XI SHU *Camptotheca acuminata*. Ref: 4097.



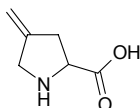
**14366 3,4-Methylenedioxy-3',4'-O-dimethyl-5'-methoxyellagic acid**C<sub>18</sub>H<sub>12</sub>O<sub>9</sub> (372.29). Source: XI SHU *Camptotheca acuminata*. Ref: 4097.**14367 (7R,8R)-3,4-Methylenedioxy-4',7-epoxy-8,3'-neolignan-7'E-ene**C<sub>19</sub>H<sub>18</sub>O<sub>3</sub> (294.35). White amorphous, [ $\alpha$ ]<sub>D</sub><sup>21</sup> = +85.5° (c = 0.06, MeOH).Source: *Piper regnellii* (root). Ref: 2358.**14368 3',4'-Methylenedioxy-(2'',3''':7,8)-furanoflavanone**C<sub>18</sub>H<sub>12</sub>O<sub>5</sub> (308.29). Viscous yellowish oil. Source: *Lonchocarpus latifolius* (root). Ref: 5108.**14369 4,5-Methylenedioxy-4'-hydroxy-2-aldehyde[1,1'-biphenyl]**C<sub>14</sub>H<sub>10</sub>O<sub>4</sub> (242.23). Amorphous powder. Source: LIN JING ZHONG ZI WEN SHU LAN *Crinum bulbispermum* (bulb). Ref: 3997.**14370 3,4-Methylenedioxy-10-hydroxy aristolactam-N-β-D-glucoside**C<sub>22</sub>H<sub>19</sub>NO<sub>9</sub> (441.40). Source: KUAJ JING MA DOU LING *Aristolochia tuberosa*. Ref: 1317, 1318.**14371 3',4'-Methylenedioxy-7-hydroxy-6-isopentenyl flavone**C<sub>21</sub>H<sub>18</sub>O<sub>5</sub> (350.37). Source: TIAN QIAO MAI GEN *Fagopyrum cymosum* [Syn. *Polygonum cymosum*]. Ref: 1435.**14372 6,7-Methylenedioxy-1(2H)-isoquinolinone**C<sub>10</sub>H<sub>7</sub>NO<sub>3</sub> (189.17). Brown crystals (CHCl<sub>3</sub>-MeOH). Source: KU DI DING *Corydalis bungeana* (whole herb). Ref: 3880.**14373 11,12-Methylenedioxykopsinaline N(4)-oxide**C<sub>22</sub>H<sub>26</sub>N<sub>2</sub>O<sub>6</sub> (414.46). [ $\alpha$ ]<sub>D</sub> = -16° (c = 0.19, CHCl<sub>3</sub>). Source: MA LAI XI YA RUI MU *Kopsia griffithii*. Ref: 1854.**14374 1,2-Methylenedioxy-4-methoxy-5-allyl-phen-3-yl β-D-glucopyranoside**C<sub>17</sub>H<sub>22</sub>O<sub>8</sub> (345.36). Source: ZI SU YE *Perilla frutescens* var. *arguta*. Ref: 1366.**14375 3,4-Methylenedioxy-3'-methoxybibenzil**3,4-Methylenedioxy-3'-methoxybibenzyl C<sub>16</sub>H<sub>16</sub>O<sub>3</sub> (256.30). Source: YE TAI *Trocholejeunea sandvicensis*. Ref: 3909.**14376 3',4'-Methylenedioxy-7-methoxyflavone**7-Methoxy-3',4'-methylenedioxyflavone C<sub>17</sub>H<sub>12</sub>O<sub>5</sub> (296.28). Source: HONG E JI XUE TENG *Millettia erythrocalyx* (stem cortex; yield = 0.00019%dw). Ref: 4624.

**14377 3,4-Methylenedioxy-3'-O-methyl-5'-hydroxyellagic acid**C<sub>16</sub>H<sub>8</sub>O<sub>9</sub> (344.24). [Source](#): XI SHU *Camptotheca acuminata*. [Ref](#): 4097.**14378 6,7-Methylenedioxy-N-methylisoquinoline**C<sub>11</sub>H<sub>10</sub>NO<sub>2</sub><sup>+</sup> (188.21). Yellow syrup. [Source](#): HOU KE GUI *Cryptocarya chinensis* (stem cortex). [Ref](#): 4160.**14379 2-[4(3,4-Methylenedioxyphenyl)butyl]-4-quinolone**C<sub>20</sub>H<sub>19</sub>NO<sub>3</sub> (321.38). mp 224°C. [Source](#): CHOU CAO *Ruta graveolens*. [Ref](#): 6.**14380 2-(3,4-Methylenedioxyphenyl)-3-methyl-5-(2-oxopropyl)benzofuran**C<sub>19</sub>H<sub>16</sub>O<sub>4</sub> (308.34). Colorless viscous oil. [Source](#): TE LI NI DA HU JIAO *Piper aequale*. [Ref](#): 1910.**14381 9'-(3,4-Methylenedioxy-phenyl)-nonanoic acid**C<sub>16</sub>H<sub>22</sub>O<sub>4</sub> (278.35). Viscous oil. [Source](#): SU LI NAN ROU DOU KOU *Virola surinamensis* [Syn. *Myristica surinamensis*]. [Ref](#): 2580.**14382 1-(3,4-Methylenedioxyphenyl)-1E-tetradecene**C<sub>21</sub>H<sub>32</sub>O<sub>2</sub> (316.49). [Source](#): JIA JU ZI *Piper sarmentosum*. [Ref](#): 1510.**14383 13'-(3,4-Methylene-dioxyphenyl)-tridecanoic acid**C<sub>20</sub>H<sub>30</sub>O<sub>4</sub> (334.46). Viscous oil. [Source](#): SU LI NAN ROU DOU KOU *Virola surinamensis* [Syn. *Myristica surinamensis*]. [Ref](#): 2580.**14384 rel-(7R,8R,7'R,8'R)-3',4'-Methylenedioxy-3,4,5,5'-tetramethoxy-7,7'-epoxylignan**C<sub>23</sub>H<sub>28</sub>O<sub>7</sub> (416.48). Pale yellow oil, [α]<sub>D</sub><sup>21</sup> = -4.5° (c = 0.01, MeOH). [Pharm](#): Antitrypanosomal (trypomastigote form of *Trypanosoma cruzi* (Y strain), IC<sub>50</sub> = 17.6 μg/mL). [Source](#): *Piper solmsianum*. [Ref](#): 3450.**14385 γ-Methylene glutamic acid**[7150-74-5] C<sub>6</sub>H<sub>9</sub>NO<sub>4</sub> (159.14). mp (dl) 203~210°C (dec). [Source](#): LUO HUA SHENG *Arachis hypogaea*. [Ref](#): 6.**14386 4-Methylene-1-isopropyl-bicyclo[3.1.0]-hexan-3-ol acetate**C<sub>12</sub>H<sub>18</sub>O<sub>2</sub> (194.28). [Source](#): KUI HAO *Artemisia princeps*. [Ref](#): 1268.**14387 24-Methylene lanost-8-enol**C<sub>31</sub>H<sub>52</sub>O (440.76). [Source](#): GOU QI ZI *Lycium chinense*. [Ref](#): 1371, 1372, 1373, 1374.**14388 24-Methylenelophenol**C<sub>29</sub>H<sub>48</sub>O (412.71). mp 172~173°C. [Source](#): GAN ZHE *Saccharum sinensis*. [Ref](#): 6.**14389 24-Methylenepollinastanone**C<sub>29</sub>H<sub>46</sub>O (410.69). White crystals, mp 76~77°C. [Source](#): *Ammocharis coranica* (bulb). [Ref](#): 3952.

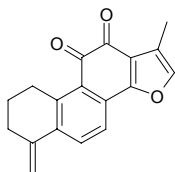
**14390 4-Methylene-DL-proline**

$C_6H_9NO_2$  (127.14). mp 225°C (dec). Source: PI PA HE *Eriobotrya japonica*.

Ref: 6.

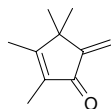
**14391 Methylene tanshinquinone**

[67656-29-5]  $C_{18}H_{14}O_3$  (278.31). Source: BAI ZHI *Angelica dahurica* [Syn. *Angelica porphyrocaulis*]<sup>[2]</sup>, DAN SHEN *Salvia miltiorrhiza* (dried root: content = 0.086%)<sup>[5508]</sup>, GAN XI SHU WEI CAO *Salvia przewalskii* (dried root: content = 0.074%)<sup>[5508]</sup>, HONG GEN CAO *Salvia prionitis* (dried root: content = 0.019%)<sup>[5508]</sup>, HUANG HUA SHU WEI CAO *Salvia flava* (dried root: content = trace)<sup>[5508]</sup>, JI YE SHU WEI CAO *Salvia bulleyana* (dried root: content = trace)<sup>[5508]</sup>, LI SE SHU WEI CAO *Salvia castanea* (dried root: content = 0.010%)<sup>[5508]</sup>, MAO DI HUANG SHU WEI CAO *Salvia digitaloides* (dried root: content = 0.006%)<sup>[5508]</sup>, NAN DAN SHEN *Salvia bowleyana* (dried root: content = 0.042%)<sup>[5508]</sup>, NI DAN SHEN *Salvia sinica* (dried root: content = 0.007%)<sup>[5508]</sup>, SAN YE SHU WEI CAO *Salvia trijuga* (dried root: content = 0.126%)<sup>[5508]</sup>, YUN NAN SHU WEI CAO *Salvia yunnanensis* (dried root: content = 0.065%)<sup>[5508]</sup>, ZI DAN SHEN *Salvia przewalskii* var. *mandarinorum* (dried root: content = %) <sup>[5508]</sup>. Ref: 2, 5508.

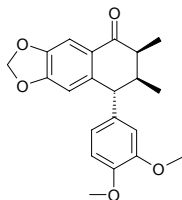
**14392 5-Methylene-2,3,4,4-tetramethylcyclopent-2-enone**

$C_{10}H_{14}O$  (150.22). Colorless oil. Source: *Lavandula luisieri* (essential oil).

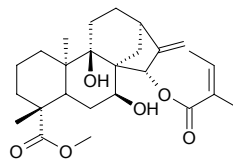
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**14393 (-)-4'-O-Methylshicine**

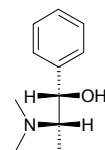
(7'R,8S,8'S)-8,8'-Dimethyl-3',4'-dimethoxy-4,5-methylenedioxy-2,7'-cycloign an-7-one  $C_{21}H_{22}O_5$  (354.41). Amorphous yellow solid,  $[\alpha]_D^{25} = -47.1^\circ$  ( $c = 1.00$ ,  $CHCl_3$ ). Source: *Holostylis reniformis* (root). Ref: 3784.

**14394 Methyl ent-7a,9a-dihydroxy-15β-[(2Z)-2-methyl-but-2-enoyloxy] kaur-16-en-19-oate**

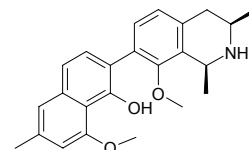
$C_{26}H_{38}O_6$  (446.59). Colorless needles, mp 108°C,  $[\alpha]_D^{20} = -1.67^\circ$ , ( $c = 2.271$ , MeOH). Pharm: Leukotriene biosynthesis Inhibitor (*in vitro*,  $IC_{50} = 10.4\mu\text{mol/L}$ ,  $p < 0.05$ , control Zileuton,  $IC_{50} = 10.4\mu\text{mol/L}$ ,  $p < 0.05$ ). Source: GAO SHAN HUO RONG CAO *Leontopodium alpinum* (root). Ref: 5037.

**14395 N-Methylephedrine**

[51018-28-1]  $C_{11}H_{17}NO$  (179.26). mp (-) 87~88°C. Pharm: Antiasthmatic (bronchial smooth muscle relaxant); used in treatment of asthmatic bronchitis; CNS stimulant. Source: DAN ZI MA HUANG *Ephedra monosperma* (herbaceous twigs: content = 0.042%)<sup>[5508]</sup>, LI JIANG MA HUANG *Ephedra likiangensis* (herbaceous twigs: mean content of 3 origins = 0.027%)<sup>[5508]</sup>, MA HUANG *Ephedra sinica* (herbaceous twigs: mean content of 5 origins = 0.079%)<sup>[5508]</sup>, MO GUO MA HUANG *Ephedra przewalskii* (herbaceous twigs: mean content = 0.006%)<sup>[5508]</sup>, MU ZEI MA HUANG *Ephedra equisetina* (herbaceous twigs: mean content of 2 origins = 0.040%)<sup>[5508]</sup>, SHAN LING MA HUANG *Ephedra gerardiana* (herbaceous twigs: content = 0.043%)<sup>[5508]</sup>, SHUANG SUI MA HUANG *Ephedra distachya*, XI ZANG ZHONG MA HUANG *Ephedra intermedia* var. *tibetica* (herbaceous twigs: content = 0.158%)<sup>[5508]</sup>, YI ZHU AI MA HUANG *Ephedra minuta* var. *dioeca* (herbaceous twigs: mean content of 2 origins = 0.041%)<sup>[5508]</sup>, ZANG MA HUANG *Ephedra saxatilis* (herbaceous twigs: content = 0.056%)<sup>[5508]</sup>, ZHONG MA HUANG *Ephedra intermedia* (herbaceous twigs: mean content of 3 origins = 0.006%)<sup>[5508]</sup>. Ref: 2, 658, 660, 5508.

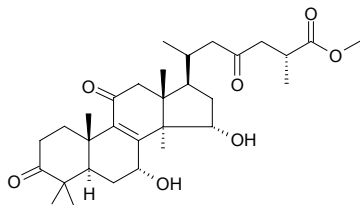
**14396 8-O-Methyl-1-epi-dioncophylline B**

$C_{24}H_{27}NO_3$  (377.49). Pharm: Antimalarial (*Plasmodium falciparum* K1,  $IC_{50} = 402\text{ng/mL}$ , NF54,  $IC_{50} = 1007\text{ng/mL}$ , MIC = 33μg/mL). Source: SAN YE MU *Triphyophyllum peltatum* (leaf). Ref: 3962.

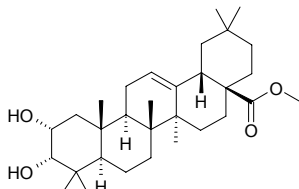


**14397 Methyl-7-epiganoderate**

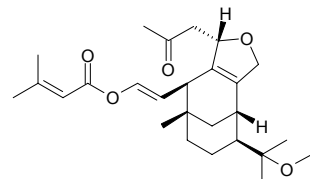
$C_{31}H_{46}O_7$  (530.71). Source: SHU SHE *Ganoderma applanatum*. Ref: 1500.

**14398 Methyl 3-epimaslinat**

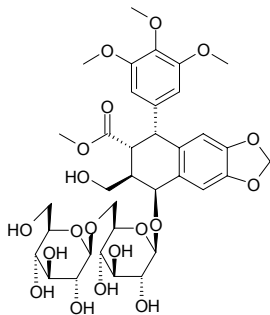
$C_{31}H_{50}O_4$  (486.74). Source: XIA KU CAO *Prunella vulgaris*. Ref: 2508.

**14399 15-O-Methyl-14-epi-neovibsanin F**

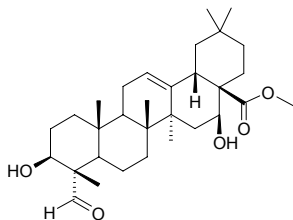
$C_{26}H_{38}O_5$  (430.59). Colorless paste,  $[\alpha]_D^{23} = +65.9^\circ$  ( $c = 0.14$ ,  $CHCl_3$ ). Source: RI BEN JIA MI *Viburnum awabuki*. Ref: 2530.

**14400 Methyl epipodophyllate 7'-O-β-D-Glucopyranosyl-(1→6)-β-D-glucopyranoside**

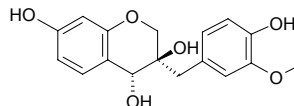
$C_{35}H_{46}O_{19}$  (770.75). White powder,  $[\alpha]_D^{15} = -120^\circ$  ( $c = 0.34$ ). Source: TAO ER QI *Podophyllum emodii* [Syn. *Podophyllum emodii* var. *chinense*; *Podophyllum sikkimensis*; *Sinopodophyllum emodii*] (root and rhizome). Ref: 4142.

**14401 Methyl 16-epiquillate**

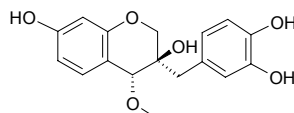
$C_{31}H_{48}O_5$  (500.73). Source: JIN TIE SUO *Psammosilene tunicoides*. Ref: 1442.

**14402 3'-O-Methyl episappanol**

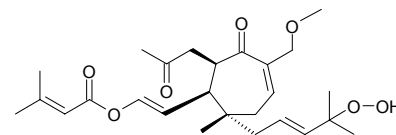
[111254-22-9]  $C_{17}H_{18}O_6$  (318.33). Source: SU MU *Caesalpinia sappan*. Ref: 1302.

**14403 4-O-Methyl episappanol**

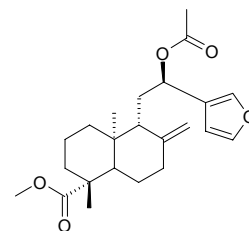
[112529-37-0]  $C_{17}H_{18}O_6$  (318.33). Source: SU MU *Caesalpinia sappan*. Ref: 1304, 4494.

**14404 18-O-Methyl-5-epi-vibsanin K**

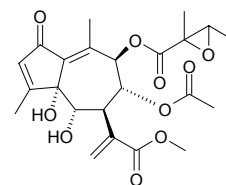
$C_{26}H_{38}O_7$  (462.59).  $[\alpha]_D^{21} = +11.9^\circ$  ( $c = 0.12$ ,  $CHCl_3$ ). Source: RI BEN JIA MI *Viburnum awabuki* (leaf). Ref: 4168.

**14405 Methyl-15,16-epoxy-12(R)-acetoxo-8(17),13(16),14-ent-labdatrien-19-oate**

$C_{23}H_{32}O_5$  (388.51). White gum,  $[\alpha]_D^{25} = -18.0^\circ$  ( $c = 0.60$ ,  $CHCl_3$ ). Pharm: Anticidal (inhibits growth of alga *Raphidocelis subcapitata*, 72h  $IC_{50} = 18.2 \mu\text{mol/L}$ ). Source: BI CHI YAN ZI CAI *Potamogeton pectinatus* (whole herb). Ref: 3488.

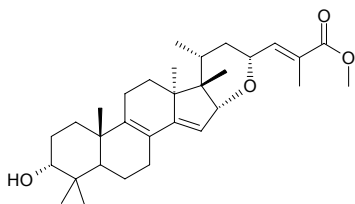
**14406 Methyl-9β-(epoxyangeloyloxy)-5α,6α-dihydroxy-2-oxo-3,4-dehydro-δ-guaian-12-oate**

$C_{23}H_{28}O_{10}$  (464.47). White oil,  $[\alpha]_D^{22} = 16.72^\circ$  ( $c = 0.14$ ,  $CHCl_3$ ). Source: *Balsamorhiza sagittata* (aerial parts), *Balsamorhiza macrophylla* (aerial parts). Ref: 991.



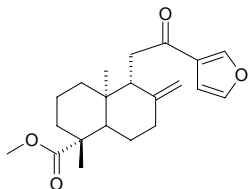
**14407 Methyl (24E)-3 $\alpha$ ,16 $\alpha$ ,23 $\alpha$ (=16R,23R)-trihydroxy-epoxy-17,14-friedolan-8,14,24-trien-26-oate**

C<sub>31</sub>H<sub>46</sub>O<sub>4</sub> (482.71). Gum, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +7.5° (c = 0.064, CHCl<sub>3</sub>). Source: MEI LI TENG HUANG *Garcinia speciosa* (bark). Ref: 3762.



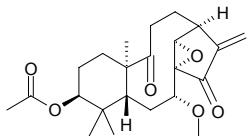
**14408 Methyl 15,16-epoxy-12-oxo-8(17),13(16),14-ent-labdatrien-19-oate**

C<sub>21</sub>H<sub>28</sub>O<sub>4</sub> (344.45). Pharm: Angicidal (inhibits growth of alga *Raphidocelis subcapitata*, 72h IC<sub>50</sub> = 6.1 μmol/L). Source: BI CHI YAN ZI CAI *Potamogeton pectinatus* (whole herb), HAI SHENG CHUN MAN ZAO *Ruppia maritima*. Ref: 3488.



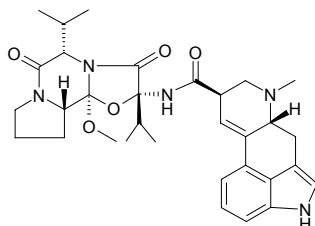
**14409 o-Methylepoxyshikoccin**

C<sub>23</sub>H<sub>32</sub>O<sub>6</sub> (404.51). mp 142–144°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +24.2° (c = 0.60, MeOH). Source: XI SI GUO XIANG CHA CAI *Isodon shikokiana* var. *occidentalis*. Ref: 4067.



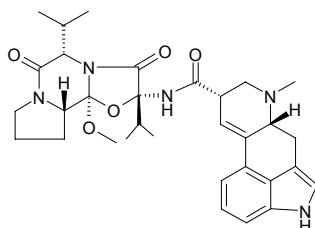
**14410 O-12'-Methyl ergocornine**

C<sub>32</sub>H<sub>41</sub>N<sub>5</sub>O<sub>5</sub> (575.71). Source: MAI JIAO *Claviceps purpurea*. Ref: 1306.



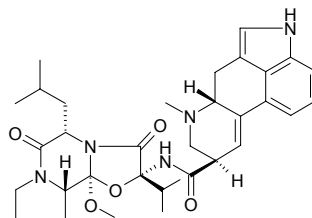
**14411 O-12'-Methyl ergocorninine**

C<sub>32</sub>H<sub>41</sub>N<sub>5</sub>O<sub>5</sub> (575.71). Source: MAI JIAO *Claviceps purpurea*. Ref: 1306, 1307.



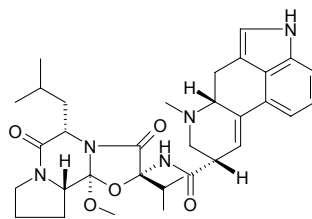
**14412 O-12'-Methyl- $\alpha$ -ergokryptine**

C<sub>33</sub>H<sub>43</sub>N<sub>5</sub>O<sub>5</sub> (589.74). Source: MAI JIAO *Claviceps purpurea*. Ref: 1306.



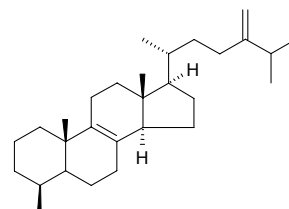
**14413 O-12'-Methyl- $\alpha$ -ergokryptinine**

C<sub>33</sub>H<sub>43</sub>N<sub>5</sub>O<sub>5</sub> (589.74). Source: MAI JIAO *Claviceps purpurea*. Ref: 1306, 1307.



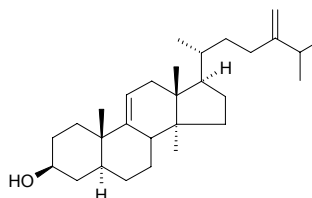
**14414 4-Methyl-7-ergosta-8,24(28)-diene**

C<sub>29</sub>H<sub>48</sub> (396.71). Source: YU MI HEI MEI *Ustilago maydis*. Ref: 1499.



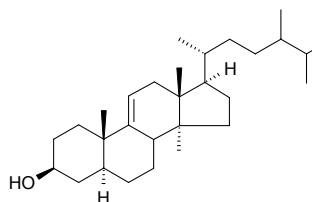
**14415 14 $\alpha$ -Methyl-5 $\alpha$ -ergosta-9(11),24(28)-dien-3 $\beta$ -ol**

C<sub>29</sub>H<sub>48</sub>O (412.71). Source: JIAO GU LAN *Gynostemma pentaphyllum*. Ref: 2.



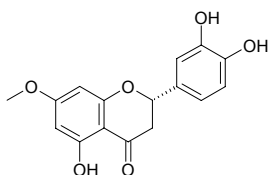
**14416 14 $\alpha$ -Methyl-5 $\alpha$ -ergosta-9(11)-en-3 $\beta$ -ol**

C<sub>29</sub>H<sub>50</sub>O (414.72). Source: JIAO GU LAN *Gynostemma pentaphyllum*. Ref: 2.

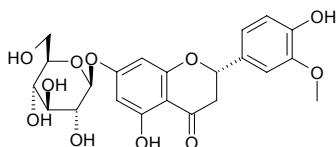


**14417 7-O-Methylerydiol**

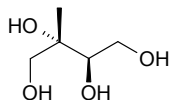
$C_{16}H_{14}O_6$  (302.29). **Pharm:** Cytotoxic (HeLa,  $IC_{50} = 18.6\mu\text{g/mL}$ , control Mitomycin C,  $IC_{50} = 1.7\mu\text{g/mL}$ ). **Source:** TUAN JI AI NA XIANG *Blumea glomerata*. **Ref:** 4092.

**14418 3'-Methyl erydiol-7-O-β-D-glucoside**

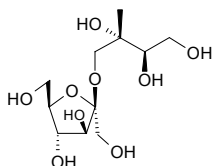
$C_{22}H_{24}O_{11}$  (464.43). **Source:** HU JI SHENG *Viscum coloratum*. **Ref:** 1434.

**14419 2-C-Methyl-D-erythritol**

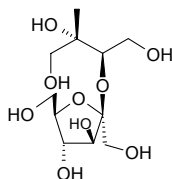
$C_5H_{12}O_4$  (136.15). **Source:** SHI LUO ZI *Anethum graveolens* (fruit). **Ref:** 4177.

**14420 2-C-Methyl-D-erythritol 1-O-β-D-fructofuranoside**

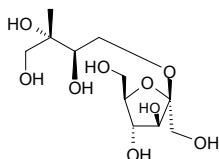
$C_{11}H_{22}O_9$  (298.29). Colorless syrup,  $[\alpha]_D^{22} = -28^\circ$  ( $c = 1.4$ , MeOH). **Source:** HUI QIN *Pimpinella anisum*. **Ref:** 2065.

**14421 2-C-Methyl-D-erythritol 3-O-β-D-fructofuranoside**

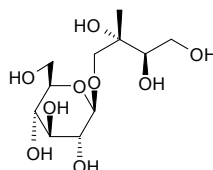
$C_{11}H_{22}O_9$  (298.29). Colorless syrup,  $[\alpha]_D^{22} = -15^\circ$  ( $c = 0.7$ , MeOH). **Source:** HUI QIN *Pimpinella anisum*. **Ref:** 2065.

**14422 2-C-Methyl-D-erythritol 4-O-β-D-fructofuranoside**

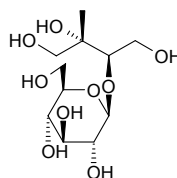
$C_{11}H_{22}O_9$  (298.29). Colorless syrup,  $[\alpha]_D^{22} = -19^\circ$  ( $c = 1.2$ , MeOH). **Source:** HUI QIN *Pimpinella anisum*. **Ref:** 2065.

**14423 2-C-Methyl-D-erythritol 1-O-β-D-glucopyranoside**

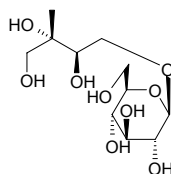
$C_{11}H_{22}O_9$  (298.29). colorless syrup,  $[\alpha]_D^{21} = -15^\circ$  ( $c = 1.2$ , MeOH). **Source:** HUI QIN *Pimpinella anisum*, HU SUI ZI *Coriandrum sativum*, ZI RAN QIN *Cuminum cyminum*. **Ref:** 2065.

**14424 2-C-Methyl-D-erythritol 3-O-β-D-glucopyranoside**

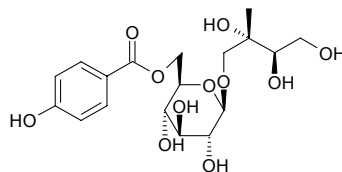
$C_{11}H_{22}O_9$  (298.29). Colorless syrup,  $[\alpha]_D^{21} = -13^\circ$  ( $c = 1.6$ , MeOH). **Source:** HUI QIN *Pimpinella anisum*, ZI RAN QIN *Cuminum cyminum*. **Ref:** 2065.

**14425 2-C-Methyl-D-erythritol 4-O-β-D-glucopyranoside**

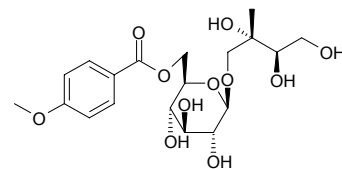
$C_{11}H_{22}O_9$  (298.29). Colorless syrup,  $[\alpha]_D^{21} = -8^\circ$  ( $c = 0.9$ , MeOH). **Source:** HUI QIN *Pimpinella anisum*, HU SUI ZI *Coriandrum sativum*, ZI RAN QIN *Cuminum cyminum*. **Ref:** 2065.

**14426 2-C-Methyl-D-erythritol 1-O-β-D-(6-O-4-hydroxybenzoyl)glucopyranoside**

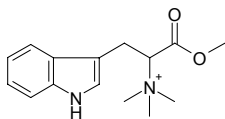
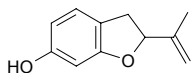
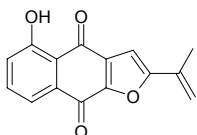
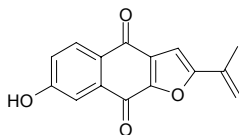
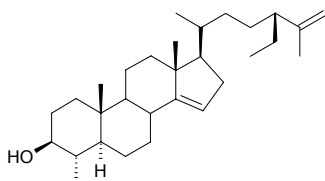
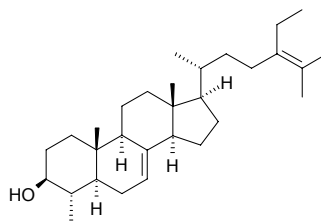
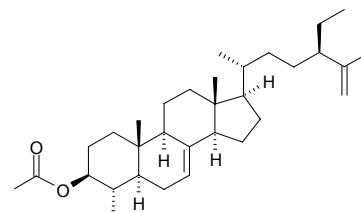
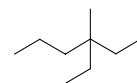
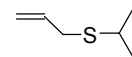
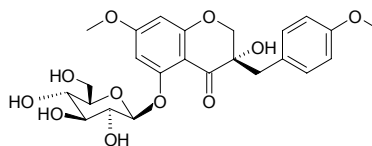
$C_{18}H_{26}O_{11}$  (418.40). Amorphous powder,  $[\alpha]_D^{22} = -12^\circ$  ( $c = 1.6$ , MeOH). **Source:** HUI QIN *Pimpinella anisum*. **Ref:** 2065.

**14427 2-C-Methyl-D-erythritol 1-O-β-D-(6-O-4-methoxybenzoyl)glucopyranoside**

$C_{19}H_{28}O_{11}$  (432.43). Amorphous powder,  $[\alpha]_D^{22} = -13^\circ$  ( $c = 0.3$ , MeOH). **Source:** HUI QIN *Pimpinella anisum*. **Ref:** 2065.

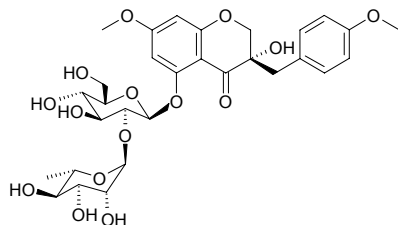




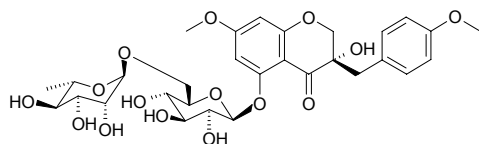
**14428 Methyl ester of *N,N*-dimethyl-tryptophan methocation**C<sub>15</sub>H<sub>21</sub>N<sub>2</sub>O<sub>2</sub> (261.35). Source: XIANG SI ZI *Abrus precatorius*. Ref: 6.**14429 2-(1'-Methylethenyl)-6-hydroxy-2,3-dihydrobenzo[*b*]furan**C<sub>11</sub>H<sub>12</sub>O<sub>2</sub> (176.22). Amorphous material. Source: FEI ZHOU ZI WEI *Newbouldia laevis* (stem cortex). Ref: 3442.**14430 2-(1'-Methylethenyl)-5-hydroxynaphtho[2,3-*b*]furan-4,9-dione**C<sub>15</sub>H<sub>10</sub>O<sub>4</sub> (254.24). Yellow solid. Source: FEI ZHOU ZI WEI *Newbouldia laevis* (stem cortex). Ref: 3442.**14431 2-(1'-Methylethenyl)-7-hydroxynaphtho[2,3-*b*]furan-4,9-dione**C<sub>15</sub>H<sub>10</sub>O<sub>4</sub> (254.24). Orange material. Source: FEI ZHOU ZI WEI *Newbouldia laevis* (stem cortex). Ref: 3442.**14432 4 $\alpha$ -Methyl-24 $\beta$ -ethyl-5 $\alpha$ -cholesta-14,25-dien-3 $\beta$ -ol**C<sub>30</sub>H<sub>50</sub>O (426.73). Crystalline solid, mp 170–172°C, [ $\alpha$ ]<sub>D</sub> = +77° (CHCl<sub>3</sub>). Source: KU LANG SHU *Clerodendrum inerme*. Ref: 3382.**14433 4 $\alpha$ -Methyl-24-ethylcholesta-7,24-dienol**C<sub>30</sub>H<sub>50</sub>O (426.73). Source: GOU QI ZI *Lycium chinense*. Ref: 1371, 1372, 1373, 1374.**14434 (2*R*)-4 $\alpha$ -Methyl-24-ethylcholesta-7,25-dien-3 $\beta$ -yl acetate**C<sub>32</sub>H<sub>52</sub>O<sub>2</sub> (428.77). Source: SHUI LONG GU *Polypodium niponicum*. Ref: 1413.**14435 3-Methyl-3-ethylhexane**[3074-76-8] C<sub>9</sub>H<sub>20</sub> (128.26). Source: ROU CONG RONG *Cistanche deserticola*. Ref: 2.**14436 3-[(1-Methylethyl)thio]-1-propene**C<sub>6</sub>H<sub>12</sub>S (116.23). Source: XIE BAI *Allium macrostemon*. Ref: 1391.**14437 (–)-7-*O*-Methyleucomol 5-*O*- $\beta$ -D-glucopyranoside**C<sub>24</sub>H<sub>28</sub>O<sub>11</sub> (482.48). White needles (MeOH), mp 198–199°C, [ $\alpha$ ]<sub>D</sub><sup>24</sup> = –18.8° (*c* = 0.01, MeOH). Pharm: Cytotoxic inactive (*in vitro*, P<sub>388</sub> and A549). Source: HU YAN WAN NIAN QING *Ornithogalum caudatum* (bulb: yield = 0.00044%dw). Ref: 4608.

**14438 (-)-7-O-Methyleucomol 5-O-β-neohesperidoside**

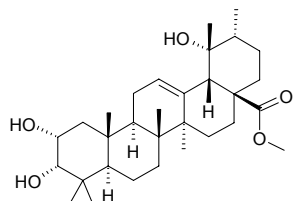
$C_{30}H_{38}O_{15}$  (638.63). White needles (MeOH), mp 212~213°C,  $[\alpha]_D^{24} = -17.2^\circ$  ( $c = 0.01$ , MeOH). **Pharm:** Cytotoxic inactive (*in vitro*, P<sub>388</sub> and A549). **Source:** HU YAN WAN NIAN QING *Ornithogalum caudatum* (bulb: yield = 0.00026%dw). **Ref:** 4608.

**14439 (-)-7-O-Methyleucomol 5-O-β-rutinoside**

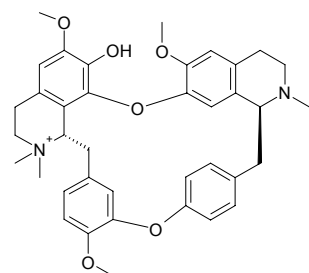
$C_{30}H_{38}O_{15}$  (638.63). White needles (MeOH), mp 207~208°C,  $[\alpha]_D^{24} = -15.5^\circ$  ( $c = 0.01$ , MeOH). **Pharm:** Cytotoxic inactive (*in vitro*, P<sub>388</sub> and A549). **Source:** HU YAN WAN NIAN QING *Ornithogalum caudatum* (bulb: yield = 0.00033%dw). **Ref:** 4608.

**14440 Methyl euscaphate**

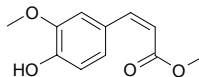
$C_{31}H_{50}O_5$  (502.74). **Source:** JIN YING ZI *Rosa laevigata*. **Ref:** 1326.

**14441 (+)-2-N-Methylfangchinoline**

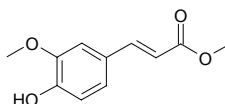
$C_{38}H_{43}N_2O_6$  (623.77). **Source:** FANG JI *Stephania tetrandra*. **Ref:** 2.

**14442 Methyl cis-ferulate**

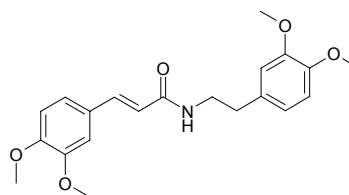
$C_{11}H_{12}O_4$  (208.22). **Source:** TAI WAN FU RONG *Hibiscus taiwanensis*. **Ref:** 2529.

**14443 Methyl trans-ferulate**

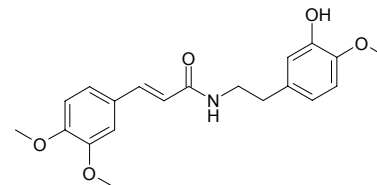
$C_{11}H_{12}O_4$  (208.22). **Source:** DONG FENG JU GEN *Atalantia buxifolia* [Syn. *Severinia buxifolia*] (root cortex), TAI WAN FU RONG *Hibiscus taiwanensis*, TAI WAN HUANG BO *Phellodendron amurense* var. *wilsonii* (leaf: yield = 0.0001%dw)<sup>[4722]</sup>, TAI WAN PU GONG YING *Taraxacum formosanum* (fresh root). **Ref:** 2529, 3075, 4488, 4722.

**14444 N-trans-4-O-Methylferuloyl 3',4'-O-dimethyldopamine**

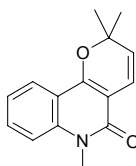
$C_{21}H_{25}NO_5$  (371.44). Colorless oil. **Pharm:** Germination/growth inhibitor/stimulator (dicotyledon *Lactuca sativa* lettuce, *Lycopersicon esculentum* tomato, monocotyledon *Allium cepa* onion, 0.0001~0.1mmol/L). **Source:** HONG HUA JIAO *Zanthoxylum rubescens*, LI *Chenopodium album* (aerial parts). **Ref:** 3499.

**14445 N-trans-4-O-Methylferuloyl 4'-O-methyldopamine**

$C_{20}H_{23}NO_5$  (357.41). Colorless oil. **Pharm:** Germination/growth inhibitor/stimulator (dicotyledon *Lactuca sativa* lettuce, *Lycopersicon esculentum* tomato, monocotyledon *Allium cepa* onion, 0.0001~0.1mmol/L). **Source:** LI *Chenopodium album* (aerial parts). **Ref:** 3499.

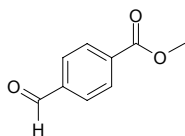
**14446 N-Methylflindersine**

[50333-13-6]  $C_{15}H_{15}NO_2$  (241.29). **Pharm:** Antifungal (*Candida albicans*); insect antifeedant (beetle). **Source:** CHOU SHAN YANG *Orixa japonica* (stem: yield = 0.0061%dw)<sup>[4774]</sup>, YU JU *Ptelea trifoliata*. **Ref:** 658, 4774.

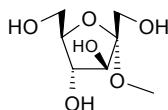


**14447 Methyl-*p*-formylbenzoate**

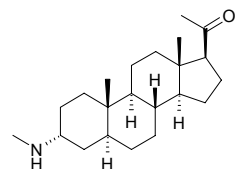
C<sub>9</sub>H<sub>8</sub>O<sub>3</sub> (164.16). Source: TAI WAN FU RONG *Hibiscus taiwanensis*. Ref: 2529.

**14448 Methyl- $\alpha$ -D-fructofuranoside**

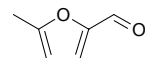
C<sub>7</sub>H<sub>14</sub>O<sub>6</sub> (194.19). Source: TAO REN *Prunus persica*. Ref: 1324.

**14449 N-Methylfuntumine**

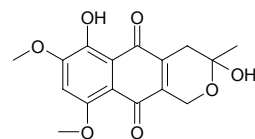
C<sub>22</sub>H<sub>37</sub>NO (331.55). Yellowish crystals (CHCl<sub>3</sub>), mp 123~124°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +81° (c = 0.074, CHCl<sub>3</sub>). Pharm: BChE inhibitor (horse serum BChE, IC<sub>50</sub> = (12.69±0.13)μmol/L, control Eserine, IC<sub>50</sub> = (0.857±0.008)μmol/L); AChE inhibitor (electric eel AChE, IC<sub>50</sub> = (97.61±1.73)μmol/L, control Eserine IC<sub>50</sub> = (0.041±0.001)μmol/L). Source: YUN NAN YE SHAN HUA *Sarcococca coriacea* [Syn. *Sarcococca wallichii*] (leaf). Ref: 4241.

**14450  $\alpha$ -Methylfurfural**

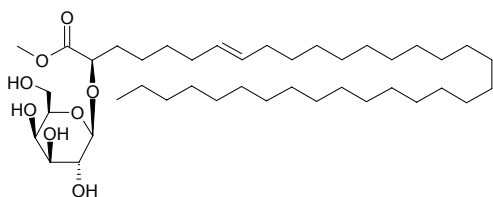
[620-02-0] C<sub>6</sub>H<sub>6</sub>O<sub>2</sub> (110.11). bp 187°C. Source: SHUI SONG *Codium fragile*. Ref: 6.

**14451 8-O-Methyl-fusarubin**

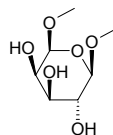
C<sub>16</sub>H<sub>16</sub>O<sub>7</sub> (320.30). Source: *Fusarium acutatum*. Ref: 5296.

**14452 Methyl-2 $\beta$ (2S)-O- $\beta$ -D-galactopyranosyl-7(E)-tetratriacontenoate**

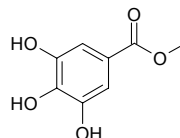
C<sub>41</sub>H<sub>78</sub>O<sub>8</sub> (699.07). Colorless powder. [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -45° (c = 0.04, CD<sub>3</sub>OD). Pharm: Tyrosinase inhibitor (IC<sub>50</sub> = (11.68±0.44)μmol/L, control Kojic acid, IC<sub>50</sub> = (16.67±0.52)μmol/L, L-Mimosine IC<sub>50</sub> = (3.68±0.02)μmol/L). Source: FEN ZHI PO JU *Amberboa ramosa*. Ref: 2531.

**14453 Methyl D-galactoside**

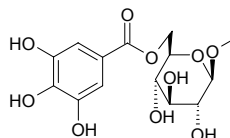
C<sub>7</sub>H<sub>14</sub>O<sub>6</sub> (194.19). mp ( $\alpha$ ) 125.5°C, ( $\beta$ ) 178~180°C. Source: LU JIAO CAI *Gloiopeltis furcata*. Ref: 6.

**14454 Methyl gallate**

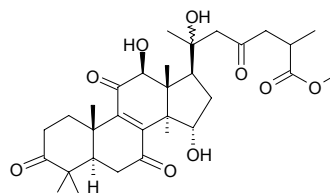
[99-24-1] C<sub>8</sub>H<sub>8</sub>O<sub>5</sub> (184.15). mp 197~198°C. Pharm: Antibacterial (acid-fast bacteria, gram-negative bacteria and gram-positive bacteria, EC = 0.5~5.0mg/mL; *Diplococcus pneumoniae*, EC = 5mg/mL, 15min; *Bacillus pneumoniae*, effective pH 5~6, 30min); antifungal; cytotoxic (antioxidant assay)<sup>[5038]</sup>. Source: DUO HUA SHAO YAO *Paeonia emodi* (fruit), HUANG LU *Cotinus coggygria*, LUAN HUA *Koeleruteria paniculata*, MU MA HUANG *Casuarina equisetifolia*, NAN DA JI *Euphorbia jolkini*, QIANG WEI GEN *Rosa multiflora*, YAN FU YE *Rhus chinensis* [Syn. *Rhus semialata*], YAN FU ZI *Rhus chinensis* [Syn. *Rhus semialata*], ZI WEI HUA *Lagerstroemia indica*. Ref: 4, 6, 3802, 5038.

**14455 Methyl-6-O-galloyl- $\beta$ -D-glucopyranoside**

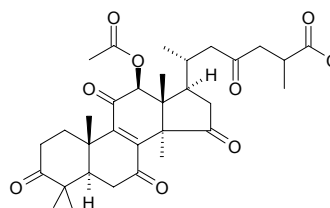
C<sub>14</sub>H<sub>18</sub>O<sub>10</sub> (346.29). Source: GOU TENG *Uncaria rhynchophylla* [Syn. *Nauclea rhynchophylla*]. Ref: 660.

**14456 Methyl ganoderate AP**

C<sub>31</sub>H<sub>44</sub>O<sub>9</sub> (560.69). Source: SHU SHE *Ganoderma applanatum*. Ref: 1500.

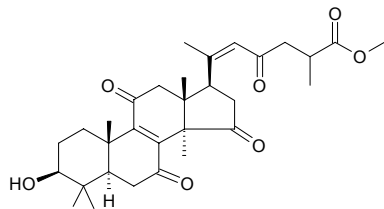
**14457 Methyl ganoderate F**

C<sub>33</sub>H<sub>44</sub>O<sub>9</sub> (584.71). Pharm: EBV-EA activation inhibitor (Raji cells *in vitro*, TPA-induced, IC<sub>50</sub> = 289mol ratio/32pmol TPA, control  $\beta$ -Carotene, IC<sub>50</sub> = 400mol ratio/32pmol TPA). Source: LING ZHI *Ganoderma lucidum* (dried sporocarp: yield = 0.0019%dw). Ref: 4737.

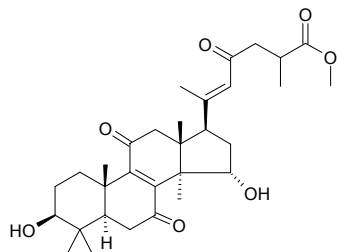


**14458 Methyl ganoderate H**

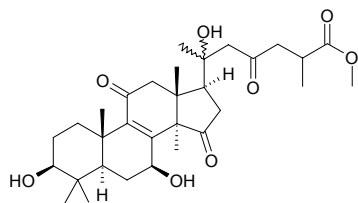
$C_{31}H_{42}O_7$  (526.68). Source: SHU SHE *Ganoderma applanatum*. Ref: 1500.

**14459 Methyl ganoderate I**

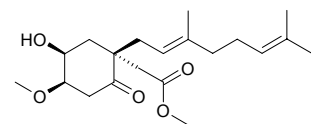
$C_{31}H_{44}O_7$  (528.69). Source: SHU SHE *Ganoderma applanatum*. Ref: 1500.

**14460 Methyl ganoderate J**

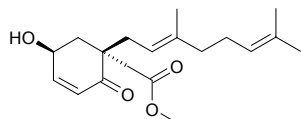
$C_{31}H_{46}O_8$  (546.71). Source: LING ZHI *Ganoderma lucidum* (dried sporocarp; yield = 0.00025%). Ref: 4603.

**14461 Methyl 2-(1'-β-geranyl-5'-β-hydroxy-4'-β-methoxy-2'-oxocyclohexyl)acetate**

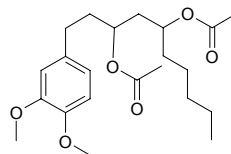
$C_{20}H_{32}O_5$  (352.48). Colorless oil,  $[\alpha]_D^{22} = -59^\circ$  ( $c = 0.103$ ,  $CHCl_3$ ). Source: *Glossocalyx brevipes* (leaf). Ref: 4973.

**14462 Methyl 2-(1'-β-geranyl-5'-β-hydroxy-2'-oxocyclohex-3'-enyl)acetate**

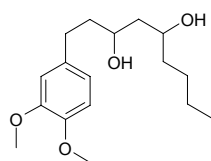
$C_{19}H_{28}O_4$  (320.43). Colorless oil,  $[\alpha]_D^{22} = -2.9^\circ$  ( $c = 0.1$ ,  $CHCl_3$ ). Pharm: Antiplasmodial (*in vitro* *Plasmodium falciparum*: D6,  $IC_{50} = 702.59$ ng/mL, control Mefloquine,  $IC_{50} = 11.67$ ng/mL; W2,  $IC_{50} = 2125.78$ ng/mL, control Mefloquine,  $IC_{50} = 4.78$ ng/mL). Source: *Glossocalyx brevipes* (leaf). Ref: 4973.

**14463 6-Methylgingediacetate**

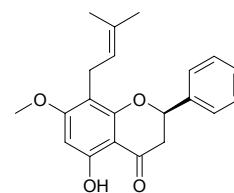
$C_{22}H_{34}O_6$  (394.51). Source: SHENG JIANG *Zingiber officinale*. Ref: 2.

**14464 6-Methylgingediol**

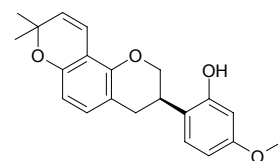
$C_{18}H_{30}O_4$  (310.44). Source: SHENG JIANG *Zingiber officinale*. Ref: 2.

**14465 7-O-Methylglabranin**

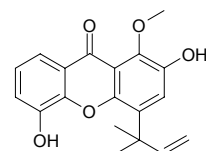
$C_{21}H_{22}O_4$  (338.41). Colorless needles ( $CHCl_3$ ), mp 124–125°C,  $[\alpha]_D^{25} = -20.9^\circ$  ( $c = 0.25$ , MeOH). Source: MEI LI YE HUI MAO DOU *Tephrosia calophylla* (whole herb). Ref: 4312.

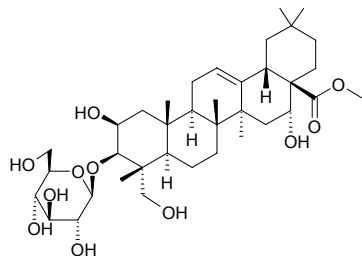
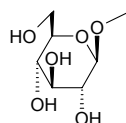
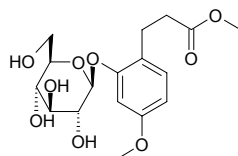
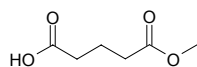
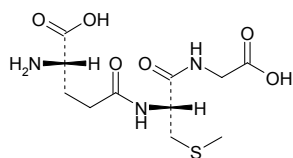
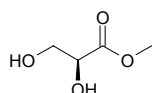
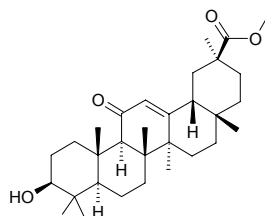
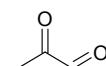
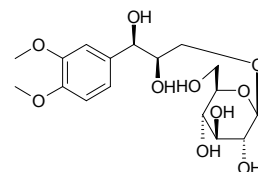
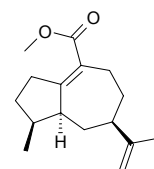
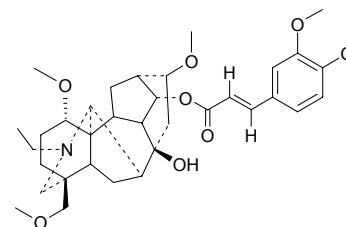
**14466 4'-O-Methylglabridin**

$C_{21}H_{22}O_4$  (338.41). Source: GAN CAO *Glycyrrhiza uralensis*. Ref: 2.

**14467 1-O-Methylglobuxanthone**

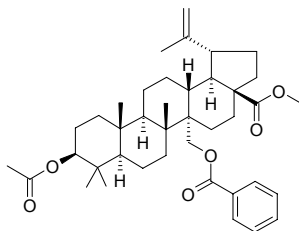
$C_{19}H_{18}O_5$  (326.35). Pale yellow needles, mp 145–146°C (acetone-hexane). Source: *Garcinia vilsersiana* (bark). Ref: 3902.



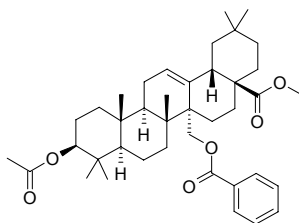
**14468 Methyl-3-O-β-D-glucopyranosyl polygalcate**C<sub>37</sub>H<sub>60</sub>O<sub>11</sub> (680.88). Source: JIE GENG *Platycodon grandiflorum*. Ref: 1381.**14469 β-Methyl-D-glucoside**C<sub>7</sub>H<sub>14</sub>O<sub>6</sub> (194.19). Source: MU XU *Medicago sativa*. Ref: 6.**14470 Methyl 2-O-β-D-glucosyloxy-4-methoxybenzenepropanoate**C<sub>17</sub>H<sub>24</sub>O<sub>9</sub> (372.38). [α]<sub>D</sub><sup>22</sup> = -85° (c = 0.9380, MeOH). Source: DUO TOU GE NI DI MU *Gnidia polycephala* (stem). Ref: 3502.**14471 Methyl glutarate**[1501-27-5] C<sub>6</sub>H<sub>10</sub>O<sub>4</sub> (146.14). Source: MU ZEI *Equisetum hiemale*. Ref: 2.**14472 S-Methylglutathione**C<sub>11</sub>H<sub>19</sub>N<sub>3</sub>O<sub>6</sub>S (321.35). Source: NIU FEI *Bos taurus domesticus*; *Bubalus bubalis*. Ref: 6.**14473 Methyl (S)-glycerate**C<sub>4</sub>H<sub>9</sub>O<sub>4</sub> (120.11). Colorless oil; [α]<sub>D</sub> = -8.4° (c = 0.44, MeOH). Source: NAN TOU QIU HAI TANG *Begonia nantoensis* (rhizome). Ref: 4267.**14474 Methylglycyrrhetate**C<sub>31</sub>H<sub>48</sub>O<sub>4</sub> (484.73). Source: GAN CAO *Glycyrrhiza uralensis*. Ref: 2.**14475 Methylglyoxal**[78-98-8] C<sub>3</sub>H<sub>4</sub>O<sub>2</sub> (72.06). Source: SHENG JIANG *Zingiber officinale*. Ref: 2.**14476 (1'R,2'R)-4-O-Methylguaiaicyl glycerol 3'-O-β-D-glucopyranoside**C<sub>17</sub>H<sub>26</sub>O<sub>10</sub> (390.39). Amorphous powder, [α]<sub>D</sub><sup>22</sup> = -15° (c = 1.2, MeOH). Source: HUI QIN *Pimpinella anisum* (fruit). Ref: 4242.**14477 Methyl guaia-1(10),11-dien-15-carboxylate**C<sub>16</sub>H<sub>24</sub>O<sub>2</sub> (248.37). Source: CHEN XIANG *Aquilaria agallocha*. Ref: 13.**14478 Methyl gymnaconitine**C<sub>35</sub>H<sub>49</sub>NO<sub>8</sub> (611.78). Amorphous powder, [α]<sub>D</sub><sup>20.5</sup> = +33.2°. Source: LU RUI WU TOU *Aconitum gymnaandrum*. Ref: 52.

**14479 Methyl helicterate**

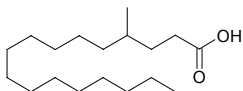
$C_{40}H_{56}O_6$  (632.89). Colorless lamellar crystals, mp 196~197°C,  $[\alpha]_D^{20} = -12.3^\circ$  ( $c = 8.0$ , chloroform) Source: SHAN ZHI MA *Helicteres angustifolia*. Ref: 40.

**14480 Methyl helicterilate**

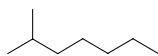
$C_{40}H_{56}O_6$  (632.89). Colorless acicular crystals, mp 152~153°C,  $[\alpha]_D^{20} = +118.8^\circ$  ( $c = 5.9$ , chloroform). Source: SHAN ZHI MA *Helicteres angustifolia*. Ref: 40.

**14481 4-Methyl heptadecanoic acid**

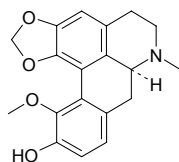
$C_{18}H_{36}O_2$  (284.49). Source: XIAN MAO *Curculigo orchoides*. Ref: 1398.

**14482 2-Methylheptane**

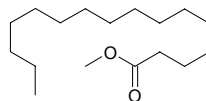
[592-27-8]  $C_8H_{18}$  (114.23). Source: SHAN ZHA *Crataegus pinnatifida*. Ref: 2.

**14483 N-Methylhernangerine**

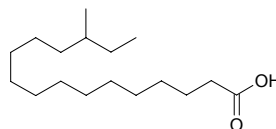
N-Methyl nandigerine [5544-68-3]  $C_{19}H_{19}NO_4$  (325.37). mp 169~170°C,  $[\alpha]_D^{32} = +300^\circ$  ( $c = 1$ ,  $CHCl_3$ ). Pharm: Anti-HIV-1 inactive (HIV-1 IN inhibitor,  $IC_{50} > 100 \mu\text{mol/L}$ , positive control Suramin,  $IC_{50} = 2.4 \mu\text{mol/L}$ )<sup>[4224]</sup>. Source: DING HU DIAO ZHANG *Lindera chunii* (root), HEI KE NAN *Lindera megaphylla*, LIAN YE TONG *Hernandia Sonora* [Syn. *Hernandia ovigera*]. Ref: 1508, 1521, 4224.

**14484 Methyl hexadecanate**

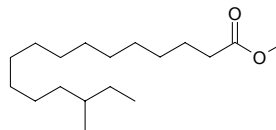
Methyl palmitate; Methyl hexadecanoate [112-39-0]  $C_{17}H_{34}O_2$  (270.46). mp 30.5°C, 29.5°C, bp 415~418°C/747mmHg. Pharm: Cytotoxic ( $P_{388}$ ,  $ED_{50} > 50 \mu\text{g/mL}$ , control Mithramycin,  $ED_{50} = 0.58 \mu\text{g/mL}$ ; A549,  $ED_{50} > 50 \mu\text{g/mL}$ , Mithramycin,  $ED_{50} = 0.073 \mu\text{g/mL}$ ; HT29,  $ED_{50} > 50 \mu\text{g/mL}$ , Mithramycin,  $ED_{50} = 0.076 \mu\text{g/mL}$ )<sup>[5421]</sup>. Source: CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*], DANG SHEN *Codonopsis pilosula*, JIAN YE TANG SONG CAO *Thalictrum acutifolium*, QING FENG TENG *Sinomenium acutum*, SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*], MO ZHI JIAO GU CUI *Casearia membranacea* (stem). Ref: 2, 6, 1476, 5421.

**14485 14-Methyl hexadecanoic acid**

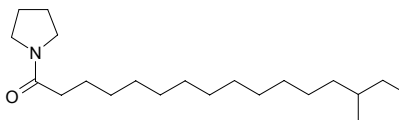
[5918-29-6]  $C_{17}H_{34}O_2$  (270.46). Source: QIANG HUO *Notopterygium incisum*. Ref: 2.

**14486 14-Methyl hexadecanoic acid methyl ester**

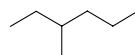
$C_{18}H_{36}O_2$  (284.49). Source: QIANG HUO *Notopterygium incisum*. Ref: 1354.

**14487 1-(14-Methylhexadecanoyl)pyrrolidine**

$C_{21}H_{41}NO$  (323.57).  $[\alpha]_D^{20} = +5^\circ$  ( $c = 0.4$ ,  $CHCl_3$ ). Source: WENG CAI *Ipomoea aquatica* [Syn. *Convolvulus repens*; *Ipomoea reptans*], WU YE YU HUANG CAO *Merremia quinquefolia*. Ref: 2403.

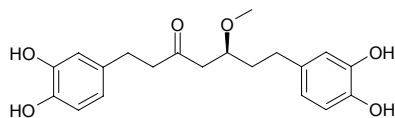
**14488 3-Methylhexane**

[589-34-4]  $C_7H_{16}$  (100.21). Source: SHAN ZHA *Crataegus pinnatifida*. Ref: 2.

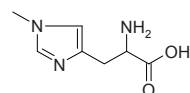


**14489 5-O-Methylhirsutanonol**

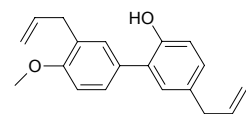
1,7-Bis-(3,4-dihydroxyphenyl)-5-methoxy-3-heptanone C<sub>20</sub>H<sub>24</sub>O<sub>6</sub> (360.41). Colorless viscous liquid,  $[\alpha]_D = +3.8^\circ$  ( $c = 0.07$ , MeOH). **Pharm:** Antioxidant (superoxide radical scavenger, IC<sub>50</sub> = 2.8 μmol/L; DPPH scavenger, IC<sub>50</sub> = 2.9 μmol/L). **Source:** CHI YANG *Alnus japonica* (leaf). **Ref:** 4535.

**14490 3-Methylhistidine**

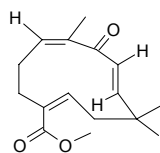
C<sub>7</sub>H<sub>11</sub>N<sub>3</sub>O<sub>2</sub> (169.18). mp (L) 248~250°C (dec). **Source:** JI ROU *Gallus gallus domesticus*, WU LI *Ophiocephalus argus*. **Ref:** 6.

**14491 6'-O-Methylhonokiol**

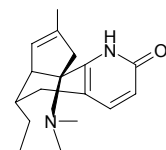
C<sub>19</sub>H<sub>20</sub>O<sub>2</sub> (280.37). **Source:** HOU PO *Magnolia officinalis*. **Ref:** 2.

**14492 Methyl 8-α-humula-6Z,9E-dien-12-oate**

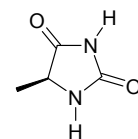
C<sub>16</sub>H<sub>22</sub>O<sub>3</sub> (262.35). **Pharm:** Phytotoxin (6mg/mL: *S. acutus*, mortality = 21%, *L. paucicostata*, mortality = 89%); cytotoxic (P<sub>388</sub>, IC<sub>50</sub> = 10 μmol/L, control *cis*-Platin, IC<sub>50</sub> = 8 μmol/L; A549, IC<sub>50</sub> = 10 μmol/L, *cis*-Platin, IC<sub>50</sub> = 8 μmol/L; HT29, IC<sub>50</sub> = 20 μmol/L, *cis*-Platin, IC<sub>50</sub> = 16 μmol/L; MEL-28, IC<sub>50</sub> = 10 μmol/L, *cis*-Platin, IC<sub>50</sub> = 8 μmol/L). **Source:** *Asteriscus vogelii* (aerial parts). **Ref:** 5123.

**14493 N-Methyl huperzine B**

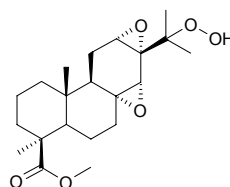
C<sub>17</sub>H<sub>22</sub>N<sub>2</sub>O (270.38). **Source:** QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*]. **Ref:** 108.

**14494 5-Methyl hydantoin**

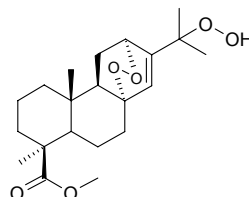
[40856-73-3] C<sub>4</sub>H<sub>6</sub>N<sub>2</sub>O<sub>2</sub> (114.10). Crystals (H<sub>2</sub>O).  $[\alpha]_D^{28} = -48^\circ$  (EtOH),  $[\alpha]_D = -58^\circ$  (H<sub>2</sub>O). **Source:** GE GEN *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*]. **Ref:** 1332, 1521.

**14495 Methyl 15-hydroperoxy-8α,14α,12α,13α-diepoxiabietan-13-en-19-oate**

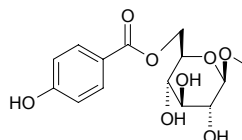
C<sub>21</sub>H<sub>32</sub>O<sub>6</sub> (380.49). White powder,  $[\alpha]_D = +0.25^\circ$  ( $c = 0.40$ , CHCl<sub>3</sub>). **Pharm:** Cytotoxic (A549, IC<sub>50</sub> > 5 μg/mL, control Cycloheximide, IC<sub>50</sub> = 0.1 μg/mL; H116, IC<sub>50</sub> > 5 μg/mL, Cycloheximide, IC<sub>50</sub> = 0.1 μg/mL; PSN1, IC<sub>50</sub> > 5 μg/mL, Cycloheximide, IC<sub>50</sub> = 0.01 μg/mL; T98G, IC<sub>50</sub> > 5 μg/mL, Cycloheximide, IC<sub>50</sub> = 2.5 μg/mL; SKBR3, IC<sub>50</sub> > 5 μg/mL, Cycloheximide, IC<sub>50</sub> = 0.05 μg/mL). **Source:** FEI NI JI CI BAI *Juniperus phoenicea* (leaf), XIANG CI BAI FEI ZHOU BIAN ZHONG *Juniperus thurifera* var. *africana* (leaf). **Ref:** 3851.

**14496 Methyl 15-hydroperoxy-8α,12α-epidioxiabiet-13-en-19-oate**

C<sub>21</sub>H<sub>32</sub>O<sub>6</sub> (380.49). White powder,  $[\alpha]_D = +9.7^\circ$  ( $c = 1.03$ , CHCl<sub>3</sub>). **Pharm:** Cytotoxic (A549, IC<sub>50</sub> = 5 μg/mL, control Cycloheximide, IC<sub>50</sub> = 0.1 μg/mL; H116, IC<sub>50</sub> = 2.5 μg/mL, Cycloheximide, IC<sub>50</sub> = 0.1 μg/mL; PSN1, IC<sub>50</sub> = 5 μg/mL, Cycloheximide, IC<sub>50</sub> = 0.01 μg/mL; T98G, IC<sub>50</sub> > 5 μg/mL, Cycloheximide, IC<sub>50</sub> = 2.5 μg/mL; SKBR3, IC<sub>50</sub> > 5 μg/mL, Cycloheximide, IC<sub>50</sub> = 0.05 μg/mL). **Source:** FEI NI JI CI BAI *Juniperus phoenicea* (leaf), XIANG CI BAI FEI ZHOU BIAN ZHONG *Juniperus thurifera* var. *africana* (leaf). **Ref:** 3851.

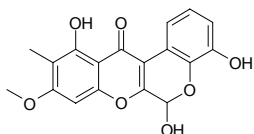
**14497 methyl (6-O-p-Hydroxybenzoyl)-β-D-glucopyranoside**

C<sub>14</sub>H<sub>18</sub>O<sub>8</sub> (314.29). **Source:** ZI YE *Catalpa ovata* (fallen leaf). **Ref:** 4290.

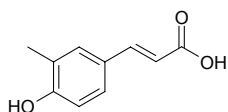


**14498 9-O-Methyl-4-hydroxyboeravinone**

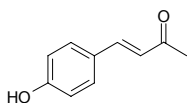
$C_{18}H_{14}O_7$  (342.31). White amorphous powder. **Pharm:** Antifungal (*Candida albicans* DSY1024,  $IC_{50} = 48\mu\text{g/mL}$ ). **Source:** ZI MO LI GEN *Mirabilis jalapa* (Plant cell culture). **Ref:** 3043.

**14499 m-Methyl-p-hydroxy-cinnamic acid**

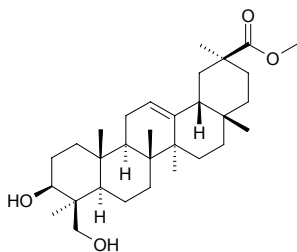
$C_{10}H_{10}O_3$  (178.19). Colorless acicular crystals, mp 170~174°C (Me<sub>2</sub>CO). **Source:** JIA BAI HE *Notholirion hyacinthinum* [Syn. *Notholirion bulbiferum*]. **Ref:** 663.

**14500 Methyl p-hydroxycinnamoyl ketone**

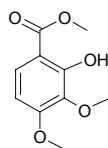
$C_{10}H_{10}O_2$  (162.19). **Pharm:** Cytotoxic inactive (Colon26-L5, HT1080, 100μmol/L). **Source:** YUN NAN CAO KOU *Alpinia blepharocalyx* (seed: yield = 0.00032%). **Ref:** 3042.

**14501 Methyl-24-hydroxy-11-deoxoglycyrrhetate**

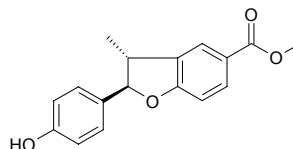
$C_{31}H_{50}O_4$  (486.74). mp 263~264°C. **Source:** GAN CAO *Glycyrrhiza uralensis*. **Ref:** 6.

**14502 Methyl 2-hydroxy-3,4-dimethoxy benzoate**

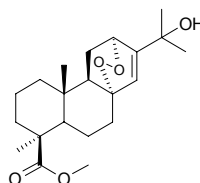
$C_{10}H_{12}O_5$  (212.20). **Source:** JIANG ZHEN XIANG *Dalbergia odorifera*. **Ref:** 1266.

**14503 Methyl-(7R,8R)-4-hydroxy-8',9'-dinor-4',7-epoxy-8,3'-neolignan-7'-ate**

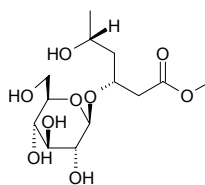
$C_{17}H_{16}O_4$  (284.31). Yellow oil,  $[\alpha]_D^{21} = +30.1^\circ$  ( $c = 0.08$ , MeOH). **Source:** *Piper regnelli* (root). **Ref:** 2358.

**14504 Methyl 15-hydroxy-8α,12α-epidioxiabiet-13-en-19-oate**

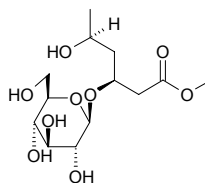
$C_{21}H_{32}O_5$  (364.49). Colorless oil,  $[\alpha]_D = +72.4^\circ$  ( $c = 0.46$ , CHCl<sub>3</sub>). **Pharm:** Cytotoxic (A549,  $IC_{50} > 5\mu\text{g/mL}$ , control Cycloheximide,  $IC_{50} = 0.1\mu\text{g/mL}$ ; H116,  $IC_{50} > 5\mu\text{g/mL}$ , Cycloheximide,  $IC_{50} = 0.1\mu\text{g/mL}$ ; PSN1,  $IC_{50} > 5\mu\text{g/mL}$ , Cycloheximide,  $IC_{50} = 0.01\mu\text{g/mL}$ ; T98G,  $IC_{50} > 5\mu\text{g/mL}$ , Cycloheximide,  $IC_{50} = 2.5\mu\text{g/mL}$ ; SKBR3,  $IC_{50} > 5\mu\text{g/mL}$ , Cycloheximide,  $IC_{50} = 0.05\mu\text{g/mL}$ ). **Source:** FEI NI JI CI BAI *Juniperus phoenicea* (leaf), XIANG CI BAI FEI ZHOU BIAN ZHONG *Juniperus thurifera* var. *africana* (leaf). **Ref:** 3851.

**14505 Methyl-(3R,5R)-5-hydroxy-3-(β-D-glucopyranosyloxy)-hexanoate**

$C_{13}H_{24}O_9$  (324.33). Oil,  $[\alpha]_D^{24} = -27.8^\circ$  ( $c = 1.15$ , MeOH). **Source:** MO JUE *Hymenophyllum barbatum*. **Ref:** 4178.

**14506 Methyl-(3S,5S)-5-hydroxy-3-(β-D-glucopyranosyloxy) hexanoate**

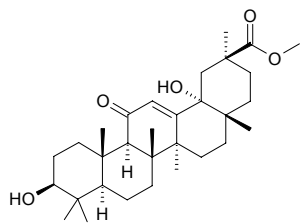
$C_{13}H_{24}O_9$  (324.33). **Source:** ZI QI *Osmunda japonica*. **Ref:** 660.



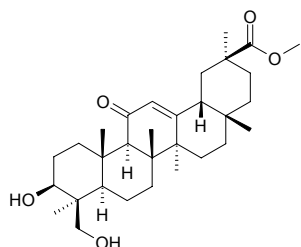


**14507 Methyl 18 $\alpha$ -hydroxyglycyrrhetate**

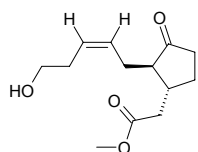
C<sub>31</sub>H<sub>48</sub>O<sub>5</sub> (500.73). White acicular crystals (95%ethanol), mp 302~303°C, 284~290°C. Source: GAN CAO *Glycyrrhiza uralensis*. Ref: 6, 82, 660.

**14508 Methyl-24-hydroxyglycyrrhetate**

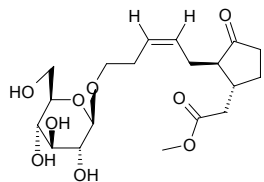
C<sub>31</sub>H<sub>48</sub>O<sub>5</sub> (500.73). mp 247~248°C. Source: GAN CAO *Glycyrrhiza uralensis*. Ref: 6.

**14509 (1R,2R)-Methyl-5'-hydroxyjasmonate**

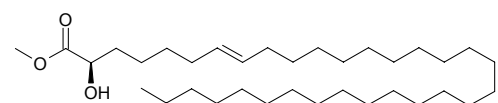
C<sub>13</sub>H<sub>20</sub>O<sub>4</sub> (240.30). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>21</sup> = -49°. Source: SHE XIANG CAO *Thymus vulgaris*. Ref: 2592.

**14510 (1R,2R)-Methyl-5'-hydroxyjasmonate 5'-O- $\beta$ -D-glucopyranoside**

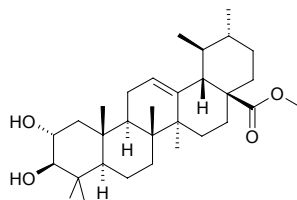
C<sub>19</sub>H<sub>30</sub>O<sub>9</sub> (402.45). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>21</sup> = -55°. Source: SHE XIANG CAO *Thymus vulgaris*, JU YU *Helianthus tuberosus*. Ref: 2592.

**14511 Methyl-2 $\beta$ (2S)-hydroxyl-7(E)-tritriacontenoate**

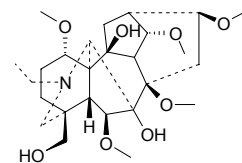
C<sub>34</sub>H<sub>66</sub>O<sub>3</sub> (522.90). Colorless powder. [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -120° (c = 0.01, CDCl<sub>3</sub>). Pharm: Tyrosinase inhibitor (IC<sub>50</sub> = (1.36±0.12) $\mu$ mol/L, control Kojic acid IC<sub>50</sub> = (16.67±0.52) $\mu$ mol/L, L-Mimosine IC<sub>50</sub> = (3.68±0.02) $\mu$ mol/L). Source: FEN ZHI PO JU *Amberboa ramosa*. Ref: 2531.

**14512 Methyl 2 $\alpha$ -hydroxyursa-28-oate**

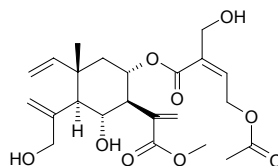
C<sub>31</sub>H<sub>50</sub>O<sub>4</sub> (486.74). Source: JIN YING ZI *Rosa laevigata*, XIA KU CAO *Prunella vulgaris*. Ref: 1326, 2508.

**14513 8-Methyl-10-hydroxylycoctonine**

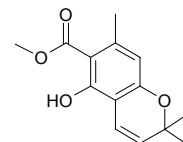
C<sub>26</sub>H<sub>43</sub>NO<sub>8</sub> (497.63). Colorless powder. Source: ZI HUA GAO WU TOU *Aconitum excelsum*. Ref: 689.

**14514 Methyl 8 $\alpha$ -(Z-2-hydroxymethyl-4-acetoxybut-2-enyloxy)-6 $\alpha$ ,15-dihydroxyelema-1,3,11(13)-trien-12-oate**

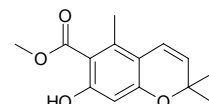
C<sub>23</sub>H<sub>32</sub>O<sub>9</sub> (452.51). Colorless oil, [ $\alpha$ ]<sub>D</sub> = +11.5° (c = 1.2, CHCl<sub>3</sub>). Source: CU CAO SHI CHE JU *Centaurea aspera* ssp. *aspera* (aerial parts), XIA YE CU CAO SHI CHE JU *Centaurea aspera* subsp. *stenophylla* (aerial parts). Ref: 5300.

**14515 Methyl 5-hydroxy-7-methyl-2,2-dimethyl-2H-1-chromene-6-carboxylate**

C<sub>14</sub>H<sub>16</sub>O<sub>4</sub> (248.28). Amorphous solid. Pharm: Antifungal (*Cladosporium sphaerospermum*, 100 $\mu$ g, weak activity; *Cladosporium cladosporioides*, 100 $\mu$ g, weak activity). Source: *Peperomia villipetiola* (stem). Ref: 5256.

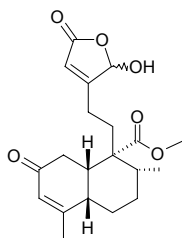
**14516 Methyl 7-hydroxy-5-methyl-2,2-dimethyl-2H-1-chromene-6-carboxylate**

C<sub>14</sub>H<sub>16</sub>O<sub>4</sub> (248.28). Amorphous solid. Pharm: Antifungal inactive (*Cladosporium sphaerospermum*, 100 $\mu$ g; *Cladosporium cladosporioides*, 100 $\mu$ g). Source: *Peperomia villipetiola* (stem). Ref: 5256.



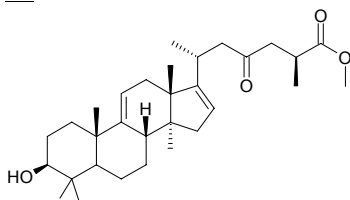
**14517 (-)-Methyl 16-hydroxy-19-nor-2-oxo-cis-cleroda-3,13-dien-15,16-olide-20-oate**

$C_{20}H_{26}O_6$  (362.43).  $[\alpha]_D = -8.1^\circ$  ( $c = 0.3$ ,  $CHCl_3$ ). Source: GE LUN BI YA BA DOU *Croton schiedeanus* (aerial parts). Ref: 4447.



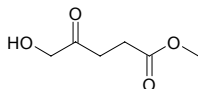
**14518 Methyl (25R)-3β-hydroxy-23-oxo-9,16-lanostadien-26-oate**

$C_{31}H_{48}O_4$  (484.73). White powder, mp 180~182°C,  $[\alpha]_D^{25} = -124.2^\circ$  ( $c = 0.0054$ ,  $CHCl_3$ ). Source: MEI LI TENG HUANG *Garcinia speciosa* (bark). Ref: 3762.



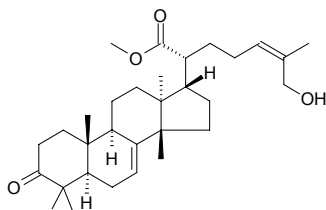
**14519 Methyl 5-hydroxy-4-oxopentanoate**

$C_6H_{10}O_4$  (146.14). Source: ER RUI HE LIAN DOU *Drymaria diandra* [Syn. *Drymaria cordata* ssp. *diandra*] (whole herb: yield = 0.00021%dw). Ref: 4758.



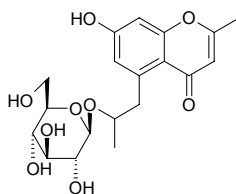
**14520 Methyl(24Z)-26-hydroxy-3-oxo-7,24-tirucalladienoate**

Methyl(24Z)-26-hydroxy-3-oxo-7,24-euphadienoate [121063-68-1]  $C_{31}H_{48}O_4$  (484.73). Source: KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. Ref: 12.



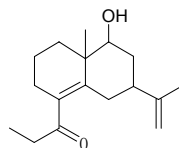
**14521 2-Methyl-5-(2'-hydroxypropyl)-7-hydroxy-chromone-2'-O-β-D-glucopyranoside**

$C_{19}H_{24}O_9$  (396.40). White powder, mp 232~233°C. Source: TIE DAO MU *Cassia siamea*. Ref: 2459.



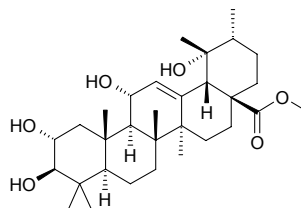
**14522 Methyl 9-hydroxyselina-4,11-dien-14-oate**

$C_{17}H_{26}O_2$  (262.40). Source: CHEN XIANG *Aquilaria agallocha*. Ref: 13.



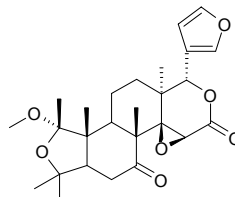
**14523 Methyl 11α-hydroxytormentate**

$C_{31}H_{50}O_6$  (518.74). Source: JIN YING ZI *Rosa laevigata*. Ref: 1326.



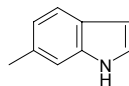
**14524 1-O-Methylchangsensin**

$C_{26}H_{34}O_7$  (458.56). Colorless needles,  $[\alpha]_D^{25} = +20.0^\circ$  ( $c = 1.2$ , MeOH). Source: SU DA QI GAN JU *Citrus sudachii* (seed). Ref: 3532.



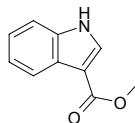
**14525 6-Methyl indole**

[3420-02-8]  $C_9H_9N$  (131.18). Source: ROU CONG RONG *Cistanche deserticola*. Ref: 2.



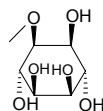
**14526 Methyl indole-3-carboxylate**

$C_{10}H_9NO_2$  (175.19). Source: TAI WAN PU GONG YING *Taraxacum formosanum* (fresh root). Ref: 4488.



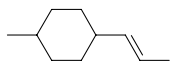
**14527 D-1-O-Methyl-muco-inositol**

$C_7H_{14}O_6$  (194.19). Source: SAN JIAN SHAN *Cephalotaxus fortunei*. Ref: 1418.

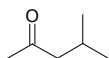


**14528 1-Methyl-4-isoallyl-cyclohexane**

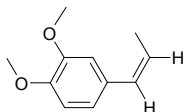
$C_{10}H_{18}$  (138.25). Source: SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. Ref: 2.

**14529 Methyl isobutyl ketone**

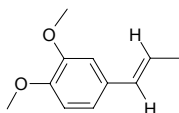
[108-10-1]  $C_6H_{12}O$  (100.16). Source: SHENG JIANG *Zingiber officinale*. Ref: 2.

**14530 cis-Methyl iso Eugenol**

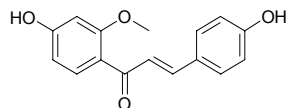
1,2-Dimethoxy-4-(1-cis-propenyl)-benzene  $C_{11}H_{14}O_2$  (178.23). White oil, bp 138~140°C/12mmHg. Pharm: Inhibitory activity against NFAT Transcription ( $IC_{50} > 100\mu\text{mol/L}$ , positive control Cyclosporin A,  $IC_{50} = (0.29\pm 0.01)\mu\text{mol/L}$ ). Source: BAI CHANG *Acorus calamus*, HUA CHA BIAO *Ribes fasciculatum* var. *chinense*. Ref: 6, 2536.

**14531 trans-Methyl iso Eugenol**

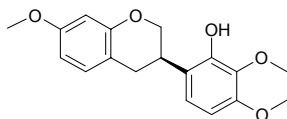
[6379-72-2]  $C_{11}H_{14}O_2$  (178.23). mp 16~17°C, bp 143~144°C/11mmHg. Pharm: Antibacterial (*Staphylococcus aureus*, MIC = 0.4mg/mL; *Diplococcus pneumoniae*, MIC = 0.6mg/mL); antihistamine; antispasmodic; antitussive (dispels phlegm); sedative; hypnotic. Source: BAI CHANG *Acorus calamus*, JIN QIAN PU *Acorus gramineus*, NAN HE SHI *Daucus carota*, OU XI XIN *Asarum europaeum*, ROU DOU KOU *Myristica fragrans*, YE XIANG MAO *Cymbopogon goeringii*. Ref: 6, 658.

**14532 2'-O-Methyl isoliquiritigenin**

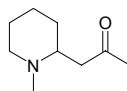
$C_{16}H_{14}O_4$  (270.29). Source: JIANG ZHEN XIANG *Dalbergia odorifera*. Ref: 1289.

**14533 7-O-Methyl isomucronulatol**

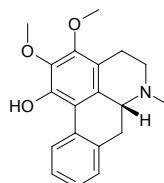
[137217-83-5]  $C_{18}H_{20}O_5$  (316.36). Source: MENG GU HUANG QI *Astragalus mongholicus*. Ref: 1328.

**14534 Methyl isopelletierine**

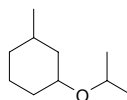
$C_9H_{17}NO$  (155.24). bp ( $\pm$ ) 96~98°C/13mmHg. Source: HENG GEN FEI CAI *Sedum kamschaticum*, SHI LIU GEN *Punica granatum*, SHI LIU PI *Punica granatum*, SHI ZHI JIA *Sedum sarmentosum*. Ref: 6, 1218, 1219, 1220, 1221.

**14535 (-)-N-Methylisopiline**

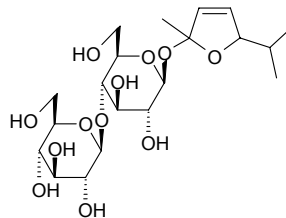
$C_{19}H_{21}NO_3$  (311.38). Source: YOU GOU YING ZHAO *Artabotrys uncinatus* (stem). Ref: 3083.

**14536 1-Methyl-3-isopropoxy cyclohexane**

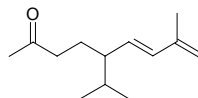
$C_{10}H_{20}O$  (156.27). Source: YI ZHI REN *Alpinia oxyphylla*. Ref: 1404.

**14537 1 $\alpha$ -O-[2'-(2'-Methyl-5'-isopropyl,3'-en-bihydrofuryl)]- $\beta$ -D-lactose**

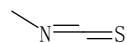
$C_{20}H_{34}O_{12}$  (466.49). White amorphous powder. Source: WU HUA GUO *Ficus carica*. Ref: 814.

**14538 8-Methyl-5-isopropyl-6,8-nonadiene-2-one**

$C_{12}H_{22}O$  (194.32). Source: HUA JIAO *Zanthoxylum bungeanum*. Ref: 1340.

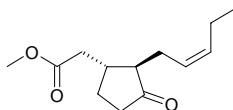
**14539 Methyl isothiocyanate**

[556-61-6]  $C_2H_3NS$  (73.12). mp 35.93°C, bp 119°C/758mmHg. Source: JIE ZI *Brassica juncea*. Ref: 6.

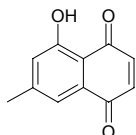


**14540 cis-Methyl jasmonate**

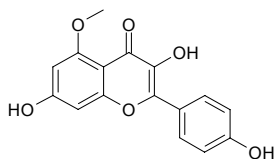
[20073-13-6] C<sub>13</sub>H<sub>20</sub>O<sub>3</sub> (224.30). Source: MO LI HUA *Jasminum sambac*.  
Ref: 1483.

**14541 7-Methyl juglone**

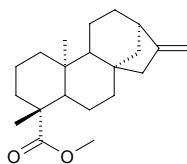
[14787-38-3] C<sub>11</sub>H<sub>8</sub>O<sub>3</sub> (188.18). Pharm: Antifungal (*Cladosporium cucumerinum*); molluscicide (kills shellfish). Source: JUN QIAN ZI *Diospyros lotus*, *Drosera* sp. Ref: 6, 658.

**14542 5-Methyl kaempferol**

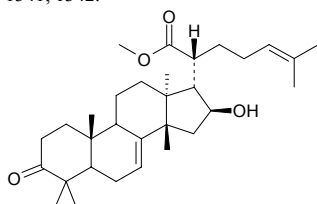
C<sub>16</sub>H<sub>12</sub>O<sub>6</sub> (300.27). Source: YING SHAN HONG *Rhododendron mucronulatum*. Ref: 6.

**14543 (-)-Methyl kaur-16-en-19-oate**

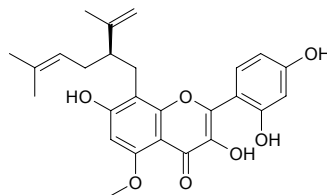
C<sub>21</sub>H<sub>32</sub>O<sub>2</sub> (316.49). Transparent oil, [α]<sub>D</sub><sup>20</sup> = -91.9° (c = 1.0, CHCl<sub>3</sub>). Pharm: Na<sup>+</sup>,K<sup>+</sup>-ATP inhibitor (crude enzyme Na<sup>+</sup>,K<sup>+</sup>-ATPase from rat brain, IC<sub>50</sub> = 550 μmol/L). Source: GUANG YE BA DOU *Croton oblongifolius* [Syn. *Croton laevigatus*] (semi-synthetic derivative). Ref: 5404.

**14544 Methyl kulonate**

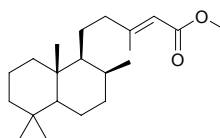
[22611-37-6] C<sub>31</sub>H<sub>48</sub>O<sub>4</sub> (484.73). Source: KU LIAN PI *Melia azedarach*. Ref: 1341, 1342.

**14545 5-O-Methyl kushenol C**

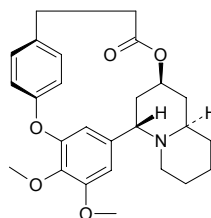
C<sub>26</sub>H<sub>28</sub>O<sub>7</sub> (452.51). Source: KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. Ref: 1333.

**14546 Methyl labd-13E-en-15-oate**

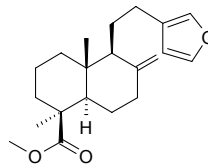
C<sub>21</sub>H<sub>30</sub>O<sub>2</sub> (320.52). Colorless gum. Source: *Colophospermum mopane* (bark and seed). Ref: 5147.

**14547 Methyl lagerine**

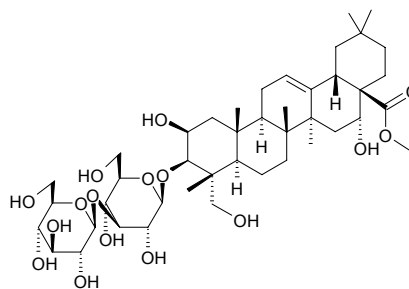
[33033-88-4] C<sub>26</sub>H<sub>31</sub>NO<sub>5</sub> (437.54). Source: ZI WEI HUA *Lagerstroemia indica*. Ref: 6.

**14548 Methyl lambertianate**

C<sub>21</sub>H<sub>30</sub>O<sub>3</sub> (330.47). Source: HAI SONG ZI *Pinus koraiensis*. Ref: 6.

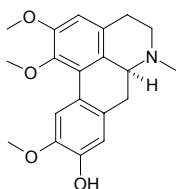
**14549 Methyl 3-O-β-laminaribiosyl polygalcate**

C<sub>43</sub>H<sub>70</sub>O<sub>16</sub> (843.03). Source: JIE GENG *Platycodon grandiflorum*. Ref: 1381.

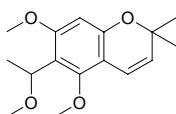


**14550 (+)-N-Methyl laurotetanine**

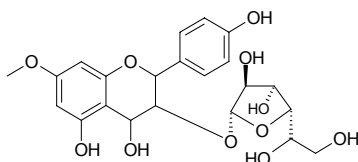
$C_{20}H_{23}NO_4$  (341.41). Source: YAN HU SUO *Corydalis yanhusuo* [Syn. *Corydalis turtschaninovii* f. *Yanhusuo*]. Ref: 2.

**14551 Methyl leptol B**

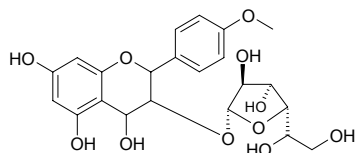
$C_{16}H_{22}O_4$  (278.35). Colorless columnar crystals (acetone),  $[\alpha]_D^{18} = +24.3^\circ$  ( $c = 0.339$ ,  $Me_2CO$ ). Source: SAN CHA KU *Evodia leptia* [Syn. *Ilex leptia*]. Ref: 393.

**14552 7-O-Methyl leucopelargonidin-3-mono-glucufuranoside**

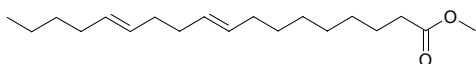
$C_{22}H_{26}O_{11}$  (466.45). Source: SHAN FAN YE *Symplocos caudata*. Ref: 6.

**14553 4'-O-Methyl leucopelargonidin-3-mono-glucufuranoside**

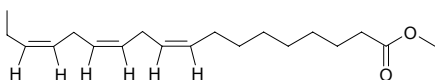
$C_{22}H_{26}O_{11}$  (466.45). Source: SHAN FAN YE *Symplocos caudata*. Ref: 6.

**14554 Methyl linoleate**

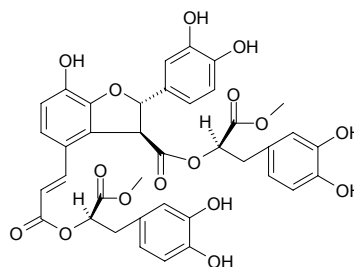
$C_{19}H_{34}O_2$  (294.48). Source: CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*], JIN YIN HUA *Lonicera japonica*. Ref: 2, 660.

**14555 Methyl linolenate**

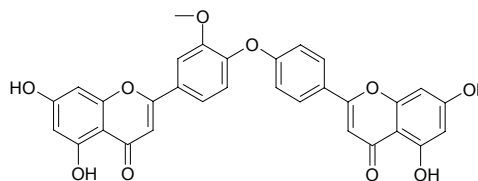
(Z,Z,Z)-9,12,15-Octadecatrienoic acid methyl ester; Linolenic acid methyl ester [301-00-8]  $C_{19}H_{32}O_2$  (292.47). bp 177~180°C/3.5mmHg. Source: KUN BU *Laminaria japonica*. Ref: 6.

**14556 Methyl lithospermate B**

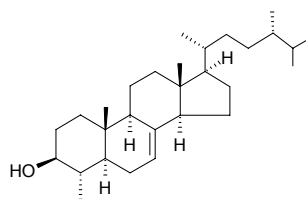
$C_{38}H_{34}O_{16}$  (746.69). Pharm: Antioxidant (DPPH scavenger,  $IC_{50} = 0.0506$ mmol/L, control Propyl gallate,  $IC_{50} = 0.03$ mol/L; superoxide radical inhibitor,  $IC_{50} = 0.113$ mmol/L, control Propyl gallate,  $IC_{50} = 0.106$ mmol/L; iron chelating assay,  $IC_{50} = 0.053$ mmol/L, control Propyl gallate,  $IC_{50} = 0.064$ mmol/L). Source: MING XIAN HUA ZHU CHANG ZHU LIU LI CAO *Lindlofia stylosa* (aerial part). Ref: 4533.

**14557 3'-O-Methyl loniflavone**

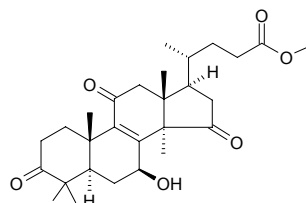
5,5',7,7''-Tetrahydroxy 3'-methoxy 4',4'''-biflavonyl ether  $C_{31}H_{20}O_{10}$  (552.50). Yellowish powder, mp 242~244°C. Source: JIN YIN HUA *Lonicera japonica* (leaf). Ref: 5335.

**14558 24-Methyllophenol**

4,24-Dimethyl cholest-7-en-3-ol [33903-17-2]  $C_{29}H_{50}O$  (414.72). Source: GOU QI ZI *Lycium chinense*. Ref: 1371, 1372, 1373, 1374.

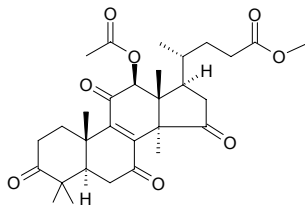
**14559 Methyl lucidenate A**

$C_{28}H_{40}O_6$  (472.63). Pharm: EBV-EA activation inhibitor (Raji cells *in vitro*, TPA-induced,  $IC_{50} = 287$ mol ratio/32pmol TPA, control  $\beta$ -Carotene,  $IC_{50} = 400$ mol ratio/32pmol TPA). Source: LING ZHI *Ganoderma lucidum* (dried sporocarp; yield = 0.019%dw) Ref: 4737.

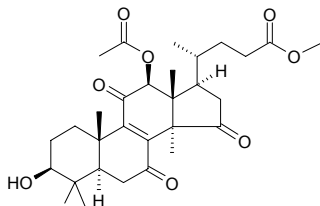


**14560 Methyl lucidenate D<sub>2</sub>**

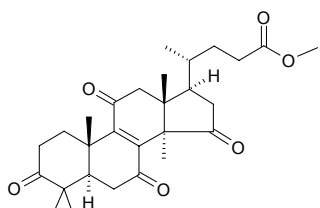
C<sub>30</sub>H<sub>40</sub>O<sub>8</sub> (528.65). **Pharm:** EBV-EA activation inhibitor (Raji cells *in vitro*, TPA-induced, IC<sub>50</sub> = 290mol ratio/32pmol TPA, control β-Carotene, IC<sub>50</sub> = 400mol ratio/32pmol TPA). **Source:** LING ZHI *Ganoderma lucidum* (dried sporocarp: yield = 0.0022%dw). **Ref:** 4737.

**14561 Methyl lucidenate E<sub>2</sub>**

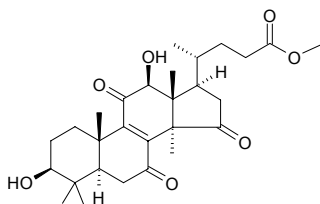
C<sub>30</sub>H<sub>42</sub>O<sub>8</sub> (530.66). **Pharm:** EBV-EA activation inhibitor (Raji cells *in vitro*, TPA-induced, IC<sub>50</sub> = 288mol ratio/32pmol TPA, control β-Carotene, IC<sub>50</sub> = 400mol ratio/32pmol TPA). **Source:** LING ZHI *Ganoderma lucidum* (dried sporocarp: yield = 0.0092%dw). **Ref:** 4737.

**14562 Methyl lucidenate F**

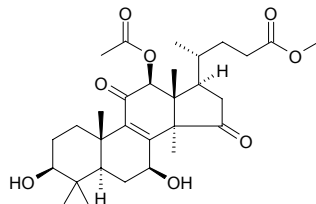
C<sub>28</sub>H<sub>38</sub>O<sub>6</sub> (470.61). Pale yellow needles (MeOH), mp 205–207°C, [α]<sub>D</sub> = +120.0° (c = 0.05, CHCl<sub>3</sub>). **Pharm:** EBV-EA activation inhibitor (Raji cells *in vitro*, TPA-induced, IC<sub>50</sub> = 285mol ratio/32pmol TPA, control β-Carotene, IC<sub>50</sub> = 400mol ratio/32pmol TPA)<sup>[4737]</sup>. **Source:** LING ZHI *Ganoderma lucidum* (dried sporocarp: yield = 0.0069%dw)<sup>[4737]</sup>. **Ref:** 3081, 4737.

**14563 Methyl lucidenate L**

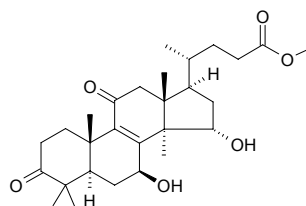
C<sub>28</sub>H<sub>40</sub>O<sub>7</sub> (488.63). **Pharm:** EBV-EA activation inhibitor (Raji cells *in vitro*, TPA-induced, IC<sub>50</sub> = 275mol ratio/32pmol TPA, control β-Carotene, IC<sub>50</sub> = 400mol ratio/32pmol TPA). **Source:** LING ZHI *Ganoderma lucidum* (dried sporocarp: yield = 0.0011%dw). **Ref:** 4737.

**14564 Methyl lucidenate P**

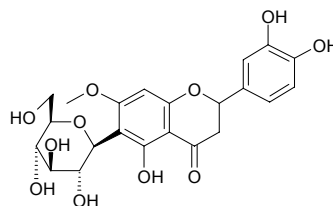
C<sub>30</sub>H<sub>44</sub>O<sub>8</sub> (532.68). Colorless needles (acetone–MeOH), mp 83–85°C, [α]<sub>D</sub><sup>25</sup> = +77.6° (c = 0.41, CHCl<sub>3</sub>). **Pharm:** EBV-EA activation inhibitor (Raji cells *in vitro*, TPA-induced, IC<sub>50</sub> = 293mol ratio/32pmol TPA, control β-Carotene, IC<sub>50</sub> = 400mol ratio/32pmol TPA). **Source:** LING ZHI *Ganoderma lucidum* (dried sporocarp: yield = 0.015%dw). **Ref:** 4737.

**14565 Methyl lucidenate Q**

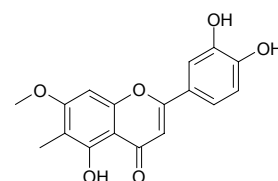
C<sub>28</sub>H<sub>42</sub>O<sub>6</sub> (474.64). Colorless needles (acetone–MeOH), mp 130–131°C, [α]<sub>D</sub><sup>25</sup> = +58.5° (c = 0.13, CHCl<sub>3</sub>). **Pharm:** EBV-EA activation inhibitor (Raji cells *in vitro*, TPA-induced, IC<sub>50</sub> = 283mol ratio/32pmol TPA, control β-Carotene, IC<sub>50</sub> = 400mol ratio/32pmol TPA). **Source:** LING ZHI *Ganoderma lucidum* (dried sporocarp: yield = 0.066%dw). **Ref:** 4737.

**14566 7-O-Methyl luteolin-6-C-β-D-glucoside**

C<sub>22</sub>H<sub>24</sub>O<sub>11</sub> (464.43). **Source:** QING YE DAN *Swertia mileensis*. **Ref:** 1358.

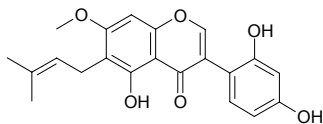
**14567 6-C-Methyl luteolin 7-methyl ether**

C<sub>17</sub>H<sub>14</sub>O<sub>6</sub> (314.30). Yellow needle crystals (CHCl<sub>3</sub>–MeOH), mp 297–298°C. **Pharm:** Antibacterial (oral pathogens: *Streptococcus mutans*, MIC = 250μg/mL, control Chlorhexidine gluconate, MIC = 1.25μg/mL; *Fusobacterium nucleatum*, MIC = 375μg/mL, Chlorhexidine gluconate, MIC = 2.5μg/mL). **Source:** BAI MAO GEN<sup>(4)</sup> *Hydrastis canadensis* (root). **Ref:** 5418.

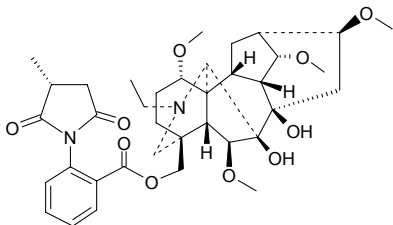


**14568 7-O-Methyluteone**

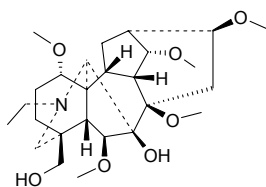
5,2',4'-Trihydroxy-7-methoxy-6-(3-methylbut-2-enyl)isoflavone  $C_{21}H_{20}O_6$  (368.39). Amorphous solid. Source: KEN NI YA CI TONG *Erythrina burttii* (stem cortex). Ref: 3387.

**14569 Methyllycaconitine**

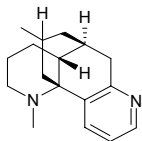
[21019-30-7]  $C_{37}H_{50}N_2O_{10}$  (682.82). mp 128°C. Pharm: Neuromuscular blocker. Source: E MEI CUI QUE HUA *Delphinium omeiense*, GAO FEI YAN CAO *Delphinium elatum*, CUI QUE HUA *Delphinium grandiflorum*. Ref: 6, 658, 2190.

**14570 8-Methyllycoctonine**

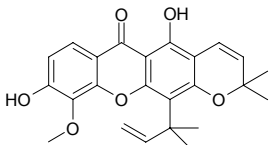
$C_{26}H_{43}NO_7$  (481.64). Colorless powder, mp 120~123°C Source: ZI HUA GAO WU TOU *Aconitum excelsum*. Ref: 689.

**14571 N-Methyllycodine**

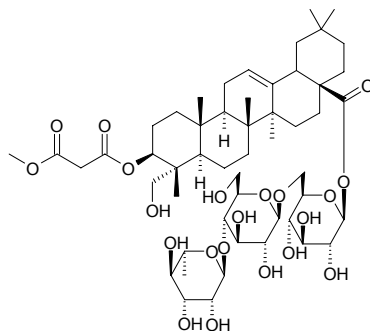
$C_{17}H_{24}N_2$  (256.39). Source: GUO JIANG LONG *Lycopodium complanatum*. Ref: 1410.

**14572 10-O-Methylmacluraxanthone**

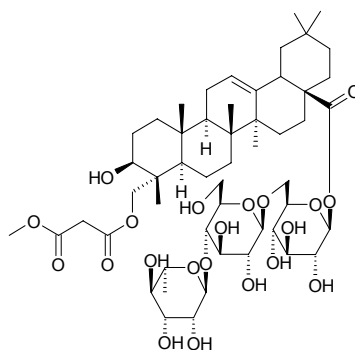
$C_{24}H_{24}O_6$  (408.46). Pharm: Cytotoxic ( $P_{388}$   $ED_{50} = 3.49\mu\text{g/mL}$ , control Mithramycin,  $ED_{50} = 0.06\mu\text{g/mL}$ , HT29  $ED_{50} = 5.25\mu\text{g/mL}$ , control Mithramycin,  $ED_{50} = 0.08\mu\text{g/mL}$ ). Source: TAI WAN LV DAO TENG HUANG *Garcinia limii*. Ref: 4094.

**14573 3-O-methyl malonylhederagenin 28-O- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside**

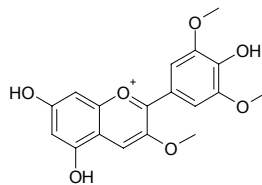
$C_{52}H_{82}O_{21}$  (1043.22). White powder, mp 168~170°C. Source: LUAN YE YIN LIAN HUA *Anemone begoniifolia*. Ref: 862.

**14574 23-O-Methyl malonylhederagenin 28-O- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside**

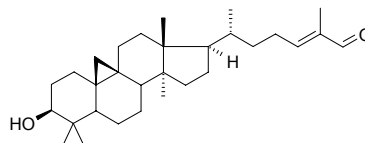
$C_{52}H_{82}O_{21}$  (1043.22). White powder, mp 175~178°C. Source: LUAN YE YIN LIAN HUA *Anemone begoniifolia*. Ref: 862.

**14575 3-O-Methyl malvidin**

$C_{18}H_{17}O_7^+$  (345.33). Source: *Vaccinium ashei* (fruit). Ref: 4240.

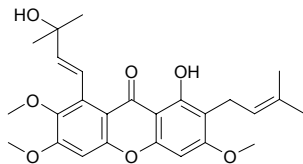
**14576 14-Methylmangiferolic aldehyde**

$C_{30}H_{48}O_2$  (440.72). mp 66~70°C. Source: MANG GUO SHU PI *Mangifera indica*. Ref: 6.

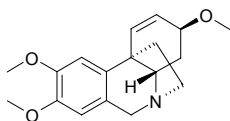


**14577 6-O-Methylmangostanin**

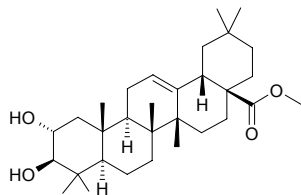
$C_{26}H_{30}O_7$  (454.52). Pale yellow gum,  $[\alpha]_D^{20} = +14.0^\circ$  ( $c = 0.43$ ,  $CHCl_3$ ). Source: DAO NIAN ZI *Garcinia mangostana*. Ref: 1964.

**14578 O-Methylmaritidine**

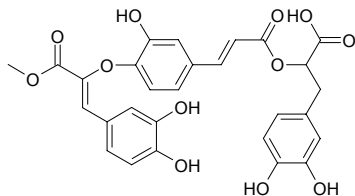
$C_{18}H_{23}NO_3$  (301.39). Source: *Cyrtanthus falcatus*. Ref: 4952.

**14579 Methyl maslinate**

$C_{31}H_{50}O_4$  (486.74). Source: PI PA YE *Eriobotrya japonica*. Ref: 1325.

**14580 Methyl melitrate A**

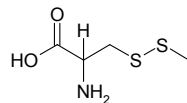
$C_{28}H_{24}O_{12}$  (552.50). Freeze-dried light-brown powder,  $[\alpha]_D^{20} = +40.5^\circ$  ( $c = 0.2$ , MeOH). Source: YAO YONG DAN SHEN *Salvia officinalis*. Ref: 2388.

**14581 Methyl mercaptan**

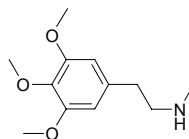
[74-93-1]  $CH_4S$  (48.11). mp  $-123^\circ C$ , bp  $5.8-6.2^\circ C$ . Pharm: Antifungal; Insecticidal. Source: LAI FU ZI *Raphanus sativus*, XIANG YE *Pelargonium graveolens*, LAI FU *Raphanus sativus*. Ref: 6, 658.

**14582 S-Methyl mercapto-L-cysteine**

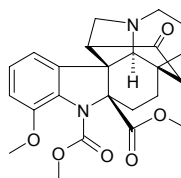
$C_4H_9NO_2S_2$  (167.25). Source: DA SUAN *Allium sativum*. Ref: 1393.

**14583 N-Methylmescaline**

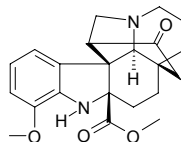
$C_{12}H_{19}NO_3$  (225.29). Pharm: Causes mental illness; similar action with mescaline. Source: AN LU LONG SHE LAN *Lophophora williamsii*, LUO TUO CI *Alhagi pseudalhagi*. Ref: 658.

**14584 Methyl 12-methoxychanofrucosinate**

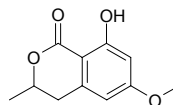
$C_{24}H_{28}N_2O_6$  (440.50). Source: HUANG HONG SE RUI MU *Kopsia flavida* (leaf). Ref: 5157.

**14585 Methyl 12-methoxy-N7-decarbomethoxychanofrucosinate**

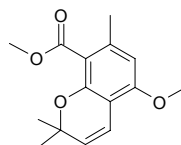
$C_{22}H_{26}N_2O_4$  (382.46). Source: HUANG HONG SE RUI MU *Kopsia flavida* (leaf). Ref: 5157.

**14586 3-Methyl-6-methoxy-8-hydroxy-3,4-dihydroisocoumarin**

$C_{11}H_{12}O_4$  (208.22). mp  $75-76^\circ C$ . Source: HU LUO BO *Daucus carota* var. *sativa*. Ref: 6.

**14587 Methyl 5-methoxy-7-methyl-2,2-dimethyl-2H-1-chromene-8-carboxylate**

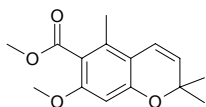
$C_{15}H_{18}O_4$  (262.31). Oil. Pharm: Antifungal (*Cladosporium sphaerospermum*, 100µg, weak activity; *Cladosporium cladosporioides*, 100µg, weak activity). Source: *Peperomia villipetiola* (stem). Ref: 5256.



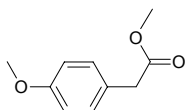


**14588 Methyl 7-methoxy-5-methyl-2,2-dimethyl-2H-1-chromene-6-carboxylate**

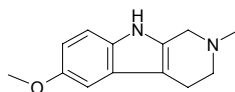
$C_{15}H_{18}O_4$  (262.31). Oil. **Pharm:** Antifungal (*Cladosporium sphaerospermum*, 100 $\mu$ g, weak activity; *Cladosporium cladosporioides*, 100 $\mu$ g, weak activity). **Source:** *Peperomia villipetiola* (stem). **Ref:** 5256.

**14589 Methyl 4-methoxyphenylacetate**

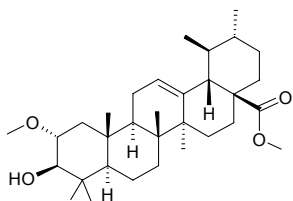
$C_{10}H_{12}O_3$  (180.21). Colorless liquid. **Source:** *Gloeophyllum odoratum*. **Ref:** 3972.

**14590 2-Methyl-6-methoxy-1,2,3,4-tetrahydro- $\beta$ -carboline**

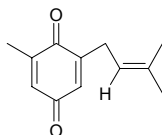
$C_{13}H_{16}N_2O$  (216.29). **Source:** NI BO ER LV RONG HAO *Meconopsis nepaulensis*. **Ref:** 1513.

**14591 Methyl 2 $\alpha$ -methoxyursolate**

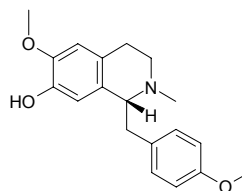
$C_{32}H_{52}O_4$  (500.77). **Source:** JIN YING ZI *Rosa laevigata*. **Ref:** 1326.

**14592 2-Methyl-6-(3-methyl-2-butenyl)benzo-1,4-quinone**

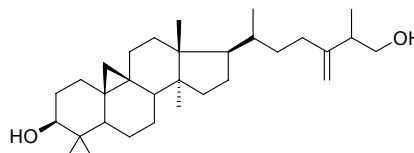
$C_{12}H_{14}O_2$  (190.24). **Pharm:** Antibacterial (*Escherichia coli* ATCC 11775, MIC > 6250 $\mu$ g/mL, control Ciproflaxin, MIC = 0.63 $\mu$ g/mL; *Klebsiella pneumoniae* NCTC 9633, MIC > 6250 $\mu$ g/mL, Ciproflaxin, MIC = 0.20 $\mu$ g/mL; *Enterococcus faecalis* ATCC 29212, MIC = 39 $\mu$ g/mL, Ciproflaxin, MIC = 6.25 $\mu$ g/mL; *Staphylococcus aureus* ATCC 6538, MIC = 39 $\mu$ g/mL, Ciproflaxin, MIC = 0.31 $\mu$ g/mL; *Bacillus cereus* ATCC 11778, MIC = 18 $\mu$ g/mL, Ciproflaxin, MIC = 2.5 $\mu$ g/mL; *Staphylococcus epidermidis* ATCC 2223, MIC = 9.8 $\mu$ g/mL, Ciproflaxin, MIC = 1.25 $\mu$ g/mL; *Cryptococcus neoformans* ATCC 90112, MIC = 70 $\mu$ g/mL, Ciproflaxin, MIC = 2.5 $\mu$ g/mL); antifungal (*Candida albicans* ATCC10231, MIC = 130 $\mu$ g/mL; control Amphotericin B, MIC = 1.25 $\mu$ g/mL). **Source:** XUAN CHUI GEN NAI LA CAO *Gunnera perpensa* (leaf and stem). **Ref:** 5314.

**14593 4'-Methyl-N-methylcoclaurine**

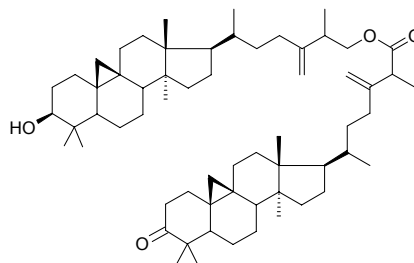
$C_{19}H_{23}NO_3$  (313.40). **Source:** LIAN ZI XIN *Nelumbo nucifera*. **Ref:** 1315.

**14594 14-Methyl-24-methylene-dihydromangiferodiol**

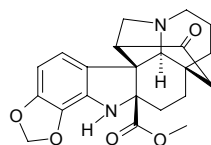
$C_{31}H_{52}O_2$  (456.76). **Source:** MANG GUO SHU PI *Mangifera indica*. **Ref:** 6.

**14595 (14-Methyl-24-methylene-dihydroman-giferodiol)-14-methyl-24-methylene dihydromangiferonate**

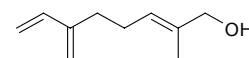
$C_{62}H_{98}O_4$  (907.47). **Source:** MANG GUO SHU PI *Mangifera indica*. **Ref:** 6.

**14596 Methyl 11,12-methylenedioxy-N<sub>1</sub>-decarbomethoxychanofrucosinate**

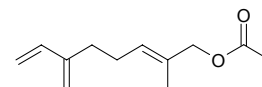
$C_{22}H_{24}N_2O_5$  (396.45). **Source:** HUANG HONG SE RUI MU *Kopsia flavida* (leaf). **Ref:** 5157.

**14597 2-Methyl-6-methylene-2,7-octadienol**

$C_{10}H_{16}O$  (152.24). **Source:** SHE XIANG CAO *Thymus vulgaris*. **Ref:** 6.

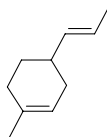
**14598 2-Methyl-6-methylene-2,7-octadienol acetate**

$C_{12}H_{18}O_2$  (194.28). **Source:** SHE XIANG CAO *Thymus vulgaris*. **Ref:** 6.

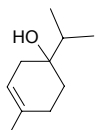


**14599 1-Methyl-4-methylethenylcyclohexene**

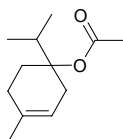
$C_{10}H_{16}$  (136.24). Source: WU WEI ZI *Schisandra chinensis*. Ref: 2.

**14600 4-Methyl-1-(1-methylethyl)-3-cyclohexene-1-ol**

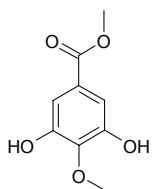
$C_{10}H_{18}O$  (154.25). Source: CHUAN XU DUAN *Dipsacus asperoides*. Ref: 1379.

**14601 4-Methyl-1-(1-methylethyl)-3-cyclohexen-1-ol-acetate**

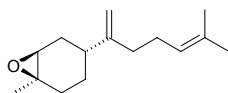
$C_{12}H_{20}O_2$  (196.29). Source: SHENG JIANG *Zingiber officinale*. Ref: 2.

**14602 Methyl-4-O-methylgallate**

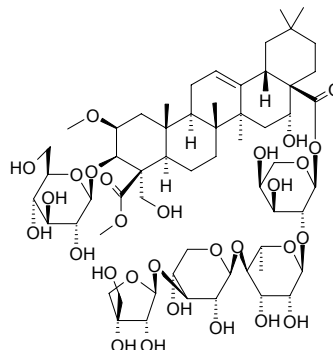
[24093-81-0]  $C_9H_{10}O_5$  (198.17). Colorless rhombic crystals (benzene), mp 136°C. Pharm: Cytotoxic (KB,  $ED_{50} = 8.62\mu\text{g/mL}$ ). Source: JIN QIAN KU YE CAO *Chrysosplenium grayanum*, WAN SHOU JU *Tagetes erecta*. Ref: 900.

**14603 1-Methyl-4-(5-methyl-1-methylenehex-4-enyl)-7-oxabicyclo [4.1.0]heptane**

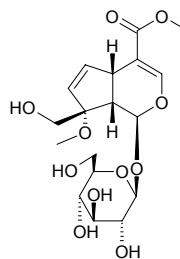
$C_{15}H_{24}O$  (220.36). Colorless oil,  $[\alpha]_D^{25} = +43.5^\circ$  ( $c = 2.7$ ,  $\text{CHCl}_3$ ). Pharm: Antimycobacterial (*Mycobacterium intracellulare*,  $IC_{50} = 10.0\mu\text{g/mL}$ , control Ciprofloxacin,  $IC_{50} = 0.25\mu\text{g/mL}$ ). Source: *Pimpinella aurea*. Ref: 5465.

**14604 Methyl 2-O-methyl platycogenate A**

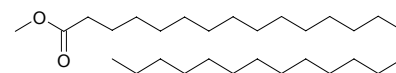
$C_{59}H_{94}O_{29}$  (1267.39). Source: JIE GENG *Platycodon grandiflorum*. Ref: 1382.

**14605 8-O-Methylmonotropein methyl ester**

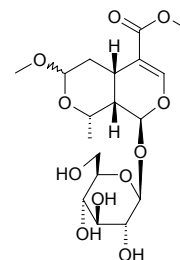
$C_{18}H_{26}O_{11}$  (418.40). Amorphous powder,  $[\alpha]_D^{25} = -114.1^\circ$  ( $c = 0.377$ , MeOH), artifact. Source: ZHI ZI *Gardenia jasminoides* [Syn. *Gardenia florida*] (leaf). Ref: 4408.

**14606 Methyl montanate**

$C_{29}H_{58}O_2$  (438.78). Source: QIN JIAO *Gentiana macrophylla*. Ref: 1357.

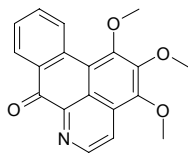
**14607 7-O-Methyl morroniside**

$C_{18}H_{28}O_{11}$  (420.42). Source: SHAN ZHU YU *Cornus officinalis* [Syn. *Macrocarpum officinale*]. Ref: 1346.

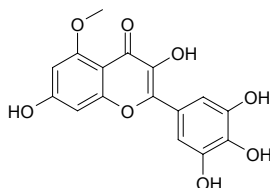


**14608 O-Methylmoschatoline**

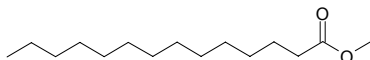
$C_{19}H_{15}NO_4$  (321.34). Source: YOU GOU YING ZHAO *Artabotrys uncinatus* (root, stem). Ref: 3083.

**14609 5-Methylmyricetin**

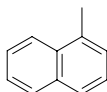
Myricetin-5-methyl ether  $C_{16}H_{12}O_8$  (332.27). Source: YING SHAN HONG *Rhododendron mucronulatum*, DU JUAN HUA *Rhododendron simsii*. Ref: 6.

**14610 Methyl myristate**

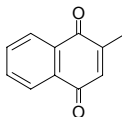
Methyl tetradecanoate [124-10-7]  $C_{15}H_{30}O_2$  (242.41). Source: DANG SHEN *Codonopsis pilosula*, QIANG HUO *Notopterygium incisum*. Ref: 2, 1354.

**14611 1-Methyl naphthalene**

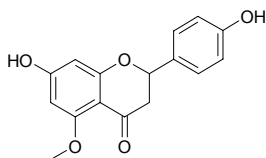
$C_{11}H_{10}$  (142.20). Source: XIA YE XIANG PU *Typha angustifolia*. Ref: 1402.

**14612 2-Methyl-1,4-naphthoquinone**

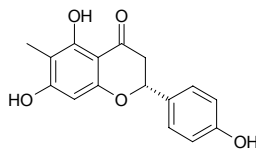
$C_{11}H_8O_2$  (172.19). Source: HU TAO REN *Juglans regia*. Ref: 1423.

**14613 5-O-Methylnaringenin**

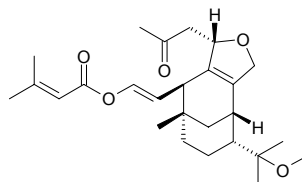
$C_{16}H_{14}O_5$  (286.29). Pharm: Cytotoxic inactive (Colon26-L5, HT1080, 100  $\mu$ mol/L). Source: YUN NAN CAO KOU *Alpinia blepharocalyx* (seed: yield = 0.0216%). Ref: 3042.

**14614 6-C-Methylnaringenin**

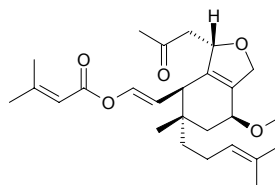
$C_{16}H_{14}O_5$  (286.29). Source: TAI WAN CU FEI *Cephalotaxus wilsoniana* (twig). Ref: 4253.

**14615 15-O-Methylnovibsanin F**

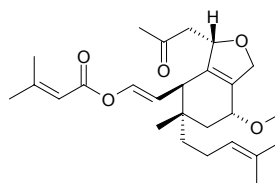
$C_{26}H_{38}O_5$  (430.59). Colorless paste,  $[\alpha]_D^{23} = +75.5^\circ$  ( $c = 0.12$ ,  $CHCl_3$ ). Source: RI BEN JIA MI *Viburnum awabuki*. Ref: 2530.

**14616 2-O-Methylnovibsanin H**

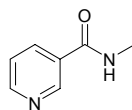
$C_{26}H_{38}O_5$  (430.59). Colorless oil,  $[\alpha]_D^{23} = +320.0^\circ$  ( $c = 0.22$ , alcohol). Source: RI BEN JIA MI *Viburnum awabuki*. Ref: 2530.

**14617 2-O-Methylnovibsanin I**

$C_{26}H_{38}O_5$  (430.59). Colorless paste,  $[\alpha]_D^{23} = +51.5^\circ$  ( $c = 0.28$ ,  $CHCl_3$ ). Source: RI BEN JIA MI *Viburnum awabuki*. Ref: 2530.

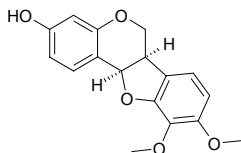
**14618 N'-Methyl nicotineamide**

$C_7H_8N_2O$  (136.15). Source: QUN DAI CAI *Undaria pinnatifida*. Ref: 1305.

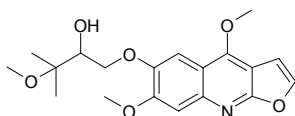


**14619 Methylnisoslin**

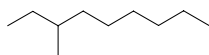
(-)-Methylnisoslin [73340-41-7]  $C_{17}H_{16}O_5$  (300.31). Colorless acicular crystals (hexane-ethyl acetate), mp 180–181°C,  $[\alpha]_D^{25} = -219^\circ$  ( $c = 0.465$ , chloroform). **Pharm:** Platelet aggregation inhibitor (due to arachidonic acid, 170  $\mu\text{mol/L}$ ). **Source:** JIANG ZHEN XIANG *Dalbergia odorifera*, MU XU *Medicago sativa*. **Ref:** 900, 1266.

**14620 Methylkolbisine**

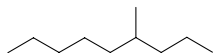
$C_{19}H_{23}NO_6$  (361.40). Needles, mp 168–169°C,  $[\alpha]_D = -2.8^\circ$  ( $c = 0.04$ , MeOH). **Source:** GAO GUI YOU MU YUN XIANG *Teclea nobilis* (aerial parts). **Ref:** 3503.

**14621 3-Methylnonane**

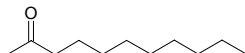
[5911-04-6]  $C_{10}H_{22}$  (142.29). **Source:** DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*]. **Ref:** 2.

**14622 4-Methylnonane**

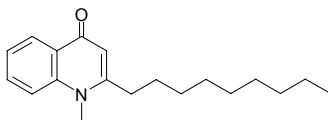
[17301-94-9]  $C_{10}H_{22}$  (142.29). **Source:** SHAN ZHA *Crataegus pinnatifida*. **Ref:** 2.

**14623 Methyl-n-nonylketone**

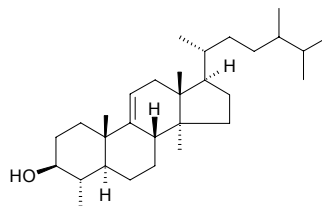
[112-12-9]  $C_{11}H_{22}O$  (170.30). bp 228°C. **Source:** YU XING CAO *Houttuynia cordata* (dried aerial parts: content = 0.0052%<sup>[5508]</sup>). **Ref:** 2, 5508.

**14624 1-Methyl-2-nonyl-4(1H)-quinolone**

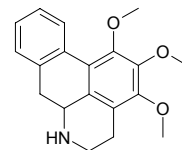
$C_{19}H_{27}NO$  (285.43). **Pharm:** Leukotriene biosynthesis inhibitor (hmn polymorphonuclear granulocytes,  $IC_{50} = 12.1 \mu\text{mol/L}$ , control Zileuton,  $IC_{50} = 10.4 \mu\text{mol/L}$ <sup>[5031]</sup>). **Source:** WU ZHU YU *Evodia rutaecarpa*. **Ref:** 1334, 5031.

**14625 24-Methyl-31-norlanost-9(11)-enol**

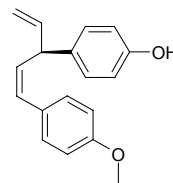
$C_{30}H_{52}O$  (428.75). **Source:** GOU QI ZI *Lycium chinense*. **Ref:** 1371, 1372, 1373, 1374.

**14626 (-)-O-Methyl-N-norlirinine**

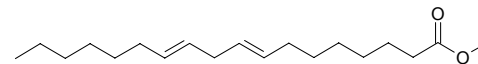
$C_{19}H_{21}NO_3$  (311.38). **Source:** YOU GOU YING ZHAO *Artabotrys uncinatus* (stem). **Ref:** 3083.

**14627 (-)-4'-O-Methyl-nyasol**

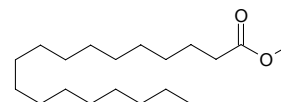
$C_{18}H_{18}O_2$  (266.34). Colorless gum,  $[\alpha]_D^{25} = -42.2^\circ$  ( $c = 0.64$ ,  $CHCl_3$ ). **Source:** KUAI GEN CHUI TOU JU *Cremanthodium ellisii*. **Ref:** 773.

**14628 Methyl octadeca-8,11-dienoate**

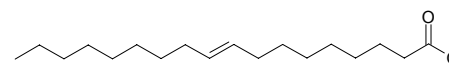
$C_{19}H_{34}O_2$  (294.48). **Source:** XIA YE XIANG PU *Typha angustifolia*. **Ref:** 1402.

**14629 Methyl octadecanoate**

Methyl octadecanoate [112-61-8]  $C_{19}H_{38}O_2$  (298.51). **Source:** DANG SHEN *Codonopsis pilosula*, LIAO DONG CONG MU *Aralia elata*, MU ZEI MA HUANG *Ephedra equisetina*, QIANG HUO *Notopterygium incisum*. **Ref:** 2, 660, 1450, 1354.

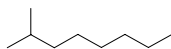
**14630 Methyl 9-octadecenoate**

Methyl oleate  $C_{19}H_{36}O_2$  (296.50). **Source:** HUA DONG LAN CI TOU *Echinops grijssii*. **Ref:** 1389.

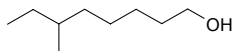


**14631 2-Methyl octane**

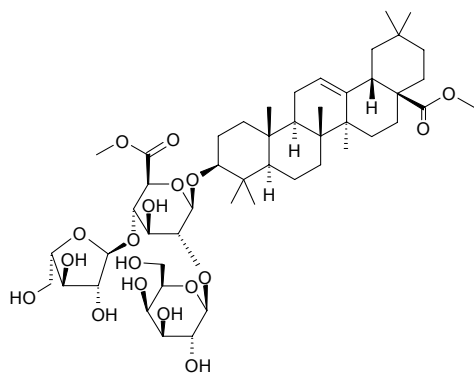
[3221-61-2] C<sub>9</sub>H<sub>20</sub> (128.26). Source: DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*], SHAN ZHA *Crataegus pinnatifida*. Ref: 2.

**14632 6-Methyl-1-octanol**

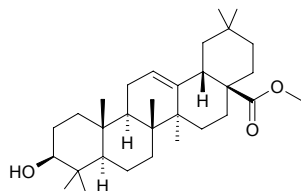
C<sub>9</sub>H<sub>20</sub>O (144.26). Source: LA MEI HUA *Chimonanthus fragrans* [Syn. *Chimonanthus praecox*]. Ref: 1474.

**14633 Methyl oleanate-(3)-[α-L-arabinofuranosyl-(1→4)]-[(β-D-galactopyranosyl-(1→2))-methyl-(β-D-glucopyranoside) uronate]**

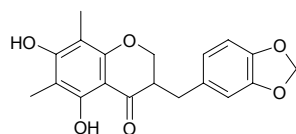
C<sub>47</sub>H<sub>72</sub>O<sub>18</sub> (925.09). Source: TONG HUA GEN *Tetrapanax papyriferus*. Ref: 1514.

**14634 Methyl oleanolate**

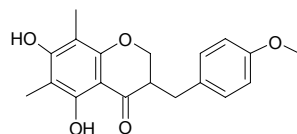
C<sub>31</sub>H<sub>50</sub>O<sub>3</sub> (470.74). Source: XIA KU CAO *Prunella vulgaris*. Ref: 2508.

**14635 Methyl ophiopogonanone A**

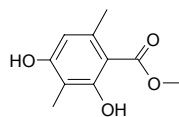
[74805-92-8] C<sub>19</sub>H<sub>18</sub>O<sub>6</sub> (342.35). Needles (CCl<sub>4</sub>), mp 166–167°C, [α]<sub>D</sub><sup>19</sup> = –72° (c = 1, CHCl<sub>3</sub>). Source: MAI DONG *Ophiopogon japonicus*. Ref: 1397.

**14636 Methyl ophiopogonanone B**

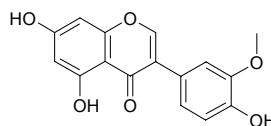
[74805-91-7] C<sub>19</sub>H<sub>20</sub>O<sub>5</sub> (328.37). Needles (CCl<sub>4</sub>), mp 159–160°C, [α]<sub>D</sub><sup>17</sup> = –53° (c = 1, Dioxane). Source: MAI DONG *Ophiopogon japonicus*. Ref: 1397.

**14637 Methyl-β-oricinol carboxylate**

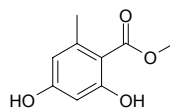
C<sub>10</sub>H<sub>12</sub>O<sub>4</sub> (196.20). Source: HONG SHI ER *Umbilicaria hypococeinea*, JIN SI SHUA *Lethariella cladonioides*, JIN YAO DAI *Lethariella zahlbruckneri*. Ref: 660, 1503.

**14638 3'-O-Methylorobol**

5,7,4'-Trihydroxy-3'-methoxyisoflavone C<sub>16</sub>H<sub>12</sub>O<sub>6</sub> (300.27). Pharm: Cytotoxic (HSC-2 cells, CC<sub>50</sub> = 0.16mmol/L; HGF, CC<sub>50</sub> > 0.67mmol/L)<sup>[3025]</sup>; hepatoprotective (mus primary cultured hepatocytes, antihepatotoxin induced by *D*-galactosamine (GalN), IC<sub>50</sub> = 55μmol/L, control Silybin IC<sub>50</sub> = 41μmol/L)<sup>[4095]</sup>. Source: JIN QUE ER *Cytisus scoparius* [Syn. *Spartium scoparium*], GOU JI *Cudrania cochinchinensis* (root: yield = 0.000046%dw)<sup>[3025]</sup>, GUANG BU DING GONG TENG *Erycibe expansa*. Ref: 1487, 3025, 4095.

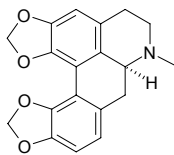
**14639 Methyl orsellinate**

C<sub>9</sub>H<sub>10</sub>O<sub>4</sub> (182.18). Pharm: Phytotoxin (inhibits radicle growth, *Amaranthus hypochondriacus*, IC<sub>50</sub> = 920μmol/L, control 2,4-D, IC<sub>50</sub> = 180μmol/L; *Echinochloa crusgalli*, IC<sub>50</sub> = 310μmol/L, control 2,4-D, IC<sub>50</sub> = 230μmol/L)<sup>[3433]</sup>; CaM interactor (cAMP phosphodiesterase inhibitor, IC<sub>50</sub> = 8.1μmol/L, control Chlorpromazine, IC<sub>50</sub> = 10.2μmol/L, interacted with bovine-brain calmodulin and inhibited the activation of the calmodulin-dependent enzyme cAMP phosphodiesterase)<sup>[3433]</sup>. Source: FU CHUI FE LAO JU *Flourensia cernua*, HONG SHI ER *Umbilicaria hypococeinea*, SHAN MAO ER *Dianella ensifolia*. Ref: 660, 1489, 3433.

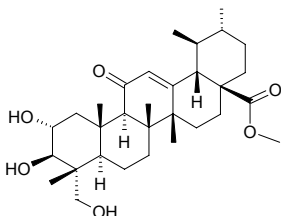


**14640 N-Methyl ovigerine**

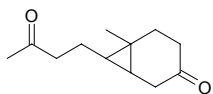
N-Methyl hernovine [13087-94-0] C<sub>19</sub>H<sub>17</sub>NO<sub>4</sub> (323.35). Source: HEI KE NAN *Lindera megaphylla*. Ref: 1508.

**14641 Methyl 11-oxoasiatate**

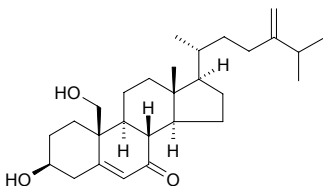
C<sub>31</sub>H<sub>48</sub>O<sub>6</sub> (516.72). Source: LONG NAO GAO XIANG *Dryobalanops aromatica*. Ref: 1511.

**14642 6-Methyl-7-(3-oxobutyl)-bicyclo[4.1.0]heptan-3-one**

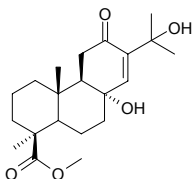
C<sub>12</sub>H<sub>18</sub>O<sub>2</sub> (194.28). Colorless oil. Source: JIANG HUANG *Curcuma longa*. Ref: 2497.

**14643 24-Methyl-7-oxocholesta-5,24(28)-diene-3β,19-diol**

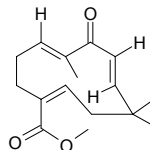
C<sub>28</sub>H<sub>44</sub>O<sub>3</sub> (428.66). Pharm: Cytotoxic inactive (hmn prostate cancer LNCaP cell line, EC<sub>50</sub> = 29.5 μg/mL). Source: *Nephthea chabroli*. Ref: 4375.

**14644 Methyl 12-oxo-8α,15-dihydroxyabiet-13-en-19-oate**

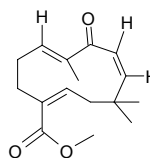
C<sub>21</sub>H<sub>32</sub>O<sub>5</sub> (364.49). Colorless oil, [α]<sub>D</sub> = +20.1° (c = 0.66, CH<sub>2</sub>Cl<sub>2</sub>). Pharm: Cytotoxic (A549, IC<sub>50</sub> > 5 μg/mL, control Cycloheximide, IC<sub>50</sub> = 0.1 μg/mL; H116, IC<sub>50</sub> = 2.5 μg/mL, Cycloheximide, IC<sub>50</sub> = 0.1 μg/mL; PSN1, IC<sub>50</sub> = 5 μg/mL, Cycloheximide, IC<sub>50</sub> = 0.01 μg/mL; T98G, IC<sub>50</sub> = 5 μg/mL, Cycloheximide, IC<sub>50</sub> = 2.5 μg/mL; SKBR3, IC<sub>50</sub> > 5 μg/mL, Cycloheximide, IC<sub>50</sub> = 0.05 μg/mL). Source: FEI NI JI CI BAI *Juniperus phoenicea* (leaf), XIANG CI BAI FEI ZHOU BIAN ZHONG *Juniperus thurifera* var. *africana* (leaf). Ref: 3851.

**14645 Methyl 8-oxo-α-humul-6E,9E-dien-12-oate**

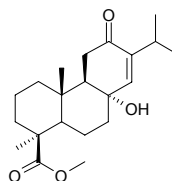
C<sub>16</sub>H<sub>22</sub>O<sub>3</sub> (262.35). Colorless oil. Pharm: Phytotoxin (6mg/mL: *S. acutus*, mortality = 11%, *L. paucicostata*, mortality = 61%); cytotoxic (P<sub>388</sub>, IC<sub>50</sub> = 40 μmol/L, control *cis*-Platin, IC<sub>50</sub> = 8 μmol/L; A549, IC<sub>50</sub> = 40 μmol/L, *cis*-Platin, IC<sub>50</sub> = 8 μmol/L; HT29, IC<sub>50</sub> > 40 μmol/L, *cis*-Platin, IC<sub>50</sub> = 16 μmol/L; MEL-28, IC<sub>50</sub> > 40 μmol/L, *cis*-Platin, IC<sub>50</sub> = 8 μmol/L). Source: *Asteriscus vogelii* (aerial parts). Ref: 5123.

**14646 Methyl 8-oxo-α-humul-6E,9Z-dien-12-oate**

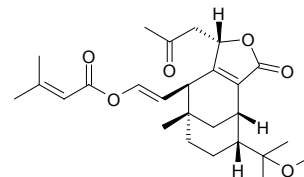
C<sub>16</sub>H<sub>22</sub>O<sub>3</sub> (262.35). Pharm: Phytotoxin (6mg/mL: *S. acutus*, mortality = 25%, *L. paucicostata*, mortality = 41%); cytotoxic (P<sub>388</sub>, IC<sub>50</sub> = 20 μmol/L, control *cis*-Platin, IC<sub>50</sub> = 8 μmol/L; A549, IC<sub>50</sub> = 20 μmol/L, *cis*-Platin, IC<sub>50</sub> = 8 μmol/L; HT29, IC<sub>50</sub> > 40 μmol/L, *cis*-Platin, IC<sub>50</sub> = 16 μmol/L; MEL-28, IC<sub>50</sub> = 20 μmol/L, *cis*-Platin, IC<sub>50</sub> = 8 μmol/L). Source: *Asteriscus vogelii* (aerial parts). Ref: 5123.

**14647 Methyl 12-oxo-8α-hydroxyabiet-13-en-19-oate**

C<sub>21</sub>H<sub>32</sub>O<sub>4</sub> (348.49). Colorless oil, [α]<sub>D</sub> = +18.3° (c = 0.91, CH<sub>2</sub>Cl<sub>2</sub>). Pharm: Cytotoxic (A549, IC<sub>50</sub> > 5 μg/mL, control Cycloheximide, IC<sub>50</sub> = 0.1 μg/mL; H116, IC<sub>50</sub> = 2.5 μg/mL, Cycloheximide, IC<sub>50</sub> = 0.1 μg/mL; PSN1, IC<sub>50</sub> > 5 μg/mL, Cycloheximide, IC<sub>50</sub> = 0.01 μg/mL; T98G, IC<sub>50</sub> > 5 μg/mL, Cycloheximide, IC<sub>50</sub> = 2.5 μg/mL; SKBR3, IC<sub>50</sub> > 5 μg/mL, Cycloheximide, IC<sub>50</sub> = 0.05 μg/mL). Source: FEI NI JI CI BAI *Juniperus phoenicea* (leaf), XIANG CI BAI FEI ZHOU BIAN ZHONG *Juniperus thurifera* var. *africana* (leaf). Ref: 3851.

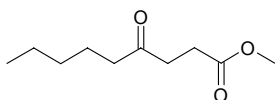
**14648 15-O-Methyl-18-oxoneovibsanin F**

C<sub>26</sub>H<sub>36</sub>O<sub>6</sub> (444.57). Colorless paste, [α]<sub>D</sub><sup>23</sup> = +155.9° (c = 0.08, alcohol). Source: RI BEN JIA MI *Viburnum awabuki*. Ref: 2530.

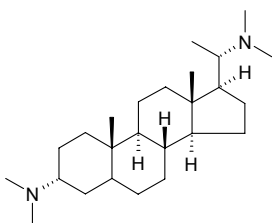


**14649 Methyl 4-oxononanoate**

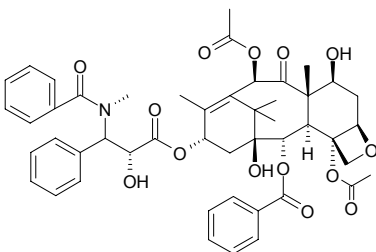
$C_{10}H_{18}O_3$  (186.25). Source: CHA YE *Camellia sinensis* [Syn. *Thea sinensis*].  
Ref: 660.

**14650 N-Methyl pachysamine A**

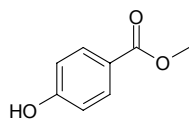
$C_{25}H_{46}N_2$  (374.66). mp 165.5~167.0°C. Source: XUE SHAN LIN  
*Pachysandra terminalis*. Ref: 6.

**14651 N-Methylpaclitaxel**

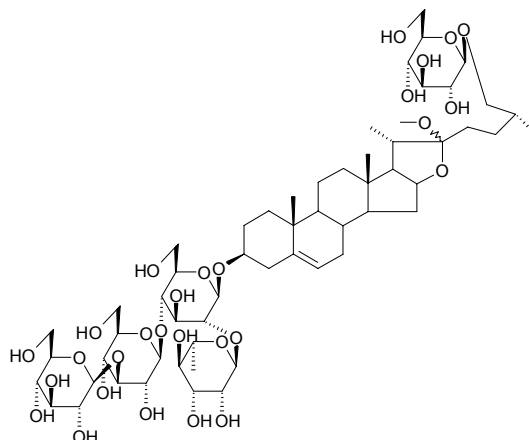
N-Methyltaxol; Taxuspinnanane I  $C_{48}H_{53}NO_{14}$  (867.96).  $[\alpha]_D = -71^\circ$  (CHCl<sub>3</sub>).  
Source: ZI SHAN *Taxus cuspidata*. Ref: 662.

**14652 Methylparaben**

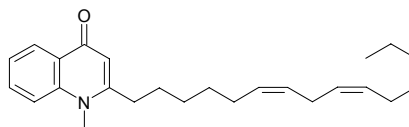
4-Hydroxybenzoic acid methyl ester  $C_8H_8O_3$  (152.15). Source: KAI KOU JIAN  
*Tupistra chinensis* (underground part)<sup>[4676]</sup>, RI BEN HUANG BAI  
*Phellodendron japonicum* (leaf), TAI WAN HUANG BO *Phellodendron*  
*amurense* var. *wilsonii* (leaf: yield = 0.00017%dw)<sup>[4722]</sup>, TAI WAN PU GONG  
YING *Taraxacum formosanum* (fresh root), ZANG HONG HUA *Crocus sativus*  
(stigma: yield = 0.00022%dw). Ref: 4233, 4488, 4502, 4653, 4676, 4722.

**14653 Methyl parvifloside**

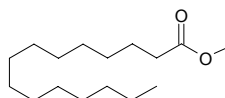
$C_{58}H_{96}O_{28}$  (1241.40). White powder, mp 234°C (dec),  $[\alpha]_D^{19.9} = -64.29^\circ$  ( $c = 0.267$ , pyridine). Source: XIAO HUA DUN YE SHU YU *Dioscorea parviflora* (fresh rhizome). Ref: 4858.

**14654 1-Methyl-2-[(6Z,9Z)-6,9-pentadecadienyl]-4(1H)-quinolone**

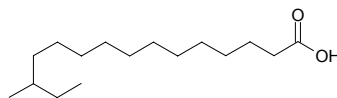
$C_{25}H_{35}NO$  (365.56). Pharm: Leukotriene biosynthesis inhibitor (hmn polymorphonuclear granulocytes, IC<sub>50</sub> = 12.3 μmol/L, zileuton, IC<sub>50</sub> = 10.4 μmol/L). Source: WU ZHU YU *Evodia rutaecarpa*. Ref: 2, 877, 5031.

**14655 Methyl pentadecanoate**

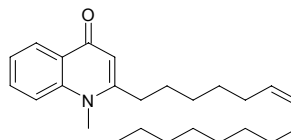
Pentadecanoic acid methyl ester [7132-64-1]  $C_{16}H_{32}O_2$  (256.43). Source:  
CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*], DANG  
SHEN *Codonopsis pilosula*. Ref: 2.

**14656 13-Methyl pentadecanoic acid**

[20121-96-4]  $C_{16}H_{32}O_2$  (256.43). Source: BAI ZHI *Angelica dahurica* [Syn.  
*Angelica porphyrocaulis*]. Ref: 2.

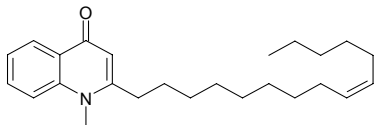
**14657 1-Methyl-2-[(Z)-6-pentadecenyl]-4(1H)-quinolone**

$C_{25}H_{37}NO$  (367.58). Source: WU ZHU YU *Evodia rutaecarpa*. Ref: 2, 877.

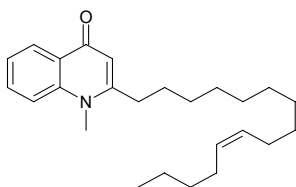


**14658 1-Methyl-2-[(Z)-9-pentadecenyl]-4(1H)-quinolone**

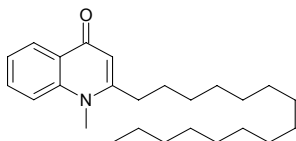
$C_{25}H_{37}NO$  (367.58). Colorless oil. Source: WU ZHU YU *Evodia rutaecarpa*. Ref: 9, 877.

**14659 1-Methyl-2-[(Z)-10-pentadecenyl]-4(1H)-quinolone**

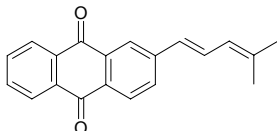
$C_{25}H_{37}NO$  (367.58). Source: WU ZHU YU *Evodia rutaecarpa*. Ref: 2, 877.

**14660 1-Methyl-2-pentadecyl-4(1H)-quinolone**

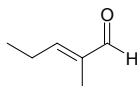
$C_{25}H_{39}NO$  (369.60). Source: WU ZHU YU *Evodia rutaecarpa*. Ref: 2.

**14661 (E)-2-(4-Methylpenta-1,3-dienyl)anthraquinone**

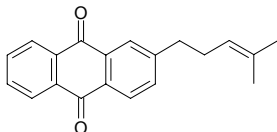
$C_{20}H_{16}O_2$  (288.35). Source: HU MA GEN *Sesamum indicum*. Ref: 3465.

**14662 2-Methyl-2-pentenal**

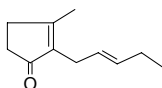
1-Methyl-3-ethylacrolein [623-36-9]  $C_6H_{10}O$  (98.15). Source: XI XIANG CONG *Allium schoenoprasum*. Ref: 6.

**14663 2-(4-Methylpent-3-enyl)anthraquinone**

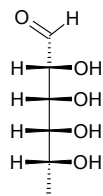
$C_{20}H_{18}O_2$  (290.37). Source: HU MA GEN *Sesamum indicum*. Ref: 3465.

**14664 3-Methyl-2-(2-pentenyl)-2-cyclopenten-1-one**

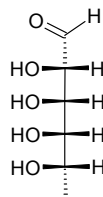
$C_{11}H_{16}O$  (164.25). Source: JIN YIN HUA *Lonicera japonica*. Ref: 1378.

**14665 Methyl pentose I**

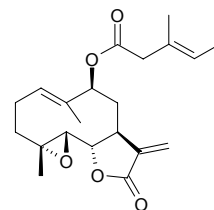
$C_6H_{12}O_5$  (164.16). Source: MU LI ROU *Ostrea rivularis*; *Ostrea talienwhanensis*; *Ostrea gigas*. Ref: 6.

**14666 Methyl pentose II**

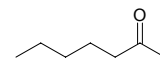
$C_6H_{12}O_5$  (164.16). Source: MU LI ROU *Ostrea rivularis*; *Ostrea talienwhanensis*; *Ostrea gigas*. Ref: 6.

**14667 9β-(3-Methyl-pentoyl-3-ene)-parthenolide**

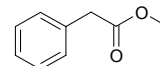
$C_{21}H_{28}O_5$  (360.45). White powder,  $[\alpha]_D^{25} = -32.0^\circ$ . Source: MAO RUI HUA YE TU MU XIANG *Inula verbascifolia*. Ref: 2041.

**14668 Methyl-n-pentyl ketone**

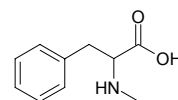
[110-43-0]  $C_7H_{14}O$  (114.19). bp 151.45°C. Source: DING XIANG *Syzygium aromaticum* [Syn. *Eugenia caryophyllata*]. Ref: 6.

**14669 Methyl phenylacetate**

[101-41-7]  $C_9H_{10}O_2$  (150.18). Source: CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*]. Ref: 2.

**14670 N-Methylphenylalanine**

$C_{10}H_{13}NO_2$  (179.22). Colorless acicular crystals. Source: HUANG YING PI MA BO *Scleroderma citrinum*. Ref: 2180.

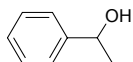




**14671 Methyl phenyl carbinol**

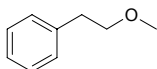
[98-85-1] C<sub>8</sub>H<sub>10</sub>O (122.17). bp (+) 98–99°C/20mmHg, (–) 93°C/14mmHg, (±) 100°C/18mmHg. Source: CHA YE *Camellia sinensis* [Syn. *Thea sinensis*].

Ref: 6.

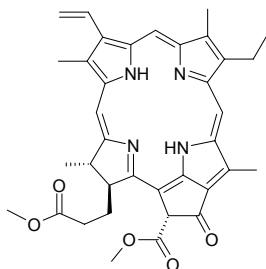
**14672 Methyl (phenyl ethyl) ether**

[3558-60-9] C<sub>9</sub>H<sub>12</sub>O (136.20). Source: LU DOU LE HUA *Pandanus tectorius*.

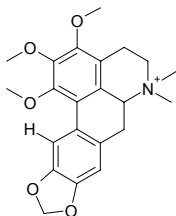
Ref: 6.

**14673 Methyl pheophorbide a**

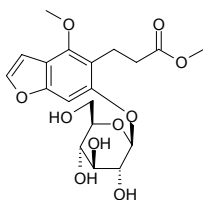
C<sub>36</sub>H<sub>38</sub>N<sub>4</sub>O<sub>5</sub> (606.73). Source: TAI WAN HUANG BO *Phellodendron amurense* var. *wilsonii* (leaf). Ref: 4722.

**14674 N-Methylphoebine**

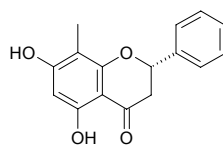
C<sub>22</sub>H<sub>26</sub>NO<sub>5</sub><sup>+</sup> (384.46). Colorless amorphous powder, [α]<sub>D</sub><sup>22</sup> = +37.1° (c = 0.70, MeOH). Source: XIAO HUA MU BAN SHU *Xylopiya parviflora* (bark and root). Ref: 3794.

**14675 Methylpicraquassioside A**

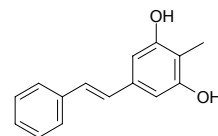
C<sub>19</sub>H<sub>24</sub>O<sub>10</sub> (412.40). Glassy powder, mp 67–69°C, [α]<sub>D</sub><sup>25</sup> = –58.82° (c = 0.34, MeOH). Source: CHOU CAO *Ruta graveolens* (dried aerial parts). Ref: 3073.

**14676 8-Methylpinocembrin**

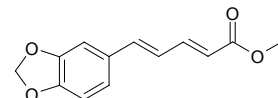
C<sub>16</sub>H<sub>14</sub>O<sub>4</sub> (270.29). [α]<sub>D</sub><sup>25</sup> = –46.2° (c = 0.42, acetone). Source: YANG PU TAO YE *Syzygium samarangense*. Ref: 4100.

**14677 4'-Methylpinosylvin**

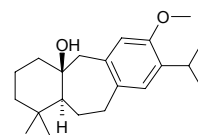
C<sub>15</sub>H<sub>14</sub>O<sub>2</sub> (226.28). Source: *Stemona* cf. *pirrei* (underground part). Ref: 3751.

**14678 Methyl piperate**

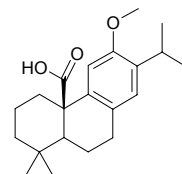
C<sub>13</sub>H<sub>12</sub>O<sub>4</sub> (232.24). Colorless crystals. Pharm: Protective gastric lesions (rat, ethanol-induced, 25mg/kg orl, length = (54.1±7.4)mm, control, length = (118.6±16.2)mm, InRt = 54.4%; indomethacin-induced in rats, dose, 25mg/kg orl, length = (84.9±9.4)mm, control, length = (89.5±9.8)mm, InRt = 5.1%). Source: *Piper chaba* (fruit). Ref: 4935.

**14679 12-O-Methylpisiferanol**

C<sub>21</sub>H<sub>32</sub>O<sub>2</sub> (316.49). Oil, [α]<sub>D</sub><sup>26</sup> = +28° (c = 2.5, MeOH). Source: HONG GUI *Chamaecyparis formosensis*. Ref: 2315.

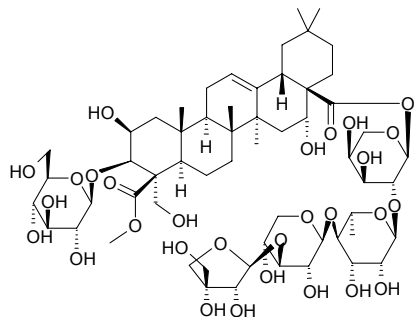
**14680 O-Methylpisiferic acid**

C<sub>21</sub>H<sub>33</sub>O<sub>3</sub> (330.47). Pharm: Antibacterial (*Staphylococcus aureus*, MIC = 12.5μg/mL; *Bacillus subtilis*, MIC = 12.5μg/mL). Source: RI BEN HUA BAI *Chamaecyparis pisifera* (leaf). Ref: 4144.

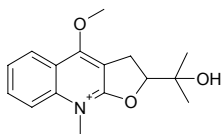


**14681 Methyl platyconate A**

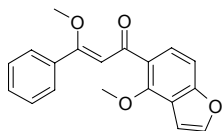
$C_{58}H_{92}O_{29}$  (1253.36). Source: JIE GENG *Platycodon grandiflorum*. Ref: 1382.

**14682 N-Methylplatydesmin**

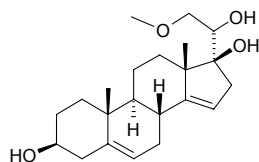
$C_{16}H_{20}NO_3^+$  (274.34). Source: CHOU CAO *Ruta graveolens*. Ref: 6.

**14683 O-Methylpongamol**

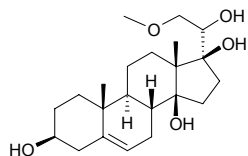
[80158-88-9]  $C_{19}H_{16}O_4$  (308.33). Yellowish oil. Pharm: Nematocide (0.1mg/mL cultured with *Toxocara canis* larvae, after 6h RM = 70, after 24h RM = 33). Source: HUI YE GEN *Tephrosia purpurea*. Ref: 1040, 1188.

**14684 21-O-Methyl-5,14-pregnadiene-3β,14β,17β,21-tetrol**

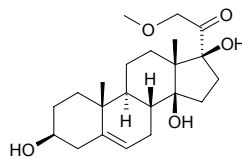
$C_{22}H_{34}O_5$  (378.51). Source: XIANG JIA PI *Periploca sepium*. Ref: 1359.

**14685 21-O-Methyl-5-pregnene-3β,14β,17β,20,21-pentol**

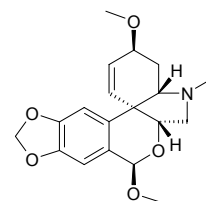
$C_{22}H_{36}O_5$  (380.53). Source: XIANG JIA PI *Periploca sepium*. Ref: 1359.

**14686 21-O-Methyl-5-pregnene-3β,17β,21-tetrol-20-one**

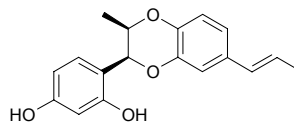
$C_{22}H_{34}O_5$  (362.51). Source: XIANG JIA PI *Periploca sepium*. Ref: 1359.

**14687 6-O-Methylpretazettine**

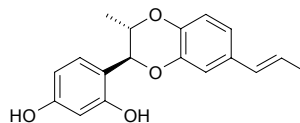
$C_{19}H_{23}NO_5$  (345.40). Colorless amorphous solid, mp 199–201°C. Source: YA MA XUN BAI HE *Eucharis amazonica* (dried bulb and leaf). Ref: 4325.

**14688 4-[(2S,3R)-3-Methyl-7-((E)-1-propenyl)-2,3-dihydro-1,4-benzodioxin-2-yl]-1,3-benzenediol**

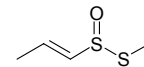
$C_{18}H_{18}O_4$  (298.34). Source: RI BEN GUI DENG QING *Rodgersia podophylla* (aerial parts). Ref: 2534.

**14689 4-[(2S,3S)-3-Methyl-7-((E)-1-propenyl)-2,3-dihydro-1,4-benzodioxin-2-yl]-1,3-benzenediol**

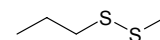
$C_{18}H_{18}O_4$  (298.34). Source: RI BEN GUI DENG QING *Rodgersia podophylla* (aerial parts). Ref: 2534.

**14690 Methyl-1-propenyl thiosulfinate**

1-Propenyl methyl thiosulfinate  $C_4H_8OS_2$  (136.24). Source: DA SUAN *Allium sativum*, JIU CAI *Allium tuberosum*, YANG CONG *Allium cepa*. Ref: 1392, 2975, 2978.

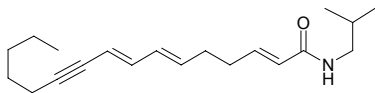
**14691 Methyl propyl disulfide**

[2179-60-4]  $C_4H_{10}S_2$  (122.25). Source: DA SUAN *Allium sativum*, XI XIANG CONG *Allium schoenoprasum*, ZHI ZI *Gardenia jasminoides* [Syn. *Gardenia florida*]. Ref: 6.

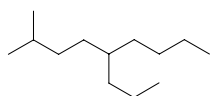


**14692 (E,E,E)-N-(2-Methylpropyl)-hexadeca-2,6,8-trien-10-ynamide**

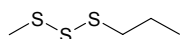
$C_{20}H_{31}NO$  (301.48). **Pharm:** Pesticide. **Source:** XI LA SHI CAO *Achillea ageratifolia*. **Ref:** 658.

**14693 2-Methyl-5-propyl nonane**

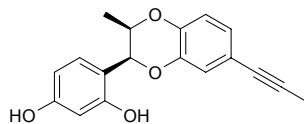
$C_{13}H_{28}$  (184.37). **Source:** ROU CONG RONG *Cistanche deserticola*. **Ref:** 2.

**14694 Methyl propyl trisulfide**

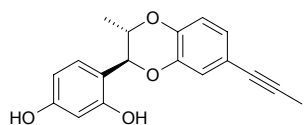
[17619-36-2]  $C_4H_{10}S_3$  (154.32). **Source:** DA SUAN *Allium sativum*. **Ref:** 2.

**14695 4-[(2S,3R)-3-Methyl-7-(1-propynyl)-2,3-dihydro-1,4-benzodioxin-2-yl]-1,3-benzenediol**

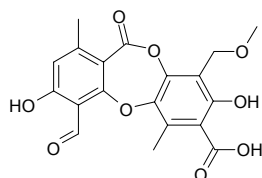
$C_{18}H_{16}O_4$  (296.33). **Source:** RI BEN GUI DENG QING *Rodgersia podophylla* (aerial parts). **Ref:** 2534.

**14696 4-[(2S,3S)-3-Methyl-7-(1-propynyl)-2,3-dihydro-1,4-benzodioxin-2-yl]-1,3-benzenediol**

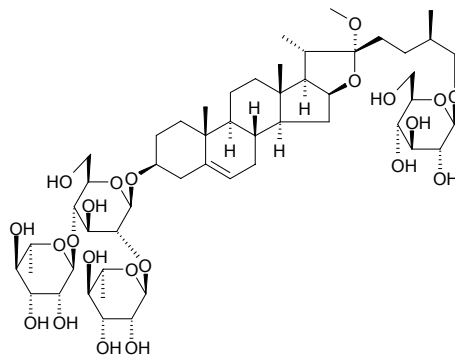
$C_{18}H_{16}O_4$  (296.33). **Source:** RI BEN GUI DENG QING *Rodgersia podophylla* (aerial parts). **Ref:** 2534.

**14697 9'-(O-Methyl)protocetraric acid**

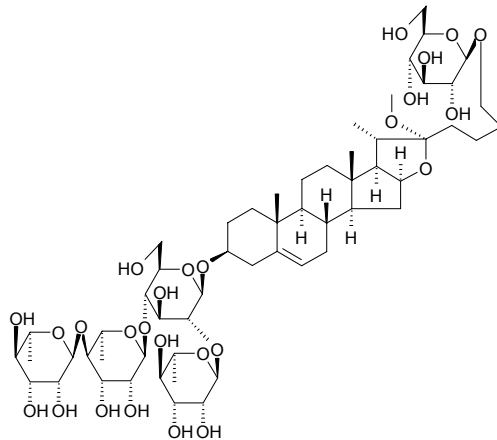
$C_{19}H_{16}O_9$  (388.33). Yellow amorphous powder. **Pharm:** Cytotoxic (L1210,  $IC_{50} > 100 \mu\text{g/mL}$ , control Etoposide,  $IC_{50} = (0.3 \pm 0.2) \mu\text{g/mL}$ ; 3LL,  $IC_{50} > 100 \mu\text{g/mL}$ , Etoposide,  $IC_{50} = (2.6 \pm 0.8) \mu\text{g/mL}$ ; DU145,  $IC_{50} > 100 \mu\text{g/mL}$ , Etoposide,  $IC_{50} = (0.9 \pm 0.2) \mu\text{g/mL}$ ; MCF7,  $IC_{50} > 100 \mu\text{g/mL}$ , Etoposide,  $IC_{50} = (12.2 \pm 0.5) \mu\text{g/mL}$ ; K562,  $IC_{50} > 100 \mu\text{g/mL}$ , Etoposide,  $IC_{50} = (2.1 \pm 1.3) \mu\text{g/mL}$ ; U251,  $IC_{50} > 100 \mu\text{g/mL}$ , Etoposide,  $IC_{50} = (0.28 \pm 0.06) \mu\text{g/mL}$ ). **Source:** ZONG JUAN SHI RUI *Cladonia convoluta*. **Ref:** 5027.

**14698 22-O-Methylprotodioscin**

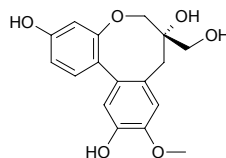
$C_{52}H_{86}O_{22}$  (1063.25). **Pharm:** Cytotoxic (hmn, leukemia cell HL-60, inhibits biosynthesis of DNA, RNA and protein and cellular growth); bone resorption inhibitor (PTH-induced in a bone organ culture system)<sup>[4692]</sup>; antifungal inactive (*Candida albicans*, *Candida glabrata*, *Candida tropicalis*,  $MIC > 200 \mu\text{g/mL}$ , inactive)<sup>[2560]</sup>. **Source:** HAI JIN BI XIE *Dioscorea spongiosa* (Rhizome: yield = 0.036%)<sup>[4692]</sup>, LONG XUE SHU *Dracaena draco* (stem cortex)<sup>[4696]</sup>, SHI DIAO BAI *Asparagus officinalis*, TIAN QIE ZI *Solanum indicum*, YUAN SHU YU *Dioscorea rotundata* [Syn. *Dioscorea cayenensis*]. **Ref:** 660, 1462, 2165, 2560, 4692, 4696, 4946.

**14699 Methyl protodiosgenin tetraglycoside**

26-O-β-D-Glucopyranosyl-22-methoxy-3β,26-dihydroxy-25(R)-furost-5-en-3-O-α-L-rhamnopyranosyl-(1→4)-α-L-rhamnopyranosyl-(1→4)-[α-L-rhamnopyranosyl-(1→2)]-β-D-glucopyranoside  $C_{58}H_{96}O_{26}$  (1209.40). White amorphous powder,  $[\alpha]_D^{20} = -100^\circ$  ( $c = 0.05$ , MeOH). **Pharm:** Antifungal inactive (hmn pathogenic yeasts *Candida albicans*, *Candida glabrata* and *Candida tropicalis*,  $MIC > 200 \mu\text{g/mL}$ )<sup>[4931]</sup>. **Source:** ZONG LV PI *Trachycarpus fortunei*, *Dioscorea cayenensis* (rhizome). **Ref:** 1519, 4931.

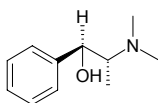
**14700 10-O-Methyl protosappanin B**

$C_{17}H_{18}O_6$  (318.33). **Source:** SU MU *Caesalpinia sappan*. **Ref:** 1329.

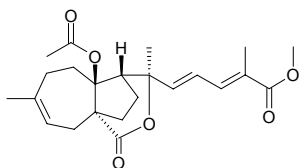


**14701 D-N-Methyl-pseudoephedrine**

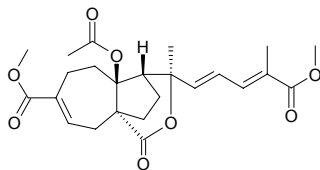
$C_{11}H_{17}NO$  (179.26). **Source:** LI JIANG MA HUANG *Ephedra likiangensis* (herbaceous twigs: mean content of 2 origins = 0.010%)<sup>[5508]</sup>, MA HUANG *Ephedra sinica* (herbaceous twigs: mean content of 4 origins = 0.007%)<sup>[5508]</sup>, MU ZEI MA HUANG *Ephedra equisetina* (herbaceous twigs: mean content of 2 origins = trace)<sup>[5508]</sup>, SHAN LING MA HUANG *Ephedra gerardiana* (herbaceous twigs: content = 0.015%)<sup>[5508]</sup>, XI ZANG ZHONG MA HUANG *Ephedra intermedia* var. *tibetica* (herbaceous twigs: content = trace)<sup>[5508]</sup>, YI ZHU AI MA HUANG *Ephedra minuta* var. *dioeca* (herbaceous twigs: mean content = trace)<sup>[5508]</sup>, ZANG MA HUANG *Ephedra saxatilis* (herbaceous twigs: content = trace)<sup>[5508]</sup>, ZHONG MA HUANG *Ephedra intermedia* (herbaceous twigs: mean content of 3 origins = trace)<sup>[5508]</sup>. **Ref:** 2, 660, 5508.

**14702 Methyl pseudolarate A**

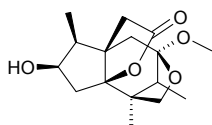
$C_{23}H_{30}O_6$  (402.49). **Source:** TU JING PI *Pseudolarix amabilis* [Syn. *Larix amabilis*; *Pseudolarix kaempferi*] (root cortex: yield = 0.00010%dw). **Ref:** 4637.

**14703 Methyl pseudolarate B**

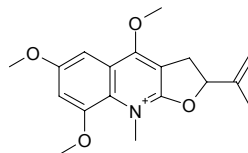
$C_{24}H_{30}O_8$  (446.50). **Source:** TU JING PI *Pseudolarix amabilis* [Syn. *Larix amabilis*; *Pseudolarix kaempferi*] (root cortex: yield = 0.0069%dw). **Ref:** 4637.

**14704 7-O-Methylpseudomajucin**

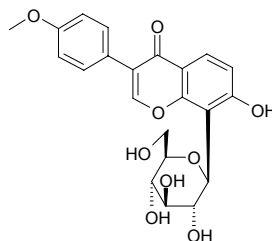
$C_{16}H_{24}O_5$  (296.37).  $[\alpha]_D^{23} = -35.6^\circ$  ( $c = 1.08$ , MeOH). **Source:** MIN WAN BA JIAO *Illicium minwanense* (pericarp: yield = 0.00021%dw). **Ref:** 4697.

**14705 O-Methylptelefolonium**

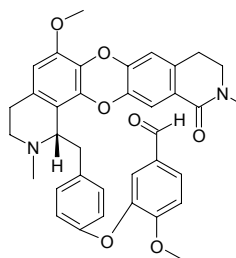
$C_{18}H_{22}NO_4^+$  (316.38). **Pharm:** Antibacterial; antifungal; cytotoxic (animal tumor and plant tumor); plant growth inhibitor. **Source:** YU JU *Ptelea trifoliata*. **Ref:** 658.

**14706 4'-O-Methylpuerarin**

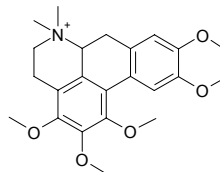
$C_{22}H_{22}O_9$  (430.42). **Source:** GE GEN *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*] (root: mean content of 6 origins = 1.12%)<sup>[5508]</sup>, GAN GE TENG GEN *Pueraria thomsonii* (root: content = 0.359%)<sup>[5508]</sup>. **Ref:** 2, 660, 5508.

**14707 O-Methyl punjabin**

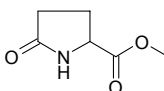
[58194-22-2]  $C_{32}H_{34}N_2O_7$  (606.68). **Source:** TAI WAN QIAN JIN TENG *Stephania sasakii*. **Ref:** 1314.

**14708 N-Methylpurpurine**

1,2,3,9,10-Substituted aporphine alkaloid  $C_{23}H_{30}NO_5^+$  (400.50). Colorless crystals, mp 187.5~190.0°C,  $[\alpha]_D^{22} = +25.1^\circ$  ( $c = 0.51$ , MeOH). **Source:** XIAO HUA MU BAN SHU *Xylopiya parviflora* (bark and root). **Ref:** 3794.

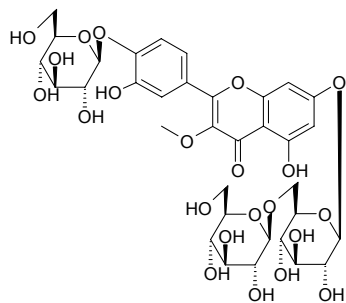
**14709 Methyl pyroglutamate**

$C_6H_9NO_3$  (143.14). **Source:** SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. **Ref:** 2487.

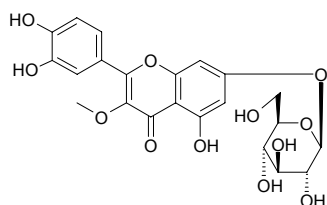


**14710 3-O-Methylquercetin-7-O-diglucoside-4'-O-glucoside**

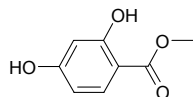
$C_{34}H_{42}O_{22}$  (802.70). Source: PING ER XIAO CAO *Ophioglossum vulgatum*. Ref: 6.

**14711 3-O-Methyl quercetin 7-O-β-D-glucopyranoside**

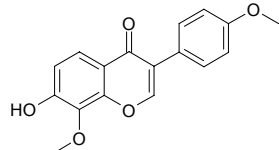
$C_{22}H_{22}O_{12}$  (478.41). Pharm: DPPH scavenger ( $SC_{50} = 6.1 \mu\text{mol/L}$ ); antioxidant (superoxide anion radical scavenger, superoxide dismutase method,  $IC_{50}$  for Formazan formation activity =  $3.9 \mu\text{mol/L}$ ). Source: XIAN REN ZHANG *Opuntia dillenii* (fresh stem: yield = 0.00015%). Ref: 4247.

**14712 Methyl-β-resorcylate**

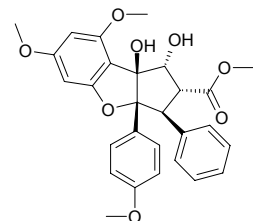
Methyl-2,4-dihydroxy-benzoate [2150-47-2]  $C_8H_8O_4$  (168.15). mp 118–119°C. Source: CI HUAI HUA *Robinia pseudoacacia*. Ref: 6.

**14713 8-o-Methylreyusi**

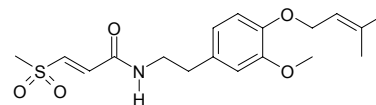
$C_{17}H_{14}O_5$  (298.30). Colorless needles, mp 221°C. Source: KUN MING JI XUE TENG *Milletia dielsiana*. Ref: 2205.

**14714 Methyl rocaglate**

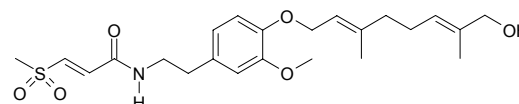
Aglafolin; Anticancer cyclopenta[b] benzofuran PMV70P691-71  $C_{28}H_{28}O_8$  (492.53). Pharm: Insecticidal (neonate larvae of *Spodoptera littoralis*,  $EC_{50} = 0.18 \text{mg/L}$ ,  $LC_{50} = 1.3 \text{mg/L}$ , control Azadirachtin,  $EC_{50} = 0.06 \text{mg/L}$ ,  $LC_{50} = 0.7 \text{mg/L}$ )<sup>[3978]</sup>, cytotoxic (Ishikawa anti-E2 bioassay)<sup>[5038]</sup>. Source: MI ZI LAN *Aglaiia odorata*, *Aglaiia spectabilis* (bark), *Aglaiia duperreana*, *Aglaiia ponapensis*. Ref: 1521, 3978, 4047, 5038.

**14715 O-Methylsakambullin**

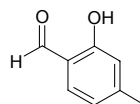
(E)-3-(Methylsulfonyl)-propenoic acid 4-(3-methyl-2-butenyloxy)-3-methoxyphenethyl amide  $C_{18}H_{25}NO_5S$  (367.47). Colorless crystals (Et<sub>2</sub>O), mp 136–138°C. Source: LV ZI SHAN XIAO JU *Glycosmis chlorosperma* (leaf). Ref: 3956.

**14716 O-Methylakerinol A**

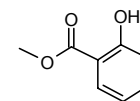
(E)-3-(Methylsulfonyl)-propenoic acid (2E,6E)-4-(8-hydroxy-3,7-dimethyl-2,6-octadienyloxy)-3-methoxyphenethyl amide  $C_{23}H_{33}NO_6S$  (451.59). Colorless crystals (Et<sub>2</sub>O), mp 125–127°C. Source: LV ZI SHAN XIAO JU *Glycosmis chlorosperma* (leaf). Ref: 3956.

**14717 4-Methyl salicylaldehyde**

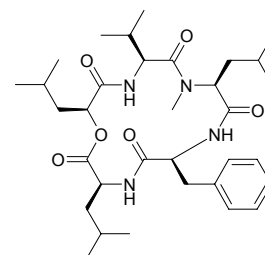
[698-27-1]  $C_8H_8O_2$  (136.15). mp 60–61°C. Source: WU JIA PI *Acanthopanax gracilistylus*. Ref: 6.

**14718 Methyl salicylate**

[119-36-8]  $C_8H_8O_3$  (152.15). bp 223°C. Source: DING XIANG *Syzygium aromaticum* [Syn. *Eugenia caryophyllata*], JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*], QING MING HUA *Beaumontia grandiflora*, QU MAI *Dianthus superbus*, SANG YE *Morus alba*, JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*]. Ref: 6, 11.

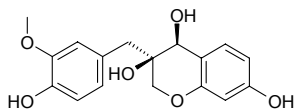
**14719 N-Methylsansalvamide**

$C_{33}H_{52}N_4O_6$  (600.81). Colorless oil,  $[\alpha]_D = -132^\circ$  ( $c = 0.415$ , CH<sub>2</sub>Cl<sub>2</sub>). Pharm: Cytotoxic (in vitro, NCI hm tumor cell line screen, mean  $GI_{50} = 8.3 \mu\text{mol/L}$ ). Source: *Fusarium* sp. Ref: 5087.

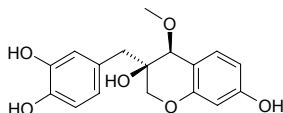


**14720 3'-O-Methyl sappanol**

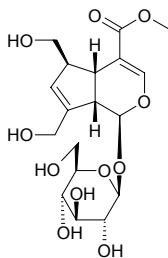
[111254-21-8] C<sub>17</sub>H<sub>18</sub>O<sub>6</sub> (318.33). Source: SU MU *Caesalpinia sappan*. Ref: 1302.

**14721 4-O-Methyl sappanol**

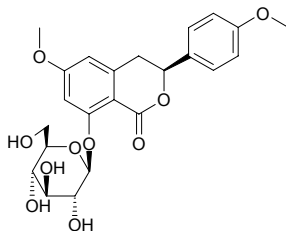
[104778-16-7] C<sub>17</sub>H<sub>18</sub>O<sub>6</sub> (318.33). Source: SU MU *Caesalpinia sappan*. Ref: 1304, 4494.

**14722 6-O-Methylscandoside methyl ester**

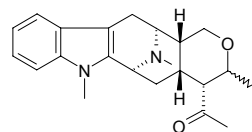
C<sub>18</sub>H<sub>26</sub>O<sub>11</sub> (418.40). Amorphous powder,  $[\alpha]_D^{25} = -83.0^\circ$  ( $c = 0.532$ , MeOH), artifact. Source: ZHI ZI *Gardenia jasminoides* [Syn. *Gardenia florida*] (leaf). Ref: 4408.

**14723 6-O-Methylscorzocreticoside I**

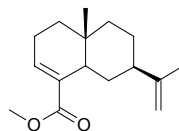
C<sub>23</sub>H<sub>26</sub>O<sub>10</sub> (462.46). Colorless needles, >206°C (dec),  $[\alpha]_D^{20} = -12^\circ$  ( $c = 0.0685$ , MeOH). Pharm: Antioxidant inactive (DPPH scavenger, IC<sub>50</sub> > 200 μg/mL; control Ascorbic acid, IC<sub>50</sub> = (2.49±0.32) μg/mL; Caffeic acid, IC<sub>50</sub> = (1.78±0.03) μg/mL; Chlorogenic acid, IC<sub>50</sub> = (1.28±0.38) μg/mL). Source: SUAN YE PO LUO MEN SHEN *Tragopogon porrifolius* (subaerial parts). Ref: 5307.

**14724 N(4)-Methyl-N(4),21-seco-talpinine**

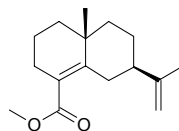
C<sub>22</sub>H<sub>28</sub>N<sub>2</sub>O<sub>2</sub> (352.48). Source: DA YE TANG JIAO SHU *Alstonia macrophylla* (leaf: yield = 0.0033%). Ref: 3020.

**14725 (-)-Methyl selina-3,11-dien-14-oate**

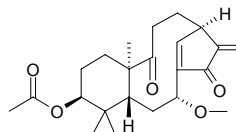
C<sub>16</sub>H<sub>24</sub>O<sub>2</sub> (248.37). Source: CHEN XIANG *Aquilaria agallocha*. Ref: 13.

**14726 (+)-Methyl selina-4,11-dien-14-oate**

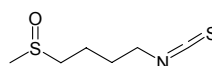
C<sub>16</sub>H<sub>24</sub>O<sub>2</sub> (248.37). Source: CHEN XIANG *Aquilaria agallocha*. Ref: 13.

**14727 o-Methylshikoccin**

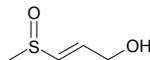
C<sub>23</sub>H<sub>32</sub>O<sub>5</sub> (388.51). mp 168–171°C,  $[\alpha]_D^{25} = -4.5^\circ$  ( $c = 0.40$ , MeOH). Source: XI SI GUO XIANG CHA CAI *Isodon shikokiana* var. *occidentalis*. Ref: 4067.

**14728 4-Methylsulfinyl butyl isothiocyanate**

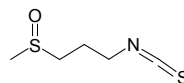
Sulforaphane. [4478-93-7] C<sub>6</sub>H<sub>11</sub>NOS<sub>2</sub> (177.29). Pharm: Antibacterial (gram-negative and gram-positive bacteria); antineoplastic (EAC); antifungal; anthelmintic (wileworm, 1mg/mL, 99% killed in 48h; trichomonad and amoeba); antitrypanosomal (2.5 μg/mL); antiviral (Mengo virus, coxsackie-B virus, pseudolyssa virus and poxvirus *in vitro*, 200 μg/mL). Source: GAN LAN *Brassica oleracea* var. *capitata*, QUN XIN CAI *Cardaria draba*, MAO DU XING CAI *Lepidium draba*. Ref: 661, 1322.

**14729 trans-3-Methylsulfinyl-2-propenol**

C<sub>4</sub>H<sub>8</sub>O<sub>2</sub>S (120.17). Pale yellow oil,  $[\alpha]_D^{25} = +22^\circ$  ( $c = 0.69$ , MeOH). Pharm: Antitubercular inactive (*Mycobacterium tuberculosis* H37Ra); antimalarial inactive (*Plasmodium falciparum*, EC<sub>50</sub> > 20 μg/mL). Source: TAI GUO NIU XU HUA *Clinacanthus siamensis* (leaf). Ref: 4410.

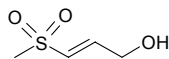
**14730 3-Methylsulfinyl propyl isothiocyanate**

C<sub>5</sub>H<sub>9</sub>NOS<sub>2</sub> (163.26). Source: GAN LAN *Brassica oleracea* var. *capitata*. Ref: 1322.

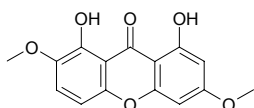


**14731 trans-3-Methylsulfonyl-2-propenol**

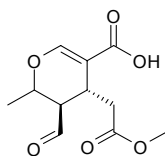
$C_4H_8O_3S$  (136.17). Pale yellow needles (MeOH), mp 57–60°C. **Pharm:** Antitubercular inactive (*Mycobacterium tuberculosis* H37Ra); antimalarial inactive (*Plasmodium falciparum*,  $EC_{50} > 20\mu\text{g/mL}$ ). **Source:** TAI GUO NIU XU HUA *Clinacanthus siamensis* (leaf). **Ref:** 4410.

**14732 2-O-Methylswertianin**

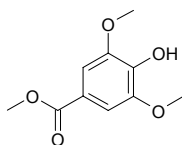
Swertiaperennin  $C_{15}H_{12}O_6$  (288.26). **Pharm:** Antihepatotoxin (animal model); vasodilator inactive<sup>[5434]</sup>. **Source:** KU HE LONG DAN *Gentiana kochiana*, RI BEN ZHANG YA CAI *Swertia japonica*. **Ref:** 658, 5434.

**14733 Methyl syramuraldehyde**

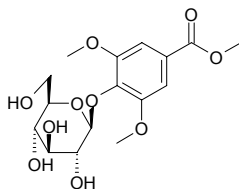
$C_{11}H_{14}O_6$  (242.23). Colorless oleaginous,  $[\alpha]_D^{22} = -87.4^\circ$  ( $c = 2$ , chloroform). **Source:** BAO MA ZI *Syringa amurensis* [Syn. *Syringa reticulata* var. *amurensis*]. **Ref:** 70.

**14734 Methyl syringate**

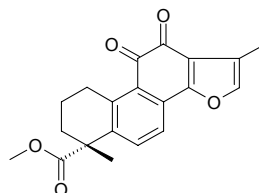
$C_{10}H_{12}O_5$  (212.20). **Source:** TAI WAN PU GONG YING *Taraxacum formosanum* (fresh root). **Ref:** 4488.

**14735 Methyl syringate 4-O-β-D-glucopyranoside**

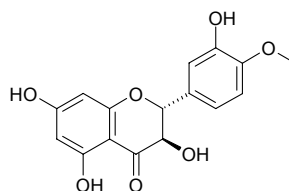
$C_{16}H_{22}O_{10}$  (374.35). Colorless needles (MeOH), mp 91–93°C,  $[\alpha]_D^{24} = -20^\circ$  ( $c = 0.9$ , MeOH). **Source:** HUI QIN *Pimpinella anisum* (fruit). **Ref:** 3402.

**14736 Methyl tanshinonate**

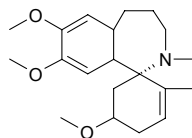
[135355-72-5]  $C_{20}H_{18}O_5$  (338.36). mp 175–176°C. **Source:** DAN SHEN *Salvia miltiorrhiza* (dried root: content = 0.014%<sup>[5508]</sup>), GAN XI SHU WEI CAO *Salvia przewalskii* (dried root: content = 0.048%<sup>[5508]</sup>), HONG GEN CAO *Salvia prionitis* (dried root: content = 0.015%<sup>[5508]</sup>), HUANG HUA SHU WEI CAO *Salvia flava* (dried root: content = trace)<sup>[5508]</sup>, JI YE SHU WEI CAO *Salvia bulleyana* (dried root: content = 0.005%<sup>[5508]</sup>), LI SE SHU WEI CAO *Salvia castanea* (dried root: content = 0.003%<sup>[5508]</sup>), MAO DI HUANG SHU WEI CAO *Salvia digitaloides* (dried root: content = 0.001%<sup>[5508]</sup>), NAN DAN SHEN *Salvia bowleyana* (dried root: content = 0.099%<sup>[5508]</sup>), NI DAN SHEN *Salvia sinica* (dried root: content = trace)<sup>[5508]</sup>, SAN YE SHU WEI CAO *Salvia trijuga* (dried root: content = 0.034%<sup>[5508]</sup>), YUN NAN SHU WEI CAO *Salvia yunnanensis* (dried root: content = 0.012%<sup>[5508]</sup>), ZI DAN SHEN *Salvia przewalskii* var. *mandarinorum* (dried root: content = %)<sup>[5508]</sup>. **Ref:** 2, 5508.

**14737 4'-O-Methyltaxifolin**

$C_{16}H_{14}O_7$  (318.29). **Pharm:** Cytotoxic (HeLa,  $IC_{50} = 32.5\mu\text{g/mL}$ , control Mitomycin C,  $IC_{50} = 1.7\mu\text{g/mL}$ ). **Source:** TUAN JI AI NA XIANG *Blumea glomerata*. **Ref:** 4092.

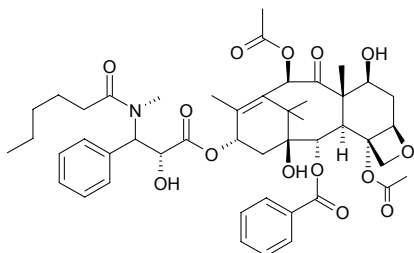
**14738 O-Methyltaxodine**

$C_{20}H_{29}NO_3$  (331.46). **Source:** SAN JIAN SHAN *Cephalotaxus fortunei*. **Ref:** 2.

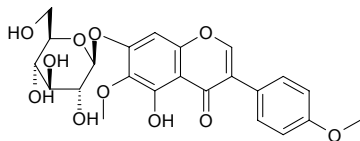


**14739 N-Methyltaxol C**

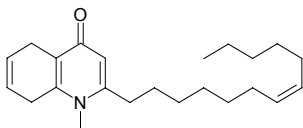
[153083-53-5]  $C_{47}H_{59}NO_{14}$  (861.99).  $[\alpha]_D = -52.7^\circ$  ( $CHCl_3$ ), mp 225~228°C,  $[\alpha]_D = -52.7^\circ$  (MeOH), mp 134°C. **Pharm:** Antineoplastic (ox brain, tubulin assay, concentration of tubulin 1.0mg/mL, activity closes to that of taxol,  $ED_{50} = 1.91\mu\text{mol/L}$ , control taxol,  $ED_{50} = 1.15\mu\text{mol/L}$ ). **Source:** JIANG GUO ZI SHAN *Taxus baccata*, ZA JIAO JIE ZHI HONG DOU SHAN *Taxus x media*. **Ref:** 662, 1649.

**14740 4'-Methyltectorigenin 7-glucoside**

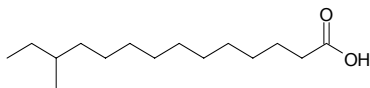
$C_{23}H_{24}O_{11}$  (476.44). Yellow amorphous powder. **Source:** AI JI ZHONG ZHI YUAN WEI *Iris carthaliniae*. **Ref:** 1880.

**14741 1-Methyl-2-[(Z)-7-tridecenyl]-4(1H)-quinolone**

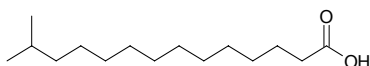
$C_{23}H_{33}NO$  (339.53). Colorless oil. **Source:** WU ZHU YU *Evodia rutaecarpa*. **Ref:** 9, 877, 2085.

**14742 12-Methyl tetradecanoic acid**

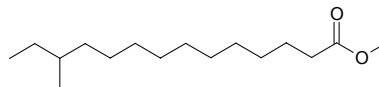
[5502-94-3]  $C_{15}H_{30}O_2$  (242.41). **Source:** QIANG HUO *Notopterygium incisum*. **Ref:** 2.

**14743 13-Methyl tetradecanoic acid**

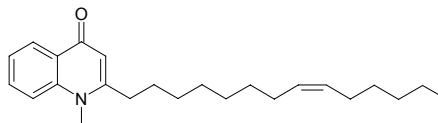
[2485-71-4]  $C_{15}H_{30}O_2$  (242.41). **Source:** BAI SHAO *Paeonia albiflora* [Syn. *Paeonia lactiflora*]. **Ref:** 6.

**14744 12-Methyl tetradecanoic acid methyl ester**

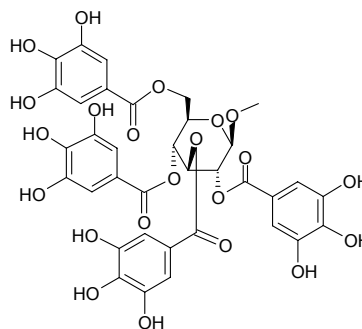
$C_{16}H_{32}O_2$  (256.43). **Source:** QIANG HUO *Notopterygium incisum*. **Ref:** 1354.

**14745 1-Methyl-2-(Z)-8-tetradecenyl-4(1H)-quinolone**

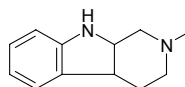
$C_{24}H_{35}NO$  (353.55). Colorless oil. **Source:** WU ZHU YU *Evodia rutaecarpa*. **Ref:** 9.

**14746 Methyl 2,3,4,6-tetra-O-galloyl-beta-D-glucopyranoside**

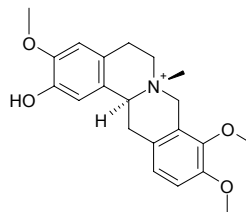
$C_{35}H_{30}O_{22}$  (802.62). **Source:** DI YU *Sanguisorba officinalis*. **Ref:** 1327.

**14747 2-Methyl-1,2,3,4-tetrahydro-beta-carboline**

$C_{12}H_{16}N_2$  (188.27). mp 216~218°C. **Source:** SHA ZAO SHU PI *Elaeagnus angustifolia*. **Ref:** 6.

**14748 (S)-trans-N-Methyltetrahydrocolumbamine**

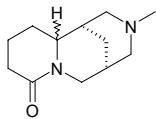
$C_{21}H_{26}NO_4$  (356.45). Yellow columnar crystals (as iodine salt), mp 202~203°C,  $[\alpha]_D^{24} = -103.4^\circ$  ( $c = 1.2$ ,  $CHCl_3$ ). **Source:** HAI NAN QING NIU DAN *Tinospora hainanensis*. **Ref:** 687.



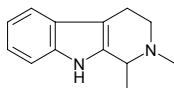


**14749 N-Methyltetrahydrocytisine**

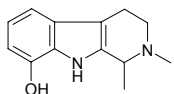
$C_{12}H_{20}N_2O$  (208.31). Source: HONG DOU *Ormosia hosiei*. Ref: 6, 1521.

**14750 N<sub>6</sub>-Methyltetrahydroharman**

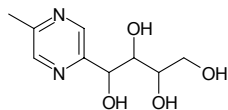
$C_{13}H_{16}N_2$  (200.29). mp 112°C. Source: HONG MU JI CAO *Desmodium gangeticum*. Ref: 6.

**14751 N<sub>6</sub>-Methyltetrahydroharmol**

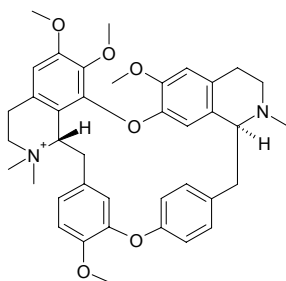
$C_{13}H_{16}N_2O$  (216.29). mp 268~270°C. Source: SHA ZAO SHU PI *Elaeagnus angustifolia*. Ref: 6.

**14752 2-Methyl-5-(1',2',3',4'-tetrahydroxybutyl)pyrazine**

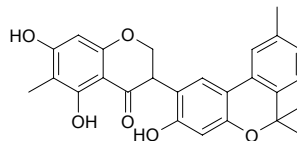
Pedatisectine E  $C_9H_{14}N_2O_4$  (214.22). White granular crystals, mp 202~203°C,  $[\alpha]_D^{17} = -87.8^\circ$  ( $c = 0.165$ , DMSO). Source: ZHANG YE BAN XIA *Pinellia pedatisecta*. Ref: 477.

**14753 (+)-2-N-Methyltetrandrine**

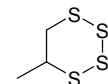
$C_{39}H_{45}N_2O_6^+$  (637.80). Source: FANG JI *Stephania tetrandra*. Ref: 2.

**14754 6-Methyltetrapterol A**

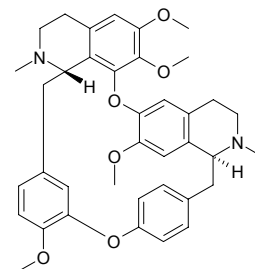
2,3-Dihydro-5,7-dihydroxy-6-methyl-3-(3-hydroxy-6,6,9-trimethyl-6H-dibenz[*b,d*]pyran-2-yl) 4*H*-1-benzopyran-4-one  $C_{26}H_{24}O_6$  (432.48). Source: DAN HUI BAI SHAN MA HUANG *Desmodium canum*. Ref: 3444.

**14755 5-Methyl-1,2,3,4-tetrathiane**

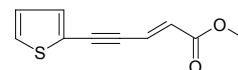
$C_3H_6S_4$  (170.34). Source: XIE BAI *Allium macrostemon*. Ref: 1391.

**14756 (+)-O-Methylthalicberine**

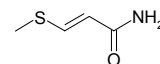
[5096-71-9]  $C_{38}H_{42}N_2O_6$  (622.77). mp 186~187°C,  $[\alpha]_D^{19} = +244.6^\circ$ . Pharm: Anti-inflammatory; antihypertensive (rbt, *in vivo*). Source: XIAO TANG SONG CAO *Thalictrum minus*, YAN GUO CAO *Thalictrum thunbergii*, YUE GUI XIAO BO *Berberis laurina*. Ref: 6, 658, 1521, 1648.

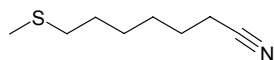
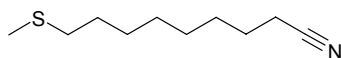
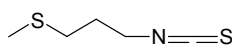
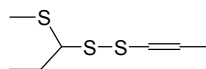
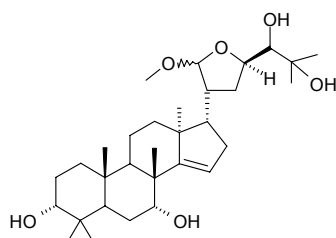
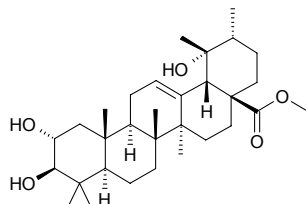
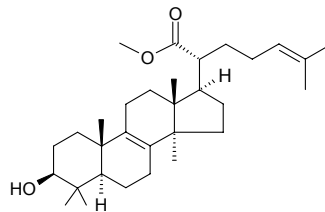
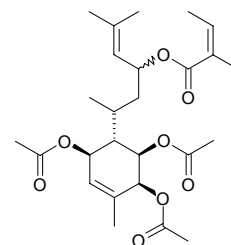
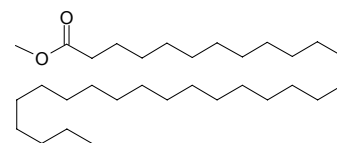
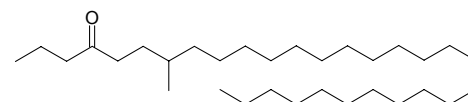
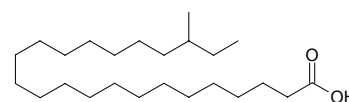
**14757 Methyl trans-5-(2-thienyl)-2-penten-4-yn-1-oate**

$C_{10}H_8O_2S$  (192.24). mp 67°C. Source: YANG SHI CAO *Achillea millefolium*. Ref: 6.

**14758 trans-3-Methylthioacrylamide**

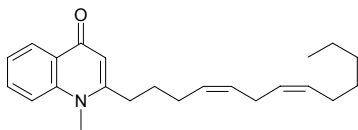
$C_4H_7NOS$  (117.17). Pale yellow solid, mp 116~118°C Pharm: Antitubercular (*Mycobacterium tuberculosis* H37Ra, Microplate Alamar Blue Assay, MIC = 200µg/mL, control Isoniazide, MIC = 0.040~0.090µg/mL, Kanamycin sulfate, MIC = 2.0~5.0µg/mL); antimalarial inactive (*Plasmodium falciparum*, EC<sub>50</sub> > 20µg/mL). Source: TAI GUO NIU XU HUA *Clinacanthus siamensis* (leaf). Ref: 4410.



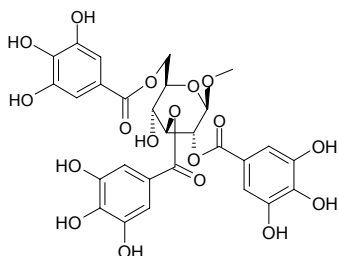
**14759 6-Methyl-1-thio-2,4-cyclohexadiene**C<sub>6</sub>H<sub>8</sub>S (112.19). [Source](#): DA SUAN *Allium sativum*. [Ref](#): 2.**14760 7-Methylthioheptanenitrile**C<sub>8</sub>H<sub>15</sub>NS (157.28). [Source](#): DOU BAN CAI *Nasturtium officinale*. [Ref](#): 1323.**14761 9-Methylthiononanenitrile**C<sub>10</sub>H<sub>19</sub>NS (185.33). [Source](#): DOU BAN CAI *Nasturtium officinale*. [Ref](#): 1323.**14762 3-Methylthiopropyl isothiocyanate**[505-79-3] C<sub>5</sub>H<sub>9</sub>NS<sub>2</sub> (147.26). bp 120.5–122.0°C/12mmHg. [Source](#): JIE ZI *Brassica juncea*. [Ref](#): 6.**14763 1-(1-Methyl thiopropyl)-1-propenyl disulfide**C<sub>7</sub>H<sub>14</sub>S<sub>3</sub> (194.38). [Source](#): A WEI *Ferula assafoetida*. [Ref](#): 1351, 1352.**14764 21-O-Methyl toosendanpentol**C<sub>31</sub>H<sub>52</sub>O<sub>6</sub> (520.76). Needles (Me<sub>2</sub>CO–hexane), mp 106–108°C, [α]<sub>D</sub> = –52.1° (c = 0.36, MeOH). [Source](#): CHUAN LIAN ZI *Melia toosendan*. [Ref](#): 1343, 1521.**14765 Methyl tormentate**C<sub>31</sub>H<sub>50</sub>O<sub>5</sub> (502.74). [Source](#): JIN YING ZI *Rosa laevigata*. [Ref](#): 1326.**14766 Methyl trametenolate**C<sub>31</sub>H<sub>50</sub>O<sub>3</sub> (470.74). [Source](#): BAO PI GU *Lentinus lepideus*. [Ref](#): 1501.**14767 3-Methyl-1-{2-[(1R\*,2S\*,5R\*,6R\*)-2,5,6-tri(acetyloxy)-4-methyl-3-cyclohexenyl]-propyl}-2-butenyl (Z)-2-methyl-2-butenoate**C<sub>26</sub>H<sub>38</sub>O<sub>8</sub> (478.59). [Pharm](#): Anti-Inflammatory (anti-oedema, control oedema = (7.8±0.3)mg, 100µg/cm<sup>2</sup> mixture with 3b, oedema = (4.6±0.5)mg, p<0.05, reduction = 41%, Indomethacin oedema = (3.4±0.3)mg, p<0.05, reduction = 56%); effect on leukocytes infiltration (control E.A. at 6h = (24.6±1.6)U/mL/min, 100µg/cm<sup>2</sup> mixture with 3b, E.A. at 6h = (18.2±0.5)U/mL/min, Reduce = 26%, p<0.05). [Source](#): GAO SHAN HUO RONG CAO *Leontopodium alpinum* (root). [Ref](#): 4985.**14768 Methyl triacontanate**[629-83-4] C<sub>31</sub>H<sub>62</sub>O<sub>2</sub> (466.84). mp 71.5°C. [Source](#): SHAN TAO JING BAI PI *Prunus davidiana*, TAO JING BAI PI *Prunus persica*. [Ref](#): 6, 660.**14769 7-Methyl-4-triacontanone**C<sub>31</sub>H<sub>62</sub>O (450.84). [Source](#): XIA YE XIANG PU *Typha angustifolia*. [Ref](#): 2, 660.**14770 21-Methyl tricosanoic acid**C<sub>24</sub>H<sub>48</sub>O<sub>2</sub> (368.65). [Source](#): XIE BAI *Allium macrostemon*. [Ref](#): 1390.

**14771 1-Methyl-2-(4Z,7Z)-4,7-tridecadienyl-4(1H)-quinolinone**

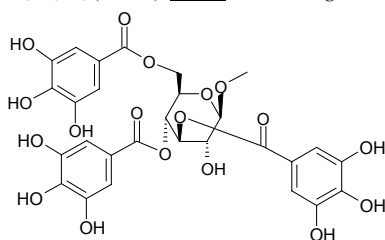
$C_{23}H_{31}NO$  (337.51). **Pharm:** Leukotriene biosynthesis inhibitor (hmn polymorphonuclear granulocytes,  $IC_{50} = 10.1 \mu\text{mol/L}$ , zileuton,  $IC_{50} = 10.4 \mu\text{mol/L}$ )<sup>[5031]</sup>. **Source:** WU ZHU YU *Evodia rutaecarpa* (fruit). **Ref:** 2, 877, 5031.

**14772 Methyl 2,3,6-tri-O-galloyl-β-D-glucopyranoside**

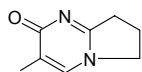
$C_{28}H_{26}O_{18}$  (650.51). **Source:** DI YU *Sanguisorba officinalis*. **Ref:** 1327.

**14773 Methyl 3,4,6-tri-O-galloyl-β-D-glucopyranoside**

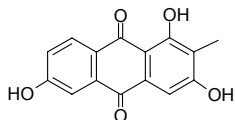
$C_{28}H_{26}O_{18}$  (650.51). **Source:** DI YU *Sanguisorba officinalis*. **Ref:** 1327.

**14774 3-Methyl-6,7,8-trihdropyrrolo[1,2-a]pyrimidin-2-one**

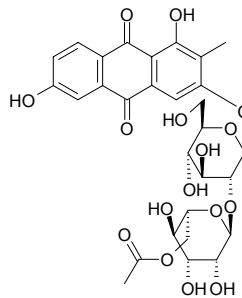
$C_8H_{10}N_2O$  (150.18). **Source:** GAN CAO *Glycyrrhiza uralensis*. **Ref:** 1331.

**14775 2-Methyl-1,3,6-trihydroxyanthraquinone**

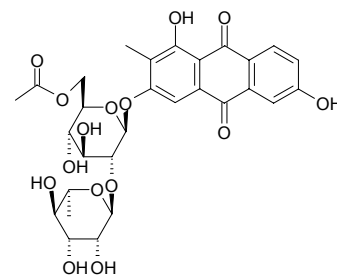
$C_{15}H_{10}O_5$  (270.24). **Pharm:** β-Hexosaminidase release inhibitor (RBL-2H3 cells,  $100 \mu\text{mol/L}$ ,  $\text{InRt} = (82.3 \pm 0.7)\%$ ,  $p < 0.01$ )<sup>[4347]</sup>; cytotoxic (KB,  $ED_{50} > 25 \mu\text{g/mL}$ , control Doxorubicin,  $ED_{50} = 0.12 \mu\text{g/mL}$ ; Hep3B,  $ED_{50} = 1.7 \mu\text{g/mL}$ , control Doxorubicin,  $ED_{50} = 0.14 \mu\text{g/mL}$ ; Colon205,  $ED_{50} = 1.16 \mu\text{g/mL}$ , control Doxorubicin,  $ED_{50} = 0.10 \mu\text{g/mL}$ ; HeLa,  $ED_{50} = 12.3 \mu\text{g/mL}$ , control Doxorubicin,  $ED_{50} = 0.11 \mu\text{g/mL}$ )<sup>[4369]</sup>; NO production inhibitor (*in vitro*, LPS-activated mouse peritoneal macrophages,  $3 \mu\text{mol/L}$ ,  $10 \mu\text{mol/L}$ ,  $30 \mu\text{mol/L}$ ,  $100 \mu\text{mol/L}$ ,  $\text{InRt} = 7.9\%$ ,  $37.5\%$ ,  $99.5\%$ ,  $99.6\%$ , respectively; control *L*-NMMA,  $3 \mu\text{mol/L}$ ,  $10 \mu\text{mol/L}$ ,  $30 \mu\text{mol/L}$ ,  $100 \mu\text{mol/L}$ ,  $\text{InRt} = 10.3\%$ ,  $15\%$ ,  $34.1\%$ ,  $63.1\%$ , respectively)<sup>[4691]</sup>. **Source:** GUANG JING QIAN CAO *Rubia wallichiana* (stem), QIAN CAO GEN *Rubia cordifolia*, XIAO HONG SHEN *Rubia yunnanensis* (root: yield =  $0.025\%$ dw)<sup>[4691]</sup>. **Ref:** 1363, 4347, 4369, 4691.

**14776 2-Methyl-1,3,6-trihydroxyanthraquinone 3-O-(6'-O-acetyl)-α-L-rhamnosyl-(1→2)-β-D-glucoside**

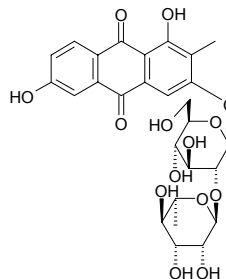
$C_{29}H_{32}O_{16}$  (636.57). **Pharm:** Cytotoxic (KB,  $ED_{50} > 25 \mu\text{g/mL}$ , control Doxorubicin,  $ED_{50} = 0.12 \mu\text{g/mL}$ ; Hep3B,  $ED_{50} > 25 \mu\text{g/mL}$ , Doxorubicin,  $ED_{50} = 0.14 \mu\text{g/mL}$ ; Colon205,  $ED_{50} > 25 \mu\text{g/mL}$ , Doxorubicin,  $ED_{50} = 0.10 \mu\text{g/mL}$ ; HeLa,  $ED_{50} > 25 \mu\text{g/mL}$ , Doxorubicin,  $ED_{50} = 0.11 \mu\text{g/mL}$ ). **Source:** GUANG JING QIAN CAO *Rubia wallichiana* (stem). **Ref:** 4369.

**14777 2-Methyl-1,3,6-trihydroxy-9,10-anthraquinone 3-O-(α-L-rhamno-pyranosyl-(1→2)(6'-acetyl)-β-D-glucopyranoside)**

$C_{29}H_{32}O_{15}$  (620.57). **Pharm:** Anti-inflammatory inactive (inhibits nitric oxide production, LPS-activated mouse peritoneal macrophages,  $100 \mu\text{mol/L}$ ,  $\text{InRt} = (7.2 \pm 4.1)\%$ , control *L*-NMMA,  $IC_{50} = 57 \mu\text{mol/L}$ )<sup>[4347]</sup>; β-Hexosaminidase inhibitor inactive (RBL-2H3 cells, inhibits release of β-hexosaminidase,  $100 \mu\text{mol/L}$ ,  $\text{InRt} = (-9.9 \pm 1.6)\%$ )<sup>[4347]</sup>. **Source:** XIAO HONG SHEN *Rubia yunnanensis* (root), QIAN CAO GEN *Rubia cordifolia*. **Ref:** 660, 4347.

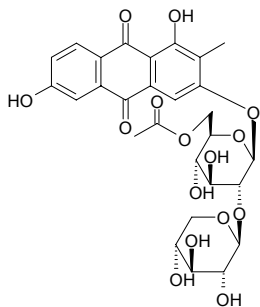
**14778 2-Methyl-1,3,6-trihydroxyanthraquinone 3-O-α-L-rhamnosyl-(1→2)-β-D-glucoside**

$C_{27}H_{30}O_{14}$  (578.53). **Source:** GUANG JING QIAN CAO *Rubia wallichiana* (stem), QIAN CAO GEN *Rubia cordifolia*. **Ref:** 660, 4369.



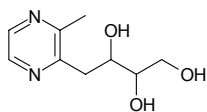
**14779 2-Methyl-1,3,6-trihydroxy-9,10-anthraquinone-3-O- $\beta$ -D-xylosyl-(1 $\rightarrow$ 2)- $\beta$ -D-(6'-O-acetyl) glucoside**

C<sub>28</sub>H<sub>30</sub>O<sub>15</sub> (606.54). Yellow acicular crystals, mp 284~286°C. Source: QIAN CAO GEN *Rubia cordifolia*. Ref: 242, 660.



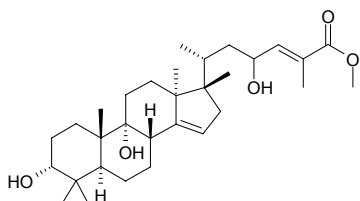
**14780 2-Methyl-3-(2',3',4'-trihydroxybutyl)pyrazine**

Pedatisectine D C<sub>9</sub>H<sub>14</sub>N<sub>2</sub>O<sub>3</sub> (198.22). White granular crystals, mp 110~112°C. Source: ZHANG YE BAN XIA *Pinellia pedatisecta*. Ref: 477.



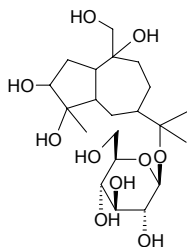
**14781 Methyl (24E)-3 $\alpha$ ,9,23-trihydroxy-17,14-friedo-lanostan-14,24-dien-26-oate**

C<sub>31</sub>H<sub>50</sub>O<sub>5</sub> (502.74). White solid, mp 128~130°C, [ $\alpha$ ]<sub>D</sub><sup>29</sup> = -48° (c = 0.42, MeOH). Source: SHAN FENG GUO *Garcinia hombroniana* (pericarp). Ref: 5085.



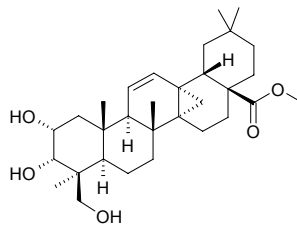
**14782 2-(8-Methyl-2,8,9-trihydroxy-2-hydroxymethylbicyclo[5.3.0]decan-7-yl)isopropanol glucoside**

C<sub>21</sub>H<sub>38</sub>O<sub>10</sub> (450.53). Source: CANG ZHU *Atractylodes lancea*. Ref: 660.



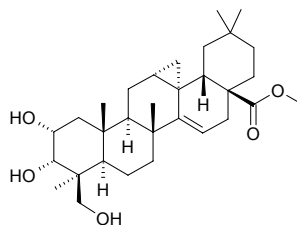
**14783 Methyl (13S,14R)2 $\alpha$ ,3 $\alpha$ ,24-trihydroxy-13,14-cyclo-oleana-11-en-28-oate**

C<sub>31</sub>H<sub>48</sub>O<sub>5</sub> (500.73). Source: XIA KU CAO *Prunella vulgaris*. Ref: 2508.



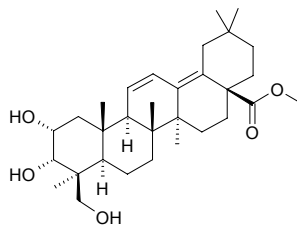
**14784 Methyl (12R,13S)2 $\alpha$ ,3 $\alpha$ ,24-trihydroxy-12,13-cyclo-taraxer-14-en-28-oate**

C<sub>31</sub>H<sub>48</sub>O<sub>5</sub> (500.73). Source: XIA KU CAO *Prunella vulgaris*. Ref: 2508.



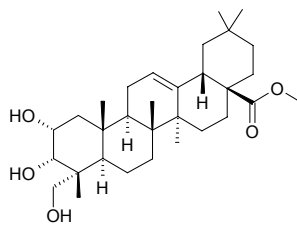
**14785 Methyl 2 $\alpha$ ,3 $\alpha$ ,24-trihydroxyoleana-11,13(18)-dien-28-oate**

C<sub>31</sub>H<sub>48</sub>O<sub>5</sub> (500.73). Source: XIA KU CAO *Prunella vulgaris*. Ref: 2508.



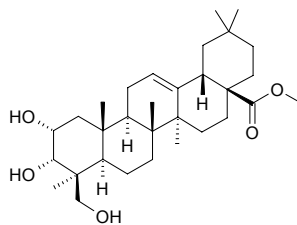
**14786 Methyl 2 $\alpha$ ,3 $\alpha$ ,23-trihydroxyolean-12-en-28-oate**

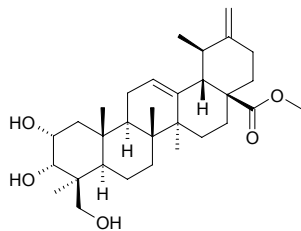
C<sub>31</sub>H<sub>50</sub>O<sub>5</sub> (502.74). Source: XIA KU CAO *Prunella vulgaris*. Ref: 2508.



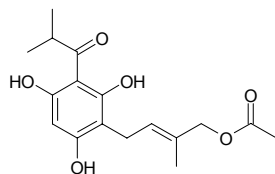
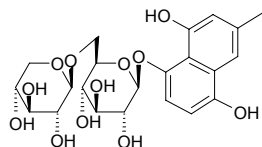
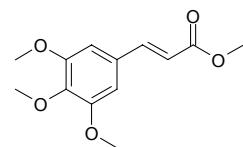
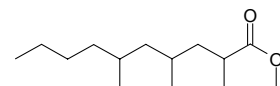
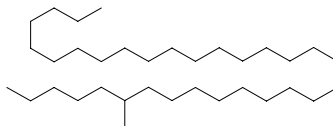
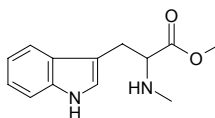
**14787 Methyl 2 $\alpha$ ,3 $\alpha$ ,24-trihydroxyolean-12-en-28-oate**

C<sub>31</sub>H<sub>50</sub>O<sub>5</sub> (502.74). Source: XIA KU CAO *Prunella vulgaris*. Ref: 2508.

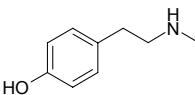
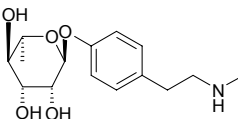


**14788 Methyl 2 $\alpha$ ,3 $\alpha$ ,24-trihydroxyursa-12,20(30)-dien-28-oate**C<sub>31</sub>H<sub>48</sub>O<sub>5</sub> (500.73). Source: XIA KU CAO *Prunella vulgaris*. Ref: 2508.**14789 2-Methyl-4-[2',4',6'-trihydroxy-3'-(2-methylpropanoyl)phenyl]but-2-enyl acetate**

C<sub>17</sub>H<sub>22</sub>O<sub>6</sub> (322.36). mp 140°C. Pharm: Antibacterial (gram-positive bacteria: *Bacillus cereus*, *Bacillus pumilus*, *Bacillus subtilis*, *Micrococcus kristinae*, *Staphylococcus aureus*, all MIC = 0.5 μg/mL; gram-negative bacteria: *Enterobacter cloacae*, *Escherichia coli*, *Klebsiella pneumoniae*, *Pseudomonas aeruginosa*, *Serratia marcescens*, all inactive); antifungal (*Aspergillus flavus*, MIC = 1.0 μg/mL; *Aspergillus niger*, MIC = 1.0 μg/mL; *Cladosporium cladosporioides*, MIC = 5.0 μg/mL; *Cladosporium cucumerinum*, MIC = 0.5 μg/mL; *Cladosporium sphaerospermum*, MIC = 0.5 μg/mL; *Phytophthora capsici*, MIC = 1.0 μg/mL). Source: NAN FEI CONG SHENG LA JU *Helichrysum caespitium* (shoot). Ref: 3899.

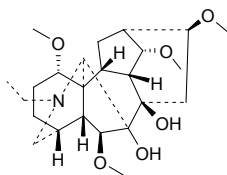
**14790 7-Methyl-1,4,5-trihydroxy-naphthalene-4-O-(6'-O-β-xylopyranosyl)-β-glucopyranoside**C<sub>22</sub>H<sub>28</sub>O<sub>12</sub> (484.46). Off-white amorphous powder, [α]<sub>D</sub><sup>17</sup> = -128.5° (c = 0.4, DMSO). Source: SHI DI *Diospyros kaki*. Ref: 2321.**14791 Methyl 3,4,5-trimethoxycinnamate**C<sub>13</sub>H<sub>16</sub>O<sub>5</sub> (252.27). Source: BI BA GEN *Piper longum*. Ref: 1482.**14792 Methyl-2,4,6-trimethyl-decanoate**C<sub>14</sub>H<sub>28</sub>O<sub>2</sub> (228.38). Source: DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*]. Ref: 2.**14793 4-Methyl-1,2,3-trithiane**C<sub>4</sub>H<sub>8</sub>S<sub>3</sub> (152.30). Source: XIE BAI *Allium macrostemon*. Ref: 1391.**14794 6-Methyl tritriacontane**C<sub>34</sub>H<sub>70</sub> (478.94). Source: BAN BIAN SU *Elsholtzia ciliata*. Ref: 1457.**14795 (+)-N<sub>b</sub>-Methyl tryptophan methyl ester (S)**C<sub>13</sub>H<sub>16</sub>N<sub>2</sub>O<sub>2</sub> (232.28). Source: HUANG HUA ZI *Sida cordifolia*. Ref: 6.**14796 N-Methyltyramine**

C<sub>9</sub>H<sub>13</sub>NO (151.21). mp 130–131°C, bp 183–185°C/9mmHg. Pharm: Diuretic; increases blood flow through kidney (0.2mg/(kg·min), renal blood flow increases 75% and amount of urine increases 100%); increases blood pressure (anesthetic dog, 0.02–0.5mg/kg iv); increases coronary flow; induces myocardial rhythm; reduces consumption of oxygen in myocardium; LD<sub>50</sub> (iv chloride) = 33.9mg/kg. Source: GAN PI *Citrus chachiensis* (dried ripe pericarp: content = 0.096%)<sup>[5508]</sup>, GOU JU ZHI SHI *Poncirus trifoliata*, HONG MU JI CAO *Desmodium gangeticum*, XIANG YUAN ZHI SHI *Citrus wilsonii*, XIAO GUO YIN MAO QIU *Mammillaria microcarpa*, ZHI KE *Citrus aurantium*, ZHI SHI *Citrus aurantium* (young fruit: content scope = 0.19%–0.83%)<sup>[5501]</sup>. Ref: 4, 658, 660, 5501, 5508.

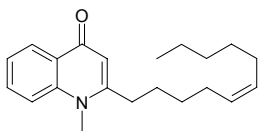
**14797 N-Methyl tyramine-O-α-L-rhamnopyranoside**C<sub>15</sub>H<sub>23</sub>NO<sub>5</sub> (297.35). Source: DA YE CAI *Selaginella doederleinii*. Ref: 1411.

**14798 6-Methylumbrofine**

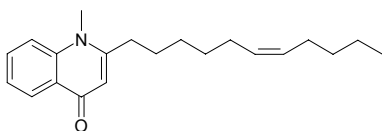
$C_{24}H_{39}NO_6$  (437.58). Colorless powder, mp 145–148°C. Source: ZI HUA GAO WU TOU *Aconitum excelsum*. Ref: 689.

**14799 1-Methyl-2-[(Z)-5-undecenyl]-4(1H)-quinolone**

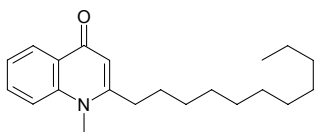
$C_{21}H_{29}NO$  (311.47). Colorless oil. Source: WU ZHU YU *Evodia rutaecarpa*. Ref: 9, 877.

**14800 1-Methyl-2-[(Z)-6-undecenyl]-4(1H)-quinolone**

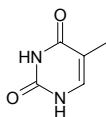
$C_{21}H_{29}NO$  (311.47). Pharm: Leukotriene biosynthesis inhibitor (hmn polymorphonuclear granulocytes,  $IC_{50} = 10.0\mu\text{mol/L}$ , zileuton,  $IC_{50} = 10.4\mu\text{mol/L}$ )<sup>[5031]</sup>. Source: WU ZHU YU *Evodia rutaecarpa*. Ref: 2, 877, 5031.

**14801 1-Methyl-2-undecyl-4(1H)-quinolone**

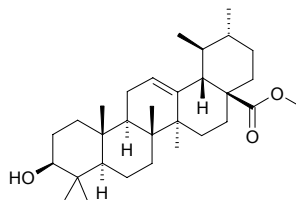
$C_{21}H_{31}NO$  (313.49). Source: WU ZHU YU *Evodia rutaecarpa*. Ref: 2.

**14802 5-Methyluracil**

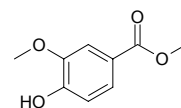
Thymine [65-71-4]  $C_5H_6N_2O_2$  (126.12). mp 326°C. Pharm: Nitrogen-containing base occurring in DNA and RNA; tyrosinase inhibitor ( $333.3\mu\text{mol/L}$ , InRt = 7.8%; control Kojic acid,  $333.3\mu\text{mol/L}$ , InRt = 59.8%)<sup>[4233]</sup>. Source: MU ZEI *Equisetum hiemale*, ZANG HONG HUA *Crocus sativus* (pollen), ZHANG YE BAN XIA *Pinellia pedatisecta*. Ref: 2, 658, 660, 4233.

**14803 Methyl ursolate**

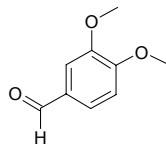
[32208-45-0]  $C_{31}H_{50}O_3$  (470.74). Source: XIA KU CAO *Prunella vulgaris*. Ref: 2508.

**14804 Methyl vanillate**

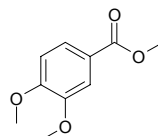
$C_9H_{10}O_4$  (182.18). Source: GUAN MU TONG *Aristolochia manshuriensis* (stem: yield = 0.00049%)<sup>[4706]</sup>, TAI WAN FU RONG *Hibiscus taiwanensis*, TAI WAN PU GONG YING *Taraxacum formosanum* (fresh root). Ref: 2529, 4488, 4706.

**14805 Methylvanillin**

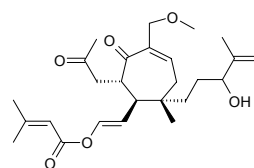
[120-14-9]  $C_9H_{10}O_3$  (166.18). mp 44°C, 58°C. Source: PENG ZI CAI *Galium verum*, SHOU ZHANG SHEN *Gymnadenia conopsea*. Ref: 6.

**14806 Methyl veratrate**

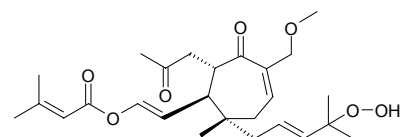
$C_{10}H_{12}O_4$  (196.20). Source: JIN FA XIAN *Polytrichum commune*. Ref: 1504.

**14807 18-O-Methylvibsanin G**

$C_{26}H_{38}O_6$  (446.59). Colorless amorphous solid,  $[\alpha]_D^{26} = +38.1^\circ$  ( $c = 0.4$ ,  $CHCl_3$ ). Source: XIANG QI JIA MI *Viburnum odoratissimum* (leaf and flower: yield = 0.00002%dw). Ref: 3004.

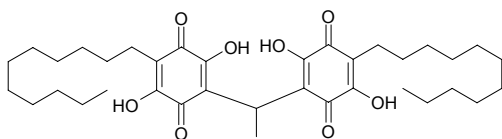
**14808 18-O-Methylvibsanin K**

$C_{26}H_{38}O_7$  (462.59). Source: RI BEN JIA MI *Viburnum awabuki* (leaf). Ref: 4168.

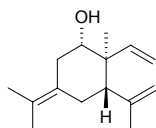


**14809 Methylvilangin**

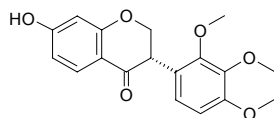
$C_{36}H_{54}O_8$  (614.83). Orange crystals (methanol), mp 129–130°C,  $[\alpha]_D^{25} = +180^\circ$  ( $c = 1.0$ ,  $CH_2Cl_2$ ). Source: TIE ZI *Myrsine africana* (fruit). Ref: 3464.

**14810 2-Methyl-2-vinyl-3-isopropenyl-5-isopropylidene cyclohexanol**

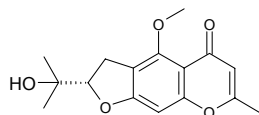
$C_{15}H_{24}O$  (220.36). bp 46–47°C. Source: XI XIN *Asarum sieboldii*. Ref: 6.

**14811 3'-O-Methylviolanone**

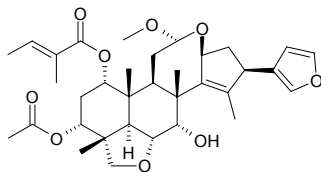
[56973-42-3]  $C_{18}H_{18}O_6$  (330.34). Source: JIANG ZHEN XIANG *Dalbergia odorifera*. Ref: 716.

**14812 5-O-Methylvisaminol**

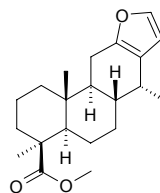
$C_{16}H_{18}O_5$  (290.32). Pharm: Antihypertensive (animal model). Source: FANG FENG *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*]. Ref: 2, 658.

**14813 12-O-Methylvolkensin**

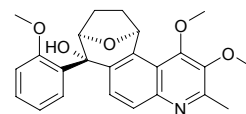
[244179-69-9]  $C_{34}H_{46}O_9$  (598.74). Colorless needles, mp = 236.5–238.0°C,  $[\alpha]_D^{18} = -52.0^\circ$  ( $c = 0.1$ , MeOH). Pharm: Cytotoxic (inhibits KB cell's growth,  $IC_{50} = 8.72\mu g/mL$ , control Adriamycin,  $IC_{50} = 0.066\mu g/mL$ ). Source: CHUAN LIAN PI *Melia toosendan*. Ref: 2314.

**14814 (+)-Methyl vouacapenate**

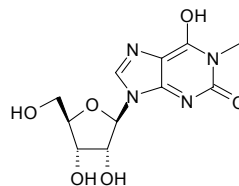
$C_{21}H_{30}O_3$  (330.47). Source: MEI GUO KE YA SHU *Vouacoupa Americana* (wood). Ref: 4315.

**14815 O-Methyl-waltherione A**

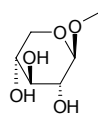
$C_{24}H_{25}NO_5$  (407.47). White solid, mp 188.0–189.0°C,  $[\alpha]_D^{25} = -21.5^\circ$  ( $c = 0.016$ ,  $CHCl_3$ ). Pharm: Antibacterial (TLC bioassay, *Staphylococcus aureus*, detection limit = 25.0 $\mu g$ ; *Streptococcus epidermidis*, detection limit = 3.5 $\mu g$ ; *Micrococcus luteus*, detection limit = 6.5 $\mu g$ ; *Klebsiella pneumoniae*, detection limit = 12.5 $\mu g$ ; *Salmonella setubal*, detection limit = 12.5 $\mu g$  and *Escherichia coli*, detection limit = 6.5 $\mu g$ ). Source: *Waltheria douradinha* (root cortex). Ref: 5284.

**14816 1-Methylxanthosine**

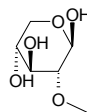
$C_{11}H_{14}N_4O_6$  (298.26). White solid. Source: LV HAI KUI *Anthopleura stell.* Ref: 2111.

**14817 1-O-Methyl-D-xyloside**

$C_6H_{12}O_5$  (164.16). mp ( $\alpha$ ) 90–92°C, ( $\beta$ ) 157°C. Source: LU JIAO CAI *Gloiopeltis furcata*. Ref: 6.

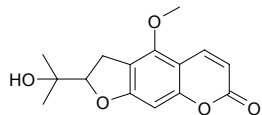
**14818 2-O-Methyl-D-xyloside**

$C_6H_{12}O_5$  (164.16). mp  $\beta$ -D (+) 137–138°C. Source: HAI DAI *Zostera marina*. Ref: 6.

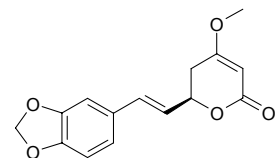


**14819 5-Methoxymarmesin**

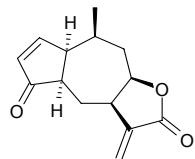
$C_{15}H_{16}O_5$  (276.29). Oil. Source: RU DI JIN NIU *Zanthoxylum nitidum* (root). Ref: 4555.

**14820 Methysticin**

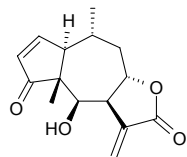
[495-85-2]  $C_{15}H_{14}O_5$  (274.28). Pharm: Antispasmodic. Source: KA WA HU JIAO *Piper methysticum*. Ref: 658.

**14821 Mexicanin E**

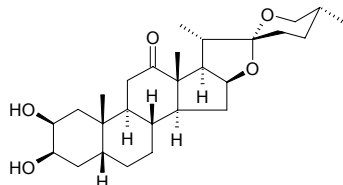
[5945-40-4]  $C_{14}H_{16}O_3$  (232.28). Pharm: Antineoplastic; cytotoxic; supertoxic agent (mammal). Source: MO XI GE DUI XIN JU *Helenium mexicanum*. Ref: 658, 1521.

**14822 Mexicanin I**

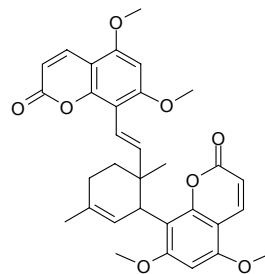
[5945-41-5]  $C_{15}H_{18}O_4$  (262.31). Pharm: Antineoplastic; cytotoxic. Source: DUI XIN JU *Helenium autumnale*. Ref: 658.

**14823 Mexogenin**

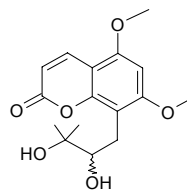
$C_{27}H_{42}O_5$  (446.63). mp 246°C. Source: JI JIAN LONG SHE LAN *Agave rigidissima*. Ref: 2503.

**14824 Mexolide**

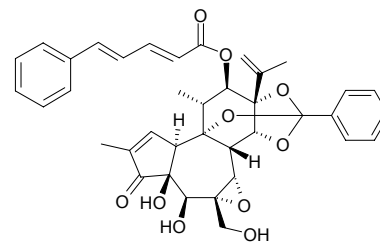
Toddasin [75775-35-8]  $C_{32}H_{32}O_8$  (544.61). Crystals ( $CH_2Cl_2$ - $Et_2O$ ), mp 241°C. Source: FEI LONG ZHANG XUE *Toddalia asiatica* [Syn. *Toddalia aculeata*; *Paullinia asiatica*], XIAO YE JIU LI XIANG *Murraya paniculata* var. *exotica*, ZHONG HUA JIU LI XIANG *Murraya exotica*. Ref: 1335, 1521.

**14825 Mexoticin**

5,7-Dimethoxy-8-(2,3-dihydroxyisopentyl) coumarin; *L*-Isomexoticin [18196-00-4]  $C_{16}H_{20}O_6$  (308.33). mp 185°C;  $[\alpha]_D^{24} = -123.7^\circ$  ( $c = 0.3$ , MeOH). Pharm: Platelet aggregation inhibitor (washed rabbit platelets, induced by thrombin, AA, collagen and PAF, 100 $\mu$ g/mL: thrombin = 0.1U/mL, AggRt = (84.0 $\pm$ 0.8)%,  $p < 0.05$ , control, AggRt = (80.0 $\pm$ 1.1)%; AA = 100 $\mu$ mol/L, AggRt = (71.3 $\pm$ 6.1)%, control, AggRt = (77.0 $\pm$ 1.5)%; collagen = 10 $\mu$ g/mL, AggRt = (69.7 $\pm$ 4.0)%,  $p < 0.05$ , control, AggRt = (78.3 $\pm$ 1.3)%; PAF = 1ng/mL, AggRt = (82.0 $\pm$ 2.9)%, control, AggRt = (82.5 $\pm$ 1.5)%)<sup>[5417]</sup>. Source: JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*], QI GUO QIAN LI XIANG *Murraya paniculata* var. *omphalocarpa* (leaf), YUN QIAN HU *Peucedanum rubricaula*, ZHONG HUA JIU LI XIANG *Murraya exotica*. Ref: 6, 11, 177, 5417.

**14826 Mezerein**

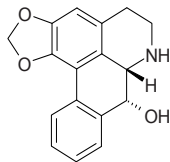
[34807-41-5]  $C_{38}H_{38}O_{10}$  (654.72). Crystals, mp 265–269°C (dec),  $[\alpha]_D^{25} = +117.5^\circ$  (chloroform); colorless columnar crystals (dichloromethane-ether), mp 258–262°C,  $[\alpha]_D^{27} = +125^\circ$  (chloroform). Pharm: Antineoplastic (mus P<sub>388</sub> and L<sub>1210</sub>, 50 $\mu$ g/kg); hemostatic (rbt, 0.01 $\mu$ mol/L, promotes platelet aggregation). Source: OU YA RUI XIANG *Daphne mezereum*. Ref: 661.



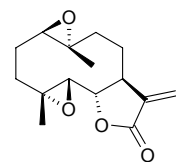


**14827 Michelalbine**

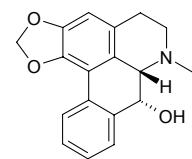
(-)-Norushinsunine [3175-84-6]  $C_{17}H_{15}NO_3$  (281.31). mp 205~207°C. Source: BAI LAN HUA *Michelia alba*, HOU PO *Magnolia officinalis*, QING FENG TENG *Sinomenium acutum*, YOU GOU YING ZHAO *Artabotrys uncinatus* (root). Ref: 6, 625, 1521, 3083.

**14828 Michelenolide**

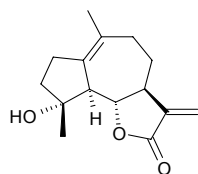
[66392-96-9]  $C_{15}H_{20}O_4$  (264.32). Pharm: Antineoplastic; cytotoxic (*in vitro*, SMMC-7721,  $IC_{50} = 2.32\mu g/mL$ ; HO-8910,  $IC_{50} = 1.37\mu g/mL$ ; control Vincristine, SMMC-7721,  $IC_{50} = 30.35\mu g/mL$ ; HO-8910,  $IC_{50} = 20.74\mu g/mL$ )<sup>[4736]</sup>. Source: CHANG YE TIAN MING JING *Carpesium longifolium* (aerial parts: yield = 0.001%dw)<sup>[4736]</sup>, WU XIN SHI *Michelia compressa* var. *formosana*. Ref: 658, 4736.

**14829 Micheline A**

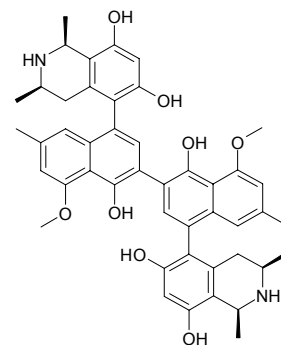
Ushinsunine [3175-89-1]  $C_{18}H_{17}NO_3$  (295.34). mp (-) 180~181°C. Pharm: Antibacterial (*Staphylococcus* sp., *Salmonella* sp., *Bacillus mycoides* and *Bacillus subtilis*). Source: HUANG MIAN GUI *Michelia champaca*, WU XIN SHI *Michelia compressa* var. *formosana*, BAI LAN HUA *Michelia alba*. Ref: 6, 658.

**14830 Micheliolide**

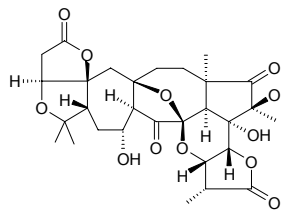
[68370-47-8]  $C_{15}H_{20}O_3$  (248.32). Pharm: Antineoplastic; cytotoxic. Source: WU XIN SHI *Michelia compressa* var. *formosana*. Ref: 658.

**14831 Michellamine B**

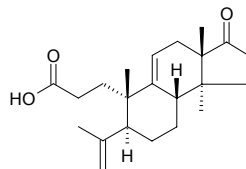
$C_{46}H_{48}N_2O_8$  (756.90). Pharm: Anti-HIV (inhibits HIV in early stage of its life cycle, inhibits the cell fusion and formation of plasmodia). Source: GOU ZHI TENG *Ancistrocladus korupensis*. Ref: 2268.

**14832 Micrandilactone A**

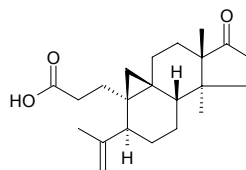
$C_{29}H_{36}O_{12}$  (576.60). Source: XIAO HUA WU WEI ZI *Schisandra micrantha*. Ref: 3006.

**14833 Micranoic acid A**

$C_{22}H_{32}O_3$  (344.50). Colorless needles (acetone), mp 87~88°C,  $[\alpha]_D^{23} = +69.11^\circ$  ( $c = 0.25$ , MeOH). Source: XIAO HUA WU WEI ZI *Schisandra micrantha* (leaf and stem). Ref: 4389.

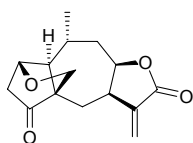
**14834 Micranoic acid B**

$C_{22}H_{32}O_3$  (344.50). Colorless prisms (acetone), mp 80~81°C,  $[\alpha]_D^{24} = +121.74^\circ$  ( $c = 0.23$ , MeOH). Source: XIAO HUA WU WEI ZI *Schisandra micrantha* (leaf and stem). Ref: 4389.

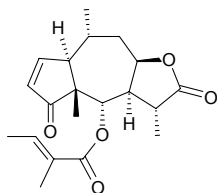


**14835 Microhelenin A**

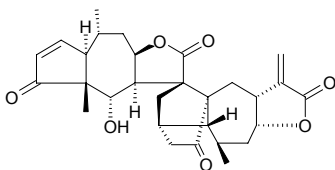
[61490-63-9] C<sub>15</sub>H<sub>18</sub>O<sub>4</sub> (262.31). mp 140~141°C. Pharm: Antineoplastic; cytotoxic. Source: XIAO TOU DUI XIN JU *Helenium microcephalum*. Ref: 5.

**14836 Microhelenin C**

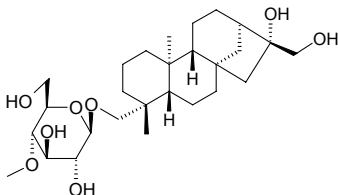
[63569-07-3] C<sub>20</sub>H<sub>26</sub>O<sub>5</sub> (346.43). Pharm: Antineoplastic; cytotoxic. Source: XIAO TOU DUI XIN JU *Helenium microcephalum*. Ref: 658.

**14837 Microlenin**

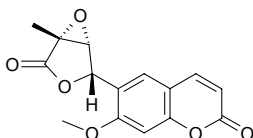
[60622-41-5] C<sub>29</sub>H<sub>34</sub>O<sub>7</sub> (494.59). mp 280°C (dec). Pharm: Antineoplastic (rat W<sub>256</sub>, 2.5mg/(kg·d) *in vivo*, biotic prolonged rate = 73%). Source: XIAO TOU DUI XIN JU *Helenium microcephalum*. Ref: 5, 658.

**14838 Microlepin**

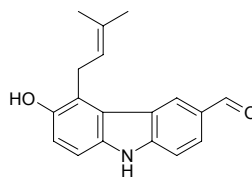
[61667-46-7] C<sub>27</sub>H<sub>46</sub>O<sub>8</sub> (498.66). Source: BIAN YUAN LIN GAI JUE *Microlepis marginata*. Ref: 1412.

**14839 Micromelin**

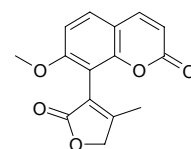
[15085-71-9] C<sub>15</sub>H<sub>12</sub>O<sub>6</sub> (288.26). Pharm: Antineoplastic. Source: XIAO YUN MU *Micromelum integerrimum*. Ref: 658.

**14840 Micromeline**

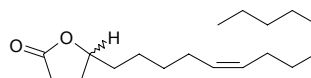
C<sub>18</sub>H<sub>17</sub>NO<sub>2</sub> (279.34). Yellow microcrystalline powder. Pharm: Antitubercular (MIC = (1.5±0.4)µg/mL, control Rifampin, MIC = (0.040±0.017)µg/mL); cytotoxic (Vero, IC<sub>50</sub> = 95µg/mL, Rifampin, IC<sub>50</sub> = 100µg/mL). Source: YING MAO XIAO YUN MU *Micromelum hirsutum* (stem cortex). Ref: 5072.

**14841 Microminutin**

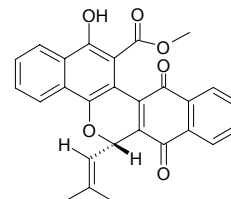
[84041-46-3] C<sub>15</sub>H<sub>12</sub>O<sub>5</sub> (272.26). Source: JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*]. Ref: 1336.

**14842 Micromolide**

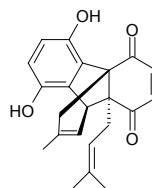
(-)-Z-9-Octadecene-4-olide C<sub>18</sub>H<sub>32</sub>O<sub>2</sub> (280.45). Colorless oil. Pharm: Antitubercular (MIC = (15.6±0.2)µg/mL, control Rifampin, MIC = (0.040±0.017)µg/mL); cytotoxic Vero, IC<sub>50</sub> > 102µg/mL, Rifampin, IC<sub>50</sub> = 100µg/mL. Source: YING MAO XIAO YUN MU *Micromelum hirsutum* (stem cortex). Ref: 5072.

**14843 Microphyllaquinone**

C<sub>27</sub>H<sub>20</sub>O<sub>6</sub> (440.46). Source: QIU ZHUANG PO BU MU *Cordia globosa* (root). Ref: 5043.

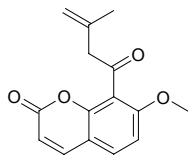
**14844 Microphyllone**

C<sub>22</sub>H<sub>22</sub>O<sub>4</sub> (350.42). Bright yellow needles, mp 167~168°C. Source: *Diospyros sylvatica* (root). Ref: 3811.

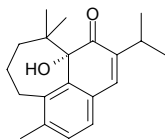


**14845 Micropubescin**

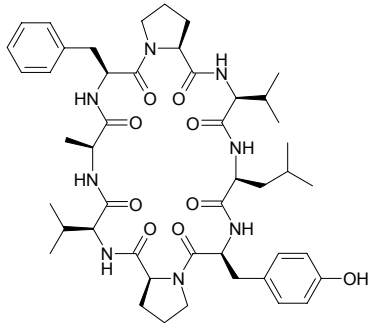
$C_{15}H_{14}O_4$  (258.28). mp 118~119°C. Source: YAN JIAO CAO *Boeninghausenia albiflora*. Ref: 2495.

**14846 Microstegiol**

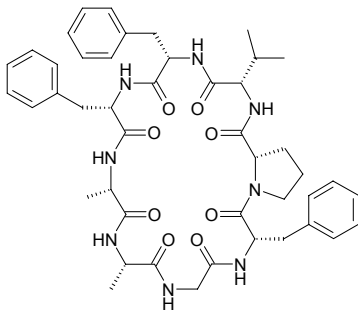
$C_{20}H_{26}O_2$  (298.43). mp 70°C,  $[\alpha]_D^{25} = +415^\circ$  ( $c = 0.1$ ,  $CHCl_3$ ). Pharm: Cytotoxic (Col2,  $IC_{50} = 17.4\mu g/mL$ , control Ellipticine,  $IC_{50} = 0.3\mu g/mL$ ; LNCaP,  $IC_{50} > 20\mu g/mL$ ; P<sub>388</sub>,  $IC_{50} = 3.0\mu g/mL$ , Ellipticine,  $IC_{50} = 0.1\mu g/mL$ ; KB,  $IC_{50} > 20\mu g/mL$ ; LU1,  $IC_{50} > 20\mu g/mL$ ). Source: XIONG RUI ZHUANG SHU WEI CAO *Salvia staminea*. Ref: 5400.

**14847 Microtoenin A**

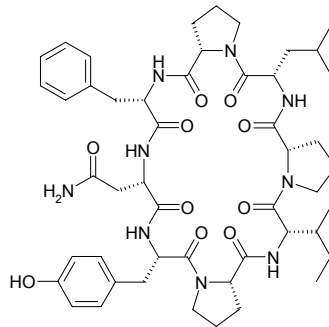
$C_{47}H_{66}N_8O_9$  (887.1). White amorphous powder, mp 280~282°C,  $[\alpha]_D^{20} = -104.8^\circ$  ( $c = 0.23$ , MeOH). Pharm: Cytotoxic inactive (Bre04, Lu04, N04,  $GI_{50} > 100\mu g/mL$ ); antiviral inactive (Vero cell lines infected with HSV-2 strain 333,  $250\mu g/mL$ ). Source: NAN CHUAN GUAN CHUN HUA *Microtoena prainiana* (stem: yield = 0.00026%dw). Ref: 4752.

**14848 Microtoenin B**

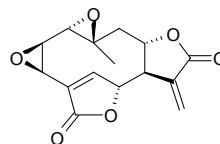
$C_{45}H_{56}N_8O_8$  (837.00). White amorphous powder, mp 288~290°C,  $[\alpha]_D^{20} = -68.3^\circ$  ( $c = 0.12$ , MeOH). Pharm: Cytotoxic inactive (Bre04, Lu04, N04,  $GI_{50} > 100\mu g/mL$ ); antiviral inactive (Vero cell lines infected with HSV-2 strain 333,  $250\mu g/mL$ ). Source: NAN CHUAN GUAN CHUN HUA *Microtoena prainiana* (stem: yield = 0.00014%dw). Ref: 4752.

**14849 Microtoenin C**

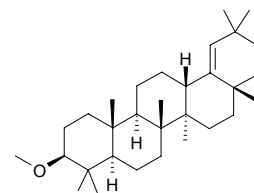
$C_{49}H_{67}N_9O_{10}$  (942.13). White amorphous powder, mp 256~258°C,  $[\alpha]_D^{20} = -93.8^\circ$  ( $c = 0.13$ , MeOH). Pharm: Cytotoxic inactive (Bre04, Lu04, N04,  $GI_{50} > 100\mu g/mL$ ); antiviral inactive (Vero cell lines infected with HSV-2 strain 333,  $250\mu g/mL$ ). Source: NAN CHUAN GUAN CHUN HUA *Microtoena prainiana* (stem: yield = 0.00026%dw). Ref: 4752.

**14850 Mikanolide**

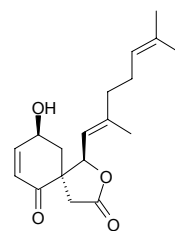
[17928-61-9]  $C_{15}H_{14}O_6$  (290.28). Pharm: Antibacterial; antifungal. Source: WEI GAN JU *Mikania scandens*, JIA ZE LAN *Mikania cordata*. Ref: 658.

**14851 Miliacin**

[5945-45-9]  $C_{31}H_{52}O$  (440.76). mp 282~283°C. Source: SHU MI *Panicum miliaceum*. Ref: 6.

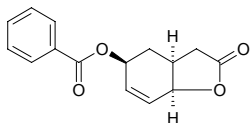
**14852 Miliusol**

(1'E)-(1R\*,5R\*,9S\*)-9-Hydroxy-1-(2,6-dimethylhepta-1,5-dienyl)-3,6-dioxo-2-oxa-spiro[4.5]dec-7-ene  $C_{18}H_{24}O_4$  (304.39). Colorless oil,  $[\alpha]_D^{23} = +38^\circ$  ( $c = 0.5$ ,  $CHCl_3$ ). Source: *Milisia balansae* (branch and leaf: yield = 0.0013%dw). Ref: 3016.

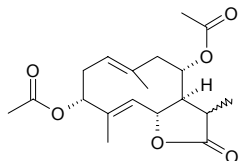


**14853 Miliosolide**

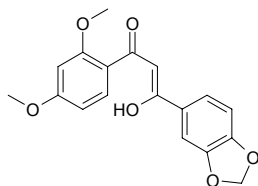
$C_{15}H_{14}O_4$  (258.28). Colorless crystals, mp 120–121°C (EtOAc). Source: *Milium balansae* (branch and leaf: yield = 0.00065%dw). Ref: 3016.

**14854 Millefin**

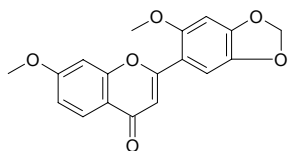
[39262-27-6]  $C_{19}H_{26}O_6$  (350.42). mp 209–210°C. Source: YANG SHI CAO *Achillea millefolium*. Ref: 6.

**14855 Milletenone**

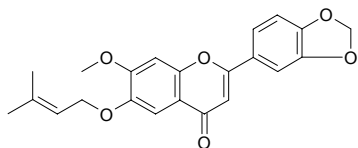
$C_{18}H_{16}O_6$  (328.32). Source: HONG E JI XUE TENG *Millettia erythrocalyx* (stem cortex: yield = 0.00020%dw). Ref: 4624.

**14856 Millettocalyxin A**

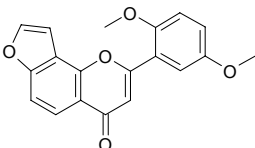
$C_{18}H_{14}O_6$  (326.31). Yellow powder. Source: HONG E JI XUE TENG *Millettia erythrocalyx* (stem cortex: yield = 0.0004%dw). Ref: 4624.

**14857 Millettocalyxin B**

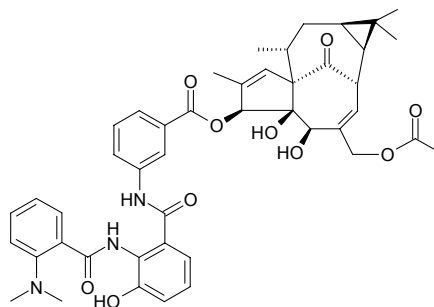
$C_{22}H_{20}O_6$  (380.4). Yellow powder. Source: HONG E JI XUE TENG *Millettia erythrocalyx* (stem cortex: yield = 0.00095%dw). Ref: 4624.

**14858 Millettocalyxin C**

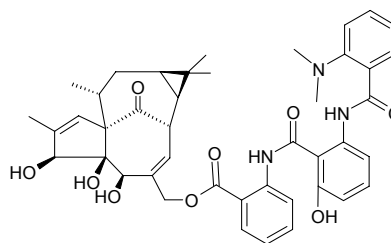
$C_{19}H_{14}O_5$  (322.32). Yellow powder. Source: HONG E JI XUE TENG *Millettia erythrocalyx* (stem cortex: yield = 0.0017%dw). Ref: 4624.

**14859 Milliamine A**

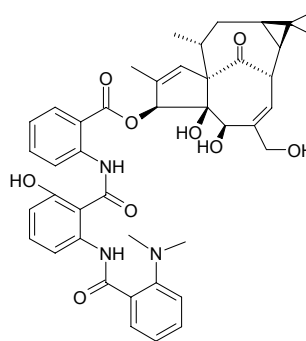
[34391-10-1]  $C_{45}H_{49}N_3O_{10}$  (791.91). Source: TIE HAI TANG *Euphorbia milii* (the compound was isolated from the plant by D.Uemura et al. in 1973)<sup>[5505]</sup>. Ref: 6, 5505.

**14860 Milliamine B**

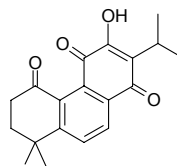
$C_{43}H_{47}N_3O_9$  (749.87). Source: TIE HAI TANG *Euphorbia milii*. Ref: 6.

**14861 Milliamine C**

[49620-09-9]  $C_{43}H_{47}N_3O_9$  (749.87). Source: TIE HAI TANG *Euphorbia milii*. Ref: 6.

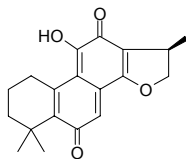
**14862 Millionone I**

[125675-06-1]  $C_{19}H_{20}O_4$  (312.37). Yellow powder, mp 151–153°C. Source: DAN SHEN *Salvia miltiorrhiza*. Ref: 1368, 1521.

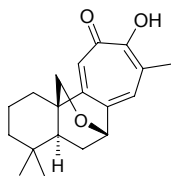


**14863 Miltionone II**

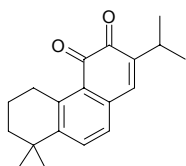
[125675-07-2] C<sub>19</sub>H<sub>20</sub>O<sub>4</sub> (312.37). Needles, mp 184–185°C, [ $\alpha$ ]<sub>D</sub><sup>23</sup> = +114.8° (c = 0.12, CHCl<sub>3</sub>). Source: DAN SHEN *Salvia miltiorrhiza*. Ref: 1368, 1521.

**14864 Miltipolone**

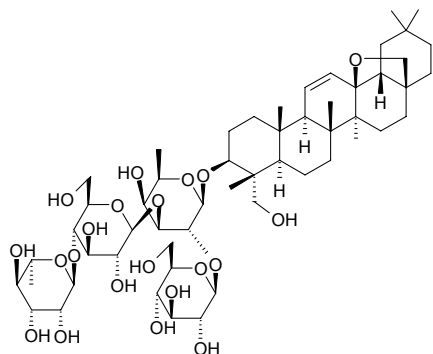
[131086-61-8] C<sub>19</sub>H<sub>24</sub>O<sub>3</sub> (300.40). Crystals, mp 132°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -77.8° (c = 0.2, CHCl<sub>3</sub>). Source: DAN SHEN *Salvia miltiorrhiza*. Ref: 1369, 1521.

**14865 Miltirone**

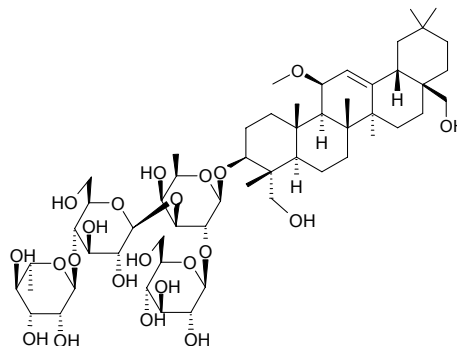
[27210-57-7] C<sub>19</sub>H<sub>22</sub>O<sub>2</sub> (282.39). mp 100°C. Pharm: Platelet aggregation inhibitor (induced by collagen IC<sub>50</sub> = 5.76 μmol/L); CNS depressant; benzodiazepine receptor agonist. Source: DAN SHEN *Salvia miltiorrhiza*. Ref: 2, 1708, 1709.

**14866 Mimengoside A**

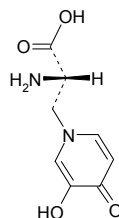
C<sub>54</sub>H<sub>88</sub>O<sub>21</sub> (1073.29). Source: MI MENG HUA *Buddleja officinalis*. Ref: 1356.

**14867 Mimengoside B**

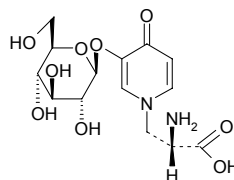
C<sub>55</sub>H<sub>92</sub>O<sub>22</sub> (1105.33). Source: MI MENG HUA *Buddleja officinalis*. Ref: 1356.

**14868 Mimosine**

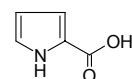
Leucaenol [500-44-7] C<sub>8</sub>H<sub>10</sub>N<sub>2</sub>O<sub>4</sub> (198.18). Crystals (H<sub>2</sub>O), mp 235–236°C, mp 226–227°C, [ $\alpha$ ]<sub>D</sub><sup>22</sup> = -20° (H<sub>2</sub>O). Pharm: Depilatory (horse, sheep and pig); leads to struma (heifer); teratogen (rat); Tyrosinase Inhibitor (IC<sub>50</sub> = (3.68±0.02) μmol/L). Source: HAN XIU CAO *Mimosa pudica*, YIN HE HUAN *Leucaena glauca* [Syn. *Leucaena leucocephala*]. Ref: 6, 658, 1521, 2544.

**14869 Mimosine-O-β-D-glucoside**

Mimoside [36518-12-4] C<sub>14</sub>H<sub>20</sub>N<sub>2</sub>O<sub>9</sub> (360.32). mp 178–179°C, [ $\alpha$ ]<sub>D</sub><sup>26</sup> = -60.9° (c = 0.46, H<sub>2</sub>O). Source: HAN XIU CAO *Mimosa pudica*, YIN HE HUAN *Leucaena glauca* [Syn. *Leucaena leucocephala*]. Ref: 6, 1521.

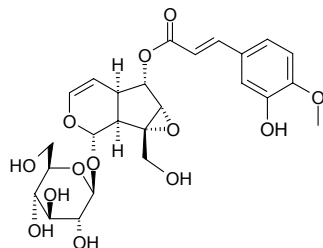
**14870 2-Minaline**

[634-97-9] C<sub>5</sub>H<sub>5</sub>NO<sub>2</sub> (111.10). Source: YI YE JIA FAN LV *Pseudostellaria heterophylla*. Ref: 1443.

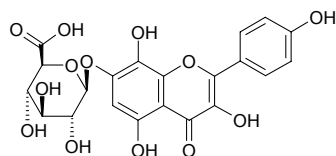


**14871 Minecoside**

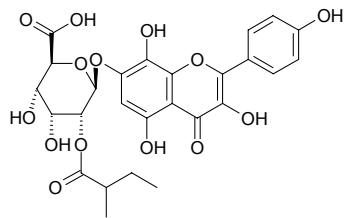
$C_{25}H_{30}O_{13}$  (538.51). Source: HU HUANG LIAN *Picrorhiza kurrooa*, ZHAN LONG JIAN *Veronicastrum sibiricum*, CAI DOU SHU *Radermachera sinica*. Ref: 1463, 1464, 1465.

**14872 Mingjinianurone A**

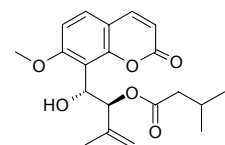
3,5,7,8,4'-Pentahydroxyflavone-7-O- $\beta$ -D-glucuronopyranoside  $C_{21}H_{18}O_{13}$  (478.37). Yellow powder, mp 230°C, soluble in methanol, ethanol acetone and dimethyl sulfoxide. Source: ZI HUA JING TIAN *Hylotelephium mingjinianum*. Ref: 308.

**14873 Mingjinianurone B**

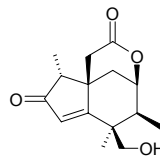
3,5,7,8,4'-Pentahydroxyflavone-8-O- $\beta$ -D-2''-O-(2-methylbutanoyl) glucuronide  $C_{26}H_{26}O_{14}$  (562.49). Yellow powder, mp 206~207°C, soluble in methanol, ethanol acetone and dimethyl sulfoxide; insoluble in chloroform and water. Source: ZI HUA JING TIAN *Hylotelephium mingjinianum*. Ref: 308.

**14874 Minumicrolin**

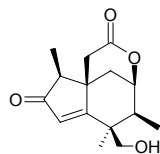
Minumicrolin  $C_{20}H_{24}O_6$  (360.41). Oil,  $[\alpha]_D = 40.9^\circ$  ( $c = 0.086$ ,  $CHCl_3$ ). Source: XIAO YE JIU LI XIANG *Murraya paniculata* var. *exotica*. Ref: 1272, 1521.

**14875 (1R\*)-Minwanenone**

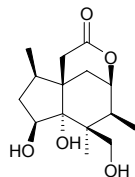
$C_{15}H_{20}O_5$  (264.32).  $[\alpha]_D^{21} = -17.9^\circ$  ( $c = 1.50$ , EtOH). Source: MIN WAN BA JIAO *Illicium minwanense* (pericarp: yield = 0.00025%dw). Ref: 4697.

**14876 (1S\*)-Minwanenone**

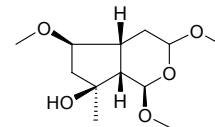
$C_{15}H_{20}O_5$  (264.32).  $[\alpha]_D^{19} = -19.9^\circ$  ( $c = 1.25$ , MeOH). Source: MIN WAN BA JIAO *Illicium minwanense* (pericarp: yield = 0.00021%dw). Ref: 4697.

**14877 Minwanensin**

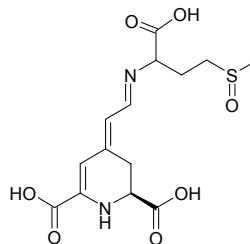
$C_{15}H_{24}O_5$  (284.36). Colorless acicular crystals, mp 171~173°C,  $[\alpha]_D^{14} = -87.4^\circ$  ( $c = 0.1075$ , methanol). Source: MIN WAN BA JIAO *Illicium minwanense*, MIN WAN BA JIAO *Illicium minwanense* (pericarp: yield = 0.00088%dw)<sup>4697</sup>. Ref: 315, 4697.

**14878 Mioporosidegenin**

$C_{12}H_{22}O_5$  (246.31). Source: GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *Huechingensis*]. Ref: 1375.

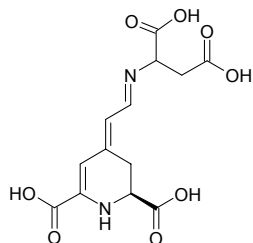
**14879 Miraxanthin I**

[5296-79-7]  $C_{14}H_{18}N_2O_7S$  (358.37). Pharm: Yellow pigment. Source: ZI MO LI GEN *Mirabilis jalapa*, ZI JIN NIU GEN *Ardisia japonica*. Ref: 6, 658.

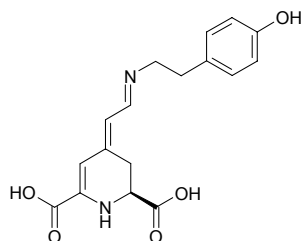


**14880 Miraxanthin II**

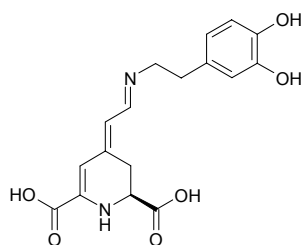
[53750-63-3] C<sub>13</sub>H<sub>14</sub>N<sub>2</sub>O<sub>8</sub> (326.27). Pharm: Yellow pigment. Source: ZI MO LI GEN *Mirabilis jalapa*, ZI JIN NIU GEN *Ardisia japonica*. Ref: 6, 658.

**14881 Miraxanthin III**

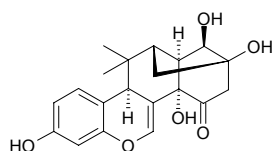
[5589-85-5] C<sub>17</sub>H<sub>18</sub>N<sub>2</sub>O<sub>5</sub> (330.34). Pharm: Yellow pigment. Source: ZI MO LI GEN *Mirabilis jalapa*, ZI JIN NIU GEN *Ardisia japonica*. Ref: 6, 658.

**14882 Miraxanthin V**

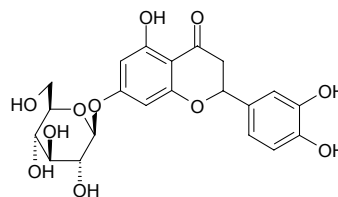
[5375-64-4] C<sub>17</sub>H<sub>18</sub>N<sub>2</sub>O<sub>6</sub> (346.34). Pharm: Yellow pigment. Source: ZI MO LI GEN *Mirabilis jalapa*, ZI JIN NIU GEN *Ardisia japonica*. Ref: 6, 658.

**14883 Miroestrol**

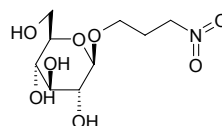
C<sub>20</sub>H<sub>22</sub>O<sub>6</sub> (358.39). mp 268–270°C (dec). Pharm: Estrogenic activity. Source: GUO YE GE *Pueraria mirifica*. Ref: 4, 658.

**14884 Miscanthoside**

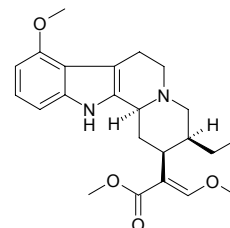
C<sub>21</sub>H<sub>22</sub>O<sub>11</sub> (450.40). mp 158–163°C. Source: MANG JING *Miscanthus sinensis*. Ref: 6.

**14885 Miserotoxin**

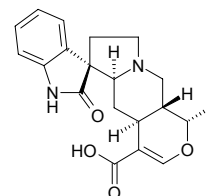
[24502-76-9] C<sub>9</sub>H<sub>17</sub>NO<sub>8</sub> (267.24). Pharm: Toxin (causes methaemoglobin disease in cattles). Source: CHI GUO HUANG QI *Astragalus pterocarpus*, JU YUAN YE HUANG QI *Astragalus miser* var. *oblongifolia*, ROU MAO HUANG QI *Astragalus atropubescens*, SI CHI HUANG QI *Astragalus tetraplerus*. Ref: 658.

**14886 Mitragynine**

C<sub>23</sub>H<sub>30</sub>N<sub>2</sub>O<sub>4</sub> (398.51). Pharm: Opioid agonist (gpg ileum, pEC<sub>50</sub> = 6.91±0.04, control Morphine, pEC<sub>50</sub> = 7.15±0.05). Source: MEI LI MAO ZHU MU *Mitragyna speciosa* (leaf). Ref: 5069.

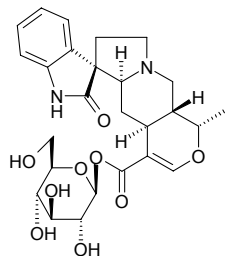
**14887 Mitraphyllic acid**

[10126-00-8] C<sub>20</sub>H<sub>22</sub>N<sub>2</sub>O<sub>4</sub> (354.41). Source: HUA GOU TENG *Uncaria sinensis*. Ref: 287, 910, 5341.

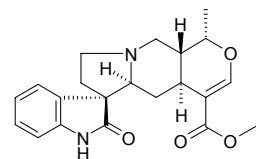


**14888 Mitraphyllic acid (16→1)-β-D-gluco-pyranosyl ester**

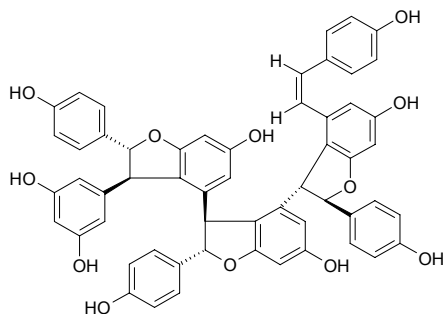
$C_{26}H_{32}N_2O_9$  (516.55). White amorphous powder crystals,  $[\alpha]_D = -48.8^\circ$  (MeOH). Source: HUA GOU TENG *Uncaria sinensis*. Ref: 287.

**14889 Mitraphylline**

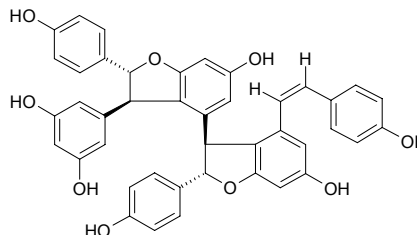
[509-80-8]  $C_{21}H_{24}N_2O_4$  (368.44). Pharm: Antihypertensive<sup>[658]</sup>, immunostimulant (maybe by increasing phagocytosis of hmn granulocytes and macrophages and blocking proliferation of myeloid cell lines)<sup>[5341]</sup>. Source: BAI GOU TENG *Uncaria sessilifructus* [Syn. *Nauclea sessilifructus*], BEI YUE GOU TENG *Uncaria homomalla* [Syn. *Uruparia homomalla*; *Uruparia tonkinensis*; *Uruparia lanosa* var. *parvifora*], BI LU GOU TENG *Uncaria tomentosa*, CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochera rosea*], CHANG HUA GOU TENG *Uncaria longiflora*, CHUAN SHANG LONG MI GOU TENG *Uncaria kawakamii*, DA YE MAO ZHU MU *Mitragyna macrophylla*, DONG FANG GOU TENG *Uncaria orientalis*, DUAN RONG MAO GOU TENG *Uncaria velutina*, ER CHA GOU TENG *Uncaria gambir*, FEI ZHOU GOU TENG *Uncaria africana*, GUI YA NA GOU TENG *Uncaria guianensis*, HOU YE GOU TENG *Uncaria callophylla*, MAO GOU TENG *Uncaria hirsuta*, MIAN MAO GOU TENG *Uncaria lanosa*, PAN ZHI GOU TENG *Uncaria scandens* [Syn. *Nauclea pilosa*; *Uruparia pilosa*; *Uncaria pilosa*], PI ZHEN YE GOU TENG *Uncaria lancifolia*, PING HUA FA LIANG GOU TENG *Uncaria laevigata*, TUO YUAN GOU TENG *Uncaria elliptica*, XIA GOU TENG *Uncaria attenuata*, *Uncaria bernaysii*, *Uncaria perrottetii*, *Uncaria sterrophylla*, occurs in many plants. Ref: 2, 658, 5341.

**14890 cis-Miyabenol A**

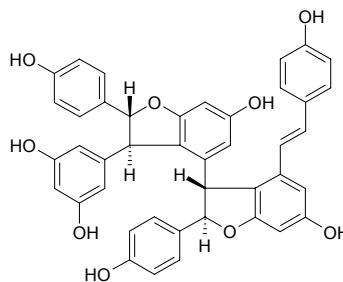
$C_{56}H_{42}O_{12}$  (906.95). White amorphous. Pharm: Ecdysteroid antagonist (*Drosophila melanogaster* B<sub>11</sub> cell line,  $IC_{50} = 31\mu\text{mol/L}$ ). Source: XIA CHUI TAI CAO *Carex pendula* (seed). Ref: 5141.

**14891 cis-Miyabenol C**

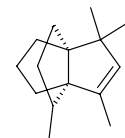
$C_{42}H_{32}O_9$  (680.72). White amorphous. Pharm: Ecdysteroid antagonist (*Drosophila melanogaster* B<sub>11</sub> cell line,  $IC_{50} = 19\mu\text{mol/L}$ ). Source: XIA CHUI TAI CAO *Carex pendula* (seed). Ref: 5141.

**14892 Miyabenol C**

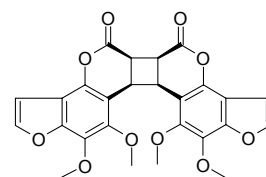
[109605-83-6]  $C_{42}H_{32}O_9$  (680.72). Pharm: PKC inhibitor ( $IC_{50} = 52.5\mu\text{mol/L}$ ). Source: BAI CI HUA *Sophora viciifolia*, SHE PU TAO *Ampelopsis brevipedunculata*, XIA YE JIN JI ER *Caragana stenophylla* (root), *Carex fedia* var. *miyabei*. Ref: 2233, 2234, 2557, 2558.

**14893 Modhephene**

$C_{15}H_{24}$  (204.36). Pharm: Anti-Inflammatory (anti-oedema, control oedema =  $(7.8 \pm 0.3)\text{mg}$ ,  $100\mu\text{g}/\text{cm}^2$  mixture with silphinene and isocomene, oedema =  $(4.9 \pm 0.4)\text{mg}$ ,  $p < 0.05$ , reduction = 37%, Indomethacin oedema =  $(3.4 \pm 0.3)\text{mg}$ ,  $p < 0.05$ , reduction = 56%). Source: GAO SHAN HUO RONG CAO *Leontopodium alpinum* (root). Ref: 4985.

**14894 Moellendorffine**

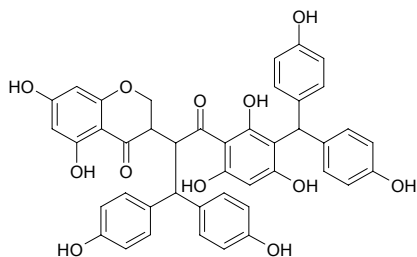
$C_{26}H_{20}O_{10}$  (492.44). Yellowish columnar crystals, mp 244–246°C. Source: LI JIANG QIAN HU *Peucedanum govanianum* var. *bicolor*, ZOU MA QIN *Heracleum moellendorffii* var. *paucivittatum*. Ref: 61, 557.



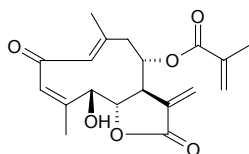


**14895 Mohsenone**

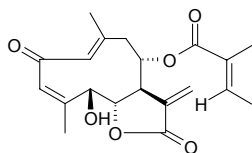
3-[1-[[3-Di(4-hydroxyphenyl)methyl]2,4,6-trihydroxyphenyl]3-di(4-hydroxyphenyl)1-propanone-2-yl]5,7-dihydroxy-4*H*-1-benzopyran-4-one C<sub>43</sub>H<sub>33</sub>O<sub>12</sub> (742.74). Brown amorphous powder. Source: LANG DU *Stellera chamaejasme*. Ref: 1911.

**14896 Molephantin**

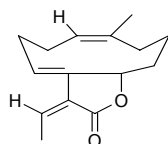
[50656-66-1] C<sub>19</sub>H<sub>22</sub>O<sub>6</sub> (346.38). mp 214~216°C. Pharm: Analgesic (mus, ip, 20mg/kg, inhibits writhing motion due to acetic acid); antineoplastic (W<sub>256</sub> and EAC); anti-inflammatory (rat, swollen foot model caused by carrageenan and experimental chronic arthritis, 2.5mg/kg ip); cytotoxic (cultural hmn throat epicytoma cells *in vitro*, EC = 0.333μg/mL). Source: ROU MAO DI DAN CAO *Elephantopus mollis*. Ref: 4, 658.

**14897 Molephantinin**

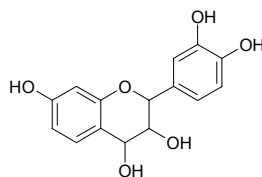
[56221-98-8] C<sub>20</sub>H<sub>24</sub>O<sub>6</sub> (360.41). mp 223~225°C. Pharm: Analgesic (mus, acetic acid-induced writhing model, 20mg/kg ip); antineoplastic (W<sub>256</sub>, biotic prolonged rate = 297%, P<sub>388</sub>, biotic prolonged rate = 46%, EAC, InRt = 88%); anti-inflammatory (rat, swollen foot model caused by carrageenan, 2.5mg/kg ip). Source: ROU MAO DI DAN CAO *Elephantopus mollis*. Ref: 4, 661.

**14898 Mollilactone**

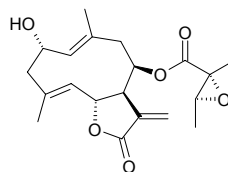
Mollilactone C<sub>15</sub>H<sub>20</sub>O<sub>2</sub> (232.33). Source: MIAN MAO MA DOU LING *Aristolochia mollissima*. Ref: 660.

**14899 Mollisacacidin**

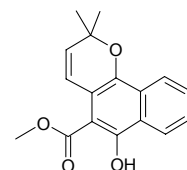
C<sub>15</sub>H<sub>14</sub>O<sub>6</sub> (290.28). mp 124~125°C. Source: ROU JIN HE HUAN *Acacia mollissima* (the compound was isolated from the plant by H.H.Kepler in 1957). Ref: 5505.

**14900 Mollisorin B**

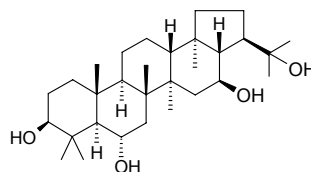
C<sub>20</sub>H<sub>26</sub>O<sub>6</sub> (362.43). Source: HUA ZE LAN *Eupatorium chinense* (whole herb: yield = 0.0073%). Ref: 4739.

**14901 Mollugin**

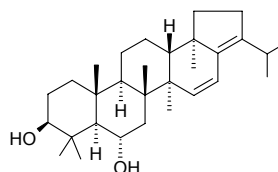
[55481-88-4] C<sub>17</sub>H<sub>16</sub>O<sub>4</sub> (284.31). Yellowish lamellar crystals, mp 128~130°C (recrystallization in alcohol), mp 132~134°C, easily soluble in chloroform, benzene and acetic acid; soluble in ether, methanol and acetone; slightly soluble in ethanol; insoluble in water, but soluble in a water solution of sodium hydroxide or potassium hydroxide. Pharm: Cytotoxic (hmn colon cancer assay, antiproliferative)<sup>[5038]</sup>. Source: DA YE QIAN CAO *Rubia schumannina*, QIAN CAO GEN *Rubia cordifolia*, SU ZHU YANG YANG *Galium mollugo*. Ref: 22, 1363, 5038.

**14902 Mollugogenol A**

[22550-76-1] C<sub>30</sub>H<sub>52</sub>O<sub>4</sub> (476.75). Source: SU MI CAO *Mollugo pentaphylla*. Ref: 1440.

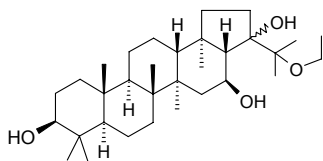
**14903 Mollugogenol B**

[22554-64-9] C<sub>30</sub>H<sub>48</sub>O<sub>2</sub> (440.72). Source: SU MI CAO *Mollugo pentaphylla*. Ref: 1440.

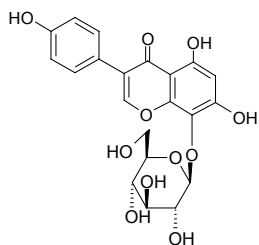


**14904 Mollugogenol D**

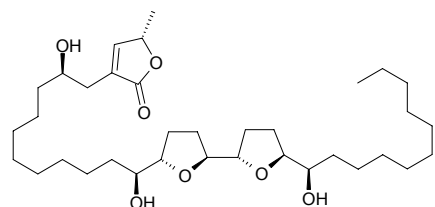
[59553-44-5]  $C_{32}H_{56}O_4$  (504.80). Source: SU MI CAO *Mollugo pentaphylla*. Ref: 1440.

**14905 Mollupentin**

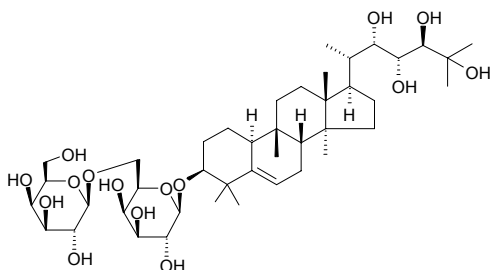
$C_{21}H_{20}O_{11}$  (448.39). Source: SU MI CAO *Mollugo pentaphylla*. Ref: 1441.

**14906 Molvizarin**

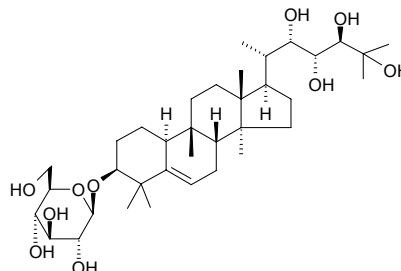
[138551-26-5]  $C_{35}H_{62}O_7$  (594.88). Amorphism, mp 36–38°C,  $[\alpha]_D = -9.7^\circ$  ( $c = 0.13$ , methanol). Pharm: Antiprotozoal; cytotoxic (A549, HT29, A498, PC3 and PACA-2,  $ED_{50} = 0.00000709$ - $0.0000447$  ng/mL, BST,  $LC_{50} = 0.0526$   $\mu$ g/mL, KB); NADH ubiquinone reductase inhibitor (mitochondria,  $IC_{50} = 1.7$  nmol/L); mitochondrial complex I selective inhibitor (NADH oxidase  $IC_{50} = (1.55 \pm 0.17)$  nmol/L,  $p < 0.001$ , control Rotenone,  $IC_{50} = (5.10 \pm 0.09)$  nmol/L)<sup>[5024]</sup>. Source: FAN LI ZHI *Annona squamosa*, MAO YE FAN LI ZHI *Annona cherimolia* (seed), NIU XIN FAN LI ZHI *Annona reticulata*. Ref: 1045, 1546, 1547, 1548, 5024.

**14907 Momorcharaside A**

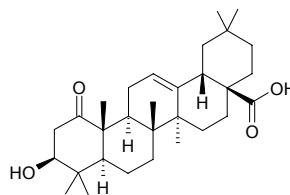
[135126-59-9]  $C_{42}H_{72}O_{15}$  (817.03). Colorless prismatic crystals, mp 170–172°C,  $[\alpha]_D^{19} = +0.80^\circ$  ( $c = 1.80$ , methanol). Pharm: Antineoplastic ( $S_{180}$ , 100  $\mu$ g/mL, inhibits DNA synthesis, InRt = 58%, inhibits RNA synthesis, InRt = 55%). Source: KU GUA *Momordica charantia*. Ref: 176.

**14908 Momorcharaside B**

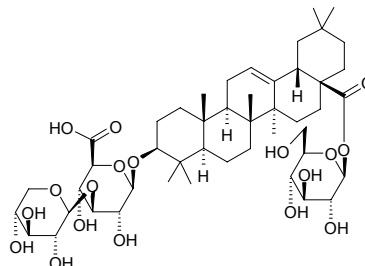
$C_{36}H_{62}O_{10}$  (654.89). Colorless acicular crystals, mp 186–189°C. Source: KU GUA *Momordica charantia*. Ref: 176.

**14909 Momordic acid**

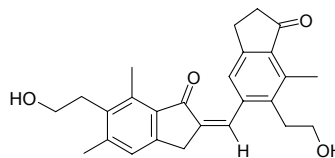
[14356-51-5]  $C_{30}H_{46}O_4$  (470.70). mp 274–276°C. Source: MU BIE ZI *Momordica cochinchinensis*. Ref: 6.

**14910 Momordin IIc**

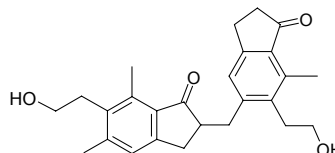
$C_{47}H_{74}O_{18}$  (927.10). Source: LUO KUI HUA *Basella rubra* (aerial parts). Ref: 3544.

**14911 Monachosorin A**

[100217-75-2]  $C_{26}H_{28}O_4$  (404.51). Source: WEI YE XI ZI JUE *Monachosorum flagellare*, XI ZI JUE *Monachosorum henryi*. Ref: 1505.

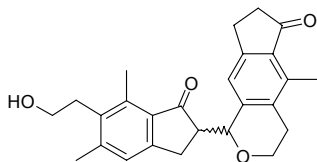
**14912 Monachosorin B**

[100217-76-3]  $C_{26}H_{30}O_4$  (406.53). Source: WEI YE XI ZI JUE *Monachosorum flagellare*, XI ZI JUE *Monachosorum henryi*. Ref: 1505.

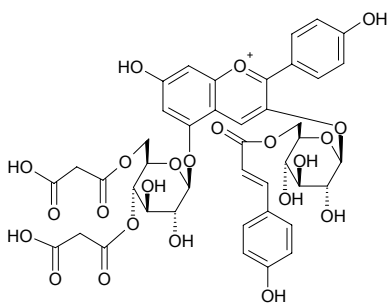


**14913 Monachosorin C**

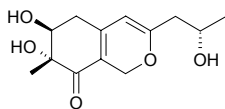
[100217-77-4] C<sub>26</sub>H<sub>28</sub>O<sub>4</sub> (404.51). Source: WEI YE XI ZI JUE *Monachosorum flagellare*, XI ZI JUE *Monachosorum henryi*. Ref: 1505.

**14914 Monardaecin**

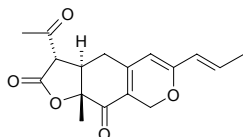
Monardein C<sub>42</sub>H<sub>41</sub>O<sub>23</sub><sup>+</sup> (913.78). Source: MEI GUO BO HE *Monarda didyma*, XI YANG HONG *Salvia splendens*. Ref: 658.

**14915 Monascusone A**

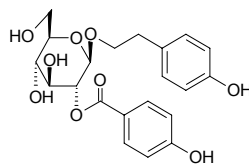
6,7-Dihydroxy-3-(2-hydroxy-propyl)-7-methyl-1,5,6,7-tetrahydro-isochromen-8-one C<sub>13</sub>H<sub>18</sub>O<sub>5</sub> (254.29). Yellow viscous liquid, [α]<sub>D</sub><sup>30</sup> = +71.95° (c = 0.93, CHCl<sub>3</sub>). Pharm: Antimalarial inactive (*Plasmodium falciparum* K1, control Dihydroartemisinin, IC<sub>50</sub> = (1.2±0.02)μg/mL); antitubercular inactive (*Mycobacterium tuberculosis* H37Ra, control Isoniazid, MIC = 0.040~0.090μg/mL; Kanamycin sulfate, MIC = 2.0~5.0μg/mL); antifungal inactive (*Candida albicans*, control Amphotericin B, IC<sub>50</sub> = (0.04±0.01)μg/mL); cytotoxic inactive (BC, control Ellipticine, IC<sub>50</sub> = 0.3μg/mL; KB, Ellipticine, IC<sub>50</sub> = 0.3μg/mL). Source: GAO LIANG HONG QU *Monascus kaoliang* (fungal). Ref: 3858.

**14916 Monascusone B**

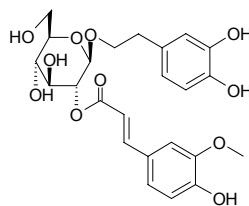
C<sub>17</sub>H<sub>18</sub>O<sub>5</sub> (302.33). Yellow viscous liquid, [α]<sub>D</sub><sup>30</sup> = +205.47° (c = 0.28, CHCl<sub>3</sub>). Source: GAO LIANG HONG QU *Monascus kaoliang*. Ref: 3858.

**14917 Monnieraside I**

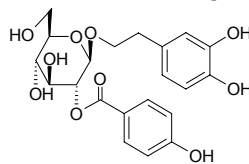
α-O-[2-O-(4-Hydroxybenzoyl)-β-D-glucopyranosyl]-4-hydroxyphenylethanol C<sub>21</sub>H<sub>24</sub>O<sub>9</sub> (420.42). Amorphous, [α]<sub>D</sub><sup>23</sup> = -14° (c = 0.8, MeOH). Source: JIA MA CHI XIAN *Bacopa monniera* (aerial parts). Ref: 4254.

**14918 Monnieraside II**

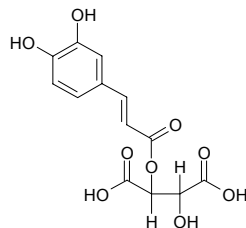
α-O-[2-O-(3-Methoxy-4-hydroxycinnamoyl)-β-D-glucopyranosyl]-3,4-dihydroxyphenylethanol C<sub>24</sub>H<sub>28</sub>O<sub>11</sub> (492.48). Amorphous, [α]<sub>D</sub><sup>23</sup> = -8° (c = 0.7, MeOH). Source: JIA MA CHI XIAN *Bacopa monniera* (aerial parts). Ref: 4254.

**14919 Monnieraside III**

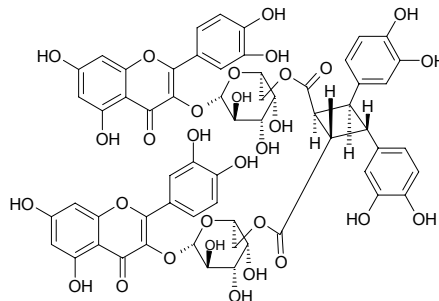
α-O-[2-O-(4-Hydroxybenzoyl)-β-D-glucopyranosyl]-3,4-dihydroxyphenylethanol C<sub>21</sub>H<sub>24</sub>O<sub>10</sub> (436.42). Amorphous, [α]<sub>D</sub><sup>23</sup> = -3° (c = 0.3, MeOH). Source: JIA MA CHI XIAN *Bacopa monniera* (aerial parts). Ref: 4254.

**14920 Monocaffeoyltartaric acid**

C<sub>13</sub>H<sub>12</sub>O<sub>9</sub> (312.24). mp 146~147°C. Source: JU QU *Cichorium intybus*. Ref: 6.

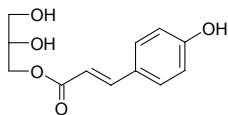
**14921 Monochaetin**

C<sub>60</sub>H<sub>52</sub>O<sub>30</sub> (1253.07). White amorphous powder, [α]<sub>D</sub> = +25.0° (c = 1.0, MeOH). Source: *Monochaetum multiflorum* (leaf). Ref: 5185.

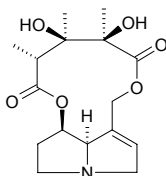


**14922 Mono-*p*-coumaroyl glyceride**

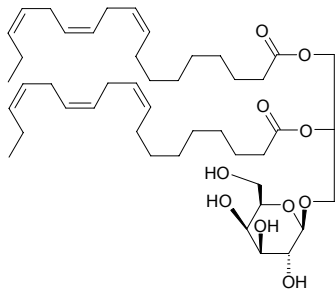
$C_{12}H_{14}O_5$  (238.24). Source: DENG XIN CAO *Juncus effusus*. Ref: 1517.

**14923 Monocrotaline**

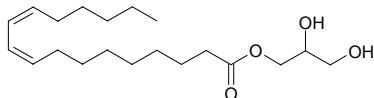
Crotaline; Retronecine† [315-22-0]  $C_{16}H_{23}NO_6$  (325.36). White acicular crystals, mp 197~198°C (dec),  $[\alpha]_D^{26} = -54.7^\circ$  (chloroform), soluble in absolute ethanol, chloroform, slightly soluble in water, ether, acetone, insoluble in petroleum ether.<sup>[5507]</sup> Pharm: Antineoplastic (in local use only, squamous carcinoma in skin, basal cell carcinoma); carcinogen, causes hepatic cancer; antispasmodic; mutagen; antihypertensive (dog); LD<sub>50</sub> (mus, ip) = 296mg/kg, (rat, sc) = 134mg/kg. Source: AO ZHU SHI DOU *Crotalaria retusa*, MEI LI ZHU SHI DOU *Crotalaria spectabilis*, TUO YE ZHU SHI DOU *Crotalaria stipularia*, WU YE ZHU SHI DOU *Crotalaria quinquefolia*, XIAO ZHU SHI DOU *Crotalaria nana*, YE BAI HE *Crotalaria sessiliflora*, ZI XIAO RONG ZI *Crotalaria assamica*, ZOU BO ZHUANG ZHU SHI DOU *Crotalaria crispata*. Ref: 4, 658, 5507.

**14924 Monogalactosyldiglyceride**

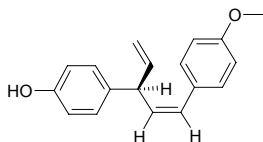
Ubiquitous 1,2-dilinolenoyl-3-galactopyranosylglycerol  $C_{45}H_{74}O_{10}$  (775.09). Source: *Trichilia pruriaria* (leaf). Ref: 3994.

**14925 1-Monolinolein**

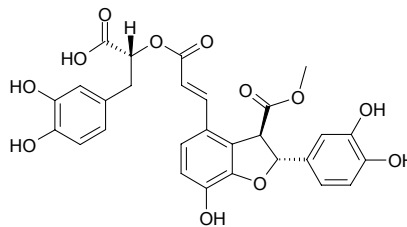
$C_{20}H_{36}O_4$  (340.51). Source: BAI ZHI *Angelica dahurica* [Syn. *Angelica porphyrocaulis*]. Ref: 2.

**14926 Monomethyl-*cis*-hinokiresinol**

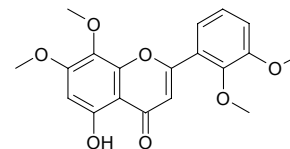
$C_{18}H_{18}O_2$  (266.34). Source: ZHI MU *Anemarrhena asphodeloides*. Ref: 1395.

**14927 Monomethyl lithospermate**

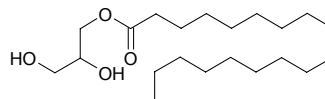
$C_{28}H_{24}O_{12}$  (552.50). Source: DAN SHEN *Salvia miltiorrhiza*. Ref: 1370.

**14928 Mono-*O*-methylwightin**

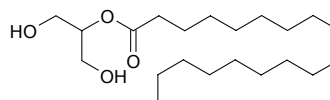
$C_{19}H_{18}O_7$  (358.35). mp 150°C. Source: CHUAN XIN LIAN *Andrographis paniculata* [Syn. *Justicia paniculata*]. Ref: 2.

**14929 α-Monoolein**

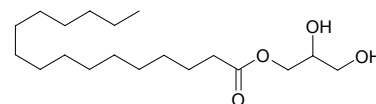
[111-03-5]  $C_{21}H_{40}O_4$  (356.55). mp 35°C Source: MANG GUO HE *Mangifera indica*. Ref: 6.

**14930 β-Monoolein**

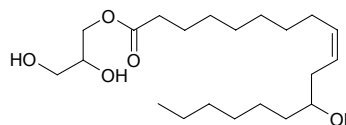
[3443-84-3]  $C_{21}H_{40}O_4$  (356.55). mp 26°C. Source: MANG GUO HE *Mangifera indica*. Ref: 6.

**14931 L-(-)-α-Monopalmitin**

(2*S*)-1-*O*-Palmitoyl glycerol [19670-51-0]  $C_{19}H_{38}O_4$  (330.51). Pharm: Cytotoxic (cyclooxygenase-1 inhibitor)<sup>[5038]</sup>; cytotoxic (cyclooxygenase-2 inhibitor)<sup>[5038]</sup>. Source: SHI DIAO BAI *Asparagus officinalis*, SHUANG BIAN GUA LOU *Trichosanthes rosthornii* [Syn. *Trichosanthes uniflora*], XI NANG MA WEI ZAO *Sargassum parvivesiculosum*. Ref: 2, 660, 2591, 5038.

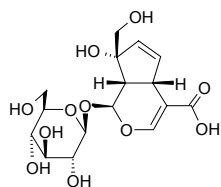
**14932 Monoricinolein**

$C_{21}H_{40}O_5$  (372.55). Source: BI MA YOU *Ricinus communis*. Ref: 6.

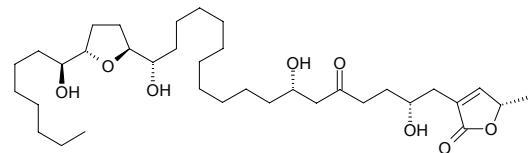


**14933 Monotropein**

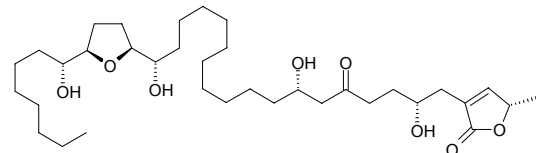
$C_{16}H_{22}O_{11}$  (290.35). mp 175°C (dec) **Pharm:** Antidiarrheal (mus,  $ED_{50} > 0.5\text{g/kg}$ ). **Source:** AI LAI MU *Cornus suecica*, BA JI TIAN *Morinda officinalis*, FEN LU ZHU YANG YANG *Galium glaucum*, HUANG SHUI JING LAN *Monotropa hypopitys*, RI BEN LU TI CAO *Pyrola japonica*, SHUI JING LAN *Monotropa uniflora*, XIONG GUO *Arctostaphylos uva-ursi*. **Ref:** 6, 658, 5501.

**14934 Montacin**

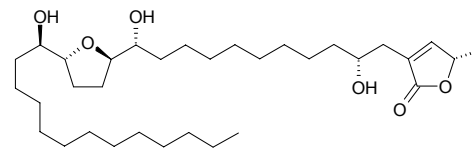
$C_{35}H_{62}O_8$  (610.88). Colorless waxy solid,  $[\alpha]_D^{25} = +4.7^\circ$  ( $c = 0.38$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (*in vitro*: A549,  $ED_{50} = 12.9\mu\text{g/mL}$ ; MCF7,  $ED_{50} = 10\mu\text{g/mL}$ ; HCT8,  $ED_{50} = 16.5\mu\text{g/mL}$ ; SK-MEL-2,  $ED_{50} = 11.2\mu\text{g/mL}$ ; KB,  $ED_{50} = 16.6\mu\text{g/mL}$ ; KB-VIN,  $ED_{50} > 20\mu\text{g/mL}$ ; U-87-MG,  $ED_{50} > 20\mu\text{g/mL}$ ; CAKI,  $ED_{50} > 20\mu\text{g/mL}$ ; PC3,  $ED_{50} > 20\mu\text{g/mL}$ ; 1A9 (3 day),  $ED_{50} > 10\mu\text{g/mL}$ ; PTX10 (3 day),  $ED_{50} > 10\mu\text{g/mL}$ ; 1A9 (6 day),  $ED_{50} = 6.7\mu\text{g/mL}$ ; PTX10 (6 day),  $ED_{50} = 7.9\mu\text{g/mL}$ ; control  $Ca^{2+}$ : A549,  $ED_{50} > 20\mu\text{g/mL}$ ; MCF7,  $ED_{50} > 20\mu\text{g/mL}$ ; HCT8,  $ED_{50} > 20\mu\text{g/mL}$ ; KB,  $ED_{50} > 20\mu\text{g/mL}$ ; PC3,  $ED_{50} > 20\mu\text{g/mL}$ ; 1A9 (3 day),  $ED_{50} > 20\mu\text{g/mL}$ ; PTX10 (3 day),  $ED_{50} > 20\mu\text{g/mL}$ ; PTX10 (6 day),  $ED_{50} > 20\mu\text{g/mL}$ ); cytotoxic (This compound +  $Ca^{2+}$  from  $CaCl_2$ , *in vitro*: A549,  $ED_{50} = 7.4\mu\text{g/mL}$ ; MCF7,  $ED_{50} = 5.5\mu\text{g/mL}$ ; HCT8,  $ED_{50} = 12.3\mu\text{g/mL}$ ; SK-MEL-2,  $ED_{50} = 13.3\mu\text{g/mL}$ ; KB,  $ED_{50} = 9.1\mu\text{g/mL}$ ; KB-VIN,  $ED_{50} = 13.9\mu\text{g/mL}$ ; U-87-MG,  $ED_{50} = 14.2\mu\text{g/mL}$ ; CAKI,  $ED_{50} = 14.2\mu\text{g/mL}$ ; PC3,  $ED_{50} = 14.2\mu\text{g/mL}$ ; 1A9 (3 day),  $ED_{50} = 6.7\mu\text{g/mL}$ ; PTX10 (3 day),  $ED_{50} = 7.5\mu\text{g/mL}$ ; 1A9 (6 day),  $ED_{50} = 4.5\mu\text{g/mL}$ ; PTX10 (6 day),  $ED_{50} = 2.8\mu\text{g/mL}$ ). **Source:** SHAN FAN LI ZHI *Annona montana* (seed: yield = 0.0015%). **Ref:** 4775.

**14935 cis-Montacin**

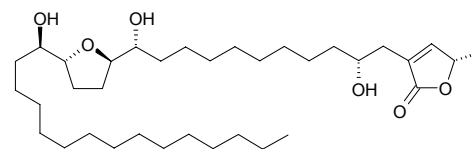
$C_{35}H_{62}O_8$  (610.88). White waxy solid,  $[\alpha]_D^{25} = +9.4^\circ$  ( $c = 0.17$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (*in vitro*: A549,  $ED_{50} = 6\mu\text{g/mL}$ ; MCF7,  $ED_{50} = 6.7\mu\text{g/mL}$ ; HCT8,  $ED_{50} = 12.9\mu\text{g/mL}$ ; KB,  $ED_{50} = 7.7\mu\text{g/mL}$ ; KB-VIN,  $ED_{50} = 13.4\mu\text{g/mL}$ ; U-87-MG,  $ED_{50} = 15\mu\text{g/mL}$ ; PC3,  $ED_{50} = 11.9\mu\text{g/mL}$ ; 1A9 (3d),  $ED_{50} = 3.6\mu\text{g/mL}$ ; PTX10 (3d),  $ED_{50} = 5.9\mu\text{g/mL}$ ; 1A9 (6d),  $ED_{50} = 0.54\mu\text{g/mL}$ ; PTX10 (6d),  $ED_{50} = 1.8\mu\text{g/mL}$ ; control  $Ca^{2+}$ : A549,  $ED_{50} > 20\mu\text{g/mL}$ ; MCF7,  $ED_{50} > 20\mu\text{g/mL}$ ; HCT8,  $ED_{50} > 20\mu\text{g/mL}$ ; KB,  $ED_{50} > 20\mu\text{g/mL}$ ; PC3,  $ED_{50} > 20\mu\text{g/mL}$ ; 1A9 (3d),  $ED_{50} > 20\mu\text{g/mL}$ ; PTX10 (3d),  $ED_{50} > 20\mu\text{g/mL}$ ; PTX10 (6d),  $ED_{50} > 20\mu\text{g/mL}$ ); cytotoxic (This compound +  $Ca^{2+}$  from  $CaCl_2$ , *in vitro*: A549,  $ED_{50} = 5.5\mu\text{g/mL}$ ; MCF7,  $ED_{50} = 6.5\mu\text{g/mL}$ ; HCT8,  $ED_{50} = 111.7\mu\text{g/mL}$ ; KB,  $ED_{50} = 8.2\mu\text{g/mL}$ ; KB-VIN,  $ED_{50} = 13.8\mu\text{g/mL}$ ; U-87-MG,  $ED_{50} = 14.3\mu\text{g/mL}$ ; PC3,  $ED_{50} = 12.1\mu\text{g/mL}$ ; 1A9 (3d),  $ED_{50} = 2\mu\text{g/mL}$ ; PTX10 (3d),  $ED_{50} = 5.3\mu\text{g/mL}$ ; 1A9 (6d),  $ED_{50} = 0.13\mu\text{g/mL}$ ; PTX10 (6d),  $ED_{50} = 0.11\mu\text{g/mL}$ ). **Source:** SHAN FAN LI ZHI *Annona montana* (seed: yield = 0.00075%). **Ref:** 4775.

**14936 Montalicin A**

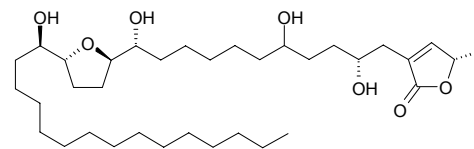
$C_{33}H_{60}O_6$  (552.84). Colorless waxy solid,  $[\alpha]_D^{25} = +17.0^\circ$  ( $c = 0.34$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (*in vitro* HepG2,  $EC_{50} < 0.01\mu\text{g/mL}$ , Hep3B,  $EC_{50} = 2.81\mu\text{g/mL}$ ; control Doxorubicin, HepG2,  $EC_{50} = 0.38\mu\text{g/mL}$ , Hep3B,  $EC_{50} = 0.36\mu\text{g/mL}$ ). **Source:** SHAN FAN LI ZHI *Annona montana* (seed). **Ref:** 5035.

**14937 Montalicin B**

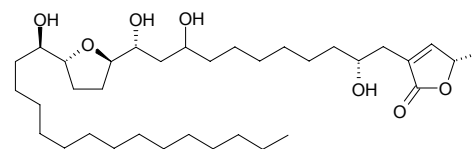
$C_{35}H_{64}O_6$  (580.90). Colorless waxy solid,  $[\alpha]_D^{25} = +13.1^\circ$  ( $c = 0.60$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (*in vitro* HepG2,  $EC_{50} = 0.53\mu\text{g/mL}$ , Hep3B,  $EC_{50} = 8.97\mu\text{g/mL}$ ; control Doxorubicin, HepG2,  $EC_{50} = 0.38\mu\text{g/mL}$ , Hep3B,  $EC_{50} = 0.36\mu\text{g/mL}$ ). **Source:** SHAN FAN LI ZHI *Annona montana* (seed). **Ref:** 5035.

**14938 Montalicin C**

$C_{35}H_{64}O_7$  (596.90). Colorless waxy solid,  $[\alpha]_D^{25} = +16.7^\circ$  ( $c = 0.34$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (*in vitro* HepG2,  $EC_{50} = 0.022\mu\text{g/mL}$ , Hep3B,  $EC_{50} = 0.82\mu\text{g/mL}$ ; control Doxorubicin, HepG2,  $EC_{50} = 0.38\mu\text{g/mL}$ , Hep3B,  $EC_{50} = 0.36\mu\text{g/mL}$ ). **Source:** SHAN FAN LI ZHI *Annona montana* (seed). **Ref:** 5035.

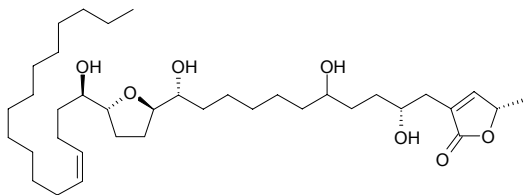
**14939 Montalicin D**

$C_{35}H_{64}O_7$  (596.90). Colorless waxy solid,  $[\alpha]_D^{25} = -3.5^\circ$  ( $c = 0.43$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (*in vitro* HepG2,  $EC_{50} = 1.99\mu\text{g/mL}$ ; control Doxorubicin, HepG2,  $EC_{50} = 0.38\mu\text{g/mL}$ , Hep3B). **Source:** SHAN FAN LI ZHI *Annona montana* (seed). **Ref:** 5035.

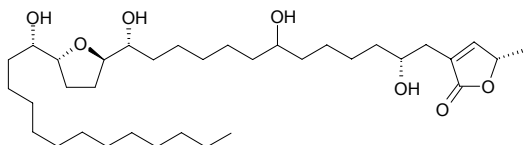


**14940 Montalicin E**

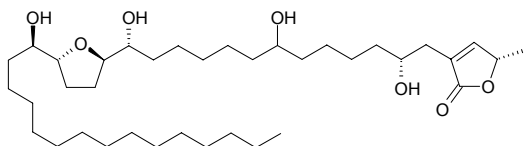
$C_{37}H_{66}O_7$  (622.93). Colorless waxy solid,  $[\alpha]_D^{25} = +16.5^\circ$  ( $c = 0.23$ ,  $CHCl_3$ ).  
**Pharm:** Cytotoxic (*in vitro* HepG2,  $EC_{50} = 0.13\mu g/mL$ , Hep3B, inactive; control Doxorubicin, HepG2,  $EC_{50} = 0.38\mu g/mL$ , Hep3B,  $EC_{50} = 0.36\mu g/mL$ ).  
**Source:** SHAN FAN LI ZHI *Annona montana* (seed). **Ref:** 5035.

**14941 Montalicin F**

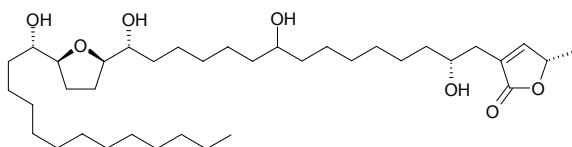
$C_{35}H_{64}O_7$  (596.90). Colorless waxy solid,  $[\alpha]_D^{25} = +19.5^\circ$  ( $c = 0.15$ ,  $CHCl_3$ ).  
**Pharm:** Cytotoxic (*in vitro* HepG2,  $EC_{50} < 0.01\mu g/mL$ ; control Doxorubicin, HepG2,  $EC_{50} = 0.38\mu g/mL$ , Hep3B). **Source:** SHAN FAN LI ZHI *Annona montana* (seed). **Ref:** 5035.

**14942 Montalicin I**

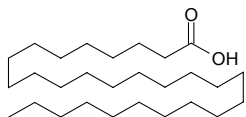
$C_{37}H_{68}O_7$  (624.95). Colorless waxy solid,  $[\alpha]_D^{25} = +16.7^\circ$  ( $c = 0.34$ ,  $CHCl_3$ ).  
**Pharm:** Cytotoxic (*in vitro* HepG2,  $EC_{50} = 0.11\mu g/mL$ , Hep3B, inactive; control Doxorubicin, HepG2,  $EC_{50} = 0.38\mu g/mL$ , Hep3B,  $EC_{50} = 0.36\mu g/mL$ ).  
**Source:** SHAN FAN LI ZHI *Annona montana* (seed). **Ref:** 5035.

**14943 Montalicin J**

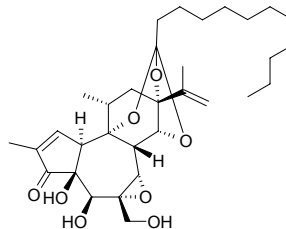
$C_{37}H_{68}O_7$  (624.95). Colorless waxy solid,  $[\alpha]_D^{25} = +7.3^\circ$  ( $c = 1.39$ ,  $CHCl_3$ ).  
**Pharm:** Cytotoxic (*in vitro* HepG2,  $EC_{50} < 0.01\mu g/mL$ , Hep3B,  $EC_{50} = 2.38\mu g/mL$ ; control Doxorubicin, HepG2,  $EC_{50} = 0.38\mu g/mL$ , Hep3B,  $EC_{50} = 0.36\mu g/mL$ ). **Source:** SHAN FAN LI ZHI *Annona montana* (seed). **Ref:** 5035.

**14944 Montanic acid**

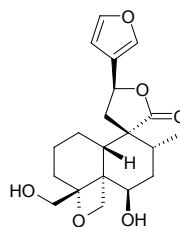
Octacosanoic acid [506-48-9]  $C_{28}H_{56}O_2$  (424.76). **Source:** HUI BAO HAO *Artemisia roxburgiana*, SHUANG BIAN GUA LOU *Trichosanthes rosthornii* [Syn. *Trichosanthes uniflora*]. **Ref:** 2, 503, 660.

**14945 Montanin**

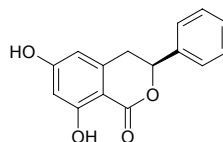
[66583-55-9]  $C_{32}H_{48}O_8$  (560.73). **Pharm:** Cytotoxic (leukemia). **Source:** BAN ZI MU *Baliospermum montanum*. **Ref:** 658.

**14946 Montanin D**

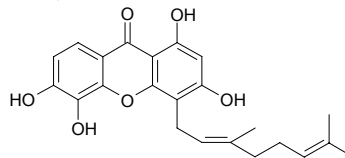
$C_{20}H_{26}O_6$  (362.43). **Pharm:** Insect antifeedant (*Spodoptera litura*,  $10\mu g/cm^2$ , antifeedant activity =  $(73\pm 3)\%$ , control Azadirachtin A,  $0.5\mu g/cm^2$ , antifeedant activity =  $(79\pm 2)\%$ ; *Plutella xylostella*,  $10\mu g/cm^2$ , antifeedant activity =  $(70\pm 2)\%$ , control Azadirachtin A,  $0.5\mu g/cm^2$ , antifeedant activity =  $(71\pm 2)\%$ )<sup>[3478]</sup>. **Source:** RONG MAO XIANG KE KE *Teucrium tomentosum* (aerial parts), SHAN XIANG KE KE *Teucrium montanum*. **Ref:** 1521, 3478.

**14947 Montroumarin**

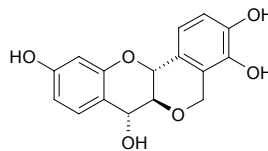
$C_{15}H_{12}O_4$  (256.26). Colorless oil,  $[\alpha]_D = +68^\circ$  ( $c = 0.057$ ,  $CHCl_3$ ). **Source:** *Montrouzieria sphaeroidea* (stem cortex). **Ref:** 3941.

**14948 Montrouxanthone**

$C_{23}H_{24}O_6$  (396.44). Yellow oil. **Source:** *Montrouzieria sphaeroidea* (stem cortex). **Ref:** 3941.

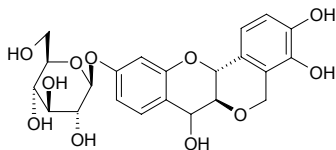
**14949 (+)-Mopanol**

$C_{16}H_{14}O_6$  (302.29). Yellow needles, mp  $185\sim 187^\circ C$ ;  $[\alpha]_D^{20} = +45.2^\circ$  ( $c = 0.02$ ,  $CH_3OH$ ). **Pharm:** Vasodilator (rat aortic rings, inhibits Phenylephrine (Phe)-induced vasoconstriction in the presences of Indomethacin and  $N^{10}$ -L-nitroarginine (L-NA) at  $10\mu mol/L$  Ach,  $10\mu mol/L$ , relaxation =  $(85\pm 2)\%$ , control Sodium nitroprusside, relaxation =  $(109\pm 5)\%$ ). **Source:** YI HUA *Lysidice rhodostegia* (root). **Ref:** 4086.

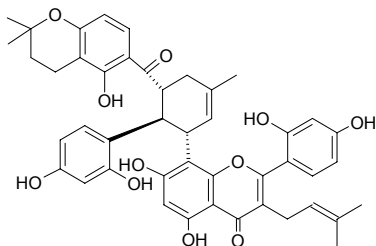


**14950 Mopanolside**

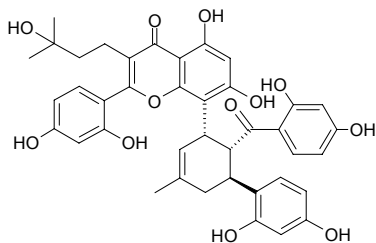
$C_{22}H_{24}O_{11}$  (464.43). Yellow needles, mp 273~275°C;  $[\alpha]_D^{20} = +103.0^\circ$  ( $c = 0.2$ ,  $CH_3OH$ ). **Pharm:** Vasodilator (rat aortic rings, inhibits Phenylephrine (Phe)-induced vasoconstriction in the presences of Indomethacin and  $N^{10}$ -*L*-nitroarginine (*L*-NA) at 10 $\mu$ mol/L Ach, 10 $\mu$ mol/L, relaxation = (53 $\pm$ 5)%, control Sodium nitroprusside, relaxation = (109 $\pm$ 5)%). **Source:** YI HUA *Lysidice rhodostegia* (root). **Ref:** 4086.

**14951 Moracenin C**

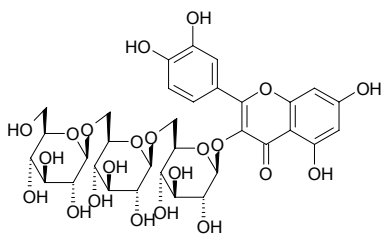
[76069-36-8]  $C_{45}H_{44}O_{11}$  (760.85). **Pharm:** Antihypertensive (strong action). **Source:** SANG BAI PI *Morus alba*. **Ref:** 1425.

**14952 Moracenin D**

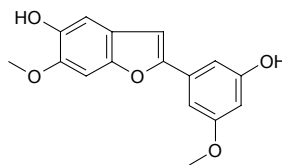
[78277-79-9]  $C_{40}H_{38}O_{12}$  (710.74). **Pharm:** Antihypertensive (strong action). **Source:** SANG BAI PI *Morus alba*. **Ref:** 1426, 1635.

**14953 Moracetin**

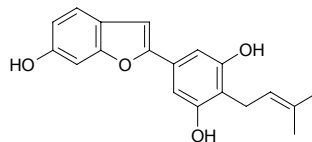
$C_{33}H_{40}O_{22}$  (788.67). mp 211~214°C. **Source:** SANG YE *Morus alba*. **Ref:** 6.

**14954 Moracin B**

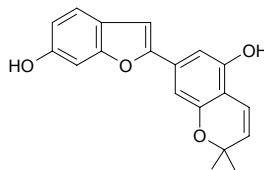
$C_{16}H_{14}O_5$  (286.29). mp 184~185°C. **Pharm:** Antifungal (*Diaporthe nomurai*, MIC = 12~25 $\mu$ g/mL, *Stigmima mori*, MIC = 49 $\mu$ g/mL, *Bipolaris leersiac*). **Source:** SANG YE *Morus alba*. **Ref:** 661, 658.

**14955 Moracin C**

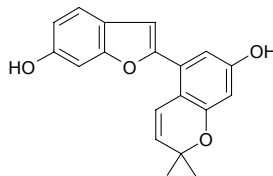
$C_{19}H_{18}O_4$  (310.35). mp 198~199°C. **Pharm:** Antifungal. **Source:** SANG YE *Morus alba*. **Ref:** 661.

**14956 Moracin D**

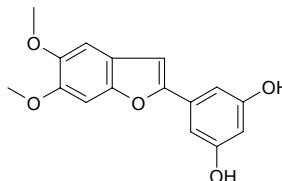
$C_{19}H_{16}O_4$  (308.34). mp 130~131°C. **Pharm:** Antifungal; aromatase inhibitor inactive (*in vitro*,  $IC_{50} > 40\mu$ mol/L; control Aminoglutethimide,  $IC_{50} = 6.4\mu$ mol/L)<sup>[3090]</sup>. **Source:** GOU SHU *Broussonetia papyrifera*<sup>[3090]</sup>, SANG YE *Morus alba*. **Ref:** 661, 3090.

**14957 Moracin E**

$C_{19}H_{16}O_4$  (308.34). mp 184~185°C. **Pharm:** Antifungal (*Diaporthe nomurai*, CIMC = 15 $\mu$ g/mL, *Stigmima mori*, CIMC = 200 $\mu$ g/mL, *Sclerotinia*, CIMC = 50 $\mu$ g/mL). **Source:** SANG YE *Morus alba*. **Ref:** 661.

**14958 Moracin F**

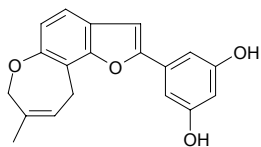
$C_{16}H_{14}O_5$  (286.29). mp 188~189°C. **Pharm:** Antifungal (*Diaporthe nomurai*, CIMC = 1000 $\mu$ g/mL, *Stigmima mori* and *Sclerotinia*, CIMC = 50 $\mu$ g/mL). **Source:** SANG YE *Morus alba*. **Ref:** 661.



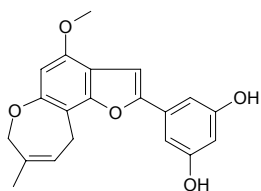
**14959 Moracin G**

$C_{19}H_{16}O_4$  (308.34). mp 198~199°C. **Pharm:** Antifungal (*Diaporthe nomurai* and *Stigmina mori*, CIMC = 50 $\mu$ g/mL, *Sclerotinia*, CIMC = 500 $\mu$ g/mL).

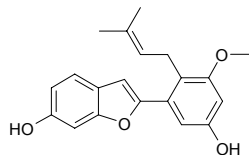
**Source:** SANG YE *Morus alba*. **Ref:** 661.

**14960 Moracin H**

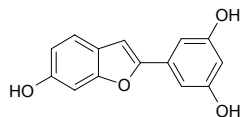
$C_{20}H_{18}O_5$  (338.36). mp 191~192°C. **Pharm:** Antifungal (*Diaporthe nomurai*, CIMC = 15 $\mu$ g/mL, *Stigmina mori*, CIMC = 100 $\mu$ g/mL). **Source:** SANG YE *Morus alba*. **Ref:** 661.

**14961 Moracin I**

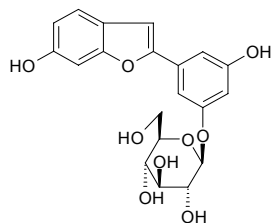
Anticancer Benzofuran PMV70P691-65  $C_{20}H_{20}O_4$  (324.38). **Pharm:** Cytotoxic (estrogen  $\alpha$  receptor-binding assay)<sup>[5038]</sup>, cytotoxic (estrogen  $\beta$  receptor-binding assay)<sup>[5038]</sup>, cytotoxic (hmn breast cancer cells, antiproliferative)<sup>[5038]</sup>, cytotoxic (cyclooxygenase-1 inhibitor)<sup>[5038]</sup>, aromatase inhibitor inactive (*in vitro*,  $IC_{50}$  > 40 $\mu$ mol/L; control Aminoglutethimide,  $IC_{50}$  = 6.4 $\mu$ mol/L)<sup>[3090]</sup>. **Source:** GOU SHU *Broussonetia papyrifera*. **Ref:** 3090, 5038.

**14962 Moracin M**

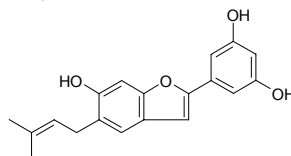
Anticancer Benzofuran PMV70P691-66  $C_{14}H_{10}O_4$  (242.23). **Pharm:** Cytotoxic (cyclooxygenase-1 inhibitor)<sup>[5038]</sup>, Aromatase inhibitor inactive (*in vitro*,  $IC_{50}$  > 40 $\mu$ mol/L; control Aminoglutethimide,  $IC_{50}$  = 6.4 $\mu$ mol/L)<sup>[3090]</sup>. **Source:** DA DA HE MIAN BAO GUO *Artocarpus dadah*, GOU SHU *Broussonetia papyrifera*. **Ref:** 3090, 5038.

**14963 Moracin M 3'-O- $\beta$ -D-glucopyranoside**

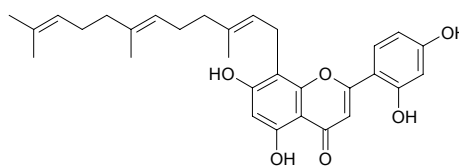
$C_{20}H_{20}O_9$  (404.38). **Source:** WEI JING BAI HE *Schoenocaulon officinale* (rhizome). **Ref:** 4210.

**14964 Moracin N**

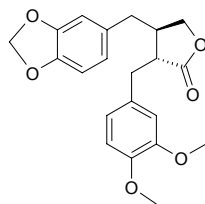
Anticancer Benzofuran PMV70P691-67  $C_{19}H_{18}O_4$  (310.35). **Pharm:** Aromatase inhibitor (*in vitro*,  $IC_{50}$  = 31 $\mu$ mol/L; control Aminoglutethimide,  $IC_{50}$  = 6.4 $\mu$ mol/L). **Source:** GOU SHU *Broussonetia papyrifera*. **Ref:** 3090, 5038.

**14965 Moralbanone**

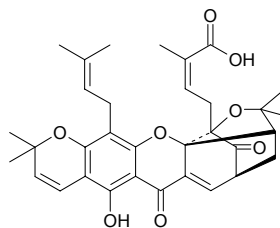
$C_{30}H_{34}O_6$  (490.60). Yellow powder. **Pharm:** Antiviral; cytotoxic (Vero cellines). **Source:** SANG BAI PI *Morus alba*. **Ref:** 2032.

**14966 Morelensin**

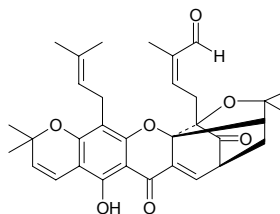
$C_{21}H_{22}O_6$  (370.41). **Source:** E SHEN *Anthriscus sylvestris*. **Ref:** 5499.

**14967 Morellic acid**

$\alpha$ -2-Guttiferin [173792-68-2]  $C_{33}H_{36}O_8$  (560.65). **Pharm:** Cytotoxic (HeLa, MIC = 3.13 $\mu$ g/mL, hmn embryonic lung fibrocyte HEL, MIC = 3.13 $\mu$ g/mL); antibacterial (methicillin-resistant *Staphylococcus aureus*, MIC = 25 $\mu$ g/mL)<sup>[4487]</sup>. **Source:** TENG HUANG *Garcinia morella*, TENG HUANG SHU *Garcinia hanburyi* (fresh fruit). **Ref:** 6, 1099, 4487.

**14968 Morellin**

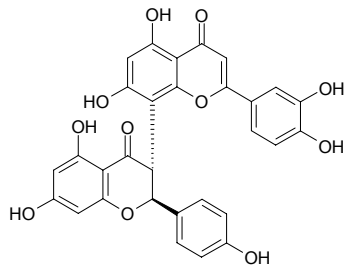
[1183-12-6]  $C_{33}H_{36}O_7$  (544.65). mp 157~159°C. **Pharm:** Antibiotic. **Source:** TENG HUANG *Garcinia morella*, TENG HUANG SHU *Garcinia hanburyi* (fresh fruit). **Ref:** 6, 658, 4487.



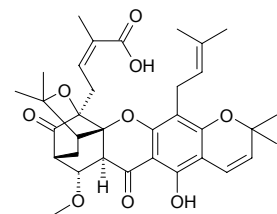


**14969 Morelloflavone**

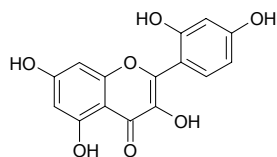
$C_{30}H_{20}O_{11}$  (556.49). mp (+) 244–245°C (dec), (±) 298°C (dec). **Pharm:** Antioxidant (DPPH scavenger, 10 μmol/L, ScRt = 51%, control BHT, 10 μmol/L, ScRt = 43%)<sup>[5319]</sup>; antibacterial (*Staphylococcus aureus* ATCC 25923, MIC > 128 μg/mL, control Vancomycin, MIC = 2 μg/mL; *Staphylococcus aureus* MRSA SK1, MIC > 128 μg/mL, Vancomycin, MIC = 2 μg/mL)<sup>[5319]</sup>. **Source:** SHAN ZHU ZI *Garcinia multiflora*, TENG HUANG *Garcinia morella*, TIAN SHAN ZHU ZI *Garcinia dulcis* (flower), TIAN SHAN ZHU ZI *Garcinia dulcis* (fruit). **Ref:** 6, 4422, 5319.

**14970 Moreollic acid**

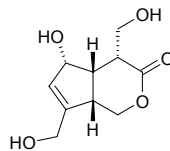
$C_{34}H_{40}O_9$  (592.69). **Pharm:** Antibacterial (methicillin-resistant *Staphylococcus aureus*, MIC = 25 μg/mL). **Source:** TENG HUANG SHU *Garcinia hanburyi* (fresh fruit). **Ref:** 4487.

**14971 Morin**

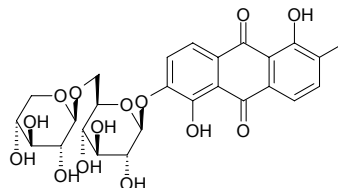
3,5,7,2',4'-Pentahydroxyflavone; Osage orange [480-16-0]  $C_{15}H_{10}O_7$  (302.24). mp 303–304°C; 285–290°C (dec). **Pharm:** Allergen; antibacterial (*Staphylococcus aureus*, *Bacillus dysenteriae*, *B. typhosus*); antineoplastic (glandular carcinoma 755, L1210, P388, S180, all *in vivo*); antispasmodic (gpg ileum, cholinesterase inhibitor, ED<sub>50</sub> of anti-angiotensin = 600 μg/mL and ED<sub>50</sub> of anti-eledoisin = 107 μg/mL); antiviral (herpes virus, EC = 50 μg/mL; potato virus); diuretic (rbt, 25 mg/kg); aldose reductase inhibitor (rat eye lens *in vivo*, CIC = 100 μmol/L); Δ<sup>5</sup>-lipoxygenase inhibitor; iodine-induced thyronine deiodinase inhibitor; mutagen (*Salmonella aertrycke*); phagostimulant (silkworm); anti-inflammatory (modulator of cytokine network; leukocyte elastase MMP-2/9 inhibitor)<sup>[4416]</sup>; anti-inflammatory (COX-2 inhibitor, rat renal medulla, and macrophages, moderate activity)<sup>[4415]</sup>; LD (rbt, sc) = 8–10 g/kg. **Source:** JU CHI SANG *Morus serrata*, QUAN YUAN YE BO LUO MI *Artocarpus integrifolia*, RAN SE SANG *Morus tinctoria*, SANG BAI PI *Morus alba*, SANG YE *Morus alba*, SANG ZHI *Morus alba*. **Ref:** 4, 658, 4415, 4416, 5501.

**14972 Morindacin**

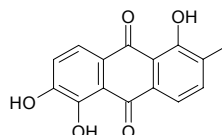
$C_{10}H_{14}O_5$  (214.22). Colorless syrup,  $[\alpha]_D^{26} = +2.0^\circ$  ( $c = 0.2$ , MeOH). **Source:** HAI BA JI *Morinda citrifolia* (fruit). **Ref:** 4542.

**14973 Morindin**

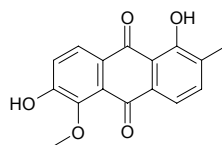
[60450-21-7]  $C_{26}H_{28}O_{14}$  (564.50). mp 264.5°C (dec). **Source:** BA JI TIAN *Morinda officinalis*. **Ref:** 6, 1521.

**14974 Morindone**

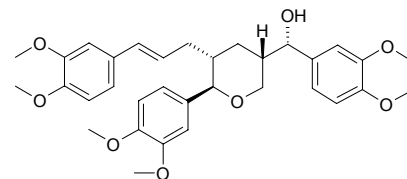
$C_{15}H_{10}O_5$  (270.24). mp 282°C. **Pharm:** Nacarat pigment. **Source:** HAI BA JI *Morinda citrifolia*, RAN SE JI YAN TENG *Morinda tinctoria*, TU LIAN QIAO *Hymenodictyon excelsum*. **Ref:** 6, 658.

**14975 Morindone-5-methylether**

$C_{16}H_{12}O_5$  (284.27). **Source:** HAI BA JI *Morinda citrifolia* (fruit). **Ref:** 4542.

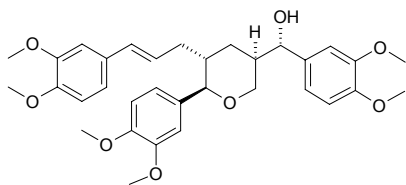
**14976 Morinol A**

$C_{33}H_{40}O_8$  (564.68). **Pharm:** Anti-inflammatory (modulator of cytokine network; inhibits cytokines formation, including TNF-α, IL-4, IL-2 and IFN-γ in hmn peripheral blood mononuclear cells). **Source:** YUAN E CI XU DUAN *Morinda chinensis*. **Ref:** 4416.

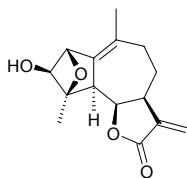


**14977 Morinol B**

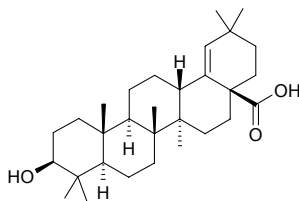
$C_{33}H_{40}O_8$  (564.68). **Pharm:** Anti-inflammatory (modulator of cytokine network: inhibits cytokines formation, including TNF- $\alpha$ , IL-4, IL-2 and IFN- $\gamma$  in hmn peripheral blood mononuclear cells,  $IC_{50} > 10\mu\text{g/mL}$ ). **Source:** YUAN E CI XU DUAN *Morina chinensis*. **Ref:** 4416.

**14978 Moroccolide A**

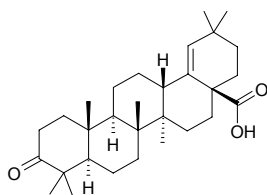
5 $\alpha$ H-2 $\beta$ ,4-Epoxy-3 $\beta$ -hydroxyguaia-1(10),11(13)-dien-6 $\beta$ ,12-olide  $C_{15}H_{18}O_4$  (262.31). Colorless gum,  $[\alpha]_D^{22} = +62^\circ$  ( $c = 0.1$ , EtOH). **Pharm:** Cytotoxic (*in vitro*, KB,  $IC_{50} = 4.5\mu\text{g/mL}$ ). **Source:** *Warionia saharae* (leaf: yield = 0.0020%dw). **Ref:** 4620.

**14979 Morolic acid**

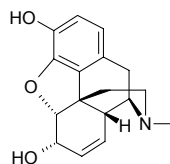
[559-68-2]  $C_{30}H_{48}O_3$  (456.72). mp 273°C (dec). **Pharm:** Anti-inflammatory (*in vivo*, prevents ear oedema formation caused by PMA and synthesis of LOX products, especially LTC<sub>4</sub> and COX metabolites derived from arachidonic acid). **Source:** SHUI TUAN HUA *Adina pilulifera* [Syn. *Cephalanthus pilulifera*], RU DU XIANG *Pistacia terebinthus*. **Ref:** 6, 4415.

**14980 Moronic acid**

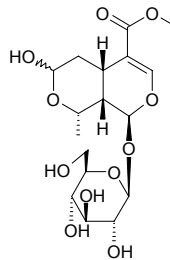
[6713-27-5]  $C_{30}H_{46}O_3$  (454.70). **Source:** JIN ZHAN JU *Calendula officinalis* (flower). **Ref:** 3551.

**14981 Morphine**

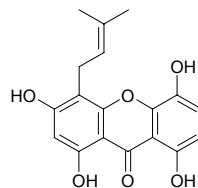
Morphia; Morphina [57-27-2]  $C_{17}H_{19}NO_3$  (285.35). Colorless columnar crystals, mp 254°C,  $[\alpha]_D^{20} = -132^\circ$  (CH<sub>3</sub>OH), very slightly soluble in boiling water, slightly soluble in alcohol<sup>[5507]</sup>. **Pharm:** Opioid agonist (gpg ileum,  $pD_2 = (7.15 \pm 0.05)(-\log\text{mol/L})$ <sup>[5069]</sup>; anesthetic; analgesic (only used in treatment of pain due to wounds, operations or burns, myocardial infarction, and cardiac asthma because it is addictive); LD<sub>50</sub> (mus, sc) = 500mg/kg. **Source:** BAI YAO ZI *Stephania cepharantha*, CHAN SU *Bufo bufo gargarizans*; *Bufo melanostictus*, LI CHUN HUA *Papaver commutatum* [Syn. *Papaver rhoeas*], YA PIAN *Papaver somniferum* (latex from unripe capsules: mean content = 99.3%<sup>[5508]</sup>), YING SU KE *Papaver somniferum* (capsule: content = 0.099%<sup>[5508]</sup>), YING SU *Papaver somniferum* (seed: content  $\approx 10\%$ <sup>[5507]</sup>). **Ref:** 2, 4, 658, 5069, 5507, 5508.

**14982 Morroniside**

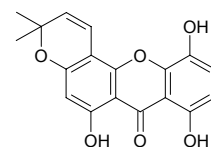
$C_{17}H_{26}O_{11}$  (406.39). Amorphous,  $[\alpha]_D = -72^\circ$  ( $c = 1$ , EtOH), mp 103–105°C,  $[\alpha]_D^{27} = -89.9^\circ$  ( $c = 1.39$ , MeOH). **Pharm:** Stomachic. **Source:** BAI JIANG *Patrinia villosa*, MO LUO SHI REN DONG *Lonicera morrowii*, RI BEN SHUANG HU DIE *Tripterospermum japonicum*, SHAN ZHU YU *Cornus officinalis* [Syn. *Macrocarpium officinale*], WU FU HUA *Adoxa moschatellina*, ZAN SHI LONG DAN *Gentiana thunbergii*. **Ref:** 2, 658, 3533.

**14983 Morusignin A**

$C_{18}H_{16}O_6$  (328.32). **Source:** *Morus* sp. **Ref:** 2513.

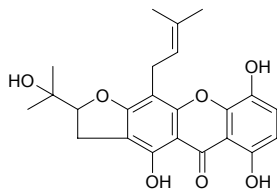
**14984 Morusignin C**

$C_{18}H_{14}O_6$  (326.31). **Source:** *Morus insignis*. **Ref:** 2513.

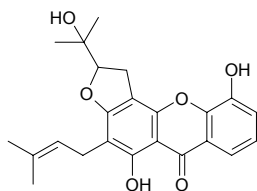


**14985 Morusignin E**

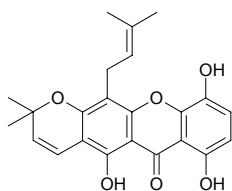
$C_{23}H_{24}O_7$  (412.44). Source: *Morus insignis*. Ref: 2513.

**14986 Morusignin H**

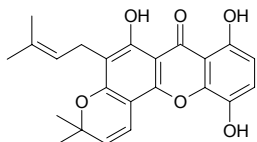
$C_{23}H_{24}O_6$  (396.44). Source: *Morus insignis*. Ref: 2513.

**14987 Morusignin I**

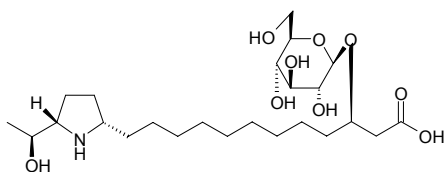
$C_{23}H_{22}O_6$  (394.43). Source: *Morus insignis*. Ref: 2513.

**14988 Morusignin J**

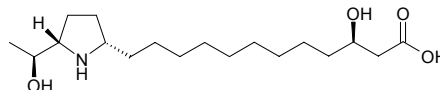
$C_{23}H_{22}O_6$  (394.43). Pharm: Antioxidant (DPPH scavenger, 10 $\mu$ mol/L, ScRt = 11%, control BHT, 10 $\mu$ mol/L, ScRt = 43%)<sup>[5319]</sup>. Source: TIAN SHAN ZHU ZI *Garcinia dulcis* (fruit), TIAN SHAN ZHU ZI *Garcinia dulcis* (flower), *Morus insignis*. Ref: 1521, 4422, 5319.

**14989 Morusimic acid A**

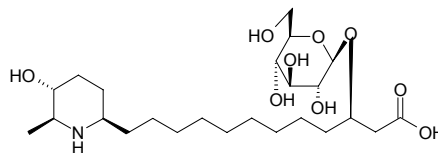
(3*R*)-3-Hydroxy-12-[(1*S*,4*S*)-4-[(1*S*)-1-hydroxyethyl]-pyrrolidin-1-yl]-dodecanoic acid-3-*O*- $\beta$ -*D*-glucopyranoside  $C_{24}H_{45}NO_9$  (507.63). Colorless powder,  $[\alpha]_D = +15.3^\circ$  ( $c = 0.18$ ,  $H_2O$ ). Pharm:  $\alpha$ -Glucosidase inhibitor inactive (control 1-Deoxyojirimucin,  $IC_{50} = 0.98$ mmol/L, Fagoming,  $IC_{50} = 15$ mmol/L). Source: SANG SHI *Morus alba*. Ref: 4161.

**14990 Morusimic acid B**

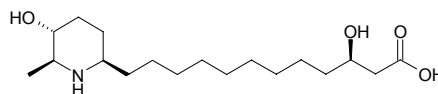
(3*R*)-3-Hydroxy-12-[(1*S*,4*S*)-4-[(1*S*)-1-hydroxyethyl]-pyrrolidin-1-yl]-dodecanoic acid  $C_{18}H_{35}NO_4$  (329.48). Colorless powder,  $[\alpha]_D = +8.8^\circ$  ( $c = 0.42$ ,  $H_2O$ ). Pharm:  $\alpha$ -Glucosidase inhibitor inactive (control 1-Deoxyojirimucin,  $IC_{50} = 0.98$ mmol/L, Fagoming,  $IC_{50} = 15$ mmol/L). Source: SANG SHI *Morus alba*. Ref: 4161.

**14991 Morusimic acid C**

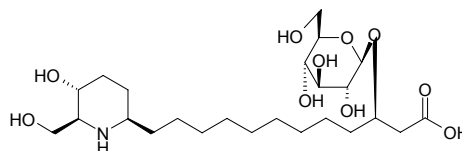
(3*R*)-3-Hydroxy-12-[(1*R*,4*R*,5*S*)-4-hydroxy-5-methyl-piperidin-1-yl]-dodecanoic acid-3-*O*- $\beta$ -*D*-glucopyranoside  $C_{24}H_{45}NO_9$  (491.63). Colorless powder,  $[\alpha]_D = -20.3^\circ$  ( $c = 0.24$ ,  $H_2O$ ). Pharm:  $\alpha$ -Glucosidase inhibitor inactive (control 1-Deoxyojirimucin,  $IC_{50} = 0.98$ mmol/L, Fagoming,  $IC_{50} = 15$ mmol/L). Source: SANG SHI *Morus alba*. Ref: 4161.

**14992 Morusimic acid D**

(3*R*)-3-Hydroxy-12-[(1*R*,4*R*,5*S*)-4-hydroxy-5-methyl-piperidin-1-yl]-dodecanoic acid  $C_{18}H_{35}NO_4$  (329.48). Colorless powder,  $[\alpha]_D = -14.6^\circ$  ( $c = 0.25$ ,  $H_2O$ ). Pharm:  $\alpha$ -Glucosidase inhibitor inactive (control 1-Deoxyojirimucin,  $IC_{50} = 0.98$ mmol/L, Fagoming,  $IC_{50} = 15$ mmol/L). Source: SANG SHI *Morus alba*. Ref: 4161.

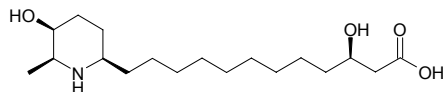
**14993 Morusimic acid E**

(3*R*)-3-Hydroxy-12-[(1*R*,4*R*,5*S*)-4-hydroxy-5-hydroxymethyl-piperidin-1-yl]-dodecanoic acid-3-*O*- $\beta$ -*D*-glucopyranoside  $C_{24}H_{45}NO_{10}$  (507.63). Colorless powder,  $[\alpha]_D = -17.2^\circ$  ( $c = 0.61$ ,  $H_2O$ ). Pharm:  $\alpha$ -Glucosidase inhibitor inactive (control 1-Deoxyojirimucin,  $IC_{50} = 0.98$ mmol/L, Fagoming,  $IC_{50} = 15$ mmol/L). Source: SANG SHI *Morus alba*. Ref: 4161.

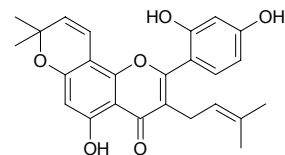


**14994 Morusimic acid F**

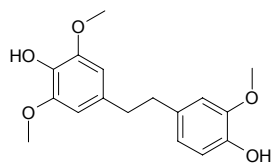
(3*R*)-3-Hydroxy-12-[(1*R*,4*S*,5*S*)-4-hydroxy-5-methyl-piperidin-1-yl]-dodecanoic acid C<sub>18</sub>H<sub>35</sub>NO<sub>4</sub> (329.48). Colorless powder, [α]<sub>D</sub> = +6.4° (*c* = 0.28, H<sub>2</sub>O). **Pharm:** α-Glucosidase inhibitor inactive (control 1-Deoxynojirimucin, IC<sub>50</sub> = 0.98mmol/L, Fagoming, IC<sub>50</sub> = 15mmol/L). **Source:** SANG SHI *Morus alba*. **Ref:** 4161.

**14995 Morusin**

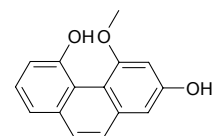
Mulberrochromene [62596-29-6] C<sub>25</sub>H<sub>24</sub>O<sub>6</sub> (420.47). Yellowish rhombic crystals (hexane–diethyl ether), mp 214–216°C; yellow crystals (hexane–dichloromethane), mp 168–169°C; mp 232–235°C. **Pharm:** Antiallergic; anti-inflammatory (NO production inhibitor)<sup>[4415]</sup>; cytotoxic (hmn lymphocyte, IC<sub>50</sub> = 8.18μg/mL); anti-HIV (*in vitro* hmn HIV, EC<sub>50</sub> = 2.91μg/mL); Na<sup>+</sup>, K<sup>+</sup>-ATP inhibitor; arachidonic acid oxidase inhibitor (mammal, IC<sub>50</sub> = 1.6–3.4μmol/L); cytotoxic (brine shrimp *Artemia salina* assay, LC<sub>50</sub> = 67.8μg/mL)<sup>[3460]</sup>. **Source:** MENG SANG *Morus mongolica* (root cortex: yield = 0.00055%semi-dw)<sup>[3034]</sup>, SANG BAI PI *Morus alba*, SANG YE *Morus alba*, SANG ZHI *Morus alba*, *Artocarpus fretessi* (bark). **Ref:** 6, 900, 1521, 3034, 3460, 4415.

**14996 Moscatilin**

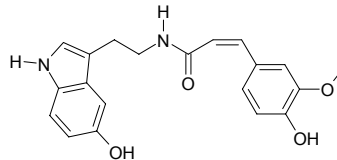
C<sub>17</sub>H<sub>20</sub>O<sub>5</sub> (304.35). **Pharm:** Platelet aggregation inhibitor (50μmol/L, InRt = 29%; 100μmol/L, InRt = 36%). **Source:** MI HUA SHI HU *Dendrobium densiflorum* (stem). **Ref:** 5171.

**14997 Moscatin**

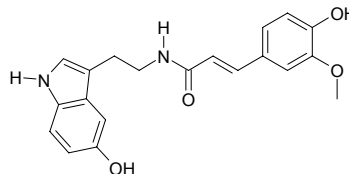
[108335-06-4] C<sub>15</sub>H<sub>12</sub>O<sub>3</sub> (240.26). Colorless crystals, mp 163–164°C. **Pharm:** Antioxidant (stronger than BHA); platelet aggregation inhibitor (strongly, due to collagen, arachidonic acid and PAF). **Source:** MEI HUA SHI HU *Dendrobium loddigesii*. **Ref:** 900.

**14998 cis-Moschamine**

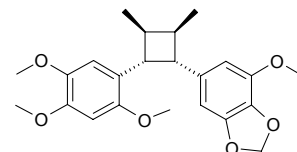
(*Z*)-*N*-(3-Methoxy-4-hydroxycinnamoyl)-5-hydroxytryptamine C<sub>20</sub>H<sub>20</sub>N<sub>2</sub>O<sub>4</sub> (352.39). Amorphous. **Source:** SHI CHE JU *Centaurea cyanus* (seed). **Ref:** 5174.

**14999 trans-Moschamine**

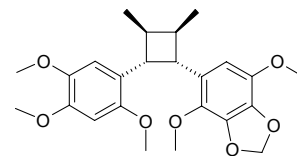
(*E*)-*N*-(3-Methoxy-4-hydroxycinnamoyl)-5-hydroxytryptamine C<sub>20</sub>H<sub>20</sub>N<sub>2</sub>O<sub>4</sub> (352.39). Amorphous. **Source:** SHI CHE JU *Centaurea cyanus* (seed). **Ref:** 5174.

**15000 Moslolignan A**

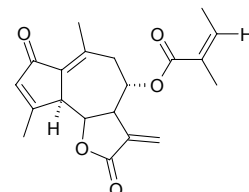
1β\*,2β\*,3α\*,4α\*-1,2-dimethyl-3-(3-methoxy-4,5-methylene-dioxyphenyl)-4-(2,4,5-trimethoxyphenyl)-cyclobutane C<sub>23</sub>H<sub>28</sub>O<sub>6</sub> (400.48). Colorless gum, [α]<sub>D</sub> = −0.15° (*c* = 1.63, MeOH). **Source:** SHI JI NING *Mosla scabra* [Syn. *Mosla punctata*]. **Ref:** 740.

**15001 Moslolignan B**

1β\*,2β\*,3α\*,4α\*-1,2-dimethyl-3-(2,5-dimethoxy-3,4-methylenedioxyphenyl)-4-(2,4,5-trimethoxyphenyl)cyclobutane C<sub>24</sub>H<sub>30</sub>O<sub>7</sub> (430.5). Colorless gum, [α]<sub>D</sub> = −0.43° (*c* = 1.38, MeOH). **Source:** SHI JI NING *Mosla scabra* [Syn. *Mosla punctata*]. **Ref:** 740.

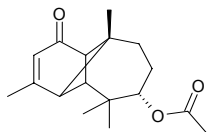
**15002 Moxartenolide**

[182267-25-0] C<sub>20</sub>H<sub>22</sub>O<sub>5</sub> (342.40). White powder, [α]<sub>D</sub><sup>28</sup> = +119.9° (*c* = 1.1, chloroform). **Pharm:** Vasodilator (rat chest main artery *in vitro*, contraction caused by KCl, arterenol and 5-HT, 30μmol/L, InRt = 24.2%, 27.5% and 19.1%, 100μmol/L, 77.1%, 84.1% and 61.4% respectively); anti-inflammatory (RAW264.7 cells, LPS-induced: NF-κB inhibitor, IC<sub>50</sub> = (1.20±0.05)μmol/L, control PTN, IC<sub>50</sub> = (3.42±0.08)μmol/L; NO production inhibitor, IC<sub>50</sub> = (4.82±0.16)μmol/L, PTN, IC<sub>50</sub> = (2.41±0.06)μmol/L, AG, IC<sub>50</sub> = (34.18±0.98)μmol/L; TNF-α production inhibitor, IC<sub>50</sub> = (8.26±0.26)μmol/L, PTN, IC<sub>50</sub> = (2.68±0.11)μmol/L)<sup>[3837]</sup>. **Source:** AI YE *Artemisia argyi*, LIN DI HAO *Artemisia sylvatica* (aerial parts). **Ref:** 989, 3837.

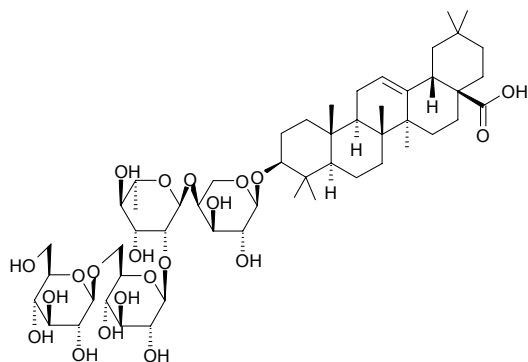


**15003 Moxarteneone**

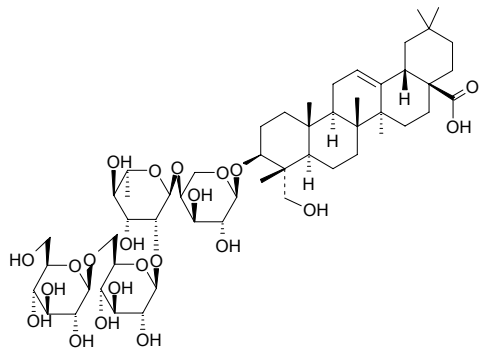
[182162-13-6] C<sub>17</sub>H<sub>24</sub>O<sub>3</sub> (276.38). White powder,  $[\alpha]_D^{28} = +51.6^\circ$  ( $c = 0.4$ , methanol). **Pharm:** Vasodilator (rat chest main artery *in vitro*, contraction caused by KCl, arterenol and 5-HT, 100 μmol/L, InRt = 77.1%, 84.1% and 61.4% respectively). **Source:** AI YE *Artemisia argyi*. **Ref:** 989.

**15004 Mubenin A**

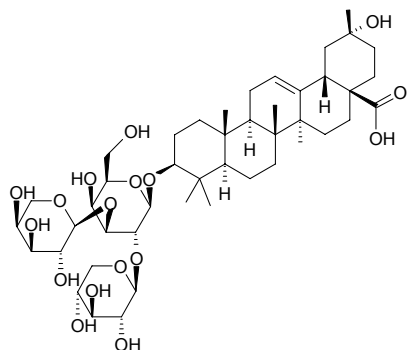
C<sub>53</sub>H<sub>86</sub>O<sub>21</sub> (1059.26). mp 255–259°C (dec). **Source:** NA TENG GUO *Stauntonia hexaphylla*. **Ref:** 1312.

**15005 Mubenin C**

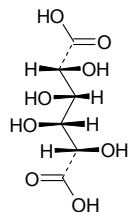
C<sub>53</sub>H<sub>86</sub>O<sub>22</sub> (1075.26). **Source:** NA TENG GUO *Stauntonia hexaphylla*. **Ref:** 1312.

**15006 Mubenoside A**

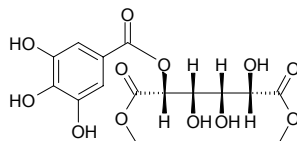
C<sub>45</sub>H<sub>72</sub>O<sub>17</sub> (885.07). **Source:** NA TENG GUO *Stauntonia hexaphylla*. **Ref:** 1313.

**15007 Mucic acid**

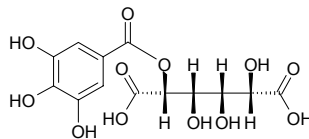
Galactaric acid [526-99-8] C<sub>6</sub>H<sub>10</sub>O<sub>8</sub> (210.14). mp 255°C. **Source:** AN MO LE *Phyllanthus emblica*. **Ref:** 6.

**15008 Mucic acid dimethyl ester 2-O-gallate**

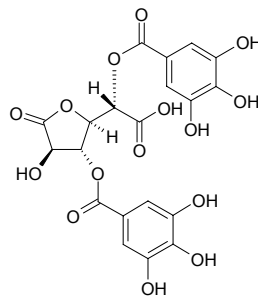
C<sub>15</sub>H<sub>18</sub>O<sub>12</sub> (390.30). White amorphous powder,  $[\alpha]_D^{22} = -51.0^\circ$  ( $c = 0.41$ , MeOH). **Source:** AN MO LE *Phyllanthus emblica* (fruit juice). **Ref:** 3521.

**15009 Mucic acid 2-O-gallate**

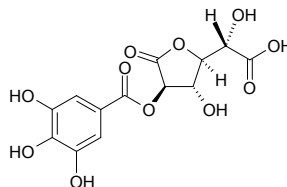
C<sub>13</sub>H<sub>14</sub>O<sub>12</sub> (362.25). Off-white amorphous powder,  $[\alpha]_D^{22} = -25.3^\circ$  ( $c = 0.28$ , H<sub>2</sub>O). **Source:** AN MO LE *Phyllanthus emblica* (fruit juice). **Ref:** 3521.

**15010 Mucic acid 1,4-lactone 3,5-di-O-gallate**

C<sub>20</sub>H<sub>16</sub>O<sub>15</sub> (496.34). White amorphous powder,  $[\alpha]_D^{22} = -96.5^\circ$  ( $c = 0.20$ , MeOH). **Source:** AN MO LE *Phyllanthus emblica* (fruit juice). **Ref:** 3521.

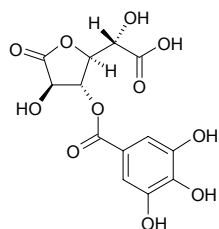
**15011 Mucic acid 1,4-lactone 2-O-gallate**

C<sub>13</sub>H<sub>12</sub>O<sub>11</sub> (344.23). White amorphous powder,  $[\alpha]_D^{22} = -9.5^\circ$  ( $c = 0.26$ , MeOH). **Source:** AN MO LE *Phyllanthus emblica* (fruit juice). **Ref:** 3521.

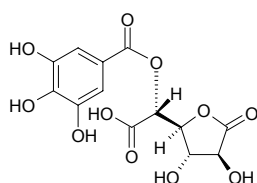


**15012 Mucic acid 1,4-lactone 3-O-gallate**

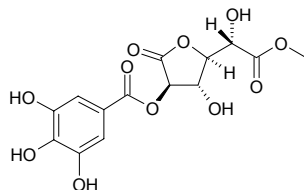
$C_{13}H_{12}O_{11}$  (344.23). White amorphous powder,  $[\alpha]_D^{22} = -30.3^\circ$  ( $c = 0.16$ , MeOH). Source: AN MO LE *Phyllanthus emblica* (fruit juice). Ref: 3521.

**15013 Mucic acid 1,4-lactone 5-O-gallate**

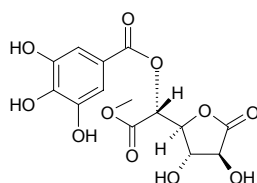
$C_{13}H_{12}O_{11}$  (344.23). White amorphous powder,  $[\alpha]_D^{22} = -29.3^\circ$  ( $c = 0.33$ , MeOH). Source: AN MO LE *Phyllanthus emblica* (fruit juice). Ref: 3521.

**15014 Mucic acid 1,4-lactone methyl ester 2-O-gallate**

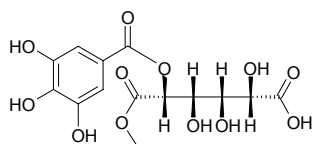
$C_{14}H_{14}O_{11}$  (358.26). White amorphous powder,  $[\alpha]_D^{22} = -13.0^\circ$  ( $c = 0.19$ , MeOH). Source: AN MO LE *Phyllanthus emblica* (fruit juice). Ref: 3521.

**15015 Mucic acid 1,4-lactone methyl ester 5-O-gallate**

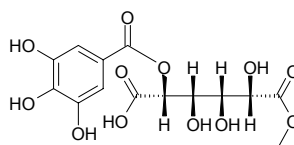
$C_{14}H_{14}O_{11}$  (358.26). White amorphous powder,  $[\alpha]_D^{22} = -30.9^\circ$  ( $c = 0.58$ , MeOH). Source: AN MO LE *Phyllanthus emblica* (fruit juice). Ref: 3521.

**15016 Mucic acid 1-methyl ester 2-O-gallate**

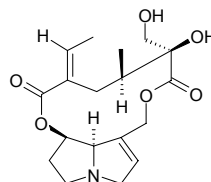
$C_{14}H_{16}O_{12}$  (376.28). White amorphous powder,  $[\alpha]_D^{22} = -38.1^\circ$  ( $c = 0.22$ , MeOH). Source: AN MO LE *Phyllanthus emblica* (fruit juice). Ref: 3521.

**15017 Mucic acid 6-methyl ester 2-O-gallate**

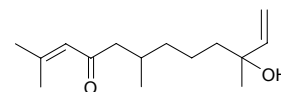
$C_{14}H_{16}O_{12}$  (376.28). White amorphous powder,  $[\alpha]_D^{22} = -43.9^\circ$  ( $c = 0.28$ , MeOH). Source: AN MO LE *Phyllanthus emblica* (fruit juice). Ref: 3521.

**15018 Mucronatinine**

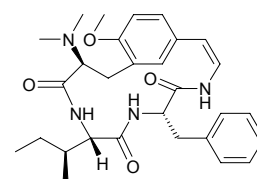
Usaramine  $C_{18}H_{25}NO_6$  (351.40). mp 161~163°C. Source: XIANG LING CAO *Crotalaria ferruginea*, ZHU SHI DOU *Crotalaria mucronata*. Ref: 6, 660.

**15019 Mucronatone**

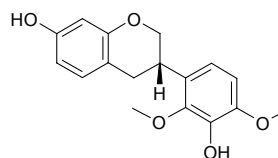
3-Hydroxy-3,7,11-trimethyl-9-oxododeca-1,10-diene  $C_{15}H_{26}O_2$  (238.37). Colorless viscous oil,  $[\alpha]_D^{27} = -16.66^\circ$  ( $c = 0.04$ ,  $CHCl_3$ ). Source: HONG QIE DONG GUO *Rhizophora mucronata* (fruit). Ref: 4058.

**15020 Mucronine A**

[38840-25-4]  $C_{29}H_{38}N_4O_4$  (506.65). Pharm: Antifungal. Source: JIAN YE ZAO *Zizyphus mucronata*, AI SAI E BI YA ZAO *Zizyphus abyssinica*. Ref: 658.

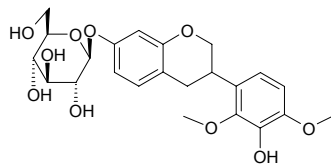
**15021 Mucronulatol**

$C_{17}H_{18}O_5$  (302.33). Pharm: Antifungal. Source: YI BIAN HUANG TAN *Dalbergia variabilis*. Ref: 658.

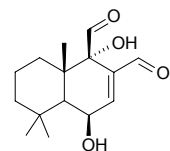


**15022 3S(-)-Mucronulatol-7-D-glucopyranoside**

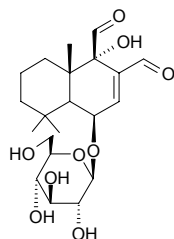
$C_{23}H_{28}O_{10}$  (464.47). White acicular crystals, mp 167~169°C. Source: MENG GU HUANG QI *Astragalus mongholicus*. Ref: 167.

**15023 Mukaadial**

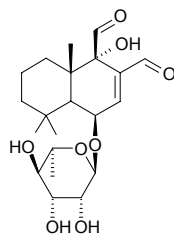
$C_{15}H_{22}O_4$  (266.34). Needle-like crystals (*n*-hexane- $CH_2Cl_2$ ), mp 245~246°C,  $[\alpha]_D^{25} = -25^\circ$  ( $c = 1.0$ , MeOH). Source: *Warburgia stuhlmannii* (leaf). Ref: 3398.

**15024 Mukaadial 6-O-β-D-glucopyranoside**

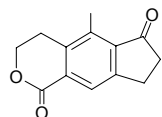
$C_{21}H_{32}O_9$  (428.48). Colorless crystals, mp 180~183°C. Source: *Warburgia stuhlmannii* (leaf). Ref: 3398.

**15025 Mukaadial 6-O-α-L-rhamnopyranoside**

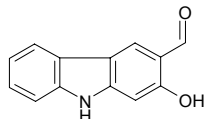
$C_{21}H_{32}O_8$  (412.48). Colorless crystals, mp >250°C. Source: *Warburgia stuhlmannii* (leaf). Ref: 3398.

**15026 Mukagolactone**

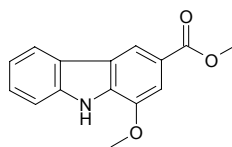
$C_{13}H_{12}O_3$  (216.24). Source: WEI YE XI ZI JUE *Monachosorum flagellare*, XI ZI JUE *Monachosorum henryi*. Ref: 1505.

**15027 Mukonal**

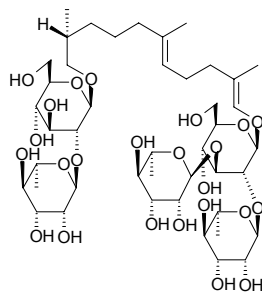
2-Hydroxy-3-formylcarbazole [20323-67-5]  $C_{13}H_9NO_2$  (211.22). Pharm: Antibacterial (*Mycobacterium tuberculosis*, MIC = 200 μg/mL, control Isoniazide, MIC = 0.040~0.090 μg/mL, kanamycin sulfate, MIC = 2.0~5.0 μg/mL)<sup>[5367]</sup>; antifungal (*Candida albicans*, IC<sub>50</sub> = 29.3 μg/mL; control Amphotericin, IC<sub>50</sub> = 0.01 μg/mL)<sup>[5367]</sup>. Source: SHAN HUANG PI *Clausena excavata*. Ref: 703, 5367.

**15028 Mukonine**

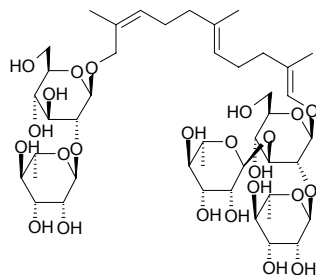
[23523-94-6]  $C_{15}H_{13}NO_3$  (255.28). Source: SHAN HUANG PI *Clausena excavata*. Ref: 703.

**15029 Mukurozioside Ia**

$C_{44}H_{76}O_{24}$  (989.08). Source: WU HUAN ZI *Sapindus mukorossi*, WU HUAN ZI PI *Sapindus mukorossi*. Ref: 1448.

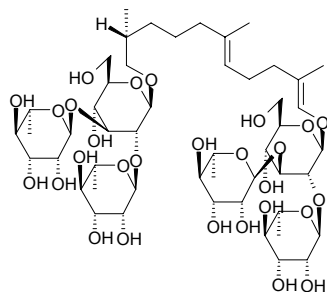
**15030 Mukurozioside Ib**

$C_{44}H_{74}O_{24}$  (987.07). Source: WU HUAN ZI *Sapindus mukorossi*, WU HUAN ZI PI *Sapindus mukorossi*. Ref: 1448.

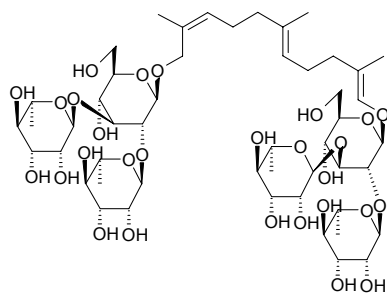


**15031 Mukurozioside II<sub>a</sub>**

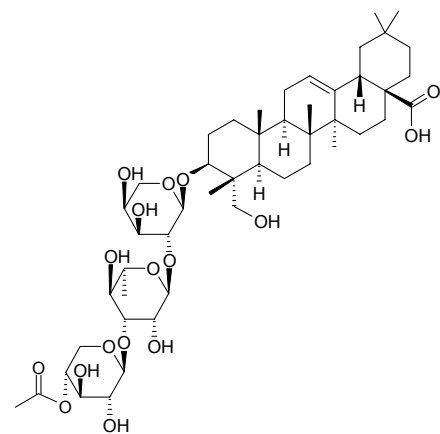
$C_{50}H_{86}O_{28}$  (1135.23). Source: WU HUAN ZI *Sapindus mukorossi*, WU HUAN ZI PI *Sapindus mukorossi*. Ref: 1448.

**15032 Mukurozioside II<sub>b</sub>**

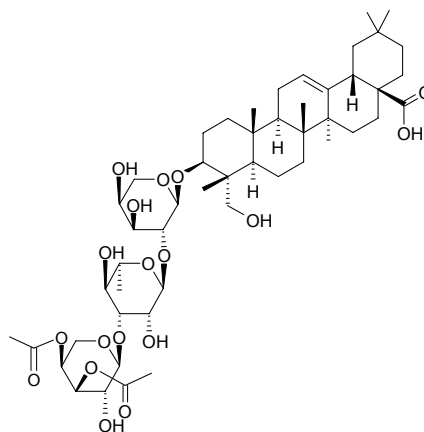
$C_{50}H_{84}O_{28}$  (1133.21). Source: WU HUAN ZI *Sapindus mukorossi*, WU HUAN ZI PI *Sapindus mukorossi*. Ref: 1448.

**15033 Mukuroziosaponin E<sub>1</sub>**

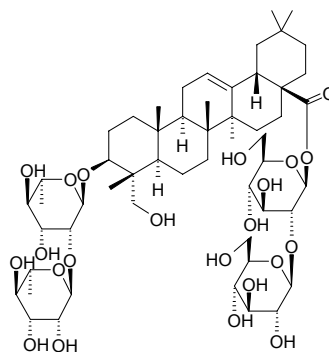
$C_{48}H_{76}O_{17}$  (925.13). Source: WU HUAN ZI *Sapindus mukorossi*, WU HUAN ZI PI *Sapindus mukorossi*. Ref: 1449.

**15034 Mukuroziosaponin G**

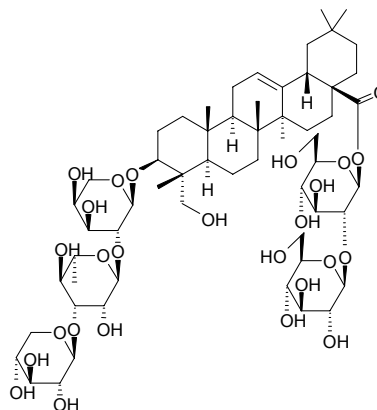
$C_{50}H_{78}O_{18}$  (967.17). Source: WU HUAN ZI *Sapindus mukorossi*, WU HUAN ZI PI *Sapindus mukorossi*. Ref: 1449.

**15035 Mukuroziosaponin X**

$C_{53}H_{86}O_{22}$  (1075.26). Source: WU HUAN ZI *Sapindus mukorossi*, WU HUAN ZI PI *Sapindus mukorossi*. Ref: 1449.

**15036 Mukuroziosaponin Y<sub>1</sub>**

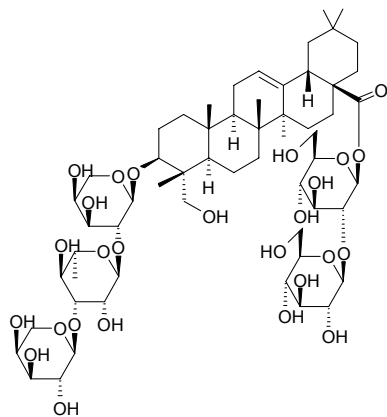
$C_{58}H_{94}O_{26}$  (1207.38). Source: WU HUAN ZI *Sapindus mukorossi*, WU HUAN ZI PI *Sapindus mukorossi*. Ref: 1449.



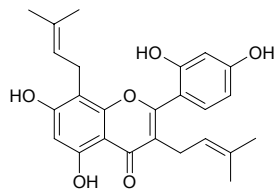


**15037 Mukurozisonin Y<sub>2</sub>**

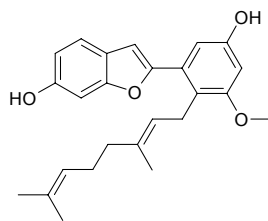
C<sub>58</sub>H<sub>94</sub>O<sub>26</sub> (1207.38). Source: WU HUAN ZI *Sapindus mukorossi*, WU HUAN ZI PI *Sapindus mukorossi*. Ref: 1449.

**15038 Mulberrin**

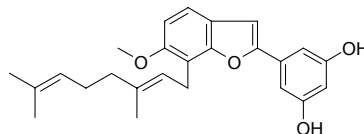
Kuwanon C [62949-79-5] C<sub>25</sub>H<sub>26</sub>O<sub>6</sub> (422.48). mp 153–156°C. Pharm: cAMP phosphodiesterase inhibitor (IC<sub>50</sub> = 38 μmol/L); anti-inflammatory (inhibits metabolism of arachidonic acid); Na<sup>+</sup>,K<sup>+</sup>-ATP inhibitor (used in treatment of heart failure and auricular arrhythmia); aldose reductase inhibitor (100 μmol/L InRt = 77.3%); anti-inflammatory (NO production inhibitor)<sup>[4415]</sup>; cytotoxic (brine shrimp *Artemia salina* assay, LC<sub>50</sub> = 77.4 μg/mL)<sup>[3460]</sup>. Source: AO DA LI YA SANG *Morus australis*, MENG SANG *Morus mongolica* (root cortex: yield = 0.00055%semi-dw), SANG ZHI *Morus alba*, SANG BAI PI *Morus alba*, *Artocarpus fretessi* (tree bark). Ref: 6, 660, 1657, 1658, 1659, 1660, 3034, 3460, 4415.

**15039 Mulberrofuran A**

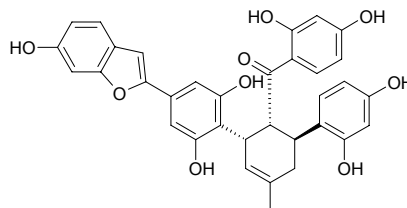
C<sub>25</sub>H<sub>28</sub>O<sub>4</sub> (392.50). Colorless lamellar crystals, mp 100–103°C. Pharm: Antibacterial (*Staphylococcus aureus*, MIC = 6.25 μg/mL; *Streptococcus faecalis*, MIC = 3.12 μg/mL; *Bacillus subtilis*, MIC = 3.12 μg/mL; *Bacillus mycoides*, MIC = 1.56 μg/mL; gram-positive bacteria). Source: SANG BAI PI *Morus alba*, SANG YE *Morus alba*. Ref: 661, 5501.

**15040 Mulberrofuran B**

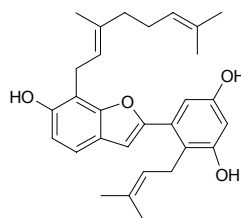
[79295-49-1] C<sub>25</sub>H<sub>28</sub>O<sub>4</sub> (392.50). Pharm: Cytotoxic (HSC-2, CC<sub>50</sub> = 59 μmol/L, 23 μg/mL; HSG, CC<sub>50</sub> = 59 μmol/L, 23 μg/mL; HGF, CC<sub>50</sub> = 71 μmol/L, 28 μg/mL). Source: MENG SANG *Morus mongolica* (root cortex: yield = 0.00009%semi-dw), SANG BAI PI *Morus alba*. Ref: 1427, 3034.

**15041 Mulberrofuran C**

C<sub>34</sub>H<sub>28</sub>O<sub>9</sub> (580.60). Pharm: Antihypertensive (animal model). Source: CAN SANG *Morus bombycis*. Ref: 658.

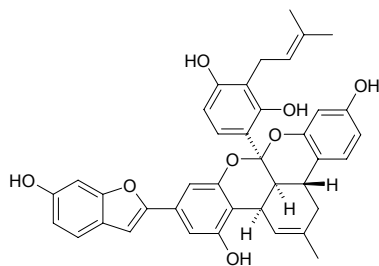
**15042 Mulberrofuran D**

C<sub>29</sub>H<sub>34</sub>O<sub>4</sub> (446.59). Pharm: Cytotoxic (HSC-2, CC<sub>50</sub> = 83 μmol/L, 37 μg/mL; HSG, CC<sub>50</sub> = 74 μmol/L, 33 μg/mL; HGF, CC<sub>50</sub> = 81 μmol/L, 36 μg/mL)<sup>[3034]</sup>; antibacterial (*Enterococcus faecalis* JCM7783 (VSE) (= ATCC19434), MIC = 3.13 μg/mL, control Linezolid, MIC = 1.56 μg/mL; *Enterococcus faecalis* JU1856 (VRE, VanA), MIC = 3.13 μg/mL, Linezolid, MIC = 0.78 μg/mL; *Enterococcus faecalis* JU1782 (VRE, VanB), MIC = 3.13 μg/mL, Linezolid, MIC = 0.78 μg/mL; *Enterococcus faecium* JCM5804 (VSE) (= ATCC 29212), MIC = 3.13 μg/mL, Linezolid, MIC = 1.56 μg/mL; *Enterococcus faecium* JU1858 (VRE, VanA), MIC = 3.13 μg/mL, Linezolid, MIC = 0.78 μg/mL; *Enterococcus faecium* JU1777 (VRE, VanB), MIC = 3.13 μg/mL, Linezolid, MIC = 1.56 μg/mL; *Enterococcus gallinarum* JU2786 (VRE, VanC), MIC = 3.13 μg/mL, Linezolid, MIC = 0.78 μg/mL; *Staphylococcus aureus* JCM2874 (MSSA) (= ATCC29213), MIC = 6.25 μg/mL, Linezolid, MIC = 1.56 μg/mL; *Staphylococcus aureus* (MRSA, 10 strains), MIC = 3.13–6.25 μg/mL, Linezolid, MIC = 0.78 μg/mL; *Staphylococcus aureus* (MRSA, 8 strains), mean MIC<sub>80</sub> = 6.25 μg/mL, Linezolid, mean MIC<sub>80</sub> = 0.78 μg/mL)<sup>[5007]</sup>. Source: MENG SANG *Morus mongolica* (root cortex: yield = 0.014%semi-dw). Ref: 3034, 5007.

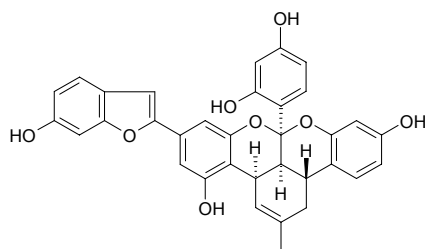


**15043 Mulberrofuran F**

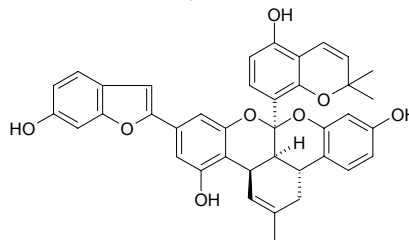
$C_{39}H_{34}O_8$  (630.70). **Pharm:** Antibacterial (*Enterococcus faecalis* JCM7783 (VSE) (= ATCC19434), MIC = 6.25 $\mu$ g/mL, control Linezolid, MIC = 1.56 $\mu$ g/mL; *Enterococcus faecalis* JU1856(VRE, VanA), MIC = 3.13 $\mu$ g/mL, Linezolid, MIC = 0.78 $\mu$ g/mL; *Enterococcus faecalis* JU1782(VRE, VanB), MIC = 3.13 $\mu$ g/mL, Linezolid, MIC = 0.78 $\mu$ g/mL; *Enterococcus faecium* JCM5804 (VSE) (= ATCC 29212), MIC = 6.25 $\mu$ g/mL, Linezolid, MIC = 1.56 $\mu$ g/mL; *Enterococcus faecium* JU1858 (VRE, VanA), MIC = 6.25 $\mu$ g/mL, Linezolid, MIC = 0.78 $\mu$ g/mL; *Enterococcus faecium* JU1777 (VRE, VanB), MIC = 3.13 $\mu$ g/mL, Linezolid, MIC = 1.56 $\mu$ g/mL; *Enterococcus gallinarum* JU2786 (VRE, VanC), MIC = 3.13 $\mu$ g/mL, Linezolid, MIC = 0.78 $\mu$ g/mL; *Staphylococcus aureus* JCM2874 (MSSA) (=ATCC29213), MIC = 6.25 $\mu$ g/mL, Linezolid, MIC = 1.56 $\mu$ g/mL; *Staphylococcus aureus* (MRSA, 10 strains), MIC = 3.13–6.25 $\mu$ g/mL, Linezolid, MIC = 0.78 $\mu$ g/mL; *Staphylococcus aureus* (MRSA, 8 strains), mean MIC<sub>80</sub> = 6.25 $\mu$ g/mL, Linezolid, mean MIC<sub>80</sub> = 0.78 $\mu$ g/mL)<sup>[5007]</sup>. **Source:** *Morus lhou*. **Ref:** 2513, 5007.

**15044 Mulberrofuran G**

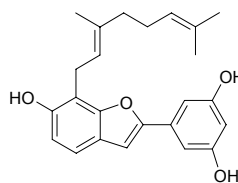
Albanol  $C_{34}H_{26}O_8$  (562.58). **Pharm:** Antibacterial (*Enterococcus faecalis* JCM7783 (VSE) (= ATCC19434), MIC = 6.25 $\mu$ g/mL, control Linezolid, MIC = 1.56 $\mu$ g/mL; *Enterococcus faecalis* JU1856(VRE, VanA), MIC = 3.13 $\mu$ g/mL, Linezolid, MIC = 0.78 $\mu$ g/mL; *Enterococcus faecalis* JU1782(VRE, VanB), MIC = 3.13 $\mu$ g/mL, Linezolid, MIC = 0.78 $\mu$ g/mL; *Enterococcus faecium* JCM5804 (VSE) (= ATCC 29212), MIC = 6.25 $\mu$ g/mL, Linezolid, MIC = 1.56 $\mu$ g/mL; *Enterococcus faecium* JU1858 (VRE, VanA), MIC = 3.13 $\mu$ g/mL, Linezolid, MIC = 0.78 $\mu$ g/mL; *Enterococcus faecium* JU1777 (VRE, VanB), MIC = 3.13 $\mu$ g/mL, Linezolid, MIC = 1.56 $\mu$ g/mL; *Enterococcus gallinarum* JU2786 (VRE, VanC), MIC = 6.25 $\mu$ g/mL, Linezolid, MIC = 0.78 $\mu$ g/mL; *Staphylococcus aureus* JCM2874 (MSSA) (=ATCC29213), MIC = 6.25 $\mu$ g/mL, Linezolid, MIC = 1.56 $\mu$ g/mL; *Staphylococcus aureus* (MRSA, 10 strains), MIC = 3.13–6.25 $\mu$ g/mL, Linezolid, MIC = 0.78 $\mu$ g/mL; *Staphylococcus aureus* (MRSA, 8 strains), mean MIC<sub>80</sub> = 6.25 $\mu$ g/mL, Linezolid, mean MIC<sub>80</sub> = 0.78 $\mu$ g/mL)<sup>[5007]</sup>. **Source:** NAI SANG *Morus macroura*, *Morus lhou*. **Ref:** 2570, 5007.

**15045 Mulberrofuran K**

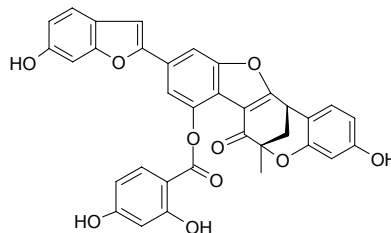
$C_{39}H_{32}O_8$  (628.69). **Source:** NAI SANG *Morus macroura*, SANG BAI PI *Morus alba*. **Ref:** 1428, 2570.

**15046 Mulberrofuran L**

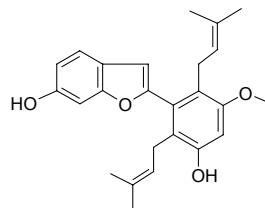
$C_{24}H_{26}O_4$  (378.47). **Pharm:** Cytotoxic (HSC-2, CC<sub>50</sub> = 190 $\mu$ mol/L, 70 $\mu$ g/mL; HSG, CC<sub>50</sub> = 160 $\mu$ mol/L, 61 $\mu$ g/mL; HGF, CC<sub>50</sub> = 190 $\mu$ mol/L, 71 $\mu$ g/mL). **Source:** MENG SANG *Morus mongolica* (root cortex: yield = 0.00045%semi-dw). **Ref:** 3034.

**15047 Mulberrofuran M**

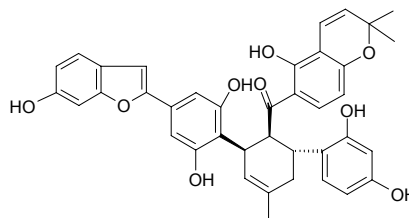
[101365-03-1]  $C_{34}H_{22}O_{10}$  (590.55). **Source:** SANG BAI PI *Morus alba*. **Ref:** 1429.

**15048 Mulberrofuran N**

[101899-56-3]  $C_{25}H_{28}O_4$  (392.50). **Source:** SANG BAI PI *Morus alba*. **Ref:** 1428.

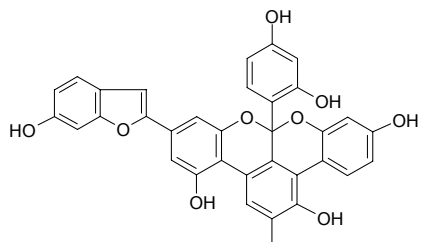
**15049 Mulberrofuran O**

[94617-38-6]  $C_{39}H_{34}O_9$  (646.70). **Source:** SANG BAI PI *Morus alba*. **Ref:** 1428.

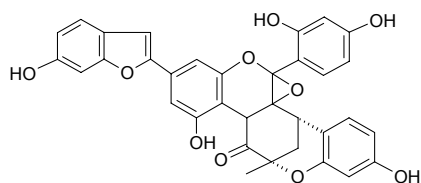


**15050 Mulberrofuran P**

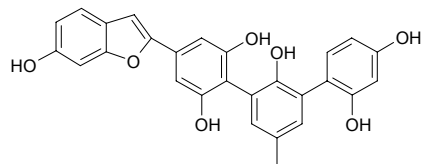
[101365-02-0] C<sub>34</sub>H<sub>22</sub>O<sub>9</sub> (574.55). Source: SANG BAI PI *Morus alba*. Ref: 1430.

**15051 Mulberrofuran Q**

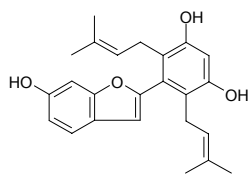
[101385-35-1] C<sub>34</sub>H<sub>24</sub>O<sub>10</sub> (592.56). Source: SANG BAI PI *Morus alba*. Ref: 1431.

**15052 Mulberrofuran R**

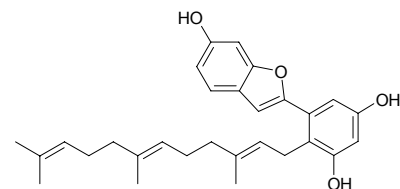
C<sub>27</sub>H<sub>20</sub>O<sub>7</sub> (456.46). Source: *Morus thou*. Ref: 2513.

**15053 Mulberrofuran V**

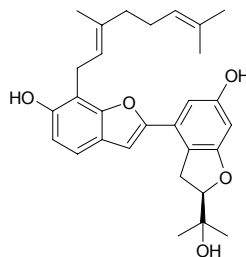
C<sub>24</sub>H<sub>26</sub>O<sub>4</sub> (378.47). Source: HUA SANG *Morus cathayana* (root cortex). Ref: 3034.

**15054 Mulberrofuran W**

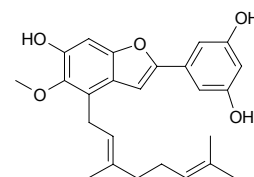
C<sub>29</sub>H<sub>34</sub>O<sub>4</sub> (446.59). Pale yellow amorphous solid. Pharm: Cytotoxic (HSC-2, CC<sub>50</sub> = 70 μmol/L, 31 μg/mL; HSG, CC<sub>50</sub> = 70 μmol/L, 31 μg/mL; HGF, CC<sub>50</sub> = 90 μmol/L, 40 μg/mL). Source: MENG SANG *Morus mongolica* (root cortex: yield = 0.00041%semi-dw). Ref: 3034.

**15055 Mulberrofuran X**

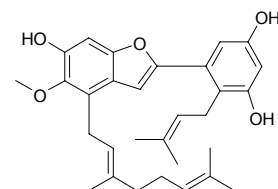
C<sub>29</sub>H<sub>34</sub>O<sub>5</sub> (462.59). Pale yellow amorphous solid, [α]<sub>D</sub><sup>20</sup> = -18° (c = 0.1, MeOH). Pharm: Cytotoxic (HSC-2, CC<sub>50</sub> = 290 μmol/L, 135 μg/mL; HSG, CC<sub>50</sub> = 260 μmol/L, 120 μg/mL; HGF, CC<sub>50</sub> = 350 μmol/L, 162 μg/mL). Source: MENG SANG *Morus mongolica* (root cortex: yield = 0.00027%semi-dw). Ref: 3034.

**15056 Mulberrofuran Y**

C<sub>25</sub>H<sub>28</sub>O<sub>5</sub> (408.5). Pale yellow amorphous solid. Pharm: Cytotoxic (HSC-2, CC<sub>50</sub> = 110 μmol/L, 46 μg/mL; HSG, CC<sub>50</sub> = 140 μmol/L, 55 μg/mL; HGF, CC<sub>50</sub> = 190 μmol/L, 78 μg/mL)<sup>[3034]</sup>; antibacterial (*Enterococcus faecalis* JCM7783 (VSE) (= ATCC19434), MIC = 6.25 μg/mL, control Linezolid, MIC = 1.56 μg/mL; *Enterococcus faecalis* JU1856(VRE, VanA), MIC = 6.25 μg/mL, Linezolid, MIC = 0.78 μg/mL; *Enterococcus faecalis* JU1782(VRE, VanB), MIC = 6.25 μg/mL, Linezolid, MIC = 0.78 μg/mL; *Enterococcus faecium* JCM5804 (VSE) (= ATCC 29212), MIC = 6.25 μg/mL, Linezolid, MIC = 1.56 μg/mL; *Enterococcus faecium* JU1858 (VRE, VanA), MIC = 6.25 μg/mL, Linezolid, MIC = 0.78 μg/mL; *Enterococcus faecium* JU1777 (VRE, VanB), MIC = 6.25 μg/mL, Linezolid, MIC = 1.56 μg/mL; *Enterococcus gallinarum* JU2786 (VRE, VanC), MIC = 6.25 μg/mL, Linezolid, MIC = 0.78 μg/mL; *Staphylococcus aureus* JCM2874 (MSSA) (=ATCC29213), MIC = 6.25 μg/mL, Linezolid, MIC = 1.56 μg/mL; *Staphylococcus aureus* (MRSA, 10 strains), MIC = 6.25 μg/mL, Linezolid, MIC = 0.78 μg/mL; *Staphylococcus aureus* (MRSA, 8 strains), mean MIC<sub>80</sub> = 6.25 μg/mL, Linezolid, mean MIC<sub>80</sub> = 0.78 μg/mL)<sup>[5007]</sup>. Source: MENG SANG *Morus mongolica* (root cortex: yield = 0.0036%semi-dw). Ref: 3034, 5007.

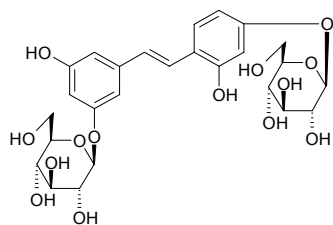
**15057 Mulberrofuran Z**

C<sub>30</sub>H<sub>36</sub>O<sub>5</sub> (476.62). Pale yellow amorphous solid. Pharm: Cytotoxic (HSC-2, CC<sub>50</sub> = 190 μmol/L, 89 μg/mL). Source: MENG SANG *Morus mongolica* (root cortex: yield = 0.00023%semi-dw). Ref: 3034.

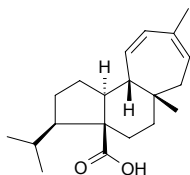


**15058 Mulberroside A**

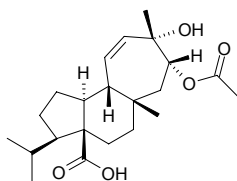
$C_{26}H_{32}O_{14}$  (568.54). Source: WEI JING BAI HE *Schoenocaulon officinale* (rhizome), *Morus lhou*. Ref: 2513, 4210.

**15059 Mulin-11,13-dien-20-oic acid**

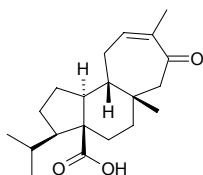
$C_{20}H_{30}O_2$  (302.46). Source: *Azorella yareta* (aerial parts). Ref: 5125.

**15060 Mulin-11-ene-13 $\alpha$ ,14 $\alpha$ -dihydroxy-20-oic acid**

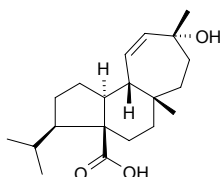
$C_{22}H_{34}O_5$  (378.51). Amber oil,  $[\alpha]_D^{20} = -82.4^\circ$  ( $c = 0.26$ ,  $Me_2CO$ ). Source: DUO CI LUO CAO *Mulinum spinosum*. Ref: 3417.

**15061 Mulin-12-ene-14-one-20-oic acid**

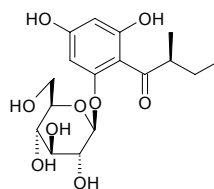
$C_{20}H_{30}O_3$  (318.46). White solid, mp 218–220°C,  $[\alpha]_D^{20} = -46.1^\circ$  ( $c = 0.36$ ,  $Me_2CO$ ). Source: DUO CI LUO CAO *Mulinum spinosum*. Ref: 3417.

**15062 Mulinolic acid**

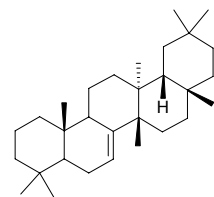
13-Hydroxymulin-11-en-20-oic acid  $C_{20}H_{32}O_3$  (320.48). Pharm: Antimalarial (*in vivo Plasmodium berghei* NK65 on infected mouse, intraperitoneal 10mg/(kg·d), growth InRt on parasite erythrocytic life cycle = 25%; control Chloroquine,  $IC_{50} = 2.5mg/(kg·d)$ )<sup>[3815]</sup>. Source: MI XIAO YING QIN *Azorella compacta* (aerial parts), *Azorella yareta* (aerial parts). Ref: 3815, 5125.

**15063 Multifidol glucoside**

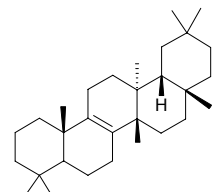
2-(2-Methylbutyryl)-phloroglucinol 1-*O*- $\beta$ -D-glucopyranoside  $C_{17}H_{24}O_9$  (372.38). Source: YOU GAN YE *Phyllanthus emblica* (leaf and branch). Ref: 4205.

**15064 Multiflor-7-ene**

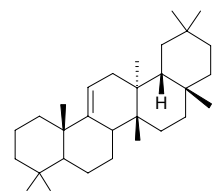
*D*: *C*-Friedolean-7-ene [72247-03-1]  $C_{30}H_{50}$  (410.73). mp 146–147°C. Source: SHUI LONG GU *Polypodium niponicum*, *Polypodium* spp. Ref: 1414, 4048.

**15065 Multiflor-8-ene**

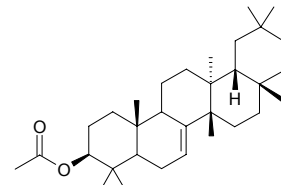
[65343-59-9]  $C_{30}H_{50}$  (410.73). Source: SHUI LONG GU *Polypodium niponicum*. Ref: 1414.

**15066 Multiflor-9(11)-ene**

[88206-86-4]  $C_{30}H_{50}$  (410.73). Source: SHUI LONG GU *Polypodium niponicum*. Ref: 1414.

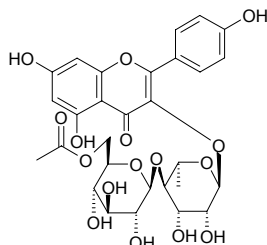
**15067 Multiflor-7-ene-3 $\beta$ -yl acetate**

$C_{32}H_{52}O_2$  (468.77). Source: SHUI LONG GU *Polypodium niponicum*. Ref: 1414.

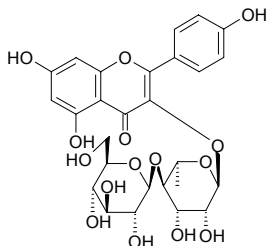


**15068 Multiflorin A**

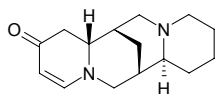
Prunuside A  $C_{29}H_{32}O_{16}$  (636.57). **Pharm:** Laxative (mus,  $ED_{50} = 30\text{mg/kg}$ , a large intestine laxative agent similar to sennoside A). **Source:** FENG WEI PA SHAN HU *Arthromeris mairei* [Syn. *Polypodium mairei*], QIANG WEI GEN *Rosa multiflora*, TAO *Prunus persica*, YU LI REN *Prunus japonica* [Syn. *Cerasus japonica*] (ripe seed: content = 0.29%<sup>[5501]</sup>). **Ref:** 533, 660, 5501.

**15069 Multiflorin B**

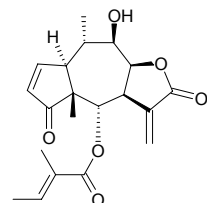
Prunuside B  $C_{27}H_{30}O_{15}$  (594.53). Yellow powder, mp 188–189°C (water-ethanol),  $[\alpha]_D^{30} = -38^\circ$  (pyridine); mp 190–200°C, 205–210°C,  $[\alpha]_D^{16} = -92.7^\circ$  ( $c = 0.63$ , methanol). **Pharm:** Laxative (mus,  $ED_{50} = 222\text{mg/kg}$ ). **Source:** CHANG GENG YU LI REN *Prunus japonica* var. *nakaii*, MU MIAN HUA *Bombax malabaricum* [Syn. *Gossampinus malabarica*], OU LI REN *Prunus humilis* [Syn. *Cerasus humilis*], QIANG WEI GEN *Rosa multiflora*, TAO *Prunus persica*, TAO HUA *Prunus persica*, YU LI REN *Prunus japonica* [Syn. *Cerasus japonica*] (ripe seed: content = 0.70%<sup>[5501]</sup>). **Ref:** 661, 1444, 5501.

**15070 Multiflorine**

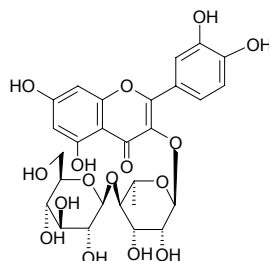
[529-80-6]  $C_{15}H_{22}N_2O$  (246.36). **Pharm:** CNS depressant. **Source:** BAI YU SHAN DOU *Lupinus albus*. **Ref:** 658.

**15071 Multigilin**

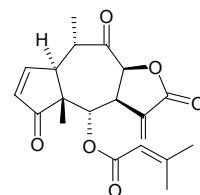
[64937-25-3]  $C_{20}H_{24}O_6$  (360.41). Colorless crystals (acetone–heptane), mp 226–230°C (dec). **Pharm:** Antineoplastic (mus  $P_{388}$ , 12.2mg/kg, biotic prolonged rate = 64%). **Source:** BAI LAI SHI JU *Baileya multiradiata*. **Ref:** 5, 661.

**15072 Multinoside A**

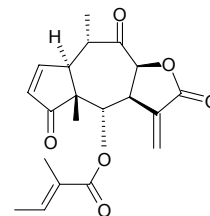
[59262-54-3]  $C_{27}H_{30}O_{16}$  (610.53). **Source:** CHANG GENG YU LI REN *Prunus japonica* var. *nakaii*, OU LI REN *Prunus humilis* [Syn. *Cerasus humilis*], YU LI REN *Prunus japonica* [Syn. *Cerasus japonica*]. **Ref:** 1444.

**15073 Multiradiatin**

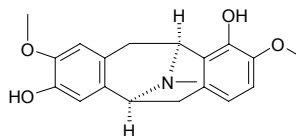
[58262-52-5]  $C_{20}H_{22}O_6$  (358.39). mp 226–230°C (dec). **Pharm:** Antineoplastic (mus  $P_{388}$  *in vitro*,  $ED_{50} = 0.02\mu\text{g/mL}$ , KB, EC = 0.12 $\mu\text{g/mL}$ ,  $L_{1210}$ , EC = 0.028 $\mu\text{g/mL}$ ). **Source:** BAI LAI SHI JU *Baileya multiradiata*. **Ref:** 5, 658.

**15074 Multisatin**

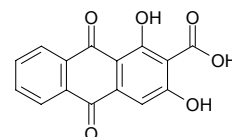
[64937-26-4]  $C_{20}H_{22}O_6$  (358.39). mp 257–260°C. **Pharm:** Antineoplastic (mus  $P_{388}$  *in vitro*,  $ED_{50} = 0.37\mu\text{g/mL}$ , *in vivo* 32mg/kg, biotic prolonged rate = 31%). **Source:** BAI LAI SHI JU *Baileya multiradiata*. **Ref:** 5, 658, 1521.

**15075 (–)-Munitagine**

$C_{19}H_{21}NO_4$  (327.38). **Source:** HOU KE GUI *Cryptocarya chinensis* (leaf). **Ref:** 4129.

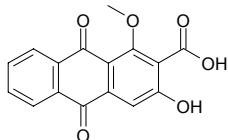
**15076 Munjistin**

[478-06-8]  $C_{15}H_8O_6$  (284.23). mp 229–230°C. **Source:** QIAN CAO GEN *Rubia cordifolia*, YANG JIAO TENG *Morinda umbellata*. **Ref:** 6.

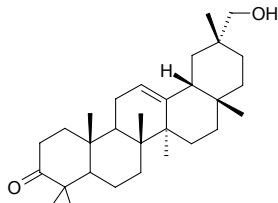


**15077 Munjistin methyl ether**

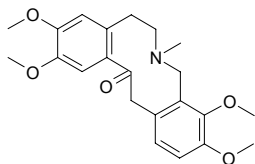
$C_{16}H_{10}O_6$  (298.25). Source: GUANG JING QIAN CAO *Rubia wallichiana* (stem), MAO XIAN ZHU JU TAI *Rhynchosychem vestitum*. Ref: 1521, 4369.

**15078 Mupinensione**

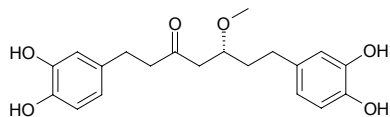
$C_{30}H_{48}O_2$  (440.72). Colorless acicular crystals (methanol), mp 230~231°C. Source: BAO XING WEI MAO *Euonymus mupinensis*. Ref: 278.

**15079 Muramine**

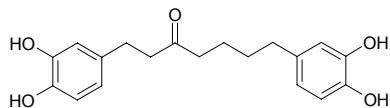
Cryptopalmatine [2292-20-8]  $C_{22}H_{27}NO_5$  (385.46). Source: HEI SHUI YE YING SU *Papaver nudicaule* ssp. *amurense*. Ref: 1321.

**15080 Muricarpone A**

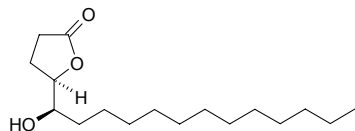
$C_{20}H_{24}O_6$  (360.41). Syrup,  $[\alpha]_D^{25} = -7.1^\circ$  ( $c = 0.88$ , MeOH). Source: YOU GUO DOU KOU *Amomum muricarpum* (rhizome: yield = 0.001%dw). Ref: 927.

**15081 Muricarpone B**

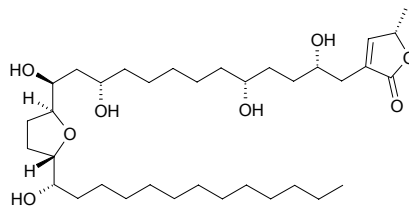
$C_{19}H_{22}O_5$  (330.38). Syrup. Source: YOU GUO DOU KOU *Amomum muricarpum* (rhizome: yield = 0.036%dw). Ref: 927.

**15082 Muricatacin**

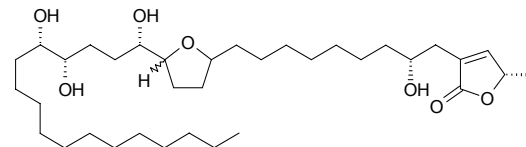
[134698-86-5]  $C_{17}H_{32}O_3$  (284.44). mp 50°C,  $[\alpha]_D^{20} = -16.1^\circ$ . Pharm: Cytotoxic (A549,  $ED_{50} = 23.3\mu\text{g/mL}$ , MCF7,  $ED_{50} = 9.8\mu\text{g/mL}$ , HT29,  $ED_{50} = 14.0\mu\text{g/mL}$ ). Source: CI GUO FAN LI ZHI *Annona muricata*. Ref: 1549.

**15083 Muricatalicin**

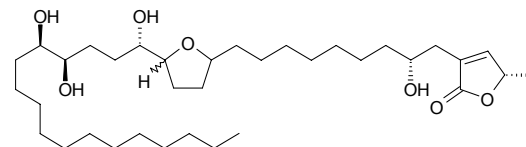
[179308-46-4]  $C_{35}H_{64}O_8$  (612.90). White crystals, mp 105~106°C,  $[\alpha]_D^{20} = +17.7^\circ$  ( $c = 0.4$ , methanol). Source: CI GUO FAN LI ZHI *Annona muricata*. Ref: 385.

**15084 Muricatetrocin A**

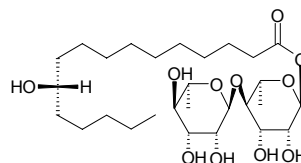
[153125-14-5]  $C_{35}H_{64}O_7$  (596.90). mp 102°C,  $[\alpha]_D^{25} = 10.3^\circ$  ( $c = 0.15$ , chloroform); mixed with muricatetrocin B, colorless oil,  $[\alpha]_D^{25} = +22.2^\circ$  ( $c = 0.25$ ,  $\text{CHCl}_3$ ). Pharm: Cytotoxic (A549,  $ED_{50} = 0.14\mu\text{g/mL}$ , MCF7,  $ED_{50} = 1.03\mu\text{g/mL}$ , HT29,  $ED_{50} \leq 10^{-8}\mu\text{g/mL}$ , BST,  $LC_{50} = 1.4\mu\text{g/mL}$ , PD experiment, tumor inhibition rate = 76%); cytotoxic (*in vitro*, mixed with Muricatetrocin B, HepG2,  $IC_{50} = 0.0495\mu\text{g/mL}$ , Hep2,2,15,  $IC_{50} = 0.00483\mu\text{g/mL}$ ; control Adriamycin, HepG2,  $IC_{50} = 0.241\mu\text{g/mL}$ , Hep2,2,15,  $IC_{50} = 0.45\mu\text{g/mL}$ )<sup>[3067]</sup>. Source: CI GUO FAN LI ZHI *Annona muricata*, CI GUO FAN LI ZHI *Annona muricata* (seed)<sup>[3067]</sup>. Ref: 1550, 3067.

**15085 Muricatetrocin B**

[153220-48-5]  $C_{35}H_{64}O_7$  (596.90). mp 89~90°C,  $[\alpha]_D^{25} = 15.0^\circ$  ( $c = 0.43$ , chloroform); mixed with muricatetrocin A, colorless oil,  $[\alpha]_D^{25} = +22.2^\circ$  ( $c = 0.25$ ,  $\text{CHCl}_3$ ). Pharm: Cytotoxic (A549,  $ED_{50} = 0.49\mu\text{g/mL}$ , MCF7,  $ED_{50} = 1.86\mu\text{g/mL}$ , HT29,  $ED_{50} = 0.028\text{ng/mL}$ , BST,  $LC_{50} = 1.8\mu\text{g/mL}$ , PD experiment, tumor inhibition rate = 53%); cytotoxic (*in vitro*, mixed with Muricatetrocin A, HepG2,  $IC_{50} = 0.0495\mu\text{g/mL}$ , Hep2,2,15,  $IC_{50} = 0.00483\mu\text{g/mL}$ ; control Adriamycin, HepG2,  $IC_{50} = 0.241\mu\text{g/mL}$ , Hep2,2,15,  $IC_{50} = 0.45\mu\text{g/mL}$ )<sup>[3067]</sup>. Source: CI GUO FAN LI ZHI *Annona muricata*, CI GUO FAN LI ZHI *Annona muricata* (seed)<sup>[3067]</sup>. Ref: 1550, 3067.

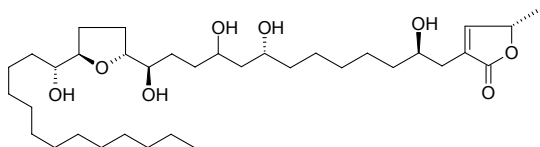
**15086 Muricatin B**

[68124-11-8]  $C_{28}H_{52}O_{11}$  (564.72). Source: WU ZHAO LONG *Ipomoea cairica* [Syn. *Ipomoea palmata*]. Ref: 6.

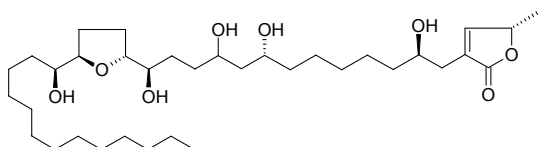


**15087 Muricatocin A**

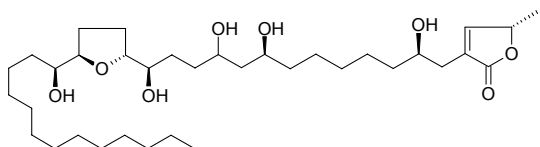
[167172-79-4] C<sub>35</sub>H<sub>64</sub>O<sub>8</sub> (612.90). White amorphous powder,  $[\alpha]_D^{22} = +21.8^\circ$  ( $c = 0.001$ , ethanol). **Pharm:** Cytotoxic (hmn A549, ED<sub>50</sub> = 0.0755 μg/mL, MCF7, ED<sub>50</sub> = 0.123 μg/mL, HT29, ED<sub>50</sub> = 1.56 μg/mL, BST, LC<sub>50</sub> = 0.699 μg/mL). **Source:** CI GUO FAN LI ZHI *Annona muricata*. **Ref:** 1048.

**15088 Muricatocin B**

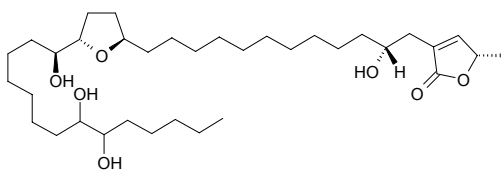
[167355-38-6] C<sub>35</sub>H<sub>64</sub>O<sub>8</sub> (612.90). White amorphous powder,  $[\alpha]_D^{22} = +62.5^\circ$  ( $c = 0.001$ , ethanol). **Pharm:** Cytotoxic (hmn A549, ED<sub>50</sub> = 0.334 μg/mL, MCF7, ED<sub>50</sub> = 0.103 μg/mL, HT29, ED<sub>50</sub> = 1.66 μg/mL, BST LC<sub>50</sub> = 0.557 μg/mL). **Source:** CI GUO FAN LI ZHI *Annona muricata*. **Ref:** 1048.

**15089 Muricatocin C**

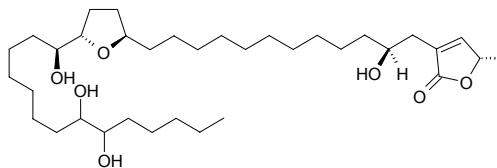
[167355-40-0] C<sub>35</sub>H<sub>64</sub>O<sub>8</sub> (612.90). White amorphous powder,  $[\alpha]_D^{22} = +32.5^\circ$  ( $c = 0.001$ , ethanol). **Pharm:** Cytotoxic (hmn A549, ED<sub>50</sub> = 0.0909 μg/mL, MCF7, ED<sub>50</sub> = 0.0645 μg/mL, HT29, ED<sub>50</sub> = 1.48 μg/mL, BST, LC<sub>50</sub> = 0.604 μg/mL). **Source:** CI GUO FAN LI ZHI *Annona muricata*. **Ref:** 1049.

**15090 Muricin A**

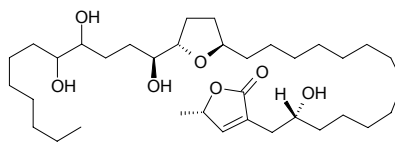
C<sub>33</sub>H<sub>64</sub>O<sub>7</sub> (596.9). White waxy solid,  $[\alpha]_D^{25} = +7.2^\circ$  ( $c = 0.25$ , CHCl<sub>3</sub>). **Pharm:** Cytotoxic (*in vitro*, HepG2, IC<sub>50</sub> = 5.04 μg/mL, Hep2,2,15, IC<sub>50</sub> = 0.00513 μg/mL; control Adriamycin, HepG2, IC<sub>50</sub> = 0.241 μg/mL, Hep2,2,15, IC<sub>50</sub> = 0.45 μg/mL). **Source:** CI GUO FAN LI ZHI *Annona muricata* (seed). **Ref:** 3067.

**15091 Muricin B**

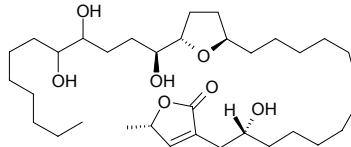
C<sub>33</sub>H<sub>64</sub>O<sub>7</sub> (596.9). White waxy solid,  $[\alpha]_D^{25} = 0^\circ$  ( $c = 0.11$ , CHCl<sub>3</sub>). **Pharm:** Cytotoxic (*in vitro*, HepG2, IC<sub>50</sub> = 1.78 μg/mL, Hep2,2,15, IC<sub>50</sub> = 0.00429 μg/mL; control Adriamycin, HepG2, IC<sub>50</sub> = 0.241 μg/mL, Hep2,2,15, IC<sub>50</sub> = 0.45 μg/mL). **Source:** CI GUO FAN LI ZHI *Annona muricata* (seed). **Ref:** 3067.

**15092 Muricin C**

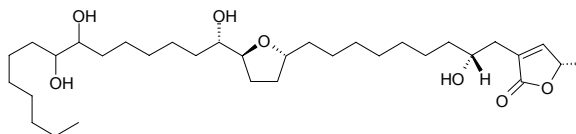
C<sub>33</sub>H<sub>64</sub>O<sub>7</sub> (596.9). White waxy solid,  $[\alpha]_D^{25} = +86.0^\circ$  ( $c = 0.15$ , CHCl<sub>3</sub>). **Pharm:** Cytotoxic (*in vitro*, HepG2, IC<sub>50</sub> = 0.499 μg/mL, Hep2,2,15, IC<sub>50</sub> = 0.00387 μg/mL; control Adriamycin, HepG2, IC<sub>50</sub> = 0.241 μg/mL, Hep2,2,15, IC<sub>50</sub> = 0.45 μg/mL). **Source:** CI GUO FAN LI ZHI *Annona muricata* (seed). **Ref:** 3067.

**15093 Muricin D**

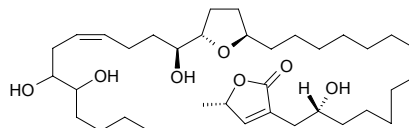
C<sub>33</sub>H<sub>60</sub>O<sub>7</sub> (568.84). White waxy solid,  $[\alpha]_D^{25} = +77.6^\circ$  ( $c = 0.34$ , CHCl<sub>3</sub>). **Pharm:** Cytotoxic (*in vitro*, HepG2, IC<sub>50</sub> = 0.00066 μg/mL, Hep2,2,15, IC<sub>50</sub> = 0.048 μg/mL; control Adriamycin, HepG2, IC<sub>50</sub> = 0.241 μg/mL, Hep2,2,15, IC<sub>50</sub> = 0.45 μg/mL). **Source:** CI GUO FAN LI ZHI *Annona muricata* (seed). **Ref:** 3067.

**15094 Muricin E**

C<sub>33</sub>H<sub>60</sub>O<sub>7</sub> (568.84). White waxy solid,  $[\alpha]_D^{25} = +91.4^\circ$  ( $c = 0.23$ , CHCl<sub>3</sub>). **Source:** CI GUO FAN LI ZHI *Annona muricata* (seed). **Ref:** 3067.

**15095 Muricin F**

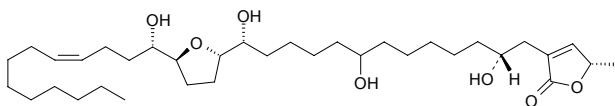
C<sub>33</sub>H<sub>62</sub>O<sub>7</sub> (594.88). White waxy solid,  $[\alpha]_D^{25} = +48.2^\circ$  ( $c = 0.48$ , CHCl<sub>3</sub>). **Pharm:** Cytotoxic (*in vitro*, HepG2, IC<sub>50</sub> = 0.0428 μg/mL, Hep2,2,15, IC<sub>50</sub> = 0.00386 μg/mL; control Adriamycin, HepG2, IC<sub>50</sub> = 0.241 μg/mL, Hep2,2,15, IC<sub>50</sub> = 0.45 μg/mL). **Source:** CI GUO FAN LI ZHI *Annona muricata* (seed). **Ref:** 3067.



**15096 Muricin G**

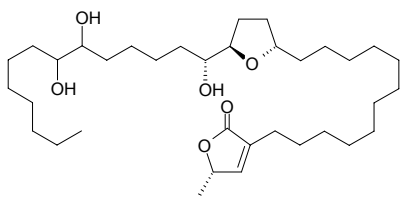
$C_{35}H_{62}O_7$  (594.88). White waxy solid,  $[\alpha]_D^{25} = +47.0^\circ$  ( $c = 0.63$ ,  $CHCl_3$ ).

**Source:** CI GUO FAN LI ZHI *Annona muricata* (seed). **Ref:** 3067.

**15097 Muricin H**

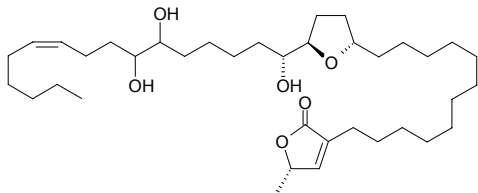
$C_{35}H_{64}O_6$  (580.9). Colorless waxy solid,  $[\alpha]_D^{25} = +9.5^\circ$  ( $c = 0.76$ ,  $CHCl_3$ ).

**Pharm:** Cytotoxic (*in vitro*, HepG2,  $IC_{50} = 0.0951\mu g/mL$ , control Adriamycin,  $IC_{50} = 0.241\mu g/mL$ ; Hep2,2,15,  $IC_{50} = 0.0118\mu g/mL$ , control Adriamycin,  $IC_{50} = 0.45\mu g/mL$ ). **Source:** CI GUO FAN LI ZHI *Annona muricata* (seed: yield = 0.01%dw). **Ref:** 4617.

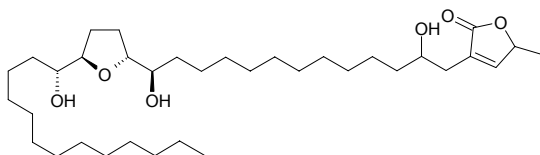
**15098 Muricin I**

$C_{37}H_{66}O_6$  (606.93). White waxy solid,  $[\alpha]_D^{25} = +88.0^\circ$  ( $c = 0.25$ ,  $CHCl_3$ ). **Pharm:**

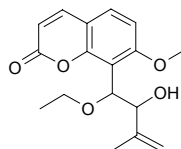
Cytotoxic (*in vitro*, HepG2,  $IC_{50} = 0.0509\mu g/mL$ , control Adriamycin,  $IC_{50} = 0.241\mu g/mL$ ; Hep2,2,15,  $IC_{50} = 0.222\mu g/mL$ , control Adriamycin,  $IC_{50} = 0.45\mu g/mL$ ). **Source:** CI GUO FAN LI ZHI *Annona muricata* (seed: yield = 0.001%dw). **Ref:** 4617.

**15099 Murisolin**

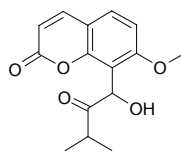
[129683-96-1]  $C_{35}H_{64}O_6$  (580.90). mp 62~64°C. **Source:** CI GUO FAN LI ZHI *Annona muricata* (seed: yield = 0.0008%dw; leaf: yield = 0.0001%dw)<sup>[4617]</sup>, JIN PING GE NA XIANG *Goniothalamus leiocarpus*, NIU XIN FAN LI ZHI *Annona reticulata*. **Ref:** 420, 432, 4617.

**15100 Murpanicin**

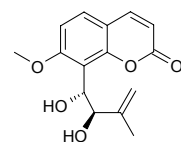
Muraxocin [113349-35-2]  $C_{17}H_{20}O_5$  (304.35). **Source:** JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*], XIAO YE JIU LI XIANG *Murraya paniculata* var. *exotica*. **Ref:** 11, 1335.

**15101 (±)-Murpaniculol**

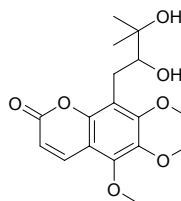
[112458-25-0]  $C_{15}H_{16}O_5$  (276.29). **Source:** JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*]. **Ref:** 1336.

**15102 (S)-Murpanidin**

[88546-96-7]  $C_{15}H_{16}O_5$  (276.29). **Source:** JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*]. **Ref:** 11.

**15103 Murragleinin**

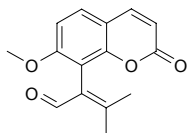
$C_{17}H_{22}O_7$  (338.36).  $[\alpha]_D^{24} = -4.7^\circ$  ( $c = 0.2$ , MeOH). **Pharm:** Platelet aggregation inhibitor (washed rabbit platelets, induced by thrombin, AA, collagen and PAF, 100 $\mu g/mL$ : thrombin = 0.1U/mL, AggRt = (89.3 $\pm$ 2.8)%,  $p < 0.05$ , control, AggRt = (80.0 $\pm$ 1.1)%; AA = 100 $\mu mol/L$ , AggRt = (77.0 $\pm$ 2.6)%, control, AggRt = (77.0 $\pm$ 1.5)%; collagen = 10 $\mu g/mL$ , AggRt = (71.3 $\pm$ 2.2)%,  $p < 0.05$ , control, AggRt = (78.3 $\pm$ 1.3)%; PAF = 1ng/mL, AggRt = (79.0 $\pm$ 3.6)%, control, AggRt = (82.5 $\pm$ 1.5)%). **Source:** QI GUO JIU LI XIANG *Murraya omphalocarpa* (leaf). **Ref:** 5417.



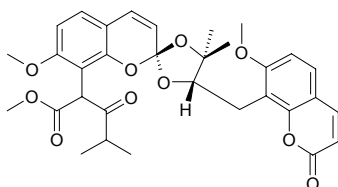


**15104 Murralongin**

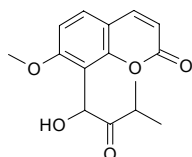
[53011-72-6]  $C_{15}H_{14}O_4$  (258.28). mp 135°C. **Pharm:** Platelet aggregation inhibitor (washed rabbit platelets, induced by thrombin, AA, collagen and PAF, 100 $\mu$ g/mL: thrombin = 0.1U/mL, AggRt = (77.3 $\pm$ 1.8)%, control, AggRt = (80.0 $\pm$ 1.1)%; AA = 100 $\mu$ mol/L, AggRt = (73.0 $\pm$ 3.1)%, control, AggRt = (77.0 $\pm$ 1.5)%; collagen = 10 $\mu$ g/mL, AggRt = (70.0 $\pm$ 0.9)%, p<0.001, control, AggRt = (78.3 $\pm$ 1.3)%; PAF = 1ng/mL, AggRt = (77.0 $\pm$ 2.9)%, control, AggRt = (82.5 $\pm$ 1.5)%<sup>[5417]</sup>. **Source:** JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*], QI GUO JIU LI XIANG *Murraya omphalocarpa* (leaf), YAN JIAO CAO *Boemninghausenia albiflora*. **Ref:** 11, 1521, 2495, 5417.

**15105 Murramarin A**

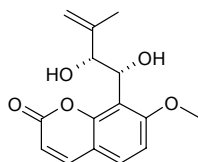
$C_{32}H_{34}O_{10}$  (578.62). Colorless oil,  $[\alpha]_D^{25} = +96^\circ$  (c = 0.135, MeOH). **Source:** ZHONG HUA JIU LI XIANG *Murraya exotica* (vegetative branches). **Ref:** 4510.

**15106 (+)-Murranganone**

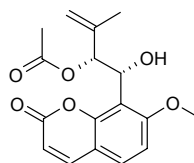
[112789-91-0]  $C_{15}H_{16}O_5$  (276.29).  $[\alpha]_D^{25} = +105.8^\circ$  (c = 0.06,  $CHCl_3$ ) **Source:** XIAO YE JIU LI XIANG *Murraya paniculata* var. *exotica*. **Ref:** 1272.

**15107 Murrangatin**

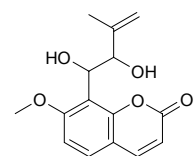
$C_{15}H_{16}O_5$  (276.29).  $[\alpha]_D^{24} = +6.8^\circ$  (c = 0.7, MeOH). **Pharm:** Platelet aggregation inhibitor (washed rabbit platelets, induced by thrombin, AA, collagen and PAF, 100 $\mu$ g/mL: thrombin = 0.1U/mL, AggRt = (81.7 $\pm$ 1.9)%, control, AggRt = (80.0 $\pm$ 1.1)%; AA = 100 $\mu$ mol/L, AggRt = (71.0 $\pm$ 1.7)%, control, AggRt = (77.0 $\pm$ 1.5)%; collagen = 10 $\mu$ g/mL, AggRt = (69.7 $\pm$ 0.03)%, p<0.001, control, AggRt = (78.3 $\pm$ 1.3)%; PAF = 1ng/mL, AggRt = (80.0 $\pm$ 2.4)%, control, AggRt = (82.5 $\pm$ 1.5)%). **Source:** QI GUO JIU LI XIANG *Murraya omphalocarpa* (leaf). **Ref:** 5417.

**15108 Murrangatin acetate**

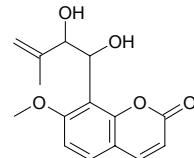
$C_{17}H_{18}O_6$  (318.33). **Source:** JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*]. **Ref:** 1336.

**15109 erythro-Murrangatin**

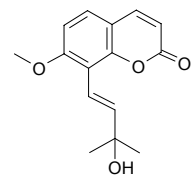
$C_{15}H_{16}O_5$  (276.29). **Source:** JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*]. **Ref:** 1337.

**15110 threo-Murrangatin**

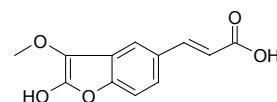
$C_{15}H_{16}O_5$  (276.29). Needle crystals ( $Et_2O-CHCl_3$ ), mp 133°C,  $[\alpha]_D^{25} = -3^\circ$  (c = 0.49,  $CHCl_3$ ). **Source:** JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*]. **Ref:** 1521.

**15111 Murraol**

$C_{15}H_{16}O_4$  (260.29). **Source:** XIAO YE JIU LI XIANG *Murraya paniculata* var. *exotica*. **Ref:** 1272.

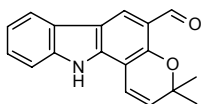
**15112 Murraxonin**

[113270-89-6]  $C_{12}H_{10}O_5$  (234.21). **Source:** XIAO YE JIU LI XIANG *Murraya paniculata* var. *exotica*. **Ref:** 1338.

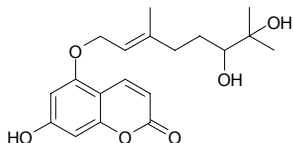


**15113 Murrayacine**

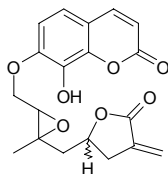
[27300-29-4] C<sub>18</sub>H<sub>15</sub>NO<sub>2</sub> (277.33). Source: YIN DU JIU LI XIANG *Murraya koenigii*. Ref: 11.

**15114 Murrayacoumarin A**

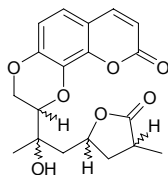
C<sub>19</sub>H<sub>24</sub>O<sub>6</sub> (348.40). Colorless oil,  $[\alpha]_D^{24} = +7.9^\circ$  ( $c = 0.114$ , MeOH). Pharm: EBV-EA inhibitor (TPA-induced, IC<sub>50</sub> = 230 Mol ratio/32 pmol TPA, control  $\beta$ -Carotene, IC<sub>50</sub> = 400 Mol ratio/32 pmol TPA). Source: YUAN DONG JIU LI XIANG *Murraya siamensis* (leaf). Ref: 5255.

**15115 Murrayacoumarin B**

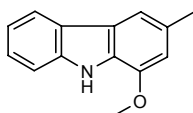
C<sub>19</sub>H<sub>28</sub>O<sub>7</sub> (358.35). Colorless oil,  $[\alpha]_D^{24} = +64.1^\circ$  ( $c = 0.103$ , MeOH). Pharm: EBV-EA inhibitor (TPA-induced, IC<sub>50</sub> = 465 Mol ratio/32 pmol TPA, control  $\beta$ -Carotene, IC<sub>50</sub> = 400 Mol ratio/32 pmol TPA). Source: YUAN DONG JIU LI XIANG *Murraya siamensis* (leaf). Ref: 5255.

**15116 Murrayacoumarin C**

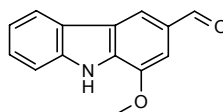
C<sub>19</sub>H<sub>20</sub>O<sub>7</sub> (360.37). Colorless oil,  $[\alpha]_D^{24} = +79.0^\circ$  ( $c = 0.371$ , MeOH). Pharm: EBV-EA inhibitor (TPA-induced, IC<sub>50</sub> = 442 Mol ratio/32 pmol TPA, control  $\beta$ -Carotene, IC<sub>50</sub> = 400 Mol ratio/32 pmol TPA). Source: YUAN DONG JIU LI XIANG *Murraya siamensis* (leaf). Ref: 5255.

**15117 Murrayafoline A**

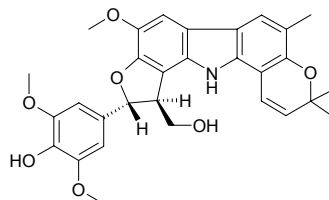
C<sub>14</sub>H<sub>13</sub>NO (211.27). Brown oil. Source: DOU YE JIU LI XIANG *Murraya euchrestifolia* [Syn. *Clausena euchrestifolia*], TAI WAN JIU LI XIANG *Murraya crenulata*, XIA GUO SHAN XIAO JU GEN *Glycosmis stenocarpa*. Ref: 11, 2569.

**15118 Murrayanine**

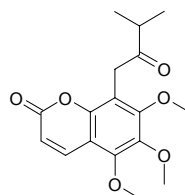
[723-97-7] C<sub>14</sub>H<sub>11</sub>NO<sub>2</sub> (225.25). Colorless rhombic crystals, mp 168°C; Silver white plates (EtOAc), mp 155°C. Pharm: Cytotoxic (KB, ED<sub>50</sub> = 26µg/mL); platelet aggregation inhibitor (rbt, due to collagen, arachidonic acid and PAF); antibacterial inactive (*Mycobacterium tuberculosis*; control Isoniazide, MIC = 0.040–0.090µg/mL, kanamycin sulfate, MIC = 2.0–5.0µg/mL)<sup>[5367]</sup>; antifungal inactive (*Candida albicans*; control Amphotericin, IC<sub>50</sub> = 0.01µg/mL)<sup>[5367]</sup>. Source: DOU YE JIU LI XIANG *Murraya euchrestifolia* [Syn. *Clausena euchrestifolia*], JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*], SHAN HUANG PI *Clausena excavata*, XIA GUO SHAN XIAO JU GEN *Glycosmis stenocarpa*, YIN DU JIU LI XIANG *Murraya koenigii*, YUAN DONG JIU LI XIANG *Murraya siamensis*. Ref: 11, 658, 2569, 5367.

**15119 Murrayanine II\***

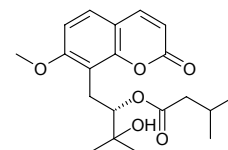
C<sub>30</sub>H<sub>31</sub>NO<sub>7</sub> (517.58). Brown powder,  $[\alpha]_D^{25} = +8.0^\circ$  ( $c = 0.74$ , CH<sub>3</sub>OH). Source: YIN DU JIU LI XIANG *Murraya koenigii* (aerial parts). Ref: 4681.

**15120 Murrayanone**

C<sub>17</sub>H<sub>20</sub>O<sub>6</sub> (320.35). Pharm: Platelet aggregation inhibitor (washed rabbit platelets, induced by thrombin, AA, collagen and PAF, 100µg/mL; thrombin = 0.1U/mL, AggRt = (78.7±1.7)%, control, AggRt = (80.0±1.1)%; AA = 100µmol/L, AggRt = (66.7±7.8)%,  $p < 0.001$ , control, AggRt = (77.0±1.5)%; collagen = 10µg/mL, AggRt = (71.7±1.2)%,  $p < 0.01$ , control, AggRt = (78.3±1.3)%; PAF = 1ng/mL, AggRt = (75.7±0.1)%,  $p < 0.01$ , control, AggRt = (82.5±1.5)%). Source: QI GUO JIU LI XIANG *Murraya omphalocarpa* (leaf). Ref: 5417.

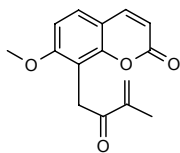
**15121 Murrayatin**

C<sub>20</sub>H<sub>26</sub>O<sub>6</sub> (362.43). Source: JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*]. Ref: 1336.

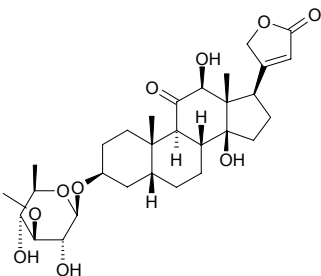


**15122 Murrayone**

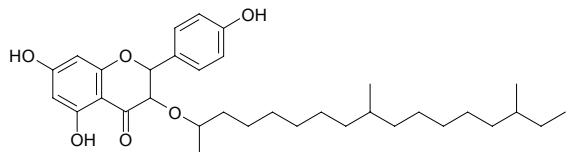
[19668-69-0] C<sub>15</sub>H<sub>14</sub>O<sub>4</sub> (258.28). Source: JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*]. Ref: 11.

**15123 Musaroside**

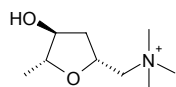
C<sub>30</sub>H<sub>44</sub>O<sub>10</sub> (564.68). Pharm: Toxin (vertebrate). Source: YANG JIAO AO ZI *Strophanthus divaricatus*. Ref: 658.

**15124 Muscanone**

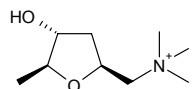
3-*O*-(1'',8'',14''-Trimethylhexadecanyl)naringenin C<sub>34</sub>H<sub>50</sub>O<sub>6</sub> (554.77). Brownish solid, mp 124~126°C. Pharm: Antifungal (*Candida albicans*). Source: A MAN SU DAN MO YAO *Commiphora wightii*. Ref: 2014.

**15125 Muscarine I**

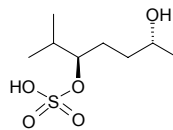
C<sub>9</sub>H<sub>20</sub>NO<sub>2</sub><sup>+</sup> (174.24). mp 182°C. Source: MA HUA *Cannabis sativa*. Ref: 6.

**15126 Muscarine II**

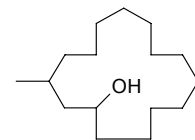
C<sub>9</sub>H<sub>20</sub>NO<sub>2</sub><sup>+</sup> (174.27). Chloride (C<sub>9</sub>H<sub>20</sub>ClNO<sub>2</sub>); thick prismatic crystals (ethanol-acetone), mp 180~181°C, [α]<sub>D</sub><sup>25</sup> = +8.1° (c = 3.5, ethanol). Pharm: Cholineoid action; CNS depressant (mus, *in vivo*, potentiates hypnotic effect of barbital); antihypertensive (cat, MED = 0.004μg/kg iodide); LD<sub>50</sub> (mus, iv) = 0.23mg/kg. Source: HUO MA REN *Cannabis sativa*. Ref: 661.

**15127 Musclide A<sub>1</sub>**

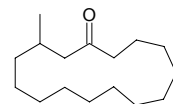
C<sub>8</sub>H<sub>18</sub>O<sub>5</sub>S (226.29). Pharm: Enhances action of β-adrenalin. Source: SHE XIANG *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*. Ref: 1406.

**15128 Muscol**

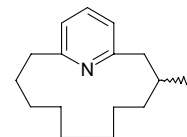
C<sub>16</sub>H<sub>32</sub>O (240.43). Source: SHE XIANG *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*. Ref: 2.

**15129 Muscone**

[541-91-3] C<sub>16</sub>H<sub>30</sub>O (238.42). Colorless liquid, bp (–) 130°C/0.5mmHg, [α]<sub>D</sub> = –13°, insoluble in water, soluble in ethanol.<sup>[5507]</sup> Pharm: Bidirectional action to drowsiness (excitation in low dose and inhibition in high dose); coronary vasodilator (increases coronary flow); increases tolerance to anoxia (mus, cardiac muscles, 100mg/kg ip); LD<sub>50</sub> (mus, iv) = 152~172mg/kg, (mus, ip) = 270~290mg/kg. Source: SHE XIANG *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus* (dried secretion obtained from musk gland of musk deer: content scope = 0.50%~5.00%<sup>[5501]</sup>, content scope of 9 batch samples = 0.37%~5.30%, mean content = 2.91%<sup>[5508]</sup>). Ref: 2, 4, 6, 658, 5501, 5507, 5508.

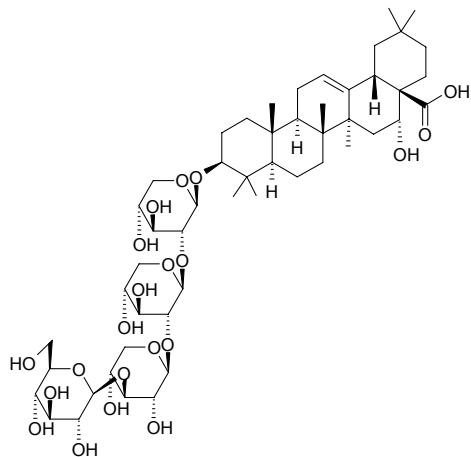
**15130 Muscopyridine**

C<sub>16</sub>H<sub>25</sub>N (231.38). Source: SHE XIANG *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*. Ref: 2.

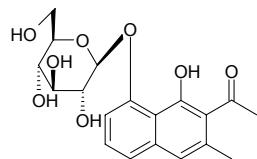


**15131 Musennin**

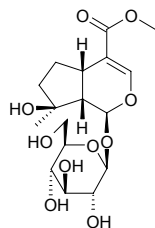
$C_{51}H_{82}O_{21}$  (1031.21). **Pharm:** Anthelmintic. **Source:** QU CHONG HE HUAN *Albizia anthelmintica*. **Ref:** 658.

**15132 Musizin-8-O-β-D-glucoside**

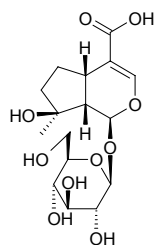
$C_{19}H_{22}O_8$  (378.38). **Source:** DA HUANG *Rheum officinale*. **Ref:** 2.

**15133 Mussaenoside**

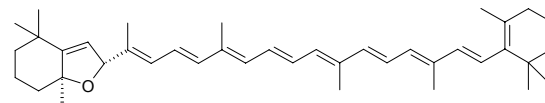
Linearoside  $C_{17}H_{26}O_{10}$  (390.39). **Source:** SI CHI SI LENG CAO *Schnabelia tetradonta* (aerial parts: yield = 0.0021%dw). **Ref:** 4665.

**15134 Mussaenosidic acid**

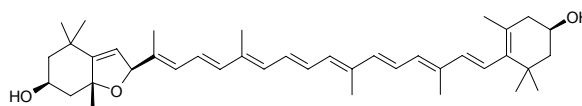
$C_{16}H_{24}O_{10}$  (376.36).  $[\alpha]_D^{29} = -62.6^\circ$  ( $c = 0.15$ , MeOH). **Pharm:** Cytotoxic inactive (Vero cells)<sup>[5456]</sup>; COX-2 inhibitor inactive<sup>[5456]</sup>. **Source:** HUA YE JIA DU JUAN *Barleria lupulina* (flower), ROU CONG RONG *Cistanche deserticola*, GUAN HUA ROU CONG RONG *Cistanche tubulosa*. **Ref:** 2448, 5456.

**15135 Mutatochrome**

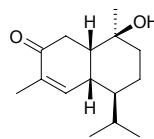
[515-06-6]  $C_{40}H_{56}O$  (552.89). **Pharm:** Precursor to biosynthesis of vitamin A. **Source:** FAN MU GUA *Carica papaya*, FAN QIE *Lycopersicon esculentum*, TIAN CHENG *Citrus sinensis*, TONG HAO *Chrysanthemum coronarium*, *Calendula* sp., *Forsythia* sp. **Ref:** 658.

**15136 Mutatoxanthin**

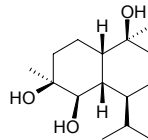
$C_{40}H_{56}O_2$  (568.89). **Source:** SU TIE SHU GUO *Cycas revoluta*. **Ref:** 1473, 1521.

**15137 Muurolan-3-en-9β-ol-2-one**

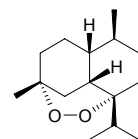
$C_{15}H_{24}O_2$  (236.36). **Source:** HUANG QI II *Engelhardia roxburghiana* (root). **Ref:** 5059.

**15138 Muurolane-4β,5β,10β-triol**

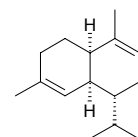
$C_{15}H_{28}O_3$  (256.39). mp 168–170°C,  $[\alpha]_D^{27} = -6.4^\circ$  ( $c = 0.14$ ,  $CHCl_3$ ). **Source:** TAI WAN SHAN *Taiwania cryptomerioides* (root). **Ref:** 4371.

**15139 (+)-Muurolan-4,7-peroxide**

$C_{15}H_{26}O_2$  (238.37). Colorless oil. **Source:** TIE JIAO JUE YU TAI *Plagiochila asplenioides* (essential oil). **Ref:** 5257.

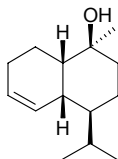
**15140 α-Muurolene**

$C_{15}H_{24}$  (204.36). **Source:** REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. **Ref:** 2, 1521.

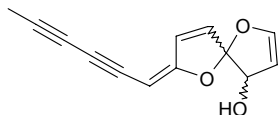


**15141 T-Muurolol**

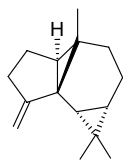
$C_{14}H_{24}O$  (208.35). **Pharm:** Cytotoxic (A549,  $ED_{50} = 3.2\mu\text{mol/L}$ ,  $ED_{50} = 14.7\mu\text{g/mL}$ , control Adriamycin,  $ED_{50} = 0.01\mu\text{mol/L}$ ,  $ED_{50} = 0.02\mu\text{g/mL}$ ; MCF7,  $ED_{50} = 0.6\mu\text{mol/L}$ ,  $ED_{50} = 2.7\mu\text{g/mL}$ , Adriamycin,  $ED_{50} = 0.1\mu\text{mol/L}$ ,  $ED_{50} = 0.1\mu\text{g/mL}$ ; HT29,  $ED_{50} = 1.8\mu\text{mol/L}$ ,  $ED_{50} = 8.0\mu\text{g/mL}$ , Adriamycin,  $ED_{50} = 0.1\mu\text{mol/L}$ ,  $ED_{50} = 0.1\mu\text{g/mL}$ )<sup>[5088]</sup>. **Source:** TAI WAN SHAN *Taiwania cryptomerioides* (root,heartwood). **Ref:** 4371, 5088.

**15142 Mycosinol**

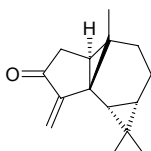
$C_{13}H_{10}O_3$  (214.22). **Pharm:** Antifungal. **Source:** QIAO GUAN JU *Coleostephus myconis*. **Ref:** 658.

**15143 (-)-(1R\*,5S\*,6R\*,7S\*,10S\*)-Myli-4(15)-ene**

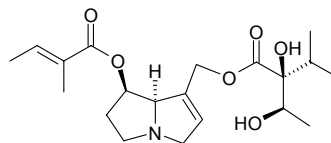
1,1,3a-Trimethyl-6-methylene-1,1a,2,3,3a,3b,4,5,6,6b-decahydrocyclopenta[2,3]cyclopropa-[1,2-a]cyclopropa[c]-benzene  $C_{15}H_{22}$  (202.34). Colorless oil. **Source:** XIAO E TAI *Mylia taylorii* (essential oil), LUO XIAO E TAI *Mylia nuda* (essential oil). **Ref:** 3840.

**15144 (-)-(1S,5R,6R,7S,10S)-Myli-4(15)-en-3-one**

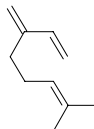
1,1,3a-Trimethyl-6-methylene-5-oxo-1,1a,2,3,3a,3b,4,-5,6,6b-decahydrocyclopenta[2,3]cyclopropa[1,2-a]cyclopropa[c]benzene  $C_{15}H_{20}O$  (216.33). Colorless oil. **Source:** XIAO E TAI *Mylia taylorii* (essential oil), LUO XIAO E TAI *Mylia nuda* (essential oil). **Ref:** 3840.

**15145 Myoscorpine**

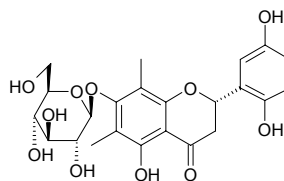
[82535-76-0]  $C_{20}H_{31}NO_6$  (381.47). **Source:** ZI CAO *Lithospermum erythrorhizon*. **Ref:** 2193.

**15146 Myrcene**

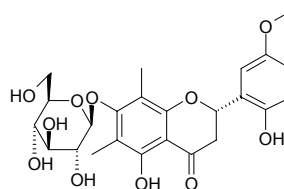
[123-35-3]  $C_{10}H_{16}$  (136.24). **Pharm:** Antitussive (mouse, fog-ammonia method, 800mg/kg, perfusion in stomach, cough time of half the animals increased by 135%); dispels phlegm (mus, phenol red method, 400mg/kg and 800mg/kg, perfusion in stomach, output of phenol red increases 214% and 276% respectively);  $LD_{50}$  (mus, orl)  $\geq 4.8\text{g/kg}$ . **Source:** CHAI HU *Bupleurum chinense*, DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*], HUANG HAO *Artemisia scoparia* [Syn. *Artemisia capillaris* var. *scoparia*], HUANG HUA HAO *Artemisia annua*, JU PI *Citrus reticulata*, KUAN YE QIANG HUO *Notopterygium forbesii* [Syn. *Notopterygium franchetii*], LIAN QIAO *Forsythia suspensa*, LIAO XI XIN *Asarum heterotropoides* var. *mandshuricum*, MA HUANG *Ephedra sinica*, MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*], MU XU *Medicago sativa*, TAI WAN CUI BAI *Calocedrus macrolepis* var. *formosana* (leaf), WU WEI ZI *Schisandra chinensis*, XI XIN *Asarum sieboldii*, XIANG YE *Pelargonium graveolens*, YAN JIAO CAO *Boeninghausenia albiflora*, YIN CHEN HAO *Artemisia capillaris*, YU XING CAO *Houttuynia cordata* (in 1925, the compound was isolated from the plant)<sup>[5505]</sup>. **Ref:** 2, 660, 1446, 1447, 4298, 5505.

**15147 Myrciacitrin I**

$C_{23}H_{26}O_{11}$  (478.46). **Pharm:** Aldose reductase inhibitor (rat lens,  $IC_{50} = 3.2\mu\text{mol/L}$ , control Epalrestat,  $IC_{50} = 0.072\mu\text{mol/L}$ ). **Source:** DUO HUA YANG MEI *Myrica multiflora* (leaf). **Ref:** 4174.

**15148 Myrciacitrin II**

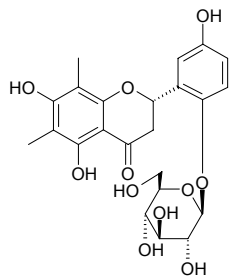
$C_{24}H_{28}O_{11}$  (492.48). **Pharm:** Aldose reductase inhibitor (rat lens,  $IC_{50} = 15\mu\text{mol/L}$ , control Epalrestat,  $IC_{50} = 0.072\mu\text{mol/L}$ ). **Source:** DUO HUA YANG MEI *Myrica multiflora* (leaf). **Ref:** 4174.



**15149 Myrciacitrin III**

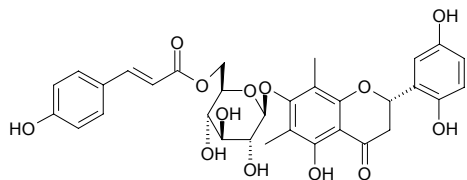
$C_{23}H_{26}O_{11}$  (478.46). Yellow powder,  $[\alpha]_D^{25} = -104.2^\circ$  ( $c = 0.16$ , EtOH).

**Pharm:** Aldose reductase inhibitor (rat lens,  $IC_{50} = 46\mu\text{mol/L}$ , control Epalrestat,  $IC_{50} = 0.072\mu\text{mol/L}$ ). **Source:** DUO HUA YANG MEI *Myrica multiflora* (leaf). **Ref:** 4174.

**15150 Myrciacitrin IV**

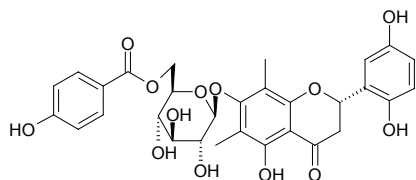
$C_{32}H_{32}O_{13}$  (624.60). Yellow powder,  $[\alpha]_D^{26} = -99.2^\circ$  ( $c = 0.68$ , EtOH). **Pharm:**

Aldose reductase inhibitor (rat lens,  $IC_{50} = 0.79\mu\text{mol/L}$ , control Epalrestat,  $IC_{50} = 0.072\mu\text{mol/L}$ ). **Source:** DUO HUA YANG MEI *Myrica multiflora* (leaf). **Ref:** 4174.

**15151 Myrciacitrin V**

$C_{30}H_{30}O_{13}$  (598.57). Yellow powder,  $[\alpha]_D^{26} = +108.2.2^\circ$  ( $c = 0.028$ , EtOH).

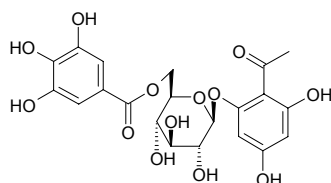
**Pharm:** Aldose reductase inhibitor (rat lens,  $IC_{50} = 16\mu\text{mol/L}$ , control Epalrestat,  $IC_{50} = 0.072\mu\text{mol/L}$ ). **Source:** DUO HUA YANG MEI *Myrica multiflora* (leaf). **Ref:** 4174.

**15152 Myrciaphenone B**

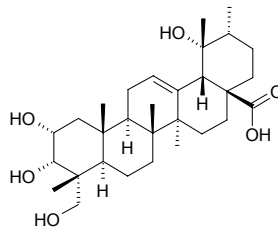
$C_{21}H_{22}O_{13}$  (482.40).  $[\alpha]_D^{25} = -64^\circ$  ( $c = 0.1$ , MeOH). **Pharm:** Antifungal

(*Candida albicans* ATCC2091, MIC > 200 $\mu\text{g/mL}$ , control Amphotericin B, MIC = 1 $\mu\text{g/mL}$ ; *Candida albicans* 32, MIC > 200 $\mu\text{g/mL}$ , Amphotericin B, MIC = 4 $\mu\text{g/mL}$ ; *Candida albicans* 19, MIC = 200 $\mu\text{g/mL}$ , Amphotericin B, MIC = 2 $\mu\text{g/mL}$ ); cytotoxic inactive (MIC > 200 $\mu\text{g/mL}$ ); antibacterial inactive.

**Source:** *Baseonema acuminatum* (leaf). **Ref:** 5021.

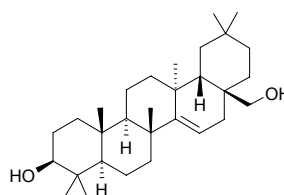
**15153 Myrianthic acid**

$C_{30}H_{48}O_6$  (504.71). **Source:** YANG TI *Rumex japonicus* (stem). **Ref:** 4541.

**15154 Myricadiol**

Myricadiol [17884-88-7]  $C_{30}H_{50}O_2$  (442.73). **Pharm:** Inhibits degranulation

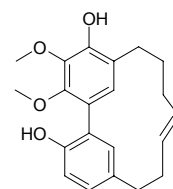
and release of  $\beta$ -hexosaminidase (RBL-2H3 cells, 100 $\mu\text{mol/L}$ , InRt = (-12.0 $\pm$ 1.9)%, control Curcumin, 100 $\mu\text{mol/L}$ , InRt = (62.6 $\pm$ 1.0)%, did not affect the enzyme activity of  $\beta$ -hexosaminidase)<sup>[4163]</sup>. **Source:** YANG MEI SHU PI *Myrica rubra* (bark: yield = 0.020%<sup>[4163]</sup>). **Ref:** 1422, 4163.

**15155 Myricanene A**

$C_{21}H_{24}O_4$  (340.42). White powder, a product with high activity by enzymatic

hydrolysis of the glucoside. **Pharm:** Inhibits degranulation and release of  $\beta$ -hexosaminidase (RBL-2H3 cells,  $IC_{50} = 98\mu\text{mol/L}$ , control Curcumin,  $IC_{50} = 82\mu\text{mol/L}$ ,  $p < 0.01$ , did not affect the enzyme activity of  $\beta$ -hexosaminidase).

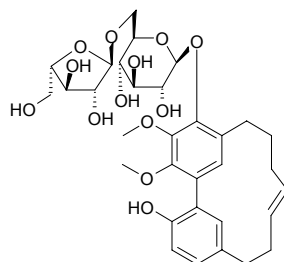
**Source:** YANG MEI SHU PI *Myrica rubra*. **Ref:** 4163.

**15156 Myricanene A****5-O- $\alpha$ -L-arabinofuranosyl(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside**

$C_{32}H_{42}O_{13}$  (634.68). White powder,  $[\alpha]_D^{22} = -0.6^\circ$  ( $c = 0.1$ , EtOH). **Pharm:**

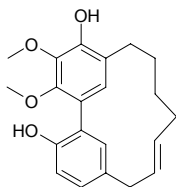
Inhibits degranulation and release of  $\beta$ -hexosaminidase (RBL-2H3 cells, 100 $\mu\text{mol/L}$ , InRt = (7.9 $\pm$ 1.4)%, control Curcumin, 100 $\mu\text{mol/L}$ , InRt = (62.6 $\pm$ 1.0)%, did not affect the enzyme activity of  $\beta$ -hexosaminidase). **Source:**

YANG MEI SHU PI *Myrica rubra* (bark: yield = 0.0032%). **Ref:** 4163.

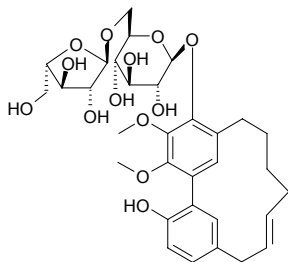


**15157 Myricanene B**

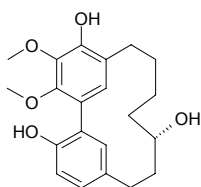
$C_{21}H_{24}O_4$  (340.42). White powder, a product with high activity by enzymatic hydrolysis of the glucoside. **Pharm:** Inhibits degranulation and release of  $\beta$ -hexosaminidase (RBL-2H3 cells,  $IC_{50} \approx 100\mu\text{mol/L}$ , control Curcumin,  $IC_{50} = 82\mu\text{mol/L}$ ,  $p < 0.01$ , did not affect the enzyme activity of  $\beta$ -hexosaminidase). **Source:** YANG MEI SHU PI *Myrica rubra*. **Ref:** 4163.

**15158 Myricanene B 5-O- $\alpha$ -L-arabinofuranosyl(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside**

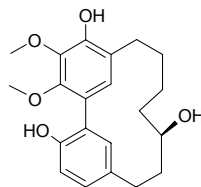
$C_{32}H_{42}O_{13}$  (634.68). White powder,  $[\alpha]_D^{22} = -10.8^\circ$  ( $c = 0.1$ , EtOH). **Pharm:** Inhibits degranulation and release of  $\beta$ -hexosaminidase (RBL-2H3 cells,  $100\mu\text{mol/L}$ ,  $\text{InRt} = (-5.2 \pm 2.8)\%$ , control Curcumin,  $100\mu\text{mol/L}$ ,  $\text{InRt} = (62.6 \pm 1.0)\%$ , did not affect the enzyme activity of  $\beta$ -hexosaminidase). **Source:** YANG MEI SHU PI *Myrica rubra* (bark: yield = 0.0029%). **Ref:** 4163.

**15159 (+)-S-Myricanol**

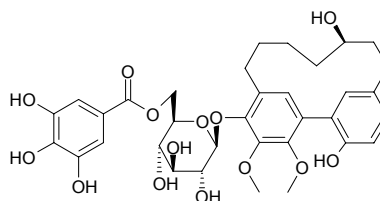
$C_{21}H_{26}O_5$  (358.44). White powder,  $[\alpha]_D^{22} = +37.3^\circ$  ( $c = 0.2$ ,  $\text{CHCl}_3$ ), a product with high activity by enzymatic hydrolysis of the glucoside. **Pharm:** Inhibits degranulation and release of  $\beta$ -hexosaminidase (RBL-2H3 cells,  $IC_{50} = 28\mu\text{mol/L}$ , control Curcumin,  $IC_{50} = 82\mu\text{mol/L}$ ,  $p < 0.01$ , did not affect the enzyme activity of  $\beta$ -hexosaminidase). **Source:** YANG MEI SHU PI *Myrica rubra*. **Ref:** 4163.

**15160 Myricanol**

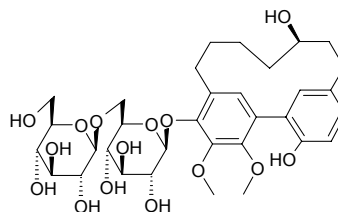
[33606-81-4]  $C_{21}H_{26}O_5$  (358.44). **Pharm:** Inhibits degranulation and release of  $\beta$ -hexosaminidase (RBL-2H3 cells,  $IC_{50} = 63\mu\text{mol/L}$ , control Curcumin,  $IC_{50} = 82\mu\text{mol/L}$ ,  $p < 0.01$ , did not affect the enzyme activity of  $\beta$ -hexosaminidase)<sup>[4163]</sup>. **Source:** YANG MEI SHU PI *Myrica rubra* (bark: yield = 0.73%dw). **Ref:** 1421, 4163.

**15161 Myricanol galloyl glucoside**

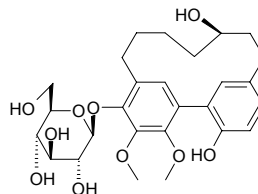
$C_{34}H_{40}O_{14}$  (672.69). **Source:** YANG MEI SHU PI *Myrica rubra*. **Ref:** 1247.

**15162 Myricanol gentiobioside**

$C_{33}H_{46}O_{15}$  (682.73). **Source:** YANG MEI SHU PI *Myrica rubra*. **Ref:** 1247.

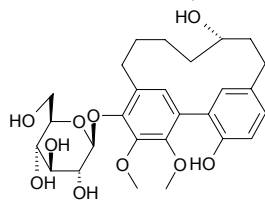
**15163 R-Myricanol 5-O- $\beta$ -D-glucopyranoside**

$C_{27}H_{36}O_{10}$  (520.58). **Pharm:** Inhibits degranulation and release of  $\beta$ -hexosaminidase (RBL-2H3 cells,  $100\mu\text{mol/L}$ ,  $\text{InRt} = (6.7 \pm 5.5)\%$ , control Curcumin,  $100\mu\text{mol/L}$ ,  $\text{InRt} = (62.6 \pm 1.0)\%$ , did not affect the enzyme activity of  $\beta$ -hexosaminidase)<sup>[4163]</sup>. **Source:** YANG MEI SHU PI *Myrica rubra* (bark: yield = 0.20%). **Ref:** 1421, 4163.

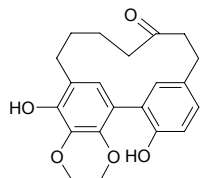


**15164 (+)-S-Myricanol 5-O-β-D-glucopyranoside**

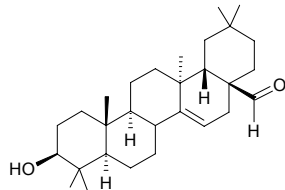
$C_{27}H_{36}O_{10}$  (520.58). White powder,  $[\alpha]_D^{22} = +81.3^\circ$  ( $c = 0.2$ , EtOH). **Pharm:** Inhibits degranulation and release of  $\beta$ -hexosaminidase (RBL-2H3 cells,  $100\mu\text{mol/L}$ ,  $\text{InRt} = (-13.1 \pm 3.6)\%$ , control Curcumin,  $100\mu\text{mol/L}$ ,  $\text{InRt} = (62.6 \pm 1.0)\%$ , did not affect the enzyme activity of  $\beta$ -hexosaminidase). **Source:** YANG MEI SHU PI *Myrica rubra* (bark: yield = 0.074%). **Ref:** 4163.

**15165 Myricanone**

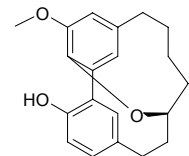
[32492-74-3]  $C_{21}H_{24}O_5$  (356.42). **Pharm:** Inhibits degranulation and release of  $\beta$ -hexosaminidase (RBL-2H3 cells,  $\text{IC}_{50} = 46\mu\text{mol/L}$ , control Curcumin,  $\text{IC}_{50} = 82\mu\text{mol/L}$ ,  $p < 0.01$ , did not affect the enzyme activity of  $\beta$ -hexosaminidase)<sup>[4163]</sup>. **Source:** YANG MEI SHU PI *Myrica rubra* (bark: yield = 0.036%). **Ref:** 1421, 4163.

**15166 Myricaolal\***

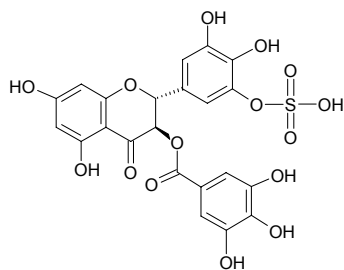
Myrkolal  $C_{29}H_{46}O_2$  (426.69). **Source:** YANG MEI SHU PI *Myrica rubra*. **Ref:** 1247.

**15167 Myricarborin**

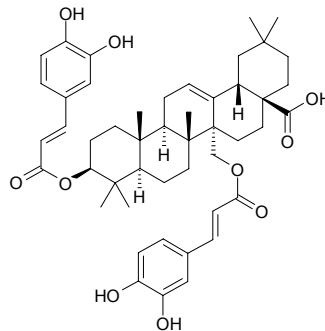
$C_{20}H_{22}O_3$  (310.40). Colorless plates ( $\text{CH}_2\text{Cl}_2$ ), mp  $141\sim 143^\circ\text{C}$ ,  $[\alpha]_D^{22} = +9.3^\circ$  ( $c = 0.41$ , MeOH). **Source:** QIAO MU ZHUANG YANG MEI *Myrica arborea* (stem and root cortex). **Ref:** 5079.

**15168 Myricatin**

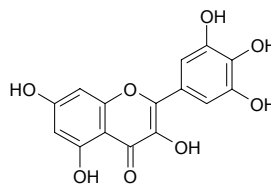
[87388-96-3]  $C_{22}H_{16}O_{15}S$  (552.43). **Source:** YANG MEI SHU PI *Myrica rubra*. **Ref:** 1420.

**15169 Myriceric acid C**

$C_{48}H_{60}O_{10}$  (797.01). **Pharm:** Anti-HIV (H9 lymphocytic cells, inhibits replication,  $\text{IC}_{50}$  (concentration that inhibits uninfected H9 cell growth by 50%) =  $14.95\mu\text{g/mL}$ ); cytotoxic (hmn, A549  $\text{EC}_{50} = 3.9\mu\text{g/mL}$ , MCF7  $\text{EC}_{50} = 4.1\mu\text{g/mL}$ ). **Source:** TAI WAN FU RONG *Hibiscus taiwanensis*. **Ref:** 2529.

**15170 Myricetin**

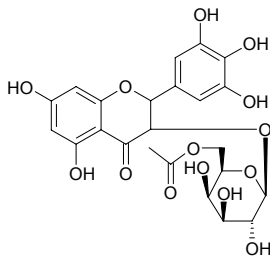
3,3',4',5,5',7-Hexahydroxyflavone; Cannabiscetin; Myricetol [529-44-2]  $C_{15}H_{10}O_8$  (318.24). mp  $> 330^\circ\text{C}$ . **Pharm:** Antibacterial (*Staphylococcus aureus*, *Bacillus coli*, *Bacillus dysenteriae*, *B. Typhosus*, *Pseudomonas maltophilia* and *Enteromorpha cloacae*); antineoplastic (B16 melanoma and  $L_{1210}$ , *in vivo*); anti-gonadotropin; cytotoxic (KB *in vitro*,  $\text{EC} = 15\mu\text{g/mL}$ ); antitussive (dispels phlegm); diuretic; inhibits release and metabolism of arachidonic acid; aldose reductase inhibitor (mus eye lens,  $100\mu\text{mol/L}$ ,  $\text{InRt} = 100\%$ );  $\Delta(5)$ -lipoxygenase inhibitor; NADH oxidase inhibitor; succinic oxidase inhibitor; inhibits degranulation and release of  $\beta$ -hexosaminidase (RBL-2H3 cells,  $\text{IC}_{50} = 23\mu\text{mol/L}$ , control Curcumin,  $\text{IC}_{50} = 82\mu\text{mol/L}$ ,  $p < 0.01$ , did not affect the enzyme activity of  $\beta$ -hexosaminidase)<sup>[4163]</sup>; DPPH scavenger ( $\text{IC}_{50} = (16.0 \pm 0.4)\mu\text{mol/L}$ , control Trolox,  $\text{IC}_{50} = (25.4 \pm 0.8)\mu\text{mol/L}$ )<sup>[4244]</sup>; LD (rbt, sc) =  $8\sim 10\text{g/kg}$ . **Source:** BAI HUA YING SHAN HONG *Rhododendron mucronatum*, CAO YUAN DA JI *Euphorbia stepposa*, CE BAI YE *Thuja orientalis* [Syn. *Platyclusus orientalis*; *Biota orientalis*], CU LIU GUO *Hippophae rhamnoides*, GUI JIAN JIN JI ER *Caragana jubata*, HUANG SHU KUI HUA *Abelmoschus manihot*, WEN GUAN MU *Xanthoceras sorbifolia* (stem and trunk: mean content = 0.12%)<sup>[5508]</sup>, XIAN CHI SHE PU TAO *Ampelopsis grossedentata* [Syn. *Ampelopsis cantoniensis* var. *grossedentata*], YANG MEI *Myrica rubra*, YANG MEI SHU PI *Myrica rubra* (bark: content = 0.027%)<sup>[5501]</sup>, YANG PU TAO YE *Syzygium samarangense*, YING MAO JIN SI TAO *Hypericum hirsutum*, YOU SE ZI JIN NIU *Ardisia colorata* (fruit), ZHAO SHENG DA JI *Euphorbia palustris*, ZHU BAI *Myrica nagi* [Syn. *Podocarpus nagi*]. **Ref:** 2, 4, 605, 658, 4013, 4163, 4244, 4100, 5501, 5507.



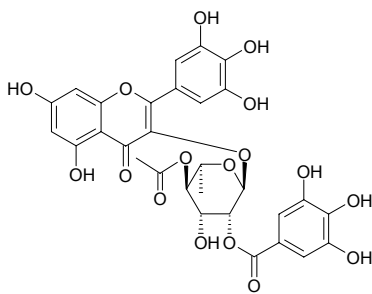


**15171 Myricetin-3-O-(6''-acetyl)- $\beta$ -D-galactopyranoside**

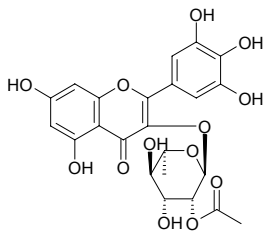
$C_{23}H_{24}O_{14}$  (524.44). Source: SAN XIAO CAO *Trifolium repens* (flower). Ref: 3970.

**15172 Myricetin-3-O-(4''-O-acetyl-2''-O-galloyl)- $\alpha$ -L-<sup>1</sup>C<sub>7</sub>-rhamnopyranoside**

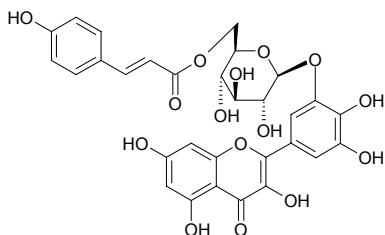
$C_{30}H_{26}O_{17}$  (658.53). Yellow amorphous powder. Source: WU MO *Eugenia jambolana* [Syn. *Syzygium cumini*; *Myrtus cumini*] (leaf). Ref: 5237.

**15173 Myricetin-3-O-(2''-O-acetyl- $\alpha$ -rhamnopyranoside)**

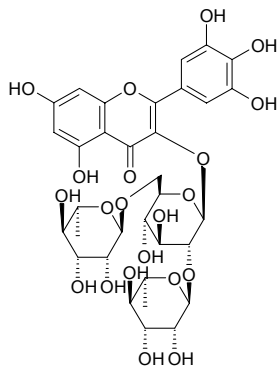
$C_{23}H_{22}O_{13}$  (506.42). Source: LAN SHUI LIAN *Nymphaea caerulea*. Ref: 2342.

**15174 Myricetin-3'-O-(6''-p-coumaroyl) glucoside**

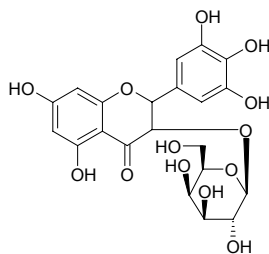
$C_{30}H_{26}O_{15}$  (626.53). Brown amorphous solid, mp 130–136°C (dec). Source: CHI YE SHUI LIAN *Nymphaea lotus*. Ref: 3405.

**15175 Myricetin-3-O-(2'',6''-di-O- $\alpha$ -rhamnosyl)- $\beta$ -glucoside**

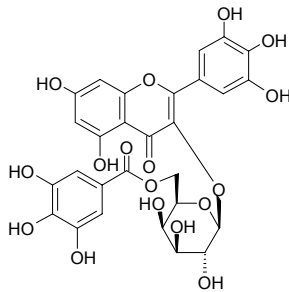
$C_{33}H_{40}O_{21}$  (772.67). Dark-yellow amorphous powder. Source: HU DIE HUA DOU *Clitoria ternatea*. Ref: 2064.

**15176 Myricetin-3-O- $\beta$ -D-galactopyranoside**

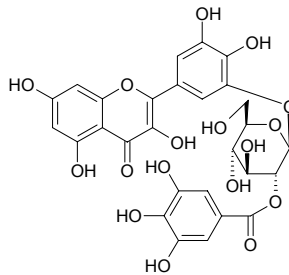
$C_{21}H_{22}O_{13}$  (482.40). Source: SAN XIAO CAO *Trifolium repens* (flower). Ref: 3970.

**15177 Myricetin-3-O- $\beta$ -D-(6''-O-galloyl)-galactopyranoside**

$C_{28}H_{24}O_{17}$  (632.49). Source: FEI CAI *Sedum aizoon*. Ref: 1486.

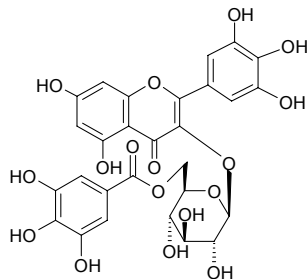
**15178 Myricetin-3-O-(2''-O-galloyl)- $\beta$ -D-glucopyranoside**

$C_{28}H_{24}O_{17}$  (632.49).  $[\alpha]_D^{25} = -65^\circ$  ( $c = 0.17$ , MeOH). Source: QU YU CAO DI LAO GUAN CAO *Geranium pratense* ssp. *funitimum* (aerial parts). Ref: 5126.

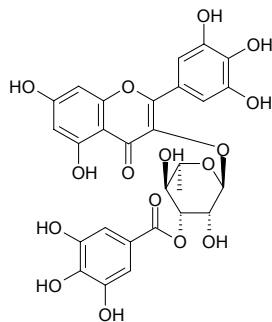


**15179 Myricetin-3-O-β-D-(6''-O-galloyl)-glucopyranoside**

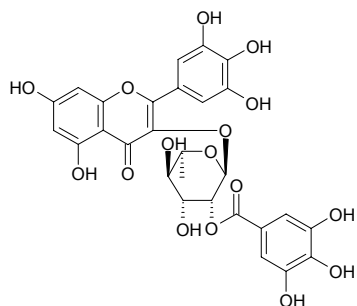
$C_{28}H_{24}O_{17}$  (632.49). Source: FENG XIANG SHU *Liquidambar formosana* [Syn. *Liquidambar taiwaniana*], FEI CAI *Sedum aizoon*. Ref: 1485, 1486.

**15180 Myricetin-3-O-(2''-O-galloyl)-α-rhamnopyranoside**

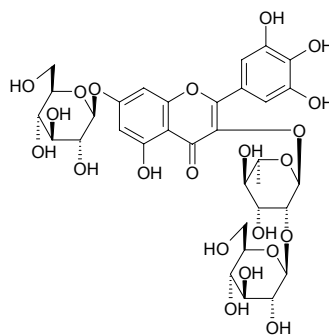
$C_{28}H_{24}O_{16}$  (616.49).  $[\alpha]_D^{25} = -11.6^\circ$  ( $c = 0.43$ , MeOH). Pharm: Inhibits cell proliferation of PBMC (activated by phytohemagglutinin (PHA),  $IC_{50} = 11.9\mu\text{mol/L}$ , inhibitory mechanism may involve the blocking of IL-2 and IFN- $\gamma$  production). Source: YANG PU TAO YE *Syzygium samarangense*. Ref: 4100.

**15181 Myricetin-3-O-(3''-O-galloyl)-α-rhamnopyranoside**

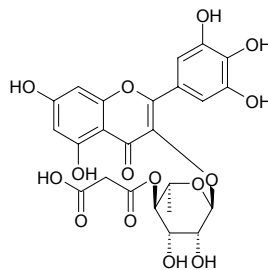
Desmanthin 1 [56939-52-7]  $C_{28}H_{24}O_{16}$  (616.49). Yellow powder, mp 176°C. Source: BIAN XU *Polygonum aviculare*, YANG PU TAO YE *Syzygium samarangense*. Ref: 1521, 2210, 4100.

**15182 Myricetin-3-O-α-L-(2-O-β-D-glucopyranosyl)rhamnopyranoside-7-O-β-D-glucopyranoside**

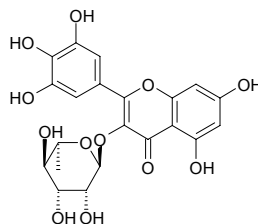
$C_{33}H_{40}O_{22}$  (788.67). Source: SHUANG HUA FAN HONG HUA *Crocus chrysanthus-biflorus*. Ref: 2343.

**15183 Myricetin-3-O-(4''-O-malonyl)-α-L-rhamnopyranoside**

$C_{24}H_{22}O_{15}$  (550.43). Source: GAO SHAN CHA BIAO *Ribes alpinum* (leaf). Ref: 3541.

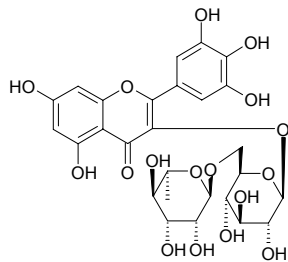
**15184 Myricetin-3-O-α-L-rhamnoside**

Myricitrin [17912-87-7]  $C_{21}H_{20}O_{12}$  (464.39). mp 197~199°C (anhydrate);  $[\alpha]_D^{25} = -150.0^\circ$  ( $c = 0.50$ , MeOH). Pharm: Antibacterial (*Pseudomonas maltophilia* and *Enteromorpha cloacae*); anti-inflammatory (induced by 12-O-tetradecanoylphorbol-13-acetate); choleric; CVS activity (contracts blood vessels, Increases blood pressure and stimulates heart); aldose reductase inhibitor (rat eye lens *in vivo*,  $10\mu\text{mol/L}$ , InRt = 100%); mutagen (*Salmonella aertrycke*); inhibits degranulation and release of  $\beta$ -hexosaminidase (RBL-2H3 cells,  $100\mu\text{mol/L}$ , InRt =  $(12.6\pm 4.2)\%$ , control Curcumin,  $100\mu\text{mol/L}$ , InRt =  $(62.6\pm 1.0)\%$ , did not affect the enzyme activity of  $\beta$ -hexosaminidase)<sup>[4163]</sup>; hepatoprotective (primary cultures of rat hepatocytes,  $H_2O_2$ -induced toxicity,  $50\mu\text{mol/L}$ , relative protection = 24.6% ( $H_2O_2$ -treated, relative protection = 0.0%, control, relative protection = 100%), positive control Silibinin, Relative protection = 74.9%)<sup>[4996]</sup>; inhibits cell proliferation of PBMC (activated by phytohemagglutinin (PHA),  $IC_{50} = 75.6\mu\text{mol/L}$ , inhibitory mechanism may involve the blocking of IL-2 and IFN- $\gamma$  production)<sup>[4100]</sup>. Source: CE BAI YE *Thuja orientalis* [Syn. *Platyclus orientalis*; *Biota orientalis*], DA JIN NIU CAO *Polygala chinensis* [Syn. *Polygala glomerata*], HENG GEN FEI CAI *Sedum kamschaticum*, GUI JIAN JIN JI ER *Caragana jubata*, HEI HU TAO *Juglans nigra*, SHI YE *Diospyros kaki*, XIAN CHI SHE PU TAO *Ampelopsis grossedentata* [Syn. *Ampelopsis cantoniensis* var. *grossedentata*], YANG MEI *Myrica rubra*, YANG MEI SHU PI *Myrica rubra* (5.59%), YANG PU TAO YE *Syzygium samarangense*, YOU GAN YE *Phyllanthus emblica* (leaf and branch), ZI JIN NIU *Ardisia japonica*, RI BEN GUI DENG QING *Rodgersia podophylla* (aerial parts). Ref: 6, 605, 658, 1417, 4163, 4205, 4996, 4100.

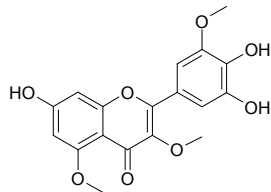


**15185 Myricetin-3-rutinoside**

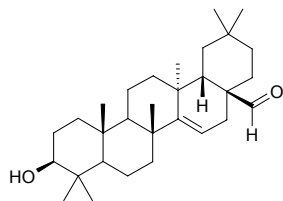
Myricetin 3-*O*-(6"-*O*- $\alpha$ -L-rhamnopyranosyl)- $\beta$ -D-glucopyranoside C<sub>27</sub>H<sub>30</sub>O<sub>17</sub> (626.53). Source: LV DOU *Onobrychis viciifolia* (leaf). Ref: 5084.

**15186 Myricetin-3,5,3'-trimethyl ether**

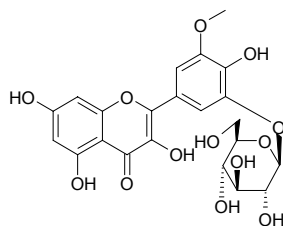
C<sub>18</sub>H<sub>16</sub>O<sub>8</sub> (360.32). Source: KE SHI FAN YING TAO *Eugenia edulis* (leaf). Ref: 3469.

**15187 Myricolal**

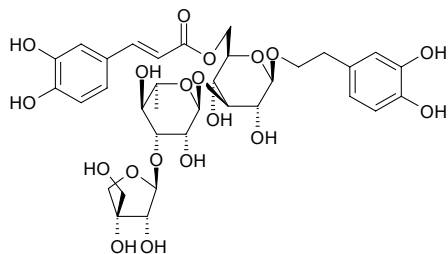
C<sub>30</sub>H<sub>48</sub>O<sub>2</sub> (440.71). Crystals, mp 288°C. Source: XIANG YANG MEI *Myrica gale*. Ref: 1512.

**15188 Myricomplanoside**

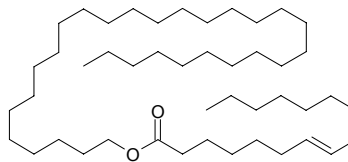
[123442-26-2] C<sub>22</sub>H<sub>22</sub>O<sub>13</sub> (494.41). Yellow acicular crystals, mp 255~257°C. Source: BIAN JING HUANG QI *Astragalus complanatus*. Ref: 123.

**15189 Myricoside**

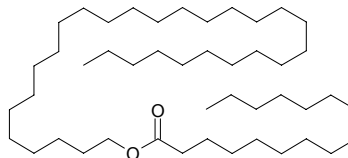
[76076-04-5] C<sub>34</sub>H<sub>44</sub>O<sub>19</sub> (756.71). Pharm: Insect antifeedant. Source: YANG MEI CHANG SHAN *Clerodendron myricoides*. Ref: 658.

**15190 Myricyl hypogaeate**

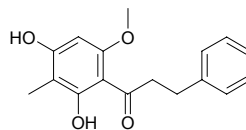
C<sub>46</sub>H<sub>90</sub>O<sub>2</sub> (675.23). Source: MI LA *Apis cerana*. Ref: 6.

**15191 Myricyl palmitate**

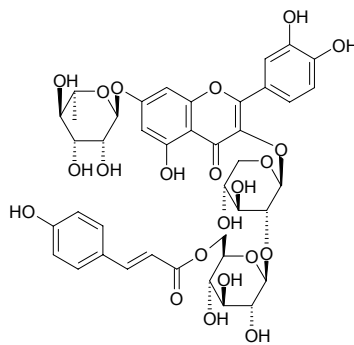
C<sub>46</sub>H<sub>92</sub>O<sub>2</sub> (677.24). Source: MI LA *Apis cerana*. Ref: 6.

**15192 Myrigalone H**

C<sub>17</sub>H<sub>18</sub>O<sub>4</sub> (286.33). Source: YANG PU TAO YE *Syzygium samarangense*. Ref: 4100.

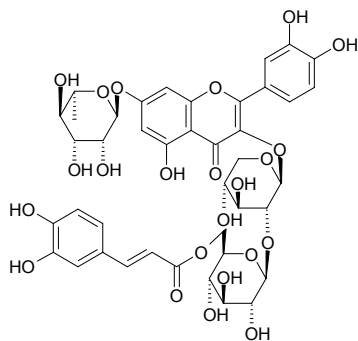
**15193 Myriophylloside B**

Quercetin-7-*O*- $\alpha$ -L-rhamnopyranosyl-3-*O*-(6"-*P*-coumaroyl)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-xylopyranoside C<sub>41</sub>H<sub>44</sub>O<sub>22</sub> (888.79). Yellow powder, mp 218~220°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -167.5° (MeOH). Source: DUO YE JI DOU *Oxytropis myriophylla*. Ref: 4265.

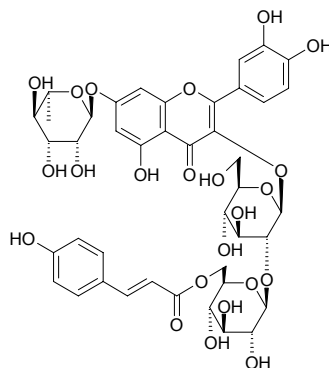


**15194 Myriophylloside C**

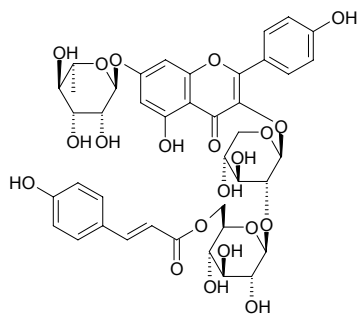
Quercetin-7-*O*- $\alpha$ -L-rhamnopyranosyl-3-*O*-(6"-caffeoyl)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-xylopyranoside C<sub>41</sub>H<sub>44</sub>O<sub>23</sub> (904.79). Yellow powder, mp 205~207°C,  $[\alpha]_D^{25} = -173.8^\circ$  (MeOH). Source: DUO YE JI DOU *Oxytropis myriophylla*. Ref: 4265.

**15197 Myriophylloside F**

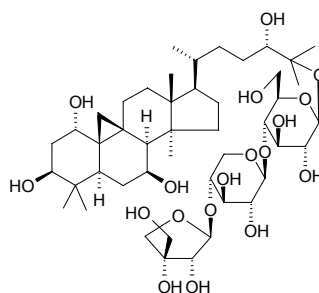
Quercetin-7-*O*- $\alpha$ -L-rhamnopyranosyl-3-*O*-(6"-coumaroyl)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranoside C<sub>42</sub>H<sub>46</sub>O<sub>23</sub> (918.82). Yellow powder, mp 224~226°C,  $[\alpha]_D^{25} = -168.6^\circ$  (MeOH). Source: DUO YE JI DOU *Oxytropis myriophylla*. Ref: 4265.

**15195 Myriophylloside D**

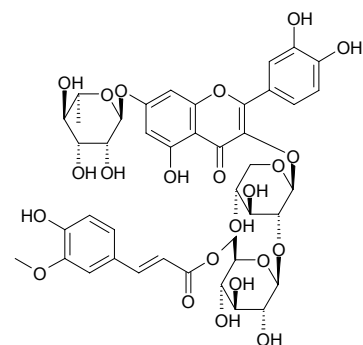
Kaempferol-7-*O*- $\alpha$ -L-rhamnopyranosyl-3-*O*-(6"-*P*-coumaroyl)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-xylopyranoside C<sub>41</sub>H<sub>44</sub>O<sub>21</sub> (872.80). Yellow powder, mp 197~200°C,  $[\alpha]_D^{25} = -120.3^\circ$  (MeOH). Source: DUO YE JI DOU *Oxytropis myriophylla*. Ref: 4265.

**15198 Myrioside A**

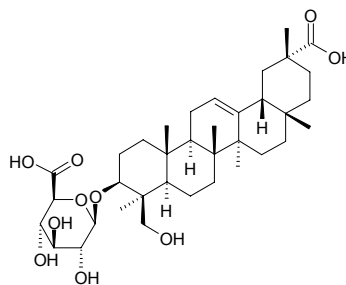
25-*O*- $\beta$ -D-Apiofuranosyl(1 $\rightarrow$ 4)- $\beta$ -D-xylopyranosyl(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl 1 $\alpha,3\beta,7\beta,24(S),25$ -pentahydroxycycloartane C<sub>46</sub>H<sub>78</sub>O<sub>18</sub> (919.12). Amorphous powder,  $[\alpha]_D^{16} = -10.1^\circ$  ( $c = 0.10$ , MeOH). Source: DUO YE JI DOU *Oxytropis myriophylla* (whole herb). Ref: 4222.

**15196 Myriophylloside E**

Quercetin-7-*O*- $\alpha$ -L-rhamnopyranosyl-3-*O*-(6"-feruloyl)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-xylopyranoside C<sub>42</sub>H<sub>46</sub>O<sub>23</sub> (918.82). Yellow powder, mp 212~214°C,  $[\alpha]_D^{25} = -154.8^\circ$  (MeOH). Source: DUO YE JI DOU *Oxytropis myriophylla*. Ref: 4265.

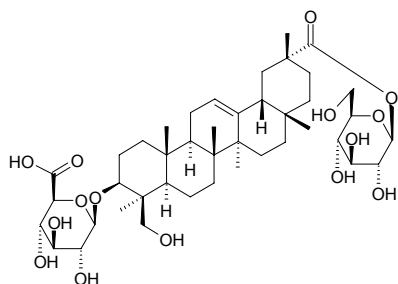
**15199 Myrioside B**

3-*O*- $\beta$ -D-Glucuronopyranosyl azukisapogenol C<sub>36</sub>H<sub>56</sub>O<sub>10</sub> (648.84). Amorphous powder,  $[\alpha]_D^{15} = +2.3^\circ$  ( $c = 0.11$ , MeOH). Source: DUO YE JI DOU *Oxytropis myriophylla* (whole herb). Ref: 4222.

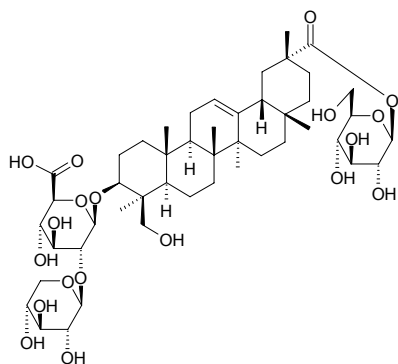


**15200 Myrioside C**

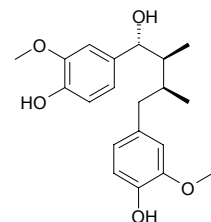
3-*O*- $\beta$ -*D*-Glucuronopyranosyl azukisapogenol 29-*O*- $\beta$ -*D*-glucopyranosyl ester C<sub>42</sub>H<sub>66</sub>O<sub>15</sub> (810.99). Amorphous powder,  $[\alpha]_D^{14} = -2.2^\circ$  ( $c = 0.12$ , MeOH). Source: DUO YE JI DOU *Oxytropis myriophylla* (whole herb). Ref: 4222.

**15201 Myrioside D**

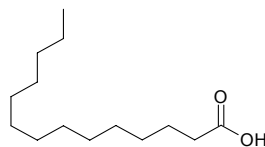
3-*O*- $\beta$ -*D*-Xylopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-glucuronopyranosyl azukisapogenol 29-*O*- $\beta$ -*D*-glucopyranoside ester C<sub>47</sub>H<sub>74</sub>O<sub>19</sub> (943.10). Amorphous powder,  $[\alpha]_D^{15} = -4.0^\circ$  ( $c = 0.10$ , MeOH). Source: DUO YE JI DOU *Oxytropis myriophylla* (whole herb). Ref: 4222.

**15202 Myristargenol B**

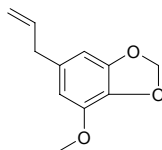
C<sub>20</sub>H<sub>26</sub>O<sub>5</sub> (346.43). Colorless amorphous,  $[\alpha]_D^{24} = +10^\circ$  ( $c = 0.09$ , CHCl<sub>3</sub>). Pharm: Antioxidant (DPPH scavenger). Source: FENG CHAO CAO *Leucas aspera* (whole herb). Ref: 4344.

**15203 Myristic acid**

Tetradecanoic acid [544-63-8] C<sub>14</sub>H<sub>28</sub>O<sub>2</sub> (228.38). mp 58°C, bp 250.5°C/100mmHg. Pharm: Precursor to essence synthesis; COX-1 and COX-2 inhibitor (IC<sub>50</sub> = 3.9~180 $\mu$ mol/L, lack of selectivity)<sup>[4415]</sup>. Source: BA DOU *Croton tiglium*, BING LANG *Areca catechu*, BU GU ZHI *Psoralea corylifolia*, CU LIU GUO *Hippophae rhamnoides*, DA CHE QIAN *Plantago major*, DA ZAO *Ziziphus jujuba*, DANG GUI *Angelica sinensis*, DANG SHEN *Codonopsis pilosula*, GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *Huechingensis*], GUA LOU *Trichosanthes kirilowii*, HONG HUA *Carthamus tinctorius*, JI GUAN ZI *Celosia cristata* (seed), LANG DANG ZI *Hyoscyamus niger* (dried ripe seed: content = 0.3%)<sup>[5508]</sup>, MAN JING ZI *Vitex trifolia*, QIANG HUO *Notopterygium incisum*, ROU DOU KOU *Myristica fragrans*, SHUANG BIAN GUA LOU *Trichosanthes rosthornii* [Syn. *Trichosanthes uniflora*], XI OU YUAN WEI *Iris florentina*, XIN JIANG GAO BEN *Conioselinum vaginatum*, XING REN *Prunus armeniaca*, YIN CHEN HAO *Artemisia capillaris*, ZHONG GUO XUAN FU HUA *Inula britannica* var. *chinensis*, occurs in many plants. Ref: 2, 333, 660, 4415, 5508.

**15204 Myristicin**

[607-91-0] C<sub>11</sub>H<sub>12</sub>O<sub>3</sub> (192.22). bp 157°C/21mmHg, 149.5°C/15mm; 95~97°C/0.2mmHg. Pharm: Antineoplastic (mus lung tumor, InRt = 65%, stomach tumor InRt = 31%); antifungal (*Cladosporium cucumerinum* *in vitro*, MED = 20 $\mu$ g); hallucinogen (normal hmn); induces activity of cytochrome system (rat, ip, 500 $\mu$ mol/kg, improves liver P450-1A1/2, 2B1/2 and 2E1 activity by 2~20 times); antioxidant (mus liver, inhibits lipid peroxidation); platelet aggregation inhibitor (rbt, *in vitro*); monoamine oxidase inhibitor (*in vitro*); larvicide (larva of *Stegomyia calopus*, 100% killed in 24h, 25mg/L); teratogen. Source: DA CAO KOU *Alpinia speciosa*, GAO BEN *Ligusticum sinense* (root and rhizome: content = 11.31%)<sup>[5508]</sup>, HAN QIN *Apium graveolens*, HUI HUI SU GENG *Perilla frutescens* var. *crispa*, JIAN ZI SU YE *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*], LIAO GAO BEN *Ligusticum jeholense* (root and rhizome: content = 1.51%)<sup>[5508]</sup>, LIAO XI XIN *Asarum heterotropoides* var. *mandshuricum*, NAN HE SHI *Daucus carota*, OU FANG FENG *Pastinaca sativa*, ROU DOU KOU *Myristica fragrans* (kernel: content scope = 2.12%~2.88%, mean content = 2.49%)<sup>[5508]</sup>, XI XIN *Asarum sieboldii*, XIN JIANG GAO BEN *Conioselinum vaginatum* (root and rhizome: content = 2.21%)<sup>[5508]</sup>, YUN NAN ZHANG *Cinnamomum glanduliferum*, ZHOU YE OU QIN *Petroselinum crispum*. Ref: 2, 660, 900, 5508.

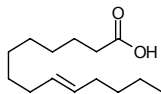


**15205 Myristoleic acid**

Tetradecenoic acid C; *cis*-9-Tetradecenoic acid [544-64-9] C<sub>14</sub>H<sub>26</sub>O<sub>2</sub> (226.36).

Source: BING LANG *Areca catechu*, ZHANG MU *Cinnamomum camphora*.

Ref: 2, 1475.

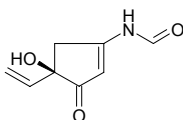
**15206 Myrothenone A**

5(*R*)-5-Ethenyl-3-formamido-5-hydroxy-2-cyclopenten-1-one C<sub>8</sub>H<sub>9</sub>NO<sub>3</sub>

(167.17). Pharm: Tyrosinase inhibitor (IC<sub>50</sub> = 6.6 μmol/L, control Kojic acid,

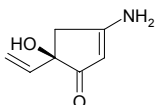
IC<sub>50</sub> = 7.7 μmol/L, used as a functional personal-care compound). Source:

*Myrothecium* sp. Ref: 4457.

**15207 Myrothenone B**

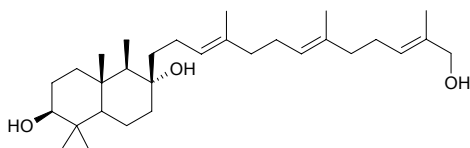
3-Amino-5-ethenyl-5-hydroxy-2-cyclopenten-1-one C<sub>7</sub>H<sub>9</sub>NO<sub>2</sub> (139.16).

Colorless oil. Source: *Myrothecium* sp. Ref: 4457.

**15208 Myrrhanol A**

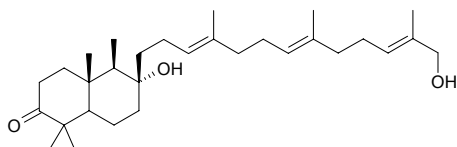
C<sub>30</sub>H<sub>52</sub>O<sub>3</sub> (460.75). Colorless oil, [α]<sub>D</sub><sup>27</sup> = +12.2° (*c* = 1.00, MeOH). Source:

MU KU ER MO YAO *Commiphora mukul*. Ref: 2572.

**15209 Myrrhanone A**

C<sub>30</sub>H<sub>50</sub>O<sub>3</sub> (458.73). Colorless oil, [α]<sub>D</sub><sup>28</sup> = +11.9° (*c* = 1.00, MeOH). Source:

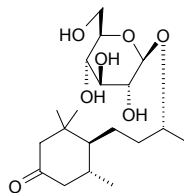
MU KU ER MO YAO *Commiphora mukul*. Ref: 2572.

**15210 Myrsinioside A**

(5*R*,6*S*,9*R*)-Megastigma-3-on-9-ol 9-*O*-β-*D*-glucopyranoside C<sub>19</sub>H<sub>34</sub>O<sub>7</sub>

(374.48). Amorphous powder, [α]<sub>D</sub><sup>24</sup> = -13.8° (*c* = 1.30, MeOH). Source:

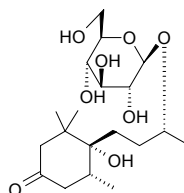
*Myrsine seguinii* (leaf). Ref: 4119.

**15211 Myrsinioside B**

(5*R*,6*R*,9*R*)-Megastigma-3-on-6,9-diol 9-*O*-β-*D*-glucopyranoside C<sub>19</sub>H<sub>34</sub>O<sub>8</sub>

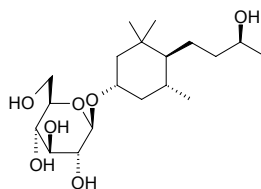
(390.48). Amorphous powder, [α]<sub>D</sub><sup>24</sup> = -3.0° (*c* = 0.41, MeOH). Source:

*Myrsine seguinii* (leaf). Ref: 4119.

**15212 Myrsinioside C**

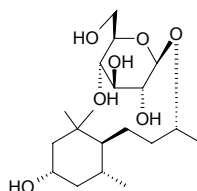
(3*S*,5*R*,6*S*,9*S*)-Megastigma-3,9-diol 3-*O*-β-*D*-glucopyranoside C<sub>19</sub>H<sub>36</sub>O<sub>7</sub>

(376.49). Amorphous powder. Source: *Myrsine seguinii* (leaf). Ref: 4119.

**15213 Myrsinioside D**

C<sub>19</sub>H<sub>36</sub>O<sub>7</sub> (376.49). Amorphous powder, [α]<sub>D</sub><sup>24</sup> = -28.6° (*c* = 1.40, MeOH).

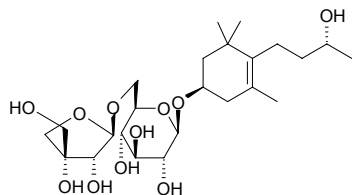
Source: *Myrsine seguinii* (leaf). Ref: 4119.



**15214 Myrsinioside E**

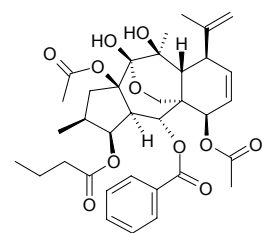
$C_{24}H_{42}O_{11}$  (506.60). Amorphous powder,  $[\alpha]_D^{24} = -76.4^\circ$  ( $c = 0.72$ , MeOH).

Source: *Myrsine seguinii* (leaf). Ref: 4119.

**15215 Myrsinol-type diterpene ester CPB51-719-1**

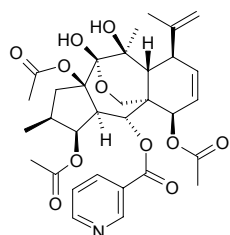
$C_{35}H_{44}O_{11}$  (640.73). Colorless oil,  $[\alpha]_D^{23} = -3.28^\circ$  ( $c = 0.12$ ,  $CHCl_3$ ). Pharm:

Prolyl endopeptidase inhibitor (*in vitro*,  $IC_{50} = 3.195\mu\text{mol/L}$ , positive control Bacitracin,  $IC_{50} = 129.26\mu\text{mol/L}$ ). Source: MI HUO DA JI *Euphorbia decipiens*. Ref: 4350.

**15216 Myrsinol-type diterpene ester CPB51-719-2**

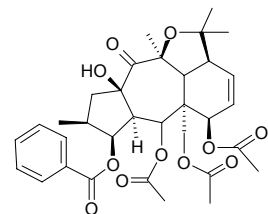
$C_{32}H_{39}NO_{11}$  (613.67). Colorless oil,  $[\alpha]_D^{23} = -6.63^\circ$  ( $c = 1.66$ ,  $CHCl_3$ ). Pharm:

Urease inhibitor (*in vitro*,  $IC_{50} = 81.39\mu\text{mol/L}$ , positive control Thiourea,  $IC_{50} = 21\mu\text{mol/L}$ ). Source: MI HUO DA JI *Euphorbia decipiens*. Ref: 4350.

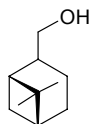
**15217 Myrsinol-type diterpene ester CPB51-719-3**

$C_{32}H_{40}O_{11}$  (612.68). Colorless oil,  $[\alpha]_D^{23} = -9.68^\circ$  ( $c = 0.14$ ,  $CHCl_3$ ). Pharm:

Prolyl endopeptidase inhibitor (*in vitro*,  $IC_{50} = 10.52\mu\text{mol/L}$ , positive control Bacitracin,  $IC_{50} = 129.26\mu\text{mol/L}$ ). Source: MI HUO DA JI *Euphorbia decipiens*. Ref: 4350.

**15218 Myrtanol**

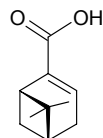
$C_{10}H_{18}O$  (154.25). Source: CHAI HU *Bupleurum chinense*, ZHU YE CHAI HU *Bupleurum marginatum*, XIAN YE CHAI HU *Bupleurum angustissimum*, XIAO YE HEI CHAI HU *Bupleurum smithii* var. *parvifolium*, ZHAI ZHU YE CHAI HU *Bupleurum marginatum* var. *stenophyllum*. Ref: 1350, 660.

**15219 Myrtenal**

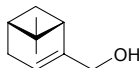
[23727-16-4]  $C_{10}H_{14}O$  (150.22). Source: DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*]. Ref: 2.

**15220 Myrtenic acid**

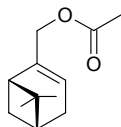
[601-74-1]  $C_{10}H_{14}O_2$  (166.22). Source: RU XIANG *Boswellia carterii*. Ref: 1271.

**15221 Myrtenol**

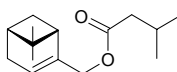
[6712-78-3]  $C_{10}H_{16}O$  (152.24). bp (-) 221~222°C. Pharm: dispels phlegm; antimicrobial; immunoenhancer. Source: CHAI HU *Bupleurum chinense*. Ref: 2, 1612, 1613.

**15222 (+)-Myrtenyl acetate**

$C_{12}H_{18}O_2$  (194.28). Source: XIE CAO *Valeriana officinalis*. Ref: 6.

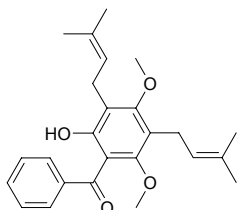
**15223 L-Myrtenyl isovalerate**

$C_{15}H_{24}O_2$  (236.36). Source: XIE CAO *Valeriana officinalis*. Ref: 6.

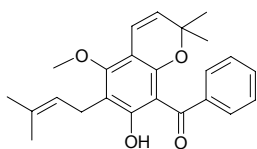


**15224 Myrtaiphenone A**

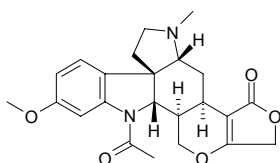
6-Hydroxy-2,4-dimethoxy-3,5-bis(3-methyl-2-butenyl)benzophenone  
 $C_{25}H_{30}O_4$  (394.52). Source: FEI JI TENG HUANG *Garcinia pseudoguttifera*  
 (heartwood). Ref: 3911.

**15225 Myrtaiphenone B**

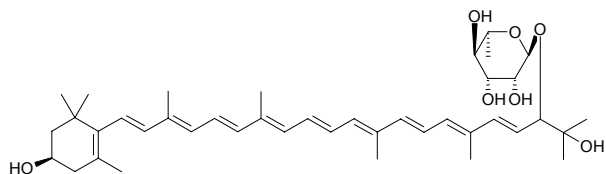
2,2-Dimethyl-8-benzoyl-7-hydroxy-5-methoxy-6-(3-methyl-2-butenyl)benzopyran  
 $C_{24}H_{26}O_4$  (378.47). Source: FEI JI TENG HUANG *Garcinia pseudoguttifera*  
 (heartwood). Ref: 3911.

**15226 Myrtoidine**

$C_{23}H_{26}N_2O_5$  (410.47). Crystals (EtOAc and cyclohexane which char without  
 melting),  $[\alpha]_D^{20} = -46.6^\circ$  ( $c = 0.5$ ,  $CH_2Cl_2$ ). Source: *Strychnos myrtoides*. Ref:  
 2297.

**15227 Myxoxanthophyll**

$C_{41}H_{60}O_7$  (664.93). Source: FA CAI *Nostoc flagelliforme*. Ref: 660.





Jiaju Zhou · Guirong Xie · Xinjian Yan

# Encyclopedia of Traditional Chinese Medicines

Molecular Structures, Pharmacological Activities,  
Natural Sources and Applications

## Vol.4

Isolated Compounds N-S

 Springer

Encyclopedia of Traditional Chinese Medicines  
Molecular Structures, Pharmacological Activities,  
Natural Sources and Applications



Jiaju Zhou • Guirong Xie • Xinjian Yan

Encyclopedia of  
Traditional Chinese Medicines  
Molecular Structures, Pharmacological  
Activities, Natural Sources and Applications

Vol. 4: Isolated Compounds N-S

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# Encyclopedia of Traditional Chinese Medicines

Molecular Structures, Pharmacological Activities, Natural Sources and Applications

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# Preface

A significant preoccupation of modern traditional Chinese medicine (TCM) research has been the characterization of TCM components, such as pertain to their isolation, purification, structural determination, and pharmacological activity. As a reference tool, this *Encyclopedia of Traditional Chinese Medicines* presents a comprehensive and integrative work on surveying TCM plant sources, chemistry, pharmacology and medicinal effects and indications in a systematic manner.

This encyclopedia is an integrated achievement of a long-term TCM research project by the authors at the Chinese Academy of Sciences<sup>[1-4]</sup>, involving three parts and now organized in six volumes:

Part I (Volumes 1 to 4 and part of Volume 5) provides structural, physical, pharmacological and natural source information on 23,033 isolated chemicals captured from 5,535 references, basically up to year 2005. A great deal of effort has been paid on overlapping or contradictory data in order to provide readers with an accurate and reliable resource.

Part II (last part of Volume 5) describes 6,926 TCM plants and congeners, together with their medicinal effects and indications. The contents of Part I and Part II are all organized in alphabetical order.

Part III (Volume 6) includes seven indexes produced by a computer program. Based on the indexes, users can readily find concerned contents in multiple ways.

With this encyclopedia, the authors attempt to provide a bridge for the communication between the TCM system and Western medicinal systems, and a platform with multiple-subjects in support of research and development of the health sciences.

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Sep, 2010, Beijing

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- [4] Jiaju Zhou, Guirong Xie and Xinjian Yan, *Data Collection of Chemical Components in Plant Origins of Traditional Chinese Medicines*, Vol 1-3, Science Press, Beijing, 2009 (in Chinese)





# Introduction

This encyclopedia mainly consists two parts - compound and plant. Its core content is the structural and pharmacological information of 23,033 phytochemicals, as well as medical effects and indications of 6,926 plant species from which the phytochemicals were isolated. The compounds, i.e. phytochemicals, are ordered alphabetically, and their ordinal numbers are used as compound unique codes. The plant species are coded from T0001 to T6926. With this code system, the complicated “many to many” relationship between compounds and plants can be clearly expressed, and any individual compound or plant could be located easily in this 6 volumes book.

## 1. Compound Entry

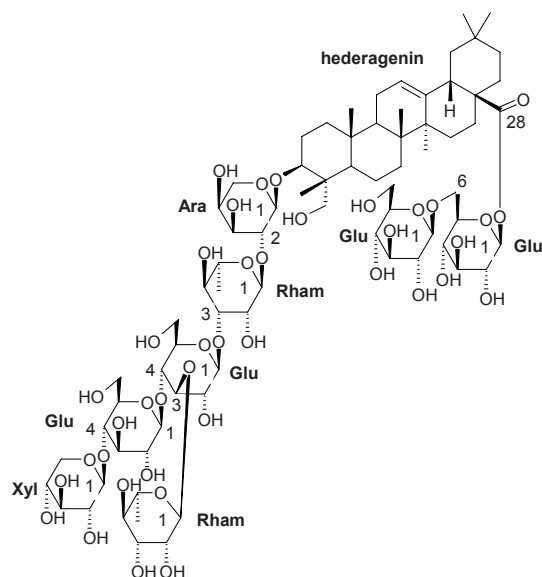
**Format of Compound Entry.** A compound entry starts with a title line, in which there are two items: the compound’s unique code and main name. Following the title line is the compound physical, pharmacological and source information, which may include 8 items:

**Title line (code number, main name)**

- A. Synonyms of the compound (if any);
- B. CASRN number (if any);
- C. Formula (relative molecular mass);
- D. Physicochemical properties;
- E. Pharmacological data (if any);
- F. Source(s);
- G. Reference(s);
- H. Graphic structure.

**Chemical Names and Synonyms.** Generally, a compound may have one scientific name and several trivial names. In the encyclopedia, based on original articles, we select one name as the “main name” (appeared at the title line of each compound entry), and use it to alphabetically order the 23,033 compounds in the first 5 volumes. The main name is either a scientific name or a trivial name. All of other names of each compound, if any, are presented after the title line.

**Stereochemistry of Chemical Structure.** We protracted all compound structures down to atom-bond level including complicated glycosides, with stereo-chemical information based on the data in the original papers. For example, the structure with full stereochemistry of compound 22,834 (isolated from CHUAN XU DUAN *Dipsacus asperoides*) is:



3-*O*-[ $\beta$ -*D*-Xylopyranosyl(1 $\rightarrow$ 4)]- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 4)]  
 [ $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 3)-  
 $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl hederagenin-  
 28-*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside

**Normalization of Pharmacological Data.** More than 8,000 TCM components in this encyclopedia have a variety of pharmacological data, which are valuable not only for the study of TCM, but also for the development of Western medicine. Because different expressions are used for the same kind of data in different articles, we have to define and normalize thousands pharmacological terms, so that the data could be expressed by a unified way, and be easily understood by readers.

The pharmacological terms in the encyclopedia are presented by a multi-layered structure. In the top layer, there are around 20 types of pharmacological activity terms, they are cytotoxic (*in vitro* anticancer), antineoplastic (*in vivo* anticancer), antibacterial, antifungal, antiviral, anti-HIV, anti-inflammatory, antioxidant, antimalarial, enzyme inhibitors, NO production inhibitors, cardiovascular activity, smooth muscle relaxant and stimulant, toxin and medium lethal dose LD<sub>50</sub>, and so forth. For each term there is a regulation about how to describe related pharmacological data. The following is an example:

**Term name** (*in vitro/in vivo*,  
 target cell **1**, quantitative data,  
 control Compound, control's data;  
 target cell **2**, quantitative data,  
 control Compound, control's data;  
 target cell **3**, quantitative data,  
 control Compound, control's data;  
 terse description of related mechanism if any).

Under the subtitle “Pharm:” of compound entry 248 (17-Acetoxyabda-7,12(*E*),14-triene), a set of bio-data is presented as follows:

Pharm: **Cytotoxic** (*in vitro*,  
 BT474 human galactophore cancer cell,  $IC_{50} = 4.7\mu\text{g/mL}$ ,  
 control Doxorubicin hydrochloride,  $IC_{50} = 0.08\mu\text{g/mL}$ ;  
 CHAGO human undifferentiated lung cancer cell,  $IC_{50} = 5.7\mu\text{g/mL}$ ,  
 control Doxorubicin hydrochloride,  $IC_{50} = 2.3\mu\text{g/mL}$ ;  
 HepG2 human liver cancer cell,  $IC_{50} = 6.5\mu\text{g/mL}$ ,  
 control Doxorubicin hydrochloride,  $IC_{50} = 0.9\mu\text{g/mL}$ ;  
 Kato3 human gastric cancer cell,  $IC_{50} = 5.3\mu\text{g/mL}$ ,  
 control Doxorubicin hydrochloride,  $IC_{50} = 1.7\mu\text{g/mL}$ ;  
 SW620 human colorectal adenocarcinoma cell,  $IC_{50} = 5.6\mu\text{g/mL}$ ,  
 control Doxorubicin hydrochloride,  $IC_{50} = 1.1\mu\text{g/mL}$ ).

In order to standardize abbreviations of cancer cells, such as BT474, CHAGO, etc., we defined and used 270 cancer cell codes (CCC) in the encyclopedia. For explanations of these codes, please see “Cancer Cell Codes in the Pharmacological Models” in Volume 1 of the encyclopedia.

By means of the formatted and structuralized methods, we normalized expressions of most pharmacological data appeared in the encyclopedia. For complete information of all 3367 normalized pharmacological activity terms, please see “Compound Pharmacological Activities Index” in Volume 6.

## 2. Plant Entry

**One Species One Entry.** Conventionally, a TCM name may include more than one plant species that have the same medical functions; therefore, a plant may not have an independent TCM entry and may be described under a TCM name. In this book, modern botany classification regulation is adopted and each plant species has an independent entry.

For example, traditional Chinese medicine DAN SHEN includes three species. They are equivalent in both effects and indications in TCM practice. In this encyclopedia, we defined three plant entries for each one of them.

T5680 *Salvia miltiorrhiza* (Lamiaceae); DAN SHEN; Danshen;  
 T5681 *Salvia miltiorrhiza* f. *alba* (Lamiaceae); BAI HUA DAN SHEN; Whiteflower Danshen;  
 T5688 *Salvia przewalskii* (Lamiaceae); GAN XI SHU WEI CAO; Przewalsk Sage.

With this method, we are able to smoothly link TCM information with that of modern botany.

**Simplified Latin Name.** For each TCM plant or TCM congener, four names are used in the encyclopedia. They are Latin name, English name, PIN-YIN name and Chinese

name, while the Chinese name only appears in TCM Plants PIN-YIN/Chinese Names Index” not in the main part of the book. For plant Latin name (e.g. scientific name), we use a simplified nomenclature, in which the nomenclator(s) information is not included. For example the Latin name of Chinese Angelica (DANG GUI) in the encyclopedia is “*Angelica sinensis*”, not “*Angelica sinensis* (Oliv.) Diels”.

**Family Name.** According to the “International Code of Botanical Nomenclature” (2007), the following eight authoritative family names are used in the encyclopedia. The family names of long usage, which are not used in are the encyclopedia, indicated in parentheses:

Apiaceae (Umbelliferae);  
 Arecaceae (Palmae);  
 Asteraceae (Compositae);  
 Brassicaceae (Cruciferae);  
 Clusiaceae (Guttiferae);  
 Fabaceae (Leguminosae);  
 Lamiaceae (Labiatae) and  
 Poaceae (Gramineae).

**PIN-YIN Name and Chinese Name.** A simplified PIN-YIN name system is used in the encyclopedia. That is not to include the four-tone mark. However, there are exceptions. Among the thousand PIN-YIN names in the book, there are seven confusing cases. For each mistakable name, a superscript is attached to the name for indicating its four-tone in order to distinguish it from other plant species. For example: BAI MAO GEN<sup>(1)</sup> and BAI MAO GEN<sup>(4)</sup> are two different TCM plants:

T3416 *Imperata cylindrica* var. *major* (Poaceae); BAI MAO GEN<sup>(1)</sup>; Lalang Grass Rhizome.  
 T3309 *Hydrastis canadensis* (Ranunculaceae); BAI MAO GEN<sup>(4)</sup>; Golden-seal.

Other six cases are:

T1449 *Cirsium japonicum* (Asteraceae); DA JI<sup>(4)</sup>; Japanese Thistle.  
 T2608 *Euphorbia pekinensis* (Euphorbiaceae); DA JI<sup>(3)</sup>; Peking Euphorbia.  
 T4124 *Matricaria chamomilla* [Syn. *Matricaria recutita*] (Asteraceae); MU<sup>(3)</sup> JU; Mayweed.  
 T0197 *Aegle marmelos* (Rutaceae); MU<sup>(4)</sup> JU; Sepiaria.  
 T1039 *Bruguiera gymnorrhiza* (Rhizophoraceae); MU LAN<sup>(3)</sup>; Common Bruguiera.  
 T3423 *Indigofera tinctoria* (Fabaceae); MU LAN<sup>(2)</sup>; True Indigo.  
 T6798 *Vitis vinifera* (Vitaceae); PU<sup>(2)</sup> TAO; European Grape.  
 T6267 *Syzygium jambos* (Myrtaceae); PU<sup>(3)</sup> TAO; Roseapple.  
 T2107 *Dendrobium nobile* (Orchidaceae); SHI HU<sup>(4)</sup>; Noble Dendrobium.  
 T2646 *Evodia rutaecarpa* var. *officinalis* (Rutaceae); SHI HU<sup>(3)</sup>; Official Evodia.  
 T1221 *Caryopteris divaricata* (Verbenaceae); YOU<sup>(2)</sup>; Divaricate Bluebeard.  
 T1478 *Citrus grandis* (Rutaceae); YOU<sup>(4)</sup>; Pummelo.

**Translation of TCM Effects Terms.** In the Volume 5 of the encyclopedia, 6,926 TCM Plant entries list in alphabetical order of *Latin names*, including 2,923 original TCM plants (including few of animals)<sup>[R01-R04]</sup> and 4,003 congeners (including a few of non-TCM medicinal plants). For each TCM plant, two most important features are traditional TCM effects and indications.

For preparing this encyclopedia, one of the greatest challenges is how to correctly translate each TCM term into correspondent English, so that Western readers are able to understand the true meaning of the content in the book. After comparing several translation systems, we decided to use Wiseman's terminological system<sup>[R05-R07]</sup> for this book.

Wiseman's system obeys two most important principles: (1). The English-language terms should be faithful to the original concepts in traditional Chinese medicine. (2). The English-language TCM terminology should be flexible enough to allow modifications and extensions so that derivative effects can be described by a structuralized manner. For instance, the term "quicken blood" describes a general effect meaning "activating blood flow" or "promoting blood circulation". Elaboration of this term produces "quicken blood and transform stasis", "quicken blood and relieve pain", "quicken blood and regulate menstruation", and so on. The following illustrations are an example of the structuralized expressions related to the term "quicken blood":

quicken blood and disinhibit water  
 quicken blood and dispel stasis  
 quicken blood and dispel wind  
 quicken blood and disperse swelling  
 quicken blood and disperse welling abscess  
 quicken blood and dissipate binds  
 quicken blood and dissipate stasis  
 quicken blood and free menstruation  
 quicken blood and free network vessels  
 quicken blood and free vessels  
 quicken blood and joint bones  
 quicken blood and move *qi*  
 quicken blood and move stasis  
 quicken blood and nourish heart  
 quicken blood and promote milk  
 quicken blood and quiet spirit  
 quicken blood and regulate menstruation  
 quicken blood and relieve pain  
 quicken blood and resolve toxin  
 quicken blood and settle pain  
 quicken blood and soothe sinews  
 quicken blood and stanch bleeding  
 quicken blood and strengthen sinews  
 quicken blood and transform stasis  
 quicken blood and vessels

**Translation of TCM Indications Terms.** Based on Wiseman's terminological system, "Chinese-English Dictionary of Traditional Chinese Medicine" compiled by Guangzhen Gao *et al.*<sup>[R08]</sup>, "An English-Chinese Medical Dictionary, Second Edition" compiled by Weiyi Chen *et al.*<sup>[R09]</sup>, and other reference dictionaries, we defined over 3,800 standard indication terms for translating TCM indications terms from Chinese to English. Among the 3,800 terms, 2,526 terms are actually used in the encyclopedia, in which 85% terms are traditional TCM terms and the rest 15% are common modern medicinal terms. Some typical examples of traditional TCM indication terms are as follows:

*yin* vacuity internal heat  
*yin* vacuity lung dryness  
*yin* vacuity tidal fever  
 chest impediment  
 chest impediment and heart pain  
 chest impediment and heart pain over back  
 chest oppression and pain  
 chest oppression with breathe hard  
 distention pain in rib-side  
 distention pain in stomach duct  
 distention pain in stomach duct and abdomen  
 externally contracted summer heat-damp  
 externally contracted wind evil  
 externally contracted wind-cold  
 externally contracted wind-heat  
 knocks and falls  
 sores  
 sores clove boil  
 swelling of sores and boils  
 sore scab and lichen  
 toxin swelling of sores

In summary, this encyclopedia provides a collection of more than 23,000 TCM chemical components isolated from natural resources and a large number of pharmacological activity data of these components. It may be used not only as a handbook to look for structures and pharmacological activities of TCM chemical components and source plant information, but also a fundamental platform for studying TCM with a systematic and integrative approach.

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Finally, we would like to give heartfelt thanks to our family members. Without their complete and never-ending support, this book would never have been completed.



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# How to Use the Books

## 1. Three Kinds of “Many to Many” Relationships

To help readers effectively search and use of the books, authors strongly suggest readers being familiar with the structure of the encyclopedia and certain important linkers or pointers between different data sets.

Firstly, in order to avoid confusing cases, please keep in mind the following three features of the book:

(a) In the encyclopedia, all of pharmacological data belong to compounds, not to plants. In other words, the encyclopedia doesn't include plants' pharmacological data.

(b) All effect and indication terms belong to TCM plants, not to compounds. And almost all of effect terms as well as 85% indication terms are pure Chinese traditional concepts.

(c) In the encyclopedia, there are three kinds of “many to many” relationships: (i), compounds to plants, which is the most important relationship. (ii), pharmacological data to compounds in the molecular level only. (iii), plants to effects/indications in the species level.

Pharm. data ↔ Compound 1		Plant T0001 ↔ effects, indications
Pharm. data ↔ Compound 2		Plant T0002 ↔ effects, indications
Pharm. data ↔ Compound 3	↔	Plant T0003 ↔ effects, indications
.....		.....
Pharm. data ↔ Compound 23032		Plant T6925 ↔ effects, indications
Pharm. data ↔ Compound 23033		Plant T6926 ↔ effects, indications
(Molecular level)		(Species level)

### Sketch Map of Three Important “Many to Many” Relationships

## 2. Seven Useful Indexes

In Volume 6, there are seven indexes for data searching.

The indexes 1-3 are tools to search compounds from different starting-points:

**Index 1** (Compound Pharmacological Activity Index) links pharmacological terms

with related compound codes. For example, if there is a question as:

“Which compounds have *in vitro* cytotoxic activity against human breast cancer cells?”

From the index 1, the answer can easily be obtained as follows:

Cytotoxic, BC hmn breast cancer cells 24, 349, 526, 2244, 3416, 3429, 3708, 4775, 5095, 6759, 6759, 6759, 12453, 12454, 15494, 15495, 18515, 20671.

Cytotoxic, BC-1 hmn breast cancer cells 1277, 2260, 5064, 5327, 6759, 6759, 8220, 8221, 8222, 8235, 10250, 10297, 10511, 11353, 13489, 13490, 13491, 13492, 13493, 13494, 13495, 15919, 17008, 18866, 20809.

Cytotoxic, BCA-1 hmn breast cancer cells 6759, 13468, 13469, 13470, 15739.

Cytotoxic, Bcap37 hmn breast cancer cells 843, 11392, 13123, 16183, 17717, 18499.

Then, from compounds code numbers, one can get detailed data for each compound.

**Index 2** (Compound Molecular Formula Index) connects a molecular formula to its all isomers. For example, there are five isomers with formula  $C_{45}H_{76}O_{18}$ :

$C_{45}H_{76}O_{18}$

Abutiloside F, 40

Asp-IV, 1905

Asp-V, 1906

Trigoneoside IIIa, 21669

Trigoneoside IIIb, 21670

**Index 3** (Compound Synonym Index) is useful for searching a compound from a known name. A strong suggestion to readers is that when searching a compound from a known name, to search twice probably is necessary: firstly from entry title in the encyclopedia text and then from the index 3.

The indexes 4–7 are tools to search TCM plants:

**Index 4** (TCM Plant English Name Index) links a Plant English Name to other names of the plant, for example:

Chinese Angelica = T0495 *Angelica sinensis* = DANG GUI

Siberian Phlojodicarpus = T4804 *Phlojodicarpus sibiricus* = ZHANG GUO QIN

Dahurian Angelica = T0478 *Angelica dahurica* [Syn. *Angelica porphyrocaulis*] = BAI ZHI

Gigantic Angelica = T0483 *Angelica gigas* = CHAO XIAN DANG GUI

Narrowleaf Angelica = T0476 *Angelica anomala* = XIA YE DANG GUI

**Index 5** (TCM Plant PIN-YIN and Chinese Name Index) links PIN-YIN name to Latin name and/or English name, for example:

BAI HUA QIAN HU = T4768 *Peucedanum praeruptorum* = Whiteflower Hogfennel

BAI HUA SHE GAN = T3457 *Iris dichotoma* = Vesper Iris

BAI HUA SHE SHE CAO = T4485 *Oldenlandia diffusa* [Syn. *Hedyotis diffusa*] = Spreading Hedyitis

**Index 6** (TCM Plant Traditional Effects Index) and **Index 7** (TCM Plant Traditional Indications Index) connect specific effect and/or indication to related plants.

For example, to search all plants with effect “nourish heart and quiet spirit”, the result is:

**nourish heart and quiet spirit:**

T0944 *Biota orientalis* [Syn. *Thuja orientalis*; *Platyclusus orientalis*],  
 T1292 *Celastrus orbiculatus* [Syn. *Celastrus articulatus*],  
 T1381 *Choerospondias axillaris*,  
 T4194 *Menyanthes trifoliata*,  
 T4400 *Nelumbo nucifera*,  
 T4902 *Pimpinella thelungiana*,  
 T5108 *Polygonum multiflorum*,  
 T5497 *Rhodiola kirilowii*,  
 T5701 *Salvia yunnanensis*.

If searching all plants with indication “angina pectoris” (a modern medicinal term), “externally contracted wind-cold” (a TCM term), and “externally contracted wind-heat” (a TCM term), you will obtain the following results:

**angina pectoris:** T1215 *Carthamus tinctorius*, T1395 *Chrysanthemum morifolium* [Syn. *Dendranthema morifolium*], T1775 *Crataegus pinnatifida*, T1778 *Crataegus pinnatifida* var. *major*, T2274 *Dryobalanops aromatica*, T2389 *Epimedium acuminatum*, T2390 *Epimedium brevicornum*, T2392 *Epimedium davidii*, T2394 *Epimedium elongatum*, T2398 *Epimedium koreanum*, T2401 *Epimedium pubescens*, T2402 *Epimedium sagittatum*, T2404 *Epimedium sutchuenense*, T2406 *Epimedium wushanense*, T2846 *Ganoderma japonicum* [Syn. *Ganoderma sinense*], T2848 *Ganoderma lucidum*, T2964 *Ginkgo biloba*, T3388 *Ilex chinensis* [Syn. *Ilex purpurea*], T3396 *Ilex pubescens*, T3397 *Ilex pubescens* var. *glaber*, T3875 *Liriope spicata* var. *prolifera*, T3925 *Loranthus parasiticus* [Syn. *Loranthus chinensis*; *Taxillus chinensis*], T3926 *Loropetalum chinense*, T4303 *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*, T4507 *Ophiopogon japonicus*, T4608 *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*], T4953 *Piper longum*, T5312 *Pueraria edulis*, T5313 *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*], T5316 *Pueraria omeiensis*, T5318 *Pueraria phaseoloides*, T5320 *Pueraria thomsonii*, T5680 *Salvia miltiorrhiza*, T5681 *Salvia miltiorrhiza* f. *alba*, T5688 *Salvia przewalskii*, T6510 *Trichosanthes kirilowii*, T6513 *Trichosanthes rosthornii* [Syn. *Trichosanthes uniflora*], T6584 *Typha angustata*, T6585 *Typha angustifolia*, T6587 *Typha latifolia*.

**externally contracted wind-cold:** T4039 *Magnolia grandiflora*, T4445 *Notopterygium forbesii* [Syn. *Notopterygium franchetii*], T4446 *Notopterygium incisum*, T4956 *Piper mullesua*, T5727 *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*].

**externally contracted wind-heat:** T0480 *Angelica decursiva* [Syn. *Peucedanum decursivum*], T1395 *Chrysanthemum morifolium* [Syn. *Dendranthema morifolium*], T1933 *Cyclea sutchuenensis*, T2798 *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*], T3819 *Ligusticum brachylobum*, T4413 *Nepeta cataria*, T4761 *Peucedanum longshengens*, T4768 *Peucedanum praeruptorum*, T4769 *Peucedanum rubricaulis*, T6791 *Vitex rotundifolia* [Syn. *Vitex trifolia* var. *simplicifolia*], T6793 *Vitex trifolia*.

### 3. Data Survey Example of Compound Entry

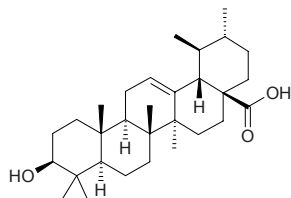
At last, we would like to take Ursolic acid (compound code 22270 in the books) as a data survey example. Under this compound there are a quite number of data as follows:



**22270 Ursolic acid**

$\beta$ -Ursolic acid [77-52-1] C<sub>30</sub>H<sub>48</sub>O<sub>3</sub> (456.72).

White solid powder (chloroform–methanol), mp 298~294°C, 265~267°C.

**Pharm: (27 items)**

- Cytotoxic** (KB, ED<sub>50</sub> > 25µg/mL, control Doxorubicin, ED<sub>50</sub> = 0.12µg/mL; Hep3B, ED<sub>50</sub> > 25µg/mL, control Doxorubicin, ED<sub>50</sub> = 0.14µg/mL; Colon205, ED<sub>50</sub> > 25µg/mL, control Doxorubicin, ED<sub>50</sub> = 0.10µg/mL; HeLa, ED<sub>50</sub> > 25µg/mL, control Doxorubicin, ED<sub>50</sub> = 0.11µg/mL)<sup>[4369]</sup>;
- cytotoxic** (*in vitro*, HONE-1 cell, IC<sub>50</sub> = (8.8±1.5)µmol/L, control Etoposide, IC<sub>50</sub> = (0.5±0.2)µmol/L, *cis*-Platin, IC<sub>50</sub> = (3.2±0.5)µmol/L; KB cell, IC<sub>50</sub> = (8.2±2.7)µmol/L, Etoposide, IC<sub>50</sub> = (0.9±0.3)µmol/L, *cis*-Platin, IC<sub>50</sub> = (4.4±0.9)µmol/L; HT29 cell, IC<sub>50</sub> = (4.7±1.5)µmol/L, Etoposide, IC<sub>50</sub> = (2.4±0.5)µmol/L, *cis*-Platin, IC<sub>50</sub> = (5.7±1.1)µmol/L)<sup>[5254]</sup>;
- antineoplastic** (liver cancer cells *in vitro*, mus ascites carcinoma *in vivo*, life was prolonged);
- antibacterial** (*Escherichia coli*, IZD = 13~15mm, control Chloramphenicol, IZD = 16~20mm, control DMSO (4%), IZD < 10mm; *Staphylococcus aureus*, IZD = 10~12mm, control Chloramphenicol, IZD = 16~20mm, control DMSO (4%), IZD < 10mm; *Bacillus subtilis*, IZD = 13~15mm; control Chloramphenicol, IZD = 16~20mm, control DMSO (4%), IZD < 10mm)<sup>[5315]</sup>;
- antibacterial** (*Staphylococcus* spp. *in vitro*, MIC = 300µg/mL, gram-positive bacteria *in vitro*, MIC = 50~400µg/mL, gram-negative bacteria *in vitro*, MIC = 200~800µg/mL, microzyme *in vitro*, MIC = 100~700µg/mL);
- antitubercular** (*Mycobacterium tuberculosis*, MIC = 41.9µg/mL, cytotoxic, Vero cells, IC<sub>50</sub> = 46.5µg/mL, SI (IC<sub>50</sub>/MIC) = 1.11, positive control Rifampin, MIC = 0.03µg/mL, IC<sub>50</sub> = 98.3µg/mL, SI = 3277)<sup>[4986]</sup>;
- anticonvulsant** (induced by corazol);
- anti-inflammatory** (rat, induced by embedding woolball, 12.5mg/(kg·d) ip, 7 days, effective);
- anti-inflammatory** (*in vitro*, murine macrophage RAW264.7 Cells, inhibits LPS-induced NO and PGE<sub>2</sub> release)<sup>[5016]</sup>;
- COX-2 enzyme selective inhibitor** (mean IC<sub>50</sub> of isomers = 130µmol/L)<sup>[4415]</sup>;
- COX-2 enzyme inhibitor** (PMA-treated hmn mammary and oral epithelial cells, molecular mechanisms is mediated by a cAMP response element in the COX-2 promoter, associated with inhibition of protein kinases)<sup>[4415]</sup>;
- antipyretic** (clearly reduces normal body temperature of rat);
- reduces serum transaminase** (animal, 100mg/kg);
- antitrypanosomal** (epimastigotes of *Trypanosoma cruzi*, MLC = 6.2µmol/L, control Gentian violet, MLC = 6.2µmol/L)<sup>[2579]</sup>;
- mucin release stimulator** (acts directly on airway mucin-secreting cells, increased mucin release (40~50)% above control at the highest concentrations 0.00001~0.001mol/L, possible use to treatment of chronic airway diseases)<sup>[4084]</sup>;
- platelet aggregation inhibitor** (2~5mg/mL collagen-induced, IC<sub>50</sub> = (511±4)µmol/L, control ASA, IC<sub>50</sub> = (420±3)µmol/L; 1~4µmol/L epinephrine-induced with 0.8~1.0mg/mL collagen, IC<sub>50</sub> = (82.6±2.8)µmol/L, ASA, IC<sub>50</sub> = (53.0±4.5)µmol/L; 10~40µmol/L Sodium arachidonate-induced with 0.8~1.0mg/mL collagen, IC<sub>50</sub> =

(669±12)μmol/L, ASA, IC<sub>50</sub> = (66.0±2.1)μmol/L; 1~5μmol/L PGH<sub>2</sub>/TXA<sub>2</sub> receptor agonist U46619-induced with 0.8~1.0mg/mL collagen, IC<sub>50</sub> > 1000μmol/L, ASA, IC<sub>50</sub> = (340±12)μmol/L)<sup>[4994]</sup>;

**tissue factor inhibitor inactive**<sup>[5387]</sup>;

**antirheumatic**<sup>[5341]</sup>;

**anti-diabetic**<sup>[5341]</sup>;

**antiulcer**<sup>[5341]</sup>;

**hypolipidemic**<sup>[5341]</sup>;

**anti-atherosclerotic**<sup>[5341]</sup>;

**anti-HIV**<sup>[5341]</sup>;

**TGF-β1 antagonist** (inhibits the binding of <sup>125</sup>I-TGF-β1 to its receptor in Balb/c 3T3 cell, IC<sub>50</sub> = (6.9±0.8)μmol/L, suggests TGF-β1 antagonistic activity is responsible, at least in part, for therapeutic efficacy of *Clerodendranthus spicatus* to treat humans with renal disease)<sup>[5496]</sup>;

**glucocorticoid** (enhances glycogen in liver, reduces glycogen in heart and striated muscles);

**LD<sub>50</sub>** (mus, ip) = 680mg/kg.

### Sources: (52 species)

BAI HUA SHE SHE CAO *Oldenlandia diffusa* [Syn. *Hedyotis diffusa*] (whole herb: mean content of 16 origins = 0.211%)<sup>[5508]</sup>;

BI LU GOU TENG *Uncaria tomentosa*,

CHE QIAN *Plantago asiatica* (whole herb: content scope = 0.28%~2.32%, mean content = 0.97%)<sup>[5508]</sup>;

CHI NAN *Syzygium buxifolium*,

CHONG YA YAO *Isodon ternifolius*,

CI WU JIA YE *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*],

DA CHE QIAN *Plantago major*,

DA ZAO *Ziziphus jujuba* (ripe fruit: mean content = 0.016%)<sup>[5508]</sup>,

DAN SHEN *Salvia miltiorrhiza*,

DIAN NAN HONG HOU KE *Calophyllum polyanthum* (seed: yield = 0.0064%dw),

DONG LING CAO *Rabdosia rubescens* (whole herb: mean content = 0.414%)<sup>[5508]</sup>; leaf: mean content = 0.573%)<sup>[5508]</sup>;

DU ZHONG *Eucommia ulmoides*,

DUAN TING SHAN MAI DONG *Liriope muscari* (tuber),

GOU GU YE *Ilex cornuta* (leaf: mean content = 0.96%)<sup>[5508]</sup>,

GUANG JING QIAN CAO *Rubia wallichiana* (stem),

HONG HUA LU TI CAO *Pyrola incarnata* (whole herb: content = 2.06%)<sup>[5508]</sup>,

HU BEI SHAN ZHA *Crataegus hupehensis* (dried ripe fruit: mean content = 0.455%),

JIAN YE TOU WU GEN *Ligularia sagitta*,

LIAN QIAN CAO *Glechoma lungituba*,

LIAN QIAO *Forsythia suspensa*,

LIU QIU SHE GEN CAO *Ophiorrhiza liukiensis* (whole herb),

MA BIAN CAO *Verbena officinalis* (whole herb: mean content of 5 batch samples = 0.227%)<sup>[5508]</sup>,

MAO CAO LONG *Ludwigia octovalvis* (whole herb: yield = 0.00012%dw),

MAO PAO TONG *Paulownia tomentosa*,

MAO XU CAO *Clerodendranthus spicatus*,

MU GUA *Chaenomeles sinensis*,

NV ZHEN ZI *Ligustrum lucidum*,

PI PA YE *Eriobotrya japonica* (dried leaf: mean content = 0.677%)<sup>[5508]</sup>,

PI PA YE *Eriobotrya japonica* (stem and leaf),

PING CHE QIAN *Plantago depressa* (whole herb: mean content = 0.276%)<sup>[5508]</sup>,

RI BEN LU TI CAO *Pyrola japonica*,



RONG SHU *Ficus microcarpa* (aerial root),  
 SHAN DI XIANG CHA CAI *Isodon oresbia*,  
 SHAN LI HONG *Crataegus pinnatifida* var. *major*,  
 SHAN ZHA *Crataegus pinnatifida* (fruit: content scope = 0.31%~0.56%)<sup>[5501]</sup>,  
 SHAN ZHU YU *Cornus officinalis* [Syn. *Macrocarpium officinale*] (dried ripe fruit: content  
 scope = 0.24%~0.32%)<sup>[5501]</sup>, mean content = 0.263%)<sup>[5508]</sup>,  
 SHI NAN *Photinia serrulata* (leaf: mean content = 1.50%)<sup>[5508]</sup>,  
 SHI SHENG BIAN LEI *Gentianopsis paludosa*,  
 SHI YE *Diospyros kaki* (dried leaf: mean content = 0.784%)<sup>[5508]</sup>,  
 SHU HUA JIE CAO *Valeriana laxiflora* (aerial parts and root),  
 SUAN ZAO *Ziziphus jujuba* var. *spinosa* (ripe fruit: content = 0.030%)<sup>[5508]</sup>,  
 SUO YANG *Cynomorium songaricum* (fleshy stem: content = 0.78%)<sup>[5508]</sup>,  
 WEI LING CAI *Potentilla chinensis*,  
 WU GENG WU JIA PI *Acanthopanax sessiliflorus* (fruit),  
 XIA KU CAO *Prunella vulgaris* (dried spike: content = 0.780%)<sup>[5508]</sup>,  
 YANG MEI SHU PI *Myrica rubra* (bark: content = 0.027%),  
 YE SHAN ZHA *Crataegus cuneata* (dried ripe fruit: mean content of 3 origins =  
 0.399%)<sup>[5508]</sup>,  
 YI LANG QING LAN *Dracocephalum kotschyi*,  
 ZHI ZI *Gardenia jasminoides* [Syn. *Gardenia florida*] (dried ripe fruit: mean content =  
 0.041%)<sup>[5508]</sup>,  
 ZHOU YE LU TI CAO *Pyrola rugosa* (whole herb: content = 3.00%)<sup>[5508]</sup>,  
*Cussonia bancoensis*,  
 Occurs in many plants.

**Ref:** 4, 367, 428, 454, 501, 592, 595, 600, 658, 660, 2579, 3005, 3061, 4084, 4163, 4369,  
 4415, 4527, 4767, 4772, 4986, 4994, 5016, 5254, 5315, 5382, 5387, 5341, 5496, 5501,  
 5508.

# Abbreviations and Symbols

12(S)-HETE	12(S)-Hydroxy-5,8,10,14-EicosaTetraEnoic acid	cAMP-PDE	cAMP-phosphodiesterase
<sup>125</sup> I-TGF- $\beta$ 1	<sup>125</sup> I-Transforming Growth Factor- $\beta$ 1	CAPE	Caffeic Acid Phenethyl Ester
5-FU	5-FluoroUracil	CB	cytochalasin B
5-HT	5-HydroxyTryptamine (serotonin)	CC	macrophage inflammatory protein (MIP-1 $\beta$ ), monocyte chemotactic protein (MCP-2), and C lymphotactin (ltn) (a chemokine family)
95%FL (=CI <sub>95</sub> )	95% Fiducial Limits (=95% Confidence Interval)	CC <sub>0</sub>	Minimum cytotoxic concentration
AA	Arachidonic Acid	CC <sub>50</sub>	IC <sub>50</sub> of cytotoxicity (concentration of the 50% cytotoxic effect)
AAPH	2,2'-Azo-bis-(2-AmidinoPropane)-diHydrochloride	CCR1	chemokine receptor 1
ABTS <sup>+</sup>	2,2'-Azino-Bis-(3-ethylbenzThiazoline 6-Sulphonic acid), radical	CD	concentration required to double enzyme (induction) activity
ACAT	Acyl-CoA Cholesterol acyltransferase	CD	Concentration required to double quinone reductase (induction) activity
ACE	Angiotensin Converting Enzyme	CD <sub>50</sub>	medium Convulsive Dose
Ach	Acetylcholine	cGMP	cyclic guanosine monophosphate
AChE	Acetylcholinesterase	cGMP-PDE	cGMP-phosphodiesterase
ACTH	AdrenoCorticoTropic Hormone	CGN	<i>cis</i> -Golgi network
AD	Alzheimer's disease	CGRP	Calcitonin gene-related peptide
ADM	adriamycin	CHO	Chinese hamster ovarian
ADP	adenosine diphosphate	CI	Chemopreventive index (=IC <sub>50</sub> /CD)
AG	aminoguanidine	CI <sub>95</sub> (=95%FL)	95% Confidence Interval (=95% Fiducial Limits)
AggRt	aggregation rate	CIC	complete inhibiting concentration
AIDS	acquired immunodeficiency syndrome	CIMC	complete inhibiting minimum concentration
ALS	amyotrophic lateral sclerosis	CINC-1	cytokine-induced neutrophil chemoattractant 1
ALT	alanine aminotransferase	CMV	Cytomegalovirus
AMP	adenosine monophosphate	CNQX	6-Cyano-7-nitroquinoxaline-2,3-dione (non-NMDA receptor antagonist)
AMV	avian myeloblastosis virus	CNS	central nervous system
AP	angina pectoris	ConA	concanavalin A
AP-1	activator protein-1	COX	cyclooxygenase
APN	Aminopeptidase N	COX-1	cyclooxygenase-1
APV	<i>dl</i> -2-Amino-5-phosphonovaleric acid (a competitive antagonist of the NMDA receptor)	COX-2	cyclooxygenase-2
aq.	aqueous solution	CPT	camptothecin
ASA	AcetylSalicylic Acid	CRF	corticotrophin releasing factor
AST	aspartate transaminase; aspartate aminotransferase	CRH-1	corticotrophin releasing hormone-1
AT-III	Antithrombase-III	CRP	C-reactive protein
ATPase	Adenosine triphosphatase	CV-3988	<i>rac</i> -3-( <i>N</i> -octadecylcarbomoyloxy)-2-methoxypropyl 2-thiazoliethyl phosphate
AZT	3'-azido-3'-deoxythymidine	CVS	cardiac vascular system
BACE1	$\beta$ -Secretase	CXC	Stromal cell-derived factor (SDF)-1 $\alpha$ and IL-8 (a chemokine)
BChE	Butyrylcholinesterase	CYP1A	Cytochrome P450 1A
bFGF	basic Fibroblast Growth Factor	CYP2D6	Cytochrome P450 2D6
BHA	Butylated HydroxyAnisole; 3- <i>tert</i> -Butyl-4-HydroxyAnisole	CYP3A4	Cytochrome P450 3A4
BHT	Butylated HydroxyToluene	d	day
bid	bis in die (Latin)	DCFH	2',7'-dichlorodihydrofluorescein dye
BLM	bleomycin	DDDP	DNA-dependent DNA polymerase
bp	boiling point	dec	decomposition
BST	Brine Shrimp lethality bioassay = Brine Shrimp Test	D-GalN	D-galactosamine
c	concentration		
C5a	complement 5a		
cAMP	cyclic adenosine monophosphate		

DGAT	Diacylglycerol acyltransferase	GSH	Glutathione; <i>N</i> -( <i>N</i> - <i>L</i> - $\gamma$ -Glutamyl- <i>L</i> -cysteinyl)glycine
dil.	dilute	GTP	Guanosine TriPhosphate
DIZ	Diameter of Inhibitory Zone	GVHR	Graft-Versus-HostReaction
DMBA	9,10-dimethyl-1,2-benzanthracene (carcinogen); 7,12-dimethylbenz[a]anthracene (carcinogen)	h	hour
DMDP	(2 <i>R</i> ,3 <i>R</i> ,4 <i>R</i> ,5 <i>R</i> )-2,5-DihydroxyMethyl-3,4-Dihydroxy-Pyrrolidine	HAD	hmn immunodeficiency virus associated dementia
DMSO	DiMethyl SulphOxide	HBeAg	hmn type B Hepatitis, e Antigen
DNA	deoxyribonucleic acid	HBsAg	hmn type B Hepatitis, Surface Antigen
DNJ	1-Deoxynojirimucin (one kind of polyhydroxy alkaloid, glucosidase inhibitor)	HBV	Hepatitis B Virus
DOX	doxorubicin	HC <sub>50</sub>	medium Hemolytic Concentration
DPI	Diphenyleneiodonium	HCoV-229E	hmn coronavirus strain 229E
DPPH	1,1-DiPhenyl-2-PicrylHydrazyl free radical	HD	Huntington's disease
DS8000	Dextran sulphate, prepared from average Mr 8000	HER rat	Hypertensive Essential Rat
DSCG	DiSodium ChromoGlycate (anti-allergic agent)	HIV	hmn immunodeficiency virus
dw	dried weight	HIV-1	hmn immunodeficiency virus type 1
E.A.	Enzyme Activity	HIV-1 IN	hmn immunodeficiency virus type 1 integrase
EBV-EA	Epstein-Barr Virus Early Antigen	HIV-1 RT	hmn immunodeficiency virus type 1 reverse transcriptase
EC	Effective Concentration	HIV-RT	hmn immunodeficiency virus reverse transcriptase
EC <sub>50</sub>	medium Effective Concentration	hmn	human
ED	Effective Dose	HSV-1	herpes simplex virus 1
ED <sub>25</sub>	Effective Dose for 25%	HSV-2	herpes simplex virus 2
ED <sub>50</sub>	medium Effective Dose (in some cases for the medium Effective Concentration)	HVA	homovanillic acid
EGCG (EGCg)	(-)-Epigallocatechin gallate	hydroxyl radical	OH <sup>•</sup>
EGF	Epidermal Growth Factor (it protects MPP <sup>+</sup> -induced cell death)	ia	intra-arterial injection
EGFR	Epidermal Growth Factor Receptor	IAA	indole-3-acetic acid
ELAM-1	Endothelial-Leukocyte Adhesion Molecule-1	IC	Inhibiting Concentration
ELISA	Enzyme-Linked ImmunoSorbent Assay	IC <sub>50</sub>	median Inhibiting Concentration
eotaxin	eosinophilous cytotoxin	IC <sub>100</sub>	Absolute Inhibiting Concentration
ERK	Extracellular signal-Regulated Kinase	ICAM-1	Intercellular Cell Adhesion Molecule-1
ET	experimental times	ICR	Imprinting Control Region mouse
FAG	Fagomine (one kind of polyhydroxy alkaloid, glucosidase inhibitor)	id	intradermal injection
FCA	Freund's complete adjuvant	ID	Inhibiting Dose
FI	Feeding Index (= ((C-T)/(C+T)×100)	ID <sub>50</sub>	Median Inhibiting Dose
Flu-A	influenza virus type A	IFN	interferon
fMLP	<i>N</i> -formyl- <i>L</i> -Methionyl- <i>L</i> -Leucyl- <i>L</i> -Phenylalanine	IFN- $\gamma$	Interferon- $\gamma$
fp	freezing point	IgE	Immunoglobulin E
FR <sub>50</sub>	Feeding ratio when the consumed area of control disc (CCD) is 50% [FR = CTD(consumed area of treated disc)/CCD]	IgG	Immunoglobulin G
fw	fresh weight	IL	interleukin
G6PD	Glucose-6-Phosphate Dehydrogenase	IL-1	Interleukin-1
GABA	$\gamma$ -aminobutyric acid	IL-1 $\alpha$	interleukin-1 $\alpha$
GaIN	galactosamine	IL-1 $\beta$	interleukin-1 $\beta$
GI	growth inhibition	IL-2	Interleukin-2
GI <sub>50</sub>	the concentration of sample necessary to inhibit the growth to 50% of the control	IL-4	Interleukin-4
Glu	glutamate	IL-6	Interleukin-6
GOT	Glutamate-Oxaloacetate Transaminase	IL-8	Interleukin-8
Gp	Gastro protective effect	IL-10	Interleukin-10
gpg	guinea pig	IL-12	Interleukin-12
GPT	GlutamicPyruvic Transaminase	im	intramuscular injection
GRO	Growth-Related Oncogene	<i>in vitro</i>	<i>in vitro</i>
		<i>in vivo</i>	<i>in vivo</i>
		Indo	indomethacin
		iNOS	inducible Nitric Oxide Synthase
		InRt	inhibitive rate
		ip	intraperitoneal injection

i.t.	intrathecal injection	MMP	Matrix MetalloProteinases
iv	intravenous injection	MMP-2	Matrix MetalloProteinase-2
IZA	Inhibition Zone Area (mm <sup>2</sup> )	mp	melting point
IZD	Inhibition Zone Diameter (mm)	mPGES	microsomal ProstaGlandin E Synthase
J774.A1	murine monocyte/macrophage cell J774.A1	MPP+	1-methyl-4-phenylpyridinium ion (neurotoxin)
JNK	c-Jun NH <sub>2</sub> -terminal kinase	MRSA	Methicillin-Resistant <i>Staphylococcus aureus</i>
KD <sub>50</sub>	Dose required to Knock down 50% of the population of insects	MSSA	Methicillin-Sensitive <i>Staphylococcus aureus</i>
LC <sub>50</sub>	concentration at which only 50% of the cell are viable	MTC	Minimal Toxic Concentration
LC <sub>50</sub>	concentration of inhibiting luminous intensity 50%	MTT	A Cytotoxicity measurement method (tetrazolium-based colorimetric assay used for cytotoxicity bioassay, see Rubinstein L. V., et al., <i>Nat. Cancer Inst.</i> , 82, 1113-1118, 1990)
LCIC	Lowest Complete Inhibition Concentration	mus	mouse
LD	Lethal Dose	<i>n</i>	number of parallel experiments
LD <sub>100</sub>	100% Lethal Dose	nAChR	neuronal nicotinic AcetylCholine Receptor
LD <sub>50</sub>	medium Lethal Dose	NADH	reduced nicotinamide adenine dinucleotide
LDH	lactate dehydrogenase	NADPH	cytochrome C reductase
LDL	Low Density Lipoprotein	NCCLS	A standard antibacterial activity test method (see Wayne P. A., "National Committee for Clinical Laboratory Standards Performance Standards for Antimicrobial Disk Susceptibility Tests," 6th ed., Approved standards M2-A6. NCCLS, 1997)
L-NA	N <sup>o</sup> -L-nitroarginine	NDGA	Nordihydroguaiaretic acid
L-NMMA	N <sup>G</sup> -monomethyl-L-arginine	NEP	Neutral EndoPeptidase
LOX	Lipoxygenase	NF	Nuclear Factor
LPO	lipid peroxidation	NF-κB	Nuclear Factor κB
LPS	lipopolysaccharide	NFAT	Nuclear Factor of Activated T cell
LTB <sub>4</sub>	Leukotriene B <sub>4</sub>	NGF	Nerve Growth Factor
LTC <sub>4</sub>	Leukotriene C <sub>4</sub>	NMDA	N-methyl-D-aspartate
LTD <sub>4</sub>	Leukotriene D <sub>4</sub>	NO	nitric oxide
MA	maytenfolic acid	non-oral	paraoral
MA	maslinic acid	NOR1	(+/-)-(E)-4-methyl-2-[(E)-hydroxyimino]-5-nitro-6-methoxy-3-hexenamid
MA	minimal amount	NOS-2	Nitric oxide synthase type-2
MABA	Microplate Alamar Blue Assay	OCIF	OsteoClastogenesis-Inhibitory Factor
MAC-1	integrin MAC-1	oral	oral
MAO-A	Monoamine oxidase A	OVA	ovalbumin
MAO-B	Monoamine oxidase B	oxazolone	oxazolone
MAPK	Mitogen-Activated Protein Kinase	OZ	opsonized zymosan
MCC	Minimum Cytocidal Concentration	P450	Cytochrome P450
MCP	Monocyte Chemotactic Protein	PAF	Platelet Activating Factor
MCTHBE	Minimum Concentration for Total Haemolysis of Bovine Erythrocytes (µg/mL)	PAF	Platelet Aggregation Factor
MDA	Methylene Dihydroxy Amphetamine	PAI-1	Plasminogen Activator Inhibitor type 1
MDA	Malondialdehyde	Para-3 (=PIV3)	Parainfluenza type 3 virus
MDR	MultiDrug Resistance	PBMC	hmn Peripheral Blood Mononuclear Cell
MED	Minimal Effective Dose	PCA reaction	Passive Cutaneous Anaphylaxis reaction
MFC	Minimal Fungicidal Concentration	PD	Parkinson's Disease
MIA	Minimal Inhibitory Amounts (µg/disc)	PD	a cytotoxic model
MIC	Minimum Inhibitory Concentration	pD2 (=pEC <sub>50</sub> )	negative logarithm (-logM) of the concentration required to produce 50% of the maximum response (EC <sub>50</sub> )
MIC <sub>80</sub>	Minimal Inhibitive Concentration for 80%	PDE	phosphodiesterase
MIC <sub>90</sub>	Minimal Inhibitive Concentration for 90%	PDTC	pyrrolidine dithiocarbamate
min	minute	PEBP2αA	polyoma enhancer binding protein 2αA
MIP-1α/β	macrophage inflammatory protein	pEC <sub>50</sub>	negative logarithm (-logM) of the concentration required to produce 50% of the maximum response (EC <sub>50</sub> )
MIQ	Minimum inhibitory quantity (µg)		
MK-801	dizocipline maleate (a non-competitive antagonist of the NMDA receptor)		
MLC	Minimum Lethal Concentration		
MLD	Minimum Lethal Dose		
MMDC	Minimal Morphological Deformation Concentration		
MMOC	Mouse Mammary Organ Culture model		

PEG	PolyEthylene Glycol	Singlet oxygen	$^1\text{O}_2$
PEP	Prolyl endopeptidase (a serine protease)	SIZ	sulfisoxazole
pet. ether	petroleum ether	SNP	sodium nitroprusside
PFTase	farnesylprenyltransferase	SOD	Superoxide dismutase
PGD <sub>2</sub>	prostaglandin D <sub>2</sub>	sp.	species
PGE <sub>2</sub>	prostaglandin E <sub>2</sub>	SP-A	pulmonary surfactant Protein A
PGF <sub>2<math>\alpha</math></sub>	prostaglandin F <sub>2<math>\alpha</math></sub>	spp.	species (plural)
PGH <sub>2</sub>	prostaglandin H <sub>2</sub>	SRSA	Slow-Reacting Substance of Anaphylaxis
PGI <sub>2</sub>	prostacyclin (prostaglandin I <sub>2</sub> )	StRt	Stimulatory Rate
PHA	phytohemagglutinin	STZ	streptozotocin
Phe	Phenylephrine	superoxide anion	$\text{O}_2^{\bullet-}$
pIC <sub>50</sub>	negative logarithm (-logM) of IC <sub>50</sub>	SuRt	survival rate
PK	protein kinase	Syn.(= ‡)	Synonym
PKC	protein kinase C	T/C	survival ratio
PLA <sub>2</sub>	phospholipase A <sub>2</sub>	TACE	$\alpha$ -Secretase (a serine protease)
PMA (=TPA)	Phorbol-12-Myristate-13-Acetate	TBARS	ThioBarbituric Acid Reactive Substance assay
PMNs	polymorphonuclear cell	TC <sub>50</sub>	50% cytoToxic Concentration
pNPPase	<i>p</i> -nitrophenylphosphate enzyme	TCM	Traditional Chinese Medicines
POA	pentacyclic oxindole alkaloids	TFP	Trifluoperazine (calmodulin antagonist)
PPase1	Protein serine/threonine Phosphatase	TGF- $\beta_1$	Transforming Growth Factor- $\beta_1$
PRA	Plaque Reduction Assay	TGI	Total Growth Inhibition, concentration at which no growth was observed
PTH	parathyroid hormone	TI	Therapeutic Index (=IC <sub>50</sub> /EC <sub>50</sub> )
PTN	parthenolide	TNF- $\alpha$	Tumor Necrosis Factor- $\alpha$
PTP1B	Protein Tyrosine Phosphatase 1B	TOA	tetracyclic oxindole alkaloids
QR	quinone reductase	topo II	DNA topoisomerase II
RA	rheumatoid arthritis	TP	Thymidine phosphorylase
Raji	EBV-transformed B cell line	tPA	tissue Plasminogen Activator
rat	white rat	TPA (=PMA)	12- <i>O</i> -tetradecanoyl phorbol 13-acetate
rbt	rabbit	TrkA	proto-oncogene TrkA
RDDP	RNA-dependent DNA polymerase	TXA <sub>2</sub>	thromboxane A <sub>2</sub>
RDS	Respiratory Distress Syndrome	TXB <sub>2</sub>	thromboxane B <sub>2</sub>
rel-InRt	relative inhibitive rate (taking the control compound as 100%)	UDP-MurNac	UDP- <i>N</i> -acetylmuramic acid
RM	Relative Mobility	VCAM-1	Vascular Cell Adhesion Molecule-1
RNA	ribonucleic acid	VCR	vincristine
RNase H	inherent ribonuclease H	VEGF	Vascular Endothelial Growth Factor
ROS	reactive oxygen species (they are involved in the genesis of various cancers, arteriosclerosis, rheumatism and ageing)	Veraguensin	veraguensin
RSV	Respiratory Syncytial Virus	VHR DS-PTPase	VHR Dual-Specificity Protein Tyrosine Phosphatase
RT	Reverse Transcriptase	VHR protein	Vaccina open reading-frame H1-Related protein phosphatase
RT-PCR	reverse-transcribed polymerase chain reaction	VP-16	A positive control for cytotoxic assay (Sigma product)
sALT	serum alanine transaminase	VRE	Vancomycin-Resistant <i>Enterococci</i> sp
sAST	serum aspartate transaminase	VSE	Vancomycin-Sensitive <i>Enterococci</i> sp
sc	subcutaneous injection	VSV	Vesicular Stomatitis Virus
SC <sub>50</sub>	Half-maximal radical Scavenging Concentration	ww	wet weight
SC <sub>50</sub>	50% Scavenging Concentration	XTT	sodium 3'-[1-(phenylaminocarbonyl)-3,4-tetrazolium] bis(4-methoxy-6-nitrobenzene)sulfonic acid
ScRt	scavenging rate	†	homonym mark
SDF	Stromal cell-Derived Factor	‡ (=Syn.)	synonym mark
SGOT	serum Glutamic Oxalacetic Transaminase	*	the name is given by the authors of the books
SGPT	serum Glutamic Pyruvic Transaminase		
SHR rat	Spontaneously Hypertensive Rats		
SI	Selective index = cytotoxic CC <sub>50</sub> /target EC <sub>50</sub>		
SI	Selective index = cytotoxic IC <sub>50</sub> /target IC <sub>50</sub>		
SI	Selective index = cytotoxic IC <sub>50</sub> /target MIC		

# Cancer Cell Codes

This set of codes for 270 cancer cells, named as **CCC code**, are defined and tried out in the books for the first time by the authors.

<b>1A9</b>	hmn ovarian cancer (cell).	<b>CaEs-17</b>	hmn esophageal cancer (cell).
<b>212</b>	inducible Ha- <i>ras</i> oncogene transformed from the NIH/3T3 cell line.	<b>CAKI</b>	hmn renal cancer (cell).
<b>308</b>	cultured mouse epidermal cells.	<b>CAKI-1</b>	hmn renal cancer (cell).
<b>3LL</b>	mus Lewis lung cancer (cell).	<b>Calu1</b>	hmn lung cancer (cell).
<b>3PS</b>	mouse leukemia (cell).	<b>Capan1</b>	pancreas cancer (cell).
<b>780-6</b>	renal cancer (cell).	<b>Capan2</b>	pancreas cancer (cell).
<b>9KB</b>	hmn epidermatoid nasopharyngeal carcinoma (cell).	<b>CaSki</b>	hmn cervical carcinoma (cell).
<b>9L</b>	rat glioma (cell).	<b>CEM</b>	leukemia (cell).
<b>9PS</b>	mouse lymphocytic leukemia (cell).	<b>CHAGO</b>	hmn undifferentiated lung cancer (cell).
<b>A2780</b>	hmn ovarian cancer (cell).	<b>CNE</b>	hmn nasopharyngeal carcinoma (cell).
<b>A375</b>	hmn melanoma (cell).	<b>Col1</b>	hmn colorectal cancer (cell).
<b>A431</b>	hmn epidermic cancer (cell).	<b>Col2</b>	hmn colorectal cancer (cell).
<b>A498</b>	hmn renal cancer (cell).	<b>COLO320DM</b>	hmn colorectal cancer (cell).
<b>A549</b>	hmn non-small cell lung cancer (cell).	<b>Colon205</b>	colorectal cancer (cell).
<b>ACHN</b>	hmn renal cancer (cell).	<b>Colon26-L5</b>	mus colorectal cancer (cell).
<b>AGS</b>	gastric adenocarcinoma (cell).	<b>COS-7</b>	monkey kidney cells.
<b>APM1840</b>	hmn leukemia (cell).	<b>CPAE</b>	calf pulmonary arterial endothelial cells.
<b>B16</b>	mouse melanoma (cell).	<b>CT-26</b>	mus colorectal cancer (cell).
<b>B16(F-10)</b>	mouse melanoma (cell).	<b>CTV1</b>	hmn leukemia (cell).
<b>BAEC</b>	bovine aortic endothelial cells.	<b>CXF94L</b>	hmn tumor (cell).
<b>BC</b>	hmn breast cancer (cell).	<b>DLD</b>	hmn colorectal adenocarcinoma (cell).
<b>BC-1</b>	hmn breast cancer (cell).	<b>DLD-1</b>	hmn colorectal adenocarcinoma (cell).
<b>BCA-1</b>	hmn breast cancer (cell).	<b>DMS114</b>	hmn lung cancer (cell).
<b>Bcap37</b>	hmn breast cancer (cell).	<b>DMS273</b>	hmn lung cancer (cell).
<b>Bel7402</b>	hmn liver cancer (cell).	<b>DU145</b>	prostatic cancer (cell).
<b>Bel7405</b>	hmn liver cancer (cell).	<b>EAC</b>	Ehrlich ascites cancer (cell).
<b>BGC823</b>	hmn gastric cancer (cell).	<b>EJ-1</b>	hmn bladder cancer (cell).
<b>BIU87</b>	bladder cancer (cell).	<b>FM3A</b>	mus breast cancer (cell).
<b>BL6</b>	mouse melanoma (cell).	<b>H.Ep.-2</b>	hmn cutis cancer cells in throat.
<b>Bowes</b>	skin cancer cells.	<b>H116</b>	hmn colorectal cancer (cell).
<b>Bre04</b>	hmn breast cancer (cell).	<b>H9</b>	lymphocytes.
<b>BSY1</b>	breast cancer (cell).	<b>HBC4</b>	breast cancer (cell).
<b>BT474</b>	hmn galactophore cancer (cell).	<b>HBC5</b>	breast cancer (cell).
<b>BT549</b>	hmn galactophore cancer (cell).	<b>HCC2998</b>	hmn colorectal cancer (cell).
<b>BXPC3</b>	pancreas cancer (cell).	<b>HCT</b>	hmn colorectal cancer (cell).
<b>C6</b>	rat glioma (cell).	<b>HCT116</b>	hmn colorectal cancer (cell).
<b>CA</b>	hmn liver cancer (cell).	<b>HCT15</b>	hmn colorectal cancer (cell).

**HCT8** hmn colorectal cancer (cell).  
**HEK-293** hmn epithelial kidney cell.  
**HEL** hmn embryonic lung fibrocytes.  
**HeLa** culture cervical epithelial cancer (cell) from Henrietta Lack.  
**HeLa ATCC-17** hmn cervical epithelial cancer (cell).  
**HeLa-S3** hmn cervical epithelial cancer (cell).  
**HELF** normal hmn embryo lung fibroblasts.  
**Hep2** hmn liver cancer (cell).  
**Hep2,2,15** hmn liver cancer (cell) transfected with hepatitis B virus.  
**Hep3B** hmn liver cancer (cell).  
**Hepa** hmn liver cancer (cell).  
**Hepa1c1c7** mus liver cancer (cell).  
**Hepa59T/VGH** hmn liver cancer (cell).  
**HepG2** hmn liver cancer (cell).  
**HEPZ** hmn epithelial cancer (cell).  
**HFF** hmn foreskin fibroblasts.  
**HGF** normal hmn gingival fibroblast cells.  
**HL-60** hmn acute promyelocytic leukemia (cell).  
**HM02** hmn melanoma (cell).  
**HMC-1** hmn leukemic mast cells.  
**HMEC** hmn microvascular endothelial cells.  
**HO-8910** hmn ovarian cancer (cell).  
**HOG.R5** green fluorescent protein (GFP)-based reporter cell.  
**HONE-1** hmn nasopharyngeal carcinoma (cell).  
**HOP-62** non-small cell lung cancer (cell).  
**Hs578T** hmn breast cancer (cell).  
**Hs740T** hmn gastric cancer (cell).  
**Hs742T** hmn breast cancer (cell).  
**Hs756T** hmn gastric cancer (cell).  
**HSC-2** hmn oral squamous cell carcinoma cells.  
**HSG** hmn salivary gland tumor (cell).  
**HT** sarcoma (cell).  
**HT1080** hmn fibrosarcoma (cell).  
**HT29** hmn colorectal cancer (cell).  
**HT3** hmn cervical carcinoma (cell).  
**hTERT-RPE1** hmn telomerase reverse transcriptase-retinal pigment epithelial cells.  
**Huh7** hmn hepatoma (cell).  
**HUVEC** hmn umbilical vein endothelial cell.  
**Jurkat-T** hmn T-cell leukemia (cell).  
**K562** hmn leukemia (cell).  
**K562/ADM** hmn leukemia (cell) of adriamycin-resistant.  
**Kato3** hmn gastric cancer (cell).  
**KB** hmn nasopharyngeal carcinoma (cell).  
**KB15** hmn nasopharyngeal carcinoma (cell).  
**KB16** hmn nasopharyngeal carcinoma (cell).  
**KB3** hmn nasopharyngeal carcinoma (cell).  
**KBV200** MDR nasopharyngeal carcinoma (cell).  
**KB-VIN** vincristine-resistant nasopharyngeal carcinoma (cell).  
**Ketr3** hmn renal cancer (cell).  
**KG-1** hmn leukemia (cell).  
**KM12** hmn colorectal cancer (cell).  
**KM20L2** hmn colorectal cancer (cell).  
**KU-1** hmn bladder cancer (cell).  
**L<sub>1210</sub>** Lymphocytic leukemia (cell).  
**L5178Y** lymphosarcoma (cell).  
**L-6** rat skeletal myoblasts.  
**L<sub>615</sub>** mouse spleen leukemia (cell).  
**L<sub>7212</sub>** mouse leukemia (cell).  
**L-929** fibrosarcoma (cell).  
**LLC** mouse Lewis lung cancer (cell).  
**LMTK** mouse fiber cells.  
**LNCaP** hmn prostatic cancer (cell).  
**LNCaP-FGC** hmn prostatic cancer (cell).  
**LO2** hmn liver cell.  
**LoVo** hmn colorectal cancer (cell).  
**LoVo/Doxo** hmn colorectal cancer cell, drug-resistant subclone.  
**LOX** melanoma (cell).  
**LOX-IMVI** melanoma (cell).  
**LS174T** colorectal cancer (cell).  
**Lu04** hmn lung cancer (cell).  
**Lu1** hmn lung cancer (cell).  
**LXFL529L** hmn large cell lung cancer (cell).  
**M1** mus myelocytic leukemia (cell).  
**M14** melanoma (cell).  
**M4BEU** hmn melanoma (cell).  
**M5076** ovarian sarcoma (cell).  
**Ma7373** mus breast cancer (cell).  
**MALME-3M** melanoma (cell).  
**MBT-2** mus bladder cancer (cell).  
**MCF7** hmn breast cancer (cell).  
**MCF7/6** hmn breast cancer (cell).  
**MCF7/ADR-RES** hmn breast cancer (cell).  
**MCF7-ras** hmn breast cancer (cell).  
**MDA231** hmn breast cancer (cell).  
**MDA-MB-231** hmn breast cancer (cell).  
**MDA-MB-435** hmn breast cancer (cell).  
**MDCK** Madin-Darby Canine.  
**MEL-28** hmn melanoma cell.  
**Meth-A** Meth-A sarcoma (cell).  
**MGe803** hmn gastric adenocarcinoma (cell).  
**MH-60** mus leukemia (cell).  
**MI4** melanoma (cell).  
**MIA-PaCa-2** hmn pancreas cancer (cell).  
**MK1** hmn gastric cancer (cell).  
**MKN1** hmn gastric cancer (cell).  
**MKN28** hmn gastric cancer (cell).  
**MKN45** hmn gastric cancer (cell).  
**MKN7** hmn gastric cancer (cell).  
**MKN74** hmn gastric cancer (cell).  
**MM1** highly invasive clone isolated from parental rat ascites hepatoma AH130 cells.  
**Molt4** hmn lymphoma (cell).  
**Mono-Mac-6** mononuclear cells.  
**MQc80-3** gastric adenocarcinoma (cell).  
**MRC-5** hmn diploid embryonic cells.

**MS301** mus breast cancer (cell).  
**MS310** mus breast cancer (cell).  
**N04** hmn neuroma (cell).  
**NCI-H1417** hmn small cell lung cancer (cell).  
**NCI-H187** hmn small cell lung cancer (cell).  
**NCI-H226** hmn non-small cell lung cancer (cell).  
**NCI-H23** hmn lung cancer (cell).  
**NCI-H460** hmn lung cancer (cell).  
**NCI-H522** hmn lung cancer (cell).  
**NK/LY** ascites cancer (cell).  
**NSCLC-N6** hmn non-small cell lung cancer (cell).  
**NUGC** hmn gastric cancer (cell).  
**NUGC-3** hmn gastric cancer (cell).  
**NUGC-4** hmn gastric cancer (cell).  
**OVCAR-2780** ovarian adenocarcinoma (cell).  
**OVCAR-3** ovarian adenocarcinoma (cell).  
**OVCAR-4** ovarian adenocarcinoma (cell).  
**OVCAR-5** ovarian adenocarcinoma (cell).  
**OVCAR-8** ovarian adenocarcinoma (cell).  
**P1534** mus, transplanted leukemia (cell).  
**P<sub>388</sub>** mouse lymphocytic leukemia (cell).  
**P<sub>388</sub>/ADM** mouse lymphocytic leukemia (cell) of adriamycin-resistant.  
**PACA-2** hmn pancreas cancer (cell) .  
**PANC1** pancreas cancer (cell).  
**PBMC** peripheral blood mononuclear cells.  
**PC12** hmn lung cancer (cell).  
**PC3** hmn prostatic cancer (cell).  
**PC-6** hmn lung cancer (cell).  
**PLC/PRF/5** hmn liver cancer (cell).  
**PSN1** hmn pancreas cancer (cell).  
**PTX10** ovarian cancer cells with  $\beta$ -tubulin mutation.  
**QGY-7703** hmn liver cancer (cell).  
**RAW264.7** mouse macrophages.  
**RBL-2H3** rat basophilic cells.  
**RL33** rbt lung cancer (cell).  
**RPMI-7951** melanoma (cell).  
**RPMI-8226** leukemia (cell).  
**RXF-393** renal cancer (cell).  
**RXF-631L** renal cancer (cell).  
**S<sub>180</sub>** mouse sarcoma (cell).  
**S37** mouse sarcoma (cell).  
**Sca7901** hmn gastric adenocarcinoma (cell).  
**SCL** hmn gastric cancer (cell).  
**SCL-37'6** hmn gastric cancer (cell).  
**SCL-6** hmn gastric cancer (cell).  
**SCL-9** hmn gastric cancer (cell).  
**SF268** hmn brain tumor (cell).  
**SF295** hmn brain tumor (cell).  
**SF539** hmn brain tumor (cell).  
**SGC** hmn gastric cancer (cell).  
**SGC7901** hmn gastric cancer (cell).  
**SiHa** hmn cervical carcinoma (cell).  
**SKBR3** hmn breast cancer (cell).  
**SKCO1** colorectal cancer (cell).  
**SK-MEL** hmn caucasian melanoma (cell).  
**SK-MEL-2** hmn melanoma (cell).  
**SK-MEL-28** hmn melanoma (cell).  
**SK-MEL-5** hmn melanoma (cell).  
**SK-MES-1** bronchogenic carcinoma cell.  
**SK-OV-3** ovarian adenocarcinoma (cell).  
**SMMC-7721** hmn liver cancer (cell).  
**SNB75** hmn brain tumor (cell).  
**SNB78** hmn brain tumor (cell).  
**SNU638** hmn gastric adenocarcinoma (cell).  
**SR** leukemia (cell).  
**St4** gastric cancer (cell).  
**SVR** mouse endothelial cells.  
**SW620** hmn colorectal adenocarcinoma (cell).  
**T24** hmn liver cancer (cell).  
**T24S** hmn bladder cancer (cell).  
**T47D** hmn breast cancer (cell).  
**T98G** hmn caucasian glioblastoma (cell).  
**TK10** renal cancer (cell).  
**Tmolt3** hmn leukemia (cell).  
**U14** mouse cervical carcinoma (cell).  
**U251** brain tumor (cell).  
**U373** caucasian glioblastoma (cell).  
**U4** mouse cervical carcinoma (cell).  
**U-87-MG** caucasian glioblastoma (cell).  
**U937** hmn monocytic leukemia (cell).  
**UACC62** melanoma (cell).  
**UO-31** renal cancer (cell).  
**Vero** green monkey kidney tumour (cell).  
**W<sub>256</sub>** rat Walker sarcoma (cell).  
**WEHI-164** mus fibrosarcoma (cell).  
**WHCO1** hmn esophageal cancer (cell).  
**WI-38** hmn lung fibrocyte (normal hmn diploid fibrocyte).  
**WiDr** colorectal adenocarcinoma (cell).  
**Wish** transformed epithelial tumour (cell).  
**XF-498** hmn tumor (cell).  
**ZR-75-1** hmn breast cancer (cell).





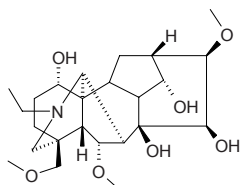
# **Volume 4 Isolated Compounds (N-S)**



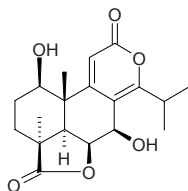
## N

**15228 Nagarine**

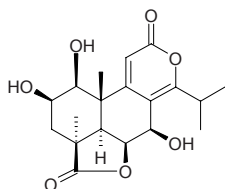
15-Episenbusine C; 15-Epifuziline; Crassicaulisine; 3-Deoxycrassicaulidine; Bullatine F [80665-73-2] C<sub>24</sub>H<sub>39</sub>NO<sub>7</sub> (453.58). Crystals (Me<sub>2</sub>CO), mp 190~191°C, [α]<sub>D</sub><sup>21</sup> = +20.4° (c = 0.88, CHCl<sub>3</sub>). Source: CU JING WU TOU *Aconitum crassicaule*, XIAO BAI CHENG *Aconitum nagarum* var. *heterotrichum* [Syn. *Aconitum bullatifolium*]. Ref: 2595, 2596.

**15229 Nagilactone A**

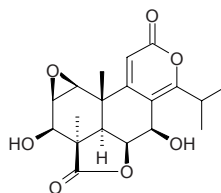
[19891-50-0] C<sub>19</sub>H<sub>24</sub>O<sub>6</sub> (348.40). mp 305°C (sub). Pharm: Plant growth regulator (pea, 10 μmol/L). Source: DUO SUI LUO HAN SONG SHI *Podocarpus polystachyus*, FEI LV BIN LUO HAN SONG *Podocarpus philippinensis*, ZHU BAI *Myrica nagi* [Syn. *Podocarpus nagi*] (in 1968, the compound was isolated from the plant by Y.Hayahi et al.)<sup>[5505]</sup>. Ref: 5, 658, 1521, 5505.

**15230 Nagilactone B**

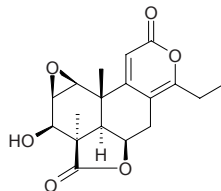
[19891-51-1] C<sub>19</sub>H<sub>24</sub>O<sub>7</sub> (364.40). mp 258~261°C (dec). Pharm: Cytotoxic (cultured Kichita sarcoma cells *in vitro*, IC<sub>50</sub> = 1.72 μmol/L); plant growth regulator (pea, 10 μmol/L). Source: ZHU BAI *Myrica nagi* [Syn. *Podocarpus nagi*] (in 1968 the compound was isolated from the plant by Y.Hayahi, et al.)<sup>[5505]</sup>. Ref: 5, 658, 1521, 5505.

**15231 Nagilactone C**

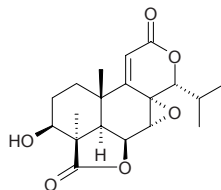
[24338-53-2] C<sub>19</sub>H<sub>22</sub>O<sub>7</sub> (362.38). mp 325°C, 290°C (dec). Pharm: Antineoplastic (mus P<sub>388</sub>, *in vivo*, 40 mg/kg, biotic prolonged rate = 45%); cytotoxic (cultured Kichita sarcoma cells *in vitro*, IC<sub>50</sub> = 2.25 μmol/L); larvicide (larva of housefly and apple moth); plant growth regulator (pea, 10 μmol/L). Source: GAO SHAN LUO HAN SONG *Podocarpus nivalis*, HA SHI LUO HAN SONG *Podocarpus hallii*, LUO HAN SONG SHI *Podocarpus macrophyllus*, PU ER DI LUO HAN SONG *Podocarpus purdieana*, YUN WU LUO HAN SONG *Podocarpus nubigenus*, ZHU BAI *Myrica nagi* [Syn. *Podocarpus nagi*] (in 1968, the compound was isolated from the plant by Y.Hayahi et al.)<sup>[5505]</sup>. Ref: 5, 6, 658, 1521, 5505.

**15232 Nagilactone D**

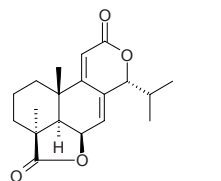
[19891-53-3] C<sub>18</sub>H<sub>20</sub>O<sub>6</sub> (332.36). mp 265~266°C (dec). Pharm: Cytotoxic (cultured Kichita sarcoma cells *in vitro*, IC<sub>50</sub> = 0.332 μmol/L); pesticide (larva, pupa and adult insect of housefly); plant growth regulator (pea, 10 μmol/L). Source: ZHU BAI *Myrica nagi* [Syn. *Podocarpus nagi*] (in 1968, the compound was isolated from the plant by Y.Hayahi, et al.)<sup>[5505]</sup>. Ref: 5, 658, 1521, 5505.

**15233 Nagilactone E**

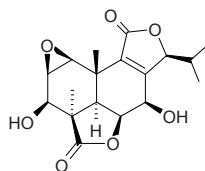
[36895-12-2] C<sub>19</sub>H<sub>24</sub>O<sub>6</sub> (348.40). Pharm: Antineoplastic (mus P<sub>388</sub>, 20 mg/kg, ip); cytotoxic (cultured Kichita sarcoma cells *in vitro*, IC<sub>50</sub> = 3.6 μmol/L); pesticide (housefly); plant growth regulator (10~100 μmol/L). Source: LUO HAN SONG SHI *Podocarpus macrophyllus*, *Podocarpus* sp. Ref: 5, 658, 1521.

**15234 Nagilactone F**

[36912-00-2] C<sub>19</sub>H<sub>24</sub>O<sub>4</sub> (316.40). Pharm: Cytotoxic (cultural Kichita sarcoma cells *in vitro*); plant growth regulator (10~100 μmol/L). Source: LUO HAN SONG SHI *Podocarpus macrophyllus*. Ref: 5, 6, 658, 1521.

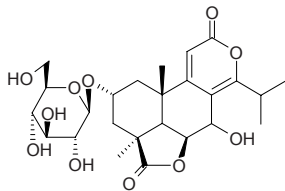
**15235 Nagilactone J**

C<sub>18</sub>H<sub>22</sub>O<sub>7</sub> (350.37). Needles (MeOH), mp 310°C (dec). Source: ZHU BAI GEN *Myrica nagi* [Syn. *Podocarpus nagi*]. Ref: 2597.

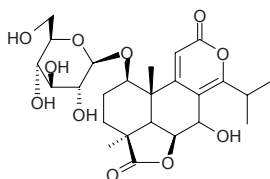


**15236 Nagilactoside A**

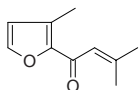
$C_{25}H_{34}O_{11}$  (510.54). Source: ZHU BAI GEN *Myrica nagi* [Syn. *Podocarpus nagi*]. Ref: 2598.

**15237 Nagilactoside B**

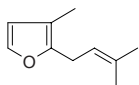
$C_{25}H_{34}O_{11}$  (510.54). Source: ZHU BAI GEN *Myrica nagi* [Syn. *Podocarpus nagi*]. Ref: 2599.

**15238 Naginataketone**

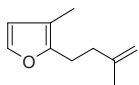
[6138-88-1]  $C_{10}H_{12}O_2$  (164.21). bp 116~119°C/20mmHg. Source: BAN BIAN SU *Elsholtzia ciliata*, HUI HUI SU GENG *Perilla frutescens* var. *crispa*, JIAN ZI SU YE *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*]. Ref: 6, 660, 1521.

**15239  $\alpha$ -Naginatene**

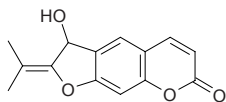
[15186-51-3]  $C_{10}H_{14}O$  (150.22). Source: BAN BIAN SU *Elsholtzia ciliata*. Ref: 6.

**15240  $\beta$ -Naginatene**

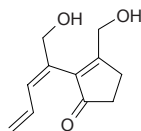
$C_{10}H_{14}O$  (150.22). Source: BAN BIAN SU *Elsholtzia ciliata*. Ref: 6.

**15241 Nakhsmyrin**

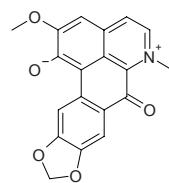
[119617-29-7]  $C_{14}H_{12}O_4$  (244.25). Source: *Smyrniopsis aucheri*. Ref: 2701, 5502.

**15242 Nakienone A**

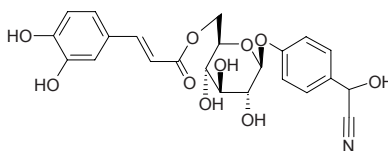
[161407-85-8]  $C_{11}H_{14}O_3$  (194.23). Pharm: Cytotoxic (KB ED<sub>50</sub> = 5  $\mu$ g/mL, HCT116 ED<sub>50</sub> = 20  $\mu$ g/mL). Source: *Synechocytis* sp. Ref: 2600.

**15243 Nandazurine**

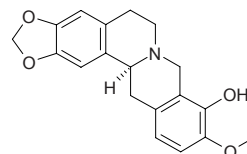
[49679-20-1]  $C_{19}H_{13}NO_5$  (335.32). mp 250~251°C. Source: NAN TIAN ZHU GEN *Nandina domestica*, NAN TIAN ZHU GENG *Nandina domestica*. Ref: 6, 1521.

**15244 Nandinin**

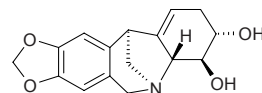
$C_{23}H_{23}NO_{10}$  (473.44). Source: NAN TIAN ZHU YE *Nandina domestica*. Ref: 2602.

**15245 Nandinine**

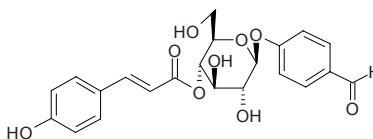
[572-76-9]  $C_{19}H_{19}NO_4$  (325.37). mp 195~196°C,  $[\alpha]_D = +303^\circ$  (CHCl<sub>3</sub>),  $[\alpha]_D = +298^\circ$  (EtOH). Source: NAN TIAN ZHU ZI *Nandina domestica*, NAN TIAN ZHU GEN *Nandina domestica*. Ref: 6, 1521.

**15246 Nangustine**

$C_{16}H_{17}NO_4$  (287.32). White solid, mp 261°C,  $[\alpha]_D^{20} = -69.6^\circ$ . Source: WU KE LAN XIA YE SHUI XIAN *Narcissus angustifolius*. Ref: 1978.

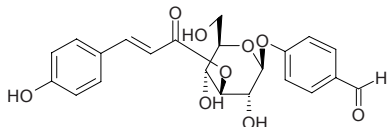
**15247 Nantenoside A**

$C_{22}H_{22}O_9$  (430.42). Source: NAN TIAN ZHU YE *Nandina domestica*. Ref: 2603.

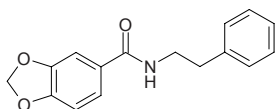


**15248 Nantenoside B**

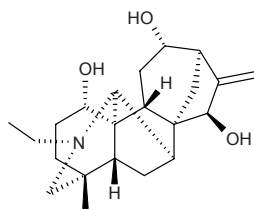
$C_{22}H_{22}O_9$  (430.42). Source: NAN TIAN ZHU YE *Nandina domestica*. Ref: 2603.

**15249 Nantoamide**

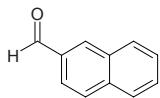
$C_{16}H_{15}NO_3$  (269.30). Colorless syrup. Pharm: Anti-HIV (inhibits HIV replication, H9 lymphocytic cells,  $IC_{50}$  (concentration that inhibits uninfected H9 cell growth by 50%) > 25  $\mu\text{g/mL}$ ,  $EC_{50}$  no suppression, TI no suppression, control AZT,  $IC_{50}$  = 500  $\mu\text{g/mL}$ ,  $EC_{50}$  = 0.0007  $\mu\text{g/mL}$ , TI = 710 000); cytotoxic (hmn cancer lines NUGC-3,  $IC_{50}$  > 20  $\mu\text{g/mL}$ , hmn cancer lines HONE-1,  $IC_{50}$  > 20  $\mu\text{g/mL}$ , hmn cancer lines A549,  $EC_{50}$  > 20  $\mu\text{g/mL}$ , hmn cancer lines MCF7,  $EC_{50}$  > 20  $\mu\text{g/mL}$ ). Source: NAN TOU QIU HAI TANG *Begonia nantoensis* (rhizome). Ref: 4267.

**15250 Napelline**

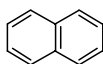
[5008-52-6]  $C_{22}H_{33}NO_3$  (359.51). Crystals,  $+1H_2O$ , mp 117–118.5°C,  $[\alpha]_D^{21} = -13^\circ$  (MeOH). Pharm: Antihypertensive (cat, brief action). Source: OU WU TOU *Aconitum napellus*, DUO GEN WU TOU *Aconitum karakolicum*. Ref: 658, 1521.

**15251  $\beta$ -Naphthaldehyde**

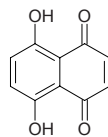
[66-99-9]  $C_{11}H_8O$  (156.19). mp 59°C. Source: WU MU XIE *Diospyros ebenum*. Ref: 6.

**15252 Naphthalene**

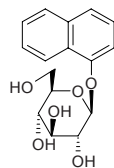
[91-20-3]  $C_{10}H_8$  (128.18). Source: FANG FENG *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*], XI XIN *Asarum sieboldii*. Ref: 2.

**15253 Naphthazarin**

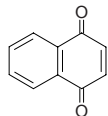
5,8-Dihydroxy-1,4-naphthoquinone [475-38-7]  $C_{10}H_6O_4$  (190.16). Pharm: Contracts blood vessels (inhibits ACh-induced relaxation on intact thoracic aorta,  $IC_{50} = (0.29 \pm 0.04) \mu\text{mol/L}$ , 1,4-Naphthoquinone,  $IC_{50} = (1.50 \pm 0.17) \mu\text{mol/L}$ )<sup>[4916]</sup>; molluscicide (toxic to shellfish). Source: DONG BEI HU TAO *Juglans mandshurica* var. *sieboldiana*, *Macrotomia euchroma* (root), XIN ZANG JIA ZI CAO *Arnebia euchroma* (root). Ref: 658, 4916.

**15254 1-Naphthol- $\beta$ -D-glucopyranoside**

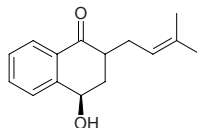
$C_{16}H_{18}O_6$  (306.32). Source: HAI ZHOU GU SUI BU *Davallia mariesii*. Ref: 2604.

**15255 1,4-Naphthoquinone**

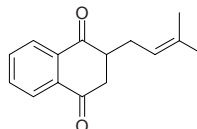
$C_{10}H_6O_2$  (158.16). Source: HU TAO REN *Juglans regia*, ZHI JIA HUA YE *Lawsonia inermis*. Ref: 2605, 2606.

**15256 Naphthoquinone I**

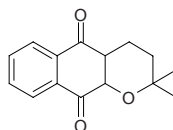
$C_{15}H_{18}O_2$  (230.31). Source: ZI MU *Catalpa ovata*. Ref: 6.

**15257 Naphthoquinone II**

$C_{15}H_{16}O_2$  (228.29). Source: ZI MU *Catalpa ovata*. Ref: 6.

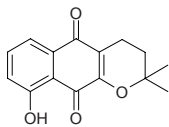
**15258 Naphthoquinone III**

$C_{15}H_{16}O_3$  (244.29). Source: ZI MU *Catalpa ovata*. Ref: 6.

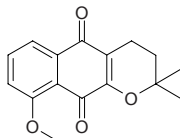


**15259 Naphthoquinone IV**

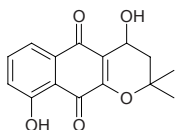
$C_{15}H_{14}O_4$  (258.28). Source: ZI MU *Catalpa ovata*. Ref: 6.

**15260 Naphthoquinone V**

$C_{16}H_{16}O_4$  (272.30). Source: ZI MU *Catalpa ovata*. Ref: 6.

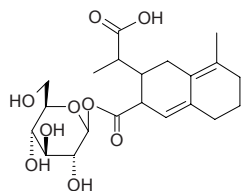
**15261 Naphthoquinone VI**

$C_{15}H_{14}O_5$  (274.28). Source: ZI MU *Catalpa ovata*. Ref: 6.

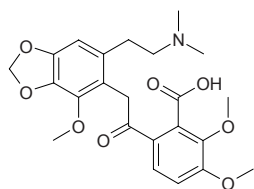
**15262 Napiferoside**

4,9-Dien-eudesmine-13,15-dicarboxylic acid-15- $\beta$ -D-glucopyranoside

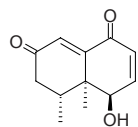
$C_{21}H_{30}O_9$  (426.47). Amorphous powder mp 176–178°C. Source: YUAN JING HUAN YANG SHEN *Crepis napifera*. Ref: 854.

**15263 Narceine**

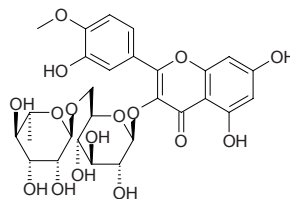
[131-28-2]  $C_{23}H_{27}NO_8$  (445.47). mp 145.2°C. Pharm: Antitussive; antihypertensive; promotes intestinal motion; respiratory stimulant. Source: YING SU *Papaver somniferum*, YA PIAN *Papaver somniferum*. Ref: 6, 658.

**15264 Narchinol A**

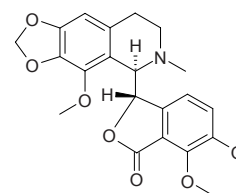
[38226-98-1]  $C_{12}H_{14}O_3$  (206.24). Yellow Crystals (EtOAc), mp 146–148°C. Source: GAN SONG *Nardostachys chinensis*. Ref: 2607.

**15265 Narcissin**

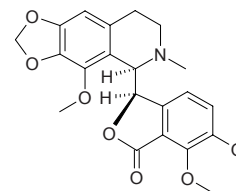
[604-80-8]  $C_{28}H_{32}O_{16}$  (624.56). mp 174°C. Source: GAN CAO *Glycyrrhiza uralensis*, SHUI XIAN HUA *Narcissus tazetta* var. *chinensis*. Ref: 6, 231, 660.

**15266  $\alpha$ -Narcotine**

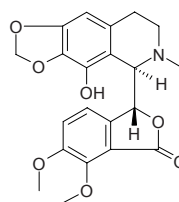
[128-62-1]  $C_{22}H_{23}NO_7$  (413.43). mp 176°C. Pharm: Antispasmodic; non-addictive antitussive (used in treatment of paroxysmal cough); LD<sub>50</sub> (mus, iv) = 83mg/kg. Source: LI CHUN HUA *Papaver commutatum* [Syn. *Papaver rhoeas*], TIAN CHENG *Citrus sinensis*, YA PIAN *Papaver somniferum*, YING SU *Papaver somniferum*, YING SU KE *Papaver somniferum*. Ref: 6, 658, 660.

**15267  $\beta$ -Narcotine**

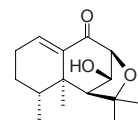
$C_{22}H_{23}NO_7$  (413.43). Source: YA PIAN *Papaver somniferum*. Ref: 660.

**15268 Narcotoline**

[521-40-4]  $C_{21}H_{21}NO_7$  (399.40). mp 202°C. Pharm: Antispasmodic; respiratory stimulant. Source: YA PIAN *Papaver somniferum*, YING SU *Papaver somniferum*, YING SU KE *Papaver somniferum*. Ref: 6, 658.

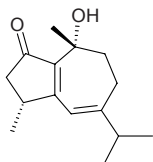
**15269 Nardofuran**

[42438-76-6]  $C_{15}H_{22}O_3$  (250.34). Oil. Source: GAN SONG *Nardostachys chinensis*. Ref: 2608.

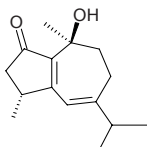


**15270 Nardoguaianone J**

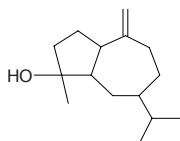
(4*R*,10*R*)-10-Hydroxyguaia-1(5),6-dien-2-one C<sub>15</sub>H<sub>22</sub>O<sub>2</sub> (234.34). Colorless oil,  $[\alpha]_D^{26} = -34.1^\circ$  ( $c = 0.26$ , MeOH). Source: GAN SONG *Nardostachys chinensis*. Ref: 2007.

**15271 Nardoguaianone K**

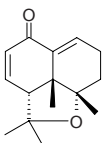
(4*R*,10*S*)-10-Hydroxyguaia-1(5),6-dien-2-one C<sub>15</sub>H<sub>22</sub>O<sub>2</sub> (234.34). Colorless oil,  $[\alpha]_D^{26} = +210.3^\circ$  ( $c = 0.53$ , MeOH). Source: GAN SONG *Nardostachys chinensis*. Ref: 2007.

**15272 Nardol**

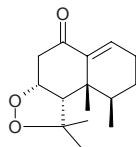
[6090-27-3] C<sub>15</sub>H<sub>26</sub>O (222.37). bp 120~125°C/0.5mmHg. Source: GAN SONG *Nardostachys chinensis*. Ref: 6.

**15273 Nardonoxide**

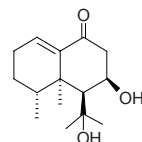
[111514-48-8] C<sub>15</sub>H<sub>20</sub>O<sub>2</sub> (232.33). Crystals (MeOH), mp 62~64°C,  $[\alpha]_D^{20} = -85^\circ$  ( $c = 0.65$ , CHCl<sub>3</sub>). Source: GAN SONG *Nardostachys chinensis*. Ref: 2609.

**15274 Nardosinone**

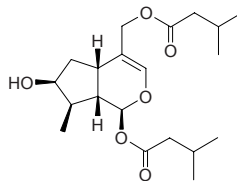
C<sub>15</sub>H<sub>22</sub>O<sub>3</sub> (250.34). mp 108~110°C. Source: GAN SONG *Nardostachys chinensis*. Ref: 6.

**15275 Nardosinonediol**

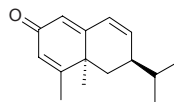
[20489-11-6] C<sub>15</sub>H<sub>24</sub>O<sub>3</sub> (252.36). Crystals (MeOH aq.), mp 141~143°C. Source: GAN SONG *Nardostachys chinensis*. Ref: 2608.

**15276 Nardostachin**

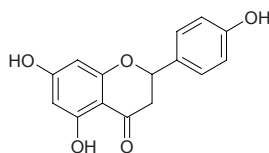
[114687-82-0] C<sub>21</sub>H<sub>32</sub>O<sub>6</sub> (368.47). Yellow oil,  $[\alpha]_D = -80.9^\circ$  ( $c = 0.4$ , CHCl<sub>3</sub>);  $[\alpha]_D^{23} = -80.9^\circ$  ( $c = 0.4$ , MeOH). Source: GAN SONG *Nardostachys chinensis*, BIAN DOU CAI YE BAI JIANG *Patrinia saniculaefolia* (whole herb). Ref: 2610, 4341.

**15277 Nardostachone**

C<sub>15</sub>H<sub>20</sub>O (216.33). bp 130~135°C/0.09mmHg. Source: GAN SONG *Nardostachys chinensis*. Ref: 6, 2781.

**15278 (±)-Naringenin**

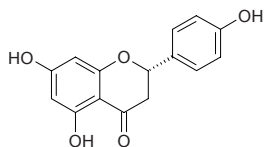
C<sub>15</sub>H<sub>12</sub>O<sub>5</sub> (272.26). Pharm: Vasorelaxant; antioxidant<sup>†</sup>; cyclonucleotide phosphodiesterase inhibitor. Source: *Citrus* spp. (fruit). Ref: 3371.



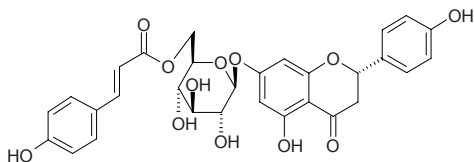


**15279 Naringenin**

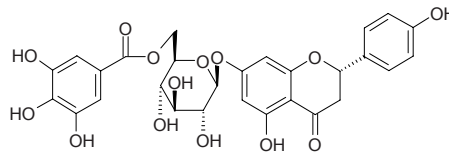
5,7,4'-Trihydroxyflavanone; (2*S*)-Naringenin [480-41-1] C<sub>15</sub>H<sub>12</sub>O<sub>5</sub> (272.26). mp 251°C. **Pharm:** Antibacterial (*Staphylococcus aureus*, *Bacillus coli*, *Bacillus dysenteriae* and *B. Typhosus*); antineoplastic (rat L<sub>1210</sub> and sarcoma); cytotoxic (HSC-2 cells, CC<sub>50</sub> = 0.55mmol/L; HGF, CC<sub>50</sub> > 0.74mmol/L)<sup>[3025]</sup>; antifungal (TLC bioautographic assay, *Cladosporium cladosporioides*, MA = 10µg, control Miconazole, MA = 1.0µg; *Cladosporium sphaerospermum*, MA = 5.0µg, Miconazole, MA = 1.0µg)<sup>[3440]</sup>; antihepatotoxic; anti-inflammatory (rat, wool-ball model, 20mg/(kg·d), ip); antispasmodic; choleric (bile secretion promotor); induces nodulin gene expression of symbion in *Rhizobium leguminosarum* and *Pisum sativum*; antioxidant; platelet aggregation inhibitor; 5-HT inhibitor; histidine decarboxylase inhibitor; anti-inflammatory (macrophages, COX-2 inhibitor, inhibits COX-2 expression)<sup>[4415]</sup>; passive cutaneous anaphylaxis inhibitor (inhibits IgE-induced β-hexosaminidase release from RBL-2H3 cells, IC<sub>50</sub> = (29±1)µmol/L, control Azelastine, IC<sub>50</sub> = (35±2)µmol/L; PCA reaction inhibitor, 5mg/kg ip, InRt = (70±2)%<sup>[5041]</sup>); aromatase inhibitor (*in vitro*, IC<sub>50</sub> = 17µmol/L; control Aminoglutethimide, IC<sub>50</sub> = 6.4µmol/L)<sup>[3090]</sup>. **Source:** CU YE MAI HU JIAO *Piper crassinervium*, DU XIAN ZI *Anacardium occidentale*, GOU JI *Cudrania cochinchinensis* (root: yield = 0.0010%dw)<sup>[3025]</sup>, GOU SHU *Broussonetia papyrifera*<sup>[3090]</sup>, HU LU BA *Trigonella foenum-graecum*, HUA ZHOU YOU *Citrus grandis* var. *Tomentosa* (closing ripe exocarp: mean content = 0.044%)<sup>[5508]</sup>, LENG ZHI HU JI SHENG *Viscum angulatum* (whole herb: yield = 0.00090%dw)<sup>[4626]</sup>, PU ER CHA *Camellia sinensis* var. *assamica*, RI BEN YING HUA *Prunus yedoensis*, SHA SHENG LA JU *Helichrysum arenarium*, SHAN TAO JING BAI PI *Prunus davidiana*, SHAN TAO ZHI *Prunus davidiana*, SHAN ZHU ZI *Garcinia multiflora* (stem: yield = 0.00007%dw)<sup>[4708]</sup>, TAO HUA *Prunus persica*, TAO JING BAI PI *Prunus persica*, TAO ZHI *Prunus persica*, TAOYE *Prunus persica*, WU HE MI JU *Citrus unshiu* (pericarp), WU MEI *Prunus mume*, XIA YE XIANG PU *Typha angustifolia*, YOU<sup>(4)</sup> *Citrus grandis* (closing ripe exocarp: mean content = 0.043%)<sup>[5508]</sup>, YOU GAN YE *Phyllanthus emblica* (branch and leaf), *Artemisia* sp., *Dahlia* sp., occurs in many plants. **Ref:** 4, 6, 581, 615, 658, 660, 3025, 3090, 3440, 4205, 4415, 4626, 4708, 5041, 5508.

**15280 Naringenin 7-O-(6''-O-trans-p-coumaroyl)-glucoside**

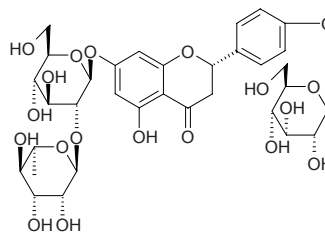
C<sub>30</sub>H<sub>28</sub>O<sub>12</sub> (580.55). **Source:** YOU GAN YE *Phyllanthus emblica* (leaf and branch). **Ref:** 4205.

**15281 Naringenin 7-O-(6''-O-galloyl)-glucoside**

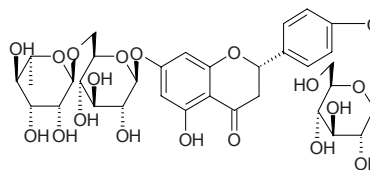
C<sub>28</sub>H<sub>26</sub>O<sub>14</sub> (586.51). **Source:** YOU GAN YE *Phyllanthus emblica* (leaf and branch). **Ref:** 4205.

**15282 Naringenin-4'-glucoside-7-neohesperidoside**

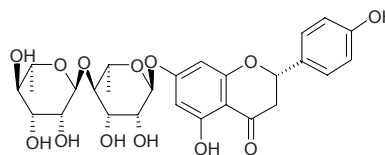
C<sub>33</sub>H<sub>42</sub>O<sub>19</sub> (742.69). **Source:** YOU<sup>(4)</sup> *Citrus grandis*. **Ref:** 6.

**15283 Naringenin-4'-glucoside-7-rutinoside**

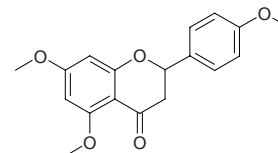
C<sub>33</sub>H<sub>42</sub>O<sub>19</sub> (742.69). **Source:** TIAN CHENG *Citrus sinensis*. **Ref:** 6.

**15284 Naringenin-7-O-α-L-rhamnosyl(1→4)-rhamnoside**

C<sub>27</sub>H<sub>32</sub>O<sub>13</sub> (564.55). **Source:** ZI WEI JING YE *Campsis grandiflora*. **Ref:** 2611.

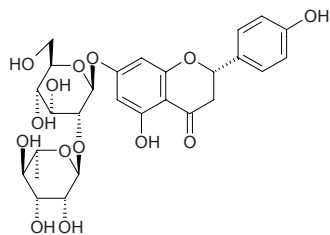
**15285 Naringenin trimethyl ether**

5,7,4'-Trimethoxyflavanone C<sub>18</sub>H<sub>18</sub>O<sub>5</sub> (314.34). Prisms (*n*-hexane–EtOAc), mp 124°C, mp 123.5~124.5°C. **Source:** CHANG YE GE NA XIANG *Goniothalamus gardneri* (aerial parts). **Ref:** 5096.

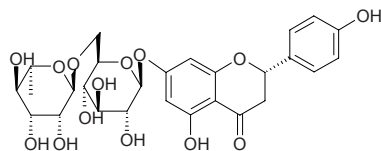


**15286 Naringin**

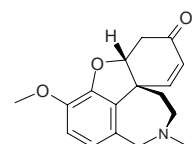
Aurantiin [10236-47-2]  $C_{27}H_{32}O_{14}$  (580.55). mp 82°C, 171°C. **Pharm:** Antibacterial (*Staphylococcus aureus*, *Bacillus coli*, *Bacillus dysenteriae* and *B. typhosus*); anti-inflammatory (mus, ip, swollen foot caused by formaldehyde, ED = 100mg/kg, rat, sc, ED = 100mg/kg); antiviral (vesicular stomatitis virus, 200 $\mu$ g/mL); bitter principle; aldose reductase inhibitor (rat eye lens, 100 $\mu$ mol/L, InRt = 80%); passive cutaneous anaphylaxis inhibitor (inhibits IgE-induced  $\beta$ -hexosaminidase release from RBL-2H3 cells,  $IC_{50}$  > 500 $\mu$ mol/L, control Azelastine,  $IC_{50}$  = (35 $\pm$ 2) $\mu$ mol/L; PCA reaction inhibitor, 20mg/kg orl, InRt = (79.2 $\pm$ 7.4)%<sup>[5041]</sup>). **Source:** GOU JU *Poncirus trifoliata*, GOU JU ZHI KE *Poncirus trifoliata*, GOU JU ZHI SHI *Poncirus trifoliata*, GU SUI BU *Drynaria fortunei* (rhizome: content scope = 0.179%–0.540%<sup>[5508]</sup>), GUAN ZHONG *Dryopteris crassirhizoma*, HUA ZHOU YOU *Citrus grandis* var. *Tomentosa* (closing ripe exocarp: content = 1.55%<sup>[5508]</sup>), JU PI *Citrus reticulata* (closing ripe exocarp: content = 0.32%<sup>[5508]</sup>), NING MENG *Citrus limon*, NING MENG PI *Citrus limon*, PU TAO YOU *Citrus paradisi*, QIU SUI QIAN JIN BA *Flemingia strobilifera*, TU XIANG RU *Origanum vulgare*, WU HE MI JU *Citrus unshiu* (pericarp), YOU<sup>(4)</sup> *Citrus grandis* (closing ripe exocarp: mean content = 3.12%<sup>[5508]</sup>), ZHI KE *Citrus aurantium* (closing ripe exocarp: content = 6.98%<sup>[5508]</sup>), ZHI SHI *Citrus aurantium* (closing ripe exocarp: content = 1.05%<sup>[5508]</sup>), ZHU LUAN *Citrus decumana*, *Adiantum* sp. **Ref:** 2, 4, 658, 660, 5041, 5501, 5508.

**15287 Narirutin**

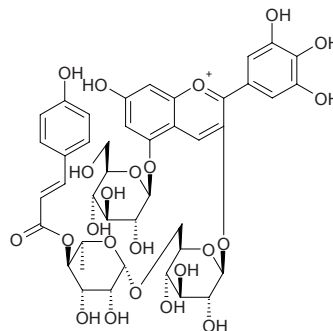
[14259-46-2]  $C_{27}H_{32}O_{14}$  (580.55). mp 160–165°C. **Pharm:** Stimulates egg deposition (*Papilio xuthus*). **Source:** TIAN CHENG *Citrus sinensis*, *Citrus* sp. **Ref:** 6, 658.

**15288 Narwedine**

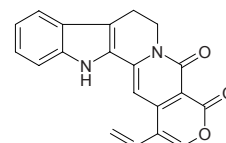
[510-77-0]  $C_{17}H_{19}NO_3$  (285.36). **Pharm:** Enhances amplitude of contraction and reduces frequency of heart beat; enhances respiration. **Source:** GUANG XI SHI SUAN *Lycoris guangxiensis*, XUE HUA LIAN *Galanthus nivalis*. **Ref:** 658.

**15289 Nasunin**

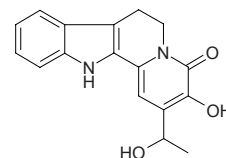
Violanin; Delphanin [28463-30-1]  $C_{42}H_{47}O_{23}$  (919.83). mp 179–180°C. **Source:** QIE ZI *Solanum melongena*. **Ref:** 6.

**15290 Nauclealine A**

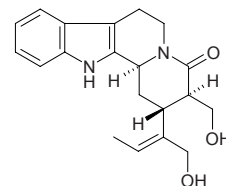
3,14,15,16,17,20-Hexadehydro-16-ethenylxayohimban-19,21-dione  $C_{20}H_{14}N_2O_3$  (330.35). Yellowish amorphous solid, mp 267–268°C (MeOH). **Source:** DONG FANG WU TAN *Nauclea orientalis* (bark). **Ref:** 3074.

**15291 Nauclealine B**

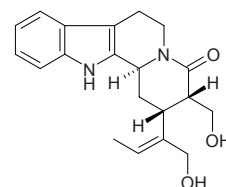
Indolo[2,3-*a*]quinolizine-2-(1-hydroxyethyl)-3-hydroxy-4,6,7,12-tetrahydro-4-one  $C_{17}H_{16}N_2O_3$  (296.33). Yellowish amorphous solid, mp 222–223°C (MeOH),  $[\alpha]_D^{22} = -11.4^\circ$  ( $c = 0.07$ , MeOH). **Source:** DONG FANG WU TAN *Nauclea orientalis* (bark). **Ref:** 3074.

**15292 Naucleamide A**

$C_{20}H_{24}N_2O_3$  (340.43). **Source:** KUAN YE WU TAN *Nauclea latifolia* (bark and wood: yield = 0.0016%). **Ref:** 4303.

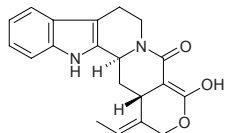
**15293 Naucleamide B**

$C_{20}H_{24}N_2O_3$  (340.43). **Source:** KUAN YE WU TAN *Nauclea latifolia* (bark and wood: yield = 0.0016%). **Ref:** 4303.

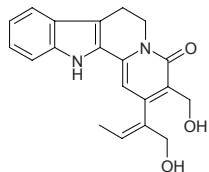


**15294 Naucleamide C**

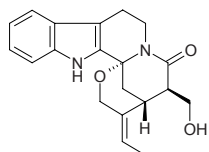
$C_{20}H_{20}N_2O_3$  (336.39). Source: KUAN YE WU TAN *Nauclea latifolia* (bark and wood; yield = 0.0012%). Ref: 4303.

**15295 Naucleamide D**

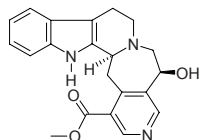
$C_{20}H_{20}N_2O_3$  (336.39). Source: KUAN YE WU TAN *Nauclea latifolia* (bark and wood; yield = 0.0012%). Ref: 4303.

**15296 Naucleamide E**

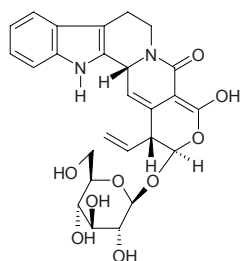
$C_{20}H_{22}N_2O_3$  (338.41). Source: KUAN YE WU TAN *Nauclea latifolia* (bark and wood; yield = 0.0008%). Ref: 4303.

**15297 Nauclechine**

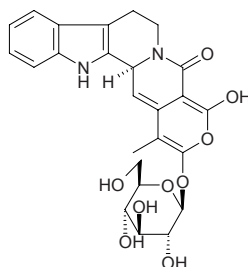
[38940-73-7]  $C_{21}H_{21}N_3O_3$  (363.42). Crystals (MeOH), mp = 108–114°C. Pharm: Antibacterial (*in vitro*: *Staphylococcus aureus*, *Bacillus subtilis*, *Bacillus coli*, *Bacillus diphtheriae*, *Streptococcus* sp., *Streptobacillus* sp., *Salmonella* sp., *Bacillus proteus*, *Bacillus lactis*, *Klebsiella pneumoniae*); antileishmanial; antifungal (*Aspergillus niger*). Source: DI SHI WU TAN *Nauclea diderrichii*, KUAN YE WU TAN *Nauclea latifolia*. Ref: 2178, 1521.

**15298 Nauclecoside**

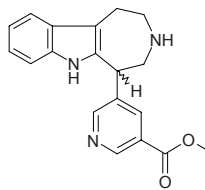
[121880-11-3]  $C_{26}H_{28}N_2O_9$  (512.52). Colorless granular crystals, mp > 310°C,  $[\alpha]_D^{25} = -149^\circ$  ( $c = 0.1$ , 50% EtOH). Pharm: Antibacterial (*in vitro*: *Staphylococcus aureus*, *Bacillus subtilis*, *Bacillus coli*, *Bacillus diphtheriae*, *Streptococcus* sp., *Salmonella* sp., *Bacillus proteus*, *Aspergillus niger*, *Bacillus lactis*, *Klebsiella* sp.); antileishmanial. Source: DAN MU *Nauclea officinalis*. Ref: 118, 2178.

**15299 Nauclecosidine**

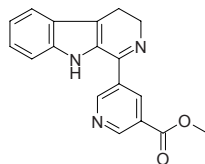
[121880-13-5]  $C_{25}H_{26}N_2O_9$  (498.49). Acicular crystals, mp 200–202°C. Source: DAN MU *Nauclea officinalis*. Ref: 118, 1521.

**15300 Nauclederine**

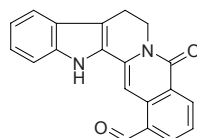
[38940-72-6]  $C_{19}H_{19}N_3O_2$  (321.38). mp 102–124°C,  $[\alpha]_D^{25} = +0^\circ$  ( $c = 3.3$ ,  $CHCl_3$ ). Pharm: Antibacterial (*in vitro*: *Staphylococcus aureus*, *Bacillus subtilis*, *Bacillus coli*, *Bacillus diphtheriae*, *Streptococcus* sp., *Streptobacillus* sp., *Salmonella* sp., *Bacillus proteus*, *Bacillus lactis*, *Klebsiella pneumoniae*); antileishmanial; antifungal (*Aspergillus niger*). Source: DI SHI WU TAN *Nauclea diderrichii*. Ref: 2178, 1521.

**15301 Naucedine**

[26238-84-6]  $C_{18}H_{15}N_3O_2$  (305.34). Yellowish needles (MeOH). mp 84–90°C. Pharm: Antibacterial (*in vitro*: *Staphylococcus aureus*, *Bacillus subtilis*, *Bacillus coli*, *Bacillus diphtheriae*, *Streptococcus* sp., *Streptobacillus* sp., *Salmonella* sp., *Bacillus proteus*, *Bacillus lactis*, *Klebsiella pneumoniae*); antileishmanial; antifungal (*Aspergillus niger*). Source: DI SHI WU TAN *Nauclea diderrichii*. Ref: 2178, 1521.

**15302 Naucleficine**

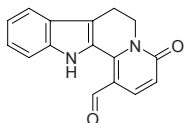
[96400-54-3]  $C_{20}H_{14}N_2O_2$  (314.35). mp 290–291°C. Pharm: Antibacterial (*in vitro*: *Staphylococcus aureus*, *Bacillus subtilis*, *Bacillus coli*, *Bacillus diphtheriae*, *Streptococcus* sp., *Streptobacillus* sp., *Salmonella* sp., *Bacillus proteus*, *Bacillus lactis*, *Klebsiella pneumoniae*); antileishmanial; antifungal (*Aspergillus niger*). Source: DAN MU *Nauclea officinalis*. Ref: 2178, 1521.



**15303 Nauclefidine**

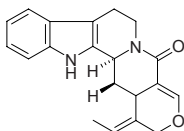
[96400-52-1] C<sub>16</sub>H<sub>12</sub>N<sub>2</sub>O<sub>2</sub> (264.29). Orange-yellow crystals, mp 307~309°C.

**Pharm:** Antibacterial (*in vitro*: *Staphylococcus aureus*, *Bacillus subtilis*, *Bacillus coli*, *Bacillus diphtheriae*, *Streptococcus* sp., *Streptobacillus* sp., *Salmonella* sp., *Bacillus proteus*, *Bacillus lactis*, *Klebsiella pneumoniae*); antileishmanial; antifungal (*Aspergillus niger*). **Source:** DAN MU *Nauclea officinalis*. **Ref:** 2178, 1521.

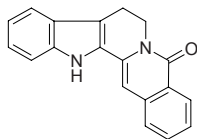
**15304 Nauclefiline**

[102358-19-0] C<sub>20</sub>H<sub>20</sub>N<sub>2</sub>O<sub>2</sub> (320.39). Colorless acicular crystals, mp 315~317°C,

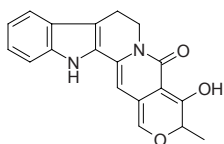
[ $\alpha$ ]<sub>D</sub> = -281 (*c* = 0.1, ethanol). **Pharm:** Antibacterial (*in vitro*: *Staphylococcus aureus*, *Bacillus subtilis*, *Bacillus coli*, *Bacillus diphtheriae*, *Streptococcus* sp., *Streptobacillus* sp., *Salmonella* sp., *Bacillus proteus*, *Bacillus lactis*, *Klebsiella pneumoniae*); antileishmanial; ; antifungal (*Aspergillus niger*). **Source:** DAN MU *Nauclea officinalis*. **Ref:** 41, 2178, 1521.

**15305 Nauclefine**

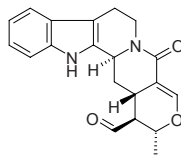
[57103-51-2] C<sub>19</sub>H<sub>14</sub>N<sub>2</sub>O (286.34). mp 285~290°C. **Pharm:** Antibacterial (*in vitro*: *Staphylococcus aureus*, *Bacillus subtilis*, *Bacillus coli*, *Bacillus diphtheriae*, *Streptococcus* sp., *Streptobacillus* sp., *Salmonella* sp., *Bacillus proteus*, *Bacillus lactis*, *Klebsiella pneumoniae*); antileishmanial; ; antifungal (*Aspergillus niger*). **Source:** KUAN YE WU TAN *Nauclea latifolia*. **Ref:** 2178.

**15306 Nauclefoline**

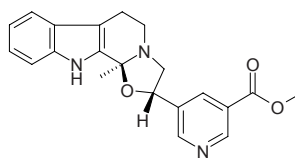
[96400-51-0] C<sub>19</sub>H<sub>16</sub>N<sub>2</sub>O<sub>3</sub> (320.35). mp 270~272°C. **Pharm:** Antibacterial (*in vitro*: *Staphylococcus aureus*, *Bacillus subtilis*, *Bacillus coli*, *Bacillus diphtheriae*, *Streptococcus* sp., *Streptobacillus* sp., *Salmonella* sp., *Bacillus proteus*, *Bacillus lactis*, *Klebsiella pneumoniae*); antileishmanial; ; antifungal (*Aspergillus niger*). **Source:** DAN MU *Nauclea officinalis*. **Ref:** 2178, 1521.

**15307 Naucleidinal**

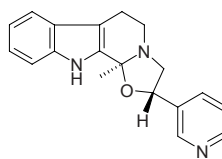
[77513-45-2] C<sub>20</sub>H<sub>20</sub>N<sub>2</sub>O<sub>3</sub> (336.39). mp 203~205°C. **Pharm:** Antibacterial (*in vitro*: *Staphylococcus aureus*, *Bacillus subtilis*, *Bacillus coli*, *Bacillus diphtheriae*, *Streptococcus* sp., *Streptobacillus* sp., *Salmonella* sp., *Bacillus proteus*, *Bacillus lactis*, *Klebsiella pneumoniae*); antileishmanial; antifungal (*Aspergillus niger*). **Source:** DAN MU *Nauclea officinalis*. **Ref:** 2178, 1521.

**15308 Naucleonidine**

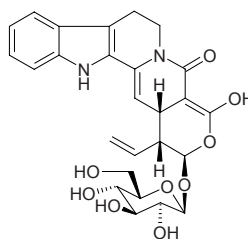
C<sub>21</sub>H<sub>21</sub>N<sub>3</sub>O<sub>3</sub> (363.42). mp 233~240°C. **Pharm:** Antibacterial (*in vitro*: *Staphylococcus aureus*, *Bacillus subtilis*, *Bacillus coli*, *Bacillus diphtheriae*, *Streptococcus* sp., *Streptobacillus* sp., *Salmonella* sp., *Bacillus proteus*, *Bacillus lactis*, *Klebsiella pneumoniae*); antileishmanial; antifungal (*Aspergillus niger*). **Source:** BO SHI WU TAN *Nauclea pobequinii*. **Ref:** 2178, 1521.

**15309 Naucleonine**

C<sub>19</sub>H<sub>19</sub>N<sub>3</sub>O (305.38). **Pharm:** Antibacterial (*in vitro*: *Staphylococcus aureus*, *Bacillus subtilis*, *Bacillus coli*, *Bacillus diphtheriae*, *Streptococcus* sp., *Streptobacillus* sp., *Salmonella* sp., *Bacillus proteus*, *Bacillus lactis*, *Klebsiella pneumoniae*); antileishmanial; antifungal (*Aspergillus niger*). **Source:** DI SHI WU TAN *Nauclea diderrichii*. **Ref:** 2178, 1521.

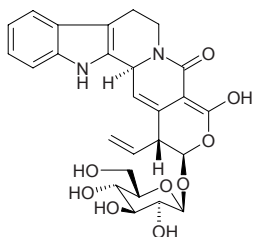
**15310 Naucleoside A**

3,14,19,20-Tetrahydro-16-ethenyl-17-( $\beta$ -D-glucopyranosyloxy)-19-hydroxy-(15 $\beta$ ,16 $\alpha$ ,17 $\beta$ )-oxayohimban-21-one C<sub>26</sub>H<sub>28</sub>N<sub>2</sub>O<sub>9</sub> (512.52). Orange-yellow amorphous solid, mp 171~172°C (MeOH), [ $\alpha$ ]<sub>D</sub><sup>22</sup> = 48.6° (*c* = 0.15, MeOH). **Source:** DONG FANG WU TAN *Nauclea orientalis* (bark). **Ref:** 3074.

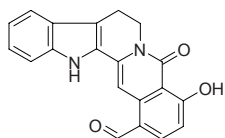


**15311 Naucleoside B**

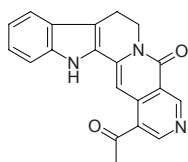
14,15,19,20-Tetrahydro-16-ethenyl-17-( $\beta$ -D-glucopyranosyloxy)-19-hydroxy- $\gamma$ -(3 $\alpha$ ,16 $\alpha$ ,17 $\beta$ )-oxayohimban-21-one C<sub>26</sub>H<sub>28</sub>N<sub>2</sub>O<sub>9</sub> (512.52). Orange-yellow amorphous solid, mp 189~190°C (MeOH), [ $\alpha$ ]<sub>D</sub><sup>22</sup> = -58.2° (c = 0.15, MeOH). Source: DONG FANG WU TAN *Nauclea orientalis* (bark). Ref: 3074.

**15312 Nauclequiniine**

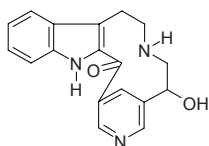
C<sub>20</sub>H<sub>14</sub>N<sub>2</sub>O<sub>3</sub> (330.35). mp 291~292°C. Pharm: Antibacterial (*in vitro*: *Staphylococcus aureus*, *Bacillus subtilis*, *Bacillus coli*, *Bacillus diphtheriae*, *Streptococcus* sp., *Streptobacillus* sp., *Salmonella* sp., *Bacillus proteus*, *Bacillus lactis*, *Klebsiella pneumoniae*); antileishmanial; antifungal (*Aspergillus niger*). Source: BO SHI WU TAN *Nauclea pobequini*. Ref: 2178.

**15313 Nauclefine**

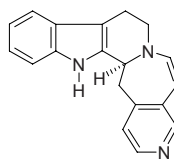
[54698-29-2] C<sub>20</sub>H<sub>15</sub>N<sub>3</sub>O<sub>2</sub> (329.36). mp 310°C. Pharm: Antibacterial (*in vitro*: *Staphylococcus aureus*, *Bacillus subtilis*, *Bacillus coli*, *Bacillus diphtheriae*, *Streptococcus* sp., *Streptobacillus* sp., *Salmonella* sp., *Bacillus proteus*, *Bacillus lactis*, *Klebsiella pneumoniae*); antileishmanial; antifungal (*Aspergillus niger*). Source: KUAN YE WU TAN *Nauclea latifolia*. Ref: 2178, 1521.

**15314 Nauclexine**

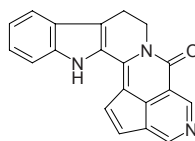
[38940-74-8] C<sub>18</sub>H<sub>17</sub>N<sub>3</sub>O<sub>2</sub> (307.36). Needles (CH<sub>2</sub>Cl<sub>2</sub>-MeOH), mp 229~232°C. Pharm: Antibacterial (*in vitro*: *Staphylococcus aureus*, *Bacillus subtilis*, *Bacillus coli*, *Bacillus diphtheriae*, *Streptococcus* sp., *Streptobacillus* sp., *Salmonella* sp., *Bacillus proteus*, *Bacillus lactis*, *Klebsiella pneumoniae*); antileishmanial; antifungal (*Aspergillus niger*). Source: DI SHI WU TAN *Nauclea diderrichii*. Ref: 2178, 1521.

**15315 Naufoline**

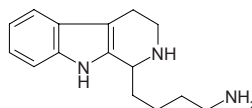
[59785-75-0] C<sub>19</sub>H<sub>17</sub>N<sub>3</sub> (287.37). Crystals (MeOH), mp 252°C. Pharm: Antibacterial (*in vitro*: *Staphylococcus aureus*, *Bacillus subtilis*, *Bacillus coli*, *Bacillus diphtheriae*, *Streptococcus* sp., *Streptobacillus* sp., *Salmonella* sp., *Bacillus proteus*, *Bacillus lactis*, *Klebsiella pneumoniae*); antileishmanial; antifungal (*Aspergillus niger*). Source: KUAN YE WU TAN *Nauclea latifolia*. Ref: 2178, 1521.

**15316 Naulafine**

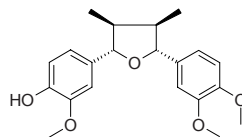
[70503-66-1] C<sub>20</sub>H<sub>13</sub>N<sub>3</sub>O (311.35). mp 300°C. Pharm: Antibacterial (*in vitro*: *Staphylococcus aureus*, *Bacillus subtilis*, *Bacillus coli*, *Bacillus diphtheriae*, *Streptococcus* sp., *Streptobacillus* sp., *Salmonella* sp., *Bacillus proteus*, *Bacillus lactis*, *Klebsiella pneumoniae*); antileishmanial; antifungal (*Aspergillus niger*). Source: KUAN YE WU TAN *Nauclea latifolia*. Ref: 2178.

**15317 Nazlinin**

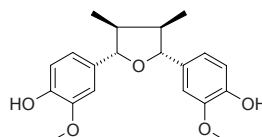
[136945-81-8] C<sub>15</sub>H<sub>21</sub>O<sub>3</sub> (243.35). White amorphous powder. Pharm: Vascular relaxant and vasoconstrictor (rbt, assay by aortal ring with endodermis, when dose less than 40nmol relaxes blood vessel, when dose over 40nmol contracts blood vessel, for assay without endodermis relaxing activity disappears). Source: DONG QIANG *Nitraria schoberi*. Ref: 1521, 2612.

**15318 (-)-Nectandrin A**

[74683-15-1] C<sub>21</sub>H<sub>26</sub>O<sub>5</sub> (358.44). Colorless oleaginous substance, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -28° (CHCl<sub>3</sub>). Source: DUAN JU *Piper mullesua*. Ref: 424.

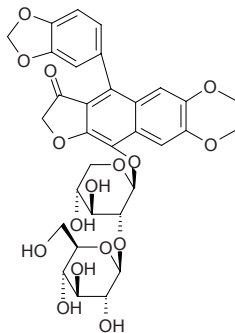
**15319 Nectandrin B**

[74683-16-2] C<sub>20</sub>H<sub>24</sub>O<sub>5</sub> (344.41). Colorless oleaginous substance. Pharm: Immunosuppressant (hmn, inhibits mitogen-induced hyperplasia of lymphocyte in peripheral blood, IC<sub>50</sub> = 3.30 $\mu$ g/mL); 5-lipoxygenase inhibitor (used in treatment of diseases due to metabolic imbalance of arachidonic acid); aldose reductase inhibitor. Source: DUAN JU *Piper mullesua*. Ref: 424, 1669, 1670.

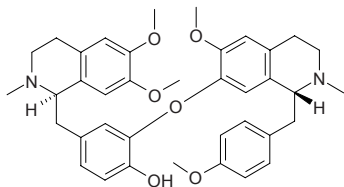


**15320 Neesiinoside A**

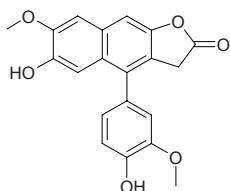
$C_{32}H_{34}O_{16}$  (674.62). Source: QIANG DAO YAO *Hypoestes purpurea* [Syn. *Justicia purpurea*; *Hypoestes sinica*] (whole herb: yield = 0.027%dw). Ref: 4712.

**15321 Neferine**

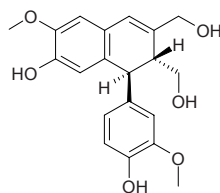
[2292-16-2]  $C_{38}H_{44}N_2O_6$  (624.78). Amorphous loose yellowish powder (diethyl ether), mp 59–61°C,  $[\alpha]_D^{24} = -44.1^\circ$  ( $c = 0.301$ , chloroform). Pharm: Antiarrhythmic; antihypertensive (vasodilation, independent of vascular endothelium); calcium antagonist (10–40  $\mu\text{mol/L}$ , inhibits the increase of  $\text{Ca}^{2+}$  concentration caused by ET-1); inhibits cardiac muscles; platelet aggregation inhibitor (inhibits calcium entry and releases in platelets); inhibits promotor of cancer. Source: LIAN ZI XIN *Nelumbo nucifera* (dried plumule and radicle in seed: mean content of 7 origins = 0.251%<sup>[5508]</sup>). Ref: 6, 900, 5501, 5508.

**15322 Negundin A**

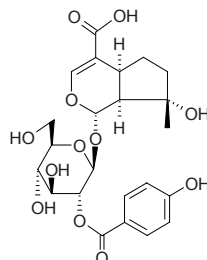
$C_{20}H_{16}O_6$  (352.35). Amorphous white solid, mp 125°C. Pharm: Lipoxygenase inhibitor (*in vitro*,  $\text{IC}_{50} = (99.5 \pm 2.0) \mu\text{mol/L}$ , control Baicalein,  $\text{IC}_{50} = (22.5 \pm 0.3) \mu\text{mol/L}$ ); AChE inhibitor (*in vitro*,  $\text{IC}_{50} > 300 \mu\text{mol/L}$ , control Galanthamine,  $\text{IC}_{50} = 0.5 \mu\text{mol/L}$ ); butyrylcholinesterase inhibitor (*in vitro*,  $\text{IC}_{50} = (85.0 \pm 0.8) \mu\text{mol/L}$ , control Galanthamine,  $\text{IC}_{50} = (8.7 \pm 0.1) \mu\text{mol/L}$ ). Source: HUANG JING GEN *Vitex negundo*. Ref: 2555.

**15323 Negundin B**

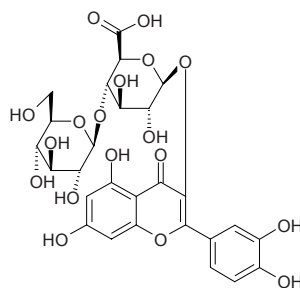
$C_{20}H_{22}O_6$  (358.39). White amorphous solid.  $[\alpha]_D^{25} = -56^\circ$  ( $c = 0.11$ , MeOH). Pharm: Lipoxygenase inhibitor (*in vitro*,  $\text{IC}_{50} = (6.25 \pm 0.50) \mu\text{mol/L}$ , control Baicalein,  $\text{IC}_{50} = (22.5 \pm 0.3) \mu\text{mol/L}$ ); AChE inhibitor (*in vitro*,  $\text{IC}_{50} = (254 \pm 1) \mu\text{mol/L}$ , control Galanthamine,  $\text{IC}_{50} = 0.5 \mu\text{mol/L}$ ); butyrylcholinesterase inhibitor (*in vitro*,  $\text{IC}_{50} = (194.0 \pm 4.4) \mu\text{mol/L}$ , control Galanthamine,  $\text{IC}_{50} = (8.7 \pm 0.1) \mu\text{mol/L}$ ). Source: HUANG JING GEN *Vitex negundo*. Ref: 2555.

**15324 Negundoside**

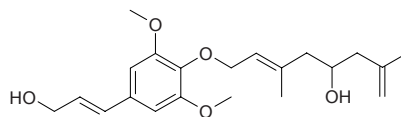
[82451-20-5]  $C_{23}H_{28}O_{12}$  (496.47). Needles (MeOH), mp 160–162°C,  $[\alpha]_D^{24} = -117.6^\circ$  ( $c = 3$ , MeOH). Source: HUANG JING YE *Vitex negundo*. Ref: 1521.

**15325 Nelumboside**

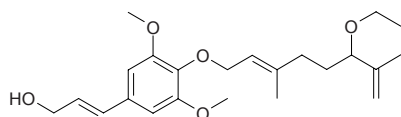
$C_{27}H_{28}O_{18}$  (640.51). mp 174–175°C. Source: HE YE *Nelumbo nucifera*, HUI XIANG JING YE *Foeniculum vulgare*. Ref: 6.

**15326 Nelumul B**

4-*O*-[(2*E*)-3,7-Dimethyl-2,7-octadien-5-yl]sinapyl alcohol  $C_{21}H_{30}O_5$  (362.47). Source: LIAN YE TUO WU *Ligularia nelumbifolia* (root: yield = 0.00070%dw). Ref: 4632.

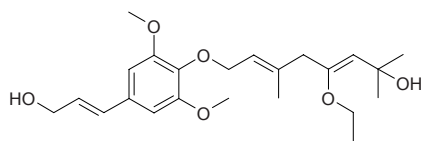
**15327 Nelumul C**

4-*O*-[(2*E*)-3,7-Dimethyl-6-ethoxy-2,7-octadiene]-sinapyl alcohol  $C_{23}H_{34}O_5$  (390.52). Source: LIAN YE TUO WU *Ligularia nelumbifolia* (root: yield = 0.0011%dw). Ref: 4632.

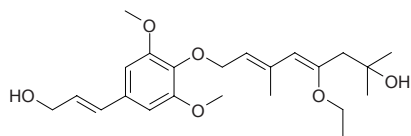


**15328 Nelumol D**

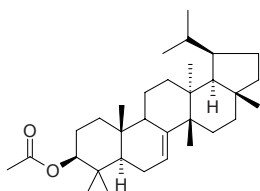
4-*O*-[(2*E*,5*E*)-3,7-Dimethyl-5-ethoxy-2,5-octadiene-7-ol]-sinapyl alcohol  
 $C_{23}H_{34}O_6$  (406.52). Source: LIAN YE TUO WU *Ligularia nelumbifolia* (root):  
 yield = 0.00085%dw). Ref: 4632.

**15329 Nelumol E**

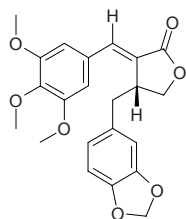
4-*O*-[(2*E*,4*E*)-3,7-Dimethyl-5-ethoxy-2,4-octadien-7-ol]-sinapyl alcohol  
 $C_{23}H_{34}O_6$  (406.52). Source: LIAN YE TUO WU *Ligularia nelumbifolia* (root):  
 yield = 0.00075%dw). Ref: 4632.

**15330 Nematocyphol acetate**

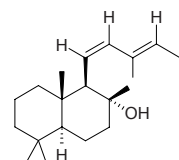
$C_{32}H_{52}O_2$  (468.77). White lamellar crystals, mp 264–265°C,  $[\alpha]_D^{21} = 0^\circ$  ( $c = 0.049$ , chloroform). Source: DA LANG DU *Euphorbia nematocypha*. Ref: 232.

**15331 Nemosin**

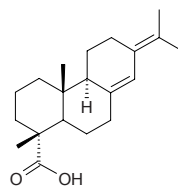
[17187-79-0]  $C_{22}H_{22}O_7$  (398.42). Pharm: Cytotoxic (hmn peripheral blood T cells, dose = 2.0 μg/mL, T cell survival rate = 69%); immunosuppressant (inhibits IL-2 secretion costimulated by CD28, dose = 2.0 μg/mL, InRt = 53%). Source: HONG CHAI HU *Bupleurum scorzonrifolium* (root). Ref: 3498.

**15332 cis-Neoabienol**

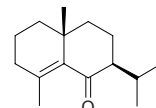
[25578-83-0]  $C_{20}H_{34}O$  (290.49).  $[\alpha]_D^{20} = +12.6^\circ$  ( $c = 3.8$ ,  $CHCl_3$ ). Source: HAI SONG ZI *Pinus koraiensis*, XI BO LI YA LENG SHAN *Abies sibirica*. Ref: 6, 2613.

**15333 Neoabietic acid**

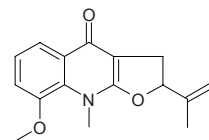
8(14),13(15)-Abietadien-18-oic acid [471-77-2]  $C_{20}H_{30}O_2$  (302.46). mp 167–169°C,  $[\alpha]_D^{24} = +159^\circ$ . Pharm: Platelet aggregation inhibitor (rbt, due to ADP and calcium); topical protectant. Source: SONG XIANG *Pinus massoniana*. Ref: 900.

**15334 Neoacolamone**

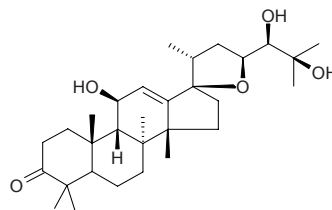
4-Eudesmen-6-one [1209-63-8]  $C_{15}H_{24}O$  (220.36). Oil,  $[\alpha]_D^{25} = +69^\circ$  ( $c = 0.22$ ,  $CHCl_3$ ). Source: JI JI *Chloranthus serratus*. Ref: 1521, 1540.

**15335 Neoacutifolin**

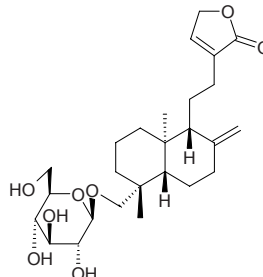
$C_{16}H_{17}NO_3$  (271.32). Pharm: Platelet aggregation inhibitor; DNA isomerase inhibitor; antibacterial; cytotoxic. Source: *Zanthoxylum* sp. Ref: 2176.

**15336 Neoalisol**

$C_{30}H_{48}O_5$  (488.71). Colorless powder, mp 211°C. Source: ZE XIE *Alisma orientale* [Syn. *Alisma plantago-aquatica* var. *orientale*]. Ref: 2202.

**15337 Neoandrographolide**

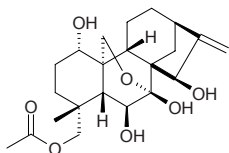
[27215-14-1]  $C_{26}H_{40}O_8$  (480.60). mp 168–169°C. Pharm: Antibacterial and antipyretic (rbt infected by *Diplococcus pneumoniae* or hemolytic β-streptococcus); low toxin (mus, orl, max. tolerance > 1.5g/kg). Source: CHUAN XIN LIAN *Andrographis paniculata* [Syn. *Justicia paniculata*] (dried aerial parts: mean content = 0.717%<sup>[5508]</sup>). Ref: 2, 658, 5508.



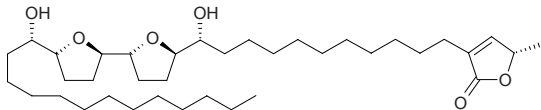


**15338 Neoangustifolin**

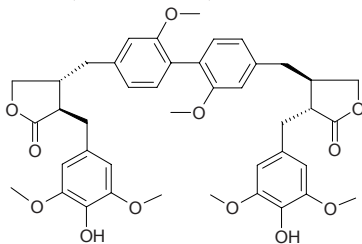
$C_{22}H_{32}O_7$  (408.50). mp 195~197°C. Source: SHAN DI XIANG CHA CAI *Isodon oresbia*. Ref: 4067.

**15339 Neoannonin**

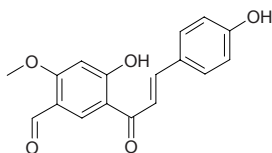
$C_{37}H_{66}O_6$  (606.93). Colorless oil,  $[\alpha]_D^{25} = +3.2^\circ$  ( $c = 0.51$ ,  $CHCl_3$ ). Pharm: Cytotoxic (hmn hepatoma cell lines HepG2,  $IC_{50} = 0.064$ ng/mL, control Adriamycin,  $IC_{50} = 0.241$ μg/mL; hmn hepatoma cells transfected with hepatitis B virus Hep2,2,15,  $IC_{50} = 0.073$ ng/mL, Adriamycin,  $IC_{50} = 0.450$ μg/mL). Source: CI GUO FAN LI ZHI *Annona muricata*. Ref: 5377.

**15340 Neoarctin B**

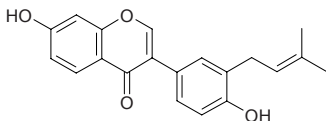
$C_{42}H_{46}O_{12}$  (742.83). Yellowish amorphous powder, mp 102.0~103.5°C,  $[\alpha]_D^{15} = -46.86^\circ$  ( $c = 0.083$ ,  $CHCl_3$ ). Source: NIU BANG ZI *Arctium lappa*. Ref: 288.

**15341 Neobavachalcone**

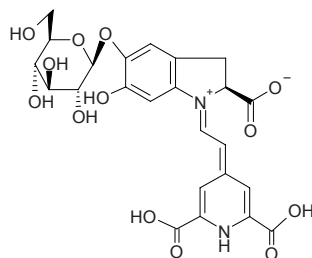
[65621-10-5]  $C_{17}H_{14}O_5$  (298.30). Source: BU GU ZHI *Psoralea corylifolia*. Ref: 2, 545.

**15342 Neobavaisoflavone**

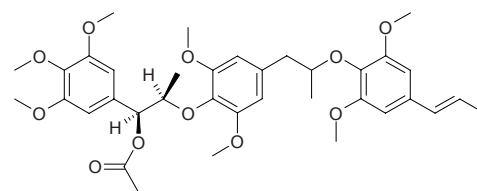
7,4'-Dihydroxy-3'-γ,γ-dimethylallyl isoflavone [41060-15-5]  $C_{20}H_{18}O_4$  (322.36). Pharm: Antibacterial (*Escherichia coli*, MIA = 0.50μg, control Chloramphenicol, MIA = 0.001μg; *Staphylococcus aureus*, MIA = 0.10μg, Chloramphenicol, MIA = 0.0001μg; *Bacillus subtilis*, MIA = 0.10μg, Chloramphenicol, MIA = 0.0001μg)<sup>[5247]</sup>; antifungal (*Candida mycoderma*, MIA = 0.02μg, control Miconazole, MIA = 0.0001μg)<sup>[5247]</sup>; antioxidant (DPPH scavenger, TLC, MIA = 0.5μg,  $IC_{50} = 671$ μg/mL; control Quercetin, MIA < 0.05μg,  $IC_{50} = 7$ μg/mL, Gallic acid, MIA < 0.05μg,  $IC_{50} = 4$ μg/mL; Ascorbic acid, MIA < 0.10μg,  $IC_{50} = 18$ μg/mL)<sup>[5247]</sup>. Source: BU GU ZHI *Psoralea corylifolia*, JI KUAN CI TONG *Erythrina latissima* (stem wood). Ref: 2, 545, 5247.

**15343 Neobetatin**

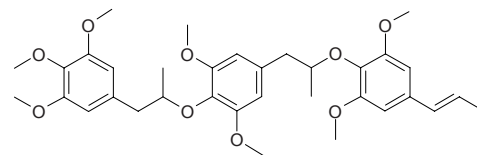
[71199-29-6]  $C_{24}H_{24}N_2O_{13}$  (548.46). Source: XIE ZHUA LAN *Schlumbergera truncata*. Ref: 2614.

**15344 Neobonaspectin A**

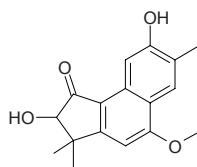
$C_{36}H_{46}O_{11}$  (654.76). Oil,  $[\alpha]_D^{20} = +5.3^\circ$  ( $c = 0.23$ ,  $CHCl_3$ ). Source: *Bonamia spectabilis* (aerial parts). Ref: 3904.

**15345 Neobonaspectin B**

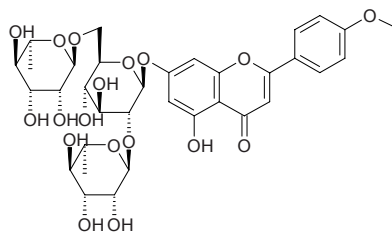
$C_{34}H_{44}O_9$  (596.72). Oil. Source: *Bonamia spectabilis* (aerial parts). Ref: 3904.

**15346 Neoboutonin**

$C_{17}H_{18}O_4$  (286.33). Pale yellow crystals (hexane-EtOAc), mp 277~278°C,  $[\alpha]_D^{20} = -41^\circ$  ( $c = 0.2$ , MeOH). Source: *Neoboutonia glabrescens*. Ref: 3441.

**15347 Neobudofficide**

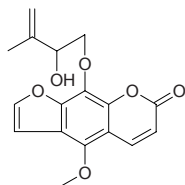
5,7-Dihydroxy-4'-methoxyflavone-7-O-α-L-rhamno-pyranosyl-(1→2)-[α-L-rhamnopyranosyl-(1→6)]-β-D-glucopyranoside  $C_{34}H_{42}O_{18}$  (738.70). Yellowish powder, mp 180~182°C. Source: MI MENG HUA *Buddleja officinalis*. Ref: 369.



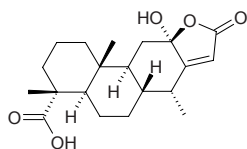


**15348 Neobyakangelicol**

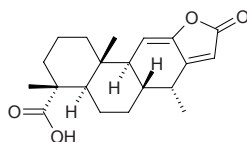
[35214-82-5] C<sub>17</sub>H<sub>16</sub>O<sub>6</sub> (316.31). mp 106–107°C. Source: BAI ZHI *Angelica dahurica* [Syn. *Angelica porphyrocaulis*], YU JU *Ptelea trifoliata*, HANG BAI ZHI *Angelica taiwaniana*. Ref: 2, 1521.

**15349 Neocaesalpin H**

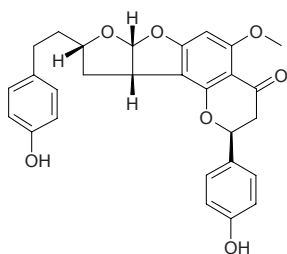
C<sub>20</sub>H<sub>28</sub>O<sub>5</sub> (348.44). Colorless needles, mp 255–256°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -73.2° (c = 0.101, MeOH). Source: CI GUO SU MU *Caesalpinia crista* (leaf). Ref: 4474.

**15350 Neocaesalpin I**

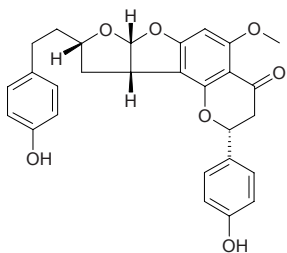
C<sub>20</sub>H<sub>26</sub>O<sub>4</sub> (330.43). Colorless needles, mp > 260°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +27.7° (c = 0.098, MeOH). Source: CI GUO SU MU *Caesalpinia crista* (leaf). Ref: 4474.

**15351 Neocalyxin A**

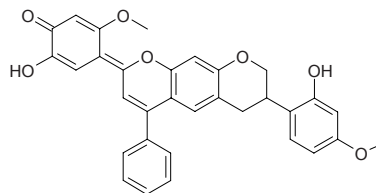
C<sub>28</sub>H<sub>26</sub>O<sub>7</sub> (474.52). Pharm: Cytotoxic (Colon26-L5, ED<sub>50</sub> > 100 μmol/L; HT1080, ED<sub>50</sub> = 10.7 μmol/L; control Curcumin, Colon26-L5, ED<sub>50</sub> = 23.2 μmol/L; HT1080, ED<sub>50</sub> = 23.4 μmol/L). Source: YUN NAN CAO KOU *Alpinia blepharocalyx* (seed: yield = 0.000022%). Ref: 3035.

**15352 Neocalyxin B**

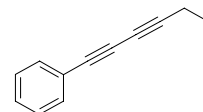
C<sub>28</sub>H<sub>26</sub>O<sub>7</sub> (474.52). Pharm: Cytotoxic (Colon26-L5, ED<sub>50</sub> = 78.0 μmol/L; HT1080, ED<sub>50</sub> = 20.2 μmol/L; control Curcumin, Colon26-L5, ED<sub>50</sub> = 23.2 μmol/L; HT1080, ED<sub>50</sub> = 23.4 μmol/L). Source: YUN NAN CAO KOU *Alpinia blepharocalyx* (seed: yield = 0.000022%). Ref: 3035.

**15353 Neocandenatone**

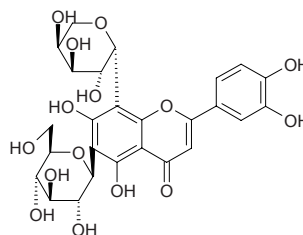
Vestitol[6→9";7O→7"]obtusaquinone C<sub>32</sub>H<sub>26</sub>O<sub>7</sub> (522.56). Purple amorphous powder. Source: JU HUA HUANG TAN *Dalbergia congestiflora* (heart wood). Ref: 3791.

**15354 Neocapillene**

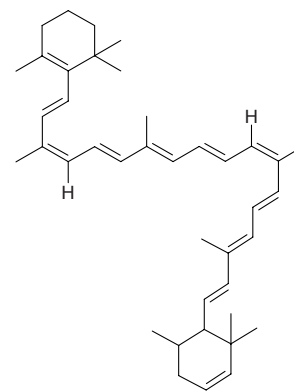
1-Phenyl-1,3-hexadiyne [10508-66-4] C<sub>12</sub>H<sub>10</sub> (154.21). Source: YIN CHEN HAO *Artemisia capillaris*. Ref: 2.

**15355 Neocarlinoside**

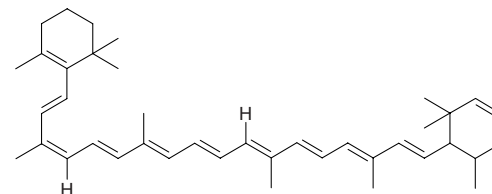
[83151-89-7] C<sub>26</sub>H<sub>28</sub>O<sub>15</sub> (580.50). Pharm: Insect phagostimulant (*Plant hoppers*). Source: JING MI *Oryza sativa*. Ref: 658.

**15356 Neo-β-carotene B**

C<sub>40</sub>H<sub>56</sub> (536.89). Source: BO CAI *Spinacia oleracea*. Ref: 6.

**15357 Neo-β-carotene U**

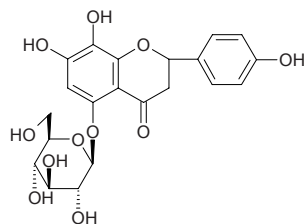
C<sub>40</sub>H<sub>56</sub> (536.89). Source: BO CAI *Spinacia oleracea*. Ref: 2615.



**15358 Neocarthamin**

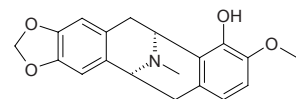
Isocarthamin C<sub>21</sub>H<sub>22</sub>O<sub>11</sub> (450.40). Source: HONG HUA *Carthamus tinctorius*.

Ref: 2.

**15359 Neocaryachine**

C<sub>19</sub>H<sub>19</sub>NO<sub>4</sub> (325.37). Source: HOU KE GUI *Cryptocarya chinensis* (wood).

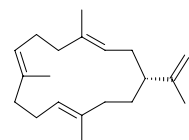
Ref: 3092.

**15360 Neocembrene**

Cembrene A [31570-39-5] C<sub>20</sub>H<sub>32</sub> (272.48). Pharm: Pheromone of

*Nasutitermis exitiosus* (for tracking). Source: XI BO LI YA YUN SHAN

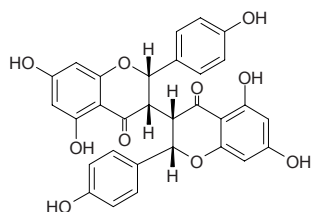
*Picea obovata*. Ref: 658, 1521.

**15361 Neochamaejasmin A**

Neochamaejasmin A [90411-13-5] C<sub>30</sub>H<sub>22</sub>O<sub>10</sub> (542.50). mp 287°C (dec), [α]<sub>D</sub>

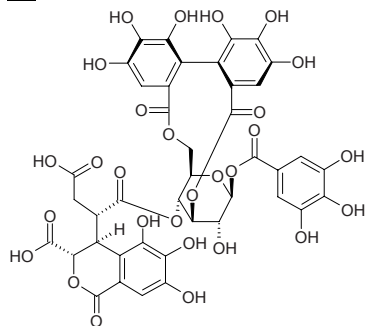
= +129° (c = 1.0, ethanol). Pharm: Inhibits promotor of cancer (inhibits teleocidin activity)<sup>[900]</sup>; antimitotic and antifungal (*Pyricularia oryzae*, 200μg/mL, strong inhibition, 400μg/mL, complete inhibition)<sup>[4476]</sup>. Source:

LANG DU *Stellera chamaejasme*. Ref: 900, 4476.

**15362 Neochebulagic acid**

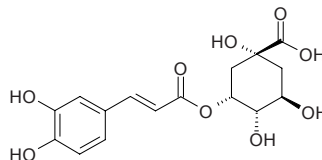
C<sub>41</sub>H<sub>32</sub>O<sub>28</sub> (972.70). Source: AN MO LE *Phyllanthus emblica* (leaf, branch).

Ref: 3094.

**15363 Neochlorogenic acid**

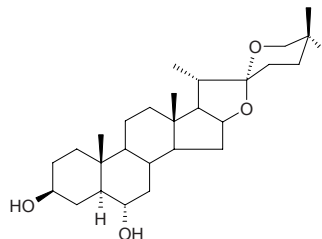
5-O-Caffeoylquinic acid [906-33-2] C<sub>16</sub>H<sub>18</sub>O<sub>9</sub> (354.32). mp 218~219°C.

Source: BIAN YE TIE XIAN JUE *Adiantum caudatum*, DA CHE QIAN *Plantago major*, MENG GU SHAN LUO BO *Scabiosa comosa*, SHA ZAO *Elaeagnus angustifolia*, TANG LI *Pyrus betulaefolia*, XIANG RI KUI JING *SUI Helianthus annuus*, XIANG RI KUI YE *Helianthus annuus*. Ref: 6, 660.

**15364 Neochlorogenin**

[511-91-1] C<sub>27</sub>H<sub>44</sub>O<sub>4</sub> (432.65). mp 269~270°C. Source: XIA YE LONG SHE

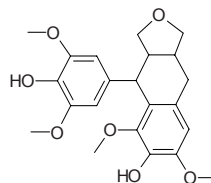
LAN *Agave cantala*. Ref: 10.

**15365 Neociwujiaphenol**

C<sub>22</sub>H<sub>26</sub>O<sub>7</sub> (402.45). White acicular crystals mp 197~199°C. Source: CI WU

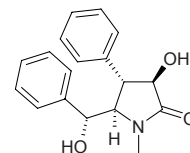
JIA YE *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*]. Ref:

835.

**15366 Neoclausenamide**

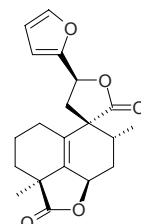
[114528-82-4] C<sub>18</sub>H<sub>19</sub>NO<sub>3</sub> (297.35). Colorless diamond crystals (methanol),

mp 205~206°C. Pharm: Antihepatotoxin (mus, liver toxicosis induced by CCl<sub>4</sub>, reduces GPT). Source: HUANG PI YE *Clausena lansium*. Ref: 1182.

**15367 Neoclerodan-5,10-en-19,6β;20,12-diolide**

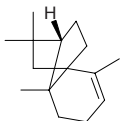
C<sub>20</sub>H<sub>22</sub>O<sub>5</sub> (342.40). mp 139~140°C, [α]<sub>D</sub><sup>18</sup> = +50° (c = 1.9, CHCl<sub>3</sub>). Source:

CHANG SUI BA DOU *Croton macrostachys* (root). Ref: 3983.

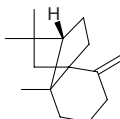


**15368  $\alpha$ -Neoclovene**

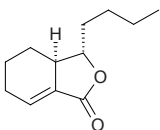
$C_{15}H_{24}$  (204.36). Source: REN SHEN *Panax ginseng* [Syn. *Panax schinseng*].  
Ref: 2616, 5330.

**15369  $\beta$ -Neoclovene**

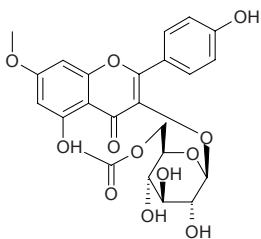
[56684-96-9]  $C_{15}H_{24}$  (204.36).  $[\alpha]_D^{25} = -30^\circ$  (MeOH). Source: REN SHEN  
*Panax ginseng* [Syn. *Panax schinseng*]. Ref: 2616, 5330.

**15370 Neocnidilide**

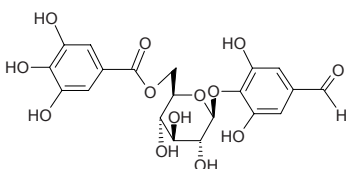
[4567-33-3]  $C_{12}H_{18}O_2$  (194.27). mp 24~27°C, bp 147~148°C/4mmHg. Pharm:  
Anticonvulsant (rat, cerebral section, inhibits release of Glu-transmitter with  
low toxin); antibacterial (*Aspergillus niger*, *Cochliobolus miyabeanus*,  
*Pyricularia oryzae*); antiasthmatic (gpg, *in vitro*, tracheal smooth muscle  
relaxant, stronger than papaverine hydrochloride). Source: CHA XIONG  
*Ligusticum sinense* cv. *chaxiong*, CHUAN XIONG *Ligusticum chuanxiong*  
[Syn. *Ligusticum wallichii*], GAO BEN *Ligusticum sinense* (25.27% in  
volatile oil). Ref: 2, 531, 1596, 1597, 1598, 1599, 5501.

**15371 Neocomplanoside**

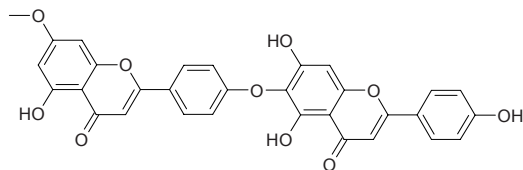
$C_{24}H_{24}O_{12}$  (504.45). Yellow acicular crystals, mp 217~219°C. Source: BIAN  
JING HUANG QI *Astragalus complanatus*. Ref: 123, 1521.

**15372 Neocretanin**

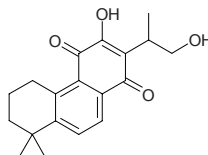
[67771-96-4]  $C_{20}H_{20}O_{13}$  (468.37). Needles +2H<sub>2</sub>O (H<sub>2</sub>O), mp 195~197°C  
(dec),  $[\alpha]_D^{23} = -63.8^\circ$  ( $c = 0.99$ , MeOH). Source: LI SHU PI *Castanea*  
*mollissima*. Ref: 1521, 2618.

**15373 Neocryptomerin**

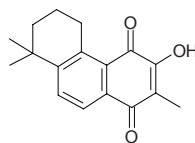
[20931-36-6]  $C_{31}H_{20}O_{10}$  (552.50). Source: LUO HAN SONG YE *Podocarpus*  
*macrophyllus*. Ref: 6.

**15374 Neocryptotanshinone**

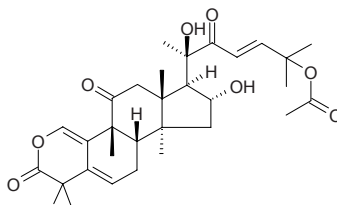
[109664-02-0]  $C_{19}H_{22}O_4$  (314.38). Orange-red needles, mp 165~167°C,  $[\alpha]_D^{23}$   
 $= +29.8^\circ$  ( $c = 0.84$ , CHCl<sub>3</sub>). Source: DAN SHEN *Salvia miltiorrhiza*. Ref:  
2619.

**15375 Neocryptotanshinone II**

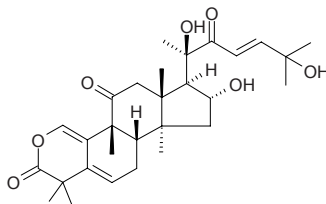
$C_{17}H_{18}O_3$  (270.33). Yellow acicular crystals, mp 129~130°C,  $[\alpha]_D^{25} = 3.8^\circ$  ( $c =$   
 $1$ , CHCl<sub>3</sub>). Source: DAN SHEN *Salvia miltiorrhiza*. Ref: 769.

**15376 Neocucurbitacin A**

$C_{31}H_{42}O_8$  (542.68). Amorphous powder,  $[\alpha]_D = +71.3^\circ$  ( $c = 0.46$ , CHCl<sub>3</sub>).  
Pharm: Polyoma enhancer binding protein 2aA (PEBP2aA) inhibitor (hmn  
osteoblast-like cells Saos-2 cell line); osteoclastogenesis-inhibitory factor  
(OCIF) gene expression inhibitor (hmn osteoblast-like cells Saos-2 cell  
line). Source: NANG GAI SI GUA *Luffa operculata*. Ref: 4136.

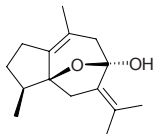
**15377 Neocucurbitacin B**

$C_{29}H_{40}O_7$  (500.64). Amorphous powder,  $[\alpha]_D = +82.0^\circ$  ( $c = 0.50$ , CHCl<sub>3</sub>).  
Source: NANG GAI SI GUA *Luffa operculata*. Ref: 4136.

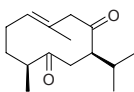


**15378 Neocurcumenol**

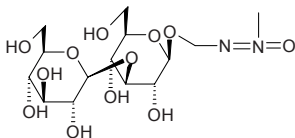
$C_{15}H_{22}O_2$  (234.34). Colorless oil,  $[\alpha]_D^{25} = +15.3^\circ$  ( $c = 2.00$ ,  $CHCl_3$ ). **Pharm:** NO production inhibitor (mus peritoneal macrophages, induced by LPS,  $100\mu\text{mol/L}$ ,  $\text{InRt} = (45.4 \pm 2.2)\%$ , control  $L$ -NMMA,  $100\mu\text{mol/L}$ ,  $\text{InRt} = (79.2 \pm 0.9)\%$ ,  $p < 0.01$ ). **Source:** PING E SHU *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*]. **Ref:** 4150.

**15379 Neocurdione**

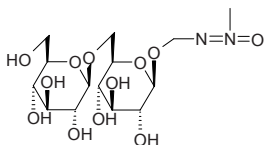
$C_{15}H_{24}O_2$  (236.36). **Pharm:** NO production inhibitor (mus peritoneal macrophages, induced by LPS,  $100\mu\text{mol/L}$ ,  $\text{InRt} = (50.4 \pm 2.3)\%$ , control  $L$ -NMMA,  $100\mu\text{mol/L}$ ,  $\text{InRt} = (79.2 \pm 0.9)\%$ ,  $p < 0.01$ ). **Source:** PING E SHU *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*]. **Ref:** 4150.

**15380 Neocycasin A**

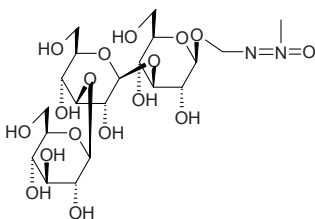
$C_{14}H_{26}N_2O_{12}$  (414.37). **Source:** SU TIE SHU GUO *Cycas revoluta*. **Ref:** 6.

**15381 Neocycasin B**

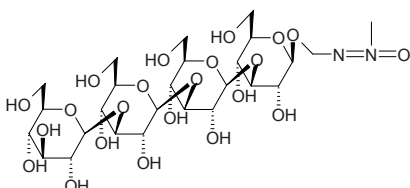
$C_{14}H_{26}N_2O_{12}$  (414.37). **Source:** SU TIE SHU GUO *Cycas revoluta*. **Ref:** 6.

**15382 Neocycasin C**

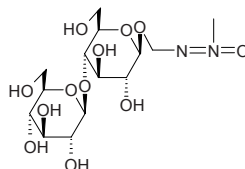
$C_{20}H_{36}N_2O_{17}$  (576.51). **Source:** SU TIE SHU GUO *Cycas revoluta*. **Ref:** 6.

**15383 Neocycasin D**

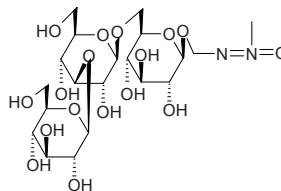
$C_{26}H_{46}N_2O_{22}$  (738.66). **Source:** SU TIE SHU GUO *Cycas revoluta*. **Ref:** 6.

**15384 Neocycasin E**

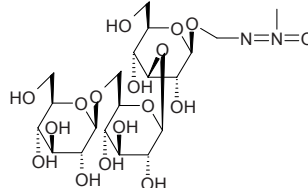
$C_{14}H_{26}N_2O_{12}$  (414.37). **Source:** SU TIE SHU GUO *Cycas revoluta*. **Ref:** 6.

**15385 Neocycasin F**

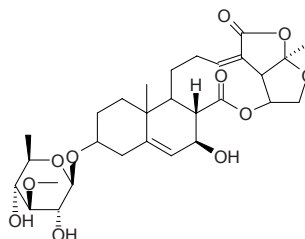
$C_{20}H_{36}N_2O_{17}$  (576.51). **Source:** SU TIE SHU GUO *Cycas revoluta*. **Ref:** 6.

**15386 Neocycasin G**

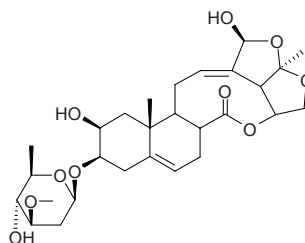
[2288-28-0]  $C_{20}H_{36}N_2O_{17}$  (576.51). **Source:** SU TIE SHU GUO *Cycas revoluta*. **Ref:** 6.

**15387 Neocynanversicoside**

$C_{29}H_{40}O_{11}$  (564.64). **Source:** WAN SHENG BAI WEI *Cynanchum versicolor*. **Ref:** 2620.

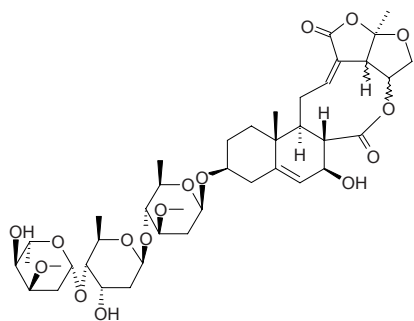
**15388 Neocynapanogenin C 3-O-β-D-oleandropyranoside**

$C_{28}H_{40}O_{10}$  (536.63). Colorless powder. **Source:** XU CHANG QING *Cynanchum paniculatum*. **Ref:** 2264.

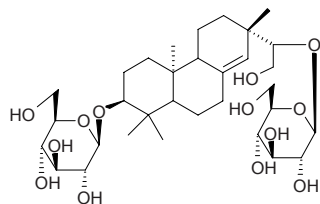


**15389 Neocynapanoside A**

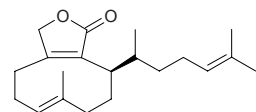
$C_{41}H_{60}O_{16}$  (808.93). Amorphous powder, mp 105–108°C,  $[\alpha]_D = -57.3^\circ$  ( $c = 1.54$ ,  $CHCl_3$ ). Source: XU CHANG QING *Cynanchum paniculatum*. Ref: 2621.

**15390 Neodarutoside**

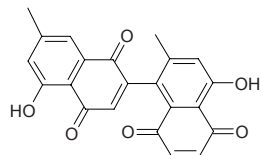
$C_{32}H_{54}O_{13}$  (646.78). Source: MAO GENG XI XIAN *Siegesbeckia orientalis* var. *glabrescens* [Syn. *Siegesbeckia glabrescens*]. Ref: 143, 2622.

**15391 Neodictyolactone**

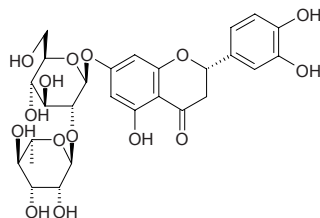
$C_{20}H_{30}O_2$  (302.46).  $[\alpha]_D^{20} = -35^\circ$  ( $c = 0.30$ ,  $CH_2Cl_2$ ). Source: XIAN ZHUANG WANG DI ZAO *Dictyota linearis*. Ref: 3818.

**15392 Neodiospyrin**

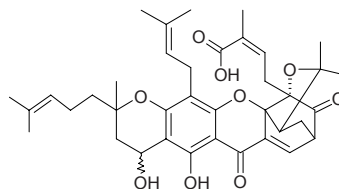
[33916-25-5]  $C_{22}H_{14}O_6$  (374.35). mp 253–254°C. Source: SHI GEN *Diospyros kaki*. Ref: 6.

**15393 Neoeriocitrin**

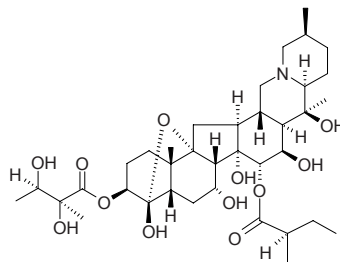
[13241-32-2]  $C_{27}H_{32}O_{15}$  (596.55). Source: *Citrus* sp. Ref: 658.

**15394 Neogambogic acid**

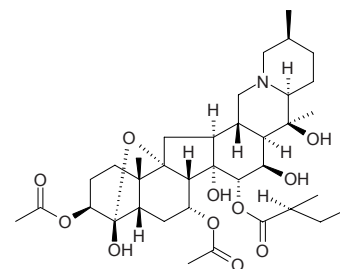
[93772-31-7]  $C_{38}H_{46}O_9$  (646.78). Yellow. Source: TENG HUANG *Garcinia morella* (dried balsam: content scope of 9 batch samples = 9.55%–22.22%, mean content = 14.98%)<sup>[5508]</sup>, TENG HUANG SHU *Garcinia hanburyi*<sup>[2623]</sup>. Ref: 2623, 5508.

**15395 Neogermbudine**

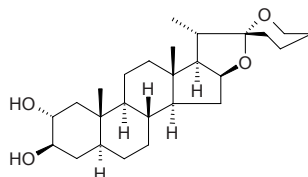
[595-64-2]  $C_{37}H_{59}NO_{12}$  (709.88). Sericate crystals (benzene), mp 149–152°C,  $[\alpha]_D^{25} = -12^\circ$  ( $c = 1$ , pyridine). Pharm: Antihypertensive (anesthetic dog, 2mg/(kg·min), iv, 10min, blood pressure lowered by 30% on average). Source: LV LI LU *Veratrum viride*, BAI LI LU *Veratrum album*. Ref: 661.

**15396 Neogermitrine**

$C_{36}H_{55}NO_{11}$  (677.84). Colorless long bar crystals or clustered acicular crystals (diluting acetone), mp 234–235°C,  $[\alpha]_D^{24} = -77^\circ$  ( $c = 1.0$ , pyridine). Pharm: Reduces myocardial contractility and antihypertensive (dog, iv); used in treatment of myasthenia gravis. Source: AI XI SHOU SHI LI LU *Veratrum eschscholtzii*, LIU SU LI LU *Veratrum fimbriatum*, LV LI LU *Veratrum viride*. Ref: 658.

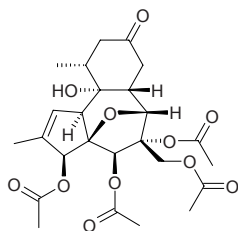
**15397 Neogitogenin**

[6811-13-8]  $C_{27}H_{44}O_4$  (432.65). Source: ZHI MU *Anemarrhena asphodeloides*. Ref: 2.

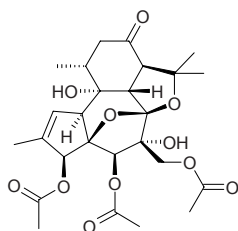


**15398 Neoglabrescin A tetraacetate**

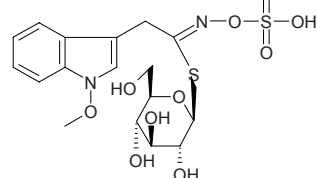
$C_{25}H_{32}O_{11}$  (508.53). Colorless crystals (acetone-petroleum ether), mp 247~248°C,  $[\alpha]_D^{20} = -64.9^\circ$  ( $c = 0.7$ ,  $CHCl_3$ ). Source: *Neoboutonia glabrescens*. Ref: 3441.

**15399 Neoglabrescin B triacetate**

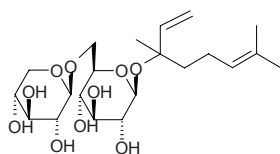
$C_{26}H_{34}O_{11}$  (522.55). Colorless crystals (acetone-petroleum ether), mp 215~216°C,  $[\alpha]_D^{20} = +8.9^\circ$  ( $c = 0.09$  MeOH). Source: *Neoboutonia glabrescens*. Ref: 3441.

**15400 Neoglucobrassicin**

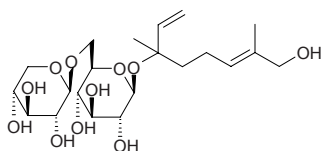
[5187-84-8]  $C_{17}H_{22}N_2O_{10}S_2$  (478.50). Source: BAO ZI GAN LAN *Brassica oleracea* var. *gemmifera*, DA QING YE *Isatis indigotica*, JING HUA HUA YE CAI *Brassica oleracea* var. *botrytis* subvar. *cauliflora*, JU SAN HUA YE CAI *Brassica oleracea* var. *botrytis* subvar. *cymosa*, PIE LAN *Brassica oleracea* var. *gongylodes*, OU ZHOU YOU CAI *Brassica napus*, ZUAN GUO SUAN JIE *Sisymbrium officinale*. Ref: 2.

**15401 Neohancoside A**

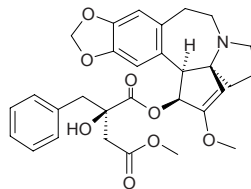
$C_{21}H_{36}O_{10}$  (448.52). White amorphous powder, mp 84~86°C (methanol). Source: HUA BEI BAI QIAN *Cynanchum hancockianum*. Ref: 244.

**15402 Neohancoside B**

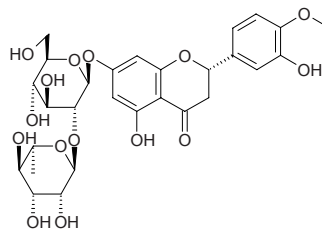
8-Hydroxy-linalool-3-O-β-D-xylopyranosyl(1→6)-β-D-glucopyranoside  
 $C_{21}H_{36}O_{11}$  (464.51). Source: HUA BEI BAI QIAN *Cynanchum hancockianum*. Ref: 244.

**15403 Neoharringtonine**

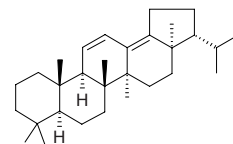
[142748-51-4]  $C_{30}H_{33}NO_8$  (535.60). Pharm: Antineoplastic (leukemia). Source: SAN JIAN SHAN *Cephalotaxus fortunei*. Ref: 2, 2630.

**15404 Neohesperidin**

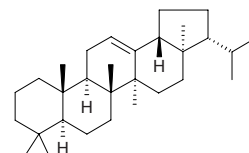
[13241-33-3]  $C_{28}H_{34}O_{15}$  (610.57). mp 234~235°C, 244°C. Pharm: Bitter principle. Source: GOU JU ZHI SHI *Poncirus trifoliata*, NING MENG PI *Citrus limon*, WU HE MI JU *Citrus unshiu*, ZHI SHI *Citrus aurantium*. Ref: 2, 658, 660.

**15405 11,13(18)-Neohopadiene**

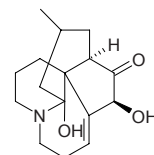
Wallichienene [3608-05-7]  $C_{30}H_{48}$  (408.72). Crystals ( $CHCl_3$ /MeOH), mp 213~215°C,  $[\alpha]_D = +42^\circ$ . Source: GAO SHAN TIAO JUE *Oleandra wallichii*, TIE SI QI *Adiantum pedatum*. Ref: 6, 1521.

**15406 12-Neohopene**

[2734-37-4]  $C_{30}H_{50}$  (410.73). Crystals ( $CHCl_3$ /MeOH), mp 134~137°C, 210~211°C,  $[\alpha]_D = +18.4^\circ$  ( $CHCl_3$ ),  $[\alpha]_D = +41.1^\circ$  ( $CHCl_3$ ). Source: DA YE GU SUI BU *Davallia divaricata* [Syn. *Davallia formosana*; *Davallia orientalis*], TIE SI QI *Adiantum pedatum*, *Adiantum* spp. Ref: 6, 1521, 2722.

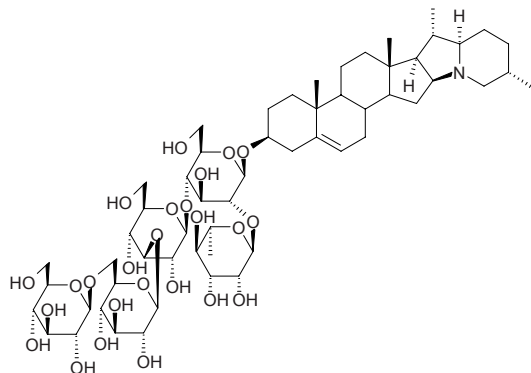
**15407 Neohuperzine**

$C_{16}H_{23}NO_3$  (277.37). Colorless needles,  $[\alpha]_D^{22} = -48.2^\circ$  ( $c = 0.1037$ , EtOH). Source: QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*]. Ref: 2245.

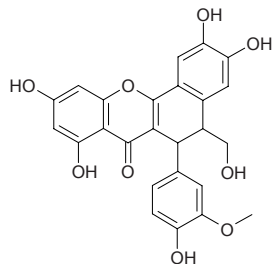


**15408 Neohyacinthoside**

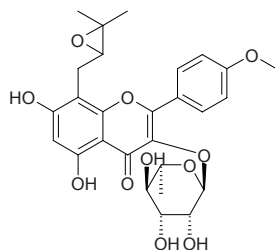
Solanidine-3-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)] $\beta$ -*D*-glucopyranoside  
 $C_{57}H_{93}NO_{25}$  (1192.37). White powder, mp 262~265°C,  $[\alpha]_D^{20} = -25.9^\circ$  ( $c = 0.29$ , pyridine). Source: BAI HE *Lilium brownii* var. *viridulum* [Syn. *Lilium brownii* var. *colchesteri*]. Ref: 93.

**15409 Neohydncarpin**

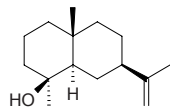
[71417-57-7]  $C_{25}H_{20}O_9$  (464.43). Yellow powder (benzene/acetone), mp 235~237°C,  $[\alpha]_D = -20.3^\circ$  ( $c = 0.59$ , MeOH). Pharm: Cytotoxic (mus, L1210; hmn: KB, colon glandular cancer, bone cancer, HeLa-S3 cervical cancer; Tmolt3 leukaemia cells). Source: WEI SHI DA FENG ZI *Hydnocarpus wightiana*. Ref: 2624, 2625.

**15410 Neocariin**

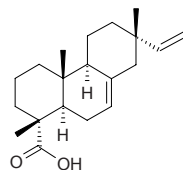
$C_{27}H_{30}O_{11}$  (530.53). Yellow powder, mp 185~187°C. Source: YIN YANG HUO *Epimedium brevicornum* Ref: 4427.

**15411 Neointermedeol**

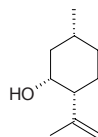
[5945-72-2]  $C_{15}H_{26}O$  (222.37). Oil, bp 85~87°C/0.5mmHg,  $[\alpha]_D^{25} = +7.5^\circ$  ( $c = 2.6$ , EtOH). Source: REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. Ref: 2626, 2627.

**15412 Neoisodextropimaric acid**

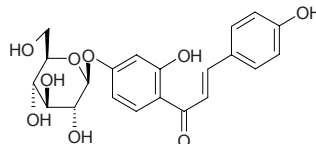
$C_{20}H_{30}O_2$  (302.46). Pharm: Antibacterial; cytotoxic (inhibition of TPA-induced ornithine decarboxylase activity with cultured mouse epidermal 308 cells)<sup>[5038]</sup>. Source: BEI MEI YA BAI *Thuja occidentalis*, DU SONG SHI *Juniperus rigida*, AN CI BAI *Juniperus conferta*. Ref: 658, 5038.

**15413 Neoisoisopulegol**

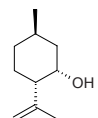
$C_{10}H_{18}O$  (154.25). Source: YU XIANG CAO *Mentha rotundifolia*. Ref: 6.

**15414 Neoisoliquiritin**

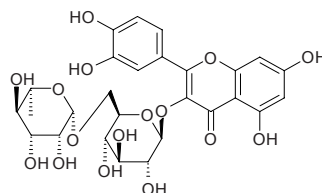
Isoliquirittigenin-4- $\beta$ -glucoside [59122-93-9]  $C_{21}H_{22}O_9$  (418.40). mp 228~230°C. Source: GAN CAO *Glycyrrhiza uralensis*. Ref: 2.

**15415 Neoisopulegol**

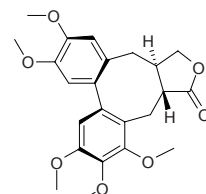
[20549-46-6]  $C_{10}H_{18}O$  (154.25). bp (+) 95°C/17mmHg. Source: YU XIANG CAO *Mentha rotundifolia*. Ref: 6.

**15416 Neoisorutin**

[36535-79-2]  $C_{27}H_{30}O_{16}$  (610.53). Source: LUO BU MA *Apocynum venetum*, PAO NANG CAO *Physochlaina physaloides*. Ref: 6.

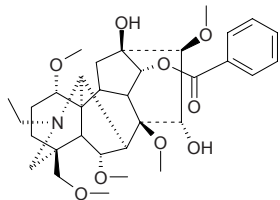
**15417 Neoistegane**

[87084-98-8]  $C_{23}H_{26}O_7$  (414.46). Pharm: Antineoplastic; cytotoxic (KB, ED<sub>50</sub> = 6.6 $\mu$ g/mL). Source: WU JIA QIAN HU *Steganotaenia araliacea*. Ref: 658, 1729.

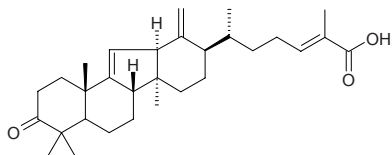


**15418 Neojiangyouaconitine**

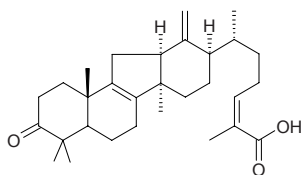
Aconitane-13,14,15-trihydroxyl,20-ethyl-1,6,8,16-tetramethoxy-4-(methoxymethyl)-14-benzoate(1 $\alpha$ ,6 $\alpha$ ,14 $\alpha$ ,15 $\alpha$ ,16 $\beta$ ) C<sub>33</sub>H<sub>47</sub>NO<sub>9</sub> (601.74). White lamellar crystals, mp 201–204°C, [ $\alpha$ ]<sub>D</sub><sup>14.4</sup> = –9.46° (c = 0.22, methanol). Source: FU ZI *Aconitum carmichaeli*. Ref: 239.

**15419 Neokadsuranic acid A**

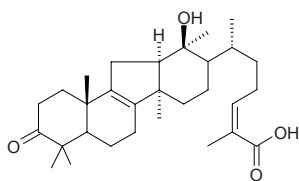
[123929-80-6] C<sub>30</sub>H<sub>44</sub>O<sub>3</sub> (452.68). Colorless oil, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = –35.0° (c = 0.1, CHCl<sub>3</sub>). Pharm: Antihypercholesterolemic (inhibits biosynthesis of cholesterol); antineoplastic<sup>[2523]</sup>; anti-HIV<sup>[2523]</sup>. Source: YI XING NAN WU WEI ZI *Kadsura heteroclita* [Syn. *Uvaria heteroclita*], CHANG GENG NAN WU WEI ZI *Kadsura peltigera* [Syn. *Kadsura longipedunculata*]. Ref: 1034, 2436, 2523, 2628.

**15420 Neokadsuranic acid B**

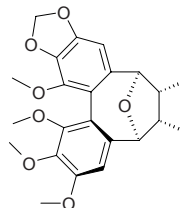
[123828-59-1] C<sub>30</sub>H<sub>44</sub>O<sub>3</sub> (452.68). [ $\alpha$ ]<sub>D</sub><sup>18</sup> = +37.4° (c = 0.11, chloroform). Pharm: Antihypercholesterolemic (inhibits biosynthesis of cholesterol). Source: CHANG GENG NAN WU WEI ZI *Kadsura peltigera* [Syn. *Kadsura longipedunculata*]. Ref: 1034, 1150.

**15421 Neokadsuranic acid C**

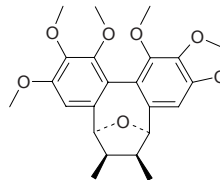
[123828-60-4] C<sub>30</sub>H<sub>46</sub>O<sub>4</sub> (470.69). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>29</sup> = +42.0° (c = 0.07, ethanol). Pharm: Antihypercholesterolemic (inhibits biosynthesis of cholesterol). Source: CHANG GENG NAN WU WEI ZI *Kadsura peltigera* [Syn. *Kadsura longipedunculata*]. Ref: 1034, 1150.

**15422 Neokadsuranin**

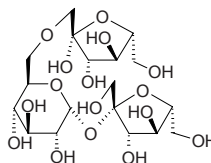
[115181-68-5] C<sub>23</sub>H<sub>26</sub>O<sub>7</sub> (414.46). Pharm: Antineoplastic (screened as potential antitumor promoters, EBV-EA induced by TPA, mol ratio/TPA = 1000, relative percentage of EBV-EA = (4.7±0.4)% (positive control value 32pmol, 20ng TPA = 100%), viability of Raji cells = 70%)<sup>[4644]</sup>. Source: LENG FAN TUAN *Kadsura coccinea* [syn. *Kadsura chenensis*; *Kadsura hainanensis*], NEI NAN WU WEI ZI *Kadsura interior* (stem). Ref: 2436, 4644.

**15423 Neokadsuranin**

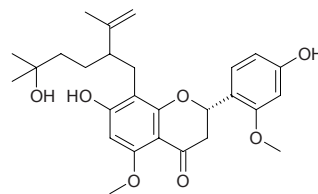
[115181-68-5] C<sub>23</sub>H<sub>26</sub>O<sub>7</sub> (414.46). Crystals (Et<sub>2</sub>O), mp 157–159°C, [ $\alpha$ ]<sub>D</sub> = 0° (CHCl<sub>3</sub>). Source: LENG FAN TUAN *Kadsura coccinea* [syn. *Kadsura chenensis*; *Kadsura hainanensis*]. Ref: 2629.

**15424 Neokestose**

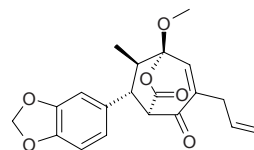
[3688-75-3] C<sub>18</sub>H<sub>32</sub>O<sub>16</sub> (504.45). Source: GE CONG *Allium victorialis*. Ref: 6.

**15425 Neokurarinol**

C<sub>27</sub>H<sub>34</sub>O<sub>7</sub> (470.57). Source: KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. Ref: 2, 1521.

**15426 Neolignan in Magnolia denudata**

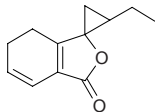
C<sub>20</sub>H<sub>20</sub>O<sub>6</sub> (356.38). Source: YU LAN *Magnolia denudata* [Syn. *Magnolia heptapata*]. Ref: 4439.



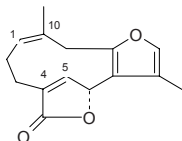


**15427 Neoligustilide**

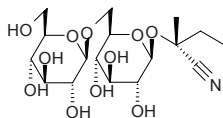
$C_{12}H_{14}O_2$  (190.24). Colorless massive crystals, mp 58–60°C. Source: LIAO GAO BEN *Ligusticum jeholense*. Ref: 343.

**15428 Neolinderalactone**

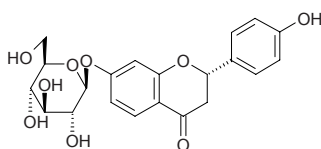
[26379-18-0]  $C_{15}H_{16}O_3$  (244.29). Prisms (MeOH), mp 116–118°C,  $[\alpha]_D^{25} = +100^\circ$  ( $c = 1.09$ , EtOH).660. Source: WU YAO *Lindera strychnifolia* [Syn. *Lindera aggregata*]. Ref: 1521.

**15429 Neolinustatin**

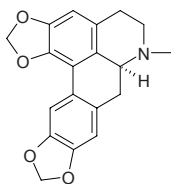
$C_{17}H_{29}NO_{11}$  (423.42). Pharm: Toxin. Source: YA MA *Linum usitatissimum*. Ref: 658.

**15430 Neoliquiritin**

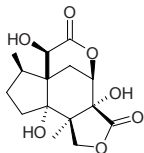
[5088-75-5]  $C_{21}H_{22}O_9$  (418.40). mp 164–166°C. Source: GAN CAO *Glycyrrhiza uralensis*. Ref: 2.

**15431 Neolitsine**

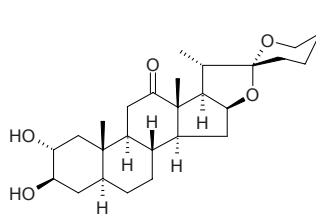
[2466-42-4]  $C_{19}H_{17}NO_4$  (323.35). Needles (Me<sub>2</sub>CO), mp 149–150°C,  $[\alpha]_D = +56.5^\circ$  ( $c = 1.57$ , CHCl<sub>3</sub>). Source: MEI LI XIN MU JIANG ZI *Neolitsia pulchella*, WU YE TENG *Cassytha filiformis*, YUE GUI YE *Laurus nobilis*. Ref: 1521, 2601.

**15432 Neomajucin**

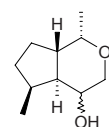
[114687-98-8]  $C_{15}H_{20}O_7$  (312.32). Colorless octahedron (EtOAc), mp 220–222°C,  $[\alpha]_D^{24} = -75^\circ$  ( $c = 0.25$ , dioxane). Pharm: Spasm action (picrotoxin-like); LD<sub>50</sub> = 12.2mg/kg. Source: DA BA JIAO *Illicium majus* (peel), JIA DI FENG PI *Illicium jiadifengpi* (pericarp: yield = 0.00014%dw)<sup>[4621]</sup>. Ref: 2631, 2751, 4621.

**15433 Neomanogenin**

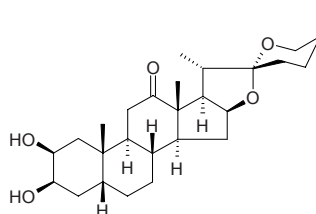
$C_{27}H_{42}O_5$  (446.63). mp 242°C. Source: TIAO WEN LONG SHE LAN *Agave striata*. Ref: 2503.

**15434 Neomatatabiol**

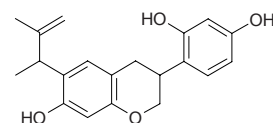
Dihydronepetalactol [21699-53-6]  $C_{10}H_{18}O_2$  (170.25). bp 95°C/5mmHg. Pharm: Attracts adult male dayfly (*Chrysopa septempunctata*). Source: MU TIAN LIAO *Actinidia polygama*. Ref: 6, 658.

**15435 Neomexogenin**

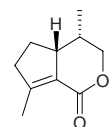
$C_{27}H_{42}O_5$  (446.63). mp 221°C. Source: *Agave roezliana*. Ref: 2503.

**15436 Neomillinol**

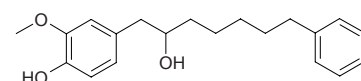
$C_{20}H_{22}O_4$  (326.40). Semisolid,  $[\alpha]_D^{25} = -6^\circ$  ( $c = 0.1$ , MeOH). Pharm: Antibacterial. Source: ZONG ZHUANG JI XUE TENG *Milletia racemosa*. Ref: 2734.

**15437 Neonepetalactone**

[24190-25-8]  $C_{10}H_{14}O_2$  (166.22). Source: MU TIAN LIAO *Actinidia polygama*. Ref: 6.

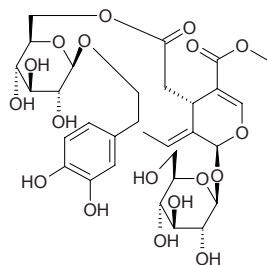
**15438 Neonootkatol**

$C_{20}H_{26}O_3$  (314.43). Yellow oil Source: YI ZHI REN *Alpinia oxyphylla*. Ref: 796.

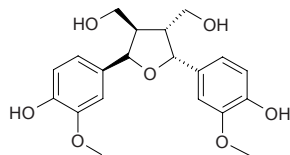


**15439 Neoneuzhenide**

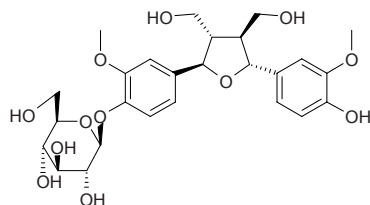
[96382-91-1]  $C_{31}H_{42}O_{18}$  (702.67). Crystals (as nona-Ac compound), mp 85–86°C (nona-Ac compound),  $[\alpha]_D = -93.5^\circ$  ( $CHCl_3$ , nona-Ac compound). **Pharm:** Antiviral (Help2 cells, Para-3,  $IC_{50} = 72.9\mu g/mL$ , TI = 2.0; MDCK cells, Flu-A, inactive; Vero cells, SV-1, inactive)<sup>[4141]</sup>; anti-hemolysis (rat, red blood cell *in vitro*, 2,2'-azo-bis-(2-amidinopropane)dihydrochloride induced,  $IC_{50} = 35.0\mu mol/L$ , control Trolox,  $IC_{50} = 55.0\mu mol/L$ )<sup>[4141]</sup>; anti-hemolysis (against hemolysis of red blood cells induced by AAPH free radicals,  $IC_{50} = 9.3\text{--}37.5\mu mol/L$ )<sup>[3545]</sup>. **Source:** NV ZHEN ZI *Ligustrum lucidum*, RI BEN NV ZHEN *Ligustrum japonicum*, **Ref:** 2633, 3545, 4141.

**15440 Neolivil**

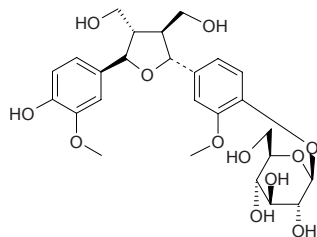
[77790-55-7]  $C_{20}H_{24}O_7$  (376.41). Oil. **Source:** YI ZHU QIAN MA *Urtica dioica*, *Thymus longiflorus*. **Ref:** 2634, 2635.

**15441 7R,7'R,8S,8'S-(+)-Neo-olivil-4-O-β-D-glucopyranoside**

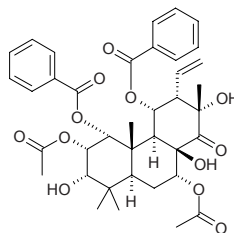
$C_{26}H_{34}O_{12}$  (538.55). Amorphous powder,  $[\alpha]_D^{24} = +6.4^\circ$  ( $c = 0.110$ , MeOH). **Source:** RI BEN ZHANG YA CAI *Swertia japonica*. **Ref:** 2528.

**15442 Neolivil-4-O-β-D-glucoside**

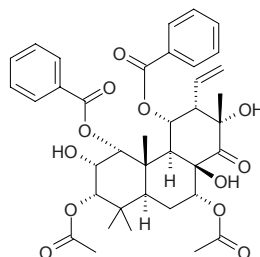
$C_{26}H_{34}O_{12}$  (538.55). **Source:** YI ZHU QIAN MA *Urtica dioica*. **Ref:** 2636.

**15443 Neoorthosiphol A**

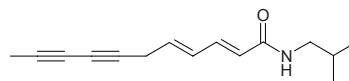
$C_{38}H_{44}O_{12}$  (692.77). **Pharm:** NO production inhibitor (LPS-activated macrophage-like J774.1 cells,  $IC_{50} = 40.7\mu mol/L$ ; control L-NMMA,  $IC_{50} = 26.0\mu mol/L$ , Polymixin B,  $IC_{50} = 27.8\mu g/mL$ , Dexamethasone  $IC_{50} = 170\mu mol/L$ )<sup>[4322]</sup>; cytotoxic (antiproliferative, Colon26-L5,  $ED_{50} = 38.3\mu g/mL$ , control 5-Fluorouracil,  $ED_{50} = 0.015\mu g/mL$ ; HT1080,  $ED_{50} = 96.3\mu g/mL$ , 5-Fluorouracil,  $ED_{50} = 0.48\mu g/mL$ )<sup>[3053]</sup>. **Source:** XIONG RUI ZHUANG ZHI GUAN CAO *Orthosiphon stamineus* [Syn: *Orthosiphon aristatus*; *Orthosiphon grandiflorus*; *Orthosiphon spicatus*] (aerial parts: yield = 0.0133%dw). **Ref:** 4322, 3053.

**15444 Neoorthosiphol B**

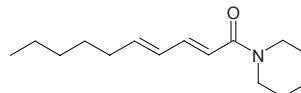
$C_{38}H_{44}O_{12}$  (692.77). **Pharm:** NO production inhibitor (LPS-activated macrophage-like J774.1 cells,  $IC_{50} = 14.0\mu mol/L$ ; control L-NMMA,  $IC_{50} = 26.0\mu mol/L$ , Polymixin B,  $IC_{50} = 27.8\mu g/mL$ , Dexamethasone  $IC_{50} = 170\mu mol/L$ )<sup>[4322]</sup>. **Source:** XIONG RUI ZHUANG ZHI GUAN CAO *Orthosiphon stamineus* [Syn: *Orthosiphon aristatus*; *Orthosiphon grandiflorus*; *Orthosiphon spicatus*] (aerial parts: yield = 0.0023%dw). **Ref:** 4322, 4741.

**15445 Neopellitorine A**

Undeca-2E,4Z-dien-7,9-diynoic acid isobutylamide  $C_{15}H_{19}NO$  (229.32). Yellow oil. **Pharm:** Insecticidal (*Sitophilus oryzae*, *Rhyzopertha dominica*, 200 $\mu g/mL$ , after 3 days mortality = 100%). **Source:** XIA YE QING HAO *Artemisia dracunculus* (aerial parts). **Ref:** 5218.

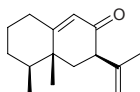
**15446 Neopellitorine B**

Deca-2E,4Z-dienoic acid piperidide  $C_{15}H_{25}NO$  (235.37). Yellow oil. **Pharm:** Insecticidal (*Sitophilus oryzae*, 200 $\mu g/mL$ , after 3 days, mortality = 70%; *Rhyzopertha dominica*, 200 $\mu g/mL$ , after 3 days, mortality = 50%)<sup>[5218]</sup>. **Source:** HU JIAO *Piper nigrum* (root: yield = 0.000029%dw), XIA YE QING HAO *Artemisia dracunculus* (aerial parts). **Ref:** 4753, 5218.



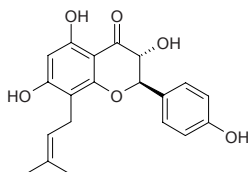
**15447 Neopetasone**

$C_{15}H_{22}O$  (218.34). Source: CHEN XIANG *Aquilaria agallocha*. Ref: 13.

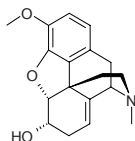
**15448 Neophellamuretin**

$C_{20}H_{20}O_6$  (356.38). Pharm: Antioxidant (DPPH radical scavenger,  $250\mu\text{mol/L}$ ,  $\text{InRt} = 20.9\%$ ; control Vitamin E,  $\text{IC}_{50} = 8.3\mu\text{mol/L}$ )<sup>[4722]</sup>. Source: TAI WAN HUANG BO *Phellodendron amurense* var. *wilsonii* (leaf: yield = 0.050%/dw).

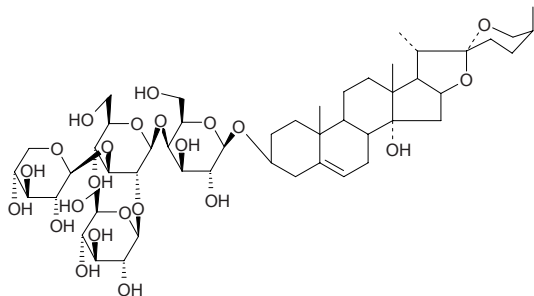
Ref: 4722.

**15449 Neopine**

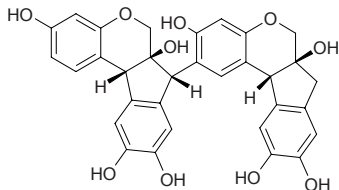
[467-14-1]  $C_{18}H_{21}NO_3$  (299.37). mp 127.0~127.5°C. Pharm: Analgesic and antispasmodic (similar action with codeine). Source: DA HONG YING SU *Papaver bracteatum*, YA PIAN *Papaver somniferum*, YING SU *Papaver somniferum*. Ref: 6, 658.

**15450 Neoprazerigenin A 3-O-β-D-lycotetraoside**

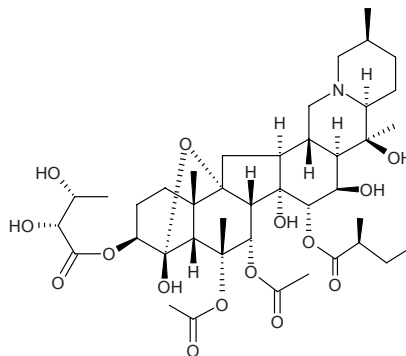
$C_{50}H_{80}O_{23}$  (1049.18). Source: XI BO LI YA LIAO *Polygonum sibiricum* [syn. *Persicaria sibirica*], HUANG JING *Polygonatum sibiricum*. Ref: 2637.

**15451 Neoprotosappanin**

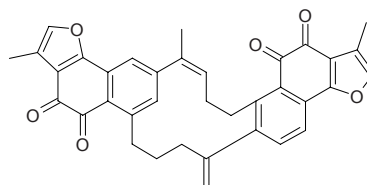
$C_{32}H_{26}O_{10}$  (570.56). Yellow amorphous solid,  $[\alpha]_D^{25} = -239.0^\circ$  ( $c = 0.3$ , MeOH). Pharm: Xanthine oxidase inhibitor (noncompetitive inhibitory activity in concentration-dependent manner,  $\text{IC}_{50} = 38.3\mu\text{mol/L}$ ,  $K_i = 29.2\mu\text{mol/L}$ , control Allopurinol, competitive type,  $\text{IC}_{50} = 2.5\mu\text{mol/L}$ ,  $K_i = 1.80\mu\text{mol/L}$ ). Source: SU MU *Caesalpinia sappan* (heartwood). Ref: 4494.

**15452 Neoprotoveratrine**

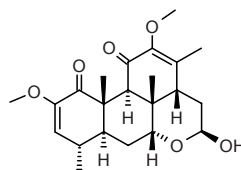
Protoveratrine B [124-97-0]  $C_{41}H_{63}NO_{15}$  (809.96). mp 269~270°C,  $[\alpha]_D = -39^\circ$  (pyridine). Pharm: Antihypertensive (strong, but with high toxicity); emetic; toxin. Source: BAI LI LU *Veratrum album*, LV LI LU *Veratrum viride*. Ref: 658, 1521.

**15453 Neo-przewaquinone A**

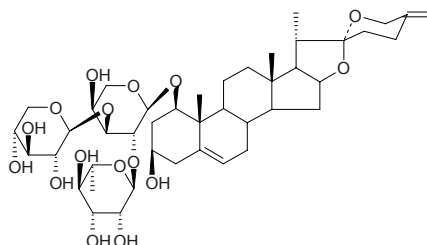
$C_{36}H_{28}O_6$  (556.62). Amaranth needles, mp 188~189°C. Source: GAN XI SHU WEI CAO *Salvia przewalskii*. Ref: 2464.

**15454 Neoquassin**

Nigakihemiacetal B  $C_{22}H_{30}O_6$  (390.48). Pharm: Extremely bitter. Source: CHU BAI PI *Ailanthus altissima*, KU MU *Picrasma quassioides* [Syn. *Picrasma ailanthoides*], KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*], MEI ZHOU KU MU *Quassia amara*, *Picrasma* sp. Ref: 12, 658, 660.

**15455 Neoruscogenin 1-O-{O-α-L-rhamnopyranosyl-(1→2)-O-β-D-xylopyranosyl-(1→3)}-α-L-arabinopyranoside**

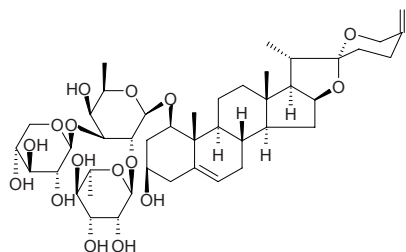
[180161-85-7]  $C_{43}H_{66}O_{16}$  (839.00). Amorphous solid,  $[\alpha]_D^{27} = -63.8^\circ$  ( $c = 0.26$ , MeOH). Pharm: cAMP phosphodiesterase inhibitor ( $\text{IC}_{50} = 92\mu\text{mol/L}$ ). Source: XIA WAN NUO LI *Nolina recurvata*. Ref: 1131.



**15456 Neoruscogenin 1-O-[O- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)-O- $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -D-fucopyranoside}**

[180161-87-9] C<sub>44</sub>H<sub>68</sub>O<sub>16</sub> (853.02). Amorphous solid,  $[\alpha]_D^{27} = -45^\circ$  ( $c = 0.44$ , MeOH). **Pharm:** cAMP phosphodiesterase inhibitor (IC<sub>50</sub> = 161  $\mu$ mol/L).

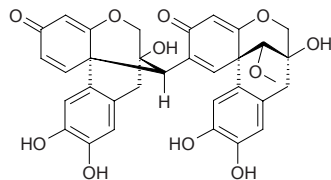
**Source:** XIA WAN NUO LI *Nolina recurvata*. **Ref:** 1131.



**15457 Neosappanone A**

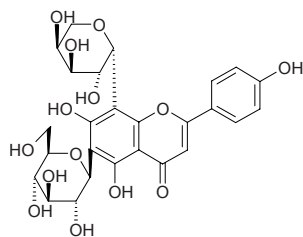
C<sub>32</sub>H<sub>28</sub>O<sub>11</sub> (600.58). **Pharm:** Xanthine oxidase inhibitor (competitive inhibitory activity in concentration-dependent manner, IC<sub>50</sub> = 29.7  $\mu$ mol/L, K<sub>i</sub> = 16.3  $\mu$ mol/L, control Allopurinol, IC<sub>50</sub> = 2.5  $\mu$ mol/L, K<sub>i</sub> = 1.80  $\mu$ mol/L).

**Source:** SU MU *Caesalpinia sappan* (heartwood). **Ref:** 4494.



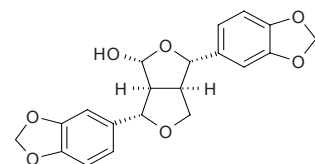
**15458 Neoschaftoside**

[61328-41-4] C<sub>26</sub>H<sub>28</sub>O<sub>14</sub> (564.50). **Pharm:** Insect phagostimulant (*Plant hoppers*). **Source:** JING MI *Oryza sativa*. **Ref:** 658.



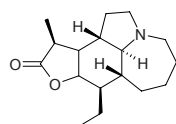
**15459 Neosesamin**

C<sub>20</sub>H<sub>18</sub>O<sub>7</sub> (370.36). Colorless acicular crystals mp 157~158°C. **Source:** TU SI ZI *Cuscuta chinensis*. **Ref:** 816.



**15460 Neostenine**

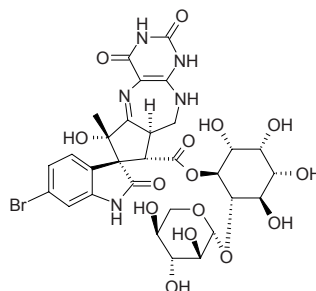
C<sub>17</sub>H<sub>27</sub>NO<sub>2</sub> (277.41). mp 90~92°C,  $[\alpha]_D^{20} = +73.6^\circ$  ( $c = 0.1$ , MeOH). **Pharm:** Antitussive (guinea pig cough model, 133  $\mu$ mol/kg ip, cough InRt = 77%,  $p < 0.001$ ). **Source:** BAI BU *Stemona tuberosa*. **Ref:** 5463.



**15461 Neosurugatoxin**

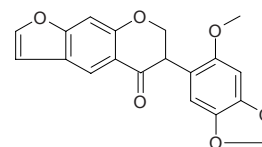
[80680-43-9] C<sub>30</sub>H<sub>34</sub>BrN<sub>5</sub>O<sub>15</sub> (784.53). **Pharm:** Mydriatic (mus, 0.03  $\mu$ g); toxin.

**Source:** RI BEN DONG FENG LUO *Babylonia japonica*. **Ref:** 658, 1521.



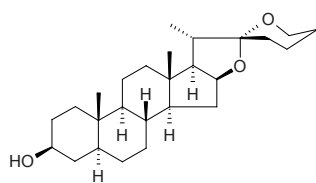
**15462 Neotenone**

Neorautenone C<sub>19</sub>H<sub>14</sub>O<sub>6</sub> (338.32). **Pharm:** Antiviral (HSV-1, 50  $\mu$ g/mL, InRt = 26.1%; HSV-2, 50  $\mu$ g/mL, InRt = 23.7%). **Source:** DI GUA ZI *Pachyrhizus erosus*. **Ref:** 4180.



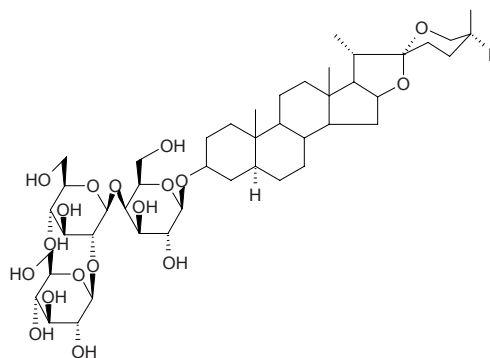
**15463 Neotigogenin**

[470-01-9] C<sub>27</sub>H<sub>44</sub>O<sub>3</sub> (416.65). mp 202~203°C. **Source:** JIAN MA *Agave sisalana*, NIAN YU XU *Smilax sieboldii*, WU CI FAN MA *Agave americana* var. *marginata* [Syn. *Agave americana* var. *variegata*], XIA YE LONG SHE LAN *Agave cantala*. **Ref:** 6, 10.



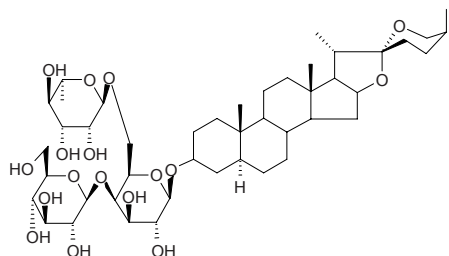
**15464 Neotigogenin-3-O- $\beta$ -D-glucoopyranosyl(1 $\rightarrow$ 2)- $\beta$ -D-glucoopyranosyl(1 $\rightarrow$ 4)- $\beta$ -D-galactopyranoside**

C<sub>45</sub>H<sub>74</sub>O<sub>18</sub> (903.08). **Source:** BAI MAO TENG *Solanum lyratum*. **Ref:** 2638.



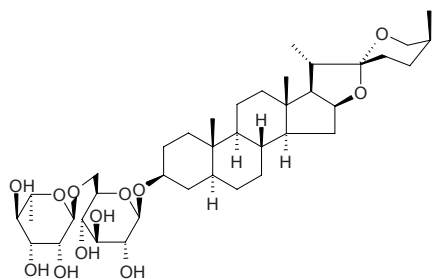
**15465 Neotigogenin-3-O- $\beta$ -D-glucopyranosyl(1 $\rightarrow$ 4)-O-[ $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 6)]- $\beta$ -D-galactopyranoside**

C<sub>45</sub>H<sub>74</sub>O<sub>17</sub> (887.08). Source: BA QIA *Smilax china* [Syn. *Smilax japonica*], NIU WEI CAI *Smilax riparia*. Ref: 2639.



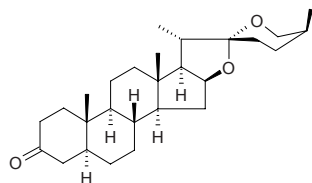
**15466 Neotigogenin-3-O- $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside**

C<sub>39</sub>H<sub>64</sub>O<sub>12</sub> (724.94). Source: BA QIA *Smilax china* [Syn. *Smilax japonica*], NIU WEI CAI *Smilax riparia*. Ref: 2639.



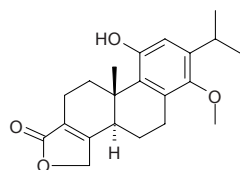
**15467 Neotigogenone**

C<sub>27</sub>H<sub>42</sub>O<sub>3</sub> (414.63). Source: JIAN MA *Agave sisalana*. Ref: 10.



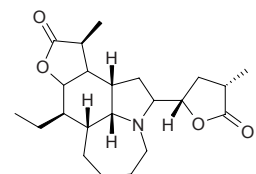
**15468 Neotriptophenolide**

[81827-74-9] C<sub>21</sub>H<sub>26</sub>O<sub>4</sub> (342.44). Source: LEI GONG TENG *Tripterygium wilfordii*. Ref: 2.



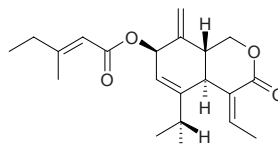
**15469 Neotuberostemonine**

C<sub>22</sub>H<sub>33</sub>NO<sub>4</sub> (375.51). [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +83.0° (*c* = 0.1, MeOH). Pharm: Antitussive (guinea pig cough model, 133  $\mu$ mol/kg ip, cough InRt = 85%, *p* < 0.001). Source: BAI BU *Stemona tuberosa*. Ref: 5463.



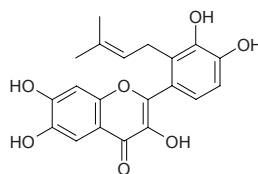
**15470 Neotussilagolactone**

[168482-85-7] C<sub>21</sub>H<sub>28</sub>O<sub>4</sub> (344.45). Colorless jelly, [ $\alpha$ ]<sub>D</sub><sup>23</sup> = -37.2° (*c* = 0.1, CHCl<sub>3</sub>). Pharm: Platelet aggregation inhibitor (PAF trial, IC<sub>50</sub> = 26.7  $\mu$ mol/L). Source: KUAN DONG HUA *Tussilago farfara*. Ref: 2640, 2641.



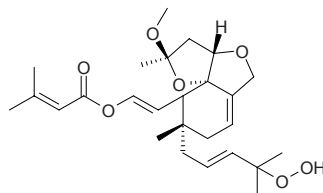
**15471 Neouralenol**

3,6,7,3',4'-Pentahydroxy-2'-isoprenylflavone [139163-16-9] C<sub>20</sub>H<sub>18</sub>O<sub>7</sub> (370.36). Dark yellow acicular crystals, mp 229~231°C. Source: GAN CAO *Glycyrrhiza uralensis*. Ref: 171, 660.



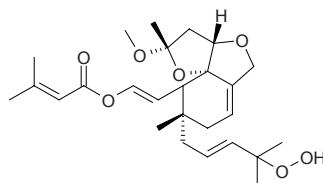
**15472 Neovibsanin D**

C<sub>26</sub>H<sub>38</sub>O<sub>7</sub> (462.59). Colorless paste, [ $\alpha$ ]<sub>D</sub><sup>23</sup> = -66.1° (*c* = 0.30, CHCl<sub>3</sub>). Source: RI BEN JIA MI *Viburnum awabuki*. Ref: 2530.



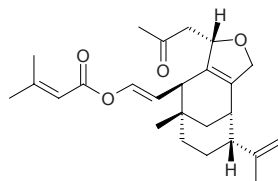
**15473 7-epi-Neovibsanin D**

C<sub>26</sub>H<sub>38</sub>O<sub>7</sub> (462.59). Colorless paste, [ $\alpha$ ]<sub>D</sub><sup>23</sup> = +24.2° (*c* = 0.70, CHCl<sub>3</sub>). Source: RI BEN JIA MI *Viburnum awabuki*. Ref: 2530.



**15474 Neovibsanin G**

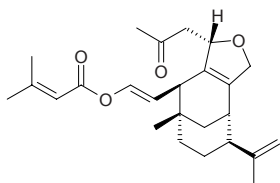
C<sub>25</sub>H<sub>34</sub>O<sub>4</sub> (398.55). Colorless paste, [ $\alpha$ ]<sub>D</sub><sup>23</sup> = +96.2° (*c* = 0.32, alcohol). Source: RI BEN JIA MI *Viburnum awabuki*. Ref: 2530.



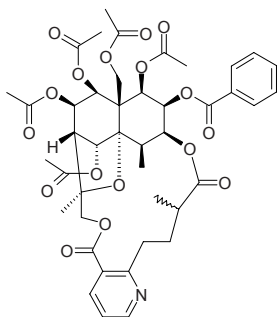
**15475 14-epi-Neovibsanin G**

$C_{25}H_{34}O_4$  (398.55). Colorless paste,  $[\alpha]_D^{23} = +136.2^\circ$  ( $c = 0.09$ , alcohol).

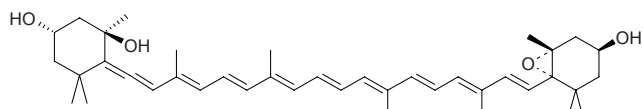
**Source:** RI BEN JIA MI *Viburnum awabuki*. **Ref:** 2530.

**15476 Neowilforine**

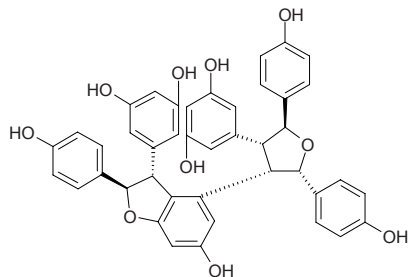
[121880-18-0]  $C_{43}H_{49}NO_{17}$  (851.87). **Source:** LEI GONG TENG *Tripterygium wilfordii*. **Ref:** 2.

**15477 Neoxanthin**

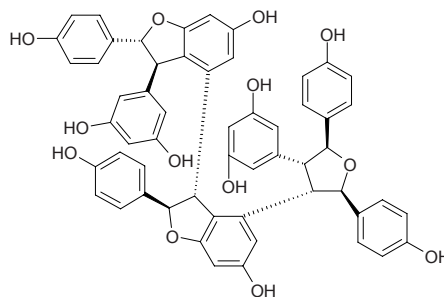
[30743-41-0]  $C_{40}H_{56}O_4$  (600.89). mp  $134^\circ\text{C}$ . **Pharm:** Yellow pigment. **Source:** DAO CAO *Oryza sativa*, HONG HAI JIAO *Capsicum annum*, JIN QUE ER *Cytisus scoparius* [Syn. *Spartium scoparium*], JING MI *Oryza sativa*, MA TI YE *Caltha palustris*, SUAN SHUI CAO *Potamogeton perfoliatus*, TAO *Prunus persica*, YANG LI *Prunus domestica*, *Forsythia* sp., *Geum* sp., *Malus* sp. **Ref:** 6, 658.

**15478 Nepalensinol D**

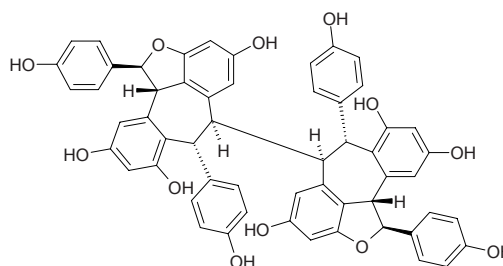
$C_{42}H_{34}O_{10}$  (698.73). Reddish brown powder, mp  $230^\circ\text{C}$  (dec),  $[\alpha]_D = -82.0^\circ$  ( $c = 0.3$ , MeOH). **Pharm:** Topoisomerase II inhibitor (hmn,  $IC_{50} = 14.8\mu\text{mol/L}$ , control Daunorubicin,  $IC_{50} = 9.1\mu\text{mol/L}$ ). **Source:** NI BO ER SONG CAO *Kobresia nepalensis* (stem: yield = 0.0003%dw). **Ref:** 1783.

**15479 Nepalensinol E**

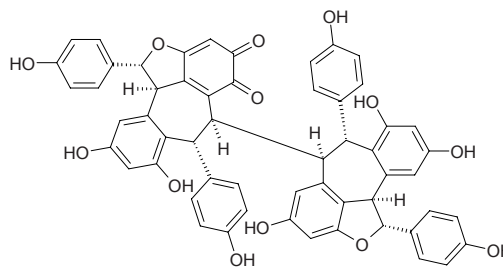
$C_{56}H_{44}O_{13}$  (924.97). Brown powder, mp  $250^\circ\text{C}$  (dec),  $[\alpha]_D = -307.8^\circ$  ( $c = 0.5$ , MeOH). **Pharm:** Topoisomerase II inhibitor (hmn,  $IC_{50} = 11.7\mu\text{mol/L}$ , control Daunorubicin,  $IC_{50} = 9.1\mu\text{mol/L}$ ). **Source:** NI BO ER SONG CAO *Kobresia nepalensis* (stem: yield = 0.0007%dw). **Ref:** 1783.

**15480 Nepalensinol F**

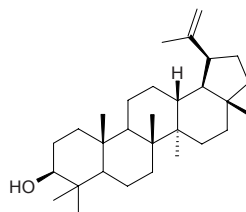
$C_{56}H_{42}O_{12}$  (906.95). Brown powder, mp  $> 300^\circ\text{C}$  (dec),  $[\alpha]_D = +26.3^\circ$  ( $c = 0.4$ , MeOH). **Pharm:** Topoisomerase II inhibitor (hmn,  $IC_{50} = 5.5\mu\text{mol/L}$ , control Daunorubicin,  $IC_{50} = 9.1\mu\text{mol/L}$ ). **Source:** NI BO ER SONG CAO *Kobresia nepalensis* (stem: yield = 0.0005%dw). **Ref:** 1783.

**15481 Nepalensinol G**

$C_{56}H_{40}O_{13}$  (920.94). Reddish brown powder, mp  $> 300^\circ\text{C}$  (dec),  $[\alpha]_D = +66^\circ$  ( $c = 0.1$ , MeOH). **Pharm:** Topoisomerase II inhibitor (hmn,  $IC_{50} > 50\mu\text{mol/L}$  inactive, control Daunorubicin,  $IC_{50} = 9.1\mu\text{mol/L}$ ). **Source:** NI BO ER SONG CAO *Kobresia nepalensis* (stem: yield = 0.0008%dw). **Ref:** 1783.

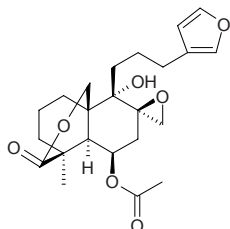
**15482 Nephinol**

$3\beta$ -Hydroxy-18 $\beta$ ,19 $\alpha$ H-lup-20(29)-ene  $C_{30}H_{50}O$  (426.73). **Source:** BO TE LAN DA JI *Euphorbia portlandica* (whole herb). **Ref:** 5019.

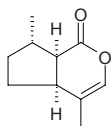


**15483 Nepetaefuran**

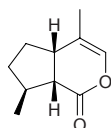
[29461-24-3] C<sub>22</sub>H<sub>28</sub>O<sub>7</sub> (404.46). **Pharm:** Cytotoxic (leukemia cells L<sub>1210</sub> in tissue culture, IC<sub>50</sub> = 50-60 μg/mL)<sup>[4328]</sup>. **Source:** JING JIE YE SHI ER CAO *Leonotis nepetaefolia*, XI YE YI MU CAO *Leonurus sibiricus* (aerial parts). **Ref:** 1521, 4328.

**15484 Nepetalactone**

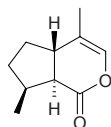
[21651-62-7] C<sub>10</sub>H<sub>14</sub>O<sub>2</sub> (166.22). Oil, [α]<sub>D</sub><sup>21</sup> = +37° (CHCl<sub>3</sub>). **Source:** HONG CHE ZHOU CAO *Trifolium pratense*, JIA JING JIE *Nepeta cataria*, MU TIAN LIAO *Actinidia polygama*. **Ref:** 660, 1521.

**15485 cis-Nepetalactone**

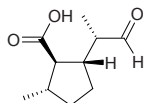
[21651-62-7] C<sub>10</sub>H<sub>14</sub>O<sub>2</sub> (166.22). Oil, [α]<sub>D</sub><sup>21</sup> = +37°. **Pharm:** Anthelmintic; stimulant (animals of family Felidae). **Source:** JIA JING JIE *Nepeta cataria*. **Ref:** 658, 1521.

**15486 trans-Nepetalactone**

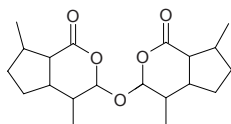
[17257-15-7] C<sub>10</sub>H<sub>14</sub>O<sub>2</sub> (166.22). Oil, [α]<sub>D</sub><sup>21</sup> = -24.4° (c = 6.2, CHCl<sub>3</sub>). **Pharm:** Anthelmintic; stimulant (animals of family Felidae). **Source:** JIA JING JIE *Nepeta cataria*. **Ref:** 658, 1521.

**15487 Nepetalic acid**

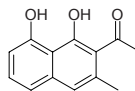
[21651-54-7] C<sub>10</sub>H<sub>16</sub>O<sub>3</sub> (184.24). mp 75~76°C. **Source:** JIA JING JIE *Nepeta cataria*. **Ref:** 6.

**15488 Nepetalic anhydride**

C<sub>21</sub>H<sub>32</sub>O<sub>5</sub> (364.49). mp 139~140°C. **Source:** JIA JING JIE *Nepeta cataria*. **Ref:** 6.

**15489 Nepodin**

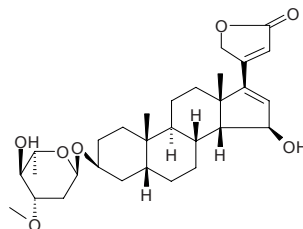
2-Acetyl-1,8-dihydroxy-3-methyl naphthalene; Musizin [3785-24-8] C<sub>13</sub>H<sub>12</sub>O<sub>3</sub> (216.24). mp 162~163°C. **Pharm:** Antibacterial (*Bacillus subtilis*, MIC = 25 μg/mL; *Sarcina* sp., MIC = 100 μg/mL); antifungal (*Trichophyton rubrum*, MIC = 50 μg/mL; *Candida albicans*, MIC = 100 μg/mL). **Source:** DUN YE SUAN MO *Rumex obtusifolius*, NI BO ER YANG TI *Rumex nepalensis*, NIU SHE CAO *Rumex dentatus* (root: mean content = 0.143%), NIU XI XI *Rumex patientia* (root: mean content = 0.0055%)<sup>[5508]</sup>, OU SHU LI *Rhamnus frangula* [Syn. *Frangula alnus*], SUAN MO *Rumex acetosa* (root: mean content = 0.0108%)<sup>[5508]</sup>, YANG TI *Rumex japonicus* (root: mean content = 0.354%)<sup>[5508]</sup>. **Ref:** 6, 658, 1521, 5508.

**15490 Nereistoxin**

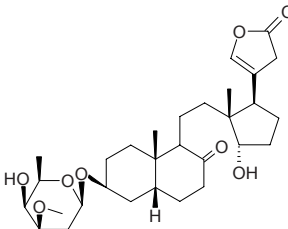
[1631-58-9] C<sub>5</sub>H<sub>11</sub>NS<sub>2</sub> (149.28). **Pharm:** Neurotoxin (mammal, bird, reptile and fish); pesticide (*Musca domestica*, LD = 144 mg/kg; American cockroach, LD = 68 mg/kg); LD<sub>50</sub> (mus, iv, oxalate) = 33 mg/kg. **Source:** YI ZU SUO SHA CAN *Lumbriconeis heteropoda*. **Ref:** 658.

**15491 Neriantin**

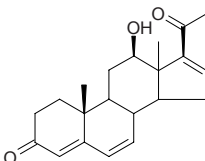
C<sub>30</sub>H<sub>44</sub>O<sub>7</sub> (516.68). mp 206~208°C. **Source:** JIA ZHU TAO *Nerium indicum*, OU ZHOU JIA ZHU TAO *Nerium oleander*. **Ref:** 6, 1521.

**15492 Neriaside**

[68165-55-9] C<sub>30</sub>H<sub>46</sub>O<sub>8</sub> (534.70). Amorphous, [α]<sub>D</sub> = -17.6°. **Source:** *Nerium odorum*. **Ref:** 2642.

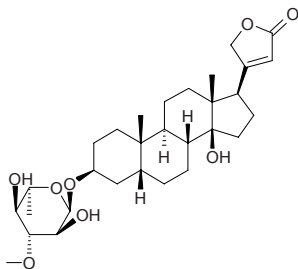
**15493 Neridienone A**

[53823-05-5] C<sub>21</sub>H<sub>26</sub>O<sub>3</sub> (326.44). Crystals (Me<sub>2</sub>CO-Hexane), mp 210~211°C, [α]<sub>D</sub> = +71.5° (MeOH). **Source:** SHAN TENG *Anodendron affine*, XIANG JIA PI *Periploca sepium*, *Nerium odorum*. **Ref:** 2643, 2644, 2645.

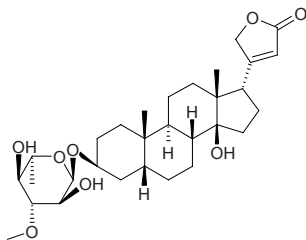


**15494 17 $\beta$ -Neriifolin**

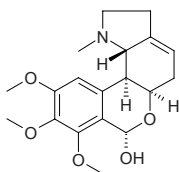
Neriifolin [466-07-9] C<sub>30</sub>H<sub>46</sub>O<sub>8</sub> (534.70). mp 218~225°C. **Pharm:** Cytotoxic (KB, ED<sub>50</sub> = 0.017 $\mu$ g/mL; BC, ED<sub>50</sub> = 0.048 $\mu$ g/mL; NCI-H187, ED<sub>50</sub> = 0.076 $\mu$ g/mL; control Ellipticine, ED<sub>50</sub> = 0.3~0.6 $\mu$ g/mL)<sup>[3777]</sup>; cytotoxic (antiproliferative hmn colon cancer assay)<sup>[5038]</sup>. **Source:** AO DAO LA MU HAI MANG GUO *Cerbera odollam* (seed), HUANG HUA JIA ZHU TAO *Thevetia neriifolia* [Syn. *Thevetia peruviana*] (seed: mean content = 2.00%<sup>[5508]</sup>), NIU XIN QIE ZI *Cerbera manghas*. **Ref:** 4, 5, 2594, 2782, 3777, 5038, 5508.

**15495 17 $\alpha$ -Neriifolin**

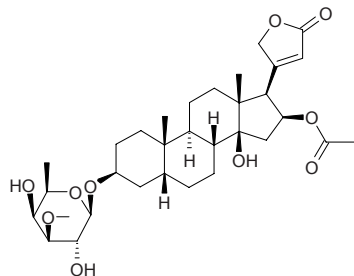
C<sub>30</sub>H<sub>46</sub>O<sub>8</sub> (534.70). **Pharm:** Cytotoxic (KB, ED<sub>50</sub> = 0.078 $\mu$ g/mL; BC, ED<sub>50</sub> = 0.049 $\mu$ g/mL; NCI-H187, ED<sub>50</sub> = 0.032 $\mu$ g/mL; control Ellipticine, ED<sub>50</sub> = 0.3~0.6 $\mu$ g/mL). **Source:** AO DAO LA MU HAI MANG GUO *Cerbera odollam* (seed). **Ref:** 3777.

**15496 Nerinine**

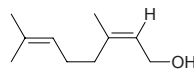
[481-44-7] C<sub>19</sub>H<sub>25</sub>NO<sub>5</sub> (347.41). mp 209~210°C. **Source:** GAN FENG CAO *Zephyranthes candida*. **Ref:** 6, 1521.

**15497 Neritaloside**

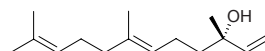
[465-13-4] C<sub>32</sub>H<sub>48</sub>O<sub>10</sub> (592.73). Fine needles (MeOH), mp 138~140°C. **Pharm:** Inhibits CNS (mus, ip 25mg/kg). **Source:** OU ZHOU JIA ZHU TAO *Nerium oleander*, PENG TE MAN DE MU *Mandevilla pentlandiana*, SHA MO QIANG WEI *Adenium obesum*. **Ref:** 2646, 2647, 2648.

**15498 Nerol**

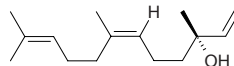
(Z)-3,7-Dimethyl-2,6-octadien-1-ol [106-25-2] C<sub>10</sub>H<sub>18</sub>O (154.25). bp 224~227°C. **Pharm:** Flavorant. **Source:** DAI DAI HUA *Citrus aurantium* var. *amara*, GUI HUA *Osmanthus fragrans*, JU PI *Citrus reticulata*, MEI GUI HUA *Rosa rugosa*, PI PA *Eriobotrya japonica*, SHENG JIANG *Zingiber officinale*, XIANG QING LAN *Dracocephalum moldavicum*. **Ref:** 2, 658.

**15499 E-Nerolidol**

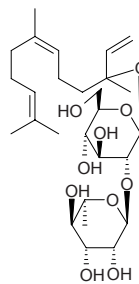
(+)-Nerolidol [7212-44-4] C<sub>15</sub>H<sub>26</sub>O (222.37). bp (+) 276°C. **Pharm:**  $\beta$ -Hexosaminidase inhibitor (RBL-2H3 cells, 100 $\mu$ mol/L, InRt = (11.8 $\pm$ 1.3)%,  $p < 0.05$ )<sup>[4221]</sup>. **Source:** SHENG JIANG *Zingiber officinale*, TU QIANG HUO *Hedychium coronarium* (rhizome). **Ref:** 2, 4221.

**15500 Z-Nerolidol**

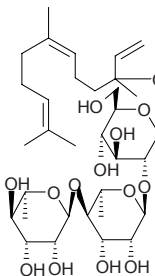
3,7,11-Trimethyl-1,6,10-dodecatrien-3-ol C<sub>15</sub>H<sub>26</sub>O (222.37). **Pharm:** Flavorant. **Source:** BI LU XIANG JIAO *Myroxylon pereirae*, DAI DAI HUA *Citrus aurantium* var. *amara*, DIAO ZHANG GEN PI *Lindera umbellata* [Syn. *Lindera erythrocarpa*], DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*], BI LU XIANG JIAO *Myroxylon pereirae*, PI PA *Eriobotrya japonica*, SHA REN *Amomum villosum*, SHENG JIANG *Zingiber officinale*, TIAN CHENG *Citrus sinensis*, ZHANG MU *Cinnamomum camphora*, ZHANG MU *Cinnamomum camphora*, ZHI ZHU XIANG *Valeriana jatamansii* [Syn. *Valeriana wallichii*]. **Ref:** 2, 658.

**15501 Nerolidol-3-O- $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranoside**

C<sub>27</sub>H<sub>46</sub>O<sub>10</sub> (530.66). **Source:** PI PA YE *Eriobotrya japonica*. **Ref:** 2649.

**15502 Nerolidol-3-O- $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 4)- $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranoside**

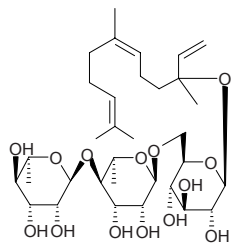
C<sub>33</sub>H<sub>56</sub>O<sub>14</sub> (676.81). **Source:** PI PA YE *Eriobotrya japonica*. **Ref:** 2649.





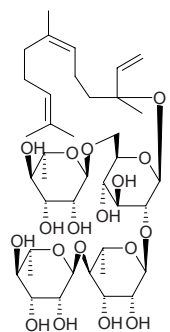
**15503 Nerolidol-3-*O*- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside**

C<sub>33</sub>H<sub>56</sub>O<sub>14</sub> (676.81). Source: PI PA YE *Eriobotrya japonica*. Ref: 2649.



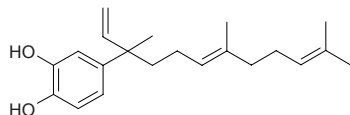
**15504 Nerolidol-3-*O*-{ $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)-[ $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 6)]- $\beta$ -D-glucopyranoside}**

C<sub>39</sub>H<sub>66</sub>O<sub>18</sub> (822.95). Source: PI PA YE *Eriobotrya japonica*. Ref: 2649.



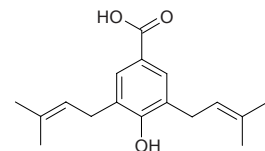
**15505 4-Nerolidylcatechol**

C<sub>21</sub>H<sub>30</sub>O<sub>2</sub> (314.47). Pharm: Myotoxic phospholipase A<sub>2</sub> (PLA<sub>2</sub>) inhibitor (*Bothrops asper*, IC<sub>50</sub> = 987 μmol/L). Source: SAN XING HU JIAO *Piper umbellatum* (branch), DUN YE HU JIAO *Piper peltatum* (branch). Ref: 5274.



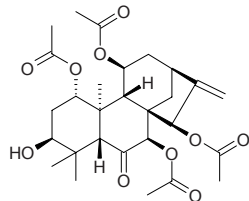
**15506 Nervogenic acid**

[17622-86-5] C<sub>17</sub>H<sub>22</sub>O<sub>3</sub> (274.36). Colorless acicular crystals, mp 94–96°C. Pharm: Antibacterial (*Bacillus subtilis* and *Micrococcus Luteus* on TLC plate, MIC = 2.0 nmol/L). Source: JIAN XUE QING *Liparis nervosa*. Ref: 900.



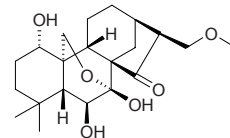
**15507 Nervosanin**

C<sub>28</sub>H<sub>38</sub>O<sub>10</sub> (534.61). mp 260–262°C, [α]<sub>D</sub><sup>20</sup> = +37.11° (c = 0.54, C<sub>5</sub>H<sub>5</sub>N). Source: XIAN MAI XIANG CHA CAI *Rabdosia nervosa*, XIAN HUA XIANG CHA CAI *Rabdosia adenantha* (leaf; yield = 0.0018%dw). Ref: 4067, 4640.



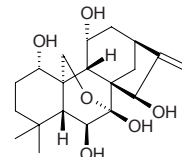
**15508 Nervosanin A**

C<sub>21</sub>H<sub>32</sub>O<sub>6</sub> (380.49). mp 200–202°C, [α]<sub>D</sub><sup>25</sup> = –82.09° (c = 0.2, MeOH). Source: XIAN MAI XIANG CHA CAI *Rabdosia nervosa*. Ref: 4067.



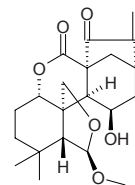
**15509 Nervosanin B**

C<sub>20</sub>H<sub>30</sub>O<sub>6</sub> (366.46). mp 258–260°C, [α]<sub>D</sub><sup>25</sup> = –54.73° (c = 0.33, C<sub>5</sub>H<sub>5</sub>N). Source: XIAN MAI XIANG CHA CAI *Rabdosia nervosa*. Ref: 4067.



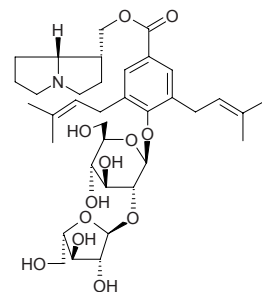
**15510 Nervosin**

C<sub>21</sub>H<sub>28</sub>O<sub>6</sub> (376.45). mp 266–268°C, [α]<sub>D</sub><sup>23</sup> = –149.8° (c = 0.27, C<sub>5</sub>H<sub>5</sub>N). Source: XIAN MAI XIANG CHA CAI *Rabdosia nervosa*. Ref: 2650, 4067.



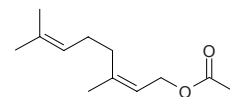
**15511 Nervosine**

[23179-26-2] C<sub>36</sub>H<sub>53</sub>NO<sub>12</sub> (691.82). Crystals +1H<sub>2</sub>O (as picrate), mp 130–131°C (picrate). Source: JIAN XUE QING *Liparis nervosa* (in 1969, the compound was isolated from the plant by K.Nishikawa et al.)<sup>[5505]</sup>. Ref: 1521, 2651, 5505.



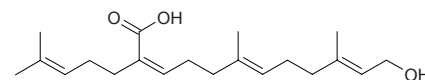
**15512 Neryl acetate**

[141-12-8] C<sub>12</sub>H<sub>20</sub>O<sub>2</sub> (196.29). bp 134°C/25mmHg. Source: PEI LAN *Eupatorium fortunei*. Ref: 6.



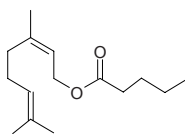
**15513 Nerylgeraniol-18-oic acid**

C<sub>20</sub>H<sub>32</sub>O<sub>3</sub> (320.48). Source: TAI WAN CUI BAI *Calocedrus macrolepis* var. *formosana* (leaf). Ref: 4297.

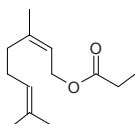


**15514 Neryl pentanoate**

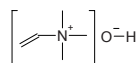
$C_{15}H_{26}O_2$  (238.37). Source: YUAN HUA *Daphne genkwa*. Ref: 2652.

**15515 Neryl propionate**

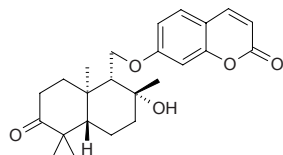
$C_{13}H_{22}O_2$  (210.32). Source: AI YE *Artemisia argyi*, DA MA YE ZE LAN *Eupatorium cannabinum*, LIAO GAO BEN *Ligusticum jeholense*, MING DANG SHEN *Changium smyrnioides*. Ref: 2653, 2654, 2655, 2656.

**15516 Neurine**

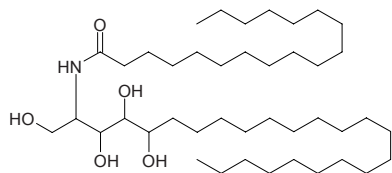
[463-88-7]  $C_5H_{13}NO$  (103.17). Sol.  $H_2O$ , EtOH. Source: MA GEN *Cannabis sativa*. Ref: 1521, 2657.

**15517 Neveskone**

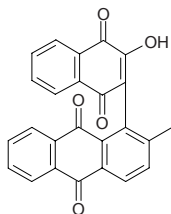
$C_{24}H_{30}O_5$  (398.50). Source: A WEI *Ferula assafoetida* (root). Ref: 5243.

**15518 Newbouldiamide**

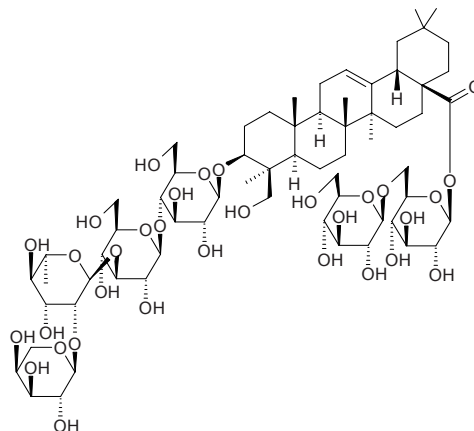
$C_{42}H_{85}NO_5$  (684.15). Colorless powder, mp 129°C,  $[\alpha]_D^{20} = +12^\circ$  ( $c = 0.001$ ). Pharm: Herbicide inactive (*Chlorella fysca*); antifungal inactive (*Ustilago violacea*); antibacterial inactive (gram-positive bacteria *Bacillus megaterium*). Source: FEI ZHOU ZI WEI *Newbouldia laevis* (seed, root cortex and stem cortex). Ref: 4467.

**15519 Newbouldiaquinone**

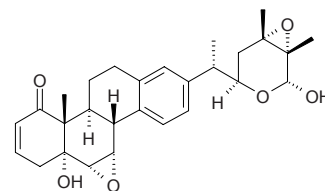
$C_{25}H_{14}O_5$  (394.39). Yellow powder, mp 206°C. Pharm: Antibacterial (gram-positive bacteria *Bacillus megaterium*); herbicide inactive (*Chlorella fysca*). Source: FEI ZHOU ZI WEI *Newbouldia laevis* (seed, root cortex and stem cortex). Ref: 4467.

**15520 New triterpenoid glycoside**

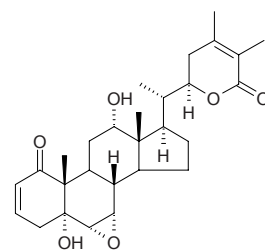
3-O-β-D-Glucopyranosyl(1→3)-α-L-rhamnopyranosyl-(1→2)-α-L-arabinopyranosyl-hederagenin-28-O-β-D-glucopyranosyl (1→6)-β-D-glucopyranosyl ester  $C_{65}H_{106}O_{32}$  (1399.55). White powder, mp 223~225°C. Source: JIN YIN HUA *Lonicera japonica*. Ref: 895.

**15521 Nicandrenone II**

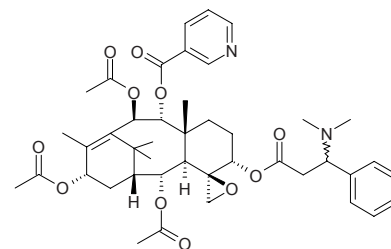
[40071-64-5]  $C_{28}H_{34}O_6$  (466.58). Crystals (benzene-chloroform), mp 117°C. Pharm: Insect antifeedant and Insecticidal. Source: JIA SUAN JIANG *Nicandra physaloides*. Ref: 6, 900, 1521, 2783.

**15522 Nicandrin B**

[92070-79-6]  $C_{28}H_{38}O_6$  (470.61). Crystals (MeOH), mp 246~248°C,  $[\alpha]_D = +110.7^\circ$  ( $c = 0.24$ ,  $CHCl_3$ ). Source: JIA SUAN JIANG *Nicandra physaloides*. Ref: 2658, 2659.

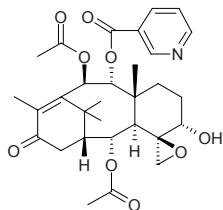
**15523 Nicaustrine**

[127211-02-3]  $C_{43}H_{54}N_2O_{11}$  (774.92). Source: AO DA LI YA HONG DOU SHAN *Austrotaxus spicata*. Ref: 662.

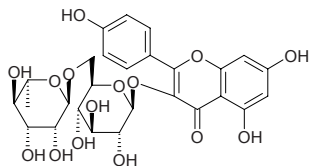


**15524 Nicotaxine**

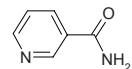
[126585-94-2] C<sub>30</sub>H<sub>37</sub>NO<sub>9</sub> (555.63). Source: AO DA LI YA HONG DOU SHAN *Austrotaxus spicata*. Ref: 662.

**15525 Nicotiflorin**

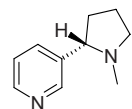
Kaempferol-3-*O*- $\beta$ -rutinoside; Kaempferol 3-*O*-(6''-*O*- $\alpha$ -rhamonpyranosyl)- $\beta$ -glucopyranoside [17650-84-9] C<sub>27</sub>H<sub>30</sub>O<sub>15</sub> (594.53). mp 224°C. Pharm: Antioxidant (DPPH scavenger, IC<sub>50</sub> > 100 $\mu$ g/mL, control Gallic acid, IC<sub>50</sub> = 3.6 $\mu$ g/mL; Cytochrome-C reduction, IC<sub>50</sub> > 50 $\mu$ g/mL, control Gallic acid, IC<sub>50</sub> = 3.0 $\mu$ g/mL)<sup>[5239]</sup>. Source: BAI GUO YE *Ginkgo biloba*, BI MA YE *Ricinus communis*, CI JI LI *Tribulus terrestris*, HUAI *Sophora japonica* (pericarp)<sup>[3080]</sup>, JI ZI MU *Sinoadina Racemosa* [Syn. *Adina racemosa*] (dried leaf, flower and twig: yield = 0.0011%dw)<sup>[3014]</sup>, LAO YA SHI *Diospyros rhombifolia* (leaf), MIAN TOU YE *Kleinhovia hospita*, WU CI FAN MA *Agave americana* var. *marginata* [Syn. *Agave americana* var. *variegata*], YI ZHU QIAN MA *Urtica dioica*, *Glycyrrhiza* sp. Ref: 6, 660, 2431, 3014, 3080, 4464, 5239.

**15526 Nicotinamide**

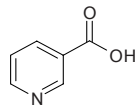
Niacin [98-92-0] C<sub>6</sub>H<sub>6</sub>N<sub>2</sub>O (122.13). Pharm: Tyrosinase inhibitor (333.3 $\mu$ mol/L, InRt = 13.5%; control Kojic acid, 333.3 $\mu$ mol/L, InRt = 59.8%)<sup>[4233]</sup>; antiarrhythmic; component of coenzyme I and II (coenzyme of many dehydrogenases); used in treatment of pellagrosis, stomatitis and glossitis. Source: TAI WAN PU GONG YING *Taraxacum formosanum* (fresh root), ZANG HONG HUA *Crocus sativus* (pollen), ZHI MU *Anemarrhena asphodeloides*. Ref: 2, 658, 4233, 4488.

**15527 (-)-Nicotine**

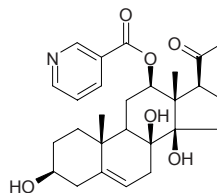
3-Pyridinecarboxamide [54-11-5] C<sub>10</sub>H<sub>14</sub>N<sub>2</sub> (162.24). bp 246.1°C/730.5mmHg. Pharm: Anti-fertility agent (male mus); pesticide; LD (hmn, orl) = 50mg. Source: DANG SHEN *Codonopsis pilosula*, GU JIE CAO *Equisetum palustre*, HUANG HUA YAN CAO *Nicotiana rustica*, KU DOU ZI *Sophora alopecuroides*, MA TI YE *Caltha palustris*, MO HAN LIAN *Eclipta prostrata* [Syn. *Eclipta alba*], PU DI WU GONG *Lycopodium cernuum*, WEN JING *Equisetum arvense*, XU LI YA MA LI JIN *Asclepias syriaca*, YAN CAO *Nicotiana tabacum*. Ref: 2, 593, 658, 5507.

**15528 Nicotinic acid**

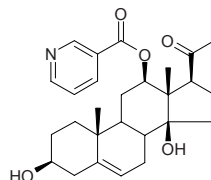
3-(1-Methyl-2-pyrrolidinyl)pyridine [59-67-6] C<sub>6</sub>H<sub>5</sub>NO<sub>2</sub> (123.11). mp 236°C. Pharm: Antihypercholesterolemic; vasodilator (peripheral). Source: DA ZAO *Ziziphus jujuba*, DANG GUI *Angelica sinensis*, DANG SHEN *Codonopsis pilosula*, DONG GUA PI *Benincasa hispida*, GOU QI ZI *Lycium chinense*, JI ZI HUANG *Gallus gallus domesticus*, JIANG *Glycine max*, LI YU *Cyprinus carpio*, MAO SHU *Dioscorea alata*, NIU RU *Bos taurus domesticus*; *Bubalus bubalis*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], TAI WAN JIN GU CAO *Ajuga taiwanensis* (whole herb), YANG RU *Capra hircus*; *Ovis aries*, YUAN CAN E *Bombyx mori*, ZHI MU *Anemarrhena asphodeloides*, ZI CAI *Porphyra tenera*. Ref: 2, 658, 660, 1521, 4483.

**15529 12-O-Nicotinoylisolineolone**

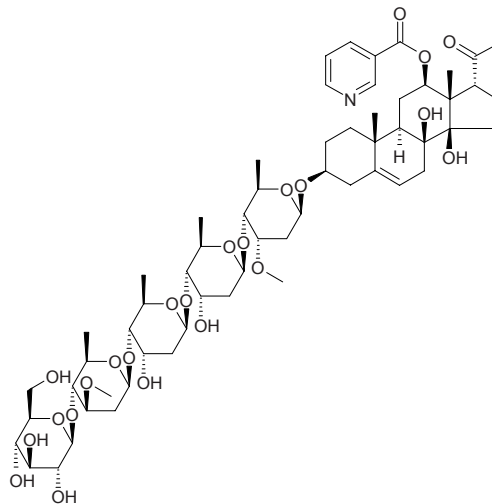
C<sub>27</sub>H<sub>35</sub>NO<sub>6</sub> (469.58). mp 250–254°C. Source: FU SHOU CAO *Adonis amurensis*. Ref: 6.

**15530 Nicotinoylisoramanone**

C<sub>27</sub>H<sub>35</sub>NO<sub>5</sub> (453.58). Source: FU SHOU CAO *Adonis amurensis*. Ref: 6, 2784.

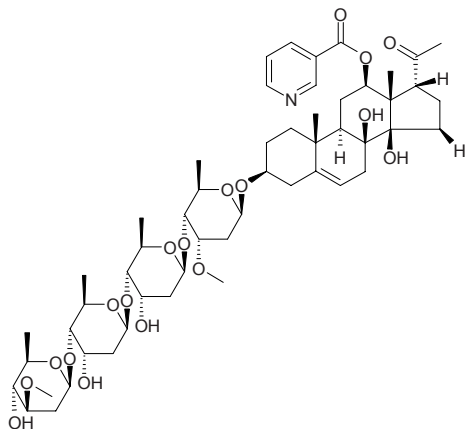
**15531 12-O-Nicotinoyllineolon 3-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-cymaropyranoside**

C<sub>59</sub>H<sub>89</sub>NO<sub>23</sub> (1180.36). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>27</sup> = -12.1° (c = 0.45, MeOH). Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.



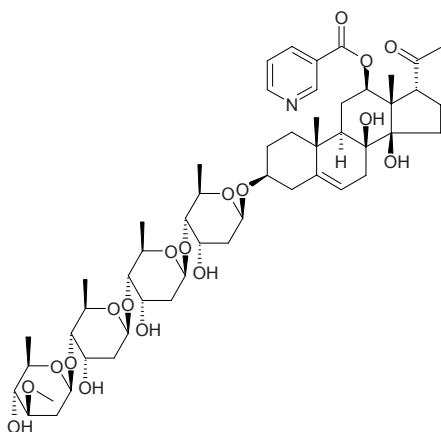
**15532 12-O-Nicotinoylneolon 3-O- $\beta$ -D-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-cymaropyranoside**

C<sub>53</sub>H<sub>79</sub>NO<sub>18</sub> (1018.22). Amorphous powder,  $[\alpha]_D^{21} = -14.4^\circ$  ( $c = 0.33$ , MeOH). Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.



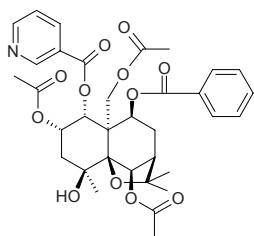
**15533 12-O-Nicotinoylneolon 3-O- $\beta$ -D-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-digitoxopyranoside**

C<sub>52</sub>H<sub>77</sub>NO<sub>18</sub> (1004.19). Amorphous powder,  $[\alpha]_D^{24} = -19.1^\circ$  ( $c = 0.57$ , MeOH). Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.



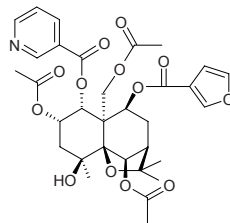
**15534 1 $\alpha$ -Nicotinoyloxy-2 $\alpha$ -acetoxy-6 $\beta$ -acetoxy-9 $\beta$ -benzoyloxy-11-acetoxy-4 $\beta$ -hydroxydihydro- $\beta$ -agarofuran**

[130774-23-1] C<sub>34</sub>H<sub>39</sub>NO<sub>12</sub> (653.69). Amorphous solid,  $[\alpha]_D^{20} = +43.9^\circ$  ( $c = 0.5$ , MeOH). Pharm: Insect antifeedant. Source: DIAO GAN MA *Celastrus angulatus*. Ref: 2660.



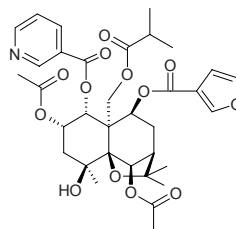
**15535 1 $\alpha$ -Nicotinoyloxy-2 $\alpha$ -acetoxy-6 $\beta$ -acetoxy-9 $\beta$ -furoyloxy-11-acetoxy-4 $\beta$ -hydroxydihydro- $\beta$ -agarofuran**

[130774-22-0] C<sub>32</sub>H<sub>37</sub>NO<sub>13</sub> (643.65). Amorphous solid,  $[\alpha]_D^{20} = +23.9^\circ$  ( $c = 0.5$ , MeOH). Pharm: Insect antifeedant. Source: DIAO GAN MA *Celastrus angulatus*. Ref: 2660.



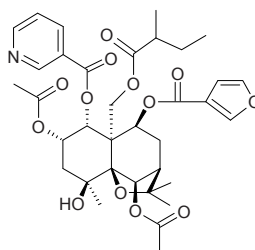
**15536 1 $\alpha$ -Nicotinoyloxy-2 $\alpha$ -acetoxy-6 $\beta$ -acetoxy-9 $\beta$ -furoyloxy-11-isobutyryloxy-4 $\beta$ -hydroxydihydro- $\beta$ -agarofuran**

[130774-20-8] C<sub>34</sub>H<sub>41</sub>NO<sub>13</sub> (671.70). mp 127~128°C,  $[\alpha]_D^{20} = +34.5^\circ$  ( $c = 0.5$ , MeOH). Pharm: Insect antifeedant. Source: DIAO GAN MA *Celastrus angulatus*. Ref: 2660.



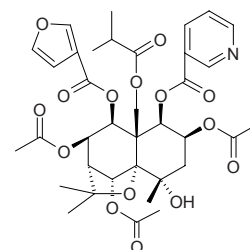
**15537 1 $\alpha$ -Nicotinoyloxy-2 $\alpha$ -acetoxy-6 $\beta$ -acetoxy-9 $\beta$ -furoyloxy-11-(2-methyl)butyryloxy-4 $\beta$ -hydroxydihydro- $\beta$ -agarofuran**

[130774-21-9] C<sub>35</sub>H<sub>43</sub>NO<sub>13</sub> (685.73). Amorphous solid,  $[\alpha]_D^{20} = +30.1^\circ$  ( $c = 0.5$ , MeOH). Pharm: Insect antifeedant. Source: DIAO GAN MA *Celastrus angulatus*. Ref: 2660.



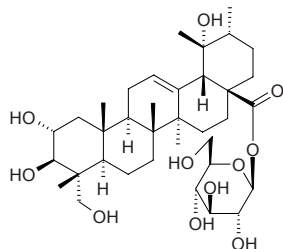
**15538 1 $\beta$ -Nicotinoyl-2 $\beta$ ,5 $\alpha$ ,7 $\beta$ -triacetoxy-4 $\alpha$ -hydroxy-11-isobutyryloxy-8 $\alpha$ -furanoyl-dihydroagarofuran**

C<sub>36</sub>H<sub>43</sub>NO<sub>15</sub> (729.74). Amorphous powder,  $[\alpha]_D^{25} = +9.2^\circ$  ( $c = 1.2$ , MeOH). Pharm: Immunosuppressant (inhibits lymphocyte transformation, 80 $\mu$ g/mL, InRt = 28%, control Dexamethasone, 50 $\mu$ g/mL, InRt = 61%). Source: LEI GONG TENG *Tripterygium wilfordii* (xylem). Ref: 4466.

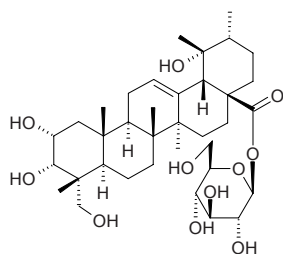


**15539 Niga-ichigoside F<sub>1</sub>**

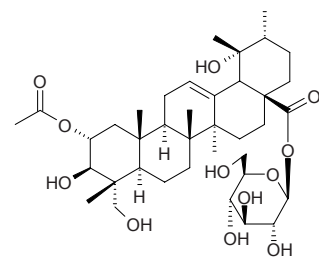
$C_{36}H_{58}O_{11}$  (666.86). Amorphous powder or needles (MeOH aq.), mp 230-231°C, 229-233°C.  $[\alpha]_D^{23} = +11.2^\circ$  ( $c = 0.93$ , MeOH). Source: CU YE XUAN GOU ZI *Rubus alceaefolius*, MAO MEI *Rubus parvifolius*, SHUI YANG MEI *Geum japonicum*, DUO CI DI SHI MU *Desfontainia spinosa*, XIA KU CAO *Prunella vulgaris*, XIAO YE XUAN GOU ZI *Rubus taiwanicolus*. Ref: 509, 606, 660, 1521, 2508.

**15540 Niga-ichigoside F<sub>2</sub>**

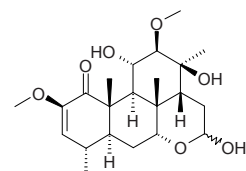
$C_{36}H_{58}O_{11}$  (666.86). White needles (MeOH), mp 214-216°C. Source: GUANG LIANG YANG TONG *Adinandra nitida*, XIA KU CAO *Prunella vulgaris*, XIAO YE XUAN GOU ZI *Rubus taiwanicolus*. Ref: 660, 2508, 2518.

**15541 Niga-ichigoside F<sub>3</sub>**

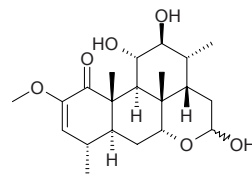
$C_{38}H_{60}O_{12}$  (708.89). Source: XIAO YE XUAN GOU ZI *Rubus taiwanicolus*. Ref: 660.

**15542 Nigakihemiacetal A**

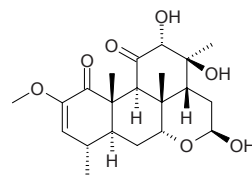
[30248-05-6]  $C_{22}H_{34}O_7$  (410.51). mp 262-263°C. Pharm: Extremely bitter. Source: KU MU *Picrasma quassioides* [Syn. *Picrasma ailanthoides*], KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. Ref: 12, 6, 658.

**15543 Nigakihemiacetal C**

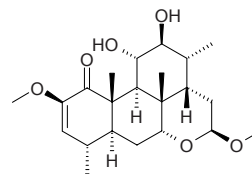
[30760-22-6]  $C_{21}H_{32}O_6$  (380.49). mp 265.0-265.5°C. Source: KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. Ref: 12, 1521.

**15544 Nigakihemiacetal E**

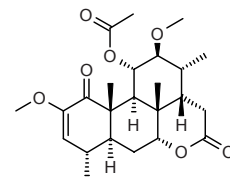
[57576-45-1]  $C_{21}H_{30}O_7$  (394.47). Source: KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. Ref: 12.

**15545 Nigakihemiacetal F**

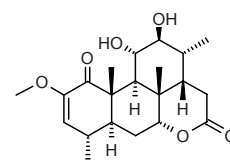
[57576-46-2]  $C_{22}H_{34}O_6$  (394.51). Source: KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. Ref: 12.

**15546 Nigakilactone C**

Nigakilactone [24148-78-5]  $C_{24}H_{34}O_7$  (434.53). mp 252.5-253.0°C. Source: KU MU *Picrasma quassioides* [Syn. *Picrasma ailanthoides*], KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. Ref: 12, 660.

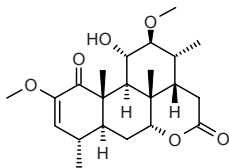
**15547 Nigakilactone A**

[24148-76-3]  $C_{21}H_{30}O_6$  (378.47). mp 237.5-238.0°C. Pharm: Antihypertensive. Source: KU MU *Picrasma quassioides* [Syn. *Picrasma ailanthoides*] (dried branch and leaf), KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. Ref: 12, 5501.

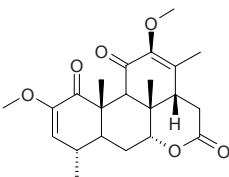


**15548 Nigakilactone B**

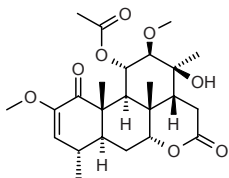
Simalikalactone A [24148-77-4]  $C_{22}H_{32}O_6$  (392.50). mp 278.5°C. Source: KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. Ref: 12.

**15549 Nigakilactone D**

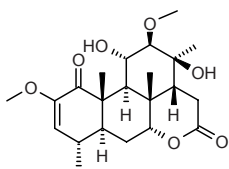
[76-78-8]  $C_{22}H_{28}O_6$  (388.46). Crystals (MeOH aq.), mp 221~222°C,  $[\alpha]_D^{20} = +34.5^\circ$  ( $c = 5.09$ ,  $CHCl_3$ ). Pharm: Insecticidal. Source: MEI ZHOU KU MU *Quassia amara*, YA MAI JIA KU MU *Picrasma excelsa*. Ref: 1521.

**15550 Nigakilactone E**

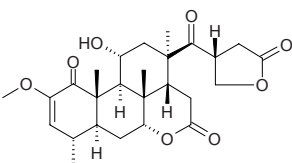
[28360-79-4]  $C_{24}H_{34}O_8$  (450.53). mp 280°C. Source: KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. Ref: 12.

**15551 Nigakilactone F**

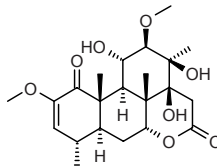
[28387-43-1]  $C_{22}H_{32}O_7$  (408.50). mp 265.0~265.5°C. Source: KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. Ref: 12.

**15552 Nigakilactone G**

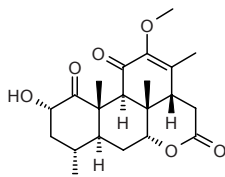
Picrasin A [27368-79-2]  $C_{26}H_{34}O_8$  (474.56). Crystals (MeOH), mp 297~299°C. Source: KU MU *Picrasma quassioides* [Syn. *Picrasma ailanthoides*], KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. Ref: 12, 2994.

**15553 Nigakilactone H**

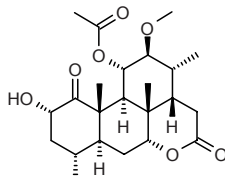
[30248-06-7]  $C_{22}H_{32}O_8$  (424.50). mp 274.0~275.5°C. Source: KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. Ref: 12.

**15554 Nigakilactone I**

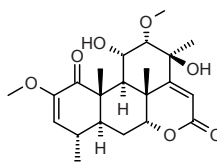
Picrasin B [26121-56-2]  $C_{21}H_{28}O_6$  (376.45). Crystals (MeOH), mp 255~257°C,  $[\alpha]_D = +16.4^\circ$  ( $CHCl_3$ ). Source: FEI ZHOU KU MU *Quassia africana*, KU MU *Picrasma quassioides* [Syn. *Picrasma ailanthoides*], KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. Ref: 12, 1521, 2994.

**15555 Nigakilactone J**

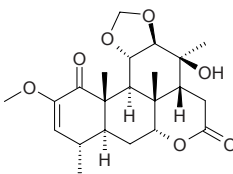
Picrasin C [33804-89-6]  $C_{23}H_{34}O_7$  (422.52). Crystals ( $CHCl_3$ -pet. ether), mp 240~241°C, 250~252°C,  $[\alpha]_D = +42^\circ$  (EtOH). Pharm: Bitter principle. Source: KU MU *Picrasma quassioides* [Syn. *Picrasma ailanthoides*], KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*], DU DOU *Laburnum anagyroides*, *Picea* sp., *Pinus* sp. Ref: 6, 12, 658, 2994.

**15556 Nigakilactone K**

[35334-39-5]  $C_{22}H_{30}O_7$  (406.48). mp 226~227°C. Source: KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. Ref: 12.

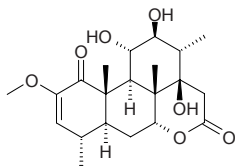
**15557 Nigakilactone L**

[35334-40-8]  $C_{22}H_{30}O_7$  (406.48). mp 296°C. Source: KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. Ref: 12.

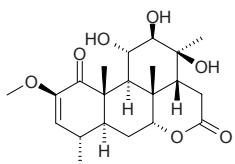


**15558 Nigakilactone M**

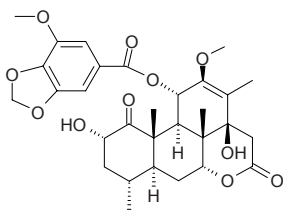
[37812-54-7] C<sub>21</sub>H<sub>30</sub>O<sub>7</sub> (394.47). **Source:** KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. **Ref:** 12.

**15559 Nigakilactone N**

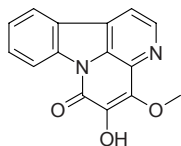
[37812-55-8] C<sub>21</sub>H<sub>30</sub>O<sub>7</sub> (394.47). mp 207~211°C. **Source:** KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. **Ref:** 12.

**15560 Nigakilactone O**

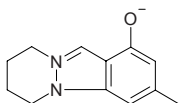
C<sub>30</sub>H<sub>36</sub>O<sub>11</sub> (572.61). **Source:** KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. **Ref:** 12.

**15561 Nigakinone**

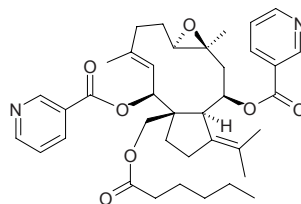
4-Methoxy-5-hydroxycanthin-6-one [18110-86-6] C<sub>15</sub>H<sub>10</sub>N<sub>2</sub>O<sub>3</sub> (266.26). **Pharm:** Antibacterial (*Diplococcus pneumoniae*, hemolytic  $\beta$ -streptococcus and *Bacillus subtilis*); LD<sub>50</sub> (mus ip) = 210mg/kg. **Source:** KU MU *Picrasma quassioides* [Syn. *Picrasma ailanthoides*] (dried branch and leaf: content scope of 5 origins = 0.03%~0.288%, mean content = 0.147%<sup>[5508]</sup>), KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*], YA MAI JIA KU MU *Picrasma excelsa*, MEI ZHOU KU MU *Quassia amara* (the compound was isolated from the plant by Yushiro Kimura et al. in 1961)<sup>[5505]</sup>. **Ref:** 6, 12, 658, 5501, 5505, 5508.

**15562 Nigeglanine**

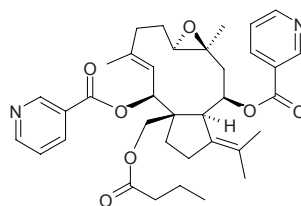
C<sub>12</sub>H<sub>14</sub>N<sub>2</sub>O<sup>-</sup> (203.27). White solid, mp 289~290°C. **Source:** XIAN MAO HEI ZHONG CAO *Nigella glandulifera* (seed). **Ref:** 4277.

**15563 Nigellamine A<sub>3</sub>**

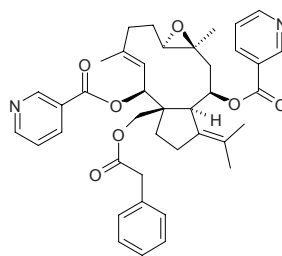
C<sub>38</sub>H<sub>48</sub>N<sub>2</sub>O<sub>7</sub> (644.82). White powder, [α]<sub>D</sub><sup>27</sup> = -11.3° (c = 0.50, CHCl<sub>3</sub>). **Pharm:** Promotes lipid metabolism (inhibits stored triglyceride in primary cultured mouse hepatocytes, 1μmol/L, stored triglyceride = (85±6)% of control, p<0.05). **Source:** ZAI PEI HEI ZHONG CAO *Nigella sativa* (seed). **Ref:** 4281.

**15564 Nigellamine A<sub>4</sub>**

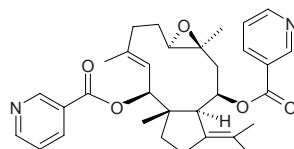
C<sub>36</sub>H<sub>44</sub>N<sub>2</sub>O<sub>7</sub> (616.76). White powder, [α]<sub>D</sub><sup>26</sup> = -13.4° (c = 0.20, CHCl<sub>3</sub>). **Pharm:** Promotes lipid metabolism (inhibits stored triglyceride in primary cultured mouse hepatocytes, 1μmol/L, stored triglyceride = (82±3)% of control, p<0.01). **Source:** ZAI PEI HEI ZHONG CAO *Nigella sativa* (seed). **Ref:** 4281.

**15565 Nigellamine A<sub>5</sub>**

C<sub>40</sub>H<sub>44</sub>N<sub>2</sub>O<sub>7</sub> (664.81). White powder, [α]<sub>D</sub><sup>28</sup> = -14.8° (c = 0.20, CHCl<sub>3</sub>). **Pharm:** Promotes lipid metabolism (inhibits stored triglyceride in primary cultured mouse hepatocytes, 1μmol/L, stored triglyceride = (66±2)% of control, p<0.01). **Source:** ZAI PEI HEI ZHONG CAO *Nigella sativa* (seed). **Ref:** 4281.

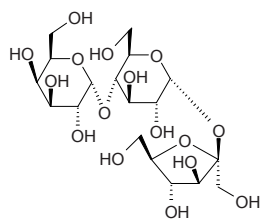
**15566 Nigellamine C**

C<sub>32</sub>H<sub>38</sub>N<sub>2</sub>O<sub>5</sub> (530.67). White powder, [α]<sub>D</sub><sup>27</sup> = -23.6° (c = 0.30, CHCl<sub>3</sub>). **Pharm:** Promotes lipid metabolism (inhibits stored triglyceride in primary cultured mouse hepatocytes, 1μmol/L, stored triglyceride = (81±1)% of control, p<0.01). **Source:** ZAI PEI HEI ZHONG CAO *Nigella sativa* (seed). **Ref:** 4281.

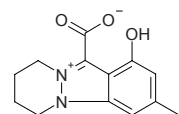


**15567 Nigellamose**

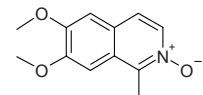
$C_{18}H_{32}O_{16}$  (504.45). White cubic crystals, mp 132–134°C,  $[\alpha]_D^{20} = +94.5^\circ$  ( $c = 0.046$ , MeOH). [Source](#): XIAN MAO HEI ZHONG CAO *Nigella glandulifera* (seed). [Ref](#): 4820.

**15568 Nigellicine**

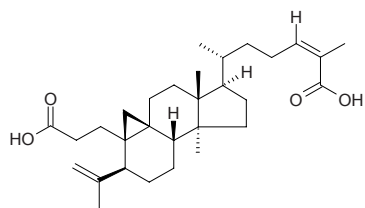
[98063-20-8]  $C_{13}H_{14}N_2O_3$  (246.27). Yellow crystals (EtOH), decomposition over a wide temperature range. [Source](#): ZAI PEI HEI ZHONG CAO *Nigella sativa*. [Ref](#): 2661.

**15569 Nigellimine N-oxide**

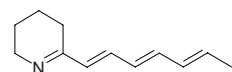
$C_{12}H_{13}NO_3$  (219.24). Amorphous. [Source](#): ZAI PEI HEI ZHONG CAO *Nigella sativa*. [Ref](#): 2662.

**15570 Nigranoic acid**

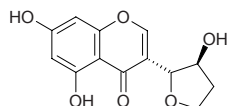
[39111-07-4]  $C_{30}H_{46}O_4$  (470.70). [Pharm](#): Anti-HIV (HIV-RT inhibitor and HIV polyase inhibitor); antineoplastic<sup>[2523]</sup>; anti-HIV<sup>[2523]</sup>. [Source](#): HUA ZHONG WU WEI ZI *Schisandra sphenanthera*, NEI FENG XIAO WU WEI ZI *Schisandra nigra*, QIU RUI WU WEI ZI *Schisandra sphaerandra*. [Ref](#): 1521, 2268, 2523.

**15571 Nigrifactin**

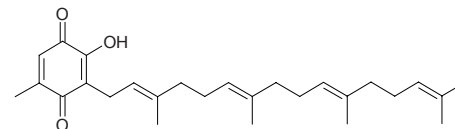
[23943-03-5]  $C_{12}H_{17}N$  (175.28). [Pharm](#): Antihistamine. [Source](#): unsteadiness mould's metabolite. [Ref](#): 658.

**15572 Nigrolineaisoflavone A**

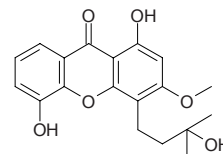
$C_{13}H_{12}O_6$  (264.24). Pale yellow crystals, mp 186–187°C,  $[\alpha]_D^{29} = -62.5^\circ$  ( $c = 0.016$ , MeOH). [Source](#): HEI XIAN TIAO TENG HUANG *Garcinia nigrolineata* (leaf: yield = 0.000394%dw). [Ref](#): 4735.

**15573 Nigrolineaquinone A**

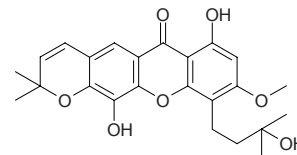
$C_{27}H_{38}O_3$  (410.6). Orange-red gum. [Source](#): HEI XIAN TIAO TENG HUANG *Garcinia nigrolineata* (leaf: yield = 0.0001%dw). [Ref](#): 4735.

**15574 Nigrolineaxanthone A**

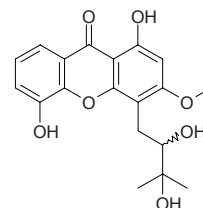
1,5-Dihydroxy-3-methoxy-4-(3-hydroxy-3-methylbutyl)xanthone  $C_{19}H_{20}O_6$  (344.37). Yellow solid, mp 142.8–144.6°C. [Source](#): HEI XIAN TIAO TENG HUANG *Garcinia nigrolineata* (stam bark). [Ref](#): 3482.

**15575 Nigrolineaxanthone B**

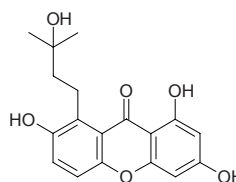
1,5-Dihydroxy-3-methoxy-4-(3-hydroxy-3-methylbutyl)-6',6'-dimethylpyrano-(2',3':6,7) xanthone  $C_{24}H_{26}O_7$  (426.47). Yellow crystals, mp 165.0–167.2°C. [Source](#): HEI XIAN TIAO TENG HUANG *Garcinia nigrolineata* (stam bark). [Ref](#): 3482.

**15576 Nigrolineaxanthone C**

1,5-Dihydroxy-3-methoxy-4-(2,3-dihydroxy-3-methylbutyl)xanthone  $C_{19}H_{20}O_7$  (360.37). Pale yellow solid, mp 104.5–105.8°C,  $[\alpha]_D^{29} = -43.5^\circ$  ( $c = 0.023$ , EtOH). [Source](#): HEI XIAN TIAO TENG HUANG *Garcinia nigrolineata* (stam bark). [Ref](#): 3482.

**15577 Nigrolineaxanthone D**

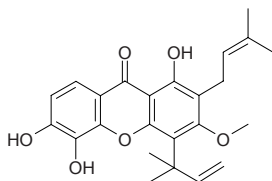
1,3,7-Trihydroxy-8-(3-hydroxy-3-methylbutyl)xanthone  $C_{18}H_{18}O_6$  (330.34). Pale yellow solid, mp 196.0–197.8°C. [Source](#): HEI XIAN TIAO TENG HUANG *Garcinia nigrolineata* (stam bark). [Ref](#): 3482.



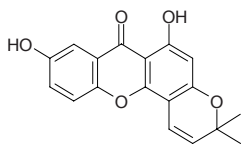


**15578 Nigrolineaxanthone E**

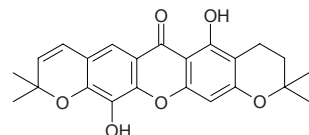
1,5,6-Trihydroxy-3-methoxy-2-(3-methyl-2-butenyl)-4-(1,1-dimethylallyl)xan-  
thone C<sub>24</sub>H<sub>26</sub>O<sub>6</sub> (410.47). Pale yellow solid, mp 102.5–103.8°C. Source: HEI  
XIAN TIAO TENG HUANG *Garcinia nigrolineata* (stam bark). Ref: 3482.

**15579 Nigrolineaxanthone F**

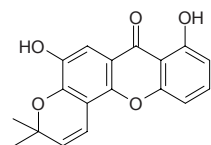
1,7-Dihydroxy-6',6'-dimethylpyrano(2',3':3,4)xan-  
thone C<sub>18</sub>H<sub>14</sub>O<sub>5</sub> (310.31).  
Yellow solid, mp 235.9–236.5°C. Source: HEI XIAN TIAO TENG HUANG  
*Garcinia nigrolineata* (stam bark). Ref: 3482.

**15580 Nigrolineaxanthone G**

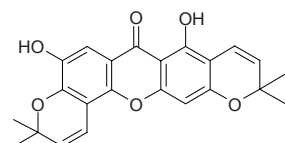
1,5-Dihydroxy-6',6'-dimethyldihydropyrano(2',3':3,2)  
-6'',6''-dimethylpyrano-(2'',3'':6,7)xan-  
thone C<sub>23</sub>H<sub>22</sub>O<sub>6</sub> (394.43). Yellow solid,  
mp 205.8–207.2°C. Source: HEI XIAN TIAO TENG HUANG *Garcinia*  
*nigrolineata* (stam bark). Ref: 3482.

**15581 Nigrolineaxanthone H**

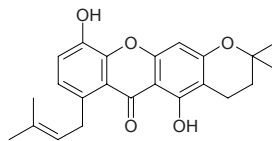
1,7-Dihydroxy-6',6'-dimethylpyrano(2',3':6,5)xan-  
thone C<sub>18</sub>H<sub>14</sub>O<sub>5</sub> (310.31).  
Yellow crystals, mp 220.1–222.5°C. Source: HEI XIAN TIAO TENG  
HUANG *Garcinia nigrolineata* (stam bark). Ref: 3482.

**15582 Nigrolineaxanthone I**

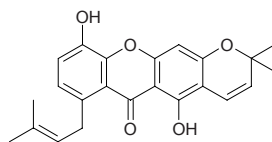
1,7-Dihydroxy-6',6'-dimethylpyrano(2',3':3,2)-6'',6''-dimethylpyrano(2'',3'':6,5)  
xan-  
thone C<sub>23</sub>H<sub>20</sub>O<sub>6</sub> (392.41). Yellow solid, mp 241.7–243.5°C. Source: HEI  
XIAN TIAO TENG HUANG *Garcinia nigrolineata* (stam bark). Ref: 3482.

**15583 Nigrolineaxanthone J**

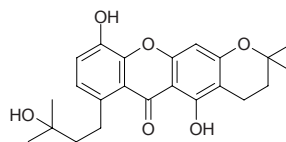
C<sub>23</sub>H<sub>24</sub>O<sub>5</sub> (380.44). Pale yellow gum. Pharm: Antibacterial inactive (MRSA).  
Source: HEI XIAN TIAO TENG HUANG *Garcinia nigrolineata* (leaf: yield  
= 0.000136%dw). Ref: 4735.

**15584 Nigrolineaxanthone K**

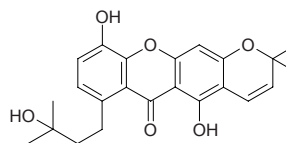
C<sub>23</sub>H<sub>22</sub>O<sub>5</sub> (378.43). Yellow gum. Pharm: Antibacterial inactive (MRSA).  
Source: HEI XIAN TIAO TENG HUANG *Garcinia nigrolineata* (leaf: yield  
= 0.00011%dw). Ref: 4735.

**15585 Nigrolineaxanthone L**

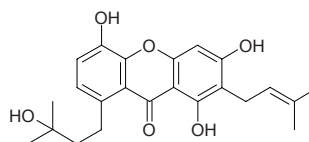
C<sub>23</sub>H<sub>26</sub>O<sub>6</sub> (398.46). Yellow gum. Pharm: Antibacterial inactive (MRSA).  
Source: HEI XIAN TIAO TENG HUANG *Garcinia nigrolineata* (leaf: yield  
= 0.0001%dw). Ref: 4735.

**15586 Nigrolineaxanthone M**

C<sub>23</sub>H<sub>24</sub>O<sub>6</sub> (396.44). Yellow solid, mp 161–162°C. Pharm: Antibacterial  
inactive (MRSA). Source: HEI XIAN TIAO TENG HUANG *Garcinia*  
*nigrolineata* (leaf: yield = 0.000056%dw). Ref: 4735.

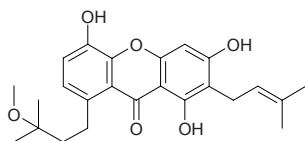
**15587 Nigrolineaxanthone N**

C<sub>23</sub>H<sub>26</sub>O<sub>6</sub> (398.46). Yellow solid, mp 199–200°C. Pharm: Antibacterial  
(MRSA, MIC = 4µg/mL; control Vancomycin, MIC = 2µg/mL). Source: HEI  
XIAN TIAO TENG HUANG *Garcinia nigrolineata* (leaf: yield =  
0.00062%dw). Ref: 4735.

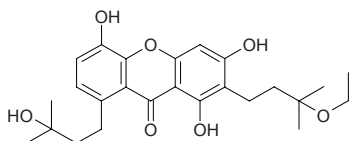


**15588 Nigrolineaxanthone O**

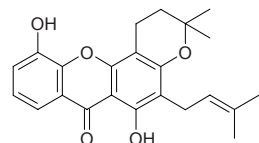
$C_{24}H_{28}O_6$  (412.49). Pale yellow gum. **Pharm:** Antibacterial inactive (MRSA). **Source:** HEI XIAN TIAO TENG HUANG *Garcinia nigrolineata* (leaf: yield = 0.00017%dw). **Ref:** 4735.

**15589 Nigrolineaxanthone P**

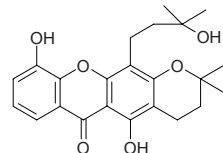
$C_{25}H_{32}O_7$  (444.53). Pale yellow gum. **Pharm:** Antibacterial inactive (MRSA). **Source:** HEI XIAN TIAO TENG HUANG *Garcinia nigrolineata* (leaf: yield = 0.00025%dw). **Ref:** 4735.

**15590 Nigrolineaxanthone Q**

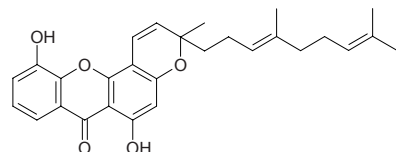
$C_{23}H_{24}O_5$  (380.44). Yellow gum. **Pharm:** Antibacterial inactive (MRSA). **Source:** HEI XIAN TIAO TENG HUANG *Garcinia nigrolineata* (leaf: yield = 0.000072%dw). **Ref:** 4735.

**15591 Nigrolineaxanthone R**

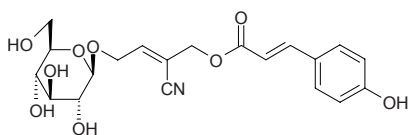
$C_{23}H_{26}O_6$  (398.46). Yellow gum. **Pharm:** Antibacterial inactive (MRSA). **Source:** HEI XIAN TIAO TENG HUANG *Garcinia nigrolineata* (leaf: yield = 0.000104%dw). **Ref:** 4735.

**15592 Nigrolineaxanthone S**

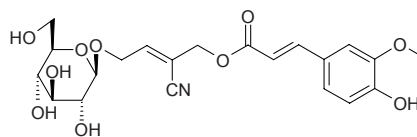
$C_{28}H_{30}O_5$  (446.55). Yellow gum,  $[\alpha]_D^{29} = +58.8^\circ$  ( $c = 0.017$ , MeOH). **Pharm:** Antibacterial inactive (MRSA). **Source:** HEI XIAN TIAO TENG HUANG *Garcinia nigrolineata* (leaf: yield = 0.000104%dw). **Ref:** 4735.

**15593 Nigrumin-5-p-coumarate**

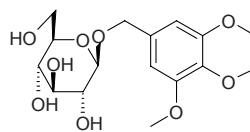
(2-*trans-p*-coumaroyloxymethyl-4- $\beta$ -D-glucopyranosyloxy-2(*E*)-butenenitrile)  $C_{20}H_{23}NO_9$  (421.41). **Source:** HEI CHA BIAO *Ribes nigrum*. **Ref:** 2000.

**15594 Nigrumin-5-ferulate**

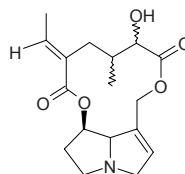
(2-*trans*-Feruloyloxymethyl-4- $\beta$ -D-glucopyranosyloxy-2(*E*)-butenenitrile)  $C_{21}H_{25}NO_{10}$  (451.43). **Source:** HEI CHA BIAO *Ribes nigrum*. **Ref:** 2000.

**15595 Nikoenoside**

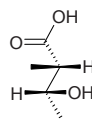
$C_{16}H_{24}O_9$  (360.36). White powder,  $[\alpha]_D^{22} = -57.7^\circ$  ( $c = 0.20$ , EtOH). **Source:** MAO GUO QI *Acer nikoense* (stem cortex: yield = 0.0015%). **Ref:** 4304.

**15596 Nilgirine**

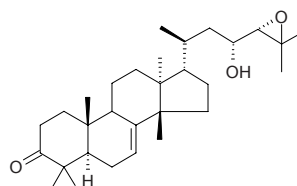
[21009-05-2]  $C_{17}H_{23}NO_5$  (321.38). mp 127–128°C. **Source:** XIANG LING CAO *Crotalaria ferruginea*. **Ref:** 6.

**15597 Nilic acid**

[473-86-9]  $C_5H_{10}O_3$  (118.13). **Source:** QIAN NIU ZI *Pharbitis nil*. **Ref:** 6.

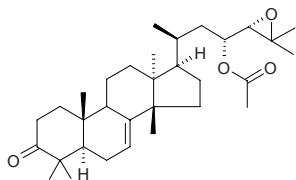
**15598 Niloticin**

[115404-57-4]  $C_{30}H_{48}O_3$  (456.72). Needles, mp 147°C,  $[\alpha]_D = -62^\circ$  ( $c = 0.08$ ,  $CHCl_3$ ); colorless needles, mp 149–151°C,  $[\alpha]_D^{25} = -82.6^\circ$  ( $c = 1.0$ , MeOH). **Pharm:** Cytotoxic ( $P_{388}$ ,  $ED_{50} = 1.5\mu g/mL$ ; KB,  $ED_{50} = 8.3\mu g/mL$ ). **Source:** BAI YE MI ZI LAN *Aglaiia leucophylla*, HUANG BAI *Phellodendron amurense*, HUANG PI SHU *Phellodendron chinense*, CHANG YE KUAN MU *Eurycoma longifolia*, NI LUO HE JIN YIN LIAN *Turraea nilotica*. **Ref:** 2663, 2664, 2665, 2666, 2667, 2668.

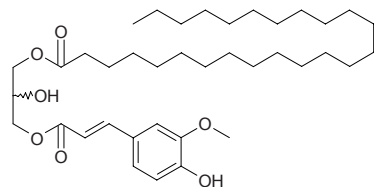


**15599 Niloticin acetate**

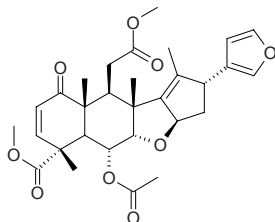
[116425-97-9] C<sub>32</sub>H<sub>50</sub>O<sub>4</sub> (498.75). Needles, mp 157grade, [ $\alpha$ ]<sub>D</sub> = -75gree (c = 0.035, CHCl<sub>3</sub>). Source: HUANG PI SHU *Phellodendron chinense*, CHANG YE KUAN MU *Eurycoma longifolia*. Ref: 2663, 2664, 2665.

**15600 Niloticol**

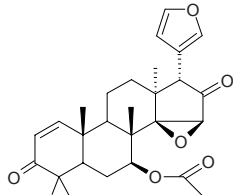
[110037-32-6] C<sub>38</sub>H<sub>64</sub>O<sub>7</sub> (632.93). Crystals (acetone, di-Ac compound), mp 68°C (di-Ac compound). Source: NI LUO HE CHENG LIU *Tamarix nilotica* (root). Ref: 2774.

**15601 Nimbin**

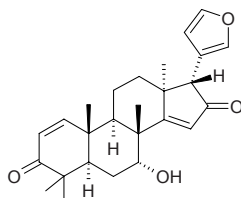
[5945-86-8] C<sub>30</sub>H<sub>36</sub>O<sub>9</sub> (540.62). Crystals (MeOH), mp 205°C, [ $\alpha$ ]<sub>D</sub> = +170°. Source: YIN JIAN *Melia indica*, *Melia azadirachta*. Ref: 2669.

**15602 Nimbinin**

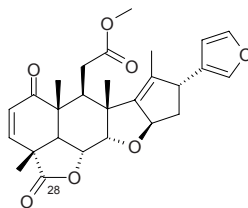
[18385-59-6] C<sub>28</sub>H<sub>34</sub>O<sub>6</sub> (466.58). Crystals (MeOH), mp 202~204°C, [ $\alpha$ ]<sub>D</sub> = +45° (CHCl<sub>3</sub>). Source: YIN JIAN *Melia indica*, *Melia azadirachta*. Ref: 2670.

**15603 Nimbocinol**

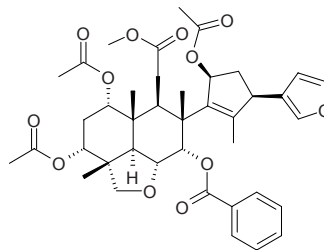
[101509-58-4] C<sub>26</sub>H<sub>32</sub>O<sub>4</sub> (408.54). mp 160~161°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -14.28° (CHCl<sub>3</sub>). Pharm: Pesticide (inhibits growth of *Heliothis virescens*, EC<sub>50</sub> = 1600mg/L). Source: KU LIAN PI *Melia azedarach*. Ref: 1521, 2671.

**15604 Nimbolide**

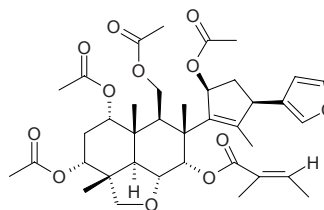
[25990-37-8] C<sub>27</sub>H<sub>30</sub>O<sub>7</sub> (466.54). Crystals (MeOH), mp 245~247°C, 228~230°C, [ $\alpha$ ]<sub>D</sub> = +206°. Source: *Melia azadirachta*. Ref: 2672.

**15605 Nimbolidin A**

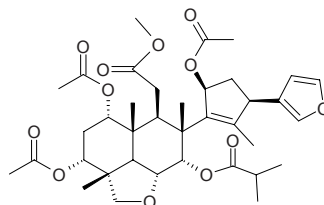
C<sub>40</sub>H<sub>48</sub>O<sub>12</sub> (720.82). Source: KU LIAN SHI *Melia azedarach* (ripe fruit). Ref: 4528.

**15606 Nimbolidin B**

[76689-94-6] C<sub>38</sub>H<sub>50</sub>O<sub>12</sub> (698.81). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>23</sup> = -7° (c = 0.15, methanol). Pharm: Insect antifeedant (larva of night moth, 500mg/L). Source: KU LIAN PI *Melia azedarach*, CHUAN LIAN ZI *Melia toosendan*. Ref: 939, 1113.

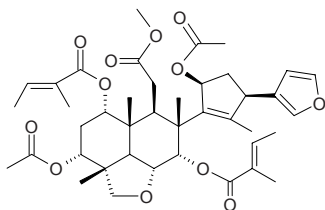
**15607 Nimbolidin C**

[169056-26-2] C<sub>37</sub>H<sub>50</sub>O<sub>12</sub> (686.80). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>23</sup> = +14° (c = 0.3, methanol). Pharm: Insect antifeedant (larva of night moth, 500mg/L). Source: CHUAN LIAN ZI *Melia toosendan*. Ref: 1113.

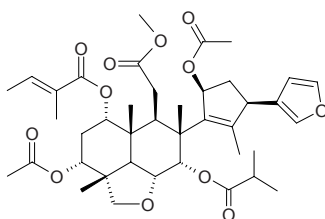


**15608 Nimbolidin D**

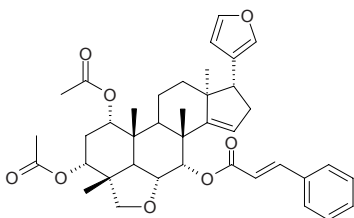
[169056-28-4] C<sub>41</sub>H<sub>54</sub>O<sub>12</sub> (738.87). Amorphous powder,  $[\alpha]_D^{22} = -55^\circ$  ( $c = 0.6$ , methanol). **Pharm:** Insect antifeedant (larva of night moth, 500mg/L). **Source:** CHUAN LIAN ZI *Melia toosendan*. **Ref:** 1113.

**15609 Nimbolidin E**

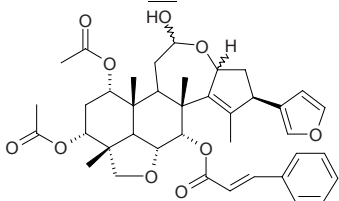
[169056-27-3] C<sub>40</sub>H<sub>54</sub>O<sub>12</sub> (726.86). Amorphous powder,  $[\alpha]_D^{22} = +4^\circ$  ( $c = 0.4$ , methanol). **Pharm:** Insect antifeedant (larva of night moth, 500mg/L). **Source:** CHUAN LIAN ZI *Melia toosendan*. **Ref:** 1113.

**15610 Nimbolin A**

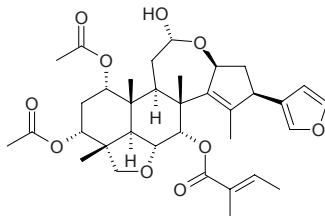
[24480-41-9] C<sub>39</sub>H<sub>46</sub>O<sub>8</sub> (642.80). mp 180–183°C. **Source:** KU LIAN PI *Melia azedarach*. **Ref:** 6.

**15611 Nimbolin B**

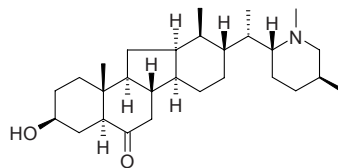
[24480-42-0] C<sub>39</sub>H<sub>46</sub>O<sub>10</sub> (674.80). mp 243–245°C. **Source:** KU LIAN PI *Melia azedarach*. **Ref:** 6.

**15612 Nimbolin B**

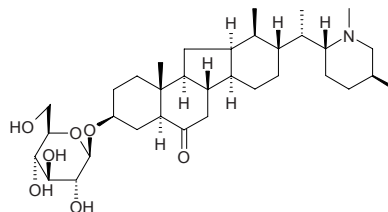
C<sub>35</sub>H<sub>46</sub>O<sub>10</sub> (626.75). Amorphous powder,  $[\alpha]_D = -42^\circ$  ( $c = 0.095$ ). **Source:** CHUAN LIAN PI *Melia toosendan*. **Ref:** 2374.

**15613 Ningpeisine**

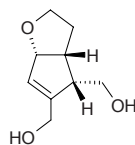
*N*-Methyl-3 $\beta$ -hydroxy-5 $\alpha$ -veratranine-6-one [117695-02-0] C<sub>28</sub>H<sub>47</sub>NO<sub>2</sub> (429.69). Colorless acicular clustered crystals, mp 228–230°C,  $[\alpha]_D^{20} = +20^\circ$  ( $c = 0.5$ , anhydrous ethanol). **Source:** NING GUO BEI MU *Fritillaria ningguoensis*. **Ref:** 105.

**15614 Ningpeisinoid**

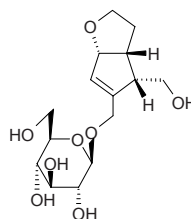
*N*-Methyl-5 $\alpha$ -veratranine-6-oxo-3 $\beta$ -*O*- $\beta$ -D-glucoside [139742-29-3] C<sub>34</sub>H<sub>57</sub>NO<sub>7</sub> (591.84). Thin acicular crystals, mp 284–286°C,  $[\alpha]_D^{20} = +24^\circ$  ( $c = 0.4$ , chloroform:ethanol = 4:1). **Pharm:** Antitussive (dispels phlegm). **Source:** NING GUO BEI MU *Fritillaria ningguoensis*. **Ref:** 205.

**15615 Ningpogenin**

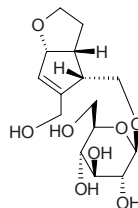
C<sub>9</sub>H<sub>14</sub>O<sub>3</sub> (170.21). Oil,  $[\alpha]_D = +16.0^\circ$  ( $c = 1$ , MeOH). **Source:** XUAN SHEN *Scrophularia ningpoensis*. **Ref:** 2673.

**15616 Ningpogoside A**

C<sub>15</sub>H<sub>24</sub>O<sub>8</sub> (332.35). **Source:** XUAN SHEN *Scrophularia ningpoensis*. **Ref:** 2674.

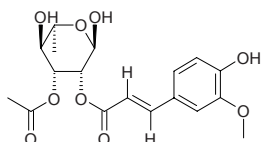
**15617 Ningpogoside B**

C<sub>15</sub>H<sub>24</sub>O<sub>8</sub> (332.35). **Source:** XUAN SHEN *Scrophularia ningpoensis*. **Ref:** 2674.

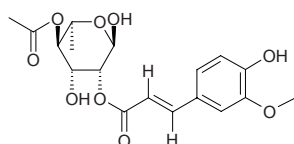


**15618 Ningposide A**

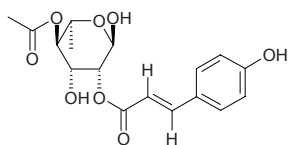
3-*O*-Acetyl-2-*O*-feruloyl- $\alpha$ -*L*-rhamnopyranose C<sub>18</sub>H<sub>22</sub>O<sub>9</sub> (382.37). Oil,  $[\alpha]_D^{20}$  = 116.29° ( $c$  = 0.63, acetone). Source: XUAN SHEN *Scrophularia ningpoensis*. Ref: 674, 741.

**15619 Ningposide B**

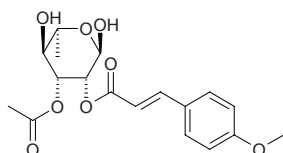
4-*O*-Acetyl-2-*O*-feruloyl- $\alpha$ -*L*-rhamnopyranose C<sub>18</sub>H<sub>22</sub>O<sub>9</sub> (382.37). Oil,  $[\alpha]_D^{20}$  = 87.23° ( $c$  = 0.241, acetone). Source: XUAN SHEN *Scrophularia ningpoensis*. Ref: 741.

**15620 Ningposide C**

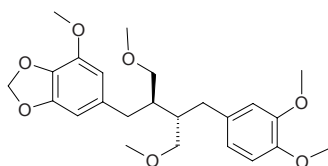
C<sub>17</sub>H<sub>20</sub>O<sub>8</sub> (352.34). Source: XUAN SHEN *Scrophularia ningpoensis*. Ref: 741.

**15621 Ningposide D**

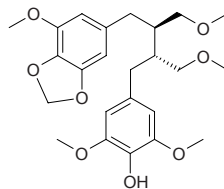
3-*O*-Acetyl-2-*O*-*p*-methoxycinnamoyl- $\alpha$ ( $\beta$ )-*L*-rhamnopyranose C<sub>18</sub>H<sub>22</sub>O<sub>8</sub> (366.37). Oil,  $[\alpha]_D^{25}$  = +42.0° ( $c$  = 0.2, CHCl<sub>3</sub>). Pharm: Cytotoxic inactive (MCF7, IC<sub>50</sub> > 100 μmol/L, control Adriamycin, IC<sub>50</sub> = (1.5±0.2) μmol/L; K562, IC<sub>50</sub> > 100 μmol/L, Adriamycin, IC<sub>50</sub> = (0.07±0.01) μmol/L; Bowes, IC<sub>50</sub> > 100 μmol/L, Adriamycin, IC<sub>50</sub> = (0.45±0.01) μmol/L; T24S, IC<sub>50</sub> > 100 μmol/L, Adriamycin, IC<sub>50</sub> = (5.8±0.6) μmol/L; A549, IC<sub>50</sub> > 100 μmol/L, Adriamycin, IC<sub>50</sub> = (15.8±6.7) μmol/L). Source: XUAN SHEN *Scrophularia ningpoensis*. Ref: 5288.

**15622 Niranthin**

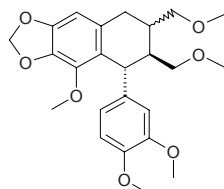
[50656-77-4] C<sub>24</sub>H<sub>32</sub>O<sub>7</sub> (432.52). Crystals (hexane), mp 67–69°C,  $[\alpha]_D^{30}$  = +28° ( $c$  = 1.29, CHCl<sub>3</sub>). Source: ZHU ZI CAO *Phyllanthus niruri*. Ref: 2675, 2676.

**15623 Nirphyllin**

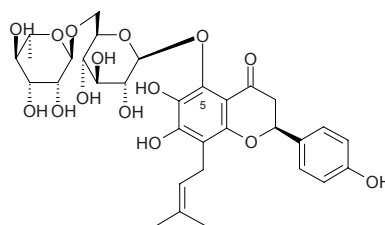
[120396-54-5] C<sub>24</sub>H<sub>32</sub>O<sub>8</sub> (448.52). Pharm: Antihepatotoxin. Source: ZHU ZI CAO *Phyllanthus niruri*. Ref: 2677.

**15624 Nirtetralin**

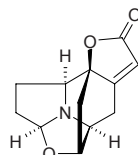
[50656-78-5] C<sub>24</sub>H<sub>30</sub>O<sub>7</sub> (430.50). Crystals (hexane), mp 55°C,  $[\alpha]_D$  = +14.39° ( $c$  = 1.39, CHCl<sub>3</sub>). Source: ZHU ZI CAO *Phyllanthus niruri*. Ref: 2675, 2676.

**15625 Nirurin**

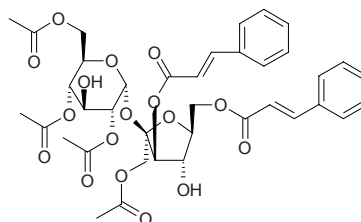
[96253-68-8] C<sub>32</sub>H<sub>40</sub>O<sub>15</sub> (664.67). Crystals (MeOH), mp 298–299°C (dec). Source: ZHU ZI CAO *Phyllanthus niruri*. Ref: 2678.

**15626 Nirurine**

[105801-14-7] C<sub>12</sub>H<sub>13</sub>NO<sub>3</sub> (219.24). Crystals (CHCl<sub>3</sub>-2-propanol), mp 205–209°C,  $[\alpha]_D$  = +196°. Source: ZHU ZI CAO *Phyllanthus niruri*. Ref: 2679.

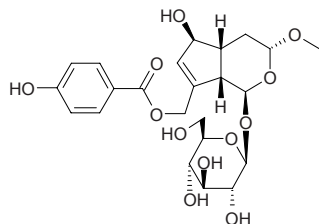
**15627 Niruriside**

[173268-90-1] C<sub>38</sub>H<sub>42</sub>O<sub>17</sub> (770.75). White amorphous powder. Pharm: Anti-HIV. Source: ZHU ZI CAO *Phyllanthus niruri*. Ref: 2680.

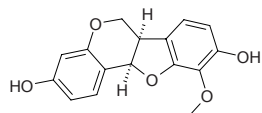


**15628 Nishindaside**

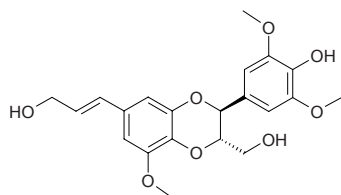
[88204-92-6] C<sub>23</sub>H<sub>30</sub>O<sub>12</sub> (498.49). Amorphous powder,  $[\alpha]_D^{25} = -83.5^\circ$  ( $c = 1$ , MeOH). Source: HUANG JING YE *Vitex negundo*. Ref: 2681.

**15629 (-)-Nissolin**

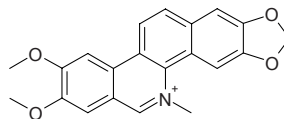
[73340-42-8] C<sub>16</sub>H<sub>14</sub>O<sub>5</sub> (286.29). Pharm: Antifungal. Source: HE CAO XIANG WAN DOU *Lathyrus nissolia*. Ref: 658, 2785.

**15630 7S,8S-Nitidanin**

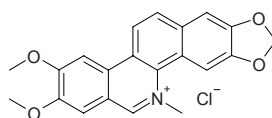
C<sub>21</sub>H<sub>24</sub>O<sub>8</sub> (404.42). Colorless oil,  $[\alpha]_D^{20} = -16.0^\circ$  ( $c = 0.5$ , MeOH). Source: TAN XIANG *Santalum album* (heartwood). Ref: 4468.

**15631 Nitidine**

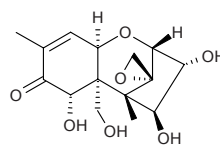
[76872-57-7] C<sub>21</sub>H<sub>18</sub>NO<sub>4</sub><sup>+</sup> (348.38). mp 215~218°C. Pharm: Antineoplastic (mus P<sub>388</sub>, 4mg/(kg·d), biotic prolonged rate = 109%; mus L<sub>1210</sub>, 4mg/(kg·d), biotic prolonged rate = 36%; showing unacceptable toxicity profile for clinical use); reverse transcriptase inhibitor (carcinogen RNA virus); antineoplastic (mus, L<sub>1210</sub> leukemia, P<sub>388</sub> leukemia, Lewis lung carcinoma, and B16 melanoma)<sup>[5369]</sup>; antineoplastic (increases life span of mouse inoculated with Ehrlich ascites tumor, causes decrease in mitotic index and size of tumor cells, and inhibits DNA and RNA synthesis in tumors)<sup>[5369]</sup>; antineoplastic (chloride is used in clinical treatment of chronic myelocytic leukemia)<sup>[5369]</sup>; cytotoxic (binds to calf thymus DNA by intercalation and to be toxic to topoisomerases I and II)<sup>[5369]</sup>; topoisomerases inhibitor (exhibits strong stabilization of covalent binary complex formed between topoisomerase I and DNA)<sup>[5369]</sup>. Source: CHU YE HUA JIAO *Zanthoxylum ailanthoides*, CHU YE HUA JIAO PI *Zanthoxylum ailanthoides*, CHU YE HUA JIAO GEN *Zanthoxylum ailanthoides*, CI KE HUA JIAO *Zanthoxylum echinocarpum*, DA YE CHOU HUA JIAO *Zanthoxylum myriacanthum*, DA YE HUA JIAO *Zanthoxylum dissitum*, DA YE HUA JIAO GEN *Zanthoxylum dissitum*, HUA JIAO *Zanthoxylum bungeanum*, HUA JIAO LE *Zanthoxylum cuspidatum*, HUANG XIN HUA JIAO *Zanthoxylum flavum*, MEI GUO CI JIAO *Zanthoxylum clava-hercules*, MEI ZHOU HUA JIAO *Zanthoxylum americanum* [Syn. *Xanthoxylum americanum*], RU DI JIN NIU *Zanthoxylum nitidum* (dried root: content = 0.15%<sup>[5508]</sup>), YING BU BO *Zanthoxylum avicennae*. Ref: 4, 5, 6, 658, 660, 1521, 5369, 5501, 5508.

**15632 Nitidine chloride**

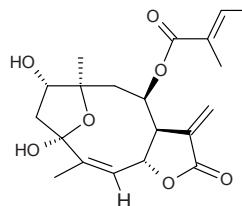
C<sub>21</sub>H<sub>18</sub>ClNO<sub>4</sub> (383.83). Yellow needles (MeOH or EtOH), mp 220°C, 238~240°C, 277~278°C (monohydrate), 284~286°C (dihydrate, dec). Source: HUA JIAO LE *Zanthoxylum cuspidatum*, RU DI JIN NIU *Zanthoxylum nitidum*. Ref: 660, 1521.

**15633 Nivalenol**

Nivalenone [23282-20-4] C<sub>15</sub>H<sub>20</sub>O<sub>7</sub> (312.33). Pharm: Antibacterial; antifungal; causes bleeding; toxin (mammal). Source: *Fusarium nivale*. Ref: 658, 1521.

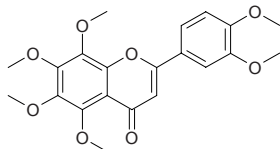
**15634 Niveusin C**

[75680-27-2] C<sub>20</sub>H<sub>26</sub>O<sub>7</sub> (378.43). Pharm: Antineoplastic; cytotoxic. Source: HUI BAI XIANG RI KUI *Helianthus canescens*, MA SHI XIANG RI KUI *Helianthus maximiliani*, XIANG RI KUI ZI *Helianthus annuus*, XUE BAI XIANG RI KUI *Helianthus niveus*. Ref: 658, 1521.

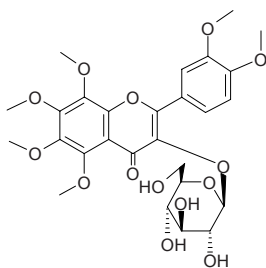


**15635 Nobiletin**

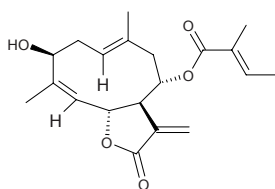
Nobiletin [10236-47-2] C<sub>21</sub>H<sub>22</sub>O<sub>8</sub> (402.40). Light yellow acicular crystals (CHCl<sub>3</sub>), mp 127~129°C; mp 137~138°C. **Pharm:** Antineoplastic (mus, *in vivo*, Lewis lung cancer and W<sub>256</sub>); cytotoxic (KB *in vitro*, ED<sub>50</sub> = 3~28 μg/mL); cytotoxic (HeLa, IC<sub>50</sub> = 30.4 μg/mL, control Mitomycin C, IC<sub>50</sub> = 1.7 μg/mL)<sup>[4092]</sup>; cytotoxic (number of tumor cell lines, antiproliferative, induces differentiation of HL-60 cells *in vitro* in a concentration-dependent manner)<sup>[5369]</sup>; cytotoxic (inhibits invasion of mus MO4 cells into embryonic chick heart fragments *in vitro*)<sup>[5369]</sup>; antifungal (*Deuterophoma tracheiphila*); antithrombotic; platelet aggregation inhibitor (rat, orl, *in vivo*); anti-inflammatory (Ungar method, ED<sub>25</sub> = 20 mg/kg, intensity of anti-inflammation 50u/g); anti-inflammatory (modulator of cytokine network: modulator of cytokine network: effectively inhibits production of PGE<sub>2</sub> and proMMP-9 in rabbit synovial fibroblasts)<sup>[4416]</sup>; anti-inflammatory (suppresses IL-1β-induced production of PGE<sub>2</sub> in hmn synovial fibroblasts, IC<sub>50</sub> < 4 μmol/L; decreases expression of IL-1α, IL-1β, TNF-α and IL-6 mRNAs in J774A.1 macrophages at 32 μmol/L; a suggested lead compound to develop novel anti-inflammatory or immunomodulatory drugs)<sup>[4416]</sup>. **Source:** CHUAN JU *Citrus nobilis*, ZHI KE *Citrus aurantium*, JIAO GAN *Citrus tankan*, JU PI *Citrus reticulata*, JIN GAN *Fortunella japonica*, JIAO GAN PI *Citrus tankan*, JIN JU 桔 | *Fortunella margarita*, LEI GONG TENG *Tripterygium wilfordii*, TUAN JI AI NA XIANG *Blumea glomerata*. **Ref:** 4, 5, 658, 660, 683, 4092, 4416, 5369, 5501.

**15636 Nobiletin-3-O-β-D-glucoside**

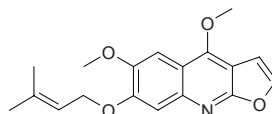
C<sub>27</sub>H<sub>32</sub>O<sub>14</sub> (580.55). **Source:** JU PI *Citrus reticulata* (dried ripe pericarp: content scope = 0.051%~0.51%, mean content = 0.24%)<sup>[5508]</sup>, TIAN CHENG *Citrus sinensis*<sup>[2682]</sup>. **Ref:** 2682, 5508.

**15637 Nobilinin**

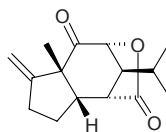
[31824-11-0] C<sub>20</sub>H<sub>26</sub>O<sub>5</sub> (346.43). **Pharm:** Antineoplastic; cytotoxic. **Source:** GAO GUI CHUN HUANG JU *Anthemis nobilis*. **Ref:** 658, 1521.

**15638 Nobiline**

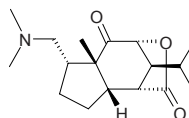
C<sub>18</sub>H<sub>19</sub>NO<sub>4</sub> (313.36). Brown plates, mp 125~126°C. **Source:** GAO GUI YOU MU YUN XIANG *Tecllea nobilis* (aerial parts). **Ref:** 3503.

**15639 Nobilomethylene**

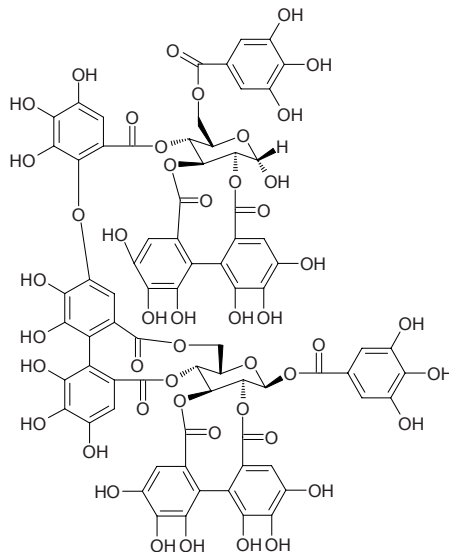
[38750-01-5] C<sub>15</sub>H<sub>20</sub>O<sub>3</sub> (248.32). Crystals (hexane), mp 159.5~160.5°C. **Source:** SHI HU<sup>(4)</sup> *Dendrobium nobile*. **Ref:** 2683.

**15640 Nobilonine**

[4684-24-6] C<sub>17</sub>H<sub>27</sub>NO<sub>3</sub> (293.41). mp 86°C. **Source:** SHI HU<sup>(4)</sup> *Dendrobium nobile*. **Ref:** 6, 1521.

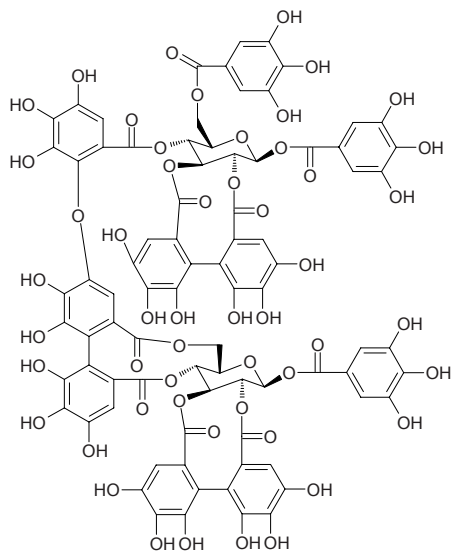
**15641 Nobotanin A**

[98725-99-6] C<sub>75</sub>H<sub>52</sub>O<sub>48</sub> (1721.22). White-like amorphous powder, [α]<sub>D</sub> = +88° (c = 1.0, MeOH). **Pharm:** Antineoplastic (S<sub>180</sub>, 10 mg/kg ip, biotic prolonged rate = 126.6%). **Source:** HONG MAO YE HAI TANG *Bredia tuberculata*, HONG WEI SUAN JIAO GAN *Medinilla magnifica*, *Tibouchina semidecandra*. **Ref:** 2684, 2685, 2686, 2687.

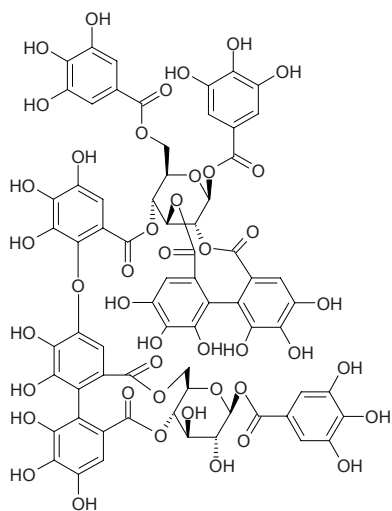


**15642 Nobotanin F**

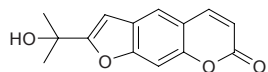
[104669-05-8]  $C_{82}H_{56}O_{52}$  (1873.33). White-like amorphous powder,  $[\alpha]_D = +60^\circ$  ( $c = 0.5$ , MeOH). **Pharm:** Antineoplastic (S<sub>180</sub>, 5mg/kg ip, biotic prolonged rate = 76.4%). **Source:** HONG MAO YE HAI TANG *Bredia tuberculata*, HONG WEI SUAN JIAO GAN *Medinilla magnifica*, *Heterocentron roseum*, *Tibouchina semidecandra*. **Ref:** 2684, 2685, 2686, 2687, 2688.

**15643 Nobotanin R**

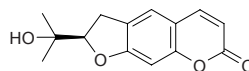
$C_{68}H_{50}O_{44}$  (1571.13). Off-white amorphous powder,  $[\alpha]_D^{27} = +86.5^\circ$  ( $c = 1.0$ , MeOH). **Source:** *Monochaetum multiflorum* (leaf). **Ref:** 3758.

**15644 Nodachenetin**

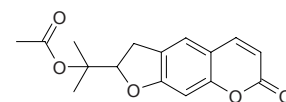
$C_{14}H_{12}O_4$  (244.25). **Source:** AO PA CAO *Oppopanax chironium* (root). **Ref:** 4071.

**15645 Nodakenetin**

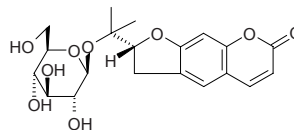
Prangeferol [495-32-9]  $C_{14}H_{14}O_4$  (246.27). Colorless rhombic crystals (ethyl acetate-petroleum ether), mp 190–192°C,  $[\alpha]_D^{22} = -22.3^\circ$  ( $c = 0.634$ , chloroform). **Pharm:** Calcium antagonist; cytotoxic (P<sub>388</sub>); platelet aggregation inhibitor (hmn, *in vitro*). **Source:** BAI HUA QIAN HU *Peucedanum praeruptorum*, DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*], KUAN YE QIANG HUO *Notopterygium forbesii* [Syn. *Notopterygium franchetii*], QIAN HUO *Angelica decursiva* [Syn. *Peucedanum decursivum*], QIANG HUO *Notopterygium incisum*, CHAO XIAN DANG GUI *Angelica gigas*, *Ptelea* sp. **Ref:** 297, 566, 658, 660, 900.

**15646 Nodakenetin acetate**

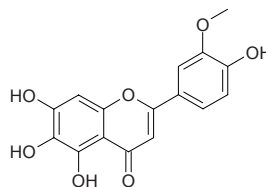
$C_{16}H_{16}O_5$  (288.30). mp 134–135°C. **Source:** YAN JIAO CAO *Boeninghausenia albiflora*. **Ref:** 2495.

**15647 Nodakenin**

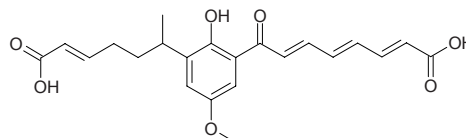
(+)-Marmesinin [495-31-8]  $C_{20}H_{24}O_9$  (408.41). Lobulette form solid (ethanol), mp 217–219°C,  $[\alpha]_D = +24^\circ$  ( $c = 0.9$ , ethanol:water = 1:1). **Pharm:** Cytotoxic (L<sub>1210</sub>); platelet aggregation inhibitor (hmn, due to ADP, 1.0mmol/L, InRt = 70%); AChE inhibitor (*in vitro*, IC<sub>50</sub> = 68μmol/L)<sup>[3058]</sup>. **Source:** BAI HUA QIAN HUO *Peucedanum praeruptorum*, BAI ZHI *Angelica dahurica* [Syn. *Angelica porphyrocaulis*], DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*], E SHEN *Anthriscus sylvestris*, KUAN YE QIANG HUO *Notopterygium forbesii* [Syn. *Notopterygium franchetii*], QIAN HUO *Angelica decursiva* [Syn. *Peucedanum decursivum*] (in 1973, the compound was isolated from the plant)<sup>[5505]</sup>, QIANG HUO *Notopterygium incisum*, CHAO XIAN DANG GUI *Angelica gigas* (underground part)<sup>[3058]</sup>. **Ref:** 2, 566, 660, 900, 3058, 5501, 5505.

**15648 Nodifloretin**

[23494-48-6]  $C_{16}H_{12}O_7$  (316.27). mp 250–253°C. **Source:** PENG LAI CAO *Lippia nodiflora*. **Ref:** 6, 1521.

**15649 Nodifloridin A**

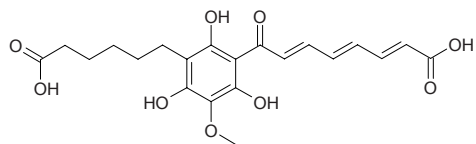
$C_{22}H_{24}O_7$  (400.43). **Source:** PENG LAI CAO *Lippia nodiflora*. **Ref:** 6.



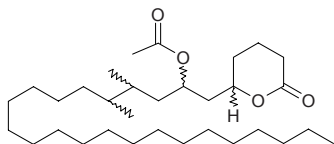


**15650 Nodifloridin B**

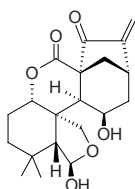
$C_{21}H_{24}O_9$  (420.42). Source: PENG LAI CAO *Lippia nodiflora*. Ref: 6.

**15651 Nodolidate**

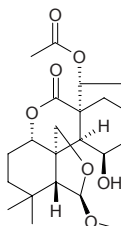
[37577-42-7]  $C_{32}H_{60}O_4$  (508.83). Crystals (MeOH- $CHCl_3$ ), mp 69~70°C,  $[\alpha]_D^{27} = -12.3^\circ$ . Source: SHEN HUANG DOU *Cassia nodosa*. Ref: 6, 1521.

**15652 Nodosin**

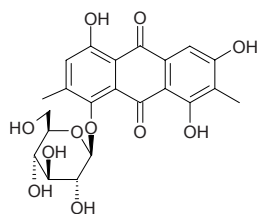
[10391-09-0]  $C_{20}H_{26}O_6$  (362.43). Crystals, mp 275~280°C (dec),  $[\alpha]_D^{17} = -203^\circ$ ,  $[\alpha]_D^{20} = -225.3^\circ$  ( $c = 0.38$ ,  $C_5H_5N$ ). Pharm: Bitter principle; antibacterial (gram-positive bacteria); insect growth inhibitor; cytotoxic (K562 cells, MTT method,  $IC_{50} = 1.43\mu g/mL$ , control *cis*-Platin,  $IC_{50} = 0.53\mu g/mL$ )<sup>[3808]</sup>. Source: MAO YE XIANG CHA CAI *Isodon japonica* [Syn. *Rabdosia japonica*], HEI HUA YAN MING CAO *Isodon trichocarpus*, SHAN DI XIANG CHA CAI *Isodon oresbia* (aerial parts). Ref: 1521, 3808, 4067.

**15653 Nodosinin**

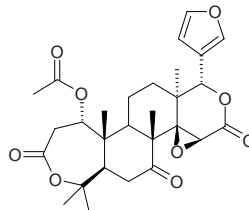
$C_{23}H_{32}O_7$  (420.51). mp 281~284°C,  $[\alpha]_D^{26} = -211^\circ$  ( $c = 0.11$ ,  $CHCl_3$ ). Source: MAO YE XIANG CHA CAI *Isodon japonica* [Syn. *Rabdosia japonica*]. Ref: 4067.

**15654 Nodososide**

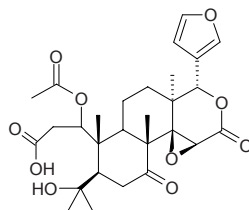
$C_{22}H_{22}O_{11}$  (462.41). Source: SHEN HUANG DOU *Cassia nodosa*. Ref: 6.

**15655 Nomilin**

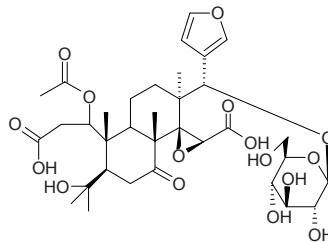
[1063-77-0]  $C_{28}H_{34}O_9$  (514.58). mp 278~279°C. Pharm: Bitter principle; insect antifeedant; anti-HIV-1 (40 $\mu$ mol/L, InRt = (77 $\pm$ 11)%, control Indinavir, 100nmol/L, InRt = 100%)<sup>[5462]</sup>. Source: CHENG ZI *Citrus junos*, CHENG ZI HE *Citrus junos*, FU JU *Citrus tangemna*, JU HE *Citrus reticulata*, YIN DU LIAN *Azadiractica indica*, ZHU JU *Citrus erythroa*. Ref: 6, 658, 5462.

**15656 Nomilinic acid**

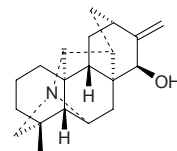
[35930-20-2]  $C_{28}H_{36}O_{10}$  (532.59). Noncrystal. Source: CHENG ZI *Citrus junos*, ZHI SHI *Citrus aurantium*. Ref: 660, 1521.

**15657 Nomilinic acid glucoside**

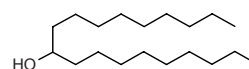
$C_{34}H_{48}O_{16}$  (712.75). Source: ZHI SHI *Citrus aurantium*. Ref: 2689.

**15658 Nominine**

[79808-87-0]  $C_{12}H_{31}NO$  (123.49). Colorless wedge-shape crystals ( $Et_2O$ -MeOH), mp 258~260°C,  $[\alpha]_D = +71.8^\circ$  ( $c = 1.26$ , methanol). Pharm: Antiarrhythmic (rat, induced by aconitine,  $ED_{50} = 5mg/kg$ );  $LD_{50}$  (rat) = 68.0mg/kg). Source: GAN WAN WU TOU *Aconitum finetianum*, SHAN YANG WU TOU *Aconitum sanyoense*, ZE WU TOU *Aconitum zeravschanicum*. Ref: 2690, 2691, 2692, 2693, 2694.

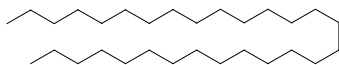
**15659 Nonacasyll alcohol-10**

Celidoniol [16840-84-9]  $C_{19}H_{40}O$  (284.53). mp 82.5°C. Source: BAI GUO *Ginkgo biloba*, BAI GUO YE *Ginkgo biloba*, BAI QU CAI *Chelidonium majus*, JU HUA HUANG LIAN *Corydalis pallida*. Ref: 2, 6.

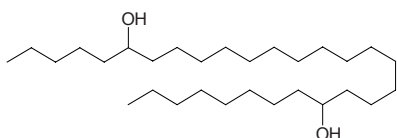


**15660 Nonacosane**

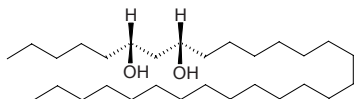
[630-03-5] C<sub>29</sub>H<sub>60</sub> (408.80). Source: DU ZHONG *Eucommia ulmoides*, HONG HUA *Carthamus tinctorius*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], SHUANG BIAN GUA LOU *Trichosanthes rosthornii* [Syn. *Trichosanthes uniflora*], XIAN HE CAO *Agrimonia pilosa* var. *japonica*, ZHI ZI *Gardenia jasminoides* [Syn. *Gardenia florida*], ZHONG MA HUANG *Ephedra intermedia*. Ref: 2, 660.

**15661 Nonacosanediol-6,21**

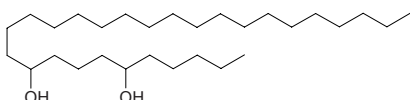
[96850-31-6] C<sub>29</sub>H<sub>60</sub>O<sub>2</sub> (440.80). Source: PU HUANG *Typha angustata*. Ref: 2, 1521, 2779.

**15662 Nonacosanediol-6,8**

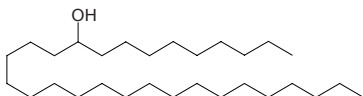
[96850-33-8] C<sub>29</sub>H<sub>60</sub>O<sub>2</sub> (440.80). Crystals (Me<sub>2</sub>CO–MeOH), mp 72–74°C. Source: HONG HUA *Carthamus tinctorius*, PU HUANG *Typha angustata*. Ref: 2, 1521, 2779.

**15663 Nonacosanediol-6,10**

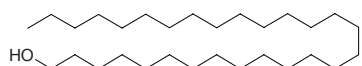
6,10-Nonacosanediol [71418-30-9] C<sub>29</sub>H<sub>60</sub>O<sub>2</sub> (440.80). Source: FU SHE SONG *Pinus radiata*, PU HUANG *Typha angustata*. Ref: 2, 1521, 2779.

**15664 10-Nonacosanol**

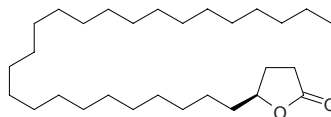
[2606-50-0] C<sub>29</sub>H<sub>60</sub>O (424.80). Crystals (EtOH, Me<sub>2</sub>CO or hexane), mp 83–84°C. Source: BAI GUO *Ginkgo biloba*, BAI QU CAI *Chelidonium majus*, CE BAI YE *Thuja orientalis* [Syn. *Platyclusus orientalis*; *Biota orientalis*], HE YE *Nelumbo nucifera*, SU TIE SHU GUO *Cycas revoluta*, TU CHUANG HUA *Dicranostigma franchetianum* [Syn. *Dicranostigma leptopodum*], WU WEI CAO *Corydalis taliensis*, YA PIAN *Papaver somniferum*, YU JIN XIANG *Tulipa gesneriana*, ZI SHAN *Taxus cuspidata*, *Chamaecyparis* spp. Ref: 660, 1521.

**15665 Nonacosanol**

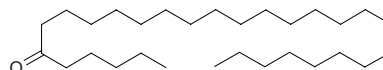
[25154-56-7] C<sub>29</sub>H<sub>60</sub>O (424.80). Source: ZHONG MA HUANG *Ephedra intermedia*, HUANG HUA HAO *Artemisia annua*. Ref: 2, 660.

**15666 Nonacosan-4-olide**

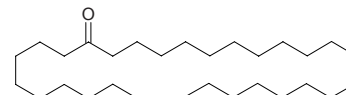
C<sub>29</sub>H<sub>56</sub>O<sub>2</sub> (436.77). Source: FU CHUI FE LAO JU *Flourensia cernua*. Ref: 3433.

**15667 6-Nonacosanone**

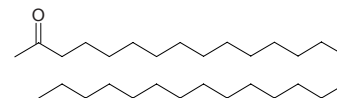
C<sub>29</sub>H<sub>58</sub>O (422.79). Source: KU LANG SHU *Clerodendrum inerme*. Ref: 3382.

**15668 10-Nonacosanone**

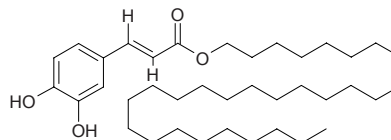
C<sub>29</sub>H<sub>58</sub>O (422.79). mp 74–75°C. Source: BAI GUO YE *Ginkgo biloba*, JI MAO SONG *Podocarpus imbricatus*. Ref: 6, 544.

**15669 2-Nonacosanone**

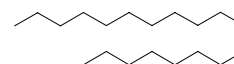
C<sub>29</sub>H<sub>58</sub>O (422.79). Source: ROU CONG RONG *Cistanche deserticola*. Ref: 2.

**15670 Nonacosanyl caffeate**

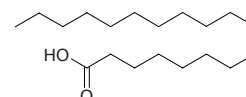
3,4-Dihydroxy-*trans*-cinnamic acid nonacosanylester C<sub>38</sub>H<sub>66</sub>O<sub>4</sub> (586.95). Pharm: Anti-inflammatory (COX-1 inhibitor, 1000μmol/L, InRt = (52±2)%, positive control Indomethacin, 1.7μmol/L, InRt = (43±3)%). Source: LUO YE SONG YE JIN SI TAO *Hypericum laricifolium* (aerial parts). Ref: 4413.

**15671 n-Nonadecane**

Nonadecane [629-92-5] C<sub>19</sub>H<sub>40</sub> (268.53). Source: DANG SHEN *Codonopsis pilosula*, ROU CONG RONG *Cistanche deserticola*, SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. Ref: 2.

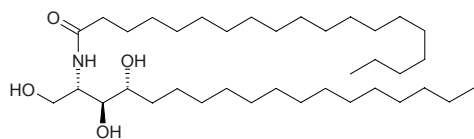
**15672 Nonadecanoic acid**

Nonadecylic acid [646-30-0] C<sub>19</sub>H<sub>38</sub>O<sub>2</sub> (298.51). Source: GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*]. Ref: 2.

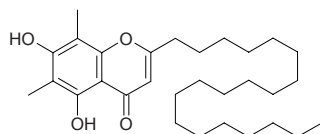


**15673 (2S,3S,4R)-2-Nonadecanoylamino-octadecane-1,3,4-triol**

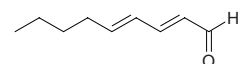
$C_{37}H_{75}NO_4$  (598.01). Colorless solid, mp 122~124°C,  $[\alpha]_D^{28} = +19.2^\circ$  (c = 0.5,  $CHCl_3$ ). Source: *Lobophytum* sp. Ref: 4432.

**15674 2-n-Nonadecyl-5,7-dihydroxy-6,8-dimethyl chromone**

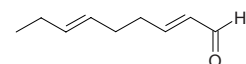
$C_{30}H_{48}O_4$  (472.71). Source: KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. Ref: 2695.

**15675 2,4-Nonadienal**

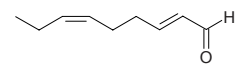
$C_9H_{14}O$  (138.21). Source: DANG SHEN *Codonopsis pilosula*. Ref: 2696.

**15676 2,6-Nonadienal**

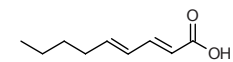
[17587-33-6]  $C_9H_{14}O$  (138.21). bp 85~87°C/11 mmHg. Pharm: Main odiferous component in cucumber *Cucumis sativus* HUANG GUA. Source: HUANG GUA *Cucumis sativus*. Ref: 6, 658.

**15677 2E,6Z-Nonadienal**

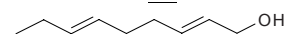
[557-48-2]  $C_9H_{14}O$  (138.21). Liquid with cucumber odour, bp 94~98°C/11mmHg. Source: HUANG GUA *Cucumis sativus*. Ref: 660, 1521.

**15678 2,4-Nonadienic acid**

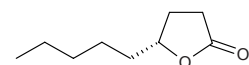
$C_9H_{14}O_2$  (154.21). Source: DANG SHEN *Codonopsis pilosula*. Ref: 2.

**15679 2,6-Nonadienol**

$C_9H_{16}O$  (140.23). bp 95.5~100.0°C/11mmHg. Source: HUANG GUA *Cucumis sativus*. Ref: 6.

**15680 γ-Nonalactone**

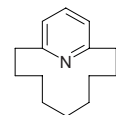
[104-61-0]  $C_9H_{16}O_2$  (156.23). Pharm: Component of coconut flavorant. Source: YE ZI RANG *Cocos nucifera*. Ref: 658, 1521.

**15681 Nonaldehyde**

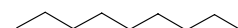
Nonylaldehyde [124-19-6]  $C_9H_{18}O$  (142.24). bp 190~192°C. Source: CAO MEI *Fragaria ananassa*, CHENG GAN CAO *Eupatorium japonicum*, DA MA YE ZE LAN *Eupatorium cannabinum*, DONG LING CAO *Rabdosia rubescens*, GAN JIANG *Zingiber officinale*, HUA ZE LAN *Eupatorium chinense*. Ref: 2, 660.

**15682 2,6-Nonamethylene pyridine**

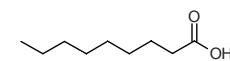
$C_{14}H_{21}N$  (203.33). Source: SHE XIANG *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*. Ref: 2.

**15683 n-Nonane**

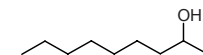
Nonane [111-84-2]  $C_9H_{20}$  (128.26). Source: SHENG JIANG *Zingiber officinale*, DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*]. Ref: 2.

**15684 Nonanoic acid**

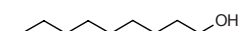
Pelargonic acid [112-05-0]  $C_9H_{18}O_2$  (158.24). Source: CHAI HU *Bupleurum chinense*, DANG SHEN *Codonopsis pilosula*, GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], GUA LOU *Trichosanthes kirilowii*, SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*], SHUANG BIAN GUA LOU *Trichosanthes rosthornii* [Syn. *Trichosanthes uniflora*], XI YANG SHEN *Panax quinquefolium*. Ref: 2, 660.

**15685 2-Nonanol**

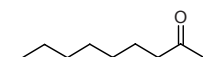
[628-99-9]  $C_9H_{20}O$  (144.26). Source: GAN JIANG *Zingiber officinale*. Ref: 2.

**15686 n-Nonanol**

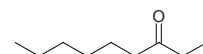
Nonyl alcohol [143-08-8]  $C_9H_{20}O$  (144.26). bp 215°C. Source: SHENG JIANG *Zingiber officinale*. Ref: 2.

**15687 2-Nonanone**

Methylheptyl-ketone [821-55-6]  $C_9H_{18}O$  (142.24). Source: SHENG JIANG *Zingiber officinale*, YIN CHEN HAO *Artemisia capillaris*. Ref: 2.

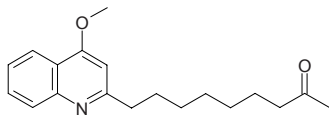
**15688 3-Nonanone**

[925-78-0]  $C_9H_{18}O$  (142.24). Liquid, fp -8°C, bp 190°C, bp 86°C/20mmHg. Pharm: Alarm pheromone of insect. Source: BEI AI *Artemisia vulgaris*. Ref: 1521, 2697.

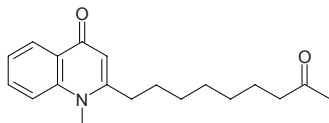


**15689 2-(Nonan-8-one)-4-methoxy-quinoline**

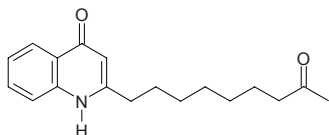
$C_{19}H_{25}NO_2$  (299.42). Source: MENG DA NA YUN XIANG *Ruta Montana* (whole herb). Ref: 3910.

**15690 2-(Nonan-8-one)-N-methyl-4-quinolone**

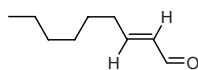
$C_{19}H_{25}NO_2$  (299.42). Source: MENG DA NA YUN XIANG *Ruta Montana* (whole herb). Ref: 3910.

**15691 2-(Nonan-8-one)-(1H)-4-quinolone**

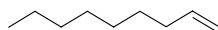
$C_{18}H_{23}NO_2$  (285.39). Source: MENG DA NA YUN XIANG *Ruta Montana* (whole herb). Ref: 3910.

**15692 (E)-2-Nonenal**

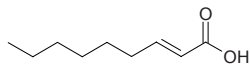
[18829-56-6]  $C_9H_{16}O$  (140.23). Source: XING REN *Prunus armeniaca*. Ref: 2.

**15693 1-Nonene**

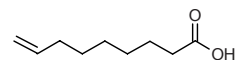
[124-11-8]  $C_9H_{18}$  (126.24). bp 146°C. Source: FENG DOU CAI *Petasites japonicus*. Ref: 6.

**15694 2-Nonenoic acid**

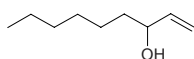
$C_9H_{16}O_2$  (156.23). Source: CHAI HU *Bupleurum chinense*. Ref: 2.

**15695 8-Nonenoic acid**

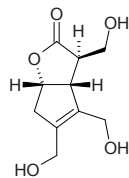
[31642-67-8]  $C_9H_{16}O_2$  (156.23). Source: BAI ZHI *Angelica dahurica* [Syn. *Angelica porphyrocaulis*]. Ref: 2.

**15696 1-Nonen-3-ol**

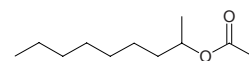
Hexylvinylcarbinol [21964-44-3]  $C_9H_{18}O$  (142.24). bp 193~194°C. Source: FENG DOU CAI *Petasites japonicus*. Ref: 6.

**15697 Non-glycosidic iridoid**

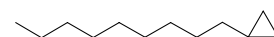
$C_{10}H_{14}O_5$  (214.22). Viscous syrup,  $[\alpha]_D^{28} = -30.6^\circ$  ( $c = 0.72$ , MeOH). Source: XIE JI CU YE MU *Lasianthus wallichii* (leaf). Ref: 4238.

**15698 2-Nonyl acetate**

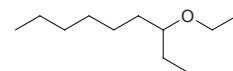
[14936-66-4]  $C_{11}H_{22}O_2$  (186.30). Source: CHOU CAO *Ruta graveolens*. Ref: 6.

**15699 Nonyl cyclopropane**

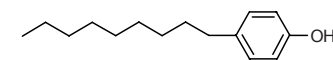
$C_{12}H_{24}$  (168.33). Source: BAI ZHI *Angelica dahurica* [Syn. *Angelica porphyrocaulis*]. Ref: 2.

**15700 Nonyl ethyl ether**

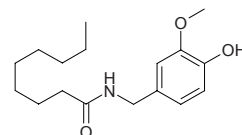
Ethyl nonyl ether [16979-32-1]  $C_{11}H_{24}O$  (172.31). bp 88°C/21mmHg. Source: WEN PO *Cydonia oblonga*. Ref: 6.

**15701 Nonylphenol**

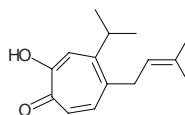
4-Nonylphenol [25154-52-3]  $C_{15}H_{24}O$  (220.36). Source: WU WEI ZI *Schisandra chinensis*. Ref: 2.

**15702 Nonyl vanillylamide**

[2444-46-4]  $C_{17}H_{27}NO_3$  (293.41). Source: LA JIAO *Capsicum frutescens*. Ref: 6.

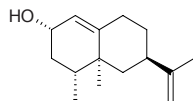
**15703 Nootkatin**

[4431-03-2]  $C_{15}H_{20}O_2$  (232.33). mp 95°C. Source: SHAN CI BAI *Juniperus taiwaniana*. Ref: 6.

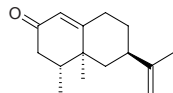


**15704 Nootkatol**

[50763-67-2] C<sub>15</sub>H<sub>24</sub>O (220.36). Colorless needles (hexane), mp 78–80°C, [ $\alpha$ ]<sub>D</sub> = +208° (*c* = 1.1, CHCl<sub>3</sub>). **Pharm:** Calcium antagonist (rbt, 30μmol antagonizes calcium ion absorption induced by KCl in artery, inhibits artery contraction; dog, 0.3μmol antagonizes calcium ion absorption induced by KCl in artery, inhibits evidently aorta contraction); vasodilator. **Source:** YI ZHI REN *Alpinia oxyphylla*. **Ref:** 657, 1207, 2698, 2699, 5501.

**15705 Nootkatone**

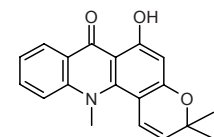
1(10),11-Eremophiladien-2-one; 4,4 $\alpha$ ,5,6,7,8-Hexahydro-4,4 $\alpha$ -dimethyl-6-(1-methylethenyl)-2(3*H*)-naphthalene [4674-50-4] C<sub>15</sub>H<sub>22</sub>O (218.34). Crystals (pet. ether), mp 36–37°C, [ $\alpha$ ]<sub>D</sub> = +195.5° (*c* = 1.5, CHCl<sub>3</sub>). **Pharm:** Na<sup>+</sup>,K<sup>+</sup>-ATP inhibitor (3μg/mL, reduces Na<sup>+</sup>,K<sup>+</sup>-ATPase activity 5%, 30μg/mL, reduces Na<sup>+</sup>,K<sup>+</sup>-ATPase activity 35%); prostaglandin synthetase inhibitor (0.5μmol/L, reduces prostaglandin synthetase activity 5%); vasodilator; antiulcerative (rat, induced by oral 1.5mL 0.15mol/L HCl 60% alcohol solution, before treatment 1h, 20mL/kg InRt = 69.8%; 50mL/kg InRt = 82.8%, *P* < 0.01); NO production inhibitor (*in vitro*, LPS-activated mouse peritoneal macrophages, IC<sub>50</sub> = 34μmol/L; control *L*-NMMA, IC<sub>50</sub> = 28μmol/L)<sup>[4655]</sup>;  $\beta$ -hexosaminidase release inhibitor (RBL-2H3 Cells, 100μmol/L, InRt = 25.8%; control Curcumin, InRt = 62.6%)<sup>[4655]</sup>; 12(*S*)-LOX inhibitor inactive (hmn Platelets, 100μg/mL, 12(*S*)-HETE Production inhibitor inactive)<sup>[4980]</sup>; flavorant; food additive. **Source:** CHAI HU *Bupleurum chinense*, CHAI SHOU *Bupleurum chaishouii*, CHUAN MU XIANG *Vladimiria souliei* [Syn. *Jurinea souliei*], CI GUI *Juniperus oxycedrus*, HONG CHAI HU *Bupleurum scorzonrifolium*, HUANG BIAN BAI *Chamaecyparis nootkatensis*, HUANG HUA HAO *Artemisia annua*, OU ZHOU CI BAI *Juniperus communis*, PU TAO YOU *Citrus paradisi*, SHI HU<sup>(4)</sup> *Dendrobium nobile*, WU WEI ZI *Schisandra chinensis*, YE JU *Chrysanthemum indicum*, YI YE BAI JIANG *Patrinia heterophylla*, YI ZHI REN *Alpinia oxyphylla* (fruit: yield = 0.17%dw)<sup>[4655]</sup>, ZHAI ZHU YE CHAI HU *Bupleurum marginatum* var. *stenophyllum*. **Ref:** 2, 660, 1207, 1521, 2698, 2700, 2702, 4655, 4980, 5501.

**15706 Nopinone**

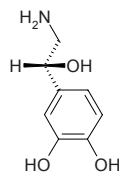
C<sub>9</sub>H<sub>14</sub>O (138.21). **Source:** RU XIANG *Boswellia carterii*. **Ref:** 660.

**15707 Noracronycine**

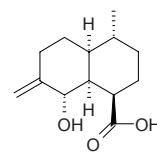
[13161-79-0] C<sub>19</sub>H<sub>17</sub>NO<sub>3</sub> (307.35). **Source:** JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*]. **Ref:** 11.

**15708 Noradrenaline**

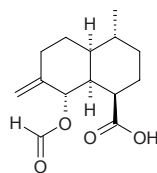
(*R*)-4-(2-Amino-1-hydroxyethyl)-1,2-benzenediol [51-41-2] C<sub>8</sub>H<sub>11</sub>NO<sub>3</sub> (169.18). mp (+) 215–217°C (dec), (–) 216.5–218.0°C, (±) 191°C (dec). **Pharm:** A hormone secreted by medulla of adrenal gland; neurotransmitter (released by sympathetic nerve endings); contracts blood vessels; increases blood pressure and blood flow through the coronary arteries; slows heart rate; increases the rate and depth of breathing; intestinal smooth muscle relaxant. **Source:** DA GUO XI FAN LIAN *Passiflora quadrangularis*, HAN XIU CAO *Mimosa pudica*, HE HUAN PI *Albizia julibrissin*, HONG HUA CAI DOU *Phaseolus multiflorus*, JIN YU *Carassius auratus*, MA CHI XIAN *Portulaca oleracea*, NIU SHEN *Bos taurus domesticus*; *Bubalus bubalis*, WAN DOU *Pisum sativum*, WEI NAO *Erinaceus europaeus*; *Hemiechinus dauuricus*; *Hemiechinus auritus*, WEI XIN GAN *Erinaceus europaeus*; *Hemiechinus dauuricus*; *Hemiechinus auritus*, XIANG JIAO *Musa paradisiaca* var. *sapientum* [Syn. *Musa sapientum*], YU SHU *Samanea saman*. **Ref:** 6, 658.

**15709 Norannuic acid**

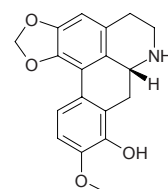
C<sub>13</sub>H<sub>20</sub>O<sub>3</sub> (224.30). Crystals, mp 180–182°C, [ $\alpha$ ]<sub>D</sub> = –104° (*c* = 1, MeOH). **Source:** HUANG HUA HAO *Artemisia annua*. **Ref:** 2704.

**15710 Norannuic acid formyl ester**

C<sub>14</sub>H<sub>20</sub>O<sub>4</sub> (252.31). Colorless oil. [ $\alpha$ ]<sub>D</sub> = –14.1° (*c* = 0.3, CHCl<sub>3</sub>). **Source:** HUANG HUA HAO *Artemisia annua* (seed). **Ref:** 3435.

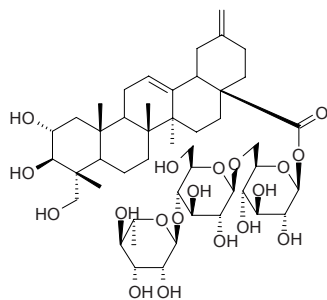
**15711 Norannuradhapurine**

[83694-79-5] C<sub>18</sub>H<sub>17</sub>NO<sub>4</sub> (311.34). Amorphous. **Source:** BAI YE GUA FU MU *Fissistigma glaucescens* [Syn. *Melodorum glaucescens*], GUA FU MU *Fissistigma oldhamii* [Syn. *Melodorum oldhamii*], *Polyalthia acuminata*. **Ref:** 2705, 2706.



**15712 Norarjunolic acid-28-O- $\alpha$ -L-rhamnosyl(1 $\rightarrow$ 4)- $\beta$ -D-glucosyl (1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside**

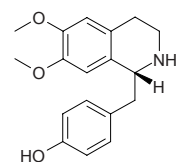
C<sub>47</sub>H<sub>74</sub>O<sub>19</sub> (943.10). Source: YU ZHI ZI *Akebia quinata*. Ref: 2707.



**15713 N-Norarmepavine**

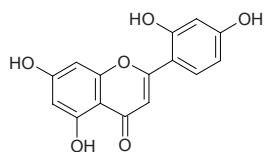
Norarmepavine C<sub>18</sub>H<sub>21</sub>NO<sub>3</sub> (299.37). mp D(+) 157~158°C, L(-) 157~158°C.

Source: HE YE *Nelumbo nucifera*, HONG NAN PI *Machilus thunbergii*, LIAN ZI *Nelumbo nucifera*. Ref: 6, 660.



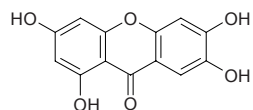
**15714 Norartocarpetin**

C<sub>15</sub>H<sub>10</sub>O<sub>6</sub> (286.24). Pale-yellow needles (Me<sub>2</sub>CO, EtOH or AcOH), mp 332~335°C. Pharm: Cytotoxic (cyclooxygenase-1 inhibitor, IC<sub>50</sub> = 4.0 μg/mL)<sup>[5038]</sup>; cytotoxic (mouse mammary organ culture assay, 85% at 10 μg/mL)<sup>[5038]</sup>. Source: BO LUO MI *Artocarpus heterophyllus*, DA DA HE MIAN BAO GUO *Artocarpus dadah*. Ref: 1521, 5038.



**15715 Norathyriol**

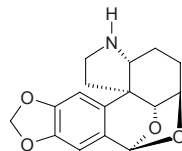
1,3,6,7-Tetrahydroxyxanthone [3542-72-1] C<sub>13</sub>H<sub>8</sub>O<sub>6</sub> (260.21). Pharm: Antibacterial (*Mycobacterium tuberculosis*); xanthinoxidase inhibitor. Source: AO SHI JIN SI TAO *Hypericum aucheri*, DAO NIAN ZI *Garcinia mangostana*, KU DING CHA *Cratoxylum prunifolium*, SANG CHENG *Maclura pomifera*, SHAN ZHU ZI *Garcinia multiflora*, TU SAN JIN SI TAO *Hypericum androsaemum*, *Chlorophora* sp., *Mammea* sp. Ref: 6, 658.



**15716 Noraugustamine**

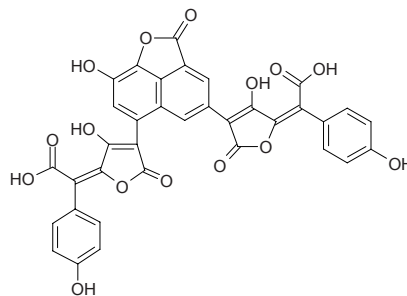
C<sub>16</sub>H<sub>17</sub>NO<sub>4</sub> (287.32). mp 149~151°C, [α]<sub>D</sub><sup>20</sup> = -50.0° (c = 0.87, MeOH).

Pharm: Antitrypanosomal (*Trypanosoma brucei*, IC<sub>50</sub> = 18.7 μg/mL); antiprotozoal inactive (*Plasmodium falciparum*, *Leishmania donovani*, *Trypanosoma cruzi*). Source: KEN NI YA WEN SHU LAN *Crinum kirkii* (bulb). Ref: 3892.



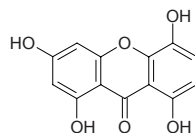
**15717 Norbadione A**

C<sub>35</sub>H<sub>18</sub>O<sub>15</sub> (678.52). Red needles, mp > 300°C. Source: DOU BAO JUN *Pisolithus tinctorius* [Syn. *Lycoperdon capitatum*; *Scleroderma tinctorium*], HE RONG GAI NIU GAN JUN *Xerocomus badius*. Ref: 2708, 2709.



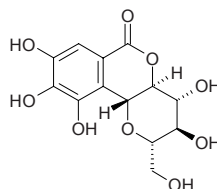
**15718 Norbellidifodin**

1,3,5,8-Tetrahydroxyxanthone C<sub>13</sub>H<sub>8</sub>O<sub>6</sub> (260.21). Yellow powder, mp 276~278°C. Pharm: AChE inhibitor (MIC = 0.04 μg = 0.15 nmol, control Galanthamine MIC = 0.01 μg = 0.03 nmol, Physostigmine MIC = 0.005 μg = 0.002 nmol, Huperzine A MIC = 0.002 μg = 0.0008 nmol)<sup>[5039]</sup>. Source: BAO E ZHANG YA CAI *Swertia calycina*, TIAN YE LONG DAN *Gentiana campestris* (leaf). Ref: 634, 5039.



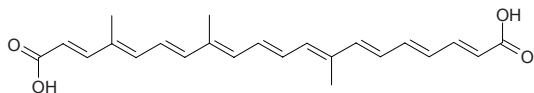
**15719 Norbergenin**

[79595-97-4] C<sub>13</sub>H<sub>14</sub>O<sub>9</sub> (314.25). Prisms or needles (H<sub>2</sub>O, dimorphism), mp 277~278°C (275~277°C, dec), (Prisms), mp 178~180°C (needles), [α]<sub>D</sub><sup>17</sup> = -22.0° (c = 0.393, H<sub>2</sub>O). Pharm: DPPH scavenger (IC<sub>50</sub> = (13.4±1.1) μmol/L, control Trolox, IC<sub>50</sub> = (25.4±0.8) μmol/L)<sup>[4244]</sup>; cytotoxic inactive (murine breast cancer cell line FM3A, 100 μmol/L)<sup>[4244]</sup>. Source: HU ER CAO *Saxifraga stolonifera*, XIA ZI HUA *Woodfordia fruticosa*, YOU SE ZI JIN NIU *Ardisia colorata* (fruit), ZHU SHA GEN *Ardisia crenata*. Ref: 2710, 2711, 2712, 4244.

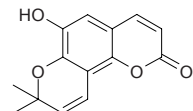


**15720 Norbixin**

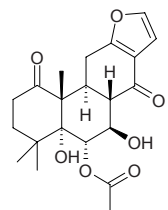
$C_{24}H_{28}O_4$  (380.49). Source: HONG MU *Bixa orellana*. Ref: 658, 1521.

**15721 Norbraylin**

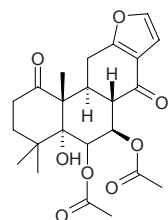
$C_{14}H_{12}O_4$  (244.25). Source: *Cedrelopsis grevei* (trunk bark). Ref: 5368.

**15722 Norcaesalpinin F**

$C_{21}H_{26}O_7$  (390.44). Colorless amorphous solid,  $[\alpha]_D^{22} = +80.4^\circ$  ( $c = 0.091$ ,  $CHCl_3$ ). Pharm: Antimalarial (antiplasmodial *Plasmodium falciparum* FCR-3/A2 clone,  $IC_{50} = 0.14 \mu\text{mol/L}$ ). Source: CI GUO SU MU *Caesalpinia crista* (seed kernel: yield = 0.0004%dw). Ref: 1126.

**15723 Norcaesalpinin MD**

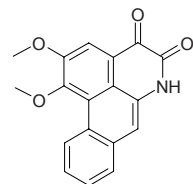
$C_{23}H_{28}O_8$  (432.47). Colorless amorphous solid,  $[\alpha]_D^{25} = +163.3^\circ$  ( $c = 0.1$ ,  $CHCl_3$ ). Source: CI GUO SU MU *Caesalpinia crista* (seed kernel). Ref: 4434.

**15724 Norcapillene**

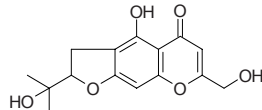
1,3-Pentadiynylbenzene  $C_{11}H_8$  (140.19). Oil, bp 45–50°C/0.001mmHg,  $n_D^{22} = 1.5726$ . Source: NAN TONG HAO *Chrysanthemum segetum*, XIA YE QING HAO *Artemisia dracunculus*, YIN CHEN HAO *Artemisia capillaris*. Ref: 2, 1521.

**15725 Norcepharadione B**

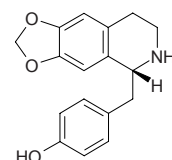
[57576-41-7]  $C_{18}H_{13}NO_4$  (307.31). mp 304–307°C (dec). Source: YU XING CAO *Houttuynia cordata*, BAI YAO ZI *Stephania cepharantha*, ZHU YE JU *Piper boehmeriaefolium*. Ref: 1521, 2428, 2713.

**15726 Norcimifugin**

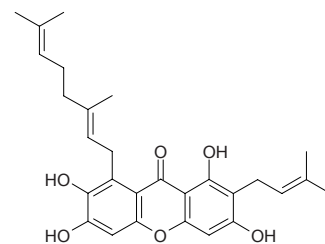
[64519-22-8]  $C_{15}H_{16}O_6$  (292.29). Source: NAN CHUAN SHENG MA *Cimicifuga nanchuanensis*. Ref: 2714.

**15727 Norcinnamolaureine**

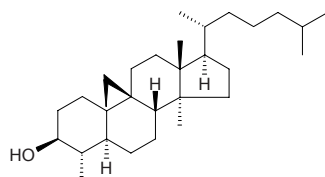
[34168-00-8]  $C_{17}H_{17}NO_3$  (283.33). Source: SHAN HU JIAO YE *Lindera glauca*. Ref: 2715.

**15728 Norcowanin**

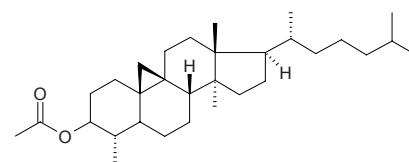
[158511-56-9]  $C_{28}H_{32}O_6$  (464.56). Yellow needles (acetone– $CH_2Cl_2$ ) mp 162–163°C. Pharm: Antibacterial (*Staphylococcus aureus*). Source: YUN NAN SHAN ZHU ZI *Garcinia cowa*. Ref: 2716.

**15729 29-Norcycloartan-3β-ol**

$C_{29}H_{50}O$  (414.72). mp 128–132°C. Source: DONG BEI DUO ZU JUE *Polypodium virginianum*, DUO ZU JUE *Polypodium vulgare*, GOU QI ZI *Lycium chinense*, SHUI LONG GU *Polypodium niponicum*, SUI BA QIA *Smilax aspera*. Ref: 6, 660.

**15730 31-Norcycloartanyl acetate**

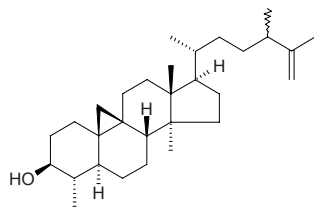
29-Norcycloartanyl acetate [17320-16-0]  $C_{31}H_{52}O_2$  (454.76). Source: DONG BEI DUO ZU JUE *Polypodium virginianum*, DUO ZU JUE *Polypodium vulgare*, SHUI LONG GU *Polypodium niponicum*. Ref: 660.



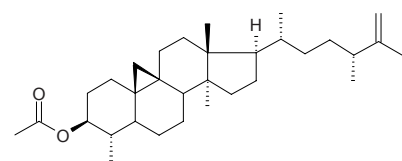


**15731 31-Norcyclolaudenol**

$C_{30}H_{50}O$  (426.73). Source: SHUI LONG GU *Polypodium niponicum*. Ref: 6, 1521.

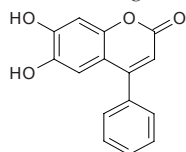
**15732 31-Norcyclolaudenyl acetate**

$C_{32}H_{52}O_2$  (468.77). Source: SHUI LONG GU *Polypodium niponicum*. Ref: 660.

**15733 Nordalbergin**

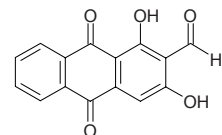
[482-82-6]  $C_{15}H_{10}O_4$  (254.24). mp 274~276°C. Source: JIANG ZHEN

XIANG *Dalbergia odorifera*. Ref: 6.

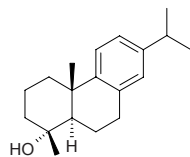
**15734 Nordamnacanthal**

[3736-59-2]  $C_{15}H_8O_5$  (268.23). Orange-yellow crystals ( $Me_2CO$ ), mp 220°C.

Source: GUANG JING QIAN CAO *Rubia wallichiana* (stem), GUANG ZE BA JI *Morinda lucida*, HAI BA JI *Morinda citrifolia*, HU CI *Damnacanthus indicus*, QIAN CAO GEN *Rubia cordifolia*, RAN SE JI YAN TENG *Morinda tinctoria*, TU LIAN QIAO *Hymenodictyon excelsum*, *Damnacanthus major*, *Rubia ibérica*, *Coprosma linearifolia*. Ref: 6, 1521, 2717, 4369.

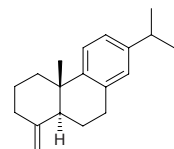
**15735 18-Nordehydroabietan-4 $\alpha$ -ol**

$C_{19}H_{28}O$  (272.43). Source: HAI SONG ZI *Pinus koraiensis*. Ref: 6.

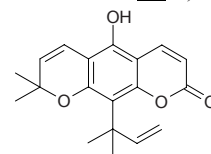
**15736 19-Nordehydroabiet-4(18)-ene**

18-Nor-4(19),8,11,13-abietatetraene  $C_{19}H_{26}$  (254.42). Source: HAI SONG ZI

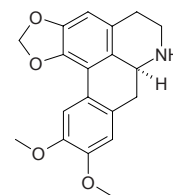
*Pinus koraiensis*. Ref: 6.

**15737 Nordentatin**

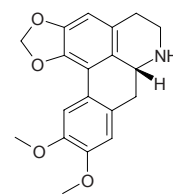
[17820-07-4]  $C_{19}H_{20}O_4$  (312.37). mp 182°C. Pharm: Antibacterial (*Mycobacterium tuberculosis*, MIC = 100  $\mu g/mL$ , control Isoniazide, MIC = 0.040~0.090  $\mu g/mL$ , kanamycin sulfate, MIC = 2.0~5.0  $\mu g/mL$ )<sup>[5367]</sup>; antifungal inactive (*Candida albicans*, control Amphotericin, IC<sub>50</sub> = 0.01  $\mu g/mL$ )<sup>[5367]</sup>; antineoplastic (Raji cells, antitumor promotor, *in vivo*, inhibits TPA-induced EBV-EA activation, compound concentration = 500(mol ratio/32pmol TPA)), EBV-EA-positive cells = (47.3 $\pm$ 1.9)% (viability >80%),  $\beta$ -Carotene, EBV-EA-positive cells = (34.3 $\pm$ 1.1)% (viability = 60%), Curcumin, EBV-EA-positive cells = (22.8 $\pm$ 1.8)% (viability > 80%); IC<sub>50</sub> = 473(mol ratio/32pmol TPA),  $\beta$ -Carotene, IC<sub>50</sub> = 400(mol ratio/32pmol TPA), Curcumin IC<sub>50</sub> = 341(mol ratio/32 pmol TPA))<sup>[5048]</sup>. Source: SHAN HUANG PI *Clausena excavata*, YE HUANG PI *Clausena dentata*, *Citrus medica* var. *etrog*, *Citrus jambhiri*, CHENG ZI *Citrus junos*, *Citrus tamurana*, *Citrus hassaku*. Ref: 6, 1521, 5048, 5367.

**15738 (+)-Nordicentrine**

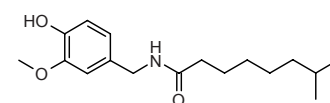
[25394-59-6]  $C_{19}H_{19}NO_4$  (325.37). mp 254~255°C (dec),  $[\alpha]_D^{31} = +31^\circ$  ( $c = 0.65$ , MeOH). Source: HEI KE NAN *Lindera megaphylla*, *Litsea salicifolia*. Ref: 1521, 2718.

**15739 (-)-Nordicentrine**

[151601-88-6]  $C_{19}H_{19}NO_4$  (325.37). mp 248°C (dec),  $[\alpha]_D^{20} = -34^\circ$  ( $c = 0.2$ , MeOH). Pharm: Cytotoxic (BCA-1 ED<sub>50</sub> = 2.0  $\mu g/mL$ ; HT1080 ED<sub>50</sub> = 1.7  $\mu g/mL$ ; LUC-1 ED<sub>50</sub> = 13.2  $\mu g/mL$ ; MEL-2 ED<sub>50</sub> = 3.3  $\mu g/mL$ ; COL-1 ED<sub>50</sub> = 1.7  $\mu g/mL$ ; KB ED<sub>50</sub> = 0.8  $\mu g/mL$ ; KB-V1 ED<sub>50</sub> = 0.7  $\mu g/mL$ ; P<sub>388</sub> ED<sub>50</sub> = 0.6  $\mu g/mL$ ; A-431 ED<sub>50</sub> = 0.8  $\mu g/mL$ ; LNCaP ED<sub>50</sub> = 1.5  $\mu g/mL$ ; ZR-75-1 ED<sub>50</sub> = 1.7  $\mu g/mL$ ; U373 ED<sub>50</sub> = 0.6  $\mu g/mL$ ); antimalarial (*Plasmodium falciparum*, chloroquine-sensitive strain D6, ED<sub>50</sub> = 470 ng/mL; chloroquine-endured strain W2, ED<sub>50</sub> = 1030 ng/mL). Source: ZHI LI QIAN JIN TENG *Stephania erecta*. Ref: 2719.

**15740 Nordihydrocapsaicin**

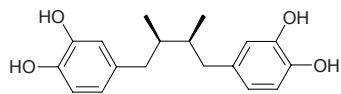
Nordihydrocapsaicin  $C_{17}H_{27}NO_3$  (293.41). Source: HONG HAI JIAO *Capsicum annuum*, LA JIAO *Capsicum frutescens*. Ref: 15, 2786.



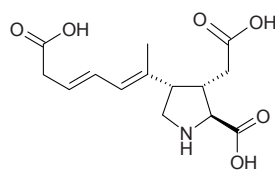


**15741 Nordihydroguaiaretic acid**

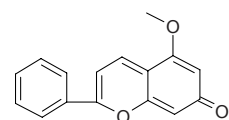
NDGA  $C_{18}H_{22}O_4$  (302.37). **Pharm:** Antineoplastic; antifungal; antimicrobial. **Source:** WU WEI ZI *Schisandra chinensis*, YU CHUANG MU *Guajacum officinale*, *Larrea* sp. **Ref:** 658, 1733.

**15742 Nordomoic acid**

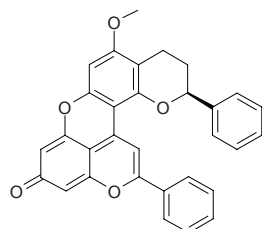
$C_{14}H_{19}NO_6$  (297.31). **Source:** RUAN GU ZAO *Chondria armata* [Syn. *Lophura armata*]. **Ref:** 2720.

**15743 Nordracorhodin**

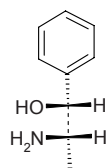
[35290-21-2]  $C_{16}H_{12}O_3$  (252.27). Red, mp 120~125°C. **Source:** QI LIN JIE *Daemonorops draco*. **Ref:** 2721.

**15744 Nordracorubin**

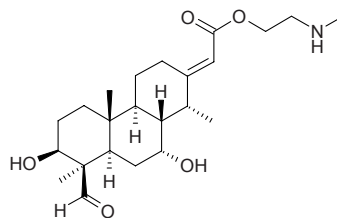
[35290-22-3]  $C_{31}H_{22}O_5$  (474.52). Red solid, mp 255~260°C,  $[\alpha]_D^{20} = -77.5^\circ$  ( $c = 0.024$ , MeOH). **Source:** QI LIN JIE *Daemonorops draco*. **Ref:** 2721.

**15745 Norephedrine**

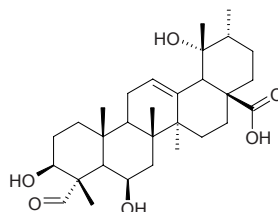
[492-41-1]  $C_9H_{13}NO$  (151.21). mp (-) 50°C. **Source:** BAN ZI MA HUANG *Ephedra lepidosperma* (herbaceous twigs: content = 0.006%)<sup>[5508]</sup>, DAN ZI MA HUANG *Ephedra monosperma* (herbaceous twigs: content = 0.152%)<sup>[5508]</sup>, LI JIANG MA HUANG *Ephedra likiangensis* (herbaceous twigs: mean content of 3 origins = 0.058%)<sup>[5508]</sup>, MA HUANG *Ephedra sinica* (herbaceous twigs: mean content of 5 origins = 0.047%)<sup>[5508]</sup>, MO GUO MA HUANG *Ephedra przewalskii* (herbaceous twigs: mean content of 2 origins = 0.007%)<sup>[5508]</sup>, MU ZEI MA HUANG *Ephedra equisetina* (herbaceous twigs: mean content of 2 origins = 0.108%)<sup>[5508]</sup>, SHAN LING MA HUANG *Ephedra gerardiana* (herbaceous twigs: content = 0.085%)<sup>[5508]</sup>, SHU ZHUANG MA HUANG *Ephedra procera* (herbaceous twigs: content = 0.0004%)<sup>[5508]</sup>, SHUANG SUI MA HUANG *Ephedra distachya* (herbaceous twigs: content = 0.0022%)<sup>[5508]</sup>, XI ZANG ZHONG MA HUANG *Ephedra intermedia* var. *tibetica* (herbaceous twigs: content = 0.037%)<sup>[5508]</sup>, XI ZI MA HUANG *Ephedra regeliana* (herbaceous twigs: content = 0.0012%)<sup>[5508]</sup>, YI ZHU AI MA HUANG *Ephedra minuta* var. *dioeca* (herbaceous twigs: mean content of 2 origins = 0.050%)<sup>[5508]</sup>, ZANG MA HUANG *Ephedra saxatilis* (herbaceous twigs: content = 0.059%)<sup>[5508]</sup>, ZHONG MA HUANG *Ephedra intermedia* (herbaceous twigs: mean content of 3 origins = 0.051%)<sup>[5508]</sup>, *Ephedra tweediana* (herbaceous twigs: content = 0.0005%)<sup>[5508]</sup>. **Ref:** 2, 660, 1521, 5508.

**15746 Norerythrostachaldine**

[55729-25-4]  $C_{23}H_{37}O_5$  (407.56). **Pharm:** Cytotoxic (KB). **Source:** LU SUI GE MU *Erythrophleum chlorostachyum*. **Ref:** 658, 1521.

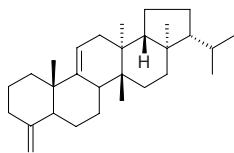
**15747 23-Nor-24-esomethylene-3,6,19-thihydroxyurs-12-en-28 oic acid**

$C_{30}H_{46}O_6$  (502.70). **Source:** BI LU GOU TENG *Uncaria tomentosa*. **Ref:** 5341.

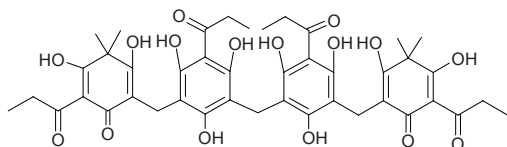


**15748 24-Nor-4(23),9(11)-fernadiene**

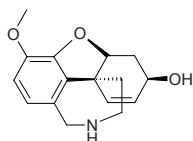
[70588-09-9] C<sub>29</sub>H<sub>46</sub> (394.69). Source: DA YE GU SUI BU *Davallia divaricata* [Syn. *Davallia formosana*; *Davallia orientalis*]. Ref: 2722.

**15749 Norflavaspidic acid**

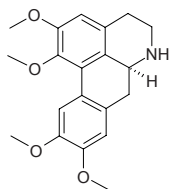
C<sub>43</sub>H<sub>48</sub>O<sub>16</sub> (820.85). Source: AO DI LI LIN MAO JUE *Dryopteris austriaca*. Ref: 1522.

**15750 Norgalanthamine**

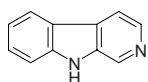
[41303-74-6] C<sub>16</sub>H<sub>19</sub>NO<sub>3</sub> (273.33). White needles (acetone), mp 152.5~153°C, colorless prisms (CHCl<sub>3</sub>-MeOH), mp 171~173°C, [α]<sub>D</sub><sup>22</sup> = -74.0° (c = 0.277, CHCl<sub>3</sub>), [α]<sub>D</sub><sup>28</sup> = -45.3° (c = 0.24, MeOH). Pharm: Cytotoxic (hmn lymphoma cell Molt4 ED<sub>50</sub> = 0.6μg/mL, mouse alveolus non-cancer fibrocyte LMTK ED<sub>50</sub> = 0.5μg/mL). Source: DA XUE HUA LIAN *Galanthus elwelii*, FU ZHUANG SHUI GUI JIAO *Hymenocallis rotata*, GUANG XI SHI SUAN *Lycoris Guangxiensis*, JIA SHUI XIAN *Narcissus pseudonarcissus* ssp. *pseudonarcissus*, RI BEN WEN SHU LAN *Crinum asiaticum* var. *japonicum*, SAI LA LIANG SHUI XIAN *Narcissus leonensis*, XUE SHENG SHUI XIAN *Narcissus nivalis*. Ref: 1207.

**15751 Norglaucine**

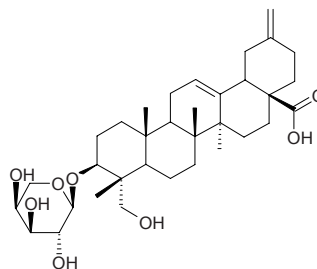
[21848-62-4] C<sub>20</sub>H<sub>23</sub>NO<sub>4</sub> (341.41). Source: *Alphonsea* spp., *Pseuduvaria* spp., *Magnolia* spp., *Liriodendron* spp., *Colubrina* spp., *Monimia* spp., *Duguetia* spp., *Chasmanthera* spp. Ref: 1521.

**15752 Norharman**

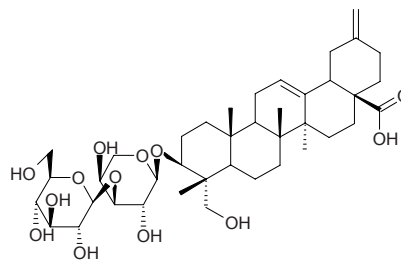
9*H*-Pyrido[3,4-*b*]indole [244-63-3] C<sub>11</sub>H<sub>8</sub>N<sub>2</sub> (168.20). mp 197°C. Source: YUAN ZHI *Polygala tenuifolia*. Ref: 538.

**15753 30-Norhederagenin-3-O-α-L-arabinopyranoside**

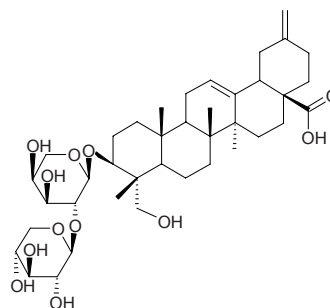
C<sub>34</sub>H<sub>52</sub>O<sub>8</sub> (588.79). Source: MU TONG *Akebia quinata*. Ref: 2723.

**15754 30-Norhederagenin-3-O-β-D-glucosyl(1→3)-α-L-arabinopyranoside**

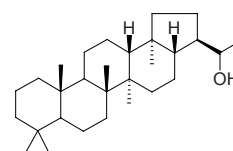
C<sub>40</sub>H<sub>62</sub>O<sub>13</sub> (750.93). Source: MU TONG *Akebia quinata*. Ref: 2723.

**15755 30-Norhederagenin-3-O-β-D-xylosyl(1→2)-α-L-arabinopyranoside**

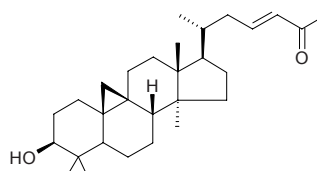
C<sub>39</sub>H<sub>60</sub>O<sub>12</sub> (720.91). Source: MU TONG *Akebia quinata*. Ref: 2723.

**15756 29-Nor-22-hopanol**

C<sub>29</sub>H<sub>50</sub>O (414.72). Source: BIAN YE TIE XIAN JUE *Adiantum caudatum*. Ref: 2724.

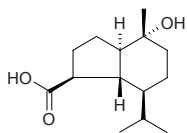
**15757 (23*E*)-27-Nor-3β-hydroxycycloart-23-en-25-one**

C<sub>29</sub>H<sub>46</sub>O<sub>2</sub> (426.69). Source: RONG SHU *Ficus microcarpa* (aerial root). Ref: 3524.

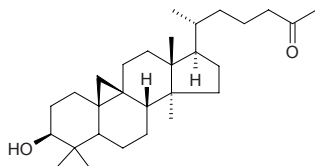


**15758 15-Nor-10-hydroxy-oplopan-4-oic acid**

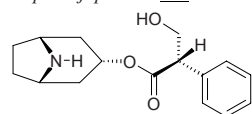
$C_{14}H_{24}O_3$  (240.35). Colorless oil. Source: HUANG HUA HAO *Artemisia annua* (seed). Ref: 3435.

**15759 27-nor-3β-Hydroxy-25-oxocycloartane**

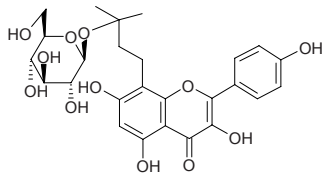
$C_{29}H_{48}O_2$  (428.70). mp 127~129°C,  $[\alpha]_D^{25} = +38.0^\circ$  ( $c = 0.3$ ,  $CHCl_3$ ). Source: RONG SHU *Ficus microcarpa* (aerial root). Ref: 3524.

**15760 Norhyoscyamine**

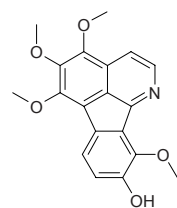
$C_{16}H_{21}NO_3$  (275.35). mp (–) 140.5°C. Source: DONG LANG DANG *Scopolia japonica*. Ref: 6.

**15761 Noricariside**

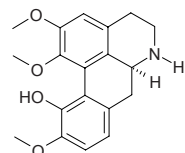
[20194-37-0]  $C_{26}H_{30}O_{12}$  (534.52). mp 271~273°C. Source: HUANG BAI *Phellodendron amurense*, *Phellodendron* spp. Ref: 2725.

**15762 Norimelutin**

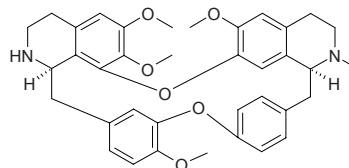
[152606-56-9]  $C_{19}H_{17}NO_5$  (339.35). Yellow powder Pharm: Cytotoxic ( $P_{388}$  *in vitro*). Source: XI SHENG TENG *Cissampelos pareira*. Ref: 2726.

**15763 Norisocorydine**

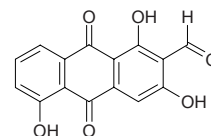
(+)-Norisocorydine  $C_{19}H_{21}NO_4$  (327.38). Source: YAN HU SUO *Corydalis yanhusuo* [Syn. *Corydalis turtschaninovii* f. *yanhusuo*], YOU GOU YING ZHAO *Artabotrys uncinatus* (root and stem)<sup>[3083]</sup>. Ref: 6, 3083.

**15764 (+)-2-Norisotetrandrine**

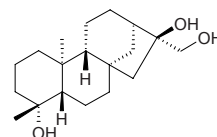
[123930-96-1]  $C_{37}H_{40}N_2O_6$  (608.74).  $[\alpha]_D = +100^\circ$  ( $c = 0.16$ ,  $CHCl_3$ ). Pharm: Cytotoxic (many cell strains); antimalarial (*Plasmodium falciparum*, chloroquine-sensitive strain D6,  $ED_{50} = 66.1$  ng/mL, chloroquine-endured strain W2,  $ED_{50} = 45.3$  ng/mL). Source: ZHI LI QIAN JIN TENG *Stephania erecta*. Ref: 2727, 2728.

**15765 Norjuzunal**

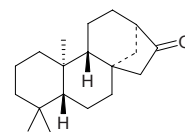
$C_{15}H_8O_6$  (284.23). mp 265°C. Source: HU CI *Damnacanthus indicus*. Ref: 6.

**15766 19-Nor-ent-kaurane-4α,16β,17-triol**

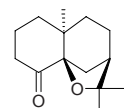
$C_{19}H_{32}O_3$  (308.47). Pharm: Antioxidant (inhibits superoxide anion generation, fMLP/CB,  $IC_{50} = (3.43 \pm 0.31) \mu\text{g/mL}$ ,  $p < 0.001$ , control DPI,  $IC_{50} = (0.13 \pm 0.06) \mu\text{g/mL}$ ,  $p < 0.001$ ). Source: FAN LI ZHI *Annona squamosa* (stem). Ref: 4950.

**15767 ent-17-Norkauran-16-one**

[1224-42-6]  $C_{19}H_{30}O$  (274.45). mp 117~118°C,  $[\alpha]_D^{20.3} = -29.0^\circ$  ( $c = 1.8$ ,  $CHCl_3$ ). Source: ZHE BEI MU *Fritillaria verticillata* var. *thunbergii* [*Fritillaria thunbergii*]. Ref: 2182.

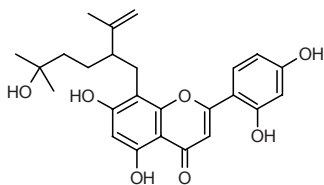
**15768 Norketoagarofuran**

$C_{14}H_{22}O_2$  (222.33). mp 56~57°C. Source: CHEN XIANG *Aquilaria agallocha*. Ref: 13, 2788.

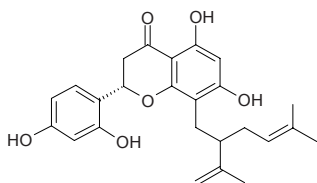


**15769 Norkurarinol**

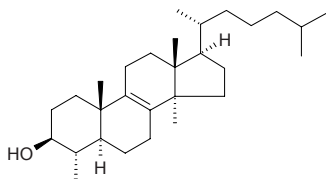
$C_{25}H_{28}O_7$  (440.50). **Pharm:** Tyrosinase inhibitor ( $IC_{50} = 2.1\mu\text{mol/L}$ , control Kojic acid,  $IC_{50} = 11.3\mu\text{mol/L}$ )<sup>[5409]</sup>. **Source:** KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. **Ref:** 2, 5409.

**15770 Norkurarinone**

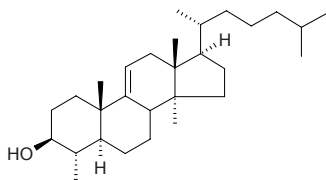
[34981-24-3]  $C_{25}H_{28}O_6$  (424.50). Crystals ( $C_6H_6$ ), mp 133°C,  $Ri[17, D] = +8^\circ$  (EtOH). **Source:** KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. **Ref:** 1521, 2729.

**15771 29-Norlanost-8-enol**

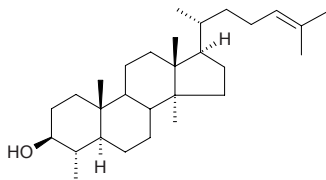
$C_{29}H_{50}O$  (414.72). **Source:** MAN TUO LUO ZI *Datura metel*, GOU QI ZI *Lycium chinense*. **Ref:** 2730.

**15772 29-Norlanost-9(11)-enol**

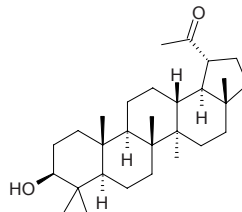
$C_{29}H_{50}O$  (414.72). **Source:** MAN TUO LUO ZI *Datura metel*, GOU QI ZI *Lycium chinense*, WAN TAO HUA ZI *Datura stramonium*. **Ref:** 2730.

**15773 29-Norlanosterol**

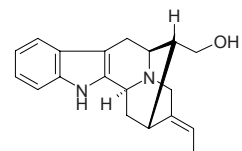
$C_{29}H_{50}O$  (414.72). **Source:** WAN TAO HUA ZI *Datura stramonium*. **Ref:** 2730.

**15774 30-Nor-lupan-3β-ol-20-one**

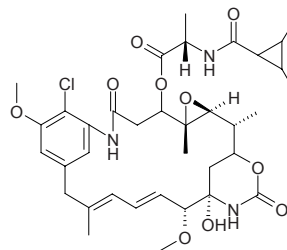
$C_{29}H_{48}O_2$  (428.70). mp 238~239°C, 237~239°C,  $[\alpha]_D^{25} = -10.2^\circ$ . **Source:** XIE WEI JU *Koelpinia linearis* (aerial parts). **Ref:** 3912.

**15775 Normacusine B**

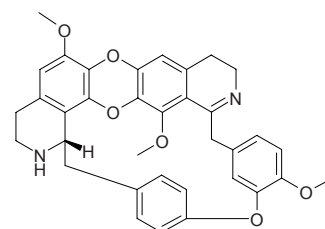
[604-99-9]  $C_{19}H_{22}N_2O$  (294.40). **Source:** MA QIAN ZI *Strychnos nux-vomica*. **Ref:** 2, 1521.

**15776 Normaytancyprine**

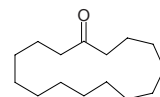
[84123-43-3]  $C_{36}H_{48}ClN_3O_{10}$  (718.25). Dark-green-brown microcrystals ( $CHCl_3$ -hexane), mp 143~145°C. **Pharm:** Antineoplastic (mus, *in vivo*,  $P_{88}$ , 0.4~12.5 $\mu\text{g/kg}$ , T/C = 145%~300%); cytotoxic (KB *in vitro*,  $ED_{50} = 10^{-6}$ ~ $10^{-5}\mu\text{g/mL}$ ). **Source:** DUO ZHI PU TE MU *Putterlickia verrucosa*. **Ref:** 2731.

**15777 Normenisarine**

$C_{35}H_{32}N_2O_6$  (576.66). mp 223°C. **Source:** MU FANG JI *Cocculus trilobus* [Syn. *Cocculus sarmentosus*]. **Ref:** 6.

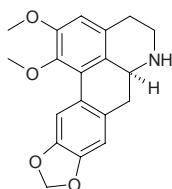
**15778 Normuscone**

[502-72-7]  $C_{15}H_{28}O$  (224.39). **Source:** SHE XIANG *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*. **Ref:** 2, 1521.

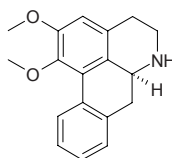


**15779 N-Nornantenine**

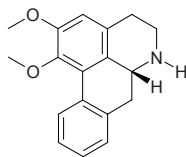
(S)-Nornantenine [15401-66-8] C<sub>19</sub>H<sub>19</sub>NO<sub>4</sub> (325.37). [ $\alpha$ ]<sub>D</sub><sup>22</sup> = +85c° (c = 0.75, EtOH). **Pharm:** Antileishmanial (*Leishmania panamensis*, IC<sub>50</sub> = (15±0.45)μmol/L, control Amphotericin B, IC<sub>50</sub> = (0.1±0.01)μmol/L; *Leishmania mexicana*, IC<sub>50</sub> = (24±0.03)μmol/L, Amphotericin B, IC<sub>50</sub> = (0.1±0.01)μmol/L; macrophage, IC<sub>50</sub> > 40μmol/L; HFF, IC<sub>50</sub> > 40μmol/L)<sup>[5424]</sup>. **Source:** JING JI GUA TAI MU *Guatteria dumetorum*, NAN TIAN ZHU ZI *Nandina domestica*, NAN TIAN ZHU GENG *Nandina domestica*. **Ref:** 2732, 2733, 5424.

**15780 (S)-Nornuciferine**

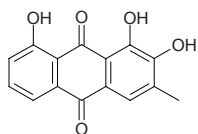
C<sub>18</sub>H<sub>19</sub>NO<sub>2</sub> (281.36). [ $\alpha$ ]<sub>D</sub><sup>22</sup> = +138c° (c = 0.22, EtOH). **Pharm:** Antileishmanial (*Leishmania panamensis*, IC<sub>50</sub> = (28±11)μmol/L, control Amphotericin B, IC<sub>50</sub> = (0.1±0.01)μmol/L; *Leishmania mexicana*, IC<sub>50</sub> = (14±1)μmol/L, Amphotericin B, IC<sub>50</sub> = (0.1±0.01)μmol/L; macrophage, IC<sub>50</sub> > 40μmol/L; HFF, IC<sub>50</sub> > 40μmol/L). **Source:** DA YE GUA TAI MU *Guatteria amplifolia*. **Ref:** 5424.

**15781 N-Nornuciferine**

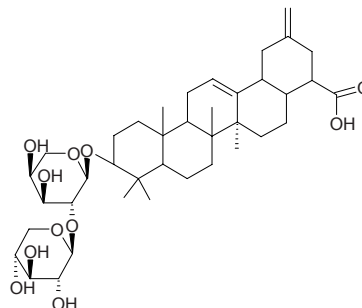
C<sub>18</sub>H<sub>19</sub>NO<sub>2</sub> (281.36). mp (-) 128~129°C. **Pharm:** Diuretic; LD<sub>50</sub> (mus, ip) = 323μmol/kg. **Source:** HE HUA YU LAN *Magnolia grandiflora*, HE YE *Nelumbo nucifera*, JIN HUANG LIAN *Nelumbo lutea*, LIAN ZI *Nelumbo nucifera*, YUAN HUA FAN LI ZHI *Annona glabra*. **Ref:** 6, 658.

**15782 Norobtusifolin**

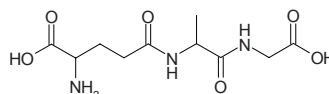
C<sub>15</sub>H<sub>10</sub>O<sub>5</sub> (270.24). **Pharm:** Cytotoxic (hmn cancer cell line). **Source:** TIE ZI *Myrsine africana*. **Ref:** 658.

**15783 30-Noroleanolic acid-3-O-β-D-xylosyl(1→2)-α-L-arabinopyranoside**

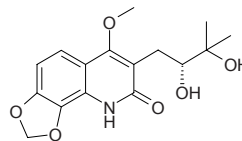
C<sub>39</sub>H<sub>60</sub>O<sub>11</sub> (704.91). **Source:** MU TONG *Akebia quinata*. **Ref:** 2723.

**15784 Norophthalmic acid**

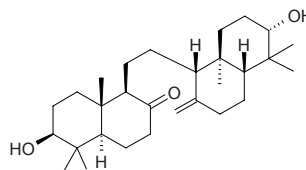
[16305-88-7] C<sub>10</sub>H<sub>17</sub>N<sub>3</sub>O<sub>6</sub> (275.26). **Source:** QUN DAI CAI *Undaria pinnatifida*. **Ref:** 2735.

**15785 Nor-orixine**

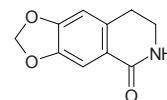
C<sub>16</sub>H<sub>19</sub>NO<sub>6</sub> (321.33). mp 199~200°C. **Source:** CHOU SHAN YANG *Orixa japonica*. **Ref:** 6.

**15786 26-Nor-8-oxo-α-onocerin**

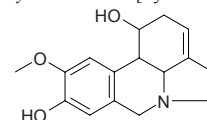
C<sub>29</sub>H<sub>48</sub>O<sub>3</sub> (444.70). **Source:** YU BAI SHI SONG *Lycopodium obscurum*. **Ref:** 2736.

**15787 Noroxyhydrastinine**

[21796-14-5] C<sub>10</sub>H<sub>9</sub>NO<sub>3</sub> (191.19). Crystals (MeOH or C<sub>6</sub>H<sub>6</sub>), mp 182~183°C, 187~187.5°C. **Source:** GAO SHAN TANG SONG CAO *Thalictrum alpinum*, MA WEI LIAN *Thalictrum foliolosum*, TIE XIAN JUE YE TANG SONG CAO *Thalictrum minus* var. *adiantifolium*, ZOU WEN TANG SONG CAO *Thalictrum rugosum*. **Ref:** 1521, 2737, 2738.

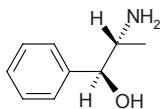
**15788 Norpluviine**

C<sub>16</sub>H<sub>19</sub>NO<sub>3</sub> (273.33). mp 239~241°C (dec), 274~275°C. **Source:** SHI SUAN *Lycoris radiata* [Syn. *Amaryllis radiata*]. **Ref:** 6.

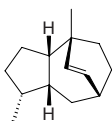


**15789 D-Norpseudoephedrine**

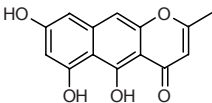
*D*-Cathine [37577-07-4] C<sub>9</sub>H<sub>13</sub>NO (151.21). Plates (MeOH), mp 77°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +33.14° (EtOH). **Pharm:** Anorexic; CNS stimulant. **Source:** BAN ZI MA HUANG *Ephedra lepidosperma* (herbaceous twigs: content = 0.011%)<sup>[5508]</sup>, DAN ZI MA HUANG *Ephedra monosperma* (herbaceous twigs: content = 0.245%)<sup>[5508]</sup>, KE SHI MEI DENG MU *Maytenus krukovii*, LI JIANG MA HUANG *Ephedra likiangensis* (herbaceous twigs: mean content of 3 origins = 0.160%)<sup>[5508]</sup>, MA HUANG *Ephedra sinica* (herbaceous twigs: mean content of 5 origins = 0.076%)<sup>[5508]</sup>, MO GUO MA HUANG *Ephedra przewalskii* (herbaceous twigs: mean content of 2 origins = 0.013%)<sup>[5508]</sup>, MU ZEI MA HUANG *Ephedra equisetina* (herbaceous twigs: mean content of 2 origins = 0.321%)<sup>[5508]</sup>, QIAO CHA *Catha edulis*, SHAN LING MA HUANG *Ephedra gerardiana* (herbaceous twigs: content = 0.075%)<sup>[5508]</sup>, SHU ZHUANG MA HUANG *Ephedra procera* (herbaceous twigs: content = 0.0012%)<sup>[5508]</sup>, SHUANG SUI MA HUANG *Ephedra distachya* (herbaceous twigs: content = 0.0017%)<sup>[5508]</sup>, XI ZANG ZHONG MA HUANG *Ephedra intermedia* var. *tibetica* (herbaceous twigs: content = 0.026%)<sup>[5508]</sup>, XI ZI MA HUANG *Ephedra regeliana* (herbaceous twigs: content = 0.0015%)<sup>[5508]</sup>, YI ZHU AI MA HUANG *Ephedra minuta* var. *dioeca* (herbaceous twigs: mean content of 2 origins = 0.065%)<sup>[5508]</sup>, ZANG MA HUANG *Ephedra saxatilis* (herbaceous twigs: content = 0.028%)<sup>[5508]</sup>, ZHONG MA HUANG *Ephedra intermedia* (herbaceous twigs: mean content of 3 origins = 0.110%)<sup>[5508]</sup>, *Ephedra tweediana* (herbaceous twigs: content = 0.0003%)<sup>[5508]</sup>, *Ephedra* sp. **Ref:** 2, 6, 658, 660, 1521, 5508.

**15790 (-)-Norrotundene**

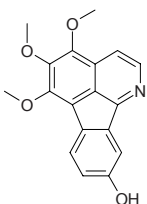
C<sub>14</sub>H<sub>22</sub> (190.33). **Source:** XIANG FU *Cyperus rotundus* (essential oil). **Ref:** 5210.

**15791 Nor-rubrofusarin**

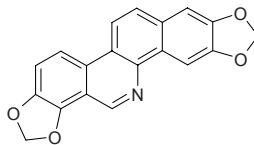
C<sub>14</sub>H<sub>10</sub>O<sub>5</sub> (258.23). **Source:** JUE MING ZI *Cassia tora*. **Ref:** 2.

**15792 Norrufescine**

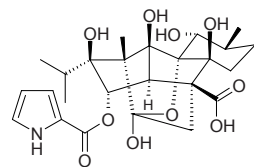
[58189-34-7] C<sub>18</sub>H<sub>15</sub>NO<sub>4</sub> (309.32). Yellow needles, mp 236–238°C. **Pharm:** Cytotoxic (P<sub>388</sub>). **Source:** HONG A BU TA CAO *Abuta rufescens*, XI SHENG TENG *Cissampelos pareira*, YI MEI NI A BU TA CAO *Abuta imene*, *Telitoxicum peruvianum*. **Ref:** 2739, 2740, 2741.

**15793 Norsanguinarine**

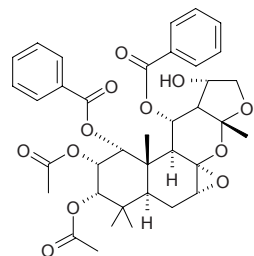
C<sub>19</sub>H<sub>11</sub>NO<sub>4</sub> (317.30). **Source:** YING SU KE *Papaver somniferum*. **Ref:** 6.

**15794 20-Norspiganthine-5-carboxylic acid**

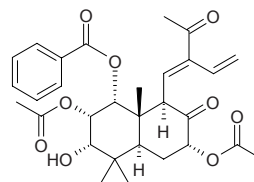
C<sub>25</sub>H<sub>33</sub>NO<sub>10</sub> (507.54). Crystals (CHCl<sub>3</sub>:MeOH = 1:1), mp > 300°C, [ $\alpha$ ]<sub>D</sub> = +15° (c = 0.4). **Source:** QU CHONG CAO *Spigelia anthelmia* (aerial parts). **Ref:** 5139.

**15795 Norstaminol A**

C<sub>37</sub>H<sub>42</sub>O<sub>12</sub> (678.74). **Pharm:** NO production inhibitor (LPS-activated macrophage-like J774.1 cells, IC<sub>50</sub> = 44.4 μmol/L; control *L*-NMMA, IC<sub>50</sub> = 26.0 μmol/L, Polymixin B, IC<sub>50</sub> = 27.8 μg/mL, Dexamethasone IC<sub>50</sub> = 170 μmol/L). **Source:** XIONG RUI ZHUANG ZHI GUAN CAO *Orthosiphon stamineus* [Syn: *Orthosiphon aristatus*; *Orthosiphon grandiflorus*; *Orthosiphon spicatus*] (aerial parts). **Ref:** 4322.

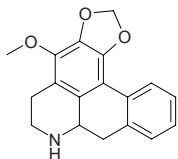
**15796 Norstaminone A**

C<sub>30</sub>H<sub>36</sub>O<sub>9</sub> (540.62). Colorless amorphous solid, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +28.9° (c = 0.10, CHCl<sub>3</sub>). **Pharm:** Cytotoxic (antiproliferative, Colon26-L5, ED<sub>50</sub> = 12.8 μg/mL, control 5-Fluorouracil, ED<sub>50</sub> = 0.015 μg/mL; HT1080, ED<sub>50</sub> = 23.2 μg/mL, 5-Fluorouracil, ED<sub>50</sub> = 0.48 μg/mL). **Source:** XIONG RUI ZHUANG ZHI GUAN CAO *Orthosiphon stamineus* [Syn: *Orthosiphon aristatus*; *Orthosiphon grandiflorus*; *Orthosiphon spicatus*] (aerial parts: yield = 0.0029% dw). **Ref:** 3053.

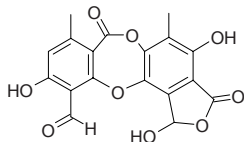


**15797 Norstephalagine**

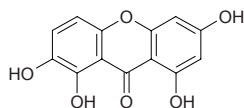
(-)-Norstephalagine [80151-82-2]  $C_{18}H_{17}NO_3$  (295.34). Crystals (isopropyl ether), mp 94–95°C,  $[\alpha]_D = -35^\circ$  ( $c = 0.98$ , alcohol). **Pharm:** Inhibits  $^3H$ -dopamine absorption by synapse of rat striatum; smooth muscle relaxant (rat uterus, contraction induced by KCl). **Source:** FEI ZHOU FAN LI ZHI *Hexalobus crispiflorus*, HUANG YANG YE MU BAN SHU *Xylopiya buxifolia*, JI XIANG YING ZHAO *Artabotrys odoratissimus*, MAN GE YING ZHAO *Artabotrys maingayi*, XIU LI YING ZHAO *Artabotrys venustus*, *Isolona maitlandii*, YOU GOU YING ZHAO *Artabotrys uncinatus* (root and stem)<sup>[3083]</sup>. **Ref:** 2742, 2743, 2744, 2745, 2746, 2747, 2748, 2749, 3083.

**15798 Norstictic acid**

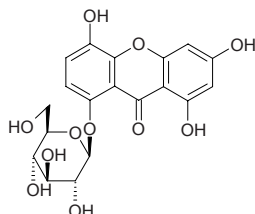
[571-67-5]  $C_{18}H_{12}O_9$  (372.29). Needles (Me<sub>2</sub>CO aq.), mp 286–287°C. **Source:** JIN SI SHUA *Lethariella cladonioides*, XIAO LA BA *Cladonia verticillata*. **Ref:** 660, 1521.

**15799 Norswertianin**

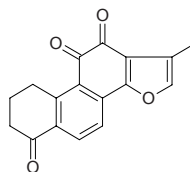
$C_{13}H_8O_6$  (260.21). **Pharm:** Mutagen (*Salmonella typhimurium*). **Source:** PU TONG ZHANG YA CAI *Swertia swertiopsis*, RI BEN ZHANG YA CAI *Swertia japonica*, SU GEN ZHANG YA CAI *Swertia perennis*. **Ref:** 658.

**15800 Norswertianol**

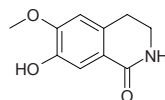
Bellidin 8-*O*-β-glucopyranoside  $C_{19}H_{18}O_{11}$  (422.35). **Pharm:** Antibacterial (*Mycobacterium tuberculosis*); AChE inhibitor (MIC = 0.50 μg = 1.20 nmol; control Galanthamine MIC = 0.01 μg = 0.03 nmol, Physostigmine MIC = 0.005 μg = 0.002 nmol, Huperzine A MIC = 0.002 μg = 0.0008 nmol). **Source:** LUAN DA SHAN ZHANG YA CAI *Swertia randainensis*, RI BEN ZHANG YA CAI *Swertia japonica*, ZI SE ZHANG YA CAI *Swertia purpurascens*, TIAN YE LONG DAN *Gentiana campestris* (leaf). **Ref:** 658, 5039.

**15801 Nortanshinone**

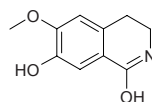
$C_{17}H_{12}O_4$  (280.28). **Pharm:** Cytotoxic. **Source:** DAN SHEN *Salvia miltiorrhiza*. **Ref:** 2, 1521.

**15802 Northalifoline (tautomeric structure 1)**

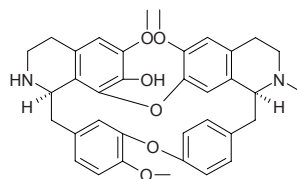
$C_{10}H_{11}NO_3$  (193.20). **Source:** BIAN FU GE GEN *Menispermum dauricum*, HEI KE NAN *Lindera megaphylla* (pedicels). **Ref:** 1521, 3792.

**15803 Northalifoline (tautomeric structure 2)**

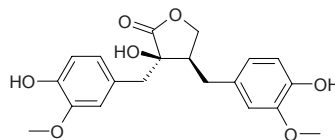
$C_{10}H_{11}NO_3$  (193.20). **Source:** BIAN FU GE GEN *Menispermum dauricum*, HEI KE NAN *Lindera megaphylla* (pedicels). **Ref:** 1521, 3792.

**15804 (+)-2-Northalrugosine**

[65995-42-8]  $C_{36}H_{38}N_2O_6$  (594.71).  $[\alpha]_D = +209^\circ$  ( $c = 0.16$ , CHCl<sub>3</sub>). **Pharm:** Cytotoxic (non-selective); antimalarial (*Plasmodium falciparum*, chloroquine-sensitive strain D6, ED<sub>50</sub> = 68.6 ng/mL; chloroquine-endured strain W2, ED<sub>50</sub> = 125.1 ng/mL). **Source:** ZHI LI QIAN JIN TENG *Stephania erecta*, *Pycnarrhena ozantha*. **Ref:** 2750, 2728.

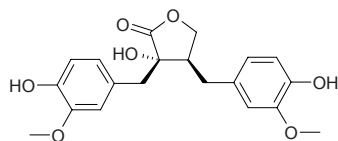
**15805 (+)-Nortrachelogenin**

(+)-Wikstromol [61521-74-2]  $C_{20}H_{22}O_7$  (374.39). **Pharm:** DPPH scavenger (IC<sub>50</sub> = 90.1 μmol/L); inhibits nitric oxide (NO) production inactive (IC<sub>50</sub> > 200 μmol/L). **Source:** LIAO GE WANG GEN *Wikstroemia indica*, CHANG YE SONG *Pinus palustris*. **Ref:** 1521, 4526.

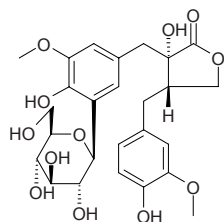


**15806 (-)-Nortrachelogenin**

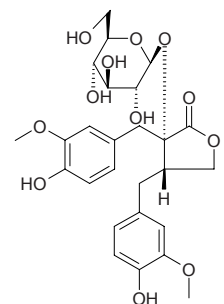
(-)-Wikstromol [34444-37-6] C<sub>20</sub>H<sub>22</sub>O<sub>7</sub> (374.39). **Pharm:** Antineoplastic (leukemia); anti-HIV. **Source:** AI JI JIA HU CI *Carissa edulis*, CHANG YE SONG *Pinus palustris*, DI ZHONG HAI JU *Cnicus benedictu*, RI BEN LUO SHI *Trachelospermum asiaticum*, WU ZHAO LONG *Ipomoea cairica* [Syn. *Ipomoea palmata*]. **Ref:** 1521.

**15807 Nortrachelogenin-5'-C-β-D-glucopyranoside**

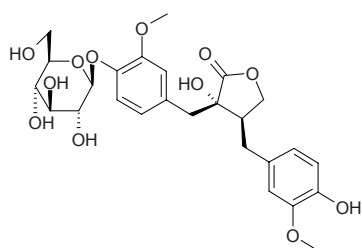
C<sub>26</sub>H<sub>32</sub>O<sub>12</sub> (536.54). White amorphous solid, [α]<sub>D</sub><sup>25</sup> = -38° (c = 0.62, MeOH). **Source:** LUO SHI TENG *Trachelospermum jasminoides* (stem and leaf). **Ref:** 5051.

**15808 Nortrachelogenin-8'-O-β-D-glucopyranoside**

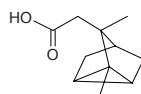
C<sub>26</sub>H<sub>32</sub>O<sub>12</sub> (536.54). White amorphous solid, [α]<sub>D</sub><sup>25</sup> = -58° (c = 0.57, MeOH). **Source:** LUO SHI TENG *Trachelospermum jasminoides* (stem and leaf). **Ref:** 5051.

**15809 Nortracheloside**

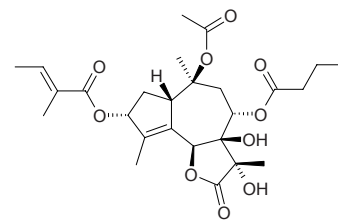
C<sub>26</sub>H<sub>32</sub>O<sub>12</sub> (536.54). mp 95~100°C. **Pharm:** DPPH scavenger (IC<sub>50</sub> = 84.2 μmol/L)<sup>[4526]</sup>; NO production inhibitor inactive (IC<sub>50</sub> > 200 μmol/L)<sup>[4526]</sup>. **Source:** DI ZHONG HAI JU *Cnicus benedictu*, LIAO GE WANG GEN *Wikstroemia indica*, LUO SHI TENG *Trachelospermum jasminoides*. **Ref:** 6, 1521, 4526.

**15810 Nortricycloekasantalic acid**

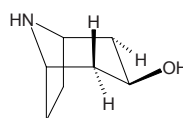
[59300-52-6] C<sub>11</sub>H<sub>16</sub>O<sub>2</sub> (180.25). Crystals (EtOH), mp 93°C, [α]<sub>D</sub> = -33.3°(EtOH). **Source:** TAN XIANG *Santalum album*. **Ref:** 2752.

**15811 Nortrilobolide**

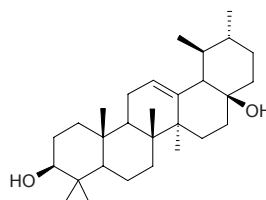
[136051-63-3] C<sub>26</sub>H<sub>36</sub>O<sub>10</sub> (508.57). [α]<sub>D</sub><sup>25</sup> = -49° (c = 0.05, CHCl<sub>3</sub>). **Pharm:** Histamine secretion promotor. **Source:** DU HU LUO BO *Thapsia garganica*. **Ref:** 2753.

**15812 Nor-ψ-tropine**

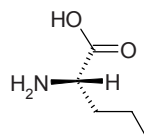
C<sub>7</sub>H<sub>13</sub>NO (127.19). **Pharm:** α-Glucosidase inhibitor inactive (control 1-Deoxynojirimucin, IC<sub>50</sub> = 0.98 mmol/L, Fagoming, IC<sub>50</sub> = 15 mmol/L). **Source:** SANG BAI PI *Morus alba*. **Ref:** 4161.

**15813 28-Nor-urs-12-ene-3β-,17β-diol**

C<sub>29</sub>H<sub>48</sub>O<sub>2</sub> (428.70). Amorphous solid, [α]<sub>D</sub><sup>20</sup> = +26° (c = 0.02, CHCl<sub>3</sub>). **Pharm:** Cytotoxic (HL-60 cells, IC<sub>50</sub> = (51±1) μmol/L). **Source:** ZHI ZHUANG E AN *Eucalyptus cladocalyx* (leaf). **Ref:** 5259.

**15814 Norvaline**

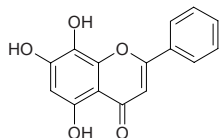
C<sub>5</sub>H<sub>11</sub>NO<sub>2</sub> (117.15). **Source:** DENG XIN CAO *Juncus effusus*, PING GUO *Malus pumila*. **Ref:** 660.



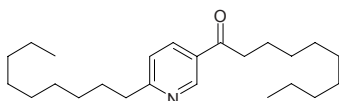


**15815 Norwogonin**

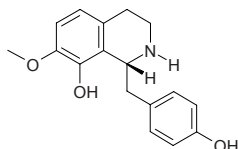
[4443-09-8]  $C_{15}H_{10}O_5$  (270.24). **Pharm:** Mutagen (*Salmonella typhimurium* TA100, with no action in TA98). **Source:** DIAN HUANG QIN *Scutellaria amoena*, HUANG QIN *Scutellaria baicalensis*, LIU YE CAI HUANG QIN *Scutellaria epilobifolia*, ZI BEI HUANG QIN *Scutellaria discolor*. **Ref:** 2, 658, 660.

**15816 2-Noryl-5-decanoylpyridine**

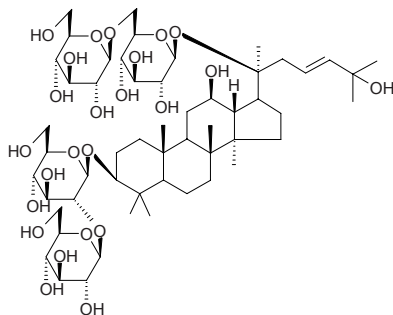
$C_{24}H_{41}NO$  (359.60). **Source:** YU XING CAO *Houttuynia cordata*. **Ref:** 2428.

**15817 Noryzaphine**

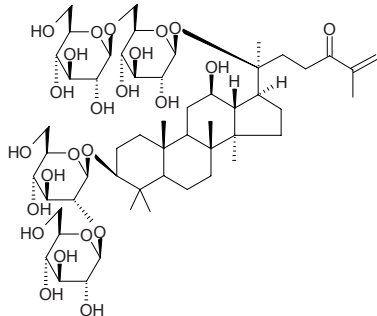
$C_{17}H_{19}NO_3$  (285.35). **Source:** KU DI DING *Corydalis bungeana*. **Ref:** 2761.

**15818 Notoginsenoside A**

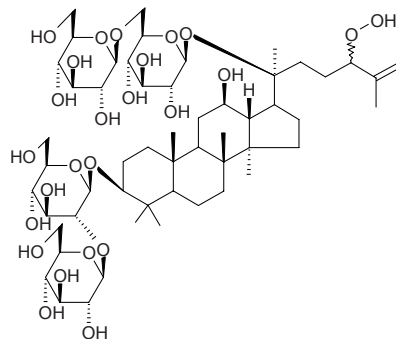
$C_{54}H_{92}O_{24}$  (1125.32). **Pharm:** Immunological adjuvant activity (OVA-immunized mouse, ELISA assay, increases serum IgG level). **Source:** SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. **Ref:** 4139.

**15819 Notoginsenoside B**

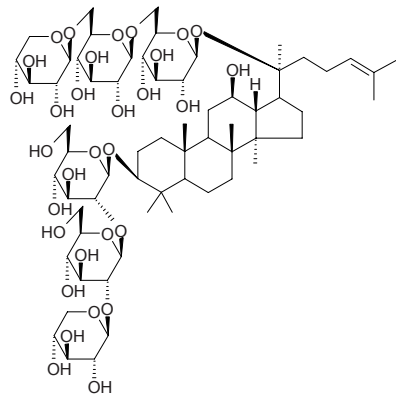
[193895-26-0]  $C_{54}H_{90}O_{24}$  (1123.31). Crystals (MeOH aq.), mp 201~204 °C,  $[\alpha]_D^{23} = +17.8^\circ$  ( $c = 0.1$ , MeOH). **Source:** SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. **Ref:** 1521.

**15820 Notoginsenoside C**

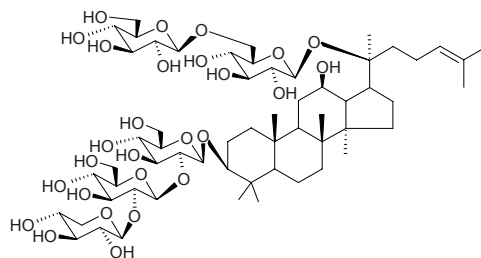
$C_{54}H_{92}O_{25}$  (1141.32). **Pharm:** Immunological adjuvant activity (OVA-immunized mouse, ELISA assay, increases serum IgG level). **Source:** SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. **Ref:** 4139.

**15821 Notoginsenoside D**

$C_{64}H_{108}O_{31}$  (1373.56). **Pharm:** Immunological adjuvant activity (OVA-immunized mouse, ELISA assay, increases serum IgG level)<sup>[4139]</sup>. **Source:** SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*], SAN QI HUA LEI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*] (flower bud: yield = 0.009%dw)<sup>[4702]</sup>. **Ref:** 4139, 4702.

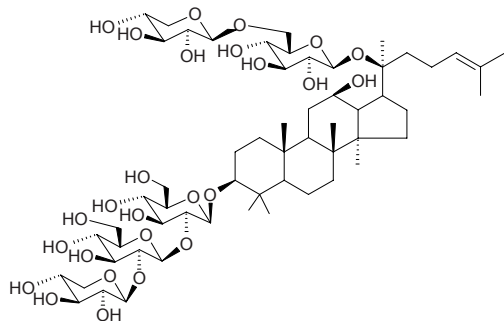
**15822 Notoginsenoside Fa**

$C_{59}H_{100}O_{27}$  (1241.44). **Pharm:** Neurite outgrowth enhancer (hmn neuroblastoma SK-N-SH cells, 100 μmol/L, total length of neurites = 112.5 μm, number of varicosity per cell = 0.53,  $p < 0.05$ ; control, total length of neurites = 45.3 μm, number of varicosity per cell = 0.10)<sup>[4647]</sup>. **Source:** SAN QI HUA LEI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*] (flower bud: yield = 0.41%dw), ZHU JIE SAN QI *Panax pseudo-ginseng* var. *japonicus* (underground part: yield = 0.011%dw). **Ref:** 4647, 4702.

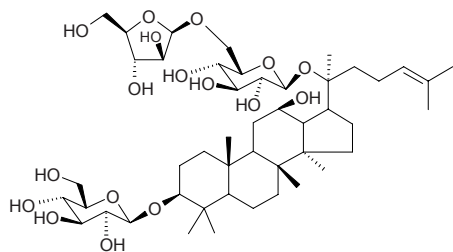


**15823 Notoginsenoside Fc**

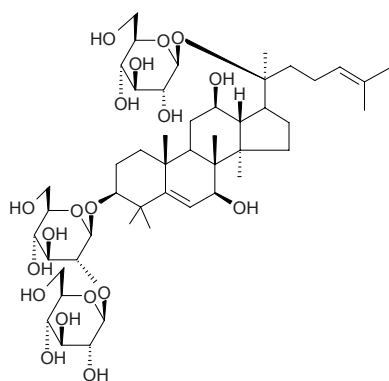
$C_{58}H_{98}O_{26}$  (1211.41). Source: ZHU JIE SAN QI *Panax pseudo-ginseng* var. *japonicus* (underground part: yield = 0.0048%dw). Ref: 4647.

**15824 Notoginsenoside Fe**

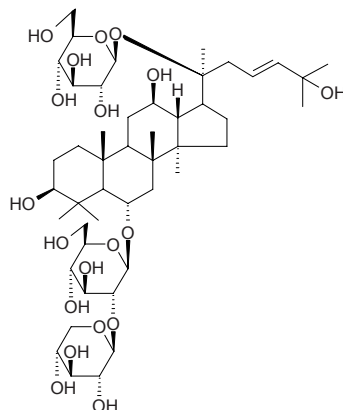
$C_{47}H_{80}O_{17}$  (917.15). Source: SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*] (flower: mean content of 8 origins = 1.15%)<sup>[5525]</sup>, ZHU JIE SAN QI *Panax pseudo-ginseng* var. *japonicus* (underground part: yield = 0.0008%dw)<sup>[4647]</sup>. Ref: 4647, 5525.

**15825 Notoginsenoside G**

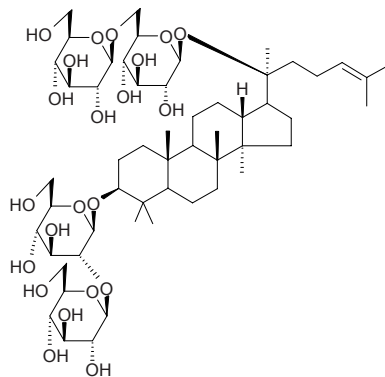
$C_{48}H_{80}O_{19}$  (961.16). Pharm: Immunological adjuvant activity (OVA-immunized mouse, ELISA assay, increases serum IgG level)<sup>[4139]</sup>. Source: SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*], ZHU JIE SAN QI *Panax pseudo-ginseng* var. *japonicus* (underground part: yield = 0.0008%dw)<sup>[4647]</sup>. Ref: 4139, 4647.

**15826 Notoginsenoside H**

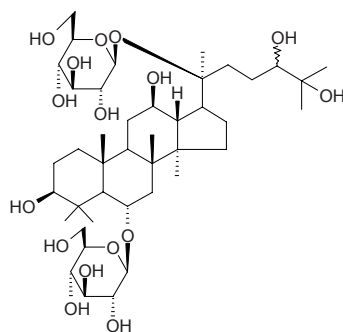
$C_{47}H_{80}O_{19}$  (949.15). Pharm: Immunological adjuvant activity (OVA-immunized mouse, ELISA assay, increases serum IgG level). Source: SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. Ref: 4139.

**15827 Notoginsenoside I**

$C_{54}H_{92}O_{22}$  (1093.32). Pharm: Immunological adjuvant activity (OVA-immunized mouse, ELISA assay, increases serum IgG level). Source: SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. Ref: 4139.

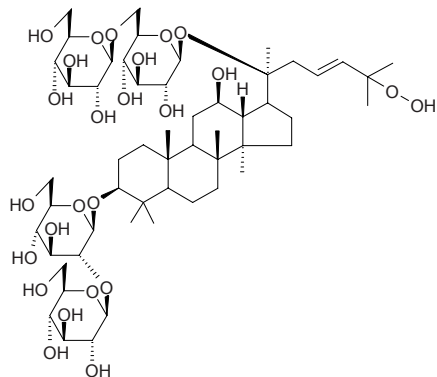
**15828 Notoginsenoside J**

$C_{42}H_{74}O_{16}$  (835.05). Source: SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. Ref: 4139.

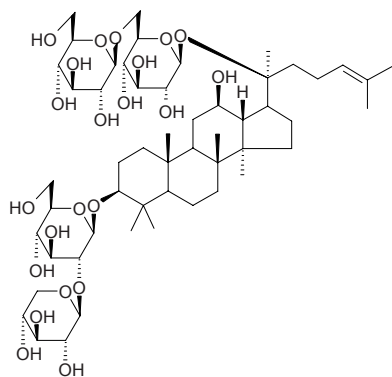


**15829 Notoginsenoside K**

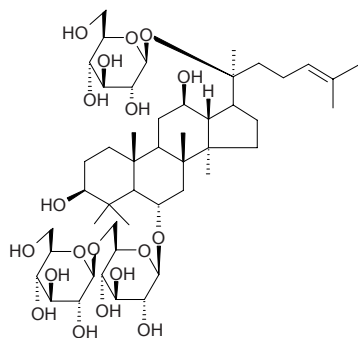
$C_{54}H_{92}O_{25}$  (1141.32). **Pharm:** Immunological adjuvant activity (OVA-immunized mouse, ELISA assay, increases serum IgG level). **Source:** SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. **Ref:** 4139.

**15830 Notoginsenoside L**

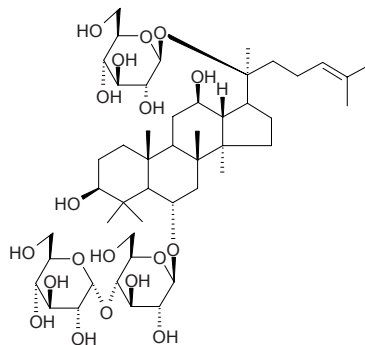
$C_{53}H_{90}O_{22}$  (1079.30). Colorless fine crystals (aqueous MeOH), mp 195–197°C,  $[\alpha]_D^{28} = +20.4^\circ$  ( $c = 0.1$ , MeOH). **Pharm:** Immunological adjuvant activity (OVA-immunized mouse, ELISA assay, increases serum IgG level). **Source:** SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. **Ref:** 4139.

**15831 Notoginsenoside M**

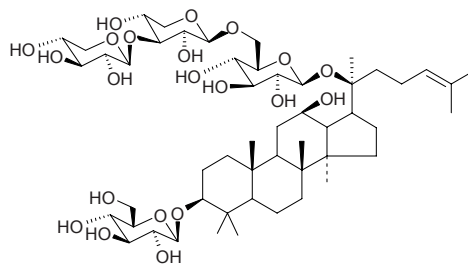
$C_{48}H_{82}O_{19}$  (963.18). Colorless fine crystals (aqueous MeOH), mp 187–189°C,  $[\alpha]_D^{28} = +24.7^\circ$  ( $c = 0.3$ , MeOH). **Source:** SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. **Ref:** 4139.

**15832 Notoginsenoside N**

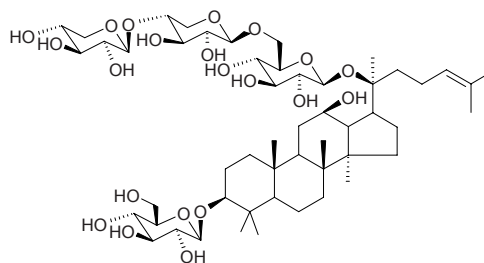
$C_{48}H_{82}O_{19}$  (936.18). Colorless fine crystals (aqueous MeOH), mp 186–188°C,  $[\alpha]_D^{28} = +50.0^\circ$  ( $c = 0.3$ , MeOH). **Pharm:** Immunological adjuvant activity (OVA-immunized mouse, ELISA assay, increases serum IgG level). **Source:** SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. **Ref:** 4139.

**15833 Notoginsenoside O**

3-*O*- $\beta$ -*D*-Glucopyranosyl-20(*S*)-protopanaxadiol 20-*O*- $\beta$ -*D*-xylopyranosyl (1 $\rightarrow$ 3)- $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside  $C_{52}H_{88}O_{21}$  (1049.27). Colorless fine crystals, mp 196–198°C (CHCl<sub>3</sub>–MeOH),  $[\alpha]_D^{28} = +0.3^\circ$  ( $c = 1.30$ , MeOH). **Source:** SAN QI HUA LEI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*] (flower bud: yield = 0.010%dw). **Ref:** 4702.

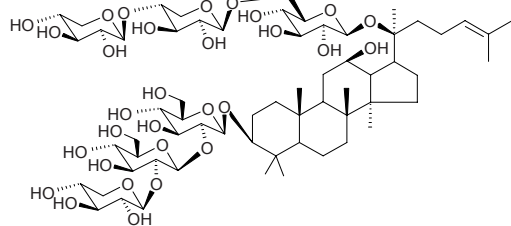
**15834 Notoginsenoside P**

3-*O*- $\beta$ -*D*-Glucopyranosyl-20(*S*)-protopanaxadiol 20-*O*- $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 4)- $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside  $C_{52}H_{88}O_{21}$  (1049.27). Colorless fine crystals, mp 194–196°C (CHCl<sub>3</sub>–MeOH),  $[\alpha]_D^{28} = +2.1^\circ$  ( $c = 1.00$ , MeOH). **Source:** SAN QI HUA LEI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*] (flower bud: yield = 0.011%dw). **Ref:** 4702.

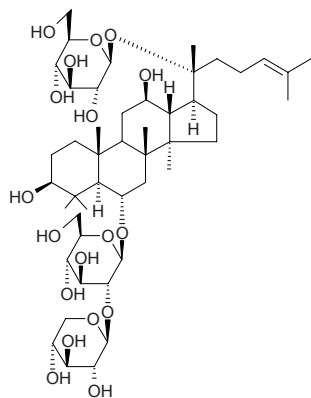


**15835 Notoginsenoside Q**

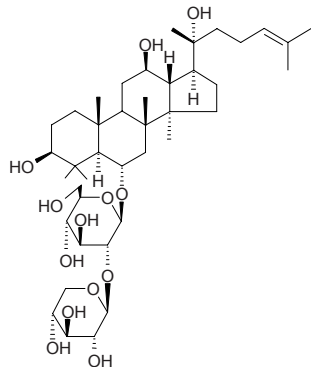
3-*O*- $\beta$ -*D*-Xylopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl-20(*S*)-protopanaxadiol 20-*O*- $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 4)- $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside C<sub>63</sub>H<sub>106</sub>O<sub>30</sub> (1343.53). Colorless fine crystals, mp 194~196°C (CHCl<sub>3</sub>-MeOH), [ $\alpha$ ]<sub>D</sub><sup>28</sup> = -0.6° (c = 0.70, MeOH). Source: SAN QI HUA LEI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*] (flower bud: yield = 0.014%dw). Ref: 4702.

**15836 Notoginsenoside R<sub>1</sub>**

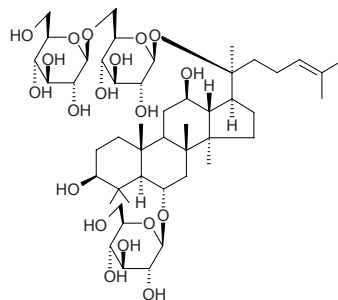
C<sub>47</sub>H<sub>80</sub>O<sub>18</sub> (933.15). Pharm: Anti-inflammatory (total saponins of SAN QI, *Panax pseudoginseng* var. *notoginseng*); hepatoprotective (inhibits activation of macrophages, inhibits increase in sALT and sAST levels, *in vivo*, D-GalN/LPS-induced liver injury in mouse, 100mg/kg ip for sALT, InRt = 87%; 100mg/kg ip for sAST, InRt = 89%; control Hydrocortisone, 20mg/kg ip for sALT, InRt = 99%; 20mg/kg ip for sAST, InRt = 97%)<sup>[4702]</sup>. Source: REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*], ZHU JIE SAN QI *Panax pseudo-ginseng* var. *japonicus* (underground part: yield = 0.023%dw)<sup>[4610]</sup>. Ref: 2, 658, 4610, 4702.

**15837 Notoginsenoside R<sub>2</sub>**

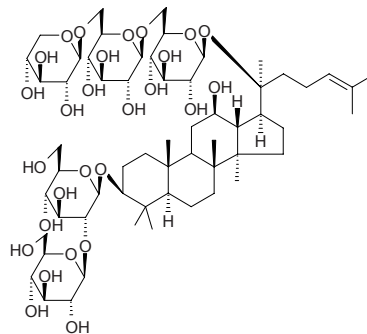
[80418-25-3] C<sub>41</sub>H<sub>70</sub>O<sub>13</sub> (771.01). Source: SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. Ref: 2, 1521.

**15838 Notoginsenoside R<sub>3</sub>**

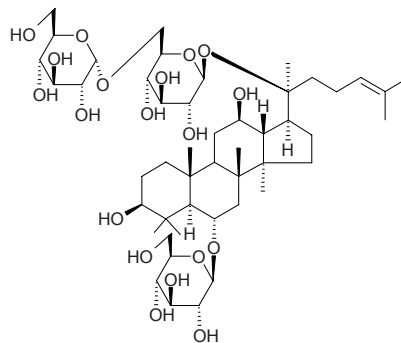
C<sub>48</sub>H<sub>82</sub>O<sub>19</sub> (963.18). Source: SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. Ref: 2.

**15839 Notoginsenoside R<sub>4</sub>**

C<sub>59</sub>H<sub>100</sub>O<sub>27</sub> (1241.44). Pharm: Neurite outgrowth enhancer (hmn neuroblastoma SK-N-SH cells, 100μmol/L, total length of neurites = 116.1μm, number of varicosity per cell = 0.68, p<0.05; control, total length of neurites = 45.3μm, number of varicosity per cell = 0.10)<sup>[4647]</sup>. Source: REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*], ZHU JIE SAN QI *Panax pseudo-ginseng* var. *japonicus* (underground part: yield = 0.0143%dw)<sup>[4647]</sup>. Ref: 2, 1521, 4647.

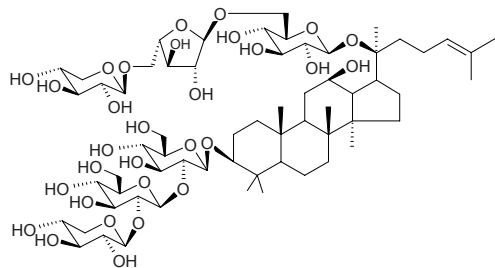
**15840 Notoginsenoside R<sub>6</sub>**

C<sub>48</sub>H<sub>82</sub>O<sub>19</sub> (936.18). Pharm: Hepatoprotective (inhibits activation of macrophages, inhibits increase in sALT and sAST levels, *in vivo*, D-GalN/LPS-induced liver injury in mouse, 100mg/kg ip for sALT, InRt = 32%; 100mg/kg ip for sAST, InRt = 44%; control Hydrocortisone, 20mg/kg ip for sALT, InRt = 99%; 20mg/kg ip for sAST, InRt = 97%)<sup>[4702]</sup>. Source: SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*], ZHU JIE SAN QI *Panax pseudo-ginseng* var. *japonicus* (underground part: yield = 0.0058%dw)<sup>[4610]</sup>. Ref: 2, 1521, 4610, 4702.

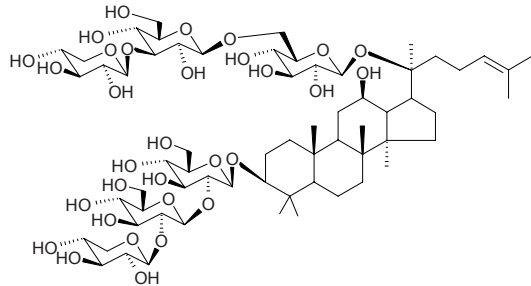


**15841 Notoginsenoside S**

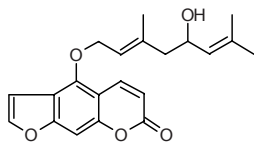
3-*O*- $\beta$ -*D*-Xylopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl-20(*S*)-protopanaxadiol 20-*O*- $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 5)- $\alpha$ -*L*-arabinofuranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside C<sub>63</sub>H<sub>106</sub>O<sub>30</sub> (1343.53). Colorless fine crystals, mp 186–188°C (CHCl<sub>3</sub>–MeOH),  $[\alpha]_D^{28} = -8.7^\circ$  ( $c = 1.40$ , MeOH). **Source:** SAN QI HUA LEI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*] (flower bud: yield = 0.029%dw). **Ref:** 4702.

**15842 Notoginsenoside T**

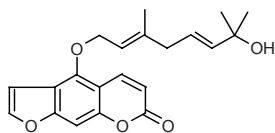
3-*O*- $\beta$ -*D*-Xylopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl-20(*S*)-protopanaxadiol 20-*O*- $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside C<sub>64</sub>H<sub>108</sub>O<sub>31</sub> (1373.56). Colorless fine crystals, mp 196–198°C (CHCl<sub>3</sub>–MeOH),  $[\alpha]_D^{28} = +6.8^\circ$  ( $c = 1.20$ , MeOH). **Source:** SAN QI HUA LEI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*] (flower bud: yield = 0.008%dw). **Ref:** 4702.

**15843 Notopterol**

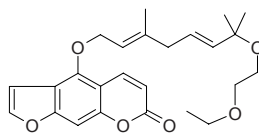
[88206-46-6] C<sub>21</sub>H<sub>22</sub>O<sub>5</sub> (354.41). **Pharm:** Analgesic (mus, orl, acetate acid-induced tail-swing model, presents dose-response relationship); sedative (mus, orl, 10–30mg/kg, extends sleeping time induced by pentobarbital); anti-inflammatory (mouse, orl, 100mg/kg, inhibits increase of vaso-permeability). **Source:** QIANG HUO *Notopterygium incisum*, KUAN YE QIANG HUO *Notopterygium forbesii* [Syn. *Notopterygium franchetii*]. **Ref:** 2, 325, 507, 566, 660, 1826.

**15844 Notoptol**

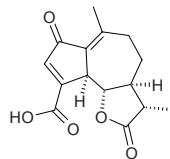
[88206-49-9] C<sub>21</sub>H<sub>22</sub>O<sub>5</sub> (354.41). **Source:** QIANG HUO *Notopterygium incisum*. **Ref:** 2, 507.

**15845 Notoptolide**

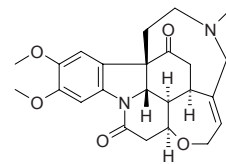
5-(2*E*)-3,7-dimethyl-5-ethoxy-2,6-octadienyloxy psoralen C<sub>25</sub>H<sub>30</sub>O<sub>6</sub> (426.51). Colorless oleaginous substance. **Source:** QIANG HUO *Notopterygium incisum*. **Ref:** 325.

**15846 Notoserolide**

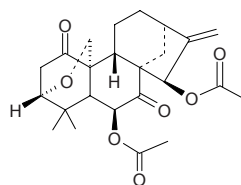
C<sub>15</sub>H<sub>16</sub>O<sub>5</sub> (276.29). Yellowish prismatic crystals, mp 238–240°C,  $[\alpha]_D^{20} = -11^\circ$  (MeOH). **Source:** LING YE ZI JU *Notoseris rhombiformis*. **Ref:** 2217.

**15847 Novacine**

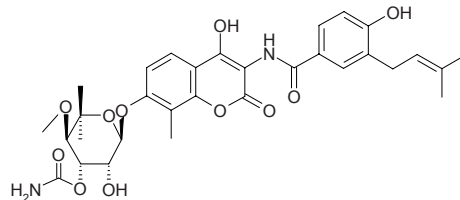
[466-64-8] C<sub>24</sub>H<sub>28</sub>N<sub>2</sub>O<sub>5</sub> (424.50). mp 231–232°C. **Source:** MA QIAN ZI *Strychnos nux-vomica*. **Ref:** 6, 542.

**15848 Novelrabdosin**

[92627-27-5] C<sub>24</sub>H<sub>30</sub>O<sub>7</sub> (430.50). mp 230–232°C,  $[\alpha]_D^{13} = -175.5^\circ$  ( $c = 0.98$ , C<sub>5</sub>H<sub>5</sub>N). **Source:** XIAN MAI XIANG CHA CAI *Rabdosia nervosa*, **Ref:** 2763, 2764, 4067.

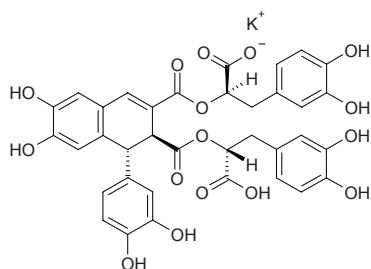
**15849 Novobiocin**

[303-81-1] C<sub>31</sub>H<sub>36</sub>N<sub>2</sub>O<sub>11</sub> (612.64). **Pharm:** Antibacterial; antimicrobial (veterinary); antiviral; plasma protein binder. **Source:** Ray-fungus *Streptomyces spheroids*, Ray-fungus *Streptomyces niveus*. **Ref:** 658.

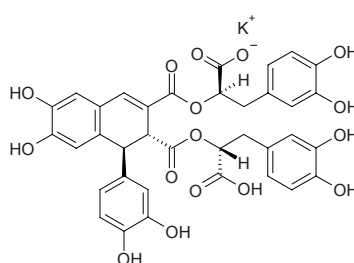


**15850 NP02140176-38-K**

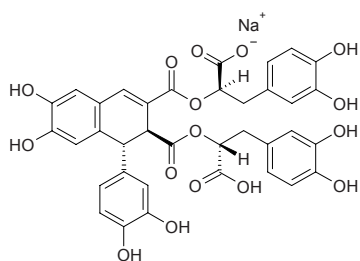
$C_{36}H_{29}KO_{16}$  (756.72). **Pharm:** Anti-HIV. **Source:** ZI CAO *Lithospermum erythrorhizon*, XIN ZANG JIA ZI CAO *Arnebia euchroma*. **Ref:** 2193.

**15854 NP02140176-42-K**

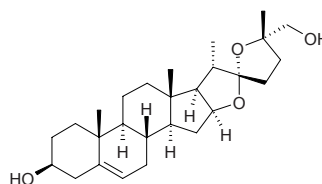
$C_{36}H_{29}KO_{16}$  (756.72). **Pharm:** Anti-HIV. **Source:** ZI CAO *Lithospermum erythrorhizon*, XIN ZANG JIA ZI CAO *Arnebia euchroma*. **Ref:** 2193.

**15851 NP02140176-39-Na**

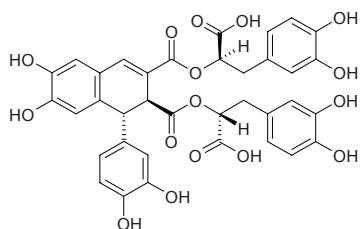
$C_{36}H_{29}NaO_{16}$  (740.61). **Pharm:** Anti-HIV. **Source:** ZI CAO *Lithospermum erythrorhizon*, XIN ZANG JIA ZI CAO *Arnebia euchroma*. **Ref:** 2193.

**15855 Nuatigenin**

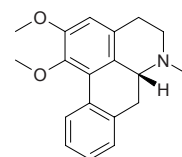
[6811-35-4]  $C_{27}H_{42}O_4$  (430.63). **Pharm:** Antifungal. **Source:** YAN MAI *Avena sativa*, DING QIE *Solanum aculeatissimum*. **Ref:** 658.

**15852 NP02140176-40**

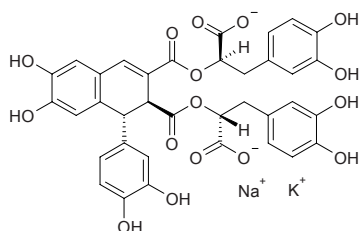
$C_{36}H_{30}O_{16}$  (718.63). **Pharm:** Anti-HIV. **Source:** ZI CAO *Lithospermum erythrorhizon*, XIN ZANG JIA ZI CAO *Arnebia euchroma*. **Ref:** 2193.

**15856 Nuciferine**

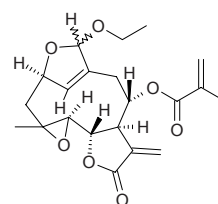
[475-83-2]  $C_{19}H_{21}NO_2$  (295.38). mp (-) 165.5°C, (±) 136–137°C. **Source:** HE YE *Nelumbo nucifera*, HE YE DI *Nelumbo nucifera*, LIAN ZI *Nelumbo nucifera*, LIAN ZI XIN *Nelumbo nucifera*. **Ref:** 6.

**15853 NP02140176-41-KNa**

$C_{36}H_{28}KNaO_{16}$  (778.70). **Pharm:** Anti-HIV. **Source:** ZI CAO *Lithospermum erythrorhizon*, XIN ZANG JIA ZI CAO *Arnebia euchroma*. **Ref:** 2193.

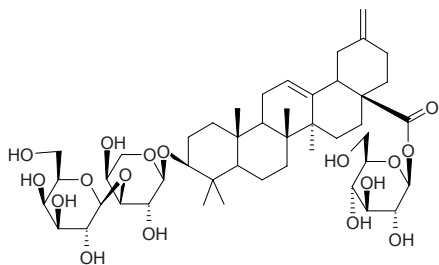
**15857 Nudaphantin**

[96627-10-0]  $C_{21}H_{26}O_7$  (390.44). Colorless oil,  $[\alpha]_D = -16^\circ$  ( $c = 0.5$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (KB,  $IC_{50} = 0.31 \mu g/mL$ ). **Source:** LUO DI DAN CAO *Elephantus nudatus*. **Ref:** 2765.

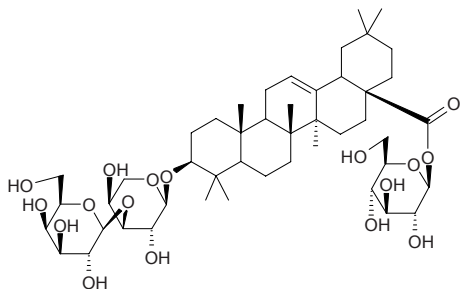


**15858 Nudicaucin A**

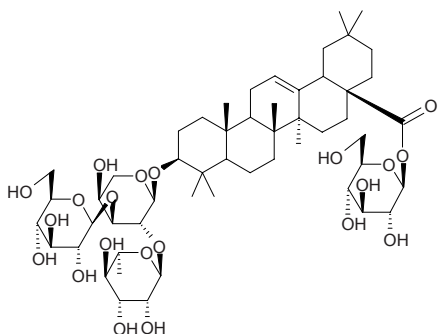
[211815-97-3]  $C_{46}H_{72}O_{17}$  (897.08). White lamellar crystals, mp 291.5–293°C (dec),  $[\alpha]_D = +71.3^\circ$  ( $c = 0.44$ , MeOH), TLC: Rf = 0.25 (75% MeOH), 0.15 (CHCl<sub>3</sub>: MeOH = 2:1). **Pharm:** Antibacterial (*Bacillus subtilis* M45 and H17, weak activity). **Source:** LUO JING ER CAO *Hedyotis nudicaulis*. **Ref:** 2766.

**15859 Nudicaucin B**

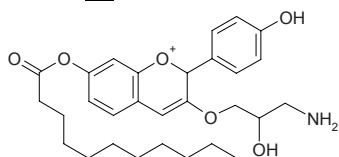
[211557-36-7]  $C_{47}H_{76}O_{17}$  (913.12). mp 256–259°C (dec);  $[\alpha]_D = +34.5^\circ$  ( $c = 0.22$ , MeOH), TLC: Rf = 0.17 (75% MeOH), 0.15 (CHCl<sub>3</sub>: MeOH = 2:1). **Pharm:** Antibacterial (*Bacillus subtilis* M45 and H17, weak activity). **Source:** LUO JING ER CAO *Hedyotis nudicaulis*. **Ref:** 2766.

**15860 Nudicaucin C**

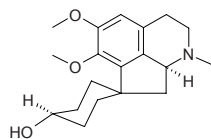
[211815-98-4]  $C_{53}H_{86}O_{21}$  (1059.26). mp 257–260°C (dec);  $[\alpha]_D = -4.9^\circ$  ( $c = 0.41$ , MeOH), TLC: Rf = 0.17 (75% MeOH), 0.04 (CHCl<sub>3</sub>: MeOH = 2:1). **Pharm:** Antibacterial (*Bacillus subtilis* M45 and H17, weak activity). **Source:** LUO JING ER CAO *Hedyotis nudicaulis*. **Ref:** 2766.

**15861 Nudicaulin**

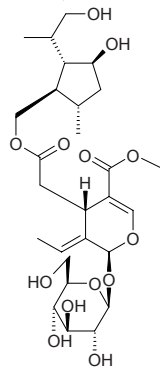
$C_{29}H_{40}NO_6^+$  (498.65). **Source:** LIE YE YE YING SU *Papaver nudicaule* var. *chinense*. **Ref:** 2767.

**15862 Nudicaulonol**

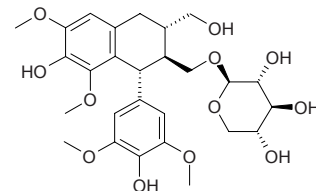
$C_{19}H_{27}NO_3$  (317.43). **Source:** LIE YE YE YING SU *Papaver nudicaule* var. *chinense*. **Ref:** 2768.

**15863 Nudifloside D**

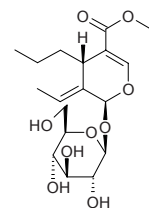
$C_{27}H_{42}O_{13}$  (574.63). Colorless amorphous powder,  $[\alpha]_D^{24} = -161^\circ$  ( $c = 0.41$ , MeOH). **Source:** YING CHUN HUA *Jasminum nudiflorum* (leaf). **Ref:** 4169.

**15864 Nudiposide**

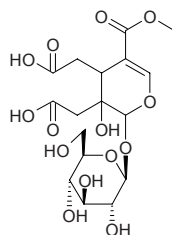
[62058-46-2]  $C_{27}H_{36}O_{12}$  (552.58). Crystals (Me<sub>2</sub>CO–C<sub>6</sub>H<sub>6</sub>), mp 175–178°C,  $[\alpha]_D^{29.5} = -67.1^\circ$  ( $c = 1.43$ , EtOH). **Source:** HONG NAN PI *Machilus thunbergii*, JIA MI *Viburnum dilatatum*, *Enkianthus nudipes*. **Ref:** 660, 2769.

**15865 Nuezhengalaside**

$C_{18}H_{28}O_9$  (388.42). Colorless powder, mp 144–147°C. **Source:** NV ZHEN ZI *Ligustrum lucidum*. **Ref:** 386.

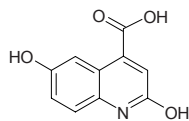
**15866 Nuezhenidic acid**

$C_{17}H_{24}O_{14}$  (452.37). mp 232–233°C. **Source:** NV ZHEN ZI *Ligustrum lucidum*. **Ref:** 8.

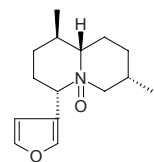


**15867 Nukagenin**

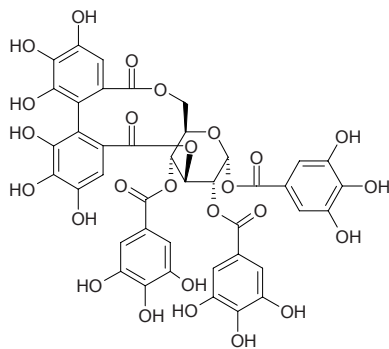
$C_{10}H_7NO_4$  (205.17). Source: MI PI KANG *Oryza sativa*. Ref: 660.

**15868 Nupharidine**

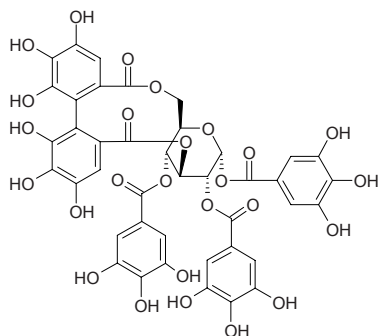
[468-89-3]  $C_{15}H_{23}NO_2$  (249.36). mp 222°C,  $[\alpha]_D = +14.5^\circ$  (H<sub>2</sub>O). Source: PING PENG CAO *Nuphar pumilum*, RI BEN PING PENG CAO *Nuphar japonicum*. Ref: 2770.

**15869 Nupharin A(S)**

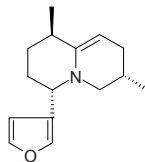
[81956-07-2]  $C_{41}H_{30}O_{26}$  (938.68). White powder (H<sub>2</sub>O), mp 243~245°C (dec),  $[\alpha]_D^{24} = -51.4^\circ$  ( $c = 1.2$ , acetone). Pharm: Antibacterial (*Staphylococcus aureus*, *Saccharomyces cerevisiae*); topoisomerase II inhibitor (IC<sub>100</sub> = 0.2 μmol/L). Source: BAN YE PING PENG CAO *Nuphar variegatum*, RI BEN PING PENG CAO *Nuphar japonicum*. Ref: 2771, 2772, 2773.

**15870 Nupharin B(R)**

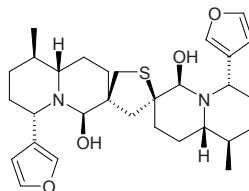
[121916-42-5]  $C_{41}H_{30}O_{26}$  (938.68). Colorless needles (H<sub>2</sub>O), mp 258°C,  $[\alpha]_D^{24} = +38.5^\circ$  ( $c = 0.8$ , acetone). Pharm: Antibacterial (*Staphylococcus aureus*, *Saccharomyces cerevisiae*). Source: BAN YE PING PENG CAO *Nuphar variegatum*, RI BEN PING PENG CAO *Nuphar japonicum*. Ref: 2771, 2772.

**15871 Nupharopumiline**

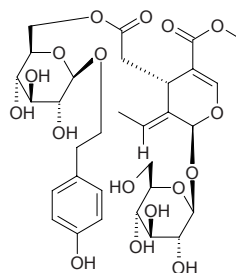
[63947-66-0]  $C_{15}H_{21}NO$  (231.34). Crystals (CCl<sub>4</sub>), mp 195~197°C,  $[\alpha]_D^{20} = +27^\circ$  (CHCl<sub>3</sub>). Source: PING PENG CAO *Nuphar pumilum*. Ref: 2770.

**15872 Nuphleine**

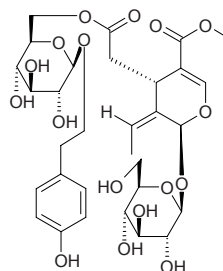
[30343-70-5]  $C_{30}H_{42}N_2O_4S$  (526.74). Glassy mass,  $[\alpha]_D^{25} = +44.5^\circ$  ( $c = 1.2$ , chloroform). Pharm: Antibacterial (*Staphylococcus aureus*, chloride 0.24~7.8 μg/mL); antifungal (*Blastomyces* sp., *Microsporium* sp., and *Trichophyton mentagrophytes*, IC = 100 μg/mL); toxin (mus, ip, 400 mg/(kg·d) for 30d, 4/6 death, 100 and 200 mg/(kg·d) for 30d, no death observed). Source: PING PENG CAO *Nuphar pumilum*. Ref: 661, 1521.

**15873 (8E)-Nüzhenide**

Nuezhenide; Specnuezhenide  $C_{31}H_{42}O_{17}$  (686.67). Amorphous powder, mp 152~155°C,  $[\alpha]_D^{26} = -140.0^\circ$  ( $c = 0.6$ , MeOH). Source: BAO MA ZI *Syringa amurensis* [Syn. *Syringa reticulata* var. *amurensis*] (leaf), NV ZHEN ZI *Ligustrum lucidum* (ripe fruit: content scope of 6 origins = 0.68%~1.18%; mean content = 0.90%<sup>[5508]</sup>). Ref: 386, 2789, 3545, 4175, 5508.

**15874 (8Z)-Nüzhenide**

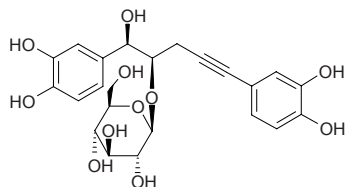
$C_{31}H_{42}O_{17}$  (686.67). Amorphous powder,  $[\alpha]_D^{26} = -101.1^\circ$  ( $c = 1.0$ , MeOH). Source: BAO MA ZI *Syringa amurensis* [Syn. *Syringa reticulata* var. *amurensis*] (leaf). Ref: 4175.



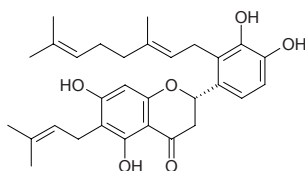


**15875 Nyasicoside**

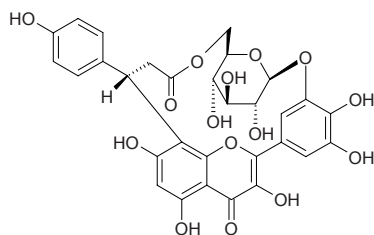
[111518-94-6] C<sub>23</sub>H<sub>26</sub>O<sub>11</sub> (478.46). mp 120~122°C (EtOH-EtOAc), [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +14.7° (c = 0.9, MeOH). **Pharm:** Antiarrhythmic (gpg, arrhythmia induced by uabain, for arrhythmia induced by 6 $\mu$ mol/L uabain, 3 $\mu$ mol/L returns normal rhythm for over 10min); contracts blood vessels (*in vitro*, rabbit aorta, facilitating effect on adrenaline evoked contractions, 1~30 $\mu$ mol/L)<sup>[5095]</sup>. **Source:** DA YE XIAN MAO *Curculigo capitulata* [Syn. *Leucojum capitulata*], MAO XIAN MAO *Curculigo pilosa* (rhizome). **Ref:** 2775, 2776, 2777, 5095.

**15876 (-)-Nymphaeol C**

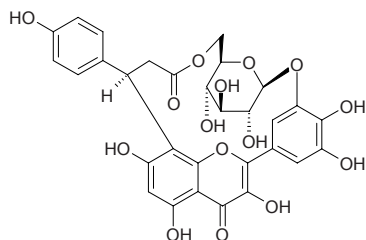
C<sub>30</sub>H<sub>36</sub>O<sub>6</sub> (492.62). **Source:** XUE TONG *Macaranga tanarius* (fallen leave). **Ref:** 3062.

**15877 Nympholide A**

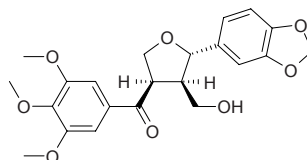
C<sub>30</sub>H<sub>26</sub>O<sub>15</sub> (626.53). Brown amorphous solid, mp 174~178°C (dec). **Source:** CHI YE SHUI LIAN *Nymphaea lotus*. **Ref:** 3405.

**15878 Nympholide B**

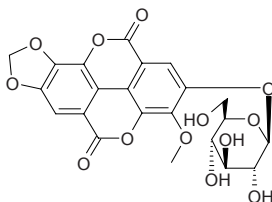
C<sub>30</sub>H<sub>26</sub>O<sub>15</sub> (626.53). Brown amorphous solid, mp 198°C (dec., softens at 168°C). **Source:** CHI YE SHUI LIAN *Nymphaea lotus*. **Ref:** 3405.

**15879 Nymphone**

[194026-36-3] C<sub>22</sub>H<sub>24</sub>O<sub>8</sub> (416.43). Colorless prisms (CH<sub>2</sub>Cl<sub>2</sub>-acetone), mp 123~125°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -47.4° (c = 0.08, CHCl<sub>3</sub>). **Pharm:** Cytotoxic (A549 ED<sub>50</sub> = 3.024 $\mu$ g/mL; HT29 ED<sub>50</sub> = 0.740 $\mu$ g/mL; KB15 ED<sub>50</sub> = 0.639 $\mu$ g/mL; P388 ED<sub>50</sub> = 0.321 $\mu$ g/mL). **Source:** SHUI LIAN YE TONG *Hernandia nymphaeifolia*. **Ref:** 2778.

**15880 Nyssoside**

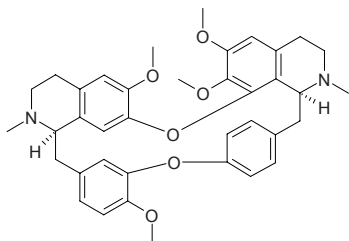
3'-O-Methyl-3,4-O-methylideneellagic acid-4'-O- $\beta$ -D-glucopyranoside C<sub>22</sub>H<sub>18</sub>O<sub>13</sub> (490.38). White acicular crystals (MeOH), mp 273~275°C, soluble in pyridine, slightly soluble in methanol, water. **Source:** ZI SHU *Nyssa sinensis*, XI SHU *Camptotheca acuminata*. **Ref:** 492, 4097.



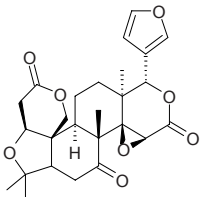
## O

**15881 Obaberine**

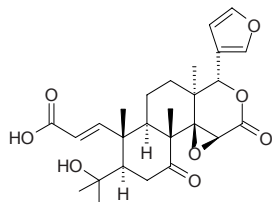
[1263-80-5]  $C_{38}H_{42}N_2O_6$  (622.77). mp 139~140°C. **Pharm:** Antibacterial (*Staphylococcus aureus* and *Mycobacterium smegmatis*, MIC = 1mg/mL; *Mycobacterium tuberculosis*, active concentration without serum = 7.8 $\mu$ g/mL, with serum = 62.5 $\mu$ g/mL); antifungal (*Candida albicans*, MIC = 1mg/mL); antihypertensive (dog, 2mg/kg, lowers of blood pressure by 5.3328kPa); antitrypanosomal; antiviral (influenza virus, 1mg/mL). **Source:** HUANG XIAO BO *Berberis tschonoskiana*, PU FU SHI DA GONG LAO *Mahonia repens*, SAN RUI LIAN GUI *Dehaasia triandra*, TOU MING TANG SONG CAO *Thalictrum lucidum*, XIA YE TANG SONG CAO *Thalictrum incidum*, XIAO TANG SONG CAO *Thalictrum minus*. **Ref:** 4, 658.

**15882 Obaculactone**

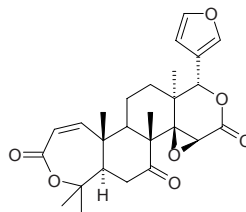
Dictamnolactone [1180-71-8]  $C_{26}H_{30}O_8$  (470.52). mp 297~298°C (dec). **Pharm:** Anthelmintic; antiulcerative (rat, induced by aspirin, *in vivo*); hypoglycemic (rbt, *in vivo*); inhibits intestinal movement (rbt, *in vivo*). **Source:** BAI SE BAI XIAN *Dictamnus albus*, BAI XIAN PI *Dictamnus dasycarpus*, CHENG ZI *Citrus junos*, CHENG ZI HE *Citrus junos*, FU JU *Citrus tangemna*, GOU JU *Poncirus trifoliata*, HUANG BAI *Phellodendron amurense*, HUANG LIAN *Coptis chinensis*, JU HE *Citrus reticulata*, JU YUAN *Citrus medica*, LIAN YE WU ZHU YU *Evodia melifolia*, SU DA QI GAN JU *Citrus sudachii*, TIAN CHENG *Citrus sinensis*, WU ZHU YU *Evodia rutaecarpa*, XIANG YUAN *Citrus wilsonii*, YOU<sup>(4)</sup> *Citrus grandis*, YOU HE *Citrus grandis*, YU KE GAN JU *Citrus yuko*, ZHI KE *Citrus aurantium*. **Ref:** 2, 6, 658.

**15883 Obacunoic acid**

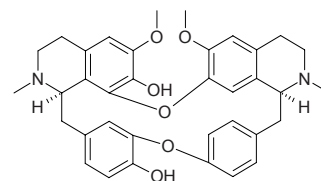
Obacunoic acid  $C_{26}H_{32}O_8$  (472.54). mp 205~206°C. **Source:** BAI XIAN PI *Dictamnus dasycarpus*, HUANG BAI *Phellodendron amurense*. **Ref:** 2, 660.

**15884 Obacunone**

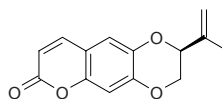
[751-03-1]  $C_{26}H_{30}O_7$  (454.52). Crystals (MeOH), mp 229~230°C,  $[\alpha]_D = -50^\circ$  (CHCl<sub>3</sub>). **Pharm:** Promotes intestinal motion (rbt, *in vitro*). **Source:** HUANG BAI *Phellodendron amurense*. **Ref:** 2, 658, 660, 1521.

**15885 (+)-Obamegine**

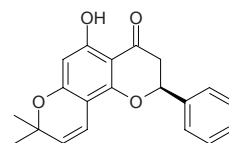
[479-37-8]  $C_{36}H_{38}N_2O_6$  (594.71). Colorless acicular crystals (ether), mp 164~166°C,  $[\alpha]_D^{11} = +98.9^\circ$  ( $c = 0.2022$ , methanol). **Pharm:** Mitochondrial respiratory chain complex I inhibitor (IC<sub>50</sub> = (1.41±0.13) $\mu$ mol/L, Rolliniastatin-1, IC<sub>50</sub> = (0.6±0.04)nmol/L, Rotenone, IC<sub>50</sub> = (5.10±0.90)nmol/L)<sup>[4954]</sup>; antibacterial (*Staphylococcus aureus*, *Bacillus coli*, *Salmonella gallinarum* and *Bacillus pneumoniae*, MIC = 100 $\mu$ g/mL; *Mycobacterium smegmatis*, MIC = 50 $\mu$ g/mL); antifungal (*Candida albicans*, MIC = 100 $\mu$ g/mL); antihypertensive (dog, dose of 0.5mg/kg, 1.0mg/kg and 2.0mg/kg, lowers blood pressure by 7.71kPa, 8.65kPa and 9.98kPa, respectively). **Source:** GE LUN BI YA MU BAN SHU *Xylopi colombiana* (fruit), HUANG GEN SHU *Xanthorhiza simplicissima*, HUANG XIAO BO *Berberis tschonoskiana*, PU FU SHI DA GONG LAO *Mahonia repens*, QIAN JIN TENG *Stephania japonica*, TOU MING TANG SONG CAO *Thalictrum lucidum*, ZOU WEN TANG SONG CAO *Thalictrum rugosum*. **Ref:** 6, 661, 4954.

**15886 Obliquin**

$C_{14}H_{12}O_4$  (244.25). **Pharm:** Anti-Inflammatory (anti-oedema, control oedema = (7.8±0.3)mg, 100 $\mu$ g/cm<sup>2</sup>, oedema = (3.9±0.5)mg,  $p < 0.05$ , reduction = 50%, Indomethacin oedema = (3.4±0.3)mg,  $p < 0.05$ , reduction = 56%). **Source:** GAO SHAN HUO RONG CAO *Leontopodium alpinum* (root). **Ref:** 4985.

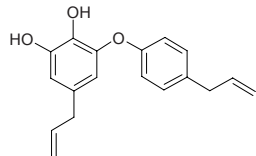
**15887 Obovatin**

$C_{20}H_{18}O_4$  (322.36). **Source:** DU HUI MAO DOU *Tephrosia toxicaria* (stem; yield = 0.0026%dw). **Ref:** 4718.

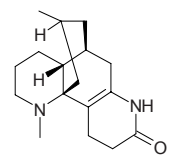


**15888 Obovatol**

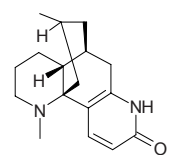
[83864-78-2] C<sub>18</sub>H<sub>18</sub>O<sub>3</sub> (282.34). Pharm: Antibacterial. Source: HOU PO *Magnolia officinalis*. Ref: 2860, 2861.

**15889  $\alpha$ -Obscurine**

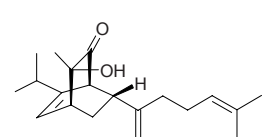
[596-55-4] C<sub>17</sub>H<sub>26</sub>N<sub>2</sub>O (274.41). mp 322~323°C. Source: GUO JIANG LONG *Lycopodium complanatum*, XIAO JIE JIN CAO *Huperzia selago* [Syn. *Lycopodium selago*]. Ref: 6.

**15890  $\beta$ -Obscurine**

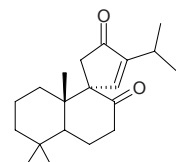
[467-79-8] C<sub>17</sub>H<sub>24</sub>N<sub>2</sub>O (272.39). mp 322~323°C (dec). Source: XIAO JIE JIN CAO *Huperzia selago* [Syn. *Lycopodium selago*]. Ref: 6.

**15891 Obtunone**

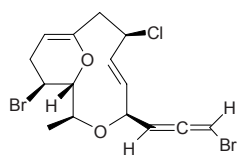
C<sub>20</sub>H<sub>30</sub>O<sub>2</sub> (302.46). Source: TAI WAN CUI BAI *Calocedrus macrolepis* var. *formosana* (leaf). Ref: 4298.

**15892 Obtusadione**

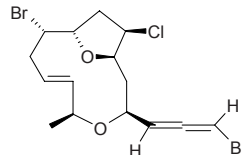
C<sub>20</sub>H<sub>30</sub>O<sub>2</sub> (302.46). mp 178~179°C, [ $\alpha$ ]<sub>D</sub><sup>19</sup> = -79.1° (c = 0.30, CHCl<sub>3</sub>). Source: TAI WAN CUI BAI *Calocedrus macrolepis* var. *formosana* (leaf). Ref: 4298.

**15893 Obtusallene I**

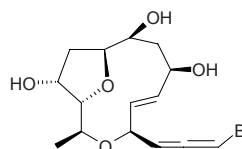
[81920-18-5] C<sub>15</sub>H<sub>17</sub>Br<sub>2</sub>ClO<sub>2</sub> (424.56). Crystals (Et<sub>2</sub>O-petroleum ether), mp 165~167°C, [ $\alpha$ ]<sub>D</sub><sup>17</sup> = -257.6° (c = 0.53, CHCl<sub>3</sub>). Source: DUN XING AO DING ZAO *Laurencia obtusa*. Ref: 2894, 2895.

**15894 Obtusallene II**

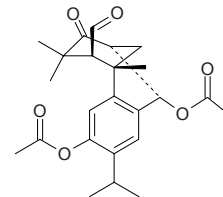
[133485-41-3] C<sub>15</sub>H<sub>19</sub>Br<sub>2</sub>ClO<sub>2</sub> (426.58). Crystals (hexane-C<sub>6</sub>H<sub>6</sub>), mp 147~149°C, [ $\alpha$ ]<sub>D</sub><sup>23</sup> = -272° (c = 0.35, CHCl<sub>3</sub>). Source: DUN XING AO DING ZAO *Laurencia obtusa*. Ref: 2795.

**15895 Obtusallenetriol**

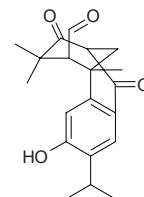
[133462-32-5] C<sub>15</sub>H<sub>21</sub>BrO<sub>5</sub> (361.24). Crystals (CHCl<sub>3</sub>), mp 78~80°C (dec), [ $\alpha$ ]<sub>D</sub><sup>24</sup> = -141.5° (c = 0.245, Me<sub>2</sub>CO). Source: DUN XING AO DING ZAO *Laurencia obtusa*. Ref: 2795.

**15896 Obtusanal A**

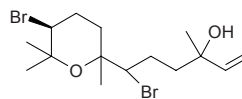
C<sub>24</sub>H<sub>30</sub>O<sub>6</sub> (414.50). Source: TAI WAN CUI BAI *Calocedrus macrolepis* var. *formosana* (leaf). Ref: 4298.

**15897 Obtusanal B**

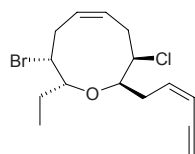
C<sub>20</sub>H<sub>24</sub>O<sub>4</sub> (328.41). mp 192~194°C, [ $\alpha$ ]<sub>D</sub><sup>28</sup> = -195.9° (c = 0.41, CHCl<sub>3</sub>). Source: TAI WAN CUI BAI *Calocedrus macrolepis* var. *formosana* (leaf). Ref: 4298.

**15898 Obtusenol**

[79406-07-8] C<sub>15</sub>H<sub>26</sub>Br<sub>2</sub>O<sub>2</sub> (398.18). Oil, [ $\alpha$ ]<sub>D</sub><sup>16</sup> = -50.2° (c = 1.7, CHCl<sub>3</sub>). Source: DUN XING AO DING ZAO *Laurencia obtusa*. Ref: 2911, 2912.

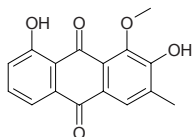
**15899 Obtusenyne**

[71939-43-0] C<sub>15</sub>H<sub>20</sub>BrClO (331.68). Oil, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +111.4° (c = 2.8, CHCl<sub>3</sub>). Source: *Laurencia* sp. Ref: 2934, 2935, 4002.

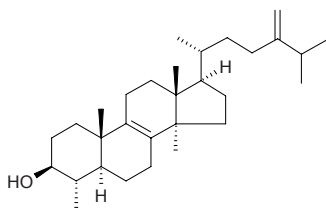


**15900 Obtusifolin**

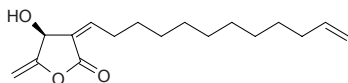
2,8-Dihydroxy-1-methoxy-3-methylantraquinone [477-85-0] C<sub>16</sub>H<sub>12</sub>O<sub>5</sub> (284.27). mp 237~238°C. Source: JUE MING ZI *Cassia tora*. Ref: 2.

**15901 Obtusifolol**

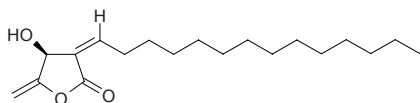
[16910-32-0] C<sub>30</sub>H<sub>50</sub>O (423.73). mp 144°C. Source: SHI LA HONG *Pelargonium hortorum*, MAN TUO LUO ZI *Datura metel*, GOU QI ZI *Lycium chinense*. Ref: 2907, 1372.

**15902 Obtusilactone**

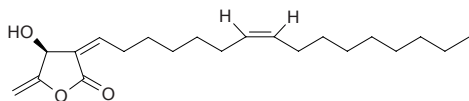
[56799-51-0] C<sub>17</sub>H<sub>16</sub>O<sub>3</sub> (278.39). Viscous liquid, [α]<sub>D</sub><sup>23</sup> = -53° (c = 0.35, MeOH). Pharm: Cytotoxic (hmn A549, ED<sub>50</sub> = 3.32 μg/mL, MCF7, ED<sub>50</sub> = 4.58 μg/mL, HT29, ED<sub>50</sub> = 3.26 μg/mL, BST, LC<sub>50</sub> = 0.035 mg/L, InRt of potato culture dish PD test = 64.2%). Source: GUI PI DIAO ZHANG *Lindera benzoin*, SAN ZUAN FENG *Lindera obtusiloba*, ZHANG SHU PI *Cinnamomum camphora*. Ref: 1053, 1119.

**15903 Obtusilactone A**

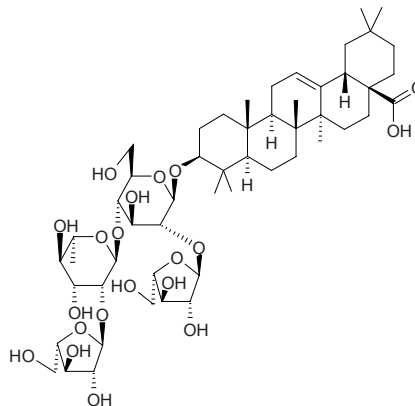
[56522-15-7] C<sub>19</sub>H<sub>32</sub>O<sub>3</sub> (308.47). Colorless ropy liquid, [α]<sub>D</sub><sup>23</sup> = -46° (c = 0.45, CHCl<sub>3</sub>). Pharm: Cytotoxic (hmn MCF7, ED<sub>50</sub> = 5.12 μg/mL, HT29, ED<sub>50</sub> = 2.93 μg/mL, BST, LC<sub>50</sub> = 0.89 mg/L). Source: GUI PI DIAO ZHANG *Lindera benzoin*, SAN ZUAN FENG *Lindera obtusiloba*, *Persea borbonia*, *Persea* spp. Ref: 2875, 2876, 1053.

**15904 Obtusilactone B**

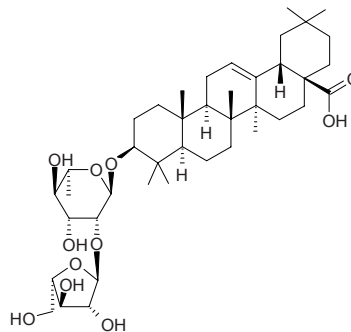
[58940-65-1] C<sub>21</sub>H<sub>34</sub>O<sub>3</sub> (334.50). Oil. Source: SAN ZUAN FENG *Lindera obtusiloba*. Ref: 2881.

**15905 Obtusilobicinin**

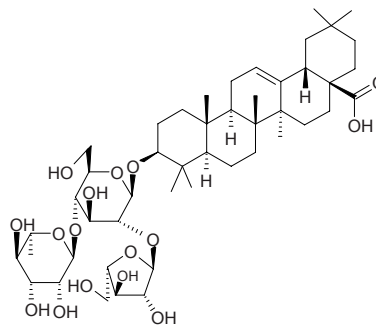
[76016-61-0] C<sub>52</sub>H<sub>84</sub>O<sub>20</sub> (1029.24). mp 226°C. Source: DUN LIE YIN LIAN HUA *Anemone obtusiloba*. Ref: 660, 1521.

**15906 Obtusilobin**

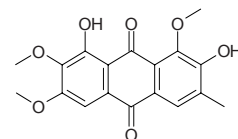
[73519-18-3] C<sub>41</sub>H<sub>66</sub>O<sub>11</sub> (734.98). Crystals (MeOH), mp 190°C. Source: DUN LIE YIN LIAN HUA *Anemone obtusiloba*. Ref: 660, 1521.

**15907 Obtusilobinin**

[73519-19-4] C<sub>47</sub>H<sub>76</sub>O<sub>16</sub> (897.12). Crystals (MeOH), mp 220°C. Source: DUN LIE YIN LIAN HUA *Anemone obtusiloba*. Ref: 660, 1521.

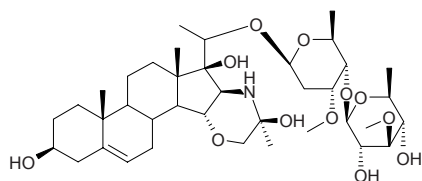
**15908 Obtusin**

1,7-Dihydroxy-2,3,8-trimethoxy-6-methylantraquinone [70588-05-5] C<sub>18</sub>H<sub>16</sub>O<sub>7</sub> (344.32). mp 242~243°C. Source: JUE MING ZI *Cassia tora* (in 1960, the compound was isolated from the plant). Ref: 5505.



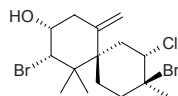
**15909 Obtusine-20(R)-O-[β-thevetopyranosyl-(1→4)-β-cymaropyranoside]**

C<sub>38</sub>H<sub>63</sub>NO<sub>12</sub> (725.93). White powder. Source: DUN XING BAI YE TENG *Cryptolepis obtusa* (root). Ref: 3920.



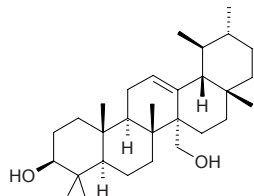
**15910 Obtusol**

[73494-22-1] C<sub>15</sub>H<sub>23</sub>Br<sub>2</sub>ClO (414.61). White needles (MeOH-H<sub>2</sub>O), mp 145~146°C, [α]<sub>D</sub> = +12° (c = 0.2, CHCl<sub>3</sub>). Pharm: Cytotoxic (HeLa, IC<sub>50</sub> = 50 μg/mL); antibacterial (*Staphylococcus aureus*, *Bacillus globisporus*, *Bacillus pyocyaneus*, *Streptococcus faecalis*, 5mg/mL, circle of inhibiting bacterium = 12~18mm). Source: CU SHENG AO DING ZAO *Laurencia caespitosa*, DUN XING AO DING ZAO *Laurencia obtusa*, LUE DA AO DING ZAO *Laurencia majuscula*. Ref: 2801, 2802, 2803, 2804.



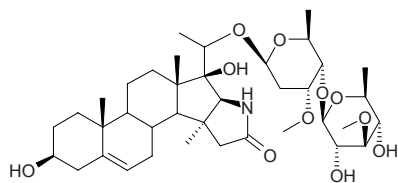
**15911 Obtusol**

12-Ursene-3β,27-diol [260392-01-6] C<sub>30</sub>H<sub>50</sub>O<sub>2</sub> (442.73). [α]<sub>D</sub><sup>27</sup> = +4° (c = 0.2, CHCl<sub>3</sub>). Source: DUN XING JI DAN HUA *Plumeria obtusa* (leaf). Ref: 2385.



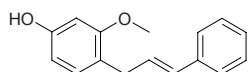
**15912 Obtusolactam-20(R)-O-[β-thevetopyranosyl-(1→4)-β-cymaropyranoside]**

C<sub>38</sub>H<sub>61</sub>NO<sub>11</sub> (707.91). White powder. Source: DUN XING BAI YE TENG *Cryptolepis obtusa* (root). Ref: 3920.



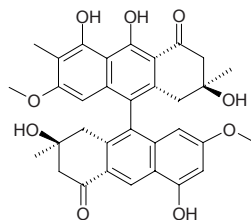
**15913 Obtustyrene**

[21148-31-2] C<sub>16</sub>H<sub>16</sub>O<sub>2</sub> (240.30). Oil, bp 140°C/0.1mmHg (bath). Source: JIANG ZHEN XIANG *Dalbergia odorifera*, *Dalbergia obtusa*, *Dalbergia retusa*. Ref: 1521, 1266.



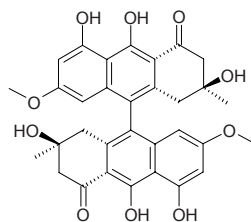
**15914 Occidentalol I**

[118528-51-1] C<sub>33</sub>H<sub>32</sub>O<sub>9</sub> (572.62). Yellow-brown prisms (C<sub>6</sub>H<sub>6</sub>), mp 280°C (dec). Source: WANG JIANG NAN *Cassia occidentalis*. Ref: 2913.



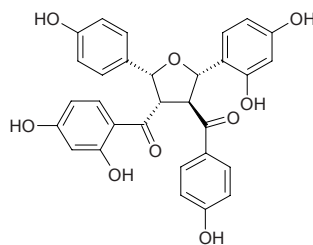
**15915 Occidentalol II**

[118528-52-2] C<sub>32</sub>H<sub>30</sub>O<sub>10</sub> (574.59). Yellow-brown prisms (C<sub>6</sub>H<sub>6</sub>), mp 270°C (dec). Source: WANG JIANG NAN *Cassia occidentalis*. Ref: 2913.



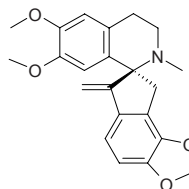
**15916 Ochnone**

*rel-4α*-(2,4-Dihydroxybenzoyl)-3β-(4-hydroxybenzoyl)-2α-(2,4-dihydroxyphenyl)-5α-(4-hydroxyphenyl)tetrahydrofuran C<sub>30</sub>H<sub>24</sub>O<sub>9</sub> (528.52). White solid, mp 164~166°C, [α]<sub>D</sub><sup>23.1</sup> = -96.7° (c = 0.21, MeOH). Pharm: Cytotoxic (MCF7 breast cancer cells, MTT method, IC<sub>50</sub> = (7±0.5) μmol/L, control Doxorubicin, IC<sub>50</sub> = (0.1±0.01) μmol/L); antibacterial inactive (MDR *Staphylococcus aureus*: RN4220 strain, 64 μg/mL, control Erythromycin, MIC = 128 μg/mL; XU212 strain, 64 μg/mL, control Tetracycline, MIC = 128 μg/mL; SA-1199-B strain, 64 μg/mL, control Norfloxacin, MIC = 32 μg/mL). Source: CHANG E JIN LIAN MU PI *Ochna macrocalyx*, SANG DAO BU SHI MU *Brackenridgea zanguebarica*. Ref: 5372.



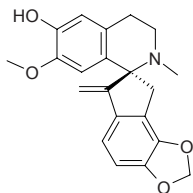
**15917 Ochotensimine**

[4829-36-1] C<sub>22</sub>H<sub>23</sub>NO<sub>4</sub> (365.43). Syrup, [α]<sub>D</sub><sup>20</sup> = +46.3° (c = 0.54, MeOH). Source: HUANG ZI JIN *Corydalis ochotensis*, SHAN YAN HU SUO *Corydalis bulbosa* [Syn. *Corydalis solida*], XIAO HUANG ZI JIN *Corydalis ochotensis* var. *raddeana*. Ref: 1521, 2920.

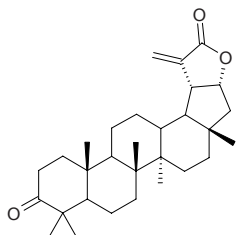


**15918 Ochotensine**

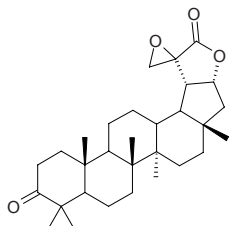
[4959-88-0] C<sub>21</sub>H<sub>21</sub>NO<sub>4</sub> (351.41). Prisms (CHCl<sub>3</sub>), mp 252°C, [α]<sub>D</sub><sup>24</sup> = +51.7° (c = 0.2, CHCl<sub>3</sub>), [α]<sub>D</sub><sup>23</sup> = +63.9° (c = 2.0, 0.1M HCl). Source: BEI ZI JIN *Corydalis sibirica*, DOU ZHUANG HE BAO MU DAN *Dicentra cucullaria*, HUANGZI JIN *Corydalis ochotensis*, SHAN YAN HU SUO *Corydalis bulbosa* [Syn. *Corydalis solida*], XIAO HUANG ZI JIN *Corydalis ochotensis* var. *raddeana*, *Corydalis vaginans*. Ref: 1521, 2964.

**15919 Ochraceolide A**

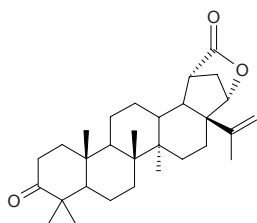
[138913-61-8] C<sub>30</sub>H<sub>44</sub>O<sub>3</sub> (452.68). Colorless crystals (CHCl<sub>3</sub>-MeOH), mp 223~225°C, [α]<sub>D</sub><sup>25</sup> = +31° (c = 0.1, MeOH). Pharm: Cytotoxic (P<sub>388</sub> *in vitro*, ED<sub>50</sub> = 0.26μg/mL; BC1, HT, Lu1, KB-V, LNCaP, ZR-75-1, U373: ED<sub>50</sub> = 4.5~17.2μg/mL). Source: WO LI HE GUAN BAN *Lophopetalum wallichii*, ZHE HUANG KAO GU NA *Kokoona ochracea*. Ref: 2892, 2957.

**15920 Ochraceolide B**

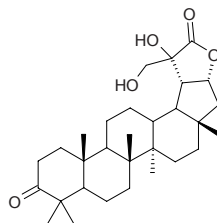
[138913-62-9] C<sub>30</sub>H<sub>44</sub>O<sub>4</sub> (468.68). Colorless crystals (Et<sub>2</sub>O), mp 236~238°C, [α]<sub>D</sub><sup>25</sup> = +10° (c = 0.1, MeOH). Pharm: Cytotoxic (P<sub>388</sub> ED<sub>50</sub> = 7.8μg/mL, KB3 ED<sub>50</sub> = 5.2μg/mL). Source: ZHE HUANG KAO GU NA *Kokoona ochracea*. Ref: 2892.

**15921 Ochraceolide C**

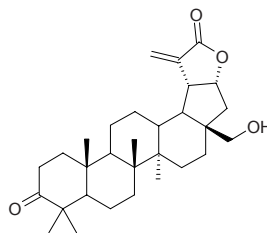
[138913-63-0] C<sub>30</sub>H<sub>44</sub>O<sub>3</sub> (452.68). Colorless crystals (toluene-pet. ether), mp 236~238°C, [α]<sub>D</sub><sup>25</sup> = -25° (c = 0.1, MeOH). Pharm: Cytotoxic (P<sub>388</sub> *in vitro*, ED<sub>50</sub> = 0.53μg/mL). Source: ZHE HUANG KAO GU NA *Kokoona ochracea*. Ref: 2892.

**15922 Ochraceolide D**

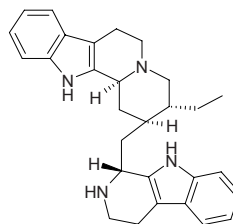
[152221-16-4] C<sub>30</sub>H<sub>46</sub>O<sub>5</sub> (486.70). Colorless crystals (CHCl<sub>3</sub>-MeOH), mp 253~256°C, [α]<sub>D</sub><sup>25</sup> = +10° (c = 0.1, MeOH). Pharm: Cytotoxic (hmn malignant glioma cell U373 *in vitro*, ED<sub>50</sub> = 3.9μg/mL; HT1080, A-431, LNCaP: weak activity). Source: ZHE HUANG KAO GU NA *Kokoona ochracea*. Ref: 2892.

**15923 Ochraceolide E**

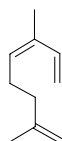
[152231-40-8] C<sub>30</sub>H<sub>44</sub>O<sub>4</sub> (468.68). Colorless crystals (CHCl<sub>3</sub>), mp 233~235°C, [α]<sub>D</sub><sup>25</sup> = +29° (c = 0.1, MeOH). Pharm: Cytotoxic (HT1080 ED<sub>50</sub> = 12.2μg/mL, Mel-2 ED<sub>50</sub> = 11.9μg/mL, ZR-75-1 ED<sub>50</sub> = 18.8μg/mL, U373 ED<sub>50</sub> = 8.6μg/mL). Source: ZHE HUANG KAO GU NA *Kokoona ochracea*. Ref: 2892.

**15924 Ochrolifuanine A**

[35527-46-9] C<sub>29</sub>H<sub>34</sub>N<sub>4</sub> (438.62). Pharm: Toxin. Source: YI SI MEI GUI SHU *Ochrosia confusa*. Ref: 658.

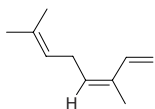
**15925 Ocimene**

α-Ocimene [502-99-8] C<sub>10</sub>H<sub>16</sub> (136.24). Source: JU PI *Citrus reticulata*, WU ZHU YU *Evodia rutaecarpa* (in 1915, the compound was isolated from the plant). Ref: 5505.

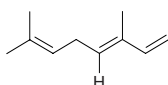


**15926  $\beta$ -cis-Ocimene**

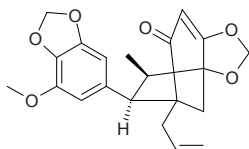
$C_{10}H_{16}$  (136.24). bp 81°C/30mmHg. Source: GUI HUA *Osmanthus fragrans*, HONG NAN PI *Machilus thunbergii*, HU TAO YE *Juglans regia*, JI DAN GUO *Passiflora edulis*, LIAN QIAO *Forsythia suspensa*, MEI GUI HUA *Rosa rugosa*, QIANG HUO *Notopterygium incisum*, SHENG JIANG *Zingiber officinale*, SHI JI NING *Mosla scabra* [Syn. *Mosla punctata*], YA ER QIN *Cryptotaenia japonica*, YU XIANG CAO *Mentha rotundifolia*, ZHONG BIN JU *Tithonia diversifolia*. Ref: 2, 660.

**15927  $\beta$ -trans-Ocimene**

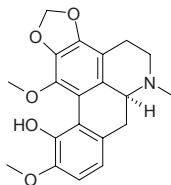
$C_{10}H_{16}$  (136.24). bp 81°C/30mmHg. Source: LIAN QIAO *Forsythia suspensa*, QIANG HUO *Notopterygium incisum*. Ref: 2.

**15928 Ocobullenone**

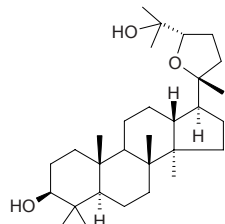
$C_{21}H_{22}O_6$  (370.41). Pharm: Anti-inflammatory (5-LOX inhibitor,  $IC_{50}$  = 100  $\mu$ mol/L; COX-1 inhibitor, > 500  $\mu$ mol/L, inactive, control Indomethacin,  $IC_{50}$  = 3.1  $\mu$ mol/L, COX-2 inhibitor, > 500  $\mu$ mol/L, inactive, Indomethacin,  $IC_{50}$  = 188  $\mu$ mol/L). Source: NAN FEI ZHANG GUI *Ocotea bullata* (stem cortex). Ref: 3971.

**15929 Ocokryptine**

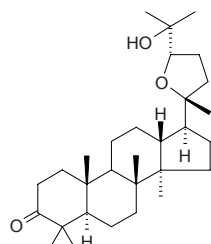
*N*-Methylhernandine  $C_{20}H_{21}NO_5$  (355.39). Pharm: Anti-HIV-1 inactive (HIV-1 IN inhibitor,  $IC_{50}$  > 100  $\mu$ mol/L, positive control Suramin,  $IC_{50}$  = 2.4  $\mu$ mol/L). Source: DING HU DIAO ZHANG *Lindera chunii* (root). Ref: 4224.

**15930 Ocotillo II**

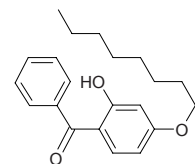
[19942-0-42]  $C_{30}H_{52}O_3$  (460.75). Crystals (EtOH), mp 198~200°C,  $[\alpha]_D^{25}$  = +28.3° ( $c$  = 2.4,  $CHCl_3$ ). Source: LONG NAO GAO XIANG *Dryobalanops aromatica*, HUA LAI CI SHU *Fouquieria splendens*, *Neolloydia texensis*. Ref: 1521, 2439.

**15931 Ocotillone**

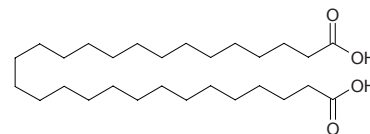
[22549-21-9]  $C_{30}H_{50}O_3$  (458.73). Crystals,  $[\alpha]_D$  = +50° (dioxane). Pharm: Cytotoxic (leukemia cells L<sub>1210</sub>,  $IC_{50}$  = 20  $\mu$ g/mL)<sup>[3786]</sup>. Source: LONG NAO GAO XIANG *Dryobalanops aromatica*, *Dipterus hispidus*, *Juliania adstringens* (bark), *Dryanobalanops* spp. Ref: 1521, 2449, 3786.

**15932 Octabenzone**

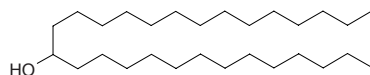
$C_{21}H_{26}O_3$  (326.44). Source: FENG YA JUE *Coniogramme japonica* [Syn. *Hemionitis japonica*]. Ref: 2942.

**15933 Octacosanedioic acid**

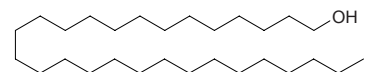
$C_{28}H_{54}O_4$  (454.74). Source: WEN JING *Equisetum arvense*. Ref: 6.

**15934 14-Octacosanol**

[138967-02-9]  $C_{28}H_{58}O$  (410.77). mp 79~80°C. Pharm: Aromatase inhibitor (29.6  $\mu$ mol/L, InRt = (24.3±8.9)%). Source: YI ZHU QIAN MA *Urtica dioica*. Ref: 900.

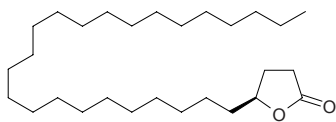
**15935 1-Octacosanol**

[557-61-9]  $C_{28}H_{58}O$  (410.77). mp 83.2~83.4°C. Source: BAI GUO *Ginkgo biloba*, HAI HONG DOU *Adenantha pavonina*, HE SHUO YAO HUA *Wikstroemia chamaedaphne*, HUI BAO HAO *Artemisia roxburgiana*, JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*], LAO SHU LE *Acanthus ilicifolius*, MU JIN PI *Hibiscus syriacus*, PEI LAN *Eupatorium fortunei*, SU MU *Caesalpinia sappan*, WU TONG BAI PI *Firmiana simplex*, XIANG MAO *Cymbopogon citratus*, ZE QI *Euphorbia helioscopia*. Ref: 2, 503, 519, 660, 1521.



**15936 Octacosan-4-olide**

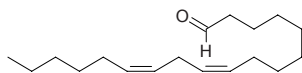
$C_{28}H_{54}O_2$  (422.74). White powder, mp 70°C (Hexane:EtOAc = 9:1). **Pharm:** Phytotoxin inactive (doesn't inhibit radicle growth of *Amaranthus hypochondriacus* and *Echinochloa crusgalli*); CaM interactor inactive. **Source:** FU CHUI FE LAO JU *Flourensia cernua*. **Ref:** 3433.

**15937 Octacosyl lignocerate**

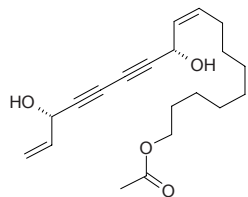
$C_{52}H_{104}O_2$  (761.41). **Source:** CHONG BAI LA *Ericerus pela*. **Ref:** 6.

**15938 9,12-Octadecadienal**

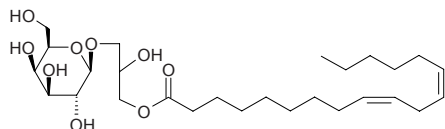
[2541-61-9]  $C_{18}H_{32}O$  (264.46). mp -32.3°C. **Source:** SHAN NAI *Kaempferia galanga*, *Hyphantria cunea*. **Ref:** 1344, 1521.

**15939 9,17-Octadecadiene-12,14-diyne-1,11,16-triol, 1-acetate**

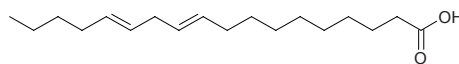
[52691-49-3]  $C_{20}H_{28}O_4$  (332.44). Oil,  $[\alpha]_D^{25} = +178.3^\circ$  ( $c = 8.9$ ,  $CHCl_3$ ), RI[20, 589nm] = +107° ( $c = 0.7$ , alcohol). **Pharm:** Antibacterial (*Staphylococcus aureus* RN4220 MIC = 50.0µg/mL; *Bacillus subtilis* MIC = 25.0µg/mL; *Mycobacterium tuberculosis*; isoniazid-resistant *Mycobacterium tuberculosis avium*). **Source:** JIE JIE LEI A WEI *Ferulago nodosa*, MEI ZHOU CI SHEN *Oplonanax horridus*. **Ref:** 2830, 2831.

**15940 (2S)-1-O-(9Z,12Z-Octadeca-dien-oyl)-3-O-β-D-galactopyranosyl-glycerol**

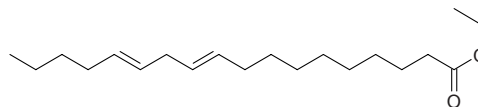
$C_{27}H_{48}O_9$  (516.68). Colorless oil,  $[\alpha]_D = -24^\circ$  ( $c = 0.1$ , MeOH). **Pharm:** PAF antagonist. **Source:** XI LAN ROU GUI *Cinnamomum zeylanicum*. **Ref:** 2199.

**15941 10,13-Octadecadienoic acid**

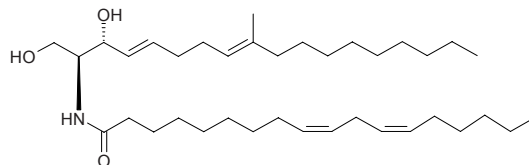
$C_{18}H_{32}O_2$  (280.45). **Source:** BIAN JING HUANG QI *Astragalus complanatus*. **Ref:** 2882.

**15942 10,13-Octadecadienoic acid ethyl ester**

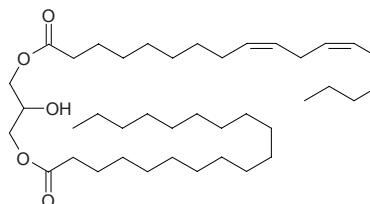
$C_{20}H_{36}O_2$  (308.51). **Source:** CI WU JIA *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*]. **Ref:** 2883.

**15943 (2S,3R,4E,8E,9'Z,12'Z)-N-9',12'-Octadecadienoyl-2-amino-9-methyl-4,8-octadecadiene-1,3-diol**

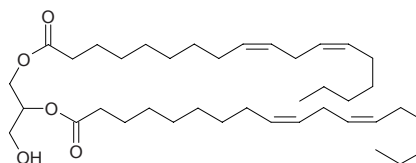
$C_{37}H_{67}NO_3$  (573.95). Amorphous powder,  $[\alpha]_D^{30} = -13.3^\circ$  ( $c = 0.08$ ,  $CHCl_3$ ). **Source:** HOU SHU SHAN GU *Panellus serotinus*, *Lyophyllum connatum*. **Ref:** 4195.

**15944 1-O-(9Z,12Z-Octadecadienoyl)-3-O-nonadecanoyl glycerol**

$C_{40}H_{74}O_5$  (635.03). **Pharm:** Cytotoxic inactive (*in vitro*, LNCaP,  $IC_{50} > 100\mu\text{mol/L}$ ). **Source:** LANG DANG ZI *Hyoscyamus niger* (seed: yield = 0.0004%dw). **Ref:** 4607.

**15945 1-O-(9Z,12Z-Octadecadienoyl)-2-O-(9Z,12Z-octadecadienoyl) glycerol**

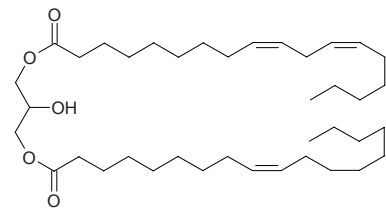
$C_{39}H_{68}O_5$  (616.97). **Pharm:** Cytotoxic inactive (*in vitro*, LNCaP,  $IC_{50} > 100\mu\text{mol/L}$ ). **Source:** LANG DANG ZI *Hyoscyamus niger* (seed: yield = 0.018%dw). **Ref:** 4607.



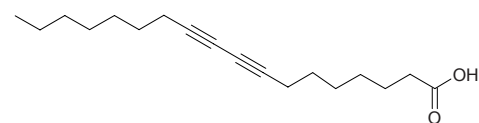


**15946 1-O-(9Z,12Z-Octadecadienoyl)-3-O-(9Z-octadecenoyl) glycerol**

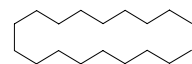
$C_{39}H_{70}O_5$  (628.99). **Pharm:** Cytotoxic inactive (*in vitro*, LNCaP,  $IC_{50} > 100\mu\text{mol/L}$ ). **Source:** LANG DANG ZI *Hyoscyamus niger* (seed: yield = 0.0012%dw). **Ref:** 4607.

**15947 Octadeca-8,10-dienoic acid**

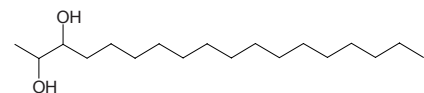
$C_{18}H_{28}O_2$  (276.42). **Pharm:** Inhibits cancer cell invasion (MM1 cells, *in vitro*,  $10\mu\text{g/mL}$ , InRt = 61.1%). **Source:** HEI ZI LI GUO JI SHENG *Scurrura atropurpurea* (yield = 0.0042%). **Ref:** 4329.

**15948 n-Octadecane**

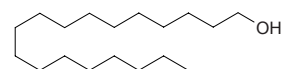
Octadecane [593-45-3]  $C_{18}H_{38}$  (254.50). **Source:** DANG SHEN *Codonopsis pilosula*. **Ref:** 2.

**15949 erythro-2,3-Octadecane-diol**

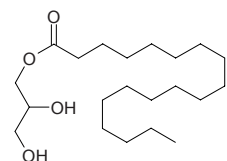
$C_{18}H_{38}O_2$  (286.50). **Source:** ZHI *Phasianus colchicus*. **Ref:** 6.

**15950 Octadecanol**

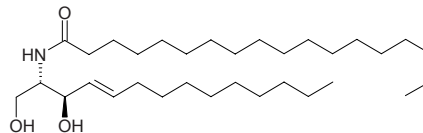
Stearyl alcohol [112-92-5]  $C_{18}H_{38}O$  (270.50). **Source:** BAI ZHI *Angelica dahurica* [Syn. *Angelica porphyrocaulis*], SHUI LIU DOU *Pongamia pinnata* (stem cortex: yield = 0.00035%). **Ref:** 2, 4721.

**15951 1-O-Octadecanoyl glycerol**

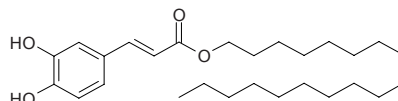
Octadecanoic acid-2,3-dihydroxypropyl ester  $C_{21}H_{42}O_4$  (358.57). **Pharm:** Cytotoxic inactive (*in vitro*, LNCaP,  $IC_{50} > 100\mu\text{mol/L}$ )<sup>[4607]</sup>. **Source:** LANG DANG ZI *Hyoscyamus niger* (seed: yield = 0.0017%dw), TIAN SHAN ZHU ZI *Garcinia dulcis* (fruit). **Ref:** 4607, 5319.

**15952 (4E,2S,3R)-2-N-Octadecanoyl-4-tetradecasphingenine**

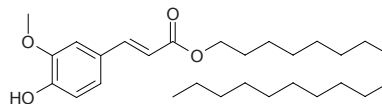
$C_{32}H_{63}NO_3$  (509.86). White powder,  $[\alpha]_D^{20} = -3.5^\circ$  ( $c = 0.012$ ,  $CHCl_3$ ). **Source:** BAI JIANG CAN *Bombyx mori*. **Ref:** 4684.

**15953 Octadecanyl caffeate**

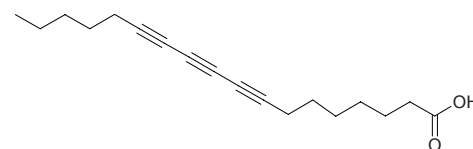
$C_{27}H_{44}O_4$  (432.65). **Source:** ZI CAO *Lithospermum erythrorhizon*. **Ref:** 2193.

**15954 Octadecanyl-3-methoxy-4-hydroxy benzeneacrylate**

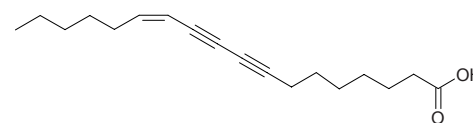
Octadecanyl 3-(4-hydroxy-3-methoxy-phenyl)-acrylate ester  $C_{28}H_{46}O_4$  (446.68). White acicular crystals, mp 67.5~69.0°C; white powder, mp 86~89°C. **Pharm:** Inhibitory activity against NFAT Transcription ( $IC_{50} = (25.7 \pm 1.7)\mu\text{mol/L}$ , positive control Cyclosporin A,  $IC_{50} = (0.29 \pm 0.01)\mu\text{mol/L}$ )<sup>[2536]</sup>. **Source:** DA JI<sup>(3)</sup> *Euphorbia pekinensis*, HUA CHA BIAO *Ribes fasciculatum* var. *chinense*, SANG HUANG *Phellinus igniarius* (sporocarp: yield = 0.0011%dw). **Ref:** 360, 2536, 4747.

**15955 Octadeca-8,10,12-trienoic acid**

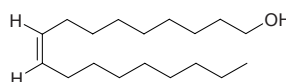
$C_{18}H_{24}O_2$  (272.39). **Pharm:** Inhibits cancer cell invasion (MM1 cells, *in vitro*,  $10\mu\text{g/mL}$ , InRt = 99.4%,  $5\mu\text{g/mL}$ , InRt = 94.9%). **Source:** HEI ZI LI GUO JI SHENG *Scurrura atropurpurea* (yield = 0.0170%). **Ref:** 4329.

**15956 (Z)-Octadec-12-ene-8,10-dienoic acid**

$C_{18}H_{26}O_2$  (274.41). **Pharm:** Inhibits cancer cell invasion (MM1 cells, *in vitro*,  $10\mu\text{g/mL}$ , InRt = 89.8%). **Source:** HEI ZI LI GUO JI SHENG *Scurrura atropurpurea* (yield = 0.0082%). **Ref:** 4329.

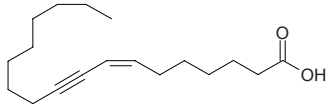
**15957 9(Z)-Octadecen-1-ol**

Oleyl alcohol [143-28-2]  $C_{18}H_{36}O$  (268.49). bp 205~210°C/15mmHg. **Source:** BAI ZHI *Angelica dahurica* [Syn. *Angelica porphyrocaulis*], LI *Chenopodium album*. **Ref:** 2, 6.

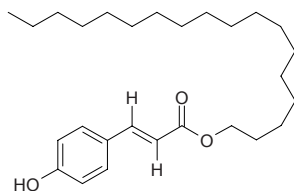


**15958 (Z)-7-Octadecen-9-ynoic acid**

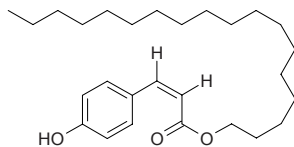
$C_{18}H_{30}O_2$  (278.44). Colorless oil. Source: *Lettowianthus stellatus* (root cortex). Ref: 3944.

**15959 Octadecyl (E)-p-coumarate**

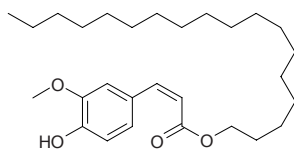
$C_{27}H_{44}O_3$  (416.65). Source: ZHAI YE NAN YANG SHAN *Araucaria angustifolia* (seeding root). Ref: 5098.

**15960 Octadecyl (Z)-p-coumarate**

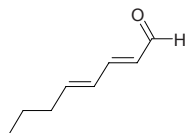
$C_{27}H_{44}O_3$  (416.65). Source: ZHAI YE NAN YANG SHAN *Araucaria angustifolia* (seeding root). Ref: 5098.

**15961 Octadecyl (Z)-ferulate**

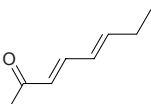
$C_{28}H_{46}O_4$  (446.68). Source: ZHAI YE NAN YANG SHAN *Araucaria angustifolia* (seeding root). Ref: 5098.

**15962 (E,E)-2,4-Octadienal**

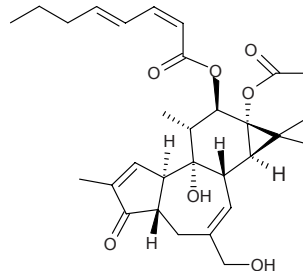
$C_8H_{12}O$  (124.18). Source: KUN BU *Laminaria japonica*. Ref: 1252.

**15963 3,5-Octadiene-2-one**

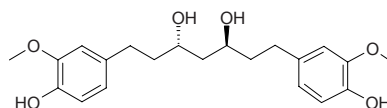
$C_8H_{12}O$  (124.18). Source: CHA YE *Camellia sinensis* [Syn. *Thea sinensis*]. Ref: 660.

**15964 12-O-2Z,4E-Octadienoyl-4-deoxyphorbol-13-acetate**

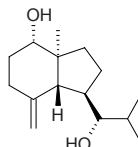
$C_{30}H_{40}O_7$  (512.65). Pharm: Irritant. Source: LU YU SHU *Euphorbia tirucalli*. Ref: 658.

**15965 Octahydrocurcumin**

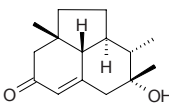
$C_{21}H_{28}O_6$  (376.45). Source: GAO LIANG JIANG *Alpinia officinarum*. Ref: 660.

**15966 Octahydro-4-hydroxy-3α-methyl-7-methylene-α-(1-methylethyl)-1H-indene-1-methanol**

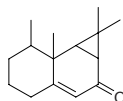
$C_{15}H_{26}O_2$  (238.37). White powder,  $[\alpha]_D^{20} = -60.8^\circ$  ( $c = 0.36$ ,  $CHCl_3$ ). Pharm: Anti-HIV-1 inactive (*in vitro*, HOG.R5). Source: DIE DA LAO *Litsea verticillata* (leaf and twig; yield = 0.00012%dw). Ref: 4688.

**15967 1,2,2a,3,6,7,8,8a-Octahydro-7-hydroxy-2a,7,8-trimethylacena-phthalen-4(4H)-one**

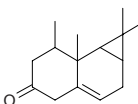
$C_{15}H_{22}O_2$  (234.34). Colorless oil,  $[\alpha]_D^{25} = +27.1^\circ$  ( $c = 0.02$ ,  $CHCl_3$ ). Source: PA KE YE XIANG SHU *Cestrum parqui* (fresh leaf). Ref: 5327.

**15968 1,1a,4,5,6,7,7a,7β-Octahydro-1,1,7,7a-tetramethyl-2H-cyclopropa(α)-naphthalen-2-one**

$C_{15}H_{22}O$  (218.34). Source: WU WEI ZI *Schisandra chinensis*. Ref: 2.

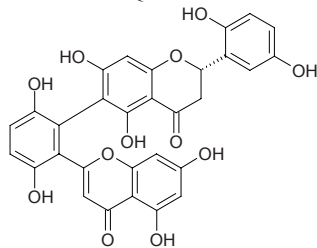
**15969 1,1a,2,4,6,7,7a,7β-Octahydro-1,1,7,7a-tetramethyl-5H-cyclopropa(α)-naphthalen-5-one**

$C_{15}H_{22}O$  (218.34). Source: WU WEI ZI *Schisandra chinensis*. Ref: 2.

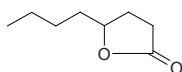


**15970 (1-2*S*)-1-*S*,*II*-5,*II*-5,*I*-7,*II*-7,*I*-2',*II*-2',*I*-5',*II*-5'-Octahydroxy-[1-*I*,*II*-6']-flavanonylflavone**

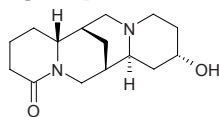
$C_{30}H_{20}O_{12}$  (572.49). Yellow needles (MeOH), mp 229–230°C (dec). Source: KE AI HUANG QIN *Scutellaria amabilis* (root: yield = 0.0051% dw). Ref: 2072.

**15971  $\gamma$ -Octalactone**

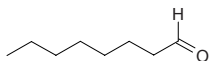
4-*n*-Butyl-4-hydroxybutyric acid lactone [104-50-7]  $C_8H_{14}O_2$  (142.20). bp 132–133°C/20mmHg. Source: CHAI HU *Bupleurum chinense*, XING ZI *Prunus armeniaca*. Ref: 2, 6.

**15972 Octalupine**

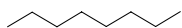
13-Hydroxylupanine [15358-48-2]  $C_{15}H_{24}N_2O_2$  (264.37). Pharm: Antiarrhythmic; antihypertensive. Source: JIN QUE ER *Cytisus scoparius* [Syn. *Spartium scoparium*], HUI HUANG HUA *Thermopsis cinerea*. Ref: 658.

**15973 Octanal**

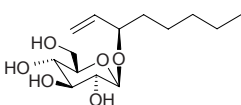
Caprylic aldehyde [124-13-0]  $C_8H_{16}O$  (128.22). Source: FANG FENG *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*], JU PI *Citrus reticulata*, KUAN YE QIANG HUO *Notopterygium forbesii* [Syn. *Notopterygium franchetii*], REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], SHENG JIANG *Zingiber officinale*. Ref: 2, 660.

**15974 *n*-Octane**

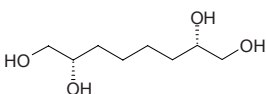
[111-65-9]  $C_8H_{18}$  (114.23). Source: DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*], SHENG JIANG *Zingiber officinale*. Ref: 2.

**15975 (3*R*)-1-Octan-3-enyl- $\beta$ -*D*-glucopyranoside**

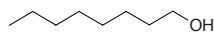
$C_{14}H_{26}O_6$  (390.36). Source: JIA MA CHI XIAN *Bacopa monniera* (whole herb: yield = 0.0041% fw). Ref: 4664.

**15976 (2*S*\*,7*S*\*)-(2)-Octane-1,2,7,8-tetrol**

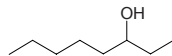
$C_8H_{18}O_4$  (178.23). Source: SUO SHA MI *Amomum xanthioides* (seed). Ref: 4365.

**15977 Octanol**

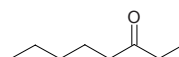
1-Octanol [111-87-5]  $C_8H_{18}O$  (130.23). Source: FANG FENG *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*], JU PI *Citrus reticulata*, XI YANG SHEN *Panax quinquefolium*. Ref: 2.

**15978 3-Octanol**

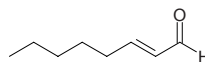
Ethylamylcarbinol  $C_8H_{18}O$  (130.23). Source: HUO XIANG *Agastache rugosus*, JING JIE *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*]. Ref: 2.

**15979 3-Octanone**

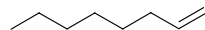
Amyl ethyl ketone [106-68-3]  $C_8H_{16}O$  (128.22). bp (+) 178.0–179.5°C, (–) 82°C/24mmHg; bp 165–166°C. Source: HUO XIANG *Agastache rugosus*, JING JIE *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*], XIANG XUN *Lentinus edodes*. Ref: 2, 6.

**15980 (*E*)-2-Octenal**

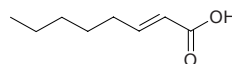
$C_8H_{14}O$  (136.20). mp 125–126°C. Source: BING CHI XIAN *Tetraplodon mnioides* [Syn. *Tetraplodon bryoides*; *Splachnum mnioides*], KUN BU *Laminaria japonica*. Ref: 2845, 1252.

**15981 1-Octene**

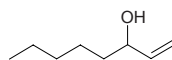
$C_8H_{16}$  (112.22). Source: BAN XIA *Pinellia ternata*. Ref: 1401.

**15982 2-Octenic acid**

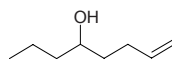
[53907-72-5]  $C_8H_{14}O_2$  (142.20). Source: CHAI HU *Bupleurum chinense*. Ref: 2.

**15983 1-Octen-3-ol**

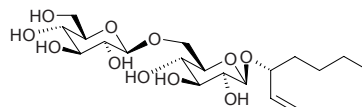
Matsutake alcohol  $C_8H_{16}O$  (128.22). bp 165–175°C. Source: BAI SU ZI *Perilla frutescens*, JING JIE *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*], SONG XUN *Tricholoma matsutake* [Syn. *Armillaria matsutake*]. Ref: 2, 6.

**15984 7-Octen-4-ol**

3-Hydroxy-1-octene [3391-86-4]  $C_8H_{16}O$  (128.22). Source: FANG FENG *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*]. Ref: 2.

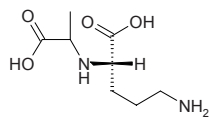
**15985 (*R*)-Oct-1-en-3-yl *O*- $\alpha$ -*L*-arabinopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside**

$C_{20}H_{36}O_{11}$  (452.5). Pharm: Bone resorption inhibitor (PTH-induced in a bone organ culture system). Source: HAI JIN BI XIE *Dioscorea spongiosa* (Rhizome: yield = 0.0017%). Ref: 4692.

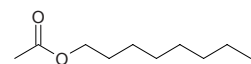


**15986 Octopinic acid**

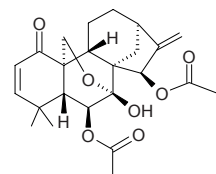
$C_8H_{16}N_2O_4$  (204.23). Source: DI JIN *Parthenocissus tricuspidata*. Ref: 6.

**15987 n-Octyl acetate**

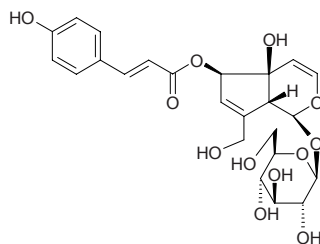
$C_{10}H_{20}O_2$  (172.27). Source: DA LIANG JIANG *Alpinia galanga*. Ref: 660.

**15988 Odonicin**

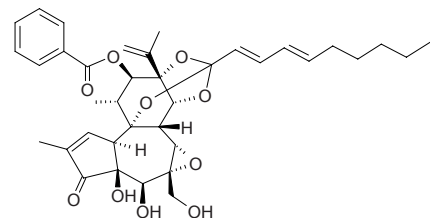
[51419-51-3]  $C_{24}H_{30}O_7$  (430.50). Crystals (MeOH), mp 193–195°C,  $[\alpha]_D^{26} = -193^\circ$  ( $c = 0.1$ ,  $CHCl_3$ ); mp 197–199°C,  $[\alpha]_D^{29} = -195.9^\circ$  ( $c = 0.15$ ,  $C_5H_5N$ ). Source: CHANG GUAN XIANG CHA CAI *Rabdosia longituba*, MAO YE XIANG CHA CAI *Isodon japonica* [Syn. *Rabdosia japonica*], XIAN MAI XIANG CHA CAI *Rabdosia nervosa*. Ref: 2819, 2820, 2821, 4067.

**15989 Odontoside**

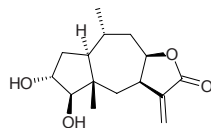
[30358-89-5]  $C_{24}H_{28}O_{12}$  (508.48). Source: CHI YE CAO *Odontites serotina*. Ref: 6.

**15990 Odoracin**

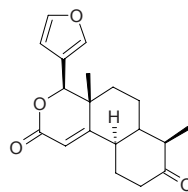
[60195-70-2]  $C_{37}H_{44}O_{10}$  (648.76). mp 204–206°C,  $[\alpha]_D^{32} = +61.7^\circ$  ( $CHCl_3$ ). Pharm: Antineoplastic (leukemia). Source: CAO WU JIU *Stillingia sylvatica* [Syn. *Sapium sylvatica*], RUI XIANG GEN *Daphne odora*, YUAN HUA *Daphne genkwa*, KUAN YE GE NI DI MU *Gnidia latifolia*. Ref: 1521, 2862.

**15991 Odoratin I\***

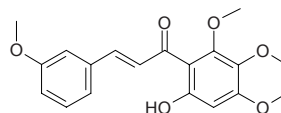
Hymenoratin [19908-77-1]  $C_{15}H_{22}O_4$  (266.34). Thin acicular crystals (acetone), mp 165–167°C. Pharm: Cytotoxic (KB,  $ED_{50} = 4\mu g/mL$ ). Source: BAI LAI SHI JU *Baileya multiradiata*, SHAO BIAN HUA BAI LAI SHI JU *Baileya pauciradiata*, XIANG MO ZHI JU *Hymenoxys odorata*. Ref: 5, 661.

**15992 Odoratin II\***

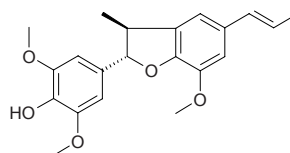
[10245-15-5]  $C_{19}H_{22}O_4$  (314.38). Crystals (EtOAc), mp 216–223°C,  $[\alpha]_D = +155^\circ$  ( $c = 0.74$ ,  $CHCl_3$ ). Source: YAN YANG CHUN *Cedrela odorata*. Ref: 2958.

**15993 Odoratin III\***

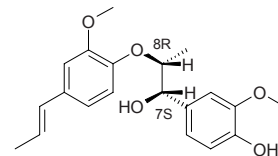
6'-Hydroxy-2',3',4,4'-tetramethoxychalcon [41929-26-4]  $C_{19}H_{20}O_6$  (344.37). Source: KUN MING JI XUE TENG *Milletia dielsiana*, FEI JI CAO *Eupatorium odoratum*. Ref: 2896, 2897.

**15994 Odoratisol A**

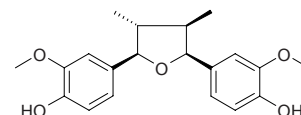
$C_{21}H_{24}O_5$  (356.42). Oil,  $[\alpha]_D^{25} = -35.1^\circ$  ( $c = 1.22$ ,  $CHCl_3$ ). Source: JI XIANG RUN NAN *Machilus odoratissima* (bark: yield = 0.0004%dw). Ref: 2070.

**15995 Odoratisol B**

$C_{20}H_{24}O_5$  (344.41). Oil,  $[\alpha]_D^{25} = +18.6^\circ$  ( $c = 1.22$ ,  $CHCl_3$ ). Source: JI XIANG RUN NAN *Machilus odoratissima* (bark: yield = 0.00035%dw). Ref: 2070.

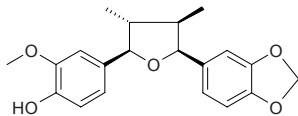
**15996 Odoratisol C**

$C_{20}H_{24}O_5$  (344.41). Oil,  $[\alpha]_D^{25} = -26.0^\circ$  ( $c = 2.79$ ,  $CHCl_3$ ). Source: JI XIANG RUN NAN *Machilus odoratissima* (bark: yield = 0.0014%dw). Ref: 2070.

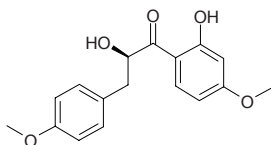


**15997 Odoratisol D**

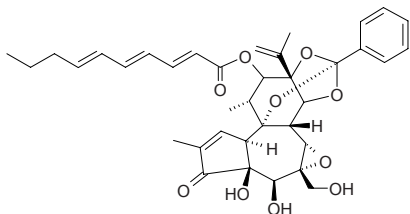
$C_{20}H_{22}O_5$  (342.40). Oil,  $[\alpha]_D^{25} = -12.8^\circ$  ( $c = 4.0$ ,  $CHCl_3$ ). Source: JI XIANG RUN NAN *Machilus odoratissima* (bark: yield = 0.0020%dw). Ref: 2070.

**15998 Odoratosol**

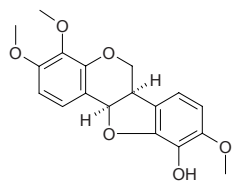
[94943-12-1]  $C_{17}H_{18}O_5$  (302.33). Pharm: Antifungal. Source: AN GE LA ZI TAN *Pterocarpus angolensis*. Ref: 658.

**15999 Odoratratin**

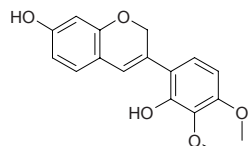
Gniditrin  $C_{37}H_{42}O_{10}$  (646.74). Source: LIANG HUA GE NI DI MU *Gnidia lamprantha*, RUI XIANG GEN *Daphne odora*. Ref: 1521, 2862.

**16000 Odoricarpan**

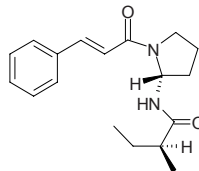
[101153-42-8]  $C_{18}H_{18}O_6$  (330.34). Source: JIANG ZHEN XIANG *Dalbergia odorifera*. Ref: 1266.

**16001 Odoriflavene**

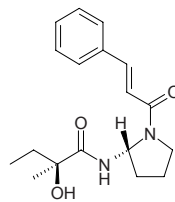
[101153-41-7]  $C_{17}H_{16}O_5$  (300.31). Prisms (EtOAc-hexane), mp 177.5~179°C. Pharm: Prostaglandin synthetase inhibitor ( $IC_{50} = 4.8\mu\text{mol/L}$ ). Source: JIANG ZHEN XIANG *Dalbergia odorifera*. Ref: 1266.

**16002 Odorine**

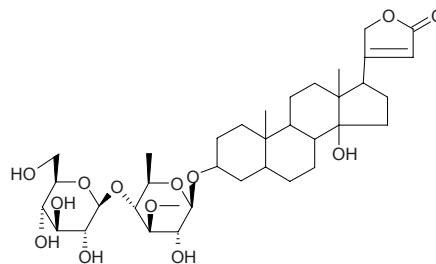
Roxburghiline; Roxburghilin [72755-20-5]  $C_{18}H_{24}N_2O_2$  (300.40). Needles (benzene), mp 218~219°C,  $[\alpha]_D^{25} = +72.6^\circ$  ( $c = 0.03$ ,  $CHCl_3$ ). Pharm: Promoter of cytotoxic effects of vincleucoblastine (inhibits vinblastine-resistant KB cells, odorine with 1 $\mu\text{g/mL}$  vinblastine, KB-V1 cell,  $ED_{50} = 6.4\mu\text{g/mL}$ ). Source: LUO KE SI BAO MI ZI LAN *Aglaia roxburghiana*, MI ZI LAN *Aglaia odorata*, TUE YUAN MI ZI LAN *Aglaia elliptica* (leaf), YIN SE MI ZI LAN *Aglaia argentea*. Ref: 2814, 2815, 2816, 2817, 2818, 4127.

**16003 (+)-Odorinol**

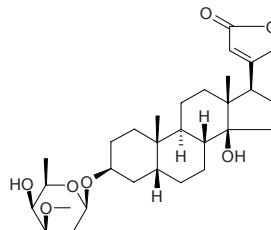
[72755-22-7]  $C_{18}H_{24}N_2O_3$  (316.40). Needles (pet. ether-benzene), mp 166~168°C,  $[\alpha]_D^{25} = +40.5^\circ$  ( $c = 0.01$ ,  $CHCl_3$ ). Pharm: Antiviral (inhibits markedly infection from RDV virus in young chicken embryo). Source: LUO KE SI BAO MI ZI LAN *Aglaia roxburghiana*, MI ZI LAN *Aglaia odorata*. Ref: 2814, 2952.

**16004 Odorobioside G**

[560-70-3]  $C_{36}H_{56}O_{13}$  (696.84). Prisms (MeOH-Me<sub>2</sub>CO-H<sub>2</sub>O), mp 240~242°C,  $[\alpha]_D^{18} = -8.1^\circ$  (MeOH). Source: MAO DI HUANG *Digitalis purpurea*, MAO HUA MAO DI HUANG *Digitalis lanata*. Ref: 1521.

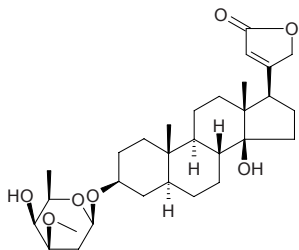
**16005 Odoroside A**

[12738-19-1]  $C_{30}H_{46}O_7$  (518.70). mp 180~185°C, 200~206°C. Source: JIA ZHU TAO *Nerium indicum*. Ref: 6.

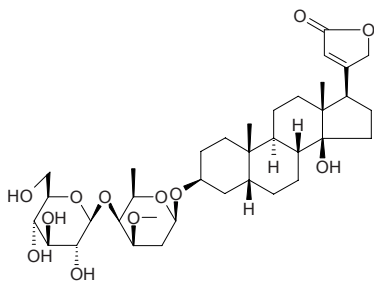


**16006 Odoroside B**

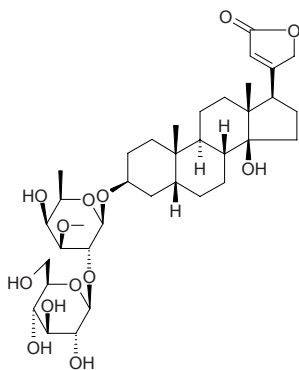
[58407-69-5]  $C_{30}H_{46}O_7$  (518.70). mp 220°C. Source: JIA ZHU TAO *Nerium indicum*. Ref: 6.

**16007 Odoroside D**

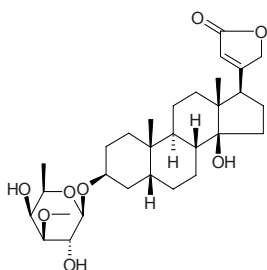
[In DNP]  $C_{36}H_{56}O_{12}$  (680.84). mp 254–256°C. Source: JIA ZHU TAO *Nerium indicum*. Ref: 6.

**16008 Odoroside F**

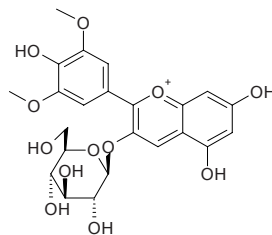
[In DNP]  $C_{36}H_{56}O_{13}$  (696.84). mp 298–302°C (dec). Source: JIA ZHU TAO *Nerium indicum*. Ref: 6.

**16009 Odoroside H**

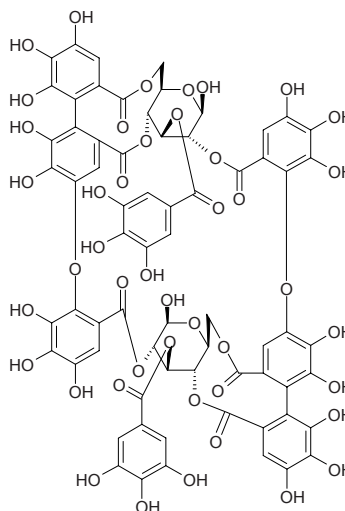
[18810-25-8]  $C_{30}H_{46}O_8$  (534.70). mp 228–232°C. Pharm: CNS depressant (mus, ip, 25mg/kg). Source: JIA ZHU TAO *Nerium indicum*. Ref: 6, 1845.

**16010 Oenin**

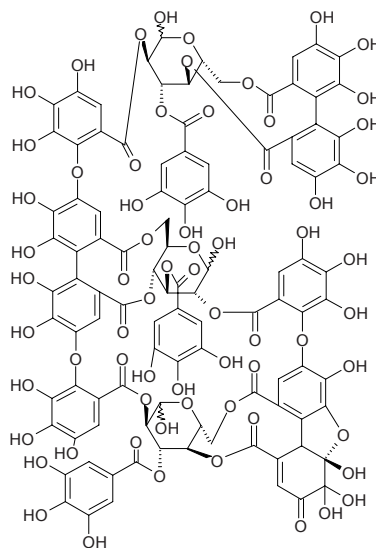
[7728-78-6]  $C_{23}H_{25}O_{12}^+$  (493.45). Source: JIU Liquor, PU<sup>(2)</sup> TAO *Vitis vinifera*. Ref: 6.

**16011 Oenothin B**

$C_{68}H_{48}O_{44}$  (1569.11). Pharm: ACE inhibitor ( $IC_{50}$  = 250  $\mu$ mol/L, control Lisinopril,  $IC_{50}$  = 1 nmol/L); NEP inhibitor ( $IC_{50}$  = 20  $\mu$ mol/L, control Phosphoramidon,  $IC_{50}$  = 9 nmol/L); APN inhibitor inactive. Source: HONG KUAI ZI *Chamaenerion angustifolium* [Syn. *Epilobium angustifolium*]. Ref: 5034.

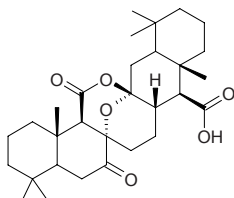
**16012 Oenotherin T<sub>1</sub>**

$C_{102}H_{72}O_{67}$  (2369.67). Pale yellow powder,  $[\alpha]_D = +130^\circ$  ( $c = 0.4$ , MeOH). Source: SI CHI YUE JIAN CAO *Oenothera tetraptera*. Ref: 1979.

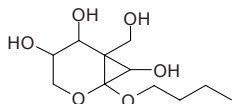


**16013 Officinalic acid**

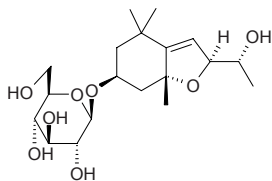
[23983-77-9] C<sub>30</sub>H<sub>44</sub>O<sub>6</sub> (500.68). Crystals, mp 272°C, [ $\alpha$ ]<sub>D</sub> = -60° (*c* = 0.5, dioxane). Source: A LI HONG *Fomes officinalis*. Ref: 2962.

**16014 Officinalisin**

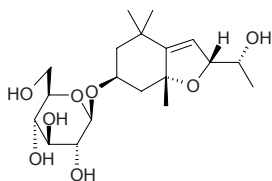
C<sub>11</sub>H<sub>20</sub>O<sub>6</sub> (248.28). Colorless acicular crystals, mp 149~151°C Source: BA JI TIAN *Morinda officinalis*. Ref: 810.

**16015 Officinoside A**

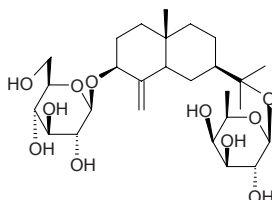
(3*S*,5*R*,8*S*,9*R*)-5,8-Epoxy-6-megastigmene-3,9-diol 3-*O*- $\beta$ -*D*-glucopyranoside C<sub>19</sub>H<sub>32</sub>O<sub>8</sub> (388.46). White powder, [ $\alpha$ ]<sub>D</sub><sup>22</sup> = +13.0° (*c* = 0.6, MeOH). Source: JIN ZHAN JU *Calendula officinalis* (flower). Ref: 4107.

**16016 Officinoside B**

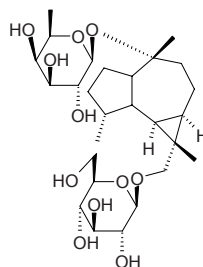
(3*S*,5*R*,8*R*,9*R*)-5,8-Epoxy-6-megastigmene-3,9-diol 3-*O*- $\beta$ -*D*-glucopyranoside C<sub>19</sub>H<sub>32</sub>O<sub>8</sub> (388.46). White powder, [ $\alpha$ ]<sub>D</sub><sup>26</sup> = +1.2° (*c* = 0.5, MeOH). Source: JIN ZHAN JU *Calendula officinalis* (flower). Ref: 4107.

**16017 Officinoside C**

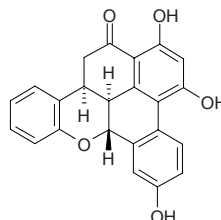
12-*O*- $\beta$ -*D*-Fucopyranosyl selin-4(15)-en-3 $\beta$ ,11-diol 3-*O*- $\beta$ -*D*-glucopyranoside C<sub>27</sub>H<sub>46</sub>O<sub>11</sub> (546.66). White powder, [ $\alpha$ ]<sub>D</sub><sup>27</sup> = -7.0° (*c* = 0.7, MeOH). Source: JIN ZHAN JU *Calendula officinalis* (flower). Ref: 4107.

**16018 Officinoside D**

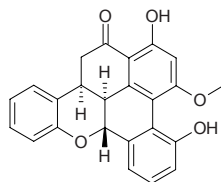
12-*O*- $\beta$ -*D*-Fucopyranosyl flourensadiol 10-*O*- $\beta$ -*D*-glucopyranoside C<sub>27</sub>H<sub>46</sub>O<sub>11</sub> (546.66). White powder, [ $\alpha$ ]<sub>D</sub><sup>26</sup> = -14.5° (*c* = 0.3, MeOH). Source: JIN ZHAN JU *Calendula officinalis* (flower). Ref: 4107.

**16019 Ohioensin A**

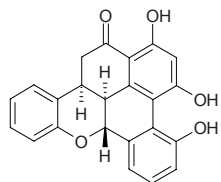
C<sub>23</sub>H<sub>16</sub>O<sub>5</sub> (372.38). Pharm: Antineoplastic; cytotoxic. Source: DUO XING JIN FA XIAN *Polytrichum ohioense*. Ref: 658.

**16020 Ohioensin B**

[145399-60-6] C<sub>24</sub>H<sub>18</sub>O<sub>5</sub> (386.41). Yellow needles, mp 246~247°C (dec), [ $\alpha$ ]<sub>D</sub><sup>27</sup> = -47° (*c* = 0.1, CHCl<sub>3</sub>). Pharm: Cytotoxic (KB ED<sub>50</sub> = 9.7 $\mu$ g/mL, MCF7 ED<sub>50</sub> = 3.4 $\mu$ g/mL, HT29 ED<sub>50</sub> = 4.3 $\mu$ g/mL). Source: DUO XING JIN FA XIAN *Polytrichum ohioense*. Ref: 2835.

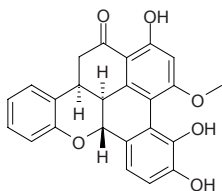
**16021 Ohioensin C**

[145399-61-7] C<sub>23</sub>H<sub>16</sub>O<sub>5</sub> (372.38). Yellow crystals, mp 230~231°C (dec), [ $\alpha$ ]<sub>D</sub><sup>27</sup> = -18° (*c* = 0.1, MeOH). Pharm: Cytotoxic (9PS ED<sub>50</sub> = 1.0 $\mu$ g/mL, A549 ED<sub>50</sub> = 8.7 $\mu$ g/mL, MCF7 ED<sub>50</sub> = 6.7 $\mu$ g/mL). Source: DUO XING JIN FA XIAN *Polytrichum ohioense*. Ref: 2835.

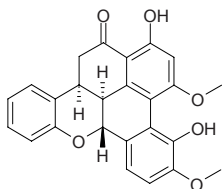


**16022 Ohioensin D**

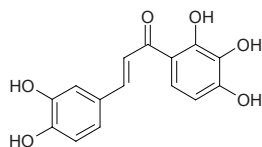
[145399-62-8]  $C_{24}H_{18}O_6$  (402.41). Yellowish crystals (MeOH), mp 244~245°C (dec),  $[\alpha]_D^{27} = -59^\circ$  ( $c = 0.1$ ,  $CHCl_3$ ). Pharm: Cytotoxic (9PS  $ED_{50} = 1.0\mu\text{g/mL}$ ). Source: DUO XING JIN FA XIAN *Polytrichum ohioense*. Ref: 2835.

**16023 Ohioensin E**

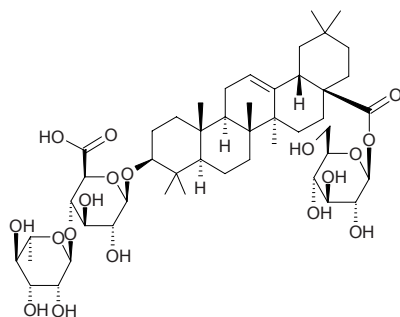
[145399-63-9]  $C_{25}H_{20}O_6$  (416.43). Yellowish needles (MeOH), mp 226~228°C (dec),  $[\alpha]_D^{27} = -42^\circ$  ( $c = 0.1$ ,  $CHCl_3$ ). Pharm: Cytotoxic (9PS  $ED_{50} = 1.6\mu\text{g/mL}$ , A549  $ED_{50} = 6.2\mu\text{g/mL}$ ). Source: DUO XING JIN FA XIAN *Polytrichum ohioense*. Ref: 2835.

**16024 Okanin**

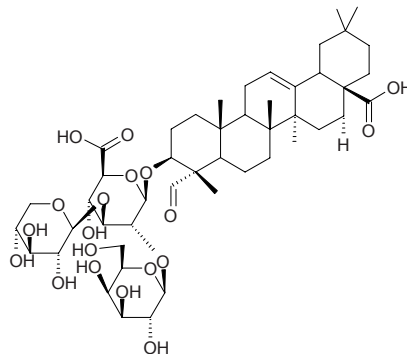
[484-76-4]  $C_{15}H_{12}O_6$  (288.26). Pharm: Uncoupling action (*Solanum tuberosum*, oxidative phosphorylation in cytoblast). Source: *Bidens* sp., *Coreopsis* sp. Ref: 658.

**16025 Olaxoside**

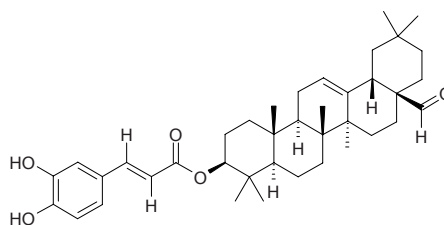
Saponin C  $C_{48}H_{76}O_{18}$  (941.13). Pharm: Anti-inflammatory. Source: *Olax* sp. Ref: 658.

**16026 Oldhamianoside**

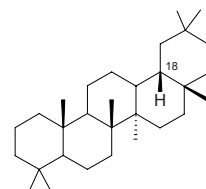
3-*O*- $\beta$ -D-Xylopyranosyl-(1 $\rightarrow$ 3)-[ $\beta$ -D-galactopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -D-glucopyranosyl gypsogenin  $C_{47}H_{72}O_{19}$  (941.09). Yellowish powder ( $C_2H_5OH$  with  $H_2O$ ). Source: XIA CAO *Gypsophila oldhamiana* (root). Ref: 4803.

**16027 Olean-28-al-3 $\beta$ -yl-caffeate**

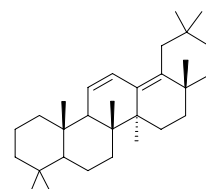
$C_{39}H_{54}O_5$  (602.86). Brown amorphous powder,  $[\alpha]_D^{25} = +25^\circ$  ( $c = 1.0$ , MeOH). Source: NAN SHE TENG GEN *Celastrus orbiculatus* [Syn. *Celastrus articulatus*], *Celastrus stephanotifolius*. Ref: 2310, 2511.

**16028 18 $\alpha$ -Oleanane**

[30759-92-3]  $C_{30}H_{53}$  (412.75). Crystals (EtOH-hexane), mp 210°C,  $[\alpha]_D^{20} = +40.3^\circ$  ( $c = 0.5$ ,  $CHCl_3$ ). Source: LUO DI SHENG GEN *Bryophyllum pinnatum*. Ref: 1521, 2915.

**16029 Olean-11,13(18)-diene**

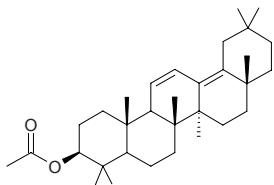
$C_{30}H_{48}$  (408.72). Source: SHUI LONG GU *Polypodium niponicum*. Ref: 1414.



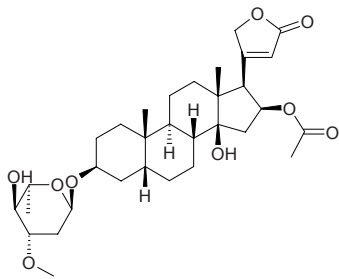


**16030 Olean-11,13(18)-diene-3 $\beta$ -yl acetate**

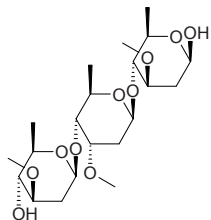
$C_{32}H_{50}O_2$  (466.75). Source: SHUI LONG GU *Polypodium niponicum*. Ref: 1414.

**16031 Oleandrin**

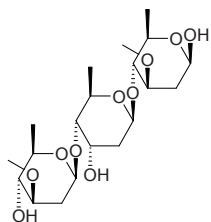
[465-16-7]  $C_{32}H_{48}O_9$  (576.73). mp 250°C (dec). Pharm: Cardiotonic (frog heart, MED = 0.02mg/kg, pigeon heart, MED = 0.368mg/kg, cat heart, MED = 0.27mg/kg); diuretic; anti-inflammatory (NF- $\kappa$ B pathway)<sup>[4415]</sup>; LD (mus) = 2.5mg/kg; LD<sub>50</sub> (rat, iv) = 0.3mg/kg. Source: OU ZHOU JIA ZHU TAO *Nerium oleander*, QING MING HUA *Beaumontia grandiflora*. Ref: 6, 658, 4415.

**16032 O- $\beta$ -D-Oleandropyranosyl-(1 $\rightarrow$ 4)-O- $\beta$ -D-cymaropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-oleandropyranose**

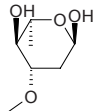
Royleose [205488-06-8]  $C_{21}H_{38}O_{10}$  (450.53).  $[\alpha]_D = +12^\circ$  ( $c = 0.34$ ,  $CHCl_3$ ). Source: ROU LEI NIU NAI CAI *Marsdenia roylei*. Ref: 2372.

**16033 O- $\beta$ -D-Oleandropyranosyl-(1 $\rightarrow$ 4)-O- $\beta$ -D-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-oleandropyranose**

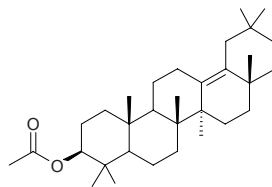
$C_{20}H_{36}O_{10}$  (436.50). Source: ROU LEI NIU NAI CAI *Marsdenia roylei*. Ref: 2372.

**16034 Oleandrose**

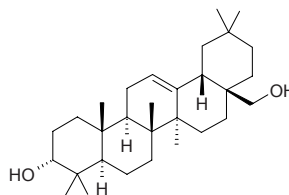
$C_7H_{14}O_4$  (162.19). mp 68~70°C. Source: FU SHOU CAO *Adonis amurensis*, LUO MO ZI *Metaplexis japonica*. Ref: 6.

**16035 Olean-13(18)-en-3-acetate**

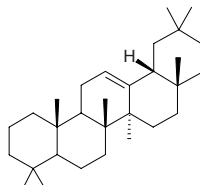
$C_{32}H_{52}O_2$  (468.77). Source: DA HUA XUAN FU HUA CAO *Inula britannica*. Ref: 1388.

**16036 Olean-12-en-3 $\beta$ ,28-diol**

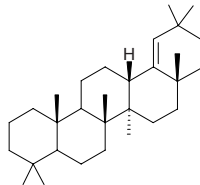
$C_{30}H_{50}O_2$  (442.73). Source: XIA KU CAO *Prunella vulgaris*. Ref: 2508.

**16037 Olean-12-ene**

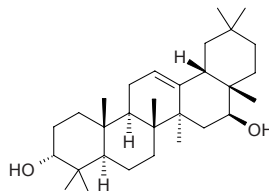
[471-68-1]  $C_{30}H_{50}$  (410.73). Crystals ( $CHCl_3$ -MeOH), mp 162~164°C,  $[\alpha]_D = +97.1^\circ$  ( $CHCl_3$ ). Source: SHUI LONG GU *Polypodium niponicum*. Ref: 1414.

**16038 Olean-18-ene**

[432-11-1]  $C_{30}H_{50}$  (410.73). Crystals ( $Me_2CO$ ), mp 174~175°C,  $[\alpha]_D = +6.2^\circ$  ( $CHCl_3$ ). Source: SHUI LONG GU *Polypodium niponicum*. Ref: 1414.

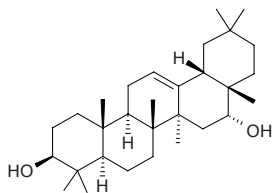
**16039 Olean-12-ene-3 $\alpha$ ,16 $\beta$ -diol**

[122564-89-0]  $C_{30}H_{50}O_2$  (442.73). mp 290~292°C,  $[\alpha]_D^{23} = +51^\circ$  ( $c = 1.0$ , chloroform). Pharm: Antihepatotoxin (liver damage caused by *D*-galactosamine). Source: QING GUO *Canarium album*. Ref: 1147.

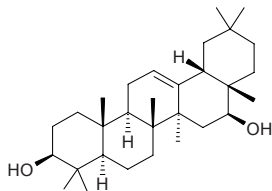


**16040 Olean-12-ene-3 $\beta$ ,16 $\alpha$ -diol**

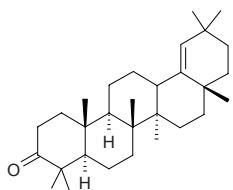
$C_{30}H_{50}O_2$  (442.73). Source: *Malina elemi*. Ref: 1521.

**16041 Olean-12-ene-3 $\beta$ ,16 $\beta$ -diol**

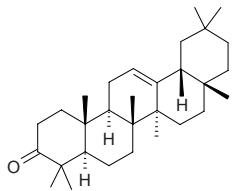
Maniladiol  $C_{30}H_{50}O_2$  (442.73). Source: JIN ZHAN JU *Calendula officinalis*, *Malina elemi*, *Baccharis* spp. Ref: 2272.

**16042 Olean-12-en-3-one**

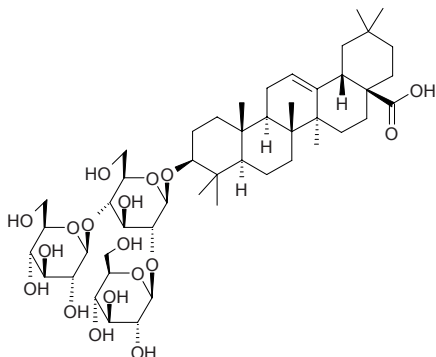
$C_{30}H_{48}O$  (424.72). Source: ZHU ZONG CAO *Adiantum capillus-veneris* (fresh frond). Ref: 4230.

**16043 Olean-18-en-3-one**

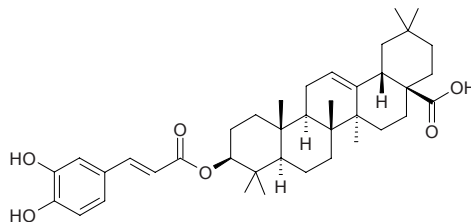
$C_{30}H_{48}O$  (424.72). Source: ZHU ZONG CAO *Adiantum capillus-veneris* (fresh frond). Ref: 4230.

**16044 Oleanoglycotoxin A**

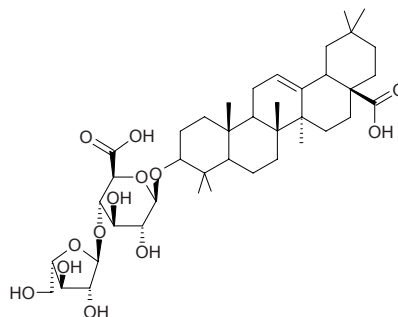
$C_{48}H_{78}O_{18}$  (943.15). Pharm: Spermaticidal (hmn sperm, 50mg/L); molluscicide (*Biomphalaria glabrata*, LD<sub>100</sub> = 6mg/L). Source: SHI ER RUI SHANG LU *Phytolacca dodecandra*. Ref: 658.

**16045 Olean-28-oi-3 $\beta$ -yl caffeate**

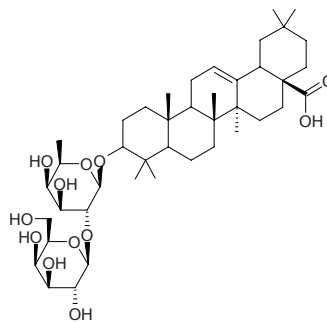
$C_{39}H_{54}O_6$  (618.86). Source: NAN SHE TENG GEN *Celastrus orbiculatus* [Syn. *Celastrus articulatus*]. Ref: 2511.

**16046 Oleanolic acid-3- $\alpha$ -L-arabinofuranosyl(1 $\rightarrow$ 4)- $\beta$ -D-glucuronopyranoside**

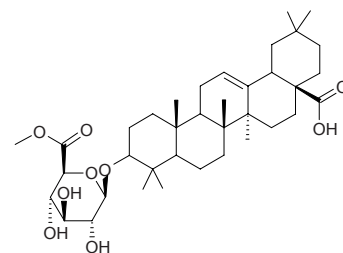
$C_{41}H_{64}O_{13}$  (764.96). Source: TONG HUA GEN *Tetrapanax papyriferus*. Ref: 2916.

**16047 Oleanolic acid-3- $\beta$ -D-galactopyranosyl(1 $\rightarrow$ 2)- $\beta$ -D-fucopyranoside**

$C_{42}H_{68}O_{12}$  (765.00). Source: TONG HUA GEN *Tetrapanax papyriferus*. Ref: 2916.

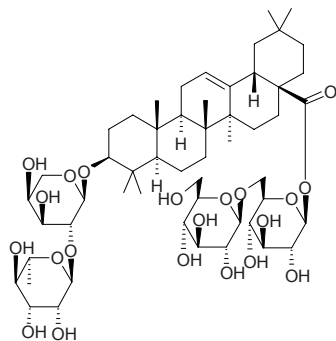
**16048 Oleanolic acid-3-O- $\beta$ -D-(6'-O-methyl)-glucuronoside**

$C_{37}H_{58}O_9$  (646.87). Source: QIN LING ZHU ZI SHEN *Panax japonicus* var. *major*. Ref: 2948.



**16049 Oleanolic acid 3-O- $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranosyl- 28-O- $\beta$ -D-glucopyranosyl(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside**

C<sub>53</sub>H<sub>86</sub>O<sub>21</sub> (1059.26). Source: LIAO DONG CONG MU YE *Aralia elata*, REN DONG TENG *Lonicera japonica*. Ref: 2791, 2863.

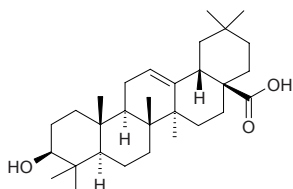


**16050 Oleanolic acid**

3-Hydroxy-12-oleanen-28-oic acid [508-02-1] C<sub>30</sub>H<sub>48</sub>O<sub>5</sub> (456.72). White acicular crystals (ethanol), mp 306~310°C; white needles (MeOH), mp 306~308°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +75.2° (*c* = 1.0, pyridine). Pharm: Cytotoxic (A2780, IC<sub>50</sub> = (20.4±0.4)μg/mL; control Actinomycin D, IC<sub>50</sub> = 2~5ng/mL)<sup>[53971]</sup>; cytotoxic (K562, ED<sub>50</sub> > 20μmol/L, control Adriamycin, ED<sub>50</sub> = (0.09±0.03)μmol/L; B16(F-10), ED<sub>50</sub> > 20μmol/L, Adriamycin, ED<sub>50</sub> = (0.06±0.10)μmol/L; SK-MEL-2, ED<sub>50</sub> > 20μmol/L, Adriamycin, ED<sub>50</sub> = (0.09±0.30)μmol/L; PC3, ED<sub>50</sub> = (15±2)μmol/L, Adriamycin, ED<sub>50</sub> = (0.83±0.18)μmol/L; LOX-IMVI, ED<sub>50</sub> > 20μmol/L, Adriamycin, ED<sub>50</sub> = (0.38±0.33)μmol/L; A549, ED<sub>50</sub> > 20μmol/L, Adriamycin, ED<sub>50</sub> = (0.67±0.21)μmol/L)<sup>[54791]</sup>; antineoplastic (S<sub>180</sub>); anti-inflammatory (rat, swollen foot model caused by carrageenan, experimental chronic arthritis); cardiotoxic; diuretic; hypoglycemic; alanine aminopherase inhibitor (serum); reduces blood capillary permeability (mus); promotes hepatic cell recondition and regeneration (animal liver injury model); antitrypanosomal (epimastigotes of *Trypanosoma cruzi*, MLC = 6.2μmol/L, control Gentian violet, MLC = 6.2μmol/L)<sup>[25791]</sup>; antioxidant (superoxide anion scavenger, fMLP/CB or PMA-stimulated hmn Neutrophils); tissue factor inhibitor inactive<sup>[53871]</sup>; antitubercular (*Mycobacterium tuberculosis*, MIC = 28.7μg/mL, cytotoxic, Vero cells, IC<sub>50</sub> = 82.9μg/mL, SI (IC<sub>50</sub>/MIC) = 2.89, positive control Rifampin, MIC = 0.03μg/mL, IC<sub>50</sub> = 98.3μg/mL, SI = 3277)<sup>[49861]</sup>; platelet aggregation inhibitor (2~5mg/mL collagen-induced, IC<sub>50</sub> > 1000μmol/L, control ASA, IC<sub>50</sub> = (420±3)μmol/L; 1~4μmol/L epinephrine-induced with 0.8~1.0mg/mL collagen, IC<sub>50</sub> = (45.3±5.1)μmol/L, ASA, IC<sub>50</sub> = (53.0±4.5)μmol/L; 10~40μmol/L Sodium arachidonate-induced with 0.8~1.0mg/mL collagen, IC<sub>50</sub> > 1000μmol/L, ASA, IC<sub>50</sub> = (66.0±2.1)μmol/L; 1~5μmol/L PGH<sub>2</sub>/TXA<sub>2</sub> receptor agonist U46619-induced with 0.8~1.0mg/mL collagen, IC<sub>50</sub> > 1000μmol/L, ASA, IC<sub>50</sub> = (340±12)μmol/L)<sup>[49941]</sup>; cytotoxic (HL-60, IC<sub>50</sub> > 100μmol/L, control Taxol, IC<sub>50</sub> = (4.1×10<sup>-4</sup>±1.1×10<sup>-4</sup>)μmol/L; MCF7, IC<sub>50</sub> > 100μmol/L, Taxol, IC<sub>50</sub> = (15.3±2.6)μmol/L; Bel7402, IC<sub>50</sub> > 100μmol/L, Taxol, IC<sub>50</sub> = (0.3±0.1)μmol/L; BGC823, IC<sub>50</sub> = (30.7±1.8)μmol/L; HeLa, IC<sub>50</sub> > 100μmol/L, Taxol, IC<sub>50</sub> = (33.0±6.1)μmol/L; KB, > 100μmol/L, Taxol, IC<sub>50</sub> > 100μmol/L)<sup>[50151]</sup>; apoptosis inducer (HL-60 cells, 15μmol/L, sub-G1 population = (8.7±4.7)%, control sub-G1 population = (5.6±0.2)%, positive control Taxol, sub-G1 population = (40.5±0.2)%)<sup>[50151]</sup>; COX-2 enzyme selective inhibitor (mean IC<sub>50</sub> of isomers = 295μmol/L)<sup>[44151]</sup>; TGF- $\beta$ 1 antagonist (inhibits the binding of <sup>125</sup>I-TGF- $\beta$ 1 to its receptor in Balb/c 3T3

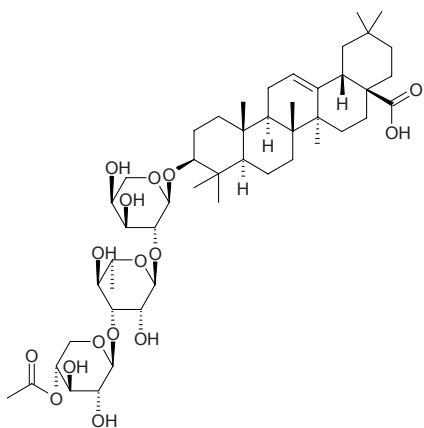
cell, IC<sub>50</sub> = (21.0±2.3)μmol/L, suggests TGF- $\beta$ 1 antagonistic activity is responsible, at least in part, for therapeutic efficacy of *Clerodendranthus spicatus* to treat humans with renal disease)<sup>[54961]</sup>; antiplasmodial (moderate *in vitro*, causes transformation of erythrocytes into stomatocytes)<sup>[54471]</sup>; cytotoxic (leukemia cells L<sub>1210</sub>, IC<sub>50</sub> = 40μg/mL)<sup>[37861]</sup>; antimalarial (*Plasmodium falciparum* FcB1, IC<sub>50</sub> = (9.8±3.1)μg/mL, control Chloroquine, IC<sub>50</sub> = (0.05±0.002)μg/mL)<sup>[44191]</sup>; low toxin. Source: BAI HUA SHE SHE CAO *Oldenlandia diffusa* [Syn. *Hedyotis diffusa*] (whole herb: mean content of 9 batch samples = 1.68%)<sup>[55081]</sup>, BIAN ZHI HU JI SHENG *Viscum articulatum*, BING PIAN *Dryobalanops aromatica*, CHE QIAN *Plantago asiatica* (whole herb: mean content = 0.227%)<sup>[55081]</sup>, CHUAN XI ZHANG YA CAI *Swertia musotii*, CI WU JIA YE *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*], CONG MU *Aralia chinensis* (root: content = 3.31%)<sup>[55081]</sup>, DA CHE QIAN *Astrantia major*, DA XING QIN *Plantago major*, DA ZAO *Ziziphus jujuba* (ripe fruit: mean content = 0.021%)<sup>[55081]</sup>, DING XIANG *Syzygium aromaticum* [Syn. *Eugenia caryophyllata*], DONG LING CAO *Rabdosia rubescens* (whole herb: mean content = 0.466%)<sup>[55081]</sup>; leaf: mean content = 0.613%)<sup>[55081]</sup>, DUAN TING SHAN MAI DONG *Liriope muscari* (tuber)<sup>[47721]</sup>, FENG XIANG JI SHENG *Viscum articulatum*, GUAN MU TONG *Aristolochia manshuriensis*, HEI REN DONG *Lonicera nigra*, HONG KUAI ZI *Chamaenerion angustifolium* [Syn. *Epilobium angustifolium*], HU JI SHENG *Viscum coloratum* (stem-leaf: content = 1.49%)<sup>[55081]</sup>, HUANG HUA BAI JIANG *Patrinia scabiosaefolia*, HUANG QI II *Engelhardia roxburghiana* (root), HUO XIANG *Agastache rugosus*, JI SHI TENG GUO *Paederia scandens*, LIAN QIAO *Forsythia suspensa* (2.28%), LIAO DONG CONG MU *Aralia elata* (root: content = 4.98%, root cortex: content = 5.59%, stem cortex: content = 3.69%)<sup>[55081]</sup>, MAI DONG *Ophiopogon japonicus* (tuber: yield = 0.00016%)<sup>[47721]</sup>, MAO CAO LONG *Ludwigia octovalvis* (whole herb: yield = 0.00016%dw), MAO XU CAO *Clerodendranthus spicatus*, MEI SHANG LU *Phytolacca americana* [Syn. *Phytolacca decandra*], MU BIE ZI *Momordica cochinchinensis*, MU GUA *Chaenomeles sinensis*, MU TONG *Akebia quinata*, NIU XI *Achyranthes bidentata* (root: content scope = 0.186%~2.190%)<sup>[55011]</sup>, mean content = 1.23%)<sup>[55081]</sup>, NV ZHEN ZI *Ligustrum lucidum* (ripe fruit: content scope of 6 origins = 8.83%~15.16%; mean content = 10.79%), PING CHE QIAN *Plantago depressa* (whole herb: mean content = 0.204%)<sup>[55081]</sup>, QING YE DAN *Swertia mileensis*, QIU MU GUA *Chaenomeles lagenaria* [Syn. *Chaenomeles speciosa*] (fruit: content scope of 3 origins = 0.46%~1.72%, mean content = 1.03%)<sup>[55081]</sup>, RI BEN LU TI CAO *Pyrola japonica*, SANG JI SHENG *Loranthus parasiticus* [Syn. *Loranthus chinensis*; *Taxillus chinensis*], SHA ZAO *Elaeagnus angustifolia* (fruit: content = 0.014%)<sup>[55081]</sup>, SHAN ZHU YU *Cornus officinalis* [Syn. *Macrocarpium officinale*] (dried ripe fruit: mean content of 3 origins = 0.066%)<sup>[55081]</sup>, SHI DI *Diospyros kaki*, SHI NAN *Photinia serrulata* (leaf: mean content = 0.653%)<sup>[55081]</sup>, SHI YE *Diospyros kaki* (dried leaf: mean content = 0.430%)<sup>[55081]</sup>, SHU HUA JIE CAO *Valeriana laxiflora* (aerial parts and root), SUAN ZAO *Ziziphus jujuba* var. *spinosa* (ripe fruit: content = 0.038%)<sup>[55081]</sup>, TIAN CAI *Beta vulgaris*, TU DANG GUI *Aralia cordata* (root: content = 0.42%)<sup>[55081]</sup>, WU GENG WU JIA PI *Acanthopanax sessiliflorus* (fruit), XIA KU CAO *Prunella vulgaris* (dried spike: content = 0.233%)<sup>[55081]</sup>, XIU QIU SHU WEI CAO *Salvia hydrangea* (flower), YI LANG QING LAN *Dracocephalum kotschyi*, YOU GAN LAN *Olea europaea*, YU ZHI ZI *Akebia quinata*, ZAO JIA *Gleditsia sinensis* [Syn. *Gleditsia horrida*] (fruit), ZI WEI *Campsis grandiflora* (dried flower: mean

content = 0.176%)<sup>[5501, 5508]</sup>, *Juliania adstringens* (bark)<sup>[3786]</sup>, *Nuxia sphaerocephala* (leaf)<sup>[4419]</sup>, occurs in many plants (very widely distributed aglycone). Ref: 4, 6, 439, 453, 455, 462, 471, 472, 592, 600, 622, 658, 660, 2579, 3005, 3786, 4415, 4418, 4419, 4772, 4986, 4994, 5015, 5059, 5387, 5397, 5447, 5479, 5496, 5501, 5508.



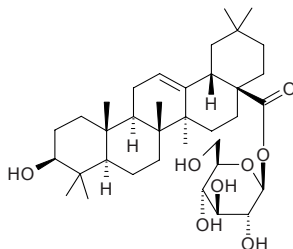
**16051 Oleanolic acid 3-O-(4-O-acetyl-β-D-xylopyranosyl)-(1→3)-α-L-rhamnopyranosyl-(1→2)-α-L-arabinopyranoside**

C<sub>48</sub>H<sub>76</sub>O<sub>16</sub> (909.13). White amorphous powder, [α]<sub>D</sub><sup>22</sup> = -20.2° (c = 3.8, MeOH). Source: AO TOU WU HUAN ZI *Sapindus emarginatus* (pericarp). Ref: 4123.



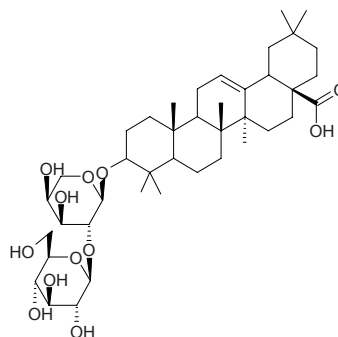
**16052 Oleanolic acid-28-O-β-D-glucopyranoside**

C<sub>36</sub>H<sub>58</sub>O<sub>8</sub> (618.86). White crystalline powder, mp 218–220°C, [α]<sub>D</sub><sup>20</sup> = +25.59° (c = 0.104, MeOH). Pharm: Molluscicide (kills genus *Oncomelania*). Source: KONG XIN XIAN *Alternanthera philoxeroides*, TAI BAI CONG MU *Aralia taibaiensis*. Ref: 470, 700.



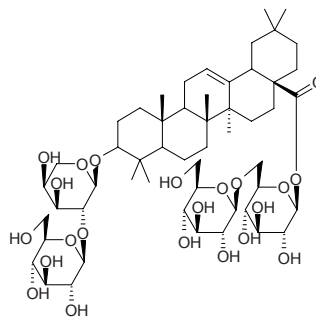
**16053 Oleanolic acid-3-O-β-D-glucopyranosyl(1→2)-α-L-arabinopyranoside**

C<sub>41</sub>H<sub>66</sub>O<sub>12</sub> (750.98). Source: HONG MAO WU JIA PI *Acanthopanax giralddii* [Syn. *Acanthopanax giralddii* var. *inermis*; *Eleutherococcus giralddii*], REN DONG TENG *Lonicera japonica*. Ref: 2791, 2954.



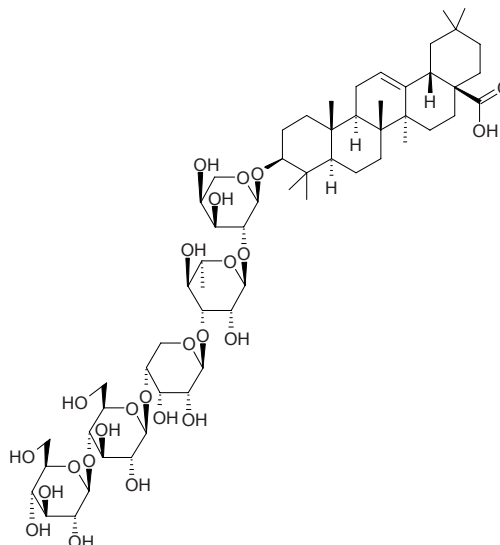
**16054 Oleanolic acid-3-O-β-D-glucopyranosyl(1→2)-α-L-arabinopyranosyl-28-O-β-D-glucopyranosyl(1→6)-β-D-glucopyranoside**

C<sub>53</sub>H<sub>86</sub>O<sub>22</sub> (1075.26). Source: REN DONG TENG *Lonicera japonica*. Ref: 2791.



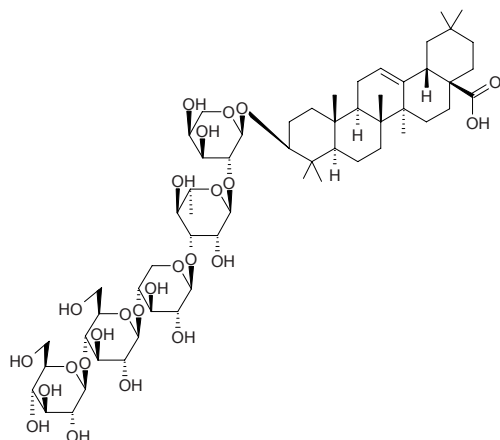
**16055 Oleanolic acid-3-O-β-D-glucopyranosyl(1→4)-β-D-glucopyranosyl(1→4)-β-D-ribosepyranosyl(1→3)-α-L-rhamnopyranosyl(1→2)-α-L-arabinopyranoside**

Prosopogenin CP<sub>9</sub> C<sub>58</sub>H<sub>94</sub>O<sub>25</sub> (1191.38). Source: WEI LING XIAN *Clematis chinensis*. Ref: 2854.



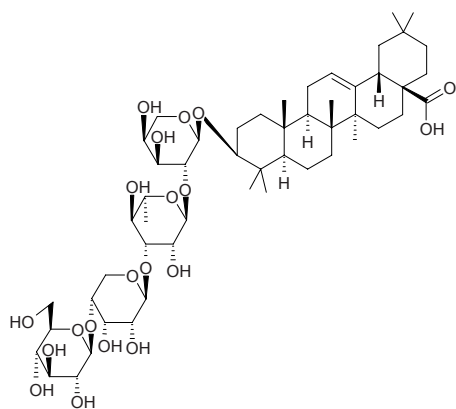
**16056 Oleanolic acid-3-O- $\beta$ -D-glucopyranosyl(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl(1 $\rightarrow$ 4)- $\beta$ -D-xylopyranosyl(1 $\rightarrow$ 3)- $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranoside**

Prosapogenin CP<sub>9a</sub> C<sub>58</sub>H<sub>94</sub>O<sub>25</sub> (1191.38). Source: WEI LING XIAN *Clematis chinensis*. Ref: 2854.



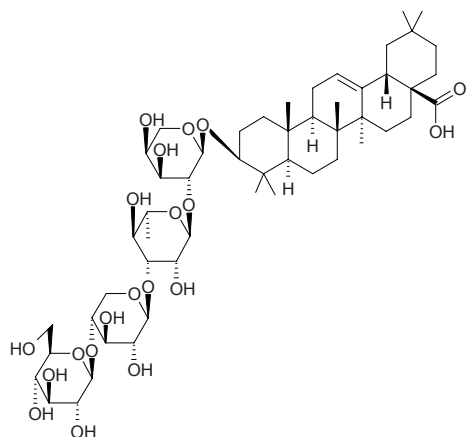
**16057 Oleanolic acid 3-O- $\beta$ -D-glucopyranosyl(1 $\rightarrow$ 4)- $\beta$ -D-ribopyranosyl(1 $\rightarrow$ 3)- $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranoside**

Prosapogenin CP<sub>7</sub> C<sub>52</sub>H<sub>84</sub>O<sub>20</sub> (1029.24). Source: WEI LING XIAN *Clematis chinensis*. Ref: 2854.



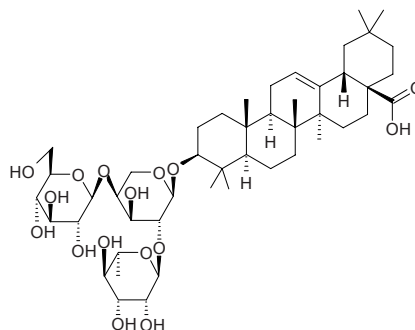
**16058 Oleanolic acid-3-O- $\beta$ -D-glucopyranosyl(1 $\rightarrow$ 4)- $\beta$ -D-xylopyranosyl(1 $\rightarrow$ 3)- $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranoside**

Prosapogenin CP<sub>7a</sub> C<sub>52</sub>H<sub>84</sub>O<sub>20</sub> (1029.24). Source: WEI LING XIAN *Clematis chinensis*. Ref: 2854.



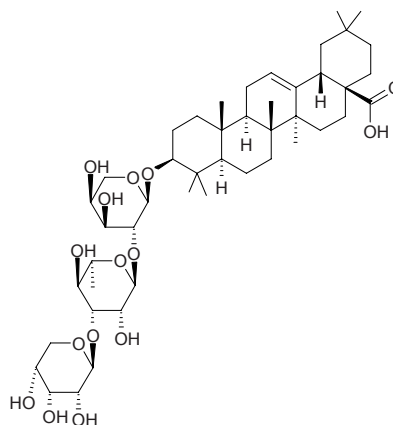
**16059 Oleanolic acid-3-O- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)-[ $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)]- $\alpha$ -L-arabinopyranoside**

C<sub>47</sub>H<sub>76</sub>O<sub>16</sub> (897.12). White needles (MeOH-H<sub>2</sub>O), mp 253~255°C. Source: DUO BEI YIN LIAN HUA *Anemone raddeana*. Ref: 2240.



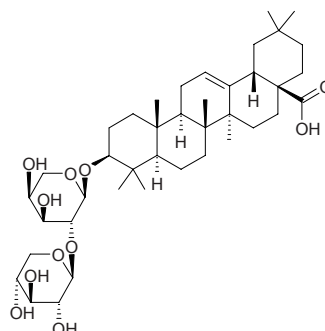
**16060 Oleanolic acid 3-O- $\beta$ -D-ribopyranosyl(1 $\rightarrow$ 3)- $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranoside**

Prosapogenin CP<sub>4</sub> [75799-18-7] C<sub>46</sub>H<sub>74</sub>O<sub>15</sub> (867.09). Source: HU ZHANG CAO *Anemone rivularis*, WEI LING XIAN *Clematis chinensis*. Ref: 1521, 2854.



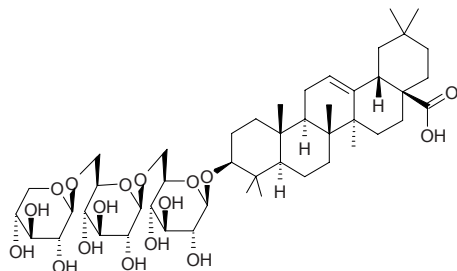
**16061 Oleanolic acid 3-O- $\beta$ -D-xylopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranoside**

Prosapogenin CP<sub>2b</sub> C<sub>40</sub>H<sub>64</sub>O<sub>11</sub> (720.95). Source: WEI LING XIAN *Clematis chinensis*. Ref: 2854.



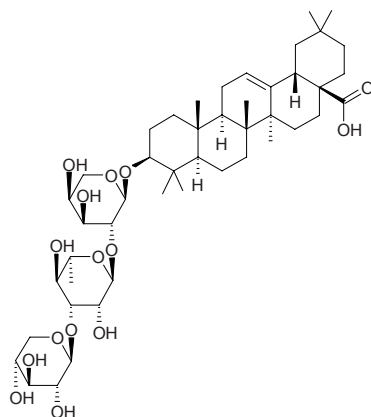
**16062 Oleanolic acid 3-O- $\beta$ -D-xylopyranosyl (1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl (1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside**

C<sub>47</sub>H<sub>76</sub>O<sub>17</sub> (913.12). Amorphous powder, mp 202~204°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -3.2° (c = 0.15, MeOH). Source: CHI GENG TENG *Gymnema sylvestre*. Ref: 766.



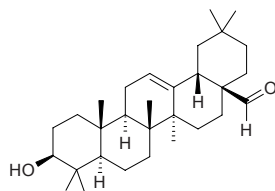
**16063 Oleanolic acid 3-O- $\beta$ -D-xylopyranosyl(1 $\rightarrow$ 3)- $\alpha$ -L-rhamnopyranosyl (1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranoside**

Prosapogenin CP<sub>3</sub> C<sub>46</sub>H<sub>74</sub>O<sub>15</sub> (867.09). Source: WEI LING XIAN *Clematis chinensis*. Ref: 2854.



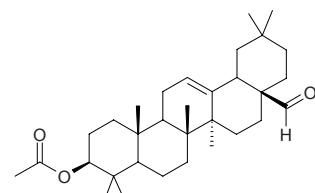
**16064 Oleanolic aldehyde**

C<sub>30</sub>H<sub>48</sub>O<sub>2</sub> (440.72). mp 230~231°C; 168~172°C. Source: MANG GUO SHU PI *Mangifera indica*. Ref: 6.



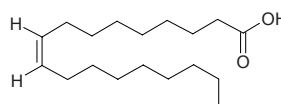
**16065 Oleanolic aldehyde acetate**

C<sub>32</sub>H<sub>50</sub>O<sub>3</sub> (482.75). Source: QIAN CAO GEN *Rubia cordifolia*. Ref: 1364.



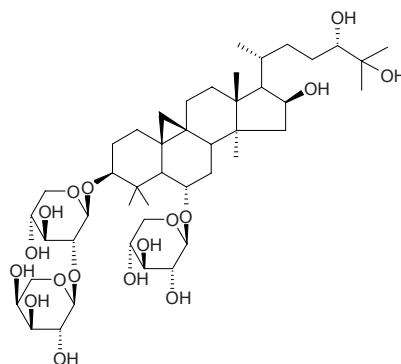
**16066 Oleic acid**

*cis*-Oleic acid [112-80-1] C<sub>18</sub>H<sub>34</sub>O<sub>2</sub> (282.47). mp 16°C, bp 285.5~286.0°C/100mmHg. Pharm: Increases absorption through skin; dermatitic (stimulant to skin); inhibits cancer cell invasion (MM1 cells, *in vitro*, 10 $\mu$ g/mL, InRt = 13.0%)<sup>[4329]</sup>. Source: HEI ZHI MA *Sesamum indicum* (black seed) [Syn. *Sesamum orientale* (black seed)] (seed: content scope = 21.6%~28.8%)<sup>[5501]</sup>, HEI ZI LI GUO JI SHENG *Scurrura atropurpurea*, JI GUAN ZI *Celosia cristata* (seed), LANG DANG ZI *Hyoscyamus niger* (dried ripe seed: content = 35.2%)<sup>[5508]</sup>, MAN JING ZI *Vitex trifolia*, MAN TUO LUO ZI *Datura metel*, MAO MAN TUO LUO ZI *Datura innoxia*, QIANG HUO *Notopterygium incisum*, YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*], YAO YONG PU GONG YING *Taraxacum officinale*, YI ZHI REN *Alpinia oxyphylla* (fruit: yield = 0.082%dw)<sup>[4655]</sup>, YIN CHEN HAO *Artemisia capillaris*. Ref: 2, 500, 658, 660, 4329, 4655, 5501, 5508.



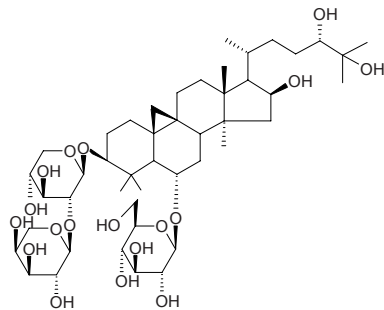
**16067 Oleifolioside A**

3-O-[ $\beta$ -Xylopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -arabinopyranosyl]-6-O- $\beta$ -xylopyranosyl-3 $\beta$ ,6 $\alpha$ ,16 $\beta$ ,24(S),25-pentahydroxycycloartane C<sub>45</sub>H<sub>76</sub>O<sub>17</sub> (889.10). Amorphous white powder, [ $\alpha$ ]<sub>D</sub><sup>27</sup> = +18.9° (c = 0.1, MeOH). Pharm: Antitrypanosomal (*Trypanosoma brucei rhodesiense*, IC<sub>50</sub> > 90 $\mu$ g/mL, control Melarsoprol, IC<sub>50</sub> = 0.0032 $\mu$ g/mL; *Trypanosoma cruzi*, IC<sub>50</sub> > 30 $\mu$ g/mL, Benznidazole, IC<sub>50</sub> = 0.50 $\mu$ g/mL); antileishmanial (*Leishmania donovani*, IC<sub>50</sub> = 13.2 $\mu$ g/mL, control Miltefosine, IC<sub>50</sub> = 0.087 $\mu$ g/mL); antimalarial (*Plasmodium falciparum*, IC<sub>50</sub> > 5 $\mu$ g/mL, Chloroquine, IC<sub>50</sub> = 0.086 $\mu$ g/mL); cytotoxic (L6 cells, IC<sub>50</sub> > 90 $\mu$ g/mL, control Podophyllotoxin, IC<sub>50</sub> = 0.008 $\mu$ g/mL). Source: YOU YE HUANG QI *Astragalus oleifolius* (lower stem part). Ref: 5285.

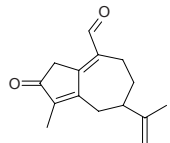


**16068 Oleifolioside B**

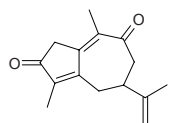
3-*O*-[ $\beta$ -Xylopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -arabinopyranosyl]-6-*O*- $\beta$ -glucopyranosyl- $\beta$ ,6 $\alpha$ ,16 $\beta$ ,24(*S*),25-pentahydroxycycloartane C<sub>46</sub>H<sub>78</sub>O<sub>18</sub> (919.12). Amorphous white powder,  $[\alpha]_D^{27} = +21.9^\circ$  ( $c = 0.1$ , MeOH). **Pharm:** Antitrypanosomal (*Trypanosoma brucei rhodesiense*, IC<sub>50</sub> > 90 $\mu$ g/mL, control Melarsoprol, IC<sub>50</sub> = 0.0032 $\mu$ g/mL; *Trypanosoma cruzi*, IC<sub>50</sub> > 30 $\mu$ g/mL, Benznidazole, IC<sub>50</sub> = 0.50 $\mu$ g/mL); antileishmanial (*Leishmania donovani*, IC<sub>50</sub> = 13.7 $\mu$ g/mL, control Miltefosine, IC<sub>50</sub> = 0.087 $\mu$ g/mL); antimalarial (*Plasmodium falciparum*, IC<sub>50</sub> > 5 $\mu$ g/mL, Chloroquine, IC<sub>50</sub> = 0.086 $\mu$ g/mL); cytotoxic (L6 cells, IC<sub>50</sub> > 90 $\mu$ g/mL, control Podophyllotoxin, IC<sub>50</sub> = 0.008 $\mu$ g/mL). **Source:** YOU YE HUANG QI *Astragalus oleifolius* (lower stem part). **Ref:** 5285.

**16069 Oleodaphnal**

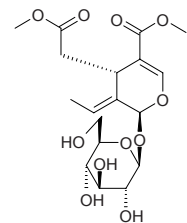
4,10,11-Guaiatriene-3-one-15-al; 3-Oxo-1(10),4,11-guaiatrien-14-al [260991-41-1] C<sub>15</sub>H<sub>18</sub>O<sub>2</sub> (230.31). Oil,  $[\alpha]_D^{25} = +5.0^\circ$  ( $c = 2.25$ , CHCl<sub>3</sub>). **Source:** YOU RUI XIANG *Daphne oleoides*. **Ref:** 2410.

**16070 Oleodaphnone**

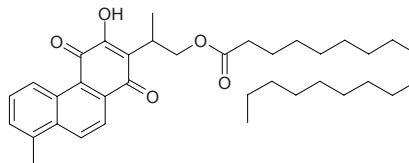
1(10),4,11-Guaiatrien-3,9-dione [260991-44-4] C<sub>15</sub>H<sub>18</sub>O<sub>2</sub> (230.31). Oil,  $[\alpha]_D^{25} = +4.1^\circ$  ( $c = 0.93$ , CHCl<sub>3</sub>). **Source:** YOU RUI XIANG *Daphne oleoides*. **Ref:** 2410.

**16071 Oleoside dimethyl ester**

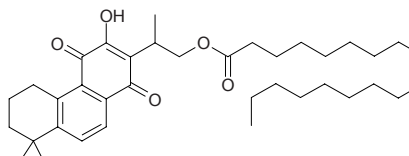
[30164-95-5] C<sub>18</sub>H<sub>26</sub>O<sub>11</sub> (418.40). **Pharm:** Antiviral (Hep2 cells, Para-3, IC<sub>50</sub> = 20.8 $\mu$ g/mL, TI = 6.0; MDCK cells, Flu-A, inactive; Vero cells, HSV-1, IC<sub>50</sub> = 83.3 $\mu$ g/mL)<sup>[4141]</sup>; anti-hemolysis (rat, red blood cell *in vitro*, 2,2'-azo-bis-(2-amidinopropane)dihydrochloride induced, IC<sub>50</sub> = 65.0 $\mu$ mol/L, control Trolox, IC<sub>50</sub> = 55.0 $\mu$ mol/L)<sup>[4141]</sup>; anti-hemolysis (against hemolysis of red blood cells induced by AAPH free radicals, weaker activity than trolox)<sup>[3545]</sup>. **Source:** NV ZHEN ZI *Ligustrum lucidum*. **Ref:** 3545, 4141.

**16072 Oleoyl danshenxinkun A**

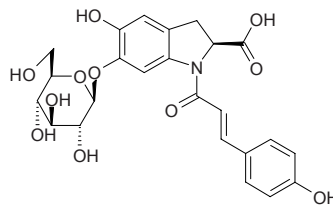
C<sub>36</sub>H<sub>48</sub>O<sub>5</sub> (560.78). Reddish oil,  $[\alpha]_D^{25} = -78.88^\circ$  ( $c = 0.25$ , CHCl<sub>3</sub>). **Pharm:** Platelet aggregation inhibitor (*in vitro*, selectively inhibits rabbit platelet aggregation, induced by 100 $\mu$ mol/L arachidonic acid, IC<sub>50</sub> = (25.5 $\pm$ 1.9) $\mu$ mol/L, control Aspirin, IC<sub>50</sub> = (27.0 $\pm$ 1.1) $\mu$ mol/L; induced by 10 $\mu$ mol/L collagen, IC<sub>50</sub> = (60.5 $\pm$ 2.6) $\mu$ mol/L; induced by 0.1U/mL thrombin, IC<sub>50</sub> > 100 $\mu$ mol/L). **Source:** DAN SHEN *Salvia miltiorrhiza*. **Ref:** 3056.

**16073 Oleoyl neocryptotanshinone**

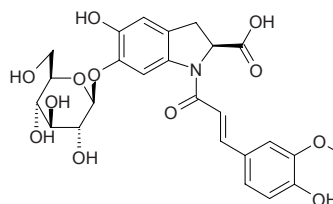
C<sub>37</sub>H<sub>54</sub>O<sub>5</sub> (578.84). Yellow oil (CHCl<sub>3</sub>),  $[\alpha]_D^{25} = +14.38^\circ$  ( $c = 0.35$ , CHCl<sub>3</sub>). **Pharm:** Platelet aggregation inhibitor (*in vitro*, selectively inhibits rabbit platelet aggregation, induced by 100 $\mu$ mol/L arachidonic acid, IC<sub>50</sub> = (5.1 $\pm$ 0.8) $\mu$ mol/L, control Aspirin, IC<sub>50</sub> = (27.0 $\pm$ 1.1) $\mu$ mol/L; induced by 10 $\mu$ mol/L collagen, IC<sub>50</sub> = (50.4 $\pm$ 1.4) $\mu$ mol/L; induced by 0.1U/mL thrombin, IC<sub>50</sub> > 100 $\mu$ mol/L). **Source:** DAN SHEN *Salvia miltiorrhiza*. **Ref:** 3056.

**16074 Oleracein A**

5-Hydroxy-1-*p*-coumaric acyl-2,3-dihydro-1*H*-indole-2-carboxylic acid-6-*O*- $\beta$ -*D*-glucopyranoside C<sub>24</sub>H<sub>25</sub>NO<sub>11</sub> (503.47). Yellow powder. **Source:** MA CHI XIAN *Portulaca oleracea*. **Ref:** 5325.

**16075 Oleracein B**

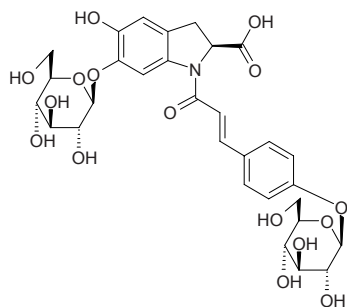
5-Hydroxy-1-ferulic acyl-2,3-dihydro-1*H*-indole-2-carboxylic acid-6-*O*- $\beta$ -*D*-glucopyranoside C<sub>25</sub>H<sub>27</sub>NO<sub>12</sub> (533.49). Yellow powder. **Source:** MA CHI XIAN *Portulaca oleracea*. **Ref:** 5325.



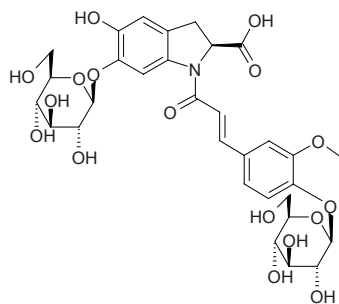


**16076 Oleracein C**

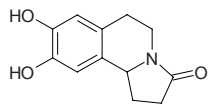
5-Hydroxy-1-(*p*-coumaric acyl-7'-*O*- $\beta$ -*D*-glucopyranose)-2,3-dihydro-1*H*-indole-2-carboxylic acid-6-*O*- $\beta$ -*D*-glucopyranoside C<sub>30</sub>H<sub>35</sub>NO<sub>16</sub> (665.61). Yellow powder,  $[\alpha]_D^{26} = -83.70^\circ$  ( $c = 0.35$ , H<sub>2</sub>O). Source: MA CHI XIAN *Portulaca oleracea*. Ref: 5325.

**16077 Oleracein D**

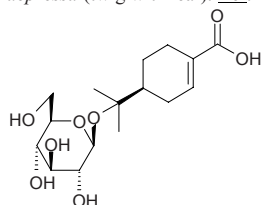
5-Hydroxy-1-(ferulic acyl-7'-*O*- $\beta$ -*D*-glucopyranose)-2,3-dihydro-1*H*-indole-2-carboxylic acid-6-*O*- $\beta$ -*D*-glucopyranoside C<sub>31</sub>H<sub>37</sub>NO<sub>17</sub> (695.64). Yellow powder,  $[\alpha]_D^{26} = +263.85^\circ$  ( $c = 0.15$ , H<sub>2</sub>O). Source: MA CHI XIAN *Portulaca oleracea*. Ref: 5325.

**16078 Oleracein E**

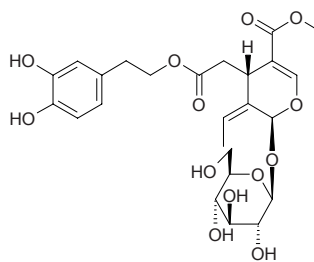
8,9-Dihydroxy-1,5,6,10*b*-tetrahydro-2*H*-pyrrolo[2,1-*a*]-isoquinolin-3-one C<sub>12</sub>H<sub>13</sub>NO<sub>3</sub> (219.24). Pale-white powder (MeOH), mp 238~240°C,  $[\alpha]_D^{26} = +61.12^\circ$  ( $c = 0.32$ , MeOH). Source: MA CHI XIAN *Portulaca oleracea*. Ref: 5325.

**16079 (-)-Oleuropeic acid 8-*O*- $\beta$ -*D*-glucopyranoside**

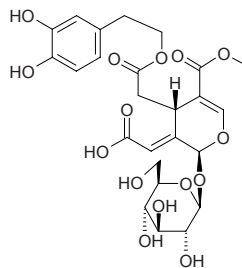
(4*S*)-4-(1- $\beta$ -*D*-Glucopyranosyloxy-1-methyl)ethyl-1-cyclohexene-1-carboxylic acid C<sub>16</sub>H<sub>26</sub>O<sub>8</sub> (346.38). White powder,  $[\alpha]_D = -36.3^\circ$  ( $c = 0.54$ , MeOH). Pharm: Antibacterial (*Helicobacter pylori* NCTC11637, MIC = 100 $\mu$ g/mL; NCTC11916, MIC = 100 $\mu$ g/mL; OCO1, MIC = 100 $\mu$ g/mL; control Hinokitilol (Nat. or Syn.), MIC = 100 $\mu$ g/mL, 100 $\mu$ g/mL, 50 $\mu$ g/mL, respectively). Source: OU ZHOU CI BAI BIAN ZHONG *Juniperus communis* var. *depressa* (twig with leaf). Ref: 4477.

**16080 Oleuropein**

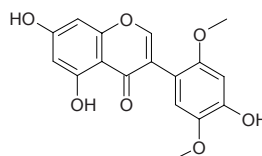
Oleuropein [32619-42-4] C<sub>25</sub>H<sub>32</sub>O<sub>13</sub> (540.53). Amorphous powder, mp 87~89°C,  $[\alpha]_D^{22} = -128.4^\circ$  ( $c = 0.61$ , ethanol); crystals (EtOAc), mp 89~91°C,  $[\alpha]_D^{26} = -168^\circ$  ( $c = 0.67$ , MeOH). artifact. Pharm: Antiarrhythmic; antibacterial (*Lactobacillus* spp.); antihypertensive (anesthetic cat with normal blood pressure, 30mg/kg, lowers blood pressure by 30%, induced hypertensive dog, 10mg/kg and 30mg/kg iv, lowers systolic pressure by 60%, lowers diastolic pressure by 70%); anti-inflammatory (100mg/kg, orl, mus swollen foot model caused by carrageenan, 3 hours later, InRt = 32.1%, edema in mus ears caused by TPA, 1mg/ear external use, InRt = 43.5%); anti-hemolysis (rat, red blood cell *in vitro*, 2,2'-azo-bis-(2-amidinopropane)dihydrochloride induced, IC<sub>50</sub> = 25.0 $\mu$ mol/L, control Trolox, IC<sub>50</sub> = 55.0 $\mu$ mol/L)<sup>[4141]</sup>; antispasmodic (duodenum, jejunum, ileum); coronary vasodilator; antiviral (Hep2 cells, Para-3, IC<sub>50</sub> = 11.7 $\mu$ g/mL, TI = 48.0; MDCK cells, Flu-A, inactive; Vero cells, HSV-1, inactive; Hep2 cells, RSV, IC<sub>50</sub> = 23.4 $\mu$ g/mL, TI = 24.0)<sup>[4141]</sup>; molluscicide (kills snails in 24 hours, LD<sub>50</sub> = 250mg/L); bitter principle (in olives); low toxin. Source: BAI LA SHU *Fraxinus chinensis*, NV ZHEN ZI *Ligustrum lucidum*, RI BEN BAI LA SHU *Fraxinus japonica*, RI BEN NV ZHEN *Ligustrum japonicum*, YOU GAN LAN *Olea europaea*. Ref: 4, 660, 1521, 900, 4141.

**16081 Oleuropeinic acid**

[96382-90-0] C<sub>25</sub>H<sub>30</sub>O<sub>15</sub> (570.51). Amorphous,  $[\alpha]_D = -120.3^\circ$  (CHCl<sub>3</sub>). Source: NV ZHEN ZI *Ligustrum lucidum*, RI BEN NV ZHEN *Ligustrum japonicum*. Ref: 2870, 2633.

**16082 Olibergin A**

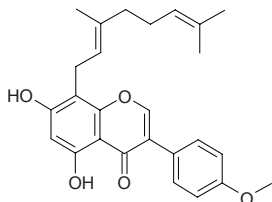
C<sub>17</sub>H<sub>14</sub>O<sub>7</sub> (330.30). Colorless oil. Pharm: EBV-EA activation inhibitor (Raji cells *in vitro*, TPA-induced, IC<sub>50</sub> = 462(mol ratio/32pmol TPA), control  $\beta$ -Carotene, IC<sub>50</sub> = 400(mol ratio/32pmol TPA)). Source: AO LI FO HUANG *Dalbergia oliveri* (stam bark). Ref: 3483.



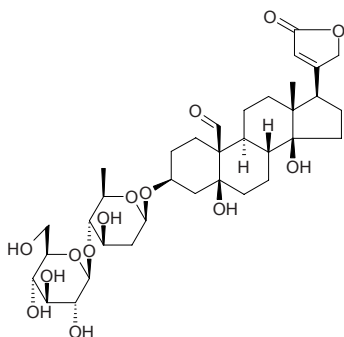


**16083 Olibergin B**

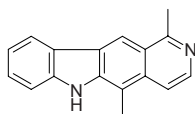
$C_{26}H_{28}O_5$  (420.51). Colorless oil. **Pharm:** EBV-EA activation inhibitor (Raji cells *in vitro*, TPA-induced,  $IC_{50} = 281$  (mol ratio/32pmol TPA), control  $\beta$ -Carotene,  $IC_{50} = 400$  (mol ratio/32pmol TPA)). **Source:** AO LI FO HUANG TAN *Dalbergia oliveri* (stam bark). **Ref:** 3483.

**16084 Olitoriside**

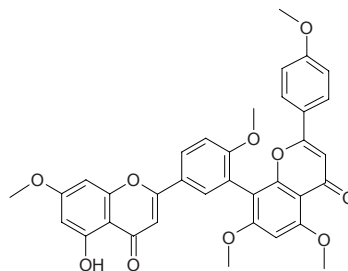
Olitorin [13289-20-8]  $C_{35}H_{52}O_{14}$  (696.80). mp 204~206°C (dec). **Pharm:** Cardiotoxic (*in vivo*, pigeon method iv, LD = 2.66 $\mu$ g/kg, frog, rbt, dog and cat); inhibits gastric acid secretion (10~100 $\mu$ mol/L, *in vitro*); LD<sub>50</sub> (mus, iv) = 5.2mg/kg. **Source:** CHANG SHUO HUANG MA *Corchorus olitorius*, HUANG MA YE *Corchorus capsularis*, HUANG MA ZI *Corchorus capsularis*, MENG GU CE JIN ZHAN HUA *Adonis mongolica*. **Ref:** 4, 6, 658.

**16085 Olivacine**

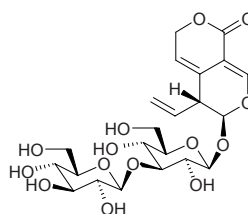
Guatambuine [484-49-1]  $C_{17}H_{14}N_2$  (246.31). mp 317~325°C. **Pharm:** Antineoplastic (hmn tumor, strong; mus L<sub>1210</sub>, ip, 25mg/kg *quaque die* or 50mg/kg *alternis diebus*, biotic prolonged rate = 89%~229%); anthelmintic, inhibits biosynthesis of protein (epimastigotes of *Trypanosoma cruzi*); antirheumatic; antiulcerative. **Source:** BAI JIAN MU *Aspidosperma campus-belus*, HE LU BAI JIAN MU *Aspidosperma olivaceum*, HEI BAI JIAN MU *Aspidosperma nigricans*. **Ref:** 5, 658.

**16086 Oliveriflavone**

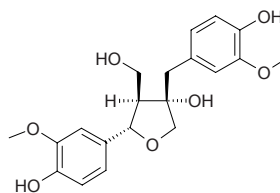
[107392-32-5]  $C_{35}H_{28}O_{10}$  (608.61). **Source:** BI ZI CU FEI *Cephalotaxus oliveri*. **Ref:** 2945.

**16087 Olivioside**

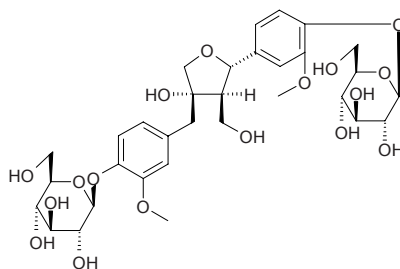
$C_{22}H_{30}O_{14}$  (518.48). **Source:** LONG DAN *Gentiana scabra* (dried rhizome and root). **Ref:** 3097.

**16088 (-)-Olivil**

[2955-23-9]  $C_{20}H_{24}O_7$  (376.41). Crystals + 1H<sub>2</sub>O (H<sub>2</sub>O), mp 127°C, 105°C, 142~143°C (anhyd.),  $[\alpha]_D^{20} = -127^\circ$ . **Source:** DU ZHONG *Eucommia ulmoides*, FEI ZHOU GAN LAN *Olea africana*, JIAN YE YIN YANG HUO *Epimedium sagittatum*, YOU GAN LAN *Olea europaea*, *Abies tsaotana*. **Ref:** 2, 660, 1521.

**16089 (-)-Olivil-4',4''-di-O-β-D-glucopyranoside**

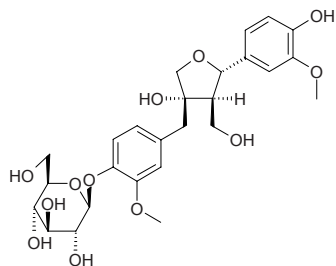
$C_{32}H_{44}O_{17}$  (700.70). **Source:** DU ZHONG *Eucommia ulmoides*. **Ref:** 2, 2793.



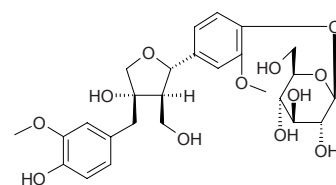
**16090 (-)-Olivil-4''-O-β-D-glucopyranoside**

$C_{26}H_{34}O_{12}$  (538.55). Amorphous powder,  $[\alpha]_D^{26} = -61.3^\circ$  ( $c = 0.37$ , MeOH).

Source: DU ZHONG *Eucommia ulmoides*, LAN SHAI PIAO *Sambucus sieboldiana* (leaf). Ref: 2, 4192.

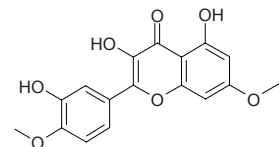
**16091 (-)-Olivil-4'-O-β-D-glucopyranoside**

$C_{26}H_{34}O_{12}$  (538.55). Source: DU ZHONG *Eucommia ulmoides*. Ref: 2.

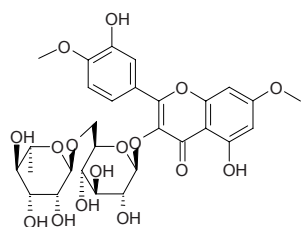
**16092 Ombuin**

3,5,3'-Trihydroxy-7,4'-dimethoxyflavone [529-40-8]  $C_{17}H_{14}O_7$  (330.30).

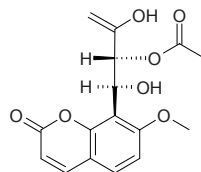
Source: GUANG HUO XIANG *Pogostemon cablin* [Syn. *Mentha cablin*], JIAO GU LAN *Gynostemma pentaphyllum*. Ref: 2, 660.

**16093 Ombuoside**

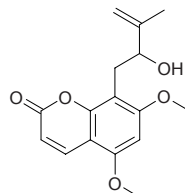
[20188-85-6]  $C_{29}H_{34}O_{16}$  (638.58). Pale yellow crystals, mp 195~196°C,  $[\alpha]_D = -43^\circ$  (pyridine). Source: A GEN TING SHANG LU *Phytolacca dioica*, JIAO GU LAN *Gynostemma pentaphyllum*, *Flyriella parryi*. Ref: 2944.

**16094 Omphalocarpinol**

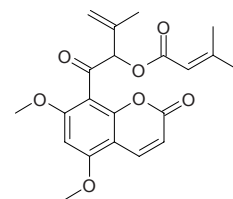
$C_{16}H_{16}O_7$  (320.30). Colorless prisms ( $CHCl_3$ ), mp 153~154°C,  $[\alpha]_D^{24} = -24.7^\circ$  ( $c = 0.05$ , MeOH). Pharm: Platelet aggregation inhibitor (washed rabbit platelets, induced by thrombin, AA, collagen and PAF, 100μg/mL: thrombin = 0.1U/mL, AggRt = (79.3±1.7)%, control, AggRt = (80.0±1.1)%; AA = 100μmol/L, AggRt = (58.0±3.6)%,  $p < 0.001$ , control, AggRt = (77.0±1.5)%; collagen = 10μg/mL, AggRt = (0±0)%,  $p < 0.001$ , control, AggRt = (78.3±1.3)%; PAF = 1ng/mL, AggRt = (79.7±2.4)%, control, AggRt = (82.5±1.5)%). Source: QI GUO JIU LI XIANG *Murraya omphalocarpa* (leaf). Ref: 5417.

**16095 Omphamurin**

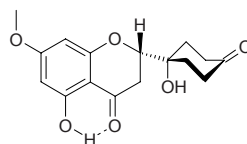
$C_{16}H_{18}O_5$  (290.32).  $[\alpha]_D^{24} = +41.4^\circ$  ( $c = 0.1$ , MeOH). Pharm: Platelet aggregation inhibitor (washed rabbit platelets, induced by thrombin, AA, collagen and PAF, 100μg/mL: thrombin = 0.1U/mL, AggRt = (84.7±1.4)%,  $p < 0.05$ , control, AggRt = (80.0±1.1)%; AA = 100μmol/L, AggRt = (0±0)%,  $p < 0.001$ , control, AggRt = (77.0±1.5)%; collagen = 10μg/mL, AggRt = (0±0)%,  $p < 0.001$ , control, AggRt = (78.3±1.3)%; PAF = 1ng/mL, AggRt = (57.3±7.8)%,  $p < 0.01$ , control, AggRt = (82.5±1.5)%). Source: QI GUO JIU LI XIANG *Murraya omphalocarpa* (leaf). Ref: 5417.

**16096 Omphamurrayin**

5,7-Dimethoxy-8-(1-oxo-2-senecioidyl-3-methyl-3-butenyl)-2*H*-1-benzopyran-2-one  $C_{21}H_{22}O_7$  (386.41).  $[\alpha]_D^{25} = -6.0^\circ$  ( $c = 0.269$ , MeOH). Source: QI GUO QIAN LI XIANG *Murraya paniculata* var. *omphalocarpa* (leaf). Ref: 4157.

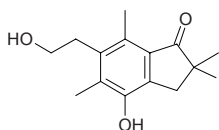
**16097 (2*S*)-Ongokein-4'-one**

(2*S*)-5-Hydroxy-2-(1'-hydroxy-4'-oxocyclohexyl)-7-methoxychroman-4-one  $C_{16}H_{18}O_6$  (306.32). White crystals, mp 165~168°C,  $[\alpha]_D = +36^\circ$  ( $c = 0.13$ ). Source: EN GE MU *Ongokea gore* (stem cortex and root). Ref: 5308.

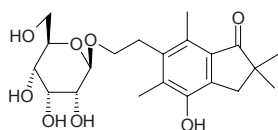


**16098 Onitin**

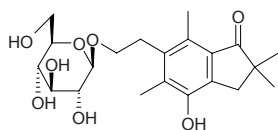
2,2,5,7-Tetramethyl-4-hydroxy-6-(2-hydroxyethyl)-indanone [53823-02-2]  $C_{15}H_{20}O_3$  (248.32). Crystals (MeOH), mp 212–214°C. **Pharm:** Ileal smooth muscle relaxant (gpg, *in vitro*, contraction induced by 5-HT or histamine); 5-HT inhibitor (D and M receptor). **Source:** JIN FEN JUE *Onychium siliculosum*, JIN MAO GOU *Cibotium barometz* [Syn. *Polypodium barometz*], JI JUE *Hypolepis punctata* [Syn. *Polypodium punctatum*], WEN JING *Equisetum arvense*, *Onychium auratum*, *Dicksonia gigantean*. **Ref:** 660, 1521, 2932, 2930, 2933.

**16099 Onitin-2'-O-β-D-alloside**

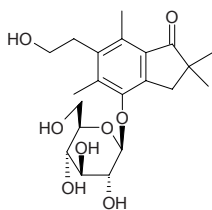
$C_{21}H_{30}O_8$  (410.47). **Source:** JIN MAO GOU *Cibotium barometz* [Syn. *Polypodium barometz*]. **Ref:** 2932.

**16100 Onitin-2'-O-β-D-glucoside**

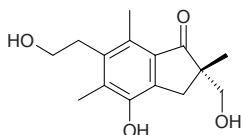
$C_{21}H_{30}O_8$  (410.47). **Source:** JIN MAO GOU *Cibotium barometz* [Syn. *Polypodium barometz*]. **Ref:** 2932.

**16101 Onitinoside**

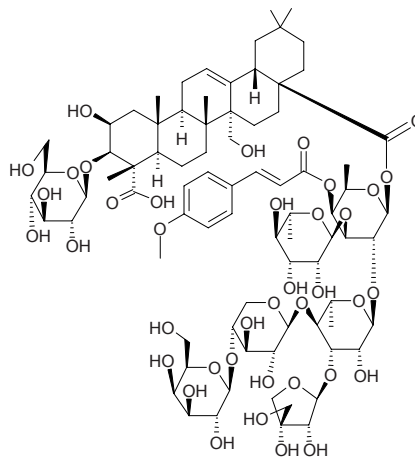
[78415-48-2]  $C_{21}H_{30}O_8$  (410.47). Colorless crystals (EtOAc), mp 172–174°C. **Pharm:** Ileal smooth muscle relaxant (gpg, *in vitro*). **Source:** JIN FEN JUE *Onychium siliculosum*. **Ref:** 2937, 2930.

**16102 (S)-Onitisin**

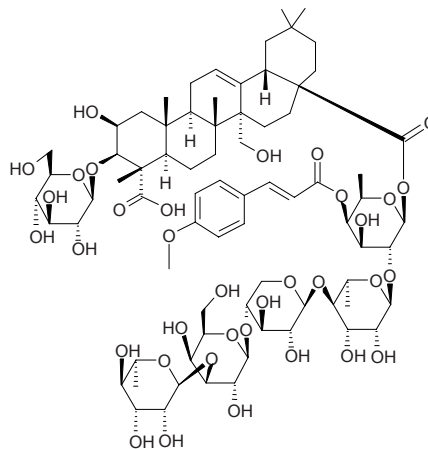
(S)-4-Hydroxypterosin A [53823-03-3]  $C_{15}H_{20}O_4$  (264.32). Needles (MeOH), mp 184°C,  $[\alpha]_D^{25} = -31.16^\circ$  ( $c = 1$ , MeOH). **Pharm:** Ileal smooth muscle relaxant (gpg, *in vitro*). **Source:** JIN FEN JUE *Onychium siliculosum*, WAN JUE *Dennstaedtia scabra* [Syn. *Dicksonia scabra*]. **Ref:** 1521, 2929, 2930, 2931.

**16103 Onjisaponin A**

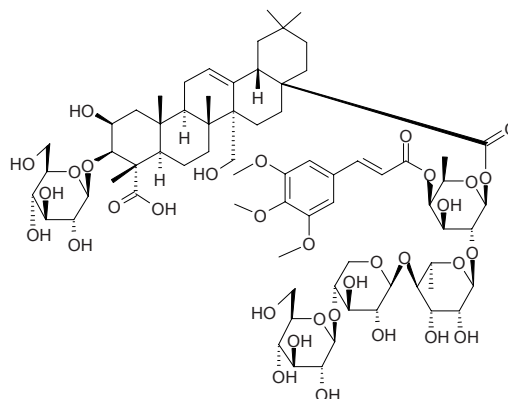
[82410-33-1]  $C_{80}H_{120}O_{39}$  (1705.83). Powder (EtOH), mp 253–254°C (dec),  $[\alpha]_D^{17} = -18.4^\circ$  ( $c = 1.24$ , MeOH). **Source:** YUAN ZHI *Polygala tenuifolia*. **Ref:** 2914.

**16104 Onjisaponin B**

[35906-36-6]  $C_{75}H_{112}O_{35}$  (1573.71). Powder (EtOH aq.), mp 249–251°C (dec),  $[\alpha]_D^{17} = -10.2^\circ$  ( $c = 1.08$ , MeOH). **Source:** MEI YUAN ZHI *Polygala senega*, YUAN ZHI *Polygala tenuifolia*. **Ref:** 2914.

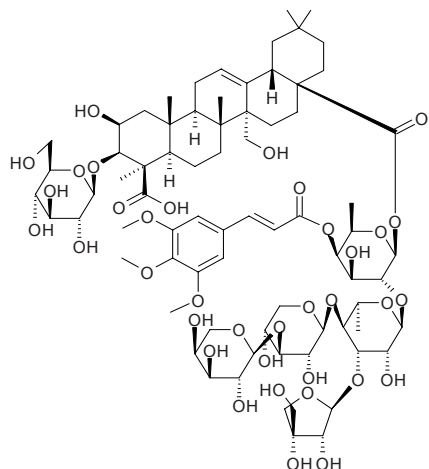
**16105 Onjisaponin E**

[82410-35-3]  $C_{71}H_{106}O_{33}$  (1487.62). Needles + 4H<sub>2</sub>O (EtOH aq.), mp 245–247°C (dec),  $[\alpha]_D^{17} = -6.5^\circ$  ( $c = 1$ , MeOH). **Source:** YUAN ZHI *Polygala tenuifolia*. **Ref:** 2914.

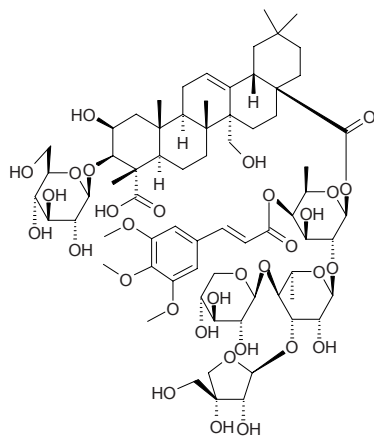


**16106 Onjisaponin F**

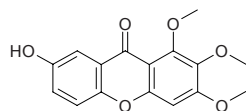
[79103-90-5] C<sub>75</sub>H<sub>112</sub>O<sub>36</sub> (1589.71). Source: LIAN QIAO *Forsythia suspensa*.  
Ref: 1521.

**16107 Onjisaponin G**

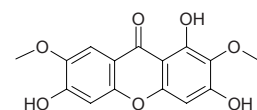
[In DNP] C<sub>70</sub>H<sub>104</sub>O<sub>32</sub> (1457.59). Source: LIAN QIAO *Forsythia suspensa*.  
Ref: 1521.

**16108 Onjixanthone I**

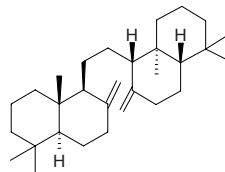
7-Hydroxy-1,2,3-trimethoxyxanthone C<sub>16</sub>H<sub>14</sub>O<sub>6</sub> (302.29). Source: HONG HUA *Carthamus tinctorius*, YUAN ZHI *Polygala tenuifolia* (cortex). Ref: 1521, 4507.

**16109 Onjixanthone II**

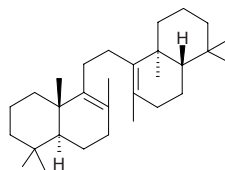
1,3,6-Trihydroxy-2,7-dimethoxyxanthone [136083-93-7] C<sub>15</sub>H<sub>12</sub>O<sub>7</sub> (304.26).  
Source: CHAN YI TENG *Securidaca inappendiculata* (stem), HONG HUA *Carthamus tinctorius*, JIA HUANG HUA YUAN ZHI *Polygala fallax* [Syn. *Polygala aureocauda*] (root and stem: yield = 0.00041%)<sup>[4683]</sup>. Ref: 2, 4683, 5238.

**16110 α-Onoceradiene**

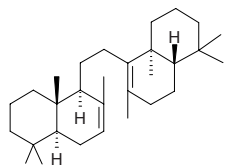
8(26),14(27)-Onoceradiene [6713-91-3] C<sub>30</sub>H<sub>50</sub> (410.73). Crystals, mp 209–210°C, [α]<sub>D</sub> = +22.4°. Source: KUAN YU XIAN JUE *Colysis pothifolia* [Syn. *Hemionitis pothifolia*], LUO YAN CAO *Lemmaphyllum microphyllum*, DAO LUAN YE FU SHI JUE *Lemmaphyllum microphyllum* var. *obovatum*. Ref: 2836, 2837, 2838.

**16111 β-Onoceradiene**

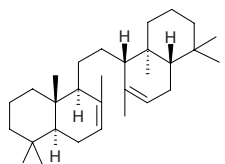
C<sub>30</sub>H<sub>50</sub> (410.73). Source: LUO YAN CAO *Lemmaphyllum microphyllum*. Ref: 2838.

**16112 Onocera-7,13-diene**

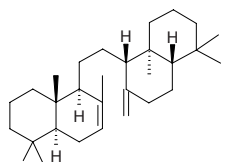
C<sub>30</sub>H<sub>50</sub> (410.73). Source: LUO YAN CAO *Lemmaphyllum microphyllum*. Ref: 2838.

**16113 Onocera-7,14-diene**

C<sub>30</sub>H<sub>50</sub> (410.73). Source: LUO YAN CAO *Lemmaphyllum microphyllum*. Ref: 2838.

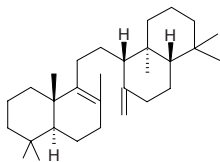
**16114 Onocera-7,14(27)-diene**

C<sub>30</sub>H<sub>50</sub> (410.73). Source: LUO YAN CAO *Lemmaphyllum microphyllum*. Ref: 2838.

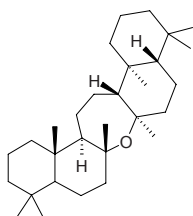


**16115 Onocera-8,14(27)-diene**

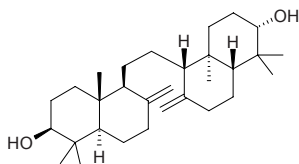
$C_{30}H_{50}$  (410.73). Source: LUO YAN CAO *Lemmaphyllum microphyllum*. Ref: 2838.

**16116 Onoceranoxide**

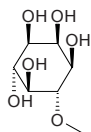
[83013-85-8]  $C_{30}H_{52}O$  (428.75). Crystals, mp 226~227°C,  $[\alpha]_D = +7.9^\circ$ . Source: DAO LUAN YE FU SHI JUE *Lemmaphyllum microphyllum* var. *obovatum*, DUO ZU JUE *Polypodium vulgare*. Ref: 2837, 2839.

**16117  $\alpha$ -Onocerin**

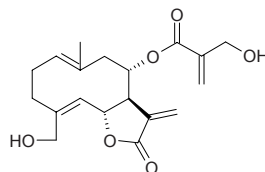
3 $\beta$ -21 $\alpha$ -Dihydroxy-14-sekogrammasera-8(26),14(27)-diene [511-01-3]  $C_{30}H_{50}O_2$  (442.73). mp 232°C; 202~203°C. Pharm: AChE inhibitor<sup>[5380]</sup>. Source: CI MANG BING HUA *Ononis spinosa* (in 1962, the compound was isolated from the plant by Hiroyuki Ageta et al.)<sup>[5505]</sup>, PU DI WU GONG *Lycopodium cernuum*, SHEN JIN CAO *Lycopodium japonicum* [Syn. *Lycopodium clavatum*], TENG SHI SONG *Lycopodium casuarinoides*, YU BAI SHI SONG *Lycopodium obscurum*, *Lycopodium sitchense*, *Lycopodium inundatum*. Ref: 6, 5380, 5505.

**16118 Ononitol**

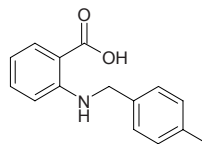
$C_7H_{14}O_6$  (194.19). mp 173°C. Source: MU XU *Medicago sativa*. Ref: 6.

**16119 Onopordopicrin**

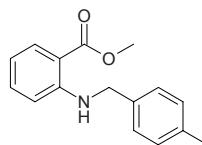
[19889-00-0]  $C_{19}H_{24}O_6$  (348.40). Crystals (CHCl<sub>3</sub>-Et<sub>2</sub>O), mp 55~58°C,  $[\alpha]_D^{25} = +16.2$  ( $c = 0.5$  MeOH). Pharm: Cytotoxic (KB, ED<sub>50</sub> = 0.85 $\mu$ g/mL; culture tumor cells); insect antifeedant; antibacterial (*Staphylococcus aureus*). Source: A ER JI ER DA CHI JI *Onopordum algeriense*, AI JI DA CHI JI *Onopordum alexandrinum*, DA CHI JI *Onopordum acanthium*, NIU BANG YE *Arctium lappa*, YI LI LI YA DA CHI JI *Onopordum illyricum*. Ref: 5, 658, 1207, 1521.

**16120 Onosmin A**

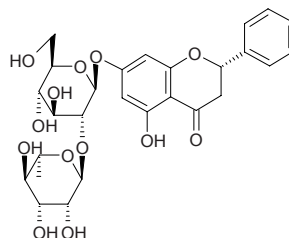
$C_{15}H_{15}NO_2$  (241.29). White amorphous solid, mp 185~187°C. Pharm: Lipoxygenase inhibitor (LOX, EC1.13.11.12, IC<sub>50</sub> = (24.2 $\pm$ 0.04) $\mu$ mol/L, non-competitive type,  $K_i$  = (22.0 $\pm$ 0.1) $\mu$ mol/L, positive control Baicalein, IC<sub>50</sub> = (22.0 $\pm$ 0.05) $\mu$ mol/L, mixed type,  $K_i$  = (18.0 $\pm$ 0.02) $\mu$ mol/L). Source: CU YING MAO DIAN ZI CAO *Onosma hispidum* (whole herb). Ref: 4490.

**16121 Onosmin B**

$C_{16}H_{17}NO_2$  (255.32). White amorphous solid, mp 137~140°C. Pharm: Lipoxygenase inhibitor (LOX, EC1.13.11.12, IC<sub>50</sub> = (36.0 $\pm$ 0.03) $\mu$ mol/L, non-competitive type,  $K_i$  = (31.1 $\pm$ 0.05) $\mu$ mol/L, positive control Baicalein, IC<sub>50</sub> = (22.0 $\pm$ 0.05) $\mu$ mol/L, mixed type,  $K_i$  = (18.0 $\pm$ 0.02) $\mu$ mol/L). Source: CU YING MAO DIAN ZI CAO *Onosma hispidum* (whole herb). Ref: 4490.

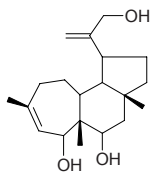
**16122 Onychin**

Sarotanamide [13241-31-1]  $C_{27}H_{32}O_{13}$  (564.55). Colorless needles, mp 277~279°C,  $[\alpha]_D^{26} = -104^\circ$  ( $c = 0.56$ , pyridine). Pharm: Cytotoxic (P<sub>388</sub>, IC<sub>50</sub> = 2.58 $\mu$ g/mL). Source: MA ZHUANG SAI YA MA *Nierembergia hippomanica*, XIAO YE JI WEI *Onychium japonicum* [Syn. *Tricomanes japonicum*]. Ref: 2826, 2827, 2828.

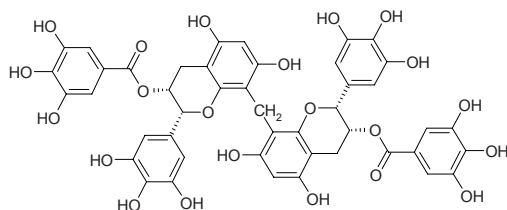


**16123 Onychiol C**

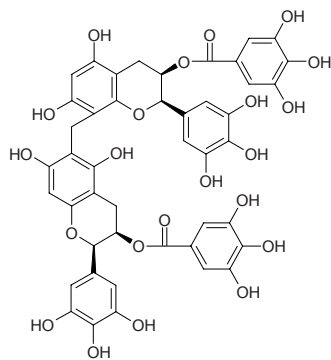
$C_{20}H_{32}O_3$  (320.48). Source: XIAO YE JI WEI *Onychium japonicum* [Syn. *Tricomanes japonicum*]. Ref: 2919.

**16124 Oolonghomobisflavan A**

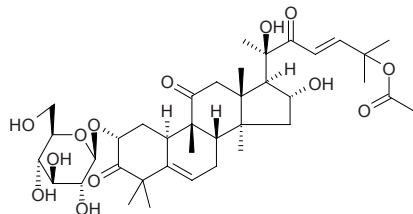
[126737-60-8]  $C_{45}H_{36}O_{22}$  (928.78). Brown amorphous powder +4H<sub>2</sub>O,  $[\alpha]_D^{26} = -271.0^\circ$  ( $c = 1.0$ , acetone). Pharm: NADH dehydrogenase inhibitor (rat liver SMP, *Bacillus subtilis* etc.). Source: WU LONG CHA *Camellia sinensis* var. *viridis*. Ref: 2823, 2824.

**16125 Oolonghomobisflavan B**

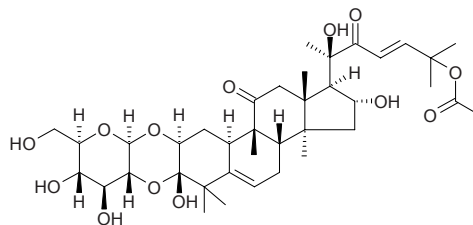
[126715-88-6]  $C_{45}H_{36}O_{22}$  (928.78). Brown amorphous powder +3H<sub>2</sub>O,  $[\alpha]_D^{26} = -205.0^\circ$  ( $c = 1.0$ , acetone). Source: WU LONG CHA *Camellia sinensis* var. *viridis*. Ref: 2823.

**16126 Opercurin A**

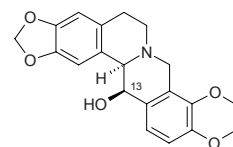
$C_{38}H_{56}O_{13}$  (720.86). Colorless amorphous powder,  $[\alpha]_D^{20} = -3.73^\circ$  ( $c = 0.51$ , acetone). Source: NANG GAI SI GUA *Luffa operculata*. Ref: 2593.

**16127 Opercurin B**

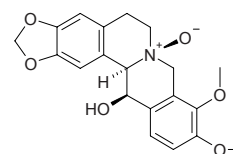
$C_{38}H_{56}O_{13}$  (720.86). Colorless amorphous powder,  $[\alpha]_D = +45.4^\circ$  ( $c = 1.42$ , acetone). Source: NANG GAI SI GUA *Luffa operculata*. Ref: 2593.

**16128 Ophiocarpine**

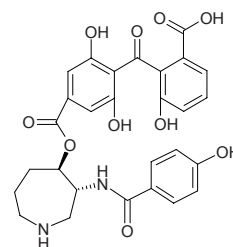
[478-13-7]  $C_{20}H_{21}NO_5$  (355.39). Prisms (MeOH), mp 188°C,  $[\alpha]_D^{24} = -283^\circ$  ( $c = 1$ , CHCl<sub>3</sub>). Pharm: Cytotoxic; antimicrobial. Source: HUA ZI JIN *Corydalis cheilanthifolia*, KU MANG HUANG JIN *Corydalis govaniiana*, SHE GUO HUANG JIN *Corydalis ophiocarpa*, *Corydalis campulicarpa*. Ref: 1521, 2898.

**16129 Ophiocarpine N-oxide**

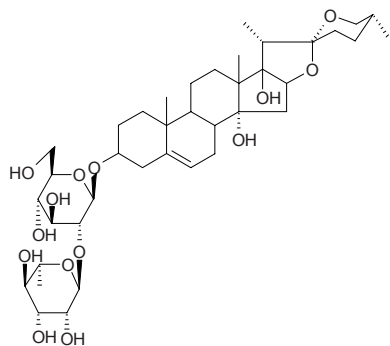
Carpoxidine [66408-19-3]  $C_{20}H_{21}NO_6$  (371.39). Crystals (MeOH), mp 213–215°C, 207–108°C,  $[\alpha]_D = -110^\circ$  ( $c = 0.5$ , CHCl<sub>3</sub>),  $[\alpha]_D^{25} = -185^\circ$  ( $c = 0.77$ , C<sub>6</sub>H<sub>6</sub>:MeOH = 2:1). Source: SHE GUO HUANG JIN *Corydalis ophiocarpa*. Ref: 1521, 2898.

**16130 Ophiocordin**

[63590-19-2]  $C_{28}H_{26}N_2O_{10}$  (550.53). Pale-yellow amorphous powder, mp > 175°C (dec). Pharm: Antifungal. Source: DA TUAN NANG CHONG CAO *Cordyceps ophioglossoides*. Ref: 2843, 2844.

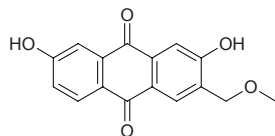


**16131 Ophiogenin-3-O- $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranoside**  
 $C_{39}H_{62}O_{14}$  (754.92). Source: MAI DONG *Ophiopogon japonicus*. Ref: 2865.



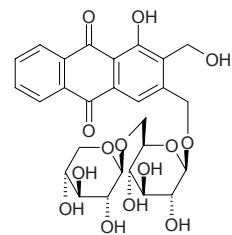
**16132 Ophiohayatone A**

$C_{16}H_{12}O_5$  (284.27). Yellow powder, mp 164–166°C. Source: XIA YE SHE GEN CAO *Ophiorrhiza hayatana*. Ref: 4516.



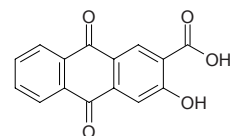
**16133 Ophiohayatone B**

$C_{27}H_{30}O_{14}$  (578.53). Yellow powder, mp 209–210°C,  $[\alpha]_D = -50.8^\circ$  ( $c = 0.024$ , MeOH). Source: XIA YE SHE GEN CAO *Ophiorrhiza hayatana*. Ref: 4516.



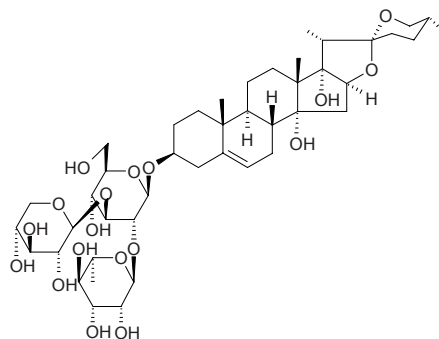
**16134 Ophiohayatone C**

$C_{15}H_8O_5$  (268.23). Yellow powder, mp 191–193°C. Source: XIA YE SHE GEN CAO *Ophiorrhiza hayatana*. Ref: 4516.



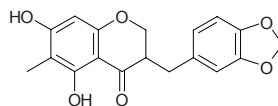
**16135 Ophiopogon A**

Ophiopogenin-3-O- $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 2) [ $\beta$ -D-xylopyranosyl(1 $\rightarrow$ 3)]- $\beta$ -D-giucopyranoside  $C_{44}H_{70}O_{18}$  (887.04). White amorphous powder, mp 250–255°C,  $[\alpha]_D^{25} = -39.09^\circ$  ( $c = 0.55$ , MeOH). Source: MAI DONG *Ophiopogon japonicus*. Ref: 890.



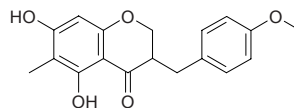
**16136 Ophiopogonanone A**

[75239-63-3]  $C_{18}H_{16}O_6$  (328.32). Needles (EtOH), mp 175–176°C,  $[\alpha]_D = -13.0^\circ$  ( $c = 1$ , dioxane). Source: MAI DONG *Ophiopogon japonicus*. Ref: 1397, 2796.



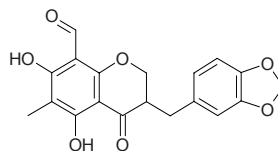
**16137 Ophiopogonanone B**

$C_{18}H_{18}O_5$  (314.34). Source: MAI DONG *Ophiopogon japonicus*. Ref: 1397.



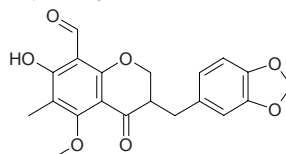
**16138 Ophiopogonanone C**

$C_{19}H_{16}O_7$  (356.34). Colorless needles ( $CHCl_3$ ), mp 171–172°C. Source: MAI DONG *Ophiopogon japonicus* (tuber). Ref: 4663.



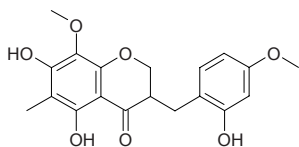
**16139 Ophiopogonanone D**

$C_{20}H_{18}O_7$  (370.36). Yellow glue-like solid, mp 65–68°C,  $[\alpha]_D^{20} = -10.0^\circ$  ( $c = 0.2$ , MeOH). Source: MAI DONG *Ophiopogon japonicus* (tuber). Ref: 4663.

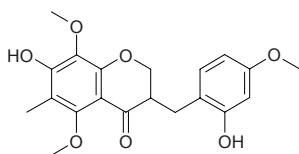


**16140 Ophiopogonone E**

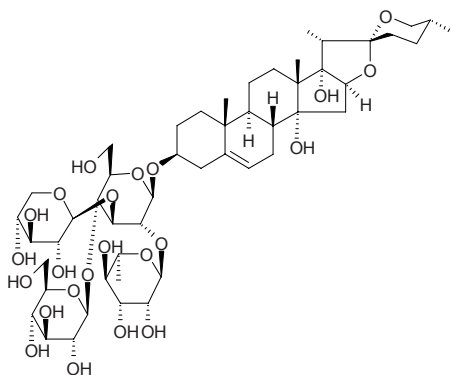
5,7-Dihydroxy-8-methoxy-6-methyl-3-(2'-hydroxy-4'-methoxybenzyl)chroman-4-one C<sub>19</sub>H<sub>20</sub>O<sub>7</sub> (360.37). Colorless glue-like solid, mp 62–64°C; amorphous powder,  $[\alpha]_D^{22} = -12.6^\circ$  ( $c = 0.29$ , CHCl<sub>3</sub>:MeOH = 1:2). Source: MAI DONG *Ophiopogon japonicus* (tuber). Ref: 2044, 4663.

**16141 Ophiopogonone F**

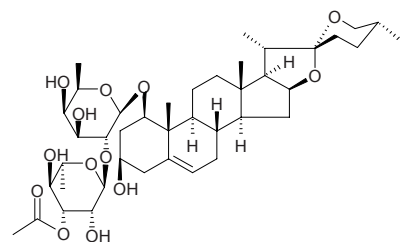
7-Hydroxy-5,8-dimethoxy-6-methyl-3-(2'-hydroxy-4'-methoxybenzyl)chroman-4-one C<sub>20</sub>H<sub>22</sub>O<sub>7</sub> (374.39). Dark red glue-like solid, mp 75–78°C,  $[\alpha]_D^{20} = +300^\circ$  ( $c = 0.01$ , MeOH)<sup>[4663]</sup>;  $[\alpha]_D^{22} = -7.74^\circ$  ( $c = 0.97$ , MeOH)<sup>[2044]</sup>. Source: MAI DONG *Ophiopogon japonicus* (tuber). Ref: 2044, 4663.

**16142 Ophiopogon B**

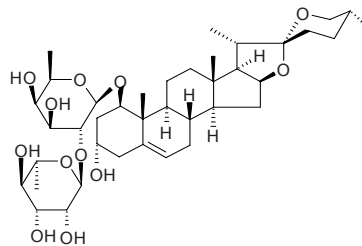
Ophiopogonin-3-*O*- $\alpha$ -L-rhamnopyranosyl (1→2) [ $\beta$ -*D*-xylopyranosyl(1→3)] [ $\beta$ -*D*-glucopyranosyl(1→4)]- $\beta$ -*D*-glucopyranoside C<sub>50</sub>H<sub>80</sub>O<sub>23</sub> (1049.18). White Amorphous powder, mp 218–222°C,  $[\alpha]_D^{25} = -57.82^\circ$  ( $c = 0.31$ , MeOH). Source: MAI DONG *Ophiopogon japonicus*. Ref: 890.

**16143 Ophiopogonin A**

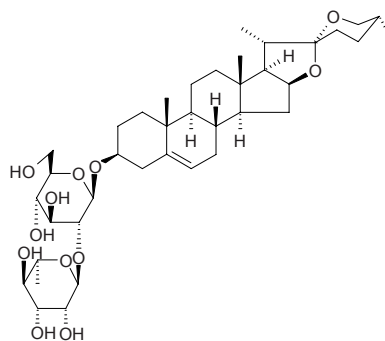
[11054-24-3] C<sub>41</sub>H<sub>64</sub>O<sub>13</sub> (764.96). Crystals (EtOH aq.), mp 182–184°C,  $[\alpha]_D^{18} = -89.7^\circ$  ( $c = 0.27$ , pyridine). Source: MAI DONG *Ophiopogon japonicus*. Ref: 660, 1521.

**16144 Ophiopogonin B**

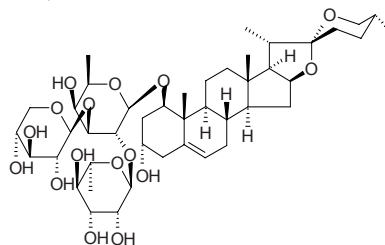
[38971-41-4] C<sub>39</sub>H<sub>62</sub>O<sub>12</sub> (722.92). mp 269–271°C. Source: MAI DONG *Ophiopogon japonicus* (dried tuberoid: mean content = 0.14%<sup>[5508]</sup>). Ref: 1521, 5508.

**16145 Ophiopogonin C'**

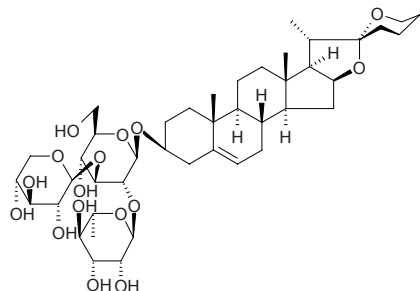
C<sub>39</sub>H<sub>62</sub>O<sub>12</sub> (722.92). Source: MAI DONG *Ophiopogon japonicus*. Ref: 660.

**16146 Ophiopogonin D**

[41753-55-3] C<sub>44</sub>H<sub>70</sub>O<sub>16</sub> (855.04). mp 263–265°C. Source: MAI DONG *Ophiopogon japonicus* (dried tuberoid: mean content = 0.15%<sup>[5508]</sup>). Ref: 660, 1521, 5508.

**16147 Ophiopogonin D'**

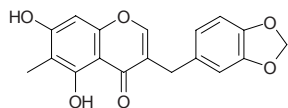
[65604-80-0] C<sub>44</sub>H<sub>70</sub>O<sub>16</sub> (855.04). Crystals (EtOH aq.), mp 255–257°C (dec),  $[\alpha]_D^{18} = -41.34^\circ$  ( $c = 0.17$ , pyridine). Source: KUO YE SHAN MAI DONG *Liriope platyphylla*, MAI DONG *Ophiopogon japonicus*. Ref: 1521, 2965, 2938.



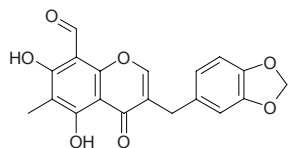


**16148 Ophiopogonone A**

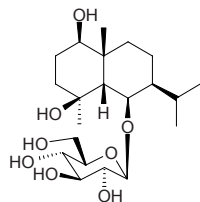
[75239-62-2] C<sub>18</sub>H<sub>14</sub>O<sub>6</sub> (326.31). Pale-yellow needles (EtOH), mp 235~236°C. Source: MAI DONG *Ophiopogon japonicus*. Ref: 2796, 2797.

**16149 Ophiopogonone C**

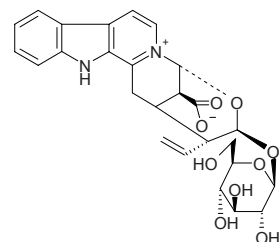
C<sub>19</sub>H<sub>14</sub>O<sub>7</sub> (354.32). Red powder, mp 147~149°C. Source: MAI DONG *Ophiopogon japonicus* (tuber). Ref: 4663.

**16150 Ophiopogonoside A**

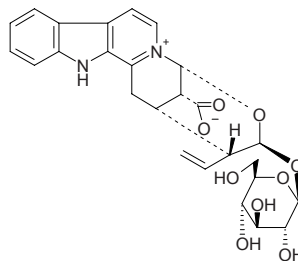
1β,4β,6β-Trihydroxy-*cis*-eudesmane-6-*O*-β-*D*-glucopyranoside C<sub>21</sub>H<sub>38</sub>O<sub>8</sub> (418.53). White amorphous powder, mp 217~219°C, [α]<sub>D</sub><sup>25</sup> = -3.4° (c = 0.30, MeOH). Source: MAI DONG *Ophiopogon japonicus* (tuber: yield = 0.000018%). Ref: 4772.

**16151 Ophiorine A**

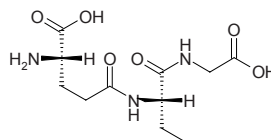
[99615-91-5] C<sub>26</sub>H<sub>28</sub>N<sub>2</sub>O<sub>9</sub> (512.52). Pale-yellow needles, mp 217~219°C, [α]<sub>D</sub> = +51°. Source: LIU QIU SHE GEN CAO *Ophiorrhiza liukuensis* (whole herb), RI BEN SHE GEN CAO *Ophiorrhiza japonica*, HEI YAN SHE GEN CAO *Ophiorrhiza kuroiwai*. Ref: 2966, 4527.

**16152 Ophiorine B**

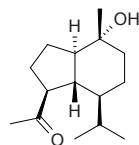
[99631-26-2] C<sub>26</sub>H<sub>28</sub>N<sub>2</sub>O<sub>9</sub> (512.52). Pale-yellow needles, mp 188~191°C, [α]<sub>D</sub> = +18.2°. Pharm: Ileal smooth muscle relaxant (gpg, *in vitro*, contraction caused by electrostimulation, ED<sub>50</sub> = 53 μmol/L). Source: HEI YAN SHE GEN CAO *Ophiorrhiza kuroiwai*, LIU QIU SHE GEN CAO *Ophiorrhiza liukuensis* (whole herb), RAN LIAO SI SHI MU *Sickingia tinctoria*, RI BEN SHE GEN CAO *Ophiorrhiza japonica*, WEI LIAN SI SHI MU *Sickingia williamsii*. Ref: 2966, 2967, 2968, 4527.

**16153 Ophthalmic acid**

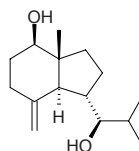
γ-*L*-Glutamyl-*L*-α-aminobutyryl glycine [495-27-2] C<sub>11</sub>H<sub>19</sub>N<sub>3</sub>O<sub>6</sub> (289.29). mp 179~180°C (dec), [α]<sub>D</sub><sup>20</sup> = -29° (c = 2.4, H<sub>2</sub>O). Source: QUN DAI CAI *Undaria pinnatifida*. Ref: 1521, 2735.

**16154 Oplopanone**

C<sub>15</sub>H<sub>26</sub>O<sub>2</sub> (238.37). Colorless prisms (*n*-hexane-EtOAc), mp 95~97°C. Pharm: Antiplasmodial inactive (*Plasmodium falciparum* strains, IC<sub>50</sub> > 50.00 μg/mL, control Chloroquine, IC<sub>50</sub> = 0.0028 μg/mL)<sup>[2383]</sup>. Source: HUANG PI GEN *Clausena lansium*, *Reneilimia cincinnata* (fruits), ZHOU YE MU LAN *Magnolia praecocissima* (seed). Ref: 2383, 2959, 4181.

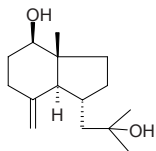
**16155 (7*R*\*)-Opposit-4(15)-ene-1β,7-diol**

C<sub>15</sub>H<sub>26</sub>O<sub>2</sub> (238.37). Colorless amorphous solid, [α]<sub>D</sub><sup>26</sup> = +36.8° (c = 0.3, CHCl<sub>3</sub>). Source: YI NIAN PENG *Erigeron annuus* (aerial parts), SU MEN BAI JIU CAO *Erigeron sumatrensis* (aerial parts). Ref: 4338.

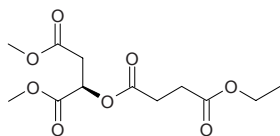


**16156 Opposit-4(15)-ene-1 $\beta$ ,11-diol**

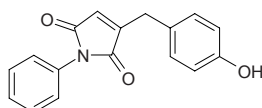
C<sub>15</sub>H<sub>26</sub>O<sub>2</sub> (238.37). Source: YI NIAN PENG *Erigeron annuus* (aerial parts), SU MEN BAI JIU CAO *Erigeron sumatrensis* (aerial parts). Ref: 4338.

**16157 Opuntiaester**

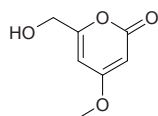
Dimethyl (2*R*)-2-[(4-ethoxy-4-oxobutanoyl)oxy]succinate C<sub>12</sub>H<sub>18</sub>O<sub>8</sub> (290.27). Colorless oil. Source: XIAN REN ZHANG *Opuntia dillenii* (stem). Ref: 4808.

**16158 Opuntin B**

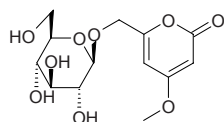
C<sub>17</sub>H<sub>13</sub>NO<sub>3</sub> (279.30). Yellowish crystals (acetone), mp 213°C. Source: XIAN REN ZHANG *Opuntia dillenii*. Ref: 2473.

**16159 Opuntiol**

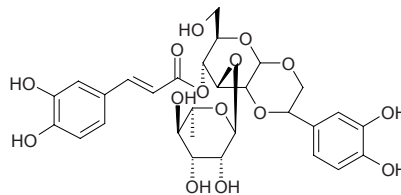
C<sub>7</sub>H<sub>8</sub>O<sub>4</sub> (156.14). Colorless needles, mp 180~181°C. Pharm: DPPH scavenger (SC<sub>50</sub> > 100 μmol/L)<sup>[4247]</sup>; antioxidant (superoxide anion radical scavenger, superoxide dismutase method, IC<sub>50</sub> for Formazan formation activity > 100 μmol/L)<sup>[4247]</sup>. Source: XIAN REN ZHANG *Opuntia dillenii* (fresh stem: yield = 0.0032%). Ref: 4247, 4826.

**16160 Opuntioside**

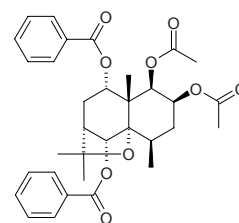
Opuntioside I; 4-Methoxy-6-( $\beta$ -D-glucopyranoxymethyl)-2*H*-pyran-2-one C<sub>13</sub>H<sub>18</sub>O<sub>9</sub> (318.28). Colorless cubic crystals, mp 145~147°C, [ $\alpha$ ]<sub>D</sub><sup>26</sup> = -42.0° (*c* = 1.0, MeOH); colorless fine crystals, mp 128.2~131.3°C, [ $\alpha$ ]<sub>D</sub><sup>26</sup> = -42.0° (*c* = 1.0, MeOH). Pharm: DPPH scavenger (SC<sub>50</sub> > 100 μmol/L)<sup>[4247]</sup>; antioxidant (superoxide anion radical scavenger, superoxide dismutase method, IC<sub>50</sub> for Formazan formation activity > 100 μmol/L)<sup>[4247]</sup>. Source: XIAN REN ZHANG *Opuntia dillenii* (fresh stem: yield = 0.0078%). Ref: 4247, 4826.

**16161 Oroposide‡**

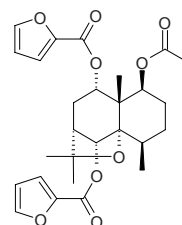
Orobanchoside; 2-(3,4-Dihydroxy) phenyl ethanol (1→1) (2→2)-[(1→3)-rhamnopyranosyl-4-*O*-caffeoyl] glucoside C<sub>29</sub>H<sub>34</sub>O<sub>15</sub> (622.59). Yellowish amorphous powder. Source: GUANG FANG FENG *Anisomeles indica* [Syn. *Epimeredi indica*] (whole herb). Ref: 4592. ‡Note: see compound 4225.

**16162 Orbiculin A**

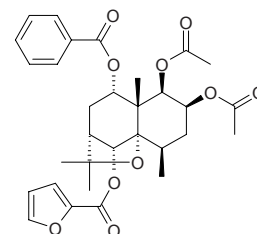
C<sub>33</sub>H<sub>38</sub>O<sub>9</sub> (578.67). Pharm: Anti-inflammatory inactive (*in vitro*, NF- $\kappa$ B inhibitor, IC<sub>50</sub> > 300 μmol/L; NO production inhibitor, IC<sub>50</sub> > 300 μmol/L; control Aminoguanidine, IC<sub>50</sub> = (16.3±0.4) μmol/L). Source: NAN SHE TENG GEN *Celastrus orbiculatus* [Syn. *Celastrus articulatus*] (root: yield = 0.0025%dw). Ref: 4604.

**16163 Orbiculin D**

C<sub>27</sub>H<sub>32</sub>O<sub>9</sub> (500.55). Pharm: Anti-inflammatory (*in vitro*, NF- $\kappa$ B inhibitor, IC<sub>50</sub> = (36.7±1.4) μmol/L; NO production inhibitor, IC<sub>50</sub> = (43.6±1.2) μmol/L; control Aminoguanidine, IC<sub>50</sub> = (16.3±0.4) μmol/L). Source: NAN SHE TENG GEN *Celastrus orbiculatus* [Syn. *Celastrus articulatus*] (root: yield = 0.0086%dw). Ref: 4604.

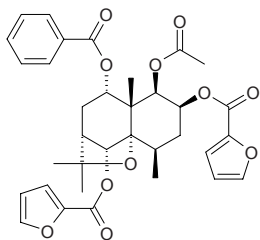
**16164 Orbiculin E**

C<sub>31</sub>H<sub>36</sub>O<sub>10</sub> (568.63). Pharm: Anti-inflammatory inactive (*in vitro*, NF- $\kappa$ B inhibitor, IC<sub>50</sub> > 300 μmol/L; NO production inhibitor, IC<sub>50</sub> > 300 μmol/L; control Aminoguanidine, IC<sub>50</sub> = (16.3±0.4) μmol/L). Source: NAN SHE TENG GEN *Celastrus orbiculatus* [Syn. *Celastrus articulatus*] (root: yield = 0.001%dw). Ref: 4604.

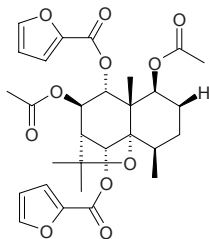


**16165 Orbiculin F**

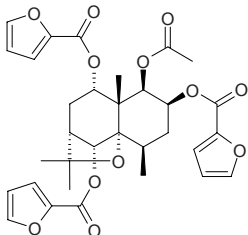
$C_{34}H_{36}O_{11}$  (620.66). **Pharm:** Anti-inflammatory inactive (*in vitro*, NF- $\kappa$ B inhibitor,  $IC_{50} > 300\mu\text{mol/L}$ ; NO production inhibitor,  $IC_{50} > 300\mu\text{mol/L}$ ; control Aminoguanidine,  $IC_{50} = (16.3\pm 0.4)\mu\text{mol/L}$ ). **Source:** NAN SHE TENG GEN *Celastrus orbiculatus* [Syn. *Celastrus articulatus*] (root: yield = 0.0027%dw). **Ref:** 4604.

**16166 Orbiculin H**

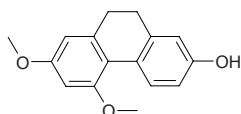
1 $\beta$ ,8 $\beta$ -Diacetoxy-6 $\alpha$ ,9 $\alpha$ -difuroyloxydihydro- $\beta$ -agarofuran  $C_{29}H_{34}O_{11}$  (558.59). White amorphous powder, mp 111~113°C,  $[\alpha]_D^{25} = -19.5^\circ$  ( $c = 1.00$ , MeOH). **Pharm:** Anti-inflammatory (*in vitro*, NF- $\kappa$ B inhibitor,  $IC_{50} = (33.5\pm 1.1)\mu\text{mol/L}$ ; NO production inhibitor,  $IC_{50} = (50.4\pm 0.8)\mu\text{mol/L}$ ; control Aminoguanidine,  $IC_{50} = (16.3\pm 0.4)\mu\text{mol/L}$ ). **Source:** NAN SHE TENG GEN *Celastrus orbiculatus* [Syn. *Celastrus articulatus*] (root: yield = 0.0047%dw). **Ref:** 4604.

**16167 Orbiculin I**

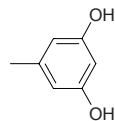
1 $\beta$ -Acetoxy-2 $\beta$ ,6 $\alpha$ ,9 $\alpha$ -trifuroyloxydihydro- $\beta$ -agarofuran  $C_{32}H_{34}O_{12}$  (610.62). White needles, mp 253~255°C,  $[\alpha]_D^{25} = +39.2^\circ$  ( $c = 0.63$ , MeOH). **Pharm:** Anti-inflammatory (*in vitro*, NF- $\kappa$ B inhibitor,  $IC_{50} = (61.5\pm 1.4)\mu\text{mol/L}$ ; NO production inhibitor,  $IC_{50} = (51.2\pm 1.3)\mu\text{mol/L}$ ; control Aminoguanidine,  $IC_{50} = (16.3\pm 0.4)\mu\text{mol/L}$ ). **Source:** NAN SHE TENG GEN *Celastrus orbiculatus* [Syn. *Celastrus articulatus*] (root: yield = 0.001%dw). **Ref:** 4604.

**16168 Orchinol**

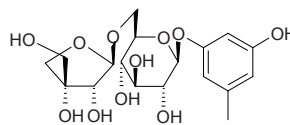
[41060-20-2]  $C_{16}H_{16}O_3$  (256.30). **Pharm:** Antifungal; plant antitoxin. **Source:** AO SHE LAN *Coeloglossum viride* [Syn. *Coeloglossum viride* var. *bracteatum*], BAI SHOU SHEN *Gymnadenia albida*, *Orchis* sp. **Ref:** 658.

**16169 Orcinol**

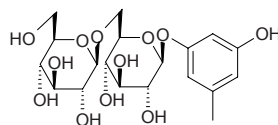
5-Methyl-1,3-benzenediol [504-15-4]  $C_7H_8O_2$  (124.14). White acicular crystals (water), monohydrate crystals: mp 59°C, anhydrite mp 107°C; bp 290°C, 147°C/5mmHg. **Pharm:** Antifungal; spermicidal (4mg/mL); antioxidant inactive (DPPH radical scavenger assay)<sup>[5232]</sup>; cytotoxic inactive (MCF, HM02, HepG2)<sup>[5232]</sup>; antihistamine inactive (rat peritoneal mast cells, compound 48/80-induced)<sup>[4755]</sup>; LD<sub>50</sub> (mus, iv) = (290±30)mg/kg, (mus, ip) = (405±14)mg/kg, (rat, orl) = 33.8mg/kg. **Source:** MAN SHAN HONG *Rhododendron dauricum* (twig and leaf: yield = 0.00046%)<sup>[4755]</sup> MEI YI *Parmelia tinctorum*, NIU XI XI *Rumex patientia*, OU SHI NAN *Erica arborea*, SAN XING OU SHI NAN *Erica umbellata*. **Ref:** 658, 661, 4755, 5232.

**16170 Orcinol-1-O- $\beta$ -D-apiofuranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside**

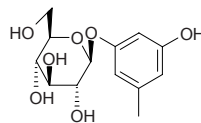
$C_{18}H_{26}O_{11}$  (418.40). Colorless amorphous powder. **Pharm:** Antioxidant (hydroxyl radical scavenger,  $IC_{50} = 1.17\mu\text{mol/L}$ , control EGCG,  $IC_{50} = 0.43\mu\text{mol/L}$ , superoxide anion radical scavenger,  $IC_{50} = 1.84\mu\text{mol/L}$ , control EGCG,  $IC_{50} = 0.53\mu\text{mol/L}$ ). **Source:** XIAN MAO *Curculigo orchioides* (rhizome). **Ref:** 4499.

**16171 Orcinol-1-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside**

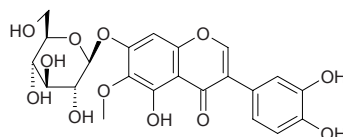
$C_{19}H_{28}O_{12}$  (448.43). **Pharm:** Antioxidant (hydroxyl radical scavenger,  $IC_{50} = 0.87\mu\text{mol/L}$ , control EGCG,  $IC_{50} = 0.43\mu\text{mol/L}$ , superoxide anion radical scavenger,  $IC_{50} = 1.56\mu\text{mol/L}$ , control EGCG,  $IC_{50} = 0.53\mu\text{mol/L}$ ). **Source:** XIAN MAO *Curculigo orchioides* (rhizome). **Ref:** 4499.

**16172 Orcinol glucoside**

$C_{13}H_{18}O_7$  (286.28). **Pharm:** Antioxidant (hydroxyl radical scavenger,  $IC_{50} = 1.39\mu\text{mol/L}$ , control EGCG,  $IC_{50} = 0.43\mu\text{mol/L}$ , superoxide anion radical scavenger,  $IC_{50} = 2.49\mu\text{mol/L}$ , control EGCG,  $IC_{50} = 0.53\mu\text{mol/L}$ )<sup>[4499]</sup>. **Source:** XIAN MAO *Curculigo orchioides*. **Ref:** 2859, 4499.

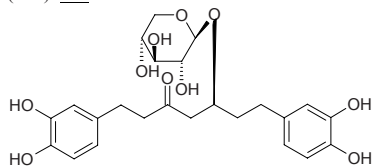
**16173 Ordoritin-glucoside**

$C_{22}H_{22}O_{12}$  (478.41). **Source:** *Glycyrrhiza* sp. **Ref:** 2431.

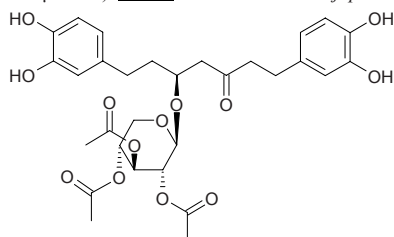


**16174 Oregonin**

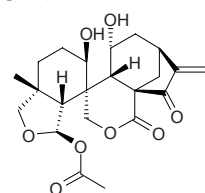
$C_{24}H_{30}O_{10}$  (478.50). Pale yellow viscous liquid,  $[\alpha]_D = -16.9^\circ$  ( $c = 0.12$ , MeOH). **Pharm:** Antioxidant (superoxide radical scavenger,  $IC_{50} = 2.2\mu\text{mol/L}$ ; DPPH scavenger,  $IC_{50} = 4.6\mu\text{mol/L}$ ). **Source:** CHI YANG *Alnus japonica* (leaf). **Ref:** 4535.

**16175 Oregonin peracetate**

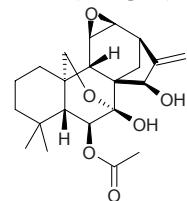
$C_{30}H_{36}O_{13}$  (604.61). **Pharm:** Antioxidant (superoxide radical scavenger,  $IC_{50} = 31.0\mu\text{mol/L}$ ). **Source:** CHI YANG *Alnus japonica* (leaf). **Ref:** 4535.

**16176 Oreskaurin A**

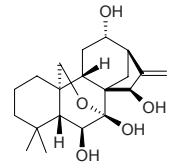
1 $\beta$ ,11 $\alpha$ -Dihydroxy-6 $\beta$ -acetoxy-6,7-seco-6,19-epoxy-7,20-olide-ent-kaur-16-en-15-one  $C_{22}H_{28}O_8$  (420.46). White amorphous powder,  $[\alpha]_D^{20} = -75.0^\circ$  ( $c = 0.1$ , MeOH). **Source:** SHAN DI XIANG CHA CAI *Isodon oresbia* (aerial parts). **Ref:** 3808.

**16177 Oreskaurin B**

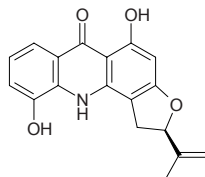
7 $\beta$ ,15 $\beta$ -Dihydroxy-6 $\beta$ -acetoxy-7 $\alpha$ ,20-epoxy-11 $\beta$ ,12 $\beta$ -epoxy-ent-kaur-16-ene  $C_{22}H_{30}O_6$  (390.48). Colorless cubic crystals, mp 167~169 $^\circ$ ,  $[\alpha]_D^{20} = -72.7^\circ$  ( $c = 0.06$ , MeOH). **Pharm:** Cytotoxic inactive (K562 cells, MTT method, control *cis*-Platin,  $IC_{50} = 0.53\mu\text{g/mL}$ ). **Source:** SHAN DI XIANG CHA CAI *Isodon oresbia* (aerial parts). **Ref:** 3808.

**16178 Oreskaurin C**

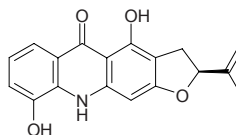
6 $\beta$ ,12 $\alpha$ ,15 $\beta$ -Trihydroxy-7 $\alpha$ ,20-epoxy-ent-kaur-16-ene  $C_{20}H_{30}O_5$  (350.46). White amorphous powder,  $[\alpha]_D^{20} = -22.2^\circ$  ( $c = 0.08$ , MeOH). **Source:** SHAN DI XIANG CHA CAI *Isodon oresbia* (aerial parts). **Ref:** 3808.

**16179 Oriciacidone C**

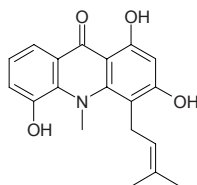
$C_{18}H_{15}NO_4$  (309.32). Yellow needles (MeOH), mp 253~254 $^\circ\text{C}$ ,  $[\alpha]_D^{25} = +21.8^\circ$  ( $c = 0.39$ , MeOH). **Pharm:**  $\alpha$ -Glucosidase inhibitor ( $IC_{50} = (56\pm 5)\mu\text{mol/L}$ , control Deoxynojirimycin,  $IC_{50} = (330\pm 8)\text{mmol/L}$ ); antioxidant (DPPH Scavenger,  $IC_{50} = (60.79\pm 1.23)\mu\text{mol/L}$ , control BHA,  $IC_{50} = (44.20\pm 0.02)\mu\text{mol/L}$ ). **Source:** *Oriciopsis glaberrima* (stem cortex: yield = 0.00075%dw). **Ref:** 1590.

**16180 Oriciacidone D**

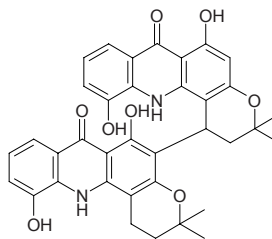
$C_{18}H_{15}NO_4$  (309.32). Yellow crystals (MeOH), mp 265~266 $^\circ\text{C}$ ,  $[\alpha]_D^{25} = +87.4^\circ$  ( $c = 0.50$ , MeOH). **Pharm:** Antioxidant (DPPH Scavenger,  $IC_{50} = (194.10\pm 1.72)\mu\text{mol/L}$ , control BHA,  $IC_{50} = (44.20\pm 0.02)\mu\text{mol/L}$ ). **Source:** *Oriciopsis glaberrima* (stem cortex: yield = 0.0005%dw). **Ref:** 1590.

**16181 Oriciacidone E**

$C_{19}H_{19}NO_4$  (325.37). Yellow amorphous powder (MeOH),  $[\alpha]_D^{25} = +63.6^\circ$  ( $c = 0.70$ , MeOH). **Source:** *Oriciopsis glaberrima* (stem cortex: yield = 0.00024%dw). **Ref:** 1590.

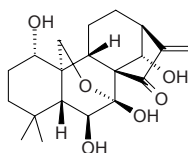
**16182 Oriciacidone F**

$C_{36}H_{32}N_2O_8$  (620.67). Yellow powder (MeOH), mp 187~189 $^\circ\text{C}$ ,  $[\alpha]_D^{25} = +35.6^\circ$  ( $c = 0.62$ , MeOH). **Pharm:**  $\alpha$ -Glucosidase inhibitor ( $IC_{50} = (34\pm 17)\mu\text{mol/L}$ , control Deoxynojirimycin,  $IC_{50} = (330\pm 8)\text{mmol/L}$ ); antioxidant (DPPH Scavenger,  $IC_{50} = (482\pm 2)\mu\text{mol/L}$ , control BHA,  $IC_{50} = (44.20\pm 0.02)\mu\text{mol/L}$ ). **Source:** *Oriciopsis glaberrima* (stem cortex: yield = 0.00075%dw). **Ref:** 1590.

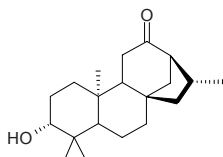


**16183 Oridonin**

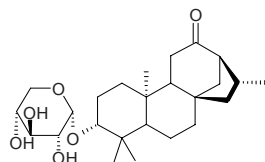
Rubescensine; Rubescensin A; Isodonol [28957-04-2]  $C_{20}H_{28}O_6$  (364.44). Colorless presms (EtOH), mp 254–260°C,  $[\alpha]_D^{25} = -51^\circ$  ( $c = 0.1$ , EtOH); mp 250–252°C,  $[\alpha]_D = -54.6^\circ$  ( $c = 0.097$ , EtOH); mp 247–250°C; mp 248–250°C,  $[\alpha]_D^{17} = -46^\circ$ , ( $c = 1.0$ ,  $C_5H_5N$ ). **Pharm:** Anti-angiogenic (*in vitro*, 2.5  $\mu\text{g}/\text{mL}$ )<sup>[3001]</sup>; cytotoxic (K562,  $IC_{50} = 4.37 \mu\text{mol}/\text{L}$ , control Cisplatin  $IC_{50} = 3.84 \mu\text{mol}/\text{L}$ ; Bcap37,  $IC_{50} = 8.32 \mu\text{mol}/\text{L}$ , Cisplatin  $IC_{50} = 1.54 \mu\text{mol}/\text{L}$ ; BIU87,  $IC_{50} = 55.91 \mu\text{mol}/\text{L}$ , Cisplatin  $IC_{50} = 4.34 \mu\text{mol}/\text{L}$ ; CA,  $IC_{50} = 0.06 \mu\text{mol}/\text{L}$ , Cisplatin  $IC_{50} = 0.88 \mu\text{mol}/\text{L}$ ; CNE,  $IC_{50} = 16.50 \mu\text{mol}/\text{L}$ , Cisplatin  $IC_{50} = 6.54 \mu\text{mol}/\text{L}$ ; HeLa,  $IC_{50} = 28.67 \mu\text{mol}/\text{L}$ , Cisplatin  $IC_{50} = 3.60 \mu\text{mol}/\text{L}$ )<sup>[4353]</sup>; antibacterial (gram-positive bacteria with strong effects, *staphylococcus aureus*, MIC = 31  $\mu\text{g}/\text{mL}$ ; gram-negative bacteria, MIC = 62.5–500  $\mu\text{g}/\text{mL}$ ); inhibits biosynthesis of DNA, RNA and protein; larvacide (inhibits growth of order Lepidoptera larva); synergist of antineoplastic bleomycin A5; antineoplastic (hmn and animal, *in vitro* and *in vivo*, used in treatment of cancer of esophagus, pancreas and liver)<sup>[2631]</sup>; cytotoxic (MGc803 hmn gastric adenocarcinoma cell line, CaEs-17 esophageal cancer cell line, *in vitro*, effective at concentrations below 15  $\text{mg}/\text{mL}$ ; Ehrlich ascites carcinoma, *in vitro*; mechanism was postulated to be due to covalent binding of oridonin to a specific site of enzymes in tumor cells)<sup>[5369]</sup>; cytotoxic ( $L_{1210}$  cells *in vitro*, inhibits DNA, RNA, and protein syntheses in a concentration-dependent manner)<sup>[5369]</sup>; antineoplastic (mus,  $L_{1210}$  leukemia, *in vivo*)<sup>[5369]</sup>;  $LD_{50}$  (mus ip) = 37.5  $\text{mg}/\text{kg}$ , 35–40  $\text{mg}/\text{kg}$ , and 55.8  $\text{mg}/\text{kg}$ . **Source:** DONG LING CAO *Rabdosia rubescens* (whole herb: mean content = 0.575%<sup>[5508]</sup>; leaf: mean content = 0.775%<sup>[5508]</sup>), LU SHAN XIANG CHA CAI *Isodon rubescens* var. *lushanensis* (leaf), MAO GUO XIANG CHA CAI *Isodon trichocarpa*, MAO YE XIANG CHA CAI *Isodon japonica* [Syn. *Rabdosia japonica*], MIAN MAO GUO XIANG CHA CAI *Isodon lasiocarpus*, XIAN MAI XIANG CHA CAI *Rabdosia nervosa*, ZHOU YE XIANG CHA CAI *Isodon rugosus* [Syn. *Rabdosia rugosa*]. **Ref:** 2, 4, 504, 658, 2631, 3001, 4067, 4353, 5348, 5369, 5508.

**16184 Oriediterpenol**

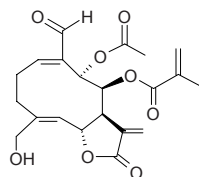
$C_{20}H_{32}O_2$  (304.48). Colorless crystals (Petroleum ether–EtOAc), mp 214–216°C,  $[\alpha]_D^{20} = -5.17^\circ$  ( $c = 0.5$ , MeOH). **Source:** ZE XIE *Alisma orientale* [Syn. *Alisma plantago-aquatica* var. *orientale*]. **Ref:** 2246.

**16185 Oriediterpenoside**

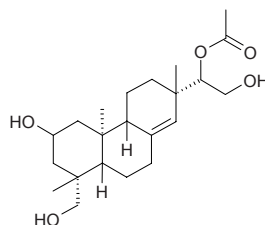
$C_{25}H_{40}O_6$  (436.59). White powder, (Petroleum ether–EtOAc), mp 218°C,  $[\alpha]_D^{20} = -27.53^\circ$  ( $c = 0.5$ , MeOH). **Source:** ZE XIE *Alisma orientale* [Syn. *Alisma plantago-aquatica* var. *orientale*]. **Ref:** 2246.

**16186 Orientalide**

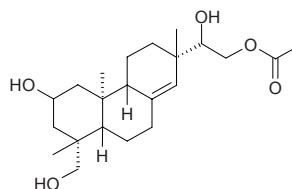
[72704-05-3]  $C_{21}H_{24}O_8$  (404.42). Noncrystal,  $[\alpha]_D^{25} = +41.2^\circ$  ( $c = 0.034$ ,  $\text{CHCl}_3$ ). **Source:** XI XIAN *Siegesbeckia orientalis*. **Ref:** 2906.

**16187 Orientalin A**

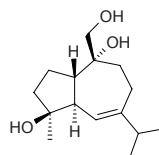
$C_{22}H_{36}O_5$  (380.53). mp 158–159°C,  $[\alpha]_D^{25} = 57.5^\circ$  ( $c = 0.348$ , MeOH). **Source:** XI XIAN *Siegesbeckia orientalis*. **Ref:** 9.

**16188 Orientalin B**

$C_{22}H_{36}O_5$  (380.53). mp 92.5–94°C. **Source:** XI XIAN *Siegesbeckia orientalis*. **Ref:** 9.

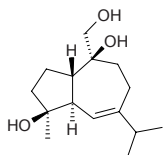
**16189 Orientalol A**

[147368-34-1]  $C_{15}H_{26}O_3$  (254.37). Oil,  $[\alpha]_D^{20} = 0^\circ$  ( $c = 0.83$ , MeOH). **Pharm:** Bladder smooth muscle relaxant (gpg, *in vitro*, induced by carbacholine, 100  $\mu\text{mol}/\text{L}$ , contractive rate = 44.3%). **Source:** ZE XIE *Alisma orientale* [Syn. *Alisma plantago-aquatica* var. *orientale*]. **Ref:** 2879, 2880, 5501.

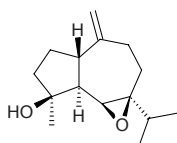


**16190 Orientalol B**

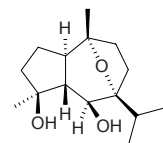
[147368-35-2] C<sub>15</sub>H<sub>26</sub>O<sub>3</sub> (254.37). Oil, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = 0° (c = 0.83, MeOH). **Pharm:** Bladder smooth muscle relaxant (gpg, *in vitro*, induced by carbacholine, 100 $\mu$ mol/L, contractive rate = 39.4%). **Source:** ZE XIE *Alisma orientale* [Syn. *Alisma plantago-aquatica* var. *orientale*]. **Ref:** 2879, 2880, 5501.

**16191 Orientalol C**

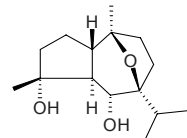
6,7-Epoxy-10(14)-guaien-4-ol [147511-74-8] C<sub>15</sub>H<sub>24</sub>O<sub>2</sub> (236.36). Oil, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +2.5° (c = 0.56, MeOH). **Pharm:** Bladder smooth muscle relaxant (gpg, *in vitro*, induced by carbacholine, 100 $\mu$ mol/L, contractive rate = 52.1%). **Source:** ZE XIE *Alisma orientale* [Syn. *Alisma plantago-aquatica* var. *orientale*]. **Ref:** 2880, 5501.

**16192 Orientalol E**

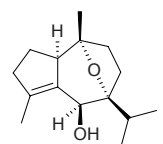
(1*R*\*, 4*S*\*, 5*R*\*, 6*S*\*, 7*R*\*, 10*R*\*)-4,6-Dihydroxy-7,10-epoxy-1,5-*trans*-guaiane C<sub>15</sub>H<sub>27</sub>O<sub>3</sub> (254.37). Colorless prisms, mp 140–142°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +5.2° (c = 0.5, MeOH). **Source:** ZE XIE *Alisma orientale* [Syn. *Alisma plantago-aquatica* var. *orientale*]. **Ref:** 3416.

**16193 Orientalol E**

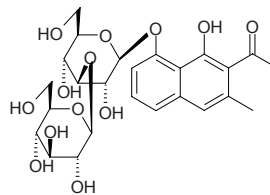
1,4-*trans*-7 $\beta$ ,10 $\beta$ -Epoxy-4 $\alpha$ ,6 $\alpha$ -dihydroxyguaiane C<sub>15</sub>H<sub>26</sub>O<sub>3</sub> (254.37). Oil. **Source:** ZE XIE *Alisma orientale* [Syn. *Alisma plantago-aquatica* var. *orientale*]. **Ref:** 2149.

**16194 Orientalol F**

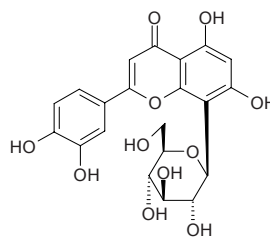
6 $\beta$ -Hydroxy-7 $\alpha$ ,10 $\alpha$ -epoxyguaiane-4,5-ene C<sub>15</sub>H<sub>24</sub>O<sub>2</sub> (236.36). Pale yellow oil, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +4.3° (c = 0.5, MeOH). **Source:** ZE XIE *Alisma orientale* [Syn. *Alisma plantago-aquatica* var. *orientale*]. **Ref:** 3416.

**16195 Orientaloside**

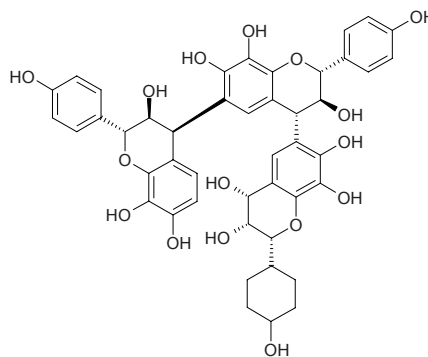
2-Acetyl-3-methyl-1,8-dihydroxynaphthalene-8-*O*- $\beta$ -D-glucopyranosyl (1 $\rightarrow$ 3)- $\beta$ -D-glucopyranoside C<sub>25</sub>H<sub>32</sub>O<sub>13</sub> (540.53). Amorphous. **Source:** NIU XI XI *Rumex patientia*. **Ref:** 5138.

**16196 Oritin**

Luteolin-8-*C*- $\beta$ -D-glucopyranoside [28608-75-5] C<sub>21</sub>H<sub>20</sub>O<sub>11</sub> (448.39). mp 265–270°C (dec). **Pharm:** Thyroid peroxidase inhibitor; Phytoalexin<sup>[4727]</sup>. **Source:** CHANG BAN JIN LIAN HUA *Trollius macropetalus*, HONG CAO *Polygonum orientale*, HU LU BA *Trigonella foenum-graecum* (dried ripe seed: content scope of 18 origins = 0.0089%–0.0259%, mean content = 0.0168%)<sup>[5508]</sup>, HU ZHI ZI *Lespedeza bicolor*, HUANG GUA *Cucumis sativus* (leaf)<sup>[4727]</sup>, JIN LIAN HUA *Trollius chinensis* [Syn. *Trollius asiaticus* var. *chinensis*], QIAO MAI JIE *Fagopyrum esculentum*, QIAN QU CAI *Lythrum salicaria*, SUAN JIAO *Tamarindus indica*, XI XIAN *Siegesbeckia orientalis*, YA MA *Linum usitatissimum*. **Ref:** 2, 6, 245, 658, 660, 4727, 5508.

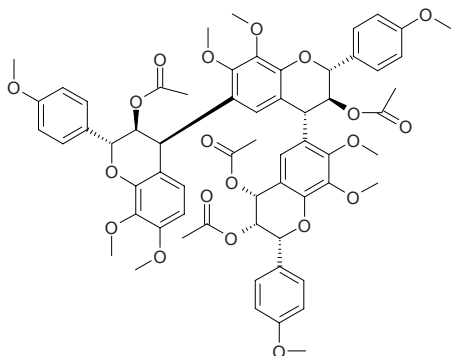
**16197 Oritin-(4 $\beta$  $\rightarrow$ 6)-oritin-(4 $\alpha$  $\rightarrow$ 6)-epioritin-4 $\alpha$ -ol**

C<sub>45</sub>H<sub>44</sub>O<sub>16</sub> (840.84). **Source:** *Acacia galpinii* (heartwood), *Acacia caffra* (heartwood). **Ref:** 3753.



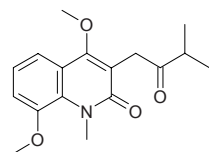
**16198 Oritin-(4 $\beta$ →6)-oritin-(4 $\alpha$ →6)-epioritin-4 $\alpha$ -ol nona-*O*-methylether tetra-acetate**

C<sub>62</sub>H<sub>64</sub>O<sub>20</sub> (1129.19). Source: *Acacia galepinii* (heartwood). Ref: 3753.



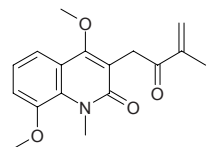
**16199 Orixalone A**

C<sub>17</sub>H<sub>21</sub>NO<sub>4</sub> (303.36). Colorless oil. Pharm: NO production inhibitor (RAW264.7 cells, LPS/IFN- $\gamma$ -induced, 10 $\mu$ mol/L, InRt = 47.3%, 50 $\mu$ mol/L, InRt = 54.8%; no significantly cytotoxic to RAW264.7 cells at the effective concentration). Source: CHOU SHAN YANG *Orixia japonica* (stem: yield = 0.0031%dw). Ref: 4774.



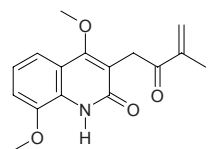
**16200 Orixalone B**

C<sub>17</sub>H<sub>19</sub>NO<sub>4</sub> (301.35). Colorless oil. Source: CHOU SHAN YANG *Orixia japonica* (stem: yield = 0.00034%dw). Ref: 4774.



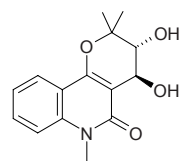
**16201 Orixalone C**

C<sub>16</sub>H<sub>17</sub>NO<sub>4</sub> (287.32). Colorless oil. Source: CHOU SHAN YANG *Orixia japonica* (stem: yield = 0.00019%dw). Ref: 4774.



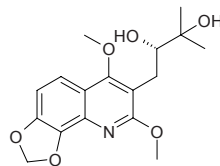
**16202 Orixalone D**

C<sub>15</sub>H<sub>17</sub>NO<sub>4</sub> (275.31). Colorless oil, [ $\alpha$ ]<sub>D</sub><sup>24</sup> = +3.1° (*c* = 0.064, MeOH). Source: CHOU SHAN YANG *Orixia japonica* (stem: yield = 0.00032%dw). Ref: 4774.



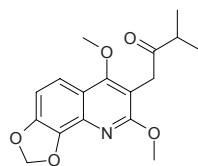
**16203 Orixine**

[17232-53-0] C<sub>17</sub>H<sub>21</sub>NO<sub>6</sub> (335.36). mp 152.5°C. Source: CHOU SHAN YANG *Orixia japonica* (stem: yield = 0.0028%dw). Ref: 6, 4774.



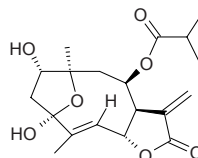
**16204 Orixinone**

[39027-00-4] C<sub>17</sub>H<sub>19</sub>NO<sub>5</sub> (317.34). mp 102~103°C. Pharm: NO production inhibitor inactive (RAW264.7 cells, LPS/IFN- $\gamma$ -induced, 30 $\mu$ mol/L; weak cytotoxic to RAW264.7 cells). Source: CHOU SHAN YANG *Orixia japonica* (stem: yield = 0.031%dw). Ref: 6, 4774.



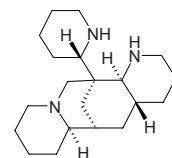
**16205 Orizabin**

[34367-14-1] C<sub>19</sub>H<sub>26</sub>O<sub>7</sub> (366.41). Pharm: Antineoplastic; cytotoxic. Source: MO XI GE XIANG RI KUI *Tithonia tagiliflora*. Ref: 658.



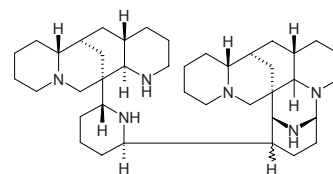
**16206 Ormosanine**

Piptanthine [7344-67-4] C<sub>20</sub>H<sub>35</sub>N<sub>3</sub> (317.52). mp 183~184°C, mp 142~146°C, 136~137°C, [ $\alpha$ ]<sub>D</sub> = -24°. Source: HONG DOU *Ormosia hosiei*, SHA DONG QING *Ammopiptanthus mongolicus* [Syn. *Piptanthus mongolicus*], XIAO SHA DONG QING *Piptanthus nanus*. Ref: 6, 1521, 2972, 2973.



**16207 Ormosinine**

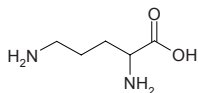
[14350-67-5] C<sub>40</sub>H<sub>66</sub>N<sub>6</sub> (631.01). Needles (EtOAc), mp 219~220°C, 203~205°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +8.9° (CHCl<sub>3</sub>). Source: *Ormosia dasycarpa*, *Ormosia panamensis*, *Ormosia jamaicensis*. Ref: 660, 1521.



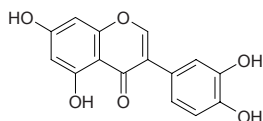


**16208 Ornithine**

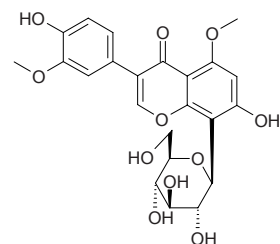
2,5-Diaminopentanoic acid  $C_5H_{12}N_2O_2$  (132.16). mp L(+) 140°C. Source: LIE DANG *Orobanchae coerulescens*. Ref: 6.

**16209 Orobol**

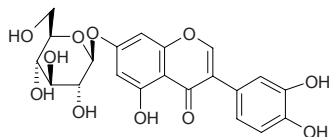
Santol; 5,7,3',4'-Tetrahydroxyisoflavone [480-23-9]  $C_{15}H_{10}O_6$  (286.24). Pale-yellow crystals (AcOH), mp 212°C; Pale yellow powder, mp 267~268°C. Pharm: Anti-gonadotropin; hepatoprotective (mus primary cultured hepatocytes, antihepatotoxin induced by *D*-galactosamine (GalN),  $IC_{50}$  = 36  $\mu$ mol/L, control Silybin  $IC_{50}$  = 41  $\mu$ mol/L)<sup>[4095]</sup>. Source: DIAN NAN HONG HOU KE *Calophyllum polyanthum* (seed: yield = 0.0089%dw), GUANG BU DING GONG TENG *Erycibe expansa*, JIN QUE ER *Cytisus scoparius* [Syn. *Spartium scoparium*], SHAN DI XIANG WAN DOU *Lathyrus montanus*, *Bolusanthus speciosus*, *Baptisia* spp., *Lathyrus* spp., *Thermopsis* spp. Ref: 658, 2925, 4095, 4767.

**16210 Orobol 5,3'-di-O-methyl-8-C-glucoside**

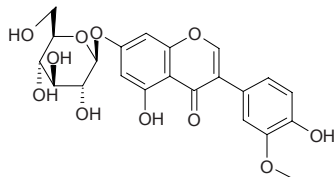
$C_{23}H_{24}O_{11}$  (476.44). Fine pale yellow needles, mp 233~237°C (MeOH/H<sub>2</sub>O). Source: ZHUO SE SANG CHENG *Maclura tinctoria*. Ref: 2353.

**16211 Oroboside**

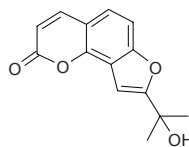
[20486-33-3]  $C_{21}H_{20}O_{11}$  (448.39). Source: FO JIA CAO *Sedum lineare* [Syn. *Sedum obtuso-lineare*]. Ref: 2917.

**16212 Oroboside-3'-methylether**

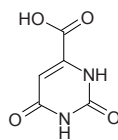
$C_{22}H_{22}O_{11}$  (462.41). Source: FO JIA CAO *Sedum lineare* [Syn. *Sedum obtuso-lineare*]. Ref: 2917.

**16213 Oroselol**

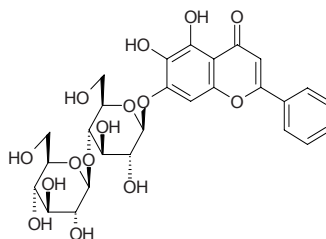
[1891-25-4]  $C_{14}H_{12}O_4$  (244.25). mp 148~151°C. Source: GAN SONG *Nardostachys chinensis*. Ref: 6.

**16214 Orotic acid**

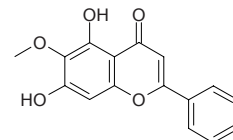
2,6-Dioxo-1,2,3,6-tetrahydro-4-pyrimidinecarboxylic acid [65-86-1]  $C_5H_4N_2O_4$  (156.10). mp 345~346°C; 322~325°C. Source: NIU RU *Bos taurus domesticus*; *Bubalus bubalis*. Ref: 6.

**16215 Oroxin B**

$C_{27}H_{30}O_{15}$  (594.53). mp 155~157°C. Source: MU HU DIE *Oroxylum indicum*. Ref: 6.

**16216 Oroxylin A**

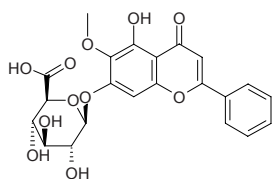
Oroxylin [480-11-5]  $C_{16}H_{12}O_5$  (284.27). mp 231~232°C. Pharm: Anti-inflammatory (hmn platelets 12-LOX inhibitor, without affecting level of cyclooxygenase)<sup>[4415]</sup>; cytotoxic (hmn peripheral blood T cells, dose = 2.0  $\mu$ g/mL, T cell survival rate = 72%)<sup>[3498]</sup>; immunosuppressant (inhibits IL-2 secretion costimulated by CD28, dose = 2.0  $\mu$ g/mL, InRt = 49%)<sup>[3498]</sup>. Source: CHUAN HUANG QIN *Scutellaria hypericifolia*, DIAN HUANG QIN *Scutellaria amoena* (dried root: content scope of 10 samples = 0.07%~0.46%, mean content = 0.21%<sup>[5508]</sup>), GAN SU HUANG QIN *Scutellaria rehdiana*, HONG CHAI HU *Bupleurum scorzonerifolium* (root), HUANG QIN *Scutellaria baicalensis*, LI JIANG HUANG QIN *Scutellaria likiangensis*, MU HU DIE SHU PI *Oroxylum indicum*, NIAN MAO HUANG QIN *Scutellaria viscidula*. Ref: 6, 660, 1521, 3498, 4415, 5508.



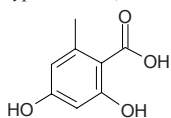


**16217 Oroxylin A 7-O-glucuronide**

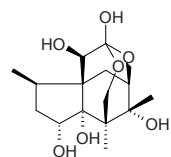
$C_{22}H_{20}O_{11}$  (460.40). Source: HUANG QIN *Scutellaria baicalensis* (dry root: content scope of 10 samples = 0.33%~1.83%, mean content = 1.29%<sup>[5508]</sup>). Ref: 2946, 5508.

**16218 Orsellinic acid**

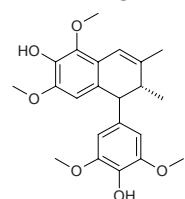
[480-64-8]  $C_8H_8O_4$  (168.15). Source: HONG SHI ER *Umbilicaria hypococcinea*, ZHOU MU ER *Auricularia delicata*. Ref: 2807, 2808.

**16219 (11)7,14-Ortholactone-3 $\alpha$ -hydroxyfloridanolide**

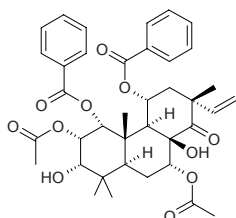
$C_{15}H_{24}O_7$  (316.35). Colorless amorphous powder,  $[\alpha]_D^{20} = -9^\circ$  ( $c = 0.40$ ,  $CH_3OH$ ). Source: *Illicium merrillianum* (pericarp: yield = 0.00013%dw). Ref: 3046.

**16220 Orthosilignin**

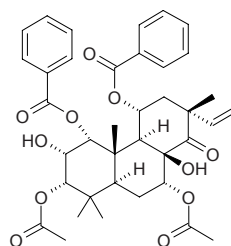
$C_{22}H_{26}O_6$  (386.45). Colorless cubical crystals ( $CHCl_3$ ). Source: JI JIAO SHEN *Orthosiphon wulfenioides* [Syn. *Coleus wulfenioides*]. Ref: 2258.

**16221 Orthosiphol A**

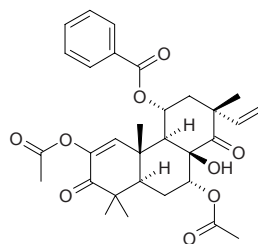
[142741-25-1]  $C_{38}H_{44}O_{11}$  (676.77). Colorless lamellar crystals ( $Et_2O$ ), mp  $210^\circ C$ ,  $[\alpha]_D^{26} = -127^\circ$  ( $c = 1.0$ ,  $CHCl_3$ ). Pharm: Anti-inflammatory (inhibits inflammation induced by cancer promotor TPA); cytotoxic (antiproliferative, Colon26-L5,  $ED_{50} = 63.8 \mu g/mL$ , control 5-Fluorouracil,  $ED_{50} = 0.015 \mu g/mL$ ; HT1080,  $ED_{50} > 100 \mu g/mL$ , 5-Fluorouracil,  $ED_{50} = 0.48 \mu g/mL$ )<sup>[3053]</sup>; NO production inhibitor (LPS-activated macrophage-like J774.1 Cells,  $IC_{50} = 11.5 \mu mol/L$ ; control *L*-NMMA,  $IC_{50} = 26.0 \mu mol/L$ ; Polymixin B,  $IC_{50} = 27.8 \mu g/mL$ )<sup>[4677]</sup>. Source: XIONG RUI ZHUANG ZHI GUAN CAO *Orthosiphon stamineus* [Syn: *Orthosiphon aristatus*; *Orthosiphon grandiflorus*; *Orthosiphon spicatus*] (aerial parts: yield = 0.002%dw). Ref: 2926, 2927, 3053, 4677, 4741.

**16222 Orthosiphol B**

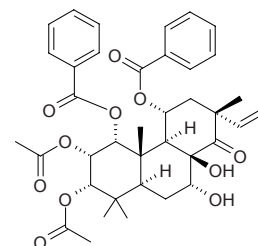
[144078-08-0]  $C_{38}H_{44}O_{11}$  (676.77). Colorless lamellar crystals ( $Et_2O$ ), mp  $240^\circ C$ ,  $[\alpha]_D^{11} = -82^\circ$  ( $c = 1.0$ ,  $CHCl_3$ ). Pharm: Anti-inflammatory (inhibits inflammation induced by cancer promotor TPA); cytotoxic (antiproliferative, Colon26-L5,  $ED_{50} = 28.1 \mu g/mL$ , control 5-Fluorouracil,  $ED_{50} = 0.015 \mu g/mL$ ; HT1080,  $ED_{50} = 57.9 \mu g/mL$ , 5-Fluorouracil,  $ED_{50} = 0.48 \mu g/mL$ )<sup>[3053]</sup>; NO production inhibitor (LPS-activated macrophage-like J774.1 Cells,  $IC_{50} = 20.5 \mu mol/L$ ; control *L*-NMMA,  $IC_{50} = 26.0 \mu mol/L$ ; Polymixin B,  $IC_{50} = 27.8 \mu g/mL$ )<sup>[4677]</sup>. Source: XIONG RUI ZHUANG ZHI GUAN CAO *Orthosiphon stamineus* [Syn: *Orthosiphon aristatus*; *Orthosiphon grandiflorus*; *Orthosiphon spicatus*] (aerial parts: yield = 0.0014%~0.0033%dw). Ref: 2926, 2927, 3053, 4677, 4741.

**16223 Orthosiphol D**

$C_{31}H_{36}O_9$  (552.63). Pharm: NO production inhibitor (LPS-activated macrophage-like J774.1 Cells,  $IC_{50} = 14.4 \mu mol/L$ ; control *L*-NMMA,  $IC_{50} = 26.0 \mu mol/L$ ; Polymixin B,  $IC_{50} = 27.8 \mu g/mL$ )<sup>[4677]</sup>. Source: XIONG RUI ZHUANG ZHI GUAN CAO *Orthosiphon stamineus* [Syn: *Orthosiphon aristatus*; *Orthosiphon grandiflorus*; *Orthosiphon spicatus*] (aerial parts: yield = 0.00032%dw<sup>[4677]</sup>; yield = 0.00019%dw<sup>[4741]</sup>). Ref: 4677, 4741.

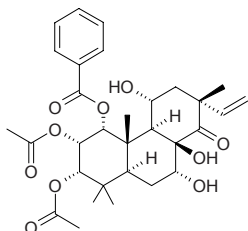
**16224 Orthosiphol F**

$C_{38}H_{44}O_{11}$  (676.77). Pharm: NO production inhibitor (LPS-activated macrophage-like J774.1 Cells,  $IC_{50} = 34.5 \mu mol/L$ ; control *L*-NMMA,  $IC_{50} = 26.0 \mu mol/L$ ; Polymixin B,  $IC_{50} = 27.8 \mu g/mL$ ). Source: XIONG RUI ZHUANG ZHI GUAN CAO *Orthosiphon stamineus* [Syn: *Orthosiphon aristatus*; *Orthosiphon grandiflorus*; *Orthosiphon spicatus*] (aerial parts: yield = 0.0106%dw). Ref: 4677.

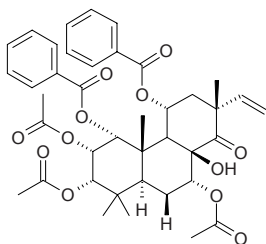


**16225 Orthosiphol G**

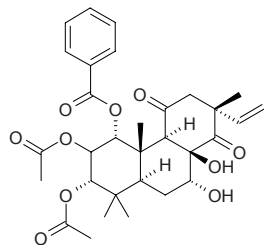
$C_{31}H_{40}O_{10}$  (572.66). **Pharm:** NO production inhibitor (LPS-activated macrophage-like J774.1 Cells,  $IC_{50}$  = 145  $\mu$ mol/L; control *L*-NMMA,  $IC_{50}$  = 26.0  $\mu$ mol/L; Polymixin B,  $IC_{50}$  = 27.8  $\mu$ g/mL). **Source:** XIONG RUI ZHUANG ZHI GUAN CAO *Orthosiphon stamineus* [Syn: *Orthosiphon aristatus*; *Orthosiphon grandiflorus*; *Orthosiphon spicatus*] (aerial parts: yield = 0.0010%dw). **Ref:** 4677.

**16226 Orthosiphol H**

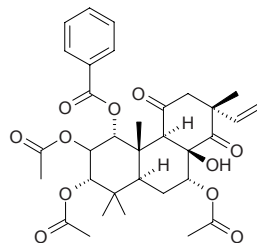
$C_{40}H_{46}O_{12}$  (718.81). **Pharm:** NO production inhibitor (LPS-activated macrophage-like J774.1 cells,  $IC_{50}$  = 24.1  $\mu$ mol/L; control *L*-NMMA,  $IC_{50}$  = 26.0  $\mu$ mol/L, Polymixin B,  $IC_{50}$  = 27.8  $\mu$ g/mL, Dexamethasone  $IC_{50}$  = 170  $\mu$ mol/L). **Source:** XIONG RUI ZHUANG ZHI GUAN CAO *Orthosiphon stamineus* [Syn: *Orthosiphon aristatus*; *Orthosiphon grandiflorus*; *Orthosiphon spicatus*] (aerial parts). **Ref:** 4322.

**16227 Orthosiphol I**

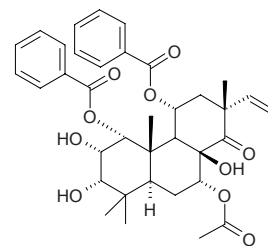
$C_{31}H_{38}O_{10}$  (570.64). **Pharm:** NO production inhibitor (LPS-activated macrophage-like J774.1 Cells,  $IC_{50}$  = 102  $\mu$ mol/L; control *L*-NMMA,  $IC_{50}$  = 26.0  $\mu$ mol/L; Polymixin B,  $IC_{50}$  = 27.8  $\mu$ g/mL). **Source:** XIONG RUI ZHUANG ZHI GUAN CAO *Orthosiphon stamineus* [Syn: *Orthosiphon aristatus*; *Orthosiphon grandiflorus*; *Orthosiphon spicatus*] (aerial parts: yield = 0.00036%dw). **Ref:** 4677.

**16228 Orthosiphol J**

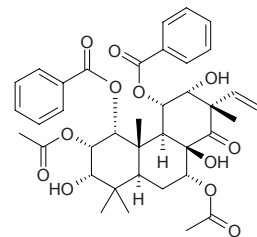
$C_{33}H_{40}O_{11}$  (612.68). **Pharm:** NO production inhibitor (LPS-activated macrophage-like J774.1 Cells,  $IC_{50}$  = 66.3  $\mu$ mol/L; control *L*-NMMA,  $IC_{50}$  = 26.0  $\mu$ mol/L; Polymixin B,  $IC_{50}$  = 27.8  $\mu$ g/mL). **Source:** XIONG RUI ZHUANG ZHI GUAN CAO *Orthosiphon stamineus* [Syn: *Orthosiphon aristatus*; *Orthosiphon grandiflorus*; *Orthosiphon spicatus*] (aerial parts: yield = 0.00014%dw). **Ref:** 4677.

**16229 Orthosiphol K**

2-*O*-Deacetylorthosiphol A; 3-*O*-Deacetylorthosiphol B  $C_{36}H_{42}O_{10}$  (634.73). Colorless amorphous solid,  $[\alpha]_D^{25}$  =  $-18.8^\circ$  ( $c$  = 0.08,  $CHCl_3$ ). **Pharm:** NO production inhibitor (LPS-activated macrophage-like J774.1 cells,  $IC_{50}$  = 27.3  $\mu$ mol/L; control *L*-NMMA,  $IC_{50}$  = 26.0  $\mu$ mol/L, Polymixin B,  $IC_{50}$  = 27.8  $\mu$ g/mL, Dexamethasone  $IC_{50}$  = 170  $\mu$ mol/L)<sup>[4322]</sup>; Cytotoxic (antiproliferative, Colon26-L5,  $ED_{50}$  = 13.8  $\mu$ g/mL, control 5-Fluorouracil,  $ED_{50}$  = 0.015  $\mu$ g/mL; HT1080,  $ED_{50}$  = 21.8  $\mu$ g/mL, 5-Fluorouracil,  $ED_{50}$  = 0.48  $\mu$ g/mL)<sup>[3053]</sup>. **Source:** XIONG RUI ZHUANG ZHI GUAN CAO *Orthosiphon stamineus* [Syn: *Orthosiphon aristatus*; *Orthosiphon grandiflorus*; *Orthosiphon spicatus*] (aerial parts: yield = 0.0016%dw<sup>[3053]</sup>, yield = 0.00032%dw<sup>[4741]</sup>). **Ref:** 4322, 3053, 4741.

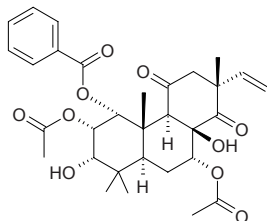
**16230 Orthosiphol L**

12-Hydroxyorthosiphol A  $C_{38}H_{44}O_{12}$  (692.77). Colorless amorphous solid,  $[\alpha]_D^{25}$  =  $-68.1^\circ$  ( $c$  = 0.11,  $CHCl_3$ ). **Pharm:** Cytotoxic (antiproliferative, Colon26-L5,  $ED_{50}$  = 24.7  $\mu$ g/mL, control 5-Fluorouracil,  $ED_{50}$  = 0.015  $\mu$ g/mL; HT1080,  $ED_{50}$  = 20.6  $\mu$ g/mL, 5-Fluorouracil,  $ED_{50}$  = 0.48  $\mu$ g/mL). **Source:** XIONG RUI ZHUANG ZHI GUAN CAO *Orthosiphon stamineus* [Syn: *Orthosiphon aristatus*; *Orthosiphon grandiflorus*; *Orthosiphon spicatus*] (aerial parts: yield = 0.0033%dw). **Ref:** 3053.

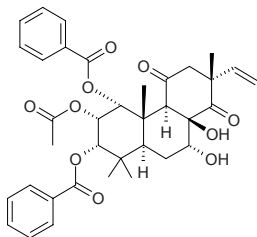


**16231 Orthosiphol M**

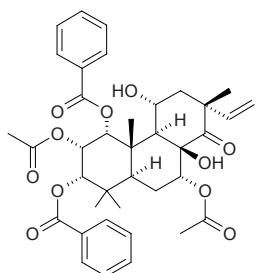
3-*O*-Deacetylorthosiphol J C<sub>31</sub>H<sub>38</sub>O<sub>10</sub> (570.64). Colorless amorphous solid,  $[\alpha]_D^{25} = -50.0^\circ$  ( $c = 0.06$ , CHCl<sub>3</sub>). **Pharm:** NO production inhibitor (LPS-activated macrophage-like J774.1 cells, IC<sub>50</sub> > 200 μmol/L; control *L*-NMMA, IC<sub>50</sub> = 26.0 μmol/L, Polymixin B, IC<sub>50</sub> = 27.8 μg/mL, Dexamethasone IC<sub>50</sub> = 170 μmol/L)<sup>[4322]</sup>; Cytotoxic (antiproliferative, Colon26-L5, ED<sub>50</sub> = 31.3 μg/mL, control 5-Fluorouracil, ED<sub>50</sub> = 0.015 μg/mL; HT1080, ED<sub>50</sub> = 81.7 μg/mL, 5-Fluorouracil, ED<sub>50</sub> = 0.48 μg/mL)<sup>[3053]</sup>. **Source:** XIONG RUI ZHUANG ZHI GUAN CAO *Orthosiphon stamineus* [Syn: *Orthosiphon aristatus*; *Orthosiphon grandiflorus*; *Orthosiphon spicatus*] (aerial parts: yield = 0.0037%dw<sup>[3053]</sup>; yield = 0.0022%dw<sup>[4741]</sup>). **Ref:** 4322, 3053, 4741.

**16232 Orthosiphol N**

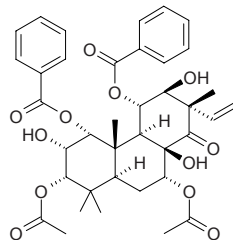
3-*O*-Benzoyl-7-*O*-deacetylorthosiphol M C<sub>36</sub>H<sub>40</sub>O<sub>10</sub> (632.71). Colorless amorphous solid,  $[\alpha]_D^{25} = -67.3^\circ$  ( $c = 0.38$ , CHCl<sub>3</sub>). **Pharm:** NO production inhibitor (LPS-activated macrophage-like J774.1 cells, IC<sub>50</sub> = 35.9 μmol/L; control *L*-NMMA, IC<sub>50</sub> = 26.0 μmol/L, Polymixin B, IC<sub>50</sub> = 27.8 μg/mL, Dexamethasone IC<sub>50</sub> = 170 μmol/L)<sup>[4322]</sup>; Cytotoxic (antiproliferative, Colon26-L5, ED<sub>50</sub> = 35.1 μg/mL, control 5-Fluorouracil, ED<sub>50</sub> = 0.015 μg/mL; HT1080, ED<sub>50</sub> = 18.6 μg/mL, 5-Fluorouracil, ED<sub>50</sub> = 0.48 μg/mL)<sup>[3053]</sup>. **Source:** XIONG RUI ZHUANG ZHI GUAN CAO *Orthosiphon stamineus* [Syn: *Orthosiphon aristatus*; *Orthosiphon grandiflorus*; *Orthosiphon spicatus*] (aerial parts: yield = 0.0073%dw<sup>[3053]</sup>; yield = 0.0020%dw<sup>[4741]</sup>). **Ref:** 4322, 3053, 4741.

**16233 Orthosiphol O**

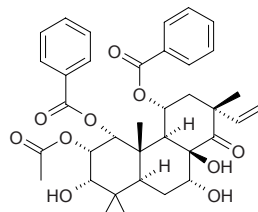
C<sub>38</sub>H<sub>44</sub>O<sub>11</sub> (676.77). **Pharm:** NO production inhibitor (LPS-activated macrophage-like J774.1 Cells, IC<sub>50</sub> = 27.7 μmol/L; control *L*-NMMA, IC<sub>50</sub> = 26.0 μmol/L; Polymixin B, IC<sub>50</sub> = 27.8 μg/mL)<sup>[4677]</sup>. **Source:** XIONG RUI ZHUANG ZHI GUAN CAO *Orthosiphon stamineus* [Syn: *Orthosiphon aristatus*; *Orthosiphon grandiflorus*; *Orthosiphon spicatus*] (aerial parts: yield = 0.0028%dw<sup>[4677]</sup>; yield = 0.00036%dw<sup>[4741]</sup>). **Ref:** 4677, 4741.

**16234 Orthosiphol R**

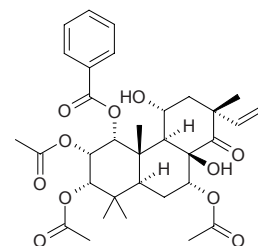
C<sub>38</sub>H<sub>44</sub>O<sub>12</sub> (692.77). **Pharm:** NO production inhibitor (LPS-activated macrophage-like J774.1 Cells, IC<sub>50</sub> = 35.7 μmol/L; control *L*-NMMA, IC<sub>50</sub> = 26.0 μmol/L; Polymixin B, IC<sub>50</sub> = 27.8 μg/mL). **Source:** XIONG RUI ZHUANG ZHI GUAN CAO *Orthosiphon stamineus* [Syn: *Orthosiphon aristatus*; *Orthosiphon grandiflorus*; *Orthosiphon spicatus*] (aerial parts: yield = 0.00008%dw). **Ref:** 4677.

**16235 Orthosiphol T**

C<sub>36</sub>H<sub>42</sub>O<sub>10</sub> (634.73). **Pharm:** NO production inhibitor (LPS-activated macrophage-like J774.1 Cells, IC<sub>50</sub> = 35.9 μmol/L; control *L*-NMMA, IC<sub>50</sub> = 26.0 μmol/L; Polymixin B, IC<sub>50</sub> = 27.8 μg/mL). **Source:** XIONG RUI ZHUANG ZHI GUAN CAO *Orthosiphon stamineus* [Syn: *Orthosiphon aristatus*; *Orthosiphon grandiflorus*; *Orthosiphon spicatus*] (aerial parts: yield = 0.00039%dw). **Ref:** 4677.

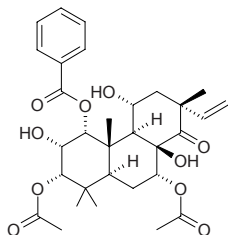
**16236 Orthosiphol U**

C<sub>33</sub>H<sub>42</sub>O<sub>11</sub> (614.7). Colorless amorphous solid,  $[\alpha]_D^{25} = -170.0^\circ$  ( $c = 0.161$ , CHCl<sub>3</sub>). **Pharm:** NO production inhibitor (LPS-activated macrophage-like J774.1 Cells, IC<sub>50</sub> = 59.7 μmol/L; control *L*-NMMA, IC<sub>50</sub> = 26.0 μmol/L; Polymixin B, IC<sub>50</sub> = 27.8 μg/mL). **Source:** XIONG RUI ZHUANG ZHI GUAN CAO *Orthosiphon stamineus* [Syn: *Orthosiphon aristatus*; *Orthosiphon grandiflorus*; *Orthosiphon spicatus*] (aerial parts: yield = 0.00079%dw). **Ref:** 4677.

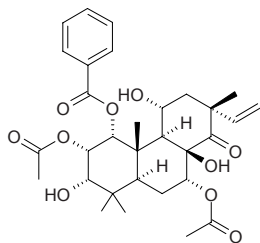


**16237 Orthosiphol V**

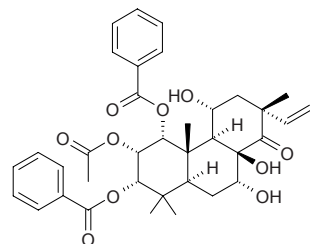
$C_{31}H_{40}O_{10}$  (572.66). Colorless amorphous solid,  $[\alpha]_D^{25} = -63.4^\circ$  ( $c = 0.028$ ,  $CHCl_3$ ). **Pharm:** NO production inhibitor (LPS-activated macrophage-like J774.1 Cells,  $IC_{50} = 54.5\mu\text{mol/L}$ ; control *L*-NMMA,  $IC_{50} = 26.0\mu\text{mol/L}$ ; Polymixin B,  $IC_{50} = 27.8\mu\text{g/mL}$ ). **Source:** XIONG RUI ZHUANG ZHI GUAN CAO *Orthosiphon stamineus* [Syn: *Orthosiphon aristatus*; *Orthosiphon grandiflorus*; *Orthosiphon spicatus*] (aerial parts: yield = 0.00004%dw). **Ref:** 4677.

**16238 Orthosiphol W**

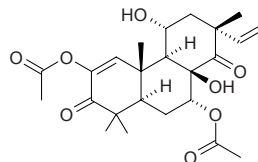
$C_{31}H_{40}O_{10}$  (572.66). Colorless amorphous solid,  $[\alpha]_D^{25} = -99.2^\circ$  ( $c = 0.025$ ,  $CHCl_3$ ). **Pharm:** NO production inhibitor (LPS-activated macrophage-like J774.1 Cells,  $IC_{50} = 57.6\mu\text{mol/L}$ ; control *L*-NMMA,  $IC_{50} = 26.0\mu\text{mol/L}$ ; Polymixin B,  $IC_{50} = 27.8\mu\text{g/mL}$ ). **Source:** XIONG RUI ZHUANG ZHI GUAN CAO *Orthosiphon stamineus* [Syn: *Orthosiphon aristatus*; *Orthosiphon grandiflorus*; *Orthosiphon spicatus*] (aerial parts: yield = 0.00010%dw). **Ref:** 4677.

**16239 Orthosiphol X**

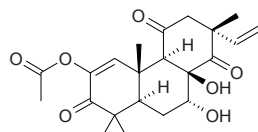
$C_{36}H_{42}O_{10}$  (634.73). Colorless amorphous solid,  $[\alpha]_D^{25} = -376.8^\circ$  ( $c = 0.029$ ,  $CHCl_3$ ). **Pharm:** NO production inhibitor (LPS-activated macrophage-like J774.1 Cells,  $IC_{50} = 6.4\mu\text{mol/L}$ ; control *L*-NMMA,  $IC_{50} = 26.0\mu\text{mol/L}$ ; Polymixin B,  $IC_{50} = 27.8\mu\text{g/mL}$ )<sup>[4677]</sup>. **Source:** XIONG RUI ZHUANG ZHI GUAN CAO *Orthosiphon stamineus* [Syn: *Orthosiphon aristatus*; *Orthosiphon grandiflorus*; *Orthosiphon spicatus*] (aerial parts: yield = 0.00054%dw<sup>[4677]</sup>; yield = 0.0015%dw<sup>[4741]</sup>). **Ref:** 4677, 4741.

**16240 Orthosiphol Y**

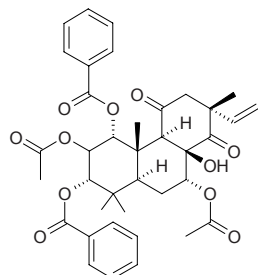
$C_{24}H_{32}O_8$  (448.52). Colorless amorphous solid,  $[\alpha]_D^{25} = -55.54^\circ$  ( $c = 0.033$ ,  $CHCl_3$ ). **Pharm:** NO production inhibitor (LPS-activated macrophage-like J774.1 Cells,  $IC_{50} = 37.9\mu\text{mol/L}$ ; control *L*-NMMA,  $IC_{50} = 26.0\mu\text{mol/L}$ ; Polymixin B,  $IC_{50} = 27.8\mu\text{g/mL}$ )<sup>[4677]</sup>. **Source:** XIONG RUI ZHUANG ZHI GUAN CAO *Orthosiphon stamineus* [Syn: *Orthosiphon aristatus*; *Orthosiphon grandiflorus*; *Orthosiphon spicatus*] (aerial parts: yield = 0.00005%dw<sup>[4677]</sup>; yield = 0.000068%dw<sup>[4741]</sup>). **Ref:** 4677, 4741.

**16241 Orthosiphol Z**

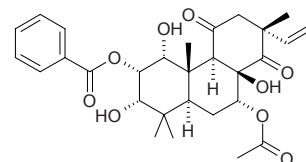
$C_{22}H_{28}O_7$  (404.46). Colorless amorphous solid,  $[\alpha]_D^{25} = -120.7^\circ$  ( $c = 0.025$ ,  $CHCl_3$ ). **Source:** XIONG RUI ZHUANG ZHI GUAN CAO *Orthosiphon stamineus* [Syn: *Orthosiphon aristatus*; *Orthosiphon grandiflorus*; *Orthosiphon spicatus*] (aerial parts: yield = 0.00002%dw). **Ref:** 4677.

**16242 Orthosiphonone A**

$C_{38}H_{42}O_{11}$  (674.75). **Pharm:** NO production inhibitor (LPS-activated macrophage-like J774.1 Cells,  $IC_{50} = 32.1\mu\text{mol/L}$ ; control *L*-NMMA,  $IC_{50} = 26.0\mu\text{mol/L}$ ; Polymixin B,  $IC_{50} = 27.8\mu\text{g/mL}$ )<sup>[4677]</sup>. **Source:** XIONG RUI ZHUANG ZHI GUAN CAO *Orthosiphon stamineus* [Syn: *Orthosiphon aristatus*; *Orthosiphon grandiflorus*; *Orthosiphon spicatus*] (aerial parts: yield = 0.0018%dw<sup>[4677]</sup>; yield = 0.00038%dw<sup>[4741]</sup>). **Ref:** 4677, 4741.

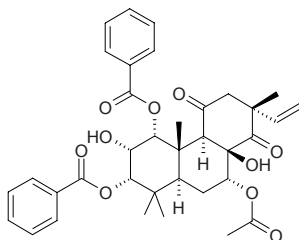
**16243 Orthosiphonone C**

$C_{29}H_{36}O_9$  (528.6). Colorless amorphous solid,  $[\alpha]_D^{25} = -117.7^\circ$  ( $c = 0.093$ ,  $CHCl_3$ ). **Pharm:** NO production inhibitor (LPS-activated macrophage-like J774.1 cells,  $IC_{50} = 81.8\mu\text{mol/L}$ ; control *L*-NMMA,  $IC_{50} = 35.7\mu\text{mol/L}$ ). **Source:** XIONG RUI ZHUANG ZHI GUAN CAO *Orthosiphon stamineus* [Syn: *Orthosiphon aristatus*; *Orthosiphon grandiflorus*; *Orthosiphon spicatus*] (aerial parts: yield = 0.00011%dw). **Ref:** 4741.

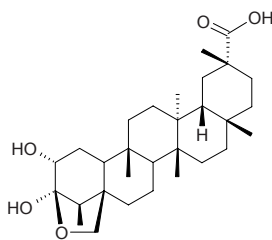


**16244 Orthosiphonone D**

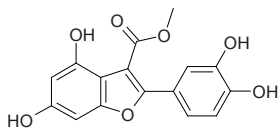
$C_{36}H_{40}O_{10}$  (632.71). Colorless amorphous solid,  $[\alpha]_D^{25} = -105.3^\circ$  ( $c = 0.393$ ,  $CHCl_3$ ). **Pharm:** NO production inhibitor (LPS-activated macrophage-like J774.1 cells,  $IC_{50} = 35.0\mu\text{mol/L}$ ; control *L*-NMMA,  $IC_{50} = 35.7\mu\text{mol/L}$ ). **Source:** XIONG RUI ZHUANG ZHI GUAN CAO *Orthosiphon stamineus* [Syn: *Orthosiphon aristatus*; *Orthosiphon grandiflorus*; *Orthosiphon spicatus*] (aerial parts: yield = 0.00018%dw). **Ref:** 4741.

**16245 Orthosphenic acid**

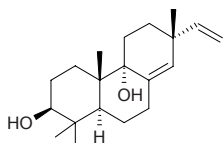
[86632-20-4]  $C_{30}H_{48}O_5$  (488.71). Pale yellow crystals, mp 298~300°C, mp 330°C (double mp). **Pharm:** DPPH free radical scavenger inactive (for 40 $\mu\text{mol/L}$  DPPH radical,  $SC_{50} > 40\mu\text{mol/L}$ )<sup>[4378]</sup>. **Source:** HEI MAN *Tripterygium regelii*, LEI GONG TENG *Tripterygium wilfordii*, SUO LA MU *Salacia prinoides* [Syn. *Salacia chinensis*] (stem), *Orthosphenia mexicana*. **Ref:** 1572, 2798, 2799, 4378.

**16246 Oryzafuran**

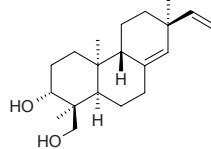
2-(3,4-Dihydroxyphenyl)-4,6-dihydroxybenzofuran-3-carboxylic acid methyl ester  $C_{16}H_{12}O_7$  (316.27). Pale brown needles (MeOH), mp 251~252°C. **Pharm:** Antioxidant (DPPH scavenger,  $EC_{50} = (1.58 \pm 0.01)\mu\text{g/mL}$ , control Ascorbic acid,  $EC_{50} = (3.35 \pm 0.01)\mu\text{g/mL}$ ). **Source:** HEI SE MI PI KANG *Oryza sativa* cv. **Ref:** 2565.

**16247 Oryzalexin E**

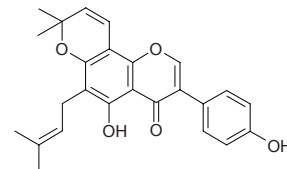
[150943-96-7]  $C_{20}H_{32}O_2$  (304.48). Needles, mp 123~124°C,  $[\alpha]_D^{25} = -26^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Antifungal (*Pyricularia oryzae*,  $ED_{50} = 62.5\text{mg/L}$ , plant antitoxin). **Source:** DAO CAO *Oryza sativa*. **Ref:** 2842.

**16248 Oryzalexin F**

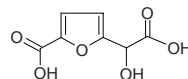
[156551-07-4]  $C_{20}H_{32}O_2$  (304.48). Needles, mp 144~146°C,  $[\alpha]_D^{20} = +16.4^\circ$  ( $c = 0.61$ ,  $CHCl_3$ ). **Pharm:** Antifungal (*Pyricularia oryzae*,  $ED_{50} = 103\text{mg/L}$ , plant antitoxin). **Source:** DAO CAO *Oryza sativa*. **Ref:** 2842.

**16249 Osajin**

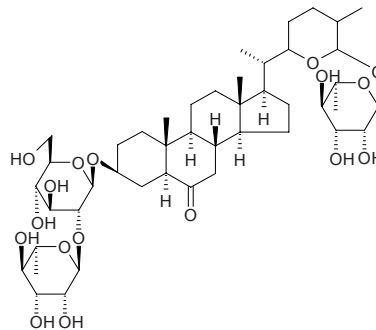
[482-53-1]  $C_{25}H_{24}O_5$  (404.47). Lemon-yellow crystals (xylene or pet. ether), mp 194~195°C. **Source:** CI TONG *Erythrina variegata* [Syn. *Erythrina indica*], FU MAO SHAN DOU GEN *Euchresta strigillosa*, PAN YUAN YU TENG *Derris scandens*, SANG CHENG *Maclura pomifera*, *Euchresta* spp. **Ref:** 1521, 2873.

**16250 Osbeckic acid**

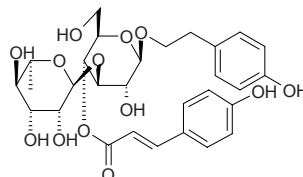
[112923-64-5]  $C_7H_6O_6$  (186.12). Oil,  $[\alpha]_D^{25} = +83.5^\circ$  ( $c = 0.2$ , MeOH). **Source:** JIN JIN XIANG *Osbeckia chinensis*. **Ref:** 2857.

**16251 Osladin**

[33650-66-7]  $C_{45}H_{74}O_{17}$  (887.08). mp 198~199°C. **Source:** SHUI LONG GU *Polypodium niponicum*. **Ref:** 6.

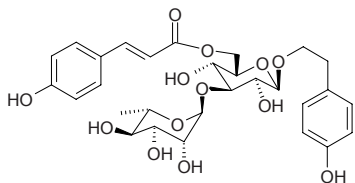
**16252 Osmanthuside B**

$C_{29}H_{36}O_{13}$  (592.60). **Pharm:** Antioxidant (antihemolysis, *in vitro*, AAPH-induced hemolysis of RBC,  $IC_{50} = 159.6\mu\text{mol/L}$ ; control Trolox,  $IC_{50} = 101\mu\text{mol/L}$ )<sup>[4698]</sup>. **Source:** CU ZHUANG NV ZHEN *Ligustrum robustum* (leaf: yield = 0.0056%dw)<sup>[4698]</sup>, ROU CONG RONG *Cistanche deserticola*. **Ref:** 2448, 4698.

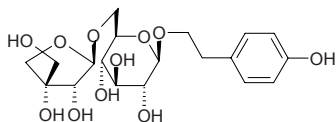


**16253 Osmanthuside B<sub>6</sub>**

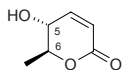
C<sub>29</sub>H<sub>36</sub>O<sub>13</sub> (592.6). **Pharm:** Antioxidant (antihemolysis, *in vitro*, AAPH-induced hemolysis of RBC, IC<sub>50</sub> = 91.7 μmol/L; control Trolox, IC<sub>50</sub> = 101 μmol/L). **Source:** CU ZHUANG NV ZHEN *Ligustrum robustum* (leaf: yield = 0.0092%dw). **Ref:** 4698.

**16254 Osmanthuside H**

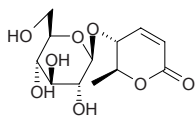
2-(4-Hydroxyphenyl)ethyl-*O*-β-*D*-apiofuranosyl-(1"→6')-β-*D*-glucopyranoside  
C<sub>19</sub>H<sub>28</sub>O<sub>11</sub> (432.43). **Source:** DA XUE TENG *Sargentodoxa cuneata* (stem). **Ref:** 5337.

**16255 5*R*,6*S*-Osmundalactone**

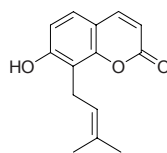
[69308-39-0] C<sub>6</sub>H<sub>8</sub>O<sub>3</sub> (128.13). Plates (C<sub>6</sub>H<sub>6</sub>) or needles, mp 82~82.5°C, [α]<sub>D</sub><sup>22</sup> = -70.6° (c = 2.0, H<sub>2</sub>O). **Source:** ZI QI *Osmunda japonica*. **Ref:** 1521, 2886.

**16256 Osmundalin**

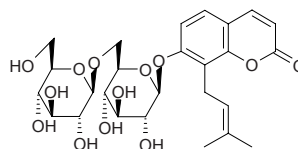
[54835-71-1] C<sub>12</sub>H<sub>18</sub>O<sub>8</sub> (290.27). **Source:** OU ZI QI *Osmunda ragalis*, ZI QI *Osmunda japonica*. **Ref:** 1521, 2887.

**16257 Osthenol**

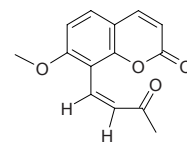
[484-14-0] C<sub>14</sub>H<sub>14</sub>O<sub>3</sub> (230.27). **Pharm:** Antifungal (*Aspergillus niger*, *Colletotrichum gloeosporioides*, *Curvularia* sp., and *Penicillium* sp.); antineoplastic (Raji cells, antitumor promotor, *in vivo*, inhibits TPA-induced EBV-EA activation, compound concentration = 500 mol ratio/32 pmol TPA, EBV-EA-positive cells = (12.8±2.0)% (viability = 70%), β-Carotene, EBV-EA-positive cells = (34.3±1.1)% (viability >80%), Curcumin, EBV-EA-positive cells = (22.8±1.8)% (viability >80%); IC<sub>50</sub> = 131 mol ratio/32 pmol TPA, β-Carotene, IC<sub>50</sub> = 400 mol ratio/32 pmol TPA, Curcumin IC<sub>50</sub> = 341 mol ratio/32 pmol TPA)<sup>[5048]</sup>. **Source:** QIANG HUO *Notopterygium incisum*, TAI WAN HUANG BO *Phellodendron amurense* var. *wilsonii* (leaf: yield = 0.00013%dw)<sup>[4722]</sup>, *Citrus rugulosa*, *Citrus sulcata*, *Citrus tamurana*, *Citrus hassaku*. **Ref:** 2, 1846, 4722, 5048.

**16258 Osthenol-7-*O*-β-gentiobioside**

C<sub>26</sub>H<sub>34</sub>O<sub>13</sub> (554.55). Amorphous powder, [α]<sub>D</sub><sup>24</sup> = -48°. **Pharm:** Antioxidant (DPPH scavenger, EC<sub>50</sub> = 16.3 μg/mL = 29.4 μmol/L, control Ascorbic acid, EC<sub>50</sub> = 1.6 μg/mL = 9.1 μmol/L)<sup>[4154]</sup>. **Source:** BEI SHA SHEN *Glehnia littoralis* (fruit), BEI SHA SHEN *Glehnia littoralis* (underground part). **Ref:** 2846, 3525, 4154.

**16259 cis-Osthenone**

C<sub>14</sub>H<sub>12</sub>O<sub>4</sub> (244.25). **Oil.** **Source:** JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*]. **Ref:** 2810.

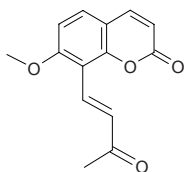


**16260 trans-Osthenone**

Osthenon [112789-90-9] C<sub>14</sub>H<sub>12</sub>O<sub>4</sub> (244.25). Prisms (Et<sub>2</sub>O), mp 134–136°C.

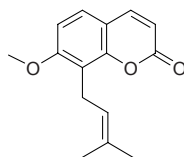
**Pharm:** Antineoplastic (Raji cells, antitumor promotor, *in vivo*, inhibits TPA-induced EBV-EA activation, compound concentration = 500mol ratio/32 pmol TPA: EBV-EA-positive cells = (13.3±1.3)% (viability > 80%), β-Carotene, EBV-EA-positive cells = (34.3±1.1)% (viability > 80%), Curcumin, EBV-EA-positive cells = (22.8±1.8)% (viability > 80%), compound IC<sub>50</sub> = 173mol ratio/32 pmol TPA, β-Carotene, IC<sub>50</sub> = 400mol ratio/32 pmol TPA, Curcumin, IC<sub>50</sub> = 341mol ratio/32 pmol TPA)<sup>[5048]</sup>.

**Source:** CHENG ZI *Citrus junos*, LI HUA JU *Citrus tachibana*, ZHONG HUA JIU LI XIANG *Murraya exotica*, *Citrus rugulosa*, *Citrus sulcata*, *Citrus taurana*, *Citrus hassaku*. **Ref:** 2809, 5048.

**16261 Osthol**

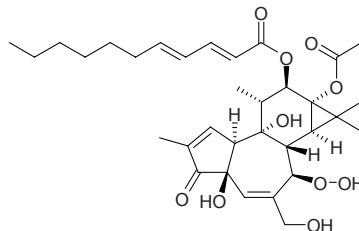
7-Methoxy-8-(3-methyl-2-butenyl)-2H-1-benzopyran-2-one [484-12-8]

C<sub>15</sub>H<sub>16</sub>O<sub>3</sub> (244.29). mp 83–84°C, bp 145–150°C. **Pharm:** Antibacterial (broad spectrum); antihypertensive (cat, 10mg/kg and 20mg/kg, lowers arterial pressure by 30% in 1h and 50% in 2h); antimalarial; antimutagenic; increases blood pressure and enhances myocardial contractility (rat, 1–2mg/kg); cytotoxic (24h: HL-60, IC<sub>50</sub> = 14.9μg/mL, control Adriamycin IC<sub>50</sub> < 0.10μg/mL; P<sub>388</sub>, IC<sub>50</sub> = 9.3μg/mL, Adriamycin IC<sub>50</sub> < 0.10μg/mL; Colon205, IC<sub>50</sub> = 29.9μg/mL, Adriamycin IC<sub>50</sub> = 0.63μg/mL; HeLa, IC<sub>50</sub> = 31.7μg/mL, Adriamycin IC<sub>50</sub> = 0.15μg/mL)<sup>[5486]</sup>; cytotoxic (12h: HL-60, IC<sub>50</sub> = 24.4μg/mL, control Adriamycin IC<sub>50</sub> = 0.18μg/mL; primary culture hmn PBMCs, IC<sub>50</sub> = 40.1μg/mL, SI = 1.6, Adriamycin IC<sub>50</sub> = 0.54μg/mL, SI = 3.3)<sup>[5486]</sup>; LD<sub>50</sub> (mus, sc) = 16mg/kg. **Source:** BA JIAO HUANG PI *Clausena anisata*, DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*] (root: content scope of 34 batch samples = 0.02%–3.26%, mean content = 0.88%<sup>[5508]</sup>), JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*], OU QIAN HU *Peucedanum ostruthium*, SHE CHUANG ZI *Cnidium monnieri* (ripe seed: content scope = 2.0%–3.0%<sup>[5501]</sup>, mean content of 26 origins = 1.53%<sup>[5508]</sup>), SHUAN CHI QIN *Prangos pabularia*, XIAN HE CAO *Agrimonia pilosa* var. *japonica*, YUAN DANG GUI *Angelica archangelica*, YUN QIAN HU *Peucedanum rubricaula*, *Citrus* sp., *Clausena* sp. **Ref:** 4, 6, 11, 177, 344, 658, 5486, 5501, 5508.

**16262 Ostodin**

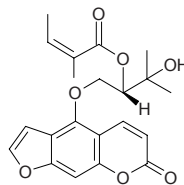
[85527-84-0] C<sub>33</sub>H<sub>46</sub>O<sub>10</sub> (602.73). Resin, [α]<sub>D</sub><sup>25</sup> = +21.4° (c = 0.14, CHCl<sub>3</sub>).

**Pharm:** Cytotoxic (P<sub>388</sub> *in vitro*, ED<sub>50</sub> = 0.055μg/mL). **Source:** YUAN ZHUI HUA YE LUN MU *Ostodes paniculata*. **Ref:** 2918.

**16263 Ostruhol**

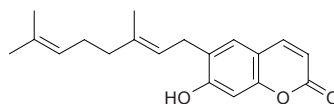
[642-08-0] C<sub>21</sub>H<sub>22</sub>O<sub>7</sub> (386.41). Crystals (C<sub>6</sub>H<sub>6</sub>), mp 136–137°C, [α]<sub>D</sub><sup>15</sup> = –18.3°

(pyridine); [α]<sub>D</sub><sup>20</sup> = +5.9° (c = 0.509, CHCl<sub>3</sub>). **Pharm:** Calcium channel blocker; vasodilator (rbt main artery, with Ca, inhibits contraction caused by KCl). **Source:** E SHEN *Anthriscus sylvestris*, GAO SHAN YAN SHEN *Cicerbita alpina*, HOU GUO DANG GUI *Angelica pachycarpa*, LIN BAI ZHI *Angelica sylvestris*, OU QIAN HU *Peucedanum ostruthium*, YUAN DANG GUI *Angelica archangelica*, ZHAO ZE QIAN HU *Peucedanum palustre*, *Peucedanum hispanicum*. **Ref:** 1035, 2847, 2848, 2849, 2850, 2851, 2852, 2853, 2855.

**16264 Ostruthin**

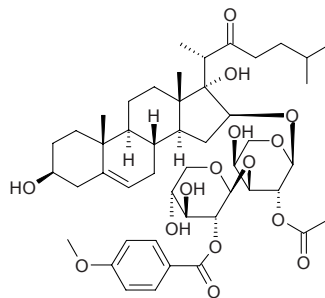
[148-83-4] C<sub>19</sub>H<sub>22</sub>O<sub>3</sub> (298.39). **Pharm:** Antibacterial (*Staphylococcus aureus*);

antifungal (*Saccharomyces cerevisiae*). **Source:** OU QIAN HU *Peucedanum ostruthium*. **Ref:** 658.

**16265 OSW-1**

C<sub>47</sub>H<sub>68</sub>O<sub>15</sub> (873.06). **Pharm:** Cytotoxic (specific activity for cancer cells).

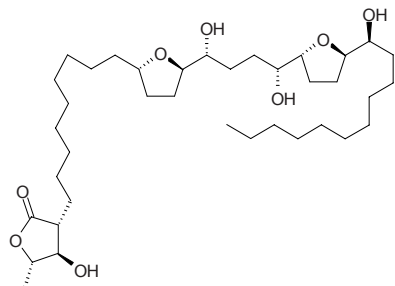
**Source:** *Ornithogalum saundersiae*. **Ref:** 2165.



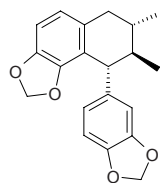


**16266 Otivarin**

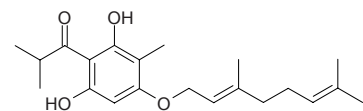
Dihydrocherimolin [92280-15-4]  $C_{37}H_{68}O_8$  (640.95).  $[\alpha]_D^{20} = +13^\circ$  ( $c = 0.15$ , MeOH). **Pharm:** Antiparasite (*Molinema dessetoe* infectivity larvae); cytotoxic (KB  $ED_{50} = 0.001\text{--}0.0001\mu\text{g/mL}$ , Vero  $ED_{50} = 0.01\text{--}0.001\mu\text{g/mL}$ ); NADH ubiquinone reductase inhibitor (mitochondria, with bigger protein-dependent titre). **Source:** MAO YE FAN LI ZHI *Annona cherimolia*. **Ref:** 2813, 1548.

**16267 Otobain**

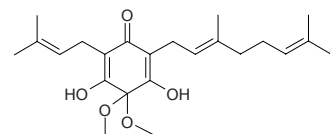
[3738-01-0]  $C_{20}H_{20}O_4$  (324.38). **Pharm:** Antifungal. **Source:** AO TUO ROU DOU KOU *Myristica otoba*, FEI LV BIN ROU DOU KOU *Myristica simiarum*. **Ref:** 658.

**16268 Otogirin**

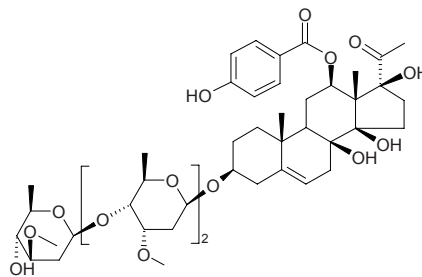
[137251-97-9]  $C_{21}H_{30}O_4$  (346.47). Crystals, mp 66–68°C. **Pharm:** Antibacterial; Antiallergic (gpg, leukotriene  $D_4$  antagonist, at 100  $\mu\text{mol/L}$  inhibits tracheal smooth muscle contraction induced by leukotriene  $D_4$ , InRt = 50%;  $TXA_2$  antagonist, at 100  $\mu\text{mol/L}$  inhibits tracheal smooth muscle contraction induced by  $TXA_2$ , InRt = 50.9%); antiviral (herpetic stomatitis RNA virus, herpes simplex virus 1 DNA virus). **Source:** XIAO LIAN QIAO *Hypericum erectum* (root and flowers). **Ref:** 2877, 2878.

**16269 Otogirone**

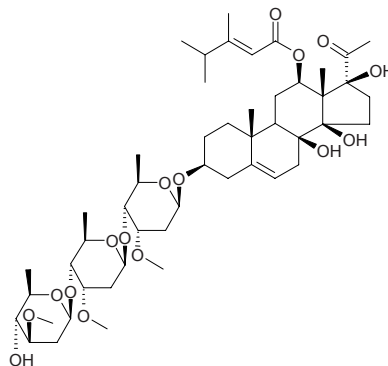
[137201-18-4]  $C_{23}H_{34}O_5$  (390.52). **Oil. Pharm:** Antibacterial; Antiallergic (gpg, leukotriene  $D_4$  antagonist, at 20  $\mu\text{mol/L}$  inhibits tracheal smooth muscle contraction induced by leukotriene  $D_4$ , InRt = 94.9%;  $TXA_2$  antagonist, at 20  $\mu\text{mol/L}$  inhibits tracheal smooth muscle contraction induced by  $TXA_2$ , InRt = 63.6%). **Source:** XIAO LIAN QIAO *Hypericum erectum* (flowers). **Ref:** 2877, 2878.

**16270 Otophylliside A**

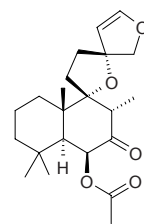
$C_{49}H_{72}O_{17}$  (933.11). **Source:** QING YANG SHEN *Cynanchum otophyllum*. **Ref:** 2902.

**16271 Otophylliside B**

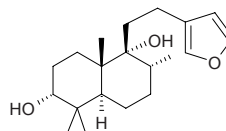
$C_{49}H_{78}O_{16}$  (923.16). **Source:** QING YANG SHEN *Cynanchum otophyllum*. **Ref:** 2902.

**16272 Otostegin A**

$C_{22}H_{32}O_5$  (376.50). Colorless needles (ether), mp 216.2–217.2°C,  $[\alpha]_D^{22} = -117^\circ$  ( $c = 0.08$ ,  $CHCl_3$ ). **Source:** GUAN MU AO TUO SI TE CAO *Otostegia fruticosa* (aerial parts). **Ref:** 3984.

**16273 Otostegindiol**

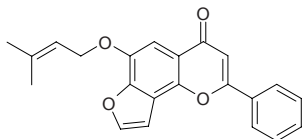
15,16-Epoxy-3 $\alpha$ ,9 $\alpha$ -dihydroxy-labda-13(16),14-diene  $C_{20}H_{32}O_3$  (320.48). White crystals (hexane), mp 124–125°C,  $[\alpha]_{589nm}^{20} = +25^\circ$  ( $c = 0.01$ , methanol). **Source:** QUAN YUAN YE AO TUO SI TE CAO *Otostegia integrifolia* (leaf). **Ref:** 3823.



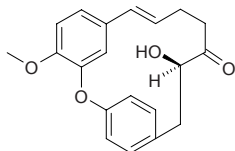


**16274 Ovalifolin**

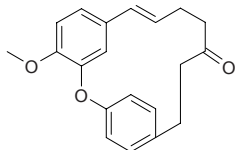
$C_{22}H_{18}O_4$  (346.39). Source: HONG E JI XUE TENG *Millettia erythrocalyx* (stem cortex: yield = 0.00030%dw). Ref: 4624.

**16275 Ovalifoliolatin A**

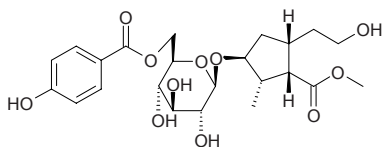
$C_{20}H_{20}O_4$  (324.38). Semisolid,  $[\alpha]_D^{25} = -8.88^\circ$  ( $c = 0.65$ , MeOH). Pharm: Antibacterial (disk susceptibility tests, standard NCCLS method, 50 $\mu$ g/disk (control 30 $\mu$ g/disk), gram-positive bacteria: *Staphylococcus aureus*, DIZ = 9mm, positive control Kanamycin, DIZ = 10mm; *Bacillus subtilis*, DIZ = 11mm, Kanamycin, DIZ = 18mm; *Bacillus sphaericus*, DIZ = 11mm, Kanamycin, DIZ = 20mm; gram-negative bacteria: *Chromobacterium violaceum*, DIZ = 7mm, Kanamycin, DIZ = 17mm; *Klebsiella aerogenes*, DIZ = 8mm, Kanamycin, DIZ = 15mm; *Pseudomonas aeruginosa*, DIZ = 9mm, Kanamycin, DIZ = 27mm). Source: TUO YUAN YE RU XIANG SHU *Boswellia ovalifoliolata* (stem). Ref: 4380.

**16276 Ovalifoliolatin B**

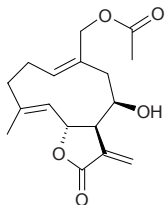
$C_{20}H_{20}O_3$  (308.38). Semisolid,  $[\alpha]_D^{25} = 0^\circ$  ( $c = 0.15$ , MeOH). Source: TUO YUAN YE RU XIANG SHU *Boswellia ovalifoliolata* (stem). Ref: 4380.

**16277 Ovatic acid methyl ester 7-O-(6'-O-p-hydroxybenzoyl)- $\beta$ -D-glucopyranoside**

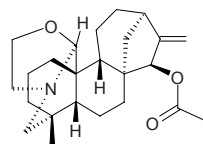
$C_{23}H_{32}O_{11}$  (484.50). Amorphous powder,  $[\alpha]_D^{25} = -0^\circ$  ( $c = 0.3$ , MeOH). Source: ZI YE *Catalpa ovata* (leaf, fallen leaf). Ref: 3536, 4290.

**16278 Ovatifolin**

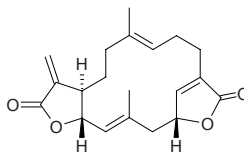
[50886-56-1]  $C_{17}H_{22}O_5$  (306.36). Pharm: Antineoplastic; cytotoxic. Source: BING HUA JU *Podanthus ovatifolius*, MI TI BING HUA JU *Podanthus mitiqui*. Ref: 658.

**16279 Ovatine**

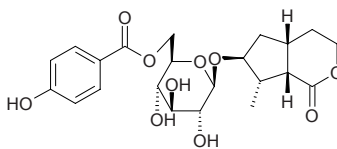
[68719-14-2]  $C_{24}H_{35}NO_3$  (385.55). Pharm: Antineoplastic. Source: *Garrya ovata* var. *lindheimeri*. Ref: 658.

**16280 Ovatodiolide**

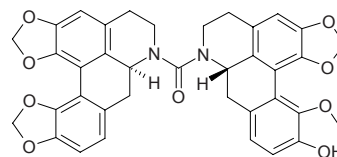
[3484-37-5]  $C_{20}H_{24}O_4$  (328.41). Colorless prisms, mp 150–151°C,  $[\alpha]_D^{23} = +21.8^\circ$  ( $c = 1.0$ ,  $CHCl_3$ ). Pharm: Cytotoxic (KB,  $IC_{50} = 0.6\mu$ g/mL); antihypertensive (dig, action in short time, not inhibits ACE); inhibits myocardial contraction and calcium antagonist. Source: GUANG FANG FENG *Anisomeles indica* [Syn. *Epimeredi indica*]. Ref: 2899, 2866, 2900.

**16281 Ovatolactone 7-O-(6'-O-p-hydroxybenzoyl)- $\beta$ -D-glucopyranoside**

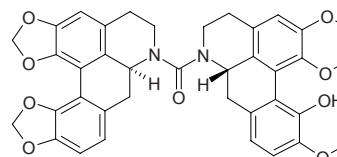
$C_{22}H_{28}O_{10}$  (452.46). Amorphous powder,  $[\alpha]_D^{25} = -17.9^\circ$  ( $c = 0.6$ , MeOH). Source: ZI YE *Catalpa ovata* (leaf, fallen leaf). Ref: 3536, 4290.

**16282 (+)-Ovihernangerine**

[187530-46-7]  $C_{37}H_{30}N_2O_9$  (646.66). Colorless prisms (MeOH), mp 194–196°C,  $[\alpha]_D^{24} = +310^\circ$  ( $c = 0.08$ ,  $CHCl_3$ ). Pharm: Cytotoxic ( $P_{388}$ ,  $ED_{50} = 1.000\mu$ g/mL, A549,  $ED_{50} = 1.570\mu$ g/mL, HT29,  $ED_{50} = 10.227\mu$ g/mL, KB16,  $ED_{50} = 0.239\mu$ g/mL). Source: SHUI LIAN YE TONG *Hernandia nymphaeifolia*. Ref: 2858.

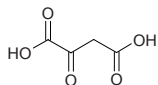
**16283 (+)-Oviisocorydine**

[187669-80-3]  $C_{38}H_{34}N_2O_9$  (662.70). Colorless prisms (MeOH), mp 168–170°C,  $[\alpha]_D^{24} = +254^\circ$  ( $c = 0.08$ ,  $CHCl_3$ ). Pharm: Cytotoxic ( $P_{388}$ ,  $ED_{50} = 1.489\mu$ g/mL, A549,  $ED_{50} = 2.146\mu$ g/mL, HT29,  $ED_{50} = 4.152\mu$ g/mL). Source: SHUI LIAN YE TONG *Hernandia nymphaeifolia*. Ref: 2858.

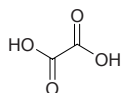


**16284 Oxalacetic acid**

2-Oxobutanedioic acid [328-42-7]  $C_4H_4O_5$  (132.07). mp 189.5°C. Source: GUI JIAN YU *Euonymus alatus*. Ref: 6.

**16285 Oxalic acid**

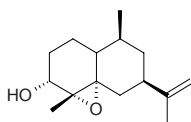
[144-62-7]  $C_2H_2O_4$  (90.04). mp 189.5°C. Pharm: Toxin (paralysis of nervous system). Source: BAI BU *Stemona tuberosa*, BO CAI *Spinacia oleracea*, CU LIU GUO *Hippophae rhamnoides*, HUANG HAO *Artemisia scoparia* [Syn. *Artemisia capillaris* var. *scoparia*], MU ZEI MA HUANG *Ephedra equisetina*, *Ephedra equisetina*, SHAN ZHA *Crataegus pinnatifida*, SHI YONG DA HUANG *Rheum raphaniticum*, YI ZHU QIAN MA *Urtica dioica*, *Oxalis* sp. Ref: 2, 6, 658, 660.

**16286 2-Oxazolidinethione**

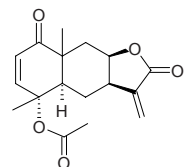
[5840-81-3]  $C_3H_5NOS$  (103.14). Source: MA BING LANG *Capparis masaiikai*. Ref: 2943.

**16287 4 $\alpha$ ,5 $\alpha$ -Oxidoeudesm-11-en-3 $\alpha$ -ol**

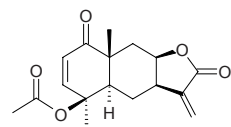
$C_{15}H_{24}O_2$  (236.36). Source: XIANG FU *Cyperus rotundus*. Ref: 2840.

**16288 1-Oxo-4 $\alpha$ -acetoxyeudesma-2,1(13)-dien-12,8 $\beta$ -olide**

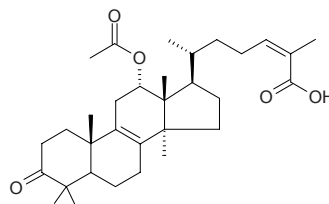
$C_{17}H_{20}O_5$  (304.35). Source: AI YE *Artemisia argyi*. Ref: 1288.

**16289 1-Oxo-4 $\beta$ -acetoxyeudesma-2,1(13)-dien-12,8 $\beta$ -olide**

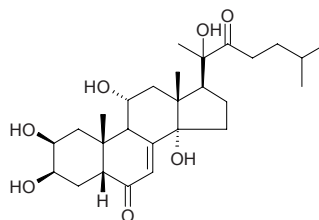
$C_{17}H_{20}O_5$  (304.35). Source: AI YE *Artemisia argyi*. Ref: 1288.

**16290 (24Z)-3-Oxo-12 $\alpha$ -acetoxylanosta-8,24-dien-26-oic acid**

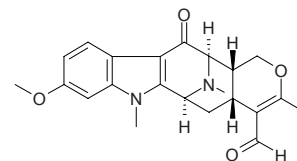
$C_{32}H_{48}O_5$  (512.74). Pharm: Antineoplastic; anti-HIV. Source: CHANG GENG NAN WU WEI ZI *Kadsura peltigera* [Syn. *Kadsura longipedunculata*]. Ref: 2523.

**16291 22-Oxo-ajugasterone C**

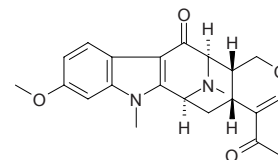
2 $\beta$ ,3 $\beta$ ,11 $\beta$ ,14 $\beta$ ,20-Pentahydroxy-cholest-7-en-6,22-dione  $C_{27}H_{42}O_7$  (478.63). White crystals (MeOH), mp 213°C. Source: ZHEN ZHU LU SHUI CAO *Cyanotis arachnoidea* [Syn. *Cyanotis bodinieri*]. Ref: 2475.

**16292 6-Oxoalstophyllal**

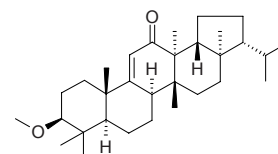
$C_{22}H_{24}N_2O_4$  (380.45). Light yellowish oil,  $[\alpha]_D = +31^\circ$  ( $c = 0.08$ ,  $CHCl_3$ ). Source: DA YE TANG JIAO SHU *Alstonia macrophylla* (leaf: yield = 0.0003%). Ref: 3020.

**16293 6-Oxoalstophylline**

$C_{22}H_{24}N_2O_4$  (380.45). Light yellowish oil,  $[\alpha]_D = +31^\circ$  ( $c = 0.08$ ,  $CHCl_3$ ). Source: DA YE TANG JIAO SHU *Alstonia macrophylla* (leaf: yield = 0.00005%). Ref: 3020.

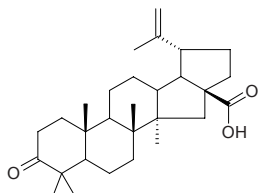
**16294 12-Oxoarundoin**

[In DNP]  $C_{31}H_{50}O_2$  (454.74). Source: MAO CAO YE *Imperata cylindrica* var. *major*. Ref: 6.

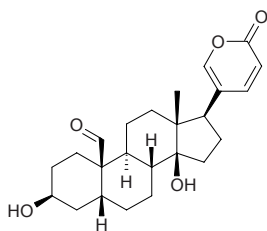


**16295 3-Oxobetulinic acid**

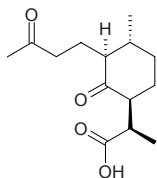
$C_{29}H_{44}O_3$  (440.67). Source: BAI TOU WENG *Pulsatilla chinensis*. Ref: 660.

**16296 19-Oxobufalin**

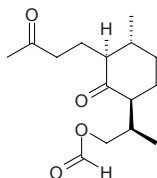
$C_{24}H_{32}O_5$  (400.52). Colorless solid,  $[\alpha]_D^{21} = +7.0^\circ$  ( $c = 0.1$ ,  $CH_3OH$ ). Pharm: Cytotoxic (*in vitro*, HL-60,  $IC_{50} < 0.01 \mu g/mL$ ; MH-60,  $IC_{50} > 25 \mu g/mL$ ; BXPC3,  $IC_{50} = 0.014 \mu g/mL$ ; MCF7,  $IC_{50} = 0.0072 \mu g/mL$ ; SF268,  $IC_{50} = 0.0047 \mu g/mL$ ; NCI-H460,  $IC_{50} = 0.018 \mu g/mL$ ; KM20L2,  $IC_{50} = 0.0082 \mu g/mL$ ; DU145,  $IC_{50} = 0.0046 \mu g/mL$ ). Source: CHAN SU *Bufo bufo gargarizans*; *Bufo melanostictus*. Ref: 3082.

**16297 1-Oxo-2β-[3-butanone]-3α-methyl-6β-[2-propanoic acid]-cyclohexane**

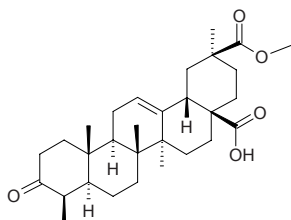
$C_{14}H_{22}O_4$  (254.33). Colorless oil,  $[\alpha]_D = -36.7^\circ$  ( $c = 1.2$ ,  $CHCl_3$ ). Source: HUANG HUA HAO *Artemisia annua* (seed). Ref: 3435.

**16298 1-Oxo-2β-[3-butanone]-3α-methyl-6β-[2-propanol formylester]-cyclohexane**

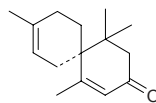
$C_{15}H_{24}O_4$  (268.36). Source: HUANG HUA HAO *Artemisia annua* (seed). Ref: 3435.

**16299 3-Oxo-30-carbomethoxy-23-norolean-12-en-28-oic acid**

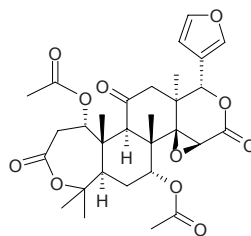
$C_{30}H_{44}O_5$  (484.68). Source: MEI SHANG LU *Phytolacca americana* [Syn. *Phytolacca decandra*]. Ref: 2960.

**16300 ent-9-Oxo-α-chamigrene**

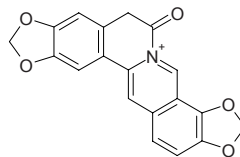
Laurenconone C [61661-47-0]  $C_{15}H_{22}O$  (218.34). Oil,  $[\alpha]_D = -43^\circ$  ( $c = 1$ ,  $CHCl_3$ ). Source: DI SUO LUO *Marchantia polymorpha*, DUN XING AO DING ZAO *Laurencia obtusa*. Ref: 1521, 1244.

**16301 11-Oxocneorin G**

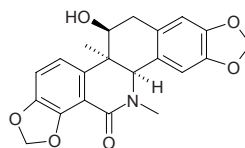
$C_{30}H_{36}O_{11}$  (572.61). Colorless prisms ( $CHCl_3$ -MeOH), mp 274–276°C,  $[\alpha]_D^{23} = +126^\circ$  ( $c = 0.1$ ,  $CHCl_3$ ). Source: ZHONG GUO YANG CHUN *Cedrela sinensis* (leaf). Ref: 3883.

**16302 8-Oxocoptisine**

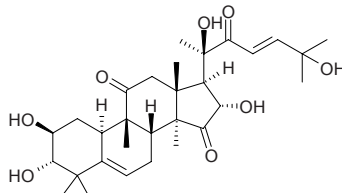
$C_{19}H_{12}NO_5$  (334.31). Source: BAI QU CAI *Chelidonium majus*. Ref: 2901.

**16303 6-Oxocorynoline**

[55739-71-4]  $C_{21}H_{19}NO_6$  (381.39). mp > 295°C. Source: ZI HUA YU DENG CAO *Corydalis incisa*. Ref: 2829.

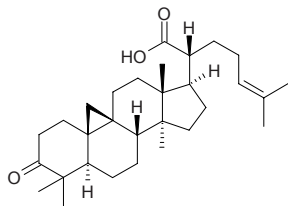
**16304 15-Oxo-cucurbitacin F**

[154346-63-1]  $C_{30}H_{44}O_8$  (532.68). Colorless needles (MeOH), mp 223–226°C,  $[\alpha]_D^{26} = +57.5^\circ$  ( $c = 0.43$ ,  $CHCl_3$ ). Pharm: Inhibits promotor of cancer (inhibits activity of EBV early antigen EBV-EA induced by TPA); anti-HIV-1 (inhibits reproduction of HIV-1 in H9 cell,  $ED_{50} = 0.3 \mu g/mL$ , therapy index = 17.0). Source: XUAN YA MEI GUI *Cowania mexicana*. Ref: 2922, 2923, 2924.

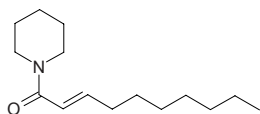


**16305 3-Oxo-24-cycloarten-21-oic acid**

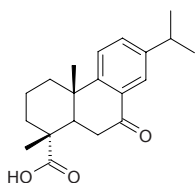
[125292-53-7] C<sub>30</sub>H<sub>46</sub>O<sub>3</sub> (454.70). Colorless crystals, mp 185~186°C, [ $\alpha$ ]<sub>D</sub><sup>21</sup> = +18.7° (*c* = 1.16, CHCl<sub>3</sub>). **Pharm:** Inhibits promotor of cancer (inhibits activity of EBV early antigen EBV-EA induced by TPA). **Source:** ZAI ZHONG LANG SE MU *Lansium domesticum*. **Ref:** 2874.

**16306 1-(1-Oxo-2E-decaenyl) piperidine**

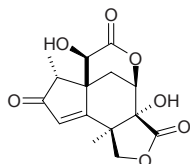
C<sub>15</sub>H<sub>27</sub>NO (237.39). **Source:** HU JIAO *Piper nigrum* (root: yield = 0.00024%dw). **Ref:** 4753.

**16307 7-Oxodehydroabietic acid**

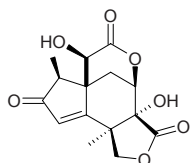
C<sub>20</sub>H<sub>26</sub>O<sub>3</sub> (314.43). **Source:** TAI WAN YUN SHAN *Picea morrisonicola* (heartwood). **Ref:** 4054.

**16308 (1R)-2-Oxo-3,4-dehydroneomajucin**

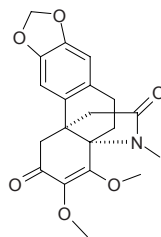
C<sub>15</sub>H<sub>16</sub>O<sub>7</sub> (308.29). **Source:** JIA DI FENG PI *Illicium jiadifengpi* (pericarp: yield = 0.0011%dw). **Ref:** 4621.

**16309 (1S)-2-Oxo-3,4-dehydroneomajucin**

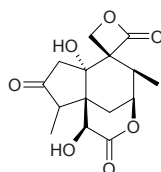
C<sub>15</sub>H<sub>16</sub>O<sub>7</sub> (308.29). **Source:** JIA DI FENG PI *Illicium jiadifengpi* (pericarp: yield = 0.0015%dw). **Ref:** 4621.

**16310 16-Oxodelavaine**

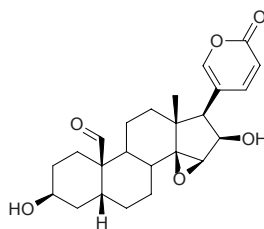
[38146-58-6] C<sub>20</sub>H<sub>21</sub>NO<sub>6</sub> (371.39). **Source:** DI BU RONG *Stephania delavayi* [Syn. *Stephania epigaea*]. **Ref:** 6.

**16311 3-Oxo-6-deoxyneoisatin**

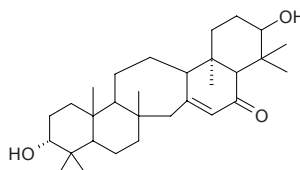
C<sub>15</sub>H<sub>18</sub>O<sub>7</sub> (310.31). **Source:** YUN NAN BA JIAO *Illicium simonsii*. **Ref:** 649.

**16312 19-Oxodesacetylcinobufagin**

C<sub>24</sub>H<sub>30</sub>O<sub>6</sub> (414.5). Colorless solid, [ $\alpha$ ]<sub>D</sub><sup>21</sup> = +17.3° (*c* = 0.1, CH<sub>3</sub>OH). **Pharm:** Cytotoxic (*in vitro*, KB, IC<sub>50</sub> = 0.65µg/mL; HL-60, IC<sub>50</sub> = 3µg/mL; MH-60, IC<sub>50</sub> > 25µg/mL; BXPC3, IC<sub>50</sub> > 1µg/mL; MCF7, IC<sub>50</sub> > 1µg/mL; SF268, IC<sub>50</sub> > 1µg/mL; NCI-H460, IC<sub>50</sub> > 1µg/mL; KM20L2, IC<sub>50</sub> > 1µg/mL; DU145, IC<sub>50</sub> > 1µg/mL). **Source:** CHAN SU *Bufo bufo gargarizans*; *Bufo melanostictus*. **Ref:** 3082.

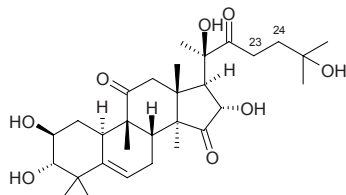
**16313 16-Oxidiepiserratenediol**

C<sub>30</sub>H<sub>48</sub>O<sub>3</sub> (456.72). **Source:** QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*], SHEN JIN CAO *Lycopodium japonicum* [Syn. *Lycopodium clavatum*]. **Ref:** 109, 1410, 2811.

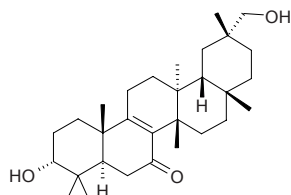


**16314 15-Oxo-23,24-dihydrocucurbitacin F**

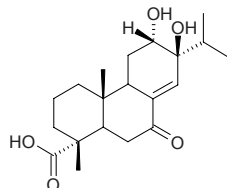
[154346-64-2] C<sub>30</sub>H<sub>46</sub>O<sub>8</sub> (534.70). Colorless needles (MeOH), mp 207~209°C, [ $\alpha$ ]<sub>D</sub><sup>26</sup> = +65.2° (c = 0.54, MeOH). **Pharm:** Inhibits promotor of cancer (inhibits activity of EBV early antigen EBV-EA induced by TPA); anti-HIV-1 (inhibits reproduction of HIV-1 in H9 cell, ED<sub>50</sub> = 2.5 µg/mL, therapy index = 15.2). **Source:** XUAN YA MEI GUI *Cowania mexicana*. **Ref:** 2922, 2923, 2924.

**16315 7-Oxodihydro karoundiol**

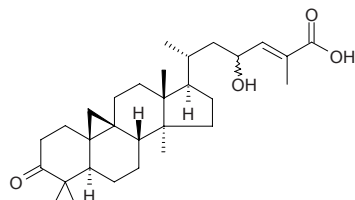
[143183-47-5] C<sub>30</sub>H<sub>48</sub>O<sub>3</sub> (456.72). mp 287~289°C (methanol-acetone). **Pharm:** Inhibits promotor of cancer (mus, inflammation caused by TPA, ID<sub>50</sub> = 0.3mg/ear) **Source:** GUA LOU *Trichosanthes kirilowii*. **Ref:** 933, 998.

**16316 7-Oxo-12α,13β-dihydroxyabie-8(14)-en-18-oic acid**

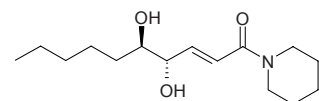
C<sub>20</sub>H<sub>30</sub>O<sub>5</sub> (350.46). White needles, mp 275~277°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +1.5° (c = 0.39, MeOH). **Source:** HUA SHAN SONG *Pinus armandii* (fruit). **Ref:** 4867.

**16317 3-Oxo-23-dihydroxycycloart-24-en-26-oic acid**

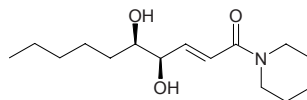
C<sub>30</sub>H<sub>46</sub>O<sub>4</sub> (470.70). It is a mixture of a known 3α, (R or S) Dihydroxycycloart-24-en-26-oic acid. **Source:** MANG GUO *Mangifera indica*. **Ref:** 1868.

**16318 (±)-erythro-1-(1-Oxo-4,5-dihydroxy-2E-decaenyl)piperidine**

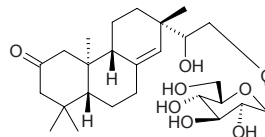
C<sub>15</sub>H<sub>27</sub>NO<sub>3</sub> (269.39). Colorless oil, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = 0° (c = 0.8, CHCl<sub>3</sub>). **Source:** HU JIAO *Piper nigrum* (root: yield = 0.00027%dw). **Ref:** 4753.

**16319 (±)-threo-1-(1-Oxo-4,5-dihydroxy-2E-decaenyl)piperidine**

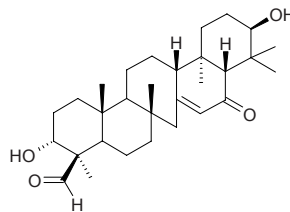
C<sub>15</sub>H<sub>27</sub>NO<sub>3</sub> (269.39). Colorless oil, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = 0° (c = 0.9, CHCl<sub>3</sub>). **Source:** HU JIAO *Piper nigrum* (root: yield = 0.00017%dw). **Ref:** 4753.

**16320 ent-2-Oxo-15,16-dihoxypimar-8(14)-en-16-O-β-glucopyranoside**

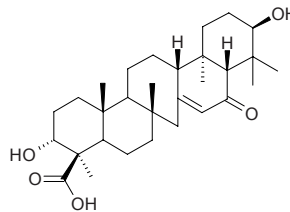
C<sub>26</sub>H<sub>42</sub>O<sub>8</sub> (482.62). White amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -51.7° (c = 1.58, MeOH). **Source:** XI XIAN *Siegesbeckia orientalis* (aerial parts: yield = 0.0027%). **Ref:** 4764.

**16321 16-Oxo-3α,21β-dihydroxserrat-14-en-24-al**

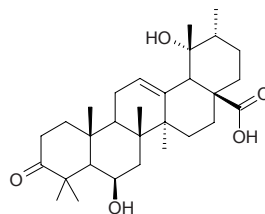
C<sub>30</sub>H<sub>46</sub>O<sub>4</sub> (470.7). Colorless prisms (CHCl<sub>3</sub>-CH<sub>3</sub>OH), mp 270~272°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -23.7° (c = 0.35, C<sub>5</sub>D<sub>5</sub>N). **Source:** QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*] (whole herb: yield = 0.000056%dw). **Ref:** 4729.

**16322 16-Oxo-3α,21β-dihydroxserrat-14-en-24-oic acid**

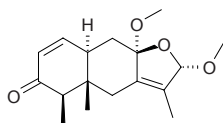
C<sub>30</sub>H<sub>46</sub>O<sub>5</sub> (486.7). White powder (CHCl<sub>3</sub>-CH<sub>3</sub>OH), mp 298~300°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +10.5° (c = 0.55, C<sub>5</sub>D<sub>5</sub>N). **Source:** QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*] (whole herb: yield = 0.000072%dw). **Ref:** 4729.

**16323 3-Oxo-6β,19α-dihydroxyurs-12-en-28-oic acid**

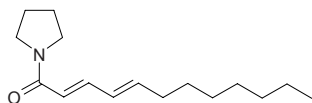
C<sub>30</sub>H<sub>46</sub>O<sub>5</sub> (486.70). **Source:** BI LU GOU TENG *Uncaria tomentosa*. **Ref:** 5341.



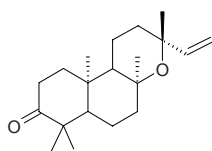
**16324 3-Oxo-8 $\alpha$ ,12 $\alpha$ -dimethoxy-8,12-dihydro-10 $\alpha$ H-furanoeremophil-1-ene**  
 C<sub>17</sub>H<sub>24</sub>O<sub>4</sub> (292.38). Colorless oil. [Source](#): HUANG SE QIAN LI GUANG  
*Senecio flavus*. [Ref](#): 2409.



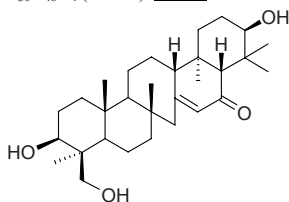
**16325 1-(1-Oxo-2E,4E-dodedienyl)pyrrolidine**  
 C<sub>16</sub>H<sub>27</sub>NO (249.40). [Source](#): HU JIAO *Piper nigrum* (root: yield =  
 0.0012%dw). [Ref](#): 4753.



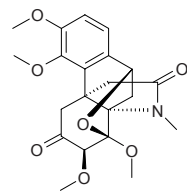
**16326 ent-3-Oxo-13-epi-manoyl oxide**  
 C<sub>20</sub>H<sub>32</sub>O<sub>2</sub> (304.48). Colorless needles (MeOH), mp 122–124°C, [α]<sub>D</sub><sup>25</sup> =  
 –36.0° (c = 0.36, CHCl<sub>3</sub>). [Source](#): HAI QI *Excoecaria agallocha* (root). [Ref](#): 5114.



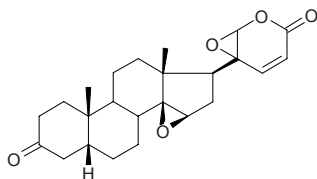
**16327 16-Oxo-21-episerratrilol**  
 C<sub>30</sub>H<sub>48</sub>O<sub>4</sub> (472.71). [Source](#): PU DI WU GONG *Lycopodium cernuum*. [Ref](#): 1410.



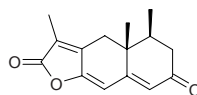
**16328 Oxoepistephamsine**  
 [51804-68-3] C<sub>21</sub>H<sub>25</sub>NO<sub>7</sub> (403.44). Light-yellow prisms (MeOH), mp 228°C,  
 [α]<sub>D</sub><sup>13</sup> = +104.88° (c = 1.0, CHCl<sub>3</sub>). [Source](#): QIAN JIN TENG *Stephania*  
*japonica*. [Ref](#): 2872.



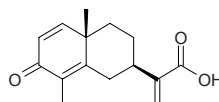
**16329 3-Oxo-20S,21-epoxyresibufogenin**  
 C<sub>24</sub>H<sub>30</sub>O<sub>5</sub> (398.5). Colorless needles, mp 180–182°C, [α]<sub>D</sub><sup>20</sup> = +30.8° (c = 0.1,  
 CHCl<sub>3</sub>). [Pharm](#): Cytotoxic (*in vitro*, KB, IC<sub>50</sub> = 18.51 μg/mL; MH-60, IC<sub>50</sub> =  
 8.54 μg/mL). [Source](#): CHAN SU *Bufo bufo gargarizans*; *Bufo melanostictus*  
 (dried secretion of skin glands: yield = 0.0048%dw). [Ref](#): 4634.



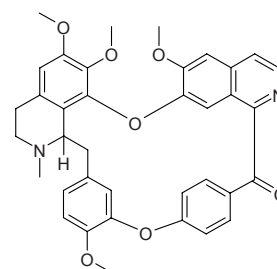
**16330 2-Oxo-eremophil-1(10),7(11),8(9)-trien-12,8-olide**  
 C<sub>15</sub>H<sub>16</sub>O<sub>3</sub> (244.29). Yellowish needles (acetone), mp 149–150°C. [Source](#):  
 KUAN SHE DU WU *Ligularia platyglossa* (root and rhizome). [Ref](#): 4911.



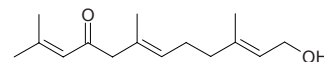
**16331 3-Oxo-erudesma-1,4,11(13)-trien-7 $\alpha$ H-12-oic acid**  
 [135594-80-8] C<sub>15</sub>H<sub>18</sub>O<sub>3</sub> (246.31). Gum, [α]<sub>D</sub> = –80° (c = 0.36, CHCl<sub>3</sub>).  
[Source](#): BEI AI *Artemisia vulgaris*. [Ref](#): 2856.



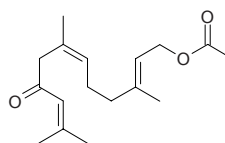
**16332 Oxofangchirine**  
 [102516-53-0] C<sub>37</sub>H<sub>34</sub>N<sub>2</sub>O<sub>7</sub> (618.69). Yellowish square crystals (acetone), mp  
 184–186°C, [α]<sub>D</sub><sup>20</sup> = +47° (c = 0.42, chloroform). [Source](#): FANG JI *Stephania*  
*tetrandra*. [Ref](#): 44.



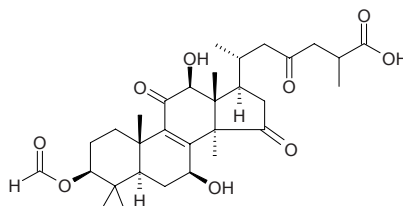
**16333 9-Oxofarnesol**  
 C<sub>15</sub>H<sub>24</sub>O<sub>2</sub> (236.36). [Source](#): GAN SHU *Ipomoea batatas* [Syn. *Convolvulus*  
*batatas*], ZHANG SHU YE *Cinnamomum camphora*. [Ref](#): 6.



**16334 9-Oxofarnesyl acetate**  
 C<sub>17</sub>H<sub>26</sub>O<sub>3</sub> (278.39). [Source](#): ZHANG SHU YE *Cinnamomum camphora*. [Ref](#): 6.

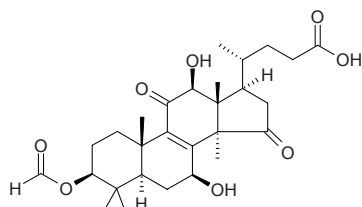


**16335 3 $\beta$ -Oxo-formyl-7 $\beta$ ,12 $\beta$ -dihydroxy-5 $\alpha$ -lanost-11,15,23-trioxo-8-  
 en(E)-26-oic acid**  
 C<sub>31</sub>H<sub>44</sub>O<sub>9</sub> (560.69). White acicular crystals, mp 196–197°C, [α]<sub>D</sub><sup>25</sup> = +108° (c  
 = 0.01, Me<sub>2</sub>CO). [Source](#): LING ZHI *Ganoderma lucidum*. [Ref](#): 2163.



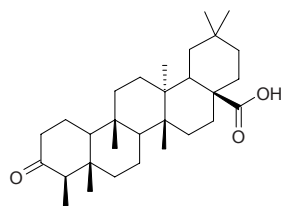
**16336 3 $\beta$ -Oxo-formyl-7 $\beta$ ,12 $\beta$ -dihydroxy-4,4,14 $\alpha$ -trimethyl-5 $\alpha$ -chol-11,15-dioxo-8-en(*E*)-24-oic acid**

C<sub>28</sub>H<sub>40</sub>O<sub>8</sub> (504.63). White acicular crystals, mp 130~131°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +96° (c = 0.01, Me<sub>2</sub>CO). Source: LING ZHI *Ganoderma lucidum*. Ref: 2163.



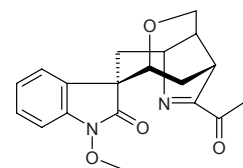
**16337 3-Oxfriedelan-28-oic acid**

C<sub>30</sub>H<sub>48</sub>O<sub>3</sub> (456.72). Pharm: Cytotoxic (*in vitro*, HONE-1 cell, IC<sub>50</sub> = (9.4±2.8)μmol/L, control Etoposide, IC<sub>50</sub> = (0.5±0.2)μmol/L, *cis*-Platin, IC<sub>50</sub> = (3.2±0.5)μmol/L; KB cell, IC<sub>50</sub> = (8.3±2.4)μmol/L, Etoposide, IC<sub>50</sub> = (0.9±0.3)μmol/L, *cis*-Platin, IC<sub>50</sub> = (4.4±0.9)μmol/L; HT29 cell, IC<sub>50</sub> > 10μmol/L, Etoposide, IC<sub>50</sub> = (2.4±0.5)μmol/L, *cis*-Platin, IC<sub>50</sub> = (5.7±1.1)μmol/L). Source: RONG SHU *Ficus microcarpa* (aerial root). Ref: 5254.



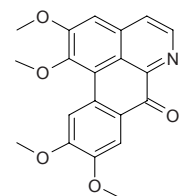
**16338 19-Oxo-gelsenicine**

19-Oxo-humantenmine C<sub>19</sub>H<sub>20</sub>N<sub>2</sub>O<sub>4</sub> (340.38). mp 226~227°C. Source: GOU WEN *Gelsemium elegans*. Ref: 14.



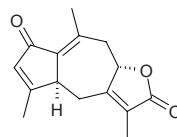
**16339 Oxoglaucine**

*O*-Methylatheroline; Noraporphine [5574-24-3] C<sub>20</sub>H<sub>17</sub>NO<sub>5</sub> (351.36). mp 225~227°C. Pharm: Antifungal (*Candida albicans*); cytotoxic (KB, ED<sub>50</sub> = 5.1μg/kg). Source: BEI MEI E ZHANG QIU *Liriodendron tulipifera*, JIAN LIE HAI YING SU *Glaucium oxylobum*, ZI FAN LI ZHI *Annona purpurea*. Ref: 5, 658.



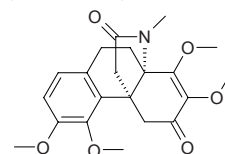
**16340 (5 $\alpha$ ,8 $\alpha$ )-2-Oxo-1(10),3,7(11)-guaiatrien-12,8-olide**

C<sub>15</sub>H<sub>16</sub>O<sub>3</sub> (244.29). Yellow amorphous solid, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +127.5° (c = 0.4, CHCl<sub>3</sub>). Pharm: CYP3A4 inhibitor and CYP2D6 inhibitor (*in vitro*, CYP3A4, IC<sub>50</sub> = 8.8μmol/L; CYP2D6, IC<sub>50</sub> > 100μmol/L; control Ketoconazole, CYP3A4, IC<sub>50</sub> = 0.72μmol/L; control Quinidine, CYP2D6, IC<sub>50</sub> = 0.082μmol/L). Source: BI CHENG QIE *Piper cubeba* (fruit: yield = 0.00023%dw). Ref: 4797.



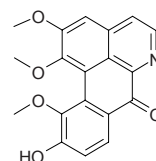
**16341 16-Oxohasubanonine**

[51804-70-7] C<sub>21</sub>H<sub>25</sub>NO<sub>6</sub> (387.44). Prisms (C<sub>6</sub>H<sub>6</sub>-Et<sub>2</sub>O), mp 161°C, [ $\alpha$ ]<sub>D</sub><sup>23</sup> = -105.2° (c = 0.5, CHCl<sub>3</sub>). Source: QIAN JIN TENG *Stephania japonica*. Ref: 2939.



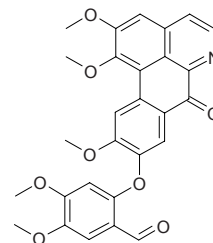
**16342 7-Oxohermagine**

C<sub>19</sub>H<sub>15</sub>NO<sub>5</sub> (337.34). Pharm: Anti-HIV-1 inactive (HIV-1 IN inhibitor, IC<sub>50</sub> > 100μmol/L, positive control Suramin, IC<sub>50</sub> = 2.4μmol/L). Source: DING HU DIAO ZHANG *Lindera chunii* (root). Ref: 4224.



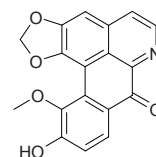
**16343 Oxohernandaline**

[187530-48-9] C<sub>28</sub>H<sub>23</sub>NO<sub>8</sub> (501.50). Yellowish prisms (alcohol), mp 197~199°C. Pharm: Cytotoxic (P<sub>388</sub>, ED<sub>50</sub> = 12.569μg/mL, A549, ED<sub>50</sub> = 27.134μg/mL, KB16, ED<sub>50</sub> = 5.300μg/mL). Source: SHUI LIAN YE TONG *Hernandia nymphaeifolia*. Ref: 2858.



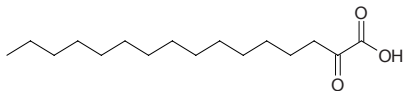
**16344 7-Oxohernangerine**

C<sub>18</sub>H<sub>11</sub>NO<sub>5</sub> (321.29). Pharm: Anti-HIV-1 (HIV-1 IN inhibitor, IC<sub>50</sub> = 18.2μmol/L, positive control Suramin, IC<sub>50</sub> = 2.4μmol/L). Source: DING HU DIAO ZHANG *Lindera chunii* (root). Ref: 4224.

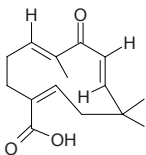


**16345 2-Oxohexadecanoic acid**

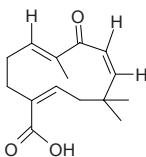
2-Oxopalmitic acid [2570-24-3] C<sub>16</sub>H<sub>30</sub>O<sub>3</sub> (270.42). Needles (petrol), mp 69.5°C. [Source](#): KONG SHI CHUN *Ulva pertusa*, *Porphyra* sp. [Ref](#): 2921.

**16346 8-Oxo- $\alpha$ -humula-6E,9E-dien-12-oic acid**

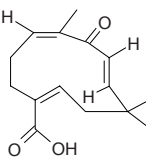
C<sub>15</sub>H<sub>20</sub>O<sub>3</sub> (248.32). [Source](#): *Asteriscus vogelii* (aerial parts). [Ref](#): 5123.

**16347 8-Oxo- $\alpha$ -humula-6E,9Z-dien-12-oic acid**

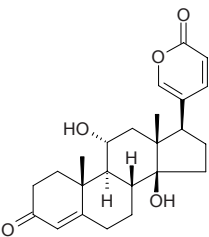
C<sub>15</sub>H<sub>20</sub>O<sub>3</sub> (248.32). [Source](#): *Asteriscus vogelii* (aerial parts). [Ref](#): 5123.

**16348 8-Oxo- $\alpha$ -humula-6Z,9Z-dien-12-oic acid**

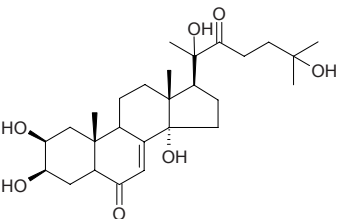
C<sub>15</sub>H<sub>20</sub>O<sub>3</sub> (248.32). [Source](#): *Asteriscus vogelii* (aerial parts). [Ref](#): 5123.

**16349 3-Oxo-11 $\alpha$ -hydroxy-12-dehydroxy-scilliphaeosidin\***

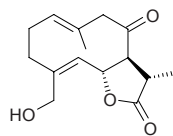
C<sub>24</sub>H<sub>30</sub>O<sub>5</sub> (398.50). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>24</sup> = +32.0° (c = 0.28, MeOH). [Source](#): HAI CONG *Urginea maritima* (bulb). [Ref](#): 3513.

**16350 22-Oxo-20-hydroxyecdysone**

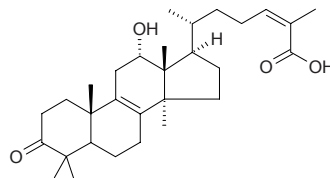
2 $\beta$ ,3 $\beta$ ,14 $\alpha$ ,20,25-Pentahydroxy-cholest-7-en-6,22-dione C<sub>27</sub>H<sub>42</sub>O<sub>7</sub> (478.63). White powder (MeOH), mp 102–106°C. [Source](#): ZHEN ZHU LU SHUI CAO *Cyanotis arachnoidea* [Syn. *Cyanotis bodinieri*]. [Ref](#): 2475.

**16351 8-Oxo-15-hydroxygermacra-1(10),E,4Z-dien-11 $\beta$ H-12,6 $\alpha$ -olide**

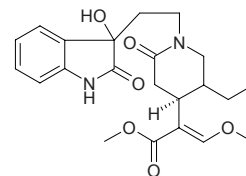
C<sub>15</sub>H<sub>20</sub>O<sub>4</sub> (264.32). Colorless oil, [ $\alpha$ ]<sub>D</sub> = -393° (c = 2.76, CHCl<sub>3</sub>). [Source](#): CU CAO SHI CHE JU *Centaurea aspera* ssp. *aspera* (aerial parts), XIA YE CU CAO SHI CHE JU *Centaurea aspera* subsp. *stenophylla* (aerial parts). [Ref](#): 5300.

**16352 (2Z)-3-Oxo-12 $\alpha$ -hydroxylanosta-8,24-dien-26-oic acid**

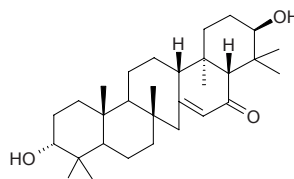
C<sub>30</sub>H<sub>46</sub>O<sub>4</sub> (470.70). [Pharm](#): Antineoplastic; anti-HIV. [Source](#): CHANG GENG NAN WU WEI ZI *Kadsura peltigera* [Syn. *Kadsura longipedunculata*]. [Ref](#): 2523.

**16353 3-Oxo-7-hydroxy-3,7-secorhynchophylline**

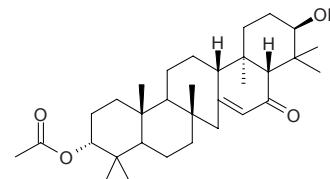
C<sub>22</sub>H<sub>28</sub>N<sub>2</sub>O<sub>6</sub> (416.48). [Source](#): XIA GOU TENG *Uncaria attenuata*. [Ref](#): 5341.

**16354 16-Oxo-3 $\alpha$ -hydroxyserrat-14-en-21 $\beta$ -ol**

C<sub>30</sub>H<sub>48</sub>O<sub>3</sub> (456.72). White powder (CHCl<sub>3</sub>-CH<sub>3</sub>OH), mp 314–316°C. [Source](#): QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*] (whole herb: yield = 0.000144%dw). [Ref](#): 4729.

**16355 16-Oxo-21 $\beta$ -hydroxyserrat-14-en-3 $\alpha$ -yl acetate**

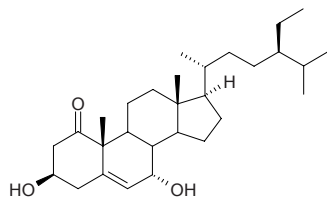
C<sub>32</sub>H<sub>50</sub>O<sub>4</sub> (498.75). Colorless needles (CHCl<sub>3</sub>), mp 270–274°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -24.1° (c = 0.47, CHCl<sub>3</sub>). [Source](#): QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*] (whole herb: yield = 0.000092%dw). [Ref](#): 4729.



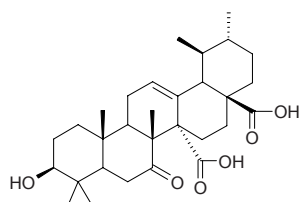


**16356 1-Oxo-7 $\alpha$ -hydroxysitosterol**

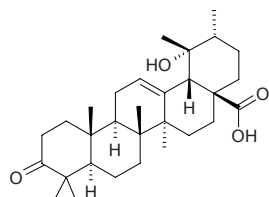
[194089-22-0] C<sub>29</sub>H<sub>48</sub>O<sub>3</sub> (444.70). [ $\alpha$ ]<sub>D</sub> = +5.3° (*c* = 0.8, CHCl<sub>3</sub>). **Pharm:** Cytotoxic (P<sub>388</sub>, KB, edge activity) **Source:** JIAO ZHI SHU WEI CAO *Salvia glutinosa*. **Ref:** 2832.

**16357 7-Oxo-3 $\beta$ -hydroxyurs-12-en-27,28-dioic acid**

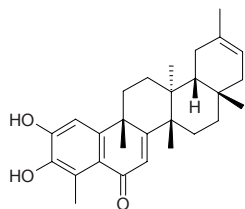
C<sub>30</sub>H<sub>44</sub>O<sub>6</sub> (500.68). **Source:** BI LU GOU TENG *Uncaria tomentosa*. **Ref:** 5341.

**16358 3-Oxo-19 $\alpha$ -hydroxyurs-12-en-28-oic acid**

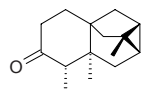
Pomonic acid C<sub>30</sub>H<sub>46</sub>O<sub>4</sub> (470.70). **Pharm:** Anti-androgenic (testosterone 5 $\alpha$ -reductase inhibitor, 50 $\mu$ g/mL, InRt = 35.60%, control Glabridine, 50 $\mu$ g/mL, InRt = 48.20%)<sup>[4106]</sup>. **Source:** DI YU *Sanguisorba officinalis*, DUO SUI PO BU MU *Cordia multispicata* (leaf). **Ref:** 2955, 4106.

**16359 6-Oxo-iguesterol**

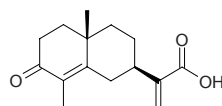
[182324-66-9] C<sub>28</sub>H<sub>36</sub>O<sub>3</sub> (420.60). Yellow paint-like amorphous solid, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +75.0° (*c* = 0.24, CHCl<sub>3</sub>). **Pharm:** Antibacterial (*Bacillus subtilis*, MIC = 25 $\mu$ g/mL). **Source:** JIA NA LI MEI DENG MU *Maytenus canariensis*. **Ref:** 2800.

**16360 3-Oxoishwarane**

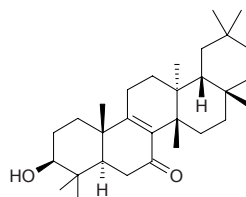
[41756-76-7] C<sub>15</sub>H<sub>22</sub>O (218.34). Crystals (pentane), mp 45~46°C. **Source:** QING MU XIANG *Aristolochia debilis* [Syn. *Aristolochia longa*]. **Ref:** 1521, 2951.

**16361 3-Oxoisocostic acid**

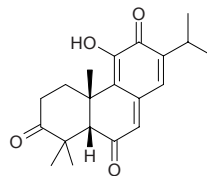
C<sub>15</sub>H<sub>20</sub>O<sub>3</sub> (248.32). **Source:** LIU LENG JU *Laggera alata* (aerial parts: yield = 0.00021%dw). **Ref:** 4709.

**16362 7-Oxoisomultiflorenol**

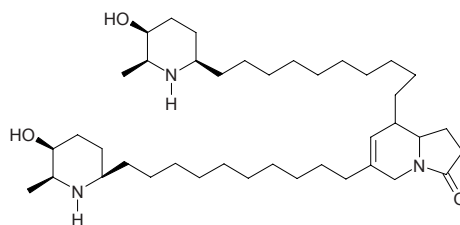
[142449-68-1] C<sub>30</sub>H<sub>48</sub>O<sub>2</sub> (440.72). mp 214~216°C, mp 202~205°C (MeOH-CHCl<sub>3</sub>), [ $\alpha$ ]<sub>D</sub><sup>23</sup> = +35° (*c* = 0.26). **Pharm:** Anti-inflammatory (inflammation caused by TPA in mus, 0.5mg/ear, InRt = 96%, ID<sub>50</sub> = 0.2mg/ear). **Source:** BAN YE DI JIN *Euphorbia supina*, GUA LOU *Trichosanthes kirilowii*, MAO GUO DI JIN *Euphorbia chamaesyce*. **Ref:** 2903, 2904, 2905.

**16363 3-Oxoisotaxodione**

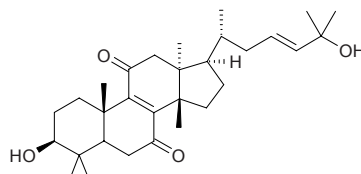
C<sub>20</sub>H<sub>24</sub>O<sub>4</sub> (328.41). Yellow gum, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -108.9° (*c* = 0.44, CHCl<sub>3</sub>). **Source:** TAI WAN SHAN *Taiwania cryptomerioides*. **Ref:** 2526.

**16364 3''''-Oxo-juliprosopine**

C<sub>40</sub>H<sub>73</sub>N<sub>3</sub>O<sub>3</sub> (644.05). Colorless gum, [ $\alpha$ ]<sub>D</sub><sup>23</sup> = +4.0° (*c* = 1.0, MeOH). **Source:** MU DOU SHU *Prosopis juliflora* (leaf). **Ref:** 3778.

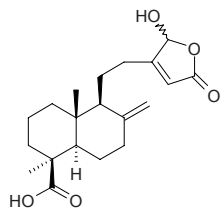
**16365 11-Oxo-kansenonol**

(23*E*)-Eupha-8,23-diene-3 $\beta$ ,25-diol-7,11-dione C<sub>30</sub>H<sub>46</sub>O<sub>4</sub> (470.7). Colorless gum, [ $\alpha$ ]<sub>D</sub><sup>23</sup> = +6.6° (*c* = 0.15, MeOH). **Pharm:** Cell division arrester (cultured individual *Xenopus laevis* cells at blastular stage, 10 $\mu$ g/mL, >50% cleavage arrest). **Source:** GAN SUI *Euphorbia kansui* (dried root: yield = 0.000013%). **Ref:** 4690.

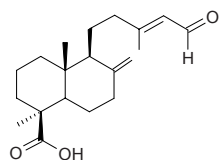


**16366 16-Oxo-8(17),13-labdadiene-15,19-dioic acid**

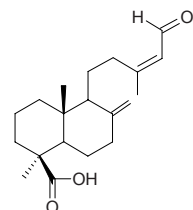
$C_{20}H_{28}O_5$  (348.44). Colorless oil,  $[\alpha]_D^{25} = +38^\circ$  ( $c = 1.03$ ,  $CHCl_3$ ). **Pharm:** Antimalarial (*in vitro*, *Plasmodium falciparum* strain 3D7,  $IC_{50} = (29.3 \pm 0.8) \mu\text{g/mL} = (84.1 \pm 2.3) \mu\text{mol/L}$ ). **Source:** CE BAI YE *Thuja orientalis* [Syn. *Platyclusus orientalis*; *Biota orientalis*]. **Ref:** 3022.

**16367 15-Oxolabda-8(17),13E-dien-19-oic acid**

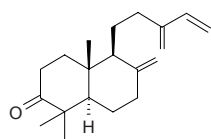
$C_{20}H_{30}O_3$  (318.46).  $[\alpha]_D^{25} = +45.2^\circ$  ( $c = 0.12$ ,  $CHCl_3$ );  $[\alpha]_D = +47.5^\circ$ . **Source:** RI BEN XIANG BAI JING PI *Thuja standishii*. **Ref:** 5352.

**16368 15-Oxolabda-8(17),13Z-dien-19-oic acid**

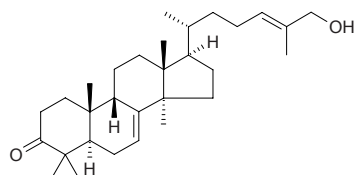
$C_{20}H_{30}O_3$  (318.46). Colorless oil,  $[\alpha]_D^{25} = +27.3^\circ$  ( $c = 0.28$ ,  $CHCl_3$ ). **Source:** RI BEN XIANG BAI JING PI *Thuja standishii*. **Ref:** 5352.

**16369 3-Oxo-labda-8(17),13(16),14-triene**

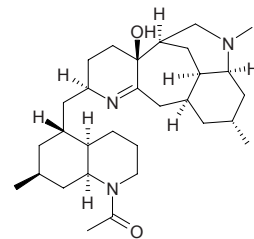
$C_{20}H_{30}O$  (286.46).  $[\alpha]_D^{20} = +34.5^\circ$  ( $c = 2.0$ ,  $CHCl_3$ ). **Source:** YUAN YE TAI *Jamesoniella colorata*. **Ref:** 3375.

**16370 24(E)-3-Oxo-9βH-lanosta-7,24-dien-26-ol**

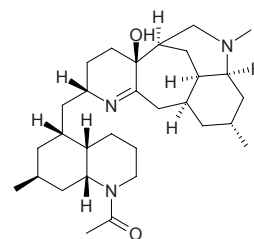
$C_{30}H_{48}O_2$  (440.72). Pale-yellow amorphous powder, mp 130~132 °C,  $[\alpha]_D^{20} = +37.8^\circ$  ( $c = 0.2$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (marginal activity: A549,  $ED_{50} = 4.1 \mu\text{g/mL}$ ; SK-OV-3,  $ED_{50} = 23.0 \mu\text{g/mL}$ ; SK-MEL-2,  $ED_{50} = 9.2 \mu\text{g/mL}$ ; HCT15,  $ED_{50} = 7.9 \mu\text{g/mL}$ ). **Source:** CHAO XIAN LENG SHAN *Abies koreana* (root cortex). **Ref:** 3854.

**16371 Oxolucidine A**

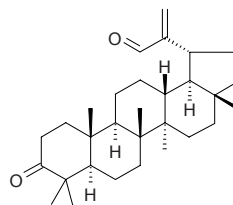
$C_{30}H_{49}N_3O_2$  (483.74).  $[\alpha]_D^{21.5} = -29.1^\circ$  ( $c = 0.74$ ,  $CHCl_3$ ). **Source:** GUANG LIANG SHI SONG *Lycopodium lucidulum*. **Ref:** 3927.

**16372 Oxolucidine B**

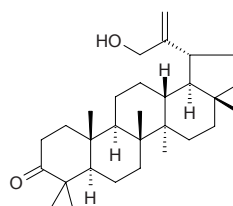
$C_{30}H_{49}N_3O_2$  (483.74).  $[\alpha]_D^{21.5} = -30.7^\circ$  ( $c = 0.55$ ,  $CHCl_3$ ). **Source:** GUANG LIANG SHI SONG *Lycopodium lucidulum*. **Ref:** 3927.

**16373 3-Oxolup-20(29)-en-30-al**

$C_{30}H_{46}O_2$  (438.70). Colorless needles,  $[\alpha]_D^{20} = +22.3^\circ$  ( $c = 1.0$ ,  $CHCl_3$ ). **Pharm:** Antimalarial (*Plasmodium falciparum* FcB1,  $IC_{50} = (1.55 \pm 0.06) \mu\text{g/mL}$ , control Chloroquine,  $IC_{50} = (0.05 \pm 0.002) \mu\text{g/mL}$ ; *Plasmodium falciparum* FcM29,  $IC_{50} = (4.67 \pm 0.09) \mu\text{g/mL}$ )<sup>[4419]</sup>; cytotoxic inactive (NSCLC-N6 cell line)<sup>[3806]</sup>. **Source:** JU MI JIN HE HUAN *Acacia mellifera* (stem cortex), *Nuxia sphaerocephala* (leaf). **Ref:** 3806, 4419.

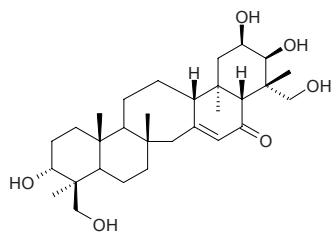
**16374 3-Oxolupenol**

30-Hydroxylup-20(29)-en-3-one  $C_{30}H_{48}O_2$  (440.72). **Pharm:** Antimalarial (*Plasmodium falciparum* FcB1,  $IC_{50} = (9.05 \pm 1.06) \mu\text{g/mL}$ , control Chloroquine,  $IC_{50} = (0.05 \pm 0.002) \mu\text{g/mL}$ ; *Plasmodium falciparum* FcM29,  $IC_{50} = (15.56 \pm 2.11) \mu\text{g/mL}$ ). **Source:** *Nuxia sphaerocephala* (leaf). **Ref:** 4419.

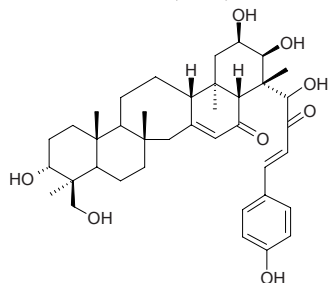


**16375 16-Oxolyclanitin**

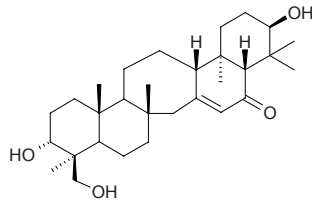
[140701-70-8] C<sub>30</sub>H<sub>48</sub>O<sub>6</sub> (504.71). Source: SHEN JIN CAO *Lycopodium japonicum* [Syn. *Lycopodium clavatum*], YU BAI SHI SONG *Lycopodium obscurum*. Ref: 1410, 2811, 2812.

**16376 16-Oxolyclanitin 30-(4-hydroxycinnamoyl)**

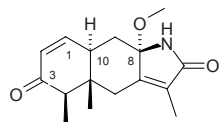
[140701-70-8] C<sub>39</sub>H<sub>54</sub>O<sub>8</sub> (650.85). Source: SHEN JIN CAO *Lycopodium japonicum* [Syn. *Lycopodium clavatum*], YU BAI SHI SONG *Lycopodium obscurum*. Ref: 1410, 2811, 2812.

**16377 16-Oxolycoclanivan**

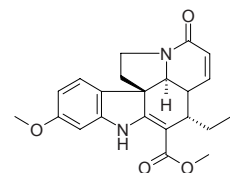
[53800-21-8] C<sub>30</sub>H<sub>48</sub>O<sub>4</sub> (472.71). Crystals (CHCl<sub>3</sub>-MeOH), mp 245-247°C. Source: GUO JIANG LONG *Lycopodium complanatum*, SHEN JIN CAO *Lycopodium japonicum* [Syn. *Lycopodium clavatum*], PU DI WU GONG *Lycopodium cernuum*. Ref: 2936, 1410, 2811.

**16378 3-Oxo-8α-methoxy-10αH-eremophila-1,7(11)-dien-12,8β-lactam**

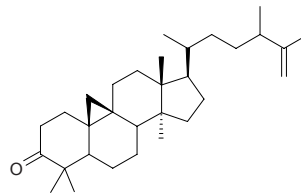
C<sub>16</sub>H<sub>21</sub>NO<sub>3</sub> (275.35). Colorless oil. Source: HUANG SE QIAN LI GUANG *Senecio flavus*. Ref: 2409.

**16379 3-Oxo-11-methoxytabersonine**

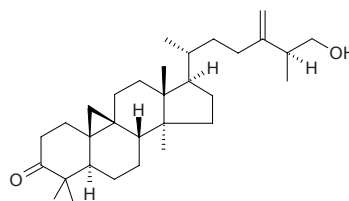
C<sub>22</sub>H<sub>24</sub>N<sub>2</sub>O<sub>4</sub> (380.45). Yellowish transparent bits, [α]<sub>D</sub><sup>30</sup> = -67.4° (chloroform). Source: DIAN JI GU CHANG SHAN *Alstonia yunnanensis*. Ref: 49.

**16380 3-Oxo-24-methylenecycloartane**

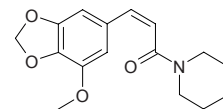
C<sub>31</sub>H<sub>50</sub>O (438.74). Yellowish oily residue. Source: WAI LAI CAI ZONG *Sabal peregrina* (leaf). Ref: 3805.

**16381 25(R)-3-Oxo-24-methylenecycloartan-26-ol**

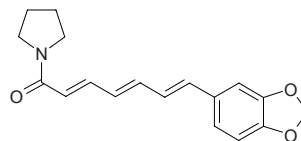
C<sub>31</sub>H<sub>50</sub>O<sub>2</sub> (454.74). Colorless needles (CHCl<sub>3</sub>-MeOH), mp 145-146°C, [α]<sub>D</sub><sup>30</sup> = +175° (c = 0.6, CHCl<sub>3</sub>). Source: MANG GUO *Mangifera indica*. Ref: 1868.

**16382 1-[1-Oxo-3(3,4-methylenedioxy-5-methoxyphenyl)-2Z-propenyl]piperidine**

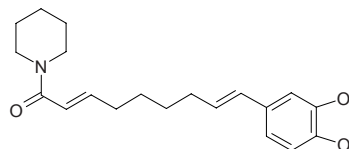
C<sub>16</sub>H<sub>19</sub>NO<sub>4</sub> (289.33). Colorless oil. Source: HU JIAO *Piper nigrum* (root: yield = 0.0001%dw). Ref: 4753.

**16383 1-[1-Oxo-7(3,4-methylenedioxyphenyl)-2E,4E,6E-heptatrienyl]pyrrolidine**

C<sub>18</sub>H<sub>19</sub>NO<sub>3</sub> (297.36). Source: HU JIAO *Piper nigrum* (root: yield = 0.000057%dw). Ref: 4753.

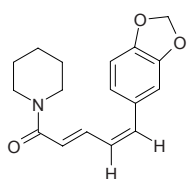
**16384 1-[1-Oxo-9(3,4-methylenedioxyphenyl)-2E,8E-nonadienyl]piperidine**

Piperonaline C<sub>21</sub>H<sub>27</sub>NO<sub>3</sub> (341.45). Colorless crystals. Pharm: Protective gastric lesions (rat, ethanol-induced, 25mg/kg orl, length = (31.7±11.8)mm, control, length = (118.6±16.2)mm, InRt = 73.3%; indomethacin-induced in rats, dose, 25mg/kg orl, length = (28.3±10.8)mm, control, length = (89.5±9.8)mm, InRt = 68.4%)<sup>[4935]</sup>. Source: HU JIAO *Piper nigrum* (root: yield = 0.00031%dw), *Piper chaba* (fruit). Ref: 4753, 4935.



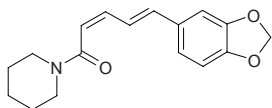
**16385 1-[1-Oxo-5(3,4-methylenedioxyphenyl)-2E,4Z-pentadienyl]piperidine**

C<sub>17</sub>H<sub>19</sub>NO<sub>3</sub> (285.35). Source: HU JIAO *Piper nigrum* (root: yield = 0.00134%dw). Ref: 4753.



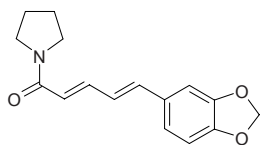
**16386 1-[1-Oxo-5(3,4-methylenedioxyphenyl)-2Z,4E-pentadienyl]piperidine**

C<sub>17</sub>H<sub>19</sub>NO<sub>3</sub> (285.35). Source: HU JIAO *Piper nigrum* (root: yield = 0.00051%dw). Ref: 4753.



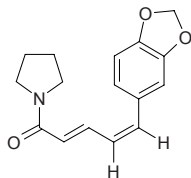
**16387 1-[1-Oxo-5(3,4-methylenedioxyphenyl)-2E,4E-pentadienyl]pyrrolidine**

Piperidine; Piperamide-C 5:2(*E,E*) [25924-78-1] C<sub>16</sub>H<sub>17</sub>NO<sub>3</sub> (271.32). Crystals (EtOAc-hexane or C<sub>6</sub>H<sub>6</sub>-pet. ether), mp 143~145°C. Source: HU JIAO *Piper nigrum* (root: yield = 0.00056%dw), JI NEI YA HU JIAO *Piper guineense*. Ref: 1521, 3240, 4753.



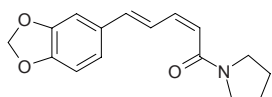
**16388 1-[1-Oxo-5(3,4-methylenedioxyphenyl)-2E,4Z-pentadienyl]pyrrolidine**

*N*-[10-(13,14-Methylenedioxyphenyl)-7(*E*),9(*Z*)-pentadienyl]-pyrrolidine C<sub>16</sub>H<sub>17</sub>NO<sub>3</sub> (271.32). Amorphous solid. Pharm: Antifungal activity as determined by direct bioautography against *Cladosporium sphaerospermum*. Source: HU JIAO *Piper nigrum* (root: yield = 0.00039%dw), LIU TU HU JIAO *Piper tuberculatum*, QIAO MU HU JIAO *Piper arboreum*. Ref: 2016, 4753.



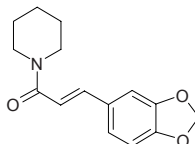
**16389 1-[1-Oxo-5(3,4-methylenedioxyphenyl)-2Z,4E-pentadienyl]pyrrolidine**

C<sub>16</sub>H<sub>17</sub>NO<sub>3</sub> (271.32). Colorless oil. Source: HU JIAO *Piper nigrum* (root: yield = 0.000057%dw). Ref: 4753.



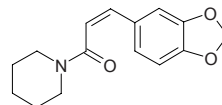
**16390 1-[1-Oxo-3(3,4-methylenedioxyphenyl)-2E-propenyl]piperidine**

C<sub>15</sub>H<sub>17</sub>NO<sub>3</sub> (259.31). Source: HU JIAO *Piper nigrum* (root: yield = 0.000046%dw). Ref: 4753.



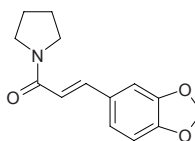
**16391 1-[1-Oxo-3(3,4-methylenedioxyphenyl)-2Z-propenyl]piperidine**

C<sub>15</sub>H<sub>17</sub>NO<sub>3</sub> (259.31). Source: HU JIAO *Piper nigrum* (root: yield = 0.00036%dw). Ref: 4753.



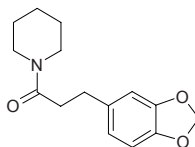
**16392 1-[1-Oxo-3(3,4-methylenedioxyphenyl)-2E-propenyl]pyrrolidine**

C<sub>14</sub>H<sub>15</sub>NO<sub>3</sub> (245.28). Source: HU JIAO *Piper nigrum* (root: yield = 0.000086%dw). Ref: 4753.



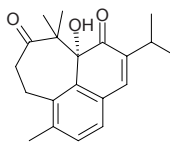
**16393 1-[1-Oxo-3(3,4-methylenedioxyphenyl)propyl]piperidine**

C<sub>15</sub>H<sub>19</sub>NO<sub>3</sub> (261.32). Source: HU JIAO *Piper nigrum* (root: yield = 0.0007%dw). Ref: 4753.



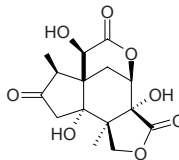
**16394 3-Oxomicrostegeiol**

C<sub>20</sub>H<sub>24</sub>O<sub>3</sub> (312.41). Yellow solid, mp 77~78°C, [α]<sub>D</sub><sup>25</sup> = +402.2° (c = 0.08, CHCl<sub>3</sub>). Source: TAI WAN SHAN *Taiwania cryptomerioides*. Ref: 2526.



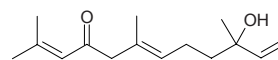
**16395 2-Oxoneomajucin**

C<sub>15</sub>H<sub>18</sub>O<sub>8</sub> (326.31). Source: JIA DI FENG PI *Illicium jiadifengpi* (pericarp). Ref: 4621.



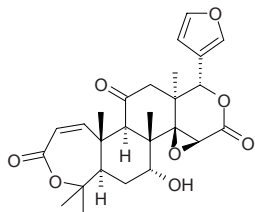
**16396 9-Oxonerolidol**

C<sub>15</sub>H<sub>24</sub>O<sub>2</sub> (236.36). Source: NAN MU *Phoebe nanmu*. Ref: 6.

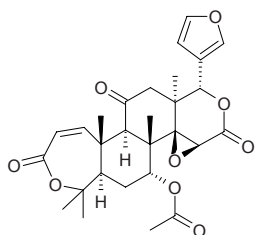


**16397 11-Oxo-7 $\alpha$ -obacunol**

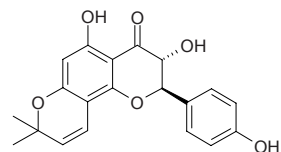
$C_{26}H_{30}O_8$  (470.52). Colorless prisms ( $CHCl_3$ -MeOH), mp 243~245°C,  $[\alpha]_D^{23} = -25.8^\circ$  ( $c = 0.1$ ,  $CHCl_3$ ). Source: ZHONG GUO YANG CHUN *Cedrela sinensis* (leaf). Ref: 3883.

**16398 11-Oxo-7 $\alpha$ -obacunyl acetate**

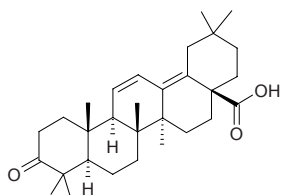
$C_{28}H_{32}O_9$  (512.56). Colorless prisms ( $CHCl_3$ -MeOH), mp 280~283°C,  $[\alpha]_D^{23} = -52.2^\circ$  ( $c = 0.1$ ,  $CHCl_3$ ). Source: ZHONG GUO YANG CHUN *Cedrela sinensis* (leaf). Ref: 3883.

**16399 4-Oxoobovatachromene**

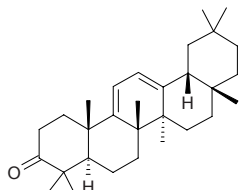
$C_{20}H_{18}O_6$  (354.36). Pharm: Antioxidant (DPPH radical scavenger, 250 $\mu$ mol/L, InRt = -1.8%; control Vitamin E, IC<sub>50</sub> = 8.3 $\mu$ mol/L). Source: TAI WAN HUANG BO *Phellodendron amurense* var. *wilsonii* (leaf; yield = 0.00053%dw). Ref: 4722.

**16400 3-Oxo-11,13(18)-oleanadien-28-oic acid**

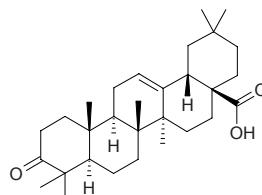
$C_{30}H_{44}O_3$  (452.68). Colorless prisms, mp 223~225°C,  $[\alpha]_D^{20} = -68^\circ$  ( $c = 0.24$ ,  $CHCl_3$ ). Source: XUAN CHUI JIA MI *Viburnum suspensum*. Ref: 1966.

**16401 3-Oxo-olean-9(11),12-diene**

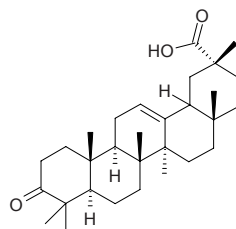
$C_{30}H_{46}O$  (422.70). Amorphous powder (acetone), easily soluble in  $CHCl_3$  and MeOH. Source: SI CHUAN QING FENG TENG *Sabia schumanniana* (aerial parts). Ref: 4883.

**16402 3-Oxo-olean-12-en-28-oic acid**

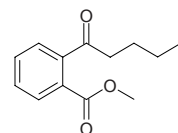
Oleanonic acid [17990-42-0]  $C_{30}H_{46}O_3$  (454.70). White powder, mp 226~229°C,  $[\alpha]_D^{20} = +101^\circ$  ( $c = 1.63$ , pyridine),  $[\alpha]_D^{25} = +76.9^\circ$  ( $c = 0.06$ ,  $CHCl_3$ ). Pharm: Cytotoxic (*in vitro*, HONE-1 cell, IC<sub>50</sub> = (7.2 $\pm$ 1.9) $\mu$ mol/L, control Etoposide, IC<sub>50</sub> = (0.5 $\pm$ 0.2) $\mu$ mol/L, *cis*-Platin, IC<sub>50</sub> = (3.2 $\pm$ 0.5) $\mu$ mol/L; KB cell, IC<sub>50</sub> = (6.3 $\pm$ 1.6) $\mu$ mol/L, Etoposide, IC<sub>50</sub> = (0.9 $\pm$ 0.3) $\mu$ mol/L, *cis*-Platin, IC<sub>50</sub> = (4.4 $\pm$ 0.9) $\mu$ mol/L; HT29 cell, IC<sub>50</sub> > 10 $\mu$ mol/L, Etoposide, IC<sub>50</sub> = (2.4 $\pm$ 0.5) $\mu$ mol/L, *cis*-Platin, IC<sub>50</sub> = (5.7 $\pm$ 1.1) $\mu$ mol/L)<sup>[5254]</sup>; cytotoxic inactive (K562, ED<sub>50</sub> > 20 $\mu$ mol/L, control Adriamycin, ED<sub>50</sub> = (0.09 $\pm$ 0.03) $\mu$ mol/L; B16(F-10), ED<sub>50</sub> > 20 $\mu$ mol/L, Adriamycin, ED<sub>50</sub> = (0.06 $\pm$ 0.10) $\mu$ mol/L; SK-MEL-2, ED<sub>50</sub> > 20 $\mu$ mol/L, Adriamycin, ED<sub>50</sub> = (0.09 $\pm$ 0.30) $\mu$ mol/L; PC3, ED<sub>50</sub> > 20 $\mu$ mol/L, Adriamycin, ED<sub>50</sub> = (0.83 $\pm$ 0.18) $\mu$ mol/L; LOX-IMVI, ED<sub>50</sub> > 20 $\mu$ mol/L, Adriamycin, ED<sub>50</sub> = (0.38 $\pm$ 0.33) $\mu$ mol/L; A549, ED<sub>50</sub> > 20 $\mu$ mol/L, Adriamycin, ED<sub>50</sub> = (0.67 $\pm$ 0.21) $\mu$ mol/L)<sup>[5479]</sup>; cytotoxic (MCF7, IC<sub>50</sub> = (4.6 $\pm$ 0.1) $\mu$ mol/L, control Adriamycin, IC<sub>50</sub> = (1.5 $\pm$ 0.2) $\mu$ mol/L; K562, IC<sub>50</sub> = (4.2 $\pm$ 0.3) $\mu$ mol/L, Adriamycin, IC<sub>50</sub> = (0.07 $\pm$ 0.01) $\mu$ mol/L; Bowes, IC<sub>50</sub> = (14.8 $\pm$ 0.5) $\mu$ mol/L, Adriamycin, IC<sub>50</sub> = (0.45 $\pm$ 0.01) $\mu$ mol/L; T24S hmn bladder cancer, IC<sub>50</sub> = (24.9 $\pm$ 0.5) $\mu$ mol/L, Adriamycin, IC<sub>50</sub> = (5.8 $\pm$ 0.6) $\mu$ mol/L; A549, IC<sub>50</sub> = (61.3 $\pm$ 1.2) $\mu$ mol/L, Adriamycin, IC<sub>50</sub> = (15.8 $\pm$ 6.7) $\mu$ mol/L)<sup>[5288]</sup>. Source: AN HUI CONG MU *Aralia subcapitata*, LONG NAO GAO XIANG *Dryobalanops aromatica*, MU TONG *Akebia quinata*, RONG SHU *Ficus microcarpa* (aerial root), SU HE XIANG *Liquidambar orientalis*, TAI WAN FU RONG *Hibiscus taiwanensis*, DA ZAO *Ziziphus jujuba*, XUAN SHEN *Scrophularia ningpoensis*, *Juliania adstringens* (bark)<sup>[3786]</sup>. Ref: 622, 660, 2529, 3786, 5254, 5288, 5479.

**16403 3-Oxo-olean-12-en-29-oic acid**

[76094-29-6]  $C_{30}H_{46}O_3$  (454.70). Colorless needles (acetone), mp 255~256°C,  $[\alpha]_D^{23} = +85.3^\circ$  ( $c = 0.59$ ,  $CHCl_3$ ). Pharm: Cytotoxic (culture P<sub>388</sub>, ED<sub>50</sub> = 0.61 $\mu$ g/mL). Source: KUN MING SHAN HAI TANG *Tripterygium hypoglaucum*. Ref: 2888, 2889.

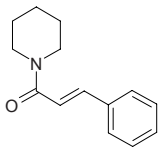
**16404 2-(1-Oxopentyl)-benzoic acid methyl ester**

$C_{13}H_{16}O_3$  (220.27). Source: CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*]. Ref: 2805.

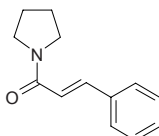


**16405 1-(1-Oxo-3-phenyl-2E-propenyl)piperidine**

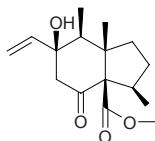
$C_{14}H_{17}NO$  (215.30). Source: HU JIAO *Piper nigrum* (root: yield = 0.00027%dw). Ref: 4753.

**16406 (1-Oxo-3-phenyl-2E-propenyl)pyrrolidine**

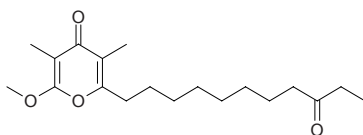
$C_{13}H_{15}NO$  (201.27). Source: HU JIAO *Piper nigrum* (root: yield = 0.000057%dw). Ref: 4753.

**16407 7-Oxopinguinol-12-methyl ester**

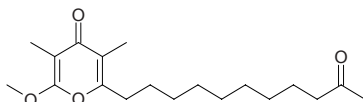
$C_{16}H_{24}O_4$  (280.37). Source: SHANG ZUO JIAN YE GUANG E TAI *Porella acutifolia* ssp. *tosana*. Ref: 3932.

**16408 9'-Oxopodopyrone**

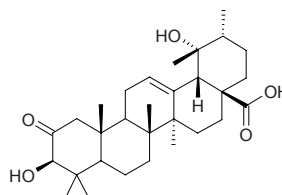
[193352-77-1]  $C_{19}H_{30}O_4$  (322.45). Colorless oil. Pharm: Bone resorption inhibitor (calvaria of baby mus, inhibits Ca release induced by bPTH, more effective than calcitonin and ipriflavone). Source: KAI TE LENG ZHU MU *Gonystylus keithii*. Ref: 2869.

**16409 10'-Oxopodopyrone**

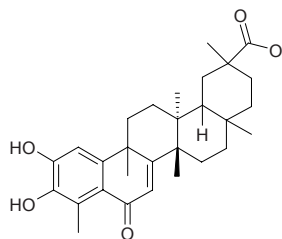
[126622-71-7]  $C_{19}H_{30}O_4$  (322.45). Colorless oil. Pharm: Bone resorption inhibitor (calvaria of baby mus, inhibits Ca release induced by bPTH, more effective than calcitonin and ipriflavone, 1.0 $\mu$ g/mL InRt = 109%). Source: KAI TE LENG ZHU MU *Gonystylus keithii*, *Podolepis longipedata*. Ref: 2868, 2869.

**16410 2-Oxopomolic acid**

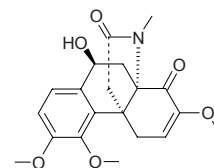
3 $\alpha$ ,19 $\alpha$ -Dihydroxy-2-oxo-12-ursen-28-oic acid  $C_{30}H_{46}O_5$  (486.70). Pharm: Immunosuppressant (hmn mononuclear cells antiproliferation, involving T lymphocytes, B lymphocytes, and macrophages isolated from peripheral blood,  $IC_{50}$  = 38.1 $\mu$ mol/L; control Cyclosporine A,  $IC_{50}$  = 0.012 $\mu$ mol/L). Source: TAI WAN PI PA *Eriobotrya deflexa* (leaf). Ref: 3064.

**16411 6-Oxopristimerol**

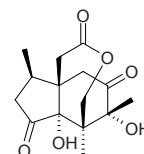
[161127-55-5]  $C_{30}H_{40}O_5$  (480.65). Colorless amorphous solid, mp 173~178°C,  $[\alpha]_D = -80.4^\circ$  ( $c$  = 0.48, pyridine). Pharm: Cytotoxic ( $L_{1210}$   $IC_{50}$  = 2.8 $\mu$ g/mL, KB  $IC_{50}$  = 2.8 $\mu$ g/mL, P<sub>388</sub>  $IC_{50}$  = 1.5 $\mu$ g/mL). Source: QIU SHI MEI DENG *Maytenus chuchuhuasca*. Ref: 2891.

**16412 16-Oxoprometaphanine**

[58738-31-1]  $C_{20}H_{23}NO_6$  (373.41). The structure is one of two tautomers. Prisms (MeOH), mp 195°C,  $[\alpha]_D^{20} = -52.3^\circ$  ( $c$  = 0.5,  $CHCl_3$ ). Source: QIAN JIN TENG *Stephania japonica*. Ref: 660, 1521.

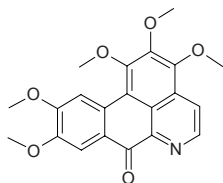
**16413 3-Oxopseudoanisatin**

$C_{15}H_{20}O_6$  (296.32).  $[\alpha]_D^{23} = -181.2^\circ$  ( $c$  = 0.17, EtOH). Source: MIN WAN BA JIAO *Illicium minwanense* (pericarp: yield = 0.00004%dw). Ref: 4697.

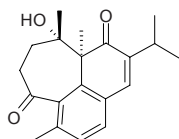


**16414 Oxopurpureine**

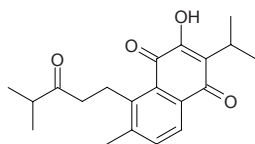
[32845-27-5] C<sub>21</sub>H<sub>19</sub>NO<sub>6</sub> (381.39). Nacarat columnar crystals (MeOH), mp 198–200°C, yellow needles (alcohol), mp 192–194°C. Pharm: Cytotoxic (S180 *in vitro*, 9KB ED<sub>50</sub> = 5.8mg/mL). Source: NIAN ZHI LUO LIN *Rollinia mucosa*, XIAO GUO TANG SONG CAO *Thalictrum microgynum* (root: content = 0.040%<sup>[5508]</sup>), YU GUO XIAO YE NAN *Phoebe cinnamomifolia*, ZI FAN LI ZHI *Annona purpurea*. Ref: 2822, 5508.

**16415 1-Oxo-salvibretol**

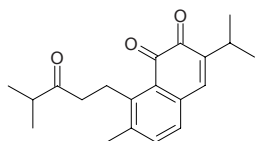
C<sub>20</sub>H<sub>24</sub>O<sub>3</sub> (312.41). [α]<sub>D</sub><sup>25</sup> = +17° (c = 0.1, CHCl<sub>3</sub>). Pharm: Cytotoxic (A2780, IC<sub>50</sub> = 22.3μg/mL, control Actinomycin D, IC<sub>50</sub> = 0.001μg/mL; P<sub>388</sub>, IC<sub>50</sub> > 20μg/mL; LNCaP, IC<sub>50</sub> > 20μg/mL; KB, IC<sub>50</sub> > 20μg/mL; Col2, IC<sub>50</sub> > 20μg/mL; LU1, IC<sub>50</sub> > 20μg/mL). Source: XIONG RUI ZHUANG SHU WEI CAO *Salvia staminea*. Ref: 5400.

**16416 3-Oxosapriparaquinone**

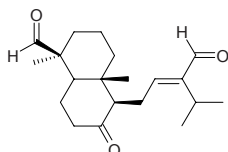
C<sub>20</sub>H<sub>24</sub>O<sub>4</sub> (328.41). Source: TAI WAN SHAN *Taiwania cryptomerioides*. Ref: 2526.

**16417 3-Oxosaprorthoquinone**

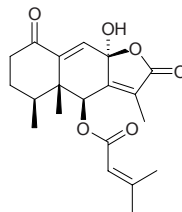
C<sub>20</sub>H<sub>24</sub>O<sub>3</sub> (312.41). Red needles, mp 72–73°C. Source: TAI WAN SHAN *Taiwania cryptomerioides*. Ref: 2526.

**16418 8-Oxo-8,14-seco-abiet-12-en-14,19-dial**

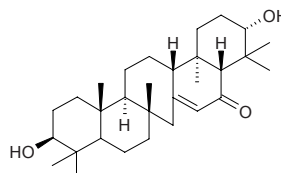
C<sub>20</sub>H<sub>30</sub>O<sub>3</sub> (318.46). Oil, [α]<sub>D</sub><sup>29</sup> = +7.1° (c = 0.42, MeOH). Source: LONG BAI *Juniperus chinensis* var. *kaizuka* (leaf: yield = 0.000067%dw). Ref: 3050.

**16419 1-Oxo-6β-seneciolyloxy-8α-hydroxyeremophil-7(11),9-(10)-dien-8β(12)-olide**

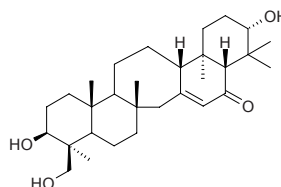
C<sub>20</sub>H<sub>24</sub>O<sub>6</sub> (360.41). Colorless gum, [α]<sub>D</sub><sup>25</sup> = –120° (c = 0.10, acetone). Source: JIA TUO WU *Ligulariopsis shichuana* (whole herb: 00020%dw). Ref: 4627.

**16420 16-Oxoserratenediol**

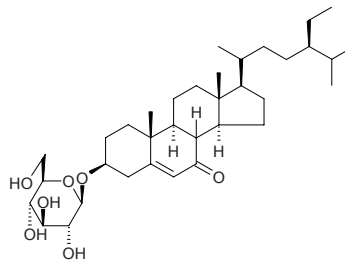
[24513-52-8] C<sub>30</sub>H<sub>48</sub>O<sub>3</sub> (456.72). mp 294–297°C. Source: SHEN JIN CAO *Lycopodium japonicum* [Syn. *Lycopodium clavatum*]. Ref: 6.

**16421 16-Oxoserratriol**

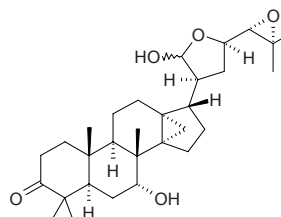
[44428-10-2] C<sub>30</sub>H<sub>48</sub>O<sub>4</sub> (472.71). mp 294–298°C. Source: QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*], GUO JIANG LONG *Lycopodium complanatum*. Ref: 2947, 2936, 1410.

**16422 7-Oxositosteryl-β-O-glucopyranoside**

C<sub>35</sub>H<sub>58</sub>O<sub>7</sub> (590.85). Source: JIN YING ZI *Rosa laevigata*. Ref: 1326.

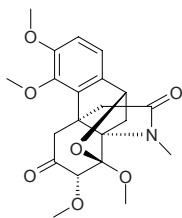
**16423 3-Oxo-skimmiarepin**

C<sub>30</sub>H<sub>46</sub>O<sub>5</sub> (486.70). Source: *Zanthoxylum* sp. Ref: 2176.

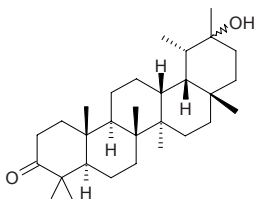


**16424 Oxostephamiersine**

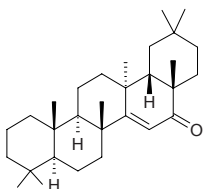
[52466-83-8] C<sub>21</sub>H<sub>25</sub>NO<sub>7</sub> (403.44). Prisms (MeOH), mp 256°C, 290°C (dimorphism), [α]<sub>D</sub><sup>27</sup> = +88.25° (c = 1.87, CHCl<sub>3</sub>). Source: AO DA LI YA QIAN JIN TENG *Stephania japonica* var. *australis*, QIAN JIN TENG *Stephania japonica*. Ref: 2872.

**16425 3-Oxo taraxastan-20(R or S)-ol**

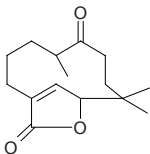
C<sub>30</sub>H<sub>50</sub>O<sub>2</sub> (442.73). Shining needles (CHCl<sub>3</sub>-MeOH) mp 275~278°C, [α]<sub>D</sub><sup>30</sup> = -9.0°. Source: MANG GUO *Mangifera indica*. Ref: 1868.

**16426 16-Oxotaraxer-14-ene**

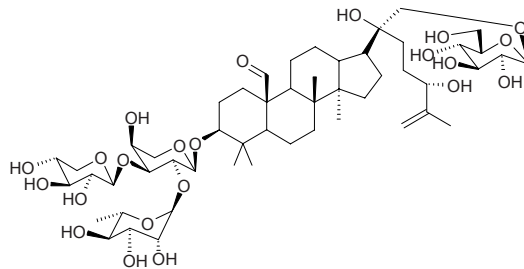
C<sub>30</sub>H<sub>48</sub>O (424.72). Source: SHUI LONG GU *Polypodium niponicum*. Ref: 1414.

**16427 8-Oxo-6,7,9,10-tetrahydrohumulen-1,12-olide**

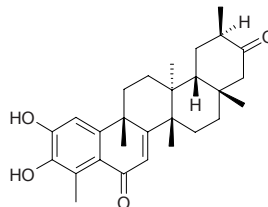
C<sub>15</sub>H<sub>22</sub>O<sub>3</sub> (250.34). Crystals, mp 112~115°C. Pharm: Phytotoxin (6mg/mL: *S. acutus*, mortality = 3%, *L. paucicostata*, mortality = 50%)<sup>[5123]</sup>; cytotoxic (P<sub>388</sub>, IC<sub>50</sub> = 40μmol/L, control *cis*-Platin, IC<sub>50</sub> = 8μmol/L; A549, IC<sub>50</sub> > 40μmol/L, *cis*-Platin, IC<sub>50</sub> = 8μmol/L; HT29, IC<sub>50</sub> > 40μmol/L, *cis*-Platin, IC<sub>50</sub> = 16μmol/L; MEL-28, IC<sub>50</sub> > 40μmol/L, *cis*-Platin, IC<sub>50</sub> = 8μmol/L)<sup>[5123]</sup>. Source: *Asteriscus vogelii* (aerial parts). Ref: 5123.

**16428 19-Oxo-3β,20S,21,24S-tetrahydrodammar-25-ene 3-O-[[α-L-rhamnopyranosyl(1→2)][β-D-xylopyranosyl(1→3)]-α-L-arabinopyranosyl]-21-O-β-D-glucopyranoside**

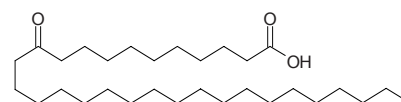
C<sub>52</sub>H<sub>86</sub>O<sub>22</sub> (1063.25). Amorphous powder, [α]<sub>D</sub><sup>20</sup> = 0° (c = 0.63, MeOH). Source: JIAO GU LAN *Gynostemma pentaphyllum* (aerial parts: yield = 0.0015%dw). Ref: 4751.

**16429 6-Oxotingenol**

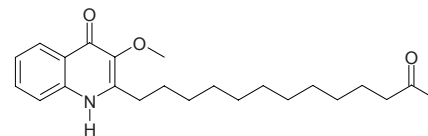
[161127-54-4] C<sub>28</sub>H<sub>36</sub>O<sub>4</sub> (436.60). White powder, mp > 300°C, [α]<sub>D</sub> = -151.8° (c = 0.11, pyridine). Pharm: Cytotoxic (L<sub>1210</sub> IC<sub>50</sub> = 6.0μg/mL; KB IC<sub>50</sub> = 30μg/mL; P<sub>388</sub> IC<sub>50</sub> = 2.6μg/mL); antibacterial (*Staphylococcus aureus* MIC = 40~50μg/mL; *Bacillus subtilis* MIC = 12~14μg/mL). Source: DONG QING YE MEI DENG MU *Maytenus ilicifolia*, JIA NA LI MEI DENG MU *Maytenus canariensis*. Ref: 2891, 2800.

**16430 11-Oxotriacontanoic acid**

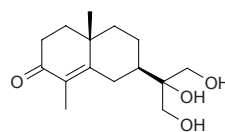
C<sub>30</sub>H<sub>58</sub>O<sub>3</sub> (466.79). mp 99~101°C. Source: YING SU *Papaver somniferum*. Ref: 6.

**16431 2-(12-Oxo-tridecanyl)-3-methoxy-4-quinolone**

C<sub>23</sub>H<sub>33</sub>NO<sub>3</sub> (371.52). White gum. Source: *Spathelia excelsa* (leaf). Ref: 5297.

**16432 3-Oxo-11,12,13-trihydroxy-eudesm-4-ene**

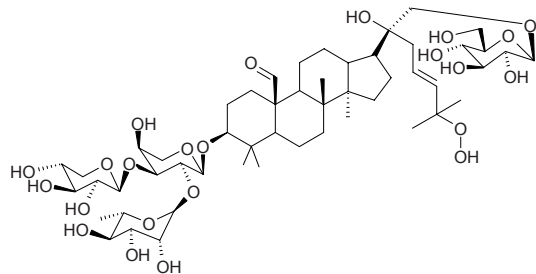
C<sub>15</sub>H<sub>24</sub>O<sub>4</sub> (268.36). [α]<sub>D</sub><sup>25</sup> = +21.8° (c = 0.17, CHCl<sub>3</sub>). Source: XI LA SI MAO SHI *Achillea holosericea*. Ref: 2008.





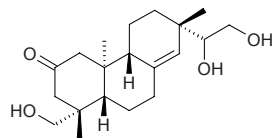
**16433 19-Oxo-3 $\beta$ ,20S,21-trihydroxy-25-hydroperoxydammar-23-ene 3-O-[[ $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 2)][ $\beta$ -D-xylopyranosyl(1 $\rightarrow$ 3)]- $\alpha$ -L-arabinopyranosyl]-21-O- $\beta$ -D-glucopyranoside**

C<sub>52</sub>H<sub>86</sub>O<sub>23</sub> (1079.25). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -3.6° (c = 0.91, MeOH). Source: JIAO GU LAN *Gynostemma pentaphyllum* (aerial parts: yield = 0.0014%dw). Ref: 4751.



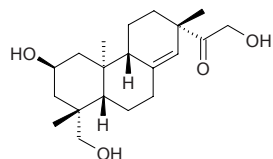
**16434 ent-2-Oxo-15,16,19-trihydroxypimar-8(14)-ene**

C<sub>20</sub>H<sub>32</sub>O<sub>4</sub> (336.48). White amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -29.9° (c = 1.55, MeOH). Source: XI XIAN *Siegesbeckia orientalis* (aerial parts: yield = 0.0007%). Ref: 4764.



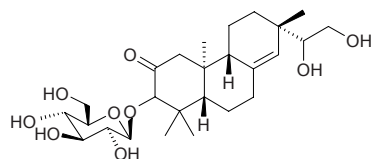
**16435 ent-15-Oxo-2 $\beta$ ,16,19-trihydroxypimar-8(14)-ene**

C<sub>20</sub>H<sub>32</sub>O<sub>4</sub> (336.48). White amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -15.1° (c = 0.55, MeOH). Source: XI XIAN *Siegesbeckia orientalis* (aerial parts: yield = 0.00037%). Ref: 4764.



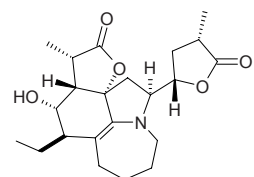
**16436 ent-2-Oxo-3 $\beta$ ,15,16-trihydroxypimar-8(14)-en-3-O- $\beta$ -glucopyranoside**

C<sub>26</sub>H<sub>42</sub>O<sub>9</sub> (498.62). Pale gum, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -22.2° (c = 1.35, MeOH). Source: XI XIAN *Siegesbeckia orientalis* (aerial parts: yield = 0.00073%). Ref: 4764.



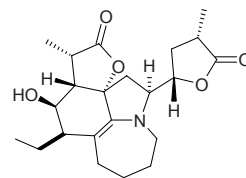
**16437 Oxotuberostemonine**

[20675-62-1] C<sub>22</sub>H<sub>31</sub>NO<sub>5</sub> (389.50). Needles (MeOH), mp 222°C, 217°C. Source: BAI BU *Stemona tuberosa*, ZHI LI BAI BU *Stemona sessilifolia*. Ref: 6, 1521.



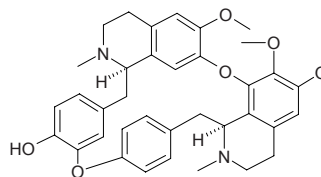
**16438 Oxotuberostemonine II**

C<sub>22</sub>H<sub>31</sub>NO<sub>5</sub> (389.50). White solid, mp 90~91°C. Source: BAI BU *Stemona tuberosa*. Ref: 673.



**16439 Oxycanthine**

Oxycanthine; 6,6',7-Trimethoxy-2,2'-dimethyloxycanthan-12'-ol [548-40-3] C<sub>37</sub>H<sub>40</sub>N<sub>2</sub>O<sub>6</sub> (608.74). Crystals (pet. ether), mp 212~214°C, [ $\alpha$ ]<sub>D</sub><sup>29</sup> = +285.6° (c = 0.5, CHCl<sub>3</sub>); mp 208~214°C, 216~217°C. Pharm: Adrenaline antagonist; antibacterial (*Mycobacterium tuberculosis*, *Staphylococcus aureus* and *Mycobacterium smegmatis*, MIC = 1 mg/mL); antifungal (*Candida albicans*, MIC = 1 mg/mL); antineoplastic (hmn HeLa-S<sub>3</sub>, ED<sub>50</sub> = 3 $\mu$ g/mL, mus ascites carcinoma, 40mg/mL); choleric; vasodilator; LD<sub>50</sub> (mus, ip) = 50mg/kg. Source: BAN RUI TANG SONG CAO *Thalictrum petaloideum* (root: content = 0.23%)<sup>[5508]</sup>, CHANG YUAN YE XIAO BO *Berberis oblonga*, CI YE SHI DA GONG LAO *Mahonia acanthifolia*, DA YE TANG SONG CAO *Thalictrum faberi* (root: content < 0.001%)<sup>[5508]</sup>, DUO HUA XIAO BO *Berberis floribunda*, GE LI FEI SI SHI DA GONG LAO *Mahonia griffithii*, HUANG GEN SHU *Xanthorhiza simplicissima*, HUANG XIAO BO *Berberis tschonoskiana*, JIAN YE SHI DA GONG LAO *Mahonia aquifolium*, JIN SI MA WEI LIAN *Thalictrum glandulosissimum* (root: content < 0.001%)<sup>[5508]</sup>, LAI SHI NA TE SHI DA GONG LAO *Mahonia leschenaultii*, LAN BO TE XIAO BO *Berberis lambertii*, MA WEI LIAN *Thalictrum foliolosum* (root: content < 0.001%)<sup>[5508]</sup>, MAN NI PU ER SHI DA GONG LAO *Mahonia manipurensis*, OU ZHOU XIAO BO *Berberis vulgaris*, PA LI BEI FANG SHI DA GONG LAO *Mahonia borealis*, PU FU SHI DA GONG LAO *Mahonia repens*, QUAN YUAN YE XIAO BO *Berberis integerrima*, RI BEN XIAO BO *Berberis thunbergii*, TOU MING TANG SONG CAO *Thalictrum lucidum*, TU HUANG LIAN *Berberis julianae*, XI JIN SHI DA GONG LAO *Mahonia sikkimensis*, XI MENG SI SHI DA GONG LAO *Mahonia simonsii*, XI YE GONG LAO MU *Mahonia fortunei*, XIA XU TANG SONG CAO *Thalictrum atriplex* (root: content < 0.001%)<sup>[5508]</sup>, XIAO BO *Berberis amurensis*, XIAO GUO TANG SONG CAO *Thalictrum microgynum* (root: content < 0.001%)<sup>[5508]</sup>, YAN GUO CAO *Thalictrum thunbergii* (root: content < 0.001%)<sup>[5508]</sup>, YING SHUI HUANG LIAN *Thalictrum simplex* [Syn. *Thalictrum simplex* var. *brevipes*] (root: content = 0.12%)<sup>[5508]</sup>, ZHI ZONG ZHUANG HUA XU XIAO BO *Berberis orthobotrys*, *Albertisia papuana*, *Cocculus leaebe*, *Magnolia compressa*, *Berberis* spp., *Mahonia* spp., occurs in many plants. Ref: 4, 6, 658, 660, 1521, 5508.

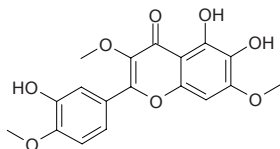


**16440 Oxyyanin B**

5,6,3'-Trihydroxy-3,7,4'-trimethoxyflavone [548-74-3] C<sub>18</sub>H<sub>16</sub>O<sub>8</sub> (360.33).

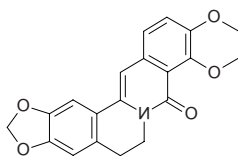
**Pharm:** Allergenic. **Source:** NI RI LI YA LIANG RUI SU MU

*Distemonanthus benthamianus*. **Ref:** 658.

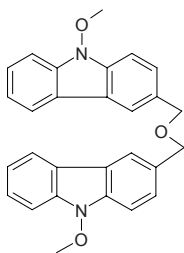
**16441 Oxyberberine**

[549-21-3] C<sub>20</sub>H<sub>17</sub>NO<sub>5</sub> (351.36). mp 198~200°C. **Source:** XIAO BO *Berberis*

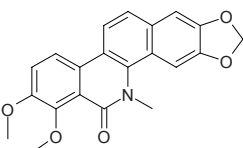
*amurensis*, MA WEI LIAN *Thalictrum foliolosum*. **Ref:** 6.

**16442 3,3'-[Oxybis(methylene)]bis(9-methoxy-9H-carbazole)**

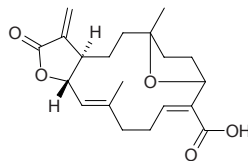
C<sub>28</sub>H<sub>24</sub>N<sub>2</sub>O<sub>3</sub> (436.52). Brown gum. **Pharm:** Antibacterial (*Staphylococcus aureus*, MIC = 50µg/mL, MIC = 0.115µmol/L, control Kanamycin, MIC = 3.13µg/mL; *Escherichia coli*, MIC = 25µg/mL, MIC = 0.057µmol/L, Kanamycin, MIC = 12.5µg/mL; *Proteus vulgaris*, MIC = 6.25µg/mL, MIC = 0.014µmol/L, Kanamycin, MIC = 12.5µg/mL); antifungal (*Aspergillus niger*, MIC = 25µg/mL, MIC = 0.057µmol/L; *Candida albicans*, MIC = 25µg/mL, MIC = 0.057µmol/L, control Fluconazole, MIC = 25µg/mL, MIC = 0.082µmol/L). **Source:** YIN DU JIU LI XIANG *Murraya koenigii* (stem cortex). **Ref:** 5299.

**16443 Oxychelerythrine**

C<sub>21</sub>H<sub>17</sub>NO<sub>5</sub> (363.37). **Source:** FEI LONG ZHANG XUE *Toddalia asiatica* [Syn. *Toddalia aculeata*; *Paullinia asiatica*], RU DI JIN NIU *Zanthoxylum nitidum*, YE HUA JIAO PI *Zanthoxylum simulans*. **Ref:** 2949, 1290, 2950.

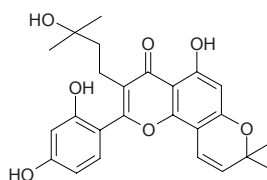
**16444 4,7-Oxycycloanisomelic acid**

[102567-16-8] C<sub>20</sub>H<sub>26</sub>O<sub>5</sub> (346.43). White powder, mp 213~215°C, [α]<sub>D</sub><sup>23</sup> = -22.4° (c = 1.0, CHCl<sub>3</sub>). **Pharm:** Cytotoxic (KB, *in vitro*, IC<sub>50</sub> = 1.6µg/mL). **Source:** GUANG FANG FENG *Anisomeles indica* [Syn. *Epimeredi indica*]. **Ref:** 2866.

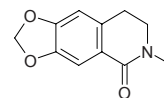
**16445 Oxydihydromorusin**

Morusinol [62949-93-3] C<sub>25</sub>H<sub>26</sub>O<sub>7</sub> (438.48). Crystals (MeOH), mp 215~216°C.

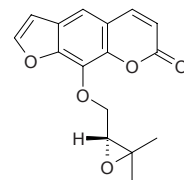
**Source:** SANG BAI PI *Morus alba*, *Morus* spp. **Ref:** 2961.

**16446 Oxyhydrastinine**

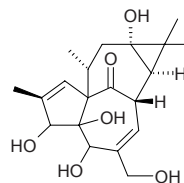
[552-29-4] C<sub>11</sub>H<sub>11</sub>NO<sub>3</sub> (205.22). Crystals (pet. Ether), mp 98°C. **Source:** JI YING SU *Argemone mexicana*, XI GUO JIAO HUI XIANG *Hypocoum leptocarpum*, YAN JIN *Fumaria schleicheri*, *Papaver dubium* var. *glabrum*. **Ref:** 1521, 2909, 37.

**16447 Oxyimperatorin‡**

Heraclenin; Epoxyimperatorin; Prangenin; Imperatorin oxide C<sub>16</sub>H<sub>14</sub>O<sub>5</sub> (286.29). **Source:** CHOU SHAN YANG *Orixa japonica* (stem: yield = 0.0014%dw). **Ref:** 4774. ‡Note: see compound 9419.

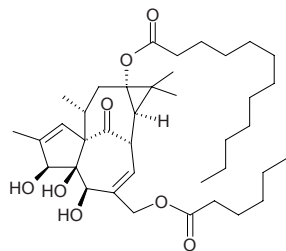
**16448 13-Oxyingenol**

C<sub>20</sub>H<sub>28</sub>O<sub>6</sub> (364.44). **Source:** GAN SUI *Euphorbia kansui*. **Ref:** 2953.

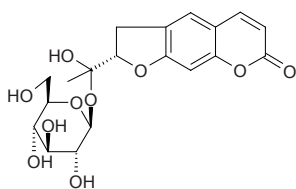


**16449 13-Oxyingenol-13-dodecanoate-20-hexanoate**

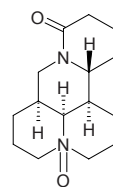
$C_{38}H_{60}O_8$  (644.90). Source: GAN SUI *Euphorbia kansui*. Ref: 2953.

**16450 Oxymarmesinin 5'-O-β-D-glucopyranoside**

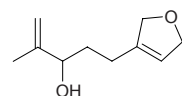
$C_{20}H_{24}O_{10}$  (424.41). mp 184–188°C,  $[\alpha]_D^{22} = -48^\circ$ . Source: BEI SHA SHEN *Glehnia littoralis* (fruit). Ref: 3525.

**16451 Oxymatrine**

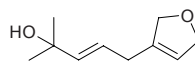
Matrine *N*-oxide [6837-52-8]  $C_{15}H_{24}N_2O_2$  (264.37). mp 206–208°C. Pharm: Analgesic (mus, chemical and heat stimulation models); antiarrhythmic (animal, induced by aconitine, chloroform-adrenalin, ouabain,  $CaCl_2$  and coronary ligation); antineoplastic; antihypertensive (anesthetic dog, iv); anti-inflammatory (acute exudative); benzedrine antagonist; caffeine antagonist; CNS activity (increases contractility of atrium, rbt, *in vitro*, 0.03–90 μmol/L, presents dose-response relationship); antipyretic (normal rat); sedative (inhibits autonomic movement in mus); strengthens CNS inhibition induced by chlorpromazine. Source: BAI CI HUA *Sophora viciifolia*, KU DOU ZI *Sophora alopecuroides* (seed: content = 2.16%<sup>[5508]</sup>), KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*] (dried root: content scope of 7 origins = 0.79%–3.60%, mean content = 1.34%<sup>[5508]</sup>), SHA SHENG HUAI *Sophora moorcroftiana*, SHAN DOU GEN *Sophora subprostrata* [Syn. *Sophora tonkinensis*] (root and rhizome: mean content of 16 origins = 0.906%<sup>[5508]</sup>). Ref: 4, 546, 564, 593, 658, 5501, 5508.

**16452 1,10-Oxy-α-myrcene hydroxide**

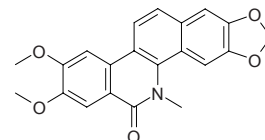
$C_{10}H_{16}O_2$  (168.24). Colorless oil,  $[\alpha]_D = -4.7^\circ$  ( $c = 0.4$ ,  $CHCl_3$ ). Source: HUANG HUA HAO *Artemisia annua* (seed). Ref: 3435.

**16453 1,10-Oxy-β-myrcene hydroxide**

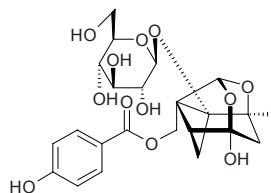
$C_{10}H_{16}O_2$  (168.24). Colorless oil,  $[\alpha]_D = -22.2^\circ$  ( $c = 0.3$ ,  $CHCl_3$ ). Source: HUANG HUA HAO *Artemisia annua* (seed). Ref: 3435.

**16454 Oxynitidine**

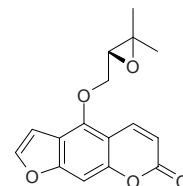
[548-31-2]  $C_{21}H_{17}NO_5$  (363.37). mp 284–285°C. Source: RU DI JIN NIU *Zanthoxylum nitidum*. Ref: 6.

**16455 Oxypaeoniflorin**

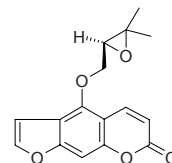
[39011-91-1]  $C_{23}H_{28}O_{12}$  (496.47). Source: BAI SHAO *Paeonia albiflora* [Syn. *Paeonia lactiflora*], CHI SHAO *Paeonia lactiflora* wild, CHUAN CHI SHAO *Paeonia veitchii*, CAO SHAO YAO *Paeonia obovata*, MU DAN PI *Paeonia moutan* [Syn. *Paeonia suffruticosa*]. Ref: 2, 660.

**16456 (S)-(-)-Oxypeucedanin**

$C_{16}H_{14}O_5$  (286.29). Pharm: NO Production inhibitor (LPS-activated mouse peritoneal macrophages,  $IC_{50} = 57 \mu\text{mol/L}$ , control *L*-NMMA,  $IC_{50} = 28 \mu\text{mol/L}$ )<sup>[4454]</sup>. Source: FEN CHA DANG GUI *Angelica furcijuga* (flower). Ref: 4454.

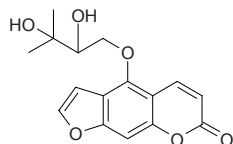
**16457 (+)-Oxypeucedanin**

[3172-02-2]  $C_{16}H_{14}O_5$  (286.29). Pharm: Antimicrobial; piscicide. Source: BAI ZHI *Angelica dahurica* [Syn. *Angelica porphyrocaulis*], SHUAN CHI QIN *Prangos pabularia*, YUAN DANG GUI *Angelica archangelica*, ZHAO ZE QIAN HU *Peucedanum palustre*. Ref: 4, 658.

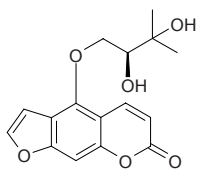


**16458 Oxypeucedanin hydrate**

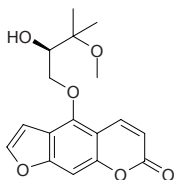
$C_{16}H_{16}O_6$  (304.30). Source: *Niphogeton ternata*. Ref: 4156.

**16459 (S)-(-)-Oxypeucedanin hydrate**

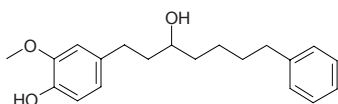
$C_{16}H_{16}O_6$  (304.30). Pharm: NO Production inhibitor (LPS-activated mouse peritoneal macrophages, 100 $\mu$ mol/L, InRt = (15.1 $\pm$ 3.0)%, control *L*-NMMA, 100 $\mu$ mol/L, InRt = (79.2 $\pm$ 0.9)%). Source: FEN CHA DANG GUI *Angelica furcijuga* (flower). Ref: 4454.

**16460 Oxypeucedanin methanolate**

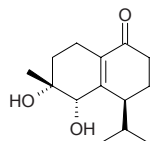
$C_{17}H_{18}O_6$  (318.33). Source: BAI ZHI *Angelica dahurica* [Syn. *Angelica porphyrocaulis*]. Ref: 5392.

**16461 Oxyphyllacinol**

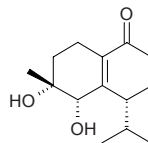
1-(4'-Hydroxy-3'-methoxyphenyl)-7-phenyl-3-heptanol  $C_{20}H_{26}O_3$  (314.43). Green liquid. Source: YI ZHI REN *Alpinia oxyphylla*. Ref: 845.

**16462 Oxyphyllenodiol A**

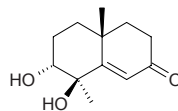
$C_{14}H_{22}O_3$  (238.33). Pharm: NO production Inhibitor (*in vitro*, LPS-activated mouse peritoneal macrophages,  $IC_{50}$  = 28 $\mu$ mol/L; control *L*-NMMA,  $IC_{50}$  = 28 $\mu$ mol/L);  $\beta$ -hexosaminidase release inhibitor (RBL-2H3 Cells, 100 $\mu$ mol/L, InRt = 1.7%; control Curcumin, InRt = 62.6%). Source: YI ZHI REN *Alpinia oxyphylla* (fruit: yield = 0.020%dw). Ref: 4655.

**16463 Oxyphyllenodiol B**

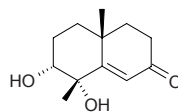
$C_{14}H_{22}O_3$  (238.33). Pharm: NO production Inhibitor (*in vitro*, LPS-activated mouse peritoneal macrophages,  $IC_{50}$  > 100 $\mu$ mol/L; control *L*-NMMA,  $IC_{50}$  = 28 $\mu$ mol/L);  $\beta$ -hexosaminidase release inhibitor (RBL-2H3 Cells, 100 $\mu$ mol/L, InRt = -3.1%; control Curcumin, InRt = 62.6%). Source: YI ZHI REN *Alpinia oxyphylla* (fruit: yield = 0.0031%dw). Ref: 4655.

**16464 Oxyphyllenone A**

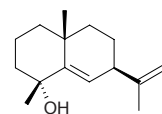
$C_{12}H_{18}O_3$  (210.28). Pharm: NO production Inhibitor (*in vitro*, LPS-activated mouse peritoneal macrophages,  $IC_{50}$  = 35 $\mu$ mol/L; control *L*-NMMA,  $IC_{50}$  = 28 $\mu$ mol/L);  $\beta$ -hexosaminidase release inhibitor (RBL-2H3 Cells, 100 $\mu$ mol/L, InRt = -4.7%; control Curcumin, InRt = 62.6%). Source: YI ZHI REN *Alpinia oxyphylla* (fruit: yield = 0.0063%dw). Ref: 4655.

**16465 Oxyphyllenone B**

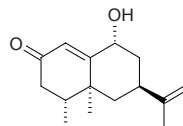
$C_{12}H_{18}O_3$  (210.28). Pharm: NO production Inhibitor (*in vitro*, LPS-activated mouse peritoneal macrophages,  $IC_{50}$  > 100 $\mu$ mol/L; control *L*-NMMA,  $IC_{50}$  = 28 $\mu$ mol/L);  $\beta$ -hexosaminidase release inhibitor (RBL-2H3 Cells, 100 $\mu$ mol/L, InRt = -1.8%; control Curcumin, InRt = 62.6%). Source: YI ZHI REN *Alpinia oxyphylla* (fruit: yield = 0.0021%dw). Ref: 4655.

**16466 Oxyphyllol A**

$C_{15}H_{24}O$  (220.36). Colorless oil,  $[\alpha]_D^{26}$  = +17.7° ( $c$  = 0.30,  $CHCl_3$ ). Pharm: NO production Inhibitor (*in vitro*, LPS-activated mouse peritoneal macrophages,  $IC_{50}$  = 42 $\mu$ mol/L; control *L*-NMMA,  $IC_{50}$  = 28 $\mu$ mol/L);  $\beta$ -hexosaminidase release inhibitor (RBL-2H3 Cells, 100 $\mu$ mol/L, InRt = -24.0%; control Curcumin, InRt = 62.6%). Source: YI ZHI REN *Alpinia oxyphylla* (fruit: yield = 0.0038%dw). Ref: 4655.

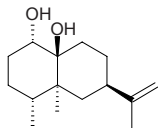
**16467 Oxyphyllol B**

$C_{15}H_{22}O_2$  (234.34). Colorless oil,  $[\alpha]_D^{28}$  = +10.4° ( $c$  = 0.10,  $CHCl_3$ ). Source: YI ZHI REN *Alpinia oxyphylla* (fruit: yield = 0.030%dw). Ref: 4655.

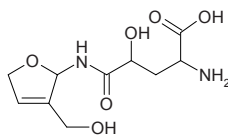


**16468 Oxyphyllol C**

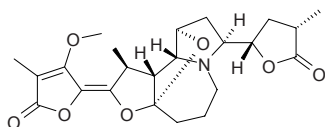
$C_{15}H_{26}O_2$  (238.37). Colorless oil,  $[\alpha]_D^{29} = +6.5^\circ$  ( $c = 1.60$ ,  $CHCl_3$ ). **Pharm:**  $\beta$ -hexosaminidase release inhibitor (RBL-2H3 Cells,  $100\mu\text{mol/L}$ ,  $\text{InRt} = 8.2\%$ ; control Curcumin,  $\text{InRt} = 62.6\%$ ). **Source:** YI ZHI REN *Alpinia oxyphylla* (fruit: yield = 0.027%dw). **Ref:** 4655.

**16469 Oxypinnatanine**

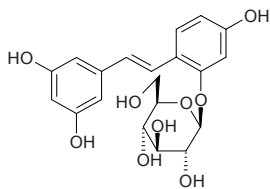
[52329-55-2]  $C_{10}H_{16}N_2O_6$  (260.25). Crystals (EtOH aq.), mp 182~185°C (dec),  $[\alpha]_D^{24} = +5.5^\circ$  ( $c = 0.8$ ,  $H_2O$ ). **Source:** XUAN CAO GEN *Hemerocallis fulva*, OU ZHOU SHENG GU YOU *Staphylea pinnata*. **Ref:** 2833.

**16470 Oxyprotostemonine**

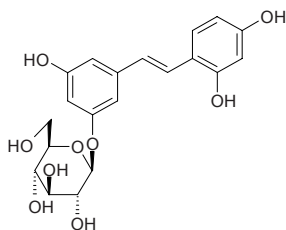
$C_{23}H_{29}NO_7$  (431.49). Amorphous,  $[\alpha]_D^{20} = +142^\circ$  ( $c = 0.2$ , MeOH). **Pharm:** Insecticidal (neonate larvae of *Spodoptera littoralis*,  $LC_{50} = 159\text{mg/L}$ ,  $EC_{50} = 47\text{mg/L}$ ). **Source:** DI TANG BAI BU *Stemona kerrii*, *Stemona curtisii*. **Ref:** 3409.

**16471 Oxyresveratrol 2-O-β-D-glucopyranoside**

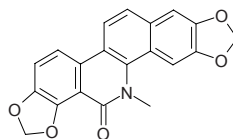
$C_{20}H_{22}O_9$  (406.39). Amorphous powder.  $[\alpha]_D^{21} = -59.1^\circ$  ( $c = 2.13$ , MeOH). **Source:** WEI JING BAI HE *Schoenocaulon officinale* (rhizome). **Ref:** 4210.

**16472 Oxyresveratrol 3'-O-β-D-glucopyranoside**

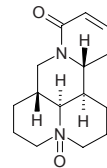
$C_{20}H_{22}O_9$  (406.39). **Source:** WEI JING BAI HE *Schoenocaulon officinale* (rhizome). **Ref:** 4210.

**16473 Oxysanguinarine**

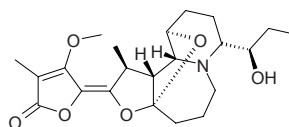
Hydroxysanguinarine [548-30-1]  $C_{20}H_{13}NO_5$  (347.33). mp 360~361°C. **Source:** BAI QU CAI *Chelidonium majus*, BO LUO HUI *Macleaya cordata*, JU HUA HUANG LIAN *Corydalis pallida*, YING SU KE *Papaver somniferum*. **Ref:** 6.

**16474 N-Oxysophocarpine**

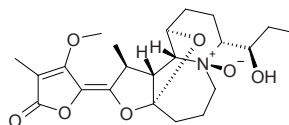
[548-30-1]  $C_{15}H_{22}N_2O_2$  (262.35). mp 198~199°C, 206~208°C. **Source:** BAI CI HUA *Sophora viciifolia*, BAI CI HUA YE *Sophora viciifolia*, KU DOU GEN *Sophora alopecuroides*, KU DOU ZI *Sophora alopecuroides* (seed: content = 0.906%<sup>[5508]</sup>), KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*] (dried root: content scope of 3 origins = 0.73%~2.12%, mean content = 1.59%<sup>[5508]</sup>), KU SHEN SHI *Sophora flavescens* [Syn. *Sophora angustifolia*]. **Ref:** 2, 546, 564, 593, 660, 5508.

**16475 Oxystemokerrin**

4-Methoxy-3-methyl-5-[(2Z,11aS)-3at,11t-epoxy-8t-((1R)-1-hydroxypropyl)-1c-methyl-(11ar,11bc)-dodecahydro-furo[3,2-c]pyrido[1,2-a]azepin-2-ylidene]-5H-furan-2-one  $C_{22}H_{31}NO_6$  (405.50). Amorphous,  $[\alpha]_D^{20} = +289^\circ$  ( $c = 0.4$ , MeOH). **Pharm:** Insecticidal (neonate larvae of *Spodoptera littoralis*,  $LC_{50} = 5.9\text{mg/L}$ ,  $EC_{50} = 0.7\text{mg/L}$ ). **Source:** DI TANG BAI BU *Stemona kerrii*, *Stemona curtisii*, *Stemona* sp.(HG915). **Ref:** 3409.

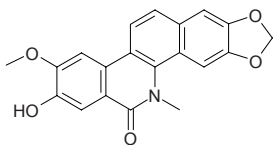
**16476 Oxystemokerrin-N-oxide**

4-Methoxy-3-methyl-5-[(2Z,11aS)-3at,11t-epoxy-8t-((1R)-1-hydroxypropyl)-1c-methyl-(11ar,11bc)-dodecahydro-furo[3,2-c]pyrido[1,2-a]azepin-2-ylidene]-5H-furan-2-one-N-oxide  $C_{22}H_{31}NO_7$  (421.49). Amorphous,  $[\alpha]_D^{20} = +247^\circ$  ( $c = 0.3$ , MeOH). **Pharm:** Insecticidal (neonate larvae of *Spodoptera littoralis*,  $LC_{50} = 12.5\text{mg/L}$ ,  $EC_{50} = 0.4\text{mg/L}$ ). **Source:** DI TANG BAI BU *Stemona kerrii*, *Stemona curtisii*, *Stemona* sp.(HG915). **Ref:** 3409.

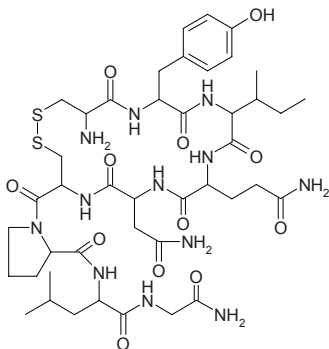


**16477 Oxyterihanine**

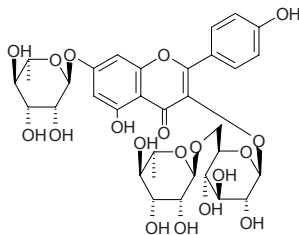
[95-66-54-9] C<sub>20</sub>H<sub>15</sub>NO<sub>5</sub> (349.35). mp > 300°C. Source: RU DI JIN NIU *Zanthoxylum nitidum*. Ref: 1290, 2841.

**16478 Oxytocin**

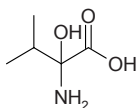
Pitocin; Syntocinon; Sympitan; Oxystin [50-56-6] C<sub>43</sub>H<sub>66</sub>N<sub>12</sub>O<sub>12</sub>S<sub>2</sub> (1007.21). White powder, [α]<sub>D</sub><sup>22</sup> = -26.2° (c = 0.53), soluble in water, *n*-butanal.<sup>[5507]</sup>  
Source: NIU NAO *Bos taurus domesticus*; *Bubalus bubalis*. Ref: 6, 5507.

**16479 Oxytroside**

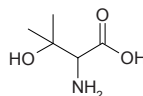
C<sub>33</sub>H<sub>40</sub>O<sub>19</sub> (740.68). Source: DUO YE JI DOU *Oxytropis myriophylla*. Ref: 2864.

**16480 α-Oxyvaline**

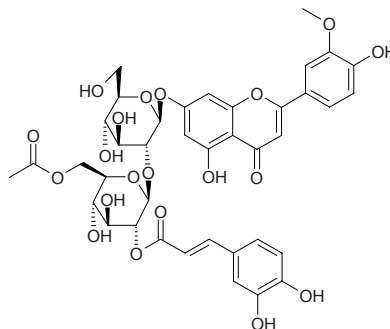
α-Hydroxyvaline C<sub>5</sub>H<sub>11</sub>NO<sub>3</sub> (133.15). mp L(+) 205°C, D(-) 205°C, (dl) 240°C (dec). Source: XIONG ZHANG *Selenarctos thibetanus*; *Ursus arctos*. Ref: 6, 660.

**16481 β-Oxyvaline**

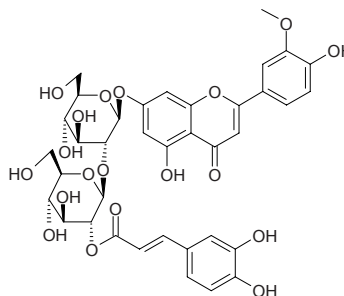
β-Hydroxyvaline C<sub>5</sub>H<sub>11</sub>NO<sub>3</sub> (133.15). mp L(+) 205°C, D(-) 205, (dl) 240°C (dec). Source: XIONG ZHANG *Selenarctos thibetanus*; *Ursus arctos*. Ref: 6, 660.

**16482 Ozturkoside A**

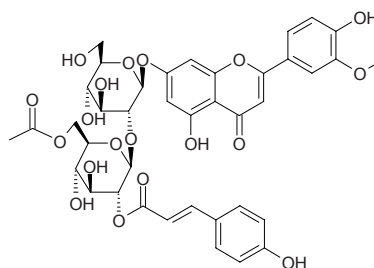
Chrysoeriol 7-*O*-[2'''-*O*-caffeoyl-6'''-*O*-acetyl-β-*D*-glucopyranosyl-(1→2)-β-*D*-glucopyranoside] C<sub>39</sub>H<sub>40</sub>O<sub>20</sub> (828.74). Yellow amorphous powder (MeOH). Source: *Sideritis ozturkii* (aerial parts). Ref: 3827.

**16483 Ozturkoside B**

Chrysoeriol 7-*O*-[2'''-*O*-caffeoyl-β-*D*-glucopyranosyl-(1→2)-β-*D*-glucopyranoside] C<sub>37</sub>H<sub>38</sub>O<sub>19</sub> (786.70). Yellow amorphous powder (MeOH). Source: *Sideritis ozturkii* (aerial parts). Ref: 3827.

**16484 Ozturkoside C**

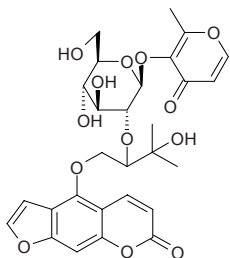
Chrysoeriol 7-*O*-[2'''-*O*-*p*-coumaroyl-6'''-β-*O*-acetyl-*D*-glucopyranosyl-(1→2)-β-*D*-glucopyranoside] C<sub>39</sub>H<sub>40</sub>O<sub>19</sub> (812.74). Yellow amorphous powder (MeOH). Source: *Sideritis ozturkii* (aerial parts). Ref: 3827.



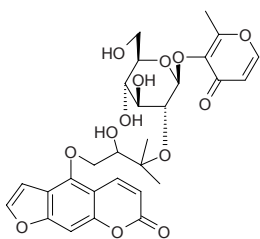
## P

**16485 Pabularin A**

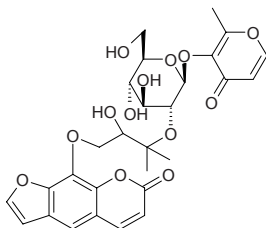
$C_{28}H_{30}O_{13}$  (574.54).  $[\alpha]_D^{25} = -166.7^\circ$  ( $c = 0.09$ , MeOH). Source: SHUAN CHI QIN *Prangos pabularia*. Ref: 2004.

**16486 Pabularin B**

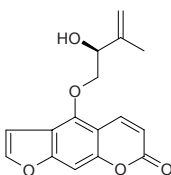
$C_{28}H_{30}O_{13}$  (574.54).  $[\alpha]_D^{25} = -211.4^\circ$  ( $c = 0.035$ , MeOH). Source: SHUAN CHI QIN *Prangos pabularia*. Ref: 2004.

**16487 Pabularin C**

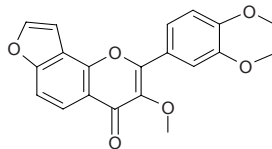
$C_{28}H_{30}O_{13}$  (574.54).  $[\alpha]_D^{25} = -33.3^\circ$  ( $c = 0.09$ , MeOH). Source: SHUAN CHI QIN *Prangos pabularia*. Ref: 2004.

**16488 Pabulenol**

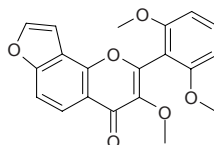
5-[2''(R)-Hydroxy-3''-methyl-3''-butenyloxy]furocoumarin [37551-62-5]  
 $C_{16}H_{14}O_5$  (286.29). mp 122~123°C; Colorless amorphous solid,  $[\alpha]_D^{23} = +63.5^\circ$  ( $c = 0.126$ ,  $CHCl_3$ ). Pharm: Antimycobacterial (*Mycobacterium fortuitum* ATCC6841, MIC = 128µg/mL, control Isoniazide, MIC = 0.5µg/mL; *Mycobacterium smegmatis* ATCC14486, MIC = 64µg/mL, Isoniazide, MIC = 2µg/mL; *Mycobacterium phlei* ATCC11758, MIC = 64µg/mL, Isoniazide, MIC = 2µg/mL; *Mycobacterium aurum* Pasteur Institute 104482, MIC = 64µg/mL, Isoniazide, MIC = 2µg/mL)<sup>[5469]</sup>. Source: BAI ZHI *Angelica dahurica* [Syn. *Angelica porphyrocaulis*], CHOU CAO *Ruta graveolens*, *Niphogeton ternata*, *Ducrosia anethifolia* (aerial parts). Ref: 2, 6, 4156, 5469.

**16489 Pachycarin A**

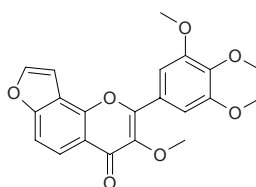
$C_{20}H_{16}O_6$  (352.35). Acicular crystals (acetone), mp 138°C. Source: KU TAN ZI *Milletia pachycarpa*. Ref: 821.

**16490 Pachycarin B**

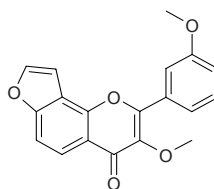
$C_{20}H_{16}O_6$  (352.35). Colorless acicular crystals, mp 187~188°C. Source: KU TAN ZI *Milletia pachycarpa*. Ref: 831.

**16491 Pachycarin C**

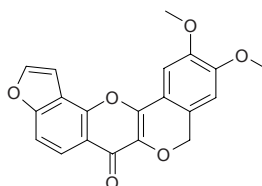
3,3',4',5'-Tetramethoxyfuran[4'',5'':8,7]foavone  $C_{21}H_{18}O_7$  (382.37). Yellowish powder, mp 156~158°C. Source: KU TAN ZI *Milletia pachycarpa*. Ref: 2147.

**16492 Pachycarin D**

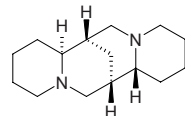
3,3'-Dimethoxyfuran[4'',5'':8,7]foavone  $C_{19}H_{14}O_5$  (322.32). White crystals, mp 170~171°C. Source: KU TAN ZI *Milletia pachycarpa*. Ref: 2147.

**16493 Pachycarin E**

2,3-Dimethoxyfuran[4'',5'':11,10]-7-oxo-[2]benzopyrano[4',3-b][1]benzopyran  $C_{20}H_{14}O_6$  (350.33). Palm yellow crystals, mp 218~221°C. Source: KU TAN ZI *Milletia pachycarpa*. Ref: 2147.

**16494 Pachycarpine**

[492-08-0]  $C_{15}H_{26}N_2$  (234.39). bp 173~174°C/8mmHg. Source: YE JUE MING *Thermopsis lupinoides*. Ref: 6.



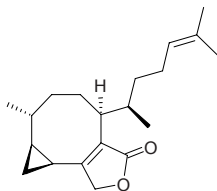


**16495 Pachylactone**

[89199-96-2] C<sub>20</sub>H<sub>30</sub>O<sub>2</sub> (302.46). Oil, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -23.3° (c = 0.18, CHCl<sub>3</sub>).

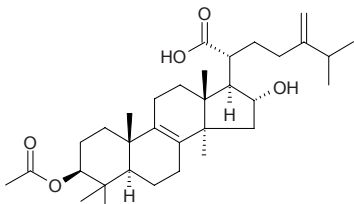
**Pharm:** Cytotoxic (P<sub>388</sub> ED<sub>50</sub> = 1.1 μg/mL, P<sub>388</sub>/DOX ED<sub>50</sub> = 1.8 μg/mL, KB ED<sub>50</sub> = 3.7 μg/mL, non-cellule lung cancer NSCLCN6-L16 ED<sub>50</sub> = 1.0 μg/mL).

**Source:** DI ZHONG HAI ZONG HAI ZAO *Dilophus ligulatus*, HOU WANG ZAO *Pachydictyon coriaceum*. **Ref:** 3720, 3721.

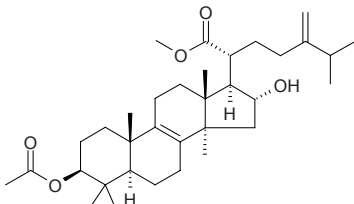
**16496 Pachymic acid**

[29070-92-6] C<sub>33</sub>H<sub>52</sub>O<sub>5</sub> (528.78). White acicular crystals, mp 295–296°C.

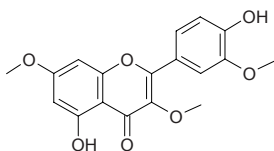
**Source:** FU LING *Poria cocos*. **Ref:** 2, 403.

**16497 Pachymic acid methyl ester**

C<sub>35</sub>H<sub>54</sub>O<sub>5</sub> (542.81). **Source:** FU LING *Poria cocos*. **Ref:** 660.

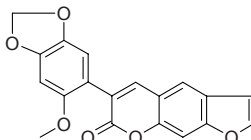
**16498 Pachypodol**

[33708-72-4] C<sub>18</sub>H<sub>16</sub>O<sub>7</sub> (344.32). mp 164–166°C. **Pharm:** Cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells)<sup>[5038]</sup>; antiviral; anti-androgenic inactive<sup>[4106]</sup>. **Source:** DUO SUI PO BU MU *Cordia multispicata* (leaf), GUANG HUO XIANG *Pogostemon cablin* [Syn. *Mentha cablin*], GUANG JIE QIU HAI TANG *Begonia glabra*, HUO XIANG *Agastache rugosus*, NAN CHUAN GUAN CHUN HUA *Microtoena prainiana* (stem: yield = 0.00004%dw)<sup>[4752]</sup>, ROU MAO QIE *Solanum pubescens*, SAN LIE XUE TONG *Macaranga triloba*, *Miliusa balansae* (branch and leaf: yield = 0.052%dw). **Ref:** 2, 505, 658, 660, 3016, 4106, 4752, 5038.

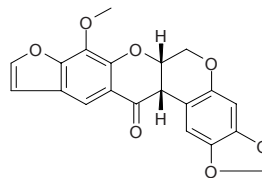
**16499 Pachyrrhizin**

[10091-01-7] C<sub>19</sub>H<sub>12</sub>O<sub>6</sub> (336.30). Yellow-green needles, mp 207–209°C.

**Pharm:** Antiviral (HSV-1, 50 μg/mL, InRt = 26.1%; HSV-2, 50 μg/mL, InRt = 23.7%)<sup>[4180]</sup>. **Source:** DOU SHU *Pachyrrhizus erosus* (seed), *Neorautanenia edulis*, *Neorautanenia pseudopachyrrhiza*. **Ref:** 6, 660, 1521, 4180.

**16500 Pachyrrhizone**

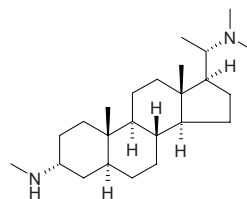
C<sub>20</sub>H<sub>14</sub>O<sub>7</sub> (366.33). mp 232–240°C (dec). **Pharm:** Pesticide; antiviral (HSV-1, 50 μg/mL, inactive; HSV-2, 50 μg/mL, InRt = 15.5%)<sup>[4180]</sup>. **Source:** DOU SHU *Pachyrrhizus erosus* (seed). **Ref:** 6, 658, 4180.

**16501 Pachysamine A**

[6801-29-2] C<sub>24</sub>H<sub>44</sub>N<sub>2</sub> (360.63). Colorless lamellar crystals

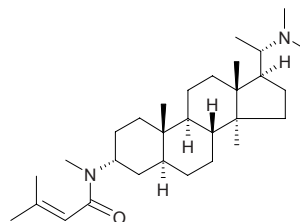
(dichloromethane–acetone), mp 167–168°C, [ $\alpha$ ]<sub>D</sub><sup>10</sup> = +20° (c = 1.24). **Pharm:**

Sedative (mus, LD<sub>50</sub> = 89.0 mg/kg, CD<sub>50</sub> = 75.3 mg/kg). **Source:** HAI NAN YE SHAN HUA *Sarcococca vagans*, JIN GANG DA *Croomia japonica*, XUE SHAN LIN *Pachysandra terminalis*. **Ref:** 6, 261, 399, 900.

**16502 Pachysamine B**

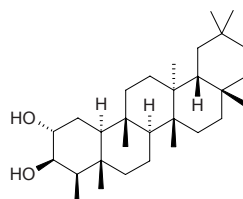
[6792-14-9] C<sub>29</sub>H<sub>50</sub>N<sub>2</sub>O (442.73). mp 171–173°C. **Source:** XUE SHAN LIN

*Pachysandra terminalis*. **Ref:** 6.

**16503 Pachysandiol A**

[17946-96-2] C<sub>30</sub>H<sub>52</sub>O<sub>2</sub> (444.75). mp 278–280°C. **Source:** XUE SHAN LIN

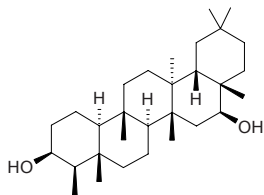
*Pachysandra terminalis*. **Ref:** 6.



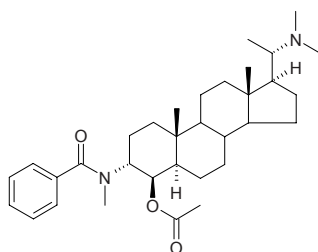


**16504 Pachysandiol B**

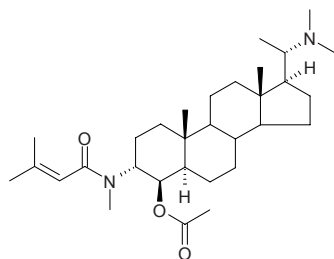
[33465-90-6] C<sub>30</sub>H<sub>52</sub>O<sub>2</sub> (444.75). mp 280~282°C. Source: XUE SHAN LIN  
*Pachysandra terminalis*. Ref: 6.

**16505 Pachysandrine A**

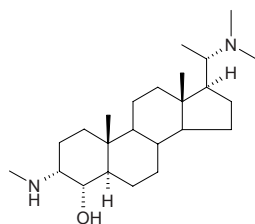
[6879-28-3] C<sub>33</sub>H<sub>50</sub>N<sub>2</sub>O<sub>3</sub> (522.78). mp 235~236°C. Pharm: Sedative;  
antiulcerative (mus, sc, 50mg/kg, gastric ulcer induced by leach stress); LD<sub>50</sub>  
(mus, ip) > 200mg/kg. Source: XUE SHAN LIN *Pachysandra terminalis* (in  
1967, the compound was isolated from the plant)<sup>[5505]</sup>. Ref: 6, 1141, 5505.

**16506 Pachysandrine B**

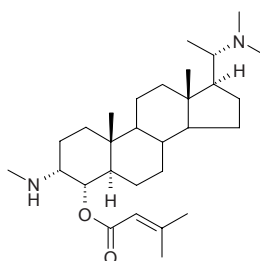
[6879-29-4] C<sub>31</sub>H<sub>52</sub>N<sub>2</sub>O<sub>3</sub> (500.77). mp 187~189°C. Source: XUE SHAN LIN  
*Pachysandra terminalis*. Ref: 6.

**16507 Pachysandrine C**

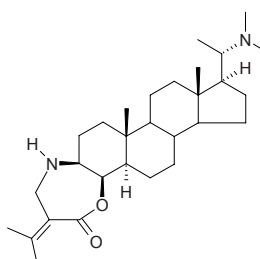
[6801-30-5] C<sub>24</sub>H<sub>44</sub>N<sub>2</sub>O (376.63). mp 212~214°C. Source: XUE SHAN LIN  
*Pachysandra terminalis*. Ref: 6.

**16508 Pachysandrine D**

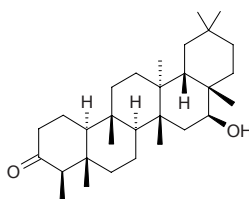
[6911-18-8] C<sub>29</sub>H<sub>50</sub>N<sub>2</sub>O<sub>2</sub> (458.73). mp 184~185°C. Source: XUE SHAN LIN  
*Pachysandra terminalis*. Ref: 6.

**16509 Pachysantermine A**

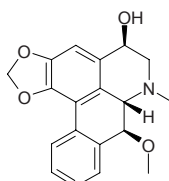
[15027-63-1] C<sub>29</sub>H<sub>48</sub>N<sub>2</sub>O<sub>2</sub> (456.72). mp 260~263°C. Source: XUE SHAN LIN  
*Pachysandra terminalis*. Ref: 6.

**16510 Pachysonol**

[33465-91-7] C<sub>30</sub>H<sub>50</sub>O<sub>2</sub> (442.73). mp 278~280°C. Source: XUE SHAN LIN  
*Pachysandra terminalis*. Ref: 6.

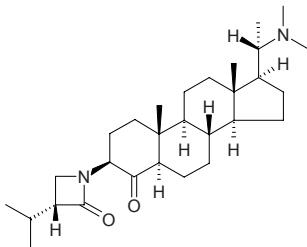
**16511 Pachystaudine**

[67627-76-3] C<sub>19</sub>H<sub>19</sub>NO<sub>4</sub> (325.37). mp 157°C, [α]<sub>D</sub> = +34° (c = 0.5, CHCl<sub>3</sub>).  
Pharm: Antiviral (HSV-1, 50% cytotoxic concentration CC<sub>50</sub> = 68.0 μmol/L,  
effective concentration of inhibiting 50% cell pathological changes ED<sub>50</sub> =  
47.5 μmol/L, selective index CC<sub>50</sub>/ED<sub>50</sub> = 1.4). Source: SI TUO HOU BING  
HUA *Pachypodanthium staudii*, Ref: 3674, 3675, 3676.

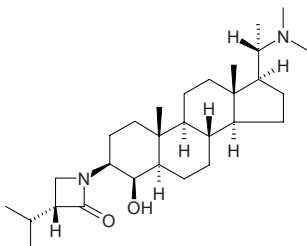


**16512 Pachystermine A**

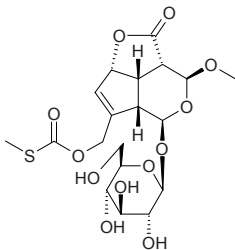
[6156-99-6] C<sub>29</sub>H<sub>48</sub>N<sub>2</sub>O<sub>2</sub> (456.72). Colorless acicular crystals (dichloromethane–acetone), mp 220–224°C, [α]<sub>D</sub><sup>20</sup> = +24° (c = 1.5). Pharm: Prevents ulcer (mus, sc, 50mg/kg); sedative (mus, ip, 100mg/kg); LD<sub>50</sub> (mus) = 365.0mg/kg, CD<sub>50</sub> (mus) = 148.0mg/kg. Source: XUE SHAN LIN *Pachysandra terminalis*. Ref: 6, 900.

**16513 Pachystermine B**

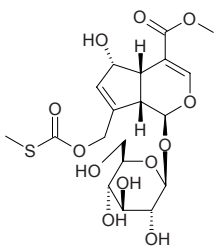
[6157-00-2] C<sub>29</sub>H<sub>50</sub>N<sub>2</sub>O<sub>2</sub> (458.73). mp 256–258°C. Source: XUE SHAN LIN *Pachysandra terminalis*. Ref: 6.

**16514 Paederia glucoside 1\***

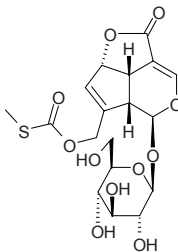
C<sub>19</sub>H<sub>26</sub>O<sub>12</sub>S (478.48). Brown powder, [α]<sub>D</sub><sup>20</sup> = –8.6° (c = 1.16, MeOH). Source: JI SHI TENG *Paederia scandens*. Ref: 1963.

**16515 Paederia glucoside 3\***

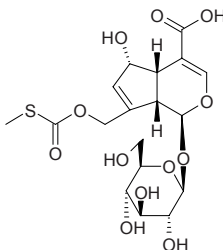
Paederosidic acid methyl ester C<sub>19</sub>H<sub>26</sub>O<sub>12</sub>S (478.48). White powder, [α]<sub>D</sub><sup>20</sup> = +12.4° (c = 0.90, MeOH). Source: JI SHI TENG *Paederia scandens*. Ref: 1963, 2561.

**16516 Paederoside**

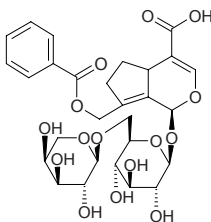
[20547-45-9] C<sub>18</sub>H<sub>22</sub>O<sub>11</sub>S (446.43). mp 122–123°C. Pharm: Laxative. Source: JI SHI TENG *Paederia scandens*, XIE JI CU YE MU *Lasianthus wallichii* (leaf). Ref: 6, 658, 2561, 4238.

**16517 Paederosidic acid**

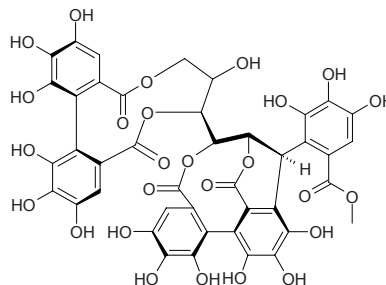
[18842-98-3] C<sub>18</sub>H<sub>24</sub>O<sub>12</sub>S (464.45). Solid +2H<sub>2</sub>O, [α]<sub>D</sub><sup>24</sup> = +28.2° (MeOH). Source: JI SHI TENG *Paederia scandens*. Ref: 2561, 2562.

**16518 Paederotoside**

10-*O*-Benzoyl-6-*O*-α-arabino(1→6)-β-glucopyranosyl arborescosidic acid C<sub>28</sub>H<sub>34</sub>O<sub>15</sub> (610.57). [α]<sub>D</sub><sup>20</sup> = –29° (c = 0.3, MeOH). Source: *Paederota lutea*. Ref: 3832.

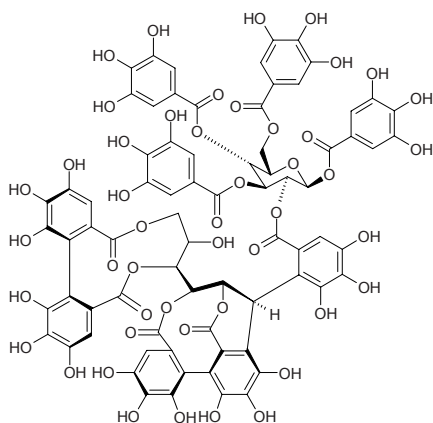
**16519 Paconianiin E**

C<sub>42</sub>H<sub>30</sub>O<sub>26</sub> (950.69). Isolated as C<sub>42</sub>H<sub>30</sub>O<sub>26</sub>·6H<sub>2</sub>O, white amorphous powder, [α]<sub>D</sub> = +166.9° (c = 0.7, MeOH). Source: BAI SHAO *Paeonia albiflora* [Syn. *Paeonia lactiflora*] (fresh fruit: yield = 0.0075%fw). Ref: 4695.

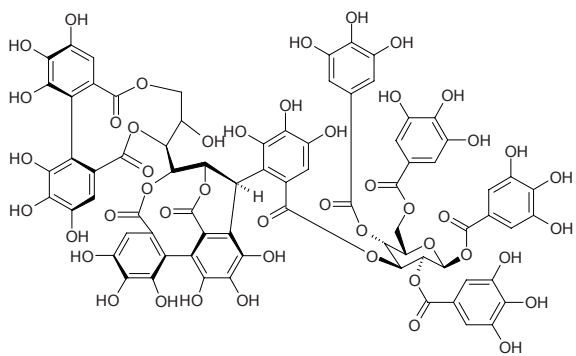


**16520 Paeonianin A**

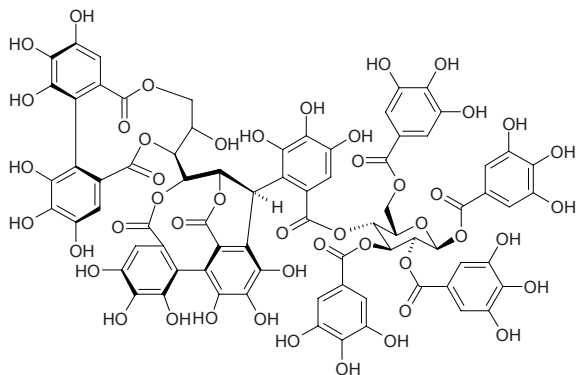
$C_{75}H_{54}O_{47}$  (1707.24). Isolated as  $C_{75}H_{54}O_{47} \cdot 10H_2O$ , white amorphous powder,  $[\alpha]_D = +219.7^\circ$  ( $c = 0.7$ , MeOH). Source: BAI SHAO *Paeonia albiflora* [Syn. *Paeonia lactiflora*] (fresh fruit: yield = 0.0011%fw). Ref: 4695.

**16521 Paeonianin B**

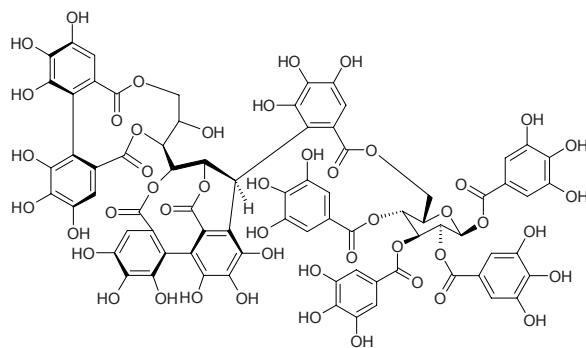
$C_{75}H_{54}O_{47}$  (1707.24). Isolated as  $C_{75}H_{54}O_{47} \cdot 11H_2O$ , white amorphous powder,  $[\alpha]_D = +158.40^\circ$  ( $c = 0.5$ , MeOH). Source: BAI SHAO *Paeonia albiflora* [Syn. *Paeonia lactiflora*] (fresh fruit: yield = 0.0084%fw). Ref: 4695.

**16522 Paeonianin C**

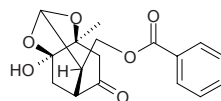
$C_{75}H_{54}O_{47}$  (1707.24). Isolated as  $C_{75}H_{54}O_{47} \cdot 9H_2O$ , white amorphous powder,  $[\alpha]_D = +115.0^\circ$  ( $c = 0.7$ , MeOH). Source: BAI SHAO *Paeonia albiflora* [Syn. *Paeonia lactiflora*] (fresh fruit: yield = 0.014%fw). Ref: 4695.

**16523 Paeonianin D**

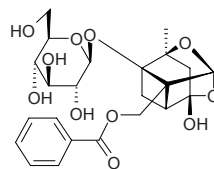
$C_{75}H_{54}O_{47}$  (1707.24). Isolated as  $C_{75}H_{54}O_{47} \cdot 8H_2O$ , white amorphous powder,  $[\alpha]_D = +79.0^\circ$  ( $c = 0.7$ , MeOH). Source: BAI SHAO *Paeonia albiflora* [Syn. *Paeonia lactiflora*] (fresh fruit: yield = 0.0011%fw). Ref: 4695.

**16524 Paeoniflorigenone**

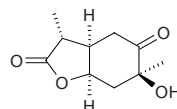
[80454-42-8]  $C_{17}H_{18}O_6$  (318.33). Viscous oil,  $[\alpha]_D^{25} = +4.3^\circ$  ( $c = 0.69$ , MeOH). Source: BAI SHAO *Paeonia albiflora* [Syn. *Paeonia lactiflora*], CHI SHAO *Paeonia lactiflora* wild. Ref: 2, 3123.

**16525 Paeoniflorin**

[23180-57-6]  $C_{23}H_{28}O_{11}$  (480.47). White hygroscopic powder, mp 196°C. Pharm: Analgesic; antiallergic; antihypertensive; anti-inflammatory (swollen foot model caused by carrageenan, glucosan rat-paw edema model); antipyretic (normal mus, artificial fever mus model); antispasmodic (rat and gpg intestine *in vitro*, rat and gpg stomach *in vivo*, rat uterine smooth muscle); antiulcerative (rat stress ulcer model); coronary vasodilator (increases coronary flow, used in treatment of coronary heart disease, acute myocardial ischemia); platelet aggregation inhibitor; sedative; lipoxygenase inhibitor (*in vitro*,  $IC_{50} = (95.1 \pm 5.0) \mu\text{mol/L}$ )<sup>[4319]</sup>;  $LD_{50}$  (mus, iv) = 3530mg/kg, (mus, ip) = 9530mg/kg. Source: BAI SHAO *Paeonia albiflora* [Syn. *Paeonia lactiflora*] (dried root: mean content = 2.63%<sup>[5508]</sup>), CAO SHAO YAO *Paeonia obovata*, CHI SHAO *Paeonia lactiflora* wild (dried root: mean content = 3.99%<sup>[5533]</sup>), CHUAN CHI SHAO *Paeonia veitchii*, DIAN MU DAN *Paeonia delavayi*, MU DAN PI *Paeonia moutan* [Syn. *Paeonia suffruticosa*] (dried root cortex: content = 1.57%<sup>[5508]</sup>), YAO YONG MU DAN *Paeonia officinalis*. Ref: 2, 4, 448, 658, 660, 4319, 5501, 5508, 5533.

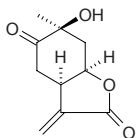
**16526 Paeonilactone A**

[98751-79-2]  $C_{10}H_{14}O_4$  (198.22). Source: BAI SHAO *Paeonia albiflora* [Syn. *Paeonia lactiflora*]. Ref: 1544.

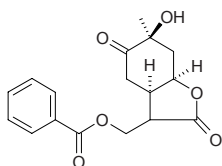


**16527 Paeonilactone B**

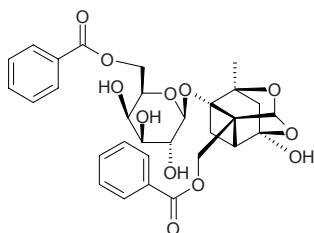
[98751-78-1] C<sub>10</sub>H<sub>12</sub>O<sub>4</sub> (196.20). Needles (EtOAc), mp 88–89°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +23.2° (MeOH). Source: BAI SHAO *Paeonia albiflora* [Syn. *Paeonia lactiflora*]. Ref: 1544.

**16528 Paeonilactone C**

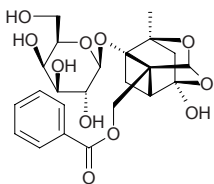
[98751-77-0] C<sub>17</sub>H<sub>18</sub>O<sub>6</sub> (318.33). Needles (MeOH aq.), mp 132–133°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = –31.6° (MeOH). Source: BAI SHAO *Paeonia albiflora* [Syn. *Paeonia lactiflora*]. Ref: 1544.

**16529 Paeonin A**

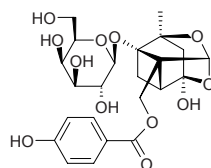
C<sub>30</sub>H<sub>32</sub>O<sub>12</sub> (584.58). Colorless gummy solid. Pharm: Lipoxigenase inhibitor (*in vitro*, IC<sub>50</sub> = 66.1±5.0 μmol/L, control Baicalein IC<sub>50</sub> = (22.4±1.3) μmol/L, control Paeoniflorin IC<sub>50</sub> = (95.1±5.0) μmol/L). Source: DUO HUA SHAO YAO *Paeonia emodi* (root). Ref: 4319.

**16530 Paeonin B**

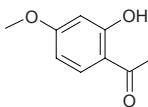
C<sub>23</sub>H<sub>28</sub>O<sub>11</sub> (480.47). Colorless gummy solid. Pharm: Lipoxigenase inhibitor (*in vitro*, IC<sub>50</sub> = 56.9±3.0 μmol/L, control Baicalein IC<sub>50</sub> = (22.4±1.3) μmol/L, control Paeoniflorin IC<sub>50</sub> = (95.1±5.0) μmol/L). Source: DUO HUA SHAO YAO *Paeonia emodi* (root). Ref: 4319.

**16531 Paeonin C**

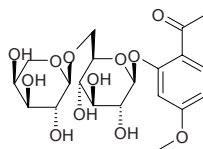
C<sub>23</sub>H<sub>28</sub>O<sub>12</sub> (496.47). Colorless gummy solid, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +14.5° (c = 0.03, CD<sub>3</sub>OD). Pharm: Lipoxigenase inhibitor (IC<sub>50</sub> = (99.5±2.5) μmol/L; control Baicalein, IC<sub>50</sub> = (22.4±1.3) μmol/L); antioxidant (ABTS<sup>•+</sup> radical quenching activity, IC<sub>50</sub> = (498.2±2.6) μmol/L; Trolox, IC<sub>50</sub> = (87.5±0.8) μmol/L). Source: DUO HUA SHAO YAO *Paeonia emodi* (fruit). Ref: 3802.

**16532 Paeonol**

2'-Hydroxy-4'-methoxyacetophenone [552-41-0] C<sub>9</sub>H<sub>10</sub>O<sub>3</sub> (166.18). mp 50°C. Pharm: Analgesic (mus, hot plate model, writhing and aldehyde models); antibacterial (*Staphylococcus aureus*, EC = 500 μg/mL; *Streptococcus faecalis*, EC = 500 μg/mL; *Bacillus coli*, EC = 200 μg/mL; *Bacillus subtilis*, EC = 200 μg/mL); anticonvulsant (induced by electricity or drugs); antihypertensive (anesthetic dog, 80–120 mg/kg iv, decreases blood pressure by 41%–61% and lasts 10–12 min); anti-inflammatory (rat, orl, swollen foot caused by carrageenan, glucosan or acetate acid); antioxidant; antipyretic (normal mus, artificial fever mus); sedative; hypnotic (mus, ip or orl); anti-inflammatory (modulator of cytokine network: inhibits in a concentration-dependent manner the formation of pro-inflammatory cytokines, such as TNF- $\alpha$ , IL-1 $\beta$  and IL-6); inhibits over-production of NO and PGE<sub>2</sub>, a potential candidate for the development of a new anti-inflammatory therapy<sup>[44][6]</sup>. Source: BAI SHAO *Paeonia albiflora* [Syn. *Paeonia lactiflora*] (dried root: mean content = 0.0159%<sup>[5508]</sup>), CHI SHAO *Paeonia lactiflora* wild (dried root: mean content = 0.0158%<sup>[5508]</sup>), ER ZHUANG BAO CHUN HUA *Primula auricula*, HONG HUA PI *Betula platyphylla* var. *japonica*, MU DAN PI *Paeonia moutan* [Syn. *Paeonia suffruticosa*] (dried root cortex: mean content of 28 origins = 1.44%<sup>[5508]</sup>), NIAN BAO CHUN *Primula viscosa*, SANG YE *Morus alba*, XU CHANG QING *Cynanchum paniculatum* (root: mean content = 1.43%<sup>[5508]</sup>). Ref: 2, 4, 658, 660, 4416, 5501, 5508.

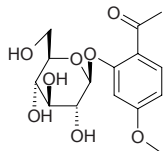
**16533 Paeonolide**

[72520-92-4] C<sub>20</sub>H<sub>28</sub>O<sub>12</sub> (460.44). Pharm: Platelet aggregation inhibitor. Source: CAO SHAO YAO *Paeonia obovata*, MU DAN PI *Paeonia moutan* [Syn. *Paeonia suffruticosa*], QIAO MU SHAO YAO *Paeonia arborea*. Ref: 2, 658, 660.

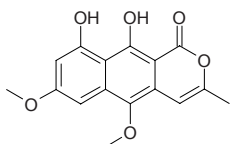


**16534 Paeonoside**

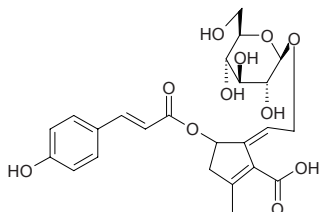
$C_{15}H_{20}O_8$  (328.32). **Pharm:** Platelet aggregation inhibitor. **Source:** MU DAN PI *Paeonia moutan* [Syn. *Paeonia suffruticosa*], QIAO MU SHAO YAO *Paeonia arborea*. **Ref:** 2, 658.

**16535 Paepalantine**

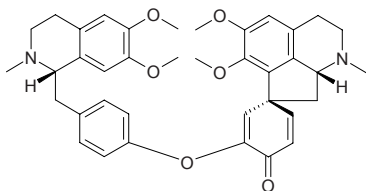
$C_{16}H_{14}O_6$  (302.29). **Pharm:** Anti-inflammatory. **Source:** *Paepalanthus bromelioides* (capitula). **Ref:** 4961.

**16536 Pagoside**

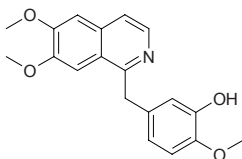
$C_{24}H_{28}O_{11}$  (492.48). **Pharm:** Elastase inhibitor (hmn leukocyte *in vitro*,  $IC_{50} = 154\mu\text{g/mL} = 260\mu\text{mol/L}$ ; control Caffeic acid,  $IC_{50} = 86\mu\text{g/mL} = 475\mu\text{mol/L}$ ). **Source:** NAN FEI GOU MA *Harpagophytum procumbens*. **Ref:** 5458.

**16537 Pakistanamine**

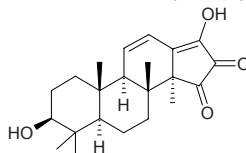
[36506-66-8]  $C_{38}H_{42}N_2O_6$  (622.77). mp 93~94°C,  $[\alpha]_D = +135^\circ$  ( $c = 0.5$ , MeOH). **Source:** MEI SUI XIAO BO *Berberis calliobotrys*, TU HUANG LIAN *Berberis julianae*, WA SHI XIAO BO *Berberis valdiviana*, BI LU ZHI XIAO BO *Berberis baluchistanica*, ZHI ZONG ZHUANG HUA XU XIAO BO *Berberis orthobotrys*. **Ref:** 1521.

**16538 Palaudine**

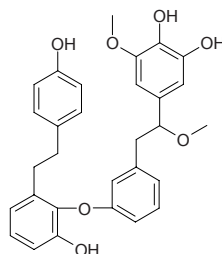
[18694-10-5]  $C_{19}H_{19}NO_4$  (325.37). mp 175~176°C. **Source:** YA PIAN *Papaver somniferum*. **Ref:** 6.

**16539 Palbinone**

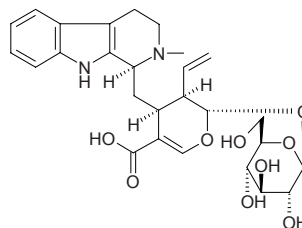
[139954-00-0]  $C_{22}H_{30}O_4$  (358.48). Red needles (Et<sub>2</sub>O-hexane), mp 254~255°C,  $[\alpha]_D = -223.8^\circ$  (CHCl<sub>3</sub>). **Pharm:** 3 $\alpha$ -Hydroxysteroid dehydrogenase inhibitor (reduced,  $IC_{50} = 0.046\mu\text{mol/L}$ , Indomethacin  $IC_{50} = 3.2\mu\text{mol/L}$ ); anti-inflammatory (inhibits hmn monocyte IL-1 $\beta$ ). **Source:** BAI SHAO *Paeonia albiflora* [Syn. *Paeonia lactiflora*]. **Ref:** 1207, 3589.

**16540 Paleatin B**

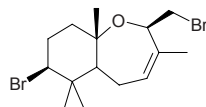
[158848-16-9]  $C_{30}H_{30}O_7$  (502.57). Amorphous powder. **Pharm:** Antioxidant ( $IC_{50} = 11.7\mu\text{mol/L}$ ); 5-lipoxidase inhibitor ( $IC_{50} = 0.78\mu\text{mol/L}$ ); cyclooxygenase inhibitor. ( $IC_{50} = 45.2\mu\text{mol/L}$ ). **Source:** ER YI TUO BAO DI QIAN *Marchantia paleacea* var. *diptera*. **Ref:** 3677, 3678.

**16541 Palicoside**

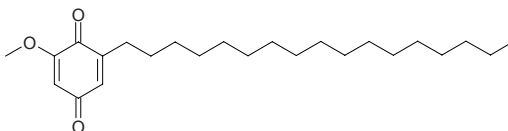
$C_{27}H_{34}N_2O_9$  (530.58). **Source:** *Strychnos mellodora*, *Strychnos vanprukii* (stem). **Ref:** 3471.

**16542 Palisadin B**

[77249-85-5]  $C_{15}H_{24}Br_2O$  (380.17). Oli,  $[\alpha]_D = +8.8^\circ$  ( $c = 1.3$ , CHCl<sub>3</sub>). **Source:** SHAN ZHUANG AO DING ZAO *Laurencia palisada*. **Ref:** 1521.

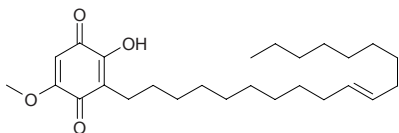
**16543 Pallasone B**

Dihydroirisquinone [78472-08-9]  $C_{24}H_{40}O_3$  (376.58). mp 88~89.5°C. **Source:** MA LIN ZI *Iris lactea* var. *chinensis* [Syn. *Iris pallasii* var. *chinensis*] (spermoderm: mean content = 0.061%<sup>[5508]</sup>). **Ref:** 3125, 3126, 5508.

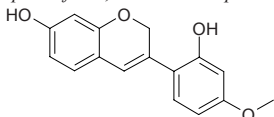


**16544 Pallasone C**

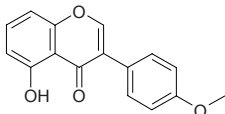
[78472-09-0] C<sub>26</sub>H<sub>42</sub>O<sub>4</sub> (418.62). mp 79.5–80.5°C. Source: MA LIN ZI *Iris lactea* var. *chinensis* [Syn. *Iris pallasii* var. *chinensis*]. Ref: 3125, 3126.

**16545 Pallidiflorene**

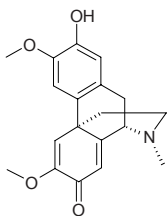
7,2'-Dihydroxy-4'-methoxyisoflav-3-ene; Bolusanthin III C<sub>16</sub>H<sub>14</sub>O<sub>4</sub> (270.29). Brown paste. Pharm: Antibacterial (*Escherichia coli*, MIA = 1.0µg, control Chloramphenicol, MIA = 0.001µg; *Bacillus subtilis*, MIA = 0.5µg, Chloramphenicol, MIA = 0.001µg; *Staphylococcus aureus*, MIA = 0.5µg, Chloramphenicol, MIA (0.001µg)<sup>[3785]</sup>; antifungal (*Candida mycoderma*, MIA = 0.05µg, control Miconazole, MIA = 0.0001µg)<sup>[3785]</sup>; antioxidant (DPPH scavenger, TLC detection limit = 0.1µg, IC<sub>50</sub> = 11µg/mL; control Quercetin, TLC detection limit < 0.05µg, IC<sub>50</sub> = 7µg/mL; Gallic acid, TLC detection limit < 0.05µg, IC<sub>50</sub> = 4µg/mL; Ascorbic acid, TLC detection limit < 0.10µg, IC<sub>50</sub> = 18µg/mL)<sup>[3785]</sup>. Source: CI GUO GAN CAO *Glycyrrhiza pallidiflora*, *Bolusanthus speciosus* (root wood). Ref: 2431, 3785.

**16546 Pallidiflorin**

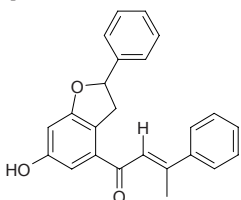
5-Hydroxy-4'-methoxyisoflavone C<sub>16</sub>H<sub>12</sub>O<sub>4</sub> (268.27). White lamellar crystals, mp 265–268°C. Source: CI GUO GAN CAO *Glycyrrhiza pallidiflora*. Ref: 166.

**16547 Pallidine**

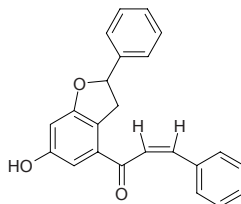
[25650-75-3] C<sub>19</sub>H<sub>21</sub>NO<sub>4</sub> (327.38). Source: JU HUA HUANG LIAN *Corydalis pallida*, ZI HUA YU DENG CAO *Corydalis incisa*. Ref: 6.

**16548 Pallidisetin A**

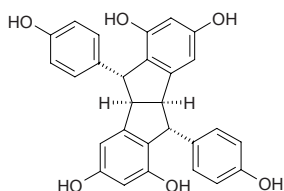
[154037-51-1] C<sub>23</sub>H<sub>18</sub>O<sub>3</sub> (342.40). Colorless plate crystals, mp 233°C (dec), [α]<sub>D</sub><sup>27</sup> = +20.0° (c = 0.1, CHCl<sub>3</sub>). Pharm: Cytotoxic (hmn, melanotic carcinoma RPMI-7951, ED<sub>50</sub> = 1.0µg/mL; polymorphism malignancy glioma, ED<sub>50</sub> = 1.0µg/mL). Source: CANG MAO JIN FA XUAN *Polytrichum pollidisetum*. Ref: 3679.

**16549 Pallidisetin B**

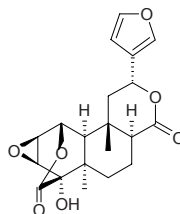
[154098-96-1] C<sub>23</sub>H<sub>18</sub>O<sub>3</sub> (342.40). Colorless needles, mp 194°C (dec), [α]<sub>D</sub><sup>27</sup> = -29.6° (c = 0.1, CHCl<sub>3</sub>). Pharm: Cytotoxic (hmn, melanotic carcinoma RPMI-7951, ED<sub>50</sub> = 2.0µg/mL; polymorphism malignancy glioma, ED<sub>50</sub> = 2.0µg/mL). Source: CANG MAO JIN FA XUAN *Polytrichum pollidisetum*. Ref: 3679.

**16550 Pallidol**

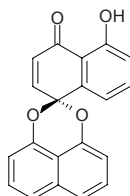
[105037-88-5] C<sub>28</sub>H<sub>22</sub>O<sub>6</sub> (454.48). Brown solid, mp > 300°C (dec), [α]<sub>D</sub> = 0° (MeOH), [α]<sub>D</sub><sup>23</sup> = -36.3° (c = 0.13, MeOH); [α]<sub>D</sub><sup>20</sup> = 0° (c = 0.45, MeOH). Pharm: Cytotoxic (hmn lymphoblast CEM, IC<sub>50</sub> = 32µg/mL); PKC inhibitor (rat brain, partly purified PKC, 100µmol/L, InRt = 25%); anti-inflammatory (COX-1 inhibitor, IC<sub>50</sub> = 50µmol/L; COX-2 inhibitor, IC<sub>50</sub> = 80µmol/L, marginally active)<sup>[3033]</sup>. Source: CANG BAI FEN TENG *Cissus pallida*, GUANG YE SHE PU TAO *Ampelopsis brevipedunculata* var. *hancei*, JIN QUE GEN *Caragana sinica*, PU<sup>(2)</sup> TAO *Vitis vinifera* (cell cultures established from pulp fragments of young fruits: yield = 0.00056%fw), LI QI HUAI *Sophora leachiana*. Ref: 1521, 3033, 3722, 3723, 3724, 3725, 3726.

**16551 Palmarin**

[17226-41-1] C<sub>20</sub>H<sub>22</sub>O<sub>7</sub> (374.39). Pharm: Bitter principle. Source: FEI ZHOU FANG JI *Jateorhiza palmata*. Ref: 658.

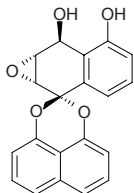
**16552 Palmarumycin CP<sub>1</sub>**

C<sub>20</sub>H<sub>12</sub>O<sub>4</sub> (316.32). Source: MA FENG SHU *Jatropha curcas* (stem). Ref: 3847.

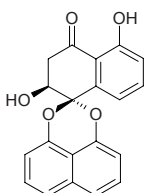


**16553 Palmarumycin JC<sub>1</sub>**

C<sub>20</sub>H<sub>14</sub>O<sub>5</sub> (334.33). White crystals, mp 208~210°C,  $[\alpha]_D^{25} = +82.5^\circ$  ( $c = 0.5$ , MeOH). Source: MA FENG SHU *Jatropha curcas* (stem). Ref: 3847.

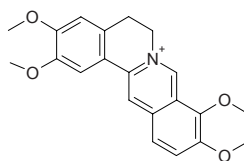
**16554 Palmarumycin JC<sub>2</sub>**

C<sub>20</sub>H<sub>14</sub>O<sub>5</sub> (334.33). Semi solid, mp 192~194°C,  $[\alpha]_D^{25} = +131.9^\circ$  ( $c = 0.5$ , CHCl<sub>3</sub>). Source: MA FENG SHU *Jatropha curcas* (stem). Ref: 3847.

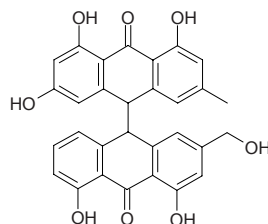
**16555 Palmatine**

Berbericinine [3486-67-7] C<sub>21</sub>H<sub>22</sub>NO<sub>4</sub><sup>+</sup> (352.41). mp 198~201°C. Pharm: Analgesic; antiarrhythmic; antibacterial (*Staphylococcus aureus* and *Sporothrix* sp., EC = 500µg/mL, *Bacillus dysenteriae*, *B. coli*, *β-Streptococcus* and 12 strains of molds); antifungal (*Candida albicans*, EC = 250µg/mL); antiviral (Asia  $\alpha$ -Influenza virus); enhances myocardial contractility; cholinesterase inhibitor; antitrypanosomal (the iodide kills Lewis-trypanosome); reduces area of myocardial infarction (rbt, *in vivo*, chloride 0.75mg/kg, iv); LD<sub>50</sub> (mus, iv, sulfocyanate) = 98µg/kg. Source: BAN RUI TANG SONG CAO *Thalictrum petaloideum* (root: content < 0.001%)<sup>[5508]</sup>, CHANG JU YAN HU SUO *Corydalis longicalcarata* (rhizome: content = 0.048%)<sup>[5508]</sup>, CHENG KOU SHI DA GONG LAO *Mahonia shenii* (stem: content = 0.33%)<sup>[5510]</sup>, CHI BAN YAN HU SUO *Corydalis remota* [Syn. *Corydalis bulbosa* var. *typica*] (rhizome: content = 0.01%)<sup>[5508]</sup>, CHUAN DIAN SHI DA GONG LAO *Mahonia veitchiorum* (stem: content = 0.19%)<sup>[5510]</sup>, DA YE TANG SONG CAO *Thalictrum faberi* (root: content < 0.001%)<sup>[5508]</sup>, DONG BEI YAN HU SUO *Corydalis ambigua* var. *amurensis* [Syn. *Corydalis ambigua*] (rhizome: content = 0.02%)<sup>[5508]</sup>, DUAN E HUANG LIAN *Coptis chinensis* var. *breviseipala* (rhizome: content = 0.65%)<sup>[5508]</sup>, DUI YE YUAN HU *Corydalis ledebouriana* (rhizome: content = 0.100%)<sup>[5508]</sup>, E MEI YE HUANG LIAN *Coptis omeiensis* (rhizome: content = 1.03%)<sup>[5508]</sup>, FEI ZHOU FANG JI *Jateorhiza palmata*, GU LIN YE LIAN *Coptis gulinensis* (rhizome: content = 0.88%)<sup>[5508]</sup>, HAI SONG ZI *Pinus koraiensis*, HU BEI SHI DA GONG LAO *Mahonia confusa* (stem: content = 0.03%)<sup>[5510]</sup>, HUA NAN GONG LAO MU *Mahonia japonica* (stem: content = 0.19%)<sup>[5510]</sup>, HUA NAN GONG LAO YE *Mahonia japonica*, HUANG BAI *Phellodendron amurense* (bark: mean content of 6 batches = 0.67%)<sup>[5508]</sup>, HUANG LIAN *Coptis chinensis* (rhizome: mean content = 1.94%)<sup>[5508]</sup>, HUANG PI SHU *Phellodendron chinense* (bark: content scope = 0.372%~0.590%)<sup>[5501]</sup>, HUANG YE DI BU RONG *Stephania viridiflavens*,

HUI LV YAN HU SUO *Corydalis adunca* (rhizome: content = 0.026%)<sup>[5508]</sup>, JIN GUO LAN *Tinospora capillipes*, JIN SI MA WEI LIAN *Thalictrum glandulosissimum* (root: content < 0.001%)<sup>[5508]</sup>, KUAN BAO SHI DA GONG LAO *Mahonia eurybracteata* (stem: mean content of 3 origins = 0.06%)<sup>[5510]</sup>, MA WEI LIAN *Thalictrum foliolosum* (root: content = 0.32%)<sup>[5508]</sup>, QUAN YE YAN HU SUO *Corydalis repens* (rhizome: content = 0.01%)<sup>[5508]</sup>, RI BEN XIAO BO *Berberis thunbergii*, SAN JIAO YE HUANG LIAN *Coptis deltoidea* (rhizome: mean content = 0.98%)<sup>[5508]</sup>, SHAO CHI XIAO BO *Berberis potaninii* (root, stem: mean content = 0.144%)<sup>[5508]</sup>, SHI DA GONG LAO MU *Mahonia bealei* (stem: mean content of 4 origins 0.11%)<sup>[5510]</sup>, TIAN XIAN TENG *Fibraurea recisa* (dried lianoid stem: content = 2.71%)<sup>[5508]</sup>, WANG CHUN YU LAN *Magnolia biondii* [Syn. *Magnolia fargesii*] (stem: mean content of 4 origins = 0.19%)<sup>[5510]</sup>, XI BING SHI DA GONG LAO *Mahonia gracilipes* (stem: mean content of 4 origins = 0.14%)<sup>[5510]</sup>, XI YE GONG LAO MU *Mahonia fortunei* (stem: mean content of 4 origins = 0.05%)<sup>[5510]</sup>, XI YE GONG LAO YE *Mahonia fortunei*, XI YE XIAO BO *Berberis poiretii*, XIA TIAN WU *Corydalis decumbens* [Syn. *Corydalis amabilis*] (rhizome: content = 0.07%)<sup>[5508]</sup>, XIA XU TANG SONG CAO *Thalictrum atriplex* (root: content < 0.001%)<sup>[5508]</sup>, XIAN E HUANG LIAN *Coptis linearisepala* (rhizome: content = 0.85%)<sup>[5508]</sup>, XIAN HUANG XIAO BO *Berberis diaphana* (root and stem: mean content = 0.082%)<sup>[5508]</sup>, XIAO BO *Berberis amurensis*, XIAO GUO SHI DA GONG LAO *Mahonia bodinieri* (stem: content = 0.13%)<sup>[5510]</sup>, XIAO GUO TANG SONG CAO *Thalictrum microgynum* (root: content < 0.001%)<sup>[5508]</sup>, YAN GUO CAO *Thalictrum thunbergii* (root: content < 0.001%)<sup>[5508]</sup>, YAN HU SUO *Corydalis yanhusuo* [Syn. *Corydalis turtschaninovii* f. *Yanhusuo*] (rhizome: mean content of 5 origins = 0.080%)<sup>[5508]</sup>, YING SHUI HUANG LIAN *Thalictrum simplex* [Syn. *Thalictrum simplex* var. *brevipes*] (root: content < 0.001%)<sup>[5508]</sup>, YUN NAN HUANG LIAN *Coptis teetoides* [Syn. *Coptis teeta*] (rhizome: mean content = 0.69%)<sup>[5508]</sup>, ZHI YI XIAO BO *Berberis dubia* (root and stem: mean content = 0.182%)<sup>[5508]</sup>, occurs in many plants (mostly in *Berberis* spp. and *Mahonia* spp. in family Berberidaceae spp.; but spread into many families). Ref: 2, 4, 408, 658, 660, 5501, 5508, 5510.

**16556 Palmidin A**

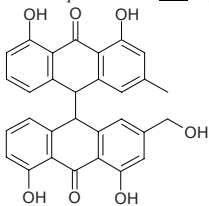
[17062-55-4] C<sub>30</sub>H<sub>22</sub>O<sub>8</sub> (510.51). Source: DA HUANG *Rheum officinale*, TANG GU TE DA HUANG *Rheum tanguticum*, ZHANG YE DA HUANG *Rheum palmatum*. Ref: 2, 660.



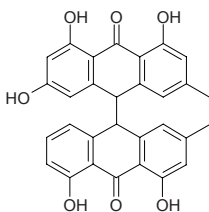


**16557 Palmidin B**

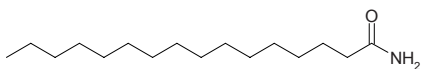
[17062-56-5] C<sub>30</sub>H<sub>22</sub>O<sub>7</sub> (494.51). Source: DA HUANG *Rheum officinale*, TANG GU TE DA HUANG *Rheum tanguticum*, ZHANG YE DA HUANG *Rheum palmatum*. Ref: 2, 660.

**16558 Palmidin C**

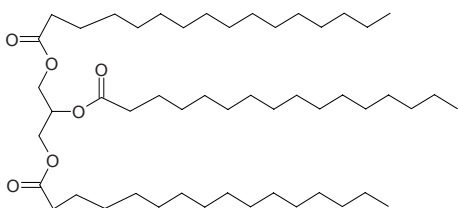
[17177-86-5] C<sub>30</sub>H<sub>22</sub>O<sub>7</sub> (494.51). Source: DA HUANG *Rheum officinale*, OU SHU LI *Rhamnus frangula* [Syn. *Frangula alnus*], TANG GU TE DA HUANG *Rheum tanguticum*, ZHANG YE DA HUANG *Rheum palmatum*. Ref: 2, 660, 1521.

**16559 Palmitamide**

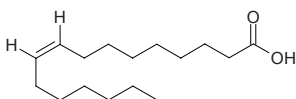
Hexadecanamide [629-54-9] C<sub>16</sub>H<sub>33</sub>NO (255.45). mp 106~107°C, bp 235~236°C/12mmHg. Source: BAI JIANG CAN *Bombyx mori*, XIANG ROU GUO *Casimiroa edulis*. Ref: 1521, 3127.

**16560 Palmitin**

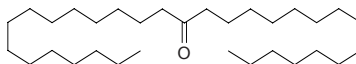
[555-44-2] C<sub>51</sub>H<sub>98</sub>O<sub>6</sub> (807.35). Source: REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. Ref: 2.

**16561 Palmitoleic acid**

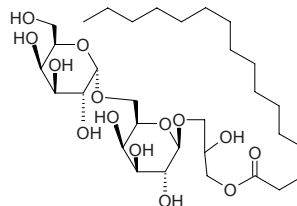
*cis*-9-Hexadecenoic acid [373-49-9] C<sub>16</sub>H<sub>30</sub>O<sub>2</sub> (254.42). Pharm: A major component of lipids of marine plants and animals, also found in plant oils, eg. *Macadamia ternifolia* (small-fruited Macadamia nut) seed oil (20%) Source: AO ZHOU JIAN GUO *Macadamia ternifolia* (seed oil, 20%), BAN WEN LU HUI *Aloe vera* var. *chinensis*, CU LIU GUO *Hippophae rhamnoides*, GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], GUA LOU *Trichosanthes kirilowii*, MAN JING ZI *Vitex trifolia*, SHUANG BIAN GUA LOU *Trichosanthes rosthornii* [Syn. *Trichosanthes uniflora*], XING REN *Prunus armeniaca*, YI ZHI REN *Alpinia oxyphylla* (fruit: yield = 0.0095%dw)<sup>[4655]</sup>, YOU ZONG *Elaeis guineensis*. Ref: 2, 658, 660, 1521, 4655.

**16562 Palmitone**

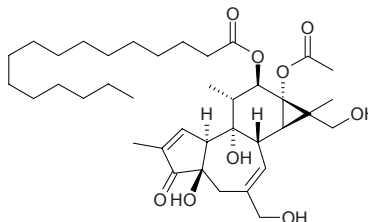
[502-73-8] C<sub>31</sub>H<sub>62</sub>O (450.84). mp 82.8°C. Source: ZHEN CAI *Litsea pungens*. Ref: 6.

**16563 1'-O-Palmitoyl-3'-O-(6-O-α-D-galactopyranosyl-β-D-galactopyranosyl)glycerol**

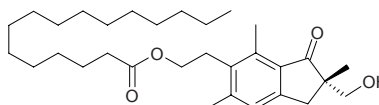
C<sub>31</sub>H<sub>58</sub>O<sub>14</sub> (654.80). Source: KONG SHI CHUN *Ulva pertusa*. Ref: 3128.

**16564 12-O-Palmitoyl-16-hydroxyphorbol-13-acetate**

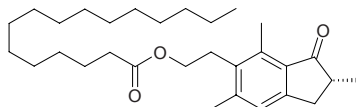
C<sub>38</sub>H<sub>60</sub>O<sub>9</sub> (660.90). Pharm: Fish toxin. Source: TONG YOU *Aleurites cordata* [Syn. *Aleurites fordii*] (fruit). Ref: 658.

**16565 Palmitoylpterosin A**

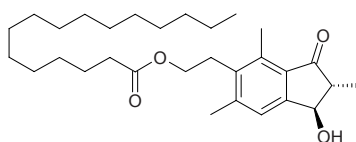
C<sub>31</sub>H<sub>50</sub>O<sub>4</sub> (486.74). mp 50~51°C. Source: JUE *Pteridium aquilinum* var. *latiusculum*. Ref: 6, 1521.

**16566 Palmitoylpterosin B**

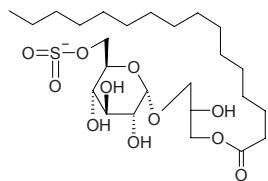
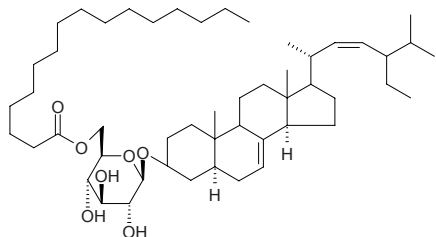
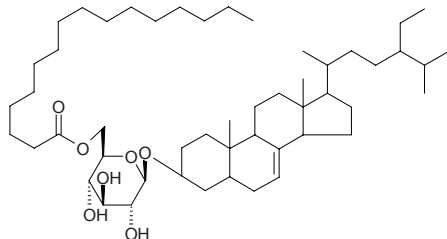
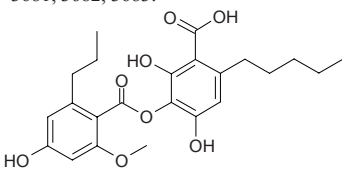
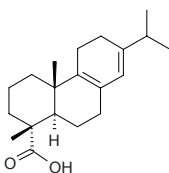
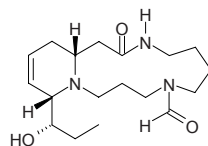
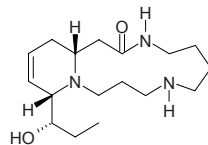
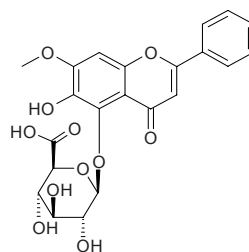
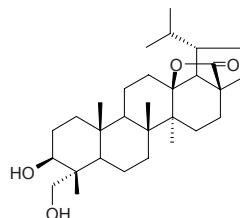
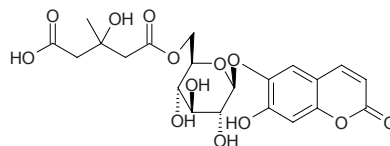
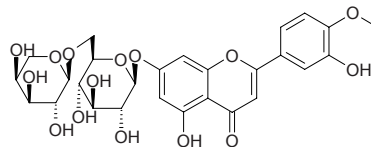
C<sub>30</sub>H<sub>48</sub>O<sub>3</sub> (456.72). mp 51~52°C. Source: JUE *Pteridium aquilinum* var. *latiusculum*. Ref: 6, 1521.

**16567 Palmitoylpterosin C**

C<sub>30</sub>H<sub>48</sub>O<sub>4</sub> (472.71). mp 95~97°C. Source: JUE *Pteridium aquilinum* var. *latiusculum*. Ref: 6, 1521.

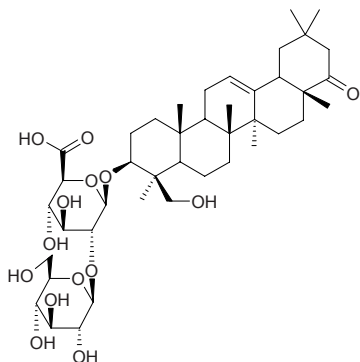




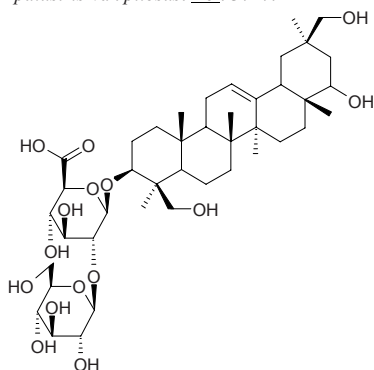
**16568 1'-O-Palmitoyl-3'-O-(6-sulfo-O- $\alpha$ -D-quinovopyranosyl)glycerol**C<sub>25</sub>H<sub>47</sub>O<sub>11</sub>S (555.71). Source: KONG SHI CHUN *Ulva pertusa*. Ref: 3128.**16569 6'-Palmityl- $\alpha$ -spinasteryl- $\beta$ -D-glucoside**C<sub>51</sub>H<sub>88</sub>O<sub>7</sub> (813.27). Source: MEI SHANG LU *Phytolacca americana* [Syn. *Phytolacca decandra*]. Ref: 2960.**16570 6'-Palmityl- $\Delta^7$ -spinasteryl- $\beta$ -D-glucoside**C<sub>51</sub>H<sub>90</sub>O<sub>7</sub> (815.28). Source: MEI SHANG LU *Phytolacca americana* [Syn. *Phytolacca decandra*]. Ref: 2960.**16571 Paludolic acid**[19833-81-9] C<sub>23</sub>H<sub>28</sub>O<sub>8</sub> (432.47). Colorless needles (cyclohexane–benzene–EtOAc), mp 170–171°C. Pharm: Anti-inflammatory (rbt kidney microsomes, ostaglandin biosynthesis inhibitor, IC<sub>50</sub> = 1.0 μmol/L, control Indometacin, IC<sub>50</sub> = 4.9 μmol/L, Aspirin, IC<sub>50</sub> = 2.0 μmol/L); Source: LA BA FEN SHI RUI *Cladonia chlorophaea*, ZHAO ZE SHU HUA *Ramalina paludosa*. Ref: 3680, 3681, 3682, 3683.**16572 Palustric acid**8,13-Abietadien-18-oic acid [1945-53-5] C<sub>20</sub>H<sub>30</sub>O<sub>2</sub> (302.46). Crystals (methanol), mp 162–167°C, [α]<sub>D</sub> = +71.6° (ethanol). Pharm: Platelet aggregation inhibitor (rbt, due to PAF, ADP and calcium); insect antifeedant (*Neodiprion species*). Source: SONG XIANG *Pinus massoniana*. Ref: 900.**16573 Palustridine**[22324-43-2] C<sub>18</sub>H<sub>31</sub>N<sub>3</sub>O<sub>3</sub> (337.47). Source: GU JIE CAO *Equisetum palustre*. Ref: 6.**16574 Palustrine**[22324-44-3] C<sub>17</sub>H<sub>31</sub>N<sub>3</sub>O<sub>2</sub> (309.46). Source: MU ZEI *Equisetum hiemale*. Ref: 2.**16575 Palustrinoside**[29673-46-9] C<sub>22</sub>H<sub>20</sub>O<sub>11</sub> (460.40). Source: GUANG YE SHUI SU *Stachys palustris*. Ref: 6.**16576 Palustrolide**[93772-37-3] C<sub>30</sub>H<sub>48</sub>O<sub>4</sub> (472.71). Crystals (MeOH), mp 310°C (dec). Source: MA TI YE *Caltha palustris*. Ref: 3129.**16577 Palustroside**[132923-05-8] C<sub>21</sub>H<sub>24</sub>O<sub>13</sub> (484.42). Source: LA BA CHA *Ledum palustre*. Ref: 913, 1521.**16578 Palustroside‡**[26931-72-6] C<sub>27</sub>H<sub>30</sub>O<sub>15</sub> (594.53). mp 178–180°C. Source: PENG ZI CAI *Galium verum*. Ref: 6.

**16579 Palustroside I**

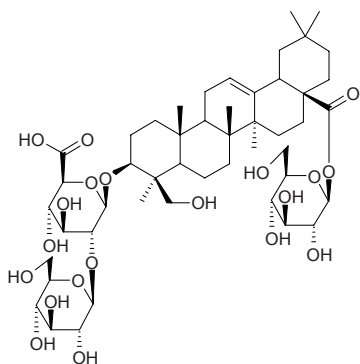
[214692-84-9] C<sub>42</sub>H<sub>66</sub>O<sub>14</sub> (794.99). White powder,  $[\alpha]_D^{25} = -9.8^\circ$  ( $c = 0.52$ , pyridine:H<sub>2</sub>O = 1:1). **Pharm:** Inhibits liver damage (culture rat liver cell, *in vitro* immunoassay of liver damage, 90 $\mu$ mol/L protective rate = 46%, 200 $\mu$ mol/L protective rate = 86%). **Source:** ROU MAO SHAN LI DOU *Lathyrus palustris* var. *pilosus*. **Ref:** 3727.

**16580 Palustroside II**

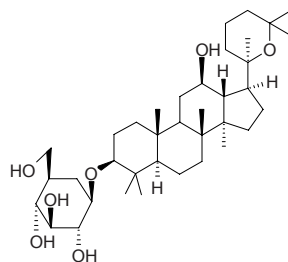
[214692-91-8] C<sub>42</sub>H<sub>68</sub>O<sub>15</sub> (813.00). White powder,  $[\alpha]_D^{25} = +0.50^\circ$  ( $c = 0.68$ , pyridine). **Pharm:** Inhibits liver damage (culture rat liver cell, *in vitro* immunoassay of liver damage, 200 $\mu$ mol/L protective rate = 54%, 500 $\mu$ mol/L protective rate = 81%). **Source:** ROU MAO SHAN LI DOU *Lathyrus palustris* var. *pilosus*. **Ref:** 3727.

**16581 Palustroside III**

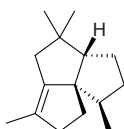
[214692-99-6] C<sub>48</sub>H<sub>76</sub>O<sub>20</sub> (973.13). White powder,  $[\alpha]_D^{25} = -4.6^\circ$  ( $c = 0.52$ , pyridine:H<sub>2</sub>O = 1:1). **Pharm:** Inhibits liver damage (culture rat liver cell, *in vitro* immunoassay of liver damage, 200 $\mu$ mol/L protective rate = 26%, 500 $\mu$ mol/L protective rate = 62%). **Source:** ROU MAO SHAN LI DOU *Lathyrus palustris* var. *pilosus*. **Ref:** 3727.

**16582 Panacon**

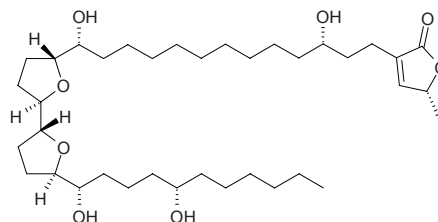
C<sub>37</sub>H<sub>64</sub>O<sub>7</sub> (620.92). **Source:** REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. **Ref:** 6.

**16583 Panaginsene**

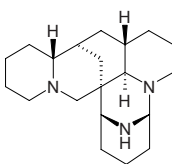
(1*S*\*,8*S*\*,11*R*\*)-4,7,7,11-Tetramethyl-tricyclo[6.3.0.0<sup>1,5</sup>]-undec-4-ene C<sub>15</sub>H<sub>24</sub> (204.36). **Source:** REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. **Ref:** 5330.

**16584 Panalicin**

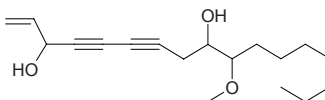
[133594-25-9] C<sub>37</sub>H<sub>66</sub>O<sub>8</sub> (638.93). Waxy solid. **Pharm:** Antimicrobial; anthelmintic. **Source:** NA ER ZI YU PAN *Uvaria narum*. **Ref:** 3684, 3685.

**16585 Panamine**

[2448-27-3] C<sub>20</sub>H<sub>33</sub>N<sub>3</sub> (315.51). Liquid,  $[\alpha]_D = -11^\circ$ , autoxidises in air. **Source:** *Ormosia* spp. **Ref:** 1521.

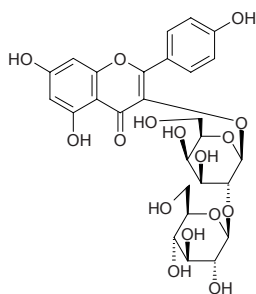
**16586 Panaquinquecol 1**

PQ-1; 10-Methoxyheptadeca-1-ene-4,6-diyn-3,9-diol [133921-57-0] C<sub>18</sub>H<sub>28</sub>O<sub>3</sub> (292.42). Oil,  $[\alpha]_D = -21.7^\circ$  ( $c = 0.58$ , methanol). **Pharm:** Cytotoxic (L<sub>1210</sub>, 0.5~1.0 $\mu$ g/mL, InRt = 100%). **Source:** XI YANG SHEN *Panax quinquefolium*. **Ref:** 2, 1017, 1521.

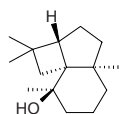


**16587 Panasenoid**

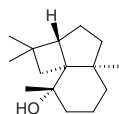
Kaempferol-3-*O*-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-galactopyranoside] [31512-06-8] C<sub>27</sub>H<sub>30</sub>O<sub>16</sub> (610.53). Crystals (EtOH), mp 225–228°C (dec). **Pharm:** Neuroprotective (primary cultures of rat cortical cells, induced by *L*-glutamate, 0.1  $\mu$ mol/L, cell viability = (4.6 $\pm$ 3.6)%), 1.0  $\mu$ mol/L, cell viability = (27.0 $\pm$ 4.9)%,  $p < 0.05$ , 10  $\mu$ mol/L, cell viability = (25.2 $\pm$ 3.6)%,  $p < 0.05$ )<sup>[3027]</sup>; anti-HIV-1 (RT (RDDP) inhibitor, IC<sub>50</sub> > 100  $\mu$ mol/L, positive control Adriamycin, IC<sub>50</sub> = 27  $\mu$ mol/L; DDDP inhibitor, IC<sub>50</sub> > 100  $\mu$ mol/L, positive control Adriamycin, IC<sub>50</sub> = 6  $\mu$ mol/L; HIV-1 IN inhibitor, IC<sub>50</sub> = 59  $\mu$ mol/L, positive control Suramin, IC<sub>50</sub> = 2.4  $\mu$ mol/L)<sup>[4187]</sup>. **Source:** BAI HUA SHE SHE CAO *Oldenlandia diffusa* [Syn. *Hedyotis diffusa*] (whole herb: yield = 0.00041%)<sup>[3027]</sup>, HUANG HAO *Artemisia scoparia* [Syn. *Artemisia capillaris* var. *scoparia*], HUANG HUA JIA ZHU TAO *Thevetia neriifolia* [Syn. *Thevetia peruviana*] (leaf), LAN SHAI PIAO *Sambucus sieboldiana*, QING LIANG BAI HE *Lilium candidum*, REN SHEN YE *Panax ginseng* [Syn. *Panax schinseng*], *Hypericum* spp. **Ref:** 660, 3027, 3121, 3130, 3131, 4187.

**16588 Panasinsanol A**

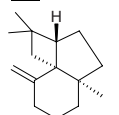
[80374-27-2] C<sub>15</sub>H<sub>26</sub>O (222.37). Oil, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -51.9° ( $c = 0.54$ , CHCl<sub>3</sub>). **Source:** REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. **Ref:** 3132.

**16589 Panasinsanol B**

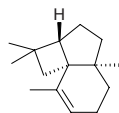
[109785-99-1] C<sub>15</sub>H<sub>26</sub>O (222.37). Oil, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -44.3° ( $c = 0.70$ , CHCl<sub>3</sub>). **Source:** REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. **Ref:** 3132.

**16590  $\beta$ -Panasinsene**

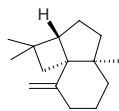
C<sub>15</sub>H<sub>24</sub> (204.36). **Source:** REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. **Ref:** 5330.

**16591  $\alpha$ -Panasinsene**

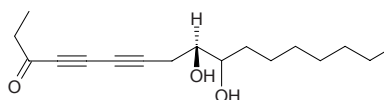
10-Panasinsanene [56633-28-4] C<sub>15</sub>H<sub>24</sub> (204.36). Oil. **Source:** REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. **Ref:** 2616.

**16592  $\beta$ -Panasinsene**

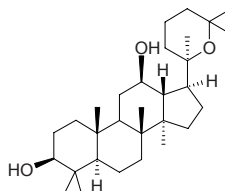
3(15)-Panasinsanene [56684-97-0] C<sub>15</sub>H<sub>24</sub> (204.36). Oil. [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -3°C (MeOH). **Source:** REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. **Ref:** 2616.

**16593 Panaxacol**

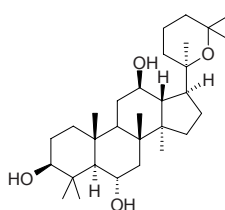
[106828-96-0] C<sub>17</sub>H<sub>26</sub>O<sub>3</sub> (278.39). Colorless solid, rapid polymerization at room temperature, [ $\alpha$ ]<sub>D</sub><sup>22</sup> = +19.5° ( $c = 1.0$ , MeOH). **Pharm:** Antineoplastic (Yoshida sarcoma, 10  $\mu$ g/mL, InRt = 95%, 25  $\mu$ g/mL *in vitro*, InRt = 100%). **Source:** REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. **Ref:** 3728, 3729.

**16594 Panaxadiol**

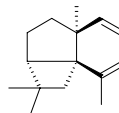
[19666-76-3] C<sub>30</sub>H<sub>52</sub>O<sub>3</sub> (460.75). mp 250°C. **Source:** JIAO GU LAN *Gynostemma pentaphyllum* (dried whole herb: content = 0.5345%)<sup>[5508]</sup>, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*] (root: content = 1.92 $\pm$ 2.10%)<sup>[5508]</sup>. **Ref:** 6, 5508.

**16595 Panaxatriol**

[32791-84-7] C<sub>30</sub>H<sub>52</sub>O<sub>4</sub> (476.75). mp 238–239°C. **Source:** REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*] (root: content = 2.71 $\pm$ 1.36%)<sup>[5508]</sup>. **Ref:** 6, 5508.

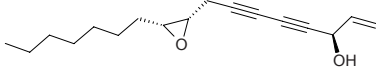
**16596 Panaxene**

(1*R*\*,2*S*\*,5*S*\*)-2-Ethenyl-1-(1-methylethenyl)-2,6,6-trimethylbicyclo[3.2.0]heptane C<sub>15</sub>H<sub>24</sub> (204.36). **Source:** REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. **Ref:** 5330.

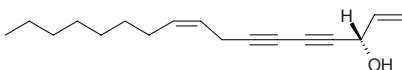


**16597 Panaxydol**[72800-72-7] C<sub>17</sub>H<sub>24</sub>O<sub>2</sub> (260.38). Yellow oil, [ $\alpha$ ]<sub>D</sub> = -19.5° (c = 0.7, MeOH).

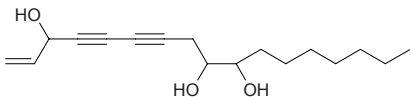
**Pharm:** Antibacterial (strongly inhibits *Staphylococcus aureus*); cytotoxic (tissue culture *in vitro*, inhibits growth of leukaemia cells). **Source:** REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*], XI YANG SHEN *Panax quinquefolium*, *Niphogeton ternata*. **Ref:** 1570, 2995, 4156.

**16598 Panaxynol**

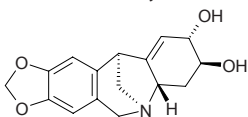
[81203-57-8] C<sub>17</sub>H<sub>24</sub>O (244.38). **Pharm:** Antibacterial (*Staphylococcus aureus*); allergenic; dermatitic (causes contact dermatitis). **Source:** SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*], SAN QI HUA LEI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*] (flower bud: yield = 0.011%dw). **Ref:** 658, 1570, 4702.

**16599 Panaxytriol**

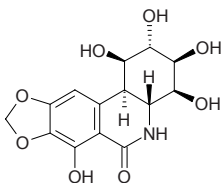
[87005-03-6] C<sub>17</sub>H<sub>26</sub>O<sub>3</sub> (278.39). Colorless lamellar crystals, mp 78~79°C. **Pharm:** Antiviral (EBV); cytotoxic (MK1, B16 melanoma, L929, SW620 and HeLa); antihypercholesterolemic (inhibits cholesterol and LDL and relates to cholesterae transfer protein, IC<sub>50</sub> = 35µg/mL). **Source:** REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. **Ref:** 2, 900.

**16600 (-)-Pancracine**

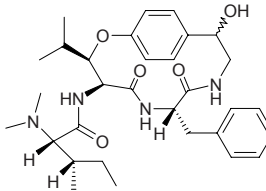
C<sub>16</sub>H<sub>17</sub>NO<sub>4</sub> (287.32). **Pharm:** Antibacterial (*Staphylococcus aureus*, IZD = 22mm, MIC = 188µg/mL; *Pseudomonas aeruginosa*, IZD = 16mm); antifungal (*Candida albicans*, IZD = 15mm, MIC = 188µg/mL). **Source:** GU TING HUA *Amaryllis belladonna* (bulb). **Ref:** 3829.

**16601 Pancratistatin**

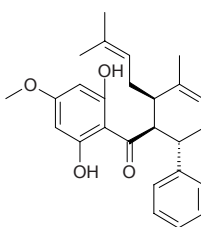
[96203-70-2] C<sub>14</sub>H<sub>15</sub>NO<sub>8</sub> (325.28). **Pharm:** Cytotoxic (P<sub>388</sub> *in vitro*, ED<sub>50</sub> = 0.01µg/mL, P<sub>388</sub> *in vivo*, 0.75~12.5mg/kg, biotic prolonged rate = (38~106)%; also effective to M5076 ovarian sarcoma); antineoplastic (shows high antineoplastic activity in NCI's 60 tumor system, the highest activity is of melanotic carcinoma, also shows high activity for carcinoma in brain, colon, lung and kidney, in stage of pre-clinic); antiviral (RNA virus, B encephalitis affected mus, after injection survival rate increases 100%; also effective to yellow fever virus and bunyavirus). **Source:** FENG YU HUA *Zephyranthes grandiflora* [Syn. *Zephyranthes carinata*]. **Ref:** 658, 1804, 1805, 1806, 1807.

**16602 Pandamine**

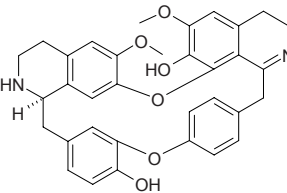
[10233-81-5] C<sub>31</sub>H<sub>44</sub>N<sub>4</sub>O<sub>5</sub> (552.72). **Pharm:** Inhibits oxidative phosphorylation (plants). **Source:** *Panda oleosa*. **Ref:** 658.

**16603 Panduratin A**

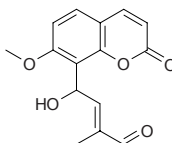
C<sub>26</sub>H<sub>30</sub>O<sub>4</sub> (406.53). **Pharm:** Anti-inflammatory (*in vitro*, NO production inhibitor, IC<sub>50</sub> = 0.0175µmol/L; PGE<sub>2</sub> production inhibitor, IC<sub>50</sub> = 0.0195µmol/L; suppresses both iNOS and COX-2 enzyme expression without any appreciable cytotoxic effect on RAW264.7 cells in a dose-dependent manner). **Source:** TI QIN ZHUANG SHAN NAI *Kaempferia pandurata*. **Ref:** 5488.

**16604 Pangkorimine**

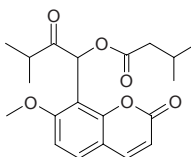
C<sub>34</sub>H<sub>32</sub>N<sub>2</sub>O<sub>6</sub> (564.64). **Pharm:** Antitrypanosomal (inhibits trypanosome form of *Trypanosoma cruzi*, strain Y, IC<sub>50</sub> = 114.8µg/mL, IC<sub>90</sub> = 245.9µg/mL); antimalarial (*Plasmodium falciparum* D6, LC<sub>50</sub> = 134.7ng/mL, SI = 19; *Plasmodium falciparum* W2, LC<sub>50</sub> = 284.5ng/mL, SI = 9); cytotoxic (KB, LC<sub>50</sub> = 2600ng/mL). **Source:** *Gutteria boliviana* (stem cortex). **Ref:** 3976.

**16605 Panial**

[112606-74-3] C<sub>15</sub>H<sub>14</sub>O<sub>5</sub> (274.28). Oil, [ $\alpha$ ]<sub>D</sub> = -6.8° (c = 0.074, CHCl<sub>3</sub>). **Source:** JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*]. **Ref:** 2810.

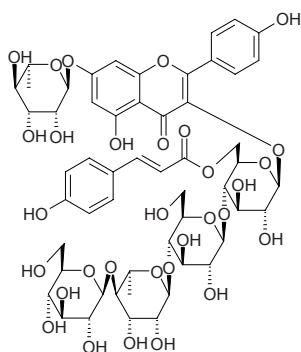
**16606 Paniculatin**

[36072-13-6] C<sub>20</sub>H<sub>24</sub>O<sub>6</sub> (360.41). mp 263°C. **Source:** JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*]. **Ref:** 6.

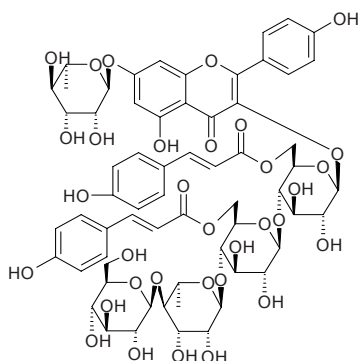


**16607 Panicalatonoid A**

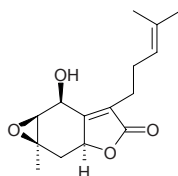
$C_{54}H_{66}O_{31}$  (1211.11). Yellow solid, mp 210~212°C. Source: LUAN SHU *Koelerutera paniculata*. Ref: 846.

**16608 Panicalatonoid B**

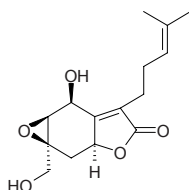
$C_{63}H_{72}O_{33}$  (1357.26). Yellow solid, mp 200~201°C. Source: LUAN SHU *Koelerutera paniculata*. Ref: 846.

**16609 Paniculide A**

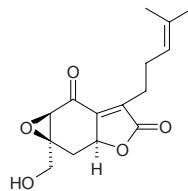
[21764-32-9]  $C_{15}H_{20}O_4$  (264.32). Source: CHUAN XIN LIAN *Andrographis paniculata* [Syn. *Justicia paniculata*]. Ref: 2, 1521.

**16610 Paniculide B**

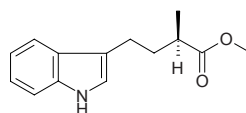
[21764-33-0]  $C_{15}H_{20}O_5$  (280.32). Source: CHUAN XIN LIAN *Andrographis paniculata* [Syn. *Justicia paniculata*]. Ref: 2, 1521.

**16611 Paniculide C**

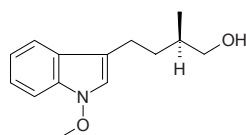
[21764-34-1]  $C_{15}H_{18}O_5$  (278.31). Source: CHUAN XIN LIAN *Andrographis paniculata* [Syn. *Justicia paniculata*]. Ref: 2, 1521.

**16612 Paniculidine A**

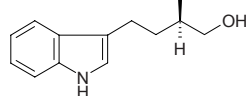
[97399-93-4]  $C_{14}H_{17}NO_2$  (231.30). Oil,  $[\alpha]_D^{24} = -31.9^\circ$  ( $c = 0.1$ ,  $CHCl_3$ ). Source: JIU LI XIANG GEN *Murraya paniculata* [Syn. *Chalcas paniculata*]. Ref: 3133.

**16613 Paniculidine B**

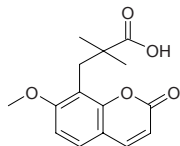
[97399-94-5]  $C_{14}H_{19}NO_2$  (233.31). Oil,  $[\alpha]_D^{20} = +21^\circ$  ( $c = 0.025$ ,  $CHCl_3$ ). Source: JIU LI XIANG GEN *Murraya paniculata* [Syn. *Chalcas paniculata*]. Ref: 3133.

**16614 Paniculidine C**

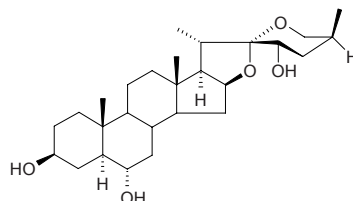
Paniculol [97399-95-6]  $C_{13}H_{17}NO$  (203.29). Oil,  $[\alpha]_D^{20} = +45^\circ$  ( $c = 0.035$ ,  $CHCl_3$ ). Source: JIU LI XIANG GEN *Murraya paniculata* [Syn. *Chalcas paniculata*]. Ref: 3133.

**16615 Paniculin**

[112397-12-3]  $C_{15}H_{16}O_5$  (276.29). Needles (MeOH), mp 236~238°C. Source: JIU LI XIANG GEN *Murraya paniculata* [Syn. *Chalcas paniculata*]. Ref: 1336.

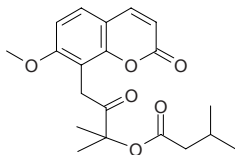
**16616 Paniculogenin**

[16750-37-1]  $C_{27}H_{44}O_5$  (448.65). mp 214~216°C. Source: SHUI QIE *Solanum torvum*. Ref: 6.

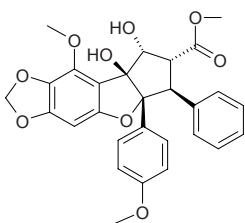


**16617 Paniculonol isovalerate**

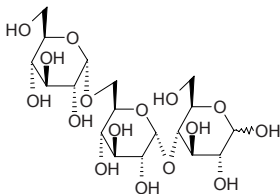
$C_{20}H_{24}O_6$  (360.41). Oil. Source: JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*]. Ref: 3134.

**16618 Pannellin**

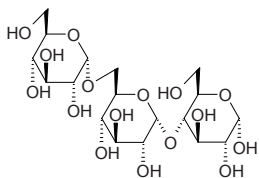
$C_{28}H_{26}O_9$  (506.51). Pharm: Insecticidal (neonate larvae of *Spodoptera littoralis*, survival rate  $LC_{50} = 2.1\mu\text{g/g}$ , control Azadirachtin, survival rate  $LC_{50} = 6.1\mu\text{g/g}$ ; growth inhibition  $EC_{50} = 0.24\mu\text{g/g}$ , Azadirachtin, growth inhibition  $EC_{50} = 0.11\mu\text{g/g}$ )<sup>[2355]</sup>. Source: KE SHI MI ZI LAN *Aglaia edulis*. Ref: 2355.

**16619 Panose**

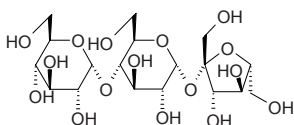
[33401-87-5]  $C_{18}H_{32}O_{16}$  (504.45). Source: XI YANG SHEN *Panax quinquefolium*. Ref: 2, 1521.

**16620 Panose B**

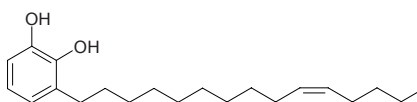
$C_{18}H_{32}O_{16}$  (504.45). Source: XI YANG SHEN *Panax quinquefolium*. Ref: 2.

**16621 Panose C**

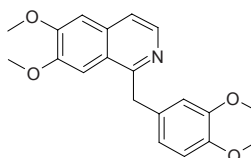
$C_{18}H_{32}O_{16}$  (504.45). Source: XI YANG SHEN *Panax quinquefolium*. Ref: 2.

**16622 3-(Pantadec-10-enyl)-catechol**

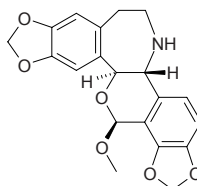
[83532-37-0]  $C_{21}H_{34}O_2$  (318.50). Colorless oil. Pharm: Sensitizer (hmn). Source: SHENG MU *Lithraea caustica*, YI YE ROU TUO GUO *Semecarpus heterophylla*. Ref: 1521, 3693.

**16623 Papaverine**

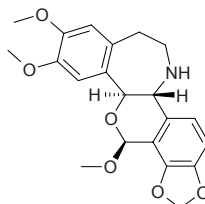
6,7-Dimethoxy-1-veratrylisoquinoline [58-74-2]  $C_{20}H_{21}NO_4$  (339.39). Needles, mp 147~148°C, soluble in ethanol, acetone, hot benzene, slightly soluble in water.<sup>[5507]</sup> Pharm: Antineoplastic; antitussive; choleric; platelet aggregation inhibitor; smooth muscle relaxant (hmn, dog); intestinal smooth muscle relaxant (*in vitro*, rat ileum, 1μg/mL, relaxant effect = (28.6±7.3)%,  $p < 0.05$ )<sup>[5002]</sup>; LD<sub>50</sub> (mus, iv) = 46.3mg/kg, (rat, orl) = 750mg/kg, (mus, orl) = 528mg/kg. Source: BAI HUA YING SU *Papaver album*, BAI YAO ZI *Stephania cepharantha*, YA PIAN *Papaver somniferum* (latex from unripe capsules: content scope = 0.8%~1.0%)<sup>[5507]</sup>, YIN DU LUO FU MU *Rauwolfia serpentina*, YING SU *Papaver somniferum*, YING SU KE *Papaver somniferum*. Ref: 4, 5, 6, 658, 5002, 5507.

**16624 Papaverrubine A**

[6807-93-8]  $C_{20}H_{19}NO_6$  (369.38). mp 223~225°C,  $[\alpha]_D^{22} = +406^\circ$  ( $c = 0.978$ ,  $CHCl_3$ ). Source: HUO XIANG YE LV RONG HAO *Meconopsis betonicifolia*, LI CHUN HUA *Papaver commutatum* [Syn. *Papaver rhoeas*], *Papaver* spp. Ref: 1521, 2993.

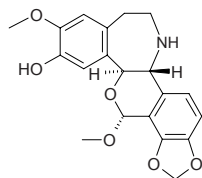
**16625 Papaverrubine B**

[5140-39-6]  $C_{21}H_{23}NO_6$  (385.42). Crystals (MeOH), mp 202~204°C, 201~203°C,  $[\alpha]_D = +398^\circ$  ( $CHCl_3$ ). Source: BO SI YING SU *Papaver persicum*, CHANG GUO YING SU *Papaver dubium*, DA HONG YING SU *Papaver bracteatum*, GAO JIA SUO YING SU *Papaver caucasicum*, GAO SHAN YING SU *Papaver alpinum*, JIN DONG YING SU *Papaver orientale*, LI CHUN HUA *Papaver commutatum* [Syn. *Papaver rhoeas*], YE YING SU *Papaver nudicaule*, YA PIAN *Papaver somniferum*. Ref: 6, 1521.

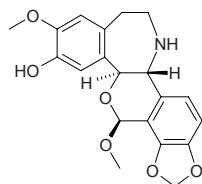


**16626 Papaverrubine C**

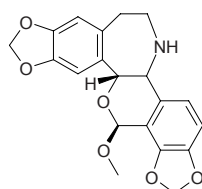
[22584-46-9] C<sub>20</sub>H<sub>21</sub>NO<sub>6</sub> (371.39). Prisms (C<sub>6</sub>H<sub>6</sub>-pet. ether), mp 190–191.5°C, [ $\alpha$ ]<sub>D</sub> = +283° (CHCl<sub>3</sub>). Source: HUO XIANG YE LV RONG HAO *Meconopsis betonicifolia*, YA PIAN *Papaver somniferum*. Ref: 6, 1521.

**16627 Papaverrubine D**

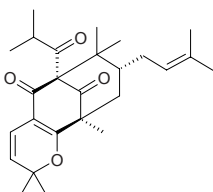
Porphyroxine [18104-24-0] C<sub>20</sub>H<sub>21</sub>NO<sub>6</sub> (371.39). Needles (MeOH), mp 237–239°C, 234–236°C, [ $\alpha$ ]<sub>D</sub> = +391° (CHCl<sub>3</sub>). Source: DUO CI LV RONG HAO *Meconopsis horridula*, HUO XIANG YE LV RONG HAO *Meconopsis betonicifolia*, LI CHUN HUA *Papaver commutatum* [Syn. *Papaver rhoeas*], NI BO ER LV RONG HAO *Meconopsis nepaulensis*, YA PIAN *Papaver somniferum*, *Meconopsis* spp., *Papaver* spp. Ref: 6, 660, 1521, 2979, 2993.

**16628 Papaverrubine E**

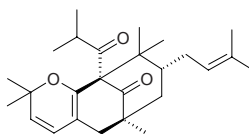
[6807-95-0] C<sub>20</sub>H<sub>19</sub>NO<sub>6</sub> (369.38). mp 230–231°C, [ $\alpha$ ]<sub>D</sub> = +331° (CHCl<sub>3</sub>). Source: DUO CI LV RONG HAO *Meconopsis horridula*, LI CHUN HUA *Papaver commutatum* [Syn. *Papaver rhoeas*], NI BO ER LV RONG HAO *Meconopsis nepaulensis*, YA PIAN *Papaver somniferum*, GUAN ZHUANG MEI YIN SU *Bocconia frutescens*, *Meconopsis* spp., *Papaver* spp. Ref: 660, 1521, 2993, 2979.

**16629 Papuaforin A**

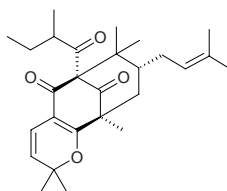
C<sub>26</sub>H<sub>36</sub>O<sub>4</sub> (412.57). Pharm: Antioxidant inactive (PMN cellular chemiluminescence assay, FMLP-induced and OZ-induced oxidative burst). Source: *Hypericum papuanum*. Ref: 5371.

**16630 Papuaforin B**

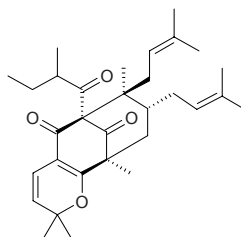
C<sub>26</sub>H<sub>38</sub>O<sub>3</sub> (398.59). Pharm: Antioxidant inactive (PMN cellular chemiluminescence assay, FMLP-induced and OZ-induced oxidative burst). Source: *Hypericum papuanum*. Ref: 5371.

**16631 Papuaforin C**

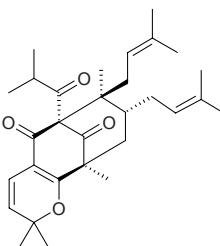
C<sub>27</sub>H<sub>38</sub>O<sub>4</sub> (426.60). Pharm: Antioxidant inactive (PMN cellular chemiluminescence assay, FMLP-induced and OZ-induced oxidative burst)<sup>[5371]</sup>. Source: *Hypericum papuanum*. Ref: 5371.

**16632 Papuaforin D**

C<sub>31</sub>H<sub>44</sub>O<sub>4</sub> (480.69). Pharm: Antioxidant inactive (PMN cellular chemiluminescence assay, FMLP-induced and OZ-induced oxidative burst)<sup>[5371]</sup>. Source: *Hypericum papuanum*. Ref: 5371.

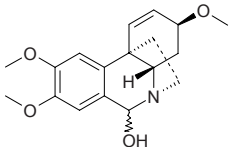
**16633 Papuaforin E**

C<sub>30</sub>H<sub>42</sub>O<sub>4</sub> (466.67). Pharm: Antioxidant (PMN cellular chemiluminescence assay, reduces oxidative burst FMLP-induced, IC<sub>50</sub> = (8.0±1.0)μmol/L, control Quercetin, IC<sub>50</sub> = (0.5±0.1)μmol/L; OZ-induced, inactive)<sup>[5371]</sup>. Source: *Hypericum papuanum*. Ref: 5371.

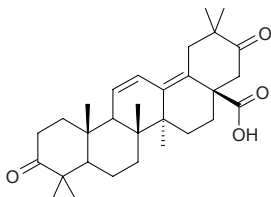


**16634 Papyramine**

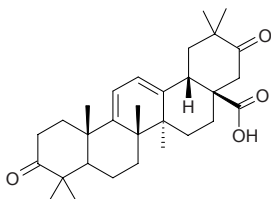
[81149-33-9] C<sub>18</sub>H<sub>23</sub>NO<sub>4</sub> (317.39). mp 137~138°C. Pharm: Cytotoxic (hmn lymphoma Molt4, ED<sub>50</sub> = 15.8µg/mL, mus fibrocyte LMTK, ED<sub>50</sub> = 1.5µg/mL, hmn hepatoma HepG2, ED<sub>50</sub> = 17µg/mL). Source: SHUI XIAN GEN *Narcissus tazetta* var. *chinensis*. Ref: 6, 1847.

**16635 Papyriogenin A**

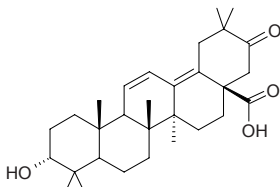
[59076-79-8] C<sub>30</sub>H<sub>42</sub>O<sub>4</sub> (466.67). Crystals (MeOH aq.), mp 262~264°C, [α]<sub>D</sub> = -11.3° (c = 16.7, CHCl<sub>3</sub>). Source: TONG TUO MU *Tetrapanax papyriferus*. Ref: 1521, 3135, 3136.

**16636 Papyriogenin B**

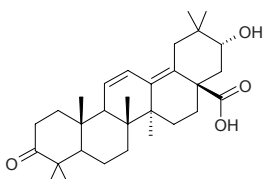
[64854-67-7] C<sub>30</sub>H<sub>42</sub>O<sub>4</sub> (466.67). Crystals (MeOH aq.), mp 259~262°C, [α]<sub>D</sub> = +19.6° (c = 10, CHCl<sub>3</sub>). Source: TONG TUO MU *Tetrapanax papyriferus*. Ref: 3137, 3135, 3136.

**16637 Papyriogenin C**

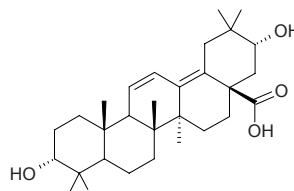
[73341-64-7] C<sub>30</sub>H<sub>44</sub>O<sub>4</sub> (468.68). Crystals (MeOH aq.), mp 230~231°C, [α]<sub>D</sub> = -188.4° (c = 0.064, EtOH). Source: TONG TUO MU *Tetrapanax papyriferus*. Ref: 1521, 3135, 3136.

**16638 Papyriogenin D**

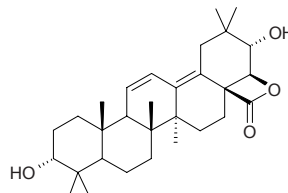
[72933-75-6] C<sub>30</sub>H<sub>44</sub>O<sub>4</sub> (468.68). Crystals (MeOH), mp 285~287°C, [α]<sub>D</sub> = -183° (c = 0.6, pyridine). Source: TONG TUO MU *Tetrapanax papyriferus*. Ref: 1521, 3135, 3136.

**16639 Papyriogenin E**

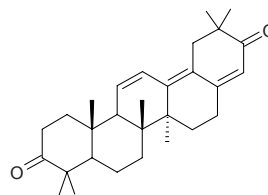
[73341-65-8] C<sub>30</sub>H<sub>46</sub>O<sub>4</sub> (470.70). Crystals (MeOH), mp 286~288°C, [α]<sub>D</sub> = -207° (c = 0.06, pyridine). Source: TONG TUO MU *Tetrapanax papyriferus*. Ref: 1521, 3135, 3136.

**16640 Papyriogenin G**

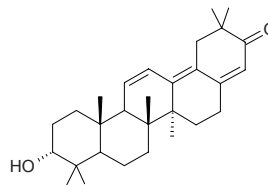
[67779-71-9] C<sub>30</sub>H<sub>44</sub>O<sub>4</sub> (468.68). Crystals, mp 188~190°C. Source: TONG TUO MU *Tetrapanax papyriferus*. Ref: 1521, 3135, 3136.

**16641 Papyriogenin H**

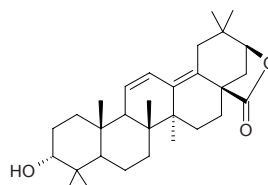
[72933-71-2] C<sub>29</sub>H<sub>40</sub>O<sub>2</sub> (420.64). Crystals, mp 127~131°C. Source: TONG TUO MU *Tetrapanax papyriferus*. Ref: 3138, 3139.

**16642 Papyriogenin I**

[72938-20-6] C<sub>29</sub>H<sub>42</sub>O<sub>2</sub> (422.66). Crystals, mp 255~257°C. Source: TONG TUO MU *Tetrapanax papyriferus*. Ref: 3138, 3139.

**16643 Papyriogenin J**

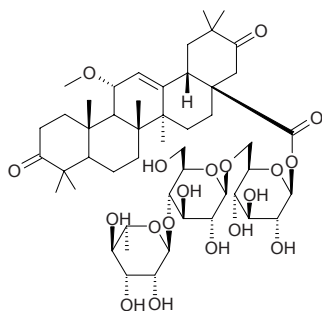
[73341-66-9] C<sub>30</sub>H<sub>44</sub>O<sub>3</sub> (452.68). Source: TONG TUO MU *Tetrapanax papyriferus*. Ref: 1521, 3135, 3136.



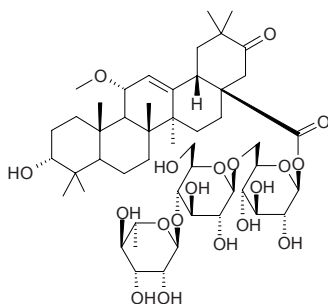


**16644 Papyriocide L-IIa**

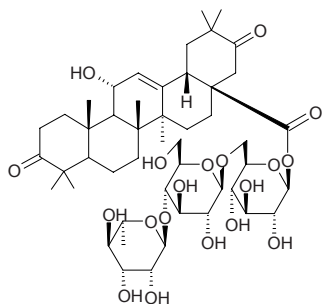
[59112-65-1] C<sub>49</sub>H<sub>76</sub>O<sub>19</sub> (969.14). Powder, mp 182~183°C, [ $\alpha$ ]<sub>D</sub> = -39° (c = 0.82, CHCl<sub>3</sub>), artifact. Source: TONG TUO MU *Tetrapanax papyriferus*. Ref: 3140.

**16645 Papyriocide L-IIb**

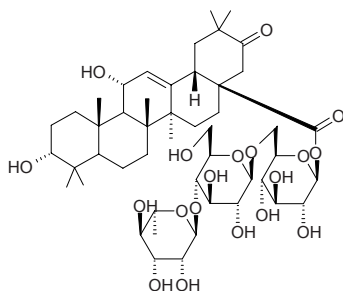
[72933-67-6] C<sub>49</sub>H<sub>78</sub>O<sub>19</sub> (971.16). Crystals, mp 178~182°C, [ $\alpha$ ]<sub>D</sub> = -37.8° (c = 0.27, EtOH). Source: TONG TUO MU *Tetrapanax papyriferus*. Ref: 3140.

**16646 Papyriocide L-IIc**

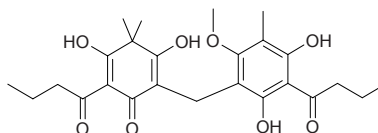
[72938-19-3] C<sub>48</sub>H<sub>74</sub>O<sub>19</sub> (955.11). Powder, mp 188~191°C, [ $\alpha$ ]<sub>D</sub> = -47.1° (c = 0.1, EtOH). Source: TONG TUO MU *Tetrapanax papyriferus*. Ref: 3140.

**16647 Papyriocide L-IId**

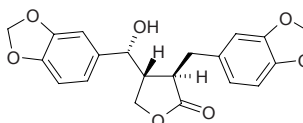
[72933-68-7] C<sub>48</sub>H<sub>76</sub>O<sub>19</sub> (957.13). Powder, mp 185~190°C, [ $\alpha$ ]<sub>D</sub> = -39.3° (c = 0.15, EtOH). Source: TONG TUO MU *Tetrapanax papyriferus*. Ref: 3140.

**16648 Paraaspidin BB**

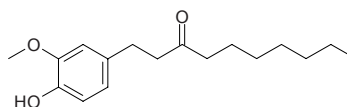
[989-54-8] C<sub>25</sub>H<sub>32</sub>O<sub>8</sub> (460.53). mp 123~125°C. Source: GUAN ZHONG *Dryopteris crassirhizoma*. Ref: 6, 1521.

**16649 Parabenzlactone**

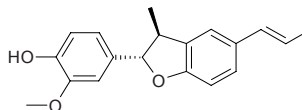
[27675-77-0] C<sub>20</sub>H<sub>18</sub>O<sub>7</sub> (370.36). White needles, mp 123~125°C, 159~161°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -11° (c = 1.15, CHCl<sub>3</sub>), [ $\alpha$ ]<sub>D</sub><sup>30</sup> = -25° (c = 0.14, CHCl<sub>3</sub>). Pharm: Immunosuppressant (hmn, inhibits ConA-induced hyperplasia of lymphocyte in peripheral blood, IC<sub>50</sub> = 4.3µg/mL). Source: CHANG YE FEI SHU *Torreya jackii*, JIA SHAN HU JIAO *Parabenzoin trilobum*. Ref: 3590, 3591, 1669.

**16650 6-Paradol**

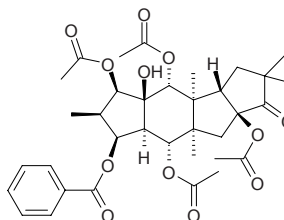
[27113-22-0] C<sub>17</sub>H<sub>26</sub>O<sub>3</sub> (278.40). Pharm: Bitter principle. Source: SHENG JIANG *Zingiber officinale*. Ref: 658.

**16651 Parakmerin A**

2,3-Dihydro-2 $\alpha$ -(4-hydroxy-3-methoxyphenyl)-3 $\beta$ -methyl-5E-propenylbenzofuran C<sub>19</sub>H<sub>20</sub>O<sub>3</sub> (296.37). White powder, mp 68~70°C, [ $\alpha$ ]<sub>D</sub><sup>21</sup> = -101.5° (c = 0.50, CHCl<sub>3</sub>). Source: YUN NAN NI DAN XING MU LAN *Parakmeria yunnanensis*. Ref: 2137.

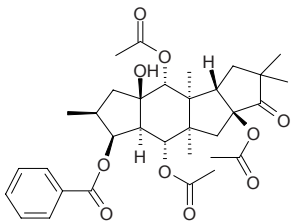
**16652 Paraliane 12**

C<sub>33</sub>H<sub>44</sub>O<sub>12</sub> (656.73). Pharm: Antifeedant (*Spodopetra littoralis*, 500~1000mg/L)<sup>[5221]</sup>; anti-HIV-1 (inhibition of virus-induced cytopathicity in MT-4 cells, EC<sub>50</sub> = 70µg/mL)<sup>[5221]</sup>; cytotoxic (MT-4, CC<sub>50</sub> = 70µg/mL)<sup>[5221]</sup>. Source: HAI YANG DA JI *Euphorbia paralias* (aerial parts). Ref: 5221.

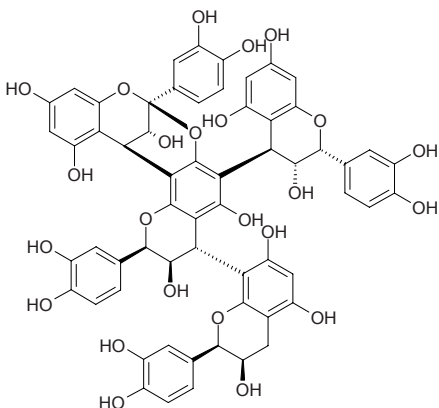


**16653 Paraliene 13**

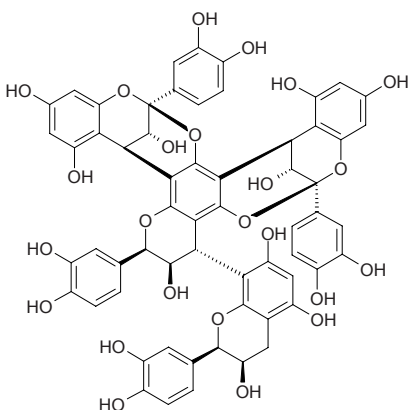
$C_{33}H_{42}O_{10}$  (598.70). **Pharm:** Antifeedant (*Spodopetra littoralis*, 1000mg/L); anti-HIV-1 (inhibition of virus-induced cytopathicity in MT-4 cells,  $EC_{50}$  = 14 $\mu$ g/mL); cytotoxic (MT-4,  $CC_{50}$  = 49 $\mu$ g/mL). **Source:** HAI YANG DA JI *Euphorbia paralias* (aerial parts). **Ref:** 5221.

**16654 Parameritannin A<sub>1</sub>**

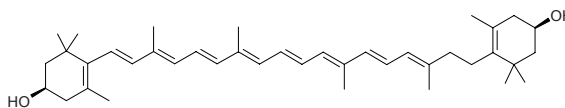
Epicatechin-(2 $\beta$ →O→7,4 $\beta$ →8)-[epicatechin-(4 $\beta$ →6)]-epicatechin-(4 $\beta$ →8)-epicatechin  $C_{60}H_{48}O_{24}$  (1153.04). Pale yellow amorphous powder,  $[\alpha]_D^{21}$  = +50.1.9° ( $c$  = 1.33, MeOH). **Source:** CHANG JIE ZHU *Parameria laevigata* (bark). **Ref:** 3523.

**16655 Parameritannin A<sub>2</sub>**

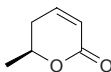
Epicatechin-(2 $\beta$ →O→5,4 $\beta$ →6)-[epicatechin-(2 $\beta$ →O→7,4 $\beta$ →8)]-epicatechin-(4 $\beta$ →8)-epicatechin  $C_{60}H_{46}O_{24}$  (1151.02). Pale yellow amorphous powder. **Source:** CHANG JIE ZHU *Parameria laevigata* (bark). **Ref:** 3523.

**16656 Parasiloxanthin**

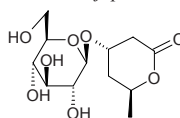
[62994-48-3]  $C_{40}H_{58}O_2$  (570.91). Orange-yellow needles, mp 202°C. **Source:** HAI YUN *Nemacystus decipiens* [Syn. *Mesogloea decipiens*; *Cladosiphon decipiens*], NIAN YU *Parasilurus asotus*. **Ref:** 3141, 3142.

**16657 Parasorbic acid**

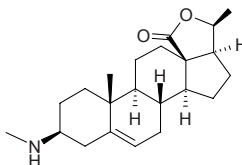
[10048-32-5]  $C_6H_8O_2$  (112.13). Oil, (S), bp (+) 104~105°C/14mmHg,  $[\alpha]_D^{24}$  = +206° ( $c$  = 1, EtOH), ( $\pm$ ): bp 110°C/15mmHg, 44°C/0.05mmHg. **Pharm:** Overcomer dormancy of peppertree fruits; carcinogenic; LD<sub>50</sub> (mus, ip) = 750mg/kg. **Source:** OU ZHOU HUA QIU *Sorbus aucuparia*, TIAN SHAN HUA QIU *Sorbus tianschanica*. **Ref:** 6, 658, 1521.

**16658 Parasorboside**

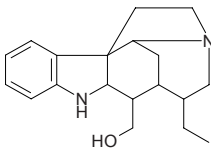
[33276-04-9]  $C_{12}H_{20}O_8$  (292.29). Needles (Me<sub>2</sub>CO), mp 68.9°C, mp 143.4°C (double mp). **Source:** OU ZHOU HUA QIU *Sorbus aucuparia*, ZI QI *Osmunda japonica*. **Ref:** 2886, 2887.

**16659 Paravallarine**

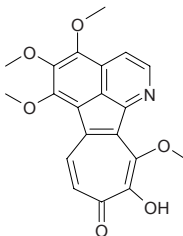
$C_{22}H_{33}NO_2$  (343.51). **Pharm:** Fish toxin. **Source:** ZHI XIE MU PI *Holarrhena antidysenterica*. **Ref:** 658.

**16660 Pareirine**

$C_{19}H_{26}N_2O$  (298.43). mp 142.5~143.0°C. **Source:** XI SHENG TENG *Cissampelos pareira*, YA HU NU *Cissampelos pareira* var. *hirsute*. **Ref:** 6, 660.

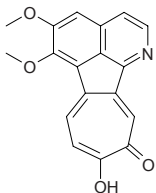
**16661 Pareirubrine A**

[147044-68-6]  $C_{20}H_{17}NO_6$  (367.36). Light red-brown needles, mp 168~170°C. **Pharm:** Cytotoxic (*in vitro*, P<sub>388</sub>, IC<sub>50</sub> = 0.33 $\mu$ g/mL). **Source:** XI SHENG TENG *Cissampelos pareira*. **Ref:** 3592.

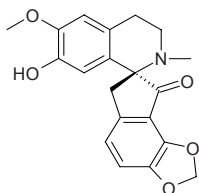


**16662 Pareirubrine B**

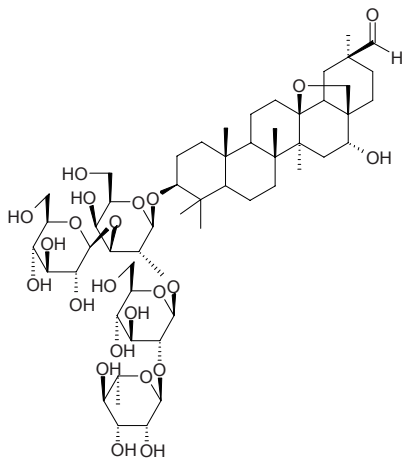
[152845-78-8]  $C_{18}H_{13}NO_4$  (307.31). Light red-brown needles, mp 290°C (dec). **Pharm:** Cytotoxic (*in vitro*,  $P_{388}$ ,  $IC_{50} = 0.17\mu\text{g/mL}$ ). **Source:** XI SHENG TENG *Cissampelos pareira*. **Ref:** 3592.

**16663 Parfumine**

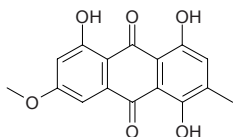
Fumarilicine [28230-70-8]  $C_{20}H_{19}NO_5$  (353.38). Crystals (EtOH or  $CHCl_3$ ), mp 118~120°C (111~112°C)  $[\alpha]_D^{23} = +18^\circ$  ( $c = 1.1$ ,  $CHCl_3$ ). **Source:** WEI LAN QIU GUO ZI JIN *Fumaria vaillantii*, XIAO HUA QIU GUO ZI JIN *Fumaria parviflora*, YAN JIN *Fumaria schleicheri*. **Ref:** 1521.

**16664 Paridiformoside**

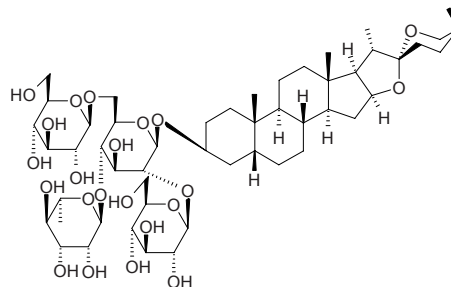
3-*O*-( $\beta$ -*D*-Glucopyranosyl-(1→3)-*O*-( $\alpha$ -*L*-rhamno-pyransyl-(1→2)- $\beta$ -*D*-glucopyranosyl(1→2))- $\beta$ -*D*-glucopyranosyl)cyclamiretin A [112468-35-6]  $C_{54}H_{88}O_{23}$  (1105.29). White powder, mp 163~165°C. **Pharm:** Uterine stimulant (animal model, presents dose-response relationship). **Source:** CHONG LOU PAI CAO *Lysimachia paridiformis*. **Ref:** 86, 1608.

**16665 Parietin**

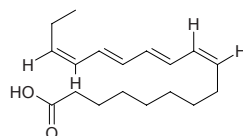
$C_{16}H_{12}O_6$  (300.27). **Pharm:** Cytotoxic inactive (*in vitro*, HeLa, Vero, K562, Raji, Wish, and Calu1 tumor cell lines,  $IC_{50} > 100\mu\text{mol/L}$ ). **Source:** YI HE GUO *Ventilago leiocarpa* (stem). **Ref:** 3057.

**16666 Parillin**

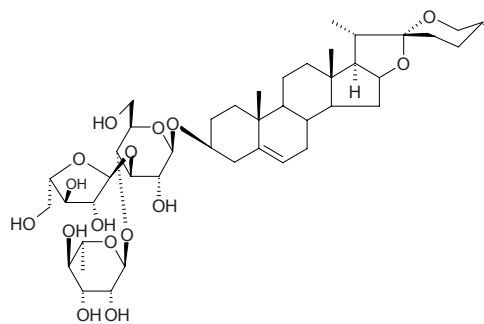
[19057-61-5]  $C_{51}H_{84}O_{22}$  (1049.23). **Pharm:** Antibacterial (phytopathogenic bacteria); antineoplastic (rat Walker carcinoma, non-orl,  $ED_{50} = 50\text{mg/kg}$ ); antifungal (*Sclerotinia*, *Claviceps purpurea* and *Trichothecium roseum*); hemolytic;  $LD_{50}$  (rat, non-orl) = 80mg/kg. **Source:** HUI BA QIA *Smilax aristolochiaefolia*. **Ref:** 658.

**16667 Parinaric acid**

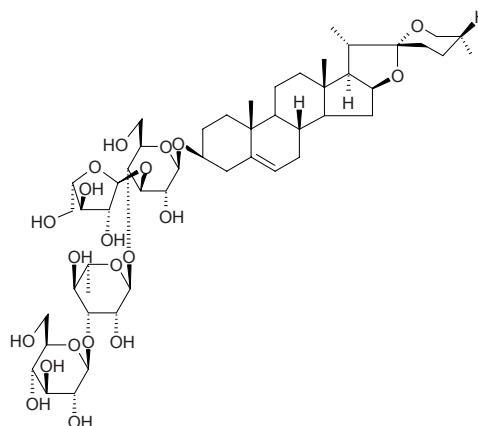
[593-38-4]  $C_{18}H_{28}O_2$  (276.42). mp 85~86°C. **Source:** JI XING ZI *Impatiens balsamina*. **Ref:** 6, 1521.

**16668 Pariphyllin**

$C_{44}H_{70}O_{16}$  (855.04). mp 294~298°C. **Source:** ZAO XIU *Paris polyphylla*. **Ref:** 6.

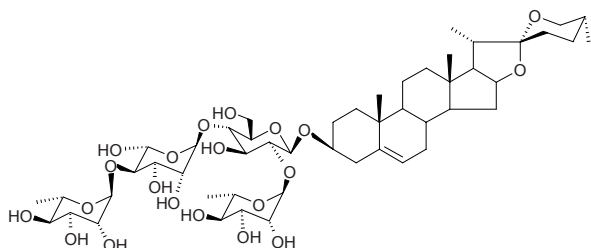
**16669 Pariphyllin B**

[57282-83-4]  $C_{50}H_{80}O_{21}$  (1017.18). Crystals +2H<sub>2</sub>O, mp 168~170°C,  $[\alpha]_D = -97.6^\circ$  ( $c = 0.87$ , pyridine). **Source:** ZAO XIU *Paris polyphylla*. **Ref:** 3143.

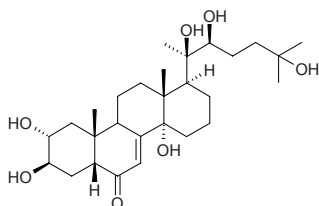


**16670 Parissaponin Pb**

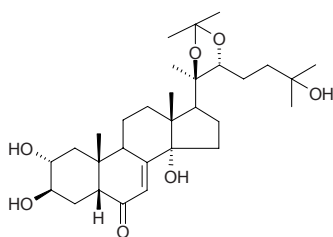
$C_{50}H_{80}O_{21}$  (1017.18). **Pharm:** Cytotoxic (*in vitro*, HeLa,  $IC_{50} = 3.14\mu\text{g/mL}$ ; control Cisplatin, HeLa,  $IC_{50} = 0.75\mu\text{g/mL}$ )<sup>[4788]</sup>. **Source:** HU BEI HUANG JING *Polygonatum zanlanscianense* (rhizome: yield = 0.00058%dw). **Ref:** 4788.

**16671 Paristerone**

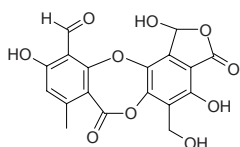
[84580-28-9]  $C_{28}H_{46}O_7$  (494.67). Crystals, mp 216~220°C,  $[\alpha]_D = +41.9^\circ$ . **Source:** ZAO XIU *Paris polyphylla*. **Ref:** 3144.

**16672 Paristerone 20,22-monoacetone**

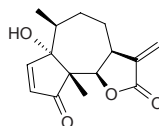
$C_{30}H_{48}O_7$  (520.71). Colorless needles, mp 108~110°C,  $[\alpha]_D^{25} = 48.7^\circ$  ( $c = 0.21$ , MeOH). **Source:** CANG BAI CHENG GOU FENG *Diploclisia glaucescens*. **Ref:** 2496.

**16673 Parmatic acid**

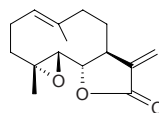
Salazinic acid [521-39-1]  $C_{18}H_{12}O_{10}$  (388.29). mp 260°C (dec). **Source:** SHI HUA *Parmelia saxatilis*. **Ref:** 6.

**16674 Parthenin**

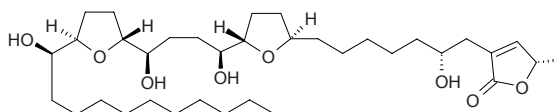
[508-59-8]  $C_{15}H_{18}O_4$  (262.31). **Pharm:** Antifungal; dermatitic (causes contact dermatitis); cytotoxic; inhibits heart (dog); insect antifeedant; molluscicide; toxin (ox, some insects). **Source:** LUO SUI TUN CAO *Ambrosia psilostachya*, NEI HUA YI WA JU *Iva nevadensis*, YIN JIAO JU *Parthenium hysterophorus*. **Ref:** 658, 4489.

**16675 Parthenolide**

[20554-84-1]  $C_{15}H_{20}O_3$  (248.32). Colorless massive crystals, mp 114~115°C. **Pharm:** Antineoplastic; cytotoxic (*in vitro*, SMMC-7721,  $IC_{50} = 4.2\mu\text{g/mL}$ ; HO-8910,  $IC_{50} = 1.37\mu\text{g/mL}$ ; control Vincristine, SMMC-7721,  $IC_{50} = 30.35\mu\text{g/mL}$ ; HO-8910,  $IC_{50} = 20.74\mu\text{g/mL}$ )<sup>[4736]</sup>; cytotoxic (U937,  $IC_{50} = 1.9\mu\text{mol/L}$ )<sup>[3887]</sup>; antibacterial; antifungal; cytotoxic; used in treatment of bilious headache (vasomotor headache); anti-inflammatory (modulator of cytokine network: blocks VCAM-1 expression induced by IL-4 in endothelial cells ( $IC_{50} < 10\mu\text{mol/L}$ ); decreases expression of IL-2 in T-lymphocytes)<sup>[4416]</sup>; anti-inflammatory (RAW264.7 cells, LPS-induced: NF- $\kappa$ B inhibitor,  $IC_{50} = (3.42 \pm 0.08)\mu\text{mol/L}$ )<sup>[3837]</sup>; anti-inflammatory (NO production inhibitor,  $IC_{50} = (2.41 \pm 0.06)\mu\text{mol/L}$ )<sup>[3837]</sup>; anti-inflammatory (TNF- $\alpha$  production inhibitor,  $IC_{50} = (2.68 \pm 0.11)\mu\text{mol/L}$ )<sup>[3837]</sup>; anti-inflammatory (inhibits LPS-induced NF- $\kappa$ B activation in murine macrophage RAW264.7 cells,  $IC_{50} = 2.34\mu\text{mol/L}$ )<sup>[4724]</sup>; anti-inflammatory (NO production inhibitor ( $IC_{50} = 2.01\mu\text{mol/L}$ )<sup>[4724]</sup>. **Source:** CHANG MAO HAN XIAO *Michelia lanuginosa*, CHANG YE TIAN MING JING *Carpesium longifolium* (aerial parts: yield = 0.0012%dw)<sup>[4736]</sup>, HUANG MIAN GUI *Michelia champaca*, YUN NAN HAN XIAO *Michelia yunnanensis*, ZHOU YE MU LAN *Magnolia praecoccissima* (seed), LEI GONG TENG *Tripterygium wilfordii*, *Parthenium* spp., *Chrysanthemum* spp., *Tanacetum* spp., *Ambrosia* spp. **Ref:** 426, 658, 3837, 3887, 4181, 4416, 4724, 4736.

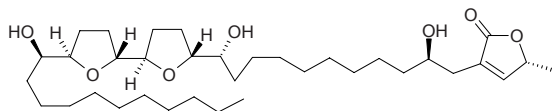
**16676 Parvifloracin**

[157110-12-8]  $C_{35}H_{62}O_8$  (610.88). White-like wax,  $[\alpha]_D^{22} = +18.75^\circ$  ( $c = 0.08$ , MeOH). **Pharm:** Cytotoxic (A549,  $ED_{50} = 2.83 \times 10^{-11}\mu\text{g/mL}$ , MCF7,  $ED_{50} < 10^{-12}\mu\text{g/mL}$ , BST,  $LC_{50} = 0.0201\mu\text{g/mL}$ ). **Source:** XIAO HUA PAO PAO *Asimina parviflora*. **Ref:** 3730.

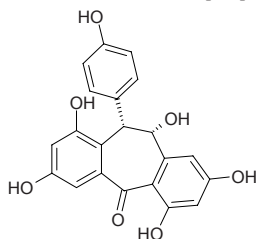


**16677 Parviflorin**

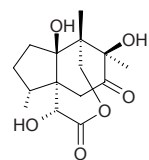
[152378-19-3] C<sub>35</sub>H<sub>62</sub>O<sub>7</sub> (594.88). White-like wax, [ $\alpha$ ]<sub>D</sub><sup>22</sup> = +18.33° (*c* = 0.06, alcohol). **Pharm:** Cytotoxic (A549, ED<sub>50</sub> < 10<sup>-12</sup> μg/mL, HT29, ED<sub>50</sub> = 0.549 μg/mL, BST, LC<sub>50</sub> = 0.08 μg/mL). **Source:** PAO PAO SHU *Asimina triloba*, PAO ZHUANG FAN LI ZHI *Annona bullata*, XIAO HUA PAO PAO *Asimina parviflora*. **Ref:** 3731, 3730, 3732, 3733.

**16678 Parviflorol**

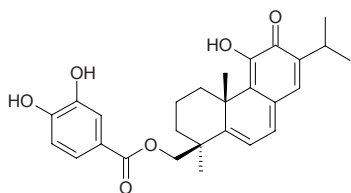
C<sub>21</sub>H<sub>16</sub>O<sub>7</sub> (380.36). Yellow solid, [ $\alpha$ ]<sub>D</sub> = +62° (*c* = 0.18, MeOH). **Source:** XIAO HUA PO LEI *Hopea parviflora* (bark). **Ref:** 3936.

**16679 Parviflorolide**

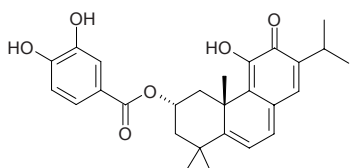
C<sub>15</sub>H<sub>22</sub>O<sub>6</sub> (298.34). **Source:** *Illicium merrillianum* (pericarp). **Ref:** 3046.

**16680 Parvifloron E**

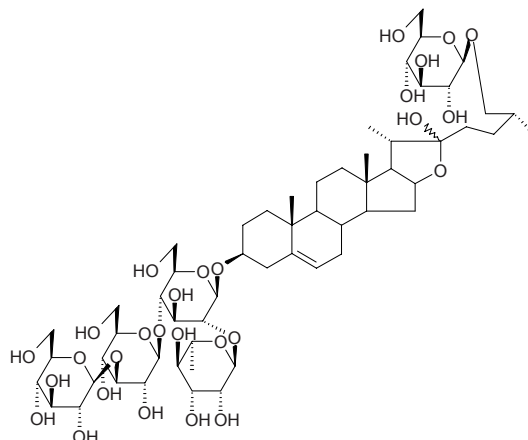
C<sub>27</sub>H<sub>30</sub>O<sub>6</sub> (450.54). **Pharm:** Antioxidant (DPPH scavenger, EC<sub>50</sub> = 0.086 mmol/L, control Vitamin E, EC<sub>50</sub> = 0.134 mmol/L). **Source:** YUAN BAN XIANG CHA CAI *Plectranthus nummularius* (leaf). **Ref:** 4121.

**16681 Parvifloron F**

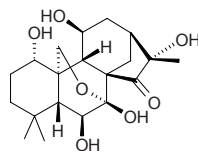
C<sub>27</sub>H<sub>30</sub>O<sub>6</sub> (450.54). **Pharm:** Antioxidant (DPPH scavenger, EC<sub>50</sub> = 0.131 mmol/L, control Vitamin E, EC<sub>50</sub> = 0.134 mmol/L). **Source:** YUAN BAN XIANG CHA CAI *Plectranthus nummularius* (leaf). **Ref:** 4121.

**16682 Parvifloside**

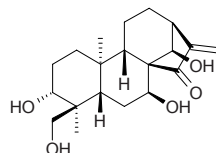
C<sub>57</sub>H<sub>94</sub>O<sub>28</sub> (1227.37). White powder, mp 214~218°C, [ $\alpha$ ]<sub>D</sub><sup>19.9</sup> = -60.69° (*c* = 0.508, pyridine). **Source:** XIAO HUA DUN YE SHU YU *Dioscorea parviflora* (fresh rhizome). **Ref:** 4858.

**16683 Parvifolin**

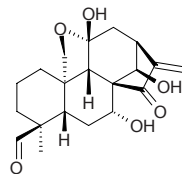
C<sub>20</sub>H<sub>30</sub>O<sub>7</sub> (382.46). Amorphous powder, [ $\alpha$ ]<sub>D</sub> = -117° (MeOH). **Source:** XIAO YE XIANG CHA CAI *Isodon parvifolia*. **Ref:** 4067.

**16684 Parvifoline A**

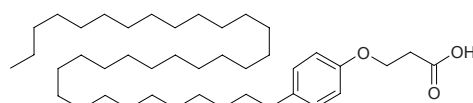
C<sub>20</sub>H<sub>30</sub>O<sub>5</sub> (350.46). mp 163~165°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -23.5° (*c* = 0.45, MeOH). **Source:** XIAO YE XIANG CHA CAI *Isodon parvifolia*. **Ref:** 4067.

**16685 Parvifoline B**

C<sub>20</sub>H<sub>26</sub>O<sub>6</sub> (362.43). mp 217~219°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -65.96° (*c* = 0.10, MeOH). **Source:** XIAO YE XIANG CHA CAI *Isodon parvifolia*. **Ref:** 4067.

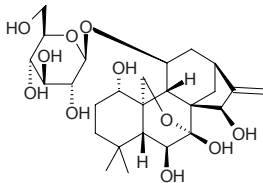
**16686 Parvifoloinoic acid**

[133336-95-5] C<sub>42</sub>H<sub>76</sub>O<sub>3</sub> (629.07). White powder, mp 90~91.5°C (CHCl<sub>3</sub>). **Pharm:** Cytotoxic (hmn liver cancer cell QGY-7703). **Source:** XIAO YE XIANG CHA CAI *Isodon parvifolia*. **Ref:** 3593.

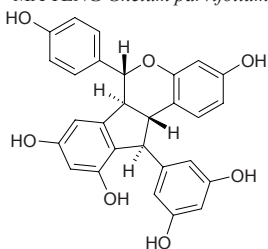


**16687 Parvifoliside**

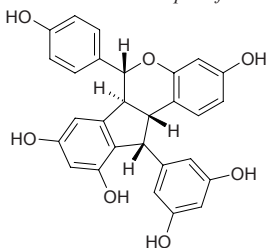
$C_{26}H_{40}O_{11}$  (528.60). mp 279~281°C,  $[\alpha]_D^{20} = +0.5^\circ$  ( $c = 0.4$ , MeOH). Source: XIAO YE XIANG CHA CAI *Isodon parvifolia*. Ref: 4067.

**16688 Parvifolol A**

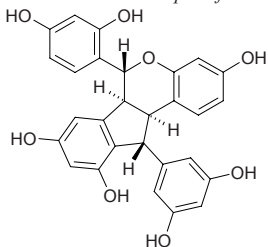
$C_{28}H_{22}O_7$  (470.48). Pale brownish amorphous solid. Source: XIAO YE MAI MA TENG *Gnetum parvifolium* [Syn. *Gnetum indicum*] (bark). Ref: 3550.

**16689 Parvifolol B**

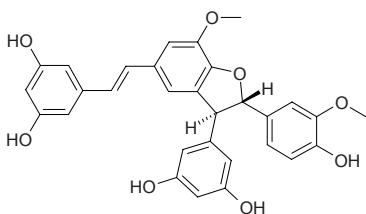
$C_{28}H_{22}O_7$  (470.48). Pale brownish amorphous solid. Source: XIAO YE MAI MA TENG *Gnetum parvifolium* [Syn. *Gnetum indicum*] (bark). Ref: 3550.

**16690 Parvifolol C**

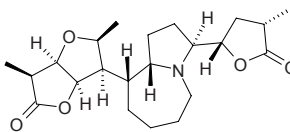
$C_{28}H_{22}O_8$  (486.48). Pale brownish amorphous solid. Source: XIAO YE MAI MA TENG *Gnetum parvifolium* [Syn. *Gnetum indicum*] (bark). Ref: 3550.

**16691 Parvifolol D**

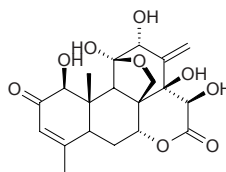
Shegansu B  $C_{30}H_{26}O_8$  (514.54). Pale brownish amorphous solid. Source: SHE GAN *Belamcanda chinensis*, XIAO YE MAI MA TENG *Gnetum parvifolium* [Syn. *Gnetum indicum*] (bark). Ref: 2233, 2234, 3550.

**16692 Parvistemonine**

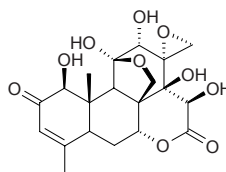
$C_{22}H_{33}NO_5$  (391.51). Pharm: Insecticidal (neonate larvae of *Spodoptera littoralis*,  $LC_{50} > 200\text{mg/L}$ ,  $EC_{50} = 163\text{mg/L}$ ). Source: *Stemona* sp. (HG915). Ref: 3409.

**16693 Pasakbumin A**

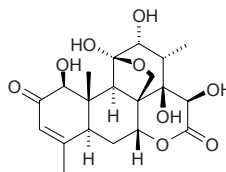
Eurycomanone  $C_{20}H_{24}O_9$  (408.41). Pharm: Cytotoxic (KB cells,  $IC_{50} = 0.40\mu\text{g/mL}$ , MCF7 cells,  $IC_{50} < 2.5\mu\text{g/mL}$ , A549 cells, remarkable activity); antileishmanial (*Leishmania* sp.,  $IC_{50} = 0.11\mu\text{g/mL}$ , control Thallioquin,  $IC_{50} = 0.21\mu\text{g/mL}$ ); antiulcerative (induced by indomethacin,  $ED_{50} = 0.27\mu\text{g/mL}$ );  $LD_{50} = 18.9\mu\text{g/kg}$ . Source: *Eurycoma* sp. Ref: 4556.

**16694 Pasakbumin B**

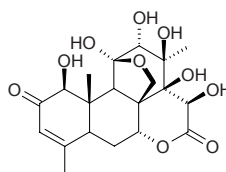
13 $\alpha$ (21)-Epoxyeurycomanone  $C_{20}H_{24}O_{10}$  (424.41). Pharm: Cytotoxic (MCF7 cancer cells,  $IC_{50} < 2.5\mu\text{g/mL}$ ); antiulcerative (induced by indomethacin,  $ED_{50} = 0.19\mu\text{g/mL}$ );  $LD_{50} = 5.1\mu\text{g/kg}$ . Source: *Eurycoma* sp. Ref: 4556.

**16695 Pasakbumin C**

13 $\beta$ ,21-Dihydroeurycomanone  $C_{20}H_{26}O_9$  (410.42). Pharm: Cytotoxic (KB cells,  $IC_{50} = 0.33\mu\text{g/mL}$ , P<sub>388</sub> cells,  $IC_{50} = 1.2\mu\text{g/mL}$ , MCF7 cells  $IC_{50} < 2.5\mu\text{g/mL}$ )<sup>[4556]</sup>. Source: *Eurycoma harmandiana* (root), *Eurycoma* sp. Ref: 4556, 5164.

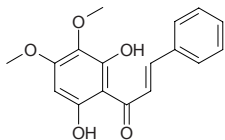
**16696 Pasakbumin D**

$C_{20}H_{26}O_{10}$  (426.42). Source: *Eurycoma* sp. Ref: 4556.

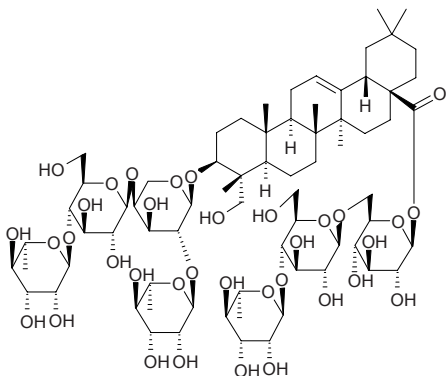


**16697 Pashanone**

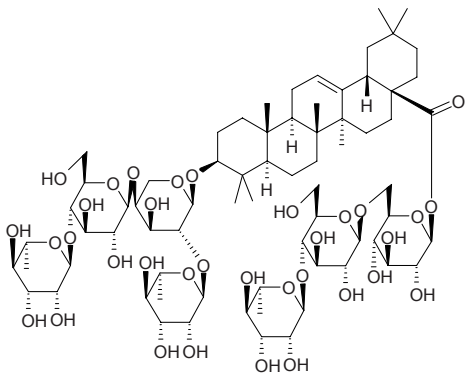
[42438-78-8] C<sub>17</sub>H<sub>16</sub>O<sub>5</sub> (300.31). Orange-red plates (C<sub>6</sub>H<sub>6</sub>-pet. ether), mp 147~149°C. Source: DIAO ZHANG ZHI YE *Lindera umbellata* [Syn. *Lindera erythrocarpa*], *Onychium auratum*, *Didymocarpus pedicellata*. Ref: 3145, 3146, 3147.

**16698 Pastuchoside A**

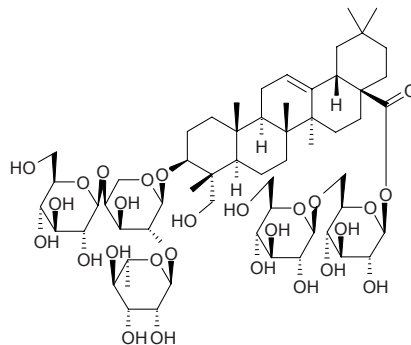
3 $\beta$ -O-{ $\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 2)-[ $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)]- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)]- $\alpha$ -L-arabinopyranosyl}-28-O-[ $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)]- $\beta$ -D-glucopyranosyl]-hederagenin C<sub>71</sub>H<sub>116</sub>O<sub>35</sub> (1529.70). White powder, mp 198°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -16° (c = 0.1, MeOH). Source: *Hedera pastuchowii*. Ref: 2543.

**16699 Pastuchoside B**

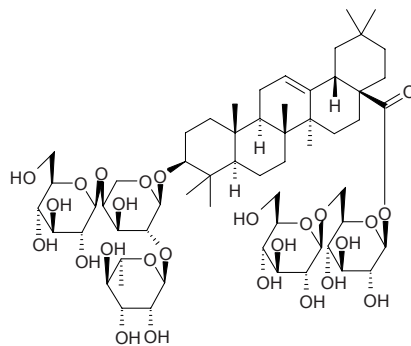
3 $\beta$ -O-{ $\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 2)-[ $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)]- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)]- $\alpha$ -L-arabinopyranosyl}-28-O-[ $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)]- $\beta$ -D-glucopyranosyl]-oleanolate C<sub>71</sub>H<sub>116</sub>O<sub>34</sub> (1513.70). White powder, mp 212°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -40° (c = 0.1, MeOH). Source: *Hedera pastuchowii*. Ref: 2543.

**16700 Pastuchoside C**

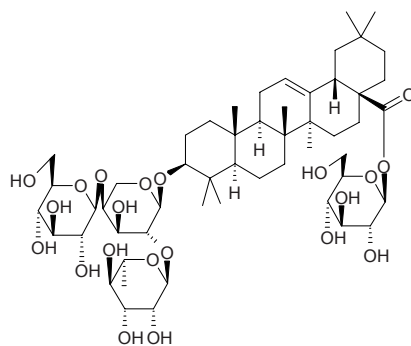
3 $\beta$ -O-{ $\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 2)-[ $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)]- $\alpha$ -L-arabinopyranosyl}-28-O-[ $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)]- $\beta$ -D-glucopyranosyl]-hederagenin C<sub>59</sub>H<sub>96</sub>O<sub>27</sub> (1237.41). White powder, mp 201°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -18° (c = 0.1, MeOH). Source: *Hedera pastuchowii*. Ref: 2543.

**16701 Pastuchoside D**

3 $\beta$ -O-{ $\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 2)-[ $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)]- $\alpha$ -L-arabinopyranosyl}-28-O-[ $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)]- $\beta$ -D-glucopyranosyl]-oleanolate C<sub>59</sub>H<sub>96</sub>O<sub>26</sub> (1221.41). White powder, mp 213°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -30° (c = 0.1, MeOH); amorphous solid, mp 228~229°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -11.8° (c = 0.17, MeOH). Pharm: Pancreatic lipase inhibitor inactive (*in vitro*, 1mg/mL)<sup>[3021]</sup>. Source: HUA BEI LAN PEN HUA *Scabiosa tschiliensis* (whole herb: yield = 0.00022%dw), *Hedera pastuchowii*. Ref: 2543, 3021.

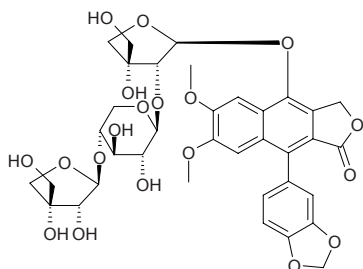
**16702 Pastuchoside E**

3 $\beta$ -O-{ $\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 2)-[ $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)]- $\alpha$ -L-arabinopyranosyl}-28-O-[ $\beta$ -D-glucopyranosyl]-oleanolate C<sub>53</sub>H<sub>86</sub>O<sub>21</sub> (1059.26). White powder, mp 205°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +25° (c = 0.1, MeOH). Source: *Hedera pastuchowii*. Ref: 2543.

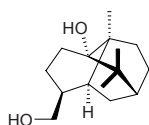


**16703 Patavine**

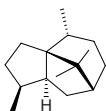
$C_{36}H_{40}O_{19}$  (776.71). Amorphous powder,  $[\alpha]_D^{24} = -18^\circ$  ( $c = 1.1$ , MeOH). **Pharm:** Cytotoxic (hmn LoVo Cell Line *in Vitro*,  $IC_{50} = (43.95 \pm 4.88) \mu\text{L/mL}$ ). **Source:** *Haplophyllum patavinum* (shoot). **Ref:** 4206.

**16704 Patchoulan-1,12-diol**

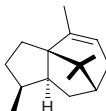
$C_{15}H_{26}O_2$  (238.37). Crystals (hexane- $C_6H_6$ ), mp 132.5–133°C. **Source:** GUANG HUO XIANG *Pogostemon cablin* [Syn. *Mentha cablin*]. **Ref:** 3148.

**16705 Patchoulane**

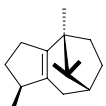
$C_{15}H_{26}$  (206.37). **Source:** HONG CHAI HU *Bupleurum scorzoniferifolium*. **Ref:** 2.

**16706  $\alpha$ -Patchoulene**

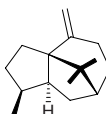
[560-32-7]  $C_{15}H_{24}$  (204.36). **Source:** GUANG HUO XIANG *Pogostemon cablin* [Syn. *Mentha cablin*]. **Ref:** 2, 1521.

**16707  $\beta$ -Patchoulene**

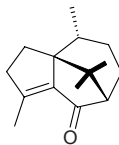
[514-51-2]  $C_{15}H_{24}$  (204.36). Oil, bp 66.8°C/0.6mmHg,  $[\alpha]_D^{30} = -42.6^\circ$  ( $c = 10.5$ ,  $CHCl_3$ ),  $n_D^{25} = 1.4978$ . **Source:** GAN SONG *Nardostachys chinensis*, GUANG HUO XIANG *Pogostemon cablin* [Syn. *Mentha cablin*], MAI DONG *Ophiopogon japonicus*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], SHI YE GAN SONG *Nardostachys jatamansi*, ZHI ZHU XIANG *Valeriana jatamansii* [Syn. *Valeriana wallichii*]. **Ref:** 660, 1521.

**16708  $\gamma$ -Patchoulene**

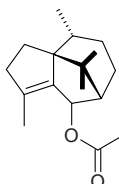
[508-55-4]  $C_{15}H_{24}$  (204.36). **Source:** DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*]. **Ref:** 2, 1521.

**16709 Patchoulenone**

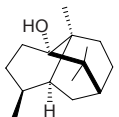
[5986-54-9]  $C_{15}H_{22}O$  (218.34). mp 52.5°C. **Source:** XIANG FU *Cyperus rotundus*. **Ref:** 6, 1521.

**16710 Patchouleny acetate**

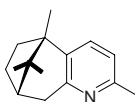
$C_{17}H_{26}O_2$  (262.40). **Source:** XIANG FU *Cyperus rotundus*. **Ref:** 3149.

**16711 Patchoulic alcohol**

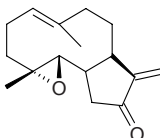
[5986-55-0]  $C_{15}H_{26}O$  (222.37). White solid, mp 37–38°C,  $[\alpha]_D = -119^\circ$  ( $c = 1.0$ ,  $CHCl_3$ ); colorless needles, mp 54–56°C,  $[\alpha]_D = -124^\circ$  ( $c = 0.22$ ,  $CHCl_3$ ). **Pharm:** Antibacterial; calcium antagonist ( $IC_{50} = 47 \mu\text{mol/L}$ ); used as a shampoo; antitrypanosomal (epimastigotes of *Trypanosoma cruzi*, *in vitro*,  $MLC > 200 \text{mmol/L}$ )<sup>[2551]</sup>. **Source:** GAN SONG *Nardostachys chinensis*, GUANG HUO XIANG *Pogostemon cablin* [Syn. *Mentha cablin*] (aerial parts: content scope = 0.26%–3.42%<sup>[5501]</sup>), HUO XIANG *Agastache rugosus*, SHI YE GAN SONG *Nardostachys jatamansi*. **Ref:** 2, 505, 658, 1521, 2551, 5501.

**16712 Patchoulipyridine**

[6517-97-1]  $C_{15}H_{21}N$  (215.34). **Source:** GUANG HUO XIANG *Pogostemon cablin* [Syn. *Mentha cablin*]. **Ref:** 2, 1521.

**16713 Pathenolide**

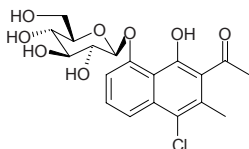
$C_{16}H_{22}O_2$  (246.35). **Pharm:** Anti-inflammatory (NF- $\kappa$ B pathway)<sup>[4415]</sup>; anti-inflammatory (NO production inhibitor, cultured rat aortic smooth muscle cells treated with LPS and interferon- $\gamma$ ; inhibits iNOS expression, hmn monocyte cell line THP-1, caused by TPA)<sup>[4415]</sup>. **Source:** HUANG MIAN GUI *Michelia champaca*, *Chrysanthemum parthenium*. **Ref:** 1521, 4415.



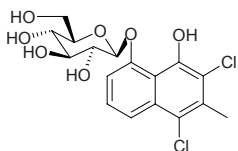


**16714 Patientoside A**

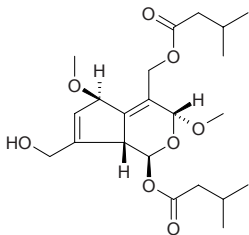
2-Acetyl-4-chloro-1,8-dihydroxy-3-methylnaphthalene-8-*O*- $\beta$ -D-glucopyranoside C<sub>19</sub>H<sub>21</sub>ClO<sub>8</sub> (412.83). Pale yellow amorphous powder,  $[\alpha]_D^{20} = -109.7^\circ$  ( $c = 0.75$ , MeOH). Source: NIU XI XI *Rumex patientia*. Ref: 3059.

**16715 Patientoside B**

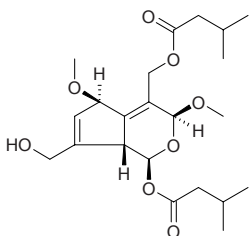
2,4-Dichloro-1,8-dihydroxy-3-methylnaphthalene-8-*O*- $\beta$ -D-glucopyranoside C<sub>17</sub>H<sub>18</sub>Cl<sub>2</sub>O<sub>7</sub> (405.23). Pale yellow amorphous powder,  $[\alpha]_D^{20} = -235.8^\circ$  ( $c = 0.72$ , MeOH). Source: NIU XI XI *Rumex patientia*. Ref: 3059.

**16716 Patridoid I**

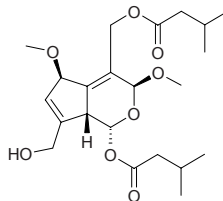
C<sub>22</sub>H<sub>34</sub>O<sub>8</sub> (426.51). Yellow oil,  $[\alpha]_D^{23} = -74.0^\circ$  ( $c = 0.5$ , MeOH). Source: BIAN DOU CAI YE BAI JIANG *Patrinia saniculaefolia* (whole herb). Ref: 4341, 5467.

**16717 Patridoid II**

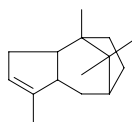
C<sub>22</sub>H<sub>34</sub>O<sub>8</sub> (426.51). Colorless oil,  $[\alpha]_D^{23} = -36.0^\circ$  ( $c = 0.5$ , MeOH). Pharm: NO production inhibitor (dose-dependent manner, IC<sub>50</sub> = 14.1  $\mu$ mol/L, decrease in quantity of NO product was accompanied by a decrease in iNOS protein level, did not affect COX-2 protein expression level)<sup>[5467]</sup>; TNF- $\alpha$  production inhibitor (dose-dependent manner, IC<sub>50</sub> = 17.6  $\mu$ mol/L)<sup>[5467]</sup>. Source: BIAN DOU CAI YE BAI JIANG *Patrinia saniculaefolia* (whole herb). Ref: 4341, 5467.

**16718 Patridoid IIA**

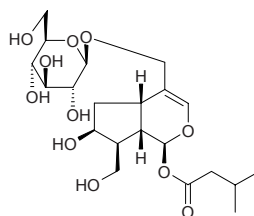
C<sub>22</sub>H<sub>34</sub>O<sub>8</sub> (426.51). Source: BIAN DOU CAI YE BAI JIANG *Patrinia saniculaefolia* (whole herb). Ref: 5467.

**16719 Patrinene**

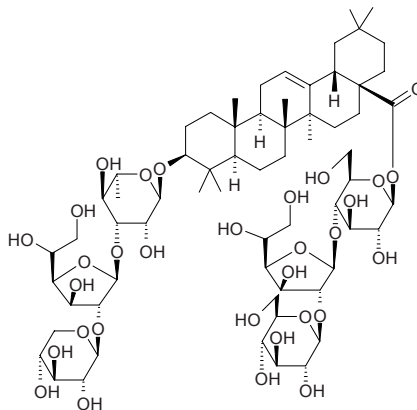
C<sub>15</sub>H<sub>24</sub> (204.36). Source: HUANG HUA BAI JIANG *Patrinia scabiosaefolia*. Ref: 2.

**16720 Patrinoside**

[53962-20-2] C<sub>21</sub>H<sub>34</sub>O<sub>11</sub> (462.50). Amorphous. Source: HUANG HUA BAI JIANG *Patrinia scabiosaefolia*. Ref: 3150.

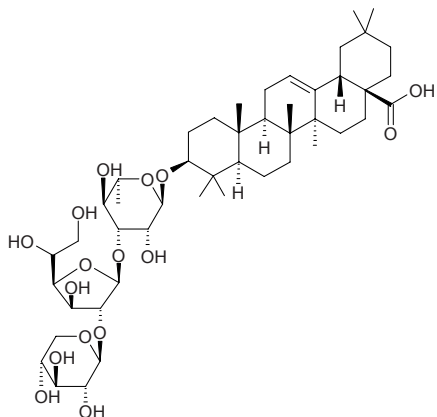
**16721 Patrinoside C**

[27004-24-6] C<sub>65</sub>H<sub>106</sub>O<sub>31</sub> (1383.55). Source: HUANG HUA BAI JIANG *Patrinia scabiosaefolia*. Ref: 6, 1521.

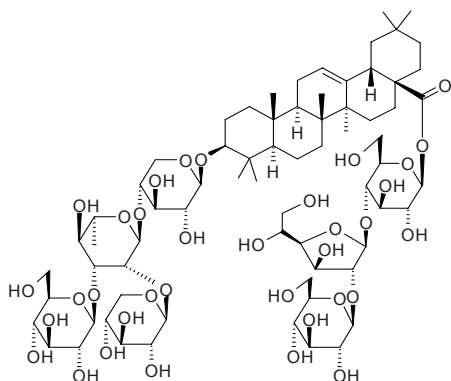


**16722 Patrinoside C<sub>1</sub>**

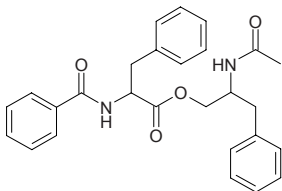
[24581-07-5] C<sub>47</sub>H<sub>76</sub>O<sub>16</sub> (897.12). Source: HUANG HUA BAI JIANG *Patrinia scabiosaefolia*. Ref: 6, 1521.

**16723 Patrinoside D**

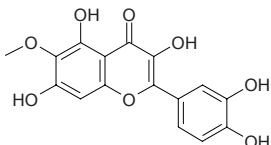
C<sub>70</sub>H<sub>114</sub>O<sub>35</sub> (1515.67). Source: HUANG HUA BAI JIANG *Patrinia scabiosaefolia*. Ref: 2, 1521.

**16724 Patriscabratine**

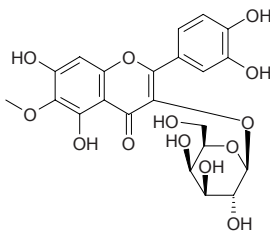
C<sub>27</sub>H<sub>28</sub>N<sub>2</sub>O<sub>4</sub> (444.54). White needles, mp 182.0~184.0°C, [α]<sub>D</sub><sup>25</sup> = -32.8° (c = 1.0, MeOH). Source: CAO YE BAI JIANG *Patrinia scabra*. Ref: 2244.

**16725 Patuletin**

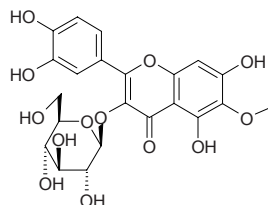
[519-96-0] C<sub>16</sub>H<sub>12</sub>O<sub>8</sub> (332.27). Pharm: Antioxidant (DPPH scavenger, IC<sub>50</sub> = 9.0 μg/mL, disoxidation of cytochrome C, IC<sub>50</sub> = 10.1 μg/mL); cytotoxic (hmn lung cancer strain GLC4, increases ID<sub>50</sub> of helenalin, ID<sub>50</sub> = 160 μmol/L; hmn colon carcinoma strain COLO320, ID<sub>50</sub> = 147 μmol/L). Source: HUANG HUA HAO *Artemisia annua*. Ref: 2, 1823, 1824, 1825.

**16726 Patuletin-3-O-β-D-galactopyranoside**

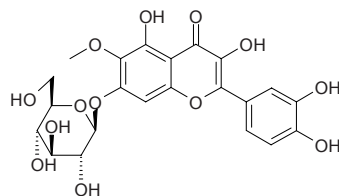
[90706-63-1] C<sub>22</sub>H<sub>22</sub>O<sub>13</sub> (494.41). Pharm: Aldose reductase inhibitor (10 μmol/L InRt = 84%, 1.0 μmol/L InRt = 38%). Source: JIAN CHI BU LI KE ER CAO *Brickellia arguta* var. *odontolepis*. Ref: 3734.

**16727 Patuletin 3-O-β-D-glycopyranoside**

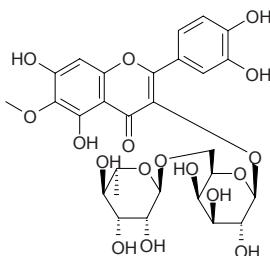
C<sub>22</sub>H<sub>22</sub>O<sub>13</sub> (494.41). Source: HUANG HUA HAO *Artemisia annua*. Ref: 2.

**16728 Patuletin-7-O-β-D-glucopyranoside**

Patulitrin [19833-25-1] C<sub>22</sub>H<sub>22</sub>O<sub>13</sub> (494.41). Pharm: Antioxidant (DPPH scavenger, IC<sub>50</sub> = (23.34±0.10) μmol/L, control Quercetin, IC<sub>50</sub> = (6.11±0.53) μg/mL)<sup>[5318]</sup>. Source: KONG QUE CAO *Tagetes patula*, MU<sup>(3)</sup> JU *Matricaria chamomilla* [Syn. *Matricaria recutita*], XUAN FU HUA *Inula britannica*, ZUI DA WAN SHOU JU *Tagetes maxima* (aerial parts). Ref: 6, 660, 5318.

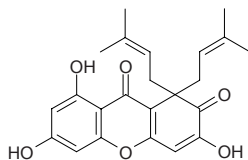
**16729 Patuletin-3-O-β-D-robinabioside**

[90706-6-3] C<sub>28</sub>H<sub>32</sub>O<sub>17</sub> (640.56). Pharm: Aldose reductase inhibitor (10 μmol/L InRt = 86%, 1.0 μmol/L InRt = 33%). Source: JIAN CHI BU LI KE ER CAO *Brickellia arguta* var. *odontolepis*. Ref: 3734.

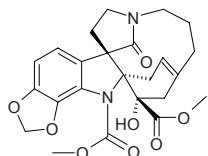


**16730 Patulone**

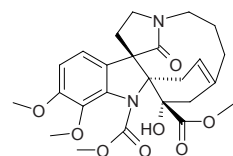
$C_{23}H_{24}O_6$  (396.44). **Pharm:** Anti-hypotension (PAF-induced, 10mg/kg, InRt = (65±9)%). **Source:** JIN SI MEI *Hypericum patulum* (cell suspension cultures). **Ref:** 5050.

**16731 Pauciflorine A**

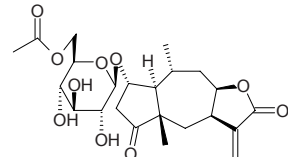
[181486-81-7]  $C_{24}H_{26}N_2O_8$  (470.48). Amorphous solid,  $[\alpha]_D = -50.7^\circ$  ( $c = 0.2$ ,  $CHCl_3$ ). **Pharm:** Antineoplastic (melanotic carcinoma, IC = 13μg/mL, inhibits formation of melanin, no cytotoxic action for normal cells). **Source:** SHAO HUA RUI MU *Kopsia pauciflora*. **Ref:** 3686.

**16732 Pauciflorine B**

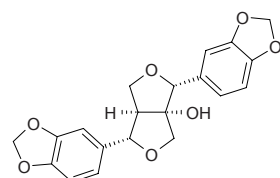
[181486-82-8]  $C_{25}H_{30}N_2O_8$  (486.53).  $[\alpha]_D = -25.0^\circ$  ( $c = 0.4$ ,  $CHCl_3$ ). **Pharm:** Antineoplastic (melanotic carcinoma, IC = 25μg/mL, inhibits formation of melanin, no cytotoxic action for normal cells). **Source:** SHAO HUA RUI MU *Kopsia pauciflora*. **Ref:** 3686.

**16733 Paucin**

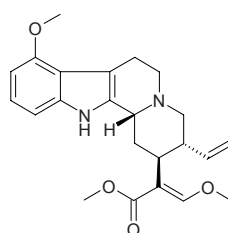
[26836-43-1]  $C_{23}H_{32}O_{10}$  (468.51). mp 178–179°C. **Pharm:** Antineoplastic (mus  $P_{388}$ , *in vivo*, 35.22mg/kg, biotic prolonged rate = 35.37%, 9.6mg/kg, biotic prolonged rate = 37%); cytotoxic (mus,  $P_{388}$  *in vitro*, EC = 0.016μg/mL, KB, EC = 0.4μg/mL). **Source:** DUO BIAN HUA BAI LAI SHI JU *Baileya pleradiata*, SHAO BIAN HUA BAI LAI SHI JU *Baileya pauciradiata*, DA HUA MO ZHI JU *Hymenoxys grandiflora*, XIANG MO ZHI JU *Hymenoxys odorata*. **Ref:** 5, 658.

**16734 Paulownin**

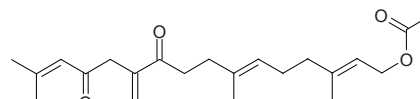
[13040-46-5]  $C_{20}H_{18}O_7$  (370.36). mp 84°C, 104–105°C. **Pharm:** Pesticide. **Source:** MAO PAO TONG *Paulownia tomentosa*, XI NAN MAO WEI SHU *Dolichandrone stipulata*, YUN NAN SHI ZI *Gmelina arborea*. **Ref:** 6, 658.

**16735 Paynantheine**

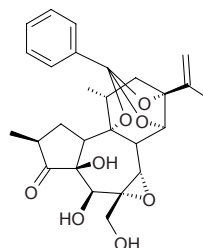
$C_{23}H_{28}N_2O_4$  (396.49). **Pharm:** Opioid agonist (gpg ileum,  $pEC_{50} = 4.99 \pm 0.06$ , control Morphine,  $pEC_{50} = 7.15 \pm 0.05$ ). **Source:** MEI LI MAO ZHU MU *Mitragyna speciosa* (leaf). **Ref:** 5069.

**16736 PC-1999-52-1447-7b**

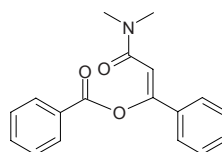
$C_{22}H_{32}O_4$  (360.50). Oil. **Source:** SHUANG CHA ZAO *Bifurcaria bifurcata*. **Ref:** 2405.

**16737 PC-1999-52-1525-6**

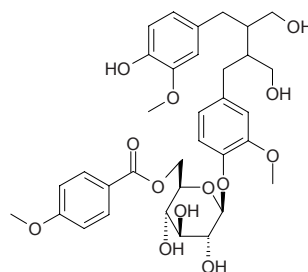
$C_{27}H_{32}O_8$  (484.55). **Source:** YOU RUI XIANG *Daphne oleoides*. **Ref:** 2410.

**16738 PC-2000-53-503-15**

$C_{18}H_{17}NO_3$  (295.34). **Source:** GUANG LIANG SHI SONG *Lycopodium lucidulum*. **Ref:** 3927.

**16739 PC-2004-65-2003-18**

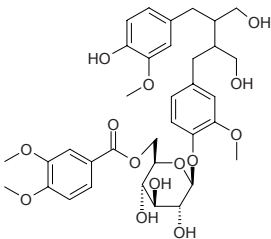
$C_{34}H_{42}O_{13}$  (658.71). Amorphous powder,  $[\alpha]_D^{22} = -35^\circ$  ( $c = 0.63$ , MeOH). **Source:** BAN ZHEN ZHONG HUA SHU *Tabebuia impetiginosa* (bark). **Ref:** 3817.



**16740 PC-2004-65-2003-19**

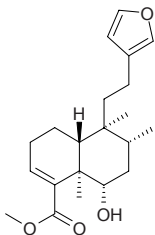
$C_{35}H_{44}O_{14}$  (688.73). Amorphous powder,  $[\alpha]_D^{24} = -43^\circ$  ( $c = 0.49$ , MeOH).

**Source:** BAN ZHEN ZHONG HUA SHU *Tabebuia impetiginosa* (bark). **Ref:** 3817.

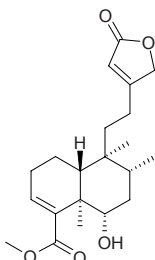
**16741 PC-66-633-5**

$C_{21}H_{30}O_4$  (346.47). Viscous,  $[\alpha]_D^{25} = -33.8^\circ$  ( $c = 1.12$ ,  $CHCl_3$ ). **Pharm:**

Antibacterial (*Bacillus subtilis*, 30 $\mu$ g/mL, IZD = 7mm, 100 $\mu$ g/mL, IZD = 12mm, control Penicillin G streptomycin, 30 $\mu$ g/mL, IZD = 15mm; *Bacillus sphaericus*, 30 $\mu$ g/mL, IZD = 6mm, 100 $\mu$ g/mL, IZD = 9mm, Penicillin G streptomycin, 30 $\mu$ g/mL, IZD = 14mm; *Staphylococcus aureus*, 30 $\mu$ g/mL, IZD = 6mm, 100 $\mu$ g/mL, IZD = 9mm, Penicillin G streptomycin, 30 $\mu$ g/mL, IZD = 12mm; *Klebsiella aerogenes*, 30 $\mu$ g/mL, IZD = 6mm, 100 $\mu$ g/mL, IZD = 9mm, Penicillin G streptomycin, 30 $\mu$ g/mL, IZD = 23mm; *Chromobacterium violaceum*, 30 $\mu$ g/mL, IZD = 7mm, 100 $\mu$ g/mL, IZD = 10mm, Penicillin G streptomycin, 30 $\mu$ g/mL, IZD = 24mm)<sup>[5260]</sup>. **Source:** ZAO CAO *Pulicaria wightiana* (aerial parts). **Ref:** 5260.

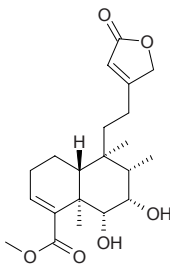
**16742 PC-66-633-1**

$C_{21}H_{30}O_5$  (362.47). White crystals, mp 200–201 $^\circ$ C (MeOH),  $[\alpha]_D^{25} = -34.9^\circ$  ( $c = 1.08$ ,  $CHCl_3$ ). **Pharm:** Antibacterial (*Bacillus subtilis*, 30 $\mu$ g/mL, IZD = 8mm, 100 $\mu$ g/mL, IZD = 12mm, control Penicillin G streptomycin, 30 $\mu$ g/mL, IZD = 15mm; *Bacillus sphaericus*, 30 $\mu$ g/mL, IZD = 8mm, 100 $\mu$ g/mL, IZD = 11mm, Penicillin G streptomycin, 30 $\mu$ g/mL, IZD = 14mm; *Staphylococcus aureus*, 30 $\mu$ g/mL, IZD = 7mm, 100 $\mu$ g/mL, IZD = 9mm, Penicillin G streptomycin, 30 $\mu$ g/mL, IZD = 12mm; *Klebsiella aerogenes*, 30 $\mu$ g/mL, IZD = 7mm, 100 $\mu$ g/mL, IZD = 12mm, Penicillin G streptomycin, 30 $\mu$ g/mL, IZD = 23mm; *Chromobacterium violaceum*, 30 $\mu$ g/mL, IZD = 7mm, 100 $\mu$ g/mL, IZD = 9mm, Penicillin G streptomycin, 30 $\mu$ g/mL, IZD = 24mm)<sup>[5260]</sup>. **Source:** ZAO CAO *Pulicaria wightiana* (aerial parts). **Ref:** 5260.

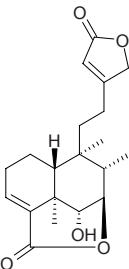
**16743 PC-66-633-2**

$C_{21}H_{30}O_6$  (378.47). Viscous,  $[\alpha]_D^{25} = -31.1^\circ$  ( $c = 0.6$ ,  $CHCl_3$ ). **Pharm:**

Antibacterial (*Bacillus subtilis*, 30 $\mu$ g/mL, IZD = 7mm, 100 $\mu$ g/mL, IZD = 9mm, control Penicillin G streptomycin, 30 $\mu$ g/mL, IZD = 15mm; *Bacillus sphaericus*, 30 $\mu$ g/mL, IZD = 8mm, 100 $\mu$ g/mL, IZD = 12mm, Penicillin G streptomycin, 30 $\mu$ g/mL, IZD = 14mm; *Staphylococcus aureus*, 30 $\mu$ g/mL, IZD = 8mm, 100 $\mu$ g/mL, IZD = 11mm, Penicillin G streptomycin, 30 $\mu$ g/mL, IZD = 12mm; *Klebsiella aerogenes*, 30 $\mu$ g/mL, IZD = 6mm, 100 $\mu$ g/mL, IZD = 9mm, Penicillin G streptomycin, 30 $\mu$ g/mL, IZD = 23mm; *Chromobacterium violaceum*, 30 $\mu$ g/mL, IZD = 8mm, 100 $\mu$ g/mL, IZD = 12mm, Penicillin G streptomycin, 30 $\mu$ g/mL, IZD = 24mm)<sup>[5260]</sup>. **Source:** ZAO CAO *Pulicaria wightiana* (aerial parts). **Ref:** 5260.

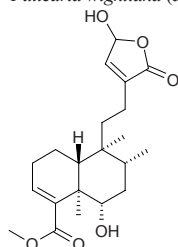
**16744 PC-66-633-3**

$C_{21}H_{26}O_5$  (346.43). White crystals, mp 205–206 $^\circ$ C (MeOH),  $[\alpha]_D^{25} = -37.3^\circ$  ( $c = 0.8$ ,  $CHCl_3$ ). **Pharm:** Antibacterial (*Bacillus subtilis*, 30 $\mu$ g/mL, IZD = 7mm, 100 $\mu$ g/mL, IZD = 11mm, control Penicillin G streptomycin, 30 $\mu$ g/mL, IZD = 15mm; *Bacillus sphaericus*, 30 $\mu$ g/mL, IZD = 7mm, 100 $\mu$ g/mL, IZD = 9mm, Penicillin G streptomycin, 30 $\mu$ g/mL, IZD = 14mm; *Staphylococcus aureus*, 30 $\mu$ g/mL, IZD = 6mm, 100 $\mu$ g/mL, IZD = 9mm, Penicillin G streptomycin, 30 $\mu$ g/mL, IZD = 12mm; *Klebsiella aerogenes*, 30 $\mu$ g/mL, IZD = 6mm, 100 $\mu$ g/mL, IZD = 8mm, Penicillin G streptomycin, 30 $\mu$ g/mL, IZD = 23mm; *Chromobacterium violaceum*, 30 $\mu$ g/mL, IZD = 7mm, 100 $\mu$ g/mL, IZD = 9mm, Penicillin G streptomycin, 30 $\mu$ g/mL, IZD = 24mm)<sup>[5260]</sup>. **Source:** ZAO CAO *Pulicaria wightiana* (aerial parts). **Ref:** 5260.

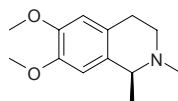


**16745 PC-66-633-4**

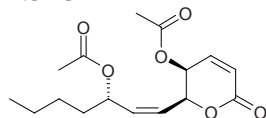
$C_{21}H_{30}O_6$  (378.47). Viscous,  $[\alpha]_D^{25} = -16.3^\circ$  ( $c = 0.4$ ,  $CHCl_3$ ). **Pharm:** Antibacterial (*Bacillus subtilis*, 30 $\mu$ g/mL, IZD = 8mm, 100 $\mu$ g/mL, IZD = 11mm, control Penicillin G streptomycin, 30 $\mu$ g/mL, IZD = 15mm; *Bacillus sphaericus*, 30 $\mu$ g/mL, IZD = 8mm, 100 $\mu$ g/mL, IZD = 12mm, Penicillin G streptomycin, 30 $\mu$ g/mL, IZD = 14mm; *Staphylococcus aureus*, 30 $\mu$ g/mL, IZD = 7mm, 100 $\mu$ g/mL, IZD = 10mm, Penicillin G streptomycin, 30 $\mu$ g/mL, IZD = 12mm; *Klebsiella aerogenes*, 30 $\mu$ g/mL, IZD = 7mm, 100 $\mu$ g/mL, IZD = 9mm, Penicillin G streptomycin, 30 $\mu$ g/mL, IZD = 23mm; *Chromobacterium violaceum*, 30 $\mu$ g/mL, IZD = 8mm, 100 $\mu$ g/mL, IZD = 12mm, Penicillin G streptomycin, 30 $\mu$ g/mL, IZD = 24mm). **Source:** ZAO CAO *Pulicaria wightiana* (aerial parts). **Ref:** 5260.

**16746 Pectenine**

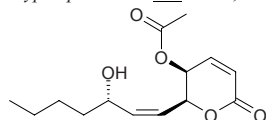
$C_{13}H_{19}NO_2$  (221.30). **Pharm:** Convulsant (warm-blooded animal). **Source:** JU REN ZHU *Carnegiea gigantea*, *Cereus pectenaboriginum*. **Ref:** 658.

**16747 Pectinolide A**

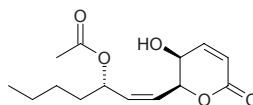
[149155-54-4]  $C_{16}H_{22}O_6$  (310.35). Oil,  $[\alpha]_D = +202^\circ$  ( $c = 0.15$ , MeOH). **Pharm:** Antibacterial (*Staphylococcus aureus*, MIC = 12.5 $\mu$ g/mL, *Bacillus subtilis*, MIC = 6.25 $\mu$ g/mL)<sup>[3594]</sup>; antibacterial (*Staphylococcus aureus*: ATCC25923, MIC = 32 $\mu$ g/mL; XU-212, MIC = 128 $\mu$ g/mL; SA-1199B, MIC = 128 $\mu$ g/mL; EMRSA-15, MIC = 128 $\mu$ g/mL; control Tetracycline, MIC = 0.08 $\mu$ g/mL, 128 $\mu$ g/mL, 64 $\mu$ g/mL and 0.15 $\mu$ g/mL respectively)<sup>[5075]</sup>; cytotoxic (many cancer cells,  $ED_{50} < 4\mu$ g/mL)<sup>[3594]</sup>; cytotoxic (KB,  $ED_{50} = 0.63\mu$ g/mL, control Ellipticine,  $ED_{50} = 0.10\mu$ g/mL)<sup>[5075]</sup>. **Source:** ZHI SHAN XIANG *Hyptis pectinata*. **Ref:** 3594, 5075.

**16748 Pectinolide B**

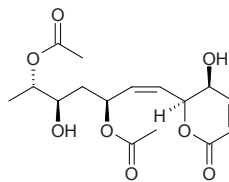
[149155-55-5]  $C_{14}H_{20}O_5$  (268.31). Oil,  $[\alpha]_D = +89.6^\circ$  ( $c = 0.57$ , MeOH). **Pharm:** Antibacterial (*Staphylococcus aureus*, MIC = 100 $\mu$ g/mL; *Bacillus subtilis*, MIC = 25 $\mu$ g/mL)<sup>[3594]</sup>; antibacterial (*Staphylococcus aureus*: ATCC25923, MIC = 128 $\mu$ g/mL; XU-212, MIC = 256 $\mu$ g/mL; SA-1199B, MIC = 256 $\mu$ g/mL; EMRSA-15, MIC = 256 $\mu$ g/mL; control Tetracycline, MIC = 0.08 $\mu$ g/mL, 128 $\mu$ g/mL, 64 $\mu$ g/mL and 0.15 $\mu$ g/mL respectively)<sup>[5075]</sup>; cytotoxic (many cancer cells,  $ED_{50} < 4\mu$ g/mL)<sup>[3594]</sup>; cytotoxic (KB,  $ED_{50} > 20\mu$ g/mL, control Ellipticine,  $ED_{50} = 0.10\mu$ g/mL)<sup>[5075]</sup>. **Source:** ZHI SHAN XIANG *Hyptis pectinata*. **Ref:** 3594, 5075.

**16749 Pectinolide C**

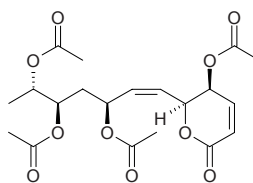
[149155-56-6]  $C_{14}H_{20}O_5$  (268.31). Oil,  $[\alpha]_D = +80.99^\circ$  ( $c = 0.76$ , MeOH). **Pharm:** Antibacterial (*Staphylococcus aureus*, MIC = 100 $\mu$ g/mL; *Bacillus subtilis*, MIC = 12.5 $\mu$ g/mL)<sup>[3594]</sup>; antibacterial (*Staphylococcus aureus*: ATCC25923, MIC = 64 $\mu$ g/mL; XU-212, MIC = 256 $\mu$ g/mL; SA-1199B, MIC = 128 $\mu$ g/mL; EMRSA-15, MIC = 128 $\mu$ g/mL; control Tetracycline, MIC = 0.08 $\mu$ g/mL, 128 $\mu$ g/mL, 64 $\mu$ g/mL and 0.15 $\mu$ g/mL respectively)<sup>[5075]</sup>; cytotoxic (many cancer cells,  $ED_{50} < 4\mu$ g/mL)<sup>[3594]</sup>; cytotoxic (KB,  $ED_{50} = 2.52\mu$ g/mL, control Ellipticine,  $ED_{50} = 0.10\mu$ g/mL)<sup>[5075]</sup>. **Source:** ZHI SHAN XIANG *Hyptis pectinata*. **Ref:** 3594, 5075.

**16750 Pectinolide D**

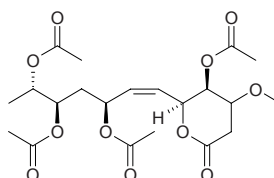
6*S*-[3*S*,6*S*-(Diaceoxy)-5*R*-hydroxy-1*Z*-hepteny]-5*S*-hydroxy-5,6-dihydro-2*H*-pyran-2-one  $C_{16}H_{22}O_8$  (342.35). Yellow oil. **Source:** ZHI SHAN XIANG *Hyptis pectinata*. **Ref:** 3487.

**16751 Pectinolide E**

6*S*-[3*S*,5*R*,6*S*-(Triaceoxy)-1*Z*-hepteny]-5*S*-acetoxy-5,6-dihydro-2*H*-pyran-2-one  $C_{20}H_{26}O_{10}$  (426.42). Yellow oil,  $[\alpha]_D = +131.8^\circ$  ( $c = 1.77$ ,  $CHCl_3$ ). **Source:** ZHI SHAN XIANG *Hyptis pectinata*. **Ref:** 3487.

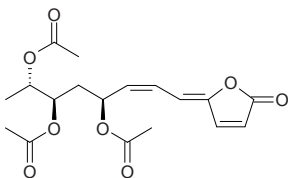
**16752 Pectinolide F**

6*S*-[3*S*,5*R*,6*S*-(triaceoxy)-1*Z*-hepteny]-5*S*-acetoxy-4*R*-methoxy-3,4,5,6-tetrahydro-4*H*pyran-2-one  $C_{21}H_{30}O_{11}$  (458.47). Yellow oil,  $[\alpha]_D = -10.0^\circ$  ( $c = 0.67$ ,  $CHCl_3$ ). **Source:** ZHI SHAN XIANG *Hyptis pectinata*. **Ref:** 3487.

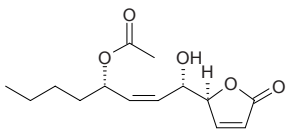


**16753 Pectinolide G**

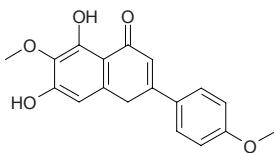
[2'Z,5(1'Z)]5-(4'S,6'R,7'S-triacetoxy-2-octenylidene)-2(5H)-furanone C<sub>18</sub>H<sub>22</sub>O<sub>8</sub> (366.37). Yellow oil,  $[\alpha]_D = -4.4^\circ$  ( $c = 1.0$ , MeOH). Source: ZHI SHAN XIANG *Hyptis pectinata*. Ref: 3487.

**16754 Pectinolide H**

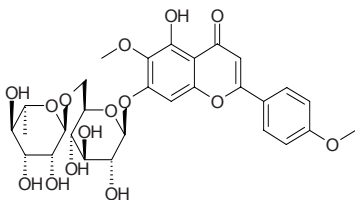
C<sub>14</sub>H<sub>20</sub>O<sub>5</sub> (268.31). Oil,  $[\alpha]_{589nm}^{25} = -41^\circ$  ( $c = 0.24$ , CHCl<sub>3</sub>). Pharm: Cytotoxic (KB, ED<sub>50</sub> > 20 μg/mL, control Ellipticine, ED<sub>50</sub> = 0.10 μg/mL); antibacterial (*Staphylococcus aureus*: ATCC25923, MIC = 32 μg/mL; XU-212, MIC = 64 μg/mL; SA-1199B, MIC = 64 μg/mL; EMRSA-15, MIC = 64 μg/mL; control Tetracycline, MIC = 0.08 μg/mL, 128 μg/mL, 64 μg/mL and 0.15 μg/mL respectively). Source: ZHI SHAN XIANG *Hyptis pectinata*. Ref: 5075.

**16755 Pectolarigenin**

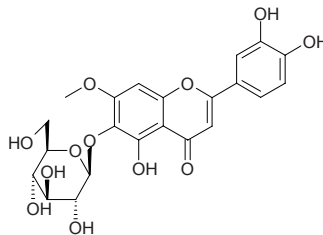
[520-12-7] C<sub>17</sub>H<sub>14</sub>O<sub>6</sub> (314.30). mp 215~216°C. Source: JIA LIAN QIAO YE *Duranta repens*. Ref: 6.

**16756 Pectolarin**

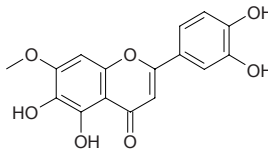
[28978-02-1] C<sub>29</sub>H<sub>34</sub>O<sub>15</sub> (622.59). mp 240~250°C (dec). Pharm: Diuretic and laxative (effective component in Yellow Toadflax, *Linaria vulgaris* (LIU CHUAN YU), used mainly in Russia); enhances myocardial contractility (rbt, iv); hemostatic Source: DA JI<sup>(4)</sup> *Cirsium japonicum* (aerial parts or root: content scope = 0.78%~1.20%<sup>[5501]</sup>), DI TANG HUA *Kerria japonica*, HONG CHE ZHOU CAO *Trifolium pratense*, LIU CHUAN YU *Linaria vulgaris*, TAI WAN JI *Cirsium japonicum* var. *takaense*. Ref: 6, 658, 5501.

**16757 Pedaliin**

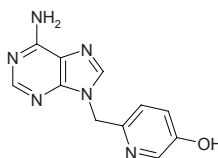
[22860-72-6] C<sub>22</sub>H<sub>22</sub>O<sub>12</sub> (478.41). mp 254°C (dec). Source: HU MA YE *Sesamum indicum*. Ref: 6.

**16758 Pedalitin**

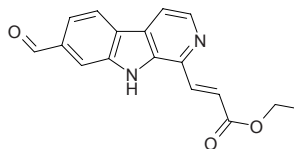
5,6,3',4'-Tetrahydroxy-7-methoxyflavone [22384-63-0] C<sub>16</sub>H<sub>12</sub>O<sub>7</sub> (316.27). Yellow acicular crystals, mp 300~301°C. Pharm: Δ<sup>5</sup>-Lipoxygenase inhibitor. Source: HU MA YE *Sesamum indicum*, LU SHI DONG LING CAO *Isodon rubescens* var. *lushiensis* (leaf: yield = 0.00032%dw)<sup>[4732]</sup>, MAO LIAN HAO *Artemisia vestita*. Ref: 474, 658, 4732.

**16759 Pedatisectine A**

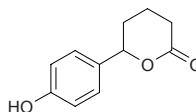
5-Hydroxy-2-pyridylmethyl-adenine [103823-31-0] C<sub>11</sub>H<sub>10</sub>N<sub>6</sub>O (242.24). Colorless fine needles (MeOH), mp 282~284°C. Pharm: Inhibits sino-atrial rate and contraction of atrium Papillary muscle (dog); coronary vasodilator (*in vitro* heart, enhances blood flow through coronary arteries). Source: ZHANG YE BAN XIA *Pinellia pedatisecta*. Ref: 3151, 3152.

**16760 Pedatisectine C**

[103805-66-9] C<sub>17</sub>H<sub>14</sub>N<sub>2</sub>O<sub>3</sub> (294.31). mp 162~164°C. Source: ZHANG YE BAN XIA *Pinellia pedatisecta*. Ref: 3151.

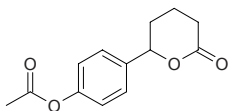
**16761 Pedicellanin**

[89647-77-8] C<sub>11</sub>H<sub>12</sub>O<sub>3</sub> (192.22). Plates (hexane-acetone), mp 125°C,  $[\alpha]_D^{28} = 0^\circ$  (MeOH). Pharm: CNS activity (mus, 20mg/kg ip, has marked adaptogenic and anti-stress action). Source: HUA GENG LONG DAN *Gentiana pedicellata*. Ref: 3595.

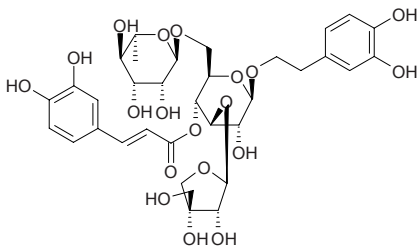


**16762 Pedicellin**

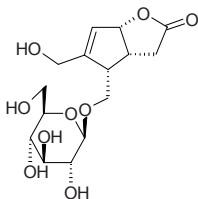
[6851-84-9] C<sub>13</sub>H<sub>14</sub>O<sub>4</sub> (234.25). Fine crystals (hexane–acetone), mp 110–112°C, [ $\alpha$ ]<sub>D</sub><sup>28</sup> = –12° (*c* = 0.34, CHCl<sub>3</sub>). **Pharm:** CNS activity (mus, 20mg/kg ip, has marked adaptogenic and anti-stress action). **Source:** HUA GENG LONG DAN *Gentiana pedicellata*. **Ref:** 3595.

**16763 Pedicularioside A**

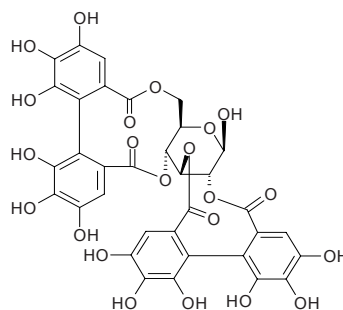
[135010-61-6] C<sub>34</sub>H<sub>44</sub>O<sub>19</sub> (756.72). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>22</sup> = –58.4° (*c* = 1.2, MeOH). **Pharm:** Antineoplastic (SMMC-7721 liver cancer, IC<sub>50</sub> = (94.8±2.0)μg/mL, MQc80-3 gastric adenocarcinoma cells, IC<sub>50</sub> = (101.6±2.8)μg/mL, L342 pulmonary adenoma, IC<sub>50</sub> = (97.6±5.0)μg/mL); antihemolytic (protects red blood cells against oxydation resulting in hemolysis); antioxidant (lipid peroxidization inhibitor, inhibits microsomal lipid peroxidization InRt = 15.6%, heperoxide InRt = 56.8%). **Source:** HONG WEN MA XIAN HAO *Pedicularis striata*, MEI GUAN MA XIAN HAO *Pedicularis decora*, SUI HUA MA XIAN HAO *Pedicularis spicata*, ZHU SI HONG WEN MA XIAN HAO *Pedicularis striata* ssp. *arachnoidea*. **Ref:** 3687, 3688, 3689, 3690, 3691, 3692.

**16764 Pedicularis lactone-1-O-β-D-glucoside**

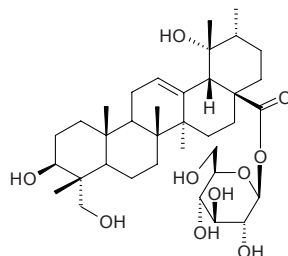
C<sub>15</sub>H<sub>22</sub>O<sub>9</sub> (346.34). White powder. **Source:** MEI GUAN MA XIAN HAO *Pedicularis decora*. **Ref:** 829.

**16765 Pedunculagin**

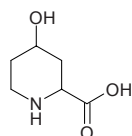
[7045-42-3] C<sub>34</sub>H<sub>24</sub>O<sub>22</sub> (784.56). Earthy yellow amorphous powder, easily soluble in MeOH and Me<sub>2</sub>CO. **Pharm:** Antihepatotoxin (*in vitro*); antioxidant (hepatic cell mitochondria in cats, inhibits lipid peroxidization); antioxidant (SOD-like activity, EC<sub>50</sub> = 63.7μmol/L, control Gallic acid, EC<sub>50</sub> = 31.7μmol/L, L-Ascorbic acid, EC<sub>50</sub> = 34.6μmol/L)<sup>[3408]</sup>; antioxidant (DPPH scavenger, EC<sub>50</sub> = 4.72μmol/L, control Gallic acid, EC<sub>50</sub> = 5.88μmol/L, L-Ascorbic acid, EC<sub>50</sub> = 6.25μmol/L)<sup>[3408]</sup>. **Source:** BAI SHAO *Paeonia albiflora* [Syn. *Paeonia lactiflora*] (fresh fruit: yield = 0.219%fw)<sup>[4695]</sup>, HU TAO REN *Juglans regia*, JING JIE HUA *Stachyurus praecox*, SHAN CHA *Camellia japonica*, TAO JIN NIANG *Rhodomyrtus tomentosa*, XIAO MU MA HUANG *Casuarina stricta*, *Quercus* spp., *Rubus* spp., *Potentilla* spp., *Juglans* spp. **Ref:** 429, 658, 3408, 4695.

**16766 Pedunculoside**

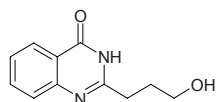
[42719-32-4] C<sub>36</sub>H<sub>58</sub>O<sub>10</sub> (650.86). White needles (MeOH), mp 212–214°C. **Source:** CHANG GENG DONG QING *Ilex pedunculosa*, GUANG LIANG YANG TONG *Adinandra nitida*, JIU BI YING *Ilex rotunda*, LUO TUO PENG *Peganum harmala*. **Ref:** 527, 1521, 2518.

**16767 Pegaline**

C<sub>6</sub>H<sub>11</sub>NO<sub>3</sub> (145.16). mp 294°C. **Source:** SI JI QING *Ilex chinensis* [Syn. *Ilex purpurea*]. **Ref:** 6.

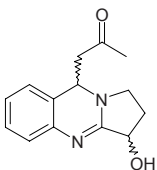
**16768 Pegamine**

[31431-93-3] C<sub>11</sub>H<sub>12</sub>N<sub>2</sub>O<sub>2</sub> (204.23). **Source:** LUO TUO PENG *Peganum harmala*. **Ref:** 6.

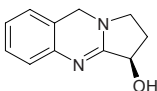


**16769 Peganidine**

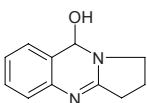
[28463-17-4] C<sub>14</sub>H<sub>16</sub>N<sub>2</sub>O<sub>2</sub> (244.30). mp 189~190°C. Source: LUO TUO PENG *Peganum harmala*. Ref: 6, 1521.

**16770 Peganine**

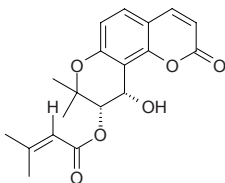
Vasicine C<sub>11</sub>H<sub>12</sub>N<sub>2</sub>O (188.23). Acicular crystals (ethanol), mp 212°C, [α]<sub>D</sub><sup>14</sup> = -254° (c = 2.4, chloroform), [α]<sub>D</sub><sup>14</sup> = -62° (c = 2.4, ethanol). Pharm: Antibacterial (*Staphylococcus aureus*, *Bacillus sonne*, *Shigella* sp., *Bacillus proteus* and *Bacillus typhosus*); anthelmintic (roundworm); antispasmodic (*in vitro* and *in vivo*); choleric (cat, iv, ED = 5mg/kg; dog, sc, bile increases 40%~100%); gastric secretion promotor (ox); antihypertensive; oxytocic. Source: DA BO GU *Adhatoda vasica*, HUANG HUA ZI *Sida cordifolia*, LIU CHUAN YU *Linaria vulgaris*, LUO TUO PENG *Peganum harmala*, LUO TUO PENG ZI *Peganum harmala*. Ref: 6, 658, 1521.

**16771 Peganol**

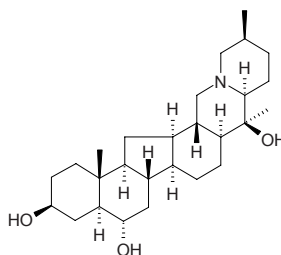
[36101-54-9] C<sub>11</sub>H<sub>12</sub>N<sub>2</sub>O (188.23). mp 178~180°C. Source: LUO TUO PENG *Peganum harmala*. Ref: 6.

**16772 Peguangxienin**

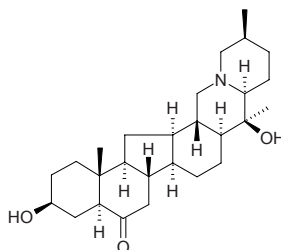
C<sub>19</sub>H<sub>20</sub>O<sub>6</sub> (344.37). White granular substance (acetone-cyclohexane), mp about 75°C, [α]<sub>D</sub><sup>12</sup> = +74° (c = 0.11, CHCl<sub>3</sub>). Source: QIAN HU *Angelica decursiva* [Syn. *Peucedanum decursivum*]. Ref: 9.

**16773 Peimine**

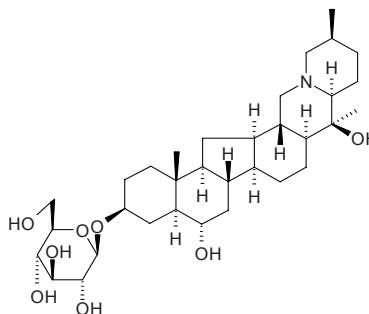
Verticine; Cevane-3,6,20-triol [23496-41-5] C<sub>27</sub>H<sub>45</sub>NO<sub>3</sub> (431.66). Acicular crystals (ethanol), mp 223~224°C, 268~270°C, [α]<sub>D</sub><sup>16</sup> = -19.4° (ethanol), [α]<sub>D</sub><sup>17</sup> = -20° (chloroform), [α]<sub>D</sub><sup>25</sup> = -15.8° (c = 0.19, EtOH), insoluble in water, soluble in most of organic solvents<sup>[5507]</sup>. Pharm: ACE inhibitor (dose-dependent manner, IC<sub>50</sub> = 312.8 μmol/L)<sup>[5414]</sup>; bronchial smooth muscle stimulant (cat and rbt, high dose, *in vitro*); bronchial smooth muscle relaxant (cat and rbt, low dose, *in vitro*); mydriatic (dog, cat and rbt); uterine stimulant (rbt, rat); LD<sub>50</sub> (mus, iv, hydrobromate) = 9.0mg/kg. Source: PING BEI MU *Fritillaria ussuriensis*, XI BEI MU *Fritillaria imperialis*, ZHE BEI MU *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*] (dried bulb: content = 0.049%<sup>[5508]</sup>); in 1932, the compound was isolated from the plant by Cheng-xia Zhao for the first time). Ref: 4, 528, 661, 5414, 5501, 5507, 5508.

**16774 Peiminine**

Verticinone [18059-10-4] C<sub>27</sub>H<sub>43</sub>NO<sub>3</sub> (429.65). mp 212~213°C, [α]<sub>D</sub> = -62.5° (ethanol). [α]<sub>D</sub><sup>25</sup> = -75.0° (c = 0.2, EtOH), Pharm: ACE inhibitor (dose-dependent manner, IC<sub>50</sub> = 165.0 μmol/L)<sup>[5414]</sup>; uterine stimulant. Source: PING BEI MU *Fritillaria ussuriensis*, ZHE BEI MU *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*] (dried bulb: content = 0.019%<sup>[5508]</sup>). Ref: 6, 658, 661, 5414, 5501, 5508.

**16775 Peiminiside**

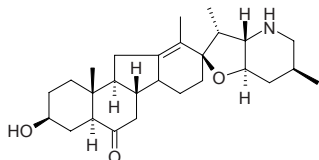
C<sub>33</sub>H<sub>55</sub>NO<sub>8</sub> (593.81). Source: ZHE BEI MU *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*]. Ref: 6.



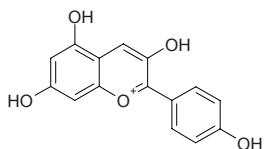


**16776 Peimisine**

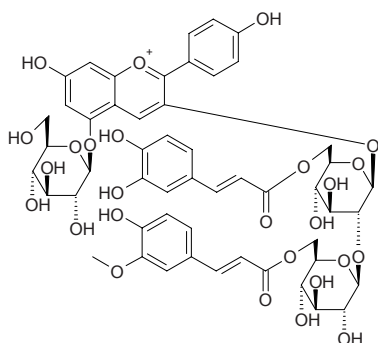
$C_{27}H_{41}NO_3$  (427.63). Colorless acicular crystals, mp 268–270°C (acetic ester–methanol),  $[\alpha]_D^{20} = -34.8^\circ$  ( $c = 0.24$ , methanol);  $[\alpha]_D^{25} = -16.7^\circ$  ( $c = 0.12$ , EtOH). **Pharm:** ACE inhibitor (dose-dependent manner,  $IC_{50} = 526.5 \mu\text{mol/L}$ )<sup>[5414]</sup>. **Source:** HUA XI BEI MU *Fritillaria siechuanica*, NING XIA BEI MU *Fritillaria taipaiensis* var. *ningxiaensis*, YI BEI MU *Fritillaria pallidiflora*, PING BEI MU *Fritillaria ussuriensis*. **Ref:** 225, 271, 660, 5414.

**16777 Pelargonidin**

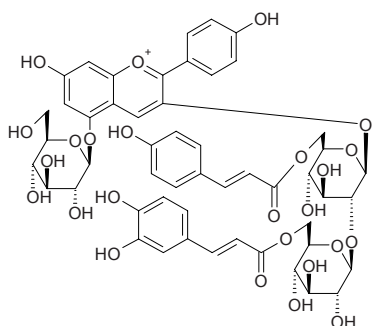
[7690-51-9]  $C_{15}H_{11}O_5^+$  (271.25). **Pharm:** Antiviral; leukocyte elastase MMP-2/9 inhibitor<sup>[4416]</sup>. **Source:** CHOU MO LI *Clerodendron fragrans*, FENG XIAN HUA *Impatiens balsamina*. **Ref:** 6, 658, 4416.

**16778 Pelargonidin-3-O-[6-O-(E)-caffeoyl-2-O-(6-(E)-feruloyl-β-D-glucopyranosyl)-(1→2)-β-D-glucopyranoside]-5-O-(β-D-glucopyranoside)**

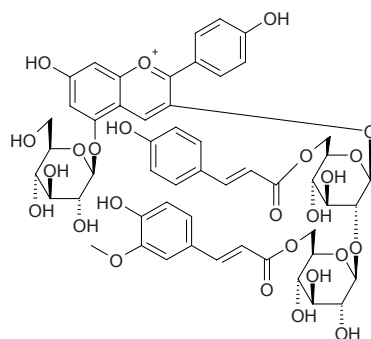
$C_{52}H_{55}O_{26}^+$  (1096.00). Red amorphous powder. **Source:** LAI FU *Raphanus sativus*. **Ref:** 1949.

**16779 Pelargonidin-3-O-[6-O-(E)-p-coumaroyl-2-O-(6-(E)-caffeoyl-β-D-glucopyranosyl)-(1→2)-β-D-glucopyranoside]-5-O-(β-D-glucopyranoside)**

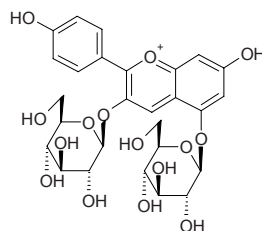
$C_{51}H_{53}O_{25}^+$  (1065.98). Red amorphous powder. **Source:** LAI FU *Raphanus sativus*. **Ref:** 1949.

**16780 Pelargonidin-3-O-[6-O-(E)-p-coumaroyl-2-O-(6-(E)-feruloyl-β-D-glucopyranosyl)-(1→2)-β-D-glucopyranoside]-5-O-(β-D-glucopyranoside)**

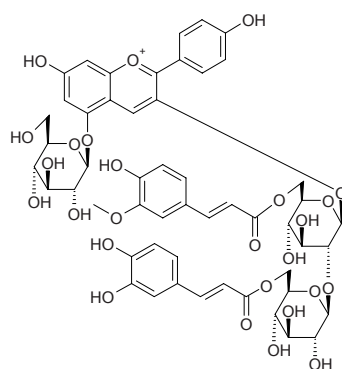
$C_{52}H_{55}O_{25}^+$  (1080.00). Red amorphous powder. **Source:** LAI FU *Raphanus sativus*. **Ref:** 1949.

**16781 Pelargonidin-3,5-diglucoside**

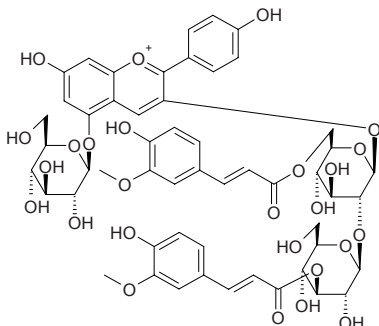
Pelargonin  $C_{27}H_{31}O_{15}^+$  (595.54). **Source:** BAI FAN DOU *Phaseolus vulgaris*, MA TI WEN TIAN ZHU KUI *Pelargonium zonale*, MU KU ER MO YAO *Commiphora mukul*, SHI LIU GEN *Punica granatum*, *Gladiolus* sp. **Ref:** 6, 658.

**16782 Pelargonidin-3-O-[6-O-(E)-feruloyl-2-O-(6-(E)-caffeoyl-β-D-glucopyranosyl)-(1→2)-β-D-glucopyranoside]-5-O-(β-D-glucopyranoside)**

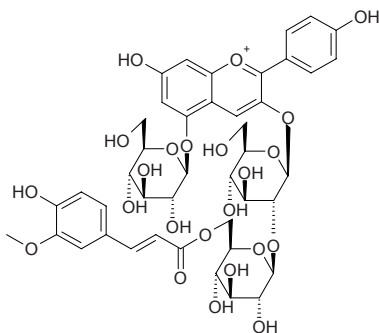
$C_{52}H_{55}O_{26}^+$  (1096.00). Red amorphous powder. **Source:** LAI FU *Raphanus sativus*. **Ref:** 1949.



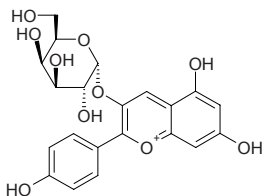
**16783 Pelargonidin-3-O-[6-O-(E)-feruloyl-2-O-(2-(E)-feruloyl-β-D-glucopyranosyl)-(1→2)-β-D-glucopyranoside]-5-O-(β-D-glucopyranoside)**  
 $C_{53}H_{57}O_{26}^+$  (1110.03). Red amorphous powder. Source: LAI FU *Raphanus sativus*. Ref: 1949.



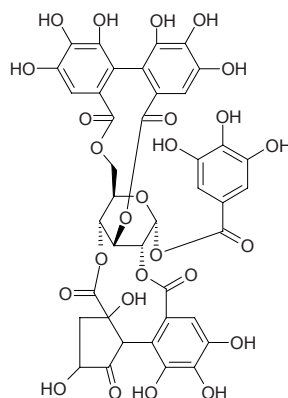
**16784 Pelargonidin-3-O-[6-O-(E)-feruloyl-2-O-β-D-glucopyranosyl]-(1→2)-β-D-glucopyranoside(-5-O-β-D-glucopyranoside)**  
 $C_{43}H_{49}O_{23}^+$  (933.86). Red amorphous powder. Source: LAI FU *Raphanus sativus*. Ref: 1949.



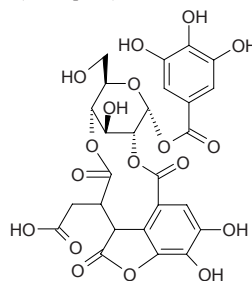
**16785 Pelargonidin-3-galactoside**  
 $C_{21}H_{21}O_{10}$  (433.40). Source: QIU MU GUA *Chaenomeles lagenaria* [Syn. *Chaenomeles speciosa*]. Ref: 6.



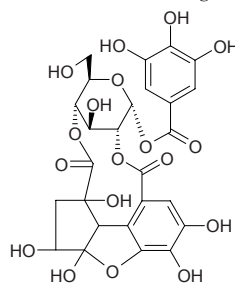
**16786 Pelargoniin A**  
 $C_{40}H_{30}O_{26}$  (926.67). White amorphous powder, mp 220°C,  $[\alpha]_D^{20} = -65.5^\circ$  ( $c = 0.06$ , MeOH). Source: SHEN YE TIAN ZHU KUI *Pelargonium reniforme* (aerial parts). Ref: 3975.



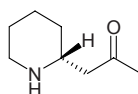
**16787 Pelargoniin B**  
 $C_{26}H_{22}O_{18}$  (622.45). White amorphous powder, mp 214°C,  $[\alpha]_D^{20} = -43.0^\circ$  ( $c = 0.5$ , MeOH). Source: SHEN YE TIAN ZHU KUI *Pelargonium reniforme* (aerial parts). Ref: 3975.



**16788 Pelargoniin C**  
 $C_{26}H_{24}O_{18}$  (624.47). White amorphous powder, mp 210°C. Source: SHEN YE TIAN ZHU KUI *Pelargonium reniforme* (aerial parts). Ref: 3975.

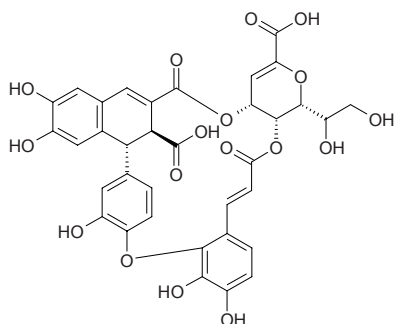


**16789 Pelletierine**  
 Isopelletierine [4396-01-4]  $C_8H_{15}NO$  (141.22). Pharm: Anthelmintic (racemate, liver flukes and tapeworm);  $LD_{50}$  (rbt, iv, racemate) = 40mg/kg. Source: AO ZHOU QIE *Solanum aviculare* [Syn. *Solanum laciniatum*], CUI MIAN SHUI QIE *Withania somnifera*, SHI LIU GEN *Punica granatum*, SHI LIU PI *Punica granatum*, TAI JING TIAN *Sedum acre*, *Lupinus formosus*. Ref: 6, 658, 1521.

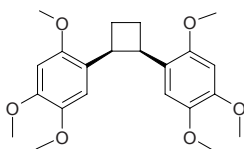


**16790 Pelliatin**

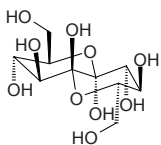
$C_{35}H_{28}O_{17}$  (720.60). Source: XI TAI *Pellia epiphylla*. Ref: 4549.

**16791 Pellucidin A**

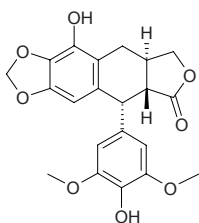
$C_{22}H_{28}O_6$  (388.46). Pale-white amorphous substance, mp 109.6~110.5°C (*n*-hexane-EtOAc). Source: CAO HU JIAO *Peperomia pellucida* (aerial parts). Ref: 5106.

**16792 Peltalosa**

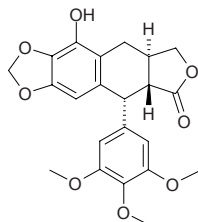
$C_{10}H_{18}O_{10}$  (298.25). Light brown solid, mp 187~189 °C,  $[\alpha]_D^{20} = -310^\circ$  ( $c = 0.01$ ,  $H_2O$ ). Pharm: Hypoglycemic (alloxan diabetic mouse)<sup>[4529]</sup>. Source: DUN ZHUANG LI JU *Psacalium peltatum* (root and rhizome). Ref: 4529.

**16793  $\alpha$ -Peltatin**

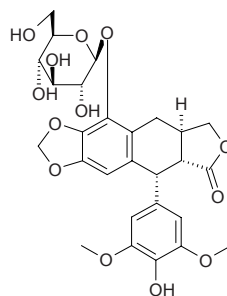
[568-53-6]  $C_{21}H_{20}O_8$  (400.39). Colorless prismatic crystals (absolute ethanol), mp 238~241°C (dec); 236~246°C,  $[\alpha]_D^{20} = -122.9^\circ$  ( $c = 0.578$ , chloroform). Pharm: Antineoplastic (mus, EAC cells, iv 0.1mg, inhibits cancer cell mitosis); anti-fertility agent (pregnant mus, orl 4mg); antiviral (HSV-1, measles virus). Source: BAI YA MA *Linum album*, DUN YE GUI JIU *Podophyllum peltatum*. Ref: 4, 5, 661.

**16794  $\beta$ -Peltatin**

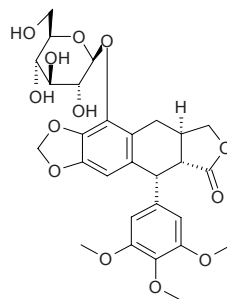
[518-29-6]  $C_{22}H_{22}O_8$  (414.42). mp 238~241°C (dec). Source: BAI YA MA *Linum album*, DUN YE GUI JIU *Podophyllum peltatum*. Ref: 4, 5.

**16795  $\alpha$ -Peltatin glucoside**

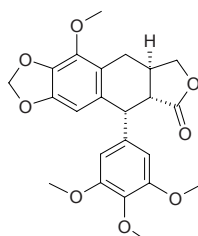
$C_{27}H_{30}O_{13}$  (562.53). mp 168~171°C. Pharm: Antineoplastic; inhibits mitosis (fibrocyte in chick, mus EAC cells, ip and lasts 6~20h); LD<sub>50</sub> (mus, ip)  $\geq 200$ mg/kg. Source: DUN YE GUI JIU *Podophyllum peltatum*. Ref: 5, 658.

**16796  $\beta$ -Peltatin glucoside**

$C_{28}H_{32}O_{13}$  (576.56). mp 156~159°C. Pharm: Antineoplastic; inhibits mitosis (mus ascites carcinoma cells, 2mg iv, the action lasts 20h); inhibits herpes simplex; LD<sub>50</sub> (mus, ip)  $> 200$ mg/kg. Source: DUN YE GUI JIU *Podophyllum peltatum*. Ref: 5, 658.

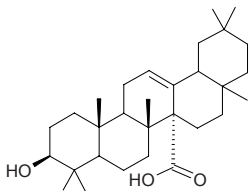
**16797  $\beta$ -Peltatin A methyl ether**

$C_{23}H_{24}O_8$  (428.45). Pharm: Antineoplastic. Source: CHA ZI YUAN BAI *Juniperus sabina*, DUN YE GUI JIU *Podophyllum peltatum*. Ref: 658.

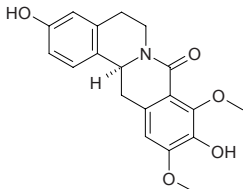


**16798  $\beta$ -Peltoboykinolic acid**

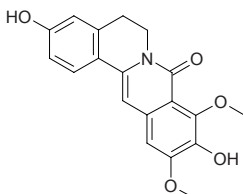
$C_{30}H_{48}O_3$  (456.72). White needles, mp 248~251°C. Source: ZANG YAO LUO JING JIN YAO *Chrysosplenium nudicaule*. Ref: 4547.

**16799 Pendulamine A**

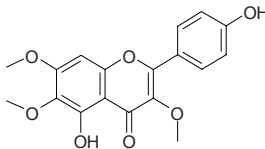
$C_{19}H_{19}NO_5$  (341.37). Brown solid,  $[\alpha]_D^{26} = -25.0^\circ$  ( $c = 0.4$ ,  $CHCl_3$ ). Pharm: Antibacterial (gram-positive: *Bacillus subtilis*, MIC = 2.0 $\mu$ g/disc, control Konamycin sulphate, MIC = 1.25 $\mu$ g/disc; *Corynebacterium hoffmanii*, MIC = 0.02 $\mu$ g/disc, Konamycin sulphate, MIC = 0.62 $\mu$ g/disc; *Staphylococcus aureus*, MIC = 0.2 $\mu$ g/disc, Konamycin sulphate, MIC = 0.31 $\mu$ g/disc; *Streptococcus pyogenes*, MIC = 20 $\mu$ g/disc, Konamycin sulphate, MIC = 1.25 $\mu$ g/disc; *Streptococcus viridans*, MIC = 12.5 $\mu$ g/disc, Konamycin sulphate, MIC = 2.5 $\mu$ g/disc; *Micrococcus lysodicklycus*, MIC = 0.02 $\mu$ g/disc, Konamycin sulphate, MIC = 10 $\mu$ g/disc; gram negative: *Klebsiella pneumoniae*, MIC = 2 $\mu$ g/disc, Konamycin sulphate, MIC = 5 $\mu$ g/disc; *Pseudomonas aeruginosa*, MIC = 2 $\mu$ g/disc, Konamycin sulphate, MIC = 5 $\mu$ g/disc; *Salmonella paratyphi A*, MIC = 0.2 $\mu$ g/disc, Konamycin sulphate, MIC = 1.25 $\mu$ g/disc; *Salmonella typhi*, MIC = 0.02 $\mu$ g/disc, Konamycin sulphate, MIC = 2.5 $\mu$ g/disc). Source: BIAN ZHONG CHANG YE AN LUO *Polyalthia longifolia* var. *pendula*. Ref: 5386.

**16800 Pendulamine B**

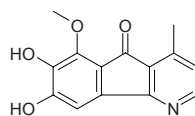
$C_{19}H_{17}NO_5$  (339.35). Reddish brown gum. Pharm: Antibacterial (gram-positive: *Corynebacterium hoffmanii*, MIC = 0.02 $\mu$ g/disc, control Konamycin sulphate, MIC = 0.62 $\mu$ g/disc; *Staphylococcus aureus*, MIC = 0.2 $\mu$ g/disc, Konamycin sulphate, MIC = 0.31 $\mu$ g/disc; *Streptococcus faecalis*, MIC = 2 $\mu$ g/disc, Konamycin sulphate, MIC = 0.31 $\mu$ g/disc; *Streptococcus pyogenes*, MIC = 20 $\mu$ g/disc, Konamycin sulphate, MIC = 1.25 $\mu$ g/disc; *Streptococcus viridans*, MIC = 0.02 $\mu$ g/disc, Konamycin sulphate, MIC = 2.5 $\mu$ g/disc; *Micrococcus lysodicklycus*, MIC = 0.02 $\mu$ g/disc, Konamycin sulphate, MIC = 10 $\mu$ g/disc; gram negative: *Bacillus pneumoniae*, MIC = 2 $\mu$ g/disc, Konamycin sulphate, MIC = 5 $\mu$ g/disc; *Salmonella paratyphi A*, MIC = 0.2 $\mu$ g/disc, Konamycin sulphate, MIC = 1.25 $\mu$ g/disc; *Salmonella typhi*, MIC = 0.2 $\mu$ g/disc, Konamycin sulphate, MIC = 2.5 $\mu$ g/disc). Source: BIAN ZHONG CHANG YE AN LUO *Polyalthia longifolia* var. *pendula*. Ref: 5386.

**16801 Penduletin**

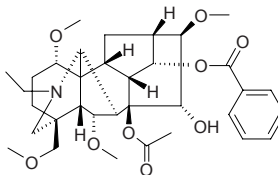
[569-80-2]  $C_{18}H_{16}O_7$  (344.32). Source: HUANG HUA HAO *Artemisia annua*. Ref: 2.

**16802 Penduline**

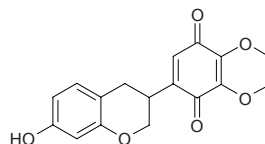
$C_{14}H_{11}NO_4$  (257.25). Orange crystals, mp 188~189°C. Pharm: Antibacterial (gram-positive: *Bacillus subtilis*, MIC = 25 $\mu$ g/disc, control Konamycin sulphate, MIC = 1.25 $\mu$ g/disc; *Corynebacterium hoffmanii*, MIC = 12.5 $\mu$ g/disc, Konamycin sulphate, MIC = 0.62 $\mu$ g/disc; *Staphylococcus aureus*, MIC = 12.5 $\mu$ g/disc, Konamycin sulphate, MIC = 0.31 $\mu$ g/disc; *Streptococcus faecalis*, MIC = 12.5 $\mu$ g/disc, Konamycin sulphate, MIC = 0.31 $\mu$ g/disc). Source: BIAN ZHONG CHANG YE AN LUO *Polyalthia longifolia* var. *pendula*. Ref: 5386.

**16803 Penduline**

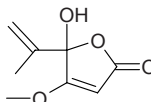
[81362-34-7]  $C_{34}H_{47}NO_9$  (613.75). Crystals (absolute ethanol), mp 166~167°C. Pharm: Analgesic (animal trials); local anesthetic (animal trials). Source: TIE BANG CHUI *Aconitum pendulum*. Ref: 661, 1521.

**16804 Pendulone**

7-Hydroxy-3',4'-dimethoxyisoflavanquinone [69359-09-7]  $C_{17}H_{16}O_6$  (316.31). Nacarat prismatic crystals, mp 154~156°C (chloroform-hexane),  $[\alpha]_D^{20} = -42^\circ$  ( $c = 2.0$ , methanol). Pharm: Inhibits promotor of cancer. Source: KUN MING JI XUE TENG *Milletia dielsiana*. Ref: 900.

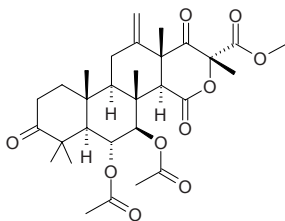
**16805 Penicillic acid**

$C_8H_{10}O_4$  (170.17). Pharm: Phytogrowth inhibitor (inhibits radicle growth of *Amaranthus hypochondriacus*,  $IC_{50} = 6.57\mu$ mol/L); phytotoxic (highly toxic to corn seeds). Source: *Malbranchea aurantiaca*. Ref: 5273.

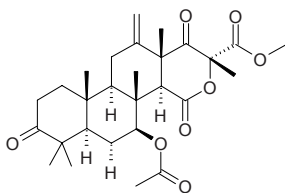


**16806 Penisimplicin A**

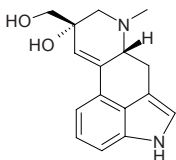
$C_{30}H_{40}O_{10}$  (560.65). Colorless needles, mp 242~245°C (benzene),  $[\alpha]_D^{20} = -298^\circ$  ( $c = 0.1$ ,  $CHCl_3$ ). Source: JI JIAN DAN QING MEI *Penicillium simplicissimum*. Ref: 4501.

**16807 Penisimplicin B**

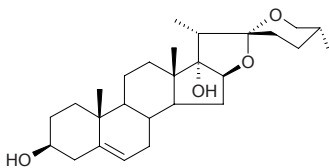
$C_{28}H_{38}O_8$  (502.61). Colorless needles, mp 252~254°C (MeOH),  $[\alpha]_D^{20} = -118^\circ$  ( $c = 0.11$ ,  $CHCl_3$ ). Source: JI JIAN DAN QING MEI *Penicillium simplicissimum*. Ref: 4501.

**16808 Penniclavine**

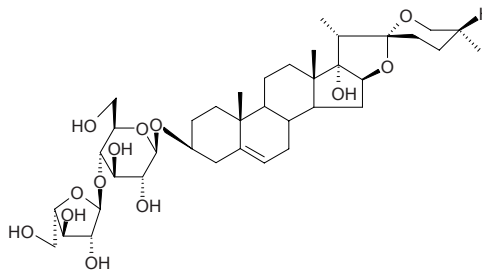
$C_{16}H_{18}N_2O_2$  (270.33). mp 222~225°C (dec). Pharm: Inhibits breeding (female rat); inhibits lactation hormone (10µg, InRt = 40%); similar action with ergotamine and ergometrine; used in treatment of bilious headache and obstetric process. Source: LIE YE QIAN NIU *Ipomoea hederacea*, MAI JIAO *Claviceps purpurea*, QIAN NIU ZI *Pharbitis nil*, TIE BANG CHUI *Aconitum pendulum*, YE MAI YIN BEI TENG *Argyrea nervosa*. Ref: 6, 658.

**16809 Pennogenin**

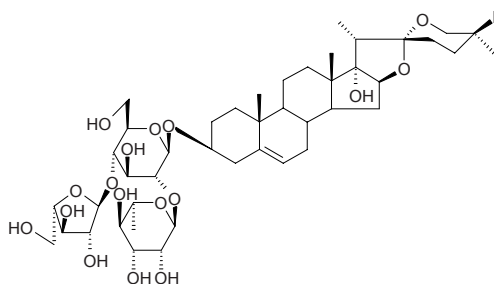
Spirost-5-ene-3,17-diol [507-89-1]  $C_{27}H_{42}O_4$  (430.63). Crystals (MeOH or  $Et_2O$ ), mp 245~247°C, 232~234°C,  $[\alpha]_D = -104.3^\circ$  ( $c = 1$ ,  $CHCl_3$ ). Source: HE HUA YAN LING CAO *Trillium erectum*, RI BEN BAI SI CAO *Chionographis japonica*, YU ER QI *Trillium camtschaticum*, *Helioniopsis orientalis*, *Paris* spp. Ref: 6, 1521.

**16810 Pennogenin-3-O-α-L-arabinofuranosyl(1→4)-β-D-glucopyranoside**

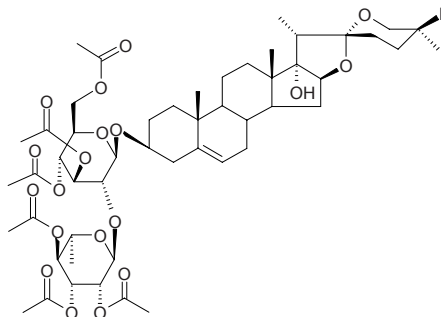
$C_{38}H_{60}O_{13}$  (724.89). Source: ZAO XIU *Paris polyphylla*. Ref: 2741.

**16811 Pennogenin-3-O-α-L-arabinofuranosyl(1→4)-[α-L-rhamnopyranosyl(1→2)]-β-D-glucopyranoside**

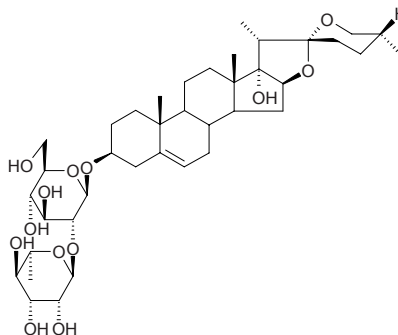
$C_{44}H_{70}O_{17}$  (871.04). Source: ZAO XIU *Paris polyphylla*. Ref: 2741.

**16812 Pennogenin-hexaacetyl-3-O-α-L-rhamnopyranosyl(1→2)-β-D-glucopyranoside**

$C_{51}H_{74}O_{19}$  (991.15). Source: ZAO XIU *Paris polyphylla*. Ref: 2741.

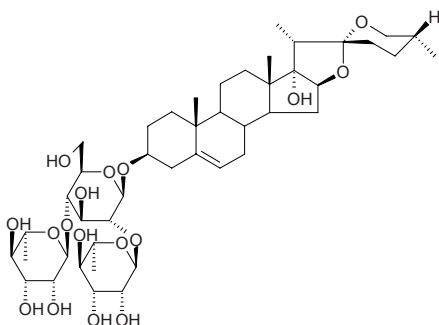
**16813 Pennogenin-3-O-α-L-rhamnopyranosyl(1→2)-β-D-glucopyranoside**

$C_{39}H_{62}O_{13}$  (738.92). Source: YUN NAN CHONG LOU *Paris polyphylla* var. *yunnanensis*. Ref: 2635.



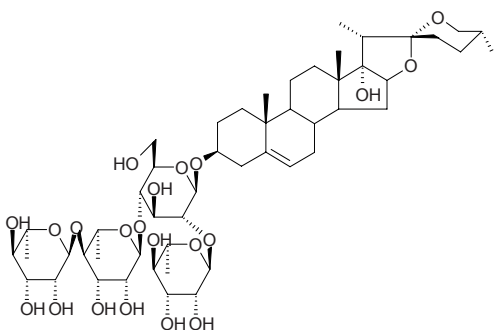
**16814 Pennogenin-3-O- $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 2)-[ $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 4)]- $\beta$ -D-glucopyranoside**

C<sub>45</sub>H<sub>72</sub>O<sub>17</sub> (885.07). **Source:** YUN NAN CHONG LOU *Paris polyphylla* var. *yunnanensis*. **Ref:** 2635, 2673.



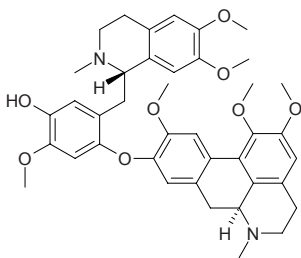
**16815 Pennogenin rhamnosyl chactotrioseide**

Pennogenin-3-O- $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 4)- $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 4)-[ $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 2)]- $\beta$ -D-glucopyranoside C<sub>51</sub>H<sub>82</sub>O<sub>21</sub> (1031.21). mp 223–227°C (dec). **Source:** HUA CHONG LOU *Paris polyphylla* var. *chinensis*, WANG SUN *Paris tetraphylla*, YUN NAN CHONG LOU *Paris polyphylla* var. *yunnanensis*, ZAO XIU *Paris polyphylla*. **Ref:** 6, 2741, 2635, 2673, 2991.



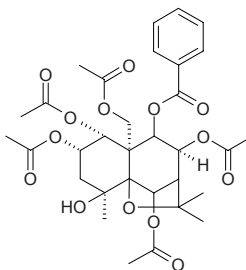
**16816 Pennsylvanine**

[53466-31-2] C<sub>40</sub>H<sub>46</sub>N<sub>2</sub>O<sub>8</sub> (682.82). White powder, mp 110–112°C (Et<sub>2</sub>O), [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +138° (*c* = 0.6, MeOH). **Pharm:** Antibacterial (*Mycobacterium smegmatis*, MIC = 1000 $\mu$ g/mL). **Source:** WAI JUAN TANG SONG CAO *Thalictrum revolutum*, YI XING TANG SONG CAO *Thalictrum dioicum*, ZA XING TANG SONG CAO *Thalictrum polygamum*. **Ref:** 3596, 1648, 3597, 3598.



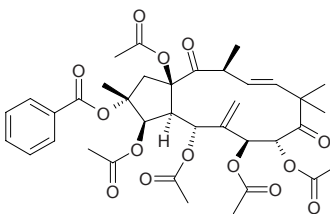
**16817 1 $\alpha$ ,2 $\alpha$ ,6 $\beta$ ,8 $\beta$ ,13-Pentaacetoxy-9 $\beta$ -benzoyloxy-4 $\beta$ -hydroxy- $\beta$ -dihydroagarofuran**

C<sub>32</sub>H<sub>40</sub>O<sub>14</sub> (648.67). White amorphous powder, mp 117–118°C, [ $\alpha$ ]<sub>D</sub><sup>24</sup> = –23.2° (*c* = 0.46, CHCl<sub>3</sub>). **Pharm:** Insecticidal (larvae of *Mythimna separata*, KD<sub>50</sub> = 159.8 $\mu$ g/g). **Source:** DIAO GAN MA *Celastrus angulatus* (root cortex): yield = 0.00053%dw). **Ref:** 3044.



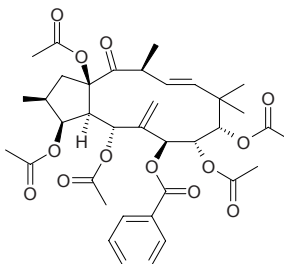
**16818 3 $\beta$ ,5 $\alpha$ ,7 $\beta$ ,8 $\alpha$ ,15 $\beta$ -Pentaacetoxy-2 $\alpha$ -benzoyloxyjatropha-6(17),11E-dien-9,14-dione**

C<sub>37</sub>H<sub>44</sub>O<sub>14</sub> (712.75). **Pharm:** Cytotoxic (*in vitro*, B16 melanoma cell line, IC<sub>50</sub> > 5 $\mu$ g/mL, no significant cytotoxicity); irritant inactive (mouse ear inflammation model, ID<sub>50</sub> > 100 $\mu$ g/ear). **Source:** *Euphorbia turczanowii* (whole herb). **Ref:** 3078.

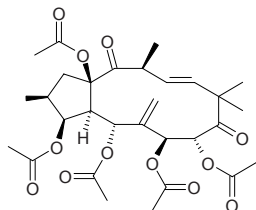


**16819 3 $\beta$ ,5 $\alpha$ ,8 $\alpha$ ,9 $\alpha$ ,15 $\beta$ -Pentaacetoxy-7 $\beta$ -benzoyloxyjatropha-6(17),11E-dien-14-one**

C<sub>37</sub>H<sub>46</sub>O<sub>13</sub> (698.77). Colorless crystals, mp 160–161°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +45.8° (*c* = 0.46, CHCl<sub>3</sub>). **Pharm:** Cytotoxic (*in vitro*, B16 melanoma cell line, IC<sub>50</sub> > 5 $\mu$ g/mL, no significant cytotoxicity)<sup>[3078]</sup>; irritant inactive (mouse ear inflammation model, ID<sub>50</sub> > 100 $\mu$ g/ear)<sup>[3078]</sup>. **Source:** *Euphorbia turczanowii* (whole herb). **Ref:** 3078.

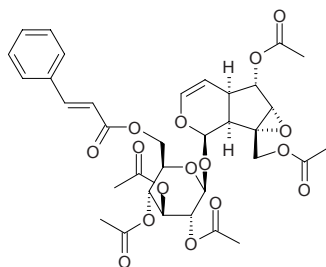


**16820** *3β,5α,7β,8α,15β*-Pentaacetoxyjatropa-6(17),11*E*-dien-9,14-dione  
C<sub>30</sub>H<sub>40</sub>O<sub>12</sub> (592.65). Colorless crystals, mp 287~289°C, [α]<sub>D</sub><sup>25</sup> = +41.9° (c = 0.48, CHCl<sub>3</sub>). **Pharm:** Cytotoxic (*in vitro*, B16 melanoma cell line, IC<sub>50</sub> > 5μg/mL, no significant cytotoxicity); irritant inactive (mouse ear inflammation model, ID<sub>50</sub> > 100μg/ear). **Source:** *Euphorbia turczaninowii* (whole herb). **Ref:** 3078.



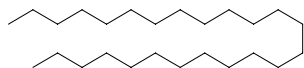
**16821** Pentaacetyl-6'-cinnamoyl catalpol

C<sub>34</sub>H<sub>38</sub>O<sub>16</sub> (702.67). **Source:** HU HUANG LIAN *Picrorhiza kurrooa*. **Ref:** 3153.



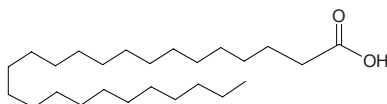
**16822** Pentacosane

[629-99-2] C<sub>25</sub>H<sub>52</sub> (352.69). **Source:** LU BIAN QING *Clerodendron cyrtophyllum*, PU HUANG *Typha angustata*, XIA YE XIANG PU *Typha angustifolia*. **Ref:** 2, 660.



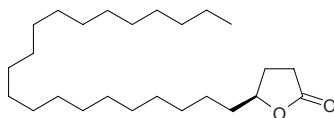
**16823** *n*-Pentacosanoic acid

Neocerotic acid [506-38-7] C<sub>25</sub>H<sub>50</sub>O<sub>2</sub> (382.68). **Source:** BING GUO HU JI SHENG *Viscum multinerve*, MI LA *Apis cerana*, QIANG HUO *Notopterygium incisum*. **Ref:** 2, 660.



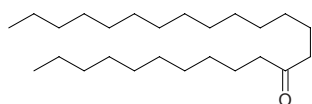
**16824** Pentacosan-4-olide

C<sub>25</sub>H<sub>48</sub>O<sub>2</sub> (380.66). **Source:** FU CHUI FE LAO JU *Flourensia cernua*. **Ref:** 3433.



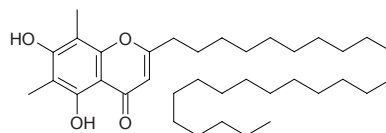
**16825** 11-Pentacosanone

C<sub>25</sub>H<sub>50</sub>O (366.68). Solid, mp 66~68°C. **Source:** KU LANG SHU *Clerodendrum inerme*. **Ref:** 3382.



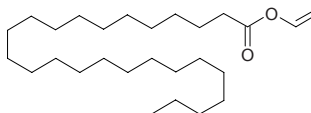
**16826** 2-*n*-Pentacosyl-5,7-dihydroxy-6,8-dimethyl chromone

C<sub>36</sub>H<sub>60</sub>O<sub>4</sub> (556.88). **Source:** KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. **Ref:** 2695.



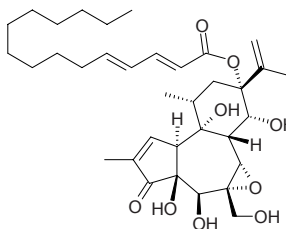
**16827** Pentacosyl vinyl ester

C<sub>27</sub>H<sub>52</sub>O<sub>2</sub> (408.71). **Source:** ZHI MU *Anemarrhena asphodeloides*. **Ref:** 3154.



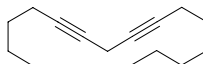
**16828** Pentadecadienoic acid

C<sub>35</sub>H<sub>52</sub>O<sub>9</sub> (616.80). White amorphous powder, [α]<sub>D</sub><sup>26</sup> = +6.1° (c = 0.6, CHCl<sub>3</sub>). **Source:** LANG DU *Stellera chamaejasme*. **Ref:** 4159.



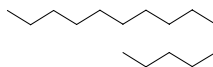
**16829** 7,10-Pentadecadiynoic acid

[22117-06-2] C<sub>15</sub>H<sub>24</sub> (204.36). **Source:** DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*]. **Ref:** 2.



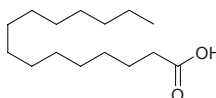
**16830** *n*-Pentadecane

Pentadecane [629-62-9] C<sub>15</sub>H<sub>32</sub> (212.42). **Source:** DANG SHEN *Codonopsis pilosula*, JIAN JIAN MU LAN *Magnolia acuminata*, LIAO XI XIN *Asarum heterotropoides* var. *mandshuricum*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*], XI XIN *Asarum sieboldii*. **Ref:** 2, 658, 660.



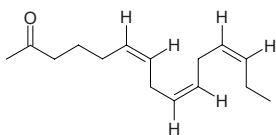
**16831** Pentadecanoic acid

Pentadecylic acid [1002-84-2] C<sub>15</sub>H<sub>30</sub>O<sub>2</sub> (242.41). **Source:** DANG SHEN *Codonopsis pilosula*, GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], GUA LOU *Trichosanthes kirtlowii*, LU HUI *Aloe vera* [Syn. *Aloe barbadensis*], SHUANG BIAN GUA LOU *Trichosanthes rosthornii* [Syn. *Trichosanthes uniflora*]. **Ref:** 2, 660.

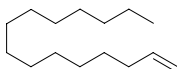


**16832 (6Z,9Z,12Z)Pentadecatrien-2-one**

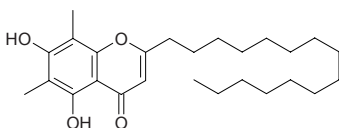
[139328-79-3] C<sub>15</sub>H<sub>24</sub>O (220.36). Oil. **Pharm:** Cytotoxic (MCF7, IC<sub>50</sub> = 5.15 μg/mL, HT29, IC<sub>50</sub> = 3.01 μg/mL). **Source:** GUI PI DIAO ZHANG *Lindera benzoin*. **Ref:** 1053.

**16833 1-Pentadecene**

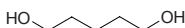
[13360-61-7] C<sub>15</sub>H<sub>30</sub> (210.41). **Source:** BAI ZHI *Angelica dahurica* [Syn. *Angelica porphyrocaulis*]. **Ref:** 2.

**16834 2-n-Pentadecyl-5,7-dihydroxy-6,8-dimethyl chromone**

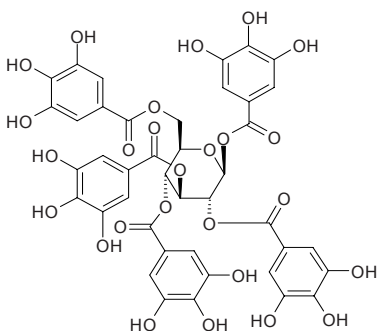
C<sub>26</sub>H<sub>40</sub>O<sub>4</sub> (416.61). **Source:** KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. **Ref:** 2695.

**16835 1,5-Pentadiol**

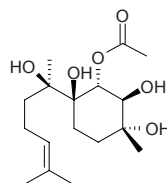
C<sub>5</sub>H<sub>12</sub>O<sub>2</sub> (104.15). **Source:** BAN XIA *Pinellia ternata*. **Ref:** 1401.

**16836 1,2,3,4,6-Pentagalloylglucose**

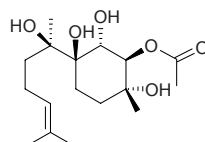
C<sub>41</sub>H<sub>32</sub>O<sub>26</sub> (940.70). **Pharm:** Anti-HIV; antioxidant (lipid peroxidation inhibitor in hepatic cellular mitochondria and microsome of rat); antihepatotoxin. **Source:** BAI LIAN *Ampelopsis japonica* [Syn. *Paullinia japonica*], BAI SHAO *Paeonia albiflora* [Syn. *Paeonia lactiflora*], BAI SHAO *Paeonia albiflora* [Syn. *Paeonia lactiflora*] (fresh fruit: yield = 0.043%fw)<sup>[4695]</sup>, HE ZI *Terminalia chebula*, MO SHI ZI *Quercus infectoria* (parasitic bee: *Cynips gallae-tinctoriae*), MU DAN PI *Paeonia moutan* [Syn. *Paeonia suffruticosa*], NUO WEI QI *Acer platanoides*, RI BEN PING PENG CAO *Nuphar japonicum*, XIAN XI LAO GUAN CAO *Geranium robertianum*, YOU GAN YE *Phyllanthus emblica* (leaf and branch), *Rhus* sp., *Cotinus* sp., *Fuchsia* sp., *Epilobium* sp., *Rosa* sp. **Ref:** 2, 658, 660, 4205, 4695, 5501.

**16837 (1R\*,2R\*,3R\*,6R\*,7R\*)1,2,3,6,7-Pentahydroxy-1-acetoxy-bisabol-10(11)-ene**

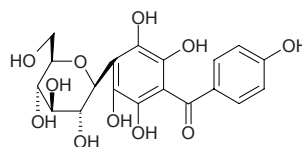
C<sub>17</sub>H<sub>30</sub>O<sub>6</sub> (330.43). [α]<sub>D</sub><sup>24</sup> = -24.1° (c = 0.45, CHCl<sub>3</sub>). **Source:** JIN SE MU JU *Matricaria aurea*. **Ref:** 2301.

**16838 (1R\*,2R\*,3R\*,6R\*,7R\*)1,2,3,6,7-Pentahydroxy-2-acetoxy-bisabol-10(11)-ene**

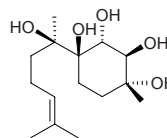
C<sub>17</sub>H<sub>30</sub>O<sub>6</sub> (330.43). **Source:** JIN SE MU JU *Matricaria aurea*. **Ref:** 2301.

**16839 2,3,4',5,6-Pentahydroxybenzophenone-4-C-glucoside**

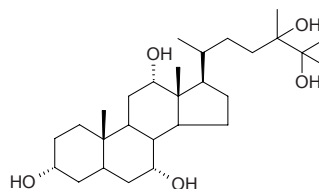
C<sub>19</sub>H<sub>20</sub>O<sub>11</sub> (424.36). Light-yellow powder, mp 168~171°C, [α]<sub>D</sub><sup>21</sup> = +21° (c = 0.1, MeOH). **Source:** ZONG BAO GE NI DI MU *Gnidia involucreta* (aerial parts). **Ref:** 3996.

**16840 (1R\*,2R\*,3R\*,6R\*,7R\*)1,2,3,6,7-Pentahydroxy-bisabol-10(11)-ene**

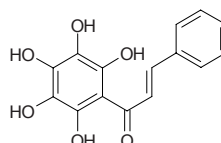
[248937-37-3] C<sub>15</sub>H<sub>28</sub>O<sub>5</sub> (288.39). [α]<sub>D</sub><sup>24</sup> = -39.9° (c = 0.36, CHCl<sub>3</sub>). **Source:** JIN SE MU JU *Matricaria aurea*. **Ref:** 2301.

**16841 Pentahydroxybufostane**

C<sub>28</sub>H<sub>50</sub>O<sub>5</sub> (466.71). mp 172°C. **Source:** CHAN CHU DAN *Bufo bufo gargarizans*; *Bufo melanostictus*. **Ref:** 6.

**16842 2',3',4',5',6'-Pentahydroxychalcone**

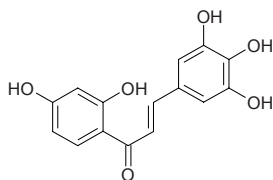
C<sub>15</sub>H<sub>12</sub>O<sub>6</sub> (288.26). Yellow solid. **Source:** BAI JIE ZI *Sinapis alba* [Syn. *Brassica alba*; *Brassica hirta*] (root and exudates). **Ref:** 3890.



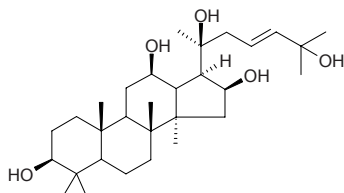


**16843 3,4,5,2',4'-Pentahydroxychalcone**

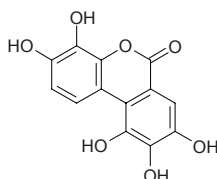
[2679-65-4] C<sub>15</sub>H<sub>12</sub>O<sub>6</sub> (288.26). Source: CI HUAI HUA *Robinia pseudoacacia*. Ref: 6.

**16844 (20S)-3β,12β,16β,25-Pentahydroxydammar-23-ene**

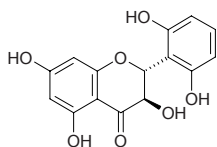
C<sub>30</sub>H<sub>52</sub>O<sub>5</sub> (492.75). Colorless needles, mp >250°C, [α]<sub>D</sub><sup>25</sup> = +47.6° (c = 0.5, CH<sub>2</sub>Cl<sub>2</sub>). Source: HUN XIAO MO YAO *Commiphora confusa* (resin). Ref: 4335.

**16845 3,4,8,9,10-Pentahydroxydibenzo[b,d]pyran-6-one**

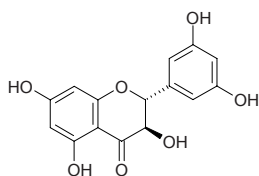
C<sub>13</sub>H<sub>8</sub>O<sub>7</sub> (276.20). Source: MAO CAO LONG *Ludwigia octovalvis* (fresh whole herb). Ref: 4827.

**16846 3,5,7,2',6'-Pentahydroxyflavanone**

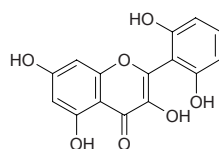
[82854-32-8] C<sub>15</sub>H<sub>12</sub>O<sub>7</sub> (304.26). Needles (MeOH), mp 221–225°C (dec). Source: HUANG QIN *Scutellaria baicalensis*, DIAN HUANG QIN *Scutellaria amoena*. Ref: 2, 660, 1521.

**16847 (+)-3,5,7,3',5'-Pentahydroxyflavanone**

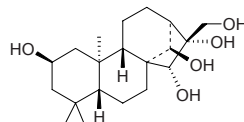
C<sub>15</sub>H<sub>12</sub>O<sub>7</sub> (304.26). Yellowish acicular crystals, mp 218–220°C, [α]<sub>D</sub><sup>15</sup> = +23.7° (c = 0.11, methanol). Source: ZHI JU ZI *Hovenia dulcis*. Ref: 391.

**16848 3,5,7,2',6'-Pentahydroxy flavone**

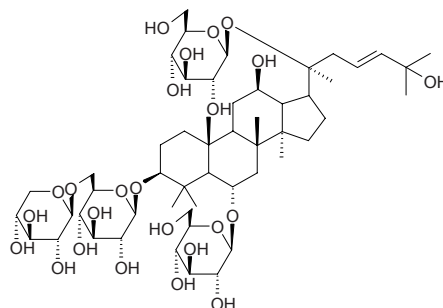
Viscudulin I [92519-95-4] C<sub>15</sub>H<sub>10</sub>O<sub>7</sub> (302.24). mp 293°C (dec). Source: HUANG QIN *Scutellaria baicalensis*, DIAN HUANG QIN *Scutellaria amoena*. Ref: 2, 660, 1521.

**16849 ent-2α,14α,15β,16S,17-Pentahydroxy kaurane**

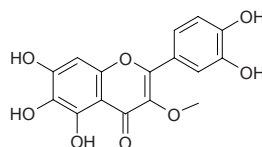
C<sub>20</sub>H<sub>34</sub>O<sub>5</sub> (354.49). Source: LI BING FENG WEI JUE *Pteris plumbea*. Ref: 3155.

**16850 3β,6α,12β,20S,25-Pentahydroxyl-dammar-23-ene-6-O-β-D-glucopyranoside-20-O-β-D-glucopyranosyl-3-O-β-D-xylopyranosyl(1→6)-D-glucopyranoside**

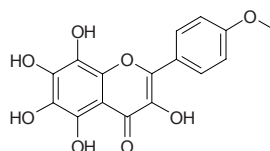
C<sub>53</sub>H<sub>90</sub>O<sub>24</sub> (1111.29). White powder, mp 201–203°C. Source: XI YANG SHEN *Panax quinquefolium*. Ref: 2267.

**16851 5,6,7,3',4'-Pentahydroxy-3-methoxyflavone**

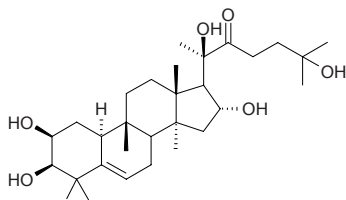
Quercetagenin 3-methyl ether [64190-88-1] C<sub>16</sub>H<sub>12</sub>O<sub>8</sub> (332.26). mp 218–220°C. Pharm: α-Glucosidase inhibitor (rat small intestine, 50 μmol/L, InRt = 62%, IC<sub>50</sub> = 31 μmol/L); invertase inhibitor (rat small intestine, IC<sub>50</sub> = 28 μmol/L, 50 μmol/L, InRt = 64%); aldose reductase inhibitor (rat eye lens, IC<sub>50</sub> = 0.058 μmol/L, ox eye lens, IC<sub>50</sub> = 0.37 μmol/L). Source: HUANG HUA HAO *Artemisia annua*. Ref: 900.

**16852 3,5,6,7,8-Pentahydroxy-2-(4-methoxyphenyl)-4H-1-benzopyran-4-one**

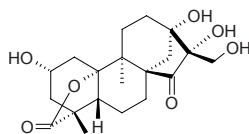
3,5,6,7,8-Pentahydroxy-4'-methoxy flavone C<sub>16</sub>H<sub>12</sub>O<sub>8</sub> (332.27). Colorless solid. Source: BAI JIE ZI *Sinapis alba* [Syn. *Brassica alba*; *Brassica hirta*] (shoot). Ref: 3890.



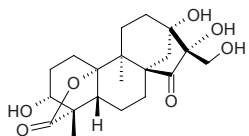
**16853 2,3,16,20,25-Pentahydroxy-9-methyl-19-norlanost-5-en-22-one**  
 $C_{30}H_{50}O_6$  (506.73). Source: HU HUANG LIAN *Picrorhiza kurroa*. Ref: 3156.



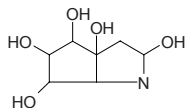
**16854 2 $\alpha$ ,10 $\alpha$ ,13 $\alpha$ ,16 $\alpha$ ,17-Pentahydroxy-9 $\alpha$ -methyl-15-oxo-20-norkauran-19-oic acid (19,10)-lactone**  
 $C_{20}H_{28}O_7$  (380.44). White needles, mp 100~103°C,  $[\alpha]_D^{25} = +15.0^\circ$  ( $c = 0.1$ , MeOH). Pharm: Cytotoxic inactive (Lu1, Col2, KB, LNCaP, hTERT-RPE1, HUVEC; control Taxol, ED<sub>50</sub> = 0.002 $\mu$ g/mL, 0.003 $\mu$ g/mL, 0.0005 $\mu$ g/mL, 0.001 $\mu$ g/mL, 0.004 $\mu$ g/mL, 0.008 $\mu$ g/mL, respectively). Source: *Parinari sprucei* (leaf). Ref: 4991.



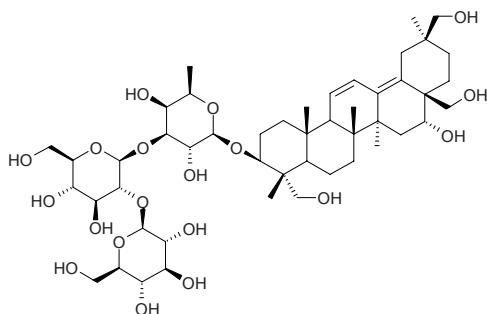
**16855 3 $\alpha$ ,10 $\alpha$ ,13 $\alpha$ ,16 $\alpha$ ,17-Pentahydroxy-9 $\alpha$ -methyl-15-oxo-20-norkaur-an-19-oic acid  $\gamma$ -lactone**  
 $C_{20}H_{28}O_7$  (380.44). White crystals, mp 85~90°C,  $[\alpha]_D^{25} = +5.3^\circ$  ( $c = 0.1$ , MeOH). Pharm: Cytotoxic inactive (Lu1, Col2, KB, LNCaP, hTERT-RPE1, HUVEC; control Taxol, ED<sub>50</sub> = 0.002 $\mu$ g/mL, 0.003 $\mu$ g/mL, 0.0005 $\mu$ g/mL, 0.001 $\mu$ g/mL, 0.004 $\mu$ g/mL, 0.008 $\mu$ g/mL, respectively). Source: *Parinari sprucei* (leaf). Ref: 4991.



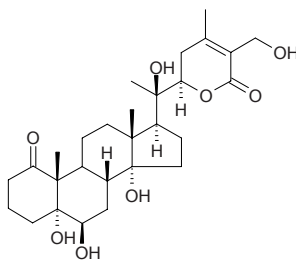
**16856 1,2,3,4,7-Pentahydroxy-6-nitrobicyclo[3.3.0]octane**  
 $C_7H_{13}NO_5$  (191.19). Source: GOU QI GEN PI *Lycium chinense*. Ref: 3157.



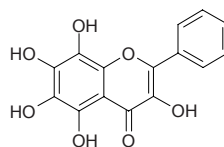
**16857 3 $\beta$ ,16 $\alpha$ ,23,28,30-Pentahydroxyolean-11,13(18)-diene 3-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -D-fucopyranoside**  
 $C_{48}H_{78}O_{19}$  (959.15). Amorphous powder,  $[\alpha]_D^{25} = -27.5^\circ$  ( $c = 0.08$ , MeOH). Source: DUO CI CHAI HU *Bupleurum spinosum* (root). Ref: 3980.



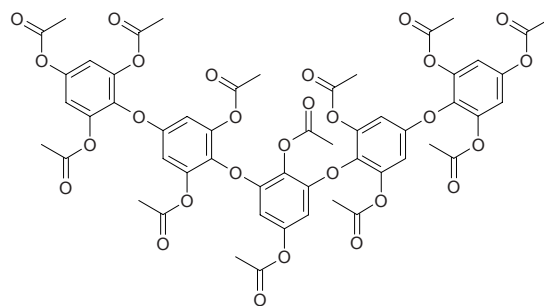
**16858 (20R,22R)-5 $\alpha$ ,6 $\beta$ ,14 $\alpha$ ,20,27-Pentahydroxy-1-oxowitha-24-enolide**  
 $C_{28}H_{42}O_8$  (506.64). Amorphous powder,  $[\alpha]_D = +72.5^\circ$  ( $c = 0.2$ , MeOH). Source: DENG LONG CAO *Physalis peruviana*. Ref: 1915.



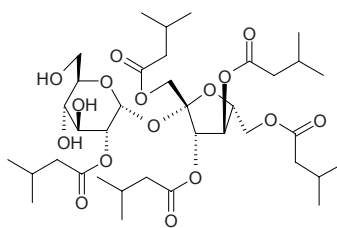
**16859 3,5,6,7,8-Pentahydroxy-2-phenyl-4H-1-benzopyran-4-one**  
3,5,6,7,8-Pentahydroxy flavone  $C_{15}H_{10}O_7$  (302.24). Colorless solid. Source: BAI JIE ZI *Sinapis alba* [Syn. *Brassica alba*; *Brassica hirta*] (root and exudates). Ref: 3890.



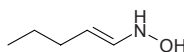
**16860 Pentaisofulhalol dodecaacetate**  
 $C_{54}H_{46}O_{28}$  (1142.95). Source: SHENG ZAO *Chorda filum*. Ref: 3158.



**16861 1',3,3',4',6'-Pentakis-O-(3-methylbutanoyl)- $\beta$ -D-fructofuranosyl  $\alpha$ -D-glucopyranoside**  
 $C_{37}H_{62}O_{16}$  (762.90). Yellowish oil,  $[\alpha]_D^{20} = +2.71^\circ$  ( $c = 0.7$ ,  $CH_2Cl_2$ ). Source: JI NEI YA BAN JIU JU *Vernonia guineensis*. Ref: 3412.

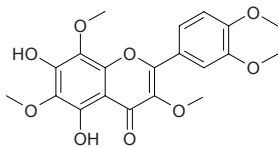


**16862 Pentaldehyde oxime**  
 $C_5H_{11}NO$  (101.15). Source: BAN XIA *Pinellia ternata*. Ref: 1401.

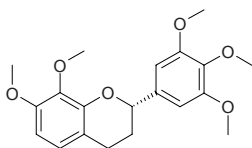


**16863 3,6,8,3',4'-Pentamethoxy-5,7-dihydroxyflavone**

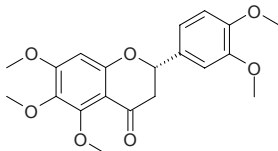
$C_{20}H_{20}O_9$  (404.38). Yellow crystals [Source](#): RU NI WENG DAO MI ZHU YU *Melicope coodeana*. [Ref](#): 1975.

**16864 (2S)-7,8,3',4',5'-Pentamethoxyflavan**

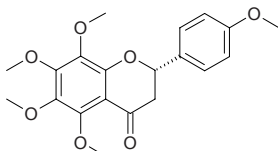
[133342-91-3]  $C_{20}H_{24}O_6$  (360.41). Colorless oil,  $[\alpha]_D^{20} = -75.0^\circ$  ( $c = 0.30$ ,  $CHCl_3$ ). [Pharm](#): Cytotoxic (hmn: melanotic carcinoma  $ED_{50} = 8.9\mu g/mL$ , colon cancer  $ED_{50} = 15.8\mu g/mL$ , nasopharyngeal carcinoma  $ED_{50} = 13.3\mu g/mL$ , vincristine-resistant KB  $ED_{50} = 2.1\mu g/mL$ ; mus: lymph leukemia cell  $ED_{50} = 5.4\mu g/mL$ ). [Source](#): YA MAI JIA YING TAO *Muntingia calabura*. [Ref](#): 3599.

**16865 (2S)-5,6,7,3',4'-Pentamethoxyflavanone**

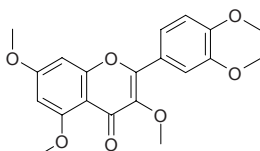
$C_{20}H_{22}O_7$  (374.39). Yellow oil,  $[\alpha]_D = 0^\circ$  ( $c = 0.1325$ , MeOH). [Source](#): RU JU *Citrus kinokuni* (peel). [Ref](#): 4132.

**16866 (2S)-5,6,7,8,4'-Pentamethoxyflavanone**

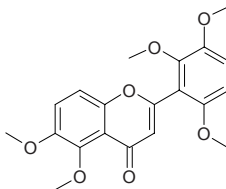
$C_{20}H_{22}O_7$  (374.39). Yellow oil,  $[\alpha]_D = +8^\circ$  ( $c = 0.074$ , MeOH). [Source](#): RU JU *Citrus kinokuni* (peel). [Ref](#): 4132.

**16867 3,5,7,3',4'-Pentamethoxyflavone**

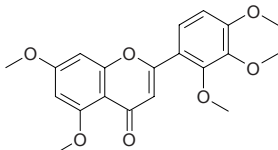
[1247-97-8]  $C_{20}H_{20}O_7$  (372.38). Yellowish plate crystals (MeOH), mp 150–151°C. [Pharm](#): Vasodilator (rat aorta strip, contraction caused by arterenol, KCl); cAMP phosphodiesterase inhibitor (rat heart,  $IC_{50} = 7.1\mu mol/L$ , rat brain,  $IC_{50} = 6.3\sim 10.2\mu mol/L$ , bovine heart,  $IC_{50} = 129\mu mol/L$ ); anti-inflammatory (rat, swollen foot model caused by carrageenan, 300mg/kg orl,  $InRt = 25.3\%$ ); cytotoxic (KB,  $ED_{50} = 25\mu g/mL$ ). [Source](#): DU HONG HUA *Callicarpa formosana*, QIN ZHUANG AO CHUN JIANG *Boesenbergia pandurata*, SAN YE MI ZHU YU *Melicope triphylla*. [Ref](#): 1555.

**16868 5,6,2',3',6'-Pentamethoxyflavone**

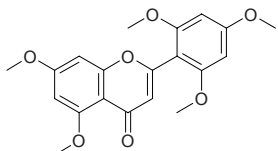
$C_{20}H_{20}O_7$  (372.38). Yellow amorphous solid. [Source](#): SI JI XIANG ROU GUO *Casimiroa tetramera* (leaf). [Ref](#): 5262.

**16869 5,7,2',3',4'-Pentamethoxyflavone**

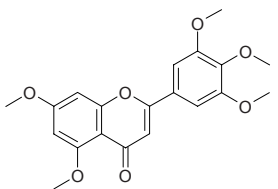
$C_{20}H_{20}O_7$  (372.38). Colorless needles ( $CHCl_3$ ), mp 166–167°C. [Source](#): TIAO WEN CHUAN XIN LIAN *Andrographis lineata*. [Ref](#): 3390.

**16870 5,7,2',4',6'-Pentamethoxyflavone**

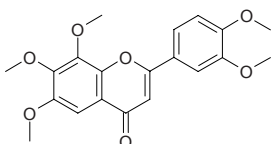
$C_{20}H_{20}O_7$  (372.38). Pale yellow solid, mp 192–194°C. [Source](#): NAN YIN DU CHUAN XIN LIAN *Andrographis viscosula*. [Ref](#): 1936.

**16871 5,7,3',4',5'-Pentamethoxyflavone**

[53350-26-8]  $C_{20}H_{20}O_7$  (372.38). Needles (MeOH), prisms ( $CHCl_3$ ), mp 196–197°C, 193°C. [Source](#): JIU LI XIANG GEN *Murraya paniculata* [Syn: *Chalcas paniculata*], JU PI *Citrus reticulata*, LONG XU TENG *Bauhinia championii*. [Ref](#): 1295, 2910.

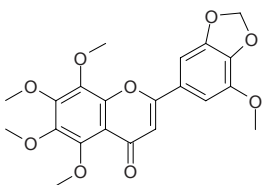
**16872 6,7,8,3',4'-Pentamethoxyflavone**

$C_{20}H_{20}O_7$  (372.38). [Source](#): XIONG RUI ZHUANG ZHI GUAN CAO *Orthosiphon stamineus* [Syn: *Orthosiphon aristatus*; *Orthosiphon grandiflorus*; *Orthosiphon spicatus*] (aerial parts: yield = 0.0082%dw). [Ref](#): 3053.

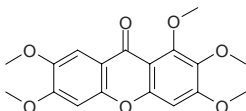


**16873 5,6,7,8,5'-Pentamethoxy-3',4'-methylenedioxyflavone**

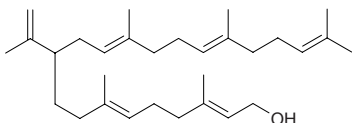
$C_{21}H_{20}O_9$  (416.39). **Pharm:** Cytotoxic inactive (HeLa,  $IC_{50} > 200\mu\text{g/mL}$ , control Mitomycin C,  $IC_{50} = 1.7\mu\text{g/mL}$ ). **Source:** TUAN JI AI NA XIANG *Blumea glomerata*. **Ref:** 4092.

**16874 1,2,3,6,7-Pentamethoxyxanthone**

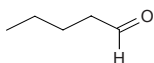
$C_{18}H_{18}O_7$  (346.34). **Source:** YUAN ZHI *Polygala tenuifolia*. **Ref:** 3159.

**16875 (2E,6E,12E,16E)-3,7,13,17,21-Pentamethyl-10-(1-methylethenyl)-2,6,12,16,20-docosapentaen-1-ol**

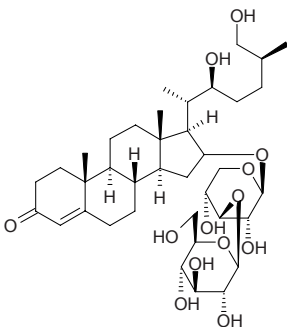
$C_{30}H_{50}O$  (426.73). Colorless oil. **Source:** *Cupania latifolia* (leaf). **Ref:** 4496.

**16876 Pentanal**

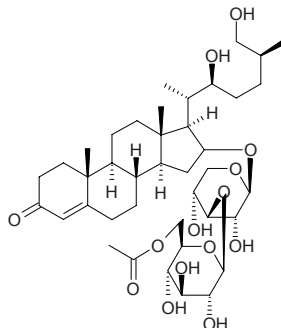
Valeric aldehyde [110-62-3]  $C_5H_{10}O$  (86.13). bp  $103^\circ\text{C}$ . **Source:** DA SUAN *Allium sativum*, FANG FENG *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*]. **Ref:** 2, 6.

**16877 Pentandroside A**

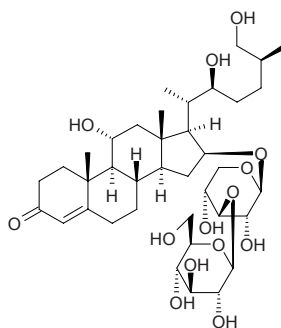
(22*S*,25*S*)-16 $\beta$ ,22,26-Trihydroxycholest-4-en-3-one  
16-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -D-xylopyranoside  $C_{38}H_{62}O_{13}$  (726.91).  
Amorphous powder,  $[\alpha]_D^{25} = +18^\circ$  ( $c = 0.1$ , MeOH). **Source:** WU XIONG  
RUI JI LI *Tribulus pentandrus* (aerial parts). **Ref:** 3877.

**16878 Pentandroside B**

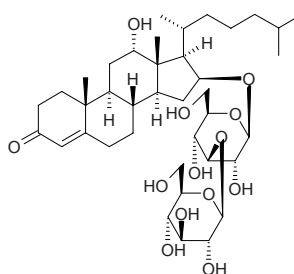
(22*S*,25*S*)-16 $\beta$ ,22,26-Trihydroxycholest-4-en-3-one  
16-*O*-[6-*O*-acetyl- $\beta$ -D-glucopyranosyl]-(1 $\rightarrow$ 3)- $\beta$ -D-xylopyranoside  
 $C_{40}H_{64}O_{14}$  (768.95). Amorphous powder,  $[\alpha]_D^{25} = +25^\circ$  ( $c = 0.1$ , MeOH).  
**Source:** WU XIONG RUI JI LI *Tribulus pentandrus* (aerial parts). **Ref:** 3877.

**16879 Pentandroside C**

(22*S*,25*S*)-11 $\alpha$ ,16 $\beta$ ,22,26-Tetrahydroxycholest-4-en-3-one  
16-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -D-xylopyranoside  $C_{38}H_{62}O_{14}$  (742.91).  
Amorphous powder,  $[\alpha]_D^{25} = +27.3^\circ$  ( $c = 0.1$ , MeOH). **Source:** WU XIONG  
RUI JI LI *Tribulus pentandrus* (aerial parts). **Ref:** 3877.

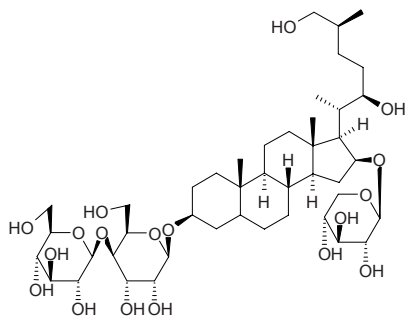
**16880 Pentandroside D**

(25*S*)-12 $\alpha$ ,16 $\beta$ -Dihydroxycholest-4-en-3-one  
16-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -D-glucopyranoside  $C_{39}H_{64}O_{13}$  (740.94).  
Amorphous powder,  $[\alpha]_D^{25} = +12^\circ$  ( $c = 0.1$ , MeOH). **Source:** WU XIONG  
RUI JI LI *Tribulus pentandrus* (aerial parts). **Ref:** 3877.

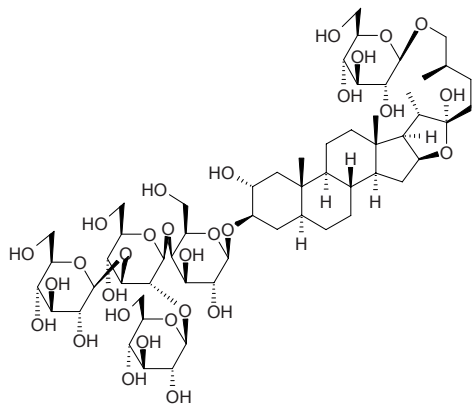


**16881 Pentandroside E**

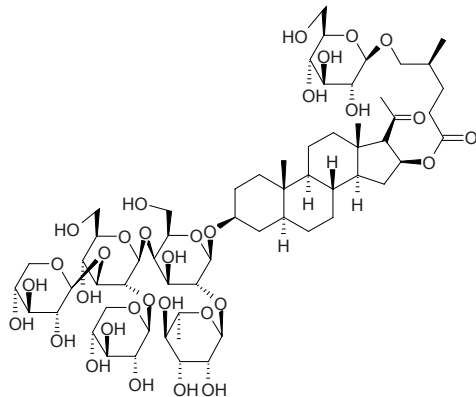
(2*S*,25*S*)-16-*O*- $\beta$ -*D*-Xylopyranosyl-5 $\alpha$ -cholestan-3 $\beta$ ,16 $\beta$ ,22,26-tetraol  
3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-galactopyranoside C<sub>44</sub>H<sub>76</sub>O<sub>18</sub> (893.09).  
Amorphous powder,  $[\alpha]_D^{25} = +41^\circ$  ( $c = 0.1$ , MeOH). **Source:** WU XIONG  
RUI JI LI *Tribulus pentandrus* (aerial parts). **Ref:** 3877.

**16882 Pentandroside F**

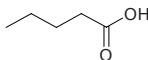
(2*S*)-26-*O*- $\beta$ -*D*-Glucopyranosyl-5 $\alpha$ -furostan-2 $\alpha$ ,3 $\beta$ ,22 $\alpha$ ,26-tetraol  
3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)-*O*- $\beta$ -*D*-glu  
copyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-galactopyranoside C<sub>57</sub>H<sub>96</sub>O<sub>30</sub> (1261.38). Amorphous  
powder,  $[\alpha]_D^{25} = -53.0^\circ$  ( $c = 0.1$ , MeOH). **Source:** WU XIONG RUI JI LI  
*Tribulus pentandrus* (aerial parts). **Ref:** 3877.

**16883 Pentandroside G**

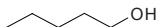
16 $\beta$ -[(4'*S*)-5'-( $\beta$ -*D*-Glucopyranosyloxy)-4'-methylpentanoyloxy]-3 $\beta$ -hydroxy-  
5 $\alpha$ -pregnan-20-one 3-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)-*O*- $\beta$ -*D*-xylopyranosyl-  
syl-(1 $\rightarrow$ 2)-*O*- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 3)-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -  
*D*-galactopyranoside} C<sub>61</sub>H<sub>100</sub>O<sub>32</sub> (1345.46). Amorphous powder,  $[\alpha]_D^{25} =$   
 $-13^\circ$  ( $c = 0.1$ , MeOH). **Source:** WU XIONG RUI JI LI *Tribulus pentandrus*  
(aerial parts). **Ref:** 3877.

**16884 Pentanic acid**

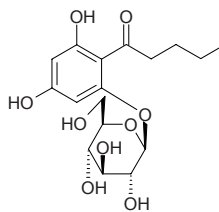
Valeric acid [109-52-4] C<sub>5</sub>H<sub>10</sub>O<sub>2</sub> (102.13). **Pharm:** LD<sub>50</sub> (mus, iv) =  
1290mg/kg. **Source:** CHAI HU *Bupleurum chinense*, HAN QIN *Apium*  
*graveolens*, KONG SHI CHUN *Ulvia pertusa*, MU HE *Rodgersia aesculifolia*,  
QIAN NIU ZI *Pharbitis nil*, SANG YE *Morus alba*, SHUI LIAO *Polygonum*  
*hydropiper*, TAO YE LIAO *Polygonum persicaria*, XIE CAO *Valeriana*  
*officinalis*, YAN CAO *Nicotiana tabacum*, YING SHAN HONG  
*Rhododendron mucronulatum*, ZHANG SHU PI *Cinnamomum camphora*, ZI  
CAI *Porphyra tenera*. **Ref:** 2, 658, 660.

**16885 Pentanol**

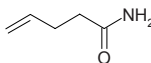
[71-41-0] C<sub>5</sub>H<sub>12</sub>O (88.15). **Source:** FANG FENG *Saposhnikovia divaricata*  
[Syn. *Ledebouriella seseloides*]. **Ref:** 2.

**16886 1-[(Pentanoyl)phloroglucinyl]- $\beta$ -*D*-glucopyranoside**

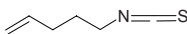
C<sub>17</sub>H<sub>24</sub>O<sub>9</sub> (372.38). Colorless gummy solid,  $[\alpha]_D^{25} = -58.6^\circ$  ( $c = 0.14$ , MeOH).  
**Pharm:** Lipoxygenase inhibitor (lipoxygenase (1.13.11.12) type I-B, IC<sub>50</sub> =  
(44.9 $\pm$ 0.5) $\mu$ mol/L, control Baicalein, IC<sub>50</sub> = (22.6 $\pm$ 0.1) $\mu$ mol/L)<sup>[442]</sup>. **Source:**  
YI HUA MU LAN *Indigofera heteranthazha* (Whole herb). **Ref:** 4442.

**16887 4-Pentenamide**

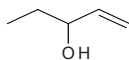
C<sub>5</sub>H<sub>9</sub>NO (99.13). Colorless lamellar crystals, mp 98.0~100.0°C. **Source:** BO  
NIANG HAO *Descurainia Sophia* (seed). **Ref:** 4903.

**16888 4-Pentenyl isothiocyanate**

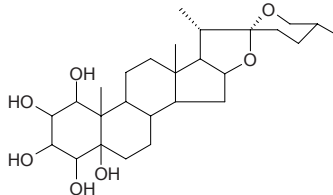
[18060-79-2] C<sub>6</sub>H<sub>9</sub>NS (127.21). bp 75°C/12mmHg. **Pharm:** Prevents cancer  
(animal model). **Source:** JIE ZI *Brassica juncea*. **Ref:** 6, 1582.

**16889 1-Penten-3-ol**

[616-25-1] C<sub>5</sub>H<sub>10</sub>O (86.13). bp 114~116°C. **Source:** LUO HUA SHENG ZHI  
YE *Arachis hypogaea*. **Ref:** 6.

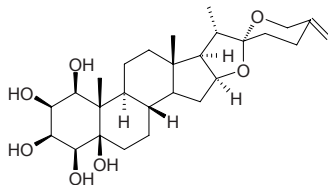
**16890 Pentolgenin**

C<sub>27</sub>H<sub>44</sub>O<sub>7</sub> (480.65). **Source:** JI XIANG CAO *Reineckea carnea*. **Ref:** 3160.

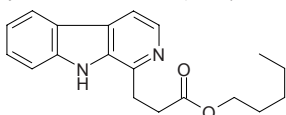


**16891**  $\Delta^{25(27)}$ -Pentrogenin

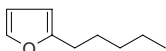
$C_{27}H_{42}O_7$  (478.63). **Pharm:** Cytotoxic (*in vitro*, hmn gastric tumor cell NUGC, 50 $\mu$ mol/L, InRt = 100%; hmn nasopharyngeal carcinoma cell HONE-1, 50 $\mu$ mol/L, InRt = 100%). **Source:** KAI KOU JIAN *Tupistra chinensis* (underground part). **Ref:** 4676.

**16892** *n*-Pentyl- $\beta$ -carboline-1-propionate

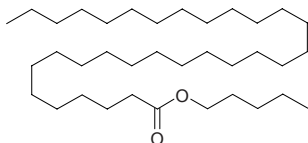
$C_{19}H_{22}N_2O_2$  (310.40). Yellow powder (benzene), mp 127°C (dec). **Pharm:** Antimalarial inactive (*Plasmodium falciparum* clones W2, D6, and TM91C235)<sup>[4728]</sup>. **Source:** CHANG YE KUAN MU *Eurycoma longifolia* (root: yield = 0.000031%dw), *Eurycoma* sp. **Ref:** 4556, 4728.

**16893** 2-Pentylfuran

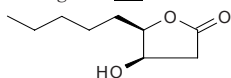
[3777-69-3]  $C_9H_{14}O$  (138.21). Oil. **Source:** CHAI SHOU *Bupleurum chaishouii*, XIA YE XIANG PU *Typha angustifolia*, ZUO JIANG CAO *Oxalis corniculata* [Syn. *Oxalis repens*]. **Ref:** 3161, 3162, 1402.

**16894** Pentyl hentriacontanoate

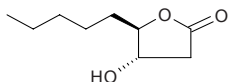
$C_{36}H_{72}O_2$  (536.97). White solid, mp 60–62°C. **Source:** RUAN GU ZAO *Chondria armata* [Syn. *Lophura armata*]. **Ref:** 5080.

**16895** erythro-5-*n*-Pentyl-4-hydroxytetrahydrofuran-2-one

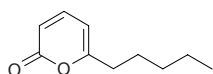
$C_9H_{16}O_3$  (172.23). Colorless liquid. **Source:** YANG HONG SHAN *Pimpinella thelungiana*. **Ref:** 817.

**16896** threo-5-*n*-Pentyl-4-hydroxy tetrahydrofuran-2-one

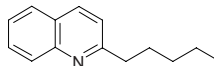
$C_9H_{16}O_3$  (172.23). Colorless liquid. **Source:** YANG HONG SHAN *Pimpinella thelungiana*. **Ref:** 817.

**16897** 6-*n*-Pentyl- $\alpha$ -pyrone

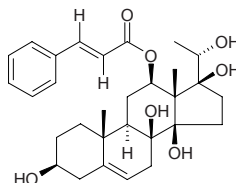
$C_{10}H_{14}O_2$  (166.22). **Pharm:** Tyrosinase inhibitor (IC<sub>50</sub> = 0.8 $\mu$ mol/L, control Kojic acid, IC<sub>50</sub> = 7.7 $\mu$ mol/L, used as a functional personal-care compound)<sup>[4457]</sup>. **Source:** *Myrothecium* sp. **Ref:** 4457.

**16898** 2-*n*-Pentylquinoline

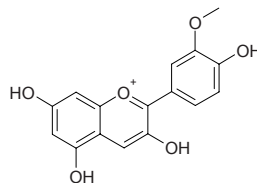
[93005-16-4]  $C_{14}H_{17}N$  (199.30). Oil. **Pharm:** Antileishmanial (*in vitro*: *Leishmania* sp. 2903 IC<sub>90</sub> = 100 $\mu$ g/mL, *Trypanosoma cruzi* IC<sub>90</sub> = 100 $\mu$ g/mL, mus-infected *Leishmania amazonensis*); Antiplasmodial (*in vivo*, mus, infected by *Plasmodium vinckei*, 0.31mmol/L/kg, survival rate = 100%); plant growth and germination inhibitor (lettuce WO JU *Lactuca sativa*); molluscicide (kills snails, 20mg/L effective). **Source:** BAO PIAN TU LA SHU *Galipea bracteata*, CHANG HUA TU LA SHU *Galipea longiflora*. **Ref:** 3600, 3601, 3602, 3603.

**16899** Penupogenin

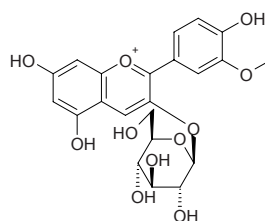
[27526-87-0]  $C_{30}H_{40}O_7$  (512.65). mp 145–150°C. **Source:** BAI SHOU WU *Cynanchum bungei*. **Ref:** 6.

**16900** Peonidin

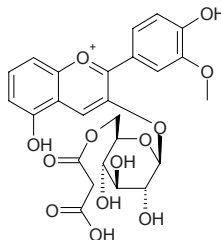
Peonidin  $C_{16}H_{13}O_6^+$  (301.28). **Pharm:** Anti-inflammatory; prevents brittle rupture of blood capillary. **Source:** XI LA GANG LIU *Periploca graeca*, XIN YI *Magnolia liliflora*, *Rhododendron* spp., *Corydalis* spp. **Ref:** 6, 658, 1521.

**16901** Peonidin-3-glucoside

Oxycoccicyanin [6906-39-4]  $C_{22}H_{23}O_{11}^+$  (463.42). Dark brown needles +2H<sub>2</sub>O, (as chloride). **Source:** AO TOU XIAN *Amaranthus lividus*, PU<sup>(2)</sup> TAO *Vitis vinifera*, MU JIN HUA *Hibiscus syriacus*, occurs in many plants. **Ref:** 660, 1521.

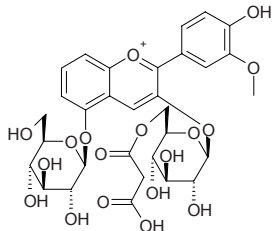
**16902** Peonidin-3-*O*-(6''-*O*-malonyl- $\beta$ -glucopyranoside)

$C_{25}H_{25}O_{13}^+$  (533.47). **Source:** YANG CONG *Allium cepa*. **Ref:** 3497.



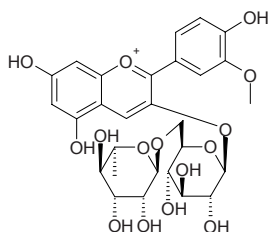
**16903 Peonidin-3-O-(6''-O-malonyl-β-glucopyranoside)-5-O-β-glucopyranoside**

$C_{31}H_{35}O_{18}^+$  (695.61). Source: YANG CONG *Allium cepa*. Ref: 3497.



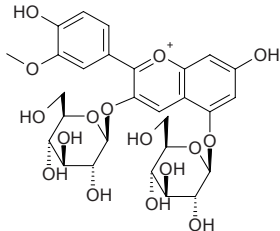
**16904 Peonidin-3-O-(6''-O-α-rhamnopyranosyl-β-glucopyranoside)**

$C_{28}H_{33}O_{15}^+$  (609.57). Source: *Dracula chimaera*, *Dracula cordobae*. Ref: 3406.



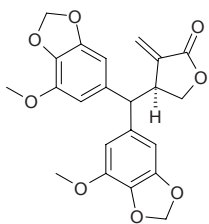
**16905 Peonin**

Peonin; Peonidin-3,5-diglucoside [132-37-6]  $C_{28}H_{33}O_{16}^+$  (625.57). Reddish-violet crystals +1H<sub>2</sub>O (HCl aq., as chloride), mp 165–167°C (dec, CHCl<sub>3</sub>), [α]<sub>D</sub> = +53.4°, chloride). Source: BAI SHAO *Paeonia albiflora* [Syn. *Paeonia lactiflora*], DU JUAN HUA *Rhododendron simsii*, XIA KU CAO *Prunella vulgaris*, *Paeonia* spp. Ref: 2, 1521, 1239, 3163, 3164.



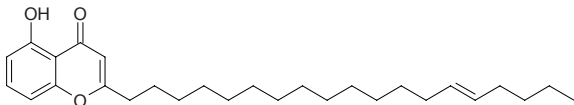
**16906 Peperomin E**

$C_{22}H_{20}O_8$  (412.40). Pharm: Cytotoxic (*in vitro*, HONE-1 cell line, 50μmol/L, cell growth InRt = 5%; NUGC-3 cell line, 50μmol/L, cell growth InRt = 1%)<sup>[3401]</sup>. Source: *Peperomia sui*. Ref: 3401.



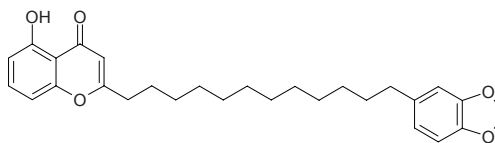
**16907 Peperovulcanone A**

$C_{28}H_{42}O_3$  (426.65). Yellow oil. Source: HUO SHAN YAN CAO HU JIAO *Peperomia vulcanica*. Ref: 2017.



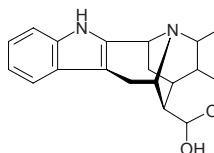
**16908 Peperovulcanone B**

$C_{28}H_{34}O_5$  (450.58). White Crystals (hexane), mp 85–86°C. Source: HUO SHAN YAN CAO HU JIAO *Peperomia vulcanica*. Ref: 2017.



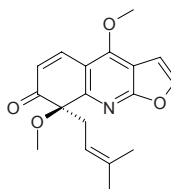
**16909 Peraksine**

[15527-80-7]  $C_{19}H_{22}N_2O_2$  (310.40). mp 196–198°C. Source: PI LI LUO FU MU *Rauwolfia perakensis*, CUI TU LUO FU MU *Rauwolfia vomitoria*. Ref: 6, 660.



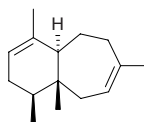
**16910 Perfamine**

[59557-95-8]  $C_{18}H_{19}NO_4$  (313.36). Prisms (hexane–Me<sub>2</sub>CO), mp 175–178°C, 164–165°C, [α]<sub>D</sub><sup>26.5</sup> = –20° (*c* = 1.00, CHCl<sub>3</sub>), [α]<sub>D</sub> = +53.4°. Source: DA YE YUN XIANG CAO *Haplophyllum perforatum*, *Haplophyllum glabrinum*. Ref: 1521.



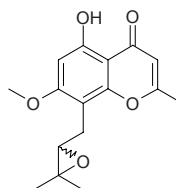
**16911 (–)-Perfora-1,7-diene**

$C_{15}H_{24}$  (204.36). Colorless oil. Source: BO BAN HE YE TAI *Scapania undulata* (essential oil). Ref: 3752.



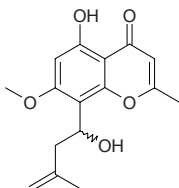
**16912 Perforamone A**

5-Hydroxy-7-methoxy-2-methyl-8-(2,3-epoxy-3-methylbutyl)chromone  $C_{16}H_{18}O_5$  (290.32). Colorless needles, mp 119–120°C, [α]<sub>D</sub><sup>25</sup> = 19.4° (*c* = 0.07, MeOH). Pharm: Antimalarial (antiplasmodial *in vitro*, *Plasmodium falciparum*, IC<sub>50</sub> > 20μg/mL); antibacterial (*Mycobacterium tuberculosis*, MIC = 50μg/mL). Source: NIU JIN GUO *Harrisonia perforata* (branche: yield = 0.043%). Ref: 25.

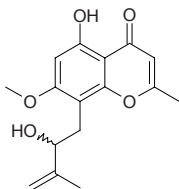


**16913 Perforamone B**

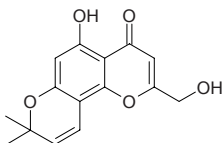
5-Hydroxy-7-methoxy-2-methyl-8-(1-hydroxy-3-methyl-3-butenyl)chromone  
 $C_{16}H_{18}O_5$  (290.32). Colorless needles, evaporation, mp 162~163°C,  $[\alpha]_D^{25} = 18.2^\circ$  ( $c = 0.12$ , MeOH). **Pharm:** Antimalarial (antiplasmodial *in vitro*, *Plasmodium falciparum*,  $IC_{50} = 10.5\mu\text{g/mL}$ ); antibacterial (*Mycobacterium tuberculosis*,  $MIC = 100\mu\text{g/mL}$ ). **Source:** NIU JIN GUO *Harrisonia perforata* (branche: yield = 0.013%). **Ref:** 25.

**16914 Perforamone C**

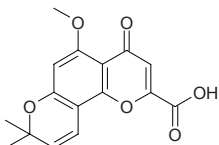
5-Hydroxy-7-methoxy-2-methyl-8-(2-hydroxy-3-methyl-3-butenyl)chromone  
 $C_{16}H_{18}O_5$  (290.32). Pale yellow rhombs, mp 104~105°C,  $[\alpha]_D^{25} = 70.6^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Antimalarial (antiplasmodial *in vitro*, *Plasmodium falciparum*,  $IC_{50} > 20\mu\text{g/mL}$ ); antibacterial (*Mycobacterium tuberculosis*,  $MIC > 200\mu\text{g/mL}$ ). **Source:** NIU JIN GUO *Harrisonia perforata* (branche: yield = 0.025%). **Ref:** 25.

**16915 Perforamone D**

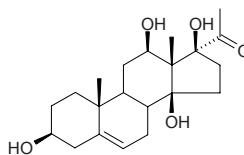
2-Hydroxymethylalloptaeroxilin  $C_{15}H_{14}O_5$  (274.28). Pale yellow rhombs, mp 139~140°C. **Pharm:** Antimalarial (antiplasmodial *in vitro*, *Plasmodium falciparum*,  $IC_{50} > 20\mu\text{g/mL}$ ); antibacterial (*Mycobacterium tuberculosis*,  $MIC = 200\mu\text{g/mL}$ ). **Source:** NIU JIN GUO *Harrisonia perforata* (branche: yield = 0.0005%). **Ref:** 25.

**16916 Perforatic acid**

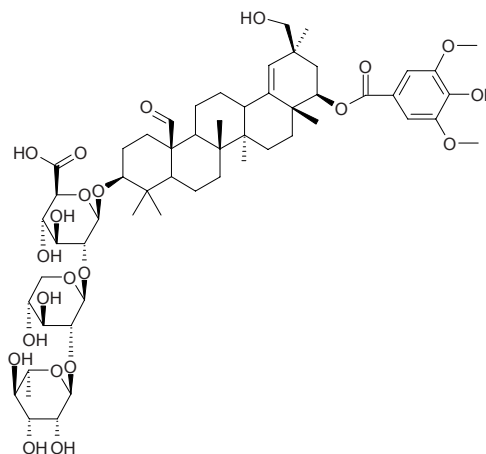
[94736-67-1]  $C_{16}H_{14}O_6$  (302.29). Yellow fine needles (MeOH), mp 246.5~248°C (dec). **Pharm:** Antineoplastic (mus, 3H-TDR *in vitro* doped ascites liver cancer cell,  $InRt = 91.2\%$ ). **Source:** NIU JIN GUO *Harrisonia perforata*. **Ref:** 3694.

**16917 Pergularin**

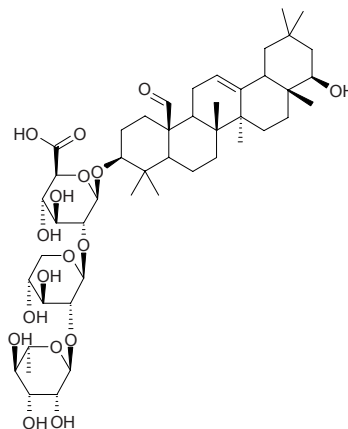
$C_{21}H_{32}O_5$  (364.49). mp 220~230°C. **Source:** FU SHOU CAO *Adonis amurensis*, LUO MO *Metaplexis japonica*. **Ref:** 6.

**16918 Periandradulcin A**

[135545-88-9]  $C_{56}H_{82}O_{22}$  (1107.26). Maple amorphous powder, mp 220~225°C (dec),  $[\alpha]_D^{25} = -55.0^\circ$  ( $c = 0.2$ , MeOH). **Pharm:** Phosphodiesterase inhibitor (phosphodiesterase in ox heart,  $ID_{50} = 0.033\mu\text{mol/L}$ ). **Source:** TIAN ZHOU WEI JIA XIONG RUI *Periandra dulcis*. **Ref:** 3695, 3696.

**16919 Periandradulcin B**

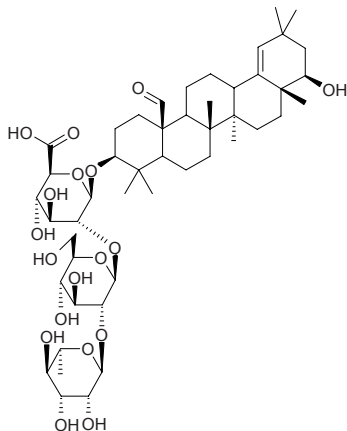
[135545-89-0]  $C_{47}H_{74}O_{17}$  (911.10). White amorphous powder, mp 225~227°C (dec),  $[\alpha]_D^{25} = +12.0^\circ$  ( $c = 1.0$ , MeOH). **Pharm:** Phosphodiesterase inhibitor (phosphodiesterase in ox heart,  $ID_{50} = 7.6\mu\text{mol/L}$ ). **Source:** TIAN ZHOU WEI JIA XIONG RUI *Periandra dulcis*. **Ref:** 3695.



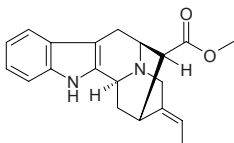


**16920 Periandradulcin C**

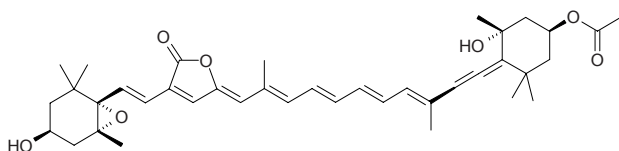
[135545-90-3] C<sub>48</sub>H<sub>76</sub>O<sub>18</sub> (941.13). Maple powder, mp 205~210°C (dec), [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -17.4° (*c* = 0.5, pyridine). **Pharm:** Phosphodiesterase inhibitor (phosphodiesterase in ox heart, ID<sub>50</sub> = 7.7 μmol/L). **Source:** TIAN ZHOU WEI JIA XIONG RUI *Periandra dulcis*. **Ref:** 3695.

**16921 Pericyclivine**

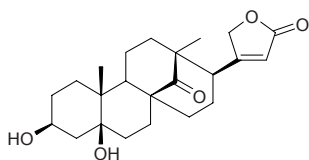
[975-77-9] C<sub>20</sub>H<sub>22</sub>N<sub>2</sub>O<sub>2</sub> (322.41). **Source:** CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochera rosea*]. **Ref:** 2, 1521.

**16922 Peridinin**

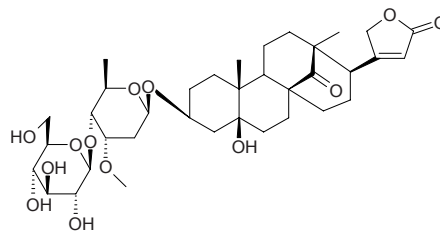
C<sub>39</sub>H<sub>50</sub>O<sub>7</sub> (630.83). **Pharm:** Anti-carcinogenic (inhibits 50nmol/L 12-*O*-tetradecanoyl phorbol 13-acetate (TPA)-stimulated <sup>32</sup>P-incorporation into the phospholipids of HeLa cells, 25 μg/mL, InRt = 28.2%). **Source:** ER JIAO DUO JIA ZAO *Peridinium bipes*. **Ref:** 4256.

**16923 Periforgenin A**

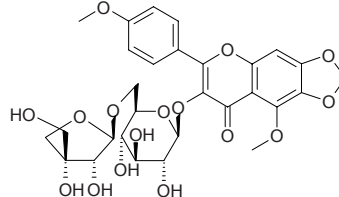
[130774-24-2] C<sub>23</sub>H<sub>32</sub>O<sub>5</sub> (388.51). mp 230~231°C, [ $\alpha$ ]<sub>D</sub> = +79.8°. **Source:** XI NAN GANG LIU *Periploca forrestii*. **Ref:** 2498.

**16924 Periforoside I**

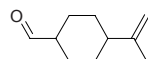
Periforoside 3-*O*-(2,6-dideoxy-4-*O*-β-*D*-glucopyranosidyl)-3-*O*-methyl-β-*D*-ribo-hexopyranoside [130812-53-2] C<sub>36</sub>H<sub>54</sub>O<sub>13</sub> (694.82). mp 240~241°C, [ $\alpha$ ]<sub>D</sub> = +90.38°. **Source:** XI NAN GANG LIU *Periploca forrestii*. **Ref:** 2498.

**16925 Periginatorine**

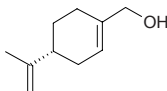
C<sub>29</sub>H<sub>32</sub>O<sub>16</sub> (636.57). Yellow crystals, mp 248~249°C, [ $\alpha$ ]<sub>D</sub><sup>29</sup> = -97° (*c* = 0.39, MeOH). **Source:** NI A LUO *Polygonum periginatoris* (root). **Ref:** 4554.

**16926 Perilal**

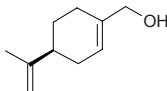
C<sub>10</sub>H<sub>16</sub>O (152.24). **Source:** SHENG JIANG *Zingiber officinale*. **Ref:** 2.

**16927 (R)-Perilla alcohol**

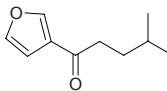
*p*-(*R*)-Mentha-1,8-dien-7-ol [57717-97-2] C<sub>10</sub>H<sub>16</sub>O (152.24). [ $\alpha$ ]<sub>D</sub> = +73°. **Source:** GE LU ZI *Carum carvi*, *Cymbopogon polyneuros*. **Ref:** 1521.

**16928 (S)-Perilla alcohol**

*p*-(*S*)-Mentha-1,8-dien-7-ol [18457-55-1] C<sub>10</sub>H<sub>16</sub>O (152.24). Oil, bp 244.5°C, bp 118~121°C/11mmHg. **Source:** DING XIANG LUO LE *Ocimum gratissimum*. **Ref:** 1521.

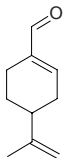
**16929 Perilla ketone**

Isoamyl-3-furyl ketone [553-84-4] C<sub>10</sub>H<sub>14</sub>O<sub>2</sub> (166.22). mp 149.5°C. **Pharm:** Cytotoxic; used in research on γ-radiation (strongly penetrates goat lung); promotes impetus of small intestine (stimulates mus circular muscle); LD<sub>50</sub> (mus, orl) = 78.9mg/kg, (rat, ip) = 5.0mg/kg, (dog, ip) = 106mg/kg, (pig, ip) ≥ 158mg/kg. **Source:** BAI SU ZI *Perilla frutescens*, GUANG HUO XIANG *Pogostemon cablin* [Syn. *Mentha cablin*], JIAN ZI SU YE *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*], ZI SU GENG *Perilla frutescens* var. *arguta*. **Ref:** 2, 660, 900.

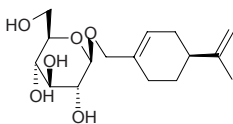


**16930 Perillaldehyde**

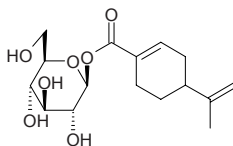
Perillylaldehyde [2111-75-3]  $C_{10}H_{14}O$  (150.22). bp (+) 234~236°C/743mmHg, (-) 235~237°C/750mmHg. Pharm: Sweetener. Source: BAI SU ZI *Perilla frutescens*, HUI HUI SU *Perilla frutescens* var. *crispa*, HUI HUI SU GENG *Perilla frutescens* var. *crispa*, JIAN ZI SU *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*], JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*], JU PI *Citrus reticulata*, OU ZE QIN *Sium latifolium*, RUI ZI SU *Perilla arguta*, ZI SU YE *Perilla frutescens* var. *arguta*. Ref: 6, 11, 658, 660.

**16931 Perilloside A**

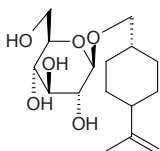
[141206-20-4]  $C_{16}H_{26}O_6$  (314.38). Needles (MeOH-H<sub>2</sub>O), mp 114.5~115°C,  $[\alpha]_D^{22} = -92.7^\circ$  ( $c = 0.77$ , MeOH). Pharm: Aldose reductase inhibitor (rat eye lens, 0.1mmol/L, InRt = 54.5%, hmn recombinant cells); prevention and cure of diabetes syndrome (retinopathy, cataract, nervous system diseases); hypoglycemic (rat, injection into stomach 10mg/kg and cane sugar 1g/kg, markedly inhibits increase of level of blood sugar); sugar hydrolase inhibitor (inhibits digestion of sugar and its absorption in small intestine). Source: BAI SU YE *Perilla frutescens*, QING ZI SU *Perilla frutescens* f. *viridis*. Ref: 3165, 3166, 3167, 3168.

**16932 Perilloside B**

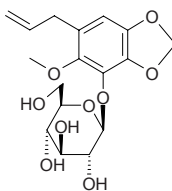
$C_{16}H_{24}O_7$  (328.37). Source: ZI SU YE *Perilla frutescens* var. *arguta*. Ref: 3169.

**16933 Perilloside C**

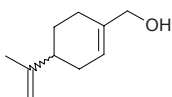
[146763-94-2]  $C_{16}H_{28}O_6$  (316.40). Needles (MeOH-H<sub>2</sub>O), mp 125.5~126.5°C,  $[\alpha]_D^{22} = -32.3^\circ$  ( $c = 0.6$ , MeOH). Pharm: Aldose reductase inhibitor (rat eye lens, 0.1mmol/L, InRt = 46.4%, hmn recombinant cells); prevention and cure of diabetes syndrome (retinopathy, cataract, nervous system diseases). Source: QING ZI SU *Perilla frutescens* f. *viridis*. Ref: 3170, 3169, 3168, 3167.

**16934 Perilloside E**

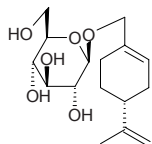
[149380-62-1]  $C_{17}H_{22}O_9$  (370.36). Needles, mp 164~165°C,  $[\alpha]_D = -22.8^\circ$  ( $c = 0.3$ , MeOH). Pharm: Antifungal. Source: BAI SU YE *Perilla frutescens*. Ref: 3171.

**16935 Perillyl alcohol**

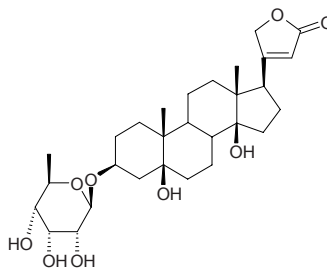
Perilla alcohol [536-59-4]  $C_{10}H_{16}O$  (152.24). bp (+) 228~229°C/755mmHg, (-) 244.5°C. Pharm: Antineoplastic (treatment of pancreatic duct cancer, inhibits skin cancer and mastocytosis)<sup>[2622]</sup>; cytotoxic (rat, liver cancer cell, inhibits growth of cells)<sup>[2622]</sup>. Source: JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*], HUI HUI SU GENG *Perilla frutescens* var. *crispa*. Ref: 6, 11, 660, 2622.

**16936 Perillylglucopyranoside**

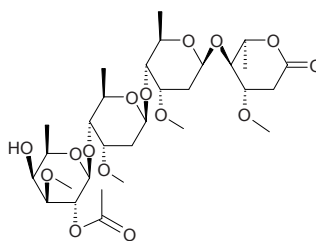
$C_{16}H_{26}O_6$  (314.38). Source: ZI SU YE *Perilla frutescens* var. *arguta*. Ref: 3172.

**16937 Peripalloside**

$C_{29}H_{44}O_9$  (536.67). Source: JIAN XUE FENG HOU *Antiaris toxicaria* [Syn. *Ambora toxicaria*]. Ref: 3173.

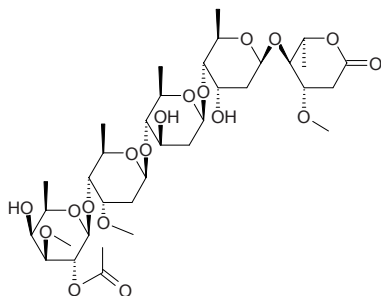
**16938 Periplocae oligosaccharide C<sub>1</sub>**

$C_{30}H_{50}O_{15}$  (650.72). Source: XIANG JIA PI *Periploca sepium*. Ref: 3174.

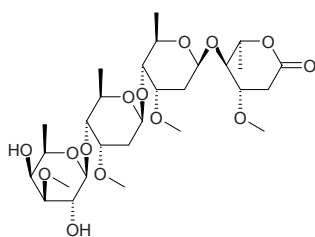


**16939 Periplocae oligosaccharide D<sub>2</sub>**

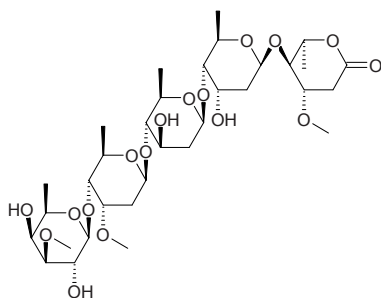
$C_{35}H_{58}O_{18}$  (766.84). Source: XIANG JIA PI *Periploca sepium*. Ref: 3174.

**16940 Periplocae oligosaccharide F<sub>1</sub>**

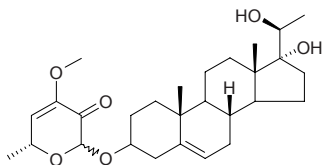
$C_{28}H_{48}O_{14}$  (608.69). Source: XIANG JIA PI *Periploca sepium*. Ref: 3174.

**16941 Periplocae oligosaccharide F<sub>2</sub>**

$C_{33}H_{56}O_{17}$  (724.80). Source: XIANG JIA PI *Periploca sepium*. Ref: 3174.

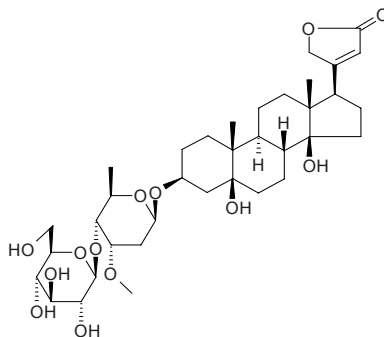
**16942 Periplocagenin**

2-[(17,20-Dihydroxypregn-5-en-3-yl)oxy]-4-methoxy-6-methyl-2H-pyran-3(6H)-one [112899-63-5]  $C_{28}H_{42}O_6$  (474.64). Needles ( $C_6H_6-CHCl_3$ ), mp 203–206°C,  $[\alpha]_D^{20} = -51.2^\circ$  ( $c = 0.3$ , MeOH). Source: XIANG JIA PI *Periploca sepium*. Ref: 2498, 3175.

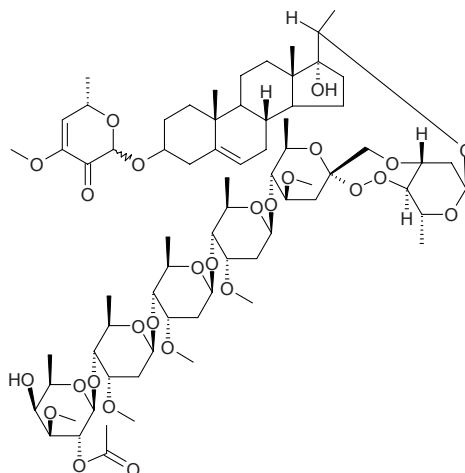
**16943 Periplocin**

Periplocoside [13137-64-9]  $C_{36}H_{56}O_{13}$  (696.84). mp 209°C (dec), 232–233°C.

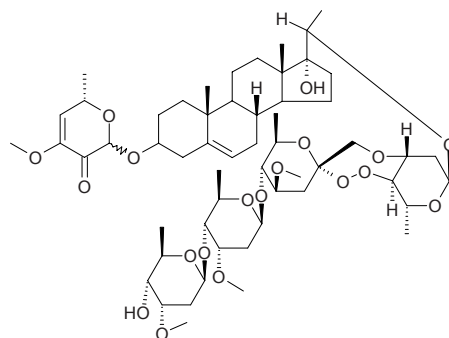
Pharm: Radioprotector (mus, microwave damage model, biotic prolonged rate = 146%); cardiac glucoside (similar action with digitalis). Source: KANG PI DU MAO XUAN HUA *Strophanthus kombe*, XI LA GANG LIU *Periploca graeca*, XIANG JIA PI *Periploca sepium*. Ref: 6, 658.

**16944 Periplocoside A**

[114828-46-5]  $C_{72}H_{114}O_{27}$  (1411.70). Powder, mp 174–176°C,  $[\alpha]_D^{20} = -1.2^\circ$  ( $c = 1.4$ ,  $CHCl_3$ ). Source: XIANG JIA PI *Periploca sepium*. Ref: 3175.

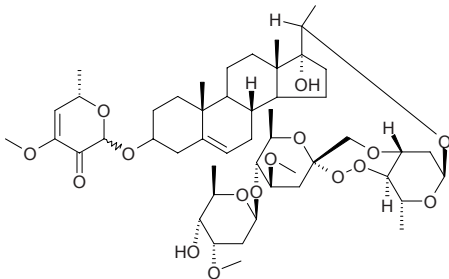
**16945 Periplocoside B**

[115742-49-2]  $C_{56}H_{88}O_{19}$  (1065.31). Powder, mp 136–138°C,  $[\alpha]_D^{20} = +1.9^\circ$  ( $c = 0.2$ ,  $CHCl_3$ ). Source: XIANG JIA PI *Periploca sepium*. Ref: 3175.

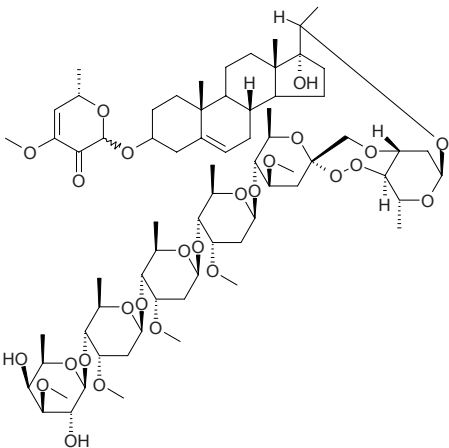


**16946 Periplocoside C**

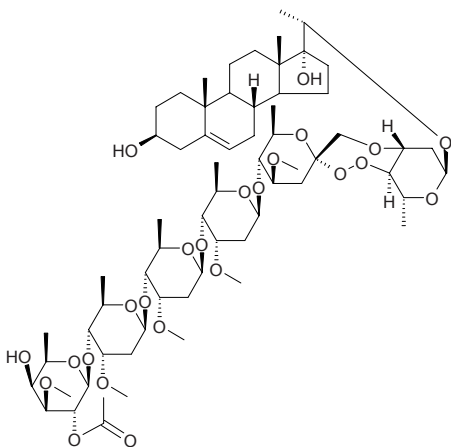
[114828-47-6] C<sub>49</sub>H<sub>76</sub>O<sub>16</sub> (921.14). Powder, mp 180~182°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -8.4° (*c* = 0.3, CHCl<sub>3</sub>). [Source](#): XIANG JIA PI *Periploca sepium*. [Ref](#): 3175.

**16947 Periplocoside D**

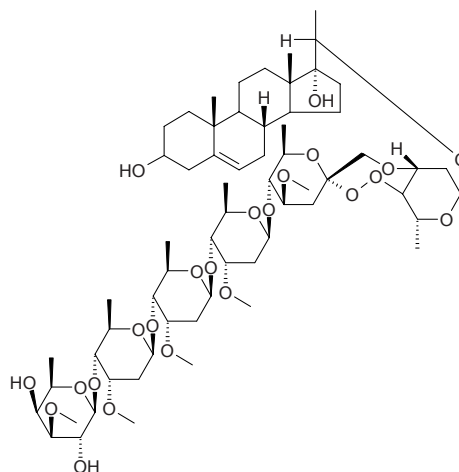
[116709-67-2] C<sub>70</sub>H<sub>112</sub>O<sub>26</sub> (1369.66). Powder, mp 191~193°C, [ $\alpha$ ]<sub>D</sub> = -3.08° (*c* = 0.26, CHCl<sub>3</sub>). [Source](#): XIANG JIA PI *Periploca sepium*. [Ref](#): 3175.

**16948 Periplocoside E**

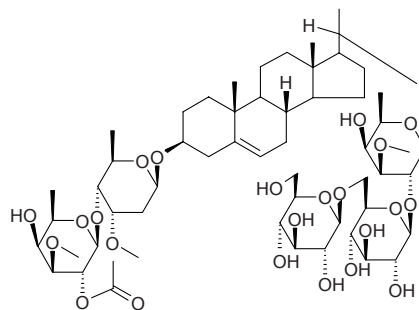
Pregn-5-ene-3,17,20-triol 20-*O*-[2-*O*-acetyl- $\beta$ -*D*-digitalopyranosyl-(1→4)- $\beta$ -*D*-cymaropyranosyl-(1→4)- $\beta$ -*D*-cymaropyranosyl-(1→4)- $\beta$ -*D*-cymaropyranosyl-(1→5)-3,7-dideoxy-4-*O*-methyl- $\alpha$ -*D*-gluco-2-heptulopyranosyl-(2→4)-dioxo-(1→3)- $\beta$ -*D*-canaropyranoside] [116709-65-0] C<sub>65</sub>H<sub>106</sub>O<sub>24</sub> (1271.56). Powder, mp 183~189°C, [ $\alpha$ ]<sub>D</sub> = -7.5° (*c* = 0.08, CHCl<sub>3</sub>). [Source](#): XIANG JIA PI *Periploca sepium*, XI NAN GANG LIU *Periploca forrestii*. [Ref](#): 2498, 3175, 3176.

**16949 Periplocoside F**

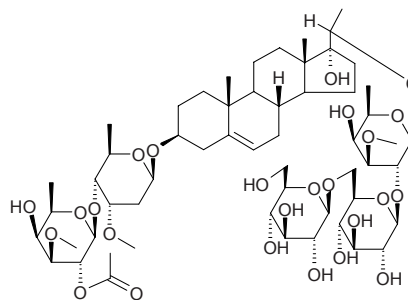
[119902-17-9] C<sub>63</sub>H<sub>104</sub>O<sub>23</sub> (1229.52). Powder, mp 195~198°C, [ $\alpha$ ]<sub>D</sub> = +8.1° (*c* = 0.07, MeOH). [Source](#): XIANG JIA PI *Periploca sepium*. [Ref](#): 3175.

**16950 Periplocoside H<sub>1</sub>**

C<sub>56</sub>H<sub>92</sub>O<sub>24</sub> (1149.34). [Source](#): XIANG JIA PI *Periploca sepium*. [Ref](#): 3353.

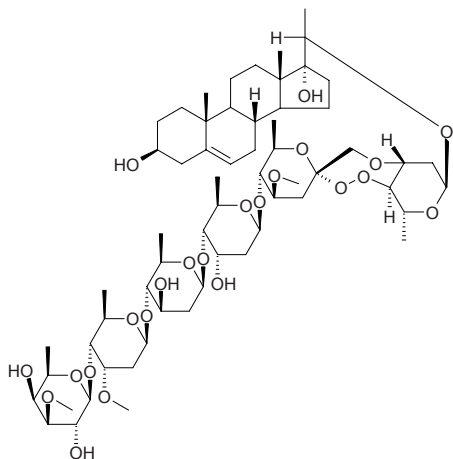
**16951 Periplocoside H<sub>2</sub>**

C<sub>56</sub>H<sub>92</sub>O<sub>25</sub> (1165.34). [Source](#): XIANG JIA PI *Periploca sepium*. [Ref](#): 3177.

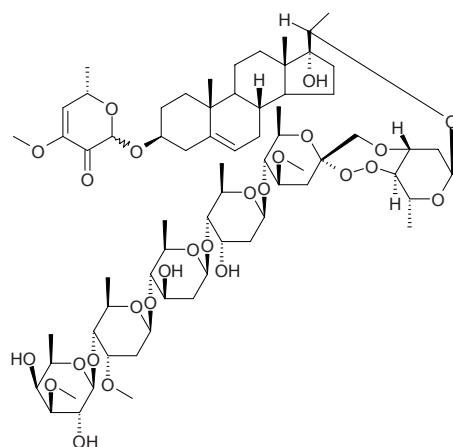


**16952 Periplocoside J**

[119902-15-7] C<sub>61</sub>H<sub>100</sub>O<sub>23</sub> (1201.46). Powder, mp 178~181°C,  $[\alpha]_D^{20} = +24.13^\circ$  ( $c = 0.12$ , MeOH). Source: XIANG JIA PI *Periploca sepium*. Ref: 3175.

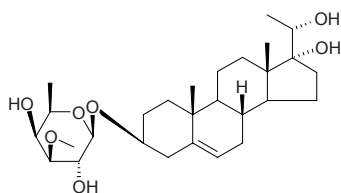
**16953 Periplocoside K**

C<sub>68</sub>H<sub>108</sub>O<sub>26</sub> (1341.60). Source: XIANG JIA PI *Periploca sepium*. Ref: 3175.

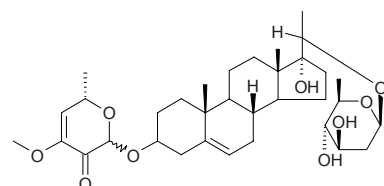
**16954 Periplocoside L**

C<sub>28</sub>H<sub>46</sub>O<sub>7</sub> (494.67). Needles, mp 238~240°C,  $[\alpha]_D = -53.3^\circ$  ( $c = 0.06$ , MeOH).

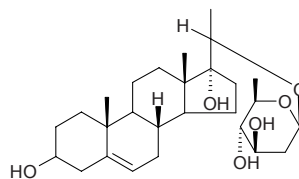
Source: XIANG JIA PI *Periploca sepium*. Ref: 2498, 3175.

**16955 Periplocoside M**

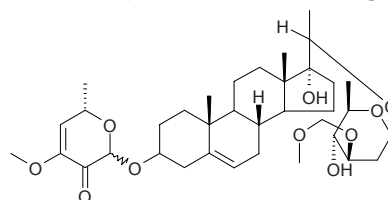
[116782-73-1] C<sub>34</sub>H<sub>52</sub>O<sub>9</sub> (604.79). Needles, mp 195~197°C,  $[\alpha]_D = -89.91^\circ$  ( $c = 0.23$ , MeOH). Source: XIANG JIA PI *Periploca sepium*. Ref: 3175.

**16956 Periplocoside N**

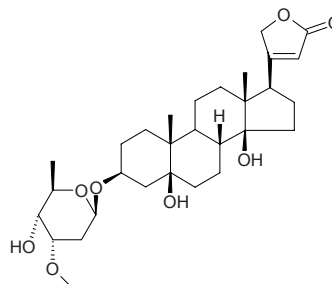
C<sub>27</sub>H<sub>44</sub>O<sub>6</sub> (464.65). Source: XIANG JIA PI *Periploca sepium*. Ref: 3175.

**16957 Periplocoside O**

[116709-67-2] C<sub>36</sub>H<sub>56</sub>O<sub>10</sub> (648.84). Powder, mp 103~106°C,  $[\alpha]_D^{20} = -84.0^\circ$  ( $c = 0.05$ , MeOH). Source: XIANG JIA PI *Periploca sepium*. Ref: 3175.

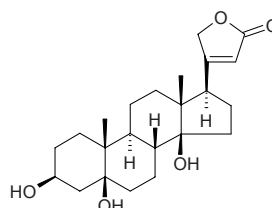
**16958 Periplocyamarin**

[32476-67-8] C<sub>30</sub>H<sub>46</sub>O<sub>8</sub> (534.70). Crystals (MeOH aq.), mp 145°C,  $[\alpha]_D^{20} = +29^\circ$  (MeOH), mp 212°C (MeOH); mp 205~208°C,  $[\alpha]_D = +25.25^\circ$ . Pharm: Toxic; LD<sub>50</sub> (cat) = 0.154mg/kg. Source: XIANG JIA PI *Periploca sepium*, *Castilla elastica*, *Strophanthus* spp., *Pentopetia* spp. Ref: 1521, 2498.

**16959 Periplogenin**

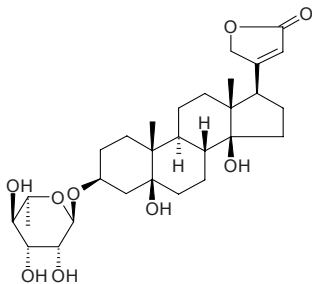
[514-39-6] C<sub>23</sub>H<sub>34</sub>O<sub>5</sub> (390.52). Crystals (MeOH aq.), mp 238°C (sinters at 140°C),  $[\alpha]_D^{31.5} = +27^\circ$  ( $c = 0.667$ , CHCl<sub>3</sub>); mp 237~238°C,  $[\alpha]_D = +29.5^\circ$ .

Pharm: Toxic; LD<sub>50</sub> (cat) = 0.72mg/kg. Source: JIAN XUE FENG HOU *Antiaris toxicaria* [Syn. *Ambora toxicaria*], PEN TUO PO TI CAO *Pentopetia androsaernifolia*, QING SHE TENG *Periploca calophylla*, XIANG JIA PI *Periploca sepium*, XI LA GANG LIU *Periploca graeca*, XI NAN GANG LIU *Periploca forrestii*, *Strophanthus preussii*, *Castilla elastica*. Ref: 1521, 2498.

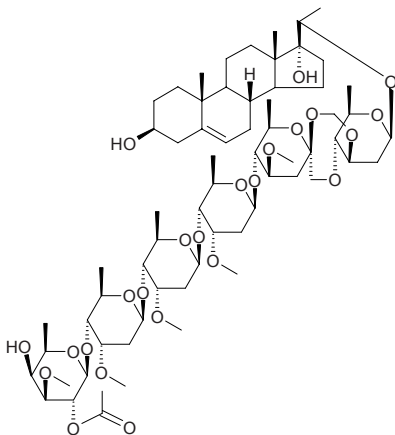


**16960 Periplogenin-3-O- $\alpha$ -L-rhamnopyranoside**

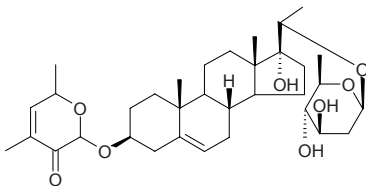
$C_{29}H_{44}O_9$  (536.67). mp 170–174°C, 219–226°C. Source: LING LAN *Convallaria keiskei* [Syn. *Convallaria majalis*]. Ref: 6.

**16961 Periploside A**

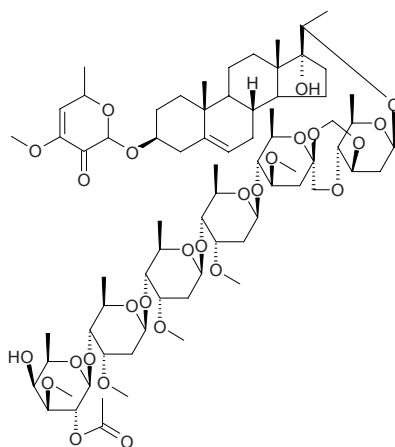
$C_{66}H_{108}O_{24}$  (1285.58). Source: XIANG JIA PI *Periploca sepium*. Ref: 3178.

**16962 Periploside B**

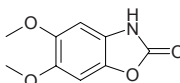
$C_{34}H_{52}O_8$  (588.79). Source: XIANG JIA PI *Periploca sepium*. Ref: 3178.

**16963 Periploside C**

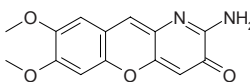
$C_{73}H_{116}O_{27}$  (1425.72). Source: XIANG JIA PI *Periploca sepium*. Ref: 3178.

**16964 Peristrophamide**

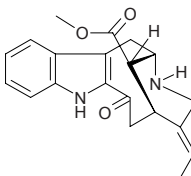
$C_9H_9NO_4$  (195.18). Reddish thin, clustered crystals; mp 221–222°C, easily soluble in ethanol, ketone, chloroform; insoluble in petroleum ether. Source: GUAN YIN CAO *Peristrophe roxburghiana*. Ref: 681.

**16965 Peristrophine**

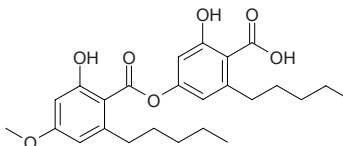
$C_{14}H_{12}N_2O_4$  (272.26). Dark red crystals, mp 250°C (dec); easy soluble in MeOH, EtOH, Me<sub>2</sub>CO, CHCl<sub>3</sub>; soluble in EtOAc; insoluble in petroleum ether. Source: GUAN YIN CAO *Peristrophe roxburghiana*. Ref: 681.

**16966 Perivine**

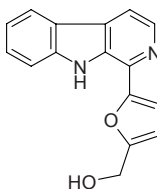
[2673-40-7]  $C_{20}H_{22}N_2O_3$  (338.41). mp 218–221°C (dec). Pharm: Analgesic; antibacterial (1.5%, effective in ratio of 8/30 hmn pathogenic bacteria); antihypertensive; antipyretic; antispasmodic; cytotoxic (mus, P<sub>388</sub> *in vitro*, ED<sub>50</sub> = 20µg/mL, KB *in vitro*, ED<sub>50</sub> = 70µg/mL); LD<sub>50</sub> (mus, orl) = 145.9mg/kg, (mus, sc) = 133.4mg/kg, (mus, iv) = 89.6mg/kg. Source: CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochera rosea*], HE ER TI SHAN MA CHA *Tabernaemontana holstii*, YUE HAN SI TONG SHAN MA CHA *Tabernaemontana johnstonii*, ZHI ZHI SHAN MA CHA *Tabernaemontana chartacea*. Ref: 4, 5, 658.

**16967 Perlatolic acid**

[529-47-5]  $C_{25}H_{32}O_7$  (444.53). mp 108°C. Source: TAI BAI HUA *Cladonia stellaris* [Syn. *Cladonia alpestris*]. Ref: 6.

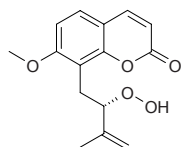
**16968 Perlolryine**

[29700-20-7]  $C_{16}H_{12}N_2O_2$  (264.29). mp 165°C. Source: CHUAN DANG SHEN *Codonopsis tangshen* (dried root: content = 0.00019%)<sup>[5508]</sup>, DANG SHEN *Codonopsis pilosula* (dried root: content = 0.000028%)<sup>[5508]</sup>, SU HUA DANG SHEN *Codonopsis pilosula* var. *modesta* [Syn. *Codonopsis modesta*] (dried root: content = 0.000007%)<sup>[5508]</sup>, YUAN ZHI *Polygala tenuifolia*. Ref: 538, 5508.

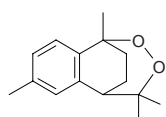


**16969 Peroxyauraptenol**

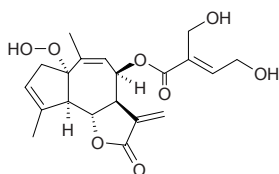
[109741-39-1] C<sub>15</sub>H<sub>16</sub>O<sub>5</sub> (276.29). Prisms, mp 114~116°C, [ $\alpha$ ]<sub>D</sub> = +3.53° (CHCl<sub>3</sub>). Source: XIAO YE JIU LI XIANG *Murraya paniculata* var. *exotica*. Ref: 1272, 3179.

**16970 10,12-Peroxycalamenene**

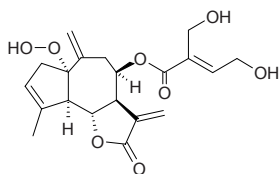
[168207-85-0] C<sub>15</sub>H<sub>20</sub>O<sub>2</sub> (232.33). Needles (CH<sub>2</sub>Cl<sub>2</sub>:hexane = 1:1), mp 67~68.5°C (cold hexane), [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -67.22° (*c* = 0.2765, CHCl<sub>3</sub>). Pharm: Antimalarial (*Plasmodium falciparum*, IC<sub>50</sub> = 2.33 μmol/L). Source: XIANG FU *Cyperus rotundus*. Ref: 1089.

**16971 Peroxyeupahakonin A**

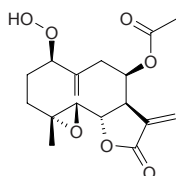
[82425-23-8] C<sub>20</sub>H<sub>24</sub>O<sub>8</sub> (392.41). Amorphous, mp 143~146°C, [ $\alpha$ ]<sub>D</sub><sup>26</sup> = -165° (*c* = 0.21, MeOH). Source: HUA ZE LAN *Eupatorium chinense*. Ref: 3180.

**16972 Peroxyeupahakonin B**

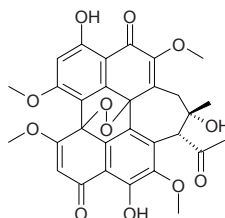
[82425-22-7] C<sub>20</sub>H<sub>24</sub>O<sub>8</sub> (392.41). Crystals (Me<sub>2</sub>CO), mp 147~148°C, [ $\alpha$ ]<sub>D</sub><sup>26</sup> = +35.4° (*c* = 0.18, MeOH). Source: HUA ZE LAN *Eupatorium chinense*. Ref: 3180.

**16973 1-Peroxyferolide**

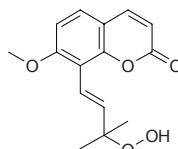
[61228-73-7] C<sub>17</sub>H<sub>22</sub>O<sub>7</sub> (338.36). Pharm: Insect antifeedant. Source: BEI MEI E ZHANG QIU *Liriodendron tulipifera*. Ref: 658.

**16974 Peroxyhypocrellin**

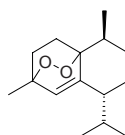
C<sub>30</sub>H<sub>26</sub>O<sub>12</sub> (578.53). Source: ZHU HONG JUN *Hypocrella bambusae*. Ref: 3181.

**16975 Peroxymurraol**

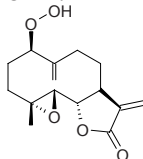
[121994-13-6] C<sub>15</sub>H<sub>16</sub>O<sub>5</sub> (276.29). Source: XIAO YE JIU LI XIANG *Murraya paniculata* var. *exotica*. Ref: 3134.

**16976 1,4-Peroxy-5-murolene**

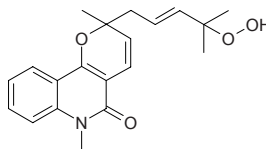
C<sub>15</sub>H<sub>26</sub>O<sub>2</sub> (236.36). Amorphous, [ $\alpha$ ]<sub>D</sub> = +41.9° (*c* = 2.30). Source: BO BAN HE YE TAI *Scapania undulata*. Ref: 5132.

**16977 Peroxyparthenolide**

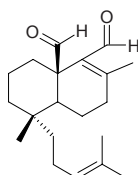
[64845-91-6] C<sub>15</sub>H<sub>20</sub>O<sub>5</sub> (280.32). Crystals (Me<sub>2</sub>CO-Et<sub>2</sub>O), mp 190°C (dec), [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +27° (*c* = 0.21, Me<sub>2</sub>CO). Source: HE HUA YU LAN *Magnolia grandiflora*. Ref: 3182.

**16978 Peroxysimulenoline**

C<sub>20</sub>H<sub>23</sub>NO<sub>4</sub> (341.41). Pharm: Platelet aggregation inhibitor; DNA isomerase inhibitor; antibacterial; cytotoxic. Source: *Zanthoxylum* sp. Ref: 2176.

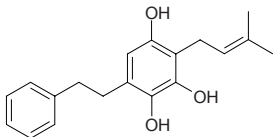
**16979 Perrottetianal**

C<sub>20</sub>H<sub>30</sub>O<sub>2</sub> (302.46). Source: SHANG ZUO JIAN YE GUANG E TAI *Porella acutifolia* ssp. *tosana*. Ref: 3932.

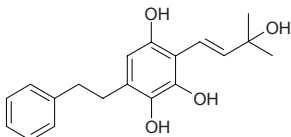


**16980 Perrottetin A**

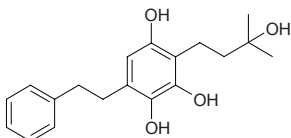
[85526-61-0] C<sub>19</sub>H<sub>22</sub>O<sub>3</sub> (298.39). Crystals, mp 99~100°C. Source: NING BIAN E TAI *Radula perrottetii*. Ref: 3697.

**16981 Perrottetin B**

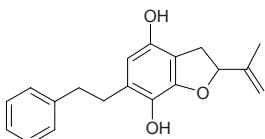
[85526-63-2] C<sub>19</sub>H<sub>22</sub>O<sub>4</sub> (314.38). Gum. Source: NING BIAN E TAI *Radula perrottetii*. Ref: 3697.

**16982 Perrottetin C**

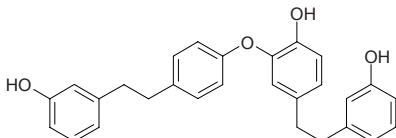
[85526-65-4] C<sub>19</sub>H<sub>24</sub>O<sub>4</sub> (316.40). Gum. Source: NING BIAN E TAI *Radula perrottetii*. Ref: 3697.

**16983 Perrottetin D**

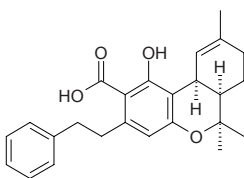
[133462-36-9] C<sub>19</sub>H<sub>20</sub>O<sub>3</sub> (296.37). Pharm: Antioxidant (lipid peroxidation inhibitor); 5-lipoxygenase inhibitor (IC<sub>50</sub> = 0.66 μmol/L); cyclooxygenase inhibitor. Source: NING BIAN E TAI *Radula perrottetii*. Ref: 3697, 3698, 3678.

**16984 Perrottetin E**

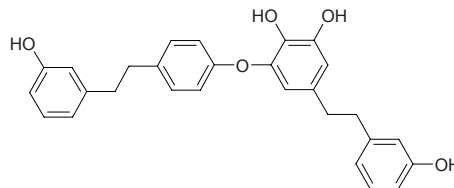
[89911-97-7] C<sub>28</sub>H<sub>26</sub>O<sub>4</sub> (426.52). Oil. Pharm: Cytotoxic (KB cells). Source: DI SUO LUO *Marchantia polymorpha*, NING BIAN E TAI *Radula perrottetii*, *Pollia endiviifolia*. Ref: 3183, 3184, 3185.

**16985 Perrottetinenic acid**

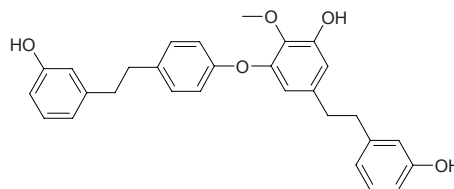
C<sub>25</sub>H<sub>28</sub>O<sub>4</sub> (392.50). Oil, [α]<sub>D</sub><sup>22</sup> = -165.8° (c = 0.35, CHCl<sub>3</sub>). Source: BIAN YUAN BIAN E TAI *Radula marginata*. Ref: 4236.

**16986 Perrottetin F**

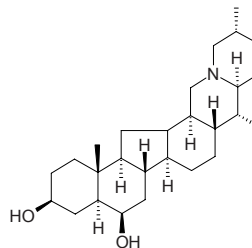
[89911-98-8] C<sub>28</sub>H<sub>26</sub>O<sub>5</sub> (442.52). Source: NING BIAN E TAI *Radula perrottetii*. Ref: 3697.

**16987 Perrottetin G**

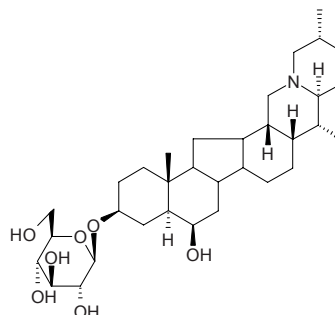
C<sub>29</sub>H<sub>28</sub>O<sub>5</sub> (456.54). Source: NING BIAN E TAI *Radula perrottetii*. Ref: 1521, 3697.

**16988 17αH-Persicanidine A**

C<sub>27</sub>H<sub>45</sub>NO<sub>2</sub> (415.67). Crystals (EtOH), mp 228~230°C (dec), [α]<sub>D</sub><sup>23</sup> = -9.7° (c = 0.5, CHCl<sub>3</sub>). Pharm: AChE inhibitor (IC<sub>50</sub> = (352.2±4.0) μmol/L, control Eserine, IC<sub>50</sub> = (0.41±0.01) μmol/L)<sup>[4217]</sup>; BChE inhibitor (IC<sub>50</sub> = (4.25±0.08) μmol/L, control Eserine, IC<sub>50</sub> = (0.857±0.008) μmol/L)<sup>[4217]</sup>. Source: XI BEI MU *Fritillaria imperialis* (bulb). Ref: 4217.

**16989 Persicanidine B-3-O-β-D-glucoside**

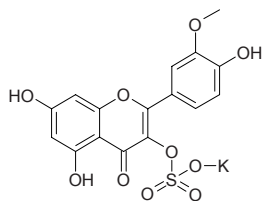
[144940-48-7] C<sub>33</sub>H<sub>55</sub>NO<sub>7</sub> (577.81). Amorphous powder, [α]<sub>D</sub><sup>29</sup> = -36.2° (c = 0.21, CHCl<sub>3</sub>). Pharm: cAMP phosphodiesterase inhibitor (IC<sub>50</sub> = 183 μmol/L). Source: TAO BEI MU *Fritillaria persica*, Ref: 1755.



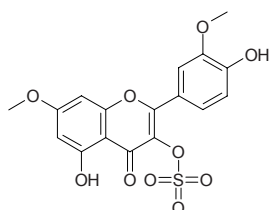


**16990 Persicarin**

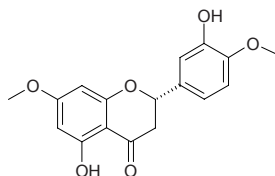
[549-31-5] C<sub>16</sub>H<sub>11</sub>KO<sub>10</sub>S (434.43). mp 280°C. Source: QIN HUA *Oenanthe javanica*, SHUI LIAO *Polygonum hydropiper*, SHUI MA TIAO *Polygonum thunbergii*. Ref: 6.

**16991 Persicarin-7-methylether**

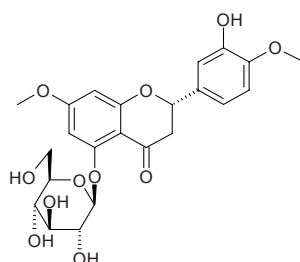
C<sub>17</sub>H<sub>13</sub>O<sub>10</sub>S (409.35). Source: LA LIAO *Polygonum hydropiper* var. *flaccidum* [Syn. *Polygonum flaccidum*], SHUI LIAO *Polygonum hydropiper*. Ref: 660, 3186.

**16992 Persicogenin**

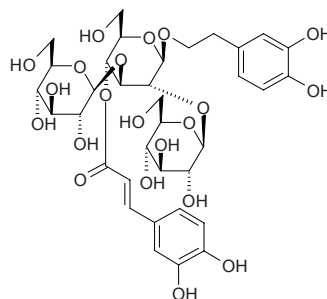
[28590-41-0] C<sub>17</sub>H<sub>16</sub>O<sub>6</sub> (316.31). Source: TAO ZHI *Prunus persica*, TAO JING BAI PI *Prunus persica*, SHAN TAO JING BAI PI *Prunus davidiana*. Ref: 6, 660.

**16993 Persicoside**

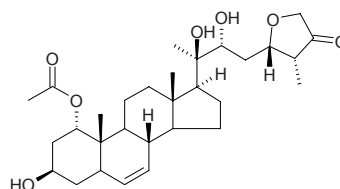
[28978-03-2] C<sub>23</sub>H<sub>26</sub>O<sub>11</sub> (478.46). mp 250~260°C. Source: TAO ZHI *Prunus persica*, TAO JING BAI PI *Prunus persica*, SHAN TAO JING BAI PI *Prunus davidiana*. Ref: 6, 660, 1521.

**16994 Persicoside**

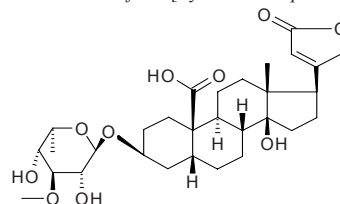
C<sub>35</sub>H<sub>46</sub>O<sub>21</sub> (802.74). Amorphous powder, [α]<sub>D</sub><sup>23</sup> = -63° (c = 0.17, EtOH). Pharm: Antioxidant (DPPH scavenger, IC<sub>50</sub> = 0.32mmol/L, control Vitamin E, IC<sub>50</sub> = 0.48mmol/L, BHA, IC<sub>50</sub> = 0.63mmol/L). Source: A LA BO PO PO NA *Veronica persica* (aerial parts). Ref: 4211.

**16995 Perulactone**

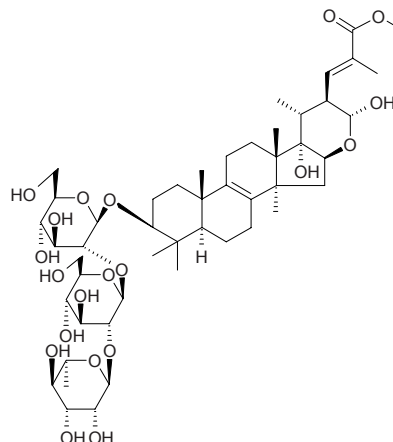
C<sub>30</sub>H<sub>46</sub>O<sub>7</sub> (518.70). Crystals (MeOH), mp 214~215°C, 239~240°C (dimorphism). Source: DENG LONG CAO *Physalis peruviana*. Ref: 3187.

**16996 Perusitin**

C<sub>30</sub>H<sub>44</sub>O<sub>10</sub> (564.68). mp 168~170°C. Source: HUANG HUA JIA ZHU TAO *Thevetia nerifolia* [Syn. *Thevetia peruviana*]. Ref: 6, 1521.

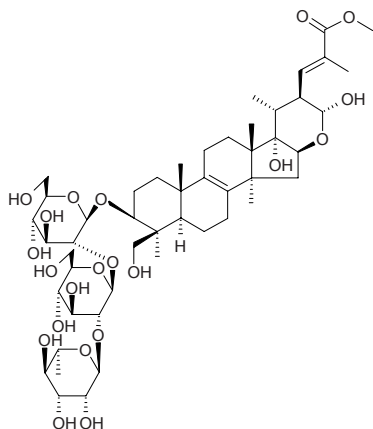
**16997 Peruvianoside A**

[145567-94-8] C<sub>49</sub>H<sub>78</sub>O<sub>20</sub> (987.16). White amorphous powder, [α]<sub>D</sub><sup>30</sup> = -23.2° (c = 0.21, MeOH). Pharm: cAMP phosphodiesterase inhibitor (IC<sub>50</sub> = 235μmol/L); enhances myocardial contractility. Source: BI LU MIAN ZAO ER *Scilla peruviana*. Ref: 3609.

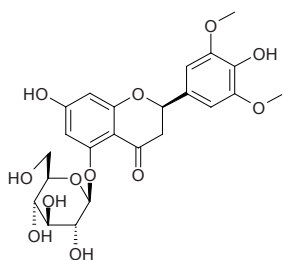


**16998 Peruvianoside B**

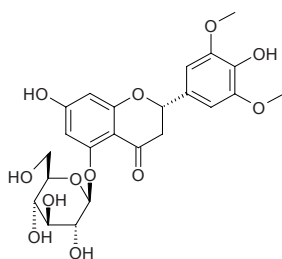
[149155-15-7] C<sub>49</sub>H<sub>78</sub>O<sub>21</sub> (1003.16). White amorphous powder,  $[\alpha]_D^{30} = -24.0^\circ$  ( $c = 0.50$ , MeOH). **Pharm:** inhibits promotor of cancer (inhibits TPA-induced <sup>32</sup>P combines with phospholipid in HeLa cells, 50 μg/mL, InRt = 15.5%). **Source:** BI LU MIAN ZAO ER *Scilla peruviana*. **Ref:** 3609, 3610.

**16999 Peruvianoside I**

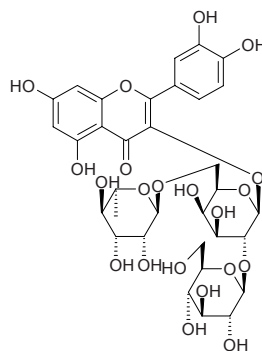
(2*R*)-5-*O*-β-*D*-Glucopyranosyl-7,4'-dihydroxy-3',5'-dimethoxyflavanone C<sub>23</sub>H<sub>26</sub>O<sub>12</sub> (494.46). White amorphous powder, mp 194–196°C,  $[\alpha]_D^{25} = -93^\circ$  ( $c = 0.02$ , MeOH). **Pharm:** Anti-HIV-1 (RT (RDDP) inhibitor, IC<sub>50</sub> > 100 μmol/L, positive control Adriamycin, IC<sub>50</sub> = 27 μmol/L; DDDP inhibitor, IC<sub>50</sub> > 100 μmol/L, positive control Adriamycin, IC<sub>50</sub> = 6 μmol/L; HIV-1 IN inhibitor, IC<sub>50</sub> > 100 μmol/L, positive control Suramin, IC<sub>50</sub> = 2.4 μmol/L). **Source:** HUANG HUA JIA ZHU TAO *Thevetia nerifolia* [Syn. *Thevetia peruviana*] (leaf). **Ref:** 4187.

**17000 Peruvianoside II**

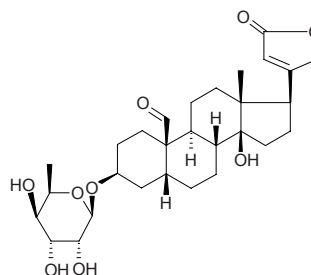
(2*S*)-5-*O*-β-*D*-Glucopyranosyl-7,4'-dihydroxy-3',5'-dimethoxyflavanone C<sub>23</sub>H<sub>26</sub>O<sub>12</sub> (494.46). White amorphous powder, mp 190–192°C,  $[\alpha]_D^{25} = -127^\circ$  ( $c = 0.02$ , MeOH). **Pharm:** Anti-HIV-1 (RT (RDDP) inhibitor, IC<sub>50</sub> > 100 μmol/L, positive control Adriamycin, IC<sub>50</sub> = 27 μmol/L; DDDP inhibitor, IC<sub>50</sub> > 100 μmol/L, positive control Adriamycin, IC<sub>50</sub> = 6 μmol/L; HIV-1 IN inhibitor, IC<sub>50</sub> > 100 μmol/L, positive control Suramin, IC<sub>50</sub> = 2.4 μmol/L). **Source:** HUANG HUA JIA ZHU TAO *Thevetia nerifolia* [Syn. *Thevetia peruviana*] (leaf). **Ref:** 4187.

**17001 Peruvianoside III**

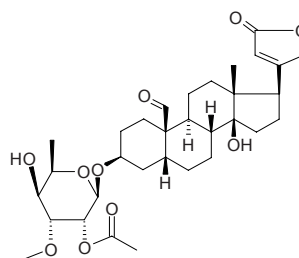
Quercetin-3-*O*-{β-*D*-glucopyranosyl-(1→2)-[α-*L*-rhamnopyranosyl-(1→6)]-β-*D*-galactopyranoside} C<sub>33</sub>H<sub>40</sub>O<sub>21</sub> (772.67). White amorphous powder, mp 205–207°C,  $[\alpha]_D^{25} = +106^\circ$  ( $c = 0.05$ , MeOH). **Pharm:** Anti-HIV-1 (RT (RDDP) inhibitor, IC<sub>50</sub> > 100 μmol/L, positive control Adriamycin, IC<sub>50</sub> = 27 μmol/L; DDDP inhibitor, IC<sub>50</sub> > 100 μmol/L, positive control Adriamycin, IC<sub>50</sub> = 6 μmol/L; HIV-1 IN inhibitor, IC<sub>50</sub> > 100 μmol/L, positive control Suramin, IC<sub>50</sub> = 2.4 μmol/L). **Source:** HUANG HUA JIA ZHU TAO *Thevetia nerifolia* [Syn. *Thevetia peruviana*] (leaf). **Ref:** 4187.

**17002 Peruvoside**

Encordin [1182-87-2] C<sub>29</sub>H<sub>42</sub>O<sub>9</sub> (534.65). mp 161–164°C. **Pharm:** Cardiac glucoside (cat model, cardiac bioactivity = (0.147±0.007)mg/kg). **Source:** HUANG HUA JIA ZHU TAO *Thevetia nerifolia* [Syn. *Thevetia peruviana*] (seed: mean content = 0.70%<sup>[5508]</sup>). **Ref:** 4, 658, 1521, 5508.

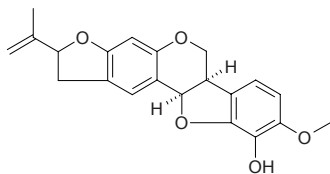
**17003 Peruvoside-2'-monoacetate**

C<sub>32</sub>H<sub>46</sub>O<sub>10</sub> (590.72). mp 212–217°C. **Source:** HUANG HUA JIA ZHU TAO *Thevetia nerifolia* [Syn. *Thevetia peruviana*]. **Ref:** 6.

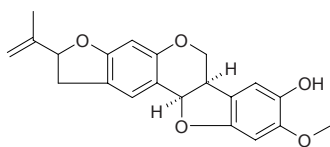


**17004 Pervilline**

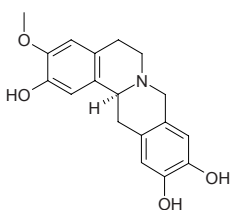
$C_{21}H_{20}O_5$  (352.39). White powder from n-hexane, mp 112~114°C,  $[\alpha]_D^{20} = -192^\circ$  ( $c = 0.12$ ,  $CHCl_3$ ). Source: *Milletia pervilleana*. Ref: 3393.

**17005 Pervillinine**

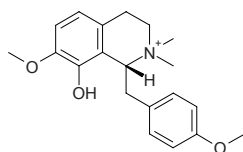
$C_{21}H_{20}O_5$  (352.39). Yellow powder from n-hexane, mp 152~154°C,  $[\alpha]_D^{20} = -189^\circ$  ( $c = 0.07$ ,  $CHCl_3$ ). Source: *Milletia pervilleana*. Ref: 3393.

**17006 Pesseoine**

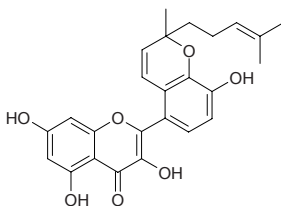
[88668-29-5]  $C_{18}H_{19}NO_4$  (313.36). Amorphous substance,  $[\alpha]_D^{20} = -160^\circ$  ( $c = 0.2$ , MeOH). Pharm: Antitrypanosomal (*Trypanosoma cruzi*, 250µg/mL, deactivation rate = 55%, control crystal violet deactivation rate = 100%). Source: CI ZHUANG FAN LI ZHI *Annona spinescens*. Ref: 3699.

**17007 Petaline**

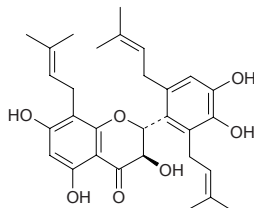
[7354-32-7]  $C_{20}H_{26}NO_3^+$  (328.44). Pharm: CNS depressant (shows antiacetylcholine activity). Source: HUA BAN SHI ZU CAO *Leontice leontopetalum*. Ref: 3188.

**17008 Petalopurplenol**

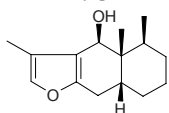
[173221-05-1]  $C_{25}H_{24}O_7$  (436.47). Yellow solid, mp 92~95°C,  $[\alpha]_D^{20} = -12^\circ$  ( $c = 1.1$ ,  $CHCl_3$ ). Pharm: Cytotoxic (BC1,  $ED_{50} = 9.9\mu\text{g/mL}$ , HT,  $ED_{50} = 7.3\mu\text{g/mL}$ , Lu1,  $ED_{50} = 14.8\mu\text{g/mL}$ , Mel-2,  $ED_{50} = 17.1\mu\text{g/mL}$ , KB, 18.9µg/mL, KB-V(+VLB), 1.0µg/mL, KB-V(-VLB), 6.7µg/mL, A-431, 11.9µg/mL, LNCaP, 14.8µg/mL, ZR-75-1, 4.1µg/mL, U373, 13.3µg/mL). Source: ZI SE BAN RUI DOU *Petalostemon purpureus*. Ref: 3612.

**17009 Petalostemumol**

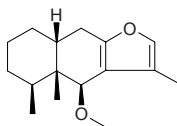
[152253-68-4]  $C_{30}H_{36}O_7$  (508.62). Yellow lamellar crystals (20%Et<sub>2</sub>O-n-hexane), mp 179~180°C,  $[\alpha]_D = +6.4^\circ$  ( $c = 0.032$ , MeOH). Pharm: Antibacterial (gram-positive bacteria, strong activity; gram-negative bacteria, moderate activity); cytotoxic (HT  $ED_{50} = 10.3\mu\text{g/mL}$ ; KB-V +VLB  $ED_{50} = 1.2\mu\text{g/mL}$ ; ZR-75-1  $ED_{50} = 17.1\mu\text{g/mL}$ ); antineoplastic (25µg/mL, same activity with bleomycin sulfate). Source: HUANG SE BAN RUI DOU *Petalostemum purpureum*. Ref: 3611, 3612.

**17010 Petasalbin**

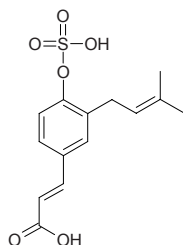
[4176-11-8]  $C_{15}H_{22}O_2$  (234.34). mp 81~82°C. Source: FENG DOU CAI *Petasites japonicus*. Ref: 6.

**17011 Petasalbin methyl ether**

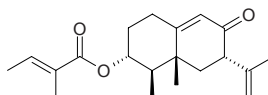
$C_{16}H_{24}O_2$  (248.37). bp 90~100°C/0.0004mmHg. Source: FENG DOU CAI *Petasites japonicus*. Ref: 6.

**17012 Petasiformin A**

$C_{14}H_{16}O_6S$  (312.34). White powder, mp > 300°C. Pharm: Antioxidant (DPPH scavenger,  $IC_{50} = 0.21\text{mg/mL}$ , control Vitamin E,  $IC_{50} = 0.15\text{mg/mL}$ ). Source: TAI WAN FENG DOU CAI *Petasites formosanus* (leaf). Ref: 2587.

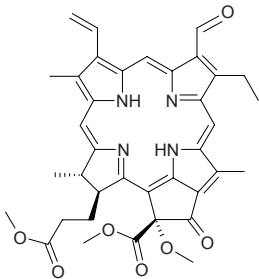
**17013 Petasin**

[26577-85-5]  $C_{20}H_{28}O_3$  (316.44). mp 65~68°C. Pharm: Antispasmodic. Source: FENG DOU CAI *Petasites japonicus*, ZI FENG DOU CAI *Petasites officinalis* [Syn. *Petasites hybridu*]. Ref: 6, 658.

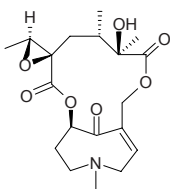


**17014 Petasiphyll A**

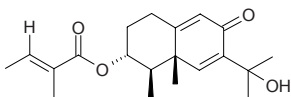
$C_{37}H_{38}N_4O_7$  (650.74). Deep green powder. Source: TAI WAN FENG DOU CAI *Petasites formosanus* (leaf). Ref: 2587.

**17015 Petasitenine**

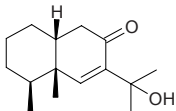
[60102-37-6]  $C_{19}H_{27}NO_7$  (381.43). Source: FENG DOU CAI *Petasites japonicus*, ZI FENG DOU CAI *Petasites officinalis* [Syn. *Petasites hybridu*]. Ref: 658.

**17016 Petasitin**

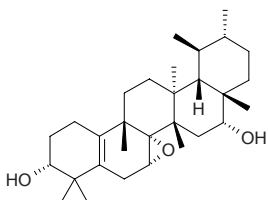
[19887-90-2]  $C_{20}H_{28}O_4$  (332.44). Source: FENG DOU CAI *Petasites japonicus*. Ref: 6.

**17017 Petasitolone**

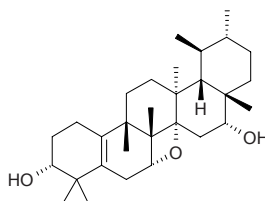
[35124-22-2]  $C_{15}H_{24}O_2$  (236.36). bp 92°C/0.15mmHg. Source: FENG DOU CAI *Petasites japonicus*. Ref: 6.

**17018 Petatrichol A**

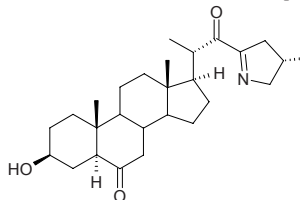
*D*:*B*-Friedoursane-3*a*,16*a*-dihydroxy-7*a*,8*a*-epoxy-5(10)-ene  $C_{30}H_{48}O_3$  (456.72). White powder, mp 186~187°C,  $[\alpha]_D^{17} = +43^\circ$  ( $c = 0.24$ ,  $CHCl_3$ ). Pharm: Antibacterial (*Escherichia coli*, IZD = 13~15mm, control Chloramphenicol, IZD = 16~20mm, DMSO (4%), IZD < 10mm; *Staphylococcus aureus*, IZD = 10~12mm, Chloramphenicol, IZD = 16~20mm, DMSO (4%), IZD < 10mm; *Bacillus subtilis*, IZD = 16~20mm; Chloramphenicol, IZD = 16~20mm, DMSO (4%), IZD < 10mm)<sup>[5315]</sup>. Source: MAO LIE FENG DOU CAI *Petasites tricholobus* (rhizome). Ref: 5315.

**17019 Petatrichol B**

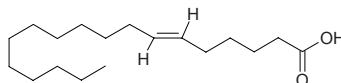
26(14→8)Abeo-*D*:*B*-friedo-ursane-3*β*,16*a*-dihydroxy-7*α*,14*α*-epoxy-5(10)-ene  $C_{30}H_{48}O_3$  (456.72). White powder, mp 191~192°C,  $[\alpha]_D^{22} = -20^\circ$  ( $c = 0.12$ ,  $CHCl_3$ ). Pharm: Antibacterial (*Escherichia coli*, IZD = 13~15mm, control Chloramphenicol, IZD = 16~20mm, DMSO (4%), IZD < 10mm; *Staphylococcus aureus*, IZD = 10~12mm, Chloramphenicol, IZD = 16~20mm, DMSO (4%), IZD < 10mm; *Bacillus subtilis*, IZD = 16~20mm; Chloramphenicol, IZD = 16~20mm, DMSO (4%), IZD < 10mm)<sup>[5315]</sup>. Source: MAO LIE FENG DOU CAI *Petasites tricholobus* (rhizome). Ref: 5315.

**17020 Petisidine**

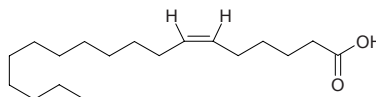
[79805-74-6]  $C_{27}H_{41}NO_3$  (427.63). Amorphous powder,  $[\alpha]_D^{29} = +18.4^\circ$  ( $c = 0.50$ ,  $CHCl_3$ ). Pharm: cAMP phosphodiesterase inhibitor ( $IC_{50} = 106\mu\text{mol/L}$ ). Source: TAO BEI MU *Fritillaria persica*. Ref: 1521, 3613.

**17021 Petroselaidic acid**

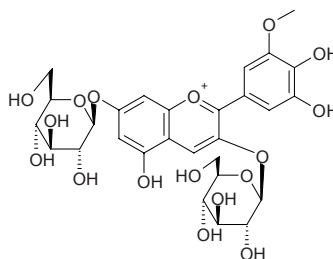
[593-40-8]  $C_{18}H_{34}O_2$  (282.47). mp 54~59°C. Source: CHAI HU *Bupleurum chinense*, HAN QIN *Apium graveolens*. Ref: 6.

**17022 Petroselinic acid**

[593-39-5]  $C_{18}H_{34}O_2$  (282.47). mp 33°C. Source: CHAI HU *Bupleurum chinense*. Ref: 6.

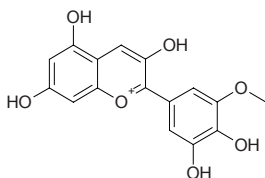
**17023 Petudin-3,7-di-O-(β-D-glucopyranoside)**

$C_{28}H_{33}O_{17}^+$  (641.57). Source: HE LAN ZHONG ZHI FAN HONG HUA *Crocus antalyensis* cv. Ref: 1897.

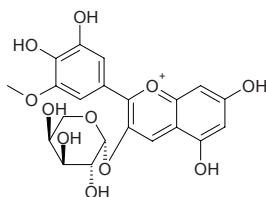


**17024 Petunidin**

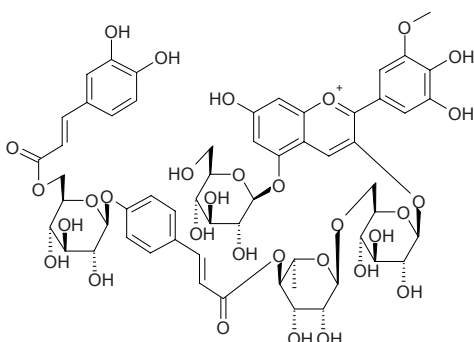
[13270-60-5]  $C_{16}H_{13}O_7^+$  (317.28). **Pharm:** Anti-inflammatory; prevents brittle rupture of blood capillary. **Source:** MU XU *Medicago sativa*, PU<sup>(2)</sup> TAO *Vitis vinifera*. **Ref:** 6, 658.

**17025 Petunidin-3-arabinoside**

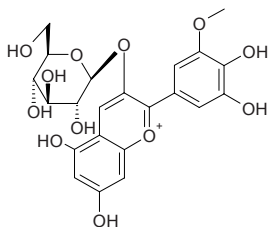
$C_{21}H_{21}O_{11}$  (449.39). **Source:** ZI WEI HUA *Lagerstroemia indica*. **Ref:** 6.

**17026 Petunidin 3-O-(6-O-(4-O-(4-O-(6-O-feruloyl-β-D-glucopyranosyl)-E-p-coumaroyl)-α-rhamnosyl)-β-D-glucopyranoside)-5-β-D-glucopyranoside**

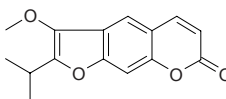
$C_{58}H_{65}O_{31}^+$  (1258.15). **Source:** BI DONG QIE *Petunia hybrida* (flower). **Ref:** 5240.

**17027 Petunidin-3-glucoside**

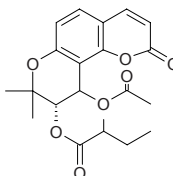
$C_{22}H_{23}O_{12}$  (479.42). **Source:** BAI FAN DOU *Phaseolus vulgaris*, HUANG LU ZHI YE *Cotinus coggygria* var. *cinerea*. **Ref:** 6.

**17028 Peucedanin**

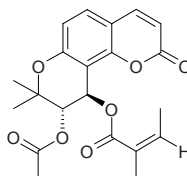
[133-26-6]  $C_{15}H_{14}O_4$  (258.26). mp 97–99°C. **Pharm:** Antibacterial (aflatoxin B<sub>1</sub>); antineoplastic (mus ascites carcinoma, InRt = 70%, mus mammary cancer *in vivo*, InRt = (30–40)%, hmn melanoma and granulation carcinoma); contracts blood vessels (frog); cytotoxic (mus ascites carcinoma, *in vitro*); estrogenic activity; LD<sub>50</sub> (mus, orl) = 315mg/kg. **Source:** E GUO QIAN HU *Peucedanum ruthenicum*, NAN HE SHI *Daucus carota*, OU ZHOU MO YAO *Myrrhis odorata*, QIAN HU *Angelica decursiva* [Syn. *Peucedanum decursivum*], SHUAN CHI QIN *Prangos pabularia*, XIA GUO QIAN HU *Peucedanum stenocarpum*, XUE WEI CAI *Anthriscus cerefolium*, YAO YONG QIAN HU *Peucedanum officinale*, ZHUN GE ER QIAN HU *Peucedanum morisonii*, AO PA CAO *Oppopanax chironium* (root). **Ref:** 5, 658, 4071.

**17029 Peucedanocoumarin I**

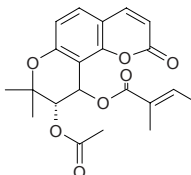
$C_{21}H_{24}O_7$  (388.42). **Source:** BAI HUA QIAN HU *Peucedanum praeruptorum*. **Ref:** 660.

**17030 Peucedanocoumarin II**

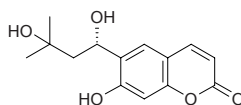
$C_{21}H_{22}O_7$  (386.41). mp 134.5–136.0°C (dec),  $[\alpha]_D^{24} = +7.0^\circ$  ( $c = 1.0$ , CHCl<sub>3</sub>). **Source:** LI JIANG QIAN HU *Peucedanum govanianum* var. *bicolor*. **Ref:** 557, 660.

**17031 Peucedanocoumarin III**

$C_{21}H_{22}O_7$  (386.41). **Source:** BAI HUA QIAN HU *Peucedanum praeruptorum*. **Ref:** 660.

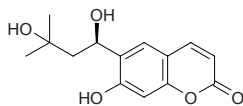
**17032 (R)-Peucedanol**

[20516-23-8]  $C_{14}H_{16}O_5$  (264.28). Crystals (EtOAc), mp 177.5–178°C, 174–175°C,  $[\alpha]_D^{23} = +50.2^\circ$  ( $c = 0.5$ , EtOH). **Source:** BIN HAI QIAN HU *Peucedanum japonicum*. **Ref:** 1521, .

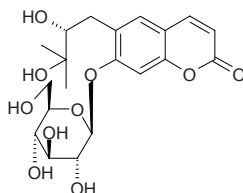


**17033 (S)-Peucedanol**

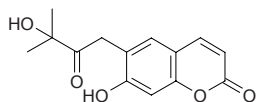
$C_{14}H_{16}O_5$  (264.28). mp 175°C,  $[\alpha]_D = -47^\circ$  ( $c = 0.68$ , EtOH). Source: BAI HUA QIAN HU *Peucedanum praeruptorum*, *Evodia belaha*. Ref: 1521, 3189.

**17034 (R)-Peucedanol 7-O-β-D-glucopyranoside**

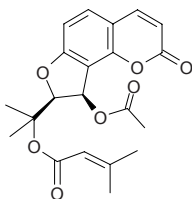
$C_{20}H_{26}O_{10}$  (426.42). Source: FEN CHA DANG GUI *Angelica furcijuga* (flower). Ref: 4454.

**17035 Peucedanone**

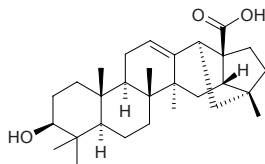
7-Hydroxy-6-(3-hydroxy-3-methyl-2-oxobutyl)-coumarin  $C_{14}H_{14}O_5$  (262.26). Pharm: AChE inhibitor (*in vitro*,  $IC_{50} = 180\mu\text{mol/L}$ ). Source: CHAO XIAN DANG GUI *Angelica gigas* (underground part). Ref: 3058.

**17036 Peucenidin**

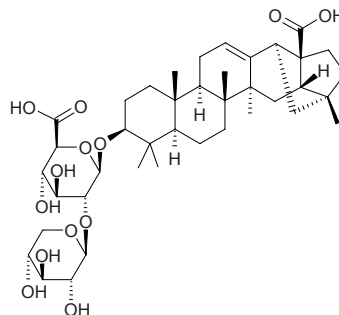
[33044-93-8]  $C_{21}H_{22}O_7$  (386.41). Pharm: Antispasmodic; coronary vasodilator. Source: BO SHI QIAN HU *Peucedanum bourgaei*, SHAN QIAN HU *Peucedanum oreoselinum*, *Libanotis pyrenaicum*. Ref: 658.

**17037 Pfaffic acid**

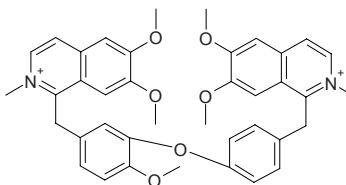
[86432-14-6]  $C_{29}H_{44}O_3$  (440.67). Pharm: Cytotoxic (4–6μg/mL). Source: BA XI REN SHEN *Pfaffia paniculata*. Ref: 658.

**17038 Pfaffoside A**

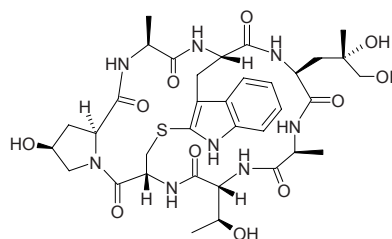
[90745-17-8]  $C_{40}H_{60}O_{13}$  (748.92). Pharm: Cytotoxic (30–50μg/mL). Source: BA XI REN SHEN *Pfaffia paniculata*. Ref: 658.

**17039 Phaeantharine**

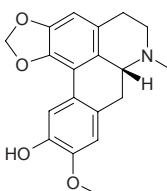
[22670-80-0]  $C_{39}H_{40}N_2O_6^{2+}$  (632.76). Pharm: Antineoplastic (animal model). Source: *Phaeanthus ebracteolatus*. Ref: 658.

**17040 Phalloidin**

[17466-45-4]  $C_{35}H_{48}N_8O_{11}S$  (788.88). Pharm: Hepatotoxin; toxin (genus *Mus*, fast action lasts 1–2h.). Source: DU E GAO *Amanita phalloides*. Ref: 658.

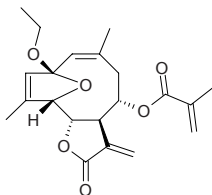
**17041 (-)-Phanostenine**

[25368-02-9]  $C_{19}H_{19}NO_4$  (325.37). Colorless Featheriness crystals (MeOH), mp 126–128°C,  $[\alpha]_D = -39^\circ$  ( $c = 0.48$ ,  $CHCl_3$ ). Pharm: Cytotoxic (hmn cancer cells); antimalarial (*Plasmodium falciparum*). Source: TAI WAN QIAN JIN TENG *Stephania sasakii*, XIAO YE DI BU RONG *Stephania succifera*, YUAN HUA FAN LI ZHI *Annona glabra*. Ref: 3614, 3615, 1756, 3616.

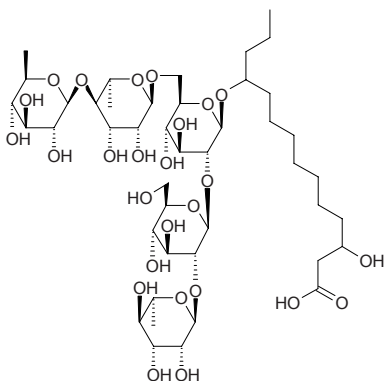


**17042 Phantomolin**

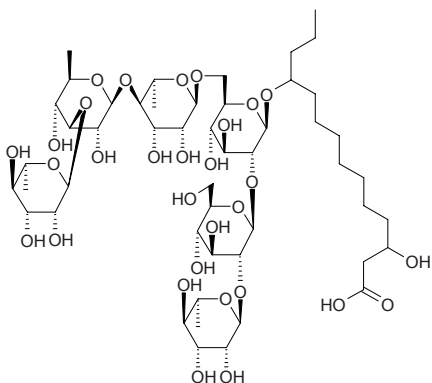
[55306-08-6] C<sub>21</sub>H<sub>26</sub>O<sub>6</sub> (374.44). Colorless oil. **Pharm:** Analgesic (mus, acetic acid-induced writhing model, 20mg/kg ip, InRt = (53±9)%, *p*<0.001); antineoplastic (mus EAC, 25mg/(kg·d) ip, InRt = 87%); anti-inflammatory (rat, swollen foot model caused by carrageenan, ip, InRt (54±19)%, *p*<0.001); cytotoxic (hmn throat epicytoma H.Ep.-2 cells *in vitro*, 0.66µg/mL). **Source:** ROU MAO DI DAN CAO *Elephantopus mollis*. **Ref:** 658, 661.

**17043 Pharbitic acid C**

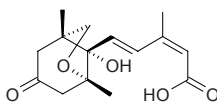
[30657-76-2] C<sub>44</sub>H<sub>78</sub>O<sub>26</sub> (1023.10). Crystals, +1H<sub>2</sub>O, mp 120–129°C, [α]<sub>D</sub> = –54.1° (MeOH). **Source:** QIAN NIU ZI *Pharbitis nil*. **Ref:** 1521.

**17044 Pharbitic acid D**

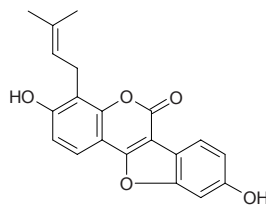
C<sub>50</sub>H<sub>88</sub>O<sub>30</sub> (1169.24). **Source:** QIAN NIU ZI *Pharbitis nil*. **Ref:** 6.

**17045 Phaseic acid**

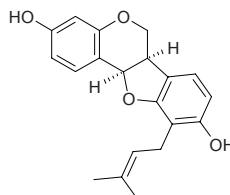
[24394-14-7] C<sub>15</sub>H<sub>20</sub>O<sub>5</sub> (280.32). mp 207–209°C, [α]<sub>D</sub> = –3350° (MeOH). **Source:** HONG HUA CAI DOU *Phaseolus multiflorus*. **Ref:** 1521.

**17046 Phaseol**

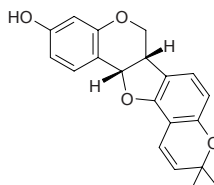
C<sub>20</sub>H<sub>16</sub>O<sub>5</sub> (336.35). **Source:** *Glycyrrhiza* sp. **Ref:** 2431.

**17047 (–)-Phaseollidin**

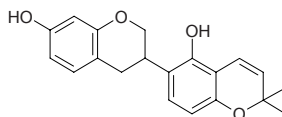
[37831-70-2] C<sub>20</sub>H<sub>20</sub>O<sub>4</sub> (324.38). **Pharm:** Antibacterial; antifungal; insect antifeedant. **Source:** JIANG DOU *Vigna unguiculata*, BIAN DOU *Lablab niger*, *Erythrina* spp., *Phaseolus* spp. **Ref:** 658.

**17048 Phaseollin**

3,9-Dihydroxy-10-*c,c*-dimethylallylpterocarpan [13401-40-6] C<sub>20</sub>H<sub>18</sub>O<sub>4</sub> (322.36). **Pharm:** Antibacterial (*Escherichia coli*, MIA = 5.00µg, control Chloramphenicol, MIA = 0.001µg; *Staphylococcus aureus*, MIA = 0.50µg, Chloramphenicol, MIA = 0.0001µg; *Bacillus subtilis*, MIA = 0.50µg, Chloramphenicol, MIA = 0.0001µg)<sup>[5247]</sup>; antifungal (*Candida mycoderma*, MIA = 0.10µg, control Miconazole, MIA = 0.0001µg)<sup>[5247]</sup>; antioxidant (DPPH scavenger, TLC, MIA = 0.1µg, IC<sub>50</sub> = 135µg/mL; control Quercetin, MIA < 0.05µg, IC<sub>50</sub> = 7µg/mL, Gallic acid, MIA < 0.05µg, IC<sub>50</sub> = 4µg/mL; Ascorbic acid, MIA < 0.10µg, IC<sub>50</sub> = 18µg/mL)<sup>[5247]</sup>; insect antifeedant. **Source:** BAI FAN DOU *Phaseolus vulgaris*, JI KUAN CI TONG *Erythrina latissima* (stem wood), JIANG DOU *Vigna unguiculata*. **Ref:** 658, 5247.

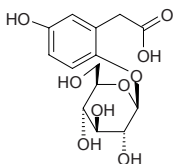
**17049 Phaseollinisoflavan**

[40323-57-7] C<sub>20</sub>H<sub>20</sub>O<sub>4</sub> (324.38). **Pharm:** Antibacterial (*Staphylococcus aureus in vitro*, MIC = 25µg/mL; *Mycobacterium smegmatis in vitro*, MIC = 12.5µg/mL); antifungal (*Blastomyces dermatitidis*, EC = 25µg/mL); insect antifeedant (*Costelytra zealandica* larva and *Heteronychus arator* larva). **Source:** BAI FAN DOU *Phaseolus vulgaris*, GAN CAO *Glycyrrhiza uralensis*, OU YA GAN CAO *Glycyrrhiza glabra* var. *typica*. **Ref:** 2, 658.

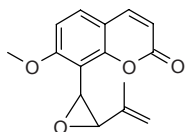


**17050 Phaseolidin**

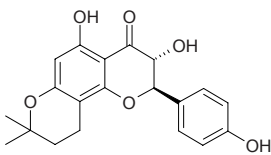
[118555-82-1] C<sub>14</sub>H<sub>18</sub>O<sub>9</sub> (330.29). Crystals (EtOAc–MeOH), mp 207–209°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = –41.13° (c = 1.24, H<sub>2</sub>O). Source: KE TENG ZI *Entada phaseoloides* [Syn. *Lens phaseoloides*]. Ref: 3190.

**17051 Phebalosin**

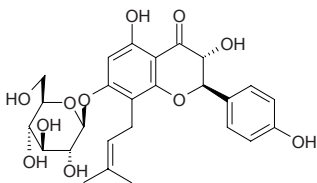
[6545-99-9] C<sub>15</sub>H<sub>14</sub>O<sub>4</sub> (258.28). Source: JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*], *Murraya* spp. Ref: 11.

**17052 Phellamuretin**

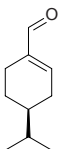
C<sub>20</sub>H<sub>20</sub>O<sub>6</sub> (356.38). Source: TAI WAN HUANG BO *Phellodendron amurense* var. *wilsonii* (leaf: yield = 0.00044%dw). Ref: 4722.

**17053 Phellamurin**

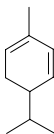
[52589-11-4] C<sub>26</sub>H<sub>30</sub>O<sub>11</sub> (518.52). mp 205°C. Pharm: Antioxidant (DPPH scavenger, 250μmol/L, InRt = 34.6%; control Vitamin E, IC<sub>50</sub> = 8.3μmol/L)<sup>[4722]</sup>. Source: HUANG BAI *Phellodendron amurense*, RI BEN HUANG BAI *Phellodendron japonicum* (leaf), TAI WAN HUANG BO *Phellodendron amurense* var. *wilsonii* (leaf: 2.61%dw)<sup>[4722]</sup>. Ref: 5, 4502, 4722.

**17054 Phellandral**

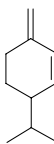
[21391-98-0] C<sub>10</sub>H<sub>16</sub>O (152.24). Oil, bp 220–230°C, [ $\alpha$ ]<sub>D</sub> = –139° (CHCl<sub>3</sub>). Source: RU XIANG *Boswellia carterii*, ZI RAN QIN *Cuminum cyminum*, *Eucalyptus* spp., *Lavandula* spp. Ref: 660, 1521.

**17055 α-Phellandrene**

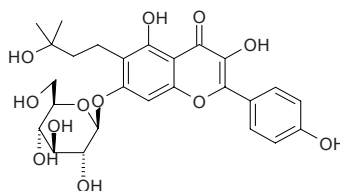
Phellandrene [99-83-2] C<sub>10</sub>H<sub>16</sub> (136.24). Pharm: Bronchial smooth muscle stimulant. Source: A LU HA LIANG JIANG *Alpinia allughas*, DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*], FU SHE SONG *Pinus radiata*, GAN JIANG *Zingiber officinale*, JU PI *Citrus reticulata*, JU YUAN *Citrus medica*, KUAN YE QIANG HUO *Notopterygium forbesii* [Syn. *Notopterygium franchetii*], MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*], SHUI HUI XIANG AN *Eucalyptus phellandra*, XIANG HUANG LIAN MU *Pistacia lentiscus*. Ref: 2, 658, 660.

**17056 β-Phellandrene**

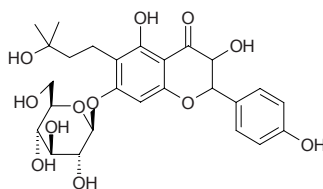
3-Methylene-6-(1-methylethyl)cyclohexene [550-10-2] C<sub>10</sub>H<sub>16</sub> (136.24). Pharm: Bronchial smooth muscle stimulant. Source: BAI ZHI *Angelica dahurica* [Syn. *Angelica porphyrocaulis*], DANG GUI *Angelica sinensis*, KA XI YA SONG *Pinus kesiya*, LIAN QIAO *Forsythia suspensa*, NAN DE WA MIAN *Gossypium sturtianum* var. *nandewarance*, SHAN NAI *Kaempferia galanga*, SHENG JIANG *Zingiber officinale*, WAN YAN XIANG MAO *Cymbopogon flexuosus*. Ref: 2, 658, 660, 1344.

**17057 Phellatin**

[32507-67-9] C<sub>26</sub>H<sub>30</sub>O<sub>12</sub> (534.52). Source: HUANG BAI *Phellodendron amurense*. Ref: 6.

**17058 Phellavin**

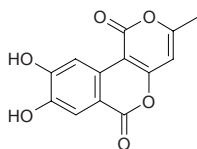
[32507-67-8] C<sub>26</sub>H<sub>32</sub>O<sub>12</sub> (536.54). Source: HUANG BAI *Phellodendron amurense*. Ref: 6.



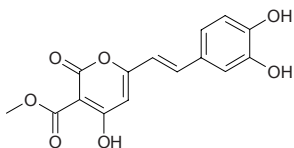


**17059 Phelligridin A**

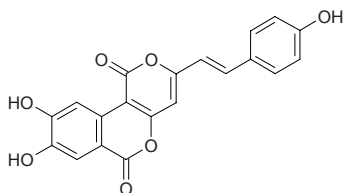
$C_{13}H_8O_6$  (260.21). **Pharm:** Cytotoxic (*in vitro*, A549,  $IC_{50} > 0.192\mu\text{mol/L}$ ; BGC823,  $IC_{50} = 0.181\mu\text{mol/L}$ ; MCF7,  $IC_{50} = 0.109\mu\text{mol/L}$ ; Bel7402,  $IC_{50} = 0.11\mu\text{mol/L}$ ; Ketr3,  $IC_{50} > 0.192\mu\text{mol/L}$ ; HCT8,  $IC_{50} > 0.192\mu\text{mol/L}$ ; control Topotecan, A549,  $IC_{50} = 0.0032\mu\text{mol/L}$ ; BGC823,  $IC_{50} = 0.0043\mu\text{mol/L}$ ; MCF7,  $IC_{50} = 0.0018\mu\text{mol/L}$ ; Bel7402,  $IC_{50} = 0.0012\mu\text{mol/L}$ ; Ketr3,  $IC_{50} = 0.0049\mu\text{mol/L}$ ; HCT8,  $IC_{50} = 0.0015\mu\text{mol/L}$ ). **Source:** SANG HUANG *Phellinus igniarius* (sporocarp). **Ref:** 4747.

**17060 Phelligridin B**

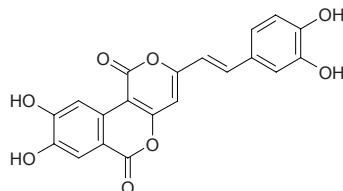
$C_{15}H_{12}O_7$  (304.26). **Pharm:** Cytotoxic (*in vitro*, A549,  $IC_{50} > 0.164\mu\text{mol/L}$ ; BGC823,  $IC_{50} = 0.146\mu\text{mol/L}$ ; MCF7,  $IC_{50} = 0.143\mu\text{mol/L}$ ; Bel7402,  $IC_{50} = 0.05\mu\text{mol/L}$ ; Ketr3,  $IC_{50} = 0.144\mu\text{mol/L}$ ; HCT8,  $IC_{50} = 0.139\mu\text{mol/L}$ ; control Topotecan, A549,  $IC_{50} = 0.0032\mu\text{mol/L}$ ; BGC823,  $IC_{50} = 0.0043\mu\text{mol/L}$ ; MCF7,  $IC_{50} = 0.0018\mu\text{mol/L}$ ; Bel7402,  $IC_{50} = 0.0012\mu\text{mol/L}$ ; Ketr3,  $IC_{50} = 0.0049\mu\text{mol/L}$ ; HCT8,  $IC_{50} = 0.0015\mu\text{mol/L}$ ). **Source:** SANG HUANG *Phellinus igniarius* (sporocarp). **Ref:** 4747.

**17061 Phelligridin C**

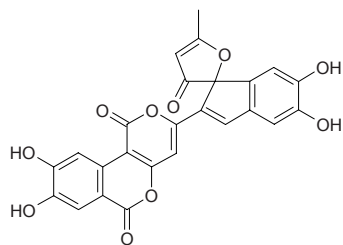
$C_{20}H_{12}O_7$  (364.31). Yellow powder, mp 272–275°C (MeOH). **Pharm:** Cytotoxic (*in vitro*, A549,  $IC_{50} = 0.012\mu\text{mol/L}$ ; BGC823,  $IC_{50} > 0.137\mu\text{mol/L}$ ; MCF7,  $IC_{50} = 0.072\mu\text{mol/L}$ ; Bel7402,  $IC_{50} = 0.01\mu\text{mol/L}$ ; Ketr3,  $IC_{50} = 0.094\mu\text{mol/L}$ ; HCT8,  $IC_{50} = 0.126\mu\text{mol/L}$ ; control Topotecan, A549,  $IC_{50} = 0.0032\mu\text{mol/L}$ ; BGC823,  $IC_{50} = 0.0043\mu\text{mol/L}$ ; MCF7,  $IC_{50} = 0.0018\mu\text{mol/L}$ ; Bel7402,  $IC_{50} = 0.0012\mu\text{mol/L}$ ; Ketr3,  $IC_{50} = 0.0049\mu\text{mol/L}$ ; HCT8,  $IC_{50} = 0.0015\mu\text{mol/L}$ ). **Source:** SANG HUANG *Phellinus igniarius* (sporocarp; yield = 0.0013%dw). **Ref:** 4747.

**17062 Phelligridin D**

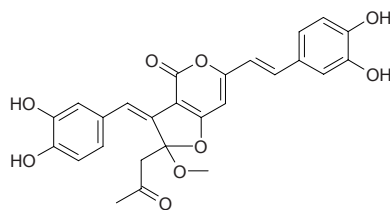
$C_{20}H_{12}O_8$  (380.31). Yellow powder (MeOH), mp > 300°C. **Pharm:** Cytotoxic (*in vitro*, A549,  $IC_{50} = 0.016\mu\text{mol/L}$ ; BGC823,  $IC_{50} > 0.131\mu\text{mol/L}$ ; MCF7,  $IC_{50} = 0.0037\mu\text{mol/L}$ ; Bel7402,  $IC_{50} = 0.008\mu\text{mol/L}$ ; Ketr3,  $IC_{50} = 0.09\mu\text{mol/L}$ ; HCT8,  $IC_{50} = 0.099\mu\text{mol/L}$ ; control Topotecan, A549,  $IC_{50} = 0.0032\mu\text{mol/L}$ ; BGC823,  $IC_{50} = 0.0043\mu\text{mol/L}$ ; MCF7,  $IC_{50} = 0.0018\mu\text{mol/L}$ ; Bel7402,  $IC_{50} = 0.0012\mu\text{mol/L}$ ; Ketr3,  $IC_{50} = 0.0049\mu\text{mol/L}$ ; HCT8,  $IC_{50} = 0.0015\mu\text{mol/L}$ ). **Source:** SANG HUANG *Phellinus igniarius* (sporocarp; yield = 0.00034%dw). **Ref:** 4747.

**17063 Phelligridin E**

$C_{25}H_{14}O_{10}$  (474.38). Orange powder (MeOH), mp 178–181°C,  $[\alpha]_D^{18} = 0^\circ$  ( $c = 0.16$ , MeOH:DMSO = 1:1). **Pharm:** Cytotoxic (*in vitro*, A549,  $IC_{50} = 0.079\mu\text{mol/L}$ ; BGC823,  $IC_{50} = 0.096\mu\text{mol/L}$ ; MCF7,  $IC_{50} = 0.07\mu\text{mol/L}$ ; Bel7402,  $IC_{50} = 0.055\mu\text{mol/L}$ ; Ketr3,  $IC_{50} > 0.105\mu\text{mol/L}$ ; HCT8,  $IC_{50} > 0.105\mu\text{mol/L}$ ; control Topotecan, A549,  $IC_{50} = 0.0032\mu\text{mol/L}$ ; BGC823,  $IC_{50} = 0.0043\mu\text{mol/L}$ ; MCF7,  $IC_{50} = 0.0018\mu\text{mol/L}$ ; Bel7402,  $IC_{50} = 0.0012\mu\text{mol/L}$ ; Ketr3,  $IC_{50} = 0.0049\mu\text{mol/L}$ ; HCT8,  $IC_{50} = 0.0015\mu\text{mol/L}$ ). **Source:** SANG HUANG *Phellinus igniarius* (sporocarp; yield = 0.00030%dw). **Ref:** 4747.

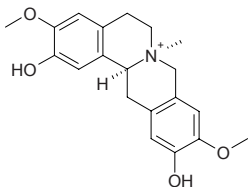
**17064 Phelligridin F**

$C_{26}H_{22}O_9$  (478.46). Orange powder (MeOH), mp<sup>21</sup> 5–217°C,  $[\alpha]_D^{18} = -3.23^\circ$  ( $c = 0.31$ , MeOH:DMSO = 1:1). **Pharm:** Cytotoxic (*in vitro*, A549,  $IC_{50} = 0.084\mu\text{mol/L}$ ; BGC823,  $IC_{50} = 0.092\mu\text{mol/L}$ ; MCF7,  $IC_{50} = 0.085\mu\text{mol/L}$ ; Bel7402,  $IC_{50} = 0.046\mu\text{mol/L}$ ; Ketr3,  $IC_{50} > 0.104\mu\text{mol/L}$ ; HCT8,  $IC_{50} > 0.104\mu\text{mol/L}$ ; control Topotecan, A549,  $IC_{50} = 0.0032\mu\text{mol/L}$ ; BGC823,  $IC_{50} = 0.0043\mu\text{mol/L}$ ; MCF7,  $IC_{50} = 0.0018\mu\text{mol/L}$ ; Bel7402,  $IC_{50} = 0.0012\mu\text{mol/L}$ ; Ketr3,  $IC_{50} = 0.0049\mu\text{mol/L}$ ; HCT8,  $IC_{50} = 0.0015\mu\text{mol/L}$ ). **Source:** SANG HUANG *Phellinus igniarius* (sporocarp; yield = 0.00044%dw). **Ref:** 4747.

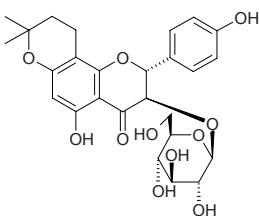


**17065 Phellodendrine**

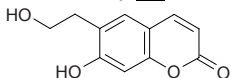
[6873-13-8] C<sub>20</sub>H<sub>24</sub>NO<sub>4</sub><sup>+</sup> (342.42). mp 258°C. Pharm: CNS depressant; inhibits spontaneous movement and reflex actions (mus). Source: HUANG BAI *Phellodendron amurense* (bark: mean content of 9 samples = 0.1468%<sup>[5508]</sup>); HUANG PI SHU *Phellodendron chinense* (bark: mean content of 15 samples = 0.4210%<sup>[5508]</sup>), TU YE HUANG PI SHU *Phellodendron chinense* var. *glabriusculum*. Ref: 4, 658, 660, 5501, 5508.

**17066 Phellodendroside**

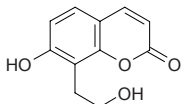
[40451-69-2] C<sub>26</sub>H<sub>30</sub>O<sub>11</sub> (518.52). Crystals, mp 154–156°C. Source: HUANG BAI *Phellodendron amurense*, RI BEN HUANG BAI *Phellodendron japonicum*. Ref: 1521.

**17067 Phellodenol A**

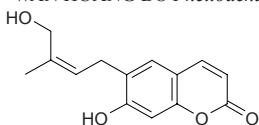
C<sub>11</sub>H<sub>10</sub>O<sub>4</sub> (206.2). White powder, mp 179–180°C (MeOH). Source: TAI WAN HUANG BO *Phellodendron amurense* var. *wilsonii* (leaf: yield = 0.00008%dw). Ref: 4722.

**17068 Phellodenol B**

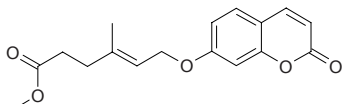
C<sub>11</sub>H<sub>10</sub>O<sub>4</sub> (206.2). White needles, mp 159–160°C (MeOH). Source: TAI WAN HUANG BO *Phellodendron amurense* var. *wilsonii* (leaf: yield = 0.00072%dw). Ref: 4722.

**17069 Phellodenol C**

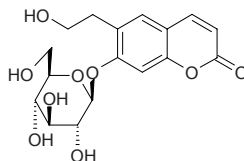
C<sub>14</sub>H<sub>14</sub>O<sub>4</sub> (246.27). White needles, mp 177–178°C (MeOH). Source: TAI WAN HUANG BO *Phellodendron amurense* var. *wilsonii* (leaf). Ref: 4722.

**17070 Phellodenol D**

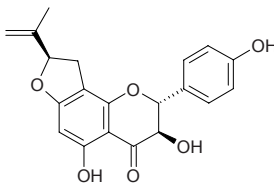
C<sub>17</sub>H<sub>18</sub>O<sub>5</sub> (302.33). Colorless powder, mp 88–89°C. Source: HUANG PI SHU *Phellodendron chinense* (leaf). Ref: 4941.

**17071 Phellodenol E**

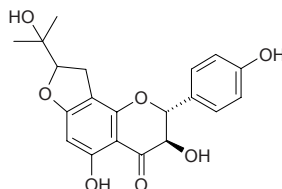
C<sub>17</sub>H<sub>20</sub>O<sub>9</sub> (368.34). Colorless powder, mp 166–167°C, [α]<sub>D</sub><sup>25</sup> = –49.5° (c = 0.025, MeOH). Source: HUANG PI SHU *Phellodendron chinense* (leaf). Ref: 4941.

**17072 Phellodensin A**

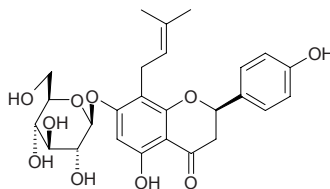
C<sub>20</sub>H<sub>18</sub>O<sub>6</sub> (354.36). White powder, mp 150–151°C (MeOH), [α]<sub>D</sub><sup>25</sup> = –18.8° (c = 0.06, MeOH). Source: TAI WAN HUANG BO *Phellodendron amurense* var. *wilsonii* (leaf: yield = 0.00053%dw). Ref: 4722.

**17073 Phellodensin C**

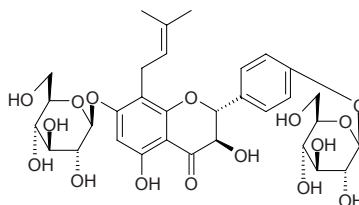
C<sub>20</sub>H<sub>20</sub>O<sub>7</sub> (372.38). White powder, mp 108–109°C (MeOH), [α]<sub>D</sub><sup>25</sup> = –28.0° (c = 0.046, MeOH). Source: TAI WAN HUANG BO *Phellodendron amurense* var. *wilsonii* (leaf: yield = 0.00009%dw). Ref: 4722.

**17074 (2R)-Phellodensin F**

C<sub>26</sub>H<sub>30</sub>O<sub>10</sub> (502.52). White powder, mp 220–221°C, [α]<sub>D</sub><sup>25</sup> = –67.5° (c = 0.15, MeOH). Source: RI BEN HUANG BAI *Phellodendron japonicum* (leaf). Ref: 4502.

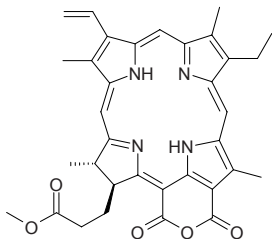
**17075 Phellodensin G**

C<sub>32</sub>H<sub>40</sub>O<sub>16</sub> (680.67). Colorless powder, mp 266–267°C, [α]<sub>D</sub><sup>25</sup> = +66.78° (c = 0.023, MeOH). Source: HUANG PI SHU *Phellodendron chinense* (leaf). Ref: 4941.

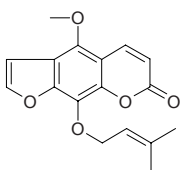


**17076 Phellophyll a**

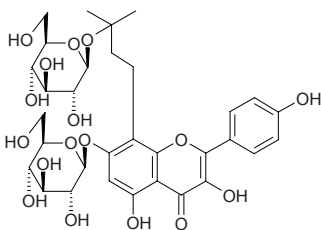
$C_{34}H_{34}N_4O_5$  (578.67). Deep green powder, mp 141~142°C, (MeOH),  $[\alpha]_D^{25} = +298.0^\circ$  ( $c = 0.007$ , MeOH). Source: TAI WAN HUANG BO *Phellodendron amurense* var. *wilsonii* (leaf: yield = 0.00031%dw). Ref: 4722.

**17077 Phellopterin**

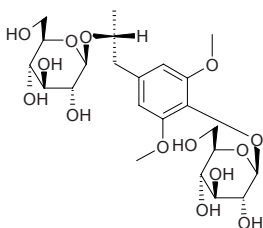
[2543-94-4]  $C_{17}H_{16}O_5$  (300.31). mp 102°C. Pharm: PGE<sub>2</sub> production inhibitor (rat peritoneal macrophages, LPS-induced, 30 μmol/L; inhibits LPS-induced expression of COX-2 and mPGES, not directly inhibits COX-1 and COX-2)<sup>[5392]</sup>. Source: BAI ZHI *Angelica dahurica* [Syn. *Angelica porphyrocaulis*], DA YE NIU FANG FENG *Heracleum mantegazzianum*, FANG FENG *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*], GUANG HUA DANG GUI *Angelica glabra*, HANG BAI ZHI *Angelica taiwaniana*, QI BAI ZHI *Angelica dahurica* cv. *qibaizhi*, QIANG HUO *Notopterygium incisum*, XIA YAN GU DANG GUI *Archangelica decurrens*, *Ferula alliacea*. Ref: 2, 566, 660, 1521, 5392.

**17078 Phelloside**

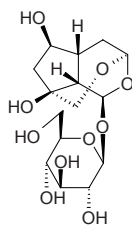
Phellizide [20194-51-8]  $C_{32}H_{40}O_{17}$  (696.67). Yellow needles, mp 282~284°C. Source: HUANG BAI *Phellodendron amurense*, KU YE DAO HUANG BAI *Phellodendron sachalinense*. Ref: 3191.

**17079 Pheloside**

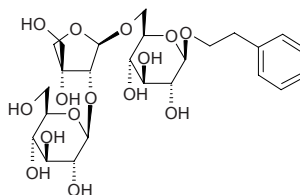
Feloside [58497-07-7]  $C_{23}H_{36}O_{14}$  (536.53). mp 224~225°C,  $[\alpha]_D^{20} = -27.7^\circ$  ( $c = 0.99$ , water). Source: *Ferula kopetdaghensis*. Ref: 2088.

**17080 Phelypaeside**

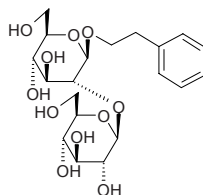
$C_{15}H_{24}O_{10}$  (364.35). Source: *Cistanche* sp. Ref: 2448.

**17081 Phenethylalcohol 8-O-β-D-glucopyranosyl-(1→2)-O-β-D-apiofuranosyl-(1→6)-β-D-glucopyranoside**

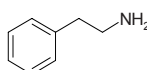
$C_{25}H_{38}O_{15}$  (578.57). Powder,  $[\alpha]_D^{26} = -56.6^\circ$  ( $c = 1.7$ , MeOH). Source: ZI HU *Bupleurum falcatum*. Ref: 2317.

**17082 Phenethylalcohol 8-O-β-D-glucopyranosyl-(1→2)-β-D-glucopyranoside**

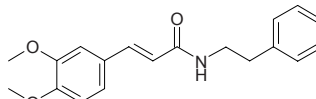
$C_{20}H_{30}O_{11}$  (446.46). Powder,  $[\alpha]_D^{26} = -17.7^\circ$  ( $c = 0.7$ , MeOH). Source: ZI HU *Bupleurum falcatum*. Ref: 2317.

**17083 Phenethylamine**

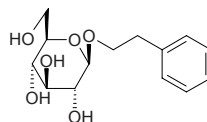
[64-04-0]  $C_8H_{11}N$  (121.18). Liquid,  $d_4^{24} = 0.958$ , bp 197~198°C, bp 70~71°C/7mmHg,  $n_D^{25} = 1.5290$ . Pharm: Irritant (to skin); sensitizer. Source: GUI GAI *Coprinus atramentarius*, HUANG HUA ZI *Sida cordifolia*, HONG MU JI CAO *Desmodium gangeticum*, MA HUANG *Ephedra sinica*, *Acacia* spp., *Crataegus* spp. Ref: 2, 6, 658, 660, 1521.

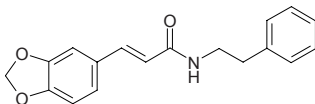
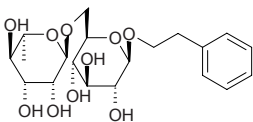
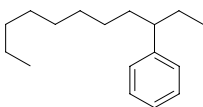
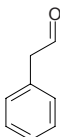
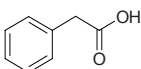
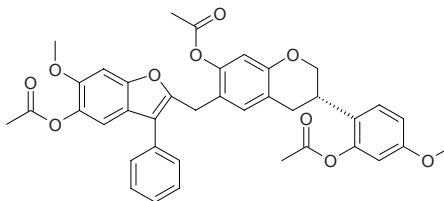
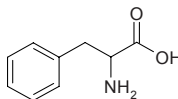
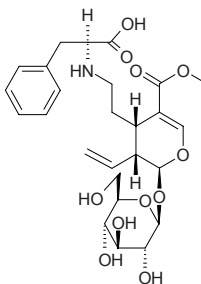
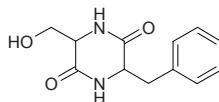
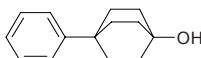
**17084 N-β-Phenethyl-3-(3,4-dimethoxy phenyl) propenamide**

$C_{19}H_{21}NO_3$  (311.38). Source: JI JI JING YE *Chloranthus serratus*. Ref: 3192.

**17085 Phenethyl β-D-glucopyranoside**

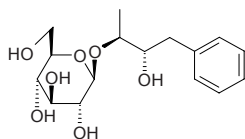
$C_{14}H_{20}O_6$  (284.31). Amorphous powder,  $[\alpha]_D^{23} = -37^\circ$ . Source: BEI SHA SHEN *Glehnia littoralis* (fruit), JIAN YE YIN YANG HUO *Epimedium sagittatum*, KUO BAO JU *Baccharis indica* [Syn. *Pluchea indica*]. Ref: 3193, 3194, 3525.



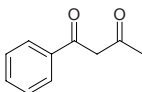
**17086 N-β-Phenethyl-3-(3,4-methylenedioxy phenyl) propenamide**C<sub>18</sub>H<sub>17</sub>NO<sub>3</sub> (295.34). Source: JI JI JING YE *Chloranthus serratus*. Ref: 3192.**17087 Phenethyl rutinoside**Phenethyl α-L-rhamnopyranosyl(1→6)-β-D-glucopyranoside C<sub>20</sub>H<sub>30</sub>O<sub>10</sub> (430.46).Source: GUAN CANG ZHU *Atractylodes japonica* (fresh rhizome), SHI LIU ZHONG ZI *Punica granatum* (seed; yield = 0.0005%). Ref: 4310, 4792.**17088 3-Phenylundecane**C<sub>17</sub>H<sub>28</sub> (232.41). Source: XI YANG SHEN *Panax quinquefolium*. Ref: 2.**17089 Phenol**Hydroxybenzene [108-95-2] C<sub>6</sub>H<sub>6</sub>O (94.11). Pharm: Antiseptic; relieves itching; toxin. Source: BAI SHAO *Paeonia albiflora* [Syn. *Paeonia lactiflora*], CHAI HU *Bupleurum chinense*, CHAN YANG *Populus tremuloides*, CHUAN XU DUAN *Dipsacus asperoides*, DANG GUI *Angelica sinensis*, LU DI MIAN *Gossypium hirsutum* [Syn. *Gossypium mexicanum*], MAN JING ZI *Vitex trifolia*, RI BEN XIANG RU *Elsholtzia nipponica*, YIN CHEN HAO *Artemisia capillaris*, ZHONG HUA JI SHI TENG *Paederia chinensis*. Ref: 2, 658, 660.**17090 Phenylacetaldehyde**[122-78-1] C<sub>8</sub>H<sub>8</sub>O (120.15). Crystals (H<sub>2</sub>O), d<sub>4</sub><sup>19.6</sup> = 1.027, mp 33–34°C, bp 195°C, bp 78°C/10mmHg. Source: BAI GUI BI *Phallus impudicus*, FAN QIE *Lycopersicon esculentum*, HONG HUA *Carthamus tinctorius*, MENG GU HAO *Artemisia mongolica*, NIU BANG GEN *Arctium lappa*, SUAN JIAO *Tamarindus indica*, WEI XIAO WAN SHOU JU *Tagetes minuta*, XING ZI *Prunus armeniaca*, *Citrus* spp. Ref: 660, 1521.**17091 Phenylacetic acid**[103-82-2] C<sub>8</sub>H<sub>8</sub>O<sub>2</sub> (136.15). Source: GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingsensis*]. Ref: 2.**17092 (3S)-6-(3-Phenyl-5-acetoxy-6-methoxybenzo[b]furan-2-ylmethyl)-vestitol-triacetate**C<sub>38</sub>H<sub>34</sub>O<sub>10</sub> (650.69). Light brown solid. Source: GUANG LIANG HUANG TAN *Dalbergia nitidula*. Ref: 1992.**17093 Phenylalanine**2-Amino-3-phenylpropanoic acid [3617-44-5] C<sub>9</sub>H<sub>11</sub>NO<sub>2</sub> (165.19). Pharm: Antidepressant; essential amino acid. Source: BAN XIA *Pinellia ternata* (dried tuber; content scope of 4 origins = 0.82%–1.61%, mean content = 1.05%)<sup>[5521]</sup>, BING LANG *Areca catechu*, CHUAN DANG SHEN *Codonopsis tangshen*, DANG SHEN *Codonopsis pilosula*, NING XIA GOU QI ZI *Lycium barbarum*, QIU HUA DANG SHEN *Codonopsis subglobosa*, ROU CONG RONG *Cistanche deserticola*, SU HUA DANG SHEN *Codonopsis pilosula* var. *modesta* [Syn. *Codonopsis modesta*]. Ref: 2, 658, 660, 5521.**17094 L-Phenylalaninosecologanin**C<sub>26</sub>H<sub>36</sub>NO<sub>11</sub> (537.57). Amorphous powder, [α]<sub>D</sub><sup>26</sup> = -112.4° (c = 0.214, MeOH). Source: JIN YIN HUA *Lonicera japonica* (stem and leaf). Ref: 4220.**17095 L-Phenylalanyl-L-serine anhydride**C<sub>12</sub>H<sub>14</sub>N<sub>2</sub>O<sub>3</sub> (234.26). Source: ZHANG YE BAN XIA *Pinellia pedatisecta*. Ref: 477.**17096 4-Phenylbicyclo[2.2.2]octan-1-ol**C<sub>14</sub>H<sub>18</sub>O (202.30). Source: WU WEI ZI *Schisandra chinensis*. Ref: 2.

**17097 (2S,3S)-1-Phenyl-2,3-butanediol 3-O-β-D-glucopyranoside**

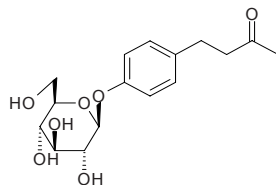
$C_{16}H_{24}O_7$  (328.37). White powder,  $[\alpha]_D^{27} = -21.9^\circ$  ( $c = 2.00$ ,  $CHCl_3$ ). Pharm: Aldose reductase inhibitor (rat lens,  $IC_{50} > 100\mu mol/L$ ,  $100\mu mol/L$  InRt = 9.7%, control Epalrestat,  $IC_{50} = 0.072\mu mol/L$ ). Source: YE JU HUA *Chrysanthemum indicum* (flower: yield = 0.019%). Ref: 4214.

**17098 1-Phenyl-1,3-butanediol**

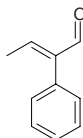
[93-91-4]  $C_{10}H_{10}O_2$  (162.19). Source: HUANG QIN *Scutellaria baicalensis*. Ref: 2.

**17099 Phenylbutanone-glucoside**

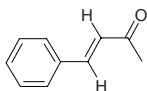
$C_{16}H_{22}O_7$  (326.35). Source: DA HUANG *Rheum officinale*, ZHANG YE DA HUANG *Rheum palmatum*. Ref: 2, 660.

**17100 2-Phenyl-2-butenal**

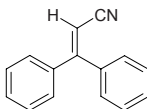
$C_{10}H_{10}O$  (146.19). Source: CHAYE *Camellia sinensis* [Syn. *Thea sinensis*]. Ref: 660.

**17101 (E)-4-Phenyl-3-buten-2-one**

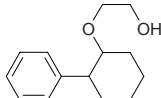
$C_{10}H_{10}O$  (146.19). Source: HUANG QIN *Scutellaria baicalensis*. Ref: 2.

**17102 α-Phenylcinnamic acid nitrile**

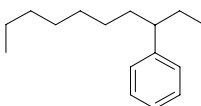
[3531-24-6]  $C_{15}H_{11}N$  (205.26). mp 49~51°C, bp 213~214°C/23mmHg. Source: HAN LIAN HUA *Tropaeolum majus*. Ref: 6.

**17103 2-(2-Phenyl cyclohexyloxy) ethanol**

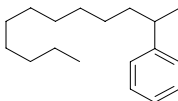
$C_{14}H_{20}O_2$  (220.31). Source: WU WEI ZI *Schisandra chinensis*. Ref: 2.

**17104 3-Phenyldecane**

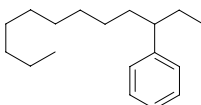
(1-Methylundecyl)benzene [2719-61-1]  $C_{16}H_{26}$  (218.39). Source: XI YANG SHEN *Panax quinquefolium*. Ref: 2.

**17105 2-Phenyldecane**

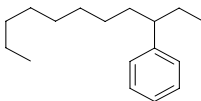
[4621-36-7]  $C_{18}H_{30}$  (246.44). Source: XI YANG SHEN *Panax quinquefolium*. Ref: 2.

**17106 3-Phenyldecane**

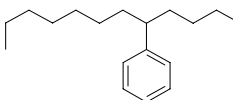
[2400-00-2]  $C_{18}H_{30}$  (246.44). Source: XI YANG SHEN *Panax quinquefolium*. Ref: 2.

**17107 4-Phenyldecane**

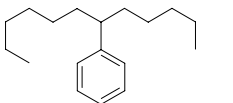
[2719-64-4]  $C_{18}H_{30}$  (246.44). Source: XI YANG SHEN *Panax quinquefolium*. Ref: 2.

**17108 5-Phenyldecane**

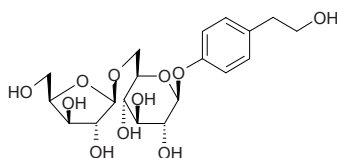
[2719-63-3]  $C_{18}H_{30}$  (246.44). Source: XI YANG SHEN *Panax quinquefolium*. Ref: 2.

**17109 6-Phenyldecane**

[2719-62-2]  $C_{18}H_{30}$  (246.44). Source: XI YANG SHEN *Panax quinquefolium*. Ref: 2.

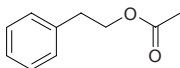
**17110 Phenyl ethanol 4-O-β-D-xylopyranosyl-(1→6)-β-D-glucopyranoside**

$C_{19}H_{28}O_{11}$  (432.43). Colorless amorphous powder. Source: TAO ER QI *Podophyllum emodii* [Syn. *Podophyllum emodii* var. *chinense*; *Podophyllum sikkimensis*; *Sinopodophyllum emodii*] (root and rhizome). Ref: 4142.

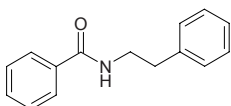


**17111 Phenylethyl acetate**

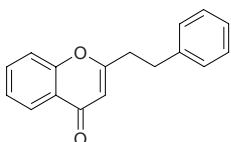
[103-45-7] C<sub>10</sub>H<sub>12</sub>O<sub>2</sub> (164.21). bp 224°C. Source: LU DOU LE HUA *Pandanus tectorius*, MEI GUI HUA *Rosa rugosa*, SHUI XIAN HUA *Narcissus tazetta* var. *chinensis*. Ref: 6.

**17112 N-(2-Phenylethyl)benzamide**

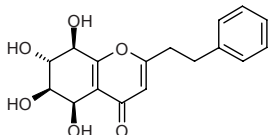
C<sub>15</sub>H<sub>15</sub>NO (225.29). White amorphous powder, mp 115.0–116.0°C, mp 117.0–118.0°C. Source: LIU ZHUANG DAN YE YUN XIANG *Ruta tuberculata* [Syn. *Haplophyllum tuberculatum*] (aerial parts). Ref: 5156.

**17113 2-(2-Phenylethyl) chromone**

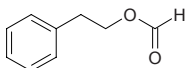
C<sub>17</sub>H<sub>14</sub>O<sub>2</sub> (250.30). White acicular crystals, mp 65°C. Source: BAI MU XIANG *Aquilaria sinensis*, CHEN XIANG *Aquilaria agallocha*. Ref: 13, 4173.

**17114 (5R,6R,7S,8R)-2-(2-Phenylethyl)-5e',6a,7e,8e'-tetrahydroxy-5,6,7,8-tetrahydrochromone**

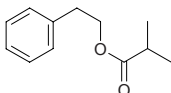
AH16 C<sub>17</sub>H<sub>18</sub>O<sub>6</sub> (318.33). White powder, mp 100–105°C, [α]<sub>D</sub> = +4.76°. Source: CHEN XIANG *Aquilaria agallocha*. Ref: 13.

**17115 Phenyl ethyl formate**

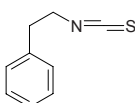
[104-62-1] C<sub>9</sub>H<sub>10</sub>O<sub>2</sub> (150.18). bp 94°C/9mmHg. Source: CHA YE *Camellia sinensis* [Syn. *Thea sinensis*]. Ref: 6.

**17116 β-Phenylethyl isobutanoate**

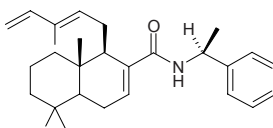
C<sub>12</sub>H<sub>16</sub>O<sub>2</sub> (192.26). Source: FU JIAN XI XIN *Asarum fukienense*. Ref: 3197.

**17117 β-Phenylethyl isothiocyanate**

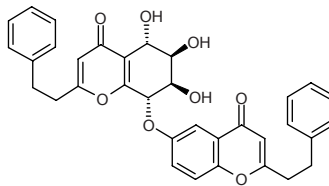
[2257-09-2] C<sub>9</sub>H<sub>9</sub>NS (163.24). Liquid, bp 142°C/13mmHg, 143–145°C/12mmHg, 106°C/2.5mmHg. Pharm: Insecticidal. Source: JIE CAI *Brassica juncea*, JIE ZI *Brassica juncea*, family Brassicaceae spp. Ref: 6, 1521.

**17118 N-[(S)-1-Phenylethyl]-labda-7,12(E),14-triene-17-amide**

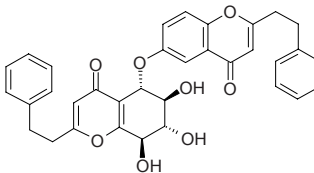
C<sub>28</sub>H<sub>39</sub>NO (405.63). mp 146–148°C, [α]<sub>D</sub><sup>20</sup> = +9.2° (c = 1.2, CHCl<sub>3</sub>). Pharm: Cytotoxic inactive (*in vitro*, BT474, CHAGO, HepG2, Kato3, SW620: > 10μg/mL). Source: GUANG YE BA DOU *Croton oblongifolius* [Syn. *Croton laevigatus*]. Ref: 5363.

**17119 (5S,6R,7R,8S)-2-(2-Phenylethyl)-5,6,7-tri-hydroxy-5,6,7,8-tetrahydro-8-[2-(2-phenylethyl)chromonyl-6-oxy]chromone (AH13)**

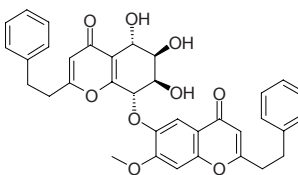
C<sub>34</sub>H<sub>30</sub>O<sub>8</sub> (566.61). Colorless acicular crystals, mp 193–194°C, [α]<sub>D</sub> = +2°. Source: CHEN XIANG *Aquilaria agallocha*. Ref: 13.

**17120 (5S,6S,7S,8R)-2-(2-Phenylethyl)-6,7,8-trihydroxy-5,6,7,8-tetrahydro-5-[2-(2-phenylethyl)chromonyl-6-oxy]chromone (AH14)**

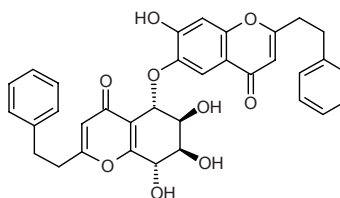
C<sub>34</sub>H<sub>30</sub>O<sub>8</sub> (566.61). White powder, mp 86–88°C, [α]<sub>D</sub> = +64.4°. Source: CHEN XIANG *Aquilaria agallocha*. Ref: 13.

**17121 (5S,6S,7R,8S)-2-(2-Phenylethyl)-5,6,7-trihydroxy-5,6,7,8-tetrahydro-8-[2-(2-phenylethyl)-7-methoxychromonyl-6-oxy]chromone (AH12)**

C<sub>35</sub>H<sub>32</sub>O<sub>9</sub> (596.64). Colorless acicular crystals, mp 227°C, [α]<sub>D</sub> = +0.7°. Source: CHEN XIANG *Aquilaria agallocha*. Ref: 13.

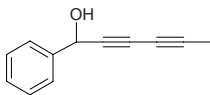
**17122 (5S,6S,7R,8S)-2-(2-Phenylethyl)-6,7,8-trihydroxy-5,6,7,8-tetrahydro-5-[2-(2-phenyl-ethyl)-7-hydroxy-chromonyl-6-oxy]-chromone (AH15)**

C<sub>34</sub>H<sub>30</sub>O<sub>9</sub> (582.61). Colorless acicular crystals, mp 244–245°C, [α]<sub>D</sub> = +5.8°. Source: CHEN XIANG *Aquilaria agallocha*. Ref: 13.

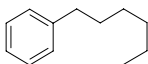


**17123 1-Phenyl-2,4-hexadiyne-1-ol**

[1574-95-4] C<sub>12</sub>H<sub>10</sub>O (170.21). Source: YIN CHEN HAO *Artemisia capillaris*. Ref: 2.

**17124 1-Phenylhexane**

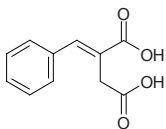
[1077-16-3] C<sub>12</sub>H<sub>18</sub> (162.28). Source: XI YANG SHEN *Panax quinquefolium*. Ref: 2.

**17125 Phenyl isothiocyanate**

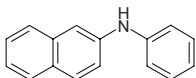
Isothiocyanato-benzene [103-72-0] C<sub>7</sub>H<sub>5</sub>NS (135.19). bp 221°C. Source: JIE ZI *Brassica juncea*. Ref: 6.

**17126 trans-Phenylitaconic acid**

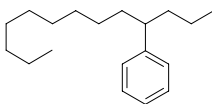
C<sub>11</sub>H<sub>10</sub>O<sub>4</sub> (206.20). Source: AI YE *Artemisia argyi*. Ref: 3198.

**17127 N-Phenyl-2-naphthylamine**

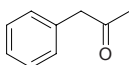
[135-88-6] C<sub>16</sub>H<sub>13</sub>N (219.29). Needles (MeOH), mp 108°C, 103–104°C, bp 395–399.5°C, 237°C/13mmHg. Pharm: Carcinogenic; LD<sub>50</sub> (mus, orl) = 8730mg/kg. Source: DING YU JU *Acroptilon repens*, DUO GEN WU TOU *Aconitum karakolicum*, JIAN HAI LONG *Syngnathus acus*, NAN HE SHI *Daucus carota*, SHUI HU LU *Eichhornia crassipes*. Ref: 1521, 3199.

**17128 4-Phenyltridecane**

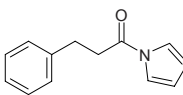
C<sub>19</sub>H<sub>32</sub> (260.47). Source: XI YANG SHEN *Panax quinquefolium*. Ref: 2.

**17129 Phenyl-2-propanone**

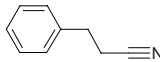
Phenylacetone [103-79-7] C<sub>9</sub>H<sub>10</sub>O (134.18). Source: WU WEI ZI *Schisandra chinensis*. Ref: 2.

**17130 N-(3-Phenylpropanoyl)pyrrole**

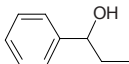
[112448-69-8] C<sub>13</sub>H<sub>13</sub>NO (199.25). mp 48.5–50°C. Source: JIA JU ZI *Piper sarmentosum*. Ref: 1510.

**17131 Phenyl propionitrile**

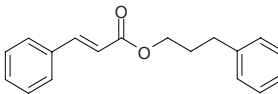
C<sub>9</sub>H<sub>9</sub>N (131.18). Source: DOU BAN CAI *Nasturtium officinale*. Ref: 1323.

**17132 Phenylpropyl alcohol**

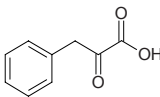
[93-54-9] C<sub>9</sub>H<sub>12</sub>O (136.20). bp (–) 94–95°C/10mmHg, (±) 217–221°C. Source: SHUI XIAN HUA *Narcissus tazetta* var. *chinensis*. Ref: 6.

**17133 Phenylpropyl cinnamate**

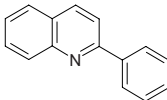
C<sub>18</sub>H<sub>18</sub>O<sub>2</sub> (266.34). Source: AN XI XIANG *Styrax benzoin*. Ref: 6.

**17134 Phenyl pyruvic acid**

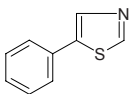
[156-06-9] C<sub>9</sub>H<sub>8</sub>O<sub>3</sub> (164.16). mp 157°C (dec). Source: LAI FU *Raphanus sativus*. Ref: 6.

**17135 2-Phenylquinoline**

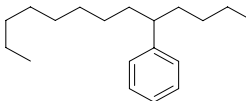
[612-96-4] C<sub>15</sub>H<sub>11</sub>N (205.26). mp 84°C (hexane). Pharm: Antileishmanial (*in vitro* *Leishmania* sp. 2903 IC<sub>90</sub> = 100µg/mL, *Trypanosoma cruzi* IC<sub>90</sub> = 100µg/mL, mus-infacted by *Leishmania amazonensis* H-142, IC<sub>90</sub> = 100µg/mL). Source: CHANG HUA TU LA SHU *Galipea longiflora*. Ref: 3617, 3601, 3618.

**17136 5-Phenyl thiazole**

C<sub>9</sub>H<sub>7</sub>NS (161.23). Source: SHAN NAI *Kaempferia galanga*. Ref: 1344.

**17137 5-Phenyltridecane**

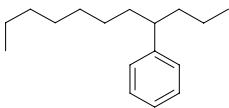
C<sub>19</sub>H<sub>32</sub> (260.47). Source: XI YANG SHEN *Panax quinquefolium*. Ref: 2.



**17138 4-Phenylundecane**

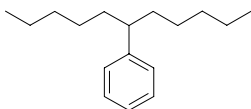
[4536-86-1] C<sub>17</sub>H<sub>28</sub> (232.41). Source: XI YANG SHEN *Panax quinquefolium*.

Ref: 2.

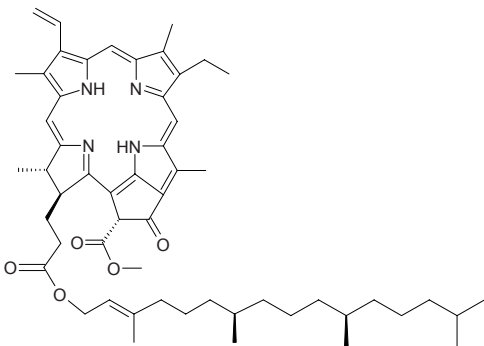
**17139 6-Phenylundecane**

[4537-14-8] C<sub>17</sub>H<sub>28</sub> (232.41). Source: XI YANG SHEN *Panax quinquefolium*.

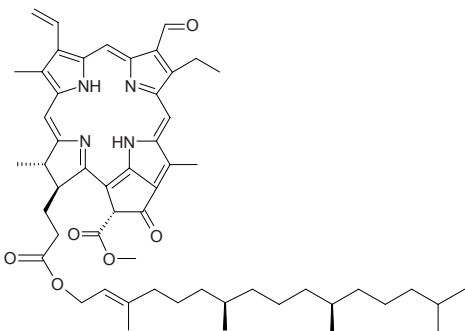
Ref: 2.

**17140 Pheophytin a**

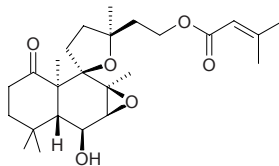
[603-17-8] C<sub>55</sub>H<sub>74</sub>N<sub>4</sub>O<sub>5</sub> (871.23). Deep-greenish-black crystals (pet. ether), [α]<sub>D</sub><sup>20</sup> = -126°. Source: BAI SHU YE *Cupressus funebris*, BO CAI *Spinacia oleracea*, TAI WAN JIN GU CAO *Ajuga taiwanensis* (whole herb), YUAN CAN SHA *Bombyx mori*. Ref: 660, 1521, 4483.

**17141 Pheophytin b**

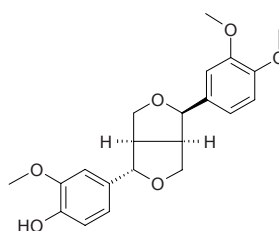
C<sub>55</sub>H<sub>72</sub>N<sub>4</sub>O<sub>6</sub> (885.21). Deep-grey-green greasy solid (pet. ether), [α]<sub>D</sub><sup>20</sup> = -133°. Source: BO CAI *Spinacia oleracea*, TAI WAN JIN GU CAO *Ajuga taiwanensis* (whole herb), YUAN CAN SHA *Bombyx mori*. Ref: 660, 1521, 4483.

**17142 Philadelphinone**

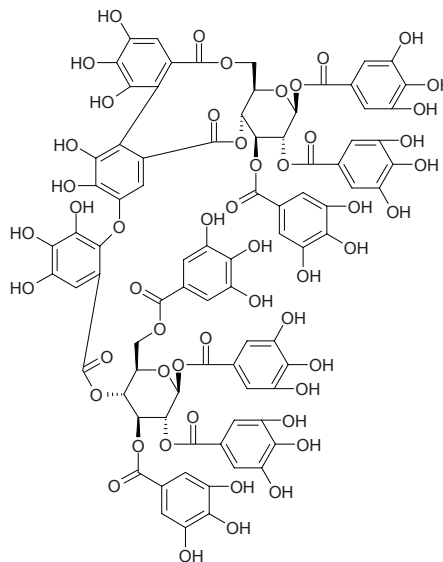
C<sub>25</sub>H<sub>38</sub>O<sub>6</sub> (434.58). Colorless amorphous solid, [α]<sub>D</sub><sup>24</sup> = -73.8° (c = 0.2, CHCl<sub>3</sub>). Source: FEI CHENG FEI PENG *Erigeron philadelphicus* (aerial parts). Ref: 4338.

**17143 Phillygenin**

C<sub>21</sub>H<sub>24</sub>O<sub>6</sub> (372.42). Source: LIAN QIAO *Forsythia suspensa*. Ref: 660, 1521.

**17144 Phillyraeoidin A**

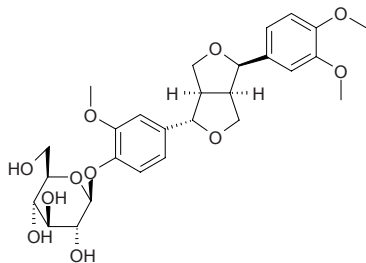
[125002-71-3] C<sub>82</sub>H<sub>60</sub>O<sub>52</sub> (1877.36). Maple amorphous powder, [α]<sub>D</sub><sup>31</sup> = +75.8° (c = 1.1, acetone). Pharm: Cytotoxic (melanotic carcinoma RPMI-7951, ED<sub>50</sub> = 0.50 μg/mL); topoisomerase II inhibitor (IC<sub>100</sub> = 0.5 μmol/L). Source: FEI LI GUI LI *Quercus phillyraeoides*. Ref: 3619, 1728, 1706.



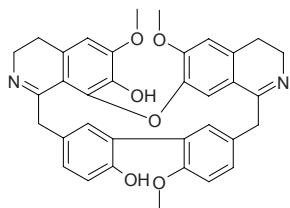


**17145 Phillyrin**

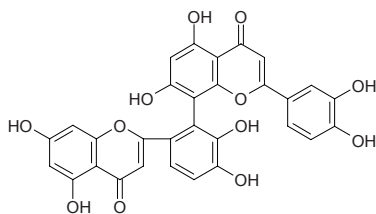
Forsythin [487-41-2]  $C_{27}H_{34}O_{11}$  (534.57). mp ( $\alpha$ ) 155°C, ( $\beta$ ) 185°C,  $[\alpha]_D^{21} = +46.9^\circ$  ( $c = 0.25$ ,  $CH_3OH$ ). Pharm: Anti-inflammatory (inhibits production of COX metabolite  $PGE_2$ ,  $IC_{50} = 45.6\mu mol/L$ ; reduces TXB2 level,  $IC_{50} = 168\mu mol/L$ )<sup>[4415]</sup>. Source: KUO YE OU NV ZFEN *Phillyrea latifolia* (leaf), LIAN QIAO *Forsythia suspensa* (green fruit: mean content of 7 origins = 0.393%, ripe fruit: mean content of 5 origins = 0.113%<sup>[5508]</sup>). Ref: 2, 660, 1521, 4415, 5508.

**17146 Philogaline**

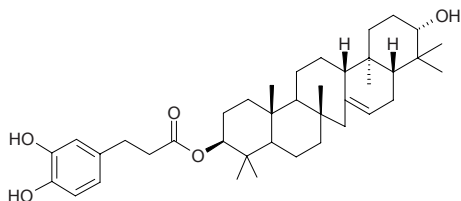
$C_{35}H_{32}N_2O_6$  (576.66). Amorphous,  $[\alpha]_D^{20} = 0^\circ$  ( $c = 0.23$ ,  $MeOH$ ). Source: *Guatteria boliviana* (stem cortex). Ref: 3976.

**17147 Philonotisflavone**

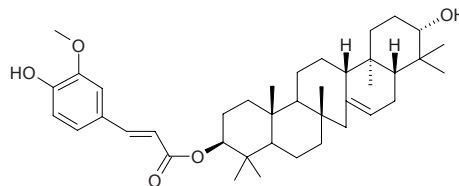
[124615-12-9]  $C_{30}H_{18}O_{12}$  (570.47). Source: ZE XIAN *Philonotis fontana*, ZHOU SHUO XIAN *Aulacomnium androgynum*. Ref: 3120, 4549.

**17148 Phlegmanol A**

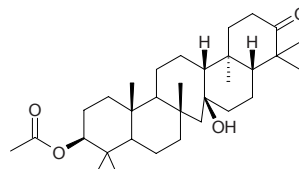
$C_{39}H_{58}O_5$  (606.89). Source: MA WEI SHAN *Phlegmariurus phlegmaria* [Syn. *Lycopodium phlegmaria*]. Ref: 3200, 2987.

**17149 Phlegmanol B**

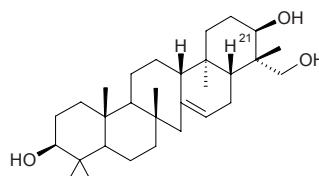
$C_{40}H_{58}O_5$  (618.91). Source: MA WEI SHAN *Phlegmariurus phlegmaria* [Syn. *Lycopodium phlegmaria*]. Ref: 2987.

**17150 Phlegmanol D**

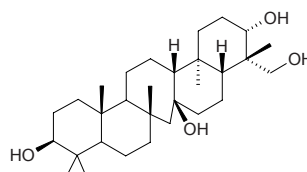
[35298-92-1]  $C_{32}H_{52}O_4$  (500.77). Crystals ( $C_6H_6$ -pet. ether), mp 304~305°C,  $[\alpha]_D^{15} = +26^\circ$  ( $c = 0.5$ ,  $CHCl_3$ ). Source: MA WEI SHAN *Phlegmariurus phlegmaria* [Syn. *Lycopodium phlegmaria*], *Lycopodium megastachyum*. Ref: 2987.

**17151 Phlegmanol E**

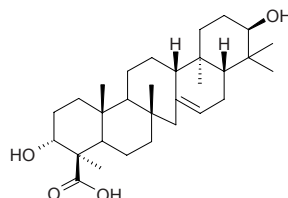
[35298-93-2]  $C_{30}H_{50}O_3$  (458.73). Crystals (pet. ether, tri-Ac compound), mp 241~242°C (tri-Ac compound). Source: GUANG LIANG SHI SONG *Lycopodium lucidulum*, MA WEI SHAN *Phlegmariurus phlegmaria* [Syn. *Lycopodium phlegmaria*]. Ref: 2987.

**17152 Phlegmanol F**

[35345-81-4]  $C_{30}H_{52}O_4$  (476.75). Crystals (as tri-Ac compound), mp 254~256°C (tri-Ac),  $[\alpha]_D^{16} = +16^\circ$  ( $c = 0.5$ ,  $CHCl_3$ , tri-Ac). Source: MA WEI SHAN *Phlegmariurus phlegmaria* [Syn. *Lycopodium phlegmaria*]. Ref: 3201.

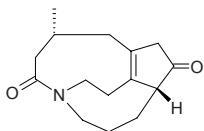
**17153 Phlegmaric acid**

[35298-94-3]  $C_{30}H_{48}O_4$  (472.71). Source: MA WEI SHAN *Phlegmariurus phlegmaria* [Syn. *Lycopodium phlegmaria*]. Ref: 2987.

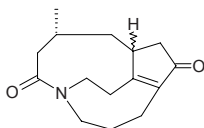


**17154 Phlegmariurine A**

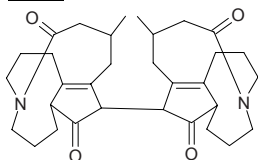
$C_{15}H_{21}NO_2$  (247.34). Source: HUA NAN MA WEI SHAN *Phlegmariurus fordii*. Ref: 3202.

**17155 Phlegmariurine B**

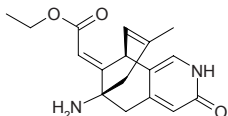
$C_{15}H_{21}NO_2$  (247.34). Source: HUA NAN MA WEI SHAN *Phlegmariurus fordii*. Ref: 3202.

**17156 Phlegmariurine C**

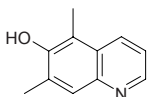
[115491-58-2]  $C_{32}H_{44}N_2O_4$  (520.72). Acicular crystals, mp 151~152°C. Source: HUA NAN MA WEI SHAN *Phlegmariurus fordii*. Ref: 95.

**17157 Phlegmariurine M**

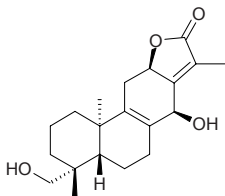
[125287-10-7]  $C_{17}H_{20}N_2O_3$  (300.36). Source: HUA NAN MA WEI SHAN *Phlegmariurus fordii*. Ref: 3203.

**17158 Phlegmariurine N**

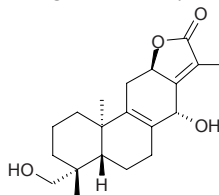
$C_{11}H_{11}NO$  (173.22). White acicular crystals, 179~181°C. Source: HUA NAN MA WEI SHAN *Phlegmariurus fordii*. Ref: 122.

**17159 Phlogacantholide B**

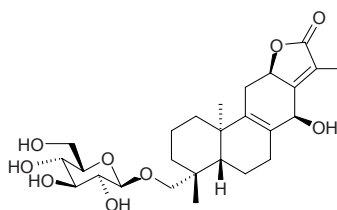
14 $\beta$ ,19-Dihydroxyabieta-8,13(15)-dien-16,12-olide  $C_{20}H_{28}O_4$  (332.44). Colorless needles (MeOH), mp<sup>21</sup> 1~213°C. Source: HUO YAN HUA *Phlogacanthus curviflorus* (root: yield = 0.0523%dw). Ref: 4799.

**17160 Phlogacantholide C**

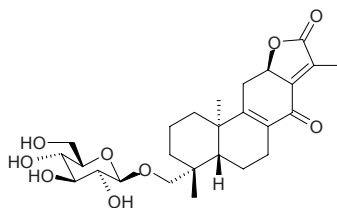
14 $\alpha$ ,19-Dihydroxyabieta-8,13(15)-dien-16,12-olide  $C_{20}H_{28}O_4$  (332.44). Colorless needles (acetone), mp 181~183°C. Source: HUO YAN HUA *Phlogacanthus curviflorus* (root: yield = 0.00042%dw). Ref: 4799.

**17161 Phlogacanthoside A**

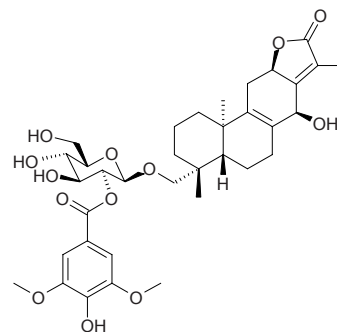
14 $\beta$ ,19-Dihydroxyabieta-8,13(15)-dien-16,12-olide 19-*O*- $\beta$ -D-glucopyranoside  $C_{26}H_{38}O_9$  (494.59). Colorless needles (MeOH), mp 148~149°C (MeOH). Source: HUO YAN HUA *Phlogacanthus curviflorus* (root: yield = 0.0085%dw). Ref: 4799.

**17162 Phlogacanthoside B**

19-Hydroxy-14-oxoabieta-8,13(15)-dien-16,12-olide 19-*O*- $\beta$ -D-glucopyranoside  $C_{26}H_{36}O_9$  (492.57). Colorless needles (MeOH), mp 136~137°C (MeOH),  $[\alpha]_D^{25} = -109.4^\circ$  ( $c = 0.16$ , MeOH). Source: HUO YAN HUA *Phlogacanthus curviflorus* (root: yield = 0.049%dw). Ref: 4799.

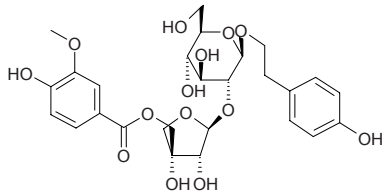
**17163 Phlogacanthoside C**

14 $\beta$ ,19-Dihydroxyabieta-8,13(15)-dien-16,12-olide 19-*O*-[2-(4-hydroxy-3,5-dimethoxybenzoyl)]- $\beta$ -D-glucopyranoside  $C_{35}H_{46}O_{13}$  (674.75). White powder,  $[\alpha]_D^{25} = -137.1^\circ$  ( $c = 0.14$ , MeOH). Source: HUO YAN HUA *Phlogacanthus curviflorus* (root: yield = 0.000077%dw). Ref: 4799.

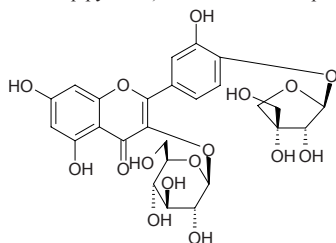


**17164 Phlomisethanoside**

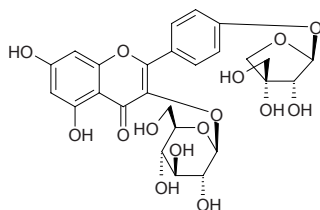
$C_{27}H_{34}O_{14}$  (582.56). Amorphous powder,  $[\alpha]_D = -58.6^\circ$  ( $c = 0.65$ , MeOH).  
 Source: DA HUA CAO SU *Phlomis grandiflora* var. *grandiflora*. Ref: 2287.

**17165 Phlomisflavoside A**

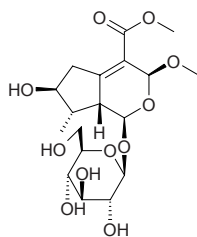
$C_{26}H_{28}O_{16}$  (596.50). Yellow amorphous powder,  $[\alpha]_D^{21} = -140^\circ$  ( $c = 0.55$ , 50% aq. pyridine). Source: *Phlomis spinidens* (aerial parts). Ref: 4115.

**17166 Phlomisflavoside B**

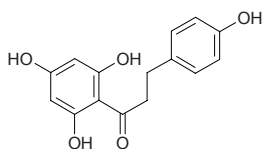
$C_{26}H_{28}O_{15}$  (580.50). Yellow amorphous powder,  $[\alpha]_D^{22} = -93.5^\circ$  ( $c = 0.64$ , 50% aq. pyridine). Source: *Phlomis spinidens* (aerial parts). Ref: 4115.

**17167 Phlomurin**

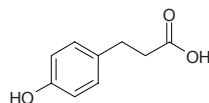
$C_{18}H_{28}O_{11}$  (420.42).  $[\alpha]_D^{21} = +12.4^\circ$  ( $c = 0.5$ , MeOH). Source: JIN HUANG CAO SU *Phlomis aurea* (leaf). Ref: 5093.

**17168 Phloretin**

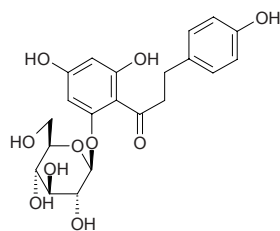
[60-82-2]  $C_{15}H_{14}O_5$  (274.28). mp 262–264°C (dec). Pharm: Antibacterial; anti-inflammatory (COX-2 inhibitor, prevents COX-2 expression)<sup>[4415]</sup>; platelet aggregation inhibitor<sup>[4415]</sup>; induces lipid peroxidization (rat, brain mitochondria); iodine-induced thyronine deiodinase inhibitor; protein kinase C inhibitor; insect antifeedant (*Schizaphis graminum*). Source: NING MENG YE *Citrus limon*. Ref: 6, 658, 4415.

**17169 Phloretinic acid**

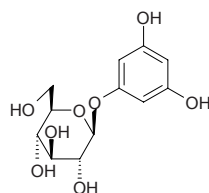
3-(4-Hydroxyphenyl)propanoic acid [501-97-3]  $C_9H_{10}O_3$  (166.18). Fluorescent substance, prisms (Et<sub>2</sub>O), mp 129–130°C, pKa = 4.76 (25°C). Pharm: Tyrosine kinase inhibitor (IC<sub>50</sub> = 64 μmol/L, interleukin-2 inducible T-cell kinase)<sup>[5252]</sup>. Source: HUANG GAN CAO *Glycyrrhiza kansuensis*, MO LEI NAN YANG SHEN *Polyscias murrayi*, PENG ZI CAI *Galium verum*, PING GUO *Malus pumila*. Ref: 660, 1521, 5252.

**17170 Phloridzin**

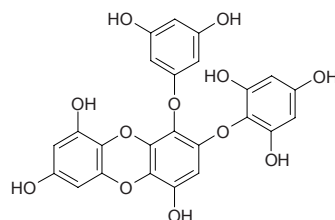
[60-81-1]  $C_{21}H_{24}O_{10}$  (436.42). Pharm: Diabetogenic; insect antifeedant (*Schizaphis graminum*, *Myzus persicae*). Source: KUAN YE SHAN YUE GUI *Kalmia latifolia*, RI BEN MA ZUI MU *Pieris japonica*, *Rhododendron* sp., *Malus* sp. Ref: 658.

**17171 Phlorin**

1,3,5-Trihydroxybenzene 1-*O*-β-*D*-glucoside [28217-60-9]  $C_{12}H_{16}O_8$  (288.26). mp 231–233°C. Pharm: α2-Macroglobulin inhibitor. Source: AN MO LE *Phyllanthus emblica* (root)<sup>[3065]</sup>, JI SU ZI *Cornus capitata* [Syn. *Dendrobenthamia capitata*], TIAN CHENG *Citrus sinensis*. Ref: 6, 3065.

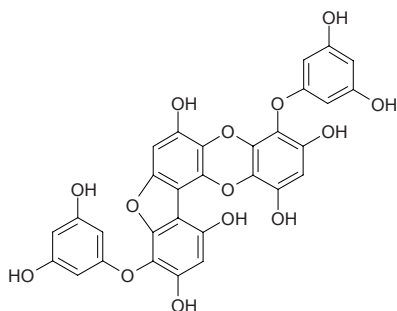
**17172 2-*O*-Phloroeckol**

[89444-89-3]  $C_{24}H_{16}O_{12}$  (496.38). Crystals, mp 206–207°C. Pharm: Insect growth inhibitor; α2-macroglobulin inhibitor. Source: HEI KUN BU *Ecklonia kurome*. Ref: 955.

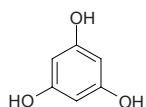


**17173 Phlorofucofuroeckol A**

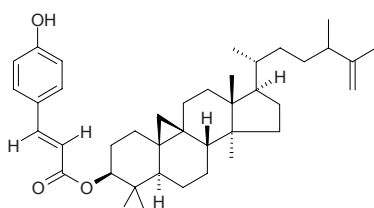
[128129-56-6] C<sub>30</sub>H<sub>18</sub>O<sub>14</sub> (602.47). Amorphous solid. **Pharm:** Antioxidant (DPPH scavenger, IC<sub>50</sub> = 4.6 μmol/L, control Ascorbic acid, IC<sub>50</sub> = 10.3 μmol/L)<sup>[4376]</sup>. **Source:** HEI KUN BU *Ecklonia kurome*, Brown alga *Ecklonia stolonifera*. **Ref:** 3204, 4376.

**17174 Phloroglucinol**

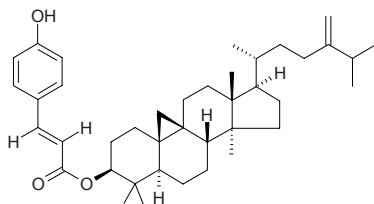
1,3,5-Trihydroxybenzene [108-73-6] C<sub>6</sub>H<sub>6</sub>O<sub>3</sub> (126.11). Leaflets or plates +2H<sub>2</sub>O (H<sub>2</sub>O), mp 117°C (dihydrate), mp 217~219°C (anhydrate, rapid heat), mp 200~209°C (anhydrate, slow heat), pK<sub>a1</sub> = 7.97; pK<sub>a2</sub> = 9.23 (20°C). **Pharm:** Antispasmodic; cytotoxic (Colon26-L5, ED<sub>50</sub> = 26.4 μmol/L; HT1080, ED<sub>50</sub> = 20.9 μmol/L)<sup>[3042]</sup>. **Source:** A LA BO JIN HE HUAN *Acacia arabica*, LV SONG QIU MAO *Mallotus philippinensis*, PING GUO *Malus pumila*, YANG CONG *Allium cepa*, YUN NAN CAO KOU *Alpinia blepharocalyx* (seed: yield = 0.00065%), *Eucalyptus kino*. **Ref:** 6, 658, 660, 1521, 3042.

**17175 Pholidotanin**

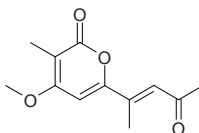
25-Methylenecycloartanyl-*p*-hydroxy-*trans*-cinnamate C<sub>40</sub>H<sub>58</sub>O<sub>3</sub> (586.91). White acicular crystals, mp 202~204°C, [α]<sub>D</sub><sup>14</sup> = +45.6° (c = 0.19, chloroform). **Source:** YUN NAN SHI XIAN TAO *Pholidota yunnanensis*. **Ref:** 478.

**17176 Pholidotin**

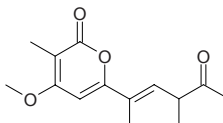
C<sub>40</sub>H<sub>58</sub>O<sub>3</sub> (586.91). Crystals, mp 196°C, [α]<sub>D</sub> = +5.54° (chloroform). **Source:** HONG SHI XIAN TAO *Pholidota rubra*. **Ref:** 659.

**17177 Phomapyrone D**

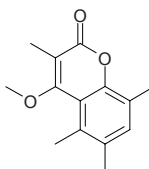
C<sub>12</sub>H<sub>14</sub>O<sub>4</sub> (222.24). **Source:** BAN DIAN XIAO QIU QIANG JUN *Leptosphaeria maculans*, JING DIAN MEI *Phoma lingam*. **Ref:** 5246.

**17178 Phomapyrone E**

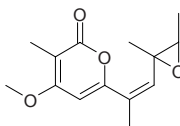
C<sub>14</sub>H<sub>18</sub>O<sub>4</sub> (250.30). **Source:** BAN DIAN XIAO QIU QIANG JUN *Leptosphaeria maculans*, JING DIAN MEI *Phoma lingam*. **Ref:** 5246.

**17179 Phomapyrone F**

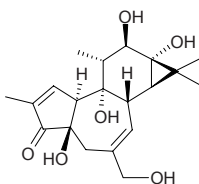
C<sub>14</sub>H<sub>16</sub>O<sub>3</sub> (232.28). **Source:** BAN DIAN XIAO QIU QIANG JUN *Leptosphaeria maculans*, JING DIAN MEI *Phoma lingam*. **Ref:** 5246.

**17180 Phomapyrone G**

C<sub>14</sub>H<sub>18</sub>O<sub>4</sub> (250.30). **Source:** BAN DIAN XIAO QIU QIANG JUN *Leptosphaeria maculans*, JING DIAN MEI *Phoma lingam*. **Ref:** 5246.

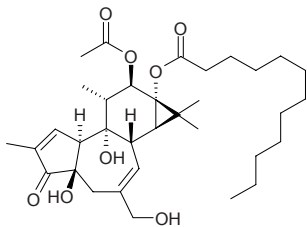
**17181 Phorbol**

4β,9α,12β,13α,20-Pentahydroxy-1,6-tigliadien-3-one [17673-25-5] C<sub>20</sub>H<sub>28</sub>O<sub>6</sub> (364.44). Crystals +MeOH (MeOH), mp 240~250°C, 250~251°C (dec, solvent free), [α]<sub>D</sub><sup>20</sup> = +118° (c = 0.4, dioxane). **Pharm:** Irritant (skin); Esters are potent tumor-promoting agents **Source:** BA DOU *Croton tiglium*, BEI MEI HONG SHAN *Sequoia sempervirens*, HONG JIAN QIU LUO *Lychnis dioica*, JU SHAN *Sequoia gigantea*, YANG CONG *Allium cepa*, *Euphorbia* spp., *Sapium* spp. **Ref:** 2, 1521.

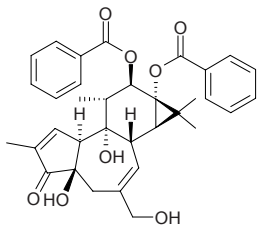


**17182 Phorbol-12-acetate-13-laurate**

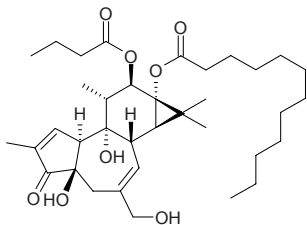
$C_{34}H_{52}O_8$  (588.79). [Source](#): BA DOU *Croton tiglium*. [Ref](#): 660.

**17183 Phorbol-12-benzoate-13-benzoate**

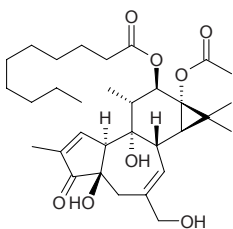
$C_{34}H_{36}O_8$  (572.66). [Source](#): BA DOU *Croton tiglium*. [Ref](#): 660.

**17184 Phorbol-12-butyrate-13-laurate**

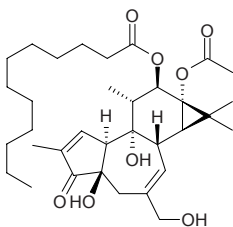
$C_{36}H_{56}O_8$  (616.84). [Source](#): BA DOU *Croton tiglium*. [Ref](#): 660.

**17185 Phorbol-12-caprate-13-acetate**

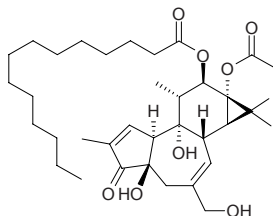
$C_{32}H_{48}O_8$  (560.73). [Source](#): BA DOU *Croton tiglium*. [Ref](#): 660.

**17186 Phorbol-12-laurate-13-acetate**

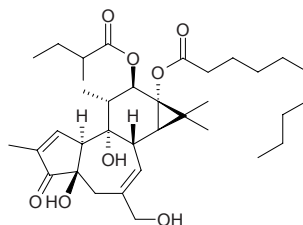
$C_{34}H_{52}O_8$  (588.79). [Source](#): BA DOU *Croton tiglium*. [Ref](#): 660.

**17187 Phorbol-4-methoxy-12-myristate-13-acetate**

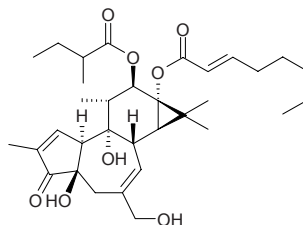
12-Tetradecanoylphorbol 13-acetate  $C_{36}H_{56}O_8$  (616.84). [Pharm](#): Carcinogen assistant; irritant; anti-HIV-1 (MT-4 cells, HIV-1-induced cytopathic effect inhibitor,  $IC_{100} = 0.00048 \mu\text{g/mL}$ ,  $CC_0 = 31.3 \mu\text{g/mL}$ , control DS8000,  $IC_{100} = 3.9 \mu\text{g/mL}$ ,  $CC_0 > 1000 \mu\text{g/mL}$ )<sup>[3921]</sup>; PKC activator (10ng/mL, activity rate = 96%)<sup>[3921]</sup>. [Source](#): BA DOU *Croton tiglium*. [Ref](#): 658, 660, 3921.

**17188 Phorbol-12-α-methylbutyrate-13-caprate**

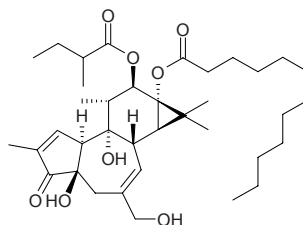
$C_{35}H_{54}O_8$  (602.82). [Source](#): BA DOU *Croton tiglium*. [Ref](#): 660.

**17189 Phorbol-12-α-methylbutyrate-13-caprylenate**

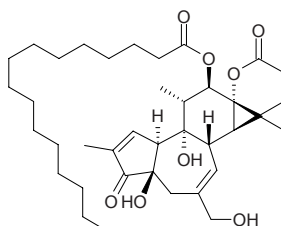
$C_{33}H_{48}O_8$  (572.75). [Source](#): BA DOU *Croton tiglium*. [Ref](#): 660.

**17190 Phorbol-12-α-methylbutyrate-13-laurate**

$C_{37}H_{58}O_8$  (630.87). [Source](#): BA DOU *Croton tiglium*. [Ref](#): 660.

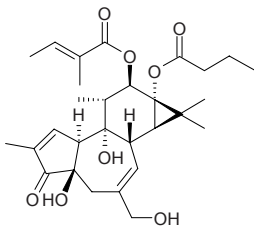
**17191 Phorbol-12-palmitate-13-acetate**

$C_{38}H_{60}O_8$  (644.90). [Source](#): BA DOU *Croton tiglium*. [Ref](#): 660.

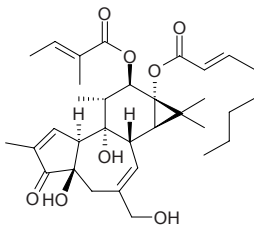


**17192 Phorbol-12-tiglate-13-butyrate**

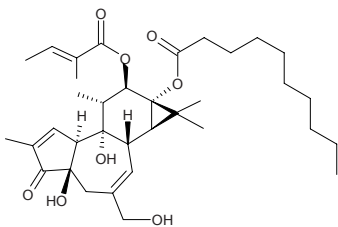
$C_{29}H_{40}O_8$  (516.64). Source: BA DOU *Croton tiglium*. Ref: 660.

**17193 Phorbol-12-tiglate-13-caprylate**

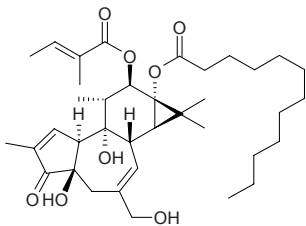
$C_{33}H_{46}O_8$  (570.73). Source: BA DOU *Croton tiglium*. Ref: 660.

**17194 Phorbol 12-tiglate 13-decanonate**

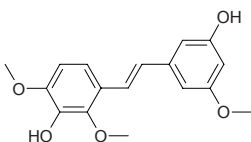
Phorbol-12-tiglate-13-caprate  $C_{35}H_{52}O_8$  (600.80). Resinoid,  $[\alpha]_D^{27} = +39^\circ$  ( $c = 0.78$ , dioxane). Pharm: Activates plasminogen; antineoplastic (mus P<sub>388</sub>, 60~250mg/kg). Source: BA DOU *Croton tiglium*. Ref: 658, 660, 661.

**17195 Phorbol-12-tiglate-13-laurate**

$C_{37}H_{56}O_8$  (628.85). Source: BA DOU *Croton tiglium*. Ref: 660.

**17196 Phoyunbene A**

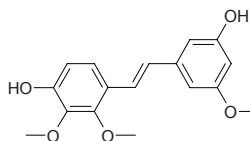
*trans*-3,3'-Dihydroxy-2',4',5-trimethoxystilbene  $C_{17}H_{18}O_5$  (302.33). White needles, mp 170~171°C. Pharm: NO production inhibitor ( $IC_{50} = 32.9\mu\text{mol/L}$  without cytotoxicity). Source: YUN NAN SHI XIAN TAO *Pholidota yunnanensis* (air-dried whole herb; yield = 0.0007%dw). Ref: 17.

**17197 Phoyunbene B**

*trans*-3,4'-Dihydroxy-2',3',5-trimethoxystilbene  $C_{17}H_{18}O_5$  (302.33). Oil.

Pharm: NO production inhibitor ( $IC_{50} = 7.5\mu\text{mol/L}$  without cytotoxicity).

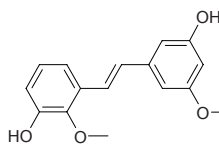
Source: YUN NAN SHI XIAN TAO *Pholidota yunnanensis* (air-dried whole herb; yield = 0.0037%dw). Ref: 17.

**17198 Phoyunbene C**

*trans*-3,3'-Dihydroxy-2',5-dimethoxystilbene  $C_{16}H_{16}O_4$  (272.30). Oil. Pharm:

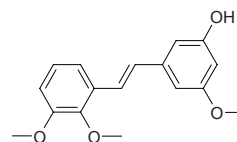
NO production inhibitor ( $IC_{50} = 49.0\mu\text{mol/L}$  without cytotoxicity). Source:

YUN NAN SHI XIAN TAO *Pholidota yunnanensis* (air-dried whole herb; yield = 0.0077%dw). Ref: 17.

**17199 Phoyunbene D**

*trans*-3-Hydroxy-2',3',5-trimethoxystilbene(6)  $C_{17}H_{18}O_4$  (286.33). Yellow

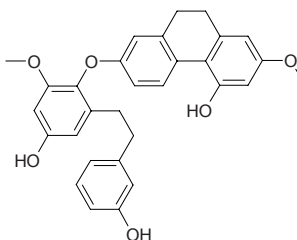
prisms, mp 128~129°C. Pharm: NO production inhibitor ( $IC_{50} = 87.3\mu\text{mol/L}$  without cytotoxicity). Source: YUN NAN SHI XIAN TAO *Pholidota yunnanensis* (air-dried whole herb; yield = 0.0005%dw). Ref: 17.

**17200 Phoyunnanin A**

7-[2-(3-Hydroxyphenethyl)-4-hydroxy-6-methoxyphenoxy]-4-hydroxy-2-methoxy-9,10-dihydrophenanthrene  $C_{30}H_{28}O_6$  (484.55). Amorphous powder.

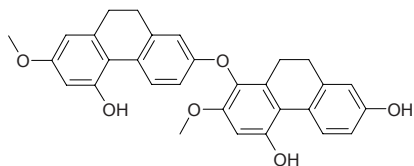
Pharm: NO production inhibitor (with cytotoxicity at the test concentration).

Source: YUN NAN SHI XIAN TAO *Pholidota yunnanensis* (air-dried whole herb; yield = 0.0007%dw). Ref: 17.

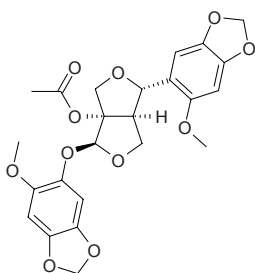


**17201 Phoyunnanin B**

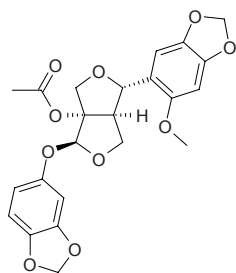
1-[(9,10-Dihydro-4-hydroxy-2-methoxy-7-phenanthrenyl)oxy]-4,7-dihydroxy-2-methoxy-9,10-dihydrophenanthrene C<sub>30</sub>H<sub>26</sub>O<sub>6</sub> (482.54). Amorphous powder. **Pharm:** NO production inhibitor (with cytotoxicity at the test concentration). **Source:** YUN NAN SHI XIAN TAO *Pholidota yunnanensis* (air-dried whole herb: yield = 0.0012%dw). **Ref:** 17.

**17202 Phrymarolin I**

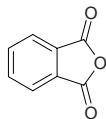
[38303-95-6] C<sub>24</sub>H<sub>24</sub>O<sub>11</sub> (488.46). **Pharm:** Synergist of pesticides. **Source:** TOU GU CAO *Speranskia tuberculata*, *Speranskia leptostachya* (in 1969, the compound was isolated from the plant)<sup>[5505]</sup>. **Ref:** 658, 5505.

**17203 Phrymarolin II**

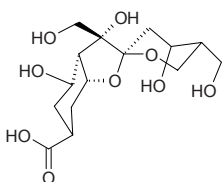
[23720-86-7] C<sub>23</sub>H<sub>22</sub>O<sub>10</sub> (458.43). mp 160–161°C. **Source:** LAO PO ZI ZHEN XIAN *Phryma leptostachya*. **Ref:** 6.

**17204 Phthalic anhydride**

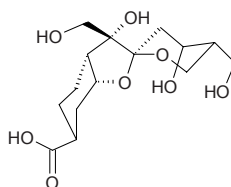
1,3-Phthalandione [85-44-9] C<sub>8</sub>H<sub>4</sub>O<sub>3</sub> (148.12). **Source:** DANG GUI *Angelica sinensis*. **Ref:** 2.

**17205 Phyllaemblic acid B**

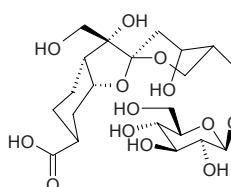
C<sub>15</sub>H<sub>24</sub>O<sub>9</sub> (348.35). Off-white amorphous powder, [α]<sub>D</sub><sup>17</sup> = +58.7° (c = 0.46, MeOH). **Source:** AN MO LE *Phyllanthus emblica* (root). **Ref:** 3065.

**17206 Phyllaemblic acid C**

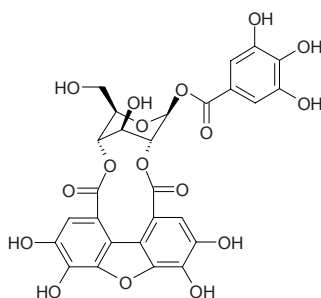
C<sub>15</sub>H<sub>24</sub>O<sub>8</sub> (332.35). Off-white amorphous powder, [α]<sub>D</sub><sup>17</sup> = +80.6° (c = 0.32, MeOH). **Source:** AN MO LE *Phyllanthus emblica* (root). **Ref:** 3065.

**17207 Phyllaemblicin D**

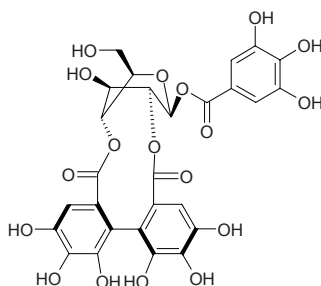
C<sub>21</sub>H<sub>34</sub>O<sub>13</sub> (494.50). Off-white amorphous powder, [α]<sub>D</sub><sup>17</sup> = +32.5° (c = 0.31, MeOH). **Source:** AN MO LE *Phyllanthus emblica* (root). **Ref:** 3065.

**17208 Phyllanemblinin A**

1-*O*-Galloyl-2,4-tetrahydroxydibenzofurancarboxyl-β-*D*-glucose C<sub>27</sub>H<sub>20</sub>O<sub>17</sub> (616.45). Off-white amorphous powder, [α]<sub>D</sub><sup>22</sup> = -103.0° (c = 0.21, MeOH). **Source:** AN MO LE *Phyllanthus emblica* (fruit juice). **Ref:** 3094.

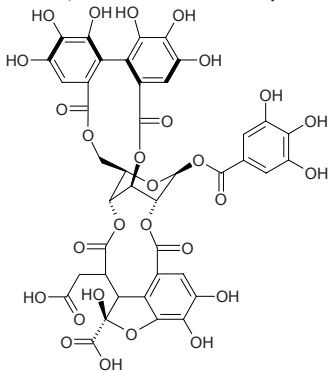
**17209 Phyllanemblinin B**

1-*O*-Galloyl-2,4-(*R*)-HHDP-β-*D*-glucose C<sub>27</sub>H<sub>22</sub>O<sub>18</sub> (634.47). White amorphous powder, [α]<sub>D</sub><sup>22</sup> = -39.5° (c = 0.18, MeOH). **Source:** AN MO LE *Phyllanthus emblica* (leaf, branch). **Ref:** 3094.

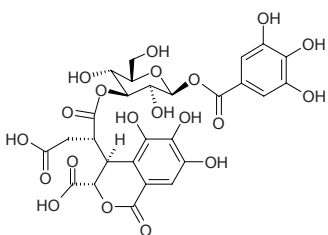


**17210 Phyllanemblinin C**

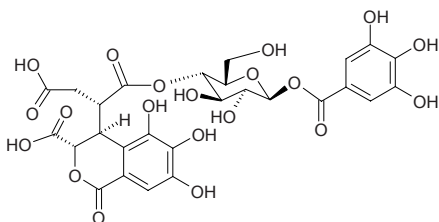
$C_{41}H_{30}O_{28}$  (970.68). Off-white amorphous powder,  $[\alpha]_D^{22} = -26.0^\circ$  ( $c = 0.13$ , MeOH). Source: AN MO LE *Phyllanthus emblica* (leaf, branch). Ref: 3094.

**17211 Phyllanemblinin D**

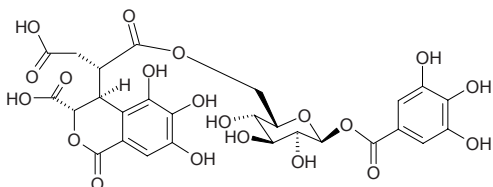
$C_{27}H_{26}O_{20}$  (670.5). White amorphous powder,  $[\alpha]_D^{22} = -7.9^\circ$  ( $c = 0.33$ , MeOH). Source: AN MO LE *Phyllanthus emblica* (leaf, branch). Ref: 3094.

**17212 Phyllanemblinin E**

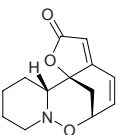
$C_{27}H_{26}O_{20}$  (670.5). White amorphous powder,  $[\alpha]_D^{22} = -8.3^\circ$  ( $c = 0.36$ , MeOH). Source: AN MO LE *Phyllanthus emblica* (leaf, branch). Ref: 3094.

**17213 Phyllanemblinin F**

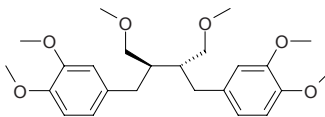
$C_{27}H_{26}O_{20}$  (670.5). White amorphous powder,  $[\alpha]_D^{22} = -18.3^\circ$  ( $c = 0.17$ , MeOH). Source: AN MO LE *Phyllanthus emblica* (leaf, branch). Ref: 3094.

**17214 ent-Phyllanthidine**

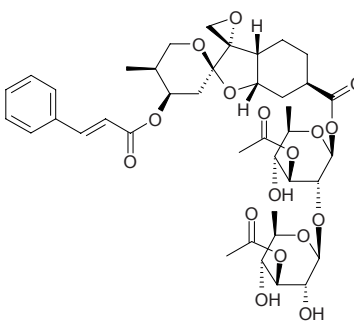
$C_{13}H_{15}NO_3$  (233.27). White needles (petroleum ether–acetone), mp 169–170°C,  $[\alpha]_D^{20} = +300^\circ$  ( $c = 0.1$ ,  $CHCl_3$ ). Source: YI YE QIU *Securinega suffruticosa* (branch leaf). Ref: 4818.

**17215 Phyllanthin**

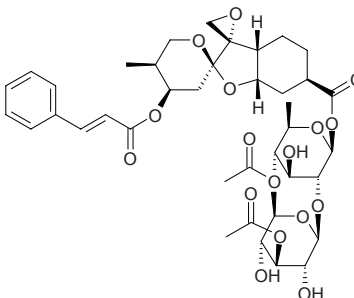
[10351-88-9]  $C_{24}H_{34}O_6$  (418.54). Pharm: Bitter principle. Source: ZHU ZI CAO *Phyllanthus niruri*. Ref: 658.

**17216 Phyllanthoside**

[63166-73-4]  $C_{40}H_{52}O_{17}$  (804.85). Amorphous solid, mp 125–127°C,  $[\alpha]_D^{22} = +16.9^\circ$  ( $c = 0.71$ ,  $CHCl_3$ ). Pharm: Antineoplastic (mus: melanotic carcinoma B16, 8mg/kg, cure rate = 12%, 4–16mg/kg, biotic prolonged rate = 62%–90%,  $P_{388}$  high activity; in stage of pre-clinic at NCI); antiviral (*in vivo*: mus genital, vagina administration, 1mg/mL tid, inhibits infection of herpes simplex virus 2; *in vitro*: cellculture, inhibits herpes simplex virus, vesicular stomatitis virus VSV, Gesak virus). Source: JIAN YE YE XIA ZHU *Phyllanthus acuminatus*. Ref: 3620, 3621, 3622.

**17217 Phyllanthostatin 1**

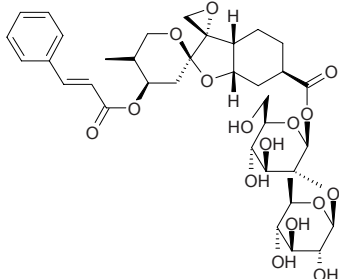
[82209-93-6]  $C_{40}H_{52}O_{17}$  (804.85). Amorphous solid, mp 125–126°C,  $[\alpha]_D^{26} = -3.6^\circ$  ( $c = 0.83$ ,  $CHCl_3$ ). Pharm: Antineoplastic (mus: melanotic carcinoma B16, 6–48mg/kg, biotic prolonged rate = 52%–90%,  $P_{388}$  high activity); antiviral (*in vivo*: mus genital, inhibits infection of herpes simplex virus 2; *in vitro*: cellculture, inhibits herpes simplex virus, vesicular stomatitis virus VSV, Gesak virus). Source: JIAN YE YE XIA ZHU *Phyllanthus acuminatus*. Ref: 3620, 3621, 3622.



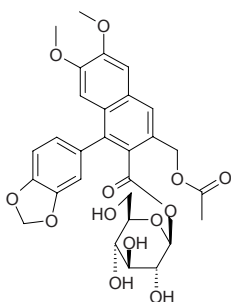


**17218 Phyllanthostatin 6**

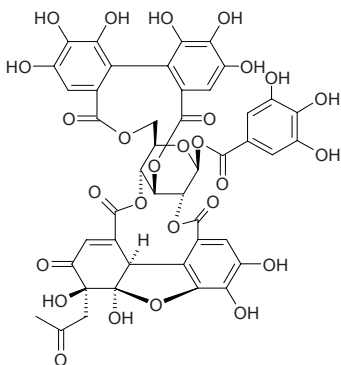
[132282-94-1] C<sub>36</sub>H<sub>48</sub>O<sub>16</sub> (736.77). Amorphous solid, mp 136–139°C,  $[\alpha]_D^{25} = +12.0^\circ$  ( $c = 0.25$ , CH<sub>2</sub>Cl<sub>2</sub>). **Pharm:** Cytotoxic (P<sub>388</sub>, ED<sub>50</sub> = 0.35 μg/mL). **Source:** JIAN YE YE XIA ZHU *Phyllanthus acuminatus*. **Ref:** 3700.

**17219 Phyllanthostatin A**

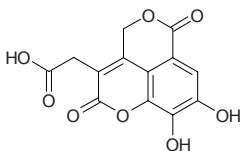
[119767-19-0] C<sub>29</sub>H<sub>30</sub>O<sub>13</sub> (586.56). **Pharm:** Inhibits activity of cells. **Source:** JIAN YE YE XIA ZHU *Phyllanthus acuminatus*. **Ref:** 658.

**17220 Phyllanthusiin D**

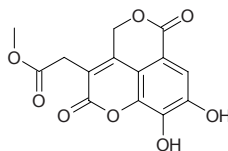
Acetonylgeraniin A [133145-19-4] C<sub>44</sub>H<sub>32</sub>O<sub>27</sub> (992.71). Colorless acicular crystals, mp 245–247°C (water–methanol). **Pharm:** Antiulcerative (mus, stomach ulcer induced by stress reaction of cold); increases blood pressure; reverses standing low blood pressure (conscious SHR rat, induced by hexamethonium); regulates cAMP level and hydrochloric acid in gastric juice. **Source:** LONG YAN YE *Euphoria longan* [Syn. *Dimocarpus longan*]. **Ref:** 900.

**17221 Phyllanthusiin E**

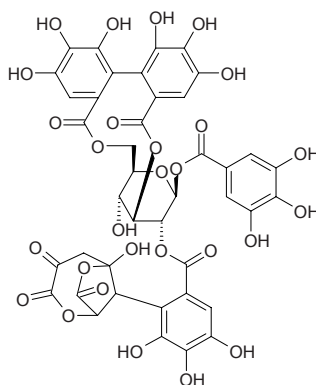
C<sub>13</sub>H<sub>8</sub>O<sub>8</sub> (292.20). White amorphous powder. **Source:** SHEN YE TIAN ZHU KUI *Pelargonium reniforme* (aerial parts). **Ref:** 3975.

**17222 Phyllanthusiin E methyl ester**

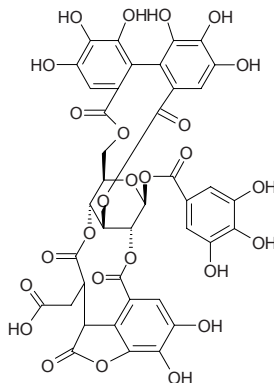
C<sub>14</sub>H<sub>10</sub>O<sub>8</sub> (306.23). White amorphous powder, mp 158–160°C. **Source:** SHEN YE TIAN ZHU KUI *Pelargonium reniforme* (aerial parts). **Ref:** 3975.

**17223 Phyllanthusiin G**

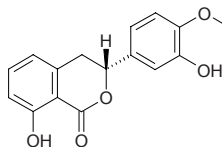
C<sub>41</sub>H<sub>30</sub>O<sub>28</sub> (970.68). Light yellow-brown amorphous powder, mp 270°C (dec, EtOH–H<sub>2</sub>O),  $[\alpha]_D^{25} = +23.1^\circ$  ( $c = 0.65$ , H<sub>2</sub>O–acetone). **Source:** YE XIA ZHU *Phyllanthus urinaria* (fresh whole herb). **Ref:** 4832.

**17224 Phyllanthusiin U**

1-*O*-Galloyl-3,6-*O*-HHDP-2,4-*O*-dehydroxymethyl-chebuloyl-β-*D*-glucopyranos C<sub>40</sub>H<sub>28</sub>O<sub>26</sub> (924.65). Yellowish amorphous powder, mp 270°C (dec),  $[\alpha]_D = -77^\circ$  ( $c = 0.6$ , MeOH). **Source:** YE XIA ZHU *Phyllanthus urinaria*. **Ref:** 680.

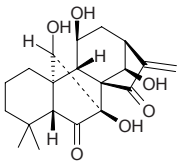
**17225 Phyllostulcin**

[480-46-6] C<sub>16</sub>H<sub>14</sub>O<sub>5</sub> (286.29). **Pharm:** Antifungal. **Source:** SE BO GE XIU QIU *Hydrangea macrophylla* var. *thunbergii* (in 1916, the compound was isolated from the plant)<sup>[5505]</sup>. **Ref:** 658, 5505.

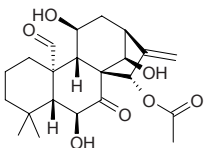


**17226 Phyllostachysin A**

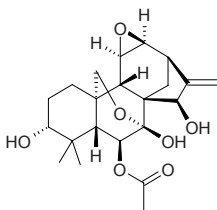
$C_{20}H_{26}O_6$  (362.43). mp 264–265°C,  $[\alpha]_D^{20} = -30.5^\circ$  ( $c = 1.25$ ,  $C_5H_5N$ ). Source: YE SUI XIANG CHA CAI *Isodon phyllostachys*. Ref: 4067.

**17227 Phyllostachysin B**

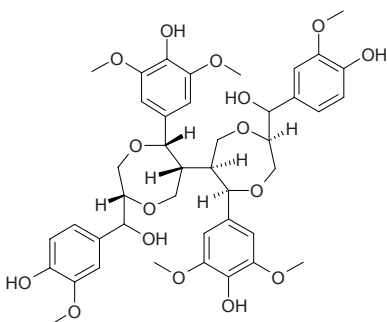
$C_{22}H_{30}O_7$  (406.48). mp 213–215°C. Source: YE SUI XIANG CHA CAI *Isodon phyllostachys*. Ref: 4067.

**17228 Phyllostachysin C**

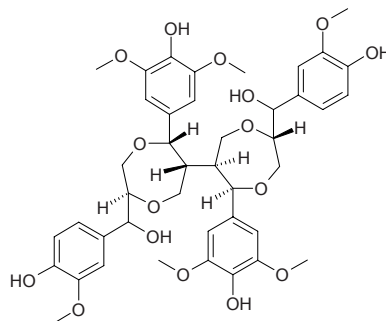
$C_{22}H_{30}O_7$  (406.48). mp 203–205°C,  $[\alpha]_D^{13} = -102.0^\circ$  ( $c = 0.55$ ,  $C_5H_5N$ ). Source: YE SUI XIANG CHA CAI *Isodon phyllostachys*. Ref: 4067.

**17229 Phyllostadimer A**

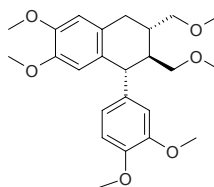
$C_{42}H_{50}O_{16}$  (810.86). Amorphous powder, mp 117–119°C,  $[\alpha]_D = -4.0^\circ$  ( $c = 1.0$ ,  $CHCl_3$ ). Pharm: Antioxidant (liposomal lipid peroxidation inhibitor, ADP/Fe<sup>2+</sup>-induced, IC<sub>50</sub> = 15 μmol/L, control Vitamin E, IC<sub>50</sub> = 235 μmol/L)<sup>[3475]</sup>. Source: MENG ZONG ZHU *Phyllostachys edulis* (bamboo stem). Ref: 3475.

**17230 Phyllostadimer B**

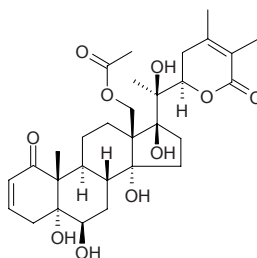
$C_{42}H_{50}O_{16}$  (810.86). Amorphous powder, mp 118–120°C,  $[\alpha]_D = +19.0^\circ$  ( $c = 1.0$ ,  $CHCl_3$ ). Source: MENG ZONG ZHU *Phyllostachys edulis* (bamboo stem). Ref: 3475.

**17231 Phytetralin**

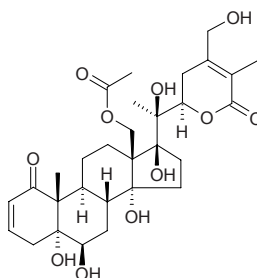
3',4',5,9,9'-Hexamethoxy-2,7'-cyclo lignan [123048-17-9]  $C_{24}H_{32}O_6$  (416.52). mp 110–111°C,  $[\alpha]_D^{30} = +17.5^\circ$  ( $c = 0.16$ ,  $CHCl_3$ ). Source: ZHU ZI CAO *Phyllanthus niruri*. Ref: 2676.

**17232 Physachenolide A**

$C_{30}H_{42}O_{10}$  (362.66). Colorless crystals, mp 204–205°C,  $[\alpha]_D^{22} = +17.58^\circ$  ( $c = 1.7$ , MeOH). Source: *Physalis chenopodifolia* (flower, stem and leaf). Ref: 4922.

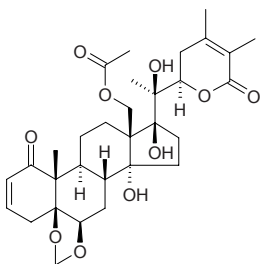
**17233 Physachenolide B**

$C_{30}H_{42}O_{11}$  (578.66). Colorless crystals (decompose on storage), mp 209–210°C,  $[\alpha]_D^{22} = +62.09^\circ$  ( $c = 1.53$ , MeOH). Source: *Physalis chenopodifolia* (flower, stem and leaf). Ref: 4922.

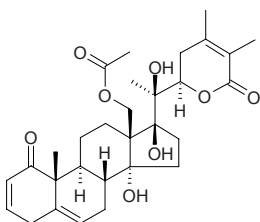


**17234 Physachenolide C**

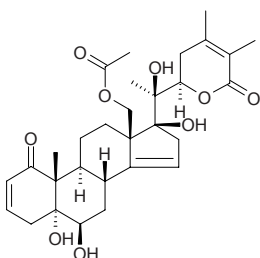
$C_{31}H_{42}O_{10}$  (574.67). Colorless crystals, mp 156–157°C. Source: *Physalis chenopodifolia* (flower, stem and leaf). Ref: 4922.

**17235 Physachenolide D**

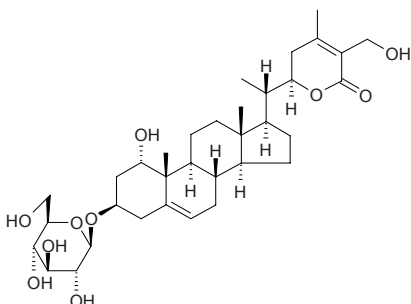
$C_{30}H_{40}O_8$  (528.65). Colorless crystals, mp 150–151°C,  $[\alpha]_D^{25} = +17.5^\circ$  ( $c = 2.05$ , MeOH). Source: *Physalis chenopodifolia* (flower, stem and leaf). Ref: 4922.

**17236 Physachenolide E**

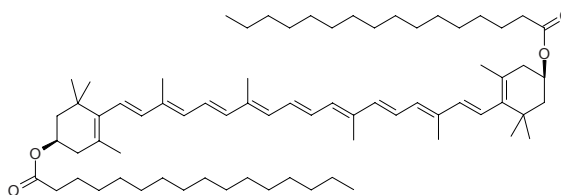
$C_{30}H_{40}O_9$  (544.65). Colorless crystals, mp 185–187°C,  $[\alpha]_D^{25} = +7.77^\circ$  ( $c = 0.9$ , MeOH). Source: *Physalis chenopodifolia* (flower, stem and leaf). Ref: 4922.

**17237 Physagulin D**

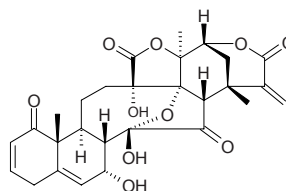
$C_{34}H_{52}O_{10}$  (620.79). Source: CUI MIAN SHUI QIE *Withania somnifera* (root). Ref: 4198.

**17238 Physalien**

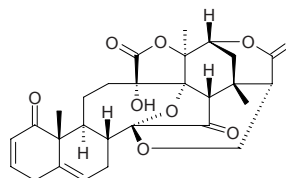
Zeaxanthin dipalmitate [144-67-2]  $C_{72}H_{116}O_4$  (1045.72). Pharm: Yellow pigment. Source: GOU QI ZI *Lycium chinense*, GUA JIN DENG GEN *Physalis alkekengi* var. *franchetii*, MAO SUAN JIANG *Physalis pubescens*, NING XIA GOU QI ZI *Lycium barbarum*. Ref: 2, 658.

**17239 Physalin A**

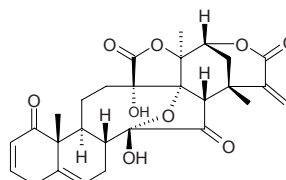
[23027-91-0]  $C_{28}H_{30}O_{10}$  (526.55). mp 266°C. Pharm: Cytotoxic (mus, myelocytic leukemia M1, 50 μmol/L); inducing cell differentiation activity (mus, myelocytic leukemia M1, 10 μmol/L, 50% M1 cells differentiate to macrophage). Source: SUAN JIANG *Physalis alkekengi*. Ref: 6, 1703.

**17240 Physalin B**

[23133-56-4]  $C_{28}H_{30}O_9$  (510.55). mp 250°C (acetone), 271°C (methanol). Pharm: Antineoplastic (mouse, leukemia 3PS, 300 mg/kg, T/C = 137%); cytotoxic (mouse lymph leukemia 9PS ED<sub>50</sub> = 0.01 μg/mL, 9KB ED<sub>50</sub> = 3.1 μg/mL; hmn leukemia cells HL-60, KG-1, CTV1, K562, APM1840); anti-inflammatory (modulator of cytokine network: inhibits generation of TNF-α, IL-6 and IL-12 in macrophages stimulated with LPS and IFNγ, IC<sub>50</sub> < 2 μg/mL; also reduces levels of TNF-α in the serum of LPS-treated mouse, 0.5 mg/mouse)<sup>[4416]</sup>. Source: SUAN JIANG *Physalis alkekengi*, KU ZHI *Physalis angulata*. Ref: 6, 1722, 1723, 1724, 4416.

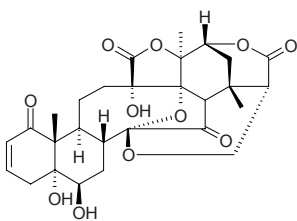
**17241 Physalin C**

[27503-33-9]  $C_{28}H_{30}O_9$  (510.55). mp 274–277°C. Source: SUAN JIANG *Physalis alkekengi*. Ref: 6.

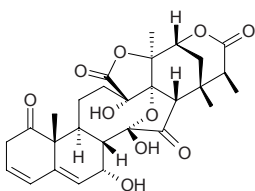


**17242 Physalin D**

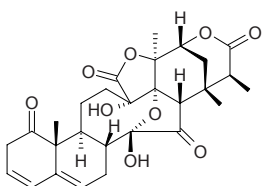
[54980-22-2] C<sub>28</sub>H<sub>32</sub>O<sub>11</sub> (544.56). Source: SUAN JIANG *Physalis alkekengi*. Ref: 6.

**17243 Physalin L**

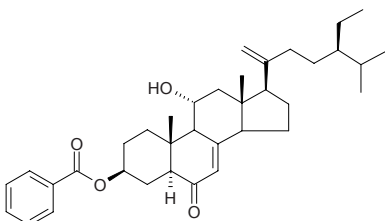
[113146-74-0] C<sub>28</sub>H<sub>32</sub>O<sub>10</sub> (528.56). Colorless prisms, mp 252~254°C (CHCl<sub>3</sub>:MeOH = 1:1), [α]<sub>D</sub> = -134° (c = 0.033, acetone). Pharm: Antineoplastic (50 μmol/L, inducing cell differentiation activity). Source: GUA JIN DENG *Physalis alkekengi* var. *franchetii*. Ref: 3623, 1703.

**17244 Physalin M**

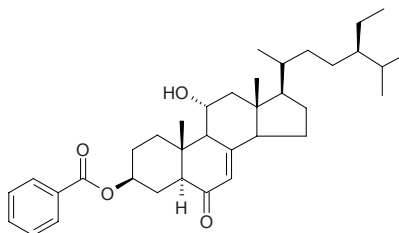
[117591-92-1] C<sub>28</sub>H<sub>32</sub>O<sub>9</sub> (512.56). Colorless prisms, mp 224~227°C, [α]<sub>D</sub><sup>24</sup> = -106° (c = 0.34, acetone). Pharm: Cytotoxic (HeLa, IC<sub>50</sub> = 27.6 μg/mL). Source: GUA JIN DENG *Physalis alkekengi* var. *franchetii*. Ref: 3735.

**17245 Physanol A**

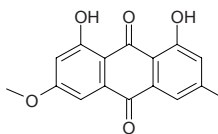
[54615-35-9] C<sub>36</sub>H<sub>50</sub>O<sub>4</sub> (546.80). Crystals (CHCl<sub>3</sub>-MeOH), mp 234~236°C, [α]<sub>D</sub> = +60° (CHCl<sub>3</sub>). Source: GUA JIN DENG *Physalis alkekengi* var. *franchetii*. Ref: 3205.

**17246 Physanol B**

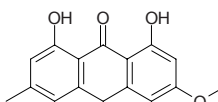
[54615-36-0] C<sub>36</sub>H<sub>52</sub>O<sub>4</sub> (548.81). Crystals (CHCl<sub>3</sub>-MeOH), mp 232~233°C. Source: GUA JIN DENG *Physalis alkekengi* var. *franchetii*. Ref: 3205.

**17247 Physcion**

Emodin-3-monomethyl ether [521-61-9] C<sub>16</sub>H<sub>12</sub>O<sub>5</sub> (284.27). mp 206~207°C. Pharm: Antibacterial (*Staphylococcus aureus*, *Bacillus coli*, *Bacillus pyocyaneus*, *Bacillus dysenteriae*); mutagen (*Salmonella* TA1535); cytochrome P-450 inhibitor (slows NADPH's reduction to P-450, influence liver's metabolism to drugs); antioxidant inactive (DPPH scavenger, IC<sub>50</sub> > 100 μg/mL; control Ascorbic acid, IC<sub>50</sub> = 3.9 μg/mL)<sup>[4711]</sup>; antioxidant inactive (DPPH scavenger assay)<sup>[5232]</sup>; cytotoxic inactive (MCF, HM02, HepG2)<sup>[5232]</sup>. Source: BA JI TIAN *Morinda officinalis*, DA HUANG *Rheum officinale*, DUN YE JUE MING *Cassia obtusifolia* (ripe seed: mean content = 0.0032%)<sup>[5508]</sup>, FAN XIE YE *Cassia angustifolia*, HE SHOU WU *Polygonum multiflorum* (dried tuberoid (raw): content scope of 8 batch samples = 0.004%~0.082%, mean content = 0.029%)<sup>[5508]</sup>, HE SHOU WU *Polygonum multiflorum* (dried tuberoid (preparing): content scope of 7 batch samples = 0.002%~0.095%, mean content = 0.067%)<sup>[5508]</sup>, HU ZHANG *Polygonum cuspidatum* (mean content = 0.228%)<sup>[5508]</sup>, JIAN YE FAN XIE YE *Cassia acutifolia*, JUE MING ZI *Cassia tora* (ripe seed: content = 0.0014%)<sup>[5508]</sup>, NI BO ER YANG TI *Rumex nepalensis*, NIU SHE CAO *Rumex dentatus* (root: mean content = 0.0249%)<sup>[5508]</sup>, NIU XI XI *Rumex patientia* (root: mean content = 0.0587%)<sup>[5508]</sup>, SUAN MO *Rumex acetosa* (root: mean content = 0.1133%)<sup>[5508]</sup>, TANG GU TE DA HUANG *Rheum tanguticum*, WANG JIANG NAN ZI *Cassia occidentalis* (ripe seed: content = 0.0068%)<sup>[5508]</sup>, YANG TI *Rumex japonicus* (root: mean content = 0.0754%)<sup>[5508]</sup>, YE JIAO TENG *Polygonum multiflorum*, ZANG BIAN DA HUANG *Rheum emodi* [Syn. *Rheum australe*] (root: yield = 0.23%dw)<sup>[4711]</sup>, ZHANG YE DA HUANG *Rheum palmatum*. Ref: 2, 6, 608, 660, 4711, 5232, 5501, 5508.

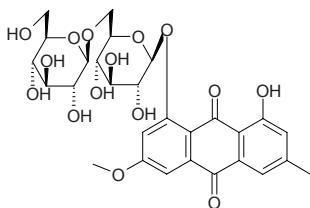
**17248 Physcion anthrone**

C<sub>16</sub>H<sub>14</sub>O<sub>4</sub> (270.29). Source: SUAN MO *Rumex acetosa*, Ref: 3206.

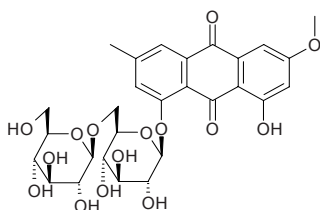


**17249 Physciondiglucoside**

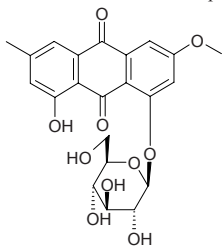
[84268-38-2] C<sub>28</sub>H<sub>32</sub>O<sub>15</sub> (608.56). Nacarat crystals (ethanol), mp 358~360°C, mp 221~223°C. **Pharm:** Laxative (mus, ori). **Source:** ZHANG YE DA HUANG *Rheum palmatum*. **Ref:** 900.

**17250 Physcion-8-O-β-D-gentiobioside**

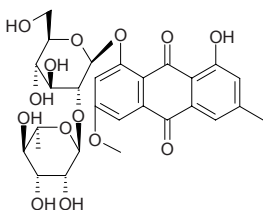
[84268-38-2] C<sub>28</sub>H<sub>32</sub>O<sub>15</sub> (608.56). **Source:** DA HUANG *Rheum officinale*, JUE MING ZI *Cassia tora*, TANG GU TE DA HUANG *Rheum tanguticum*, ZANG BIAN DA HUANG *Rheum emodi* [Syn. *Rheum australe*] (root: yield = 0.083%dw)<sup>[4711]</sup>, ZHANG YE DA HUANG *Rheum palmatum*, ZHOU ZHI SHU LI *Rhamnus virgata*. **Ref:** 2, 658, 660, 4711.

**17251 Physcion-8-O-β-D-glucopyranoside**

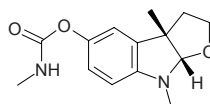
C<sub>22</sub>H<sub>22</sub>O<sub>10</sub> (446.42). **Pharm:** Laxative; antioxidant inactive (DPPH scavenger, IC<sub>50</sub> > 100μg/mL; control Ascorbic acid, IC<sub>50</sub> = 3.9μg/mL)<sup>[4711]</sup>. **Source:** BO XI SHU LI *Rhamnus purshiana*, DA HUANG *Rheum officinale*, HU ZHANG *Polygonum cuspidatum*, TANG GU TE DA HUANG *Rheum tanguticum*, TIAN SHAN DA HUANG *Rheum wittrocki*, ZANG BIAN DA HUANG *Rheum emodi* [Syn. *Rheum australe*] (root: yield = 0.53%dw)<sup>[4711]</sup>, ZHANG YE DA HUANG *Rheum palmatum*. **Ref:** 608, 658, 660, 4711.

**17252 Physcion-8-O-rhamnosyl-(1→2)-glucoside**

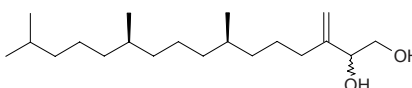
[132396-79-3] C<sub>28</sub>H<sub>32</sub>O<sub>14</sub> (592.56). Orange-yellow needles (CH<sub>3</sub>OH), mp 174~176°C. **Pharm:** Cytotoxic (hmn hepatoma cell PLC/PRF/5, ED<sub>50</sub> = 2.50μg/mL, KB cell, ED<sub>50</sub> = 3.58μg/mL). **Source:** TAI WAN SHU LI *Rhamnus formosana*. **Ref:** 3624, 3625.

**17253 Physoveneine**

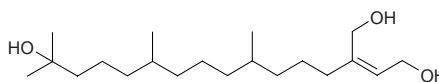
[6091-05-5] C<sub>14</sub>H<sub>18</sub>N<sub>2</sub>O<sub>3</sub> (262.31). mp 123°C, [α]<sub>D</sub><sup>22</sup> = -92° (EtOH). **Pharm:** Cholinesterase inhibitor; similar action with physostigmine; myotic agent (powerful). **Source:** DU BIAN DOU *Physostigma venenosum*. **Ref:** 658, 1521.

**17254 Phytene-1,2-diol**

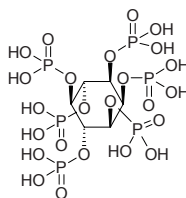
C<sub>20</sub>H<sub>40</sub>O<sub>2</sub> (312.54). Colorless oil. **Source:** HUANG HUA HAO *Artemisia annua* (seed). **Ref:** 3435.

**17255 2Z-Phytene-1,15,20-triol**

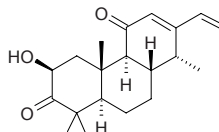
C<sub>20</sub>H<sub>40</sub>O<sub>3</sub> (328.54). Colorless oil, [α]<sub>D</sub><sup>20</sup> = -7.1° (c = 0.2, CHCl<sub>3</sub>). **Source:** *Tylimanthus renifolius*. **Ref:** 3491.

**17256 Phytic acid**

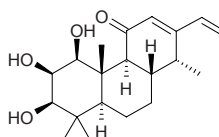
Myo-inositol hexaphosphate [83-86-3] C<sub>6</sub>H<sub>18</sub>O<sub>24</sub>P<sub>6</sub> (660.04). **Source:** SHAN YAO *Dioscorea batatas* [Syn. *Dioscorea opposita*]. **Ref:** 2.

**17257 Phytocassane A**

[166547-21-3] C<sub>20</sub>H<sub>28</sub>O<sub>3</sub> (316.44). Colorless mucus. **Pharm:** Antifungal (rice pathogenic fungus *Magnaporthe grisea*, ED<sub>50</sub> = 20μg/mL). **Source:** DAO CAO *Oryza sativa*. **Ref:** 1169.

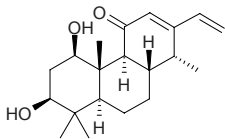
**17258 Phytocassane B**

[166547-22-4] C<sub>20</sub>H<sub>30</sub>O<sub>4</sub> (334.46). Colorless glue. **Pharm:** Antifungal (rice pathogenic fungus *Magnaporthe grisea*, inhibits sporular growth, ED<sub>50</sub> = 4μg/mL). **Source:** DAO CAO *Oryza sativa*. **Ref:** 1169.

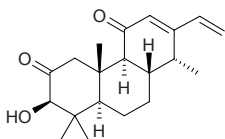


**17259 Phytocassane C**

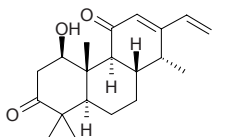
[166547-23-5] C<sub>20</sub>H<sub>30</sub>O<sub>3</sub> (318.46). Colorless glue. **Pharm:** Antifungal (rice pathogenic fungus *Magnaporthe grisea*, inhibits sporular growth, ED<sub>50</sub> = 7 μg/mL). **Source:** DAO CAO *Oryza sativa*. **Ref:** 1169.

**17260 Phytocassane D**

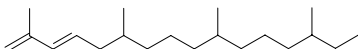
[166547-24-6] C<sub>20</sub>H<sub>28</sub>O<sub>3</sub> (316.44). Colorless glue. **Pharm:** Antifungal (rice pathogenic fungus *Magnaporthe grisea*, inhibits sporular growth, ED<sub>50</sub> = 25 μg/mL). **Source:** DAO CAO *Oryza sativa*. **Ref:** 1169.

**17261 Phytocassane E**

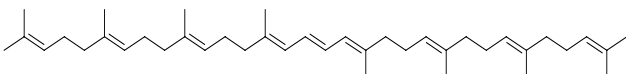
[181524-78-7] C<sub>20</sub>H<sub>28</sub>O<sub>3</sub> (316.44). Glue. **Pharm:** Antifungal (rice pathogenic fungus *Magnaporthe grisea*, inhibits sporular growth, ED<sub>50</sub> = 6 μg/mL). **Source:** DAO CAO *Oryza sativa*. **Ref:** 1169.

**17262 trans-1,3-Phytodiene**

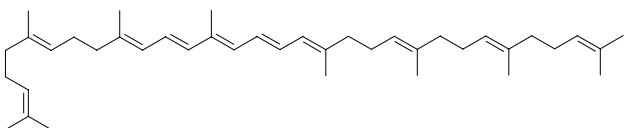
C<sub>20</sub>H<sub>38</sub> (278.53). **Source:** FU PING *Lemna minor*. **Ref:** 3207.

**17263 Phytoene**

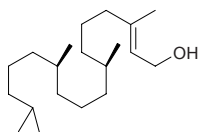
7,7',8,8',11,11',12,12'-Octahydrolycopene [540-04-5] C<sub>40</sub>H<sub>64</sub> (544.96). Viscous oil with strong UV fluorescence. **Source:** FAN MU GUA *Carica papaya*, WAN SHOU JU *Tagetes erecta*, ZANG HONG HUA *Crocus sativus*, *Mycobacterium phlei*. **Ref:** 660, 1521.

**17264 Phytofluene**

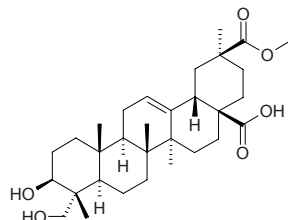
7,7',8,8',11,12-Hexahydrolycopene [540-05-6] C<sub>40</sub>H<sub>62</sub> (542.94). Pale-yellow oil with brilliant green fluorescence. **Source:** FAN MU GUA *Carica papaya*, HU LUO BO *Daucus carota* var. *sativa*, JU YUAN *Citrus medica*, PI PA *Eriobotrya japonica*, SAN SE JIN *Viola tricolor*, WAN SHOU JU *Tagetes erecta*, XI GUA *Citrullus vulgaris* [Syn. *Citrullus lanatus*], YANG TAO *Averrhoa carambola*, ZANG HONG HUA *Crocus sativus*, *Neurospora* spp. **Ref:** 6, 660, 1521.

**17265 Phytol**

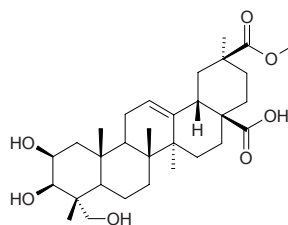
(E)-Phytol [150-86-7] C<sub>20</sub>H<sub>40</sub>O (296.54). bp 145°C/0.03mmHg. **Pharm:** Cytotoxic (HeLa, IC<sub>50</sub> = (13.8±1.3) μg/mL, control Camptothecin, IC<sub>50</sub> = 0.5 μmol/mL; HL-60, IC<sub>50</sub> = (16.4±2.0) μg/mL, Camptothecin, IC<sub>50</sub> = 0.1 μmol/mL; WI-38, IC<sub>50</sub> = (13.8±1.7) μg/mL, Camptothecin, IC<sub>50</sub> = 0.6 μmol/mL)<sup>[3807]</sup>; raw material of synthesis of vitamins K<sub>1</sub> and E. **Source:** BAI MEI HUA *Prunus mume* (flower: yield = 0.0009%fw)<sup>[4641]</sup>, HAI FENG TENG *Piper kadsura* [Syn. *Piper futokadsura*], QUN DAI CAI *Undaria pinnatifida*, YUAN CAN SHA *Bombyx mori*, ZAN BI XI BA DOU *Croton zambesicus* (leaf). **Ref:** 6, 658, 2537, 3807, 4641.

**17266 Phytolaccagenic acid**

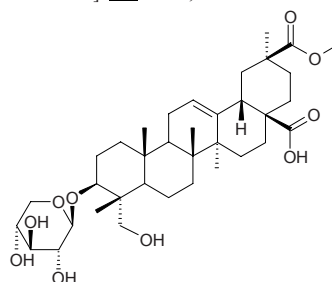
Phytolaccinic acid [54928-05-1] C<sub>31</sub>H<sub>48</sub>O<sub>6</sub> (516.72). Crystals (EtOAc), mp 295–299°C, [α]<sub>D</sub><sup>25</sup> = –66.5° (c = 1, MeOH). **Source:** MEI SHANG LU *Phytolacca americana* [Syn. *Phytolacca decandra*]. **Ref:** 3208.

**17267 Phytolaccagenin**

[1802-12-6] C<sub>31</sub>H<sub>48</sub>O<sub>7</sub> (532.72). Crystals (MeOH), mp 317–318°C (dec), [α]<sub>D</sub><sup>26</sup> = +113.7° (c = 0.89, MeOH). **Pharm:** Anti-inflammatory. **Source:** MEI SHANG LU *Phytolacca americana* [Syn. *Phytolacca decandra*], *Phytolacca* spp. **Ref:** 660, 1521.

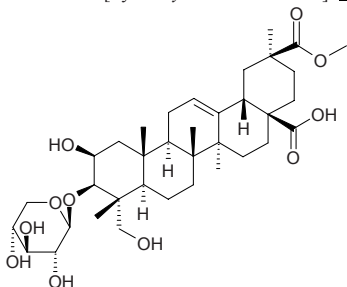
**17268 Phytolaccoside A**

[65608-00-6] C<sub>36</sub>H<sub>56</sub>O<sub>10</sub> (648.84). mp 273–274°C, [α]<sub>D</sub> = +56.5° (c = 0.14, MeOH). **Source:** MEI SHANG LU *Phytolacca americana* [Syn. *Phytolacca decandra*]. **Ref:** 3106, 3108.

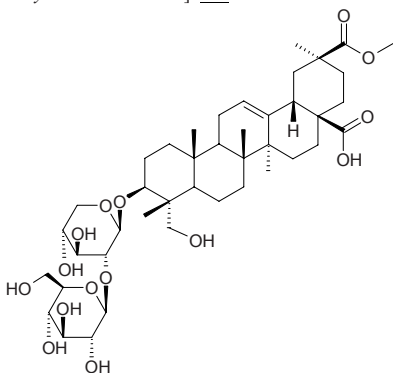


**17269 Phytolaccoside B**

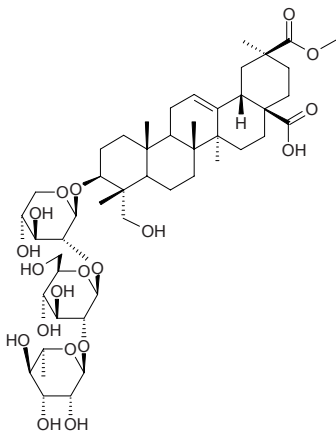
Phytolaccasaponin G [60820-94-2]  $C_{36}H_{56}O_{11}$  (664.84). **Pharm:** Ectoparasiticide; molluscicide. **Source:** MEI SHANG LU *Phytolacca americana* [Syn. *Phytolacca decandra*]. **Ref:** 658, 1521.

**17270 Phytolaccoside D<sub>2</sub>**

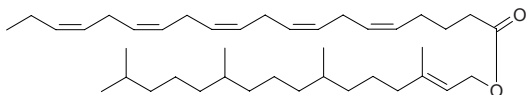
$C_{42}H_{66}O_{15}$  (810.99). **Source:** MEI SHANG LU *Phytolacca americana* [Syn. *Phytolacca decandra*]. **Ref:** 3108.

**17271 Phytolaccoside F**

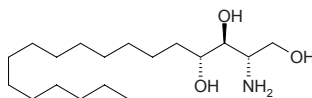
$C_{48}H_{76}O_{19}$  (957.13). **Source:** MEI SHANG LU *Phytolacca americana* [Syn. *Phytolacca decandra*]. **Ref:** 3108.

**17272 (E)-Phytol(5Z,8Z,11Z,14Z,17Z)-eicosapentaenoate**

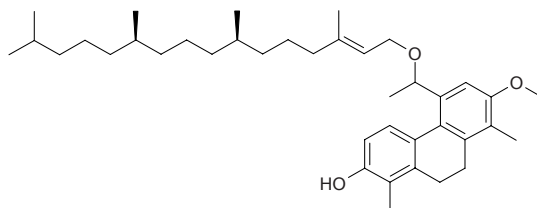
[94035-77-5]  $C_{40}H_{68}O_2$  (580.99). Colorless oil. **Pharm:** Antibacterial (*Staphylococcus aureus*, *Staphylococcus epidermidis* and *Salmonella typhimurium*, inhibits markedly). **Source:** TUO YUAN ZHOU XING ZAO *Navicula delognei* f. *elliptica*. **Ref:** 3736.

**17273 Phytosphingosine**

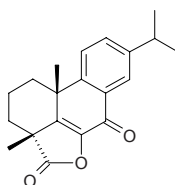
[15639-50-6]  $C_{18}H_{39}NO_3$  (317.52). mp 108°C,  $[\alpha]_D^{28} = -14.1^\circ$  (CHCl<sub>3</sub>). **Source:** HONG YUAN CENG KONG JUN *Fomitopsis pinicola* [Syn. *Fomes pinicola*; *Polyporus pinicola*]. **Ref:** 660, 1521.

**17274 5-(1-Phytoxy-ethyl)-2-hydroxy-7-methoxy-1,8-dimethyl-9,10-dihydrophenanthrene**

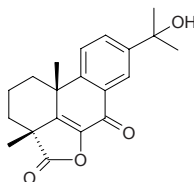
$C_{39}H_{60}O_3$  (576.91). **Source:** JIAN DENG XIN CAO *Juncus acutus*. **Ref:** 1965.

**17275 Picelactone A**

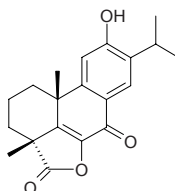
$C_{20}H_{22}O_3$  (310.40). Amorphous solid,  $[\alpha]_D^{20} = +14.5^\circ$  ( $c = 0.45$ , CHCl<sub>3</sub>). **Source:** TAI WAN YUN SHAN *Picea morrisonicola* (heartwood). **Ref:** 4054.

**17276 Picelactone B**

$C_{20}H_{22}O_4$  (326.40). Amorphous solid,  $[\alpha]_D^{19} = +23.5^\circ$  ( $c = 0.25$ , CHCl<sub>3</sub>). **Source:** TAI WAN YUN SHAN *Picea morrisonicola* (heartwood). **Ref:** 4054.

**17277 Picelactone C**

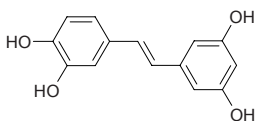
$C_{20}H_{22}O_4$  (326.40). Amorphous solid,  $[\alpha]_D^{26} = +20.1^\circ$  ( $c = 0.17$ , CHCl<sub>3</sub>). **Source:** TAI WAN YUN SHAN *Picea morrisonicola* (heartwood). **Ref:** 4054.



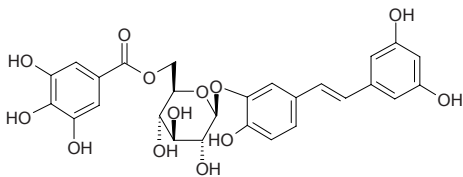


**17278 E-Piceatannol**

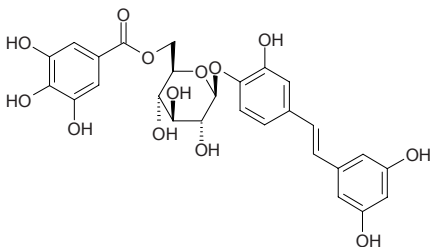
3,5,3',4'-Tetrahydroxystilbene [10083-24-6] C<sub>14</sub>H<sub>12</sub>O<sub>4</sub> (244.25). Yellowish crystals, mp 229°C; 222~223°C; needles (EtOAc-hexane), mp 231~232°C, 216°C. **Pharm:** Antineoplastic; antifungal; coronary vasodilator (gpg, ED<sub>50</sub> = 13.0 μg/heart); antihistamine (inhibits histamine release, rat); antioxidant (superoxide anion scavenger, inhibits lipid peroxidation); antioxidant (superoxide anion scavenger (IC<sub>50</sub> = (4.66±0.14) μmol/L, positive control (+)-Catechin, IC<sub>50</sub> = (3.67±0.14) μmol/L)<sup>[4514]</sup>; aromatic L-amino-acid decarboxylase inhibitor (IC<sub>50</sub> = 5 μmol/L); lipoxygenase inhibitor (10 μmol/L, LTC<sub>4</sub> in leukemia basophiles, InRt = 100%, PGD<sub>2</sub> formation in leukemia basophiles, InRt = 75%); monoamine oxidase A inhibitor; antihypertensive (rat); plant growth inhibitor; supertoxic agent. **Source:** CHANG HUA BAN KE YA SHU *Vouacapoua macropetala*, FANG JI YE BA QIA *Smilax menispermoidea*, MAO CI JIN JI ER *Caragana tibetica* (stem), TIAN SHAN DA HUANG *Rheum wittrockii*, OU ZHOU YUN SHAN *Picea abies*, *Pericopsis angolensis*, SI CHUAN CHAN DA HUANG *Rheum* sp.<sup>[2969]</sup>, YU DA HUANG *Rheum* sp.<sup>[4064]</sup>. **Ref:** 609, 900, 1521, 2834, 2969, 4064, 4514.

**17279 Piceatannol 3'-O-β-D-(6''-O-galloyl)glucopyranoside**

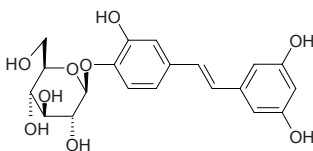
C<sub>27</sub>H<sub>26</sub>O<sub>13</sub> (558.50). **Source:** YU DA HUANG *Rheum* sp.<sup>[4064]</sup>. **Ref:** 2834, 4064.

**17280 Piceatannol 4'-O-(6''-O-galloyl)β-D-glucopyranoside**

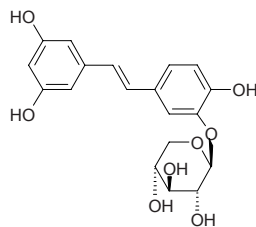
C<sub>27</sub>H<sub>26</sub>O<sub>13</sub> (558.50). **Source:** SI CHUAN CHAN DA HUANG *Rheum* sp.<sup>[2969]</sup>. **Ref:** 2969.

**17281 Piceatannol 4'-O-β-D-glucopyranoside**

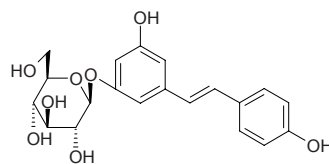
C<sub>20</sub>H<sub>22</sub>O<sub>9</sub> (406.39). **Source:** SI CHUAN CHAN DA HUANG *Rheum* sp.<sup>[2969]</sup>. **Ref:** 2969.

**17282 Piceatannol 3'-O-β-D-xylopyranoside**

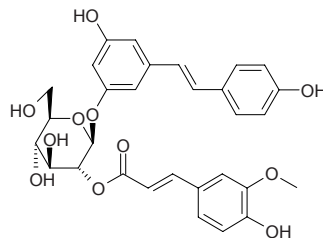
C<sub>19</sub>H<sub>20</sub>O<sub>8</sub> (376.37). **Source:** YU DA HUANG *Rheum* sp.<sup>[4064]</sup>. **Ref:** 2834, 4064.

**17283 Piceid**

Polydatin; Resveraltrol 3-O-β-D-glucopyranoside [27208-80-6] C<sub>20</sub>H<sub>22</sub>O<sub>8</sub> (390.39). White needles, mp 219~223°C (220~225°C, 225~226°C, 229~231°C), [α]<sub>D</sub><sup>25</sup> = -59.9° (c = 0.25, MeOH); [α]<sub>D</sub><sup>25</sup> = -65.26°, [α]<sub>D</sub><sup>20</sup> = -61.0° (c = 0.02, CH<sub>3</sub>OH). **Pharm:** Antibacterial (*Staphylococcus aureus*, *Diplococcus pneumoniae*); antitussive (mus, cat); vasodilator (rat aortic rings, inhibits phenylephrine-induced vasoconstriction in the presences of indomethacin and N<sup>o</sup>-L-nitroarginine (L-NA) at 10 μmol/L Ach, 10 μmol/L, relaxation = (65±2)%, control SNP, relaxation = (109±5)%)<sup>[4086]</sup>; platelet aggregation inhibitor (2.5 μg/mL collagen-induced, IC<sub>50</sub> = (41.8±2.2) μmol/L, p < 0.01, control *trans*-Resveratrol, IC<sub>50</sub> = (11.6±2.1) μmol/L, p < 0.01; 6 μmol/L ADP-induced, IC<sub>50</sub> = (91.9±6.7) μmol/L, p < 0.01, *trans*-Resveratrol, IC<sub>50</sub> = (17.8±3.3) μmol/L, p < 0.01)<sup>[5094]</sup>; antioxidant (DPPH radical scavenger, IC<sub>50</sub> = 82.4 μmol/L, control Vitamin E, IC<sub>50</sub> = 20.7 μmol/L, control BHT, IC<sub>50</sub> = 12.6 μmol/L)<sup>[3452]</sup>; antioxidant (superoxide anion scavenger, 100 μmol/L, InRt < 50%, control Vitamin E, 100 μmol/L, InRt < 50%, control BHT, IC<sub>50</sub> = 24.6 μmol/L)<sup>[3452]</sup>; antioxidant (lipid peroxidation inhibitor, IC<sub>50</sub> = 67.2 μmol/L, control Vitamin E, IC<sub>50</sub> = 5.3 μmol/L, control BHT, IC<sub>50</sub> = 1.0 μmol/L)<sup>[3452]</sup>. **Source:** HE SHOU WU *Polygonum multiflorum*, HU ZHANG *Polygonum cuspidatum* (rhizome: content scope of 15 origins = 1.20%~3.63%, mean content = 2.23%)<sup>[5508]</sup>, MAO MAI LIAO *Pleuropterus ciliinervis*, QING MEI *Vatica rassak* (stem cortex), SA HA LIN YUN SHAN *Picea glehnii*, TANG GU TE DA HUANG *Rheum tanguticum*, WEI JING BAI HE *Schoenocaulon officinale* (rhizome), YI HUA *Lysidice rhodostegia* (root), ZHANG YE DA HUANG *Rheum palmatum*, *Rheum palaestinum* (aerial parts), *Eucalyptus* sp. **Ref:** 2, 658, 660, 3452, 3950, 4086, 4186, 4210, 5094, 5501, 5508.

**17284 Piceid 2'-O-E-ferulate**

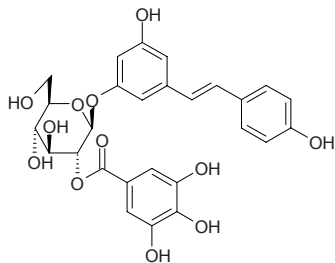
C<sub>30</sub>H<sub>30</sub>O<sub>11</sub> (566.57). White amorphous powder, [α]<sub>D</sub> = -13° (c = 0.20, MeOH). **Source:** *Upuna borneensis* (stem). **Ref:** 3834.



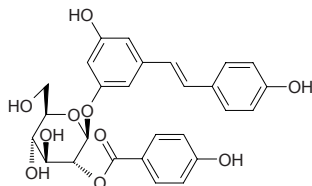


**17285 Piccid-2''-O-gallate**

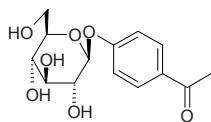
$C_{27}H_{26}O_{12}$  (542.50). White amorphous powder (MeOH-H<sub>2</sub>O),  $[\alpha]_D = -37.0^\circ$  ( $c = 0.22$ , MeOH). **Pharm:** Antioxidant (DPPH radical scavenger,  $IC_{50} = 16.5\mu\text{mol/L}$ , control Vitamin E,  $IC_{50} = 20.7\mu\text{mol/L}$ , control BHT,  $IC_{50} = 12.6\mu\text{mol/L}$ )<sup>[3452]</sup>; antioxidant (superoxide anion scavenger,  $IC_{50} = 23.9\mu\text{mol/L}$ , control Vitamin E,  $100\mu\text{mol/L}$ , InRt < 50%, control BHT,  $IC_{50} = 24.6\mu\text{mol/L}$ )<sup>[3452]</sup>; antioxidant (lipid peroxidation inhibitor,  $IC_{50} = 4.3\mu\text{mol/L}$ , control Vitamin E,  $IC_{50} = 5.3\mu\text{mol/L}$ , control BHT,  $IC_{50} = 1.0\mu\text{mol/L}$ )<sup>[3452]</sup>. **Source:** MAO MAI LIAO *Pleuropterus ciliinervis*. **Ref:** 3452.

**17286 Piccid 2'-O-p-hydroxybenzoate**

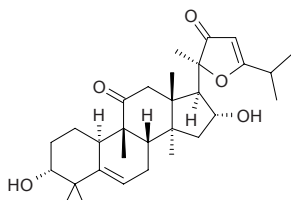
$C_{27}H_{26}O_{10}$  (510.50). White amorphous powder,  $[\alpha]_D = -9^\circ$  ( $c = 0.10$ , MeOH). **Source:** *Upuna borneensis* (stem). **Ref:** 3834.

**17287 Picein**

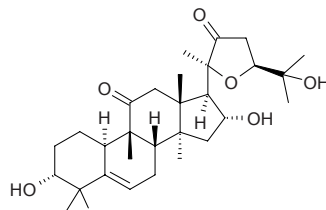
Piceoside [530-14-3]  $C_{14}H_{18}O_7$  (298.30). Crystals +1H<sub>2</sub>O (H<sub>2</sub>O), mp 195°C,  $[\alpha]_D = -88.9^\circ$  (H<sub>2</sub>O). **Pharm:** Antihepatotoxin (rat, liver toxicosis induced by CCl<sub>4</sub> and GaIN, weak activity); antioxidant inactive (hydroxyl radical scavenger,  $IC_{50} > 400\mu\text{mol/L}$ , control Ascorbic acid,  $IC_{50} = 51.8\mu\text{mol/L}$ , superoxide anion radical scavenger,  $IC_{50} > 400\mu\text{mol/L}$ , control Ascorbic acid,  $IC_{50} = 86.2\mu\text{mol/L}$ )<sup>[4289]</sup>. **Source:** HU HUANG LIAN *Picrorhiza kurroa*, LIU ZHI *Salix babylonica*, XI ZANG HU HUANG LIAN *Picrorhiza scrophulariiflora* (root), *Amelanchier* spp., *Picea* spp. **Ref:** 1521, 3100, 4289.

**17288 Picfeltarraegenin I**

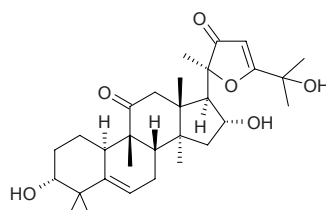
[82145-63-9]  $C_{30}H_{44}O_5$  (484.68). Crystals, mp 209~210°C,  $[\alpha]_D = +158.9^\circ$  ( $c = 1$ , MeOH). **Source:** KU XUAN SHEN *Picria felterrae*. **Ref:** 3209.

**17289 Picfeltarraegenin II**

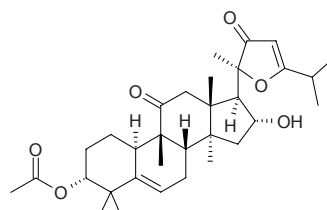
[82145-62-8]  $C_{30}H_{46}O_6$  (502.70). **Source:** KU XUAN SHEN *Picria felterrae*. **Ref:** 3210, 3211.

**17290 Picfeltarraegenin III**

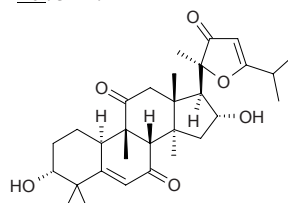
[80818-76-4]  $C_{30}H_{44}O_6$  (500.68). **Source:** KU XUAN SHEN *Picria felterrae*. **Ref:** 3210.

**17291 Picfeltarraegenin IV**

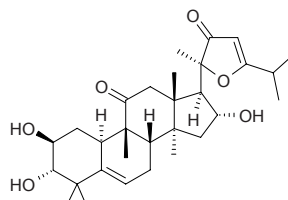
[82145-61-7]  $C_{32}H_{46}O_6$  (526.72). **Source:** KU XUAN SHEN *Picria felterrae*. **Ref:** 3354.

**17292 Picfeltarraegenin V**

[82452-27-5]  $C_{30}H_{42}O_6$  (498.67). **Source:** KU XUAN SHEN *Picria felterrae*. **Ref:** 3212.

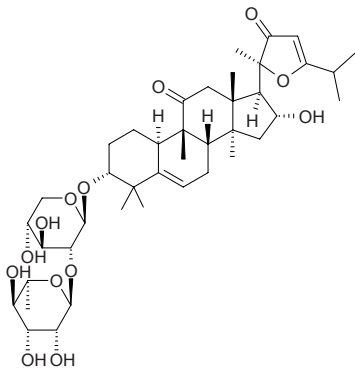
**17293 Picfeltarraegenin VI**

[82452-26-4]  $C_{30}H_{44}O_6$  (500.68). **Source:** KU XUAN SHEN *Picria felterrae*. **Ref:** 3212.

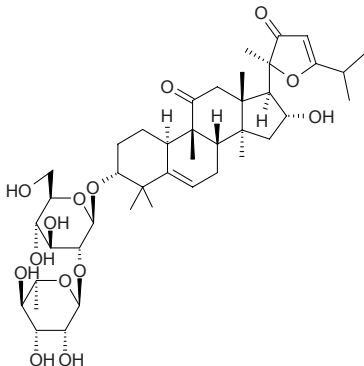


**17294 Picfeltarraenin IA**

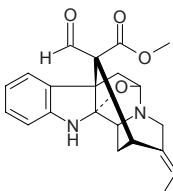
[97230-47-2] C<sub>41</sub>H<sub>62</sub>O<sub>13</sub> (762.94). Source: KU XUAN SHEN *Picria felterrae*.  
Ref: 3213.

**17295 Picfeltarraenin IB**

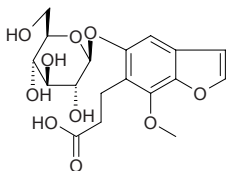
[97230-46-1] C<sub>42</sub>H<sub>64</sub>O<sub>14</sub> (792.97). Source: KU XUAN SHEN *Picria felterrae*.  
Ref: 3213.

**17296 Picralinal**

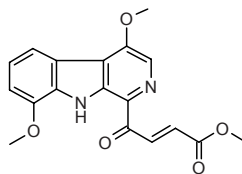
[20045-06-1] C<sub>21</sub>H<sub>22</sub>N<sub>2</sub>O<sub>4</sub> (366.42). mp 179~180°C. Source: XIANG PI MU  
*Alstonia scholaris*. Ref: 6, 1521.

**17297 Picraqquassioide A**

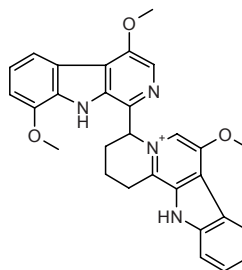
6-Carboxyethyl-7-methoxy-5-hydroxybenzofuran-5-*O*-β-*D*-glucopyranoside  
 C<sub>18</sub>H<sub>22</sub>O<sub>10</sub> (398.37). Amorphous powder, [α]<sub>D</sub><sup>21</sup> = -60° (c = 1.8, MeOH).  
Source: BEI SHA SHEN *Glehnia littoralis* (fruit), CHOU CAO *Ruta graveolens* (dried aerial parts). Ref: 3073, 3525.

**17298 Picrasidine E**

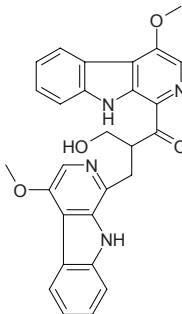
[94530-77-5] C<sub>18</sub>H<sub>16</sub>N<sub>2</sub>O<sub>5</sub> (340.34). Source: KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. Ref: 12.

**17299 Picrasidine F**

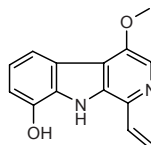
C<sub>29</sub>H<sub>27</sub>N<sub>4</sub>O<sub>3</sub><sup>+</sup> (479.56). Source: KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. Ref: 12, 1521.

**17300 Picrasidine H**

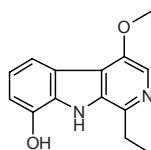
[105608-30-8] C<sub>28</sub>H<sub>24</sub>N<sub>4</sub>O<sub>4</sub> (480.53). Source: KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. Ref: 12, 1521.

**17301 Picrasidine I**

[100234-59-1] C<sub>14</sub>H<sub>12</sub>N<sub>2</sub>O<sub>2</sub> (240.26). Source: KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. Ref: 12.

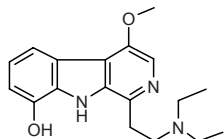
**17302 Picrasidine J**

[100234-62-6] C<sub>14</sub>H<sub>14</sub>N<sub>2</sub>O<sub>2</sub> (242.28). Source: KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. Ref: 12.

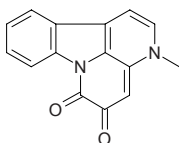


**17303 Picrasidine K**

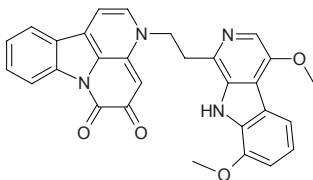
[100234-63-7] C<sub>18</sub>H<sub>23</sub>N<sub>3</sub>O<sub>2</sub> (313.40). Source: KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. Ref: 12.

**17304 Picrasidine L**

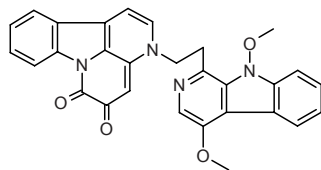
C<sub>15</sub>H<sub>10</sub>N<sub>2</sub>O<sub>2</sub> (250.26). Source: CHANG YE KUAN MU *Eurycoma longifolia* (root: yield = 0.000011%dw)<sup>[4728]</sup>. Ref: 4556, 4728.

**17305 Picrasidine M**

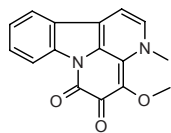
[99964-79-1] C<sub>29</sub>H<sub>22</sub>N<sub>4</sub>O<sub>4</sub> (490.52). Nacarat acicular crystals (dimethyl sulfoxide), mp 294~295°C (dec). Pharm: cAMP phosphodiesterase inhibitor (*in vitro*, IC<sub>50</sub> = 96μmol/L). Source: KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. Ref: 12, 1009, 1011, 1198.

**17306 Picrasidine N**

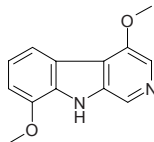
[101219-62-9] C<sub>29</sub>H<sub>22</sub>N<sub>4</sub>O<sub>4</sub> (490.52). Nacarat acicular crystals (chloroform:methanol = 1:1), mp 171~172°C (dec). Pharm: cAMP phosphodiesterase inhibitor (*in vitro*, IC<sub>50</sub> = 2μmol/L). Source: KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. Ref: 12, 1010, 1011, 1198.

**17307 Picrasidine O**

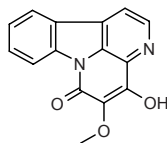
[101219-63-0] C<sub>16</sub>H<sub>12</sub>N<sub>2</sub>O<sub>3</sub> (280.29). Source: KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. Ref: 12.

**17308 Picrasidine P**

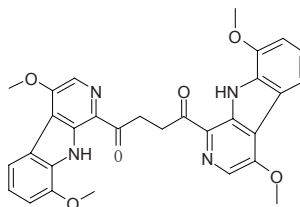
[99964-78-0] C<sub>13</sub>H<sub>12</sub>N<sub>2</sub>O<sub>2</sub> (228.25). Source: KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. Ref: 12, 1521.

**17309 Picrasidine Q**

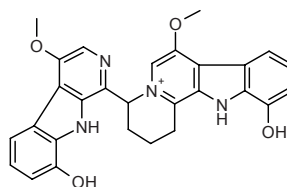
C<sub>15</sub>H<sub>10</sub>N<sub>2</sub>O<sub>3</sub> (266.26). Pharm: Cytotoxic (*in vitro*, A549, ED<sub>50</sub> = 16.2μg/mL; MCF7, ED<sub>50</sub> = 18.1μg/mL; HIV, no significant effect)<sup>[4728]</sup>, antimalarial (*Plasmodium falciparum* W2, IC<sub>50</sub> = 3.5μg/mL; *Plasmodium falciparum* D6, IC<sub>50</sub> = 3μg/mL)<sup>[4728]</sup>. Source: CHANG YE KUAN MU *Eurycoma longifolia* (root: yield = 0.00001%dw)<sup>[4728]</sup>, KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. Ref: 12, 4728.

**17310 Picrasidine R**

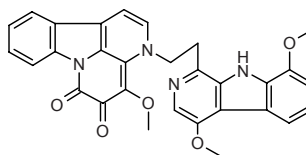
[106154-68-1] C<sub>31</sub>H<sub>28</sub>N<sub>4</sub>O<sub>5</sub> (538.61). Source: KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. Ref: 12, 1521.

**17311 Picrasidine T**

C<sub>28</sub>H<sub>25</sub>N<sub>4</sub>O<sub>4</sub> (481.54). Source: KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. Ref: 12, 1521.

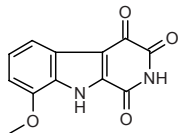
**17312 Picrasidine U**

[118636-90-1] C<sub>30</sub>H<sub>24</sub>N<sub>4</sub>O<sub>5</sub> (520.55). Source: KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. Ref: 12.

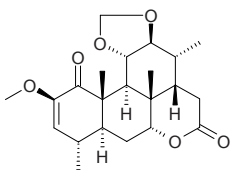


**17313 Picrasidine V**

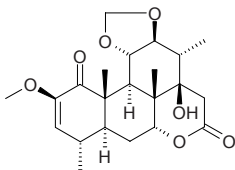
[131653-92-4] C<sub>12</sub>H<sub>8</sub>N<sub>2</sub>O<sub>4</sub> (244.21). [Source](#): KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. [Ref](#): 12.

**17314 Picrasin D**

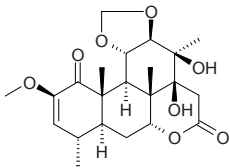
[33204-37-4] C<sub>22</sub>H<sub>30</sub>O<sub>6</sub> (390.48). mp 283.5~285.0°C. [Source](#): KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. [Ref](#): 12.

**17315 Picrasin E**

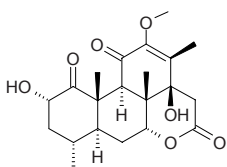
[33204-38-5] C<sub>22</sub>H<sub>30</sub>O<sub>7</sub> (406.48). mp 293~295°C. [Source](#): KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. [Ref](#): 12.

**17316 Picrasin F**

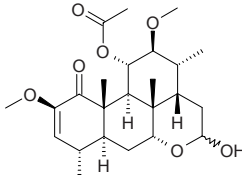
[35026-93-8] C<sub>22</sub>H<sub>30</sub>O<sub>8</sub> (422.48). mp 282~283°C. [Source](#): KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. [Ref](#): 12.

**17317 Picrasin G**

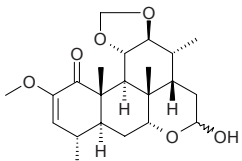
[35598-69-7] C<sub>21</sub>H<sub>28</sub>O<sub>7</sub> (392.45). [Source](#): KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. [Ref](#): 12, 1521.

**17318 Picrasinol A**

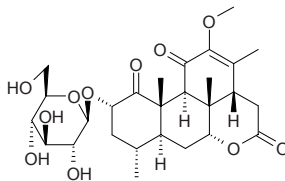
[89498-92-0] C<sub>24</sub>H<sub>36</sub>O<sub>7</sub> (436.55). [Source](#): KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. [Ref](#): 12.

**17319 Picrasinol B**

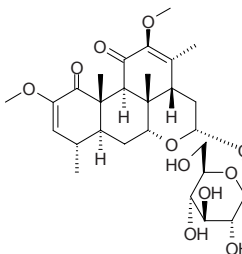
[89498-91-9] C<sub>22</sub>H<sub>32</sub>O<sub>6</sub> (392.50). [Source](#): KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. [Ref](#): 12.

**17320 Picrasinoside A**

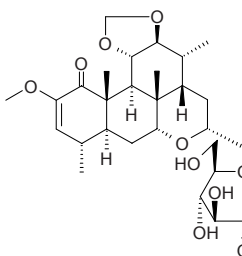
[83543-82-2] C<sub>27</sub>H<sub>38</sub>O<sub>11</sub> (538.60). [Source](#): KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. [Ref](#): 12.

**17321 Picrasinoside B**

[89200-08-8] C<sub>28</sub>H<sub>40</sub>O<sub>11</sub> (552.62). [Source](#): KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. [Ref](#): 12.

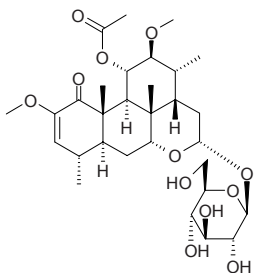
**17322 Picrasinoside C**

[89200-07-0] C<sub>28</sub>H<sub>42</sub>O<sub>11</sub> (554.64). [Source](#): KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. [Ref](#): 12.

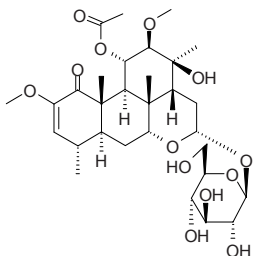


**17323 Picrasinoides D**

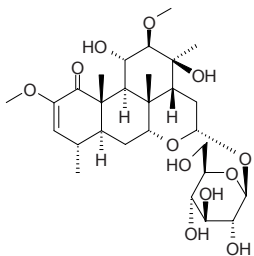
[89200-06-6] C<sub>30</sub>H<sub>46</sub>O<sub>12</sub> (598.69). Source: KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. Ref: 12.

**17324 Picrasinoides E**

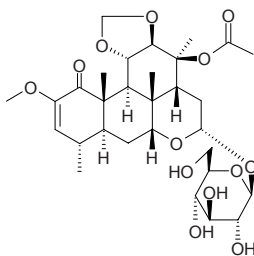
[89200-05-5] C<sub>30</sub>H<sub>46</sub>O<sub>13</sub> (614.69). Source: KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. Ref: 12.

**17325 Picrasinoides G**

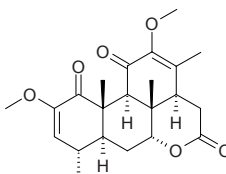
[89200-03-3] C<sub>28</sub>H<sub>44</sub>O<sub>12</sub> (572.66). Source: KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. Ref: 12.

**17326 Picrasinoides H**

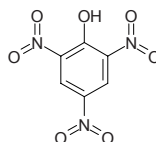
C<sub>30</sub>H<sub>44</sub>O<sub>13</sub> (612.68). Source: KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. Ref: 12.

**17327 Picrasmin**

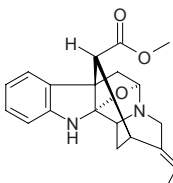
Isoquassin C<sub>22</sub>H<sub>28</sub>O<sub>6</sub> (388.46). Plates and rods (MeOH aq.), mp 222~225°C, mp 291°C, [α]<sub>D</sub><sup>20</sup> = +46.6° (CHCl<sub>3</sub>). Source: KU MU *Picrasma quassioides* [Syn. *Picrasma ailanthoides*], KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. Ref: 6, 660, 1521.

**17328 Picric acid**

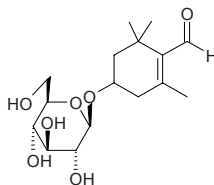
C<sub>6</sub>H<sub>3</sub>N<sub>3</sub>O<sub>7</sub> (229.11). Source: WU MEI *Prunus mume*. Ref: 660.

**17329 Picrinine**

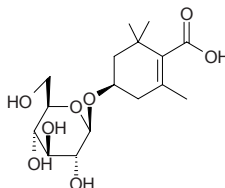
[4684-32-6] C<sub>20</sub>H<sub>22</sub>N<sub>2</sub>O<sub>3</sub> (338.41). mp 223~225°C (dec). Source: XIANG PI MU *Alstonia scholaris*. Ref: 6.

**17330 Picrocrocin**

[138-55-6] C<sub>16</sub>H<sub>26</sub>O<sub>7</sub> (330.38). mp 156°C. Source: ZANG HONG HUA *Crocus sativus*, ZANG HONG HUA *Crocus sativus* (stigma: 1.39%dw)<sup>[4653]</sup>. Ref: 6, 4653.

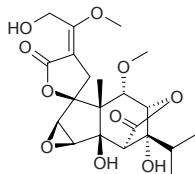
**17331 Picrocrocinic acid O-β-D-glucopyrinoside**

[62218-53-5] C<sub>16</sub>H<sub>26</sub>O<sub>8</sub> (346.38). Source: ZHI ZI *Gardenia jasminoides* [Syn. *Gardenia florida*]. Ref: 2, 626.

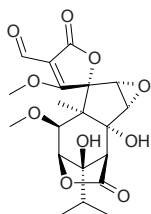


**17332 Picrodendrin A**

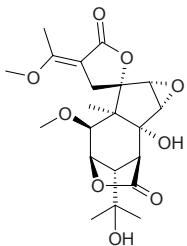
[123617-36-7] C<sub>21</sub>H<sub>28</sub>O<sub>10</sub> (440.45). Colorless prismatic crystals, mp 223°C, [α]<sub>D</sub><sup>25</sup> = -25° (c = 1.3, pyridine). **Pharm:** Pesticide (kills cockroach, LD<sub>50</sub> = 1.1 μg/cockroach). **Source:** JIANG GUO KU SHU *Picrodendron baccatum*. **Ref:** 1555.

**17333 Picrodendrin B**

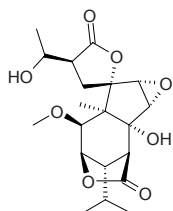
[135462-99-6] C<sub>20</sub>H<sub>24</sub>O<sub>10</sub> (414.41). Colorless prisms (MeOH), mp 245°C, [α]<sub>D</sub><sup>25</sup> = -50.4° (c = 1.8, pyridine). **Pharm:** Inhibits <sup>35</sup>S-TBPS specially combines with rat brain meninges (IC<sub>50</sub> = 0.16 μmol/L). **Source:** JIANG GUO KU SHU *Picrodendron baccatum*. **Ref:** 3737, 1198.

**17334 Picrodendrin M**

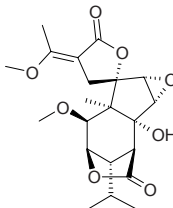
[142808-70-6] C<sub>21</sub>H<sub>28</sub>O<sub>9</sub> (414.45). Prisms (MeOH), mp 256–258°C, [α]<sub>D</sub><sup>22</sup> = -23.1° (c = 0.3, pyridine). **Pharm:** Inhibits <sup>35</sup>S-TBPS specially combines with rat brain meninges (IC<sub>50</sub> = 0.16 μmol/L, the activity is double of that of tutin); pesticide (kills cockroach, LD<sub>50</sub> = 0.047 μg/cockroach). **Source:** JIANG GUO KU SHU *Picrodendron baccatum*. **Ref:** 3701, 1198.

**17335 Picrodendrin O**

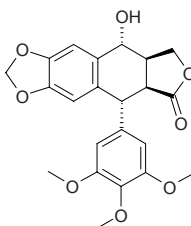
[142816-75-9] C<sub>20</sub>H<sub>28</sub>O<sub>8</sub> (396.44). Prisms (MeOH), mp 233–234°C, [α]<sub>D</sub><sup>25</sup> = +9.4° (c = 0.6, pyridine). **Pharm:** Inhibits <sup>35</sup>S-TBPS specially combines with rat brain meninges (IC<sub>50</sub> = 5.4 μmol/L); pesticide (kills cockroach, LD<sub>50</sub> = 0.37 μg/cockroach). **Source:** JIANG GUO KU SHU *Picrodendron baccatum*. **Ref:** 3701, 1198.

**17336 Picrodendrin Q**

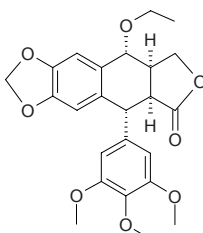
[142808-73-9] C<sub>21</sub>H<sub>28</sub>O<sub>8</sub> (408.45). Prisms (MeOH), mp 219°C, [α]<sub>D</sub><sup>25</sup> = -2.0° (c = 0.6, pyridine). **Pharm:** Inhibits <sup>35</sup>S-TBPS specially combines with rat brain meninges (IC<sub>50</sub> = 0.0075 μmol/L, the activity is 45 times of that of tutin); pesticide (kills cockroach, LD<sub>50</sub> = 0.071 μg/cockroach). **Source:** JIANG GUO KU SHU *Picrodendron baccatum*. **Ref:** 3701, 1198.

**17337 Picropodophyllin**

Picropodophyllotoxin [477-47-4] C<sub>22</sub>H<sub>22</sub>O<sub>8</sub> (414.42). Colorless fine needles, mp 229–230°C, [α]<sub>D</sub> = +9.4°. **Pharm:** Anti-fertility agent; antiviral (measles virus, HSV-1, HSV/CV-1, IC<sub>50</sub> < 20 μg/mL, VSV/BHK, IC<sub>50</sub> < 10 μg/mL); antineoplastic (P<sub>388</sub> IC<sub>50</sub> < 2.5 μg/mL, control Adriamycin, IC<sub>50</sub> = 0.017 μg/mL, A549 IC<sub>50</sub> < 2.5 μg/mL, adriamycin, IC<sub>50</sub> = 0.053 μg/mL, HT29 IC<sub>50</sub> < 2.5 μg/mL, adriamycin, IC<sub>50</sub> = 0.11 μg/mL). **Source:** DUN YE GUI JIU *Podophyllum peltatum*, SHAN HE YE *Diphylleia grayi*, BAI BA JIAO LIAN *Dysosma majorensis* [Syn. *Podophyllum majorensis*; *Dysosma lichuanensis*], CHA ZI YUAN BAI *Juniperus sabina*, DUO HUA BA JIAO LIAN *Dysosma aurantiocaulis*, RU XIANG BAI *Juniperus thurifera*, LIU JIAO LIAN *Dysosma pleiantha* [Syn. *Podophyllum pleianthum*] (rhizome: content = 0.034%)<sup>[5508]</sup>, TAO ER QI *Podophyllum emodii* [Syn. *Podophyllum emodii* var. *chinense*; *Podophyllum sikkimensis*; *Sinopodophyllum emodii*] (root and rhizome: mean content of 2 origins = 0.12%<sup>[5508]</sup>), WO ER QI *Diphylleia sinensis* (rhizome: mean content of 4 origins = 0.52%<sup>[5508]</sup>), ZHE BEI MU *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*]. **Ref:** 658, 1521, 2719, 2729, 3115, 3218, 3220, 3221, 3222, 3223, 3224, 3543, 5508.

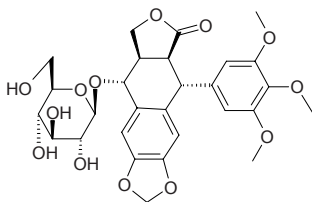
**17338 Picropodophyllin-1-ethyl ether**

C<sub>24</sub>H<sub>26</sub>O<sub>8</sub> (442.47). White thin acicular crystals (Me<sub>2</sub>CO), mp 217–220°C, [α]<sub>D</sub><sup>17</sup> = +69° (c = 0.01, CHCl<sub>3</sub>). **Source:** SHAN HE YE *Diphylleia grayi*. **Ref:** 279.

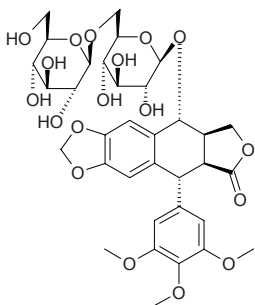


**17339 L-Picropodophyllin 7'-O-β-D-glucopyranoside**

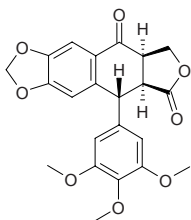
$C_{28}H_{32}O_{13}$  (576.56). Colorless needles,  $[\alpha]_D^{26} = -91^\circ$  ( $c = 0.08$ , EtOH:H<sub>2</sub>O = 1:1). **Source:** TAO ER QI *Podophyllum emodii* [Syn. *Podophyllum emodii* var. *chinense*; *Podophyllum sikkimense*; *Sinopodophyllum emodii*] (rhizome). **Ref:** 4320.

**17340 L-Picropodophyllin 7'-O-(β-D-glucopyranosyl-(1→6)-β-D-glucopyranoside)**

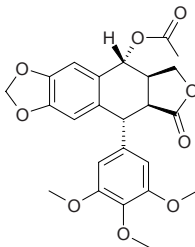
$C_{34}H_{42}O_{18}$  (738.70). Colorless needles,  $[\alpha]_D^{29} = -46^\circ$  ( $c = 0.6$ , MeOH). **Source:** TAO ER QI *Podophyllum emodii* [Syn. *Podophyllum emodii* var. *chinense*; *Podophyllum sikkimense*; *Sinopodophyllum emodii*] (rhizome). **Ref:** 4320.

**17341 Picropodophyllone**

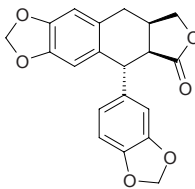
[477-48-5]  $C_{22}H_{20}O_8$  (412.40). Colorless needles, mp 158–159°C,  $[\alpha]_D^{25} = -142^\circ$  ( $c = 0.83$ , CHCl<sub>3</sub>). **Pharm:** Antiviral (HSV/CV-1, IC<sub>50</sub> = 20 μg/mL, VSV/BHK, IC<sub>50</sub> = 10 μg/mL); antineoplastic (P<sub>388</sub> IC<sub>50</sub> = 5 μg/mL, control adriamycin IC<sub>50</sub> = 0.017 μg/mL, A549 IC<sub>50</sub> = 5 μg/mL, control adriamycin IC<sub>50</sub> = 0.053 μg/mL, HT29 IC<sub>50</sub> = 5 μg/mL, control adriamycin IC<sub>50</sub> = 0.11 μg/mL); antifungal (200 μg/mL: *Acrothesium floccosum*, *Curvularia lunata*, *Pleurotus ostreatus*). **Source:** BAI BA JIAO LIAN *Dysosma majorensis* [Syn. *Podophyllum majorense*; *Dysosma lichuanensis*], CHA ZI YUAN BAI *Juniperus sabina*, DUO HUA BA JIAO LIAN *Dysosma aurantiocaulis*, LIU JIAO LIAN *Dysosma pleiantha* [Syn. *Podophyllum pleianthum*] (rhizome: content = 0.031%<sup>[5508]</sup>), SHAN XI WO ER QI *Diphylleia cymosa*, TAO ER QI *Podophyllum emodii* [Syn. *Podophyllum emodii* var. *chinense*; *Podophyllum sikkimense*; *Sinopodophyllum emodii*] (rhizome: mean content of 2 origins = 0.042%<sup>[5508]</sup>), WO ER QI *Diphylleia sinensis* (rhizome: mean content of 4 origins = 0.067%<sup>[5508]</sup>). **Ref:** 3214, 3215, 2729, 3115, 3216, 3217, 3218, 3219, 5508.

**17342 Picropodophyllotoxin acetate**

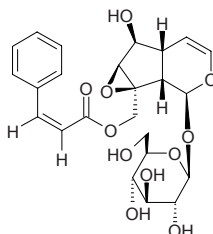
Anticancer Lignan PMV70P691-027 [38491-90-6]  $C_{24}H_{24}O_9$  (456.45). Colorless needles, mp 217°C,  $[\alpha]_D^{20} = +19.4^\circ$  ( $c = 1.0$ , CHCl<sub>3</sub>). **Pharm:** Antiviral (HSV/CV-1, IC<sub>50</sub> < 20 μg/mL, VSV/BHK, IC<sub>50</sub> < 10 μg/mL); antineoplastic (P<sub>388</sub> IC<sub>50</sub> < 0.25 μg/mL, control adriamycin IC<sub>50</sub> = 0.017 μg/mL, A549 IC<sub>50</sub> < 0.25 μg/mL, adriamycin IC<sub>50</sub> = 0.053 μg/mL, HT29 IC<sub>50</sub> < 0.25 μg/mL, adriamycin IC<sub>50</sub> = 0.11 μg/mL); cytotoxic (soft agar transformation assay with JB6 cells)<sup>[5038]</sup>. **Source:** CHA ZI YUAN BAI *Juniperus sabina*, LIAN YE TONG *Hernandia Sonora* [Syn. *Hernandia ovigera*] (seed). **Ref:** 3218, 3220, 5038.

**17343 Picropolygamain**

$C_{20}H_{16}O_6$  (352.35). Colorless oil. **Pharm:** Cytotoxic (hmn fibrosarcoma cells HT1080, ED<sub>50</sub> = 1.9 μg/mL, control Adriamycin, ED<sub>50</sub> = 0.1 μg/mL)<sup>[4437]</sup>. **Source:** LIE WEI LIE LAN *Bursera graveolens* (stem). **Ref:** 4437.

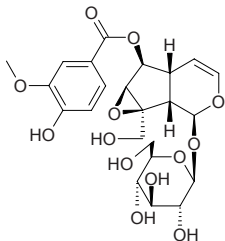
**17344 Picroside I**

6'-Cinnamoylcatalpol [76248-14-1]  $C_{24}H_{28}O_{11}$  (492.48). White powder crystals (ethanol–water), mp 76–77°C. **Pharm:** Antihepatotoxic; anti-inflammatory (mus); antioxidant (free radical scavenger *in vitro*). **Source:** HU HUANG LIAN *Picrorhiza kurrooa*, XI ZANG HU HUANG LIAN *Picrorhiza scrophulariiflora*. **Ref:** 900, 1521.

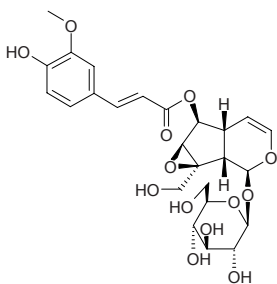


**17345 Picroside II**

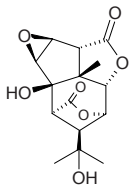
6-Vanilloylcatalpol [39012-20-9] C<sub>23</sub>H<sub>28</sub>O<sub>13</sub> (512.47). White acicular crystals (methanol), mp 186°C. **Pharm:** Antihepatotoxin (complement-dependent hepatotoxicity, inhibits increase of GTP); anti-inflammatory (mus, edema on ears induced by TPA). **Source:** HU HUANG LIAN *Picrorhiza kurroa* (dried rhizome:: mean content = 1.62%<sup>[5508]</sup>), XI ZANG HU HUANG LIAN *Picrorhiza scrophulariiflora* (dried rhizome:: mean content = 7.23%<sup>[5508]</sup>). **Ref:** 6, 660, 900, 1521, 5508.

**17346 Picroside III**

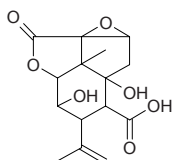
[64461-95-6] C<sub>25</sub>H<sub>30</sub>O<sub>13</sub> (538.51). mp 154–155°C, [α]<sub>D</sub><sup>20</sup> = –78° (CHCl<sub>3</sub>). **Source:** HU HUANG LIAN *Picrorhiza kurroa*. **Ref:** 3225.

**17347 Picrotin**

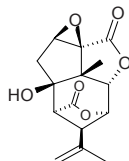
[21416-53-5] C<sub>15</sub>H<sub>18</sub>O<sub>7</sub> (310.31). Very bitter and very poisonous glittering trapezoidal leaflike crystals, mp 203°C, [α]<sub>D</sub><sup>16</sup> = –29.3° (c = 4, absolute ethanol). **Pharm:** Antidote (poisoning from barbital); CNS stimulant; GABA<sub>A</sub> receptor antagonist; used in treatment of skin disease. **Source:** DUN YE GUI JIU *Podophyllum peltatum*, SHAN HE YE *Diphylleia grayi*, CHA ZI YUAN BAI *Juniperus sabina*, YIN DU FANG JI *Anamirta paniculata*, YIN DU MU FANG JI *Cocculus indicus*. **Ref:** 658, 661, 1521.

**17348 Picrotoxic acid**

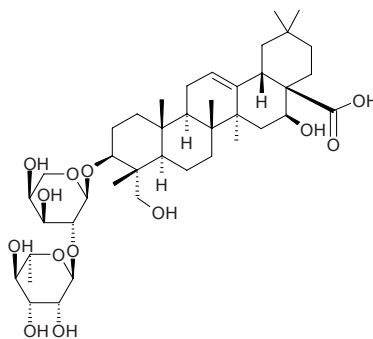
C<sub>15</sub>H<sub>18</sub>O<sub>7</sub> (310.31). White needles, mp 208–210 °C. **Source:** *Anamirta cocculus*. **Ref:** 1876.

**17349 Picrotoxinin**

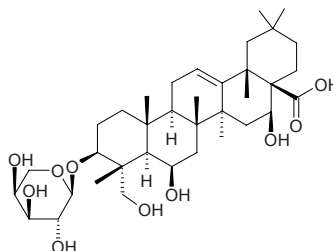
[17617-45-7] C<sub>15</sub>H<sub>16</sub>O<sub>6</sub> (292.29). **Source:** YIN DU MU FANG JI *Cocculus indicus*. **Ref:** 661, 1521.

**17350 Pictoside A**

Caulophyllogenin 3-*O*- $\alpha$ -L-rhamnopyranosyl(1→2)- $\alpha$ -L-arabinopyranoside C<sub>41</sub>H<sub>66</sub>O<sub>13</sub> (766.98). Colorless powder, mp 224–226°C (MeOH), [α]<sub>D</sub><sup>20</sup> = –1.8° (c = 0.23, MeOH). **Pharm:** Anti-inflammatory (male ICR mus, orl, dose = 50mg/kg). **Source:** ZHUO SE CI QIU *Kalopanax pictum* (stem cortex). **Ref:** 4212.

**17351 Pictoside B**

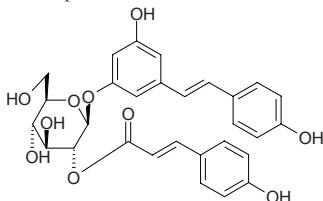
Pictogenin (3 $\beta$ ,6 $\beta$ ,16 $\alpha$ ,23-tetrahydroxyolean-12-ene-28-oic acid) 3-*O*- $\alpha$ -L-arabinopyranoside C<sub>35</sub>H<sub>56</sub>O<sub>10</sub> (636.83). Colorless powder, mp 218–220°C (MeOH), [α]<sub>D</sub><sup>20</sup> = +2.6° (c = 0.17, MeOH). **Pharm:** Anti-inflammatory inactive<sup>[4212]</sup>. **Source:** ZHUO SE CI QIU *Kalopanax pictum* (stem cortex). **Ref:** 4212.



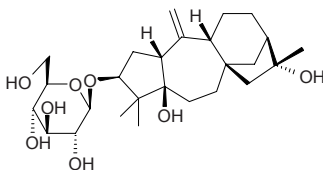


**17352 Pieceid-2''-O-coumarate**

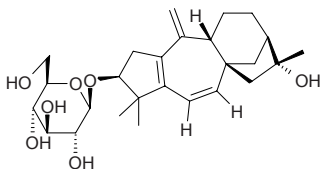
$C_{29}H_{28}O_{10}$  (536.54). White amorphous powder (MeOH),  $[\alpha]_D^{25} = 2.5^\circ$  ( $c = 0.22$ , MeOH). **Pharm:** Antioxidant (DPPH radical scavenger,  $IC_{50} = 84.3\mu\text{mol/L}$ , control Vitamin E,  $IC_{50} = 20.7\mu\text{mol/L}$ , control BHT,  $IC_{50} = 12.6\mu\text{mol/L}$ ); antioxidant (superoxide anion scavenger,  $IC_{50} = 74.6\mu\text{mol/L}$ , control Vitamin E,  $100\mu\text{mol/L}$ , InRt < 50%, control BHT,  $IC_{50} = 24.6\mu\text{mol/L}$ ); antioxidant (lipid peroxidation inhibitor,  $IC_{50} = 5.1\mu\text{mol/L}$ , control Vitamin E,  $IC_{50} = 5.3\mu\text{mol/L}$ , control BHT,  $IC_{50} = 1.0\mu\text{mol/L}$ ). **Source:** MAO MAI LIAO *Pleuropterus ciliinervis*. **Ref:** 3452.

**17353 Pierisformoside B**

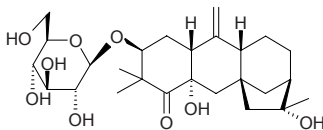
$C_{26}H_{42}O_8$  (482.62). Viscous syrup,  $[\alpha]_D^{18} = -2.31^\circ$  ( $c = 0.17$ , MeOH). **Source:** MEI LI MA ZUI MU *Pieris formosa* (leaf). **Ref:** 3992.

**17354 Pierisformoside C**

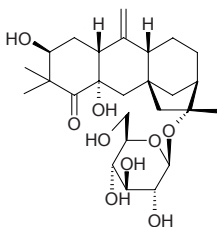
$C_{26}H_{38}O_7$  (462.59). Viscous syrup,  $[\alpha]_D^{23} = +87.81^\circ$  ( $c = 0.11$ , MeOH). **Source:** MEI LI MA ZUI MU *Pieris formosa* (leaf). **Ref:** 3992.

**17355 Pierisformoside D**

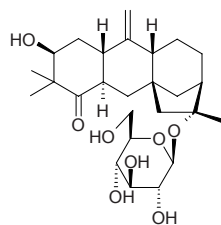
$C_{26}H_{40}O_9$  (496.60). Viscous syrup,  $[\alpha]_D^{18} = -4.35^\circ$  ( $c = 0.15$ , MeOH). **Source:** MEI LI MA ZUI MU *Pieris formosa* (leaf). **Ref:** 3992.

**17356 Pierisformoside E**

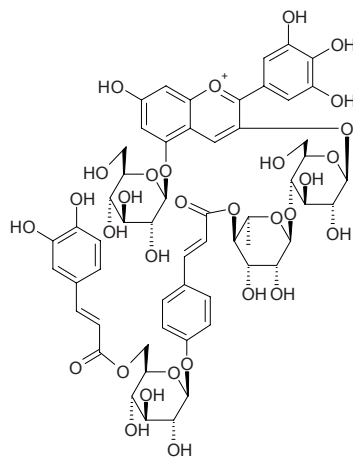
$C_{26}H_{40}O_9$  (496.60). Viscous syrup,  $[\alpha]_D^{18} = -6.09^\circ$  ( $c = 0.20$ , MeOH). **Source:** MEI LI MA ZUI MU *Pieris formosa* (leaf). **Ref:** 3992.

**17357 Pierisformoside F**

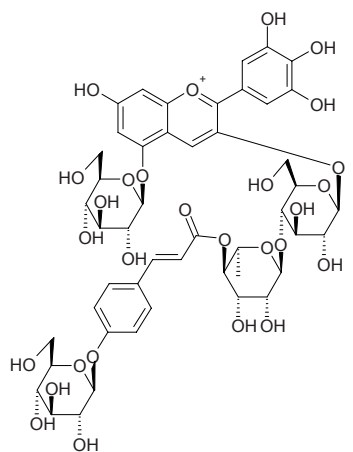
$C_{26}H_{40}O_8$  (480.60). Viscous syrup,  $[\alpha]_D^{16} = -13.78^\circ$  ( $c = 0.13$ , MeOH). **Source:** MEI LI MA ZUI MU *Pieris formosa* (leaf). **Ref:** 3992.

**17358 Pigment 25**

Delphinidin 3-O-[6-O-(4-O-(4-O-(6-O-(*trans*-caffeoyl)- $\beta$ -D-glucopyranosyl)-*trans*-*p*-coumaroyl)- $\alpha$ -L-rhamnopyranosyl)- $\beta$ -D-glucopyranoside]-5-O-[ $\beta$ -D-glucopyranoside]  $C_{57}H_{63}O_{31}^+$  (1244.12). **Source:** *Petunia reitzii*. **Ref:** 3998.

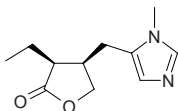
**17359 Pigment 26**

Delphinidin 3-O-[6-O-(4-O-(4-O-( $\beta$ -D-glucopyranosyl)-*trans*-*p*-coumaroyl)- $\alpha$ -L-rhamnopyranosyl)- $\beta$ -D-glucopyranoside]-5-O-[ $\beta$ -D-glucopyranoside]  $C_{48}H_{57}O_{28}^+$  (1081.97). **Source:** *Petunia reitzii*. **Ref:** 3998.

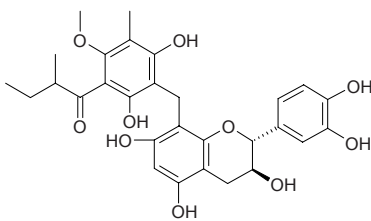


**17360 Pilocarpine**

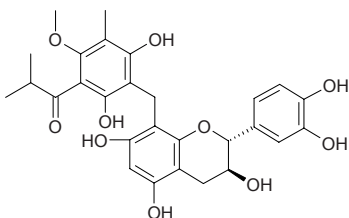
Ocusert pilo [92-13-7]  $C_{11}H_{16}N_2O_2$  (208.26). Oil or crystals, mp 34°C, bp 260°C/5mmHg, (with some conversion into iso-pilocarpine),  $[\alpha]_D^{18} = +106^\circ$  ( $c = 2$ , water), soluble in water, ethanol, chloroform, slightly soluble in ether, benzene, almost insoluble in petroleum spirit.<sup>[5507]</sup> **Pharm:** Stimulates M-cholinergic receptor agonist; causes miosis; smooth muscle stimulant; perspiration; used in treatment of glaucoma. **Source:** MAO GUO YUN XING *Pilocarpus jaborandi* (in 1879, isolated from the plant by Petit for the first time<sup>[5507]</sup>; in 1966, the compound was isolated from the plant by R.K.Hill et al.)<sup>[5505]</sup>. **Ref:** 658, 5505, 5507.

**17361 Pilosanol A**

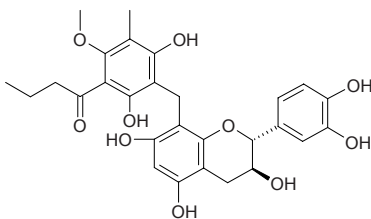
[142542-76-5]  $C_{29}H_{32}O_{10}$  (540.57). Maple powder, mp 190–195°C (dec),  $[\alpha]_D^{23} = -52.6^\circ$  ( $c = 1.9$ , MeOH). **Pharm:** Antibacterial (*Staphylococcus aureus*, MED = 100µg/disk). **Source:** LONG YA CAO *Agrimonia pilosa*. **Ref:** 3626.

**17362 Pilosanol B**

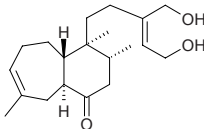
[142542-77-6]  $C_{28}H_{32}O_{10}$  (526.55). Maple powder, mp 158–160°C (dec),  $[\alpha]_D^{23} = -46.3^\circ$  ( $c = 1.86$ , MeOH). **Pharm:** Antibacterial (*Staphylococcus aureus*, MED = 100µg/disk). **Source:** LONG YA CAO *Agrimonia pilosa*. **Ref:** 3626.

**17363 Pilosanol C**

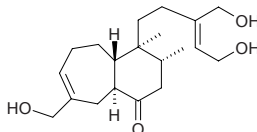
[142542-78-7]  $C_{28}H_{30}O_{10}$  (526.55). Maple powder, mp 185–190°C (dec),  $[\alpha]_D^{23} = -69.2^\circ$  ( $c = 1.82$ , MeOH). **Pharm:** Antibacterial (*Staphylococcus aureus*, MED = 100µg/disk). **Source:** LONG YA CAO *Agrimonia pilosa*. **Ref:** 3626.

**17364 Pilosanol A**

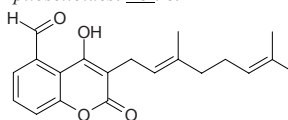
$C_{20}H_{32}O_3$  (320.48). Crystals, mp 98.5–99°C,  $[\alpha]_D^{30.5} = -51.1^\circ$  ( $c = 0.56$ , EtOH). **Source:** MAO MA CHI XIAN *Portulaca pilosa*. **Ref:** 3226.

**17365 Pilosanol B**

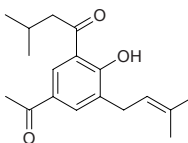
$C_{20}H_{32}O_4$  (336.48). Oil,  $[\alpha]_D^{30.5} = -52.2^\circ$  ( $c = 1.27$ , EtOH). **Source:** MAO MA CHI XIAN *Portulaca pilosa*. **Ref:** 3226.

**17366 Piloselloidal**

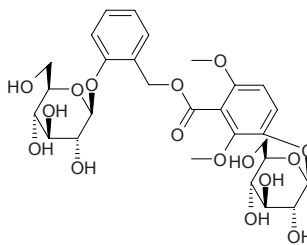
[54963-36-9]  $C_{20}H_{22}O_4$  (326.40). **Source:** MAO DA DING CAO *Gerbera piloselloides*. **Ref:** 6.

**17367 Piloselloidone**

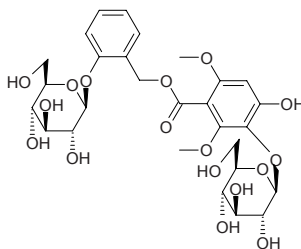
[54963-42-7]  $C_{18}H_{24}O_3$  (288.39). **Source:** MAO DA DING CAO *Gerbera piloselloides*. **Ref:** 6.

**17368 Piloside A**

$C_{28}H_{36}O_{16}$  (628.59). Crystals (MeOH), mp 150–152°C,  $[\alpha]_D^{20} = -50.2^\circ$  ( $c = 0.6$ , MeOH). **Source:** MAO XIAN MAO *Curculigo pilosa* (rhizome). **Ref:** 5095.

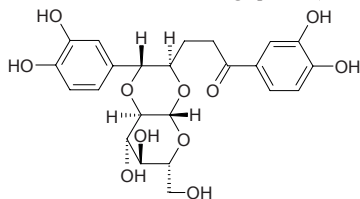
**17369 Piloside B**

$C_{28}H_{36}O_{17}$  (644.59). Amorphous powder, mp 132–136°C,  $[\alpha]_D^{20} = -39.3^\circ$  ( $c = 0.34$ , MeOH). **Source:** MAO XIAN MAO *Curculigo pilosa* (rhizome). **Ref:** 5095.

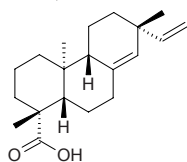


**17370 Pisosidine**

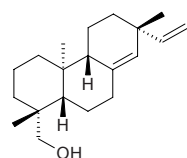
$C_{23}H_{26}O_{11}$  (478.46). Crystals (EtOAc), mp 165~167°C,  $[\alpha]_D^{20} = +43.2^\circ$  ( $c = 0.84$ , MeOH). **Pharm:** Contracts blood vessels (*in vitro*, rabbit aorta, facilitating effect on adrenaline evoked contractions, 1~30 $\mu$ mol/L); contracts blood vessels (*in vitro*, rabbit aorta, dose dependent, 30~62 $\mu$ mol/L). **Source:** MAO XIAN MAO *Curculigo pilosa* (rhizome). **Ref:** 5095.

**17371 L-Pimara-8(14),15-dien-19-oic acid**

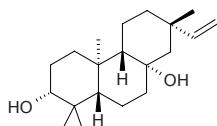
*ent*-Pimara-8(14),15-dien-19-oic acid  $C_{20}H_{30}O_2$  (302.46). mp (-) 163~164°C; white crystals, mp 163~165°C,  $[\alpha]_D^{25} = -120.0^\circ$  ( $c = 0.50$ ,  $CHCl_3$ ). **Pharm:** Antibacterial (*Staphylococcus aureus*, MIC > 100 $\mu$ g/mL; *Bacillus subtilis*, MIC = 50 $\mu$ g/mL)<sup>[4144]</sup>; COX-1 inhibitor (*in vitro*, IC<sub>50</sub> = 0.19mmol/L)<sup>[4957]</sup>. **Source:** RI BEN HUA BAI *Chamaecyparis pisifera* (leaf), TU DANG GUI *Aralia cordata*, CI SAN JIA *Acanthopanax trifoliatum* (stem cortex). **Ref:** 6, 4144, 4957.

**17372 L-Pimara-8(14),15-dien-19-ol**

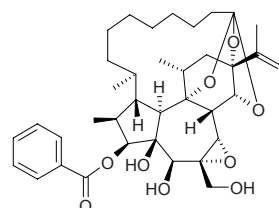
$C_{20}H_{32}O$  (288.48). mp (-) 109~110°C. **Source:** TU DANG GUI *Aralia cordata*. **Ref:** 6.

**17373 ent-Pimara-15-ene-3 $\alpha$ ,8 $\alpha$ -diol**

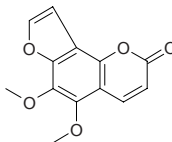
$C_{20}H_{34}O_2$  (309.49). White solid, mp 137.5~138.5°C,  $[\alpha]_D^{25} = -17.5^\circ$  ( $c = 1.36$ ,  $CHCl_3$ ). **Source:** A GEN TING SHU QU CAO *Gnaphalium gaudichaudianum*. **Ref:** 2059.

**17374 Pimelea factor P<sub>2</sub>**

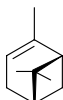
$C_{37}H_{50}O_9$  (638.81). **Pharm:** Irritant. **Source:** family Thymelaeaceae spp. **Ref:** 658.

**17375 Pimpinellin**

[131-12-4]  $C_{13}H_{10}O_5$  (246.22). Crystals (EtOAc-hexane), mp 95~96°C, 119°C. **Pharm:** Antibacterial (*Mycobacterium tuberculosis*). **Source:** DA HUI QIN *Pimpinella magna*, DIAN BAI ZHI *Heracleum scabridum*, DUAN JING GU DANG GUI *Archangelica brevicaulis* [Syn. *Angelica brevicaulis*; *Angelica brevicaulis*], DUAN MAO DU HUO *Heracleum moellendorffii* [Syn. *Heracleum microcarpum*; *Heracleum morifolium*], FEI LONG ZHANG XUE *Toddalia asiatica* [Syn. *Toddalia aculeata*; *Paullinia asiatica*], HU ER CAO YE HUI QIN *Pimpinella saxifraga*, JIA NA LI HAO *Artemisia canariensis*, LANG DU *Stellera chamaejasme*, LI JIANG QIAN HU *Peucedanum govanianum* var. *bicolor*, NIU FANG FENG *Heracleum sphondylium*, QU XI DANG GUI *Angelica genuflexa*, YANG JIAO MIAN *Alstonia mairei*, YONG NING DU HUO *Heracleum yungningense*, ZHI SHA CAO *Cyperus papyrus*, *Heracleum* spp. **Ref:** 6, 541, 557, 658, 660, 1521.

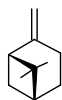
**17376  $\alpha$ -Pinene**

$C_{10}H_{16}$  (136.24). bp (+) 155~156°C/755mmHg, (-) 155~156°C/746mmHg, ( $\pm$ ) 156.2°C/741mmHg. **Pharm:** Antifungal; antitussive (dispels phlegm); irritant. **Source:** BO HE *Mentha haplocalyx* [Syn. *Mentha canadaensis*; *Mentha arvensis* var. *haplocalyx*; *Mentha arvensis*], DAN YE MAN JING ZI *Vitex rotundifolia* [Syn. *Vitex trifolia* var. *simplicifolia*], DANG SHEN *Codonopsis pilosula*, DONG LING CAO *Rabdosia rubescens*, DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*], FANG FENG *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*], GAO LIANG JIANG *Alpinia officinarum* (dried rhizome: mean content = 0.42%)<sup>[5508]</sup>, HOU PO *Magnolia officinalis*, HUANG HAO *Artemisia scoparia* [Syn. *Artemisia capillaris* var. *scoparia*], HUANG HUA HAO *Artemisia annua*, HUI HUI SU GENG *Perilla frutescens* var. *crispa*, HUO XIANG *Agastache rugosus*, JIAN ZI SU YE *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*], JIN YIN HUA *Lonicera japonica*, JING JIE *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*], JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*], JU PI *Citrus reticulata*, KUAN YE QIANG HUO *Notopterygium forbesii* [Syn. *Notopterygium franchetii*], KUO YE XIE CAO *Valeriana officinalis* var. *latifolia*, LIAN QIAO *Forsythia suspensa*, LIAO XI XIN *Asarum heterotropoides* var. *mandshuricum*, MA WEI SONG YE *Pinus massoniana* (dried leaf: mean content = 0.0221%)<sup>[5508]</sup>, NAN HE SHI *Daucus carota*, PI PA YE *Eriobotrya japonica*, QIANG HUO *Notopterygium incisum*, ROU DOU KOU *Myristica fragrans* (kernel: mean content = 0.78%)<sup>[5508]</sup>, SHENG JIANG *Zingiber officinale*, TOU HUA DU JUAN *Rhododendron capitatum*, WU WEI ZI *Schisandra chinensis*, XI XIN *Asarum sieboldii*, YIN CHEN HAO *Artemisia capillaris*, YU XING CAO *Houttuynia cordata*, ZHI ZHU XIANG *Valeriana jatamansii* [Syn. *Valeriana wallichii*], *Citrus* sp., occurs in many plants. **Ref:** 2, 11, 658, 660, 5501, 5508.

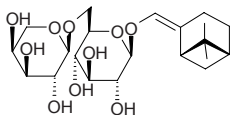


**17377  $\beta$ -Pinene**

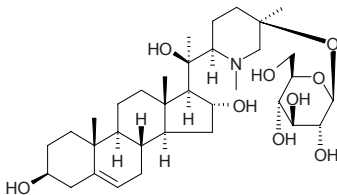
$C_{10}H_{16}$  (136.24). bp (+) 162~166°C, (-) 163.5~164.0°C/746mmHg. Pharm: Antifungal; anti-inflammatory (the most effective component of 10 compounds in Fineleaf Schizonepeta, JING JIE, *Schizonepeta tenuifolia*); antitussive (dispels phlegm). Source: DAN YE MAN JING ZI *Vitex rotundifolia* [Syn. *Vitex trifolia* var. *simplicifolia*], HUANG HAO *Artemisia scoparia* [Syn. *Artemisia capillaris* var. *scoparia*], HUANG HUA HAO *Artemisia annua*, HUO XIANG *Agastache rugosus*, JIAN ZI SU YE *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*], JING JIE *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*], JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*], KUAN YE QIANG HUO *Notopterygium forbesii* [Syn. *Notopterygium franchetii*], KUO YE XIE CAO *Valeriana officinalis* var. *latifolia*, LIAN QIAO *Forsythia suspensa* (green fruit: mean content of 7 origins = 1.16%, ripe fruit: mean content of 5 origins = 0.50%)<sup>[5520]</sup>, PI PA YE *Eriobotrya japonica*, QIANG HUO *Notopterygium incisum*, YIN CHEN HAO *Artemisia capillaris*. Ref: 2, 11, 658, 660, 5520.

**17378 (Z)-(1S,5R)- $\beta$ -Pinen-10-yl- $\beta$ -vicianoside**

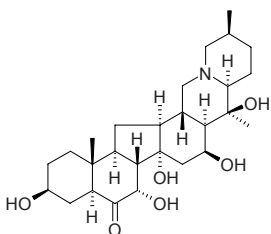
$C_{21}H_{34}O_{10}$  (446.50). Source: CHI SHAO *Paeonia lactiflora* wild. Ref: 2.

**17379 Pingbeidinioside**

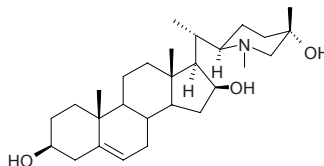
[125309-97-9]  $C_{34}H_{57}NO_9$  (623.83). Colorless acicular crystals, mp 242.0~243.2°C,  $[\alpha]_D^{25} = +6.9^\circ$  ( $c = 0.145$ , MeOH). Source: PING BEI MU *Fritillaria ussuriensis*. Ref: 138.

**17380 Pingbeimine C**

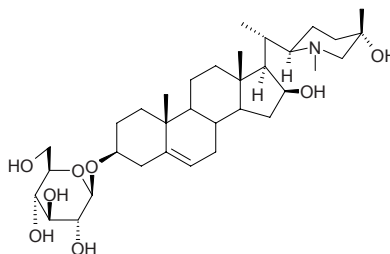
C-Nor-D-homosteroid alkaloid [128585-96-6]  $C_{27}H_{43}NO_6$  (477.65). Colorless prismatic crystals, mp 171.53°C,  $[\alpha]_D^{25} = -24.6^\circ$  ( $c = 1.1$ , methanol). Source: PING BEI MU *Fritillaria ussuriensis*. Ref: 150.

**17381 Pingbeinine**

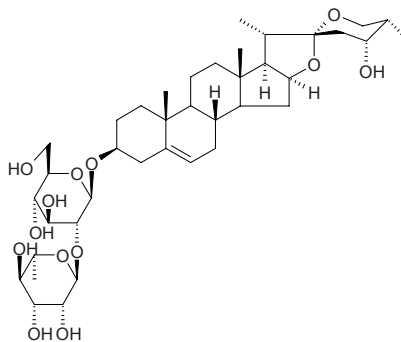
[131984-89-9]  $C_{28}H_{47}NO_3$  (445.69). Needles (MeOH), mp 223~235°C,  $[\alpha]_D = -32.8^\circ$  ( $c = 0.09$ , MeOH). Source: PING BEI MU *Fritillaria ussuriensis*. Ref: 3227.

**17382 Pingbeininoside**

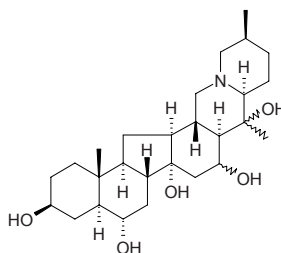
[131984-90-2]  $C_{34}H_{57}NO_8$  (607.84). Needles (MeOH), mp 244~246°C,  $[\alpha]_D = -4.57^\circ$  ( $c = 0.164$ , MeOH). Source: PING BEI MU *Fritillaria ussuriensis*. Ref: 3227.

**17383 Pingbeisaponin**

Pingbeisaponin [126453-84-7]  $C_{39}H_{62}O_{13}$  (738.92). Source: PING BEI MU *Fritillaria ussuriensis*. Ref: 3228.

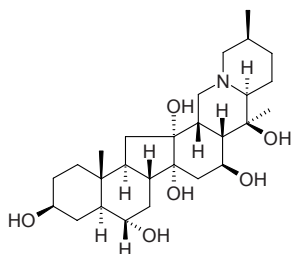
**17384 Pingpeimine A**

Pingpeimine A [82841-67-6]  $C_{27}H_{45}NO_5$  (463.66). Pharm: Antitussive (dispels phlegm); antihypertensive. Source: PING BEI MU *Fritillaria ussuriensis*. Ref: 658, 3114.

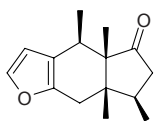


**17385 Pingpeimine B**

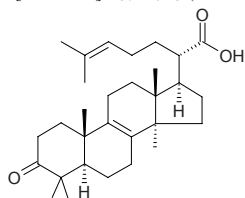
5 $\alpha$ ,17 $\beta$ ,22 $\alpha$ -Cevanine-3 $\beta$ ,6 $\alpha$ ,12 $\alpha$ ,14 $\alpha$ ,16 $\beta$ ,20 $\beta$ -hexol C<sub>27</sub>H<sub>45</sub>NO<sub>6</sub> (479.66). Colorless acicular crystals, mp 242~244°C, [ $\alpha$ ]<sub>D</sub> = +24.9° (c = 0.08, methanol). Source: PING BEI MU *Fritillaria ussuriensis*. Ref: 117, 660.

**17386 Pinguisone**

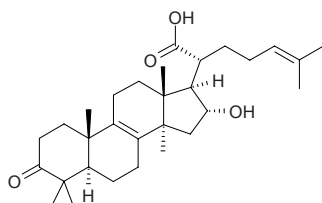
[22489-40-3] C<sub>15</sub>H<sub>20</sub>O<sub>2</sub> (232.33). Pharm: Insect antifeedant. Source: LONG YA CAO *Agrimonia pilosa*. Ref: 658.

**17387 Pinicolic acid A**

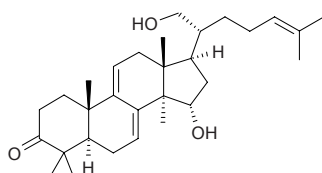
[466-05-7] C<sub>30</sub>H<sub>46</sub>O<sub>3</sub> (454.70). Source: FU LING *Poria cocos*. Ref: 2.

**17388 Pinicolic acid E**

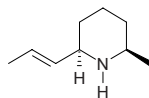
16 $\alpha$ -Hydroxy-3-oxolanosta-8,24-dien-21-oic acid C<sub>30</sub>H<sub>46</sub>O<sub>4</sub> (470.70). Waxy yellow solid. Source: HONG YUAN CENG KONG JUN *Fomitopsis pinicola* [Syn. *Fomes pinicola*; *Polyporus pinicola*] (crust). Ref: 3972.

**17389 Pinicolol C**

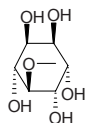
3-Oxolanosta-7,9(11),24-trien-15 $\alpha$ ,21-diol C<sub>30</sub>H<sub>46</sub>O<sub>3</sub> (454.70). Waxy yellow solid. Source: HONG YUAN CENG KONG JUN *Fomitopsis pinicola* [Syn. *Fomes pinicola*; *Polyporus pinicola*] (crust). Ref: 3972.

**17390 Pinidine**

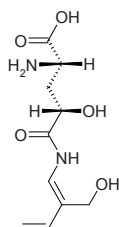
2-Methyl-6-(prop-2-enyl)piperidine [501-02-0] C<sub>9</sub>H<sub>17</sub>N (139.24). bp 176~177°C/751mmHg. Source: HAI SONG ZI *Pinus koraiensis*. Ref: 6.

**17391 Pinitol**

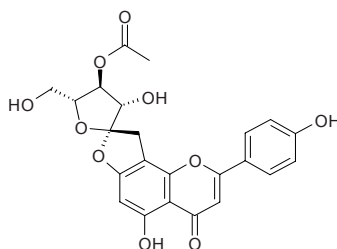
[10284-63-6] C<sub>7</sub>H<sub>14</sub>O<sub>6</sub> (194.19). mp 186°C. Source: YE GUAN MEN *Lespedeza cuneata*. Ref: 6.

**17392 Pinnatanine**

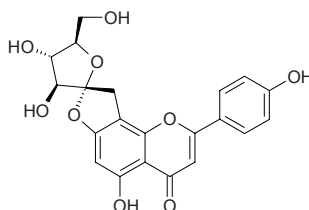
[35214-74-5] C<sub>10</sub>H<sub>16</sub>N<sub>2</sub>O<sub>5</sub> (244.25). mp 175°C (dec), [ $\alpha$ ]<sub>D</sub><sup>27</sup> = +3.2° (c = 0.5, H<sub>2</sub>O). Source: OU ZHOU SHENG GU YOU *Staphylea pinnata*, XUAN CAO GEN *Hemerocallis fulva*. Ref: 3229.

**17393 Pinnatifin I**

C<sub>23</sub>H<sub>20</sub>O<sub>10</sub> (456.41). yellowish acicular crystals, mp 251~253°C. Source: SHAN LI HONG *Crataegus pinnatifida* var. *major*. Ref: 2129.

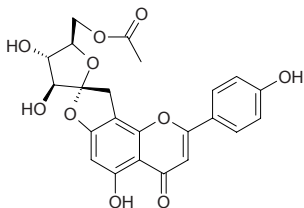
**17394 Pinnatifinoside A**

C<sub>21</sub>H<sub>18</sub>O<sub>9</sub> (414.37). Yellow needles, mp 185~187°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +79° (c = 0.24, MeOH). Source: SHAN LI HONG *Crataegus pinnatifida* var. *major* (leaf). Ref: 5170.

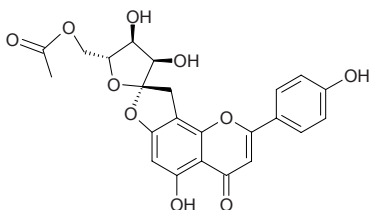


**17395 Pinnatifinoside B**

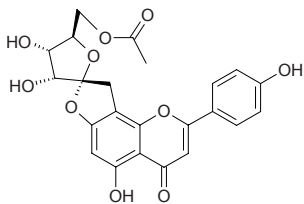
$C_{23}H_{20}O_{10}$  (456.41). Light yellow needles, 240~242°C,  $[\alpha]_D^{25} = +58^\circ$  ( $c = 0.12$ , MeOH). Source: SHAN LI HONG *Crataegus pinnatifida* var. *major* (leaf). Ref: 5170.

**17396 Pinnatifinoside C**

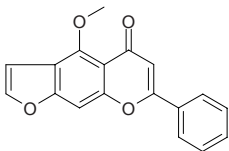
$C_{23}H_{20}O_{10}$  (456.41). Light yellow needles, 246~248°C,  $[\alpha]_D^{25} = -34^\circ$  ( $c = 0.16$ , MeOH). Source: SHAN LI HONG *Crataegus pinnatifida* var. *major* (leaf). Ref: 5170.

**17397 Pinnatifinoside D**

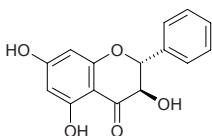
$C_{23}H_{20}O_{10}$  (456.41). Light yellow needles, 248~250°C,  $[\alpha]_D^{25} = +25^\circ$  ( $c = 0.11$ , MeOH). Source: SHAN LI HONG *Crataegus pinnatifida* var. *major* (leaf). Ref: 5170.

**17398 Pinnatin**

[1232-43-5]  $C_{18}H_{12}O_4$  (292.29). mp 176~177°C. Source: SHUI LIU DOU *Pongamia pinnata*. Ref: 6.

**17399 Pinobanksin**

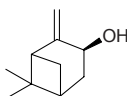
[548-82-3]  $C_{15}H_{12}O_5$  (272.26). Long yellow prisms (MeOH), mp 177~178°C,  $[\alpha]_D = +15^\circ$  ( $c = 2$ , MeOH). Source: BO LE SHU *Bretschneidera sinensis*, JIE LIAO *Polygonum nodosum*, MI HUA SHI DOU LAN *Bulbophyllum odoratissimum* [Syn. *Stelis odoratissimum*], *Baccharis* spp., *Helichrysum* spp., *Larix* spp., *Pinus* spp., *Platanus* spp., *Polygonum* spp., *Prunus* spp., *Tilia* spp. Ref: 1521, 3230, 3231, 3232.

**17400 L-Pinocamphone**

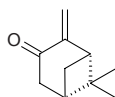
[22339-21-5]  $C_{10}H_{16}O$  (152.24). bp 212~214°C. Source: JIN XIAN CAO *Glechoma longituba*. Ref: 6, 1521.

**17401 trans-Pinocarveol**

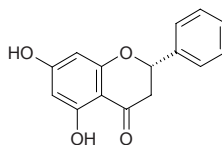
$C_{10}H_{16}O$  (152.24). mp (+) 7°C, (-) 5°C, (±) 14°C. Source: HU JIAO *Piper nigrum*. Ref: 6.

**17402 (-)-Pinocarvone**

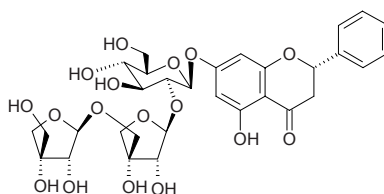
(-)-2(10)-Pinen-3-one  $C_{10}H_{14}O$  (150.22). Oil, mp -1.8°C, bp 67~69°C/4mmHg,  $[\alpha]_D = -68.5^\circ$ . Pharm: Insect attractant (bark beetles). Source: AN YE *Eucalyptus globulus*, TU JING JIE *Chenopodium ambrosioides*, YUAN MAO JING JIE *Nepeta ciliaris*. Ref: 1521.

**17403 Pinocembrin**

(S)-Pinocembrin [480-39-7]  $C_{15}H_{12}O_4$  (256.26).  $[\alpha]_D^{25} = -32.8^\circ$  ( $c = 0.39$ , acetone). Pharm: Cytotoxic (aromatase inhibitor)<sup>[5038]</sup>; antibacterial (*Bacillus subtilis*, 3µg/mL); antifungal (*Candida albicans*, EC = 0.1-3.0mg/mL, *Saccharomyces cerevisiae* and *Cryptococcus neoformans*); anti-inflammatory<sup>[4415]</sup>. Source: DA HUA GE NA XIANG *Goniothalamus griffithii*, GOU SHU GUO *Broussonetia papyrifera*, GUANG GUO GAN CAO *Glycyrrhiza glabra* (leaf)<sup>[4685]</sup>, RUI SHI SHI SONG *Pinus cembra*, YI DA LI LA JU *Helichrysum italicum*, *Glycyrrhiza* sp., *Prunus* sp., *Helichrysum* sp., YANG PU TAO YE *Syzygium samarangense*. Ref: 658, 1521, 5038, 4100, 4415, 4685, 5453.

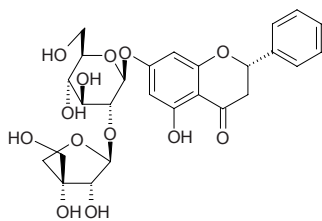
**17404 Pinocembrin 7-O-apiosyl(1→5)apiosyl(1→2)-β-D-glucopyranoside**

$C_{31}H_{38}O_{17}$  (682.64). Colorless amorphous solid,  $[\alpha]_D = -119^\circ$  ( $c = 0.3$ , MeOH). Source: LENG ZHI HU JI SHENG *Viscum angulatum* (whole herb: yield = 0.015%dw). Ref: 4626.

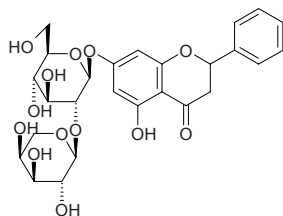


**17405 (2S)-Pinocembrin 7-O-[β-D-apiosyl(1→2)]-β-D-glucoside**

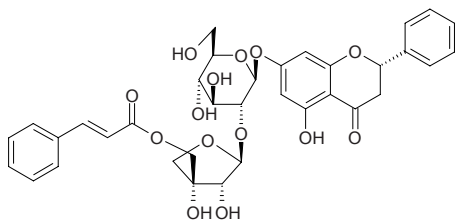
$C_{26}H_{30}O_{13}$  (550.52). Colorless powder (MeOH), mp 204–205°C,  $[\alpha]_D = -107.6^\circ$  ( $c = 0.01$ , MeOH). Source: BIAN ZHI HU JI SHENG *Viscum articulatum*. Ref: 4053.

**17406 Pinocembrin-7-O-α-arabinopyranosyl-(1→2)-β-glucopyranoside**

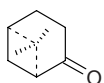
$C_{26}H_{30}O_{13}$  (550.52). Pale yellowish powder. Source: DONG AN NA TUO LI YA SHI CHE JU *Centaurea pseudoscabiosa* ssp. *pseudoscabiosa*. Ref: 1947.

**17407 (2S)-Pinocembrin****7-O-[cinnamoyl(1→5)]-β-D-apiosyl(1→2)]-β-D-glucoside**

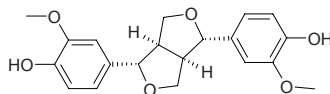
$C_{35}H_{36}O_{14}$  (680.67). White powder (MeOH), mp 170–172°C,  $[\alpha]_D = -129.7^\circ$  ( $c = 0.035$ , MeOH). Source: BIAN ZHI HU JI SHENG *Viscum articulatum*. Ref: 4053.

**17408 (-)-β-Pinone**

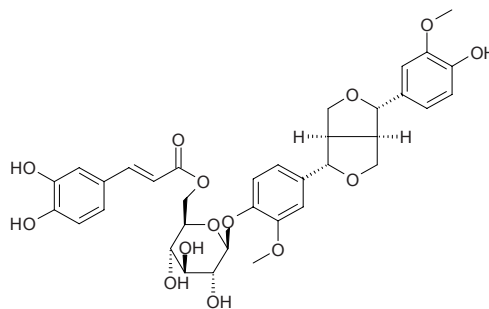
$C_9H_{14}O$  (138.21). bp 85°C/11mmHg,  $[\alpha]_D = -18.35^\circ$  (semisynthetic). Source: YAO YONG XUN YI CAO *Lavandula officinalis*. Ref: 1521.

**17409 (+)-Pinoresinol**

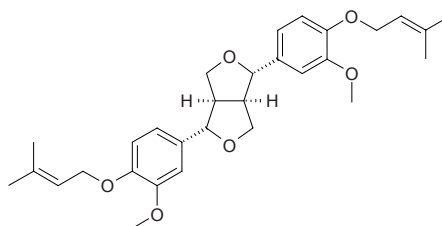
$C_{20}H_{22}O_6$  (358.40). Pharm: cAMP phosphodiesterase inhibitor; aldose reductase inhibitor ( $IC_{50} > 100\mu\text{mol/L}$ ,  $100\mu\text{mol/L}$  InRt = 34%, control Epalrestat,  $IC_{50} = 0.072\mu\text{mol/L}$ )<sup>[4530]</sup>; EBV-EA inhibitor (TPA-induced,  $IC_{50} = 398$ (mol ratio/32pmol TPA), control Curcumin,  $IC_{50} = 341$ (mol ratio/32pmol TPA))<sup>[5028]</sup>; anti-inflammatory (modulator of cytokine network: inhibits LPS-activated production of TNF-α in RAW264.7 cells,  $IC_{50} = 50\sim 100\mu\text{mol/L}$ )<sup>[4416]</sup>; inhibits inducible nitric oxide synthase (iNOS) expression (lipopolysaccharide (LPS)-induced, RAW264.7 cells)<sup>[2582]</sup>; plant growth stimulatory or inhibitory activity (radicle length: *Lactuca sativa*,  $1\mu\text{mol/L}$ , StRt > 61%,  $10\mu\text{mol/L}$ , StRt = (30–60)%,  $100\mu\text{mol/L}$ , StRt > 61%,  $1\text{mmol/L}$ , StRt > 61%; *Raphanus sativus*,  $1\mu\text{mol/L}$ , StRt > 61%,  $10\mu\text{mol/L}$ , StRt > 61%,  $100\mu\text{mol/L}$ , StRt > 61%,  $1\text{mmol/L}$ , StRt > 61%; *Allium cepa*,  $1\mu\text{mol/L}$ , StRt = (30–60)%,  $10\mu\text{mol/L}$ , StRt or InRt < 10%,  $100\mu\text{mol/L}$ , StRt = (10–30)%,  $1\text{mmol/L}$ , StRt = (10–30)%)<sup>[5217]</sup>. Source: DU ZHONG *Eucommia ulmoides*, LIAN QIAO *Forsythia suspensa* (fruit: content = 0.121%)<sup>[5508]</sup>, RI BEN BAI LA SHU *Fraxinus japonica*, RI BEN HUANG LIAN *Coptis japonica* (rhizome), RI BEN YU LIN SONG *Picea jezoensis*, SA HA LIN YUN SHAN *Picea glehnii* (stem cortex), SHUI MU XUE LIAN HUA *Saussurea medusa* (whole herb), TAI WAN GE NA XIANG *Goniolthalamus amuyon* (fresh leaf)<sup>[4686]</sup>, XI YANG JIE GU MU *Sambucus nigra*, YI YE TIE SHAN *Tsuga heterophylla*, ZHAI YE NAN YANG SHAN *Araucaria angustifolia*, *Wikstroemia* sp., *Pinus* sp. Ref: 658, 2582, 4416, 4530, 4686, 5028, 5217, 5508.

**17410 Pinoresinol O-[6-O-(E)-caffeoyl]-β-D-glucopyranoside**

$C_{35}H_{38}O_{14}$  (682.68). Amorphous powder,  $[\alpha]_D^{22} = +39^\circ$  ( $c = 0.69$ , MeOH). Source: XIAO LONG YE KUO BAO JU *Baccharis dracunculifolia* (aerial parts). Ref: 4184.

**17411 (+)-Pinoresinol-di-3,3-dimethylallyl ether**

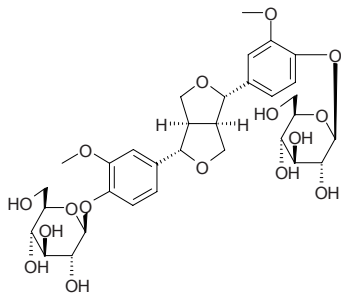
$C_{30}H_{38}O_6$  (494.63). Pharm: Antineoplastic; cathartic; sthenic; pesticide; ichthyotoxin; muscle relaxant. Source: *Zanthoxylum* sp. Ref: 2176.



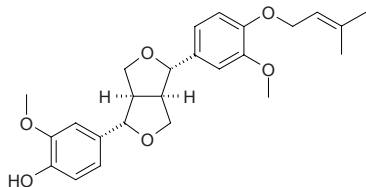


**17412 (+)-Pinoresinol-di-O-β-D-glucoside**

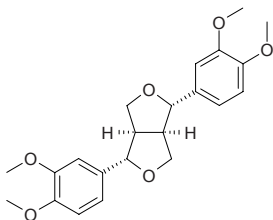
Pinoresinol-4,4'-di-O-β-D-glucoside C<sub>32</sub>H<sub>42</sub>O<sub>16</sub> (682.68). **Pharm:** Antihypertensive (spontaneous hypertensive rat, iv: 30mg/kg, lowers blood pressure by 25~35mmHg, 40mg/kg, 80mmHg, 100mg/kg, 90~120mmHg). **Source:** CI WU JIA *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*], DU ZHONG *Eucommia ulmoides* (bark: content scope of 7 origins = 0.043%~0.506%, mean content = 0.23%<sup>[5508]</sup>), XIE CAO *Valeriana officinalis* (root: yield = 0.016%<sup>[4656]</sup>). **Ref:** 2, 4656, 5501, 5508.

**17413 (+)-Pinoresinol-3,3-dimethylallyl ether**

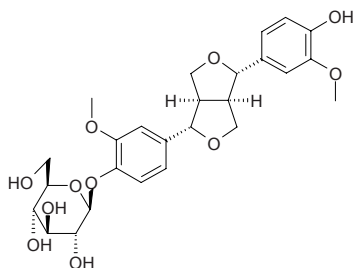
C<sub>25</sub>H<sub>30</sub>O<sub>6</sub> (426.51). **Pharm:** Antineoplastic; cathartic; sthenic; pesticide; ichthyotoxin; muscle relaxant. **Source:** *Zanthoxylum* sp. **Ref:** 2176.

**17414 Pinoresinol dimethyl ether**

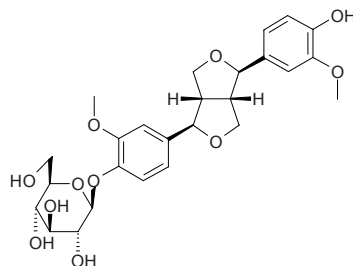
C<sub>22</sub>H<sub>26</sub>O<sub>6</sub> (386.45). **Source:** WANG CHUN YU LAN *Magnolia biondii* [Syn. *Magnolia fargesii*]. **Ref:** 543.

**17415 (+)-Pinoresinol O-β-D-glucopyranoside**

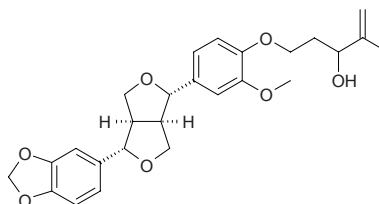
C<sub>26</sub>H<sub>32</sub>O<sub>11</sub> (520.54). **Pharm:** Aldose reductase inhibitor (IC<sub>50</sub> > 100μmol/L, 100μmol/L InRt = 37%, control Epalrestat, IC<sub>50</sub> = 0.072μmol/L)<sup>[4530]</sup>. **Source:** DU ZHONG *Eucommia ulmoides*, SAI ER WEI YA SHI CAO *Achillea alexandri-regis*, SHUI MU XUE LIAN HUA *Saussurea medusa* (whole herb), XIAO LONG YE KUO BAO JU *Baccharis dracunculifolia* (aerial parts), XIE CAO *Valeriana officinalis* (root)<sup>[4656]</sup>. **Ref:** 2, 2545, 4184, 4530, 4656.

**17416 (-)-Pinoresinol O-β-D-glucopyranoside**

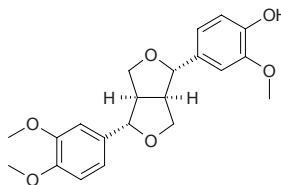
C<sub>26</sub>H<sub>32</sub>O<sub>11</sub> (520.54). **Pharm:** Antioxidant (*in vitro*, DPPH radical scavenger, IC<sub>50</sub> = 260μmol/L; control Vitamin E, IC<sub>50</sub> = 20.1μmol/L). **Source:** RI BEN AN XI XIANG JING PI *Styrax japonica* (stem cortex: yield = 0.0113%<sup>[dw]</sup>). **Ref:** 4787.

**17417 (+)-Pinoresinol-3-hydroxy-4-methyl-4-pentenyl ether**

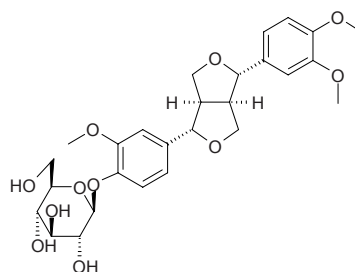
C<sub>26</sub>H<sub>30</sub>O<sub>7</sub> (454.52). **Pharm:** Antineoplastic; cathartic; sthenic; pesticide; ichthyotoxin; muscle relaxant. **Source:** *Zanthoxylum* sp. **Ref:** 2176.

**17418 (+)-Pinoresinol monomethyl ether**

C<sub>21</sub>H<sub>24</sub>O<sub>6</sub> (372.42). **Source:** YUN NAN FEI SHU *Torreya yunnanensis* (leaf and twig: yield = 0.0096%<sup>[dw]</sup>). **Ref:** 4707.

**17419 (+)-Pinoresinol monomethyl ether O-β-D-glucopyranoside**

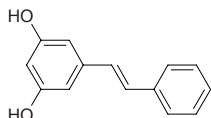
C<sub>27</sub>H<sub>34</sub>O<sub>11</sub> (534.57). **Source:** YUN NAN FEI SHU *Torreya yunnanensis* (leaf and twig: yield = 0.022%<sup>[dw]</sup>)<sup>[4707]</sup>, ZHONG HUA QING NIU DAN *Tinospora sinensis* (stem). **Ref:** 4292, 4707.



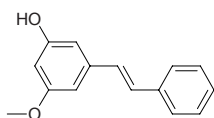


**17420 Pinosylvin**

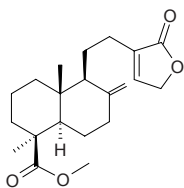
[22139-77-1] C<sub>14</sub>H<sub>12</sub>O<sub>2</sub> (212.25). **Pharm:** Antifungal (*Pyricularia grisea*, EC<sub>50</sub> = 7 μg/mL, EC<sub>90</sub> = 16 μg/mL; *Cladosporium herbarum*, EC<sub>50</sub> = 10 μg/mL, EC<sub>90</sub> = 58 μg/mL; *Fusarium avenaceum*, EC<sub>50</sub> = 36 μg/mL, EC<sub>90</sub> = 50 μg/mL; *Alternaria citri*, EC<sub>50</sub> = 35 μg/mL, EC<sub>90</sub> = 46 μg/mL; *Botrytis cinerea*, EC<sub>50</sub> = 11 μg/mL, EC<sub>90</sub> = 39 μg/mL)<sup>[3751]</sup>; toxin (fungi, bacteria and some animals). **Source:** YIN DU HUANG TAN *Dalbergia sissoo*, XI BO DE QI MU *Alnus sieboldiana*, *Stemona cf. pierrei* (underground parts), *Pinus* sp., *Nothofagus* sp. **Ref:** 658, 3751.

**17421 Pinosylvin methyl ether**

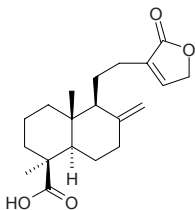
C<sub>15</sub>H<sub>14</sub>O<sub>2</sub> (226.28). **Pharm:** Antifungal; insect antifeedant ("Showshoe Hare" *Lepus americanus*). **Source:** MEI ZHOU LU QI MU *Alnus crispa*, XI BO DE QI MU *Alnus sieboldiana*, *Pinus* sp. **Ref:** 658.

**17422 Pinusolide**

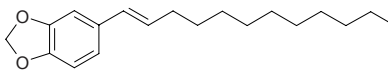
[31685-80-0] C<sub>21</sub>H<sub>30</sub>O<sub>4</sub> (346.47). Colorless oil, [α]<sub>D</sub><sup>25</sup> = +47° (c = 3.0, CHCl<sub>3</sub>), [α]<sub>D</sub><sup>23</sup> = +58.5° (c = 0.1, CHCl<sub>3</sub>); fine needles (pet. ether), mp 83–84°C, [α]<sub>D</sub><sup>23</sup> = +24° (MeOH). **Pharm:** PAF antagonist (*in vivo*, *in vitro*, IC<sub>50</sub> = 0.25 μmol/L, protects mus from lethality induced by PAF, ED<sub>50</sub> (iv) = 1.1 mg/kg, ED<sub>50</sub> (orl) = 69 mg/kg); Anti-inflammatory (mus, edema on ears caused by oleum crotonis, 2 mg/ear); antimalarial (*in vitro*, *Plasmodium falciparum* strain 3D7, IC<sub>50</sub> = (18.5 ± 1.6) μg/mL = (53.4 ± 4.6) μmol/L)<sup>[3022]</sup>. **Source:** BAI ZI REN *Biota orientalis* [Syn. *Thuja orientalis*; *Platyclusus orientalis*], CE BAI YE *Thuja orientalis* [Syn. *Platyclusus orientalis*; *Biota orientalis*], HONG SONG *Pinus koraiensis*, TAI WAN GUO SONG *Pinus armandii* var. *mastersiana*, XI BO LI YA HONG SONG *Pinus sibirica*. **Ref:** 1521, 3022, 3233, 3234, 3235.

**17423 Pinusolidic acid**

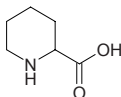
Pinusolide acid; Pinusolic acid C<sub>20</sub>H<sub>28</sub>O<sub>4</sub> (332.44). Colorless oil, [α]<sub>D</sub><sup>25</sup> = +53° (c = 0.36, CHCl<sub>3</sub>), [α]<sub>D</sub><sup>23</sup> = +54.5° (c = 0.1, CHCl<sub>3</sub>). **Pharm:** Antimalarial (*in vitro*, *Plasmodium falciparum* strain 3D7, IC<sub>50</sub> = (54.5 ± 1.4) μg/mL = (163.9 ± 4.2) μmol/L)<sup>[3022]</sup>. **Source:** CE BAI YE *Thuja orientalis* [Syn. *Platyclusus orientalis*; *Biota orientalis*]. **Ref:** 3022.

**17424 Pipataline**

[18634-87-2] C<sub>19</sub>H<sub>28</sub>O<sub>2</sub> (288.43). mp 38°C. **Source:** *Piper peepuloides*. **Ref:** 3236.

**17425 Pipecolic acid**

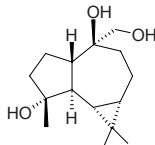
*dl*-Pipecolinic acid [535-75-1] C<sub>6</sub>H<sub>11</sub>NO<sub>2</sub> (129.16). mp (+) 270°C, (–) 270°C, (±) 264°C. **Pharm:** Germination inhibitor. **Source:** BAI FAN DOU *Phaseolus vulgaris*, BIAN DOU *Dolichos lablab*, CAN DOU *Vicia faba*, HAI JIU CAI *Triglochin maritimum*, SHENG JIANG *Zingiber officinale*, SUAN JIAO *Tamarindus indica*, WANG GUA ZI *Trichosanthes cucumeroides*. **Ref:** 6, 658.

**17426 D-α-Pipecoline**

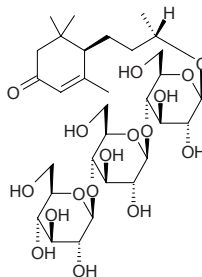
[109-05-7] C<sub>6</sub>H<sub>13</sub>N (99.18). bp (+) 117.0–117.5°C. **Source:** HAI SONG ZI *Pinus koraiensis*. **Ref:** 6.

**17427 Pipelol A**

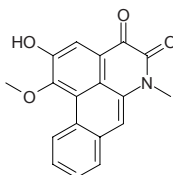
C<sub>15</sub>H<sub>26</sub>O<sub>3</sub> (254.37). Syrup, [α]<sub>D</sub><sup>19</sup> = –14.3° (c = 1.2, MeOH). **Source:** CHANG HU JIAO *Piper elongatum* (aerial parts). **Ref:** 4239.

**17428 Pipeloside A**

C<sub>31</sub>H<sub>52</sub>O<sub>17</sub> (696.75). Syrup, [α]<sub>D</sub><sup>19</sup> = +173.7° (c = 0.9, MeOH). **Source:** CHANG HU JIAO *Piper elongatum* (aerial parts). **Ref:** 4239.

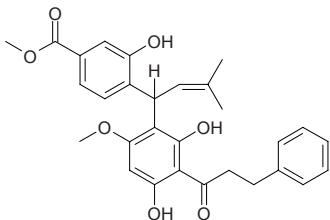
**17429 Piperadione**

Aristolodione [109771-09-7] C<sub>18</sub>H<sub>13</sub>NO<sub>4</sub> (307.31). Crystals (CHCl<sub>3</sub>–MeOH), mp 273–276°C (dec). **Source:** BI BA GEN *Piper longum*, ZHI LI MA DOU LING *Aristolochia chilensis*. **Ref:** 3237, 3238.

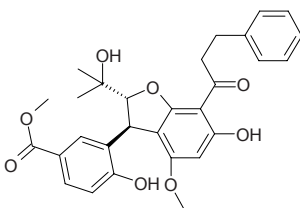


**17430 Piperaduncin A**

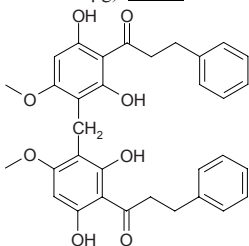
[155023-54-4] C<sub>29</sub>H<sub>30</sub>O<sub>7</sub> (490.56). Yellowish amorphous powder,  $[\alpha]_D^{20} = -3.1^\circ$  ( $c = 0.64$ , MeOH). **Pharm:** Cytotoxic (KB, ED<sub>50</sub> = 2.3 μg/mL); antibacterial (*Bacillus subtilis* MIC = 1.6 μg on TLC plate, *Micrococcus luteus* MIC = 1.6 μg). **Source:** GOU ZHUANG HU JIAO *Piper aduncum*. **Ref:** 3702.

**17431 Piperaduncin B**

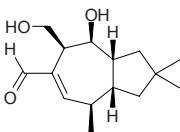
[155023-55-5] C<sub>29</sub>H<sub>30</sub>O<sub>8</sub> (506.56). Yellow oil,  $[\alpha]_D^{20} = -15^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Cytotoxic (KB, ED<sub>50</sub> = 4.7 μg/mL); antibacterial (*Bacillus subtilis* MIC = 0.2 μg on TLC plate, *Micrococcus luteus* MIC = 0.4 μg). **Source:** GOU ZHUANG HU JIAO *Piper aduncum*. **Ref:** 3702.

**17432 Piperaduncin C**

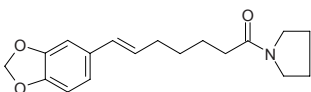
[155023-56-6] C<sub>33</sub>H<sub>32</sub>O<sub>8</sub> (556.62). Yellow amorphous powder. **Pharm:** Antibacterial (*Bacillus subtilis*, TLC plate, MIC = 1.5 μg, *Micrococcus luteus*, MIC = 3.0 μg). **Source:** GOU ZHUANG HU JIAO *Piper aduncum*. **Ref:** 3702.

**17433 Piperalol**

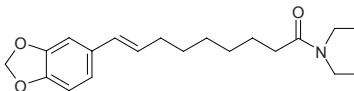
[100288-35-5] C<sub>15</sub>H<sub>24</sub>O<sub>3</sub> (252.36). Pungent oil,  $[\alpha]_D^{23} = +57^\circ$  ( $c = 4.3$ , Et<sub>2</sub>O). **Source:** LA RU GU *Lactarius piperatus* [Syn. *Agaricus piperatus*], MAO TOU RU GU *Lactarius torminosus*, *Lactarius necator*, *Russula queletii*. **Ref:** 3239.

**17434 Piperamide C 7:1(6E)**

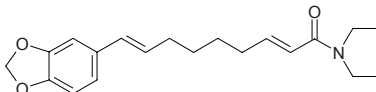
[117137-66-3] C<sub>18</sub>H<sub>23</sub>NO<sub>3</sub> (301.39). Oil. **Pharm:** Larvicidal. **Source:** HU JIAO *Piper nigrum*. **Ref:** 3240.

**17435 Piperamide C 9:1(8E)**

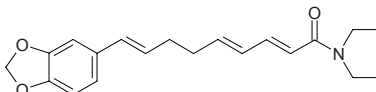
Tricholein [62510-52-5] C<sub>20</sub>H<sub>27</sub>NO<sub>3</sub> (329.44). Oil. **Pharm:** Larvicidal. **Source:** HU JIAO *Piper nigrum* (root: yield = 0.00019%dw), MAO SUI HU JIAO *Piper trichostachyon*. **Ref:** 3242, 3243, 3240, 4753.

**17436 Piperamide C 9:2(2E,8E)**

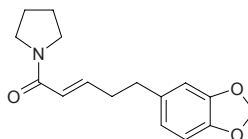
Brachyamide B [117137-67-4] C<sub>20</sub>H<sub>25</sub>NO<sub>3</sub> (327.43). Oil. **Pharm:** Larvicidal. **Source:** DUAN SUI HU JIAO *Piper brachystachyum*, HU JIAO *Piper nigrum* (root: yield = 0.000057%dw). **Ref:** 3240, 3244, 4753.

**17437 Piperamide C 9:3(2E,4E,8E)**

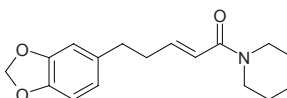
[117137-68-5] C<sub>20</sub>H<sub>23</sub>NO<sub>3</sub> (325.41). Yellow needles, mp 105~106°C. **Pharm:** Larvicidal. **Source:** HU JIAO *Piper nigrum* (root: yield = 0.00011%dw). **Ref:** 3240, 4753.

**17438 Piperamine**

Piperamide C 5:1(2E); 1-[1-Oxo-5(3,4-methylenedioxyphenyl)-2E-pentenyl]pyrrolidine [117137-65-2] C<sub>16</sub>H<sub>19</sub>NO<sub>3</sub> (273.33). Oil. **Pharm:** Antifungal (*Cladosporium sphaerospermum*, MIA = 5.0 μg, control Nystatin, MIA = 0.5 μg)<sup>[5102]</sup>. **Source:** HU JIAO *Piper nigrum*, HU JIAO *Piper nigrum* (root: yield = 0.00016%dw), YING MAO HU JIAO *Piper hispidum* (stem). **Ref:** 3240, 3241, 4753, 5102.

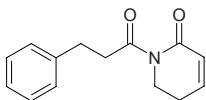
**17439 Piperanine**

1-[1-Oxo-5(3,4-methylenedioxyphenyl)-2E-pentenyl]piperidine [23512-46-1] C<sub>17</sub>H<sub>21</sub>NO<sub>3</sub> (287.36). Colorless crystals. **Pharm:** Protective gastric lesions (rat, ethanol-induced, 25mg/kg orl, length = (58.2±9.8)mm, control, length = (118.6±16.2)mm, InRt = 50.9%; indomethacin-induced in rats, dose, 25mg/kg orl, length = (62.8±10.1)mm, control, length = (89.5±9.8)mm, InRt = 29.8%)<sup>[4935]</sup>; antifungal (*Cladosporium sphaerospermum*, MIA = 5.0 μg, control Nystatin, MIA = 0.5 μg)<sup>[5102]</sup>. **Source:** HU JIAO *Piper nigrum* (root: yield = 0.000024%dw), LIU TU HU JIAO *Piper tuberculatum* (seed), *Piper chaba* (fruit). **Ref:** 6, 4753, 4935, 5102.

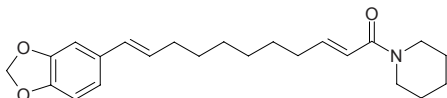


**17440 Piperchabamide A**

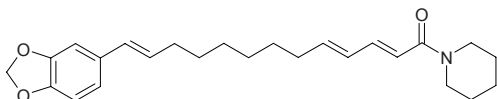
$C_{14}H_{15}NO_2$  (229.28). Colorless oil. Source: *Piper chaba* (fruit). Ref: 4935.

**17441 Piperchabamide B**

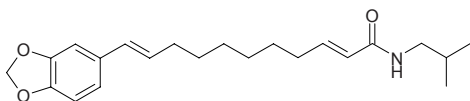
$C_{23}H_{31}NO_3$  (369.51). Colorless oil. Source: *Piper chaba* (fruit). Ref: 4935.

**17442 Piperchabamide C**

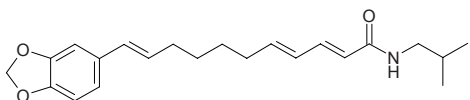
$C_{25}H_{33}NO_3$  (395.55). Colorless oil. Source: *Piper chaba* (fruit). Ref: 4935.

**17443 Piperchabamide D**

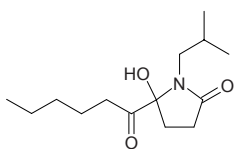
$C_{22}H_{31}NO_3$  (357.50). Colorless oil. Source: *Piper chaba* (fruit). Ref: 4935.

**17444 Pipericide**

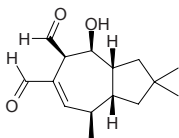
Retrofractamide B [54794-74-0]  $C_{22}H_{29}NO_3$  (355.48). Crystals (EtOAc), mp 114–115°C. Pharm: Insecticidal. Source: CHANG GUO BI BA *Piper retrofractum*, HU JIAO *Piper nigrum*. Ref: 3245, 3240.

**17445 Pipericyliamide**

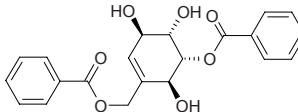
*N*-Isobutyl-4-hexanoyl-4-hydroxypyrrolidin-1-one  $C_{14}H_{25}NO_3$  (255.36). Colorless oil,  $[\alpha]_D^{25} = 0^\circ$  ( $c = 1$ ,  $CHCl_3$ ). Source: HU JIAO *Piper nigrum* (root: yield = 0.00056%dw). Ref: 4753.

**17446 Piperdial**

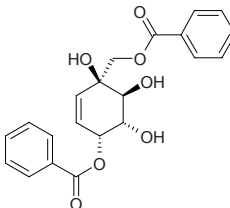
[100288-36-6]  $C_{15}H_{22}O_3$  (250.34). Pungent oil,  $[\alpha]_D^{23} = +77^\circ$  ( $c = 0.8$ ,  $Et_2O$ ). Source: LA RU GU *Lactarius piperatus* [Syn. *Agaricus piperatus*], MAO TOU RU GU *Lactarius torminosus*, *Lactarius necator*, *Russula queletii*. Ref: 3239.

**17447 Piperenol A**

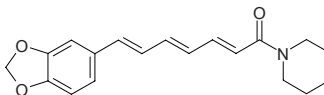
[134476-89-4]  $C_{21}H_{20}O_7$  (384.39). Crystals (EtOAc–hexane), mp 48–49°C,  $[\alpha]_D = +14.6^\circ$  ( $c = 0.5$ , MeOH). Source: BI CHENG QIE *Piper cubeba*, *Piper clarkii*. Ref: 3246.

**17448 Piperenol B**

[134476-91-8]  $C_{21}H_{20}O_7$  (384.39). Semi-solid,  $[\alpha]_D = +50^\circ$  ( $c = 1$ , MeOH). Source: BI CHENG QIE *Piper cubeba*, Ref: 3246.

**17449 Piperettine**

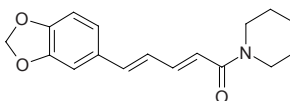
Piperamide A 7:3(2*E*,4*E*,6*E*) [583-34-6]  $C_{19}H_{21}NO_3$  (311.38). Yellow needles ( $C_6H_6$ –hexane), mp 148°C. Source: HU JIAO *Piper nigrum* (fruit: mean content = yield = 0.53%<sup>[5508]</sup>; root: yield = 0.000014%dw<sup>[4753]</sup>), *Piper aurantiacum*. Ref: 3240, 4753, 5508.

**17450 Piperidine**

Azacyclohexane [110-89-4]  $C_5H_{11}N$  (85.15). mp –9°C, bp 106°C. Source: BI BA *Piper longum*, MA HUA *Cannabis sativa*. Ref: 6.

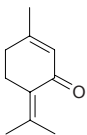
**17451 Piperine**

1,3-Benzodioxol-5-yl-1-oxo-2,4-pentadienylpiperine; (*E,E*)-Piperylpiperidine [94-62-2]  $C_{17}H_{19}NO_3$  (285.35). Yellow needles, mp 129.5°C, almost insoluble in water, slightly soluble in ether, soluble in ethanol, easily soluble in chloroform, benzene, acetic acid.<sup>[5507]</sup> Pharm: Anticonvulsant; pesticide; sedative; MAO-A inhibitor ( $IC_{50} = 20.9\mu\text{mol/L}$ ); MAO-B inhibitor ( $IC_{50} = 7.0\mu\text{mol/L}$ ); protective gastric lesions (rat, ethanol-induced, 6.25mg/kg orl, length = (113.0±13.1)mm, control, length = (122.6±11.3)mm, InRt = 7.8%; 25mg/kg orl, length = (54.8±6.3)mm, InRt = 55.3%; indomethacin-induced, 25mg/kg orl, length = (27.3±5.6)mm, control, length = (77.1±6.7)mm, InRt = 64.6%)<sup>[4935]</sup>; LD<sub>50</sub> (rat, ip) = 348.6mg/kg. Source: BI BA *Piper longum* (fruit-spike: content scope = 4%–6%<sup>[5501]</sup>), BI BA GEN *Piper longum*, JI NEI YA HU JIAO *Piper guineense*, HU JIAO *Piper nigrum* (fruit: content scope = 3.15%–4.82%<sup>[5501]</sup>), HU JIAO *Piper nigrum* (fruit: mean content = 4.32%<sup>[5508]</sup>; root: yield = 0.000036%dw<sup>[4753]</sup>), *Piper chaba* (fruit). Ref: 6, 658, 4482, 4753, 4935, 5501, 5507, 5508.

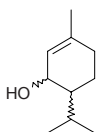


**17452 Piperitenone**

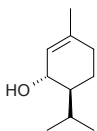
[491-09-8] C<sub>10</sub>H<sub>14</sub>O (150.22). Source: JING JIE *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*]. Ref: 2.

**17453 Piperitol**

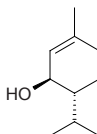
C<sub>10</sub>H<sub>18</sub>O (154.25). Source: AI YE *Artemisia argyi*, KUI HAO *Artemisia princeps*, MENG GU HAO *Artemisia mongolica*, ROU DOU KOU *Myristica fragrans*, YE AI HAO *Artemisia lavandulaefolia*. Ref: 3247, 3248, 1268.

**17454 (3R,4S)-(-)-trans-Piperitol**

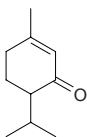
[25437-28-9] C<sub>10</sub>H<sub>18</sub>O (154.25). Oil, bp 98°C/15mmHg, [α]<sub>D</sub><sup>35</sup> = -25° (c = 2.1, C<sub>6</sub>H<sub>6</sub>). Source: *Mentha* spp., *Eucalyptus* spp. Ref: 1521, 3249.

**17455 (3S,4R)-(+)-cis-Piperitol**

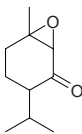
[65733-28-0] C<sub>10</sub>H<sub>18</sub>O (154.25). bp 101~104°C/16mmHg, [α]<sub>D</sub><sup>16</sup> = +40.22° (+28°). Source: *Andropogon* sp. Ref: 1521, 3249.

**17456 Piperitone**

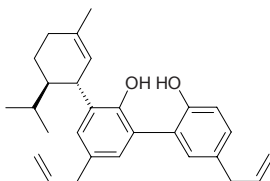
3-Methyl-6-(1-methylethyl)-2-cyclohexen-1-one [89-81-6] C<sub>10</sub>H<sub>16</sub>O (152.24). bp (+) 116.0~118.5°C/20mmHg, (-) 109.5~110.5°C/15mmHg, (±) 232~233°C/769mmHg. Pharm: Antiasthmatic (gpg, bronchospasm induced by histamine, im, 1.2mL/kg, tracheal smooth muscle relaxant); antibacterial (*α*-Streptococcus, *β*-Streptococcus, *Diplococcus pneumoniae* and *Staphylococcus aureus*); antitussive; LD<sub>50</sub> (mus, perfusion in stomach) = 4.32mg/kg. Source: FU AN *Eucalyptus dives*, HU JIAO *Piper nigrum*, JING JIE *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*], XI TE KA YUN SHAN *Picea sitchensis*, XIN NONG XIANG MAO *Cymbopogon sennaarensis*, YUN XIANG CAO *Cymbopogon distans*. Ref: 2, 4, 6, 658, 3112, 5501.

**17457 Piperitone oxide**

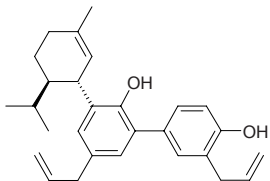
[5286-38-4] C<sub>10</sub>H<sub>16</sub>O<sub>2</sub> (168.24). Crystals (hexane), mp 14.5~15.5°C, [α]<sub>D</sub><sup>22</sup> = -177.0° (c = 0.96, EtOH), d<sub>25</sub><sup>25</sup> = 1.01, n<sub>D</sub><sup>20</sup> = 1.4624. Source: SEN LIN BO HE *Mentha sylvestris*, YU XIANG CAO *Mentha rotundifolia*. Ref: 3250.

**17458 Piperitylmagnolol**

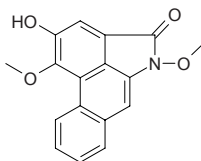
C<sub>28</sub>H<sub>34</sub>O<sub>2</sub> (402.58). Source: HOU PO *Magnolia officinalis*. Ref: 2.

**17459 Piperitylhonokiol**

C<sub>28</sub>H<sub>34</sub>O<sub>2</sub> (402.58). Source: HOU PO *Magnolia officinalis*. Ref: 2.

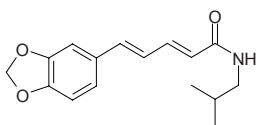
**17460 Piperlactam S**

Spiplactam S C<sub>17</sub>H<sub>13</sub>NO<sub>4</sub> (295.30). Pharm: Anti-inflammatory (modulator of cytokine network: inhibits C5a-induced release of TNF-α and IL-1β in RAW264.7 macrophages)<sup>[4416]</sup>; antioxidant (1~20μmol/L, prevention of copper-induced LDL peroxidation; amelioration of freeradical-Induced oxidative stress of endothelial cells; attenuate Fe<sup>2+</sup>-in-duced oxidation of cell membrane; effectively minimizes H<sub>2</sub>O<sub>2</sub>/FeSO<sub>4</sub>-induced loss of cell viability in cultured endothelial cells and significantly reversed H<sub>2</sub>O<sub>2</sub>/FeSO<sub>4</sub>-induced impairment of endothelium-dependent relaxation to acetylcholine in rat aorta; may help to reduce the risk of atherosclerosis)<sup>[5353]</sup>; anti-Inflammatory (modulation of C5a-induced chemotaxis and inflammatory cytokines production in macrophages: 1~30μmol/L Piperlactam S suppresses C5a-induced migration across a fibrinogen-coated barrier, IC<sub>50</sub> = (4.5±0.3)μmol/L; At 30μmol/L, piperlactam S inhibits chemotaxis by more than 95% and also decreased phagocytosis by 25% without reducing macrophage viability and adherent capacity; inhibits C5a-stimulated release of TNF-α and IL-1β; retardation of macrophage recruitment and suppression of cytokines production might underlie potential usefulness of piperlactam S as an anti-inflammatory agent)<sup>[5354]</sup>. Source: HAI FENG TENG *Piper kadsura* [Syn. *Piper futokadsura*]. Ref: 4416, 5353, 5354.

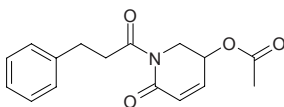


**17461 Piperlonguminine**

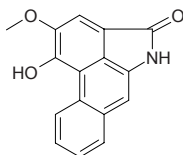
[5950-12-9] C<sub>16</sub>H<sub>19</sub>NO<sub>3</sub> (273.33). Colorless crystals, mp 166~168°C. **Pharm:** Protective gastric lesions (rat, ethanol-induced, 25mg/kg orl, length = (51.7±9.7)mm, control, length = (118.6±16.2)mm, InRt = 56.4%; indomethacin-induced in rats, dose, 25mg/kg orl, length = (73.6±12.8)mm, control, length = (89.5±9.8)mm, InRt = 17.8%)<sup>[4935]</sup>; melanogenesis inhibitor (melanoma B16 cells, inhibits  $\alpha$ -melanocyte-stimulating hormone ( $\alpha$ -MSH)-induced melanogenesis, 25 $\mu$ mol/L, InRt = (85.1±4.9)%, 12.5 $\mu$ mol/L, InRt = (62.1±6.1)%, 6.3 $\mu$ mol/L, InRt = (36.4±4.6)%, 3.1 $\mu$ mol/L, InRt = (18.4±5.1)%, IC<sub>50</sub> = 9.6 $\mu$ mol/L; control, Kojic acid, IC<sub>50</sub> = 44.6 $\mu$ mol/L; inhibits  $\alpha$ -MSH-induced tyrosinase synthesis, does not inhibit tyrosinase activity or directly depigments melanin)<sup>[4083]</sup>. **Source:** BI BA GEN *Piper longum*, *Piper chaba* (fruit), BI BA *Piper longum* (fruit). **Ref:** 6, 4083, 4935.

**17462 Pipermethystine**

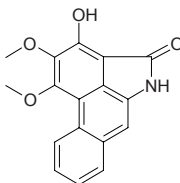
C<sub>16</sub>H<sub>17</sub>NO<sub>4</sub> (287.32). Colorless oil, [ $\alpha$ ]<sub>D</sub><sup>23</sup> = -176.4° (c = 0.49, Me<sub>2</sub>CO). **Source:** KA WA HU JIAO *Piper methysticum*. **Ref:** 3373.

**17463 Piperolactam A**

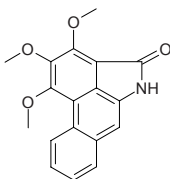
[112501-42-5] C<sub>16</sub>H<sub>11</sub>NO<sub>3</sub> (265.27). Crystals, (C<sub>6</sub>H<sub>6</sub>-MeOH), mp 303~306°C (dec), mp 271~273°C (EtOAc). **Pharm:** Platelet aggregation inhibitor (rbt platelets induced by thrombin, 100 $\mu$ g/mL, add thrombin 0.1u/mL, cause platelet aggregation, control AggRt = (92.6±0.4)%; add AA, 100 $\mu$ mol/L, 100 $\mu$ g/mL, cause platelet aggregation, 20 $\mu$ g/mL, AggRt = (83.0±0.3)%, control AggRt = (87.8±0.3)%; add collagen 10 $\mu$ g/mL, 100 $\mu$ g/mL, cause platelet aggregation, 20 $\mu$ g/mL, AggRt = (87.5±0.2)%, control AggRt = (89.3±0.5)%, Aspirin 100 $\mu$ g/mL, AggRt = (81.3±0.5)%; add PAF 2ng/mL, 100 $\mu$ g/mL, cause platelet aggregation, control AggRt = (93.0±0.6)%)<sup>[4938]</sup>. **Source:** BI BA GEN *Piper longum*, LUAN YE HU JIAO *Piper attenuatum*, TAI WAN HU JIAO *Piper taiwanense* (stem), YU XING CAO *Houttuynia cordata*, ZHU YE JU *Piper boehmeriaefolium*, *Piper hamiltonii*, *Parastolochia flos-avis*. **Ref:** 1521, 2428, 2713, 3238, 4938.

**17464 Piperolactam B**

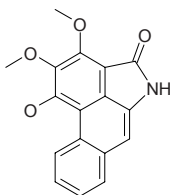
[116084-93-6] C<sub>17</sub>H<sub>13</sub>NO<sub>4</sub> (295.30). Crystals, (MeOH), mp 212~214°C. **Pharm:** Platelet aggregation inhibitor (rbt platelets induced by thrombin, 50 $\mu$ g/mL, add thrombin 0.1u/mL, AggRt = (51.0±0.7)%, control AggRt = (92.6±0.4)%; add AA 100 $\mu$ mol/L, 20 $\mu$ g/mL, AggRt = (72.0±0.7)%, control AggRt = (87.8±0.3)%, Aspirin 50 $\mu$ g/mL, AggRt = (11.7±10.1)%; add collagen 10 $\mu$ g/mL, 20 $\mu$ g/mL, AggRt = (64.7±3.0)%, control AggRt = (89.3±0.5)%, Aspirin 100 $\mu$ g/mL, AggRt = (81.3±0.5)%; add PAF 2ng/mL, 50 $\mu$ g/mL, AggRt = (73.0±1.4)%, control AggRt = (93.0±0.6)%)<sup>[4938]</sup>. **Source:** BI BA GEN *Piper longum*, TAI WAN HU JIAO *Piper taiwanense* (stem), ZHU YE JU *Piper boehmeriaefolium*. **Ref:** 1521, 2713, 3238, 4938.

**17465 Piperolactam C**

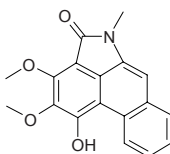
[116064-76-7] C<sub>18</sub>H<sub>15</sub>NO<sub>4</sub> (309.32). Crystals, (C<sub>6</sub>H<sub>6</sub>-MeOH), mp 187~188°C. **Source:** BI BA GEN *Piper longum*, TAI WAN HU JIAO *Piper taiwanense* (stem), ZHU YE JU *Piper boehmeriaefolium*. **Ref:** 2713, 4938.

**17466 Piperolactam D**

[128718-51-4] C<sub>17</sub>H<sub>13</sub>NO<sub>4</sub> (295.30). Yellow crystals, (C<sub>6</sub>H<sub>6</sub>-MeOH), mp 226~227°C. **Source:** BI BA GEN *Piper longum*, LUAN YE HU JIAO *Piper attenuatum*, ZHU YE JU *Piper boehmeriaefolium*. **Ref:** 3251.

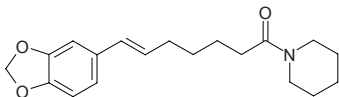
**17467 Piperolactam E**

C<sub>18</sub>H<sub>15</sub>NO<sub>4</sub> (309.32). Grayish needles (benzene-MeOH), mp 179~181°C. **Pharm:** Platelet aggregation inhibitor (rbt platelets induced by thrombin, 100 $\mu$ g/mL, add thrombin 0.1u/mL, AggRt = (79.7±1.2)%, control AggRt = (92.6±0.4)%; add AA 100 $\mu$ mol/L, 100 $\mu$ g/mL, AggRt = (49.3±3.8)%, control AggRt = (87.8±0.3)%, Aspirin 50 $\mu$ g/mL, AggRt = (11.7±10.1)%; add collagen 10 $\mu$ g/mL, 100 $\mu$ g/mL, AggRt = (0.0±0.0)%, 20 $\mu$ g/mL, AggRt = (74.0±2.5)%, control AggRt = (89.3±0.5)%, Aspirin 100 $\mu$ g/mL, AggRt = (81.3±0.5)%; add PAF 2ng/mL, 100 $\mu$ g/mL, AggRt = (66.7±4.3)%, control AggRt = (93.0±0.6)%)<sup>[4938]</sup>. **Source:** TAI WAN HU JIAO *Piper taiwanense* (stem). **Ref:** 4938.

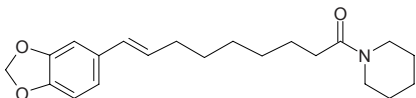


**17468 Piperolein A**

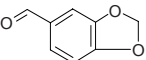
[30505-92-1] C<sub>19</sub>H<sub>25</sub>NO<sub>3</sub> (315.42). Pale-yellow oil. Source: HU JIAO *Piper nigrum*. Ref: 3252.

**17469 Piperolein B**

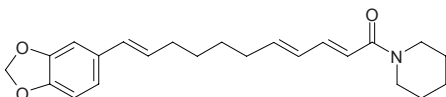
1-[1-Oxo-9(3,4-methylenedioxyphenyl)-8E-nonenyl]piperidine; Piperamide A 9:1(8E) C<sub>21</sub>H<sub>29</sub>NO<sub>3</sub> (343.47). Source: HU JIAO *Piper nigrum* (root: yield = 0.00049%dw). Ref: 3240, 4753.

**17470 Piperonal**

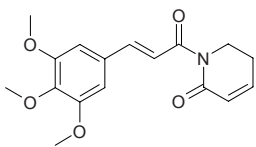
Piperonylaldehyde [120-57-0] C<sub>8</sub>H<sub>6</sub>O<sub>3</sub> (150.11). mp 37°C. Pharm: Kills body louse. Source: CI HUAI HUA *Robinia pseudoacacia*, HU JIAO *Piper nigrum*, PENG ZI CAI *Galium verum*, SHOU ZHANG SHEN *Gymnadenia conopsea*, *Heliotropium* sp., *Vanilla* sp., *Viola* sp. Ref: 6, 658.

**17471 Piperundecalidine**

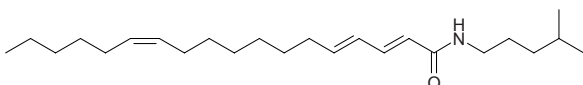
[88660-11-1] C<sub>23</sub>H<sub>29</sub>NO<sub>3</sub> (367.49). Crystals, (EtOAc-hexane), mp 64.5-65.5°C. Source: BI BA *Piper longum*. Ref: 3253.

**17472 Piplartine**

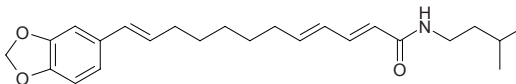
*N*-(3',4',5'-Trimethoxycinnamoyl)-2-pyridin-2-one [20069-09-4] C<sub>17</sub>H<sub>19</sub>NO<sub>5</sub> (317.34). Pale yellow needles (MeOH), mp 124-126°C. Pharm: Antiasthmatic (effective treatment for asthma and chronic bronchitis); antihypertensive (dog, 0.1mg/kg); inhibits ileac tension and contractility (rbt, rat). Source: BI BA *Piper longum*, CHANG BING HU JIAO *Piper sulvaticum*, BI BA GEN *Piper longum*, *Piper cenocladum* (leaf). Ref: 6, 658, 3896, 5501.

**17473 Pipnoohine**

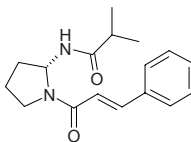
(2E,4E,12Z)-*N*-(4-Methylpentyl)octadeca-2,4,12-trienamide C<sub>24</sub>H<sub>43</sub>NO (361.62). Amorphous powder. Pharm: Pesticide (fourth instar larvae of *Aedes aegypti*, WHO method, 35.0mg/L)<sup>[2559]</sup>. Source: HU JIAO *Piper nigrum*. Ref: 2559.

**17474 Pipyahyine**

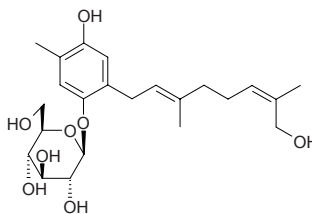
(2E,4E,11E)-12-(Benzo[1,3]dioxol-5-yl)-*N*-(3-methylbutyl)dodeca-2,4,11-triene n-amide C<sub>24</sub>H<sub>33</sub>NO<sub>3</sub> (383.54). White needles (pet. ether : EtOAc = 7:3), mp 109-110.5°C. Pharm: Pesticide (fourth instar larvae of *Aedes aegypti*, WHO method, 30.0mg/L). Source: HU JIAO *Piper nigrum*. Ref: 2559.

**17475 Piriferine**

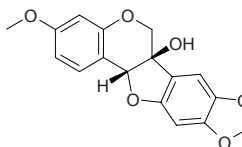
[113689-36-4] C<sub>17</sub>H<sub>22</sub>N<sub>2</sub>O<sub>2</sub> (286.38). Crystals, mp 164-165.5°C (Et<sub>2</sub>O-CHCl<sub>3</sub>), [α]<sub>D</sub><sup>28</sup> = +30° (c = 0.01, absolute alcohol). Pharm: Promotes cytotoxic effects of vincalukoblastine (KB-VI ED<sub>50</sub> = 10μg/mL, with 1mg/mL vincalukoblastine ED<sub>50</sub> = 8.5μg/mL). Source: DA YE SHU LAN *Aglaia elliptifolia* (leaf: yield = 0.00015%dw)<sup>[3031]</sup>, LI MI ZI LAN *Aglaia pirifera*. Ref: 3031, 3628.

**17476 Pirolatin**

[23176-70-7] C<sub>23</sub>H<sub>34</sub>O<sub>8</sub> (438.52). Crystals +1H<sub>2</sub>O (MeOH aq.), mp 168-170°C, [α]<sub>D</sub><sup>25</sup> = -35.3° (c = 1.015, EtOH). Source: RI BEN LU TI CAO *Pyrola japonica*, family Pyrolaceae spp. Ref: 3254.

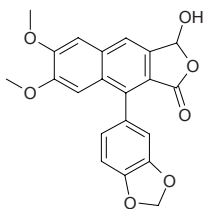
**17477 Pisatin**

[20186-22-5] C<sub>17</sub>H<sub>14</sub>O<sub>6</sub> (314.30). Crystals(petroleum ether), mp 72°C, [α]<sub>578nm</sub><sup>20</sup> = +280° (c = 0.11, ether). Pharm: Antifungal (genus *Sclerotinia*, ED<sub>50</sub> = 0.1mmol/L, CIC = 0.28mmol/L). Source: WAN DOU *Pisum sativum*. Ref: 661.

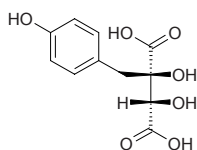


**17478 Piscatorin**

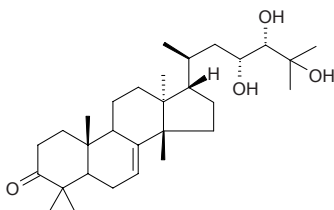
$C_{21}H_{16}O_7$  (380.36). White amorphous powder, mp 247°C. **Pharm:** Antifungal (*Aspergillus fumigatus*, MIC  $\geq 3\mu\text{g/mL}$ , Miconazole nitrate, MIC  $\geq 0.5\mu\text{g/mL}$ ; *Candida albicans*, MIC  $\geq 8\mu\text{g/mL}$ , Miconazole nitrate, MIC  $\geq 0.2\mu\text{g/mL}$ ; *Aspergillus flavus*, MIC  $\geq 25\mu\text{g/mL}$ , Miconazole nitrate, MIC  $\geq 0.2\mu\text{g/mL}$ ; *Blastoschizomyces capitatus*, MIC  $\geq 128\mu\text{g/mL}$ , Miconazole nitrate, MIC  $\geq 1\mu\text{g/mL}$ ; *Cryptococcus neoformans*, MIC  $\geq 128\mu\text{g/mL}$ ); antiprotozoal (*Trypanosoma brucei rhodesiense*, IC<sub>50</sub> = 2.3 $\mu\text{g/mL}$ , control Melarsoprol, IC<sub>50</sub> = 0.003 $\mu\text{g/mL}$ ; *Trypanosoma cruzi*, IC<sub>50</sub> > 4 $\mu\text{g/mL}$ , control Benznidazol, IC<sub>50</sub> = 0.27 $\mu\text{g/mL}$ ; *Plasmodium falciparum* (strain K1), IC<sub>50</sub> > 5 $\mu\text{g/mL}$ , control Chloroquine, IC<sub>50</sub> = 0.12 $\mu\text{g/mL}$ ); cytotoxic (Jurkat-T, IC<sub>50</sub> = 14 $\mu\text{g/mL}$ , control Helenalin, IC<sub>50</sub> = 0.03 $\mu\text{g/mL}$ ; KB, IC<sub>50</sub> = 10 $\mu\text{g/mL}$ , control Helenalin, IC<sub>50</sub> = 0.2 $\mu\text{g/mL}$ ; L-6, IC<sub>50</sub> > 15 $\mu\text{g/mL}$ ; PBMC, IC<sub>50</sub> > 15 $\mu\text{g/mL}$ , control Helenalin, IC<sub>50</sub> = 0.03 $\mu\text{g/mL}$ ); piscicide (adult zebra fishes *Brachydanio rerio*, LC<sub>100</sub> = 1.0 $\mu\text{g/mL}$ , time = 25–35min; control Rotenone, LC<sub>100</sub> = 1.0 $\mu\text{g/mL}$ , time = 20–30min; negative control Catechin, LC<sub>100</sub> > 200 $\mu\text{g/mL}$ , time > 120min). **Source:** YU FU YE XIA ZHU *Phyllanthus piscatorum*. **Ref:** 5393.

**17479 Piscidic acid**

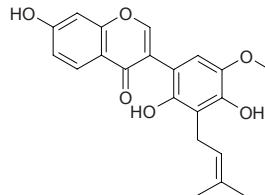
*p*-Hydroxybenzyltartaric acid [35388-57-9]  $C_{11}H_{12}O_7$  (256.21). Elongated prisms (EtOAc-CHCl<sub>3</sub>), mp 186–187°C,  $[\alpha]_D^{20} = +41.03^\circ$  ( $c = 2.65$ , H<sub>2</sub>O). **Source:** CHUAN LONG SHU YU *Dioscorea nipponica*, FAN MA *Agave americana*, HONG KOU SHUI XIAN *Narcissus poeticus*, LI GUO XIAN REN ZHANG *Opuntia ficus-indica*, YA MAI JIA DU YU DOU *Piscidia erythrina*. **Ref:** 3255, 3256, 3257.

**17480 Piscidinol A**

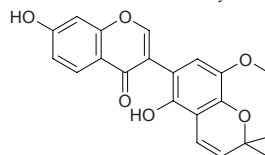
[100198-09-2]  $C_{30}H_{50}O_4$  (474.73). Crystals (MeOH), mp 195°C,  $[\alpha]_D^{25} = -90^\circ$  ( $c = 1$ , CHCl<sub>3</sub>). **Source:** HUANG PI SHU *Phellodendron chinense*, PI XI DI GE SHE SHU *Walsura piscidia*, NI LUO HE JIN YIN LIAN *Turraea nilotica*, *Eurycoma* sp. **Ref:** 1521, 2663, 4556.

**17481 Piscisoflavone A**

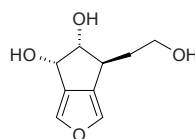
[141968-01-6]  $C_{21}H_{20}O_6$  (368.39). Yellowish glue with modena fluorescence. **Pharm:** Antifungal (*Cladosporium* sp., TLC chromatoplate 50 $\mu\text{g}$ , diameter of bacterial inhibition zone = 15mm). **Source:** YA MAI JIA DU YU DOU *Piscidia erythrina*. **Ref:** 3629.

**17482 Piscisoflavone B**

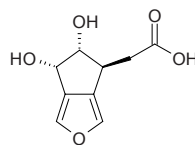
[141968-02-7]  $C_{21}H_{18}O_6$  (366.37). Yellow prisms with modena fluorescence, mp 212–213°C. **Pharm:** Antifungal (*Cladosporium* sp., TLC chromatoplate 50 $\mu\text{g}$ , diameter of bacterial inhibition zone = 12mm). **Source:** YA MAI JIA DU YU DOU *Piscidia erythrina*. **Ref:** 3629.

**17483 Piscirocin A**

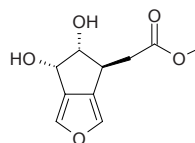
(4*S*,5*R*,6*S*)-5,6-Dihydroxy-5,6-dihydro-4*H*-cyclopenta[*c*]furan-4-ethanol  $C_9H_{12}O_4$  (184.19). Colorless plates, mp 88–90°C (MeOH),  $[\alpha]_D^{20} = -50.2^\circ$  ( $c = 1.0$ , MeOH). **Source:** XI ZANG HU HUANG LIAN *Picrorhiza scrophulariiflora* (root). **Ref:** 4966.

**17484 Piscirocin B**

(4*S*,5*R*,6*S*)-5,6-Dihydroxy-5,6-dihydro-4*H*-cyclopenta-*c*]furan-4-acetic acid  $C_9H_{10}O_5$  (198.18). White amorphous powder, mp 160–162°C (MeOH),  $[\alpha]_D^{20} = -50.2^\circ$  ( $c = 0.3$ , MeOH). **Source:** XI ZANG HU HUANG LIAN *Picrorhiza scrophulariiflora* (root). **Ref:** 4966.

**17485 Piscirocin C**

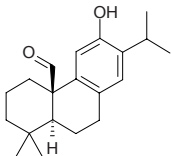
(4*S*,5*R*,6*S*)-5,6-Dihydroxy-5,6-dihydro-4*H*-cyclopenta-*c*]furan-4-acetic acid methyl ester  $C_{10}H_{12}O_5$  (212.20). Colorless oil, mp 88–90°C (MeOH),  $[\alpha]_D^{20} = -34.5^\circ$  ( $c = 0.4$ , MeOH). **Source:** XI ZANG HU HUANG LIAN *Picrorhiza scrophulariiflora* (root). **Ref:** 4966.



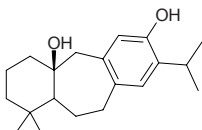


**17486 Pisiferal**

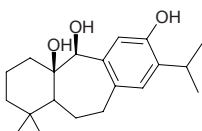
[24035-37-8] C<sub>20</sub>H<sub>28</sub>O<sub>2</sub> (300.44). Colorless needles (benzene–Et<sub>2</sub>O), mp 80–82°C, [α]<sub>D</sub><sup>25</sup> = 164.1° (c = 0.61, MeOH). **Pharm:** Antibacterial (*Staphylococcus aureus*, MIC = 25 μg/mL; *Bacillus subtilis*, MIC = 25 μg/mL)<sup>[4144]</sup>; used in treatment of skin disease (acne, scurf)<sup>[900]</sup>; deodorant (bad breath, foot osmyl, hircus)<sup>[900]</sup>; antioxidant<sup>[900]</sup>. **Source:** DU YU SHU WEI CAO *Salvia pisdica*, JU MI SHU WEI CAO *Salvia mellifera*, RI BEN HUA BAI *Chamaecyparis pisifera*, WEI SHI SHU WEI CAO *Salvia wiedemannii*, XIAO GAI SHU WEI CAO *Salvia microstegia*. **Ref:** 900, 4144.

**17487 Pisiferanol**

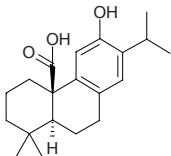
C<sub>20</sub>H<sub>30</sub>O<sub>2</sub> (302.46). **Pharm:** Antibacterial (*Staphylococcus aureus*, MIC = 25 μg/mL; *Bacillus subtilis*, MIC = 25 μg/mL)<sup>[4144]</sup>. **Source:** GAN XI SHU WEI CAO *Salvia przewalskii*, RI BEN HUA BAI *Chamaecyparis pisifera*. **Ref:** 1521, 4144, 4538.

**17488 Pisiferdiol**

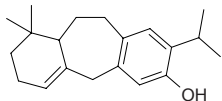
C<sub>20</sub>H<sub>30</sub>O<sub>3</sub> (318.46). **Pharm:** Antibacterial (*Staphylococcus aureus*, MIC = 100 μg/mL; *Bacillus subtilis*, MIC = 50 μg/mL). **Source:** RI BEN HUA BAI *Chamaecyparis pisifera* (leaf). **Ref:** 4144.

**17489 Pisiferic acid**

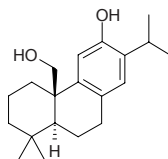
[67494-15-9] C<sub>20</sub>H<sub>28</sub>O<sub>3</sub> (316.44). Colorless prisms, mp 155–160°C, [α]<sub>D</sub><sup>20</sup> = +177° (c = 0.35, MeOH). **Pharm:** Cytotoxic (HeLa-S3, inhibits biosynthesis of DNA)<sup>[900]</sup>; antibacterial (*Staphylococcus aureus*, MIC = 25 μg/mL; *Bacillus subtilis*, MIC = 25 μg/mL)<sup>[4144]</sup>; antibacterial (gram-positive and gram-negative bacteria, *Proteus vulgaris*, *Pyricularia oryzae*, *Pseudomonas* sp.)<sup>[900]</sup>; antioxidant (stronger than VE)<sup>[900]</sup>. **Source:** JIAO NIAN XIANG CHA CAI *Isodon glutinosa*, RI BEN HUA BAI *Chamaecyparis pisifera*. **Ref:** 900, 4144.

**17490 Pisiferin**

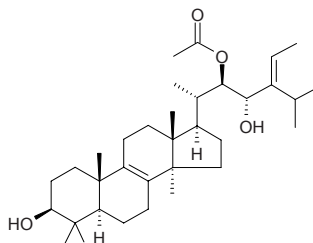
[76210-23-6] C<sub>20</sub>H<sub>28</sub>O (284.45). **Source:** GAN XI SHU WEI CAO *Salvia przewalskii*, RI BEN HUA BAI *Chamaecyparis pisifera*. **Ref:** 1521, 4538.

**17491 Pisiferol**

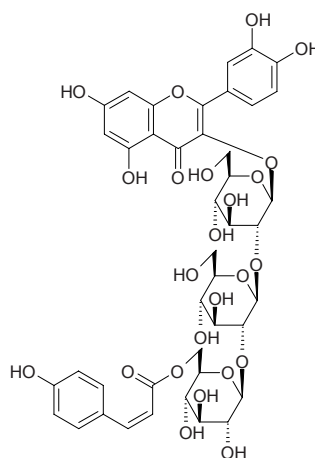
[24035-36-7] C<sub>20</sub>H<sub>30</sub>O<sub>2</sub> (302.46). Needles (benzene–Et<sub>2</sub>O), mp 95–97°C (Et<sub>2</sub>O/ethane), [α]<sub>D</sub><sup>26</sup> = +80.6° (c = 0.85, MeOH). **Pharm:** Antibacterial (*Staphylococcus aureus*, MIC = 25 μg/mL; *Bacillus subtilis*, MIC = 25 μg/mL)<sup>[4144]</sup>; used in treatment of skin disease (acne, scurf)<sup>[900]</sup>; deodorant (bad breath, foot osmyl, hircus)<sup>[900]</sup>; antioxidant (stronger than VE)<sup>[900]</sup>. **Source:** RI BEN HUA BAI *Chamaecyparis pisifera*. **Ref:** 900, 4144.

**17492 Pisosterol**

Mutumul [97091-00-4] C<sub>34</sub>H<sub>56</sub>O<sub>4</sub> (528.82). **Source:** DOU BAO JUN *Pisolithus tinctorius* [Syn. *Lycoperdon capitatum*; *Scleroderma tinctorium*]. **Ref:** 3258, 3259, 3260.

**17493 Pisumflavonoside I**

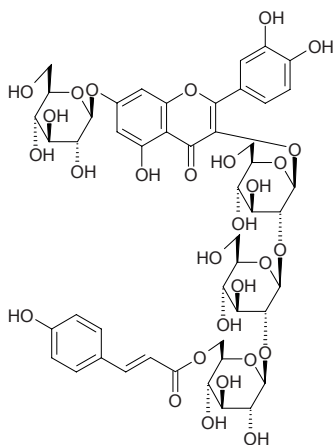
Quercetin-3-*O*-(6-*O*-*cis-p*-coumaroyl)-β-*D*-glucopyranosyl (1→2)-β-*D*-glucopyranosyl (1→2)-β-*D*-glucopyranoside C<sub>42</sub>H<sub>46</sub>O<sub>24</sub> (934.82). Yellow powder, [α]<sub>D</sub><sup>25</sup> = –38.2° (c = 0.3, MeOH). **Pharm:** Hepatoprotective (*in vitro*, mus primary cultured hepatocytes, inhibits liver cytotoxicity induced by GaIn, 100 μmol/L, InRt = (12.1±1.5)%, p<0.01). **Source:** WAN DOU *Pisum sativum* (young seedpot). **Ref:** 4110.



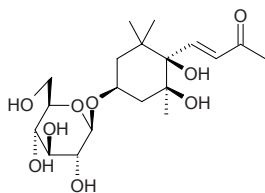


**17494 Pisumflavonoid II**

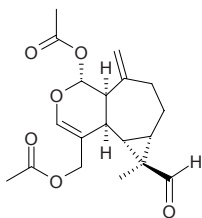
7-*O*- $\beta$ -D-Glucopyranosyl-quercetin 3-*O*-(6-*O*-*trans-p*-coumaroyl)- $\beta$ -D-glucopyranosyl(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranosyl(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranoside  
 $C_{48}H_{56}O_{29}$  (1096.96). Yellow powder,  $[\alpha]_D^{25} = -59.0^\circ$  ( $c = 0.3$ , MeOH).  
**Pharm:** Hepatoprotective (*in vitro*, mus primary cultured hepatocytes, inhibits liver cytotoxicity induced by GaIn, 100 $\mu$ mol/L, InRt = (15.5 $\pm$ 1.0)%,  $p < 0.01$ ).  
**Source:** WAN DOU *Pisum sativum* (young seedpot). **Ref:** 4110.

**17495 Pisumionoside**

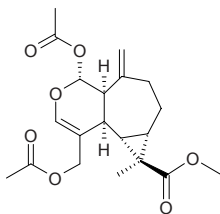
$C_{19}H_{32}O_9$  (404.46). White powder,  $[\alpha]_D^{26} = -3.4^\circ$  ( $c = 0.2$ , MeOH). **Source:** WAN DOU *Pisum sativum* (young seedpot). **Ref:** 4110.

**17496 Plagiochiline T**

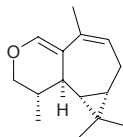
2 $\alpha$ ,15-Diacetoxy-2,3-epoxy-2,3-seco-(1 $\alpha$ ,5 $\alpha$ ,6 $\beta$ ,7 $\beta$ )-aromadendra-3,10(14)-dien-13-al  $C_{19}H_{24}O_6$  (384.40). **Source:** *Plagiochila carringtonii*. **Ref:** 2307.

**17497 Plagiochiline U**

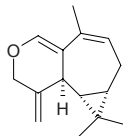
Methyl-2 $\alpha$ ,15-diacetoxy-2,3-epoxy-2,3-seco-(1 $\alpha$ ,5 $\alpha$ ,6 $\beta$ ,7 $\beta$ )-aromadendra-3,10(14)-dien-13-oate  $C_{20}H_{26}O_7$  (378.43). **Source:** *Plagiochila carringtonii*. **Ref:** 2307.

**17498 (+)-Plagiochiline W**

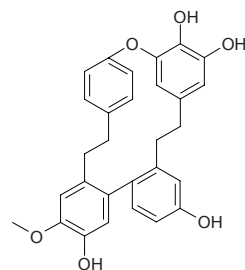
$C_{15}H_{22}O$  (218.34). Colorless oil. **Source:** TIE JIAO JUE YU TAI *Plagiochila asplenioides* (essential oil). **Ref:** 5257.

**17499 (+)-Plagiochiline X**

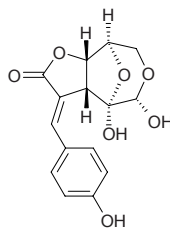
$C_{15}H_{20}O$  (216.33). Colorless oil. **Source:** TIE JIAO JUE YU TAI *Plagiochila asplenioides* (essential oil). **Ref:** 5257.

**17500 Plagiochin A**

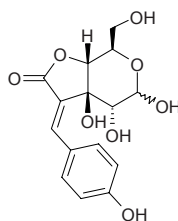
[112923-41-8]  $C_{29}H_{26}O_6$  (470.53). / **Pharm:** Nourishes nerve (neurite outgrowth enhancer). **Source:** RI BEN DUO CI YU TAI *Plagiochila acanthophylla* ssp. *japonica*, *Plagiochila siophila*. **Ref:** 3703, 3704.

**17501 Plagiogyrin A**

[91486-94-1]  $C_{15}H_{14}O_7$  (306.27). Needles (MeOH), mp 223~225 $^\circ$ C,  $[\alpha]_D^{25} = +438.0^\circ$  ( $c = 1.0$ , MeOH). **Source:** ER XING LIU ZU JUE *Plagiogyria stenoptera*, HUA ZHONG LIU ZU JUE *Plagiogyria euphlebia*, *Plagiogyria matsumureana*. **Ref:** 3261, 3262.

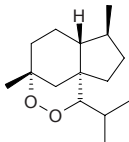
**17502 Plagiogyrin B**

[91486-95-2]  $C_{15}H_{16}O_8$  (324.29). Oil,  $[\alpha]_D^{22} = +94.1^\circ$  ( $c = 1.0$ , MeOH). **Source:** DAO YE LIU ZU JUE *Plagiogyria dumii*, *Plagiogyria matsumureana*. **Ref:** 3261, 3262.

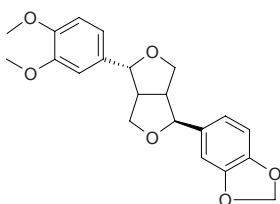


**17503 (+)-Plagio-4,7-peroxide**

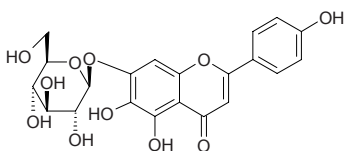
$C_{15}H_{26}O_2$  (238.37). Colorless oil. Source: TIE JIAO JUE YU TAI *Plagiochila asplenioides* (essential oil). Ref: 5257.

**17504 L-Planinin**

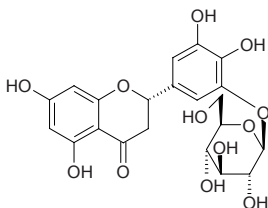
(1*R*,2*R*,5*R*,6*S*)-2-(3',4'-Dimethoxy-phenyl)-6-(3'',4''-methylene dioxyphenyl)-3,7-dioxabicyclo(3,3,0) octane  $C_{21}H_{22}O_6$  (370.41). Colorless columnar crystals, mp 133.0~133.5°C. Source: ZHU YE JIAO *Zanthoxylum planispinum*. Ref: 106.

**17505 Plantaginin**

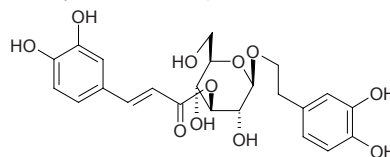
[26046-94-6]  $C_{21}H_{20}O_{11}$  (448.39). mp 214°C. Pharm: Antitussive (dispels phlegm, effective component in *Plantago asiatica* CHE QIAN); CNS activity (causes heart beat to slow and amplitude to increasing in low dose; causes heart paralysis and hypotension in high dose); promotes intestinal and uterine motion; low toxin. Source: CHE QIAN *Plantago asiatica*, CHE QIAN *Plantago asiatica* (seed). Ref: 6, 658, 5501.

**17506 Plantagoside**

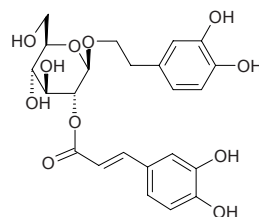
[78708-33-5]  $C_{21}H_{22}O_{12}$  (466.40). Colorless acicular crystals (methanol), mp 208~211°C, 241~243°C (dec, two melting points),  $[\alpha]_D^{25} = -44.4^\circ$  ( $c = 0.61$ , methanol). Pharm: Inhibits lymphocyte reproduction caused by sheep red blood cell antibody and concanavalin A (ConA,  $IC_{50} = 1.8\mu\text{g/mL}$ ); selective  $\alpha$ -mannosidase inhibitor. Source: CHE QIAN *Plantago asiatica*, DA CHE QIAN *Plantago major* (dried ripe fruit: mean content of 7 origins = 0.66%)<sup>[5508]</sup>. Ref: 942, 1000, 1028, 5508.

**17507 Plantainoside A**

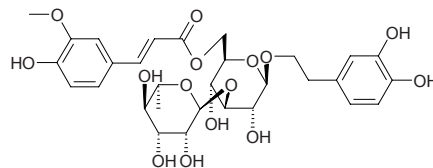
Plantagoside A [136172-59-3]  $C_{23}H_{26}O_{11}$  (478.46).  $[\alpha]_D^{23} = +4.5^\circ$  ( $c = 1.47$ , methanol). Pharm: Antioxidant (microsome of murine hepatic cells, inhibits lipid peroxidation induced by ADP+NADPH,  $IC_{50} = 0.54\mu\text{mol/L}$ ). Source: CHE QIAN *Plantago asiatica*, JIA MA CHI XIAN *Bacopa monniera* (whole herb: yield = 0.012%fw). Ref: 1127, 4664.

**17508 Plantainoside B**

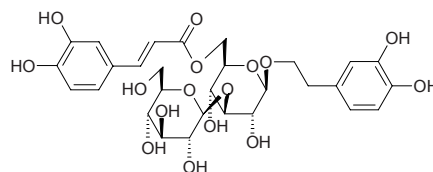
[136083-85-7]  $C_{23}H_{26}O_{11}$  (478.46). Amorphous,  $[\alpha]_D^{23} = -54.6^\circ$  ( $c = 0.27$ , MeOH). Pharm: Antioxidant (lipid peroxidation inhibitor, rat, hepatic cellular microsome, induced by ADP+NADPH,  $IC_{50} = 0.49\mu\text{mol/L}$ ); platelet aggregation inhibitor (caused by collagen, marked inhibiting). Source: CHE QIAN *Plantago asiatica*, JIA MA CHI XIAN *Bacopa monniera* (whole herb: yield = 0.00094%fw). Ref: 1127, 3263, 4254, 4664.

**17509 Plantainoside C**

[136083-86-8]  $C_{30}H_{38}O_{15}$  (638.63).  $[\alpha]_D^{23} = -238.1^\circ$  ( $c = 0.07$ , MeOH). Source: CHE QIAN *Plantago asiatica*, DA YE ZUI YU CAO *Buddleja davidii*. Ref: 1127, 3264.

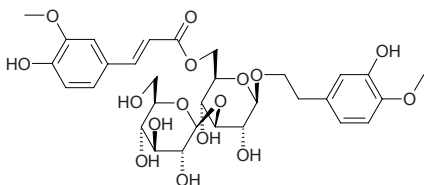
**17510 Plantainoside D**

[136083-87-9]  $C_{29}H_{36}O_{16}$  (640.60). Amorphous powder,  $[\alpha]_D^{23} = -24.8^\circ$  ( $c = 1.07$ , MeOH). Pharm: Antioxidant (hydroxyl radical scavenger,  $IC_{50} = 39.3\mu\text{mol/L}$ , control Ascorbic acid,  $IC_{50} = 51.8\mu\text{mol/L}$ , superoxide anion radical scavenger,  $IC_{50} = 74.8\mu\text{mol/L}$ , control Ascorbic acid,  $IC_{50} = 86.2\mu\text{mol/L}$ )<sup>[4289]</sup>; antioxidant (lipid peroxidation inhibitor, rat, hepatic cellular microsome, induced by ADP+NADPH,  $IC_{50} = 0.36\mu\text{mol/L}$ ). Source: BIAN DA XIU QIU *Hemiphragma heterophyllum*, CHANG YE CHE QIAN *Plantago lanceolata*, CHE QIAN *Plantago asiatica*, XI ZANG HU HUANG LIAN *Picrorhiza scrophulariiflora* (root), YU ZAN YE CHE QIAN *Plantago hostifolia*. Ref: 1127, 3265, 3266, 4289, 5020.

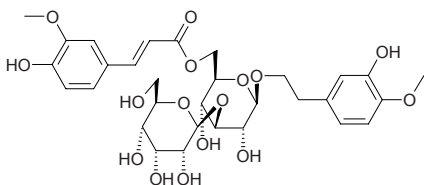


**17511 Plantainoside E**

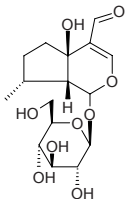
Scroside B [136083-88-0] C<sub>31</sub>H<sub>40</sub>O<sub>16</sub> (668.65).  $[\alpha]_D^{23} = -32.7^\circ$  ( $c = 0.84$ , MeOH). **Pharm:** Antioxidant (hydroxyl radical scavenger, IC<sub>50</sub> = 94.9 μmol/L, control Ascorbic acid, IC<sub>50</sub> = 51.8 μmol/L, superoxide anion radical scavenger, IC<sub>50</sub> = 233.0 μmol/L, control Ascorbic acid, IC<sub>50</sub> = 86.2 μmol/L)<sup>[4289]</sup>. **Source:** CHE QIAN *Plantago asiatica*, XI ZANG HU HUANG LIAN *Picrorhiza scrophulariiflora* (root). **Ref:** 1127, 4289.

**17512 Plantainoside F**

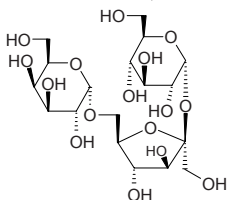
[136029-89-5] C<sub>31</sub>H<sub>40</sub>O<sub>16</sub> (668.65).  $[\alpha]_D^{23} = -60.6^\circ$  ( $c = 0.31$ , MeOH). **Source:** CHE QIAN *Plantago asiatica*. **Ref:** 660, 1127.

**17513 Plantarenaloid**

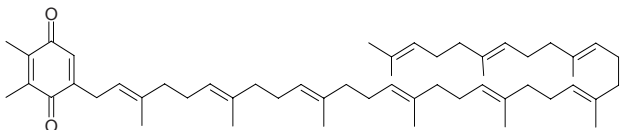
Yuheinoside [72396-01-1] C<sub>16</sub>H<sub>24</sub>O<sub>9</sub> (360.36). Amorphous,  $[\alpha]_D^{25} = -188.8^\circ$  ( $c = 1.2$ , MeOH). **Source:** DA CHE QIAN *Plantago major*, HUANG ZHONG HUA *Tecoma stans*, SONG HAO *Phtheirospermum japonicum* [Syn. *Gerardia japonica*], *Leucocarpus perfoliatus*. **Ref:** 1521, 3267, 1259.

**17514 Planteose**

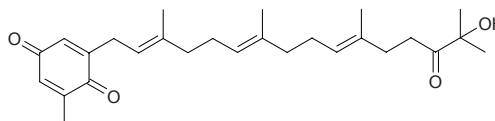
[470-57-5] C<sub>18</sub>H<sub>32</sub>O<sub>16</sub> (504.45). mp 123~124°C. **Source:** LUO LE ZI *Ocimum basilicum*. **Ref:** 6, 1521.

**17515 Plastoquinone**

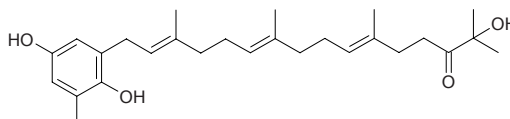
[4299-57-4] C<sub>53</sub>H<sub>80</sub>O<sub>2</sub> (749.23). mp 48~49°C. **Pharm:** Bioactive in connection with plant photosynthesis and path of respiration. **Source:** CAN DOU YE *Vicia faba*, HONG CAO *Polygonum orientale*, YAO YONG PU GONG YING *Taraxacum officinale*. **Ref:** 6, 658, 660.

**17516 Plastoquinone C<sub>1</sub>**

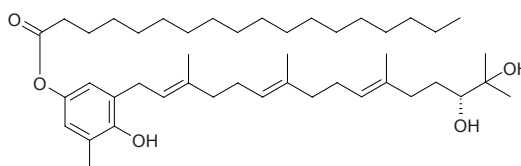
C<sub>27</sub>H<sub>38</sub>O<sub>4</sub> (426.60). Colorless oil. **Source:** Gulfweed *Sargassum micracanthum*. **Ref:** 4506.

**17517 Plastoquinone C<sub>2</sub>**

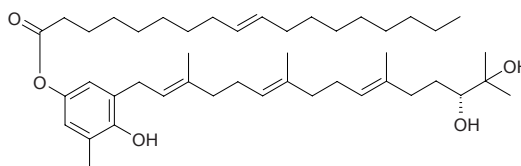
C<sub>27</sub>H<sub>40</sub>O<sub>4</sub> (428.62). Pale yellowish oil. **Pharm:** Antioxidant (lipid peroxidation inhibitor, IC<sub>50</sub> = 0.95 μg/mL, control Vitamin E, IC<sub>50</sub> = 40.4 μg/mL; DPPH scavenger, 100 μg/mL, reductive rate = 3.00%); cytotoxic (Colon26-L5 cell, IC<sub>50</sub> = 1.51 μg/mL, control *cis*-Platin, IC<sub>50</sub> = 0.67 μg/mL). **Source:** Gulfweed *Sargassum micracanthum*. **Ref:** 4506.

**17518 Plastoquinone C<sub>3</sub>**

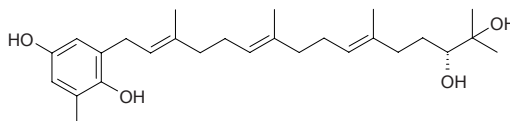
C<sub>45</sub>H<sub>76</sub>O<sub>5</sub> (697.10). Colorless oil,  $[\alpha]_D^{25} = +6.2^\circ$  ( $c = 0.56$ , CHCl<sub>3</sub>). **Pharm:** Antioxidant (lipid peroxidation inhibitor, IC<sub>50</sub> = 44.3 μg/mL, control Vitamin E, IC<sub>50</sub> = 40.4 μg/mL; DPPH scavenger, 100 μg/mL, reductive rate = 52.6%); cytotoxic (Colon26-L5 cell, IC<sub>50</sub> = 17.5 μg/mL, control *cis*-Platin, IC<sub>50</sub> = 0.67 μg/mL). **Source:** Gulfweed *Sargassum micracanthum*. **Ref:** 4506.

**17519 Plastoquinone C<sub>4</sub>**

C<sub>45</sub>H<sub>74</sub>O<sub>5</sub> (695.09). Colorless oil,  $[\alpha]_D^{25} = +6.0^\circ$  ( $c = 0.33$ , CHCl<sub>3</sub>). **Pharm:** Antioxidant (lipid peroxidation inhibitor, IC<sub>50</sub> = 1.15 μg/mL, control Vitamin E, IC<sub>50</sub> = 40.4 μg/mL; DPPH scavenger, 100 μg/mL, reductive rate = 32.3%); cytotoxic (Colon26-L5 cell, IC<sub>50</sub> = 1.69 μg/mL, control *cis*-Platin, IC<sub>50</sub> = 0.67 μg/mL). **Source:** Gulfweed *Sargassum micracanthum*. **Ref:** 4506.

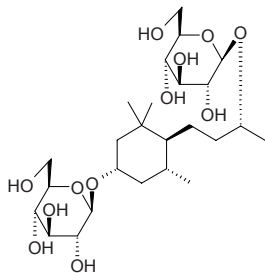
**17520 Plastoquinone from *Sargassum micracanthum***

C<sub>27</sub>H<sub>42</sub>O<sub>4</sub> (430.63). **Source:** Gulfweed *Sargassum micracanthum*. **Ref:** 4506.

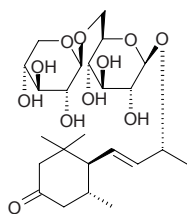


**17521 Platanionoside D**

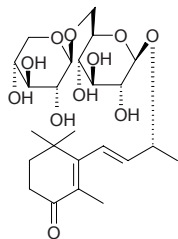
(3*S*,5*R*,6*S*,9*R*)-3,9-Dihydroxymegastigmane di-*O*- $\beta$ -*D*-glucopyranoside  
 $C_{25}H_{46}O_{12}$  (538.64). Amorphous powder,  $[\alpha]_D^{20} = -41.0^\circ$  ( $c = 0.61$ , MeOH).  
 Source: GUA MU BIAN ZHONG *Alangium paltanifolium* var. *platanifolium*  
 (leaf). Ref: 4170.

**17522 Platanionoside E**

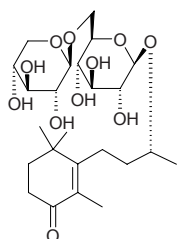
(5*R*,6*R*,7*E*)-9-Hydroxymegastigman-7-en-3-one *O*-primeveroside  
 $C_{24}H_{40}O_{11}$  (504.58). Amorphous powder,  $[\alpha]_D^{20} = -41.0^\circ$  ( $c = 0.61$ , MeOH). Source:  
 GUA MU BIAN ZHONG *Alangium paltanifolium* var. *platanifolium* (leaf).  
 Ref: 4170.

**17523 Platanionoside F**

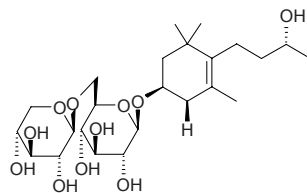
(9*R*,7*E*)-9-Hydroxymegastigmane-5,7-dien-4-one *O*-primeveroside  
 $C_{24}H_{38}O_{11}$  (502.56). Amorphous powder,  $[\alpha]_D^{23} = -17.6^\circ$  ( $c = 0.74$ , MeOH).  
 Source: GUA MU BIAN ZHONG *Alangium paltanifolium* var. *platanifolium*  
 (leaf). Ref: 4170.

**17524 Platanionoside G**

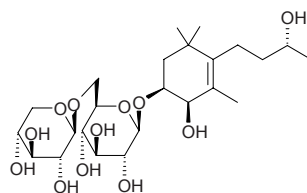
(9*R*)-9-Hydroxymegastigman-5-en-4-one *O*-primeveroside  
 $C_{24}H_{40}O_{11}$  (504.58). Amorphous powder,  $[\alpha]_D^{23} = -32.8^\circ$  ( $c = 1.28$ , MeOH). Source:  
 GUA MU BIAN ZHONG *Alangium paltanifolium* var. *platanifolium* (leaf).  
 Ref: 4170.

**17525 Platanionoside H**

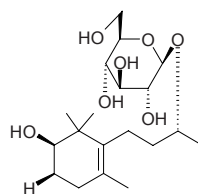
(3*S*,9*R*)-3,9-Dihydroxymegastigman-5-ene 3-*O*-primeveroside  
 $C_{24}H_{42}O_{11}$  (506.60). Amorphous powder,  $[\alpha]_D^{20} = -66.9^\circ$  ( $c = 1.30$ , MeOH). Source:  
 GUA MU BIAN ZHONG *Alangium paltanifolium* var. *platanifolium* (leaf).  
 Ref: 4170.

**17526 Platanionoside I**

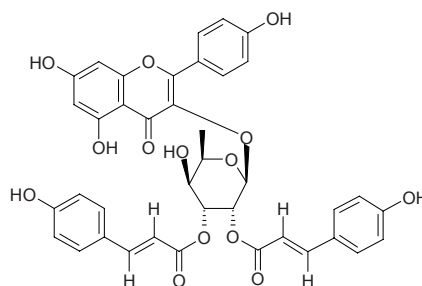
(3*S*,4*R*,9*\zeta*)-3,4,9-Trihydroxymegastigman-5-ene 3-*O*-primeveroside  
 $C_{24}H_{42}O_{12}$  (522.60). Amorphous powder,  $[\alpha]_D^{20} = -65.4^\circ$  ( $c = 0.26$ , MeOH).  
 Source: GUA MU BIAN ZHONG *Alangium paltanifolium* var. *platanifolium*  
 (leaf). Ref: 4170.

**17527 Platanionoside J**

(2*R*,9*R*)-2,9-Dihydroxymegastigman-5-ene 9-*O*- $\beta$ -*D*-glucopyranoside  
 $C_{19}H_{34}O_7$  (374.48). Amorphous powder,  $[\alpha]_{405nm}^{20} = -7.8^\circ$  ( $c = 0.51$ , MeOH).  
 Source: GUA MU BIAN ZHONG *Alangium paltanifolium* var. *platanifolium*  
 (leaf). Ref: 4170.

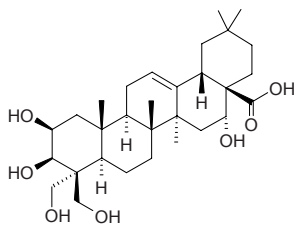
**17528 Platanoside**

Kaempferol 3-(2,3-di-*E*-*p*-coumaroyl- $\alpha$ -*L*-rhamnopyranoside)  
 $C_{39}H_{32}O_{14}$  (724.67). Yellowish powder. Pharm: Antibacterial (*\beta*-*Streptococcus*,  
*Bacillus coli*, *Klebsiella pneumoniae* and *Bacillus pyocyaneus*); cytotoxic  
 (KM3, HL-60, DAUDI, Jurkat-T and SDK). Source: HU SUI ZI *Coriandrum*  
*sativum*. Ref: 1115.

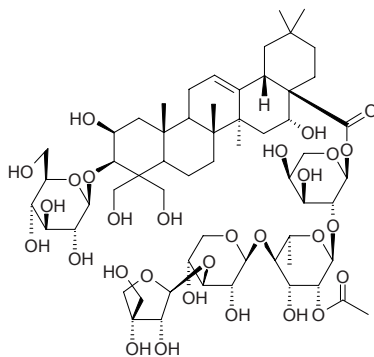


**17529 Platycodigenin**

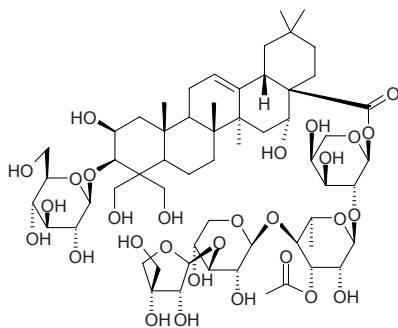
[22327-82-8] C<sub>30</sub>H<sub>48</sub>O<sub>7</sub> (520.71). mp 241~242°C. Source: JIE GENG *Platycodon grandiflorum*. Ref: 6.

**17530 Platycodin A**

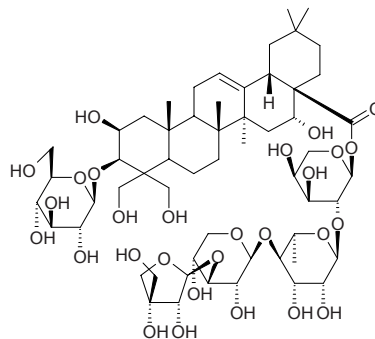
2''-*O*-Acetyl platycodin D [66779-34-8] C<sub>59</sub>H<sub>94</sub>O<sub>29</sub> (1267.39). Powder +1H<sub>2</sub>O, mp 217~220.5°C (dec), [α]<sub>D</sub><sup>28</sup> = -26.6° (c = 1.7, MeOH). Source: JIE GENG *Platycodon grandiflorum*. Ref: 1521, 3268.

**17531 Platycodin C**

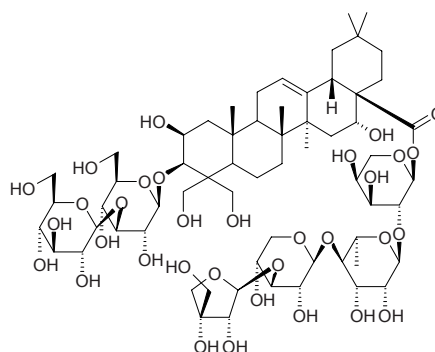
3''-*O*-Acetyl platycodin D [66779-35-9] C<sub>59</sub>H<sub>94</sub>O<sub>29</sub> (1267.39). Powder, mp 225~227°C (dec), [α]<sub>D</sub><sup>28</sup> = -28.3° (c = 1.14, MeOH). Source: JIE GENG *Platycodon grandiflorum*. Ref: 1521, 3268.

**17532 Platycodin D**

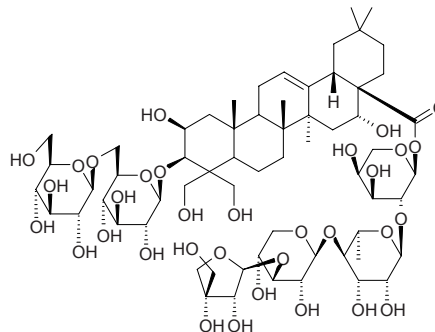
[58479-68-8] C<sub>57</sub>H<sub>92</sub>O<sub>28</sub> (1225.35). mp 228~237°C, [α]<sub>D</sub><sup>23</sup> = -30.5° (MeOH). Pharm: Anti-inflammatory (rat peritoneal macrophages, inhibits PGE2 production and inhibits COX-2 production, but not COX-1)<sup>[4415]</sup>. Source: JIE GENG *Platycodon grandiflorum* (dried root: content scope of 10 origins = 0.28%~0.88%, mean content = 0.50%<sup>[5508]</sup>). Ref: 1521, 3268, 4415, 5508.

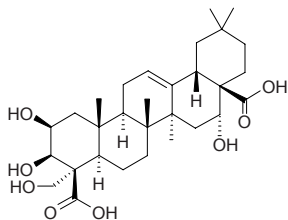
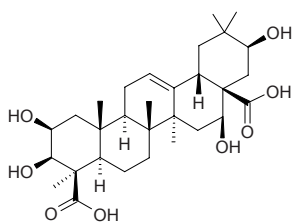
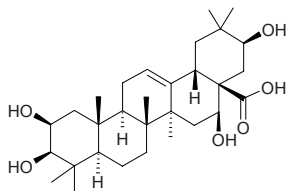
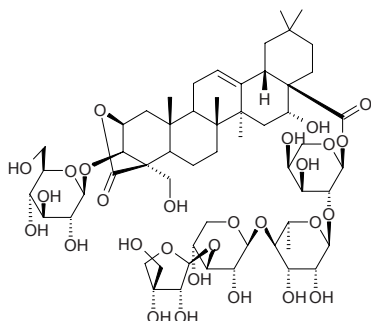
**17533 Platycodin D<sub>2</sub>**

[66663-90-9] C<sub>63</sub>H<sub>102</sub>O<sub>33</sub> (1387.50). mp 227~235°C, [α]<sub>D</sub><sup>23</sup> = -27.9° (MeOH). Source: JIE GENG *Platycodon grandiflorum*. Ref: 1521, 1382.

**17534 Platycodin D<sub>3</sub>**

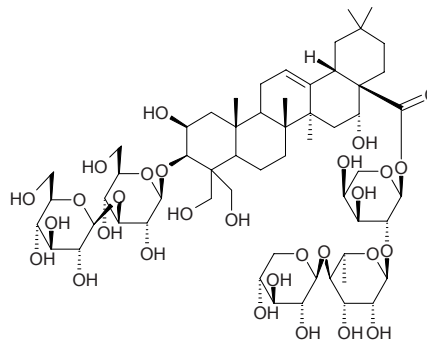
[67884-03-1] C<sub>63</sub>H<sub>102</sub>O<sub>33</sub> (1387.50). mp 218~225°C, [α]<sub>D</sub><sup>23</sup> = -24.3° (MeOH). Source: JIE GENG *Platycodon grandiflorum*. Ref: 1521, 1382.



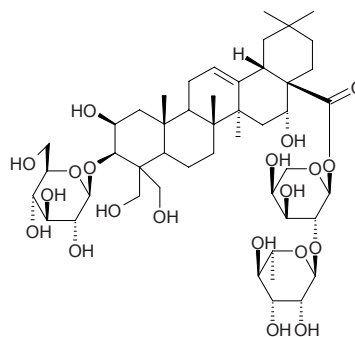
**17535 Platycogenic acid A**[26121-79-9] C<sub>30</sub>H<sub>46</sub>O<sub>8</sub> (534.70). mp 243~249°C. Source: JIE GENG*Platycodon grandiflorum*. Ref: 6.**17536 Platycogenic acid B**[26121-80-2] C<sub>30</sub>H<sub>46</sub>O<sub>8</sub> (534.70). mp 274~277°C (dec). Source: JIE GENG*Platycodon grandiflorum*. Ref: 6.**17537 Platycogenic acid C**[26121-81-3] C<sub>30</sub>H<sub>48</sub>O<sub>6</sub> (504.71). mp 282~288°C (dec). Source: JIE GENG*Platycodon grandiflorum*. Ref: 6.**17538 Platyconic acid A lactone-28-[β-D-apiofuranosyl(1→3)-β-D-xylopyranosyl(1→4)-α-L-rhamnopyranosyl(1→2)-L-arabinopyranosyl] 3-O-β-D-glucopyranoside**C<sub>57</sub>H<sub>88</sub>O<sub>28</sub> (1221.32). Source: JIE GENG *Platycodon grandiflorum*. Ref: 1382.**17539 Platycoside A**

3-O-β-D-Glucopyranosyl-(1→3)-β-D-glucopyranosyl

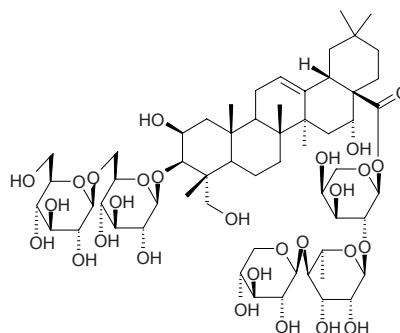
2β,3β,16α,23,24-pentahydroxyolean-12-ene-28-oic acid

28-O-β-D-xylopyranosyl-(1→4)-α-L-rhamnopyranosyl-(1→2)-α-L-arabinopyranoside C<sub>58</sub>H<sub>94</sub>O<sub>29</sub> (1255.38). Source: JIE GENG *Platycodon grandiflorum*.Ref: 4900.**17540 Platycoside F**

3-O-β-D-Glucopyranosyl-2β,3β,16α,23,24-pentahydroxyolean-12-ene-28-oic acid

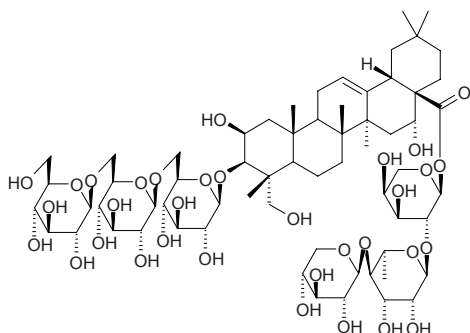
28-O-α-L-rhamnopyranosyl-(1→2)-α-L-arabinopyranoside C<sub>47</sub>H<sub>76</sub>O<sub>20</sub> (961.12). Source: JIE GENG *Platycodon grandiflorum*. Ref: 4900.**17541 Platycoside H**

3-O-β-D-Glucopyranosyl-(1→6)-β-D-glucopyranosyl-2β,3β,16α,23-tetrahydroxyolean-12-en-28-oic acid

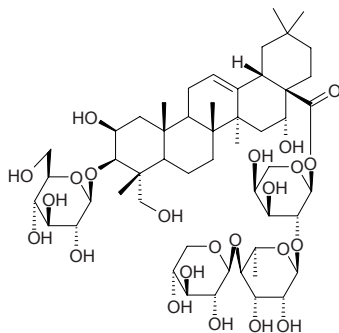
28-O-β-D-xylopyranosyl-(1→4)-α-L-rhamnopyranosyl-(1→2)-α-L-arabinopyranoside C<sub>58</sub>H<sub>94</sub>O<sub>28</sub> (1239.38). White amorphous powder. Source: JIE GENG *Platycodon grandiflorum* (root; yield = 0.00021% dw). Ref: 2172.

**17542 Platycoside I**

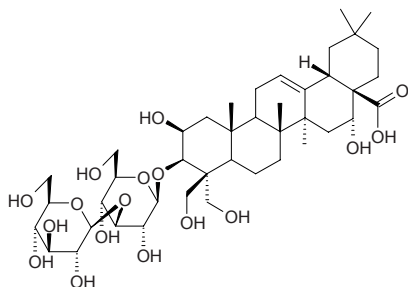
3-*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl-2 $\beta$ ,3 $\beta$ ,16 $\alpha$ ,23-tetrahydroxyolean-12-en-28-oic acid 28-*O*- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranoside C<sub>64</sub>H<sub>104</sub>O<sub>33</sub> (1401.52). White amorphous powder. Source: JIE GENG *Platycodon grandiflorum* (root; yield = 0.00005% dw). Ref: 2172.

**17543 Platycoside J**

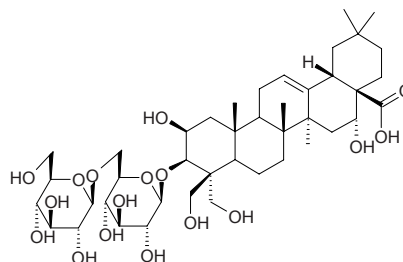
3-*O*- $\beta$ -*D*-Glucopyranosyl-2 $\beta$ ,3 $\beta$ ,16 $\alpha$ ,23-tetrahydroxyolean-12-en-28-oic acid 28-*O*- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranoside C<sub>52</sub>H<sub>84</sub>O<sub>23</sub> (1077.24). White amorphous powder. Source: JIE GENG *Platycodon grandiflorum* (root; yield = 0.00018% dw). Ref: 2172.

**17544 Platycoside K**

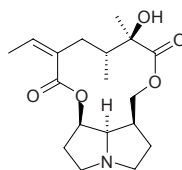
3-*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosyl-2 $\beta$ ,3 $\beta$ ,16 $\alpha$ ,23,24-pentahydroxyolean-12-en-28-oic acid C<sub>42</sub>H<sub>68</sub>O<sub>17</sub> (845.00). White amorphous powder. Source: JIE GENG *Platycodon grandiflorum* (root; yield = 0.00012% dw). Ref: 2172.

**17545 Platycoside L**

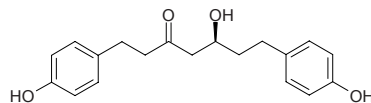
3-*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl-2 $\beta$ ,3 $\beta$ ,16 $\alpha$ ,23,24-pentahydroxyolean-12-en-28-oic acid C<sub>42</sub>H<sub>68</sub>O<sub>17</sub> (845.00). White amorphous powder. Source: JIE GENG *Platycodon grandiflorum* (root; yield = 0.00013% dw). Ref: 2172.

**17546 Platyphylline**

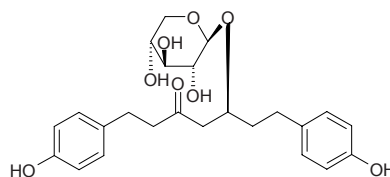
[480-78-4] C<sub>18</sub>H<sub>27</sub>NO<sub>5</sub> (337.42). Needles (H<sub>2</sub>O), mp 129°C, mp 124~125°C, [α]<sub>D</sub> = -56° (CHCl<sub>3</sub>), [α]<sub>D</sub> = -59° (EtOH). Pharm: Anticholinergic; antiulcerative (used in treatment of peptic ulcer of digestive tract). Source: DA BAI DING CAO *Senecio oryzetorum*, DA TOU TUO WU *Ligularia japonica* [Syn. *Arnica japonica*; *Senecio japonica*], GOU SHE CAO *Tephrosia kirilowii* [Syn. *Senecio integrifolius* var. *fauriei*], KUAN YE QIAN LI GUANG *Senecio platyphyllus*, PING HUA FENG DOU CAI *Petasites laevigatus*, TIE SHENG QIAN LI GUANG *Senecio adnatus*, YAO YONG DAO TI HU *Cynoglossum officinale*, *Senecio* spp. Ref: 6, 658, 1521, 2971, 3107.

**17547 Platyphyllonol**

Hannokinin; 1,7-Bis(4-hydroxyphenyl)-5*S*-hydroxy-3-heptanone C<sub>19</sub>H<sub>22</sub>O<sub>4</sub> (314.38). Needles, mp 139~140°C, 131~142°C. Source: CHI YANG *Alnus japonica*, HUA MU PI *Betula platyphylla*, HONG HUA PI *Betula platyphylla* var. *japonica* (in 1973, the compound was isolated from the plant by M.terazawa et al.)<sup>[5505]</sup>, *Alnus* spp. Ref: 660, 1521, 5505.

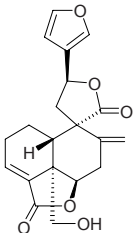
**17548 Platyphyllonol-5-*O*- $\beta$ -*D*-xylopyranoside**

C<sub>24</sub>H<sub>30</sub>O<sub>8</sub> (446.50). Pharm: Antioxidant (3.125μg/mL, superoxide radical scavenging activity = 1.4%, control Urcumin 16.1%; 6.25μg/mL, DPPH radical scavenging activity = 2.0%, control Urcumin 50.0%). Source: CHI YANG *Alnus japonica* (leaf). Ref: 4535.

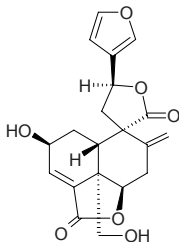


**17549 Plaunol B**

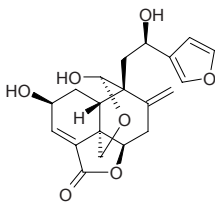
[69749-00-4] C<sub>20</sub>H<sub>20</sub>O<sub>6</sub> (356.38). mp 184°C, [ $\alpha$ ]<sub>D</sub><sup>24</sup> = +41.4° (*c* = 0.35, acetone). **Pharm:** Antiulcerative (inhibits gastric ulcer, rat, ip, 3mg/kg and 10mg/kg, InRt = 55% and 85% respectively). **Source:** JIN QIN ZHUANG BA DOU *Croton sublyratus*. **Ref:** 661.

**17550 Plaunol C**

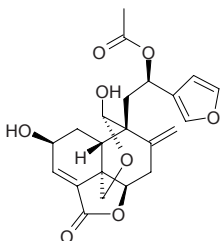
[69749-01-5] C<sub>20</sub>H<sub>20</sub>O<sub>7</sub> (372.38). mp 197~199°C, [ $\alpha$ ]<sub>D</sub><sup>24</sup> = -144° (*c* = 1.28, acetone). **Pharm:** Antiulcerative (inhibits gastric ulcer, rat, ip, 3mg/kg and 10mg/kg, InRt = 36% and 88% respectively). **Source:** JIN QIN ZHUANG BA DOU *Croton sublyratus*. **Ref:** 661.

**17551 Plaunol D**

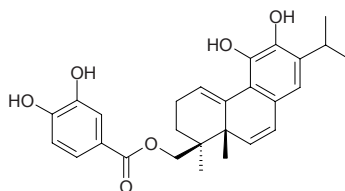
[66302-50-9] C<sub>20</sub>H<sub>22</sub>O<sub>7</sub> (374.40). mp 170~172°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -144° (*c* = 1.0, acetone). **Pharm:** Antiulcerative (inhibits gastric ulcer, rat, ip, 3mg/kg and 10mg/kg, InRt = 44% and 61% respectively). **Source:** JIN QIN ZHUANG BA DOU *Croton sublyratus*. **Ref:** 661.

**17552 Plaunol E**

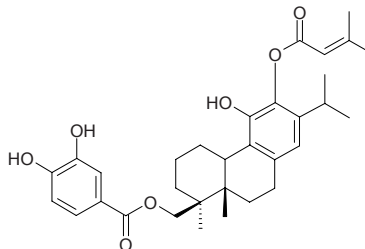
[69749-02-6] C<sub>22</sub>H<sub>24</sub>O<sub>8</sub> (416.43). mp 180~181°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -140° (*c* = 1.0, acetone). **Pharm:** Antiulcerative (inhibits gastric ulcer, rat, ip, 3mg/kg and 10mg/kg, InRt = 52% and 82% respectively). **Source:** JIN QIN ZHUANG BA DOU *Croton sublyratus*. **Ref:** 661.

**17553 Plectranthol A**

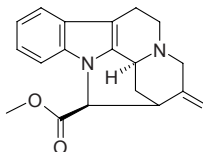
19-*O*-(3,4-Dihydroxybenzoyl)-11,12-dihydroxy-20(10→5)-abeo-abieta-1(10), 6,8,11,13-tetraene C<sub>27</sub>H<sub>30</sub>O<sub>6</sub> (450.54). Brownish oil, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -154.2° (*c* = 0.22, MeOH). **Pharm:** Antioxidant (DPPH scavenger, EC<sub>50</sub> = 0.073mmol/L, control Vitamin E, EC<sub>50</sub> = 0.134mmol/L). **Source:** YUAN BAN XIANG CHA CAI *Plectranthus nummularius* (leaf). **Ref:** 4121.

**17554 Plectranthol B**

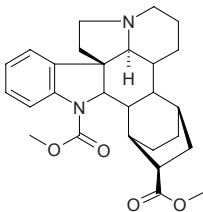
12-*O*-(3-Methyl-2-butenyl)-19-*O*-(3,4-dihydroxybenzoyl)-11-hydroxyabieta-8,11,13-triene C<sub>32</sub>H<sub>40</sub>O<sub>7</sub> (536.67). Brownish amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -20.6° (*c* = 0.20, MeOH). **Pharm:** Antioxidant (DPPH scavenger, EC<sub>50</sub> = 0.099mmol/L, control Vitamin E, EC<sub>50</sub> = 0.134mmol/L). **Source:** YUAN BAN XIANG CHA CAI *Plectranthus nummularius* (leaf). **Ref:** 4121.

**17555 Pleiocarpamine**

[6393-66-4] C<sub>20</sub>H<sub>22</sub>N<sub>2</sub>O<sub>2</sub> (322.41). **Source:** CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochnera rosea*], HONG HUA RUI MU *Kopsia fruticosa* (leaf). **Ref:** 2, 1521, 3830.

**17556 Pleiocarpine**

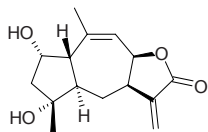
[559-52-4] C<sub>27</sub>H<sub>34</sub>N<sub>2</sub>O<sub>4</sub> (450.58). Crystals (MeOH or pentane-MeOH), mp 142.5°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -145° (*c* = 1.1725, CHCl<sub>3</sub>), pK<sub>a</sub> = 6.19 (MAS). **Source:** YUN NAN RUI MU *Kopsia officinalis*. **Ref:** 1521, 3269.



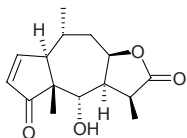


**17557 Pleniradin**

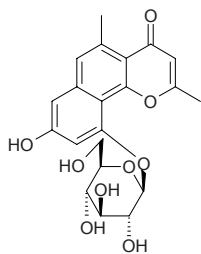
[25941-24-6] C<sub>15</sub>H<sub>20</sub>O<sub>4</sub> (264.32). **Pharm:** Antineoplastic (mus P<sub>388</sub> *in vivo*, 25mg/kg, biotic prolonged rate = 45%, mus B16 melanoma *in vivo*, 150mg/kg, biotic prolonged rate = 26%); cytotoxic (L<sub>1210</sub>, ED<sub>50</sub> = 4.3μg/mL; KB *in vitro*, ED<sub>50</sub> = 14μg/mL; mus P<sub>388</sub>, *in vitro*). **Source:** BAI LAI SHI JU *Baileya multiradiata*. **Ref:** 5, 658.

**17558 Plenolin**

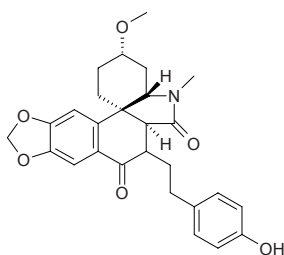
[34257-95-9] C<sub>15</sub>H<sub>20</sub>O<sub>4</sub> (264.33). **Pharm:** Antineoplastic; cytotoxic. **Source:** DUO BIAN HUA BAI LAI SHI JU *Baileya pleniradiata*, DUI XIN JU *Helenium autumnale*. **Ref:** 658.

**17559 Pleuropyrone A**

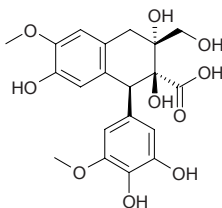
2,5-Dimethyl-8,10-dihydroxynaphthopyrone 10-*O*-β-*D*-glucopyranoside C<sub>21</sub>H<sub>22</sub>O<sub>9</sub> (418.40). White amorphous powder (MeOH), [α]<sub>D</sub><sup>24</sup> = -51° (c = 2.3, MeOH). **Pharm:** Antioxidant inactive (DPPH scavenger, IC<sub>50</sub> > 100μmol/L, control BHT, IC<sub>50</sub> = (15.3±0.6)μmol/L; superoxide radical inhibitor, IC<sub>50</sub> > 100μmol/L, control BHT, IC<sub>50</sub> = (48.9±2.5)μmol/L; lipid peroxidation scavenger, IC<sub>50</sub> > 100μmol/L, control BHT, IC<sub>50</sub> = (0.11±0.02)μmol/L)<sup>[4402]</sup>. **Source:** MAO MAI LIAO *Pleuropterus ciliinervis* (root). **Ref:** 4402.

**17560 (+)-Plicamine**

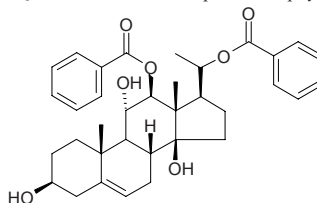
C<sub>27</sub>H<sub>29</sub>NO<sub>6</sub> (463.54). Amorphous solid, [α]<sub>D</sub> = +74.4° (c = 0.117, MeOH). **Source:** TU ER QI XUE HUA LIAN *Galanthus plicatus* ssp. *byzantinus*. **Ref:** 1872.

**17561 Plicatic acid**

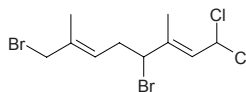
[16462-65-0] C<sub>20</sub>H<sub>22</sub>O<sub>10</sub> (422.40). **Pharm:** Causes asthma and nasitis; sensitizer. **Source:** BEI MEI XIANG BAI *Thuja plicata*. **Ref:** 658.

**17562 Plocigenin**

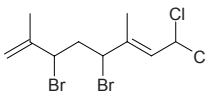
[97743-93-6] C<sub>35</sub>H<sub>42</sub>O<sub>7</sub> (574.72). mp 187~189°C, [α]<sub>D</sub> = -18.6°. **Source:** QING SHE TENG *Periploca calophylla*. **Ref:** 2498.

**17563 Plocoralide A**

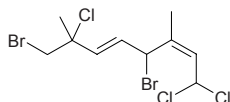
4,8-Dibromo-1,1-dichloro-3,7-dimethyl-2*E*,6*E*-octadiene C<sub>10</sub>H<sub>14</sub>Br<sub>2</sub>Cl<sub>2</sub> (364.94). Colorless oil. **Source:** SHAN HU GEN HAI TOU HONG *Plocamium corallorrhiza*. **Ref:** 5277.

**17564 Plocoralide B**

4,6-Dibromo-1,1-dichloro-3,7-dimethyl-2*E*,7-octadiene C<sub>10</sub>H<sub>14</sub>Br<sub>2</sub>Cl<sub>2</sub> (364.94). Colorless oil, [α]<sub>D</sub> = -15° (c = 0.02, CHCl<sub>3</sub>). **Pharm:** Cytotoxic (*in vitro*, WHCO1, IC<sub>50</sub> = 9.3μmol/L, control *cis*-Platin, IC<sub>50</sub> = 13μmol/L)<sup>[5277]</sup>. **Source:** SHAN HU GEN HAI TOU HONG *Plocamium corallorrhiza*. **Ref:** 5277.

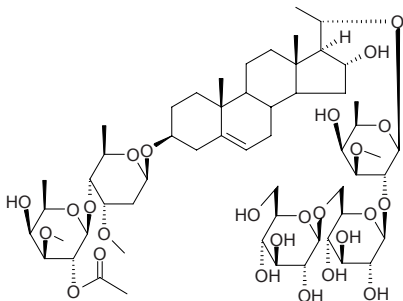
**17565 Plocoralide C**

4,8-Dibromo-1,1,7-trichloro-3,7-dimethyl-2*E*,5*Z*-octadiene C<sub>10</sub>H<sub>13</sub>Br<sub>2</sub>Cl<sub>3</sub> (399.38). Colorless oil, [α]<sub>D</sub> = -43° (c = 0.03, CHCl<sub>3</sub>). **Pharm:** Cytotoxic (*in vitro*, WHCO1, IC<sub>50</sub> = 33.8μmol/L, control *cis*-Platin, IC<sub>50</sub> = 13μmol/L). **Source:** SHAN HU GEN HAI TOU HONG *Plocamium corallorrhiza*. **Ref:** 5277.

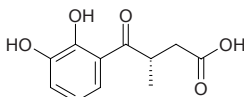


**17566 Plocoside B**

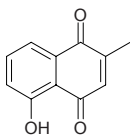
3-*O*-[2-Acetyl-3-*O*-methyl- $\beta$ -*D*-fucopyranosyl-(1 $\rightarrow$ 4)-2,6-dideoxy-3-*O*-methyl- $\beta$ -*D*-ribo-hexopyranoside] 20-*O*-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)-3-*O*-methyl- $\beta$ -*D*-fucopyranoside] [73528-21-9] C<sub>56</sub>H<sub>92</sub>O<sub>25</sub> (1165.34).  $[\alpha]_D^{25} = +18.5^\circ$ . Source: XIANG JIA PI *Periploca sepium*. Ref: 2498.

**17567 Plumbagic acid**

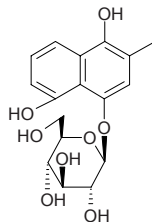
C<sub>11</sub>H<sub>12</sub>O<sub>5</sub> (224.21). Yellowish rhomboid crystals, mp 110°C. Pharm: Antibacterial; antitussive (dispels phlegm). Source: BAI HUA DAN *Plumbago zeylanica*. Ref: 661.

**17568 Plumbagin**

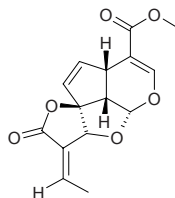
5-Hydroxy-2-methyl-1,4-naphthoquinone [481-42-5] C<sub>11</sub>H<sub>8</sub>O<sub>3</sub> (188.18). mp 78–79°C. Pharm: Antibacterial (*Mycobacterium tuberculosis*, MIC = 7.8 μg/mL); anti-fertility agent; antihypertensive; inhibits heart and relaxes artery; antitussive (mus, orl, dispels phlegm, 80mg/kg); enhances phagocytosis of granular leukocytes (hmn, *in vitro*); platelet aggregation inhibitor (zooperly); antithrombotic (platelet aggregation inhibitor *in vitro*: ADP-induced IC<sub>50</sub> = 39.4 μmol/L, AA-induced IC<sub>50</sub> = 82.7 μmol/L, PAF-induced IC<sub>50</sub> = 38.1 μmol/L; decreases binding between thrombin-stimulated platelets and neutrophils, IC<sub>50</sub> = 62.9 μmol/L; inhibits washed platelet aggregation stimulated by fMLP-activated neutrophils, IC<sub>50</sub> = 54.3 μmol/L, stimulated by PAF-activated neutrophils, IC<sub>50</sub> = 47.6 μmol/L; increases inhibition of intact neutrophils on platelet reactivity)<sup>[5498]</sup>. Source: BAI HUA DAN *Plumbago zeylanica*, BU YING CAO *Dionaea muscipula*, JI WA CAO *Plumbagella micrantha*, JIAO ZHU HUA *Ceratostigma plumbaginoides*, MAO GAO CAI *Drosera peltata* var. *lunata*, OU ZHOU LAN MO LI *Plumbago europaea*, YUAN YE MAO GAO CAI *Drosera rotundifolia*, ZI JIN LIAN *Ceratostigma willmottianum*, ZI XUE HUA *Plumbago indica*, *Diospyros* sp., *Sparaxis* sp. Ref: 4, 621, 658, 5498.

**17569 Plumbaside A**

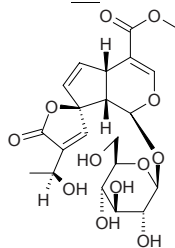
[126582-70-5] C<sub>17</sub>H<sub>20</sub>O<sub>8</sub> (352.34). Yellow-white powder. Pharm: Immunoenhancer (*in vitro*, promotes multiplication of lymphocyte T in 10–100pg/mL). Source: BU YING CAO *Dionaea muscipula*, XIAO JIAO ZHU HUA *Ceratostigma minus*, YUAN YE BU YING CAO *Dionaea rotundifolia*, ZHONG JIAN MAO GAO CAI *Drosera intermedia*. Ref: 3738, 3739, 3740, 3741.

**17570 Plumericin**

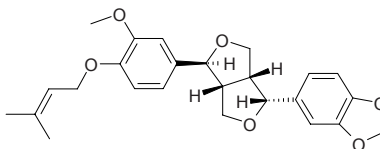
[77-16-7] C<sub>15</sub>H<sub>14</sub>O<sub>6</sub> (290.28). Thin oblong lamellar crystals (ethanol, methyl benzene or dichloroethane–ether), mp 211.5–212.5 (decomposition), under high vacuum 160–180°C (sub),  $[\alpha]_D^{25} = +195.5^\circ$  (*c* = 0.982, chloroform). Pharm: Antibacterial (*Mycobacterium tuberculosis* 607, gram-negative and -positive bacteria); antifungal. Source: RUAN ZHI HUANG CHAN *Allemanda cathartica*. Ref: 661.

**17571 Plumieride**

[511-89-7] C<sub>21</sub>H<sub>26</sub>O<sub>12</sub> (470.44). Bitter monohydrate crystals (water), mp 156–158°C; anhydride colorless rhomboid crystals (methanol–acetone), mp 224–225°C,  $[\alpha]_D^{16} = -114^\circ$  (*c* = 0.54, water),  $[\alpha]_D^{20} = -80^\circ$  (methanol). Pharm: Antibacterial (gram-negative and -positive bacteria); diuretic (> 0.3g); laxative (mus, ED<sub>50</sub> = 0.12g/kg). Source: HONG JI DAN HUA *Plumeria rubra*. Ref: 661.

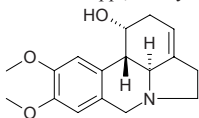
**17572 Pluviatilol- $\gamma$ , $\gamma$ -dimethylallyl ether**

[85994-79-2] C<sub>25</sub>H<sub>28</sub>O<sub>6</sub> (424.50). White granularity ceystals, mp 102°C (MeOH),  $[\alpha]_D^{20} = -107.5^\circ$  (*c* = 0.9, CHCl<sub>3</sub>). Pharm: CNS depressant. Source: BING GUO HUA JIAO *Zanthoxylum podocarpum*, CHU YE HUA JIAO PI *Zanthoxylum ailanthoides*, CI HUA JIAO *Zanthoxylum acanthopodium*, MEI GUO CI JIAO *Zanthoxylum clava-hercules*. Ref: 3742, 3743, 3744, 3745.

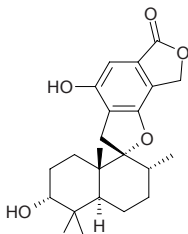


**17573 Pluviine**

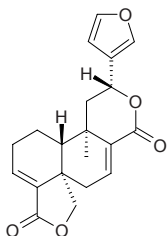
[548-11-8] C<sub>17</sub>H<sub>21</sub>NO<sub>3</sub> (287.36). mp 225~227°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -171° (c = 0.18, EtOH). Source: LU CONG *Lycoris squamigera*, SHI SUAN *Lycoris radiata* [Syn. *Amaryllis radiata*], ZHONG GUO SHI SUAN *Lycoris chinensis*, *Narcissus* spp., family Amaryllidaceae spp. Ref: 6, 1521, 3270.

**17574 PM04701085-02**

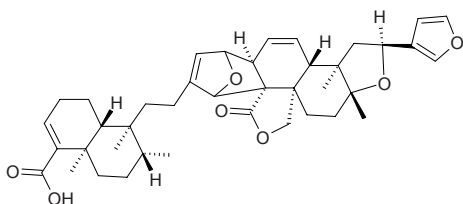
C<sub>23</sub>H<sub>30</sub>O<sub>5</sub> (386.49). Brown solid, [ $\alpha$ ]<sub>D</sub><sup>28</sup> = -18.9° (c = 0.33, MeOH). Pharm: Antiviral (HSV-1, 20µg/mL inactive, control Acyclovir IC<sub>50</sub> = (1.5±0.5)µg/mL, colorimetric method (P. Skehan, et al., J Natl Cancer Inst 1990, 82, 1107-1112)); antimalarial (*Plasmodium falciparum*, K1 multi-drug-resistant strain, cultivated *in vitro* by Trager and Jensen method (Science, 1976, 193, 673), IC<sub>50</sub> = (0.15±0.01)µg/mL, control Dihydroartemisinin IC<sub>50</sub> = (1.2±0.02)ng/mL); cytotoxic (Vero cells, 50µg/mL inactive, control Ellipticine IC<sub>50</sub> = (0.4±0.1)µg/mL, colorimetric method (P. Skehan, et al., J Natl Cancer Inst 1990, 82, 1107-1112)). Source: Fungus *Stachybotrys nephrospora*. Ref: 4078.

**17575 PM-2004-70-452-3**

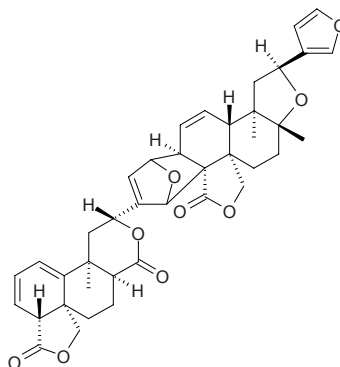
C<sub>20</sub>H<sub>20</sub>O<sub>5</sub> (340.38). Crystallized (CHCl<sub>3</sub>-MeOH), mp 240~241°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -85.0° (c = 1.0, CHCl<sub>3</sub>). Source: *Salvia wagneriana* (aerial parts). Ref: 4976.

**17576 PM-2004-70-452-4**

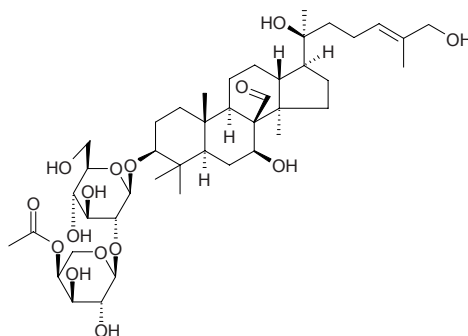
C<sub>40</sub>H<sub>50</sub>O<sub>7</sub> (642.84). Crystallized (CHCl<sub>3</sub>-MeOH), mp 223~224°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -140.0° (c = 1.0, CHCl<sub>3</sub>). Source: *Salvia wagneriana* (aerial parts). Ref: 4976.

**17577 PM-2004-70-452-5**

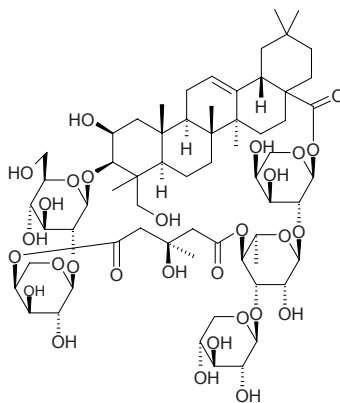
C<sub>40</sub>H<sub>42</sub>O<sub>9</sub> (666.78). Crystallized (CHCl<sub>3</sub>-MeOH), mp 212~213°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +9.0° (c = 1.0, CHCl<sub>3</sub>). Source: *Salvia wagneriana* (aerial parts). Ref: 4976.

**17578 PM-2004-70-458-3b**

C<sub>43</sub>H<sub>70</sub>O<sub>15</sub> (827.03). White crystalline powder (MeOH), mp 136~138°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +20.75° (c = 0.53, MeOH). Pharm: Antiviral (Vero cells, HSV-1, TC<sub>50</sub> = 852.1µg/mL, Acyclovir, TC<sub>50</sub> > 1000µg/mL). Source: JIA BEI MU *Bolbostemma paniculatum* (bulb). Ref: 4977.

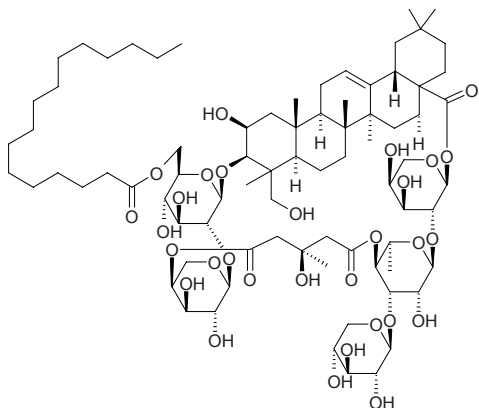
**17579 PM-2004-70-458-4**

C<sub>63</sub>H<sub>98</sub>O<sub>29</sub> (1319.27). Pharm: Antiviral (Vero cells, HSV-1, TC<sub>50</sub> = 1.37µg/mL, Acyclovir, TC<sub>50</sub> > 1000µg/mL). Source: JIA BEI MU *Bolbostemma paniculatum* (bulb). Ref: 4977.

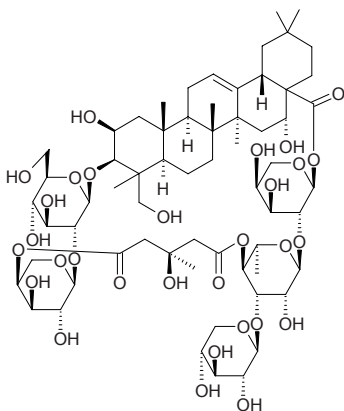


**17580 PM-2004-70-458-4a**

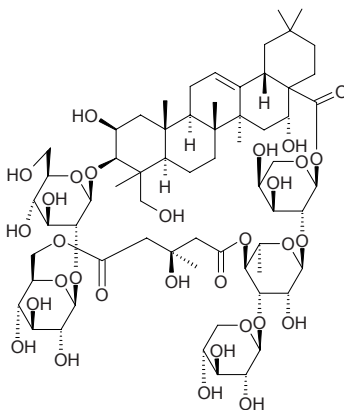
$C_{79}H_{128}O_{30}$  (1557.88). White crystalline powder (MeOH), mp 238~240°C,  $[\alpha]_D^{20} = +12.57^\circ$  ( $c = 0.56$ , MeOH). **Pharm:** Antiviral (Vero cells, HSV-1,  $TC_{50} = 4.11 \mu\text{g/mL}$ , Acyclovir,  $TC_{50} > 1000 \mu\text{g/mL}$ ). **Source:** JIA BEI MU *Bolbostemma paniculatum* (bulb). **Ref:** 4977.

**17581 PM-2004-70-458-5**

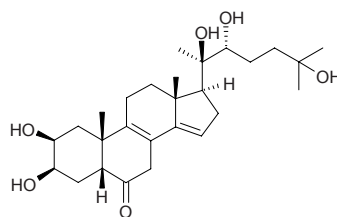
$C_{63}H_{98}O_{30}$  (1335.47). **Pharm:** Antiviral (Vero cells, HSV-1,  $TC_{50} < 0.45 \mu\text{g/mL}$ , Acyclovir,  $TC_{50} > 1000 \mu\text{g/mL}$ ). **Source:** JIA BEI MU *Bolbostemma paniculatum* (bulb). **Ref:** 4977.

**17582 PM-2004-70-458-6**

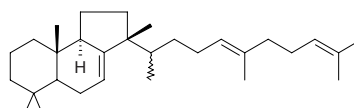
$C_{64}H_{100}O_{31}$  (1365.49). **Pharm:** Antiviral (Vero cells, HSV-1,  $TC_{50} = 2.45 \mu\text{g/mL}$ , Acyclovir,  $TC_{50} > 1000 \mu\text{g/mL}$ ). **Source:** JIA BEI MU *Bolbostemma paniculatum* (bulb). **Ref:** 4977.

**17583 Podecdysone B**

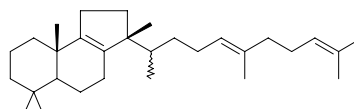
[22612-27-7]  $C_{27}H_{42}O_6$  (426.63). **Pharm:** Insect ecdysone. **Source:** *Podocarpus* sp. **Ref:** 658.

**17584 7,17,21-Podiodatriene**

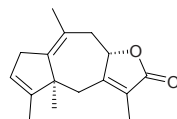
$C_{30}H_{50}$  (410.73). Oil,  $[\alpha]_D^{23} = -11.5^\circ$  ( $c = 0.2$ ,  $\text{CHCl}_3$ ). **Source:** SHUI LONG GU *Polypodium niponicum*. **Ref:** 3271.

**17585 8,17,21-Podiodatriene**

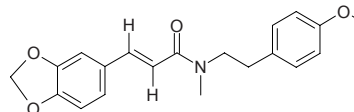
$C_{30}H_{50}$  (410.73). Oil,  $[\alpha]_D^{23} = +11.7^\circ$  ( $c = 0.2$ ,  $\text{CHCl}_3$ ). **Source:** SHUI LONG GU *Polypodium niponicum*. **Ref:** 3271.

**17586 Podoandin**

[142279-47-8]  $C_{15}H_{18}O_2$  (230.31). Prisms, mp 114~115°C. **Pharm:** Molluscicide (*Biomphalaria glabratus*, 250mg/L, 24h, kill ratio = 100%). **Source:** ZHI LI LUO HAN SONG *Podocarpus andina*. **Ref:** 3630.

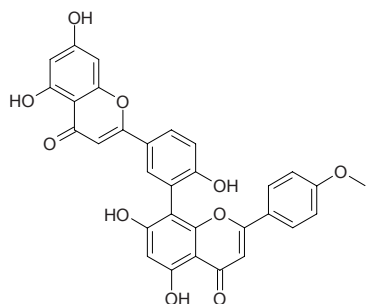
**17587 Podocarpamide**

[121880-09-9]  $C_{20}H_{21}NO_4$  (339.39). Acicular clustered crystals, mp 85~86°C. **Pharm:** Platelet aggregation inhibitor (*in vitro*); antihepatotoxin (reduces level of transaminase *in vitro*). **Source:** BING GUO HUA JIAO *Zanthoxylum podocarpum*. **Ref:** 119.

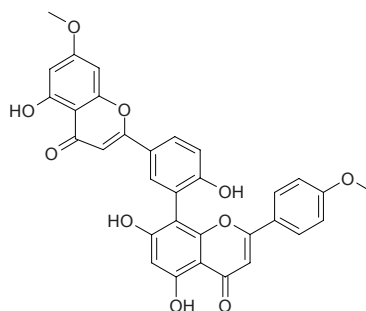


**17588 Podocarpusflavone A**

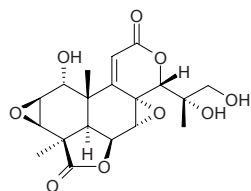
[22136-74-9] C<sub>31</sub>H<sub>20</sub>O<sub>10</sub> (552.50). Yellowish amorphous powder (MeOH), mp 321~323°C, [α]<sub>D</sub><sup>18.1</sup> = +15.31° (c = 0.27, C<sub>5</sub>H<sub>5</sub>N). **Pharm:** Tissue proteinase B inhibitor (IC<sub>50</sub> = 1.68 μmol/L); cytotoxic (HT29, IC<sub>50</sub> = 11.16 μmol/L); antioxidant inactive (DPPH scavenger, 10 μmol/L, ScRt = 5%; control BHT, 10 μmol/L, ScRt = 43%, IC<sub>50</sub> = 19.00 μmol/L)<sup>[4422]</sup>. **Source:** DU SONG SHI *Juniperus rigida*, JI MAO SONG *Podocarpus imbricatus*, LUO HAN SONG YE *Podocarpus macrophyllus*, MO XI GE LUO YU SHAN *Taxodium mucronatum* (twig and leaf), TIAN SHAN ZHU ZI *Garcinia dulcis* (flower). **Ref:** 6, 544, 4422, 4571.

**17589 Podocarpusflavone B**

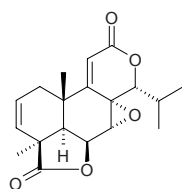
[23624-21-7] C<sub>32</sub>H<sub>22</sub>O<sub>10</sub> (566.53). **Source:** LUO HAN SONG YE *Podocarpus macrophyllus*. **Ref:** 6.

**17590 Podolactone B**

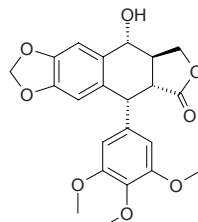
[26804-82-0] C<sub>19</sub>H<sub>22</sub>O<sub>9</sub> (394.38). **Pharm:** Inhibits mitosis (plant cells). **Source:** BAI RI QING *Podocarpus neriifolius*. **Ref:** 658, 1521.

**17591 Podolide**

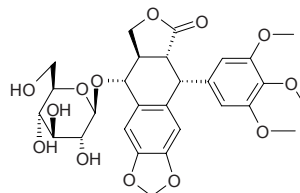
[55786-36-2] C<sub>19</sub>H<sub>22</sub>O<sub>5</sub> (330.38). mp 296~298°C. **Pharm:** Antineoplastic (mus P<sub>388</sub>, *in vivo*); cytotoxic (KB *in vitro*, hmn P<sub>388</sub> *in vitro*, inhibits cell culture of Kichita sarcoma). **Source:** XI LUO HAN SONG *Podocarpus gracilior*. **Ref:** 5.

**17592 Podophyllotoxin**

Condyline; Podophyllinic acid lactone [518-28-5] C<sub>22</sub>H<sub>22</sub>O<sub>8</sub> (414.42). Solvated crystals, mp 114~118°C (bubble occurs), mp 183.3~184.0°C (after drying), [α]<sub>D</sub><sup>20</sup> = -132.7° (chloroform), slightly soluble in water, soluble in ethanol, chloroform, acetone, hot benzene, ice vinegar.<sup>[5507]</sup> **Pharm:** Anti-fertility agent; antiviral (measles virus, HSV-1); cytotoxic (KB, IC<sub>50</sub> = 0.014 μmol/L<sup>[3969]</sup>, IC<sub>50</sub> = 0.01 μg/mL<sup>[5176]</sup>); cytotoxic (BST assay, IC<sub>50</sub> = 4.5 μg/mL<sup>[5332]</sup>); cytotoxic (L-6, IC<sub>50</sub> = 0.0075 μg/mL<sup>[5008]</sup>); cytotoxic (L-6, IC<sub>50</sub> = 0.008 μg/mL<sup>[5009]</sup>); inhibits mitosis; immunosuppressant; intestinal smooth muscle stimulant; used in treatment of the fig wart (tincture in 5%, overall effective rate = 100%); LD<sub>50</sub> (mus, orl) = 90 mg/kg, (mus, ip) = 30~35 mg/kg. **Source:** BAI BA JIAO LIAN *Dysosma majorensis* [Syn. *Podophyllum majorensis*; *Dysosma lichuanensis*] (rhizome: content = 0.50%)<sup>[5508]</sup>, BEI MEI YUAN BAI *Juniperus virginiana*, BI LIN BA JIAO LIAN *Dysosma furfuracea* (rhizome: mean content in different seasons = 7.09%)<sup>[5508]</sup>, CHA ZI YUAN BAI *Juniperus sabina*, CHONG MING BA JIAO LIAN *Dysosma subrosea* (rhizome: content = 0.29%)<sup>[5508]</sup>, CHOU BAI *Sabina vulgaris*, CHUAN BA JIAO LIAN *Dysosma veitchii* (rhizome: content = 0.089%)<sup>[5508]</sup>, DUN YE GUI JIU *Podophyllum peltatum*, E SHEN *Anthriscus sylvestris*, GUANG XI BA JIAO LIAN *Dysosma guangxiensis* (rhizome: content = 0.12%)<sup>[5508]</sup>, GUI JIU *Dysosma versipellis* [Syn. *Podophyllum versipelle*] (rhizome: content = 0.86%)<sup>[5508]</sup>, LIU JIAO LIAN *Dysosma pleiantha* [Syn. *Podophyllum pleianthum*] (rhizome: content = 0.24%)<sup>[5508]</sup>, SHAN HE YE *Diphylleia grayi* (rhizome: content = 2.8%)<sup>[5508]</sup>, TAO ER QI *Podophyllum emodii* [Syn. *Podophyllum emodii* var. *chinense*; *Podophyllum sikkimense*; *Sinopodophyllum emodii*] (rhizome: mean content of 3 origins = 5.60%)<sup>[5508]</sup>, WO ER QI *Diphylleia sinensis* (rhizome: mean content of 4 origins = 2.99%)<sup>[5508]</sup>, XIAO BA JIAO LIAN *Dysosma difformis* (rhizome: content = 0.22%)<sup>[5508]</sup>. **Ref:** 4, 6, 279, 658, 3543, 3969, 5008, 5009, 5176, 5332, 5499, 5507, 5508.

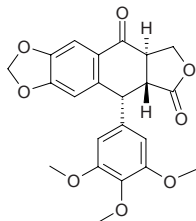
**17593 Podophyllotoxin 7'-O-β-D-glucopyranoside**

C<sub>28</sub>H<sub>32</sub>O<sub>13</sub> (576.56). Hygroscopic white amorphous flocculus, mp 152~154°C, [α]<sub>D</sub><sup>20</sup> = -76.4° (c = 0.576, methanol), [α]<sub>D</sub><sup>20</sup> = -117° (c = 0.668, pyridine). **Pharm:** Antineoplastic (mus EAC, ip); inhibits mitosis; antiviral (herpes simplex virus); LD<sub>50</sub> (mus, ip) = 200 mg/kg. **Source:** TAO ER QI *Podophyllum emodii* [Syn. *Podophyllum emodii* var. *chinense*; *Podophyllum sikkimense*; *Sinopodophyllum emodii*], DUN YE GUI JIU *Podophyllum peltatum*. **Ref:** 661, 3543.

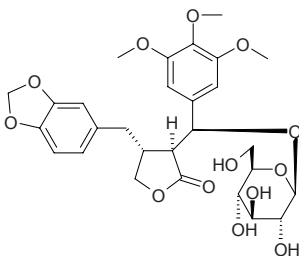


**17594 Podophyllotoxone**

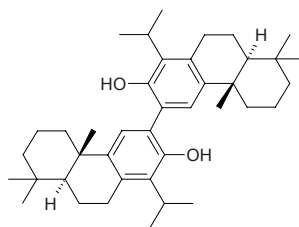
$C_{22}H_{20}O_8$  (412.40). **Pharm:** Cytotoxic. **Source:** BAI BA JIAO LIAN *Dysosma majorensis* [Syn. *Podophyllum majorensis*; *Dysosma lichuanensis*], DUN YE GUI JIU *Podophyllum peltatum*, LIU JIAO LIAN *Dysosma pleiantha* [Syn. *Podophyllum pleianthum*] (rhizome: content = 0.016%<sup>[5508]</sup>), TAO ER QI *Podophyllum emodii* [Syn. *Podophyllum emodii* var. *chinense*; *Podophyllum sikkimense*; *Sinopodophyllum emodii*] (rhizome: mean content of 2 origins = 0.306%<sup>[5508]</sup>), WO ER QI *Diphylleia sinensis* (rhizome: mean content of 4 origins = 0.131%<sup>[5508]</sup>). **Ref:** 658, 2719, 2729, 2997, 3115, 5508.

**17595 Podorhizol β-D-glucoside**

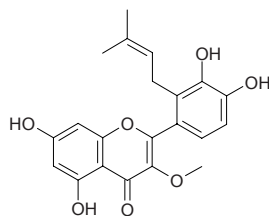
$C_{28}H_{34}O_{13}$  (578.58). **Pharm:** Inhibits mitosis. **Source:** DUN YE GUI JIU *Podophyllum peltatum*, TAO ER QI *Podophyllum emodii* [Syn. *Podophyllum emodii* var. *chinense*; *Podophyllum sikkimense*; *Sinopodophyllum emodii*]. **Ref:** 658.

**17596 Podototarin**

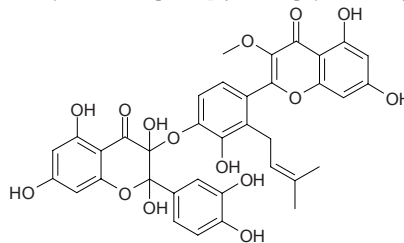
[2539-02-8]  $C_{40}H_{58}O_2$  (570.91). mp 225–226°C. **Source:** LUO HAN SONG YE *Podocarpus macrophyllus*. **Ref:** 6.

**17597 Podoverin A**

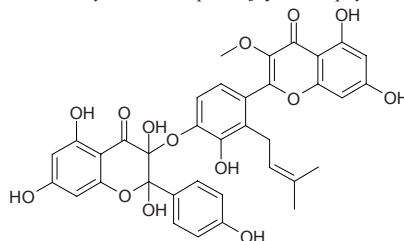
[107882-43-9]  $C_{21}H_{20}O_7$  (384.38). White crystals, mp 82–84°C (Et<sub>2</sub>O-pet. ether). **Pharm:** Anti-inflammatory (*in vitro*, IC<sub>50</sub> = 4.7 μmol/L). **Source:** GUI JIU *Dysosma versipellis* [Syn. *Podophyllum versipelle*]. **Ref:** 3631.

**17598 Podoverin B**

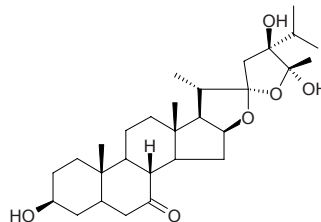
[107882-41-7]  $C_{36}H_{30}O_{15}$  (702.63). Yellow crystals, mp 180–182°C (Et<sub>2</sub>O-pet. ether). **Pharm:** Anti-inflammatory (*in vitro*, IC<sub>50</sub> = 6.4 μmol/L). **Source:** GUI JIU *Dysosma versipellis* [Syn. *Podophyllum versipelle*]. **Ref:** 3631.

**17599 Podoverin C**

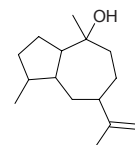
[107882-40-6]  $C_{36}H_{30}O_{14}$  (686.63). Yellowish amorphous substance, mp 171–173°C. **Pharm:** Anti-inflammatory (*in vitro*, IC<sub>50</sub> = 89 μmol/L). **Source:** GUI JIU *Dysosma versipellis* [Syn. *Podophyllum versipelle*]. **Ref:** 3631.

**17600 Pogosterol**

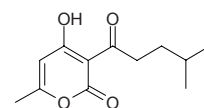
[149155-26-0]  $C_{29}H_{46}O_6$  (490.69). Crystals (MeOH), mp 154–157°C, [ $\alpha$ ]<sub>D</sub><sup>23</sup> = –91.6° (*c* = 0.43, CHCl<sub>3</sub>). **Pharm:** Cytotoxic (*in vitro*, L<sub>1210</sub> IC<sub>50</sub> = 1.7 μg/mL). **Source:** BO GE BAN JIU JU *Vernonia pogosperma*. **Ref:** 3632.

**17601 Pogostol**

[21698-41-9]  $C_{15}H_{26}O$  (222.37). **Source:** GUANG HUO XIANG *Pogostemon cablin* [Syn. *Mentha cablin*]. **Ref:** 2, 660.

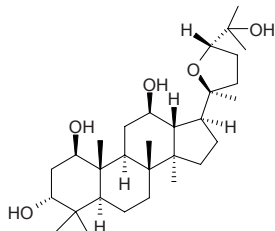
**17602 Pogostone**

$C_{12}H_{16}O_4$  (224.26). mp 33–34°C. **Pharm:** Antibacterial (*Staphylococcus aureus*,  $\alpha$ -hemolytic streptococcus); antifungal (*Candida albicans*, *Rhizopus niger*, *Cryptococcus neoformans*); antiseptic. **Source:** GUANG HUO XIANG *Pogostemon cablin* [Syn. *Mentha cablin*] (aerial parts: content scope = 0.004%–0.016%<sup>[5501]</sup>). **Ref:** 2, 505, 660, 5501.

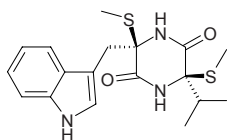


**17603 Polacamdrin**

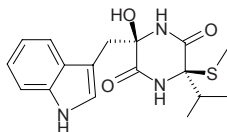
[145700-90-9] C<sub>30</sub>H<sub>52</sub>O<sub>5</sub> (492.75). Colorless prisms, mp 234~238°C, [ $\alpha$ ]<sub>D</sub> = -86.5° (*c* = 0.89, CHCl<sub>3</sub>). **Pharm:** Cytotoxic (KB, ED<sub>50</sub> = 0.6µg/mL, P<sub>388</sub> ED<sub>50</sub> = 0.9µg/mL, RPMI-7951 ED<sub>50</sub> = 0.62µg/mL). **Source:** SHI ER RUI CHOU SHI CAI *Polanisia dodecandra*. **Ref:** 3633.

**17604 Polanrazine B**

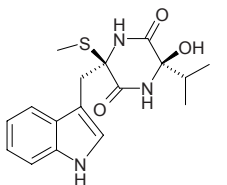
C<sub>18</sub>H<sub>23</sub>N<sub>3</sub>O<sub>2</sub>S<sub>2</sub> (377.53). [ $\alpha$ ]<sub>D</sub> = -60° (*c* = 0.2, CHCl<sub>3</sub>). **Source:** BAN DIAN XIAO QIU QIANG JUN *Leptosphaeria maculans*, JING DIAN MEI *Phoma lingam*. **Ref:** 5213.

**17605 Polanrazine C**

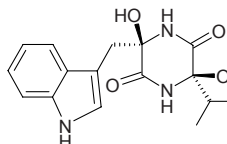
C<sub>17</sub>H<sub>21</sub>N<sub>3</sub>O<sub>3</sub>S (347.44). [ $\alpha$ ]<sub>D</sub> = +16° (*c* = 0.18, MeOH). **Pharm:** Phytotoxin (brown mustard leaves, moderate but selective toxicity, causing necrotic and chlorotic lesions, 1~3mm diameter). **Source:** BAN DIAN XIAO QIU QIANG JUN *Leptosphaeria maculans*, JING DIAN MEI *Phoma lingam*. **Ref:** 5213.

**17606 Polanrazine D**

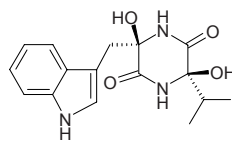
C<sub>17</sub>H<sub>21</sub>N<sub>3</sub>O<sub>3</sub>S (347.44). [ $\alpha$ ]<sub>D</sub> = -8.2° (*c* = 0.18, MeOH). **Source:** BAN DIAN XIAO QIU QIANG JUN *Leptosphaeria maculans*, JING DIAN MEI *Phoma lingam*. **Ref:** 5213.

**17607 Polanrazine E**

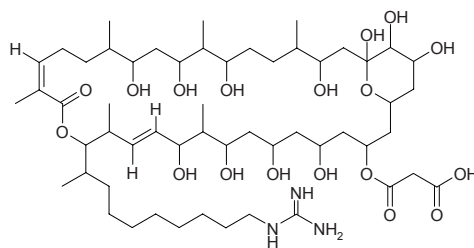
C<sub>17</sub>H<sub>21</sub>N<sub>3</sub>O<sub>4</sub> (331.37). [ $\alpha$ ]<sub>D</sub> = -6° (*c* = 0.07, MeOH). **Pharm:** Phytotoxin (brown mustard leaves, moderate but selective toxicity, causing necrotic and chlorotic lesions, 1~3mm diameter)<sup>[5213]</sup>. **Source:** BAN DIAN XIAO QIU QIANG JUN *Leptosphaeria maculans*, JING DIAN MEI *Phoma lingam*. **Ref:** 5213.

**17608 Polanrazine F**

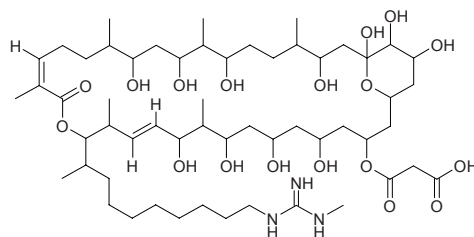
C<sub>17</sub>H<sub>19</sub>N<sub>3</sub>O<sub>4</sub> (317.35). [ $\alpha$ ]<sub>D</sub> = -10° (*c* = 0.26, MeOH). **Source:** BAN DIAN XIAO QIU QIANG JUN *Leptosphaeria maculans*, JING DIAN MEI *Phoma lingam*. **Ref:** 5213.

**17609 Polaramycin A**

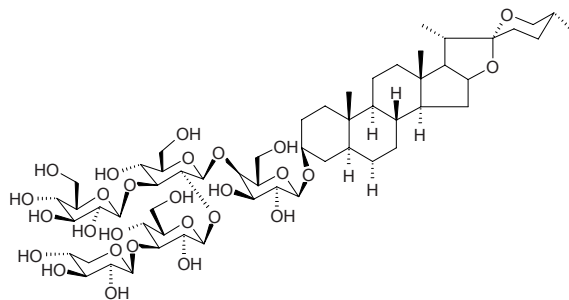
C<sub>55</sub>H<sub>99</sub>N<sub>3</sub>O<sub>18</sub> (1090.41). White crystalline powder. **Source:** *Streptomyces hygroscopicus*. **Ref:** 380.

**17610 Polaramycin B**

C<sub>56</sub>H<sub>101</sub>N<sub>3</sub>O<sub>18</sub> (1104.44). White crystalline powder. **Source:** *Streptomyces hygroscopicus*. **Ref:** 380.

**17611 Polianthoside B**

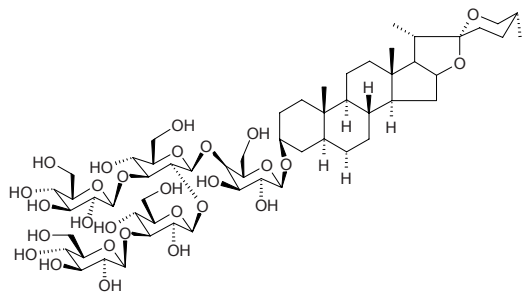
Tigogenin 3-*O*- $\beta$ -*D*-Xylopyranosyl-(1→3)- $\beta$ -*D*-glucopyranosyl-(1→2)-[ $\beta$ -*D*-glucopyranosyl-(1→3)]- $\beta$ -*D*-glucopyranosyl-(1→4)- $\beta$ -*D*-galactopyranoside C<sub>56</sub>H<sub>92</sub>O<sub>27</sub> (1197.34). White amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>18.3</sup> = -52.04° (*c* = 0.0221, pyridine). **Pharm:** Cytotoxic inactive (*in vitro*, HeLa, IC<sub>50</sub> > 20µg/mL; control cis-Platin, IC<sub>50</sub> = 0.75µg/mL). **Source:** WAN XIANG YU *Polianthes tuberosa* (tuber: yield = 0.00058%fw). **Ref:** 3002.



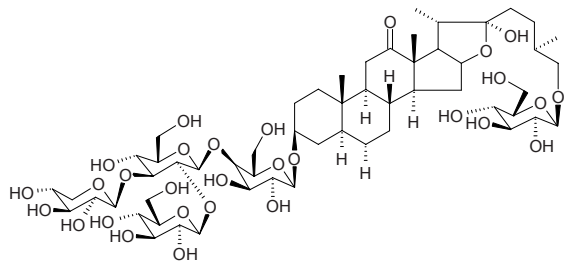


**17612 Polianthoside C**

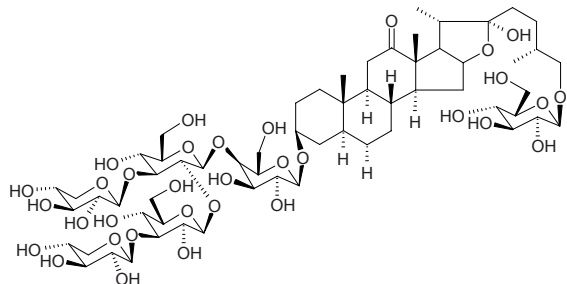
Tigogenin 3-*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-galactopyranoside C<sub>57</sub>H<sub>94</sub>O<sub>28</sub> (1227.37). White amorphous powder,  $[\alpha]_D^{19.8} = -32.79^\circ$  ( $c = 0.0183$ , pyridine). **Pharm:** Cytotoxic inactive (*in vitro*, HeLa, IC<sub>50</sub> > 20 $\mu$ g/mL; control cis-Platin, IC<sub>50</sub> = 0.75 $\mu$ g/mL). **Source:** WAN XIANG YU *Polianthes tuberosa* (tuber: yield = 0.00028%fw). **Ref:** 3002.

**17613 Polianthoside D**

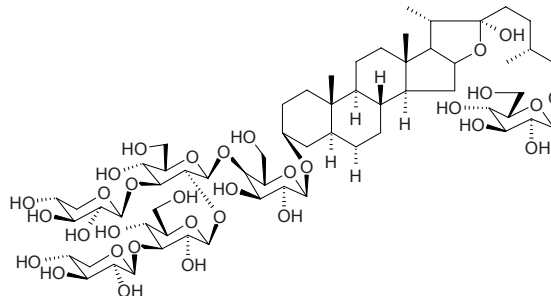
26-*O*- $\beta$ -*D*-Glucopyranosyl-(25*R*)-5 $\alpha$ -furost-3 $\beta$ ,22 $\alpha$ ,26-triol-12-one 3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)-[ $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-galactopyranoside C<sub>56</sub>H<sub>92</sub>O<sub>29</sub> (1229.34). White amorphous powder,  $[\alpha]_D^{18.1} = -23.21^\circ$  ( $c = 0.0474$ , pyridine). **Pharm:** Cytotoxic (*in vitro*, HeLa, IC<sub>50</sub> = 7.9 $\mu$ g/mL; control cis-Platin, IC<sub>50</sub> = 0.75 $\mu$ g/mL). **Source:** WAN XIANG YU *Polianthes tuberosa* (tuber: yield = 0.0062%fw). **Ref:** 3002.

**17614 Polianthoside E**

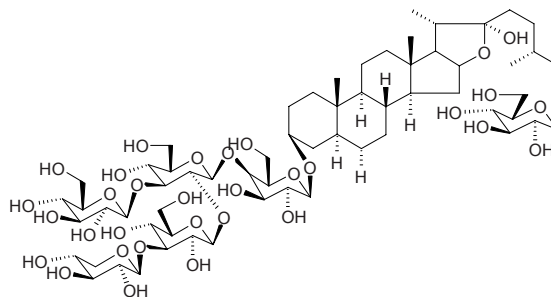
26-*O*- $\beta$ -*D*-Glucopyranosyl-(25*R*)-5 $\alpha$ -furost-3 $\beta$ ,22 $\alpha$ ,26-triol-12-one 3-*O*- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)-[ $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-galactopyranoside C<sub>61</sub>H<sub>100</sub>O<sub>33</sub> (1361.46). White amorphous powder,  $[\alpha]_D^{18.1} = -23.53^\circ$  ( $c = 0.034$ , pyridine). **Pharm:** Cytotoxic (*in vitro*, HeLa, IC<sub>50</sub> = 5.2 $\mu$ g/mL; control cis-Platin, IC<sub>50</sub> = 0.75 $\mu$ g/mL). **Source:** WAN XIANG YU *Polianthes tuberosa* (tuber: yield = 0.021%fw). **Ref:** 3002.

**17615 Polianthoside F**

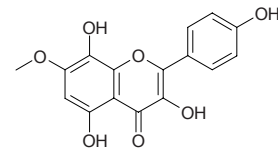
26-*O*- $\beta$ -*D*-Glucopyranosyl-(25*R*)-5 $\alpha$ -furost-3 $\beta$ ,22 $\alpha$ ,26-triol 3-*O*- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)-[ $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-galactopyranoside C<sub>61</sub>H<sub>102</sub>O<sub>32</sub> (1347.47). White amorphous powder,  $[\alpha]_D^{19.8} = -37.18^\circ$  ( $c = 0.039$ , pyridine). **Pharm:** Cytotoxic (*in vitro*, HeLa, IC<sub>50</sub> = 20.00 $\mu$ g/mL; control cis-Platin, IC<sub>50</sub> = 0.75 $\mu$ g/mL). **Source:** WAN XIANG YU *Polianthes tuberosa* (tuber: yield = 0.030%fw). **Ref:** 3002.

**17616 Polianthoside G**

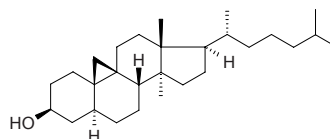
26-*O*- $\beta$ -*D*-Glucopyranosyl-(25*R*)-5 $\alpha$ -furost-3 $\beta$ ,22 $\alpha$ ,26-triol 3-*O*- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-galactopyranoside C<sub>62</sub>H<sub>104</sub>O<sub>33</sub> (1377.5). White amorphous powder,  $[\alpha]_D^{19.7} = -35.26^\circ$  ( $c = 0.039$ , pyridine). **Pharm:** Cytotoxic (*in vitro*, HeLa, IC<sub>50</sub> = 5.4 $\mu$ g/mL; control cis-Platin, IC<sub>50</sub> = 0.75 $\mu$ g/mL). **Source:** WAN XIANG YU *Polianthes tuberosa* (tuber: yield = 0.00075%fw). **Ref:** 3002.

**17617 Pollenitin**

3,5,8,4'-Tetrahydroxy-7-methoxy flavone C<sub>16</sub>H<sub>12</sub>O<sub>7</sub> (316.27). Yellow needles (AcOH), mp 285°C. **Source:** CHA HUA *Camellia sinensis* [Syn. *Thea sinensis*], *Notholaena* spp. **Ref:** 1521, 3272.

**17618 Pollinastanol**

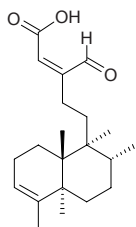
[1912-66-9] C<sub>28</sub>H<sub>48</sub>O (400.69). mp 95°C. **Source:** SHUI LONG GU *Polypodium niponicum*. **Ref:** 6.



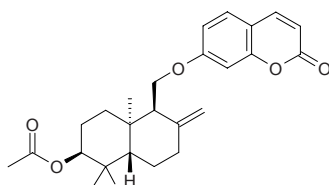


**17619 Polyalthialdoic acid**

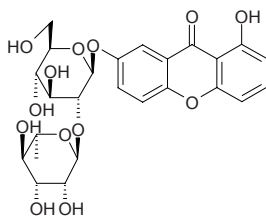
[137109-33-2] C<sub>20</sub>H<sub>30</sub>O<sub>3</sub> (318.46). White powder, mp 167~170°C,  $[\alpha]_D^{22} = -36.7^\circ$  ( $c = 0.03$ , absolute alcohol). **Pharm:** Cytotoxic (hmn, markedly inhibits A549, MCF7, and HT29; hmn culture cancer cells ED<sub>50</sub> = 0.6 μg/mL; markedly inhibits Crown gall cancer). **Source:** CHANG YE AN LUO *Polyalthia longifolia*. **Ref:** 3634.

**17620 Polyanthinin**

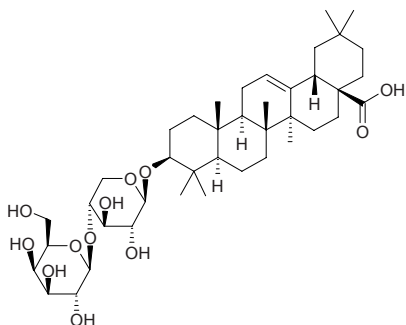
Polyanthin C<sub>26</sub>H<sub>32</sub>O<sub>5</sub> (424.54). mp 127~129°C,  $[\alpha]_D^{20} = -32^\circ$  (EtOH). **Source:** A WEI *Ferula assafoetida* (root), DUO HUA A WEI *Ferula polyantha*. **Ref:** 1521, 3273, 5243.

**17621 Polycaudoside A**

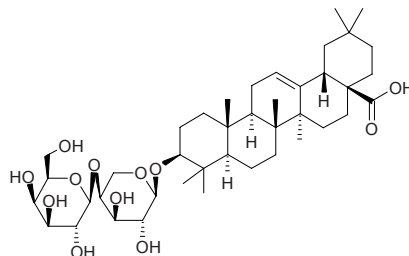
1,7-Dihydroxyxanthone-7-*O*- $\alpha$ -L-rhamnopyranosyl-(1→2)- $\beta$ -D-glucopyranoside C<sub>25</sub>H<sub>28</sub>O<sub>13</sub> (536.49). Yellow needles, mp = 115~117°C. **Source:** SHUI HUANG YANG MU *Polygala caudata*. **Ref:** 2329.

**17622 Polyfolioliide A**

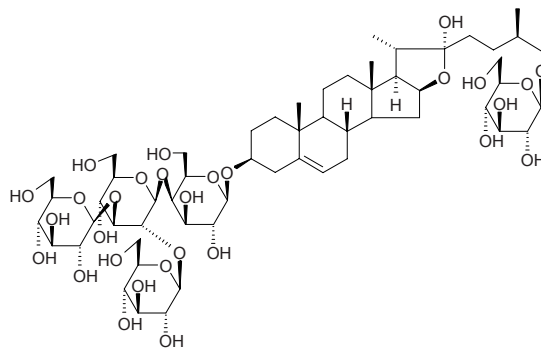
3-*O*- $\beta$ -D-Galactopyranosyl-(1→4)- $\beta$ -D-xylopyranosyloleanolic acid C<sub>41</sub>H<sub>66</sub>O<sub>12</sub> (750.98). Colorless solid,  $[\alpha]_D^{25} = +12.4^\circ$  ( $c = 1.42$ , MeOH). **Pharm:** Cytotoxic (A2780, IC<sub>50</sub> = (6.7±0.4) μg/mL; control Actinomycin D, IC<sub>50</sub> = 2~5 ng/mL). **Source:** DA YE NAN YANG SHEN *Polyscias amplifolia* (infructescence). **Ref:** 5397.

**17623 Polyfolioliide B**

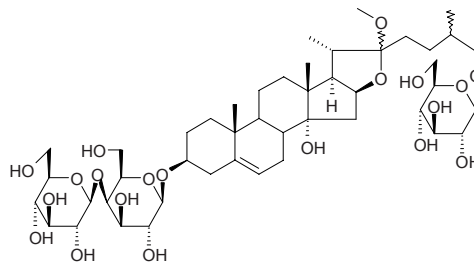
3-*O*- $\beta$ -D-Galactopyranosyl-(1→4)- $\alpha$ -L-arabinopyranosyloleanolic acid C<sub>41</sub>H<sub>66</sub>O<sub>12</sub> (750.98). Colorless solid,  $[\alpha]_D^{25} = +26.4^\circ$  ( $c = 0.96$ , MeOH). **Pharm:** Cytotoxic (A2780, IC<sub>50</sub> = (9.2±0.3) μg/mL; control Actinomycin D, IC<sub>50</sub> = 2~5 ng/mL). **Source:** DA YE NAN YANG SHEN *Polyscias amplifolia* (infructescence). **Ref:** 5397.

**17624 Polyfuroside**

C<sub>57</sub>H<sub>94</sub>O<sub>29</sub> (1243.37). **Source:** YU ZHU *Polygonatum odoratum* [Syn. *Polygonatum officinale*]. **Ref:** 660.

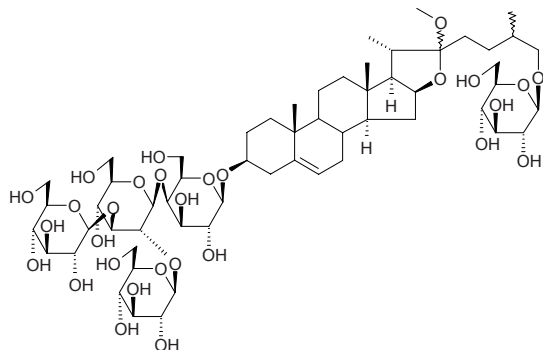
**17625 Polyfuroside PO<sub>6</sub>**

C<sub>46</sub>H<sub>76</sub>O<sub>20</sub> (949.11). **Source:** YU ZHU *Polygonatum odoratum* [Syn. *Polygonatum officinale*]. **Ref:** 660.

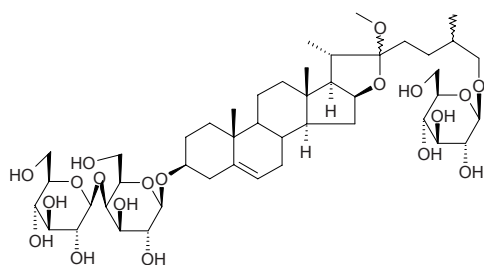


**17626 Polyfuroside PO<sub>7</sub>**

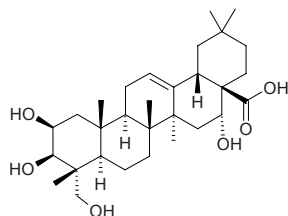
$C_{58}H_{96}O_{29}$  (1257.39). Source: YU ZHU *Polygonatum odoratum* [Syn. *Polygonatum officinale*]. Ref: 660.

**17627 Polyfuroside PO<sub>8</sub>**

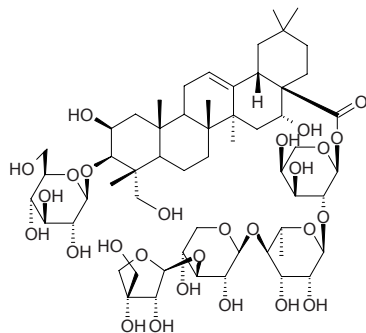
$C_{46}H_{76}O_{19}$  (933.11). Source: YU ZHU *Polygonatum odoratum* [Syn. *Polygonatum officinale*]. Ref: 660.

**17628 Polygalacic acid**

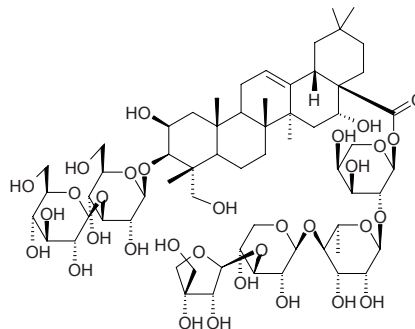
[22338-71-2]  $C_{30}H_{48}O_6$  (504.71). mp 300~305°C. Source: JIE GENG *Platycodon grandiflorum*. Ref: 6.

**17629 Polygalacin D**

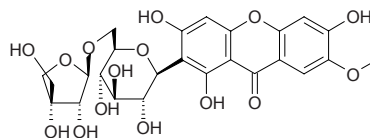
$C_{57}H_{92}O_{27}$  (1209.35). Source: JIE GENG *Platycodon grandiflorum*. Ref: 1382.

**17630 Polygalacin D<sub>2</sub>**

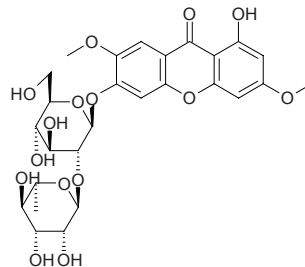
$C_{63}H_{102}O_{32}$  (1371.50). Source: JIE GENG *Platycodon grandiflorum*. Ref: 1382.

**17631 Polygalaxanthone III**

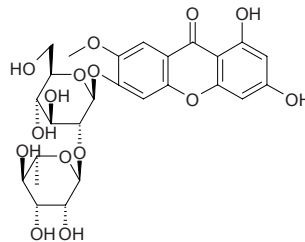
$C_{25}H_{28}O_{15}$  (568.39). Amorphous powder. Source: XI BO LI YA YUAN ZHI *Polygala sibirica*. Ref: 691.

**17632 Polygalaxanthone IV**

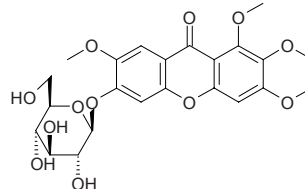
$C_{27}H_{32}O_{15}$  (596.55). Yellow powder, mp 273~275°C,  $[\alpha]_D^{23} = -60^\circ$  ( $c = 0.70$ , MeOH). Source: YUAN ZHI *Polygala tenuifolia*. Ref: 1974.

**17633 Polygalaxanthone V**

$C_{26}H_{30}O_{15}$  (582.52). Yellow powder, mp 232~235 °C,  $[\alpha]_D^{23} = -81.7^\circ$  ( $c = 0.71$ , MeOH). Source: YUAN ZHI *Polygala tenuifolia*. Ref: 1974.

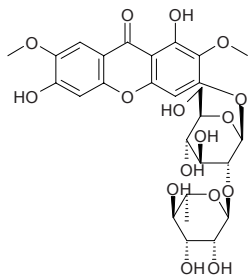
**17634 Polygalaxanthone VI**

$C_{23}H_{26}O_{12}$  (494.46). Yellow powder, mp 245~247 °C. Source: YUAN ZHI *Polygala tenuifolia*. Ref: 1974.

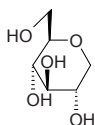


**17635 Polygalaxanthone VII**

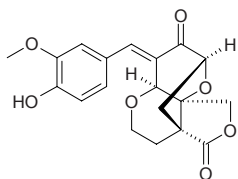
$C_{27}H_{32}O_{16}$  (612.55). Pale yellow powder, mp 182~184 °C. Source: YUAN ZHI *Polygala tenuifolia*. Ref: 1974.

**17636 Polygalitol**

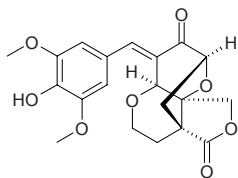
$C_6H_{12}O_5$  (164.16). mp 142~143°C. Source: HUANG HUA YUAN ZHI *Polygala arillata*, YUAN ZHI *Polygala tenuifolia*. Ref: 2.

**17637 Polygalolide A**

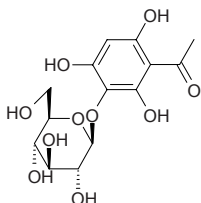
$C_{19}H_{18}O_7$  (358.35). Light brown amorphous powder,  $[\alpha]_D^{24} = -14.4^\circ$  ( $c = 0.018$ , MeOH). Source: JIA HUANG HUA YUAN ZHI *Polygala fallax* [Syn. *Polygala aureocauda*] (root and stem: yield = 0.00054%). Ref: 4683.

**17638 Polygalolide B**

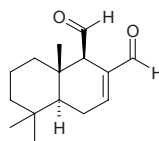
$C_{20}H_{20}O_8$  (388.38). Light brown amorphous powder,  $[\alpha]_D^{24} = -21.3^\circ$  ( $c = 0.015$ , MeOH). Source: JIA HUANG HUA YUAN ZHI *Polygala fallax* [Syn. *Polygala aureocauda*] (root and stem: yield = 0.00049%). Ref: 4683.

**17639 Polygoacetophenoside**

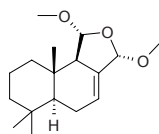
[110906-84-8]  $C_{14}H_{18}O_{10}$  (346.29). Source: HE SHOU WU *Polygonum multiflorum*. Ref: 2.

**17640 Polygodial**

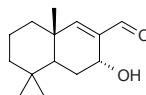
Tadeonal [6754-20-7]  $C_{15}H_{22}O_2$  (234.34). mp 57°C, bp 138~140°C/0.8mmHg. Pharm: Insect antifeedant. Source: SHUI LIAO *Polygonum hydropiper*. Ref: 6, 658, 1521.

**17641 Polygodial acetal**

[98204-88-7]  $C_{17}H_{28}O_3$  (280.41). Yellow oil. Source: SHUI LIAO *Polygonum hydropiper*. Ref: 3274.

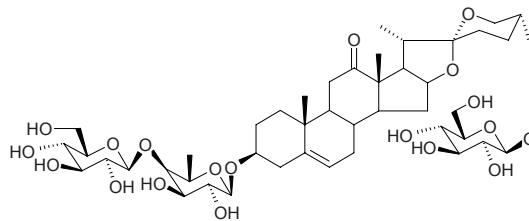
**17642 Polygonal**

[72537-20-3]  $C_{14}H_{22}O_2$  (222.33). Crystals, mp 116~117°C,  $[\alpha]_D = -7.3^\circ$  ( $c = 7.4$ ,  $CHCl_3$ ). Source: LIAO SHI *Polygonum hydropiper*. Ref: 3275.

**17643 Polygonatoside A**

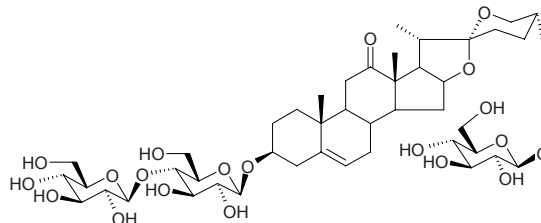
(25S)-3 $\beta$ ,27-Dihydroxyspirost-5-en-12-one

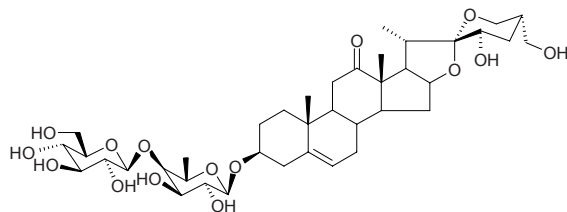
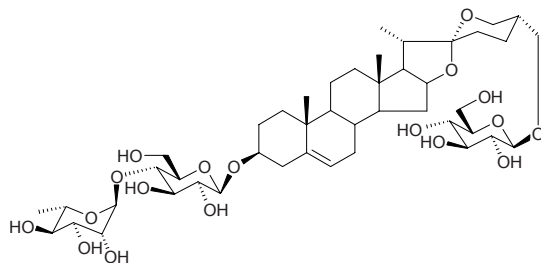
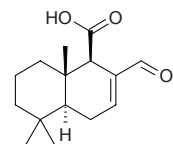
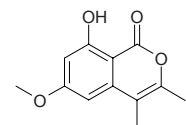
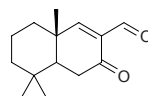
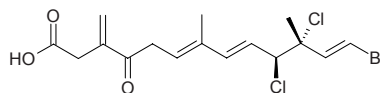
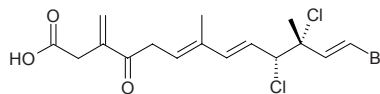
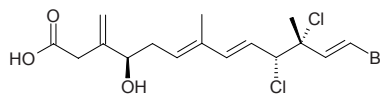
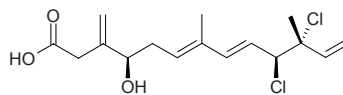
27-O- $\beta$ -D-glucopyranosyl-3-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-fucopyranoside of  $C_{45}H_{70}O_{19}$  (915.05). White amorphous powder,  $[\alpha]_D^{20} = -24.51^\circ$  ( $c = 0.1489$ , pyridine). Pharm: Cytotoxic (*in vitro*, HeLa,  $IC_{50} = 5.06\mu g/mL$ ; control Cisplatin, HeLa,  $IC_{50} = 0.75\mu g/mL$ ). Source: HU BEI HUANG JING *Polygonatum zanlanscianense* (rhizome: yield = 0.00055%dw). Ref: 4788.

**17644 Polygonatoside B**

(25S)-3 $\beta$ ,27-Dihydroxyspirost-5-en-12-one

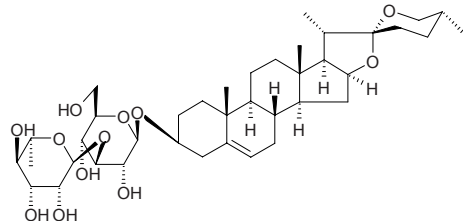
27-O- $\beta$ -D-glucopyranosyl-3-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-galactopyranoside  $C_{45}H_{70}O_{20}$  (831.05). White amorphous powder,  $[\alpha]_D^{20} = -19.19^\circ$  ( $c = 0.0521$ , pyridine). Pharm: Cytotoxic (*in vitro*, HeLa,  $IC_{50} = 5.13\mu g/mL$ ; control Cisplatin, HeLa,  $IC_{50} = 0.75\mu g/mL$ ). Source: HU BEI HUANG JING *Polygonatum zanlanscianense* (rhizome: yield = 0.00014%dw). Ref: 4788.



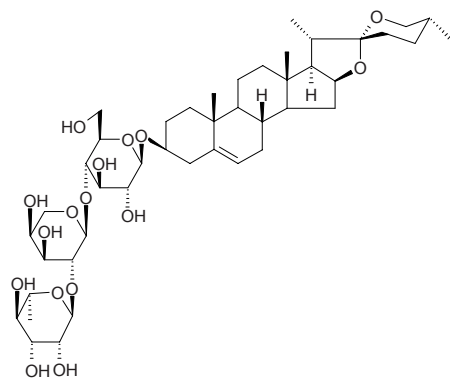
**17645 Polygonatoside C**(23*S*,25*S*)-3 $\beta$ ,23,27-Trihydroxyspirost-5-en-12-one3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-fucopyranoside C<sub>39</sub>H<sub>60</sub>O<sub>15</sub> (768.9).White solid,  $[\alpha]_D^{20} = -48.43^\circ$  ( $c = 0.0351$ , pyridine). **Pharm:** Cytotoxic (*in vitro*, HeLa, IC<sub>50</sub> = 7.45  $\mu$ g/mL; control Cisplatin, HeLa, IC<sub>50</sub> = 0.75  $\mu$ g/mL).**Source:** HU BEI HUANG JING *Polygonatum zanlanscianense* (rhizome: yield = 0.00018% dw). **Ref:** 4788.**17646 Polygonatoside D**(25*S*)-Spirost-5-ene-3 $\beta$ ,27-diol27-*O*- $\beta$ -*D*-glucopyranosyl-3-*O*-[ $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)]- $\beta$ -*D*-glucopyranoside C<sub>45</sub>H<sub>72</sub>O<sub>18</sub> (901.06). White amorphous powder,  $[\alpha]_D^{20} = -50.31^\circ$  ( $c = 0.0141$ , pyridine).**Pharm:** Cytotoxic (*in vitro*, HeLa, IC<sub>50</sub> = 5.83  $\mu$ g/mL; control Cisplatin, HeLa, IC<sub>50</sub> = 0.75  $\mu$ g/mL). **Source:** HU BEI HUANG JING *Polygonatum zanlanscianense* (rhizome: yield = 0.00006% dw). **Ref:** 4788.**17647 Polygonic acid**[98204-84-3] C<sub>15</sub>H<sub>22</sub>O<sub>3</sub> (250.34). Crystals, mp 96–97°C,  $[\alpha]_D^{23} = -31^\circ$  ( $c = 1.06$ , CHCl<sub>3</sub>). **Source:** LA LIAO *Polygonum hydropiper* var. *flaccidum* [Syn. *Polygonum flaccidum*], SHUI LIAO *Polygonum hydropiper*. **Ref:** 660, 3274.**17648 Polygonolide**[100560-66-5] C<sub>12</sub>H<sub>12</sub>O<sub>4</sub> (220.23). **Pharm:** Anti-inflammatory. **Source:** SHUI LIAO *Polygonum hydropiper*. **Ref:** 658.**17649 Polygonone**[72581-67-0] C<sub>14</sub>H<sub>20</sub>O<sub>2</sub> (220.31). Oil. **Source:** SHUI LIAO *Polygonum hydropiper*. **Ref:** 3274.**17650 Polyhalogenated homosesquiterpenic fatty acid A**(6*E*,8*E*,12*E*)-3-Methylene-4-oxo-7,11-dimethyl-(10*S*\*,11*R*\*)-dichloro-13-bromo-trideca-6,8,12-trienoic acid C<sub>16</sub>H<sub>19</sub>BrCl<sub>2</sub>O<sub>3</sub> (410.14).  $[\alpha]_D = -43.1^\circ$  ( $c = 0.17$ , MeOH). **Source:** RUAN GU HAI TOU HONG *Plocamium cartilagineum*. **Ref:** 5158.**17651 Polyhalogenated homosesquiterpenic fatty acid B**(6*E*,8*E*,12*E*)-3-Methylene-4-oxo-7,11-dimethyl-(10*R*\*,11*R*\*)-dichloro-13-bromo-trideca-6,8,12-trienoic acid C<sub>16</sub>H<sub>19</sub>BrCl<sub>2</sub>O<sub>3</sub> (410.14).  $[\alpha]_D = +37.6^\circ$  ( $c = 0.14$ , MeOH). **Source:** RUAN GU HAI TOU HONG *Plocamium cartilagineum*. **Ref:** 5158.**17652 Polyhalogenated homosesquiterpenic fatty acid C**(6*E*,8*E*,12*E*)-3-Methylene-(4*R*)-hydroxy-7,11-dimethyl-(10*R*\*,11*R*\*)-dichloro-13-bromo-trideca-6,8,12-trienoic acid C<sub>16</sub>H<sub>21</sub>BrCl<sub>2</sub>O<sub>3</sub> (412.15).  $[\alpha]_D = +30.1^\circ$  ( $c = 0.14$ , MeOH). **Source:** RUAN GU HAI TOU HONG *Plocamium cartilagineum*. **Ref:** 5158.**17653 Polyhalogenated homosesquiterpenic fatty acid D**(6*E*,8*E*,12*E*)-3-Methylene-(4*R*)-hydroxy-7,11-dimethyl-(10*S*\*,11*R*\*)-dichloro-13-bromo-trideca-6,8,12-trienoic acid oil C<sub>16</sub>H<sub>22</sub>Cl<sub>2</sub>O<sub>3</sub> (333.26).  $[\alpha]_D = 15.4^\circ$  ( $c = 0.18$ , MeOH). **Source:** RUAN GU HAI TOU HONG *Plocamium cartilagineum*. **Ref:** 5158.

**17654 Polyphyllin C**

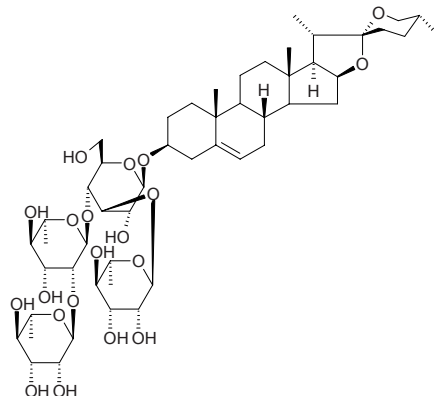
Diosgenin-3- $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 3)- $\beta$ -D-glucopyranoside C<sub>39</sub>H<sub>62</sub>O<sub>12</sub> (722.92).  $[\alpha]_D^{25} = -97.3^\circ$  ( $c = 0.07$ , pyridine). **Pharm:** Cytotoxic (*in vitro*, HeLa, IC<sub>50</sub> = 6.23  $\mu$ g/mL; control *cis*-Platin, HeLa, IC<sub>50</sub> = 0.75  $\mu$ g/mL)<sup>[4788]</sup>; cytotoxic (*in vitro*: A375, IC<sub>50</sub> = (3.31 $\pm$ 2.51)  $\mu$ mol/L, control Mithramycin, IC<sub>50</sub> = (0.37 $\pm$ 0.05)  $\mu$ mol/L; L929, IC<sub>50</sub> = (4.37 $\pm$ 2.89)  $\mu$ mol/L, Mithramycin, IC<sub>50</sub> = (0.31 $\pm$ 0.03)  $\mu$ mol/L; HeLa, IC<sub>50</sub> = (4.29 $\pm$ 1.89)  $\mu$ mol/L, Mithramycin, IC<sub>50</sub> = (0.19 $\pm$ 0.03)  $\mu$ mol/L)<sup>[5000]</sup>. **Source:** HU BEI HUANG JING *Polygonatum zanlanscianense* (rhizome: yield = 0.00025%dw)<sup>[4788]</sup>, HUANG SHAN YAO *Dioscorea panthaica* (rhizome), ZAO XIU Paris *polyphylla*. **Ref:** 6, 2996, 4788, 5000.

**17655 Polyphyllin D**

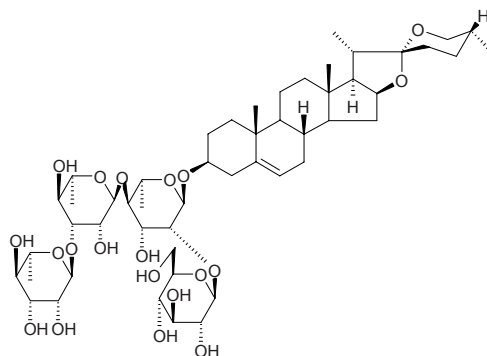
Diosgenin-3-O-[ $\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 2)-[ $\alpha$ -L-arabinopyranosyl-(1 $\rightarrow$ 4)]- $\beta$ -D-glucopyranoside [76296-72-5] C<sub>44</sub>H<sub>70</sub>O<sub>16</sub> (855.04). Crystals (MeOH), mp 275~280°C,  $[\alpha]_D = -113^\circ$  ( $c = 0.53$ , MeOH). **Pharm:** Hemostatic. **Source:** ZAO XIU Paris *polyphylla*. **Ref:** 2996, 3355.

**17656 Polyphyllin E**

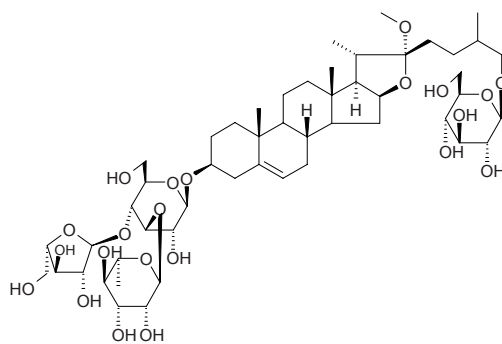
Diosgenin-3-O- $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 4)[ $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 3)]- $\beta$ -D-glucopyranoside C<sub>51</sub>H<sub>82</sub>O<sub>20</sub> (1015.21). **Source:** ZAO XIU Paris *polyphylla*. **Ref:** 2996.

**17657 Polyphyllin F**

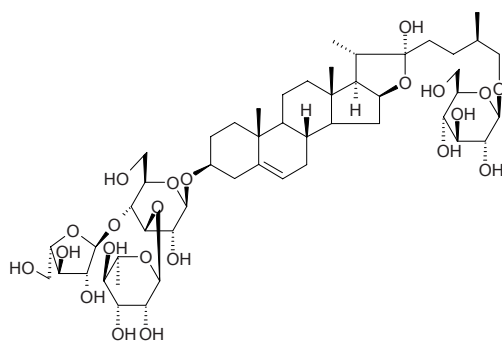
Diosgenin 3-O-[ $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)]- $\alpha$ -L-rhamnopyranoside] C<sub>51</sub>H<sub>82</sub>O<sub>20</sub> (1015.21). **Source:** ZAO XIU Paris *polyphylla*. **Ref:** 2996.

**17658 Polyphyllin G**

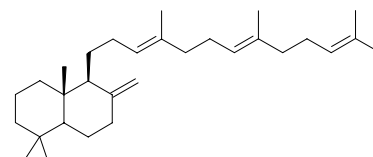
C<sub>51</sub>H<sub>84</sub>O<sub>22</sub> (1049.22). **Source:** ZAO XIU Paris *polyphylla*. **Ref:** 3276.

**17659 Polyphyllin H**

C<sub>50</sub>H<sub>82</sub>O<sub>22</sub> (1035.20). **Source:** ZAO XIU Paris *polyphylla*. **Ref:** 3276.

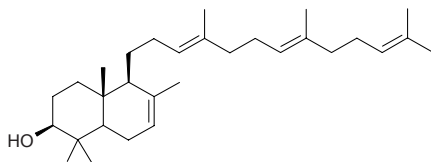
**17660  $\alpha$ -Polypodatetraene**

[88902-02-7] C<sub>30</sub>H<sub>50</sub> (410.73). Oil,  $[\alpha]_D^{23} = +27.4^\circ$  ( $c = 0.4$ , CHCl<sub>3</sub>). **Source:** DUO ZU JUE *Polypodium vulgare*, FU RUI ER JUE *Polystichum fauriei*, LUO YAN CAO *Lemmaphyllum microphyllum*. **Ref:** 3277, 2839.

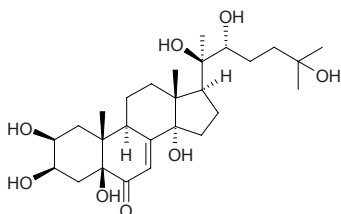


**17661 (13E,17E)-Polypoda-7,13,17,21-tetraen-3 $\beta$ -ol**

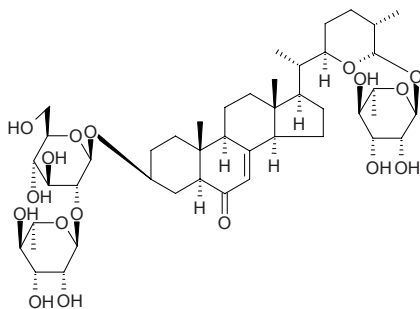
$C_{30}H_{50}O$  (426.73). Oil,  $[\alpha]_D^{20} = +3.8^\circ$  ( $c = 1.4$ ). Source: HUANG NIU MU *Cratogeomys cochinchinense*. Ref: 1907.

**17662 Polypodine B**

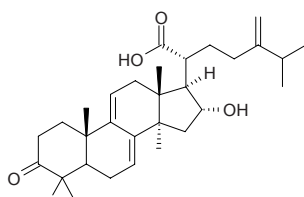
[18069-14-2]  $C_{27}H_{44}O_8$  (496.65). White powder, mp 252~254°C. Pharm: Insect ecdysone; larvicide (larva growth inhibitor of *Acroepiopsis assectella*); antineoplastic (inhibits EBV-EA induction). Source: BAI MAO XIA KU CAO *Ajuga decumbens*, DA HUA JIAN QIU LUO *Lychnis fulgens*, DUO ZU JUE *Polypodium vulgare*, LU CAO *Rhaponticum carthamoides*, PU FU JIN GU CAO *Ajuga reptans*, MAO JIAN QIU LUO *Lychnis coronaria*. Ref: 658, 693, 2189.

**17663 Polypodoside A**

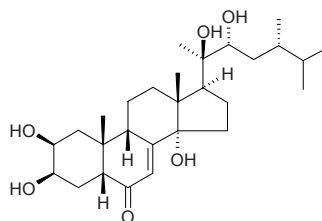
[119784-25-7]  $C_{45}H_{72}O_{17}$  (885.07). Colorless needles (alcohol), mp 198~200°C,  $[\alpha]_D = -37^\circ$  ( $c = 0.3$ , MeOH). Pharm: Sweetener. Source: DUO ZU JUE *Polypodium vulgare*, TIAN GEN DUO ZU JUE *Polypodium glycyrrhiza*. Ref: 3746, 3747.

**17664 Polyporenic acid C**

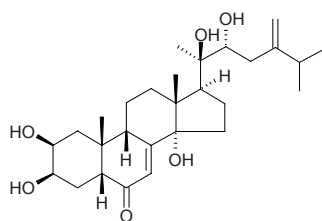
[465-18-9]  $C_{31}H_{46}O_4$  (482.71). White columnar crystals, mp 258~260°C. Pharm: Antineoplastic (EBV-EA induced by TPA, mol ratio/TPA = 1000, relative percentage of EBV-EA = 0% (positive control value 32pmol, 20ng TPA = 100%), viability of Raji cells = 70%; reference compound  $\beta$ -Carotene, relative percentage = 8.6%)<sup>[4616]</sup>. Source: FU LING *Poria cocos* (sclerotium; yield = 0.00013%dw)<sup>[4616]</sup>. Ref: 473, 4616.

**17665 Polyporusterone A**

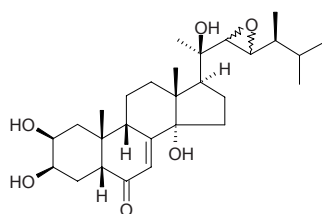
[141360-88-5]  $C_{28}H_{46}O_6$  (478.68). Needles (MeOH), mp 261.5°C,  $[\alpha]_D^{20} = +52.9^\circ$  ( $c = 0.61$ , EtOH). Pharm: Cytotoxic. Source: ZHU LING *Polyporus umbellatus*. Ref: 3278.

**17666 Polyporusterone B**

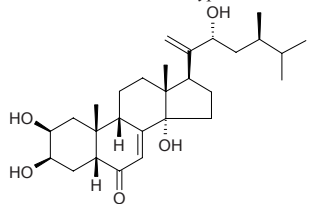
[141360-89-6]  $C_{28}H_{44}O_6$  (476.66). Needles (MeOH), mp 250°C,  $[\alpha]_D^{20} = +56.1^\circ$  ( $c = 0.46$ , EtOH). Pharm: Cytotoxic. Source: ZHU LING *Polyporus umbellatus*. Ref: 3278.

**17667 Polyporusterone C**

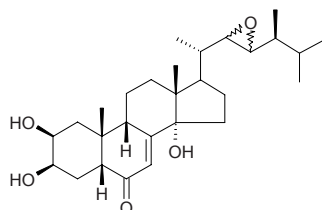
[141360-90-9]  $C_{28}H_{44}O_6$  (476.66). Needles (MeOH), mp 250°C. Pharm: Cytotoxic. Source: ZHU LING *Polyporus umbellatus*. Ref: 3278.

**17668 Polyporusterone D**

[141360-91-0]  $C_{28}H_{44}O_5$  (460.66). Amorphous powder. Pharm: Cytotoxic. Source: ZHU LING *Polyporus umbellatus*. Ref: 3278.

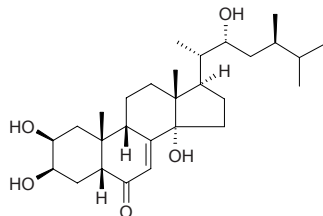
**17669 Polyporusterone E**

[141360-92-1]  $C_{28}H_{44}O_5$  (460.66). Needles (MeOH), mp 232°C. Pharm: Cytotoxic. Source: ZHU LING *Polyporus umbellatus*. Ref: 3278.

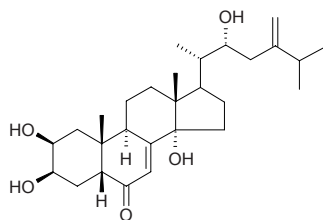


**17670 Polyporusterone F**

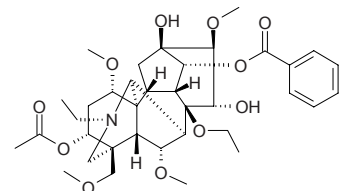
[141360-93-2] C<sub>28</sub>H<sub>46</sub>O<sub>5</sub> (462.68). Needles (MeOH), mp 251°C. Pharm.: Cytotoxic. Source: ZHU LING *Polyporus umbellatus*. Ref.: 3278.

**17671 Polyporusterone G**

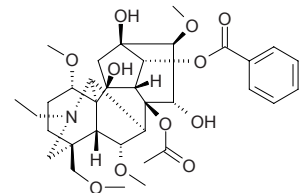
[141360-94-3] C<sub>28</sub>H<sub>44</sub>O<sub>5</sub> (460.66). Amorphous powder. Pharm.: Cytotoxic. Source: ZHU LING *Polyporus umbellatus*. Ref.: 3278.

**17672 Polyschistine A**

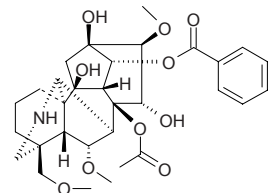
C<sub>36</sub>H<sub>51</sub>NO<sub>11</sub> (673.81). Source: BEI WU TOU *Aconitum kusnezoffii*, DUO LIE WU TOU *Aconitum polyschistum*. Ref.: 1521.

**17673 Polyschistine B**

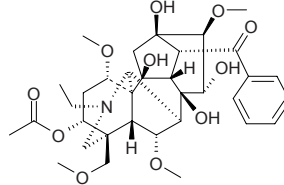
[96562-89-9] C<sub>34</sub>H<sub>47</sub>NO<sub>11</sub> (645.75). mp 182~185°C. Source: DUO LIE WU TOU *Aconitum polyschistum*. Ref.: 3279.

**17674 Polyschistine C**

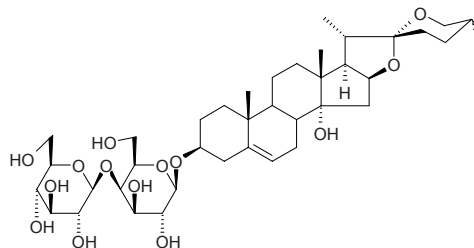
[96562-90-2] C<sub>31</sub>H<sub>41</sub>NO<sub>10</sub> (587.67). Amorphous solid. Source: DUO LIE WU TOU *Aconitum polyschistum*. Ref.: 3279.

**17675 Polyschistine D**

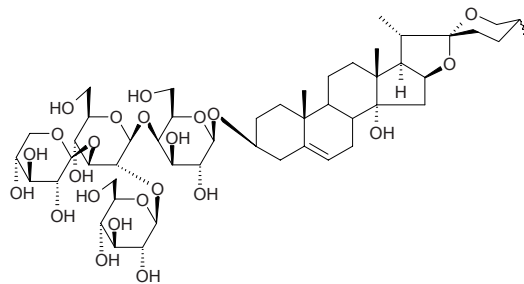
[119347-26-1] C<sub>34</sub>H<sub>47</sub>NO<sub>11</sub> (645.75). Needles (EtOAc), mp 251~252°C, [α]<sub>D</sub> = +11.4° (CHCl<sub>3</sub>). Source: DUO LIE WU TOU *Aconitum polyschistum*. Ref.: 3280.

**17676 Polyspirostanol PO<sub>1</sub>**

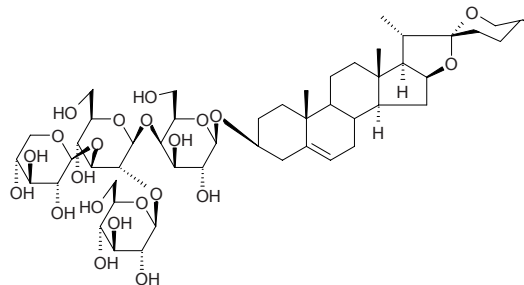
C<sub>39</sub>H<sub>62</sub>O<sub>14</sub> (754.92). Source: HUANG JING *Polygonatum sibiricum*. Ref.: 660.

**17677 Polyspirostanol PO<sub>2</sub>**

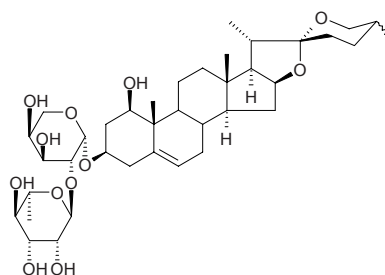
C<sub>50</sub>H<sub>80</sub>O<sub>23</sub> (1049.18). Source: HUANG JING *Polygonatum sibiricum*. Ref.: 660.

**17678 Polyspirostanol PO<sub>3</sub>**

C<sub>50</sub>H<sub>80</sub>O<sub>22</sub> (1033.18). Source: HUANG JING *Polygonatum sibiricum*. Ref.: 660.

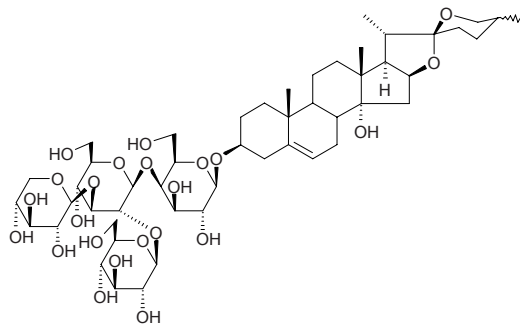
**17679 Polyspirostanol PO<sub>5</sub>**

C<sub>38</sub>H<sub>60</sub>O<sub>12</sub> (708.89). Source: HUANG JING *Polygonatum sibiricum*. Ref.: 660.

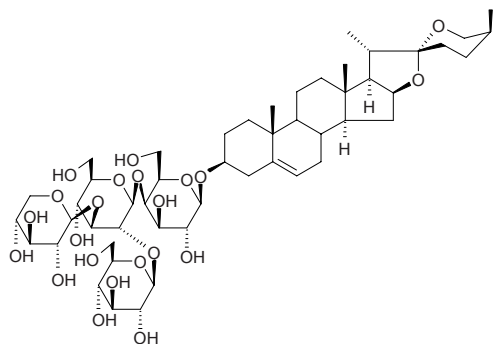


**17680 Polyspirostanol PO<sub>6</sub>**

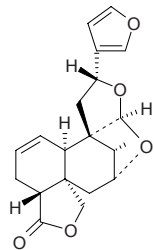
C<sub>50</sub>H<sub>80</sub>O<sub>23</sub> (1049.18). Source: HUANG JING *Polygonatum sibiricum*. Ref: 660.

**17681 Polyspirostanol PO<sub>5</sub>**

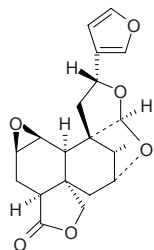
C<sub>50</sub>H<sub>80</sub>O<sub>22</sub> (1033.18). Source: HUANG JING *Polygonatum sibiricum*. Ref: 660.

**17682 Polystachyne A**

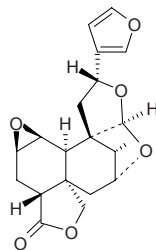
C<sub>20</sub>H<sub>22</sub>O<sub>5</sub> (342.40). mp 204~206°C, [α]<sub>D</sub><sup>20</sup> = 8.5° (c = 0.155, CHCl<sub>3</sub>). Source: DUO SUI SHU WEI CAO *Salvia polystachya* (aerial parts). Ref: 3901.

**17683 Polystachyne B**

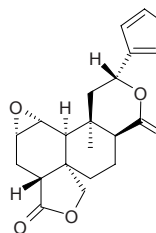
C<sub>20</sub>H<sub>22</sub>O<sub>6</sub> (358.39). mp 217~219°C, [α]<sub>D</sub><sup>20</sup> = 0.0° (c = 0.159, CHCl<sub>3</sub>). Source: DUO SUI SHU WEI CAO *Salvia polystachya* (aerial parts). Ref: 3901.

**17684 Polystachyne C**

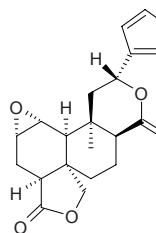
C<sub>20</sub>H<sub>22</sub>O<sub>6</sub> (358.39). mp 244~247°C, [α]<sub>D</sub><sup>20</sup> = -15.09° (c = 0.159, CHCl<sub>3</sub>). Source: DUO SUI SHU WEI CAO *Salvia polystachya* (aerial parts). Ref: 3901.

**17685 Polystachyne D**

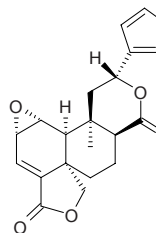
C<sub>20</sub>H<sub>22</sub>O<sub>6</sub> (358.39). mp 180~182°C, [α]<sub>D</sub><sup>20</sup> = -78.3° (c = 0.279, CHCl<sub>3</sub>). Source: DUO SUI SHU WEI CAO *Salvia polystachya* (aerial parts). Ref: 3901.

**17686 4αH-Polystachyne D**

C<sub>20</sub>H<sub>22</sub>O<sub>6</sub> (358.39). Source: DUO SUI SHU WEI CAO *Salvia polystachya* (aerial parts). Ref: 3901.

**17687 Polystachyne E**

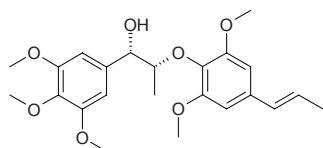
C<sub>20</sub>H<sub>20</sub>O<sub>6</sub> (356.38). mp 251~253°C. Source: DUO SUI SHU WEI CAO *Salvia polystachya* (aerial parts). Ref: 3901.



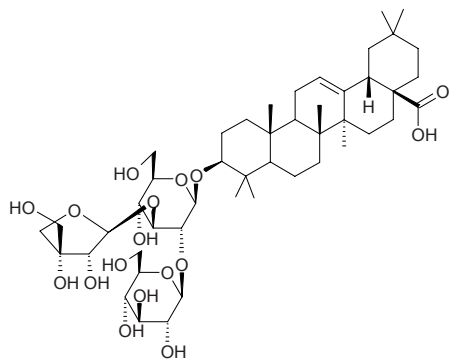


**17688 Polysyphorin**

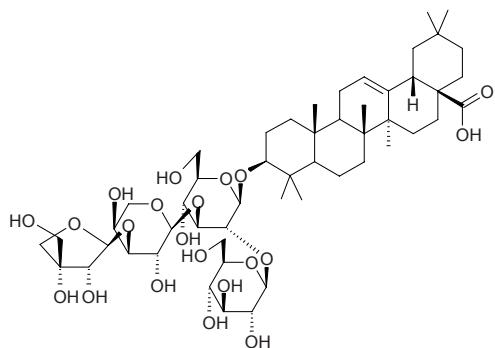
*threo*-*A*<sup>7</sup>-7-Hydroxy-3,4,5,3',5'-pentamethoxy-8-*O*-4'-neoligna [137196-25-9] C<sub>23</sub>H<sub>30</sub>O<sub>7</sub> (418.49). Colorless prismatic crystals, mp 147–148°C, [α]<sub>D</sub><sup>25</sup> = 0° (*c* = 0.40, chloroform). **Pharm:** Platelet aggregation inhibitor (25 μmol/L, InRt = 94%, IC<sub>50</sub> = 13.0 μmol/L); PAF receptor antagonist (12 μmol/L, InRt = 72%, IC<sub>50</sub> = 10 μmol/L). **Source:** ZHANG YE HU JIAO *Piper polysyphorum*. **Ref:** 191, 1578.

**17689 *Pometia ridleyi* saponin 2**

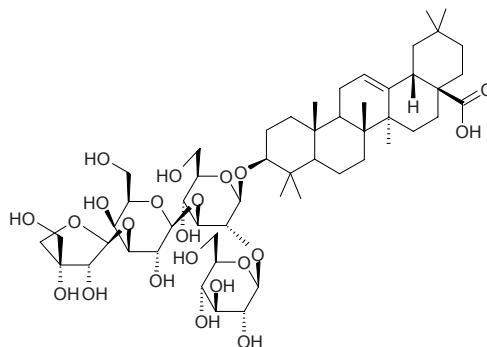
3-*O*-β-*D*-Apiofuranosyl-(1→3)-[β-*D*-glucopyranosyl-(1→2)]-β-*D*-glucopyranosyl-oleanolic acid C<sub>47</sub>H<sub>76</sub>O<sub>17</sub> (913.12). [α]<sub>D</sub><sup>21</sup> = +4.92° (*c* = 0.32, MeOH). **Source:** LI DE LI FAN LONG YAN *Pometia ridleyi* (stem cortex). **Ref:** 3455.

**17690 *Pometia ridleyi* saponin 3**

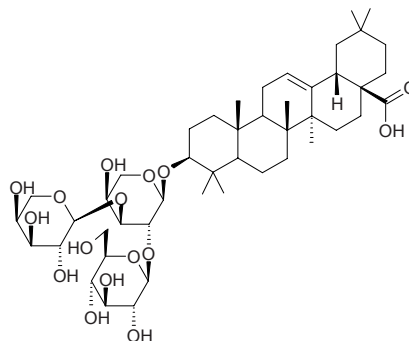
3-*O*-β-*D*-Apiofuranosyl-(1→3)-α-*L*-arabinopyranosyl-(1→3)-[β-*D*-glucopyranosyl-(1→2)]-β-*D*-glucopyranosyl-oleanolic acid C<sub>52</sub>H<sub>84</sub>O<sub>21</sub> (1045.24). [α]<sub>D</sub><sup>21</sup> = +16.0° (*c* = 0.25, MeOH). **Source:** LI DE LI FAN LONG YAN *Pometia ridleyi* (stem cortex). **Ref:** 3455.

**17691 *Pometia ridleyi* saponin 5**

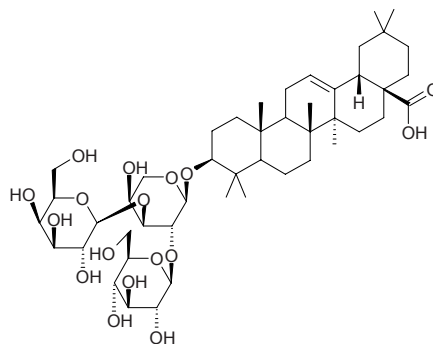
3-*O*-β-*D*-Apiofuranosyl-(1→3)-β-*D*-galactopyranosyl-(1→3)-[β-*D*-glucopyranosyl-(1→2)]-β-*D*-glucopyranosyl-oleanolic acid C<sub>53</sub>H<sub>86</sub>O<sub>22</sub> (1075.26). [α]<sub>D</sub><sup>21</sup> = +10.5° (*c* = 0.98, MeOH). **Source:** LI DE LI FAN LONG YAN *Pometia ridleyi* (stem cortex). **Ref:** 3455.

**17692 *Pometia ridleyi* saponin 6**

3-*O*-α-*L*-Arabinopyranosyl-(1→3)-[β-*D*-glucopyranosyl-(1→2)]-α-*L*-arabinopyranosyl-oleanolic acid C<sub>46</sub>H<sub>74</sub>O<sub>16</sub> (883.09). [α]<sub>D</sub><sup>21</sup> = -27.3° (*c* = 0.13, MeOH). **Source:** LI DE LI FAN LONG YAN *Pometia ridleyi* (stem cortex). **Ref:** 3455.

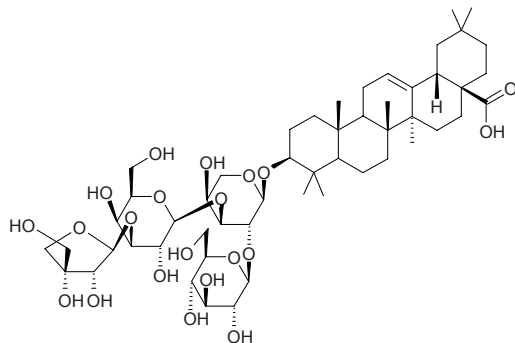
**17693 *Pometia ridleyi* saponin 7**

3-*O*-β-*D*-Galactopyranosyl-(1→3)-[β-*D*-glucopyranosyl-(1→2)]-α-*L*-arabinopyranosyl-oleanolic acid C<sub>47</sub>H<sub>76</sub>O<sub>17</sub> (913.12). [α]<sub>D</sub><sup>21</sup> = +6.7° (*c* = 0.15, MeOH). **Source:** LI DE LI FAN LONG YAN *Pometia ridleyi* (stem cortex). **Ref:** 3455.

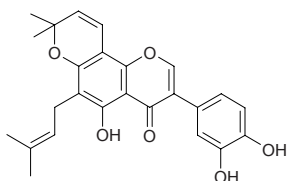


**17694 Pomelia ridleyi saponin 8**

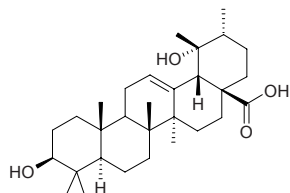
3-*O*- $\beta$ -D-Apiofuranosyl-(1 $\rightarrow$ 3)- $\beta$ -D-galactopyranosyl-(1 $\rightarrow$ 3)-[ $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)]- $\alpha$ -L-arabinopyranosyl-oleanolic acid C<sub>52</sub>H<sub>84</sub>O<sub>21</sub> (1045.24).  
 $[\alpha]_D^{21} = +12.8^\circ$  ( $c = 0.22$ , MeOH). Source: LI DE LI FAN LONG YAN  
*Pometia ridleyi* (stem cortex). Ref: 3455.

**17695 Pomiferin**

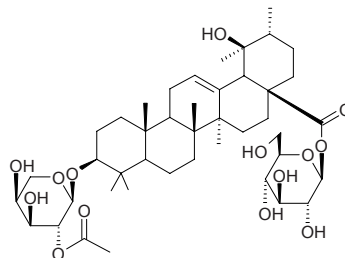
[572-03-2] C<sub>25</sub>H<sub>24</sub>O<sub>6</sub> (420.47). Pharm: Antimicrobial. Source: SANG CHENG  
*Maclura pomifera*. Ref: 658.

**17696 Pomolic acid**

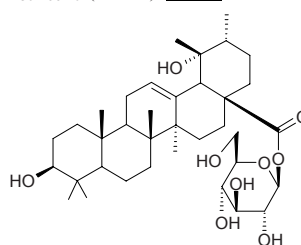
3 $\beta$ ,19 $\alpha$ -Dihydroxyurs-12-en-28-oic acid; 19 $\alpha$ -Hydroxyursolic acid  
 [13849-91-7] C<sub>30</sub>H<sub>48</sub>O<sub>4</sub> (472.71). Colorless thin acicular crystals  
 (methanol–water), mp 293–295°C,  $[\alpha]_D^{32} = +6.1^\circ$  ( $c = 0.69$ , pyridine); mp  
 301–303°C,  $[\alpha]_D^{20} = +37^\circ$  ( $c = 2.0$ , THF). Pharm: Antibacterial  
 (*Staphylococcus aureus*, MIC = 25 $\mu$ g/mL, var. *Streptococcus*, MIC =  
 12.5–25 $\mu$ g/mL; *Bacillus pyocyaneus*, MIC = 25 $\mu$ g/mL); cytotoxic (P<sub>388</sub>, ED<sub>50</sub>  
 = 2.9 $\mu$ g/mL); cytotoxic inactive (HSC-2, IC<sub>50</sub> > 200 $\mu$ g/mL; HGF, IC<sub>50</sub> >  
 200 $\mu$ g/mL)<sup>[5160]</sup>. Source: CHI NAN *Syzygium buxifolium*, DI YU *Sanguisorba*  
*officinalis*, MI DIE XIANG *Rosmarinus officinalis*, WU LING ZHI  
*Trogopterus xanthipes*; *Pteromys volans*, SHE MEI *Duchesnea indica*, WU  
 SE MEI *Lantana camara*. Ref: 6, 600, 638, 900, 5160.

**17697 Pomolic acid-3 $\beta$ -*O*- $\alpha$ -L-2-acetoxyarabinopyranosyl-28-*O*- $\beta$ -D-glucopyranoside**

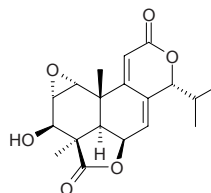
C<sub>43</sub>H<sub>68</sub>O<sub>14</sub> (809.01). Pharm: promotes biosynthesis of prostaglandin PGI<sub>2</sub>.  
Source: GOU GU YE *Ilex cornuta*. Ref: 660.

**17698 Pomolic acid-28-*O*- $\beta$ -D-glucopyranoside**

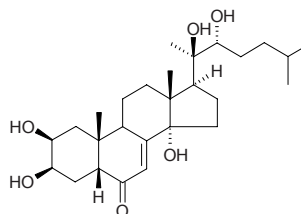
C<sub>36</sub>H<sub>58</sub>O<sub>9</sub> (634.86). Source: DI YU *Sanguisorba officinalis*. Ref: 3281.

**17699 Ponalactone A**

[33722-77-9] C<sub>19</sub>H<sub>22</sub>O<sub>6</sub> (346.39). Pharm: Inhibits mitosis (plant cells). Source:  
 TAI WAN LUO HAN SONG *Podocarpus nakaii*. Ref: 658.

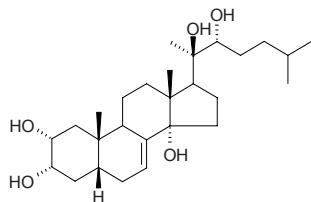
**17700 Ponasterone A**

[13408-56-5] C<sub>27</sub>H<sub>44</sub>O<sub>6</sub> (464.65). mp 259–260°C (dec). Pharm: Insect  
 ecdysone. Source: DONG FANG GOU JI *Woodwardia orientalis*, DUAN YE  
 LUO HAN SONG SHI *Podocarpus macrophyllus* var. *maki*, DUAN YE  
 LUO HAN SONG YE *Podocarpus macrophyllus* var. *maki*, JUE *Pteridium*  
*aquilinum* var. *latiusculum*, LUO HAN SONG SHI *Podocarpus macrophyllus*,  
 LUO HAN SONG YE *Podocarpus macrophyllus*, TAI WAN LUO HAN  
 SONG *Podocarpus nakaii* (in 1966, the compound was isolated from the plant  
 by K.Nakanishi et al.)<sup>[5505]</sup>, XIAO YE GUAN ZHONG *Matteuccia*  
*struthiopteris*, ZI QI *Osmunda japonica*, ZI SHAN *Taxus cuspidata*. Ref: 6,  
 658, 660, 5505.

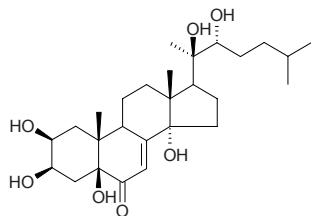


**17701 Ponasterone B**

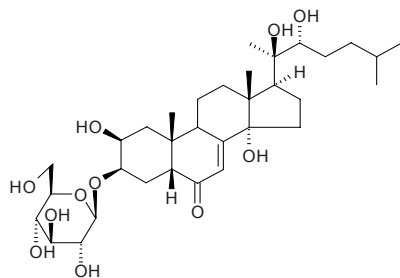
$C_{27}H_{46}O_5$  (450.66). Source: TAI WAN LUO HAN SONG *Podocarpus nakaii* (in 1966, the compound was isolated from the plant by K.Nakanishi et al.). Ref: 5505.

**17702 Ponasterone C**

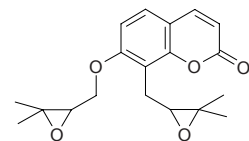
$C_{27}H_{44}O_7$  (480.65). Source: TAI WAN LUO HAN SONG *Podocarpus nakaii* (in 1966, the compound was isolated from the plant by K.Nakanishi et al.). Ref: 5505.

**17703 Ponasteroside A**

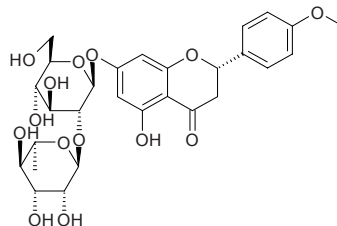
Warabisterone [20117-33-3]  $C_{33}H_{54}O_{11}$  (626.79). mp 278.0~279.5°C. Source: JUE *Pteridium aquilinum* var. *latiusculum*. Ref: 6.

**17704 Poncimarin**

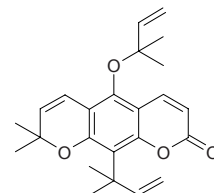
[55916-48-8]  $C_{19}H_{22}O_5$  (330.38). Needles (MeOH), mp 140°C,  $[\alpha]_D^{25} = -56.2^\circ$  ( $c = 9.4$ ,  $CHCl_3$ ). Source: GOU JU ZHI SHI *Poncirus trifoliata*. Ref: 3282.

**17705 Poncirin**

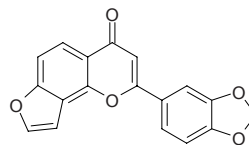
[14941-08-3]  $C_{28}H_{34}O_{14}$  (594.57). mp 211~212°C. Pharm: Bitter principle; passive cutaneous anaphylaxis inhibitor (inhibits IgE-induced  $\beta$ -hexosaminidase release from RBL-2H3 cells,  $IC_{50} > 500\mu\text{mol/L}$ , control Azelastine,  $IC_{50} = (35\pm 2)\mu\text{mol/L}$ ; PCA reaction inhibitor, 20mg/kg orl, InRt =  $(75.7\pm 7.8)\%$ )<sup>[5041]</sup>. Source: GOU JU *Poncirus trifoliata*, GOU JU YE *Poncirus trifoliata*, YOU<sup>(4)</sup> *Citrus grandis*, *Citrus* sp., *Eremocitrus* sp. Ref: 6, 658, 5041.

**17706 Pongfolin**

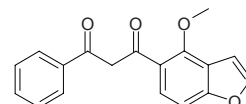
$C_{24}H_{28}O_4$  (380.49). Pharm: Antineoplastic (Raji cells, antitumor promotor, *in vivo*, inhibits TPA-induced EBV-EA activation, compound concentration = 500mol ratio/32 pmol TPA: EBV-EA-positive cells =  $(40.3\pm 2.3)\%$  (viability > 80%),  $\beta$ -Carotene, EBV-EA-positive cells =  $(34.3\pm 1.1)\%$  (viability > 80%), Curcumin, EBV-EA-positive cells =  $(22.8\pm 1.8)\%$  (viability > 80%), compound  $IC_{50} = 338\text{mol ratio/32 pmol TPA}$ ,  $\beta$ -Carotene,  $IC_{50} = 400\text{mol ratio/32 pmol TPA}$ , Curcumin,  $IC_{50} = 341\text{mol ratio/32 pmol TPA}$ ). Source: CHENG ZI *Citrus junos*, *Citrus medica* var. *etrog*, LI HUA JU *Citrus tachibana*, *Citrus rugulosa*, *Citrus jambhiri*, *Citrus tamurana*. Ref: 5048.

**17707 Pongaglabrone**

$C_{18}H_{10}O_5$  (306.28). Source: HONG E JI XUE TENG *Millettia erythrocalyx* (stem cortex: yield = 0.00045%dw). Ref: 4624.

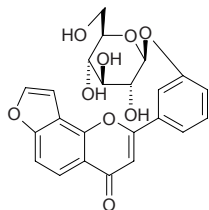
**17708 Pongamol**

Lanceolatin C [484-33-3]  $C_{18}H_{14}O_4$  (294.31). Yellow prismatic crystals (methanol), mp 130~131°C. Pharm: Nematocide (0.1mg/mL, cultured with larva of *toxocara canis*, in 6 hours RM = 0); sedative;  $LD_{50}$  (ip) = 17.14mg/kg. Source: SHUI LIU DOU *Pongamia pinnata*, HUI YE GEN *Tephrosia purpurea*. Ref: 900, 1521.

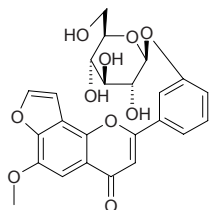


**17709 Pongamoside A**

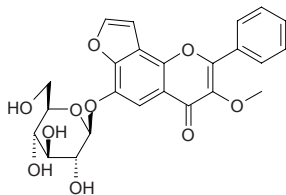
3'-*O*- $\beta$ -*D*-Glucopyranosyl[2'',3'';7,8]furanoflavone C<sub>23</sub>H<sub>20</sub>O<sub>9</sub> (440.41). Pale yellow crystals (DMSO), mp 259~260°C, [ $\alpha$ ]<sub>D</sub><sup>31</sup> = -33.6° (*c* = 0.280, pyridine). Source: SHUI LIU DOU *Pongamia pinnata* (fruit). Ref: 3790.

**17710 Pongamoside B**

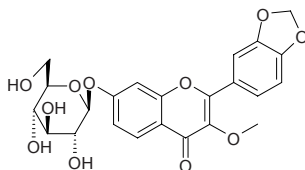
6-Methoxy-3'-*O*- $\beta$ -*D*-glucopyranosyl[2'',3'';7,8]furanoflavone C<sub>24</sub>H<sub>22</sub>O<sub>10</sub> (470.44). Pale yellow solid. Source: SHUI LIU DOU *Pongamia pinnata* (fruit). Ref: 3790.

**17711 Pongamoside C**

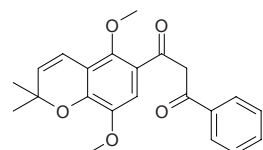
3-Methoxy-6-*O*- $\beta$ -*D*-glucopyranosyl[2'',3'';7,8]furanoflavone C<sub>24</sub>H<sub>22</sub>O<sub>10</sub> (470.44). White crystals (DMSO), mp 237~238°C, [ $\alpha$ ]<sub>D</sub><sup>31</sup> = -32.8° (*c* = 0.265, pyridine). Source: SHUI LIU DOU *Pongamia pinnata* (fruit). Ref: 3790.

**17712 Pongamoside D**

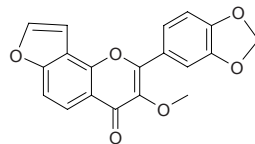
3-Methoxy-3',4'-methylenedioxy-7-*O*- $\beta$ -*D*-glucopyranosyl flavone C<sub>23</sub>H<sub>22</sub>O<sub>11</sub> (474.43). White crystals (DMSO), mp 214~215°C, [ $\alpha$ ]<sub>D</sub><sup>31</sup> = -56.6° (*c* = 0.265, pyridine). Source: SHUI LIU DOU *Pongamia pinnata* (fruit). Ref: 3790.

**17713 Ponganone I**

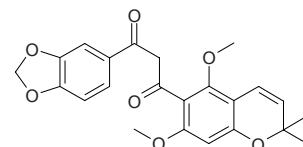
C<sub>22</sub>H<sub>22</sub>O<sub>5</sub> (366.42). Source: HONG E JI XUE TENG *Millettia erythrocalyx* (stem cortex: yield = 0.00010%dw). Ref: 4624.

**17714 Pongapin**

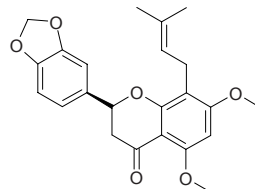
[481-99-2] C<sub>19</sub>H<sub>12</sub>O<sub>6</sub> (336.30). mp 190~191°C. Source: SHUI LIU DOU *Pongamia pinnata*. Ref: 6.

**17715 Pongapinone A**

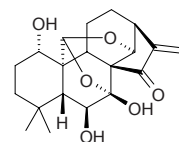
C<sub>23</sub>H<sub>22</sub>O<sub>7</sub> (410.43). Pharm: Cytotoxic (*in vitro*, Hepa1c1c7 mouse hepatoma cells, IC<sub>50</sub> = 23.8μg/mL, CD = 5μg/mL, CI = 4.8; control Sulforaphane, IC<sub>50</sub> = 2.1μg/mL, CD = 0.087μg/mL, CI = 24.1). Source: SHUI LIU DOU *Pongamia pinnata* (stem cortex: yield = 0.00052%). Ref: 4721.

**17716 Pongapinone B**

C<sub>23</sub>H<sub>24</sub>O<sub>6</sub> (396.44). Source: SHUI LIU DOU *Pongamia pinnata* (stem cortex: yield = 0.0059%). Ref: 4721.

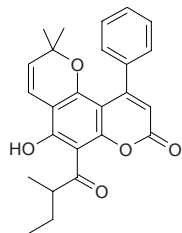
**17717 Ponicidin**

Rubescensine B [52617-37-5] C<sub>20</sub>H<sub>26</sub>O<sub>6</sub> (362.43). Colorless acicular crystals (methanol), mp 238~241; mp 236~241°C, [ $\alpha$ ]<sub>D</sub><sup>23</sup> = -107° (*c* = 0.12, pyridine), mp 236~238°C, [ $\alpha$ ]<sub>D</sub><sup>17</sup> = -118° (*c* = 0.1, pyridine). Pharm: Antineoplastic (many types of transplanted tumor); cytotoxic (K562, IC<sub>50</sub> = 2.26μmol/L, control Cisplatin IC<sub>50</sub> = 3.84μmol/L; Bcap37, IC<sub>50</sub> = 6.76μmol/L, control Cisplatin IC<sub>50</sub> = 1.54μmol/L; BGC823, IC<sub>50</sub> = 55.17μmol/L, control Cisplatin IC<sub>50</sub> = 2.54μmol/L; BIU87, IC<sub>50</sub> = 13.26μmol/L, control Cisplatin IC<sub>50</sub> = 4.34μmol/L; CA, IC<sub>50</sub> = 0.06μmol/L, control Cisplatin IC<sub>50</sub> = 0.88μmol/L; CNE, IC<sub>50</sub> = 13.26μmol/L, control Cisplatin IC<sub>50</sub> = 6.54μmol/L; HeLa, IC<sub>50</sub> = 11.31μmol/L, control Cisplatin IC<sub>50</sub> = 3.60μmol/L)<sup>[4353]</sup>, cytotoxic (EAC, *in vitro*); anti-angiogenic (*in vitro*, 1.5μg/mL)<sup>[3001]</sup>; LD<sub>50</sub> (mus, ip) = 45.1mg/kg. Source: DONG LING CAO *Rabdosia rubescens* (leaf: mean content collected in Aug. = 0.206%<sup>[5508]</sup>), LU SHAN XIANG CHA CAI *Isodon rubescens* var. *lushanensis* (leaf), MAO YE XIANG CHA CAI *Isodon japonica* [Syn. *Rabdosia japonica*], XIAN MAI XIANG CHA CAI *Rabdosia nervosa*. Ref: 5, 504, 1521, 3001, 4067, 4353, 5508.

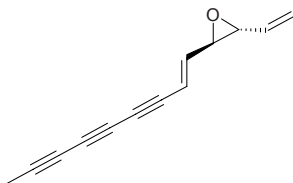


**17718 Ponnalide**

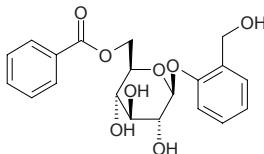
[5302-74-9] C<sub>25</sub>H<sub>24</sub>O<sub>5</sub> (404.47). Crystals, mp 159~160°C. Source: HAI TANG GUO *Calophyllum inophyllum*. Ref: 3283.

**17719 Ponticaepoxide**

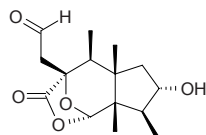
[3562-36-5] C<sub>13</sub>H<sub>10</sub>O (182.22). Crystals (pet. ether), mp 66°C, [α]<sub>D</sub><sup>23</sup> = +201° (c = 1.0, Me<sub>2</sub>CO). Source: HUANG HUA HAO *Artemisia annua*, *Achillea* spp., *Artemisia* spp., *Chrysanthemum* spp., *Tanacetum* spp., family Asteraceae spp. Ref: 3284, 3285, 3286.

**17720 Populin**

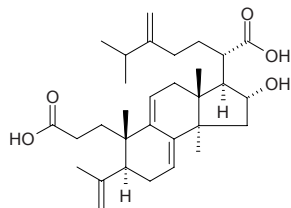
[99-17-2] C<sub>20</sub>H<sub>22</sub>O<sub>8</sub> (390.39). Crystals +2H<sub>2</sub>O (H<sub>2</sub>O), crystals (EtOH), mp 180°C, [α]<sub>D</sub> = -2° (c = 5, pyridine), [α]<sub>D</sub><sup>21</sup> = -29° (c = 20%, Me<sub>2</sub>CO aq.). Source: MAO BAI YANG *Populus tomentosa*, *Populus* spp., *Salix* spp. Ref: 1521, 3287.

**17721 Porellapinguisanolid**

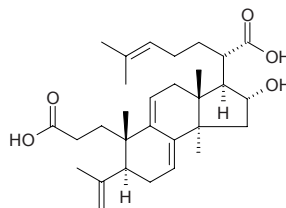
C<sub>15</sub>H<sub>22</sub>O<sub>5</sub> (282.34). Source: YE TAI *Trocholejeunea sandvicensis*. Ref: 3909.

**17722 Poricoic acid A**

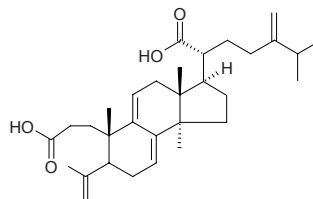
C<sub>31</sub>H<sub>46</sub>O<sub>5</sub> (498.71). Pharm: Cytotoxic (*in vitro*, for all NCI 60 hmn cancer cell lines, GI<sub>50</sub> = 15-30 μmol/L)<sup>[4616]</sup>; antineoplastic (EBV-EA induced by TPA, mol ratio/TPA = 1000, relative percentage of EBV-EA = 0% (positive control value 32 pmol, 20 ng TPA = 100%), viability of Raji cells = 70%; reference compound β-Carotene, relative percentage = 8.6%)<sup>[4616]</sup>. Source: FU LING *Poria cocos* (sclerotium: yield = 0.00050% dw)<sup>[4616]</sup>. Ref: 2, 4616.

**17723 Poricoic acid B**

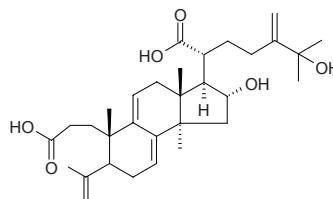
C<sub>30</sub>H<sub>44</sub>O<sub>5</sub> (484.68). Pharm: Antineoplastic (EBV-EA induced by TPA, mol ratio/TPA = 1000, relative percentage of EBV-EA = 0% (positive control value 32 pmol, 20 ng TPA = 100%), viability of Raji cells = 70%; reference compound β-Carotene, relative percentage = 8.6%). Source: FU LING *Poria cocos* (sclerotium: yield = 0.00066% dw). Ref: 2, 4616.

**17724 Poricoic acid C**

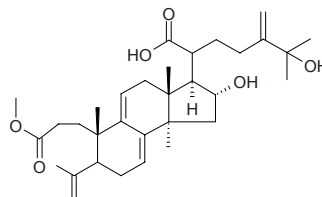
[151200-89-4] C<sub>31</sub>H<sub>46</sub>O<sub>4</sub> (482.71). Amorphous powder, [α]<sub>D</sub><sup>26</sup> = +40° (c = 0.5, MeOH). Source: FU LING *Poria cocos*. Ref: 3288.

**17725 Poricoic acid D**

[151200-90-7] C<sub>31</sub>H<sub>46</sub>O<sub>6</sub> (514.71). Amorphous powder, [α]<sub>D</sub><sup>26</sup> = +11° (c = 1, MeOH). Source: FU LING *Poria cocos*. Ref: 3288.

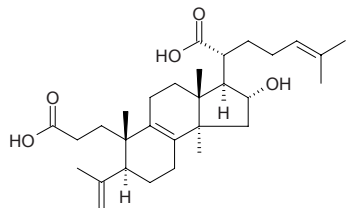
**17726 Poricoic acid DM**

[151200-91-8] C<sub>32</sub>H<sub>48</sub>O<sub>6</sub> (528.74). Amorphous powder, [α]<sub>D</sub><sup>26</sup> = +25° (c = 0.5, MeOH). Source: FU LING *Poria cocos*. Ref: 3288.

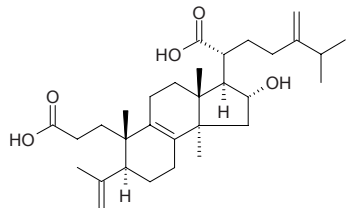


**17727 Poricoic acid G**

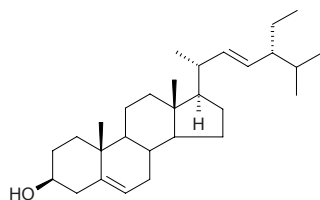
16 $\alpha$ -Hydroxy-3,4-seco-lanosta-4(28),8,24-triene-3,21-dioic acid C<sub>30</sub>H<sub>46</sub>O<sub>5</sub> (486.7). Colorless needles, mp 260°C (dec), [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +38° (c = 0.36, MeOH). **Pharm:** Cytotoxic (*in vitro*, HL-60, GI<sub>50</sub> = 39.3nmol/L; for all the other NCI 59 hmn cancer cell lines, GI<sub>50</sub> > 22 $\mu$ mol/L); antineoplastic (EBV-EA induced by TPA, mol ratio/TPA = 1000, relative percentage of EBV-EA = 0% (positive control value 32pmol, 20ng TPA = 100%), viability of Raji cells = 70%; reference compound  $\beta$ -Carotene, relative percentage = 8.6%). **Source:** FU LING *Poria cocos* (sclerotium: yield = 0.00033%dw). **Ref:** 4616.

**17728 Poricoic acid H**

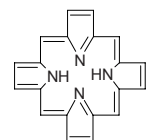
16 $\alpha$ -Hydroxy-3,4-seco-24-methyl-lanosta-4(28),8,24(24<sup>1</sup>)-triene-3,21-dioic acid C<sub>31</sub>H<sub>48</sub>O<sub>5</sub> (500.73). Colorless needles, mp 270°C (dec), [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +43° (c = 0.34, MeOH). **Pharm:** Antineoplastic (EBV-EA induced by TPA, mol ratio/TPA = 1000, relative percentage of EBV-EA = 0% (positive control value 32pmol, 20ng TPA = 100%), viability of Raji cells = 70%; reference compound  $\beta$ -Carotene, relative percentage = 8.6%). **Source:** FU LING *Poria cocos* (sclerotium: yield = 0.00028%dw). **Ref:** 4616.

**17729 Poriferasterol**

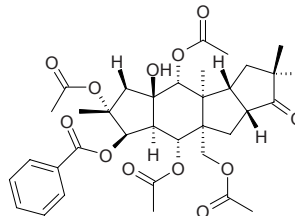
[481-16-3] C<sub>29</sub>H<sub>48</sub>O (412.71). Crystals (EtOH), mp 156°C, [ $\alpha$ ]<sub>D</sub> = -46° (CHCl<sub>3</sub>). **Source:** E ZHANG TENG *Schefflera arboricola*, Burrowing sponge *Cliona celata*, sponge *Haliclona variclonia*, sponge *Sphaeciospongia vesparia*, green algae *Chlorella* spp., protozoan *Ochromonas malhamensis*. **Ref:** 1521, 3289.

**17730 Porphyrin**

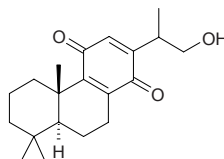
C<sub>20</sub>H<sub>14</sub>N<sub>4</sub> (310.36). **Source:** JI ZI KE *Gallus gallus domesticus*, ZHEN ZHU MU *Cristaria plicata*; *Hyriopsis cumingii*. **Ref:** 6, 3290.

**17731 Portlandicine**

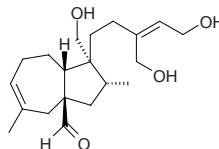
2 $\alpha$ ,5 $\alpha$ ,14 $\alpha$ ,17 $\alpha$ -Tetraacetoxy-3 $\beta$ -benzoyloxy-15 $\beta$ -hydroxy-9-oxoparaliane C<sub>35</sub>H<sub>44</sub>O<sub>12</sub> (656.73). Amorphous solid, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -57.7° (c = 0.10, CHCl<sub>3</sub>). **Pharm:** Multidrug resistance (MDR) reversing activity (hmn MDR1 gene transfected mouse lymphoma cells, FSC: forward scatter count = 529.87, DMSO control = 519.74; SSC: side scatter count = 244.47, DMSO control = 234.67; FL-1: fluorescence intensity = 17.00, DMSO control = 5.92). **Source:** BO TE LAN DA JI *Euphorbia portlandica* (whole herb). **Ref:** 4919.

**17732 Portlanquinol**

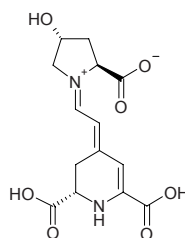
16-Hydroxy-abieta-8,12-diene-11,14-dione C<sub>20</sub>H<sub>28</sub>O<sub>3</sub> (316.44). Yellow oil, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +33.4° (c = 0.10, CHCl<sub>3</sub>). **Pharm:** P-glycoprotein inhibitor (hmn MDR1 gene transfected mouse lymphoma cells, reverses multidrug resistance (MDR), toxic). **Source:** BO TE LAN DA JI *Euphorbia portlandica* (whole herb). **Ref:** 5019.

**17733 Portulal**

[22571-65-9] C<sub>20</sub>H<sub>32</sub>O<sub>4</sub> (336.48). mp 113°C. **Pharm:** Plant growth regulator. **Source:** DA HUA MA CHI XIAN *Portulaca grandiflora*. **Ref:** 6, 658.

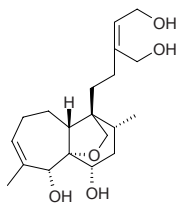
**17734 Portulaxanthine**

Portulaxanthin I [11042-69-6] C<sub>14</sub>H<sub>16</sub>N<sub>2</sub>O<sub>7</sub> (324.30). **Source:** DA HUA MA CHI XIAN *Portulaca grandiflora*. **Ref:** 658.

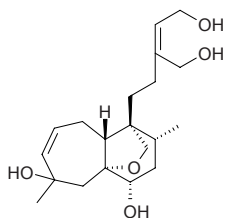


**17735 Portulene**

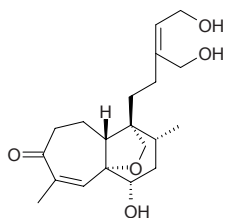
$C_{20}H_{32}O_5$  (352.48). Source: DA HUA MA CHI XIAN *Portulaca grandiflora*.  
Ref: 3291.

**17736 Portulenol**

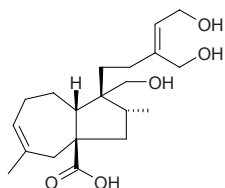
$C_{20}H_{32}O_5$  (352.48). Source: DA HUA MA CHI XIAN *Portulaca grandiflora*.  
Ref: 3291.

**17737 Portulenone**

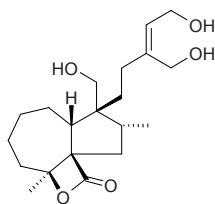
$C_{20}H_{30}O_5$  (350.46). Source: DA HUA MA CHI XIAN *Portulaca grandiflora*.  
Ref: 3291.

**17738 Portulic acid**

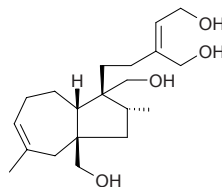
$C_{20}H_{32}O_5$  (352.48). Source: DA HUA MA CHI XIAN *Portulaca grandiflora*.  
Ref: 3292.

**17739 Portulic lactone**

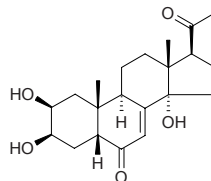
[98263-93-5]  $C_{20}H_{32}O_5$  (352.48). Oil,  $[\alpha]_D^{26.5} = +23.8^\circ$  ( $c = 0.58$ , EtOH).  
Source: DA HUA MA CHI XIAN *Portulaca grandiflora*. Ref: 3292.

**17740 Portulol**

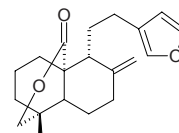
$C_{20}H_{34}O_4$  (338.49). Source: DA HUA MA CHI XIAN *Portulaca grandiflora*. Ref: 3292.

**17741 Poststerone**

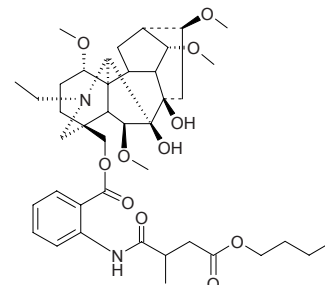
[10162-99-9]  $C_{21}H_{30}O_5$  (362.47). Source: MA NIU XI *Cyathula capitata*. Ref: 6.

**17742 Potamogetonin**

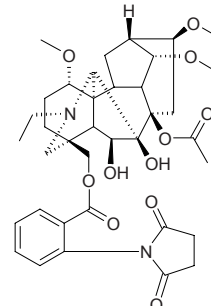
15,16-Epoxy-8(17),13(16),14-*ent*-labdatrien-20,19-olide  $C_{20}H_{26}O_3$  (314.43).  
White amorphous powder,  $[\alpha]_D^{25} = -29.7^\circ$  ( $c = 0.34$ ,  $CHCl_3$ ). Pharm:  
Phytotoxin (*Raphidocelis subcapitata*,  $IC_{50} = 28.58 \mu\text{mol/L}$ )<sup>[5184]</sup>. Source: FU  
YE YAN ZI CAI *Potamogeton natans*. Ref: 5184.

**17743 Potanidine A**

$C_{41}H_{60}N_2O_{11}$  (756.94). White amorphous powder,  $[\alpha]_D^{13} = +15.5^\circ$  ( $c = 1.0$ ,  
methanol). Source: HEI SHUI CUI QUE *Delphinium potaninii*. Ref: 314.

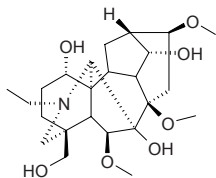
**17744 Potanidine B**

$C_{37}H_{48}N_2O_{11}$  (696.80). White amorphous powder,  $[\alpha]_D^{24} = +28.6^\circ$  ( $c = 0.07$ ,  
chloroform). Source: HEI SHUI CUI QUE *Delphinium potaninii*. Ref: 314.

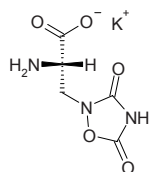


**17745 Potanine**

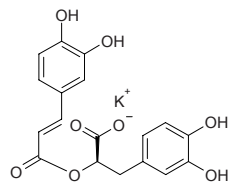
$C_{24}H_{39}NO_7$  (453.58). White amorphous powder. Source: E MEI CUI QUE HUA *Delphinium omeiense*. Ref: 2190.

**17746 Potassium quisqualate**

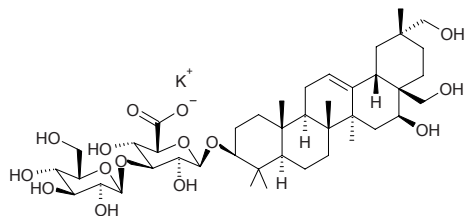
$C_5H_6KN_3O_5$  (227.22). Source: SHI JUN ZI *Quisqualis indica*, SHI JUN ZI YE *Quisqualis indica*. Ref: 3293, 3294.

**17747 Potassium rosmarinatate**

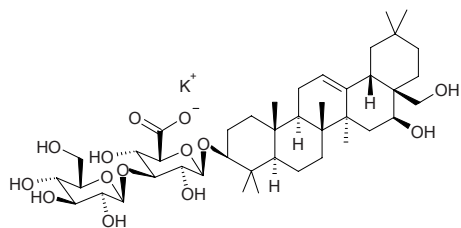
$C_{18}H_{15}KO_8$  (398.42). Tan amorphous powder. Source: XIN ZANG JIA ZI CAO *Arnebia euchroma*. Ref: 2187.

**17748 Potassium salt of 29-hydroxylongispinogenin 3-O-β-D-glucopyranosyl(1→3)-β-D-glucuronopyranoside**

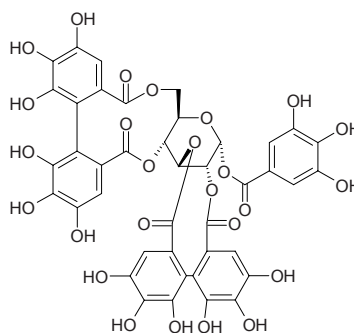
$C_{42}H_{67}KO_{15}$  (851.10). Amorphous powder, mp 290–293°C,  $[\alpha]_D^{20} = +10.3^\circ$  ( $c = 0.12$ , MeOH). Source: CHI GENG TENG *Gymnema sylvestre* (leaf: yield = 0.0055%dw). Ref: 3037.

**17749 Potassium salt of longispinogenin 3-O-β-D-glucopyranosyl (1→3)-β-D-glucuronopyranoside**

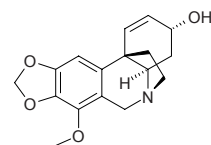
$C_{42}H_{67}KO_{14}$  (835.10). Amorphous powder, mp 305–310°C,  $[\alpha]_D^{20} = +18.1^\circ$  ( $c = 0.08$ , MeOH). Source: CHI GENG TENG *Gymnema sylvestre* (leaf: yield = 0.0020%dw). Ref: 3037.

**17750 Potentillin**

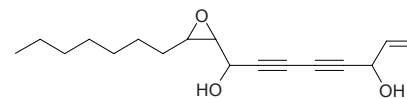
[82262-94-0]  $C_{41}H_{28}O_{26}$  (936.66). Off-white amorphous powder +5H<sub>2</sub>O,  $[\alpha]_D^{20} = +108^\circ$  ( $c = 0.7$ , EtOH). Source: JIN YING YE *Rosa laevigata*, JIN YING ZI *Rosa laevigata*, LONG YA CAO *Agrimonia pilosa*, RI BEN LONG YA CAO *Agrimonia japonica*, SHE HAN WEI LING CAI *Potentilla kleiniana*, *Rubus* spp. Ref: 2988, 2884, 2970, 3104.

**17751 Powelline**

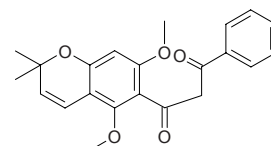
$C_{17}H_{19}NO_4$  (301.35). Source: GUAN MU WEN SHU LAN *Crinum macowanii* (bulb), *Crinum moorei*. Ref: 4000, 4952.

**17752 PQ-2**

[133921-58-1]  $C_{17}H_{24}O_3$  (276.38). Source: XI YANG SHEN *Panax quinquefolium*. Ref: 2, 1521.

**17753 Praeacansone B**

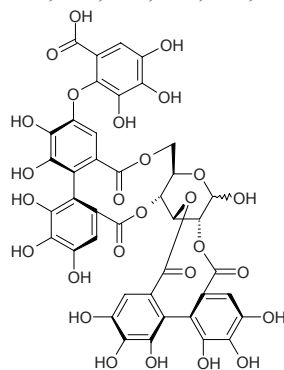
$C_{22}H_{22}O_5$  (366.42). Pharm: Cytotoxic (*in vitro*, Hepa1c1c7 mouse hepatoma cells, IC<sub>50</sub> = 6.5 μg/mL, CD = 3.6 μg/mL, CI = 1.8; control Sulforaphane, IC<sub>50</sub> = 2.1 μg/mL, CD = 0.087 μg/mL, CI = 24.1). Source: SHUI LIU DOU *Pongamia pinnata* (stem cortex: yield = 0.00072%). Ref: 4721.



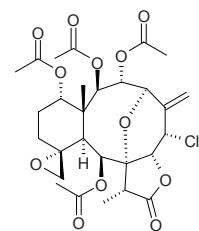


**17754 Praecoxin A**

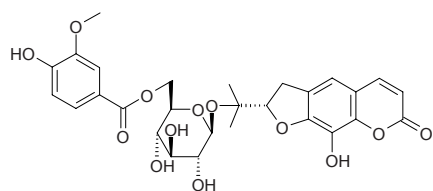
[85137-27-5]  $C_{41}H_{28}O_{27}$  (952.66). Light brown powder,  $[\alpha]_D^{22} = +45^\circ$  ( $c = 0.5$ , MeOH). **Pharm:** Antineoplastic ( $S_{180}$  *in vivo*, 5mg/kg ip, biotic prolonged rate = 70%). **Source:** CHI YANG *Alnus japonica*, HONG RU CAO *Euphorbia makinoi*, HU LI *Quercus aliena*, HU TAO REN *Juglans regia*, JING JIE HUA *Stachyurus praecox*, XIAO YE YING MAO QI MU *Alnus hirsute* var. *microphylla*, *Terminalia calamansanai*, *Tibouchina semidecandra*. **Ref:** 2685, 3408, 3635, 3636, 3637, 2686, 3638, 3639, 3640.

**17755 Praelolide**

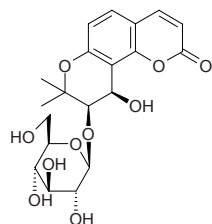
$C_{28}H_{35}ClO_{12}$  (599.04). White powder, mp 267~269°C,  $[\alpha]_D^{25} = -26^\circ$  ( $c = 2.4$ ,  $CHCl_3$ ). **Source:** CUI DENG XIN LIU SHAN HU *Junceella fragilis*, DENG XIN LIU SHAN HU *Junceella juncea* (yield = 0.00032%). **Ref:** 4411, 4781.

**17756 Praeroside I**

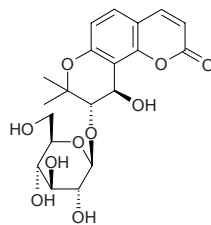
[121064-73-1]  $C_{28}H_{30}O_{13}$  (574.54). Crystals, mp 143~145°C (dec),  $[\alpha]_D^{24} = +202.3^\circ$  ( $H_2O$ ). **Source:** BAI HUA QIAN HU *Peucedanum praeruptorum*. **Ref:** 3295.

**17757 Praeroside II**

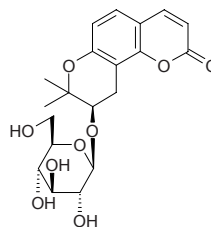
Campestrinoside [84458-87-7]  $C_{20}H_{24}O_{10}$  (424.41). mp 172~173°C,  $[\alpha]_D = -272.5^\circ$  (EtOH). **Source:** BAI HUA QIAN HU *Peucedanum praeruptorum*, FEN CHA DANG GUI *Angelica furcijuga* (flower), PING DI XI FENG QIN *Seseli campestre*. **Ref:** 1521, 4454.

**17758 Praeroside III**

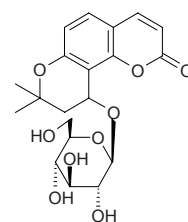
[117306-98-6]  $C_{20}H_{24}O_{10}$  (424.41). Crystals, mp 134.5~136°C (dec),  $[\alpha]_D^{24} = -31^\circ$  (MeOH). **Source:** BAI HUA QIAN HU *Peucedanum praeruptorum*. **Ref:** 1521.

**17759 Praeroside IV**

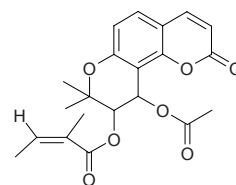
[117233-34-8]  $C_{20}H_{24}O_9$  (408.41). mp 115~116.5°C,  $[\alpha]_D^{24} = +4^\circ$  (MeOH). **Source:** BAI HUA QIAN HU *Peucedanum praeruptorum*. **Ref:** 3356.

**17760 Praeroside V**

[117233-35-9]  $C_{20}H_{24}O_9$  (408.41). Crystals, mp 130~131.5°C,  $[\alpha]_D^{24} = 0^\circ$ . **Source:** BAI HUA QIAN HU *Peucedanum praeruptorum*. **Ref:** 3356.

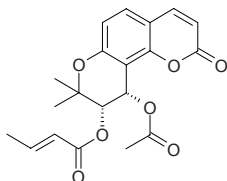
**17761 Praeruptorin A**

[73069-27-9]  $C_{21}H_{22}O_7$  (386.41). **Pharm:** Used in treatment of acute arrhythmia. **Source:** BAI HUA QIAN HU *Peucedanum praeruptorum* (root: content = 0.1%<sup>[5501]</sup>). **Ref:** 658, 5501.

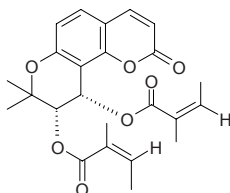


**17762 Praeruptorin C**

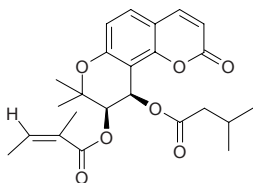
Pd-Ia C<sub>20</sub>H<sub>20</sub>O<sub>7</sub> (386.41). **Pharm:** Inhibits contraction of aorta strip *in vitro* (rbt, induced by Ca and K); inhibits contraction of blood vessel and cardiac muscle (*in vitro*); protects *in vitro* heart from damage during ischemic re-perfusion. **Source:** BAI HUA QIAN HU *Peucedanum praeruptorum* (root: content scope of 7 origins = 0.040%~1.17%, mean content = 0.39%<sup>[5508]</sup>). **Ref:** 9, 658, 5501, 5508.

**17763 Praeruptorin D**

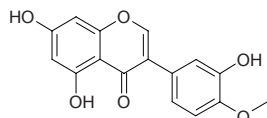
3'(S),4'(S)-Diangeloyloxy-3',4'-dihydroseselin; Pd-II [73069-28-0] C<sub>24</sub>H<sub>26</sub>O<sub>7</sub> (426.47). White needles (alcohol), mp 171~172°C, [α]<sub>D</sub><sup>24</sup> = +34.6° (c = 0.8, CHCl<sub>3</sub>). **Pharm:** Antineoplastic (mus, *in vivo*, TPA-induced skin tumor; *in vitro* inhibits phosphorylated action of phospholipid, then inhibits cancer cell's growth and metabolism); platelet aggregation inhibitor (induced by PAF, IC<sub>50</sub> = 0.05mmol/L). **Source:** BAI HUA QIAN HU *Peucedanum praeruptorum* (root: mean content = 0.543%<sup>[5508]</sup>), BIN HAI QIAN HU *Peucedanum japonicum*, GUANG XI QIAN HU *Peucedanum guangxiense*, SHUANG SE SUO ZI QIN *Pleurospermum govanianum* var. *bicolor*, TAI WAN QIAN HU *Peucedanum formosanum*. **Ref:** 557, 3296, 3297, 3298, 3299, 3300, 3301, 3357, 5508.

**17764 (+)-Praeruptorin E**

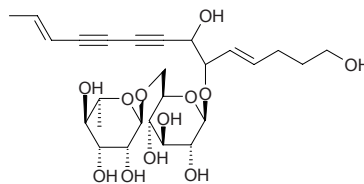
[78478-28-1] C<sub>24</sub>H<sub>28</sub>O<sub>7</sub> (428.46). White rhomboid crystals (absolute ethanol), mp 138~140°C, [α]<sub>D</sub> = +36° (c = 5.54, chloroform). **Pharm:** increases tolerance to anoxia (mus). **Source:** BAI HUA QIAN HU *Peucedanum praeruptorum*, XUAN NIU XIE HAO *Seseli tortuosum*. **Ref:** 658, 5501.

**17765 Pratensein**

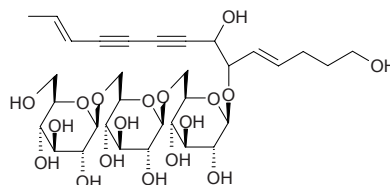
[2284-31-3] C<sub>16</sub>H<sub>12</sub>O<sub>6</sub> (300.27). mp 272~273°C. **Pharm:** Antihypercholesterolemic. **Source:** HUI HUI DOU *Cicer arietinum*, HONG CHE ZHOU CAO *Trifolium pratense*, ZHONG GUO XUAN FU HUA *Inula britannica* var. *chinensis*, XUAN FU HUA *Inula britannica*. **Ref:** 6, 658, 660.

**17766 Pratalin A**

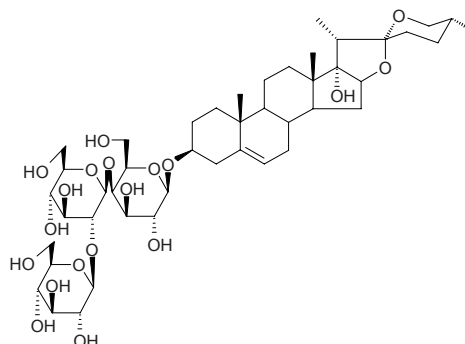
C<sub>26</sub>H<sub>38</sub>O<sub>12</sub> (542.59). **Source:** TONG CHUI YU DAI CAO *Pratia nummularia*. **Ref:** 3362.

**17767 Pratalin B**

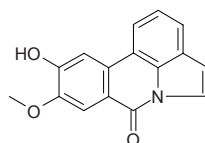
C<sub>32</sub>H<sub>48</sub>O<sub>18</sub> (720.73). **Source:** TONG CHUI YU DAI CAO *Pratia nummularia*. **Ref:** 3362.

**17768 Pratoside A**

[150205-55-3] C<sub>45</sub>H<sub>72</sub>O<sub>19</sub> (917.06). Powder (MeOH), [α]<sub>D</sub><sup>27</sup> = -129.3° (c = 0.75, MeOH). **Pharm:** Spermicidal (hmn, 1mg/mL, spermatoc activity = 43%, 2mg/mL, spermatoc activity = 0%). **Source:** KANG DING YU ZHU *Polygonatum prattii*. **Ref:** 3705, 1159.

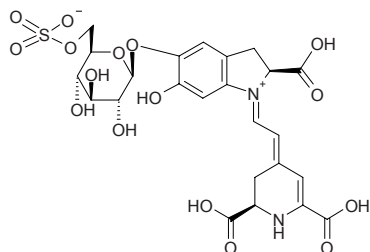
**17769 Pratorimine**

C<sub>16</sub>H<sub>11</sub>NO<sub>3</sub> (265.27). Pale brown needles (CH<sub>3</sub>CN-H<sub>2</sub>O), mp 224~226°C. **Pharm:** Cytotoxic (Meth-A cell, ED<sub>50</sub> = 4.1μg/mL, control Adriamycin, ED<sub>50</sub> < 0.09μg/mL; LLC cell, ED<sub>50</sub> > 10μg/mL, control Adriamycin, ED<sub>50</sub> = 0.1μg/mL). **Source:** RI BEN WEN SHU LAN *Crinum asiaticum* var. *japonicum* (bulb). **Ref:** 4125.

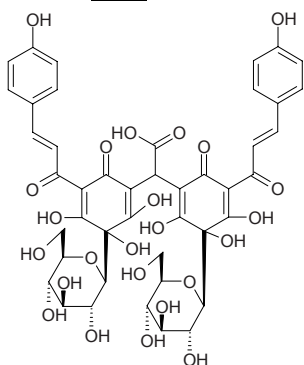


**17770 Prebetanin**

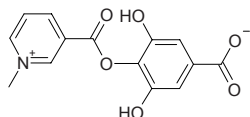
[13798-16-8] C<sub>24</sub>H<sub>26</sub>N<sub>2</sub>O<sub>16</sub>S (630.55). Source: TIAN CAI *Beta vulgaris*, MEI SHANG LU *Phytolacca americana* [Syn. *Phytolacca decandra*]. Ref: 658.

**17771 Precarthamin**

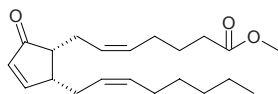
C<sub>44</sub>H<sub>44</sub>O<sub>24</sub> (956.83). Pharm: Yellow pigment; biosynthesis precursor of carthamin. Source: HONG HUA *Carthamus tinctorius*. Ref: 3303.

**17772 Precatorine**

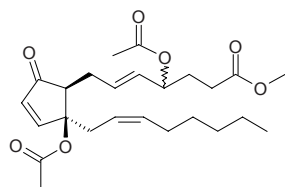
[36675-57-7] C<sub>14</sub>H<sub>11</sub>NO<sub>6</sub> (289.25). mp 218~220°C. Source: XIANG SI ZI *Abrus precatorius*. Ref: 6.

**17773 Preclavulone A methyl ester**

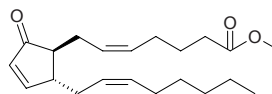
C<sub>21</sub>H<sub>32</sub>O<sub>3</sub> (332.49). Colorless viscous oil, [α]<sub>D</sub><sup>25</sup> = -13.9° (c = 0.05, THF), [α]<sub>D</sub><sup>25</sup> = -17.9° (c = 0.05, CHCl<sub>3</sub>). Source: CHONG SHENG RUAN SHAN HU *Clavularia viridis*. Ref: 4367.

**17774 Preclavulone A methyl ester derivative CPB51-909-3**

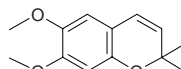
C<sub>25</sub>H<sub>36</sub>O<sub>7</sub> (448.56). Colorless viscous oil, [α]<sub>D</sub><sup>25</sup> = +22.8° (c = 0.08, CHCl<sub>3</sub>). Source: CHONG SHENG RUAN SHAN HU *Clavularia viridis*. Ref: 4367.

**17775 Preclavulone A methyl ester 12-isomer**

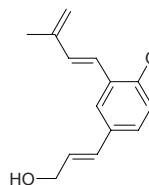
C<sub>21</sub>H<sub>32</sub>O<sub>3</sub> (332.49). Colorless viscous oil, [α]<sub>D</sub><sup>25</sup> = -49.8° (c = 0.08, THF), [α]<sub>D</sub><sup>25</sup> = -51.0° (c = 0.08, CHCl<sub>3</sub>). Source: CHONG SHENG RUAN SHAN HU *Clavularia viridis*. Ref: 4367.

**17776 Precocene II**

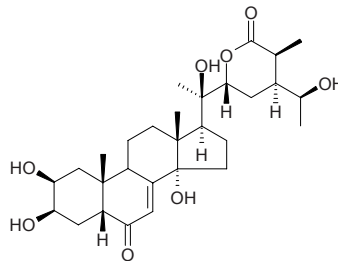
[644-06-4] C<sub>13</sub>H<sub>16</sub>O<sub>3</sub> (220.27). Pharm: Pesticide. Source: XIONG ER CAO *Ageratum houstonianum*, CHANG YE QIAN LI GUANG *Senecio longifolius*. Ref: 658.

**17777 Precolpuchol**

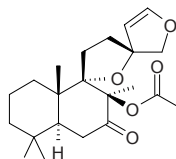
[194150-51-1] C<sub>14</sub>H<sub>16</sub>O<sub>2</sub> (216.28). Oil. Pharm: Antibacterial (*Staphylococcus aureus*, 0.5 μg); antifungal (*Cladosporium* sp., strongly inhibition). Source: MEI LI BU KU *Coleonema pulchellum*. Ref: 3706.

**17778 Precyasterone**

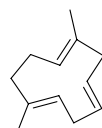
[27335-85-9] C<sub>29</sub>H<sub>44</sub>O<sub>8</sub> (520.67). Source: MA NIU XI *Cyathula capitata*. Ref: 6.

**17779 Pregaleopsin**

C<sub>22</sub>H<sub>32</sub>O<sub>5</sub> (376.50). White powder. Source: BO SI YI MU CAO *Leonurus persicus*. Ref: 2499.

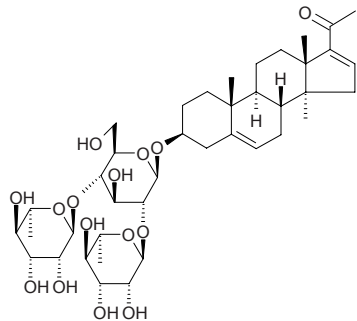
**17780 Pregeijerene B**

(E,E,E)-1,7-Dimethylcyclodeca-1,4,7-triene C<sub>12</sub>H<sub>18</sub> (162.28). Oil. Source: ZHI LI CI BAI *Juniperus erectopatens*. Ref: 2066.

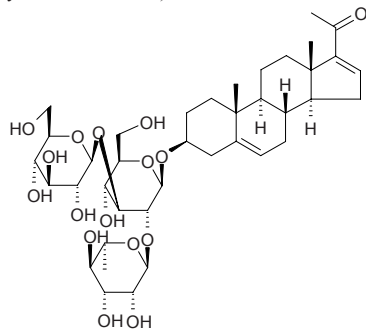


**17781 Pregna-5,16-dien-3 $\beta$ -ol-20-one 3-O- $\beta$ -chacotrioside**

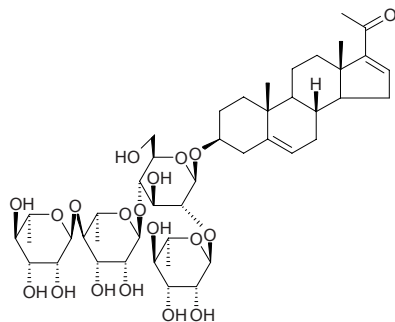
$C_{39}H_{60}O_{15}$  (768.90). mp 260–262°C (dec). Source: HAI JIN BI XIE *Dioscorea spongiosa* (Rhizome: yield = 0.0013%)<sup>[4692]</sup>, ZAO XIU *Paris polyphylla*. Ref: 6, 4692.

**17782 Pregnadienolone-3-O- $\beta$ -gracillimatriose**

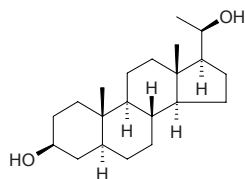
$C_{39}H_{60}O_{16}$  (784.90). Source: HAI JIN BI XIE *Dioscorea spongiosa* (Rhizome: yield = 0.000072%). Ref: 4692.

**17783 Pregna-5,16-dien-3 $\beta$ -ol-20-one-3 $\beta$ -O- $\alpha$ -L-rhamnopyranosyl (1 $\rightarrow$ 2)-[ $\alpha$ -L-rhamnopyranosyl (1 $\rightarrow$ 4)- $\alpha$ -L-rhamnopyranosyl (1 $\rightarrow$ 4)]- $\beta$ -D-glucopyranoside**

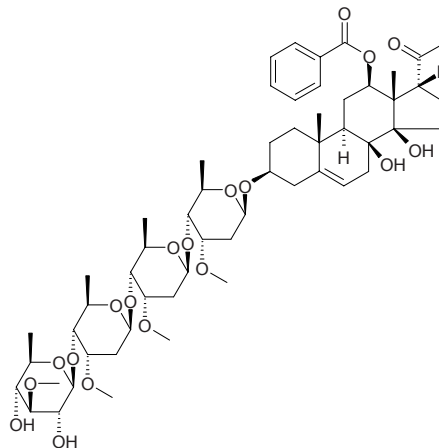
$C_{45}H_{70}O_{19}$  (915.05). Source: YUN NAN CHONG LOU *Paris polyphylla* var. *yunnanensis*. Ref: 2673.

**17784 5 $\alpha$ -Pregnane-3 $\beta$ ,20 $\beta$ -diol**

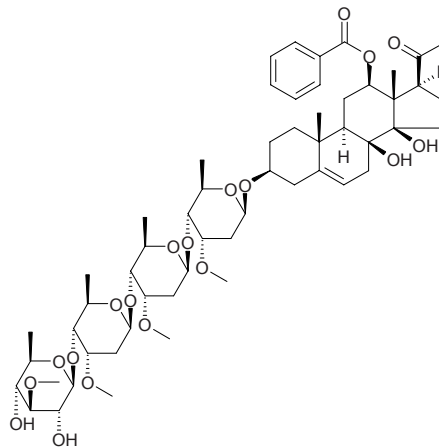
$C_{21}H_{36}O_2$  (320.52). Source: JIAN MA *Agave sisalana*. Ref: 6, 2983.

**17785 Pregnane glycoside AI**

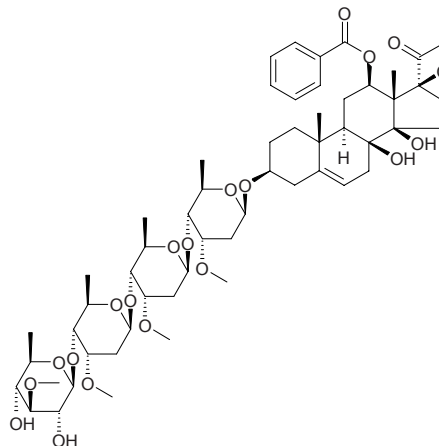
12-O-Benzoylneolon 3-O- $\beta$ -D-thevetopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-cymaropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-cymaropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-cymaropyranoside  
 $C_{56}H_{84}O_{19}$  (1061.28). Amorphous powder,  $[\alpha]_D^{21} = -3.08^\circ$  ( $c = 2.26$ , MeOH). Source: *Araujia sericifera* (root). Ref: 4377.

**17786 Pregnane glycoside BI**

$C_{56}H_{84}O_{19}$  (1061.28). Amorphous powder,  $[\alpha]_D^{24} = +37.6^\circ$  ( $c = 1.58$ , MeOH). Source: *Araujia sericifera* (root). Ref: 4377.

**17787 Pregnane glycoside CI**

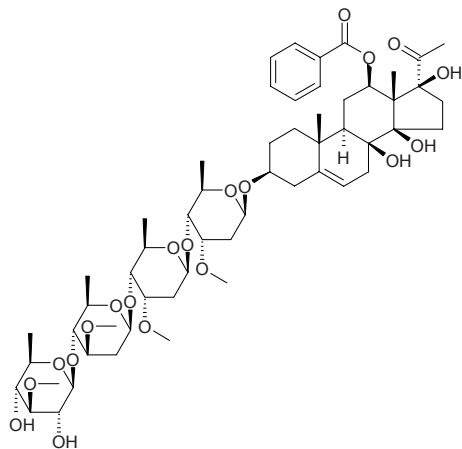
$C_{56}H_{84}O_{20}$  (1077.28). Amorphous powder,  $[\alpha]_D^{21} = +11.9^\circ$  ( $c = 2.2$ , MeOH). Source: *Araujia sericifera* (root). Ref: 4377.



**17788 Pregnane glycoside CII**

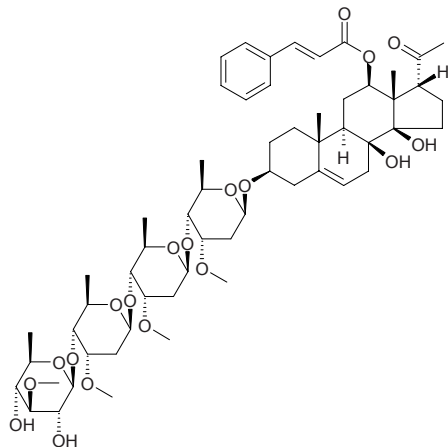
$C_{56}H_{84}O_{20}$  (1077.28). Amorphous powder,  $[\alpha]_D^{24} = -0.66^\circ$  ( $c = 0.38$ , MeOH).

Source: *Araujia sericifera* (root). Ref: 4377.

**17789 Pregnane glycoside DI**

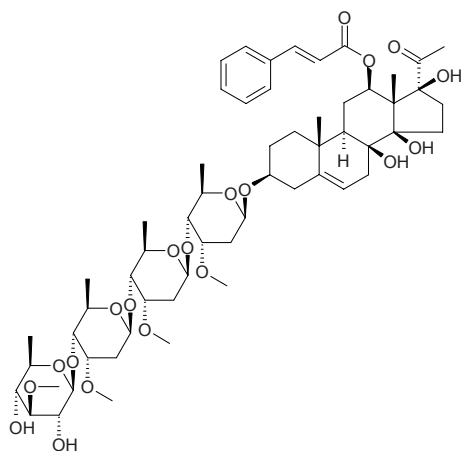
$C_{58}H_{86}O_{19}$  (1087.32). Amorphous powder,  $[\alpha]_D^{23} = +22.9^\circ$  ( $c = 1.52$ , MeOH).

Source: *Araujia sericifera* (root). Ref: 4377.

**17790 Pregnane glycoside EI**

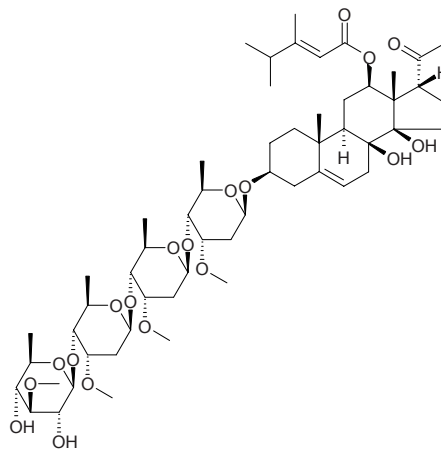
$C_{58}H_{86}O_{20}$  (1103.32). Amorphous powder,  $[\alpha]_D^{22} = +38^\circ$  ( $c = 0.78$ , MeOH).

Source: *Araujia sericifera* (root). Ref: 4377.

**17791 Pregnane glycoside FI**

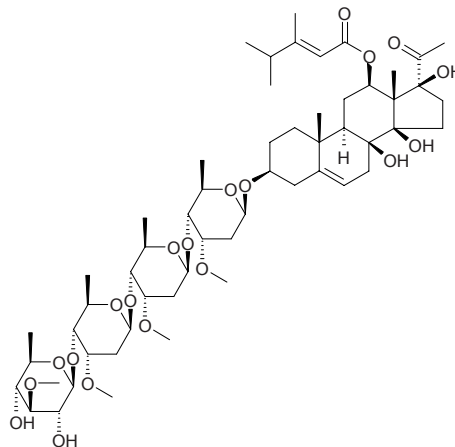
$C_{56}H_{90}O_{19}$  (1067.33). Amorphous powder,  $[\alpha]_D^{23} = +2.8^\circ$  ( $c = 0.98$ , MeOH).

Source: *Araujia sericifera* (root). Ref: 4377.

**17792 Pregnane glycoside GI**

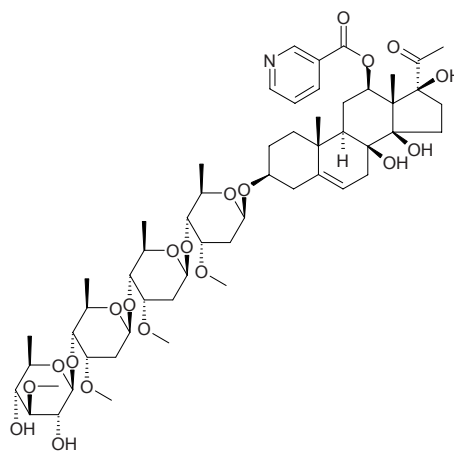
$C_{56}H_{90}O_{20}$  (1083.33). Amorphous powder,  $[\alpha]_D^{23} = +19^\circ$  ( $c = 0.81$ , MeOH).

Source: *Araujia sericifera* (root). Ref: 4377.

**17793 Pregnane glycoside HI**

$C_{55}H_{83}NO_{20}$  (1078.27). Amorphous powder,  $[\alpha]_D^{23} = +10^\circ$  ( $c = 0.36$ , MeOH).

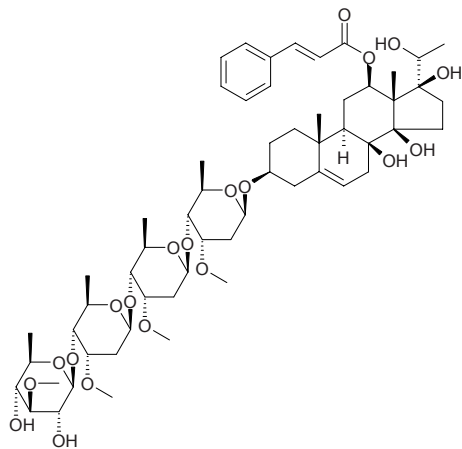
Source: *Araujia sericifera* (root). Ref: 4377.



**17794 Pregnane glycoside NI**

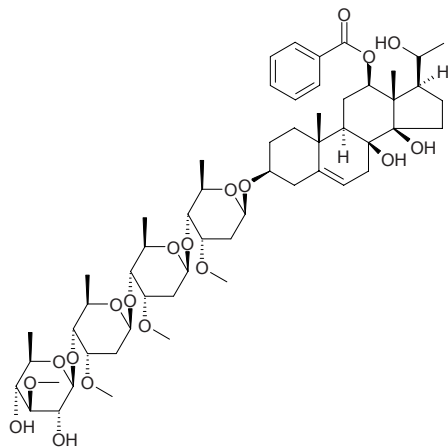
$C_{58}H_{88}O_{20}$  (1105.34). Amorphous powder,  $[\alpha]_D^{24} = +34^\circ$  ( $c = 0.27$ , MeOH).

Source: *Araujia sericifera* (root). Ref: 4377.

**17795 Pregnane glycoside OI**

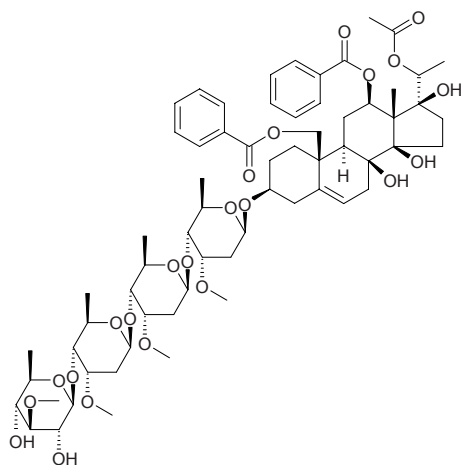
$C_{56}H_{86}O_{19}$  (1063.30). Amorphous powder,  $[\alpha]_D^{22} = +28.1^\circ$  ( $c = 1.67$ , MeOH).

Source: *Araujia sericifera* (root). Ref: 4377.

**17796 Pregnane glycoside QI**

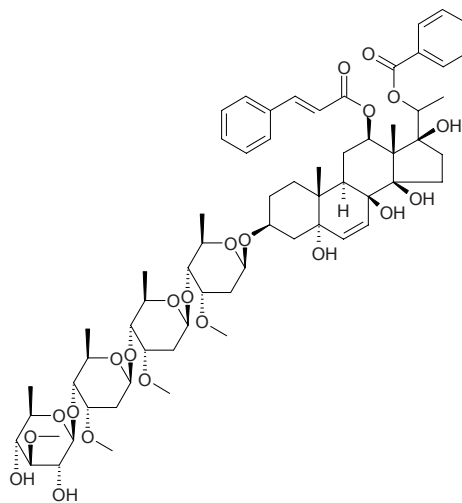
$C_{65}H_{92}O_{23}$  (1241.44). Amorphous powder,  $[\alpha]_D^{23} = +59.5^\circ$  ( $c = 1.36$ , MeOH).

Source: *Araujia sericifera* (root). Ref: 4377.

**17797 Pregnane glycoside TI**

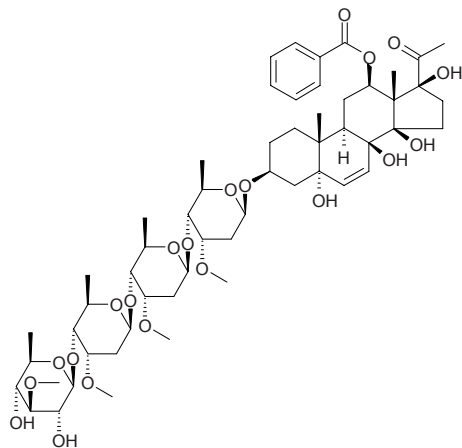
$C_{65}H_{92}O_{22}$  (1225.44). Amorphous powder,  $[\alpha]_D^{22} = +141^\circ$  ( $c = 1.67$ , MeOH).

Source: *Araujia sericifera* (root). Ref: 4377.

**17798 Pregnane glycoside UI**

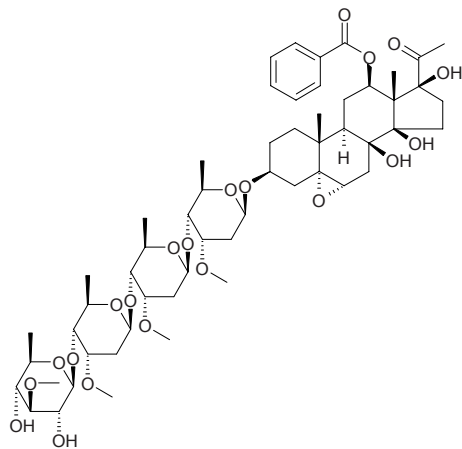
$C_{56}H_{84}O_{21}$  (1093.28). Amorphous powder,  $[\alpha]_D^{22} = +19^\circ$  ( $c = 0.72$ , MeOH).

Source: *Araujia sericifera* (root). Ref: 4377.

**17799 Pregnane glycoside VI**

$C_{56}H_{84}O_{21}$  (1093.28). Amorphous powder,  $[\alpha]_D^{24} = +1.8^\circ$  ( $c = 0.56$ , MeOH).

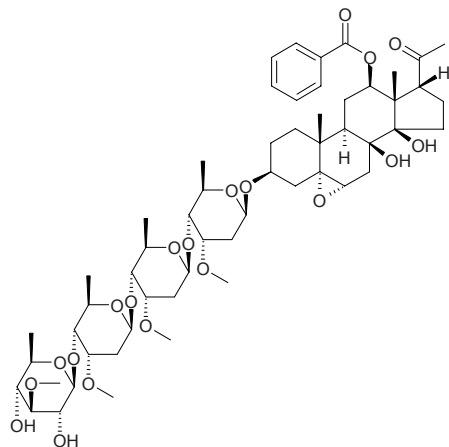
Source: *Araujia sericifera* (root). Ref: 4377.



**17800 Pregnane glycoside WI**

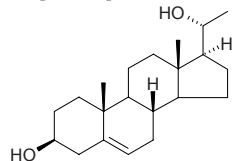
$C_{56}H_{84}O_{20}$  (1077.28). Amorphous powder,  $[\alpha]_D^{24} = -13^\circ$  ( $c = 0.51$ , MeOH).

Source: *Araujia sericifera* (root). Ref: 4377.

**17801 5-Pregnene-3 $\beta$ ,20 $\alpha$ -diol**

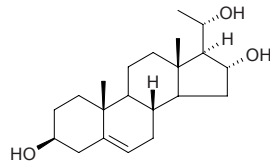
$C_{21}H_{34}O_2$  (318.50). mp 182°C,  $[\alpha]_D = -55.5^\circ$ . Source: XIANG JIA PI

*Periploca sepium*. Ref: 2498.

**17802 5-Pregnene-3 $\beta$ ,16 $\alpha$ ,20 $\alpha$ -triol**

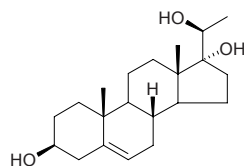
$C_{22}H_{36}O_3$  (348.53). mp 251°C,  $[\alpha]_D = -65.0^\circ$ . Source: XIANG JIA PI

*Periploca sepium*. Ref: 2498.

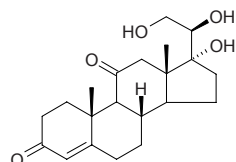
**17803 5-Pregnene-3 $\beta$ ,17 $\alpha$ ,20 $\alpha$ -triol**

$C_{21}H_{34}O_3$  (334.50). mp 230°C,  $[\alpha]_D = -69.2^\circ$ . Source: XIANG JIA PI

*Periploca sepium*. Ref: 2498.

**17804 4-Pregnene-17 $\alpha$ ,20 $\beta$ ,21-triol-3,11-dione**

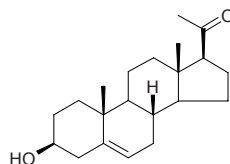
$C_{21}H_{30}O_5$  (362.47). Source: ZI HE CHE *Homo sapiens*. Ref: 660.

**17805 Pregnenolone**

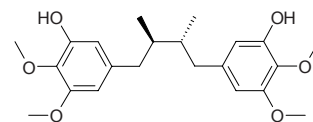
$C_{21}H_{32}O_2$  (316.49). Source: BAI XIAN PI *Dictamnus dasycarpus*, SHI LIU

YE *Punica granatum*, XIN JIANG GAO BEN *Conioselinum vaginatum*,

XING AN CHAI HU *Bupleurum sibiricum*. Ref: 3304, 3305, 3306, 3307.

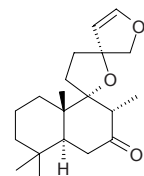
**17806 Pregomisin**

$C_{22}H_{30}O_6$  (390.48). Source: WU WEI ZI *Schisandra chinensis*. Ref: 2.

**17807 Prehispanolone**

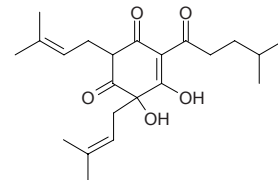
[132922-55-5]  $C_{20}H_{30}O_3$  (318.46). Source: YI MU CAO *Leonurus*

*heterophyllus* [Syn. *Leonurus artemisia*]. Ref: 2.

**17808 Prehumulone**

$C_{22}H_{32}O_5$  (376.50). Oil,  $[\alpha]_D^{23} = -172^\circ$  ( $c = 0.12$ , 2,2,3-trimethylpentane).

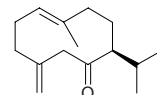
Source: PI JIU HUA *Humulus lupulus*. Ref: 3308.

**17809 Preisocalamendiol**

1(10),4(15)-Germacradien-6-one [25645-19-6]  $C_{15}H_{24}O$  (220.36). Oil. Source:

BAI CHANG *Acorus calamus*, KUAN YE KUO BAO JU *Baccharis latifolia*,

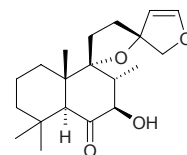
TOU HUA DU JUAN *Rhododendron capitatum*. Ref: 3309, 3310, 3311, 3312.

**17810 Preleoheterin**

9,13:15,16-Diepoxy-7-hydroxy-14-labden-6-one [151178-05-1]  $C_{20}H_{30}O_4$

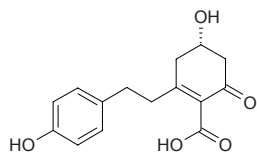
(334.46). Crystals; syrup,  $[\alpha]_D^{25} = -15.99^\circ$  ( $c = 0.5$ , EtOH). Source: YI MU

CAO *Leonurus heterophyllus* [Syn. *Leonurus artemisia*]. Ref: 1543, 2499.

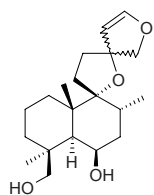


**17811 Prelunularic acid**

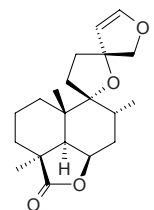
[85926-21-2] C<sub>15</sub>H<sub>16</sub>O<sub>5</sub> (276.29). Oil. Source: DI SUO LUO *Marchantia polymorpha*, SHE TAI *Conocephalum conicum*. Ref: 3313, 3314, 3315.

**17812 Premarrubenol**

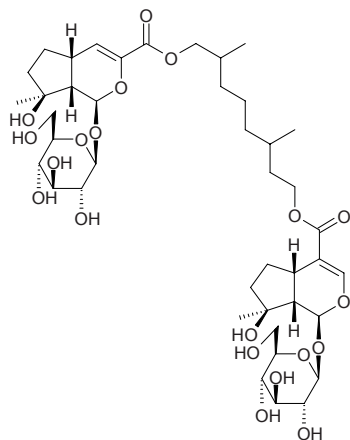
C<sub>20</sub>H<sub>32</sub>O<sub>4</sub> (336.48). Source: BAI HUA XIA ZHI CAO *Marrubium supinum* [Syn. *Lagopsis supina*], OU XIA ZHI CAO *Marrubium vulgare*. Ref: 1521, 5355.

**17813 Premarrubiin**

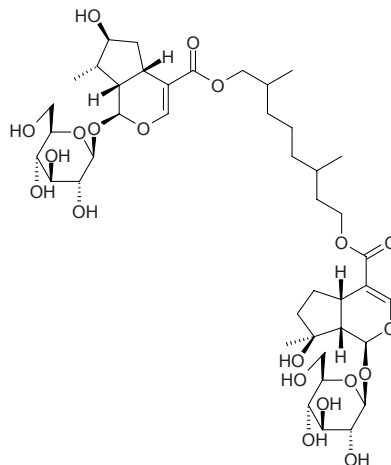
[72059-02-2] C<sub>20</sub>H<sub>28</sub>O<sub>4</sub> (332.44). Pharm: Astringent; antitussive (dispels phlegm). Source: OU XIA ZHI CAO *Marrubium vulgare*. Ref: 658, 5355.

**17814 Premnaodoroside A**

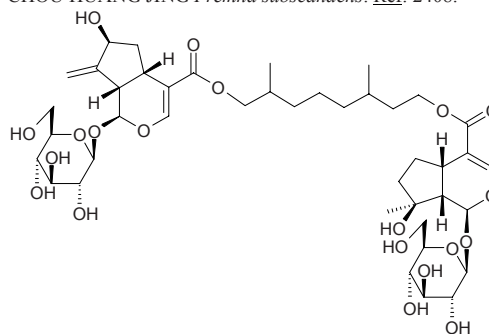
C<sub>42</sub>H<sub>66</sub>O<sub>20</sub> (890.98). [α]<sub>D</sub><sup>22</sup> = -96.9° (c = 2.07, MeOH). Source: PAN YUAN CHOU HUANG JING *Premna subscandens*. Ref: 2408.

**17815 Premnaodoroside B**

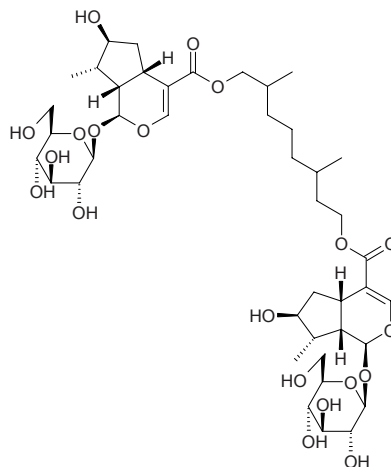
C<sub>42</sub>H<sub>66</sub>O<sub>20</sub> (890.98). [α]<sub>D</sub><sup>22</sup> = -96.9° (c = 1.14, MeOH). Source: PAN YUAN CHOU HUANG JING *Premna subscandens*. Ref: 2408.

**17816 Premnaodoroside C**

C<sub>42</sub>H<sub>64</sub>O<sub>20</sub> (888.97). [α]<sub>D</sub><sup>22</sup> = -85.7° (c = 1.59, MeOH). Source: PAN YUAN CHOU HUANG JING *Premna subscandens*. Ref: 2408.

**17817 Premnaodoroside D**

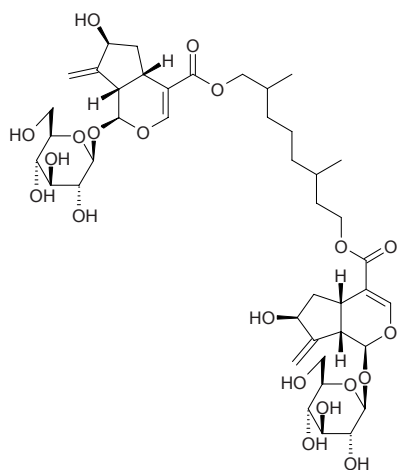
[260803-62-1] C<sub>42</sub>H<sub>66</sub>O<sub>20</sub> (890.98). Amorphous powder, [α]<sub>D</sub><sup>25</sup> = -89.4° (c = 1.04, MeOH). Source: PAN YUAN CHOU HUANG JING *Premna subscandens*. Ref: 2408.



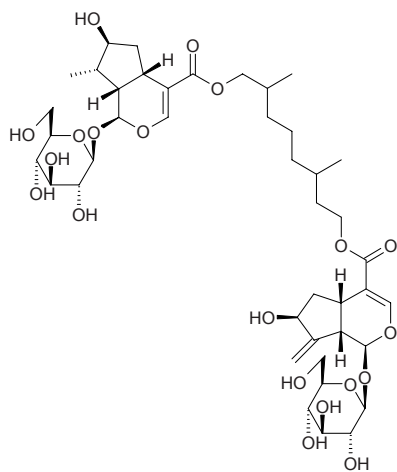


**17818 Premnaodoroside E**

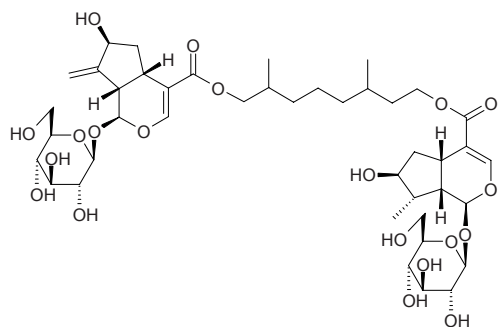
[260803-63-2] C<sub>42</sub>H<sub>62</sub>O<sub>20</sub> (886.95). Amorphous powder,  $[\alpha]_D^{25} = -28.9^\circ$  ( $c = 0.28$ , MeOH). Source: PAN YUAN CHOU HUANG JING *Premna subscandens*. Ref: 2408.

**17819 Premnaodoroside F<sub>1</sub>**

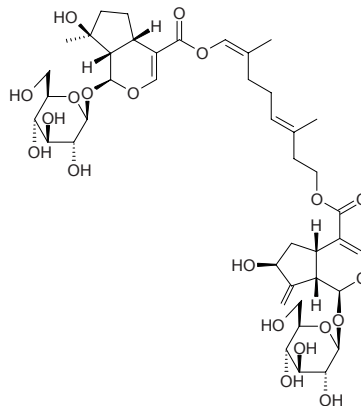
C<sub>42</sub>H<sub>64</sub>O<sub>20</sub> (888.97). Mixture with Premnaodoroside F<sub>2</sub>: amorphous powder,  $[\alpha]_D^{25} = -69.1^\circ$  ( $c = 1.88$ , MeOH). Source: PAN YUAN CHOU HUANG JING *Premna subscandens*. Ref: 2408.

**17820 Premnaodoroside F<sub>2</sub>**

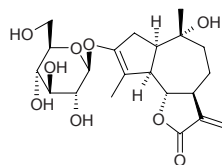
C<sub>42</sub>H<sub>64</sub>O<sub>20</sub> (888.97). Mixture with Premnaodoroside F<sub>1</sub>: amorphous powder,  $[\alpha]_D^{25} = -69.1^\circ$  ( $c = 1.88$ , MeOH). Source: PAN YUAN CHOU HUANG JING *Premna subscandens*. Ref: 2408.

**17821 Premnaodoroside G**

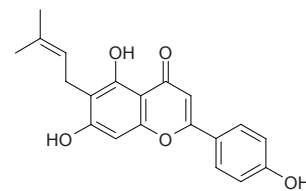
C<sub>42</sub>H<sub>60</sub>O<sub>20</sub> (884.93). Amorphous powder,  $[\alpha]_D^{25} = -46.6^\circ$  ( $c = 0.34$ , MeOH). Source: PAN YUAN CHOU HUANG JING *Premna subscandens*. Ref: 2408.

**17822 Prenantheside A**

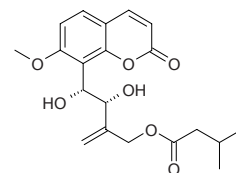
[112606-68-5] C<sub>21</sub>H<sub>30</sub>O<sub>9</sub> (426.47). Amorphous powder,  $[\alpha]_D^{25} = +10.3^\circ$  ( $c = 1.12$ , pyridine). Pharm: Cytotoxic (L-5178Y, ID<sub>50</sub> = 4.0 μg/mL). Source: QI YE PAN GUO JU *Prenanthes acerifolia*. Ref: 3707, 1738.

**17823 6-Prenylapigenin**

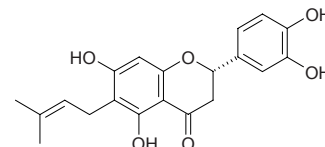
C<sub>20</sub>H<sub>18</sub>O<sub>5</sub> (338.36). Source: HUANG YAN MU *Chlorophora tinctoria*, *Dorstenia kameruniana*, *Erythrina vogelii*. Ref: 1521, 4421.

**17824 8-Prenylated coumarin microfalcatin isovalerate**

Micromarin B [260368-19-2] C<sub>20</sub>H<sub>24</sub>O<sub>7</sub> (376.41). Crystals (*n*-hexane-acetone), mp 100~105°C,  $[\alpha]_D^{24} = 0^\circ$  ( $c = 1.0$ , CHCl<sub>3</sub>). Source: XIAO GAN *Micromelum falcatum*. Ref: 2421.

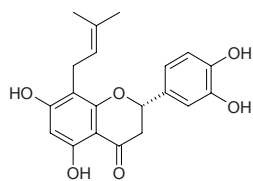
**17825 6-Prenylated eriodictyol**

C<sub>20</sub>H<sub>20</sub>O<sub>6</sub> (356.38). Source: *Glycyrrhiza* sp. Ref: 2431.

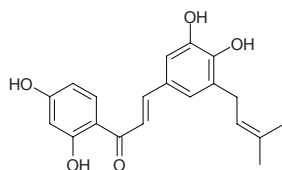


**17826 8-Prenylated eriodictyol**

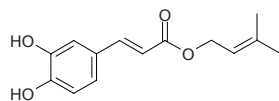
$C_{20}H_{20}O_6$  (356.38). **Source:** *Glycyrrhiza* sp. **Ref:** 2431.

**17827 5-Prenylbutein**

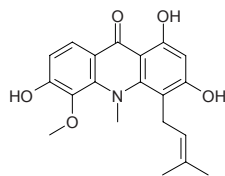
2',3,4,4'-Tetrahydroxy-5-prenylchalcone  $C_{20}H_{20}O_5$  (340.38). Amorphous powder. **Pharm:** Antimalarial (*Plasmodium falciparum* D6,  $IC_{50} = (10.3 \pm 1.3) \mu\text{g/mL}$ ; control Chloroquine,  $IC_{50} = (0.009 \pm 0.002) \mu\text{g/mL}$ , Quinine,  $IC_{50} = (0.04 \pm 0.01) \mu\text{g/mL}$ ; *Plasmodium falciparum* W2,  $IC_{50} = (11.2 \pm 1.9) \mu\text{g/mL}$ , Chloroquine,  $IC_{50} = (0.08 \pm 0.003) \mu\text{g/mL}$ , Quinine,  $IC_{50} = (0.21 \pm 0.01) \mu\text{g/mL}$ ). **Source:** A BI XI NI YA CI TONG *Erythrina abyssinica* (stem cortex). **Ref:** 3879.

**17828 Prenyl caffeate**

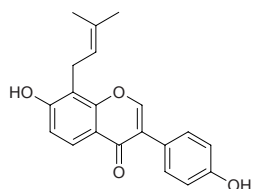
$C_{14}H_{16}O_4$  (248.28). **Pharm:** Allergenic. **Source:** *Populus* sp. **Ref:** 658.

**17829 Prenylcitpressine**

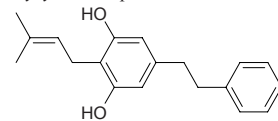
[81525-60-2]  $C_{20}H_{21}NO_5$  (355.39). Yellow slice substance ( $\text{Et}_2\text{O}$ ), mp 160–162°C. **Pharm:** Anti-inflammatory; antineoplastic (EBV-EA induced by TPA, InRt = 100% with molecular ratio of Euglobal-III/TPA 1000). **Source:** BAI YOU *Citrus grandis* f. *hakunikuju*, BIAN PING JU *Citrus depressa*, WEN DAN YOU *Citrus grandis* f. *buntan*, ZHOU CHANG JU *Citrus funadoko*, ZHU LUAN *Citrus decumana*. **Ref:** 3708, 3709, 3710, 3711, 3712, 3713.

**17830 8-Prenyldaidzein**

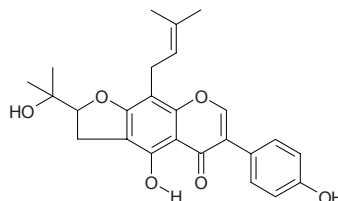
$C_{20}H_{18}O_4$  (322.36). **Pharm:** Cytotoxic (KB,  $IC_{50} > 75 \mu\text{mol/L}$ , control Helenalin,  $IC_{50} = (0.64 \pm 0.08) \mu\text{mol/L}$ , Melphalan,  $IC_{50} = (6.0 \pm 0.5) \mu\text{mol/L}$ ; Mono-Mac-6,  $IC_{50} > 75 \mu\text{mol/L}$ , Helenalin,  $IC_{50} = (3.1 \pm 0.3) \mu\text{mol/L}$ ; Jurkat-T,  $IC_{50} > 75 \mu\text{mol/L}$ , Helenalin,  $IC_{50} = (1.14 \pm 0.08) \mu\text{mol/L}$ , Melphalan,  $IC_{50} = (9.1 \pm 0.8) \mu\text{mol/L}$ ). **Source:** *Bituminaria morisiana* (leaf). **Ref:** 5077.

**17831 4-Prenyldihdropinosylvin**

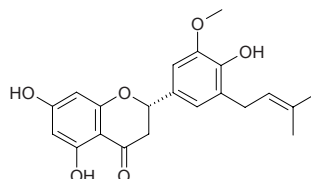
$C_{19}H_{22}O_2$  (282.39). **Pharm:** Antimicrobial. **Source:** MEI ZHOU GAN CAO *Glycyrrhiza lepidota*. **Ref:** 658.

**17832 8-Prenylerythrinin**

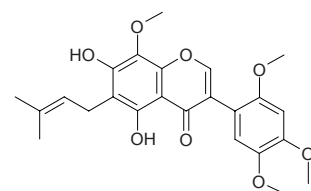
$C_{25}H_{26}O_6$  (422.48). **Pharm:** Cytotoxic (KB,  $EC_{50} = 13 \mu\text{g/mL}$ )<sup>[5220]</sup>. **Source:** CI TONG *Erythrina variegata* [Syn. *Erythrina indica*] (stem cortex). **Ref:** 5220.

**17833 5'-Prenylhomoeiodictyol**

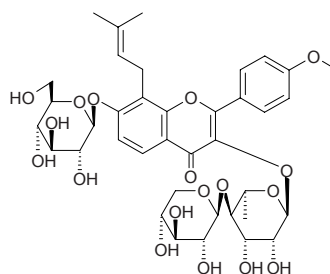
$C_{21}H_{22}O_6$  (370.41). **Pharm:** Antifungal (*Cladosporium cucumerinum*). **Source:** BO SHI CI TONG *Erythrina berteroaana*. **Ref:** 658.

**17834 6-Prenylisocaviunin**

[132923-42-3]  $C_{24}H_{26}O_8$  (442.47). Creamy amorphous powder, mp 182–183°C. **Pharm:** Estrogenic activity (rat). **Source:** CUI QUE YE DUAN GUAN CAO *Sopubia delphinifolia*. **Ref:** 3641.

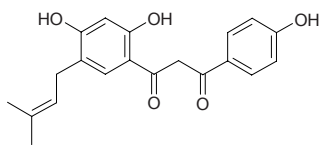
**17835 8-Prenylkaempferol-4'-methoxy-3-[xylosyl (1→4) rhamnoside]-7-glucoside**

$C_{38}H_{48}O_{18}$  (792.80). **Source:** WU SHAN YIN YANG HUO *Epimedium wushanense*. **Ref:** 3316.

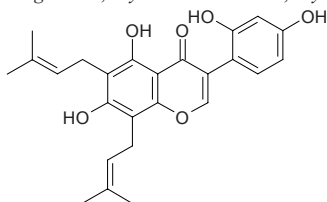


**17836 5'-Prenyllicodione**

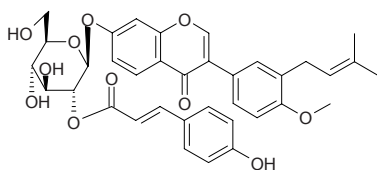
[107390-47-6] C<sub>20</sub>H<sub>20</sub>O<sub>5</sub> (340.38). Yellow needles, mp 130~135°C. Source: JI GAN CAO *Glycyrrhiza echinata* (cultured cell), ZHANG GUO GAN CAO *Glycyrrhiza inflata*. Ref: 3317, 3318.

**17837 8-Prenyluteone**

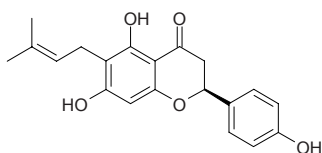
C<sub>25</sub>H<sub>26</sub>O<sub>6</sub> (422.48). Source: SAI NEI JIA ER CI TONG *Erythrina senegalensis*, *Erythrina eriotriocha*, *Erythrina vogelii*. Ref: 1521, 4421.

**17838 3'-Prenyl-4'-methoxy-isoflavone-7-O'-β-D-(2''-O-p-coumaroyl) glycopyranoside**

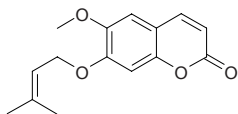
[126654-66-8] C<sub>36</sub>H<sub>36</sub>O<sub>11</sub> (644.68). Colorless microcrystals, mp 158~160°C. Pharm: Estrogenic activity. Source: CUI QUE YE DUAN GUAN CAO *Sopubia delphinifolia*. Ref: 3642.

**17839 6-Prenylnaringenin**

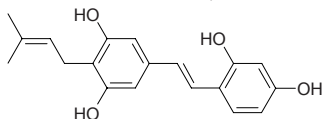
C<sub>20</sub>H<sub>20</sub>O<sub>5</sub> (340.38). Source: PI JIU HUA *Humulus lupulus* (strobile). Ref: 4789.

**17840 7-Prenyloxy-6-methoxycoumarin**

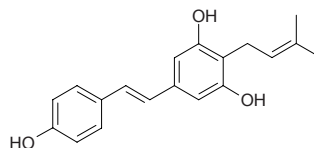
C<sub>15</sub>H<sub>16</sub>O<sub>4</sub> (260.29). mp 80~82°C (Me<sub>2</sub>CO). Source: SHA DI YUAN ZHI *Polygala sabulosa*. Ref: 5110.

**17841 4'-Prenyloxyresveratrol**

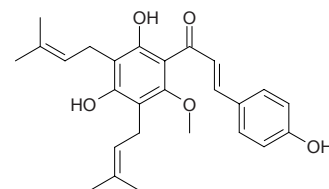
*trans*-4-Isopentenyl-3,5,2',4'-tetrahydroxystilbene C<sub>19</sub>H<sub>20</sub>O<sub>4</sub> (312.37). Pharm: Antifungal<sup>[658]</sup>; antimalarial (*Plasmodium falciparum*, EC<sub>50</sub> = 8.2 μg/mL, control Chloroquine diphosphate, EC<sub>50</sub> = 0.16 μg/mL, EC<sub>50</sub> = 3.1 μmol/L)<sup>[3963]</sup>. Source: QUAN YUAN GUI MU *Artocarpus integra* (aerial parts), SANG ZHI *Morus alba*. Ref: 658, 3963.

**17842 4-Prenylresveratrol**

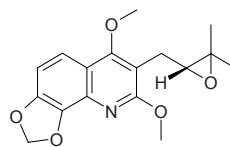
C<sub>19</sub>H<sub>20</sub>O<sub>3</sub> (296.37). Pharm: Antifungal (*Cladosporium cucumerinum*). Source: LUO HUA SHENG *Arachis hypogaea*. Ref: 658.

**17843 5'-Prenylxanthohumol**

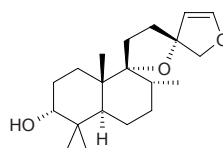
C<sub>26</sub>H<sub>30</sub>O<sub>5</sub> (422.53). Source: PI JIU HUA *Humulus lupulus* (strobile). Ref: 4789.

**17844 Preorixine**

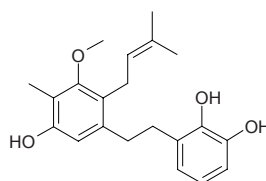
C<sub>17</sub>H<sub>19</sub>NO<sub>5</sub> (317.34). Pharm: NO production inhibitor inactive (RAW264.7 cells, LPS/IFN-γ-induced, 30 μmol/L; weak cytotoxic to RAW264.7 cells). Source: CHOU SHAN YANG *Orixa japonica* (stem: yield = 0.027%dw). Ref: 4774.

**17845 Preotostegindiol**

9(13),15(16)-Diepoxy-3α-hydroxy-16-dihydro-14-ene C<sub>20</sub>H<sub>32</sub>O<sub>3</sub> (320.48). White crystals. Source: QUAN YUAN YE AO TUO SI TE CAO *Otostegia integrifolia* (leaf). Ref: 3823.

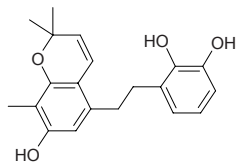
**17846 Preracemosol A**

C<sub>21</sub>H<sub>26</sub>O<sub>4</sub> (342.44). Brown viscous oil. Pharm: Antimalarial (*Plasmodium falciparum*, EC<sub>50</sub> = 18.0 μg/mL, control Chloroquine diphosphate, EC<sub>50</sub> = 0.16 μg/mL); cytotoxic inactive (KB, control Ellipticine, EC<sub>50</sub> = 0.3 μg/mL; BC, control Ellipticine, EC<sub>50</sub> = 0.3 μg/mL). Source: MA LA BA YANG TI JIA *Bauhinia malabarica* (root). Ref: 5092.

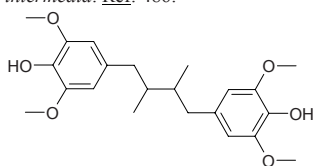


**17847 Preracemosol B**

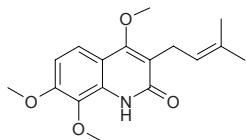
$C_{20}H_{22}O_4$  (326.40). Brown viscous oil. **Pharm:** Antimalarial (*Plasmodium falciparum*,  $EC_{50}$  = 3.0  $\mu$ g/mL, control Chloroquine diphosphate,  $EC_{50}$  = 0.16  $\mu$ g/mL); cytotoxic inactive (KB, control Ellipticine,  $EC_{50}$  = 0.3  $\mu$ g/mL; BC, control Ellipticine,  $EC_{50}$  = 0.3  $\mu$ g/mL). **Source:** MA LA BA YANG TI JIA *Bauhinia malabarica* (root). **Ref:** 5092.

**17848 Preschisanthrin**

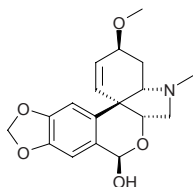
$C_{22}H_{30}O_6$  (390.48). White acicular crystals, mp 119~120°C,  $[\alpha]_D^{19} = 0^\circ$  (MeOH). **Source:** ZHONG JIAN WU WEI ZI *Schisandra propinqua* var. *intermedia*. **Ref:** 486.

**17849 Preskimmianine**

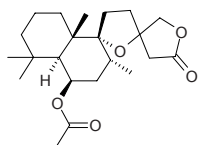
[38695-41-9]  $C_{17}H_{21}NO_4$  (303.36). mp 151~152°C. **Source:** BAI SE BAI XIAN *Dictamnus albus*, BAI XIAN PI *Dictamnus dasycarpus*, CHOU SHAN YANG *Orixa japonica*. **Ref:** 660, 3319.

**17850 Pretazettine**

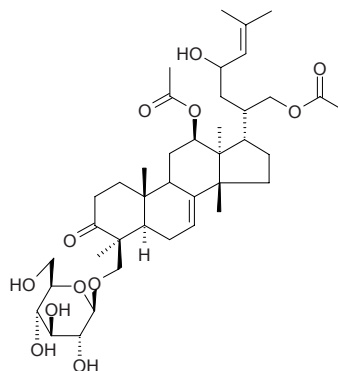
Isotazettine [17322-84-8]  $C_{18}H_{21}NO_5$  (331.37). mp 234~236°C. **Pharm:** Antineoplastic (HeLa, leukemia caused by Rauscher leukemia virus, inhibits biosynthesis of protein in eukaryotic cells). **Source:** DUO HUA SHUI XIAN *Narcissus tazetta*, GAN FENG CAO *Zephyranthes candida*, QUAN NENG HUA *Pancreatium biflorum*, SHI SUAN *Lycoris radiata* [Syn. *Amaryllis radiata*], SHUI XIAN GEN *Narcissus tazetta* var. *chinensis*. **Ref:** 5, 658.

**17851 Previtexilactone**

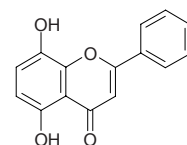
$C_{22}H_{34}O_5$  (378.51). Colorless prisms (hexane- $CHCl_3$ ), mp 224~225°C, mp 214~215°C,  $[\alpha]_D = -20.2^\circ$  ( $c = 0.85$ ,  $CHCl_3$ ). **Pharm:** Antitrypanosomal (epimastigotes of *Trypanosoma cruzi*, *in vitro*, MLC > 245  $\mu$ mol/L)<sup>[2550]</sup>. **Source:** MAN JING ZI *Vitex trifolia*. **Ref:** 2550.

**17852 Prieurianoside**

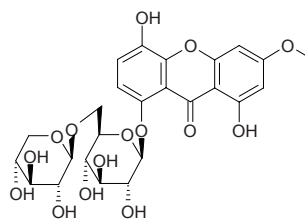
12 $\beta$ ,21-Diacetoxy-29- $\beta$ -D-glucopyranosyloxy-23 $\zeta$ -hydroxytirucalla-7,24-dien-3-one  $C_{40}H_{62}O_{12}$  (734.93). Microcrystals, mp 113~115°C,  $[\alpha]_D^{20} = -73.8^\circ$  (MeOH). **Pharm:** Cytotoxic inactive (KB,  $EC_{50}$  > 10  $\mu$ g/mL). **Source:** *Trichilia prieuriana* (leaf). **Ref:** 3994.

**17853 Primetin**

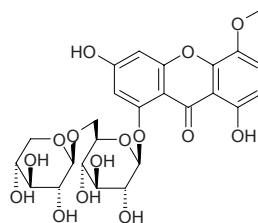
[548-58-3]  $C_{15}H_{10}O_4$  (254.25). **Pharm:** Allergenic. **Source:** CHANG BAI SHAN BAO CHUN *Primula modesta*, JIA NA DA BAO CHUN *Primula mistassinica*. **Ref:** 658.

**17854 8-O-Primeverosylbellidifolin**

$C_{25}H_{28}O_{15}$  (568.49). **Source:** RI BEN ZHANG YA CAI *Swertia japonica*. **Ref:** 2528.

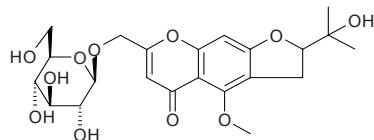
**17855 1-O-Primeverosyl-3,8-dihydroxy-5-methoxyxanthone**

$C_{25}H_{28}O_{15}$  (568.49). Yellow crystals, mp 207~209°C,  $[\alpha]_D^{20} = -68.75^\circ$  ( $c = 0.08$ , DMSO). **Source:** XI DIAN ZHANG YA CAI *Swertia punctata*. **Ref:** 2155.

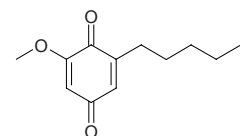


**17856 Prim-O-glucosylcimifugin**

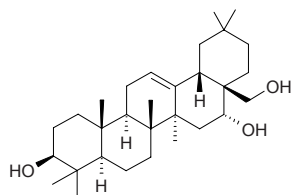
$C_{22}H_{28}O_{11}$  (468.42). Source: FANG FENG *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*]. Ref: 2.

**17857 Primin**

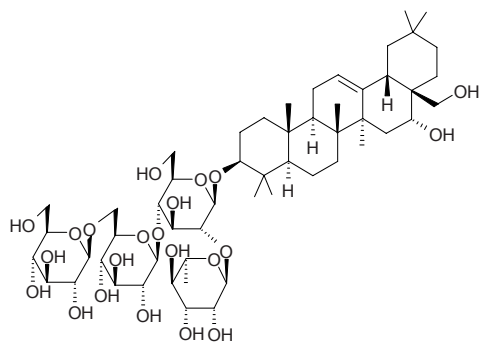
[15121-94-5]  $C_{12}H_{16}O_3$  (208.26). Pharm: Insect antifeedant; irritant (to skin); molluscicide (toxic to shellfish). Source: E BAO CHUN *Primula obconica*, GAO BAO CHUN *Primula elatior*, *Miconia* sp. Ref: 658.

**17858 Primulagenin A**

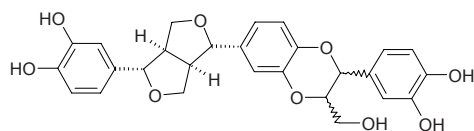
[465-95-2]  $C_{30}H_{50}O_3$  (458.73). mp 249.5~250.0°C. Source: TIE ZI *Myrsine africana*, ZHEN ZHU CAI *Lysimachia clethroides*. Ref: 6.

**17859 Primulasaponin**

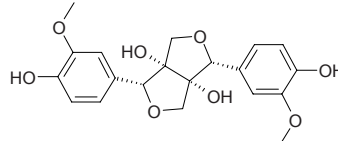
$C_{54}H_{90}O_{22}$  (1091.31). Pharm: Antibacterial; antineoplastic. Source: GAO BAO CHUN *Primula elatior*. Ref: 658.

**17860 Princepin**

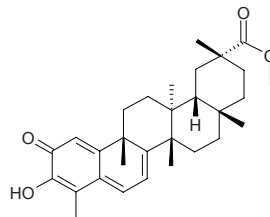
*rel*-((7 $\alpha$ ,7 $\alpha$ ,8 $\alpha$ ,8 $\alpha$ ,7 $\alpha$ ,8 $\beta$ )-4',7'':7,9':7',9'-Triepoxy-3',8''-oxy-8,8'-sesquieolignan-3,3'',4,4'',9''-pentaol and *rel*-((7 $\alpha$ ,7 $\alpha$ ,8 $\alpha$ ,8 $\alpha$ ,7 $\beta$ ,8 $\alpha$ )-4',7'':7,9':7',9'-Triepoxy-3',8''-oxy-8,8'-sesquieolignan-3,3'',4,4'',9''-pentaol)  $C_{27}H_{26}O_9$  (494.50). Colorless amorphous solid. Source: BA XI QIAO AN MU *Joannesia princeps* (seed). Ref: 3369.

**17861 Prinsepiol**

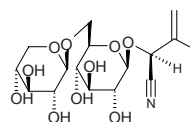
$C_{20}H_{22}O_8$  (390.39). Pharm: Antitubercular (*Mycobacterium tuberculosis*, MIC > 128 $\mu$ g/mL, cytotoxic, Vero cells, IC<sub>50</sub> = 13.0 $\mu$ g/mL, positive control Rifampin, MIC = 0.03 $\mu$ g/mL, IC<sub>50</sub> = 98.3 $\mu$ g/mL, SI = 3300). Source: SHU HUA JIE CAO *Valeriana laxiflora* (aerial parts and root). Ref: 4986.

**17862 Pristimerin**

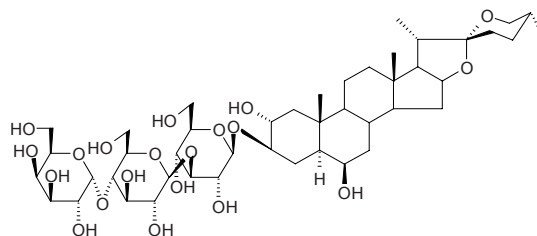
[1258-84-0]  $C_{30}H_{40}O_4$  (464.65). Orange crystals (methanol), mp 214~217°C. Pharm: Antineoplastic; cytotoxic (KB, IC<sub>50</sub> = (0.60±0.01) $\mu$ mol/L, control Podophyllotoxin, IC<sub>50</sub> = 0.014 $\mu$ mol/L)<sup>[3969]</sup>; cytotoxic (HeLa, ID<sub>50</sub> = 0.6 $\mu$ g/mL); antiamebic (used in treatment of dysentery); antibacterial (*Staphylococcus aureus*, *Diplococcus pneumoniae*, *Streptococcus pyogenes* and *Streptococcus varians*, 5~8 $\mu$ g/mL); antibacterial (*Bacillus cereus*, MIC = 8.62 $\mu$ mol/L, control Chloramphenicol, MIC = 6.19 $\mu$ mol/L; *Staphylococcus epidermidis*, MIC = 0.54 $\mu$ mol/L, Chloramphenicol, MIC = 12.38 $\mu$ mol/L; *Micrococcus luteus*, MIC = 8.62 $\mu$ mol/L, Chloramphenicol, MIC = 6.19 $\mu$ mol/L)<sup>[3969]</sup>; anti-inflammatory (modulator of cytokine network: inhibits LPS-stimulated IL-1 $\beta$  production on hmn monocytes, mean IC<sub>50</sub> = 56 nmol/L)<sup>[4416]</sup>; anti-inflammatory (NF- $\kappa$ B pathway)<sup>[4415]</sup>; anti-inflammatory (NO production inhibitor)<sup>[4415]</sup>. Source: BIAN SHUO TENG *Pristimera indica*, GAO MEI YING BAN *Crossopetalum gaumeri* (root), JIA NA LI MEI DENG MU *Maytenus canariensis*, QIAO CHA *Catha edulis*, *Prinostemma aspera*. Ref: 5, 661, 3969, 4416, 4415.

**17863 Proacaciberin**

[79197-21-0]  $C_{16}H_{25}NO_{10}$  (391.38). Pharm: Toxin. Source: XI BO JIN HE HUAN *Acacia sieberiana*. Ref: 658.

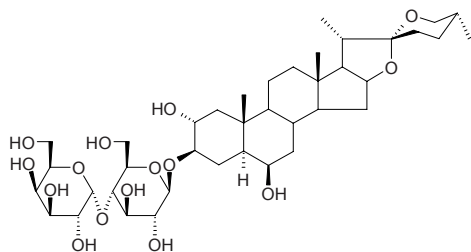
**17864 Proampeloside Bf<sub>1</sub>**

$C_{45}H_{74}O_{20}$  (935.08). Pharm: Antifungal (*Candida albicans*). Source: DA TOU SUAN *Allium ampeloprasum*. Ref: 2165.

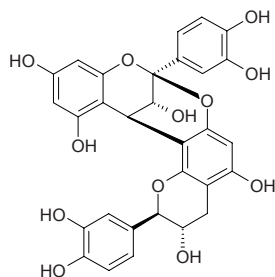


**17865 Proampelosiide Bf<sub>2</sub>**

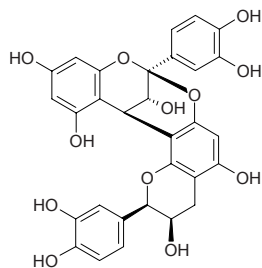
C<sub>39</sub>H<sub>64</sub>O<sub>15</sub> (772.94). **Pharm:** Antifungal (*Candida albicans*). **Source:** DA TOU SUAN *Allium ampeloprasum*. **Ref:** 2165.

**17866 Proanthocyanidin A<sub>1</sub>**

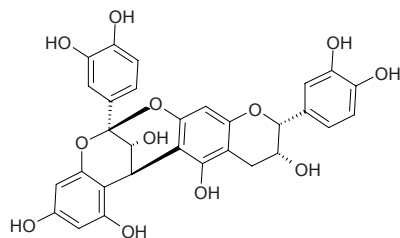
C<sub>30</sub>H<sub>24</sub>O<sub>12</sub> (576.52). Colorless needles (H<sub>2</sub>O), mp 280°C (dec), [α]<sub>D</sub><sup>22</sup> = +63.87° (c = 1.12, acetone). **Pharm:** Hyaluronidase inhibitor<sup>[2284]</sup>. **Source:** LUO HUA SHENG *Arachis hypogaea*, DAO NIAN ZI *Garcinia mangostana* (fruit hull). **Ref:** 2284,3066.

**17867 Proanthocyanidin A<sub>2</sub>**

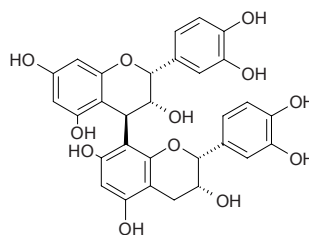
[41743-41-3] C<sub>30</sub>H<sub>24</sub>O<sub>12</sub> (576.52). Colorless needles (H<sub>2</sub>O), mp 273°C (dec), [α]<sub>D</sub> = +55.63° (c = 1.08, acetone). **Pharm:** Hyaluronidase inhibitor; tanning agent. **Source:** DAO NIAN ZI *Garcinia mangostana* (fruit hull)<sup>[3066]</sup>, LUO HUA SHENG *Arachis hypogaea*, OU ZHOU QI YE SHU *Aesculus hippocastanum*, SU DAN KE LE GUO *Cola acuminata*, YUE JU YE *Vaccinium vitis-idaea*. **Ref:** 658, 2284, 3066.

**17868 Proanthocyanidin A<sub>6</sub>**

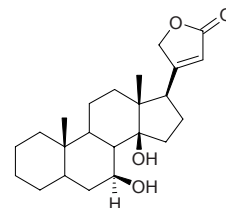
C<sub>30</sub>H<sub>24</sub>O<sub>12</sub> (576.52). Pale yellow amorphous powder, [α]<sub>D</sub><sup>21</sup> = +17.3° (c = 1.68, MeOH). **Source:** CHANG JIE ZHU *Parameria laevigata* (bark). **Ref:** 3523.

**17869 Proanthocyanidin B<sub>2</sub>**

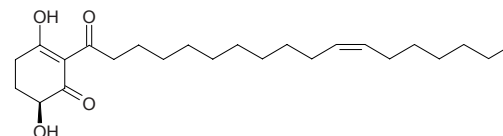
Procyanidin B<sub>2</sub> [29106-49-8] C<sub>30</sub>H<sub>26</sub>O<sub>12</sub> (578.53). Whitish amorphous powder, [α]<sub>D</sub> = +34.1° (c = 1.0, acetone), [α]<sub>D</sub> = +26° (H<sub>2</sub>O). **Pharm:** Anticomplement activity (IC<sub>50</sub> = 55.7μg/mL); antihypertensive (inhibits sympathetic nerve and relaxes blood vessels directly); inhibits promotor of cancer (mus skin cancer induced by TPA, 10μmol/L); protein kinase C inhibitor (rat cerebrum, IC<sub>50</sub> = 1μmol/L); reverse transcriptase inhibitor; antioxidant (DPPH scavenger, IC<sub>50</sub> = (0.96±0.09)μmol/L; control EGG, IC<sub>50</sub> = (1.13±0.08)μmol/L)<sup>[3848]</sup>; inhibits oxidation of LDL. **Source:** BING LANG *Areca catechu*, CHANG JI HUANG *Rheum* sp.<sup>[4893]</sup>, DAO NIAN ZI *Garcinia mangostana* (fruit hull)<sup>[3066]</sup>, DUAN MAO JIN XIAN CAO GEN *Antenoron neofiliforme*, DUN YE GUI PI *Cinnamomum bejolghota* [Syn. *Cinnamomum obtusifolium*; *Laurus bejolghota*], GUI ZHI *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*], HAI ZHOU GU SUI BU *Davallia mariesii*, LONG YAN YE *Euphoria longan* [Syn. *Dimocarpus longan*], LUO HUA SHENG *Arachis hypogaea* (seed), MAO HANG ZI SHAO *Campylotropis hirtella*, PO LUO MEN ZAO JIA *Cassia fistula*, PU<sup>(2)</sup> TAO *Vitis vinifera*, ROU GUI *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*], SHU LIANG *Dioscorea cirrhosa* [Syn. *Dioscorea pogonoides*], TIAN QIAO MAI GEN *Fagopyrum cymosum* [Syn. *Polygonum cymosum*], ZHANG SHU PI *Cinnamomum camphora*, *Aesculus* spp., *Cotoneaster* spp., *Crataegus* spp., *Malus* spp., occurs in many plants. **Ref:** 660, 900, 1521, 2604, 2871, 2893, 2908, 2963, 2976, 2977, 2982, 3066, 3848, 4893.

**17870 Proceragenin**

[144334-40-7] C<sub>23</sub>H<sub>34</sub>O<sub>4</sub> (374.53). Fine needles (MeOH), mp 254–255°C, [α]<sub>D</sub> = +6° (c = 1, alcohol). **Pharm:** Antibacterial (gram-positive and gram-negative bacteria). **Source:** CHANG NIU JIAO GUA *Calotropis procera*. **Ref:** 3643.

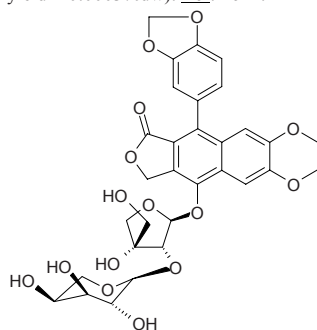
**17871 Proctorione C**

C<sub>24</sub>H<sub>40</sub>O<sub>4</sub> (392.58). **Pharm:** Cytotoxic (*in vitro*, HONE-1 cell line, 50μmol/L, cell growth InRt = 0%, IC<sub>50</sub> = 8.08μg/mL; NUGC-3 cell line, 50μmol/L, cell growth InRt = 0%, IC<sub>50</sub> = 10.3μg/mL)<sup>[3401]</sup>. **Source:** *Peperomia sui*. **Ref:** 3401.

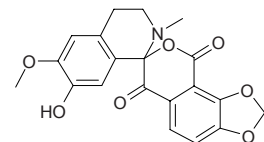


**17872 Procumbenoside A**

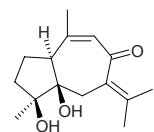
4-*O*- $\alpha$ -*L*-Arabinopyranosyl-(1" $\rightarrow$ 2")- $\beta$ -*D*-apiofuranosyldiphyllin C<sub>31</sub>H<sub>32</sub>O<sub>15</sub> (644.59). Colorless powder (MeOH), [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -16° (*c* = 0.10, MeOH). **Pharm:** Cytotoxic (*in vitro*, 212, ED<sub>50</sub> = 3.1  $\mu$ g/mL, control Cisplatin, ED<sub>50</sub> = 1.3  $\mu$ g/mL; CaSKi, not determined, control Actinomycin D, ED<sub>50</sub> = 0.0019  $\mu$ g/mL; Hep3B, ED<sub>50</sub> = 3.1  $\mu$ g/mL, control 5-Fluorouracil, ED<sub>50</sub> = 0.0715  $\mu$ g/mL; SiHa, not determined, control Actinomycin D, ED<sub>50</sub> = 0.00081  $\mu$ g/mL; HepG2, ED<sub>50</sub> = 3.9  $\mu$ g/mL, control 5-Fluorouracil, ED<sub>50</sub> = 0.033  $\mu$ g/mL; HT29, ED<sub>50</sub> = 6.7  $\mu$ g/mL, control 5-Fluorouracil, ED<sub>50</sub> = 0.074  $\mu$ g/mL; HCT116, no significant activity, control 5-Fluorouracil, ED<sub>50</sub> = 0.48  $\mu$ g/mL; MCF7, not determined; MCF7-ras, not determined). **Source:** JUE CHUANG *Rostellularia procumbens* [Syn. *Justicia procumbens*] (whole herb: yield = 0.0003%dw). **Ref:** 4612.

**17873 Procumbine**

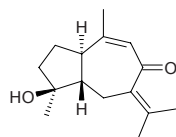
[109389-82-4] C<sub>20</sub>H<sub>17</sub>NO<sub>7</sub> (383.36). Orange-red needles, mp 191~192°C. **Source:** PING ZHAN JIAO HUI XIANG *Hypocoum procumbens*, XI GUO JIAO HUI XIANG *Hypocoum leptocarpum*. **Ref:** 3320, 3321.

**17874 Procurcumadiol**

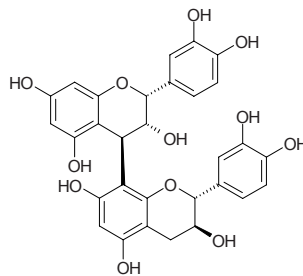
4 $\beta$ ,5 $\beta$ -Dihydroxy-7(11),9-guaiadien-8-one [129673-90-1] C<sub>15</sub>H<sub>22</sub>O<sub>3</sub> (250.34). Needles (C<sub>6</sub>H<sub>6</sub>), mp 150~150.5°C. **Source:** JIANG HUANG *Curcuma longa*. **Ref:** 1405.

**17875 Procurcumenol**

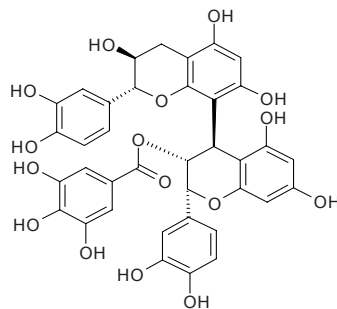
[21698-40-8] C<sub>15</sub>H<sub>22</sub>O<sub>2</sub> (234.34). **Pharm:** NO production inhibitor (mus peritoneal macrophages, induced by LPS, 100  $\mu$ mol/L, InRt = (67.8 $\pm$ 4.4)%, control *L*-NMMA, 100  $\mu$ mol/L, InRt = (79.2 $\pm$ 0.9)%, *p* < 0.01)<sup>[4150]</sup>, TNF- $\alpha$  production inhibitor (LPS-activated macrophages, mean IC<sub>50</sub> = 310.5  $\mu$ mol/L)<sup>[4416]</sup>. **Source:** PING E SHU *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*]. **Ref:** 6, 4150, 4416.

**17876 Procyanidin B<sub>1</sub>**

[20315-25-7] C<sub>30</sub>H<sub>26</sub>O<sub>12</sub> (578.53). Yellowish powder, crystals (MeOH, deca-Ac compound), mp 231~232°C (deca-Ac compound), RI [25, D] = +110.9° (*c* = 2, acetone, deca-Ac compound). **Pharm:** Antineoplastic (tumor caused by TPA, 10  $\mu$ mol/L); antioxidant (inhibits free-radical induced lysis of rat red blood cells and exhibits strong and dose-dependent protection of cell membrane)<sup>[5341]</sup>; antioxidant (mitochondria of mus heart, inhibits oxygen consumption, IC<sub>50</sub> = 16.0  $\mu$ mol/L, inhibits formation of MDA, IC<sub>50</sub> = 15.5  $\mu$ mol/L, at 5 $\times$ 10<sup>-5</sup>~100 $\times$ 10<sup>-5</sup>%, pH 7~9, activity stronger than VC,  $\gamma$ -oryzanol, gallic acid and catechin); DPPH scavenger (stronger than VC and VE). **Source:** BING LANG *Areca catechu*, CHANG JI HUANG *Rheum* sp.<sup>[4893]</sup>, CHI DOU *Vigna angularis* [Syn. *Dolichus angularis*; *Phaseolus angularis*], DAN ZI SHAN *ZHA Crataegus monogyna*, HONG HUA LU TI CAO *Pyrola incarnata*, HUA GOU TENG *Uncaria sinensis*, HUANG YAO ZI *Dioscorea bulbifera*, KE KE *Theobroma cacao*, LUO HAN BAI *Thujopsis dolobrata*, LUO YE SONG *Larix gmelini*, MAO HANG ZI SHAO *Campylotropis hirtella*, MAO SHU *Dioscorea alata*, MAO ZHI HUA *Betula pubescens*, OU ZHOU QI YE SHU *Aesculus hippocastanum*, PU<sup>(2)</sup> TAO *Vitis vinifera*, ROU GUI *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*], SHU LIANG *Dioscorea cirrhosa* [Syn. *Dioscorea pogonoides*], YE CAO MEI *Fragaria vesca*, YUE JU YE *Vaccinium vitis-idaea*, ZHANG SHU PI *Cinnamomum camphora*, *Betula* spp., occurs in many plants. **Ref:** 660, 1521, 1555, 2871, 2893, 2963, 2977, 3103, 3322, 3323, 3324, 4893, 5341.

**17877 Procyanidin B<sub>1</sub> 3'-*O*-gallate**

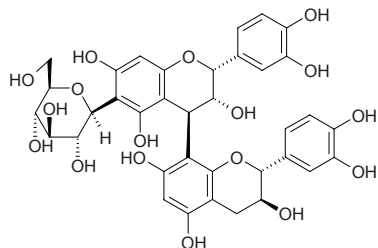
C<sub>37</sub>H<sub>30</sub>O<sub>16</sub> (730.64). [ $\alpha$ ]<sub>D</sub><sup>21</sup> = -21° (Me<sub>2</sub>CO). **Source:** CHANG JI HUANG *Rheum* sp.<sup>[4893]</sup>, DA HUANG *Rheum officinale*, HE SHOU WU *Polygonum multiflorum*, TANG GU TE DA HUANG *Rheum tanguticum*, ZHANG YE DA HUANG *Rheum palmatum*. **Ref:** 2, 660, 1521, 2893, 4893.



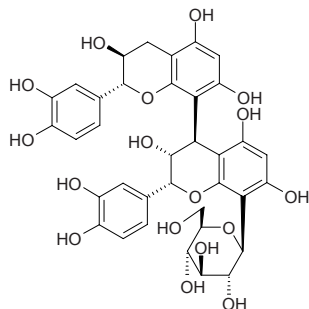


**17878 Procyanidin B<sub>1</sub>-6-C-β-D-glucopyranoside**

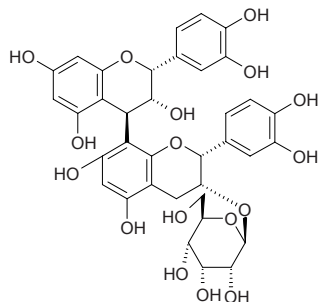
[105330-50-5] C<sub>36</sub>H<sub>36</sub>O<sub>17</sub> (740.68). Off-white amorphous powder +2H<sub>2</sub>O or tan powder +1H<sub>2</sub>O, [α]<sub>D</sub><sup>21</sup> = +12.5° (c = 1.1, Me<sub>2</sub>CO), [α]<sub>D</sub><sup>21</sup> = +45.1° (c = 0.79, MeOH). Source: ROU GUI *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*], *Rheum* spp. Ref: 3325, 2908.

**17879 Procyanidin B<sub>1</sub>-8-C-β-D-glucopyranoside**

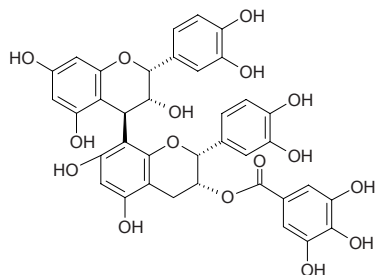
[105371-28-6] C<sub>36</sub>H<sub>36</sub>O<sub>17</sub> (740.68). Tan powder +1.5H<sub>2</sub>O, [α]<sub>D</sub><sup>19</sup> = +33.7° (c = 0.88, MeOH). Source: CHANG JI HUANG *Rheum* sp.<sup>[4893]</sup>. Ref: 2908, 3325, 4893.

**17880 Procyanidin B<sub>2</sub>-3''-O-β-D-allopyranoside**

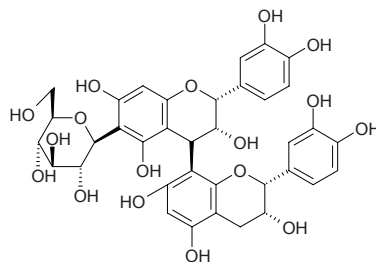
C<sub>36</sub>H<sub>36</sub>O<sub>17</sub> (740.68). Source: DAN YE XIN YUE JUE *Pronephrium simplex* [Syn. *Meniscium simplex*]. Ref: 660.

**17881 Procyanidin B<sub>2</sub>-3'-O-gallate**

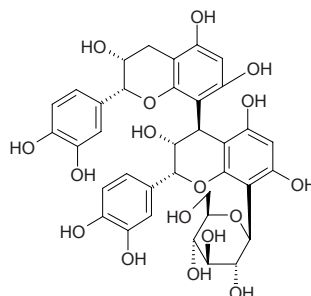
C<sub>37</sub>H<sub>30</sub>O<sub>16</sub> (730.64). Source: CHANG JI HUANG *Rheum* sp.<sup>[4893]</sup>, DUAN MAO JIN XIAN CAO GEN *Antenoron neofiliforme*, HONG HUA LU TI CAO *Pyrola incarnata*. Ref: 2893, 2976, 3103, 4893.

**17882 Procyanidin B<sub>2</sub>-6-C-glucopyranoside**

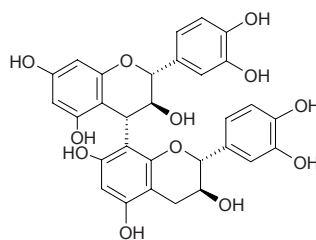
C<sub>36</sub>H<sub>36</sub>O<sub>17</sub> (740.68). Source: CHANG JI HUANG *Rheum* sp.<sup>[4893]</sup>. Ref: 3325, 4893.

**17883 Procyanidin B<sub>2</sub>-8-C-β-D-glucopyranoside**

C<sub>36</sub>H<sub>36</sub>O<sub>17</sub> (740.68). Source: CHANG JI HUANG *Rheum* sp.<sup>[4893]</sup>. Ref: 3325, 4893.

**17884 Procyanidin B<sub>3</sub>**

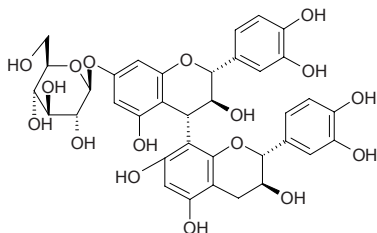
[20315-25-7] C<sub>30</sub>H<sub>26</sub>O<sub>12</sub> (578.53). Brown amorphous powder, [α]<sub>D</sub><sup>18</sup> = -158.0° (c = 0.5, acetone:H<sub>2</sub>O = 1:1). Pharm: Antioxidant (inhibits oxidation of LDL, at (0.00005~0.005)%, pH 7~9, activity stronger than VC, γ-oryzanol, gallic acid and catechin); DPPH scavenger (stronger than VC and VE); antioxidant (DPPH scavenger, IC<sub>50</sub> = (1.11±0.15) μmol/L; control EGG, IC<sub>50</sub> = (1.13±0.08) μmol/L)<sup>[3848]</sup>. Source: BING LANG *Areca catechu*, HONG HUA LU TI CAO *Pyrola incarnata*, HUANG HUA ER LIU *Salix caprea*, JIN YING ZI *Rosa laevigata*, LUO HUA SHENG *Arachis hypogaea* (seed), LUO YE SONG *Larix gmelini*, MAO ZHI HUA *Betula pubescens*, NIAN WEI LING CAI *Potentilla viscosa*, PU ER CHA *Camellia sinensis* var. *assamica*, PU<sup>(2)</sup> TAO *Vitis vinifera*, RUAN TIAO QI QIANG WEI *Rosa henryi*, YAN BAI CAI *Bergenia purpurascens*, YUE JU YE *Vaccinium vitis-idaea*, *Betula* spp. Ref: 1555, 3848.



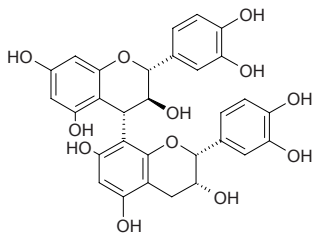


**17885 Procyanidin B<sub>3</sub>-7-*O*-β-D-glucopyranoside**

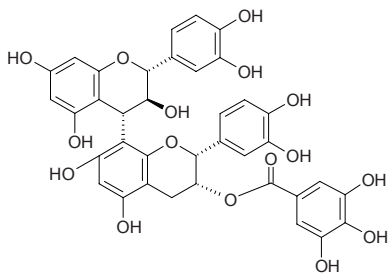
[105330-57-2] C<sub>36</sub>H<sub>36</sub>O<sub>17</sub> (740.68). Tan powder +1H<sub>2</sub>O, [α]<sub>D</sub><sup>19</sup> = -197.5° (c = 0.69, MeOH). Source: CHANG JI HUANG *Rheum* sp.<sup>[4893]</sup>. Ref: 1521, 3325, 4893.

**17886 Procyanidin B<sub>4</sub>**

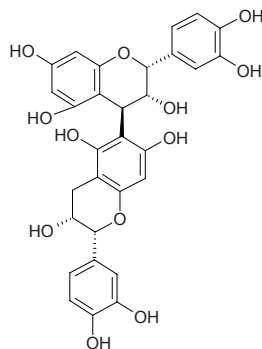
[29106-51-2] C<sub>30</sub>H<sub>26</sub>O<sub>12</sub> (578.53). mp 207~210°C. Pharm: Antioxidant; inhibits oxidation of LDL; antineoplastic (mus, TPA-induced skin tumor, 10 μmol/L with moderate action); antiulcerative; treatment of pediatric gastrointestinal functional disorder; antioxidant (DPPH scavenger, IC<sub>50</sub> = (1.02±0.09) μmol/L; control EGG, IC<sub>50</sub> = (1.13±0.08) μmol/L)<sup>[3848]</sup>. Source: FU PEN ZI *Rubus idaeus*, KUN MING SHAN HAI TANG *Tripterygium hypoglaucum*, LUO HUA SHENG *Arachis hypogaea* (seed). Ref: 612, 658, 1832, 1833, 3848.

**17887 Procyanidin B<sub>4</sub>-3'-*O*-gallate**

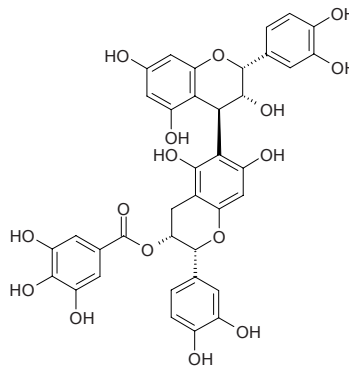
C<sub>37</sub>H<sub>30</sub>O<sub>16</sub> (730.64). Source: CHANG JI HUANG *Rheum* sp.<sup>[4893]</sup>. Ref: 2893, 4893.

**17888 Procyanidin B<sub>5</sub>**

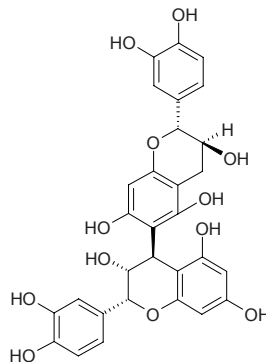
Proanthocyanidin B<sub>5</sub> [12798-57-1] C<sub>30</sub>H<sub>26</sub>O<sub>12</sub> (578.53). [α]<sub>D</sub> = +102° (H<sub>2</sub>O). Source: DAO NIAN ZI *Garcinia mangostana* (fruit hull)<sup>[3066]</sup>, DUN YE GUI PI *Cinnamomum bejolghota* [Syn. *Cinnamomum obtusifolium*; *Laurus bejolghota*], FU SHE SONG *Pinus radiata*, HAI ZHOU GU SUI BU *Davallia mariesii*, KE KE *Theobroma cacao*, MAO HANG ZI SHAO *Campylotropis hirtella*, OU ZHOU QI YE SHU *Aesculus hippocastanum*, ROU GUI *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*], SHU LIANG *Dioscorea cirrhosa* [Syn. *Dioscorea pogonoides*], TAI DA SONG *Pinus taeda*. Ref: 1521, 2604, 2871, 2908, 2963, 2977, 3066.

**17889 Procyanidin B<sub>5</sub> 3'-*O*-gallate**

C<sub>37</sub>H<sub>30</sub>O<sub>16</sub> (730.64). White powder, [α]<sub>D</sub><sup>22</sup> = 61° (c = 0.12, MeOH). Source: SHAN PU TAO *Vitis amurensis*. Ref: 772.

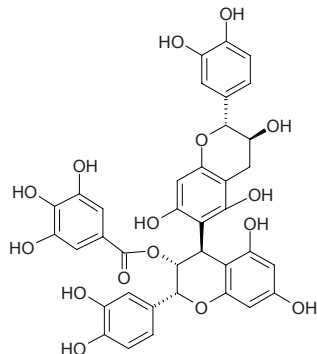
**17890 Procyanidin B<sub>7</sub>**

[12798-59-3] C<sub>30</sub>H<sub>26</sub>O<sub>12</sub> (578.53). [α]<sub>D</sub> = +142° (H<sub>2</sub>O). Source: CHANG JI HUANG *Rheum* sp.<sup>[4893]</sup>, HUANG HUA ER LIU *Salix caprea*, ROU GUI *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*], TAI DA SONG *Pinus taeda*, YUE JU YE *Vaccinium vitis-idaea*, ZHANG SHU PI *Cinnamomum camphora*. Ref: 1521, 2893, 2963, 3324, 4893.

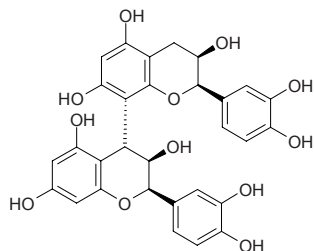


**17891 Procyanidin B<sub>7</sub>-3-O-gallate**

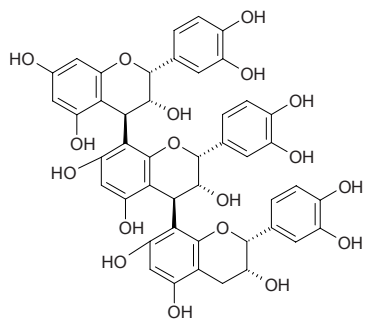
C<sub>37</sub>H<sub>30</sub>O<sub>16</sub> (730.64). Source: CHANG JI HUANG *Rheum* sp.<sup>[4893]</sup>. Ref: 2893, 4893.

**17892 Procyanidin C**

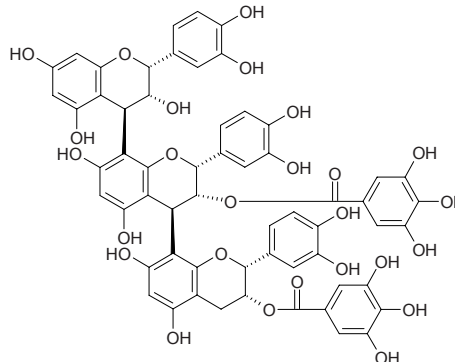
[35356-33-3] C<sub>30</sub>H<sub>26</sub>O<sub>12</sub> (578.53). mp 212~215°C, [α]<sub>D</sub><sup>27</sup> = -201° (methanol). Source: KUN MING SHAN HAI TANG *Tripterygium hypoglaucum*, HONG HUA LU TI CAO *Pyrola incarnata*. Ref: 612, 660.

**17893 Procyanidin C<sub>1</sub>**

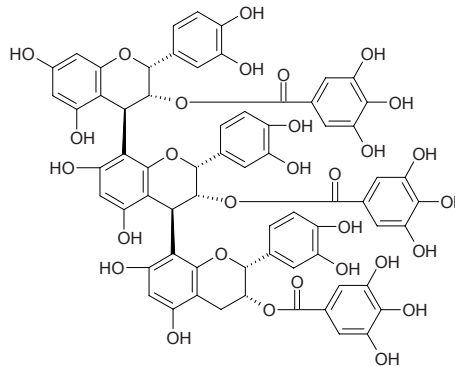
[65085-09-8] C<sub>45</sub>H<sub>38</sub>O<sub>18</sub> (866.79). [α]<sub>D</sub> = +102° (H<sub>2</sub>O). Source: MAO HANG ZI SHAO *Campylotropis hirtella*, ROU GUI *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*], SHU LIANG *Dioscorea cirrhosa* [Syn. *Dioscorea pognonoides*], ZHANG SHU PI *Cinnamomum camphora*, occurs in many plants. Ref: 660, 1521, 2871, 2963, 2977.

**17894 Procyanidin C<sub>1</sub>-3',3''-di-O-gallate**

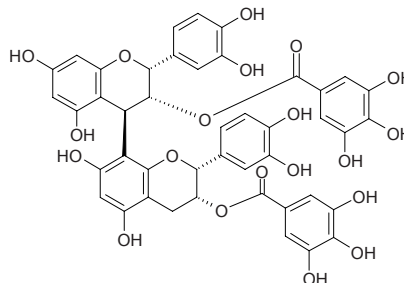
[106533-61-3] C<sub>59</sub>H<sub>46</sub>O<sub>26</sub> (1171.01). Tan amorphous powder +4H<sub>2</sub>O, [α]<sub>D</sub><sup>28</sup> = -5.5° (c = 0.64, Me<sub>2</sub>CO). Source: CHANG JI HUANG *Rheum* sp.<sup>[4893]</sup>. Ref: 2893, 4893.

**17895 Procyanidin C<sub>1</sub>-3,3',3''-tri-O-gallate**

[106533-62-4, 117772-85-7] C<sub>66</sub>H<sub>50</sub>O<sub>30</sub> (1323.12). Tan amorphous powder +3H<sub>2</sub>O, [α]<sub>D</sub><sup>28</sup> = +13.4° (c = 0.93, Me<sub>2</sub>CO). Pharm: Angiotensin I-converting enzyme inhibitor, ACEI (strong); xanthinoxidase inhibitor; antioxidant (peroxidized anion scavenger); cytotoxic (melanotic carcinoma RPMI-7951 ED<sub>50</sub> = 3.05 μg/mL). Source: CHANG JI HUANG *Rheum* sp.<sup>[4893]</sup>, HU ER CAO *Saxifraga stolonifera*. Ref: 1728, 2893, 3326, 3327, 4893.

**17896 Procyanidin B<sub>2</sub> 3,3'-di-O-gallate**

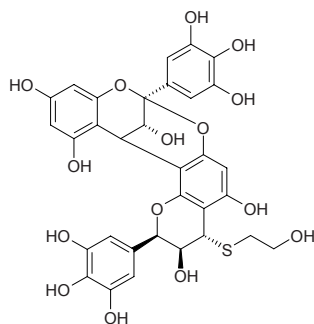
[79907-44-1] C<sub>44</sub>H<sub>34</sub>O<sub>20</sub> (882.75). Pharm: Antiviral (HSV-1, concentration for reducing spots by 50% PRD<sub>50</sub> = 15 μmol/L); cytotoxic (melanotic carcinoma RPMI-7951, ED<sub>50</sub> = 3.45 μg/mL); topoisomerase II inhibitor (*in vitro*, IC<sub>50</sub> = 12.5 μmol/L). Source: CHANG JI HUANG *Rheum* sp.<sup>[4893]</sup>, DA HUANG *Rheum officinale*, HONG HUA LU TI CAO *Pyrola incarnata*, TANG GU TE DA HUANG *Rheum tanguticum*, TIAN QIAO MAI GEN *Fagopyrum cymosum* [Syn. *Polygonum cymosum*], ZHANG YE DA HUANG *Rheum palmatum*. Ref: 2, 660, 1046, 1727, 1728, 2656, 2893, 3103, 4893.



**17897 Prodelphinidin A<sub>2</sub> 4'-(2-hydroxyethyl)thio ether**

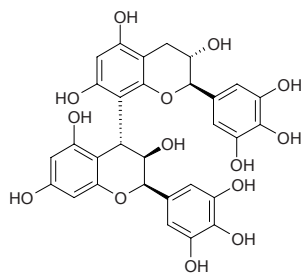
C<sub>32</sub>H<sub>28</sub>O<sub>15</sub>S (684.63). Red amorphous powder,  $[\alpha]_D = -18.6^\circ$  ( $c = 0.2$ , MeOH).

Source: XIAO GUO YE JIAO *Musa acuminata* (fruit). Ref: 3913.

**17898 Prodelphinidin B<sub>1</sub>**

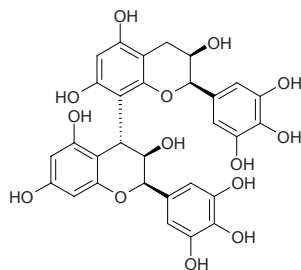
C<sub>30</sub>H<sub>26</sub>O<sub>14</sub> (610.53). Source: AN MO LE *Phyllanthus emblica* (leaf, branch).

Ref: 3094.

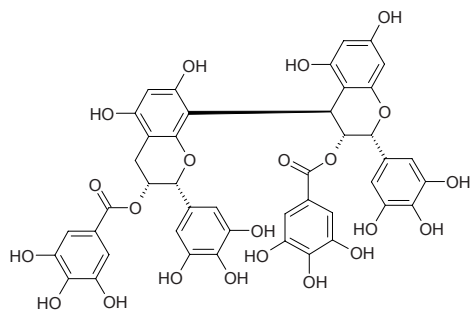
**17899 Prodelphinidin B<sub>2</sub>**

C<sub>30</sub>H<sub>26</sub>O<sub>14</sub> (610.53). Source: AN MO LE *Phyllanthus emblica* (leaf, branch).

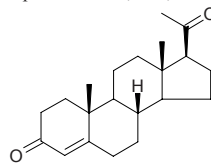
Ref: 3094.

**17900 Prodelphinidin B 23,3'-di-O-gallate**

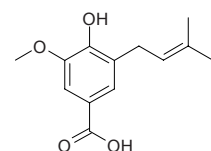
C<sub>44</sub>H<sub>34</sub>O<sub>22</sub> (914.75). Pharm: Anti-HSV-2 (*in vitro*, XTT and plaque reduction (PRA) assay, MOI (multiplicity of infection: Number of virus units (plaque forming units (PFU)) per cell) = 0.5, IC<sub>50</sub> = (5.3±0.1)μmol/L, CC<sub>50</sub> = (35.5±2.5)μmol/L, SI = 6.7, control Acyclovir IC<sub>50</sub> = (0.8±0.1)μmol/L, CC<sub>50</sub> > 1000μmol/L, SI > 1250; plaque reduction assay, IC<sub>50</sub> = (0.4±0.04)μmol/L, SI = 88.8, Acyclovir IC<sub>50</sub> = (0.4±0.1)μmol/L, SI > 2500). Source: YANG MEI SHU PI *Myrica rubra*. Ref: 5468.

**17901 Progesterone**

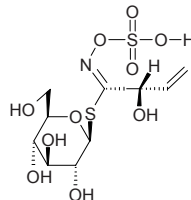
Pregn-4-ene-3,20-dione; Progestine; Progestone; Gestone; Nalutron; Luteol [57-83-0] C<sub>21</sub>H<sub>30</sub>O<sub>2</sub> (314.47). mp ( $\alpha$ ) 129~131°C, mp ( $\beta$ ) 121°C,  $[\alpha]_D^{20} (\beta) = +172\sim182^\circ$  ( $c = 2$ , dioxane), insoluble in water, soluble in ethanol, acetone, chloroform, dioxane.<sup>[5507]</sup> Pharm: Steroid hormone (responsible for preparing the inner lining of the uterus for pregnancy). Source: ZI HE CHE *Homo sapiens*. Ref: 6, 658, 5507.

**17902 Proglobleflowery acid**

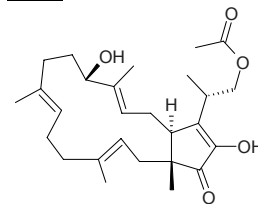
3-Methoxy-4-hydroxyl-5-(3'-methyl-2') butylenyl benzoic acid [146367-85-3] C<sub>13</sub>H<sub>16</sub>O<sub>4</sub> (236.27). White acicular crystals (ethanol-water), mp 141~142°C, hardly soluble in water, easily soluble in 5mol/L NaHCO<sub>3</sub>. Source: CHANG BAN JIN LIAN HUA *Trollius macropetalus*. Ref: 245.

**17903 Progoitrin**

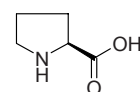
[585-95-5] C<sub>11</sub>H<sub>19</sub>NO<sub>10</sub>S<sub>2</sub> (389.40). Pharm: Causes goitre; feeding irritant (*Plutella maculipennis*); promotes oviposition (*Delia brassicae*); toxin (animal model). Source: YOU CAI ZI *Brassica napus* var. *napus*, JIE ZI *Brassica juncea*, GAN LAN *Brassica oleracea* var. *capitata*. Ref: 658.

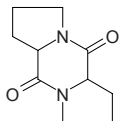
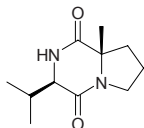
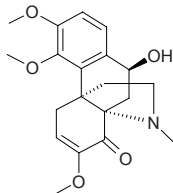
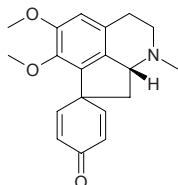
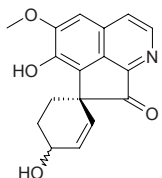
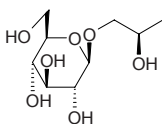
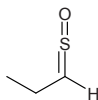
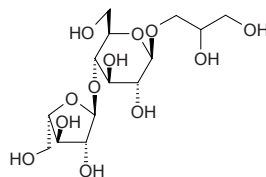
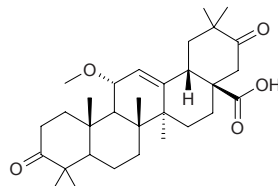
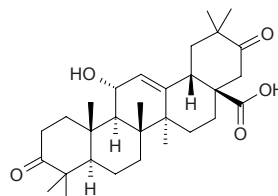
**17904 Proliferin**

Fysaproliferin [152469-17-5] C<sub>27</sub>H<sub>40</sub>O<sub>5</sub> (444.61). Amorphous solid, mp 142~147°C,  $[\alpha]_D = -35^\circ$  ( $c = 0.255$ , methanol). Pharm: Toxin (*Artemia salina*). Source: DUN YE SHU YU *Dioscorea zingiberensis*. Ref: 1166.

**17905 Proline**

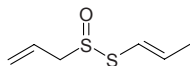
[147-85-3] C<sub>5</sub>H<sub>9</sub>NO<sub>2</sub> (115.13). Crystals (EtOH-Et<sub>2</sub>O), mp 220~222°C (dec),  $[\alpha]_D^{25} = -86.2^\circ$  ( $c = 1$ , H<sub>2</sub>O),  $[\alpha]_D = -60.4^\circ$  ( $c = 1$ , 5M HCl). Source: BAN XIA *Pinellia ternata* (dried tuber: content scope of 4 origins = 0.07%~0.74%, mean content = 0.52%)<sup>[5521]</sup>, occurs in many plants. Ref: 1521, 5521.



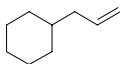
**17906 L-Prolyl-L-proline anhydride**C<sub>10</sub>H<sub>14</sub>N<sub>2</sub>O<sub>2</sub> (194.24). Source: ZHANG YE BAN XIA *Pinellia pedatisecta*.Ref: 477.**17907 L-Prolyl-L-valine anhydride**C<sub>11</sub>H<sub>18</sub>N<sub>2</sub>O<sub>2</sub> (210.28). Source: ZHANG YE BAN XIA *Pinellia pedatisecta*.Ref: 3328.**17908 Prometaphanine**[6858-85-1] C<sub>20</sub>H<sub>25</sub>NO<sub>5</sub> (359.43). Source: QIAN JIN TENG *Stephania**japonica*. Ref: 6, 1521.**17909 Pronuciferine**[2128-60-1] C<sub>19</sub>H<sub>21</sub>NO<sub>3</sub> (311.38). mp (+) 127~129°C, (±) 148~1451°C. Pharm:Local anesthetic. Source: GUANG YE DI BU RONG *Stephania glabra*, HE YE *Nelumbo nucifera*, LIAN ZI *Nelumbo nucifera*, LIAN ZI XIN *Nelumbo nucifera*, XIAN YE BA DOU *Croton linearis*. Ref: 6, 658.**17910 Prooxocryprochine**C<sub>17</sub>H<sub>15</sub>NO<sub>4</sub> (297.31). Yellow syrup, [α]<sub>D</sub><sup>20</sup> = -17.2° (c = 0.0193, MeOH). Source:HOU KE GUI *Cryptocarya chinensis* (wood). Ref: 3092.**17911 (2S)-Propane-1,2-diol 1-O-β-D-glucopyranoside**C<sub>9</sub>H<sub>18</sub>O<sub>7</sub> (238.24). Amorphous powder, [α]<sub>D</sub><sup>21</sup> = -8°. Source: HU SUI ZI*Coriandrum sativum*. Ref: 4302.**17912 Propanethial S-oxide**C<sub>3</sub>H<sub>6</sub>OS (90.15). Pharm: Lacrimator. Source: YANG CONG *Allium cepa*. Ref: 658.**17913 Propane-1-thiol**[107-03-9] C<sub>3</sub>H<sub>8</sub>S (76.16). Pharm: Flavorant. Source: BAI FAN DOU*Phaseolus vulgaris*, DA TOU SUAN *Allium ampeloprasum*, MA LING SHU *Solanum tuberosum*, WAN DOU *Pisum sativum*, YANG CONG *Allium cepa*.Ref: 658.**17914 Propane-2-thiol**[75-33-2] C<sub>3</sub>H<sub>8</sub>S (76.16). Pharm: Flavorant. Source: MA LING SHU *Solanum tuberosum*. Ref: 658.**17915 Propanetriol-α-L-arabinofuranosyl (1→4)-β-D-glucopyranoside**C<sub>14</sub>H<sub>26</sub>O<sub>12</sub> (386.36). Pharm: Antihypertensive. Source: HONG HUA*Carthamus tinctorius*. Ref: 3329.**17916 n-Propanol**[71-23-8] C<sub>3</sub>H<sub>8</sub>O (60.10). Source: SHENG JIANG *Zingiber officinale*. Ref: 2.**17917 Propapyriogenin A<sub>1</sub>**[72933-73-4] C<sub>31</sub>H<sub>46</sub>O<sub>5</sub> (498.71). Crystals (Et<sub>2</sub>O-C<sub>6</sub>H<sub>6</sub>), mp 142~145°C, [α]<sub>D</sub><sup>20</sup> = -30° (c = 0.1, EtOH). Source: TONG TUO MU *Tetrapanax papyriferus*. Ref: 3135.**17918 Propapyriogenin A<sub>2</sub>**[72933-74-5] C<sub>30</sub>H<sub>44</sub>O<sub>5</sub> (484.68). Pharm: Anti-inflammatory. Source: TONGTUO MU *Tetrapanax papyriferus*, YUAN YE CHAI HU *Bupleurum rotundifolium*. Ref: 658.

**17919 1-Propenylallylthiosulfinate**

$C_6H_{10}OS_2$  (162.27). Source: DA SUAN *Allium sativum*. Ref: 1392.

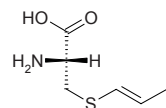
**17920 1-Propenyl-cyclohexane**

[2114-42-3]  $C_9H_{16}$  (124.23). Source: SHAN ZHA *Crataegus pinnatifida*. Ref: 2.

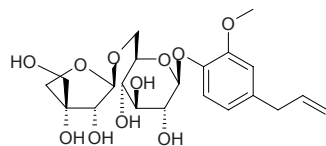
**17921 S-(1-Propenyl)-L-cystein**

[52438-09-2]  $C_6H_{11}NO_2S$  (161.22). Needles (EtOH aq.), mp 195°C (dec),  $[\alpha]_D^{10} = -15^\circ$  ( $c = 0.4$ , 2N HCl). Source: DA SUAN *Allium sativum*. Ref:

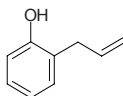
3110.

**17922 4-Propenyl-2-methoxyphenyl 6-O-β-D-apiofuranosyl (1→6)-β-D-glucopyranoside**

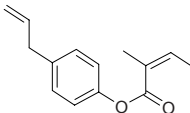
$C_{21}H_{30}O_{11}$  (458.47). Source: ZHONG HUA QING NIU DAN *Tinospora sinensis* (stem). Ref: 4292.

**17923 2-(2-Propenyl) phenol**

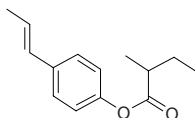
$C_9H_{10}O$  (134.18). Source: DA LIANG JIANG *Alpinia galanga*. Ref: 660.

**17924 4-(2-Propenyl)-phenyl angelate**

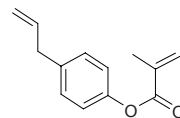
$C_{14}H_{16}O_2$  (216.28). Colorless oil. Pharm: Antimycobacterial (*Mycobacterium intracellulare*,  $IC_{50} = 7.0\mu g/mL$ , control Ciprofloxacin,  $IC_{50} = 0.25\mu g/mL$ ); antifungal (*Cryptococcus neoformans*,  $IC_{50} = 40\mu g/mL$ , control Amphotericin B,  $IC_{50} = 0.5\mu g/mL$ ); antimalarial (*Plasmodium falciparum* D6,  $IC_{50} = 2.2\mu g/mL$ , SI > 4.5, control Artemisinin,  $IC_{50} = 0.006\mu g/mL$ ; *Plasmodium falciparum* W2,  $IC_{50} = 1.8\mu g/mL$ , SI > 5.5, control Artemisinin,  $IC_{50} = 0.007\mu g/mL$ ). Source: *Pimpinella isaurica*. Ref: 5465.

**17925 4-(1-Propenyl)-phenyl 2-methylbutanoate**

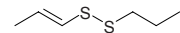
Anethol 2-methyl-butyrate  $C_{14}H_{18}O_2$  (218.30). Colorless oil. Source: *Pimpinella corymbosa*. Ref: 5465.

**17926 4-(1-Propenyl)-phenyl tiglate**

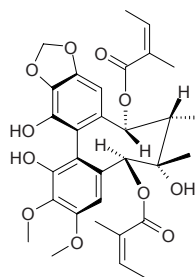
Anol tiglate  $C_{14}H_{16}O_2$  (216.28). Colorless oil. Pharm: Antimycobacterial (*Mycobacterium intracellulare*,  $IC_{50} = 15\mu g/mL$ , control Ciprofloxacin,  $IC_{50} = 0.25\mu g/mL$ ); antifungal (*Cryptococcus neoformans*,  $IC_{50} = 25\mu g/mL$ , control Amphotericin B,  $IC_{50} = 0.5\mu g/mL$ ). Source: *Pimpinella isaurica*. Ref: 5465.

**17927 Propenyl propyl disulfide**

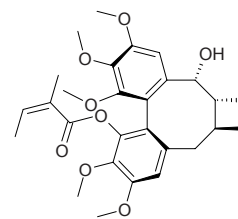
$C_6H_{12}S_2$  (148.29). Source: XI XIANG CONG *Allium schoenoprasum*. Ref: 6.

**17928 Propinquanin E**

$C_{31}H_{36}O_{11}$  (584.63). Colorless needles, mp 110–112°C,  $[\alpha]_D^{20} = +34^\circ C$  ( $c = 0.22$ ,  $CHCl_3$ ). Pharm: Cytotoxic (hmn hepatocellular carcinoma HepG2,  $IC_{50} = 35.95\mu mol/L$ , control Camptothecin,  $IC_{50} = 1.23\mu mol/L$ ; hmn oropharyngeal epidermoid carcinoma KB,  $IC_{50} = 46.23\mu mol/L$ , Camptothecin,  $IC_{50} = 1.78\mu mol/L$ ; hmn acute promyelocytic leukemia HL-60,  $IC_{50} = 32.53\mu mol/L$ , Camptothecin,  $IC_{50} = 1.35\mu mol/L$ ; hepatocellular carcinoma Bel7402,  $IC_{50} = 39.38\mu mol/L$ , Camptothecin,  $IC_{50} = 1.02\mu mol/L$ ). Source: HAN RUI WU WEI ZI *Schisandra propinqua* (stem: yield = 0.00086% dw). Ref: 2097.

**17929 Propinquanin F**

$C_{28}H_{36}O_8$  (500.59). Colorless needles, mp 109°C,  $[\alpha]_D^{20} = +8.5^\circ$  ( $c = 1.48$ ,  $CHCl_3$ ). Pharm: Cytotoxic (hmn hepatocellular carcinoma HepG2,  $IC_{50} = 59.91\mu mol/L$ , control Camptothecin,  $IC_{50} = 1.23\mu mol/L$ ; hmn oropharyngeal epidermoid carcinoma KB,  $IC_{50} = 42.98\mu mol/L$ , Camptothecin,  $IC_{50} = 1.78\mu mol/L$ ; hmn acute promyelocytic leukemia HL-60,  $IC_{50} = 60.02\mu mol/L$ , Camptothecin,  $IC_{50} = 1.35\mu mol/L$ ). Source: HAN RUI WU WEI ZI *Schisandra propinqua* (stem: yield = 0.0037% dw). Ref: 2097.

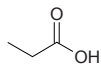
**17930 Propionaldehyde**

Propanal [123-38-6]  $C_3H_6O$  (58.08). Source: SHENG JIANG *Zingiber officinale*. Ref: 2.

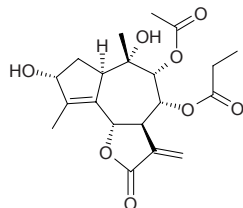


**17931 Propionic acid**

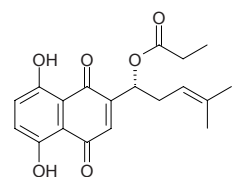
Propanoic acid [79-09-4] C<sub>3</sub>H<sub>6</sub>O<sub>2</sub> (74.08). bp 141.35°C. **Pharm:** Antifungal; antiseptic; inhibits molds. **Source:** BAI GUO *Ginkgo biloba*. **Ref:** 2, 658.

**17932 8α-Propionyloxanthemolide C**

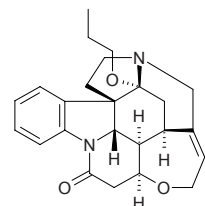
C<sub>20</sub>H<sub>26</sub>O<sub>8</sub> (394.43). Amorphous solid. **Source:** *Anthemis carpatica* (aerial parts). **Ref:** 3974.

**17933 Propionylshikonin**

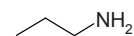
C<sub>19</sub>H<sub>20</sub>O<sub>6</sub> (344.37). **Source:** ZI CAO *Lithospermum erythrorhizon*. **Ref:** 2193.

**17934 16-Propoxystrychnine**

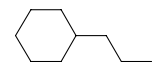
C<sub>24</sub>H<sub>28</sub>N<sub>2</sub>O<sub>3</sub> (392.50). mp 174~175°C. **Source:** LV SONG GUO *Strychnos ignatii*. **Ref:** 6.

**17935 Propylamine**

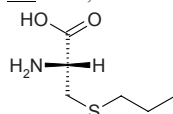
*n*-Propylamine [107-10-8] C<sub>3</sub>H<sub>9</sub>N (59.11). bp 49°C. **Source:** LING MAO XIANG *Viverra zibetha*. **Ref:** 6.

**17936 Propylcyclohexane**

[1678-92-8] C<sub>9</sub>H<sub>18</sub> (126.24). **Source:** SHAN ZHA *Crataegus pinnatifida*. **Ref:** 2.

**17937 S-Propyl-L-cystein**

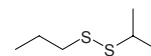
C<sub>6</sub>H<sub>13</sub>NO<sub>2</sub>S (163.24). [α]<sub>D</sub> = -24.9° (H<sub>2</sub>O). **Source:** DA SUAN *Allium sativum*. **Ref:** 1521, 3330.

**17938 2-N-Propyl-1,3-dioxolane**

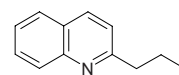
C<sub>5</sub>H<sub>11</sub>NO<sub>2</sub> (117.15). **Source:** AI YE *Artemisia argyi*. **Ref:** 1280.

**17939 Propyl isopropyl disulfide**

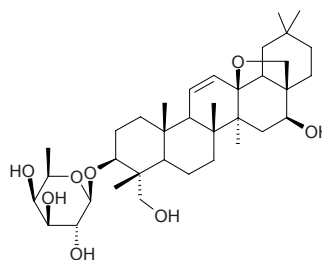
C<sub>6</sub>H<sub>14</sub>S<sub>2</sub> (150.31). **Source:** XIE BAI *Allium macrostemon*. **Ref:** 1391.

**17940 2-n-Propylquinoline**

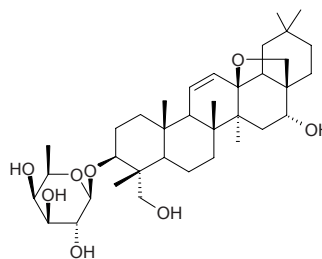
[1613-32-7] C<sub>12</sub>H<sub>13</sub>N (171.24). Oil. **Pharm:** Antileishmanial (*in vitro*: *Leishmania* sp. 2903 IC<sub>50</sub> = 50μg/mL, *Trypanosoma cruzi* IC<sub>50</sub> = 50μg/mL, mus-infected *Leishmania amazonensis*); antiplasmodial (*in vivo*: mus, infected by *Plasmodium vinckei*, 0.31mmol/L/kg, survival rate = 60%); plant growth and germination inhibitor (lettuce WO JU *Lactuca sativa*). **Source:** BAO PIAN TU LA SHU *Galipea bracteata*, CHANG HUA TU LA SHU *Galipea longiflora*. **Ref:** 3600, 3601, 3602, 3603.

**17941 Prosaikogenin F**

3-*O*-β-*D*-Fucopyranosyl saikogenin F C<sub>36</sub>H<sub>58</sub>O<sub>8</sub> (618.86). **Source:** ZHU YE CHAI HU *Bupleurum marginatum*. **Ref:** 660.

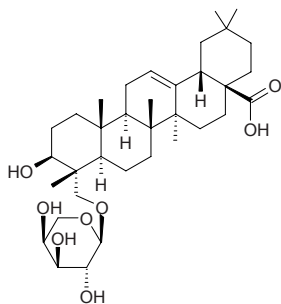
**17942 Prosaikogenin G**

C<sub>36</sub>H<sub>58</sub>O<sub>8</sub> (618.86). **Source:** WEN CHUAN CHAI HU *Bupleurum wenchuanense*. **Ref:** 3331.

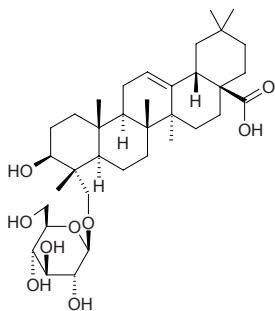


**17943 Prosapogenin CP<sub>0</sub>**

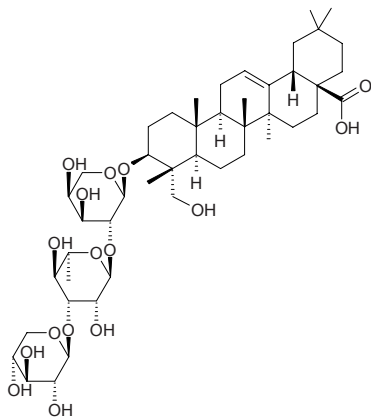
Hederagenin-23-*O*- $\alpha$ -*L*-arabinopyranoside C<sub>35</sub>H<sub>56</sub>O<sub>8</sub> (604.83). Source: WEI LING XIAN *Clematis chinensis*. Ref: 660.

**17944 Prosapogenin CP<sub>2a</sub>**

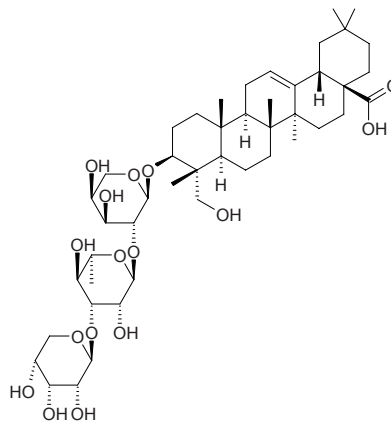
Hederagenin-23-*O*- $\beta$ -*D*-glucopyranoside C<sub>36</sub>H<sub>58</sub>O<sub>9</sub> (634.86). Source: WEI LING XIAN *Clematis chinensis*. Ref: 660.

**17945 Prosapogenin CP<sub>5</sub>**

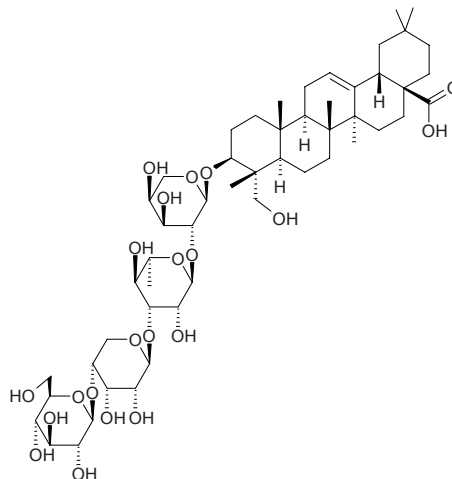
Hederagenin-3-*O*- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranoside C<sub>46</sub>H<sub>74</sub>O<sub>16</sub> (883.09). Source: YU ZHI ZI *Akebia quinata*. Ref: 660.

**17946 Prosapogenin CP<sub>6</sub>**

Hederagenin-3-*O*- $\beta$ -*D*-ribopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranoside C<sub>46</sub>H<sub>74</sub>O<sub>16</sub> (883.09). Source: WEI LING XIAN *Clematis chinensis*, XI ZANG TIE XIAN LIAN *Clematis tibetana* (aerial parts). Ref: 660, 3530.

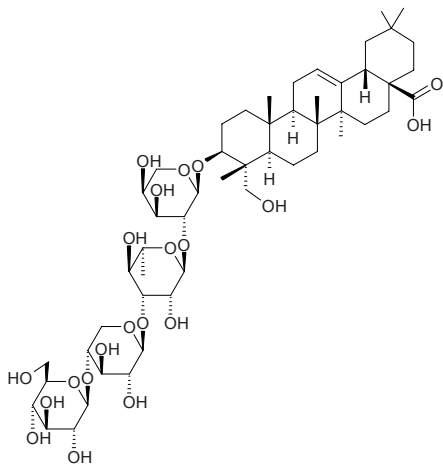
**17947 Prosapogenin CP<sub>8</sub>**

Hederagenin-3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-ribopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranoside C<sub>52</sub>H<sub>84</sub>O<sub>21</sub> (1045.24). Source: WEI LING XIAN *Clematis chinensis*, XI ZANG TIE XIAN LIAN *Clematis tibetana* (aerial parts). Ref: 660, 3530.

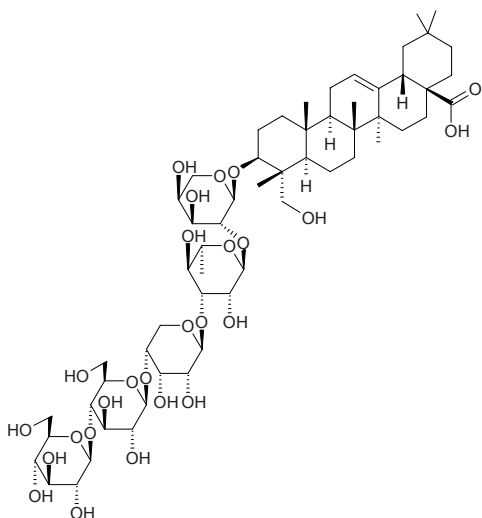


**17948 Prosapogenin CP<sub>8a</sub>**

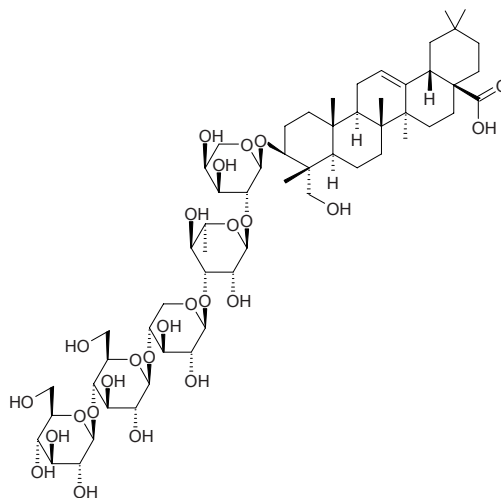
Hederagenin-3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranoside C<sub>52</sub>H<sub>84</sub>O<sub>21</sub> (1045.24). Source: WEI LING XIAN *Clematis chinensis*. Ref: 660.

**17949 Prosapogenin CP<sub>10</sub>**

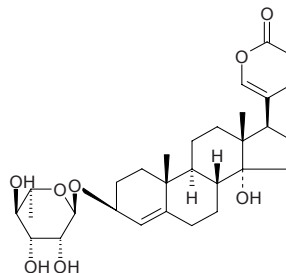
Hederagenin-3-*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 4)- $\beta$ -*D*-ribofuranosyl-(1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranoside C<sub>58</sub>H<sub>94</sub>O<sub>26</sub> (1207.38). Source: WEI LING XIAN *Clematis chinensis*, XI ZANG TIE XIAN LIAN *Clematis tibetana* (aerial parts). Ref: 660, 3530.

**17950 Prosapogenin CP<sub>10a</sub>**

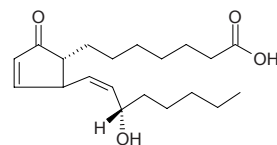
Hederagenin-3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranoside C<sub>58</sub>H<sub>94</sub>O<sub>26</sub> (1207.38). Source: WEI LING XIAN *Clematis chinensis*. Ref: 660.

**17951 Proscillaridin A**

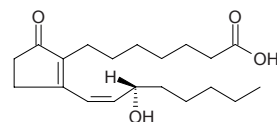
C<sub>30</sub>H<sub>42</sub>O<sub>8</sub> (530.66). mp 215–218°C. Source: MIAN ZAO ER *Scilla scilloides*. Ref: 6.

**17952 Prostaglandin A<sub>1</sub>**

[14152-28-4] C<sub>20</sub>H<sub>32</sub>O<sub>4</sub> (336.48). Colorless powder, mp 42–44°C, easily soluble in MeOH, alcohol, CHCl<sub>3</sub>; insoluble in water. Pharm: Antihypertensive; diuretic; antineoplastic; antiviral (poliomyelitis virus and Mayaro virus, inhibits reproduction); prostaglandin-like physio-activities. Source: FEN NIE CONG TOU *Allium cepa* var. *agrogatum*, XIE BAI *Allium macrostemon* (dried bulb: content = 0.589%<sup>[5508]</sup>). Ref: 3644, 3645, 3646, 3647, 3648, 5508.

**17953 Prostaglandin B<sub>1</sub>**

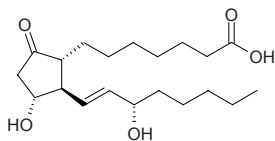
[13345-51-2] C<sub>20</sub>H<sub>32</sub>O<sub>4</sub> (336.48). Yellowish oil. Pharm: Strengthens vasoconstriction (stronger than PGE<sub>2</sub> and PGF<sub>2a</sub>); prostaglandin-like physio-activities. Source: XIE BAI *Allium macrostemon*. Ref: 3645.



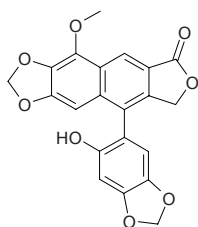


**17954 Prostaglandin E<sub>1</sub>**

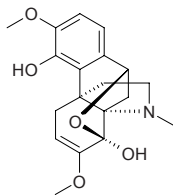
PGE<sub>1</sub> [745-65-3] C<sub>20</sub>H<sub>34</sub>O<sub>5</sub> (354.49). Crystals (EtOAc), mp 114–116.5°C,  $[\alpha]_D^{24} = -53.2^\circ$  ( $c = 0.977$ , THF). Source: LU RONG *Cervus nippon*; *Cervus elaphus*. Ref: 1521, 3332, 5507.

**17955 Prostalidin A**

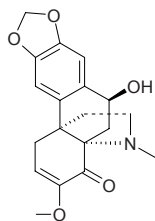
[73461-17-3] C<sub>21</sub>H<sub>14</sub>O<sub>8</sub> (394.34). Pharm: Antidepressant. Source: JUE CHUANG *Rostellularia procumbens* [Syn. *Justicia procumbens*]. Ref: 658.

**17956 Prostephabyssine**

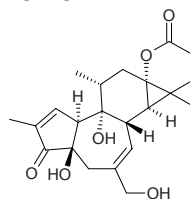
[36871-88-2] C<sub>19</sub>H<sub>23</sub>NO<sub>5</sub> (345.40). Pale-yellow glass. Source: FEN JI DU *Stephania longa*, *Stephania abyssinica*. Ref: 3333, 3334.

**17957 Prosteph aberrine**

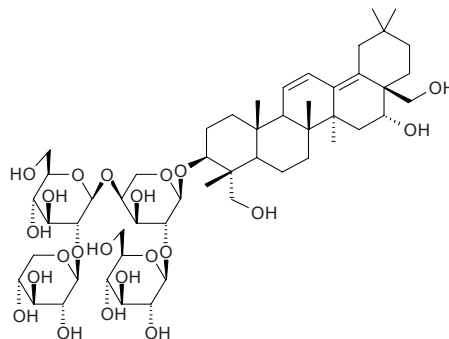
[105608-27-3] C<sub>19</sub>H<sub>21</sub>NO<sub>5</sub> (343.38). Light-yellow prisms (MeOH), mp 225°C (dec),  $[\alpha]_D^{15} = -219.1^\circ$  ( $c = 0.25$ , CHCl<sub>3</sub>). Source: QIAN JIN TENG *Stephania japonica*. Ref: 3335.

**17958 Prostratin**

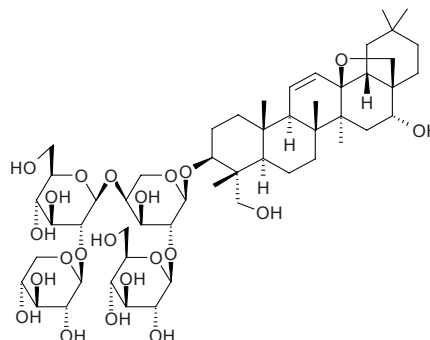
[60857-08-1] C<sub>22</sub>H<sub>30</sub>O<sub>6</sub> (390.48). Crystals (acetone), mp 225°C, 217–218°C,  $[\alpha]_D = +64^\circ$  ( $c = 0.13$ , MeOH). Pharm: Anti-HIV (CEM-SS cells infected by HIV-1, has anti-HIV-1 activity, inhibits produce of viral antigen P24 and plasmodia); used in treatment of AIDS; sedative (mus, 20mg/kg orl, InRt = 92%, 1 mg/kg sc, InRt = 62%); analgesic (mus, 20mg/kg orl, InRt = 96%, 1 mg/kg sc, InRt = 48%); inhibits hyperplasia induced by PMA (mus); ornithine decarboxylase inhibitor; anti-inflammatory (inhibits edema and inflammation induced by PMA). Source: CAO WU JIU *Stillingia sylvatica* [Syn. *Sapium sylvatica*], JIAN JIAN AO YANG *Homalanthus acuminatus*, LANG DU DA JI *Euphorbia fischeriana*, PING WO DAO HUA *Pimelea prostrata*, XIA CHUI AO YANG *Homalanthus nutans*, ZONG ZHUANG JIA RUI XIANG *Daphnopsis racemosa*. Ref: 900.

**17959 Prostratoside D**

3-*O*-{ $\beta$ -*D*-Xylopyranosyl-(1→2)- $\beta$ -*D*-glucopyranosyl-(1→4)-[ $\beta$ -*D*-glucopyranosyl-(1→2)]- $\alpha$ -*L*-arabinopyranoside}-saikogenin C<sub>52</sub>H<sub>84</sub>O<sub>22</sub> (1061.24). White powder, mp 246–248°C,  $[\alpha]_D^{25} = -21.0^\circ$  ( $c = 0.58$ , MeOH). Source: DUO JIA CAO *Polycarpon prostratum*. Ref: 2136.

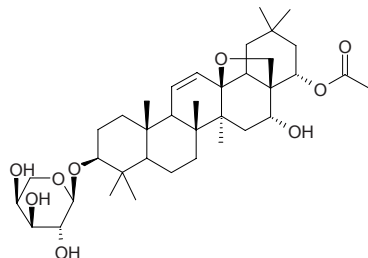
**17960 Prostratoside E**

3-*O*-{ $\beta$ -*D*-Xylopyranosyl-(1→2)- $\beta$ -*D*-glucopyranosyl-(1→4)-[ $\beta$ -*D*-glucopyranosyl-(1→2)]- $\alpha$ -*L*-arabinopyranoside}-saikogenin G C<sub>52</sub>H<sub>84</sub>O<sub>22</sub> (1061.24). White powder mp 223–226°C,  $[\alpha]_D^{25} = +14.7^\circ$  ( $c = 0.51$ , MeOH). Source: DUO JIA CAO *Polycarpon prostratum*. Ref: 2136.

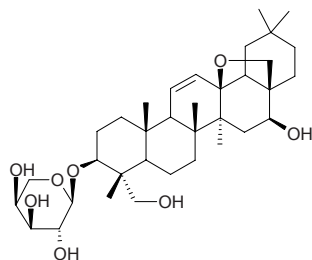


**17961 Prostratoside I**

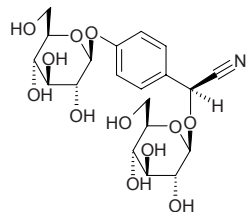
3-*O*- $\alpha$ -L-Arabinopyranosyl-16 $\alpha$ -hydroxy-22 $\alpha$ -acetoxy-saikogenin E  
 $C_{37}H_{58}O_{19}$  (646.87). White powder. Source: DUO JIA CAO *Polycarpon prostratum*. Ref: 2086.

**17962 Prostratoside J**

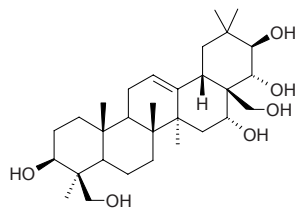
3-*O*- $\alpha$ -L-Arabinopyranosyl saikogenin F  $C_{35}H_{56}O_8$  (604.83). White powder.  
Source: DUO JIA CAO *Polycarpon prostratum*. Ref: 2086.

**17963 Proteacin**

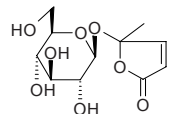
$C_{19}H_{27}NO_{12}$  (461.43). Pharm: Toxin. Source: AO ZHOU JIAN GUO  
*Macadamia ternifolia*. Ref: 658.

**17964 Protoescigenin**

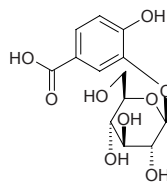
$C_{30}H_{50}O_6$  (506.73). mp 310°C. Source: RI BEN QI YE SHU *Aesculus turbinata*. Ref: 6, 660.

**17965 Protoanemonin hydrate glucoside**

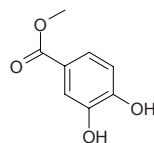
$C_{11}H_{16}O_8$  (276.25). Source: BAI HUA TENG *Clematis terniflora* [Syn.  
*Clematis maximowicziana*]. Ref: 6.

**17966 Protocatechuic acid-3-glucoside**

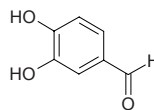
$C_{13}H_{16}O_9$  (316.27). Source: YE LI ZHI YE *Pyrus calleryana*. Ref: 6.

**17967 Protocatechuic acid methyl ester**

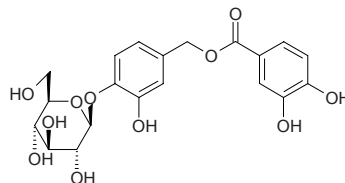
$C_8H_8O_4$  (168.15). Source: ZANG HONG HUA *Crocus sativus* (pollen). Ref: 4233.

**17968 Protocatechuic aldehyde**

Protocatechualdehyde; 3,4-Dihydroxybenzyl aldehyde [139-85-5]  $C_7H_6O_3$   
 (138.12). Light cream-color dacrular crystals (water), mp 153~154°C.  
Pharm: Coronary vasodilator. Source: AI NA XIANG *Blumea balsamifera*  
 (leaf and twig: mean content = 0.0072%)<sup>[5508]</sup>, BAN XIA *Pinellia ternata*,  
 BIAN FU GE GEN *Menispermum dauricum*, DAN SHEN *Salvia miltiorrhiza*  
 (dried root: mean content of 9 origins = 0.0602%)<sup>[5508]</sup>, GAN XI SHU WEI  
 CAO *Salvia przewalskii* (dried root: content = 0.065%)<sup>[5508]</sup>, HONG GEN  
 CAO *Salvia prionitis* (dried root: content = 0.014%)<sup>[5508]</sup>, HUANG HUA  
 SHU WEI CAO *Salvia flava* (dried root: content = 0.024%)<sup>[5508]</sup>, JI YE SHU  
 WEI CAO *Salvia bulleyana* (dried root: content = 0.024%)<sup>[5508]</sup>, JIA LEI JUE  
 MING *Cassia garrettiana* (heartwood), LAN YU BAI JI *Bletilla formosana*  
 (whole herb), LI SE SHU WEI CAO *Salvia castanea* (dried root: content =  
 0.039%)<sup>[5508]</sup>, MAO DI HUANG SHU WEI CAO *Salvia digitaloides* (dried  
 root: content = 0.014%)<sup>[5508]</sup>, NAN DAN SHEN *Salvia bowleyana* (dried root:  
 content = 0.060%)<sup>[5508]</sup>, NI DAN SHEN *Salvia sinica* (dried root: content =  
 0.015%)<sup>[5508]</sup>, SAN YE SHU WEI CAO *Salvia trijuga* (dried root: content =  
 0.044%)<sup>[5508]</sup>, SANG HUANG *Phellinus igniarius* (sporocarp: yield =  
 0.0060%dw), SI JI QING *Ilex chinensis* [Syn. *Ilex purpurea*], TIAN MA  
*Gastrodia elata*, YUN NAN SHU WEI CAO *Salvia yunnanensis* (dried root:  
 content = 0.022%)<sup>[5508]</sup>, ZI DAN SHEN *Salvia przewalskii* var. *mandarinorum*  
 (dried root: content = %) <sup>[5508]</sup>, ZONG LV PI *Trachycarpus fortunei* (petiole  
 and fibre of sheath, roasted petiole: mean content of 5 origins = 0.156%)<sup>[5508]</sup>.  
Ref: 2, 4, 6, 661, 1521, 3792, 4500, 4747, 5501, 5508.

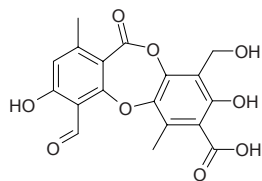
**17969 Protocatechuoyl calleryanin**

$C_{20}H_{22}O_{11}$  (438.39). Source: YE LI ZHI YE *Pyrus calleryana*. Ref: 6.

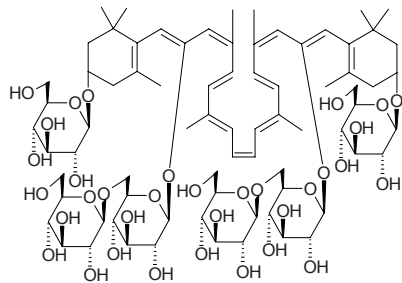


**17970 Protocetraric acid**

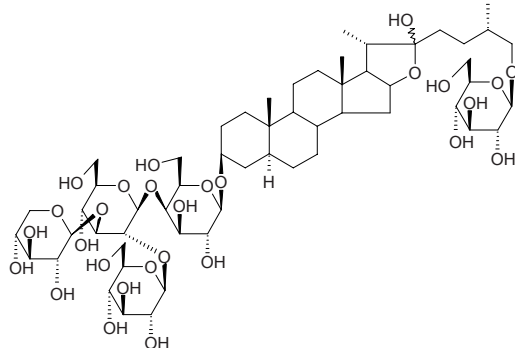
$C_{18}H_{14}O_9$  (374.31). Source: ZONG JUAN SHI RUI *Cladonia convoluta*. Ref: 5027.

**17971 Protocrocin**

$C_{76}H_{116}O_{34}$  (1573.75). Source: ZANG HONG HUA *Crocus sativus*. Ref: 6.

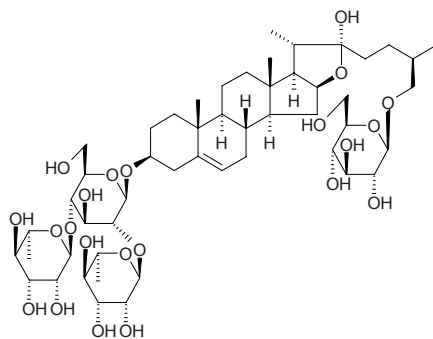
**17972 Protodesgalactotigonin**

$C_{56}H_{94}O_{28}$  (1215.36). Source: DA SUAN *Allium sativum*. Ref: 3336.

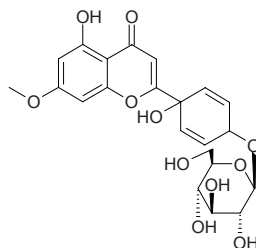
**17973 Protodioscin**

[54506-80-9]  $C_{51}H_{84}O_{22}$  (1049.23). Colorless rhombic crystals (water), mp 190~196°C (dec),  $[\alpha]_D = -79.8^\circ$  ( $c = 0.99$ , pyridine); mp 267~271°C (dec).

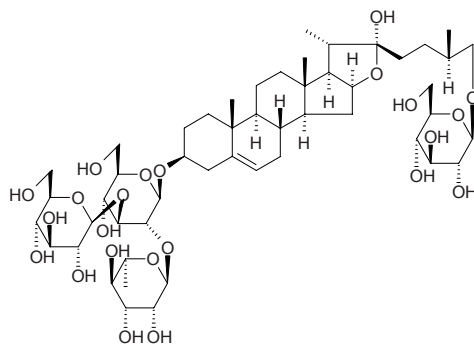
Pharm: Cytotoxic (hmn PC-6,  $IC_{50} = 1.53 \mu\text{g/mL}$ , hmn MCF7,  $IC_{50} = 1.86 \mu\text{g/mL}$ , hmn SW620,  $IC_{50} = 1.83 \mu\text{g/mL}$ , hmn NUGC-3,  $IC_{50} = 1.69 \mu\text{g/mL}$ , mus P<sub>388</sub>,  $IC_{50} = 1.67 \mu\text{g/mL}$ ). Source: QIE ZI *Solanum melongena*, SHAN BI XIE *Dioscorea tokoro*, TIAN QIE ZI *Solanum indicum*, XIAN XI SHU YU *Dioscorea gracillima*, ZHANG LIU TOU *Costus speciosus*. Ref: 658, 900, 1462, 2730.

**17974 Protogenkwanin-4'-glucoside**

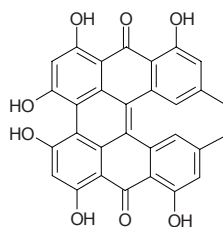
[78983-46-7]  $C_{22}H_{24}O_{11}$  (464.43). Needles (MeOH), mp 129~131°C,  $[\alpha]_D^{18} = -40^\circ$  ( $c = 1$ , pyridine). Source: GUANG NANG ZI BING JUE *Pseudophegopteris subaurita*, WEN JING *Equisetum arvense*, *Pseudophegopteris bukoensis*, *Pseudophegopteris hirtirachis*. Ref: 1521.

**17975 Protograccilin**

[54848-30-5]  $C_{51}H_{84}O_{23}$  (1065.22). White rhombic crystals, mp 223~225°C,  $[\alpha]_D^{25} = -75.1^\circ$  ( $c = 1.00$ , dimethylformamide). Pharm: Cytotoxic (K562 *in vitro*,  $IC_{50} = 3.3 \mu\text{mol/L}$ , changes the shape of *Pyricularia oryzae* mycelium, MIC = 94.0  $\mu\text{mol/L}$ ). Source: CI JI LI *Tribulus terrestris*, DUN YE SHU YU *Dioscorea zingiberensis*, HAI JIN BI XIE *Dioscorea spongiosa* (Rhizome: yield = 0.000072%)<sup>[4692]</sup>, SHAN BI XIE *Dioscorea tokoro*, XIAN XI SHU YU *Dioscorea gracillima*, XIAO HUA DUN YE SHU YU *Dioscorea parviflora*, ZHANG LIU TOU *Costus speciosus*. Ref: 10, 15, 900, 4692.

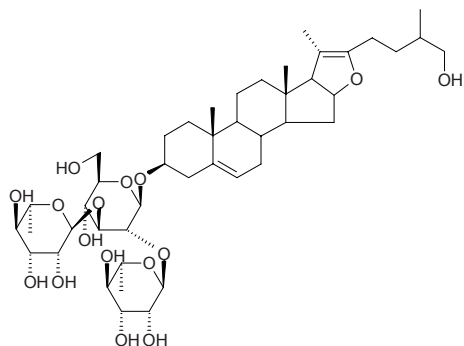
**17976 Protohypericin**

$C_{30}H_{18}O_8$  (506.47). Source: SHA DI YUAN ZHI *Polygala sabulosa* Ref: 5110.

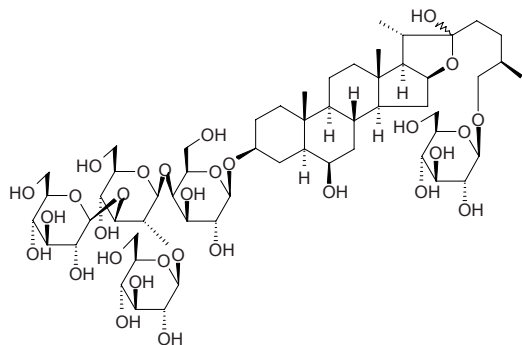


**17977 Protohypoglauaine A**

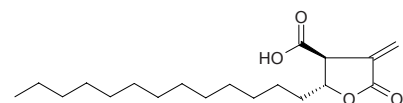
$C_{45}H_{72}O_{16}$  (869.07). **Source:** BI XIE *Dioscorea hypoglauca* [Syn. *Dioscorea collettii* var. *hypoglauca*]. **Ref:** 3337.

**17978 Proto-iso-erubioside B**

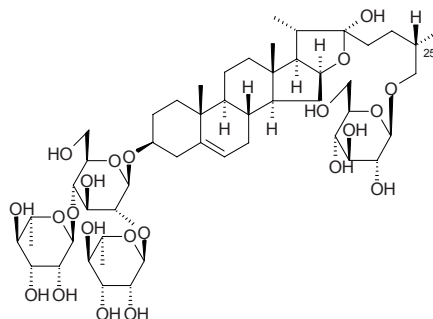
$C_{57}H_{96}O_{30}$  (1261.38). White powder, mp 218~220°C,  $[\alpha]_D^{20} = -26^\circ$  ( $c = 0.1$ ,  $C_5H_5N$ ). **Pharm:** Antithrombotic; used in treatment of stroke. **Source:** DA SUAN *Allium sativum*. **Ref:** 362.

**17979 Protolichesterinic acid**

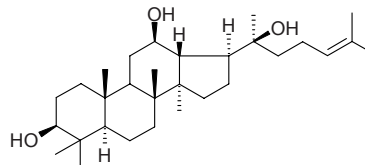
$C_{19}H_{32}O_4$  (324.46). **Pharm:** 5-LOX inhibitor (porcine leucocytes, *in vitro*,  $IC_{50} = 20.0\mu\text{mol/L}$ , control Zileuton,  $IC_{50} = 0.4\mu\text{mol/L}$ , LOX has been implicated in carcinogenesis in various cancer types); 12-LOX inhibitor (hmn platelet, *in vitro*); cytotoxic (acute promyelocytic leukemia (HL-60),  $EC_{50} = (8.1\pm 1.8)\mu\text{g/mL}$ , Zileuton,  $EC_{50} = (38.8\pm 12.3)\mu\text{g/mL}$ ; colorectal adenocarcinoma (WiDr),  $EC_{50} = (18.1\pm 6.2)\mu\text{g/mL}$ , Zileuton,  $EC_{50} > 80\mu\text{g/mL}$ ; erythro-leukemia (K562),  $EC_{50} = (10.7\pm 0.1)\mu\text{g/mL}$ , Zileuton,  $EC_{50} = (38.5\pm 5.4)\mu\text{g/mL}$ ; gastric adenocarcinoma (AGS),  $EC_{50} = (7.0\pm 0.9)\mu\text{g/mL}$ , Zileuton,  $EC_{50} = (70.5\pm 3.1)\mu\text{g/mL}$ ; breast carcinoma T47D,  $EC_{50} = (3.7\pm 1.6)\mu\text{g/mL}$ , Zileuton,  $EC_{50} = (23.9\pm 4.1)\mu\text{g/mL}$ ; ovarian adenocarcinoma (NIH:OVCAR-3),  $EC_{50} = (4.2\pm 1.3)\mu\text{g/mL}$ , Zileuton,  $EC_{50} = (53.1\pm 7.7)\mu\text{g/mL}$ ; pancreas cancer (Capan1),  $EC_{50} = (2.4\pm 0.9)\mu\text{g/mL}$ , Zileuton,  $EC_{50} = (12.9\pm 11.7)\mu\text{g/mL}$ ; pancreas cancer (Capan2),  $EC_{50} = (8.7\pm 4.5)\mu\text{g/mL}$ , Zileuton,  $EC_{50} > 80\mu\text{g/mL}$ ; pancreas cancer (PANC1),  $EC_{50} = (3.1\pm 0.8)\mu\text{g/mL}$ , Zileuton,  $EC_{50} = (46.6\pm 5.4)\mu\text{g/mL}$ ; prostatic cancer (PC3),  $EC_{50} = (2.6\pm 1.1)\mu\text{g/mL}$ , Zileuton,  $EC_{50} = (49.9\pm 9.0)\mu\text{g/mL}$ ; small cell lung cancer (NCI-H1417),  $EC_{50} = (4.2\pm 0.2)\mu\text{g/mL}$ , Zileuton,  $EC_{50} > 80\mu\text{g/mL}$ ; T-cell leukemia (Jurkat-T),  $EC_{50} = (4.3\pm 3.3)\mu\text{g/mL}$ , Zileuton,  $EC_{50} = (78.3\pm 5.0)\mu\text{g/mL}$ ). **Source:** BING DAO YI *Cetraria islandica*. **Ref:** 4082.

**17980 Protoneodioscin**

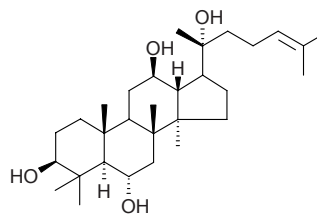
[60478-69-5]  $C_{51}H_{84}O_{22}$  (1049.22). White amorphous powder, mp 166~168°C (dec),  $[\alpha]_D^{13} = -70.1^\circ$  ( $c = 0.001$ , pyridine). **Pharm:** Cytotoxic (*in vitro*, K562,  $IC_{50} = 2.7\mu\text{mol/L}$ , changes the shape of *Pyricularia oryzae* mycelium, MIC =  $95.4\mu\text{mol/L}$ ). **Source:** BI XIE *Dioscorea hypoglauca* [Syn. *Dioscorea collettii* var. *hypoglauca*]. **Ref:** 3714.

**17981 Protopanaxadiol**

[6892-79-1]  $C_{30}H_{52}O_3$  (460.75). mp 236~238°C. **Source:** REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. **Ref:** 6.

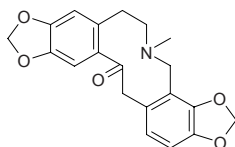
**17982 Protopanaxatriol**

20(R)-Protopanaxatriol [1453-93-6]  $C_{30}H_{52}O_4$  (476.75). Colorless acicular crystals (chloroform-ether), mp 248~250°C; 233~235°C. **Source:** REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], REN SHEN HUA LEI *Panax ginseng* [Syn. *Panax schinseng*]. **Ref:** 6, 446.

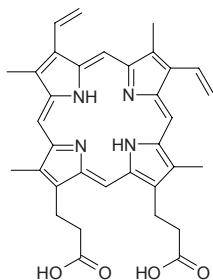


**17983 Protopine**

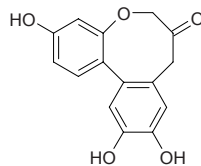
Biflorine [130-86-9]  $C_{20}H_{19}NO_5$  (353.38). Colorless prisms, mp 214–216°C. **Pharm:** Antibacterial; antimalarial; antiasthmatic; choleric (bile secretion promotor); smooth muscle relaxant; sedative; pregnancy terminator (mus, stops pregnancy in early stage); anti-HIV inactive (H9 lymphocytes, control AZT,  $IC_{50} = 500\mu\text{g/mL}$ ,  $EC_{50} = 0.0317\mu\text{g/mL}$ ,  $TI = 15,800$ )<sup>[5364]</sup>. **Source:** BAI QU CAI *Chelidonium majus* (whole herb: mean content of 5 origins = 0.035%)<sup>[5508]</sup>, BAN RUI TANG SONG CAO *Thalictrum petaloideum* (root: content < 0.001%)<sup>[5508]</sup>, CHANG JU YAN HU SUO *Corydalis longicalcarata* (rhizome: content = 0.28%)<sup>[5508]</sup>, CHI BAN YAN HU SUO *Corydalis remota* [Syn. *Corydalis bulbosa* var. *typica*] (rhizome: content = 0.02%)<sup>[5508]</sup>, DA YE TANG SONG CAO *Thalictrum faberi* (root: content < 0.001%)<sup>[5508]</sup>, DA ZAO *Ziziphus jujuba*, DONG BEI YAN HU SUO *Corydalis ambigua* var. *amurensis* [Syn. *Corydalis ambigua*] (rhizome: content = 0.02%)<sup>[5508]</sup>, DUI YE YUAN HU *Corydalis ledebouriana* (rhizome: content = 0.70%)<sup>[5508]</sup>, HUI LV YAN HU SUO *Corydalis adunca* (rhizome: content = 0.44%)<sup>[5508]</sup>, JI YING SU *Argemone mexicana*, JIAN JU ZI JIN *Corydalis suaveolens* [Syn. *Corydalis sheareri*], JIN SI MA WEI LIAN *Thalictrum glandulosissimum* (root: content < 0.005%)<sup>[5508]</sup>, KU DI DING *Corydalis bungeana* (whole herb with root: content scope of 8 origins = 0.056%–0.121%, mean content = 0.093%)<sup>[5508]</sup>, MA WEI LIAN *Thalictrum foliolosum* (root: content < 0.001%)<sup>[5508]</sup>, NAN TIAN ZHU ZI *Nandina domestica*, QUAN YE YAN HU SUO *Corydalis repens* (rhizome: content = 0.03%)<sup>[5508]</sup>, XIA TIAN WU *Corydalis decumbens* [Syn. *Corydalis amabilis*] (dried tuber: content scope = 0.35%–0.65%)<sup>[5508]</sup>, XIA XU TANG SONG CAO *Thalictrum atriplex* (root: content < 0.001%)<sup>[5508]</sup>, XIAO GUO TANG SONG CAO *Thalictrum microgynum* (root: content = 0.34%)<sup>[5508]</sup>, YAN GUO CAO *Thalictrum thunbergii* (root: content < 0.001%)<sup>[5508]</sup>, YAN HU SUO *Corydalis yanhusuo* [Syn. *Corydalis turtschaninovii* f. *yanhusuo*] (rhizome: mean content of 2 origins = 0.048%)<sup>[5508]</sup>, YING SHUI HUANG LIAN *Thalictrum simplex* [Syn. *Thalictrum simplex* var. *brevipes*] (root: content < 0.001%)<sup>[5508]</sup>, YING SU *Papaver somniferum*. **Ref:** 2, 658, 5364, 5501, 5508.

**17984 Protoporphyrin**

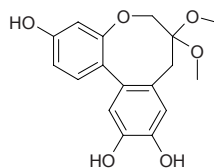
[553-12-8]  $C_{34}H_{34}N_4O_4$  (562.67). mp 225–230°C. **Source:** NIU XUE *Bos taurus domesticus*; *Bubalus bubalis*. **Ref:** 6.

**17985 Protosappanin A**

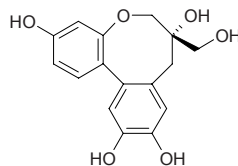
[102036-28-2]  $C_{15}H_{12}O_5$  (272.26). mp 250–252°C. **Pharm:** Xanthine oxidase inhibitor (competitive inhibitory activity in concentration-dependent manner,  $IC_{50} = 55.6\mu\text{mol/L}$ ,  $K_i = 34.7\mu\text{mol/L}$ , control Allopurinol,  $IC_{50} = 2.5\mu\text{mol/L}$ ,  $K_i = 1.80\mu\text{mol/L}$ )<sup>[4494]</sup>. **Source:** SU MU *Caesalpinia sappan* (heartwood). **Ref:** 508, 4494.

**17986 Protosappanin A dimethyl acetal**

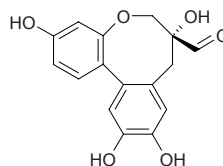
$C_{17}H_{18}O_6$  (318.33). Light yellow amorphous solid. **Pharm:** Xanthine oxidase inhibitor (competitive inhibitory activity in concentration-dependent manner,  $IC_{50} = 50.7\mu\text{mol/L}$ ,  $K_i = 26.9\mu\text{mol/L}$ , control Allopurinol,  $IC_{50} = 2.5\mu\text{mol/L}$ ,  $K_i = 1.80\mu\text{mol/L}$ ). **Source:** SU MU *Caesalpinia sappan* (heartwood). **Ref:** 4494.

**17987 Protosappanin B**

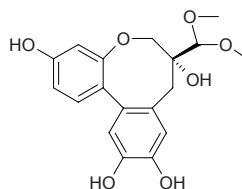
[102036-29-3]  $C_{16}H_{16}O_6$  (304.30). Amorphous powder,  $[\alpha]_D^{15} = -11.4^\circ$  (MeOH). **Source:** SU MU *Caesalpinia sappan* (heartwood). **Ref:** 3338, 4494.

**17988 Protosappanin C**

[111534-98-6]  $C_{16}H_{14}O_6$  (302.29).  $[\alpha]_D^{25} = -37.0^\circ$  ( $c = 5.32$ , MeOH). **Source:** RI BEN SU MU *Caesalpinia japonica*, SU MU *Caesalpinia sappan*. **Ref:** 1521, 3339.

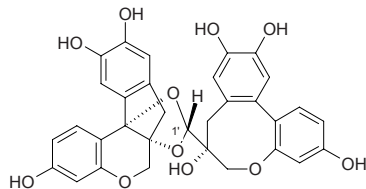
**17989 Protosappanin C dimethyl acetal**

$C_{18}H_{20}O_7$  (348.36). **Source:** SU MU *Caesalpinia sappan* (heartwood). **Ref:** 4494.

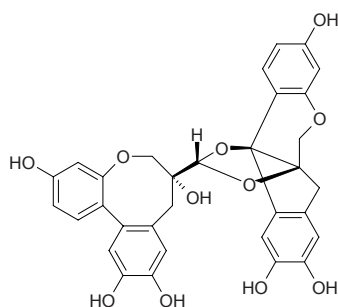


**17990 Protosappanin E<sub>1</sub>**

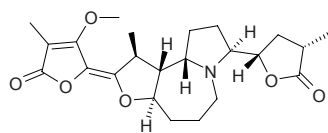
[130233-78-2] C<sub>32</sub>H<sub>26</sub>O<sub>11</sub> (586.56). An inseparable mixture with 1'-isomer Protosappanin E2 [Source](#): SU MU *Caesalpinia sappan*. [Ref](#): 3338.

**17991 Protosappanin E<sub>2</sub>**

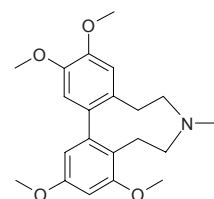
C<sub>32</sub>H<sub>26</sub>O<sub>11</sub> (586.56). Yellow amorphous solid,  $[\alpha]_D^{20} = -16.9^\circ$  ( $c = 0.175$ , MeOH). [Pharm](#): Xanthine oxidase inhibitor (competitive inhibitory activity in concentration-dependent manner, IC<sub>50</sub> = 18.9 μmol/L, K<sub>i</sub> = 10.6 μmol/L, control Allopurinol, IC<sub>50</sub> = 2.5 μmol/L, K<sub>i</sub> = 1.80 μmol/L). [Source](#): SU MU *Caesalpinia sappan* (heartwood). [Ref](#): 4494.

**17992 Protostemonine**

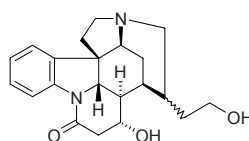
[27495-40-5] C<sub>23</sub>H<sub>31</sub>NO<sub>6</sub> (417.51). mp 172°C. [Pharm](#): Insecticidal (neonate larvae of *Spodoptera littoralis*, LC<sub>50</sub> = 17.7 mg/L, EC<sub>50</sub> = 2.2 mg/L). [Source](#): DI TANG BAI BU *Stemona kerrii*, WAN SHENG BAI BU *Stemona japonica* (in 1970, the compound was isolated from the plant by H.Irie et al.)<sup>[5505]</sup>, YIN DU ZHI NA BAI BU *Stemona cochinchinensis*, ZHI LI BAI BU *Stemona sessilifolia*, *Stemona curtisii*, *Stemona cf. pierrei* (underground parts). [Ref](#): 6, 660, 3409, 3751, 5505.

**17993 Protostephanine**

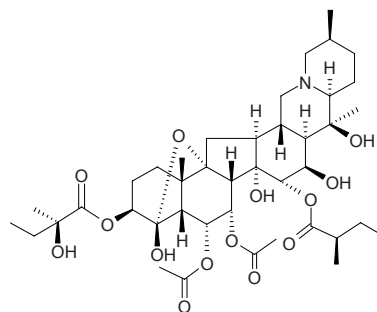
[549-28-0] C<sub>21</sub>H<sub>27</sub>NO<sub>4</sub> (357.45). mp 91°C. [Source](#): QIAN JIN TENG *Stephania japonica*. [Ref](#): 6.

**17994 Protostrychnine**

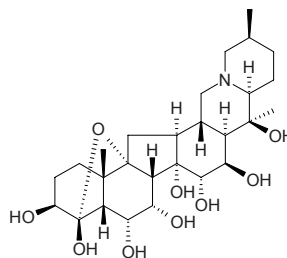
[71610-48-5] C<sub>21</sub>H<sub>26</sub>N<sub>2</sub>O<sub>3</sub> (354.45). [Source](#): MA QIAN ZI *Strychnos nux-vomica*. [Ref](#): 2.

**17995 Protoveratrine A**

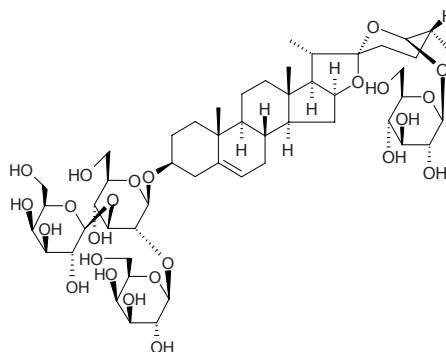
[143-57-7] C<sub>41</sub>H<sub>63</sub>NO<sub>14</sub> (793.96). Crystals (acetone), mp 267–269°C (dec),  $[\alpha]_D^{25} = -40.5^\circ$  (pyridine),  $[\alpha]_D^{25} = -10.5^\circ$  (chloroform). [Pharm](#): Antihypertensive; emetic. [Source](#): BAI LI LU *Veratrum album*. [Ref](#): 658.

**17996 Protoverine**

[76-45-9] C<sub>27</sub>H<sub>43</sub>NO<sub>9</sub> (525.65). [Pharm](#): Increases blood pressure. [Source](#): BAI LI LU *Veratrum album*. [Ref](#): 658.

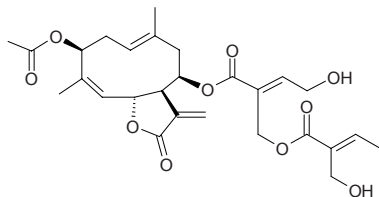
**17997 Protozingiberensisaponin**

C<sub>51</sub>H<sub>82</sub>O<sub>24</sub> (1079.21). [Source](#): DUN YE SHU YU *Dioscorea zingiberensis*. [Ref](#): 10.

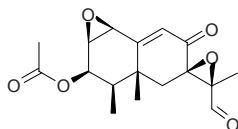


**17998 Provincialin**

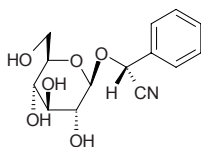
[40328-06-9] C<sub>27</sub>H<sub>34</sub>O<sub>10</sub> (518.57). Mucilage, difficult to crystallize, [ $\alpha$ ]<sub>D</sub> = -85° (*c* = 0.6, chloroform). **Pharm:** Antineoplastic; cytotoxic (KB, ED<sub>50</sub> = 3.5 μg/mL). **Source:** TU ER FENG *Liatriis provincialis*. **Ref:** 661.

**17999 PR toxin**

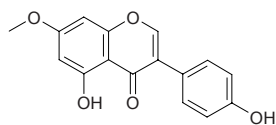
[56299-00-4] C<sub>17</sub>H<sub>20</sub>O<sub>6</sub> (320.35). **Pharm:** Supertoxic agent. **Source:** LOU DI QING MEI *Penicillium roqueforti*. **Ref:** 658.

**18000 Prunasin**

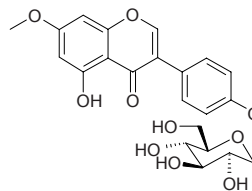
[99-18-3] C<sub>14</sub>H<sub>17</sub>NO<sub>6</sub> (295.29). **Pharm:** Plant growth stimulatory or inhibitory activity (radicle length: *Lactuca sativa*, 1 μmol/L, StRt or InRt < 10%, 10 μmol/L, InRt = (10~30)%, 100 μmol/L, InRt = (31~60)%, 1 mmol/L, InRt > 61%; *Raphanus sativus*, 1 μmol/L, StRt = (10~30)%, 10 μmol/L, StRt = (10~30)%, 100 μmol/L, InRt = (10~30)%, 1 mmol/L, InRt > 61%; *Allium cepa*, 1 μmol/L, StRt or InRt < 10%, 10 μmol/L, InRt = (31~60)%, 100 μmol/L, InRt = (10~30)%, 1 mmol/L, InRt = (31~60)%)<sup>[5217]</sup>; toxin. **Source:** OU ZHOU JUE *Pteridium aquilinum*, XI YANG JIE GU MU *Sambucus nigra*, XING REN *Prunus armeniaca*, JIAN ZI SU YE *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*], *Cystopteris* sp. **Ref:** 2, 658, 660, 5217.

**18001 Prunetin**

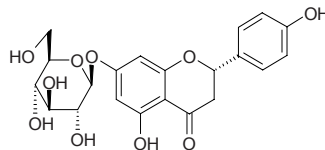
[552-59-0] C<sub>16</sub>H<sub>12</sub>O<sub>5</sub> (284.27). Colorless acicular crystals (methanol), mp 240°C; 208°C. **Pharm:** Antihypercholesterolemic (rat, hyperlipemia caused by triton WR1339). **Source:** AN GE LA ZI TAN *Pterocarpus angolensis*, GUANG GUO GAN CAO *Glycyrrhiza glabra*, MI SI KE HUANG TAN *Dalbergia miscolobium*, MU HU DIE *Oroxylum indicum*, PU DUN LI *Prunus puddun*, WEI RUI LI *Prunus verecunda*, MENG MAI ROU DOU KOU *Myristica malabarica* (heartwood). **Ref:** 661, 3906.

**18002 Prunetin 4'-O-β-D-glucopyranoside**

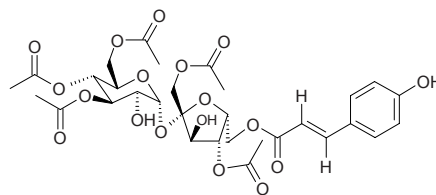
C<sub>22</sub>H<sub>22</sub>O<sub>10</sub> (446.41). **Source:** HUAI *Sophora japonica* (pericarp). **Ref:** 3080.

**18003 Prunin**

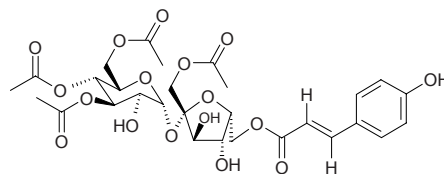
[529-55-5] C<sub>21</sub>H<sub>22</sub>O<sub>10</sub> (434.40). mp 224~226°C. **Pharm:** Antifungal (*Sporotrichum pulverulentum*). **Source:** FAN QIE *Lycopersicon esculentum*, TAO *Prunus persica*, MANG JING *Miscanthus sinensis*, YOU GAN YE *Phyllanthus emblica* (leaf and branch), *Abies* sp., *Pinus* sp., *Podocarpus* sp. **Ref:** 6, 658, 4205.

**18004 Prunose I**

1,4,3',4',6'-Penta-*O*-acetyl-6-*O*-*p*-coumaroylsucrose C<sub>31</sub>H<sub>38</sub>O<sub>18</sub> (698.64). White powder, [ $\alpha$ ]<sub>D</sub><sup>27</sup> = +26.9° (*c* = 1.00, MeOH). **Pharm:** Aldose reductase inhibitor (*in vitro*, rat lens aldose reductase, IC<sub>50</sub> = 58 μmol/L; control Epalrestat, IC<sub>50</sub> = 0.072 μmol/L); platelet aggregation inhibitor (induced by thrombin, *in vitro*, 0.1 mmol/L, InRt = 30.5%, 0.3 mmol/L, InRt = 48.1%; control Aspirin, 0.1 mmol/L, InRt = 15.8%, 1.0 mmol/L, InRt = 53.5%). **Source:** BAI MEI HUA *Prunus mume* (flower: yield = 0.016%fw). **Ref:** 4641.

**18005 Prunose II**

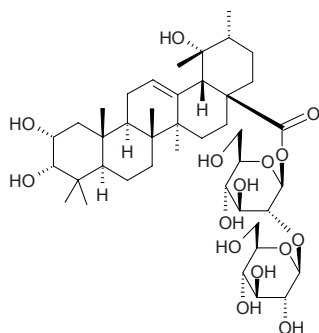
1,3',4',6'-Tetra-*O*-acetyl-6-*O*-*p*-coumaroylsucrose C<sub>29</sub>H<sub>36</sub>O<sub>17</sub> (656.60). White powder, [ $\alpha$ ]<sub>D</sub><sup>28</sup> = +18.7° (*c* = 1.00, MeOH). **Pharm:** Aldose reductase inhibitor (*in vitro*, rat lens aldose reductase, IC<sub>50</sub> > 100 μmol/L, 100 μmol/L InRt = 21%; control Epalrestat, IC<sub>50</sub> = 0.072 μmol/L); platelet aggregation inhibitor (induced by thrombin, *in vitro*, 0.1 mmol/L, InRt = 27.9%, 0.3 mmol/L, InRt = 44.0%; control Aspirin, 0.1 mmol/L, InRt = 15.8%, 1.0 mmol/L, InRt = 53.5%). **Source:** BAI MEI HUA *Prunus mume* (flower: yield = 0.0084%fw). **Ref:** 4641.



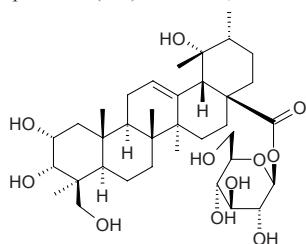


**18006 Pruvuloside A**

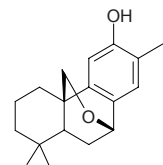
$C_{42}H_{68}O_{15}$  (813.00). Source: XIA KU CAO *Prunella vulgaris*. Ref: 2508.

**18007 Pruvuloside B**

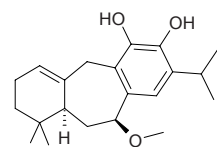
2 $\alpha$ ,3 $\alpha$ ,19 $\alpha$ ,24-Tetrahydroxyurs-12-en-28-oic acid 28-O- $\beta$ -D-glucopyranoside  
 $C_{36}H_{58}O_{11}$  (666.86). White amorphous powder. Source: XIA KU CAO  
*Prunella vulgaris*, YE SHENG SHAN YING TAO *Prunus serrulata* var.  
*spontanea* (leaf). Ref: 2508, 4263.

**18008 Przewalskin**

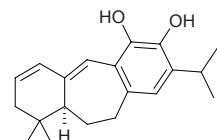
$C_{18}H_{24}O_2$  (272.39). Source: GAN XI SHU WEI CAO *Salvia przewalskii*. Ref:  
 1521, 4538.

**18009 Przewalskin C**

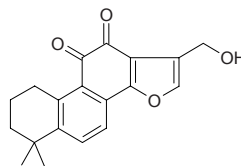
$C_{21}H_{30}O_3$  (330.47). White amorphous powder,  $[\alpha]_D^{21.6} = -192.08^\circ$  ( $c = 0.05$ ,  
 $CHCl_3$ ). Source: GAN XI SHU WEI CAO *Salvia przewalskii*. Ref: 4538.

**18010 Przewalskin D**

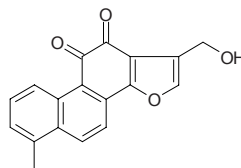
$C_{20}H_{26}O_2$  (298.43). White amorphous powder,  $[\alpha]_D^{21.7} = +6.70^\circ$  ( $c = 0.29$ ,  
 $CHCl_3$ ). Source: GAN XI SHU WEI CAO *Salvia przewalskii*. Ref: 4538.

**18011 Przewaquinone A**

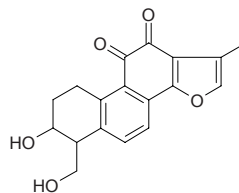
[76843-23-7]  $C_{19}H_{18}O_4$  (310.35). mp 173–175°C (dec). Pharm: Cytotoxic  
 (hum: A549, SK-OV-3, SK-MEL-2, XF-498, HCT15, IC<sub>50</sub> = 0.8–2.3 $\mu$ g/mL);  
 antineoplastic (mouse Lewis lung cancer, melanoma B16 and S<sub>180</sub>, 120 or  
 150mg/kg ip, InRt = (35.8–67.8)%), mouse P<sub>388</sub>, biotic prolonged rate > 100%);  
 antibacterial (*Staphylococcus aureus* 209P); tuberculostatic (hum,  
*Mycobacterium tuberculosis* H37Rv, MIC = 1mg/L). Source: ZI DAN SHEN  
*Salvia przewalskii* var. *mandarinorium*. Ref: 5, 658, 721, 1697, 1698.

**18012 Przewaquinone B**

[76829-01-1]  $C_{18}H_{12}O_4$  (292.29). mp 242–243°C. Pharm: Antineoplastic.  
Source: DAN SHEN *Salvia miltiorrhiza* (dried root: content = 0.002%<sup>[5508]</sup>),  
 GAN XI SHU WEI CAO *Salvia przewalskii* (dried root: content =  
 0.158%<sup>[5508]</sup>), HONG GEN CAO *Salvia prionitis* (dried root: content = trace)  
<sup>[5508]</sup>, HUANG HUA SHU WEI CAO *Salvia flava* (dried root: content = trace)  
<sup>[5508]</sup>, JI YE SHU WEI CAO *Salvia bulleyana* (dried root: content = trace)  
<sup>[5508]</sup>, LI SE SHU WEI CAO *Salvia castanea* (dried root: content =  
 0.018%<sup>[5508]</sup>), MAO DI HUANG SHU WEI CAO *Salvia digitaloides* (dried  
 root: content = trace)<sup>[5508]</sup>, NAN DAN SHEN *Salvia bowleyana* (dried root:  
 content = trace)<sup>[5508]</sup>, NI DAN SHEN *Salvia sinica* (dried root: content = trace)  
<sup>[5508]</sup>, SAN YE SHU WEI CAO *Salvia trijuga* (dried root: content =  
 0.003%<sup>[5508]</sup>), YUN NAN SHU WEI CAO *Salvia yumnanensis* (dried root:  
 content = 0.001%<sup>[5508]</sup>), ZI DAN SHEN *Salvia przewalskii* var. *mandarinorium*  
 (dried root: content = %)<sup>[5508]</sup>. Ref: 1697, 5508.

**18013 Przewaquinone F**

[96839-31-5]  $C_{18}H_{16}O_5$  (312.33). mp 199–203°C. Source: ZI DAN SHEN  
*Salvia przewalskii* var. *mandarinorium*. Ref: 2106.

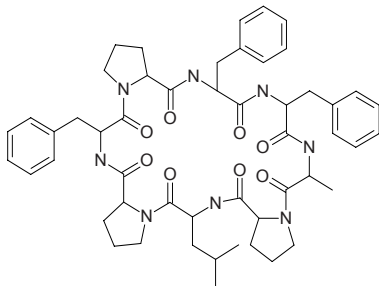




**18014 Psammosilenin A**

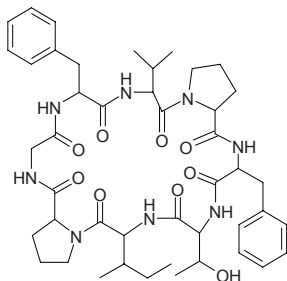
$C_{51}H_{64}N_8O_8$  (917.13). white powder,  $[\alpha]_D^{24} = -108.1^\circ$  ( $c = 0.39$ , MeOH).

Source: JIN TIE SUO *Psammosilene tunicoides*. Ref: 898.

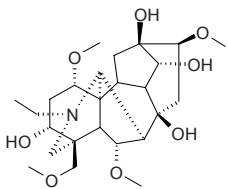
**18015 Psammosilenin B**

$C_{45}H_{62}N_8O_9$  (859.04). white powder,  $[\alpha]_D^{24} = -73.6^\circ$  ( $c = 0.39$ , MeOH).

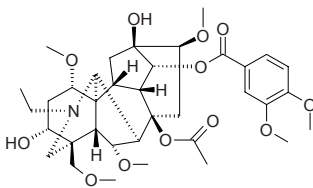
Source: JIN TIE SUO *Psammosilene tunicoides*. Ref: 898.

**18016 Pseudoaconine**

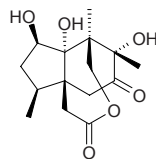
$C_{25}H_{41}NO_8$  (483.61). White amorphous powder. Source: GONG GA SHAN WU TOU *Aconitum liljestrandii*, GUA YE WU TOU *Aconitum hemsleyanum*. Ref: 2191, 2208.

**18017 Pseudoaconitine**

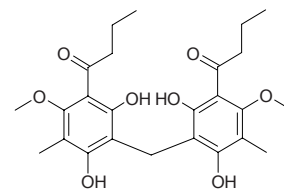
[127-29-7]  $C_{36}H_{51}NO_{12}$  (689.81). mp 214°C (dec). Pharm: Antihypertensive; toxin. Source: FA KANG WU TOU *Aconitum falconeri*, NI BO ER WU TOU *Aconitum ferox*, SUI ZHUANG WU TOU *Aconitum spicatum*, YA DONG WU TOU *Aconitum balfourii*. Ref: 6, 658, 660.

**18018 Pseudoanisatin**

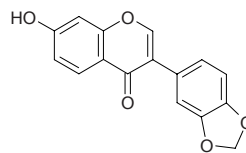
[31090-37-6]  $C_{15}H_{22}O_6$  (298.34). Crystals (EtOAc), mp 207~208. Source: HONG HUI XIANG *Illicium henryi*, MIN WAN BA JIAO *Illicium minwanense* (pericarp: yield = 0.00046%dw)<sup>[4697]</sup>, RI BEN MANG CAO *Illicium anisatum*. Ref: 100, 3358, 4697.

**18019 Pseudoaspidin**

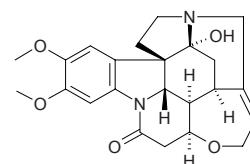
[478-28-4]  $C_{25}H_{32}O_8$  (460.53). Source: XIAN HE CAO *Agrimonia pilosa* var. *japonica*. Ref: 2, 1521.

**18020 Pseudobaptigenin**

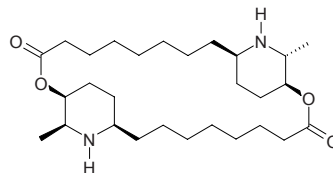
[90-29-9]  $C_{16}H_{10}O_5$  (282.26). Pharm: Germination inhibitor (embryo sheath of wheat, *in vitro*). Source: *Pterocarpus* sp., *Maackia* sp., *Dalbergia* sp. Ref: 658.

**18021 Pseudobrucine**

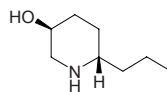
[560-30-5]  $C_{23}H_{26}N_2O_5$  (410.47). mp 258°C. Source: MA QIAN ZI *Strychnos nux-vomica*. Ref: 2.

**18022 Pseudocarpaine**

$\psi$ -Carpaine [3760-91-6]  $C_{28}H_{50}N_2O_4$  (478.72). mp 65~68°C. Source: FAN MU GUA YE *Carica papaya*. Ref: 6, 1521.

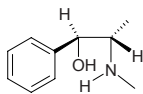
**18023 Pseudoconhydrine**

[140-55-6]  $C_8H_{17}O$  (143.23). Pharm: Toxin. Source: DU SHEN *Conium maculatum*. Ref: 658.

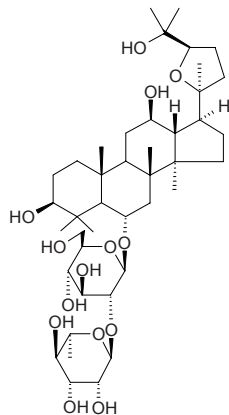


**18024 D-Pseudoephedrine**

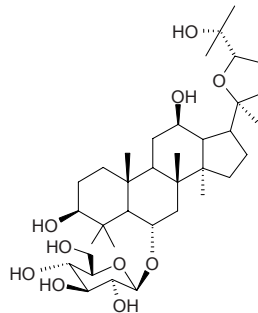
[90-82-4]  $C_{10}H_{15}NO$  (165.24). mp (+) 117~118°C. **Pharm:** Contracts blood vessels (peripheral); adrenergic  $\alpha$ -receptor agonist and  $\beta$ -receptor agonist (to produce sympathomimetic action); bronchial smooth muscle relaxant. **Source:** BAN ZI MA HUANG *Ephedra lepidosperma* (herbaceous twigs: content = 0.011%)<sup>[5508]</sup>, DAN ZI MA HUANG *Ephedra monosperma* (herbaceous twigs: content = 0.781%)<sup>[5508]</sup>, HUANG HUA ZI *Sida cordifolia*, LI JIANG MA HUANG *Ephedra likiangensis* (herbaceous twigs: mean content of 3 origins = 0.662%)<sup>[5508]</sup>, MA HUANG *Ephedra sinica* (herbaceous twigs: content scope = 0.037%~0.312%)<sup>[5501]</sup>, mean content of 5 origins = 0.169%<sup>[5508]</sup>, MO GUO MA HUANG *Ephedra przewalskii* (herbaceous twigs: mean content of 2 origins = 0.017%)<sup>[5508]</sup>, MU ZEI MA HUANG *Ephedra equisetina* (herbaceous twigs: content scope = 0.395%~0.654%)<sup>[5501]</sup>, mean content of 2 origins = 0.525%<sup>[5508]</sup>, SHAN LING MA HUANG *Ephedra gerardiana* (herbaceous twigs: content = 0.144%)<sup>[5508]</sup>, SHU ZHUANG MA HUANG *Ephedra procera* (herbaceous twigs: content = 0.19%)<sup>[5508]</sup>, SHUANG SUI MA HUANG *Ephedra distachya* (herbaceous twigs: content = 0.018%)<sup>[5508]</sup>, XI ZANG ZHONG MA HUANG *Ephedra intermedia* var. *tibetica* (herbaceous twigs: content = 0.070%)<sup>[5508]</sup>, XI ZI MA HUANG *Ephedra regeliana* (herbaceous twigs: content = 0.10%)<sup>[5508]</sup>, YI ZHU AI MA HUANG *Ephedra minuta* var. *dioeca* (herbaceous twigs: mean content of 2 origins = 0.230%)<sup>[5508]</sup>, ZANG MA HUANG *Ephedra saxatilis* (herbaceous twigs: content = 0.062%)<sup>[5508]</sup>, ZHONG MA HUANG *Ephedra intermedia* (herbaceous twigs: content scope = 0.798%~1.163%)<sup>[5501]</sup>, mean content of 3 origins = 0.958%<sup>[5508]</sup>, *Ephedra tweediana* (herbaceous twigs: content = 0.011%)<sup>[5508]</sup>. **Ref:** 2, 6, 658, 660, 1521, 5501, 5508.

**18025 Pseudoginsenoside F<sub>11</sub>**

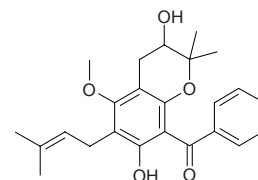
Ginsenoside A  $C_{42}H_{72}O_{14}$  (801.03). **Source:** REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], ZHU JIE SAN QI *Panax pseudo-ginseng* var. *japonicus* (underground part: yield = 0.0038%dw)<sup>[4610]</sup>. **Ref:** 2, 1521, 4610.

**18026 (24S)-Pseudoginsenoside RT<sub>4</sub>**

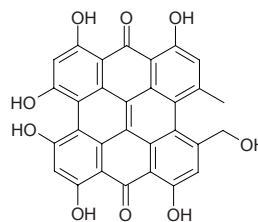
$C_{36}H_{62}O_{10}$  (654.89). **Source:** ZHU JIE SAN QI *Panax pseudo-ginseng* var. *japonicus* (underground part: yield = 0.013%dw). **Ref:** 4610.

**18027 Pseudoguttiaphenone-A**

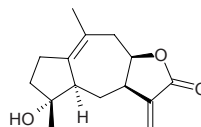
2,2-Dimethyl-8-benzoyl-3,7-dihydroxy-5-methoxy-6-(3-methyl-2-butenyl)-3,4-dihydrobenzopyran  $C_{24}H_{28}O_5$  (396.49).  $[\alpha]_D^{25} = +2.48^\circ$  ( $c = 1.1$ ,  $CHCl_3$ ). **Source:** FEI JI TENG HUANG *Garcinia pseudoguttifera* (heartwood). **Ref:** 3911.

**18028 Pseudohypericin**

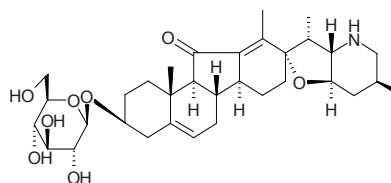
[55954-61-5]  $C_{30}H_{16}O_9$  (520.46). **Pharm:** Antiviral (retrovirus, *in vitro* and *in vivo*). **Source:** SAN LENG YE JIN SI TAO *Hypericum triquetrifolium*. **Ref:** 658.

**18029 Pseudovalin**

[1461-34-3]  $C_{15}H_{20}O_3$  (248.33). **Pharm:** Antifungal (*Candida albicans* and *Saccharomyces cerevisiae*). **Source:** *Iva microcephala*. **Ref:** 658.

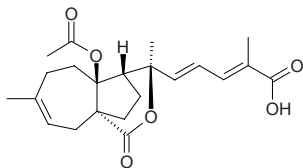
**18030 Pseudojervine**

[36069-05-3]  $C_{33}H_{49}NO_8$  (587.76). mp 300~301°C (dec). **Source:** LI LU *Veratrum nigrum*. **Ref:** 6.

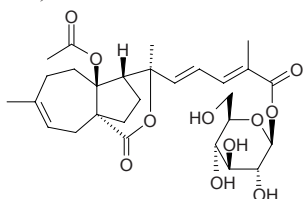


**18031 Pseudolaric acid A**

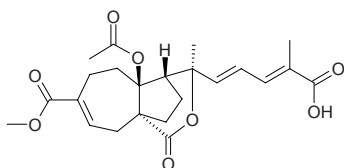
[82508-32-5] C<sub>22</sub>H<sub>28</sub>O<sub>6</sub> (388.46). mp 219°C (benzene). **Pharm:** Antifungal; LD<sub>50</sub> (mus, iv) = 485(430~548)mg/kg; LD<sub>50</sub> (mus, ip) = 396(347-453)mg/kg; LD<sub>50</sub> (mus, sc) = 311(303~319)mg/kg; LD<sub>50</sub> (rat orl) = 219(193~250)mg/kg. **Source:** TU JING PI *Pseudolarix amabilis* [Syn. *Larix amabilis*; *Pseudolarix kaempferi*] (root cortex: yield = 0.0063%dw). **Ref:** 3340, 3341, 3342, 4637.

**18032 Pseudolaric acid A-O-β-D-glucopyranoside**

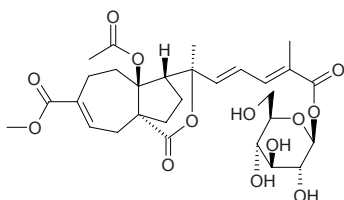
C<sub>28</sub>H<sub>38</sub>O<sub>11</sub> (550.61). **Source:** TU JING PI *Pseudolarix amabilis* [Syn. *Larix amabilis*; *Pseudolarix kaempferi*] (root cortex: yield = 0.0027%dw). **Ref:** 3343, 4637.

**18033 Pseudolaric acid B**

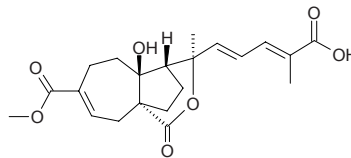
[82508-31-4] C<sub>23</sub>H<sub>28</sub>O<sub>8</sub> (432.47). Colorless powder, mp 139~141°C; crystals, mp 165~167°C (anhydro~benzene), [α]<sub>D</sub><sup>27.5</sup> = -37.3° (c = 0.0233, MeOH). **Pharm:** Anti-fertility agent (mus, rbt, dog); antifungal; cytotoxic (*in vitro*, P<sub>388</sub>, IC<sub>50</sub> = 0.32μg/mL; A549, IC<sub>50</sub> = 0.86μg/mL)<sup>[4762]</sup>; LD<sub>50</sub> (mus, iv) = 423(404~442)mg/kg; LD<sub>50</sub> (mus, ip) = 316(285~351)mg/kg; LD<sub>50</sub> (rat, orl) = 130(114~149)mg/kg. **Source:** TU JING PI *Pseudolarix amabilis* [Syn. *Larix amabilis*; *Pseudolarix kaempferi*] (root cortex: yield = 0.096%dw). **Ref:** 3340, 3341, 3342, 3344, 4637, 4762.

**18034 Pseudolaric acid B-O-β-D-glucopyranoside**

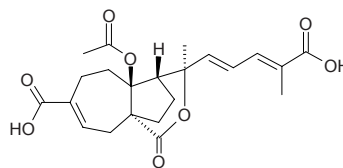
C<sub>29</sub>H<sub>38</sub>O<sub>13</sub> (594.62). **Pharm:** Cytotoxic (culture hmn liver cancer cell strain SMMC-7721, 10μg/mL, kill rate = 42.9%, InRt on cell proliferation = 56.7%~96.9%, InRt on protein content = 64.5%). **Source:** TU JING PI *Pseudolarix amabilis* [Syn. *Larix amabilis*; *Pseudolarix kaempferi*] (root cortex: yield = 0.0954%dw). **Ref:** 3343, 3345, 4637.

**18035 Pseudolaric acid C**

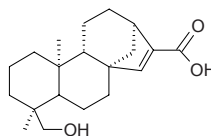
Desacetyl pseudolaric acid B [82601-41-0] C<sub>21</sub>H<sub>26</sub>O<sub>7</sub> (390.44). Colorless needles (MeOH), mp 198~200°C, [α]<sub>D</sub><sup>25</sup> = -78.6° (c = 0.2, MeOH); crystals, mp 220~222°C (CHCl<sub>3</sub>). **Pharm:** Antifungal. **Source:** TU JING PI *Pseudolarix amabilis* [Syn. *Larix amabilis*; *Pseudolarix kaempferi*]. **Ref:** 3340, 3341, 3342, 3344.

**18036 Pseudolaric acid C<sub>2</sub>**

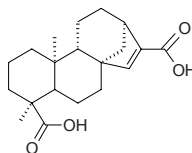
C<sub>22</sub>H<sub>26</sub>O<sub>8</sub> (418.45). **Pharm:** Antifungal. **Source:** TU JING PI *Pseudolarix amabilis* [Syn. *Larix amabilis*; *Pseudolarix kaempferi*]. **Ref:** 3359, 3341, 3342.

**18037 Pseudolaric acid D**

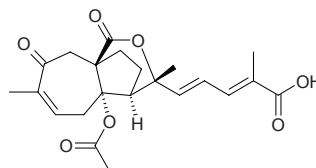
C<sub>20</sub>H<sub>30</sub>O<sub>3</sub> (318.46). **Source:** TU JING PI *Pseudolarix amabilis* [Syn. *Larix amabilis*; *Pseudolarix kaempferi*]. **Ref:** 3346.

**18038 Pseudolaric acid E**

C<sub>20</sub>H<sub>28</sub>O<sub>4</sub> (332.44). **Source:** TU JING PI *Pseudolarix amabilis* [Syn. *Larix amabilis*; *Pseudolarix kaempferi*]. **Ref:** 3346.

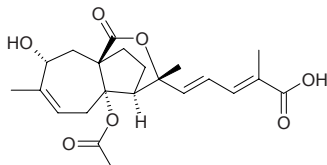
**18039 Pseudolaric acid F**

C<sub>22</sub>H<sub>26</sub>O<sub>7</sub> (402.45). White amorphous powder, [α]<sub>D</sub><sup>20</sup> = +25.1° (c = 0.93, Me<sub>2</sub>CO). **Source:** TU JING PI *Pseudolarix amabilis* [Syn. *Larix amabilis*; *Pseudolarix kaempferi*] (root cortex: yield = 0.00021%dw). **Ref:** 4637.

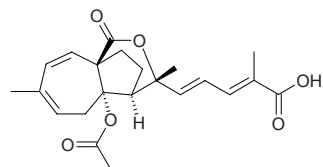


**18040 Pseudolaric acid G**

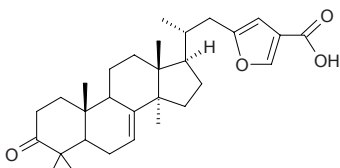
$C_{22}H_{28}O_7$  (404.46). White amorphous powder,  $[\alpha]_D^{20} = -17.4^\circ$  ( $c = 0.71$ ,  $Me_2CO$ ). Source: TU JING PI *Pseudolarix amabilis* [Syn. *Larix amabilis*; *Pseudolarix kaempferi*] (root cortex: yield = 0.000033%dw). Ref: 4637.

**18041 Pseudolaric acid H**

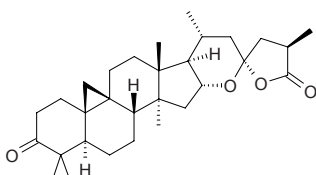
$C_{22}H_{26}O_6$  (386.45). Gum,  $[\alpha]_D^{20} = +11.5^\circ$  ( $c = 0.56$ ,  $Me_2CO$ ). Source: TU JING PI *Pseudolarix amabilis* [Syn. *Larix amabilis*; *Pseudolarix kaempferi*] (root cortex: yield = 0.000046%dw). Ref: 4637.

**18042 Pseudolarifuroic acid**

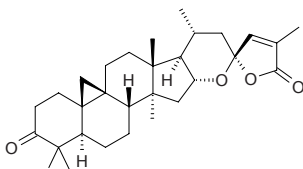
$C_{30}H_{42}O_4$  (466.67). Source: TU JING PI *Pseudolarix amabilis* [Syn. *Larix amabilis*; *Pseudolarix kaempferi*]. Ref: 3347.

**18043 Pseudolarolide A**

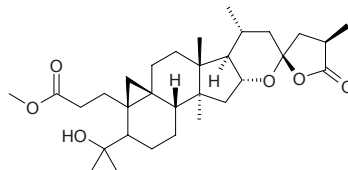
$C_{30}H_{44}O_4$  (468.68). Plates (MeOH), mp 257–259°C. Source: TU JING PI *Pseudolarix amabilis* [Syn. *Larix amabilis*; *Pseudolarix kaempferi*]. Ref: 3348.

**18044 Pseudolarolide B**

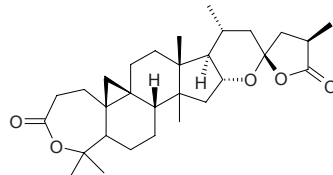
[151368-43-3]  $C_{30}H_{42}O_4$  (466.67). Needles ( $Me_2CO$ ), mp 229–231°C. Pharm: Cytotoxic (KB,  $ED_{50} = 0.49\mu g/mL$ , A549,  $ED_{50} = 0.67\mu g/mL$ , HCT8,  $ED_{50} = 0.73\mu g/mL$ , P388,  $ED_{50} = 0.79\mu g/mL$ ). Source: TU JING PI *Pseudolarix amabilis* [Syn. *Larix amabilis*; *Pseudolarix kaempferi*]. Ref: 3348.

**18045 Pseudolarolide C**

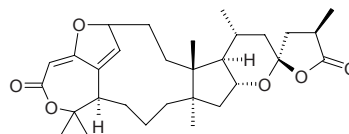
$C_{31}H_{48}O_6$  (516.72). Prisms ( $Me_2CO$ ), mp 205–207.5°C. Source: TU JING PI *Pseudolarix amabilis* [Syn. *Larix amabilis*; *Pseudolarix kaempferi*]. Ref: 3348.

**18046 Pseudolarolide D**

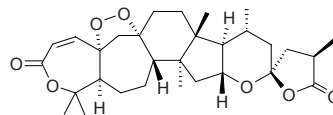
$C_{30}H_{44}O_5$  (484.68). Needles ( $Me_2CO$ ), mp 222–223°C. Source: TU JING PI *Pseudolarix amabilis* [Syn. *Larix amabilis*; *Pseudolarix kaempferi*]. Ref: 3348.

**18047 Pseudolarolide E**

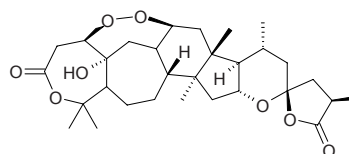
$C_{30}H_{42}O_6$  (498.67). Crystals, mp 209–210°C,  $[\alpha]_D = +2.5^\circ$  ( $c = 0.5$ , EtOH). Source: TU JING PI *Pseudolarix amabilis* [Syn. *Larix amabilis*; *Pseudolarix kaempferi*]. Ref: 3349.

**18048 Pseudolarolide H**

$C_{30}H_{42}O_7$  (514.67). Prisms ( $Me_2CO$ ), mp 218–221°C. Source: TU JING PI *Pseudolarix amabilis* [Syn. *Larix amabilis*; *Pseudolarix kaempferi*]. Ref: 3350.

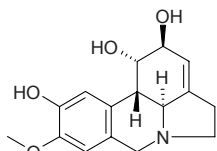
**18049 Pseudolarolide I**

$C_{30}H_{44}O_8$  (532.68). Needles (MeOH), mp 203–205°C. Source: TU JING PI *Pseudolarix amabilis* [Syn. *Larix amabilis*; *Pseudolarix kaempferi*]. Ref: 3351.

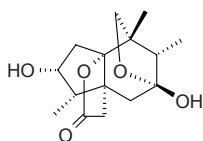


**18050 Pseudolycorine**

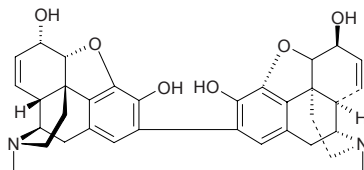
[29429-03-6]  $C_{16}H_{19}NO_4$  (289.33). mp 247~248°C. **Pharm:** Antineoplastic; antiviral (meningitis virus, EMC virus and Japanese encephalitis virus); LD<sub>50</sub> (rat, ip) = 110mg/kg. **Source:** DA YI ZHI JIAN *Lycoris aurea*, SHI SUAN *Lycoris radiata* [Syn. *Amaryllis radiata*], SHUI XIAN GEN *Narcissus tazetta* var. *chinensis*, SHUI XIAN HUA *Narcissus tazetta* var. *chinensis*. **Ref:** 4, 5, 658.

**18051 Pseudomajucin**

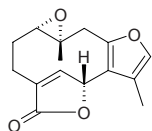
[125028-61-7]  $C_{15}H_{22}O_5$  (282.34). **Source:** DA BA JIAO *Illicium majus*, MIN WAN BA JIAO *Illicium minwanense* (pericarp: yield = 0.0073%dw), *Illicium merrillianum* (pericarp: yield = 0.037%dw). **Ref:** 1521, 3046, 4697.

**18052 Pseudomorphine**

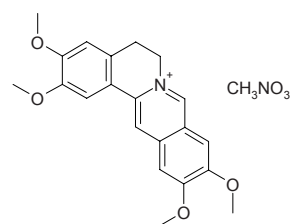
[125-24-6]  $C_{34}H_{36}N_2O_6$  (568.68). mp 327°C (dec). **Source:** YA PIAN *Papaver somniferum*. **Ref:** 6.

**18053 Pseudoneolinderane**

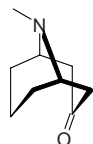
[20082-45-5]  $C_{15}H_{16}O_4$  (260.29). **Pharm:** Anti-HIV-1 inactive (HIV-1 IN inhibitor, IC<sub>50</sub> > 100μmol/L, positive control Suramin, IC<sub>50</sub> = 2.4μmol/L)<sup>[4224]</sup>. **Source:** DING HU DIAO ZHANG *Lindera chunii* (root). **Ref:** 4224.

**18054 Pseudopalmatine methyl nitrate**

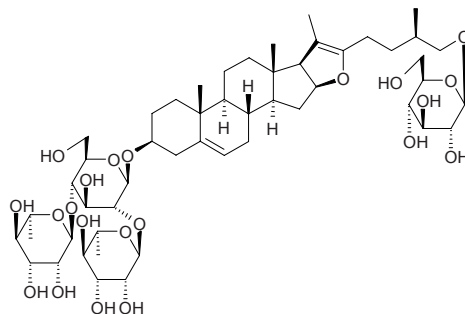
[153306-31-1]  $C_{22}H_{25}N_2O_7$  (429.45). Yellow needles, mp 276~277°C (dec). **Pharm:** Cytotoxic (P<sub>388</sub>, 10μg/mL, InRt = 56%). **Source:** HUANG YE DI BU RONG *Stephania viridiflavens*. **Ref:** 3649.

**18055 Pseudopelletierine**

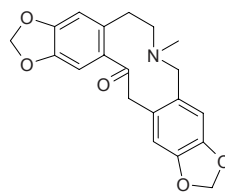
[552-70-5]  $C_9H_{15}NO$  (153.23). mp 54°C. **Source:** SHI LIU GEN *Punica granatum*. **Ref:** 6.

**18056 Pseudoprotodioscin**

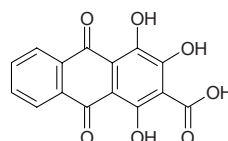
[102115-79-7]  $C_{51}H_{82}O_{21}$  (1031.21). Powder (MeOH-EtOAc), mp 174~176°C (dec),  $[\alpha]_D^{20} = -80.4^\circ$  ( $c = 1$ , pyridine),  $[\alpha]_D^{25} = -66.4^\circ$  ( $c = 0.1$ , pyridine). **Pharm:** Cytotoxic (*in vitro*: A375, IC<sub>50</sub> = (7.38±2.32)μmol/L, control Mithramycin, IC<sub>50</sub> = (0.37±0.05)μmol/L; L929, IC<sub>50</sub> = (6.75±3.62)μmol/L, Mithramycin, IC<sub>50</sub> = (0.31±0.03)μmol/L; HeLa, IC<sub>50</sub> = (5.02±2.19)μmol/L, Mithramycin, IC<sub>50</sub> = (0.19±0.03)μmol/L)<sup>[5000]</sup>. **Source:** BA QIA *Smilax china* [Syn. *Smilax japonica*], HUANG SHAN YAO *Dioscorea panthaica* (rhizome), QIAO BING BA QIA *Smilax stans* [Syn. *Smilax vaginata* var. *stans*], TIAN MEN DONG *Asparagus cochinchinensis* [Syn. *Asparagus lucidus*], WA SHI ZONG LV *Trachycarpus wagnerianus*. **Ref:** 3352, 2639, 3553, 5000.

**18057 Pseudopropine**

[24240-05-9]  $C_{20}H_{19}NO_5$  (353.38). White crystals, mp 201~203°C (acetone). **Pharm:** Cytotoxic (P<sub>388</sub>). **Source:** FEI JI AI JIAO *Fagara vitiensis*, PIAN CHI TANG SONG CAO *Thalictrum delavayi*. **Ref:** 3650, 3651.

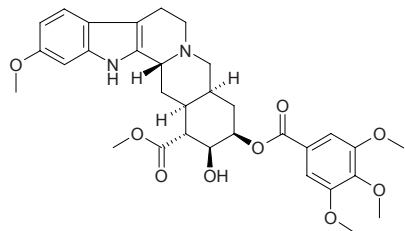
**18058 Pseudopurpurin**

[476-41-5]  $C_{15}H_8O_7$  (300.23). mp 222~224°C (dec). **Pharm:** Genotoxic (hamster, mutagenesis experiment on fibrocyte). **Source:** QIAN CAO GEN *Rubia cordifolia*. **Ref:** 6, 658.

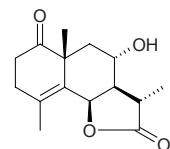


**18059 Pseudoreserpine 16,17-stereoisomer**

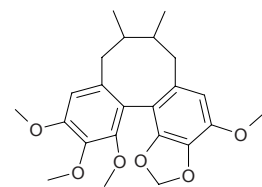
$C_{32}H_{38}N_2O_9$  (594.67). **Pharm:** Antihypertensive. **Source:** YUN NAN LUO FU MU *Rauvolfia yunnanensis*. **Ref:** 658.

**18060 Pseudosantonin**

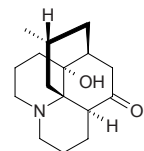
[474-05-5]  $C_{15}H_{20}O_4$  (264.32). mp 183~184°C. **Source:** HUANG HUA HAO *Artemisia annua*. **Ref:** 6.

**18061 Pseudo-γ-schisandrin**

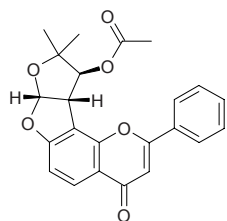
$C_{23}H_{28}O_6$  (400.48). mp 92~93°C. **Source:** WU WEI ZI *Schisandra chinensis*. **Ref:** 2.

**18062 Pseudoselagine**

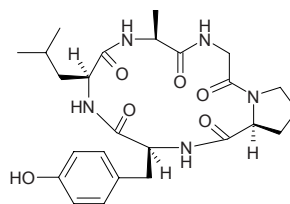
[21061-90-5]  $C_{16}H_{25}NO_2$  (263.38). mp 163°C. **Source:** XIAO JIE JIN CAO *Huperzia selago* [Syn. *Lycopodium selago*]. **Ref:** 6.

**18063 Pseudosmiglabrin**

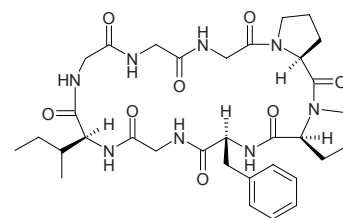
(-)-Pseudosemiglabrin [75444-25-6]  $C_{23}H_{20}O_6$  (392.41). Colorless lamellar crystals (methanol), mp 171~174°C; mp 181~183°C,  $[\alpha]_D^{25} = -384^\circ$  ( $c = 0.49$ , chloroform). **Pharm:** Platelet aggregation inhibitor (selective, caused by thromboxane  $A_2$ , 6.5 μg/mL, InRt = (85±5)%,  $IC_{50} = 12.5$  μmol/L). **Source:** HUI YE GEN *Tephrosia purpurea*. **Ref:** 900.

**18064 Pseudostellarin A**

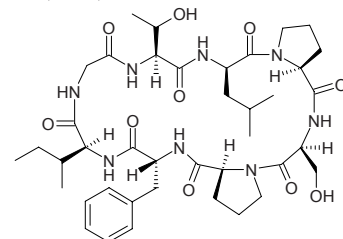
[156430-20-5]  $C_{25}H_{35}N_5O_6$  (501.58). Colorless needles, mp 151~153°C (MeOH),  $[\alpha]_D = -118.7^\circ$  ( $c = 0.92$ , MeOH). **Pharm:** Tyrosinase inhibitor ( $IC_{50} = 131$  μmol/L). **Source:** YI YE JIA FAN LV *Pseudostellaria heterophylla*. **Ref:** 3652, 3653, 3654.

**18065 Pseudostellarin B**

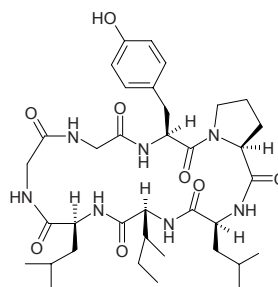
[156430-21-6]  $C_{33}H_{46}N_8O_8$  (682.78). Colorless needles, mp 167~169°C (MeOH),  $[\alpha]_D = -54.5^\circ$  ( $c = 0.32$ , MeOH). **Pharm:** Tyrosinase inhibitor ( $IC_{50} = 187$  μmol/L). **Source:** YI YE JIA FAN LV *Pseudostellaria heterophylla*. **Ref:** 3652, 3653, 3654.

**18066 Pseudostellarin C**

[156430-22-7]  $C_{40}H_{60}N_8O_{10}$  (812.97). Colorless needles, mp 185~187°C (MeOH),  $[\alpha]_D = -39.1^\circ$  ( $c = 0.52$ , MeOH). **Pharm:** Tyrosinase inhibitor ( $IC_{50} = 63$  μmol/L). **Source:** YI YE JIA FAN LV *Pseudostellaria heterophylla*. **Ref:** 3652, 3653, 3654.

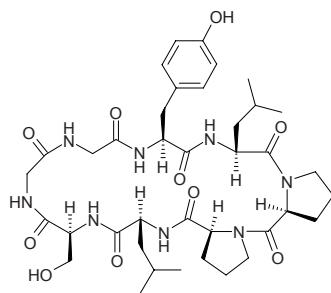
**18067 Pseudostellarin D**

[158335-65-0]  $C_{36}H_{55}N_7O_8$  (713.88). Colorless needles, mp 177~179°C (MeOH),  $[\alpha]_D = -64.8^\circ$  ( $c = 0.54$ , MeOH). **Pharm:** Tyrosinase inhibitor ( $IC_{50} = 100$  μmol/L); antineoplastic (inhibits formation of melanin,  $IC_{50} = 49$  μmol/L). **Source:** YI YE JIA FAN LV *Pseudostellaria heterophylla*. **Ref:** 3653, 3654.

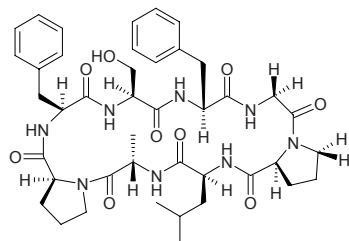


**18068 Pseudostellarin F**

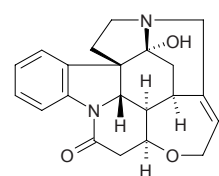
[158335-67-2]  $C_{38}H_{56}N_8O_{10}$  (784.92). Colorless needles, mp 169~171°C (MeOH),  $[\alpha]_D = -58.9^\circ$  ( $c = 0.98$ , MeOH). **Pharm:** Tyrosinase inhibitor ( $IC_{50} = 50\mu\text{mol/L}$ ). **Source:** YI YE JIA FAN LV *Pseudostellaria heterophylla*. **Ref:** 3653, 3654.

**18069 Pseudostellarin G**

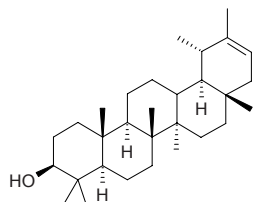
[156525-71-2]  $C_{42}H_{56}N_8O_9$  (816.96). Colorless needles, mp 265°C (dec),  $[\alpha]_D = -57.7^\circ$  ( $c = 0.78$ , MeOH). **Pharm:** Tyrosinase inhibitor ( $IC_{50} = 75\mu\text{mol/L}$ ); antineoplastic (inhibits formation of melanin,  $IC_{50} = 102\mu\text{mol/L}$ ). **Source:** YI YE JIA FAN LV *Pseudostellaria heterophylla*. **Ref:** 3655, 3654.

**18070 Pseudostrychnine**

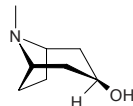
[465-62-3]  $C_{21}H_{22}N_2O_3$  (350.42). mp 266°C. **Source:** MA QIAN ZI *Strychnos nux-vomica*. **Ref:** 2, 542.

**18071 Pseudotaraxterol**

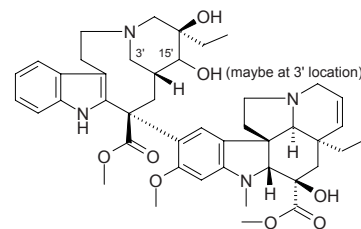
$C_{30}H_{50}O$  (426.73). **Pharm:** Antibacterial (*Escherichia coli*, IZD = 13~15mm, control Chloramphenicol, IZD = 16~20mm, DMSO (4%), IZD < 10mm; *Staphylococcus aureus*, IZD < 10mm, Chloramphenicol, IZD = 16~20mm, DMSO (4%), IZD < 10mm; *Bacillus subtilis*, IZD = 10~12mm; Chloramphenicol, IZD = 16~20mm, DMSO (4%), IZD < 10 mm). **Source:** MAO LIE FENG DOU CAI *Petasites tricholobus* (rhizome). **Ref:** 5315.

**18072 Pseudotropine**

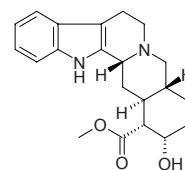
[135-97-7]  $C_8H_{15}NO$  (141.21). mp 108~109°C, bp 240~241°C. **Source:** MAN TUO LUO GEN *Datura metel*, MAO MAN TUO LUO GEN *Datura innoxia*. **Ref:** 6, 660.

**18073 Pseudovincalcaleukoblastine diol**

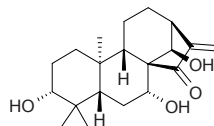
Pseudovincalastinediol [58511-80-1]  $C_{44}H_{56}N_4O_8$  (768.96). **Source:** CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochera rosea*]. **Ref:** 2, 1521.

**18074 Pseudoyohimbine**

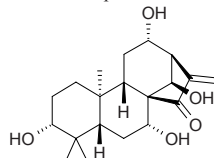
[84-37-7]  $C_{21}H_{26}N_2O_3$  (354.45). White powder,  $[\alpha]_D^{25.4} = +24.3^\circ$  ( $c = 0.8$ , pyridine). **Source:** YANG JIAO MIAN *Alstonia mairei*. **Ref:** 633.

**18075 Pseurata A**

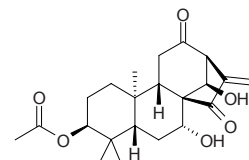
$C_{20}H_{30}O_4$  (334.46). mp 165~167°C. **Source:** CHUAN ZANG XIANG CHA CAI *Isodon pharicus*. **Ref:** 4067.

**18076 Pseurata B**

$C_{20}H_{30}O_5$  (350.46). mp 238~241°C. **Source:** CHUAN ZANG XIANG CHA CAI *Isodon pharicus*. **Ref:** 4067.

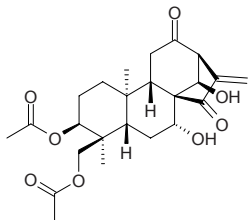
**18077 Pseurata C**

$C_{22}H_{30}O_6$  (390.48). mp 119~121°C. **Source:** CHUAN ZANG XIANG CHA CAI *Isodon pharicus*. **Ref:** 4067.

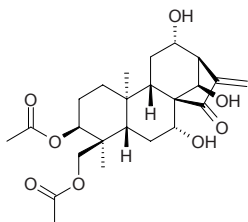


**18078 Pseurata D**

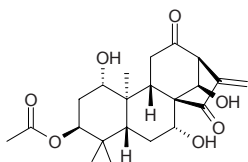
$C_{24}H_{32}O_8$  (448.52). mp 133~135°C. Source: CHUAN ZANG XIANG CHA CAI *Isodon pharicus*. Ref: 4067.

**18079 Pseurata E**

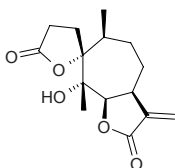
$C_{24}H_{34}O_8$  (450.53). mp 144~146°C. Source: CHUAN ZANG XIANG CHA CAI *Isodon pharicus*. Ref: 4067.

**18080 Pseurata F**

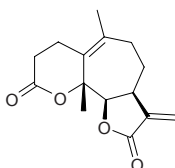
$C_{22}H_{30}O_7$  (406.48). mp 268~273°C. Source: CHUAN ZANG XIANG CHA CAI *Isodon pharicus*. Ref: 4067.

**18081 Psilostachyin**

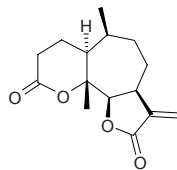
[3533-47-9]  $C_{15}H_{20}O_5$  (280.32). mp 212~214°C. Source: LUO SUI TUN CAO *Ambrosia psilostachya*, TUN CAO *Ambrosia artemisiifolia*. Ref: 526, 1521.

**18082 Psilostachyin B**

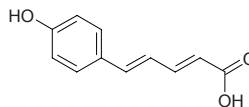
[6995-02-4]  $C_{15}H_{18}O_4$  (262.31). mp 117~119°C. Source: LUO SUI TUN CAO *Ambrosia psilostachya*, TUN CAO *Ambrosia artemisiifolia*. Ref: 526, 1521.

**18083 Psilostachyin C**

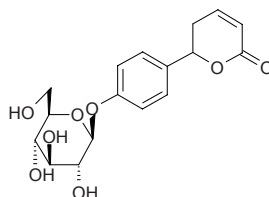
[6466-67-7]  $C_{15}H_{20}O_4$  (264.32). mp 225~226°C. Source: LUO SUI TUN CAO *Ambrosia psilostachya*, TUN CAO *Ambrosia artemisiifolia*. Ref: 526, 1521.

**18084 Psilotic acid**

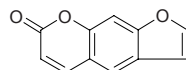
$C_{11}H_{10}O_3$  (190.20). Source: SHI SHUA BA *Psilotum nudum*. Ref: 3554.

**18085 Psilotin**

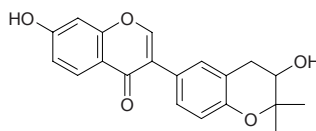
[4624-52-6]  $C_{17}H_{20}O_8$  (352.34). mp 130~131°C. Source: SHI SHUA BA *Psilotum nudum*. Ref: 6.

**18086 Psoralen**

7*H*-Furo[3,2-g][1]benzopyran-7-one; Ficusin [66-97-7]  $C_{11}H_6O_3$  (186.17). mp 171°C; 189~190°C. Pharm: Antibacterial (*Mycobacterium tuberculosis*); antineoplastic; hemostatic; photosensitizer; antioxidant (DPPH scavenger,  $EC_{50} > 50\mu\text{g/mL}$ ,  $50\mu\text{g/mL}$  InRt = 41%, control Ascorbic acid,  $EC_{50} = 1.6\mu\text{g/mL} = 9.1\mu\text{mol/L}$ )<sup>[4154]</sup>; LD<sub>50</sub> (mus, orl) = 625mg/kg, (mus, sc) = 480mg/kg, (rat, orl) = 1330mg/kg, (rat, sc) = 830mg/kg. Source: BAI HUA QIAN HU *Peucedanum praeruptorum*, BEI SHA SHEN *Glehnia littoralis* (root: mean content of 6 origins = 0.00125%<sup>[5508]</sup>), BU GU ZHI *Psoralea corylifolia* (dried ripe fruit: content scope = 0.23%~0.98%<sup>[5501]</sup>, mean content of 10 origins = 0.420%<sup>[5508]</sup>), CHOU CAO *Ruta graveolens* (whole herb: mean content of 2 origins = 0.192%<sup>[5508]</sup>), CU YE RONG *Ficus simplicissima* (root: content = 0.062%<sup>[5508]</sup>), DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*], FANG FENG *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*] (dried root: content = 0.0012%<sup>[5508]</sup>), RUAN MAO DU HUO *Heracleum lanatum*, WU HUA GUO *Ficus carica*. Ref: 2, 4, 5, 268, 658, 4154, 5501, 5508.

**18087 Psoralenol**

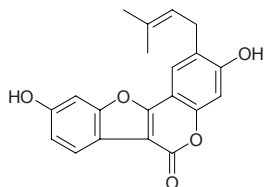
[70522-30-4]  $C_{20}H_{18}O_5$  (338.36). Source: BU GU ZHI *Psoralea corylifolia*. Ref: 2, 545.



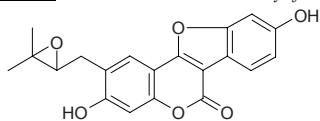


**18088 Psoralidin**

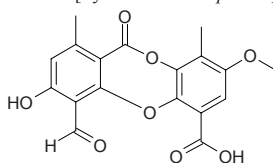
[18642-23-4] C<sub>20</sub>H<sub>16</sub>O<sub>5</sub> (336.35). mp 292°C (dec). **Pharm:** Antifungal; protein tyrosine phosphatase 1B (PTP1B) inhibitor (IC<sub>50</sub> = (9.4±0.5)μmol/L, control RK-682, IC<sub>50</sub> = 5.0μmol/L)<sup>[5049]</sup>; cytotoxic (SNU-1, IC<sub>50</sub> = 53μg/mL, SNU-16, IC<sub>50</sub> = 203μg/mL). **Source:** BU GU ZHI *Psoralea corylifolia* (dried ripe fruit: mean content of 7 origins = 1.502%<sup>[5508]</sup>). **Ref:** 2, 545, 1161, 1167, 5049, 5508.

**18089 Psoralidin-2',3'-oxide**

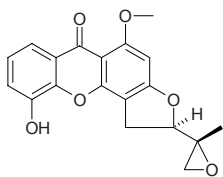
C<sub>20</sub>H<sub>16</sub>O<sub>6</sub> (352.35). Needles (EtOH, diacetate), mp 232~234°C (diacetate). **Source:** BU GU ZHI *Psoralea corylifolia*. **Ref:** 3555.

**18090 Psoromic acid**

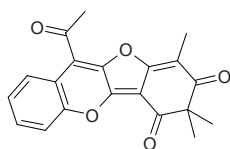
[7729-11-8] C<sub>18</sub>H<sub>14</sub>O<sub>8</sub> (358.31). mp 265°C. **Source:** TAI BAI HUA *Cladonia stellaris* [Syn. *Cladonia alpestris*]. **Ref:** 6.

**18091 Psorospermin**

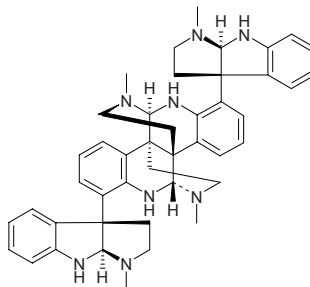
[74045-97-9] C<sub>19</sub>H<sub>16</sub>O<sub>6</sub> (340.34). Acicular crystals, mp 227~228°C. **Pharm:** Antineoplastic (mus P<sub>388</sub>, *in vivo*, 8mg/kg, biotic prolonged rate = 58%); cytotoxic (KB, ED<sub>50</sub> = 0.1μg/mL). **Source:** PU SUO MU *Psorospermum febrifugum*. **Ref:** 5, 658.

**18092 Psorothamnone A**

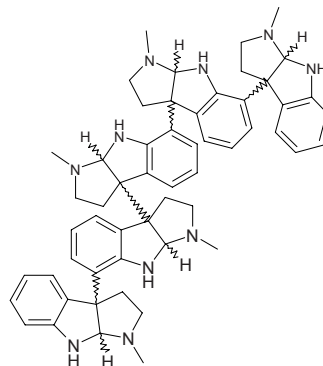
[208105-38-8] C<sub>20</sub>H<sub>16</sub>O<sub>5</sub> (336.35). Orange needles (EtOAc), mp 247~248°C (dec). **Pharm:** Protein kinase C inhibitor (IC<sub>50</sub> = 12μg/mL). **Source:** DENG XIN DAI ER DOU *Psorothamnus junceus*. **Ref:** 3656.

**18093 Psycholeine**

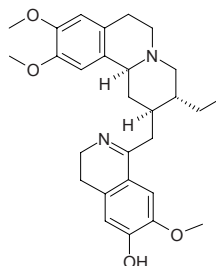
[144424-79-3] C<sub>44</sub>H<sub>50</sub>N<sub>8</sub> (690.94). [α]<sub>D</sub><sup>20</sup> = -150° (c = 0.4, alcohol). **Pharm:** Somatostatin antagonist. **Source:** YOU GAN LAN JIU JIE *Psychotria oleoides*. **Ref:** 3657, 3658.

**18094 Psychotridine**

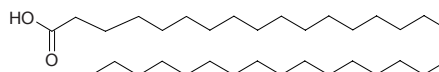
[51617-25-1] C<sub>55</sub>H<sub>62</sub>N<sub>10</sub> (863.17). **Pharm:** Anthelmintic; antitrypanosomal (*in vitro*). **Source:** BI CHUAN JIU JIE MU *Psychotria beccaroides*. **Ref:** 658.

**18095 Psychotrine**

[7633-29-6] C<sub>28</sub>H<sub>36</sub>N<sub>2</sub>O<sub>4</sub> (464.61). **Pharm:** Antiamebic; antitussive (dispels phlegm); emetic. **Source:** AN GE LA BA JIAO FENG *Alangium lamarkii*. **Ref:** 658.

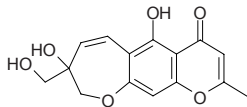
**18096 Psyllic acid**

C<sub>33</sub>H<sub>66</sub>O<sub>2</sub> (494.89). mp 94~95°C. **Source:** MI LA *Apis cerana*. **Ref:** 6.

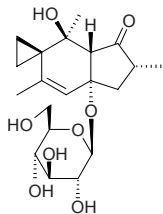


**18097 Ptaeroglycol**

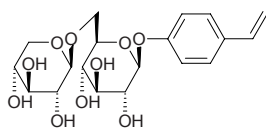
[18836-12-9] C<sub>15</sub>H<sub>14</sub>O<sub>6</sub> (290.28). Yellowish amorphous solid (alcohol), mp 234°C. **Pharm:** Cytotoxic (HeLa, ID<sub>50</sub> = 5 μg/mL); Antibacterial (5 mg/mL, *Staphylococcus aureus*, *Bacillus globisporus*). **Source:** BEI FEN NAI AO LE MU *Cneorum pulverulentum*, *Ptaeroxylon obliquum*. **Ref:** 1035, 3715, 3716, 3717.

**18098 Ptaquiloside**

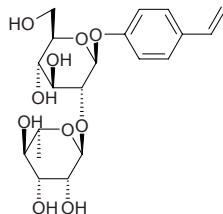
Aquilide A [87625-62-5] C<sub>20</sub>H<sub>30</sub>O<sub>8</sub> (398.46). Amorphous powder, mp 85–89°C, [α]<sub>D</sub><sup>22</sup> = -188° (c = 1.00, MeOH). **Pharm:** Potent carcinogen. **Source:** JIN MAO GOU *Cibotium barometz* [Syn. *Polypodium barometz*], WEI YE XI ZI JUE *Monachosorum flagellare*, WAN JUE *Dennstaedtia scabra* [Syn. *Dicksonia scabra*], CU MAO LIN GAI JUE *Microlepia strigosa* [Syn. *Trichomanes strigosa*], JI JUE *Hypolepis punctata* [Syn. *Polypodium punctatum*], JUE *Pteridium aquilinum* var. *latiusculum*, FENG WEI JUE *Pteris cretica* var. *nervosa* [Syn. *Pteris nervosa*]. **Ref:** 1521, 3102, 2931, 3556, 3557.

**18099 Ptelatoside A**

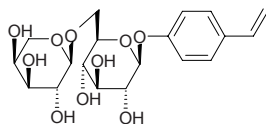
[90899-20-0] C<sub>19</sub>H<sub>26</sub>O<sub>10</sub> (414.41). Crystals (Me<sub>2</sub>CO aq.), mp 183–185°C, [α]<sub>D</sub><sup>22</sup> = -104° (c = 0.68, H<sub>2</sub>O). **Source:** OU ZHOU JUE *Pteridium aquilinum*. **Ref:** 3556.

**18100 Ptelatoside B**

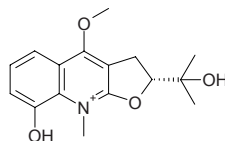
[90852-99-6] C<sub>20</sub>H<sub>28</sub>O<sub>10</sub> (428.44). Amorphous, [α]<sub>D</sub><sup>23</sup> = -94.8° (c = 1, H<sub>2</sub>O). **Source:** OU ZHOU JUE *Pteridium aquilinum*. **Ref:** 3556.

**18101 Ptelatoside C**

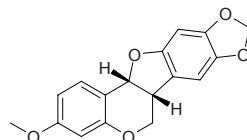
[98755-18-1] C<sub>19</sub>H<sub>26</sub>O<sub>10</sub> (414.41). Amorphous powder, [α]<sub>D</sub><sup>22</sup> = -67.3° (c = 0.79, H<sub>2</sub>O). **Source:** OU ZHOU JUE *Pteridium aquilinum*. **Ref:** 3557, 3556.

**18102 Pteleatin**

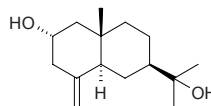
[34443-73-7] C<sub>16</sub>H<sub>20</sub>NO<sub>4</sub><sup>+</sup> (290.34). **Pharm:** Antibacterial (*Mycobacterium smegmatis* and *Staphylococcus aureus*, chloride); antifungal (*Candida albicans*, chloride). **Source:** YU JU *Ptelea trifoliata*. **Ref:** 658.

**18103 Pterocarpin**

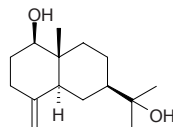
[524-97-0] C<sub>17</sub>H<sub>14</sub>O<sub>5</sub> (298.30). mp (+) 159–160°C, (-) 164–165°C, (±) 185–186°C. **Pharm:** Antineoplastic (S<sub>180</sub>); antifungal (*Curvularia lunata*, 20 μg/mL, InRt > 50%); hepatoprotective (mus primary cultured hepatocytes, antihepatotoxin induced by *D*-galactosamine (GalN), 100 μmol/L, InRt = (14.6 ± 0.5)%, weak, control Silybin, 100 μmol/L, InRt = (77.0 ± 5.5)%)<sup>[4095]</sup>. **Source:** SI ZI TAN *Pterocarpus santalinus*, ZI TAN *Pterocarpus indicus*, E SUN ZI TAN *Pterocarpus osun*, SHAN DOU GEN *Sophora subprostrata* [Syn. *Sophora tonkinensis*], GUANG BU DING GONG TENG *Erycibe expansa*. **Ref:** 5, 6, 658, 4095, 5505.

**18104 Pterocarpol**

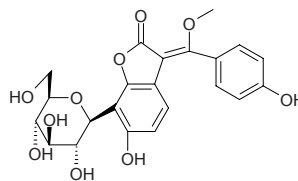
[21677-80-5] C<sub>15</sub>H<sub>26</sub>O<sub>2</sub> (238.37). mp 104–105°C. **Source:** ZI TAN *Pterocarpus indicus*. **Ref:** 6.

**18105 Pterocarpus marsupium sesquiterpene**

C<sub>15</sub>H<sub>26</sub>O<sub>2</sub> (238.37). **Source:** NANG ZHUANG ZI TAN *Pterocarpus marsupium* (heartwood). **Ref:** 3789.

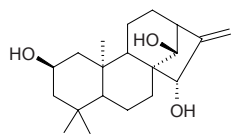
**18106 Pterisoauroside**

3-(*α*-Methoxy-4-hydroxybenzylidene)-6-hydroxybenzo-(2*H*)-furanone-7-*C*-*β*-*D*-glucopyranoside C<sub>22</sub>H<sub>22</sub>O<sub>10</sub> (446.41). Light yellow crystals, mp 197–199°C, [α]<sub>D</sub><sup>29</sup> = +11.4° (c = 0.07, MeOH). **Source:** NANG ZHUANG ZI TAN *Pterocarpus marsupium* (heartwood). **Ref:** 3789.

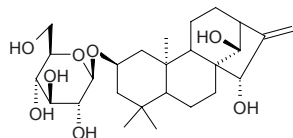


**18107 Pterokaurane P<sub>1</sub>**

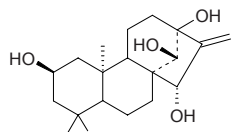
$C_{20}H_{32}O_3$  (320.48). Source: LI BING FENG WEI JUE *Pteris plumbea*. Ref: 3155.

**18108 Pterokaurane P<sub>1</sub>-2-O-β-D-glucoside**

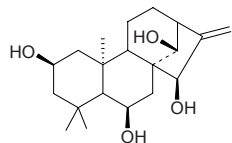
$C_{26}H_{42}O_8$  (482.62). Source: LI BING FENG WEI JUE *Pteris plumbea*. Ref: 3155.

**18109 Pterokaurane P<sub>2</sub>**

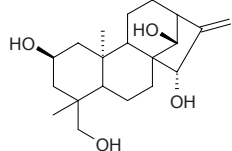
$C_{20}H_{32}O_4$  (336.48). Source: LI BING FENG WEI JUE *Pteris plumbea*. Ref: 3155.

**18110 Pterokaurane P<sub>3</sub>**

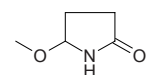
$C_{20}H_{32}O_4$  (336.48). Source: LI BING FENG WEI JUE *Pteris plumbea*. Ref: 3155.

**18111 Pterokaurane P<sub>4</sub>**

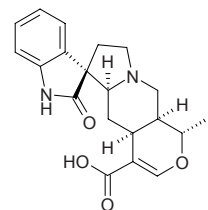
$C_{20}H_{32}O_4$  (336.48). Source: LI BING FENG WEI JUE *Pteris plumbea*. Ref: 3155.

**18112 Pterolactam**

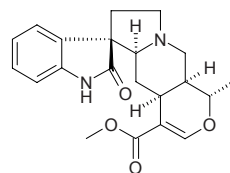
[63853-74-7]  $C_5H_9NO_2$  (115.13). mp 56~57°C. Source: JUE *Pteridium aquilinum* var. *latiusculum*. Ref: 6.

**18113 Pteropodic acid**

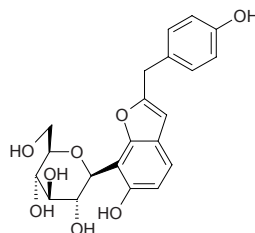
$C_{20}H_{22}N_2O_4$  (354.41). mp 227~229°C (dec),  $[\alpha]_D = -126^\circ$  ( $c = 0.1$ , MeOH). Source: HUA GOU TENG *Uncaria sinensis*. Ref: 3558, 5341.

**18114 Pteropodine**

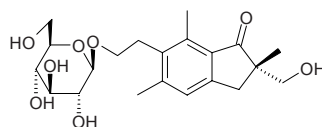
Uncarine C [5629-60-7]  $C_{21}H_{24}N_2O_4$  (368.43). White acicular crystals,  $[\alpha]_D^{17} = -123.8^\circ$  (chloroform). Pharm: Enhances phagocytic function (*in vitro*)<sup>[900]</sup>; cytotoxic (SK-MEL, KB, BT549, SK-OV-3 and Vero cell lines)<sup>[5341]</sup>; cytotoxic (mammalian cell lines,  $IC_{50} = 17\sim 51\mu\text{g/mL}$ )<sup>[5341]</sup>; cytotoxic and DNA damaging activity (RS321 yeast assay,  $IC_{12} = 140\mu\text{g/mL}$ ; RS322 yeast assay,  $IC_{12} = 120\mu\text{g/mL}$ )<sup>[5341]</sup>; immunostimulant (maybe by increasing phagocytosis of hmn granulocytes and macrophages and blocking proliferation of myeloid cell lines)<sup>[5341]</sup>; CNS activity (positively modulates both 5-HT2 receptor and muscarinic M1 receptor)<sup>[5341]</sup>. Source: BEI YUE GOU TENG *Uncaria homomalla* [Syn. *Uruparia homomalla*; *Uruparia tonkinensis*; *Uruparia lanosa* var. *parviflora*], BI LU GOU TENG *Uncaria tomentosa*, CHANG HUA GOU TENG *Uncaria longiflora*, DONG FANG GOU TENG *Uncaria orientalis*, DUAN RONG MAO GOU TENG *Uncaria velutina*, GOU TENG *Uncaria rhynchophylla* [Syn. *Nauclea rhynchophylla*], GUI YA NA GOU TENG *Uncaria guianensis*, HUA GOU TENG *Uncaria sinensis*, MIAN MAO GOU TENG *Uncaria lanosa*, PAN ZHI GOU TENG *Uncaria scandens* [Syn. *Nauclea pilosa*; *Uruparia pilosa*; *Uncaria pilosa*], *Uncaria bernaysii*, *Uncaria donisii*, *Uncaria perrottetii*, *Uncaria roxburghiana*, *Uncaria sterrophylla*. Ref: 900, 5341.

**18115 Pteroside**

6-Hydroxy-2-(4-hydroxybenzyl)-benzofuran-7-C-β-D-glucopyranoside  $C_{21}H_{22}O_8$  (402.40). Light brown crystals ( $H_2O:MeOH = 19:1$ ), mp 117~118°C,  $[\alpha]_D^{29} = +9.15^\circ$  ( $c = 0.295$ , MeOH). Source: NANG ZHUANG ZI TAN *Pterocarpus marsupium* (heartwood). Ref: 3789.

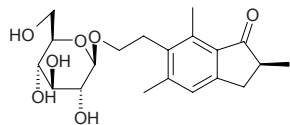
**18116 Pteroside A**

[35910-15-7]  $C_{21}H_{30}O_8$  (410.47). Source: JUE *Pteridium aquilinum* var. *latiusculum*. Ref: 6, 1521.

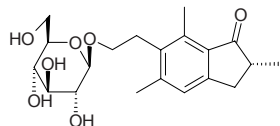


**18117 (2S)-Pteroside B**

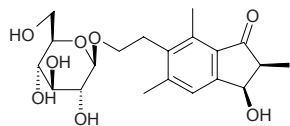
$C_{20}H_{28}O_7$  (380.44). mp 164~166°C,  $[\alpha]_D = -13.6^\circ$ . Source: JUE *Pteridium aquilinum* var. *latiusculum*. Ref: 3559.

**18118 Pteroside B**

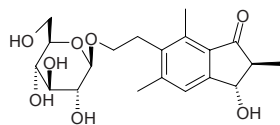
[29774-74-1]  $C_{20}H_{28}O_7$  (380.44). mp 119~121°C. Source: JUE *Pteridium aquilinum* var. *latiusculum*. Ref: 6, 1521.

**18119 (2S,3R)-Pteroside C**

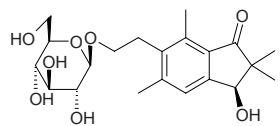
$C_{20}H_{28}O_8$  (396.44). Amorphous. Source: JUE *Pteridium aquilinum* var. *latiusculum*. Ref: 3559.

**18120 Pteroside C**

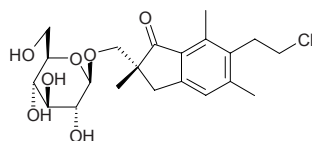
[35910-17-9]  $C_{20}H_{28}O_8$  (396.44). Source: JUE *Pteridium aquilinum* var. *latiusculum*. Ref: 6, 1521.

**18121 Pteroside D**

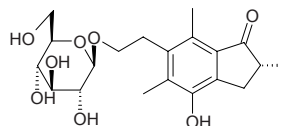
[35943-38-5]  $C_{21}H_{30}O_8$  (410.47). Source: JUE *Pteridium aquilinum* var. *latiusculum*. Ref: 6, 1521.

**18122 (2S)-Pteroside K**

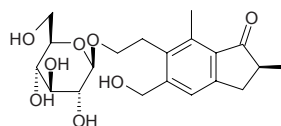
[69753-96-4]  $C_{21}H_{29}ClO_7$  (428.91). mp 94~96°C,  $[\alpha]_D = -26.4^\circ$ . Source: JUE *Pteridium aquilinum* var. *latiusculum*. Ref: 3559.

**18123 Pteroside M**

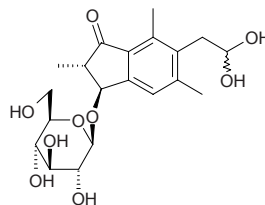
[52715-92-1]  $C_{20}H_{28}O_8$  (396.44). Crystals (EtOH), mp 192°C,  $[\alpha]_D^{18} = +129^\circ$  ( $c = 1.2$ , Me<sub>2</sub>CO aq.). Source: XIAO YE JI WEI *Onychium japonicum* [Syn. *Tricomanes japonicum*]. Ref: 1521, 3560.

**18124 Pteroside P**

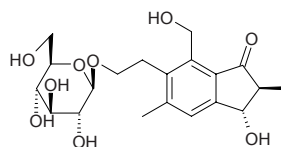
[54854-88-5]  $C_{20}H_{28}O_8$  (396.44). Crystals (CHCl<sub>3</sub>-MeOH), mp 191~193°C,  $[\alpha]_D = -14.9^\circ$  (MeOH). Source: OU ZHOU JUE *Pteridium aquilinum*. Ref: 3559.

**18125 Pteroside Q**

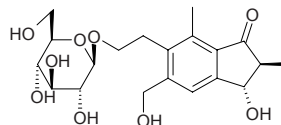
[54797-08-9]  $C_{20}H_{28}O_9$  (412.44). Syrup,  $[\alpha]_D^{25} = +24^\circ$  ( $c = 1$ , MeOH). Source: LI JUE *Histiopteris incisa*, SAN CHA FENG WEI JUE *Pteris wallichinan*, XIE YU FENG WEI JUE *Pteris oshimensis*. Ref: 1521, 3561.

**18126 Pteroside S**

[62043-50-9]  $C_{20}H_{28}O_9$  (412.44). Source: BIAN YI FENG WEI JUE *Pteris inaequalis*, JIN CHAI FENG WEI JUE *Pteris fauriei* [Syn. *Pteris fauriei* var. *minor*]. Ref: 1521, 3562.

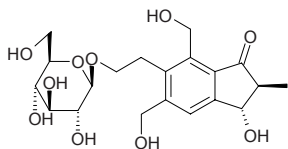
**18127 Pteroside T**

[62043-51-0]  $C_{20}H_{28}O_9$  (412.44). Crystals, mp 118~121°C,  $[\alpha]_D^{22} = +33^\circ$  ( $c = 1.2$ , MeOH). Source: BIAN YI FENG WEI JUE *Pteris inaequalis*, JIN CHAI FENG WEI JUE *Pteris fauriei* [Syn. *Pteris fauriei* var. *minor*]. Ref: 1521, 3562.

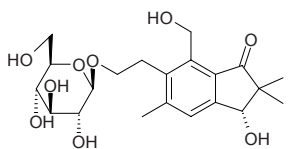


**18128 Pteroside U**

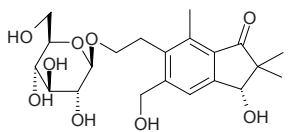
[62043-52-1] C<sub>20</sub>H<sub>28</sub>O<sub>10</sub> (428.44). Crystals, mp 149–151°C, [α]<sub>D</sub><sup>22</sup> = +2.3° (c = 0.865, MeOH). Source: JIN CHAI FENG WEI JUE *Pteris fauriei* [Syn. *Pteris fauriei* var. *minor*]. Ref: 1521, 3562.

**18129 Pteroside W**

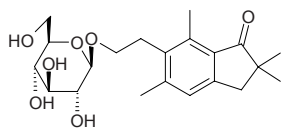
[62043-48-5] C<sub>21</sub>H<sub>30</sub>O<sub>9</sub> (426.47). Source: JIN CHAI FENG WEI JUE *Pteris fauriei* [Syn. *Pteris fauriei* var. *minor*]. Ref: 3562.

**18130 Pteroside X**

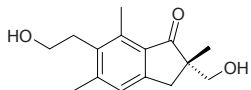
[62043-49-6] C<sub>21</sub>H<sub>30</sub>O<sub>9</sub> (426.47). Syrup, [α]<sub>D</sub><sup>21</sup> = -10.3° (c = 0.58, MeOH). Source: JIN CHAI FENG WEI JUE *Pteris fauriei* [Syn. *Pteris fauriei* var. *minor*]. Ref: 3562.

**18131 Pteroside Z**

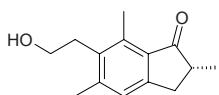
[35943-37-4] C<sub>21</sub>H<sub>30</sub>O<sub>7</sub> (394.47). Source: JUE *Pteridium aquilinum* var. *latiusculum*. Ref: 6, 1521.

**18132 Pterosin A**

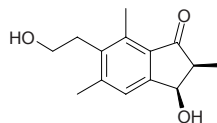
[35910-16-8] C<sub>15</sub>H<sub>20</sub>O<sub>3</sub> (248.32). mp 125–127°C. Source: JUE *Pteridium aquilinum* var. *latiusculum*. Ref: 6, 1521.

**18133 Pterosin B**

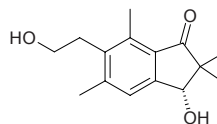
[34175-96-7] C<sub>14</sub>H<sub>18</sub>O<sub>2</sub> (218.30). mp 109–110°C. Source: JUE *Pteridium aquilinum* var. *latiusculum*. Ref: 6, 1521.

**18134 Pterosin C**

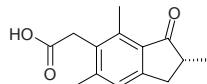
C<sub>14</sub>H<sub>18</sub>O<sub>3</sub> (234.30). mp 153–156°C. Source: JUE *Pteridium aquilinum* var. *latiusculum*. Ref: 6, 1521.

**18135 Pterosin D**

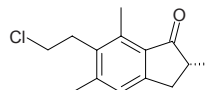
[61138-81-6] C<sub>15</sub>H<sub>20</sub>O<sub>3</sub> (248.32). mp 189–190°C. Source: JUE *Pteridium aquilinum* var. *latiusculum*. Ref: 6, 1521.

**18136 Pterosin E**

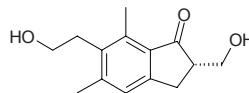
[52528-78-6] C<sub>14</sub>H<sub>16</sub>O<sub>3</sub> (232.28). mp 160–162°C. Source: JUE *Pteridium aquilinum* var. *latiusculum*. Ref: 6, 1521.

**18137 Pterosin F**

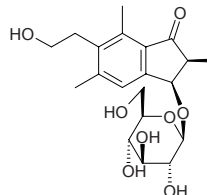
[34175-98-9] C<sub>14</sub>H<sub>17</sub>ClO (236.74). mp 66–67°C. Source: JUE *Pteridium aquilinum* var. *latiusculum*. Ref: 6, 1521.

**18138 Pterosin G**

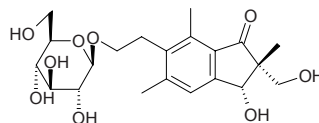
[35964-50-2] C<sub>14</sub>H<sub>18</sub>O<sub>3</sub> (234.30). mp 152–153°C. Source: JUE *Pteridium aquilinum* var. *latiusculum*. Ref: 6, 1521.

**18139 Pterosin C-3-O-glucoside**

C<sub>20</sub>H<sub>28</sub>O<sub>8</sub> (396.44). Source: FENG WEI CAO *Pteris multifida*. Ref: 3563.

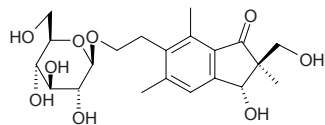
**18140 2R,3R-Pterosin L-2'-O-β-D-glucoside**

C<sub>21</sub>H<sub>30</sub>O<sub>9</sub> (426.47). Oil, [α]<sub>D</sub> = +18.4°. Source: JI JUE *Hypolepis punctata* [Syn. *Polypodium punctatum*]. Ref: 3564.

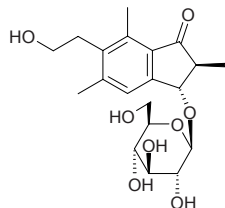


**18141 2S,3R-Pterosin L-2'-O-β-D-glucoside**

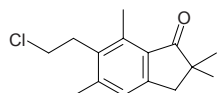
$C_{21}H_{30}O_9$  (426.47). Syrup,  $[\alpha]_D^{23} = -19.0^\circ$  ( $c = 1.21$ , MeOH). Source: JI JUE *Hypolepis punctata* [Syn. *Polypodium punctatum*]. Ref: 3564.

**18142 2S,3S-Pterosin C-3-O-β-D-glucoside**

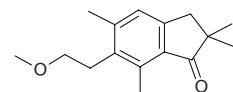
$C_{20}H_{28}O_8$  (396.44). Source: CU MAO LIN GAI JUE *Microlepia strigosa* [Syn. *Trichomanes strigosa*]. Ref: 3565.

**18143 Pterosin H**

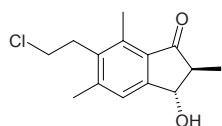
Hypolepin A [39004-41-6]  $C_{15}H_{19}ClO$  (250.77). mp 87.5~88°C. Source: JI JUE *Hypolepis punctata* [Syn. *Polypodium punctatum*]. Ref: 2931.

**18144 Pterosin I**

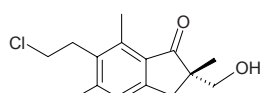
Hypolepin C  $C_{16}H_{22}O_2$  (246.35). Source: JI JUE *Hypolepis punctata* [Syn. *Polypodium punctatum*]. Ref: 2931.

**18145 Pterosin J**

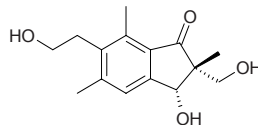
[41411-02-3]  $C_{14}H_{17}ClO_2$  (252.74). mp 136~137°C. Source: JUE *Pteridium aquilinum* var. *latiusculum*. Ref: 6, 1521.

**18146 Pterosin K**

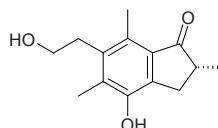
[41411-03-4]  $C_{15}H_{19}ClO_2$  (266.77). mp 85~87°C. Source: JUE *Pteridium aquilinum* var. *latiusculum*. Ref: 6, 1521.

**18147 Pterosin L**

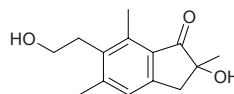
[41411-04-5]  $C_{15}H_{20}O_4$  (264.32). mp 139~141°C. Source: JUE *Pteridium aquilinum* var. *latiusculum*. Ref: 6, 1521.

**18148 Pterosin M**

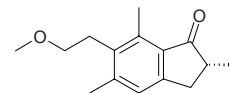
[52744-25-9]  $C_{14}H_{18}O_3$  (234.30). Crystals ( $H_2O$  or EtOAc), mp 187°C. Source: XIAO YE JI WEI *Onychium japonicum* [Syn. *Trichomanes japonicum*]. Ref: 1521, 3560.

**18149 Pterosin N**

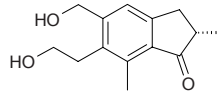
[54797-11-4]  $C_{14}H_{18}O_3$  (234.30). Crystals ( $Me_2CO$ ), mp 165~167°C,  $[\alpha]_D = -18.8^\circ$  (MeOH). Source: JUE *Pteridium aquilinum* var. *latiusculum*. Ref: 1521, 2732.

**18150 Pterosin O**

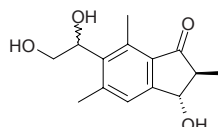
[54854-89-6]  $C_{15}H_{20}O_2$  (232.33). Crystals (hexane), mp 45~46°C; oil,  $[\alpha]_D = -14.1^\circ$  ( $CHCl_3$ ). Source: CU MAO LIN GAI JUE *Microlepia strigosa* [Syn. *Trichomanes strigosa*], FENG WEI CAO *Pteris multifida*, JIN JI WEI *Pteris dactylina*, OU ZHOU JUE *Pteridium aquilinum*. Ref: 1521, 2732, 3563.

**18151 Pterosin P**

[56374-2-2]  $C_{14}H_{18}O_3$  (234.30). Crystals ( $CHCl_3-C_6H_6$ ), mp 115~117°C,  $[\alpha]_D = +4.6^\circ$  (MeOH). Source: OU ZHOU JUE *Pteridium aquilinum*. Ref: 3559.

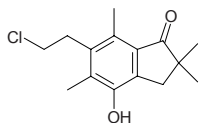
**18152 Pterosin Q**

[54797-09-0]  $C_{14}H_{18}O_4$  (250.30). Syrup,  $[\alpha]_D^{25} = +90^\circ$  ( $c = 1$ , MeOH). Source: LI JUE *Histiopteris incisa*, JIN JI WEI *Pteris dactylina*, XIE YU FENG WEI JUE *Pteris oshimensis*. Ref: 1521, 3563.

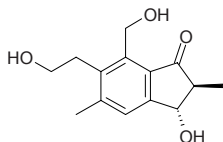


**18153 Pterisin R**

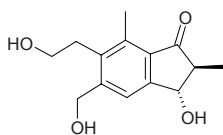
[76947-56-3] C<sub>15</sub>H<sub>19</sub>ClO<sub>2</sub> (266.77). mp 199.5~200°C. Source: JIN MAO GOU *Cibotium barometz* [Syn. *Polypodium barometz*]. Ref: 2932.

**18154 Pterisin S**

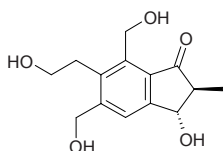
[56227-00-0] C<sub>14</sub>H<sub>18</sub>O<sub>4</sub> (250.30). mp 118~119°C, [α]<sub>D</sub><sup>25</sup> = +71° (c = 0.53, MeOH). Source: DA YE JING KOU BIAN CAO *Pteris cretica*, FENG WEI CAO *Pteris multifida*, FENG WEI JUE *Pteris cretica* var. *nervosa* [Syn. *Pteris nervosa*], *Pteris livida*, *Eriosorus flexuosus*, *Jamesonia scammanae*. Ref: 1521, 3563.

**18155 Pterisin T**

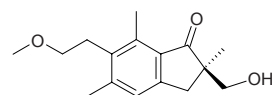
[56227-01-1] C<sub>14</sub>H<sub>18</sub>O<sub>4</sub> (250.30). Syrup, [α]<sub>D</sub><sup>24</sup> = +91° (c = 1, MeOH). Source: CHANG BING FENG WEI JUE *Pteris bella*, PING YU FENG WEI JUE *Pteris kiuschiuensis*, XIAN YU FENG WEI JUE *Pteris linearis*. Ref: 1521.

**18156 Pterisin U**

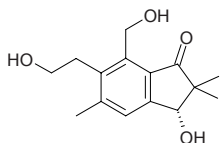
[56227-02-2] C<sub>14</sub>H<sub>18</sub>O<sub>5</sub> (266.30). mp 129~130°C, [α]<sub>D</sub><sup>21</sup> = +73.1° (c = 0.47, MeOH). Source: PING YU FENG WEI JUE *Pteris kiuschiuensis*. Ref: 1521.

**18157 Pterisin V**

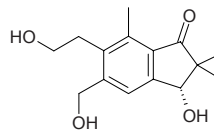
[56670-45-2] C<sub>16</sub>H<sub>22</sub>O<sub>3</sub> (262.35). Oil, [α]<sub>D</sub><sup>22</sup> = -4° (c = 0.69, MeOH). Source: WAN JUE *Dennstaedtia scabra* [Syn. *Dicksonia scabra*]. Ref: 2929, 2931.

**18158 Pterisin W**

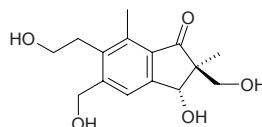
[62043-46-3] C<sub>15</sub>H<sub>20</sub>O<sub>4</sub> (264.32). Syrup, [α]<sub>D</sub><sup>21</sup> = +51.2° (c = 0.215, MeOH). Source: JIN CHAI FENG WEI JUE *Pteris fauriei* [Syn. *Pteris fauriei* var. *minor*]. Ref: 3562.

**18159 Pterisin X**

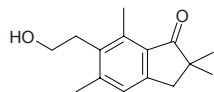
[62043-47-4] C<sub>15</sub>H<sub>20</sub>O<sub>4</sub> (264.32). Syrup, [α]<sub>D</sub><sup>21</sup> = +31.1° (c = 0.29, MeOH). Source: FENG YA JUE *Coniogramme japonica* [Syn. *Hemionitis japonica*], JIN CHAI FENG WEI JUE *Pteris fauriei* [Syn. *Pteris fauriei* var. *minor*]. Ref: 3562, 2932.

**18160 Pterisin Y**

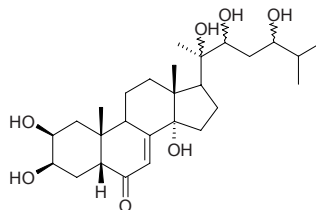
[76947-59-6] C<sub>15</sub>H<sub>20</sub>O<sub>5</sub> (280.32). Oil, [α]<sub>D</sub><sup>15</sup> = +62.2° (c = 1.35, MeOH). Source: FENG YA JUE *Coniogramme japonica* [Syn. *Hemionitis japonica*]. Ref: 2932.

**18161 Pterisin Z**

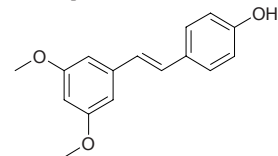
[34169-69-2] C<sub>15</sub>H<sub>20</sub>O<sub>2</sub> (232.33). mp 86~88°C. Source: JI JUE *Hypolepis punctata* [Syn. *Polypodium punctatum*], JIN MAO GOU *Cibotium barometz* [Syn. *Polypodium barometz*], JUE *Pteridium aquilinum* var. *latiusculum*. Ref: 6, 2732, 2931, 3102.

**18162 Pterosterone**

2,3,14,20,22,24-Hexahydroxycholest-7-en-6-one [18089-44-6] C<sub>27</sub>H<sub>44</sub>O<sub>7</sub> (480.65). Crystals +H<sub>2</sub>O, mp 229~230°C, [α]<sub>D</sub> = +7.4° (MeOH). Pharm: Insect ecdysone (molting hormone). Source: BEI MEI QIU ZI JUE *Onoclea sensibilis*, CANG BAI CHENG GOU FENG *Diploclisia glaucescens*, JUE *Pteridium aquilinum* var. *latiusculum*, LUO YAN CAO *Lemmaphyllum microphyllum*, XIAO YE GUAN ZHONG *Matteuccia struthiopteris*, *Vitex megapotamica*, *Lastrea thelpteris*. Ref: 6, 658, 660, 1521.

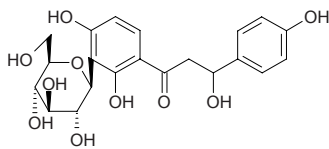
**18163 Pterostilbene**

[537-42-8] C<sub>16</sub>H<sub>16</sub>O<sub>3</sub> (256.30). mp 86°C. Pharm: Antifungal. Source: JIAN YE LONG XUE SHU *Dracaena cochinchinensis*, PU<sup>(2)</sup> TAO *Vitis vinifera*, QI LIN JIE *Daemonorops draco* (balsam: mean content = 1.03%)<sup>[5508]</sup>, SI ZI TAN *Pterocarpus santalinus*, ZI TAN *Pterocarpus indicus*. Ref: 6, 616, 658, 1521, 5508.

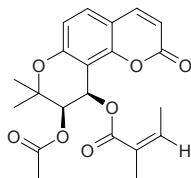


**18164 Pterosupin**

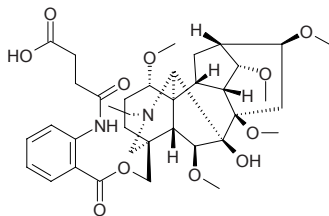
[81861-73-6] C<sub>21</sub>H<sub>24</sub>O<sub>10</sub> (436.42). mp 165~167°C (benzene-EtOAc), [ $\alpha$ ]<sub>D</sub><sup>26</sup> = +51° (c = 0.21, MeOH). **Pharm:** Antihypercholesterolemic (hypercholesterolemic rat caused by meals, markedly reduces the level of cholesterol, LDL in serum, LDL, triglyceride and index of artery atherosclerosis, increases the level of and ratio between HDL and all-cholesterol). **Source:** NANG ZHUANG ZI TAN *Pterocarpus marsupium*. **Ref:** 3659, 3660.

**18165 Pteryxin**

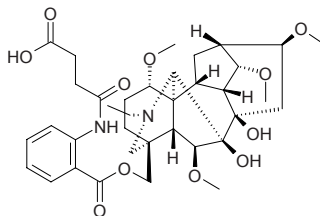
[13161-75-6] C<sub>21</sub>H<sub>22</sub>O<sub>7</sub> (386.41). mp 82°C; 87~88°C. **Pharm:** Anti-atherosclerotic; antihypercholesterolemic (reduces the level of cholesterol and lecithin in serum); antispasmodic (rbt and mus intestine, induced by BaCl<sub>2</sub>, relaxes uterus *in vitro*); fish toxin; antihypertensive; slows heart rate; coronary vasodilator (increases coronary flow). **Source:** BEI FANG DANG GUI *Angelica ursina*, JI JI QIN *Zizia aptera*, LI JIANG QIAN HU *Peucedanum govanianum* var. *bicolor*, MI HUA YAN FENG *Libanotis condensata*, MIAN MAO XIE HAO *Seseli ericephalum*. **Ref:** 4, 557, 658.

**18166 Puberaconitidine**

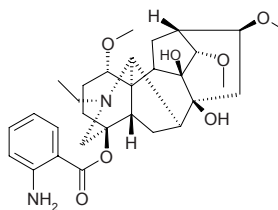
C<sub>37</sub>H<sub>52</sub>N<sub>2</sub>O<sub>11</sub> (700.83). **Source:** NIU BIAN *Aconitum barbatum* var. *puberulum* [Syn. *Aconitum ochranthum*]. **Ref:** 660.

**18167 Puberaconitine**

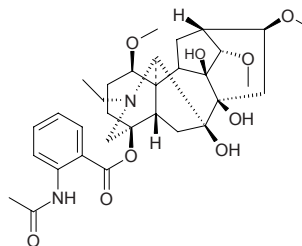
C<sub>36</sub>H<sub>50</sub>N<sub>2</sub>O<sub>11</sub> (686.81). **Source:** NIU BIAN *Aconitum barbatum* var. *puberulum* [Syn. *Aconitum ochranthum*]. **Ref:** 660.

**18168 Puberanidine**

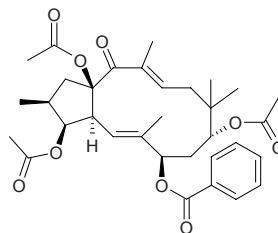
C<sub>30</sub>H<sub>42</sub>N<sub>2</sub>O<sub>7</sub> (542.68). **Source:** BEI FANG WU TOU *Aconitum septentrionale*, GAN WAN WU TOU *Aconitum finetianum*, NIU BIAN *Aconitum barbatum* var. *puberulum* [Syn. *Aconitum ochranthum*]. **Ref:** 660, 1521.

**18169 Puberanine**

C<sub>32</sub>H<sub>44</sub>N<sub>2</sub>O<sub>9</sub> (600.72). **Pharm:** Anti-inflammatory (modified assay of Berridge, 100µg/mL, InRt = 33.69%)<sup>[5271]</sup>; tyrosinase inhibitor (IC<sub>50</sub> = (205.2±0.2)µmol/L, control Kojic acid, IC<sub>50</sub> = (16.67±0.52)µmol/L, L-Mimosine, IC<sub>50</sub> = (3.68±0.02)µmol/L)<sup>[5271]</sup>; antioxidant (DPPH scavenger, 1µmol/L, ScRt = 12.2%; control 3-*t*-Butyl-4-hydroxyanisole, 1µmol/L, ScRt = 92.5%)<sup>[5271]</sup>. **Source:** NIU BIAN *Aconitum barbatum* var. *puberulum* [Syn. *Aconitum ochranthum*], *Aconitum leave* (aerial parts). **Ref:** 660, 1521, 5271.

**18170 Pubescene A**

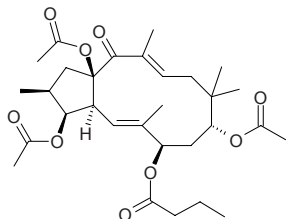
3β,9α,15β-Triacetoxo-7β-benzoyloxy-14-oxojatropha-5*E*,12*E*-diene C<sub>33</sub>H<sub>42</sub>O<sub>9</sub> (582.70). Amorphous solid, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -48° (c = 0.14, CHCl<sub>3</sub>). **Pharm:** Cytotoxic (inhibits growth of hmn cancer cells, MCF7, GI<sub>50</sub> > 50µmol/L, control Doxorubicin, GI<sub>50</sub> = (42.8±8.2)µmol/L; NCI-H460, GI<sub>50</sub> = (31.7±2.4)µmol/L, Doxorubicin, GI<sub>50</sub> = (94.0±8.7)µmol/L; SF268, GI<sub>50</sub> > 50µmol/L, Doxorubicin, GI<sub>50</sub> = (93.0±7.0)µmol/L)<sup>[5384]</sup>; multidrug resistance (MDR) reversing activities (16µmol/L, fluorescence intensity = 340.00, fluorescence activity ratio = 45.94, DMSO: 20µmol/L, fluorescence intensity = 5.84, fluorescence activity ratio = 0.78)<sup>[4928]</sup>. **Source:** DUAN ROU MAO DA JI *Euphorbia pubescens* (whole herb). **Ref:** 4928, 5384.



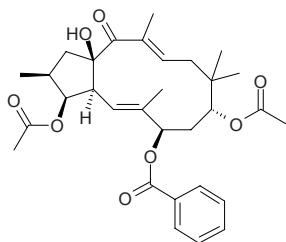


**18171 Pubescene B**

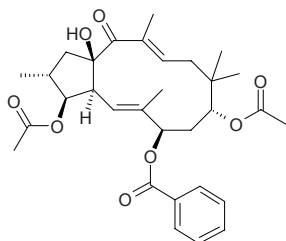
3 $\beta$ ,9 $\alpha$ ,15 $\beta$ -Triacetoxy-7 $\beta$ -butyroyloxy-14-oxojatropha-5E,12E-diene C<sub>30</sub>H<sub>44</sub>O<sub>9</sub> (548.68). Amorphous solid,  $[\alpha]_D^{25} = -20^\circ$  ( $c = 0.13$ , CHCl<sub>3</sub>). **Pharm:** Cytotoxic (inhibits growth of hmn cancer cells, MCF7, GI<sub>50</sub> > 50 $\mu$ mol/L, control Doxorubicin, GI<sub>50</sub> = (42.8 $\pm$ 8.2) $\mu$ mol/L; NCI-H460, GI<sub>50</sub> = (18.8 $\pm$ 2.5) $\mu$ mol/L, Doxorubicin, GI<sub>50</sub> = (94.0 $\pm$ 8.7) $\mu$ mol/L; SF268, GI<sub>50</sub> > 50 $\mu$ mol/L, Doxorubicin, GI<sub>50</sub> = (93.0 $\pm$ 7.0) $\mu$ mol/L)<sup>[5384]</sup>; Multidrug resistance (MDR) reversing activities (16 $\mu$ mol/L, fluorescence intensity = 142.67, fluorescence activity ratio = 19.76, DMSO: 20 $\mu$ mol/L, fluorescence intensity = 5.84, fluorescence activity ratio = 0.78)<sup>[4928]</sup>. **Source:** DUAN ROU MAO DA JI *Euphorbia pubescens* (whole herb). **Ref:** 4928, 5384.

**18172 Pubescene C**

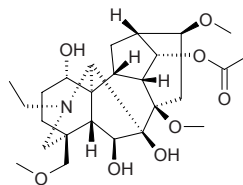
3 $\beta$ ,9 $\alpha$ -Diacetoxy-7 $\beta$ -benzoyloxy-15 $\beta$ -hydroxy-14-oxojatropha-5E,12E-diene C<sub>31</sub>H<sub>40</sub>O<sub>8</sub> (540.66). Amorphous solid,  $[\alpha]_D^{25} = -18^\circ$  ( $c = 0.11$ , CHCl<sub>3</sub>). **Pharm:** Multidrug resistance (MDR) reversing activities (16 $\mu$ mol/L, fluorescence intensity = 122.20, fluorescence activity ratio = 16.51, DMSO: 20 $\mu$ mol/L, fluorescence intensity = 5.84, fluorescence activity ratio = 0.78)<sup>[4928]</sup>; Cytotoxic (inhibits growth of hmn cancer cells, MCF7, GI<sub>50</sub> > 50 $\mu$ mol/L, control Doxorubicin, GI<sub>50</sub> = (42.8 $\pm$ 8.2) $\mu$ mol/L; NCI-H460, GI<sub>50</sub> = (33.3 $\pm$ 5.9) $\mu$ mol/L, Doxorubicin, GI<sub>50</sub> = (94.0 $\pm$ 8.7) $\mu$ mol/L; SF268, GI<sub>50</sub> > 50 $\mu$ mol/L, Doxorubicin, GI<sub>50</sub> = (93.0 $\pm$ 7.0) $\mu$ mol/L)<sup>[5384]</sup>. **Source:** DUAN ROU MAO DA JI *Euphorbia pubescens* (whole herb). **Ref:** 4928, 5384.

**18173 Pubescene D**

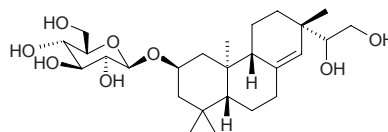
C<sub>31</sub>H<sub>40</sub>O<sub>8</sub> (540.66). Amorphous solid,  $[\alpha]_D^{25} = +20.9^\circ$  ( $c = 0.14$ , CHCl<sub>3</sub>). **Pharm:** Multidrug resistance (MDR) reversing activities (16 $\mu$ mol/L, fluorescence intensity = 243.71, fluorescence activity ratio = 32.93, DMSO: 20 $\mu$ mol/L, fluorescence intensity = 5.84, fluorescence activity ratio = 0.78). **Source:** DUAN ROU MAO DA JI *Euphorbia pubescens* (whole herb). **Ref:** 4928.

**18174 Pubescenine**

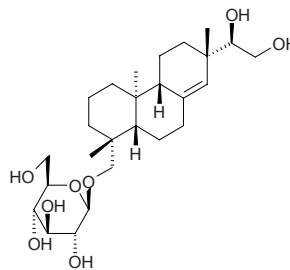
[116339-93-6] C<sub>26</sub>H<sub>41</sub>NO<sub>8</sub> (495.62). Crystals (EtOAc), mp 227–229°C,  $[\alpha]_D = -1.3^\circ$  ( $c = 0.15$ , EtOH). **Source:** DUAN ROU MAO FEI YAN CAO *Consolida pubescens*. **Ref:** 1521.

**18175 Pubeside A**

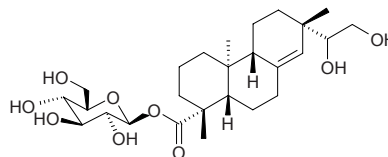
C<sub>26</sub>H<sub>44</sub>O<sub>8</sub> (484.64). mp 265–267°C,  $[\alpha]_D^{26} = -36.78^\circ$  ( $c = 0.2477$ , MeOH). **Source:** XI XIAN *Siegesbeckia orientalis* (aerial parts: yield = 0.00033%), XIAN GENG XI XIAN *Siegesbeckia orientalis* var. *pubescens* [Syn. *Siegesbeckia pubescens*]. **Ref:** 9, 4764.

**18176 Pubeside B**

*ent*-(15R),16,19-Trihydroxypimar-8(14)-ene 19-*O*- $\beta$ -D-glucopyranoside C<sub>26</sub>H<sub>44</sub>O<sub>8</sub> (484.64). White amorphous powder,  $[\alpha]_D^{25} = -34.5^\circ$  ( $c = 0.60$ , MeOH); mp 257–260°C,  $[\alpha]_D^{25} = -67.01^\circ$  ( $c = 0.237$ , MeOH). **Source:** XI XIAN *Siegesbeckia orientalis* (aerial parts: yield = 0.00033%), XIAN GENG XI XIAN *Siegesbeckia orientalis* var. *pubescens* [Syn. *Siegesbeckia pubescens*]. **Ref:** 9, 4438, 4764.

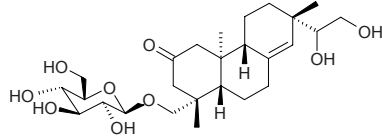
**18177 Pubeside C**

C<sub>26</sub>H<sub>42</sub>O<sub>9</sub> (498.62). mp 261–263°C,  $[\alpha]_D^{26} = -9.6^\circ$  ( $c = 0.626$ , MeOH). **Source:** XI XIAN *Siegesbeckia orientalis* (aerial parts: yield = 0.00033%), XIAN GENG XI XIAN *Siegesbeckia orientalis* var. *pubescens* [Syn. *Siegesbeckia pubescens*]. **Ref:** 9, 4764.

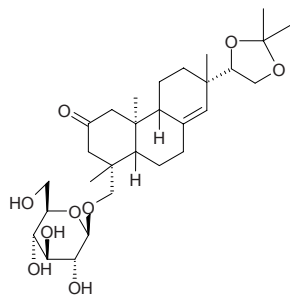


**18178 Pubeside D**

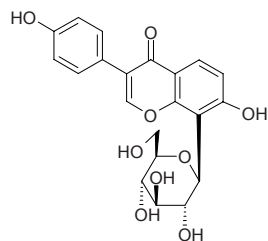
$C_{26}H_{42}O_9$  (498.62). mp 250~253°C. Source: XI XIAN *Siegesbeckia orientalis* (aerial parts: yield = 0.00047%), XIAN GENG XI XIAN *Siegesbeckia orientalis* var. *pubescens* [Syn. *Siegesbeckia pubescens*]. Ref: 9, 4764.

**18179 Pubeside E**

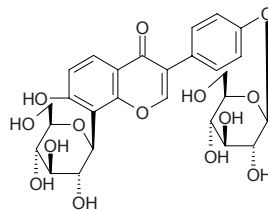
$C_{29}H_{46}O_9$  (538.68). mp 240~243°C. Source: XIAN GENG XI XIAN *Siegesbeckia orientalis* var. *pubescens* [Syn. *Siegesbeckia pubescens*]. Ref: 9.

**18180 Puerarin**

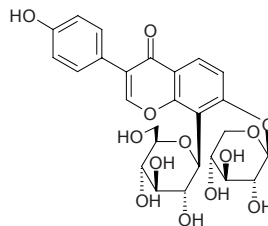
[3681-99-0]  $C_{21}H_{20}O_9$  (416.39). mp 187°C (dec). Pharm: Antihypertensive (conscious hypertensive essential rat HER, 100mg/kg); antiarrhythmic (against ventricular premature beat and tachycardia); antiarrhythmic (rbt, 10mg/kg, induced by  $CHCl_3$ -adrenalin);  $\beta$ -Adrenergic receptor blocker; anti-ischemia myocardial (rat, acute ischemia induced by hypophysin); improves barrier of microcirculation (mus, small intestine experiment); used in treatment of arterial blockage in retina; used in treatment of hypertension and angina pectoris (effective component in *Pueraria lobata* GE GEN); coronary vasodilator (increase of blood flow through coronary arteries, decrease of consumption of oxygen of cardiac muscle). Source: E MEI GE *Pueraria omeiensis* (root: mean content = 2.30%)<sup>[5508]</sup>, FEN GE *Pueraria lobata* var. *thomsonii* (root: mean content of 2 origins = 1.02%)<sup>[5508]</sup>, GAN GE TENG GEN *Pueraria thomsonii* (root: mean content of 2 origins = 1.03%)<sup>[5508]</sup>, GE GEN *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*] (root: mean content = 3.19%)<sup>[5508]</sup>, HUANG MAO GE *Pueraria calycina* (root: content = 0.140%)<sup>[5508]</sup>, SAN LIE YE GE *Pueraria phaseoloides* (root: content = 2.92%)<sup>[5508]</sup>, SHI YONG GE *Pueraria edulis* (root: content = 0.25%)<sup>[5508]</sup>, YUN NAN GE TENG *Pueraria peduncularis* (root: content = 0.158%)<sup>[5508]</sup>, *Pueraria* spp. Ref: 4, 658, 660, 1521, 3113, 5501, 5508.

**18181 Puerarin-4'-O-D-glucoside**

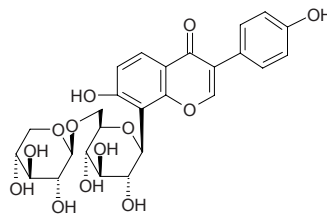
[117047-08-2]  $C_{27}H_{30}O_{14}$  (578.53). mp 187°C,  $[\alpha]_D^{22} = +28.8^\circ$  (NaOH aq.). Source: GE GEN *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*]. Ref: 1521, 3109.

**18182 Puerarin-xyloside I**

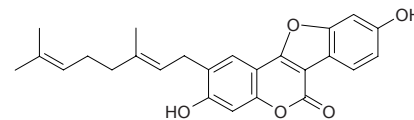
$C_{26}H_{28}O_{13}$  (548.51). Source: GE GEN *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*]. Ref: 2.

**18183 Puerarin xyloside II**

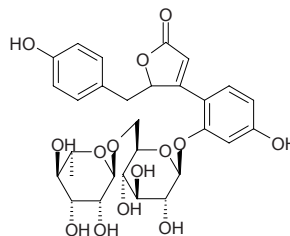
$C_{26}H_{28}O_{13}$  (548.51). Source: GE GEN *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*]. Ref: 1298.

**18184 Puerarol**

$C_{25}H_{24}O_5$  (404.47). Needles, mp 237°C (dec). Source: GE GEN *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*]. Ref: 2, 1521, 3109.

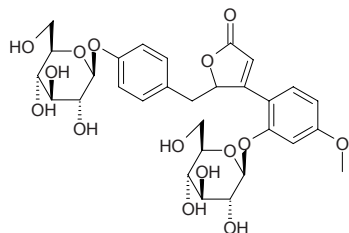
**18185 Pueroside A**

[100692-52-2]  $C_{29}H_{34}O_{14}$  (606.59). Needles, mp 183~185°C,  $[\alpha]_D = -107.5^\circ$  (MeOH). Source: GE GEN *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*]. Ref: 3566, 1521.

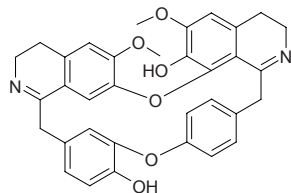


**18186 Pueroside B**

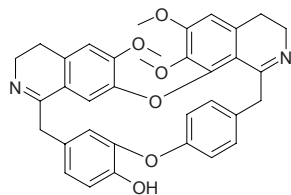
[100692-54-4] C<sub>30</sub>H<sub>36</sub>O<sub>15</sub> (636.61). Needles, mp 227~229°C, [ $\alpha$ ]<sub>D</sub> = -37.6° (MeOH). Source: GE GEN *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*]. Ref: 3566, 1521.

**18187 Puertogaline A**

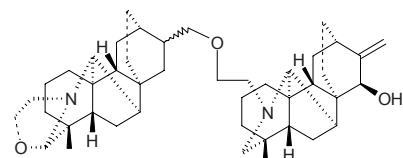
C<sub>34</sub>H<sub>30</sub>N<sub>2</sub>O<sub>6</sub> (562.63). Amorphous, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = 0° (c = 0.5, CHCl<sub>3</sub>:MeOH = 3:1). Pharm: Antitrypanosomal (inhibits trypomastigote form of *Trypanosoma cruzi*, strain Y, IC<sub>50</sub> = 136.3µg/mL, IC<sub>90</sub> = 260.3µg/mL). Source: *Guatteria boliviana* (stem cortex). Ref: 3976.

**18188 Puertogaline B**

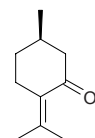
C<sub>35</sub>H<sub>32</sub>N<sub>2</sub>O<sub>6</sub> (576.66). Amorphous, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = 0° (c = 0.77, CHCl<sub>3</sub>). Pharm: Antitrypanosomal (inhibits trypomastigote form of *Trypanosoma cruzi*, strain Y, IC<sub>50</sub> = 43.9µg/mL, IC<sub>90</sub> = 163.1µg/mL); antimalarial (*Plasmodium falciparum* D6, LC<sub>50</sub> = 316.4ng/mL, SI = 15; *Plasmodium falciparum* W2, LC<sub>50</sub> = 183.2ng/mL, SI = 26); cytotoxic (KB, LC<sub>50</sub> = 4800ng/mL). Source: *Guatteria boliviana* (stem cortex). Ref: 3976.

**18189 Pukeensine**

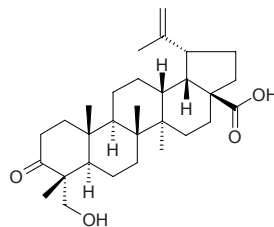
[144442-84-2] C<sub>44</sub>H<sub>64</sub>N<sub>2</sub>O<sub>3</sub> (669.01). Amorphous powder. Source: PU GE WU TOU *Aconitum pukeense*. Ref: 229.

**18190 Pulegone**

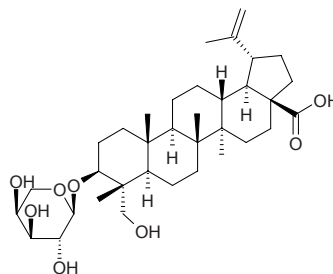
(R)-(+)-Pulegone [15932-80-6] C<sub>10</sub>H<sub>16</sub>O (152.24). bp (+) 224°C, (-) 109°C/20mmHg. Pharm: Anti-inflammatory; uterine relaxant (oxytocin- and PGF<sub>2a</sub>-stimulated contractions of isolated rat myometrium, oxytocin-stimulated, IC<sub>50</sub> = (21.8±2.1)µg/mL; PGF<sub>2a</sub>-stimulated, IC<sub>50</sub> = (12.7±4.6)µg/mL)<sup>[5066]</sup>. Source: CHAI HU *Bupleurum chinense*, HUA DONG LAN CI TOU *Echinops grijsii*, JIN XIAN CAO *Glechoma longituba*, JIN ZHAN JU *Calendula officinalis*, JING JIE *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*], JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*], XI YANG SHEN *Panax quinquefolium*, YU XIANG CAO *Mentha rotundifolia*, CHUN E BO HE *Mentha pulegium*. Ref: 2, 11, 658, 660, 5066.

**18191 Pulsatillilic acid**

23-Hydroxy-3-oxo-20(29)-lupen-28-oic acid C<sub>30</sub>H<sub>46</sub>O<sub>4</sub> (470.70). Source: BAI TOU WENG *Pulsatilla chinensis*. Ref: 2.

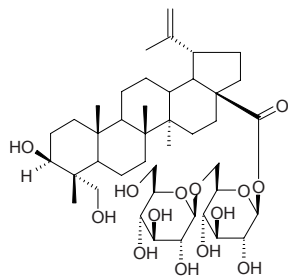
**18192 Pulsatilloside A**

3-O- $\alpha$ -L-Arabinopyranosyl-3 $\beta$ ,23-dihydroxy-lup-20(29)-en-28-oic acid C<sub>35</sub>H<sub>56</sub>O<sub>8</sub> (604.83). Purity  $\geq$  98%, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +102.5° (c = 0.15, CH<sub>3</sub>OH); amorphous powder, mp 160~165°C. Pharm: Anti-apoptosis (Protects PC12 Cells apoptosis Induced by sodium cyanide (NaCN, 10mmol/L) and glucose deprivation: MTT assay, control normal cells, survival rate = 100%, injured cells, survival rate = 73.9%, injured cells + 10.0µg/mL Pulsatilloside A, survival rate = 99.2%; LDH release assay, control normal cells, LDH activity = (71.4±5.3)unit/mL, injured cells, LDH activity = (134.4±1.1)unit/mL, injured cells + 10.0µg/mL Pulsatilloside A, LDH activity = (70.9±4.1)unit/mL; flow cytometry assay, control normal cells, apoptosis rate = (2.01±0.81)%, injured cells, apoptosis rate = (18.70±1.90)%, injured cells + 10.0µg/mL Pulsatilloside A, apoptosis rate = (4.64±0.96)%<sup>[5360]</sup>). Source: BAI TOU WENG *Pulsatilla chinensis*. Ref: 2, 9, 5360.

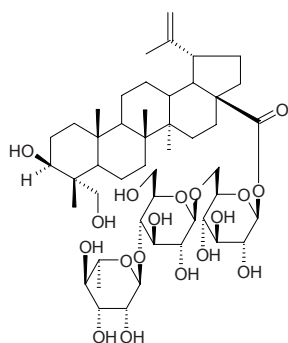


**18193 Pulsatilloside B**

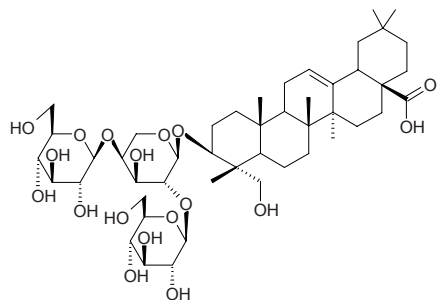
$C_{42}H_{68}O_{14}$  (797.00). Amorphous powder, mp 200–202°C. Source: BAI TOU WENG *Pulsatilla chinensis*. Ref: 9.

**18194 Pulsatilloside C**

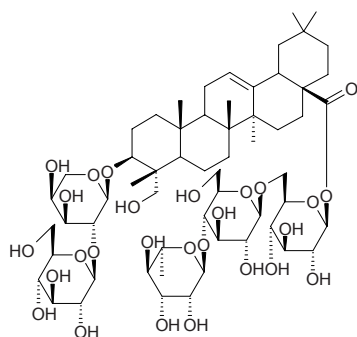
$C_{48}H_{78}O_{18}$  (943.15). Amorphous powder, mp 200–202°C,  $[\alpha]_D^{25} = -8.3^\circ$  ( $c = 0.522$ , MeOH). Source: BAI TOU WENG *Pulsatilla chinensis*. Ref: 9.

**18195 Pulsatilloside A**

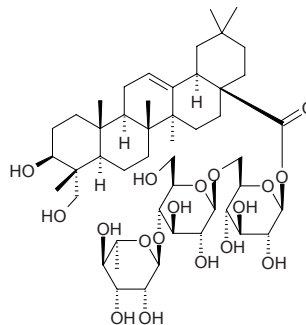
$C_{47}H_{76}O_{18}$  (929.12). Source: ZHONG E BAI TOU WENG *Pulsatilla campanella*. Ref: 3567, 3568.

**18196 Pulsatilloside B**

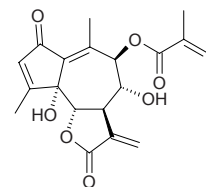
$C_{59}H_{96}O_{27}$  (1237.41). Source: ZHONG E BAI TOU WENG *Pulsatilla campanella*. Ref: 3567, 3568, 1521.

**18197 Pulsatilloside C**

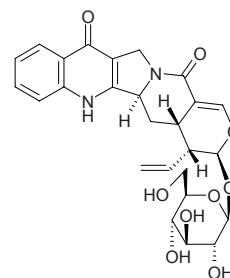
Kalopanaxsaponin G [57539-70-5]  $C_{48}H_{78}O_{18}$  (943.13). Colorless amorphous powder, mp 190–195°C; colorless acicular crystals (watery ethanol), mp 213–215°C (dec),  $[\alpha]_D = -2.8^\circ$  ( $c = 0.3$ , methanol). Pharm: Sedative (mus orl, 1mg/kg, inhibits spontaneous movement). Source: YE MU GUA *Stauntonia chinensis*. Ref: 900.

**18198 Pumilin**

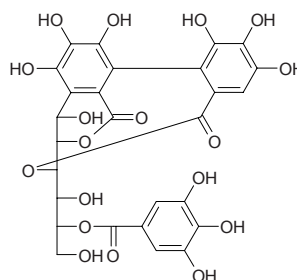
[1405-19-2]  $C_{20}H_{22}O_7$  (374.39). mp 248–249°C (dec). Source: AI SHENG BO LAN DI *Berlandiera pumila*. Ref: 1521.

**18199 Pumiloside**

$C_{26}H_{28}N_2O_9$  (512.52). Colorless amorphous solid, mp 307–308°C (MeOH),  $[\alpha]_D^{22} = -39.8^\circ$  ( $c = 0.15$ , MeOH); prisms, mp > 300°C. Source: DONG FANG WU TAN *Nauclea orientalis* (bark), DUAN XIAO SHE GEN CAO *Ophiorrhiza pumila*, LIU QIU SHE GEN CAO *Ophiorrhiza liukiensis* (whole herb), XI SHU *Camptotheca acuminata*. Ref: 1521, 3074, 4097, 4527.

**18200 Punicaacortein A**

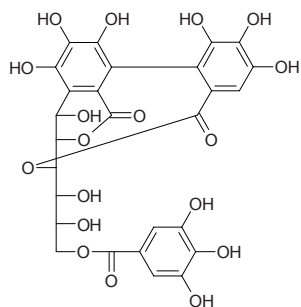
[103488-35-3]  $C_{27}H_{22}O_{18}$  (634.47). Tan amorphous powder +0.5H<sub>2</sub>O,  $[\alpha]_D^{28} = -73.8^\circ$  ( $c = 0.6$ , MeOH). Source: SHI LIU PI *Punica granatum*. Ref: 3569, 3570.



**18201 Punicacortein B**

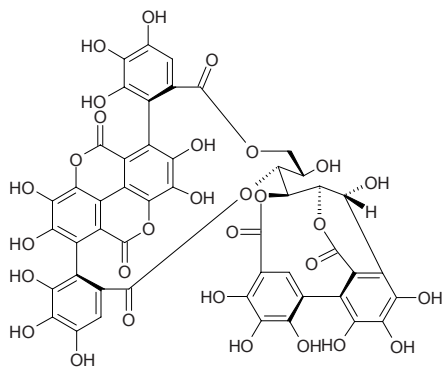
6-Galloyl-2,3-(*S*)-hexahydroxydiphenyl-*D*-glucose [103488-36-4] C<sub>27</sub>H<sub>22</sub>O<sub>18</sub> (634.47). Tan amorphous powder +0.5H<sub>2</sub>O, [α]<sub>D</sub><sup>28</sup> = +11.9° (*c* = 0.5, MeOH).

Source: SHI LIU PI *Punica granatum*. Ref: 3569, 3570.

**18202 Punicacortein C**

[103488-37-5] C<sub>48</sub>H<sub>28</sub>O<sub>30</sub> (1084.74). Yellow amorphous powder, [α]<sub>D</sub><sup>28</sup> = -37.7°

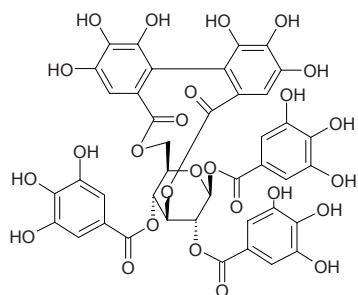
(*c* = 1.2, H<sub>2</sub>O). Pharm: Cytotoxic (malanotic carcinoma RPMI-7951, ED<sub>50</sub> = 3.86 μg/mL); HIV reverse transcriptase inhibitor (IC<sub>50</sub> = 5 μmol/L, inhibits HIV replication); topoisomerase II inhibitor (IC<sub>100</sub> = 0.5 μmol/L); pesticide (dog roundworm larva). Source: QIAO MU ZHUANG LAN REN *Terminalia arborea*, SHI LIU PI *Punica granatum*. Ref: 3569, 3661, 3662, 1728, 1706, 3663.

**18203 Punicafolin**

[88847-11-4] C<sub>41</sub>H<sub>30</sub>O<sub>26</sub> (938.67). White powder, mp 235–237°C (dec), [α]<sub>D</sub><sup>20</sup> =

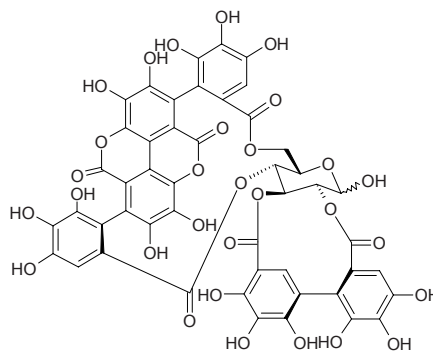
-59.5° (*c* = 0.4, methanol). Pharm: Hyaluronidase inhibitor (10 mmol/L, InRt = 96%); protein kinase C inhibitor (IC<sub>50</sub> = 4 μmol/L). Source: AN MO LE

*Phyllanthus emblica* (fruit juice)<sup>[3094]</sup>, ZE QI *Euphorbia helioscopia*, YE WU TONG *Mallotus japonicus*, SUAN SHI LIU *Punica granatum*. Ref: 900, 3094.

**18204 Punicalagin**

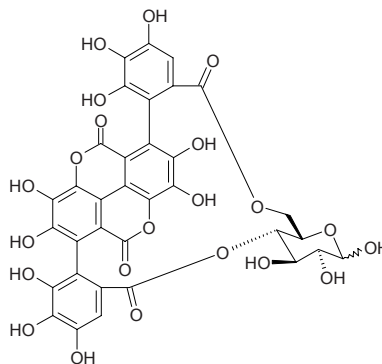
[65995-63-3] C<sub>48</sub>H<sub>28</sub>O<sub>30</sub> (1084.74). Yellow amorphous powder +1H<sub>2</sub>O, [α]<sub>D</sub><sup>20</sup> =

-181° (*c* = 1.0, H<sub>2</sub>O), [α]<sub>D</sub><sup>28</sup> = +3.8° (*c* = 0.9, MeOH), anomeric mixture. Pharm: Toxic to sheep and cattle. Source: SHI LIU PI *Punica granatum*, HE ZI *Terminalia chebula*. Ref: 3571, 3572, 3573, 3574.

**18205 Punicalin**

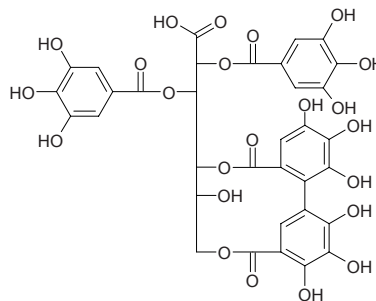
4,6-(*S,S*)-Gallagyl-*D*-glucose [65995-64-4] C<sub>34</sub>H<sub>22</sub>O<sub>22</sub> (782.54). Yellow amorphous powder +1H<sub>2</sub>O, [α]<sub>D</sub><sup>28</sup> = -81.1° (*c* = 0.6, H<sub>2</sub>O), anomeric mixture.

Source: SHI LIU PI *Punica granatum*. Ref: 3569.

**18206 Puniguconin**

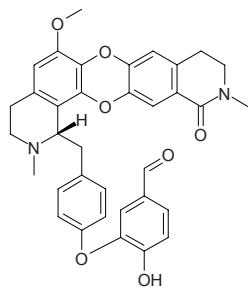
[103488-38-6] C<sub>34</sub>H<sub>26</sub>O<sub>23</sub> (802.57). Tan amorphous powder +2H<sub>2</sub>O, [α]<sub>D</sub><sup>25</sup> =

+45.5° (*c* = 0.7, MeOH). Source: DA HUA ZI WEI *Lagerstroemia speciosa* [Syn. *Munchausia speciosa*; *Lagerstroemia flos-reginae*], SHI LIU PI *Punica granatum*. Ref: 3569, 3575.

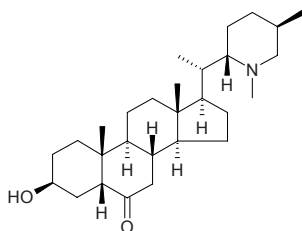


**18207 Punjabine**

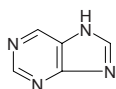
[84435-36-9] C<sub>35</sub>H<sub>32</sub>N<sub>2</sub>O<sub>7</sub> (592.65). [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -40° (c = 0.48, MeOH). Source: GOU QI XIAO BO *Berberis lycium*. Ref: 3576.

**18208 Puqietinone**

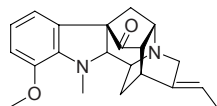
[133362-87-5] C<sub>28</sub>H<sub>47</sub>NO<sub>2</sub> (429.69). mp 240~245°C, [ $\alpha$ ]<sub>D</sub> = +29.4° (c = 0.64, CHCl<sub>3</sub>). Source: PU QI BEI MU *Fritillaria puqiensis*. Ref: 2201.

**18209 Purine**

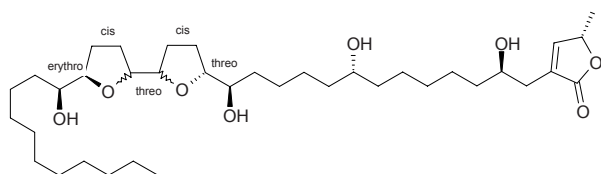
7*H*-Imidazo[4,5-*d*]pyrimidine [120-73-0] C<sub>5</sub>H<sub>4</sub>N<sub>4</sub> (120.11). mp 216~217°C. Source: LUO HUA SHENG *Arachis hypogaea*. Ref: 6.

**18210 Purpeline**

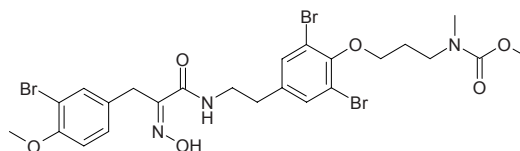
[2246-33-5] C<sub>21</sub>H<sub>24</sub>N<sub>2</sub>O<sub>2</sub> (336.44). Source: CUI TU LUO FU MU *Rauwolfia vomitoria*, KE MING XI LUO FU MU *Rauwolfia cumminsi*. Ref: 1521.

**18211 Purpuracenin**

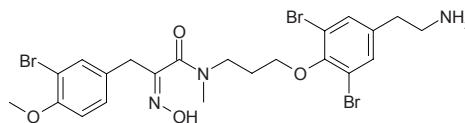
[227086-12-6] C<sub>37</sub>H<sub>66</sub>O<sub>8</sub> (638.93). Yellowish wax, mp 42~44°C, [ $\alpha$ ]<sub>D</sub> = +26° (c = 0.1, MeOH). Pharm: Cytotoxic (A549, ED<sub>50</sub> = 0.048 μg/mL; A498, ED<sub>50</sub> < 0.001 μg/mL; PC3, ED<sub>50</sub> < 0.001 μg/mL; BST, LC<sub>50</sub> = 3.0 μg/mL). Source: ZI FAN LI ZHI *Annona purpurea*. Ref: 3748.

**18212 Purpuramine K**

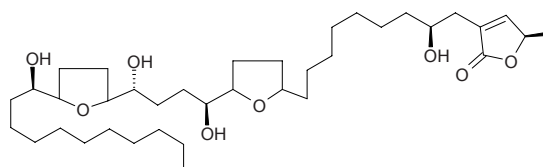
C<sub>24</sub>H<sub>28</sub>Br<sub>3</sub>N<sub>3</sub>O<sub>6</sub> (694.22). White solid, mp 190~195°C. Pharm: Antibacterial (disk susceptibility tests, standard NCCLS method, 50 μg/disk (control 30 μg/disk), gram-positive bacteria: *Staphylococcus aureus*, DIZ = 10mm, positive control Kanamycin, DIZ = 10mm, *Bacillus subtilis*, DIZ = 10mm, positive control Kanamycin, DIZ = 18mm, *Bacillus sphaericus*, DIZ = 9mm, positive control Kanamycin, DIZ = 20mm; gram-negative bacteria: *Chromobacterium violaceum*, DIZ = 8mm, positive control Kanamycin, DIZ = 17mm, *Klebsiella aerogenes*, DIZ = 11mm, positive control Kanamycin, DIZ = 15mm, *Pseudomonas aeruginosa*, DIZ = 12mm, positive control Kanamycin, DIZ = 27mm). Source: ZI SHA ROU HAI MIAN *Psammaphysilla purpurea*. Ref: 4372.

**18213 Purpuramine L**

C<sub>22</sub>H<sub>26</sub>Br<sub>3</sub>N<sub>3</sub>O<sub>4</sub> (636.18). White solid, mp 175~178°C. Pharm: Antibacterial (disk susceptibility tests, standard NCCLS method, 50 μg/disk (control 30 μg/disk), gram-positive bacteria: *Staphylococcus aureus*, DIZ = 14mm, positive control Kanamycin, DIZ = 10mm; *Bacillus subtilis*, DIZ = 14mm, positive control Kanamycin, DIZ = 18mm; *Bacillus sphaericus*, DIZ = 12mm, positive control Kanamycin, DIZ = 20mm; gram-negative bacteria: *Chromobacterium violaceum*, DIZ = 13mm, positive control Kanamycin, DIZ = 17mm; *Klebsiella aerogenes*, 10mm, positive control Kanamycin, DIZ = 15mm; *Pseudomonas aeruginosa*, DIZ = 16mm, positive control Kanamycin, DIZ = 27mm). Source: ZI SHA ROU HAI MIAN *Psammaphysilla purpurea*. Ref: 4372.

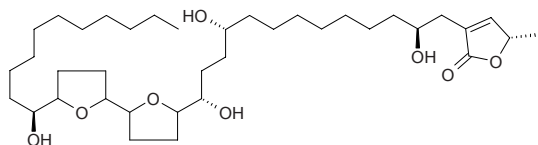
**18214 Purpureacin 1**

[150134-21-7] C<sub>37</sub>H<sub>66</sub>O<sub>8</sub> (638.93). White amorphous powder, [ $\alpha$ ]<sub>D</sub> = -3.3° (c = 0.12, MeOH). Pharm: Cytotoxic (BST, LC<sub>50</sub> = 0.53 μg/mL); antibacterial (*Bacillus subtilis*, MED = 20 μg); antifungal (yeast *Candida albicans*, MED = 0.05 μg); larvacide (larva of *stegomyia calopus*, LC<sub>100</sub> = 2.0 μg/mL). Source: ZI FAN LI ZHI *Annona purpurea*. Ref: 3664.

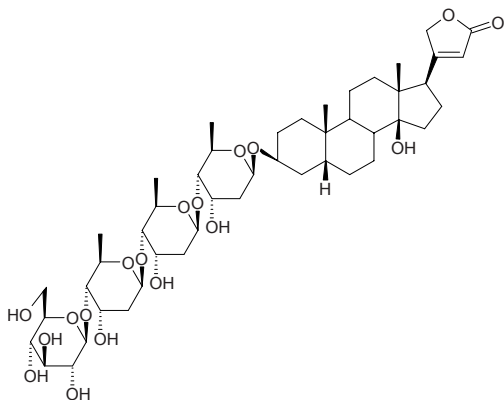


**18215 Purpureacin 2**

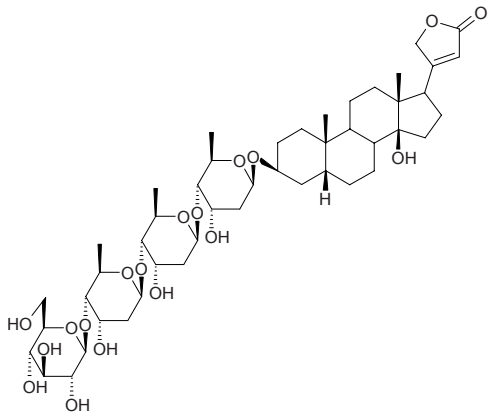
[149990-60-3] C<sub>37</sub>H<sub>66</sub>O<sub>8</sub> (638.93). White amorphous powder,  $[\alpha]_D^{20} = +6.5^\circ$  ( $c = 0.17$  MeOH). **Pharm:** Cytotoxic (BST, LC<sub>50</sub> = 0.38 μg/mL); antifungal (yeast *Candida albicans*, MED = 1 μg); larvicide (larva of *stegomyia calopus*, LC<sub>100</sub> = 1.0 μg/mL). **Source:** ZI FAN LI ZHI *Annona purpurea*. **Ref:** 3664.

**18216 Purpurea glycoside A**

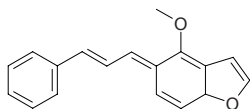
[19855-40-4] C<sub>47</sub>H<sub>74</sub>O<sub>18</sub> (927.10). Platelets (EtOH–Et<sub>2</sub>O) or amorphous substance, mp 270~280°C (dec),  $[\alpha]_D^{20} = +12^\circ$  (EtOH aq.). **Pharm:** Cardiotonic. **Source:** MAO DI HUANG *Digitalis purpurea* (dried leaf: content = 0.053%<sup>[5508]</sup>), *Digitalis* spp. **Ref:** 660, 1521, 5508.

**18217 Purpurea glycoside B**

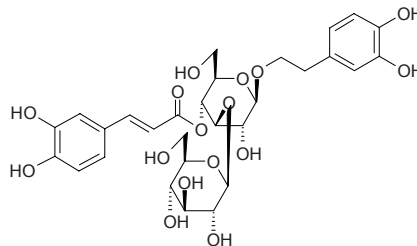
[19855-39-1] C<sub>47</sub>H<sub>74</sub>O<sub>18</sub> (927.10). Prisms or needles (CHCl<sub>3</sub>–MeOH–Et<sub>2</sub>O), mp 240°C (dec),  $[\alpha]_D^{20} = +15.5^\circ$  (EtOH aq.). **Source:** MAO DI HUANG *Digitalis purpurea* (dried leaf: content = 0.051%<sup>[5508]</sup>), *Digitalis* spp. **Ref:** 660, 1521, 5508.

**18218 Purpureamethide**

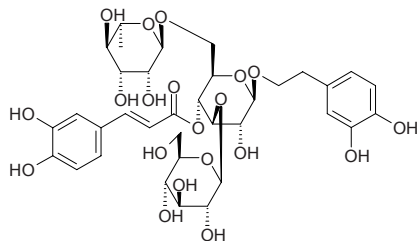
[83728-91-0] C<sub>18</sub>H<sub>16</sub>O<sub>2</sub> (264.33). Red crystals (C<sub>6</sub>H<sub>6</sub>–EtOAc), mp 127~128°C. **Source:** HUI YE *Tephrosia purpurea*. **Ref:** 3577.

**18219 Purpureaside A**

Plantamajoside; 3,4-Dihydroxy-β-phenethyl-O-β-D-glucopyranosyl-(1→3)-4-O-caffeoyl-β-D-glucopyranoside [104777-68-6] C<sub>29</sub>H<sub>36</sub>O<sub>16</sub> (640.60). Amorphous powder, mp 158~162°C; 142.7~152.0°C,  $[\alpha]_D^{24.8} = -43.88^\circ$  ( $c = 0.47$ , methanol),  $[\alpha]_D^{19} = -54.3^\circ$  ( $c = 0.8$ , MeOH). **Pharm:** Antiasthmatic; antibacterial (*Pseudomonas cepacia* and *Pseudomonas maltophilia* ED = 0.2~0.5 mg; *Corynebacterium fascians* MIC = 2.0 mg/mL; *Erwinia carotovora* var. *Carotovora* MIC = 1.0 mg/mL; *Escherichia coli*, *Staphylococcus aureus*, several plant pathogenic bacteria); anti-inflammatory (mus ears, caused by arachidonic acid, 1 mg/ear InRt = 12%, 2 mg/ear InRt = 25%); Δ<sup>5</sup>-lipoxygenase inhibitor (IC<sub>50</sub> = 0.373 μmol/L); cAMP phosphodiesterase inhibitor (*in vitro*, IC<sub>50</sub> = 160 μmol/L); decreases some hmn leukocyte functions. **Source:** CHANG YE CHE QIAN *Plantago lanceolata*, DA CHE QIAN *Plantago major*, CHE QIAN *Plantago asiatica*, GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], MAO DI HUANG *Digitalis purpurea*, PU FU JING TU ER CAO *Lagotis stolonifera*. **Ref:** 2, 658, 900, 3000, 3101, 5020.

**18220 Purpureaside B**

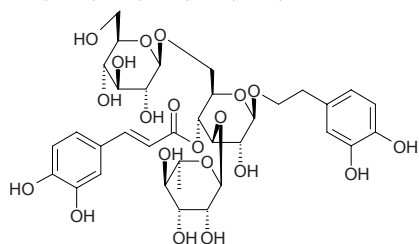
3,4-Dihydroxy-β-phenethyl-O-β-D-glucopyranosyl-(1→3)-O-α-L-rhamnopyranosyl-(1→6)-4-O-caffeoyl-β-D-glucopyranoside [104777-69-7] C<sub>35</sub>H<sub>46</sub>O<sub>20</sub> (786.74). Amorphous powder,  $[\alpha]_D^{19} = -14^\circ$  ( $c = 1.0$ , MeOH);  $[\alpha]_D^{27} = -16^\circ$  ( $c = 1.0$ , MeOH). **Pharm:** Antibacterial (*Bacillus coli*, weak); decreases some hmn leukocyte functions. **Source:** GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], MAO DI HUANG *Digitalis purpurea*. **Ref:** 2, 2999, 3000.



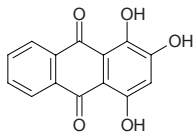


**18221 Purpureaside C**

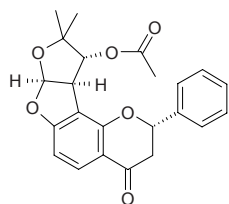
[108648-07-3] C<sub>35</sub>H<sub>46</sub>O<sub>20</sub> (786.74). Amorphous powder,  $[\alpha]_D^{27} = -16.3^\circ$  ( $c = 1.0$ , MeOH),  $[\alpha]_D^{24} = -60.3^\circ$  ( $c = 0.61$ , MeOH). **Pharm:** Anti-inflammatory (*in vivo*, swollen foot model caused by carrageenan); immunosuppressant (mus, 100mg/kg orl, inhibits formation of hemolytic patch formative cell HPFC in spleen, InRt = 26.3%); antibacterial (*Bacillus coli*); antihepatotoxin (anti-hepatotoxicity); immunosuppressant; antitrypanosomal (*Trypanosoma b. rhodesiense*, IC<sub>50</sub> = 8.9μg/mL, control Melarsoprol, IC<sub>50</sub> = 0.00098μg/mL; *Trypanosoma cruzi*, IC<sub>50</sub> > 90μg/mL, control Benznidazole, IC<sub>50</sub> = 1.06μg/mL)<sup>[5009]</sup>; antileishmanial (*Leishmania donovani*, IC<sub>50</sub> = 13.1μg/mL, control Miltefosine, IC<sub>50</sub> = 0.102μg/mL)<sup>[5009]</sup>; antimalarial (*Plasmodium falciparum*, IC<sub>50</sub> > 50μg/mL, control Artemisinin, IC<sub>50</sub> = 0.0022μg/mL)<sup>[5009]</sup>; cytotoxic (L-6, IC<sub>50</sub> > 90μg/mL, control Podophyllotoxin, IC<sub>50</sub> = 0.008μg/mL)<sup>[5009]</sup>. **Source:** GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingsensis*], MAO DI HUANG *Digitalis purpurea*, ROU CONG RONG *Cistanche deserticola*, XIAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingsensis*], YAN SHENG ROU CONG RONG *Cistanche salsa*, ZI DI HUANG *Rehmannia glutinosa* var. *purpurea*, ZONG KUI CAO SU *Phlomis brunneogaleata*. **Ref:** 2, 628, 658, 660, 1521, 3000, 3578, 1785, 3579, 3580, 5009.

**18222 Purpurin**

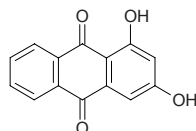
[81-54-9] C<sub>14</sub>H<sub>8</sub>O<sub>5</sub> (256.22). mp 263°C. **Pharm:** Genotoxic (hamster, mutagenesis experiment on fibrocyte); cytotoxic (KB, ED<sub>50</sub> = 3.1μg/mL, control Doxorubicin, ED<sub>50</sub> = 0.12μg/mL; Hep3B, ED<sub>50</sub> > 25μg/mL, control Doxorubicin, ED<sub>50</sub> = 0.14μg/mL; Colon205, ED<sub>50</sub> > 25μg/mL, control Doxorubicin, ED<sub>50</sub> = 0.10μg/mL; HeLa, ED<sub>50</sub> > 25μg/mL, control Doxorubicin, ED<sub>50</sub> = 0.11μg/mL)<sup>[4369]</sup>. **Source:** GUANG JING QIAN CAO *Rubia wallichiana* (stem), YANG QIAN CAO *Rubia tinctorum*, QIAN CAO GEN *Rubia cordifolia*, XIANG CHE YE CAO *Asperula odorata*, *Galium* sp. **Ref:** 6, 658, 4369.

**18223 (+)-Purpurin 2**

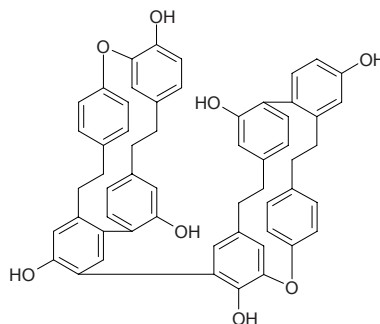
[93787-60-3] C<sub>23</sub>H<sub>22</sub>O<sub>6</sub> (394.43). Needles (pet. Ether-CHCl<sub>3</sub>), mp 145~146°C,  $[\alpha]_D^{27} = +20.3^\circ$  ( $c = 1.05$ , CHCl<sub>3</sub>). **Pharm:** Induces quinone reductase (mus hepatic cytochrome, CD = 5.6μmol/L, IC<sub>50</sub> > 50.7μmol/L, chemical preventive index (CI = IC<sub>50</sub>/CD) > 9.0). **Source:** HAN MI ER DUN HUI YE *Tephrosia hamiltonii*, HUI YE *Tephrosia purpurea*, HUI YE GEN *Tephrosia purpurea*. **Ref:** 3665, 3666, 1657.

**18224 Purpuroxanthin**

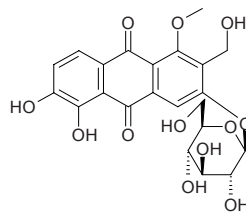
Xanthopurpurin; 1,3-Dihydroxy-9,10-anthraquinone [518-83-2] C<sub>14</sub>H<sub>8</sub>O<sub>4</sub> (240.22). mp 268~270°C. **Pharm:** Cytotoxic (KB, ED<sub>50</sub> = 6.57μg/mL, control Doxorubicin, ED<sub>50</sub> = 0.12μg/mL; Hep3B, ED<sub>50</sub> = 1.7μg/mL, control Doxorubicin, ED<sub>50</sub> = 0.14μg/mL; Colon205, ED<sub>50</sub> = 1.9μg/mL, control Doxorubicin, ED<sub>50</sub> = 0.10μg/mL; HeLa, ED<sub>50</sub> > 25μg/mL, control Doxorubicin, ED<sub>50</sub> = 0.11μg/mL)<sup>[4369]</sup>. **Source:** GUANG JING QIAN CAO *Rubia wallichiana* (stem), QIAN CAO GEN *Rubia cordifolia*, YANG JIAO TENG *Morinda umbellata*. **Ref:** 6, 660, 4369.

**18225 Pusalatin C**

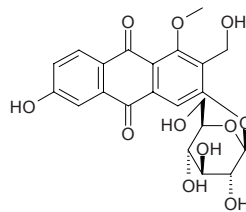
C<sub>56</sub>H<sub>46</sub>O<sub>8</sub> (846.99). **Source:** HU BAO TAI *Blasia pusilla*. **Ref:** 4549.

**18226 Putorinoside A**

2-Hydroxymethyl-1-methoxy-3,5,6-trihydroxyanthraquinone 3-O-β-glucopyranoside C<sub>22</sub>H<sub>22</sub>O<sub>12</sub> (478.41).  $[\alpha]_D^{20} = -96^\circ$  ( $c = 0.05$ , MeOH). **Source:** *Putoria calabrica*. **Ref:** 4197.

**18227 Putorinoside B**

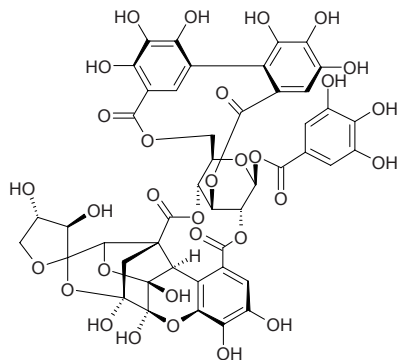
2-Hydroxymethyl-1-methoxy-3,6-dihydroxyanthraquinone 3-O-β-glucopyranoside C<sub>22</sub>H<sub>22</sub>O<sub>11</sub> (462.41).  $[\alpha]_D^{20} = -56^\circ$  ( $c = 0.05$ , MeOH). **Source:** *Putoria calabrica*. **Ref:** 4197.



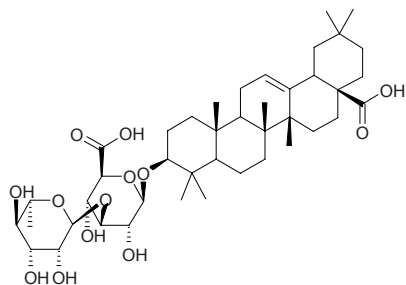


**18228 Putranjivain A**

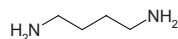
[131959-62-1]  $C_{46}H_{36}O_{31}$  (1084.76). Amorphous powder,  $[\alpha]_D = -89.0^\circ$  ( $c = 0.1$ , methanol). **Pharm:** HIV reverse transcriptase inhibitor ( $IC_{50} = 3.9\mu\text{mol/L}$ ). **Source:** AN MO LE *Phyllanthus emblica* (fruit juice)<sup>[3094]</sup>. **Ref:** 900, 3094.

**18229 Putranoside A**

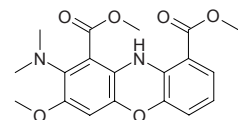
[51161-56-9]  $C_{42}H_{66}O_{13}$  (778.99). White amorphous powder, mp 261–272°C (dec). **Pharm:** Spermaticidal (1.0–1.3mg/mL); molluscicide (*Biomphalaria glabrata* snail EC = 3mg/L; 3mg/L, 100% killed); hemolytic (0.01mg/mL). **Source:** AI JI TIAN JING *Sesbania sesban*, JIANG GUO XIAN *Deeringia amaranthoides* [Syn. *Cladostachys frutescens*], MA DAO SI WO CI DOU *Swartzia madagascariensis*, NIU YAN PENG QI JU *Zexmenia bupthalmiflora*, PU YE SHAN YOU ZI *Opilia celtidifolia*, *Diospyros zombensis*, *Putranjiva roxburghii*. **Ref:** 3667, 3668, 3669, 3670, 3671, 3672, 3673.

**18230 Putrescine**

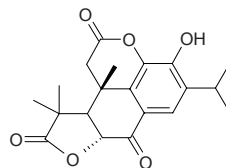
1,4-Diaminobutane [110-60-1]  $C_4H_{12}N_2$  (88.15). mp 27–28°C, bp 158–159°C. **Pharm:** Reagent used in biochemistry research. **Source:** JIANG *Glycine max*, MAI YA *Hordeum vulgare*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]<sup>[5508]</sup>. **Ref:** 6, 658, 5508.

**18231 Pycnosanguin**

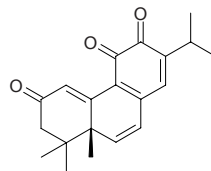
[133056-31-2]  $C_{19}H_{20}N_2O_6$  (372.38). Yellow needles, mp 246–249°C. **Source:** XUE HONG SHUAN JUN *Pycnoporus sanguineus*. **Ref:** 3581.

**18232 Pygmaeocin A**

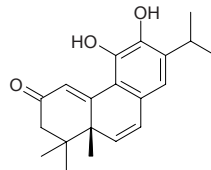
[122590-05-0]  $C_{20}H_{22}O_6$  (358.39). Crystals (MeOH), mp 281–283°C. **Source:** QIAN JIE CAO *Pygmaeopremna herbacea* [Syn. *Premna herbacea*]. **Ref:** 3119.

**18233 Pygmaeocin B**

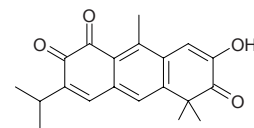
[128049-12-7]  $C_{20}H_{22}O_3$  (310.40). Purple solid ( $CH_2Cl_2$ ), mp 108.5–110°C. **Source:** QIAN JIE CAO *Pygmaeopremna herbacea* [Syn. *Premna herbacea*]. **Ref:** 3582.

**18234 Pygmaeocin C**

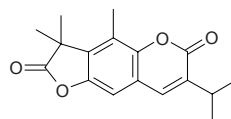
[128022-72-0]  $C_{20}H_{24}O_3$  (312.41). Yellow foam. **Source:** QIAN JIE CAO *Pygmaeopremna herbacea* [Syn. *Premna herbacea*]. **Ref:** 3582.

**18235 Pygmaeocine E**

[115333-92-1]  $C_{20}H_{20}O_4$  (324.38). Brownish-red prisms ( $CHCl_3$ –MeOH), mp 192–193°C. **Source:** QIAN JIE CAO *Pygmaeopremna herbacea* [Syn. *Premna herbacea*]. **Ref:** 3583.

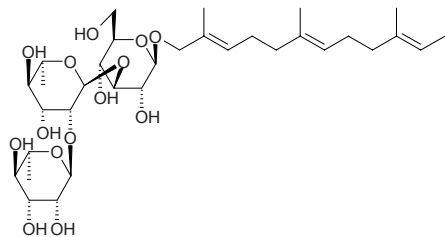
**18236 Pygmaeoherin**

[115028-58-5]  $C_{17}H_{18}O_4$  (286.33). Needles ( $CHCl_3$ –MeOH), mp 198–200°C. **Source:** QIAN JIE CAO *Pygmaeopremna herbacea* [Syn. *Premna herbacea*]. **Ref:** 3584.

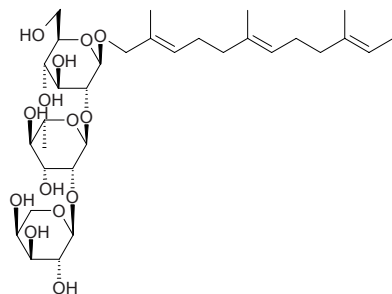


**18237 Pyishiauoside I<sub>b</sub>**

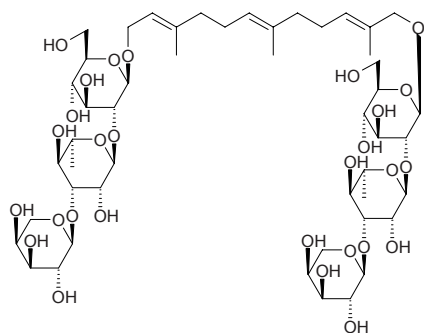
$C_{33}H_{56}O_{14}$  (676.81). Source: PI SHAO ZI *Sapindus delavayi* [Syn. *Pancovia delavayi*]. Ref: 3585.

**18238 Pyishiauoside II<sub>b</sub>**

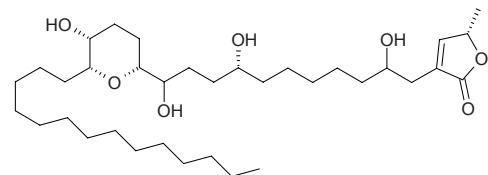
$C_{32}H_{54}O_{14}$  (662.78). Source: PI SHAO ZI *Sapindus delavayi* [Syn. *Pancovia delavayi*]. Ref: 3585.

**18239 Pyishiauoside IV<sub>b</sub>**

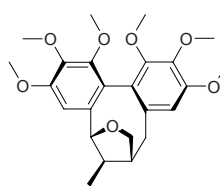
$C_{49}H_{82}O_{28}$  (1119.18). Source: PI SHAO ZI *Sapindus delavayi* [Syn. *Pancovia delavayi*]. Ref: 3585.

**18240 Pyragonicin**

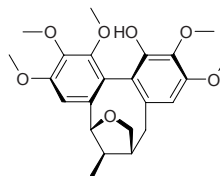
[209668-36-0]  $C_{35}H_{64}O_7$  (596.90). White amorphous wax,  $[\alpha]_D^{23} = -25.6^\circ$  ( $c = 0.008$ ,  $CHCl_3$ ). Pharm: Cytotoxic (PACA-2,  $ED_{50} = 0.058 \mu g/mL$ , BST,  $LC_{50} = 0.9 \mu g/mL$ , YFM,  $LC_{50} = 73.8 \mu g/mL$ ). Source: DA GE NA XIANG *Goniothalamus giganteus*. Ref: 3749.

**18241 Pyramidatin A**

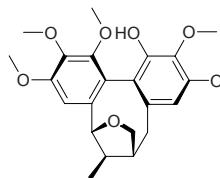
$C_{24}H_{30}O_7$  (430.50). Colorless crystals, mp 152~154°C ( $CHCl_3:EtOAc = 9:1$ ). Source: JIN ZI TA MU LAN *Magnolia pyramidata* (leaf). Ref: 5103.

**18242 Pyramidatin B**

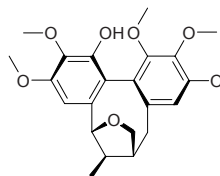
$C_{23}H_{28}O_7$  (416.48). Colorless crystals, mp 198~199°C ( $CHCl_3:EtOAc = 9:1$ ). Source: JIN ZI TA MU LAN *Magnolia pyramidata* (leaf). Ref: 5103.

**18243 Pyramidatin C**

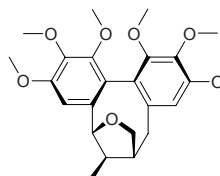
$C_{23}H_{28}O_7$  (416.48). Colorless oil. Source: JIN ZI TA MU LAN *Magnolia pyramidata* (leaf). Ref: 5103.

**18244 Pyramidatin D**

$C_{23}H_{28}O_7$  (416.48). Amorphous solid. Source: JIN ZI TA MU LAN *Magnolia pyramidata* (leaf). Ref: 5103.

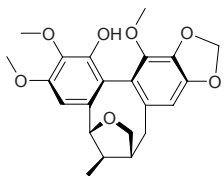
**18245 Pyramidatin E**

$C_{23}H_{28}O_7$  (416.48). Amorphous solid. Source: JIN ZI TA MU LAN *Magnolia pyramidata* (leaf). Ref: 5103.

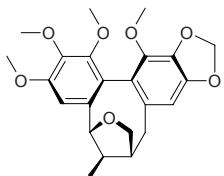


**18246 Pyramidatin F**

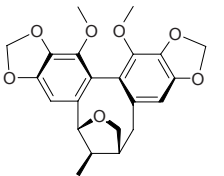
$C_{22}H_{24}O_7$  (400.43). Amorphous solid. Source: JIN ZI TA MU LAN *Magnolia pyramidata* (leaf). Ref: 5103.

**18247 Pyramidatin G**

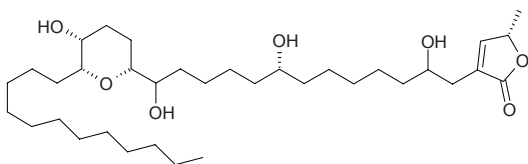
$C_{23}H_{26}O_7$  (414.46). Colorless oil. Source: JIN ZI TA MU LAN *Magnolia pyramidata* (leaf). Ref: 5103.

**18248 Pyramidatin H**

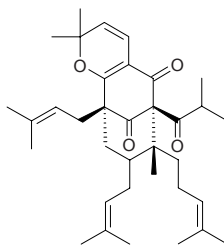
$C_{22}H_{22}O_7$  (398.42). Colorless crystals, mp 208~211°C (hexane-EtOAc). Source: JIN ZI TA MU LAN *Magnolia pyramidata* (leaf). Ref: 5103.

**18249 Pyranicin**

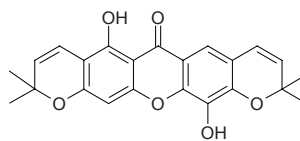
[209668-35-9]  $C_{35}H_{64}O_7$  (596.90). White amorphous wax,  $[\alpha]_D^{23} = -9.7^\circ$  ( $c = 0.008$ ,  $CHCl_3$ ). Source: DA GE NA XIANG *Goniothalamus giganteus*. Ref: 3749.

**18250 Pyrano-[7,28-b]hyperforin**

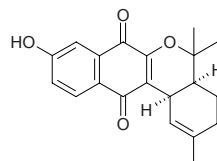
$C_{35}H_{50}O_4$  (534.79). Colorless viscous oil,  $[\alpha]_D^7 = +83.5^\circ$  ( $c = 0.28$ ,  $CHCl_3$ ). Source: GUAN YE LIAN QIAO *Hypericum perforatum* (aerial parts: yield = 0.00012%dw). Ref: 3032.

**18251 Pyranojacaeubin**

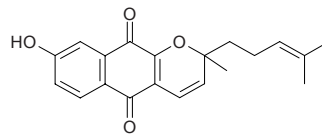
$C_{23}H_{20}O_6$  (392.41). Pharm: Antivirus (hmn coronavirus strain 229E (HCoV-229E), 15µg/mL). Source: *Calophyllum blancoi* (root). Ref: 4441.

**18252 Pyranokunthone A**

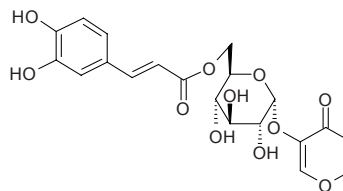
$C_{20}H_{20}O_4$  (324.38). Yellow solid,  $[\alpha]_D^{20} = -38^\circ$  ( $c = 0.04$ ,  $CHCl_3$ ). Pharm: Antimalarial (antiplasmodial); toxic (endothelial cell line ECV-304). Source: WU GAN DA YU YE QIU *Stereospermum kunthianum*. Ref: 2019.

**18253 Pyranokunthone B**

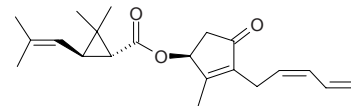
$C_{20}H_{20}O_4$  (324.38). Yellow solid,  $[\alpha]_D^{20} = 0^\circ$  ( $c = 0.2$ ,  $CHCl_3$ ). Pharm: Antimalarial (antiplasmodial); toxic (endothelial cell line ECV-304). Source: WU GAN DA YU YE QIU *Stereospermum kunthianum*. Ref: 2019.

**18254 1-(2'-γ-Pyranone)-6-caffeoyl-α-D-pyranoglucose**

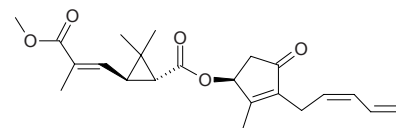
$C_{20}H_{20}O_{11}$  (436.38). Yellowish powder, mp 145~146°C. Source: DENG ZHAN XI XIN *Erigeron breviscapus*. Ref: 2115.

**18255 Pyrethrin I**

[121-21-1]  $C_{21}H_{28}O_3$  (328.46). bp 146~150°C/0.0005mmHg. Source: BAI SHAO *Paeonia albiflora* [Syn. *Paeonia lactiflora*]. Ref: 6, 1521.

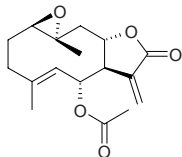
**18256 Pyrethrin II**

[121-29-9]  $C_{22}H_{28}O_5$  (372.47). bp 192~193°C/0.007mmHg. Pharm: Pesticide; LD<sub>50</sub> (rat, orl) = 1.2g/kg. Source: BAI SHAO *Paeonia albiflora* [Syn. *Paeonia lactiflora*]. Ref: 6, 658, 1521.

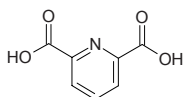


**18257 Pyrethrosin**

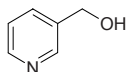
[28272-18-6] C<sub>17</sub>H<sub>22</sub>O<sub>5</sub> (306.36). **Pharm:** Dermatitic (causes contact dermatitis); molluscicide; plant growth regulator. **Source:** CHU CHONG JU *Chrysanthemum cinerariaefolium*, HONG HUA CHU CHONG JU *Chrysanthemum coccineum*. **Ref:** 658.

**18258 Pyridine-2,6-dicarboxylic acid**

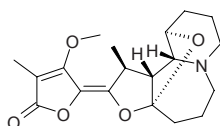
C<sub>7</sub>H<sub>5</sub>NO<sub>4</sub> (167.12). **Source:** YONG CHONG CAO *Cordyceps militaris*. **Ref:** 4784.

**18259 Pyridin-3-yl-methanol**

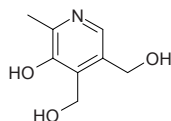
C<sub>6</sub>H<sub>7</sub>NO (109.13). **Source:** ZANG HONG HUA *Crocus sativus* (pollen), ZANG HONG HUA *Crocus sativus* (stigma: yield = 0.00007%dw). **Ref:** 4233, 4653.

**18260 Pyridostemin**

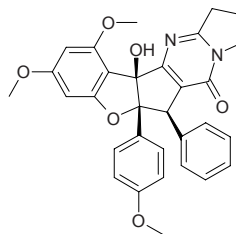
4-Methoxy-3-methyl-5-[(2Z,11aS)-3at,11t-epoxy-1c-methyl-(11ar,11bc)-dodecahydrofuro[3,2-c]pyrido[1,2-a]azepin-2-ylidene]-5H-furan-2-one C<sub>19</sub>H<sub>25</sub>NO<sub>5</sub> (347.41). Amorphous, [α]<sub>D</sub><sup>20</sup> = +473° (c = 0.4, MeOH). **Pharm:** Insecticidal (neonate larvae of *Spodoptera littoralis*, LC<sub>50</sub> = 149mg/L, EC<sub>50</sub> = 96mg/L). **Source:** *Stemona* sp.(HG915). **Ref:** 3409.

**18261 Pyridoxine**

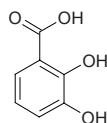
Vitamin B<sub>6</sub> [65-23-6] C<sub>8</sub>H<sub>11</sub>NO<sub>3</sub> (169.18). mp 160°C (sub). **Pharm:** Prevents atherosclerosis; coenzyme of amino transferase, decarboxylase, racemase and some other amino acids; improves appetite and symptoms in hepatitis patients; indispensable for cell growth (promotes biosynthesis of protein). **Source:** BA JIAO HUI XIANG *Illicium verum*, FENG MI *Apis cerana*, GAN ZHE *Saccharum sinensis*, MO GU *Agaricus campestris*, NIU RU *Bos taurus domesticus*; *Bubalus bubalis*, YU SHU SHU *Zea mays*. **Ref:** 6, 658.

**18262 Pyrimidinone**

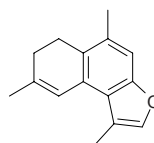
[15595-93-0] C<sub>31</sub>H<sub>28</sub>N<sub>2</sub>O<sub>6</sub> (524.57). Colorless lamellar crystals (dichloromethane-methanol), mp 256~257°C [α]<sub>D</sub><sup>20</sup> = -50.1° (c = 0.41, chloroform). **Pharm:** Antineoplastic (inhibits K-ras-NRK, IC<sub>50</sub> = 81ng/mL, induces normal conformation of cells and inhibits biosynthesis of protein in 10~30ng/mL); pesticide. **Source:** MI ZI LAN *Aglaia odorata*. **Ref:** 900.

**18263 o-Pyrocatechuic acid**

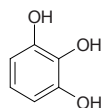
[303-38-8] C<sub>7</sub>H<sub>6</sub>O<sub>4</sub> (154.12). **Source:** BAI HUA YING SHAN HONG *Rhododendron mucronatum*. **Ref:** 6.

**18264 Pyrocurzerenone**

[20013-75-6] C<sub>15</sub>H<sub>16</sub>O (212.29). Crystals (pet. ether), mp 76.5~77.5°C. **Source:** PING E SHU *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*]. **Ref:** 3586.

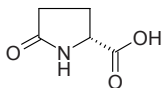
**18265 Pyrogallol**

[87-66-1] C<sub>6</sub>H<sub>6</sub>O<sub>3</sub> (126.11). **Pharm:** Antifungal (microzyme, such as *Candida albicans*); antimutagenic; inhibits degradation of insulin. **Source:** CHANG JIAO DOU *Ceratonia siliqua*, JIAN YING XUAN GOU ZI *Rubus rigidus*, LONG YAN JING *Phyllanthus reticulatus*, MA SHI DA HUANG *Rheum maximowiczii*, MENG ZI CAO HU JIAO *Peperomia duclouxii* (whole herb: yield = 0.000061%)<sup>[4733]</sup>, XIANG CAO SHUI YANG ME *Geum urbanum*, *Rosa* sp. **Ref:** 658, 4733.

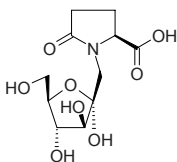


**18266 Pyroglutamic acid**

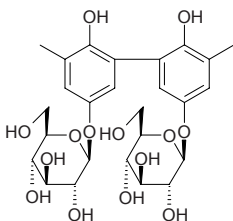
5-Oxoprolinone [4042-36-8] C<sub>5</sub>H<sub>7</sub>NO<sub>3</sub> (129.12). mp 182~183°C. Source: GOU QI YE *Lycium chinense*, MO GU *Agaricus campestris*, SHU DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*]. Ref: 6, 2928.

**18267 Pyroglutamic acid N-fructoside**

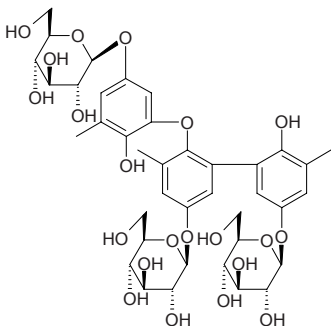
C<sub>11</sub>H<sub>17</sub>NO<sub>8</sub> (291.26). Source: DANG SHEN *Codonopsis pilosula*. Ref: 660.

**18268 Pyrolaside A**

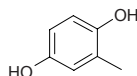
C<sub>26</sub>H<sub>34</sub>O<sub>14</sub> (570.55). White amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = 0° (c = 0.10, H<sub>2</sub>O). Source: YUAN YE LU TI CAO *Pyrola rotundifolia* (whole herb). Ref: 4498.

**18269 Pyrolaside B**

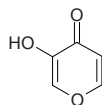
C<sub>39</sub>H<sub>50</sub>O<sub>21</sub> (854.82). White amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -47.4° (c = 0.10, H<sub>2</sub>O). Pharm: Antibacterial (*Staphylococcus aureus*, MIC = 35.0 μg/mL, control Bakuchiol, MIC = 20.0 μg/mL; *Micrococcus luteus*, MIC = 20.5 μg/mL, control Bakuchiol, MIC = 10.0 μg/mL). Source: YUAN YE LU TI CAO *Pyrola rotundifolia* (whole herb). Ref: 4498.

**18270 Pyrolin**

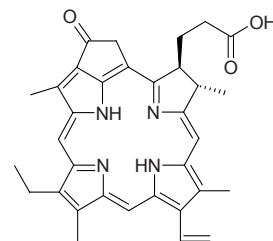
2,5-Dihydroxytoluene [95-71-6] C<sub>7</sub>H<sub>7</sub>O<sub>2</sub> (124.13). Lamellar crystals (benzene), mp 126~127°C, mp 124~125°C, bp 163°C/11 mmHg. Pharm: Antibacterial (broad spectrum and low toxicity, *Staphylococcus aureus*, MIC = 125.0 μg/mL; *Enterococcus* sp., MIC = 125.0 μg/mL; *Bacillus typhosus*, MIC = 1000 μg/mL); antifungal; pesticide (curculio, grasshopper, housefly and cockroach); used in treatment of infectious diseases (infection of respiratory tract, urethra, digestive tract and wounds). Source: LU XIAN CAO *Pyrola calliantha* [Syn. *Pyrola rotundifolia* ssp. *chinensis*], PU TONG LU TI CAO *Pyrola decorata*, YUAN YE LU TI CAO *Pyrola rotundifolia*. Ref: 6, 660, 661, 5501.

**18271 Pyromeconic acid**

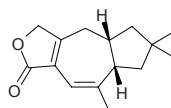
3-Hydroxy-4H-pyran-4-one [496-63-9] C<sub>5</sub>H<sub>4</sub>O<sub>3</sub> (112.09). mp 117°C, bp 227~228°C. Source: YI NIAN PENG *Erigeron annuus*. Ref: 6, 415, 1521.

**18272 Pyropheophorbide a**

[24533-72-0] C<sub>33</sub>H<sub>34</sub>N<sub>4</sub>O<sub>3</sub> (534.66). Crystals (Et<sub>2</sub>O), mp 210°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -342° (acetone). Pharm: Antiviral (HSV-2, EC<sub>50</sub> = 57 μg/mL); antineoplastic (concentrated in tumor tissue, produces cytotoxic activity under exposure of light with special wavelength). Source: DAN YE DONG FENG JU *Atalantia monophylla*. Ref: 1035, 3718, 3719.

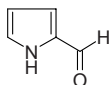
**18273 Pyrovellerolactone**

[68582-98-9] C<sub>15</sub>H<sub>20</sub>O<sub>2</sub> (232.33). Source: RONG BAI RU GU *Lactarius vellereus*, SI YANG PI ZHI RU GU *Lactarius pergamenus*, *Lactarius helvus*. Ref: 660, 1521.



**18274 Pyrrole-2-aldehyde**

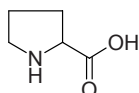
[1003-29-8] C<sub>5</sub>H<sub>5</sub>NO (95.10). mp 46~47°C. Source: CHA YE *Camellia sinensis* [Syn. *Thea sinensis*]. Ref: 6.

**18275 Pyrrolidine**

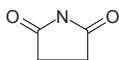
Tetrahydropyrrole [123-75-1] C<sub>4</sub>H<sub>9</sub>N (71.12). mp 88.5~89.0°C. Source: HU LUO BO *Daucus carota* var. *sativa*, HE SHI FENG *Daucus carota*. Ref: 6.

**18276 Pyrrolidine carboxylic acid**

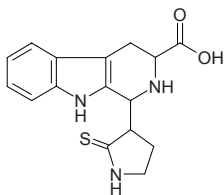
[609-36-9] C<sub>5</sub>H<sub>9</sub>NO<sub>2</sub> (115.13). mp (+) 215~220°C (dec), (-) 220~222°C (dec), (±) 213°C. Source: WU HUA GUO *Ficus carica*. Ref: 6.

**18277 Pyrrolidine-2,5-dione**

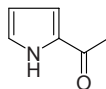
C<sub>4</sub>H<sub>5</sub>NO<sub>2</sub> (99.09). Source: REN SHEN LU *Panax ginseng* [Syn. *Panax schinseng*]. Ref: 3587.

**18278 1-(2'-Pyrrolidinethion-3'-yl)-1,2,3,4-tetrahydro-β-carboline-3-carboxylic acid**

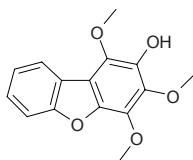
C<sub>16</sub>H<sub>17</sub>N<sub>3</sub>O<sub>2</sub>S (315.40). Source: LAI FU *Raphanus sativus*. Ref: 3588.

**18279 Pyrrolyl-α-methyl ketone**

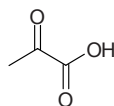
[1072-83-9] C<sub>6</sub>H<sub>7</sub>NO (109.13). Source: XIE CAO *Valeriana officinalis*. Ref: 6.

**18280 α-Pyrufuran**

[88256-05-7] C<sub>15</sub>H<sub>14</sub>O<sub>5</sub> (274.28). Pharm: Antifungal (*Cladosporium cucumerinum*). Source: XI YANG LI *Pyrus communis*. Ref: 658.

**18281 Pyruvic acid**

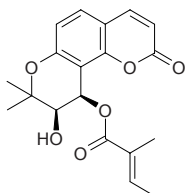
Pyroracemic acid [127-17-3] C<sub>3</sub>H<sub>4</sub>O<sub>3</sub> (88.06). Crystals or liquid with odour resembling acetic acid, mp 13.6°C, bp 165°C (partly dec), bp 65°C/10mmHg, pK<sub>a1</sub> = 2.39 (25°C). Source: FENG HUANG MU *Delonix regia*, HONG HAI JIAO *Capsicum annum*, HUI HUI DOU *Cicer arietinum*, JI CAI *Capsella bursa-pastoris*, JI MAO CAI *Pterocladia tenuis*, KUAN YE XIANG PU *Typha latifolia*, LAN HU LU BA *Trigonella caerulea*, PING GUO *Malus pumila*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], SHUI LIAO *Polygonum hydropiper*, TAO YE LIAO *Polygonum persicaria*, WAN DOU *Pisum sativum*, ZI YANG TI JIA *Bauhinia purpurea*, ZUO JIANG CAO *Oxalis corniculata* [Syn. *Oxalis repens*]. Ref: 2, 660, 1521.



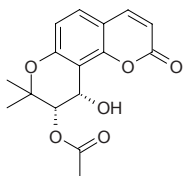
## Q

**18282 Qianhuocoumarin A**

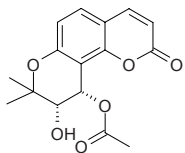
Lasertipin; 3'(*R*)-Hydroxy-4'(*R*)-tigloyloxy-3',4'-dihydroseselin C<sub>19</sub>H<sub>20</sub>O<sub>6</sub> (344.37). White prismatic crystals, mp 123~126°C,  $[\alpha]_D^{20} = +209.6^\circ$  ( $c = 0.5$ , CHCl<sub>3</sub>). **Pharm:** NO Production inhibitor (LPS-activated mouse peritoneal macrophages, 100μmol/L, InRt = (24.9±4.0)%), control *L*-NMMA, 100μmol/L, InRt = (79.2±0.9)%<sup>[4454]</sup>. **Source:** BAI HUA QIAN HU *Peucedanum praeruptorum*, FEN CHA DANG GUI *Angelica furcijuga* (flower). **Ref:** 268, 4454.

**18283 Qianhuocoumarin B**

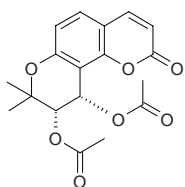
3'(*S*)-Acetoxy-4'(*S*)-hydroxy-3',4'-dihydroseselin C<sub>16</sub>H<sub>16</sub>O<sub>6</sub> (304.30). Colorless crystals (petroleum spirit-acetic ester), mp 159~161°C,  $[\alpha]_D^{20} = +3.9^\circ$  ( $c = 1.0$ , CHCl<sub>3</sub>). **Source:** BAI HUA QIAN HU *Peucedanum praeruptorum*. **Ref:** 281.

**18284 Qianhuocoumarin C**

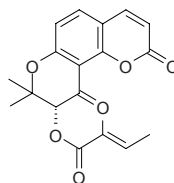
3'(*S*)-Hydroxy-4'(*S*)-acetoxy-3',4'-dihydroseselin C<sub>16</sub>H<sub>16</sub>O<sub>6</sub> (304.30). Colorless crystals (petroleum spirit-acetic ester), mp 186~188°C,  $[\alpha]_D^{20} = +7.6^\circ$  ( $c = 1.0$ , CHCl<sub>3</sub>). **Source:** BAI HUA QIAN HU *Peucedanum praeruptorum*. **Ref:** 281.

**18285 Qianhuocoumarin D**

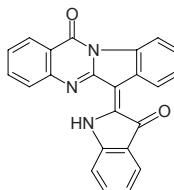
3'(*S*),4'(*S*)-Diacetoxy-3',4'-dihydroseselin C<sub>18</sub>H<sub>18</sub>O<sub>7</sub> (346.34). Colorless prismatic crystals, mp 160.5~162.5°C,  $[\alpha]_D^{20} = +4.0^\circ$  ( $c = 1.0$ , chloroform). **Source:** BAI HUA QIAN HU *Peucedanum praeruptorum*. **Ref:** 290.

**18286 Qianhuocoumarin E**

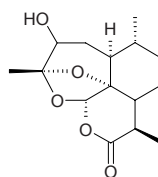
3'(*R*)-Tigloyloxy-4'-keto-3',4'-dihydroseselin C<sub>19</sub>H<sub>18</sub>O<sub>6</sub> (342.35). Colorless prismatic crystals, mp 103.5~105.5°C,  $[\alpha]_D^{20} = +19.6^\circ$  ( $c = 1.0$ , chloroform). **Source:** BAI HUA QIAN HU *Peucedanum praeruptorum*. **Ref:** 290.

**18287 Qingdainone**

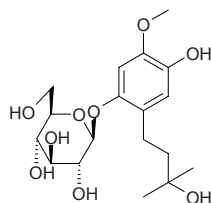
Indolo[2,1*b*]-quinazoline-6,12-dione [97457-31-3] C<sub>23</sub>H<sub>13</sub>N<sub>3</sub>O<sub>2</sub> (363.38). Dark purple acicular crystals, mp 278~280°C. **Pharm:** Antineoplastic (mus, Lewis lung cancer, B16 melanoma). **Source:** DA QING YE *Isatis indigotica*, LIAO LAN GUO *Polygonum tinctorium*, LIAO LAN YE *Polygonum tinctorium*, MA LAN YE *Baphicacanthus cusia* [Syn. *Strobilanthes cusia*], OU ZHOU SONG LAN *Isatis tinctoria*. **Ref:** 21, 660.

**18288 Qinghaosu IV**

Artemisinin IV C<sub>15</sub>H<sub>22</sub>O<sub>5</sub> (282.34). **Source:** HUANG HUA HAO *Artemisia annua*. **Ref:** 2, 660.

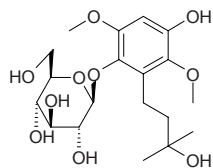
**18289 Qingjueine I**

2-(3'-Hydroxy-3'-methylbutyl)-4-hydroxy-5-methoxyphenol-1-*O*-β-*D*-glucopyranoside C<sub>18</sub>H<sub>28</sub>O<sub>9</sub> (388.42). Amorphous powder (EtOH), mp 212~214°C,  $[\alpha]_D^{20} = -38.24^\circ$  ( $c = 0.1$ , MeOH). **Source:** FENG WEI CAO *Pteris multifida*. **Ref:** 4550.

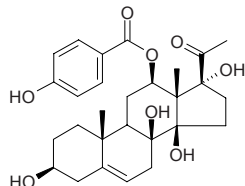


**18290 Qingjueine II**

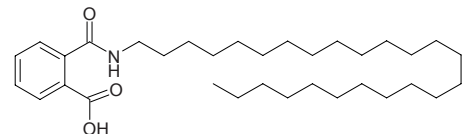
2-(3'-Hydroxy-3'-methylbutyl)-4-hydroxy-3,6-dimethoxyphenyl-1-*O*- $\beta$ -D-glucopyranoside C<sub>19</sub>H<sub>30</sub>O<sub>10</sub> (418.44). White amorphous powder (MeOH), mp 234~236°C,  $[\alpha]_D^{20} = -37.6^\circ$  ( $c = 0.1$ , MeOH). Source: FENG WEI CAO *Pteris multifida*. Ref: 4550.

**18291 Qingyangshengenin**

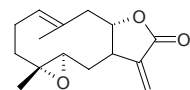
C<sub>28</sub>H<sub>36</sub>O<sub>8</sub> (500.59). Source: DUAN JIE SHEN *Cynanchum wallichii*, QING YANG SHEN *Cynanchum otophyllum*. Ref: 4038, 4039.

**18292 Qinjiaoamide**

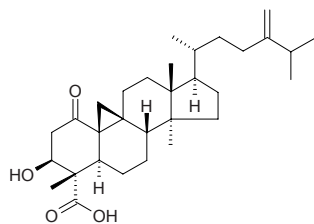
*N*-Pentacosyl-2-carboxy-benzoyl amide C<sub>33</sub>H<sub>57</sub>NO<sub>3</sub> (515.83). White needles, mp 103~105°C. Source: QIN JIAO *Gentiana macrophylla*. Ref: 4594.

**18293 Quadrangolide**

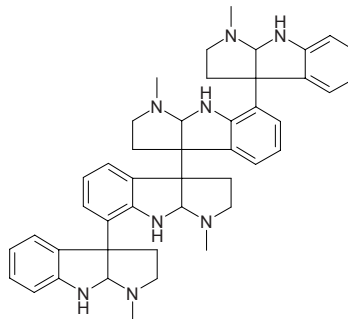
[110269-98-2] C<sub>15</sub>H<sub>20</sub>O<sub>3</sub> (248.32). Prisms (MeOH), mp 118~120°C,  $[\alpha]_D^{20} = +134.6^\circ$  ( $c = 0.575$ , CHCl<sub>3</sub>). Pharm: Anthelmintic (ants, 6.0mg/mL). Source: SI LENG ZE LAN *Eupatorium quadrangulare*, TAI PING YANG JIA ZE LAN *Mikania mendocina*. Ref: 4023, 4024.

**18294 Quadrangularic acid E**

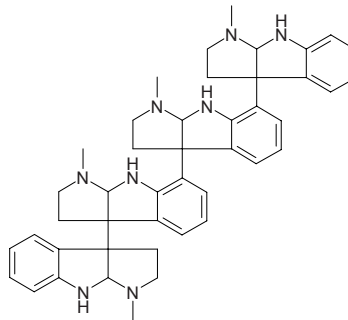
C<sub>31</sub>H<sub>48</sub>O<sub>4</sub> (484.73). Pharm: Anti-HIV-1 (syncytium assay: IC<sub>50</sub> = 18.5μg/mL, EC<sub>50</sub> = 6.8μg/mL; HIV-1 RT assay: 200μg/mL, InRt = 80.1%, IC<sub>50</sub> = 47.9μg/mL, control Fagaronine chloride, IC<sub>50</sub> = 10.9μg/mL, Nevirapine IC<sub>50</sub> = 1.8μg/mL). Source: TAI GUO ZHI ZI *Gardenia thailandica* (leaf and twig). Ref: 4963.

**18295 Quadrigemine A**

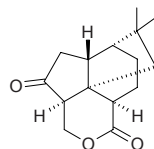
[69937-02-6] C<sub>44</sub>H<sub>50</sub>N<sub>8</sub> (690.94). White amorphous resinoid foam,  $[\alpha]_D^{23} = +32^\circ$  (alcohol). Pharm: Platelet aggregation inhibitor (hmn, induced by ADP, collagen, thrombin, EC = 1~10μmol/L, acts in late stage of platelet activation); Cytotoxic (rat, cultural liver cancer cell HTC, 5μmol/L, cellular death rate = 100%). Source: FU SI TE JIU JIE *Psychotria forsteriana*, *Hodgkinsonia frutescens*. Ref: 4014, 4015, 4016.

**18296 Quadrigemine B**

[69937-10-6] C<sub>44</sub>H<sub>50</sub>N<sub>8</sub> (690.94). White crystals (MeOH), mp 229~234°C,  $[\alpha]_D^{23} = +263^\circ$  (alcohol). Pharm: Platelet aggregation inhibitor (hmn, induced by ADP, collagen, thrombin, EC = 1~10μmol/L, acts in late stage of platelet activation); Cytotoxic (rat, cultural liver cancer cell HTC, 10μmol/L, cellular death rate = 100%). Source: FU SI TE JIU JIE *Psychotria forsteriana*, HUI ZHUANG JIU JIE *Psychotria rostrata*, *Hodgkinsonia frutescens*. Ref: 4014, 4015, 4016, 4017.

**18297 Quadrone**

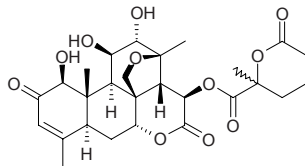
[66550-08-1] C<sub>15</sub>H<sub>20</sub>O<sub>3</sub> (248.33). Pharm: Antineoplastic; cytotoxic. Source: *Aspergillus terreus*. Ref: 658.



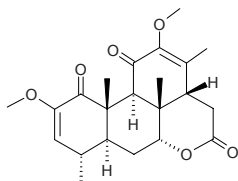


**18298 Quassimarin**

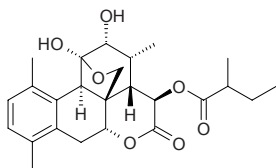
[59938-97-5]  $C_{27}H_{36}O_{11}$  (536.58). Acicular crystals (ethyl acetate–hexane), mp 237.5–238.5°C (dec),  $[\alpha]_D^{26} = +22.4^\circ$  ( $c = 0.29$ , chloroform). **Pharm:** Antineoplastic (mus,  $P_{388}$ , 4mg/kg, biotic prolonged rate = 65%, 50 $\mu$ g/kg, biotic prolonged rate > 25%); cytotoxic (KB,  $ED_{50} = 0.01\mu$ g/mL). **Source:** MEI ZHOU KU MU *Quassia amara*. **Ref:** 661, 658.

**18299 Quassin**

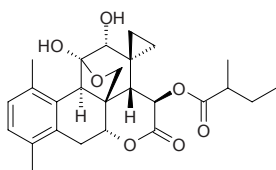
[76-78-8]  $C_{22}H_{28}O_6$  (388.46). **Pharm:** Anthelmintic (anti-pinworm *Ascaris vermicularis*); bitter principle (very bitter taste); inhibits heart (mammal, heart rate and amplitude); stomachic; LD (rbt, iv) = 0.14g. **Source:** KU MU *Picrasma quassioides* [Syn. *Picrasma ailanthoides*], CHU BAI PI *Ailanthus altissima*, KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*], MEI ZHOU KU MU *Quassia amara* (in 1836, the compound was first isolated from the plant by Winkler)<sup>[5505]</sup>. **Ref:** 12, 658, 5501, 5505.

**18300 Quassinoid PC03-579A**

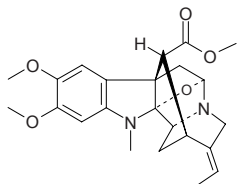
$C_{25}H_{32}O_7$  (444.53). Oil **Source:** GAO CHU *Ailanthus excelsa*. **Ref:** 2051.

**18301 Quassinoid PC03-579B**

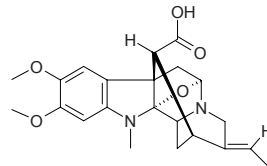
$C_{26}H_{32}O_7$  (456.54). Oil **Source:** GAO CHU *Ailanthus excelsa*. **Ref:** 2051.

**18302 Quaternine**

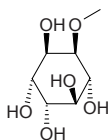
$C_{23}H_{28}N_2O_5$  (412.49). **Source:** DA YE TANG JIAO SHU *Alstonia macrophylla* (leaf: yield = 0.0003%). **Ref:** 3020.

**18303 Quaternine**

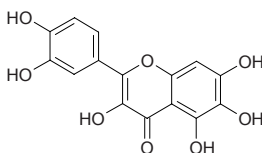
Alspopicalamine [57499-02-2]  $C_{23}H_{28}N_2O_5$  (412.49). Crystals (MeOH), mp 153°C,  $[\alpha]_D^{20} = -27^\circ$  ( $c = 0.4$ ,  $CHCl_3$ ). **Source:** CUI TU LUO FU MU *Rauwolfia vomitoria*, DA YE TANG JIAO SHU *Alstonia macrophylla*, SI SHU JI GU CHANG SHAN *Alstonia quaternata*, *Alstonia legouixiae*, *Rauwolfia oreogiton*, *Rauwolfia volkensii*. **Ref:** 660, 1521.

**18304 L-Quebrachitol**

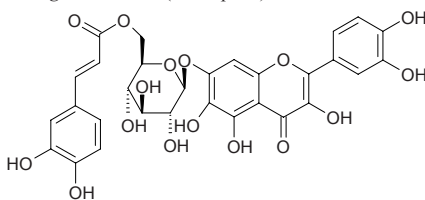
$C_7H_{14}O_6$  (194.19). mp (–) 191°C. **Pharm:** Biosynthetic precursor of some drugs. **Source:** XIANG JIAO SHU *Hevea brasiliensis*, AI YE *Artemisia argyi*. **Ref:** 6, 658.

**18305 Quercetagetin**

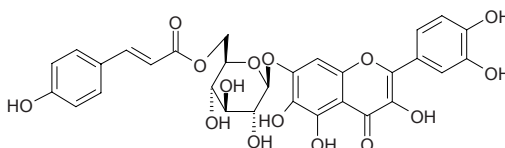
[90-18-6]  $C_{15}H_{10}O_8$  (318.24). mp 318–320°C. **Pharm:** Antibacterial (*Pseudomonas maltophilia* and *Enteromorpha cloacae*). **Source:** DA BAI DING CAO *Senecio oryzetorum*, HAI ER CHA *Acacia catechu*, KONG QUE CAO *Tagetes patula*. **Ref:** 6, 658.

**18306 Quercetagetin-7-O-(6-O-caffeoyl-β-D-glucopyranoside)**

$C_{30}H_{26}O_{16}$  (642.53). Yellow crystals, mp 198–200°C,  $[\alpha]_D = -248^\circ$  ( $c = 0.501$ , MeOH). **Pharm:** Antioxidant (DPPH scavenger,  $IC_{50} = (2.73 \pm 0.04)\mu$ mol/L, control Quercetin,  $IC_{50} = (6.11 \pm 0.53)\mu$ g/mL). **Source:** ZUI DA WAN SHOU JU *Tagetes maxima* (aerial parts). **Ref:** 5318.

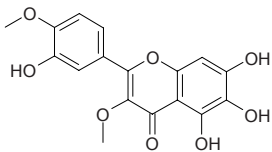
**18307 Quercetagetin-7-O-(6-O-p-coumaroyl-β-D-glucopyranoside)**

$C_{30}H_{26}O_{15}$  (626.53). Yellow powder, mp 224–226°C,  $[\alpha]_D = -193^\circ$  ( $c = 0.321$ , MeOH). **Pharm:** Antioxidant (DPPH scavenger,  $IC_{50} = (3.29 \pm 0.05)\mu$ mol/L, control Quercetin,  $IC_{50} = (6.11 \pm 0.53)\mu$ g/mL). **Source:** ZUI DA WAN SHOU JU *Tagetes maxima* (aerial parts). **Ref:** 5318.

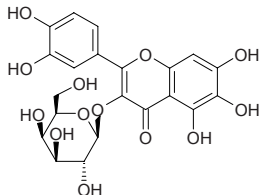


**18308 Quercetagenin-3,4'-dimethyl ether**

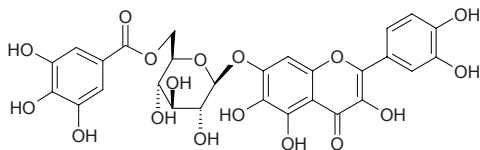
$C_{17}H_{14}O_8$  (346.30). Source: HUANG HUA HAO *Artemisia annua*. Ref: 2, 660.

**18309 Quercetagenin-3-galactoside**

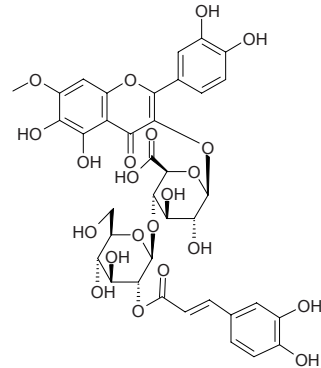
$C_{21}H_{20}O_{13}$  (480.39). mp 200°C. Source: DI YANG QUE *Lotus corniculatus*. Ref: 6.

**18310 Quercetagenin-7-O-(6-O-galloyl-β-D-glucopyranoside)**

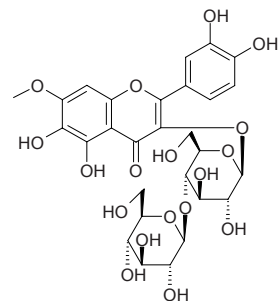
$C_{28}H_{24}O_{17}$  (632.49). Yellow amorphous powder,  $[\alpha]_D^{25} = -235^\circ$  ( $c = 0.085$ , MeOH). Pharm: Antioxidant (DPPH scavenger,  $IC_{50} = (6.91 \pm 0.02) \mu\text{mol/L}$ , control Quercetin,  $IC_{50} = (6.11 \pm 0.53) \mu\text{g/mL}$ ). Source: ZUI DA WAN SHOU JU *Tagetes maxima* (aerial parts). Ref: 5318.

**18311 Quercetagenin 7-methylether-3-O-[2-O-caffeoyl-β-D-glucopyranosyl(1→2)-O-β-D-glucuronopyranoside]**

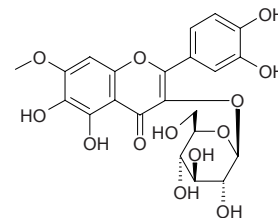
$C_{37}H_{36}O_{22}$  (832.69).  $[\alpha]_D^{25} = -30.6^\circ$  ( $c = 0.1$ , MeOH). Source: *Paepalanthus vellozioides*, *Paepalanthus latipes*. Ref: 2290.

**18312 Quercetagenin 7-methylether 3-O-cellobioside**

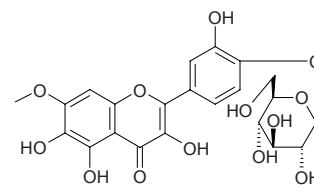
$C_{28}H_{32}O_{18}$  (656.56).  $[\alpha]_D^{25} = -11.4^\circ$  ( $c = 0.1$ , MeOH). Source: *Paepalanthus vellozioides*, *Paepalanthus latipes*. Ref: 2290.

**18313 Quercetagenin 7-methylether-3-O-β-D-glucopyranoside**

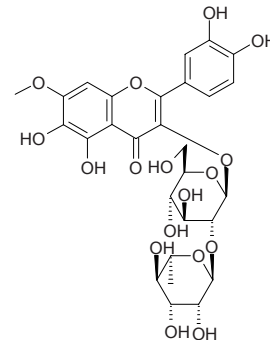
$C_{22}H_{22}O_{13}$  (494.41).  $[\alpha]_D^{25} = -12.5^\circ$  ( $c = 0.1$ , MeOH). Source: *Paepalanthus vellozioides*, *Paepalanthus latipes*. Ref: 2290.

**18314 Quercetagenin 7-methylether-4'-O-β-D-glucopyranoside**

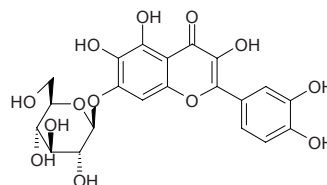
$C_{22}H_{22}O_{13}$  (494.41).  $[\alpha]_D^{25} = -7.4^\circ$  ( $c = 0.1$ , MeOH). Source: *Paepalanthus vellozioides*, *Paepalanthus latipes*. Ref: 2290.

**18315 Quercetagenin 7-methylether 3-O-neohesperidoside**

$C_{28}H_{32}O_{17}$  (640.56).  $[\alpha]_D^{25} = -47.2^\circ$  ( $c = 0.1$ , MeOH). Source: *Paepalanthus vellozioides*, *Paepalanthus latipes*. Ref: 2290.

**18316 Quercetagitrin**

Quercetagenin 7-O-β-D-glucopyranoside [548-75-4]  $C_{21}H_{20}O_{13}$  (480.39). mp 236–238°C (dec). Pharm: Antioxidant (DPPH scavenger,  $IC_{50} = (5.08 \pm 0.03) \mu\text{mol/L}$ , control Quercetin,  $IC_{50} = (6.11 \pm 0.53) \mu\text{g/mL}$ )<sup>[5318]</sup>. Source: DA BAI DING CAO *Senecio oryzetorum*, KONG QUE CAO *Tagetes patula*, XUAN FU HUA *Inula britannica*, ZUI DA WAN SHOU JU *Tagetes maxima* (aerial parts). Ref: 6, 660, 5318.



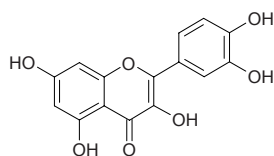
**18317 Quercetin**

2,(3,4-Dihydroxyphenyl)-3,5,7-trihydroxy-4*H*-1-benzopyran-4-one [117-39-5]  
C<sub>15</sub>H<sub>10</sub>O<sub>7</sub> (302.24). Yellow acicular crystals (methanol), mp 313–314°C.

**Pharm:** Anti-HIV-1 (RT (RDDP)inhibitor, IC<sub>50</sub> = 43μmol/L, positive control Adriamycin, IC<sub>50</sub> = 27μmol/L; DDDP inhibitor, IC<sub>50</sub> > 100μmol/L, positive control Adriamycin, IC<sub>50</sub> = 6μmol/L; HIV-1 IN inhibitor, IC<sub>50</sub> = 15μmol/L, positive control suramin, IC<sub>50</sub> = 2.4μmol/L)<sup>[4187]</sup>; antiasthmatic (used as a cure for chronic bronchitis); antibacterial; antihepatotoxin; antihypertensive; anti-inflammatory (COX-1 inhibitor, 200μmol/L, InRt = (44±2)%, positive control Indomethacin, 1.7μmol/L, InRt = (43±3)%); antitussive; antiviral; coronary vasodilator (increases coronary flow); antitussive (dispels phlegm); antihypercholesterolemic; 5-HT inhibitor; smooth muscle relaxant; platelet aggregation inhibitor; 3',5'-cAMP-phosphodiesterase inhibitor; fatty acid synthetase inhibitor; aldose reductase inhibitor (eye lens); protein kinase C inhibitor; antihypertensive; reduces blood capillary brittleness; antioxidant (DPPH scavenger, EC<sub>50</sub> = 1.5μg/mL = 5.0μmol/L, control Ascorbic acid, EC<sub>50</sub> = 1.6μg/mL = 9.1μmol/L)<sup>[4154]</sup>; antioxidant (DPPH scavenger, IC<sub>50</sub> = 17.5μmol/L, control Vitamin E, IC<sub>50</sub> = 27.0μmol/L)<sup>[4502]</sup>; DPPH scavenger (IC<sub>50</sub> = (11.6±0.7)μmol/L, control Trolox, IC<sub>50</sub> = (25.4±0.8)μmol/L)<sup>[4244]</sup>; DPPH scavenger (SC<sub>50</sub> = 3.3μmol/L)<sup>[4247]</sup>; antioxidant (superoxide anion radical scavenger, superoxide dismutase method, IC<sub>50</sub> for Formazane formation activity = 72μmol/L)<sup>[4247]</sup>; antioxidant (DPPH scavenger, IC<sub>50</sub> = 3.7nmol/mL<sup>[3507]</sup>, IC<sub>50</sub> = (6.11±0.53)μg/mL<sup>[5318]</sup>, IC<sub>50</sub> = (9.7±0.8)μmol/L<sup>[5493]</sup>); antioxidant (DPPH scavenger, TLC, MIA < 0.05μg, IC<sub>50</sub> = 7μg/mL)<sup>[3785, 5247]</sup>; antioxidant (DPPH scavenger, TLC, MIA = 1μg)<sup>[5385]</sup>; antioxidant (chemiluminescence method, IC<sub>50</sub> = (0.53±0.01)μmol/L)<sup>[3764]</sup>; antioxidant (PMN cellular chemiluminescence assay, reduces oxidative burst FMLP-induced, IC<sub>50</sub> = (0.5±0.05)μmol/L)<sup>[5371]</sup>; IL-10-like activity (proliferation assay, dose-dependent, maximal at 30μg/mL)<sup>[4445]</sup>; aldose reductase inhibitor (IC<sub>50</sub> = 2.2μmol/L, control Epalrestat, IC<sub>50</sub> = 0.072μmol/L)<sup>[4530]</sup>; anti-inflammatory (modulator of cytokine network: inhibits LPS-stimulated TNF-α and IL-6 release in RAW264.7 macrophages, IC<sub>50</sub> = 1μmol/L)<sup>[4416]</sup>; leukocyte elastase MMP-2/9 inhibitor<sup>[4416]</sup>; TNF-α secretion inhibitor (LPS-stimulated RAW264.7 macrophages, IC<sub>50</sub> < 200μg/mL, by interfering with phosphorylation and activation of JNK/SAPK and its downstream substrates *c*-Jun and ATF-2, and ERK1/2 and p38 MAPK)<sup>[4416]</sup>; inhibits activation of transcription factor AP-1<sup>[4416]</sup>; TNF-α production inhibitor (murine macrophages, LPS-stimulated, IC<sub>50</sub> < 20μmol/mL)<sup>[4416]</sup>; anti-inflammatory (macrophages, COX-2 inhibitor, inhibits COX-2 expression)<sup>[4415]</sup>; anti-inflammatory (NF-κB pathway)<sup>[4415]</sup>; anti-inflammatory (NO production inhibitor, mus, macrophage-like cell line RAW264.7 activated by LPS/IFN, IC<sub>50</sub> = 26.8μmol/L)<sup>[2537, 2556]</sup>; anti-inflammatory (NO production inhibitor, mus, macrophage-like cell line, RAW264.7, activated by LPS and recombinant mouse IFN-γ, IC<sub>50</sub> = 24.8μmol/L)<sup>[2541]</sup>; xanthine oxidase inhibitor (IC<sub>50</sub> = 3.4μg/mL, IC<sub>50</sub> = 10μmol/L)<sup>[5250]</sup>; LD<sub>50</sub> (mus, orl) = 160mg/kg. **Source:** A LA BO JIAO JIN HE HUAN *Acacia nilotica*, BAI GUO *Ginkgo biloba*, BAI GUO YE *Ginkgo biloba* (leaf: mean content of 3 samples = 2.55%)<sup>[5508]</sup>, BEI SHA SHEN *Glehnia littoralis* (underground part), BIAN DI JIN *Hypericum wightianum* (dried whole herb: content = 0.1465%)<sup>[5508]</sup>, BIAN TAO *Mangifera persiciformis*, BIAN XU *Polygonum aviculare* (aerial parts: content = 0.0902%), CE BAI YE *Thuja orientalis* [Syn. *Platyclusus orientalis*; *Biota orientalis*] (dried leaf: content scope of 14 origins = 0.17%–0.33%,

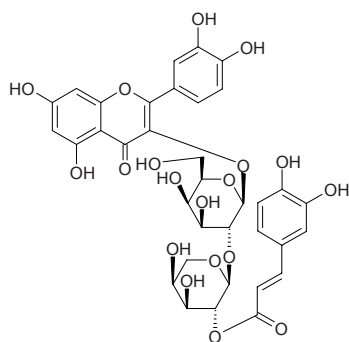
mean content = 0.25%)<sup>[5508]</sup>, CHENG GAN SHENG MA *Eupatorium lindleyanum* (whole herb: mean content = 0.095%)<sup>[5508]</sup>, CHENG LIU *Tamarix chinensis*, CHUAN BA JIAO LIAN *Dysosma veitchii*, CI WU JIA *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*] (root and rhizome: content = 0.069%)<sup>[5508]</sup>, CU LIU GUO *Hippophae rhamnoides* (leaf: content = 0.016%)<sup>[5508]</sup>, DA JIN QIAN CAO *Lysimachia christinae*, DA TU SI ZI *Cuscuta japonica* (ripe fruit: mean content = 0.0141%)<sup>[5508]</sup>, DI JIN CAO *Euphorbia humifusa* (aerial parts: content = 0.0092%)<sup>[5508]</sup>, DU ZHONG YE *Eucommia ulmoides* (leaf: content = 0.019%)<sup>[5508]</sup>, DUO SUI LIAO *Polygonum polystachyum*, FENG JIAO *Apis mellifera ligustica* (bee glue: mean content of 5 beach samples = 0.41%)<sup>[5508]</sup>, GAO LIANG JIANG *Alpinia officinarum*, GUAN YE LIAN QIAO *Hypericum perforatum* (whole herb: mean content = 0.072%)<sup>[5508]</sup>, HONG HUA *Carthamus tinctorius* (flower: mean content of 4 origins = 0.49%)<sup>[5508]</sup>, HONG MA *Apocynum lancifolium*, HU ZHANG *Polygonum cuspidatum*, HUAI JIAO *Sophora japonica*, HUAI *Sophora japonica* (flower), HUANG HAI TANG *Hypericum ascyron* (dried whole herb: content = 0.1107%)<sup>[5508]</sup>, HUANG HUA HAO *Artemisia annua*, HUANG QI *Astragalus membranaceus* (Dried root: mean content of 5 origins = 0.018%)<sup>[5519]</sup>, HUANG SHU KUI HUA *Abelmoschus manihot*, JI WU BING JIN SI TAO *Hypericum subsessile* (dried whole herb: content = 0.0733%)<sup>[5508]</sup>, JI ZI MU *Sinoadina Racemosa* [Syn. *Adina racemosa*] (leaf, flower and twig: yield = 0.0099%dw<sup>[4723]</sup>, yield = 0.021%dw<sup>[3014]</sup>), JIAN YE YIN YANG HUO *Epimedium sagittatum*, JIN SI MEI *Hypericum patulum* (dried whole herb: content = 0.6401%)<sup>[5508]</sup>, KU HAO *Conyza blinii*, KUAN YE XIANG PU *Typha latifolia*, LANG PA CAO *Bidens tripartita* (whole herb: mean content = 0.061%)<sup>[5508]</sup>, LAO SHU LE *Acanthus ilicifolius*, LI JIANG QIAN HU *Peucedanum govanianum* var. *bicolor*, LIANG SHAN DU JUAN *Rhododendron huianum* (leaf: content = 0.048%)<sup>[5508]</sup>, LING NAN DU JUAN *Rhododendron mariae* (branchlet-leaf or flower: content = 0.6448%)<sup>[5508]</sup>, LU SHI DONG LING CAO *Isodon rubescens* var. *lushiensis* (leaf: yield = 0.00026%dw)<sup>[4732]</sup>, LU XIAN CAO *Pyrola calliantha* [Syn. *Pyrola rotundifolia* ssp. *chinensis*], LUO BU MA *Apocynum venetum* (dried leaf: content scope = 0.0073%–0.0277%)<sup>[5501]</sup>; content scope of 6 origins = 0.0018%–0.0165%, mean content = 0.0090%)<sup>[5529]</sup>, LUO YE SONG YE JIN SI TAO *Hypericum laricifolium* (aerial parts), MAN SHAN HONG *Rhododendron dauricum* (leaf: mean content of 11 origins = 0.099%)<sup>[5508]</sup>, MANG NIU ER MIAO *Erodium stephanianum*, MAO GUO DU JUAN *Rhododendron seniavinii* (branchlet-leaf or flower: content = 0.2097%)<sup>[5508]</sup>, MAO YAN CAO *Euphorbia lumulata* (whole herb), MU ZEI *Equisetum hiemale* (aerial parts: mean content = 0.179%)<sup>[5508]</sup>, NAN FANG TU SI ZI *Cuscuta australis* (ripe fruit: mean content = 0.0069%)<sup>[5508]</sup>, PI JIU HUA TU SI ZI *Cuscuta lupuliformis* (ripe fruit: mean content = 0.0061%)<sup>[5508]</sup>, PU HUANG *Typha angustata*, RI BEN HUANG BAI *Phellodendron japonicum* (leaf), RI BEN LU TI CAO *Pyrola japonica*, RU YUAN DU JUAN *Rhododendron lingii* (branchlet-leaf or flower: content = 0.1752%)<sup>[5508]</sup>, SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*], SANG JI SHENG *Loranthus parasiticus* [Syn. *Loranthus chinensis*; *Taxillus chinensis*] (content = 0.027%)<sup>[5501]</sup>, SANG YE *Morus alba* (leaf: mean content = 0.0107%)<sup>[5508]</sup>, SHAN WO JU *Lactuca indica* (Fresh whole herb: yield = 0.00063%fw)<sup>[4689]</sup>, SHI WEI *Pyrrosia lingua* (dried leaf: mean content = 0.11%)<sup>[5508]</sup>, SHI ZHI JIA *Sedum sarmentosum* (whole herb: mean content of 10 origins = 0.131%)<sup>[5532]</sup>, SHUI MU XUE LIAN HUA *Saussurea medusa* (whole herb), TAI WAN HUANG BO *Phellodendron amurense* var. *wilsonii*

(leaf: yield = 0.00017%dw)<sup>[4722]</sup>, TU SI ZI *Cuscuta chinensis* (ripe fruit: content scope = 0.119%–0.204%<sup>[5501]</sup>, mean content = 0.150%<sup>[5508]</sup>), WEI LING CAI *Potentilla chinensis*, WEN GUAN MU *Xanthoceras sorbifolia* (stem and trunk: mean content = 0.011%<sup>[5508]</sup>), XI SHU *Camptotheca acuminata*, XIA YE XIANG PU *Typha angustifolia*, XIAN HE CAO *Agrimonia pilosa* var. *japonica*, XIAN REN ZHANG *Opuntia dillenii* (fresh stem), XUAN FU HUA *Inula britannica*, YANG PU TAO YE *Syzygium samarangense*, YAO YONG PU GONG YING *Taraxacum officinale*, YE XIA ZHU *Phyllanthus urinaria* (whole herb: mean content = 0.042%<sup>[5508]</sup>), YI BI LI YA LI *Quercus iberica*, YI ZHU QIAN MA *Urtica dioica*, YIN CHEN HAO *Artemisia capillaris*, YOU GAN YE *Phyllanthus emblica* (leaf and branch), YOU SE ZI JIN NIU *Ardisia colorata* (fruit), YU XING CAO *Houttuynia cordata*, YUAN BAO CAO *Hypericum sampsonii* (dried whole herb: content = 0.0079%<sup>[5508]</sup>), YUN SHI *Caesalpinia decapetala* (leaf), ZHAI YE BAN FENG HE *Pterospermum lanceaefolium*, ZHAN E JIN SI TAO *Hypericum lancasteri* (dried whole herb: content = 0.1595%<sup>[5508]</sup>), ZHAO SHAN BAI *Rhododendron micranthum* (leaf: content scope from Feb. to Nov. 0.10%–0.47%, mean content = 0.29%<sup>[5508]</sup>), ZHEN ZHU MEI *Sorbaria sorbifolia* (bark: content = 0.62%<sup>[5508]</sup>), ZHONG GUO SHA JI *Hippophae rhamnoides* subsp. *sinensis* (leaf: content = 0.006%<sup>[5508]</sup>), ZHONG GUO XUAN FU HUA *Inula britannica* var. *chinensis*, ZHONG YA SHA JI *Hippophae rhamnoides* subsp. *turkestanica* (leaf: content = 0.007%<sup>[5508]</sup>), ZI WAN *Aster tataricus* (root and rhizome: content = 0.0104%<sup>[5508]</sup>), occurs in many plants (esp. in fruits, for example detected in almost all studied in family Apiaceae spp.). Ref: 2, 4, 468, 475, 550, 557, 594, 604, 615, 658, 660, 2080, 2537, 2541, 2556, 3014, 3507, 3764, 3785, 4013, 4097, 4154, 4187, 4205, 4244, 4247, 4413, 4415, 4416, 4445, 4456, 4502, 4530, 4689, 4722, 4723, 4732, 5247, 5250, 5318, 5371, 5375, 5385, 5493, 5501, 5508, 5519, 5529, 5532.



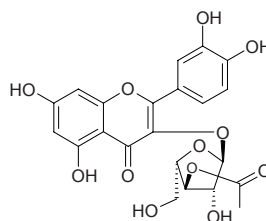
**18318 Quercetin-3-O-(2-E-caffeoyl)- $\alpha$ -L-arabinopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-galactopyranoside**

C<sub>35</sub>H<sub>34</sub>O<sub>19</sub> (758.65). Yellow amorphous powder,  $[\alpha]_D^{25} = -70^\circ$  ( $c = 0.1$ , MeOH). Source: LV TI GEN CAO *Helleborus viridis* (leaf). Ref: 3875.



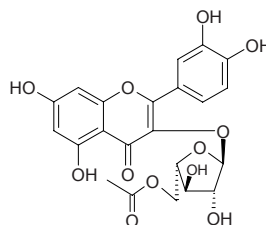
**18319 Quercetin-3-O- $\alpha$ -L-(3''-O-acetyl)-arabinofuranoside**

C<sub>22</sub>H<sub>20</sub>O<sub>12</sub> (476.40). Pharm: Hepatoprotective (primary cultures of rat hepatocytes, H<sub>2</sub>O<sub>2</sub>-induced toxicity, 50 $\mu$ mol/L, relative protection = 45.7%, H<sub>2</sub>O<sub>2</sub>-treated, relative protection = 0.0%, control, relative protection = 100%), positive control Silibinin, Relative protection = 74.9%). Source: RI BEN GUI DENG QING *Rodgersia podophylla* (aerial parts). Ref: 4996.



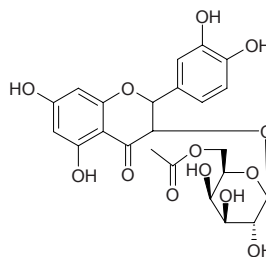
**18320 Quercetin-3-O- $\alpha$ -L-(5''-O-acetyl)-arabinofuranoside**

C<sub>22</sub>H<sub>20</sub>O<sub>12</sub> (476.40). Yellow powder, mp 186°C,  $[\alpha]_D^{20} = -96.3^\circ$  ( $c = 0.1$ , MeOH). Pharm: Hepatoprotective (primary cultures of rat hepatocytes, H<sub>2</sub>O<sub>2</sub>-induced toxicity, 50 $\mu$ mol/L, relative protection = 44.5%, H<sub>2</sub>O<sub>2</sub>-treated, relative protection = 0.0%, control, relative protection = 100%), positive control Silibinin, Relative protection = 74.9%). Source: RI BEN GUI DENG QING *Rodgersia podophylla* (aerial parts). Ref: 4996.



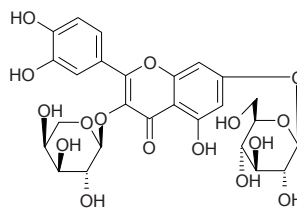
**18321 Quercetin-3-O-(6''-acetyl)- $\beta$ -D-galactopyranoside**

C<sub>23</sub>H<sub>24</sub>O<sub>13</sub> (508.44). Source: SAN XIAO CAO *Trifolium repens* (flower). Ref: 3970.



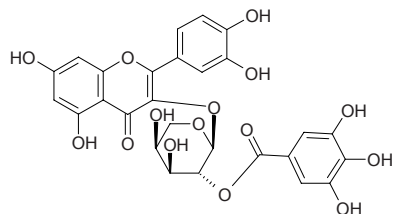
**18322 Quercetin-3-L-arabino-7-D-glucoside**

C<sub>26</sub>H<sub>28</sub>O<sub>16</sub> (596.50). Source: MEI SHANG LU *Phytolacca americana* [Syn. *Phytolacca decandra*]. Ref: 6.

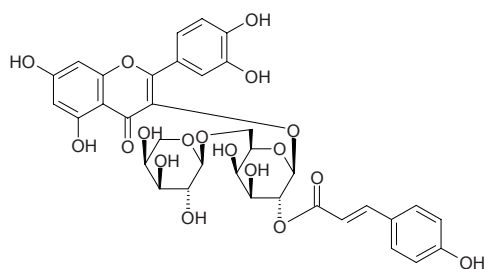


**18323 Quercetin-3-O- $\alpha$ -arabinopyranoside-2''-gallate**

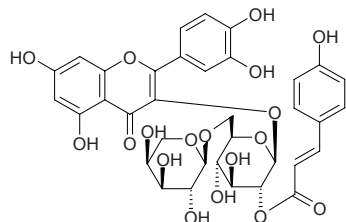
[128700-95-8] C<sub>27</sub>H<sub>22</sub>O<sub>15</sub> (586.47). Yellow prisms (MeOH-H<sub>2</sub>O), mp 192–193°C, [ $\alpha$ ]<sub>D</sub> = -125° (c = 0.33, MeOH). **Pharm:** antioxidant (rht, peroxidation of erythrocytic membrane, IC<sub>50</sub> = 34  $\mu$ mol/L); xanthinoxidase inhibitor (IC<sub>50</sub> = 60  $\mu$ mol/L); SOD activity (activity = 90 units/mg). **Source:** CHANG HUI AN *Eucalyptus rostrata*, *Lasiobema japonica*. **Ref:** 1737, 4019, 4020.

**18324 Quercetin-3-O- $\alpha$ -L-arabinopyranosyl-(1→6)-[2''-O-(E)-p-coumaroyl]- $\beta$ -D-galactopyranoside**

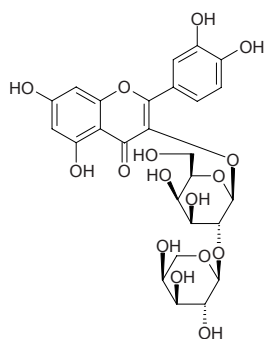
C<sub>35</sub>H<sub>34</sub>O<sub>18</sub> (742.65). Yellow solid, [ $\alpha$ ]<sub>D</sub><sup>17</sup> = -46° (c = 0.44, MeOH). **Source:** ZHAI YE YE WAN DOU *Vicia angustifolia*. **Ref:** 1917.

**18325 Quercetin-3-O- $\alpha$ -L-arabinopyranosyl-(1→6)-[2''-O-(E)-p-coumaroyl]- $\beta$ -D-glucopyranoside**

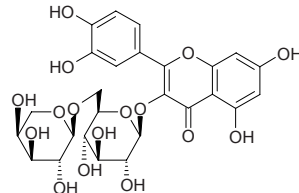
C<sub>35</sub>H<sub>34</sub>O<sub>18</sub> (742.65). Yellow solid, [ $\alpha$ ]<sub>D</sub><sup>17</sup> = -90° (c = 0.73, MeOH). **Source:** ZHAI YE YE WAN DOU *Vicia angustifolia*. **Ref:** 1917.

**18326 Quercetin-3-O- $\alpha$ -L-arabinopyranosyl-(1→2)- $\beta$ -D-galactopyranoside**

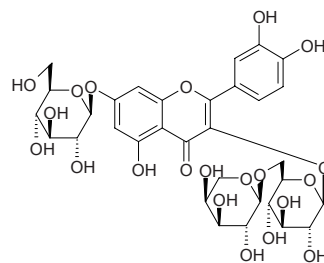
C<sub>26</sub>H<sub>28</sub>O<sub>16</sub> (596.50). Yellow amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -43° (c = 0.1, MeOH). **Source:** LV TI GEN CAO *Helleborus viridis* (leaf). **Ref:** 3875.



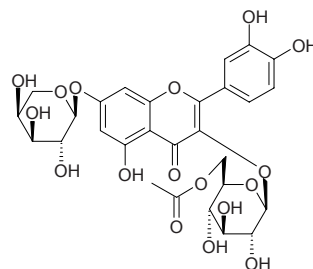
**18327 Quercetin-3-O- $\alpha$ -arabinopyranosyl(1'''→6'')- $\beta$ -glucopyranoside  $\beta$ -Vicianosyl-3-quercetin** C<sub>26</sub>H<sub>28</sub>O<sub>16</sub> (596.50). Yellow solid (MeOH), mp 200–202°C. **Source:** KU DI DING *Corydalis bungeana* (whole herb), XING CAI *Nymphoides peltatum*. **Ref:** 6, 3880.

**18328 Quercetin-3-O- $\alpha$ -arabinopyranosyl(1'''→6'')- $\beta$ -glucopyranoside 7-O- $\beta$ -glucopyranoside**

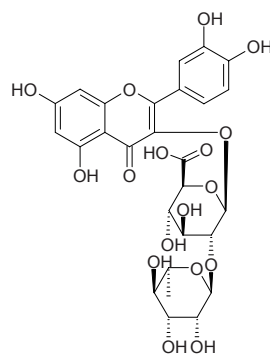
C<sub>32</sub>H<sub>38</sub>O<sub>21</sub> (758.65). Yellow solid (MeOH). **Source:** KU DI DING *Corydalis bungeana* (whole herb). **Ref:** 3880.

**18329 Quercetin-7-O- $\alpha$ -L-Arabinosyl-3-O- $\beta$ -D-6''-acetyl glucopyranoside**

C<sub>28</sub>H<sub>30</sub>O<sub>17</sub> (638.54). Yellow amorphous powder, mp 223–225°C, [ $\alpha$ ]<sub>D</sub><sup>23</sup> = -26.19° (c = 0.420, DMSO). **Source:** HONG YA DA JI *Knoxia valerianoides*. **Ref:** 4841.

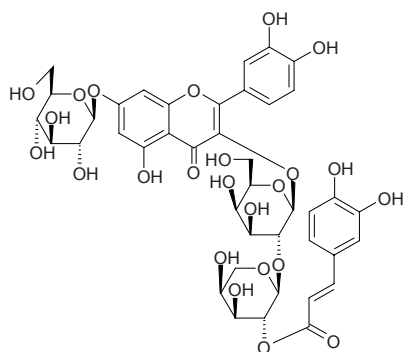


**18330 Quercetin-3-O-(2''-O-rhamnopyranosyl)- $\beta$ -glucuronopyranoside** C<sub>27</sub>H<sub>28</sub>O<sub>17</sub> (624.51). **Pharm:** Antioxidant (DPPH scavenger, SC<sub>50</sub> = 5.0  $\mu$ mol/L, control Vitamin E, SC<sub>50</sub> = 5.2 mmol/L). **Source:** LAO YA SHI *Diospyros rhombifolia* (leaf). **Ref:** 4464.



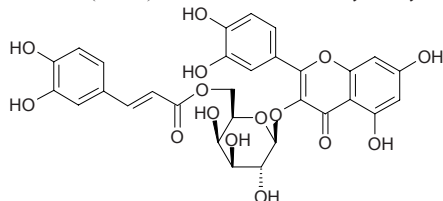
**18331 Quercetin-3-O-(2-E-caffeoyl)- $\alpha$ -L-arabinopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-galactopyranoside-7-O- $\beta$ -D-glucopyranoside**

C<sub>41</sub>H<sub>44</sub>O<sub>24</sub> (920.79). Yellow amorphous powder,  $[\alpha]_D^{25} = -42^\circ$  ( $c = 0.1$ , MeOH). Source: LV TI GEN CAO *Helleborus viridis* (leaf). Ref: 3875.



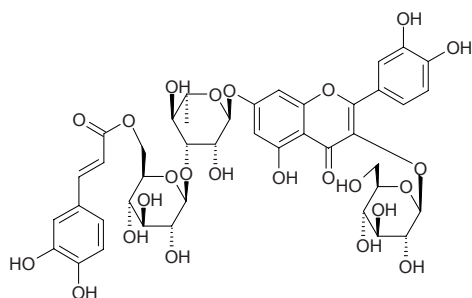
**18332 Quercetin-3-O- $\beta$ -D-(6''-caffeoyl galactoside)**

C<sub>30</sub>H<sub>26</sub>O<sub>15</sub> (626.53). Source: TIAN HU SUI *Hydrocotyle sibthorpioides*. Ref: 4036.



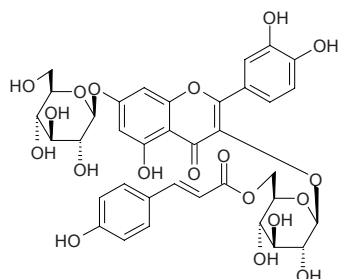
**18333 Quercetin-7-O-(6-trans-caffeoyl)- $\beta$ -glucopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -rhamnopyranoside-3-O- $\beta$ -glucopyranoside**

C<sub>42</sub>H<sub>46</sub>O<sub>23</sub> (934.82). Amorphous orange-yellow powder, mp 185~187°C,  $[\alpha]_D^{25} = -38.3^\circ$  ( $c = 0.1$ , MeOH). Source: *Aconitum napellus* ssp. *neomontanum* (flower). Ref: 5148.



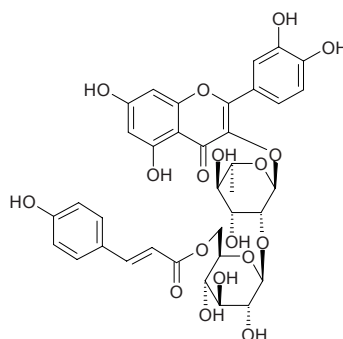
**18334 Quercetin-3-O- $\beta$ -(6''-E-p-coumaroyl)glucopyranoside)-7-O- $\beta$ -glucopyranoside**

C<sub>36</sub>H<sub>36</sub>O<sub>19</sub> (772.68). Faint yellow amorphous powder. Source: DUO YE BAI MAI GEN *Lotus polyphyllus*. Ref: 1973.



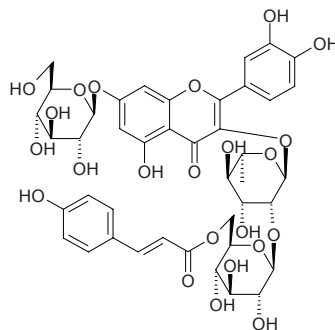
**18335 Quercetin-3-O- $\alpha$ -L-[6'''-p-coumaroyl-( $\beta$ -D)-glucopyranosyl-(1,2)-rhamnopyranoside]**

C<sub>36</sub>H<sub>36</sub>O<sub>18</sub> (756.68). Pharm: Antioxidant (DPPH scavenger, IC<sub>50</sub> = 14.0 $\mu$ g/mL, control Gallic acid, IC<sub>50</sub> = 3.6 $\mu$ g/mL; Cytochrome-C reduction, IC<sub>50</sub> = 13.2 $\mu$ g/mL, control Gallic acid, IC<sub>50</sub> = 3.0 $\mu$ g/mL). Source: BAI GUO YE *Ginkgo biloba*. Ref: 5239.



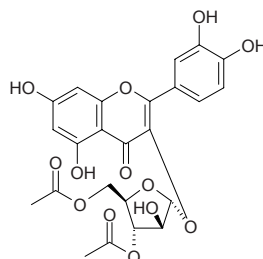
**18336 Quercetin-3-O- $\alpha$ -L-[6'''-p-coumaroyl-( $\beta$ -D)-glucopyranosyl-(1,2)-rhamnopyranoside]-7-O- $\beta$ -D-glucopyranoside**

C<sub>42</sub>H<sub>46</sub>O<sub>23</sub> (918.82). Pharm: Antioxidant (DPPH scavenger, IC<sub>50</sub> = 14.5 $\mu$ g/mL, control Gallic acid, IC<sub>50</sub> = 3.6 $\mu$ g/mL; Cytochrome-C reduction, IC<sub>50</sub> = 13.5 $\mu$ g/mL, control Gallic acid, IC<sub>50</sub> = 3.0 $\mu$ g/mL). Source: BAI GUO YE *Ginkgo biloba*. Ref: 5239.



**18337 Quercetin-3-O- $\alpha$ -L-3'',5''-diacetyl-arabinofuranoside**

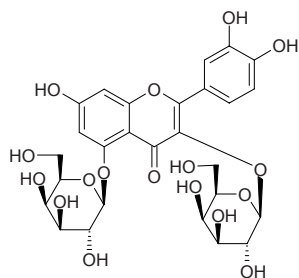
C<sub>24</sub>H<sub>22</sub>O<sub>13</sub> (518.44). Dark yellow powder,  $[\alpha]_D^{20} = -102.3^\circ$  ( $c = 0.17$ , MeOH). Source: RI BEN GUI DENG QING *Rodgersia podophylla* (aerial parts: yield = 0.00047%dw). Ref: 1179.



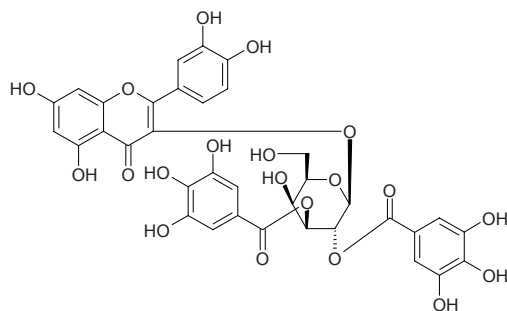


**18338 Quercetin-3,5-di-*D*-galactoside**

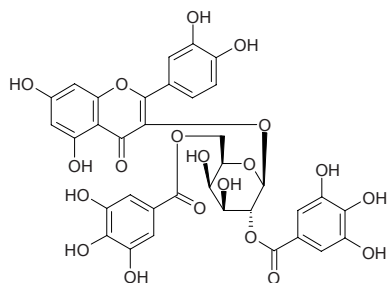
$C_{27}H_{30}O_{17}$  (626.53). mp 196~197°C, 219~220°C (solidifying), 270°C. Source: ZE QI *Euphorbia helioscopia*. Ref: 6.

**18339 Quercetin-3-*O*-(2'',3'''-digalloyl)- $\beta$ -*D*-galactopyranoside**

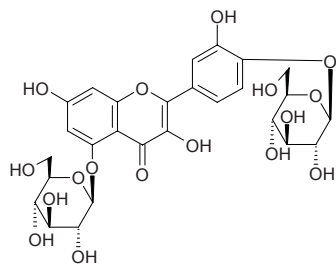
$C_{35}H_{28}O_{20}$  (768.60). Yellow amorphous powder,  $[\alpha]_D^{23} = -28.7^\circ$  ( $c = 0.30$ , MeOH). Pharm: Insulin-like activity (proliferation assay, dose-dependent, maximal at 30 $\mu$ g/mL). Source: MAO YAN CAO *Euphorbia lunulata* (whole herb). Ref: 4445.

**18340 Quercetin-3-*O*-(2'',6''-digalloyl)- $\beta$ -*D*-galactopyranoside**

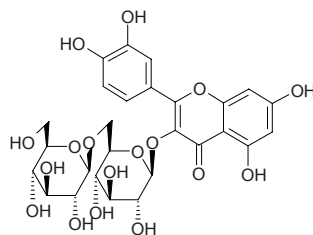
[200860-88-4]  $C_{35}H_{28}O_{20}$  (768.60). Yellow amorphous powder, mp 222~224°C (dec),  $[\alpha]_D^{21} = -45.9^\circ$  ( $c = 0.4$ , MeOH). Pharm: Anti-HIV (HIV-1 integrase inhibitor,  $IC_{50} = (24.2 \pm 6.6)\mu$ g/mL). Source: CHAO XIAN WU JIAO FENG *Acer okamotoanum*. Ref: 4025.

**18341 Quercetin-5,4'-di-*O*- $\beta$ -*D*-glucopyranoside**

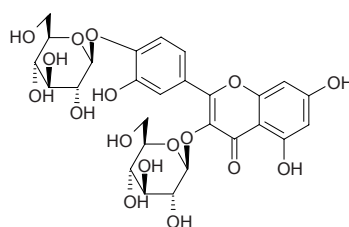
$C_{27}H_{30}O_{17}$  (626.53). Source: CAN JIAN *Bombyx mori*. Ref: 1983.

**18342 Quercetin-3-diglucoside**

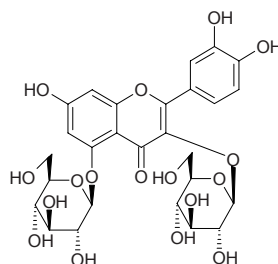
Meratin [27215-04-9]  $C_{27}H_{30}O_{17}$  (626.53). mp 182~184°C. Source: DUO SUI LIAO *Polygonum polystachyum*, FU SANG HUA *Hibiscus rosa-sinensis*, LA MEI HUA *Chimonanthus fragrans* [Syn. *Chimonanthus praecox*]. Ref: 6.

**18343 Quercetin-3,4'-diglucoside**

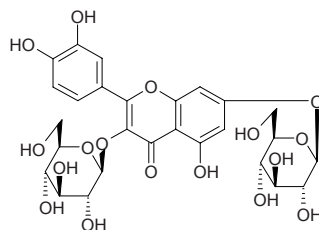
$C_{27}H_{30}O_{17}$  (626.53). Source: HU CONG *Allium ascalonicum*, YANG CONG *Allium cepa*. Ref: 6.

**18344 Quercetin-3,5-diglucoside**

$C_{27}H_{30}O_{17}$  (626.53). Source: NING MENG PI *Citrus limon*. Ref: 6, 660.

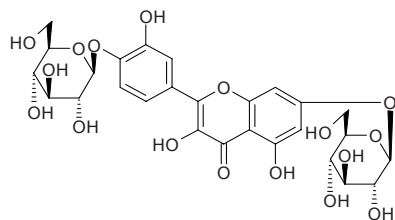
**18345 Quercetin-3,7-diglucoside**

Quercetin-3,7-di-*O*- $\beta$ -*D*-glucopyranoside  $C_{27}H_{30}O_{17}$  (626.53). mp 218~220°C. Pharm: Aldose reductase inhibitor (rat lens,  $IC_{50} = 84\mu$ mol/L, control Epalrestat,  $IC_{50} = 0.072\mu$ mol/L). Source: FU SANG HUA *Hibiscus rosa-sinensis*, YE JU HUA *Chrysanthemum indicum* (flower: yield = 0.0038%). Ref: 6, 4214.

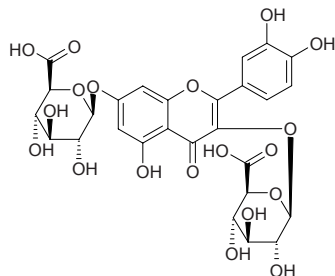


**18346 Quercetin-7,4'-diglucoside**

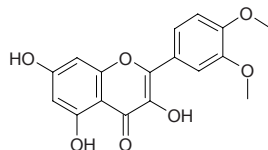
$C_{27}H_{30}O_{17}$  (626.53). Source: HU CONG *Allium ascalonicum*, YANG CONG *Allium cepa*. Ref: 6.

**18347 Quercetin-3,7-diglucuronide**

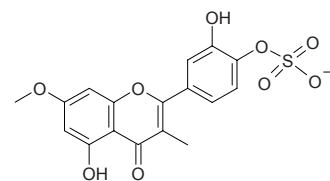
$C_{27}H_{26}O_{19}$  (654.50). Source: JIN JIN BANG *Potentilla reptans* var. *sericophylla*. Ref: 6.

**18348 Quercetin-3',4'-dimethyl ether**

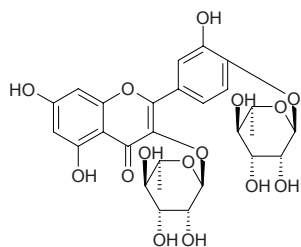
$C_{17}H_{14}O_7$  (330.30). Source: CHENG LIU *Tamarix chinensis* (dried tender branch-leaf: content = 0.115%<sup>[5508]</sup>), DUO ZHI CHENG LIU *Tamarix ramosissima* (dried tender branch-leaf: content = 0.064%<sup>[5508]</sup>). Ref: 115, 5508.

**18349 Quercetin-3-methyl-7-methyl ether-4'-sulfate**

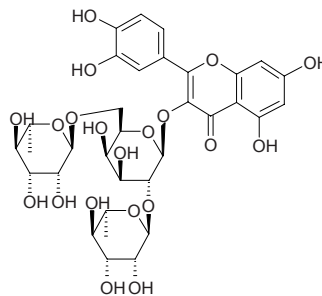
$C_{17}H_{13}O_9S$  (393.35). Source: RUI SHI QIAN NIU *Ipomoea regnellii*. Ref: 1891.

**18350 Quercetin-3,4'-di- $\alpha$ -L-rhamnopyranoside**

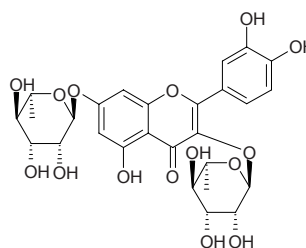
$C_{27}H_{30}O_{15}$  (594.53). Yellow amorphous powder. Source: SHUANG ZHONG ZI SHU LI *Rhamnus disperma*. Ref: 2380.

**18351 Quercetin-3-O-(2'',6''- $\alpha$ -L-dirhamnopyranosyl)- $\beta$ -D-galactopyranoside**

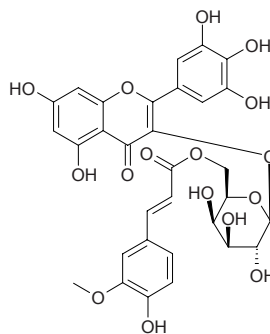
$C_{33}H_{40}O_{20}$  (756.67). Pharm: Aldose reductase inhibitor (*in vitro*, rat lens aldose reductase,  $IC_{50} > 30 \mu\text{mol/L}$ ,  $30 \mu\text{mol/L}$  InRt = 40%; control Epalrestat,  $IC_{50} = 0.072 \mu\text{mol/L}$ ). Source: BAI MEI HUA *Prunus mume* (flower: yield = 0.010%fw). Ref: 4641.

**18352 Quercetin-3,7- $\alpha$ -L-dirhamnoside**

$C_{27}H_{30}O_{15}$  (594.53). mp 185~186°C. Source: NAN SHE TENG YE *Celastrus orbiculatus* [Syn. *Celastrus articulatus*]. Ref: 6.

**18353 Quercetin-3-O-(6''-feruloyl)- $\beta$ -D-galactopyranoside**

$C_{31}H_{28}O_{16}$  (656.56). Gum. Source: NIAN MAO LIAO *Polygonum viscosum* (whole herbs). Ref: 3955.

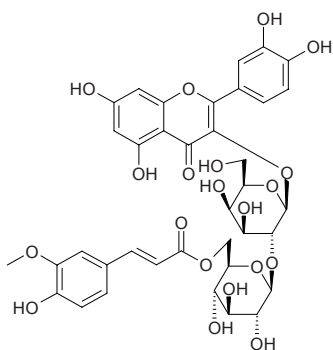




**18354 Quercetin-3-O-[(6-O-feruloyl)-β-D-glucopyranosyl-(1→2)-β-D-galactopyranoside]**

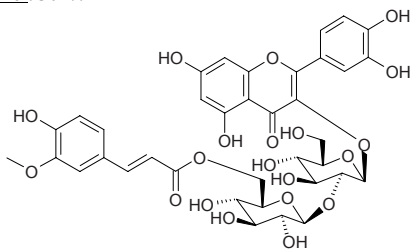
$C_{37}H_{38}O_{20}$  (802.70). Dark yellow amorphous powder, mp 207–210°C,  $[\alpha]_D^{25} = -0.058^\circ$  ( $c = 0.1$ , MeOH). **Pharm:** Anti-HIV-1 (RT (RDDP) inhibitor,  $IC_{50} = 20\mu\text{mol/L}$ , positive control Adriamycin,  $IC_{50} = 27\mu\text{mol/L}$ ; DDDP inhibitor,  $IC_{50} = 42\mu\text{mol/L}$ , positive control Adriamycin,  $IC_{50} = 6\mu\text{mol/L}$ ; HIV-1 IN inhibitor,  $IC_{50} = 5\mu\text{mol/L}$ , positive control Suramin,  $IC_{50} = 2.4\mu\text{mol/L}$ )<sup>[4187]</sup>; Neuroprotective (primary cultures of rat cortical cells, induced by *L*-glutamate,  $0.1\mu\text{mol/L}$ , cell viability =  $(62.7\pm 1.1)\%$ ,  $p < 0.001$ ,  $1.0\mu\text{mol/L}$ , cell viability =  $(72.9\pm 3.3)\%$ ,  $p < 0.001$ ,  $10\mu\text{mol/L}$ , cell viability =  $(75.0\pm 0.2)\%$ ,  $p < 0.001$ )<sup>[3027]</sup>.

**Source:** HUANG HUA JIA ZHU TAO *Thevetia nerifolia* [Syn. *Thevetia peruviana*] (leaf), BAI HUA SHE SHE CAO *Oldenlandia diffusa* [Syn. *Hedyotis diffusa*] (whole herb: yield = 0.00036%). **Ref:** 4187, 3027.



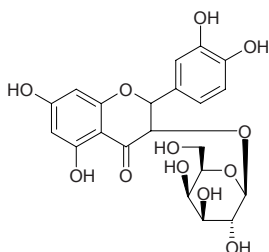
**18355 Quercetin-3-O-[2-O-(6-O-E-feruloyl)-β-D-glucopyranosyl]-β-D-glucopyranoside**

$C_{37}H_{38}O_{20}$  (802.7). **Pharm:** Neuroprotective (primary cultures of rat cortical cells, induced by *L*-glutamate,  $0.1\mu\text{mol/L}$ , cell viability =  $(62.6\pm 2.9)\%$ ,  $p < 0.001$ ,  $1.0\mu\text{mol/L}$ , cell viability =  $(71.5\pm 1.6)\%$ ,  $p < 0.001$ ,  $10\mu\text{mol/L}$ , cell viability =  $(73.7\pm 2.7)\%$ ,  $p < 0.001$ ). **Source:** BAI HUA SHE SHE CAO *Oldenlandia diffusa* [Syn. *Hedyotis diffusa*] (whole herb: yield = 0.00039%). **Ref:** 3027.



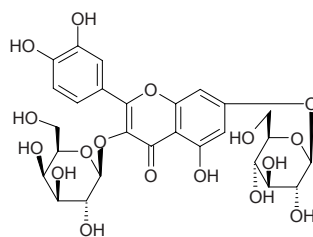
**18356 Quercetin-3-O-β-D-galactopyranoside**

$C_{21}H_{22}O_{12}$  (466.40). **Source:** SAN XIAO CAO *Trifolium repens* (flower). **Ref:** 3970.



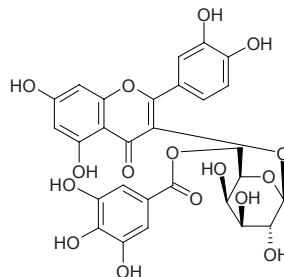
**18357 Quercetin-3-O-β-D-galactoside-7-O-β-glucoside**

$C_{27}H_{30}O_{17}$  (626.53). **Source:** TU SI ZI *Cuscuta chinensis*. **Ref:** 4031.



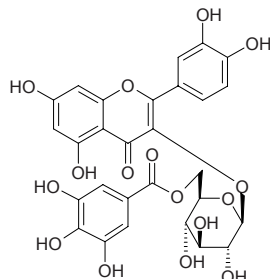
**18358 Quercetin-3-O-(6''-galloyl)-galactoside**

$C_{28}H_{24}O_{16}$  (616.49). **Pharm:** ACE inhibitor ( $IC_{50} = 160\mu\text{mol/L}$ , control Lisinopril,  $IC_{50} = 1\text{nmol/L}$ ); NEP inhibitor ( $IC_{50} = 120\mu\text{mol/L}$ , control Phosphoramidon,  $IC_{50} = 9\text{nmol/L}$ ); APN inhibitor inactive. **Source:** HONG KUAI ZI *Chamaenerion angustifolium* [Syn. *Epilobium angustifolium*]. **Ref:** 5034.



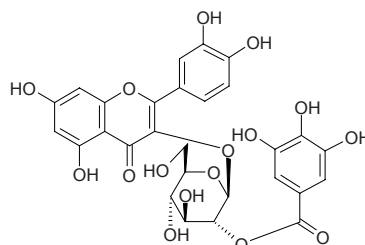
**18359 Quercetin-3-O-(6''-galloyl)-β-D-glucopyranoside**

$C_{28}H_{24}O_{16}$  (616.49).  $[\alpha]_D^{25} = -20.8^\circ$  ( $c = 0.1$ , MeOH). **Pharm:** Antifungal (*Candida albicans* ATCC2091, MIC >  $200\mu\text{g/mL}$ , control Amphotericin B, MIC =  $1\mu\text{g/mL}$ ; *Candida albicans* 32, MIC >  $200\mu\text{g/mL}$ , Amphotericin B, MIC =  $4\mu\text{g/mL}$ ; *Candida albicans* 19, MIC =  $200\mu\text{g/mL}$ , Amphotericin B, MIC =  $2\mu\text{g/mL}$ ); cytotoxic inactive (MIC >  $200\mu\text{g/mL}$ ); antibacterial inactive. **Source:** *Baseonema acuminatum* (leaf). **Ref:** 5021.



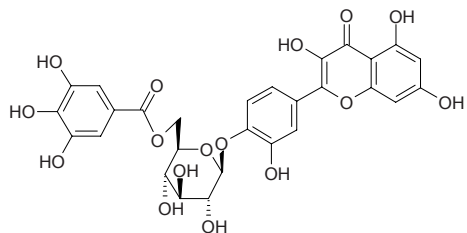
**18360 Quercetin-3-O-(2''-O-galloyl)-β-D-glucoside**

Quercetin-3-β-D-glucoside-2''-gallic acid  $C_{28}H_{24}O_{16}$  (616.49). **Source:** BAN DI JIN *Euphorbia maculata*, JIE LIAO *Polygonum nodosum*, YU LIAO *Polygonum lapathifolium*. **Ref:** 4032, 4033, 4034.

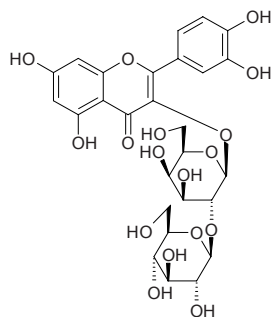


**18361 Quercetin-4'-*O*- $\beta$ -D-glucopyranoside-6''-gallate**

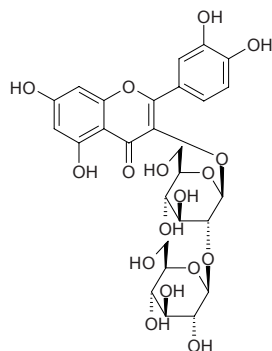
[149998-41-4] C<sub>28</sub>H<sub>24</sub>O<sub>16</sub> (616.49). Yellow powder. **Pharm:** Xanthinoxidase inhibitor (IC<sub>50</sub> = 1.3 $\mu$ mol/L); SOD activity (activity = 450units/mg). **Source:** CHANG HUI AN *Eucalyptus rostrata*. **Ref:** 1737, 4020, 4021, 4022.

**18362 Quercetin-3-*O*-[ $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-galactopyranoside]**

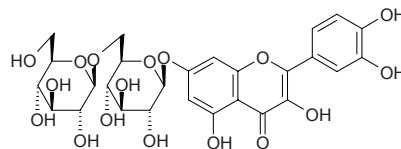
C<sub>27</sub>H<sub>30</sub>O<sub>17</sub> (626.53). **Pharm:** Neuroprotective (primary cultures of rat cortical cells, induced by *L*-glutamate, 0.1 $\mu$ mol/L, cell viability = (48.4 $\pm$ 0.7)%,  $p < 0.01$ , 1.0 $\mu$ mol/L, cell viability = (66.0 $\pm$ 1.6)%,  $p < 0.001$ , 10 $\mu$ mol/L, cell viability = (54.0 $\pm$ 2.9)%,  $p < 0.001$ )<sup>[3027]</sup>; anti-HIV-1 (RT (RDDP) inhibitor, IC<sub>50</sub> > 100 $\mu$ mol/L, positive control Adriamycin, IC<sub>50</sub> = 27 $\mu$ mol/L; DDDP inhibitor, IC<sub>50</sub> > 100 $\mu$ mol/L, positive control Adriamycin, IC<sub>50</sub> = 6 $\mu$ mol/L; HIV-1 IN inhibitor, IC<sub>50</sub> > 100 $\mu$ mol/L, positive control Suramin, IC<sub>50</sub> = 2.4 $\mu$ mol/L)<sup>[4187]</sup>. **Source:** BAI HUA SHE SHE CAO *Oldenlandia diffusa* [Syn. *Hedyotis diffusa*] (whole herb: yield = 0.00039%)<sup>[3027]</sup>, HUANG HUA JIA ZHU TAO *Thevetia nerifolia* [Syn. *Thevetia peruviana*] (leaf). **Ref:** 3027, 4187.

**18363 Quercetin-3-*O*-[ $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranoside]**

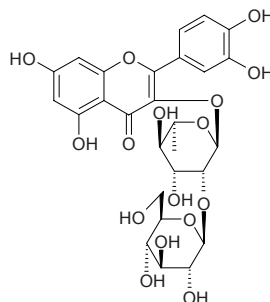
C<sub>27</sub>H<sub>30</sub>O<sub>17</sub> (626.53). **Pharm:** Anti-HIV-1 (RT (RDDP) inhibitor, IC<sub>50</sub> = 41 $\mu$ mol/L, positive control Adriamycin, IC<sub>50</sub> = 27 $\mu$ mol/L; DDDP inhibitor, IC<sub>50</sub> > 100 $\mu$ mol/L, positive control Adriamycin, IC<sub>50</sub> = 6 $\mu$ mol/L; HIV-1 IN inhibitor, IC<sub>50</sub> = 45 $\mu$ mol/L, positive control Suramin, IC<sub>50</sub> = 2.4 $\mu$ mol/L)<sup>[4187]</sup>. **Source:** HUANG HUA JIA ZHU TAO *Thevetia nerifolia* [Syn. *Thevetia peruviana*] (leaf)<sup>[4187]</sup>, LUO BU MA *Apocynum venetum* (dried leaf: content scope of 6 origins = 0.0%-0.569%, mean content = 0.230%)<sup>[5529]</sup>. **Ref:** 4187, 5529.

**18364 Quercetin-7-*O*- $\beta$ -D-glucopyranosyl(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside**

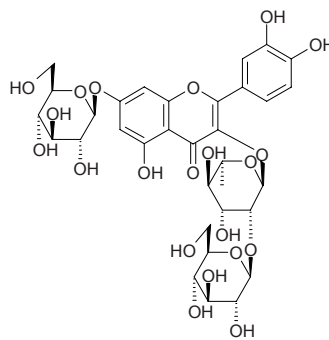
C<sub>27</sub>H<sub>30</sub>O<sub>17</sub> (626.53). Yellow powder, mp 220°C (dec). **Source:** BO NIANG HAO *Descurainia Sophia*. **Ref:** 2514, 2521.

**18365 Quercetin-3-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -L-rhamnopyranoside**

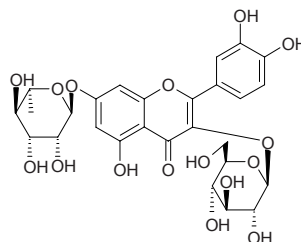
C<sub>27</sub>H<sub>30</sub>O<sub>16</sub> (610.53). **Pharm:** Antioxidant (DPPH scavenger, IC<sub>50</sub> = 16.1 $\mu$ g/mL, control Gallic acid, IC<sub>50</sub> = 3.6 $\mu$ g/mL; Cytochrome-C reduction, IC<sub>50</sub> = 14.8 $\mu$ g/mL, control Gallic acid, IC<sub>50</sub> = 3.0 $\mu$ g/mL). **Source:** BAI GUO YE *Ginkgo biloba*. **Ref:** 5239.

**18366 Quercetin-3-*O*- $\alpha$ -L-(2-*O*- $\beta$ -D-glucopyranosyl)rhamnopyranoside-7-*O*- $\beta$ -D-glucopyranoside**

C<sub>33</sub>H<sub>40</sub>O<sub>21</sub> (772.67). **Source:** SHUANG HUA FAN HONG HUA *Crocus chrysanthus-biflorus*. **Ref:** 2343.

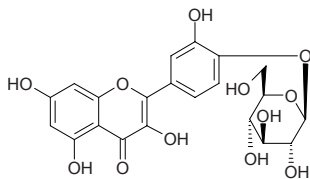
**18367 Quercetin-3- $\beta$ -D-glucopyranosyl-7- $\alpha$ -L-rhamnoside**

C<sub>27</sub>H<sub>30</sub>O<sub>16</sub> (610.53). mp 186~188°C. **Source:** TIAO JING CAO *Euonymus japonicus*, NAN SHE TENG YE *Celastrus orbiculatus* [Syn. *Celastrus articulatus*]. **Ref:** 6.

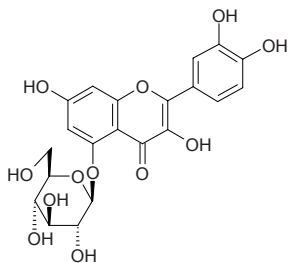


**18368 Quercetin-4'-glucoside**

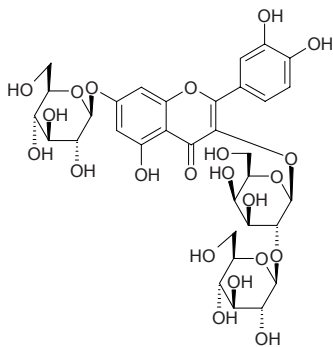
Spiraeoside [20229-56-5]  $C_{21}H_{20}O_{12}$  (464.39). mp 209~211°C. **Pharm:** Aldose reductase inhibitor (rat, eye lens, 10 $\mu$ mol/L InRt = 51.2%, 1 $\mu$ mol/L InRt = 8.9%); antioxidant (rbt, peroxidization of erythrocytic membrane, IC<sub>50</sub> = 162 $\mu$ mol/L); xanthinoxidase inhibitor (IC<sub>50</sub> = 1.3 $\mu$ mol/L, 2.5 $\mu$ mol/L); cAMP phosphodiesterase inhibitor (IC<sub>50</sub> = 100 $\mu$ mol/L); hyaluronidase inhibitor. **Source:** HU CONG *Allium ascalonicum*, MU FU RONG HUA *Hibiscus mutabilis*. **Ref:** 6, 1631, 1652, 1653, 1699, 1737.

**18369 Quercetin-5-O- $\beta$ -D-glucoside**

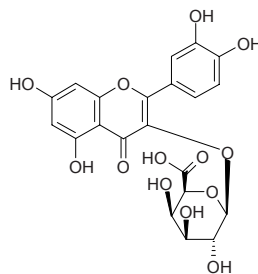
Saxifragin [34199-21-8]  $C_{21}H_{20}O_{12}$  (464.39). Yellow needles (MeOH-pyridine), mp 244~246°C, 264°C (dec),  $[\alpha]_D^{27} = -105^\circ$  ( $c = 0.575$ , pyridine). **Source:** HU ER CAO *Saxifraga stolonifera*, LU CAO *Rhaponticum carthamoides*. **Ref:** 1521, 4007, 4028.

**18370 Quercetin-3-O- $\beta$ -D-glucosyl(1 $\rightarrow$ 2)- $\beta$ -D-galactoside 7-O- $\beta$ -D-glucoside**

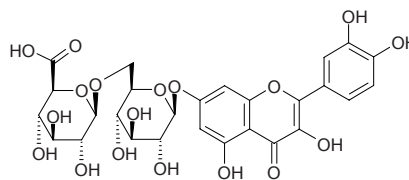
$C_{33}H_{40}O_{22}$  (788.67). Amorphous powder, mp 199~202°C,  $[\alpha]_D^{26} = -37^\circ$  ( $c = 0.09$ , H<sub>2</sub>O). **Source:** HU LU BA *Trigonella foenum-graecum* (stem). **Ref:** 5197.

**18371 Quercetin-3-O-glucuronide**

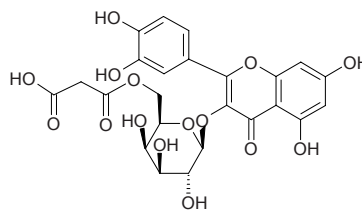
$C_{21}H_{18}O_{13}$  (478.37). **Pharm:** ACE inhibitor (IC<sub>50</sub> = 200 $\mu$ mol/L, control Lisinopril, IC<sub>50</sub> = 1nmol/L); NEP inhibitor (IC<sub>50</sub> = 250 $\mu$ mol/L, control Phosphoramidon, IC<sub>50</sub> = 9nmol/L); APN inhibitor inactive. **Source:** HONG KUAI ZI *Chamaenerion angustifolium* [Syn. *Epilobium angustifolium*]. **Ref:** 5034.

**18372 Quercetin-7-O-glucuronoglucoside**

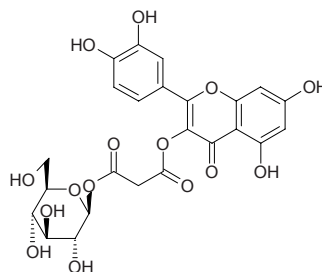
$C_{27}H_{28}O_{18}$  (640.51). **Source:** DA HUA XUAN FU HUA CAO *Imula britannica*. **Ref:** 4030.

**18373 Quercetin-3-O-(6''-malonyl)-D-galactoside**

$C_{24}H_{22}O_{15}$  (550.43). **Source:** ZHU ZONG CAO *Adiantum capillus-veneris*. **Ref:** 4029.

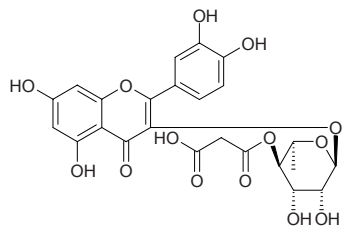
**18374 Quercetin-3-O-malonyl-beta-D-glucoside**

$C_{24}H_{22}O_{15}$  (550.43). **Source:** WO JU *Lactuca sativa*. **Ref:** 6.

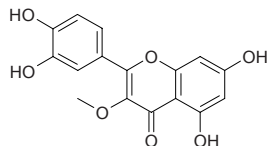


**18375 Quercetin-3-O-(4''-O-malonyl)- $\alpha$ -L-rhamnopyranoside**

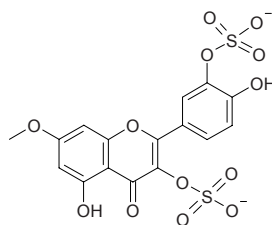
$C_{24}H_{22}O_{14}$  (534.43). Source: GAO SHAN CHA BIAO *Ribes alpinum* (leaf). Ref: 3541.

**18376 Quercetin-3-methyl ether**

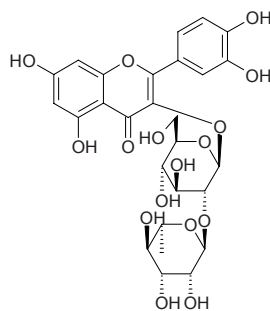
3-O-Methylquercetin; 3-MQ [1486-70-0]  $C_{16}H_{12}O_7$  (316.27). Green crystals, mp 267~277°C; 259°C. Pharm: Antiarrhythmic; antibacterial; antiviral (*in vitro*, 0.01  $\mu$ g/mL epidemic poliomyelitis virus I and Gesak virus B<sub>4</sub>, InRt = 90%); platelet aggregation inhibitor (due to collagen and arachidonic acid); cyclo-oxygenase inhibitor; PDE isozymes selective inhibitor (PDE subtypes 1, 5, 2, 4 from guinea pig lungs and PDE subtype 3 from guinea pig hearts, PDE Subtype 5, IC<sub>50</sub> = 86.9  $\mu$ mol/L; PDE Subtype 1, IC<sub>50</sub> = 31.9  $\mu$ mol/L; PDE Subtype 4, IC<sub>50</sub> = 28.5  $\mu$ mol/L; PDE Subtype 2, IC<sub>50</sub> = 18.6  $\mu$ mol/L; PDE Subtype 3, IC<sub>50</sub> = 1.6  $\mu$ mol/L; may has a potential in the treatment of asthma)<sup>[5383]</sup>; TNF- $\alpha$  production inhibitor (murine macrophages, LPS-stimulated)<sup>[4416]</sup>; total cAMP- and cGMP-phosphodiesterase (PDE) inhibitor (guinea pig trachea, at low concentrations)<sup>[4085]</sup>; PDE3 more selective inhibitor (than PDE4)<sup>[4085]</sup>; suppressive effects on ovalbumin (OVA)-induced airway hyperresponsiveness (*in vivo* and *in vitro*): (1)3-MQ (3~30  $\mu$ mol/kg, ip) significantly suppressed the enhanced pause (Penh) value induced by aerosolized methacholine (50mg/mL) in sensitized mouse after secondary allergen challenge; (2)3-MQ (3~30  $\mu$ mol/kg, ip) significantly suppressed total inflammatory cells, macrophages, neutrophils, and eosinophils, but not lymphocytes; (3)3-MQ (3  $\mu$ mol/kg, ip) significantly decreased the secretion of TNF- $\alpha$ , and at the highest dose (30  $\mu$ mol/kg, ip) even decreased the secretions of IL-4, IL-5, and TNF- $\alpha$ ; (4)3-MQ (1~10  $\mu$ mol/L) as well as Ro20-1724 (3~30  $\mu$ mol/L), a selective PDE4 inhibitor, significantly attenuated OVA (100  $\mu$ g/mL)-induced contractions; (5)3-MQ (30  $\mu$ mol/L) as well as milrinone (1~10  $\mu$ mol/L), a selective PDE3 inhibitor, significantly enhanced baseline contractions in isolated guinea pig left and right atria; (6)neither 3-MQ nor milrinone significantly affected baseline beating rate in the right atria; (7)3-MQ (3~30  $\mu$ mol/kg, ip) did not significantly affect systolic pressure in conscious mouse; (8)In conclusion, 3-MQ has both anti-inflammatory and bronchodilating effects, and has the potential for use in the treatment of asthma at a dose without affecting blood pressure)<sup>[4085]</sup>; DPPH scavenger (SC<sub>50</sub> = 6.0  $\mu$ mol/L)<sup>[4247]</sup>; antioxidant (superoxide anion radical scavenger, superoxide dismutase method, IC<sub>50</sub> for Formazane formation activity = 11  $\mu$ mol/L)<sup>[4247]</sup>. Source: E BU SHI CAO *Centipeda minima*, HUANG HUA HAO *Artemisia annua*, JI YING SU *Argemone mexicana*, TAI ZHONG SHU LI *Rhamnus nakaharai*, TAI ZHONG SHU LI *Rhamnus nakaharai*, XIAN REN ZHANG *Opuntia dillenii*. Ref: 2, 6, 658, 660, 900, 1320, 4085, 4247, 4416, 5383.

**18377 Quercetin-7-methyl ether-3,3'-disulfate**

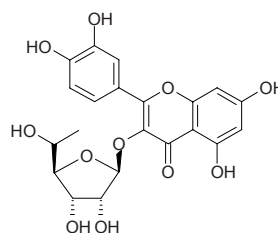
$C_{16}H_{10}O_{13}S_2$  (474.38). Source: RUAN YIN BEI TENG *Argyrea mollis*. Ref: 1891.

**18378 Quercetin-3-O-neohesperidoside**

Quercetin-3-O-(2''-O- $\alpha$ -rhamnopyranosyl)- $\beta$ -glucopyranoside [32453-36-4]  $C_{27}H_{30}O_{16}$  (610.53). Yellow crystals, mp 187~189°C. Pharm: Antithrombotic (promotes endothelial cells to produce protein, increases activity of TPA, against fibrin to damage endothelial cells); antioxidant (DPPH scavenger, SC<sub>50</sub> = 3.6  $\mu$ mol/L, positive control Vitamin E, SC<sub>50</sub> = 5.2 mmol/L)<sup>[4464]</sup>; aldose reductase inhibitor (*in vitro*, rat lens aldose reductase, IC<sub>50</sub> = 18  $\mu$ mol/L; control Epalrestat, IC<sub>50</sub> = 0.072  $\mu$ mol/L)<sup>[4641]</sup>. Source: BAI MEI HUA *Prunus mume* (flower: yield = 0.0023%fw)<sup>[4641]</sup>, FAN SHI LIU YE *Psidium guajava*, HOU PI SHU *Lansea grandis* [Syn. *Lansea coromandelica*], JIN ZHAN JU *Calendula officinalis*, JIN ZHAN JU *Calendula officinalis* (flower), LAO YA SHI *Diospyros rhombifolia* (leaf), PU HUANG *Typha angustata*, XIA YE XIANG PU *Typha angustifolia*. Ref: 2, 55, 3551, 4003, 4004, 4005, 4464, 4641.

**18379 Quercetin-3- $\alpha$ -L-rhamnofuranoside**

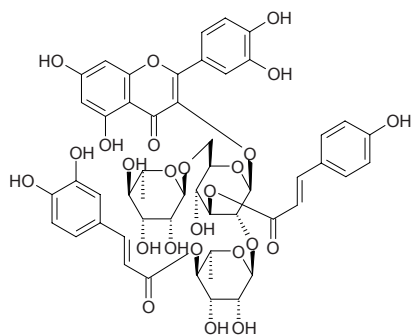
$C_{21}H_{20}O_{11}$  (448.39). Source: GUI JIAN JIN JI ER *Caragana jubata*. Ref: 6.



**18380 Quercetin-3-*O*- $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 6)-[(4-*O*-*trans*-caffeoyl)- $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 2)]-(3-*O*-*trans*-*p*-coumaroyl)- $\beta$ -D-galactopyranoside**

C<sub>51</sub>H<sub>52</sub>O<sub>25</sub> (1064.97). Yellow powder,  $[\alpha]_D^{28} = -117^\circ$  ( $c = 0.5$ , MeOH).

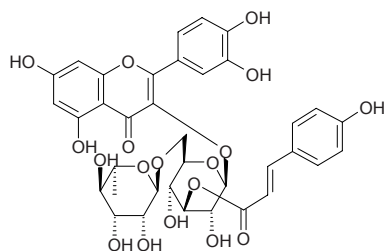
Source: JI ZI MU *Sinoadina Racemosa* [Syn. *Adina racemosa*] (dried leaf, flower and twig; yield = 0.0028%dw). Ref: 3014.



**18381 Quercetin-3-*O*- $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 6)-(3-*O*-*trans*-*p*-coumaroyl)- $\beta$ -D-galactopyranoside**

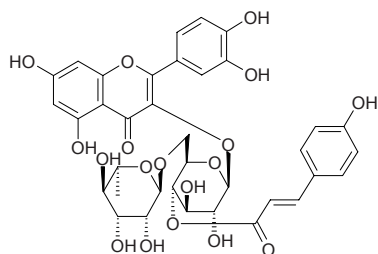
C<sub>36</sub>H<sub>36</sub>O<sub>18</sub> (756.68). Yellow powder,  $[\alpha]_D^{22} = -86^\circ$  ( $c = 0.6$ , MeOH). Source:

JI ZI MU *Sinoadina Racemosa* [Syn. *Adina racemosa*] (dried leaf, flower and twig; yield = 0.00059%dw). Ref: 3014.



**18382 Quercetin-3-*O*- $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 6)-(4-*O*-*trans*-*p*-coumaroyl)- $\beta$ -D-galactopyranoside**

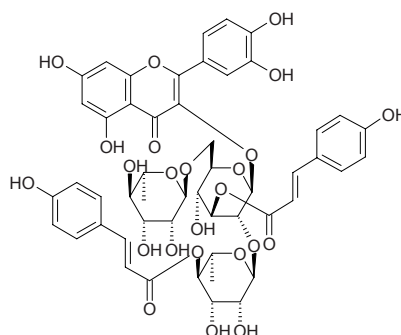
C<sub>36</sub>H<sub>36</sub>O<sub>18</sub> (756.68). Source: JI ZI MU *Sinoadina Racemosa* [Syn. *Adina racemosa*] (dried leaf, flower and twig; yield = 0.014%dw). Ref: 3014.



**18383 Quercetin-3-*O*- $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 6)-[(4-*O*-*trans*-*p*-coumaroyl)- $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 2)]-(3-*O*-*trans*-*p*-coumaroyl)- $\beta$ -D-galactopyranoside**

C<sub>51</sub>H<sub>52</sub>O<sub>24</sub> (1048.97). Yellow powder,  $[\alpha]_D^{29} = -114^\circ$  ( $c = 1.0$ , MeOH).

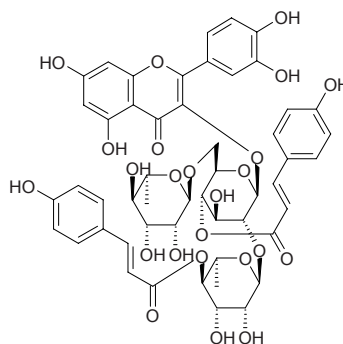
Source: JI ZI MU *Sinoadina Racemosa* [Syn. *Adina racemosa*] (dried leaf, flower and twig; yield = 0.0016%dw). Ref: 3014.



**18384 Quercetin-3-*O*- $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 6)-[(4-*O*-*trans*-*p*-coumaroyl)- $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 2)]-(4-*O*-*trans*-*p*-coumaroyl)- $\beta$ -D-galactopyranoside**

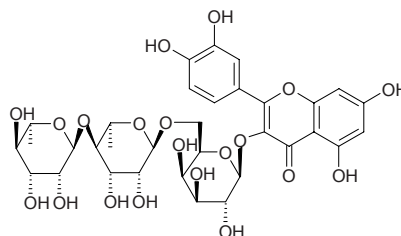
C<sub>51</sub>H<sub>52</sub>O<sub>24</sub> (1048.97). Yellow powder,  $[\alpha]_D^{25} = -300^\circ$  ( $c = 0.5$ , MeOH).

Source: JI ZI MU *Sinoadina Racemosa* [Syn. *Adina racemosa*] (dried leaf, flower and twig; yield = 0.0077%dw). Ref: 3014.



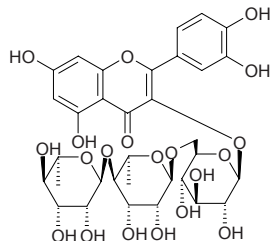
**18385 Quercetin-3-*O*-[ $\alpha$ -rhamnopyranosyl(1 $\rightarrow$ 4)]-rhamnopyranosyl-(1 $\rightarrow$ 6)]- $\beta$ -galactopyranoside**

C<sub>33</sub>H<sub>40</sub>O<sub>20</sub> (756.67). Source: MI HOU LI GEN *Actinidia arguta*, MU TIAN LIAO *Actinidia polygama*. Ref: 4040.



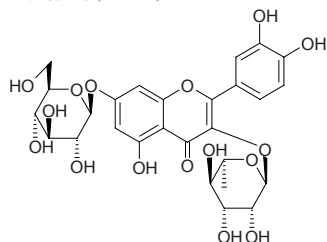
**18386 Quercetin-3-O-[ $\alpha$ -rhamnopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -rhamnopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -glucopyranoside]**

$C_{33}H_{40}O_{20}$  (756.67). Source: HUA LING CAO *Eschscholzia californica*. Ref: 1898.



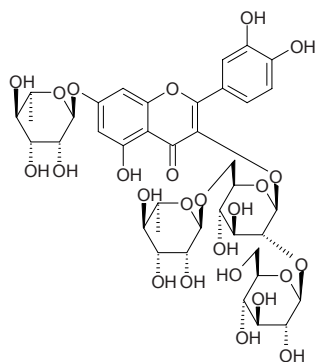
**18387 Quercetin-3-rhamnoside-7-glucoside**

$C_{27}H_{30}O_{16}$  (610.53). Source: MIAN TENG *Celastrus hypoleucus*. Ref: 6.



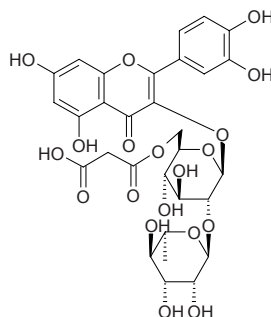
**18388 Quercetin-3-O-[ $\alpha$ -rhamnosyl (1 $\rightarrow$ 6)] [ $\beta$ -glucosyl (1 $\rightarrow$ 2)]- $\beta$ -glucoside-7-O- $\alpha$ -rhamnoside**

$C_{39}H_{50}O_{25}$  (918.82). Yellow powder. Source: *Warburgia ugandensis* (leaf). Ref: 3470.



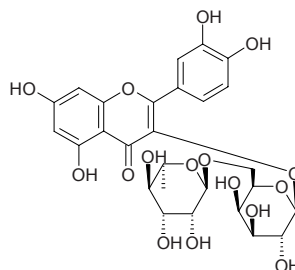
**18389 Quercetin-3-O-(2''-O- $\alpha$ -rhamnosyl-6''-O-malonyl)- $\beta$ -glucoside**

$C_{30}H_{32}O_{19}$  (696.58). Dark~yellow amorphous powder. Source: HU DIE HUA DOU *Clitoria ternatea*. Ref: 2064.



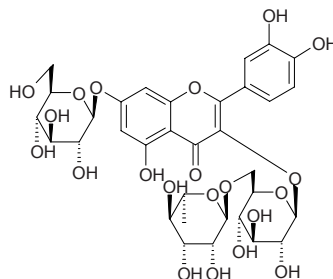
**18390 Quercetin-3-robinobioside**

Quercetin-3-O- $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 6)- $\beta$ -D-galactopyranoside  $C_{27}H_{30}O_{16}$  (610.53). Source: DENG LONG CAO *Physalis peruviana*, HUANG SHU KUI HUA *Abelmoschus manihot*, BAI MEI HUA *Prunus mume* (flower: yield = 0.0016%fw)<sup>[4641]</sup>, JI ZI MU *Sinoadina Racemosa* [Syn. *Adina racemosa*] (dried leaf, flower and twig: yield = 0.0062%dw)<sup>[3014]</sup>. Ref: 3014, 4012, 4013, 4641.



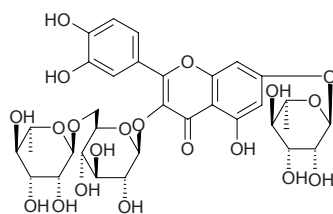
**18391 Quercetin-3-rutinoside-7-glucoside**

Quercetin-3-O-(6''-O- $\alpha$ -L-rhamnopyranosyl)- $\beta$ -D-glucopyranoside-7-O- $\beta$ -D-glucopyranoside  $C_{33}H_{40}O_{21}$  (772.67). Source: CAO WEN JING *Equisetum pratense*, DENG LONG CAO *Physalis peruviana*, GU JIE CAO *Equisetum palustre*, LV DOU *Onobrychis viciifolia* (leaf). Ref: 4042, 4043, 5084.



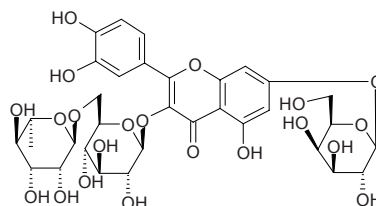
**18392 Quercetin-3-rutinoside-7-rhamnoside**

$C_{33}H_{40}O_{20}$  (756.67). Source: LIN WEN JING *Equisetum sylvaticum*. Ref: 4042.



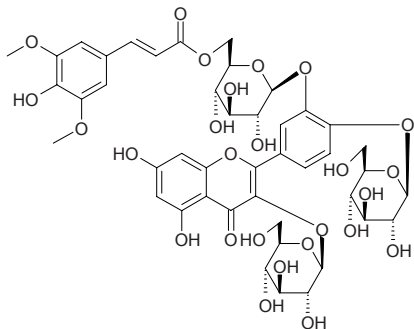
**18393 Quercetin-3-rutinosyl-7-galactoside**

$C_{33}H_{40}O_{21}$  (772.67). Source: HUANG HAO *Artemisia scoparia* [Syn. *Artemisia capillaris* var. *scoparia*]. Ref: 2.



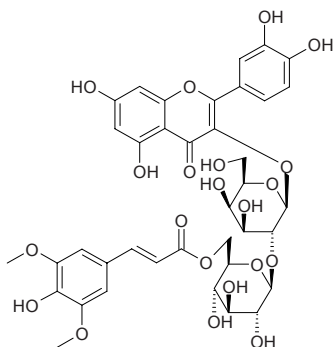
**18394 Quercetin-3'-(6-sinapoyl-O-β-D-glucopyranosyl)-3,4'-di-O-β-D-glucopyranoside**

C<sub>44</sub>H<sub>50</sub>O<sub>26</sub> (994.87). Source: ZHI MA CAI *Eruca sativa* (leaf). Ref: 5149.



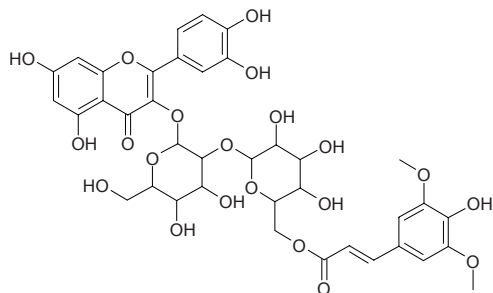
**18395 Quercetin-3-O-[(6-O-sinapoyl)-β-D-glucopyranosyl-(1→2)-β-D-galactopyranoside]**

C<sub>38</sub>H<sub>40</sub>O<sub>21</sub> (832.73). Pharm: Anti-HIV-1 (RT (RDDP) inhibitor, IC<sub>50</sub> = 33 μmol/L, positive control Adriamycin, IC<sub>50</sub> = 27 μmol/L; DDDP inhibitor, IC<sub>50</sub> = 69 μmol/L, positive control Adriamycin, IC<sub>50</sub> = 6 μmol/L; HIV-1 IN inhibitor, IC<sub>50</sub> = 7 μmol/L, positive control Suramin, IC<sub>50</sub> = 2.4 μmol/L). Source: HUANG HUA JIA ZHU TAO *Thevetia neriiifolia* [Syn. *Thevetia peruviana*] (leaf). Ref: 4187.



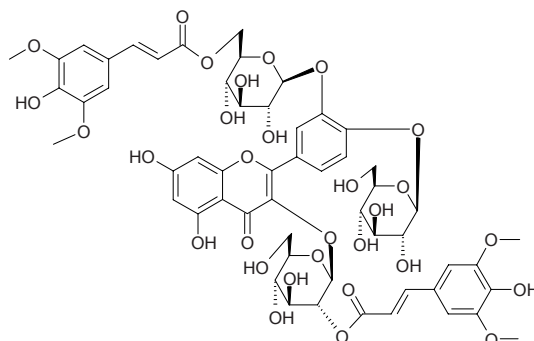
**18396 Quercetin-3-O-[2-O-(6-O-E-sinapoyl)-β-D-glucopyranosyl]-β-D-glucopyranoside**

C<sub>38</sub>H<sub>40</sub>O<sub>21</sub> (832.73). Yellowish powder, mp 208–210°C. Source: BAI HUA SHE SHE CAO *Oldenlandia diffusa* [Syn. *Hedyotis diffusa*]. Ref: 4882.



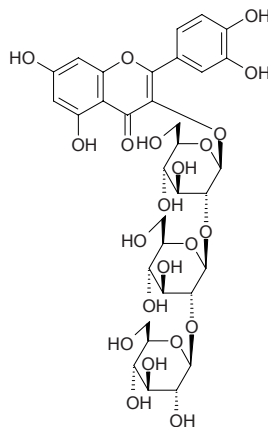
**18397 Quercetin-3-(2-sinapoyl-O-β-D-glucopyranosyl)-3'-(6-sinapoyl-O-β-D-glucopyranosyl)-4'-O-β-D-glucopyranoside**

C<sub>55</sub>H<sub>60</sub>O<sub>30</sub> (1201.07). Source: ZHI MA CAI *Eruca sativa* (leaf). Ref: 5149.



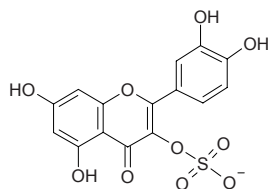
**18398 Quercetin-3-sophorotrioside**

C<sub>33</sub>H<sub>40</sub>O<sub>22</sub> (788.67). Pharm: Hepatoprotective (*in vitro*, mus primary cultured hepatocytes, inhibits liver cytotoxicity induced by GaIN, 100 μmol/L, InRt = (14.5±4.2)%, *p*<0.01); hepatoprotective (mus, *in vivo*, inhibits liver damage induced by GaIN, LPS or CCl<sub>4</sub>). Source: WAN DOU *Pisum sativum* (young seedpot). Ref: 4110.



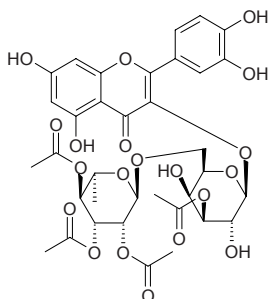
**18399 Quercetin-3-sulphate**

C<sub>15</sub>H<sub>9</sub>O<sub>10</sub>S (381.30). Source: DA HUA XUAN FU HUA CAO *Inula britannica*, SHUI LIAO *Polygonum hydropiper*. Ref: 1388, 4027.



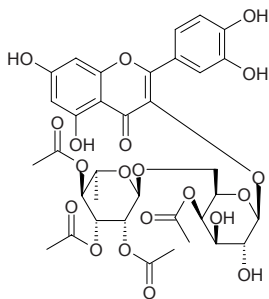
**18400 Quercetin-3-O-[(2,3,4-triacetyl- $\alpha$ -rhamnopyranosyl)-(1 $\rightarrow$ 6)]-3-acetyl- $\beta$ -galactopyranoside**

$C_{35}H_{38}O_{20}$  (778.68). **Pharm:** Anticomplement activity (classical pathway,  $IC_{50}$  = (36.4 $\pm$ 1.8) $\mu$ mol/L, control Dextrane sulphate,  $IC_{50}$  = (0.00019 $\pm$ 0.00005) $\mu$ mol/L); antioxidant (DPPH scavenger,  $IC_{50}$  = (17.8 $\pm$ 0.1) $\mu$ mol/L, control Quercetin,  $IC_{50}$  = (9.7 $\pm$ 0.8) $\mu$ mol/L). **Source:** SUI ZHUANG BAI JIN HUA *Centaurium spicatum*. **Ref:** 5493.



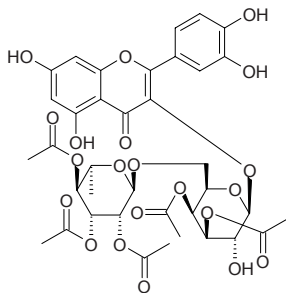
**18401 Quercetin-3-O-[(2,3,4-triacetyl- $\alpha$ -rhamnopyranosyl)-(1 $\rightarrow$ 6)]-4-acetyl- $\beta$ -galactopyranoside**

$C_{35}H_{38}O_{20}$  (778.68). **Pharm:** Anticomplement activity (classical pathway,  $IC_{50}$  = (22.8 $\pm$ 4.9) $\mu$ mol/L, control Dextrane sulphate,  $IC_{50}$  = (0.00019 $\pm$ 0.00005) $\mu$ mol/L); antioxidant (DPPH scavenger,  $IC_{50}$  = (14.3 $\pm$ 0.4) $\mu$ mol/L, control Quercetin,  $IC_{50}$  = (9.7 $\pm$ 0.8) $\mu$ mol/L). **Source:** SUI ZHUANG BAI JIN HUA *Centaurium spicatum*. **Ref:** 5493.



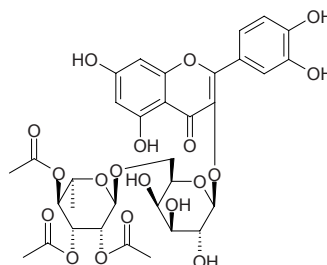
**18402 Quercetin-3-O-[(2,3,4-triacetyl- $\alpha$ -rhamnopyranosyl)-(1 $\rightarrow$ 6)]-3,4-diacetyl- $\beta$ -galactopyranoside**

$C_{37}H_{40}O_{21}$  (820.72). **Pharm:** Anticomplement activity (classical pathway,  $IC_{50}$  = 59.3 $\mu$ mol/L, control Dextrane sulphate,  $IC_{50}$  = (0.00019 $\pm$ 0.00005) $\mu$ mol/L); antioxidant (DPPH scavenger,  $IC_{50}$  = (25.8 $\pm$ 0.2) $\mu$ mol/L, control Quercetin,  $IC_{50}$  = (9.7 $\pm$ 0.8) $\mu$ mol/L). **Source:** SUI ZHUANG BAI JIN HUA *Centaurium spicatum*. **Ref:** 5493.



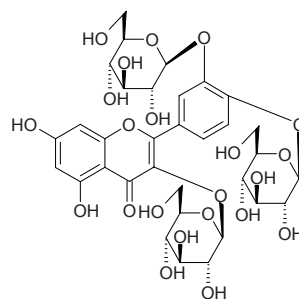
**18403 Quercetin-3-O-[(2,3,4-triacetyl- $\alpha$ -rhamnopyranosyl)-(1 $\rightarrow$ 6)]- $\beta$ -galactopyranoside**

$C_{33}H_{36}O_{19}$  (736.64). **Pharm:** Anticomplement activity (classical pathway,  $IC_{50}$  = (10.0 $\pm$ 0.9) $\mu$ mol/L, control Dextrane sulphate,  $IC_{50}$  = (0.00019 $\pm$ 0.00005) $\mu$ mol/L); antioxidant (DPPH scavenger,  $IC_{50}$  = (13.9 $\pm$ 0.3) $\mu$ mol/L, control Quercetin,  $IC_{50}$  = (9.7 $\pm$ 0.8) $\mu$ mol/L). **Source:** SUI ZHUANG BAI JIN HUA *Centaurium spicatum*. **Ref:** 5493.



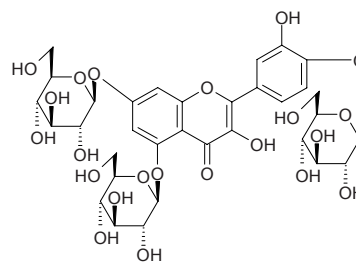
**18404 Quercetin-3,3',4'-tri- $O$ - $\beta$ -D-glucopyranoside**

$C_{33}H_{40}O_{22}$  (788.67). **Source:** ZHI MA CAI *Eruca sativa* (leaf). **Ref:** 5149.



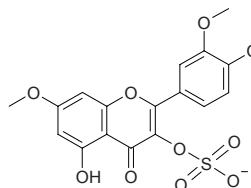
**18405 Quercetin-5,7,4'-tri- $O$ - $\beta$ -D-glucopyranoside**

$C_{33}H_{40}O_{22}$  (788.67). **Source:** CAN JIAN *Bombyx mori*. **Ref:** 1983.



**18406 Quercetin-3',4',7-trimethyl ether-3-sulfate**

$C_{18}H_{15}O_{10}S$  (423.38). **Source:** RUI SHI QIAN NIU *Ipomoea regnellii*. **Ref:** 1891.

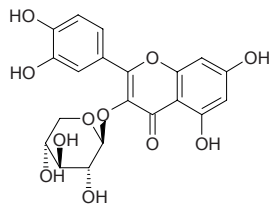




**18407 Quercetin-3- $\beta$ -D-xylopyranoside**

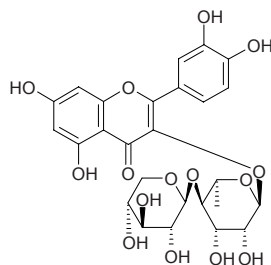
Reynoutrin [P00565in] C<sub>20</sub>H<sub>18</sub>O<sub>11</sub> (434.36). mp 210~211°C, 203~204°C.

**Source:** GUI JIAN JIN JI ER *Caragana jubata*, HU ZHANG *Polygonum cuspidatum*, ZHEN ZHU MEI *Sorbaria sorbifolia*, GAO CONG ZHEN ZHU MEI *Sorbaria arborea*, BA JIAO HUI XIANG *Illicium verum*, BI MA YE *Ricinus communis*, JIN JI LE *Cinchona ledgeriana*, KUO JIA HE HUAN *Albizzia lebbbeck*. **Ref:** 6, 660, 1521.

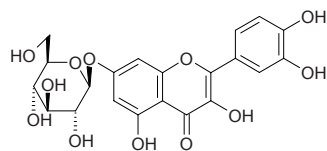
**18408 Quercetin-3-O- $\beta$ -D-xylose-(1 $\rightarrow$ 4)- $\alpha$ -L-rhamnoside**

[196310-24-4] C<sub>26</sub>H<sub>28</sub>O<sub>15</sub> (589.50). Yellow needles. **Pharm:**

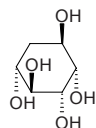
Anti-inflammatory (mus, 40mg/kg sc, edema InRt = 33%, with high therapy index). **Source:** LUO DI SHENG GEN *Bryophyllum pinnatum*. **Ref:** 4026.

**18409 Quercimeritrin**

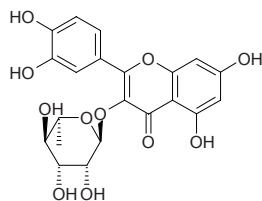
C<sub>21</sub>H<sub>20</sub>O<sub>12</sub> (464.39). **Pharm:** Anti-inflammatory (IL-5 inhibitor, concentration-dependent manner, mean IC<sub>50</sub> = 27.3  $\mu$ mol/L)<sup>[4416]</sup>. **Source:** LU DI MIAN *Gossypium hirsutum* [Syn. *Gossypium mexicanum*], JI YAN CAO *Kummerowia striata*. **Ref:** 658, 4416.

**18410 D-Quercitol**

C<sub>6</sub>H<sub>12</sub>O<sub>5</sub> (164.16). mp 235~237°C. **Source:** HU CONG *Allium ascalonicum*, RU LAN *Stephania hernandifolia*, TIE ZI *Myrsine africana*, XI SHENG TENG *Cissampelos pareira*, OU ZHOU BAI LI *Quercus robur*, YANG YE AN *Eucalyptus populnea*. **Ref:** 6, 658.

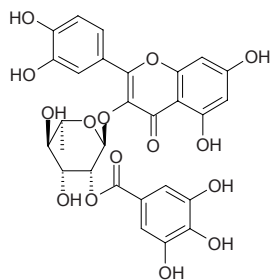
**18411 Quercitrin**

Quercetin-3-O- $\alpha$ -L-rhamnopyranoside C<sub>21</sub>H<sub>20</sub>O<sub>11</sub> (448.39). Yellow crystals, mp 166~168°C, mp 182~185°C, mp 178~182 °C. **Pharm:** Antibacterial (*Pseudomonas maltophilia* and *Enteromorpha cloacae*); antineoplastic; antihepatotoxic; anti-inflammatory; antimutagenic; antiviral (murine tissue and chicken embryo, vesicular stomatitis virus, influenza virus A); diuretic; hemostatic; aldose reductase inhibitor (eye lens, strong); antioxidant (3.125  $\mu$ g/mL, superoxide radical scavenging activity = 15.6%, control Urcumin 16.1%; 6.25  $\mu$ g/mL, DPPH radical scavenging activity = 11.6%, control Urcumin 50.0%)<sup>[4535]</sup>; inhibits cancer cell invasion inactive (MM1 cells, *in vitro*, 10  $\mu$ g/mL)<sup>[4329]</sup>; insect antifeedant (*Bombyx mor*); insect phagostimulant (*Gastrophysa atricycaea*); hepatoprotective (primary cultures of rat hepatocytes, H<sub>2</sub>O<sub>2</sub>-induced toxicity, 50  $\mu$ mol/L, relative protection = 57.3% (H<sub>2</sub>O<sub>2</sub>-treated, relative protection = 0.0%, control, relative protection = 100%), positive control Silibinin, Relative protection = 74.9%)<sup>[4996]</sup>; ACE inhibitor (IC<sub>50</sub> = 250  $\mu$ mol/L, control Lisinopril, IC<sub>50</sub> = 1 nmol/L); NEP inhibitor (IC<sub>50</sub> > 500  $\mu$ mol/L, control Phosphoramidon, IC<sub>50</sub> = 9 nmol/L); APN inhibitor inactive; inhibitory activity against NFAT transcription (IC<sub>50</sub> > 100  $\mu$ mol/L, positive control Cyclosporin A, IC<sub>50</sub> = (0.29 $\pm$ 0.01)  $\mu$ mol/L)<sup>[2536]</sup>. **Source:** BAI GUO YE *Ginkgo biloba*, BIAN XU *Polygonum aviculare*, CE BAI YE *Thuja orientalis* [Syn. *Platyclusus orientalis*; *Biota orientalis*], CHI YANG *Alnus japonica* (leaf), DUO SUI LIAO *Polygonum polystachyum*, GUAN YE LIAN QIAO *Hypericum perforatum*, HEI ZI LI GUO JI SHENG *Scurrura atropurpurea*, HONG KUI ZI *Chamaenerion angustifolium* [Syn. *Epilobium angustifolium*], HU ZHANG *Polygonum cuspidatum*, HU ZHANG YE *Polygonum cuspidatum*, LING NAN DU JUAN *Rhododendron mariae* (branchlet-leaf or flower: content = 0.76%)<sup>[5508]</sup>, LONG YAN YE *Euphorbia longan* [Syn. *Dimocarpus longan*], MAN SHAN HONG *Rhododendron dauricum* (branchlet-leaf or flower: content = 0.42%)<sup>[5508]</sup>, MANG QI GU *Dicranopteris pedata* [Syn. *Polypodium pedatum*; *Dicranopteris dichotoma*], MAO YAN CAO *Euphorbia lunulata*, OU ZHOU QI YE SHU *Aesculus hippocastanum*, OU ZHOU YOU CAI *Brassica napus*, BI BEN GUI DENG QING *Rodgersia podophylla* (aerial parts), SAN BAI CAO *Saururus chinensis*, SANG JI SHENG *Loranthus parasiticus* [Syn. *Loranthus chinensis*; *Taxillus chinensis*], SHAN YING TAO *Prunus tomentosa*, SHUI LIAO *Polygonum hydropiper*, SHUI MA TIAO *Polygonum thunbergii*, TIAN QIAO MAI GEN *Fagopyrum cymosum* [Syn. *Polygonum cymosum*], YANG MEI SHU PI *Myrica rubra* (bark: yield = 0.0028%), YI ZHI HUANG HUA *Solidago virgaurea* var. *leiocarpa* [Syn. *Solidago decurrens*], YOU GAN YE *Phyllanthus emblica* (leaf and branch), YU XING CAO *Houttuynia cordata* (dried aerial parts: content = 0.026%)<sup>[5508]</sup>, ZHAI YE BAN FENG HE *Pterispermum lanceaefolium*, ZHUO SE LI *Quercus tinctoria*, ZI JIN NIU *Ardisia japonica*, occurs in many plants. **Ref:** 2, 6, 433, 658, 660, 2536, 4163, 4205, 4329, 4535, 4996, 5034, 5508.

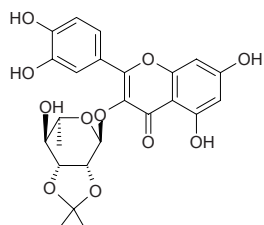


**18412 Quercitrin-2''-gallate**

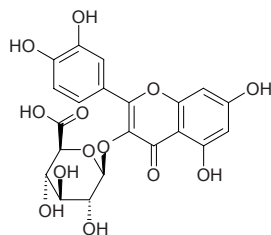
$C_{28}H_{24}O_{15}$  (600.49). Yellowish solid. Source: LUAN SHU *Koeleruteria paniculata*. Ref: 677.

**18413 Quercitrin derivative CPB-50-208-18**

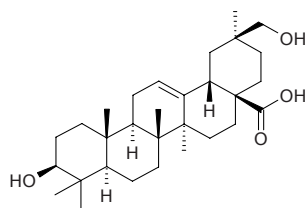
$C_{24}H_{24}O_{11}$  (488.45). Pharm: Inhibits degranulation and release of  $\beta$ -hexosaminidase (RBL-2H3 cells, 100  $\mu$ mol/L, InRt = (39.8 $\pm$ 1.4)%), control Curcumin, 100  $\mu$ mol/L, InRt = (62.6 $\pm$ 1.0)%,  $p < 0.01$ , did not affect the enzyme activity of  $\beta$ -hexosaminidase). Source: YANG MEI SHU PI *Myrica rubra* (bark: yield = 0.0059%). Ref: 4163.

**18414 Querciturone**

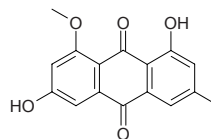
Quercetin-3-*O*- $\beta$ -glucuronopyranoside [22688-79-5]  $C_{21}H_{18}O_{13}$  (478.37). mp 190°C. Pharm: Antioxidant (DPPH scavenger,  $SC_{50}$  = 1.5  $\mu$ mol/L, positive control Vitamin E,  $SC_{50}$  = 5.2 mmol/L)<sup>[4464]</sup>. Source: LAO YA SHI *Diospyros rhombifolia* (leaf), ZHU ZONG CAO *Adiantum capillus-veneris*. Ref: 6, 4464.

**18415 Queretaroic acid**

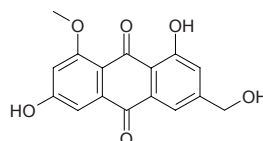
[511-82-0]  $C_{30}H_{48}O_4$  (472.71). mp 318~323°C. Source: SAN TAI HONG HUA *Clerodendron serratum*. Ref: 6.

**18416 Questin**

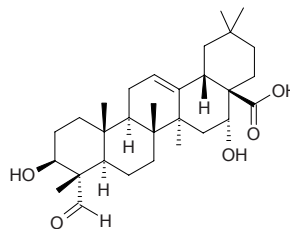
Emodin-1-monomethyl ether [3774-64-9]  $C_{16}H_{12}O_5$  (284.27). mp 301~303°C. Source: HE SHOU WU *Polygonum multiflorum*, HU ZHANG *Polygonum cuspidatum*, NIU XI XI *Rumex patientia*, YE JIAO TENG *Polygonum multiflorum*. Ref: 2, 6, 660.

**18417 Questinol**

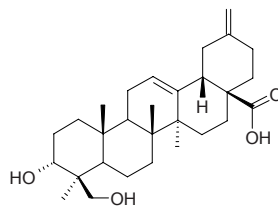
[35688-09-6]  $C_{16}H_{12}O_6$  (300.27). Source: HU ZHANG *Polygonum cuspidatum*. Ref: 2.

**18418 Quillaic acid**

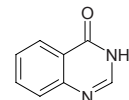
3,16-Dihydroxy-23-oxo-12-oleanen-28-oic acid [631-01-6]  $C_{30}H_{46}O_5$  (486.70). Crystals (EtOH), mp 294°C,  $[\alpha]_D^{20}$  = +56.1° (pyridine). Source: HAN MAI PING CAO *Silene jensisensis*, JIN TIE SUO *Psammosilene tunicoides*, ZAO PI SHU *Quillaja saponaria*. Ref: 658, 1521, 4037.

**18419 Quinatic acid**

3,24-Dihydroxy-30-nor-12,20(29)-oleanadien-28-oic acid [119863-89-7]  $C_{29}H_{44}O_4$  (456.67). White powder; needles, mp 269~272°C,  $[\alpha]_D^{18}$  = +66.6° ( $c$  = 0.375, pyridine). Source: E ZHANG TENG *Schefflera arboricola* (stem of branch), MU TONG *Akebia quinata*, SAN YE MU TONG *Akebia trifoliata* (stem), NA TENG *Stauntonia hexaphylla*. Ref: 1274, 1521, 4035, 4545, 4899.

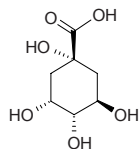
**18420 4-Quinazolone**

[491-36-1]  $C_8H_6N_2O$  (146.15). mp 211~212°C. Pharm: Cytotoxic inactive (*in vitro*, HONE-1 and NUGC cancer cell lines, no significant activity)<sup>[3069]</sup>. Source: CHANG SHAN *Dichroa febrifuga*, ZHONG GUO XIU QIU *Hydrangea chinensis* (root)<sup>[3069]</sup>. Ref: 6, 3069.

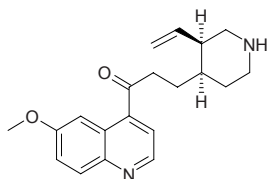


**18421 Quinic acid**

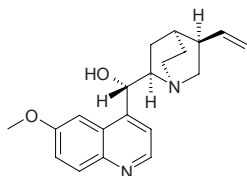
(1 $\alpha$ ,3 $\alpha$ ,4 $\alpha$ ,5 $\beta$ )-1,3,4,5-Tetrahydroxy-cyclohexanecarboxylic acid [77-95-2] C<sub>7</sub>H<sub>12</sub>O<sub>6</sub> (192.17). mp (–) 172°C. **Pharm:** Acidic component of common plants. **Source:** BAI GUO *Ginkgo biloba*, HE ZI *Terminalia chebula*, HE ZI YE *Terminalia chebula*, HUI XIANG JING YE *Foeniculum vulgare*, JIN JI LE *Cinchona ledgeriana*, MEI GUI HUA *Rosa rugosa*, NING MENG *Citrus limon*, NING MENG AN YE *Eucalyptus citriodora*, PU TAO TENG YE *Vitis vinifera*, TAO YE *Prunus persica*, WU HUA GUO *Ficus carica*, XIANG RI KUI ZI *Helianthus annuus*, YI ZHU QIAN MA *Urtica dioica*. **Ref:** 2, 6, 658, 660.

**18422 Quinicine**

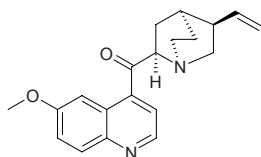
[845-5-9] C<sub>20</sub>H<sub>24</sub>N<sub>2</sub>O<sub>2</sub> (324.43). mp (+) 60°C. **Source:** JIN JI LE *Cinchona ledgeriana*. **Ref:** 6.

**18423 Quinidine**

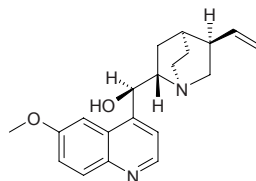
$\beta$ -Quinine [56-54-2] C<sub>20</sub>H<sub>24</sub>N<sub>2</sub>O<sub>2</sub> (324.43). mp (+) 174~175°C (anhydrate). **Pharm:** CYP2D6 inhibitor (IC<sub>50</sub> = 0.068  $\mu$ mol/L)<sup>[4449]</sup>, CYP2D6 inhibitor (*in vitro*, IC<sub>50</sub> = 0.082  $\mu$ mol/L)<sup>[4797]</sup>. **Source:** JIN JI LE *Cinchona ledgeriana*. **Ref:** 4, 4449, 4797.

**18424 Quinidinone**

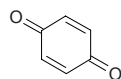
(8 $\alpha$ )-6'-Methoxycinchonan-9-one [84-31-1] C<sub>20</sub>H<sub>22</sub>N<sub>2</sub>O<sub>2</sub> (322.41). mp 108°C. **Source:** JIN JI LE *Cinchona ledgeriana*. **Ref:** 6.

**18425 Quinine**

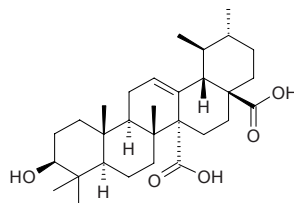
6-Methoxycinchonan-9-ol [130-95-0] C<sub>20</sub>H<sub>24</sub>N<sub>2</sub>O<sub>2</sub> (324.43). [ $\alpha$ ]<sub>D</sub><sup>15</sup> = –169° (ethanol), insoluble in water, soluble in benzene, ether, easily soluble in ethanol, chloroform.<sup>[5507]</sup> **Pharm:** Antimalarial (formerly used to treat malaria, now largely replaced by more effective, less toxic drugs); antimalarial (*Plasmodium falciparum* D6, LC<sub>50</sub> = 9.2ng/mL, SI > 2174; *Plasmodium falciparum* W2, LC<sub>50</sub> = 59.8ng/mL, SI > 334)<sup>[3976]</sup>; cytotoxic (KB, LC<sub>50</sub> > 20000ng/mL)<sup>[3976]</sup>; bitter principle (one of the bitterest substances, in 10  $\mu$ mol/L being extremely bitter); stimulates horses (used in horse racing). **Source:** HONG SE JIN JI NA SHU *Cinchona succirubra*, JIN JI LE *Cinchona ledgeriana*. **Ref:** 4, 658, 3976, 5507.

**18426 Quinone**

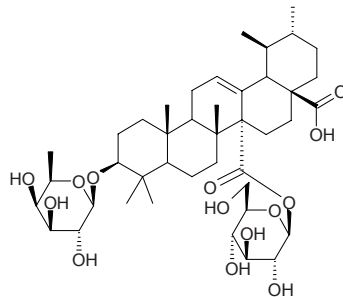
1,4-Benzoquinone [106-51-4] C<sub>6</sub>H<sub>4</sub>O<sub>2</sub> (108.10). Yellow crystals (pet. ether or H<sub>2</sub>O), mp 117°C, soluble in EtOH, Et<sub>2</sub>O. **Pharm:** Irritant (causes dermatitis and conjunctivitis); toxic (highly). **Source:** HUANG CHONG *Romalea microptera*, *Streptothris chromogena*. **Ref:** 1521.

**18427 Quinovic acid**

3-Hydroxy-12-ursene-27,28-dioic acid [465-74-7] C<sub>30</sub>H<sub>46</sub>O<sub>5</sub> (486.70). mp 298°C. **Source:** SHUI TUAN HUA *Adina pilulifera* [Syn. *Cephalanthus pilulifera*]. **Ref:** 6.

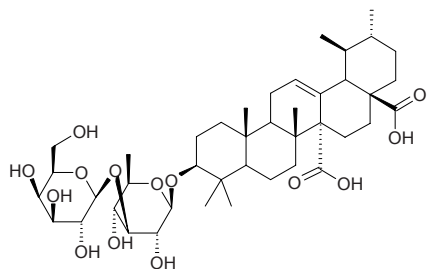
**18428 Quinovic acid 3 $\beta$ -O- $\beta$ -D-fucopyranosyl-(27-1)- $\beta$ -D-glucopyranosyl ester**

C<sub>42</sub>H<sub>66</sub>O<sub>14</sub> (794.99). **Source:** BI LU GOU TENG *Uncaria tomentosa*, GUI YA NA GOU TENG *Uncaria guianensis*. **Ref:** 5341.



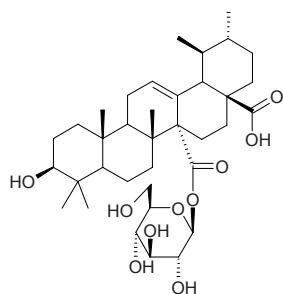
**18429 Quinovic acid 3-*O*- $\beta$ -D-galactopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -D-quinovopyranoside**

C<sub>42</sub>H<sub>66</sub>O<sub>14</sub> (794.99). Source: BI LU GOU TENG *Uncaria tomentosa*. Ref: 5341.



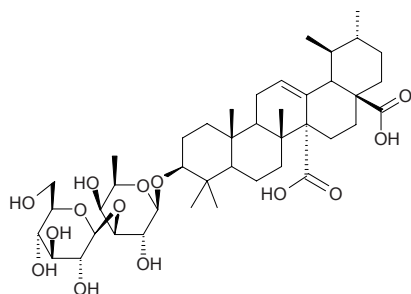
**18430 Quinovic acid 27-*O*- $\beta$ -D-glucopyranosyl ester**

C<sub>36</sub>H<sub>56</sub>O<sub>10</sub> (648.84). Source: BI LU GOU TENG *Uncaria tomentosa*. Ref: 5341.



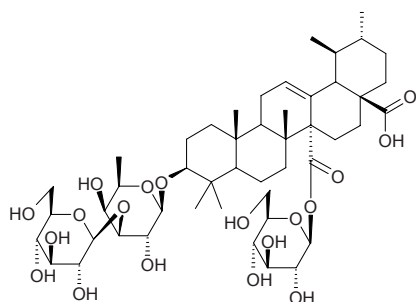
**18431 Quinovic acid 3 $\beta$ -*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -D-fucopyranoside**

C<sub>42</sub>H<sub>66</sub>O<sub>14</sub> (794.99). Source: BI LU GOU TENG *Uncaria tomentosa*. Ref: 5341.



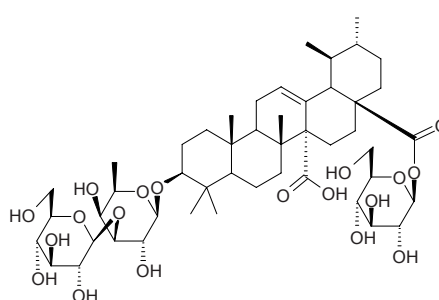
**18432 Quinovic acid 3 $\beta$ -*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -D-fucopyranosyl-(27-1)- $\beta$ -D-glucopyranosyl ester**

C<sub>48</sub>H<sub>76</sub>O<sub>19</sub> (957.13). Source: BI LU GOU TENG *Uncaria tomentosa*, GUI YA NA GOU TENG *Uncaria guianensis*. Ref: 5341.



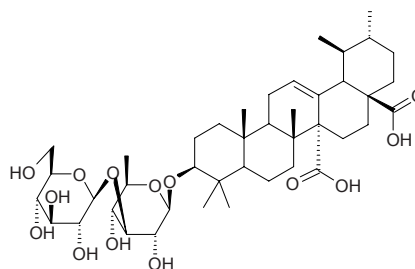
**18433 Quinovic acid 3 $\beta$ -*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -D-fucopyranosyl-(28-1)- $\beta$ -D-glucopyranosyl ester**

C<sub>48</sub>H<sub>76</sub>O<sub>19</sub> (957.13). Source: BI LU GOU TENG *Uncaria tomentosa*. Ref: 5341.



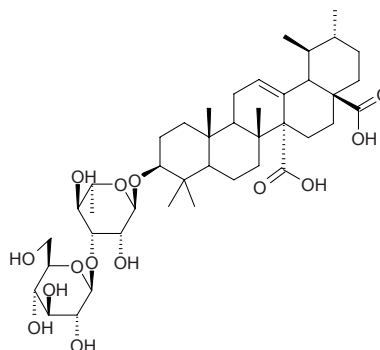
**18434 Quinovic acid 3-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -D-quinovopyranoside**

C<sub>42</sub>H<sub>66</sub>O<sub>14</sub> (794.99). Source: BI LU GOU TENG *Uncaria tomentosa*. Ref: 5341.



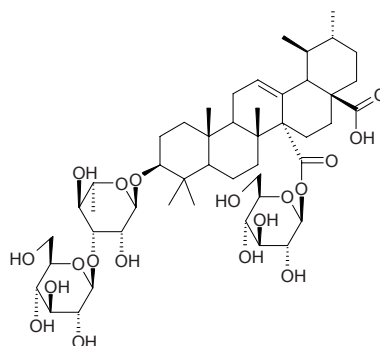
**18435 Quinovic acid 3-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -L-rhamnopyranoside**

C<sub>42</sub>H<sub>66</sub>O<sub>14</sub> (794.99). Source: BI LU GOU TENG *Uncaria tomentosa*. Ref: 5341.



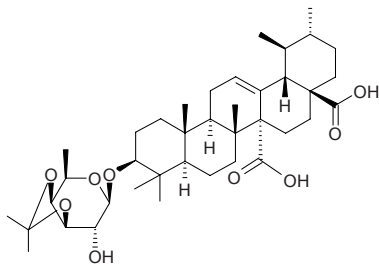
**18436 Quinovic acid 3-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -L-rhamnopyranoside 27-*O*- $\beta$ -D-glucopyranosyl ester**

C<sub>48</sub>H<sub>76</sub>O<sub>19</sub> (957.13). Source: BI LU GOU TENG *Uncaria tomentosa*. Ref: 5341.

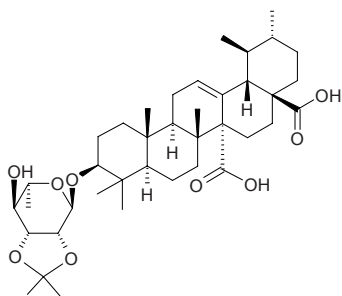


**18437 Quinovic acid-3 $\beta$ -O-(3',4'-O-isopropylidene)- $\beta$ -D-fucopyranoside**

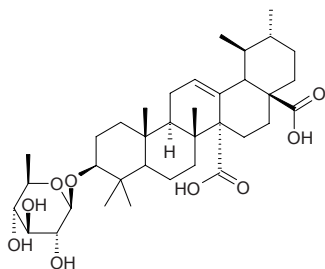
C<sub>39</sub>H<sub>60</sub>O<sub>9</sub> (672.91). White powder, mp 220°C (dec), [ $\alpha$ ]<sub>D</sub><sup>30</sup> = +48.77° (c = 0.611, MeOH). Source: XI YE SHUI TUAN HUA *Adina rubella*. Ref: 651.

**18438 Quinovic****acid-3 $\beta$ -(2',3'-O-isopropylidene)- $\alpha$ -L-rhamnopyranoside**

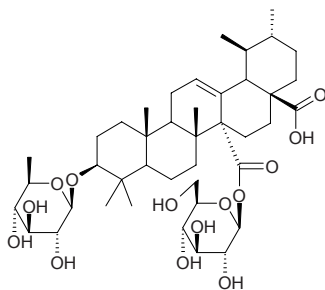
C<sub>39</sub>H<sub>60</sub>O<sub>9</sub> (672.91). White powder, mp 268~272°C (dec), [ $\alpha$ ]<sub>D</sub><sup>22</sup> = +47.29° (c = 0.317, MeOH). Source: XI YE SHUI TUAN HUA *Adina rubella*. Ref: 651.

**18439 Quinovic acid 3 $\beta$ -O- $\beta$ -D-quinovopyranoside**

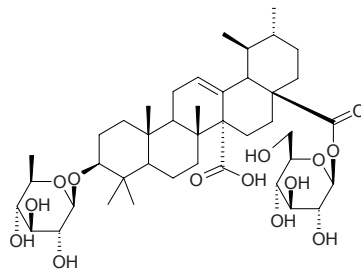
C<sub>36</sub>H<sub>56</sub>O<sub>9</sub> (632.84). Source: GUI YA NA GOU TENG *Uncaria guianensis*. Ref: 5341.

**18440 Quinovic acid 3-O- $\beta$ -D-quinovopyranoside 27-O- $\beta$ -D-glucopyranosyl ester**

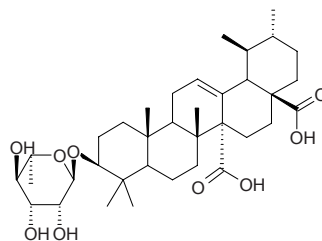
C<sub>42</sub>H<sub>66</sub>O<sub>14</sub> (794.99). Pharm: Anti-inflammatory (20mg/kg, InRt = 33%)<sup>[5341]</sup>. Source: BI LU GOU TENG *Uncaria tomentosa*. Ref: 5341.

**18441 Quinovic acid 3-O- $\beta$ -D-quinovopyranoside 28-O- $\beta$ -D-glucopyranosyl ester**

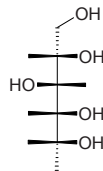
C<sub>42</sub>H<sub>66</sub>O<sub>14</sub> (794.99). Source: TUO YUAN GOU TENG *Uncaria elliptica*, JI ZI MU *Sinoadina Racemosa* [Syn. *Adina racemosa*] (leaf, flower and twig; yield = 0.0053%dw). Ref: 5341, 4723.

**18442 Quinovic acid 3 $\beta$ -O- $\alpha$ -L-rhamnopyranoside**

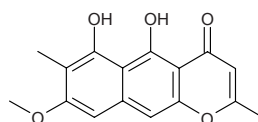
C<sub>36</sub>H<sub>56</sub>O<sub>9</sub> (632.84). Source: BI LU GOU TENG *Uncaria tomentosa*. Ref: 5341.

**18443 D-Quinovitrol**

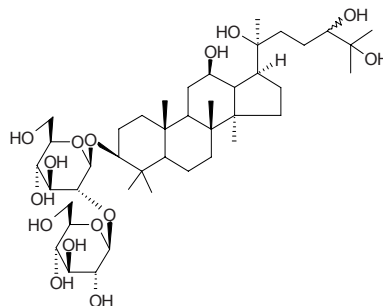
C<sub>6</sub>H<sub>14</sub>O<sub>5</sub> (166.18). Colorless syrup, [ $\alpha$ ]<sub>D</sub><sup>24</sup> = -11° (c = 0.2, MeOH). Source: SHE CHUANG ZI *Cnidium monnieri* (fruit). Ref: 5205.

**18444 Quinquangulin**

[64892-58-2] C<sub>16</sub>H<sub>14</sub>O<sub>5</sub> (286.29). Pharm: Cytotoxic (P<sub>388</sub>). Source: WU LENG JUE MING *Cassia quinquangula*. Ref: 658.

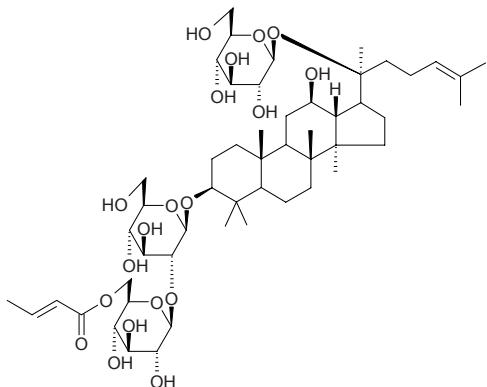
**18445 Quinquenoside F<sub>1</sub>**

C<sub>42</sub>H<sub>74</sub>O<sub>15</sub> (819.05). White amorphous powder, mp 237~238°C. Source: XI YANG SHEN *Panax quinquefolium*. Ref: 789.

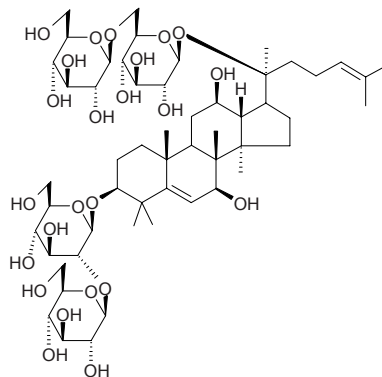


**18446 Quinquenoside I**

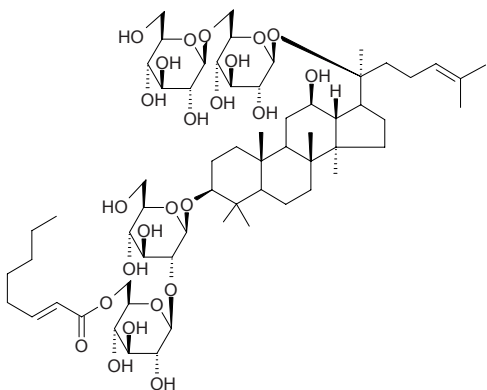
$C_{52}H_{86}O_{19}$  (1015.25). Source: SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. Ref: 4139.

**18449 Quinquenoside IV**

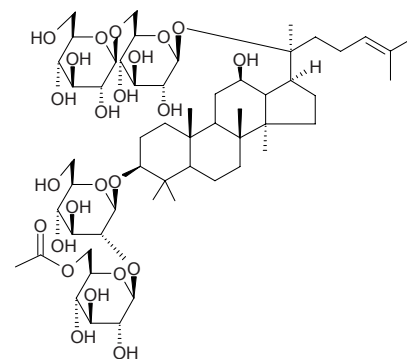
$C_{54}H_{90}O_{24}$  (1123.31). Pharm: Immunological adjuvant activity (OVA-immunized mouse, ELISA assay, increases serum IgG level). Source: SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. Ref: 4139.

**18447 Quinquenoside II**

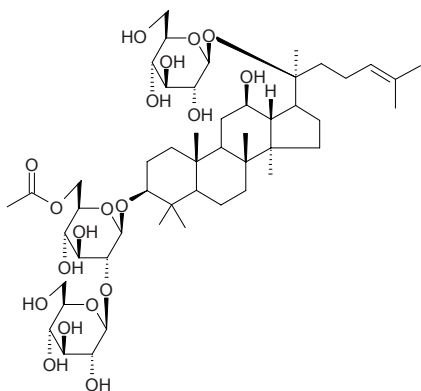
$C_{62}H_{104}O_{24}$  (1233.51). Source: SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. Ref: 4139.

**18450 Quinquenoside R<sub>1</sub>**

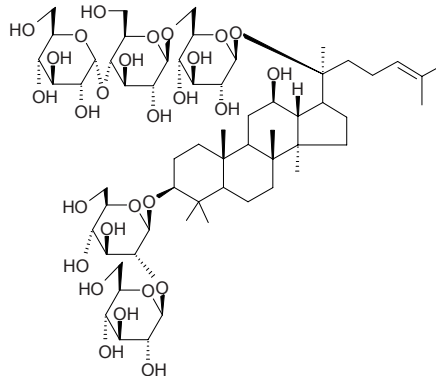
$C_{56}H_{94}O_{24}$  (1151.36). Source: REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], XI YANG SHEN *Panax quinquefolium*. Ref: 660.

**18448 Quinquenoside III**

$C_{50}H_{84}O_{19}$  (989.22). Pharm: Immunological adjuvant activity (OVA-immunized mouse, ELISA assay, increases serum IgG level). Source: SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. Ref: 4139.

**18451 Quinquenoside V**

$C_{60}H_{102}O_{28}$  (1271.47). Pharm: Immunological adjuvant activity (OVA-immunized mouse, ELISA assay, increases serum IgG level). Source: SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. Ref: 4139.



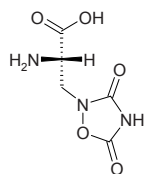
**18452 Quisqualic acid**

$\alpha$ -Amino-3,5-dioxo-1,2,4-oxadiazolidine-2-propanoic acid [52809-07-1]

C<sub>5</sub>H<sub>7</sub>N<sub>3</sub>O<sub>5</sub> (189.13). mp 187~188 (dec). **Pharm:** Anthelmintic (roundworm).

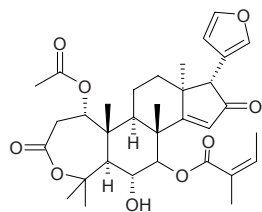
**Source:** SHI JUN ZI *Quisqualis indica*, MAO SHI JUN ZI *Quisqualis indica* var. *villosa* (in 1972 the compound was isolated from the plant)<sup>[5505]</sup>,

*Quisqualis fructus*. **Ref:** 1521, 5501, 5505.

**18453 Quivisianthone**

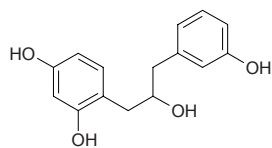
7-Deacetyl-7-angeloyl-16-ketohadalactone A C<sub>33</sub>H<sub>42</sub>O<sub>9</sub> (582.70). Pale

yellow gum,  $[\alpha]_D = +0.0^\circ$ . **Source:** *Quivisia papinae* (seed). **Ref:** 3759.

**18454 Quracol A**

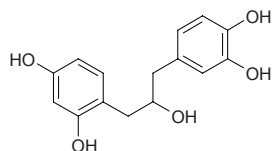
[108549-45-7] C<sub>15</sub>H<sub>16</sub>O<sub>4</sub> (260.29). mp 88~90°C,  $[\alpha]_D^{20} = 0^\circ$  ( $c = 0.01$ , alcohol).

**Pharm:** Ileal smooth muscle relaxant (gpg, *in vitro*, contraction induced by electrostimulation; 20 $\mu$ g/mL histamine antagonist). **Source:** NIU XUAN JIN HE HUAN *Acacia tortilis* ssp. *raddiana*. **Ref:** 4018.

**18455 Quracol B**

[108549-46-8] C<sub>15</sub>H<sub>16</sub>O<sub>5</sub> (276.29). mp 92~94°C,  $[\alpha]_D^{20} = 0^\circ$  ( $c = 0.05$ , alcohol).

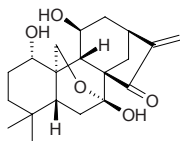
**Pharm:** Ileal smooth muscle relaxant (gpg, *in vitro*, contraction induced by electrostimulation; 20 $\mu$ g/mL histamine antagonist). **Source:** NIU XUAN JIN HE HUAN *Acacia tortilis* ssp. *raddiana*. **Ref:** 4018.



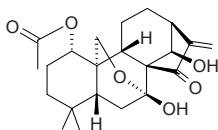
## R

**18456 Rabdocoetsin A**

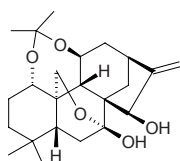
$C_{20}H_{28}O_5$  (348.44). mp 250–252°C,  $[\alpha]_D = -100^\circ$  ( $c = 0.40$ , MeOH);  $[\alpha]_D^{20} = -96.2^\circ$  ( $c = 0.09$ , MeOH). Source: XI ZHUI XIANG CHA CAI *Rabdosia coetsa*, ZI MAO XIANG CHA CAI *Isodon enanderianus* (aerial parts). Ref: 4067, 5475.

**18457 Rabdocoetsin B**

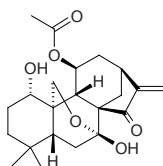
$C_{22}H_{30}O_6$  (390.48).  $[\alpha]_D^{20} = -75.2^\circ$  ( $c = 0.11$ , MeOH). Pharm: Cytotoxic (hmn tumor K562 cells,  $IC_{50} = 0.13 \mu\text{g/mL}$ , control *cis*-Platin,  $IC_{50} = 0.52 \mu\text{g/mL}$ )<sup>[5475]</sup>. Source: XI ZHUI XIANG CHA CAI *Rabdosia coetsa*, ZI MAO XIANG CHA CAI *Isodon enanderianus* (aerial parts). Ref: 660, 4067, 5475.

**18458 Rabdocoetsin C**

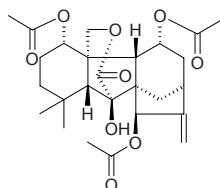
$C_{23}H_{34}O_5$  (390.52). mp 248–249°C. Source: XI ZHUI XIANG CHA CAI *Rabdosia coetsa*. Ref: 4067.

**18459 Rabdocoetsin D**

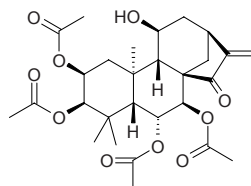
$C_{22}H_{30}O_6$  (390.48).  $[\alpha]_D^{20} = -96.1^\circ$  ( $c = 0.08$ , MeOH). Pharm: Cytotoxic (hmn tumor K562 cells,  $IC_{50} = 0.87 \mu\text{g/mL}$ , control *cis*-Platin,  $IC_{50} = 0.52 \mu\text{g/mL}$ )<sup>[5475]</sup>. Source: XI ZHUI XIANG CHA CAI *Rabdosia coetsa*, ZI MAO XIANG CHA CAI *Isodon enanderianus* (aerial parts). Ref: 660, 4067, 5475.

**18460 Rabdoepigibberellolide**

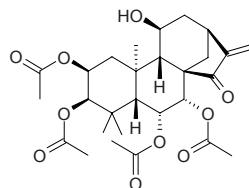
$C_{26}H_{34}O_9$  (490.56). mp 255.5–256.5°C,  $[\alpha]_D = -89^\circ$  ( $c = 0.28$ , MeOH). Source: SI GUO XIANG CHA CAI *Rabdosia shikokiana*. Ref: 4067.

**18461 Rabdoforrestin A**

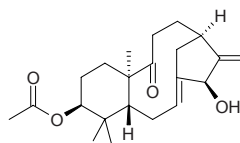
[117695-11-1]  $C_{28}H_{38}O_{10}$  (534.61). Pharm: Cytotoxic (MG cells, EAC cells). Source: MAO GENG XIA YE XIANG CHA CAI *Isodon angustifolius* var. *glabrescens* (leaf: yield = 0.0093%), ZI E XIANG CHA CAI *Isodon forrestii* (leaf: yield = 0.28%). Ref: 4065, 4066.

**18462 Rabdoforrestin A'**

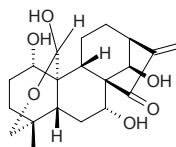
$C_{28}H_{38}O_{10}$  (534.61). mp 173–174°C,  $[\alpha]_D^{22} = -38.7^\circ$  ( $c = 0.58$ , MeOH). Source: ZI E XIANG CHA CAI *Isodon forrestii*. Ref: 4067.

**18463 Rabdohakusin**

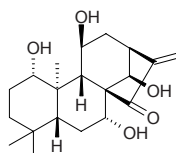
$C_{22}H_{32}O_4$  (360.50). mp 97–98°C,  $[\alpha]_D = +78.7^\circ$  ( $c = 0.127$ ,  $\text{CHCl}_3$ ). Source: YIN DI KUAN YE XIANG CHA CAI *Isodon umbrosa* var. *latifolia*. Ref: 4067.

**18464 Rabdoinflxin A**

$C_{20}H_{28}O_6$  (364.44). mp 214–216°C,  $[\alpha]_D^{24} = -115.7^\circ$  ( $c = 1.0$ , MeOH). Source: NEI ZHE XIANG CHA CAI *Isodon inflexa* [Syn. *Rabdosia inflexa*]. Ref: 4067.

**18465 Rabdoinflxin B**

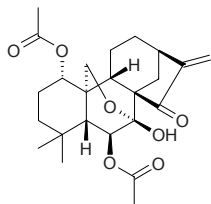
$C_{20}H_{30}O_5$  (350.46). mp 266–268°C,  $[\alpha]_D^{24} = -74.9^\circ$  ( $c = 0.45$ , MeOH). Source: NEI ZHE XIANG CHA CAI *Isodon inflexa* [Syn. *Rabdosia inflexa*]. Ref: 4067.



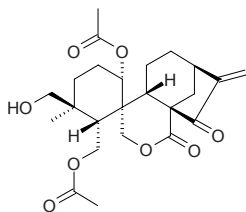


**18466 Rabdokaurin A**

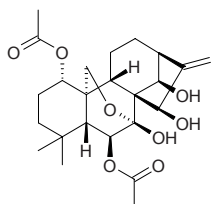
$C_{24}H_{32}O_7$  (432.52). mp 227–229°C,  $[\alpha]_D^{26} = +57.0^\circ$  ( $c = 0.84$ , MeOH). Source: CHANG GUAN XIANG CHA CAI *Rabdosia longituba*. Ref: 4067.

**18467 Rabdokaurin B**

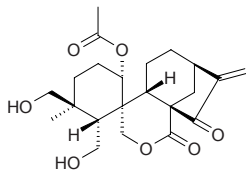
$C_{24}H_{32}O_8$  (448.52). Amorphous powder,  $[\alpha]_D^{26} = -93.6^\circ$  ( $c = 0.81$ , MeOH). Source: CHANG GUAN XIANG CHA CAI *Rabdosia longituba*. Ref: 4067.

**18468 Rabdokaurin C**

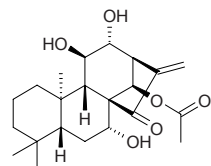
$C_{24}H_{34}O_8$  (450.53). mp 232–234°C,  $[\alpha]_D^{22} = -17.5^\circ$  ( $c = 1.16$ ,  $C_5H_5N$ ). Source: CHANG GUAN XIANG CHA CAI *Rabdosia longituba*. Ref: 4067.

**18469 Rabdokaurin D**

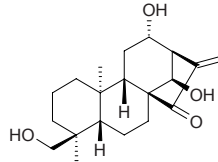
$C_{22}H_{30}O_7$  (406.48). mp 227–230°C,  $[\alpha]_D^{21} = +34.1^\circ$  ( $c = 0.62$ , MeOH). Source: CHANG GUAN XIANG CHA CAI *Rabdosia longituba*. Ref: 4067.

**18470 Rabdokunmin A**

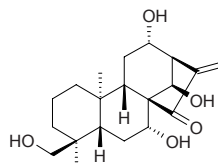
$C_{22}H_{32}O_6$  (392.50). mp 212–214°C,  $[\alpha]_D^{21} = -51.0^\circ$  ( $c = 0.51$ ,  $Me_2CO$ ). Source: KUN MING XIANG CHA CAI *Isodon kunmingensis*. Ref: 4067.

**18471 Rabdokunmin B**

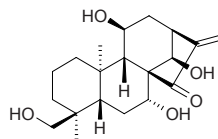
$C_{20}H_{30}O_4$  (334.46). mp 259.5–261.5°C,  $[\alpha]_D^{21} = -46.2^\circ$  ( $c = 0.52$ , MeOH). Source: KUN MING XIANG CHA CAI *Isodon kunmingensis*. Ref: 4067.

**18472 Rabdokunmin C**

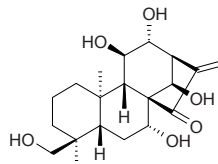
$7\alpha, 12\alpha, 14\beta, 18$ -Tetrahydroxy-*ent*-kaur-16-en-15-one  $C_{20}H_{30}O_5$  (350.46). mp 145–146°C,  $[\alpha]_D^{21} = -85.7^\circ$  ( $c = 0.54$ , MeOH). Pharm: Cytotoxic (*in vitro*,  $P_{388}$ ,  $ED_{50} = 1.06\mu g/mL$ )<sup>[3012]</sup>. Source: KUN MING XIANG CHA CAI *Isodon kunmingensis*, WEI YE XIANG CHA CAI *Rabdosia excisa* (aerial parts: yield = 0.0024%dw). Ref: 3012, 4067.

**18473 Rabdokunmin D**

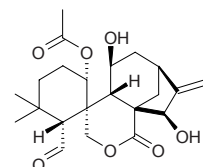
$C_{20}H_{30}O_5$  (350.46). mp 254–257°C,  $[\alpha]_D^{21} = -113.3^\circ$  ( $c = 0.57$ , MeOH). Source: KUN MING XIANG CHA CAI *Isodon kunmingensis*. Ref: 4067.

**18474 Rabdokunmin E**

$C_{20}H_{30}O_6$  (366.46). mp 286–288°C,  $[\alpha]_D^{21} = -110.5^\circ$  ( $c = 0.51$ , MeOH). Source: KUN MING XIANG CHA CAI *Isodon kunmingensis*. Ref: 4067.

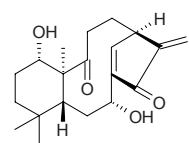
**18475 Rabdolasional**

$C_{22}H_{30}O_7$  (406.48).  $[\alpha]_D^{27} = +7.5^\circ$  ( $c = 0.27$ , MeOH). Source: CU GUO XIANG CHA CAI *Isodon lasiocarpa*. Ref: 4067.

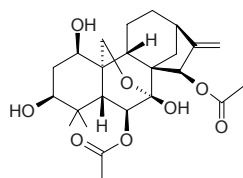


**18476 Rabdolatifolin**

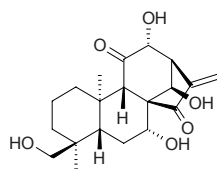
$C_{20}H_{28}O_4$  (332.44). Amorphous powder,  $[\alpha]_D^{21} = -45.1^\circ$  ( $c = 0.14$ , MeOH).  
 Source: YIN DI KUAN YE XIANG CHA CAI *Isodon umbrosa* var. *latifolia*.  
 Ref: 4067.

**18477 Rabdolongin A**

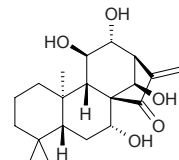
$C_{24}H_{34}O_8$  (450.53). mp 134–137°C,  $[\alpha]_D^{23} = -75.5^\circ$  ( $c = 1.02$ , MeOH). Source:  
 CHANG GUAN XIANG CHA CAI *Rabdosia longituba*. Ref: 660, 4067.

**18478 Rabdoloxin A**

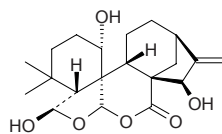
$C_{20}H_{28}O_6$  (364.44). mp 220–222°C,  $[\alpha]_D^{25} = -62.9^\circ$  ( $c = 0.70$ ,  $C_5H_5N$ ). Source:  
 WAN ZHUI XIANG CHA CAI *Isodon loxothyrsa*. Ref: 4067.

**18479 Rabdoloxin B**

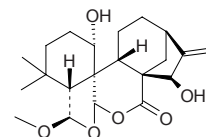
$C_{20}H_{30}O_5$  (350.46). mp 283–285°C,  $[\alpha]_D^{25} = -59.5^\circ$  ( $c = 0.84$ ,  $C_5H_5N$ ). Source:  
 WAN ZHUI XIANG CHA CAI *Isodon loxothyrsa*. Ref: 4067.

**18480 Rabdonervosin A**

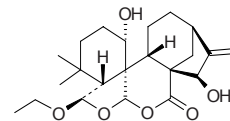
1 $\alpha,6\beta,15\beta$ -Trihydroxy-6,7-B-seco-ent-kaur-16-en-6,20-epoxy-7,20- $\delta$ -olide  
 $C_{20}H_{28}O_6$  (364.44). White acicular crystals (ethyl acetate), mp 312–314°C.  
 Source: XIAN MAI XIANG CHA CAI *Rabdosia nervosa*. Ref: 496, 4067.

**18481 Rabdonervosin B**

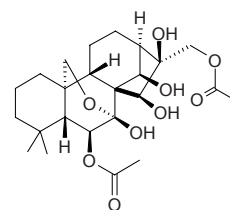
$C_{21}H_{30}O_6$  (378.47). White acicular crystals, mp 300–302°C. Source: XIAN  
 MAI XIANG CHA CAI *Rabdosia nervosa*. Ref: 828, 4067.

**18482 Rabdonervosin C**

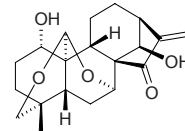
$C_{22}H_{32}O_6$  (392.5). White acicular crystals (ethyl acetate), mp 297–299°C.  
 Source: XIAN MAI XIANG CHA CAI *Rabdosia nervosa*. Ref: 786.

**18483 Rabdophyllin H**

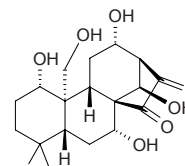
[102641-82-7]  $C_{24}H_{36}O_9$  (468.55). White crystals, mp 234–236°C, mp  
 220–222°C. Pharm: Antineoplastic (mus, EAC, biotic prolonged rate =  
 188.9%  $p < 0.01$ ); cytotoxic (hmn, liver cell strain QGY-7703, *in vitro*,  $IC_{50} =$   
 3.87  $\mu\text{g/mL}$ ). Source: DA YE XIANG CHA CAI *Rabdosia macrophylla* (leaf).  
 Ref: 45, 1409, 4067.

**18484 Rabdoserrin A**

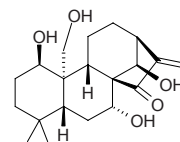
[96685-01-7]  $C_{20}H_{26}O_5$  (346.43). Colorless lamellar crystals  
 (chloroform–ethanol), mp 312–314°C,  $[\alpha]_D^{20} = -98.2^\circ$  ( $c = 1.4$ , DMF) Pharm:  
 Cytotoxic (HeLa, 4  $\mu\text{g/mL}$ , InRt = 87.6%). Source: NEI ZHE XIANG CHA  
 CAI *Isodon inflexa* [Syn. *Rabdosia inflexa*] (leaf: yield = 0.057%), XI  
 HUANG CAO *Rabdosia serra* (stem and leaf). Ref: 29, 900, 4067.

**18485 Rabdoserrin B**

[96685-00-6]  $C_{20}H_{30}O_6$  (366.46). mp 278–280°C,  $[\alpha]_D^{20} = -95.8^\circ$  ( $c = 0.6$ ,  
 pyridine). Pharm: Cytotoxic (*in vitro*,  $P_{388}$ ,  $ED_{50} = 1.01 \mu\text{g/mL}$ ; HeLa)<sup>[3012]</sup>.  
 Source: NEI ZHE XIANG CHA CAI *Isodon inflexa* [Syn. *Rabdosia inflexa*]  
 (leaf: yield = 0.011%), WEI YE XIANG CHA CAI *Rabdosia excisa* (aerial  
 parts: yield = 0.00053% dw), XI HUANG CAO *Rabdosia serra*. Ref: 660, 900,  
 3012, 4067.

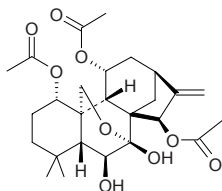
**18486 Rabdoserrin D**

$C_{20}H_{30}O_5$  (350.46). Source: XI HUANG CAO *Rabdosia serra*. Ref: 660,  
 4067.

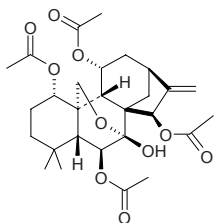


**18487 Rabdosiainin A**

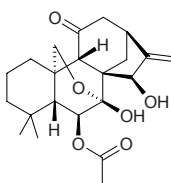
$C_{26}H_{36}O_9$  (492.57). Source: SI GUO XIANG CHA CAI *Rabdosisia shikokiana*.  
Ref: 660, 4067.

**18488 Rabdosiainin B**

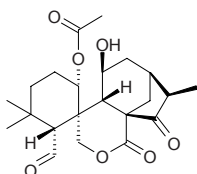
$C_{28}H_{38}O_{10}$  (534.61). Source: SI GUO XIANG CHA CAI *Rabdosisia shikokiana*.  
Ref: 660, 4067.

**18489 Rabdosiainin C**

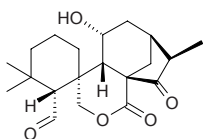
$C_{22}H_{30}O_6$  (390.48). mp 222~225°C,  $[\alpha]_D^{20} = -170^\circ$  ( $c = 0.15$ ,  $CHCl_3$ ). Source:  
 SI GUO XIANG CHA CAI *Rabdosisia shikokiana*. Ref: 4067.

**18490 Rabdosichuanin A**

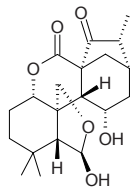
$C_{22}H_{30}O_7$  (406.48). mp 225~227°C,  $[\alpha]_D^{25} = +107.27^\circ$  ( $c = 0.55$ , MeOH).  
Source: SI CHUAN XIANG CHA CAI *Isodon setschwanensis*. Ref: 4067.

**18491 Rabdosichuanin B**

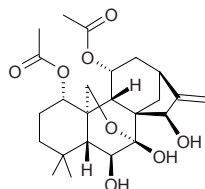
$C_{20}H_{28}O_5$  (348.33). mp 241~243°C,  $[\alpha]_D^{24} = -58.16^\circ$  ( $c = 0.576$ , MeOH).  
Source: SI CHUAN XIANG CHA CAI *Isodon setschwanensis*. Ref: 4067.

**18492 Rabdosichuanin C**

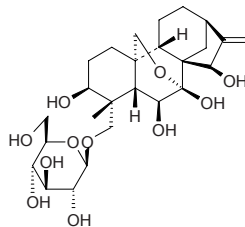
$C_{20}H_{28}O_6$  (364.44). mp 231~233°C,  $[\alpha]_D^{25} = -120.94^\circ$  ( $c = 0.55$ , MeOH).  
Source: SI CHUAN XIANG CHA CAI *Isodon setschwanensis*. Ref: 4067.

**18493 Rabdosichuanin D**

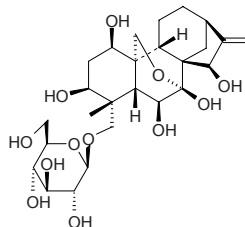
$C_{24}H_{34}O_8$  (450.53). mp 246~248°C,  $[\alpha]_D^{25} = -32.79^\circ$  ( $c = 0.427$ , MeOH).  
Source: SI CHUAN XIANG CHA CAI *Isodon setschwanensis*. Ref: 4067.

**18494 Rabdoside 1**

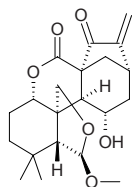
$C_{26}H_{40}O_{11}$  (528.60). mp 179~180°C,  $[\alpha]_D^{26.5} = -4.6^\circ$  ( $c = 1.0$ , MeOH). Source:  
 MAO E XIANG CHA CAI *Rabdosisia eriocalyx*. Ref: 660, 4067.

**18495 Rabdoside 2**

$C_{26}H_{40}O_{12}$  (544.60). mp 170~171°C,  $[\alpha]_D^{26.5} = -4.5^\circ$  ( $c = 1.0$ , MeOH). Source:  
 MAO E XIANG CHA CAI *Rabdosisia eriocalyx*. Ref: 660, 4067.

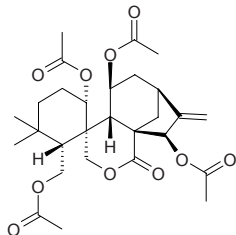
**18496 Rabdosin A**

$C_{21}H_{28}O_6$  (376.45). mp 200~202°C,  $[\alpha]_D^{13} = -40.1^\circ$  ( $c = 1.07$ ,  $C_5H_5N$ ). Source:  
 MAO YE XIANG CHA CAI *Isodon japonica* [Syn. *Rabdosisia japonica*]. Ref:  
 4067.

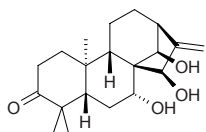


**18497 Rabdosiolate**

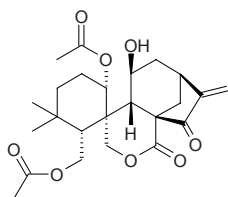
$C_{28}H_{38}O_{10}$  (534.61). mp 216~218°C,  $[\alpha]_D = -47.2^\circ$  ( $c = 0.44$ ,  $CHCl_3$ ). Source: MAO YE XIANG CHA CAI *Isodon japonica* [Syn. *Rabdosisia japonica*]. Ref: 4067.

**18498 Rabdosiin**

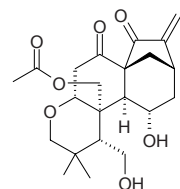
$C_{20}H_{30}O_4$  (334.46). mp 271~272.5°C,  $[\alpha]_D^{16} = -108^\circ$  ( $c = 0.001$ , MeOH). Source: MAO YE XIANG CHA CAI *Isodon japonica* [Syn. *Rabdosisia japonica*]. Ref: 4067.

**18499 Rabdosisin B**

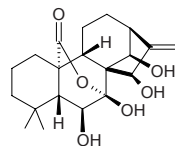
Exidonin  $C_{24}H_{32}O_8$  (448.52). mp 182~184°C,  $[\alpha]_D^{13} = 130.6^\circ$  ( $c = 2.20$ ,  $C_5H_5N$ ). Pharm: Cytotoxic (K562,  $IC_{50} = 4.61 \mu\text{mol/L}$ , control Cisplatin  $IC_{50} = 3.84 \mu\text{mol/L}$ ; Bcap37,  $IC_{50} = 15.84 \mu\text{mol/L}$ , Cisplatin  $IC_{50} = 1.54 \mu\text{mol/L}$ ; BGC823,  $IC_{50} = 10.93 \mu\text{mol/L}$ , Cisplatin  $IC_{50} = 2.54 \mu\text{mol/L}$ ; CA,  $IC_{50} > 100 \mu\text{mol/L}$ , Cisplatin  $IC_{50} = 0.88 \mu\text{mol/L}$ ; HeLa,  $IC_{50} > 100 \mu\text{mol/L}$ , Cisplatin  $IC_{50} = 3.60 \mu\text{mol/L}$ )<sup>[4353]</sup>. Source: LU SHAN XIANG CHA CAI *Isodon rubescens* var. *lushanensis* (leaf), MAO YE XIANG CHA CAI *Isodon japonica* [Syn. *Rabdosisia japonica*]. Ref: 5, 4067, 4353.

**18500 Rabdosisin C**

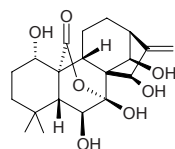
[82460-75-1]  $C_{22}H_{30}O_7$  (406.48). mp 266~268°C. Source: MAO YE XIANG CHA CAI *Isodon japonica* [Syn. *Rabdosisia japonica*]. Ref: 5.

**18501 Rabdotermin A**

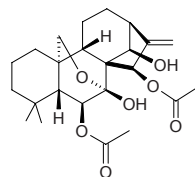
$C_{20}H_{28}O_6$  (364.44). Source: LU SHAN XIANG CHA CAI *Isodon rubescens* var. *lushanensis* (leaf), NIU WEI CAO *Isodon ternifolia*. Ref: 660, 4067, 4353.

**18502 Rabdotermin B**

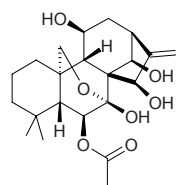
$C_{20}H_{28}O_7$  (380.44). Source: LU SHAN XIANG CHA CAI *Isodon rubescens* var. *lushanensis* (leaf), NIU WEI CAO *Isodon ternifolia*. Ref: 660, 4067, 4353.

**18503 Rabdotermin C**

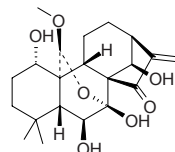
Rubescensin E  $C_{24}H_{34}O_7$  (434.53). Source: DONG LING CAO *Rabdosisia rubescens*, NIU WEI CAO *Isodon ternifolia*. Ref: 660, 1521, 4067.

**18504 Rabdotermin D**

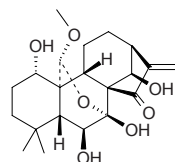
$C_{22}H_{32}O_7$  (408.50).  $[\alpha]_D = -43.3^\circ$  ( $c = 0.38$ , MeOH). Source: HAN SHENG XIANG CHA CAI *Isodon xerophilus* (leaf), NIU WEI CAO *Isodon ternifolia*. Ref: 4067, 5182.

**18505 Rabdotermin E**

$C_{21}H_{30}O_7$  (394.47).  $[\alpha]_D^{21} = -47.2^\circ$  ( $c = 0.67$ , MeOH). Source: NIU WEI CAO *Isodon ternifolia*. Ref: 4067.

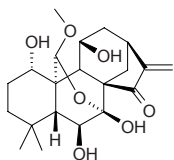
**18506 Rabdotermin F**

$C_{21}H_{30}O_7$  (394.47).  $[\alpha]_D^{26} = -78.8^\circ$  ( $c = 0.29$ , MeOH). Source: NIU WEI CAO *Isodon ternifolia*. Ref: 4067.

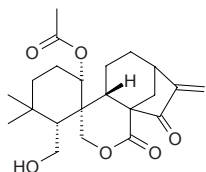


**18507 Rabdoternin G**

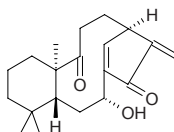
$C_{22}H_{30}O_7$  (394.47).  $[\alpha]_D^{26} = -103.0^\circ$  ( $c = 0.59$ , MeOH). Source: NIU WEI CAO *Isodon ternifolia*. Ref: 4067.

**18508 Rabdoternin H**

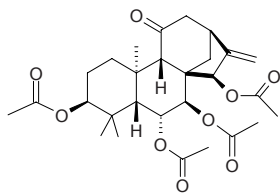
$C_{22}H_{30}O_6$  (390.48). Colorless needles (MeOH), mp 246~248°C,  $[\alpha]_D^{24.9} = +36.3^\circ$  ( $c = 0.903$ , MeOH). Source: CHONG YA YAO *Isodon ternifolius*. Ref: 2265.

**18509 Rabdoubrosanin**

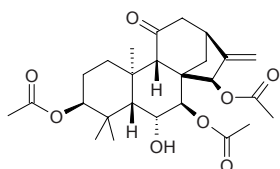
$C_{20}H_{28}O_3$  (316.44).  $[\alpha]_D^{22} = -40.6^\circ$  ( $c = 0.16$ , MeOH). Source: YIN DI XIANG CHA CAI *Isodon umbrosa*. Ref: 4067.

**18510 Rabyuennane A**

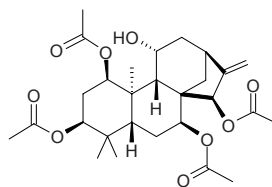
$C_{28}H_{38}O_9$  (518.61). Source: BU YU HONG *Rabdosia yuennanensis*. Ref: 660, 4067.

**18511 Rabyuennane B**

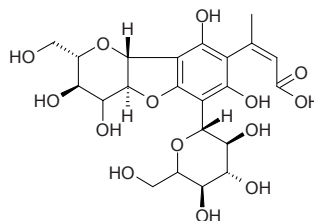
$C_{26}H_{36}O_8$  (476.57). Source: BU YU HONG *Rabdosia yuennanensis*. Ref: 660, 4067.

**18512 Rabyuennane C**

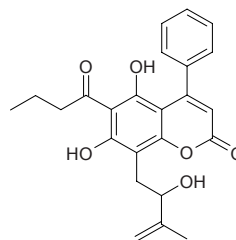
$C_{28}H_{40}O_9$  (520.63). Source: BU YU HONG *Rabdosia yuennanensis*. Ref: 660, 4067.

**18513 Racemosic acid**

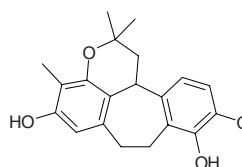
(*rel*)-4,6-Dihydroxy-5-[3-methyl-(*E*)-propenoic acid-3-yl]-7 $\beta$ -glucopyranosyl-{2 $\alpha$ ,3 $\beta$ -dihydrobenzofuran}-(3,2:b)-[4 $\alpha$ ,5 $\beta$ -dihydroxy-6 $\alpha$ -hydroxymethyltetrahydro]dropyran  $C_{27}H_{28}O_{14}$  (516.46). Pharm: Anti-Inflammatory (*in vitro*, COX-1 inhibitor,  $IC_{50} = (90.1 \pm 3.4) \mu\text{mol/L}$ , control Indomethacin,  $IC_{50} = (9.5 \pm 0.1) \mu\text{mol/L}$ ; 5-LOX inhibitor,  $IC_{50} = (18.5 \pm 0.3) \mu\text{mol/L}$ , Indomethacin,  $IC_{50} = 65.2 \mu\text{mol/L}$ ). Source: JU GUO RONG *Ficus racemosa* (bark). Ref: 4971.

**18514 Racemosol**

$C_{24}H_{24}O_6$  (408.46). Yellow prisms ( $C_6H_{14}:EtOAc = 9:1$ ), mp 140.8°C,  $[\alpha]_D = 0^\circ$  ( $c = 0.8$ ,  $CHCl_3$ ). Source: ZONG ZHUANG TIE LI MU *Mesua racemosa*. Ref: 1871.

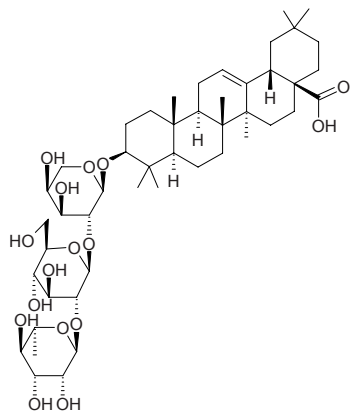
**18515 Racemosol†**

[103805-86-3]  $C_{21}H_{24}O_4$  (340.42). Pharm: Cytotoxic (KB,  $EC_{50} = 15.0 \mu\text{g/mL}$ , control Ellipticine,  $EC_{50} = 0.3 \mu\text{g/mL}$ ; BC,  $EC_{50} = 6.1 \mu\text{g/mL}$ , Ellipticine,  $EC_{50} = 0.3 \mu\text{g/mL}$ )<sup>[5092]</sup>; antimalarial (*Plasmodium falciparum*,  $EC_{50} = 0.9 \mu\text{g/mL}$ , control Chloroquine diphosphate,  $EC_{50} = 0.16 \mu\text{g/mL}$ )<sup>[5092]</sup>. Source: MA LA BA YANG TI JIA *Bauhinia malabarica* (root), ZONG ZHUANG HUA YANG TI JIA *Bauhinia racemosa*. Ref: 1521, 5092.

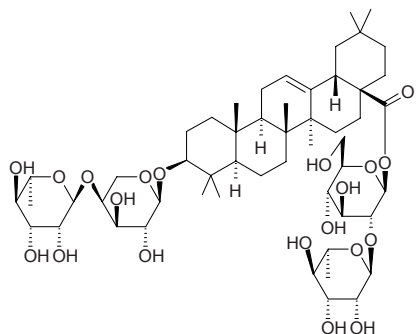


**18516 Raddeanin A**

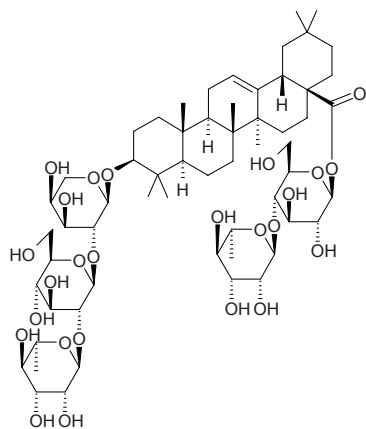
$C_{47}H_{76}O_{16}$  (897.12). Source: DUO BEI YIN LIAN HUA *Anemone raddeana* (dried rhizome: mean content = 0.32%<sup>[5508]</sup>). Ref: 660, 5508.

**18517 Raddeanin C**

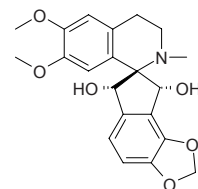
$C_{53}H_{86}O_{20}$  (1043.26). Source: DUO BEI YIN LIAN HUA *Anemone raddeana*. Ref: 660.

**18518 Raddeanin D**

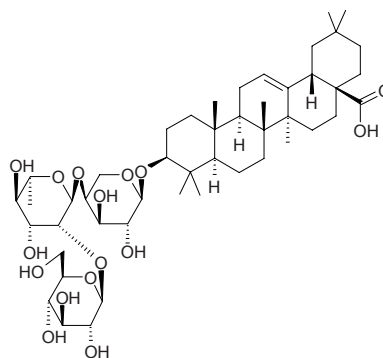
$C_{59}H_{96}O_{25}$  (1205.41). Source: DUO BEI YIN LIAN HUA *Anemone raddeana*. Ref: 660.

**18519 Raddeanine**

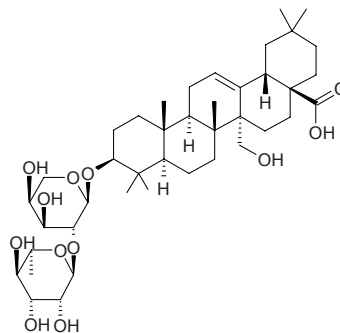
Sipeimine†  $C_{21}H_{23}NO_6$  (385.42). Source: KU MANG HUANG JIN *Corydalis govaniana*, XIAO HUANG ZI JIN *Corydalis ochotensis* var. *raddeana*. Ref: 660, 1521.

**18520 Raddeanin E**

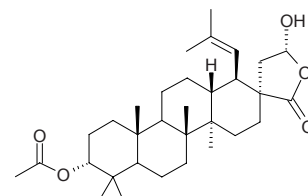
$C_{47}H_{76}O_{16}$  (897.12). Source: DUO BEI YIN LIAN HUA *Anemone raddeana*. Ref: 660.

**18521 Raddeanoside**

27-Hydroxyolean-12-en-28-oic-acid-3-*O*- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranoside  $C_{41}H_{66}O_{12}$  (750.98). White powder, mp 274–276°C. Source: DUO BEI YIN LIAN HUA *Anemone raddeana*. Ref: 2240.

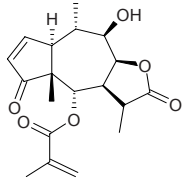
**18522 Radermasinin**

$C_{32}H_{50}O_5$  (514.75). Pharm: Cytotoxic. Source: CAI DOU SHU *Radermachera sinica*. Ref: 660, 1521.

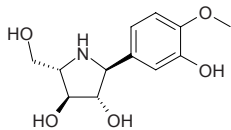


**18523 Radiatin**

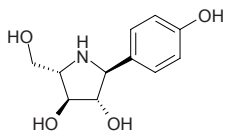
[25873-31-8] C<sub>19</sub>H<sub>24</sub>O<sub>6</sub> (348.40). mp 184~188°C, 202~204°C. **Pharm:** Antineoplastic (mus P<sub>388</sub>, *in vivo*, 25mg/kg, biotic prolonged rate = 61%); cytotoxic (mus, P<sub>388</sub> *in vitro*, ED<sub>50</sub> = 0.39µg/mL; mus, L<sub>1210</sub> *in vitro*, ED<sub>50</sub> = 1.2µg/mL; KB *in vitro*, ED<sub>50</sub> = 1.6µg/mL). **Source:** BAI LAI SHI JU *Baileya multiradiata*. **Ref:** 5, 658.

**18524 Radicamine A**

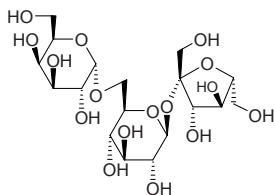
(2*S*,3*S*,4*S*,5*S*)-2-Hydroxymethyl-3,4-dihydroxy-5-(3-hydroxy-4-methoxyphenyl)-pyrrolidine C<sub>12</sub>H<sub>17</sub>NO<sub>5</sub> (255.27). Pale yellow oil, [α]<sub>D</sub> = +43.7° (c = 0.13, H<sub>2</sub>O). **Pharm:** α-Glucosidase inhibitor (IC<sub>50</sub> = 6.7µmol/L, control DMDP, IC<sub>50</sub> = 4.9µmol/L). **Source:** BAN BIAN LIAN *Lobelia chinensis* [Syn. *Lobelia radicans*]. **Ref:** 4134.

**18525 Radicamine B**

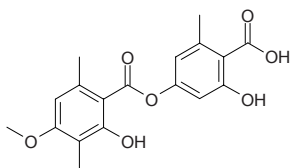
(2*S*,3*S*,4*S*,5*S*)-2-Hydroxymethyl-3,4-dihydroxy-5-(4-hydroxyphenyl)-pyrrolidine C<sub>11</sub>H<sub>15</sub>NO<sub>4</sub> (225.25). Pale yellow oil, [α]<sub>D</sub> = +72.0° (c = 0.10, H<sub>2</sub>O). **Pharm:** α-Glucosidase inhibitor (IC<sub>50</sub> = 9.3µmol/L, control DMDP, IC<sub>50</sub> = 4.9µmol/L). **Source:** BAN BIAN LIAN *Lobelia chinensis* [Syn. *Lobelia radicans*]. **Ref:** 4134.

**18526 Raffinose**

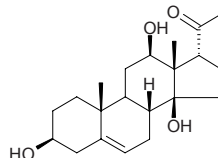
*D*-Raffinose pentahydrate [512-69-6] C<sub>18</sub>H<sub>32</sub>O<sub>16</sub> (504.45). mp 118~119°C. **Source:** CHE QIAN *Plantago asiatica*, GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. **Ref:** 2, 660.

**18527 Ramalic acid**

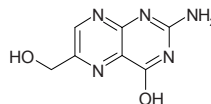
[500-37-8] C<sub>18</sub>H<sub>18</sub>O<sub>7</sub> (346.34). mp 203°C (dec). **Source:** SONG LUO *Usnea longissima*. **Ref:** 6.

**18528 Ramanone**

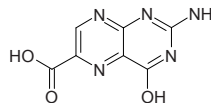
C<sub>21</sub>H<sub>32</sub>O<sub>4</sub> (348.49). **Source:** LUO MO ZI *Metaplexis japonica*. **Ref:** 660.

**18529 Ranachrome 3**

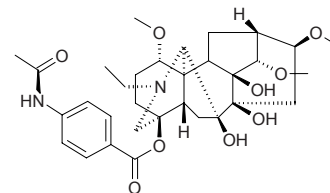
C<sub>7</sub>H<sub>7</sub>N<sub>5</sub>O<sub>2</sub> (193.17). **Source:** QING WA *Rana nigromaculata*; *Rana plancyi*. **Ref:** 6.

**18530 Ranachrome 5**

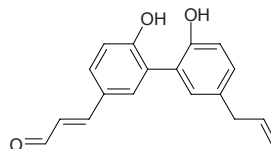
2-Amino-4-hydroxy-pteridine-6-carboxylic acid C<sub>7</sub>H<sub>5</sub>N<sub>5</sub>O<sub>3</sub> (207.15). **Source:** QING WA *Rana nigromaculata*; *Rana plancyi*, JIN YU *Carassius auratus*. **Ref:** 6.

**18531 Ranaconitine**

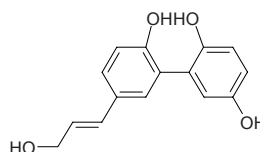
C<sub>32</sub>H<sub>44</sub>N<sub>2</sub>O<sub>9</sub> (600.72). **Source:** GAN WAN WU TOU *Aconitum finetianum*, GAO WU TOU *Aconitum sinomontanum*, NIU BIAN *Aconitum barbatum* var. *puberulum* [Syn. *Aconitum ochranthum*]. **Ref:** 660, 1521.

**18532 Randainal**

[87562-13-8] C<sub>18</sub>H<sub>16</sub>O<sub>3</sub> (280.33). **Source:** HOU PO *Magnolia officinalis*. **Ref:** 2.

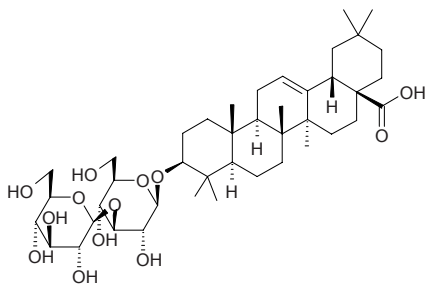
**18533 Randaiol**

5-Allyl-2,2',5'-trihydroxybiphenyl C<sub>15</sub>H<sub>14</sub>O<sub>4</sub> (258.28). **Source:** TAI WAN CHA MU *Sassafras randainense*. **Ref:** 427.

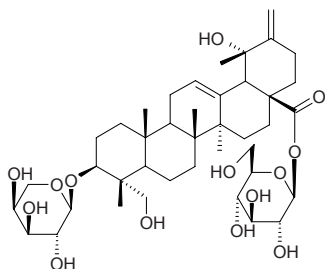


**18534 Radianin**

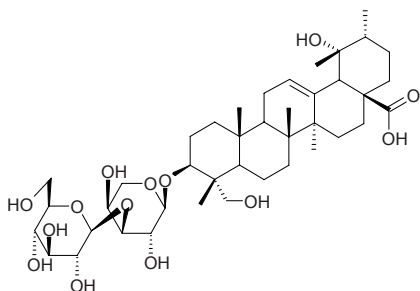
[72786-31-3] C<sub>42</sub>H<sub>68</sub>O<sub>13</sub> (780.79). Amorphous powder, mp 290~295°C (dec), [α]<sub>D</sub><sup>25</sup> = +0.22° (c = 0.036, methanol). Pharm: Immunoenhancer (*in vitro*, promotes multiplication of lymphocyte T in 10ng/mL~10pg/mL); hemolytic (ox erythrocyte, HC<sub>50</sub> = 2mg/L); molluscicide (planorbid test, LC<sub>50</sub> = 3mg/L). Source: LIAO DONG CONG MU *Aralia elata*. Ref: 900.

**18535 Radiansaponin I**

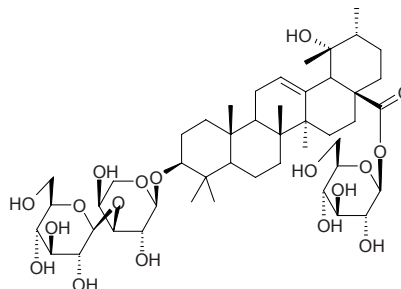
3-*O*-*α*-L-Arabinopyranosyl-3β,19 $\alpha$ ,23-trihydroxyursa-12,20(30)-dien-28-oic acid 28- $\beta$ -D-glucopyranosyl ester C<sub>41</sub>H<sub>64</sub>O<sub>14</sub> (780.96). White powder, [α]<sub>D</sub><sup>20</sup> = +45.9° (c = 0.17, MeOH). Source: BA NA MA SHAN SHI LIU *Randia formosa* (leaf). Ref: 3951.

**18536 Radiansaponin II**

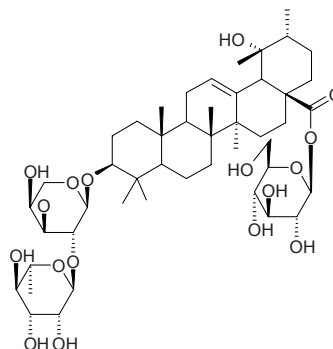
3-*O*- $\beta$ -D-Glucopyranosyl-(1→3)-*α*-L-arabinopyranosyl rotundic acid C<sub>41</sub>H<sub>66</sub>O<sub>14</sub> (782.97). White powder, [α]<sub>D</sub><sup>20</sup> = +10.9° (c = 0.12, MeOH). Source: BA NA MA SHAN SHI LIU *Randia formosa* (leaf). Ref: 3951.

**18537 Radiansaponin III**

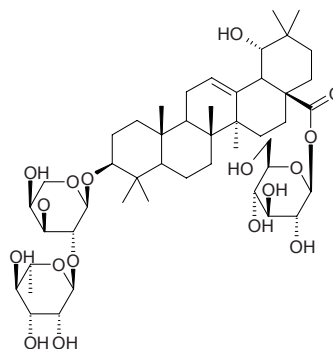
3-*O*- $\beta$ -D-Glucopyranosyl-(1→3)-*α*-L-arabinopyranosyl pomolic acid 28- $\beta$ -D-glucopyranosyl ester C<sub>47</sub>H<sub>76</sub>O<sub>18</sub> (929.12). White powder, [α]<sub>D</sub><sup>20</sup> = +6.67° (c = 0.33, MeOH). Source: BA NA MA SHAN SHI LIU *Randia formosa* (leaf). Ref: 3951.

**18538 Radiansaponin IV**

3-*O*-*α*-L-Rhamnopyranosyl-(1→2)-*α*-L-arabinopyranosyl pomolic acid 28- $\beta$ -D-glucopyranosyl ester C<sub>47</sub>H<sub>76</sub>O<sub>17</sub> (913.12). White powder, [α]<sub>D</sub><sup>20</sup> = -65° (c = 0.24, MeOH). Source: BA NA MA SHAN SHI LIU *Randia formosa* (leaf). Ref: 3951.

**18539 Radiansaponin V**

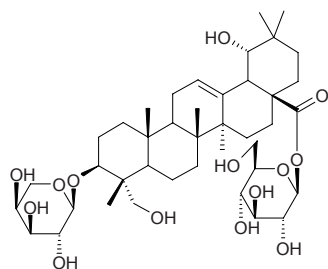
3-*O*-*α*-L-Rhamnopyranosyl-(1→2)-*α*-L-arabinopyranosyl siaresinolic acid 28- $\beta$ -D-glucopyranosyl ester C<sub>47</sub>H<sub>76</sub>O<sub>17</sub> (913.12). White powder, [α]<sub>D</sub><sup>20</sup> = -29.6° (c = 0.24, MeOH). Source: BA NA MA SHAN SHI LIU *Randia formosa* (leaf). Ref: 3951.



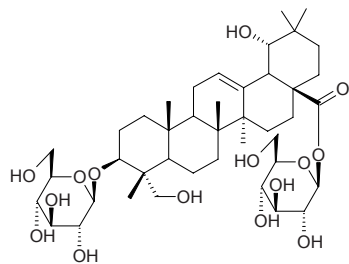


**18540 Randiasaponin VI**

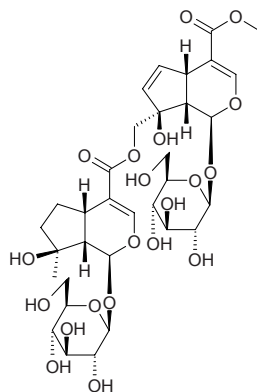
3-*O*- $\alpha$ -L-Arabinopyranosyl ilexosapogenin A 28- $\beta$ -D-glucopyranosyl ester  
 $C_{41}H_{66}O_{14}$  (782.97). White powder,  $[\alpha]_D^{20} = +7.1^\circ$  ( $c = 0.14$ , MeOH). Source:  
 BA NA MA SHAN SHI LIU *Randia formosa* (leaf). Ref: 3951.

**18541 Randiasaponin VII**

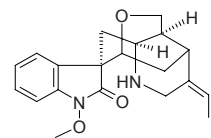
3-*O*- $\beta$ -D-Glucopyranosyl ilexosapogenin A 28- $\beta$ -D-glucopyranosyl ester  
 $C_{42}H_{68}O_{15}$  (813.00). White powder,  $[\alpha]_D^{20} = +16.6^\circ$  ( $c = 0.35$ , MeOH). Source:  
 BA NA MA SHAN SHI LIU *Randia formosa* (leaf). Ref: 3951.

**18542 Randinoside**

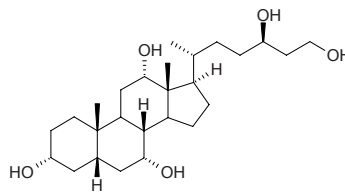
$C_{33}H_{46}O_{20}$  (762.72). White powder,  $[\alpha]_D^{20} = -6.5^\circ$  ( $c = 1.7$ , MeOH). Source:  
 SHAN SHI LIU *Randia spinosa*. Ref: 3380.

**18543 Rankinidine**

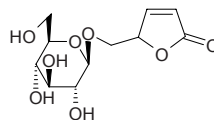
[106466-66-4]  $C_{20}H_{24}N_2O_3$  (340.43). mp 175~178°C,  $[\alpha]_D = -126^\circ$ . Source:  
 GOU WEN *Gelsemium elegans*. Ref: 294.

**18544 Ranol**

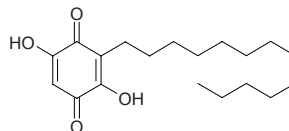
[67392-10-3]  $C_{26}H_{46}O_5$  (438.65). Source: HA SHI MA *Rana temporaria*  
*chensinensis*; *Rana amurensis*. Ref: 6.

**18545 Ranunculin**

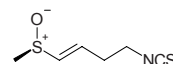
[644-69-9]  $C_{11}H_{16}O_8$  (276.25). mp 141~142°C. Pharm: Cytotoxic (RB,  $IC_{50} =$   
 $0.21 \mu\text{mol/L}$ , Bel7420,  $IC_{50} = 0.35 \mu\text{mol/L}$ ); antimutagenic (back mutation of  
*Salmonella typhimurium* TA<sub>100</sub> and TA<sub>102</sub> induced by mitomycin, InRt = 70%);  
 causes blistering in cuticle. Source: BAI TOU WENG *Pulsatilla chinensis*  
 (root: content = 0.66%<sup>[5501]</sup>), SHI LONG RUI *Ranunculus sceleratus*. Ref: 6,  
 658, 5501.

**18546 Rapanone**

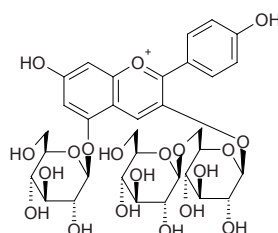
[573-40-0]  $C_{19}H_{30}O_4$  (322.45). Brown lamellar crystals (hexane-ethanol), mp  
 141~142°C; orange glittering lamellar crystals (CCl<sub>4</sub>), mp 137~142°C. Pharm:  
 Anthelmintic. Source: LA ZHU GUO *Aegiceras corniculatum*, DA WEI YAO  
*Heliotropium indicum*, ZHU SHA GEN *Ardisia crenata*, *Ardisia* sp., *Myrsine*  
 sp. Ref: 660, 658, 1521.

**18547 Raphanin**

$C_6H_9NOS_2$  (175.27). Pharm: Antibacterial (*Staphylococcus aureus*,  
*Escherichia coli*, EC = 1 mg/mL); antifungal; cytotoxic (shows potential  
 cancer protective properties) Source: LAI FU ZI *Raphanus sativus*. Ref: 1521,  
 5501.

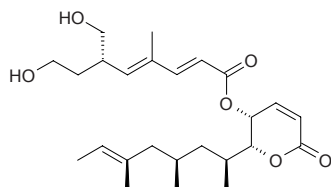
**18548 Raphanusin**

Rubrobrassicin [75093-88-8]  $C_{33}H_{41}O_{20}^+$  (757.68). Source: LAI FU *Raphanus*  
*sativus*. Ref: 660.

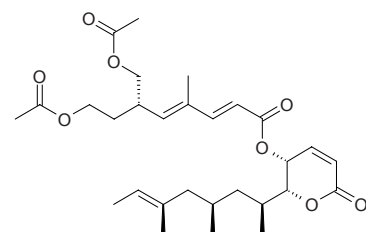


**18549 Rasfonin**

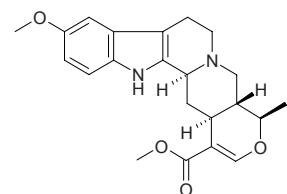
$C_{25}H_{38}O_6$  (434.58). White amorphous powder,  $[\alpha]_D^{24} = -223.6^\circ$  ( $c = 6.00$ , MeOH). **Pharm:** Immunosuppressant (mus splenic lymphocyte, ConA-induced proliferation,  $IC_{50} = 0.7\mu\text{g/mL}$ , control Cyclosporin,  $IC_{50} = 0.04\mu\text{g/mL}$ ; LPS-induced proliferation,  $IC_{50} = 0.5\mu\text{g/mL}$ , control Cyclosporin,  $IC_{50} = 0.07\mu\text{g/mL}$ ). **Source:** MAO SHU MEI *Trichurus terrophilus*. **Ref:** 4491.

**18550 Rasfonin diacetate**

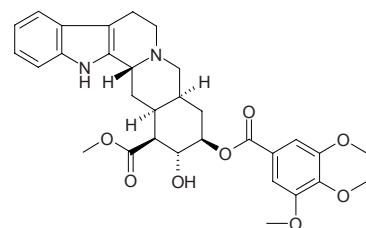
$C_{29}H_{42}O_8$  (518.65). Colorless amorphous powder,  $[\alpha]_D^{23} = -95.7^\circ$  ( $c = 0.72$ , MeOH). **Pharm:** Immunosuppressant (mus splenic lymphocyte, ConA-induced proliferation,  $IC_{50} = 6.0\mu\text{g/mL}$ , control Cyclosporin,  $IC_{50} = 0.04\mu\text{g/mL}$ ; LPS-induced proliferation,  $IC_{50} = 6.9\mu\text{g/mL}$ , control Cyclosporin,  $IC_{50} = 0.07\mu\text{g/mL}$ ). **Source:** MAO SHU MEI *Trichurus terrophilus*. **Ref:** 4491.

**18551 Raumitorine**

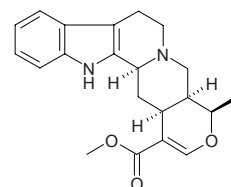
$C_{22}H_{26}N_2O_4$  (382.46). **Source:** CUI TU LUO FU MU *Rauwolfia vomitoria*. **Ref:** 660.

**18552 Raunescine**

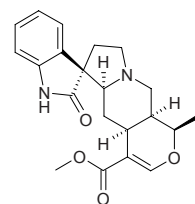
[117-73-7]  $C_{31}H_{36}N_2O_8$  (564.64). mp 160~170°C. **Pharm:** Antihypertensive; sedative; used in treatment of arrhythmia. **Source:** LUO FU MU *Rauwolfia verticillata*. **Ref:** 6, 658.

**18553 Rauniticine**

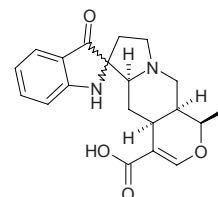
$C_{21}H_{24}N_2O_3$  (352.44). **Source:** GUANG LIANG LUO FU MU *Rauwolfia nitida*, MIAN MAO GOU TENG *Uncaria lanosa*, TUO YUAN GOU TENG *Uncaria elliptica*, XIA GOU TENG *Uncaria attenuata*. **Ref:** 1521, 5341.

**18554 Rauniticine oxindole A**

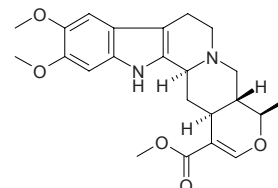
$C_{21}H_{24}N_2O_4$  (368.44). **Source:** TUO YUAN GOU TENG *Uncaria elliptica*. **Ref:** 5341.

**18555 Rauniticine pseudoindoxyl**

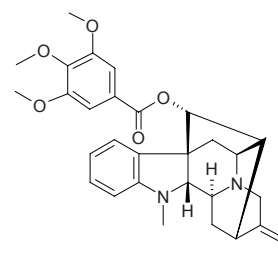
$C_{20}H_{22}N_2O_4$  (354.41). **Source:** TUO YUAN GOU TENG *Uncaria elliptica*. **Ref:** 5341.

**18556 Rauvanine**

$C_{23}H_{28}N_2O_5$  (412.49). **Source:** CUI TU LUO FU MU *Rauwolfia vomitoria*. **Ref:** 660.

**18557 Rauvomitine**

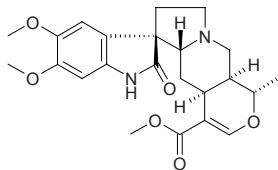
$C_{30}H_{34}N_2O_5$  (502.62). **Source:** CUI TU LUO FU MU *Rauwolfia vomitoria*, GANG GUO LUO FU MU *Rauwolfia obscura*. **Ref:** 660, 1521.



**18558 Rauvoxine**

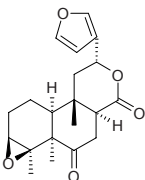
C<sub>23</sub>H<sub>28</sub>N<sub>2</sub>O<sub>6</sub> (428.49). Source: CUI TU LUO FU MU *Rauvolfia vomitoria*.

Ref: 660.

**18559 Ravidin A**

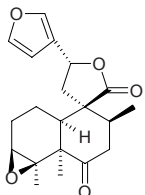
C<sub>20</sub>H<sub>24</sub>O<sub>5</sub> (344.41). Colorless crystals, mp 171~173°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -22.45° (c = 0.530, CHCl<sub>3</sub>). Source: QIAN HUI MAO GUAN JU *Nannoglottis ravida*

(root). Ref: 3852.

**18560 Ravidin B**

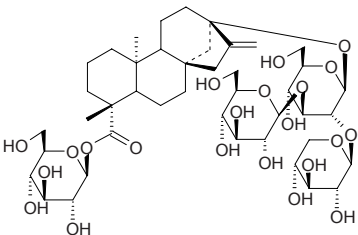
C<sub>20</sub>H<sub>24</sub>O<sub>5</sub> (344.41). White amorphous solid, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -77.50° (c = 0.120, CHCl<sub>3</sub>).

Source: QIAN HUI MAO GUAN JU *Nannoglottis ravida* (root). Ref: 3852.

**18561 Rebaudioside F**

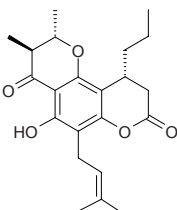
C<sub>43</sub>H<sub>68</sub>O<sub>22</sub> (937.01). Non-crystalline solid, [ $\alpha$ ]<sub>D</sub> = 25.5° (c = 1.0, MeOH).

Source: TIAN YE JU *Eupatorium rebaudianum*. Ref: 1987.

**18562 Recedensolide**

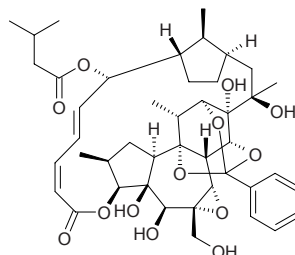
C<sub>22</sub>H<sub>28</sub>O<sub>5</sub> (372.47). Yellow oil, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -76.1° (c = 1.0, CH<sub>2</sub>Cl<sub>2</sub>). Pharm:

Cytotoxic (KB, ED<sub>50</sub> = 6.81µg/mL, HeLa, ED<sub>50</sub> = 6.27µg/mL, hmn medulloblastoma, ED<sub>50</sub> = 12.49µg/mL, control Doxorubicin, ED<sub>50</sub> = 0.15µg/mL, 0.14µg/mL, 0.19µg/mL respectively). Source: *Calophyllum blancoi* (seed). Ref: 4274.

**18563 Rediocide A**

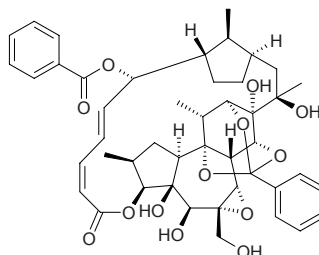
C<sub>44</sub>H<sub>58</sub>O<sub>13</sub> (794.95). White powder, mp 193~195°C, [ $\alpha$ ]<sub>D</sub><sup>30</sup> = -124.0° (c = 0.1, MeOH). Pharm: Acaricide (*Dermatophagoides pteronyssinus*, 7d, LC<sub>50</sub> = 2.53µg/cm<sup>2</sup>, control Benzyl benzoate, LC<sub>50</sub> = 6.6µg/cm<sup>2</sup>). Source:

*Trigonostemon reidioides* (root). Ref: 4440.

**18564 Rediocide C**

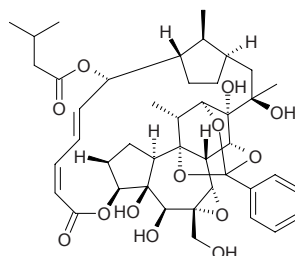
C<sub>46</sub>H<sub>54</sub>O<sub>13</sub> (814.94). White powder, mp 191~193°C, [ $\alpha$ ]<sub>D</sub><sup>30</sup> = -46.0° (c = 0.1, MeOH). Pharm: Acaricide (*Dermatophagoides pteronyssinus*, 7d, LC<sub>50</sub> = 0.78µg/cm<sup>2</sup>, control Benzyl benzoate, LC<sub>50</sub> = 6.6µg/cm<sup>2</sup>). Source:

*Trigonostemon reidioides* (root). Ref: 4440.

**18565 Rediocide E**

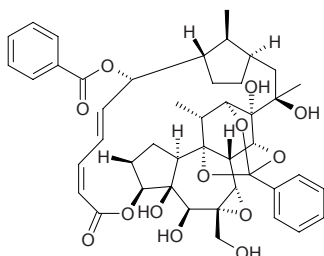
C<sub>43</sub>H<sub>56</sub>O<sub>13</sub> (780.92). White powder, mp 197~198°C, [ $\alpha$ ]<sub>D</sub><sup>30</sup> = -14.0° (c = 0.1, MeOH). Pharm: Acaricide (*Dermatophagoides pteronyssinus*, 7d, LC<sub>50</sub> = 5.59µg/cm<sup>2</sup>, control Benzyl benzoate, LC<sub>50</sub> = 6.6µg/cm<sup>2</sup>). Source:

*Trigonostemon reidioides* (root). Ref: 4440.

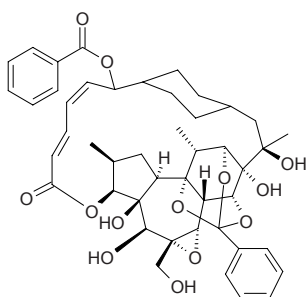


**18566 Rediocide F**

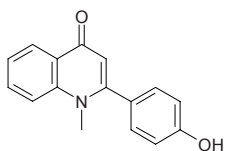
$C_{45}H_{52}O_{13}$  (800.91). White powder, mp 199–200°C,  $[\alpha]_D^{30} = -292.0^\circ$  ( $c = 0.1$ , MeOH). **Pharm:** Acaricide (*Dermatophagoides pteronyssinus*, 7d,  $LC_{50} = 0.92\mu\text{g}/\text{cm}^2$ , control Benzyl benzoate,  $LC_{50} = 6.6\mu\text{g}/\text{cm}^2$ ). **Source:** *Trigonostemon reidioides* (root). **Ref:** 4440.

**18567 Rediocide G**

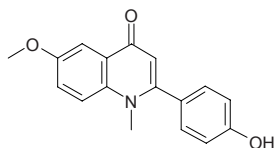
$C_{46}H_{54}O_{13}$  (814.94). White powder, mp >230°C (dec). **Pharm:** Cytotoxic. **Source:** *Trigonostemon reidioides* (root). **Ref:** 4519.

**18568 Reevesianine A**

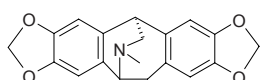
$C_{16}H_{13}NO_2$  (251.29). **Source:** YIN YU *Skimmia reevesiana*. **Ref:** 660.

**18569 Reevesianine B**

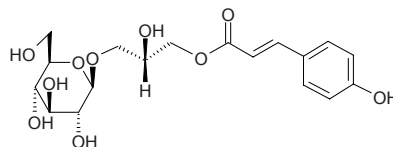
$C_{17}H_{15}NO_3$  (281.31). **Source:** YIN YU *Skimmia reevesiana*. **Ref:** 660.

**18570 Reframidine**

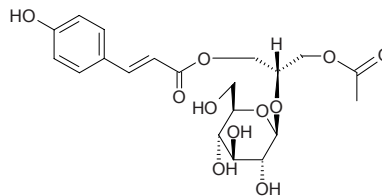
$C_{19}H_{17}NO_4$  (323.35). **Source:** LIE YE YE YING SU *Papaver nudicaule* var. *chinense*. **Ref:** 660.

**18571 Regaloside A**

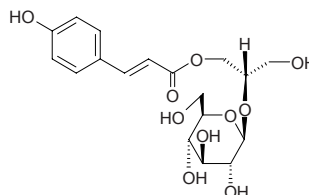
$C_{18}H_{24}O_{10}$  (400.39). **Source:** BAI HE *Lilium brownii* var. *viridulum* [Syn. *Lilium brownii* var. *colchesteri*], HEI BAI HE *Fritillaria camtschatscensis*, JUAN DAN *Lilium tigrinum* [Syn. *Lilium lancifolium*]. **Ref:** 660, 1521.

**18572 Regaloside B**

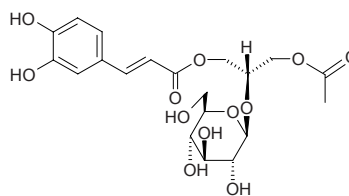
$C_{20}H_{26}O_{11}$  (442.42). **Source:** SHE XIANG BAI HE *Lilium longiflorum*. **Ref:** 660, 1521.

**18573 Regaloside D**

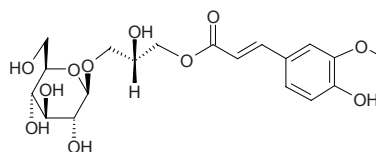
$C_{18}H_{24}O_{10}$  (400.39). **Source:** BAI HE *Lilium brownii* var. *viridulum* [Syn. *Lilium brownii* var. *colchesteri*], SHE XIANG BAI HE *Lilium longiflorum*. **Ref:** 660, 1521.

**18574 Regaloside E**

$C_{20}H_{26}O_{12}$  (458.42). **Source:** SHE XIANG BAI HE *Lilium longiflorum*. **Ref:** 660, 1521.

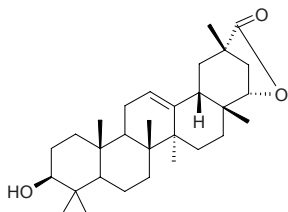
**18575 Regaloside F**

$C_{19}H_{26}O_{11}$  (430.41). **Source:** JUAN DAN *Lilium tigrinum* [Syn. *Lilium lancifolium*]. **Ref:** 660, 1521.

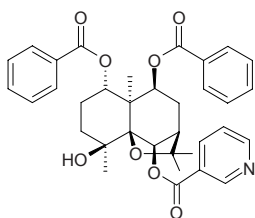


**18576 Regelide**

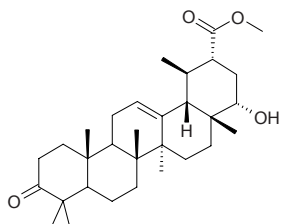
$C_{30}H_{46}O_3$  (454.70). Source: HEI MAN *Tripterygium regelii*, XIANG SI TENG *Abrus precatorius*. Ref: 660, 1521.

**18577 Regelidine**

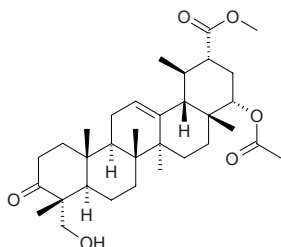
$C_{35}H_{37}NO_8$  (599.69). Source: HEI MAN *Tripterygium regelii*. Ref: 660, 1521.

**18578 Regelin**

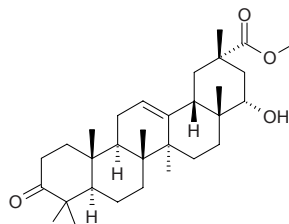
$C_{31}H_{48}O_4$  (484.73). Source: HEI MAN *Tripterygium regelii*, KUN MING SHAN HAI TANG *Tripterygium hypoglaucum*. Ref: 660, 1521.

**18579 Regelin C**

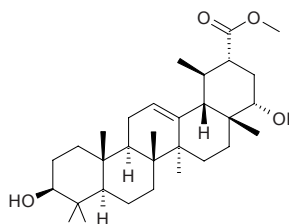
Methyl 3-oxo-22 $\alpha$ -acetoxy-23-hydroxy-urs-12-ene-30-oate [121880-06-6]  $C_{33}H_{50}O_6$  (542.76). Colorless massive crystals, mp 161~163°C,  $[\alpha]_D^{20} = +60^\circ$  ( $c = 0.5$ ,  $CHCl_3$ ). Source: HEI MAN *Tripterygium regelii*. Ref: 120.

**18580 Regelin D**

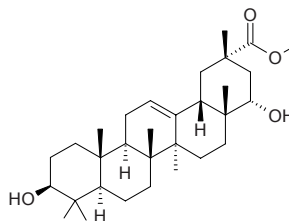
Methyl 3-oxo-22 $\alpha$ -hydroxy-olean-12-ene-29-oate [121880-07-7]  $C_{31}H_{48}O_4$  (484.73). Colorless acicular crystals, mp 197~198°C,  $[\alpha]_D^{20} = +54^\circ$  ( $c = 0.3$ ,  $CHCl_3$ ). Source: HEI MAN *Tripterygium regelii*, LEI GONG TENG *Tripterygium wilfordii*. Ref: 120, 1521.

**18581 Regelindiol A**

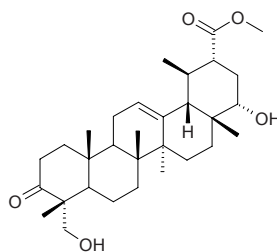
Methyl-3 $\beta$ ,22 $\alpha$ -dihydroxy-urs-12-ene-30-oate [121880-08-8]  $C_{31}H_{50}O_4$  (486.74). Colorless acicular crystals, mp 241~242°C,  $[\alpha]_D^{20} = +57^\circ$  ( $c = 0.2$ ,  $CHCl_3$ ). Source: HEI MAN *Tripterygium regelii*. Ref: 120.

**18582 Regelindiol B**

Methylabrusgenate; Methyl-3 $\beta$ ,22 $\alpha$ -dihydroxy-olean-12-ene-29-oate [84104-83-6]  $C_{31}H_{50}O_4$  (486.74). Colorless acicular crystals, mp 198~199°C,  $[\alpha]_D^{20} = +44^\circ$  ( $c = 0.2$ ,  $CHCl_3$ ). Source: HEI MAN *Tripterygium regelii*, XIANG SI TENG *Abrus precatorius*. Ref: 120, 1300.

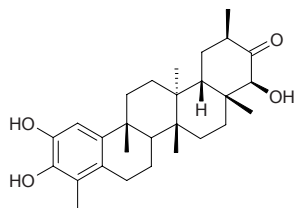
**18583 Regelinol**

$C_{31}H_{48}O_5$  (500.73). Source: HEI MAN *Tripterygium regelii*. Ref: 660, 1521.

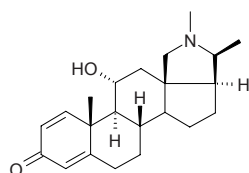


**18584 Regeol A**

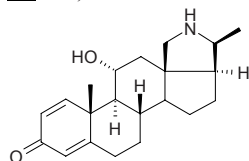
$C_{28}H_{40}O_4$  (440.63). **Pharm:** Antioxidant (DPPH scavenger, for  $40\mu\text{mol/L}$  DPPH radical,  $SC_{50} = 10\mu\text{mol/L}$ ). **Source:** SUO LA MU *Salacia prinoides* [Syn. *Salacia chinensis*] (stem). **Ref:** 4378.

**18585 Regholarrhenine A**

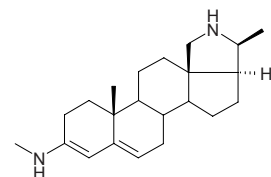
$C_{22}H_{31}NO_2$  (341.50). **Source:** ZHI XIE MU PI *Holarrhena antidysenterica*. **Ref:** 660, 1521.

**18586 Regholarrhenine B**

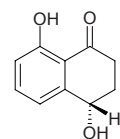
$C_{21}H_{29}NO_2$  (327.47). **Source:** ZHI XIE MU PI *Holarrhena antidysenterica*. **Ref:** 660, 1521.

**18587 Regholarrhenine C**

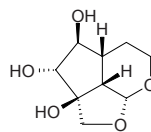
$C_{22}H_{34}N_2$  (326.53). **Source:** ZHI XIE MU PI *Holarrhena antidysenterica*. **Ref:** 660.

**18588 (-)-Regiolone**

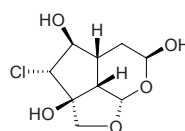
(4S)-4,8-Dihydroxy- $\alpha$ -tetralone  $C_{10}H_{10}O_3$  (178.19).  $[\alpha]_D^{26} = -11.3^\circ$  ( $c = 0.20$ , EtOH). **Pharm:** Cytotoxic inactive (MTT assay, HT29 cell line, MCF7 cell line)<sup>[4321]</sup>. **Source:** DONG BEI HU TAO *Juglans mandshurica* var. *sieboldiana* (fruit), HU TAO QIU *Juglans mandshurica* (root), HU TAO SHU PI *Juglans regia* (bark), HUANG QI II *Engelhardia roxburghiana* (root). **Ref:** 660, 4321, 4492, 5059.

**18589 Rehmaglutin A**

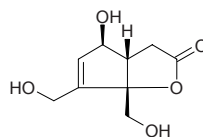
[103744-82-7]  $C_9H_{14}O_5$  (202.21). **Source:** GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], SHU DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*]. **Ref:** 2, 660.

**18590 Rehmaglutin B**

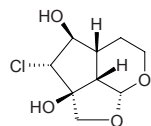
[103744-83-8]  $C_9H_{13}ClO_5$  (236.65). **Source:** GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*]. **Ref:** 2, 660.

**18591 Rehmaglutin C**

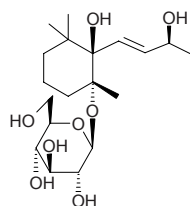
[103744-81-6]  $C_9H_{12}O_5$  (200.19). **Source:** GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*]. **Ref:** 2, 660.

**18592 Rehmaglutin D**

[103744-84-9]  $C_9H_{13}ClO_4$  (220.65). **Source:** GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], SHU DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*]. **Ref:** 2, 660, 5501.

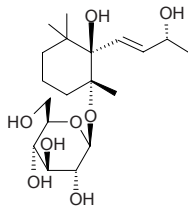
**18593 Rehmaionoside A**

[104112-06-3]  $C_{19}H_{34}O_8$  (390.48). **Source:** GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*]. **Ref:** 2.

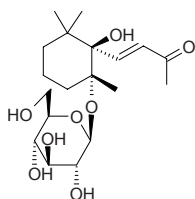


**18594 Rehmaionoside B**

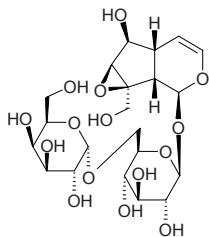
[104056-83-9] C<sub>19</sub>H<sub>34</sub>O<sub>8</sub> (390.48). Source: GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*]. Ref: 2.

**18595 Rehmaionoside C**

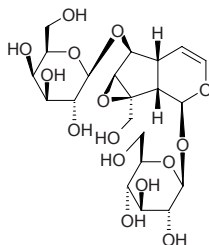
[104112-05-2] C<sub>19</sub>H<sub>32</sub>O<sub>8</sub> (388.46). Source: GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*]. Ref: 2.

**18596 Rehmannioside A**

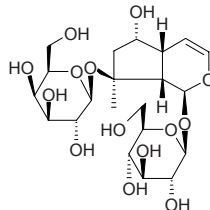
[81720-05-0] C<sub>21</sub>H<sub>32</sub>O<sub>15</sub> (524.48). Source: GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], SHU DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], XIAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*]. Ref: 2, 660.

**18597 Rehmannioside B**

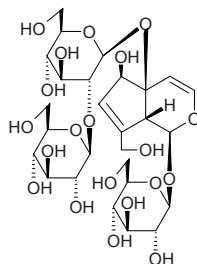
[81720-06-1] C<sub>21</sub>H<sub>32</sub>O<sub>15</sub> (524.48). Source: GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], SHU DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], XIAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*]. Ref: 2, 660.

**18598 Rehmannioside C**

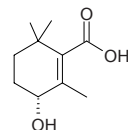
[81720-07-2] C<sub>21</sub>H<sub>34</sub>O<sub>14</sub> (510.50). Source: GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], SHU DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], XIAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*]. Ref: 2, 660.

**18599 Rehmannioside D**

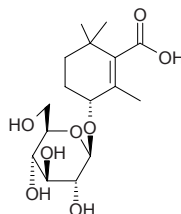
Melittoside 3''-O-β-glucopyranoside [81720-08-3] C<sub>27</sub>H<sub>42</sub>O<sub>20</sub> (686.62). Amorphous, [α]<sub>D</sub><sup>20</sup> = -36.1° (c = 0.7, MeOH). Pharm: Hypoglycemic (mus with spontaneous diabetes, orl, weak activity); antihepatotoxin (treatment of infection from hepatitis virus). Source: GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], KU LANG SHU *Clerodendrum inerme* (aerial parts), SHU DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], XIAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*]. Ref: 2, 660, 1787, 1788, 5186.

**18600 Rehmapicrogenin**

C<sub>10</sub>H<sub>16</sub>O<sub>3</sub> (184.24). Source: SHU DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*]. Ref: 660.

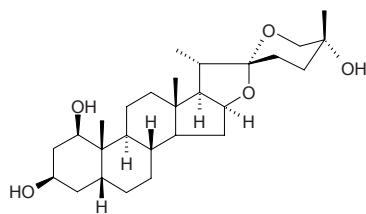
**18601 Rehmapicroside**

[104056-82-8] C<sub>16</sub>H<sub>26</sub>O<sub>8</sub> (346.38). Source: GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*]. Ref: 2.

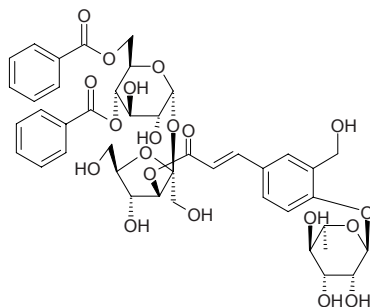


**18602 Reineckiagenin**

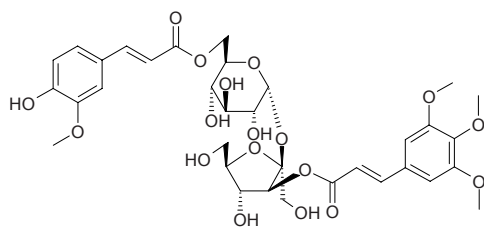
[6808-26-0]  $C_{27}H_{44}O_5$  (448.65). mp 278~280°C. Source: JI XIANG CAO *Reineckea carnea*. Ref: 6.

**18606 Reinosio D**

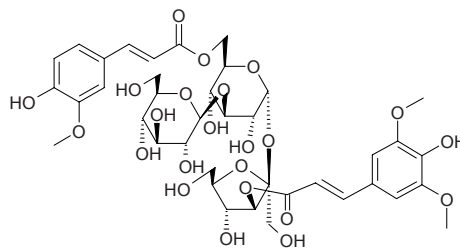
$C_{42}H_{48}O_{20}$  (872.84).  $[\alpha]_D = -51.1^\circ$ . Source: SHI YE CAO *Polygala reinii*, HUANG HUA YUAN ZHI *Polygala arillata*. Ref: 2184.

**18603 Reinosio A**

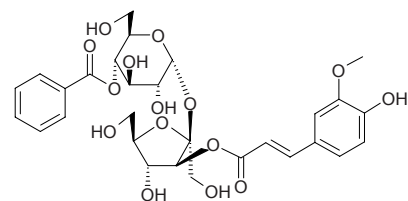
$C_{34}H_{42}O_{18}$  (738.70).  $[\alpha]_D = -4.8^\circ$ . Source: SHI YE CAO *Polygala reinii*. Ref: 2184.

**18607 Reinosio E**

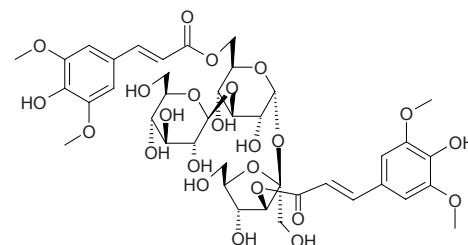
$C_{39}H_{50}O_{23}$  (886.82).  $[\alpha]_D = -52.2^\circ$ . Source: SHI YE CAO *Polygala reinii*. Ref: 2184.

**18604 Reinosio B**

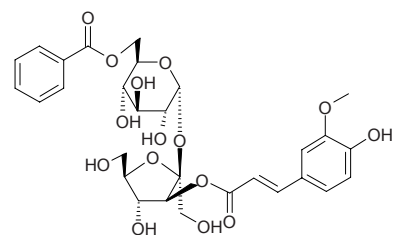
$C_{29}H_{34}O_{15}$  (622.59).  $[\alpha]_D = -51.8^\circ$ . Source: SHI YE CAO *Polygala reinii*. Ref: 2184.

**18608 Reinosio F**

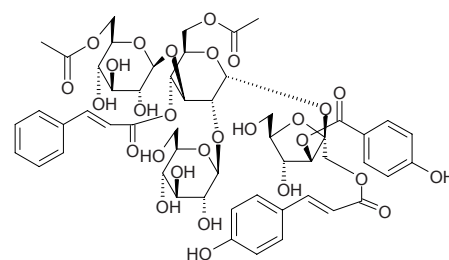
$C_{40}H_{52}O_{24}$  (916.85).  $[\alpha]_D = -59.0^\circ$ . Source: SHI YE CAO *Polygala reinii*. Ref: 2184.

**18605 Reinosio C**

$C_{29}H_{34}O_{15}$  (622.59).  $[\alpha]_D = -29.3^\circ$ . Source: SHI YE CAO *Polygala reinii*. Ref: 2184.

**18609 Reinosio G**

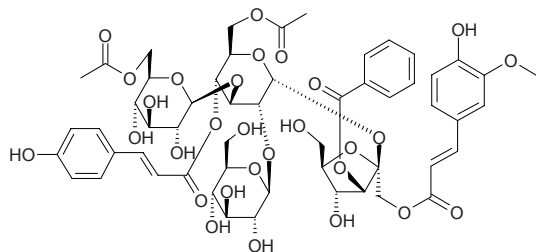
$C_{53}H_{62}O_{28}$  (1147.07).  $[\alpha]_D = -30.6^\circ$ . Source: GUANG LIANG YUAN ZHI *Polygala nitida*. Ref: 2184.



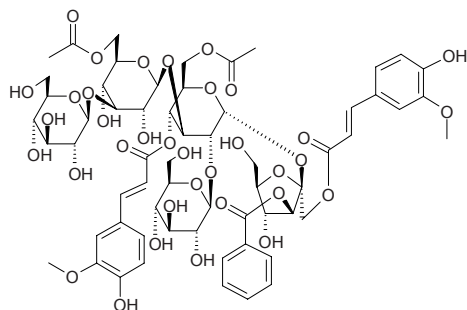


**18610 Reiniose H**

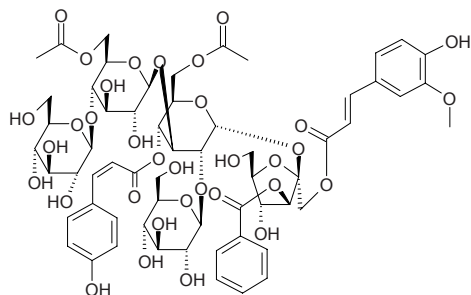
$C_{54}H_{64}O_{29}$  (1177.09).  $[\alpha]_D = -15.7^\circ$ . Source: GUANG LIANG YUAN ZHI *Polygala nitida*. Ref: 2184.

**18611 Reiniose I**

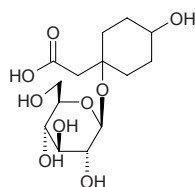
$C_{61}H_{76}O_{35}$  (1369.26).  $[\alpha]_D = -21.0^\circ$ . Source: SHI YE CAO *Polygala reinii*. Ref: 2184.

**18612 Reiniose J**

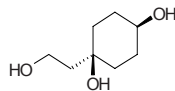
$C_{60}H_{74}O_{34}$  (1339.24).  $[\alpha]_D = +2.6^\circ$ . Source: SHI YE CAO *Polygala reinii*. Ref: 2184.

**18613 Rengynic acid 1'-O-β-D-glucoside**

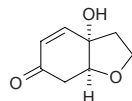
$C_{14}H_{24}O_9$  (336.34). White powder. Source: LIAN QIAO *Forsythia suspensa*. Ref: 2507.

**18614 Rengyol**

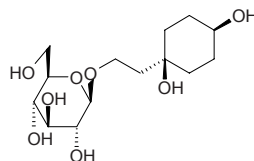
$C_8H_{16}O_3$  (160.21). Source: LIAN QIAO *Forsythia suspensa*, TONG LUO HAN *Milingtonia hortensis*. Ref: 660.

**18615 Rengyolone**

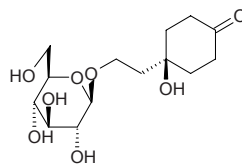
Halleridone; 3,3α,7,7α-Tetrahydro-3α-hydroxy-6(2H)-benzofuranone [ $93675-87-7$ ]  $C_8H_{10}O_3$  (154.17). Source: LIAN QIAO *Forsythia suspensa*, LING MU *Eurya japonica*, TONG LUO HAN *Milingtonia hortensis*. Ref: 660.

**18616 Rengyoside A**

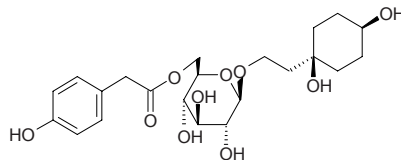
$C_{14}H_{26}O_8$  (322.36). Source: LIAN QIAO *Forsythia suspensa*, TONG LUO HAN *Milingtonia hortensis*. Ref: 660.

**18617 Rengyoside B**

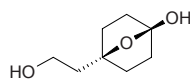
$C_{14}H_{24}O_8$  (320.34). Source: LIAN QIAO *Forsythia suspensa*, TONG LUO HAN *Milingtonia hortensis*. Ref: 660.

**18618 Rengyoside C**

$C_{22}H_{32}O_{10}$  (456.49). Source: LIAN QIAO *Forsythia suspensa*. Ref: 660.

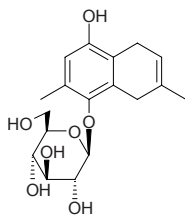
**18619 Rengyoxide**

$C_8H_{14}O_3$  (158.20). Source: LIAN QIAO *Forsythia suspensa*. Ref: 660.

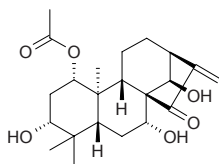


**18620 Renifolin**

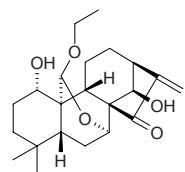
[36314-24-6] C<sub>18</sub>H<sub>24</sub>O<sub>7</sub> (352.39). mp 236~238°C (dec). Source: LU XIAN CAO *Pyrola calliantha* [Syn. *Pyrola rotundifolia* ssp. *chinensis*], YUAN YE LU TI CAO *Pyrola rotundifolia*. Ref: 6, 660.

**18621 Reniformin B**

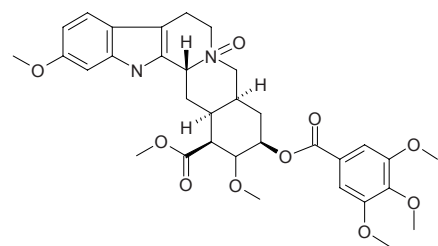
C<sub>22</sub>H<sub>32</sub>O<sub>6</sub> (392.50). mp 275~277°C, [α]<sub>D</sub><sup>20</sup> = -37.13° (c = 0.1, EtOH). Source: SHEN XING XIANG CHA CAI *Isodon latifolia* var. *reniformis*. Ref: 4067.

**18622 Reniformin C**

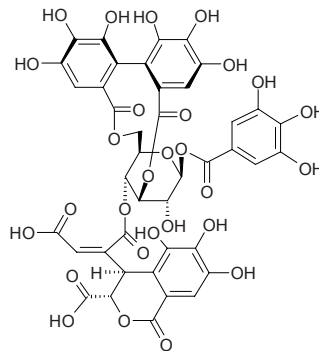
C<sub>22</sub>H<sub>32</sub>O<sub>5</sub> (376.50). mp 186.5~187.5°C, [α]<sub>D</sub><sup>20</sup> = -33.80° (c = 0.1, EtOH). Source: SHEN XING XIANG CHA CAI *Isodon latifolia* var. *reniformis*. Ref: 4067.

**18623 Renoxidine**

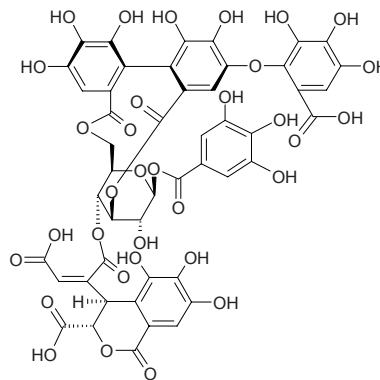
C<sub>33</sub>H<sub>40</sub>N<sub>2</sub>O<sub>9</sub> (608.69). Pharm: Antiadrenergic; anticonvulsant; antineoplastic; sedative; antihypertensive. Source: CUI TU LUO FU MU *Rauwolfia vomitoria*, DA YE LUO FU MU *Rauwolfia macrophylla*, MAN CHANG CHUN HUA *Vinca minor*, SHU JI GU CHANG SHAN *Alstonia constricta*, YIN DU LUO FU MU *Rauwolfia serpentina*. Ref: 660, 1521.

**18624 Repandusinic acid A**

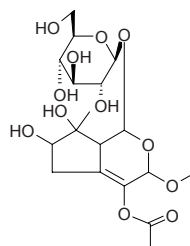
[125516-10-1] C<sub>41</sub>H<sub>30</sub>O<sub>28</sub> (970.68). Brown amorphous powder, [α]<sub>D</sub><sup>13</sup> = -54.3° (c = 0.9, methanol). Pharm: Topoisomerase II inhibitor (IC<sub>100</sub> = 0.5 μmol/L); HIV reverse transcriptase inhibitor (IC<sub>50</sub> = 0.1 μg/mL); low toxin (mus, orl, 100mg/kg, no dying). Source: LONG YAN YE *Euphoria longan* [Syn. *Dimocarpus longan*], SHI YAN FENG *Mallotus repandus* var. *chrysocarpus* [Syn. *Mallotus chrysocarpus*; *Mallotus repandus*], ZHU ZI CAO *Phyllanthus niruri*. Ref: 660, 900.

**18625 Repandusinic acid B**

C<sub>48</sub>H<sub>34</sub>O<sub>33</sub> (1138.79). Source: SHI YAN FENG *Mallotus repandus* var. *chrysocarpus* [Syn. *Mallotus chrysocarpus*; *Mallotus repandus*]. Ref: 660.

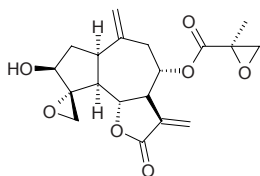
**18626 Reponside**

C<sub>18</sub>H<sub>28</sub>O<sub>12</sub> (436.42). Source: JIA LIAN QIAO *Duranta repens*. Ref: 660.

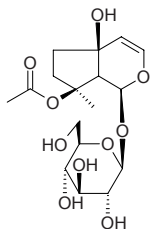


**18627 Repin**

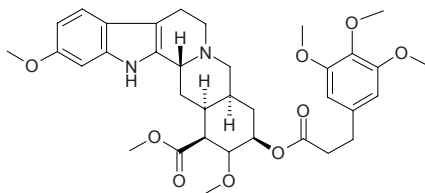
[11024-67-2] C<sub>19</sub>H<sub>22</sub>O<sub>7</sub> (362.37). Amorphous powder,  $[\alpha]_D^{25} = +54^\circ$  ( $c = 0.9$ , chloroform). **Pharm:** Antiprotozoal (amebic and *Trichomonas vaginalis*, 0.24–7.80 μg/mL). **Source:** DING YU JU *Acroptilon repens*. **Ref:** 661.

**18628 Reptoside**

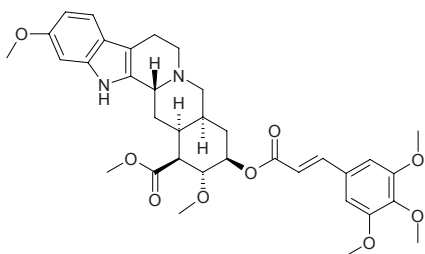
C<sub>17</sub>H<sub>26</sub>O<sub>10</sub> (390.39). **Source:** DU ZHONG *Eucommia ulmoides*, DU ZHONG YE *Eucommia ulmoides*, LONG TU ZHU *Clerodendrum thomsonae*, PU FU JIN GU CAO *Ajuga reptans*. **Ref:** 660.

**18629 Rescinnamidine**

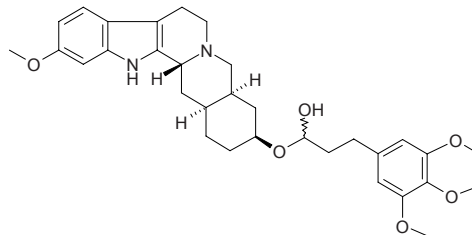
C<sub>35</sub>H<sub>44</sub>N<sub>2</sub>O<sub>9</sub> (636.75). **Source:** YIN DU LUO FU MU *Rauwolfia serpentina*. **Ref:** 660, 1521.

**18630 Rescinnamine**

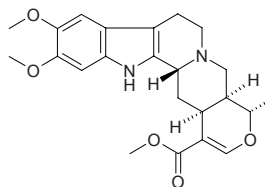
[84-34-4] C<sub>35</sub>H<sub>42</sub>N<sub>2</sub>O<sub>9</sub> (634.74). Tiny acicular crystals (benzene), mp 238–239°C (vacuum),  $[\alpha]_D^{24} = -97^\circ$  ( $c = 1$ , chloroform). **Pharm:** Antihypertensive; sedative. **Source:** CUI TU LUO FU MU *Rauwolfia vomitoria*, DAI YE LUO FU MU *Rauwolfia macrophylla*, GUANG LIANG LUO FU MU *Rauwolfia nitida*, YIN DU LUO FU MU *Rauwolfia serpentina*. **Ref:** 661.

**18631 Rescinnaminol**

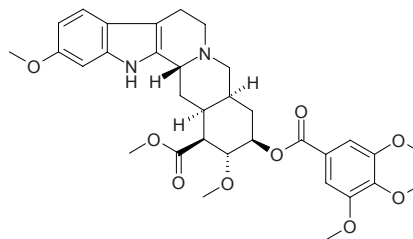
C<sub>32</sub>H<sub>42</sub>N<sub>2</sub>O<sub>6</sub> (550.70). **Source:** YIN DU LUO FU MU *Rauwolfia serpentina*. **Ref:** 660, 1521.

**18632 Reserpiline**

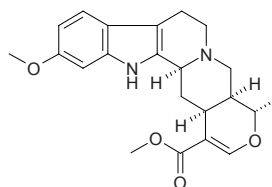
[131-02-2] C<sub>23</sub>H<sub>28</sub>N<sub>2</sub>O<sub>5</sub> (412.47). Amorphous powder,  $[\alpha]_D^{20} = -38^\circ$  (ethanol),  $\sim 14$  ( $c = 1.5$ , pyridine),  $\sim 12$  ( $c = 1.7$ , chloroform). **Pharm:** Antihypertensive. **Source:** YIN DU LUO FU MU *Rauwolfia serpentina*, GUANG LIANG LUO FU MU *Rauwolfia nitida*. **Ref:** 658.

**18633 Reserpine**

Serpasil; Serpax; Alserin [50-55-5] C<sub>33</sub>H<sub>40</sub>N<sub>2</sub>O<sub>9</sub> (608.69). Prismatic crystals, mp 264–265°C (dec),  $[\alpha]_D^{22} = -118^\circ$  (CHCl<sub>3</sub>), easily soluble in CHCl<sub>3</sub>, soluble in benzene, acetic ester, slightly soluble in ethanol, insoluble in water.<sup>[5507]</sup> **Pharm:** Antihypertensive (effective component in total alkaloids of Common Devilpepper, *Rauwolfia verticillata*, LUO FU MU); sedative. **Source:** CUI TU LUO FU MU *Rauwolfia vomitoria*, DIAN JI GU CHANG SHAN *Alstonia yunnanensis*, KUO YE LUO FU MU *Rauwolfia latifrons*, LUO FU MU *Rauwolfia verticillata*, PI LI LUO FU MU *Rauwolfia perakensis*, YIN DU LUO FU MU *Rauwolfia serpentina* (isolated from the plant firstly in 1952<sup>[5507]</sup>), YUN NAN LUO FU MU *Rauwolfia yunnanensis*. **Ref:** 5, 6, 658, 660, 5507.

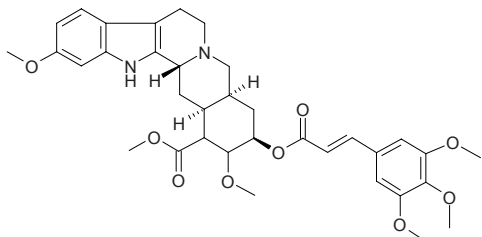
**18634 Reserpiline 1**

Pubescine C<sub>22</sub>H<sub>26</sub>N<sub>2</sub>O<sub>4</sub> (382.46). **Source:** DA CHANG CHUN HUA *Vinca herbacea* [Syn. *Vinca major*], LUO FU MU *Rauwolfia verticillata*, YIN DU LUO FU MU *Rauwolfia serpentina*. **Ref:** 660, 1521.

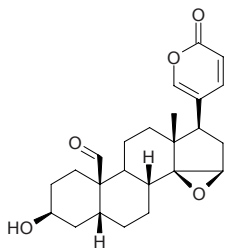


**18635 Reserpinine 2**

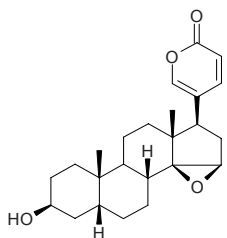
Anaprel  $C_{35}H_{42}N_2O_9$  (634.73). Source: CUI TU LUO FU MU *Rauwolfia vomitoria*, DA YE LUO FU MU *Rauwolfia macrophylla*, KA FU LA LUO FU MU *Rauwolfia caffra*, KE MING XI LUO FU MU *Rauwolfia cumminsi*, *Rauwolfia oreogiton*, *Rauwolfia volkensii*. Ref: 660, 1521.

**18636 Resibufagin**

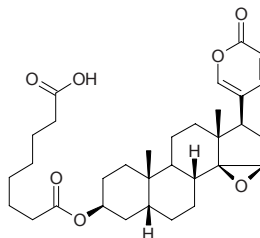
[20987-24-0]  $C_{24}H_{30}O_5$  (398.50). mp 210~212°C. Source: CHAN SU *Bufo bufo gargarizans*; *Bufo melanostictus*. Ref: 2, 6.

**18637 Resibufogenin**

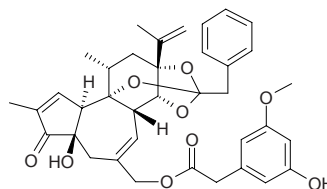
Bufogenin [465-39-4]  $C_{24}H_{32}O_4$  (384.52). mp 113~140°C, 155~168°C. Pharm: Cardiotoxic; increases blood pressure; respiratory stimulant; used in treatment of heart failure and breathing inhibition; cytotoxic (*in vitro*, KB,  $IC_{50}$  = 1.3  $\mu$ g/mL; HL-60,  $IC_{50}$  = 0.5  $\mu$ g/mL; MH-60,  $IC_{50}$  = 10  $\mu$ g/mL)<sup>[3082]</sup>; cytotoxic (*in vitro*, KB,  $IC_{50}$  = 1.34  $\mu$ g/mL; MH-60,  $IC_{50}$  = 10.48  $\mu$ g/mL)<sup>[4634]</sup>. Source: CHAN PI *Bufo bufo gargarizans*; *Bufo melanostictus*, CHAN SU *Bufo bufo gargarizans* (dried secretion: content = 0.51%<sup>[5508]</sup>); *Bufo melanostictus* (dried secretion: content = 0.05%<sup>[5508]</sup>), CHAN CHU *Bufo bufo gargarizans*; *Bufo melanostictus*. Ref: 2, 6, 617, 658, 3082, 4634, 5508.

**18638 Resibufogenin 3-hydrogen suberate**

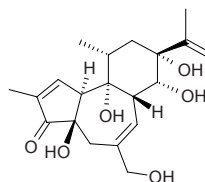
$C_{32}H_{44}O_7$  (540.70). Source: CHAN SU *Bufo bufo gargarizans*; *Bufo melanostictus*. Ref: 2.

**18639 Resiniferatoxin**

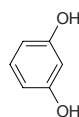
[57444-62-9]  $C_{37}H_{40}O_9$  (628.73). Pharm: Irritant (to skin). Source: SHU ZHI DA JI *Euphorbia resinifera*, PO SEN DA JI *Euphorbia poissonii*. Ref: 658.

**18640 Resiniferonol**

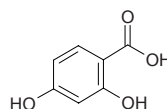
[57444-60-7]  $C_{20}H_{28}O_6$  (364.44). Pharm: Carcinogen assistant (ester derivatives); Irritant (to skin, ester derivatives). Source: SHU ZHI DA JI *Euphorbia resinifera*. Ref: 658.

**18641 Resorcinol**

[108-46-3]  $C_6H_6O_2$  (110.11). Source: GANG SONG *Pinus rigida*. Ref: 658.

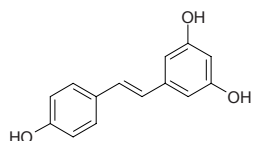
**18642  $\beta$ -Resorcylic acid**

[89-86-1]  $C_7H_6O_4$  (154.12). mp 218~219°C. Source: CI HUAI HUA *Robinia pseudoacacia*. Ref: 6.

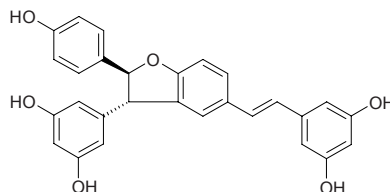


**18643 Resveratrol**

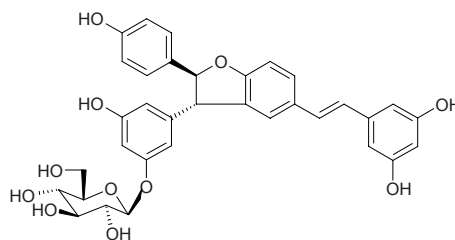
3,5,4'-Trihydroxystilbene [501-36-0] C<sub>14</sub>H<sub>12</sub>O<sub>3</sub> (228.25). Grey-white powder (methanol), mp 253~255°C (methanol), mp 261°C (diluted ethanol, dec), easily soluble in chloroform, ether, methanol, ethanol, acetone.<sup>[507]</sup> **Pharm:** Cytotoxic (cyclooxygenase-1 inhibitor)<sup>[5038]</sup>; COX-2 inhibitor (IC<sub>50</sub> = 1.3 μmol/L)<sup>[3869]</sup>; COX-1 inhibitor (IC<sub>50</sub> = 1.1 μmol/L)<sup>[3869]</sup>; COX-1 inhibitor (IC<sub>50</sub> = 0.25 μg/mL)<sup>[5030]</sup>; COX-2 inhibitor (IC<sub>50</sub> = 0.30 μg/mL)<sup>[5030]</sup>; antibacterial; antifungal; antihypercholesterolemic (inhibits liver damage, glycoside); antioxidant (inhibits lipid peroxidation, rat mitochondria of hepatocyte, induced by ADP and NADPH); antioxidant (DPPH radical scavenger, IC<sub>50</sub> = 38.9 μmol/L, control Vitamin E, IC<sub>50</sub> = 20.7 μmol/L, control BHT, IC<sub>50</sub> = 12.6 μmol/L)<sup>[3452]</sup>; antioxidant (superoxide anion scavenger, IC<sub>50</sub> = 51.1 μmol/L, control Vitamin E, 100 μmol/L, InRt < 50%, control BHT, IC<sub>50</sub> = 24.6 μmol/L)<sup>[3452]</sup>; antioxidant (lipid peroxidation inhibitor, IC<sub>50</sub> = 3.3 μmol/L, control Vitamin E, IC<sub>50</sub> = 5.3 μmol/L, control BHT, IC<sub>50</sub> = 1.0 μmol/L)<sup>[3452]</sup>; antioxidant (superoxide anion scavenger, 100 μmol/L, InRt = (50.5 ± 1.7)%, positive control (+)-Catechin, IC<sub>50</sub> = (3.67 ± 0.14) μmol/L)<sup>[4514]</sup>; anti-inflammatory (modulator of cytokine network: blocks TNF-α-induced cell-cell adhesion between HUVECs and THP-1 cells)<sup>[4416]</sup>; anti-inflammatory (COX-1/COX-2 inhibitor; prostanoid inhibitor via LOX pathway; K562 cells apoptosis via inhibition of both LOX and COX activity; causes a pronounced reduction in the *c-fos* and TGF-β1 expression in mouse skin stimulated by phorbol myristate acetate (PMA); inhibits COX-2 transcription and activity associated with inhibition of AP-1-mediated gene expression in PMA-treated mammary epithelial cells, by inhibiting signal transduction through PKC)<sup>[4415]</sup>; anti-inflammatory (NF-κB pathway)<sup>[4415]</sup>; anti-inflammatory (cultured cells, suppresses iNOS expression and NO production, by down-regulation of NF-κB binding activity via blockade of IκBα degradation)<sup>[4415]</sup>; phytoalexin<sup>[4415]</sup>; antiallergic<sup>[4415]</sup>; antioxidant<sup>[4415]</sup>; anti-carcinogenic<sup>[4415]</sup>; platelet aggregation inhibitor (2.5 μg/mL collagen-induced, IC<sub>50</sub> = (11.6 ± 2.1) μmol/L, *p* < 0.01; 6 μmol/L ADP-induced, IC<sub>50</sub> = (17.8 ± 3.3) μmol/L, *p* < 0.01)<sup>[5094]</sup>; aromatase inhibitor inactive (*in vitro*, IC<sub>50</sub> > 40 μmol/L; control Aminoglutethimide, IC<sub>50</sub> = 6.4 μmol/L)<sup>[3090]</sup>. **Source:** BAI LI LU *Veratrum album* (in 1940, isolated from the plant<sup>[5507]</sup>), CHI CHI JUE MING *Cassia dentata*, DA DA HE MIAN BAO GUO *Artocarpus dadah*, DUN YE CHE ZHOU CAO *Trifolium dubium*, FANG JI YE BA QIA *Smilax menispermoides*, GOU SHU *Broussonetia papyrifera*<sup>[3090]</sup>, HE SHOU WU *Polygonum multiflorum*, HU ZHANG *Polygonum cuspidatum* (root: content = 1.10%<sup>[5501]</sup>), LUO HUA SHENG *Arachis hypogaea*, MAO CI JIN JI ER *Caragana tibetica* (stem), MAO MAI LIAO *Pleuropterus ciliinervis*, MAO YE LI LU *Veratrum grandiflorum* (root), PU<sup>(2)</sup> TAO *Vitis vinifera*, QING MEI *Vatica rassak* (stem cortex), SA HA LIN YUN SHAN *Picea glehnii*, SHE PU TAO *Ampelopsis brevipedunculata*, TIAN SHAN DA HUANG *Rheum wittrockii*, WO SHI AN *Eucalyptus wandoo*, WU SU LI LI LU *Veratrum nigrum* var. *ussuriense*, XI BO LI YA HONG SONG *Pinus sibirica* (bark), XIAO YE MAI MA TENG *Gnetum parvifolium* [Syn. *Gnetum indicum*], YUN SHI *Caesalpinia decapetala* (leaf), ZHAO WA ZHE SHU *Cudrania javanensis*, *Vitis* spp., occurs in many plants. **Ref:** 193, 438, 552, 609, 658, 1521, 2233, 2234, 3090, 3452, 3869, 3950, 4186, 4415, 4416, 4456, 4514, 5030, 5038, 5094, 5501, 5507, 5508.

**18644 Resveratrol E-dehydromer**

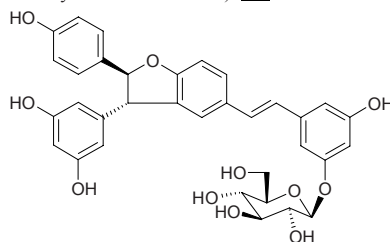
Anticancer Stilbenoid PMV70P691-144 C<sub>28</sub>H<sub>22</sub>O<sub>6</sub> (454.48). Oil, [α]<sub>D</sub><sup>20</sup> = -1.7° (*c* = 0.23, MeOH). **Pharm:** Anti-inflammatory (COX-1 inhibitor, IC<sub>50</sub> = 4.3 μmol/L; COX-2 inhibitor, IC<sub>50</sub> = 3.7 μmol/L)<sup>[3033]</sup>; cytotoxic (cyclooxygenase-1 inhibitor)<sup>[5038]</sup>; cytotoxic (cyclooxygenase-2 inhibitor)<sup>[5038]</sup>. **Source:** PU<sup>(2)</sup> TAO *Vitis vinifera* (cell cultures established from pulp fragments of young fruits: yield = 0.00048%fw). **Ref:** 3033, 5038.

**18645 Resveratrol (E)-dehydromer 11-O-β-D-glucopyranoside**

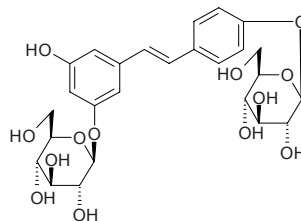
C<sub>34</sub>H<sub>32</sub>O<sub>11</sub> (616.63). Powder, [α]<sub>D</sub><sup>20</sup> = -18.9° (*c* = 0.38, MeOH). **Pharm:** Anti-inflammatory (COX-1 inhibitor, IC<sub>50</sub> = 5.2 μmol/L; COX-2 inhibitor, IC<sub>50</sub> = 7.5 μmol/L). **Source:** PU<sup>(2)</sup> TAO *Vitis vinifera* (cell cultures established from pulp fragments of young fruits: yield = 0.00056%fw). **Ref:** 3033.

**18646 Resveratrol (E)-dehydromer 11'-O-β-D-glucopyranoside**

C<sub>34</sub>H<sub>32</sub>O<sub>11</sub> (616.63). Powder, [α]<sub>D</sub><sup>20</sup> = -12.0° (*c* = 0.05, MeOH). **Source:** PU<sup>(2)</sup> TAO *Vitis vinifera* (cell cultures established from pulp fragments of young fruits: yield = 0.00002%fw). **Ref:** 3033.

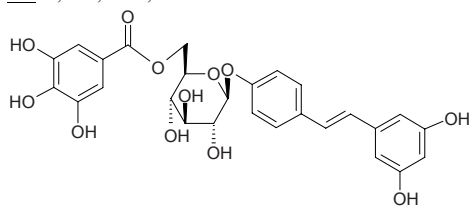
**18647 Resveratrol 3,4'-O,O'-di-β-D-glucopyranoside**

C<sub>26</sub>H<sub>32</sub>O<sub>13</sub> (552.54). Amorphous powder. [α]<sub>D</sub><sup>21</sup> = -74.7° (*c* = 3.53, MeOH). **Source:** WEI JING BAI HE *Schoenocaulon officinale* (rhizome). **Ref:** 4210.

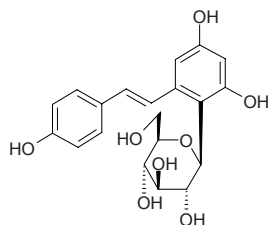


**18648 Resveratrol-4'-O-(6"-O-galloyl)- $\beta$ -D-glucopyranoside**

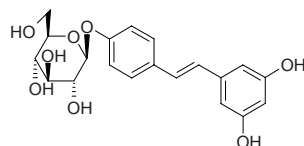
3,5,4'-Trihydroxystilbene-4'-(6"-galloyl)-glucoside C<sub>27</sub>H<sub>26</sub>O<sub>12</sub> (542.50).  
**Source:** SI CHUAN CHAN DA HUANG *Rheum* sp.<sup>[2969]</sup>, TANG GU TE DA HUANG *Rheum tanguticum*, ZHANG YE DA HUANG *Rheum palmatum*.  
**Ref:** 2, 660, 2969, 4063.

**18649 Resveratrol-10-C- $\beta$ -glucopyranoside**

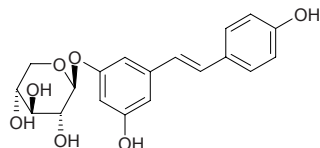
C<sub>20</sub>H<sub>22</sub>O<sub>8</sub> (390.39). White amorphous powder,  $[\alpha]_D^{24} = +23^\circ$  ( $c = 0.1$ , MeOH).  
**Source:** YOU YONG PO LEI *Hopea utilis* (stem wood). **Ref:** 3546.

**18650 Resveratrol-4'-O- $\beta$ -D-glucoside**

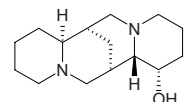
3,5,4'-Trihydroxystilbene-4'-glucoside; Resveratrolside C<sub>20</sub>H<sub>22</sub>O<sub>8</sub> (390.39).  
**Source:** DA HUANG *Rheum officinale*, SI CHUAN CHAN DA HUANG *Rheum* sp.<sup>[2969]</sup>, TANG GU TE DA HUANG *Rheum tanguticum*, XI BO LI YA HONG SONG *Pinus sibirica*, ZHANG YE DA HUANG *Rheum palmatum*, *Rhizoma rhei*. **Ref:** 2, 660, 1521, 2969, 4063.

**18651 E-Resveratrol 3-O- $\beta$ -D-xylopyranoside**

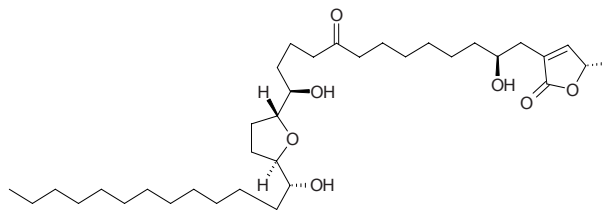
C<sub>19</sub>H<sub>20</sub>O<sub>7</sub> (360.37). White needles, mp 214~215°C;  $[\alpha]_D^{20} = -12.2^\circ$  ( $c = 0.02$ , CH<sub>3</sub>OH). **Pharm:** Vasodilator (rat aortic rings, inhibits Phenylephrine (Phe)-induced vasoconstriction in the presences of Indomethacin and N<sup>o</sup>-L-nitroarginine (L-NA) at 10 $\mu$ mol/L Ach, 10 $\mu$ mol/L, relaxation = (57 $\pm$ 7)%, control Sodium nitroprusside, relaxation = (109 $\pm$ 5)%)<sup>[4086]</sup>.  
**Source:** YI HUA *Lysidice rhodostegia* (root). **Ref:** 4086.

**18652 Retamine**

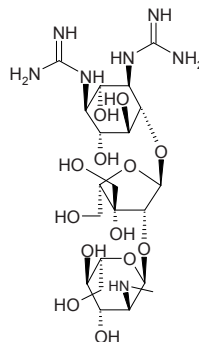
[2122-29-4] C<sub>15</sub>H<sub>26</sub>N<sub>2</sub>O (250.39). **Pharm:** Uterine stimulant; diuretic; antihypertensive. **Source:** family Fabaceae spp. **Ref:** 658.

**18653 Reticulacinone**

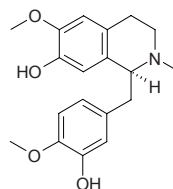
C<sub>35</sub>H<sub>62</sub>O<sub>7</sub> (594.88). Yellowish wax solid, mp 68~70°C. **Source:** NIU XIN FAN LI ZHI *Annona reticulata*. **Ref:** 432.

**18654 Reticulin**

[6835-00-3] C<sub>21</sub>H<sub>39</sub>N<sub>7</sub>O<sub>13</sub> (599.60). mp 200°C (dec). **Source:** YAN HU SUO *Corydalis yanhusuo* [Syn. *Corydalis turtschaninovii* f. *Yanhusuo*], YA PIAN *Papaver somniferum*. **Ref:** 6.

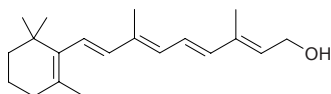
**18655 Reticuline**

Laudanosoline 4',6-dimethyl ethe [485-19-8] C<sub>19</sub>H<sub>23</sub>NO<sub>4</sub> (329.40). Yellowish powder, mp 146°C,  $[\alpha]_D^{16} = +98.4^\circ$  ( $c = 0.77$ , ethanol). **Pharm:** Platelet aggregation inhibitor (due to ADP and arachidonic acid); uterine relaxant; neuromuscular blocker (frog, MIC = 100 $\mu$ g/mL); promotes hair growth. **Source:** FAN LI ZHI *Annona squamosa*, HE BAO MU DAN GEN *Dicentra spectabilis*, HENG ZHOU WU YAO *Cocculus laurifolius*, HONG NAN PI *Machilus thunbergii*, MA WEI LIAN *Thalictrum foliolosum*, NIU XIN FAN LI ZHI *Annona reticulata*, YING SU *Papaver somniferum*, YOU GOU YING ZHAO *Artabotrys uncinatus* (root, stem and leaf)<sup>[3083]</sup>, YUAN HUA FAN LI ZHI *Annona glabra*, ZHANG MU *Cinnamomum camphora*, ZI HUA YU DENG CAO *Corydalis incisa*. **Ref:** 6, 658, 660, 900, 3083.

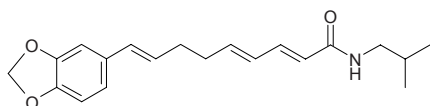


**18656 Retinol**

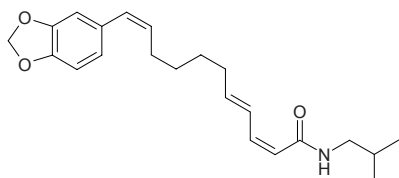
Vitamin A; Afaxin; Oleovitamin A [68-26-8] C<sub>20</sub>H<sub>30</sub>O (286.46). **Pharm:** Essential for growth, vision in dim light, and the maintenance of soft mucous tissue. **Source:** CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*], CU LIU GUO *Hippophae rhamnoides*, DAN YE MAN JING ZI *Vitex rotundifolia* [Syn. *Vitex trifolia* var. *simplicifolia*], DANG GUI *Angelica sinensis*, JI GUAN ZI *Celosia cristata* (seed), LU RONG *Cervus nippon*; *Cervus elaphus*, SHAN ZHU YU *Cornus officinalis* [Syn. *Macrocarpium officinale*], YE GU *Aeginetia indica*. **Ref:** 2, 658, 660, 1521.

**18657 Retrofractamide A**

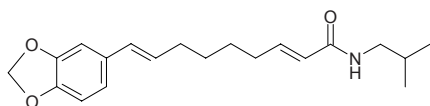
Piperamide B 9: 3(2*E*,4*E*,8*E*) C<sub>20</sub>H<sub>25</sub>NO<sub>3</sub> (327.43). **Source:** CHANG GUO BI BA *Piper retrofractum*, HU JIAO *Piper nigrum*. **Ref:** 660.

**18658 Retrofractamide B**

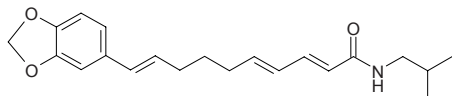
C<sub>22</sub>H<sub>29</sub>NO<sub>3</sub> (355.48). Colorless crystals. **Pharm:** Protective gastric lesions (rat, ethanol-induced, 25mg/kg orl, length = (39.9±13.3)mm, control, length = (118.6±16.2)mm, InRt = 66.4%; indomethacin-induced in rats, dose, 25mg/kg orl, length = (36.4±12.8)mm, control, length = (89.5±9.8)mm, InRt = 59.3%). **Source:** *Piper chaba* (fruit). **Ref:** 4935.

**18659 Retrofractamide C**

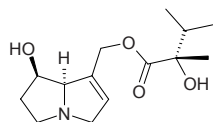
C<sub>20</sub>H<sub>27</sub>NO<sub>3</sub> (329.44). **Source:** CHANG GUO BI BA *Piper retrofractum*. **Ref:** 660.

**18660 Retrofractamide D**

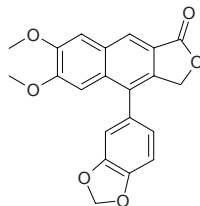
C<sub>21</sub>H<sub>27</sub>NO<sub>3</sub> (341.45). **Source:** CHANG GUO BI BA *Piper retrofractum*. **Ref:** 660.

**18661 Retrohoustine**

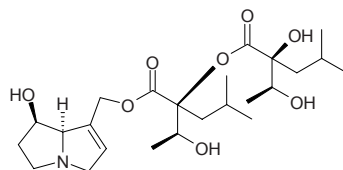
O<sup>9</sup>-(2*S*-2β-Hydroxy-2,3-dimethyl-butanoyl) C<sub>14</sub>H<sub>23</sub>NO<sub>4</sub> (269.34). **Source:** XIONG ER CAO *Ageratum houstonianum* (aerial parts). **Ref:** 5173.

**18662 Retrojusticidin B**

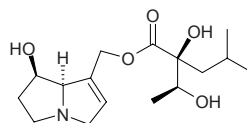
C<sub>21</sub>H<sub>16</sub>O<sub>6</sub> (364.36). **Pharm:** Anti-HIV (HIV-1 reverse transcriptase highly selective inhibitor, IC<sub>50</sub> = 5.5μmol/L, pharmacokinetic and Metabolic Studies in rats). **Source:** YIN DU SI LI LAN KA YE XIA ZHU *Phyllanthus myritifolius*. **Ref:** 4090.

**18663 Retronecine 2*S*-hydroxy-2*S*-(1*S*-hydroxyethyl)-2*S*-[(1'*S*-hydroxyethyl)-4-methylpentanoyl]-4-methylpentanoyl ester**

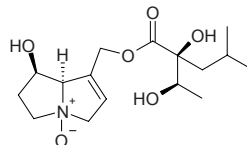
C<sub>24</sub>H<sub>41</sub>NO<sub>8</sub> (471.60). Red oil, [α]<sub>D</sub><sup>25</sup> = -4.0° (c = 0.1, MeOH). **Source:** CU MAO NIU SHE CAO *Anchusa strigosa*. **Ref:** 5441.

**18664 Retronecine 2*S*-hydroxy-2*S*-(1*S*-hydroxyethyl)-4-methylpentanoyl ester**

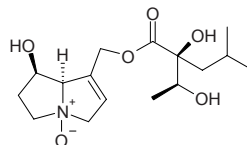
C<sub>16</sub>H<sub>27</sub>NO<sub>5</sub> (313.40). Yellow-orange oil, [α]<sub>D</sub><sup>25</sup> = +2.2° (c = 0.05, MeOH). **Source:** CU MAO NIU SHE CAO *Anchusa strigosa*. **Ref:** 5441.

**18665 Retronecine N-oxide 2*S*-hydroxy-2*S*-(1*R*-hydroxyethyl)-4-methylpentanoyl ester**

C<sub>16</sub>H<sub>27</sub>NO<sub>6</sub> (329.40). Red oil, [α]<sub>D</sub><sup>25</sup> = +2.3° (c = 0.1, MeOH). **Source:** CU MAO NIU SHE CAO *Anchusa strigosa*. **Ref:** 5441.

**18666 Retronecine N-oxide 2*S*-hydroxy-2*S*-(1*S*-hydroxyethyl)-4-methylpentanoyl ester**

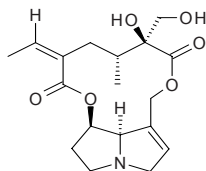
Platynecine N-oxide 2*S*-hydroxy-2*S*-(1*S*-hydroxyethyl)-4-methyl-pentanoyl ester C<sub>16</sub>H<sub>27</sub>NO<sub>6</sub> (329.40). Orange oil, [α]<sub>D</sub><sup>25</sup> = +4° (c = 0.05, MeOH); [α]<sub>D</sub><sup>25</sup> = +3.0° (c = 0.1, MeOH). **Source:** CU MAO NIU SHE CAO *Anchusa strigosa* (flower, leaf and root). **Ref:** 5298, 5441.



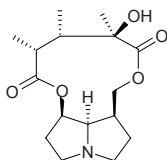


**18667 Retrorsine**

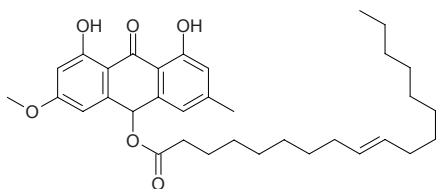
[480-54-6] C<sub>18</sub>H<sub>25</sub>NO<sub>6</sub> (351.40). mp 207~208°C, 216.0~216.5°C. **Pharm:** Mutagen (drosophila and Ames experiments); Toxic (hepatic and pulmonary toxicity). **Source:** DA BAI DING CAO *Senecio oryzetorum*, FEI LV BIN QIAN LI GUANG *Senecio philippicus*, GUANG E ZHU SHI DOU *Crotalaria usaramoensis*, OU ZHOU QIAN LI GUANG *Senecio vulgaris*, WAN QU QIAN LI GUANG *Senecio retrorsus*, YING ZHAO DOU ZHU SHI DOU *Crotalaria spartioides*. **Ref:** 6, 658.

**18668 Retusine**

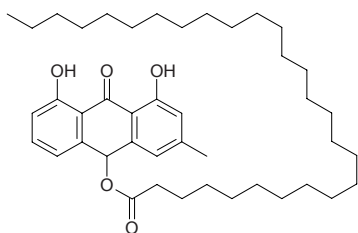
[480-86-4] C<sub>16</sub>H<sub>25</sub>NO<sub>5</sub> (311.38). mp 163~164°C. **Pharm:** Cytotoxic (KB, ED<sub>50</sub> = 41 μg/mL); β-glucuronidase inhibitor (rbt, neutrocyte, ED<sub>50</sub> = 60 μmol/L); Ca<sup>2+</sup>-ATPase inhibitor (brawn reticulum, 100 μmol/L, InRt = 100%). **Source:** HUO XIANG *Agastache rugosus*. **Ref:** 505, 1767, 1768.

**18669 Revandchinone 1**

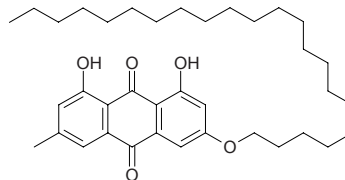
C<sub>34</sub>H<sub>46</sub>O<sub>6</sub> (550.74). Yellow needles (EtOAc), mp 214°C. **Source:** ZANG BIAN DA HUANG *Rheum emodi* [Syn. *Rheum australe*]. **Ref:** 2061.

**18670 Revandchinone 2**

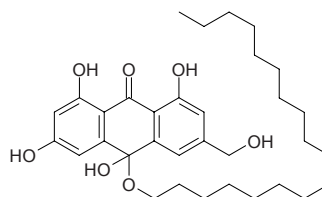
C<sub>43</sub>H<sub>66</sub>O<sub>5</sub> (663.00). Orange yellow needles (EtOAc), mp 201°C. **Source:** ZANG BIAN DA HUANG *Rheum emodi* [Syn. *Rheum australe*]. **Ref:** 2061.

**18671 Revandchinone 3**

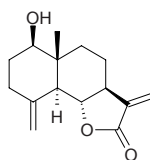
C<sub>37</sub>H<sub>54</sub>O<sub>5</sub> (578.84). Yellow needles (EtOAc), mp 220 °C. **Source:** ZANG BIAN DA HUANG *Rheum emodi* [Syn. *Rheum australe*]. **Ref:** 2061.

**18672 Revandchinone 4**

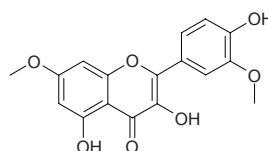
C<sub>33</sub>H<sub>48</sub>O<sub>7</sub> (556.75). yellow needles (EtOAc), mp 235 °C. **Source:** ZANG BIAN DA HUANG *Rheum emodi* [Syn. *Rheum australe*]. **Ref:** 2061.

**18673 Reynosin**

[28254-53-7] C<sub>15</sub>H<sub>20</sub>O<sub>3</sub> (248.32). Colorless acicular crystals, mp 145~146°C. **Pharm:** Anti-inflammatory (modulator of cytokine network: inhibits formation of CINC-1, concentration-dependent manner, in NRK-52E rat kidney epithelial cells stimulated with LPS, IC<sub>50</sub> = 1 μmol/L; inhibits TNF-α production in LPS-activated RAW264.7 cells, IC<sub>50</sub> = 87.4 μmol/L)<sup>[4416]</sup>; cytotoxic (KB ATCC CCL17, IC<sub>50</sub> = 2.7 μg/mL)<sup>[5399]</sup>; cytotoxic (*in vitro*, HepG<sub>2</sub>, CD<sub>50</sub> = 11 μg/mL; HeLa, CD<sub>50</sub> = 7.5 μg/mL; OVCAR-3, CD<sub>50</sub> = 7.5 μg/mL; control Cisplatin, HepG<sub>2</sub>, CD<sub>50</sub> = 2.8 μg/mL; HeLa, CD<sub>50</sub> = 5.2 μg/mL; OVCAR-3, CD<sub>50</sub> = 3 μg/mL; without significant antibacterial effect)<sup>[4720]</sup>. **Source:** MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*] (root: yield = 0.0022%dw)<sup>[4720]</sup>, YUN NAN HAN XIAO *Michelia yunnanensis*, *Warionia saharae*. **Ref:** 426, 5399, 4416, 4720.

**18674 Rhamnazin**

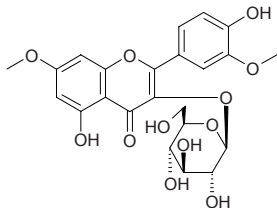
[552-54-5] C<sub>17</sub>H<sub>14</sub>O<sub>7</sub> (330.30). mp 216~218°C. **Pharm:** Antioxidant inactive (DPPH radical scavenger, 10 μmol/L, ScRt = 8%; control BHT, 10 μmol/L, ScRt = 43%, IC<sub>50</sub> = 19.00 μmol/L)<sup>[4422]</sup>; antibacterial (*Staphylococcus aureus*, penicillin-sensitive strain ATCC 25923, MIC > 128 μg/mL; methicillin-resistant strain MRSA SK1, MIC > 128 μg/mL)<sup>[4422]</sup>. **Source:** DUO SUI LIAO *Polygonum polystachyum*, TIAN SHAN ZHU ZI *Garcinia dulcis* (flower). **Ref:** 6, 4422.



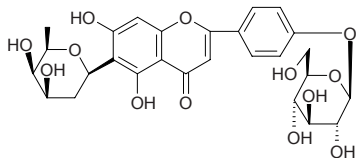


**18675 Rhamnazin-3-O-β-D-glucoside**

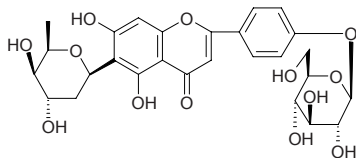
C<sub>23</sub>H<sub>24</sub>O<sub>12</sub> (492.44). **Source:** BING GUO HU JI SHENG *Viscum multinerve*, HU JI SHENG *Viscum coloratum*. **Ref:** 660.

**18676 Rhamnellaflavoside A**

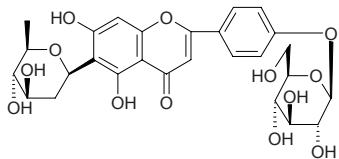
6-C-β-D-Oliopyranosyl-4'-O-β-D-glucopyranosylapigenin C<sub>27</sub>H<sub>30</sub>O<sub>13</sub> (562.53). Yellow amorphous powder, [α]<sub>D</sub><sup>26</sup> = +51.4° (c = 1.50, MeOH). **Source:** BU DUI CHENG MAO RU *Rhamnella inaequilatera* (leaf). **Ref:** 3770.

**18677 Rhamnellaflavoside B**

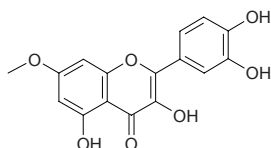
6-C-β-D-Boivinopyranosyl-4'-O-β-D-glucopyranosylapigenin C<sub>27</sub>H<sub>30</sub>O<sub>13</sub> (562.53). Yellow amorphous powder, [α]<sub>D</sub><sup>26</sup> = +4.1° (c = 0.50, MeOH). **Source:** BU DUI CHENG MAO RU *Rhamnella inaequilatera* (leaf). **Ref:** 3770.

**18678 Rhamnellaflavoside C**

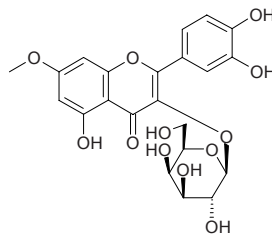
6-C-β-D-4-Epioliosyl-4'-O-β-D-glucopyranosylapigenin C<sub>27</sub>H<sub>30</sub>O<sub>13</sub> (562.53). Yellow amorphous powder, [α]<sub>D</sub><sup>26</sup> = +33.6° (c = 0.83, MeOH). **Source:** BU DUI CHENG MAO RU *Rhamnella inaequilatera* (leaf). **Ref:** 3770.

**18679 Rhamnetin**

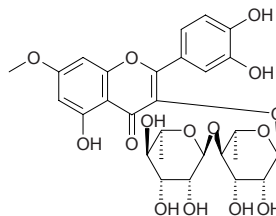
[90-19-7] C<sub>16</sub>H<sub>12</sub>O<sub>7</sub> (316.27). Yellow powdery crystals (MeOH), mp 288~290°C. **Pharm:** Allergenic (moderate activity); antibacterial (*Pseudomonas maltophilia* and *Enteromorpha cloacae*); antineoplastic; cytotoxic; mutagen (*Salmonella aertrycke* TA98). **Source:** DING XIANG *Syzygium aromaticum* [Syn. *Eugenia caryophyllata*], FENG JIAO *Apis mellifera ligustica*, GUANG HUO XIANG *Pogostemon cablin* [Syn. *Mentha cablin*], HUANG HUA HAO *Artemisia annua*, XI YE TENG *Tetracera asiatica*. **Ref:** 2, 6, 463, 658, 660.

**18680 Rhamnetin-3-galactoside**

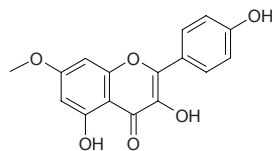
C<sub>22</sub>H<sub>22</sub>O<sub>12</sub> (478.41). **Source:** BIAN XU *Polygonum aviculare*. **Ref:** 660.

**18681 Rhamnetin-3-O-rhamnosyl (1→4)-rhamnopyranoside**

C<sub>28</sub>H<sub>32</sub>O<sub>15</sub> (608.56). **Source:** XIANG FU *Cyperus rotundus*. **Ref:** 660.

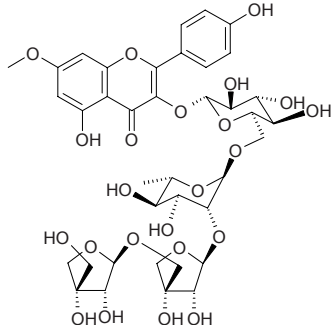
**18682 Rhamnocitrin**

Kaempferol-7-methylether [569-92-6] C<sub>16</sub>H<sub>12</sub>O<sub>6</sub> (300.27). Yellow amorphous powder, mp 225~227°C, mp 221~222°C. **Pharm:** Antioxidant (*in vitro*, PEP inhibitor, IC<sub>50</sub> = (32.64±0.84)μmol/L, control Bacitracin, IC<sub>50</sub> = (129.3±3.2)μmol/L)<sup>[4923]</sup>; cytotoxic inactive (Lu1, 20μg/mL, control Ellipticine, ED<sub>50</sub> = 0.02μg/mL; Col2, 20μg/mL, control Ellipticine, ED<sub>50</sub> = 0.3μg/mL; KB, 20μg/mL, control Ellipticine, ED<sub>50</sub> = 0.04μg/mL; LN CaP, 20μg/mL, control Ellipticine, ED<sub>50</sub> = 0.8μg/mL; KB in absence of 1μg/mL vinblastine, 20μg/mL, control Ellipticine, ED<sub>50</sub> = 0.3μg/mL; KB in presence of 1μg/mL vinblastine, 20μg/mL, control Ellipticine, ED<sub>50</sub> = 0.2μg/mL; BC1, 20μg/mL, control Ellipticine, ED<sub>50</sub> = 0.5μg/mL)<sup>[3479]</sup>. **Source:** GANG MAO CHENG LIU *Tamarix hispida* (aerial parts), HUANG HAO *Artemisia scoparia* [Syn. *Artemisia capillaris* var. *scoparia*], HUANG HUA HAO *Artemisia annua*, NING MENG AN YE *Eucalyptus citriodora*, SHE GAN *Belamcanda chinensis* (rhizome), TU SHA REN *Alpinia japonica*, XI YE TENG *Tetracera asiatica*, YIN CHEN HAO *Artemisia capillaris*, *Alomia myriadenia* (aerial parts). **Ref:** 2, 6, 372, 660, 3479, 4128, 4923.



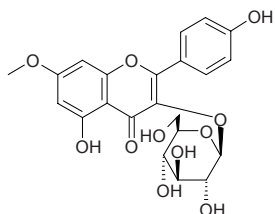
**18683 Rhannocitrin 3-O-apiosyl(1→5)-apiosyl(1→2)-[α-L-rhamnopyranosyl(1→6)]-β-D-glucopyranoside**

C<sub>38</sub>H<sub>48</sub>O<sub>23</sub> (872.79). Yellowish amorphous solid. Source: LENG ZHI HU JI SHENG *Viscum angulatum* (whole herb; yield = 0.00086%dw). Ref: 4626.



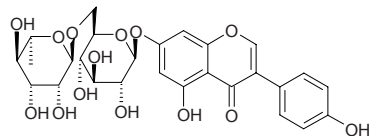
**18684 Rhannocitrin-3-O-β-D-glucoside**

C<sub>22</sub>H<sub>22</sub>O<sub>11</sub> (462.41). Source: BIAN JING HUANG QI *Astragalus complanatus*. Ref: 660.



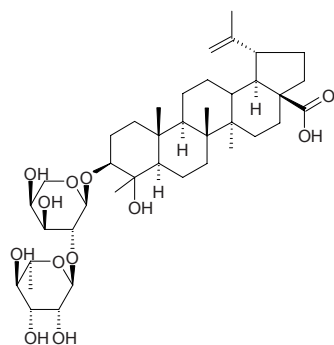
**18685 7-O-α-Rhamno(1→6)-β-glucosylgenistein**

C<sub>27</sub>H<sub>30</sub>O<sub>14</sub> (578.53). White amorphous powder, mp 216–219°C. Pharm: Anti-Inflammatory (inhibit brain liposomal peroxidation, 62.5μg/mL, optical density of DMSO control = (100.1±0.2)%; positive control Propyl gallate, 7.5μmol/mL, optical density of DMSO control = (20.6±0.2)%); granular release inhibitor. Source: PAN YUAN YU TENG *Derris scandens* (stem). Ref: 4984.



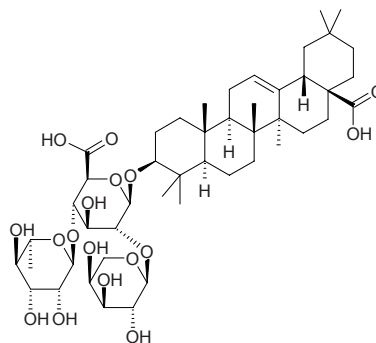
**18686 3-O-α-L-Rhamnopyranosyl(1→2)-α-L-arabinopyranosyl-3β,23-dihydroxylup-20(29)-en-28-oic-acid**

C<sub>40</sub>H<sub>64</sub>O<sub>12</sub> (736.95). Source: BAI TOU WENG *Pulsatilla chinensis*. Ref: 660.



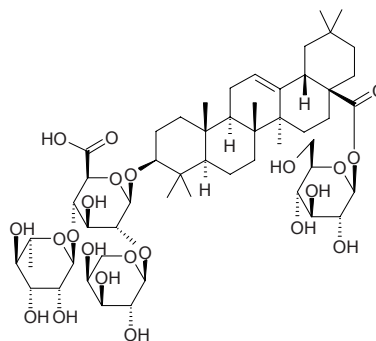
**18687 3-O-α-L-Rhamnopyranosyl-(1→4)-[α-L-arabinopyranosyl-(1→2)]-β-D-glucuronopyranosyl oleanolic acid**

C<sub>47</sub>H<sub>74</sub>O<sub>17</sub> (911.10). Amorphous powder, [α]<sub>D</sub><sup>23</sup> = -4.2° (c = 0.91, MeOH). Source: E ZHANG TENG *Schefflera arboricola*. Ref: 3381.



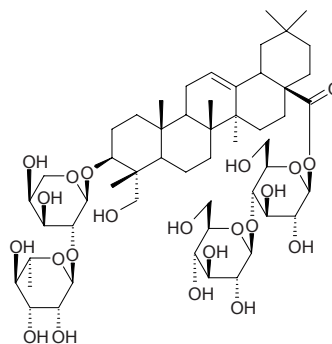
**18688 3-O-α-L-Rhamnopyranosyl-(1→4)-[α-L-arabinopyranosyl-(1→2)]-β-D-glucuronopyranosyl oleanolic acid 28-O-β-D-glucopyranosyl ester**

C<sub>53</sub>H<sub>84</sub>O<sub>22</sub> (1073.25). Amorphous powder, [α]<sub>D</sub><sup>23</sup> = -10.2° (c = 2.06, MeOH). Source: E ZHANG TENG *Schefflera arboricola*. Ref: 3381.



**18689 3β-O-(α-L-Rhamnopyranosyl(1→2)-α-L-arabinopyranosyl)-hederagenin-28-O-β-D-glucopyranosyl(1→4)-β-D-glucopyranosyl ester**

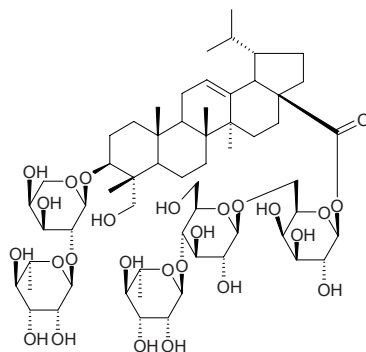
C<sub>53</sub>H<sub>86</sub>O<sub>22</sub> (1075.26). Source: YUAN YE E ZHANG CHAI *Schefflera rotundifolia* (aerial parts). Ref: 5036.



**18690** 3 $\beta$ -O-( $\alpha$ -Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -arabinopyranosyl)-23-hydroxylup-12-en-28-O-( $\alpha$ -rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -galactopyranosyl)ester

C<sub>59</sub>H<sub>96</sub>O<sub>26</sub> (1221.41). White amorphous powder,  $[\alpha]_D^{25} = +93^\circ$  ( $c = 1$ , MeOH).

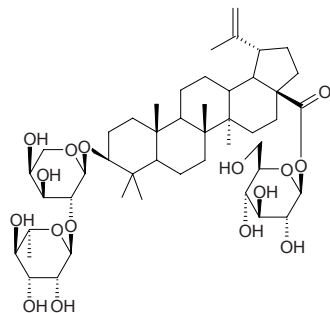
**Pharm:** Antiproliferative (*in vitro*, J774 cell line, IC<sub>50</sub> = 0.60 $\mu$ mol/L, control 6-Mercaptopurine, IC<sub>50</sub> = 0.003 $\mu$ mol/L; WEHI-164, IC<sub>50</sub> = 0.6 $\mu$ mol/L, 6-Mercaptopurine, IC<sub>50</sub> = 0.017 $\mu$ mol/L). **Source:** *Schefflera fagueti*. **Ref:** 5436.



**18691** 3 $\beta$ -D-O-( $\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranosyl)-lup-20(29)-ene-28-O- $\beta$ -D-glucopyranosyl ester

C<sub>47</sub>H<sub>76</sub>O<sub>16</sub> (897.12). White powder,  $[\alpha]_D^{25} = +71^\circ$ , ( $c = 0.1$ , MeOH). **Pharm:**

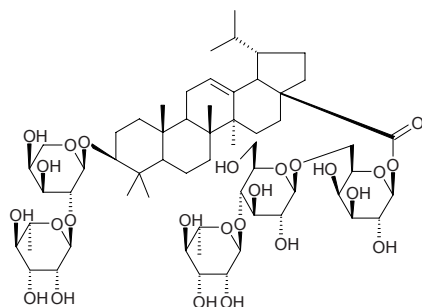
Cytotoxic (antiproliferative *in vitro*: J774.A1 cell line, IC<sub>50</sub> = 0.32 $\mu$ mol/L; HEK-293 cell line, IC<sub>50</sub> = 0.44 $\mu$ mol/L; WEHI-164 cell line, IC<sub>50</sub> = 0.79 $\mu$ mol/L; control 6-Mercaptopurine, J774.A1 cell line, IC<sub>50</sub> = 0.003 $\mu$ mol/L; HEK-293 cell line, IC<sub>50</sub> = 0.007 $\mu$ mol/L; WEHI-164 cell line, IC<sub>50</sub> = 0.015 $\mu$ mol/L). **Source:** YUAN YE E ZHANG CHAI *Schefflera rotundifolia* (aerial parts). **Ref:** 5036.



**18692** 3 $\beta$ -O-( $\alpha$ -Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -arabinopyranosyl)-lup-12-en-28-O-( $\alpha$ -rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -galactopyranosyl) ester

C<sub>59</sub>H<sub>96</sub>O<sub>25</sub> (1205.41). White amorphous powder,  $[\alpha]_D^{25} = +86^\circ$  ( $c = 1$ , MeOH).

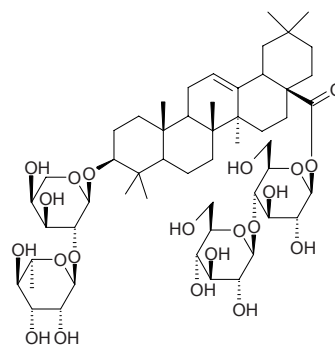
**Pharm:** Antiproliferative (*in vitro*, J774 cell line, IC<sub>50</sub> = 0.70 $\mu$ mol/L; control 6-Mercaptopurine, IC<sub>50</sub> = 0.003 $\mu$ mol/L) **Source:** *Schefflera fagueti*. **Ref:** 5436.



**18693** 3 $\beta$ -D-O-( $\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranosyl)-olean-12-ene-28-O-( $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl) ester

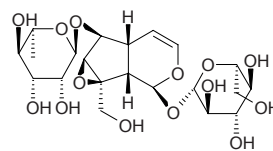
C<sub>53</sub>H<sub>86</sub>O<sub>21</sub> (1059.26). White powder,  $[\alpha]_D^{25} = +37^\circ$ , ( $c = 1$ , MeOH). **Pharm:**

Cytotoxic (antiproliferative *in vitro*: J774.A1 cell line, IC<sub>50</sub> = 0.45 $\mu$ mol/L; HEK-293 cell line, IC<sub>50</sub> = 1.85 $\mu$ mol/L; WEHI-164 cell line, IC<sub>50</sub> = 0.67 $\mu$ mol/L; control 6-Mercaptopurine, J774.A1 cell line, IC<sub>50</sub> = 0.003 $\mu$ mol/L; HEK-293 cell line, IC<sub>50</sub> = 0.007 $\mu$ mol/L; WEHI-164 cell line, IC<sub>50</sub> = 0.015 $\mu$ mol/L). **Source:** YUAN YE E ZHANG CHAI *Schefflera rotundifolia* (aerial parts). **Ref:** 5036.



**18694** 6-O- $\alpha$ -L-Rhamnopyranosylcatalpol

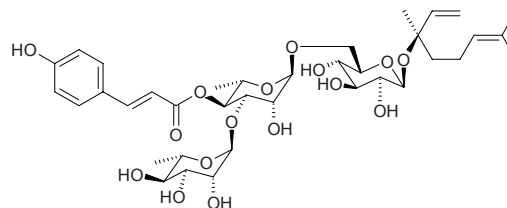
C<sub>21</sub>H<sub>32</sub>O<sub>14</sub> (508.48). **Source:** FEI LV BIN SHI ZI *Gmelina philippensis* (aerial parts). **Ref:** 3954.



**18695** (3S)-O- $\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 3)-[4-O-(*E*-coumaroyl)- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl]-linalool

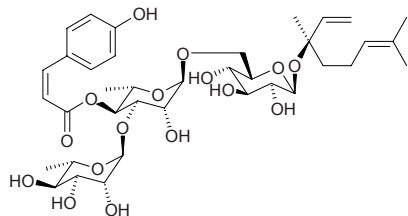
C<sub>37</sub>H<sub>54</sub>O<sub>16</sub> (754.83). White amorphous powder, mp 144–146°C,  $[\alpha]_D^{25} =$

$-31.8^\circ$  ( $c = 0.67$ , MeOH). **Pharm:** Immunosuppressant inactive (hmm mononuclear cells antiproliferation, involving T lymphocytes, B lymphocytes, and macrophages isolated from peripheral blood, 100 $\mu$ mol/L). **Source:** TAI WAN PI PA *Eriobotrya deflexa* (leaf). **Ref:** 3064.



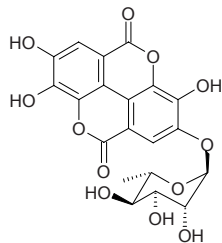
**18696 (3S)-O- $\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 3)-[4-O-(Z)-coumaroyl]- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl-linalool**

C<sub>37</sub>H<sub>54</sub>O<sub>16</sub> (754.83). White amorphous powder, mp 136–137°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = –87.4° (c = 0.39, MeOH). **Pharm:** Immunosuppressant inactive (hmn mononuclear cells antiproliferation, involving T lymphocytes, B lymphocytes, and macrophages isolated from peripheral blood, 100 $\mu$ mol/L). **Source:** TAI WAN PI PA *Eriobotrya deflexa* (leaf). **Ref:** 3064.



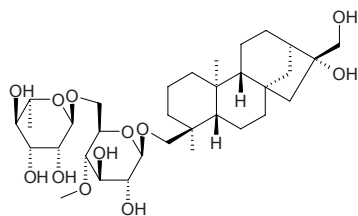
**18697 4-( $\alpha$ -Rhamnopyranosyl)ellagic acid**

C<sub>20</sub>H<sub>16</sub>O<sub>12</sub> (448.34). **Pharm:** Cytotoxic (*in vitro*, P<sub>388</sub>, IC<sub>50</sub> = 62 $\mu$ g/mL; P<sub>388</sub>/ADM, IC<sub>50</sub> = 53 $\mu$ g/mL; K562, IC<sub>50</sub> = 82 $\mu$ g/mL; K562/ADM, IC<sub>50</sub> = 67 $\mu$ g/mL; B16, IC<sub>50</sub> = 88 $\mu$ g/mL; HeLa, IC<sub>50</sub> = 86.5 $\mu$ g/mL; KB, IC<sub>50</sub> = 98 $\mu$ g/mL; HIV-1 protease inhibitor (IC<sub>50</sub> = 4.8 $\mu$ g/mL). **Source:** YUN NAN FENG CHE ZI *Combretum yunnanensis* (branch) **Ref:** 4693.



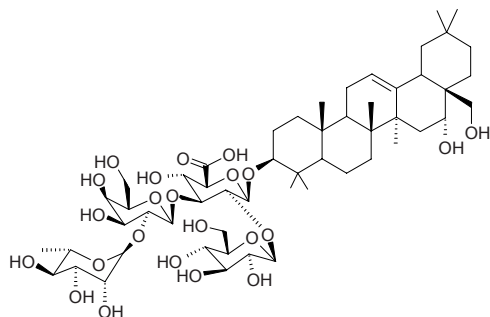
**18698 6'-O- $\alpha$ -L-Rhamnopyranosyl-4-epimicrolepin**

C<sub>33</sub>H<sub>56</sub>O<sub>12</sub> (644.81). **Source:** BIAN YUAN LIN GAI JUE *Microlepis marginata*. **Ref:** 660.



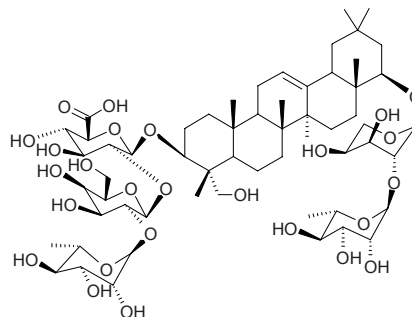
**18699 3-O-{ $\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-galactopyranosyl-(1 $\rightarrow$ 3)-[ $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -D-glucuronopyranosyl}-primulagenin A**

C<sub>54</sub>H<sub>88</sub>O<sub>23</sub> (1105.29). **Source:** RI BEN HOU PI XIANG *Ternstroemia japonica* (fresh fruit; yield = 0.0021%fw). **Ref:** 4730.



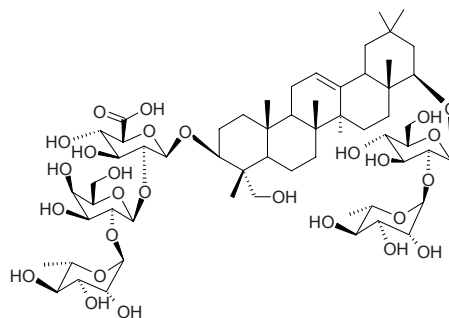
**18700 3-O-{{ $\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-galactopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -D-glucuronopyranosyl}-22-O- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranosyl]-3 $\beta$ ,22 $\beta$ ,24-trihydroxyolean-12-ene**

C<sub>59</sub>H<sub>96</sub>O<sub>26</sub> (1221.41). White amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = –14.20° (c = 0.50, MeOH). **Pharm:** Cytotoxic (*in vitro*, Hs740T, ED<sub>50</sub> = 3.53 $\mu$ g/mL; Hs756T, ED<sub>50</sub> = 2.47 $\mu$ g/mL; Hs578T, ED<sub>50</sub> = 2.39 $\mu$ g/mL; Hs742T, ED<sub>50</sub> = 17.51 $\mu$ g/mL; DU145, ED<sub>50</sub> = 3.12 $\mu$ g/mL; LNCaP-FGC, ED<sub>50</sub> = 27.5 $\mu$ g/mL). **Source:** DA DOU *Glycine max* (Soybean phytochemical concentrate; yield = 0.0039%dw). **Ref:** 4630.



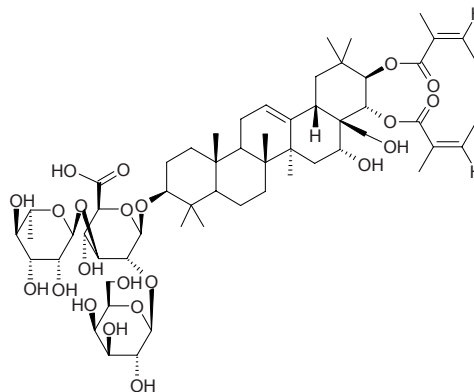
**18701 3-O-{{ $\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-galactopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -D-glucuronopyranosyl}-22-O- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranosyl]-3 $\beta$ ,22 $\beta$ ,24-trihydroxyolean-12-ene**

C<sub>60</sub>H<sub>98</sub>O<sub>27</sub> (1251.43). White amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = –23.00° (c = 0.53, MeOH). **Pharm:** Cytotoxic (*in vitro*, Hs740T, ED<sub>50</sub> = 4.1 $\mu$ g/mL; Hs756T, ED<sub>50</sub> = 3.94 $\mu$ g/mL; Hs578T, ED<sub>50</sub> = 2.12 $\mu$ g/mL; Hs742T, ED<sub>50</sub> = 14.63 $\mu$ g/mL; DU145, ED<sub>50</sub> = 3.25 $\mu$ g/mL; LNCaP-FGC, ED<sub>50</sub> = 24.1 $\mu$ g/mL). **Source:** DA DOU *Glycine max* (Soybean phytochemical concentrate; yield = 0.0051%dw). **Ref:** 4630.

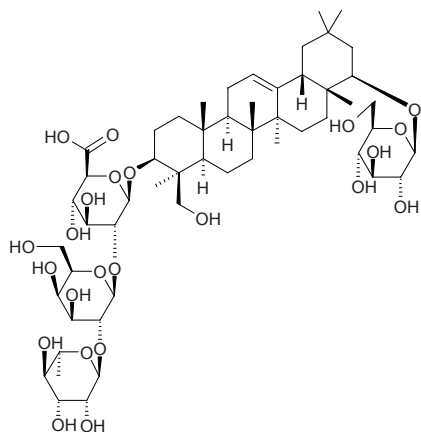


**18702 3-O- $\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 3)-[ $\beta$ -D-galactopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -D-glucuronopyranosyl-21 $\beta$ ,22 $\alpha$ -di-O-angeloylbarringtonol C**

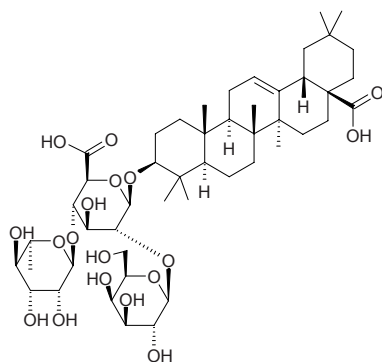
C<sub>58</sub>H<sub>90</sub>O<sub>22</sub> (1139.35). [ $\alpha$ ]<sub>D</sub><sup>21</sup> = –10.0° (c = 0.66, MeOH). **Pharm:** Hemolytic. **Source:** NAN SU GE LAN JIA SHAN LUO *Harpullia austro-caledonica* (stem cortex). **Ref:** 5269.



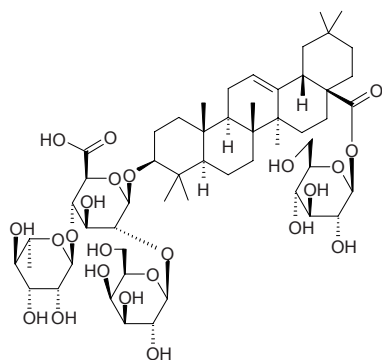
**18703** 3-*O*-[ $\alpha$ -*L*-Rhamnopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-galactopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-glucuronopyranosyl]-22-*O*- $\beta$ -*D*-glucopyranosylsoyasapogenol B  
[142449-92-1] C<sub>54</sub>H<sub>88</sub>O<sub>23</sub> (1105.29). White needles,  $[\alpha]_D^{25} = -13^\circ$  ( $c = 0.4$ , MeOH). Source: *Trifolium resupinatum*. Ref: 2339.



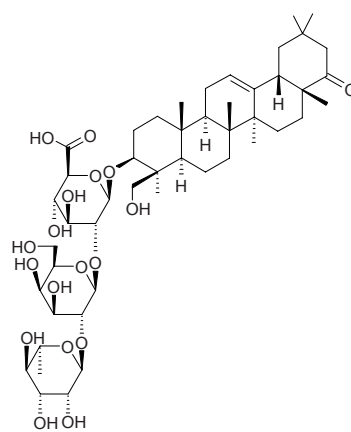
**18704** 3-*O*- $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 4)-[ $\beta$ -*D*-galactopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -*D*-glucuronopyranosyl oleanolic acid  
C<sub>48</sub>H<sub>76</sub>O<sub>18</sub> (941.13). Amorphous powder,  $[\alpha]_D^{23} = -10.4^\circ$  ( $c = 1.95$ , MeOH). Source: E ZHANG TENG *Schefflera arboricola*. Ref: 3381.



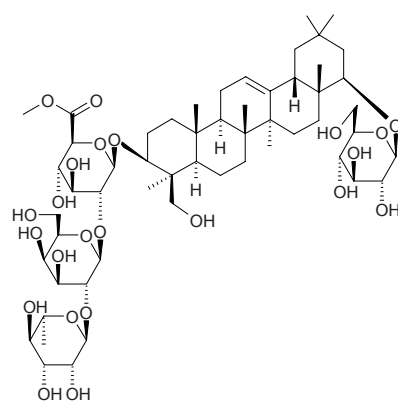
**18705** 3-*O*- $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 4)-[ $\beta$ -*D*-galactopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -*D*-glucuronopyranosyl oleanolic acid 28-*O*- $\beta$ -*D*-Glucopyranosylester  
C<sub>54</sub>H<sub>86</sub>O<sub>23</sub> (1103.27). Amorphous powder,  $[\alpha]_D^{23} = -12.1^\circ$  ( $c = 1.28$ , MeOH). Source: E ZHANG TENG *Schefflera arboricola*. Ref: 3381.



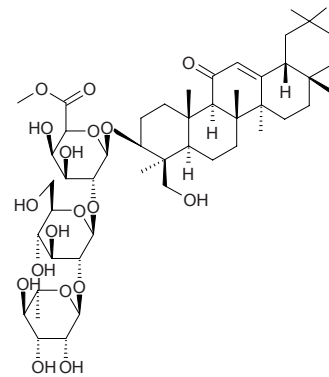
**18706** 3-*O*-[ $\alpha$ -*L*-Rhamnopyranosyl (1 $\rightarrow$ 2)- $\beta$ -*D*-galactopyranosyl (1 $\rightarrow$ 2)- $\beta$ -*D*-glucuronopyranosyl] soyasapogenol E  
C<sub>48</sub>H<sub>76</sub>O<sub>18</sub> (941.13). Source: GUANG JIN QIAN CAO *Desmodium styracifolium*. Ref: 660.



**18707** 3-*O*- $\alpha$ -*L*-Rhamnopyranosyl (1 $\rightarrow$ 2)- $\beta$ -*D*-galactopyranosyl (1 $\rightarrow$ 2)-6-*O*-methyl- $\beta$ -*D*-glucuronopyranosyl-soyasapogenol B-22-*O*- $\beta$ -*D*-glucopyranoside  
C<sub>55</sub>H<sub>90</sub>O<sub>23</sub> (1119.32). Source: BIAN JING HUANG QI *Astragalus complanatus*. Ref: 660.

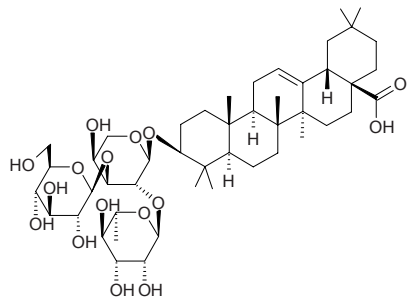


**18708** 3-*O*- $\alpha$ -*L*-Rhamnopyranosyl (1 $\rightarrow$ 2)- $\beta$ -*D*-galactopyranosyl (1 $\rightarrow$ 2)-6-*O*-methyl- $\beta$ -*D*-glucuronopyranosyl-3 $\beta$ ,22 $\beta$ ,24-trihydroxy-11-oxo-olean-12-ene  
C<sub>49</sub>H<sub>78</sub>O<sub>18</sub> (955.16). Source: BIAN JING HUANG QI *Astragalus complanatus*. Ref: 660.



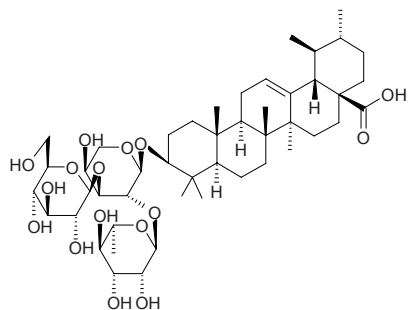
**18709** 3-*O*-[ $\alpha$ -*L*-Rhamnopyranosyl (1→2)]-[ $\beta$ -*D*-glucopyranosyl (1→3)]- $\alpha$ -*L*-arabinopyranosyl oleanolic acid

Patrinia-glycoside B-II C<sub>47</sub>H<sub>76</sub>O<sub>16</sub> (897.12). Source: HUANG HUA BAI JIANG *Patrinia scabiosaefolia*. Ref: 660.



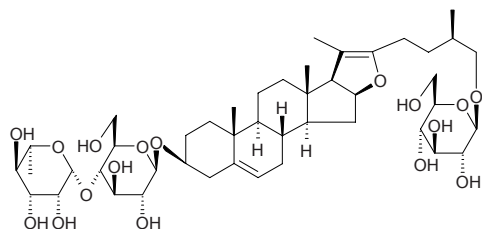
**18710** 3-*O*-[ $\alpha$ -*L*-Rhamnopyranosyl (1→2)]-[ $\beta$ -*D*-glucopyranosyl (1→3)]- $\alpha$ -*L*-arabinopyranosyl ursolic acid

C<sub>47</sub>H<sub>76</sub>O<sub>16</sub> (897.12). Source: HUANG HUA BAI JIANG *Patrinia scabiosaefolia*. Ref: 660.



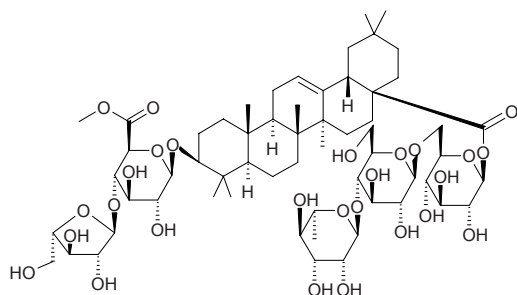
**18711** 3-*O*-[ $\alpha$ -*L*-Rhamnopyranosyl(1→4)- $\beta$ -*D*-glucopyranosyl]-26-*O*-[ $\beta$ -*D*-glucopyranosyl)-(25*R*)-furosta-5,20-dien-3 $\beta$ , 26-diol

C<sub>45</sub>H<sub>72</sub>O<sub>17</sub> (885.07). Source: TIAN MEN DONG *Asparagus cochinchinensis* [Syn. *Asparagus lucidus*]. Ref: 660.



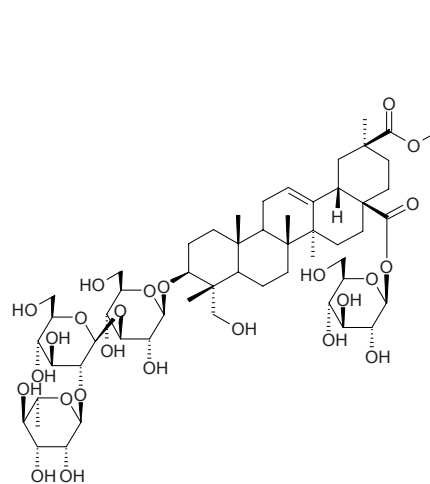
**18712**  $\alpha$ -*L*-Rhamnopyranosyl(1→4)- $\beta$ -*D*-glucopyranosyl(1→6)- $\beta$ -*D*-glucopyranosyl(1→6)- $\beta$ -*D*-glucopyranosyl-oleanate-3- $\alpha$ -*L*-arabinofuranosyl(1→4)-methyl- $\beta$ -*D*-glucuronopyranosideuronate

C<sub>60</sub>H<sub>96</sub>O<sub>27</sub> (1249.42). Source: TONG HUA GEN *Tetrapanax papyriferus*. Ref: 660.



**18713** 3-*O*-[ $\alpha$ -*L*-Rhamnopyranosyl(1→2)- $\beta$ -*D*-glucopyranosyl(1→2)- $\beta$ -*D*-glucopyranosyl] phytolaccagenic acid 28-*O*- $\beta$ -*D*-glucopyranosyl ester

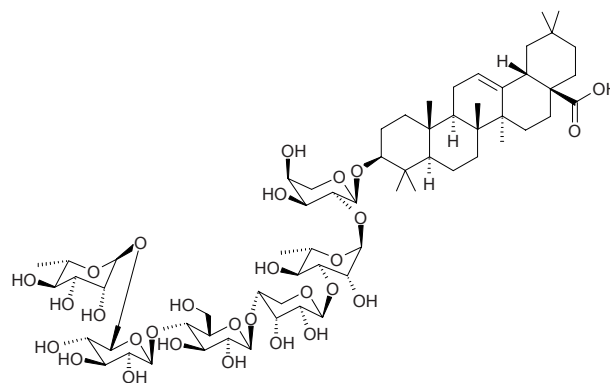
C<sub>55</sub>H<sub>88</sub>O<sub>25</sub> (1149.30). mp 227~230°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +5.3° (*c* = 0.7, MeOH). Source: CANG BAI CHENG GOU FENG *Diploclisia glaucescens*. Ref: 2054.



**18714** 3 $\beta$ -[(*O*- $\alpha$ -*L*-Rhamnopyranosyl(1→6)-*O*- $\beta$ -*D*-glucopyranosyl(1→4)-*O*- $\beta$ -*D*-glucopyranosyl(1→4)-*O*- $\beta$ -*D*-ribosepyranosyl(1→3)-*O*- $\alpha$ -*L*-rhamnopyranosyl(1→2)- $\alpha$ -*L*-arabinopyranosyl)oxy]olean-12-en-28-*oic* acid

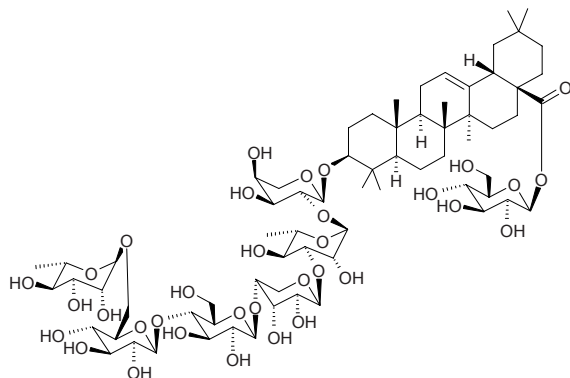
C<sub>64</sub>H<sub>104</sub>O<sub>29</sub> (1337.53). Amorphous solid, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -82.0° (*c* = 0.25, MeOH).

Pharm: Cytotoxic (*in vitro*, HL-60, IC<sub>50</sub> = 2.8  $\mu$ mol/L; BSY1, IC<sub>50</sub> = 5.9  $\mu$ mol/L; U251, IC<sub>50</sub> = 6.3  $\mu$ mol/L; SF295 IC<sub>50</sub> = 6  $\mu$ mol/L; PC3, IC<sub>50</sub> = 6  $\mu$ mol/L; NCI-H460, IC<sub>50</sub> = 40  $\mu$ mol/L; OVCAR-3, IC<sub>50</sub> = 47  $\mu$ mol/L; OVCAR-8, IC<sub>50</sub> = 71  $\mu$ mol/L; stomach MKN28, IC<sub>50</sub> = 30  $\mu$ mol/L; no significant differential cellular sensitivities when it was evaluated in the Japanese Foundation for Cancer Research 39 cell line assay). Source: WEI LING XIAN *Clematis chinensis* (root: yield = 0.0087%). Ref: 4763.



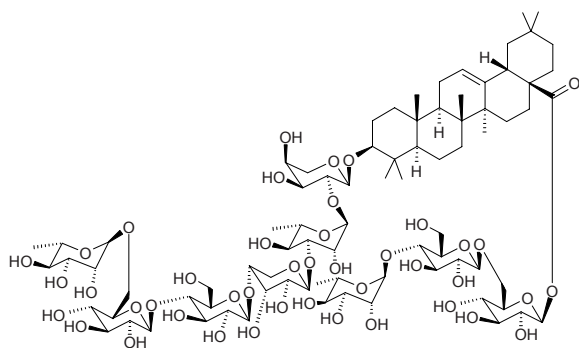
**18715** 3 $\beta$ -[(*O*- $\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 6)-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)-*O*- $\beta$ -D-ribosepyranosyl-(1 $\rightarrow$ 3)-*O*- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranosyl)oxy]olean-12-en-28-oic acid  $\beta$ -D-glucopyranosyl ester

C<sub>70</sub>H<sub>114</sub>O<sub>34</sub> (1499.67). Amorphous solid,  $[\alpha]_D^{25} = -70.0^\circ$  ( $c = 0.25$ , MeOH). Source: WEI LING XIAN *Clematis chinensis* (root; yield = 0.00042%). Ref: 4763.



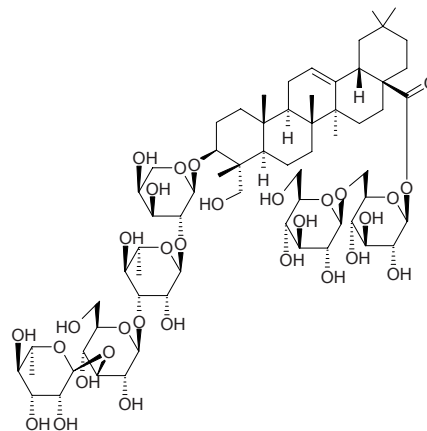
**18716** 3 $\beta$ -[(*O*- $\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 6)-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)-*O*- $\beta$ -D-ribosepyranosyl-(1 $\rightarrow$ 3)-*O*- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranosyl)oxy]olean-12-en-28-oic acid *O*- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl ester

C<sub>82</sub>H<sub>134</sub>O<sub>43</sub> (1807.96). Amorphous solid,  $[\alpha]_D^{25} = -94.0^\circ$  ( $c = 0.25$ , MeOH). Pharm: Cytotoxic inactive (*in vitro*, HL-60, 20 $\mu$ mol/L; but it can be converted to the cytotoxic saponin 1 (3 $\beta$ -[(*O*- $\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 6)-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)-*O*- $\beta$ -D-ribosepyranosyl-(1 $\rightarrow$ 3)-*O*- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranosyl)oxy]olean-12-en-28-oic acid) by cleavage of the C-28 triglycosyl ester linkage and is concluded to have a cytotoxic potentiality)). Source: WEI LING XIAN *Clematis chinensis* (root; yield = 0.11%). Ref: 4763.



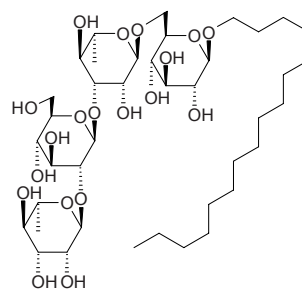
**18717** 3-*O*-2-L-Rhamnopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranosyl hederagenin 28-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl ester

C<sub>65</sub>H<sub>106</sub>O<sub>31</sub> (1385.55). White powder, mp 220–224°C,  $[\alpha]_D^{19} = -27.6^\circ$  ( $c = 0.2$ , methanol). Source: CHUAN XU DUAN *Dipsacus asperoides*. Ref: 211.



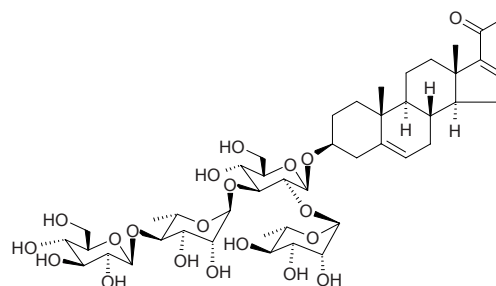
**18718** 1-*O*-[ $\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl]hexadecanol

C<sub>40</sub>H<sub>74</sub>O<sub>19</sub> (859.02).  $[\alpha]_D = -37.2^\circ$  ( $c = 0.492$ , CH<sub>3</sub>OH). Source: YAN SE LONG YAN *Dimocarpus fumatus*. Ref: 1853.



**18719** 3 $\beta$ -[(*O*- $\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 2)-*O*-[*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -D-glucopyranosyl)oxy]pregna-5,16-dien-20-one

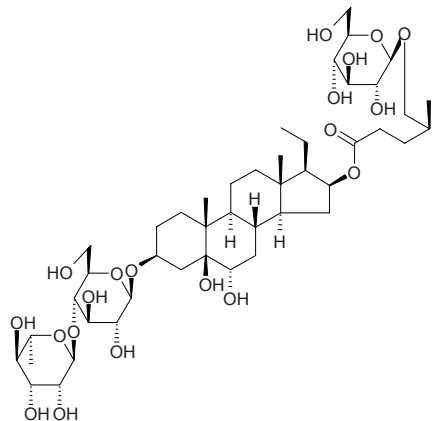
C<sub>45</sub>H<sub>70</sub>O<sub>20</sub> (931.05). Amorphous solid,  $[\alpha]_D^{25} = -44.0^\circ$  ( $c = 0.10$ , CHCl<sub>3</sub>:MeOH = 1:1). Source: JIAN GEN SHU *Tacca chantrieri* [Syn. *Tacca minor*; *Tacca esquirolii*] (rhizome; yield = 0.00041%dw). Ref: 4648.



**18720 3-O- $\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl 3 $\beta$ ,5 $\beta$ ,6 $\alpha$ ,16 $\beta$ -tetrahydroxypregnane 16-(5-O- $\beta$ -D-glucopyranosyl-4(S)-methyl-5-hydroxypentanoic acid) ester**

$C_{45}H_{76}O_{20}$  (937.10). Amorphous powder,  $[\alpha]_D^{29} = -28.4^\circ$  ( $c = 0.15$ , pyridine).

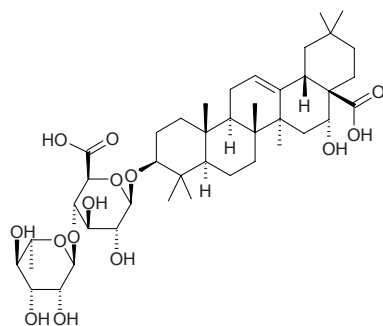
Source: JIU ZI *Allium tuberosum*. Ref: 4262.



**18721 3-O-[ $\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucuronopyranosyl] echinocystic acid**

$C_{42}H_{66}O_{14}$  (794.99). Amorphous powder,  $[\alpha]_D^{23} = -27.8^\circ$  ( $c = 1.10$ , MeOH).

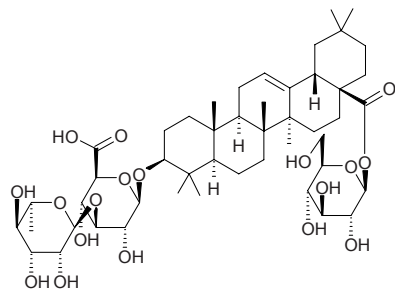
Source: E ZHANG TENG *Schefflera arboricola*. Ref: 3381.



**18722 3-O-[ $\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -D-glucuronopyranosyl]-28-O-( $\beta$ -D-glucopyranosyl)-3 $\beta$ -hydroxyolean-12-en-28-oate**

$C_{48}H_{76}O_{18}$  (941.13). Source: JIU CENG FENG *Cladostachys amaranthoides*

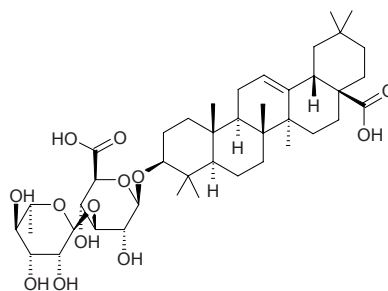
[Syn. *Achyranthes amaranthoides*; *Cladostachys frutescens*; *Deeringia amaranthoides*] (fruit). Ref: 660.



**18723 3-O- $\alpha$ -L-Rhamnopyranosyl (1 $\rightarrow$ 3)- $\beta$ -D-glucuronopyranosyl-3 $\beta$ -hydroxyolean-12-en-28-oate**

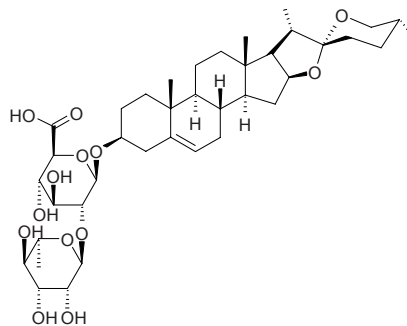
$C_{42}H_{66}O_{13}$  (778.99). Source: JIU CENG FENG *Cladostachys amaranthoides*

[Syn. *Achyranthes amaranthoides*; *Cladostachys frutescens*; *Deeringia amaranthoides*] (fruit). Ref: 660.



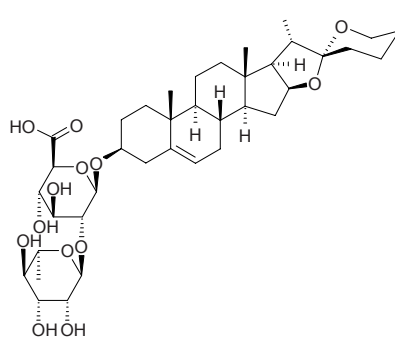
**18724 3-O- $\alpha$ -L-Rhamnopyranosyl (1 $\rightarrow$ 2)- $\beta$ -D-glucuronopyranosyl-3 $\beta$ -hydroxy-25R-spirost-5-ene**

$C_{39}H_{60}O_{13}$  (736.91). Source: BAI MAO TENG *Solanum lyratum*. Ref: 660.



**18725 3-O- $\alpha$ -L-Rhamnopyranosyl (1 $\rightarrow$ 2)- $\beta$ -D-glucuronopyranosyl-3 $\beta$ -hydroxy-25S-spirost-5-ene**

$C_{39}H_{60}O_{13}$  (736.91). Source: BAI MAO TENG *Solanum lyratum*. Ref: 660.

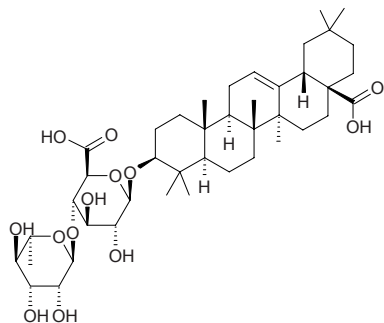




**18726 3-O-[ $\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucuronopyranosyl]oleanolic acid**

C<sub>42</sub>H<sub>66</sub>O<sub>13</sub> (778.99). Amorphous powder,  $[\alpha]_D^{23} = -8.4^\circ$  ( $c = 2.34$ , MeOH).

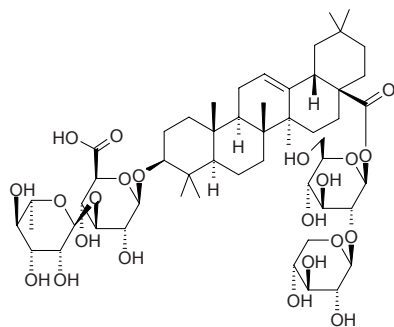
Source: E ZHANG TENG *Schefflera arborea*. Ref: 3381.



**18727 3-O-[ $\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -D-glucuronopyranosyl]-28-O-[ $\beta$ -D-xylopyranosyl(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranosyl]-3 $\beta$ -hydroxyolean-12-en-28-oate**

C<sub>53</sub>H<sub>84</sub>O<sub>22</sub> (1073.25). Source: JIU CENG FENG *Cladostachys amaranthoides*

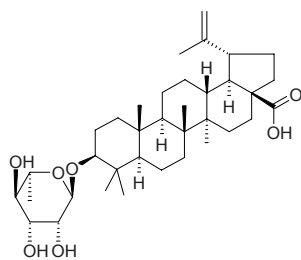
[Syn. *Achyranthes amaranthoides*; *Cladostachys frutescens*; *Deeringia amaranthoides*] (fruit). Ref: 660.



**18728  $\alpha$ -L-Rhamnopyranosyl-3 $\beta$ -hydroxy-lup-20(29)-en-28-oic acid**

C<sub>36</sub>H<sub>58</sub>O<sub>7</sub> (602.86). Source: XIAO HUA WU YA GUO *Dillenia pentagyna*.

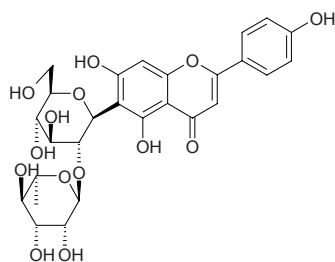
Ref: 1521.



**18729 2''-O- $\alpha$ -L-Rhamnopyranosylisovitexin**

C<sub>27</sub>H<sub>30</sub>O<sub>14</sub> (578.53).  $[\alpha]_D^{27} = -122.4^\circ$  ( $c = 0.65$ , pyridine). Source: RI BEN

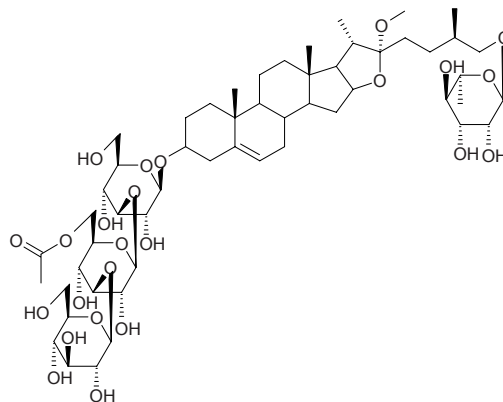
SHUANG HU DIE *Tripterispermum japonicum*. Ref: 3533.



**18730 (25R)-26-[( $\alpha$ -L-Rhamnopyranosyl)oxy]-22 $\alpha$ -methoxyfurost-5-en-3 $\beta$ -yl-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)-O-[6-acetyl- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)]-O- $\beta$ -D-glucopyranoside**

C<sub>54</sub>H<sub>88</sub>O<sub>24</sub> (1121.29). Amorphous powder,  $[\alpha]_D^{25} = -46^\circ$  ( $c = 0.05$ , MeOH).

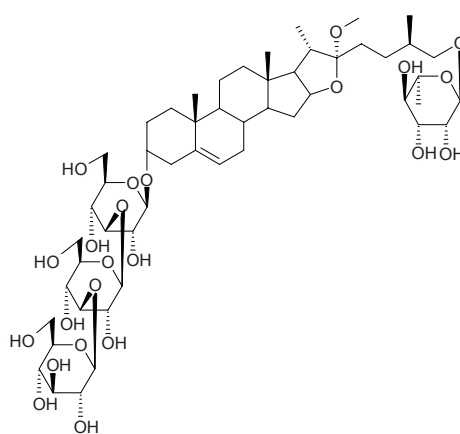
Source: LV TI GEN CAO *Helleborus viridis* (leaf). Ref: 3875.



**18731 (25R)-26-[( $\alpha$ -L-Rhamnopyranosyl)oxy]-22 $\alpha$ -methoxyfurost-5-en-3 $\beta$ -yl-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)-O- $\beta$ -D-glucopyranoside**

C<sub>52</sub>H<sub>86</sub>O<sub>23</sub> (1079.25). Amorphous powder,  $[\alpha]_D^{25} = -70^\circ$  ( $c = 0.1$ , MeOH).

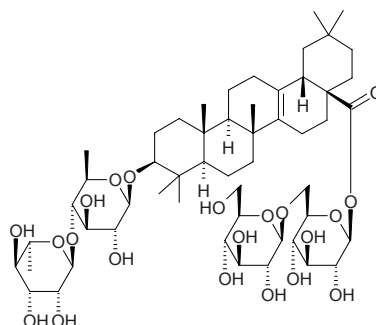
Source: LV TI GEN CAO *Helleborus viridis* (leaf). Ref: 3875.



**18732 3-O- $\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-quinovopyranosyl pyrocincholic acid 28-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl ester**

C<sub>53</sub>H<sub>86</sub>O<sub>21</sub> (1059.26). Amorphous powder,  $[\alpha]_D^{25} = -43^\circ$  ( $c = 0.5$ , MeOH).

Source: WU BING XIN WU TAN *Neonauclea sessilifolia* [Syn. *Nauclea sessilifolia*; *Adina sessilifolia*](root). Ref: 4405.

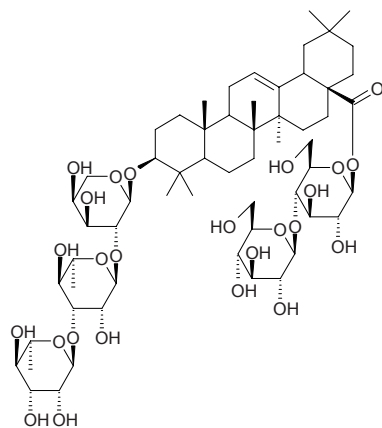


**18733** 3-*O*-( $\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -L-rhamno-pyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranosyl)-olean-12-ene-28-*O*-( $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl) ester

C<sub>59</sub>H<sub>96</sub>O<sub>25</sub> (1205.41). White powder,  $[\alpha]_D^{25} = +22^\circ$ , ( $c = 1$ , MeOH). **Pharm:** Cytotoxic (antiproliferative *in vitro*: J774.A1 cell line, IC<sub>50</sub> = 1.78  $\mu$ mol/L; HEK-293 cell line, IC<sub>50</sub> = 2.2  $\mu$ mol/L; control 6-Mercaptopurine, J774.A1 cell line, IC<sub>50</sub> = 0.003  $\mu$ mol/L; HEK-293 cell line, IC<sub>50</sub> = 0.007  $\mu$ mol/L).

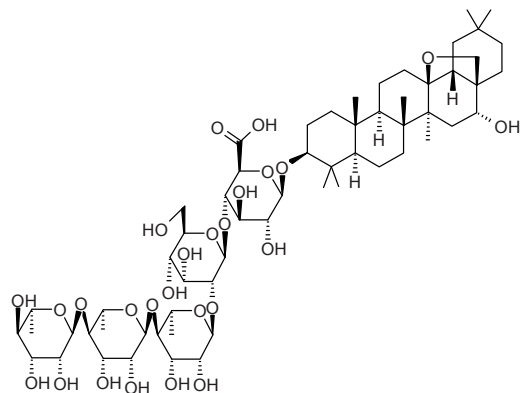
**Source:** YUAN YE E ZHANG CHAI *Schefflera roundifolia* (aerial parts).

**Ref:** 5036.



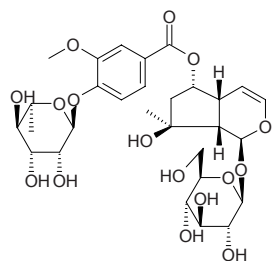
**18734** 3- $\beta$ -{*O*- $\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 4)-*O*- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)-[*O*- $\alpha$ -L-rham-nopyranosyl-(1 $\rightarrow$ 2)-*O*- $\beta$ -D-glucopyranosyl(1 $\rightarrow$ 4)-*O*- $\beta$ -D-glucuronopyranosyl]}-16 $\alpha$ -hydroxy-13 $\beta$ , 28-epoxyoleanane

C<sub>60</sub>H<sub>98</sub>O<sub>26</sub> (1235.43). **Source:** CI WU JIA *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*]. **Ref:** 2.



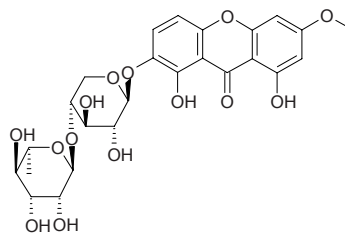
**18735** 6-*O*-(4''-*O*- $\alpha$ -L-Rhamnopyranosyl) vanilloylajugol

C<sub>29</sub>H<sub>40</sub>O<sub>16</sub> (644.63). **Source:** GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*]. **Ref:** 2.



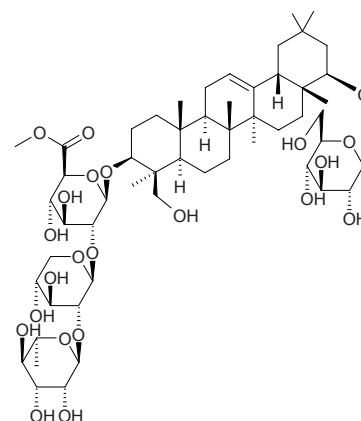
**18736** 2-*O*-[ $\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-xylopyranosyl]-1,8-dihydroxy-6-methoxyxanthone

C<sub>25</sub>H<sub>28</sub>O<sub>14</sub> (552.49). **Source:** RI BEN ZHANG YA CAI *Swertia japonica*. **Ref:** 2528.



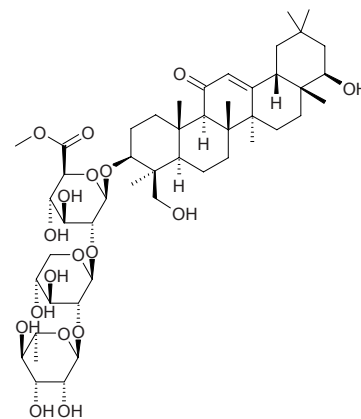
**18737** 3-*O*- $\alpha$ -L-Rhamnopyranosyl(1 $\rightarrow$ 2)- $\beta$ -D-xylopyranosyl(1 $\rightarrow$ 2)-6-*O*-methyl- $\beta$ -D-glucuronopyranosyl-soyasapogenol B 22-*O*- $\beta$ -D-glucopyranoside

C<sub>54</sub>H<sub>88</sub>O<sub>22</sub> (1089.29). **Source:** BIAN JING HUANG QI *Astragalus complanatus*. **Ref:** 660.



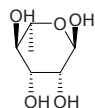
**18738** 3-*O*- $\alpha$ -L-Rhamnopyranosyl(1 $\rightarrow$ 2)- $\beta$ -D-xylopyranosyl(1 $\rightarrow$ 2)-6-*O*-methyl- $\beta$ -D-glucuronopyranosyl-3 $\beta$ ,22 $\beta$ ,24-trihydroxy-11-oxo-olean-12-ene

C<sub>48</sub>H<sub>76</sub>O<sub>18</sub> (941.13). **Source:** BIAN JING HUANG QI *Astragalus complanatus*. **Ref:** 660.

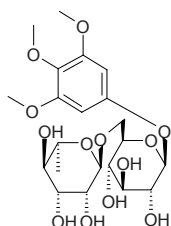


**18739 Rhamnose**

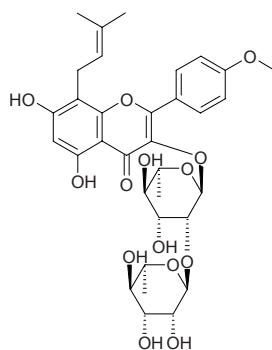
6-Deoxy-*L*-mannose [3615-41-6] C<sub>6</sub>H<sub>12</sub>O<sub>5</sub> (164.16). (L) White powdery crystals, mp 289–290°C (MeOH), mp (L) ( $\alpha$ ) 105°C, ( $\beta$ ) 123–125°C. Source: DANG SHEN *Codonopsis pilosula*, DONG BEI CI REN SHEN *Oplopanax elatus*, LU HUI *Aloe vera* [Syn. *Aloe barbadensis*], QIANG HUO *Notopterygium incisum*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], XIA YE XIANG PU *Typha angustifolia*. Ref: 2, 6, 450, 660.

**18740 1-[ $\alpha$ -*L*-Rhamnosyl-(1→6)- $\beta$ -*D*-glucopyranosyl]-3,4,5-trimethoxybenzene**

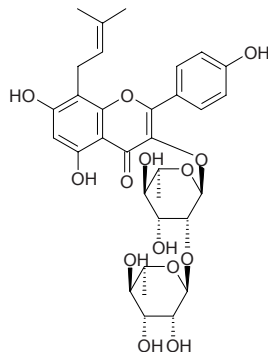
C<sub>21</sub>H<sub>32</sub>O<sub>13</sub> (492.48). Source: MAO GUO QI *Acer nikoense* (stem cortex: yield = 0.0010%). Ref: 4304.

**18741 2''-*O*-Rhamnosyl icariside II**

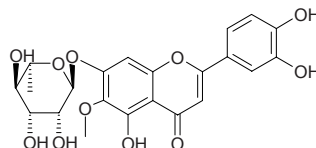
C<sub>33</sub>H<sub>40</sub>O<sub>14</sub> (660.68). Source: CHAO XIAN YIN YANG HUO *Epimedium koreanum*. Ref: 660.

**18742 2''-*O*-Rhamnosylkariside A**

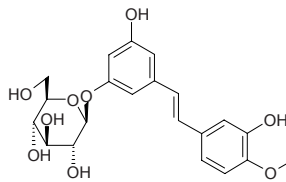
C<sub>32</sub>H<sub>38</sub>O<sub>14</sub> (646.65). Source: CHAO XIAN YIN YANG HUO *Epimedium koreanum*. Ref: 660.

**18743 7 $\alpha$ -*L*-Rhamnosyl-6-methoxyluteolin**

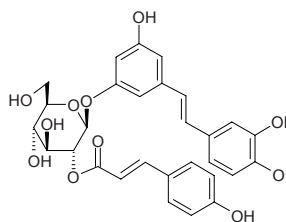
C<sub>22</sub>H<sub>22</sub>O<sub>11</sub> (462.41). Source: KONG XIN XIAN *Alternanthera philoxeroides*. Ref: 6.

**18744 Rhaponticin**

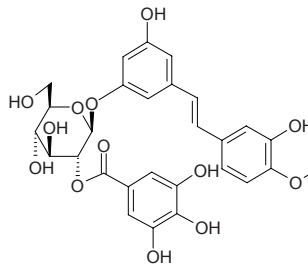
Rhapontigenin 3-*O*- $\beta$ -*D*-glucopyranoside [155-58-8] C<sub>21</sub>H<sub>24</sub>O<sub>9</sub> (420.42). Colorless needles (acetone), mp 245–247°C, mp 246–248°C, mp 231°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = –56° (*c* = 0.88, acetone:H<sub>2</sub>O = 1:1) (lit. [ $\alpha$ ]<sub>D</sub><sup>25</sup> = –56.3°). Pharm: Platelet aggregation inhibitor (2.5  $\mu$ g/mL collagen-induced, IC<sub>50</sub> = (52.3  $\pm$  4.1)  $\mu$ mol/L, *p* < 0.05, control *trans*-Resveratrol, IC<sub>50</sub> = (11.6  $\pm$  2.1)  $\mu$ mol/L, *p* < 0.01; 6  $\mu$ mol/L ADP-induced, IC<sub>50</sub> = (112  $\pm$  17)  $\mu$ mol/L, *p* < 0.05, *trans*-Resveratrol, IC<sub>50</sub> = (17.8  $\pm$  3.3)  $\mu$ mol/L, *p* < 0.01)<sup>[5094]</sup>. Source: DA HUANG *Rheum officinale*, ZHANG YE DA HUANG *Rheum palmatum*, *Rheum palaestinum* (aerial parts). Ref: 2, 660, 1521, 5094.

**18745 Rhaponticin 2''-*O*-*p*-coumarate**

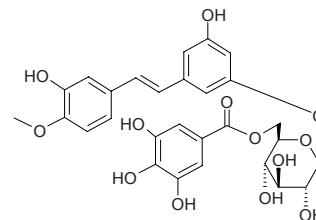
C<sub>30</sub>H<sub>30</sub>O<sub>11</sub> (566.57). Source: YU DA HUANG *Rheum* sp.<sup>[4064]</sup>. Ref: 660, 4064.

**18746 Rhaponticin 2''-*O*-gallate**

C<sub>28</sub>H<sub>28</sub>O<sub>13</sub> (572.53). Source: YU DA HUANG *Rheum* sp.<sup>[4064]</sup>. Ref: 660, 4064.

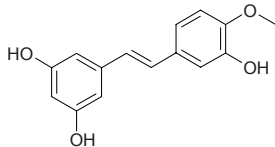
**18747 Rhaponticin 6''-*O*-gallate**

C<sub>28</sub>H<sub>28</sub>O<sub>13</sub> (572.53). Source: YU DA HUANG *Rheum* sp.<sup>[4064]</sup>. Ref: 660, 4064.

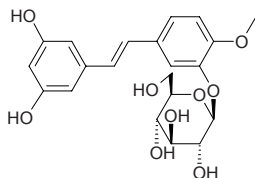


**18748 Rhapontigenin**

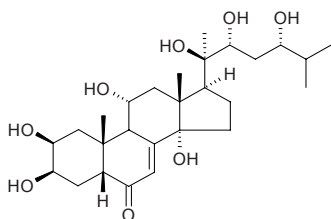
Pontigenin [500-65-2] C<sub>15</sub>H<sub>14</sub>O<sub>4</sub> (258.28). mp 186~187°C. Source: DA HUANG *Rheum officinale*. Ref: 6.

**18749 Rhapontigenin 3'-O-β-D-glucopyranoside**

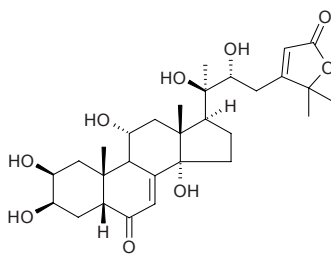
C<sub>21</sub>H<sub>24</sub>O<sub>9</sub> (420.42). Source: YU DA HUANG *Rheum* sp.<sup>[4064]</sup>. Ref: 660, 4064.

**18750 Rhapontisterone**

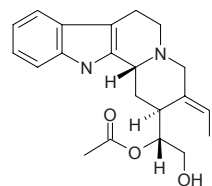
(20*R*,22*R*,24*S*)-2β,3β,11α,14α,20,22,24-Hepta-hydroxy-5β-cholest-7-en-6-one C<sub>27</sub>H<sub>44</sub>O<sub>8</sub> (496.65). White acicular crystals, mp 234~236°C. Source: LOU LU *Rhaponticum uniflorum*. Ref: 194.

**18751 Rhapontisterone R<sub>1</sub>**

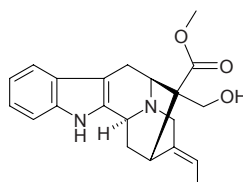
C<sub>29</sub>H<sub>42</sub>O<sub>9</sub> (534.65). Source: LOU LU *Rhaponticum uniflorum*. Ref: 365.

**18752 Rhazimanine**

C<sub>21</sub>H<sub>26</sub>N<sub>2</sub>O<sub>3</sub> (354.45). Source: XIANG PI MU *Alstonia scholaris*. Ref: 660.

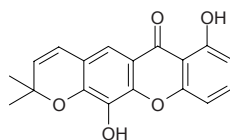
**18753 Rhazine**

[639-36-1] C<sub>21</sub>H<sub>24</sub>N<sub>2</sub>O<sub>3</sub> (352.44). mp 245.0~247.5°C (ethanol), 243~246°C (benzene). Source: XIANG PI MU *Alstonia scholaris*. Ref: 6.

**18754 Rheediachromenoxanthone**

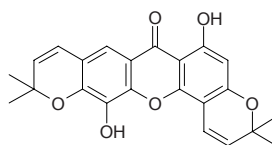
[82667-93-4] C<sub>18</sub>H<sub>14</sub>O<sub>5</sub> (310.31). Crystals (Et<sub>2</sub>O-hexane), mp 223~224°C.

Pharm: Cytotoxic (P<sub>388</sub> ED<sub>50</sub> = 1.67μg/mL, control Mithramycin ED<sub>50</sub> = 0.06μg/mL; HT29 ED<sub>50</sub> = 4.68μg/mL, control Mithramycin ED<sub>50</sub> = 0.08μg/mL). Source: TAI WAN LV DAO TENG HUANG *Garcinia linii*, *Rheedia gardneriana*. Ref: 4094.

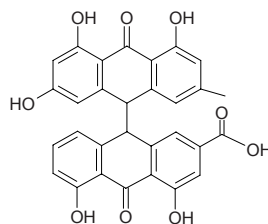
**18755 Rheediaxanthone A**

C<sub>23</sub>H<sub>20</sub>O<sub>6</sub> (392.41). Pharm: Antioxidant inactive (DPPH scavenger, 10μmol/L, ScRt = 8%; control BHT, 10μmol/L, ScRt = 43%, IC<sub>50</sub> = 19.00μmol/L)<sup>[4422]</sup>.

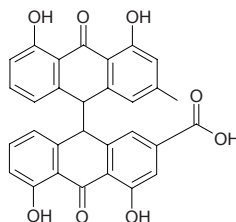
Source: HEI XIAN TIAO TENG HUANG *Garcinia nigrolineata* (stam bark), TIAN SHAN ZHU ZI *Garcinia dulcis* (flower). Ref: 3482, 4422.

**18756 Rheidin A**

Reidin A C<sub>30</sub>H<sub>20</sub>O<sub>9</sub> (524.49). Source: DA HUANG *Rheum officinale*, TANG GU TE DA HUANG *Rheum tanguticum*, ZHANG YE DA HUANG *Rheum palmatum*. Ref: 2, 660.

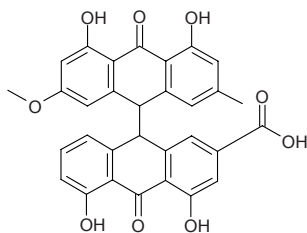
**18757 Rheidin B**

Reidin B C<sub>30</sub>H<sub>20</sub>O<sub>8</sub> (508.49). Source: DA HUANG *Rheum officinale*, TANG GU TE DA HUANG *Rheum tanguticum*, ZHANG YE DA HUANG *Rheum palmatum*. Ref: 2, 660.

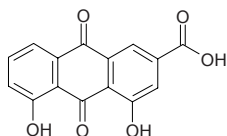


**18758 Rheidin C**

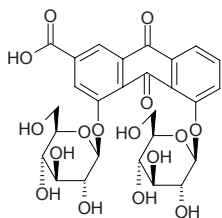
Rheidin C  $C_{31}H_{22}O_9$  (538.52). Source: DA HUANG *Rheum officinale*, TANG GU TE DA HUANG *Rheum tanguticum*, ZHANG YE DA HUANG *Rheum palmatum*. Ref: 2, 660.

**18759 Rhein**

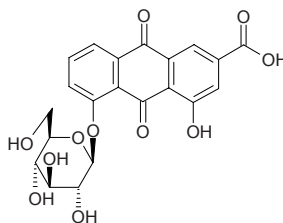
Cassic acid [478-43-3]  $C_{15}H_8O_6$  (284.23). mp 321–322°C. Pharm: Antineoplastic (mus, melanoma, 50mg/(kg·d), InRt = 76%, mammary cancer and EAC); antiproliferative (liver cancer cell HepG2,  $IC_{50}$  = 39.3  $\mu$ mol/L, control 5-FU, 200  $\mu$ mol/L, inhibition rate = 50%)<sup>[4915]</sup>; antibacterial (*Streptococcus* sp., *Staphylococcus aureus*, *Bacillus diphtheriae*, *Bacillus subtilis*, *Bacillus anthracis*, *B. typhosus*, *Bacillus paratyphosus*, and *Bacillus dysenteriae*, MIC = 15  $\mu$ g/mL); antifungal (dermatophyte); diuretic; laxative (very strong). Source: CHOU CAO *Ruta graveolens*, DA HUANG *Rheum officinale*, FAN XIE YE *Cassia angustifolia*, HE SHOU WU *Polygonum multiflorum* (dried tuberoid (preparing): content scope of 2 batch samples = 0.082%–0.094%, mean content = 0.088%)<sup>[5508]</sup>, HU ZHANG *Polygonum cuspidatum*, JIAN YE FAN XIE YE *Cassia acutifolia*, JUE MING ZI *Cassia tora*, SHAN BIAN DOU ZI *Cassia mimosoides*, SHE XIANG XUAN *Hemerocallis thunbergii*, TANG GU TE DA HUANG *Rheum tanguticum*, XUAN CAO GEN *Hemerocallis fulva* (root: mean content collected in Apr. To Jun. = 0.02016%)<sup>[5508]</sup>, ZANG BIAN DA HUANG *Rheum emodi* [Syn. *Rheum australe*] (stem and rhizome: content < 0.05%)<sup>[5508]</sup>, ZHANG YE DA HUANG *Rheum palmatum* (stem and rhizome: content scope = 0.50%–4.50%). Ref: 2, 4, 555, 658, 660, 4915, 5508.

**18760 Rhein diglucoside**

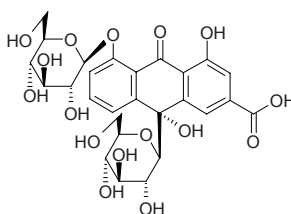
$C_{27}H_{28}O_{16}$  (608.51). Source: ZHANG YE DA HUANG *Rheum palmatum*. Ref: 6.

**18761 Rhein-8-O-β-D-glucopyranoside**

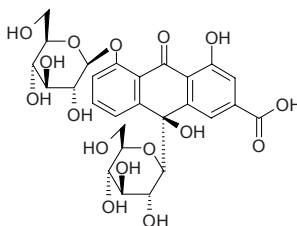
Rhein-8-monoglucoside  $C_{21}H_{18}O_{11}$  (446.37). mp 260–266°C. Source: DA HUANG *Rheum officinale*, TANG GU TE DA HUANG *Rheum tanguticum* (dried stem and rhizome: mean content of 3 origins = 1.07%)<sup>[5517]</sup>, ZHANG YE DA HUANG *Rheum palmatum* (dried stem and rhizome: mean content of 4 origins = 1.27%)<sup>[5517]</sup>. Ref: 2, 6, 660, 5517.

**18762 Rheinoside A**

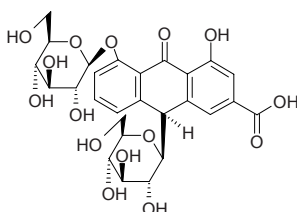
$C_{27}H_{30}O_{16}$  (610.53). Source: ZHANG YE DA HUANG *Rheum palmatum*, TANG GU TE DA HUANG *Rheum tanguticum*. Ref: 2, 660.

**18763 Rheinoside B**

$C_{27}H_{30}O_{16}$  (610.53). Source: ZHANG YE DA HUANG *Rheum palmatum*, TANG GU TE DA HUANG *Rheum tanguticum*. Ref: 2, 660.

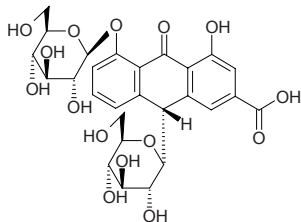
**18764 Rheinoside C**

$C_{27}H_{30}O_{15}$  (594.53). Source: ZHANG YE DA HUANG *Rheum palmatum*, TANG GU TE DA HUANG *Rheum tanguticum*. Ref: 2, 660.

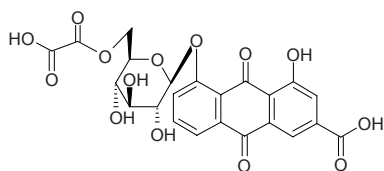


**18765 Rheinoside D**

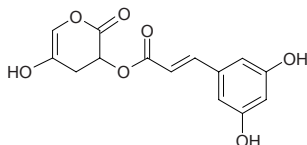
$C_{27}H_{30}O_{15}$  (594.53). Source: ZHANG YE DA HUANG *Rheum palmatum*, TANG GU TE DA HUANG *Rheum tanguticum*. Ref: 2, 660.

**18766 Rhein-8-O-β-D-(6'-oxalyl)-glucopyra-noside**

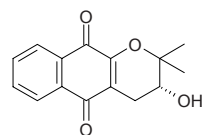
$C_{23}H_{18}O_{14}$  (518.39). Source: DA HUANG *Rheum officinale*, ZHANG YE DA HUANG *Rheum palmatum*, TANG GU TE DA HUANG *Rheum tanguticum*. Ref: 2, 660.

**18767 Rheumin**

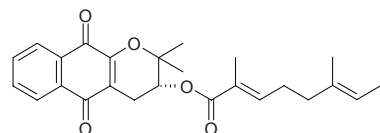
$C_{14}H_{12}O_7$  (292.25). Yellow acicular crystals, mp 245~248°C. Source: HE TAO DA HUANG *Rheum hotaense*. Ref: 818.

**18768 Rhinacanthin A**

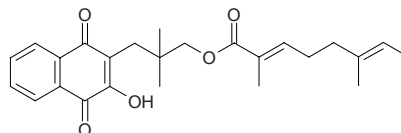
$C_{15}H_{14}O_4$  (258.28). Pharm: Cytotoxic (KB ED<sub>50</sub> = 6.75μg/mL; P<sub>388</sub> ED<sub>50</sub> = 0.72μg/mL; A549 ED<sub>50</sub> = 3.06μg/mL; HT29 ED<sub>50</sub> = 2.17μg/mL; HL-60 ED<sub>50</sub> = 1.16μg/mL); platelet aggregation inhibitor (rbt: due to 10μg/mL collagen, 50μg/mL InRt = 100%; due to 100μmol/L arachidonic acid, 100μg/mL InRt = 100%). Source: BAI HE LING ZHI *Rhinacanthus nasutus* (root; yield = 0.049%dw). Ref: 660, 1555.

**18769 Rhinacanthin B**

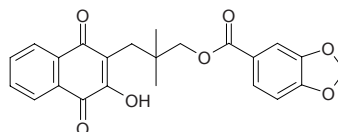
$C_{25}H_{28}O_5$  (408.50). Pharm: Cytotoxic (KB ED<sub>50</sub> = 8.01μg/mL; P<sub>388</sub> ED<sub>50</sub> = 0.35μg/mL; A549 ED<sub>50</sub> = 6.50μg/mL; HT29 ED<sub>50</sub> = 3.01μg/mL; HL-60 ED<sub>50</sub> = 2.57μg/mL); platelet aggregation inhibitor (rbt: due to 10μg/mL collagen, 50μg/mL InRt = 87.8%, 100μg/mL InRt = 100%; due to 2ng/mL PAF, 100μg/mL InRt = 63.1%). Source: BAI HE LING ZHI *Rhinacanthus nasutus* (root; yield = 0.0058%dw). Ref: 660, 1555.

**18770 Rhinacanthin C**

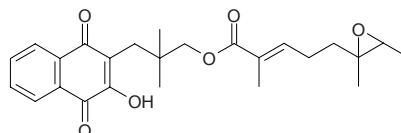
$C_{25}H_{30}O_5$  (410.51). Pharm: Cytotoxic (KB ED<sub>50</sub> = 6.26μg/mL; P<sub>388</sub> ED<sub>50</sub> = 0.26μg/mL; A549 ED<sub>50</sub> = 0.35μg/mL; HT29 ED<sub>50</sub> = 0.68μg/mL; HL-60 ED<sub>50</sub> = 0.68μg/mL); platelet aggregation inhibitor (rbt: due to 10μg/mL collagen, 100μg/mL InRt = 75.2%; due to 100μmol/L arachidonic acid, 100μg/mL InRt = 100%); antiviral (hmn, CMV, EC<sub>50</sub> = 0.02μg/mL, SI = 28; mus, CMV, EC<sub>50</sub> = 0.57μg/mL, SI = 4.6). Source: BAI HE LING ZHI *Rhinacanthus nasutus* (root; yield = 0.114%dw). Ref: 1555.

**18771 Rhinacanthin D**

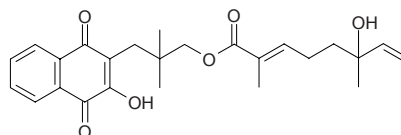
$C_{23}H_{20}O_7$  (408.41). Pharm: Cytotoxic (KB ED<sub>50</sub> = 25.0μg/mL; P<sub>388</sub> ED<sub>50</sub> = 3.79μg/mL; A549 ED<sub>50</sub> = 8.26μg/mL; HT29 ED<sub>50</sub> = 8.89μg/mL; HL-60 ED<sub>50</sub> = 11.8μg/mL); antiviral (hmn, CMV, EC<sub>50</sub> = 0.22μg/mL; mus, CMV, EC<sub>50</sub> = 9.5μg/mL). Source: BAI HE LING ZHI *Rhinacanthus nasutus* (root; yield = 0.0025%). Ref: 1555.

**18772 Rhinacanthin G**

$C_{25}H_{30}O_6$  (426.51). Pharm: Cytotoxic (KB ED<sub>50</sub> = 4.45μg/mL; P<sub>388</sub> ED<sub>50</sub> = 0.14μg/mL; A549 ED<sub>50</sub> = 0.75μg/mL; HT29 ED<sub>50</sub> = 0.57μg/mL; HL-60 ED<sub>50</sub> = 1.14μg/mL); platelet aggregation inhibitor (rbt: due to 100μmol/L arachidonic acid, 100μg/mL InRt = (42.6±8.9)%). Source: BAI HE LING ZHI *Rhinacanthus nasutus* (root; yield = 0.0046%). Ref: 1555.

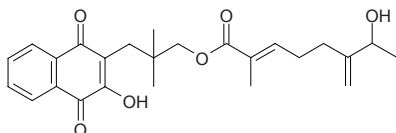
**18773 Rhinacanthin H**

$C_{25}H_{30}O_6$  (426.51). Pharm: Cytotoxic (KB ED<sub>50</sub> = 23.8μg/mL; P<sub>388</sub> ED<sub>50</sub> = 6.43μg/mL; A549 ED<sub>50</sub> = 9.97μg/mL; HT29 ED<sub>50</sub> = 11.5μg/mL; HL-60 ED<sub>50</sub> = 8.87μg/mL); platelet aggregation inhibitor (rbt: due to 100μmol/L arachidonic acid, 100μg/mL InRt = (54.8±4.4%); due to 10μg/mL collagen, 100μg/mL InRt = (31.0±3.9)%). Source: BAI HE LING ZHI *Rhinacanthus nasutus* (root; yield = 0.0028%). Ref: 1555.

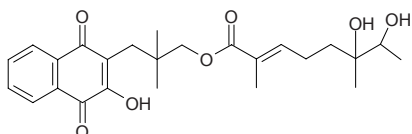


**18774 Rhinacanthin I**

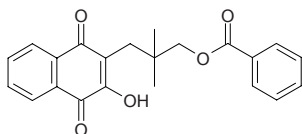
$C_{25}H_{30}O_6$  (426.51). **Pharm:** Cytotoxic (KB  $ED_{50}$  = 13.2 $\mu$ g/mL;  $P_{388}$   $ED_{50}$  = 4.88 $\mu$ g/mL; A549  $ED_{50}$  = 7.18 $\mu$ g/mL; HT29  $ED_{50}$  = 6.30 $\mu$ g/mL; HL-60  $ED_{50}$  = 5.12 $\mu$ g/mL); platelet aggregation inhibitor (rbt: due to 100 $\mu$ mol/L arachidonic acid, 100 $\mu$ g/mL InRt = (54.9 $\pm$ 8.2)%; due to 2ng/mL PAF, 100 $\mu$ g/mL InRt = (22.2 $\pm$ 3.9)%). **Source:** BAI HE LING ZHI *Rhinacanthus nasutus* (root; yield = 0.0037%). **Ref:** 1555.

**18775 Rhinacanthin K**

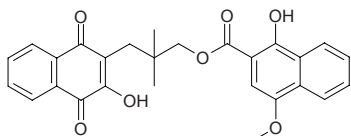
$C_{25}H_{30}O_7$  (444.53). **Pharm:** Cytotoxic (KB  $ED_{50}$  = 17.3 $\mu$ g/mL,  $P_{388}$   $ED_{50}$  = 3.17 $\mu$ g/mL, A549  $ED_{50}$  = 16.4 $\mu$ g/mL, HT29  $ED_{50}$  = 7.75 $\mu$ g/mL, HL-60  $ED_{50}$  = 6.81 $\mu$ g/mL); platelet aggregation inhibitor (rbt: due to 100 $\mu$ mol/L arachidonic acid, 100 $\mu$ g/mL InRt = (36.8 $\pm$ 8.9)%). **Source:** BAI HE LING ZHI *Rhinacanthus nasutus* (root; yield = 0.0017%). **Ref:** 1555.

**18776 Rhinacanthin M**

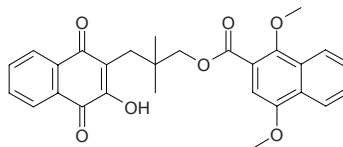
$C_{22}H_{20}O_5$  (364.40). **Pharm:** Cytotoxic (KB  $ED_{50}$  = 19.2 $\mu$ g/mL;  $P_{388}$   $ED_{50}$  = 3.95 $\mu$ g/mL; A549  $ED_{50}$  = 8.90 $\mu$ g/mL; HT29  $ED_{50}$  = 10.1 $\mu$ g/mL; HL-60  $ED_{50}$  = 19.9 $\mu$ g/mL); platelet aggregation inhibitor (rbt: due to 100 $\mu$ mol/L arachidonic acid, 100 $\mu$ g/mL InRt = (100 $\pm$ 1)%). **Source:** BAI HE LING ZHI *Rhinacanthus nasutus* (root; yield = 0.0037%). **Ref:** 1555.

**18777 Rhinacanthin N**

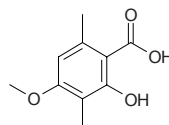
$C_{27}H_{24}O_7$  (460.49). **Pharm:** Cytotoxic (KB  $ED_{50}$  = 4.80 $\mu$ g/mL;  $P_{388}$   $ED_{50}$  = 0.71 $\mu$ g/mL; A549  $ED_{50}$  = 1.97 $\mu$ g/mL; HT29  $ED_{50}$  = 2.67 $\mu$ g/mL; HL-60  $ED_{50}$  = 1.38 $\mu$ g/mL). **Source:** BAI HE LING ZHI *Rhinacanthus nasutus* (root; yield = 0.0012%). **Ref:** 1555.

**18778 Rhinacanthin Q**

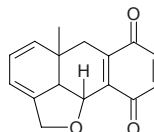
$C_{28}H_{26}O_7$  (474.52). **Pharm:** Cytotoxic ( $P_{388}$   $ED_{50}$  = 0.61 $\mu$ g/mL; A549  $ED_{50}$  = 3.61 $\mu$ g/mL; HT29  $ED_{50}$  = 7.60 $\mu$ g/mL; HL-60  $ED_{50}$  = 8.90 $\mu$ g/mL); platelet aggregation inhibitor (rbt: due to 100 $\mu$ mol/L arachidonic acid, 100 $\mu$ g/mL InRt = (55 $\pm$ 11)%; due to 10 $\mu$ g/mL collagen, 100 $\mu$ g/mL InRt = (20.4 $\pm$ 3.7)%). **Source:** BAI HE LING ZHI *Rhinacanthus nasutus* (root; yield = 0.00021%). **Ref:** 1555.

**18779 Rhizonic acid**

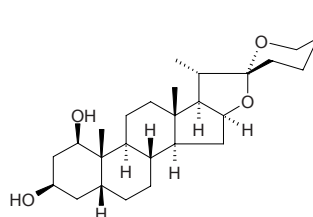
Coccellinic acid  $C_{10}H_{12}O_4$  (196.20). **Source:** DI TU YI *Rhizocarpon geographicum*, LI BIAN ZHI YI *Evernia prunastri*. **Ref:** 1521.

**18780 Rhizonone**

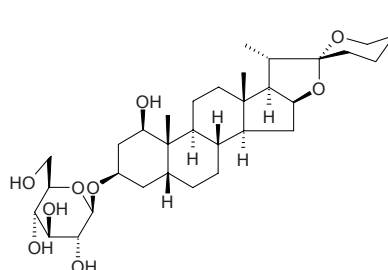
$C_{16}H_{14}O_3$  (254.29). Colorless oil. **Pharm:** Antifungal (*Cladosporium fulvum*, inhibits spore germination). **Source:** ZI CAO *Lithospermum erythrorhizon*. **Ref:** 2298.

**18781 Rhodeasapogenin**

[514-30-7]  $C_{27}H_{44}O_4$  (432.65). mp 293~295°C. **Source:** LING LAN *Convallaria keiskei* [Syn. *Convallaria majalis*]. **Ref:** 6.

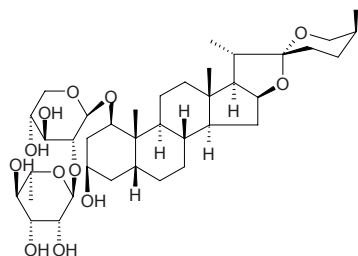
**18782 Rhodeasapogenin-3-O-β-D-glucopyranoside**

$C_{33}H_{54}O_9$  (594.79). **Source:** WAN NIAN QING GEN *Rhodea japonica* [Syn. *Orontium japonicum*]. **Ref:** 660.



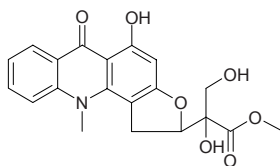
**18783 Rhodexasopogenin-1-O- $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 2)- $\beta$ -D-xylopyranoside**

C<sub>38</sub>H<sub>62</sub>O<sub>12</sub> (710.91). Source: WAN NIAN QING GEN *Rohdea japonica* [Syn. *Orontium japonicum*]. Ref: 660.



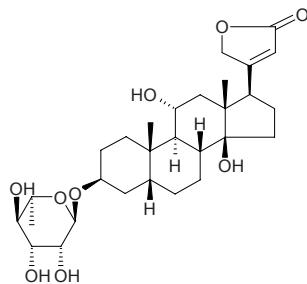
**18784 Rhodesiacidrone**

Methyl 2,3-dihydroxy-2-(5-hydroxy-11-methyl-6-oxo-1,2,6,11-tetrahydrofuro [2,3-c]acridin-2-yl) propanoate C<sub>20</sub>H<sub>19</sub>NO<sub>7</sub> (385.38). Yellow amorphous powder,  $[\alpha]_D = -47.7^\circ$  ( $c = 0.1$ , MeOH). Pharm: Antileishmanial (*Leishmania major* promastigote, 10 $\mu$ mol/L, survival = (30.7 $\pm$ 3.2)%), 1 $\mu$ mol/L, survival = (96.0 $\pm$ 1.8)%, control Amphotericin B, 10 $\mu$ mol/L, survival = (0.2 $\pm$ 0.04)%, 1 $\mu$ mol/L, survival = (71.9 $\pm$ 4.4)%; *Leishmania major* amastigote, 10 $\mu$ mol/L, survival = (6.2 $\pm$ 0.7)%, 1 $\mu$ mol/L, survival = (48.6 $\pm$ 2.7)%, control Amphotericin B, 10 $\mu$ mol/L, survival = (0.4 $\pm$ 0.02)%, 1 $\mu$ mol/L, survival = (0.5 $\pm$ 0.03)%; antifungal inactive (silica gel TLC, *Cladosporium cucumerinum*, control Nystatin, MIA = 0.2 $\mu$ g). Source: *Thamnosma rhodesica* (root). Ref: 3797.



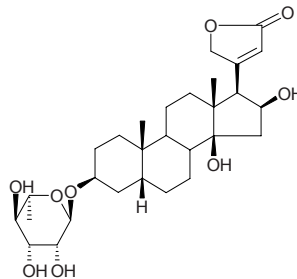
**18785 Rhodexin A**

[545-49-3] C<sub>29</sub>H<sub>44</sub>O<sub>9</sub> (536.67). mp 265°C (dec). Pharm: Cardiotonic; toxin (vertebrate). Source: WAN NIAN QING GEN *Rohdea japonica* [Syn. *Orontium japonicum*]. Ref: 6, 658.



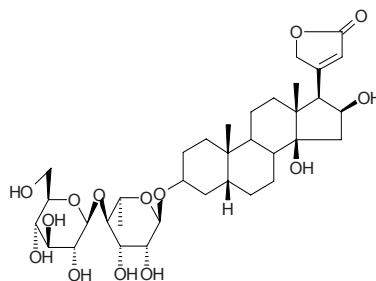
**18786 Rhodexin B**

[50906-58-6] C<sub>29</sub>H<sub>44</sub>O<sub>9</sub> (536.67). mp 262°C (dec). Source: WAN NIAN QING GEN *Rohdea japonica* [Syn. *Orontium japonicum*]. Ref: 660, 1521.



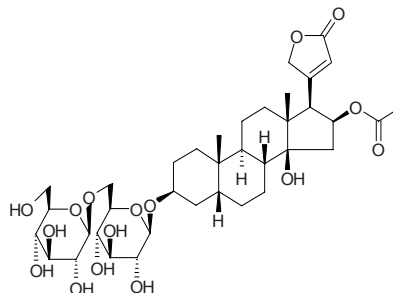
**18787 Rhodexin C**

[50906-57-5] C<sub>35</sub>H<sub>54</sub>O<sub>14</sub> (699.81). mp 275°C (dec). Source: WAN NIAN QING GEN *Rohdea japonica* [Syn. *Orontium japonicum*]. Ref: 660, 1521.



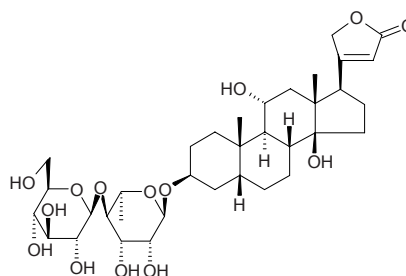
**18788 Rhodexin D**

C<sub>37</sub>H<sub>56</sub>O<sub>16</sub> (756.85). mp 181~184°C. Source: WAN NIAN QING GEN *Rohdea japonica* [Syn. *Orontium japonicum*]. Ref: 6.



**18789 Rhodexoside**

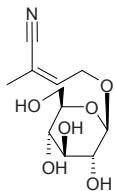
C<sub>35</sub>H<sub>54</sub>O<sub>14</sub> (698.81). Source: WAN NIAN QING GEN *Rohdea japonica* [Syn. *Orontium japonicum*]. Ref: 660.



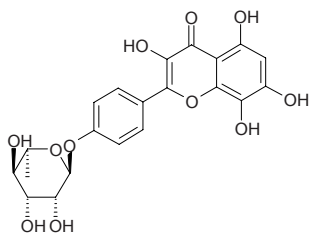


**18790 Rhodiocyanoside A**

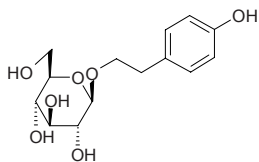
(Z)-4-( $\beta$ -D-Glucopyranosyloxy)-2-methyl-2-butenenitrile; Multifidin [168433-86-1] C<sub>11</sub>H<sub>17</sub>NO<sub>6</sub> (259.26). **Pharm:** Antiallergic (rat, passive skin allergy, 100mg/kg, 20min InRt = 26.9%). **Source:** SHENG DI HONG JING TIAN *Rhodiola sacra*. **Ref:** 742, 1726.

**18791 Rhodiolatuntoside**

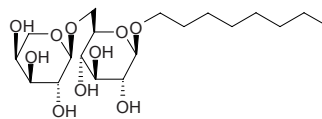
3,5,7,8-Tetrahydroxyl flavone 4'-O- $\alpha$ -L-rhamnopyranoside C<sub>21</sub>H<sub>20</sub>O<sub>11</sub> (448.39). Yellow amorphous powder, mp 350°C. **Source:** DE QIN HONG JING TIAN *Rhodiola atuntsuensis*. **Ref:** 885.

**18792 Rhodiolioside**

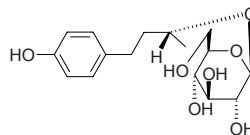
Salidroside; *p*-Hydroxyphenethyl- $\beta$ -D-glucoside [10338-51-9] C<sub>14</sub>H<sub>20</sub>O<sub>7</sub> (300.31). **Pharm:** Anti-inflammatory (inhibits production of COX metabolite PGE<sub>2</sub>, IC<sub>50</sub> = 72.1  $\mu$ mol/L; reduces TXB<sub>2</sub> level, IC<sub>50</sub> = 154  $\mu$ mol/L)<sup>[44151]</sup>. **Source:** DA HUA HONG JING TIAN *Rhodiola crenulata* [Syn. *Rhodiola euryphylla*] (root: content = 1.26%<sup>[5508]</sup>), HU SHENG HONG JING TIAN *Rhodiola subopposita* (whole herb: content = 0.25%<sup>[5508]</sup>), JI SHI HONG JING TIAN *Rhodiola algida* (root: content = 3.13%<sup>[5508]</sup>), KUO YE OU NV ZFEN *Phillyrea latifolia* (leaf), MA QIAN ZI *Strychnos nux-vomica*, NV ZHEN ZI *Ligustrum lucidum* (ripe fruit: content scope of 6 origins = 6.11%–9.17%; mean content = 7.22%<sup>[5508]</sup>), SHEN HONG HONG JING TIAN *Rhodiola coccinea* (root: content = 0.98%<sup>[5508]</sup>), SHENG DI HONG JING TIAN *Rhodiola sacra*, SI LIE HONG JING TIAN *Rhodiola quadrifida* (root: content = 2.12%<sup>[5508]</sup>), XI MA HONG JING TIAN *Rhodiola himalansis* (whole herb: content = 0.014%<sup>[5508]</sup>), XIA YE HONG JING TIAN *Rhodiola kirilowii* (root: content = 2.51%<sup>[5508]</sup>), YUAN CONG HONG JING TIAN *Rhodiola juparensis* (root: content = 0.64%<sup>[5508]</sup>), YUE JU YE *Vaccinium vitis-idaea*, YUN NAN HONG JING TIAN *Rhodiola yunnanensis* (whole herb: content = 0.031%<sup>[5508]</sup>). **Ref:** 2, 6, 218, 516, 660, 1521, 4415, 5508.

**18793 Rhodioctanoside**

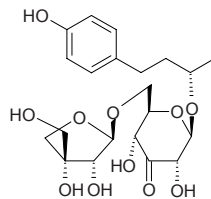
Octyl 6-O- $\alpha$ -L-arabinopyranosyl- $\beta$ -D-glucopyranoside [168288-07-1] C<sub>19</sub>H<sub>36</sub>O<sub>10</sub> (424.49). **Source:** SHENG DI HONG JING TIAN *Rhodiola sacra*. **Ref:** 742.

**18794 Rhododendrin**

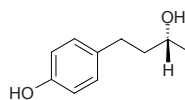
[497-78-9] C<sub>16</sub>H<sub>24</sub>O<sub>7</sub> (328.36). **Pharm:** Diuretic; causes perspiration. **Source:** NIU PI CHA *Rhododendron chrysanthum*, FU LEI SHI DU JUAN HUA *Rhododendron fauriei*, *Betula* sp. **Ref:** 658.

**18795 Rhododendroketoside**

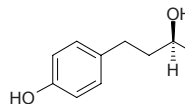
C<sub>21</sub>H<sub>30</sub>O<sub>11</sub> (458.47). White powder, [ $\alpha$ ]<sub>D</sub><sup>22</sup> = -84.6° (c = 0.20, EtOH). **Source:** MAO GUO QI *Acer nikoense* (stem cortex: yield = 0.0009%). **Ref:** 4304.

**18796 Rhododendrol**

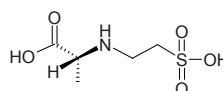
[501-96-2] C<sub>10</sub>H<sub>14</sub>O<sub>2</sub> (166.22). mp (-) 82°C. **Source:** BAI HUA YING SHAN HONG *Rhododendron mucronatum*, MAN SHAN HONG *Rhododendron dauricum*. **Ref:** 6.

**18797 (+)-Rhododendrol**

C<sub>10</sub>H<sub>14</sub>O<sub>2</sub> (166.22). **Pharm:**  $\beta$ -Hexosaminidase inhibitor inactive (RBL-2H3 cells, inhibits release of  $\beta$ -hexosaminidase, 100  $\mu$ mol/L, InRt = (2.2±0.5)%). **Source:** MAO GUO QI *Acer nikoense* (stem cortex). **Ref:** 4304.

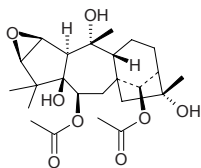
**18798 D-Rhodioc acid**

C<sub>5</sub>H<sub>11</sub>NO<sub>5</sub>S (197.21). **Source:** JIAO CHA CAI *Chondrus ocelladus*. **Ref:** 660.

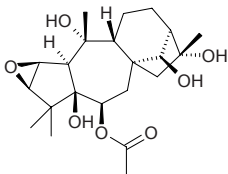


**18799 Rhodojaponin I**

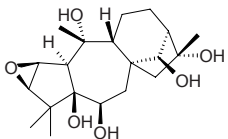
$C_{24}H_{36}O_8$  (452.55). Source: RI BEN DU JUAN HUA *Rhododendron japonicum* (in 1969, the compound was isolated from the plant). Ref: 5505.

**18800 Rhodojaponin II**

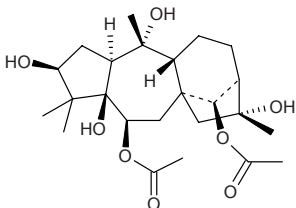
$C_{22}H_{34}O_7$  (410.51). Source: NAO YANG HUA *Rhododendron molle* (flower: yield = 0.0063%dw), RI BEN DU JUAN HUA *Rhododendron japonicum* (in 1969, the compound was isolated from the plant). Ref: 4780, 5505.

**18801 Rhodojaponin III**

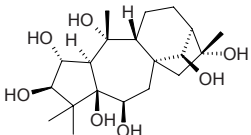
$C_{20}H_{32}O_6$  (368.47). Source: RI BEN DU JUAN HUA *Rhododendron japonicum* (the compound was isolated from the plant by Kuni Ito et al. in 1969)<sup>[5505]</sup>, NAO YANG HUA *Rhododendron molle* (flower: yield = 0.0042%dw)<sup>[4780]</sup>, NAO YANG HUA ZI *Rhododendron molle* (fruit). Ref: 660, 4780, 5505.

**18802 Rhodojaponin IV**

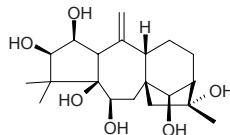
[30460-34-5]  $C_{24}H_{38}O_8$  (454.57). Pharm: Phytotoxin. Source: RI BEN DU JUAN HUA *Rhododendron japonicum*. Ref: 658.

**18803 Rhodojaponin VI**

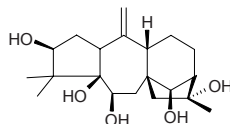
$C_{20}H_{34}O_7$  (386.49). Source: NAO YANG HUA *Rhododendron molle* (flower: yield = 0.0042%dw). Ref: 4780.

**18804 Rhodomollein I**

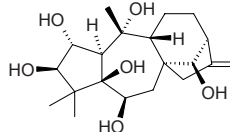
$C_{20}H_{32}O_6$  (368.47). Source: NAO YANG HUA ZI *Rhododendron molle* (fruit). Ref: 660.

**18805 Rhodomollein II**

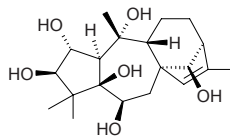
$C_{20}H_{32}O_5$  (352.48). Source: NAO YANG HUA ZI *Rhododendron molle* (fruit). Ref: 660.

**18806 Rhodomollein IX**

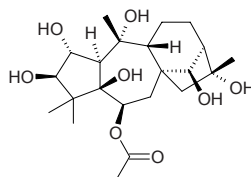
2 $\alpha$ ,3 $\beta$ ,5 $\beta$ ,6 $\beta$ ,10 $\alpha$ ,14 $\beta$ -Hexahydroxygrayan-16-ene  $C_{20}H_{32}O_6$  (368.47). Amorphous powder, mp 133~135°C,  $[\alpha]_D^{25} = -32.8^\circ$  ( $c = 0.24$ , MeOH). Source: NAO YANG HUA *Rhododendron molle* (flower: yield = 0.00021%dw). Ref: 4780.

**18807 Rhodomollein X**

2 $\alpha$ ,3 $\beta$ ,5 $\beta$ ,6 $\beta$ ,10 $\alpha$ ,14 $\beta$ -Hexahydroxygrayan-15-ene  $C_{20}H_{32}O_6$  (368.47). Amorphous powder, mp 223~224°C,  $[\alpha]_D^{25} = -11.0^\circ$  ( $c = 0.45$ , MeOH). Source: NAO YANG HUA *Rhododendron molle* (flower: yield = 0.00017%dw). Ref: 4780.

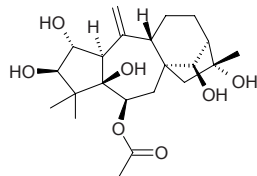
**18808 Rhodomollein XI**

6 $\beta$ -Acetoxy-2 $\alpha$ ,3 $\beta$ ,5 $\beta$ ,14 $\beta$ ,16 $\alpha$ -pentahydroxygrayanane  $C_{22}H_{36}O_8$  (428.53). Amorphous powder, mp 170~172°C,  $[\alpha]_D^{25} = -24.5^\circ$  ( $c = 0.89$ , MeOH). Source: NAO YANG HUA *Rhododendron molle* (flower: yield = 0.0042%dw). Ref: 173, 4780.

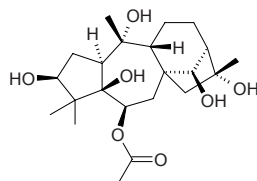


**18809 Rhodomollein XII**

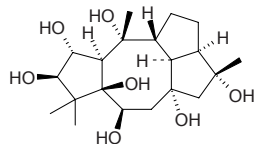
6 $\beta$ -Acetoxy-2 $\alpha$ ,3 $\beta$ ,5 $\beta$ ,14 $\beta$ ,16 $\alpha$ -pentahydroxygrayan-10(20)-ene C<sub>22</sub>H<sub>34</sub>O<sub>7</sub> (410.51). Amorphous powder, mp 75~77°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -14.5° (c = 1.09, MeOH). Source: NAO YANG HUA *Rhododendron molle* (flower: yield = 0.00013%dw). Ref: 4780.

**18810 Rhodomollein XIII**

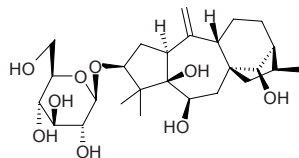
6 $\beta$ -Acetyloxy-3 $\beta$ ,5 $\beta$ ,10 $\alpha$ ,14 $\beta$ ,16 $\alpha$ -pentahydroxygrayanane C<sub>22</sub>H<sub>36</sub>O<sub>7</sub> (412.53). Amorphous powder, mp > 255°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -14.7° (c = 0.16, MeOH). Source: NAO YANG HUA *Rhododendron molle* (flower: yield = 0.00025%dw). Ref: 4780.

**18811 Rhodomollein XIV**

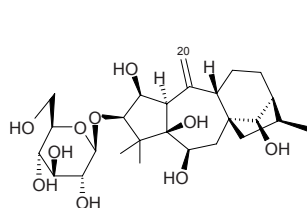
2 $\alpha$ ,3 $\beta$ ,5 $\beta$ ,6 $\beta$ ,8 $\alpha$ ,10 $\alpha$ ,16 $\alpha$ -Heptahydroxykalmene C<sub>20</sub>H<sub>34</sub>O<sub>7</sub> (386.49). Amorphous powder, mp 133~135°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -17.1° (c = 0.08, MeOH). Source: NAO YANG HUA *Rhododendron molle* (flower: yield = 0.00021%dw). Ref: 4780.

**18812 Rhodoside A**

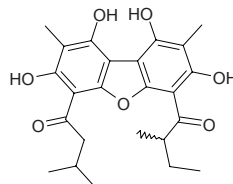
C<sub>26</sub>H<sub>42</sub>O<sub>9</sub> (498.62). Viscous syrup, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -31.2° (c = 0.50, MeOH). Source: NAO YANG HUA *Rhododendron molle*. Ref: 5396.

**18813 Rhodoside B**

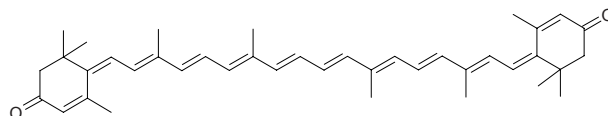
C<sub>26</sub>H<sub>42</sub>O<sub>10</sub> (514.62). Viscous syrup, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -26.9° (c = 1.18, MeOH). Source: NAO YANG HUA *Rhododendron molle*. Ref: 5396.

**18814  $\psi$ -Rhodomyrtxin**

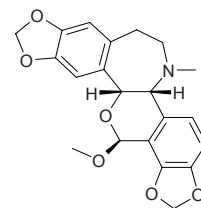
[24563-20-0] C<sub>24</sub>H<sub>28</sub>O<sub>7</sub> (428.49). Pharm: Toxin (mus). Source: DA GUO TAO JIN NIANG *Rhodomyrtus macrocarpa*. Ref: 658.

**18815 Rhodoxanthin**

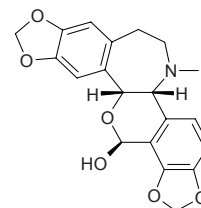
[116-30-3] C<sub>40</sub>H<sub>50</sub>O<sub>2</sub> (562.84). Source: FU YE YAN ZI CAI *Potamogeton natans*, JIANG GUO ZI SHAN *Taxus baccata*, *Equisetum* sp., *Adiantum* sp. Ref: 658.

**18816 Rhoeadine**

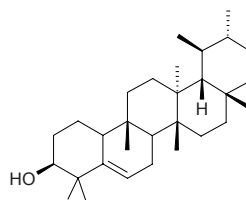
[2718-25-4] C<sub>21</sub>H<sub>21</sub>NO<sub>6</sub> (383.40). mp 256~257°C. Pharm: Cytotoxic (ascites carcinoma cells, *in vitro*); antitussive (dispels phlegm); sedative; toxin (induces spasm of tested animals in high dose); LD<sub>50</sub> (rat, ip) = 530mg/kg. Source: LI CHUN HUA *Papaver commutatum* [Syn. *Papaver rhoeas*], YA PIAN *Papaver somniferum*. Ref: 6, 658.

**18817 Rhoegenine**

[5574-77-6] C<sub>20</sub>H<sub>19</sub>NO<sub>6</sub> (369.38). mp 236~238°C. Source: LI CHUN HUA *Papaver commutatum* [Syn. *Papaver rhoeas*]. Ref: 6.

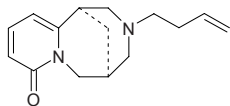
**18818 Rhoiptelenol**

C<sub>30</sub>H<sub>50</sub>O (426.73). Source: YANG MEI SHU PI *Myrica rubra* (bark: yield = 0.0036%). Ref: 4163.

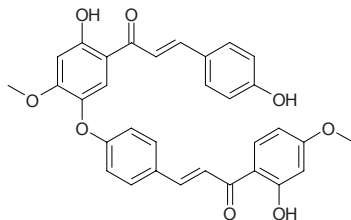


**18819 Rhombifoline**

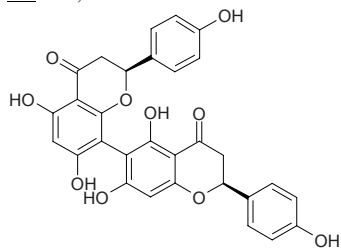
[529-78-2]  $C_{15}H_{20}N_2O$  (244.34). bp 120°C/0.2mmHg. Source: MU MA DOU *Thermopsis lanceolata*. Ref: 6.

**18820 Rhuschalcone 1**

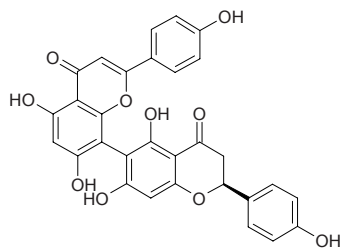
2',4'',2'''-Trihydroxy-4',4'''-dimethoxy-4-O-5'''-bichalcone  $C_{32}H_{26}O_8$  (538.56). Yellow needles (methanol), mp 232–234°C. Source: *Rhus pyroides* (twig). Ref: 3934.

**18821 Rhusflavanone**

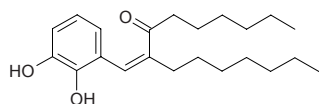
$C_{30}H_{22}O_{10}$  (542.50). Source: YE QI SHU ZI *Rhus sylvestris* (fruit and seed). Ref: 660, 1521.

**18822 Rhusflavone**

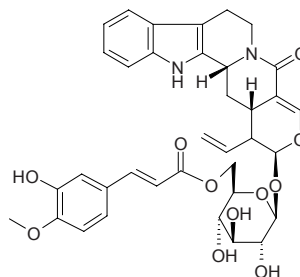
$C_{30}H_{20}O_{10}$  (540.49). Source: YE QI SHU ZI *Rhus sylvestris* (fruit and seed). Ref: 660.

**18823 Rhusone**

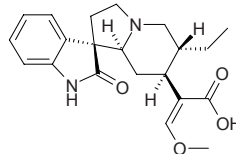
1-(2',3'-Dihydroxyphenyl)-2-n-heptyl-1-nonene-3-one  $C_{22}H_{34}O_3$  (346.51). Light grey amorphous powder, mp 60–62°C, soluble in liposoluble organic solvents, insoluble in water. Source: TAI SHAN YAN FU ZI *Rhus taishanensis*. Ref: 494.

**18824 Rhynchophine**

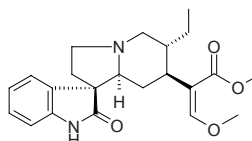
[84638-29-9]  $C_{36}H_{38}N_2O_{11}$  (674.71). Pharm: Anti-inflammatory<sup>[5341]</sup>, antiviral<sup>[5341]</sup>. Source: BI LU GOU TENG *Uncaria tomentosa*, GOU TENG *Uncaria rhynchophylla* [Syn. *Nauclea rhynchophylla*]. Ref: 2, 5341.

**18825 Rhynchophyllic acid**

$C_{21}H_{26}N_2O_4$  (370.45). Source: HUA GOU TENG *Uncaria sinensis*. Ref: 660, 5341.

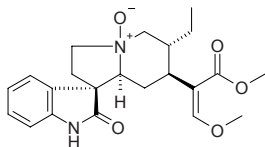
**18826 Rhynchophylline**

Mitrinermine [76-66-4]  $C_{22}H_{28}N_2O_4$  (384.48). Colorless acicular crystals (MeOH), mp 216°C,  $[\alpha]_D^{13} = -14.7^\circ$  ( $c = 2.5$ ,  $CHCl_3$ ), soluble in  $CHCl_3$ , acetone, ethanol, slightly soluble in ether, acetic ester, almost insoluble in petroleum ether.<sup>[5507]</sup> Pharm: Antihypertensive (spontaneous hypertensive rats)<sup>[5341]</sup>; smooth muscle relaxant (gpg colonic); antihypertensive (primary hypertensive rat, 50mg/kg perfusion in stomach, blood pressure reduced by 18mmHg; cat, iv, 20mg/kg, blood pressure reduced 32% and the action lasts 4h, in clinic for 254 patients treated, overall effective rate = 77.2%); reduces consumption of oxygen in myocardium; sedative (hypnotic, 100mg/kg, prolongation of thiopental-induced hypnosis)<sup>[5341]</sup>; slows heart rate; slows myocardial contractility; immunostimulant inactive<sup>[5341]</sup>; LD<sub>50</sub> (mus, ip)= 162.3mg/kg, (mus, sc)= 165mg/kg. Source: BAI GOU TENG *Uncaria sessilifrutus* [Syn. *Nauclea sessilifrutus*], BI LU GOU TENG *Uncaria tomentosa*, CHANG HUA GOU TENG *Uncaria longiflora*, DA YE GOU TENG *Uncaria macrophylla* (hooked stem-branch: mean content = 0.065%<sup>[5508]</sup>), FEI ZHOU GOU TENG *Uncaria africana*, GOU TENG *Uncaria rhynchophylla* [Syn. *Nauclea rhynchophylla*] (hooked stem-branch: mean content = 0.018%<sup>[5508]</sup>), GUI YA NA GOU TENG *Uncaria guianensis*, HOU YE GOU TENG *Uncaria callophylla*, HUA GOU TENG *Uncaria sinensis* (hooked stem-branch: mean content = 0.032%<sup>[5508]</sup>), MAO GOU TENG *Uncaria hirsuta* (hooked stem-branch: mean content = 0.020%<sup>[5508]</sup>), PI ZHEN YE GOU TENG *Uncaria lancifolia* (hooked stem-branch: mean content = 0.035%<sup>[5508]</sup>), PO LUO ZHOU GOU TENG *Uncaria borneensis*, SUAN GOU TENG *Uncaria acida*, TUO YUAN GOU TENG *Uncaria elliptica*, WU CI MAO ZHU MU *Mitragyna inermis*<sup>[5507]</sup>, XIA GOU TENG *Uncaria attenuata*, XIN XING GOU TENG *Uncaria cordata*, *Uncaria bernaysii*, *Uncaria kunstleri*, *Uncaria sterrophylla*, *Uncaria talbotii*. Ref: 4, 658, 660, 5341, 5501, 5507, 5508.

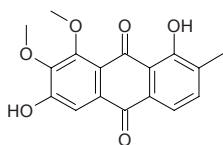


**18827 Rhynchophylline N-oxide**

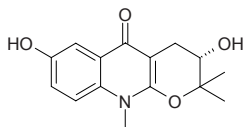
$C_{22}H_{28}N_2O_5$  (400.48). Source: FENG XIANG SHU YE *Cephalanthus occidentalis*, HUA GOU TENG *Uncaria sinensis*. Ref: 6, 660.

**18828 Rhynchotechol**

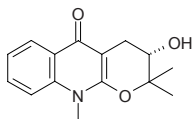
1,6-Dihydroxy-7,8-dimethoxy-2-methyl-9,10-anthraquinone [133086-78-9]  $C_{17}H_{14}O_6$  (314.30). Orange acicular crystals, mp 236.5~238.0°C. Source: MAO XIAN ZHU JU TAI *Rhynchotechum vestitum*. Ref: 168.

**18829 Ribalinidine**

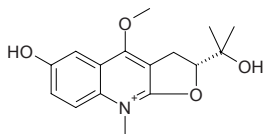
$C_{15}H_{17}NO_4$  (275.31). mp 257~258°C (dec). Source: CHOU CAO *Ruta graveolens*. Ref: 6.

**18830 Ribalinine**

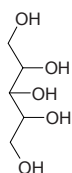
$C_{15}H_{17}NO_3$  (259.31). Source: SAN CHA KU *Evodia lepta* [Syn. *Ilex lepta*], YE HUA JIAO PI *Zanthoxylum simulans*. Ref: 660.

**18831 Ribalinium**

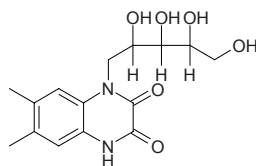
[6883-22-3]  $C_{16}H_{20}NO_4$  (290.34). Pharm: Antibacterial (*Mycobacterium smegmatis*). Source: CHOU CAO *Ruta graveolens*. Ref: 6, 658.

**18832 Ribitol**

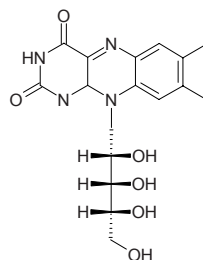
[488-81-3]  $C_5H_{12}O_5$  (152.15). mp 102°C. Source: E SHEN *Anthriscus sylvestris*. Ref: 6.

**18833 1-Ribityl-2,3-diketo-1,2,3,4-tetrahydro-6,7-dimethyl-quinoxaline**

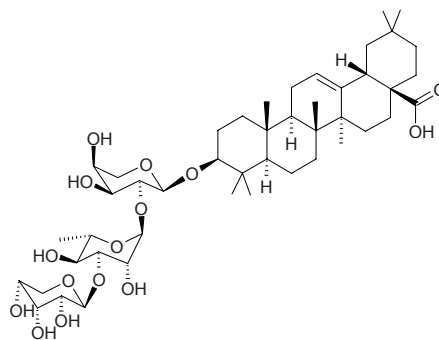
$C_{15}H_{20}N_2O_6$  (324.34). Colorless crystals, mp 259~261°C. Pharm: Antihypertensive (distinctly reduces blood pressure). Source: HONG HUA *Carthamus tinctorius*. Ref: 4580.

**18834 Riboflavine**

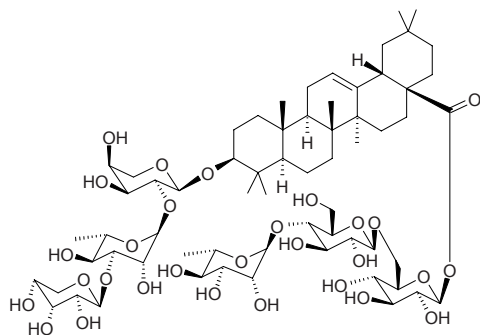
Vitamin B<sub>2</sub>; Vitamin G; 7,8-Dimethyl-10-*D*-ribityl-isoalloxazine; 6,7-Dimethyl-9-*D*-ribitylisoalloxazine [83-88-5]  $C_{17}H_{20}N_4O_6$  (376.38). mp 278~282°C. Pharm: Antineoplastic (rat, sarcoma 45); maintains normal vision; LD<sub>50</sub> (mus, ip) = 340mg/kg, (rat, ip) = 560mg/kg. Source: BAI GUO *Ginkgo biloba*, DA ZAO *Ziziphus jujuba*, GOU QI ZI *Lycium chinense*, LU GEN *Phragmites communis*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], SANG YE *Morus alba* (leaf: content scope of 8 origins = 0.00069%~0.0049%, mean content = 0.0016%)<sup>[5508]</sup>, WU CI ZAO *Ziziphus jujuba* var. *inermis*, ZANG HONG HUA *Crocus sativus*. Ref: 2, 5, 661, 658, 5508.

**18835 3β-[(O-β-D-Ribopyranosyl-(1→3)-O-α-L-rhamnopyranosyl-(1→2)-α-L-arabinopyranosyl)oxy]olean-12-en-28-oic acid**

$C_{46}H_{74}O_{15}$  (867.09). Pharm: Cytotoxic (*in vitro*, HL-60, IC<sub>50</sub> = 2.3 μmol/L). Source: WEI LING XIAN *Clematis chinensis* (root: yield = 0.0004%). Ref: 4763.

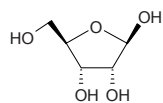


**18836** 3β-[(O-β-D-Ribopyranosyl-(1→3)-O-α-L-rhamnopyranosyl-(1→2)-α-L-arabinopyranosyl)oxy]olean-12-en-28-oic acid O-α-L-rhamnopyranosyl-(1→4)-O-β-D-glucopyranosyl-(1→6)-β-D-glucopyranosyl ester  
 $C_{64}H_{104}O_{29}$  (1337.53). Source: WEI LING XIAN *Clematis chinensis* (root: yield = 0.00064%). Ref: 4763.



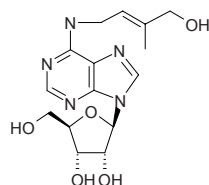
**18837 Ribose**

$C_5H_{10}O_5$  (150.13). mp (D) 86–87°C, 95°C. Source: FAN SHI LIU GAN *Psidium guajava*, DANG SHEN *Codonopsis pilosula*. Ref: 6, 660, 1521.



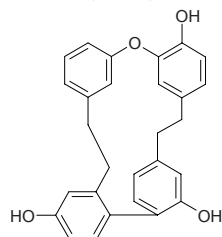
**18838 9-Ribosylzeatin**

$C_{15}H_{21}N_5O_5$  (351.37). Source: MI HOU TAO *Actinidia chinensis*. Ref: 660.



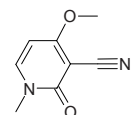
**18839 Riccardin C**

$C_{28}H_{24}O_4$  (424.50). Source: DI SUO LUO *Marchantia polymorpha*. Ref: 660.



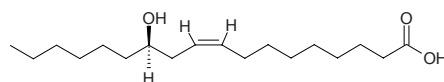
**18840 Ricinine**

Ricidine; 4-Methoxy-N-methyl-3-cyano-2-pyridone [524-40-3]  $C_8H_8N_2O_2$  (164.17). Columnar crystals, (ethanol), mp 201.5°C, slightly soluble in water, ethanol, chloroform, ether, soluble in hot water.<sup>[5507]</sup> Pharm: Toxin. Source: BI MA ZI *Ricinus communis*, BI MA YE *Ricinus communis*. Ref: 6, 658, 5507.



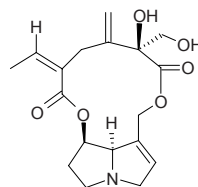
**18841 Ricinoleic acid**

(12*R*)-Hydroxy-*cis*-9-octadecenoic acid; Ricinolic acid [141-22-0]  $C_{18}H_{34}O_3$  (298.47). mp 5.5°C, bp 245°C/10mmHg. Pharm: Contraceptive; herbicide; inhibits biosynthesis of cholesterol (*in vitro*); inhibits transport of gall; laxative. Source: BI MA ZI *Ricinus communis*, BI MA YOU *Ricinus communis*, LING ZHI *Ganoderma lucidum*. Ref: 4, 658.



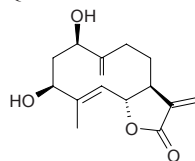
**18842 Riddelline**

[23246-96-0]  $C_{18}H_{23}NO_6$  (349.39). Pharm: Anticholinergic; hepatotoxin. Source: AI JI QIAN LI GUANG *Senecio aegypticus*, OU ZHOU QIAN LI GUANG *Senecio vulgaris*, RUI DE QIAN LI GUANG *Senecio riddellii*, SHA SHENG QIAN LI GUANG *Senecio eremophilus*, SHU MA *Crotalaria juncea*, TUN CAO QIAN LI GUANG *Senecio ambrosioides*. Ref: 658.



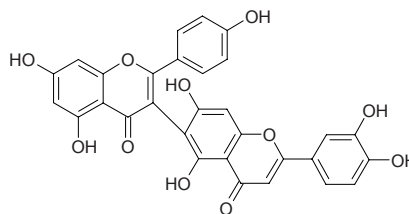
**18843 Ridentin**

[28148-84-7]  $C_{15}H_{20}O_4$  (264.32). mp 215–218°C (dec). Pharm: Antineoplastic; cytotoxic. Source: AI YE *Artemisia argyi*, SAN CHI HAO *Artemisia tridentata*, QING AI *Artemisia cana*, SAN LIE HAO *Artemisia tripartita*. Ref: 6, 658.



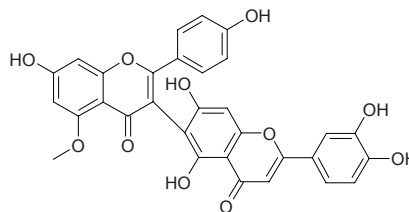
**18844 Ridiculuflavone A**

3''',4',4''',5,5'',7,7''-Heptahydroxy-3,6''-biflavone  $C_{30}H_{18}O_{11}$  (554.47). Yellow solid, mp 230.5–232.2°C,  $[\alpha]_D^{26} = +47.9^\circ$  ( $c = 0.046$ , MeOH). Source: *Aristolochia ridicula* (leaf). Ref: 5263.



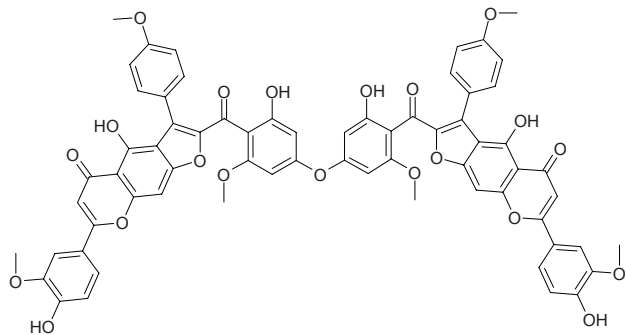
**18845 Ridiculuflavone B**

3''',4',4''',5'',7,7''-Hexahydroxy-5-methoxy-3,6''-biflavone  $C_{31}H_{20}O_{11}$  (568.50). Yellow solid, mp 224.1–225.7°C,  $[\alpha]_D^{25} = +18.2^\circ$  ( $c = 0.10$ , MeOH). Source: *Aristolochia ridicula* (leaf). Ref: 5263.

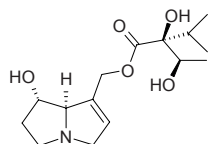


**18846 RidiculoflavonylchalconeA**

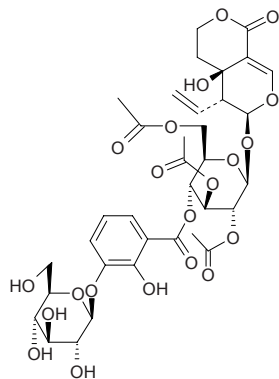
Oxy{bis[5''(4',5,7''-trihydroxy-3',4''-trimethoxy-7-O- $\alpha$ -6- $\beta$ -flavone-chalcone)]} C<sub>66</sub>H<sub>46</sub>O<sub>21</sub> (1175.09). Yellow solid, mp 153.6–156.5°C, [ $\alpha$ ]<sub>D</sub><sup>28</sup> = –30.8° (*c* = 0.088, MeOH). Source: *Aristolochia ridicula* (leaf). Ref: 5263.

**18847 Rinderine**

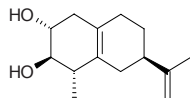
[6029-84-1] C<sub>15</sub>H<sub>25</sub>NO<sub>5</sub> (299.37). Pharm: Toxic (hepatic and pulmonary toxicity). Source: CHANG RUI LIU LI CAO *Solenanthes circinatus*, GAO ZE LAN *Eupatorium altissimum*, DA MA YE ZE LAN *Eupatorium cannabinum*. Ref: 658.

**18848 Rindoside**

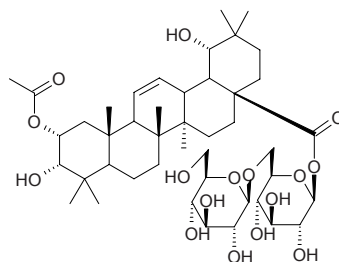
Gelidoside [128420-44-0] C<sub>35</sub>H<sub>42</sub>O<sub>21</sub> (798.71). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = –149.5° (*c* = 0.4, MeOH). [ $\alpha$ ]<sub>D</sub><sup>20</sup> = –102.8° (MeOH). Source: LONG DAN *Gentiana scabra*. Ref: 2, 1521.

**18849 Rishitin**

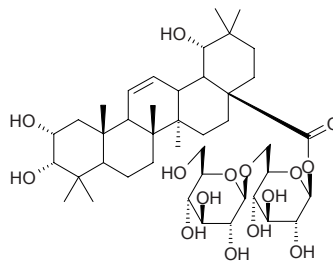
[18178-54-6] C<sub>14</sub>H<sub>22</sub>O<sub>2</sub> (222.33). Pharm: Antibacterial; antifungal; toxin (plants). Source: MA LING SHU *Solanum tuberosum*, YAN CAO *Nicotiana tabacum*. Ref: 658.

**18850 Rivaloside C**

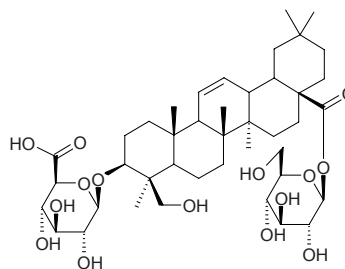
2 $\alpha$ -Acetoxy-3 $\alpha$ ,19 $\alpha$ -dihydroxy-olean-12-en-28-oic acid 28-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside C<sub>44</sub>H<sub>70</sub>O<sub>16</sub> (855.04). Amorphous solid, [ $\alpha$ ]<sub>D</sub> = –3.6° (*c* = 0.2, MeOH). Source: XI LIU ZHU YANG YANG *Galium rivale* (aerial parts). Ref: 3981.

**18851 Rivaloside D**

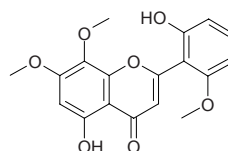
2 $\alpha$ ,3 $\alpha$ ,19 $\alpha$ -Trihydroxy-olean-12-en-28-oic acid 28-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside C<sub>42</sub>H<sub>68</sub>O<sub>15</sub> (813.00). Amorphous solid, [ $\alpha$ ]<sub>D</sub> = –25.9° (*c* = 0.1, MeOH). Source: XI LIU ZHU YANG YANG *Galium rivale* (aerial parts). Ref: 3981.

**18852 Rivaloside E**

3-O- $\beta$ -D-Glucuronosyl-24-hydroxy-olean-12-en-28-oic acid 28-O- $\beta$ -D-glucopyranoside C<sub>42</sub>H<sub>66</sub>O<sub>15</sub> (810.99). Amorphous solid, [ $\alpha$ ]<sub>D</sub> = –7.6° (*c* = 0.2, MeOH). Source: XI LIU ZHU YANG YANG *Galium rivale* (aerial parts). Ref: 3981.

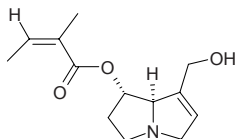
**18853 Rivularin**

C<sub>18</sub>H<sub>16</sub>O<sub>7</sub> (344.32). Source: BAN ZHI LIAN *Scutellaria barbata* [Syn. *Scutellaria rivularis*] (root). Ref: 660.

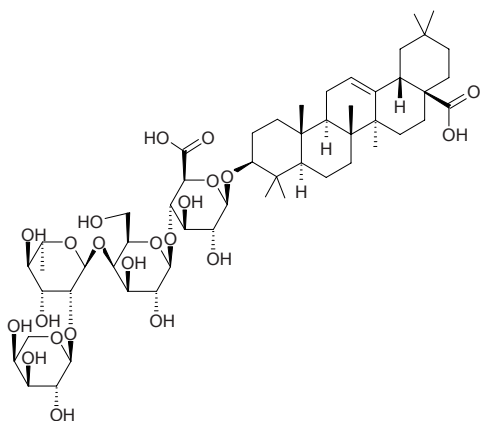


**18854 Rivularine**

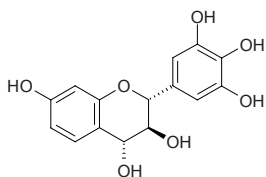
[723-78-4] C<sub>13</sub>H<sub>19</sub>NO<sub>3</sub> (237.30). **Pharm:** Hepatotoxin (sheep). **Source:** XI QIAN LI GUANG *Senecio rivularis*. **Ref:** 658.

**18855 Rivularinin**

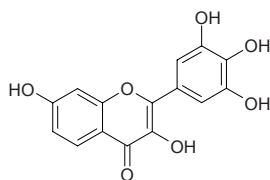
C<sub>53</sub>H<sub>84</sub>O<sub>22</sub> (1073.25). **Source:** HU ZHANG CAO *Anemone rivularis* (root). **Ref:** 660.

**18856 Robidandiol**

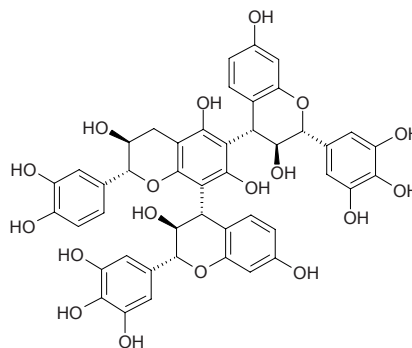
3,3',4,4',5',7-Hexahydroxyflavan [4382-45-0] C<sub>15</sub>H<sub>14</sub>O<sub>7</sub> (306.27). **Source:** A LA BO JIAO JIN HE HUAN *Acacia nilotica*. **Ref:** 5375.

**18857 Robinetin**

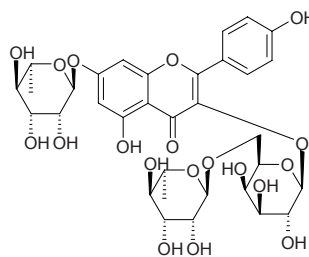
[490-31-3] C<sub>15</sub>H<sub>10</sub>O<sub>7</sub> (302.24). mp 325~330°C (dec). **Pharm:** Antibacterial (*Pseudomonas maltophilia* and *Enteromorpha cloacae*). **Source:** CI HUAI HUA *Robinia pseudoacacia*, DAN ZHONG ZAO JIA *Gleditsia monosperma*, HEI JING SHU *Acacia mearnsii*, JI CAI *Capsella bursa-pastoris*, SI TU JI XUE TENG *Milletia stuhlmannii*. **Ref:** 6, 658.

**18858 Robinetinidol-(4α→8)-catechin-(6→4α)-robinetinidol**

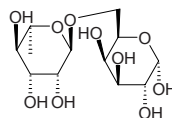
[85820-29-7] C<sub>45</sub>H<sub>38</sub>O<sub>18</sub> (866.79). **Pharm:** Tanning agent. **Source:** HEI JING SHU *Acacia mearnsii*. **Ref:** 658.

**18859 Robinin**

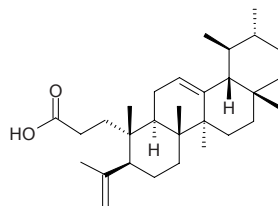
Kaempferol-3-O-α-L-rhamnopyranosyl-(1→6)-β-D-galactopyranosyl-7-O-α-L-rhamnopyranoside [301-19-9] C<sub>33</sub>H<sub>40</sub>O<sub>19</sub> (740.68). mp (α) 195~197°C (water), (β) 249~250°C (ethanol). **Pharm:** Antibacterial (*Pseudomonas maltophilia* and *Enteromorpha cloacae*); anti-inflammatory (rat, rbt); diuretic; LD (rat and mouse, ip) > 100mg/kg. **Source:** JIA DAN BAO JUN YANG HUAI *Robinia pseudoacacia*, GE GEN *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*], LIAN XING HUANG QI *Astragalus falcatus*, LUO FU MU *Rauvolfia verticillata*, LUO FU MU JING YE *Rauvolfia verticillata*, SI GUO HUANG QI *Astragalus shikokianus* (aerial parts), *Vigna* sp. **Ref:** 5, 6, 658, 3922.

**18860 Robinobiose**

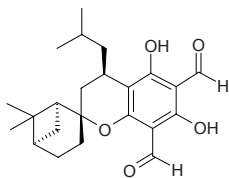
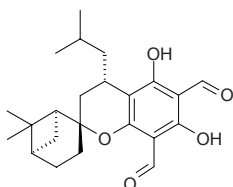
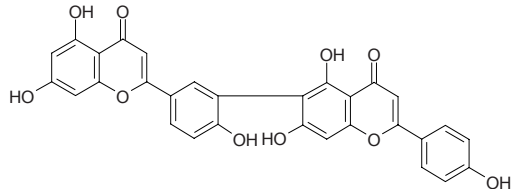
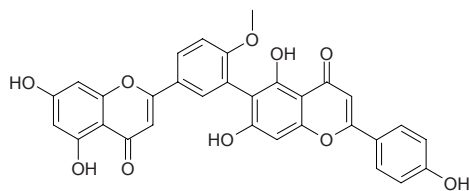
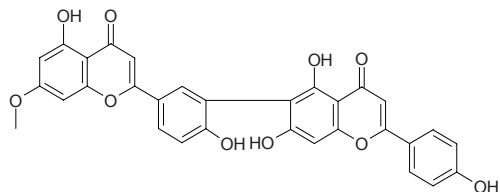
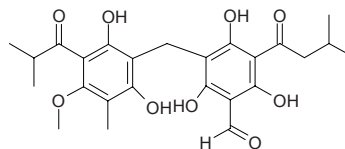
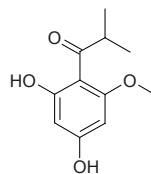
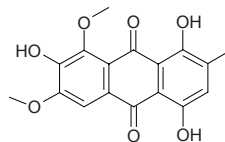
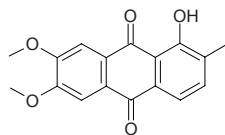
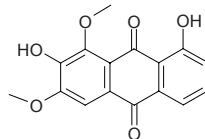
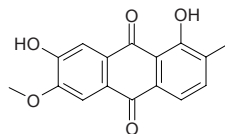
[17074-00-9] C<sub>12</sub>H<sub>22</sub>O<sub>10</sub> (326.30). **Source:** occurs in many plants (the sugar presents in various glycosides; esp. flavonoids). **Ref:** 660.

**18861 Roburic acid**

C<sub>30</sub>H<sub>48</sub>O<sub>2</sub> (440.72). **Source:** QIN JIAO *Gentiana macrophylla*. **Ref:** 660.

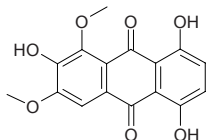




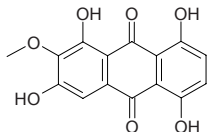
**18862 Robustadial A**[88130-99-8] C<sub>23</sub>H<sub>30</sub>O<sub>5</sub> (386.49). **Pharm:** Antimalarial (*Plasmodium berghei*).**Source:** DA YE AN YE *Eucalyptus robusta*. **Ref:** 658.**18863 Robustadial B**[88197-30-2] C<sub>23</sub>H<sub>30</sub>O<sub>5</sub> (386.48). **Source:** DA YE AN YE *Eucalyptus robusta*.**Ref:** 660.**18864 Robustaflavone**[49620-13-5] C<sub>30</sub>H<sub>18</sub>O<sub>10</sub> (538.47). **Pharm:** Cyclonucleotide phosphodiesteraseinhibitor. **Source:** JI MAO SONG *Podocarpus imbricatus*, *Araucaria* sp.,*Juniperus* sp., *Rhus* sp. **Ref:** 544, 658.**18865 Robustaflavone 4'-O-methyl ether**C<sub>21</sub>H<sub>22</sub>O<sub>10</sub> (552.50). Amorphous powder. **Source:** DA YE CAI *Selaginella**doederleinii*. **Ref:** 4567.**18866 Robustaflavone-7''-methyl ether**[136638-91-0] C<sub>31</sub>H<sub>20</sub>O<sub>10</sub> (552.50). **Pharm:** Cytotoxic (hmn, *in vitro*: BC-1 EC<sub>50</sub> = 3.3 μg/mL; HT1080 EC<sub>50</sub> = 0.9 μg/mL; Lu1 EC<sub>50</sub> = 0.4 μg/mL; Co1-2 EC<sub>50</sub> = 6.0 μg/mL; KB EC<sub>50</sub> = 3.6 μg/mL; drug-resistant KB+Vinblastine EC<sub>50</sub> = 8.9 μg/mL; drug-resistant KB EC<sub>50</sub> = 7.5 μg/mL; LNCaP EC<sub>50</sub> = 3.7 μg/mL; ZR-75-1 EC<sub>50</sub> = 1.4 μg/mL; U373 EC<sub>50</sub> = 0.7 μg/mL). **Source:** JI MAO SONG *Podocarpus imbricatus*. **Ref:** 544, 1811.**18867 Robustaol A**C<sub>25</sub>H<sub>30</sub>O<sub>9</sub> (474.52). Yellowish acicular crystals (petroleum ether), mp163–164°C. **Pharm:** Antimalarial (*Plasmodium berghei*). **Source:** DA YE ANYE *Eucalyptus robusta*, BO SHI AN *Eucalyptus berghei*. **Ref:** 658.**18868 Robustaol B**[102092-19-3] C<sub>11</sub>H<sub>14</sub>O<sub>4</sub> (210.23). Yellow acicular crystals, mp 138–142°C.**Pharm:** Antibacterial (*Staphylococcus aureus* and *Bacillus* sp., MIC = 63 μg/mL); Antiviral (HSV-1 virus and poliomyelitis 1, 5 μg/disk). **Source:** DAYE AN YE *Eucalyptus robusta*. **Ref:** 1067, 1181.**18869 Robustaquinone A**1,4,7-Trihydroxy-6,8-dimethoxy-1-methylantraquinone C<sub>17</sub>H<sub>14</sub>O<sub>7</sub> (330.30).**Source:** CU ZHUANG JIN JI NA *Cinchona robusta*. **Ref:** 2276.**18870 Robustaquinone B**1-Hydroxy-6,7-dimethoxy-2-methylantraquinone C<sub>17</sub>H<sub>14</sub>O<sub>5</sub> (298.30). **Source:**CU ZHUANG JIN JI NA *Cinchona robusta*. **Ref:** 2276.**18871 Robustaquinone C**2,8-Dihydroxy-1,3-dimethoxyanthraquinone C<sub>16</sub>H<sub>12</sub>O<sub>6</sub> (300.27). **Source:** CUZHUANG JIN JI NA *Cinchona robusta*. **Ref:** 2276.**18872 Robustaquinone D**1,7-Dihydroxy-6-methoxy-2-methylantraquinone C<sub>16</sub>H<sub>12</sub>O<sub>5</sub> (284.27). **Source:**CU ZHUANG JIN JI NA *Cinchona robusta*. **Ref:** 2276.

**18873 Robustaquinone E**

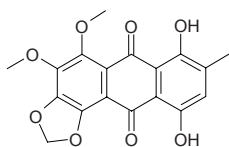
2,5,8-Trihydroxy-1,3-dimethoxyanthraquinone C<sub>16</sub>H<sub>12</sub>O<sub>7</sub> (316.27). [Source](#): CU ZHUANG JIN JI NA *Cinchona robusta*. [Ref](#): 2276.

**18874 Robustaquinone F**

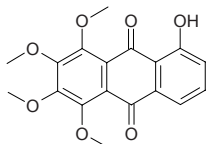
1,3,5,8-Tetrahydroxy-2-methoxyanthraquinone C<sub>15</sub>H<sub>10</sub>O<sub>7</sub> (302.24). [Source](#): CU ZHUANG JIN JI NA *Cinchona robusta*. [Ref](#): 2276.

**18875 Robustaquinone G**

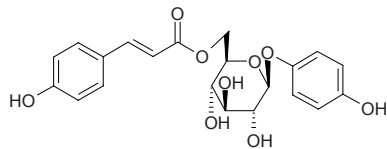
1,4-Dihydroxy-7,8-dimethoxy-2-methyl-5,6-methylenedioxyanthraquinone C<sub>18</sub>H<sub>14</sub>O<sub>8</sub> (358.31). [Source](#): CU ZHUANG JIN JI NA *Cinchona robusta*. [Ref](#): 2276.

**18876 Robustaquinone H**

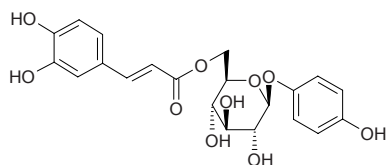
5-Hydroxy-1,2,3,4-tetramethoxyanthraquinone C<sub>18</sub>H<sub>16</sub>O<sub>7</sub> (344.32). [Source](#): CU ZHUANG JIN JI NA *Cinchona robusta*. [Ref](#): 2276.

**18877 Robustaside A**

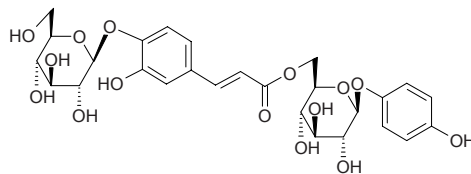
6'-(4"-Hydroxycinnamoyl)arbutin [148810-39-3] C<sub>21</sub>H<sub>22</sub>O<sub>9</sub> (418.40). Amorphous powder.  $[\alpha]_D = -34.3^\circ$  ( $c = 1.61$ , MeOH). [Source](#): YAO YONG HEI MIAN SHEN YE *Breynia officinalis* (leaf), YIN HUA *Grevillea robusta*, YIN HUA *Grevillea robusta* (leaf). [Ref](#): 1521, 2583, 3905.

**18878 Robustaside B**

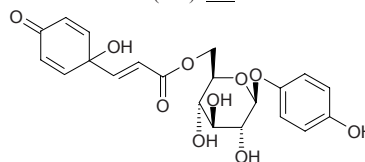
6'-(3",4"-Dihydroxycinnamoyl)arbutin C<sub>21</sub>H<sub>22</sub>O<sub>10</sub> (434.40). Amorphous powder.  $[\alpha]_D = -49.9^\circ$  ( $c = 6.95$ , MeOH). [Source](#): YIN HUA *Grevillea robusta* (leaf). [Ref](#): 3905.

**18879 Robustaside C**

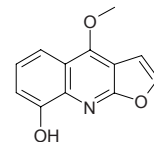
6'-(4"-O-β-Glucopyranosyl-3"-hydroxycinnamoyl)arbutin C<sub>27</sub>H<sub>32</sub>O<sub>15</sub> (596.55). Amorphous powder.  $[\alpha]_D = -57.2^\circ$  ( $c = 0.58$ , MeOH). [Source](#): YIN HUA *Grevillea robusta* (leaf). [Ref](#): 3905.

**18880 Robustaside D**

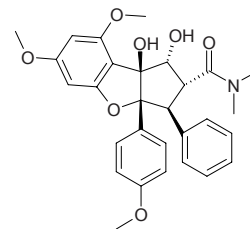
C<sub>21</sub>H<sub>22</sub>O<sub>10</sub> (434.40). Gum,  $[\alpha]_D = -46.1^\circ$  ( $c = 1.84$ , EtOH). [Source](#): YIN HUA *Grevillea robusta* (leaf). [Ref](#): 3905.

**18881 Robustine**

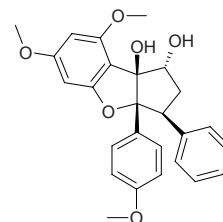
[2255-50-7] C<sub>12</sub>H<sub>9</sub>NO<sub>3</sub> (215.21). [Pharm](#): Potentiates hypnotic effect of barbiturates. [Source](#): GAO JIA SUO BAI XIAN *Dictamnus caucasicus*, FEI LONG ZHANG XUE *Toddalia asiatica* [Syn. *Toddalia aculeata*; *Paullinia asiatica*]. [Ref](#): 658.

**18882 Rocaglamide**

[84573-16-0] C<sub>29</sub>H<sub>31</sub>NO<sub>7</sub> (505.57). mp 129–130°C. [Pharm](#): Antineoplastic (leukemia); insecticidal. [Source](#): MI ZI LAN *Aglaia odorata*. [Ref](#): 1521.

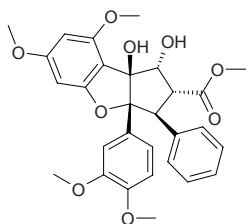
**18883 Rocaglamide derivative 1**

C<sub>26</sub>H<sub>26</sub>O<sub>6</sub> (434.49). [Pharm](#): Insecticidal (neonate larvae of *Spodoptera littoralis*, EC<sub>50</sub> = 0.80mg/L, LC<sub>50</sub> = 17.4mg/L; control Azadirachtin, EC<sub>50</sub> = 0.06mg/L, LC<sub>50</sub> = 0.7mg/L)<sup>[3978]</sup>. [Source](#): MI ZI LAN *Aglaia odorata*, *Aglaia spectabilis* (bark), *Aglaia duperreana*. [Ref](#): 3978.

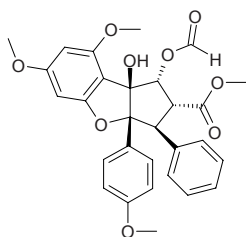


**18884 Rocaglamide derivative 4**

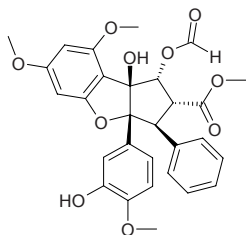
$C_{29}H_{30}O_9$  (522.56).  $[\alpha]_D^{20} = -164.5^\circ$  ( $c = 0.75$ , EtOH). **Pharm:** Insecticidal (neonate larvae of *Spodoptera littoralis*,  $EC_{50} = 0.88\text{mg/L}$ ,  $LC_{50} = 5.2\text{mg/L}$ , control Azadirachtin,  $EC_{50} = 0.06\text{mg/L}$ ,  $LC_{50} = 0.7\text{mg/L}$ ). **Source:** *Aglaia spectabilis* (bark). **Ref:** 3978.

**18885 Rocaglamide derivative 5**

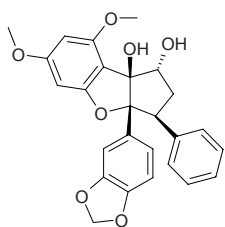
$C_{29}H_{28}O_9$  (520.54).  $[\alpha]_D^{20} = -140.9^\circ$  ( $c = 2.15$ , EtOH). **Pharm:** Insecticidal (neonate larvae of *Spodoptera littoralis*,  $EC_{50} = 0.30\text{mg/L}$ ,  $LC_{50} = 5.2\text{mg/L}$ , control Azadirachtin,  $EC_{50} = 0.06\text{mg/L}$ ,  $LC_{50} = 0.7\text{mg/L}$ ). **Source:** *Aglaia spectabilis* (bark). **Ref:** 3978.

**18886 Rocaglamide derivative 6**

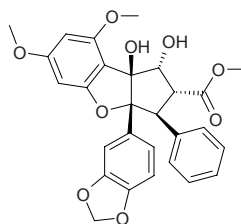
$C_{29}H_{28}O_{10}$  (536.54).  $[\alpha]_D^{20} = -37.4^\circ$  ( $c = 2.93$ , EtOH). **Pharm:** Insecticidal (neonate larvae of *Spodoptera littoralis*,  $EC_{50} = 0.30\text{mg/L}$ ,  $LC_{50} = 5.2\text{mg/L}$ , control Azadirachtin,  $EC_{50} = 0.06\text{mg/L}$ ,  $LC_{50} = 0.7\text{mg/L}$ ). **Source:** *Aglaia spectabilis* (bark). **Ref:** 3978.

**18887 Rocaglamide derivative 7**

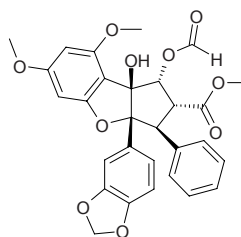
$C_{26}H_{24}O_7$  (448.48). **Pharm:** Insecticidal (neonate larvae of *Spodoptera littoralis*,  $EC_{50} = 4.10\text{mg/L}$ ,  $LC_{50} > 80.0\text{mg/L}$ , control Azadirachtin,  $EC_{50} = 0.06\text{mg/L}$ ,  $LC_{50} = 0.7\text{mg/L}$ ). **Source:** TUE YUAN MI ZI LAN *Aglaia elliptica*, *Aglaia spectabilis* (bark). **Ref:** 3978.

**18888 Rocaglamide derivative 8**

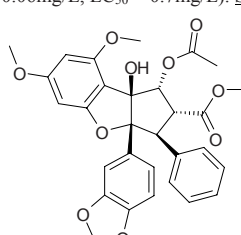
$C_{28}H_{26}O_9$  (506.51). **Pharm:** Insecticidal (neonate larvae of *Spodoptera littoralis*,  $EC_{50} = 0.69\text{mg/L}$ ,  $LC_{50} = 7.7\text{mg/L}$ , control Azadirachtin,  $EC_{50} = 0.06\text{mg/L}$ ,  $LC_{50} = 0.7\text{mg/L}$ ). **Source:** TUE YUAN MI ZI LAN *Aglaia elliptica*, *Aglaia spectabilis* (bark). **Ref:** 3978.

**18889 Rocaglamide derivative 9**

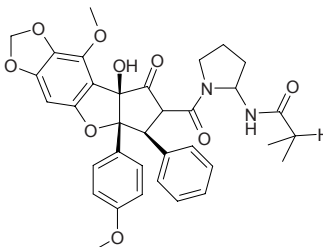
$C_{29}H_{26}O_{10}$  (534.52). **Pharm:** Insecticidal (neonate larvae of *Spodoptera littoralis*,  $EC_{50} = 0.27\text{mg/L}$ ,  $LC_{50} = 5.6\text{mg/L}$ , control Azadirachtin,  $EC_{50} = 0.06\text{mg/L}$ ,  $LC_{50} = 0.7\text{mg/L}$ ). **Source:** TUE YUAN MI ZI LAN *Aglaia elliptica*, *Aglaia spectabilis* (bark). **Ref:** 3978.

**18890 Rocaglamide derivative 10**

$C_{30}H_{28}O_{10}$  (548.55). **Pharm:** Insecticidal (neonate larvae of *Spodoptera littoralis*,  $EC_{50} = 0.25\text{mg/L}$ ,  $LC_{50} = 8.7\text{mg/L}$ , control Azadirachtin,  $EC_{50} = 0.06\text{mg/L}$ ,  $LC_{50} = 0.7\text{mg/L}$ ). **Source:** *Aglaia spectabilis* (bark). **Ref:** 3978.

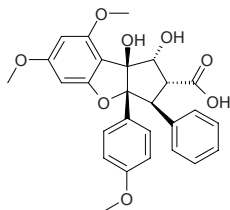
**18891 Rocaglamide derivative 11**

$C_{35}H_{36}N_2O_9$  (628.69). **Pharm:** Insecticidal (neonate larvae of *Spodoptera littoralis*,  $EC_{50} = 0.99\text{mg/L}$ ,  $LC_{50} = 6.5\text{mg/L}$ , control Azadirachtin,  $EC_{50} = 0.06\text{mg/L}$ ,  $LC_{50} = 0.7\text{mg/L}$ ). **Source:** *Aglaia spectabilis* (bark), *Aglaia oligophylla*. **Ref:** 3978.

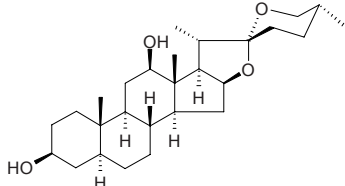


**18892 Rocagloic acid**

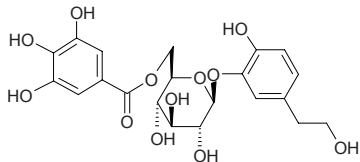
Ferrugin [143901-35-3]  $C_{27}H_{26}O_8$  (478.50). White powder, mp 145~146°C,  $[\alpha]_D^{22} = -47.6^\circ$  ( $c = 0.02$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (A549,  $ED_{50} = 0.00074\mu g/mL$ ; HL-60,  $ED_{50} = 0.00084\mu g/mL$ ; HT29,  $ED_{50} = 0.00084\mu g/mL$ ; KB,  $ED_{50} = 0.0023\mu g/mL$ ; P<sub>388</sub>,  $ED_{50} = 0.0012\mu g/mL$ )<sup>[3031]</sup>. **Source:** DA YE SHU LAN *Aglai elliptifolia* (leaf: yield = 0.00035%dw). **Ref:** 3031, 4046.

**18893 Rockogenin**

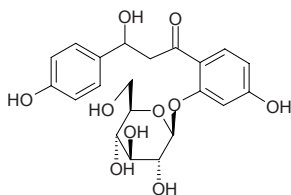
[16653-52-4]  $C_{27}H_{44}O_4$  (432.65). mp 208~210°C (methanol), 217~220°C (ether). **Source:** DONG YI HAO JIAN MA *Agave east-one*, FAN MA *Agave americana*, JIAN MA *Agave sisalana*. **Ref:** 10.

**18894 Rocymosin A**

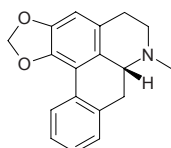
$C_{21}H_{24}O_{12}$  (468.42). **Source:** XIAO GUO QIANG WEI GEN *Rosa cymosa*. **Ref:** 660.

**18895 Rocymosin B**

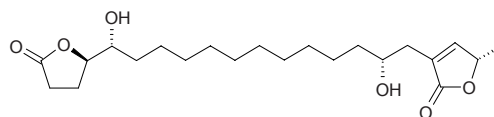
$C_{21}H_{24}O_{10}$  (436.42). **Source:** XIAO GUO QIANG WEI GEN *Rosa cymosa*. **Ref:** 660.

**18896 Roemerine**

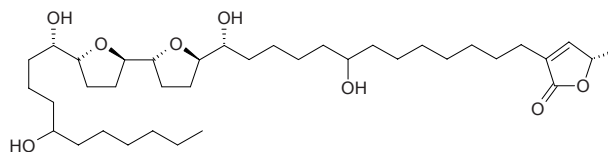
[548-08-3]  $C_{18}H_{17}NO_2$  (279.34). mp 102~103°C. **Source:** HE YE *Nelumbo nucifera*, HE GENG *Nelumbo nucifera*, HE YE DI *Nelumbo nucifera*. **Ref:** 6.

**18897 Rollicosin**

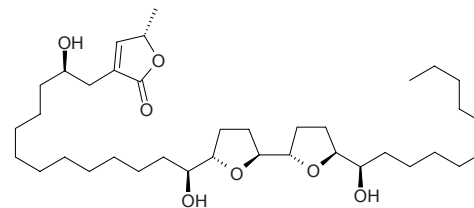
$C_{22}H_{36}O_6$  (396.53). White amorphous powder,  $[\alpha]_D^{24} = -26^\circ$  ( $c = 0.05$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (HepG2,  $IC_{50} = 0.10\mu g/mL$ ; Hep2,2,15,  $IC_{50} = 0.021\mu g/mL$ ; control Adriamycin,  $IC_{50} = 0.045\mu g/mL$ ; the first compound of this type to contain lactone moieties on both sides of the aliphatic chain and to lack either tetrahydrofuran or tetrahydropyran rings, may serve as a new prototype molecule to develop Annonaceous acetogenins as potential antitumor agents). **Source:** NIAN ZHI LUO LIN *Rollinia mucosa* (Fresh, unripe fruit: yield = 0.000018%fw). **Ref:** 4679.

**18898 Rollimusin**

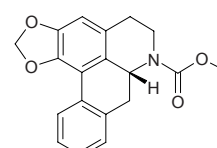
$C_{37}H_{66}O_8$  (638.93). Waxy solid,  $[\alpha]_D^{25} = -7.8^\circ$  ( $c = 0.55$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (hmn hepatoma cell lines HepG2,  $IC_{50} = 0.0215\mu g/mL$ , control Adriamycin,  $IC_{50} = 0.241\mu g/mL$ ; hmn hepatoma cells transfected with hepatitis B virus Hep2,2,15,  $IC_{50} = 0.00145\mu g/mL$ , Adriamycin,  $IC_{50} = 0.450\mu g/mL$ ). **Source:** CI GUO FAN LI ZHI *Annona muricata*. **Ref:** 5377.

**18899 Rolliniastatin 1**

[111056-97-4]  $C_{37}H_{66}O_7$  (622.93). Oleaginous, mp 81~83°C (acetone),  $[\alpha]_{589nm} = +25.2^\circ$ ,  $[\alpha]_{578nm} = +26.2^\circ$ ,  $[\alpha]_{546nm} = +30.1^\circ$ ,  $[\alpha]_{436nm}^{28} = +48.5^\circ$ ,  $[\alpha]_{365nm} = +76.7^\circ$  ( $c = 1.03$ , dichloromethane). **Pharm:** Antineoplastic (P<sub>388</sub>,  $ED_{50} = 0.045ng/mL$ ); cytotoxic (BST,  $LD_{50} = 0.0049\mu g/mL$ ); larvicide (larva of *stegomyia calopus*,  $LD_{50} = 0.2\mu g/mL$ ); mitochondrial complex I selective inhibitor (NADH oxidase  $IC_{50} = (0.51\pm 0.03)nmol/L$ ,  $p < 0.001$ , control Rotenone,  $IC_{50} = (5.10\pm 0.09)nmol/L$ )<sup>[5024]</sup>. **Source:** MAO YE FAN LI ZHI *Annona cherimolia* (seed), NIU XIN FAN LI ZHI *Annona reticulata*. **Ref:** 900, 5024.

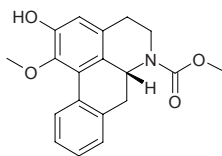
**18900 Romucosine**

$C_{19}H_{17}NO_4$  (323.35). **Source:** NIAN ZHI LUO LIN *Rollinia mucosa*. **Ref:** 1521.

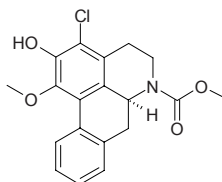


**18901 Romucosine A**

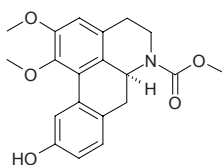
2-Hydroxy-1-methoxy-4,5,6a,7-tetrahydro-dibenzo[de,g]quinoline-6-carboxylic acidmethyl ester C<sub>19</sub>H<sub>19</sub>NO<sub>4</sub> (325.37). Brown amorphous powder,  $[\alpha]_D^{25} = -105^\circ$  ( $c = 0.1$ , CHCl<sub>3</sub>). **Pharm:** Platelet aggregation inhibitor (washed rabbit platelets, 100 $\mu$ g: 0.1U/mL thrombin-induced, AggRt = (89.0 $\pm$ 0.3)%,  $p < 0.001$ ; 10 $\mu$ mol/L AA-induced, AggRt = (0.0 $\pm$ 0.0)%,  $p < 0.001$ ; 10 $\mu$ mol/L collagen-induced, AggRt = (15.7 $\pm$ 5.2)%,  $p < 0.001$ ; 2ng/mL PAF-induced, AggRt = (37.0 $\pm$ 11.7)%,  $p < 0.001$ )<sup>[5143]</sup>. **Source:** NIAN ZHI LUO LIN *Rollinia mucosa*. **Ref:** 1521, 5143.

**18902 Romucosine B**

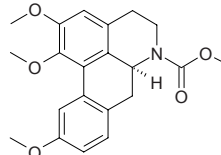
3-Chloro-2-hydroxy-4,5,6a,7-tetrahydro-dibenzo[de,g]quinoline-6-carboxylic acidmethyl ester C<sub>19</sub>H<sub>18</sub>ClNO<sub>4</sub> (359.81). White amorphous powder,  $[\alpha]_D^{25} = +153^\circ$  ( $c = 0.05$ , CHCl<sub>3</sub>). **Pharm:** Platelet aggregation inhibitor (washed rabbit platelets, 100 $\mu$ g: 0.1U/mL thrombin-induced, AggRt = (89.0 $\pm$ 0.3)%,  $p < 0.001$ ; 10 $\mu$ mol/L AA-induced, AggRt = (75.2 $\pm$ 3.2)%,  $p < 0.05$ ; 10 $\mu$ mol/L collagen-induced, AggRt = (87.2 $\pm$ 0.7)%,  $p < 0.01$ ; 2ng/mL PAF-induced, AggRt = (88.3 $\pm$ 0.9)%,  $p < 0.05$ )<sup>[5143]</sup>. **Source:** NIAN ZHI LUO LIN *Rollinia mucosa*. **Ref:** 1521, 5143.

**18903 Romucosine C**

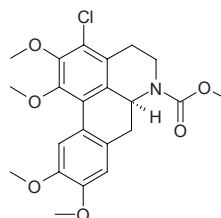
10-Hydroxy-1,2-dimethoxy-4,5,6a,7-tetrahydro-dibenzo[de,g]quinoline-6-carboxylic acidmethyl ester C<sub>20</sub>H<sub>21</sub>NO<sub>5</sub> (355.39). White amorphous powder,  $[\alpha]_D^{25} = +140^\circ$  ( $c = 0.05$ , CHCl<sub>3</sub>). **Pharm:** Platelet aggregation inhibitor (washed rabbit platelets, 100 $\mu$ g: 0.1U/mL thrombin-induced, AggRt = (90.4 $\pm$ 0.4)%,  $p < 0.01$ ; 10 $\mu$ mol/L AA-induced, AggRt = (21.1 $\pm$ 2.7)%,  $p < 0.001$ ; 10 $\mu$ mol/L collagen-induced, AggRt = (62.5 $\pm$ 7.9)%,  $p < 0.05$ ; 2ng/mL PAF-induced, AggRt = (87.4 $\pm$ 0.3)%,  $p < 0.001$ )<sup>[5143]</sup>. **Source:** NIAN ZHI LUO LIN *Rollinia mucosa*. **Ref:** 1521, 5143.

**18904 Romucosine D**

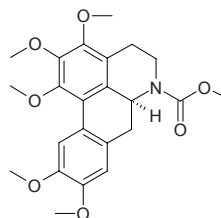
C<sub>21</sub>H<sub>23</sub>NO<sub>5</sub> (369.42). White amorphous powder,  $[\alpha]_D^{25} = +145^\circ$  ( $c = 0.05$ , CHCl<sub>3</sub>). **Pharm:** Platelet aggregation inhibitor (washed rabbit platelets, 100 $\mu$ g: 0.1U/mL thrombin-induced, AggRt = (87.2 $\pm$ 1.1)%,  $p < 0.001$ ; 10 $\mu$ mol/L AA-induced, AggRt = (0.0 $\pm$ 0.0)%,  $p < 0.001$ ; 10 $\mu$ mol/L collagen-induced, AggRt = (0.0 $\pm$ 0.0)%,  $p < 0.001$ ; 2ng/mL PAF-induced, AggRt = (6.1 $\pm$ 5.0)%,  $p < 0.001$ )<sup>[5143]</sup>. **Source:** NIAN ZHI LUO LIN *Rollinia mucosa*. **Ref:** 1521, 5143.

**18905 Romucosine F**

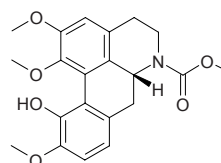
C<sub>22</sub>H<sub>24</sub>ClNO<sub>6</sub> (433.89). **Source:** NIAN ZHI LUO LIN *Rollinia mucosa*. **Ref:** 1521.

**18906 Romucosine G**

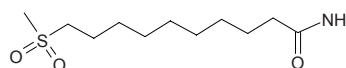
C<sub>23</sub>H<sub>27</sub>NO<sub>7</sub> (429.47). **Source:** NIAN ZHI LUO LIN *Rollinia mucosa*. **Ref:** 1521.

**18907 Romucosine H**

C<sub>21</sub>H<sub>23</sub>NO<sub>6</sub> (385.42). Brown amorphous powder, mp 230–233°C,  $[\alpha]_D^{24} = -43^\circ$  ( $c = 0.01$ , CHCl<sub>3</sub>). **Source:** MAO YE FAN LI ZHI *Annona cherimolia*. **Ref:** 751.

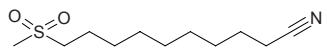
**18908 Rorifamide**

C<sub>11</sub>H<sub>23</sub>NO<sub>3</sub>S (249.37). **Source:** HAN CAI *Rorippa montana* [Syn. *Rorippa dubia*; *Sisymbrium dublium*]. **Ref:** 660.

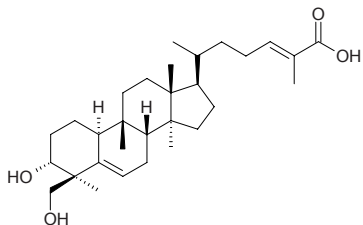


**18909 Rorifone**

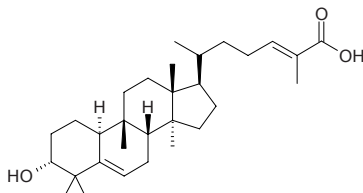
[53078-90-3] C<sub>11</sub>H<sub>21</sub>NO<sub>2</sub>S (231.36). mp 40~46°C, bp 188~192°C/1mmHg. Source: HAN CAI *Rorippa montana* [Syn. *Rorippa dubia*; *Sisymbrium dublium*]. Ref: 4.

**18910 Rosacea acid A**

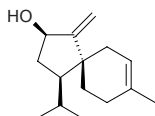
C<sub>30</sub>H<sub>48</sub>O<sub>4</sub> (472.71). White powder, mp 266~267°C (methanol), [α]<sub>D</sub><sup>18</sup> = +16.8° (c = 0.05, pyridine). Source: KU HONG GU *Russula rosacea*. Ref: 289.

**18911 Rosacea acid B**

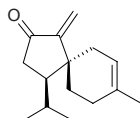
C<sub>30</sub>H<sub>48</sub>O<sub>3</sub> (456.72). White powder, mp 198~201°C (methanol), [α]<sub>D</sub><sup>18</sup> = +16.6° (c = 0.10, pyridine). Source: KU HONG GU *Russula rosacea*. Ref: 289.

**18912 Rosacorenon**

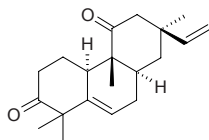
C<sub>15</sub>H<sub>24</sub>O (220.36). Source: MEI GUI HUA *Rosa rugosa*. Ref: 660.

**18913 Rosacorenone**

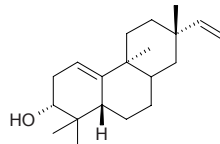
C<sub>15</sub>H<sub>22</sub>O (218.34). Source: MEI GUI HUA *Rosa rugosa*. Ref: 660.

**18914 5,15-Rosadiene-3,11-dione**

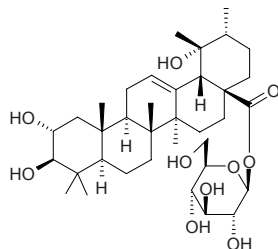
C<sub>20</sub>H<sub>28</sub>O<sub>2</sub> (300.44). Colorless oil, [α]<sub>D</sub><sup>20</sup> = +40.3° (c = 0.4, CHCl<sub>3</sub>). Source: *Tylimanthus renifolius*. Ref: 3491.

**18915 (3R)-ent-1(10),15-Rosadien-3-ol**

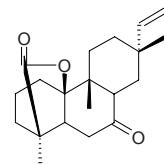
C<sub>20</sub>H<sub>32</sub>O (288.48). [α]<sub>D</sub><sup>20</sup> = +3.9° (c = 1.91, CHCl<sub>3</sub>). Source: *Heteroscyphus billardieri*, *Plagiochila deltoidea*. Ref: 4284.

**18916 Rosamultin**

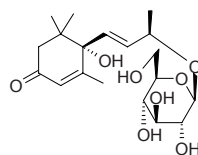
Tormentic acid β-D-glucopyranosyl ester; 2α,3β,19α-Trihydroxyurs-12-en-28-oic acid 28-β-D-glucopyranosyl ester [88515-58-6] C<sub>36</sub>H<sub>58</sub>O<sub>10</sub> (650.86). Pharm: Antihypercholesterolemic (mus, hyperlipemia caused by triton, reduces the level of cholesterol and triglyceride in serum); hemolytic; antiviral (*in vitro*); cytotoxic inactive (HSC-2, IC<sub>50</sub> > 200μg/mL; HGF, IC<sub>50</sub> > 200μg/mL)<sup>[5160]</sup>. Source: DI YU *Sanguisorba officinalis*, JIN YING ZI *Rosa laevigata*, SHE MEI *Duchesnea indica*. Ref: 660, 1560, 1561, 5160.

**18917 Rosenonolactone**

C<sub>20</sub>H<sub>28</sub>O<sub>3</sub> (316.44). Crystals, mp 214°C, [α]<sub>D</sub><sup>20</sup> = -107.5° (c = 1.2, CHCl<sub>3</sub>). Pharm: Prolyl endopeptidase inhibitor (flavobacterium origin, IC<sub>50</sub> = (675±0.03)μmol/L, control Z-pro-prolinal, IC<sub>50</sub> = (0.884±0.025)μmol/L)<sup>[4179]</sup>; thrombin inhibitor (bovine source, IC<sub>50</sub> = (875±0.02)μmol/L control Leupeptin, IC<sub>50</sub> = (45.4±0.03)μmol/L)<sup>[4179]</sup>. Source: JIA LIAN QIAO *Duranta repens* (whole herb). Ref: 4179, 1521.

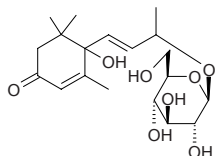
**18918 (6S,9R)-Roseoside**

[54835-70-0] C<sub>19</sub>H<sub>30</sub>O<sub>8</sub> (386.45). Amorphous powder, crystals (as tetra-Ac-compound), mp 153°C (tetra-Ac-compound), [α]<sub>D</sub> = +62° (c = 0.8, CHCl<sub>3</sub>, tetra-Ac-compound). Source: CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochera rosea*], CHA RU SHI WAN CUO *Asystasia intrusa*, JI ZI MU *Sinoadina Racemosa* [Syn. *Adina racemosa*] (leaf, flower and twig: yield = 0.0025%dw)<sup>[4723]</sup>, LIU QIU SHE GEN CAO *Ophiorrhiza liukiensis* (whole herb), PI PA YE *Eriobotrya japonica* (stem, leaf)<sup>[3061]</sup>, SANG YE *Morus alba* (leaf: yield = 0.0012%)<sup>[3507]</sup>, WU CI ZAO *Ziziphus jujuba* var. *inermis*. Ref: 2, 660, 1521, 2589, 3061, 3507, 4527, 4723.

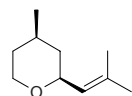


**18919 Roseoside II**

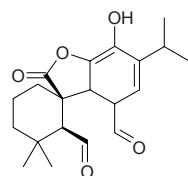
$C_{19}H_{30}O_8$  (386.45). Source: *Morus* sp. Ref: 2513.

**18920 Rose oxide**

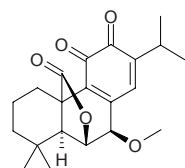
$C_{10}H_{18}O$  (154.25). Source: XIANG YE *Pelargonium graveolens*. Ref: 660.

**18921 Rosmadial**

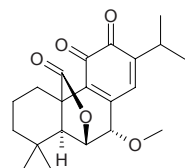
$C_{20}H_{26}O_5$  (346.43). Source: GAN XI SHU WEI CAO *Salvia przewalskii*, MI DIE XIANG *Rosmarinus officinalis*. Ref: 1521, 4538.

**18922 Rosmaquinone A**

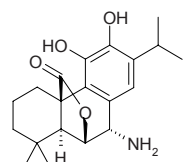
7β-Methoxyabieta-8,13-diene-11,12-dione-(20,6β)-olide  $C_{21}H_{26}O_5$  (358.44). Reddish yellow oil,  $[\alpha]_D^{25} = +3.2^\circ$  ( $c = 0.08$ , MeOH). Source: MI DIE XIANG *Rosmarinus officinalis* (aerial parts). Ref: 5306.

**18923 Rosmaquinone B**

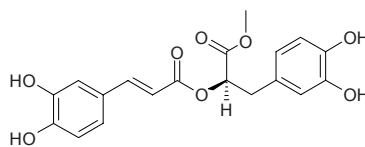
7α-Methoxyabieta-8,13-diene-11,12-dione-(20,6β)-olide  $C_{21}H_{26}O_5$  (358.44). Reddish yellow oil,  $[\alpha]_D^{25} = -6.1^\circ$  ( $c = 0.05$ , MeOH). Source: MI DIE XIANG *Rosmarinus officinalis* (aerial parts). Ref: 5306.

**18924 Rosmaricine**

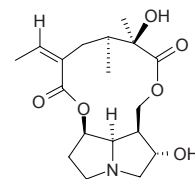
$C_{20}H_{27}NO_4$  (345.44). mp 199–200°C. Source: MI DIE XIANG *Rosmarinus officinalis*. Ref: 6.

**18925 Rosmarinic acid methyl ester**

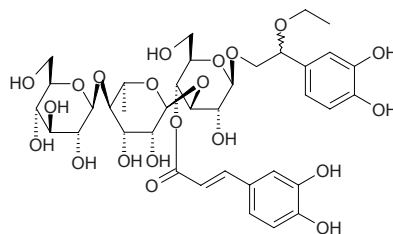
Methyl rosmarinate  $C_{19}H_{18}O_8$  (374.35). Pharm: Antioxidant (DPPDPPH scavenger,  $IC_{50} = 0.1456$ mmol/L, control Propyl gallate,  $IC_{50} = 0.03$ mol/L; superoxide radical inhibitor,  $IC_{50} = 0.443$ mmol/L, control Propyl gallate,  $IC_{50} = 0.106$ mmol/L; iron chelating assay,  $IC_{50} = 0.092$ mmol/L, control propyl gallate,  $IC_{50} = 0.064$ mmol/L)<sup>[4533]</sup>. Source: CHANG GUAN XIANG CHA CAI *Rabdosia longituba*, DAN SHEN *Salvia miltiorrhiza*, JING JIE *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*], MING XIAN HUA ZHU CHANG ZHU LIU LI CAO *Lindelofia stylosa* (aerial parts). Ref: 660, 1458, 1459, 4533.

**18926 Rosmarinine**

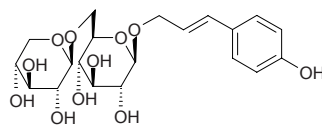
[520-65-0]  $C_{18}H_{27}NO_6$  (353.42). Source: MI DIE XIANG YE QIAN LI GUANG *Senecio rosmarinifolius*. Ref: 658.

**18927 Rossicaside F**

2-(3,4-Dihydroxyphenyl)-*R,S*-2-ethoxy-ethyl-*O*-β-*D*-glucopyranosyl(1→4)-*L*-rhamnopyranosyl(1→3)(4-*O*-*trans*-caffeoyl)-β-*D*-glucopyranoside  $C_{37}H_{50}O_{21}$  (830.80). Brown syrup,  $[\alpha]_D^{23} = -70.9^\circ$  ( $c = 0.79$ , H<sub>2</sub>O). Source: CAO CONG RONG *Boschniakia rossica* (whole herb: yield = 0.00036%). Ref: 1559.

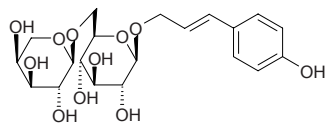
**18928 Rossicasin A**

*trans-p*-Coumaryl-(6'-*O*-β-*D*-xylopyranosyl)-*O*-β-*D*-glucopyranoside  $C_{20}H_{28}O_{11}$  (444.44). Colorless needles (MeOH), mp 168–170°C,  $[\alpha]_D^{23} = -92.5^\circ$  ( $c = 0.4$ , H<sub>2</sub>O). Source: CAO CONG RONG *Boschniakia rossica* (whole herb: yield = 0.00068%). Ref: 1559.

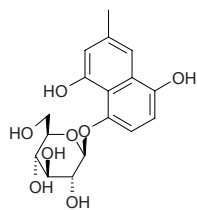


**18929 Rossicasin B**

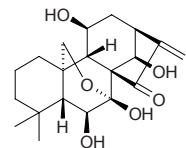
*trans-p*-Coumaryl-(6'-*O*- $\alpha$ -L-arabinopyranosyl)-*O*- $\beta$ -D-glucopyranoside  
 $C_{20}H_{28}O_{11}$  (444.44). Brown syrup,  $[\alpha]_D^{23} = -51.7^\circ$  ( $c = 0.29$ ,  $H_2O$ ). Source:  
 CAO CONG RONG *Boschniakia rossica* (whole herb: yield = 0.00014%).  
Ref: 1559.

**18930 Rossoliside**

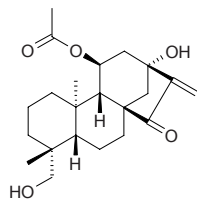
$C_{17}H_{20}O_8$  (352.34). Source: YUAN YE MAO GAO CAI *Drosera rotundifolia*.  
Ref: 660.

**18931 Rosthorin A**

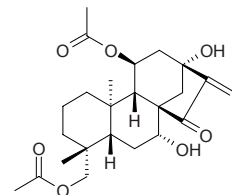
$C_{20}H_{28}O_6$  (364.44). mp 257~260°C,  $[\alpha]_D^{16} = -87.9^\circ$  ( $c = 0.38$ , MeOH). Pharm:  
 Cytotoxic (K562,  $IC_{50} = 5.20\mu g/mL$ , control Mitoxantrone,  $IC_{50} = 0.29\mu g/mL$ ;  
 HL-60,  $IC_{50} > 1000\mu g/mL$ , Mitoxantrone,  $IC_{50} = 0.29\mu g/mL$ ; HCT,  $IC_{50} =$   
 13.69 $\mu g/mL$ , Mitoxantrone,  $IC_{50} = 1.54\mu g/mL$ ; MKN28,  $IC_{50} = 0.92\mu g/mL$ ,  
 Mitoxantrone,  $IC_{50} = 0.02\mu g/mL$ )<sup>[5182]</sup>. Source: YING HUA XIANG CHA  
 CAI *Isodon rosthornii*, HAN SHENG XIANG CHA CAI *Isodon xerophilus*  
 (leaf). Ref: 4067, 5182.

**18932 Rosthornin A (Isodopharin C)**

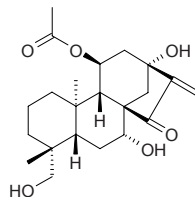
$C_{22}H_{32}O_5$  (376.50). mp 168~170°C,  $[\alpha]_D^{21} = -150.98^\circ$  ( $c = 0.51$ ,  $CHCl_3$ ).  
Source: YING HUA XIANG CHA CAI *Isodon rosthornii*. Ref: 4067.

**18933 Rosthornin B**

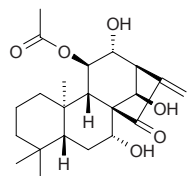
$C_{24}H_{34}O_7$  (434.53). mp 147~149°C,  $[\alpha]_D^{25} = -156.3^\circ$  ( $c = 0.56$ , MeOH).  
Source: YING HUA XIANG CHA CAI *Isodon rosthornii*. Ref: 4067.

**18934 Rosthornin C**

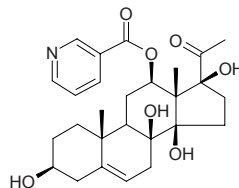
$C_{22}H_{32}O_6$  (392.50). mp 174~176°C. Source: YING HUA XIANG CHA CAI  
*Isodon rosthornii*. Ref: 4067.

**18935 Rosthornin D**

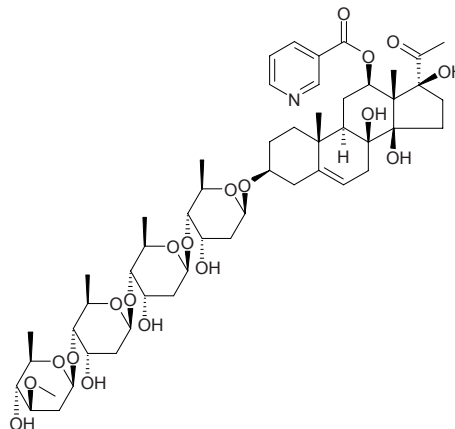
$C_{22}H_{32}O_6$  (392.50). mp 152~154°C. Source: YING HUA XIANG CHA CAI  
*Isodon rosthornii*. Ref: 4067.

**18936 Rostratamine**

$C_{27}H_{35}NO_7$  (485.58). Source: DUAN JIE SHEN *Cynanchum wallichii*, QING  
 YANG SHEN *Cynanchum otophyllum*. Ref: 660.

**18937 Rostratamine 3-O- $\beta$ -D-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-digitoxopyranoside**

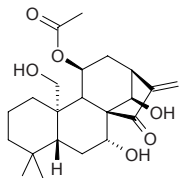
$C_{52}H_{77}NO_{19}$  (1020.19). Amorphous powder,  $[\alpha]_D^{24} = -4.6^\circ$  ( $c = 0.61$ , MeOH).  
Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.



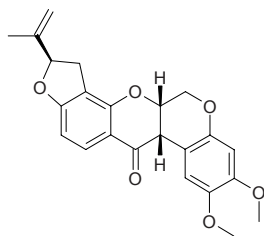


**18938 Rostronol F**

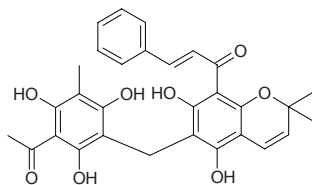
$C_{22}H_{32}O_6$  (392.50). Source: JIE XING YE TAI *Jungermannia truncata*. Ref: 4201.

**18939 Rotenone**

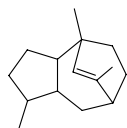
[83-79-4]  $C_{23}H_{22}O_6$  (394.43). mp (-) 163°C. Pharm: Mitochondrial respiratory chain complex I inhibitor ( $IC_{50} = (5.10 \pm 0.90) \text{ nmol/L}$ )<sup>[4954]</sup>; NADH oxidase inhibitor (submitochondrial particles from bovine heart,  $IC_{50} = (0.0051 \pm 0.0009) \mu\text{mol/L}$ )<sup>[5356]</sup>; mitochondrial complex I selective inhibitor (NADH oxidase,  $IC_{50} = (5.10 \pm 0.09) \text{ nmol/L}$ )<sup>[5024]</sup>; antiprotozoal; piscicide (adult zebra fishes *Brachydanio rerio*,  $LC_{100} = 1.0 \mu\text{g/mL}$ , time = 20~30min)<sup>[5393]</sup>; pesticide; anti-tumor promotor (*in vivo*, mouse skin tumor, inhibits TPA-induced EBV-EA activation, 100(mol ratio/32pmol TPA), EBV-EA positive cells = 69.2% viability, positive control  $\beta$ -Carotene, EBV-EA positive cells = 82.7% viability)<sup>[4982]</sup>; LD (dog, iv) = 0.5mg/kg; LD<sub>50</sub> (mus, ip) = 2.8mg/kg. Source: DI GUA ZI *Pachyrhizus erosus*, DOU SHU *Pachyrhizus erosus* (seed), HUI YE GEN *Tephrosia purpurea*, JI XUE TENG GEN *Millettia reticulata*, KU TAN ZI *Millettia pachycarpa*, MAO RUI HUA *Verbascum thapsus*, MAO YU TENG *Derris elliptica*, YU TENG *Derris trifoliata*, YU TENG *Derris trifoliata* (stem). Ref: 6, 658, 4180, 4954, 4982, 5024, 5356, 5393.

**18940 Rottlerin**

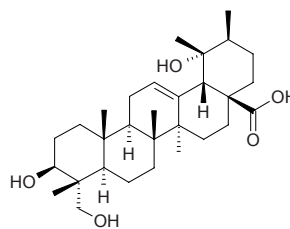
[82-08-6]  $C_{30}H_{28}O_8$  (516.55). mp 212°C. Pharm: Anthelmintic (veterinary); toxin; used in clinical treatment of cancer. Source: LV SONG QIU MAO *Mallotus philippinensis*. Ref: 6, 658.

**18941 Rotundene**

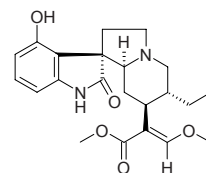
$C_{15}H_{24}$  (204.36). Source: KAN MAI NIANG ZHUANG SHA CAO *Cyperus alopecuroides* (essential oil). Ref: 5129.

**18942 Rotundic acid**

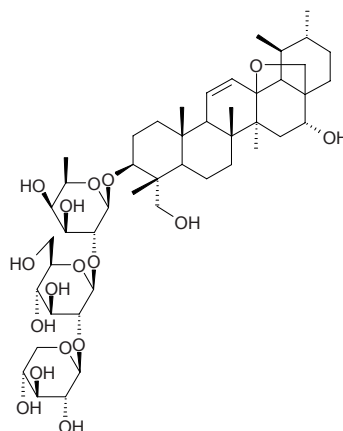
[20137-37-5]  $C_{30}H_{48}O_5$  (488.71). Source: JIU BI YING *Ilex rotunda*, SI JI QING *Ilex chinensis* [Syn. *Ilex purpurea*]. Ref: 6, 527.

**18943 Rotundifoline**

[6883-25-6]  $C_{22}H_{28}N_2O_5$  (400.48). mp 238~240°C. Source: BI LU GOU TENG *Uncaria tomentosa*, ER CHA GOU TENG *Uncaria gambir*, HOU YE GOU TENG *Uncaria callophylla*, TUO YUAN GOU TENG *Uncaria elliptica*, XIA GOU TENG *Uncaria attenuata*. Ref: 6, 5341.

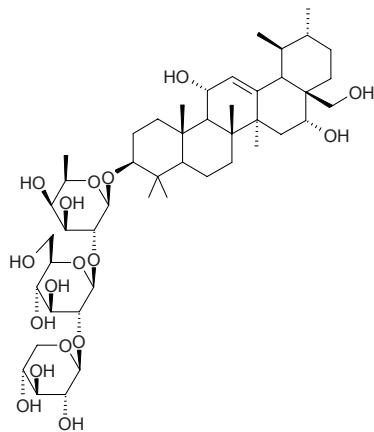
**18944 Rotundifolioside A**

13 $\beta$ ,28-Epoxy-16 $\alpha$ ,23-dihydroxyurs-11-en-3 $\beta$ -yl  $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-fucopyranoside  $C_{47}H_{76}O_{17}$  (913.12). White powder,  $[\alpha]_D^{24} = -62.0^\circ$  ( $c = 0.18$ , pyridine). Pharm: Cytotoxic (antiproliferative activity *in vitro*, MTT assay, hmn MK1,  $GI_{50} = 48 \mu\text{mol/L}$ ; hmn HeLa,  $GI_{50} = 71 \mu\text{mol/L}$ ; murine B16F10,  $GI_{50} = 31 \mu\text{mol/L}$ ). Source: YUAN YE CHAI HU *Bupleurum rotundifolium* (fruit). Ref: 4331.

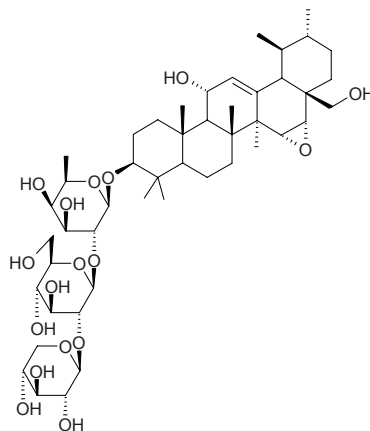


**18945 Rotundifolioside B**

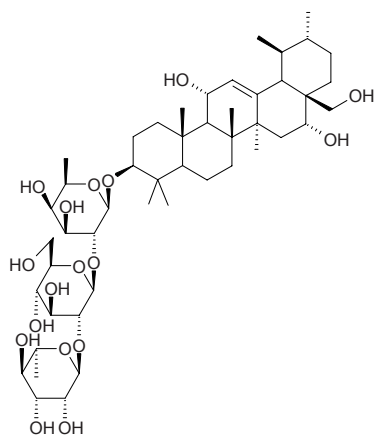
11 $\alpha$ ,16 $\alpha$ ,28-Trihydroxyurs-12-en-3 $\beta$ -yl  $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-fucopyranoside C<sub>47</sub>H<sub>78</sub>O<sub>17</sub> (915.14). White powder,  $[\alpha]_D^{24} = -60.5^\circ$  ( $c = 0.62$ , pyridine). **Pharm:** Cytotoxic inactive (antiproliferative activity *in vitro*, MTT assay, hmn MK1, GI<sub>50</sub> > 100 $\mu$ g/mL; hmn HeLa, GI<sub>50</sub> > 100 $\mu$ g/mL; murine B16F10, GI<sub>50</sub> > 100 $\mu$ g/mL). **Source:** YUAN YE CHAI HU *Bupleurum rotundifolium* (fruit). **Ref:** 4331.

**18947 Rotundifolioside D**

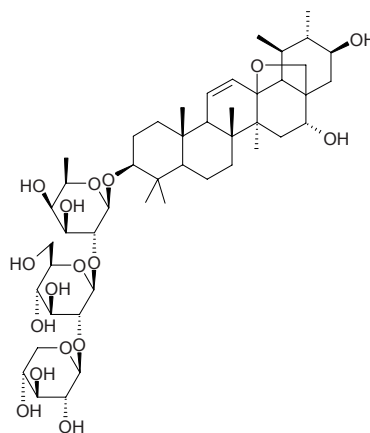
15 $\alpha$ ,16 $\alpha$ -Epoxy-11 $\alpha$ ,28-dihydroxyurs-12-en-3 $\beta$ -yl  $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-fucopyranoside C<sub>47</sub>H<sub>76</sub>O<sub>17</sub> (913.12). White powder,  $[\alpha]_D^{24} = -40.4^\circ$  ( $c = 1.11$ , pyridine). **Pharm:** Cytotoxic inactive (antiproliferative activity *in vitro*, MTT assay, hmn MK1, GI<sub>50</sub> > 100 $\mu$ g/mL; hmn HeLa, GI<sub>50</sub> > 100 $\mu$ g/mL; murine B16F10, GI<sub>50</sub> > 100 $\mu$ g/mL). **Source:** YUAN YE CHAI HU *Bupleurum rotundifolium* (fruit). **Ref:** 4331.

**18946 Rotundifolioside C**

11 $\alpha$ ,16 $\alpha$ ,28-Trihydroxyurs-12-en-3 $\beta$ -yl  $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-fucopyranoside C<sub>48</sub>H<sub>80</sub>O<sub>17</sub> (929.16). White powder,  $[\alpha]_D^{24} = -93.0^\circ$  ( $c = 0.29$ , pyridine). **Pharm:** Cytotoxic inactive (antiproliferative activity *in vitro*, MTT assay, hmn MK1, GI<sub>50</sub> > 100 $\mu$ g/mL; hmn HeLa, GI<sub>50</sub> > 100 $\mu$ g/mL; murine B16F10, GI<sub>50</sub> > 100 $\mu$ g/mL). **Source:** YUAN YE CHAI HU *Bupleurum rotundifolium* (fruit). **Ref:** 4331.

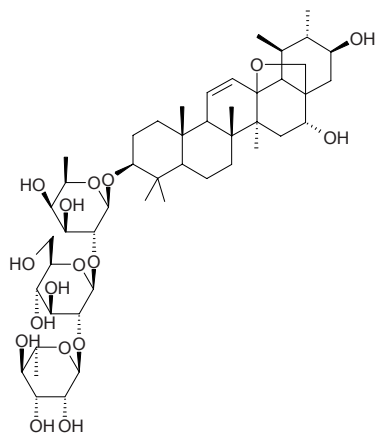
**18948 Rotundifolioside E**

13 $\beta$ ,28-Epoxy-16 $\alpha$ ,21 $\beta$ -dihydroxyurs-11-en-3 $\beta$ -yl  $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-fucopyranoside C<sub>47</sub>H<sub>76</sub>O<sub>17</sub> (913.12). White powder,  $[\alpha]_D^{24} = -16.8^\circ$  ( $c = 0.59$ , pyridine). **Pharm:** Cytotoxic inactive (antiproliferative activity *in vitro*, MTT assay, hmn MK1, GI<sub>50</sub> > 100 $\mu$ g/mL; hmn HeLa, GI<sub>50</sub> > 100 $\mu$ g/mL; murine B16F10, GI<sub>50</sub> > 100 $\mu$ g/mL). **Source:** YUAN YE CHAI HU *Bupleurum rotundifolium* (fruit). **Ref:** 4331.

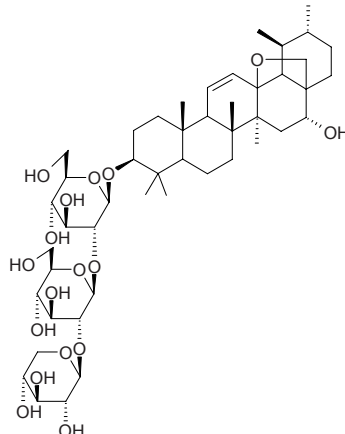


**18949 Rotundifolioside F**

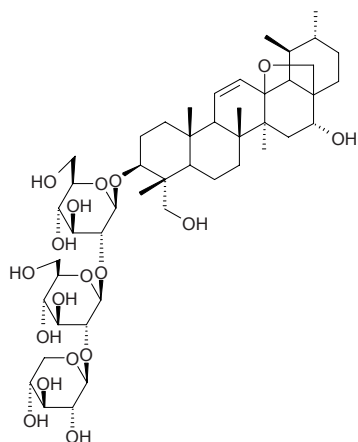
13 $\beta$ ,28-Epoxy-16 $\alpha$ ,21 $\beta$ -dihydroxyurs-11-en-3 $\beta$ -yl  $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-fucopyranoside C<sub>48</sub>H<sub>78</sub>O<sub>17</sub> (927.15). White powder,  $[\alpha]_D^{24} = -12.9^\circ$  ( $c = 0.47$ , pyridine). **Pharm:** Cytotoxic inactive (antiproliferative activity *in vitro*, MTT assay, hmn MK1, GI<sub>50</sub> > 100 $\mu$ g/mL, hmn HeLa, GI<sub>50</sub> > 100 $\mu$ g/mL, murine B16F10, GI<sub>50</sub> > 100 $\mu$ g/mL). **Source:** YUAN YE CHAI HU *Bupleurum rotundifolium* (fruit). **Ref:** 4331.

**18951 Rotundifolioside H**

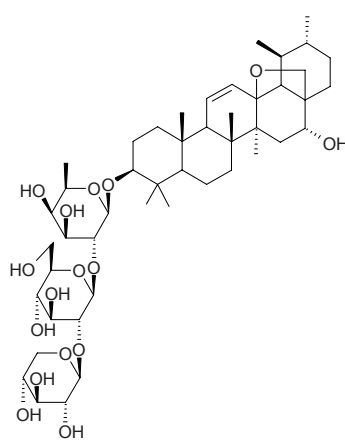
13 $\beta$ ,28-Epoxy-16 $\alpha$ -hydroxyurs-11-en-3 $\beta$ -yl  $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranoside C<sub>47</sub>H<sub>76</sub>O<sub>17</sub> (913.12). White powder,  $[\alpha]_D^{24} = -9.4^\circ$  ( $c = 0.64$ , pyridine). **Pharm:** Cytotoxic (antiproliferative activity *in vitro*, MTT assay, hmn MK1, GI<sub>50</sub> = 18 $\mu$ mol/L, hmn HeLa, GI<sub>50</sub> = 31 $\mu$ mol/L, murine B16F10, GI<sub>50</sub> = 18 $\mu$ mol/L). **Source:** YUAN YE CHAI HU *Bupleurum rotundifolium* (fruit). **Ref:** 4331.

**18950 Rotundifolioside G**

13 $\beta$ ,28-Epoxy-16 $\alpha$ ,23-dihydroxyurs-11-en-3 $\beta$ -yl  $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranoside C<sub>47</sub>H<sub>76</sub>O<sub>18</sub> (929.12). White powder,  $[\alpha]_D^{24} = +3.8^\circ$  ( $c = 0.90$ , pyridine). **Pharm:** Cytotoxic (antiproliferative activity *in vitro*, MTT assay, hmn MK1, GI<sub>50</sub> = 84 $\mu$ mol/L; hmn HeLa, GI<sub>50</sub> > 100 $\mu$ g/mL; murine B16F10, GI<sub>50</sub> = 46 $\mu$ mol/L). **Source:** YUAN YE CHAI HU *Bupleurum rotundifolium* (fruit). **Ref:** 4331.

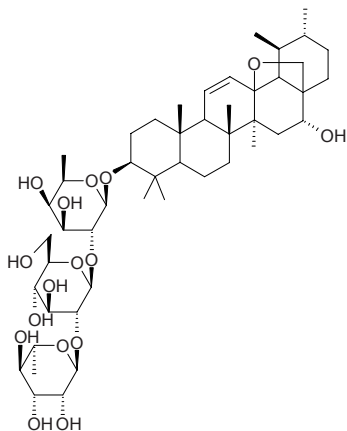
**18952 Rotundifolioside I**

13 $\beta$ ,28-Epoxy-16 $\alpha$ -hydroxyurs-11-en-3 $\beta$ -yl  $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-fucopyranoside C<sub>47</sub>H<sub>76</sub>O<sub>16</sub> (897.12). White powder,  $[\alpha]_D^{24} = -10.1^\circ$  ( $c = 0.99$ , pyridine). **Pharm:** Cytotoxic (antiproliferative activity *in vitro*, MTT assay, hmn MK1, GI<sub>50</sub> = 20 $\mu$ mol/L; hmn HeLa, GI<sub>50</sub> = 37 $\mu$ mol/L; murine B16F10, GI<sub>50</sub> = 18 $\mu$ mol/L). **Source:** YUAN YE CHAI HU *Bupleurum rotundifolium* (fruit). **Ref:** 4331.

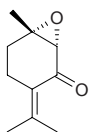


**18953 Rotundifolioside J**

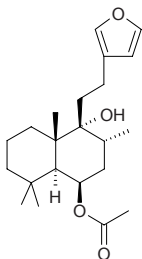
13 $\beta$ ,28-Epoxy-16 $\alpha$ -hydroxyurs-11-en-3 $\beta$ -yl  $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-fucopyranoside C<sub>48</sub>H<sub>78</sub>O<sub>16</sub> (911.15). White powder,  $[\alpha]_D^{24} = +31.3^\circ$  ( $c = 1.00$ , pyridine). **Pharm:** Cytotoxic (antiproliferative activity *in vitro*, MTT assay, hmn MK1, GI<sub>50</sub> = 16 $\mu$ mol/L; hmn HeLa, GI<sub>50</sub> = 21 $\mu$ mol/L; murine B16F10, GI<sub>50</sub> = 11 $\mu$ mol/L). **Source:** YUAN YE CHAI HU *Bupleurum rotundifolium* (fruit). **Ref:** 4331.

**18954 Rotundifolone**

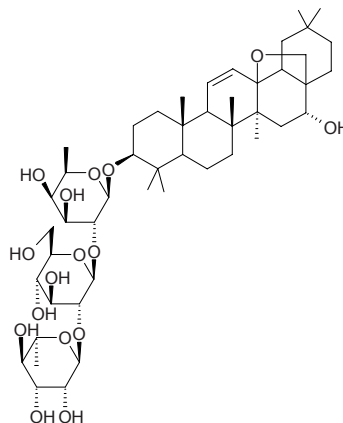
Piperitenone oxide [5945-46-0] C<sub>10</sub>H<sub>14</sub>O<sub>2</sub> (166.22). Crystals, mp 27.5°C, bp 86°C/1mmHg,  $[\alpha]_D^{10} = +166.5^\circ$  (MeOH). **Source:** YU XIANG CAO *Mentha rotundifolia*, *Mentha* spp. **Ref:** 6, 2674, 3105.

**18955 Rotundifuran**

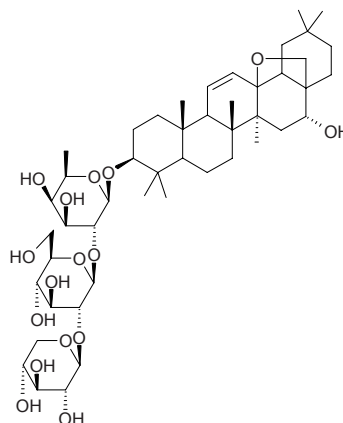
[50656-65-0] C<sub>22</sub>H<sub>34</sub>O<sub>4</sub> (362.51). **Source:** MAN JING ZI *Vitex trifolia*. **Ref:** 746.

**18956 Rotundioside F**

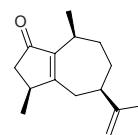
C<sub>48</sub>H<sub>78</sub>O<sub>16</sub> (911.15). **Source:** YUAN YE CHAI HU *Bupleurum rotundifolium* (fruit). **Ref:** 4331.

**18957 Rotundioside G**

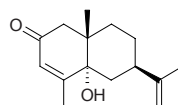
C<sub>47</sub>H<sub>76</sub>O<sub>16</sub> (897.12). **Source:** YUAN YE CHAI HU *Bupleurum rotundifolium* (fruit). **Ref:** 4331.

**18958 Rotundone**

[18374-76-0] C<sub>15</sub>H<sub>22</sub>O (218.34). bp 128–129°C/1mm **Source:** XIANG FU *Cyperus rotundus*. **Ref:** 6.

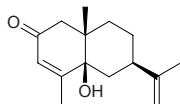
**18959  $\alpha$ -Rotunol**

[24405-56-9] C<sub>15</sub>H<sub>22</sub>O<sub>2</sub> (234.34). mp ( $\alpha$ ) 87.5–88.5°C **Source:** XIANG FU *Cyperus rotundus*. **Ref:** 6.

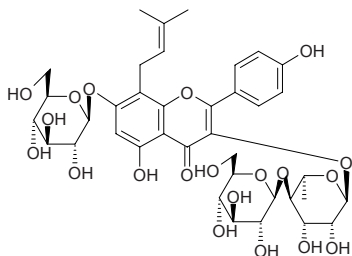


**18960  $\beta$ -Rotunol**

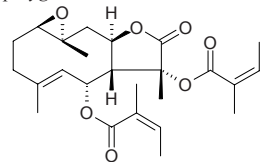
[24405-57-0] C<sub>15</sub>H<sub>22</sub>O<sub>2</sub> (234.34). mp ( $\beta$ ) 118~119°C. Source: XIANG FU *Cyperus rotundus*. Ref: 6.

**18961 Rouhuoside**

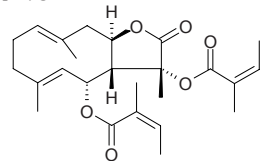
[131862-37-8] C<sub>38</sub>H<sub>48</sub>O<sub>20</sub> (824.71). Source: WU SHAN YIN YANG HUO *Epimedium wushanense*, ROU MAO YIN YANG HUO *Epimedium pubescens*. Ref: 2, 660.

**18962 Rouyolide A**

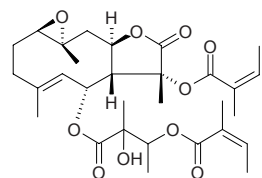
C<sub>25</sub>H<sub>34</sub>O<sub>7</sub> (446.55). Oil, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +75.3° (*c* = 0.473, CHCl<sub>3</sub>). Source: *Rouya polygama*. Ref: 3414.

**18963 Rouyolide B**

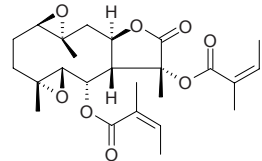
C<sub>25</sub>H<sub>34</sub>O<sub>6</sub> (430.55). Oil, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +57.3° (*c* = 0.041, CHCl<sub>3</sub>). Source: *Rouya polygama*. Ref: 3414.

**18964 Rouyolide C**

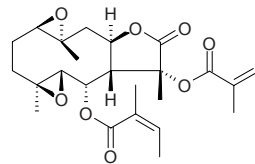
C<sub>30</sub>H<sub>42</sub>O<sub>10</sub> (562.66). Oil, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +141.4° (*c* = 0.082, CHCl<sub>3</sub>). Source: *Rouya polygama*. Ref: 3414.

**18965 Rouyolide D**

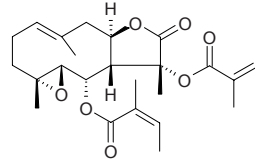
C<sub>25</sub>H<sub>34</sub>O<sub>8</sub> (462.54). Oil, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +16.6° (*c* = 0.042, CHCl<sub>3</sub>). Source: *Rouya polygama*. Ref: 3414.

**18966 Rouyolide E**

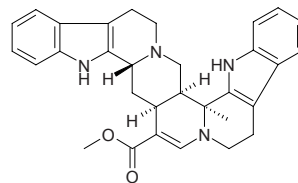
C<sub>25</sub>H<sub>34</sub>O<sub>8</sub> (462.54). Oil, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +2.95° (*c* = 0.206, CHCl<sub>3</sub>). Source: *Rouya polygama*. Ref: 3414.

**18967 Rouyolide F**

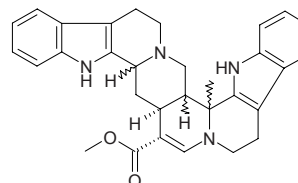
C<sub>25</sub>H<sub>34</sub>O<sub>7</sub> (446.55). Oil, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +85.5° (*c* = 110, CHCl<sub>3</sub>). Source: *Rouya polygama*. Ref: 3414.

**18968 Roxburghine**

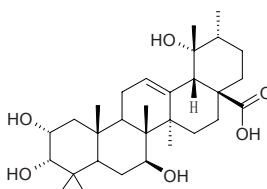
C<sub>31</sub>H<sub>32</sub>N<sub>4</sub>O<sub>2</sub> (492.63). Source: ER CHA GOU TENG *Uncaria gambir*. Ref: 660.

**18969 Roxburghine X**

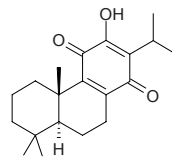
C<sub>31</sub>H<sub>32</sub>N<sub>4</sub>O<sub>2</sub> (492.63). Source: TUO YUAN GOU TENG *Uncaria elliptica*. Ref: 5341.

**18970 Roxburic acid**

2 $\beta$ ,3 $\beta$ ,7 $\beta$ ,19 $\alpha$ -Tetrahydroxyurs-12-en-28-oic acid [108657-25-6] C<sub>30</sub>H<sub>48</sub>O<sub>6</sub> (504.71). White amorphous powder, mp 292°C (dec), [ $\alpha$ ]<sub>D</sub><sup>18</sup> = 0° (*c* = 0.1550, pyridine). Source: CI LI *Rosa roxburghii*. Ref: 74.

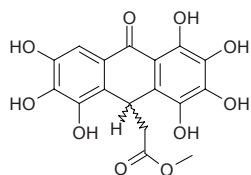
**18971 Royleanone**

C<sub>20</sub>H<sub>28</sub>O<sub>3</sub> (316.44). Source: XI MA XUAN FU HUA *Inula royleana*, XIN XI LAN LUO HAN SONG *Podocarpus ferrugineus*. Ref: 1521.

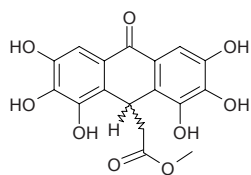


**18972 Rubanthrone A**

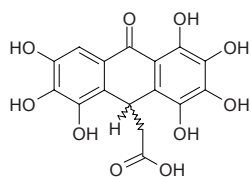
$C_{17}H_{14}O_{10}$  (378.30).  $[\alpha]_D = +6.1^\circ$  ( $c = 0.09$ , MeOH). **Pharm:** Antibacterial (*Staphylococcus aureus*, EC = 4.5mg/mL). **Source:** YU YE MAO MEI *Rubus ulmifolius*. **Ref:** 2017.

**18973 Rubanthrone B**

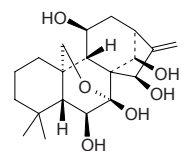
$C_{17}H_{14}O_9$  (362.30). **Source:** YU YE MAO MEI *Rubus ulmifolius*. **Ref:** 2010.

**18974 Rubanthrone C**

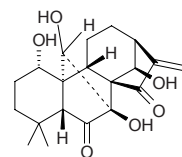
$C_{16}H_{12}O_{10}$  (364.27).  $[\alpha]_D = +2.1^\circ$  ( $c = 0.05$ , MeOH). **Source:** YU YE MAO MEI *Rubus ulmifolius*. **Ref:** 2010.

**18975 Rubescensin C**

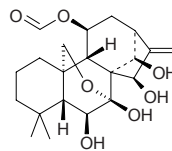
[81661-34-9]  $C_{20}H_{30}O_6$  (366.46). Crystals (MeOH), mp 239–241°C,  $[\alpha]_D^{25} = -68.6^\circ$  ( $c = 0.14$ , pyridine). **Source:** DONG LING CAO *Rabdosia rubescens*. **Ref:** 2087, 4067.

**18976 Rubescensin D**

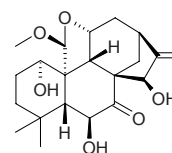
$C_{20}H_{26}O_6$  (362.43). mp 264–266°C,  $[\alpha]_D^{20} = -57.2^\circ$  ( $c = 0.236$ ,  $C_5H_5N$ ). **Source:** DONG LING CAO *Rabdosia rubescens*. **Ref:** 4067.

**18977 Rubescensin H**

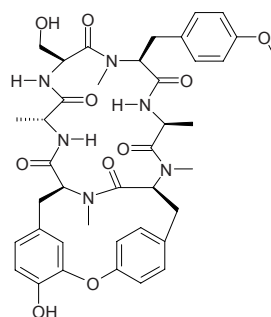
6 $\beta$ ,7 $\beta$ ,14 $\beta$ ,15 $R$ -Tetrahydroxy-11 $\beta$ -O-formyl-7 $\alpha$ ,20-epoxy-ent-kaur-16-ene  $C_{21}H_{30}O_7$  (394.47). Colorless crystals mp 140–142°C,  $[\alpha]_D^{28} = 11.9^\circ$  ( $c = 0.1265$ , MeOH). **Source:** DONG LING CAO *Rabdosia rubescens*. **Ref:** 879.

**18978 Rubescensin W**

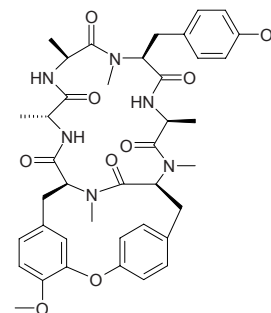
$C_{21}H_{30}O_6$  (378.47). Colorless cubes,  $[\alpha]_D^{26.9} = +57.69^\circ$  ( $c = 0.34$ , MeOH). **Pharm:** Cytotoxic inactive (K562 cells,  $IC_{50} = 38.96\mu\text{g/mL}$ , positive control *cis*-Platinum,  $IC_{50} = 1.14\mu\text{g/mL}$ ). **Source:** MAO YE XIANG CHA CAI *Isodon japonica* [Syn. *Rabdosia japonica*]. **Ref:** 4998.

**18979 Rubia akane RA-I**

$C_{40}H_{48}N_6O_{10}$  (772.86). **Source:** QIAN CAO GEN *Rubia cordifolia*. **Ref:** 660.

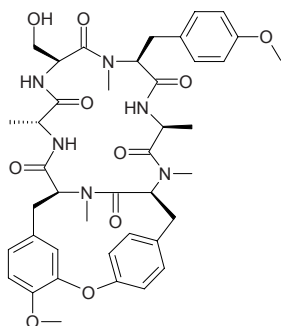
**18980 Rubia akane RA-II**

$C_{40}H_{48}N_6O_9$  (756.89). **Source:** QIAN CAO GEN *Rubia cordifolia*. **Ref:** 660.

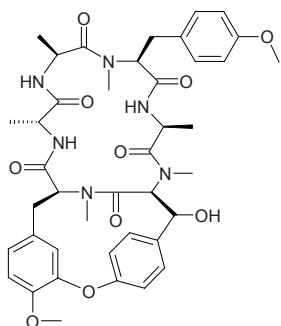


**18981 Rubia akane RA-III**

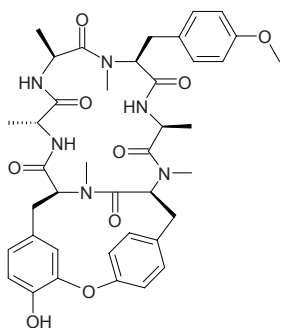
$C_{41}H_{50}N_6O_{10}$  (786.89). Source: QIAN CAO GEN *Rubia cordifolia*. Ref: 660.

**18982 Rubia akane RA-IV**

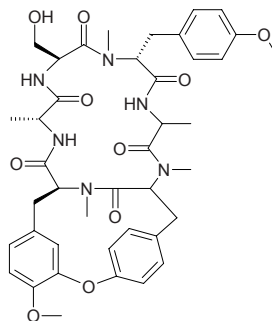
$C_{41}H_{50}N_6O_{10}$  (786.89). Source: QIAN CAO GEN *Rubia cordifolia*. Ref: 660.

**18983 Rubia akane RA-V**

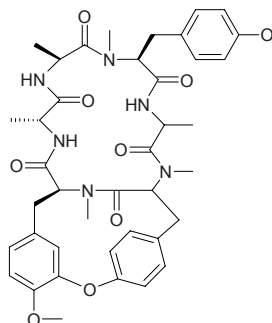
$C_{40}H_{48}N_6O_9$  (756.86). Pharm: Anti-inflammatory (inhibits nitric oxide production, LPS-activated mouse peritoneal macrophages,  $0.03\mu\text{mol/L}$ , InRt =  $(77.1\pm 1.9)\%$ ,  $IC_{50} = 0.015\mu\text{mol/L}$ , control Herbimycin A,  $IC_{50} = 0.094\mu\text{mol/L}$ );  $\beta$ -Hexosaminidase inhibitor inactive (RBL-2H3 cells, inhibits release of  $\beta$ -hexosaminidase,  $100\mu\text{mol/L}$ , InRt =  $(1.2\pm 2.5)\%$ )<sup>[4347]</sup>. Source: QIAN CAO GEN *Rubia cordifolia*, XIAO HONG SHEN *Rubia yunnanensis* (root). Ref: 660, 4347.

**18984 Rubia akane RA-VI**

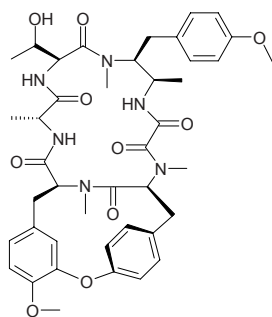
$C_{41}H_{50}N_6O_{10}$  (786.89). Source: QIAN CAO GEN *Rubia cordifolia*. Ref: 660.

**18985 Rubia akane RA-VII**

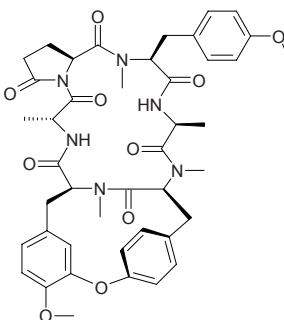
$C_{41}H_{50}N_6O_9$  (770.89). Source: QIAN CAO GEN *Rubia cordifolia*. Ref: 660.

**18986 Rubia akane RA-VIII**

$C_{42}H_{52}N_6O_{10}$  (800.92). Source: QIAN CAO GEN *Rubia cordifolia*. Ref: 660.

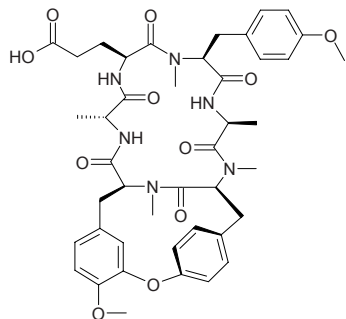
**18987 Rubia akane RA-IX**

$C_{43}H_{50}N_6O_{10}$  (810.91). Source: QIAN CAO GEN *Rubia cordifolia*. Ref: 660.

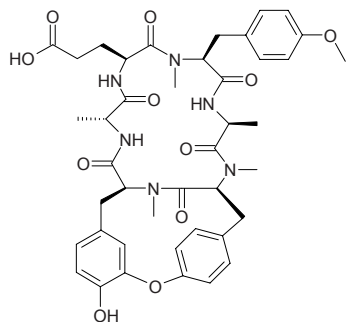


**18988 Rubia akane RA-X**

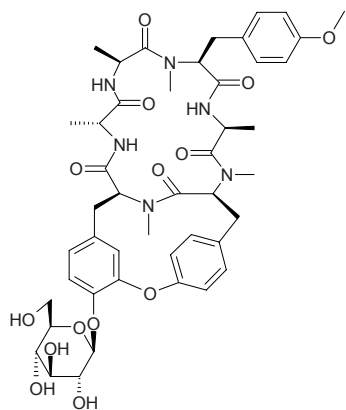
$C_{43}H_{52}N_6O_{11}$  (828.93). Source: QIAN CAO GEN *Rubia cordifolia*. Ref: 660.

**18989 Rubia akane RA-XI**

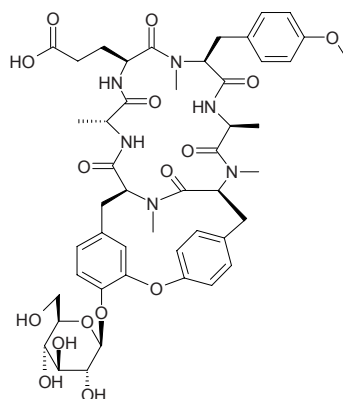
$C_{42}H_{50}N_6O_{11}$  (814.90). Source: QIAN CAO GEN *Rubia cordifolia*. Ref: 660.

**18990 Rubia akane RA-XII**

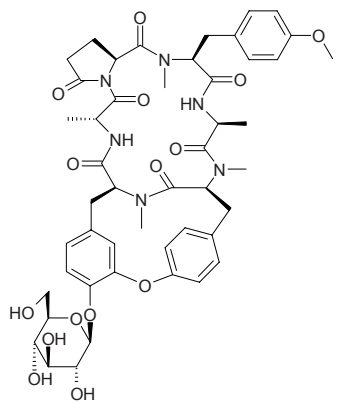
$C_{46}H_{58}N_6O_{14}$  (919.01). Pharm: Anti-inflammatory (inhibits nitric oxide production, LPS-activated mouse peritoneal macrophages,  $1\mu\text{mol/L}$ ,  $\text{InRt} = (54.0 \pm 4.2)\%$ ,  $\text{IC}_{50} = 0.85\mu\text{mol/L}$ , control *L*-NMMA,  $\text{IC}_{50} = 57\mu\text{mol/L}$ );  $\beta$ -hexosaminidase inhibitor (RBL-2H3 cells, inhibits release of  $\beta$ -hexosaminidase,  $100\mu\text{mol/L}$ ,  $\text{InRt} = (35.7 \pm 4.0)\%$ ,  $p < 0.01$ )<sup>[4347]</sup>. Source: QIAN CAO GEN *Rubia cordifolia*, XIAO HONG SHEN *Rubia yunnanensis* (root). Ref: 660, 4347.

**18991 Rubia akane RA-XIII**

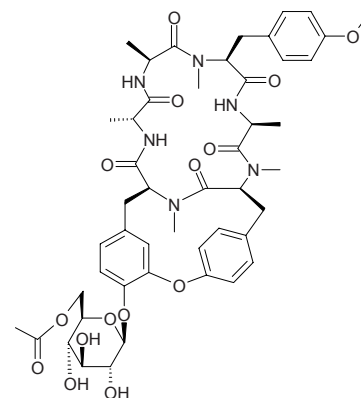
$C_{48}H_{60}N_6O_{16}$  (977.04). Source: QIAN CAO GEN *Rubia cordifolia*. Ref: 660.

**18992 Rubia akane RA-XIV**

$C_{48}H_{58}N_6O_{15}$  (959.03). Source: QIAN CAO GEN *Rubia cordifolia*. Ref: 660.

**18993 Rubia akane RA-XV**

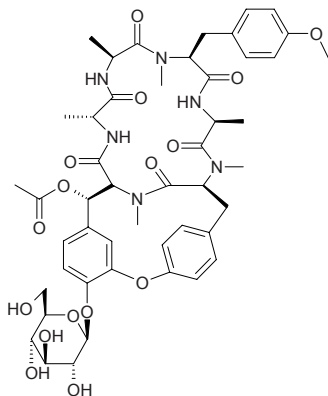
$C_{48}H_{60}N_6O_{15}$  (961.04). Source: QIAN CAO GEN *Rubia cordifolia*. Ref: 660.



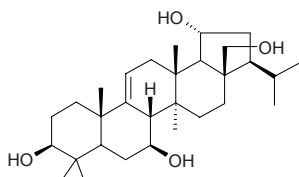


**18994 Rubia akane RA-XVI**

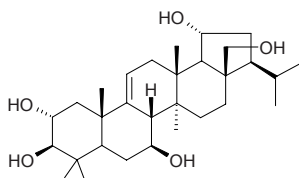
[150373-89-0] C<sub>48</sub>H<sub>60</sub>N<sub>6</sub>O<sub>16</sub> (977.04). Acicular crystals, mp 220°C (dec), [α]<sub>D</sub> = -179.7° (c = 0.06, methanol). **Pharm:** Cytotoxic (P<sub>388</sub>, ED<sub>50</sub> = 1.5 μg/mL). **Source:** QIAN CAO GEN *Rubia cordifolia* (root: yield = 0.0000036%dw). **Ref:** 660, 1105.

**18995 Rubiarbonol A**

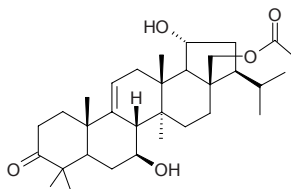
C<sub>30</sub>H<sub>50</sub>O<sub>4</sub> (474.73). **Pharm:** NO production inhibitor (*in vitro*, LPS-activated mouse peritoneal macrophages, 3 μmol/L, 10 μmol/L, 30 μmol/L, 100 μmol/L, InRt = 4.2%, -4.2%, 2.9%, 86.3%, respectively; control *L*-NMMA, 3 μmol/L, 10 μmol/L, 30 μmol/L, 100 μmol/L, InRt = 10.3%, 15%, 34.1%, 63.1%, respectively)<sup>[4691]</sup>; β-hexosaminidase inhibitor inactive (RBL-2H3 cells, inhibits release of β-hexosaminidase, 100 μmol/L, InRt = (1.2 ± 2.3)%)<sup>[4347]</sup>; platelet aggregation promoter or inhibitor (a promoter at low concentration of 30.9 μg/mL; a inhibitor at high concentration, 100 μmol/L AA induced: control AggRt = 87.1%, 100 μmol/L, AggRt = 83.8%; 10 μg/mL collagen induced: control AggRt = 91.0%, 100 μmol/L, AggRt = 89.6%; 0.1 U/mL thrombin induced: control AggRt = 91.7%, 100 μmol/L, AggRt = 90.7%; 2 ng/mL PAF induced: control AggRt = 92.6%, 100 μmol/L, AggRt = 91.3%)<sup>[4646]</sup>. **Source:** XIAO HONG SHEN *Rubia yunnanensis* (root: yield = 0.011%dw)<sup>[4691]</sup>. **Ref:** 4347, 4691, 4646.

**18996 Rubiarbonol F**

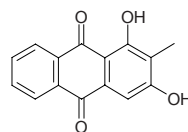
C<sub>30</sub>H<sub>50</sub>O<sub>5</sub> (490.73). **Pharm:** NO production inhibitor (*in vitro*, LPS-activated mouse peritoneal macrophages, 3 μmol/L, 10 μmol/L, 30 μmol/L, 100 μmol/L, InRt = 7.9%, 15.4%, 22%, 60%, respectively; control *L*-NMMA, 3 μmol/L, 10 μmol/L, 30 μmol/L, 100 μmol/L, InRt = 10.3%, 15%, 34.1%, 63.1%, respectively)<sup>[4691]</sup>; β-hexosaminidase inhibitor (RBL-2H3 cells, inhibits release of β-hexosaminidase, 100 μmol/L, InRt = (42.5 ± 2.9)%, *p* < 0.01)<sup>[4347]</sup>. **Source:** XIAO HONG SHEN *Rubia yunnanensis* (root: yield = 0.0020%dw)<sup>[4691]</sup>. **Ref:** 4347, 4691, 4646.

**18997 Rubiarbonone C'**

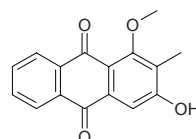
C<sub>32</sub>H<sub>50</sub>O<sub>5</sub> (514.75). **Pharm:** β-Hexosaminidase inhibitor (RBL-2H3 cells, inhibits release of β-hexosaminidase, 100 μmol/L, InRt = (15.1 ± 4.5)%). **Source:** XIAO HONG SHEN *Rubia yunnanensis* (root). **Ref:** 4347.

**18998 Rubiadin**

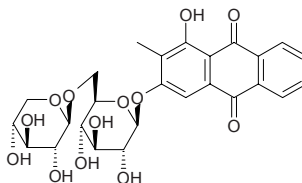
[117-02-2] C<sub>15</sub>H<sub>10</sub>O<sub>4</sub> (254.24). mp 270~271°C. **Pharm:** Cytotoxic (KB, ED<sub>50</sub> > 25 μg/mL, control Doxorubicin, ED<sub>50</sub> = 0.12 μg/mL; Hep3B, ED<sub>50</sub> > 25 μg/mL, control Doxorubicin, ED<sub>50</sub> = 0.14 μg/mL; Colon205, ED<sub>50</sub> > 25 μg/mL, control Doxorubicin, ED<sub>50</sub> = 0.10 μg/mL; HeLa, ED<sub>50</sub> > 25 μg/mL, control Doxorubicin, ED<sub>50</sub> = 0.11 μg/mL)<sup>[4369]</sup>. **Source:** GUANG JING QIAN CAO *Rubia wallichiana* (stem), TU LIAN QIAO *Hymenodictyon excelsum*, YANG JIAO TENG *Morinda umbellata*. **Ref:** 6, 4369.

**18999 Rubiadin-1-methyl ether**

C<sub>16</sub>H<sub>12</sub>O<sub>4</sub> (268.27). mp 291°C. **Source:** TU LIAN QIAO *Hymenodictyon excelsum*, YANG JIAO TENG *Morinda umbellata*. **Ref:** 6.

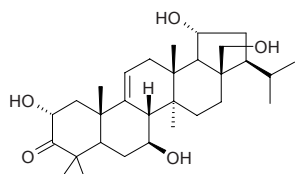
**19000 Rubiadin primeveroside**

C<sub>26</sub>H<sub>28</sub>O<sub>13</sub> (548.51). mp 248~250°C. **Source:** GUANG JING QIAN CAO *Rubia wallichiana* (stem), PENG ZI CAI *Galium verum*. **Ref:** 6, 4369.

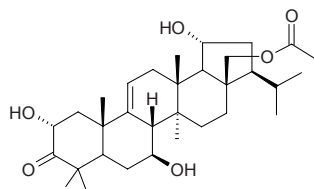


**19001 Rubianol A**

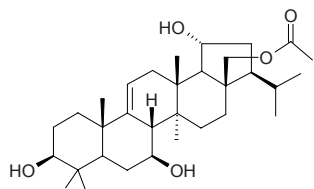
$C_{30}H_{48}O_5$  (488.71). White powder,  $[\alpha]_D^{25} = +10.0^\circ$  ( $c = 0.30$ , MeOH). **Pharm:**  $\beta$ -Hexosaminidase inhibitor inactive (RBL-2H3 cells, inhibits release of  $\beta$ -hexosaminidase,  $100\mu\text{mol/L}$ , InRt =  $(5.8\pm 5.2)\%$ )<sup>[4347]</sup>; NO production inhibitor (*in vitro*, LPS-activated mouse peritoneal macrophages,  $3\mu\text{mol/L}$ ,  $10\mu\text{mol/L}$ ,  $30\mu\text{mol/L}$ ,  $100\mu\text{mol/L}$ , InRt =  $-10.3\%$ ,  $2.1\%$ ,  $1.8\%$ ,  $40.3\%$ , respectively; control *L*-NMMA,  $3\mu\text{mol/L}$ ,  $10\mu\text{mol/L}$ ,  $30\mu\text{mol/L}$ ,  $100\mu\text{mol/L}$ , InRt =  $10.3\%$ ,  $15\%$ ,  $34.1\%$ ,  $63.1\%$ , respectively)<sup>[4691]</sup>. **Source:** XIAO HONG SHEN *Rubia yunnanensis* (root: yield =  $0.0039\%$ dw). **Ref:** 4347, 4691.

**19002 Rubianol B**

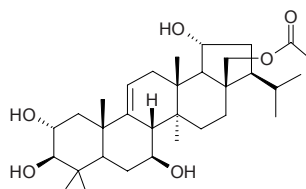
$C_{32}H_{50}O_6$  (530.75). **Pharm:**  $\beta$ -Hexosaminidase inhibitor inactive (RBL-2H3 cells, inhibits release of  $\beta$ -hexosaminidase,  $100\mu\text{mol/L}$ , InRt =  $(1.9\pm 7.3)\%$ )<sup>[4347]</sup>; NO production inhibitor (*in vitro*, LPS-activated mouse peritoneal macrophages,  $3\mu\text{mol/L}$ ,  $10\mu\text{mol/L}$ ,  $30\mu\text{mol/L}$ ,  $100\mu\text{mol/L}$ , InRt =  $-1.5\%$ ,  $0.0\%$ ,  $-5.8\%$ ,  $15.4\%$ , respectively; control *L*-NMMA,  $3\mu\text{mol/L}$ ,  $10\mu\text{mol/L}$ ,  $30\mu\text{mol/L}$ ,  $100\mu\text{mol/L}$ , InRt =  $10.3\%$ ,  $15\%$ ,  $34.1\%$ ,  $63.1\%$ , respectively)<sup>[4691]</sup>. **Source:** XIAO HONG SHEN *Rubia yunnanensis* (root: yield =  $0.0011\%$ dw). **Ref:** 4347, 4691.

**19003 Rubianol C**

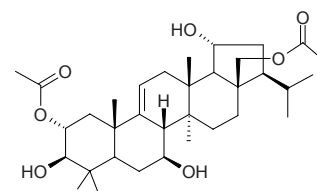
$C_{32}H_{52}O_5$  (516.77). White powder,  $[\alpha]_D^{25} = +36.4^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** NO production inhibitor (*in vitro*, LPS-activated mouse peritoneal macrophages,  $3\mu\text{mol/L}$ ,  $10\mu\text{mol/L}$ ,  $30\mu\text{mol/L}$ ,  $100\mu\text{mol/L}$ , InRt =  $11.1\%$ ,  $4.7\%$ ,  $-7.4\%$ ,  $25.5\%$ , respectively; control *L*-NMMA,  $3\mu\text{mol/L}$ ,  $10\mu\text{mol/L}$ ,  $30\mu\text{mol/L}$ ,  $100\mu\text{mol/L}$ , InRt =  $10.3\%$ ,  $15\%$ ,  $34.1\%$ ,  $63.1\%$ , respectively)<sup>[4691]</sup>;  $\beta$ -hexosaminidase inhibitor inactive (RBL-2H3 cells, inhibits release of  $\beta$ -hexosaminidase,  $100\mu\text{mol/L}$ , InRt =  $(0.3\pm 5.9)\%$ )<sup>[4347]</sup>. **Source:** XIAO HONG SHEN *Rubia yunnanensis* (root: yield =  $0.0092\%$ dw)<sup>[4691]</sup>. **Ref:** 4347, 4691.

**19004 Rubianol D**

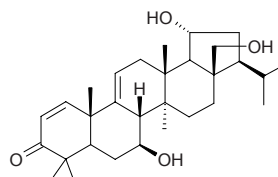
$C_{32}H_{52}O_6$  (532.77). White powder,  $[\alpha]_D^{25} = +63.6^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** NO production inhibitor (*in vitro*, LPS-activated mouse peritoneal macrophages,  $3\mu\text{mol/L}$ ,  $10\mu\text{mol/L}$ ,  $30\mu\text{mol/L}$ ,  $100\mu\text{mol/L}$ , InRt =  $5.3\%$ ,  $4.3\%$ ,  $-11.1\%$ ,  $76.5\%$ , respectively; control *L*-NMMA,  $3\mu\text{mol/L}$ ,  $10\mu\text{mol/L}$ ,  $30\mu\text{mol/L}$ ,  $100\mu\text{mol/L}$ , InRt =  $10.3\%$ ,  $15\%$ ,  $34.1\%$ ,  $63.1\%$ , respectively)<sup>[4691]</sup>;  $\beta$ -hexosaminidase inhibitor (RBL-2H3 cells, inhibits release of  $\beta$ -hexosaminidase,  $100\mu\text{mol/L}$ , InRt =  $(39.7\pm 2.4)\%$ ,  $p < 0.01$ )<sup>[4347]</sup>. **Source:** XIAO HONG SHEN *Rubia yunnanensis* (root: yield =  $0.0041\%$ dw)<sup>[4691]</sup>. **Ref:** 4347, 4691.

**19005 Rubianol E**

$C_{34}H_{54}O_7$  (574.81). White powder,  $[\alpha]_D^{25} = +18.1^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** NO production inhibitor (*in vitro*, LPS-activated mouse peritoneal macrophages,  $3\mu\text{mol/L}$ ,  $10\mu\text{mol/L}$ ,  $30\mu\text{mol/L}$ ,  $100\mu\text{mol/L}$ , InRt =  $21.3\%$ ,  $-12\%$ ,  $-7.9\%$ ,  $77.1\%$ , respectively; control *L*-NMMA,  $3\mu\text{mol/L}$ ,  $10\mu\text{mol/L}$ ,  $30\mu\text{mol/L}$ ,  $100\mu\text{mol/L}$ , InRt =  $10.3\%$ ,  $15\%$ ,  $34.1\%$ ,  $63.1\%$ , respectively)<sup>[4691]</sup>;  $\beta$ -hexosaminidase inhibitor (RBL-2H3 cells, inhibits release of  $\beta$ -hexosaminidase,  $100\mu\text{mol/L}$ , InRt =  $(17.5\pm 4.7)\%$ )<sup>[4347]</sup>. **Source:** XIAO HONG SHEN *Rubia yunnanensis* (root: yield =  $0.0053\%$ dw)<sup>[4691]</sup>. **Ref:** 4347, 4691.

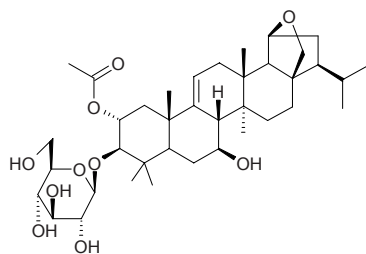
**19006 Rubianol G**

$C_{30}H_{46}O_4$  (470.70). White powder,  $[\alpha]_D^{25} = +206.1^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Anti-inflammatory (inhibits nitric oxide production, LPS-activated mouse peritoneal macrophages,  $100\mu\text{mol/L}$ , InRt =  $(70.5\pm 3.4)\%$ ,  $IC_{50} = 70\mu\text{mol/L}$ , control *L*-NMMA,  $IC_{50} = 57\mu\text{mol/L}$ );  $\beta$ -hexosaminidase inhibitor (RBL-2H3 cells, inhibits release of  $\beta$ -hexosaminidase,  $100\mu\text{mol/L}$ , InRt =  $(21.4\pm 3.4)\%$ ,  $p < 0.01$ ). **Source:** XIAO HONG SHEN *Rubia yunnanensis* (root). **Ref:** 4347.

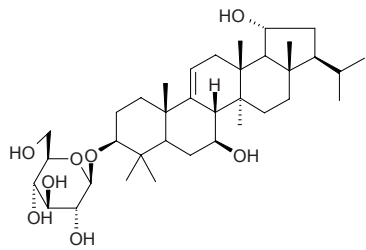


**19007 Rubianoside I**

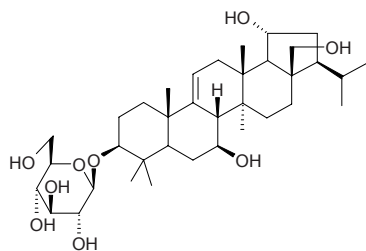
$C_{38}H_{60}O_{10}$  (676.90). White powder,  $[\alpha]_D^{25} = +10.9^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** NO production inhibitor (*in vitro*, LPS-activated mouse peritoneal macrophages,  $3\mu\text{mol/L}$ ,  $10\mu\text{mol/L}$ ,  $30\mu\text{mol/L}$ ,  $100\mu\text{mol/L}$ , InRt =  $-0.3\%$ ,  $-8\%$ ,  $1.5\%$ ,  $-3.2\%$ , respectively; control *L*-NMMA,  $3\mu\text{mol/L}$ ,  $10\mu\text{mol/L}$ ,  $30\mu\text{mol/L}$ ,  $100\mu\text{mol/L}$ , InRt =  $10.3\%$ ,  $15\%$ ,  $34.1\%$ ,  $63.1\%$ , respectively)<sup>[4691]</sup>;  $\beta$ -hexosaminidase inhibitor inactive (RBL-2H3 cells, inhibits release of  $\beta$ -hexosaminidase,  $100\mu\text{mol/L}$ , InRt =  $(4.4\pm 1.6)\%$ )<sup>[4347]</sup>. **Source:** XIAO HONG SHEN *Rubia yunnanensis* (root; yield =  $0.0018\%$ dw)<sup>[4691]</sup>. **Ref:** 4347, 4691.

**19008 Rubianoside II**

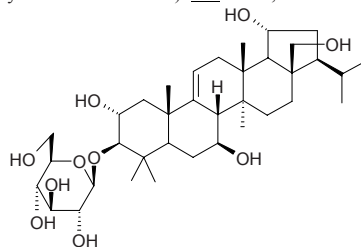
$C_{36}H_{60}O_8$  (620.87). White powder,  $[\alpha]_D^{25} = +2.2^\circ$  ( $c = 0.20$ , MeOH). **Source:** XIAO HONG SHEN *Rubia yunnanensis* (root). **Ref:** 4347.

**19009 Rubianoside III**

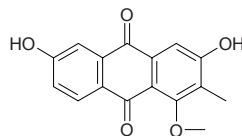
$C_{36}H_{60}O_9$  (636.87). White powder,  $[\alpha]_D^{25} = +3.5^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Anti-inflammatory (inhibits nitric oxide production, LPS-activated mouse peritoneal macrophages,  $3\mu\text{mol/L}$ , InRt =  $(10.3\pm 9.4)\%$ , control *L*-NMMA,  $IC_{50} = 57\mu\text{mol/L}$ );  $\beta$ -hexosaminidase inhibitor inactive (RBL-2H3 cells, inhibits release of  $\beta$ -hexosaminidase,  $100\mu\text{mol/L}$ , InRt =  $(-2.9\pm 3.5)\%$ ). **Source:** XIAO HONG SHEN *Rubia yunnanensis* (root). **Ref:** 4347.

**19010 Rubianoside IV**

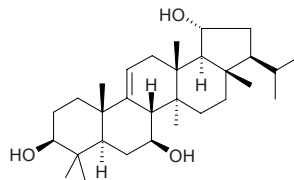
Rubiarboside F  $C_{36}H_{60}O_{10}$  (652.87). Colorless powder (MeOH), mp  $294\text{--}295^\circ\text{C}$ ,  $[\alpha]_D = +98.1^\circ$  ( $c = 0.05$ , MeOH); white powder,  $[\alpha]_D^{25} = +90.5^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Anti-inflammatory (inhibits nitric oxide production, LPS-activated mouse peritoneal macrophages,  $3\mu\text{mol/L}$ , InRt =  $(10.2\pm 5.3)\%$ , control *L*-NMMA,  $IC_{50} = 57\mu\text{mol/L}$ )<sup>[4347]</sup>;  $\beta$ -hexosaminidase inhibitor inactive (RBL-2H3 cells, inhibits release of  $\beta$ -hexosaminidase,  $100\mu\text{mol/L}$ , InRt =  $(-3.4\pm 3.6)\%$ )<sup>[4347]</sup>. **Source:** XIAO HONG SHEN *Rubia yunnanensis* (root; yield =  $0.00013\%$ dw). **Ref:** 4347, 4646.

**19011 Rubianthraquinone**

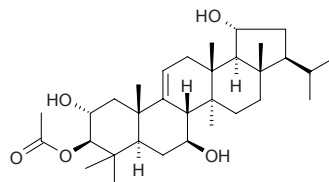
$C_{16}H_{12}O_5$  (284.27). Yellow powder. **Pharm:** Anti-inflammatory (inhibits nitric oxide production, LPS-activated mouse peritoneal macrophages,  $100\mu\text{mol/L}$ , InRt =  $(38.5\pm 2.1)\%$ , control *L*-NMMA,  $IC_{50} = 57\mu\text{mol/L}$ );  $\beta$ -hexosaminidase inhibitor inactive (RBL-2H3 cells, inhibits release of  $\beta$ -hexosaminidase,  $100\mu\text{mol/L}$ , InRt =  $(4.4\pm 1.5)\%$ ). **Source:** XIAO HONG SHEN *Rubia yunnanensis* (root). **Ref:** 4347.

**19012 Rubiarbonol B**

$C_{30}H_{50}O_3$  (458.73). **Pharm:** Platelet aggregation inhibitor ( $100\mu\text{mol/L}$  AA induced: control AggRt =  $87.1\%$ ,  $150\mu\text{mol/L}$ , AggRt =  $80.4\%$ ,  $p < 0.01$ ;  $10\mu\text{g/mL}$  collagen induced: control AggRt =  $91.0\%$ ,  $100\mu\text{mol/L}$ , AggRt =  $82.2\%$ ,  $p < 0.01$ ,  $150\mu\text{mol/L}$ , AggRt =  $79.8\%$ ,  $p < 0.01$ ;  $0.1\text{U/mL}$  thrombin induced: control AggRt =  $91.7\%$ ,  $150\mu\text{mol/L}$ , AggRt =  $89.6\%$ ,  $p < 0.01$ ;  $2\text{ng/mL}$  PAF induced: control AggRt =  $92.6\%$ ,  $150\mu\text{mol/L}$ , AggRt =  $90.4\%$ ,  $p < 0.05$ ). **Source:** XIAO HONG SHEN *Rubia yunnanensis* (root; yield =  $0.000071\%$ dw). **Ref:** 4646.

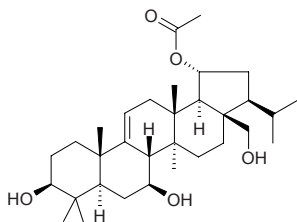
**19013 Rubiarbonol D**

$C_{32}H_{52}O_5$  (516.77). **Source:** QIAN CAO GEN *Rubia cordifolia*. **Ref:** 660.

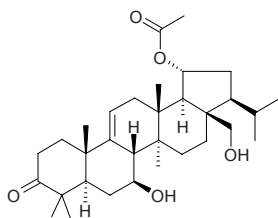


**19014 Rubiarbonol G**

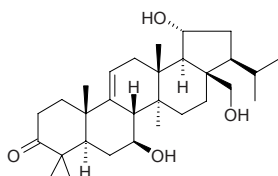
$C_{32}H_{52}O_5$  (516.77). **Source:** XIAO HONG SHEN *Rubia yunnanensis* (root: yield = 0.000071%dw). **Ref:** 4646.

**19015 Rubiarbonone A**

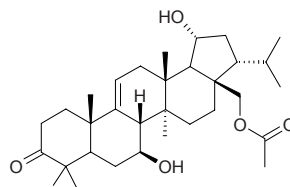
$C_{32}H_{50}O_5$  (514.75). **Pharm:** Platelet aggregation promoter or inhibitor (a promoter at low concentration of 28.4 $\mu$ g/mL; a inhibitor at high concentration, 100 $\mu$ mol/L AA induced: control AggRt = 87.1%, 100 $\mu$ mol/L, AggRt = 85.4%; 10 $\mu$ g/mL collagen induced: control AggRt = 91.0%, 100 $\mu$ mol/L, AggRt = 88.1%; 0.1U/mL thrombin induced: control AggRt = 91.7%, 100 $\mu$ mol/L, AggRt = 91.1%; 2ng/mL PAF induced: control AggRt = 92.6%, 100 $\mu$ mol/L, AggRt = 90.3%). **Source:** XIAO HONG SHEN *Rubia yunnanensis* (root: yield = 0.00012%dw). **Ref:** 4646.

**19016 Rubiarbonone B**

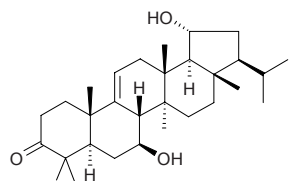
$C_{30}H_{48}O_4$  (472.71). **Pharm:** NO production inhibitor (*in vitro*, LPS-activated mouse peritoneal macrophages, 3 $\mu$ mol/L, 10 $\mu$ mol/L, 30 $\mu$ mol/L, 100 $\mu$ mol/L, InRt = -9.7%, -13.7%, 16.9%, 19.7%, respectively; control *L*-NMMA, 3 $\mu$ mol/L, 10 $\mu$ mol/L, 30 $\mu$ mol/L, 100 $\mu$ mol/L, InRt = 10.3%, 15%, 34.1%, 63.1%, respectively)<sup>[4691]</sup>;  $\beta$ -hexosaminidase inhibitor inactive (RBL-2H3 cells, inhibits release of  $\beta$ -hexosaminidase, 100 $\mu$ mol/L, InRt = (5.2 $\pm$ 11.2)%)<sup>[4347]</sup>. **Source:** XIAO HONG SHEN *Rubia yunnanensis* (root: yield = 0.00024%–0.0041%dw). **Ref:** 4347, 4646, 4691.

**19017 Rubiarbonone C**

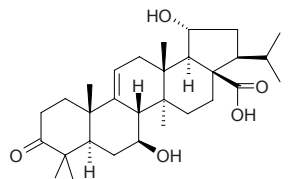
$C_{32}H_{55}O_5$  (514.75). **Pharm:** NO production inhibitor (*in vitro*, LPS-activated mouse peritoneal macrophages, 3 $\mu$ mol/L, 10 $\mu$ mol/L, 30 $\mu$ mol/L, 100 $\mu$ mol/L, InRt = 3.7%, -2.3%, 8%, 90.3%, respectively; control *L*-NMMA, 3 $\mu$ mol/L, 10 $\mu$ mol/L, 30 $\mu$ mol/L, 100 $\mu$ mol/L, InRt = 10.3%, 15%, 34.1%, 63.1%, respectively). **Source:** XIAO HONG SHEN *Rubia yunnanensis* (root: yield = 0.012%dw). **Ref:** 4691.

**19018 Rubiarbonone D**

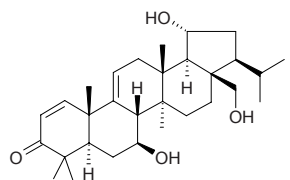
7 $\beta$ ,19 $\alpha$ -Dihydroxyarbor-9(11)-en-3-one  $C_{30}H_{48}O_3$  (456.72). Colorless needles (CHCl<sub>3</sub>), mp 231–232°C, [ $\alpha$ ]<sub>D</sub> = +94.4° (*c* = 0.03, CHCl<sub>3</sub>). **Source:** XIAO HONG SHEN *Rubia yunnanensis* (root: yield = 0.000076%dw). **Ref:** 4646.

**19019 Rubiarbonone F**

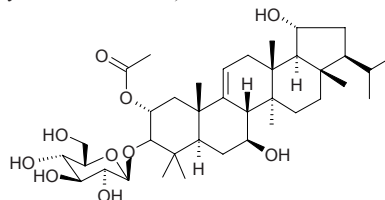
28-Carboxy-7 $\beta$ ,19 $\alpha$ -dihydroxyarbor-9(11)-en-3-one  $C_{30}H_{46}O_5$  (486.7). Colorless needles (MeOH), mp 253–254°C, [ $\alpha$ ]<sub>D</sub> = +26.4° (*c* = 0.06, MeOH). **Source:** XIAO HONG SHEN *Rubia yunnanensis* (root: yield = 0.00006%dw). **Ref:** 4646.

**19020 Rubiarbonone E**

$C_{30}H_{46}O_4$  (470.70). Colorless powder (MeOH), mp 258–259°C, [ $\alpha$ ]<sub>D</sub> = +233.4° (*c* = 0.03, MeOH). **Source:** XIAO HONG SHEN *Rubia yunnanensis* (root: yield = 0.000071%dw). **Ref:** 4646.

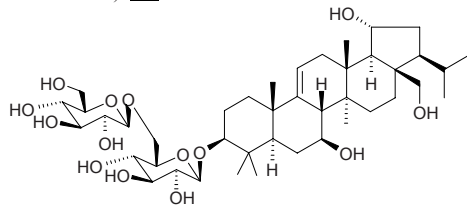
**19021 Rubiarboside A**

$C_{38}H_{62}O_{10}$  (678.91). **Source:** XIAO HONG SHEN *Rubia yunnanensis* (root: yield = 0.00036%dw). **Ref:** 4646.

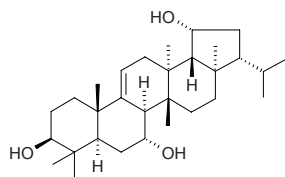


**19022 Rubiarboside G**

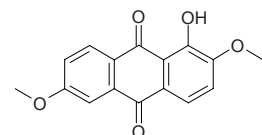
$C_{42}H_{70}O_{14}$  (799.02). Colorless powder (MeOH), mp > 290°C,  $[\alpha]_D = +56.4^\circ$  (c = 0.05, MeOH). Source: XIAO HONG SHEN *Rubia yunnanensis* (root: yield = 0.00012%dw). Ref: 4646.

**19023 Rubiatriol**

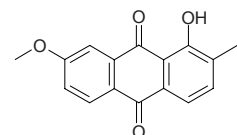
$C_{30}H_{50}O_3$  (458.73). Source: QIAN CAO GEN *Rubia cordifolia*. Ref: 660.

**19024 Rubiawallin A**

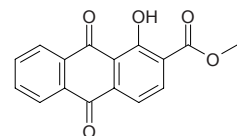
$C_{16}H_{12}O_5$  (284.27). Red needles (acetone), mp > 280°C. Source: GUANG JING QIAN CAO *Rubia wallichiana* (stem). Ref: 4369.

**19025 Rubiawallin B**

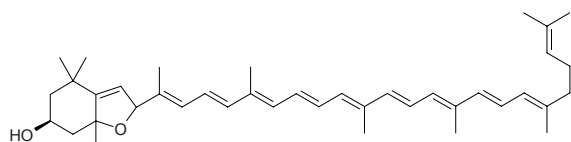
$C_{16}H_{12}O_4$  (268.27). Yellow needles (acetone), mp 136–137°C. Source: GUANG JING QIAN CAO *Rubia wallichiana* (stem). Ref: 4369.

**19026 Rubiawallin C**

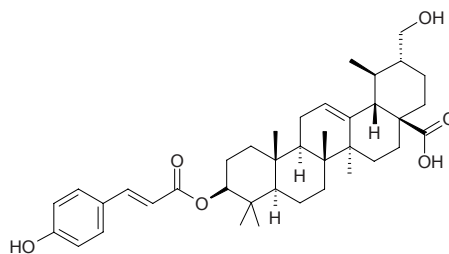
$C_{16}H_{10}O_5$  (282.26). Yellow needles (acetone), mp 136–137°C. Source: GUANG JING QIAN CAO *Rubia wallichiana* (stem). Ref: 4369.

**19027 Rubichrome**

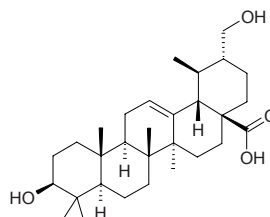
$C_{40}H_{56}O_2$  (568.89). mp 154°C (vaccum). Source: KONG QUE CAO *Tagetes patula*. Ref: 6, 1521.

**19028 Rubicoumaric acid**

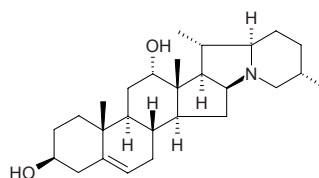
$C_{39}H_{54}O_6$  (618.86). Source: QIAN CAO TENG *Rubia cordifolia* (aerial parts). Ref: 660.

**19029 Rubifolic acid**

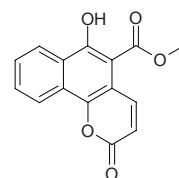
$C_{30}H_{48}O_4$  (472.71). Source: QIAN CAO TENG *Rubia cordifolia* (aerial parts). Ref: 660.

**19030 Rubijervine**

[79-58-3]  $C_{27}H_{43}NO_2$  (413.65). mp 242°C. Source: LI LU *Veratrum nigrum*. Ref: 6.

**19031 Rubilactone**

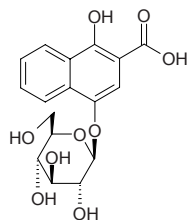
$C_{15}H_{10}O_5$  (270.24). Yellowish crystals, mp 216–218°C. Source: QIAN CAO GEN *Rubia cordifolia*. Ref: 226.



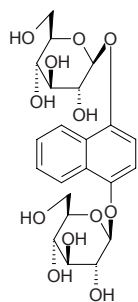
**19032 Rubinaphthin A**

2-Carboxyl-1,4-naphthohydroquinone-4-*O*- $\beta$ -*D*-glucopyranoside C<sub>17</sub>H<sub>18</sub>O<sub>9</sub> (366.33). Pale yellow powder (MeOH), mp 194–195°C, [ $\alpha$ ]<sub>D</sub> = –96.0° (c = 0.15, MeOH). **Pharm:**  $\beta$ -Hexosaminidase inhibitor (RBL-2H3 cells, inhibits release of  $\beta$ -hexosaminidase, 100 $\mu$ mol/L, InRt = (14.2 $\pm$ 6.3)%<sup>[4347]</sup>).

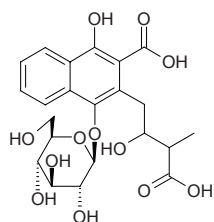
anti-inflammatory inactive (inhibits nitric oxide production, LPS-activated mouse peritoneal macrophages, 100 $\mu$ mol/L, InRt = (4.5 $\pm$ 5.2)%, control L-NMMA, IC<sub>50</sub> = 57 $\mu$ mol/L)<sup>[4347]</sup>. **Source:** XIAO HONG SHEN *Rubia yunnanensis* (root). **Ref:** 4165, 4347.

**19033 Rubinaphthin B**

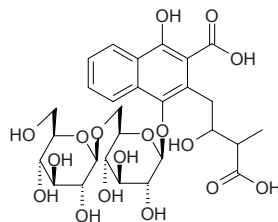
1,4-Naphthohydroquinone-1,4-di-*O*- $\beta$ -*D*-glucopyranoside C<sub>22</sub>H<sub>28</sub>O<sub>12</sub> (484.42). Pale yellow powder (MeOH), mp 272–273°C, [ $\alpha$ ]<sub>D</sub> = –183.3° (c = 0.075, MeOH). **Source:** XIAO HONG SHEN *Rubia yunnanensis* (root). **Ref:** 4165.

**19034 Rubinaphthin C**

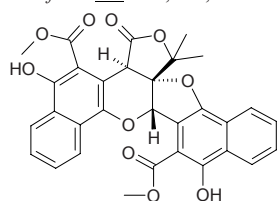
2-Carboxyl-3-(3'-carboxyl-2'-hydroxy)-butyl-1,4-naphthohydroquinone-4-*O*- $\beta$ -*D*-glucopyranoside C<sub>22</sub>H<sub>26</sub>O<sub>12</sub> (482.45). Orange syrup (MeOH), [ $\alpha$ ]<sub>D</sub> = –159.5° (c = 0.47, MeOH). **Source:** XIAO HONG SHEN *Rubia yunnanensis* (root). **Ref:** 4165.

**19035 Rubinaphthin D**

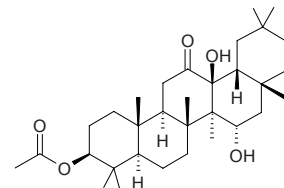
2-Carboxyl-3-(3'-carboxyl-2'-hydroxy)-butyl-1,4-naphthohydroquinone-4-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside C<sub>28</sub>H<sub>36</sub>O<sub>17</sub> (644.59). Dark orange syrup (MeOH), [ $\alpha$ ]<sub>D</sub> = –48.0° (c = 0.38, MeOH). **Source:** XIAO HONG SHEN *Rubia yunnanensis* (root). **Ref:** 4165.

**19036 Rubioncolin B**

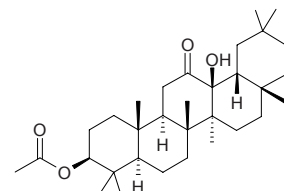
[132268-06-5] C<sub>31</sub>H<sub>24</sub>O<sub>10</sub> (556.53). Jacinth rhombic crystals, mp 235–236°C, [ $\alpha$ ]<sub>D</sub> = 0° (c = 0.3, chloroform). **Pharm:** Antineoplastic (S<sub>180</sub>, *in vivo*, 10mg/kg). **Source:** GOU MAO QIAN CAO *Rubia oncotricha*, QIAN CAO GEN *Rubia cordifolia*. **Ref:** 660, 958, 1016.

**19037 Rubiprasin A**

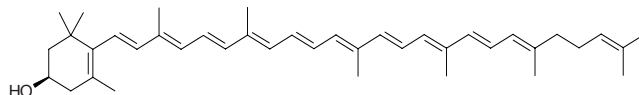
C<sub>32</sub>H<sub>52</sub>O<sub>5</sub> (516.77). **Source:** HEI GUO QIAN CAO *Rubia cordifolia* var. *pratensis*, QIAN CAO GEN *Rubia cordifolia*. **Ref:** 660, 1521.

**19038 Rubiprasin B**

C<sub>32</sub>H<sub>52</sub>O<sub>4</sub> (500.77). **Source:** HEI GUO QIAN CAO *Rubia cordifolia* var. *pratensis*, QIAN CAO GEN *Rubia cordifolia*. **Ref:** 660, 1521.

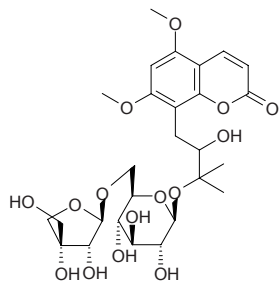
**19039 Rubixanthin**

[3763-55-1] C<sub>40</sub>H<sub>56</sub>O (552.89). mp 160°C. **Source:** JIN ZHAN JU *Calendula officinalis*, JU PI *Citrus reticulata*, KONG QUE CAO *Tagetes patula*, MEI GUI HUA *Rosa rugosa*, QUAN CHI QIANG WEI *Rosa canina*, XIANG RI KUI ZI *Helianthus annuus*, XING REN *Prunus armeniaca*, XIU HONG QIANG WEI *Rosa rubiginosa*, XUAN GOU ZI *Rubus chamaemorus*. **Ref:** 6.

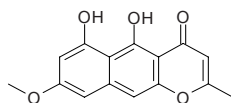


**19040 Rubricauloside**

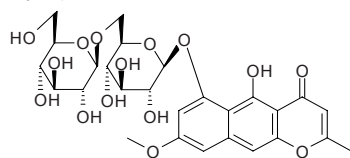
5,7-Dimethoxy-8-[2'-hydroxy-3'-methyl, 3'-*O*- $\beta$ -D-apiofuranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosylbutyl]-coumarin C<sub>27</sub>H<sub>38</sub>O<sub>15</sub> (602.59). White amorphous powder, mp 123–127°C,  $[\alpha]_D^{16} = -38.5^\circ$  ( $c = 0.31$ , DMSO). Source: YUN QIAN HU *Peucedanum rubricaula*. Ref: 177, 476.

**19041 Rubrofusarin**

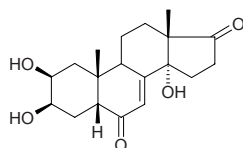
[3567-00-8] C<sub>15</sub>H<sub>12</sub>O<sub>5</sub> (272.26). mp 210–211°C. Pharm: Cytotoxic (P<sub>388</sub>); CNS depressant (animal model); toxin. Source: JUE MING ZI *Cassia tora*, WU LENG JUE MING *Cassia quinquangula*, MANG GUO *Mangifera indica*. Ref: 2, 658.

**19042 Rubrofusarin-6- $\beta$ -gentiobioside**

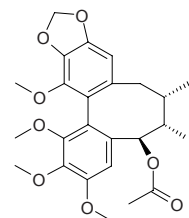
Rubrofusarin gentiobioside [24577-90-0] C<sub>27</sub>H<sub>32</sub>O<sub>15</sub> (596.55). Pharm: Antihepatotoxin (liver damage caused by galactosamine, stronger than silybin). Source: JUE MING ZI *Cassia tora*. Ref: 2, 725, 1686.

**19043 Rubrosterone**

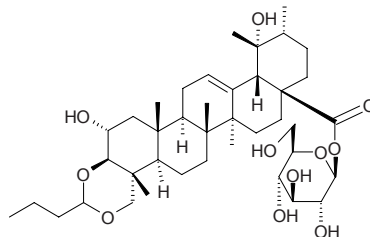
[19466-41-2] C<sub>19</sub>H<sub>26</sub>O<sub>5</sub> (334.42). Source: NIU XI *Achyranthes bidentata*. Ref: 2.

**19044 Rubschisantherin**

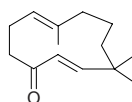
Acetylgomisin O [102637-03-6] C<sub>25</sub>H<sub>30</sub>O<sub>8</sub> (458.51). Amorphous powder,  $[\alpha]_D^{18} = -69^\circ$  (ethanol). Source: HONG HUA WU WEI ZI *Schisandra rubriflora*, WU WEI ZI *Schisandra chinensis*. Ref: 39.

**19045 Rubusside A**

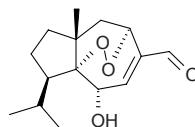
C<sub>40</sub>H<sub>64</sub>O<sub>11</sub> (720.95). Amorphous powder,  $[\alpha]_D^{25} = +30.5^\circ$  ( $c = 0.2$ , MeOH). Source: PU TONG XUAN GOU ZI *Rubus allegheniensis* (fruit). Ref: 4314.

**19046 Rudbeckianone**

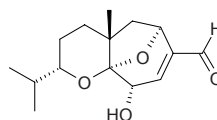
C<sub>14</sub>H<sub>22</sub>O (206.33). Source: JIN GUANG JU *Rudbeckia laciniata* (leaf), YU LIN CAI *Blainvillea acmella* [Syn. *Verbesina acmella*; *Eclipta latifolia*; *Blainvillea latifolia*] (root). Ref: 660.

**19047 Rugosal A**

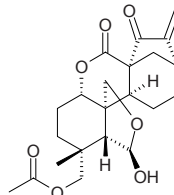
Rugosal [121387-05-1] C<sub>15</sub>H<sub>22</sub>O<sub>4</sub> (266.34). Pharm: Antimicrobial. Source: MEI GUI HUA *Rosa rugosa* (injured leaf). Ref: 658.

**19048 Rugosal D**

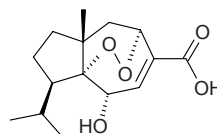
C<sub>15</sub>H<sub>22</sub>O<sub>4</sub> (266.34). Source: MEI GUI HUA *Rosa rugosa*. Ref: 660.

**19049 Rugosanin**

C<sub>22</sub>H<sub>28</sub>O<sub>7</sub> (404.46). mp 234–239°C,  $[\alpha]_D^{20} = -197.6^\circ$  ( $c = 0.21$ , C<sub>5</sub>H<sub>5</sub>N). Source: ZHOU YE XIANG CHA CAI *Isodon rugosus* [Syn. *Rabdosia rugosa*]. Ref: 4067.

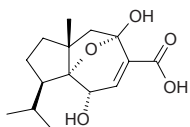
**19050 Rugosic acid A**

C<sub>15</sub>H<sub>22</sub>O<sub>5</sub> (282.34). Source: MEI GUI HUA *Rosa rugosa*. Ref: 660.

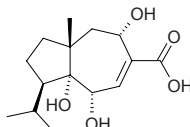


**19051 Rugosic acid B**

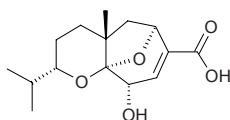
$C_{15}H_{22}O_5$  (282.34). Source: MEI GUI HUA *Rosa rugosa*. Ref: 660.

**19052 Rugosic acid C**

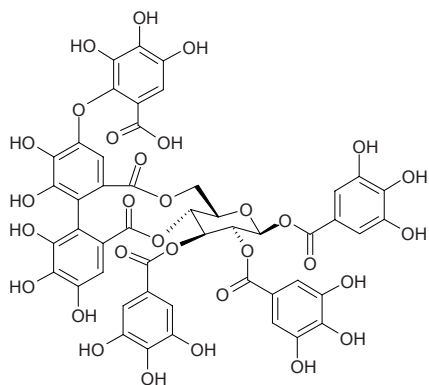
$C_{15}H_{24}O_5$  (284.36). Source: MEI GUI HUA *Rosa rugosa*. Ref: 660.

**19053 Rugosic acid D**

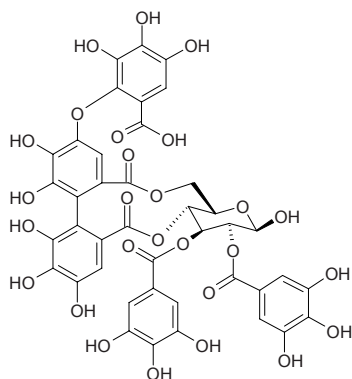
$C_{15}H_{22}O_5$  (282.34). Source: MEI GUI HUA *Rosa rugosa*. Ref: 660.

**19054 Rugosin A**

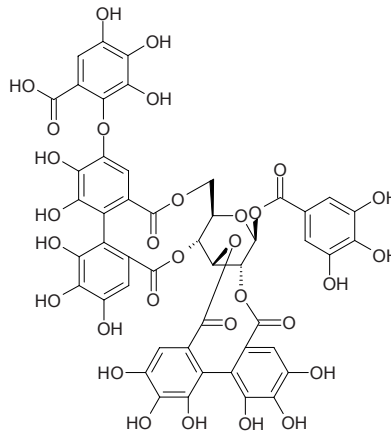
$C_{48}H_{34}O_{31}$  (1106.79). Source: MEI GUI HUA *Rosa rugosa* (receptacle). Ref: 660.

**19055 Rugosin B**

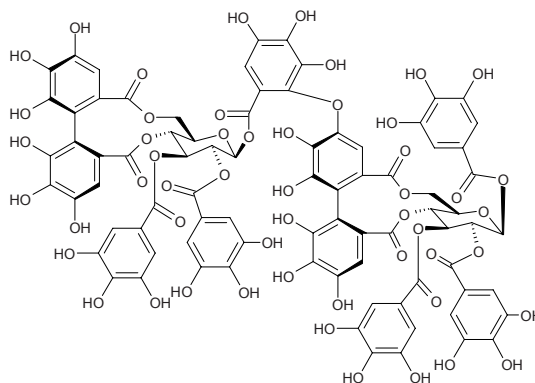
$C_{41}H_{30}O_{27}$  (954.68). Source: MEI GUI HUA *Rosa rugosa* (receptacle). Ref: 660.

**19056 Rugosin C**

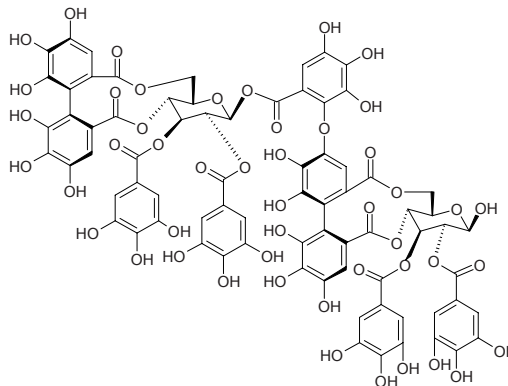
$C_{48}H_{32}O_{31}$  (1104.77). Pharm: Antioxidant (SOD-like activity,  $EC_{50} = 45.3 \mu\text{mol/L}$ , control Gallic acid,  $EC_{50} = 31.7 \mu\text{mol/L}$ , *L*-Ascorbic acid,  $EC_{50} = 34.6 \mu\text{mol/L}$ )<sup>[3408]</sup>; antioxidant (DPPH free radical scavenger,  $EC_{50} = 0.34 \mu\text{mol/L}$ , control Gallic acid,  $EC_{50} = 5.88 \mu\text{mol/L}$ , *L*-Ascorbic acid,  $EC_{50} = 6.25 \mu\text{mol/L}$ )<sup>[3408]</sup>. Source: HU TAO REN *Juglans regia*, MEI GUI HUA *Rosa rugosa* (receptacle). Ref: 660, 3408.

**19057 Rugosin D**

[84754-11-0]  $C_{82}H_{58}O_{52}$  (1875.35). Pharm: Antineoplastic (potent *in vivo*); cytotoxic ( $P_{388}$ ); CNS depressant; toxin. Source: LING *Trapa bispinosa*, MEI GUI HUA *Rosa rugosa* (receptacle), RI BEN MA SANG *Coriaria japonica*, XIAO GUO QIANG WEI GEN *Rosa cymosa*, XUAN GUO WEN ZI CAO *Filipendula ulmaria*. Ref: 658, 660, 1521.

**19058 Rugosin E**

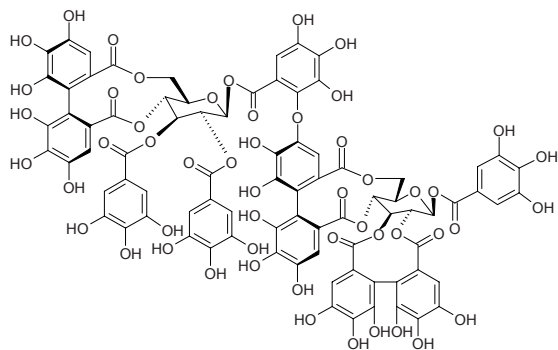
$C_{75}H_{54}O_{48}$  (1723.24). Source: MEI GUI HUA *Rosa rugosa* (receptacle). Ref: 660.



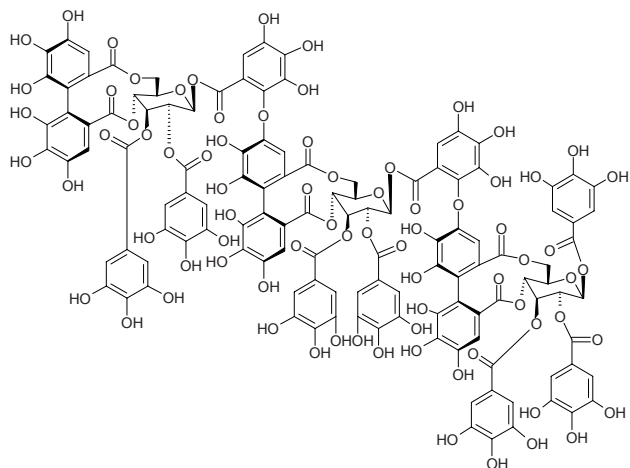


**19059 Rugosin F**

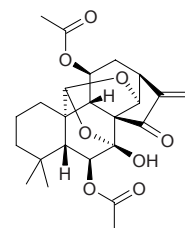
$C_{82}H_{56}O_{52}$  (1873.33). Source: MEI GUI HUA *Rosa rugosa* (receptacle). Ref: 660.

**19060 Rugosin G**

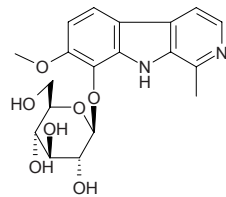
$C_{123}H_{86}O_{78}$  (2812.01). Light-tan amorphous powder +18H<sub>2</sub>O,  $[\alpha]_D = +109^\circ$  ( $c = 1$ , Me<sub>2</sub>CO). Source: MEI GUI HUA *Rosa rugosa* (receptacle). Ref: 660, 1521.

**19061 Rugosinin**

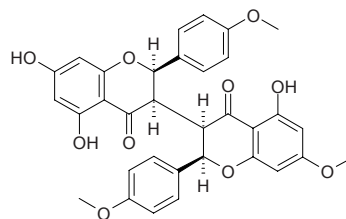
$C_{24}H_{30}O_8$  (446.50). Colorless prisms (EtOAc-hexane), mp 156~158°C,  $[\alpha]_D^{23} = -127^\circ$  ( $c = 0.4$ , MeOH). Pharm: Cytotoxic (DNA-damaging activity, mutant yeast strain RAD 52Y, IC<sub>12</sub> = 25µg/mL, control Streptonigrin, IC<sub>12</sub> = 0.4µg/mL; wild type yeast strain RAD+, IC<sub>12</sub> = 45µg/mL, control Streptonigrin, IC<sub>12</sub> = 1.0µg/mL)<sup>[5348]</sup>. Source: ZHOU YE XIANG CHA CAI *Isodon rugosus* [Syn. *Rabdosia rugosa*]. Ref: 5348.

**19062 Ruine**

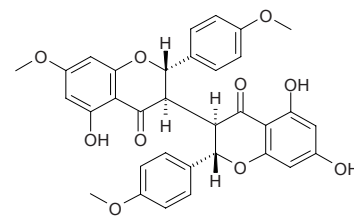
[32472-23-4]  $C_{19}H_{22}N_2O_7$  (390.40). mp 227~229°C. Source: LUO TUO PENG *Peganum harmala*. Ref: 6.

**19063 Ruixianglangdusu A**

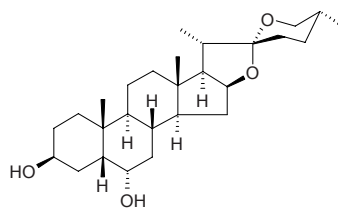
$C_{33}H_{28}O_{10}$  (584.59). White lamellar crystals,  $[\alpha]_D^{19} = +176^\circ$  ( $c = 0.106$ , MeOH). Source: LANG DU *Stellera chamaejasme*. Ref: 2125.

**19064 Ruixianglangdusu B**

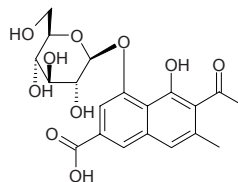
$C_{33}H_{28}O_{10}$  (584.59). Amorphous powder,  $[\alpha]_D^{15} = +181^\circ$  ( $c = 0.28$ , MeOH). Source: LANG DU *Stellera chamaejasme*. Ref: 2125.

**19065 Ruizgenin**

[74609-42-0]  $C_{27}H_{44}O_4$  (432.65). mp 221°C. Source: *Agave lecheguilla*. Ref: 2503.

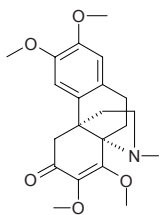
**19066 Rumexoside**

2-Acetyl-3-methyl-6-carboxy-1,8-dihydroxynaphthalene-8-*O*-β-*D*-glucopyranoside  $C_{20}H_{22}O_{10}$  (422.39). Amorphous. Source: NIU XI XI *Rumex patientia*. Ref: 5138.

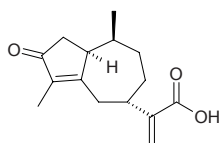


**19067 Runanine**

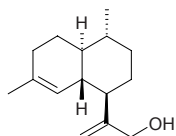
$C_{27}H_{27}NO_5$  (373.45). Source: JIN BU HUAN *Stephania sinica*. Ref: 660.

**19068 Rupestic acid**

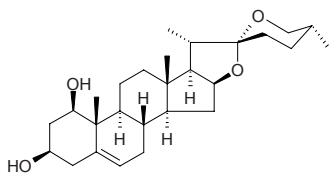
[115473-63-7]  $C_{15}H_{20}O_3$  (248.32). Colorless acicular crystals, mp 132~133°C,  $[\alpha]_D^{25} = +150^\circ$  ( $c = 0.176$ , ethanol). Source: XIN JIANG YI ZHI HAO *Artemisia rupestris* [Syn. *Artemisia dentata*; *Artemisia viridis*; *Artemisia viridifolia*] (whole herb: mean content of 3 batch samples = 0.158%<sup>[5518]</sup>). Ref: 96, 5518.

**19069 Rupestrenol**

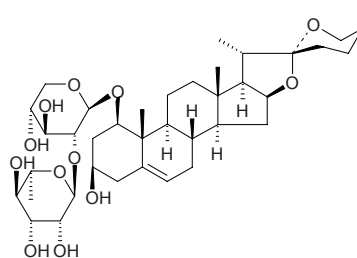
(+)-(1*R*\*,6*S*\*,7*S*\*,10*S*\*)-12-hydroxy-4,11(13)-cadinadiene  $C_{15}H_{24}O$  (220.36). Colorless solid, mp 50~52°C,  $[\alpha]_D = +43.9^\circ$  ( $c = 0.86$ ,  $CHCl_3$ ). Source: ZI BEI TAI *Plagiochasma rupestre*. Ref: 2392.

**19070 Ruscogenin**

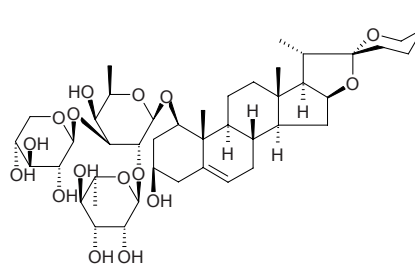
[35882-30-5]  $C_{27}H_{42}O_4$  (430.63). mp 205~211°C. Pharm: Anti-atherosclerosis; antihypertensive; antihypercholesterolemic (reduces the level of cholesterol in serum); used in treatment of pile. Source: BIAN JING YAN JIE CAO *Ophiopogon planiscapus*, CI JI LI *Tribulus terrestris*, JI LI GEN *Tribulus terrestris*, JIA YE SHU *Ruscus aculeatus*, KUO YE SHAN MAI DONG *Liriope platyphylla* (dried tuberoid: mean content = 0.014%<sup>[5508]</sup>), MAI DONG *Ophiopogon japonicus* (dried tuberoid: mean content = 0.033%<sup>[5508]</sup>), SHAN MAI DONG *Liriope spicata* (dried tuberoid: mean content = 0.021%<sup>[5508]</sup>). Ref: 6, 658, 5508.

**19071 25(S)-Ruscogenin 1-O- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-xylopyranoside**

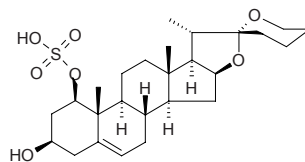
$C_{38}H_{60}O_{12}$  (708.89). White powder, mp 232~234°C (dec). Source: HU BEI SHAN MAI DONG *Liriope spicata* var. *prolifera*. Ref: 142.

**19072 25(S)-Ruscogenin 1-O-[ $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)]-[ $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -D-fucopyranoside**

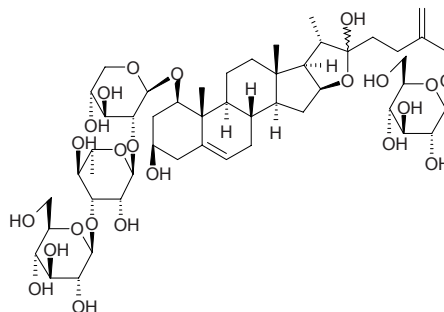
(25*S*)-Ruscogenin 1-*O*-{*O*- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)-*O*-[ $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -D-fucopyranoside} [125150-67-6]  $C_{44}H_{70}O_{16}$  (855.04). Colorless acicular crystals (methanol), mp 201~202°C (dec),  $[\alpha]_D^{23} = -93.4^\circ$  ( $c = 0.41$ , pyridine); colorless acicular crystals, mp 240~242°C,  $[\alpha]_D^{24} = -100.9^\circ$ . Pharm: cAMP phosphodiesterase inhibitor (*in vitro*,  $IC_{50} = 103\mu\text{mol/L}$ ). Source: HU BEI SHAN MAI DONG *Liriope spicata* var. *prolifera*, MAI DONG *Ophiopogon japonicus* (dried tuberoid: mean content = 0.099%<sup>[5508]</sup>). Ref: 142, 999, 1085, 1131, 5508.

**19073 Ruscogenin 1-O-sulfate**

$C_{27}H_{42}O_7S$  (510.70). Source: MAI DONG *Ophiopogon japonicus*. Ref: 660.

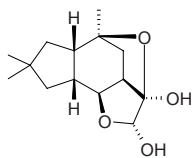
**19074 Ruscoside**

[51024-64-7]  $C_{50}H_{80}O_{23}$  (1049.18). Pharm: Anti-inflammatory. Source: JIA YE SHU *Ruscus aculeatus*, BIAN JING YAN JIE CAO *Ophiopogon planiscapus*. Ref: 658.

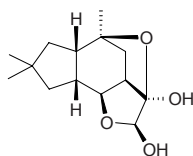


**19075 Russulanorol A**

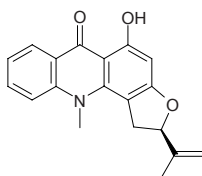
$C_{14}H_{22}O_4$  (254.33). Amorphous powder. Source: MEI WEI HONG GU *Russula delica* (sporocarp). Ref: 4374.

**19076 Russulanorol B**

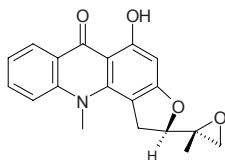
$C_{14}H_{22}O_4$  (254.33). Amorphous powder. Source: MEI WEI HONG GU *Russula delica* (sporocarp). Ref: 4374.

**19077 Rutacridone**

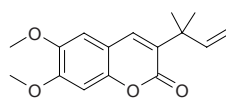
[17948-33-3]  $C_{19}H_{17}NO_3$  (307.35). Yellow amorphous powder, mp 161~162°C,  $[\alpha]_D = -44.9^\circ$  ( $c = 0.1$ , MeOH); yellow crystals. Pharm: Antileishmanial (*Leishmania major* promastigote, 10  $\mu\text{mol/L}$ , survival = (34.9±1.5)%, 1  $\mu\text{mol/L}$ , survival = (69.9±2.8)%, control Amphotericin B, 10  $\mu\text{mol/L}$ , survival = (0.2±0.04)%, 1  $\mu\text{mol/L}$ , survival = (71.9±4.4)%); *Leishmania major* amastigote, 10  $\mu\text{mol/L}$ , survival = (88.0±5.1)%, 1  $\mu\text{mol/L}$ , survival = (82.0±4.0)%, control Amphotericin B, 10  $\mu\text{mol/L}$ , survival = (0.4±0.02)%, 1  $\mu\text{mol/L}$ , survival = (0.5±0.03)%)<sup>[3797]</sup>; antifungal inactive (silica gel TLC, *Cladosporium cucumerinum*, control Nystatin, MIA = 0.2  $\mu\text{g}$ )<sup>[3797]</sup>; algicidal (*Oscillatoria perornata*, LCIC > 100mg/L; *Selenastrum capricornutum*, LCIC > 100mg/L)<sup>[5328]</sup>. Source: CHOU CAO *Ruta graveolens*, *Thamnosma rhodesica* (root). Ref: 6, 3797, 5328.

**19078 Rutacridone epoxide**

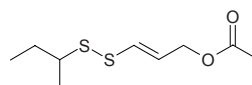
[77996-03-3]  $C_{19}H_{17}NO_4$  (323.35). Bright yellow powder. Pharm: Antibacterial; algicidal (*Oscillatoria perornata*, LCIC = 0.1mg/L,  $IC_{50} = 0.009 \mu\text{mol/L}$ ; *Selenastrum capricornutum*, LCIC = 1mg/L,  $IC_{50} = 0.00173 \mu\text{mol/L}$ )<sup>[5328]</sup>; antifungal (*Colletotrichum acutatum*, *Colletotrichum fragariae*, *Colletotrichum gloeosporioides*,  $IC_{50} = 0.125\text{--}1.0 \mu\text{mol/L}$ ; 0.5  $\mu\text{mol/L}$ , *Colletotrichum fragariae*, *Colletotrichum gloeosporioides*, GI = 100%; 1.0  $\mu\text{mol/L}$ , *Colletotrichum acutatum*, GI = 100%)<sup>[5328]</sup>. Source: CHOU CAO *Ruta graveolens*. Ref: 658, 5328.

**19079 Rutacultin**

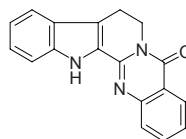
[31526-60-0]  $C_{16}H_{18}O_4$  (274.32). mp 100~102°C. Source: CHOU CAO *Ruta graveolens*. Ref: 6.

**19080 Rutadisulfide A**

$C_9H_{16}O_2S_2$  (220.35). Source: CHOU A WEI *Ferula foetida* (root: yield = 0.00038%). Ref: 4659.

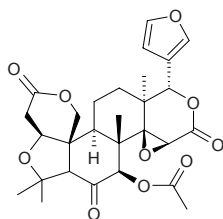
**19081 Rutaecarpine**

[84-26-4]  $C_{18}H_{13}N_3O$  (287.32). Acicular crystals (EtOAc), mp 259.5~260.0°C, 256°C) Pharm: Antihypertensive (vasodilator, activates vanilloid receptors to evoke calcitonin gene-related peptide (CGRP) release)<sup>[5358]</sup>; analgesic; promotes uterine contraction (chloride,  $EC \leq 1.0 \mu\text{g/mL}$ ); raises body temperature; vanilloid receptor activator (to evoke calcitonin gene-related peptide (CGRP) release, CGRP alleviates cardiac anaphylactic injury)<sup>[4087]</sup>, a detail study on protective effects of rutaecarpine on cardiac anaphylaxis (the protective effects of rutaecarpine on cardiac anaphylactic injury are related to inhibition of TNF- $\alpha$  production by stimulation of CGRP release)<sup>[4087]</sup>; anti-inflammatory (RAW264.7 cells, inhibits LPS-induced PGE<sub>2</sub> production)<sup>[4415]</sup>. Source: BO SHI WU ZHU YU *Evodia rutaecarpa* var. *bodinieri* (dried and almost ripe fruit: content scope of 4 origins = 0.173%~0.568%, mean content = 0.331%)<sup>[5508]</sup>, RI BEN HUANG BAI *Phellodendron japonicum* (leaf), SHI HU<sup>(3)</sup> *Evodia rutaecarpa* var. *officinalis* (dried and almost ripe fruit: content scope of 14 origins = 0.119%~0.832%, mean content = 0.364%)<sup>[5508]</sup>, WU ZHU YU *Evodia rutaecarpa* (dried and almost ripe fruit: content scope of 14 origins = 0.392%~1.331%, mean content = 0.791%)<sup>[5508]</sup>, WU ZHU YU *Evodia rutaecarpa* (dried unripe fruit), YI HUA WU ZHU YU *Evodia baberi* (dried and almost ripe fruit: content scope of 2 origins = 0.087%~0.110%, mean content = 0.098%)<sup>[5508]</sup>. Ref: 2, 347, 661, 4087, 4415, 4502, 5358, 5501, 5508.

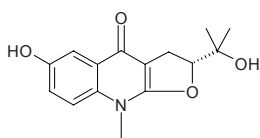


**19082 Rutaevin acetate**

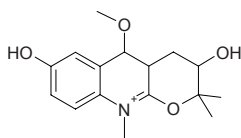
O-Acetylrutaevin [62306-81-4] C<sub>28</sub>H<sub>32</sub>O<sub>10</sub> (528.56). Source: WU ZHU YU *Evodia rutaecarpa*. Ref: 2.

**19083 Rutalinidine**

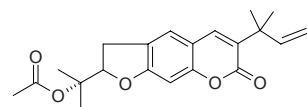
Ribaline [50894-68-3] C<sub>15</sub>H<sub>17</sub>NO<sub>4</sub> (275.31). Source: CHOU CAO *Ruta graveolens*. Ref: 6.

**19084 Rutalinium**

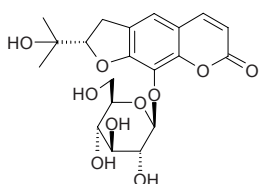
[27539-40-8] C<sub>16</sub>H<sub>22</sub>NO<sub>4</sub><sup>+</sup> (292.36). Source: CHOU CAO *Ruta graveolens*. Ref: 6.

**19085 Rutamarin**

Chalepin acetate [14882-94-1] C<sub>21</sub>H<sub>24</sub>O<sub>5</sub> (356.42). mp 107~108°C. Pharm: Antispasmodic (pig, contraction of coronary artery *in vitro* caused by acetyl-β-methylcholine, *in vitro* fundus ventriculi of rat, ileum of rat, gpg and rbt, spasm reduced by methylcholine and BaCl<sub>2</sub>); cytotoxic (HeLa, blocks DNA synthesis). Source: CHOU CAO *Ruta graveolens*, YAN JIAO CAO *Boeninghausenia albiflora*, RI BEN CHOU JIE CAO *Boeninghausenia japonica*. Ref: 5, 658.

**19086 Rutarin**

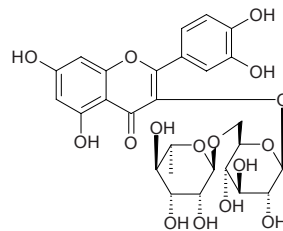
[20320-81-4] C<sub>20</sub>H<sub>24</sub>O<sub>10</sub> (424.41). Pharm: Antifungal. Source: CHOU CAO *Ruta graveolens*, SUI ZHUANG YUN XIANG *Ruta chalepensis*. Ref: 658.

**19087 Rutin**

Quercetin-3-O-(6"-O-α-rhamnopyranosyl)-β-glucopyranoside; Quercetin-3-rutinoside; Rutoside; Sophorin [153-18-4] C<sub>27</sub>H<sub>30</sub>O<sub>16</sub> (610.53). Yellow crystals, +3H<sub>2</sub>O, mp 188~190°C, mp 214~215°C (dec, anhyd.), [α]<sub>D</sub><sup>23</sup> = +13.8° (EtOH), soluble in water, EtOH, acetone, insoluble in benzene, ether, chloroform.<sup>[5507]</sup> Pharm: Anti-inflammatory (rat, inflammation model induced by embedding woolball, sulfate of rutin being strong anti-inflammatory for edema due to heat stimulation in rat, free radical scavenger); antiviral (vesicular stomatitis virus, max. inhibition in 200μg/mL); aldose reductase inhibitor (*in vitro*, rat lens aldose reductase, IC<sub>50</sub> = 13μmol/L; control Epalrestat, IC<sub>50</sub> = 0.072μmol/L)<sup>[4641]</sup>; aldose reductase inhibitor (eye lens, 10μmol/L, InRt = 95%); insect antifeedant (*Heliothis zea*); insect phagostimulant (*Gastrophysa atrocynaea*); irritant of contact-ovipositing (*Papilio xuthus*); removes fat from liver of fatty infiltration; antioxidant (DPPH scavenger, EC<sub>50</sub> = 5.0μg/mL = 8.2μmol/L, control Ascorbic acid, EC<sub>50</sub> = 1.6μg/mL = 9.1μmol/L)<sup>[4154]</sup>; antioxidant (DPPH scavenger, SC<sub>50</sub> = 3.6μmol/L, positive control Vitamin E, SC<sub>50</sub> = 5.2mmol/L)<sup>[4464]</sup>; antioxidant (DPPH scavenger, SC<sub>50</sub> = 4.3μmol/L)<sup>[4247]</sup>; antioxidant (DPPH scavenger, IC<sub>50</sub> = (0.15±0.00)μmol/L)<sup>[3764]</sup>; antioxidant (Chemiluminescence Method, IC<sub>50</sub> = (0.11±0.01)μmol/L)<sup>[3764]</sup>; antioxidant (superoxide anion radical scavenger, superoxide dismutase method, IC<sub>50</sub> for Formazan formation activity = 15μmol/L)<sup>[4247]</sup>; antioxidant (DPPH scavenger, IC<sub>50</sub> = 16.2μg/mL, control Gallic acid, IC<sub>50</sub> = 3.6μg/mL; Cytochrome-C reduction, IC<sub>50</sub> = 14.9μg/mL, control Gallic acid, IC<sub>50</sub> = 3.0μg/mL)<sup>[5239]</sup>; inhibits cancer cell invasion inactive (MM1 cells, *in vitro*, 10μg/mL)<sup>[4329]</sup>; cytotoxic inactive (*in vitro*, LNCaP, IC<sub>50</sub> > 100μmol/L)<sup>[4607]</sup>; anti-inflammatory (macrophages, COX-2 inhibitor, inhibits COX-2 expression)<sup>[4415]</sup>; reduces blood capillary permeability and brittleness; used in treatment of blood capillary ailments<sup>[5341]</sup>. LD<sub>50</sub> (mus, iv) = 950mg/kg. Source: BAI GUO *Ginkgo biloba*, BAI MEI HUA *Prunus mume* (flower: yield = 0.0007%fw)<sup>[4641]</sup>, BEI SHA SHEN *Glehnia littoralis* (underground part), BIAN DI JIN *Hypericum wightianum* (dried whole herb: content = 0.0191%)<sup>[5508]</sup>, CHI AN *Eucalyptus camaldulensis*, CHOU CAO *Ruta graveolens* (dried aerial parts)<sup>[3073]</sup>, CU LIU GUO *Hippophae rhamnoides* (leaf: content = 0.238%)<sup>[5508]</sup>, DA ZAO *Ziziphus jujuba*, DUN BAO XUE LIAN *Saussurea nigrescens* (whole herb: content = 0.0051%)<sup>[5508]</sup>, FAN QIE *Lycopersicon esculentum* (fruit: yield = 0.00044%fw), GAN CAO *Glycyrrhiza uralensis*, GAN SU SHAN ZHA *Crataegus kansuensis* (dried ripe fruit: content = 0.027%), GUAN YE LIAN QIAO *Hypericum perforatum* (dried whole herb: content = 0.3095%)<sup>[5508]</sup>, GUANG ZHI GOU ER CHA *Berberis polyphylla* var. *leioclada*, HE YE FENG MAO JU *Saussurea graminea* (whole herb: content = 0.0515%)<sup>[5508]</sup>, HEI ZI LI GUO JI SHENG *Scurrula atropurpurea*, HONG HUA *Carthamus tinctorius* (flower: mean content of 4 origins = 1.24%)<sup>[5508]</sup>, HU BEI SHAN ZHA *Crataegus hupehensis* (dried ripe fruit: mean content of 5 origins = 0.012%)<sup>[5508]</sup>, HU ZHANG YE *Polygonum cuspidatum*, HUAI JIAO *Sophora japonica* (dried ripe fruit: content = 3.15%)<sup>[5508]</sup>, HUAI *Sophora japonica* (flower: content scope = 8%~28%)<sup>[5501]</sup>, mean content = 9.33%, bud: mean content = 22.08%<sup>[5508]</sup>, HUAI *Sophora japonica* (pericarp)<sup>[3800]</sup>, HUANG HAI TANG *Hypericum ascyron* (dried whole herb: content = 0.0176%)<sup>[5508]</sup>, HUANG HAO *Artemisia scoparia* [Syn. *Artemisia capillaris* var. *scoparia*], HUANG HUA HAO *Artemisia annua*, JI LI MIAO *Tribulus terrestris*, JI ZI MU *Sinoadina Racemosa* [Syn. *Adina racemosa*] (dried leaf, flower and twig: yield = 0.0049%dw)<sup>[3014]</sup>, JIAN PU ZHAI GU KE *Erythroxylum*

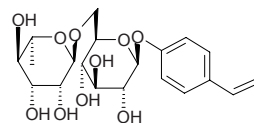
*cambodianum* (aerial parts), JIANG ZI SHA JI *Hippophae rhamnoides* subsp. *gyantsensis* (leaf: content = 0.009%)<sup>[5508]</sup>, JIAO GU LAN *Gynostemma pentaphyllum*, JIN SI MEI *Hypericum patulum* (dried whole herb: content = 0.2661%)<sup>[5508]</sup>, KU QIAO MAI *Fagopyrum tataricum* (seed: content = 4%)<sup>[5507]</sup>, KUAN DONG HUA *Tussilago farfara* (flower bud: content = 2.64%(wild); content = 1.62%(cultivate)<sup>[5508]</sup>), LAN YU LUO YE RONG *Ficus ruficaulis* var. *antaensis* (leaf: yield = 0.0105%fw)<sup>[4794]</sup>, LANG DANG ZI *Hyoscyamus niger* (seed: yield = 0.001%dw)<sup>[4607]</sup>, LAO YA SHI *Diospyros rhombifolia* (leaf), LEI GUO SHA JI *Hippophae neurocarpa* (leaf: content = 0.271%)<sup>[5508]</sup>, LIAO NING SHAN ZHA *Crataegus sanguinea* (dried ripe fruit: content = 0.035%)<sup>[5508]</sup>, LU HUI *Aloe vera* [Syn. *Aloe barbadensis*], MAO GOU TENG *Uncaria hirsuta*, MAO GUO YI ZHI HUANG HUA *Solidago virgaurea*, MAO SHAN ZHA *Crataegus maximowiczii* (dried ripe fruit: content = 0.056%)<sup>[5508]</sup>, MEI HUA FENG MAO JU *Saussurea pulchella* (whole herb: content = 0.215%)<sup>[5508]</sup>, MIAN TOU YE *Kleinhovia hospita*, PU HUANG *Typha angustata*, QIAO MAI *Fagopyrum esculentum*, QIAO MAI JIE *Fagopyrum esculentum*, QU ZHOU HAI JIN SHA *Lygodium flexuosum* [Syn. *Lygodium pinnatifidum*; *Ophioglossum flexuosum*], SAI ER WEI YA SHI CAO *Achillea alexandri-regis*, SANG YE *Morus alba* (leaf: mean content = 0.364%)<sup>[5508]</sup>, SHAN LI HONG *Crataegus pinnatifida* var. *major* (dried ripe fruit: mean content of 4 origins = 0.007%), SHAN WO JU *Lactuca indica* (Fresh whole herb: yield = 0.0010%fw)<sup>[4689]</sup>, SHAN ZHA *Crataegus pinnatifida* (dried ripe fruit: content scope = 0.008%–0.22%)<sup>[5501]</sup>; mean content of 3 origins = 0.020%<sup>[5508]</sup>, SHU QU FENG MAO JU *Saussurea gnaphaloides* (whole herb: content = 0.0557%)<sup>[5508]</sup>, TIAN CONG *Philydrum lanuginosum*, TIAN QIAO MAI GEN *Fagopyrum cymosum* [Syn. *Polygonum cymosum*], TING JING BIAN DI JIN *Hypericum elodeoides* (dried whole herb: content = 0.0087%)<sup>[5508]</sup>, TUO YUAN GOU TENG *Uncaria elliptica*, WAN E JIN SI TAO *Hypericum curvisepalum* (dried whole herb: content = 0.0211%)<sup>[5508]</sup>, WU MAO SHAN ZHA *Crataegus pinnatifida* var. *psilosa* (dried ripe fruit: content = 0.033%)<sup>[5508]</sup>, XI ZANG SHA JI *Hippophae thibetana* (leaf: content = 0.018%)<sup>[5508]</sup>, XIAN HE CAO *Agrimonia pilosa* var. *japonica*, XIAN REN ZHANG *Opuntia dillenii* (fresh stem: yield = 0.00014%), XIANG TANG SONG CAO *Thalictrum foetidum*, XIAO HUA FENG MAO JU *Saussurea parviflora* (whole herb: content = 0.0564%)<sup>[5508]</sup>, XIAO JI *Cirsium setosum* [Syn. *Cerratula setosa*; *Cirsium segetum*; *Cephalanoplos segetum*] (whole herb or root: content scope of 6 origins = trace–0.64%, mean content = 0.154%)<sup>[5508]</sup>, XUE LIAN *Saussurea involucrata* (whole herb: content = 0.0704%)<sup>[5508]</sup>, YANG ZI XIAO LIAN QIAO *Hypericum faberi* (dried whole herb: content = 0.0661%)<sup>[5508]</sup>, YE SHAN ZHA *Crataegus cuneata* (dried ripe fruit: mean content of 2 origins = 0.167%)<sup>[5508]</sup>, YE WU TONG *Mallotus japonicus*, YE XIA ZHU *Phyllanthus urinaria*, YI MU CAO *Leonurus heterophyllus* [Syn. *Leonurus artemisia*], YI ZHU QIAN MA *Urtica dioica*, YOU GAN YE *Phyllanthus emblica* (leaf and branch), YU XING CAO *Houttuynia cordata*, YUN NAN SHA JI *Hippophae rhamnoides* subsp. *yunnanensis* (leaf: content = 0.202%)<sup>[5508]</sup>, YUN NAN SHAN ZHA *Crataegus scabrifolia* (dried ripe fruit: content = 0.010%)<sup>[5508]</sup>, ZHONG GUO SHA JI *Hippophae rhamnoides* subsp. *sinensis* (leaf: content = 0.352%)<sup>[5508]</sup>, ZHONG YA SHA JI *Hippophae rhamnoides* subsp. *turkestanica* (leaf: content = 0.389%)<sup>[5508]</sup>, *Polygonum* sp., *Saussurea amarafisch* (whole herb: content = 0.0723%)<sup>[5508]</sup>, *Saussurea prostrata* (whole herb: content = 0.109%)<sup>[5508]</sup>, *Saussurea soroseris* (whole herb: content = 0.0043%)<sup>[5508]</sup>, occurs in many plants (Presence in over 30 families. mostly

dicotyledons). Ref: 2, 4, 6, 231, 283, 594, 658, 660, 1521, 2545, 2986, 3014, 3018, 3073, 3080, 3764, 4154, 4205, 4247, 4329, 4415, 4461, 4464, 4607, 4641, 4689, 4794, 5239, 5341, 5501, 5507, 5508.



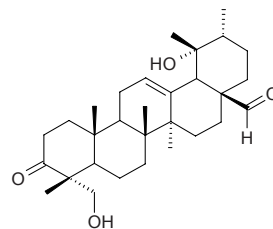
#### 19088 *p*- $\beta$ -Rutinosyloxy styrene

C<sub>20</sub>H<sub>28</sub>O<sub>10</sub> (428.44). Source: MANG QI GU *Dicranopteris pedata* [Syn. *Polypodium pedatum*; *Dicranopteris dichotoma*]. Ref: 660.



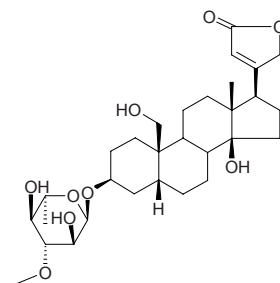
#### 19089 Rutundanonic acid

C<sub>30</sub>H<sub>46</sub>O<sub>4</sub> (470.70). Source: JIU BI YING *Ilex rotunda*. Ref: 2160.



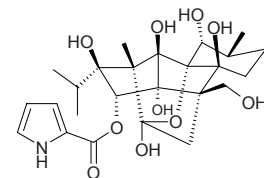
#### 19090 Ruvoside

C<sub>30</sub>H<sub>46</sub>O<sub>9</sub> (550.70). mp 232–234°C. Pharm: Cardiac glycoside (cat, cardiac bioactivity (0.0019±0.0055)mg/kg). Source: HUANG HUA JIA ZHU TAO *Thevetia nerifolia* [Syn. *Thevetia peruviana*]. Ref: 6, 658.



#### 19091 Ryanodine

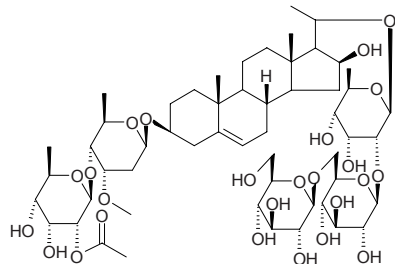
C<sub>25</sub>H<sub>35</sub>NO<sub>10</sub> (509.56). Crystals (CHCl<sub>3</sub>:Me<sub>2</sub>CO = 3:1), mp 180°C, [ $\alpha$ ]<sub>D</sub> = +9° (c = 0.7). Pharm: Cardiac contraction inhibitor (guinea-pig papillary muscle, causes a prolongation of the latency time and decrease of contraction force, EC<sub>50</sub> = 14nmol/L). Source: QU CHONG CAO *Spigelia anthelmia* (aerial parts). Ref: 5139.



## S

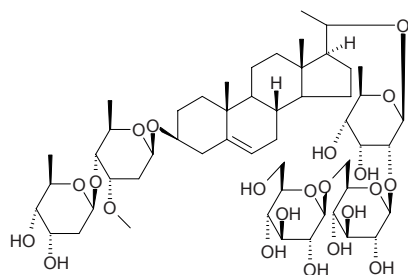
## 19092 S-4a

$C_{54}H_{88}O_{25}$  (1137.29). mp 182–184°C,  $[\alpha]_D = -16.24^\circ$ . Source: XIANG JIA PI *Periploca sepium*. Ref: 2498.



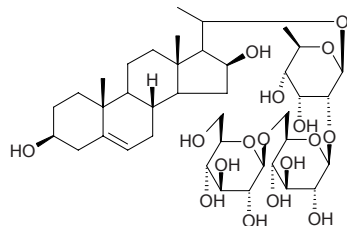
## 19093 S-5

$C_{52}H_{86}O_{22}$  (1063.25). mp 175–177°C,  $[\alpha]_D = -25.22^\circ$ . Source: XIANG JIA PI *Periploca sepium*. Ref: 2498.



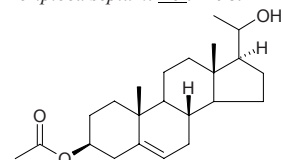
## 19094 S-10

$C_{39}H_{64}O_{17}$  (804.93). mp 167–169°C,  $[\alpha]_D = -2.6^\circ$ . Source: XIANG JIA PI *Periploca sepium*. Ref: 2498.



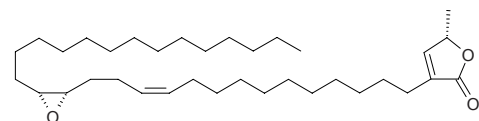
## 19095 S-20

$C_{23}H_{36}O_3$  (360.54). mp 165–167°C,  $[\alpha]_D = -65.2^\circ$ . Source: XIANG JIA PI *Periploca sepium*. Ref: 2498.



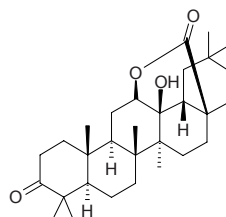
## 19096 Sabadelin

$C_{35}H_{62}O_3$  (530.88). White waxy solid,  $[\alpha]_D = +12^\circ$  ( $c = 0.19$ , MeOH). Source: CI GUO FAN LI ZHI *Annona muricata*. Ref: 2401.



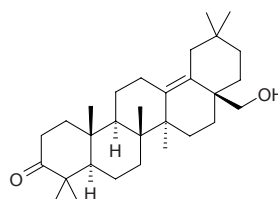
## 19097 Sabialactone

$C_{30}H_{46}O_4$  (470.70). Colorless granular crystals, mp 273–275°C,  $[\alpha]_D^{13} = +78.65^\circ$  ( $c = 0.09$ , chloroform). Source: JIAN YE QING FENG TENG *Sabia swinhoi*. Ref: 326, 403, 407, 377.



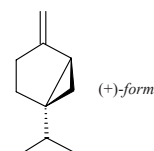
## 19098 Sabianone

$C_{30}H_{48}O_2$  (440.72). White amorphous powder, mp 185°C. Source: JIAN YE QING FENG TENG *Sabia swinhoi*. Ref: 326.



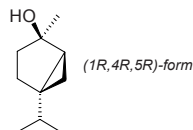
## 19099 Sabinene

4-Methylene-1-(1-methylethyl)bicyclo[3.1.0]hexane [3387-41-5]  $C_{10}H_{16}$  (136.24). bp (+) 163–165°C, (–) 162–166°C. Source: KUAN YE QIANG HUO *Notopterygium forbesii* [Syn. *Notopterygium franchetii*], LIAO XI XIN *Asarum heterotropoides* var. *mandshuricum*, XI XIN *Asarum sieboldii*. Ref: 2, 660.



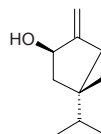
## 19100 Sabinene hydrate

$C_{10}H_{18}O$  (154.25). mp (+) 36.5–37.2°C. Source: JU PI *Citrus reticulata*. Ref: 2.



## 19101 Sabinol

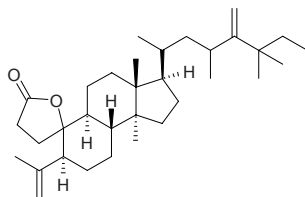
$C_{10}H_{16}O$  (152.24). bp 208°C. Pharm: Anthelmintic; inhibits small intestinal movement (rbt, *in vitro*, immediately action). Source: CHOU BAI *Sabina vulgaris*, CHA ZI YUAN BAI *Juniperus sabina*, XIAO RU XIANG *Schinus terebinthifolius*. Ref: 6, 658.



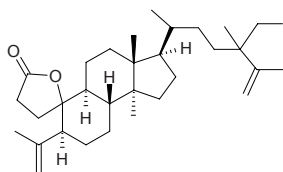


**19102 Sablaurin A**

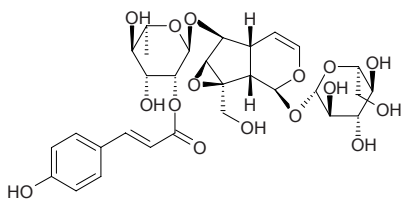
25-Ethyl,23-methyl-19-*nor*-24-methylene-3,4-*seco*-4(28)-lanosten-10,3-olide  
 $C_{32}H_{54}O_2$  (482.80). Creamy white solid. Source: *Sabal causerianum* (leaf). Ref: 3805.

**19103 Sablaurin B**

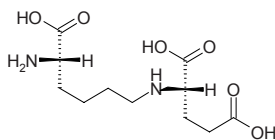
24-Ethyl,24-methyl-19-*nor*-3,4-*seco*-4(28),25(26)-lanostadiene-10,3-olide  
 $C_{32}H_{52}O_2$  (468.77). Creamy white solid. Source: *Sabal blackburniana* (leaf).  
Ref: 3805.

**19104 Saccatoside**

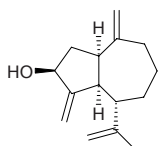
6-*O*-*α*-L-(2''-*O*-*trans*-*p*-Coumaroyl)rhamnopyranosylcatalpol  $C_{30}H_{38}O_{16}$   
 (654.63). Source: FEI LV BIN SHI ZI *Gmelina philippensis* (aerial parts),  
 NANG ZHUANG MAO RUI HUA *Verbascum saccatum*. Ref: 1521, 3954.

**19105 Saccharopine**

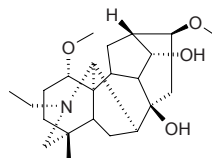
[13429-91-9]  $C_{11}H_{20}N_2O_6$  (276.29). Source: XIANG XUN *Lentinus edodes*,  
 YAN CAO *Nicotiana tabacum*. Ref: 660.

**19106 Saccogynol**

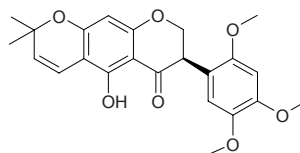
(+)-(1*R*\*,3*S*\*,5*R*\*,6*S*\*)-Saccogynol  $C_{15}H_{22}O$  (218.34). Source: *Saccogyna*  
*viticulosa* (essential oil). Ref: 3839.

**19107 Sachaconitine**

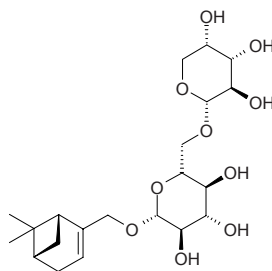
Vilmorrianine D  $C_{23}H_{37}NO_4$  (391.56). White amorphous powder. Source:  
 GONG GA SHAN WU TOU *Aconitum liljestrandii*, GUA YE WU TOU  
*Aconitum hemsleyanum*. Ref: 2191, 2208.

**19108 (R)-Saclenone**

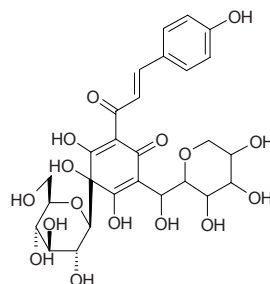
(*R*)-5-Hydroxy-2',4',5'-trimethoxy-2'',2''-dimethylpyrano[5'',6'':6,7]isoflavanon  
 $e$   $C_{23}H_{24}O_7$  (412.44). Amorphous powder,  $[\alpha]_D = -22^\circ$  ( $c = 0.1$ , MeOH).  
Source: *Erythrina saclexii* (stem cortex). Ref: 5097.

**19109 Sacranoside A**

$C_{21}H_{34}O_{10}$  (446.5). Source: SHENG DI HONG JING TIAN *Rhodiola sacra*.  
Ref: 742.

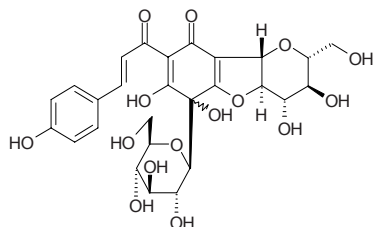
**19110 Saffloin A**

[78281-02-4]  $C_{27}H_{32}O_{16}$  (612.55). Source: HONG HUA *Carthamus tinctorius*  
 (flower: mean content of 4 origins = 1.17%<sup>[5526]</sup>). Ref: 660, 1545, 5526.

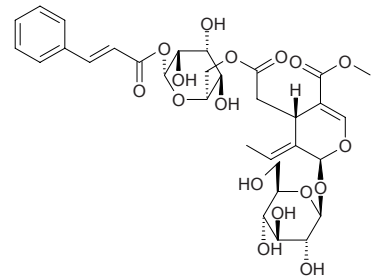


**19111 Safflower yellow A**

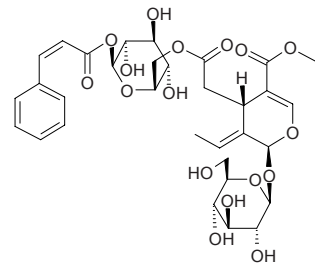
Safflor yellow A [85532-77-0]  $C_{27}H_{30}O_{15}$  (594.53). **Pharm:** Anticonvulsant (rat, ip, 1.1g/kg); sedative (mus, ip, 0.55g/kg, extends sleeping time induced by pentobarbital or aquachloral); inhibits blood capillary permeability (rat, ip, 1.1g/kg, induced by histamine); anti-inflammatory (rat, ip, 1.1g/kg, paw edema model caused by formaldehyde);  $LD_{50}$  (mus, iv) = 2.35g/kg. **Source:** HONG HUA *Carthamus tinctorius* (flower: mean content of 4 origins = 0.70%<sup>[5526]</sup>). **Ref:** 2, 5501, 5526.

**19112 Safghanoside A**

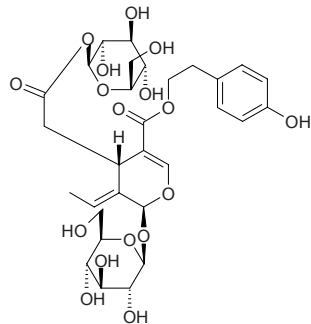
$C_{32}H_{40}O_{17}$  (692.67). Colorless amorphous powder,  $[\alpha]_D^{27} = -143^\circ$  ( $c = 0.96$ , MeOH). **Source:** A FU HAN DING XIANG *Syringa afghanica*. **Ref:** 2006.

**19113 Safghanoside B**

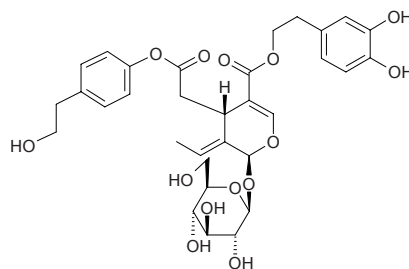
$C_{32}H_{40}O_{17}$  (692.67). Colorless amorphous powder,  $[\alpha]_D^{26} = -158^\circ$  ( $c = 0.33$ , MeOH). **Source:** A FU HAN DING XIANG *Syringa afghanica*. **Ref:** 2006.

**19114 Safghanoside C**

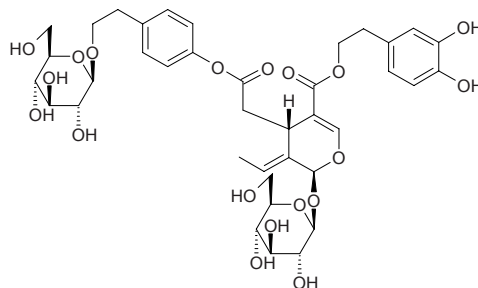
$C_{30}H_{40}O_{17}$  (672.64). Colorless amorphous powder,  $[\alpha]_D^{27} = -102^\circ$  ( $c = 0.83$ , MeOH). **Source:** A FU HAN DING XIANG *Syringa afghanica*. **Ref:** 2006.

**19115 Safghanoside D**

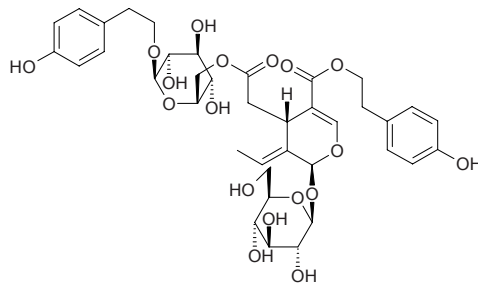
$C_{32}H_{38}O_{14}$  (646.65). Colorless amorphous powder,  $[\alpha]_D^{27} = -129^\circ$  ( $c = 1.05$ , MeOH). **Source:** A FU HAN DING XIANG *Syringa afghanica*. **Ref:** 2006.

**19116 Safghanoside E**

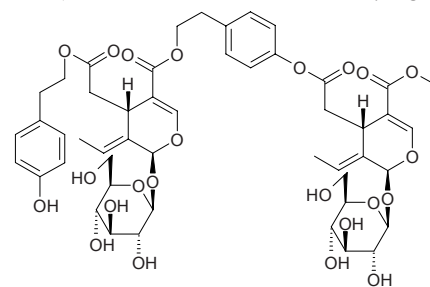
$C_{38}H_{48}O_{19}$  (808.79). Colorless amorphous powder,  $[\alpha]_D^{26} = -104^\circ$  ( $c = 0.69$ , MeOH). **Source:** A FU HAN DING XIANG *Syringa afghanica*. **Ref:** 2006.

**19117 Safghanoside F**

$C_{38}H_{48}O_{18}$  (792.80). Colorless amorphous powder,  $[\alpha]_D^{27} = -101^\circ$  ( $c = 0.27$ , MeOH). **Source:** A FU HAN DING XIANG *Syringa afghanica*. **Ref:** 2006.

**19118 Safghanoside G**

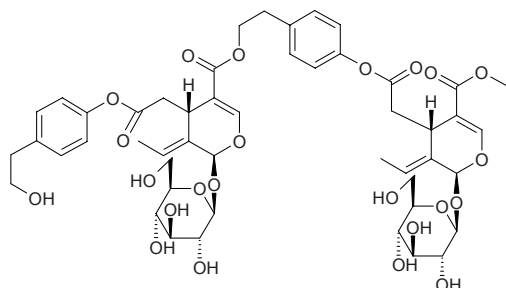
$C_{49}H_{60}O_{23}$  (1017.01). Colorless amorphous powder,  $[\alpha]_D^{27} = -182^\circ$  ( $c = 0.62$ , MeOH). **Source:** A FU HAN DING XIANG *Syringa afghanica*. **Ref:** 2006.



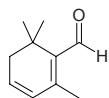


**19119 Safghanoside H**

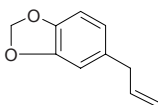
$C_{49}H_{60}O_{23}$  (1017.01). Colorless amorphous powder,  $[\alpha]_D^{28} = -142^\circ$  ( $c = 0.33$ , MeOH). Source: A FU HAN DING XIANG *Syringa afghanica*. Ref: 2006.

**19120 Safranal**

[116-26-7]  $C_{10}H_{14}O$  (150.22). bp 172°C. Source: ZANG HONG HUA *Crocus sativus*, GOU QI ZI *Lycium chinense*. Ref: 6, 660.

**19121 Saffrole**

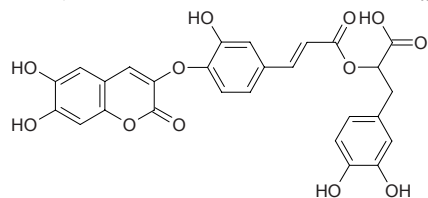
1,2-Methylenedioxy-4-allyl-benzene [94-59-7]  $C_{10}H_{10}O_2$  (162.19). Pharm: Antifungal (broad spectrum); carcinogen (liver, low dose); toxin (hmn). Source: DONG DU HUI *Illicium religiosum*, DU HENG *Asarum forbesii*, LIAN QIAO *Forsythia suspensa*, LIAO XI XIN *Asarum heterotropoides* var. *mandshuricum*, LIU YE MU LAN *Magnolia salicifolia*, LUO JI SHAN YUAN BAI *Juniperus scopulorum*, LUO LE *Ocimum basilicum*, MEI ZHOU CHA MU *Sassafras albidum*, ROU DOU KOU *Myristica fragrans* (kernel: content scope = 0.27%~0.39%, mean content = 0.31%<sup>[5508]</sup>), SHENG JIANG *Zingiber officinale*, XI XIN *Asarum sieboldii* (whole herb = content scope = 0.014%~0.96%)<sup>[5501]</sup>, ZHANG MU *Cinnamomum camphora*. Ref: 2, 658, 660, 5501, 5508.

**19122 Safynol**

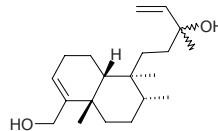
$C_{13}H_{12}O_2$  (200.24). Yellowish powder, mp 97~99°C. Pharm: Cytotoxic (HL-60,  $IC_{50} = 4.7 \mu\text{g/mL}$ , K562,  $IC_{50} = 6.0 \mu\text{g/mL}$ )<sup>[4596]</sup>; plant antitoxin<sup>[658]</sup>. Source: GUI ZHEN CAO *Bidens bipinnata* (whole herb), HONG HUA *Carthamus tinctorius*, *Centaurea* sp. Ref: 658, 4596.

**19123 Sagecoumarin**

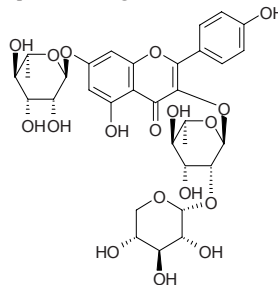
$C_{27}H_{20}O_{12}$  (536.45). Freeze-dried light-brown powder,  $[\alpha]_D^{20} = +52^\circ$  ( $c = 0.2$ , MeOH). Source: YAO YONG DAN SHEN *Salvia officinalis*. Ref: 2388.

**19124 Sagittariol**

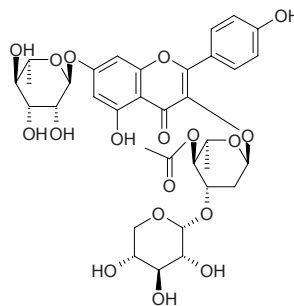
[56497-92-8]  $C_{20}H_{34}O_2$  (306.49). mp 109~110°C. Source: CI GU *Sagittaria sagittifolia*. Ref: 6, 1521.

**19125 Sagittatin A**

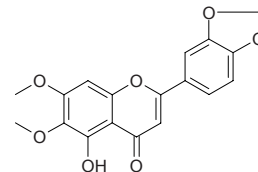
[124704-85-4]  $C_{32}H_{38}O_{18}$  (710.65). Source: JIAN YE YIN YANG HUO *Epimedium sagittatum*. Ref: 2, 660, 1521.

**19126 Sagittatin B**

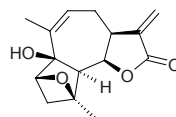
[124723-15-5]  $C_{34}H_{40}O_{18}$  (736.69). Source: JIAN YE YIN YANG HUO *Epimedium sagittatum*. Ref: 2, 1521.

**19127 Sagittin**

5-Hydroxy-6,7-dimethoxy-3',4'-methylene-dioxy-flavone  $C_{18}H_{14}O_7$  (342.31). Yellow acicular crystals, mp 254~257°C (230°C, sub). Source: JIAN YE YIN YANG HUO *Epimedium sagittatum*. Ref: 485, 660.

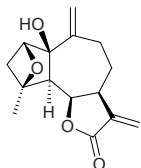
**19128 Saharanolide A**

5 $\alpha$ H-2,4 $\beta$ -Epoxy-1-hydroxyguaia-9(10),11(13)-dien-6 $\beta$ -12-olide  $C_{15}H_{18}O_4$  (262.31). Colorless gum,  $[\alpha]_D^{22} = -86^\circ$  ( $c = 0.1$ , EtOH). Pharm: Cytotoxic (*in vitro*, KB,  $IC_{50} = 3.3 \mu\text{g/mL}$ ). Source: *Warionia saharae* (leaf: yield = 0.0004%dw). Ref: 4620.

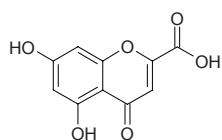


**19129 Saharanolide B**

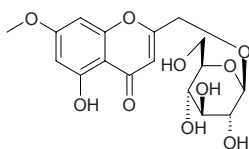
5 $\alpha$ H-2,4 $\beta$ -Epoxy-1-hydroxyguaia-10(14),11(13)-dien-6 $\beta$ ,12-olide C<sub>15</sub>H<sub>18</sub>O<sub>4</sub> (262.31). Colorless gum,  $[\alpha]_D^{22} = -86^\circ$  ( $c = 0.1$ , EtOH). **Pharm:** Cytotoxic (*in vitro*, KB, IC<sub>50</sub> = 5.5 $\mu$ g/mL). **Source:** *Warionia saharae* (leaf: yield = 0.0005%dw). **Ref:** 4620.

**19130 Saikochromic acid**

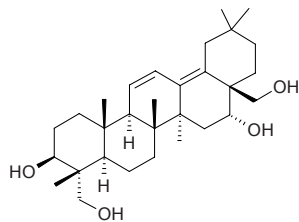
C<sub>10</sub>H<sub>6</sub>O<sub>6</sub> (222.16). Yellowish needles. **Source:** CHAI HU *Bupleurum chinense*. **Ref:** 8.

**19131 Saikochromoside A**

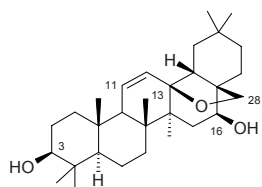
C<sub>17</sub>H<sub>20</sub>O<sub>10</sub> (384.34). White needles, mp 189–191°C. **Source:** CHAI HU *Bupleurum chinense*. **Ref:** 8.

**19132 Saikogenin D**

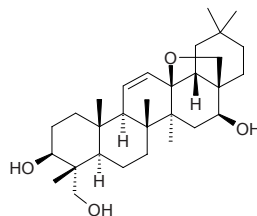
[5573-16-0] C<sub>30</sub>H<sub>48</sub>O<sub>4</sub> (472.71). **Source:** ZI HU *Bupleurum falcatum*. **Ref:** 2247.

**19133 Saikogenin E**

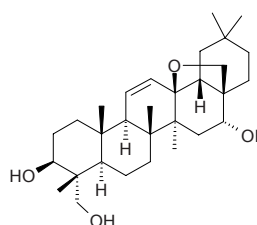
[13715-23-6] C<sub>30</sub>H<sub>48</sub>O<sub>3</sub> (456.72). mp 289°C (dec). **Source:** CHAI HU *Bupleurum chinense*. **Ref:** 2.

**19134 Saikogenin F**

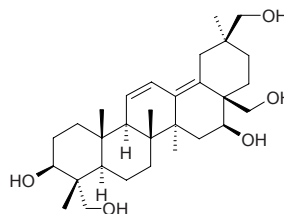
[14356-59-3] C<sub>30</sub>H<sub>48</sub>O<sub>4</sub> (472.71). mp 265–273°C. **Source:** CHAI HU *Bupleurum chinense*, XIAO YE HEI CHAI HU *Bupleurum smithii* var. *parvifolium*. **Ref:** 2, 598.

**19135 Saikogenin G**

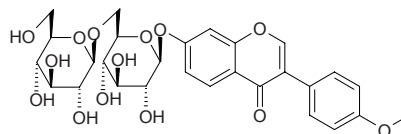
[18175-79-6] C<sub>30</sub>H<sub>48</sub>O<sub>4</sub> (472.71). mp 238–245°C. **Source:** CHAI HU *Bupleurum chinense*, XIAO YE HEI CHAI HU *Bupleurum smithii* var. *parvifolium*. **Ref:** 2, 598.

**19136 Saikogenin Q**

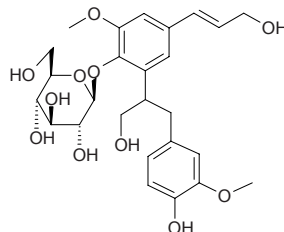
Olean-11,13(18)-diene-3 $\beta$ ,16 $\beta$ ,23,28,30-pentol [168146-19-8] C<sub>30</sub>H<sub>48</sub>O<sub>5</sub> (488.71). White powder, mp 302–304°C. **Source:** XIAO YE HEI CHAI HU *Bupleurum smithii* var. *parvifolium*, HEI CHAI HU *Bupleurum smithii*. **Ref:** 327, 1521, 2247.

**19137 Saikoisoflavonoside A**

C<sub>28</sub>H<sub>32</sub>O<sub>14</sub> (592.56). Yellow-white powder, mp 245–246°C. **Source:** HONG CHAI HU *Bupleurum scorzonerifolium*. **Ref:** 8.

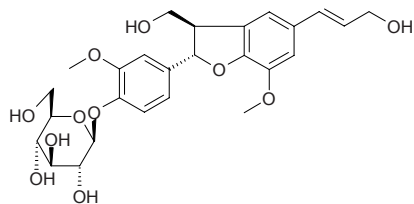
**19138 Saikolignanoside A**

C<sub>26</sub>H<sub>34</sub>O<sub>11</sub> (522.55). Yellow-white powder, mp 110–112°C,  $[\alpha]_D^{23} = +32.8^\circ$  ( $c = 0.131$ , MeOH). **Source:** HONG CHAI HU *Bupleurum scorzonerifolium*. **Ref:** 8.

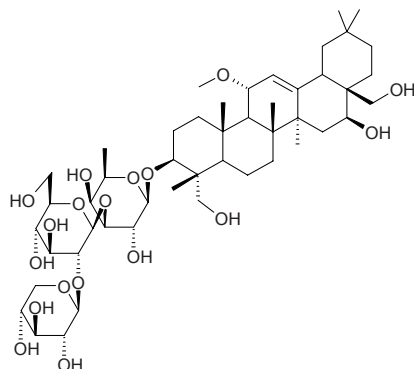


**19139 Saikolignanose D**

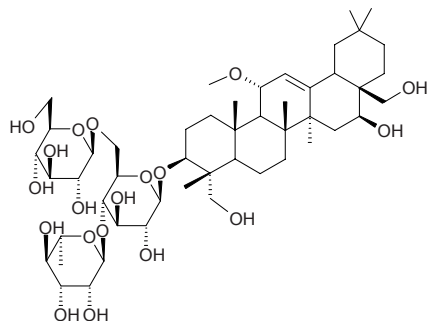
$C_{26}H_{32}O_{11}$  (520.54). Yellow-white powder, mp 102~104°C,  $[\alpha]_D^{28} = +0.63^\circ$  ( $c = 0.156\text{g}/100\text{ml}$  in MeOH). Source: HONG CHAI HU *Bupleurum scorzonerifolium*. Ref: 8.

**19140 Saikosaponin 15**

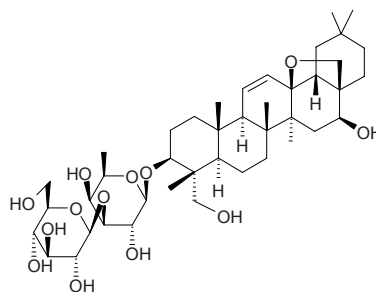
$C_{48}H_{80}O_{18}$  (945.16). Source: ZHAI ZHU YE CHAI HU *Bupleurum marginatum* var. *stenophyllum*. Ref: 660.

**19141 Saikosaponin 16**

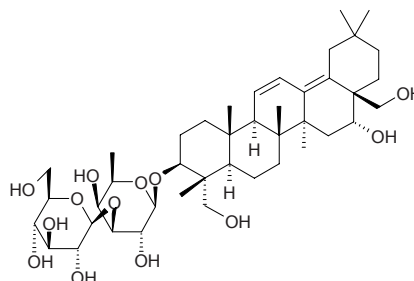
$C_{49}H_{82}O_{19}$  (975.19). Source: ZHAI ZHU YE CHAI HU *Bupleurum marginatum* var. *stenophyllum*. Ref: 660.

**19142 Saikosaponin A**

[20736-09-8]  $C_{42}H_{68}O_{13}$  (781.00). mp 225~232°C. Pharm: Antineoplastic (EAC); antihepatotoxin (rat, hepatotoxin induced by  $\text{CCl}_4$ ); anti-inflammatory; antiviral (influenza virus  $\text{A}_2$  *in vitro*, 50  $\mu\text{g}/\text{mL}$ ,  $\text{InRt} = 69\%$ ); antihypercholesterolemic. Source: CHAI HU *Bupleurum chinense* (dried root: content scope = 0.11%~0.34%, mean content = 0.185%<sup>[5508]</sup>), HEI CHAI HU *Bupleurum smithii* (dried root: mean content = 0.470%<sup>[5508]</sup>), HONG CHAI HU *Bupleurum scorzonerifolium* (dried root: content scope = 0.03%~0.07%, mean content = 0.05%<sup>[5508]</sup>), XIAN YE CHAI HU *Bupleurum angustissimum* (dried root: content = 0.05%<sup>[5508]</sup>), XIAO YE HEI CHAI HU *Bupleurum smithii* var. *parvifolium* (dried root: content scope = 0.13%~0.24%, mean content = 0.176%<sup>[5508]</sup>), YIN ZHOU CHAI HU *Bupleurum yinchowense* (dried root: content scope = 0.08%~0.13%, mean content = 0.105%<sup>[5508]</sup>), ZHU YE CHAI HU *Bupleurum marginatum* (dried root: content = 0.41%<sup>[5508]</sup>), ZHUI YE CHAI HU *Bupleurum bicaule* (dried root: content scope = 0.07%~0.08%, mean content = 0.075%<sup>[5508]</sup>), ZI HU *Bupleurum falcatum* (dried root: content = 0.07%<sup>[5508]</sup>), *Bupleurum* spp. Ref: 5, 403, 598, 658, 660, 5426, 5501, 5508.

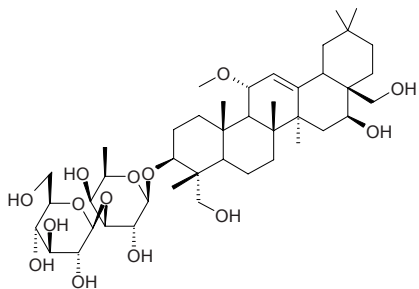
**19143 Saikosaponin B<sub>2</sub>**

[58316-41-9]  $C_{42}H_{68}O_{13}$  (781.00). White powder (methanol-diethyl ether), mp 235~240°C,  $[\alpha]_D^{25} = -32.1^\circ$  ( $c = 0.518$ ). Pharm: Anti-inflammatory; cytotoxic ( $\text{P}_{388}$ ,  $\text{ED}_{50} = 0.3\mu\text{g}/\text{mL}$ , inhibits growth of B16 melanoma,  $\text{MH}_1\text{C}_1$  and  $\text{EL}_4$ , induces apoptosis of B16 melanoma); immunoenhancer (prolongs survival time of immunologic injury mus); inhibits lipolysis (selectively); stimulates synthesis of  $\text{PGE}_2$ . Source: DUO ZHI CHAI HU *Bupleurum polyclonum*, HEI CHAI HU *Bupleurum smithii*, LI JIANG CHAI HU *Bupleurum rockii*, YIN ZHOU CHAI HU *Bupleurum yinchowense*, ZI HU *Bupleurum falcatum*. Ref: 660, 900.

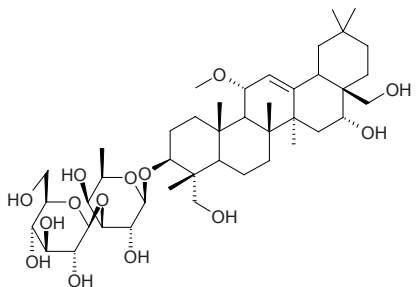


**19144 Saikosaponin B<sub>3</sub>**

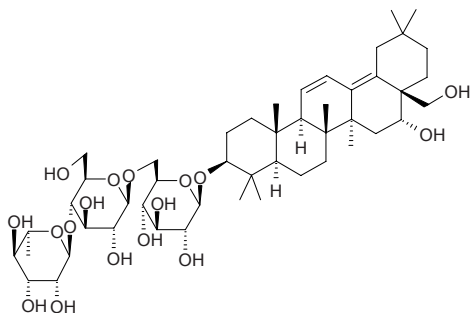
$C_{43}H_{72}O_{14}$  (813.04). Source: ZHAI ZHU YE CHAI HU *Bupleurum marginatum* var. *stenophyllum*, ZHU YE CHAI HU *Bupleurum marginatum*, ZI HU *Bupleurum falcatum*. Ref: 660.

**19145 Saikosaponin B<sub>4</sub>**

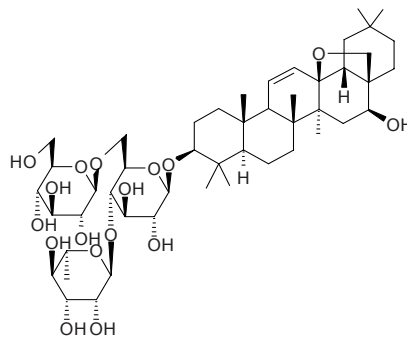
$C_{43}H_{72}O_{14}$  (813.04). Source: ZHAI ZHU YE CHAI HU *Bupleurum marginatum* var. *stenophyllum*, ZI HU *Bupleurum falcatum*. Ref: 660.

**19146 Saikosaponin BK<sub>1</sub>**

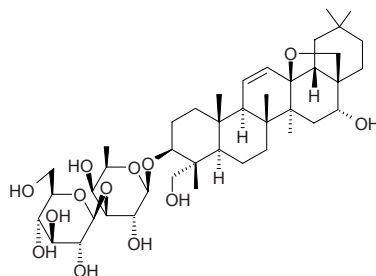
$C_{48}H_{78}O_{17}$  (927.15). Pharm: cytotoxic (*in vitro*, leukemia). Source: KUN MING CHAI HU *Bupleurum kunmingense*. Ref: 658.

**19147 Saikosaponin C**

[20736-08-7]  $C_{48}H_{78}O_{17}$  (927.15). mp 202~210°C. Pharm: Anti-HBV (significantly inhibits expression of HBsAg in 2,2,15 cells,  $p < 0.05$ ; inhibits secretion of HBsAg,  $IC_{50} = 11 \mu\text{g/mL}$ ; inhibits expression of HBV DNA,  $IC_{50} = 13.4 \mu\text{g/mL}$ )<sup>[5426]</sup>. Source: CHAI HU *Bupleurum chinense* (dried root: mean content = 0.430%<sup>[5508]</sup>), HEI CHAI HU *Bupleurum smithii* (dried root: mean content = 0.628%<sup>[5508]</sup>), HONG CHAI HU *Bupleurum scorzonerifolium*, ZHU YE CHAI HU *Bupleurum marginatum* (dried root: content = 0.26%<sup>[5508]</sup>), *Bupleurum* spp. Ref: 2, 403, 660, 5426, 5508.

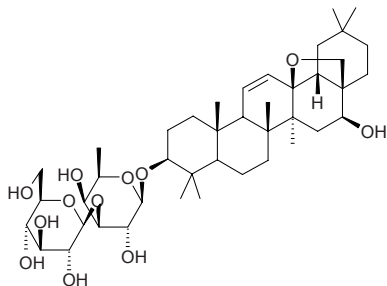
**19148 Saikosaponin D**

[20874-52-6]  $C_{42}H_{68}O_{13}$  (781.00). White powder, mp 212~218°C,  $[\alpha]_D^{23} = +37^\circ$  (ethanol),  $+36.8^\circ$  ( $c = 1.9$ , ethanol). Pharm: Antibacterial (*Bacillus pyocyaneus*); antineoplastic (EAC); antihepatotoxin (liver damage caused by  $\text{CCl}_4$  and galactosamine); anti-inflammatory ( $P < 0.001$ ); antiviral (measles virus and herpes simplex virus *in vitro*,  $> 5 \mu\text{mol/L}$ ); cytotoxic (KB,  $ED_{50} = 9.2 \mu\text{g/mL}$ ; P<sub>388</sub>,  $ED_{50} = 1.1 \mu\text{g/mL}$ ); cytotoxic (HepG2 hmn hepatocellular carcinoma cells,  $10 \mu\text{g/mL}$ )<sup>[5426]</sup>; immunoenhancer (prolongs life time of immunologically impaired animal); hemolytic (*in vivo*); antihypercholesterolemic; stimulates release of CRF and CRF gene express (in rat hypothalamus); stimulates synthesis of  $\text{PGE}_2$ . Source: CHAI HU *Bupleurum chinense* (dried root: content scope = 0.12%~0.35%, mean content = 0.217%<sup>[5508]</sup>), DA YE CHAI HU *Bupleurum longiradiatum*, HEI CHAI HU *Bupleurum smithii* (dried root: mean content = 0.227%<sup>[5508]</sup>), HONG CHAI HU *Bupleurum scorzonerifolium* (dried root: content scope = 0.05%~0.16%, mean content = 0.09%<sup>[5508]</sup>), XIAN YE CHAI HU *Bupleurum angustissimum* (dried root: content = 1.42%<sup>[5508]</sup>), XIAO YE HEI CHAI HU *Bupleurum smithii* var. *parvifolium* (dried root: content scope = 0.15%~0.26%, mean content = 0.21%<sup>[5508]</sup>), YIN ZHOU CHAI HU *Bupleurum yinchowense* (dried root: content scope = 0.14%~0.23%, mean content = 0.185%<sup>[5508]</sup>), ZHU YE CHAI HU *Bupleurum marginatum* (dried root: content = 0.44%<sup>[5508]</sup>), ZHUI YE CHAI HU *Bupleurum bicaule* (dried root: content scope = 1.74%~2.36%, mean content = 2.05%<sup>[5508]</sup>), ZI HU *Bupleurum falcatum* (dried root: content = 0.16%<sup>[5508]</sup>), *Bupleurum* spp. Ref: 5, 403, 598, 660, 900, 5426, 5501, 5508.

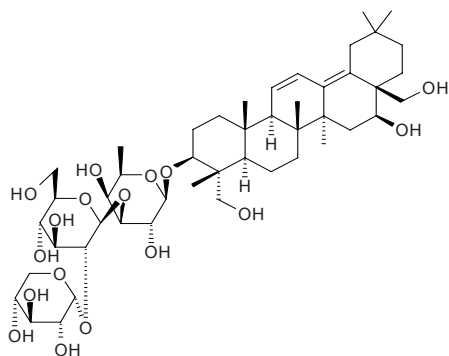


**19149 Saikosaponin E**

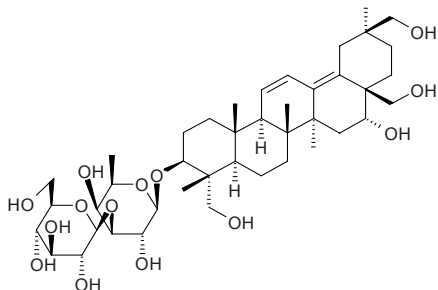
$C_{42}H_{68}O_{12}$  (765.00). Source: DUO ZHI CHAI HU *Bupleurum polyclonum*, LI JIANG CHAI HU *Bupleurum rockii*, ZHU YE CHAI HU *Bupleurum marginatum*, ZI HU *Bupleurum falcatum*. Ref: 660.

**19150 Saikosaponin K**

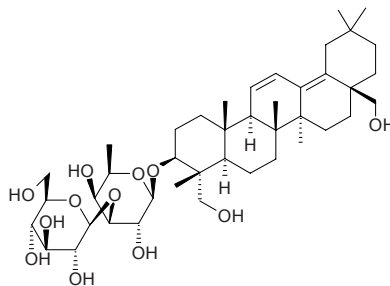
$3\beta,16\beta,23,28$ -Tetrahydroxyoleana-11,13(18)-dien-3-*O*- $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -D-fucopyranoside  $C_{47}H_{76}O_{17}$  (913.12). White powder, mp 241~245°C,  $[\alpha]_D^{21} = -20.9^\circ$  ( $c = 0.12$ , EtOH). Source: HEI CHAI HU *Bupleurum smithii*. Ref: 264.

**19151 Saikosaponin L**

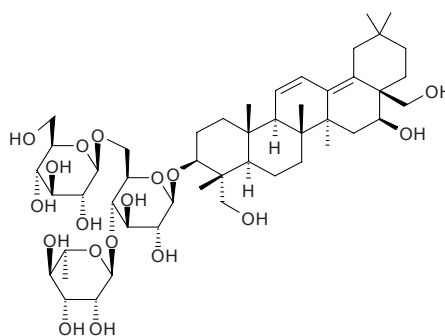
$3\beta,16\alpha,23,28,30$ -Pentahydroxyoleana-11,13(18)-dien-3-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -D-fucopyranoside  $C_{42}H_{68}O_{14}$  (797.00). White powder, mp 208~212°C. Source: HEI CHAI HU *Bupleurum smithii*. Ref: 264, 407.

**19152 Saikosaponin M**

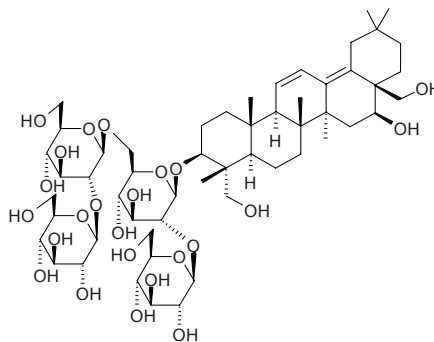
$3\beta,23,28$ -Trihydroxyoleana-11,13(18)-dien-3-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -D-fucopyranoside  $C_{42}H_{68}O_{12}$  (765.00). White powder, mp 205~210°C,  $[\alpha]_D^{21} = -117.6^\circ$  ( $c = 0.03$ , ethanol). Source: HEI CHAI HU *Bupleurum smithii*. Ref: 313.

**19153 Saikosaponin N**

$3\beta,16\beta,23,28$ -Tetrahydroxyoleana-11,13(18)-dien-3-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)-[ $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)]- $\beta$ -D-glucopyranoside  $C_{48}H_{78}O_{18}$  (943.15). White powder, mp 217~221°C,  $[\alpha]_D^{21} = +81.6^\circ$  ( $c = 0.10$ , ethanol). Source: HEI CHAI HU *Bupleurum smithii*. Ref: 313.

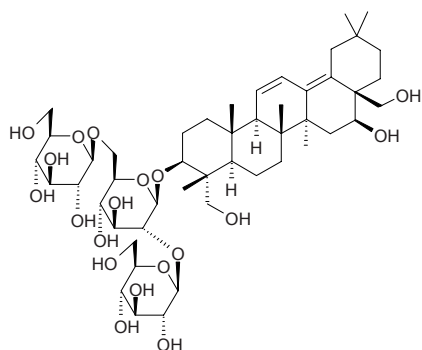
**19154 Saikosaponin O**

[179981-97-6]  $C_{54}H_{88}O_{24}$  (1121.29). Source: XIAO YE HEI CHAI HU *Bupleurum smithii* var. *parvifolium*. Ref: 2247.

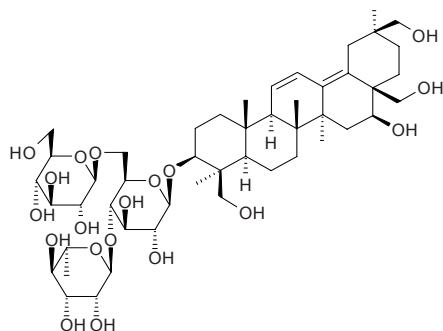


**19155 Saikosaponin P**

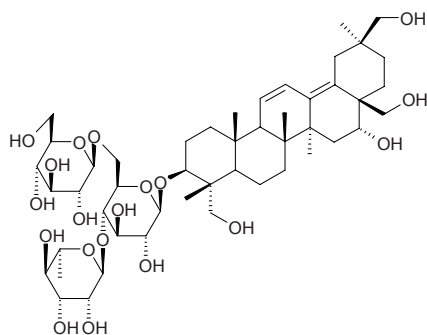
$C_{48}H_{78}O_{19}$  (959.15). Source: XIAO YE HEI CHAI HU *Bupleurum smithii* var. *parvifolium*. Ref: 2247.

**19156 Saikosaponin Q**

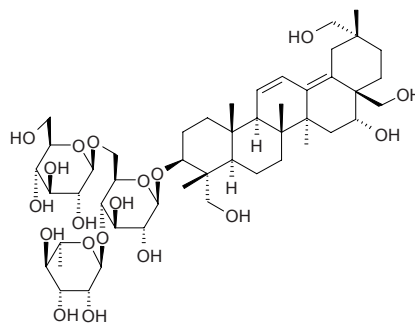
3 $\beta$ ,16 $\beta$ ,23,28,30-Pentahydroxyoleana-11,13,(18)-diene-3 $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)-[ $\alpha$ -L-rhamno-pyranosyl-(1 $\rightarrow$ 4)]- $\beta$ -D-glucopyranoside  $C_{48}H_{78}O_{19}$  (959.15). White powder, mp 224~227°C. Source: XIAO YE HEI CHAI HU *Bupleurum smithii* var. *parvifolium*. Ref: 327.

**19157 Saikosaponin Q<sub>1</sub>**

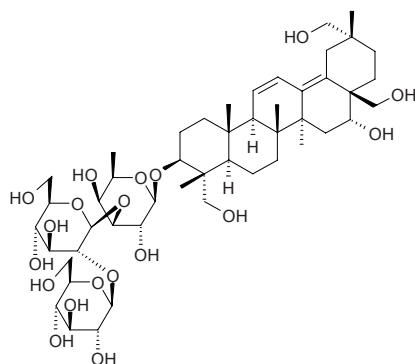
$C_{48}H_{78}O_{19}$  (958.15). White powder, mp 230~246°C. Source: CHAI HU *Bupleurum chinense*. Ref: 8.

**19158 Saikosaponin Q<sub>2</sub>**

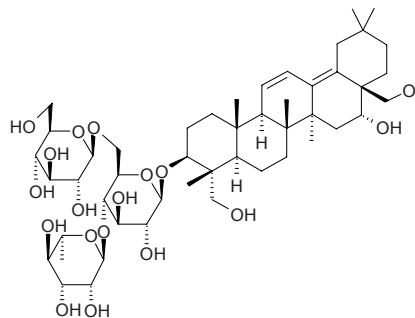
$C_{48}H_{78}O_{19}$  (959.15). Source: CHAI HU *Bupleurum chinense*. Ref: 2247.

**19159 Saikosaponin R**

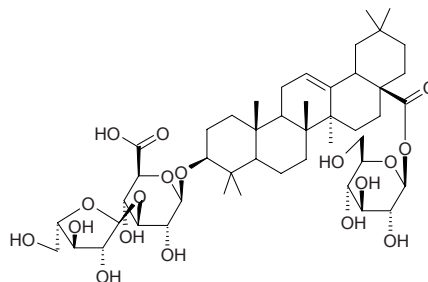
$C_{48}H_{78}O_{19}$  (959.15). Source: HONG CHAI HU *Bupleurum scorzoniferolium*. Ref: 2247.

**19160 Saikosaponin S**

$C_{48}H_{78}O_{18}$  (943.15). Source: HONG CHAI HU *Bupleurum scorzoniferolium*. Ref: 2247.

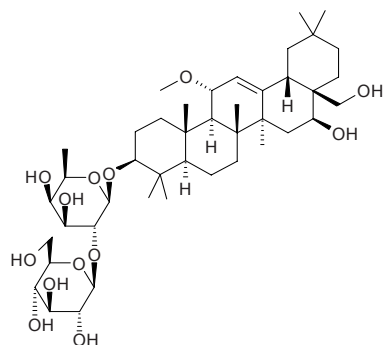
**19161 Saikosaponin S<sub>1</sub>**

$C_{47}H_{74}O_{18}$  (927.10). Source: CHAI HU *Bupleurum chinense*. Ref: 660.

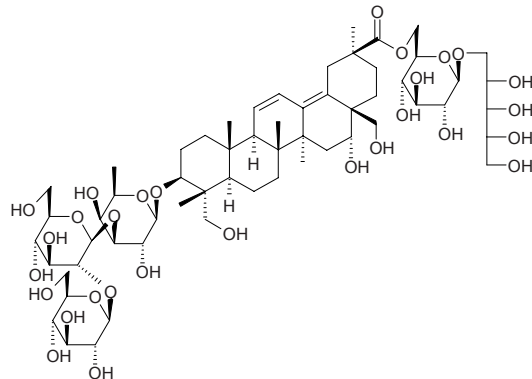


**19162 Saikosaponin T**

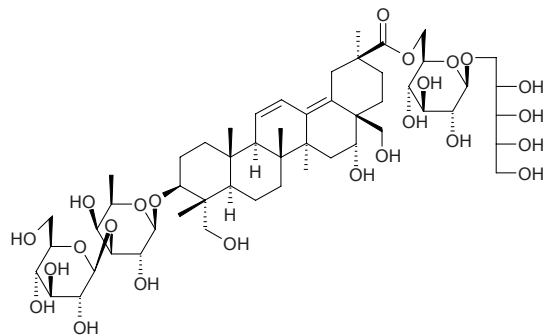
3 $\beta$ ,16 $\beta$ ,28-Trihydroxy-11- $\alpha$ - $\beta$ -methoxy-olean-12-ene-3-*O*- $\beta$ -*D*-glucosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-fucoside C<sub>43</sub>H<sub>72</sub>O<sub>13</sub> (797.05). White powder, mp 223~225°C, mp 237~240°C. Source: CHAI HU *Bupleurum chinense*, HONG CHAI HU *Bupleurum scorzonerifolium*. Ref: 403, 1521.

**19163 Saikosaponin U**

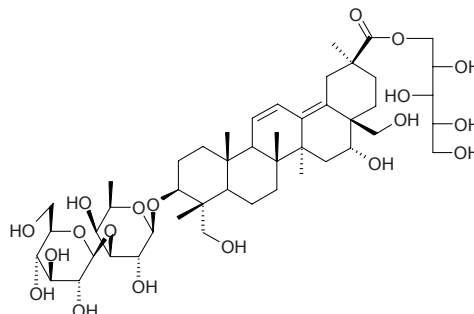
3-*O*-[ $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-fucopyranosyl]-3 $\beta$ ,16 $\alpha$ ,23,28-tetrahydroxy-olean-11,13(18)-dien-30-oic acid-30-*O*-[pentito(1 $\rightarrow$ 1)- $\beta$ -*D*-glucopyranosyl-6-ester C<sub>59</sub>H<sub>96</sub>O<sub>29</sub> (1269.41). White powder, mp 276~278°C. Source: HONG CHAI HU *Bupleurum scorzonerifolium*. Ref: 1879, 2247.

**19164 Saikosaponin V**

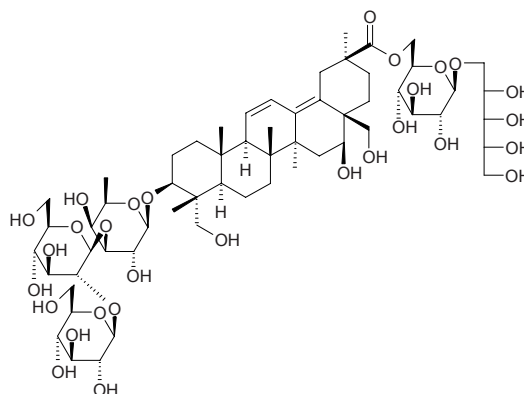
3-*O*-[ $\beta$ -*D*-Glucopyranosyl(1 $\rightarrow$ 3)- $\beta$ -*D*-fucopyranosyl]-3 $\beta$ ,16 $\alpha$ ,23,28-tetrahydroxy-olean-11,13(18)-dien-30-oic acid 30-*O*-[pentito(1 $\rightarrow$ 1)- $\beta$ -*D*-glucopyranosyl-6-ester C<sub>53</sub>H<sub>86</sub>O<sub>24</sub> (1107.26). White powder, mp 198~201°C. Source: CHAI HU *Bupleurum chinense*, HONG CHAI HU *Bupleurum scorzonerifolium*. Ref: 407, 1879.

**19165 Saikosaponin V<sub>1</sub>**

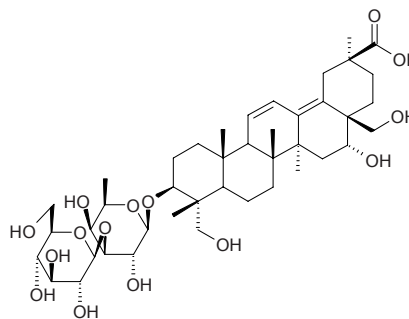
C<sub>47</sub>H<sub>76</sub>O<sub>19</sub> (945.12). White powder, mp 232~239°C. Source: CHAI HU *Bupleurum chinense*. Ref: 8.

**19166 Saikosaponin V<sub>2</sub>**

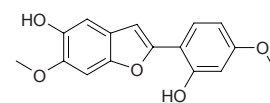
C<sub>59</sub>H<sub>96</sub>O<sub>29</sub> (1269.41). Source: CHAI HU *Bupleurum chinense*. Ref: 2247.

**19167 Saikosaponin X**

C<sub>42</sub>H<sub>66</sub>O<sub>15</sub> (810.99). White powder, mp 245~246°C. Source: HONG CHAI HU *Bupleurum scorzonerifolium*. Ref: 8.

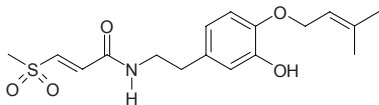
**19168 Sainfuran**

C<sub>16</sub>H<sub>14</sub>O<sub>5</sub> (286.29). Pharm: Antifungal (*Cladosporium cladosporioides*); insect antifeedant. Source: LV DOU *Onobrychis viciifolia*. Ref: 658.

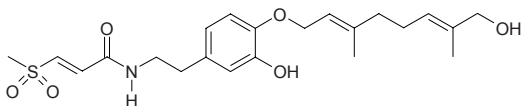


**19169 Sakambullin**

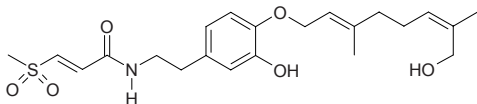
(*E*)-3-(Methylsulfonyl)-propenoic acid 3-hydroxy-4-(3-methyl-2-butenyloxy)-phenethyl amide C<sub>17</sub>H<sub>23</sub>NO<sub>5</sub>S (353.44). Colorless crystals (Et<sub>2</sub>O), mp 111~113°C. Source: LV ZI SHAN XIAO JU *Glycosmis chlorosperma* (leaf). Ref: 3956.

**19170 Sakerinol A**

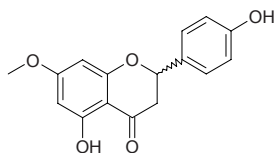
(*E*)-3-(Methylsulfonyl)-propenoic acid (2*E*,6*E*)-3-hydroxy-4-(8-hydroxy-3,7-dimethyl-2,6-octadienyloxy)-phenethyl amide C<sub>22</sub>H<sub>31</sub>NO<sub>6</sub>S (437.56). Colorless crystals (Et<sub>2</sub>O), mp 133~135°C. Source: LV ZI SHAN XIAO JU *Glycosmis chlorosperma* (leaf). Ref: 3956.

**19171 Sakerinol B**

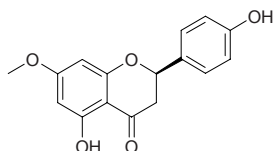
(*E*)-3-(Methylsulfonyl)-propenoic acid (2*E*,6*Z*)-3-hydroxy-4-(8-hydroxy-3,7-dimethyl-2,6-octadienyloxy)-phenethyl amide C<sub>22</sub>H<sub>31</sub>NO<sub>6</sub>S (437.56). Colorless crystals (Et<sub>2</sub>O), mp 98~100°C. Source: JIA ZONG ZHUANG HUA XU SHAN XIAO JU *Glycosmis pseudoracemosa* (leaf). Ref: 3956.

**19172 Sakuranetin**

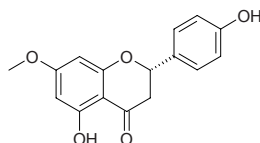
C<sub>16</sub>H<sub>14</sub>O<sub>5</sub> (286.29). Pharm: Antifungal (TLC bioautographic assay, *Cladosporium cladosporioides*, MA = 1.0µg, control Miconazole, MA = 1.0µg; *Cladosporium sphaerospermum*, MA = 1.0µg, control Miconazole, MA = 1.0µg). Source: CU YE MAI HU JIAO *Piper crassinervium*. Ref: 3440.

**19173 (R)-Sakuranetin**

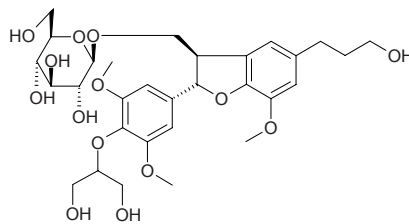
C<sub>16</sub>H<sub>14</sub>O<sub>5</sub> (286.29). mp 131~133°C. Source: RI BEN YING HUA *Prunus yedoensis*. Ref: 1521.

**19174 (S)-Sakuranetin**

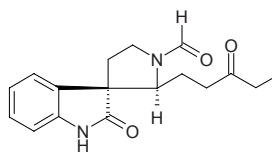
7-*O*-Methylnaringenin [2957-21-3] C<sub>16</sub>H<sub>14</sub>O<sub>5</sub> (286.29). mp 152~154°C. Pharm: Antifungal (*Ribes nigrum*, *Grossulariaceae* family); cytotoxic (HeLa, IC<sub>50</sub> = 93.1µg/mL, control Mitomycin C, IC<sub>50</sub> = 1.7µg/mL)<sup>[4092]</sup>; antifungal (*Candida albicans*, *Candida krusei*, MIC = 100µg/mL, control Nystatin, MIC = 2.0µg/mL)<sup>[5201]</sup>; antibacterial (*Staphylococcus aureus*, MIC ≈ 100µg/mL, control Chloramphenicol, MIC = 4.0µg/mL; *Mycobacterium smegmatis*, *Mycobacterium intracellulare*, *Mycobacterium xenopi*, MIC ≈ 100µg/mL, control Isoniazide, MIC = 10.0µg/mL)<sup>[5201]</sup>. Source: SHU ZHI YAN FU MU *Rhus retinorrhoea* (leaf), TIAN YE HAO *Artemisia campestris*, YING TAO *Prunus pseudocerasus*, *Juglans* sp., *Betula* sp., TUAN JI AI NA XIANG *Blumea glomerata*. Ref: 6, 658, 4092, 5201.

**19175 (-)-Sakuraresinoside**

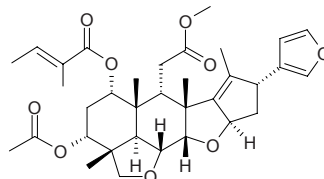
C<sub>30</sub>H<sub>42</sub>O<sub>14</sub> (626.66). White powder, [α]<sub>D</sub><sup>22</sup> = -8.8° (c = 0.20, EtOH). Source: MAO GUO QI *Acer nikoense* (stem cortex: yield = 0.0002%). Ref: 4304.

**19176 Salacin**

C<sub>17</sub>H<sub>20</sub>N<sub>2</sub>O<sub>3</sub> (300.36). Source: XIA GOU TENG *Uncaria attenuata*. Ref: 5341.

**19177 Salannin**

C<sub>34</sub>H<sub>44</sub>O<sub>9</sub> (596.73). Pharm: Insect antifeedant. Source: KU LIAN PI *Melia azedarach*. Ref: 658.

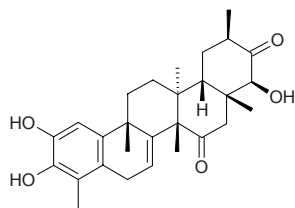




**19178 Salaquinone B**

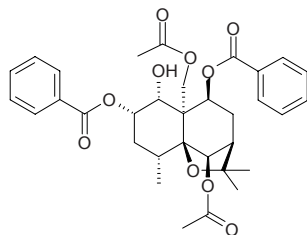
$C_{28}H_{36}O_5$  (452.60). Amorphous powder,  $[\alpha]_D^{26} = +69.4^\circ$  ( $c = 0.20$ ,  $CHCl_3$ ).

**Source:** SUO LA MU *Salacia prinoides* [Syn. *Salacia chinensis*] (stem). **Ref:** 4378.

**19179 Salasol B**

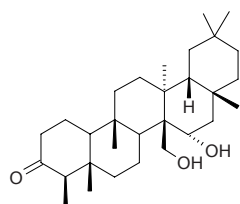
$C_{33}H_{38}O_{10}$  (594.66). White powder,  $[\alpha]_D^{26} = +59.0^\circ$  ( $c = 0.10$ ,  $CHCl_3$ ). **Source:**

SUO LA MU *Salacia prinoides* [Syn. *Salacia chinensis*] (stem). **Ref:** 4378.

**19180 Salasone D**

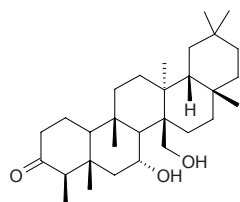
$C_{30}H_{50}O_3$  (458.73). White powder,  $[\alpha]_D^{22} = -19.6^\circ$  ( $c = 0.50$ ,  $CHCl_3$ ). **Source:**

SUO LA MU *Salacia prinoides* [Syn. *Salacia chinensis*] (stem). **Ref:** 4378.

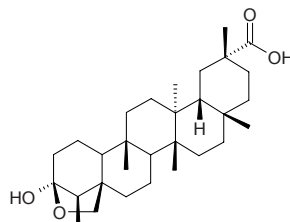
**19181 Salasone E**

$C_{30}H_{50}O_3$  (458.73). White powder,  $[\alpha]_D^{23} = -18.5^\circ$  ( $c = 0.50$ ,  $CHCl_3$ ). **Source:**

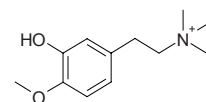
SUO LA MU *Salacia prinoides* [Syn. *Salacia chinensis*] (stem). **Ref:** 4378.

**19182 Salaspermic acid**

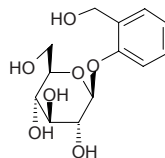
[71247-78-4]  $C_{30}H_{48}O_4$  (472.71). **Pharm:** Anti-HIV (inhibits HIV's replication in H9 lymphocyte,  $EC_{50} = 10\mu\text{mol/L}$ , for non-infected H9 lymphocyte  $IC_{50} = 53\mu\text{mol/L}$ ); HIV reverse transcriptase inhibitor; DPPH scavenger inactive (for  $40\mu\text{mol/L}$  DPPH radical,  $SC_{50} > 40\mu\text{mol/L}$ )<sup>[4378]</sup>. **Source:** LEI GONG TENG *Tripterygium wilfordii*, SUO LA MU *Salacia prinoides* [Syn. *Salacia chinensis*] (stem). **Ref:** 2, 1763, 4378.

**19183 Salicifoline**

[6882-07-1]  $C_{12}H_{20}NO_2^+$  (210.30). **Source:** BAI LAN HUA *Michelia alba*, HE HUA YU LAN *Magnolia grandiflora*, HOU PO *Magnolia officinalis*, RI BEN XIN YI *Magnolia kobus*, YE HE HUA *Magnolia coco*, YU LAN *Magnolia denudata* [Syn. *Magnolia heptapata*], ZI YU LAN PI *Magnolia liliiflora*. **Ref:** 6, 625, 1521.

**19184 Salicin**

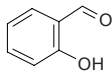
2-(Hydroxymethyl)phenyl- $\beta$ -D-glucopyranoside; Salicoside [138-52-3]  $C_{13}H_{18}O_7$  (286.28). White columnar crystals, mp  $199\text{--}202^\circ\text{C}$ ,  $[\alpha]_D^{20} = -45.6^\circ$  (EtOH), soluble in water, hot EtOH, insoluble in  $CHCl_3$ , ether.<sup>[5507]</sup> **Pharm:** Analgesic; antipyretic; antirheumatic; bitter principle (stomachic for sheep); local anesthetic. **Source:** BEI JING YANG *Populus beijingensis* (bark: content = 1.03%)<sup>[5508]</sup>, DA QING YANG *Populus ussuriensis* (bark: content = 1.42%)<sup>[5508]</sup>, DA YE YANG *Populus lasiocarpa* (bark: content = 0.52%)<sup>[5508]</sup>, HE BEI YANG *Populus hopeiensis* (bark: content = 1.89%)<sup>[5508]</sup>, JIA YANG *Populus canadensis* (bark: content = 0.69%)<sup>[5508]</sup>, JIAN GAN YANG *Populus nigra* var. *thevestina* (bark: content = 0.49%)<sup>[5508]</sup>, LIU BAI PI *Salix babylonica*, LIU ZHI *Salix babylonica*, MAO BAI YANG *Populus tomentosa* (bark: content = 0.57%)<sup>[5508]</sup>, QING YANG *Populus cathayana* (bark: content = 0.70%)<sup>[5508]</sup>, SHAN YANG *Populus davidiana* (bark: content = 1.87%)<sup>[5508]</sup>, SHUI YANG MU BAI PI *Salix purpurea*, SHUI YANG ZHI YE *Salix purpurea*, XIANG YANG *Populus koreana* (bark: content = 0.68%)<sup>[5508]</sup>, XIANG YE YANG *Populus adenopoda* (bark: content = 1.24%)<sup>[5508]</sup>, XIAO HEI YANG *Populus xiaohei* (bark: content = 0.72%)<sup>[5508]</sup>, XIAO QING YANG *Populus pseudo-simonii* (bark: content = 1.01%)<sup>[5508]</sup>, XIAO YE YANG *Populus simonii* (bark: content = 2.16%)<sup>[5508]</sup>, XIN JIANG YANG *Populus alba* var. *pyramidalis* (bark: content = 1.25%)<sup>[5508]</sup>, YIN BAI YANG *Populus alba* (bark: content = 2.63%)<sup>[5508]</sup>, YING YE JIA MI *Viburnum prunifolium*, *Populus* sp., *Salix* sp. (2%–4%; the compound was isolated from the plant in 1942)<sup>[5505]</sup>. **Ref:** 6, 269, 658, 5505, 5507, 5508.



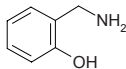
**19185 Salicylaldehyde**

$C_7H_6O_2$  (122.12). Source: CHA YE *Camellia sinensis* [Syn. *Thea sinensis*].

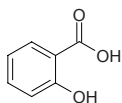
Ref: 660.

**19186 Salicylamine**

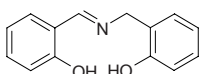
[932-30-9]  $C_7H_9NO$  (123.16). mp 129°C. Source: QIAO MAI *Fagopyrum esculentum*. Ref: 6.

**19187 Salicylic acid**

Phenol-2-carboxylic acid [69-72-7]  $C_7H_6O_3$  (138.12). mp 159°C, bp 211°C/20mmHg. Pharm: Anti-fertility agent (inhibits spermatogenesis); antiseptic; used in treatment of dermatosis and tinea. Source: BAN LAN GEN *Isatis indigotica* (dried root: mean content of 5 origins = 0.00063%)<sup>[5508]</sup>, BIAN FU GE GEN *Menispermum dauricum*, DA CHE QIAN *Plantago major*, DIAN BAI ZHU SHU *Gaultheria yunnanensis* (root: content scope of 3 origins = 0.0035%–0.0063%, mean content = 0.0050%)<sup>[5508]</sup>, HUANG HAO *Artemisia scoparia* [Syn. *Artemisia capillaris* var. *scoparia*], HUANG HUA HAO *Artemisia annua*, KU BAO *Sauromatum guttatum*, MA LIU YE *Pterocarya stenoptera*, MIAN HUA *Gossypium herbaceum*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], SHENG MA *Cimicifuga foetida*, XUAN FU HUA *Inula britannica*, YU JIN XIANG *Tulipa gesneriana*. Ref: 2, 658, 660, 3792, 5508.

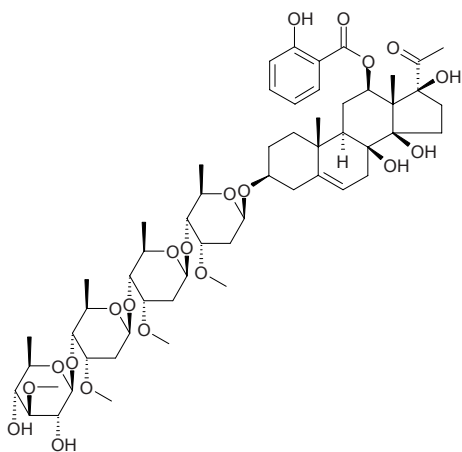
**19188 N-Salicylidene-salicylamine**

$C_{14}H_{13}NO_2$  (227.27). Source: QIAO MAI *Fagopyrum esculentum*. Ref: 6.

**19189 12-O-Salicyloyldeacetylmetaplexigenin**

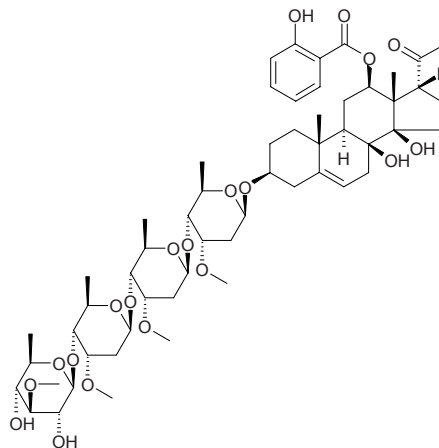
$C_{56}H_{84}O_{21}$  (1093.28). Amorphous powder,  $[\alpha]_D^{22} = +6.48^\circ$  ( $c = 1.06$ , MeOH).

Source: *Araujia sericifera* (root). Ref: 4377.

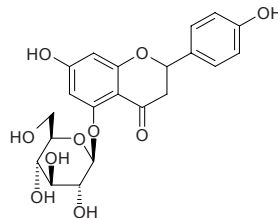
**19190 12-O-Salicyloyllineolon**

$C_{56}H_{84}O_{20}$  (1077.28). Amorphous powder,  $[\alpha]_D^{24} = -6.0^\circ$  ( $c = 0.39$ , MeOH).

Source: *Araujia sericifera* (root). Ref: 4377.

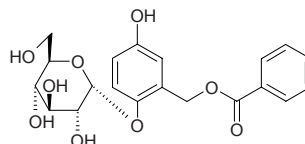
**19191 Salipurposide**

$C_{21}H_{22}O_{10}$  (434.40). mp 227°C. Source: SHUI YANG MU BAI PI *Salix purpurea*, TAO ZHI *Prunus persica*. Ref: 6.

**19192 Salireposide**

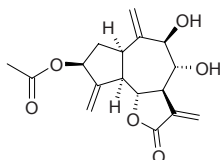
1-Benzoylmethyl-5-hydroxyphenyl- $\alpha$ -D-glucopyranoside  $C_{20}H_{22}O_9$  (406.39).

White powder,  $[\alpha]_D^{23} = -9.1^\circ$  ( $c = 0.21$ , MeOH). Pharm: Phosphodiesterase I inhibitor (*in vitro*,  $IC_{50} = (544 \pm 0.02) \mu\text{mol/L}$ , control Cysteine,  $IC_{50} = (274 \pm 0.07) \mu\text{mol/L}$ )<sup>[4093]</sup>; thymidine phosphorylase inhibitor (*in vitro*,  $IC_{50} = (354.2 \pm 5.7) \mu\text{mol/L}$ , control 7-Deazaxanthine,  $IC_{50} = (38.68 \pm 4.42) \mu\text{mol/L}$ )<sup>[4093]</sup>. Source: BEI JING YANG *Populus beijingensis* (bark: content = 0.05%)<sup>[5508]</sup>, DA QING YANG *Populus ussuriensis* (bark: content = 0.40%)<sup>[5508]</sup>, HE BEI YANG *Populus hopeiensis* (bark: content = 0.53%)<sup>[5508]</sup>, MAO BAI YANG *Populus tomentosa* (bark: content = 0.54%)<sup>[5508]</sup>, QING YANG *Populus cathayana* (bark: content = 0.22%)<sup>[5508]</sup>, SHAN YANG *Populus davidiana* (bark: content = 0.69%)<sup>[5508]</sup>, XIANG YANG *Populus koreana* (bark: content = 0.93%)<sup>[5508]</sup>, XIANG YE YANG *Populus adenopoda* (bark: content = 0.16%)<sup>[5508]</sup>, XIAO HEI YANG *Populus xiaohai* (bark: content = 0.09%)<sup>[5508]</sup>, XIAO QING YANG *Populus pseudo-simonii* (bark: content = 0.05%)<sup>[5508]</sup>, XIN JIANG YANG *Populus alba* var. *pyramidalis* (bark: content = 0.76%)<sup>[5508]</sup>, YIN BAI YANG *Populus alba* (bark: content = 0.80%)<sup>[5508]</sup>, ZHU ZI SHU *Symplocos racemosa*. Ref: 3374, 4093, 5508.

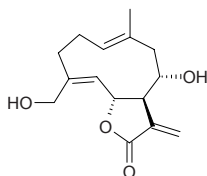


**19193 Salograviolide A**

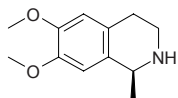
[145274-56-2] C<sub>17</sub>H<sub>20</sub>O<sub>6</sub> (320.35). **Pharm:** Antifungal (*Aspergillus niger*, MIC = 6.25 μg/mL; *Aspergillus ochraceus*, MIC = 3.13 μg/mL; *Penicillium ochrocloron*, MIC = 25 μg/mL; *Cladosporium cladosporioides*, MIC = 3.13 μg/mL; *Fusarium tricinctum*, MIC = 12.5 μg/mL; *Phomopsis helianthi*, MIC = 1.56 μg/mL, *Trichoderma viride*, inactive). **Source:** NI GU LA SHI CHE JU *Centaurea nicolai*. **Ref:** 2361.

**19194 Salonenolide**

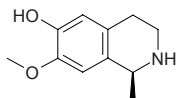
C<sub>15</sub>H<sub>20</sub>O<sub>4</sub> (264.33). **Pharm:** Antineoplastic; cytotoxic; insect antifeedant. **Source:** family Asteraceae spp. **Ref:** 658.

**19195 Salsolidine**

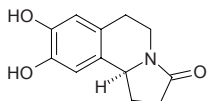
C<sub>12</sub>H<sub>17</sub>NO<sub>2</sub> (207.26). Lamellar crystals (water), mp 69~70°C, [α]<sub>D</sub> = -63° (ethanol), hydrochloride, white or yellowish crystals powder, mp 235~236°C, [α]<sub>D</sub><sup>18</sup> = -25 (water). **Pharm:** Antispasmodic (rat intestine, spasm caused by BaCl<sub>2</sub>); antihypertensive (inhibits vasomotorium in medulla); LD<sub>50</sub> (rat, ip) = 300 mg/kg. **Source:** ZHU MAO CAI *Salsola collina*. **Ref:** 661, 658.

**19196 Salsoline**

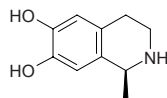
C<sub>11</sub>H<sub>15</sub>NO<sub>2</sub> (193.25). Grass-yellow acicular crystals (methanol or ethanol), mp 221°C, [α]<sub>D</sub><sup>20</sup> = +34.5° (c = 1, 0.1 mol/L hydrochloric acid). **Pharm:** Analgesic; antihypertensive (inhibits vasomotorium in medulla); increases tolerance to anoxia (mus); LD<sub>50</sub> (mus, iv) = 140 mg/kg. **Source:** ZHU MAO CAI *Salsola collina*. **Ref:** 661.

**19197 Salsoline A**

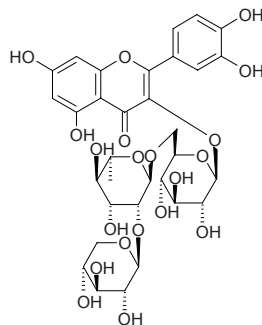
C<sub>12</sub>H<sub>13</sub>NO<sub>3</sub> (219.24). Light purple lamellar crystals (Me<sub>2</sub>CO), mp 257~259°C, [α]<sub>D</sub><sup>25</sup> = -82.6° (c = 0.1, MeOH). **Source:** ZHU MAO CAI *Salsola collina* (aerial parts). **Ref:** 4846.

**19198 (-)-Salsolinol**

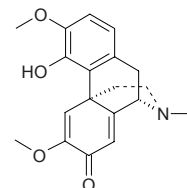
C<sub>10</sub>H<sub>13</sub>NO<sub>2</sub> (179.22). Unsteady hydrobromide, tiny cream-colored prismatic crystals (ethanol-ether), mp 195~198°C. **Pharm:** Analgesic; increases blood pressure and raises heart rate (rat, iv); monoamine oxidase inhibitor; neuromuscular blocker; stimulates atrium (gpg, *in vitro*). **Source:** FEN BA JIAO *Musa paradisiaca*, KE KE *Theobroma cacao*, NIU XIN FAN LI ZHI *Annona reticulata*, WU TOU *Aconitum carmichaeli*. **Ref:** 661.

**19199 Saluenin**

Cetin 3-O-β-D-xylopyranosyl-(1→2)-α-L-rhamnopyranosyl-(1→6)-β-D-glucopyranoside C<sub>32</sub>H<sub>38</sub>O<sub>20</sub> (742.65). Green-yellow powder. **Source:** NU JIANG SHAN CHA *Camellia saluenensis*. **Ref:** 889.

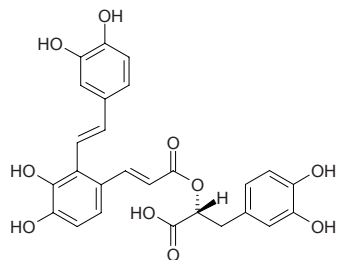
**19200 (-)-Salutaridine**

Sinoacutine [4090-18-0] C<sub>19</sub>H<sub>21</sub>NO<sub>4</sub> (327.38). mp 198°C. **Pharm:** Cytotoxic (*in vitro*, HepG<sub>2</sub>, IC<sub>50</sub> = 10.2 μg/mL; Hep2,2,15, IC<sub>50</sub> = 10.4 μg/mL)<sup>[3083]</sup>; analgesic (cat). **Source:** JU HUA HUANG LIAN *Corydalis pallida*, QING FENG TENG *Sinomenium acutum*, XI SHEN SHAN ZI JIN *Corydalis pallida* var. *tenuis*, XUE SAN SHU *Stephania dielsiana*, YOU GOU YING ZHAO *Artabotrys uncinatus* (root, stem, leaf), ZI HUA YU DENG CAO *Corydalis incisa*. **Ref:** 6, 658, 3083, 5501.

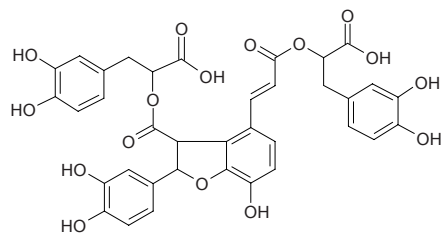


**19201 Salvianolic acid A**

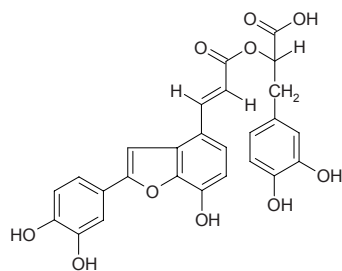
[96574-01-5] C<sub>26</sub>H<sub>22</sub>O<sub>10</sub> (494.46). Amorphous yellow compound,  $[\alpha]_D^{18} = +41^\circ$  ( $c = 0.099$ , ethanol). **Pharm:** Antineoplastic; free radical scavenger (against damage in mitochondria of rat hepatic and cardiac cells caused by oxygen free radicals); inhibits gastric secretion (rat); antioxidant (inhibits lipid peroxidation strongly, induced by vitamin C-nicotinamide ADP and Fe<sup>2+</sup>-cysteine in microsome of murine cerebral, hepatic and renal cells); antioxidant (*in vitro*, Cu<sup>2+</sup> induced LDL peroxidation assay, IC<sub>50</sub> = 0.59 μmol/L; control Probuocol, IC<sub>50</sub> = 4.7 μmol/L)<sup>[4628]</sup>; H<sup>+</sup>, K<sup>+</sup>-ATPase inhibitor (inhibits secretion and ulcer, IC<sub>50</sub> = 0.52 μmol/L); pNPPase inhibitor (inhibits secretion and ulcer, IC<sub>50</sub> = 1.7 μmol/L); 5-lipoxygenase inhibitor (IC<sub>50</sub> = 0.38 μmol/L); aldose reductase inhibitor (eye lens, IC<sub>50</sub> = 9.80 nmol/L); protects against damage of cardiac muscle (rat, *in vitro*, caused by ischemia-perfusion); reduces learning disorder in mus caused by ischemia-perfusion; reverses action of potassium channel in myocardium membrane. **Source:** DAN SHEN *Salvia miltiorrhiza*, ZI DAN TENG *Tournefortia sarmentosa* (stem: yield = 0.00093%)<sup>[4628]</sup>. **Ref:** 658, 900, 4628.

**19202 Salvianolic Acid B**

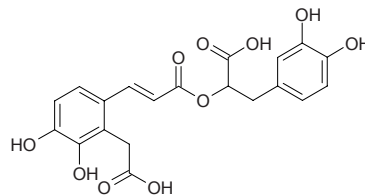
C<sub>36</sub>H<sub>33</sub>O<sub>16</sub> (718.63). Purity ≥ 96%. **Pharm:** Angiogenesis enhancer (*in vitro* murine SVR endothelial cells, up-regulation of vascular endothelial growth factor (VEGF) and its receptors VEGF-R1, VEGF-R2 gene)<sup>[5350]</sup>. **Source:** DAN SHEN *Salvia miltiorrhiza*. **Ref:** 5350.

**19203 Salvianolic acid C**

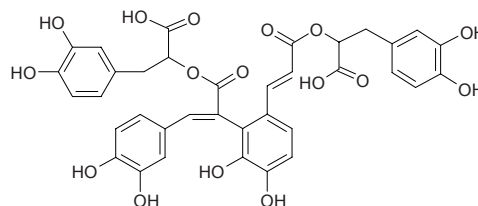
[115841-09-3] C<sub>26</sub>H<sub>20</sub>O<sub>10</sub> (492.44). Amorphous yellow compound,  $[\alpha]_D^{14} = +70^\circ$  ( $c = 0.12$ , ethanol). **Pharm:** Free radical scavenger; platelet aggregation inhibitor. **Source:** DAN SHEN *Salvia miltiorrhiza*. **Ref:** 900.

**19204 Salvianolic acid D**

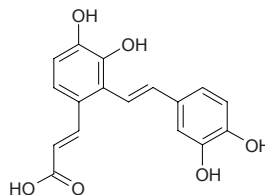
C<sub>20</sub>H<sub>18</sub>O<sub>10</sub> (418.36). **Source:** DAN SHEN *Salvia miltiorrhiza*. **Ref:** 660.

**19205 Salvianolic acid E**

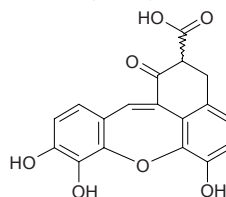
C<sub>36</sub>H<sub>30</sub>O<sub>16</sub> (718.63). **Source:** DAN SHEN *Salvia miltiorrhiza*. **Ref:** 660.

**19206 Salvianolic acid F**

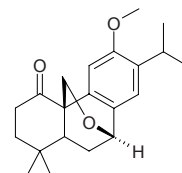
C<sub>17</sub>H<sub>14</sub>O<sub>6</sub> (314.3). **Pharm:** Antioxidant (*in vitro*, Cu<sup>2+</sup> induced LDL peroxidation assay, IC<sub>50</sub> = 5.44 μmol/L; control Probuocol, IC<sub>50</sub> = 4.7 μmol/L)<sup>[4628]</sup>. **Source:** ZI DAN TENG *Tournefortia sarmentosa* (stem: yield = 0.00016%). **Ref:** 4628.

**19207 Salvianolic acid G**

C<sub>18</sub>H<sub>12</sub>O<sub>7</sub> (340.29). **Source:** DAN SHEN *Salvia miltiorrhiza*. **Ref:** 660.

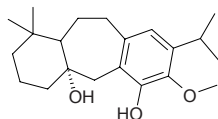
**19208 Salvibracteone**

1-Oxo-12-methoxy-7,20-epoxyabieta-8,11,13-trienestructureforsalvibractone C<sub>21</sub>H<sub>28</sub>O<sub>3</sub> (328.46).  $[\alpha]_D = 0^\circ$  ( $c = 1.0$ , CHCl<sub>3</sub>). **Source:** BAO PIAN SHU WEI CAO *Salvia bracteata* (root). **Ref:** 2406.

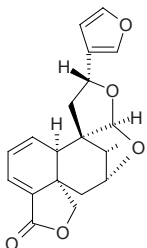


**19209 Salvicanol**

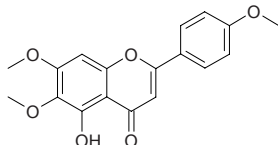
$C_{21}H_{32}O_3$  (332.49). Source: GAN XI SHU WEI CAO *Salvia przewalskii*, JIA NA LI SHU WEI CAO *Salvia canariensis*. Ref: 1521, 4538.

**19210 Salvifarcin**

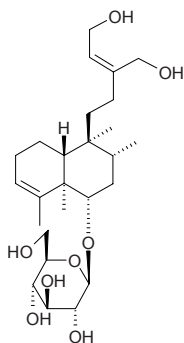
$C_{20}H_{20}O_5$  (340.38). Source: DUO SUI SHU WEI CAO *Salvia polystachya* (aerial parts). Ref: 3901.

**19211 Salvigenin**

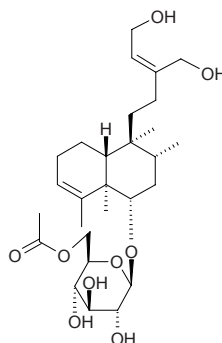
7-*O*-Methylpectolinarigenin; Psathyrotin [19103-54-9]  $C_{18}H_{16}O_6$  (328.32). Yellowish acicular crystals, mp 212–218°C (benzene–methanol). Pharm: Induces cell differentiation (mus myelocytic leukemia cells, strongly, in 50 μmol/L and 5 μmol/L, growing rate = 67% and 76% respectively, activity of macrophage the former > 10%); inhibits influenza virus sialoma (InRt = 8.2%); antioxidant inactive (ferric thiocyanate method, 0.5 mmol/L, peroxidation value = 100%, control BHA, 0.5 mmol/L, peroxidation value = 4.5%, control Vitamin E, 0.5 mmol/L, peroxidation value = 14.7%)<sup>[4508]</sup>. Source: CHI YANG *Alnus japonica*, JU PI *Citrus reticulata*, LIU JI NU *Artemisia anomala* (whole herb with flowers), MAO XU CAO *Clerodendranthus spicatus*, SHUI HU MAN *Clerodendron inerme*, TIAN SHE CAO *Lippia dulcis* (aerial parts), YANG SHI CAO *Achillea millefolium*. Ref: 660, 900, 4508.

**19212 Salvigreside A**

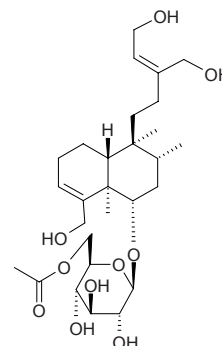
6 $\alpha$ -*O*-( $\beta$ -*D*-Glucopyranosyl)-15,16-dihydroxycleroda-3,13(14)-dien  $C_{26}H_{44}O_8$  (484.64). Colorless amorphous powder,  $[\alpha]_D^{20} = -17.8^\circ$  ( $c = 0.09$ , MeOH). Source: GE SHI SHU WEI CAO *Salvia greggii* (aerial parts). Ref: 3859.

**19213 Salvigreside B**

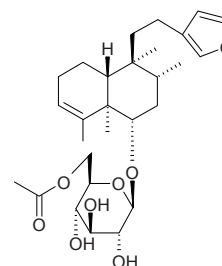
6 $\alpha$ -*O*-(6-*O*-Acetyl- $\beta$ -*D*-glucopyranosyl)-15,16-dihydroxycleroda-3,13(14)-dien  $C_{28}H_{46}O_9$  (526.67). Colorless amorphous powder,  $[\alpha]_D^{25} = -17.2^\circ$  ( $c = 0.61$ , MeOH). Source: GE SHI SHU WEI CAO *Salvia greggii* (aerial parts). Ref: 3859.

**19214 Salvigreside C**

6 $\alpha$ -*O*-(6-*O*-Acetyl- $\beta$ -*D*-glucopyranosyl)-15,16,18-trihydroxy-cleroda-3,13(14)-dien  $C_{28}H_{46}O_{10}$  (542.67). Colorless amorphous powder,  $[\alpha]_D^{25} = -12.5^\circ$  ( $c = 0.28$ , MeOH). Source: GE SHI SHU WEI CAO *Salvia greggii* (aerial parts). Ref: 3859.

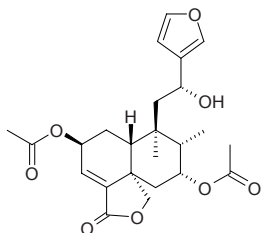
**19215 Salvigreside D**

6 $\alpha$ -*O*-(6-*O*-Acetyl- $\beta$ -*D*-glucopyranosyl)-15,16-epoxycleroda-3,13(16),14-trien  $C_{28}H_{42}O_8$  (506.64). Colorless amorphous powder,  $[\alpha]_D^{25} = -16.1^\circ$  ( $c = 0.74$ , MeOH). Source: GE SHI SHU WEI CAO *Salvia greggii* (aerial parts). Ref: 3859.

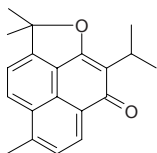


**19216 Salvigresin**

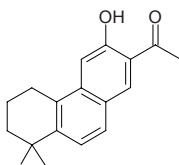
$C_{24}H_{30}O_8$  (446.50). Colorless prisms [*n*-hexane:EtOAc = 1:1], mp 242~245°C,  $[\alpha]_D^{25} = -118.6^\circ$  ( $c = 0.22$ ,  $CHCl_3$ ). Source: GE SHI SHU WEI CAO *Salvia greggii*. Ref: 3413.

**19217 Salvilenone**

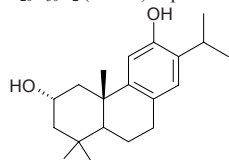
$C_{20}H_{20}O_2$  (292.38). mp 141°C. Source: DAN SHEN *Salvia miltiorrhiza*. Ref: 2090.

**19218 Salvinone**

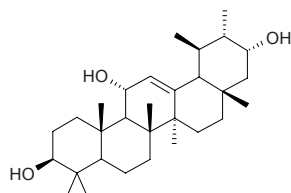
$C_{18}H_{20}O_2$  (268.36). Source: DAN SHEN *Salvia miltiorrhiza*. Ref: 660.

**19219 Salviol**

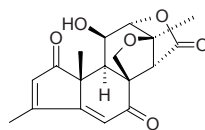
$C_{20}H_{30}O_2$  (302.46). mp 108°C. Source: DAN SHEN *Salvia miltiorrhiza*. Ref: 2.

**19220 Salvistamineol**

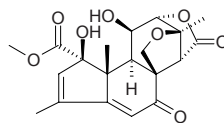
3β,11α,21α-Trihydroxyurs-12-ene  $C_{30}H_{50}O_3$  (458.73). mp 268~270°C,  $[\alpha]_D^{25} = +44^\circ$  ( $c = 0.16$ ,  $CHCl_3$ ). Pharm: Cytotoxic (A2780,  $IC_{50} = 21.0\mu g/mL$ , control Actinomycin D,  $IC_{50} = 0.001\mu g/mL$ ; LNCaP,  $IC_{50} > 20\mu g/mL$ ; KB,  $IC_{50} > 20\mu g/mL$ ; Col2,  $IC_{50} > 20\mu g/mL$ ; LU1,  $IC_{50} > 20\mu g/mL$ ). Source: XIONG RUI ZHUANG SHU WEI CAO *Salvia staminea*. Ref: 5400.

**19221 Samaderine A**

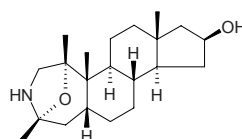
$C_{18}H_{18}O_6$  (330.34). Pharm: Cytotoxic (leukemia). Source: MA DAO HUANG LIAN SHU *Samadera madagascariensis* (leaf), family Simarubaceae spp. Ref: 658, 5334.

**19222 Samaderolactone A**

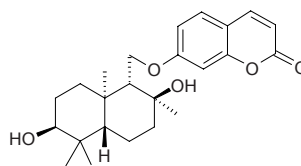
$C_{20}H_{22}O_8$  (390.39). Yellow amorphous solid,  $[\alpha]_D = +14^\circ$  ( $c = 0.066$ ,  $CHCl_3$ ). Source: MA DAO HUANG LIAN SHU *Samadera madagascariensis* (leaf). Ref: 5334.

**19223 Samandarine**

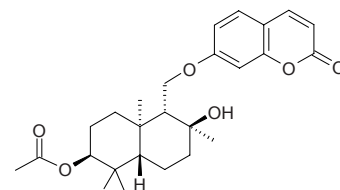
[467-51-6]  $C_{19}H_{31}NO_2$  (305.46). Pharm: Causes local paralysis; increases blood pressure; neurotoxin; LD (rbt) =  $1\mu g/kg$ . Source: BAN YUAN *Necturus maculosus*. Ref: 658.

**19224 Samarcandin**

$C_{24}H_{32}O_5$  (400.52). Source: A WEI *Ferula assafoetida* (root). Ref: 5243.

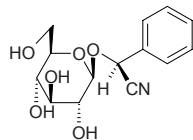
**19225 Samarcandin acetate**

$C_{26}H_{34}O_6$  (442.56). Source: *Ferula pseudooreoselinum*. Ref: 660.

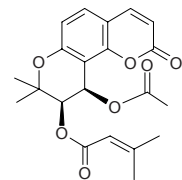


**19226 Sambunigrin**

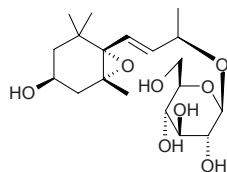
$C_{14}H_{17}NO_6$  (295.29). **Pharm:** Plant growth stimulatory or inhibitory activity (radicle length: *Lactuca sativa*,  $1\mu\text{mol/L}$ , StRt or InRt < 10%,  $10\mu\text{mol/L}$ , InRt = (10~30)%,  $100\mu\text{mol/L}$ , InRt = (31~60)%,  $1\text{mmol/L}$ , InRt > 61%; *Raphanus sativus*,  $1\mu\text{mol/L}$ , StRt = (10~30)%,  $10\mu\text{mol/L}$ , StRt = (10~30)%,  $100\mu\text{mol/L}$ , StRt or InRt < 10%,  $1\text{mmol/L}$ , InRt > 61%; *Allium cepa*,  $1\mu\text{mol/L}$ , StRt or InRt < 10%,  $10\mu\text{mol/L}$ , InRt = (10~30)%,  $100\mu\text{mol/L}$ , InRt = (31~60)%,  $1\text{mmol/L}$ , InRt = (31~60)%). **Source:** XI YANG JIE GU MU *Sambucus nigra*. **Ref:** 5217.

**19227 Samidin**

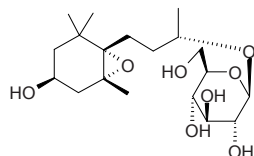
[477-33-8]  $C_{21}H_{22}O_7$  (386.41). Prismatic crystals(ethanol), mp 135~137°C,  $[\alpha]_D^{20} = +26^\circ$  ( $c = 1.0$ , chloroform),  $+100^\circ$  ( $c = 1.0$ , dioxane). **Pharm:** Coronary vasodilator;  $LD_{50}$  (rat, orl) = 1469mg/kg. **Source:** CHI A MI *Ammi visnaga*, XUAN NIU XIE HAO *Seseli tortuosum*. **Ref:** 661.

**19228 Sammangaoside A**

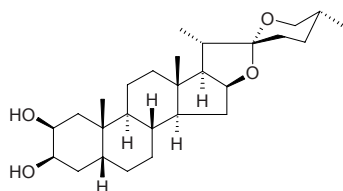
(3*S*,5*R*,6*S*,7*E*,9*S*)-3-Hydroxy-5,6-epoxy- $\beta$ -ionyl-9-*O*- $\beta$ -glucopyranoside  $C_{19}H_{32}O_8$  (388.46). Amorphous,  $[\alpha]_D^{20} = -99.1^\circ$  ( $c = 0.8$ , MeOH). **Source:** KU LANG SHU *Clerodendrum inerme* (aerial parts). **Ref:** 5186.

**19229 Sammangaoside B**

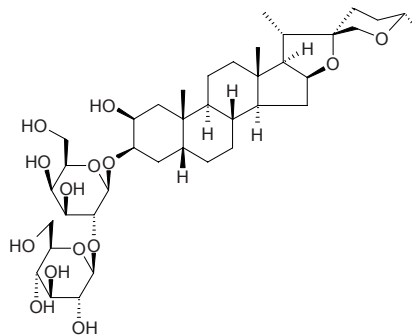
(3*S*,5*R*,6*S*,9*R*)-3-Hydroxy-5,6-epoxy- $\beta$ -dihydroionyl-9-*O*- $\beta$ -glucopyranoside  $C_{19}H_{34}O_8$  (390.48). Amorphous,  $[\alpha]_D^{20} = -35.0^\circ$  ( $c = 0.4$ , MeOH). **Source:** KU LANG SHU *Clerodendrum inerme* (aerial parts). **Ref:** 5186.

**19230 Samogenin**

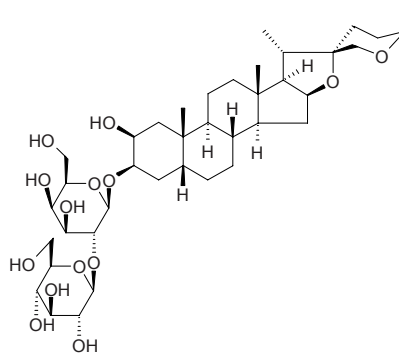
$C_{27}H_{44}O_4$  (432.65). mp 212°C. **Source:** *Agave yuccaeifolia*. **Ref:** 2503.

**19231 (25*R*)-Samogenin 3-*O*- $\beta$ -*D*-glucopyranosyl (1 $\rightarrow$ 2)- $\beta$ -*D*-galactopyranoside**

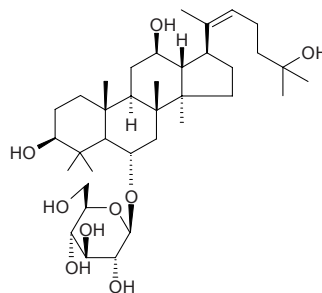
$C_{39}H_{64}O_{14}$  (756.94). White amorphous powder, mp 270~272°C. **Pharm:** Platelet aggregation inhibitor. **Source:** GUA LOU *Trichosanthes kirilowii*, XIE BAI *Allium macrostemon*. **Ref:** 2466.

**19232 (25*S*)-Samogenin 3-*O*- $\beta$ -*D*-glucopyranosyl (1 $\rightarrow$ 2)- $\beta$ -*D*-galactopyranoside**

$C_{39}H_{64}O_{14}$  (756.94). White amorphous powder. **Pharm:** Platelet aggregation inhibitor. **Source:** GUA LOU *Trichosanthes kirilowii*, XIE BAI *Allium macrostemon*. **Ref:** 2466.

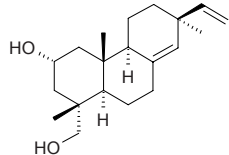
**19233 Sanchinoside B<sub>1</sub>**

Notoginsenoside B<sub>1</sub>  $C_{36}H_{62}O_9$  (638.89). White powder, mp 144~146°C. **Source:** SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. **Ref:** 28, 2762

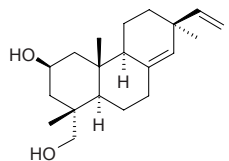


**19234 ent-8(14),15-Sandaracopimaradiene-2 $\alpha$ ,18-diol**

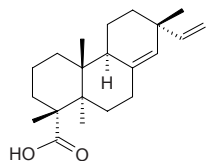
$C_{20}H_{32}O_2$  (304.48). Colorless crystals (methanol), mp 182°C,  $[\alpha]_D = +8.77^\circ$  ( $c = 0.001$ ,  $CHCl_3$ ). **Pharm:** Antileishmanial (*Leishmania donovani* promastigotes,  $IC_{50} = 16.8\mu\text{mol/L}$ , SI = 1.12, control Pentamidine,  $IC_{50} = 0.40\mu\text{mol/L}$ , SI = 0.42, amastigotes,  $IC_{50} > 90\mu\text{mol/L}$ , control Pentostam,  $IC_{50} = 9.75\mu\text{g/mL}$ ); antimalarial (*Plasmodium falciparum* K1,  $IC_{50} = 166\mu\text{mol/L}$ , SI = 0.29, control Chloroquine,  $IC_{50} = 0.59\mu\text{mol/L}$ , SI = 272.20); antitrypanosomal (*Trypanosoma brucei brucei* blood stream trypomastigotes,  $IC_{50} > 30\mu\text{mol/L}$ , control Pentamidine,  $IC_{50} = 0.00034\mu\text{mol/L}$ ); cytotoxic (KB cells,  $IC_{50} = 48\mu\text{mol/L}$ , control Pentamidine,  $IC_{50} = 0.17\mu\text{mol/L}$ ). **Source:** *Guarea rhopalocarpa* (leaf). **Ref:** 5127.

**19235 ent-8(14),15-Sandaracopimaradiene-2 $\beta$ ,18-diol**

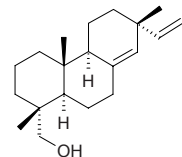
$C_{20}H_{32}O_2$  (304.48). Colorless crystals (methanol), mp 156°C,  $[\alpha]_D = +11.36^\circ$  ( $c = 0.001$ ,  $CHCl_3$ ). **Pharm:** Antileishmanial (*Leishmania donovani* promastigotes,  $IC_{50} = 49.7\mu\text{mol/L}$ , SI = 1.52, control Pentamidine,  $IC_{50} = 0.40\mu\text{mol/L}$ , SI = 0.42, amastigotes,  $IC_{50} > 90\mu\text{mol/L}$ , control Pentostam,  $IC_{50} = 9.75\mu\text{g/mL}$ ); antimalarial (*Plasmodium falciparum* K1,  $IC_{50} = 104\mu\text{mol/L}$ , SI = 0.73; control Chloroquine,  $IC_{50} = 0.59\mu\text{mol/L}$ , SI = 272.20); antitrypanosomal (*Trypanosoma brucei brucei* blood stream trypomastigotes,  $IC_{50} > 30\mu\text{mol/L}$ , control Pentamidine,  $IC_{50} = 0.00034\mu\text{mol/L}$ ); cytotoxic (KB cells,  $IC_{50} = 75.8\mu\text{mol/L}$ , control Pentamidine,  $IC_{50} = 0.17\mu\text{mol/L}$ ). **Source:** *Guarea rhopalocarpa* (leaf). **Ref:** 5127.

**19236 Sandaracopimaric acid**

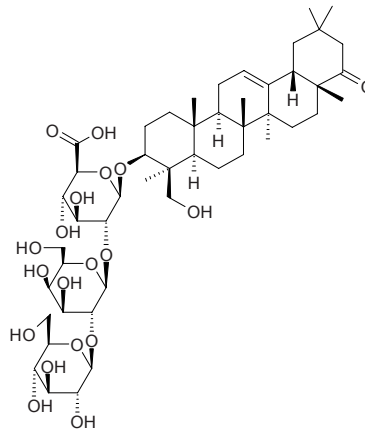
Cryptopimaric acid  $C_{20}H_{30}O_2$  (302.46). mp 170–172°C (MeOH– $CHCl_3$ ),  $[\alpha]_D^{25} = -18.1^\circ$  ( $c = 0.95$ ,  $CHCl_3$ ); mp 165–168°C,  $[\alpha]_D^{25} = -19.8^\circ$ . **Pharm:** Cytotoxic (EBV-EA inhibitor TPA-induced, mol ratio/TPA = 1000, InRt = 100%)<sup>[5352]</sup>. **Source:** QI LIN JIE *Daemonorops draco*, RI BEN XIANG BAI JING PI *Thuja standishii*. **Ref:** 660, 5352.

**19237 Sandaracopimarinol**

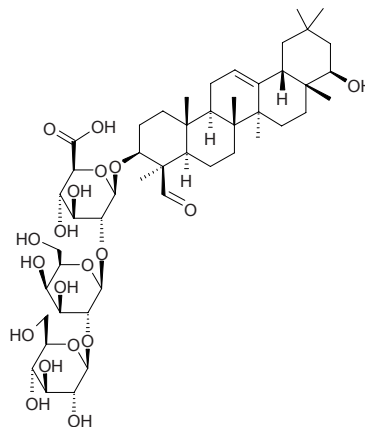
$C_{20}H_{32}O$  (288.48). mp 63–65°C. **Source:** LIU SHAN *Cryptomeria fortunei*. **Ref:** 6.

**19238 Sandosaponin A**

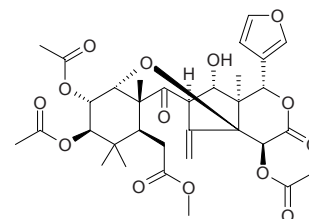
Soyasaponin Bd  $C_{48}H_{76}O_{19}$  (957.12). Colorless crystals (water–MeOH), mp 200–201°C,  $[\alpha]_D^{23} = -5.8^\circ$  ( $c = 0.8$ , MeOH). **Pharm:** Antihistamine (inhibits histamine release, rat peritoneum oozing cells, caused by antigen-antibody reaction,  $10\mu\text{mol/L}$ , InRt = 58.2%). **Source:** BAI FAN DOU *Phaseolus vulgaris*. **Ref:** 990.

**19239 Sandosaponin B**

$C_{48}H_{76}O_{19}$  (957.12). Colorless thin crystals (water–MeOH), mp 212–213°C,  $[\alpha]_D^{28} = +34.8^\circ$  ( $c = 0.3$ , methanol). **Pharm:** Antihistamine (inhibits histamine release, rat peritoneum oozing cells, caused by antigen-antibody reaction,  $10\mu\text{mol/L}$ , InRt = 59.4%). **Source:** BAI FAN DOU *Phaseolus vulgaris*. **Ref:** 990.

**19240 Sandrapin A**

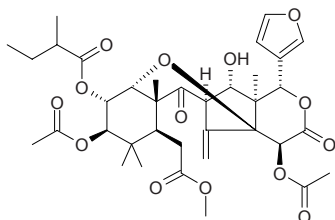
$C_{33}H_{40}O_{14}$  (660.68). Colorless needles, mp 252–255°C,  $[\alpha]_D^{25} = +6.6^\circ$  ( $c = 1.1$ ,  $CHCl_3$ ). **Source:** YIN DU SHAN DAO LIAN YE *Sandoricum koetjape* [Syn. *Sandoricum indicum*]. **Ref:** 2585, 3494.



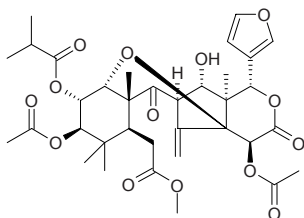


**19241 Sandrapin B**

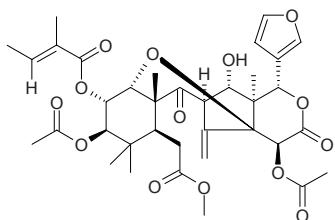
$C_{36}H_{46}O_{14}$  (702.76). Colorless needles, mp 210~213°C,  $[\alpha]_D^{25} = +6.0^\circ$  ( $c = 0.8$ ,  $CHCl_3$ ). Source: YIN DU SHAN DAO LIAN YE *Sandoricum koetjape* [Syn. *Sandoricum indicum*]. Ref: 2585, 3494.

**19242 Sandrapin C**

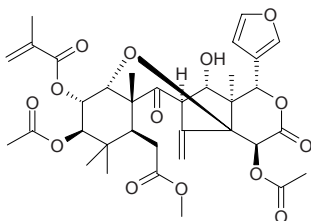
$C_{35}H_{44}O_{14}$  (688.73). Colorless needles, mp 205~208°C,  $[\alpha]_D^{25} = +7.0^\circ$  ( $c = 0.8$ ,  $CHCl_3$ ). Source: YIN DU SHAN DAO LIAN YE *Sandoricum koetjape* [Syn. *Sandoricum indicum*]. Ref: 2585, 3494.

**19243 Sandrapin D**

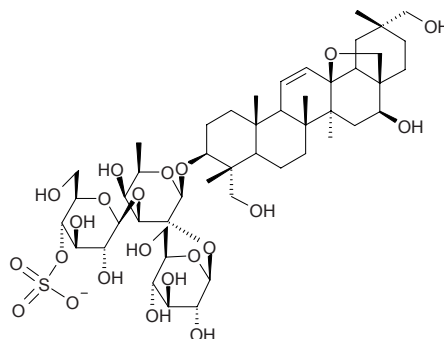
$C_{36}H_{44}O_{14}$  (700.74). Colorless needles, mp 209~211°C,  $[\alpha]_D = +12.5^\circ$  ( $c = 0.7$ , MeOH). Source: YIN DU SHAN DAO LIAN YE *Sandoricum koetjape* [Syn. *Sandoricum indicum*]. Ref: 2585.

**19244 Sandrapin E**

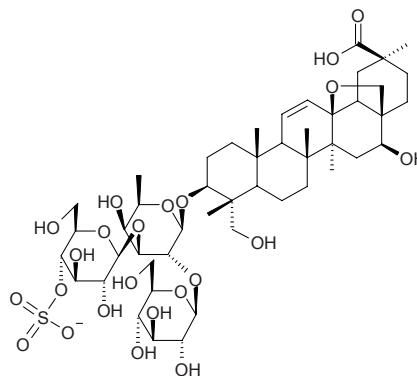
$C_{35}H_{42}O_{14}$  (686.72). Colorless needles, mp 209~210°C,  $[\alpha]_D = +11.5^\circ$  ( $c = 0.4$ , MeOH). Source: YIN DU SHAN DAO LIAN YE *Sandoricum koetjape* [Syn. *Sandoricum indicum*]. Ref: 2585.

**19245 Sandrosaponin II**

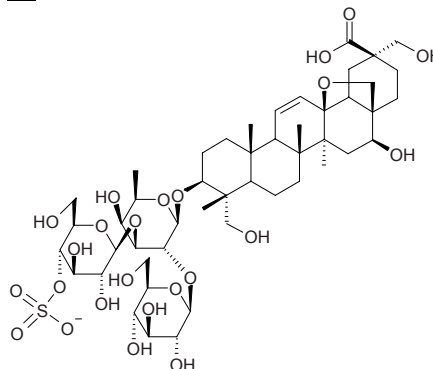
13,28-Epoxy-3 $\beta$ ,16 $\beta$ ,23,29-tetrahydroxyolean-11-en-3- $\beta$ -yl  $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)-[4-O-sulfo- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)] $\beta$ -D-fucopyranoside  $C_{48}H_{77}O_{22}S^-$  (1038.20). Amorphous powder,  $[\alpha]_D = +47.8^\circ$  ( $c = 0.2$ , MeOH). Source: JIAN YING CHAI HU *Bupleurum rigidum* (aerial parts). Ref: 3985.

**19246 Sandrosaponin III**

13,28-Epoxy-3 $\beta$ ,16 $\beta$ ,23-trihydroxyolean-11-en-3- $\beta$ -yl-30-oic acid  $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)-[4-O-sulfo- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)] $\beta$ -D-fucopyranoside  $C_{48}H_{75}O_{23}S^-$  (1052.18). Amorphous powder,  $[\alpha]_D = +53.5^\circ$  ( $c = 0.18$ , MeOH). Source: JIAN YING CHAI HU *Bupleurum rigidum* (aerial parts). Ref: 3985.

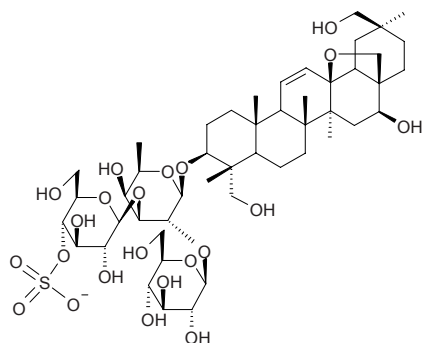
**19247 Sandrosaponin IV**

13,28-Epoxy-3 $\beta$ ,16 $\beta$ ,23,29-tetrahydroxyolean-11-en-3- $\beta$ -yl 30-oic acid  $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)-[4-O-sulfo- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -D-fucopyranoside  $C_{48}H_{75}O_{24}S^-$  (1068.18). Amorphous powder,  $[\alpha]_D = +48.5^\circ$  ( $c = 0.1$ , MeOH). Source: JIAN YING CHAI HU *Bupleurum rigidum* (aerial parts). Ref: 3985.

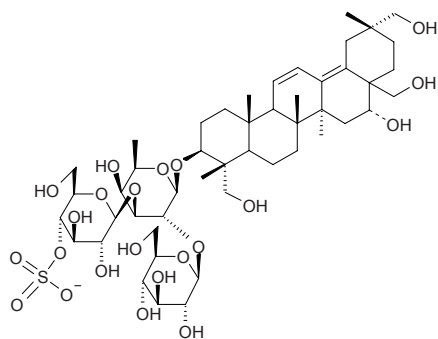


**19248 Sandrosaponin V**

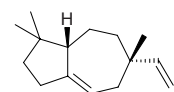
13,28-Epoxy-3 $\beta$ ,16 $\beta$ ,23,30-tetrahydroxyolean-11-en-3 $\beta$ -yl  $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)-[4-O-sulfo- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -D-fucopyranoside  
 $C_{48}H_{77}O_{22}S^-$  (1038.20). Amorphous powder,  $[\alpha]_D^{25} = +30.6^\circ$  ( $c = 0.07$ , MeOH).  
 Source: JIAN YING CHAI HU *Bupleurum rigidum* (aerial parts). Ref: 3985.

**19249 Sandrosaponin VI**

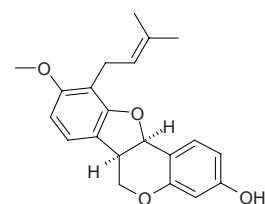
3 $\beta$ ,16 $\alpha$ ,23,28,29-Pentahydroxy-11,13(18)-oleanedien-3 $\beta$ -yl  $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)-[4-O-sulfo- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -D-fucopyranoside  
 $C_{48}H_{77}O_{22}S^-$  (1038.20). Amorphous powder,  $[\alpha]_D^{25} = +17.5^\circ$  ( $c = 0.14$ , MeOH).  
 Source: JIAN YING CHAI HU *Bupleurum rigidum* (aerial parts). Ref: 3985.

**19250 (+)-Sandvicene**

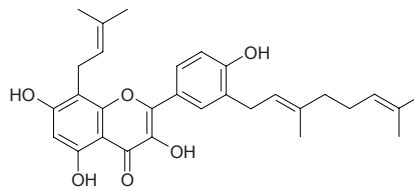
$C_{15}H_{24}$  (204.36). Source: YE TAI *Trocholejeunea sandvicensis*. Ref: 735.

**19251 Sandwicensin**

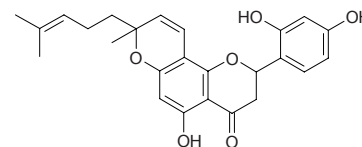
[74515-46-1]  $C_{21}H_{22}O_4$  (338.41). Source: HUI CI TONG *Erythrina glauca*.  
 Ref: 2268.

**19252 Sanggenol B**

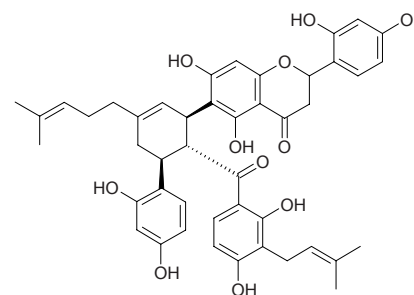
$C_{30}H_{34}O_6$  (490.60). Source: HUA SANG *Morus cathayana*. Ref: 2513.

**19253 Sanggenol L**

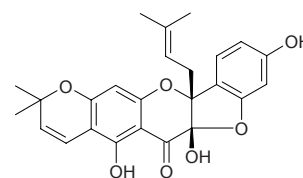
$C_{25}H_{26}O_6$  (422.48). A diastereomeric mixture: pale yellow amorphous solid,  
 $[\alpha]_D^{22} = -18^\circ$  ( $c = 0.1$ , MeOH). Source: MENG SANG *Morus mongolica*  
 (root cortex: yield = 0.00018%semi-dw). Ref: 3034.

**19254 Sanggenol M**

$C_{45}H_{46}O_{11}$  (762.86). A diastereomeric mixture: pale yellow amorphous solid,  
 $[\alpha]_D^{22} = -126^\circ$  ( $c = 0.1$ , MeCN). Pharm: Cytotoxic (racemic mixture, HSC-2,  
 $CC_{50} = 13\mu\text{mol/L}$ ,  $10\mu\text{g/mL}$ ; HSG,  $CC_{50} = 13\mu\text{mol/L}$ ,  $10\mu\text{g/mL}$ ; HGF,  $CC_{50} =$   
 $32\mu\text{mol/L}$ ,  $24\mu\text{g/mL}$ )<sup>[3034]</sup>. Source: MENG SANG *Morus mongolica* (root  
 cortex: yield = 0.0014%semi-dw). Ref: 3034.

**19255 Sanggenon A**

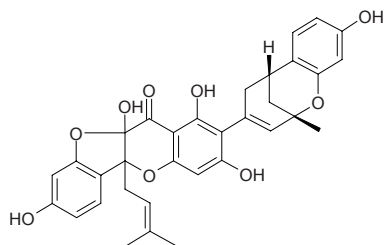
$C_{25}H_{24}O_7$  (436.47). Pharm: Protein kinase C inhibitor (inhibits protein kinase  
 C of teleocidin, a promotor of cancer, with dose-dependent relationship)<sup>[2513]</sup>;  
 ornithine decarboxylase inhibitor (inhibits reducing activity of ornithine  
 decarboxylase, ODC, a promotor of cancer)<sup>[2513]</sup>; cytotoxic (HSC-2,  $CC_{50} =$   
 $53\mu\text{mol/L}$ ,  $23\mu\text{g/mL}$ ; HSG,  $CC_{50} = 46\mu\text{mol/L}$ ,  $20\mu\text{g/mL}$ ; HGF,  $CC_{50} =$   
 $110\mu\text{mol/L}$ ,  $49\mu\text{g/mL}$ )<sup>[3034]</sup>. Source: HUA SANG *Morus cathayana* (root  
 cortex.), SANG BAI PI *Morus alba*. Ref: 660, 1521, 2513, 3034.



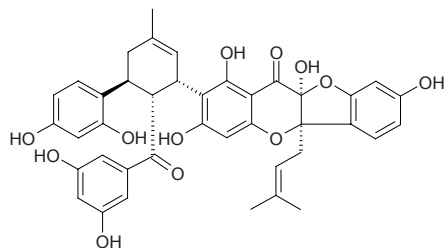
**19256 Sanggenon B**

$C_{33}H_{30}O_9$  (570.60). **Pharm:** Cytotoxic (HSC-2,  $CC_{50} = 39\mu\text{mol/L}$ ,  $22\mu\text{g/mL}$ ; HSG,  $CC_{50} = 47\mu\text{mol/L}$ ,  $27\mu\text{g/mL}$ ; HGF,  $CC_{50} = 98\mu\text{mol/L}$ ,  $56\mu\text{g/mL}$ )<sup>[3034]</sup>.

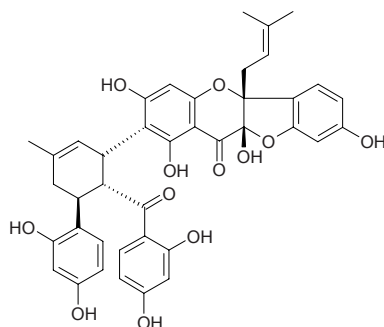
**Source:** HUA SANG *Morus cathayana* (root cortex), SANG BAI PI *Morus alba*. **Ref:** 660, 1521, 3034.

**19257 Sanggenon C**

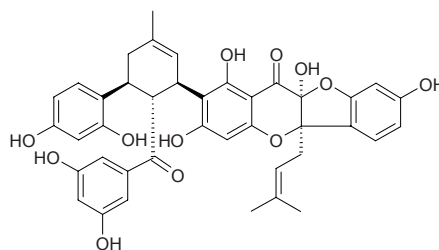
$C_{40}H_{36}O_{12}$  (708.73). **Pharm:** Antimicrobial (*Staphylococcus aureus*, *Bacillus subtilis*, *Trichophyton mentagrophytes*, *Pyricularia oryzae*); antihypertensive; cytotoxic (HSC-2,  $CC_{50} = 18\mu\text{mol/L}$ ,  $13\mu\text{g/mL}$ ; HSG,  $CC_{50} = 23\mu\text{mol/L}$ ,  $16\mu\text{g/mL}$ ; HGF,  $CC_{50} = 42\mu\text{mol/L}$ ,  $30\mu\text{g/mL}$ )<sup>[3034]</sup>. **Source:** HUA SANG *Morus cathayana* (root cortex), SANG BAI PI *Morus alba* (root cortex: content scope of 10 origins = 0.020%–0.55%, mean content = 0.130%)<sup>[5508]</sup>. **Ref:** 658, 3034, 5508.

**19258 Sanggenon C<sub>1</sub>**

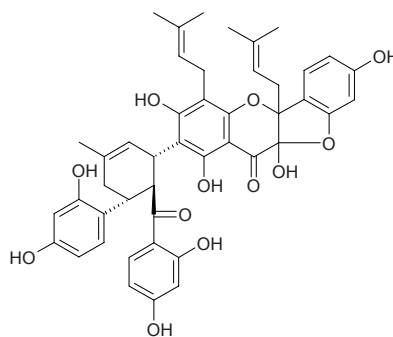
$C_{40}H_{36}O_{12}$  (708.73). **Source:** HUA SANG *Morus cathayana* (root cortex). **Ref:** 5169.

**19259 Sanggenon D**

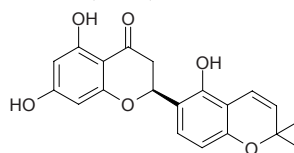
[81422-93-7]  $C_{40}H_{36}O_{12}$  (708.73). Amorphous powder, mp 175–185°C,  $[\alpha]_D^{26} = -145^\circ$  ( $c = 0.17$ , methanol). **Pharm:** Antimicrobial (*Staphylococcus aureus*, *Bacillus subtilis*, *Trichophyton mentagrophytes* and *Pyricularia oryzae*); inhibits teleocidin; protein kinase C inhibitor; antihypertensive (rat, iv, 0.5–2.0mg/kg); inhibits metabolism of arachidonic acid (in rat platelet aggregation, inhibits formation of HHT  $IC_{50} = 43.3\mu\text{mol/L}$  and thromboxane  $B_2$ ,  $IC_{50} = 48.3\mu\text{mol/L}$ ); cAMP phosphodiesterase inhibitor ( $IC_{50} = 26\mu\text{mol/L}$ ); anti-inflammatory (NO production inhibitor)<sup>[4415]</sup>; cytotoxic (HSC-2,  $CC_{50} = 44\mu\text{mol/L}$ ,  $31\mu\text{g/mL}$ ; HSG,  $CC_{50} = 64\mu\text{mol/L}$ ,  $45\mu\text{g/mL}$ ; HGF,  $CC_{50} = 140\mu\text{mol/L}$ ,  $100\mu\text{g/mL}$ )<sup>[3034]</sup>. **Source:** HUA SANG *Morus cathayana* (root cortex), SANG BAI PI *Morus alba*. **Ref:** 658, 900, 3034, 4415.

**19260 Sanggenon E**

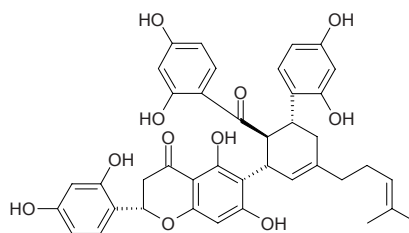
$C_{45}H_{44}O_{12}$  (776.85). **Source:** SANG BAI PI *Morus alba*. **Ref:** 660.

**19261 Sanggenon F**

$C_{20}H_{18}O_6$  (354.36). **Source:** SANG BAI PI *Morus alba*. **Ref:** 660.

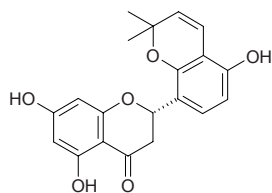
**19262 Sanggenon G**

Sanggenone G [85698-31-3]  $C_{40}H_{38}O_{11}$  (694.74). Amorphous powder,  $[\alpha]_D^{16} = -277^\circ$  ( $c = 0.93$ , MeOH). **Source:** MENG SANG *Morus mongolica* (root cortex: yield = 0.0018% semi-dw), SANG BAI PI *Morus alba*. **Ref:** 660, 2513, 3034.

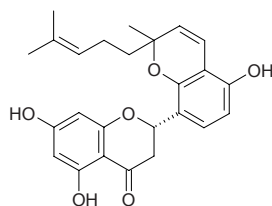


**19263 Sanggenon H**

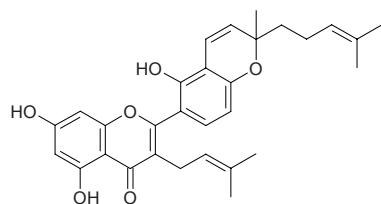
$C_{20}H_{18}O_6$  (354.36). Source: SANG BAI PI *Morus alba*. Ref: 660.

**19264 Sanggenon I**

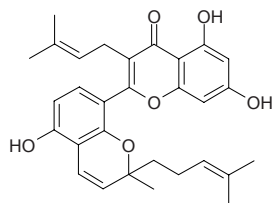
$C_{25}H_{26}O_6$  (422.48). Source: SANG BAI PI *Morus alba*. Ref: 660.

**19265 Sanggenon J**

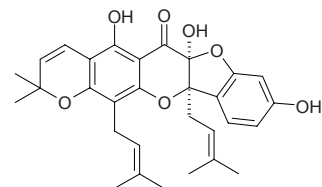
$C_{30}H_{32}O_6$  (488.59). Source: SANG BAI PI *Morus alba*, *Morus* sp. Ref: 660, 2513.

**19266 Sanggenon K**

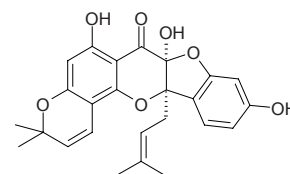
$C_{30}H_{32}O_6$  (488.59). Source: SANG BAI PI *Morus alba*. Ref: 660.

**19267 Sanggenon L**

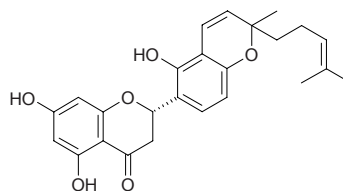
$C_{30}H_{32}O_7$  (504.59). Source: SANG BAI PI *Morus alba*. Ref: 660.

**19268 Sanggenon M**

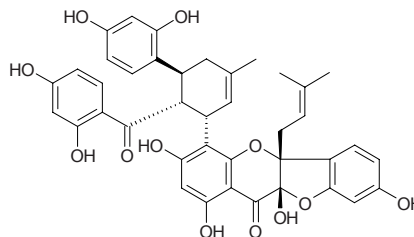
$C_{25}H_{24}O_7$  (436.47). Pharm: Cytotoxic (HSC-2,  $CC_{50}$  = 48  $\mu$ mol/L, 21  $\mu$ g/mL; HSG,  $CC_{50}$  = 53  $\mu$ mol/L, 23  $\mu$ g/mL; HGF,  $CC_{50}$  = 110  $\mu$ mol/L, 49  $\mu$ g/mL)<sup>[3034]</sup>. Source: HUA SANG *Morus cathayana* (root cortex), SANG BAI PI *Morus alba*. Ref: 660, 1521, 3034.

**19269 Sanggenon N**

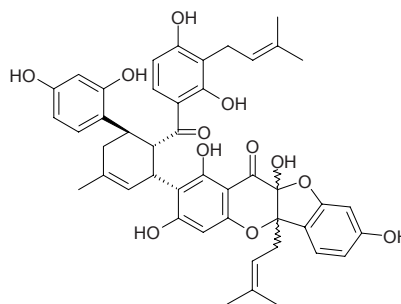
$C_{25}H_{26}O_6$  (422.48). Source: SANG BAI PI *Morus alba*. Ref: 660.

**19270 Sanggenon O**

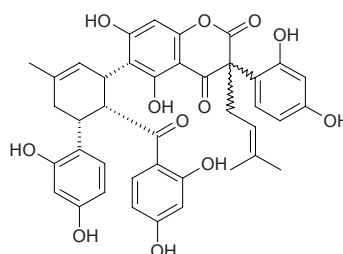
$C_{40}H_{36}O_{12}$  (708.73). Source: HUA SANG *Morus cathayana* (root cortex), SANG BAI PI *Morus alba*. Ref: 660, 5169.

**19271 Sanggenon P**

$C_{45}H_{44}O_{12}$  (776.85). Source: SANG BAI PI *Morus alba*. Ref: 660.

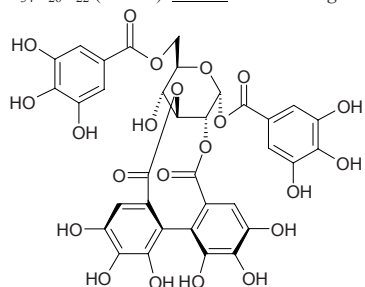
**19272 Sanggenon Q**

$C_{40}H_{36}O_{12}$  (708.73). Source: MENG SANG *Morus mongolica*. Ref: 2513.

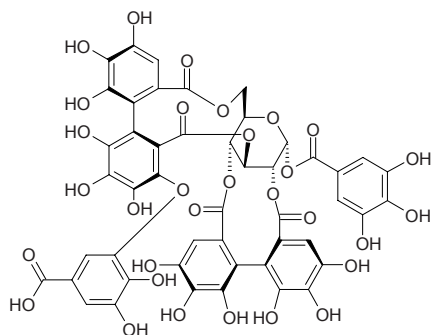


**19273 Sanguiin H<sub>1</sub>**

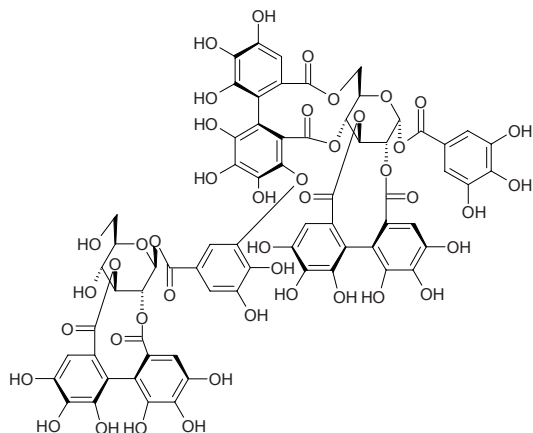
$C_{34}H_{26}O_{22}$  (786.57). Source: DI YU *Sanguisorba officinalis*. Ref: 660.

**19274 Sanguiin H<sub>2</sub>**

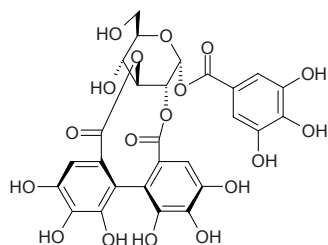
$C_{48}H_{32}O_{31}$  (1104.77). Source: DI YU *Sanguisorba officinalis*. Ref: 660.

**19275 Sanguiin H<sub>3</sub>**

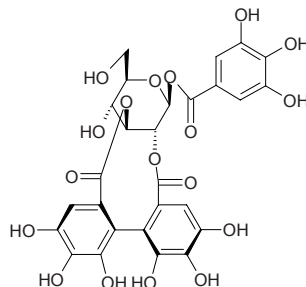
$C_{68}H_{48}O_{44}$  (1569.11). Source: DI YU *Sanguisorba officinalis*. Ref: 660.

**19276 Sanguiin H<sub>4</sub>**

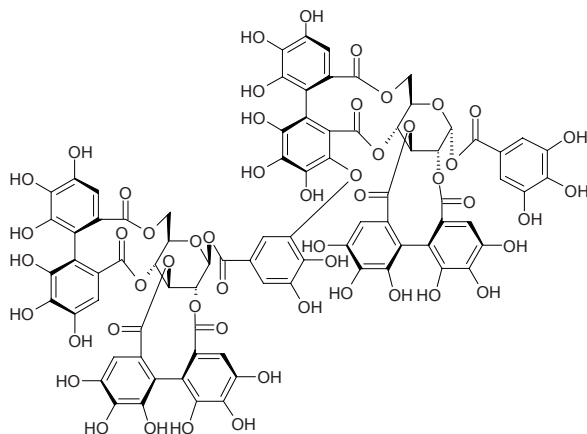
$C_{27}H_{22}O_{18}$  (634.47). Source: DI YU *Sanguisorba officinalis*, JIN YING ZI *Rosa laevigata*. Ref: 660.

**19277 Sanguiin H<sub>5</sub>**

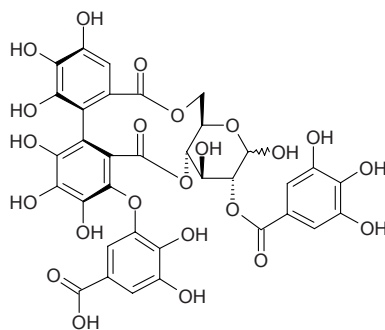
Isostrictinin  $C_{27}H_{22}O_{18}$  (634.47). Pharm: Antioxidant (SOD-like activity,  $EC_{50} = 47.3\mu\text{mol/L}$ , control Gallic acid,  $EC_{50} = 31.7\mu\text{mol/L}$ , *L*-Ascorbic acid,  $EC_{50} = 34.6\mu\text{mol/L}$ )<sup>[3408]</sup>; antioxidant (DPPH free radical scavenger,  $EC_{50} = 1.73\mu\text{mol/L}$ , control Gallic acid,  $EC_{50} = 5.88\mu\text{mol/L}$ , *L*-Ascorbic acid,  $EC_{50} = 6.25\mu\text{mol/L}$ )<sup>[3408]</sup>. Source: BAN LI *Castanea mollissima* (leaf), DI YU *Sanguisorba officinalis*, HU TAO REN *Juglans regia*, MEI GUI HUA *Rosa rugosa*. Ref: 660, 3408.

**19278 Sanguiin H<sub>6</sub>**

$C_{82}H_{54}O_{52}$  (1871.31). Pharm: Cytotoxic (HeLa,  $ED_{50} = 12\text{mmol/L}$ ); DNA topoisomerase inhibitor. Source: DI YU *Sanguisorba officinalis*. Ref: 660.

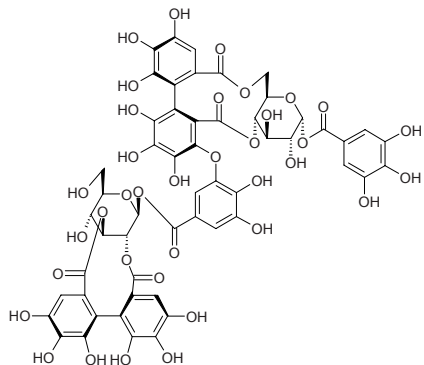
**19279 Sanguiin H<sub>7</sub>**

[[98917-86-3]]  $C_{34}H_{26}O_{23}$  (802.57). Source: DI YU *Sanguisorba officinalis*. Ref: 660.

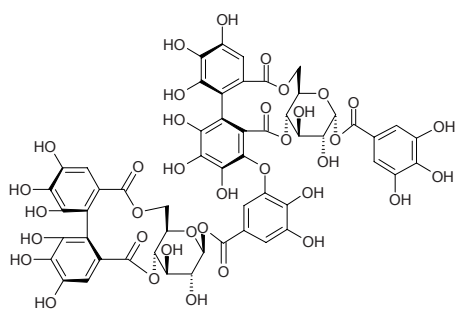


**19280 Sanguiin H<sub>8</sub>**

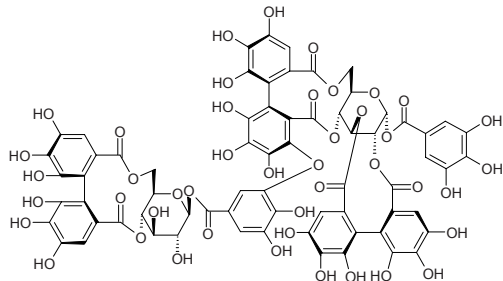
$C_{54}H_{42}O_{36}$  (1266.92). Source: DI YU *Sanguisorba officinalis*. Ref: 660.

**19281 Sanguiin H<sub>9</sub>**

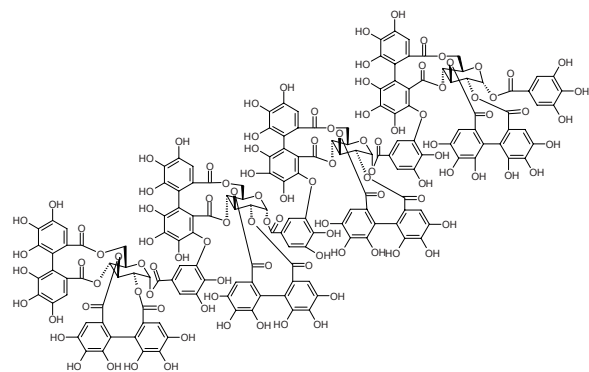
$C_{54}H_{42}O_{36}$  (1266.92). Source: DI YU *Sanguisorba officinalis*. Ref: 660.

**19282 Sanguiin H<sub>10</sub>**

$C_{68}H_{48}O_{44}$  (1569.11). Source: DI YU *Sanguisorba officinalis*. Ref: 660.

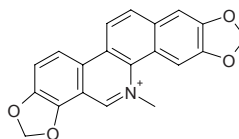
**19283 Sanguiin H<sub>11</sub>**

$C_{164}H_{106}O_{104}$  (3740.61). Source: DI YU *Sanguisorba officinalis*. Ref: 660.

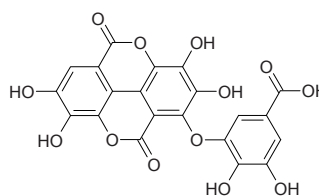
**19284 Sanguinarine**

$\psi$ -Cheierythrine [2447-54-3.]  $C_{20}H_{14}NO_4$  (332.34). mp 242–243°C (dec).

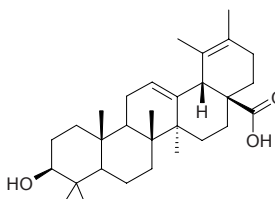
Pharm: PKA inhibitor (catalytic subunit of rat liver protein kinase A,  $IC_{50} = 6\mu\text{mol/L}$ )<sup>[5369]</sup>; PKC inhibitor ( $IC_{50} > 200\mu\text{mol/L}$ )<sup>[5369]</sup>; Cytotoxic (hmn keratinocytes, inhibits growth of cells,  $IC_{50} = 0.2\mu\text{mol/L}$ )<sup>[5369]</sup>; Cytotoxic (decreases concentration-dependently viability of hmn epidermoid carcinoma A431 cells at lower concentrations than of normal hmn epidermal keratinocytes, results in an induction of apoptosis but did not lead to formation of a DNA in normal keratinocytes)<sup>[5369]</sup>; Cytotoxic (interacts with calf thymus DNA and alters its secondary structure)<sup>[5369]</sup>; anti-HIV inactive (H9 lymphocytes, control AZT,  $IC_{50} = 500\mu\text{g/mL}$ ,  $EC_{50} = 0.0317\mu\text{g/mL}$ ,  $TI = 15800$ )<sup>[5364]</sup>. Source: BAI QU CAI *Chelidonium majus*, BO LUO HUI *Macleaya cordata* (whole herb: content = 5.69%<sup>[5508]</sup>), HE BAO MU DAN GEN *Dicentra spectabilis*, HE QING HUA *Hylomecon japonica*, JI YING SU *Argemone mexicana*, JU HUA HUANG LIAN *Corydalis pallida*, LI CHUN HUA *Papaver commutatum* [Syn. *Papaver rhoeas*], MEI ZHOU XUE GEN CAO *Sanguinaria canadensis*, XI GUO JIAO HUI XIANG *Hypecoum leptocarpum*, YA PIAN *Papaver somniferum*, YAO YONG QIU GUO ZI JIN *Fumaria officinalis*, YI YANG HE BAO MU DAN *Dicentra peregrina*, YING SU *Papaver somniferum*, YING SU KE *Papaver somniferum*, ZI HUA YU DENG CAO *Corydalis incisa*. Ref: 4, 6, 658, 5364, 5369, 5508.

**19285 Sanguisobic acid dilactone**

$C_{21}H_{10}O_{13}$  (470.31). Source: DI YU *Sanguisorba officinalis*. Ref: 660.

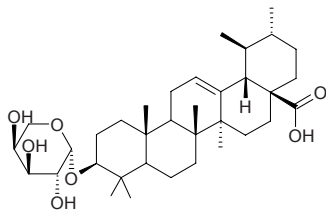
**19286 Sanguisorbigenin**

$C_{30}H_{46}O_3$  (454.70). Source: DI YU *Sanguisorba officinalis*. Ref: 660.

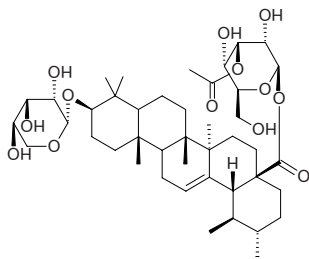


**19287 Sanguisorbin B**

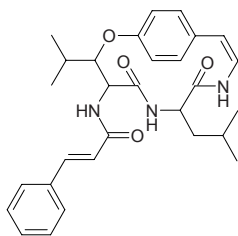
$C_{35}H_{56}O_7$  (588.83). Source: DI YU *Sanguisorba officinalis*. Ref: 660.

**19288 Sanguisorbin E**

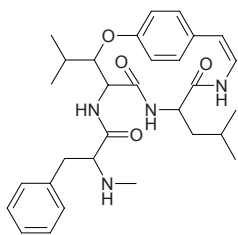
$C_{43}H_{68}O_{13}$  (793.01). Source: DI YU *Sanguisorba officinalis*. Ref: 660.

**19289 Sanjoinine**

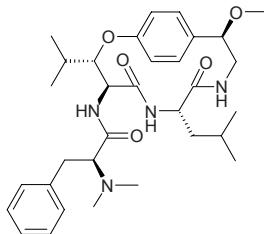
$C_{29}H_{35}N_3O_4$  (489.62). Source: SUAN ZAO REN *Ziziphus jujuba* var. *spinosa*. Ref: 660.

**19290 Sanjoinine B**

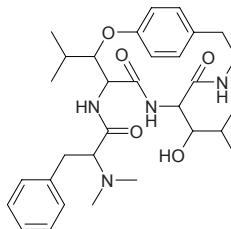
$C_{30}H_{40}N_4O_4$  (520.68). Source: SUAN ZAO REN *Ziziphus jujuba* var. *spinosa*. Ref: 660.

**19291 Sanjoinine D**

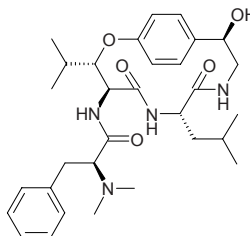
$C_{32}H_{46}N_4O_5$  (566.75). Source: SUAN ZAO REN *Ziziphus jujuba* var. *spinosa*. Ref: 660.

**19292 Sanjoinine F**

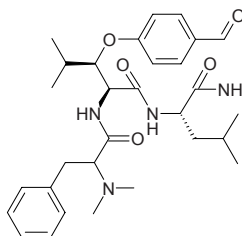
$C_{31}H_{44}N_4O_5$  (552.72). Source: SUAN ZAO REN *Ziziphus jujuba* var. *spinosa*. Ref: 660.

**19293 Sanjoinine G<sub>1</sub>**

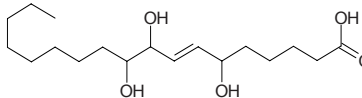
$C_{31}H_{44}N_4O_5$  (552.72). Source: SUAN ZAO REN *Ziziphus jujuba* var. *spinosa*. Ref: 660.

**19294 Sanjoinine G<sub>2</sub>**

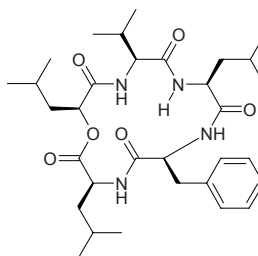
$C_{30}H_{42}N_4O_5$  (538.69). Source: SUAN ZAO REN *Ziziphus jujuba* var. *spinosa*. Ref: 660.

**19295 Sanleng acid**

$C_{18}H_{34}O_5$  (330.47). White amorphous powder, mp 116~118°C, soluble in ethanol, ethyl acetate. Source: SAN LENG *Sparganium stoloniferum*. Ref: 480.

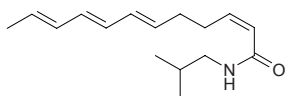
**19296 Sansalvamide**

$C_{32}H_{50}N_4O_6$  (586.78). Pharm: Cytotoxic (in vitro, NCI hm tumor cell line screen, mean GI<sub>50</sub> = 3.6 μmol/L). Source: *Fusarium* sp. Ref: 5087.

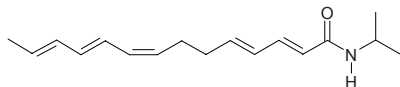


**19297 Sanshool**

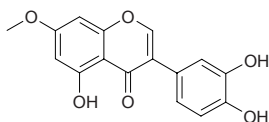
$C_{16}H_{25}NO$  (247.38). mp 69°C. Source: YE HUA JIAO YE *Zanthoxylum simulans*. Ref: 6.

**19298  $\gamma$ -Sanshool**

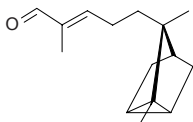
$C_{17}H_{25}NO$  (259.39). Pharm: Platelet aggregation inhibitor. Source: QUAN YUAN YE HUA JIAO *Zanthoxylum integrifolium*. Ref: 2176.

**19299 Santal**

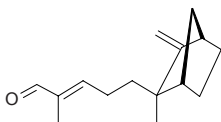
$C_{16}H_{12}O_6$  (300.27). Pharm: Antioxidant (DPPH scavenger, ScRt = 86.84%, control BHT, ScRt = 71.5%); antibacterial (*Staphylococcus aureus* ATCC 25923, MIC = 128 $\mu$ g/mL, Vancomycin, MIC = 0.5 $\mu$ g/mL; MRSA SK1, MIC = 2 $\mu$ g/mL, Vancomycin, MIC = 1.0 $\mu$ g/mL); increases blood pressure (anesthetized rats, increases in mean arterial blood pressure, 4.0mg/kg, 21.7mmHg). Source: PAN YUAN YU TENG *Derris scandens* (stem). Ref: 3810.

**19300  $\alpha$ -Santalal**

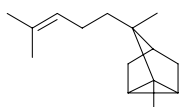
$C_{15}H_{22}O$  (218.34). Source: TAN XIANG *Santalum album*. Ref: 660.

**19301  $\beta$ -Santalal**

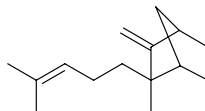
$C_{15}H_{22}O$  (218.34). Source: TAN XIANG *Santalum album*. Ref: 660.

**19302  $\alpha$ -Santalene**

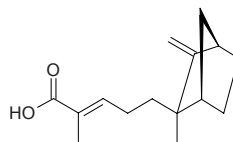
$C_{15}H_{24}$  (204.36). bp 252°C/753mmHg. Source: DONG FENG JU GEN *Atalantia buxifolia* [Syn. *Severinia buxifolia*] (root cortex)<sup>[3075]</sup>, FENG DOU CAI *Petasites japonicus*, HUA DONG LAN CI TOU *Echinops grysii*, TAN XIANG *Santalum album*, ZHANG MU *Cinnamomum camphora*. Ref: 6, 660, 3075.

**19303  $\beta$ -Santalene**

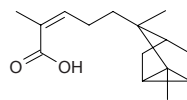
$\beta$ -Santalal(3,15),10-diene  $C_{15}H_{24}$  (204.36). bp 125~127°C/9mmHg, mp 263~264°C. Pharm: Smell of cedar. Source: HUA DONG LAN CI TOU *Echinops grysii*, WU WEI ZI *Schisandra chinensis*, TAN XIANG *Santalum album*, ZHANG MU *Cinnamomum camphora*. Ref: 2, 6, 658, 660.

**19304  $\beta$ -Santallic acid**

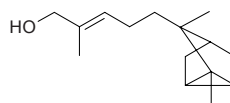
$C_{15}H_{22}O_2$  (234.34). Source: TAN XIANG *Santalum album*. Ref: 660.

**19305 Santallic acid**

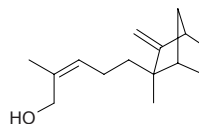
$C_{15}H_{22}O_2$  (234.34). mp ( $\beta$ ) 202°C, ( $\gamma$ ) 189°C, bp ( $\alpha$ ) 193°C/9mmHg. Source: TAN XIANG *Santalum album*. Ref: 6.

**19306  $\alpha$ -Santalol**

$C_{15}H_{24}O$  (220.36). bp 166~167°C/14mmHg. Pharm: Antibacterial. Source: HOU PO *Magnolia officinalis*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], WU WEI ZI *Schisandra chinensis*, TAN XIANG *Santalum album* (1.08%~2.37%). Ref: 6, 658, 5501.

**19307  $\beta$ -Santalol**

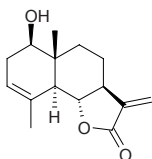
$C_{15}H_{24}O$  (220.36). bp 177~178°C/17mmHg. Pharm: Antibacterial. Source: TAN XIANG *Santalum album* (heartwood: content scope = 0.75%~1.40%<sup>[5501]</sup>), SHENG JIANG *Zingiber officinale*. Ref: 6, 658, 5501.





**19308 Santamarin**

Santamarine C<sub>15</sub>H<sub>20</sub>O<sub>3</sub> (248.33). **Pharm:** Anti-inflammatory (modulator of cytokine network: inhibits TNF $\alpha$  production in LPS-activated RAW264.7 cells, IC<sub>50</sub> = 105  $\mu$ mol/L)<sup>[4416]</sup>; antineoplastic; cytotoxic (*in vitro*, HepG<sub>2</sub>, CD<sub>50</sub> = 7.5  $\mu$ g/mL; HeLa, CD<sub>50</sub> = 10  $\mu$ g/mL; OVCAR-3, CD<sub>50</sub> = 10  $\mu$ g/mL; control Cisplatin, HepG<sub>2</sub>, CD<sub>50</sub> = 2.8  $\mu$ g/mL; HeLa, CD<sub>50</sub> = 5.2  $\mu$ g/mL; OVCAR-3, CD<sub>50</sub> = 3  $\mu$ g/mL; without significant antibacterial effect)<sup>[4720]</sup>. **Source:** MI HUA TUN CAO *Ambrosia confertiflora*, MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*] (root: yield = 0.00056%dw)<sup>[4720]</sup>, WU XIN SHI *Michelia compressa* var. *formosana*, *Artemisia* sp., *Tanacetum* sp., *Chrysanthemum* sp. **Ref:** 658, 4416, 4720.

**19309 Santene**

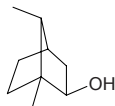
C<sub>9</sub>H<sub>14</sub> (122.21). bp 140–141°C. **Source:** TAN XIANG *Santalum album*, YU XIANG CAO *Mentha rotundifolia*. **Ref:** 6.

**19310 Santenone**

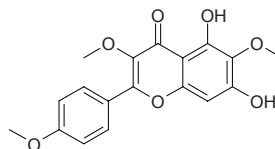
C<sub>9</sub>H<sub>14</sub>O (138.21). mp (–) 58–61°C, (±) 55–57°C, bp (–) 193–195°C, (±) 197°C. **Source:** TAN XIANG *Santalum album*. **Ref:** 6.

**19311 Santenone alcohol**

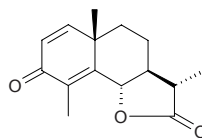
C<sub>9</sub>H<sub>16</sub>O (140.23). mp 86°C; 58–62°C. **Source:** TAN XIANG *Santalum album*. **Ref:** 6.

**19312 Santin**

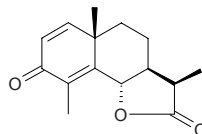
Betuletol 3-methyl ether; Centauridin; Tanetin; 6-Hydroxykaempferol 3,6,4'-trimethylether; 5,7-Dihydroxy-3,6,4'-trimethoxyflavone [27782-63-4] C<sub>18</sub>H<sub>16</sub>O<sub>7</sub> (344.32). mp 159–161°C. **Pharm:** Cyclo-oxygenase inhibitor (relative inhibition of thromboxane B<sub>2</sub>, IC<sub>50</sub> = 27  $\mu$ mol/L)<sup>[2292]</sup>; 5-lipoxygenase inhibitor (relative inhibition of leukotriene B<sub>4</sub>, IC<sub>50</sub> = 58  $\mu$ mol/L)<sup>[2292]</sup>; NO production inhibitor (LPS-induced, concentration-dependent manner, IC<sub>50</sub> = 7.8  $\mu$ mol/L or 6.2  $\mu$ mol/L)<sup>[4918]</sup>; PGE<sub>2</sub> production inhibitor (LPS-induced, concentration-dependent manner, IC<sub>50</sub> = 3.9  $\mu$ mol/L or 4.3  $\mu$ mol/L)<sup>[4918]</sup>; antitubercular (*Mycobacterium tuberculosis*, MIC = 46.2  $\mu$ g/mL, cytotoxic, Vero cells, IC<sub>50</sub> = 28.7  $\mu$ g/mL, SI (IC<sub>50</sub>/MIC) = 0.62, positive control Rifampin, MIC = 0.03  $\mu$ g/mL, IC<sub>50</sub> = 98.3  $\mu$ g/mL, SI = 3300)<sup>[4986]</sup>. **Source:** CHI YANG *Alnus japonica*, CHU AI JU *Tanacetum parthenium*<sup>[2292]</sup>, JU HAO *Tanacetum vulgare*<sup>[2292]</sup>, SHU HUA JIE CAO *Valeriana laxiflora* (aerial parts and root)<sup>[4986]</sup>, XIAO YE JU HAO *Tanacetum microphyllum* (aerial parts), *Alnus* spp., *Betula* spp., *Achillea* spp., *Dodonaea* spp. **Ref:** 660, 1512, 2292, 4918, 4986.

**19313  $\alpha$ -Santonin**

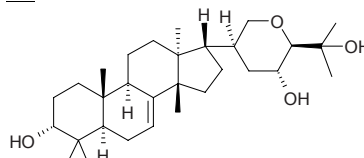
C<sub>15</sub>H<sub>18</sub>O<sub>3</sub> (246.31). mp (–) 174–176°C. **Pharm:** Anthelmintic; antineoplastic; cytotoxic; insect antifeedant; plant growth regulator. **Source:** HUI HAO *Seriphidium cinum* [Syn. *Artemisia cina*], BIN HAO *Artemisia maritima*, *Artemisia* sp. **Ref:** 6, 658.

**19314  $\beta$ -Santonin**

C<sub>15</sub>H<sub>18</sub>O<sub>3</sub> (246.31). mp (–) 216–218°C. **Pharm:** Anthelmintic but is highly toxic and is no longer used clinically. **Source:** DONG BEI HUI HAO *Seriphidium finitum* [Syn. *Artemisia finita*], HUANG HUA HAO *Artemisia annua*, MI HAO *Artemisia compacta*, XUE LING HAO *Artemisia schrenkiana*, YA LIE XING HAO *Artemisia sublessingiana*. **Ref:** 6, 658.

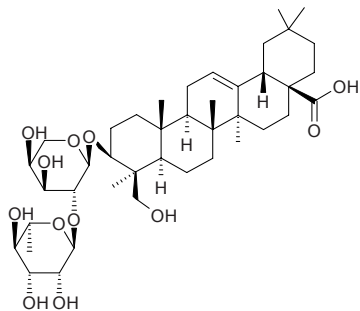
**19315 Sapelin A**

C<sub>30</sub>H<sub>50</sub>O<sub>4</sub> (474.73). **Pharm:** Cytotoxic. **Source:** *Entandrophragma cylindricum*. **Ref:** 658.

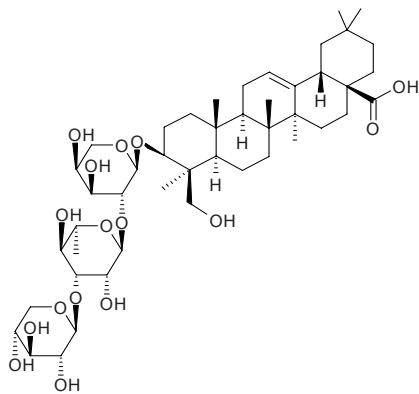


**19316 Sapindoside A**

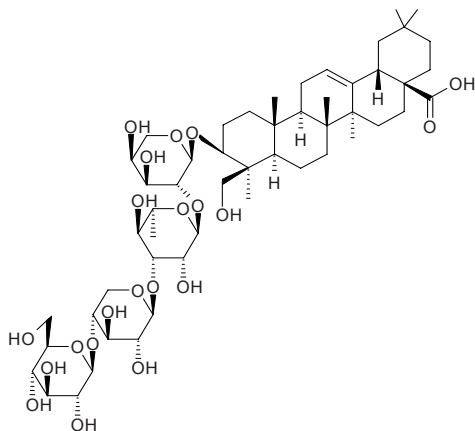
Akebiasaponin P<sub>D</sub> C<sub>41</sub>H<sub>66</sub>O<sub>12</sub> (750.98). mp 214~216°C. Pharm: Antineoplastic; antifungal; hemolytic; antihypercholesterolemic; antihypertensive (rbt, sc, 0.04mg/kg, blood pressure being reduced by 25%); molluscicide (*Biomphalaria glabrata*, EC = 8mg/L); LD<sub>50</sub> (mus, iv or ip) = 270mg/kg, (mus, sc) = 659mg/kg, (mus, orl) = 1625mg/kg. Source: CHAO XIAN BAI TOU WENG *Pulsatilla cernua*, LING XING CHANG CHUN TENG *Hedera rhombea*, MU TONG *Akebia quinata*, WU HUAN ZI PI *Sapindus mukorossi*, WU HUAN ZI YE *Sapindus mukorossi*, YANG CHANG CHUN TENG *Hedera helix*. Ref: 6, 658.

**19317 Sapindoside B**

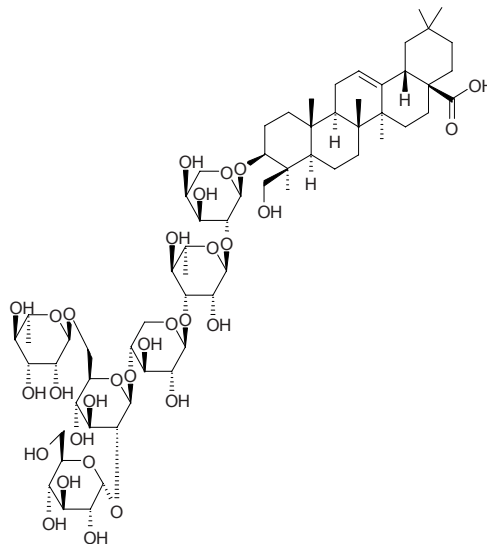
Akebiasaponin P<sub>G</sub> C<sub>46</sub>H<sub>74</sub>O<sub>16</sub> (883.09). mp 276~278°C. Source: HUANG HE MAO REN DONG *Lonicera fulvotomentosa*, WU HUAN ZI YE *Sapindus mukorossi*, WU HUAN ZI PI *Sapindus mukorossi*. Ref: 6, 660.

**19318 Sapindoside C**

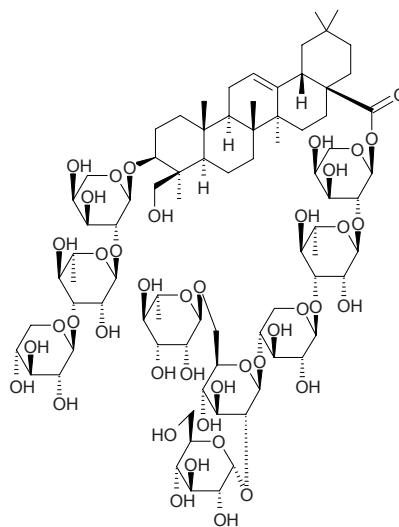
Prosapogenin CP<sub>8a</sub> C<sub>52</sub>H<sub>84</sub>O<sub>21</sub> (1045.24). mp 235°C. Source: WU HUAN ZI PI *Sapindus mukorossi*. Ref: 6.

**19319 Sapindoside D**

C<sub>64</sub>H<sub>104</sub>O<sub>30</sub> (1353.52). Source: WU HUAN ZI PI *Sapindus mukorossi*. Ref: 6.

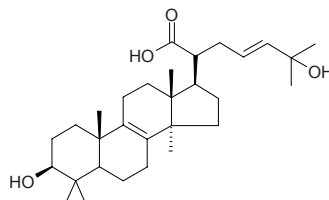
**19320 Sapindoside E**

C<sub>80</sub>H<sub>130</sub>O<sub>42</sub> (1763.90). Source: WU HUAN ZI PI *Sapindus mukorossi*. Ref: 6.

**19321 Saponaceic acid I**

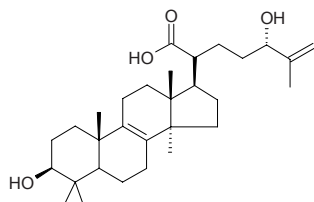
3β,25-Dihydroxylanosta-8,23E dien-21-oic acid C<sub>30</sub>H<sub>48</sub>O<sub>4</sub> (472.71).

Amorphous powder, [α]<sub>D</sub><sup>25</sup> = +10.0° (c = 0.2, MeOH). Source: ZAO WEI KOU MO *Tricholoma saponaceum*. Ref: 4252.

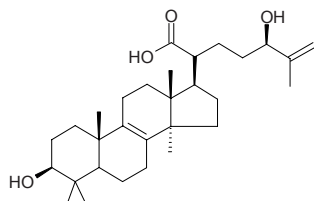


**19322 Saponaceoic acid II**

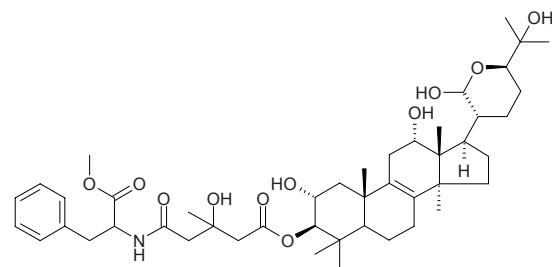
3,24-Dihydroxyylanosta-8,25-dien-21-oic acid C<sub>30</sub>H<sub>48</sub>O<sub>4</sub> (472.71). Amorphous powder,  $[\alpha]_D^{25} = +3.8^\circ$  ( $c = 0.2$ , MeOH). Source: ZAO WEI KOU MO *Tricholoma saponaceum*. Ref: 4252.

**19323 Saponaceoic acid III**

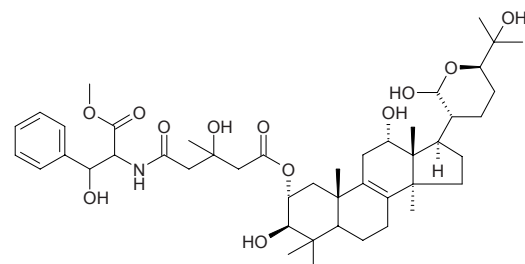
3 $\beta$ ,24R-Dihydroxyylanosta-8,25-dien-21-oic acid C<sub>30</sub>H<sub>48</sub>O<sub>4</sub> (472.71). Amorphous powder,  $[\alpha]_D^{25} = -5.0^\circ$  ( $c = 0.2$ , MeOH). Source: ZAO WEI KOU MO *Tricholoma saponaceum*. Ref: 4252.

**19324 Saponaceol A**

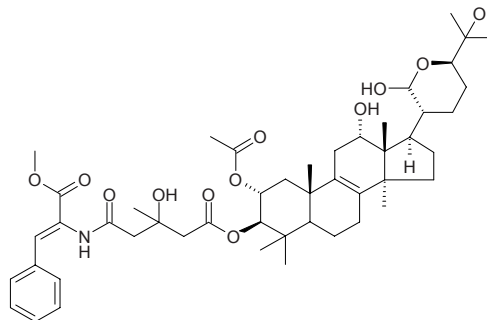
C<sub>46</sub>H<sub>69</sub>NO<sub>11</sub> (812.06). Amorphous powder,  $[\alpha]_D^{25} = -10.4^\circ$  ( $c = 0.6$ , MeOH). Pharm: Cytotoxic (HL-60 hmn leukemia cell, IC<sub>50</sub> = 8.9  $\mu$ mol/L). Source: ZAO WEI KOU MO *Tricholoma saponaceum*. Ref: 4059.

**19325 Saponaceol B**

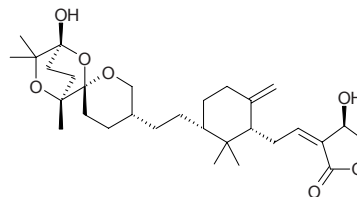
C<sub>46</sub>H<sub>69</sub>NO<sub>12</sub> (828.06). Amorphous powder,  $[\alpha]_D^{25} = -4.45^\circ$  ( $c = 0.4$ , MeOH). Source: ZAO WEI KOU MO *Tricholoma saponaceum*. Ref: 4059.

**19326 Saponaceol C**

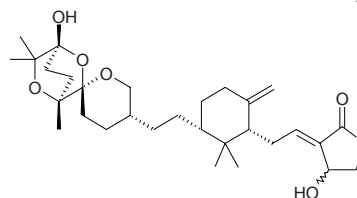
C<sub>48</sub>H<sub>69</sub>NO<sub>12</sub> (852.08). Amorphous powder,  $[\alpha]_D^{25} = -20.6^\circ$  ( $c = 0.5$ , MeOH). Source: ZAO WEI KOU MO *Tricholoma saponaceum*. Ref: 4059.

**19327 Saponaceolide A**

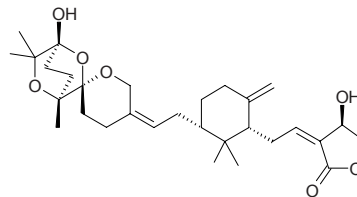
C<sub>30</sub>H<sub>46</sub>O<sub>7</sub> (518.70). Colorless needles, mp 147–150°C,  $[\alpha]_D^{25} = +73.4^\circ$  ( $c = 0.9$ , CHCl<sub>3</sub>). Source: ZAO WEI KOU MO *Tricholoma saponaceum*. Ref: 4252.

**19328 Saponaceolide E**

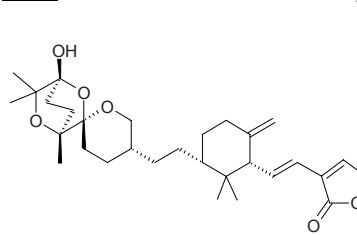
C<sub>30</sub>H<sub>46</sub>O<sub>7</sub> (518.70). Amorphous powder,  $[\alpha]_D^{25} = +15.4^\circ$  ( $c = 0.8$ , MeOH). Source: ZAO WEI KOU MO *Tricholoma saponaceum*. Ref: 4252.

**19329 Saponaceolide F**

C<sub>30</sub>H<sub>44</sub>O<sub>7</sub> (516.68). Amorphous powder,  $[\alpha]_D^{25} = +26.8^\circ$  ( $c = 0.3$ , MeOH). Source: ZAO WEI KOU MO *Tricholoma saponaceum*. Ref: 4252.

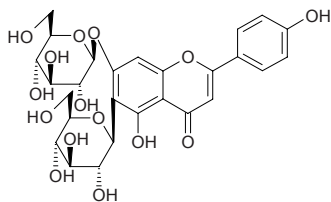
**19330 Saponaceolide G**

C<sub>30</sub>H<sub>44</sub>O<sub>6</sub> (500.68). Amorphous powder,  $[\alpha]_D^{25} = +27.7^\circ$  ( $c = 0.3$ , MeOH). Source: ZAO WEI KOU MO *Tricholoma saponaceum*. Ref: 4252.

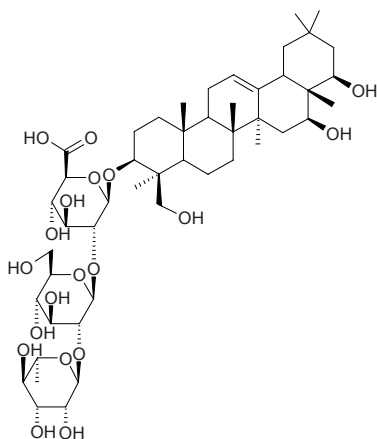


**19331 Saponarin**

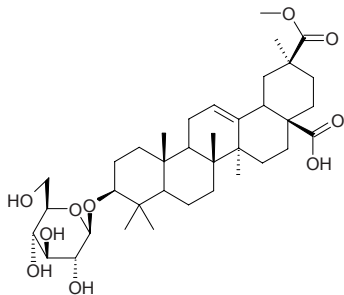
Isovitexin 7-*O*- $\beta$ -D-glucopyranoside [20310-89-8] C<sub>27</sub>H<sub>30</sub>O<sub>15</sub> (594.53). mp 231~232°C (dec). **Pharm:** Antihepatotoxin. **Source:** MU JIN HUA *Hibiscus syriacus*, SHUI MU CAO *Mnium cuspidatum*, FEI ZAO CAO *Saponaria officinalis* (in 1944, the compound was isolated from the plant)<sup>[5505]</sup>. **Ref:** 6, 1563, 5505.

**19332 Spartium junceum saponin**

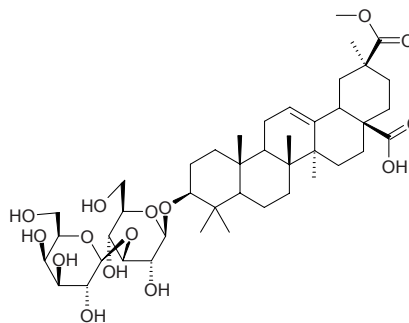
3-*O*-[ $\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 2)-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranosyl]-3 $\beta$ ,16 $\beta$ ,22 $\beta$ ,24-tetrahydroxy-olean-12-ene C<sub>48</sub>H<sub>78</sub>O<sub>19</sub> (959.15). White powder. **Pharm:** Anti-ulcerogenic activity. **Source:** YING ZHAO DOU *Spartium junceum*. **Ref:** 2324.

**19333 Saponin 1**

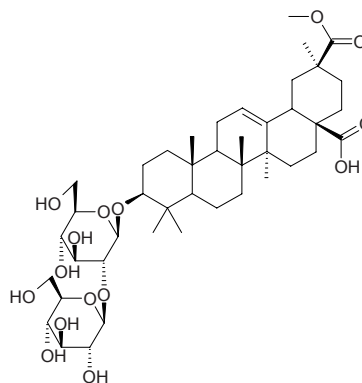
3-*O*- $\beta$ -D-Glucopyranosylserjanic acid C<sub>37</sub>H<sub>58</sub>O<sub>10</sub> (662.87). White amorphous powder,  $[\alpha]_D^{25} = +62^\circ$  ( $c = 0.1$ , MeOH). **Pharm:** Molluscicide (LC<sub>100</sub> = 3.1  $\mu$ g/mL, control 3-*O*-( $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl) bayogenin, LC<sub>100</sub> = 12.5  $\mu$ g/mL); spermicidal (IC<sub>100</sub> = 700  $\mu$ g/mL, 3-*O*-( $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl) bayogenin, IC<sub>100</sub> = 500  $\mu$ g/mL); haemolytic (MCTHBE = 1.9  $\mu$ g/mL, 3-*O*-( $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl) bayogenin, MCTHBE = 7.5  $\mu$ g/mL). **Source:** ER SHI RUI SHANG LU *Phytolacca icosandra* (berry). **Ref:** 5101.

**19334 Saponin 2**

3-*O*-( $\beta$ -D-Galactopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -D-glucopyranosyl)serjanic acid C<sub>43</sub>H<sub>68</sub>O<sub>15</sub> (825.01). White amorphous powder,  $[\alpha]_D^{25} = +60^\circ$  ( $c = 0.1$ , MeOH). **Pharm:** Molluscicide (LC<sub>100</sub> = 3.1  $\mu$ g/mL, control 3-*O*-( $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl) bayogenin, LC<sub>100</sub> = 12.5  $\mu$ g/mL); spermicidal (IC<sub>100</sub> = 500  $\mu$ g/mL, 3-*O*-( $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl) bayogenin, IC<sub>100</sub> = 500  $\mu$ g/mL); haemolytic (MCTHBE = 3.8  $\mu$ g/mL, 3-*O*-( $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl) bayogenin, MCTHBE = 7.5  $\mu$ g/mL). **Source:** ER SHI RUI SHANG LU *Phytolacca icosandra* (berry). **Ref:** 5101.

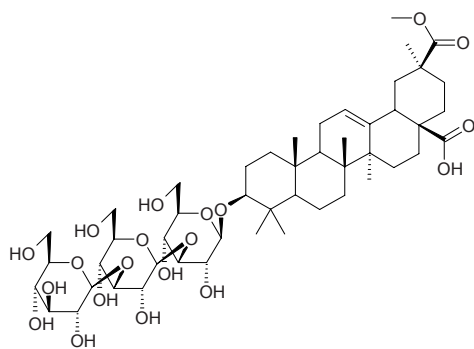
**19335 Saponin 3**

3-*O*-( $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranosyl)serjanic acid C<sub>43</sub>H<sub>68</sub>O<sub>15</sub> (825.01). White amorphous powder,  $[\alpha]_D^{25} = +49^\circ$  ( $c = 0.1$ , MeOH). **Pharm:** Molluscicide (LC<sub>100</sub> = 10.0  $\mu$ g/mL, control 3-*O*-( $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl) bayogenin, LC<sub>100</sub> = 12.5  $\mu$ g/mL); spermicidal (IC<sub>100</sub> = 250  $\mu$ g/mL, 3-*O*-( $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl) bayogenin, IC<sub>100</sub> = 500  $\mu$ g/mL); haemolytic (MCTHBE = 7.5  $\mu$ g/mL, 3-*O*-( $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl) bayogenin, MCTHBE = 7.5  $\mu$ g/mL). **Source:** ER SHI RUI SHANG LU *Phytolacca icosandra* (berry). **Ref:** 5101.

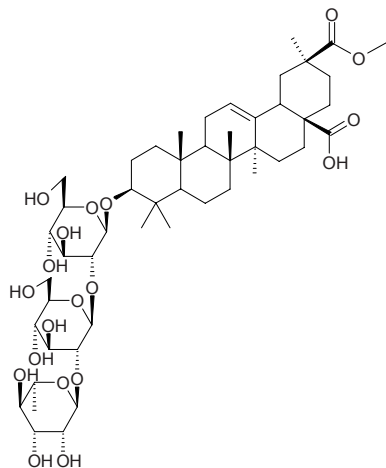


**19336 Saponin 4**

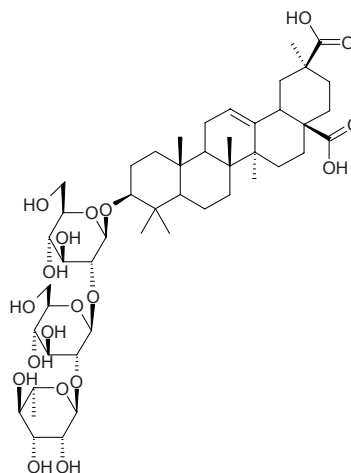
3-*O*-( $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosyl)serjanic acid C<sub>49</sub>H<sub>78</sub>O<sub>20</sub> (987.16). White amorphous powder,  $[\alpha]_D^{23} = +47^\circ$  ( $c = 0.1$ , MeOH). **Pharm:** Molluscicide (LC<sub>100</sub> = 12.5 $\mu$ g/mL, control 3-*O*-( $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl)bayogenin, LC<sub>100</sub> = 12.5 $\mu$ g/mL); spermicidal (IC<sub>100</sub> = 1333 $\mu$ g/mL, 3-*O*-( $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl)bayogenin, IC<sub>100</sub> = 500 $\mu$ g/mL); haemolytic (MCTHBE = 7.5 $\mu$ g/mL, 3-*O*-( $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl)bayogenin, MCTHBE = 7.5 $\mu$ g/mL). **Source:** ER SHI RUI SHANG LU *Phytolacca icosandra* (berry). **Ref:** 5101.

**19337 Saponin 5**

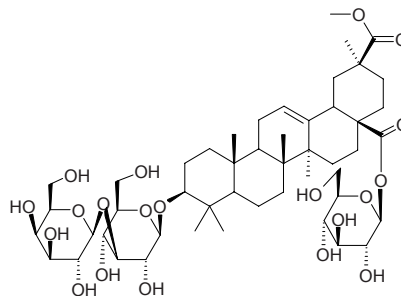
3-*O*-( $\alpha$ -*L*-Rhamnopyranosyl-( $\rightarrow$ )- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl)serjanic acid C<sub>49</sub>H<sub>78</sub>O<sub>19</sub> (971.16). White amorphous powder,  $[\alpha]_D^{23} = +21^\circ$  ( $c = 0.1$ , MeOH). **Pharm:** Molluscicide (LC<sub>100</sub> = 50.0 $\mu$ g/mL, control 3-*O*-( $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl)bayogenin, LC<sub>100</sub> = 12.5 $\mu$ g/mL); spermicidal (IC<sub>100</sub> > 2000 $\mu$ g/mL, 3-*O*-( $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl)bayogenin, IC<sub>100</sub> = 500 $\mu$ g/mL); haemolytic (MCTHBE > 60 $\mu$ g/mL, 3-*O*-( $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl)bayogenin, MCTHBE = 7.5 $\mu$ g/mL). **Source:** ER SHI RUI SHANG LU *Phytolacca icosandra* (berry). **Ref:** 5101.

**19338 Saponin 6**

3-*O*-( $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl)serjanic acid C<sub>48</sub>H<sub>76</sub>O<sub>19</sub> (957.13). White amorphous powder,  $[\alpha]_D^{23} = +22^\circ$  ( $c = 0.1$ , MeOH). **Pharm:** Molluscicide (LC<sub>100</sub> > 50.0 $\mu$ g/mL, control 3-*O*-( $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl)bayogenin, LC<sub>100</sub> = 12.5 $\mu$ g/mL); spermicidal (IC<sub>100</sub> > 2000 $\mu$ g/mL, 3-*O*-( $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl)bayogenin, IC<sub>100</sub> = 500 $\mu$ g/mL); haemolytic (MCTHBE > 60 $\mu$ g/mL, 3-*O*-( $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl)bayogenin, MCTHBE = 7.5 $\mu$ g/mL). **Source:** ER SHI RUI SHANG LU *Phytolacca icosandra* (berry). **Ref:** 5101.

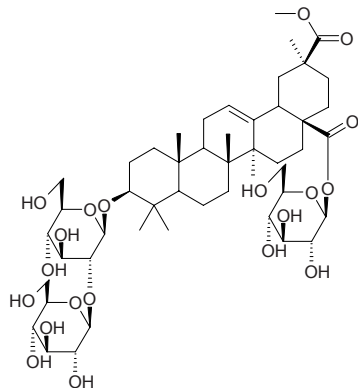
**19339 Saponin 7**

3-*O*-( $\beta$ -*D*-Galactopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosyl)serjanic acid 28-*O*- $\beta$ -*D*-glucopyranoside C<sub>49</sub>H<sub>78</sub>O<sub>20</sub> (987.16). **Pharm:** Molluscicide (LC<sub>100</sub> > 50.0 $\mu$ g/mL, control 3-*O*-( $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl)bayogenin, LC<sub>100</sub> = 12.5 $\mu$ g/mL); spermicidal (IC<sub>100</sub> > 2000 $\mu$ g/mL, 3-*O*-( $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl)bayogenin, IC<sub>100</sub> = 500 $\mu$ g/mL); haemolytic (MCTHBE > 60 $\mu$ g/mL, 3-*O*-( $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl)bayogenin, MCTHBE = 7.5 $\mu$ g/mL). **Source:** ER SHI RUI SHANG LU *Phytolacca icosandra* (berry). **Ref:** 5101.

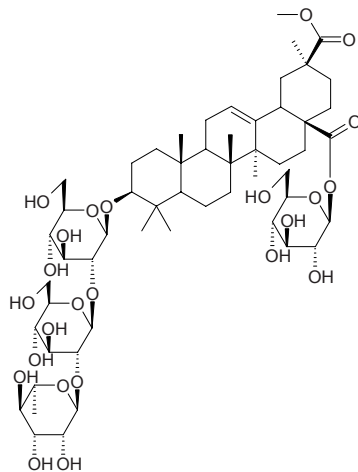


**19340 Saponin 8**

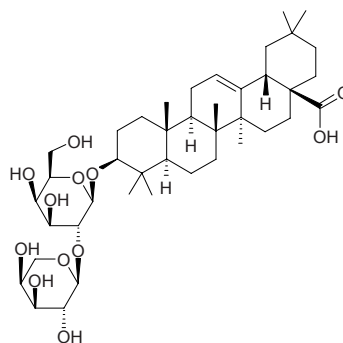
3-*O*-( $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl)serjanic acid 28-*O*- $\beta$ -*D*-glucopyranoside C<sub>49</sub>H<sub>78</sub>O<sub>20</sub> (987.16). **Pharm:** Molluscicide (LC<sub>100</sub> > 50.0 $\mu$ g/mL, control 3-*O*-( $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl)bayogenin, LC<sub>100</sub> = 12.5 $\mu$ g/mL); spermicidal (IC<sub>100</sub> > 2000 $\mu$ g/mL, 3-*O*-( $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl)bayogenin, IC<sub>100</sub> = 500 $\mu$ g/mL); haemolytic (MCTHBE > 60 $\mu$ g/mL, 3-*O*-( $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl)bayogenin, MCTHBE = 7.5 $\mu$ g/mL). **Source:** ER SHI RUI SHANG LU *Phytolacca icosandra* (berry). **Ref:** 5101.

**19341 Saponin 9**

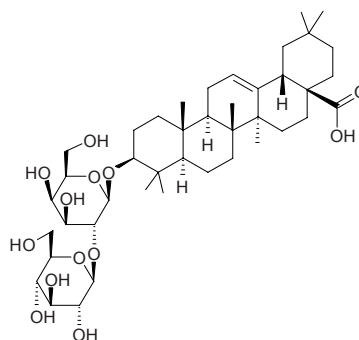
3-*O*-( $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl)serjanic acid 28-*O*- $\beta$ -*D*-glucopyranoside C<sub>55</sub>H<sub>88</sub>O<sub>24</sub> (1133.30). **Pharm:** Molluscicide (LC<sub>100</sub> > 50.0 $\mu$ g/mL, control 3-*O*-( $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl)bayogenin, LC<sub>100</sub> = 12.5 $\mu$ g/mL); spermicidal (IC<sub>100</sub> > 2000 $\mu$ g/mL, 3-*O*-( $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl)bayogenin, IC<sub>100</sub> = 500 $\mu$ g/mL); haemolytic (MCTHBE > 60 $\mu$ g/mL, 3-*O*-( $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl)bayogenin, MCTHBE = 7.5 $\mu$ g/mL). **Source:** ER SHI RUI SHANG LU *Phytolacca icosandra* (berry). **Ref:** 5101.

**19342 Saponin E<sub>3</sub>**

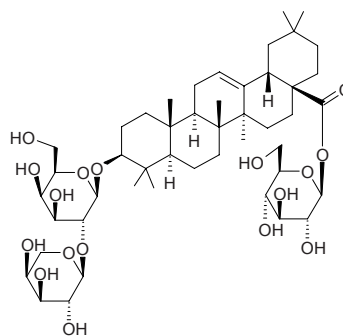
C<sub>41</sub>H<sub>66</sub>O<sub>12</sub> (750.98). **Source:** GUAN CONG DONG QING *Ilex dumosa*. **Ref:** 2160.

**19343 Saponin E<sub>6</sub>**

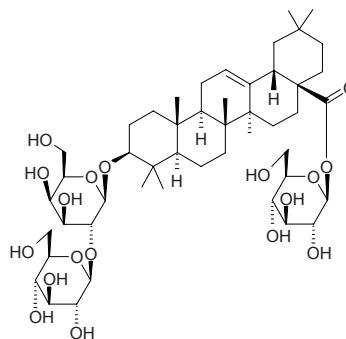
C<sub>42</sub>H<sub>68</sub>O<sub>13</sub> (781.00). **Source:** GUAN CONG DONG QING *Ilex dumosa*. **Ref:** 2160.

**19344 Saponin E<sub>7</sub>**

C<sub>47</sub>H<sub>76</sub>O<sub>17</sub> (913.12). **Source:** GUAN CONG DONG QING *Ilex dumosa*. **Ref:** 2160.

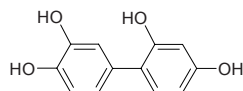
**19345 Saponin E<sub>8</sub>**

C<sub>48</sub>H<sub>78</sub>O<sub>18</sub> (943.15). **Source:** GUAN CONG DONG QING *Ilex dumosa*. **Ref:** 2160.

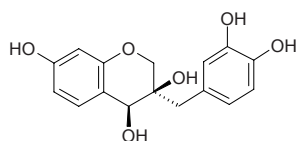


**19346 Sappanin**

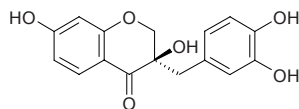
$C_{12}H_{10}O_4$  (218.21). mp 210–211°C. Source: SU MU *Caesalpinia sappan*. Ref: 6.

**19347 Sappanol**

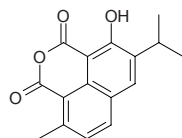
$C_{16}H_{16}O_6$  (304.30). Pharm: Xanthine oxidase inhibitor (competitive inhibitory activity in concentration-dependent manner,  $IC_{50} = 93.2 \mu\text{mol/L}$ ,  $K_i = 61.6 \mu\text{mol/L}$ , control Allopurinol,  $IC_{50} = 2.5 \mu\text{mol/L}$ ,  $K_i = 1.80 \mu\text{mol/L}$ )<sup>[4494]</sup>. Source: SU MU *Caesalpinia sappan*, SU MU *Caesalpinia sappan* (heartwood). Ref: 660, 4494.

**19348 Sappanone B**

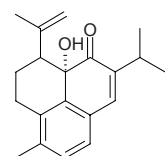
$C_{16}H_{14}O_6$  (302.29). Pharm: Xanthine oxidase inhibitor (competitive inhibitory activity in concentration-dependent manner,  $IC_{50} = 34.2 \mu\text{mol/L}$ ,  $K_i = 20.7 \mu\text{mol/L}$ , control Allopurinol,  $IC_{50} = 2.5 \mu\text{mol/L}$ ,  $K_i = 1.80 \mu\text{mol/L}$ )<sup>[4494]</sup>. Source: SU MU *Caesalpinia sappan*, SU MU *Caesalpinia sappan* (heartwood). Ref: 660, 4494.

**19349 Saprionide**

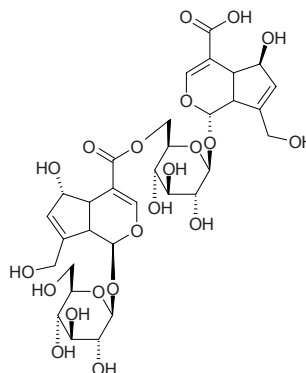
$C_{16}H_{14}O_4$  (270.29). Pale yellow powder. Pharm: Antibacterial inactive (*in vitro*, *Staphylococcus aureus*, *Micrococcus luteus*); topoisomerase I inhibitor inactive (*in vitro*); cytotoxic inactive (HL-60, SGC7901 and MKN-28). Source: HONG GEN CAO *Salvia prionitis* (root: yield = 0.00020%dw). Ref: 4635.

**19350 Sappirearine**

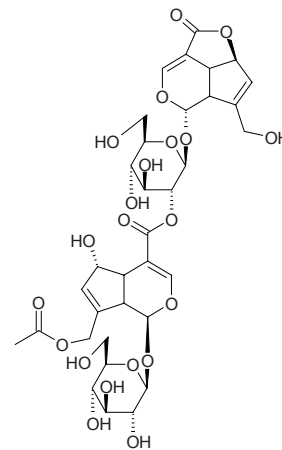
$C_{20}H_{24}O_2$  (296.41). Pale yellow prisms, mp 45°C. Pharm: Antibacterial inactive (*in vitro*, *Staphylococcus aureus*, *Micrococcus luteus*); topoisomerase I inhibitor inactive (*in vitro*); cytotoxic inactive (HL-60, SGC7901 and MKN-28). Source: HONG GEN CAO *Salvia prionitis* (root: yield = 0.0018%dw). Ref: 4635.

**19351 Saprosmoside G**

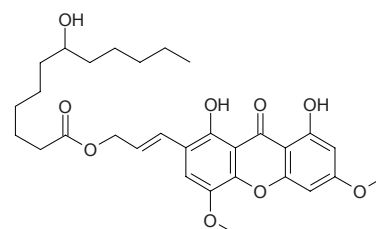
$C_{32}H_{42}O_{21}$  (762.68). White amorphous powder,  $[\alpha]_D^{19} = -1.2^\circ$  ( $c = 0.25$ , MeOH). Source: MA LAI BAN DAO RAN MU SHU *Saprosma scortechinii* (bustem and leaf). Ref: 4219.

**19352 Saprosmoside H**

$C_{34}H_{42}O_{21}$  (786.70). Yellow amorphous powder,  $[\alpha]_D^{19} = -46.4^\circ$  ( $c = 0.11$ , MeOH). Source: MA LAI BAN DAO RAN MU SHU *Saprosma scortechinii* (bustem and leaf). Ref: 4219.

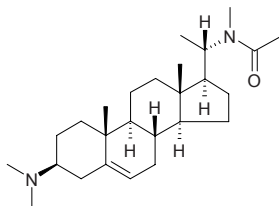
**19353 Sappanthone**

$C_{30}H_{38}O_9$  (542.63). Source: WANG BU LIU XING *Vaccaria segetalis* [Syn. *Vaccaria pyramidata*]. Ref: 660.

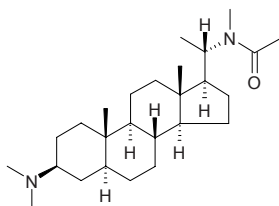


**19354 Saracocine**

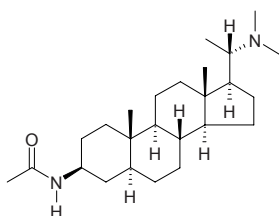
$C_{26}H_{44}N_2O$  (400.65). Yellowish gum, mp 226–228°C,  $[\alpha]_D^{20} = +56^\circ$  ( $c = 0.23$ , MeOH). **Pharm:** Antispasmodic (spontaneous contraction of rabbit jejunum,  $EC_{50} = 5.9\mu\text{g/mL}$ , control Verapamil,  $EC_{50} = 0.1\mu\text{g/mL}$ ;  $K^+$  80mmol/L contracted rabbit jejunum,  $EC_{50} = 24.5\mu\text{g/mL}$ , Verapamil,  $EC_{50} = 0.1\mu\text{g/mL}$ ); AChE inhibitor ( $EC_{50} = 8.0\mu\text{g/mL}$ , Verapamil,  $EC_{50} = 8.9\mu\text{g/mL}$ ). **Source:** YE SHAN HUA *Sarcococca saligna* (whole herb). **Ref:** 5054.

**19355 Saracodine**

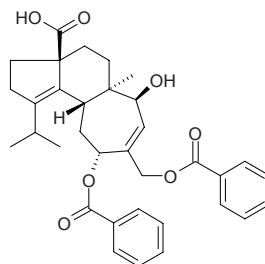
$C_{26}H_{46}N_2O$  (402.67). White amorphous material, mp 240–241°C,  $[\alpha]_D^{20} = -14.4^\circ$  ( $c = 0.02$ ,  $CDCl_3$ ). **Pharm:** Antispasmodic (spontaneous contraction of rabbit jejunum,  $EC_{50} = 7.0\mu\text{g/mL}$ , control Verapamil,  $EC_{50} = 0.1\mu\text{g/mL}$ ;  $K^+$  80mmol/L contracted rabbit jejunum,  $EC_{50} = 17.5\mu\text{g/mL}$ , Verapamil,  $EC_{50} = 0.1\mu\text{g/mL}$ ) AChE inhibitor ( $EC_{50} = 20.0\mu\text{g/mL}$ , Verapamil,  $EC_{50} = 8.9\mu\text{g/mL}$ ). **Source:** YE SHAN HUA *Sarcococca saligna* (whole herb). **Ref:** 5054.

**19356 Saracorine**

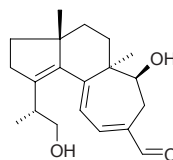
$C_{25}H_{44}N_2O$  (388.64). White amorphous material,  $[\alpha]_D^{20} = +49^\circ$  ( $c = 0.81$ ,  $CDCl_3$ ). **Pharm:** Antispasmodic (spontaneous contraction of rabbit jejunum,  $EC_{50} = 16.1\mu\text{g/mL}$ , control Verapamil,  $EC_{50} = 0.1\mu\text{g/mL}$ ;  $K^+$  80mmol/L contracted rabbit jejunum,  $EC_{50} = 62.3\mu\text{g/mL}$ , Verapamil,  $EC_{50} = 0.1\mu\text{g/mL}$ ); AChE inhibitor ( $EC_{50} = 27.2\mu\text{g/mL}$ , Verapamil,  $EC_{50} = 8.9\mu\text{g/mL}$ ). **Source:** YE SHAN HUA *Sarcococca saligna* (whole herb). **Ref:** 5054.

**19357 Sarbronine B**

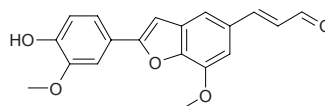
$C_{34}H_{38}O_7$  (558.68). Yellowish oil,  $[\alpha]_D^{25} = +10.3^\circ$  ( $c = 0.01$ , MeOH). **Source:** MEI WEI CHI JUN *Hydnum repandum*. **Ref:** 4804.

**19358 Sarcodonin A**

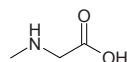
[125882-71-5]  $C_{20}H_{28}O_3$  (316.44). Yellow-green syrup,  $[\alpha]_D^{25} = +91.7^\circ$  ( $c = 0.1$ ,  $CHCl_3$ ). **Source:** MEI WEI CHI JUN *Hydnum repandum*. **Ref:** 4804.

**19359 Sarcomeginal**

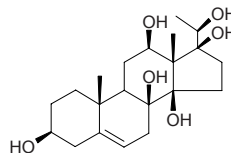
$C_{19}H_{16}O_5$  (324.34). Colorless amorphous solid. **Source:** *Sarcomelicope megistophylla*. **Ref:** 5408.

**19360 Sarcosine**

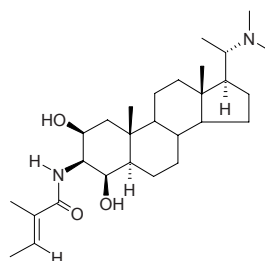
[107-97-1]  $C_3H_7NO_2$  (89.09). mp 212–213°C (dec). **Source:** LI YU *Cyprinus carpio*, MO GU *Agaricus campestris*. **Ref:** 6.

**19361 Sarcostin**

$C_{21}H_{34}O_6$  (382.50). **Source:** BAI SHOU WU *Cynanchum bungei*, LUO MO *Metaplexis japonica*, XU CHANG QING *Cynanchum paniculatum*. **Ref:** 6.

**19362 Sarcovagine A**

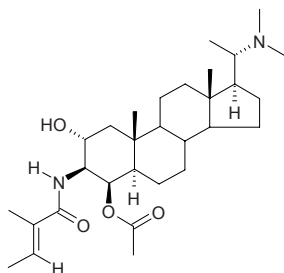
$C_{28}H_{48}N_2O_3$  (460.71). White acicular crystals, mp 277–278°C,  $[\alpha]_D^{25} = +21.2^\circ$  ( $c = 0.11$ , chloroform). **Source:** HAI NAN YE SHAN HUA *Sarcococca vagans*. **Ref:** 399.



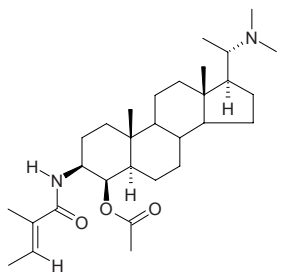


**19363 Sarcovagine B**

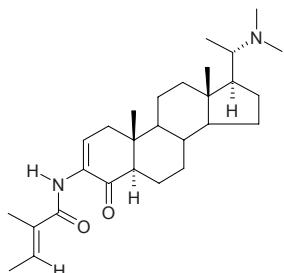
$C_{30}H_{50}N_2O_4$  (502.74). White crystals, mp 205~206°C,  $[\alpha]_D^{25} = +19.6^\circ$  ( $c = 0.06$ , chloroform). Source: HAI NAN YE SHAN HUA *Sarcococca vagans*. Ref: 399.

**19364 Sarcovagine C**

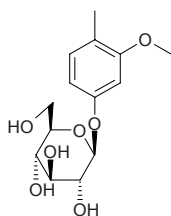
$C_{30}H_{50}N_2O_3$  (486.74). White acicular crystals, mp 192~194°C,  $[\alpha]_D^{13} = -9.01^\circ$  ( $c = 0.122$ , chloroform). Source: HAI NAN YE SHAN HUA *Sarcococca vagans*. Ref: 399.

**19365 Sarcovagine D**

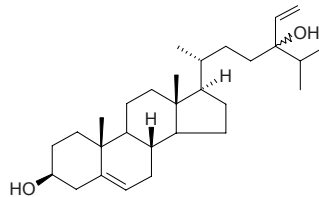
$C_{28}H_{44}N_2O_2$  (440.68). White crystals, mp 170~172°C,  $[\alpha]_D^{25} = +39.5^\circ$  ( $c = 0.07$ , chloroform). Source: HAI NAN YE SHAN HUA *Sarcococca vagans*. Ref: 399.

**19366 Sargencuneside**

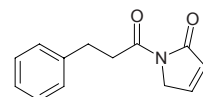
$C_{14}H_{20}O_7$  (300.31). Colorless acicular crystals (ethanol), mp 161~162°C. Source: DA XUE TENG *Sargentodoxa cuneata*. Ref: 481.

**19367 Saringosterol**

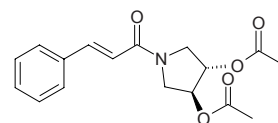
Stigmasta-5,28-diene-3,24-diol  $C_{29}H_{48}O_2$  (428.70). mp 160~161°C. Source: QUN DAI CAI *Undaria pinnatifida*. Ref: 6.

**19368 Sarmentamide A**

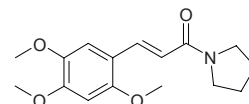
*N*-(Phenylpropanoyl)- $\Delta^3$ -2-pyrrolidone  $C_{13}H_{13}NO_2$  (215.25). Colorless oil. Source: JIA JU ZI *Piper sarmentosum* (fresh root: yield = 0.007%fw). Ref: 973.

**19369 Sarmentamide B**

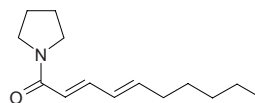
*N*-Cinnamoyl-*trans*-3,4-diacetoxypyrrolidine  $C_{17}H_{19}NO_5$  (317.34). Colorless wax,  $[\alpha]_D^{25} = 68.3^\circ$  ( $c = 0.12$ , MeOH). Source: JIA JU ZI *Piper sarmentosum* (fresh root: yield = 0.0016%fw). Ref: 973.

**19370 Sarmentamide C**

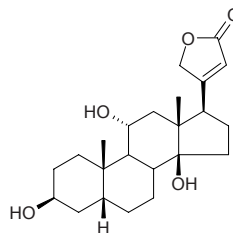
*N*-(2,4,5-Trimethoxycinnamoyl)pyrrolidine  $C_{16}H_{21}NO_4$  (291.35). Colorless solid, mp 159~162°C. Source: JIA JU ZI *Piper sarmentosum* (fresh root: yield = 0.0025%fw). Ref: 973.

**19371 Sarmentine**

1-(1-Oxo-2*E*,4*E*-decadienyl)pyrrolidine  $C_{14}H_{23}NO$  (221.35). Source: HU JIAO *Piper nigrum* (root: yield = 0.0034%dw), JIA JU ZI *Piper sarmentosum*. Ref: 660, 4753.

**19372 Sarmentogenin**

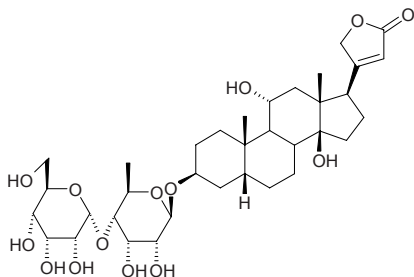
$C_{23}H_{34}O_5$  (390.52). Source: YANG JIAO AO ZI *Strophanthus divaricatus*. Ref: 660.



**19373 Sarmentogenin-3 $\beta$ -O-[ $\alpha$ -allosyl-(1 $\rightarrow$ 4)- $\beta$ -6-deoxyalloside]**

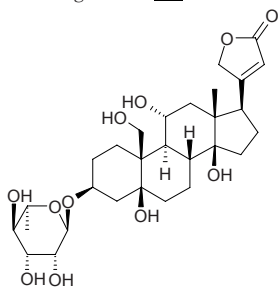
C<sub>35</sub>H<sub>54</sub>O<sub>14</sub> (698.81). White-brown powder,  $[\alpha]_D^{24} = -5.2^\circ$  ( $c = 2.3$ , MeOH).

**Pharm:** Cytotoxic (KB, IC<sub>50</sub> = (0.075 $\pm$ 0.004) $\mu$ mol/L, control Podophyllotoxin, IC<sub>50</sub> = 0.014 $\mu$ mol/L). **Source:** GAO MEI YING BAN *Crossopetalum gaumeri* (root). **Ref:** 3969.

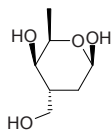
**19374 Sarmentoloside**

C<sub>29</sub>H<sub>44</sub>O<sub>11</sub> (568.67). **Pharm:** Toxin (vertebrate). **Source:** YANG JIAO AO ZI

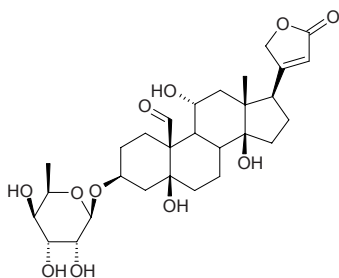
*Strophanthus divaricatus*, XI FEI YANG JIAO AO *Strophanthus sarmentosus* var. *senegambiae*. **Ref:** 658.

**19375 Sarmentose**

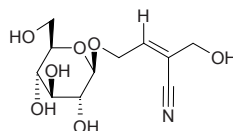
C<sub>7</sub>H<sub>14</sub>O<sub>4</sub> (162.19). mp 78~79°C. **Source:** FU SHOU CAO *Adonis amurensis*, LUO MO ZI *Metaplexis japonica*. **Ref:** 6.

**19376 Sarmentosigenin-3 $\beta$ -O- $\beta$ -6-deoxyguloside**

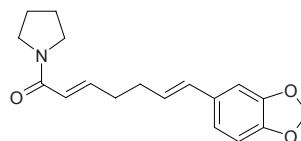
C<sub>29</sub>H<sub>42</sub>O<sub>11</sub> (566.65). White powder,  $[\alpha]_D^{24} = -26.0^\circ$  ( $c = 2.3$ , MeOH). **Pharm:** Cytotoxic (KB, IC<sub>50</sub> = (0.074 $\pm$ 0.009) $\mu$ mol/L, control Podophyllotoxin, IC<sub>50</sub> = 0.014 $\mu$ mol/L). **Source:** GAO MEI YING BAN *Crossopetalum gaumeri* (root). **Ref:** 3969.

**19377 Sarmentosin**

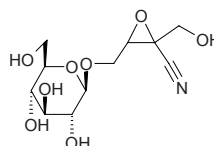
(E)-4-( $\beta$ -D-Glucopyranosyloxy)-2-(hydroxymethyl)-2-butenitrile  
[71933-54-5] C<sub>11</sub>H<sub>17</sub>NO<sub>7</sub> (275.26). White gum,  $[\alpha]_D^{22} = +39.99^\circ$  ( $c = 0.5$ , CHCl<sub>3</sub>). **Pharm:** Reduces level of SGPT; antihepatotoxin (mus orl, repairs acute hepatic injury induced by CCl<sub>4</sub>-liquid paraffin); inhibitory activity against NFAT transcription (IC<sub>50</sub> > 100 $\mu$ mol/L, positive control Cyclosporin A, IC<sub>50</sub> = (0.29 $\pm$ 0.01) $\mu$ mol/L)<sup>[2536]</sup>. **Source:** HUA CHA BIAO *Ribes fasciculatum* var. *chinense*, SHENG DI HONG JING TIAN *Rhodiola sacra*, SHI ZHI JIA *Sedum sarmentosum* (whole herb: mean content of 2 origins = 0.415%<sup>[5508]</sup>). **Ref:** 742, 2536, 5501, 5508.

**19378 Sarmentosine**

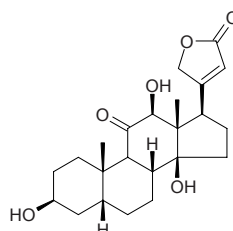
Piperamide C 7:2(2E,6E); 1-[1-Oxo-7(3,4-methylenedioxyphenyl)-2E,6E-heptadienyl]pyrrolidine [112448-68-7] C<sub>18</sub>H<sub>21</sub>NO<sub>3</sub> (299.37). mp 77.5~79.5°C. **Pharm:** Larvicidal. **Source:** HU JIAO *Piper nigrum* (root: yield = 0.000071%dw), JIA JU ZI *Piper sarmentosum*. **Ref:** 660, 1510, 3240, 4753.

**19379 Sarmentosin epoxide**

C<sub>11</sub>H<sub>17</sub>NO<sub>8</sub> (291.26). **Pharm:** Toxin. **Source:** XI PA JING TIAN *Sedum cepaea*. **Ref:** 658.

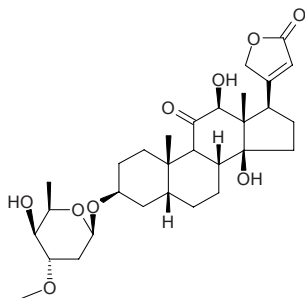
**19380 Sarmutogenin**

C<sub>23</sub>H<sub>32</sub>O<sub>6</sub> (404.51). **Source:** YANG JIAO AO ZI *Strophanthus divaricatus*. **Ref:** 660.

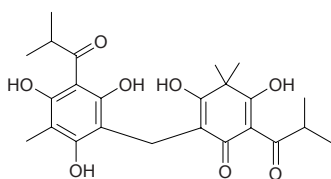


**19381 Sarmutoside**

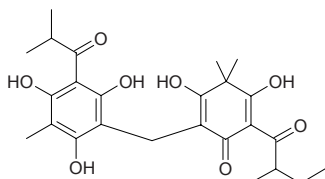
$C_{30}H_{44}O_9$  (548.68). mp 150~152°C, 233~245°C, 250~252°C. Source: YANG JIAO AO ZI *Strophanthus divaricatus*. Ref: 6.

**19382 Saroaspidin A**

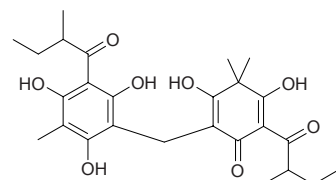
$C_{24}H_{30}O_8$  (446.50). Source: DI ER CAO *Hypericum japonicum*. Ref: 660.

**19383 Saroaspidin B**

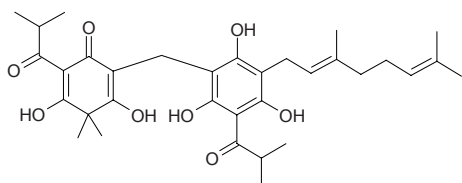
$C_{25}H_{32}O_8$  (460.53). Source: DI ER CAO *Hypericum japonicum*. Ref: 660.

**19384 Saroaspidin C**

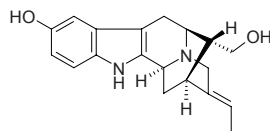
$C_{26}H_{34}O_8$  (474.56). Source: DI ER CAO *Hypericum japonicum*. Ref: 660.

**19385 Sarothralen A**

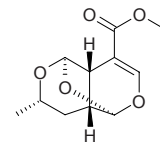
$C_{33}H_{44}O_8$  (568.71). Source: DI ER CAO *Hypericum japonicum*. Ref: 660.

**19386 Sarpagine**

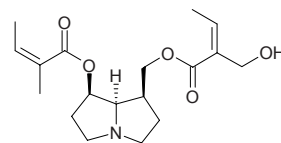
$C_{19}H_{22}N_2O_2$  (310.40). White prismatic crystals, mp 300~310°C,  $[\alpha]_D^{24.4} = +48.65^\circ$  ( $c = 1.483$ , pyridine). Pharm: Adrenergic receptor blocker; antihypertensive (hypertensive dog, iv, 1~2mg/kg); nicotine antagonist. Source: CUI TU LUO FU MU *Rauwolfia vomitoria*, KA FU LA LUO FU MU *Rauwolfia caffra*, KE MING XI LUO FU MU *Rauwolfia cumminsii*, PI LI LUO FU MU *Rauwolfia perakensis*, YANG JIAO MIAN *Alstonia mairei*, YIN DU LUO FU MU *Rauwolfia serpentina*. Ref: 633, 658, 660.

**19387 Sarracenin**

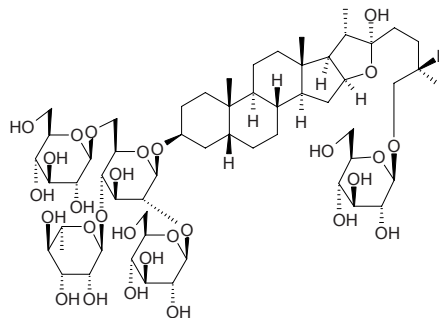
[59653-37-1]  $C_{11}H_{14}O_5$  (226.23). mp 127~128°C (dec). Pharm: Antineoplastic (mus,  $P_{388}$ , 50mg/kg, *in vivo*, biotic prolonged rate = 50%). Source: HUANG PING ZI CAO *Sarracenia flava*. Ref: 5, 658.

**19388 Sarracine**

[2492-09-3]  $C_{18}H_{27}NO_5$  (337.42). mp 45~46°C, 51~52°C. Pharm: Anticholinergic (inhibits acetylcholine); antispasmodic (relieves spasm of intestinal canal in gpg and rat); antiulcerative, used in treatment of gastric ulcer (in former USSR); bidirectional action to CNS (first stimulates center and then inhibits it); antihypertensive. Source: DA BAI DING CAO *Senecio oryzetorum*, HUANG WAN *Senecio nemorensis*, PING QIAN LI GUANG *Senecio sarracenicus*, YE SHENG QIAN LI GUANG *Senecio sylvaticus*. Ref: 5, 6, 658.

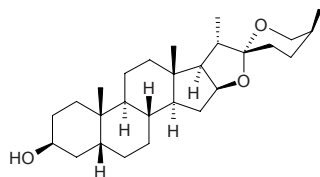
**19389 Sarsaparilloside**

$C_{57}H_{96}O_{28}$  (1229.38). Source: HUI BA QIA *Smilax aristolochiaefolia*. Ref: 658.

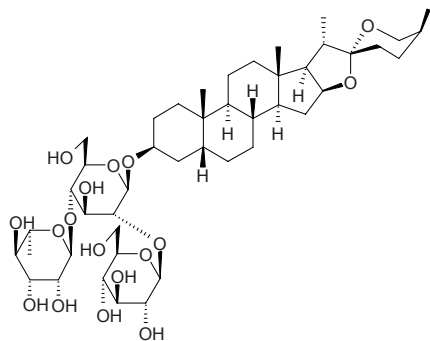


**19390 Sarsasapogenin**

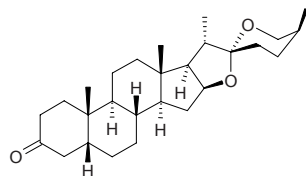
(25S)-5 $\beta$ -Spirostan-3 $\beta$ -ol [126-19-2] C<sub>27</sub>H<sub>44</sub>O<sub>3</sub> (416.65). **Pharm:** Raw material of synthesis of pregnane. **Source:** TIAN MEN DONG *Asparagus cochinchinensis* [Syn. *Asparagus lucidus*] (dried tuberoid: 3 mean content of 3 origins = 0.2879%)<sup>[5508]</sup>, ZHI MU *Anemarrhena asphodeloides* (dried rhizome: content scope of 5 origins = 0.844%~1.832%, mean content = 1.354%)<sup>[5508]</sup>. **Ref:** 2, 658, 5508.

**19391 Sarsasapogenin 3-O-4<sup>β</sup>-rhamnosyl-sophorose**

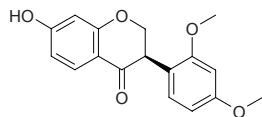
C<sub>45</sub>H<sub>74</sub>O<sub>17</sub> (887.09). **Pharm:** Molluscicide (*Biomphalaria glabrata*, LD<sub>100</sub> = 20mg/L). **Source:** WAN QU TIAN MEN DONG *Asparagus curillus*. **Ref:** 658.

**19392 Sarsasapogenone**

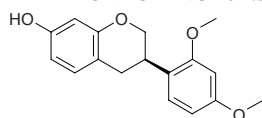
C<sub>27</sub>H<sub>42</sub>O<sub>3</sub> (414.63). mp 176~178°C, [α]<sub>D</sub><sup>29</sup> = -56.0° (c = 0.30, CHCl<sub>3</sub>), existing in moldy source plant only. **Source:** CHA RUI SHU YU *Dioscorea collettii*. **Ref:** 10, 24, 660.

**19393 Sativanone**

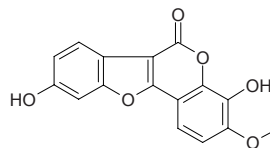
[70561-31-8] C<sub>17</sub>H<sub>16</sub>O<sub>5</sub> (300.31). **Source:** JIANG ZHEN XIANG *Dalbergia odorifera*. **Ref:** 716.

**19394 Sativin**

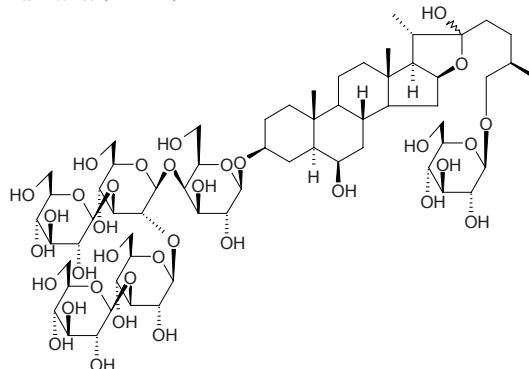
Sativan C<sub>17</sub>H<sub>18</sub>O<sub>4</sub> (286.33). **Pharm:** Antifungal. **Source:** HUA XU GENG BAI MAI GEN *Lotus pedunculatus*, MAO CI JIN JI ER *Caragana tibetica* (stem), YA MA XUN YU TENG *Derris amazonica*. **Ref:** 658, 4514.

**19395 Sativol**

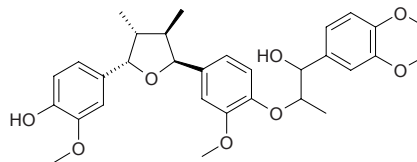
C<sub>16</sub>H<sub>10</sub>O<sub>6</sub> (298.25). mp 303°C. **Source:** MU XU *Medicago sativa*. **Ref:** 6.

**19396 Sativoside B<sub>1</sub>**

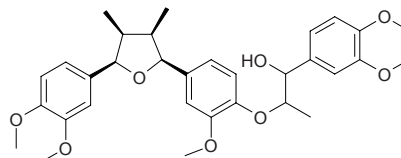
C<sub>63</sub>H<sub>106</sub>O<sub>35</sub> (1423.53). **Source:** DA SUAN *Allium sativum*. **Ref:** 660.

**19397 Saucerneol**

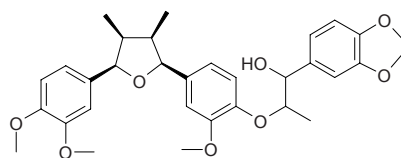
[88497-86-3] C<sub>31</sub>H<sub>38</sub>O<sub>8</sub> (538.64). **Source:** YU XING CAO *Houttuynia cordata*, *Saururus* sp. **Ref:** 2428.

**19398 Saucerneol A**

C<sub>32</sub>H<sub>40</sub>O<sub>8</sub> (552.67). Amorphous powder, [α]<sub>D</sub> = -83° (c = 0.7, CHCl<sub>3</sub>). **Source:** SAN BAI CAO *Saururus chinensis* (underground part). **Ref:** 4122.

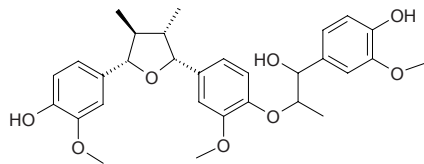
**19399 Saucerneol B**

C<sub>31</sub>H<sub>36</sub>O<sub>8</sub> (536.63). Amorphous powder, [α]<sub>D</sub> = -58° (c = 0.6, CHCl<sub>3</sub>). **Source:** SAN BAI CAO *Saururus chinensis* (underground part). **Ref:** 4122.

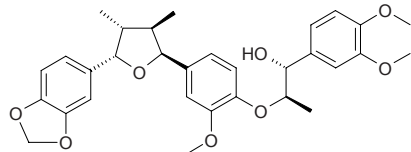


**19400 Saucerneol C**

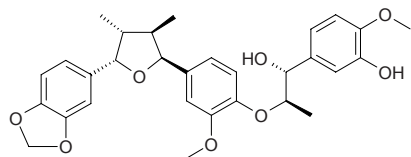
$C_{30}H_{36}O_8$  (524.62). Amorphous powder,  $[\alpha]_D^{25} = -66^\circ$  ( $c = 0.7$ ,  $CHCl_3$ ). Source: SAN BAI CAO *Saururus chinensis* (underground part). Ref: 4122.

**19401 Saucerneol D**

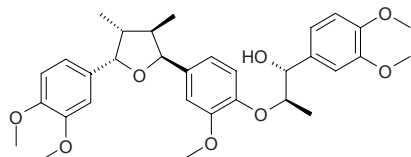
$C_{31}H_{36}O_8$  (536.63). Colorless powder, mp 75~76°C,  $[\alpha]_D^{25} = -88.1^\circ$  ( $c = 1.2$ ,  $CHCl_3$ ). Pharm: Anti-inflammatory (NF- $\kappa$ B inhibitor,  $IC_{50} = 6.1 \mu\text{mol/L}$ ). Source: SAN BAI CAO *Saururus chinensis* (root). Ref: 3453.

**19402 Saucerneol E**

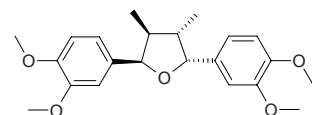
$C_{30}H_{34}O_8$  (522.60). Colorless powder, mp 76~78°C,  $[\alpha]_D^{25} = -83.0^\circ$  ( $c = 1.2$ ,  $CHCl_3$ ). Pharm: Anti-inflammatory (NF- $\kappa$ B inhibitor,  $IC_{50} = 12.7 \mu\text{mol/L}$ ). Source: SAN BAI CAO *Saururus chinensis* (root). Ref: 3453.

**19403 (-)-Saucerneol methyl ether**

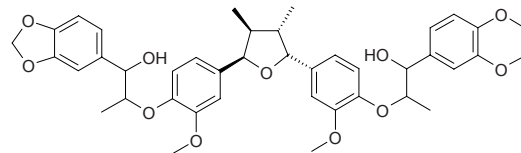
$C_{32}H_{40}O_8$  (552.67). Colorless powder, mp 72~74°C,  $[\alpha]_D^{25} = -63.0^\circ$  ( $c = 0.5$ ,  $CHCl_3$ ). Pharm: Anti-inflammatory (NF- $\kappa$ B inhibitor,  $IC_{50} = 16.9 \mu\text{mol/L}$ ). Source: SAN BAI CAO *Saururus chinensis* (root). Ref: 3453.

**19404 Saucernefin**

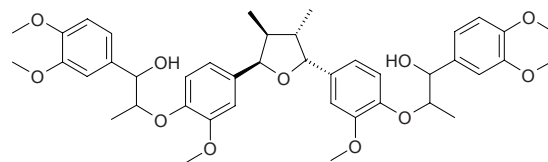
(+)-Saucernefin  $C_{22}H_{28}O_5$  (372.47). Colorless powder, mp 78~80°C,  $[\alpha]_D^{25} = +48.1^\circ$  ( $c = 0.5$ ,  $CHCl_3$ ). Pharm: PAF antagonist<sup>[658]</sup>, anti-inflammatory (NF- $\kappa$ B inhibitor,  $IC_{50} > 30 \mu\text{mol/L}$ )<sup>[3453]</sup>. Source: MEI ZHOU SAN BAI CAO *Saururus cernuus*, SAN BAI CAO *Saururus chinensis* (root). Ref: 658, 3453.

**19405 Saucernefin 7**

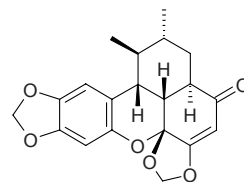
$C_{41}H_{48}O_{11}$  (716.83). Pale brown solid,  $[\alpha]_D^{25} = -13.4^\circ$  ( $c = 0.01$ , MeOH). Pharm: Anti-inflammatory (NO production inhibitor, LPS-induced Raw264.7 cells; PGE<sub>2</sub> production inhibitor, LPS-induced Raw264.7 cells; suppresses expression of iNOS and COX-2 protein in a dose-dependent manner)<sup>[5466]</sup>. Source: YU XING CAO *Houttuynia cordata*, SAN BAI CAO *Saururus chinensis*, *Saururus* sp. Ref: 2428, 5466.

**19406 Saucernefin 8**

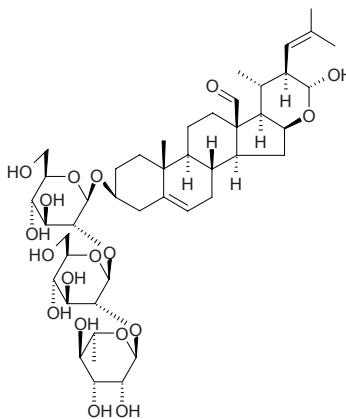
$C_{42}H_{52}O_{11}$  (732.88). Pale brown solid,  $[\alpha]_D^{25} = -15.1^\circ$  ( $c = 0.01$ , MeOH). Pharm: Anti-inflammatory (NO production inhibitor, LPS-induced Raw264.7 cells; PGE<sub>2</sub> production inhibitor, LPS-induced Raw264.7 cells; suppresses expression of iNOS and COX-2 protein in a dose-dependent manner)<sup>[5466]</sup>. Source: YU XING CAO *Houttuynia cordata*, SAN BAI CAO *Saururus chinensis*, *Saururus* sp. Ref: 2428, 5466.

**19407 Sauchinone**

$C_{20}H_{20}O_6$  (356.38). Colorless needles, mp 223~225°C,  $[\alpha]_D^{25} = -96.2^\circ$  ( $c = 1.7$ ,  $CHCl_3$ ). Pharm: Anti-inflammatory (LPS-stimulated RAW264.7 cells, NO production inhibitor through suppression of NF- $\kappa$ B by inhibiting transactivation activity of RelA subunit). Source: SAN BAI CAO *Saururus chinensis*. Ref: 5487.

**19408 Saundersioside C**

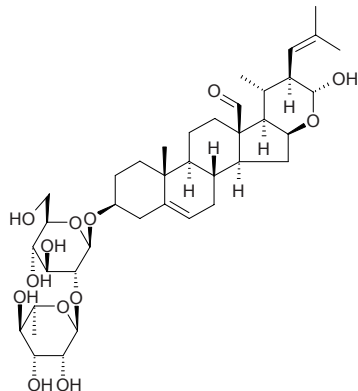
$C_{45}H_{70}O_{18}$  (899.05). Amorphous solid,  $[\alpha]_D^{30} = -49.6^\circ$  ( $c = 0.10$ , MeOH). Source: *Ornithogalum saundersiae*. Ref: 2363.



**19409 Saundersioside D**

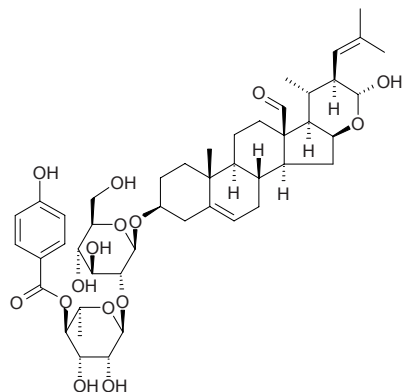
$C_{39}H_{60}O_{13}$  (736.91). Amorphous solid,  $[\alpha]_D^{28} = -60.0^\circ$  ( $c = 0.10$ , MeOH).

Source: *Ornithogalum saundersiae*. Ref: 2363.

**19410 Saundersioside E**

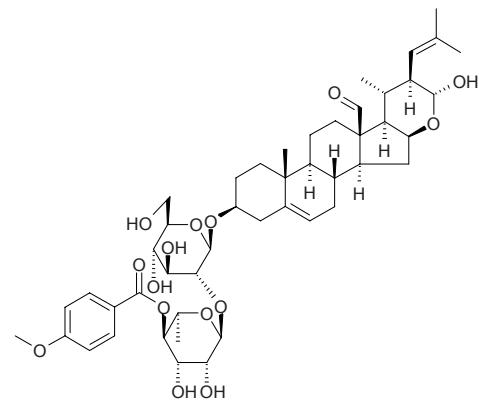
$C_{46}H_{64}O_{15}$  (857.01). Amorphous solid,  $[\alpha]_D^{27} = -32.8^\circ$  ( $c = 0.25$ , MeOH).

Pharm: Cytotoxic (cytostatic, HL-60 cells,  $IC_{50} = 0.021 \mu\text{mol/L}$ ). Source: *Ornithogalum saundersiae*. Ref: 2363.

**19411 Saundersioside F**

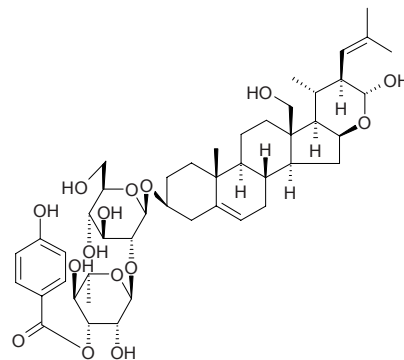
$C_{47}H_{66}O_{15}$  (871.04). Amorphous solid,  $[\alpha]_D^{26} = -4.0^\circ$  ( $c = 0.10$ , MeOH).

Pharm: Cytotoxic (cytostatic, HL-60 cells,  $IC_{50} = 0.019 \mu\text{mol/L}$ ). Source: *Ornithogalum saundersiae*. Ref: 2363.

**19412 Saundersioside G**

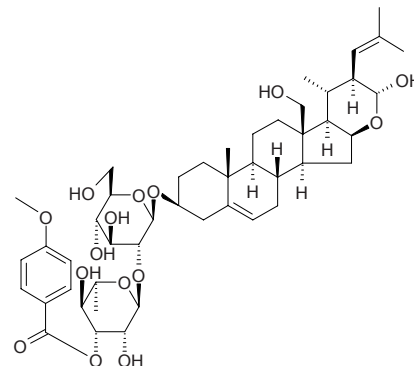
$C_{46}H_{66}O_{15}$  (859.03). Amorphous solid,  $[\alpha]_D^{26} = -20.0^\circ$  ( $c = 0.10$ , MeOH).

Pharm: Cytotoxic (cytostatic, HL-60 cells,  $IC_{50} = 0.063 \mu\text{mol/L}$ ). Source: *Ornithogalum saundersiae*. Ref: 2363.

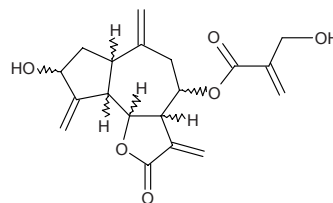
**19413 Saundersioside H**

$C_{47}H_{68}O_{15}$  (873.06). Amorphous solid,  $[\alpha]_D^{26} = -16.0^\circ$  ( $c = 0.10$ , MeOH).

Pharm: Cytotoxic (cytostatic, HL-60 cells,  $IC_{50} = 0.052 \mu\text{mol/L}$ ). Source: *Ornithogalum saundersiae*. Ref: 2363.

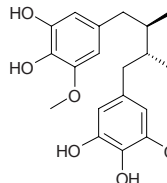
**19414 Saupirin**

$C_{19}H_{22}O_6$  (346.39). Pharm: Antiprotozoal (pathogenic amoeba and *Trichomonas vaginalis*). Source: MEI HUA FENG MAO JU *Saussurea pulchella*, XIN MEI FENG MAO JU *Saussurea neopulchella*. Ref: 658.

**19415 Sauriol A**

$C_{20}H_{26}O_6$  (362.43). White amorphous solid,  $[\alpha]_D = -240^\circ$  ( $c = 0.03$ ,  $\text{CHCl}_3$ ).

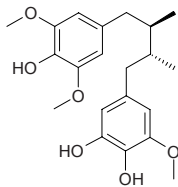
Source: MEI ZHOU SAN BAI CAO *Saururus cernuus*. Ref: 3959.



**19416 Sauriol B**

$C_{21}H_{28}O_6$  (376.45). White amorphous solid,  $[\alpha]_D = -92^\circ$  ( $c = 0.13$ ,  $CHCl_3$ ).

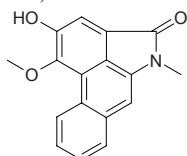
Source: MEI ZHOU SAN BAI CAO *Saururus cernuus*. Ref: 3959.

**19417 Sauristolactam**

Sauristolactam  $C_{17}H_{13}NO_3$  (279.30). Source: MEI ZHOU SAN BAI CAO

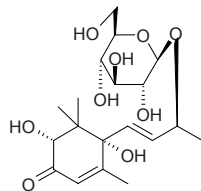
*Saururus cernuus*, SAN BAI CAO *Saururus chinensis* (aerial parts). Ref:

2428, 4968.

**19418 Sauroposide**

$C_{19}H_{30}O_9$  (402.45). Amorphous powder,  $[\alpha]_D^{31} = -37.9^\circ$  ( $c = 1.11$ , MeOH).

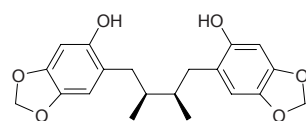
Source: TONG XU SHOU GONG MU *Sauropus androgynus*. Ref: 3432.

**19419 Saururin A**

$C_{20}H_{22}O_6$  (358.39). Pale brown solid,  $[\alpha]_D^{25} = 0^\circ$  ( $c = 0.45$ ,  $CHCl_3$ ). Pharm:

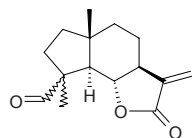
Antioxidant (*in vitro*, low-density lipoprotein peroxidation,  $IC_{50} = 8.5 \mu\text{mol/L}$ ; control Probulcol,  $IC_{50} = 1.3 \mu\text{mol/L}$ ). Source: SAN BAI CAO *Saururus*

*chinensis*. (underground part). Ref: 3096.

**19420 Saussureal**

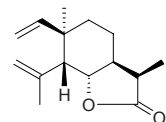
$C_{15}H_{20}O_3$  (248.32). Source: MU XIANG *Saussurea lappa* [Syn. *Aucklandia*

*lappa*]. Ref: 660.

**19421 Saussurea lactone**

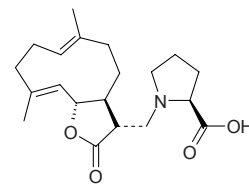
$C_{15}H_{22}O_2$  (234.34). mp 148–149°C. Source: MU XIANG *Saussurea lappa*

[Syn. *Aucklandia lappa*]. Ref: 2, 6.

**19422 Saussureamine A**

[148245-82-3]  $C_{20}H_{29}NO_4$  (347.46). Colorless prismatic crystals, mp

135–139°C,  $[\alpha]_D^{24} = +36.7^\circ$  (methanol). Pharm: Antiulcerative (stomach ulcer caused by HCl/ethanol, rat, 100mg/kg, InRt = 59.8%, mus, 200mg/kg, InRt = 57%). Source: MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*]. Ref: 986.

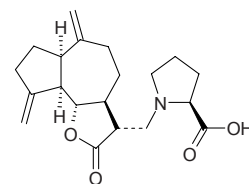
**19423 Saussureamine B**

[126209-82-3]  $C_{20}H_{27}NO_4$  (345.44). White powder,  $[\alpha]_D = -25.9^\circ$  (methanol).

Pharm: Antiulcerative (rat, stomach ulcer caused by HCl/ethanol, 50mg/kg,

InRt = 87.2%). Source: MU XIANG *Saussurea lappa* [Syn. *Aucklandia*

*lappa*]. Ref: 986.

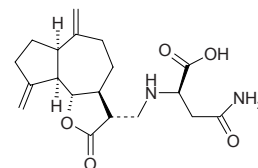
**19424 Saussureamine C**

[148245-83-4]  $C_{19}H_{26}N_2O_5$  (362.43). White powder,  $[\alpha]_D = -17.2^\circ$  (methanol).

Pharm: Antiulcerative (rat, stomach ulcer caused by HCl/ethanol, 100mg/kg,

InRt = 68.1%). Source: MU XIANG *Saussurea lappa* [Syn. *Aucklandia*

*lappa*]. Ref: 986.

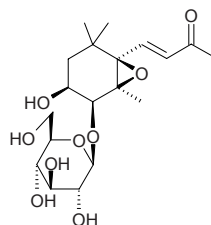
**19425 Saussureoside A**

$C_{19}H_{30}O_9$  (402.45). White powder,  $[\alpha]_D^{24} = -45.0^\circ$  ( $c = 0.80$ , MeOH). Pharm:

Aldose reductase inhibitor inactive ( $IC_{50} > 100 \mu\text{mol/L}$ , 100  $\mu\text{mol/L}$  InRt = 3%,

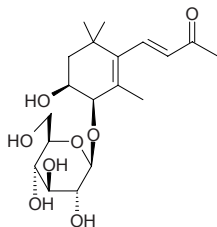
control Epalrestat,  $IC_{50} = 0.072 \mu\text{mol/L}$ ). Source: SHUI MU XUE LIAN HUA

*Saussurea medusa* (whole herb). Ref: 4530.

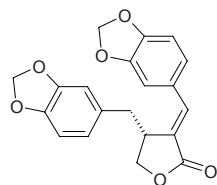


**19426 Saussureoside B**

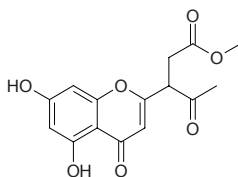
$C_{19}H_{30}O_8$  (386.45). White powder,  $[\alpha]_D^{26} = -39.5^\circ$  ( $c = 0.98$ , MeOH). **Pharm:** Aldose reductase inhibitor inactive ( $IC_{50} > 100\mu\text{mol/L}$ ,  $100\mu\text{mol/L}$  InRt = 13%, control Epalrestat,  $IC_{50} = 0.072\mu\text{mol/L}$ ). **Source:** SHUI MU XUE LIAN HUA *Saussurea medusa* (whole herb). **Ref:** 4530.

**19427 Savinin**

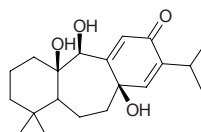
Saussurine  $C_{20}H_{16}O_6$  (352.35). mp 146.4~148.4°C. **Pharm:** Antirheumatic; regulates menstrual cycle; anti-inflammatory (modulator of cytokine network: inhibits LPS-activated production of TNF- $\alpha$  in RAW264.7 cells,  $IC_{50} = 31.9\mu\text{mol/L}$ )<sup>[4416]</sup>; cytotoxic (A549,  $ED_{50} = 6.7\mu\text{mol/L}$ ,  $ED_{50} = 19.1\mu\text{g/mL}$ , control Adriamycin,  $ED_{50} = 0.01\mu\text{mol/L}$ ,  $ED_{50} = 0.02\mu\text{g/mL}$ ; MCF7,  $ED_{50} = 0.5\mu\text{mol/L}$ ,  $ED_{50} = 1.5\mu\text{g/mL}$ , Adriamycin,  $ED_{50} = 0.1\mu\text{mol/L}$ ,  $ED_{50} = 0.1\mu\text{g/mL}$ ; HT29,  $ED_{50} = 1.5\mu\text{mol/L}$ ,  $ED_{50} = 4.3\mu\text{g/mL}$ , Adriamycin,  $ED_{50} = 0.1\mu\text{mol/L}$ ,  $ED_{50} = 0.1\mu\text{g/mL}$ )<sup>[5088]</sup>. **Source:** CHA ZI YUAN BAI *Juniperus sabina*, CHOU CAO *Ruta graveolens*, MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*], TAI WAN SHAN *Taiwania cryptomerioides* (heartwood), WU GENG WU JIA PI *Acanthopanax sessiliflorus*, XIAO GUO YUN XIANG *Ruta microcarpa*, SI ZI TAN *Pterocarpus santalinus* (heartwood), *Justicia hyssopifolia* (aerial parts). **Ref:** 2, 6, 658, 4259, 4416, 5088, 5501.

**19428 Sawarachromone**

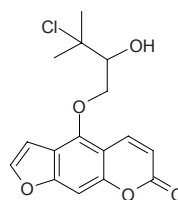
5,7-Dihydroxy-2-(1-acetyl-2-methoxycarbonylethyl)-chromone  $C_{15}H_{14}O_7$  (306.27). Fine crystals, mp 191~19°C (MeOH). **Pharm:** Antibacterial inactive (*Staphylococcus aureus*, MIC > 100 $\mu\text{g/mL}$ ; *Bacillus subtilis*, MIC > 100 $\mu\text{g/mL}$ ). **Source:** RI BEN HUA BAI *Chamaecyparis pisifera* (leaf). **Ref:** 4144.

**19429 Sawaradienone**

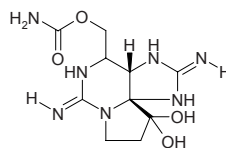
*rel*-(8*R*,10*R*,20*S*)-8,10,20-Trihydroxy-9(10 $\rightarrow$ 20)-abeo-abieta-9,13-dien-12-one  $C_{20}H_{30}O_4$  (334.46). Colorless viscous oil. **Pharm:** Antibacterial inactive (*Staphylococcus aureus*, MIC > 100 $\mu\text{g/mL}$ ; *Bacillus subtilis*, MIC > 100 $\mu\text{g/mL}$ ). **Source:** RI BEN HUA BAI *Chamaecyparis pisifera* (leaf). **Ref:** 4144.

**19430 Saxalin**

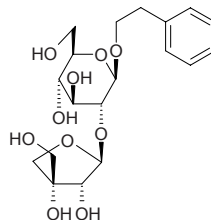
$C_{16}H_{15}ClO_5$  (322.75). **Source:** *Niphogeton ternata*. **Ref:** 4156.

**19431 Saxitoxin**

Mussel poison; Clam poison  $C_{10}H_{17}N_7O_4$  (299.29). Easily soluble in water, methanol, slightly soluble in ethanol, ice vinegar, insoluble in lipidic solvents. **Pharm:** Blocks nerve; LD (hmn, orl) = 0.10-0.12mg or 0.54-0.90mg. **Source:** BAI TA GE *Saxidomus giganteus*, *Platypodia granulosa*, *Emerita analoga*. **Ref:** 658, 5507.

**19432 Sayaendoside**

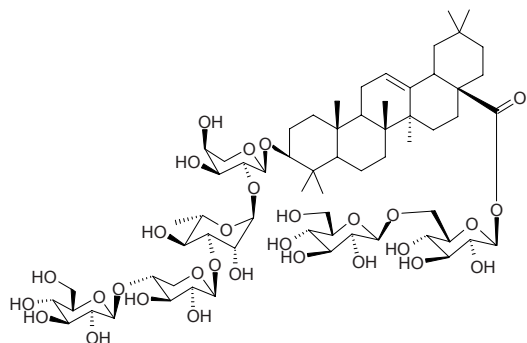
Phenethyl 1-*O*- $\beta$ -D-apiofuranosyl (1 $\rightarrow$ 2)- $\beta$ -D-glucopyranoside  $C_{19}H_{28}O_{10}$  (416.43). Yellow powder,  $[\alpha]_D^{25} = -18.6^\circ$  ( $c = 0.05$ , MeOH). **Source:** WAN DOU *Pisum sativum* (young seedpot). **Ref:** 4110.



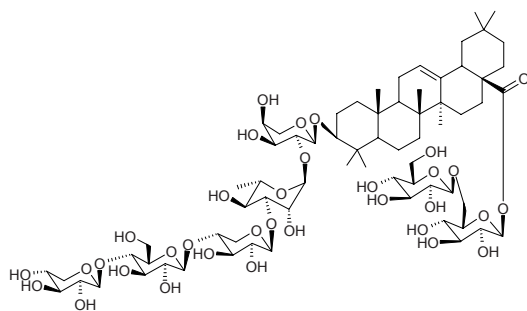


**19433 Scabiosaponin A**

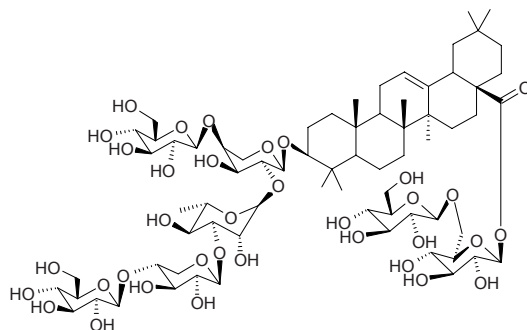
3-*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyloleanoic acid 28-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside C<sub>64</sub>H<sub>104</sub>O<sub>30</sub> (1353.52). Amorphous solid, mp 216–218°C,  $[\alpha]_D^{20} = -6.6^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Pancreatic lipase inhibitor (*in vitro*, weak). **Source:** HUA BEI LAN PEN HUA *Scabiosa tschiliensis* (whole herb: yield = 0.0052%dw). **Ref:** 3021.

**19434 Scabiosaponin B**

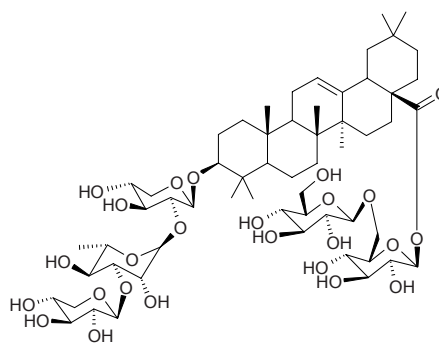
3-*O*- $\beta$ -*D*-Xylopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyloleanoic acid 28-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside C<sub>69</sub>H<sub>112</sub>O<sub>34</sub> (1485.64). Amorphous solid, mp 230–231°C,  $[\alpha]_D^{25} = -28.9^\circ$  ( $c = 0.30$ , MeOH). **Pharm:** Pancreatic lipase inhibitor (*in vitro*, weak). **Source:** HUA BEI LAN PEN HUA *Scabiosa tschiliensis* (whole herb: yield = 0.0010%dw). **Ref:** 3021.

**19435 Scabiosaponin C**

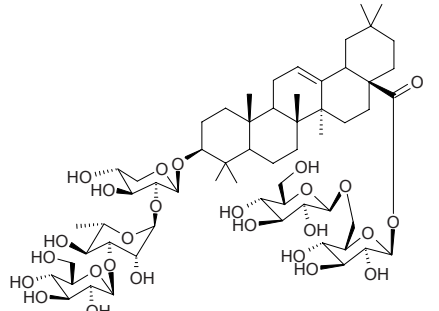
3-*O*-[ $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)] [ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)]- $\alpha$ -*L*-arabinopyranosyloleanoic acid 28-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside C<sub>70</sub>H<sub>114</sub>O<sub>35</sub> (1515.67). Amorphous solid, mp<sup>21</sup>9–220°C,  $[\alpha]_D^{25} = -19.3^\circ$  ( $c = 0.20$ , MeOH). **Pharm:** Pancreatic lipase inhibitor (*in vitro*, weak). **Source:** HUA BEI LAN PEN HUA *Scabiosa tschiliensis* (whole herb: yield = 0.00058%dw). **Ref:** 3021.

**19436 Scabiosaponin E**

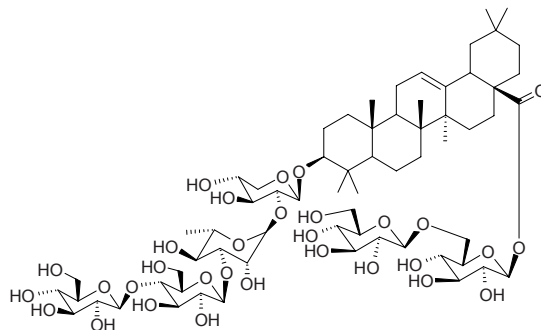
3-*O*- $\beta$ -*D*-Xylopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-xylopyranosyloleanoic acid 28-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside C<sub>58</sub>H<sub>94</sub>O<sub>25</sub> (1191.38). Amorphous solid, mp 208–210°C,  $[\alpha]_D^{20} = -22.9^\circ$  ( $c = 0.56$ , MeOH). **Pharm:** Pancreatic lipase inhibitor (*in vitro*, 1mg/mL, InRt comparing the control = 80%). **Source:** HUA BEI LAN PEN HUA *Scabiosa tschiliensis* (whole herb: yield = 0.00052%dw). **Ref:** 3021.

**19437 Scabiosaponin F**

3-*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-xylopyranosyloleanoic acid 28-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside C<sub>59</sub>H<sub>96</sub>O<sub>26</sub> (1221.41). Amorphous solid, mp<sup>21</sup>8–219°C,  $[\alpha]_D^{25} = -11.1^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Pancreatic lipase inhibitor (*in vitro*, 1mg/mL, InRt comparing the control = 73%). **Source:** HUA BEI LAN PEN HUA *Scabiosa tschiliensis* (whole herb: yield = 0.00033%dw). **Ref:** 3021.

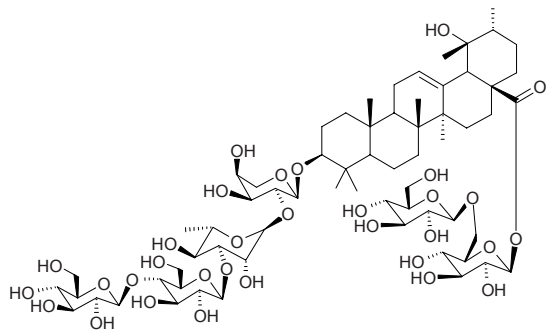
**19438 Scabiosaponin G**

3-*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-xylopyranosyloleanoic acid 28-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside C<sub>65</sub>H<sub>106</sub>O<sub>31</sub> (1383.55). Amorphous solid, mp 228–230°C,  $[\alpha]_D^{21} = -20.3^\circ$  ( $c = 1.28$ , MeOH). **Pharm:** Pancreatic lipase inhibitor (*in vitro*, 1mg/mL, InRt comparing the control = 78%). **Source:** HUA BEI LAN PEN HUA *Scabiosa tschiliensis* (whole herb: yield = 0.00026%dw). **Ref:** 3021.

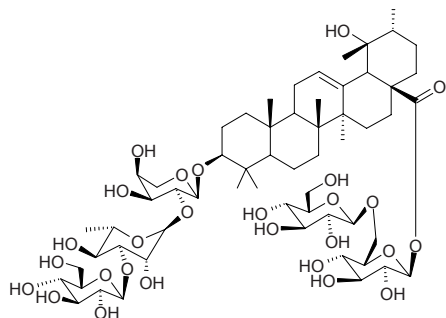


**19439 Scabiosaponin H**

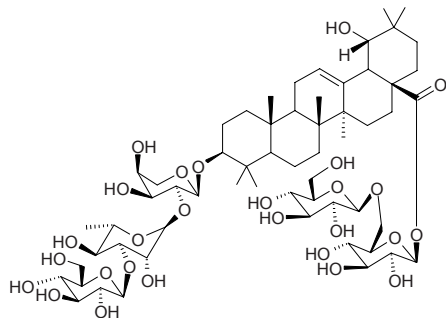
3-*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosylpomolic acid 28-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside C<sub>65</sub>H<sub>106</sub>O<sub>32</sub> (1399.55). Amorphous solid, mp 230–232°C,  $[\alpha]_D^{20} = -11.3^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Pancreatic lipase inhibitor (*in vitro*, 1mg/mL, InRt comparing the control = 57%). **Source:** HUA BEI LAN PEN HUA *Scabiosa tschiliensis* (whole herb: yield = 0.0023%dw). **Ref:** 3021.

**19440 Scabiosaponin I**

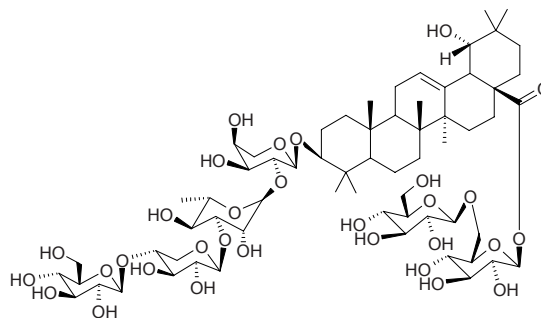
3-*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosylpomolic acid 28-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside C<sub>59</sub>H<sub>96</sub>O<sub>27</sub> (1237.41). Amorphous solid, mp<sup>21</sup> 3–215°C,  $[\alpha]_D^{20} = -15.0^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Pancreatic lipase inhibitor (*in vitro*, 1mg/mL, InRt comparing the control = 71%). **Source:** HUA BEI LAN PEN HUA *Scabiosa tschiliensis* (whole herb: yield = 0.0025%dw). **Ref:** 3021.

**19441 Scabiosaponin J**

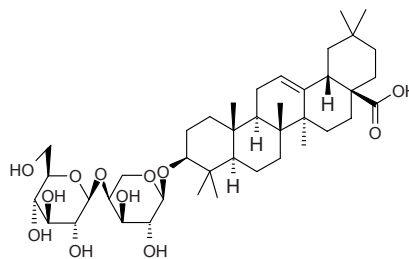
3-*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosylsarsinolic acid 28-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside C<sub>59</sub>H<sub>96</sub>O<sub>27</sub> (1237.41). Amorphous solid, mp<sup>21</sup> 2–214°C,  $[\alpha]_D^{20} = -6.5^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Pancreatic lipase inhibitor (*in vitro*, 1mg/mL, InRt comparing the control = 69%). **Source:** HUA BEI LAN PEN HUA *Scabiosa tschiliensis* (whole herb: yield = 0.00069%dw). **Ref:** 3021.

**19442 Scabiosaponin K**

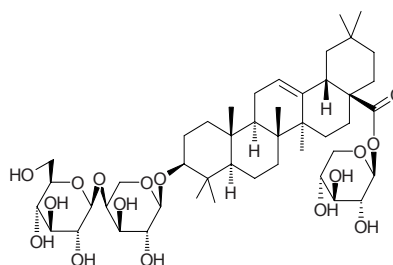
3-*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosylsarsinolic acid 28-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside C<sub>64</sub>H<sub>104</sub>O<sub>31</sub> (1369.52). Amorphous solid, mp 220–222°C,  $[\alpha]_D^{20} = -36^\circ$  ( $c = 0.10$ , MeOH). **Source:** HUA BEI LAN PEN HUA *Scabiosa tschiliensis* (whole herb: yield = 0.00014%dw). **Ref:** 3021.

**19443 Scabioside B**

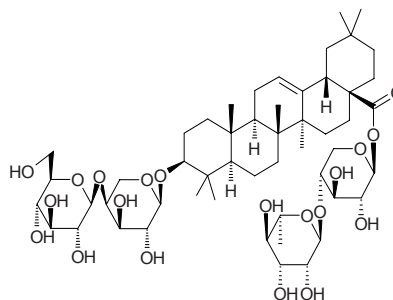
C<sub>41</sub>H<sub>66</sub>O<sub>12</sub> (750.98). mp 210–212°C. **Source:** HUANG HUA BAI JIANG *Patrinia scabiosaefolia*. **Ref:** 2.

**19444 Scabioside D**

C<sub>46</sub>H<sub>74</sub>O<sub>16</sub> (883.09). mp 224–226°C. **Source:** HUANG HUA BAI JIANG *Patrinia scabiosaefolia*. **Ref:** 2.

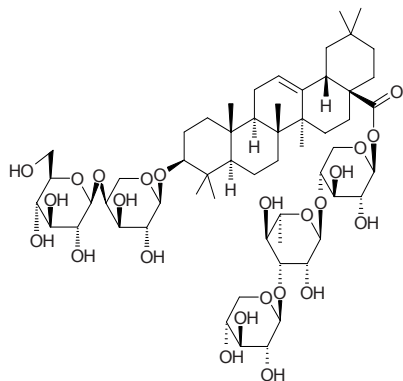
**19445 Scabioside E**

C<sub>52</sub>H<sub>84</sub>O<sub>20</sub> (1029.24). mp 224–227°C. **Source:** HUANG HUA BAI JIANG *Patrinia scabiosaefolia*. **Ref:** 2.

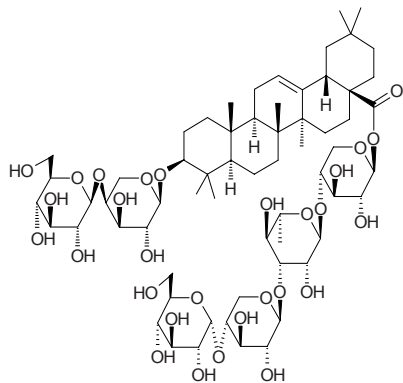


**19446 Scabioside F**

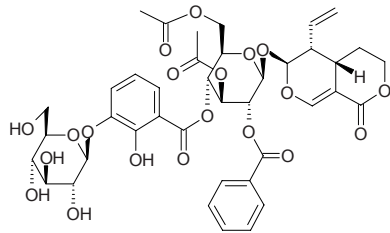
$C_{57}H_{92}O_{24}$  (1161.35). Source: HUANG HUA BAI JIANG *Patrinia scabiosaefolia*. Ref: 2.

**19447 Scabioside G**

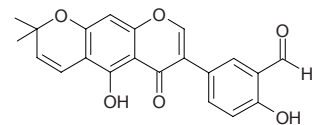
$C_{63}H_{102}O_{29}$  (1323.50). mp 235–236°C. Source: HUANG HUA BAI JIANG *Patrinia scabiosaefolia*. Ref: 2.

**19448 Scaboside**

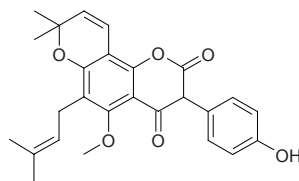
$C_{40}H_{44}O_{20}$  (844.78). Source: LONG DAN *Gentiana scabra*. Ref: 2.

**19449 Scandenal**

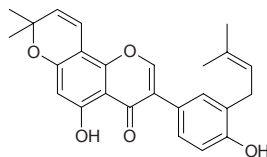
3'-Formyl-4',5'-dihydroxy-2'',2''-dimethylchromeno-[6,7:5'',6'']isoflavone  $C_{21}H_{16}O_6$  (364.36). Yellow solid, mp 79–80°C. Pharm: Increases blood pressure (anesthetized rats, increases in mean arterial blood pressure, 0.4mg/kg, 11.67mmHg). Source: PAN YUAN YU TENG *Derris scandens* (stem). Ref: 3810.

**19450 Scandenin**

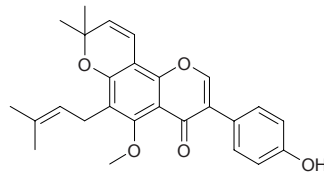
$C_{26}H_{26}O_6$  (434.49). Pharm: Anti-Inflammatory (inhibit brain liposomal peroxidation, 50µg/mL, optical density of DMSO control = (16.9±0.1)%,  $p < 0.001$ ; positive control Propyl gallate, 7.5µmol/mL, optical density of DMSO control = (20.6±0.2)%). Source: PAN YUAN YU TENG *Derris scandens* (stem). Ref: 4984.

**19451 Scanderone**

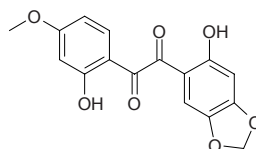
4',5-Dihydroxy-3'-prenyl-2'',2''-dimethylchromeno-[7,8:6'',5'']isoflavone  $C_{25}H_{24}O_5$  (404.47). Yellow solid, mp 115–116°C. Pharm: Increases blood pressure (anesthetized rats, increases in mean arterial blood pressure, 4.0mg/kg, 20mmHg). Source: PAN YUAN YU TENG *Derris scandens* (stem). Ref: 3810.

**19452 Scandinone**

$C_{26}H_{26}O_5$  (418.49). Yellow amorphous. Pharm: Antifungal (*Trichophyton mentagrophytes*, 500–1000µg/mL)<sup>[2347]</sup>; antioxidant (DPPH scavenger, ScRt = 63.16%, control BHT, ScRt = 71.5%)<sup>[3810]</sup>; antibacterial (*Staphylococcus aureus* ATCC 25923, MIC > 256µg/mL, control Vancomycin, MIC = 0.5µg/mL; MRSA SK1, MIC > 256µg/mL, Vancomycin, MIC = 1.0µg/mL)<sup>[3810]</sup>; increases blood pressure (anesthetized rats, increases in mean arterial blood pressure, 4.0mg/kg, 9.17mmHg)<sup>[3810]</sup>. Source: PAN YUAN YU TENG *Derris scandens*. Ref: 2347, 3810.

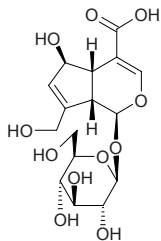
**19453 Scandione**

2',2''-Dihydroxy-4'-methoxy-4'',5''-methylenedioxybenzil  $C_{16}H_{12}O_7$  (316.27). Yellow solid, mp 132–133°C. Source: PAN YUAN YU TENG *Derris scandens* (stem). Ref: 3810.

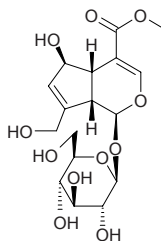


**19454 Scandoside**

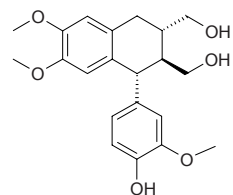
[18842-99-4] C<sub>16</sub>H<sub>22</sub>O<sub>11</sub> (390.35). mp 139~143°C. Source: JI SHI TENG *Paederia scandens*. Ref: 6.

**19455 Scandoside methyl ester**

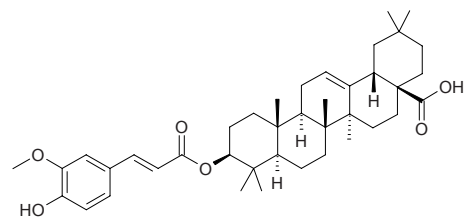
C<sub>17</sub>H<sub>24</sub>O<sub>11</sub> (404.37). Pharm: Antineoplastic (strong). Source: ZHI ZI *Gardenia jasminoides* [Syn. *Gardenia florida*]. Ref: 2, 626, 658.

**19456 Scaphopetalone**

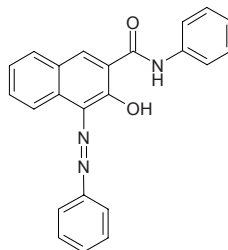
9,4,9'-Trihydroxy 4,5,3'-trimethoxy aryltetralin lignan C<sub>21</sub>H<sub>26</sub>O<sub>6</sub> (374.44). Brown sticky oil. Source: *Scaphopetalum thonneri* (stem cortex). Ref: 3363.

**19457 Scaphopetalumate**

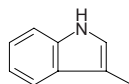
3β-O-E-Feruloyl oleanolic acid C<sub>40</sub>H<sub>56</sub>O<sub>6</sub> (632.89). Amorphous powder. Source: *Scaphopetalum thonneri* (stem cortex). Ref: 3363.

**19458 Scarlet808**

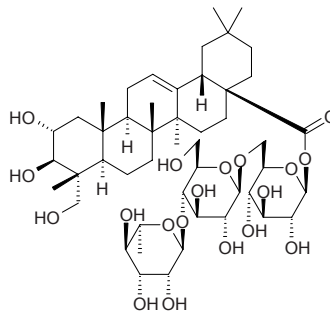
2-Hydroxy-3-(phenylaminocarbonyl)naphthalene-1-azobenzene C<sub>23</sub>H<sub>17</sub>N<sub>3</sub>O<sub>2</sub> (367.41). Red needles (CHCl<sub>3</sub>), mp 249~250°C. Pharm: Cytotoxic (K562, inhibits cell proliferation). Source: MI MAI E ZHANG CHAI *Schefflera venulosa* (stem cortex). Ref: 4600.

**19459 Scatole**

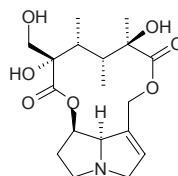
Skatole [83-34-1] C<sub>9</sub>H<sub>9</sub>N (131.18). mp 95°C, bp 265~266°C/755mmHg. Pharm: Funk. Source: LING MAO XIANG *Viverra zibetha*, TIAN CAI *Beta vulgaris*, *Arum* sp. Ref: 6, 658.

**19460 Scaffoleoside A**

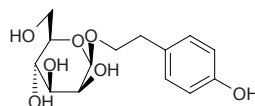
C<sub>48</sub>H<sub>78</sub>O<sub>19</sub> (959.15). Source: JI XUE CAO *Centella asiatica* (aerial parts). Ref: 4135.

**19461 Sceleratine**

[6190-25-6] C<sub>18</sub>H<sub>27</sub>NO<sub>7</sub> (369.42). mp 178°C, [α]<sub>D</sub><sup>21</sup> = +54° (ethanol). Pharm: Uterine stimulant (gpg, *in vitro*, EC = 1:20000); toxin (humans and livestock, liver). Source: LA QIAN LI GUANG *Senecio sceleratus*. Ref: 661.

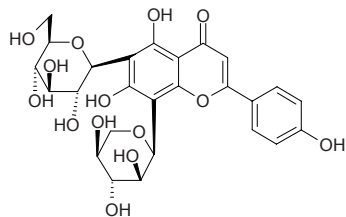
**19462 Sceptroside**

C<sub>14</sub>H<sub>20</sub>O<sub>7</sub> (300.31). Amorphous solid, [α]<sub>D</sub><sup>20</sup> = -51° (c = 0.5, MeOH). Source: *Isoplexis sceptrum* (fresh leaf). Ref: 5291.

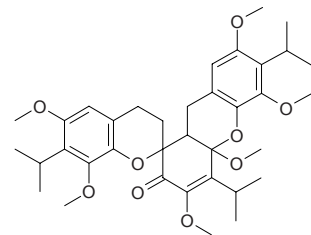


**19463 Schaftoside**

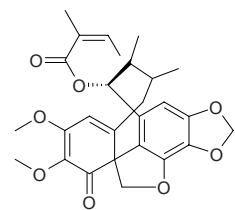
[51938-32-0]  $C_{26}H_{28}O_{14}$  (564.50). **Pharm:** Insect phagostimulant (*Plant hoppers*). **Source:** GAN CAO *Glycyrrhiza uralensis* (root and rhizome: content = 0.038%)<sup>[5508]</sup>, GUANG GUO GAN CAO *Glycyrrhiza glabra* (root and rhizome: content = 0.015%)<sup>[5508]</sup>, JING MI *Oryza sativa*<sup>[658]</sup>, TIAN NAN XING *Arisaema consanguineum* (dried tuber: content scope of 9 origins = 0.0102%–0.185%, mean content = 0.038%)<sup>[5508]</sup>, YI YE TIAN NAN XING *Arisaema heterophyllum* (dried tuber: content scope of 7 origins = 0.009%–0.0555%, mean content = 0.052%)<sup>[5508]</sup>, ZHANG GUO GAN CAO *Glycyrrhiza inflata* (root and rhizome: content = 0.038%)<sup>[5508]</sup>. **Ref:** 658, 5508.

**19464 (±)-Schefflone**

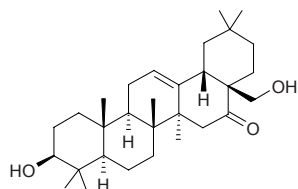
$C_{36}H_{48}O_9$  (624.78). Creamy crystals, mp 210°C,  $[\alpha]_D = 0.0^\circ$  ( $c = 0.16$ ,  $CHCl_3$ ). **Source:** XIE FEI ZI YU PAN *Uvaria scheffleri* (root cortex). **Ref:** 3763.

**19465 Schiarisanrin E**

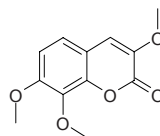
$C_{27}H_{30}O_8$  (482.54). Pale yellow solid. **Pharm:** Antihepatitis inactive (anti-HBsAg, 100µg/mL, InRt < 25%, inactive; anti-HBeAg, 100µg/mL, InRt < 25%, inactive). **Source:** A LI SHAN WU WEI ZI *Schisandra arisanensis* (stem). **Ref:** 4397.

**19466 Schimperinone**

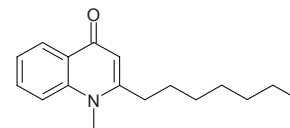
3β,28-dihydroxy-16-oxo-12-oleanene  $C_{30}H_{48}O_3$  (456.72). Colorless needles, mp 269–271°C,  $[\alpha]_D^{25} = -11^\circ$  ( $c = 0.6$ ,  $CHCl_3$ ). **Source:** KEN NI YA XIAN SUAN QIANG *Embelia schimperi*. **Ref:** 2058.

**19467 Schinicooumarin**

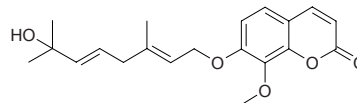
3,7,8-Trimethoxycoumarin [168074-91-7]  $C_{12}H_{12}O_5$  (236.22). Acicular crystals (Benzene–ethyl formate), mp 147–151°C. **Pharm:** Platelet aggregation inhibitor (caused by arachidonic acid, 100µg/mL InRt = 100%). **Source:** QING JIAO *Zanthoxylum schinifolium*. **Ref:** 1098.

**19468 Schinifoline**

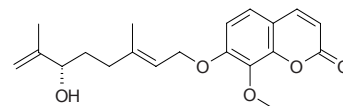
*N*-methyl-2-heptyl-4(1*H*)-quinolone [80554-58-1]  $C_{17}H_{23}NO$  (257.38). White acicular crystals (hexane:chloroform = 7:3), mp 81–82°C. **Pharm:** Antibacterial (gram-positive bacteria); platelet aggregation inhibitor; DNA isomerase inhibitor; cytotoxic. **Source:** HUA JIAO *Zanthoxylum bungeanum* (dried ripe pericarp: content = 0.007%)<sup>[5508]</sup>, QING JIAO *Zanthoxylum schinifolium* (dried ripe pericarp: content = 0.047%)<sup>[5508]</sup>. **Ref:** 207, 660, 2176, 5508.

**19469 Schinilenol**

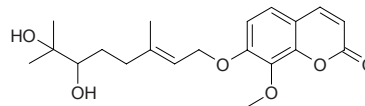
$C_{20}H_{24}O_5$  (344.41). **Pharm:** Antibacterial; smooth muscle relaxant; anticoagulant; photosensitive agent; ichthyotoxin; toxin. **Source:** *Zanthoxylum* sp. **Ref:** 2176.

**19470 Schininallyl**

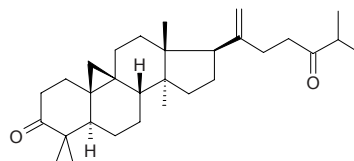
[168074-92-8]  $C_{20}H_{24}O_5$  (344.41). Prismatic crystals, mp 78–80°C,  $[\alpha]_D^{22} = -16.4^\circ$  ( $c = 0.07$ , chloroform). **Pharm:** Platelet aggregation inhibitor (*in vitro*, caused by arachidonic acid, collagen and PAF, 100µg/mL,  $P < 0.001$ ). **Source:** QING JIAO *Zanthoxylum schinifolium*. **Ref:** 1098.

**19471 Schinindiol**

$C_{20}H_{26}O_6$  (362.43). **Pharm:** Antibacterial; smooth muscle relaxant; anticoagulant; photosensitive agent; ichthyotoxin; toxin. **Source:** *Zanthoxylum* sp. **Ref:** 2176.

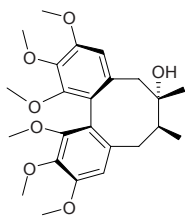
**19472 Schisandraflorin**

$C_{30}H_{46}O_2$  (438.70). **Pharm:** Antineoplastic; anti-HIV. **Source:** DA HUA WU WEI ZI *Schisandra grandiflora*. **Ref:** 2523.

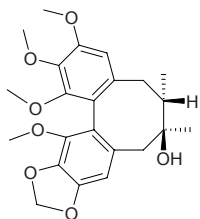


**19473 Schisandrol A**

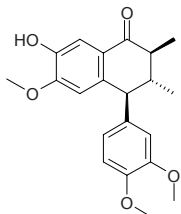
Wuweizichun A [7432-28-2]  $C_{24}H_{32}O_7$  (432.52). mp 118~119°C, 133°C,  $[\alpha]_D^{23} = +76.1^\circ$  ( $c = 0.71$ ,  $CHCl_3$ ). **Pharm:** Analgesic; antipyretic; antispasmodic; smooth muscle relaxant; choleric; antihepatotoxin (repairs hepatic injury induced by  $CCl_4$  and galactosamine, reduces SGPT and SGOT); CNS depressant; inhibits gastric secretion; slows heart rate; tonic (effective component in *Schisandra chinensis* WU WEI ZI); NFAT transcription inhibitor ( $IC_{50} = (1.34 \pm 0.05) \mu\text{mol/L}$ , control Cyclosporin A,  $IC_{50} = (1.20 \pm 0.29) \text{nmol/L}$ )<sup>[5343]</sup>. **Source:** HU LU BA *Trigonella foenum-graecum*, HUA ZHONG WU WEI ZI *Schisandra sphenanthera* (dried ripe fruit: content scope of 3 origins = 0.004%~0.079%, mean content = 0.04%)<sup>[5508]</sup>, WU WEI ZI *Schisandra chinensis* (dried ripe fruit: content scope of 6 origins = 2.24%~9.87%, mean content = 4.39%)<sup>[5508]</sup>. **Ref:** 2, 4, 6, 588, 5343, 5508.

**19474 Schisandrol B**

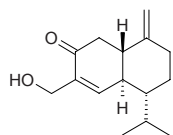
$C_{23}H_{28}O_7$  (416.48).  $[\alpha]_D^{23} = +72.2^\circ$  ( $c = 0.53$ ,  $CHCl_3$ ). **Pharm:** NFAT (nuclear factor of activated T cells) transcription inhibitor ( $IC_{50} = (16.37 \pm 1.00) \mu\text{mol/L}$ , control Cyclosporin A,  $IC_{50} = (1.20 \pm 0.29) \text{nmol/L}$ )<sup>[5343]</sup>. **Source:** HUA ZHONG WU WEI ZI *Schisandra sphenanthera* (dried ripe fruit: content scope of 3 origins = 0.027%~0.038%, mean content = 0.032%)<sup>[5508]</sup>, WU WEI ZI *Schisandra chinensis* (dried ripe fruit: content scope of 6 origins = 0.74%~3.75%, mean content = 1.40%)<sup>[5508]</sup>. **Ref:** 5343, 5508.

**19475 Schisandrone**

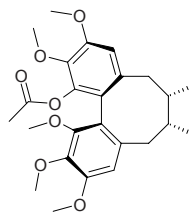
$C_{21}H_{24}O_5$  (356.42). **Source:** HUA ZHONG WU WEI ZI *Schisandra sphenanthera*, YI GENG WU WEI ZI *Schisandra henryi*. **Ref:** 660.

**19476 Schisandronol**

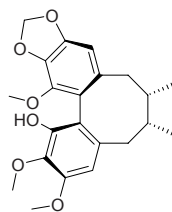
[61206-02-8]  $C_{15}H_{22}O_2$  (234.34). **Source:** NEI FENG XIAO WU WEI ZI *Schisandra nigra*. **Ref:** 1521.

**19477 Schisanhenol acetate**

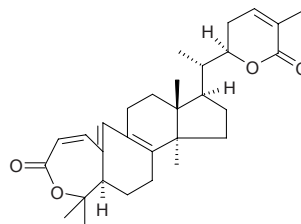
$C_{25}H_{32}O_7$  (444.53). Acicular crystals, mp 157~159°C,  $[\alpha]_D^{35} = +31.6^\circ$  (ethanol). **Source:** HONG HUA WU WEI ZI *Schisandra rubriflora*, WU WEI ZI *Schisandra chinensis*. **Ref:** 2, 39.

**19478 Schisanhenol B**

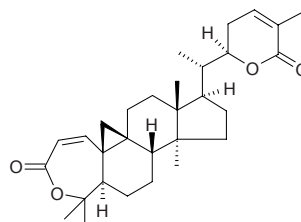
$C_{22}H_{26}O_6$  (386.45). Granular crystals (petroleum spirit-ether), mp 144~146°C. **Source:** HONG HUA WU WEI ZI *Schisandra rubriflora*, WU WEI ZI *Schisandra chinensis*. **Ref:** 2, 39.

**19479 Schisanlactone A**

[87164-31-6]  $C_{30}H_{40}O_4$  (464.65). Crystals, mp 227~229°C,  $[\alpha]_D^{23} = +365^\circ$  ( $c = 0.20$ ,  $CHCl_3$ ). **Pharm:** Antineoplastic<sup>[2523]</sup>; anti-HIV<sup>[2523]</sup>. **Source:** CHANG GENG NAN WU WEI ZI *Kadsura peltigera* [Syn. *Kadsura longipedunculata*], *Schisandra* sp. **Ref:** 2437, 2438, 2523.

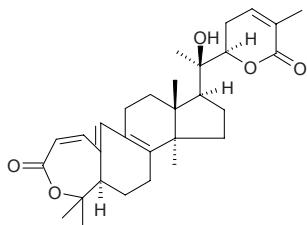
**19480 Schisanlactone B**

$C_{30}H_{42}O_4$  (466.67). Crystals, mp 205~207°C,  $[\alpha]_D^{20} = +80.2^\circ$  ( $c = 0.94$ ,  $CHCl_3$ ). **Pharm:** Antineoplastic<sup>[2523]</sup>; anti-HIV<sup>[2523]</sup>. **Source:** CHANG GENG NAN WU WEI ZI *Kadsura peltigera* [Syn. *Kadsura longipedunculata*], *Schisandra* sp. **Ref:** 1185, 2437, 2523.

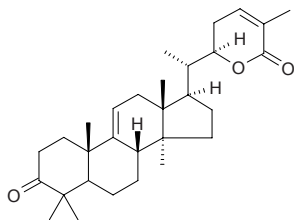


**19481 Schisanlactone C**

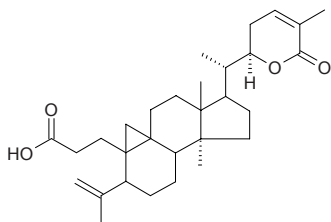
[92051-27-9] C<sub>30</sub>H<sub>40</sub>O<sub>5</sub> (480.65). Source: *Schisandra* sp. Ref: 2441.

**19482 Schisanlactone D**

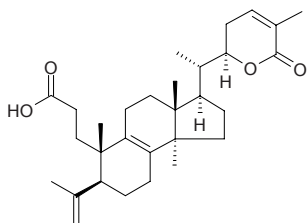
[92051-26-8] C<sub>30</sub>H<sub>44</sub>O<sub>3</sub> (452.68). Source: *Schisandra* sp. Ref: 2441.

**19483 Schisanlactone E**

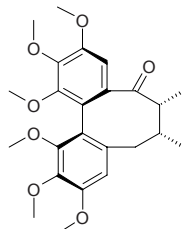
[136040-43-2] C<sub>30</sub>H<sub>44</sub>O<sub>4</sub> (468.68). mp 120~122°C, [α]<sub>D</sub><sup>15</sup> = -113.0° (c = 0.330, chloroform). Pharm: Cytotoxic (*in vitro*, P<sub>388</sub>, IC<sub>50</sub> = 10 μg/mL)<sup>[2523]</sup>. Source: CHANG GENG NAN WU WEI ZI *Kadsura peltigera* [Syn. *Kadsura longipedunculata*]. Ref: 1185, 2523.

**19484 Schisanlactone F**

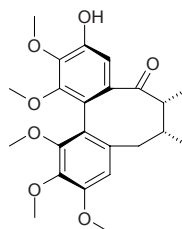
C<sub>30</sub>H<sub>44</sub>O<sub>4</sub> (468.68). Pharm: Antineoplastic<sup>[2523]</sup>; anti-HIV<sup>[2523]</sup>. Source: CHANG GENG NAN WU WEI ZI *Kadsura peltigera* [Syn. *Kadsura longipedunculata*]. Ref: 2438, 2440, 2523.

**19485 Schisanlignone A**

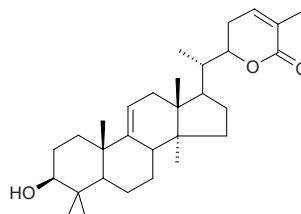
[13557-67-4] C<sub>24</sub>H<sub>30</sub>O<sub>7</sub> (430.50). Crystals (ethyl formate), mp 104~105°C, [α]<sub>D</sub><sup>24</sup> = -74.8° (c = 0.210, chloroform). Pharm: Cytotoxic (*in vitro*, P<sub>388</sub>, IC<sub>50</sub> = 10 μg/mL). Source: CHANG GENG NAN WU WEI ZI *Kadsura peltigera* [Syn. *Kadsura longipedunculata*]. Ref: 1184.

**19486 Schisanlignone B**

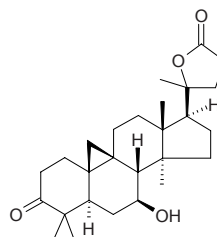
[135459-86-8] C<sub>23</sub>H<sub>28</sub>O<sub>7</sub> (416.47). mp 151~152°C, [α]<sub>D</sub><sup>24</sup> = -36.9° (c = 0.2355, chloroform). Pharm: Cytotoxic (*in vitro*, P<sub>388</sub>, IC<sub>50</sub> = 10 μg/mL). Source: CHANG GENG NAN WU WEI ZI *Kadsura peltigera* [Syn. *Kadsura longipedunculata*]. Ref: 1184.

**19487 Schisanol**

C<sub>30</sub>H<sub>46</sub>O<sub>3</sub> (454.70). Pharm: Antineoplastic; anti-HIV. Source: HUA ZHONG WU WEI ZI *Schisandra sphenanthera*. Ref: 2523.

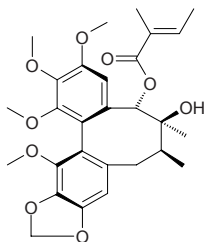
**19488 Schisanterpene B**

C<sub>27</sub>H<sub>40</sub>O<sub>4</sub> (428.62). Colorless needles, mp 193~194°C, [α]<sub>D</sub><sup>20</sup> = +20°C (c = 0.1, CHCl<sub>3</sub>). Pharm: Cytotoxic (hmn hepatocellular carcinoma HepG2, IC<sub>50</sub> = 61.32 μmol/L, control Camptothecin, IC<sub>50</sub> = 1.23 μmol/L; hmn acute promyelocytic leukemia HL-60, IC<sub>50</sub> = 58.07 μmol/L, Camptothecin, IC<sub>50</sub> = 1.35 μmol/L; hepatocellular carcinoma Bel7402, IC<sub>50</sub> = 72.93 μmol/L, Camptothecin, IC<sub>50</sub> = 1.02 μmol/L). Source: HAN RUI WU WEI ZI *Schisandra propinqua* (stem: yield = 0.0001% dw). Ref: 2097.

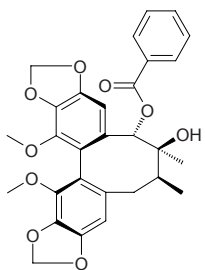


**19489 Schisantherin C**

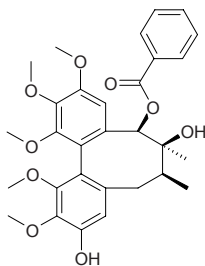
[58546-55-7]  $C_{28}H_{34}O_9$  (514.58). **Pharm:** Antihepatotoxin (mus, orl, 50mg/(kg·d), 15 days, reduces activity of SGPT). **Source:** HUA ZHONG WU WEI ZI *Schisandra sphenanthera*, WU WEI ZI *Schisandra chinensis*. **Ref:** 2, 658.

**19490 Schisantherin D**

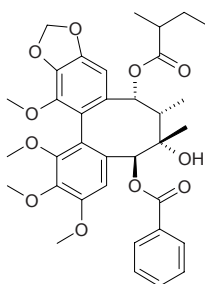
Schisantherin D [64917-82-4]  $C_{29}H_{28}O_9$  (520.54). **Pharm:** Antihepatotoxin (mus, orl, 50mg/(kg·d), 15 days, reduces activity of SGPT). **Source:** HUA ZHONG WU WEI ZI *Schisandra sphenanthera*, WU WEI ZI *Schisandra chinensis*. **Ref:** 2, 658.

**19491 Schisantherin E**

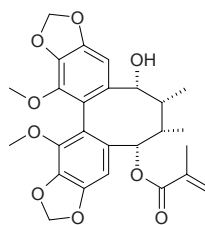
[64917-83-5]  $C_{30}H_{34}O_9$  (538.60). **Source:** WU WEI ZI *Schisandra chinensis*. **Ref:** 2.

**19492 Schisantherin J**

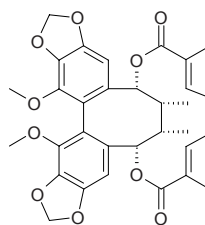
[135432-28-9]  $C_{35}H_{40}O_{11}$  (636.70). **Source:** CHANG GENG NAN WU WEI ZI *Kadsura peltigera* [Syn. *Kadsura longipedunculata*]. **Ref:** 2436.

**19493 Schisantherin L**

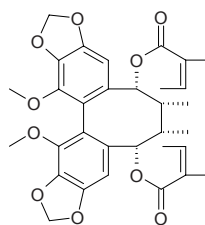
[149990-51-2]  $C_{27}H_{30}O_9$  (498.53). **Source:** LENG FAN TUAN *Kadsura coccinea* [syn. *Kadsura chenensis*; *Kadsura hainanensis*]. **Ref:** 2436.

**19494 Schisantherin M**

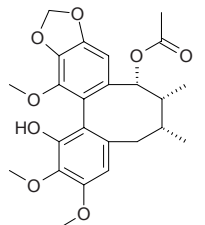
[149990-52-3]  $C_{32}H_{36}O_{10}$  (580.64). **Source:** LENG FAN TUAN *Kadsura coccinea* [syn. *Kadsura chenensis*; *Kadsura hainanensis*]. **Ref:** 2436.

**19495 Schisantherin N**

[150132-86-8]  $C_{32}H_{36}O_{10}$  (580.64). **Source:** LENG FAN TUAN *Kadsura coccinea* [syn. *Kadsura chenensis*; *Kadsura hainanensis*]. **Ref:** 2436.

**19496 Schisantherin O**

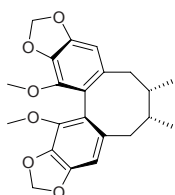
[150132-87-9]  $C_{24}H_{28}O_8$  (444.49). **Source:** LENG FAN TUAN *Kadsura coccinea* [syn. *Kadsura chenensis*; *Kadsura hainanensis*]. **Ref:** 2436.



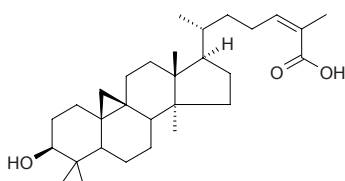


**19497 Schizandrin C**

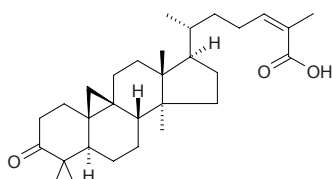
Schisandrin C; Wuweizisu C [61301-33-5]  $C_{22}H_{24}O_6$  (384.43).  $[\alpha]_D^{23} = -57.4^\circ$  ( $c = 0.85, CHCl_3$ ). **Pharm:** Antineoplastic (screened as potential antitumor promoters, EBV-EA induced by TPA, mol ratio/TPA = 1000, relative percentage of EBV-EA =  $(2.6 \pm 0.2)\%$  (positive control value 32pmol, 20ng TPA = 100%), viability of Raji cells = 70%)<sup>[4644]</sup>; antihepatotoxin (mus, hepatotoxin induced by  $CCl_4$  or thioacetamide, 100mg/kg orl, lowers SGPT); NFAT transcription inhibitor ( $IC_{50} = (7.54 \pm 0.22)\mu\text{mol/L}$ , control Cyclosporin A,  $IC_{50} = (1.20 \pm 0.29)\text{nmol/L}$ )<sup>[5343]</sup>. **Source:** CHANG GENG NAN WU WEI ZI *Kadsura peltigera* [Syn. *Kadsura longipedunculata*], HONG HUA WU WEI ZI *Schisandra rubriflora*, HUA ZHONG WU WEI ZI *Schisandra sphenanthera* (dried ripe fruit: content scope of 2 origins = 0.08%~0.12%, mean content = 0.10%<sup>[5508]</sup>), NEI NAN WU WEI ZI *Kadsura interior* (stem)<sup>[4644]</sup>, WU WEI ZI *Schisandra chinensis* (dried ripe fruit: content scope of 6 origins = 0.20%~1.32%, mean content = 0.60%<sup>[5508]</sup>). **Ref:** 2, 39, 658, 4644, 5343, 5508.

**19498 Schizandrollic acid**

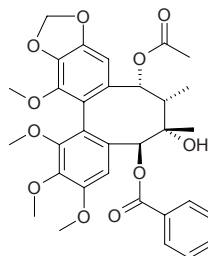
$C_{30}H_{48}O_3$  (456.72). **Pharm:** Antineoplastic; anti-HIV. **Source:** HUA ZHONG WU WEI ZI *Schisandra sphenanthera*, YI GENG WU WEI ZI *Schisandra henryi*. **Ref:** 2523.

**19499 Schizandronic acid**

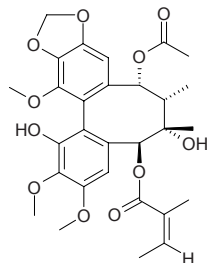
Schizandronic acid; Ganwuweizic acid [55511-14-3]  $C_{30}H_{46}O_3$  (454.70). **Pharm:** Antineoplastic<sup>[2523]</sup>; anti-HIV<sup>[2523]</sup>. **Source:** CHANG GENG NAN WU WEI ZI *Kadsura peltigera* [Syn. *Kadsura longipedunculata*], NEI FENG XIAO WU WEI ZI *Schisandra nigra*, XIAO HUA WU WEI ZI *Schisandra micrantha* (bustem and leaf). **Ref:** 2436, 2523, 4389.

**19500 Schizanrin F**

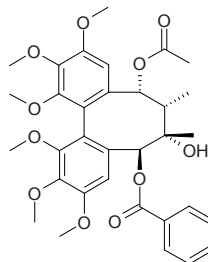
$C_{32}H_{34}O_{11}$  (594.62). White solid, mp 141~143°C. **Pharm:** Antihepatitis inactive (anti-HBsAg, 100μg/mL, InRt < 25%, inactive; anti-HBeAg, 100μg/mL, InRt < 25%, inactive). **Source:** *Kadsura matsudai* (stem). **Ref:** 4397.

**19501 Schizanrin G**

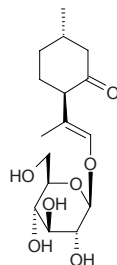
$C_{29}H_{34}O_{11}$  (558.58). White needles, mp 179~182°C. **Pharm:** Antihepatitis inactive (anti-HBsAg, 100μg/mL, InRt < 25%, inactive; anti-HBeAg, 100μg/mL, InRt < 25%, inactive). **Source:** *Kadsura matsudai* (stem). **Ref:** 4397.

**19502 Schizanrin H**

$C_{33}H_{38}O_{11}$  (610.66). White needles, mp 193~195°C. **Pharm:** Antihepatitis inactive (anti-HBsAg, 100μg/mL, InRt < 25%, inactive; anti-HBeAg, 100μg/mL, InRt < 25%, inactive). **Source:** *Kadsura matsudai* (stem). **Ref:** 4397.

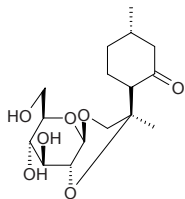
**19503 Schizonepetoside A**

[78887-75-9]  $C_{16}H_{26}O_7$  (330.38). **Source:** JING JIE *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*]. **Ref:** 2.

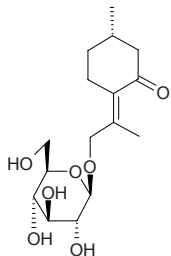


**19504 Schizonepetoside B**

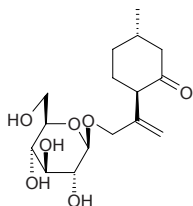
[78897-60-6]  $C_{16}H_{26}O_7$  (330.38). Source: JING JIE *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*]. Ref: 2, 660.

**19505 Schizonepetoside C**

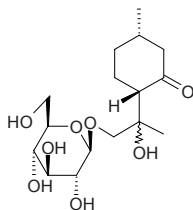
[105351-69-7]  $C_{16}H_{26}O_7$  (330.38). Source: JING JIE *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*]. Ref: 2, 1521.

**19506 Schizonepetoside D**

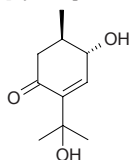
$C_{16}H_{26}O_7$  (330.38). Source: JING JIE *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*]. Ref: 660.

**19507 Schizonepetoside E**

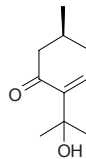
$C_{16}H_{28}O_8$  (348.40). Source: JING JIE *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*]. Ref: 660.

**19508 Schizonodiol**

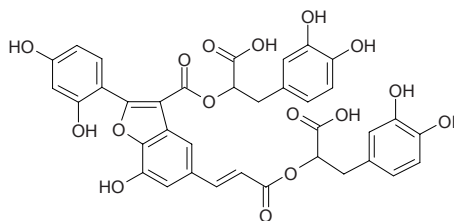
[121693-13-8]  $C_{10}H_{16}O_3$  (184.24). Source: JING JIE *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*]. Ref: 2.

**19509 Schizonol**

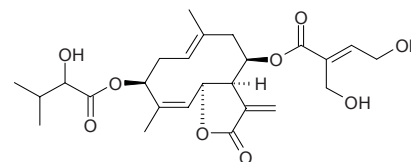
$C_{10}H_{16}O_2$  (168.24). Source: JING JIE *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*]. Ref: 2.

**19510 Schizotenuin A**

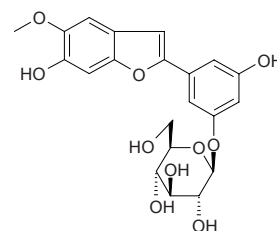
$C_{36}H_{28}O_{16}$  (716.61). Source: JING JIE *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*]. Ref: 660.

**19511 Schkuhrin II**

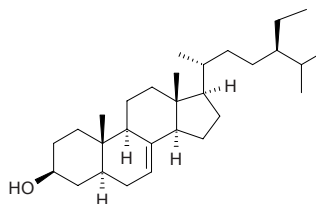
[70434-09-2]  $C_{25}H_{34}O_9$  (478.54). Pharm: Antibacterial; cytotoxic (KB, 5.5 μg/mL); insect antifeedant. Source: SHI KU JU *Schkuhria pinnata*. Ref: 5, 658.

**19512 Schoenoside**

$C_{21}H_{22}O_{10}$  (434.40). Amorphous powder.  $[\alpha]_D^{21} = -84.2^\circ$  (c = 0.48, MeOH). Source: WEI JING BAI HE *Schoenocaulon officinale* (rhizome). Ref: 4210.

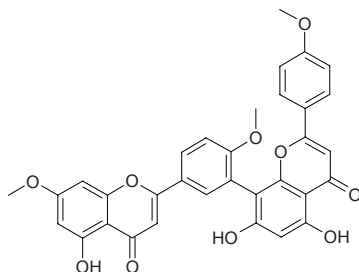
**19513 Schottenol**

[521-03-9]  $C_{29}H_{50}O$  (414.72). Pharm: Precursor to biosynthesis of ecdysone (*Drosophila pachea*). Source: family Cactaceae spp. Ref: 658.

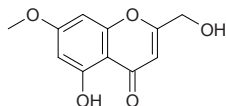


**19514 Sciadopitysin**

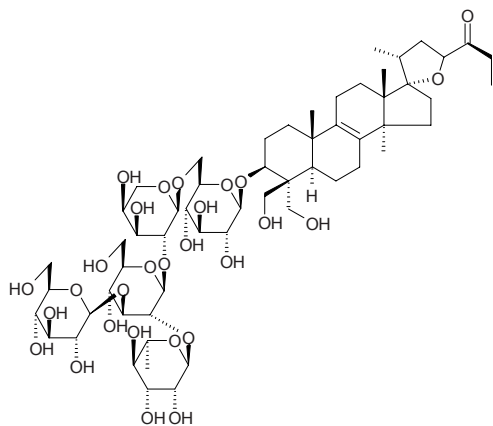
7,4',4'''-Tri-*O*-methyl amentoflavone [521-34-6] C<sub>33</sub>H<sub>24</sub>O<sub>10</sub> (580.55). mp 295–297°C. **Source:** BAI GUO YE *Ginkgo biloba* (in 1956 the compound was isolated from leaf of the plant)<sup>[5505]</sup>, SAN JIAN SHAN *Cephalotaxus fortunei*, YUN NAN FEI SHU *Torreya yunnanensis* (twig and leaf: yield = 0.00038%dw)<sup>[4707]</sup>, ZHAI YE NAN YANG SHAN *Araucaria angustifolia* (seeding root), ZI SHAN *Taxus cuspidata*. **Ref:** 660, 4707, 5098, 5505.

**19515 Scikochromone A**

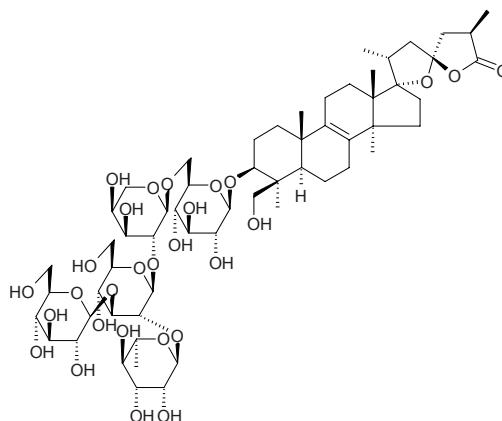
C<sub>11</sub>H<sub>10</sub>O<sub>5</sub> (222.20). **Pharm:** Cytotoxic (hmn peripheral blood T cells, dose = 5.0 μg/mL, T cell survival rate = 90%); immunosuppressant (inhibits IL-2 secretion costimulated by CD28, dose = 5.0 μg/mL, InRt = 63%). **Source:** HONG CHAI HU *Bupleurum scorzonrifolium* (root). **Ref:** 3498.

**19516 Scillanoside L<sub>1</sub>**

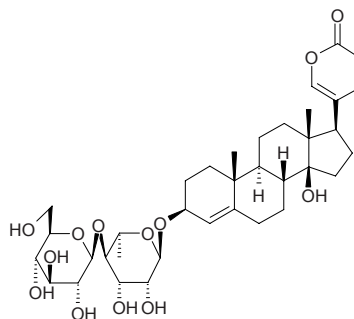
15-Deoxy-30-hydroxyeucosterol 3-*O*- $\alpha$ -L-rhamnopyranosyl-(1→2)-[( $\beta$ -D-glucopyranosyl-(1→3))- $\beta$ -D-glucopyranosyl-(1→2)- $\alpha$ -L-arabinopyranosyl-(1→6)- $\beta$ -D-glucopyranoside C<sub>58</sub>H<sub>94</sub>O<sub>28</sub> (1239.38). White amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -57.1° (c = 0.08, MeOH). **Pharm:** Cytotoxic (HT1080 ED<sub>50</sub> = (2.62±1.79)nmol/L; B16(F-10) ED<sub>50</sub> = (2.38±2.10)nmol/L; 3LL ED<sub>50</sub> = (4.07±1.05)nmol/L; MCF7 ED<sub>50</sub> = (7.96±4.83)nmol/L; PC3 ED<sub>50</sub> = (5.08±3.95)nmol/L; HT29 ED<sub>50</sub> = (6.56±5.21)nmol/L; LOX-IMVI ED<sub>50</sub> = (3.82±1.68)nmol/L; A549 ED<sub>50</sub> = (4.51±3.23)nmol/L; control adriamycin ED<sub>50</sub> = (0.09±0.03)nmol/L, (0.06±0.10)nmol/L, (0.09±0.03)nmol/L, (0.38±0.34)nmol/L, (0.83±0.18)nmol/L, (1.07±0.12)nmol/L, (0.38±0.33)nmol/L, (0.67±0.21)nmol/L, respectively). **Source:** MIAN ZAO ER *Scilla scilloides* (fresh bulb). **Ref:** 4225.

**19517 Scillanoside L<sub>2</sub>**

(23*S*,25*R*)-17 $\alpha$ ,23-Epoxy-29-hydroxy-3 $\beta$ -[(*O*- $\alpha$ -L-rhamnopyranosyl-(1→2)-*O*- $\beta$ -D-glucopyranosyl-(1→3))-*O*- $\beta$ -D-glucopyranosyl-(1→2)- $\alpha$ -L-arabinopyranosyl-(1→6)- $\beta$ -D-glucopyranosyl]oxy]lanost-8-en-23,26-olide C<sub>59</sub>H<sub>94</sub>O<sub>28</sub> (1251.39). Amorphous solid, [ $\alpha$ ]<sub>D</sub><sup>26</sup> = -102.0° (c = 0.1, MeOH); white amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -34.7° (c = 0.08, MeOH). **Pharm:** Cytotoxic (HT1080 ED<sub>50</sub> = (2.34±0.11)nmol/L; B16(F-10) ED<sub>50</sub> = (5.27±2.71)nmol/L; 3LL ED<sub>50</sub> = (3.53±3.53)nmol/L; MCF7 ED<sub>50</sub> > 10)nmol/L; PC3 ED<sub>50</sub> = (4.82±3.52)nmol/L; HT29 ED<sub>50</sub> > 10)nmol/L; LOX-IMVI ED<sub>50</sub> = (4.51±1.82)nmol/L; A549 ED<sub>50</sub> = (5.60±2.99)nmol/L; control Adriamycin ED<sub>50</sub> = (0.09±0.03)nmol/L, (0.06±0.10)nmol/L, (0.09±0.03)nmol/L, (0.38±0.34)nmol/L, (0.83±0.18)nmol/L, (1.07±0.12)nmol/L, (0.38±0.33)nmol/L, (0.67±0.21)nmol/L, respectively)<sup>[4225]</sup>; cytotoxic (Hmn oral squamous cell carcinoma cells HSC-2, IC<sub>50</sub> = 14 μg/mL, control Etoposide, IC<sub>50</sub> = 24 μg/mL)<sup>[4308]</sup>. **Source:** MIAN ZAO ER *Scilla scilloides* (fresh bulb), XUE GUANG HUA *Chionodoxa luciliae* (fresh bulb). **Ref:** 4225, 4308.

**19518 Scillaren A**

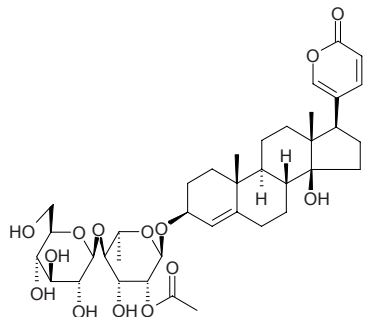
C<sub>36</sub>H<sub>52</sub>O<sub>13</sub> (692.81). Very bitter, two crystals type. acicular crystals(methanol), mp 184–186°C; tiny leaflike crystals (methanol), mp 208–211°C, [ $\alpha$ ]<sub>D</sub><sup>23</sup> = -71.9° (c = 1.011, methanol). **Pharm:** LD<sub>50</sub> (cat, iv) = 0.143mg/kg. **Source:** HAI CONG *Urginea maritima*. **Ref:** 661.



**19519 Scillarenin 3-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)-2'-*O*-acetyl- $\alpha$ -L-rhamnopyranoside**

$C_{38}H_{54}O_{14}$  (734.85). Amorphous powder,  $[\alpha]_D^{26} = -67.3^\circ$  ( $c = 0.50$ , MeOH).

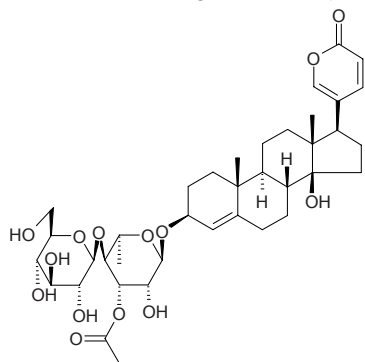
Source: HAI CONG *Urginea maritima* (bulb). Ref: 3513.



**19520 Scillarenin 3-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)-3'-*O*-acetyl- $\alpha$ -L-rhamnopyranoside**

$C_{38}H_{54}O_{14}$  (734.85). Amorphous powder,  $[\alpha]_D^{26} = -60.6^\circ$  ( $c = 0.57$ , MeOH).

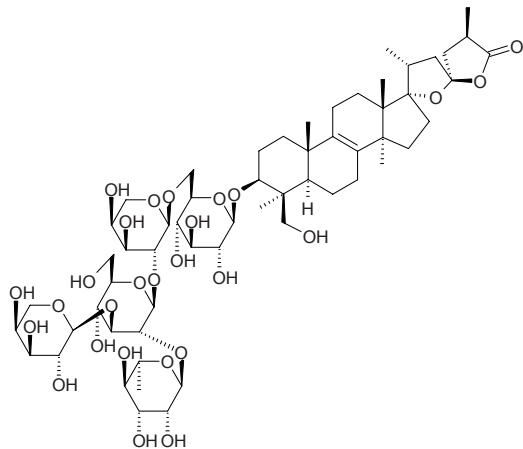
Source: HAI CONG *Urginea maritima* (bulb). Ref: 3513.



**19521 Scillasaponin E**

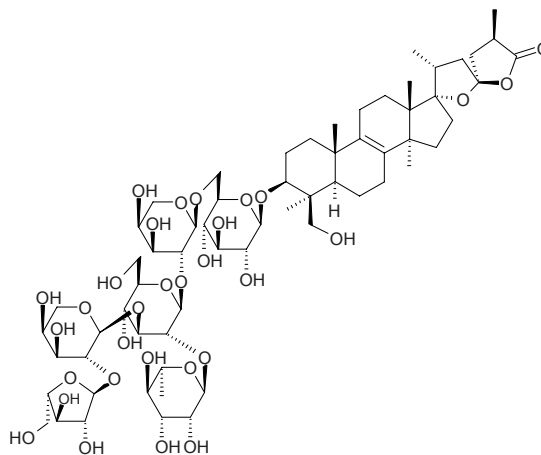
(23*S*,25*R*)-3 $\beta$ -[(*O*- $\alpha$ -L-Arabinopyranosyl-(1 $\rightarrow$ 3)-*O*-[ $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)]-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)-*O*- $\alpha$ -L-arabinopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl)oxy]-17 $\alpha$ ,23-epoxy-29-hydroxylanost-8-en-23,26-olide  $C_{58}H_{92}O_{27}$  (1221.36). Amorphous solid,  $[\alpha]_D^{27} = 22.0^\circ$  ( $c = 0.10$ , MeOH). Pharm:

Cytotoxic (HSC-2 hmn oral squamous cell carcinoma cells,  $IC_{50} = 6.3\mu\text{g/mL}$ , control Etoposide,  $IC_{50} = 24\mu\text{g/mL}$ ). Source: QI YI PU TAO FENG XIN ZI *Muscari paradoxum* (bulb). Ref: 3495.



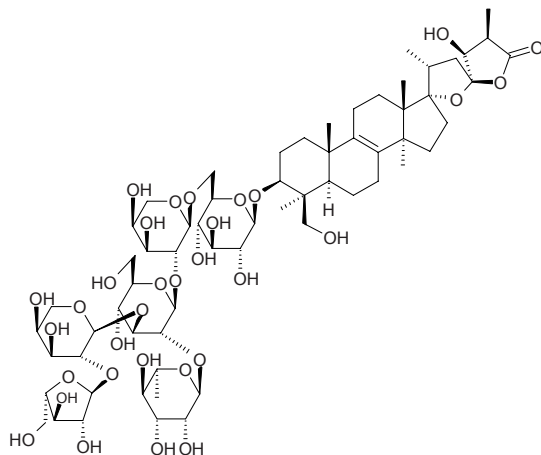
**19522 Scillasaponin F**

(23*S*,25*R*)-3 $\beta$ -[(*O*- $\alpha$ -L-Arabinofuranosyl-(1 $\rightarrow$ 2)-*O*- $\alpha$ -L-arabinopyranosyl-(1 $\rightarrow$ 3)-*O*-[ $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)]-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)-*O*- $\alpha$ -L-arabinopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl)oxy]-17 $\alpha$ ,23-epoxy-29-hydroxylanost-8-en-23,26-olide  $C_{63}H_{100}O_{31}$  (1353.48). Amorphous solid,  $[\alpha]_D^{28} = 40.0^\circ$  ( $c = 0.10$ , MeOH). Pharm: Cytotoxic (HSC-2 hmn oral squamous cell carcinoma cells,  $IC_{50} = 23\mu\text{g/mL}$ , control Etoposide,  $IC_{50} = 24\mu\text{g/mL}$ ). Source: QI YI PU TAO FENG XIN ZI *Muscari paradoxum* (bulb). Ref: 3495.



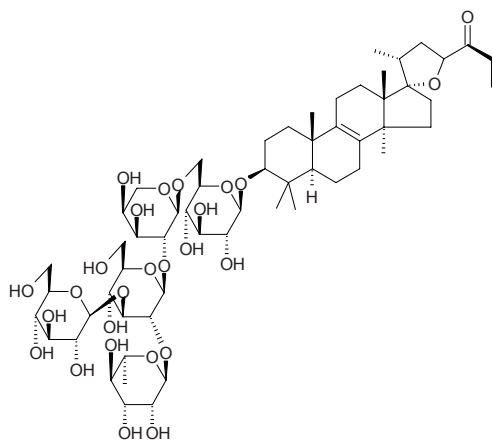
**19523 Scillasaponin G**

(23*S*,24*S*,25*R*)-3 $\beta$ -[(*O*- $\alpha$ -L-Arabinofuranosyl-(1 $\rightarrow$ 2)-*O*- $\alpha$ -L-arabinopyranosyl-(1 $\rightarrow$ 3)-*O*-[ $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)]-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)-*O*- $\alpha$ -L-arabinopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl)oxy]-17 $\alpha$ ,23-epoxy-24,29-dihydroxylanost-8-en-23,26-olide  $C_{63}H_{100}O_{32}$  (1369.48). Amorphous solid,  $[\alpha]_D^{28} = 36.0^\circ$  ( $c = 0.10$ , MeOH). Pharm: Cytotoxic (HSC-2 hmn oral squamous cell carcinoma cells,  $IC_{50} = 59\mu\text{g/mL}$ , control Etoposide,  $IC_{50} = 24\mu\text{g/mL}$ ). Source: QI YI PU TAO FENG XIN ZI *Muscari paradoxum* (bulb). Ref: 3495.

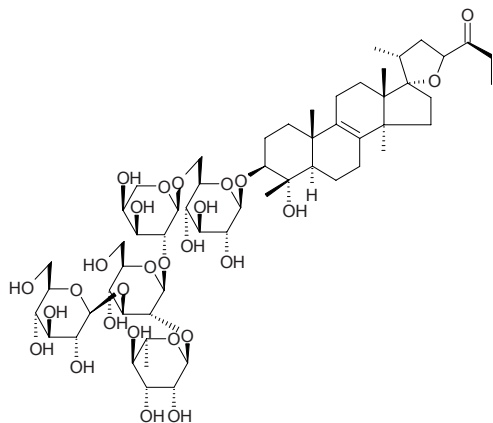


**19524 Scillascilloside E<sub>1</sub>**

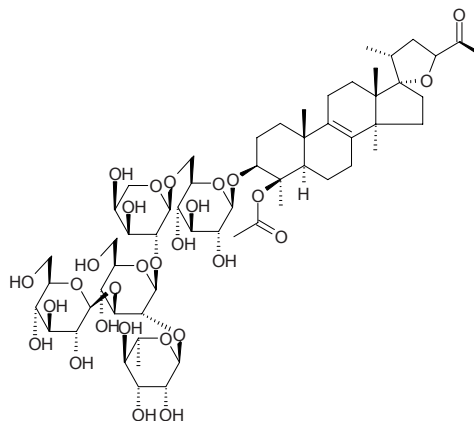
C<sub>58</sub>H<sub>94</sub>O<sub>26</sub> (1207.38). White amorphous powder (aq. MeOH), mp 221~223°C,  $[\alpha]_D^{25} = -57.1^\circ$  ( $c = 0.08$ , MeOH). **Pharm:** Cytotoxic (HT1080 ED<sub>50</sub> = (1.66±0.04)nmol/L; B16(F-10) ED<sub>50</sub> = (2.66±0.21)nmol/L; 3LL ED<sub>50</sub> = (2.59±0.49)nmol/L; MCF7 ED<sub>50</sub> = (3.06±2.35)nmol/L; PC3 ED<sub>50</sub> = (1.53±0.28)nmol/L; HT29 ED<sub>50</sub> = (3.00±2.76)nmol/L; LOX-IMVI ED<sub>50</sub> = (2.44±0.43)nmol/L; A549 ED<sub>50</sub> = (1.98±1.80)nmol/L; control Adriamycin ED<sub>50</sub> = (0.09±0.03)nmol/L, (0.06±0.10)nmol/L, (0.09±0.03)nmol/L, (0.38±0.34)nmol/L, (0.83±0.18)nmol/L, (1.07±0.12)nmol/L, (0.38±0.33)nmol/L, (0.67±0.21)nmol/L, respectively); antineoplastic (*in vivo*, apparently increased the life span of mouse bearing Sarcoma 180 tumor cell, 3mg/kg, T/C = 239%). **Source:** MIAN ZAO ER *Scilla scilloides* (fresh bulb). **Ref:** 4225.

**19525 Scillascilloside E<sub>2</sub>**

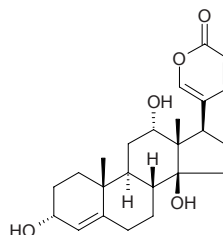
C<sub>57</sub>H<sub>92</sub>O<sub>27</sub> (1209.35). **Pharm:** Cytotoxic (HT1080 ED<sub>50</sub> = (2.30±0.04)nmol/L; B16(F-10) ED<sub>50</sub> = (7.06±4.07)nmol/L; 3LL ED<sub>50</sub> = (3.83±3.98)nmol/L; MCF7 ED<sub>50</sub> = (4.80±1.72)nmol/L; PC3 ED<sub>50</sub> = (3.95±0.43)nmol/L; HT29 ED<sub>50</sub> = (3.23±3.09)nmol/L; LOX-IMVI ED<sub>50</sub> = (3.70±4.32)nmol/L; A549 ED<sub>50</sub> = (3.54±0.74)nmol/L; control Adriamycin ED<sub>50</sub> = (0.09±0.03)nmol/L, (0.06±0.10)nmol/L, (0.09±0.03)nmol/L, (0.38±0.34)nmol/L, (0.83±0.18)nmol/L, (1.07±0.12)nmol/L, (0.38±0.33)nmol/L, (0.67±0.21)nmol/L, respectively). **Source:** MIAN ZAO ER *Scilla scilloides* (fresh bulb). **Ref:** 4225.

**19526 Scillascilloside E<sub>3</sub>**

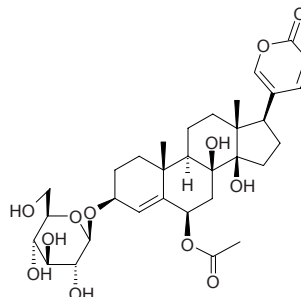
C<sub>59</sub>H<sub>94</sub>O<sub>28</sub> (1251.39). **Pharm:** Cytotoxic (HT1080 ED<sub>50</sub> = (1.69±1.65)nmol/L; B16(F-10) ED<sub>50</sub> = (3.82±1.79)nmol/L; 3LL ED<sub>50</sub> = (2.61±0.26)nmol/L; MCF7 ED<sub>50</sub> = (4.34±2.46)nmol/L; PC3 ED<sub>50</sub> = (2.33±0.95)nmol/L; HT29 ED<sub>50</sub> = (5.96±2.73)nmol/L; LOX-IMVI ED<sub>50</sub> = (4.89±0.12)nmol/L; A549 ED<sub>50</sub> = (3.09±1.98)nmol/L; control Adriamycin ED<sub>50</sub> = (0.09±0.03)nmol/L, (0.06±0.10)nmol/L, (0.09±0.03)nmol/L, (0.38±0.34)nmol/L, (0.83±0.18)nmol/L, (1.07±0.12)nmol/L, (0.38±0.33)nmol/L, (0.67±0.21)nmol/L, respectively). **Source:** MIAN ZAO ER *Scilla scilloides* (fresh bulb). **Ref:** 4225.

**19527 3- $\alpha$ ,12 $\alpha$ -Scilliphaeosidin**

C<sub>24</sub>H<sub>32</sub>O<sub>5</sub> (400.52). Amorphous powder,  $[\alpha]_D^{26} = +110.3^\circ$  ( $c = 1.07$ , MeOH). **Source:** HAI CONG *Urginea maritima* (bulb). **Ref:** 3513.

**19528 Scilliroside**

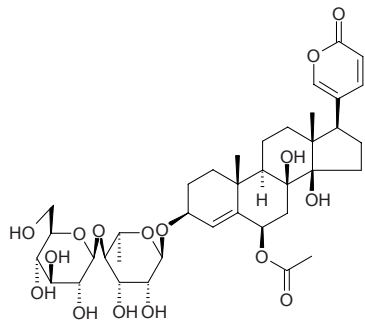
C<sub>32</sub>H<sub>44</sub>O<sub>12</sub> (620.76). **Pharm:** Rodenticide; LD<sub>50</sub> (male rat, orl) = 0.7mg/kg. **Source:** HAI CONG *Urginea maritima*. **Ref:** 658.



**19529 Scillirosidin 3-O-β-D-glucopyranosyl-(1→4)-α-L-rhamnopyranoside**

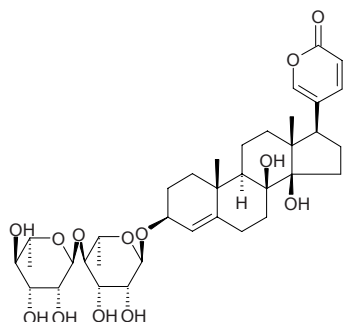
$C_{38}H_{54}O_{16}$  (766.84). Amorphous powder,  $[\alpha]_D^{26} = -71.1^\circ$  ( $c = 1.0$ , MeOH).

Source: HAI CONG *Urginea maritima* (bulb). Ref: 3513.

**19530 Scillirubrosidin 3-O-α-L-rhamnopyranosyl-(1→4)-α-L-rhamnopyranoside**

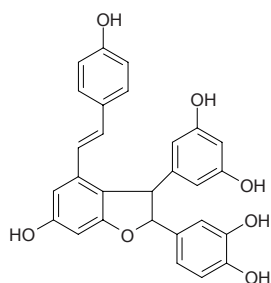
$C_{36}H_{52}O_{13}$  (692.81). Amorphous powder,  $[\alpha]_D^{26} = -94.5^\circ$  ( $c = 2.5$ , MeOH).

Source: HAI CONG *Urginea maritima* (bulb). Ref: 3513.

**19531 Scirpusin A**

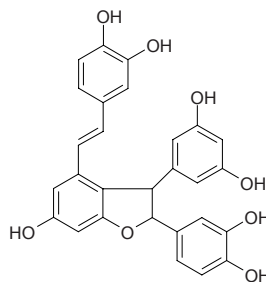
[69297-51-4]  $C_{28}H_{22}O_7$  (470.48). Pharm: Antioxidant (superoxide anion scavenger,  $IC_{50} = (4.68 \pm 0.14) \mu\text{mol/L}$ , control (+)-Catechin,  $IC_{50} = (3.67 \pm 0.14) \mu\text{mol/L}$ ). Source: MAO CI JIN JI ER *Caragana tibetica* (stem).

Ref: 4514.

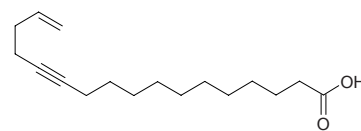
**19532 Scirpusin B**

[69297-49-0]  $C_{28}H_{22}O_8$  (486.48). Pharm: Antioxidant (superoxide anion scavenger,  $IC_{50} = (2.83 \pm 0.03) \mu\text{mol/L}$ , control (+)-Catechin,  $IC_{50} = (3.67 \pm 0.14) \mu\text{mol/L}$ ). Source: MAO CI JIN JI ER *Caragana tibetica* (stem).

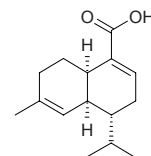
Ref: 4514.

**19533 Scleropyric acid**

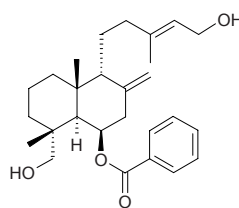
$C_{17}H_{28}O_2$  (264.41). Colorless sticky solid. Pharm: Antitubercular (*Mycobacterium tuberculosis* H<sub>37</sub>Ra, MIC = 25 μg/mL, control Rifampicin, MIC = 0.004 μg/mL, Isoniazid, MIC = 0.06 μg/mL, Kanamycin sulfate, MIC = 2.5 μg/mL); anti-plasmodial (parasite *Plasmodium falciparum* K1 multidrug-resistant strain,  $IC_{50} = 7.2 \mu\text{g/mL}$ ). Source: YING HE *Scleropyrum wallichianum* (twig). Ref: 4520.

**19534 Sclerosporin**

[66419-03-2]  $C_{15}H_{22}O_2$  (234.34). Pharm: Induces formation of spore (mycelium in fungi, under illumination, 0.001 μg/mL). Source: *Sclerotinia fruticola*. Ref: 658.

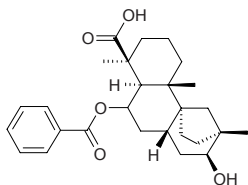
**19535 Scopadiol**

$C_{27}H_{38}O_4$  (426.6). Pharm: Cytotoxic (*in vitro*, SCL,  $ED_{50} = 22.8 \mu\text{mol/L}$ ; SCL-6,  $ED_{50} = 12.2 \mu\text{mol/L}$ ; SCL-376,  $ED_{50} = 8.9 \mu\text{mol/L}$ ; SCL-9,  $ED_{50} = 12.2 \mu\text{mol/L}$ ; Kato3,  $ED_{50} = 9.7 \mu\text{mol/L}$ ; NuGc-4,  $ED_{50} = 16.6 \mu\text{mol/L}$ ; control Vinblastine Sulfate: SCL,  $ED_{50} = 5.9 \mu\text{mol/L}$ ; SCL-6,  $ED_{50} = 6.1 \mu\text{mol/L}$ ; SCL-376,  $ED_{50} = 5.3 \mu\text{mol/L}$ ; SCL-9,  $ED_{50} = 5.3 \mu\text{mol/L}$ ; Kato3,  $ED_{50} = 6.1 \mu\text{mol/L}$ ; NUGC-4,  $ED_{50} = 5.3 \mu\text{mol/L}$ ). Source: YE GAN CAO *Scoparia dulcis* (aerial parts: yield = 0.0185% dw). Ref: 4703.

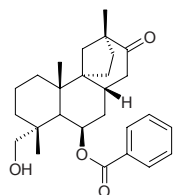


**19536 Scopadulcic acid C**

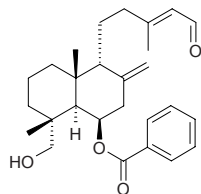
$C_{27}H_{36}O_5$  (440.58). Amorphous powder,  $[\alpha]_D^{25} = -21.7^\circ$  ( $c = 0.23$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (MTT assay, KB cells,  $IC_{50} = 50\mu g/mL$ ); NO production inhibitor (murine macrophages LPS/IFN $\gamma$ -induced,  $IC_{50} = 900\mu g/mL$ , Note: inorganic free radical NO is produced by the oxidation of L-arginine by NO synthase and its overproduction can stimulate tumor growth and metastasis by promoting the migratory, invasive, and angiogenic potentials of tumor cells); multidrug resistance protein (MRP) inhibitor ( $IC_{50} = 20\mu g/mL$ ). **Source:** YE GAN CAO *Scoparia dulcis* (aerial parts: yield = 0.00023%dw). **Ref:** 2098.

**19537 Scopadulciol**

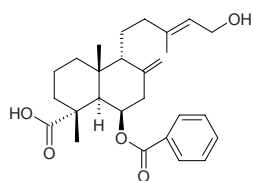
Dulcinol [136565-26-9]  $C_{27}H_{36}O_4$  (424.58). Colorless amorphous powder,  $[\alpha]_D^{25} = -2.3^\circ$  ( $c = 0.5$ , chloroform). **Pharm:** Cytotoxic (*in vitro*, SCL,  $ED_{50} = 22\mu mol/L$ ; SCL-6,  $ED_{50} = 32.8\mu mol/L$ ; SCL-37'6,  $ED_{50} = 24.4\mu mol/L$ ; SCL-9,  $ED_{50} = 37.7\mu mol/L$ ; Kato3,  $ED_{50} = 35.5\mu mol/L$ ; NuGc-4,  $ED_{50} = 33.3\mu mol/L$ ; control Vinblastine Sulfate: SCL,  $ED_{50} = 5.9\mu mol/L$ ; SCL-6,  $ED_{50} = 6.1\mu mol/L$ ; SCL-37'6,  $ED_{50} = 5.3\mu mol/L$ ; SCL-9,  $ED_{50} = 5.3\mu mol/L$ ; Kato3,  $ED_{50} = 6.1\mu mol/L$ ; NUGC-4,  $ED_{50} = 5.3\mu mol/L$ )<sup>[4703]</sup>; inhibits replication of HSV-1;  $H^+$ ,  $K^+$ -ATPase inhibitor (pig,  $10\mu mol/L$ , InRt = 21%,  $100\mu mol/L$ , InRt = 45%, inhibits secretion and ulcer). **Source:** YE GAN CAO *Scoparia dulcis* (aerial parts: yield = 0.0154%dw)<sup>[4703]</sup>. **Ref:** 950, 1068, 1125, 4703.

**19538 Scopanolal**

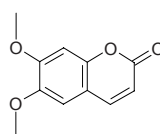
$C_{27}H_{36}O_4$  (424.59). Gum,  $[\alpha]_D^{25} = -7.1^\circ$  ( $c = 0.48$ ,  $CHCl_3$ ). **Source:** YE GAN CAO *Scoparia dulcis* (aerial parts: yield = 0.00077%dw). **Ref:** 4703.

**19539 Scoparic acid A**

[116425-30-0]  $C_{27}H_{36}O_5$  (440.58). Colorless amorphous powder,  $[\alpha]_D = -38.3^\circ$  (chloroform). **Pharm:** Ileal smooth muscle relaxant (gpg, *in vitro*,  $IC_{50} = 32\mu mol/L$ );  $\beta$ -glucuronidase inhibitor (ox liver,  $IC_{50} = 6.8\mu mol/L$ ). **Source:** YE GAN CAO *Scoparia dulcis*. **Ref:** 975.

**19540 Scoparone**

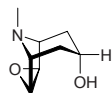
6,7-Dimethoxycoumarin; Aesculetin dimethylether [120-08-1]  $C_{11}H_{10}O_4$  (206.20). Needles ( $H_2O$ ), mp  $114^\circ C$ , mp  $144-145^\circ C$ . **Pharm:** Analgesic (hot plate model and acetic acid-induced writhing model); antiasthmatic (for asthmatic bronchitis, effective rate = 83%); anti-inflammatory (swollen foot model caused by carrageenan); choleric (anesthetic rat and dog, effective component in Virgate Wormwood, *Artemisia scoparia* HUANG HAO); coronary vasodilator; vasodilator ( $1-100\mu mol/L$ , relaxation of rat aortic rings arterenol precontracted with in a concentration-dependent manner, in presence of endothelium  $EC_{50} = (2.49 \pm 0.13)\mu mol/L$ , in absence of endothelium  $EC_{50} = (52 \pm 4)\mu mol/L$ )<sup>[5368]</sup>; diuretic (dog); estrogenic activity (rat); antihypertensive (dog, iv,  $10mg/kg$ , blood pressure reduces by 56%, action maintains 160min); increases cerebral blood flow; inhibits calcium activation and release (blood vessel smooth muscle); antineoplastic (Raji cells, antitumor promotor, *in vivo*, inhibits TPA-induced EBV-EA activation, compound concentration =  $500mol$  ratio/32 pmol TPA, EBV-EA-positive cells =  $(45.3 \pm 1.5)\%$  (viability >80%),  $\beta$ -Carotene, EBV-EA-positive cells =  $(34.3 \pm 1.1)\%$  (viability >80), Curcumin, EBV-EA-positive cells =  $(22.8 \pm 1.8)\%$  (viability >80%);  $IC_{50} = 457mol$  ratio/32 pmol TPA,  $\beta$ -Carotene,  $IC_{50} = 400mol$  ratio/32 pmol TPA, Curcumin  $IC_{50} = 341mol$  ratio/32 pmol TPA)<sup>[5048]</sup>; platelet aggregation inhibitor ( $50\mu mol/L$ , InRt = 31%;  $100\mu mol/L$ , InRt = 64%)<sup>[5171]</sup>; cytotoxic (KB,  $ED_{50} > 25\mu g/mL$ , control Doxorubicin,  $ED_{50} = 0.12\mu g/mL$ ; Hep3B,  $ED_{50} = 7.5\mu g/mL$ , Doxorubicin,  $ED_{50} = 0.14\mu g/mL$ ; Colon205,  $ED_{50} > 25\mu g/mL$ , Doxorubicin,  $ED_{50} = 0.10\mu g/mL$ ; HeLa,  $ED_{50} > 25\mu g/mL$ , Doxorubicin,  $ED_{50} = 0.11\mu g/mL$ )<sup>[4369]</sup>;  $LD_{50}$  (mus, orl) =  $940mg/kg$ ; **Source:** BEI MEI E ZHANG QIU *Liriodendron tulipifera*, CI HUA JIAO *Zanthoxylum acanthopodium*, CONG MU *Aralia chinensis*, DIE QIAO SHI HU *Dendrobium aurantiacum* var. *denneanum* (stem: content = 0.0032%)<sup>[5508]</sup>, DUAN BANG SHI HU *Dendrobium capillipes* (stem: content = 0.0085%)<sup>[5508]</sup>, GE GEN *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*], GUANG JING QIAN CAO *Rubia wallichiana* (stem), HUANG HAO *Artemisia scoparia* [Syn. *Artemisia capillaris* var. *scoparia*] (aerial parts: content = 0.46%)<sup>[5501]</sup>, HUANG HUA HAO *Artemisia annua*, JIA LIAN QIAO *Duranta repens* (whole herb), JU HUA SHI HU *Dendrobium thyrsiflorum*, KU RUO LONG DAN *Gentiana kuroo*, LIAN QIAO *Forsythia suspensa*, LONG YAN DU HUO *Aralia fargesii*, MI HUA SHI HU *Dendrobium densiflorum* (stem: content = 0.068%)<sup>[5508]</sup>, MU CHAI HU *Bupleurum frutescens*, MU<sup>(4)</sup> JU *Aegle marmelos*, QING JIAO *Zanthoxylum schinifolium*, RI BEN HUANG BAI *Phellodendron japonicum* (leaf), RU DI JIN NIU *Zanthoxylum nitidum*, TAI WAN FU RONG *Hibiscus taiwanensis*, YE HUA JIAO YE *Zanthoxylum simulans*, YIN CHEN HAO *Artemisia capillaris* (aerial parts: content scope = 2.0%~2.6%)<sup>[5501]</sup>, *Cedrelopsis grevei* (trunk bark), *Citrus medica* var. *etrog*, *Citrus sulcata*, *Citrus tamurana*, occurs in many plants. **Ref:** 2, 4, 6, 571, 642, 658, 660, 1521, 2529, 4179, 4369, 4502, 5171, 5048, 5368, 5501, 5508.





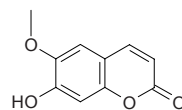
**19541 Scopine**

[498-45-3] C<sub>8</sub>H<sub>13</sub>NO<sub>2</sub> (155.20). mp 76°C. Source: SAI LANG DANG *Anisodius luridus*. Ref: 6.

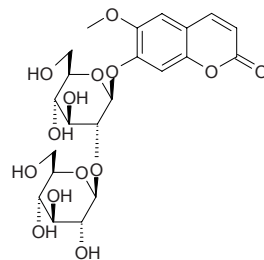
**19542 Scopoletin**

6-Methoxy-7-hydroxycoumarin; Chrysatroic acid; Baogongteng B [92-61-5] C<sub>10</sub>H<sub>8</sub>O<sub>4</sub> (192.17). Needles or prisms (EtOH), mp 204°C; 207~208°C. Pharm: Cytotoxic (KB, ED<sub>50</sub> > 25µg/mL, control Doxorubicin, ED<sub>50</sub> = 0.12µg/mL; Hep3B, ED<sub>50</sub> > 25µg/mL, control Doxorubicin, ED<sub>50</sub> = 0.14µg/mL; Colon205, ED<sub>50</sub> > 25µg/mL, control Doxorubicin, ED<sub>50</sub> = 0.10µg/mL; HeLa, ED<sub>50</sub> > 25µg/mL, control Doxorubicin, ED<sub>50</sub> = 0.11µg/mL)<sup>[4369]</sup>; antineoplastic (KB *in vitro*, ED<sub>50</sub> = 100µg/mL, mus lymphocyte leukemia *in vivo*); antibacterial; antifungal; anti-inflammatory; antispasmodic (gpg ileum and trachea); antitussive (dispels phlegm, reduces viscosity of phlegm and neutrophil in phlegm); germination inhibitor (shoot of pea); stimulates germination (*Striga asiatica*); used in treatment of rheumatism and neuralgia (one of effective components in *Erycibe obtusifolia* DING GONG TENG); antioxidant (DPPH scavenger, EC<sub>50</sub> > 33µg/mL, 33µg/mL InRt = 34%, control Ascorbic acid, EC<sub>50</sub> = 1.6µg/mL = 9.1µmol/L)<sup>[4154]</sup>; β-hexosaminidase inhibitor inactive (RBL-2H3 cells, inhibits release of β-hexosaminidase, 100µmol/L, InRt = (1.9±3.4%)<sup>[4304]</sup>); antileishmanial (*Leishmania donovani* promastigotes, IC<sub>50</sub> = 374µmol/L, SI = 0.35; control Pentamidine, IC<sub>50</sub> = 0.40µmol/L, SI = 0.42; amastigotes, IC<sub>50</sub> > 90µmol/L, control Pentostam, IC<sub>50</sub> = 9.75µg/mL)<sup>[5127]</sup>; antitrypanosomal (*Trypanosoma brucei brucei* blood stream trypomastigotes, IC<sub>50</sub> > 30µmol/L, control Pentamidine, IC<sub>50</sub> = 0.00034µmol/L)<sup>[5127]</sup>; cytotoxic (KB cells, IC<sub>50</sub> = 130.2µmol/L, control Pentamidine, IC<sub>50</sub> = 0.17µmol/L)<sup>[5127]</sup>; cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells)<sup>[5038]</sup>; antineoplastic (Raji cells, antitumor promotor, *in vivo*, inhibits TPA-induced EBV-EA activation, compound concentration = 500mol ratio/32 pmol TPA, EBV-EA-positive cells = (53.3±2.0)% (viability > 80%), β-Carotene, EBV-EA-positive cells = (34.3±1.1)% (viability > 80%), Curcumin, EBV-EA-positive cells = (22.8±1.8)% (viability > 80%); IC<sub>50</sub> = 510mol ratio/32 pmol TPA, β-Carotene, IC<sub>50</sub> = 400mol ratio/32 pmol TPA, Curcumin IC<sub>50</sub> = 341mol ratio/32 pmol TPA)<sup>[5048]</sup>; platelet aggregation inhibitor (50µmol/L, InRt = 5%; 100µmol/L, InRt = 21%)<sup>[5171]</sup>; antioxidant inactive (*in vitro*, rat liver microsomes lipid peroxidation)<sup>[3088]</sup>; MAO inhibitor (IC<sub>50</sub> = 19.4µg/mL)<sup>[3088]</sup>; LD<sub>50</sub> (mus, ip) = 0.85g/kg, (mus, orl) = 1.39g/kg. Source: BAI ZHI *Angelica dahurica* [Syn. *Angelica porphyrocaulis*], BEI FANG GOU QI GEN PI *Lycium chinense* var. *potaninii* (root cortex: content = 0.00076%)<sup>[5508]</sup>, BEI SHA SHEN *Glehnia littoralis* (underground part), BIAN XU *Polygonum aviculare*, DANG GUI *Angelica sinensis*, DI JIN CAO *Euphorbia humifusa*, DIAN QIE *Atropa belladonna*, DIAN QIN *Sinodielsia yunnanensis* (root), DING GONG TENG *Erycibe obtusifolia*, DONG LANG DANG *Scopolia japonica*, DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*], DUAN ROU MAO DA JI *Euphorbia pubescens*, DUO BIAN XIAO GUAN HUA *Coronilla varia*, FU SHOU CAO *Adonis amurensis*, GOU QI GEN PI *Lycium chinense* (root cortex: content = 0.0019%)<sup>[5508]</sup>, GOU QI ZI *Lycium chinense*, GUANG JING QIAN CAO *Rubia wallichiana* (stem), GUANG YE DING GONG TENG *Erycibe schmidtii*, HAI SHI *Diospyros maritima*, HONG NAN

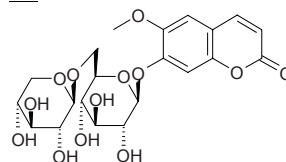
PI *Machilus thunbergii*, HU LU BA *Trigonella foenum-graecum*, HUA GOU TENG *Uncaria sinensis*, HUANG HAO *Artemisia scoparia* [Syn. *Artemisia capillaris* var. *scoparia*], HUANG HUA BAI JIANG *Patrinia scabiosaeifolia*, HUANG HUA HAO *Artemisia annua*, HUANG HUA REN *Sida acuta*, JIAN YE CEN *Fraxinus szaboana* [Syn. *Fraxinus chinensis* var. *acuminata*], JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*], LIU QIU SHE GEN CAO *Ophiorrhiza liukiensis* (whole herb), LONG YAN DU HUO *Aralia fargesii*, MA TI YE *Caltha palustris*, MAN SHAN HONG *Rhododendron dauricum*, MAO GUO QI *Acer nikoense* (stem cortex), MI HUA SHI HU *Dendrobium densiflorum* (stem), MU JIN HUA *Hibiscus syriacus*<sup>[3088]</sup>, NAN CHUAN GUAN CHUN HUA *Microtoena prainiana* (stem: yield = 0.00007%dw)<sup>[4752]</sup>, NING XIA GOU QI GEN PI *Lycium barbarum* (root cortex: content = 0.00095%)<sup>[5508]</sup>, NING XIA GOU QI ZI *Lycium barbarum*, RI BEN HUANG BAI *Phellodendron japonicum* (leaf), SANG BAI PI *Morus alba* (root cortex: content scope of 10 origins = 0.0020%~0.0173%, mean content = 0.0100%)<sup>[5508]</sup>, SANG YE *Morus alba*, SI GE MENG XUAN HAU *Convolvulus scammonia*, TAI WAN FU RONG *Hibiscus taiwanensis*, TAI WAN HUANG BO *Phellodendron amurense* var. *wilsonii* (leaf: yield = 0.00016%dw)<sup>[4722]</sup>, TIAN QIE ZI *Solanum indicum* (root)<sup>[3087]</sup>, TU MAO DONG QING *Ilex pubescens* var. *glaber*, XIAO YUN MU *Micromelum integerrimum*, XUAN FU HUA *Inula britannica*, YE HEI YING *Prunus serotina*, YI ZHU QIAN MA *Urtica dioica*, YIN CHEN HAO *Artemisia capillaris*, ZHAI YE BAN FENG HE *Pterospermum lanceaeifolium*, ZHAO SHAN BAI *Rhododendron micranthum*, *Citrus medica* var. *etrog*, *Guarea rhopalocarpa* (leaf), occurs in many plants. Ref: 2, 4, 11, 415, 571, 585, 588, 658, 660, 1424, 1493, 1494, 1495, 2529, 3087, 3088, 4154, 4304, 4305, 4369, 4502, 4527, 4722, 4752, 5038, 5048, 5127, 5171, 5384, 5501, 5508.

**19543 Scopoletin 7-O-β-D-sophoroside**

C<sub>22</sub>H<sub>28</sub>O<sub>14</sub> (516.46). Off-white amorphous powder. Source: *Viburnum tinus* (leaf). Ref: 5339.

**19544 Scopoletin β-D-xylopyranosyl-(1→6)-β-D-glucopyranoside**

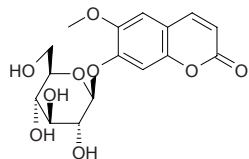
C<sub>21</sub>H<sub>26</sub>O<sub>13</sub> (486.43). Colorless needles (MeOH), mp 243~245°C, [α]<sub>D</sub><sup>23</sup> = -148° (c = 0.5, H<sub>2</sub>O). Source: CANG ZHU *Atractylodes lancea* (rhizome). Ref: 4384.



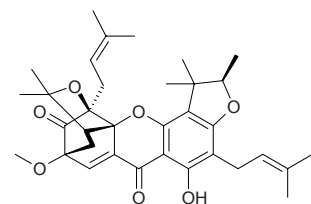


**19545 Scopolin**

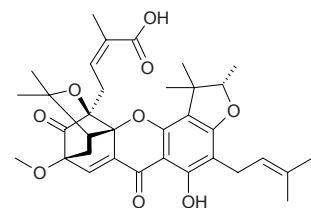
[531-44-2]  $C_{16}H_{18}O_9$  (354.32). mp 219°C. **Pharm:** Anti-inflammatory; used in treatment of rheumatism and neuralgia (one of the effective components in DING GONG TENG). **Source:** DING GONG TENG *Erycibe obtusifolia*, DONG LANG DANG *Scopolia japonica*, GUANG YE DING GONG TENG *Erycibe schmidtii*, HUANG HUA HAO *Artemisia annua*, JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*], PI ZHEN QI SHU *Rhus lanceolata*, SANG YE *Morus alba* (leaf: yield = 0.0003%), XIANG RI KUI JING SUI *Helianthus annuus*, XIANG RI KUI YE *Helianthus annuus*, XIANG RI KUI ZI *Helianthus annuus*, YAN CAO *Nicotiana tabacum*, *Hedera* sp., *Swertia* sp., *Anthemis* sp., *Artemisia* sp., *Celtis* sp. **Ref:** 6, 11, 658, 3507, 5501.

**19546 Scortechinone A**

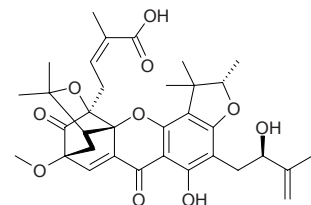
$C_{34}H_{42}O_7$  (652.71). **Pharm:** Antibacterial (*Staphylococcus aureus* ATCC25923, MIC = 128 µg/mL, control Vancomycin, MIC = 1 µg/mL; *Staphylococcus aureus* SK1, MIC = 128 µg/mL, Vancomycin, MIC = 1 µg/mL). **Source:** *Garcinia scortechinii* (stem cortex). **Ref:** 5058.

**19547 Scortechinone B**

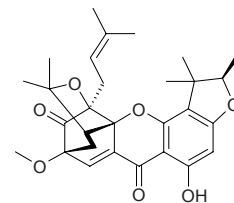
$C_{34}H_{40}O_9$  (592.69). **Pharm:** Antibacterial (*Staphylococcus aureus* ATCC25923, MIC = 8 µg/mL, control Vancomycin, MIC = 1 µg/mL; *Staphylococcus aureus* SK1, MIC = 2 µg/mL, Vancomycin, MIC = 1 µg/mL). **Source:** *Garcinia scortechinii* (stem cortex). **Ref:** 5058.

**19548 Scortechinone C**

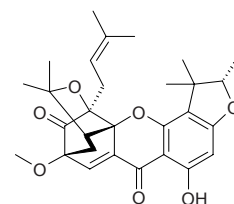
$C_{34}H_{40}O_{10}$  (608.69). **Pharm:** Antibacterial (*Staphylococcus aureus* ATCC25923, MIC = 32 µg/mL, control Vancomycin, MIC = 1 µg/mL; *Staphylococcus aureus* SK1, MIC = 32 µg/mL, Vancomycin, MIC = 1 µg/mL). **Source:** *Garcinia scortechinii* (stem cortex). **Ref:** 5058.

**19549 Scortechinone D**

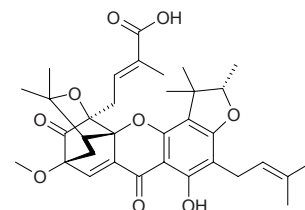
$C_{29}H_{34}O_7$  (494.59). **Pharm:** Antibacterial (*Staphylococcus aureus* ATCC25923, MIC > 256 µg/mL, control Vancomycin, MIC = 1 µg/mL; *Staphylococcus aureus* SK1, MIC > 256 µg/mL, Vancomycin, MIC = 1 µg/mL). **Source:** *Garcinia scortechinii* (stem cortex). **Ref:** 5058.

**19550 Scortechinone E**

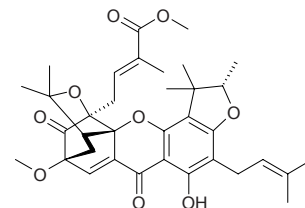
$C_{29}H_{34}O_7$  (494.59). **Pharm:** Antibacterial (*Staphylococcus aureus* ATCC25923, MIC > 256 µg/mL, control Vancomycin, MIC = 1 µg/mL; *Staphylococcus aureus* SK1, MIC > 256 µg/mL, Vancomycin, MIC = 1 µg/mL). **Source:** *Garcinia scortechinii* (stem cortex). **Ref:** 5058.

**19551 Scortechinone F**

$C_{34}H_{40}O_9$  (592.69). **Pharm:** Antibacterial (*Staphylococcus aureus* ATCC25923, MIC = 16 µg/mL, control Vancomycin, MIC = 1 µg/mL; *Staphylococcus aureus* SK1, MIC = 4 µg/mL, Vancomycin, MIC = 1 µg/mL). **Source:** *Garcinia scortechinii* (stem cortex). **Ref:** 5058.

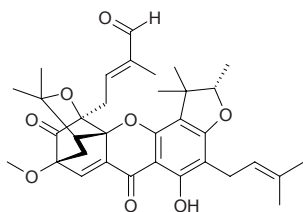
**19552 Scortechinone G**

$C_{35}H_{42}O_9$  (606.72). **Pharm:** Antibacterial (*Staphylococcus aureus* ATCC25923, MIC > 64 µg/mL, control Vancomycin, MIC = 1 µg/mL; *Staphylococcus aureus* SK1, MIC > 64 µg/mL, Vancomycin, MIC = 1 µg/mL). **Source:** *Garcinia scortechinii* (stem cortex). **Ref:** 5058.

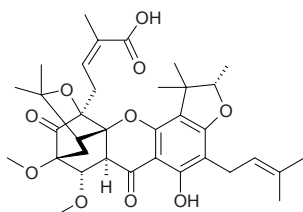


**19553 Scortechinone H**

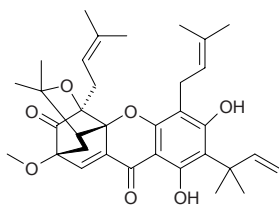
$C_{34}H_{40}O_8$  (576.69). **Pharm:** Antibacterial (*Staphylococcus aureus* ATCC25923, MIC > 64 $\mu$ g/mL, control Vancomycin, MIC = 1 $\mu$ g/mL; *Staphylococcus aureus* SK1, MIC = 4 $\mu$ g/mL, Vancomycin, MIC = 1 $\mu$ g/mL). **Source:** *Garcinia scortechinii* (stem cortex). **Ref:** 5058.

**19554 Scortechinone I**

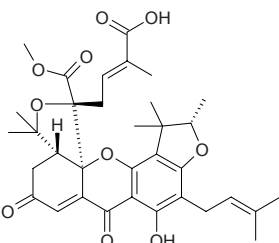
$C_{35}H_{44}O_{10}$  (624.73). **Pharm:** Antibacterial (*Staphylococcus aureus* ATCC25923, MIC = 8 $\mu$ g/mL, control Vancomycin, MIC = 1 $\mu$ g/mL; *Staphylococcus aureus* SK1, MIC = 8 $\mu$ g/mL, Vancomycin, MIC = 1 $\mu$ g/mL). **Source:** *Garcinia scortechinii* (stem cortex). **Ref:** 5058.

**19555 Scortechinone J**

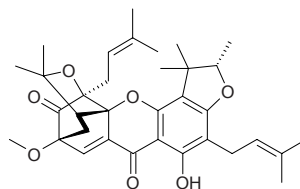
$C_{34}H_{42}O_7$  (562.71). **Pharm:** Antibacterial (*Staphylococcus aureus* ATCC25923, MIC = 32 $\mu$ g/mL, control Vancomycin, MIC = 1 $\mu$ g/mL; *Staphylococcus aureus* SK1, MIC = 8 $\mu$ g/mL, Vancomycin, MIC = 1 $\mu$ g/mL). **Source:** *Garcinia scortechinii* (stem cortex). **Ref:** 5058.

**19556 Scortechinone K**

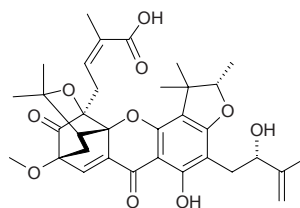
$C_{34}H_{40}O_{10}$  (608.59). **Pharm:** Antibacterial (*Staphylococcus aureus* ATCC25923, MIC = 128 $\mu$ g/mL, control Vancomycin, MIC = 1 $\mu$ g/mL; *Staphylococcus aureus* SK1, MIC = 128 $\mu$ g/mL, Vancomycin, MIC = 1 $\mu$ g/mL). **Source:** *Garcinia scortechinii* (stem cortex). **Ref:** 5058.

**19557 Scortechinone L**

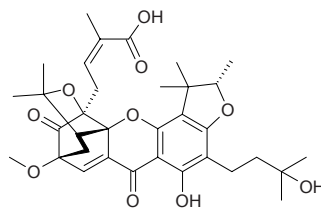
$C_{34}H_{42}O_7$  (562.71). Yellow gum,  $[\alpha]_D^{29} = -176^\circ$  ( $c = 0.017$ , MeOH). **Pharm:** Antibacterial (*Staphylococcus aureus* ATCC25923, MIC > 64 $\mu$ g/mL, control Vancomycin, MIC = 1 $\mu$ g/mL; *Staphylococcus aureus* SK1, MIC > 64 $\mu$ g/mL, Vancomycin, MIC = 1 $\mu$ g/mL). **Source:** *Garcinia scortechinii* (stem cortex). **Ref:** 5058.

**19558 Scortechinone M**

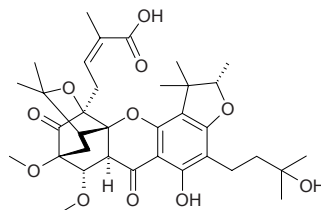
$C_{34}H_{40}O_{10}$  (608.69). Yellow gum,  $[\alpha]_D^{29} = -353^\circ$  ( $c = 0.017$ , MeOH). **Pharm:** Antibacterial (*Staphylococcus aureus* ATCC25923, MIC = 32 $\mu$ g/mL, control Vancomycin, MIC = 1 $\mu$ g/mL; *Staphylococcus aureus* SK1, MIC = 32 $\mu$ g/mL, Vancomycin, MIC = 1 $\mu$ g/mL). **Source:** *Garcinia scortechinii* (stem cortex). **Ref:** 5058.

**19559 Scortechinone N**

$C_{34}H_{42}O_{10}$  (610.71). Yellow gum,  $[\alpha]_D^{29} = -263^\circ$  ( $c = 0.019$ , MeOH). **Pharm:** Antibacterial (*Staphylococcus aureus* ATCC25923, MIC = 32 $\mu$ g/mL, control Vancomycin, MIC = 1 $\mu$ g/mL; *Staphylococcus aureus* SK1, MIC = 32 $\mu$ g/mL, Vancomycin, MIC = 1 $\mu$ g/mL). **Source:** *Garcinia scortechinii* (stem cortex). **Ref:** 5058.

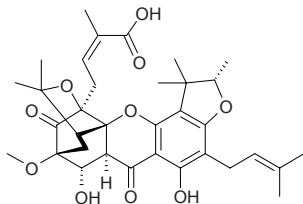
**19560 Scortechinone O**

$C_{35}H_{46}O_{11}$  (642.75). Pale yellow gum,  $[\alpha]_D^{29} = +77^\circ$  ( $c = 0.013$ , MeOH). **Pharm:** Antibacterial (*Staphylococcus aureus* ATCC25923, MIC > 128 $\mu$ g/mL, control Vancomycin, MIC = 1 $\mu$ g/mL; *Staphylococcus aureus* SK1, MIC > 128 $\mu$ g/mL, Vancomycin, MIC = 1 $\mu$ g/mL). **Source:** *Garcinia scortechinii* (stem cortex). **Ref:** 5058.

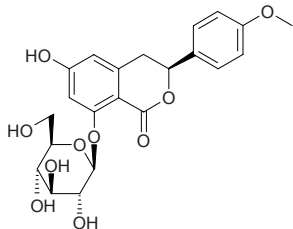


**19561 Scortechinone P**

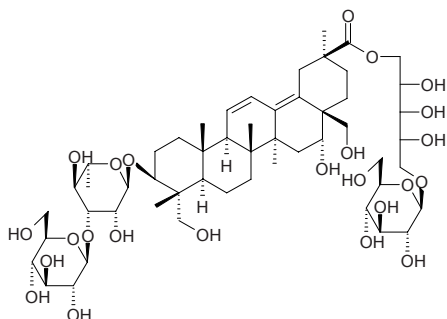
$C_{34}H_{42}O_{10}$  (610.71). Pale yellow gum,  $[\alpha]_D^{29} = +83^\circ$  ( $c = 0.012$ , MeOH).  
**Pharm:** Antibacterial (*Staphylococcus aureus* ATCC25923, MIC = 32  $\mu\text{g/mL}$ , control Vancomycin, MIC = 1  $\mu\text{g/mL}$ ; *Staphylococcus aureus* SK1, MIC = 16  $\mu\text{g/mL}$ , Vancomycin, MIC = 1  $\mu\text{g/mL}$ ). **Source:** *Garcinia scortechinii* (stem cortex). **Ref:** 5058.

**19562 Scorzoeticoside I**

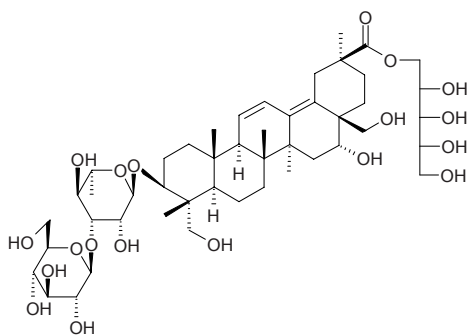
$C_{22}H_{24}O_{10}$  (448.43). **Pharm:** Antioxidant (DPPH scavenger,  $IC_{50} = (59.15 \pm 7.38)$   $\mu\text{g/mL}$ ; control Ascorbic acid,  $IC_{50} = (2.49 \pm 0.32)$   $\mu\text{g/mL}$ , Caffeic acid,  $IC_{50} = (1.78 \pm 0.03)$   $\mu\text{g/mL}$ , Chlorogenic acid,  $IC_{50} = (1.28 \pm 0.38)$   $\mu\text{g/mL}$ ). **Source:** SUAN YE PO LUO MEN SHEN *Tragopogon porrifolius* (subaerial parts). **Ref:** 5307.

**19563 Scorzoneroside A**

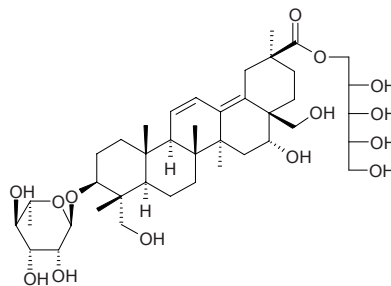
$C_{53}H_{86}O_{24}$  (1107.26). **Source:** HONG CHAI HU *Bupleurum scorzoniferolium*. **Ref:** 2247.

**19564 Scorzoneroside B**

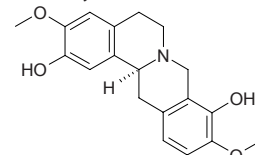
$C_{47}H_{76}O_{19}$  (945.12). **Source:** HONG CHAI HU *Bupleurum scorzoniferolium*. **Ref:** 2247.

**19565 Scorzoneroside C**

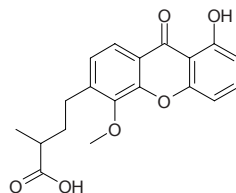
$C_{41}H_{66}O_{14}$  (782.97). **Source:** HONG CHAI HU *Bupleurum scorzoniferolium*. **Ref:** 2247.

**19566 Scoulerine**

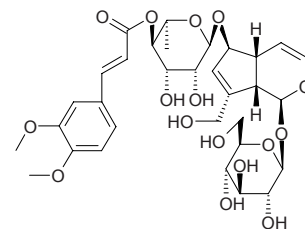
(*S*)-5,8,13,13a-Tetrahydro-3,10-dimethoxy-6*H*-dibenzo[*a,g*]quinolizine-2,9-diol [6451-73-6]  $C_{19}H_{21}NO_4$  (327.38). mp (+) 197°C, (-) 204°C. **Source:** HE BAO MU DAN GEN *Dicentra spectabilis*, JU HUA HUANG LIAN *Corydalis pallida*, YA PIAN *Papaver somniferum*, YAN HU SUO *Corydalis yanhusuo* [Syn. *Corydalis turtschaninovii* f. *Yanhusuo*], ZI HUA YU DENG CAO *Corydalis incisa*. **Ref:** 6.

**19567 Scriblitifolic acid**

$C_{19}H_{18}O_6$  (342.35). mp 163–164°C, mp 164–167°C (petrol- $CHCl_3$ ). **Source:** TE SI MAN NI HU TONG BIAN ZHONG *Calophyllum teysmannii* var. *inophylloide* (wood). **Ref:** 3937.

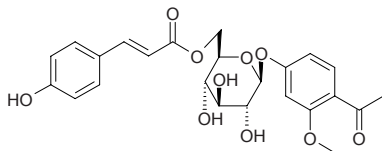
**19568 Scrolepidoside**

6-*O*-[4'-*O*-*trans*-(3,4-Dimethoxycinnamoyl)- $\alpha$ -*L*-rhamnopyranosyl]aucubin  $C_{32}H_{42}O_{16}$  (682.68). Amorphous powder,  $[\alpha]_D^{22} = -140^\circ$  ( $c = 0.23$ , MeOH). **Pharm:** Antitrypanosomal (*Trypanosoma brucei rhodesiense*,  $IC_{50} = 33.3$   $\mu\text{g/mL}$ , control Melarsoprol,  $IC_{50} = 0.0033$   $\mu\text{g/mL}$ ; *Trypanosoma cruzi*,  $IC_{50} > 90$   $\mu\text{g/mL}$ , control Benznidazole,  $IC_{50} = 0.70$   $\mu\text{g/mL}$ ); antileishmanial (*Leishmania donovani*,  $IC_{50} = 6.1$   $\mu\text{g/mL}$ , control Miltefosine,  $IC_{50} = 0.32$   $\mu\text{g/mL}$ ); antimalarial (*Plasmodium falciparum*,  $IC_{50} > 50$   $\mu\text{g/mL}$ , control Artemisinin,  $IC_{50} = 0.002$   $\mu\text{g/mL}$ ); cytotoxic (L6 cells,  $IC_{50} > 90$   $\mu\text{g/mL}$ , control Podophyllotoxin,  $IC_{50} = 0.0075$   $\mu\text{g/mL}$ ). **Source:** LIN PIAN XUAN SHEN *Scrophularia lepidota* (root). **Ref:** 5251.

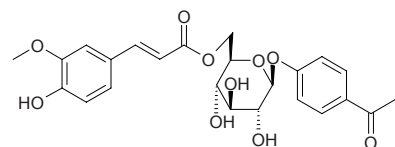


**19569 Scrophuloside A**

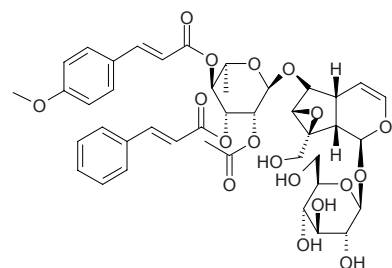
$C_{24}H_{26}O_{10}$  (474.47). Colorless amorphous powder,  $[\alpha]_D^{24} = -29.5^\circ$  ( $c = 0.88$ , MeOH). **Source:** *Neopicrorhiza scrophulariiflora* (rhizome: yield = 0.0059%dw). **Ref:** 1584.

**19570 Scrophuloside B**

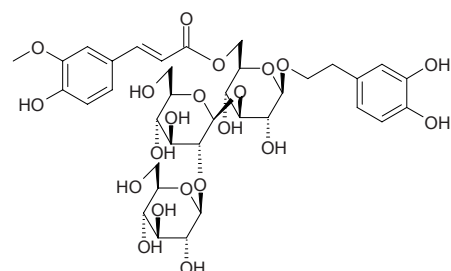
$C_{24}H_{26}O_{10}$  (474.47). Colorless amorphous powder,  $[\alpha]_D^{24} = -36.0^\circ$  ( $c = 0.50$ , MeOH). **Source:** *Neopicrorhiza scrophulariiflora* (rhizome: yield = 0.0022%dw). **Ref:** 1584.

**19571 Scrophuloside B<sub>a</sub>**

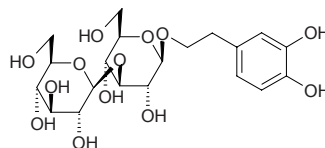
6-*O*-(2''-*O*-Acetyl-3''-*O*-cinnamoyl-4''-*O*-*p*-methoxycinnamoyl- $\alpha$ -*L*-rhamnopyranosyl)catalpol  $C_{42}H_{48}O_{18}$  (840.84). Yellowish powder,  $[\alpha]_D^{25} = -31.8^\circ$  ( $c = 0.29$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (MCF7,  $IC_{50} > 100\mu\text{mol/L}$ , control Adriamycin,  $IC_{50} = (1.5 \pm 0.2)\mu\text{mol/L}$ ; K562,  $IC_{50} = (44.6 \pm 6.4)\mu\text{mol/L}$ , Adriamycin,  $IC_{50} = (0.07 \pm 0.01)\mu\text{mol/L}$ ; Bowes,  $IC_{50} = (90.2 \pm 7.7)\mu\text{mol/L}$ , Adriamycin,  $IC_{50} = (0.45 \pm 0.01)\mu\text{mol/L}$ ; T24S,  $IC_{50} > 100\mu\text{mol/L}$ , Adriamycin,  $IC_{50} = (5.8 \pm 0.6)\mu\text{mol/L}$ ; A549,  $IC_{50} > 100\mu\text{mol/L}$ , Adriamycin,  $IC_{50} = (15.8 \pm 6.7)\mu\text{mol/L}$ ). **Source:** XUAN SHEN *Scrophularia ningpoensis*. **Ref:** 5288.

**19572 Scroside A**

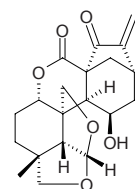
$C_{36}H_{48}O_{21}$  (816.77). **Pharm:** Antioxidant (hydroxyl radical scavenger,  $IC_{50} = 98.0\mu\text{mol/L}$ , control Ascorbic acid,  $IC_{50} = 51.8\mu\text{mol/L}$ , superoxide anion radical scavenger,  $IC_{50} = 167.7\mu\text{mol/L}$ , control Ascorbic acid,  $IC_{50} = 86.2\mu\text{mol/L}$ ). **Source:** XI ZANG HU HUANG LIAN *Picrorhiza scrophulariiflora* (root). **Ref:** 4289.

**19573 Scroside D**

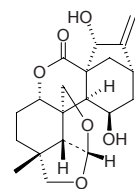
$C_{20}H_{30}O_{13}$  (478.45). White amorphous powder, mp 240–242°C (MeOH),  $[\alpha]_D^{20} = -42.6^\circ$  ( $c = 0.8$ , MeOH). **Pharm:** Antioxidant (hydroxyl radical scavenger,  $IC_{50} = 48.7\mu\text{mol/L}$ , control Ascorbic acid,  $IC_{50} = 51.8\mu\text{mol/L}$ , superoxide anion radical scavenger,  $IC_{50} = 84.5\mu\text{mol/L}$ , control Ascorbic acid,  $IC_{50} = 86.2\mu\text{mol/L}$ ). **Source:** XI ZANG HU HUANG LIAN *Picrorhiza scrophulariiflora* (root). **Ref:** 4289.

**19574 Sculponeatin A**

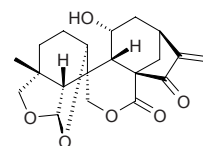
$C_{20}H_{24}O_6$  (360.41). Crystals, mp  $> 300^\circ\text{C}$ ,  $[\alpha]_D^{25} = -139^\circ$  ( $c = 0.21$ , pyridine). **Pharm:** Antibacterial (*Staphylococcus aureus*, *Bacillus dysenteriae* and *Bacillus subtilis*, MIC = 62.5 $\mu\text{g/mL}$ ). **Source:** CAO SU *Phlomis umbrosa*, HUANG HUA XIANG CHA CAI *Isodon sculponeata* [Syn. *Rabdosia sculponeata*]. **Ref:** 4067.

**19575 Sculponeatin B**

[85287-60-1]  $C_{20}H_{26}O_6$  (362.43). White crystals, mp 316–318°C,  $[\alpha]_D^{27} = -161.4^\circ$  ( $c = 0.5$ , pyridine); mp 244–246°C,  $[\alpha]_D^{25} = -109^\circ$  ( $c = 0.14$ ,  $C_5H_5N$ ). **Pharm:** Antibacterial (*Staphylococcus aureus*, *Bacillus dysenteriae* and *Bacillus subtilis*, MIC = 62.5 $\mu\text{g/mL}$ ). **Source:** HUANG HUA XIANG CHA CAI *Isodon sculponeata* [Syn. *Rabdosia sculponeata*]. **Ref:** 661, 4067.

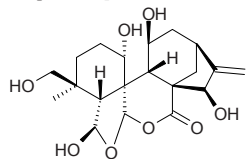
**19576 Sculponeatin C**

$C_{20}H_{24}O_6$  (360.41). mp 292–294°C,  $[\alpha]_D^{24} = -163^\circ$  ( $c = 0.21$ ,  $C_5H_5N$ ). **Source:** HUANG HUA XIANG CHA CAI *Isodon sculponeata* [Syn. *Rabdosia sculponeata*]. **Ref:** 4067.

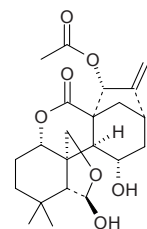


**19577 Sculponeatin D**

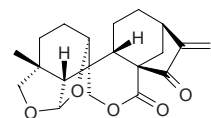
$C_{20}H_{28}O_8$  (396.44). mp 288~290.5°C,  $[\alpha]_D^{19} = -100.0^\circ$  (MeOH). Source: HUANG HUA XIANG CHA CAI *Isodon sculponeata* [Syn. *Rabdosia sculponeata*]. Ref: 4067.

**19578 Sculponeatin E**

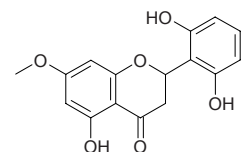
$C_{22}H_{30}O_7$  (406.48). White crystals mp 136~137°C,  $[\alpha]_D^{14.5} = -145.56^\circ$  ( $c = 0.564$ ). Source: HUANG HUA XIANG CHA CAI *Isodon sculponeata* [Syn. *Rabdosia sculponeata*]. Ref: 2113.

**19579 Sculponeatin J**

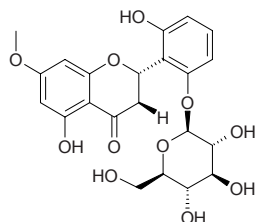
$C_{20}H_{24}O_5$  (344.41). Pharm: Cytotoxic (*in vitro*, K562,  $IC_{50} = 0.83\mu\text{g/mL}$ ; control *cis*-Platin,  $IC_{50} = 0.52\mu\text{g/mL}$ ). Source: LU SHI DONG LING CAO *Isodon rubescens* var. *lushiensis* (leaf: yield = 0.00022%dw). Ref: 4732.

**19580 Scuteamoenin**

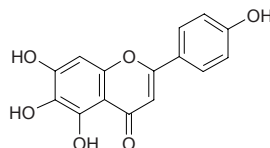
(2*S*)-2',5,6'-Trihydroxy-7-methoxyflavanone  $C_{16}H_{14}O_6$  (302.29). Colorless acicular crystals, mp 250°C. Source: DIAN HUANG QIN *Scutellaria amoena*. Ref: 153.

**19581 Scuteamoenoside**

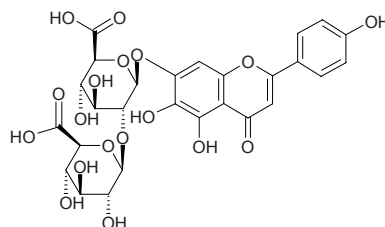
(2*S*)-2',5,6'-trihydroxy-7-methoxyflavanone-2'-*O*- $\beta$ -*D*-glucopyranoside  $C_{22}H_{24}O_{11}$  (464.43). Colorless crystalline powder, mp 236~239°C. Source: DIAN HUANG QIN *Scutellaria amoena*. Ref: 124.

**19582 Scutellarein**

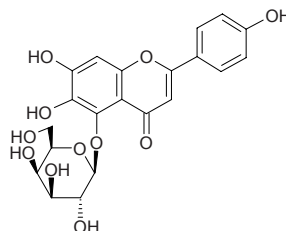
[529-53-3]  $C_{15}H_{10}O_6$  (286.24). mp 350°C. Pharm: Inhibits formation of indole-3-acetic acid oxidase and ATP; larvacide (inhibits larva of *Heliothis zea* growth). Source: BAN ZHI LIAN *Scutellaria barbata* [Syn. *Scutellaria rivularis*], CHOU MO LI *Clerodendron fragrans*, HAN XIN CAO *Scutellaria indica*, JIA LIAN QIAO YE *Duranta repens*, MU HU DIE *Oroxylum indicum*, MU HU DIE SHU PI *Oroxylum indicum*, ZI MEI SHU *Millingtonia hortensis*. Ref: 6, 658.

**19583 Scutellarein-7-O-diglucuronide**

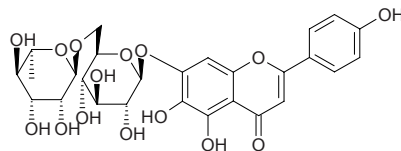
$C_{27}H_{26}O_{18}$  (638.50). Source: HUI HUI SU GENG *Perilla frutescens* var. *crispa*. Ref: 660.

**19584 Scutellarein-5-galactoside**

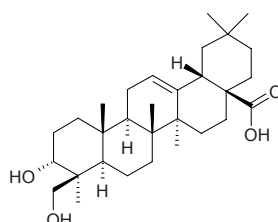
$C_{21}H_{20}O_{11}$  (448.39). Source: ZI MEI SHU *Millingtonia hortensis*. Ref: 6.

**19585 Scutellarein-7-rutinoside**

$C_{27}H_{30}O_{15}$  (488.71). Source: MU HU DIE SHU PI *Oroxylum indicum*. Ref: 6.

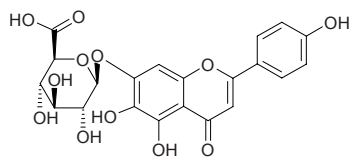
**19586 Scutellaric acid**

$C_{30}H_{48}O_4$  (472.71). White amorphous powder, mp 273~276°C,  $[\alpha]_D^{23} = +34.6^\circ$  ( $c = 0.85$ , pyridine). Pharm: Quinone reductase inducer inactive (mouse Hepalc7 hepatoma cells,  $CD > 10\mu\text{g/mL}$ ). Source: *Coussarea brevicaulis*. Ref: 3434.

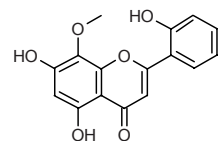


**19587 Scutellarin**

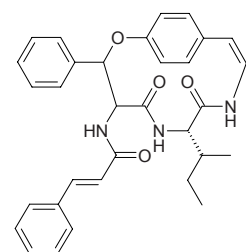
[27740-01-8]  $C_{21}H_{18}O_{12}$  (462.37). mp > 300°C. **Pharm:** Improves permeability of BBB; increases cerebral blood flow; platelet aggregation inhibitor (induced by ADP); main component of breviscapin in *Erigeron breviscapus* DENG ZHAN XI XIN to cure post-palsy paralysis; reduces resistance of cerebral blood vessels; used in treatment of post-palsy paralysis (for 469 cases in clinic, effective rate = 89.3%); antioxidant (PC12 cells, against oxidative toxicity induced by glutamate: control, LDH released = (25.94±5.92)%; glutamate, LDH released = (76.26±7.01)%; 0.1μmol/L+Glu, LDH released = (58.98±9.20)%; 1.0μmol/L+Glu, LDH released = (52.23±7.74)%; 10μmol/L+Glu, LDH released = (42.27±3.84)%; Vitamin E 10μmol/L+Glu, LDH released = (55.70±8.84)%<sup>[4972]</sup>; LD<sub>50</sub> (mus, iv) = 1314mg/kg. **Source:** BAN ZHI LIAN *Scutellaria barbata* [Syn. *Scutellaria rivularis*], CHOU MO LI *Clerodendron fragrans*, DA CHE QIAN *Plantago major*, DENG ZHAN XI XIN *Erigeron breviscapus*, GAO CONG ZHEN ZHU MEI *Sorbaria arborea*, GAO HUANG QIN *Scutellaria altissima*, HUANG QIN *Scutellaria baicalensis*, HUANG QIN *Scutellaria baicalensis*, JIAN ZI SU YE *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*], MU HU DIE *Oroxylum indicum*, ZHEN ZHU MEI *Sorbaria sorbifolia*. **Ref:** 6, 658, 660, 4972, 5501.

**19588 Scutevulin**

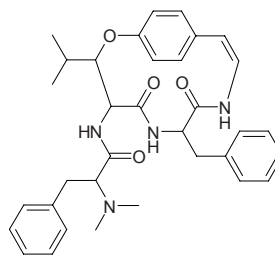
5,7,2'-Trihydroxy-8-methoxyflavone [80713-32-2]  $C_{16}H_{12}O_6$  (300.27). **Pharm:** cAMP phosphodiesterase inhibitor (ox heart, IC<sub>50</sub> = 6μmol/L). **Source:** HUANG QIN *Scutellaria baicalensis*. **Ref:** 2, 1652.

**19589 Scutianene D**

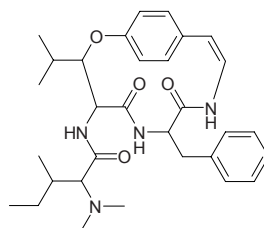
$C_{32}H_{33}N_3O_4$  (523.64). **Pharm:** Antibacterial inactive (gram-positive: *Staphylococcus aureus*, control Chloramphenicol, MIA = 0.7μg; *Staphylococcus epidermidis*, Chloramphenicol, MIA = 0.7μg; *Micrococcus luteus*, Chloramphenicol, MIA = 0.7μg; gram-negative: *Salmonella setubal*, Chloramphenicol, MIA = 0.7μg; *Escherichia coli*, Chloramphenicol, MIA = 0.5μg; *Klebsiella pneumoniae*, Chloramphenicol, MIA = 0.5μg); antifungal inactive (*Candida albicans* and *Saccharomyces cerevisiae*, 100μg). **Source:** HUANG YANG YE DUI CI TENG *Scutia buxifolia* (root cortex). **Ref:** 5323.

**19590 Scutianine B**

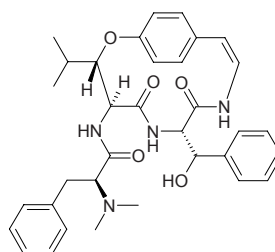
$C_{34}H_{40}N_4O_4$  (568.72). **Pharm:** Antibacterial (gram-negative: *Escherichia coli*, MIA = 6.25μg or 12.5μg, control Chloramphenicol, MIA = 0.5μg); antifungal inactive (*Candida albicans* and *Saccharomyces cerevisiae*, 100μg). **Source:** HUANG YANG YE DUI CI TENG *Scutia buxifolia* (root cortex). **Ref:** 5323.

**19591 Scutianine C**

$C_{31}H_{42}N_4O_4$  (534.70). **Pharm:** Antibacterial inactive (gram-positive: *Staphylococcus aureus*, control Chloramphenicol, MIA = 0.7μg; *Staphylococcus epidermidis*, Chloramphenicol, MIA = 0.7μg; *Micrococcus luteus*, Chloramphenicol, MIA = 0.7μg; gram-negative: *Salmonella setubal*, Chloramphenicol, MIA = 0.7μg; *Escherichia coli*, Chloramphenicol, MIA = 0.5μg; *Klebsiella pneumoniae*, Chloramphenicol, MIA = 0.5μg); antifungal inactive (*Candida albicans* and *Saccharomyces cerevisiae*, 100μg). **Source:** HUANG YANG YE DUI CI TENG *Scutia buxifolia* (root cortex). **Ref:** 5323.

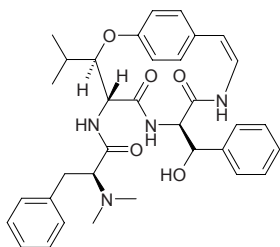
**19592 Scutianine D**

$C_{34}H_{40}N_4O_5$  (584.72). **Pharm:** Antibacterial (gram-positive: *Staphylococcus epidermidis*, MIA = 50.0μg, control Chloramphenicol, MIA = 0.7μg; *Micrococcus luteus*, MIA = 25.0μg, Chloramphenicol, MIA = 0.7μg; gram-negative: *Escherichia coli*, MIA = 50.0μg, Chloramphenicol, MIA = 0.5μg); antifungal inactive (*Candida albicans* and *Saccharomyces cerevisiae*, 100μg). **Source:** HUANG YANG YE DUI CI TENG *Scutia buxifolia* (root cortex). **Ref:** 5323.

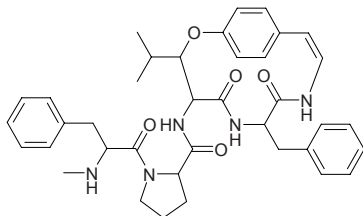


**19593 Scutianine E**

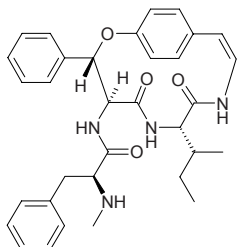
$C_{34}H_{40}N_4O_5$  (584.72). **Pharm:** Antibacterial (gram-positive: *Staphylococcus aureus*, MIA = 25.0 $\mu$ g, control Chloramphenicol, MIA = 0.7 $\mu$ g; *Staphylococcus epidermidis*, MIA = 6.25 $\mu$ g, Chloramphenicol, MIA = 0.7 $\mu$ g; *Micrococcus luteus*, MIA = 6.25 $\mu$ g, Chloramphenicol, MIA = 0.7 $\mu$ g; gram-negative: *Escherichia coli*, MIA = 6.25 $\mu$ g, Chloramphenicol, MIA = 0.5 $\mu$ g; *Klebsiella pneumoniae*, MIA = 12.5 $\mu$ g, Chloramphenicol, MIA = 0.5 $\mu$ g); antifungal inactive (*Candida albicans* and *Saccharomyces cerevisiae*, 100 $\mu$ g). **Source:** HUANG YANG YE DUI CI TENG *Scutia buxifolia* (root cortex). **Ref:** 5323.

**19594 Scutianine F**

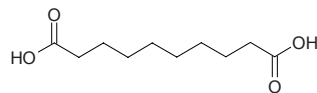
$C_{38}H_{45}N_5O_5$  (651.81). **Pharm:** Antibacterial inactive (gram-positive: *Staphylococcus aureus*, control Chloramphenicol, MIA = 0.7 $\mu$ g; *Staphylococcus epidermidis*, Chloramphenicol, MIA = 0.7 $\mu$ g; *Micrococcus luteus*, Chloramphenicol, MIA = 0.7 $\mu$ g; gram-negative: *Salmonella setubal*, Chloramphenicol, MIA = 0.7 $\mu$ g; *Escherichia coli*, Chloramphenicol, MIA = 0.5 $\mu$ g; *Klebsiella pneumoniae*, Chloramphenicol, MIA = 0.5 $\mu$ g); antifungal inactive (*Candida albicans* and *Saccharomyces cerevisiae*, 100 $\mu$ g). **Source:** HUANG YANG YE DUI CI TENG *Scutia buxifolia* (root cortex). **Ref:** 5323.

**19595 Scutianine M**

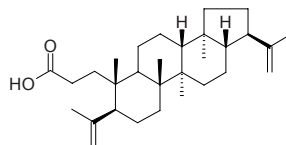
$C_{33}H_{38}N_4O_4$  (554.70). White powder, mp 257~259°C,  $[\alpha]_D^{25} = +120^\circ$  ( $c = 0.018$ ,  $CHCl_3$ ). **Pharm:** Antibacterial inactive (gram-positive: *Staphylococcus aureus*, control Chloramphenicol, MIA = 0.7 $\mu$ g; *Staphylococcus epidermidis*, Chloramphenicol, MIA = 0.7 $\mu$ g; *Micrococcus luteus*, Chloramphenicol, MIA = 0.7 $\mu$ g; gram-negative: *Salmonella setubal*, Chloramphenicol, MIA = 0.7 $\mu$ g; *Escherichia coli*, Chloramphenicol, MIA = 0.5 $\mu$ g; *Klebsiella pneumoniae*, Chloramphenicol, MIA = 0.5 $\mu$ g); antifungal inactive (*Candida albicans* and *Saccharomyces cerevisiae*, 100 $\mu$ g). **Source:** HUANG YANG YE DUI CI TENG *Scutia buxifolia* (root cortex). **Ref:** 5323.

**19596 Sebacic acid**

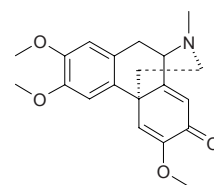
Decanedioic acid [111-20-6]  $C_{10}H_{18}O_4$  (202.25). **Source:** BI MA ZI *Ricinus communis*, DANG GUI *Angelica sinensis*. **Ref:** 2.

**19597 Sebiferic acid**

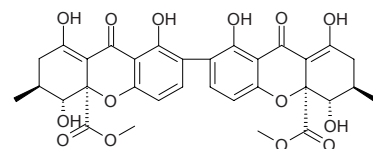
[52809-09-3]  $C_{30}H_{48}O_2$  (440.72). mp 178~180°C. **Source:** WU JIU MU GEN PI *Sapium sebiferum*. **Ref:** 6.

**19598 (+)-Sebiferine**

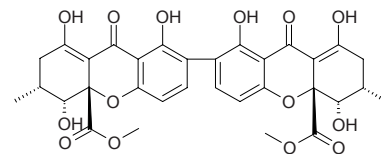
$C_{20}H_{23}NO_4$  (341.41). **Source:** *Stephania* sp. **Ref:** 3404.

**19599 Secalonic acid A**

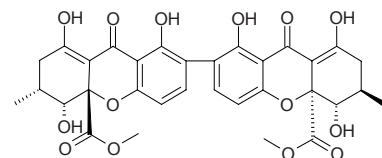
$C_{32}H_{30}O_{14}$  (638.59). mp 246~247°C (dec). **Source:** MAI JIAO *Claviceps purpurea*. **Ref:** 6.

**19600 Secalonic acid B**

$C_{32}H_{30}O_{14}$  (638.59). mp 254~256°C (dec). **Source:** MAI JIAO *Claviceps purpurea*. **Ref:** 6.

**19601 Secalonic acid C**

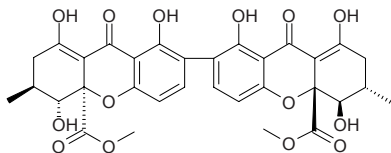
$C_{32}H_{30}O_{14}$  (638.59). mp 159~161°C. **Source:** MAI JIAO *Claviceps purpurea*. **Ref:** 6.



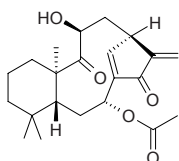


**19602 Secalonic acid D**

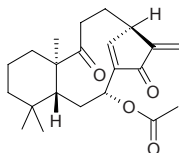
$C_{32}H_{30}O_{14}$  (638.59). mp 253–255°C. Source: MAI JIAO *Claviceps purpurea*.  
Ref: 6.

**19603 ent-8,9-Seco-7 $\alpha$ -acetoxy-11 $\beta$ -hydroxykaura-(14),16-dien-9,15-dione**

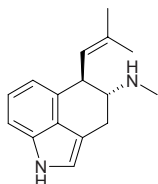
$C_{22}H_{30}O_5$  (374.48). Colorless oil,  $[\alpha]_{589nm}^{20} = 2^\circ$ ,  $[\alpha]_{578nm}^{24} = +3^\circ$ ,  $[\alpha]_{546nm} = +6^\circ$ ,  
 $[\alpha]_{435nm} = +50^\circ$ , ( $c = 0.2$ , MeOH). Source: *Lepidolaena taylorii*. Ref: 1901.

**19604 ent-8,9-Seco-7 $\alpha$ -acetoxykaura-8(14),16-dien-9,15-dione**

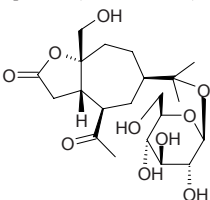
$C_{22}H_{30}O_4$  (358.48). Colorless oil,  $[\alpha]_{589nm}^{20} = -72^\circ$ ,  $[\alpha]_{577nm} = -82^\circ$ ,  
 $[\alpha]_{546nm} = -98^\circ$ ,  $[\alpha]_{435nm} = -173^\circ$ ,  $[\alpha]_{405nm} = -111^\circ$  ( $c = 0.2$ ,  $CHCl_3$ ).  
Source: *Lepidolaena taylorii*. Ref: 1901.

**19605 6,7-Seco-agroclavine**

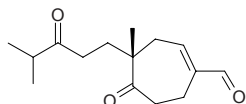
$C_{16}H_{22}N_2$  (240.35). Source: MAI JIAO *Claviceps purpurea*. Ref: 660.

**19606 (1S,5R,7R,10R)-Secoatractylolactone 11-O- $\beta$ -D-glucopyranoside**

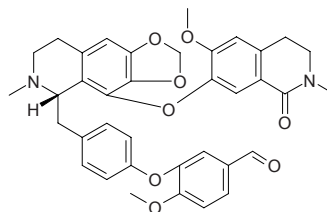
$C_{21}H_{34}O_{10}$  (446.50). Amorphous powder,  $[\alpha]_D^{22} = +36^\circ$  ( $c = 1.3$ , MeOH).  
Source: CANG ZHU *Atractylodes lancea*, GUAN CANG ZHU *Atractylodes japonica* (fresh rhizome). Ref: 4310, 4348.

**19607 Secocarotanal**

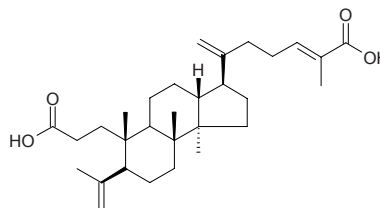
$C_{15}H_{22}O_3$  (250.34). Source: MEI GUI HUA *Rosa rugosa*. Ref: 660.

**19608 Secocepharanthine**

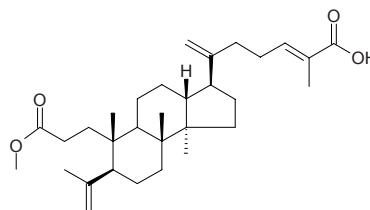
$C_{37}H_{36}N_2O_8$  (636.71). Source: TAI WAN QIAN JIN TENG *Stephania sasakii*.  
Ref: 660.

**19609 (24E)-3,4-Secodammara-4(28),20,24-trien-3,26-dioic acid**

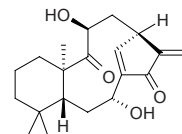
$C_{30}H_{46}O_4$  (470.70). Source: CHI YANG *Alnus japonica*. Ref: 660.

**19610 24(E)-3,4-Secodammara-4(28),20,24-trien-3,26-dioic acid-3-methylester**

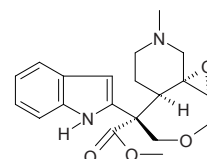
$C_{31}H_{48}O_4$  (484.73). Source: CHI YANG *Alnus japonica*. Ref: 660.

**19611 ent-8,9-Seco-7 $\alpha$ ,11 $\beta$ -dihydroxykaura-14(14),16-dien-9,15-dione**

$C_{20}H_{28}O_4$  (332.44). Colorless oil,  $[\alpha]_{589nm}^{19} = -3^\circ$ ,  $[\alpha]_{577nm} = -2^\circ$ ,  $[\alpha]_{546nm} = +1^\circ$ ,  
 $[\alpha]_{435nm} = +53^\circ$ ,  $[\alpha]_{405nm} = +165^\circ$  ( $c = 0.2$ ,  $CHCl_3$ ). Source: *Lepidolaena taylorii*. Ref: 1901.

**19612 6,7-Seco-19,20-epoxyangustilobine B**

$C_{20}H_{24}N_2O_4$  (356.43). Amorphous solid,  $[\alpha]_D^{29} = +73.6^\circ$  ( $c = 1.25$ , MeOH).  
Source: XIANG PI MU *Alstonia scholaris* (leaf). Ref: 2806.

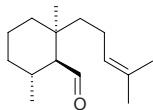




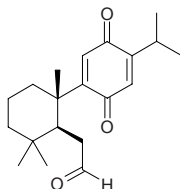
**19613 (-)-6,7-Seco-eudesm-7(11)-en-6-ol**

$C_{15}H_{26}O$  (222.36). Colorless oil. Source: *Tritomaria polita* (essential oil).

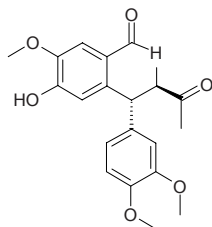
Ref: 3446.

**19614 7,8-Seco-para-ferruginone**

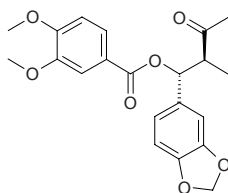
$C_{20}H_{28}O_3$  (316.44). Yellow needles, mp 151~152°C. Pharm: Antibacterial (*in vitro*, *Staphylococcus aureus*, MIC = 20 $\mu$ mol/L; *Micrococcus luteus*, MIC = 15 $\mu$ mol/L). Source: HONG GEN CAO *Salvia prionitis* (root: yield = 0.00030%dw). Ref: 4635.

**19615 7,8-Seco-holostylone A**

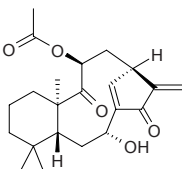
(7*S*,8*R*)-4-Hydroxy-3',4',5-trimethoxy-7,8-seco-2,7'-cycloignan-7,8-dione  $C_{21}H_{24}O_6$  (372.42). Amorphous yellow solid,  $[\alpha]_D^{25} = -181.8^\circ$  ( $c = 0.44$ ,  $CHCl_3$ ). Source: *Holostylis reniformis* (root). Ref: 3784.

**19616 7,8-Seco-holostylone B**

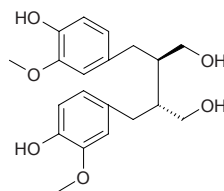
(7*R*,8*S*)-3,4-Dimethoxy-3',4'-methylenedioxy-7,8-seco-7,7'-epoxyignan-7,8-dione  $C_{21}H_{22}O_7$  (386.41). Amorphous yellow solid,  $[\alpha]_D^{25} = +37.0^\circ$  ( $c = 0.13$ ,  $CHCl_3$ ). Source: *Holostylis reniformis* (root). Ref: 3784.

**19617 ent-8,9-Seco-7a-hydroxy-11-acetoxykaura-8(14),16-dien-9,15-dione**

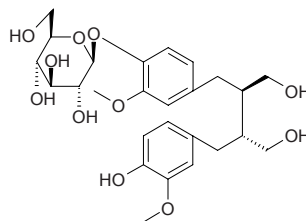
$C_{22}H_{30}O_5$  (374.48). Colorless oil,  $[\alpha]_{589nm}^{20} = -31^\circ$ ,  $[\alpha]_{577nm} = -42^\circ$ ,  $[\alpha]_{546nm} = -54^\circ$ ,  $[\alpha]_{435nm} = -131^\circ$ ,  $[\alpha]_{405nm} = -126^\circ$  ( $c = 0.2$ ,  $CHCl_3$ ) Source: *Lepidolaena taylorii*. Ref: 1901.

**19618 (-)-Secoisolariciresinol**

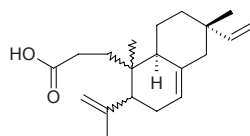
(8*R*,8'*R*)-(-)-Secoisolariciresinol  $C_{20}H_{26}O_6$  (362.43). Pale yellow amorphous powder. Pharm: Antioxidant (DPPH scavenger,  $EC_{50} = 7.7\mu$ g/mL = 21.3 $\mu$ mol/L, control Ascorbic acid,  $EC_{50} = 1.6\mu$ g/mL = 9.1 $\mu$ mol/L)<sup>[4154]</sup>; antioxidant (DPPH scavenger,  $IC_{50} = 28.9\mu$ mol/L, control Caffeic acid,  $IC_{50} = 25.5\mu$ mol/L)<sup>[5407]</sup>; NO production inhibitor (*in vitro*, LPS-activated mouse peritoneal macrophages, 3 $\mu$ mol/L, 10 $\mu$ mol/L, 30 $\mu$ mol/L, 100 $\mu$ mol/L, InRt = -7.3%, 6.5%, 0.9%, -12.5%, respectively; control *L*-NMMA, 3 $\mu$ mol/L, 10 $\mu$ mol/L, 30 $\mu$ mol/L, 100 $\mu$ mol/L, InRt = 10.3%, 15%, 34.1%, 63.1%, respectively)<sup>[4691]</sup>; NO production inhibitor ( $IC_{50} = 148\mu$ mol/L, control *L*-NMMA,  $IC_{50} = 28.5\mu$ mol/L)<sup>[5407]</sup>;  $\beta$ -hexosaminidase inhibitor inactive (RBL-2H3 cells, inhibits release of  $\beta$ -hexosaminidase, 100 $\mu$ mol/L, InRt = (-2.8 $\pm$ 5.3%)<sup>[4347]</sup>; aldose reductase inhibitor ( $IC_{50} > 100\mu$ mol/L, 100 $\mu$ mol/L InRt = 26%, control Epalrestat,  $IC_{50} = 0.072\mu$ mol/L)<sup>[4530]</sup>; cytotoxic (*in vitro*, 26-L5,  $EC_{50} = 5.9\mu$ g/mL; HT1080,  $EC_{50} = 60.2\mu$ g/mL; control 5-Fluorouracil, Colon26-L5,  $EC_{50} = 0.29\mu$ g/mL; HT1080,  $EC_{50} = 0.07\mu$ g/mL)<sup>[4661]</sup>; estrogenic<sup>[5408]</sup>. Source: BEI SHA SHEN *Glehnia littoralis* (underground part), CHU YE HUA JIAO *Zanthoxylum ailanthoides*, SHUI GUI JIAO YE *Hymenocallis littoralis* [Syn. *Hymenocallis americana*; *Pancretium littoralis*], SHUI MU XUE LIAN HUA *Saussurea medusa* (whole herb), XIAO HONG SHEN *Rubia yunnanensis* (root: yield = 0.0054%dw)<sup>[4691]</sup>, YI YE TIE SHAN *Tsuga heterophylla* (sapwood), YUN NAN HONG DOU SHAN *Taxus yunnanensis* (wood: yield = 0.607%dw), *Sarcomelicope megistophylla*. Ref: 660, 3965, 4154, 4347, 4530, 4661, 4691, 5407, 5408.

**19619 (-)-Secoisolariciresinol 4-O-β-D-glucopyranoside**

$C_{26}H_{36}O_{11}$  (524.57). Colorless amorphous solid,  $[\alpha]_D = -182.1^\circ$  ( $c = 0.05$ , MeOH). Pharm: Antioxidant (DPPH scavenger,  $EC_{50} = 21.0\mu$ g/mL = 40.0 $\mu$ mol/L, control Ascorbic acid,  $EC_{50} = 1.6\mu$ g/mL = 9.1 $\mu$ mol/L). Source: BEI SHA SHEN *Glehnia littoralis* (underground part). Ref: 4154.

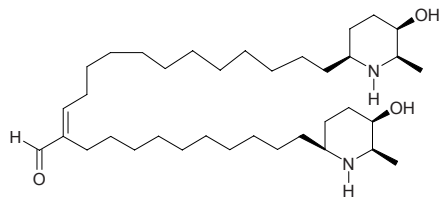
**19620 3,4-Secoisopi-mara-4(18),7,15-trien-3-oic acid**

$C_{20}H_{30}O_2$  (302.46). Pharm: Inhibits intestinal motility (mouse, *in vivo*)<sup>[4964]</sup>. Source: ZHU HONG SHU WEI CAO *Salvia cinnabarina* (aerial parts). Ref: 4942, 4964.

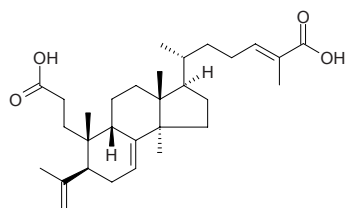


**19621 Secojuliprosopinal**

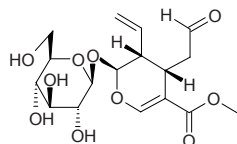
$C_{30}H_{68}N_2O_3$  (576.95). Colorless gum,  $[\alpha]_D^{28} = +5.0^\circ$  ( $c = 1.0$ , MeOH). Source: MU DOU SHU *Prosopis juliflora* (leaf). Ref: 3778.

**19622 24(E)-3,4-Seco-9βH-lanosta-4(28),7,24-triene-3,26-dioic acid**

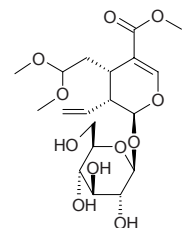
$C_{30}H_{46}O_4$  (470.70). White amorphous powder, mp 232~236 °C,  $[\alpha]_D^{20} = -13.4^\circ$  ( $c = 0.2$ , EtOH). Pharm: Cytotoxic (weak activity: A549,  $ED_{50} = 28.3\mu\text{g/mL}$ ; SK-OV-3,  $ED_{50} = 20.9\mu\text{g/mL}$ ; SK-MEL-2,  $ED_{50} = 29.9\mu\text{g/mL}$ ; HCT15,  $ED_{50} = 30.4\mu\text{g/mL}$ ). Source: CHAO XIAN LENG SHAN *Abies koreana* (root cortex). Ref: 3854.

**19623 Secologanin**

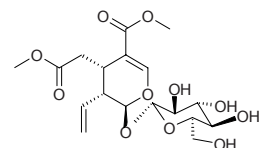
Loniceroside  $C_{17}H_{24}O_{10}$  (388.37). Source: JI ZI MU *Sinoadina Racemosa* [Syn. *Adina racemosa*] (leaf, flower and twig: yield = 0.0013%dw)<sup>[4723]</sup>, SHUI CAI *Menyanthes trifoliata* (in 1968, the compound was isolated from the plant by Battersby et al.)<sup>[5505]</sup>. Ref: 6, 4723, 5505.

**19624 Secologanin dimethyl acetal**

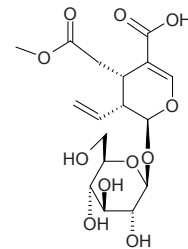
$C_{19}H_{30}O_{11}$  (434.44). Source: REN DONG TENG *Lonicera japonica*, JI ZI MU *Sinoadina Racemosa* [Syn. *Adina racemosa*] (leaf, flower and twig: yield = 0.00057%dw). Ref: 660, 4723.

**19625 Secologanoside dimethyl ester**

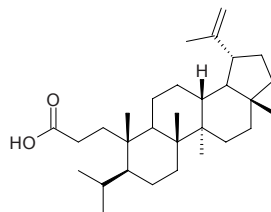
$C_{18}H_{26}O_{11}$  (418.4). Source: JI ZI MU *Sinoadina Racemosa* [Syn. *Adina racemosa*] (leaf, flower and twig: yield = 0.0078%dw). Ref: 4723.

**19626 Secologanoside 7-methyl ester**

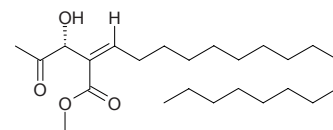
$C_{17}H_{24}O_{11}$  (404.37). Amorphous powder,  $[\alpha]_D^{25} = -106.1^\circ$  ( $c = 0.337$ , MeOH). Source: BAO MA ZI *Syringa amurensis* [Syn. *Syringa reticulata* var. *amurensis*] (leaf), JI ZI MU *Sinoadina Racemosa* [Syn. *Adina racemosa*] (leaf, flower and twig: yield = 0.0059%dw). Ref: 4363.

**19627 3,4-Seco-20(29)-lupen-3-oic acid**

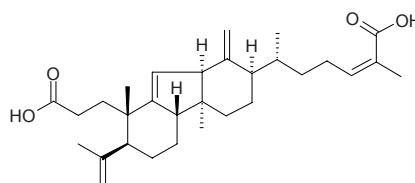
$C_{30}H_{50}O_2$  (442.73). Source: TAI WAN HUANG BO *Phellodendron amurense* var. *wilsonii* (leaf: yield = 0.00094%dw). Ref: 4722.

**19628 Secomahubanolide**

(2Z)-2-[(1R)-1-Hydroxy-2-oxo-propyl]-icos-2-enoic acid methyl ester  $C_{24}H_{44}O_4$  (396.62). Colorless oil,  $[\alpha]_D^{25} = -11.16^\circ$  ( $c = 0.029$ ,  $CHCl_3$ ). Source: TAI WAN RUI FANG RUN NAN *Machilus zuihoensis* (stem wood). Ref: 5287.

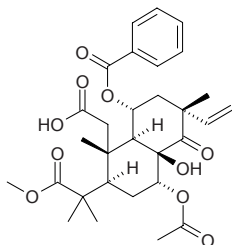
**19629 Seco-neokadsuranic acid A**

$C_{30}H_{44}O_4$  (468.68). Pharm: Antineoplastic<sup>[2523]</sup>; anti-HIV<sup>[2523]</sup>. Source: YI XING NAN WU WEI ZI *Kadsura heteroclita* [Syn. *Uvaria heteroclita*]. Ref: 660, 2436, 2523.

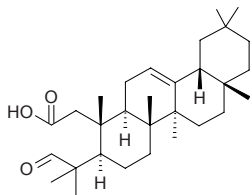


**19630 Secoorthosiphol B**

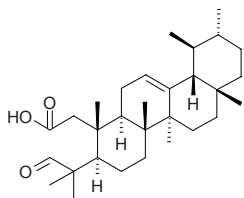
$C_{30}H_{38}O_{10}$  (558.63). **Pharm:** NO production inhibitor (LPS-activated macrophage-like J774.1 Cells,  $IC_{50} = 127 \mu\text{mol/L}$ ; control *L*-NMMA,  $IC_{50} = 26.0 \mu\text{mol/L}$ ; Polymixin B,  $IC_{50} = 27.8 \mu\text{g/mL}$ )<sup>[4677]</sup>. **Source:** XIONG RUI ZHUANG ZHI GUAN CAO *Orthosiphon stamineus* [Syn: *Orthosiphon aristatus*; *Orthosiphon grandiflorus*; *Orthosiphon spicatus*] (aerial parts: yield = 0.00018%<sup>[4677]</sup>; yield = 0.00094%<sup>[4741]</sup>). **Ref:** 4677, 4741.

**19631 2,3-seco-3-Oxoolean-12-en-2-oic acid**

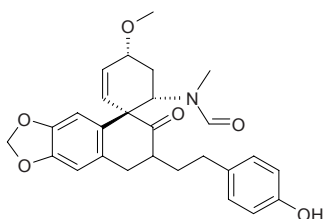
$C_{30}H_{48}O_3$  (456.72). Amorphous powder,  $[\alpha]_D^{23} = +52.7^\circ$  ( $c = 0.4$ ,  $\text{CHCl}_3$ ). **Source:** HUANG LONG DAN *Gentiana lutea* (rhizome and root). **Ref:** 4307.

**19632 2,3-Seco-3-oxours-12-en-2-oic acid**

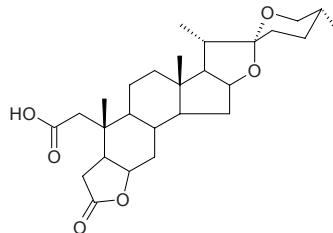
$C_{30}H_{48}O_3$  (456.72). Amorphous powder,  $[\alpha]_D^{23} = +68.1^\circ$  ( $c = 0.8$ ,  $\text{CHCl}_3$ ). **Source:** HUANG LONG DAN *Gentiana lutea* (rhizome and root). **Ref:** 4307.

**19633 (-)-Secoplicamine**

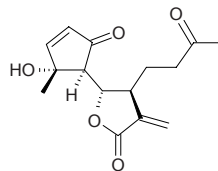
$C_{27}H_{29}NO_6$  (463.54). Amorphous solid,  $[\alpha]_D = -16.9^\circ$  ( $c = 0.142$ , MeOH). **Source:** TU ER QI XUE HUA LIAN *Galanthus plicatus* ssp. *byzantinus*. **Ref:** 1872.

**19634 2,3-Seco-porrigenin**

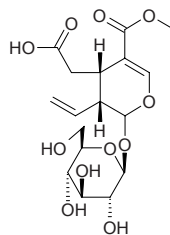
$C_{27}H_{40}O_6$  (460.62). **Pharm:** Cytotoxic (inhibits cancer cell proliferation *in vitro*). **Source:** JIU CONG *Allium porrum*. **Ref:** 2165.

**19635 Secotanapartholide A**

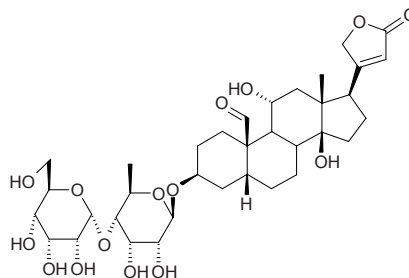
$C_{15}H_{18}O_5$  (278.31). **Source:** LIU JI NU *Artemisia anomala* (whole herb with flowers). **Ref:** 660.

**19636 Secoxyloganin**

[58822-47-2]  $C_{17}H_{24}O_{11}$  (404.37). **Pharm:** Antitrypanosomal (trypomastigotes of *Trypanosoma cruzi*, *in vitro*,  $IC_{50} = 74.2 \mu\text{g/mL}$ , control Gentian violet,  $IC_{50} = 7.5 \mu\text{g/mL}$ )<sup>[3439]</sup>. **Source:** JI ZI MU *Sinoadina Racemosa* [Syn. *Adina racemosa*] (leaf, flower and twig: yield = 0.338%<sup>[4723]</sup>), REN DONG TENG *Lonicera japonica*, *Calycophyllum spruceanum*. **Ref:** 660, 3439, 4723.

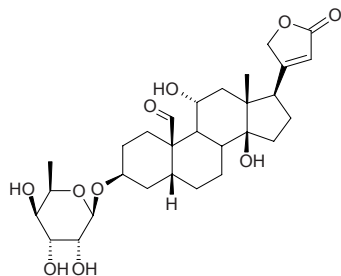
**19637 Securigenin-3β-O-[α-allosyl-(1→4)-β-6-deoxyalloside]**

$C_{35}H_{52}O_{15}$  (712.80). White-yellow powder,  $[\alpha]_D^{24} = -28.7^\circ$  ( $c = 2.2$ , MeOH). **Pharm:** Cytotoxic (KB,  $IC_{50} = (0.104 \pm 0.005) \mu\text{mol/L}$ , control Podophyllotoxin,  $IC_{50} = 0.014 \mu\text{mol/L}$ ). **Source:** GAO MEI YING BAN *Crossopetalum gaumeri* (root). **Ref:** 3969.

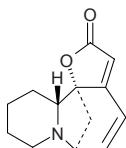


**19638 Securigenin-3 $\beta$ -O- $\beta$ -6-deoxyguloside**

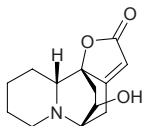
$C_{29}H_{42}O_{10}$  (550.65). White powder,  $[\alpha]_D^{24} = -61.0^\circ$  ( $c = 1.0$ , MeOH). **Pharm:** Cytotoxic (KB,  $IC_{50} = (0.164 \pm 0.015) \mu\text{mol/L}$ , control Podophyllotoxin,  $IC_{50} = 0.014 \mu\text{mol/L}$ ). **Source:** GAO MEI YING BAN *Crossopetalum gaumeri* (root). **Ref:** 3969.

**19639 Securinine**

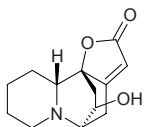
Securinan-11-one [5610-40-2]  $C_{13}H_{15}NO_2$  (217.27). Light yellow crystals, mp 142~143°C,  $[\alpha]_D^{20} = 1042.3^\circ$  (ethanol), easily soluble in chloroform, ethanol, slightly soluble in ether, acetone, water.<sup>[5507]</sup> **Pharm:** Enhances myocardial contractility (anesthetic animal iv); increases blood pressure (anesthetic animal, iv); cholinesterase inhibitor; CNS stimulant; respiratory stimulant (anesthetic animal, iv);  $LD_{50}$  (mus, iv) = 3.5mg/kg or 6.3mg/kg, (mus, ip) = 25mg/kg, (rat, ip) = 41mg/kg. **Source:** YI YE QIU *Securinega suffruticosa* (in 1956, isolated from the plant for the first time<sup>[5507]</sup>), PAN ZHUANG YE XIA ZHU *Phyllanthus discoides*. **Ref:** 6, 658, 5507.

**19640 Securinol A**

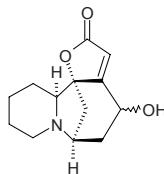
[5008-48-0]  $C_{13}H_{17}NO_3$  (235.29). mp (+) 135~136°C. **Source:** YI YE QIU *Securinega suffruticosa*. **Ref:** 6, 1521.

**19641 Securinol B**

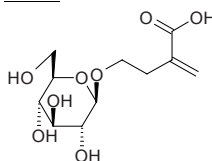
[30155-10-3]  $C_{13}H_{17}NO_3$  (235.29). mp (+) 158~160°C. **Source:** YI YE QIU *Securinega suffruticosa*. **Ref:** 6, 1521.

**19642 Securinol C**

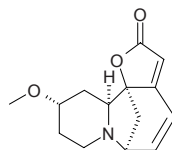
$C_{13}H_{17}NO_3$  (235.29). mp (-) 114~115°C. **Source:** YI YE QIU *Securinega suffruticosa*. **Ref:** 6.

**19643 Securiterpenoside**

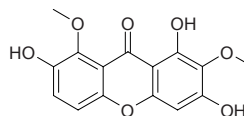
$C_{11}H_{18}O_8$  (278.26). White crystals, easily solving in methanol, mp 80~83°C. **Source:** CHAN YI TENG *Securidaca inappendiculata*. **Ref:** 2228.

**19644 Securitinine**

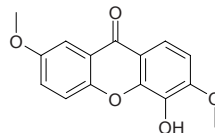
$C_{14}H_{17}NO_3$  (247.30). mp 129~130°C. **Source:** YI YE QIU *Securinega suffruticosa*. **Ref:** 6.

**19645 Securixanthone A**

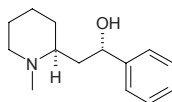
1,3,7-Trihydroxy-2,8-dimethoxyxanthone  $C_{15}H_{12}O_7$  (304.26). Fine yellow needles (MeOH), mp 218°C. **Source:** CHAN YI TENG *Securidaca inappendiculata* (stem). **Ref:** 5238.

**19646 Securixanthone B**

3,7-Dimethoxy-4-hydroxyxanthone  $C_{15}H_{12}O_5$  (272.26). Fine yellow needles (MeOH), mp 178°C. **Source:** CHAN YI TENG *Securidaca inappendiculata* (stem). **Ref:** 5238.

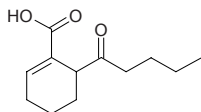
**19647 (2S,2'S)-Sedamine**

$C_{14}H_{21}NO$  (219.33). **Source:** TAI JING TIAN *Sedum acre*, *Sedum* spp. **Ref:** 1521.

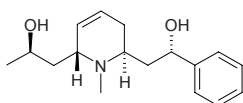


**19648 Sedanonic acid**

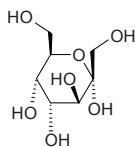
$C_{12}H_{18}O_3$  (210.38). Source: CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*]. Ref: 660.

**19649 (-)-Sedinine**

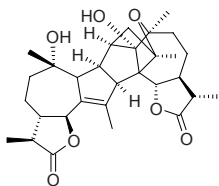
$C_{17}H_{25}NO_2$  (275.39). Source: FEI CAI *Sedum aizoon*, TAI JING TIAN *Sedum acre*. Ref: 660, 1521.

**19650 Sedoheptulose**

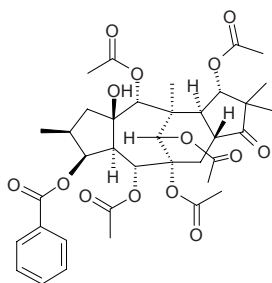
$C_7H_{14}O_7$  (210.19). Source: FAN MU GUA *Carica papaya*, FEI CAI *Sedum aizoon*, SHI ZHI JIA *Sedum sarmentosum*, YING SU KE *Papaver somniferum*. Ref: 660.

**19651 Seemarin**

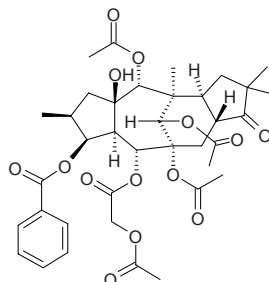
$C_{30}H_{40}O_7$  (512.65). mp 256–257°C,  $[\alpha]_D = +114.5^\circ$  ( $c = 0.10$ , MeOH/CHCl<sub>3</sub>). Source: YOU RUI XIANG *Daphne oleoides*. Ref: 2302.

**19652 Segetene 3**

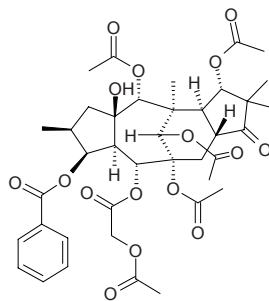
$C_{37}H_{46}O_{14}$  (714.77). Pharm: Antifeedant (*Spodopetra littoralis*, 1000mg/L); anti-HIV-1 (inhibition of virus-induced cytopathicity in MT-4 cells,  $EC_{50} > 100\mu\text{g/mL}$ ); cytotoxic (MT-4,  $CC_{50} > 100\mu\text{g/mL}$ ). Source: HAI YANG DA JI *Euphorbia paralias* (aerial parts). Ref: 5221.

**19653 Segetene 4**

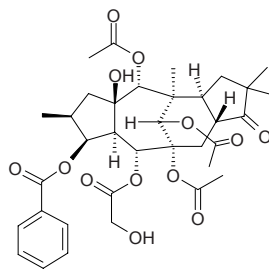
$C_{37}H_{46}O_{14}$  (714.77). Pharm: Antifeedant (*Spodopetra littoralis*, 1000mg/L); anti-HIV-1 (inhibition of virus-induced cytopathicity in MT-4 cells,  $EC_{50} > 100\mu\text{g/mL}$ ); cytotoxic (MT-4,  $CC_{50} > 100\mu\text{g/mL}$ ). Source: HAI YANG DA JI *Euphorbia paralias* (aerial parts). Ref: 5221.

**19654 Segetene 5**

$C_{39}H_{48}O_{16}$  (772.81). Pharm: Antifeedant (*Spodopetra littoralis*, 500mg/L); anti-HIV-1 (inhibition of virus-induced cytopathicity in MT-4 cells,  $EC_{50} = 51\mu\text{g/mL}$ ); cytotoxic (MT-4,  $CC_{50} = 51\mu\text{g/mL}$ ). Source: HAI YANG DA JI *Euphorbia paralias* (aerial parts). Ref: 5221.

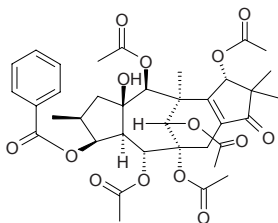
**19655 Segetene 6**

$C_{35}H_{44}O_{13}$  (672.73). Pharm: Anti-HIV-1 (inhibition of virus-induced cytopathicity in MT-4 cells,  $EC_{50} > 100\mu\text{g/mL}$ ); cytotoxic (MT-4,  $CC_{50} > 100\mu\text{g/mL}$ ). Source: HAI YANG DA JI *Euphorbia paralias* (aerial parts). Ref: 5221.

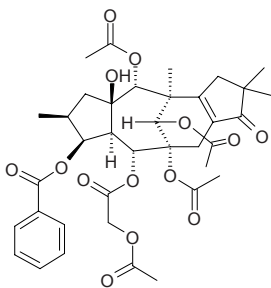


**19656 Segetene A**

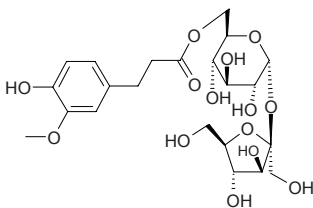
5 $\alpha$ ,6,11 $\alpha$ ,14 $\beta$ ,17(*R*)-Pentaacetoxy-3 $\beta$ -benzoyloxy-15 $\beta$ -hydroxyseget-8(12)-en-9-one C<sub>37</sub>H<sub>44</sub>O<sub>14</sub> (712.75). White amorphous powder,  $[\alpha]_D = -4^\circ$  ( $c = 0.17$ , MeOH). **Pharm:** Antifeedant (*Spodopetra littoralis*, > 1000mg/L); anti-HIV-1 (inhibition of virus-induced cytopathicity in MT-4 cells, EC<sub>50</sub> > 100 $\mu$ g/mL); cytotoxic (MT-4, CC<sub>50</sub> > 100 $\mu$ g/mL). **Source:** HAI YANG DA JI *Euphorbia paralias* (aerial parts). **Ref:** 5221.

**19657 Segetene B**

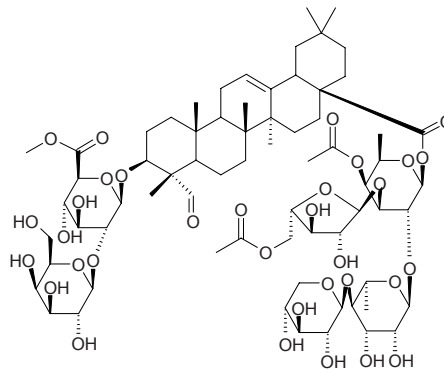
6,14 $\alpha$ ,17(*R*)-Triacetoxy-5 $\alpha$ -(2-acetoxyacetoxy)-3 $\beta$ -benzoyloxy-15 $\beta$ -hydroxyseget-8(12)-en-9-one C<sub>37</sub>H<sub>44</sub>O<sub>14</sub> (712.75). White amorphous powder,  $[\alpha]_D = -51^\circ$  ( $c = 0.13$ ). **Pharm:** Antifeedant (*Spodopetra littoralis*, > 1000mg/L). **Source:** HAI YANG DA JI *Euphorbia paralias* (aerial parts). **Ref:** 5221.

**19658 Segetoside A**

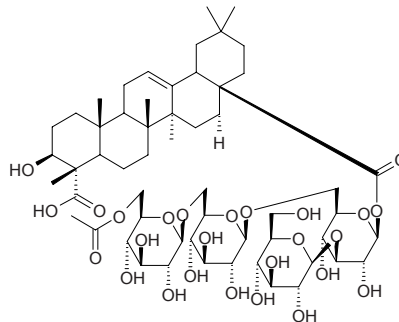
$\alpha$ -D-(6-*O*-Dihydroferuloyl)-glucuronosyl(1 $\rightarrow$ 2)- $\beta$ -D-fructofuranoside C<sub>22</sub>H<sub>32</sub>O<sub>15</sub> (536.49). Colorless oil,  $[\alpha]_D^{24} = +38.21^\circ$  ( $c = 0.56$ , MeOH). **Source:** WANG BU LIU XING *Vaccaria segetalis* [Syn. *Vaccaria pyramidata*]. **Ref:** 8.

**19659 Segetoside B**

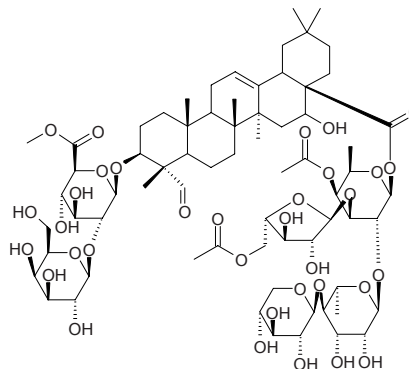
28-*O*- $\beta$ -D-Xylopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)-[ $\alpha$ -L-(5-*O*-acetyl)-arabinofuranosyl(1 $\rightarrow$ 3)]- $\beta$ -D-(4-*O*-acetyl)-fucopyranosyl-gypsogenin-3-*O*- $\beta$ -D-galactopyranosyl(1 $\rightarrow$ 2)- $\beta$ -D-(6-*O*-methyl ester)-glucuronopyranoside C<sub>69</sub>H<sub>106</sub>O<sub>33</sub> (1463.59). White powder,  $[\alpha]_D^{24} = -8.70^\circ$  ( $c = 0.52$ , MeOH). **Source:** WANG BU LIU XING *Vaccaria segetalis* [Syn. *Vaccaria pyramidata*]. **Ref:** 8.

**19660 Segetoside C**

Gypsogenic acid-28-*O*- $\beta$ -D-(6-*O*-acetyl)-glucopyranosyl(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)-[ $\beta$ -D-glucopyranosyl(1 $\rightarrow$ 3)]- $\beta$ -D-glucopyranoside C<sub>56</sub>H<sub>88</sub>O<sub>26</sub> (1177.31). White powder,  $[\alpha]_D^{22} = +8.86^\circ$  ( $c = 0.43$ , MeOH). **Source:** WANG BU LIU XING *Vaccaria segetalis* [Syn. *Vaccaria pyramidata*]. **Ref:** 8.

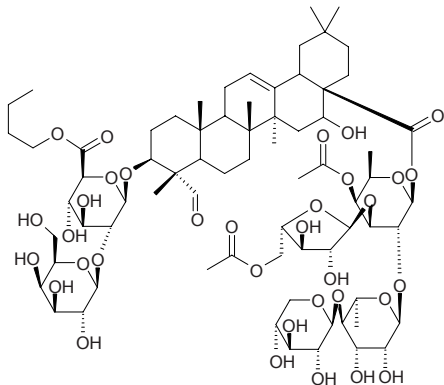
**19661 Segetoside D**

28-*O*- $\beta$ -D-Xylopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)-[ $\alpha$ -L-(5-*O*-acetyl)-arabinofuranosyl(1 $\rightarrow$ 3)]- $\beta$ -D-(4-*O*-acetyl)-fucopyranosyl-quillaic acid-3-*O*- $\beta$ -D-galactopyranosyl(1 $\rightarrow$ 2)- $\beta$ -D-(6-*O*-methyl ester)-glucuronopyranoside C<sub>69</sub>H<sub>106</sub>O<sub>34</sub> (1479.59). White powder,  $[\alpha]_D^{24} = -13.97^\circ$  ( $c = 1.40$ , MeOH). **Source:** WANG BU LIU XING *Vaccaria segetalis* [Syn. *Vaccaria pyramidata*]. **Ref:** 8.

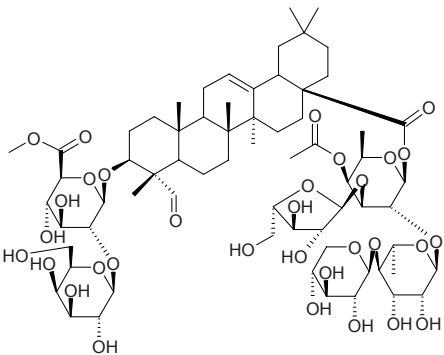


**19662 Segetoside E**

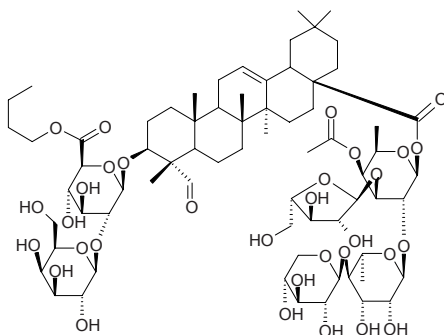
28-*O*- $\beta$ -*D*-Xylopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)-[ $\alpha$ -*L*-(5-*O*-acetyl)-arabinofuranosyl(1 $\rightarrow$ 3)]- $\beta$ -*D*-(4-*O*-acetyl)-fucopyranosyl-quillaic acid-3-*O*- $\beta$ -*D*-galactopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-(6-*O*-*n*-butyl ester)-glucuronopyranoside C<sub>72</sub>H<sub>112</sub>O<sub>34</sub> (1521.68). White powder,  $[\alpha]_D^{24} = -17.93^\circ$  (c = 0.50, MeOH). Source: WANG BU LIU XING *Vaccaria segetalis* [Syn. *Vaccaria pyramidata*]. Ref: 8.

**19663 Segetoside F**

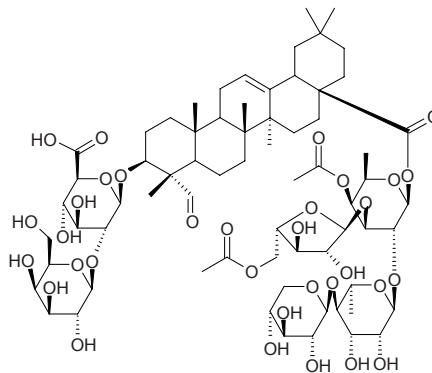
28-*O*-[ $\beta$ -*D*-Xylopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)]- $\alpha$ -*L*-arabinofuranosyl(1 $\rightarrow$ 3)- $\beta$ -*D*-(4-*O*-acetyl)-fucopyranosyl-gypsogenin-3-*O*- $\beta$ -*D*-galactopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-(6-*O*-methyl ester)-glucuronopyranoside C<sub>67</sub>H<sub>104</sub>O<sub>32</sub> (1461.56). White powder,  $[\alpha]_D^{24} = -5.03^\circ$  (c = 0.52, MeOH). Source: WANG BU LIU XING *Vaccaria segetalis* [Syn. *Vaccaria pyramidata*]. Ref: 8.

**19664 Segetoside G**

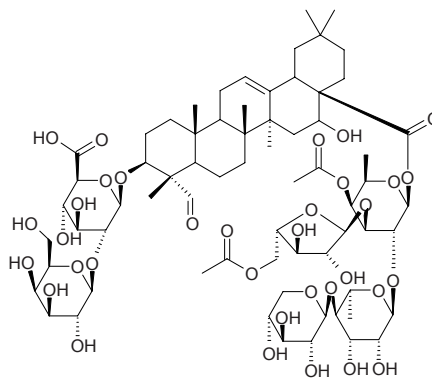
28-*O*- $\beta$ -*D*-Xylopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)-[ $\alpha$ -*L*-arabinofuranosyl(1 $\rightarrow$ 3)]- $\beta$ -*D*-(4-*O*-acetyl)-fucopyranosyl-gypsogenin-3-*O*- $\beta$ -*D*-galactopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-(6-*O*-*n*-butyl ester)-glucuronopyranoside C<sub>70</sub>H<sub>110</sub>O<sub>32</sub> (1463.64). White powder,  $[\alpha]_D^{24} = -6.39^\circ$  (c = 0.36, MeOH). Source: WANG BU LIU XING *Vaccaria segetalis* [Syn. *Vaccaria pyramidata*]. Ref: 8.

**19665 Segetoside H**

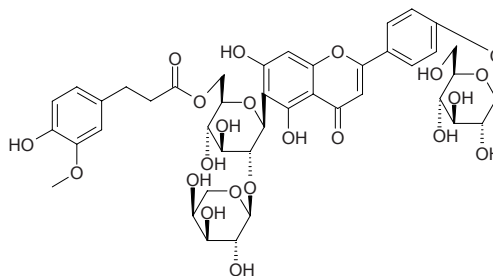
28-*O*- $\beta$ -*D*-Xylopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)-[ $\alpha$ -*L*-(5-*O*-acetyl)-arabinofuranosyl(1 $\rightarrow$ 3)]- $\beta$ -*D*-(4-*O*-acetyl)-fucopyranosyl-gypsogenin-3-*O*- $\beta$ -*D*-galactopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-glucuronopyranoside C<sub>68</sub>H<sub>104</sub>O<sub>33</sub> (1449.57). White powder,  $[\alpha]_D^{24} = -36.71^\circ$  (c = 0.14, MeOH). Source: WANG BU LIU XING *Vaccaria segetalis* [Syn. *Vaccaria pyramidata*]. Ref: 8.

**19666 Segetoside I**

28-*O*- $\beta$ -*D*-Xylopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)-[ $\alpha$ -*L*-(5-*O*-acetyl)-arabinofuranosyl(1 $\rightarrow$ 3)]- $\beta$ -*D*-(4-*O*-acetyl)-fucopyranosyl-quillaic acid-3-*O*- $\beta$ -*D*-galactopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-glucuronopyranoside C<sub>68</sub>H<sub>104</sub>O<sub>34</sub> (1465.57). White powder,  $[\alpha]_D^{24} = -13.94^\circ$  (c = 1.27, MeOH). Source: WANG BU LIU XING *Vaccaria segetalis* [Syn. *Vaccaria pyramidata*]. Ref: 8.

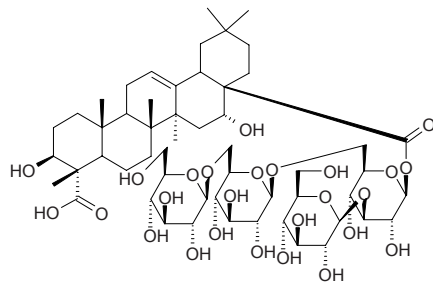
**19667 Segetoside J**

4'-*O*-Glucopyranosyl apigenin-6-*C*- $\alpha$ -*L*-arabinopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-(6-*O*-dihydroferuloyl)-glucopyranoside C<sub>42</sub>H<sub>48</sub>O<sub>22</sub> (904.84). Source: WANG BU LIU XING *Vaccaria segetalis* [Syn. *Vaccaria pyramidata*]. Ref: 8.

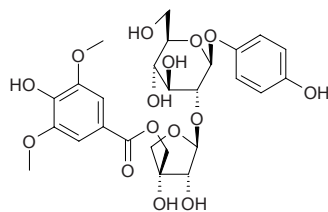


**19668 Segetoside K**

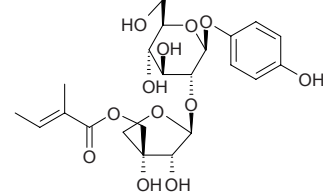
Olean-12-ene-23 $\alpha$ ,28 $\beta$ -dioic acid-3 $\beta$ -,16 $\alpha$ -dihydroxy-28-*O*- $\beta$ -D-glucopyranosyl(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)-[ $\beta$ -D-glucopyranosyl(1 $\rightarrow$ 3)]- $\beta$ -D-glucopyranoside C<sub>54</sub>H<sub>86</sub>O<sub>26</sub> (1151.27). White powder,  $[\alpha]_D^{24} = -20.53^\circ$  ( $c = 0.28$ , MeOH). Source: WANG BU LIU XING *Vaccaria segetalis* [Syn. *Vaccaria pyramidata*]. Ref: 8.

**19669 Seguinose F**

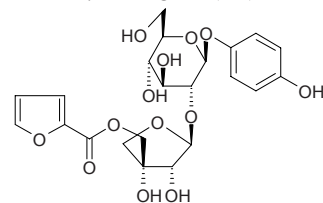
C<sub>26</sub>H<sub>32</sub>O<sub>15</sub> (584.54). Source: JIU BING YE *Glycosmis pentaphylla* (stem). Ref: 4424.

**19670 Seguinose G**

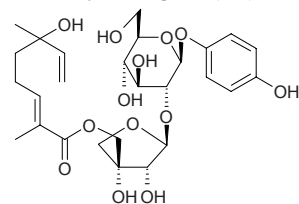
C<sub>22</sub>H<sub>30</sub>O<sub>12</sub> (486.48). Amorphous powder,  $[\alpha]_D^{22} = -85.1^\circ$  ( $c = 0.48$ , MeOH). Source: *Myrsine seguinii* (leaf). Ref: 2378.

**19671 Seguinose H**

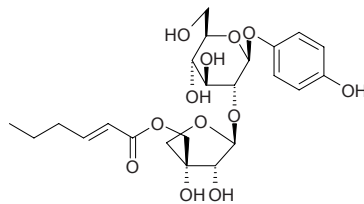
C<sub>22</sub>H<sub>26</sub>O<sub>13</sub> (498.44). Amorphous powder,  $[\alpha]_D^{22} = -72.1^\circ$  ( $c = 0.89$ , MeOH). Source: *Myrsine seguinii* (leaf). Ref: 2378.

**19672 Seguinose I**

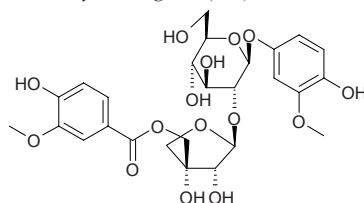
C<sub>27</sub>H<sub>38</sub>O<sub>13</sub> (570.60). Amorphous powder,  $[\alpha]_D^{22} = -53.7^\circ$  ( $c = 0.99$ , MeOH). Source: *Myrsine seguinii* (leaf). Ref: 2378.

**19673 Seguinose J**

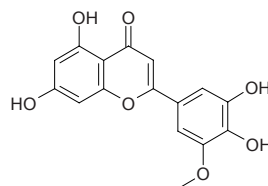
C<sub>23</sub>H<sub>32</sub>O<sub>12</sub> (500.50). Amorphous powder,  $[\alpha]_D^{23} = -70.2^\circ$  ( $c = 0.41$ , MeOH). Source: *Myrsine seguinii* (leaf). Ref: 2378.

**19674 Seguinose K**

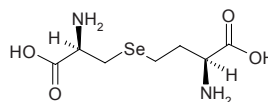
C<sub>26</sub>H<sub>36</sub>O<sub>15</sub> (584.54). Amorphous powder,  $[\alpha]_D^{22} = -52.4^\circ$  ( $c = 0.21$ , MeOH). Source: *Myrsine seguinii* (leaf). Ref: 2378.

**19675 Selagin**

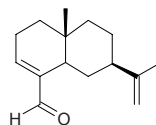
C<sub>16</sub>H<sub>12</sub>O<sub>7</sub> (316.27). Source: XIAO JIE JIN CAO *Huperzia selago* [Syn. *Lycopodium selago*]. Ref: 660.

**19676 L-Selenocystathionine**

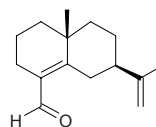
C<sub>7</sub>H<sub>14</sub>N<sub>2</sub>O<sub>4</sub>Se (269.16). Pharm: Toxin. Source: *Astragalus* sp. Ref: 658.

**19677 (-)-Selina-3,11-dien-14-al**

C<sub>15</sub>H<sub>22</sub>O (218.34). Source: CHEN XIANG *Aquilaria agallocha*. Ref: 13.

**19678 (+)-Selina-4,11-dien-14-al**

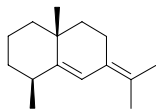
C<sub>15</sub>H<sub>22</sub>O (218.34). Source: CHEN XIANG *Aquilaria agallocha*. Ref: 13.



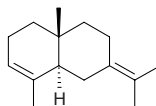


**19679 (-)-Selina-5,7(11)-diene**

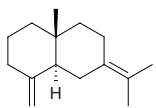
$C_{15}H_{24}$  (204.36). Colorless oil. Source: TIE JIAO JUE YU TAI *Plagiochila asplenioides* (essential oil). Ref: 5257.

**19680 3,7(11)-Selinadiene**

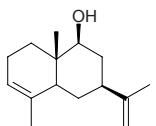
$C_{15}H_{24}$  (204.36). Source: MA HUA *Cannabis sativa*. Ref: 660.

**19681 Selina-4(15),7(11)-diene**

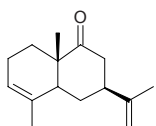
Selina-4(15),7(11)-diene  $C_{15}H_{24}$  (204.36). Source: MA HUA *Cannabis sativa*, PI JIU HUA *Humulus lupulus*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. Ref: 660.

**19682 (+)-Selina-3,11-dien-9-ol**

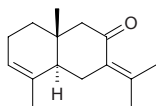
$C_{15}H_{24}O$  (220.36). Source: CHEN XIANG *Aquilaria agallocha*. Ref: 13.

**19683 (-)-Selina-3,11-dien-9-one**

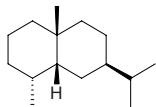
$C_{15}H_{22}O$  (218.34). Source: CHEN XIANG *Aquilaria agallocha*. Ref: 13.

**19684 Selina-3,7(11)-dien-8-one**

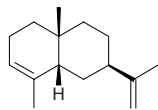
$C_{15}H_{22}O$  (218.34). Source: SHUANG YE XI XIN *Asarum caulescens*. Ref: 660.

**19685 Selinane**

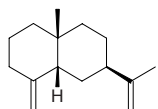
Selinane  $C_{15}H_{28}$  (208.39). Source: CHEN XIANG *Aquilaria agallocha*, MAN SHAN HONG *Rhododendron dauricum*. Ref: 6.

**19686  $\alpha$ -Selinene**

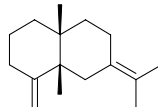
$C_{15}H_{24}$  (204.36). bp 268~272°C. Source: REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. Ref: 2.

**19687  $\beta$ -Selinene**

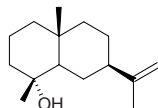
$C_{15}H_{24}$  (204.36). Source: BEI CANG ZHU *Atractylodes chinensis*, CANG ZHU *Atractylodes lancea*, KUAN YE QIANG HUO *Notopterygium forbesii* [Syn. *Notopterygium franchetii*], MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*], NAN HE SHI *Daucus carota*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], WU WEI ZI *Schisandra chinensis*. Ref: 2, 660.

**19688  $\gamma$ -Selinene**

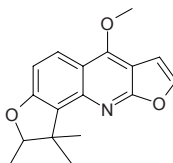
$C_{15}H_{24}$  (204.36). Source: REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. Ref: 2.

**19689 Selin-11-en-4 $\alpha$ -ol**

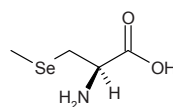
$C_{15}H_{26}O$  (222.37). Pharm: NO production Inhibitor (*in vitro*, LPS-activated mouse peritoneal macrophages,  $IC_{50}$  = 39  $\mu$ mol/L; control *L*-NMMA,  $IC_{50}$  = 28  $\mu$ mol/L)<sup>[4655]</sup>;  $\beta$ -hexosaminidase release inhibitor (RBL-2H3 Cells, 100  $\mu$ mol/L, InRt = 11.9%; control Curcumin, InRt = 62.6%)<sup>[4655]</sup>. Source: YI ZHI REN *Alpinia oxyphylla* (fruit: yield = 0.0009%dw). Ref: 4655.

**19690 Semecarpine**

$C_{17}H_{17}NO_3$  (283.33). Pale yellow needles ( $CHCl_3$ - $Me_2CO$ ), mp 145~147°C,  $[\alpha]_D^{24}$  = +2.6 ( $c$  = 0.14, MeOH). Pharm: Cytotoxic ( $P_{388}$  cell line,  $ED_{50}$  = 28.1  $\mu$ g/mL, control Mithramycin,  $ED_{50}$  = 0.06  $\mu$ g/mL; HT29,  $ED_{50}$  > 50  $\mu$ g/mL, Mithramycin,  $ED_{50}$  = 0.07  $\mu$ g/mL; A549,  $ED_{50}$  = 29.3  $\mu$ g/mL, Mithramycin,  $ED_{50}$  = 0.08  $\mu$ g/mL). Source: SI ROU TUO GUO YE MI ZHU YU *Melicope semecarpifolia*. Ref: 5405.

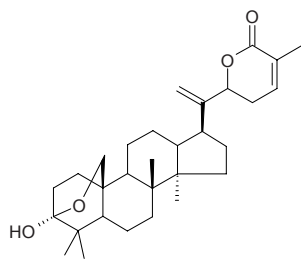
**19691 Se-Methyl-L-selenocysteine**

$C_4H_9NO_2Se$  (182.08). Pharm: Causes selenium poisoning. Source: ER GOU HUANG QI *Astragalus bisulcatus*. Ref: 658.

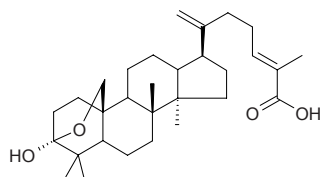


**19692 Semialactone**

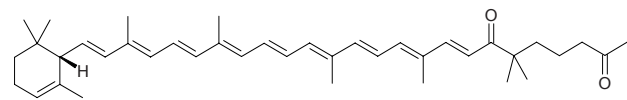
$C_{30}H_{44}O_4$  (468.68). White powder,  $[\alpha]_D^{25} = +73^\circ$  ( $c = 0.15$ ,  $CHCl_3$ ). Source: YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*] (stem cortex). Ref: 4111.

**19693 Semialatic acid**

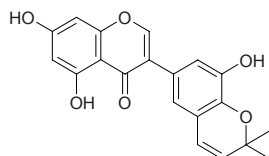
$C_{30}H_{46}O_4$  (470.70). White powder,  $[\alpha]_D^{25} = +71^\circ$  ( $c = 0.40$ ,  $CHCl_3$ ). Source: YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*] (stem cortex). Ref: 4111.

**19694 Semi- $\alpha$ -carotenone**

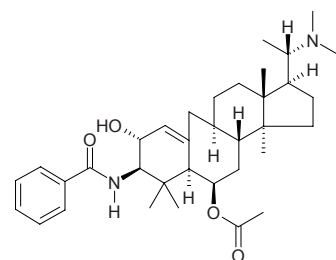
$C_{40}H_{56}O_2$  (568.89). mp  $135^\circ C$ . Source: JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*]. Ref: 6.

**19695 Semilicoisoflavone B**

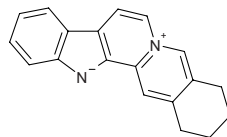
[129280-33-7]  $C_{20}H_{16}O_6$  (352.35). Source: CU MAO GAN CAO *Glycyrrhiza aspera*, *Glycyrrhiza* sp. Ref: 660, 2431.

**19696 Semperviraminol**

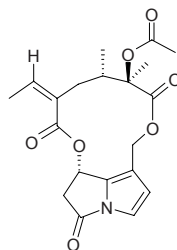
$C_{35}H_{52}N_2O_4$  (564.82). Pharm: AChE inhibitor inactive (control Physostigmine),  $IC_{50} = (0.041 \pm 0.001) \mu mol/L$ . Source: DUO RU TOU HUANG YANG *Buxus papillosa* (leaf). Ref: 5216.

**19697 Sempervirine II**

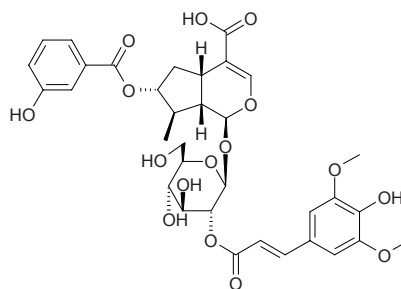
Sempervirine; Sempervine  $C_{19}H_{16}N_2$  (272.35). Pharm: Antineoplastic. Source: CHANG LV GOU WEN *Gelsemium sempervirens*. Ref: 658.

**19698 Senaetnine**

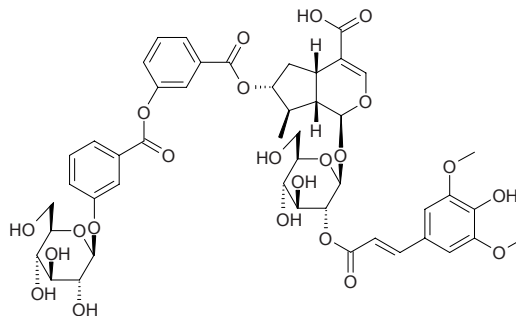
[64191-69-1]  $C_{20}H_{23}NO_7$  (389.41). Crystals, mp  $183.5^\circ C$ ,  $[\alpha]_D^{24} = 10.6^\circ$  ( $c = 2.5$ ,  $CHCl_3$ ). Pharm: Toxin (rat, harmful to lung not liver). Source: *Senecio aetnensis*. Ref: 658, 1521.

**19699 Senburiside I**

$C_{34}H_{38}O_{16}$  (702.67). Source: BAO JING ZHANG YA CAI *Swertia franchetiana* (whole herb). Ref: 4469.

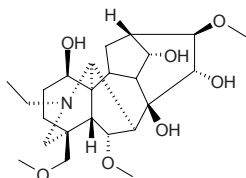
**19700 Senburiside III**

$C_{47}H_{52}O_{23}$  (984.92). White amorphous powder (MeOH-H<sub>2</sub>O),  $[\alpha]_D^{25} = -60.0^\circ$  ( $c = 1.03$ , MeOH). Source: BAO JING ZHANG YA CAI *Swertia franchetiana* (whole herb). Ref: 4469.

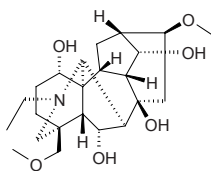


**19701 Senbusine C**

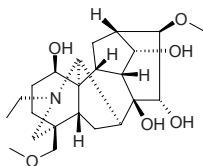
Fuziline [80665-72-1]  $C_{24}H_{39}NO_7$  (453.58). White mass crystals, mp 202.5~206.0°C; colorless powder,  $[\alpha]_D^{26} = +10.8^\circ$  ( $c = 1.564$ ,  $CHCl_3$ ). Source: WU TOU *Aconitum carmichaeli*, ZHONG BA E ZHANG YE FU ZI *Aconitum carmichaeli* cv. Ref: 461, 2502.

**19702 Senbusine A**

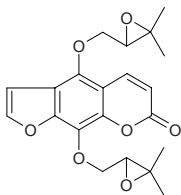
[82202-95-7]  $C_{23}H_{37}NO_6$  (423.55). White amorphous powder. Source: GUA YE WU TOU *Aconitum hemsleyanum*, WU TOU *Aconitum carmichaeli*. Ref: 2208.

**19703 Senbusine B**

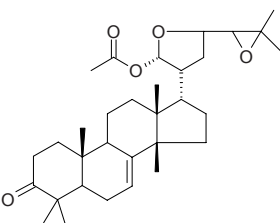
$C_{23}H_{37}NO_6$  (423.55). Source: WU TOU *Aconitum carmichaeli*. Ref: 660.

**19704 Sen-byakangelicol**

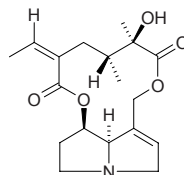
$C_{21}H_{22}O_7$  (386.41). Source: BAI ZHI *Angelica dahurica* [Syn. *Angelica porphyrocaulis*]. Ref: 2.

**19705 Sendanone acetate**

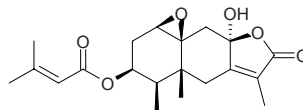
$C_{32}H_{48}O_5$  (512.74). mp 184~186°C. Source: RI BEN KU LIAN *Melia azedarach* var. *japonica*. Ref: 6, 660.

**19706 Senecionine**

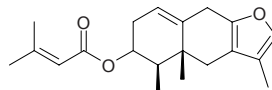
12-Hydroxysenecionan-11,16-dione [130-01-8]  $C_{18}H_{25}NO_5$  (335.40). mp 232~233°C. Pharm: Antispasmodic (intestinal smooth muscle relaxant); mutagen; reduces arteriotony; toxin (poison for liver, lung and reproductive system);  $LD_{50}$  (mus, ip) = 64.9mg/kg. Source: CAO DIAN QIAN LI GUANG *Senecio jacobaea*, DA BAI DING CAO *Senecio oryzetorum*, DA TOU TUO WU *Ligularia japonica* [Syn. *Arnica japonica*; *Senecio japonica*], OU ZHOU QIAN LI GUANG *Senecio vulgaris*. Ref: 6, 658.

**19707 3β-Senecioyloxy-1β,10β-epoxy-8α-hydroxyeremophil-7(11)-en-8β(12)-olide**

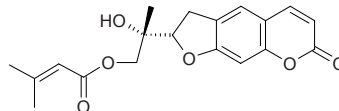
$C_{20}H_{26}O_6$  (362.43). White needles (MeOH), mp 182~184°C,  $[\alpha]_D^{25} = -123^\circ$  ( $c = 0.75$ , acetone). Pharm: Antibacterial (*Bacillus subtilis*, 100μg/mL, IZD = 13~15mm, moderate, control Chloromycetin, IZD = 16~20mm; *Escherichia coli*, 100μg/mL, IZD = 13~15mm, Chloromycetin, IZD = 16~20mm)<sup>[4627]</sup>. Source: JIA TUO WU *Ligulariopsis shichuana* (whole herb: yield = 0.0012%dw). Ref: 4627.

**19708 Senecioyloxyeryopsin**

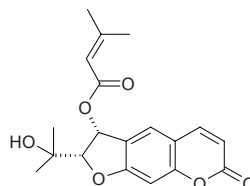
$C_{20}H_{26}O_3$  (314.43). Source: HUANG SE QIAN LI GUANG *Senecio flavus*. Ref: 2409.

**19709 (+)-2''-Senecioyloxymarmesin**

$C_{19}H_{20}O_6$  (344.37). mp 100~102°C (hexane- $CH_2Cl_2$ ),  $[\alpha]_D^{20} = +28^\circ$  ( $c = 0.7$ ,  $CHCl_3$ ). Source: JU MAO LEI A WEI *Ferulago capillaries* (root). Ref: 3938.

**19710 (-)-(2''S,3'R)-3'-Senecioyloxymarmesin**

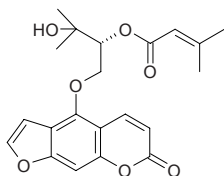
$C_{19}H_{20}O_6$  (344.37). mp 148~149°C (*n*-hexane- $CH_2Cl_2$ ),  $[\alpha]_D^{20} = -236^\circ$  ( $c = 1.3$ ,  $CHCl_3$ ). Source: JU MAO LEI A WEI *Ferulago capillaries* (root). Ref: 3938.



**19711 (+)-Senecioplpranol**

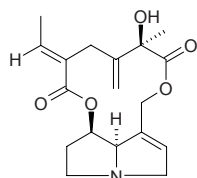
$C_{21}H_{22}O_7$  (386.41). mp 164~165°C (MeOH),  $[\alpha]_D^{20} = +9.0^\circ$  ( $c = 1.0$ ,  $Me_2CO_3$ ).

Source: JU MAO LEI A WEI *Ferulago capillaries* (root). Ref: 3938.

**19712 (E)-Seneciophylline**

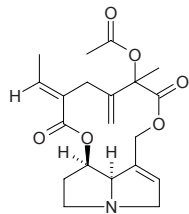
[480-81-9]  $C_{18}H_{23}NO_5$  (333.39). White acicular crystals, mp 217~218°C.

Pharm: Antispasmodic (rat and rbt, isolated intestinal tube, spasm induced by carbachol); toxin (poison for heart, liver and lung). Source: CAO DIAN QIAN LI GUANG *Senecio jacobaea*, DA BAI DING CAO *Senecio oryzetorum*, FEI LV BIN QIAN LI GUANG *Senecio phillicus*, KUAN YE QIAN LI GUANG *Senecio platyphyllus*, OU ZHOU QIAN LI GUANG *Senecio vulgaris*, SHU MA *Crotalaria juncea*, TU SAN QI *Senecio chrysanthemoides*. Ref: 6, 151, 658.

**19713 Seneciophyllinine**

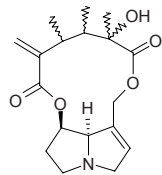
$C_{20}H_{25}NO_6$  (375.43). White acicular crystals, mp 82.0~82.5°C. Source: SAN

QI CAO *Gynura segetum* [Syn. *Gynura japonica*]. Ref: 151.

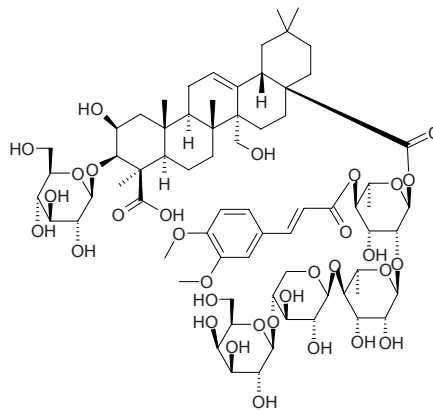
**19714 Senecivernine**

[72755-25-0]  $C_{18}H_{25}NO_5$  (335.41). Pharm: Hepatotoxin. Source: CHUN

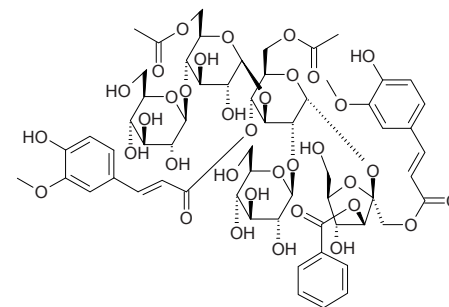
QIAN LI GUANG *Senecio vernalis*. Ref: 658.

**19715 Senegin II**

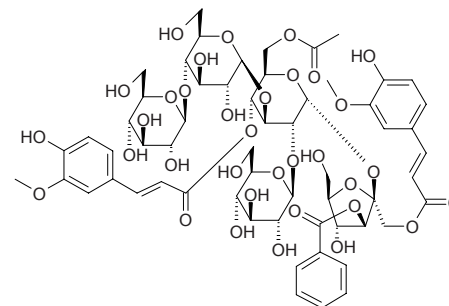
2,3,27-Trihydroxy-12-oleanene-23,28-dioic acid 3-O- $\beta$ -D-glucopyranoside, 28-O-[ $\beta$ -D-galactopyranosyl-(1→4)- $\beta$ -D-xylopyranosyl-(1→4)- $\alpha$ -L-rhamnopyranosyl-(1→2)-[3,4-dimethoxycinnamoyl-(1→4)]- $\alpha$ -L-fucopyranosyl] ester [34366-31-9]  $C_{70}H_{104}O_{32}$  (1457.60). Pharm: Antineoplastic; antitussive (dispels phlegm). Source: MEI YUAN ZHI *Polygala senega*. Ref: 658, 1521.

**19716 Senegose A**

[151466-60-3]  $C_{61}H_{76}O_{35}$  (1369.26).  $[\alpha]_D = -9.9^\circ$ . Source: KUAN YE MEI YUAN ZHI *Polygala senega* var. *latifolia*. Ref: 2184.

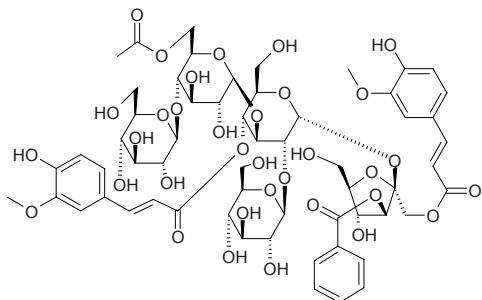
**19717 Senegose B**

$C_{59}H_{74}O_{34}$  (1327.23).  $[\alpha]_D = -10.2^\circ$ . Source: KUAN YE MEI YUAN ZHI *Polygala senega* var. *latifolia*. Ref: 2184.

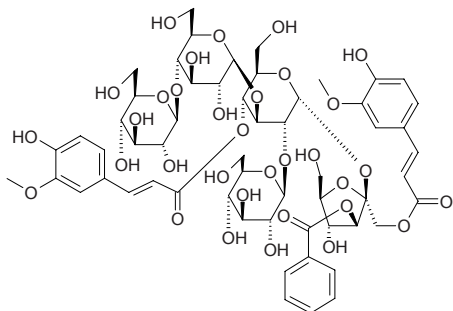


**19718 Senegose C**

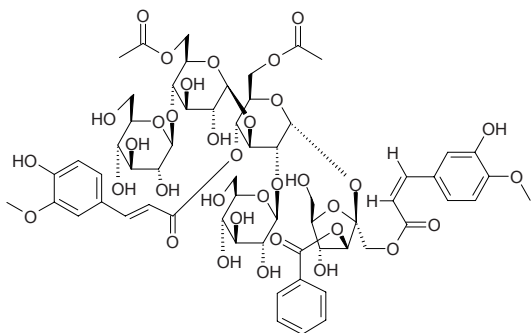
$C_{59}H_{74}O_{34}$  (1327.23).  $[\alpha]_D = -16.0^\circ$ . Source: KUAN YE MEI YUAN ZHI  
*Polygala senega* var. *latifolia*. Ref: 2184.

**19719 Senegose D**

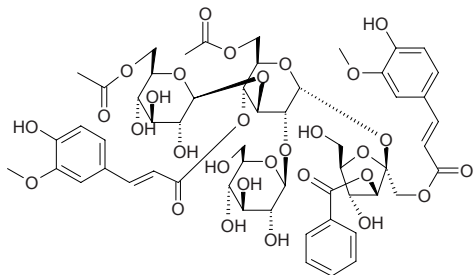
$C_{57}H_{72}O_{33}$  (1285.19).  $[\alpha]_D = -6.9^\circ$ . Source: KUAN YE MEI YUAN ZHI  
*Polygala senega* var. *latifolia*. Ref: 2184.

**19720 Senegose E**

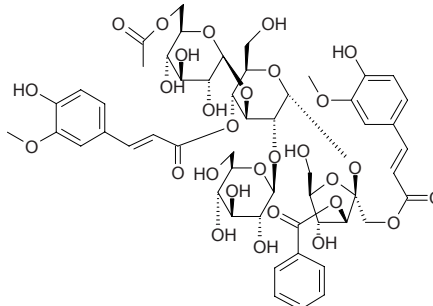
$C_{61}H_{76}O_{35}$  (1329.26).  $[\alpha]_D = +64.5^\circ$ . Source: KUAN YE MEI YUAN ZHI  
*Polygala senega* var. *latifolia*. Ref: 2184.

**19721 Senegose F**

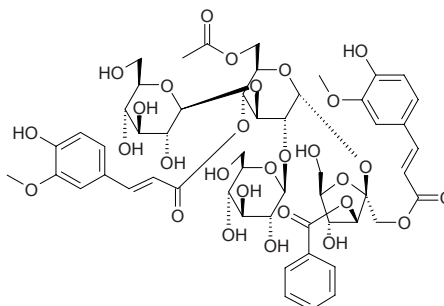
$C_{55}H_{66}O_{30}$  (1207.12).  $[\alpha]_D = -11.5^\circ$ . Source: KUAN YE MEI YUAN ZHI  
*Polygala senega* var. *latifolia*. Ref: 2184.

**19722 Senegose G**

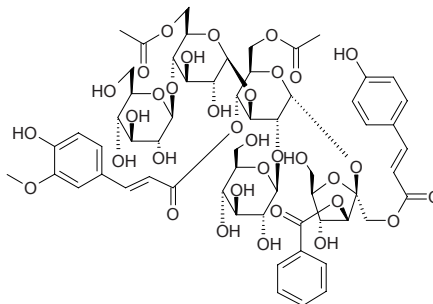
$C_{53}H_{64}O_{29}$  (1165.08).  $[\alpha]_D = +1.2^\circ$ . Source: KUAN YE MEI YUAN ZHI  
*Polygala senega* var. *latifolia*. Ref: 2184.

**19723 Senegose H**

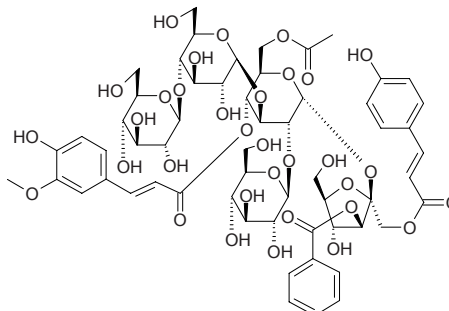
$C_{53}H_{64}O_{29}$  (1165.08).  $[\alpha]_D = -3.0^\circ$ . Source: KUAN YE MEI YUAN ZHI  
*Polygala senega* var. *latifolia*. Ref: 2184.

**19724 Senegose J**

$C_{60}H_{74}O_{34}$  (1339.24).  $[\alpha]_D = -6.6^\circ$ . Source: MEI YUAN ZHI *Polygala senega*.  
Ref: 2184.

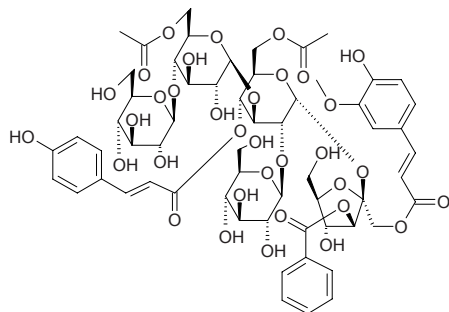
**19725 Senegose K**

$C_{58}H_{72}O_{33}$  (1297.20).  $[\alpha]_D = -2.6^\circ$ . Source: MEI YUAN ZHI *Polygala senega*.  
Ref: 2184.

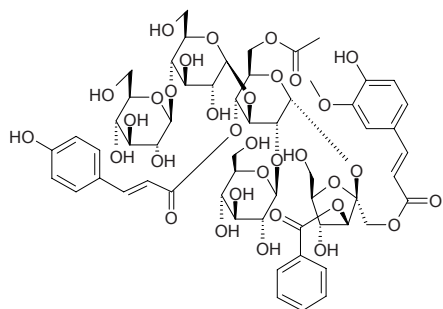


**19726 Senegose L**

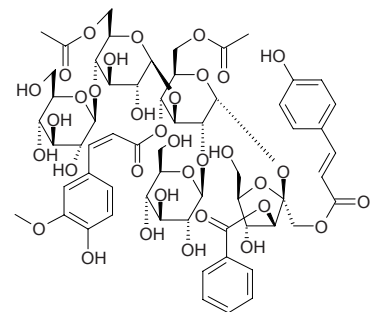
$C_{60}H_{74}O_{34}$  (1339.24).  $[\alpha]_D = -6.3^\circ$ . Source: MEI YUAN ZHI *Polygala senega*.  
Ref: 2184.

**19727 Senegose M**

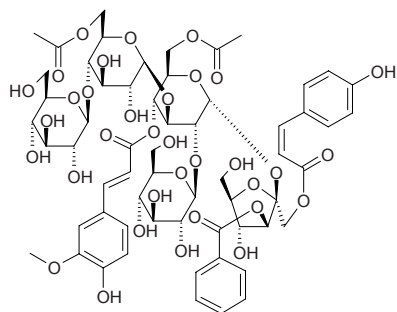
$C_{58}H_{72}O_{33}$  (1297.20).  $[\alpha]_D = -4.4^\circ$ . Source: MEI YUAN ZHI *Polygala senega*.  
Ref: 2184.

**19728 Senegose N**

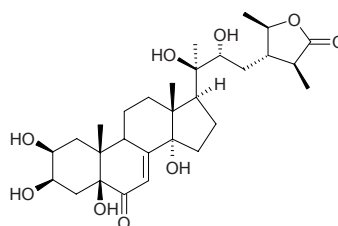
$C_{60}H_{74}O_{34}$  (1339.24).  $[\alpha]_D = +39.6^\circ$ . Source: MEI YUAN ZHI *Polygala senega*. Ref: 2184.

**19729 Senegose O**

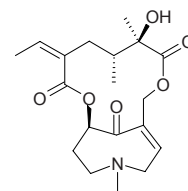
$C_{60}H_{74}O_{34}$  (1339.24).  $[\alpha]_D = -13.1^\circ$ . Source: MEI YUAN ZHI *Polygala senega*. Ref: 2184.

**19730 Sengosterone**

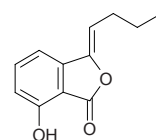
[22799-11-7]  $C_{29}H_{44}O_9$  (536.67). mp 159~161°C. Source: MA NIU XI *Cyathula capitata*. Ref: 6.

**19731 Senkirkine**

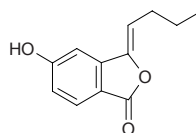
[2318-18-5]  $C_{19}H_{27}NO_6$  (365.43). Pharm: Carcinogen (liver); mutagen (Ames experiment, cell culture, and fruit fly experiment). Source: CAO DIAN QIAN LI GUANG *Senecio jacobaea*, CHUN QIAN LI GUANG *Senecio vernalis*, FENG DOU CAI *Petasites japonicus*, JIN LIAN HUA ZHU SHI DOU *Crotalaria laburnifolia*, KUAN DONG HUA *Tussilago farfara*, LEI SHI QIAN LI GUANG *Senecio renardii*, LIAN PENG CAO *Farfugium japonicum*, YI DIAN HONG *Emilia sonchifolia*. Ref: 658, 660.

**19732 Senkyunolide B**

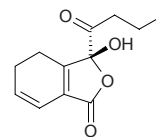
$C_{12}H_{12}O_3$  (204.23). Source: CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*]. Ref: 660.

**19733 Senkyunolide C**

(Z)-5-Hydroxy-3-butylidene-phthalide  $C_{12}H_{12}O_3$  (204.23). Source: CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*]. Ref: 2, 660.

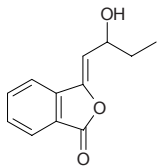
**19734 Senkyunolide D**

$C_{12}H_{14}O_4$  (222.24). Source: CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*]. Ref: 660.

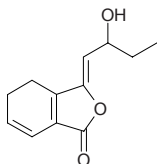


**19735 Senkyunolide E**

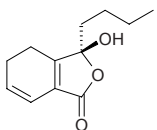
$C_{12}H_{12}O_3$  (204.23). Source: CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*]. Ref: 660.

**19736 Senkyunolide F**

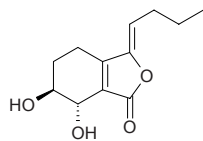
$C_{12}H_{14}O_3$  (206.24). Source: CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*]. Ref: 660.

**19737 Senkyunolide G**

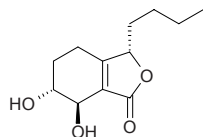
[94530-85-5]  $C_{12}H_{16}O_3$  (208.26). Pharm: Anticonvulsant (rat, cerebral section, inhibits release of Glu-transmitter). Source: CHA XIONG *Ligusticum sinense* cv. *chaxiong*, CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*], GAO BEN *Ligusticum sinense*. Ref: 531, 660, 1596.

**19738 Senkyunolide H**

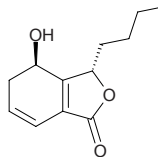
[94596-27-7]  $C_{12}H_{16}O_4$  (224.26). Pharm: Anticonvulsant (rat, cerebral section, inhibits release of Glu-transmitter); anti-arteriosclerosis (mus, inhibits proliferation of cultured cell in aortal smooth muscle  $IC_{50} < 0.1 \mu\text{g/mL}$ ). Source: CHA XIONG *Ligusticum sinense* cv. *chaxiong*, CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*], GAO BEN *Ligusticum sinense*. Ref: 531, 660, 1596, 1600.

**19739 Senkyunolide J**

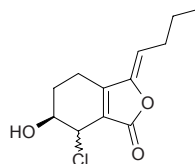
$C_{12}H_{18}O_4$  (226.27). Source: CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*]. Ref: 660.

**19740 Senkyunolide K**

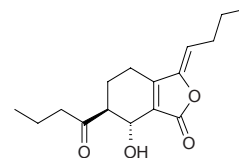
$C_{12}H_{16}O_3$  (208.26). Source: CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*]. Ref: 2.

**19741 Senkyunolide L**

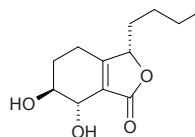
$C_{12}H_{15}ClO_3$  (242.70). Source: CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*]. Ref: 2.

**19742 Senkyunolide M**

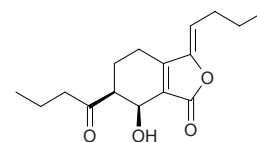
$C_{16}H_{22}O_4$  (278.35). Source: CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*]. Ref: 2.

**19743 Senkyunolide N**

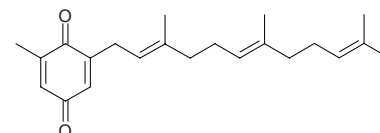
3*S*,6*S*,7*S*-3-Butyl-4,5-dihydro-6,7-dihydroxy phthalide  $C_{12}H_{18}O_4$  (226.27). Source: CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*]. Ref: 660.

**19744 Senkyunolide Q**

$C_{16}H_{22}O_4$  (278.35). Source: CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*]. Ref: 660.

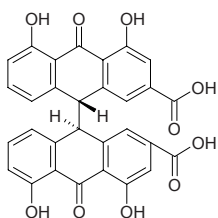
**19745 Senkyunone**

$C_{22}H_{30}O_2$  (326.48). Source: CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*]. Ref: 660.

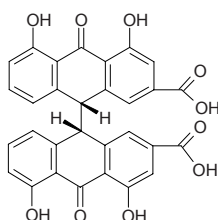


**19746 Sennidin A**

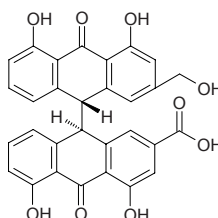
$C_{30}H_{18}O_{10}$  (538.47). **Source:** DA HUANG *Rheum officinale*, TANG GU TE DA HUANG *Rheum tanguticum*, ZHANG YE DA HUANG *Rheum palmatum*. **Ref:** 2, 660.

**19747 Sennidin B**

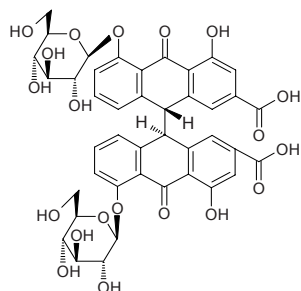
$C_{30}H_{18}O_{10}$  (538.47). **Source:** ZHANG YE DA HUANG *Rheum palmatum*. **Ref:** 660.

**19748 Sennidin C**

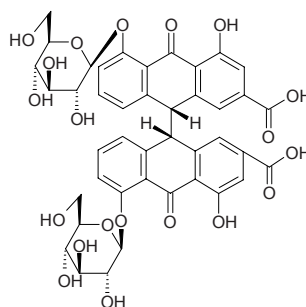
$C_{30}H_{20}O_9$  (524.49). **Source:** DA HUANG *Rheum officinale*, TANG GU TE DA HUANG *Rheum tanguticum*, ZHANG YE DA HUANG *Rheum palmatum*. **Ref:** 2, 660.

**19749 Sennoside A**

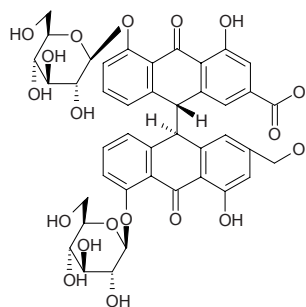
$C_{42}H_{38}O_{20}$  (862.76). **Pharm:** Laxative; hemostatic;  $LD_{50}$  (mus) = 1.414g/kg. **Source:** DA HUANG *Rheum officinale*, FAN XIE YE *Cassia angustifolia*, HE ZI *Terminalia chebula*, JIAN YE FAN XIE YE *Cassia acutifolia* (in 1950, the compound was isolated from the plant by A. Stoll et al.)<sup>[5505]</sup>, TANG GU TE DA HUANG *Rheum tanguticum*, ZHANG YE DA HUANG *Rheum palmatum*. **Ref:** 2, 658, 660, 5501, 5505.

**19750 Sennoside B**

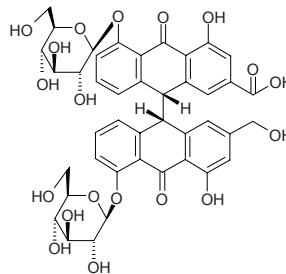
$C_{42}H_{38}O_{20}$  (862.76). **Pharm:** Laxative; hemostatic. **Source:** DA HUANG *Rheum officinale*, FAN XIE YE *Cassia angustifolia*, JIAN YE FAN XIE YE *Cassia acutifolia*, ZHANG YE DA HUANG *Rheum palmatum*. **Ref:** 660, 5501.

**19751 Sennoside C**

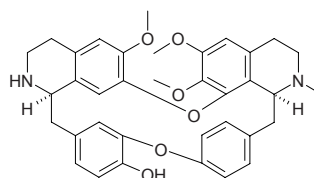
$C_{42}H_{40}O_{19}$  (848.78). **Source:** DA HUANG *Rheum officinale*, FAN XIE YE *Cassia angustifolia*, JIAN YE FAN XIE YE *Cassia acutifolia*, TANG GU TE DA HUANG *Rheum tanguticum*, ZHANG YE DA HUANG *Rheum palmatum*. **Ref:** 2, 660.

**19752 Sennoside D**

$C_{42}H_{40}O_{19}$  (848.78). **Source:** FAN XIE YE *Cassia angustifolia*, JIAN YE FAN XIE YE *Cassia acutifolia*, ZHANG YE DA HUANG *Rheum palmatum*. **Ref:** 660.

**19753 Sepeperine**

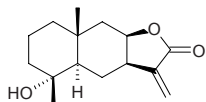
$C_{36}H_{38}N_2O_6$  (594.71). **Pharm:** Antitrypanosomal (inhibits trypomastigote form of *Trypanosoma cruzi*, strain Y,  $IC_{50}$  = 78.1  $\mu$ g/mL,  $IC_{90}$  = 285.3  $\mu$ g/mL); antimalarial (*Plasmodium falciparum* D6,  $LC_{50}$  = 73.6 ng/mL, SI = 92; *Plasmodium falciparum* W2,  $LC_{50}$  = 100.1 ng/mL, SI = 68); cytotoxic (KB,  $LC_{50}$  = 6800 ng/mL). **Source:** *Guatteria boliviana* (stem cortex). **Ref:** 3976.



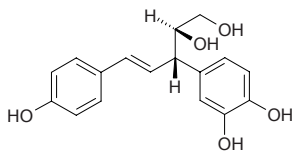


**19754 Septuplinolide**

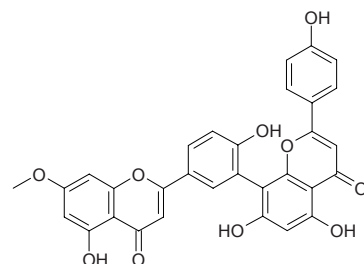
$C_{15}H_{22}O_3$  (250.34). Source: HE AN FU LAO JU *Flourensia riparia* (aerial parts). Ref: 3820.

**19755 Sequirin C**

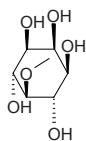
$C_{17}H_{18}O_5$  (302.33).  $[\alpha]_D^{21} = +38.1^\circ$  ( $c = 1.00$ ,  $Me_2CO$ ). Source: GE BI TIAN MEN *Asparagus gobicus* (root). Ref: 4975.

**19756 Sequoiaflavone**

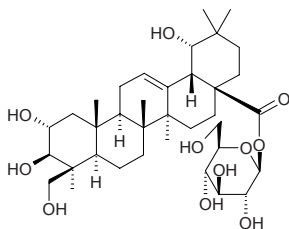
$C_{31}H_{20}O_{10}$  (552.5). Source: YUN NAN SUI HUA SHAN *Amentotaxus yunnanensis* (leaf and twig; yield = 0.00025%dw). Ref: 4707.

**19757 Sequoyitol**

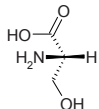
$C_7H_{14}O_6$  (194.19). Source: BAI GUO YE *Ginkgo biloba*., SAN JIAN SHAN *Cephalotaxus fortunei*, YUN NAN SUI HUA SHAN *Amentotaxus yunnanensis* (leaf and twig; yield = 0.00017%dw). Ref: 660, 4707.

**19758 Sericoside**

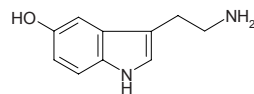
[55306-04-2]  $C_{36}H_{58}O_{11}$  (666.86). Source: XIA KU CAO *Prunella vulgaris*. Ref: 2508.

**19759 (S)-Serine**

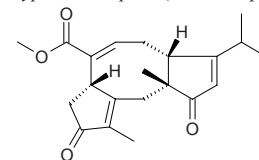
(L)-Serine  $C_3H_7NO_3$  (105.09). Source: BAN XIA *Pinellia ternata* (dried tuber: content scope of 4 origins = 0.66%~1.02%, mean content = 0.80%)<sup>[5521]</sup>, widely distributed in nature (from wide variety of protein hydrolysates). Ref: 660, 5521.

**19760 Serotonin**

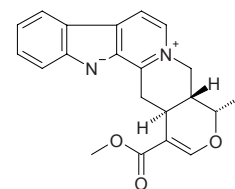
[65099-56-1]  $C_{10}H_{12}N_2O$  (176.22). Pharm: Neurotransmitter. Source: CHAN SU *Bufo bufo gargarizans*; *Bufo melanostictus*, CI YANG LI DOU *Mucuna pruriens*, FAN QIE *Lycopersicon esculentum*, XIANG JIAO *Musa paradisiaca* var. *sapientum* [Syn. *Musa sapientum*], YI ZHU QIAN MA *Urtica dioica*. Ref: 2, 658.

**19761 Serpendione**

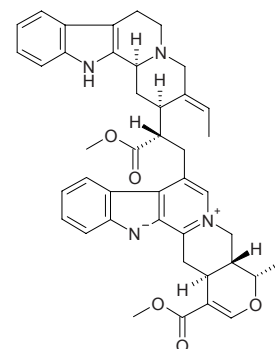
$C_{21}H_{26}O_4$  (342.44).  $[\alpha]_D = +109.7^\circ$  ( $c = 0.58$ ,  $CHCl_3$ ). Pharm: Vasodilator (isolated rat aorta, 0.05mg/mL, strongly depressed the maximal responses to the contractile agent, InRt = 92.2%). Source: PU FU QIANG DAO YAO *Hypoestes serpens* (dried and powdered aerial parts). Ref: 3036.

**19762 Serpentine**

$C_{21}H_{20}N_2O_3$  (348.41). Pharm: Antineoplastic (mus, mammary cancer MS310); antihypertensive; CNS activity (increases atrial and ventricular thresholds, also reduces atrial conduction, dog heart iv, 0.5~2.0mg/kg). Source: BI SHI LUO FU MU *Rauwolfia beddomei*, CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochera rosea*], DA CHANG CHUN HUA *Vinca herbacea* [Syn. *Vinca major*], GUAN MU LUO FU MU *Rauwolfia fruticosa*, YIN DU LUO FU MU *Rauwolfia serpentina*. Ref: 2, 658.

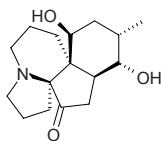
**19763 Serpentinine**

[36519-42-3]  $C_{42}H_{44}N_4O_5$  (684.84). mp 265~270°C. Source: CUI TU LUO FU MU *Rauwolfia vomitoria*, YUN NAN LUO FU MU *Rauwolfia yunnanensis*. Ref: 6, 660.

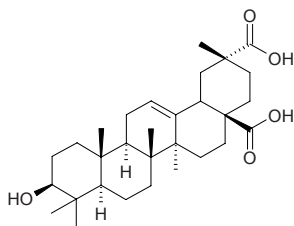


**19764 Serrantinine**

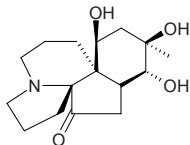
$C_{16}H_{25}NO_3$  (279.38). mp 244~245°C. Source: JU CHI SHI SONG *Lycopodium serratum* var. *thunbergii* (in 1966, the compound was isolated from the plant by K.Nishikawa et al.). Ref: 5505.

**19765 Serratagenic acid**

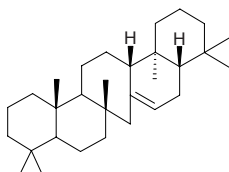
$C_{30}H_{46}O_5$  (486.70). mp > 310°C. Source: SAN TAI HONG HUA *Clerodendron serratum*. Ref: 6.

**19766 Serratanidine**

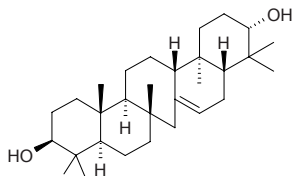
$C_{16}H_{25}NO_4$  (295.38). mp 210~211°C. Source: QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*]. Ref: 6.

**19767 Serratene**

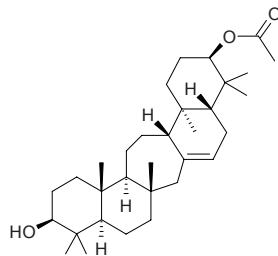
Serrat-14-ene  $C_{30}H_{50}$  (410.73). mp 239.5~240.0°C. Source: DONG BEI DUO ZU JUE *Polypodium virginianum*, SHUI LONG GU *Polypodium niponicum*. Ref: 6, 660.

**19768 Serratenediol**

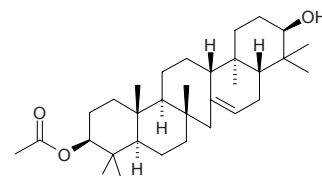
Serrat-14-en-3 $\beta$ ,21 $\alpha$ -diol [2239-24-9]  $C_{30}H_{50}O_2$  (442.73). Colorless powder, mp 302.5~304.5°C, mp 298~299°C (MeOH),  $[\alpha]_D^{26} = +21.5^\circ$  ( $c = 0.30$ ,  $CHCl_3$ ). Source: GUO JIANG LONG *Lycopodium complanatum*, PU DI WU GONG *Lycopodium cernuum* (root, stem and leaf: yield = 0.0025%dw)<sup>[4633]</sup>, QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*] (2%; in 1964, the compound was isolated from the plant)<sup>[5505]</sup>. Ref: 6, 4633, 5505.

**19769 Serratenediol-21-acetate**

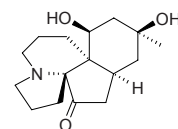
$C_{32}H_{52}O_3$  (484.77). White lamellar crystals, mp > 300°C. Source: QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*]. Ref: 109.

**19770 Serratenediol-3-acetate**

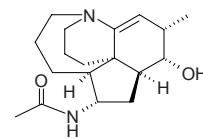
Phlegmanol C [1260-05-5]  $C_{32}H_{52}O_3$  (484.77). Crystals ( $C_6H_6$ ), mp 336~338°C,  $[\alpha]_D^{15} = -20^\circ$  ( $c = 0.5$ ,  $CHCl_3$ ), mp 317~319°C. Source: MA WEI SHAN *Phlegmariurus phlegmaria* [Syn. *Lycopodium phlegmaria*], QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*], *Lycopodium megastachyum*. Ref: 6, 2987.

**19771 Serratine**

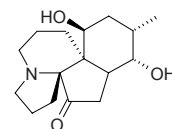
[15252-93-4]  $C_{16}H_{25}NO_3$  (279.38). mp 253°C. Source: QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*]. Ref: 6.

**19772 Serratinidine**

[7689-04-5]  $C_{18}H_{28}N_2O_2$  (304.44). mp 232~234°C. Source: QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*]. Ref: 6.

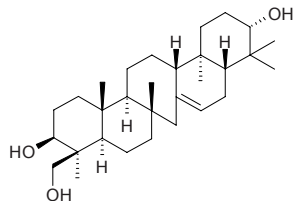
**19773 Serratinine**

[5545-99-3]  $C_{16}H_{25}NO_3$  (279.38). mp 244~245°C. Source: QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*]. Ref: 6.

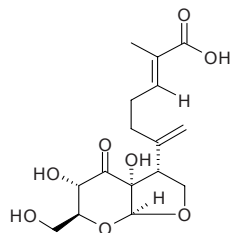


**19774 Serratriol**

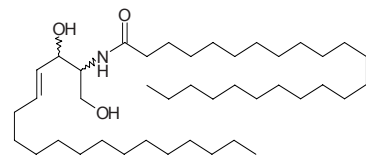
$C_{30}H_{50}O_3$  (458.73). mp 335~336°C. Source: PU DI WU GONG *Lycopodium cornu*, QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*]. Ref: 6.

**19775 Serratumin A**

$C_{16}H_{22}O_8$  (342.35). Brown gum,  $[\alpha]_D^{16.7} = +11.53^\circ$  ( $c = 0.009$ , pyridine). Source: SAN TAI HUA *Clerodendrum serratum* var. *amplexifolium*. Ref: 887.

**19776 Sertularamide**

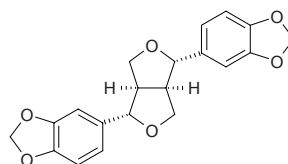
$C_{41}H_{81}NO_3$  (636.11). White amorphous powder. Source: BANG YE JUE ZAO *Caulerpa sertularioides*. Ref: 808.

**19777 Sesamin**

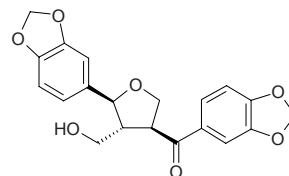
$C_{20}H_{18}O_6$  (354.36). Yellow needles, mp 122~124°C, mp 123~124°C,  $[\alpha]_D^{23} = +42^\circ$  ( $c = 0.1$ ,  $CHCl_3$ ); (-) 122~124°C, ( $\pm$ ) 129~130°C; mp 124°C,  $[\alpha]_D^{25} = +63.2^\circ$  ( $c = 0.34$ ,  $CHCl_3$ ). Pharm: Antibacterial (*Mycobacterium tuberculosis*); antiviral (influenza virus, Sendai virus); antifungal (TLC bioautography method at very low concentration); antifungal (TLC-based assay, *Cladosporium cucumerinum*, MIQ = 0.1  $\mu$ g, control Moiconazole, MIQ = 1  $\mu$ g)<sup>[5385]</sup>; cytotoxic (Meth-A sarcoma cell line,  $ED_{50} = 6.0 \mu$ g/mL, LLC cell line,  $ED_{50} > 10 \mu$ g/mL)<sup>[3510]</sup>; antioxidant (TLC-based assay, DPPH scavenger, MIQ = 10  $\mu$ g; control Quercetin, MIQ = 1  $\mu$ g)<sup>[5385]</sup>; neuroprotective (glutamate-induced neurotoxicity in primary cultures of cortical cells, 0.1  $\mu$ mol/L, protection rate = (16.6 $\pm$ 1.3)%; MK-801, 1.0  $\mu$ mol/L, protection rate = (83.6 $\pm$ 2.0)%,  $p < 0.001$ , CNQX, 1.0  $\mu$ mol/L, protection rate = (70.5 $\pm$ 1.5)%,  $p < 0.001$ )<sup>[4927]</sup>.

Source: BI BA *Piper longum*, BIAN XING MU LAN *Magnolia mutabilis*, CI HUA JIAO *Zanthoxylum acanthopodium*, CI WU JIA *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*], HAN CHENG XI XIN *Asarum sieboldii* var. *seoulensis* (the compound was isolated from the plant by T. Kaku et al. in 1931)<sup>[5505]</sup>, HEI ZHI MA *Sesamum indicum* (black seed) [Syn. *Sesamum orientale* (black seed)] (seed: content scope = 0.18%~0.21%)<sup>[5501]</sup>, HONG NAN PI *Machilus thunbergii*, HU JIAO HUA JIAO *Zanthoxylum piperitum*, LIAO XI XIN *Asarum heterotropoides* var. *mandshuricum* (dried whole herb: mean content = 0.0375%)<sup>[5508]</sup>, MAO PAO TONG *Paulownia*

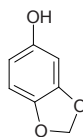
*tomentosa*, MENG DA NA YUN XIANG *Ruta montana*, QIANG DAO YAO *Hypoestes purpurea* [Syn. *Justicia purpurea*; *Hypoestes sinica*] (whole herb: yield = 0.0036%dw)<sup>[4712]</sup>, QING HAO *Artemisia apiacea* [Syn. *Artemisia carvifolia*; *Artemisia caruifolia*] (aerial parts), RONG MAO SHAN XIANG *Hyptis tomentosa*, RU DI JIN NIU *Zanthoxylum nitidum* (dried root: mean content = 0.115%)<sup>[5508]</sup>, SI LI LAN KA TU MI SHU *Bridelia retusa*, WU GENG WU JIA PI *Acanthopanax sessiliflorus*, WU JIA PI *Acanthopanax gracilistylus*, XI XIN *Asarum sieboldii* (dried whole herb: mean content = 0.0292%)<sup>[5508]</sup>, ZHONG YA KU HAO *Artemisia absinthium*, ZHOU YE MU LAN *Magnolia praecocissima* (seed), *Fagara xanthoxyloides*, *Fagara* sp., occurs in many plants. Ref: 2, 658, 660, 2021, 3510, 4181, 4712, 4927, 5385, 5501, 5505, 5508.

**19778 Sesaminone**

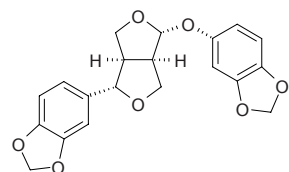
$C_{20}H_{18}O_7$  (370.36).  $[\alpha]_D^{25} = -30.6^\circ$  ( $c = 0.1$ ,  $CHCl_3$ ). Pharm: Bone resorption inhibitor (bones were cultured with PTH 200  $\mu$ mol/L,  $^{45}Ca$  release = (13.6 $\pm$ 1.0)%,  $p < 0.001$ , control  $^{45}Ca$  release = (15.4 $\pm$ 1.3)%). Source: HAI JIN BI XIE *Dioscorea spongiosa* (rhizome). Ref: 4921.

**19779 Sesamol**

1,3-Benzodioxol-5-ol [533-31-3]  $C_7H_6O_3$  (138.12). mp 65.8°C. Pharm: Causes allergic reaction (hmn skin). Source: BAI ZHI MA *Sesamum indicum* (white seed) [Syn. *Sesamum orientale* (white seed)], HEI ZHI MA *Sesamum indicum* (black seed) [Syn. *Sesamum orientale* (black seed)]. Ref: 6, 658.

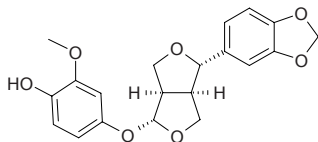
**19780 Sesamolol**

$C_{20}H_{18}O_7$  (370.36). mp 94°C. Source: HEI ZHI MA *Sesamum indicum* (black seed) [Syn. *Sesamum orientale* (black seed)]. Ref: 6.

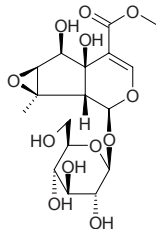


**19781 Sesamolinal**

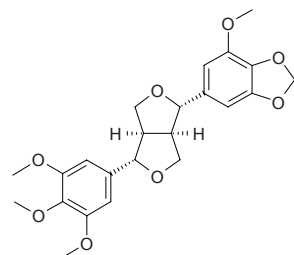
$C_{20}H_{20}O_7$  (372.38). **Pharm:** Antioxidant. **Source:** HEI ZHI MA *Sesamum indicum* (black seed) [Syn. *Sesamum orientale* (black seed)]. **Ref:** 658.

**19782 Sesamoside**

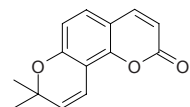
$C_{17}H_{24}O_{12}$  (420.37). **Source:** MENG GU CAO SU *Phlomis mongolica*, XIAN SHENG MA XIAN HAO *Pedicularis muscicola*. **Ref:** 560, 579.

**19783 Sesartemin**

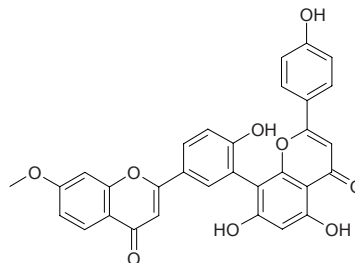
$C_{23}H_{26}O_8$  (430.46). **Pharm:** Monoamine oxidase inhibitor (microsome in digestive tract of *Ostrinia nubilalis*); lowers isolation-induced aggression (mouse); cytotoxic (Meth-A sarcoma cell line,  $ED_{50} = 9.7\mu\text{g/mL}$ , LLC cell line,  $ED_{50} > 10\mu\text{g/mL}$ )<sup>[3510]</sup>. **Source:** QING HAO *Artemisia apiacea* [Syn. *Artemisia carvifolia*; *Artemisia caruifolia*] (aerial parts), ZHONG YA KU HAO *Artemisia absinthium*. **Ref:** 658, 3510.

**19784 Seselin**

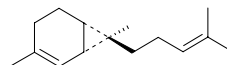
$C_{14}H_{12}O_3$  (228.25). mp 119~120°C. **Pharm:** Antifungal (*Curvularia lunata*, *Aspergillus niger*); antineoplastic (Raji cells, antitumor promotor, *in vivo*, inhibits TPA-induced EBV-EA activation, compound concentration = 500(mol ratio/32pmol TPA), EBV-EA-positive cells = (46.5±1.9)% (viability > 80%),  $\beta$ -Carotene, EBV-EA-positive cells = (34.3±1.1)% (viability > 80%), Curcumin, EBV-EA-positive cells = (22.8±1.8)% (viability > 80%);  $IC_{50} = 461$ (mol ratio/32pmol TPA),  $\beta$ -Carotene,  $IC_{50} = 400$ (mol ratio/32pmol TPA), Curcumin  $IC_{50} = 341$ (mol ratio/32pmol TPA))<sup>[5048]</sup>. **Source:** CHENG ZI *Citrus junos*, GOU JU *Poncirus trifoliata*, HAN QIN *Apium graveolens*, HUI XIANG *Foeniculum vulgare*, LI HUA JU *Citrus tachibana*, TAI WAN HUANG BO *Phellodendron amurense* var. *wilsonii* (leaf: yield = 0.00012%dw)<sup>[4722]</sup>, XIAN YE QIN *Apium leptophyllum*, YIN DU XIE HAO *Seseli indicum*, ZHI GEN PI *Poncirus trifoliata*, ZHI KE *Citrus aurantium*, *Citrus rugulosa*, *Citrus hassaku*. **Ref:** 6, 658, 4722, 5048.

**19785 Sesguoiaflavone**

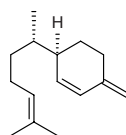
$C_{31}H_{20}O_9$  (536.50). **Source:** SAN JIAN SHAN *Cephalotaxus fortunei*. **Ref:** 2.

**19786 Sesquicarene**

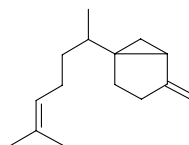
[20479-23-6]  $C_{15}H_{24}$  (204.36). **Source:** WU WEI ZI *Schisandra chinensis*. **Ref:** 2.

**19787  $\beta$ -Sesquiphellandrene**

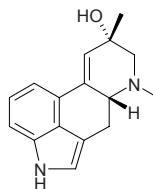
[20307-83-9]  $C_{15}H_{24}$  (204.36). **Source:** GAN JIANG *Zingiber officinale*. **Ref:** 2.

**19788 Sesquisabinene**

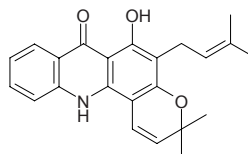
$C_{15}H_{24}$  (204.36). **Source:** HU JIAO *Piper nigrum*. **Ref:** 660.

**19789 Setoclavine**

$C_{16}H_{18}N_2O$  (254.33). **Source:** MAI JIAO *Claviceps purpurea*. **Ref:** 660.

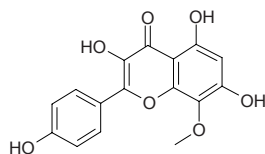
**19790 Severifoline**

$C_{23}H_{23}NO_3$  (361.44). **Pharm:** Cytotoxic (*in vitro*, Colon205,  $ED_{50} > 25\mu\text{g/mL}$ , inactive; Hep3B,  $ED_{50} > 25\mu\text{g/mL}$ , inactive; KB,  $ED_{50} = 0.09\mu\text{g/mL}$ ). **Source:** DONG FENG JU GEN *Atalantia buxifolia* [Syn. *Severinia buxifolia*] (root cortex). **Ref:** 3075.

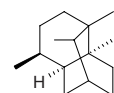


**19791 Sexangularetin**

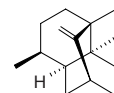
[571-74-4] C<sub>16</sub>H<sub>12</sub>O<sub>7</sub> (316.27). **Pharm:** Mutagen (*Salmonella typhimurium* TA100). **Source:** XI ZE LAN *Eupatorium gracile*. **Ref:** 658.

**19792 Seychellane**

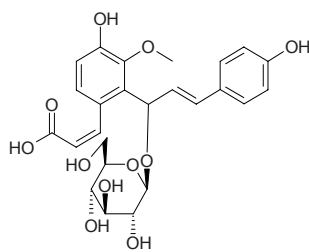
C<sub>15</sub>H<sub>26</sub> (202.37). **Source:** SHI YE GAN SONG *Nardostachys jatamansi*. **Ref:** 660.

**19793 Seychellene**

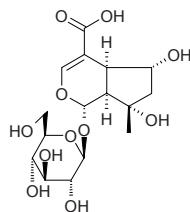
C<sub>15</sub>H<sub>24</sub> (204.36). **Source:** GUANG HUO XIANG *Pogostemon cablin* [Syn. *Mentha cablin*], SHI YE GAN SONG *Nardostachys jatamansi*. **Ref:** 660.

**19794 Shakuchirin**

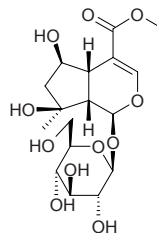
C<sub>25</sub>H<sub>28</sub>O<sub>11</sub> (504.50). mp 100~110°C. **Source:** HUO TAN MU CAO *Polygonum chinense*, TIAN QIAO MAI GEN *Fagopyrum cymosum* [Syn. *Polygonum cymosum*]. **Ref:** 6.

**19795 Shanzhiside**

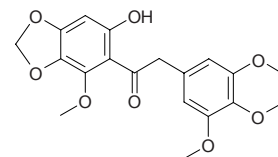
[29836-27-9] C<sub>16</sub>H<sub>24</sub>O<sub>11</sub> (392.36). mp 82~90°C; [α]<sub>D</sub><sup>29</sup> = -125.4° (c = 0.102, MeOH). **Pharm:** Cytotoxic inactive (Vero cells)<sup>[5456]</sup>; COX-2 inhibitor inactive<sup>[5456]</sup>. **Source:** HUA YE JIA DU JUAN *Barleria lupulina* (flower), ZHI ZI *Gardenia jasminoides* [Syn. *Gardenia florida*]. **Ref:** 2, 5456.

**19796 Shanzhiside methyl ester**

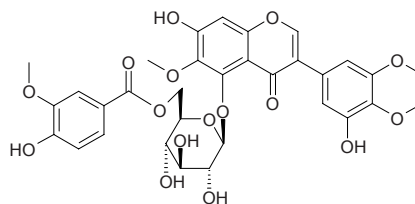
C<sub>17</sub>H<sub>26</sub>O<sub>11</sub> (406.39). [α]<sub>D</sub><sup>27</sup> = -105.2° (c = 0.104, MeOH). **Pharm:** Cytotoxic inactive (Vero cells); COX-2 inhibitor inactive. **Source:** HUA YE JIA DU JUAN *Barleria lupulina* (flower). **Ref:** 5456.

**19797 Sheganone**

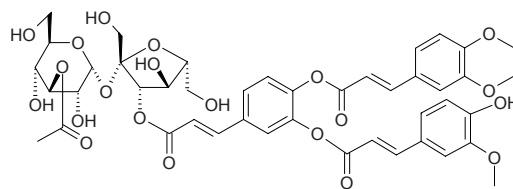
C<sub>19</sub>H<sub>20</sub>O<sub>8</sub> (376.37). **Source:** SHE GAN *Belamcanda chinensis*. **Ref:** 660.

**19798 Shegansu A**

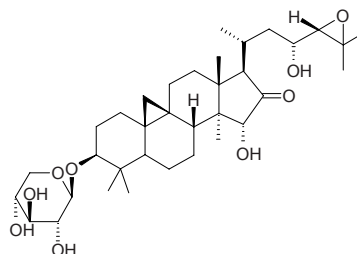
Irigenin-5-*O*-(6''-*O*-vanillin acid)-β-*D*-glucoside C<sub>32</sub>H<sub>32</sub>O<sub>16</sub> (672.60). Yellow crystals, mp 140~143°C, [α]<sub>D</sub><sup>14</sup> = -17.3° (c = 0.22, EtOH). **Source:** SHE GAN *Belamcanda chinensis*. **Ref:** 9.

**19799 Shegansu C**

C<sub>44</sub>H<sub>48</sub>O<sub>21</sub> (912.86). Yellowish amorphous, [α]<sub>D</sub><sup>31</sup> = +51.3° (c = 0.075, EtOH). **Source:** SHE GAN *Belamcanda chinensis*. **Ref:** 9.

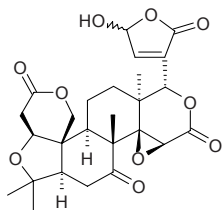
**19800 Shengmanol xyloside**

C<sub>35</sub>H<sub>56</sub>O<sub>9</sub> (620.83). **Source:** SAN MIAN DAO *Cimicifuga acerina*, XING AN SHENG MA *Cimicifuga dahurica*. **Ref:** 660.

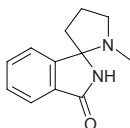


**19801 Shihulimonin A**

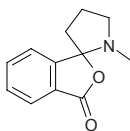
21-Hydroxy-23-oxo-20-en-limonin  $C_{26}H_{30}O_{10}$  (502.525). Colorless acicular crystals, mp 284–288°C,  $[\alpha]_D = -70^\circ$  ( $c = 0.16$ , MeOH). Source: SHI HU<sup>(3)</sup> *Evodia rutaecarpa* var. *officinalis*. Ref: 2126.

**19802 Shihunidine**

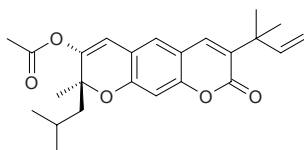
[135626-84-5]  $C_{12}H_{14}N_2O$  (202.26). Colorless columnar crystals ( $C_6H_6$ ), mp 173–174°C,  $[\alpha]_D^{22} = 0^\circ$ . Pharm:  $Na^+$ ,  $K^+$ -ATP inhibitor (rat, microsome in kidney, strong action). Source: MEI HUA SHI HU *Dendrobium loddigesii*. Ref: 189.

**19803 Shihunine**

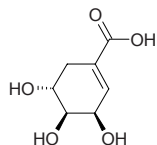
[4031-12-3]  $C_{12}H_{13}NO_2$  (203.24). mp 79°C. Pharm:  $Na^+$ ,  $K^+$ -ATP inhibitor (rat, microsome in kidney, strong action). Source: MEI HUA SHI HU *Dendrobium loddigesii*. Ref: 6, 189.

**19804 Shijiaocao lactone**

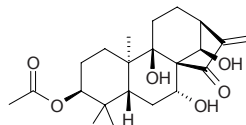
$C_{24}H_{28}O_5$  (396.49). mp 95–97°C. Source: SHI JIAO CAO *Boenninghausenia sessilicarpa*. Ref: 2495.

**19805 Shikimic acid**

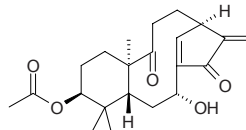
3,4,5-Trihydroxy-1-cyclohexene-1-carboxylic acid [138-59-0]  $C_7H_{10}O_5$  (174.15). Pharm: Mutagen (strong). Source: DONG DU HUI *Illicium religiosum*, BAI GUO *Ginkgo biloba*, LV BEI GUI HUA *Excoecaria cochinchinensis* var. *viridis*, MANG QI GU *Dicranopteris pedata* [Syn. *Polypodium pedatum*; *Dicranopteris dichotoma*], MIN WAN BA JIAO *Illicium minwanense*. Ref: 2, 315, 658, 660, 4544.

**19806 Shikoccidin**

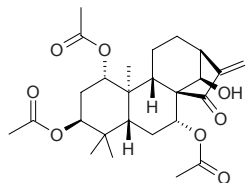
$C_{22}H_{32}O_6$  (392.50). mp 178–179°C,  $[\alpha]_D^{27} = -3.2^\circ$  ( $c = 0.20$ , MeOH). Source: XI SI GUO XIANG CHA CAI *Isodon shikokiana* var. *occidentalis*. Ref: 4067.

**19807 Shikoccin**

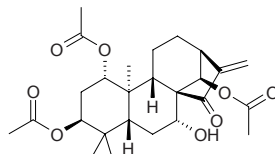
$C_{22}H_{30}O_5$  (374.48). mp 150–152°C,  $[\alpha]_D^{25} = -37^\circ$  ( $c = 0.24$ ,  $CHCl_3$ ). Source: XI SI GUO XIANG CHA CAI *Isodon shikokiana* var. *occidentalis*. Ref: 4067.

**19808 Shikodokaurin A**

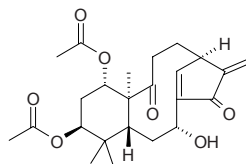
$C_{26}H_{36}O_8$  (476.57). mp 232–234°C. Source: JIAN XING SI GUO XIANG CHA CAI *Isodon shikokiana* var. *intermedius*. Ref: 4067.

**19809 Shikodokaurin B**

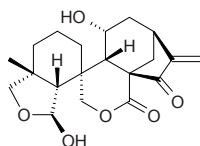
$C_{26}H_{36}O_8$  (476.57). Amorphous powder. Source: JIAN XING SI GUO XIANG CHA CAI *Isodon shikokiana* var. *intermedius*. Ref: 4067.

**19810 Shikodomedin**

$C_{24}H_{32}O_7$  (432.52). mp 193–194°C,  $[\alpha]_D^{22} = -67.0^\circ$  ( $c = 0.46$ ,  $CHCl_3$ ). Source: JIAN XING SI GUO XIANG CHA CAI *Isodon shikokiana* var. *intermedius*. Ref: 4067.

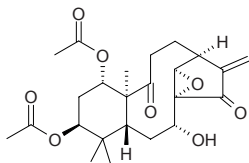
**19811 Shikodonin**

[66548-00-3]  $C_{20}H_{26}O_6$  (362.43). mp 206–209°C. Pharm: Antineoplastic; pesticide (insects). Source: SI GUO XIANG CHA CAI *Rabdosia shikokiana*, ZHONG JIAN XIANG CHA CAI *Isodon shikokianus* var. *intermedius*. Ref: 658, 4067.

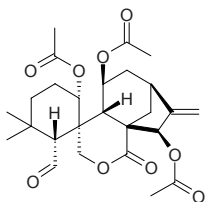


**19812 Shikokiamedin**

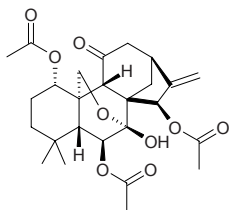
$C_{24}H_{32}O_8$  (448.52). Amorphous powder,  $[\alpha]_D^{22} = -42.5^\circ$  ( $c = 0.26$ ,  $CHCl_3$ ). Source: JIAN XING SI GUO XIANG CHA CAI *Isodon shikokiana* var. *intermedius*. Ref: 4067.

**19813 Shikokianal acetate**

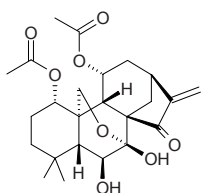
$C_{26}H_{34}O_9$  (490.56). mp 192~194°C,  $[\alpha]_D^{22} = +89^\circ$  ( $c = 0.26$ ,  $CHCl_3$ ). Source: SI GUO XIANG CHA CAI *Rabdosia shikokiana*. Ref: 4067.

**19814 Shikokianidin**

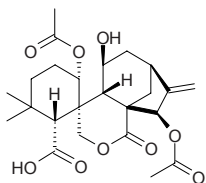
$C_{26}H_{34}O_9$  (490.56). mp 218~219°C,  $[\alpha]_D = -109^\circ$  ( $C_5H_5N$ ). Source: SI GUO XIANG CHA CAI *Rabdosia shikokiana*. Ref: 4067.

**19815 Shikokianin**

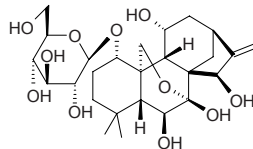
[24267-69-4]  $C_{24}H_{32}O_8$  (448.52). mp 284~287°C,  $[\alpha]_D^{25} = -38.7^\circ$  ( $c = 0.2$ ,  $C_5H_5N$ ). Source: MAO YE XIANG CHA CAI *Isodon japonica* [*Syn. Rabdosia japonica*], SI GUO XIANG CHA CAI *Rabdosia shikokiana*. Ref: 575, 4067.

**19816 Shikokianoic acid**

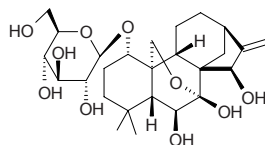
$C_{24}H_{32}O_9$  (464.52). mp 134~135°C,  $[\alpha]_D^{22} = +3^\circ$  ( $c = 0.35$ ,  $CHCl_3$ ). Source: SI GUO XIANG CHA CAI *Rabdosia shikokiana*. Ref: 4067.

**19817 Shikokiaside A**

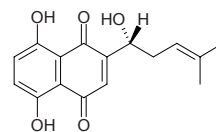
$C_{26}H_{40}O_{11}$  (528.60). mp 235~240°C,  $[\alpha]_D^{25} = +0.5^\circ$  ( $c = 0.8$ ,  $C_5H_5N$ ). Source: SI GUO XIANG CHA CAI *Rabdosia shikokiana*. Ref: 4067.

**19818 Shikokiaside B**

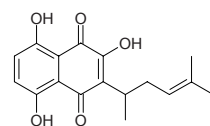
$C_{26}H_{40}O_{10}$  (512.60). mp 265~268°C,  $[\alpha]_D^{25} = -15.3^\circ$  ( $c = 1.2$ ,  $C_5H_5N$ ). Source: SI GUO XIANG CHA CAI *Rabdosia shikokiana*. Ref: 4067.

**19819 Shikonin**

[517-89-5]  $C_{16}H_{16}O_5$  (288.30). Pharm: Antibacterial (lactic acid bacteria and vinegar organism, EC = 20~30 µg/mL; *Bacillus coli*, *B. typhosus*, *Bacillus dysenteriae*, *Bacillus pyocyaneus* and *Staphylococcus aureus*); antineoplastic (mus,  $S_{180}$ , 10mg/(kg·d) ip, complete inhibition); antiprotozoal; platelet aggregation inhibitor; antiviral; used in treatment of amoebic dysentery (0.5~10 µg/mL); used in treatment of cirrhosis with ascites (animals, biotic prolonged rate = 92.5%); used in treatment of hepatitis (acute icteric, acute non-icteric, chronic); contracts blood vessels (inhibits ACh-induced relaxation on intact thoracic aorta,  $IC_{50} = (0.244 \pm 0.039) \mu\text{mol/L}$ , control 1,4-Naphthoquinone  $IC_{50} = (1.50 \pm 0.17) \mu\text{mol/L}$ )<sup>[4916]</sup>; antioxidant; anti-inflammatory (modulator of cytokine network: blocks RANTES (regulated upon activation on normal T-cell expressed and secreted) and macrophage inflammatory protein (MIP-1a) binding to hmn monocytes,  $IC_{50} = 3.6 \mu\text{mol/L}$  and  $2.6 \mu\text{mol/L}$ , respectively; blocks RANTES and MIP-1a binding to hmn embryonic kidney (HEK)/293 cells transfected with stable CC chemokine receptor-1 (CCR1) ( $IC_{50} = 2.63 \mu\text{mol/L}$  and  $2.57 \mu\text{mol/L}$ , respectively); inhibits RANTES-induced CCR1 cell migration, without interfering with CCR1 cell migration induced by epidermal growth factor (EGF); appears to be a highly specific antagonist for the CCR1 receptor)<sup>[4416]</sup>. Source: BAI GUO ZI CAO *Lithospermum officinale*, DIAN ZI CAO *Onosma paniculatum* (root: content = 0.02%<sup>[5508]</sup>), JIA ZI CAO *Arnebia guttata* (root: mean content of 2 origins = 0.02%<sup>[5508]</sup>), XIN ZANG JIA ZI CAO *Arnebia euchroma* (root: mean content of 3 origins = 0.14%<sup>[5508]</sup>), ZI CAO *Lithospermum erythrorhizon* (root: mean content of 7 origins = 0.07%<sup>[5508]</sup>). Ref: 2, 658, 660, 2193, 4416, 4916, 5501, 5508.

**19820 Shikonine**

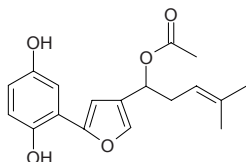
$C_{17}H_{18}O_5$  (302.33). Source: ZI CAO *Lithospermum erythrorhizon*. Ref: 2193.



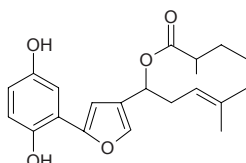


**19821 Shikonofuran A**

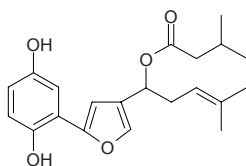
$C_{18}H_{20}O_5$  (316.36). Source: ZI CAO *Lithospermum erythrorhizon*. Ref: 2193.

**19822 Shikonofuran B**

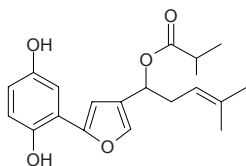
$C_{21}H_{26}O_5$  (358.44). Pharm: Prostaglandin biosynthesis inhibitor (20 $\mu$ g/mL, InRt = 72.5%). Source: ZI CAO *Lithospermum erythrorhizon*, XIN ZANG JIA ZI CAO *Arnebia euchroma*. Ref: 660, 2193.

**19823 Shikonofuran C**

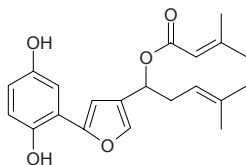
$C_{21}H_{26}O_5$  (358.44). Pharm: Prostaglandin biosynthesis inhibitor (20 $\mu$ g/mL, InRt = 72.5%). Source: ZI CAO *Lithospermum erythrorhizon*, XIN ZANG JIA ZI CAO *Arnebia euchroma*. Ref: 660, 2193.

**19824 Shikonofuran D**

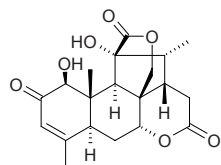
$C_{20}H_{24}O_5$  (344.41). Source: ZI CAO *Lithospermum erythrorhizon*. Ref: 2193.

**19825 Shikonofuran E**

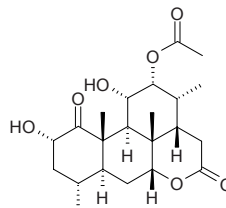
$C_{21}H_{24}O_5$  (356.42). Source: ZI CAO *Lithospermum erythrorhizon*. Ref: 2193.

**19826 Shinjudilactone**

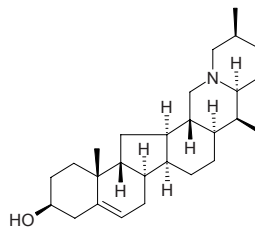
$C_{20}H_{24}O_7$  (376.41). Source: CHU BAI PI *Ailanthus altissima*. Ref: 660.

**19827 Shinjulactone K**

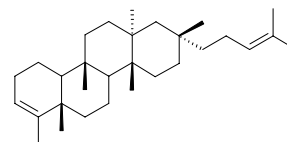
[94451-22-6]  $C_{22}H_{32}O_7$  (408.49). Colorless prismatic crystals (chloroform-hexane), mp 135~139°C,  $[\alpha]_D^{24} = +33^\circ$  ( $c = 1.0$ , chloroform). Pharm: Tuberculostatic (*in vivo*, *Mycobacterium tuberculosis* H37Rv, 12.5 $\mu$ g/mL, InRt = 19%). Source: CHU BAI PI *Ailanthus altissima*. Ref: 934, 996.

**19828 Shinonomenine**

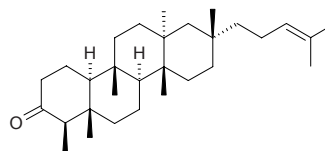
$C_{27}H_{43}NO$  (397.65). Source: XI BEI MU *Fritillaria imperialis* (bulb). Ref: 4217.

**19829 Shiona-3,21-diene**

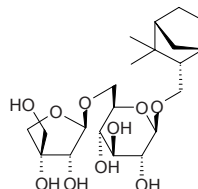
$C_{30}H_{50}$  (410.73). Source: DAO LUAN YE FU SHI JUE *Lemnaphyllum microphyllum* var. *obovatum*. Ref: 660.

**19830 Shionone**

[10376-48-4]  $C_{30}H_{50}O$  (426.73). mp 161~162°C. Source: ZI WAN *Aster tataricus* (root and rhizome: mean content of 25 origins = 0.131%). Ref: 6, 5508.

**19831 Shionoside A**

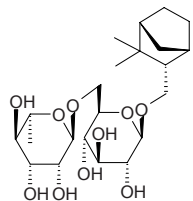
$C_{21}H_{36}O_{10}$  (448.52). Source: ZI WAN *Aster tataricus*. Ref: 660.



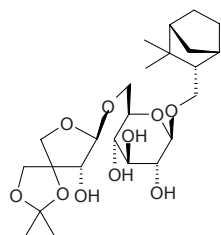


**19832 Shionoside B**

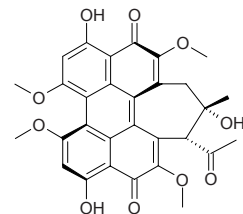
$C_{22}H_{38}O_{10}$  (462.54). Source: ZI WAN *Aster tataricus*. Ref: 660.

**19833 Shionoside C**

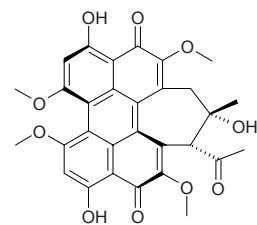
$C_{24}H_{40}O_{10}$  (488.58). Source: ZI WAN *Aster tataricus*. Ref: 660.

**19834 Shiraiachrome A**

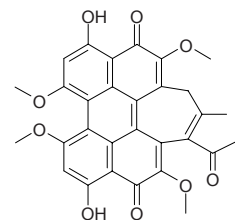
$C_{30}H_{26}O_{10}$  (546.54). Source: ZHU XUANG *Shiraiia bambusicola*. Ref: 660.

**19835 Shiraiachrome B**

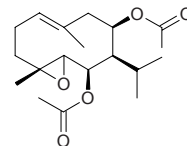
$C_{30}H_{26}O_{10}$  (546.54). Source: ZHU XUANG *Shiraiia bambusicola*. Ref: 660.

**19836 Shiraiachrome C**

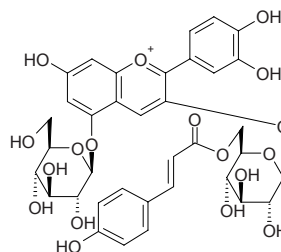
$C_{30}H_{24}O_9$  (528.52). Source: ZHU XUANG *Shiraiia bambusicola*. Ref: 660.

**19837 Shiromodiol diacetate**

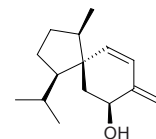
$C_{19}H_{30}O_5$  (338.45). Pharm: Insect antifeedant. Source: SAN YE DIAO ZHANG *Lindera triloba*. Ref: 658.

**19838 Shisonin**

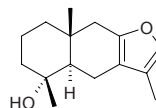
$C_{36}H_{37}O_{18}^+$  (757.69). Source: QIE ZI *Solanum melongena*, *Perilla* spp. Ref: 660.

**19839 Shizuka-acoradienol**

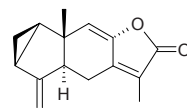
$C_{15}H_{24}O$  (220.36). Source: YIN XIAN CAO *Chloranthus japonicus*. Ref: 660.

**19840 Shizukafuranol**

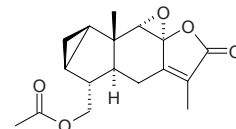
$C_{15}H_{22}O_2$  (234.34). Source: JIN SU LAN *Chloranthus spicatus*, YIN XIAN CAO *Chloranthus japonicus*. Ref: 660.

**19841 Shizukanolide B**

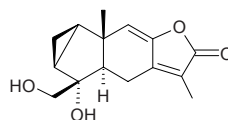
$C_{15}H_{16}O_2$  (228.29). Source: YIN XIAN CAO *Chloranthus japonicus*. Ref: 660.

**19842 Shizukanolide D**

$C_{17}H_{20}O_5$  (304.35). Source: YIN XIAN CAO *Chloranthus japonicus*. Ref: 660.

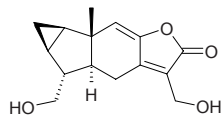
**19843 Shizukanolide E**

$C_{15}H_{18}O_4$  (262.31). Source: JI JI *Chloranthus serratus*, YIN XIAN CAO *Chloranthus japonicus*. Ref: 660, 1521.

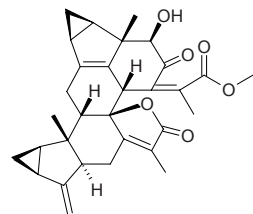


**19844 Shizukanolide F**

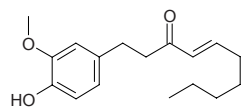
$C_{15}H_{18}O_4$  (262.31). **Source:** JI JI *Chloranthus serratus*, YIN XIAN CAO *Chloranthus japonicus*. **Ref:** 660, 1521.

**19845 Shizukaol A**

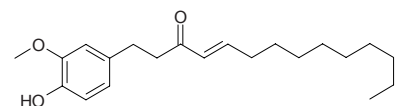
$C_{31}H_{34}O_6$  (5002.61). **Source:** YIN XIAN CAO *Chloranthus japonicus*. **Ref:** 660.

**19846 6-Shogaol**

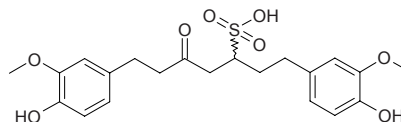
Shogaol; *trans*-6-Shogaol [555-66-8]  $C_{17}H_{24}O_3$  (276.38). Grey-yellow oil. **Pharm:** Antemetic (frog, 100mg/kg); antihypertensive (rat, 0.5mg/mL iv); free radical scavenger; enhances myocardial contractility and raises heart rate (*in vitro* rat heart, 3.6 $\mu$ mol/L); antihistamine (inhibits histamine release, rat peritoneal giant cells, caused by calcium); inhibits mesenteric venous contraction (mus, caused by arterenol and PGF<sub>2</sub>); platelet aggregation inhibitor (due to arachidonic acid, *in vitro*, IC<sub>50</sub> = 2.23 $\mu$ mol/L); inhibits rat skin passive allergy; 5-lipoxygenase inhibitor; cyclo-oxygenase inhibitor; prostaglandin biosynthese inhibitor (IC<sub>50</sub> = 1.6 $\mu$ mol/L); insect antifeedant (termites, 1000mg/L); irritant; mutagen (TA100, TA535); nematocide; antagonist to body temperature reduction caused by 5-HT (mus, orl, 10mg/kg); molluscicide (toxic to shellfish); CYP3A4 inhibitor (IC<sub>50</sub> = 77.7 $\mu$ mol/L, control Ketoconazole, IC<sub>50</sub> = 0.245 $\mu$ mol/L)<sup>[4669]</sup>; CYP2D6 inhibitor inactive (IC<sub>50</sub> > 100 $\mu$ mol/L, control Quinidine, IC<sub>50</sub> = 0.078 $\mu$ mol/L)<sup>[4669]</sup>. **Source:** FANG XIANG JIANG *Zingiber aromaticum* (rhizome: yield = 0.000047%dw)<sup>[4669]</sup>, GAN JIANG *Zingiber officinale*, SHENG JIANG *Zingiber officinale*. **Ref:** 2, 900, 4669.

**19847 trans-10-Shogaol**

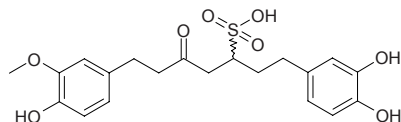
$C_{21}H_{32}O_3$  (332.49). **Pharm:** CYP3A4 inhibitor (IC<sub>50</sub> = 90.2 $\mu$ mol/L, control Ketoconazole IC<sub>50</sub> = 0.24 $\mu$ mol/L); CYP2D6 inhibitor (IC<sub>50</sub> = 45.7 $\mu$ mol/L, control Quinidine IC<sub>50</sub> = 0.068 $\mu$ mol/L). **Source:** FANG XIANG JIANG *Zingiber aromaticum* (rhizome). **Ref:** 4449.

**19848 Shogasulfonic acid A**

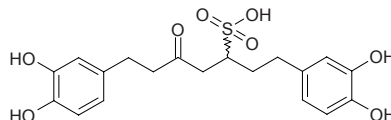
5-Sulfonyl-1,7-bis(4-hydroxy-3-methoxyphenyl)-heptan-3-one  $C_{21}H_{26}O_8S$  (438.50). Pale yellowish amorphous powder, mp 205°C (dec),  $[\alpha]_D^{21} = -0.5^\circ$  ( $c = 2.00$ , MeOH). **Source:** SHENG JIANG *Zingiber officinale*. **Ref:** 3361.

**19849 Shogasulfonic acid B**

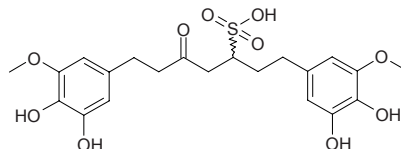
5-Sulfonyl-1-(4-hydroxy-3-methoxyphenyl)-7-(3,4-dihydroxyphenyl)-heptan-3-one  $C_{20}H_{24}O_8S$  (424.47). Pale green oil,  $[\alpha]_D^{21} = -1.0^\circ$  ( $c = 1.60$ , MeOH). **Source:** SHENG JIANG *Zingiber officinale*. **Ref:** 3361.

**19850 Shogasulfonic acid C**

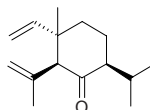
5-Sulfonyl-1,7-bis(3,4-dihydroxyphenyl)-heptan-3-one  $C_{19}H_{22}O_8S$  (410.45). Pale yellowish oily substance,  $[\alpha]_D^{21} = -5.6^\circ$  ( $c = 0.25$ , MeOH). **Source:** SHENG JIANG *Zingiber officinale*. **Ref:** 3361.

**19851 Shogasulfonic acid D**

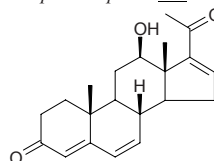
5-Sulfonyl-1,7-bis(4,5-dihydroxy-3-methoxyphenyl)-heptan-3-one  $C_{21}H_{26}O_{10}S$  (470.50). Pale yellowish crystalline powder, mp 154~158°C (dec),  $[\alpha]_D^{21} = -0.3^\circ$  ( $c = 1.00$ , MeOH). **Source:** SHENG JIANG *Zingiber officinale*. **Ref:** 3361.

**19852 Shyobunone**

$C_{13}H_{24}O$  (220.36). **Source:** BAI CHANG *Acorus calamus*. **Ref:** 6.

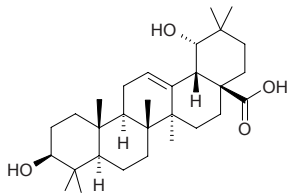
**19853 S-I**

$C_{21}H_{26}O_3$  (326.44). mp 210~212°C,  $[\alpha]_D = +69.5^\circ$ . **Source:** XIANG JIA PI *Periploca septium*. **Ref:** 2498.

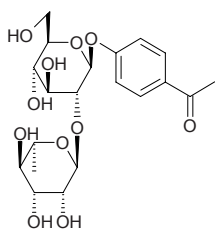


**19854 Siaresinolic acid**

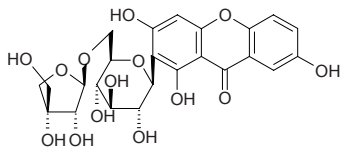
$C_{30}H_{48}O_4$  (472.71). mp 274~275°C. Source: YUE NAN AN XI XIANG *Styrax tonkinensis*. Ref: 6, 660.

**19855 Sibiricaphenone**

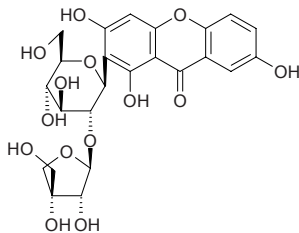
$C_{20}H_{28}O_{11}$  (444.44). Amorphous powder,  $[\alpha]_D^{23} = -62^\circ$  ( $c = 0.97$ , MeOH). Source: XI BO LI YA YUAN ZHI *Polygala sibirica*. Ref: 691.

**19856 Sibiricaxanthone A**

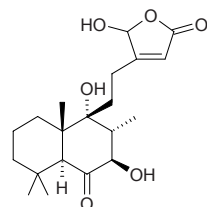
$C_{24}H_{26}O_{14}$  (538.47). Yellow amorphous powder;  $[\alpha]_D^{23} = +312^\circ$  ( $c = 0.85$ , MeOH). Source: XI BO LI YA YUAN ZHI *Polygala sibirica*. Ref: 691.

**19857 Sibiricaxanthone B**

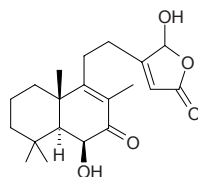
$C_{24}H_{26}O_{14}$  (538.47). Yellow amorphous powder;  $[\alpha]_D^{23} = -11^\circ$  ( $c = 1.44$ , MeOH). Source: XI BO LI YA YUAN ZHI *Polygala sibirica*. Ref: 691.

**19858 Sibiricinone A**

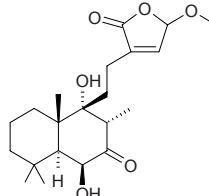
$C_{20}H_{30}O_6$  (366.46). Colorless oil,  $[\alpha]_D^{20} = +18.4^\circ$  ( $c = 0.64$ ,  $CHCl_3$ ). Source: XI YE YI MU CAO *Leonurus sibiricus* (aerial parts: yield = 0.00022%). Ref: 4744.

**19859 Sibiricinone B**

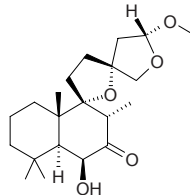
$C_{20}H_{28}O_5$  (348.44). Colorless oil,  $[\alpha]_D^{20} = +4.4^\circ$  ( $c = 0.18$ ,  $CHCl_3$ ). Source: XI YE YI MU CAO *Leonurus sibiricus* (aerial parts: yield = 0.00026%). Ref: 4744.

**19860 Sibiricinone C**

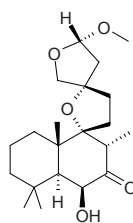
$C_{21}H_{32}O_6$  (380.49). Colorless oil,  $[\alpha]_D^{20} = +4.7^\circ$  ( $c = 1.58$ ,  $CHCl_3$ ). Source: XI YE YI MU CAO *Leonurus sibiricus* (aerial parts: yield = 0.00056%). Ref: 4744.

**19861 Sibiricinone D**

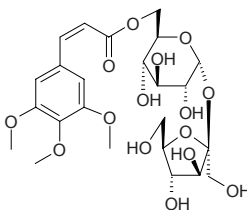
$C_{21}H_{34}O_5$  (366.5). Colorless oil. Source: XI YE YI MU CAO *Leonurus sibiricus* (aerial parts). Ref: 4744.

**19862 Sibiricinone E**

$C_{21}H_{34}O_5$  (366.5). Colorless oil. Source: XI YE YI MU CAO *Leonurus sibiricus* (aerial parts). Ref: 4744.

**19863 Sibiricose A<sub>2</sub>**

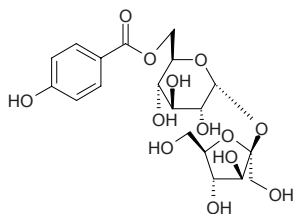
$C_{24}H_{34}O_{15}$  (562.53). Amorphous powder;  $[\alpha]_D^{23} = +19^\circ$  ( $c = 0.56$ , MeOH). Source: XI BO LI YA YUAN ZHI *Polygala sibirica*. Ref: 691.



**19864 Sibiricose A<sub>3</sub>**

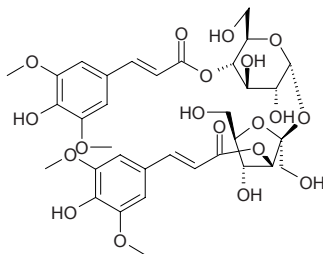
C<sub>19</sub>H<sub>26</sub>O<sub>13</sub> (462.41). Amorphous powder;  $[\alpha]_D^{23} = +29^\circ$  ( $c = 1.30$ , MeOH).

Source: XI BO LI YA YUAN ZHI *Polygala sibirica*. Ref: 691.

**19865 Sibiricose A<sub>4</sub>**

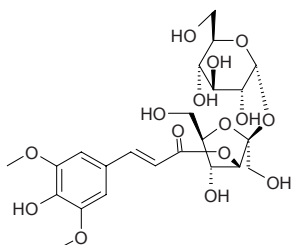
C<sub>34</sub>H<sub>42</sub>O<sub>19</sub> (754.70). Amorphous powder;  $[\alpha]_D^{23} = -23^\circ$  ( $c = 1.13$ , MeOH).

Source: XI BO LI YA YUAN ZHI *Polygala sibirica*. Ref: 691.

**19866 Sibiricose A<sub>6</sub>**

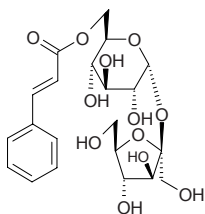
C<sub>23</sub>H<sub>32</sub>O<sub>15</sub> (548.50). Amorphous powder;  $[\alpha]_D^{23} = -2^\circ$  ( $c = 0.72$ , MeOH).

Source: XI BO LI YA YUAN ZHI *Polygala sibirica*. Ref: 691.

**19867 Sibirioside A**

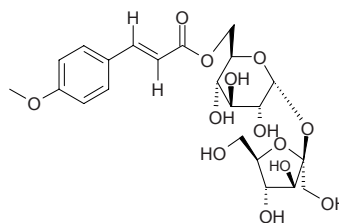
C<sub>21</sub>H<sub>28</sub>O<sub>12</sub> (472.45). Colorless prismatic crystals, mp 110–112°C,  $[\alpha]_D =$

$-29.6^\circ$  ( $c = 0.20$ , methanol). Source: ZHAN LONG JIAN *Veronicastrum sibiricum*. Ref: 337.

**19868 Sibirioside B**

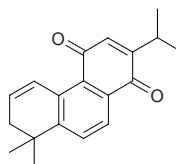
C<sub>22</sub>H<sub>30</sub>O<sub>13</sub> (502.48). Colorless prismatic crystals, mp 108–110°C,  $[\alpha]_D =$

$-20.18^\circ$  ( $c = 0.34$ , methanol). Source: ZHAN LONG JIAN *Veronicastrum sibiricum*. Ref: 337.

**19869 Sibiriquinone A**

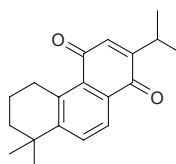
C<sub>19</sub>H<sub>20</sub>O<sub>2</sub> (280.37). Red solid,  $[\alpha]_D^{25} = +16.6^\circ$  ( $c = 0.2$ , MeOH). Pharm:

Immunosuppressant (lymphocyte transformation assay, control Concanavalin A, 5μg/mL, InRt = -12%, 20μg/mL, InRt = 32%, 80μg/mL, InRt = 41%; control Dexamethasone, 50μg/mL, InRt = 63%). Source: ZHAN LONG JIAN *Veronicastrum sibiricum* (aerial parts). Ref: 4260.

**19870 Sibiriquinone B**

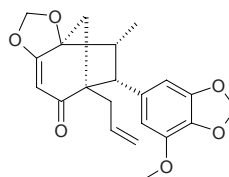
C<sub>19</sub>H<sub>22</sub>O<sub>2</sub> (282.39). Red solid,  $[\alpha]_D^{25} = +7.8^\circ$  ( $c = 0.2$ , MeOH). Pharm:

Immunosuppressant (lymphocyte transformation assay, control Concanavalin A, 5μg/mL, InRt = 12%, 20μg/mL, InRt = 35%, 80μg/mL, InRt = 52%; control Dexamethasone, 50μg/mL, InRt = 63%). Source: ZHAN LONG JIAN *Veronicastrum sibiricum* (aerial parts). Ref: 4260.

**19871 Sibyllenone**

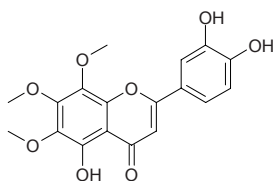
C<sub>21</sub>H<sub>22</sub>O<sub>6</sub> (370.41). Colorless crystals, mp 160°C,  $[\alpha]_D^{23} = 0^\circ$  ( $c = 0.0021$ ,

CHCl<sub>3</sub>). Pharm: Anti-inflammatory (5-LOX inhibitor, IC<sub>50</sub> = 18.6μmol/L; COX-1 inhibitor, > 500μmol/L, inactive, control Indomethacin, IC<sub>50</sub> = 3.1μmol/L, COX-2 inhibitor, > 500μmol/L, inactive, Indomethacin, IC<sub>50</sub> = 188μmol/L). Source: NAN FEI ZHANG GUI *Ocotea bullata* (stem cortex). Ref: 3971.

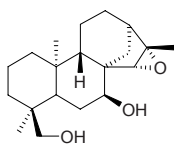


**19872 Sideritiflavone**

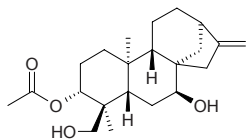
[70360-12-2] C<sub>18</sub>H<sub>16</sub>O<sub>8</sub> (360.32). Yellow columnar crystals, mp 223~226°C (MeOH). Source: DONG LING CAO *Rabdosia rubescens* (stem and leaf). Ref: 1521, 4906.

**19873 Sideroxol**

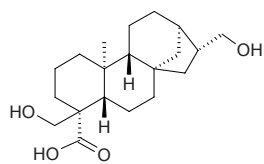
C<sub>20</sub>H<sub>32</sub>O<sub>3</sub> (320.48). Colorless needles (CHCl<sub>3</sub>). Source: *Sideritis ozturkii* (aerial parts). Ref: 3827.

**19874 Sidol**

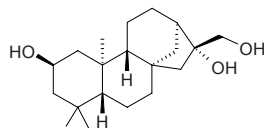
C<sub>22</sub>H<sub>34</sub>O<sub>4</sub> (362.51). White resin (CHCl<sub>3</sub>). Source: *Sideritis ozturkii* (aerial parts). Ref: 3827.

**19875 Siegesbeckic acid**

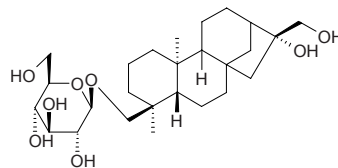
C<sub>20</sub>H<sub>32</sub>O<sub>4</sub> (336.48). mp 251~251.5°C, [α]<sub>D</sub><sup>26</sup> = -108° (c = 0.277, C<sub>5</sub>H<sub>5</sub>N). Source: XIAN GENG XI XIAN *Siegesbeckia orientalis* var. *pubescens* [Syn. *Siegesbeckia pubescens*], XI XIAN *Siegesbeckia orientalis*. Ref: 9, 660.

**19876 Siegesbeckiol**

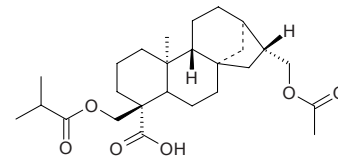
C<sub>20</sub>H<sub>34</sub>O<sub>3</sub> (322.49). mp 271~273°C, [α]<sub>D</sub><sup>28</sup> = -27.6° (c = 0.290, C<sub>5</sub>H<sub>5</sub>N), mp 268~269°C, [α]<sub>D</sub><sup>22</sup> = -26.7° (c = 0.74, CHCl<sub>3</sub>). Source: XIAN GENG XI XIAN *Siegesbeckia orientalis* var. *pubescens* [Syn. *Siegesbeckia pubescens*], XI XIAN *Siegesbeckia orientalis*, DAN HUANG XIANG CHA CAI *Isodon flavidus*. Ref: 9, 660, 4067.

**19877 Siegesbeckioside**

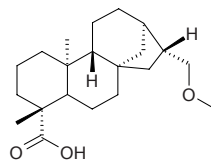
C<sub>26</sub>H<sub>44</sub>O<sub>8</sub> (484.64). mp 276.5~277.5°C, [α]<sub>D</sub><sup>25</sup> = -29.2° (c = 0.290, C<sub>5</sub>H<sub>5</sub>N). Source: XIAN GENG XI XIAN *Siegesbeckia orientalis* var. *pubescens* [Syn. *Siegesbeckia pubescens*]. Ref: 9.

**19878 Siegesetheric acid I**

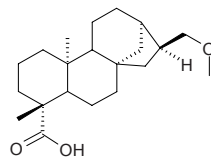
*ent*-17-Acetoxy-18-isobutyryloxy-16(α)-kauran-19-oic acid C<sub>26</sub>H<sub>40</sub>O<sub>6</sub> (448.61). White acicular crystals (acetic ester), mp 152~153°C. Source: XI XIAN *Siegesbeckia orientalis*. Ref: 377.

**19879 Siegesetheric acid II**

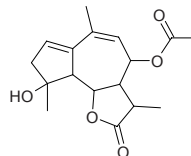
*ent*-17-Ethoxy-16(α)-kauran-19-oic acid C<sub>22</sub>H<sub>36</sub>O<sub>3</sub> (348.53). White lamellar crystals (acetic ester), mp 202~204°C. Source: XI XIAN *Siegesbeckia orientalis*. Ref: 377.

**19880 Siegesmethyletheric acid**

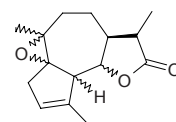
C<sub>21</sub>H<sub>34</sub>O<sub>3</sub> (334.5). Colorless acicular crystals (acetone) mp 231~232°C. Source: XIAN GENG XI XIAN *Siegesbeckia orientalis* var. *pubescens* [Syn. *Siegesbeckia pubescens*]. Ref: 798.

**19881 Sieversin**

C<sub>17</sub>H<sub>22</sub>O<sub>5</sub> (306.36). mp 128~131°C. Source: BAI HAO *Artemisia sieversiana*. Ref: 6.

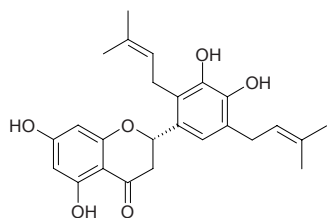
**19882 Sieversinin**

C<sub>15</sub>H<sub>20</sub>O<sub>3</sub> (248.32). mp 141~142°C. Source: BAI HAO *Artemisia sieversiana*. Ref: 6.

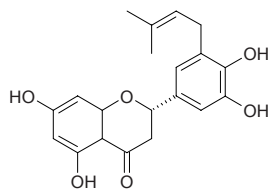


**19883 Sigmoidin A**

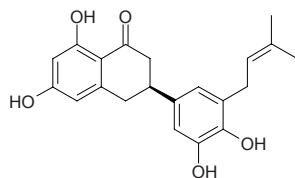
$C_{26}H_{30}O_5$  (422.53). **Pharm:** Antimalarial (*Plasmodium falciparum* D6,  $IC_{50} = (5.8 \pm 0.6) \mu\text{g/mL}$ , control Chloroquine,  $IC_{50} = (0.009 \pm 0.002) \mu\text{g/mL}$ , Quinine,  $IC_{50} = (0.04 \pm 0.01) \mu\text{g/mL}$ ; *Plasmodium falciparum* W2,  $IC_{50} = (5.9 \pm 1.1) \mu\text{g/mL}$ , Chloroquine,  $IC_{50} = (0.08 \pm 0.01) \mu\text{g/mL}$ , Quinine,  $IC_{50} = (0.21 \pm 0.01) \mu\text{g/mL}$ )<sup>[3879]</sup>; antioxidant (DPPH scavenger,  $100 \mu\text{mol/L}$ , InRt = 93%, control Quercetin 3-*O*-glucoside, InRt = 92%)<sup>[4932]</sup>; LTB<sub>4</sub> production inhibitor (rat peritoneal leukocytes,  $100 \mu\text{mol/L}$ , InRt = 95%,  $IC_{50} = 31 \mu\text{mol/L}$ , control Apigenin  $IC_{50} = 14 \mu\text{mol/L}$ )<sup>[4932]</sup>; anti-inflammatory (*in vivo*, mouse ear edema induced by phospholipase A2, 5mg/kg, orl, InRt = 20%, Cyproheptadine, InRt = 74%)<sup>[4932]</sup>. **Source:** A BI XI NI YA CI TONG *Erythrina abyssinica* (stem cortex), AI SI XING CI TONG *Erythrina sigmoidea*. **Ref:** 1521, 3879, 4932.

**19884 Sigmoidin B**

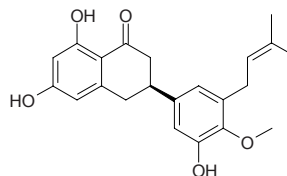
$C_{20}H_{22}O_6$  (358.39). **Source:** GAN CAO *Glycyrrhiza uralensis*. **Ref:** 660.

**19885 Sigmoidin B**

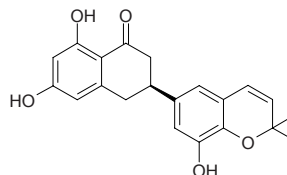
$C_{21}H_{22}O_5$  (354.41). **Pharm:** Antimalarial (*Plasmodium falciparum* D6,  $IC_{50} = (8.1 \pm 2.2) \mu\text{g/mL}$ , control Chloroquine,  $IC_{50} = (0.009 \pm 0.002) \mu\text{g/mL}$ , Quinine,  $IC_{50} = (0.04 \pm 0.01) \mu\text{g/mL}$ ; *Plasmodium falciparum* W2,  $IC_{50} = (9.3 \pm 2.7) \mu\text{g/mL}$ , Chloroquine,  $IC_{50} = (0.08 \pm 0.01) \mu\text{g/mL}$ , Quinine,  $IC_{50} = (0.21 \pm 0.01) \mu\text{g/mL}$ )<sup>[3879]</sup>; antioxidant (DPPH scavenger,  $100 \mu\text{mol/L}$ , InRt = 86%, control Quercetin 3-*O*-glucoside, InRt = 92%)<sup>[4932]</sup>; LTB<sub>4</sub> production inhibitor (rat peritoneal leukocytes,  $100 \mu\text{mol/L}$ , InRt = 44%, control Apigenin  $IC_{50} = 14 \mu\text{mol/L}$ )<sup>[4932]</sup>; anti-inflammatory (*in vivo*, mouse ear edema induced by phospholipase A2, 5mg/kg, orl, InRt = 59%, cyproheptadine, InRt = 74%)<sup>[4932]</sup>. **Source:** A BI XI NI YA CI TONG *Erythrina abyssinica* (stem cortex), AI SI XING CI TONG *Erythrina sigmoidea*. **Ref:** 1521, 3879, 4932.

**19886 Sigmoidin B-4'-methyl ether**

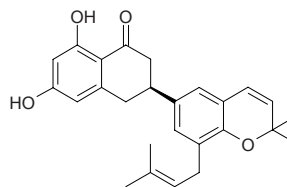
$C_{22}H_{24}O_5$  (368.43). **Pharm:** Antimalarial (*Plasmodium falciparum* D6,  $IC_{50} = (13.0 \pm 2.0) \mu\text{g/mL}$ , control Chloroquine,  $IC_{50} = (0.009 \pm 0.002) \mu\text{g/mL}$ , Quinine,  $IC_{50} = (0.04 \pm 0.01) \mu\text{g/mL}$ ; *Plasmodium falciparum* W2,  $IC_{50} = (12.7 \pm 2.9) \mu\text{g/mL}$ , Chloroquine,  $IC_{50} = (0.08 \pm 0.01) \mu\text{g/mL}$ , Quinine,  $IC_{50} = (0.21 \pm 0.01) \mu\text{g/mL}$ )<sup>[3879]</sup>. **Source:** A BI XI NI YA CI TONG *Erythrina abyssinica* (stem cortex), BO SHI CI TONG *Erythrina berteroaana*. **Ref:** 1521, 3879.

**19887 Sigmoidin C**

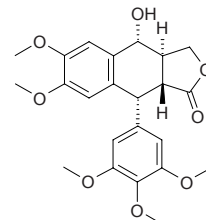
$C_{21}H_{20}O_5$  (352.39). **Pharm:** Antimalarial (*Plasmodium falciparum* D6,  $IC_{50} = (17.8 \pm 3.6) \mu\text{g/mL}$ , control Chloroquine,  $IC_{50} = (0.009 \pm 0.002) \mu\text{g/mL}$ , Quinine,  $IC_{50} = (0.04 \pm 0.01) \mu\text{g/mL}$ ; *Plasmodium falciparum* W2,  $IC_{50} = (15.8 \pm 3.9) \mu\text{g/mL}$ , Chloroquine,  $IC_{50} = (0.08 \pm 0.01) \mu\text{g/mL}$ , Quinine,  $IC_{50} = (0.21 \pm 0.01) \mu\text{g/mL}$ )<sup>[3879]</sup>. **Source:** A BI XI NI YA CI TONG *Erythrina abyssinica* (stem cortex), AI SI XING CI TONG *Erythrina sigmoidea*. **Ref:** 1521, 3879.

**19888 Sigmoidin E**

$C_{26}H_{28}O_4$  (404.51). **Pharm:** Antimalarial (*Plasmodium falciparum* D6,  $IC_{50} = (9.1 \pm 2.3) \mu\text{g/mL}$ , control Chloroquine,  $IC_{50} = (0.009 \pm 0.002) \mu\text{g/mL}$ , Quinine,  $IC_{50} = (0.04 \pm 0.01) \mu\text{g/mL}$ ; *Plasmodium falciparum* W2,  $IC_{50} = (11.8 \pm 2.5) \mu\text{g/mL}$ , Chloroquine,  $IC_{50} = (0.08 \pm 0.01) \mu\text{g/mL}$ , Quinine,  $IC_{50} = (0.21 \pm 0.01) \mu\text{g/mL}$ )<sup>[3879]</sup>. **Source:** A BI XI NI YA CI TONG *Erythrina abyssinica* (stem cortex), AI SI XING CI TONG *Erythrina sigmoidea*. **Ref:** 1521, 3879.

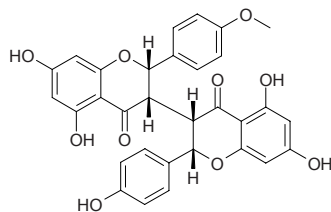
**19889 Sikkimotxin**

[18651-67-7]  $C_{23}H_{26}O_8$  (430.46). mp 120°C. **Pharm:** Antineoplastic (cutaneous carcinoma); toxin (used only externally in clinic). **Source:** TAO ER QI *Podophyllum emodii* [Syn. *Podophyllum emodii* var. *chinense*; *Podophyllum sikkimense*; *Sinopodophyllum emodii*]. **Ref:** 5.

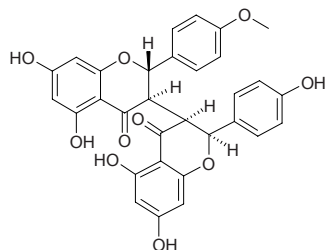


**19890 Sikokianin A**

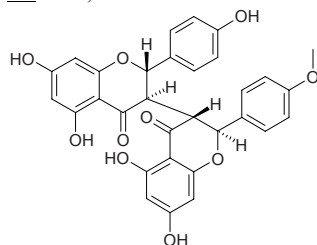
[106293-99-6] C<sub>31</sub>H<sub>24</sub>O<sub>10</sub> (556.53). Needles (MeOH aq.), mp 230–232°C, [ $\alpha$ ]<sub>D</sub> = +150° (c = 0.74, MeOH). **Pharm:** Antimitotic and antifungal (*Pyricularia oryzae*, 400µg/mL, middle inhibition)<sup>[4476]</sup>. **Source:** LANG DU *Stellera chamaejasme*, SI GUO YAO HUA *Wikstroemia sikokiana*. **Ref:** 2542, 4476.

**19891 Sikokianin B**

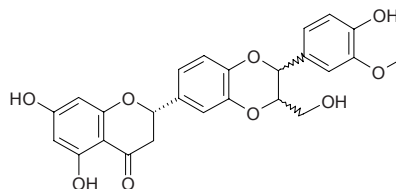
[106235-33-0] C<sub>31</sub>H<sub>24</sub>O<sub>10</sub> (556.53). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>30</sup> = +199.7° (c = 1.0, MeOH). **Pharm:** Antimalarial (chloroquine-resistant K1 strain of *Plasmodium falciparum*, IC<sub>50</sub> = 0.54µg/mL, control Chloroquine, IC<sub>50</sub> = 0.56µg/mL, Artemisinin, IC<sub>50</sub> = 0.0097µg/mL; drug-sensitive FCR3 strain, IC<sub>50</sub> = 0.54µg/mL, control Chloroquine, IC<sub>50</sub> = 0.014µg/mL, Artemisinin, IC<sub>50</sub> = 0.0068µg/mL)<sup>[4926]</sup>; cytotoxic (MRC-5 cells, IC<sub>50</sub> = 22.54µg/mL, control Chloroquine, IC<sub>50</sub> = 18.54µg/mL, Artemisinin, IC<sub>50</sub> = 45.12µg/mL)<sup>[4926]</sup>; NO production inhibitor (mus, macrophage-like cell line, RAW264.7, activated by LPS and recombinant mouse IFN- $\gamma$ , IC<sub>50</sub> = 50–60µmol/L, control Quercetin, IC<sub>50</sub> = 24.8µmol/L)<sup>[2541]</sup>. **Source:** LIAO GE WANG GEN *Wikstroemia indica*. **Ref:** 2541, 4926.

**19892 Sikokianin C**

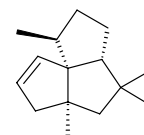
[159813-69-1] C<sub>31</sub>H<sub>24</sub>O<sub>10</sub> (556.53). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>30</sup> = +3.1° (c = 1.0, MeOH). **Pharm:** Antimalarial (chloroquine-resistant K1 strain of *Plasmodium falciparum*, IC<sub>50</sub> = 0.56µg/mL, control Chloroquine, IC<sub>50</sub> = 0.56µg/mL, Artemisinin, IC<sub>50</sub> = 0.0097µg/mL; drug-sensitive FCR3 strain, IC<sub>50</sub> = 0.34µg/mL, control Chloroquine, IC<sub>50</sub> = 0.014µg/mL, Artemisinin, IC<sub>50</sub> = 0.0068µg/mL)<sup>[4926]</sup>; cytotoxic (MRC-5 cells, IC<sub>50</sub> = 11.21µg/mL, control Chloroquine, IC<sub>50</sub> = 18.54µg/mL, Artemisinin, IC<sub>50</sub> = 45.12µg/mL)<sup>[4926]</sup>; NO production inhibitor (mus, macrophage-like cell line, RAW264.7, activated by LPS and recombinant mouse IFN- $\gamma$ , IC<sub>50</sub> = 50–60µmol/L, control Quercetin, IC<sub>50</sub> = 24.8µmol/L)<sup>[2541]</sup>. **Source:** LIAO GE WANG GEN *Wikstroemia indica*. **Ref:** 2541, 4926.

**19893 Silandrin**

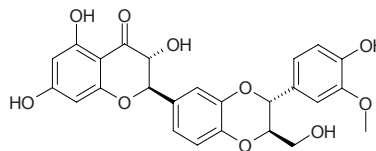
[70815-32-6] C<sub>25</sub>H<sub>22</sub>O<sub>9</sub> (466.45). **Pharm:** Antihepatotoxin. **Source:** SHUI FEI JI *Silybum marianum*. **Ref:** 658.

**19894 Silphinene**

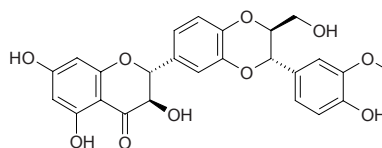
C<sub>15</sub>H<sub>24</sub> (204.36). **Pharm:** Anti-Inflammatory (anti-oedema, control oedema = (7.8±0.3)mg, 100µg/cm<sup>2</sup> mixture with modhephene and isocomene, oedema = (4.9±0.4)mg, p<0.05, reduction = 37%, Indomethacin oedema = (3.4±0.3)mg, p<0.05, reduction = 56%). **Source:** GAO SHAN HUO RONG CAO *Leontopodium alpinum* (root). **Ref:** 4985.

**19895 Silybin**

Silybin A; Silibinin [22888-70-6] C<sub>25</sub>H<sub>22</sub>O<sub>10</sub> (482.45). Yellowish flat crystals (MeOH–H<sub>2</sub>O), mp 162–163°C, [ $\alpha$ ]<sub>D</sub> = +20° (c = 0.21, acetone); soluble in acetone, methanol, acetic ester, ethanol, slightly soluble in chloroform, insoluble in water.<sup>[5507]</sup> **Pharm:** Antihepatotoxin; used in treatment of hepatitis; LOX inhibitor<sup>[4415]</sup>; COX inhibitor<sup>[4415]</sup>; anti-inflammatory (NO production inhibitor, peritoneal macrophages in LPS-treated mouse, reduces NO production and iNOS gene expression, by inhibiting NF- $\kappa$ B)<sup>[4415]</sup>; LD<sub>50</sub> (mus, iv) = (1056±35)mg/kg. **Source:** SHUI FEI JI *Silybum marianum* (dried ripe fruit: content = 1.31%<sup>[5508]</sup>). **Ref:** 658, 4415, 4719, 5507, 5508.

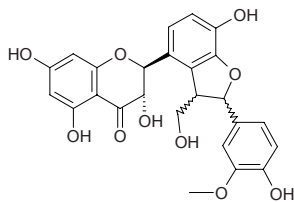
**19896 Silybin B**

C<sub>25</sub>H<sub>22</sub>O<sub>10</sub> (482.45). Yellow grain crystals (MeOH–H<sub>2</sub>O), mp 158–160°C, [ $\alpha$ ]<sub>D</sub> = –1.07° (c = 0.28, acetone). **Source:** SHUI FEI JI *Silybum marianum* (seed). **Ref:** 4719.

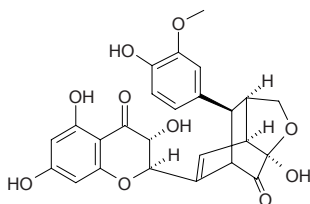


**19897 Silychristin**

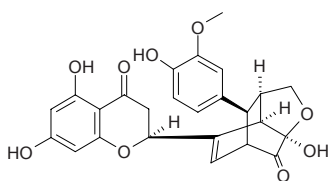
[33889-69-9]  $C_{25}H_{22}O_{10}$  (482.45). mp 174–176°C (water),  $[\alpha]_D^{23} = +81.4^\circ$  (pyridine). **Pharm:** Plant growth inhibitor; used in treatment of hepatitis; LOX inhibitor<sup>[4415]</sup>; COX inhibitor<sup>[4415]</sup>. **Source:** SHUI FEI JI *Silybum marianum*. **Ref:** 661, 658, 4415.

**19898 Silydianin**

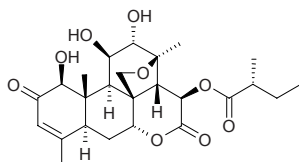
[29782-68-1]  $C_{25}H_{22}O_{10}$  (482.45). mp 191°C,  $[\alpha]_D^{24} = +175^\circ$  (acetone). **Pharm:** Antihepatotoxin; peroxidase inhibitor; plant growth inhibitor; LOX inhibitor<sup>[4415]</sup>; COX inhibitor<sup>[4415]</sup>. **Source:** SHUI FEI JI *Silybum marianum*. **Ref:** 661, 4415.

**19899 Silymonin**

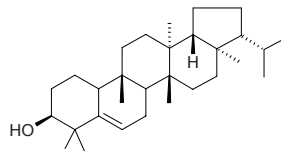
$C_{25}H_{22}O_9$  (466.45). **Source:** SHUI FEI JI *Silybum marianum*. **Ref:** 660.

**19900 Simalikalactone D**

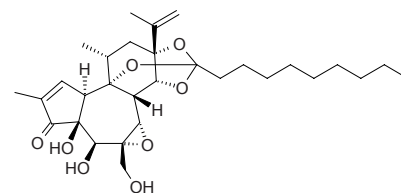
[35321-80-3]  $C_{25}H_{34}O_9$  (478.54). mp 228–230°C. **Pharm:** Antiamebic; anti-neoplastic (mus  $P_{388}$ , 1mg/kg, biotic prolonged rate = (65–75)%, KB *in vitro*,  $ED_{50} = 0.01\text{--}0.001\mu\text{g/mL}$ ); antimalarial (*Plasmodium falciparum*,  $CIC = 0.002\mu\text{g/mL}$ ); antiviral. **Source:** FEI ZHOU KU MU *Quassia africana*, KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*], MEI ZHOU KU MU *Quassia amara*. **Ref:** 5, 658.

**19901 Simiarenol**

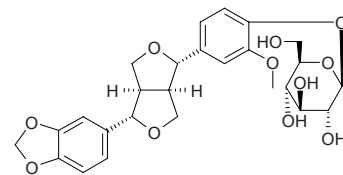
$C_{30}H_{50}O$  (426.73). **Source:** BAI MAO GEN<sup>(1)</sup> *Imperata cylindrica* var. *major*, DONG GUA PI *Benincasa hispida*, DONG GUA ZI *Benincasa hispida*, LIU JI NU *Artemisia anomala* (whole herb with flowers), YI DIAN HONG *Emilia sonchifolia*. **Ref:** 660.

**19902 Simplexin**

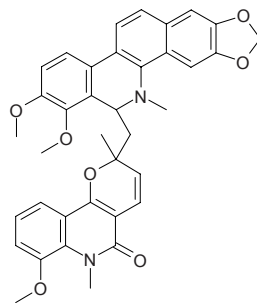
Wikstrotoxin [1404-62-2]  $C_{30}H_{44}O_8$  (532.68). **Pharm:** Causes pulmonary heart disease (taken long-term); causes St. George disease (ox). **Source:** LANG DU *Stellera chamaejasme*, SHAN DI YAO HUA *Wikstroemia monticola*, DAN ZHI DAO HUA *Pimelea simplex*. **Ref:** 658, 660, 1521.

**19903 Simplexoside**

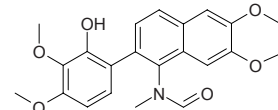
$C_{26}H_{30}O_{11}$  (518.53). **Pharm:** Antioxidant; CNS depressant. **Source:** DAN JUE CHUANG *Justicia simplex*. **Ref:** 658.

**19904 Simlanoquinoline**

[155416-22-1]  $C_{37}H_{34}N_2O_7$  (618.69). **Pharm:** Platelet aggregation inhibitor; DNA isomerase inhibitor; antibacterial; cytotoxic. **Source:** YE HUA JIAO GEN *Zanthoxylum simulans*. **Ref:** 2176.

**19905 Simlansamide**

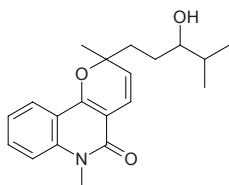
[176713-29-4]  $C_{22}H_{23}NO_6$  (397.43). **Pharm:** Platelet aggregation inhibitor; DNA isomerase inhibitor; antibacterial; cytotoxic. **Source:** YE HUA JIAO GEN *Zanthoxylum simulans*. **Ref:** 1521, 2176.



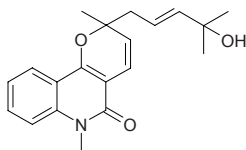


**19906 Simulansine**

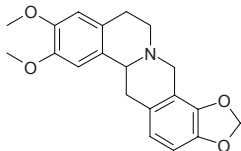
[176520-66-4] C<sub>20</sub>H<sub>25</sub>NO<sub>3</sub> (327.43). **Pharm:** Platelet aggregation inhibitor; DNA isomerase inhibitor; antibacterial; cytotoxic. **Source:** YE HUA JIAO GEN *Zanthoxylum simulans*. **Ref:** 2176.

**19907 Simulenoline**

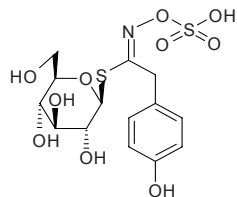
C<sub>20</sub>H<sub>23</sub>NO<sub>3</sub> (325.41). **Pharm:** Platelet aggregation inhibitor; DNA isomerase inhibitor; antibacterial; cytotoxic. **Source:** YE HUA JIAO GEN *Zanthoxylum simulans*. **Ref:** 2176.

**19908 Sinactine**

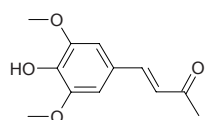
C<sub>20</sub>H<sub>21</sub>NO<sub>4</sub> (339.39). mp (-) 175°C, (±) 168°C. **Source:** LI CHUN HUA *Papaver commutatum* [Syn. *Papaver rhoeas*], QING FENG TENG *Sinomenium acutum*. **Ref:** 6.

**19909 Sinalbine**

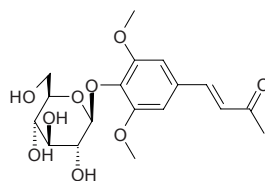
Inapine glucosinolate C<sub>14</sub>H<sub>19</sub>NO<sub>10</sub>S<sub>2</sub> (425.44). mp 139°C (anhydrate). **Pharm:** Antifungal (*Trichophyton* sp., *Oidium porriginis*); irritant. **Source:** BAI JIE ZI *Sinapis alba* [Syn. *Brassica alba*; *Brassica hirta*], BAN LAN GEN *Isatis indigotica*, BO NIANG HAO *Descurainia sophia*, LAI FU ZI *Raphanus sativus*, TING LI ZI *Lepidium apetalum* [Syn. *Lepidium micranthum*], YE OU BAI JIE *Sinapis arvensis*. **Ref:** 6, 658, 660.

**19910 Sinapaldehyde**

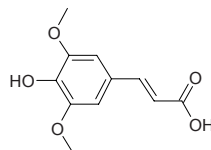
[4206-58-0] C<sub>11</sub>H<sub>12</sub>O<sub>4</sub> (208.22). **Pharm:** Cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells)<sup>[5038]</sup>; detumescent (rat ears); prostaglandin biosynthetase inhibitor. **Source:** HEI HU TAO *Juglans nigra*, HOU PO *Magnolia officinalis*, TAI WAN FU RONG *Hibiscus taiwanensis*, YIN BAI QI *Acer saccharinum*, *Quercus* sp., *Aglaia ponapensis*. **Ref:** 2, 658, 2529, 5038.

**19911 Sinapaldehyde glucoside**

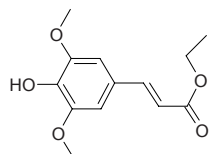
C<sub>17</sub>H<sub>22</sub>O<sub>9</sub> (370.36). **Source:** JIU BI YING *Ilex rotunda*. **Ref:** 660.

**19912 Sinapic acid**

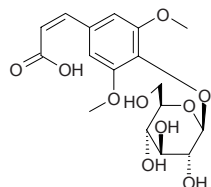
C<sub>11</sub>H<sub>12</sub>O<sub>5</sub> (224.22). mp 192°C. **Pharm:** Antibacterial; antifungal; antihepatotoxin. **Source:** DI SHAO GUA *Cynanchum thesioides*, HUI XIANG JING YE *Foeniculum vulgare*, JIA DU XING CAI *Lepidium sativum*, JIE ZI *Brassica juncea*, LAO SHU GUA *Capparis spinosa*, LI MENG GEN *Citrus limonia*, LI MENG YE *Citrus limonia*, NAN FANG OU SHI NAN *Erica australis*, NING MENG *Citrus limon*, NING MENG PI *Citrus limon*, OU XI XIN *Asarum europaeum*, PU<sup>(2)</sup> TAO *Vitis vinifera*, SI ZI TAN *Pterocarpus santalinus*, YANG CONG *Allium cepa*, YE JIE *Brassica oleracea*, YI ZHU QIAN MA *Urtica dioica*, occurs in many plants (a common constit. of plants and fruits. Found by Bate-Smith in 26% of investigated dicotyledonous and 57% of monocotyledonous spp.). **Ref:** 6, 658, 660, 1521.

**19913 Sinapic acid ethyl ester**

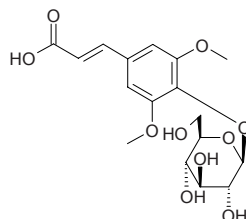
C<sub>13</sub>H<sub>16</sub>O<sub>5</sub> (252.27). **Source:** BO NIANG HAO *Descurainia Sophia* (seeds). **Ref:** 2548.

**19914 cis-Sinapic acid glucoside**

C<sub>17</sub>H<sub>22</sub>O<sub>10</sub> (386.36). **Source:** BO NIANG HAO *Descurainia sophia* **Ref:** 660.

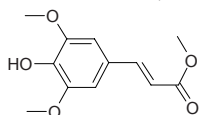
**19915 trans-Sinapic acid glucoside**

C<sub>17</sub>H<sub>22</sub>O<sub>10</sub> (386.36). **Source:** BO NIANG HAO *Descurainia sophia* **Ref:** 660.

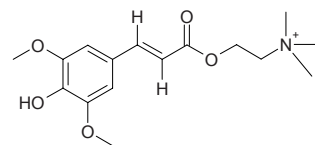


**19916 trans-Sinapic acid methylester**

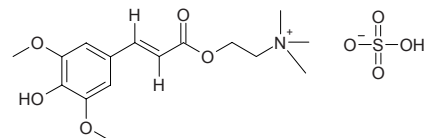
3-(4-Hydroxy-3,5-dimethoxy-phenyl)-acrylic acid methyl ester  $C_{12}H_{14}O_5$  (238.24). Slightly yellow powder; colorless crystals, mp 83~85°C,  $[\alpha]_D^{22} = -8.1^\circ$  (CHCl<sub>3</sub>). **Pharm:** Cytotoxic (*in vitro* antiproliferative activity, LoVo, IC<sub>50</sub> > 40 μmol/L, control Doxorubicin, IC<sub>50</sub> = (0.04±0.01) μmol/L). **Source:** PU TONG YUAN ZHI *Polygala vulgaris*, SHUI GAN CAO *Amsonia sinensis*. **Ref:** 2092, 4246.

**19917 Sinapine**

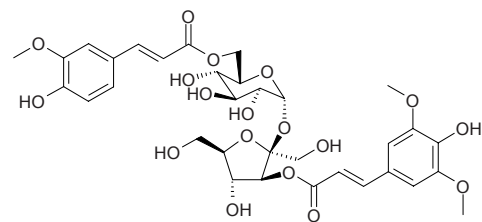
$C_{16}H_{24}NO_5$  (310.37). mp 179°C. **Source:** BAI JIE ZI *Sinapis alba* [Syn. *Brassica alba*; *Brassica hirta*] (dried ripe seed: content (sulfofyanate) = 0.45%<sup>[5508]</sup>), JIE ZI *Brassica juncea*, LAI FU ZI *Raphanus sativus* (ripe seed: content scope of 5 origins = 0.17%~0.36%, mean content = 0.25%<sup>[5508]</sup>). **Ref:** 6, 5508.

**19918 Sinapine bisulfate**

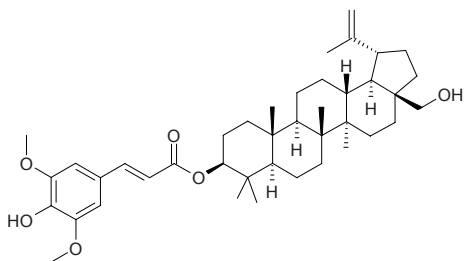
$C_{16}H_{25}NO_9S$  (414.44). **Pharm:** Antihypertensive. **Source:** LAI FU ZI *Raphanus sativus* (seed: content = 0.21%). **Ref:** 5501.

**19919 3'-Sinapoyl-6-feruloylsucrose**

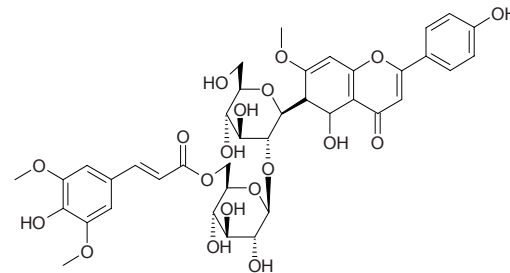
$C_{33}H_{40}O_{18}$  (724.68). Amorphous powder,  $[\alpha]_D^{25} = -69.11^\circ$  ( $c = 0.34$ , MeOH). **Source:** CHOU CAO *Ruta graveolens* (dried aerial parts). **Ref:** 3073.

**19920 3β-trans-Sinapoyloxylyp-20(29)-en-28-ol**

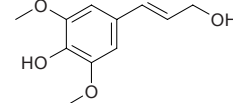
$C_{41}H_{60}O_6$  (648.93). Pale yellow amorphous powder (CHCl<sub>3</sub>-MeOH), mp 200°C (dec),  $[\alpha]_D^{22} = +22.5^\circ$  ( $c = 0.16$ , MeOH). **Source:** FEI LV BIN PIAO SHU *Celtis philippinensis*. **Ref:** 2060.

**19921 6'''-Sinapoylspinosin**

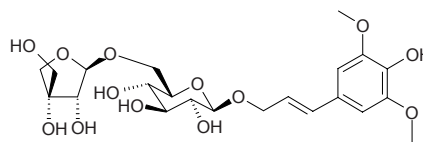
$C_{39}H_{44}O_{19}$  (816.77). **Source:** DA ZAO *Ziziphus jujuba*, SUAN ZAO REN *Ziziphus jujuba* var. *spinosa*. **Ref:** 2.

**19922 Sinapyl alcohol**

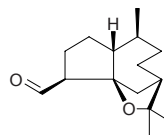
3-(4-Hydroxy-3,5-dimethoxyphenyl)-prop-2-enol [537-33-7]  $C_{11}H_{14}O_4$  (210.23). **Pharm:** Precursor to biosynthesis of lignin (in angiosperms); anti-inflammatory (mouse, inhibits increased vascular permeability by acetic acid, 30mg/(kg-d), orl, InRt = 38%, control Indomethacin, 100mg/(kg-d), orl, InRt = 45%<sup>[4073]</sup>), anti-inflammatory (rat, acute paw edema by carrageen, 30mg/(kg-d), orl, 1h, 3h, 5h, InRt = 17%, 41%, 21%, control ibuprofen, 100mg/(kg-d), orl, 1h, 3h, 5h, InRt = 42%, 55%, 47%<sup>[4073]</sup>); analgesic (mouse: acetic acid induced writhing, 30mg/(kg-d), orl, InRt = 55%, control Aspirin, 100mg/(kg-d), orl, InRt = 68%; hot plate test, 30mg/(kg-d), orl, increased action time = 83%; control Morphine, increased action time = 138%<sup>[4073]</sup>). **Source:** MAO PAO TONG *Paulownia tomentosa*, QIAN MA *Urtica cannabina*, TIAN NV MU LAN *Magnolia sieboldii* (stem cortex), *Viscum* sp. **Ref:** 658, 660, 4073.

**19923 Sinapyl 9-O-[β-D-apiofuranosyl(1→6)]-O-β-D-glucopyranoside**

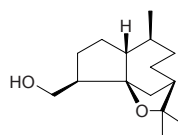
$C_{22}H_{32}O_{13}$  (504.49). White powder, mp 284~286°C,  $[\alpha]_D^{20} = +13.2^\circ$  ( $c = 0.50$ , H<sub>2</sub>O). **Pharm:** Antioxidant (*in vitro*, effect on conjugated diene formation of LDL or MDA level in rat brain). **Source:** SHI LIU ZHONG ZI *Punica granatum* (seed: yield = 0.0003%). **Ref:** 4792.

**19924 Sinenofuranal**

$C_{15}H_{24}O_2$  (236.36). **Source:** BAI MU XIANG *Aquilaria sinensis*. **Ref:** 13.

**19925 Sinenofuranol**

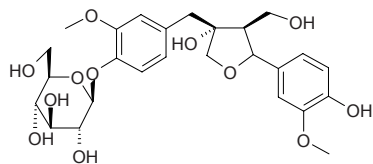
$C_{15}H_{26}O_2$  (238.37). **Source:** BAI MU XIANG *Aquilaria sinensis*. **Ref:** 13.



**19926 Sinenoside**

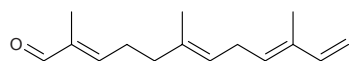
$C_{26}H_{34}O_{12}$  (538.55). White crystals,  $[\alpha]_D^{19} = -46.67^\circ$  ( $c = 0.015$ ,  $C_5H_5N$ ).

**Source:** NV ZHEN XIAO LA SHU *Ligustrum sinense*. **Ref:** 2444.

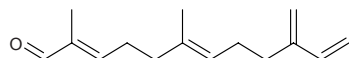
**19927  $\alpha$ -Sinensal**

2,6,10-Trimethyl-2,6,9,11-dodecatetraenal  $C_{15}H_{22}O$  (218.34). **Pharm:** Flavorant.

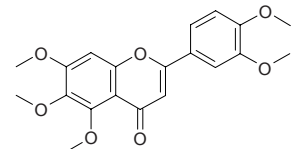
**Source:** JU PI *Citrus reticulata*, TIAN CHENG *Citrus sinensis*. **Ref:** 658, 660.

**19928  $\beta$ -Sinensal**

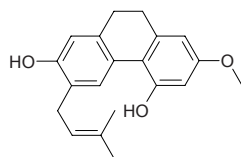
$C_{15}H_{22}O$  (218.34). **Pharm:** Flavorant. **Source:** TIAN CHENG *Citrus sinensis*. **Ref:** 658.

**19929 Sinensetin**

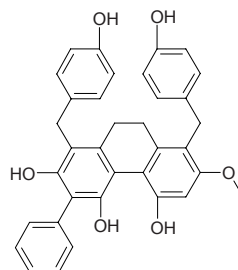
5,6,7,3',4'-Pentamethoxyflavone [2306-27-6]  $C_{20}H_{20}O_7$  (372.38). Colorless prismatic crystals, mp 169–171°C (methanol); pale-yellow prisms, mp 179°C, 172–173°C. **Pharm:** Antifungal; cytotoxic (EAC *in vitro*, 30  $\mu\text{mol/L}$ , InRt = 50%); induces cell differentiation (mus myelocytic leukemia cells, 50  $\mu\text{mol/L}$ , growing rate = 62%, 5  $\mu\text{mol/L}$ , growing rate = 81%, 50  $\mu\text{mol/L}$  and 5  $\mu\text{mol/L}$ , activity of macrophages >10%, HL-60 cells, 100  $\mu\text{mol/L}$ , growing rate = 50%, 50  $\mu\text{mol/L}$ , growing rate = 73%, 50  $\mu\text{mol/L}$ , activity of macrophages >25%, 5  $\mu\text{mol/L}$ , activity of macrophages = 10%); antihistamine (inhibits histamine release, basophiles, due to antigen and TPA,  $IC_{50} = 44$  and 26  $\mu\text{mol/L}$  respectively); inhibits oxidation of linoleic acid ( $IC_{50} = 114 \mu\text{mol/L}$ ); inhibits tissue factor express (induced by hmn interleukin-1 in hyalin leukocyte,  $IC_{50} = 10 \mu\text{mol/L}$ ); 15-lipoxygenase inhibitor. **Source:** HUA ZHOU YOU *Citrus grandis* var. *tomentosa*, JIAO GAN *Citrus tankan*, JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*], JU PI *Citrus reticulata*, LONG XU TENG *Bauhinia championii*, MAO XU CAO *Clerodendranthus spicatus*, SHENG HONG JI *Ageratum conyzoides*, TIAN CHENG *Citrus sinensis*, ZHI KE *Citrus aurantium*, ZHI SHI *Citrus aurantium*, ZONG ZHUANG HUA LI *Chenopodium championii*. **Ref:** 658, 900, 979, 2648, 2867, 2910, 2974, 2998.

**19930 Sinensol G**

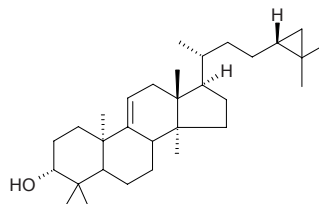
2-Methoxy-4,7-dihydroxy-6-isopentenyl-9,10-dihydrophenanthrene  $C_{20}H_{22}O_3$  (310.40). Colorless amorphous powder. **Source:** ZHONG GUO SHOU CAO *Spiranthes sinensis* (aerial parts). **Ref:** 4120.

**19931 Sinensol H**

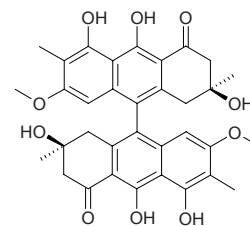
4,5,7-Trihydroxy-1,8-bis(4-hydroxybenzyl)-3-methoxy-6-phenyl-9,10-dihydrophenanthrene  $C_{35}H_{30}O_6$  (546.63). Pale yellow amorphous powder,  $[\alpha]_D^{25} = 0^\circ$  ( $c = 0.5$ , MeOH). **Source:** ZHONG GUO SHOU CAO *Spiranthes sinensis* (aerial parts). **Ref:** 4120.

**19932 Sinetirucallol**

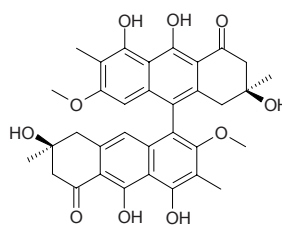
24,31-Homocyclotirucall-9(11)-ene-3 $\beta$ -ol  $C_{31}H_{52}O$  (440.76). Colorless needles, mp 96–97°C,  $[\alpha]_D^{25} = -66^\circ$  ( $c = 0.5$ ,  $\text{CHCl}_3$ ). **Source:** ZHONG GUO SHOU CAO *Spiranthes sinensis* (aerial parts). **Ref:** 4120.

**19933 Singueanol I**

$C_{34}H_{34}O_{10}$  (602.64). **Pharm:** Antibacterial<sup>[4418]</sup>; antispasmodic<sup>[4418]</sup>. **Source:** WANG JIANG NAN *Cassia occidentalis*, DONG FEI JUE MING *Cassia singueana*. **Ref:** 660, 4418.

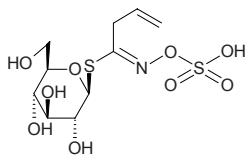
**19934 Singueanol II**

$C_{34}H_{34}O_{10}$  (602.64). **Pharm:** Antibacterial; antispasmodic. **Source:** DONG FEI JUE MING *Cassia singueana*. **Ref:** 4418.

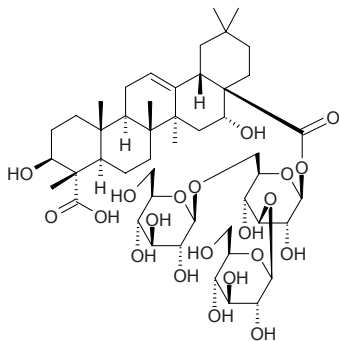


**19935 Sinigrin**

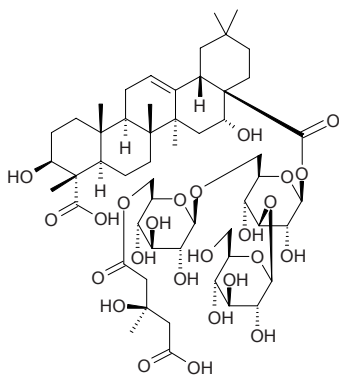
[3952-98-5] C<sub>10</sub>H<sub>17</sub>NO<sub>9</sub>S<sub>2</sub> (359.38). mp 127~129°C. **Pharm:** Antibacterial; irritant; promotes secretion of digestive juice. **Source:** BAI JIANG *Patrinia villosa*, BAN LAN GEN *Isatis indigotica*, JI CAI *Capsella bursa-pastoris*, JIE ZI *Brassica juncea*, LA GEN *Armoracia lapathifolia*, XI MING *Thlaspi arvense*, XI MING ZI *Thlaspi arvense*. **Ref:** 4, 6, 658, 660.

**19936 Sinocrassulose I**

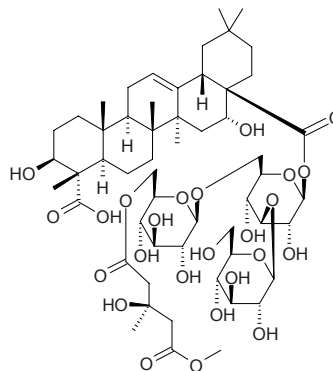
3 $\beta$ ,16 $\alpha$ -Dihydroxyolean-12-en-23,28-dioic acid 28-O-[ $\beta$ -D-glucopyranosyl (1 $\rightarrow$ 3)][ $\beta$ -D-glucopyranosyl(1 $\rightarrow$ 6)]- $\beta$ -D-glucopyranosyl ester C<sub>48</sub>H<sub>76</sub>O<sub>21</sub> (989.13). White amorphous powder,  $[\alpha]_D^{26} = +17.6^\circ$  ( $c = 0.051$ , MeOH). **Source:** SI MA LI JIN SHI LIAN *Sinocrassula asclepiadea* (root). **Ref:** 4264.

**19937 Sinocrassulose II**

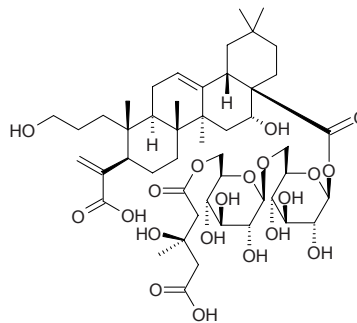
3 $\beta$ ,16 $\alpha$ -Dihydroxyolean-12-en-23,28-dioic acid 28-O-[ $\beta$ -D-glucopyranosyl (1 $\rightarrow$ 3)][ $\beta$ -D-6-O-((3R)-3-hydroxy-3-methylglutaryl)glucopyranosyl(1 $\rightarrow$ 6)]- $\beta$ -D-glucopyranosyl ester C<sub>54</sub>H<sub>84</sub>O<sub>25</sub> (1133.26). White amorphous powder,  $[\alpha]_D^{26} = +13.9^\circ$  ( $c = 0.074$ , MeOH). **Source:** SI MA LI JIN SHI LIAN *Sinocrassula asclepiadea* (root). **Ref:** 4264.

**19938 Sinocrassulose III**

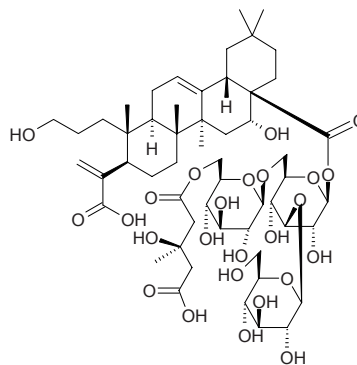
3 $\beta$ ,16 $\alpha$ -Dihydroxyolean-12-en-23,28-dioic acid 28-O-[ $\beta$ -D-glucopyranosyl(1 $\rightarrow$ 3)][ $\beta$ -D-6-O-(3-hydroxy-5-methoxy-3-methyl-5-oxopentanyloxy)glucopyranosyl(1 $\rightarrow$ 6)]- $\beta$ -D-glucopyranosyl ester C<sub>55</sub>H<sub>86</sub>O<sub>25</sub> (1147.28). White amorphous powder,  $[\alpha]_D^{26} = +30.4^\circ$  ( $c = 0.023$ , MeOH). **Source:** SI MA LI JIN SHI LIAN *Sinocrassula asclepiadea* (root). **Ref:** 4264.

**19939 Sinocrassulose IV**

3,16 $\alpha$ -Dihydroxy-3,4-seco-olean-4(24),12-dien-23,28-dioic acid 28-O-[ $\beta$ -D-6-O-(3-hydroxy-3-methylglutaryl)-glucopyranosyl(1 $\rightarrow$ 6)]- $\beta$ -D-glucopyranosyl ester C<sub>48</sub>H<sub>74</sub>O<sub>20</sub> (971.11). White amorphous powder,  $[\alpha]_D^{26} = +22.6^\circ$  ( $c = 0.031$ , MeOH). **Source:** SI MA LI JIN SHI LIAN *Sinocrassula asclepiadea* (root). **Ref:** 4264.

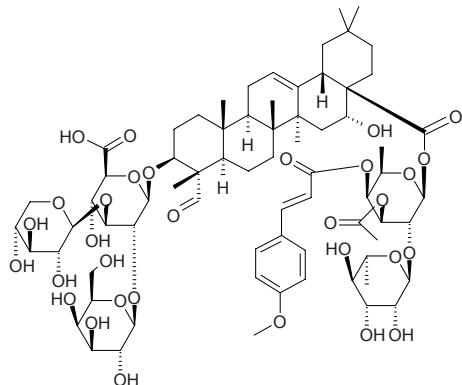
**19940 Sinocrassulose V**

3,16 $\alpha$ -Dihydroxy-3,4-seco-olean-4(24),12-dien-23,28-dioic acid 28-O-[ $\beta$ -D-glucopyranosyl(1 $\rightarrow$ 3)]{ $\beta$ -D-6-O-[(3R)-3-hydroxy-3-methylglutaryl]-glucopyranosyl(1 $\rightarrow$ 6)}- $\beta$ -D-glucopyranosyl ester C<sub>54</sub>H<sub>84</sub>O<sub>25</sub> (1133.26). White amorphous powder,  $[\alpha]_D^{26} = +39.7^\circ$  ( $c = 0.026$ , MeOH). **Source:** SI MA LI JIN SHI LIAN *Sinocrassula asclepiadea* (root). **Ref:** 4264.

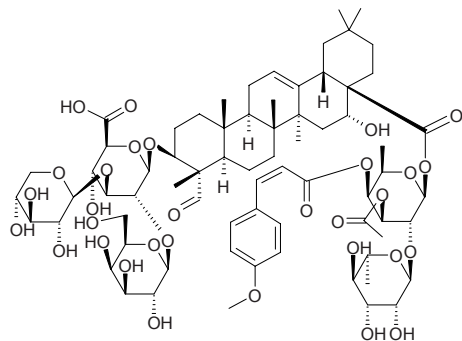


**19941 Sinocrassuloside VI**

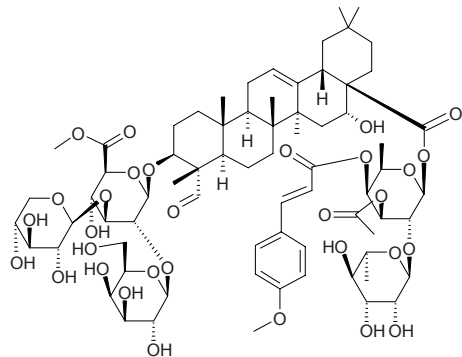
3-*O*-[ $\beta$ -*D*-Galactopyranosyl(1 $\rightarrow$ 2)][ $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucuronopyranosyl quillaic acid 28-*O*-[ $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)]-3-*O*-acetyl-4-*O*-(*E*)-*para*-methoxycinnamoyl- $\beta$ -*D*-fucopyranosyl ester C<sub>71</sub>H<sub>102</sub>O<sub>31</sub> (1451.59). White amorphous powder,  $[\alpha]_D^{26} = +18.4^\circ$  ( $c = 0.076$ , MeOH). Source: SI MA LI JIN SHI LIAN *Sinocrassula asclepiadea* (root). Ref: 4264.

**19942 Sinocrassuloside VII**

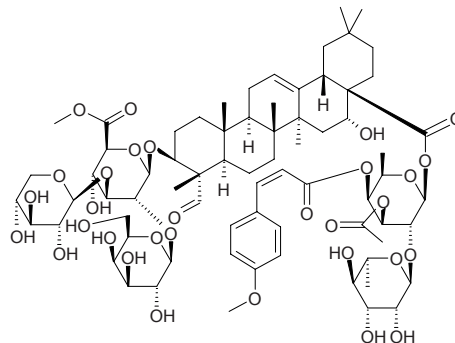
3-*O*-[ $\beta$ -*D*-Galactopyranosyl(1 $\rightarrow$ 2)][ $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucuronopyranosyl quillaic acid 28-*O*-[ $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)]-3-*O*-acetyl-4-*O*-(*Z*)-*para*-methoxycinnamoyl- $\beta$ -*D*-fucopyranosyl ester C<sub>71</sub>H<sub>102</sub>O<sub>31</sub> (1451.59). White amorphous powder,  $[\alpha]_D^{26} = +8.3^\circ$  ( $c = 0.004$ , MeOH). Source: SI MA LI JIN SHI LIAN *Sinocrassula asclepiadea* (root). Ref: 4264.

**19943 Sinocrassuloside VIII**

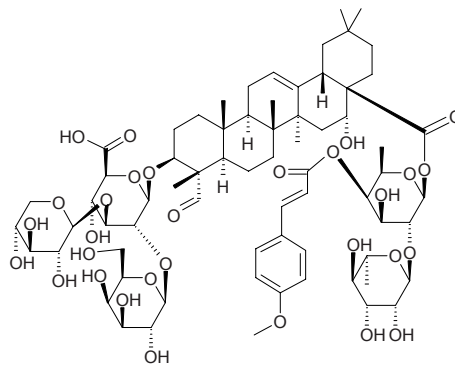
3-*O*-[ $\beta$ -*D*-Galactopyranosyl(1 $\rightarrow$ 2)][ $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 3)]-[6-*O*-methyl- $\beta$ -*D*-glucuronopyranosyl] quillaic acid 28-*O*-[ $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)]-[3-*O*-acetyl-4-*O*-(*E*)-*para*-methoxycinnamoyl- $\beta$ -*D*-fucopyranosyl] ester C<sub>72</sub>H<sub>104</sub>O<sub>31</sub> (1465.61). White amorphous powder,  $[\alpha]_D^{26} = +12.1^\circ$  ( $c = 0.022$ , MeOH). Source: SI MA LI JIN SHI LIAN *Sinocrassula asclepiadea* (root). Ref: 4264.

**19944 Sinocrassuloside IX**

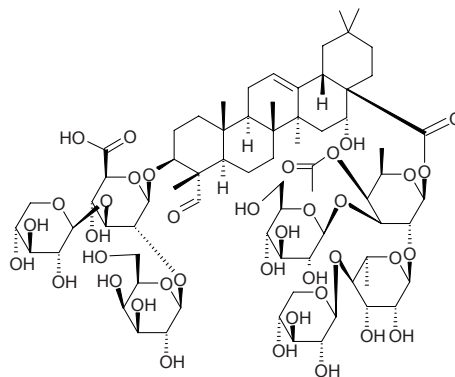
3-*O*-[ $\beta$ -*D*-Galactopyranosyl(1 $\rightarrow$ 2)][ $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 3)]-[6-*O*-methyl- $\beta$ -*D*-glucuronopyranosyl] quillaic acid 28-*O*-[ $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)]-3-*O*-acetyl-4-*O*-(*Z*)-*para*-methoxycinnamoyl- $\beta$ -*D*-fucopyranosyl ester C<sub>72</sub>H<sub>104</sub>O<sub>31</sub> (1465.61). White amorphous powder,  $[\alpha]_D^{26} = +37.5^\circ$  ( $c = 0.016$ , MeOH). Source: SI MA LI JIN SHI LIAN *Sinocrassula asclepiadea* (root). Ref: 4264.

**19945 Sinocrassuloside X**

3-*O*-[ $\beta$ -*D*-Galactopyranosyl(1 $\rightarrow$ 2)][ $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucuronopyranosyl quillaic acid 28-*O*-[ $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)]-4-*O*-(*E*)-*para*-methoxycinnamoyl- $\beta$ -*D*-fucopyranosyl ester C<sub>69</sub>H<sub>100</sub>O<sub>30</sub> (1409.55). White amorphous powder,  $[\alpha]_D^{26} = +38.5^\circ$  ( $c = 0.026$ , MeOH). Source: SI MA LI JIN SHI LIAN *Sinocrassula asclepiadea* (root). Ref: 4264.

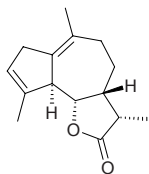
**19946 Sinocrassuloside XI**

3-*O*-[ $\beta$ -*D*-Galactopyranosyl(1 $\rightarrow$ 2)][ $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucuronopyranosyl quillaic acid 28-*O*-{[ $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 4)]- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)}-[ $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 3)]-4-*O*-acetyl- $\beta$ -*D*-fucopyranosyl ester C<sub>72</sub>H<sub>112</sub>O<sub>38</sub> (1585.67). White amorphous powder,  $[\alpha]_D^{26} = +3.5^\circ$  ( $c = 0.019$ , MeOH). Source: SI MA LI JIN SHI LIAN *Sinocrassula asclepiadea* (root). Ref: 4264.

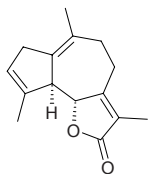


**19947 Sinodiellide A**

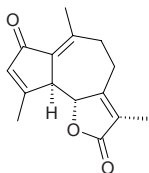
5 $\alpha$ ,6 $\beta$ ,7 $\beta$ -H-1(10),3-Guaiadien-12,6 $\alpha$ -olide C<sub>15</sub>H<sub>20</sub>O<sub>2</sub> (232.33). Colorless needles, mp 145.5~146.5°C; white powder (EtOAc), mp 127~128°C, [ $\alpha$ ]<sub>D</sub><sup>21</sup> = -59.82° (*c* = 0.56, CHCl<sub>3</sub>). Source: DIAN QIN *Sinodielsia yunnanensis* (root): yield = 0.062%. Ref: 4305, 5470.

**19948 Sinodiellide B**

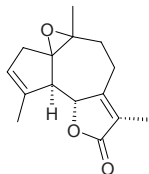
5 $\alpha$ ,6 $\beta$ -H-1(10),3,7(11)-Guaiatrien-12,6 $\alpha$ -olide C<sub>15</sub>H<sub>18</sub>O<sub>2</sub> (230.31). Colorless needles (EtOAc), mp 91~92°C, [ $\alpha$ ]<sub>D</sub><sup>21</sup> = -30.09° (*c* = 0.62, CHCl<sub>3</sub>); mp 104.3~105.0°C. Source: DIAN QIN *Sinodielsia yunnanensis* (root): yield = 0.024%. Ref: 4305, 5470.

**19949 Sinodiellide C**

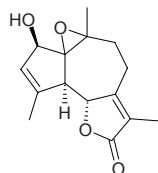
C<sub>15</sub>H<sub>16</sub>O<sub>3</sub> (244.29). Colorless crystalline powder, mp 140.5~141.0°C. Source: DIAN QIN *Sinodielsia yunnanensis* (root): yield = 0.0015%. Ref: 4305.

**19950 Sinodiellide D**

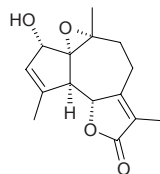
C<sub>15</sub>H<sub>18</sub>O<sub>3</sub> (246.31). Colorless amorphous powder. Source: DIAN QIN *Sinodielsia yunnanensis* (root): yield = 0.0010%. Ref: 4305.

**19951 Sinodiellide E**

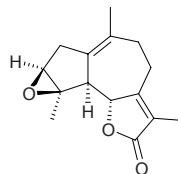
C<sub>15</sub>H<sub>18</sub>O<sub>4</sub> (262.31). Colorless needles, mp 163.6~164.0°C, [ $\alpha$ ]<sub>D</sub><sup>22</sup> = +46.3° (*c* = 0.549, CHCl<sub>3</sub>). Source: DIAN QIN *Sinodielsia yunnanensis* (root). Ref: 4336.

**19952 Sinodiellide F**

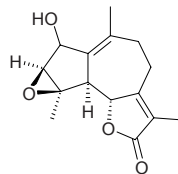
C<sub>15</sub>H<sub>18</sub>O<sub>4</sub> (262.31). Colorless needles, mp 102.8~103.0°C, [ $\alpha$ ]<sub>D</sub><sup>22</sup> = -168.7° (*c* = 0.435, CHCl<sub>3</sub>). Source: DIAN QIN *Sinodielsia yunnanensis* (root). Ref: 4336.

**19953 Sinodiellide G**

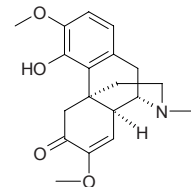
C<sub>15</sub>H<sub>18</sub>O<sub>3</sub> (246.31). Colorless amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>22</sup> = +6.1° (*c* = 0.405, CHCl<sub>3</sub>). Source: DIAN QIN *Sinodielsia yunnanensis* (root). Ref: 4336.

**19954 Sinodiellide H**

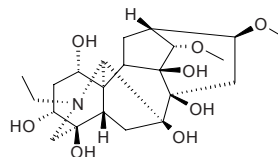
C<sub>15</sub>H<sub>18</sub>O<sub>4</sub> (262.31). Pale yellow viscous oil, [ $\alpha$ ]<sub>D</sub><sup>22</sup> = -7.3° (*c* = 0.379, CHCl<sub>3</sub>). Source: DIAN QIN *Sinodielsia yunnanensis* (root). Ref: 4336.

**19955 Sinomenine**

Coculine [115-53-7] C<sub>19</sub>H<sub>23</sub>NO<sub>4</sub> (329.40). mp 162°C. Pharm: Analgesic (mus, rbt); antiarrhythmic (*in vitro* atrium of gpg); anti-inflammatory (rat, arthritis model due to methanol or egg white); antitussive (mus, cat); inhibits intestinal smooth muscle (*in vitro*); antihypertensive (dog, cat and rat, iv and orl); negative chronotropic action; releases histamine; LD<sub>50</sub> (mus, orl) = 580mg/kg, (mus, sc) = 535mg/kg, (mus, ip) = 285mg/kg, (dog, orl) = 45mg/kg, (monkey, orl) = 95mg/kg. Source: BIAN FU GE *Menispermum dauricum*, BIAN FU GE GEN *Menispermum dauricum* (rhizome: mean content = 0.107%<sup>[5508]</sup>), QING FENG TENG *Sinomenium acutum* (stem: content = 0.81%<sup>[5501]</sup>). Ref: 4, 6, 658, 5501, 5508.

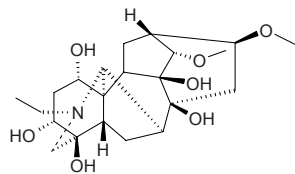
**19956 Sinomontanine D**

C<sub>22</sub>H<sub>35</sub>O<sub>8</sub>N (441.53). White amorphous powder. Source: GAO WU TOU *Aconitum sinomontanum*. Ref: 844.

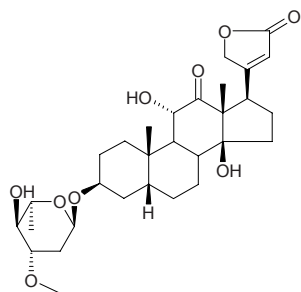


**19957 Sinomontanine E**

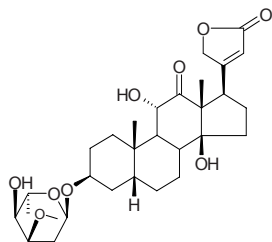
C<sub>22</sub>H<sub>35</sub>O<sub>7</sub>N (425.53). White amorphous powder. Source: GAO WU TOU *Aconitum sinomontanum*. Ref: 844.

**19958 Sinoside**

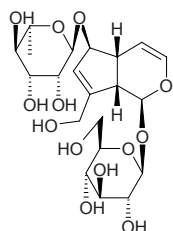
C<sub>30</sub>H<sub>44</sub>O<sub>9</sub> (548.68). mp 197~202°C, 233~244°C. Pharm: Cardiotonic. Source: YANG JIAO AO ZI *Strophanthus divaricatus*. Ref: 6, 658.

**19959 Sinostroside**

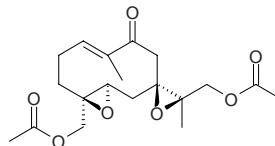
C<sub>30</sub>H<sub>44</sub>O<sub>9</sub> (548.68). mp 183~193°C. Source: YANG JIAO AO ZI *Strophanthus divaricatus*. Ref: 6.

**19960 Sinuatol**

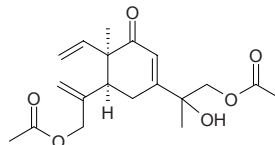
6-*O*- $\alpha$ -L-Rhamnopyranosyl-aucubin C<sub>21</sub>H<sub>32</sub>O<sub>13</sub> (492.48). Pharm: Antitrypanosomal (*Trypanosoma brucei rhodesiense*, IC<sub>50</sub> > 100  $\mu$ g/mL, control Melarsoprol, IC<sub>50</sub> = 0.0033  $\mu$ g/mL; *Trypanosoma cruzi*, IC<sub>50</sub> > 90  $\mu$ g/mL, control Benznidazole, IC<sub>50</sub> = 0.70  $\mu$ g/mL); antileishmanial (*Leishmania donovani*, IC<sub>50</sub> > 100  $\mu$ g/mL, control Miltefosine, IC<sub>50</sub> = 0.32  $\mu$ g/mL); antimalarial (*Plasmodium falciparum*, IC<sub>50</sub> > 50  $\mu$ g/mL, control Artemisinin, IC<sub>50</sub> = 0.002  $\mu$ g/mL); cytotoxic (L6 cells, IC<sub>50</sub> > 90  $\mu$ g/mL, control Podophyllotoxin, IC<sub>50</sub> = 0.0075  $\mu$ g/mL). Source: LIN PIAN XUAN SHEN *Scrophularia lepidota* (root). Ref: 5251.

**19961 Sipaucin A**

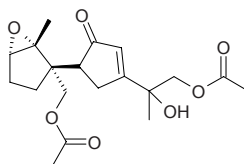
C<sub>19</sub>H<sub>26</sub>O<sub>7</sub> (366.41). Yellow oil,  $[\alpha]_D^{20} = -4^\circ$  ( $c = 0.10$ , CHCl<sub>3</sub>). Source: SHAO HUA XI PA MU *Siparuna pauciflora*. Ref: 3376.

**19962 Sipaucin B**

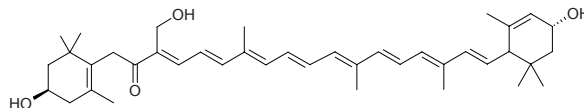
C<sub>19</sub>H<sub>26</sub>O<sub>6</sub> (350.42). Yellow oil,  $[\alpha]_D^{20} = +8^\circ$  ( $c = 0.25$ , CHCl<sub>3</sub>). Source: SHAO HUA XI PA MU *Siparuna pauciflora*. Ref: 3376.

**19963 Sipaucin C**

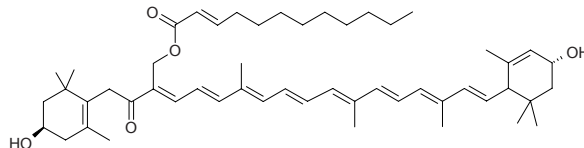
C<sub>19</sub>H<sub>26</sub>O<sub>7</sub> (366.41). Yellow oil,  $[\alpha]_D^{20} = +3^\circ$  ( $c = 0.30$ , CHCl<sub>3</sub>). Source: SHAO HUA XI PA MU *Siparuna pauciflora*. Ref: 3376.

**19964 Siphonaxanthin**

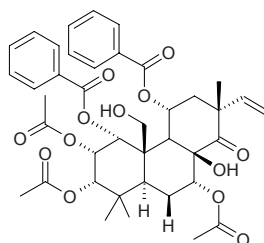
C<sub>40</sub>H<sub>56</sub>O<sub>4</sub> (600.89). Source: SHUI SONG *Codium fragile*. Ref: 660.

**19965 Siphonein**

C<sub>52</sub>H<sub>76</sub>O<sub>5</sub> (781.18). Source: SHUI SONG *Codium fragile*. Ref: 660.

**19966 Siphonol A**

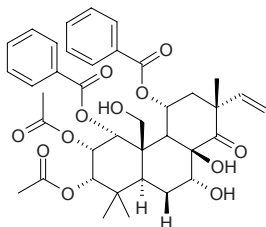
C<sub>40</sub>H<sub>46</sub>O<sub>13</sub> (734.80). Colorless amorphous solid,  $[\alpha]_D^{25} = -146.5^\circ$  ( $c = 0.07$ , CHCl<sub>3</sub>). Pharm: NO production inhibitor (LPS-activated macrophage-like J774.1 cells, IC<sub>50</sub> = 10.8  $\mu$ mol/L; control L-NMMA, IC<sub>50</sub> = 26.0  $\mu$ mol/L, Polymixin B, IC<sub>50</sub> = 27.8  $\mu$ g/mL, Dexamethasone IC<sub>50</sub> = 170  $\mu$ mol/L). Source: XIONG RUI ZHUANG ZHI GUAN CAO *Orthosiphon stamineus* [Syn: *Orthosiphon aristatus*; *Orthosiphon grandiflorus*; *Orthosiphon spicatus*] (aerial parts). Ref: 4322.



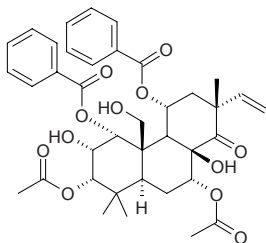


**19967 Siphonol B**

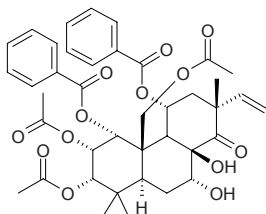
$C_{38}H_{44}O_{12}$  (692.77). Colorless amorphous solid,  $[\alpha]_D^{25} = -103.4^\circ$  ( $c = 0.08$ ,  $CHCl_3$ ). **Pharm:** NO production inhibitor (LPS-activated macrophage-like J774.1 cells,  $IC_{50} = 17.3\mu\text{mol/L}$ ; control *L*-NMMA,  $IC_{50} = 26.0\mu\text{mol/L}$ , Polymixin B,  $IC_{50} = 27.8\mu\text{g/mL}$ , Dexamethasone,  $IC_{50} = 170\mu\text{mol/L}$ ). **Source:** XIONG RUI ZHUANG ZHI GUAN CAO *Orthosiphon stamineus* [Syn: *Orthosiphon aristatus*; *Orthosiphon grandiflorus*; *Orthosiphon spicatus*] (aerial parts). **Ref:** 4322.

**19968 Siphonol C**

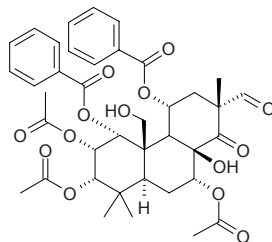
$C_{38}H_{44}O_{12}$  (692.77). Colorless amorphous solid,  $[\alpha]_D^{25} = -49.9^\circ$  ( $c = 0.06$ ,  $CHCl_3$ ). **Pharm:** NO production inhibitor (LPS-activated macrophage-like J774.1 cells,  $IC_{50} = 22.9\mu\text{mol/L}$ ; control *L*-NMMA,  $IC_{50} = 26.0\mu\text{mol/L}$ , Polymixin B,  $IC_{50} = 27.8\mu\text{g/mL}$ , Dexamethasone  $IC_{50} = 170\mu\text{mol/L}$ ). **Source:** XIONG RUI ZHUANG ZHI GUAN CAO *Orthosiphon stamineus* [Syn: *Orthosiphon aristatus*; *Orthosiphon grandiflorus*; *Orthosiphon spicatus*] (aerial parts). **Ref:** 4322.

**19969 Siphonol D**

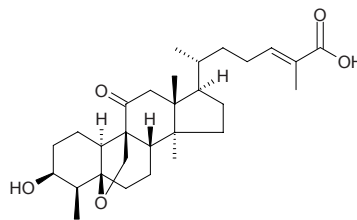
$C_{40}H_{46}O_{13}$  (734.80). Colorless amorphous solid,  $[\alpha]_D^{25} = -92.8^\circ$  ( $c = 0.09$ ,  $CHCl_3$ ). **Pharm:** NO production inhibitor (LPS-activated macrophage-like J774.1 cells,  $IC_{50} = 46.5\mu\text{mol/L}$ ; control *L*-NMMA,  $IC_{50} = 26.0\mu\text{mol/L}$ , Polymixin B,  $IC_{50} = 27.8\mu\text{g/mL}$ , Dexamethasone  $IC_{50} = 170\mu\text{mol/L}$ ). **Source:** XIONG RUI ZHUANG ZHI GUAN CAO *Orthosiphon stamineus* [Syn: *Orthosiphon aristatus*; *Orthosiphon grandiflorus*; *Orthosiphon spicatus*] (aerial parts). **Ref:** 4322.

**19970 Siphonol E**

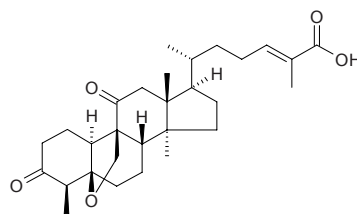
$C_{39}H_{44}O_{14}$  (736.78). Colorless amorphous solid,  $[\alpha]_D^{25} = -135.7^\circ$  ( $c = 0.06$ ,  $CHCl_3$ ). **Pharm:** NO production inhibitor (LPS-activated macrophage-like J774.1 cells,  $IC_{50} = 23.0\mu\text{mol/L}$ ; control *L*-NMMA,  $IC_{50} = 26.0\mu\text{mol/L}$ , Polymixin B,  $IC_{50} = 27.8\mu\text{g/mL}$ , Dexamethasone  $IC_{50} = 170\mu\text{mol/L}$ ). **Source:** XIONG RUI ZHUANG ZHI GUAN CAO *Orthosiphon stamineus* [Syn: *Orthosiphon aristatus*; *Orthosiphon grandiflorus*; *Orthosiphon spicatus*] (aerial parts). **Ref:** 4322.

**19971 Siraitic acid A**

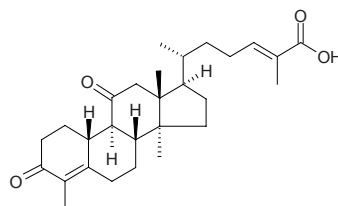
$C_{29}H_{44}O_5$  (472.67). White columnar crystals, mp 210–211°C,  $[\alpha]_D^{22} = +58.6^\circ$  ( $c = 0.50$ , EtOH). **Source:** LUO HAN GUO *Siraitia grosvenorii* [Syn: *Momordica grosvenorii*]. **Ref:** 495.

**19972 Siraitic acid B**

$C_{29}H_{42}O_5$  (470.66). White columnar crystals, mp 171–172°C,  $[\alpha]_D^{22} = +41.4^\circ$  ( $c = 0.50$ , EtOH). **Source:** LUO HAN GUO *Siraitia grosvenorii* [Syn: *Momordica grosvenorii*]. **Ref:** 495.

**19973 Siraitic acid C**

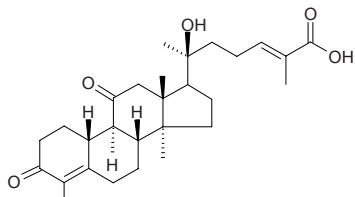
$C_{28}H_{40}O_4$  (440.63). White columnar crystals mp 217–218°C. **Source:** LUO HAN GUO *Siraitia grosvenorii* [Syn: *Momordica grosvenorii*]. **Ref:** 812.



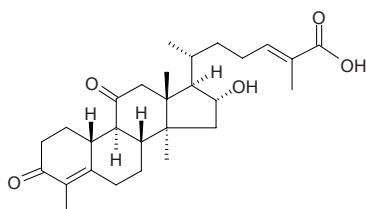


**19974 Siraitic acid D**

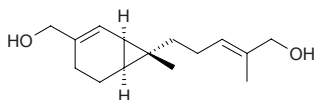
$C_{28}H_{40}O_5$  (456.63). White columnar crystals mp 194–195°C. Source: LUO HAN GUO *Siraitia grosvenorii* [Syn. *Momordica grosvenorii*]. Ref: 812.

**19975 Siraitic acid E**

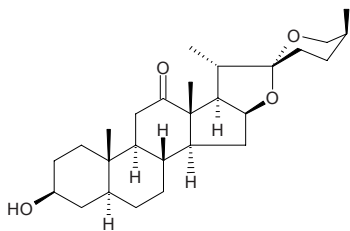
$C_{28}H_{40}O_5$  (456.63). White acicular crystals mp 246–248°C. Source: LUO HAN GUO *Siraitia grosvenorii* [Syn. *Momordica grosvenorii*]. Ref: 836.

**19976 Sirenin**

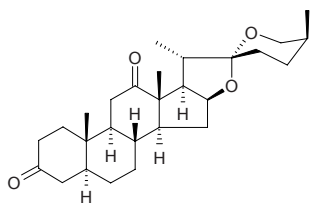
$C_{15}H_{24}O_2$  (236.36). Pharm: Alluring action (male gamete of Allomyces,  $1 \times 10^{-10}$  mol/L). Source: *Saprolegnia ferax*. Ref: 658.

**19977 Sisalagenin**

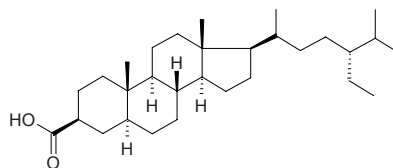
$C_{27}H_{42}O_4$  (430.63). Source: JIAN MA *Agave sisalana*. Ref: 10.

**19978 Sisalagenone**

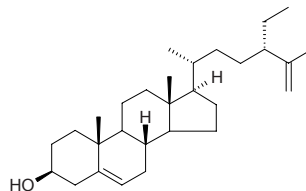
$C_{27}H_{40}O_4$  (428.62). Source: SHUI QIE *Solanum torvum*. Ref: 6.

**19979 Sitostanyl formate**

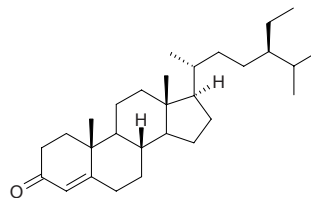
$C_{30}H_{52}O_2$  (444.75). mp 107°C,  $[\alpha]_D = +9.9^\circ$  ( $c = 0.3$ ,  $CHCl_3$ ). Source: BING YE SUO LUO *Yathea podophylla* (fresh frond). Ref: 4401.

**19980 5,25-Sitost-dienol**

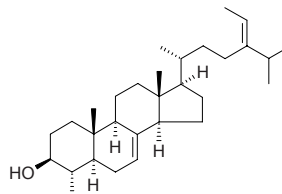
$C_{29}H_{48}O$  (412.71). Source: GUA LOU *Trichosanthes kirilowii*. Ref: 2.

**19981  $\beta$ -Sitostenone**

Stigmast-4-en-3-one  $C_{29}H_{48}O$  (412.71).  $[\alpha]_D^{25} = +83^\circ$  ( $c = 0.5$ ,  $CHCl_3$ ). Pharm: Cytotoxic ( $P_{388}$ ,  $ED_{50} = 20.14 \mu\text{g/mL}$ , control Mithramycin,  $ED_{50} = 0.58 \mu\text{g/mL}$ ; A549,  $ED_{50} > 50 \mu\text{g/mL}$ , Mithramycin,  $ED_{50} = 0.073 \mu\text{g/mL}$ ; HT29,  $ED_{50} > 50 \mu\text{g/mL}$ , Mithramycin,  $ED_{50} = 0.076 \mu\text{g/mL}$ )<sup>[5421]</sup>. Source: MIAN MAO MA DOU LING *Aristolochia mollissima* (dried root and stem: yield = 0.0019% dw), XIONG RUI ZHUANG SHU WEI CAO *Salvia staminea*, MO ZHI JIAO GU CUI *Casearia membranacea* (stem). Ref: 1521, 3026, 5400, 5421.

**19982  $\alpha_1$ -Sitosterol**

[474-40-8]  $C_{30}H_{50}O$  (426.73). mp 162–164°C. Source: AI QIE *Solanum demissum*, MA LING SHU *Solanum tuberosum*, WAN DOU *Pisum sativum*. Ref: 1521.

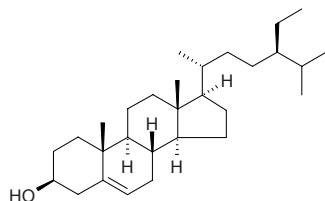


**19983  $\beta$ -Sitosterol**

(3 $\beta$ ,24R)Stigmast-5-en-3-ol [83-46-5] C<sub>29</sub>H<sub>50</sub>O (414.72). mp 136~137°C, [ $\alpha$ ]<sub>D</sub><sup>22</sup> = -35° (CHCl<sub>3</sub>), [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -36° (c = 1.0, C HCl<sub>3</sub>); [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -36.0° (c = 0.2, CHCl<sub>3</sub>). **Pharm:** Antineoplastic (mus Lewis lung cancer and adenocarcinoma 715, rat W<sub>256</sub>); antimutagenic (*E. coli* PQ37, antigenotoxicity test, for mutagen MNNG shows 45% reduction of induction factor, for mutagen NQO, shows 55% reduction of induction factor)<sup>[4459]</sup>; anti-inflammatory; antitussive (mus, cough induced by ammonia, orl, ED = 250mg/kg); antihypercholesterolemic (mus and jockos, reduces cholesterol); antifungal inactive (hmn pathogenic yeasts *Candida albicans*, *Candida glabrata* and *Candida tropicalis*); 12(S)-LOX inhibitor (hmn Platelets, 12(S)-HETE Production inhibitor, 100 $\mu$ g/mL, inhibitive rate = (25.0 $\pm$ 2.2)%, control Baicalein, IC<sub>50</sub> = 24.6 $\mu$ mol/L)<sup>[4980]</sup>; gastroprotective (30 mg/kg, Gp = (42.5 $\pm$ 7.5)%, control Carbenoxolone, Gp = (88.4 $\pm$ 5.4)%, *p*<0.05)<sup>[5461]</sup>; platelet aggregation inhibitor (washed rabbit platelets, 100 $\mu$ g/mL, 100 $\mu$ mol/L AA-induced, InRt = 18.6%, control 50 $\mu$ mol/L Aspirin, InRt = 100%; 10 $\mu$ g/mL collagen-induced, InRt = 8.4%, 100 $\mu$ mol/L Aspirin, InRt = 4.9%; 0.1U/mL Thrombin-induced, InRt = 16.3%, 100 $\mu$ mol/L Aspirin, InRt = 1.7%; 2ng/mL PAF-induced, InRt = 1.3%, 100 $\mu$ mol/L Aspirin, InRt = 2.1%)<sup>[5427]</sup>; platelet aggregation inhibitor (2~5mg/mL collagen-induced, IC<sub>50</sub> = (195 $\pm$ 8) $\mu$ mol/L, control ASA, IC<sub>50</sub> = (420 $\pm$ 3) $\mu$ mol/L; 1~4 $\mu$ mol/L epinephrine-induced with 0.8~1.0mg/mL collagen, IC<sub>50</sub> = (174 $\pm$ 8) $\mu$ mol/L, ASA, IC<sub>50</sub> = (53 $\pm$ 5) $\mu$ mol/L; 10~40 $\mu$ mol/L Sodium arachidonate-induced with 0.8~1.0mg/mL collagen, IC<sub>50</sub> = (145 $\pm$ 5) $\mu$ mol/L, ASA, IC<sub>50</sub> = (66.0 $\pm$ 2.1) $\mu$ mol/L; 1~5 $\mu$ mol/L PGH<sub>2</sub>/TXA<sub>2</sub> receptor agonist U46619-induced with 0.8~1.0mg/mL collagen, IC<sub>50</sub> = (170 $\pm$ 9) $\mu$ mol/L, ASA, IC<sub>50</sub> = (340 $\pm$ 12) $\mu$ mol/L)<sup>[4994]</sup>; cytotoxic (P<sub>388</sub>, ED<sub>50</sub> = 15.87 $\mu$ g/mL, control Mithramycin, ED<sub>50</sub> = 0.58 $\mu$ g/mL; A549, ED<sub>50</sub> > 50 $\mu$ g/mL, Mithramycin, ED<sub>50</sub> = 0.073 $\mu$ g/mL; HT29, ED<sub>50</sub> > 50 $\mu$ g/mL, Mithramycin, ED<sub>50</sub> = 0.076 $\mu$ g/mL)<sup>[5421]</sup>; cytotoxic (MCF7, IC<sub>50</sub> > 100 $\mu$ mol/L, control Adriamycin, IC<sub>50</sub> = (1.5 $\pm$ 0.2) $\mu$ mol/L; K562, IC<sub>50</sub> > 100 $\mu$ mol/L, Adriamycin, IC<sub>50</sub> = (0.07 $\pm$ 0.01) $\mu$ mol/L; Bowes, IC<sub>50</sub> = (36.5 $\pm$ 3.8) $\mu$ mol/L, Adriamycin, IC<sub>50</sub> = (0.45 $\pm$ 0.01) $\mu$ mol/L; T24S, IC<sub>50</sub> > 100 $\mu$ mol/L, Adriamycin, IC<sub>50</sub> = (5.8 $\pm$ 0.6) $\mu$ mol/L; A549, IC<sub>50</sub> > 100 $\mu$ mol/L, Adriamycin, IC<sub>50</sub> = (15.8 $\pm$ 6.7) $\mu$ mol/L)<sup>[5288]</sup>; cytotoxic inactive (*in vitro*, HONE-1 and NUGC cancer cell lines, no significant activity)<sup>[3069]</sup>; cytotoxic inactive (*in vitro*, LNCaP, IC<sub>50</sub> > 100 $\mu$ mol/L)<sup>[4607]</sup>; antitrypanosomal inactive (epimastigotes of *Trypanosoma cruzi*, 400 $\mu$ mol/L)<sup>[2579]</sup>; tyrosinase inhibitor (333 $\mu$ mol/L, InRt = 14.3%, control Kojic acid, IC<sub>50</sub> = 125 $\mu$ mol/L)<sup>[4722]</sup>; CYP3A4 inhibitor inactive (IC<sub>50</sub> > 100 $\mu$ mol/L, control Ketoconazole, IC<sub>50</sub> = 0.245 $\mu$ mol/L)<sup>[4669]</sup>; CYP2D6 inhibitor inactive (IC<sub>50</sub> > 100 $\mu$ mol/L, control Quinidine, IC<sub>50</sub> = 0.078 $\mu$ mol/L)<sup>[4669]</sup>. **Source:** AN ZI BEI MU *Fritillaria unibracteata*, BA DOU *Croton tiglium*, BA JI TIAN *Morinda officinalis* (root: content scope = 0.059%~0.062%)<sup>[5501]</sup>, BA QIA *Smilax china* [Syn. *Smilax japonica*] (tuberoid: mean content = 0.0050%)<sup>[5508]</sup>, BAI GUO *Ginkgo biloba*, BAI JIE ZI *Sinapis alba* [Syn. *Brassica alba*; *Brassica hirta*] (dried ripe seed: content = 0.03%)<sup>[5508]</sup>, BAI SHAO *Paeonia albiflora* [Syn. *Paeonia lactiflora*], BAN LAN GEN *Isatis indigotica*, BAN XIA *Pinellia ternata*, BEI JIA ER TANG SONG CAO *Thalictrum baicalense*, BEI MA DOU LING *Aristolochia contorta*, BEI MA DOU LING GEN *Aristolochia contorta*, CHAN SU *Bufo bufo gargarizans*; *Bufo melanostictus*, CHANG YE TIAN MING JING *Carpesium longifolium* (aerial parts: yield = 0.0036%dw)<sup>[4736]</sup>, CHAO XIAN LENG SHAN *Abies koreana* (root cortex), CHE QIAN *Plantago asiatica*, CHI SHAO *Paeonia lactiflora* wild, CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*], CHUAN XU DUAN

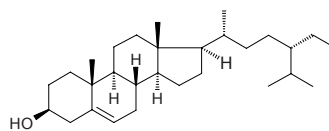
*Dipsacus asperoides*, CI WU JIA *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*], CI WU JIA YE *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*], CU LIU GUO *Hippophae rhamnoides*, DA CHE QIAN *Plantago major*, DA QING YE *Isatis indigotica*, DAN SHEN *Salvia miltiorrhiza*, DIAN HUANG QIN *Scutellaria amoena*, DIAN LONG DAN *Gentiana rigescens*, DIAN NAN HONG HOU KE *Calophyllum polyanthum* (seed: yield = 0.020%dw)<sup>[4767]</sup>, DONG BEI TIAN NAN XING *Arisaema amurense* (dried tuber: content = 0.25%)<sup>[5508]</sup>, DONG CHONG XIA CAO *Cordyceps sinensis*, DONG FANG WU TAN *Nauclea orientalis* (bark)<sup>[3074]</sup>, DONG FENG JU GEN *Atalantia buxifolia* [Syn. *Severinia buxifolia*] (root cortex)<sup>[3075]</sup>, DU ZHONG *Eucommia ulmoides*, FANG FENG *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*], FANG XIANG JIANG *Zingiber aromaticum* (rhizome: yield = 0.00025%dw)<sup>[4669]</sup>, GAN CAO *Glycyrrhiza uralensis*, GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], GE GEN *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*], GOU QI GEN PI *Lycium chinense*, GOU QI ZI *Lycium chinense*, GU SUI BU *Drynaria fortunei*, GUAN MU TONG *Aristolochia manshuriensis* (stem)<sup>[4706]</sup>, GUANG FANG JI *Aristolochia fangchi*, GUANG JING QIAN CAO *Rubia wallichiana* (stem), GUI ZHI *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*], HAI FENG TENG *Piper kadsura* [Syn. *Piper futokadsura*], HE SHOU WU *Polygonum multiflorum*, HEI DA DOU *Glycine max*, HONG HUA *Carthamus tinctorius*, HUA DONG LAN CI TOU *Echinops grijsii*, HUAI TONG *Aristolochia moupinensis*, HUANG BAI *Phellodendron amurense*, HUANG GAN CAO *Glycyrrhiza kansuensis*, HUANG HUA HAO *Artemisia annua*, HUANG QI *Astragalus membranaceus*, HUANG QI II *Engelhardia roxburghiana* (root), HUANG QIN *Scutellaria baicalensis*, HUI HUI SU *Perilla frutescens* var. *crispa*, HUO XIANG *Agastache rugosus*, HUO YAN HUA *Phlogacanthus curviflorus* (root: yield = 0.0062%dw)<sup>[4799]</sup>, JIAN YE TOU WU GEN *Ligularia sagitta*, JIAN ZI SU YE *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*], JIN YIN HUA *Lonicera japonica*, JU PI *Citrus reticulata*, KAI KOU JIAN *Tupistra chinensis* (underground part)<sup>[4676]</sup>, LANG DANG ZI *Hyoscyamus niger* (seed: yield = 0.00024%dw)<sup>[4607]</sup>, LI MENG PI *Citrus limonia*, LIU QIU SHE GEN CAO *Ophiorrhiza liukuensis* (whole herb), LIU SU SHI HU *Dendrobium fimbriatum* var. *oculatum*, LONG XUE SHU *Dracaena draco* (stem cortex)<sup>[4696]</sup>, LU SHAN SHI WEI *Pyrrhosia sheareri*, MA TI YE *Caltha palustris*, MAN JING ZI *Vitex trifolia*, MANG QI GU *Dicranopteris pedata* [Syn. *Polypodium pedatum*; *Dicranopteris dichotoma*], MENG GU HUANG QI *Astragalus mongholicus*, MIAN MAO MA DOU LING *Aristolochia mollissima* (dried root and stem: yield = 0.012%dw)<sup>[3026]</sup>, MO ZHI JIAO GU CUI *Casearia membranacea* (stem), MU JIN PI *Hibiscus syriacus*, MU TONG *Akebia quinata*, MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*], OU ZHOU CI BAI *Juniperus communis* (wood), PI PA YE *Eriobotrya japonica* (stem and leaf)<sup>[3061]</sup>, PU HUANG *Typha angustata*, QIANG HUO *Notopterygium incisum*, QIANG XIANG *Celosia argentea* (seed), QING FENG TENG *Sinomenium acutum*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], RI BEN HUANG BAI *Phellodendron japonicum* (leaf), RI BEN LU TI CAO *Pyrola japonica*, ROU CONG RONG *Cistanche deserticola*, SAI ER WEI YA SHI CAO *Achillea alexandri-regis*, SAN LENG *Sparganium stoloniferum* (tuber: content = 0.0353%)<sup>[5508]</sup>, SAN QI CAO *Gynura segetum* [Syn. *Gynura japonica*] (rhizome), SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*], SHAN YAO *Dioscorea batatas* [Syn. *Dioscorea opposita*],

SHENG DI HONG JING TIAN *Rhodiola sacra*, SHI WEI *Pyrrosia lingua*, SHOU LIAN LIANG YI MU *Amphipterygium adstringens* (stem cortex), SI CHI SI LENG CAO *Schnabelia tetradonta* (aerial parts: yield = 0.0012%<sub>dw</sub>)<sup>[4665]</sup>, TAI WAN FU RONG *Hibiscus taiwanensis*, TAI WAN GE NA XIANG *Goniothalamus amuyon* (fresh bustem and leaf)<sup>[4686]</sup>, TAI WAN HUANG BO *Phellodendron amurense* var. *wilsonii* (leaf: yield = 0.0016%<sub>dw</sub>)<sup>[4722]</sup>, TAI WAN JIN GU CAO *Ajuga taiwanensis* (whole herb), TAI WAN PU GONG YING *Taraxacum formosanum* (fresh root), TAI WAN XIU XIAN JU *Spiraea formosana*, TIAN MA *Gastrodia elata*, TIAN NAN XING *Arisaema consanguineum* (dried tuber: content scope of 3 origins = 0.11%–0.13%, mean content = 0.12%<sup>[5508]</sup>), TU YE HUANG PI SHU *Phellodendron chinense* var. *glabriusculum*, WU GENG WU JIA PI *Acanthopanax sessiliflorus*, WU GENG WU JIA PI *Acanthopanax sessiliflorus* (fruit), WU JIA PI *Acanthopanax gracilistylus*, XIA YE XIANG PU *Typha angustifolia*, XIAN GENG XI XIAN *Siegesbeckia orientalis* var. *pubescens* [Syn. *Siegesbeckia pubescens*], XIAN HE CAO *Agrimonia pilosa* var. *japonica*, XIAO HONG SHEN *Rubia yunnanensis* (root)<sup>[4646]</sup>, XIAO MAI *Triticum aestivum* [Syn. *Triticum vulgare*], XIAO QIAO MU ZI JIN NIU *Ardisia arborescens* (whole herb)<sup>[4769]</sup>, XIAO YE GUAN ZHONG *Matteuccia struthiopteris*, XIN JIANG LAN CI TOU *Echinops ritro*, XING AN SHENG MA *Cimicifuga dahurica*, XIONG RUI ZHUANG SHU WEI CAO *Salvia staminea*, XUAN SHEN *Scrophularia ningpoensis*, YANG MEI SHU PI *Myrica rubra* (bark: yield = 0.0036%), YAO YONG PU GONG YING *Taraxacum officinale*, YE ZI RANG *Cocos nucifera*, YI LANG QING LAN *Dracocephalum kotschyi*, YI YE TIAN NAN XING *Arisaema heterophyllum*, YI ZHU QIAN MA *Urtica dioica*, YIN CHEN HAO *Artemisia capillaris*, YING HE *Scleropyrum wallichianum* (twig), YU SHU SHU *Zea mays*, YU XING CAO *Houttuynia cordata*, YUN NAN GAN CAO *Glycyrrhiza yunnanensis*, YUN NAN SUI HUA SHAN *Amentotaxus yunnanensis* (twig and leaf: yield = 0.0005%<sub>dw</sub>)<sup>[4707]</sup>, ZAN BI XI BA DOU *Croton zambesicus* (leaf), ZAO JIA CI *Gleditsia sinensis* [Syn. *Gleditsia horrida*] (thorn), ZHAI YE BAN FENG HE *Pterospermum lanceaefolium*, ZHANG GUO GAN CAO *Glycyrrhiza inflata*, ZHANG YE BAN XIA *Pinellia pedatisecta* (dried tuber: content = 0.15%<sup>[5508]</sup>), ZHI ZI *Gardenia jasminoides* [Syn. *Gardenia florida*], ZHONG GUO XIU QIU *Hydrangea chinensis* (root)<sup>[3069]</sup>, ZI SU YE *Perilla frutescens* var. *arguta*, *Juliania adstringens* (bark), occurs in many plants (the commonest sterol of higher plants). Ref: 2, 4, 377, 519, 658, 660, 1521, 2529, 2545, 2575, 2576, 2579, 3026, 3061, 3069, 3074, 3075, 3786, 3807, 3854, 4163, 4369, 4459, 4483, 4488, 4502, 4520, 4527, 4607, 4646, 4665, 4669, 4676, 4686, 4696, 4706, 4707, 4722, 4736, 4767, 4769, 4799, 4980, 4994, 5059, 5288, 5382, 5400, 5421, 5427, 5461, 5501, 5508.



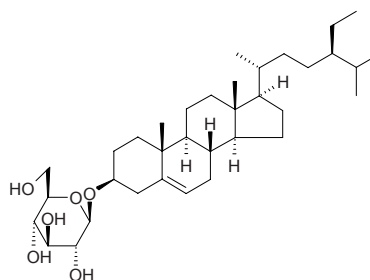
#### 19984 $\gamma$ -Sitosterol

(3 $\beta$ ,24S)Stigmast-5-en-3-ol C<sub>29</sub>H<sub>50</sub>O (414.72). mp 147~148°C, [ $\alpha$ ]<sub>D</sub><sup>23</sup> = -47.7° (CHCl<sub>3</sub>). Source: BAN LAN GEN *Isatis indigotica*, DA QING YE *Isatis indigotica*, LI MENG PI *Citrus limonia*, LU BIAN QING *Clerodendron cyrtophyllum*, YUN QIAN HU *Peucedanum rubricaulae*. Ref: 2, 177, 660, 1521.



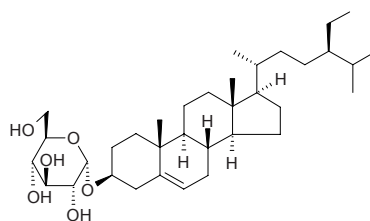
#### 19985 $\beta$ -Sitosterol-3-O- $\beta$ -D-glucoside

$\beta$ -Sitosteryl 3-O- $\beta$ -D-glucoside C<sub>35</sub>H<sub>60</sub>O<sub>6</sub> (576.86). mp 135~136°C, [ $\alpha$ ]<sub>D</sub><sup>23</sup> = +40.2° (c = 0.85, pyridine). Pharm: Antibacterial (oral pathogens: *Streptococcus mutans*, MIC > 500  $\mu$ g/mL, control Chlorhexidine gluconate, MIC = 1.25  $\mu$ g/mL; *Fusobacterium nucleatum*, MIC > 500  $\mu$ g/mL, Chlorhexidine gluconate, MIC = 2.5  $\mu$ g/mL)<sup>[5418]</sup>; cytotoxic (P<sub>388</sub>, ED<sub>50</sub> = 6.12  $\mu$ g/mL, control Mithramycin, ED<sub>50</sub> = 0.58  $\mu$ g/mL; A549, ED<sub>50</sub> > 50  $\mu$ g/mL, Mithramycin, ED<sub>50</sub> = 0.073  $\mu$ g/mL; HT29, ED<sub>50</sub> = 26.55  $\mu$ g/mL, Mithramycin, ED<sub>50</sub> = 0.076  $\mu$ g/mL)<sup>[5421]</sup>. Source: BAI MAO GEN<sup>(4)</sup> *Hydrastis canadensis* (root), MO ZHI JIAO GU CUI *Casearia membranacea* (stem). Ref: 5418, 5421.



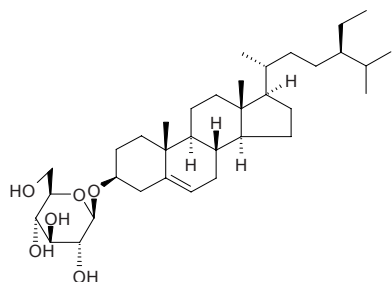
#### 19986 $\beta$ -Sitosterol- $\alpha$ -D-glucoside

C<sub>35</sub>H<sub>60</sub>O<sub>6</sub> (576.86). mp 300~302°C. Source: CHUAN CHI SHAO *Paeonia veitchii*. Ref: 448.

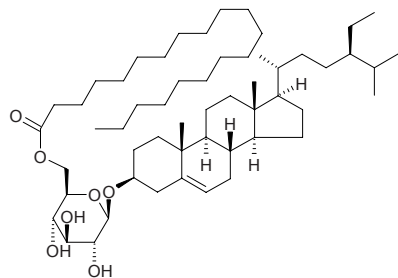


**19987  $\beta$ -Sitosterol- $\beta$ -D-glucoside**

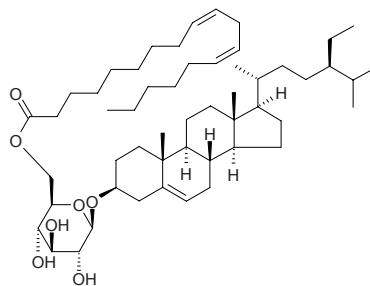
3-*O*- $\beta$ -D-Glycopyranosylsitosterol C<sub>35</sub>H<sub>60</sub>O<sub>6</sub> (576.86). White powder; mp 283~286°C (dec),  $[\alpha]_D^{25} = -51^\circ$  ( $c = 1.0$ , MeOH). **Pharm:** Cytotoxic inactive (*in vitro*, HONE-1 and NUGC cancer cell lines, no significant activity)<sup>[3069]</sup>; CYP3A4 inhibitor inactive (IC<sub>50</sub> > 100 $\mu$ mol/L, control Ketoconazole IC<sub>50</sub> = 0.24 $\mu$ mol/L)<sup>[4449]</sup>; CYP2D6 inhibitor inactive (IC<sub>50</sub> > 100 $\mu$ mol/L, control Quinidine IC<sub>50</sub> = 0.068 $\mu$ mol/L)<sup>[4449]</sup>. **Source:** DUN XING BAI YE TENG *Cryptolepis obtusa* (root), BAN XIA *Pinellia ternata*, CHAO XIAN LENG SHAN *Abies koreana* (root cortex), CHUAN XIN LIAN *Andrographis paniculata* [Syn. *Justicia paniculata*], DONG FANG GOU JI *Woodwardia orientalis*, DONG FANG WU TAN *Nauclaea orientalis* (bark)<sup>[3074]</sup>, FANG XIANG JIANG *Zingiber aromaticum* (rhizome), GOU QI YE *Lycium chinense*, GUAN MU TONG *Aristolochia manshuriensis* (stem: yield = 0.0027%)<sup>[4706]</sup>, HONG SAN QI *Polygonum suffutum*, HUANG HUA BAI JIANG *Patrinia scabiosaefolia*, HUANG KUI *Abelmoschus moschatus* [Syn. *Hibiscus abelmoschus*], JIN YIN HUA *Lonicera japonica*, KAI KOU JIAN *Tupistra chinensis* (underground part)<sup>[4676]</sup>, KU GUA *Momordica charantia*, LI MU *Lyonia ovalifolia*, MAN JING ZI *Vitex trifolia*, MANG QI GU *Dicranopteris pedata* [Syn. *Polypodium pedatum*; *Dicranopteris dichotoma*], MU TONG *Akebia quinata*, MU TONG GEN *Akebia quinata*, PI JIU HUA *Humulus lupulus* (strobile)<sup>[4789]</sup>, SAN QI HUA LEI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*] (flower bud: yield = 0.0035%dw)<sup>[4702]</sup>, SANG YE *Morus alba*, SHUI QIE *Solanum torvum*, TAI WAN FU RONG *Hibiscus taiwanensis*, TAI WAN JIN GU CAO *Ajuga taiwanensis* (whole herb), WU SE MEI *Lantana camara* (aerial parts), XIANG JIA PI *Periploca sepium*, XIONG RUI ZHUANG SHU WEI CAO *Salvia staminea*, YA PIAN *Papaver somniferum*, YU BAI FU *Typhonium giganteum*, YUAN CAN SHA *Bombyx mori*, YUN NAN CAO KOU *Alpinia blepharocalyx* (seed: yield = 0.00023%<sup>[3042]</sup>; yield = 0.000050%dw<sup>[3048]</sup>), ZHANG LIU TOU *Costus speciosus*, ZHONG GUO XIU QIU *Hydrangea chinensis* (root)<sup>[3069]</sup>, *Nuxia sphaerocephala* (leaf), occurs in many plants. **Ref:** 6, 377, 535, 562, 660, 2529, 3042, 3048, 3069, 3074, 3854, 3920, 4309, 4419, 4449, 4483, 4676, 4702, 4706, 4789, 5400.

**19988  $\beta$ -Sitosterol-3-*O*- $\beta$ -D-glucoside-6'-*O*-eicosanate**

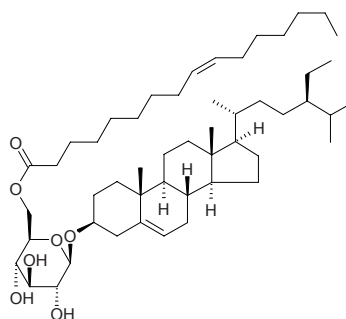
C<sub>55</sub>H<sub>98</sub>O<sub>7</sub> (871.39). White crystals, mp 121~123°C. **Source:** SHENG TENG *Stelmatocrypton khasianum*. **Ref:** 2157.

**19989  $\beta$ -Sitosterol-3-(6-linoleoyl)glucopyranoside**

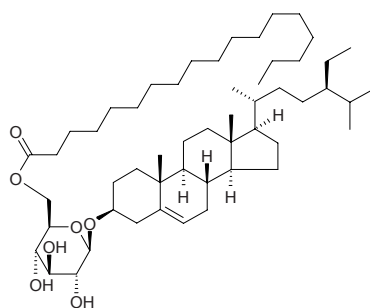
C<sub>53</sub>H<sub>90</sub>O<sub>7</sub> (839.30). **Source:** REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. **Ref:** 660.

**19990  $\beta$ -Sitosterol-3-(6-palmitoleoyl)glucopyranoside**

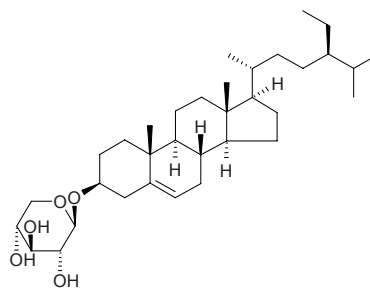
C<sub>51</sub>H<sub>88</sub>O<sub>7</sub> (813.27). **Source:** REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. **Ref:** 660.

**19991  $\beta$ -Sitosterol-3-(6-stearoyl)glucopyranoside**

C<sub>53</sub>H<sub>94</sub>O<sub>7</sub> (843.34). **Source:** REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. **Ref:** 660.

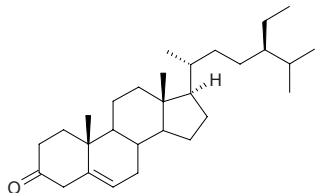
**19992  $\beta$ -Sitosterol-3-*O*- $\beta$ -D-xylopyranoside**

C<sub>34</sub>H<sub>58</sub>O<sub>5</sub> (546.84). Colorless acicular crystals (methanol), mp 285~287°C,  $[\alpha]_D = -55.2^\circ$  ( $c = 0.39$ , pyridine). **Source:** NAN FANG TU SI ZI *Cuscuta australis*. **Ref:** 468.

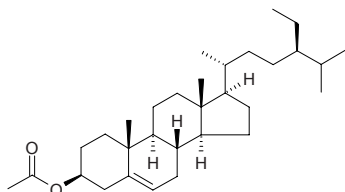


**19993  $\beta$ -Sitosterone**

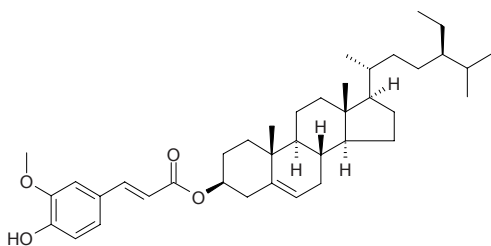
Stigmast-5-en-3-one;  $\Delta^5$ -Sitosterol-3-one C<sub>29</sub>H<sub>48</sub>O (412.71). Needles (MeOH-Et<sub>2</sub>O), mp 94°C,  $[\alpha]_D^{27} = +80.3^\circ$  ( $c = 0.4$ , CHCl<sub>3</sub>). **Pharm:** Platelet aggregation inhibitor (washed rabbit platelets, 100 $\mu$ g/mL, 100 $\mu$ mol/L AA-induced, AggRt = 2.4%, control 50 $\mu$ mol/L Aspirin, AggRt = 100%; 10 $\mu$ g/mL collagen-induced, AggRt = 4.6%, 100 $\mu$ mol/L Aspirin, AggRt = 4.9%; 0.1U/mL thrombin-induced, AggRt = 4.9%, 100 $\mu$ mol/L Aspirin, AggRt = 1.7%; 2ng/mL PAF-induced, AggRt = 2.4%, 100 $\mu$ mol/L Aspirin, AggRt = 2.1%)<sup>[5427]</sup>. **Source:** SAN QI CAO *Gynura segetum* [Syn. *Gynura japonica*] (rhizome), occurs in many plants. **Ref:** 1521, 5427.

**19994  $\beta$ -Sitoseryl acetate**

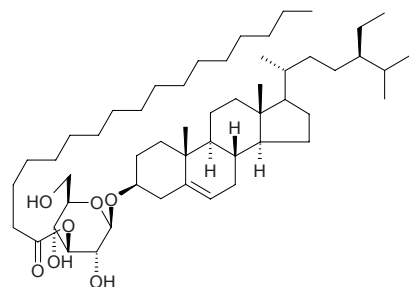
C<sub>31</sub>H<sub>52</sub>O<sub>2</sub> (456.76). mp 134°C. **Source:** QIAO MU ZI ZHU *Callicarpa arborea*. **Ref:** 6.

**19995  $\beta$ -Sitoseryl ferulate**

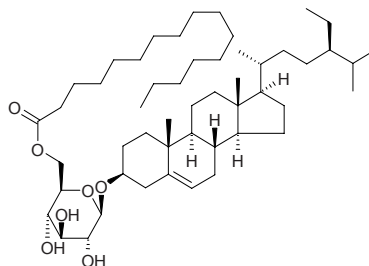
C<sub>39</sub>H<sub>58</sub>O<sub>4</sub> (590.89). mp 131.0~131.5°C. **Source:** MI PI KANG *Oryza sativa*. **Ref:** 6.

**19996  $\beta$ -Sitoseryl glucoside 3'-O-heptadecoate**

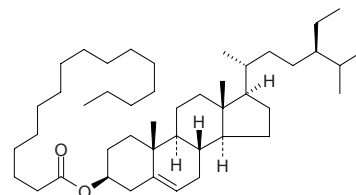
C<sub>52</sub>H<sub>92</sub>O<sub>7</sub> (829.31). **Source:** ROU CONG RONG *Cistanche deserticola*. **Ref:** 2448.

**19997  $\beta$ -Sitoseryl-D-glucoside-6'-palmitate**

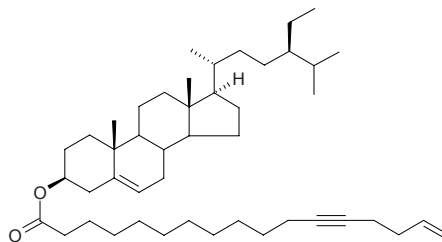
6'-O-Palmityl-sitoseryl-3-O- $\beta$ -D-glucoside, Stoindoside I C<sub>51</sub>H<sub>90</sub>O<sub>7</sub> (815.28).  $[\alpha]_D^{21} = -43^\circ$  ( $c = 1.70$ , CHCl<sub>3</sub>). **Pharm:** Antiemetic (young male chicks, copper sulfate induced emesis assay, 50mg/kg, InRt = 50.9%,  $p < 0.001$ )<sup>[4649]</sup>. **Source:** GAO LIANG JIANG *Alpinia officinarum* (rhizome: yield = 0.00087%dw), LONG XUE SHU *Dracaena draco* (stem cortex), DONG FANG GOU JI *Woodwardia orientalis*, YA PIAN *Papaver somniferum*, YI ZHU QIAN MA *Urtica dioica*, GE BI TIAN MEN *Asparagus gobicus* (root). **Ref:** 6, 2989, 4649, 4696, 4975.

**19998  $\beta$ -Sitoseryl palmitate**

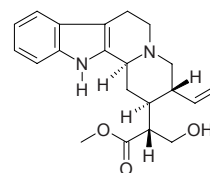
C<sub>45</sub>H<sub>80</sub>O<sub>2</sub> (653.14). mp 89°C. **Source:** PU HUANG *Typha angustata*, XIA YE XIANG PU *Typha angustifolia*. **Ref:** 2, 660.

**19999  $\beta$ -Sitoseryl-3-O-scleropyrate**

C<sub>46</sub>H<sub>76</sub>O<sub>2</sub> (661.12). Amorphous. **Pharm:** Antitubercular inactive (*Mycobacterium tuberculosis* H<sub>37</sub>Ra); antiplasmodial inactive (parasite *Plasmodium falciparum* K1 multidrug-resistant strain). **Source:** YING HE *Scleropyrum wallichianum* (twig). **Ref:** 4520.

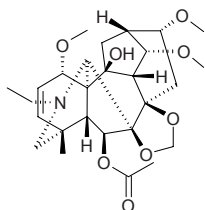
**20000 Sitsirikine**

[1245-00-7] C<sub>21</sub>H<sub>26</sub>N<sub>2</sub>O<sub>3</sub> (354.45). mp 206~208°C. **Source:** CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochera rosea*]. **Ref:** 2.

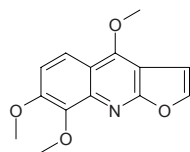


**20001 Siwanine A**

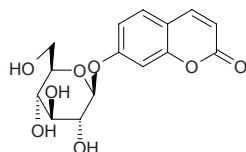
$C_{27}H_{39}NO_8$  (505.61). White amorphous powder. Source: QIN LING CUI QUE HUA *Delphinium giraldii*. Ref: 2506.

**20002 Skimmianine**

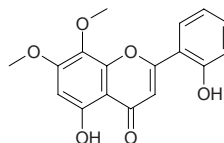
$C_{14}H_{13}NO_4$  (259.26). mp 176°C, Note: commonly in family *Rutaceae*. Pharm: Analgesic; anticonvulsant; antipyretic; CNS depressant; phototoxic (*Saccharomyces cerevisiae*, *Candida albicans*); photo-activated antibacterial (*Staphylococcus aureus*)<sup>[4989]</sup>; photo-activated antifungal (*Candida albicans* weak)<sup>[4989]</sup>; photo-activated DNA binding (restriction enzymes Xba I, Bci V I, Sal I, Pst I, Sph I and Hind III)<sup>[4989]</sup>; cytotoxic (P<sub>388</sub> cell line, ED<sub>50</sub> = 2.5 µg/mL, control Mithramycin, ED<sub>50</sub> = 0.06 µg/mL; HT29, ED<sub>50</sub> = 7.2 µg/mL, Mithramycin, ED<sub>50</sub> = 0.07 µg/mL; A549, ED<sub>50</sub> = 0.12 µg/mL, Mithramycin, ED<sub>50</sub> = 0.08 µg/mL)<sup>[5405]</sup>; LD<sub>50</sub> (mus, ip) = 150–250 mg/kg. Source: BAI SE BAI XIAN *Dictamnus albus*, BAI XIAN PI *Dictamnus dasycarpus*, CHOU CAO *Ruta graveolens*, CHOU SHAN YANG *Orixa japonica* (stem: yield = 0.00061% dw)<sup>[4774]</sup>, CHU YE HUA JIAO PI *Zanthoxylum ailanthoides*, FEI LONG ZHANG XUE *Toddalia asiatica* [Syn. *Toddalia aculeata*; *Paullinia asiatica*], GOU JU *Poncirus trifoliata*, HUA JIAO GEN *Zanthoxylum bungeanum*, HUA JIAO *Zanthoxylum bungeanum* (dried ripe pericarp: content scope = 0.0025%–0.0071%<sup>[5501]</sup>, content = 0.005%<sup>[5508]</sup>), JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*], QING JIAO *Zanthoxylum schinifolium* (dried ripe pericarp: content scope = 0.0251%–0.0471%<sup>[5501]</sup>, content = 0.045%<sup>[5508]</sup>), SI ROU TUO GUO YE MI ZHU YU *Melicope semecarpifolia*, XIANG YIN YU *Skimmia japonica*, YIN YU *Skimmia reevesiana*, ZHU YE JIAO GEN *Zanthoxylum planispinum*, *Sarcomelicope glauca*. Ref: 6, 11, 658, 4774, 4989, 5405, 5501, 5508.

**20003 Skimmin**

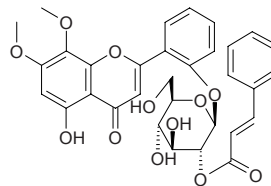
Umbelliferone 7-*O*-β-*D*-glucopyranoside  $C_{15}H_{16}O_8$  (324.29). Amorphous powder,  $[\alpha]_D^{24} = -48^\circ$ , mp 219–221°C; mp 219–221°C. Source: BEI SHA SHEN *Glehnia littoralis* (fruit), CONG ZHU XUE LIAN *Saussurea tridactyla* var. *maidugonla*, GUANG RONG YIN YU *Skimmia laureola*, SANG YE *Morus alba* (leaf: yield = 0.0013%<sup>[3507]</sup>), YIN YU *Skimmia reevesiana*, XIANG YIN YU *Skimmia japonica* (the compound was isolated from the plant by J.F.Eykman in 1844)<sup>[5505]</sup>, XIANG YIN YU *Skimmia japonica* (leaf), *Morus* sp. Ref: 6, 660, 1521, 2513, 3507, 3525, 5055.

**20004 Skullcapflavone I**

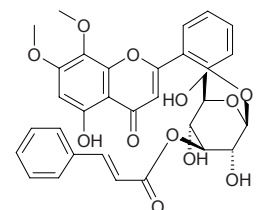
Panicolin [41060-16-6]  $C_{17}H_{14}O_6$  (314.30). Source: CHUAN XIN LIAN *Andrographis paniculata* [Syn. *Justicia paniculata*], HUANG QIN *Scutellaria baicalensis*, SHEN CHANG CHUAN XIN LIAN *Andrographis elongata* (whole herb). Ref: 2, 4149.

**20005 Skullcapflavone I 2'-*O*-β-*D*-(2''-*E*-cinnamoyl)glucopyranoside**

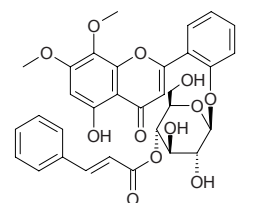
$C_{32}H_{30}O_{12}$  (606.59). Yellow amorphous powder (MeOH), mp 196–197°C,  $[\alpha]_D^{25} = -0.15^\circ$  ( $c = 4.0$ , MeOH). Source: BAI LI XIANG YE CHUN XIN LIAN *Andrographis serpyllifolia*. Ref: 2354.

**20006 Skullcapflavone I 2'-*O*-β-*D*-(3''-*E*-cinnamoyl)glucopyranoside**

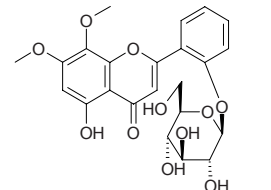
$C_{32}H_{30}O_{12}$  (606.59). Yellow amorphous powder (MeOH), mp 236–237°C,  $[\alpha]_D^{25} = -0.09^\circ$  ( $c = 5.0$ , MeOH). Source: BAI LI XIANG YE CHUN XIN LIAN *Andrographis serpyllifolia*. Ref: 2354.

**20007 Skullcapflavone I 2'-*O*-β-*D*-(4''-*E*-cinnamyl)glucopyranoside**

$C_{32}H_{30}O_{12}$  (606.59). Yellow amorphous powder, mp 247–249°C (MeOH),  $[\alpha]_D^{25} = -12.0^\circ$  ( $c = 4.0$ , MeOH). Source: SHEN CHANG CHUAN XIN LIAN *Andrographis elongata* (whole herb). Ref: 4149.

**20008 Skullcapflavone I 2'-*O*-β-*D*-glucopyranoside**

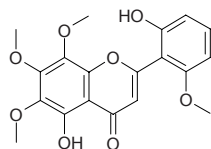
$C_{23}H_{24}O_{11}$  (476.44). Source: SHEN CHANG CHUAN XIN LIAN *Andrographis elongata* (whole herb). Ref: 4149.



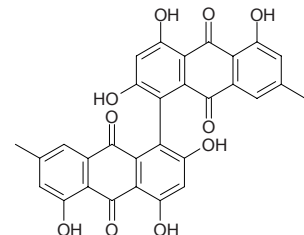


**20009 Skullcapflavone II**

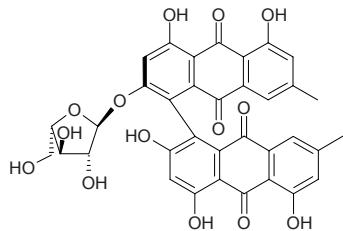
5,2'-Dihydroxy-6,7,8,6'-tetamethoxyflavone [55084-08-7]  $C_{19}H_{18}O_8$  (374.35). Yellow pillar crystals, mp 180–181°C; yellow lamellar crystals (methanol), mp 194–196°C. **Pharm:** Antineoplastic (ICR mus S<sub>180</sub>, biotic prolonged rate = 172%); antithrombotic (1.0mmol/L, inhibits platelet aggregation due to collagen, InRt = 32.5%); bradykinin antagonist; cytotoxic (*in vitro*, L<sub>1210</sub> ED<sub>50</sub> = 1.5µg/mL); antihistamine (inhibits histamine release, *in vitro*, rat peritoneal giant cells, IC<sub>50</sub> = 15.0µmol/L); trypsin inhibitor (IC<sub>50</sub> = 18µmol/L); cytotoxic (LXFL529L hmn large cell lung carcinoma cell line and HL-60, inhibits cell growth at a micromolar range)<sup>[5369]</sup>; tyrosine kinase inhibitor (tyrosine kinase of EGFR, IC<sub>50</sub> > 60µmol/L)<sup>[5369]</sup>. **Source:** DIAN HUANG QIN *Scutellaria amoena*, HUANG QIN *Scutellaria baicalensis* (dried root: mean content = 0.055%<sup>[5508]</sup>), NIAN MAO HUANG QIN *Scutellaria viscidula*. **Ref:** 2, 658, 660, 900, 5369, 5508.

**20010 Skyrin**

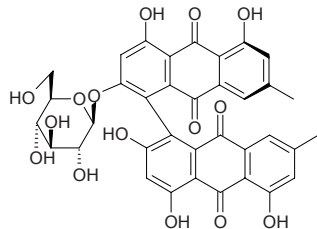
$C_{30}H_{18}O_{10}$  (538.47). **Pharm:** Cytotoxic (*in vitro*, Calu1, IC<sub>50</sub> = (14.3±2.5)µmol/L; HeLa, IC<sub>50</sub> = (11.3±3.5)µmol/L; K562, IC<sub>50</sub> = (27.3±5.0)µmol/L; Raji, IC<sub>50</sub> = (12.3±4.1)µmol/L; Vero, IC<sub>50</sub> = (18.3±2.6)µmol/L; Wish, IC<sub>50</sub> = (21.3±3.2)µmol/L, 1,3,8-trihydroxy for anthraquinone plays a significant role in the cytotoxic activity). **Source:** YI HE GUO *Ventilago leiocarpa* (stem). **Ref:** 3057.

**20011 S-(+)-Skyrin-6-O-α-arabinofuranoside**

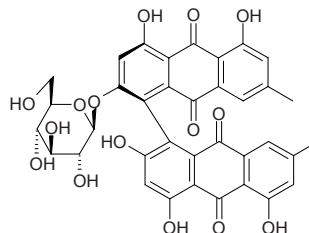
$C_{35}H_{26}O_{14}$  (670.59). Red-orange amorphous powder. **Source:** GUAN YE LIAN QIAO *Hypericum perforatum* (aerial parts). **Ref:** 5119.

**20012 R(-)-Skyrin-6-O-β-glucopyranoside**

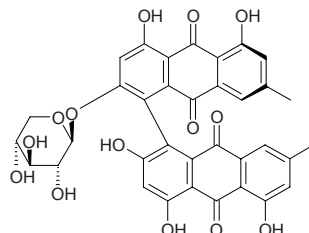
$C_{36}H_{28}O_{15}$  (700.62). Red-orange amorphous powder, mp > 300°C. **Pharm:** Inhibits [<sup>125</sup>I]sauvagine binding to CRH-1 receptor (IC<sub>50</sub> = 4µmol/L). **Source:** GUAN YE LIAN QIAO *Hypericum perforatum* (aerial parts). **Ref:** 5119.

**20013 S-(+)-Skyrin-6-O-β-glucopyranoside**

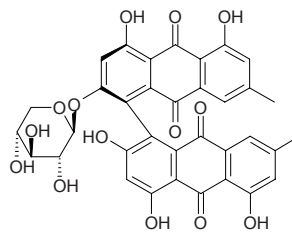
$C_{36}H_{28}O_{15}$  (700.62). Red-orange amorphous powder, mp > 300°C. **Pharm:** Inhibits [<sup>125</sup>I]sauvagine binding to CRH-1 receptor (IC<sub>50</sub> = 1µmol/L). **Source:** GUAN YE LIAN QIAO *Hypericum perforatum* (aerial parts). **Ref:** 5119.

**20014 R(-)-Skyrin-6-O-β-D-xylopyranoside**

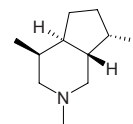
$C_{35}H_{26}O_{14}$  (670.59). Orange-red amorphous powder. **Source:** YUAN BAO CAO *Hypericum sampsonii* (whole herb). **Ref:** 4055.

**20015 S-(+)-Skyrin-6-O-β-D-xylopyranoside**

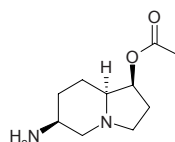
$C_{35}H_{26}O_{14}$  (670.59). Red-orange amorphous powder. **Source:** GUAN YE LIAN QIAO *Hypericum perforatum* (aerial parts). **Ref:** 5119.

**20016 β-Skytanthine**

$C_{11}H_{21}N$  (167.30). **Pharm:** Low toxin; tremorigenic agent. **Source:** family Asteraceae spp. **Ref:** 658.

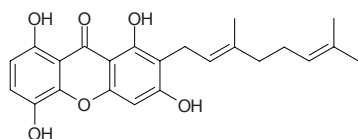
**20017 Slaframine**

$C_{10}H_{18}N_2O_2$  (198.27). **Pharm:** Parasympathomimetic. **Source:** SAN XIAO CAO *Trifolium repens*. **Ref:** 658

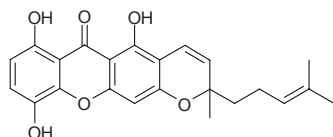


**20018 Smeathxanthone A**

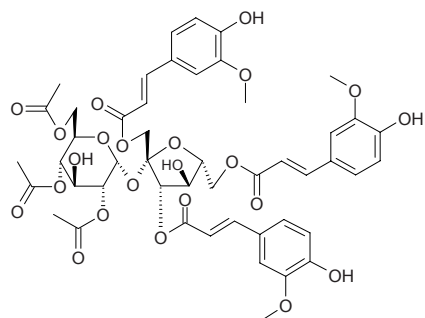
2-(3,7-Dimethyl-2,6-octadienyl)-1,3,5,8-tetrahydroxyxanthone  $C_{23}H_{24}O_6$  (396.44). Yellow crystals, mp 216~218°C. **Pharm:** Antibacterial (*In vitro*, *Escherichia coli*, MIC = 156.25µg/mL, Gentamicin/Nystatin, MIC = 10µg/mL; *Klebsiella pneumoniae*, MIC = 312.5µg/mL, Gentamicin/Nystatin, MIC = 10µg/mL; *Proteus vulgaris*, MIC = 312.5µg/mL, Gentamicin/Nystatin, MIC = 5µg/mL; *Salmonella typhimurium*, MIC = 156.25µg/mL, Gentamicin/Nystatin, MIC = 5µg/mL; *Staphylococcus aureus*, MIC = 312.5µg/mL, Gentamicin/Nystatin, MIC = 10µg/mL; *Streptococcus faecalis*, MIC = 156.25µg/mL, Gentamicin/Nystatin, MIC = 10µg/mL); antifungal (*Candida albicans*, MIC = 312.5µg/mL, Gentamicin/Nystatin, MIC = 30µg/mL; *Candida krusei*, MIC = 312.5µg/mL, Gentamicin/Nystatin, MIC = 30µg/mL). **Source:** *Garcinia smeathmannii* (stem cortex). **Ref:** 5310.

**20019 Smeathxanthone B**

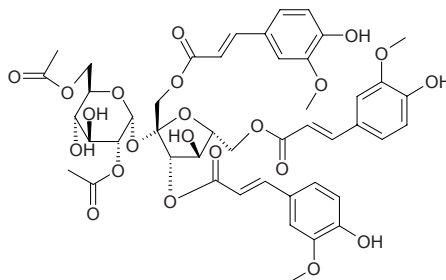
5,7,10-Trihydroxy-2-methyl-2-(4-methylpent-3-enyl)[2*H*,6*H*]pyran[3,2-*b*]xanthen-6-one  $C_{23}H_{22}O_6$  (394.43). Yellow crystals, mp 187~189°C,  $[\alpha]_D^{22} = +30.3^\circ$  ( $c = 0.02$ , MeOH). **Pharm:** Antibacterial (*In vitro*, *Escherichia coli*, MIC = 625µg/mL, Gentamicin/Nystatin, MIC = 10µg/mL; *Klebsiella pneumoniae*, MIC = 625µg/mL, Gentamicin/Nystatin, MIC = 10µg/mL; *Proteus vulgaris*, MIC = 312.5µg/mL, Gentamicin/Nystatin, MIC = 5µg/mL; *Salmonella typhimurium*, MIC = 625µg/mL, Gentamicin/Nystatin, MIC = 5µg/mL; *Staphylococcus aureus*, MIC = 312.5µg/mL, Gentamicin/Nystatin, MIC = 10µg/mL; *Streptococcus faecalis*, MIC = 625µg/mL, Gentamicin/Nystatin, MIC = 10µg/mL); antifungal (*Candida albicans*, MIC = 312.5µg/mL, Gentamicin/Nystatin, MIC = 30µg/mL; *Candida krusei*, MIC = 312.5µg/mL, Gentamicin/Nystatin, MIC = 30µg/mL). **Source:** *Garcinia smeathmannii* (stem cortex). **Ref:** 5310.

**20020 Smiglaside A**

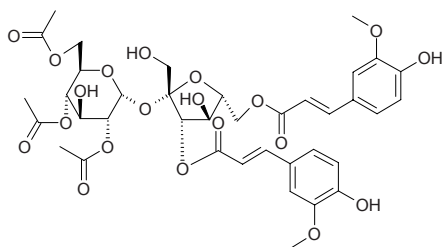
$C_{48}H_{52}O_{23}$  (996.94). Amorphous powder,  $[\alpha]_D = 79.53^\circ$  ( $c = 0.4$ , MeOH). **Source:** TU FU LING *Smilax glabra*. **Ref:** 771.

**20021 Smiglaside B**

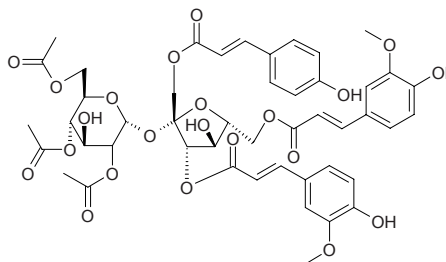
$C_{46}H_{50}O_{22}$  (954.9). Yellowish amorphous powder,  $[\alpha]_D = 36.65^\circ$  ( $c = 0.7$ , MeOH). **Source:** TU FU LING *Smilax glabra*. **Ref:** 771.

**20022 Smiglaside C**

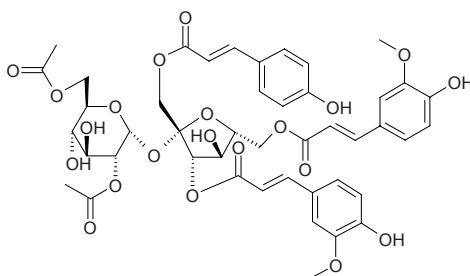
$C_{38}H_{44}O_{20}$  (820.76). Amorphous powder,  $[\alpha]_D = 32.86^\circ$  ( $c = 0.6$ , MeOH). **Source:** TU FU LING *Smilax glabra*. **Ref:** 771.

**20023 Smiglaside D**

$C_{47}H_{50}O_{22}$  (966.91). Amorphous powder,  $[\alpha]_D = 67.14^\circ$  ( $c = 0.5$ , MeOH). **Source:** TU FU LING *Smilax glabra*. **Ref:** 771.

**20024 Smiglaside E**

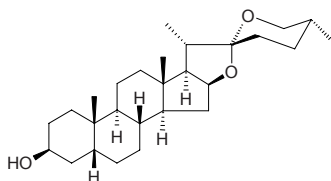
$C_{45}H_{48}O_{21}$  (924.87). Amorphous powder,  $[\alpha]_D = 123.84^\circ$  ( $c = 0.4$ , MeOH). **Source:** TU FU LING *Smilax glabra*. **Ref:** 771.



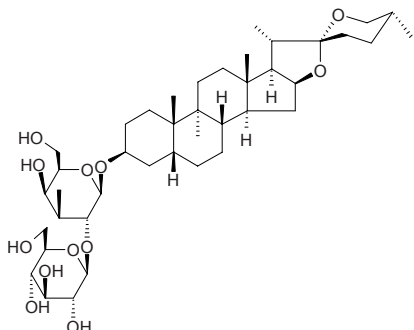


**20025 Smilagenin**

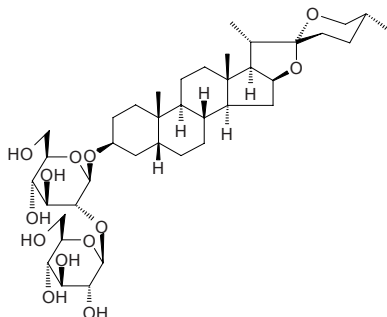
Isosarsapogenin  $C_{27}H_{44}O_3$  (416.65). mp 183~184°C. Source: ZHI MU *Anemarrhena asphodeloides*. Ref: 2.

**20026 Smilagenin-3-O-β-D-glucopyranosyl (1→2)-β-D-galactopyranoside**

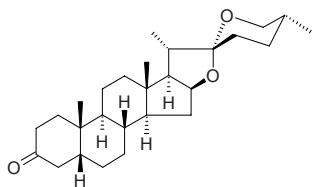
$C_{40}H_{66}O_{12}$  (738.96). Source: XIE BAI *Allium macrostemon*. Ref: 660.

**20027 Smilagenin-3-O-[β-D-glucopyranosyl(1→2)]-β-D-mannopyranoside**

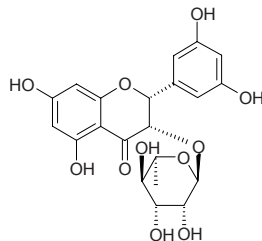
Isosarsapogenin-3-O-[β-D-glucopyranosyl(1→2)]-β-D-mannopyranoside  $C_{39}H_{64}O_{13}$  (740.94). White granular crystals, mp 265~267°C,  $[\alpha]_D^{12} = -189.3^\circ$ . Source: ZHI MU *Anemarrhena asphodeloides*. Ref: 199.

**20028 Smilagenone**

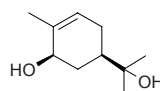
$C_{27}H_{42}O_3$  (414.63). It only exists in moldy source plants and causes the quality of the diosgenin products to decrease. Source: CHA RUI SHU YU *Dioscorea collettii*, CHUAN LONG SHU YU *Dioscorea nipponica*, DUN YE SHU YU *Dioscorea zingiberensis*, FU ZHOU SHU YU *Dioscorea futschauensis*, SHU KUI YE SHU YU *Dioscorea althaeoides*. Ref: 10.

**20029 Smitilbin**

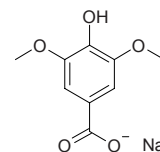
$C_{21}H_{22}O_{11}$  (450.40). Source: TU FU LING *Smilax glabra*. Ref: 714.

**20030 Sobrerol**

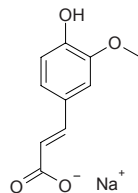
Sobrepin [498-71-5]  $C_{10}H_{18}O_2$  (170.25). Pharm: Antineoplastic (reduces markedly morbidity of mammary cancer). Source: occurs in many plants (vegetables and fruits). Ref: 1521, 1582.

**20031 Sodium syringate**

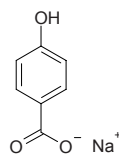
$C_9H_9NaO_5$  (220.16). Source: *Eurycoma* sp. Ref: 4556.

**20032 Sodium ferulate**

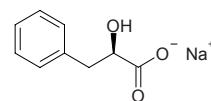
$C_{10}H_9NaO_4$  (216.17). White amorphous powder. Source: XIN ZANG JIA ZI CAO *Arnebia euchroma*. Ref: 2187.

**20033 Sodium p-hydroxybenzoate**

$C_7H_5NaO_3$  (160.11). Source: *Eurycoma* sp. Ref: 4556.

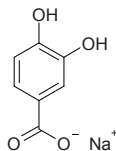
**20034 (2R)-Sodium 3-phenyllactate**

$C_9H_9NaO_3$  (188.16). Colorless needles, mp > 280°C, (MeOH),  $[\alpha]_D^{25} = -26.8^\circ$  ( $c = 0.0025$ , MeOH). Source: TAI WAN HUANG BO *Phellodendron amurense* var. *wilsonii* (leaf: yield = yield = 0.00051%dw). Ref: 4722.

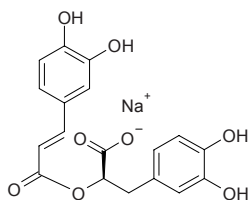


**20035 Sodium protocatechuate**

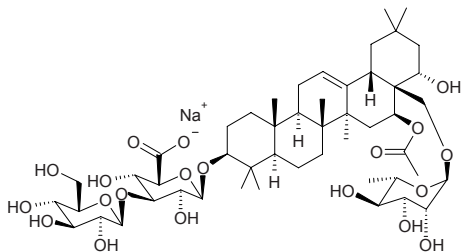
$C_7H_5NaO_4$  (176.11). Source: *Eurycoma* sp. Ref: 4556.

**20036 Sodium rosmarinate**

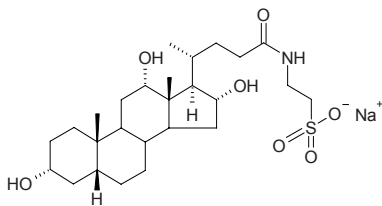
$C_{18}H_{15}NaO_8$  (382.31). White amorphous powder. Source: XIN ZANG JIA ZI CAO *Arnebia euchroma*. Ref: 2187.

**20037 Sodium salt of alternoside II**

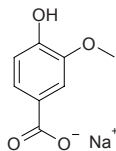
$C_{50}H_{79}NaO_{20}$  (1023.16). Amorphous powder, mp 294–296°C,  $[\alpha]_D^{20} = +1.5^\circ$  ( $c = 0.19$ , MeOH). Pharm: Anti-sweetener. Source: CHI GENG TENG *Gymnema sylvestre* (leaf: yield = yield = 0.0040%dw). Ref: 3037.

**20038 Sodium taurophythocholate**

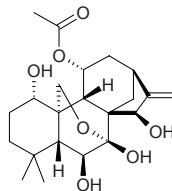
$C_{26}H_{44}NNaO_7S$  (537.70). White powder, mp 192–194°C. Source: MANG SHE *Python molurus bivittatus*. Ref: 240.

**20039 Sodium vanillate**

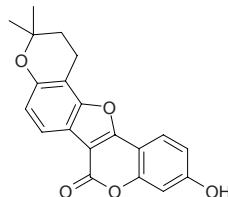
$C_8H_7NaO_4$  (190.13). Source: *Eurycoma* sp. Ref: 4556.

**20040 Sodoponin**

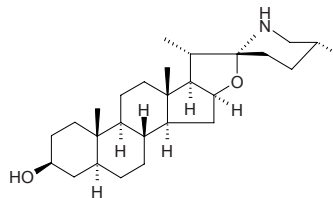
$C_{22}H_{32}O_7$  (408.50). mp 229–231.5°C,  $[\alpha]_D^{28} = +45.7^\circ$  ( $c = 1.0$ ,  $CHCl_3$ ). Source: MAO YE XIANG CHA CAI *Isodon japonica* [Syn. *Rabdosia japonica*], SHAN DI XIANG CHA CAI *Isodon oresbia* (aerial parts). Ref: 3808, 4067.

**20041 Sojagol**

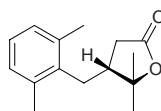
$C_{20}H_{16}O_5$  (336.35). Pharm: Antifungal; estrogenic activity. Source: HEI DA DOU *Glycine max*. Ref: 658.

**20042 Soladulcidine**

Soladulcidine  $C_{27}H_{45}NO_2$  (415.67). mp 209–211°C,  $[\alpha]_D = -50^\circ$  ( $c = 0.4$ , chloroform). Pharm: Antifungal (*Claviceps purpurea*, *Sclerotinia*, *Trichothecium roseum*). Source: QIAN NIAN BU LAN XIN *Solanum dulcamara*, BAI MAO TENG *Solanum lyratum*. Ref: 6, 658, 660.

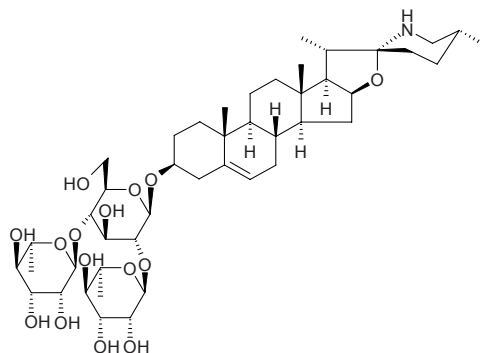
**20043 Solafuranone**

$C_{15}H_{20}O_2$  (232.33). White solid (EtOAc/hexane), mp 132–133°C,  $[\alpha]_D^{25} = +14.0^\circ$  ( $c = 1.0$ ,  $CH_3CN$ ). Source: TIAN QIE ZI *Solanum indicum* (root). Ref: 3087.

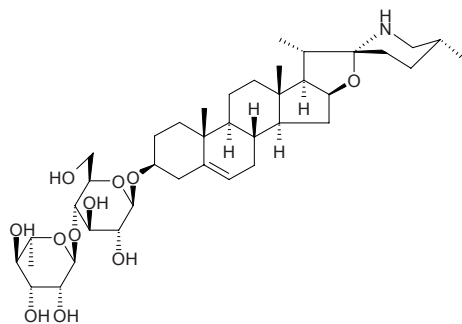


**20044 Solamargine**

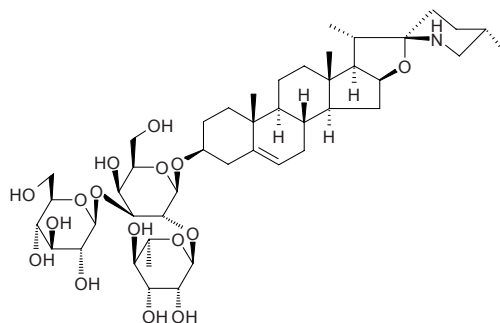
$C_{45}H_{73}NO_{15}$  (868.08). mp 293–295°C. Pharm: Antibacterial; antineoplastic (mus,  $S_{180}$ , ED = 30mg/kg). Source: BAI MAO TENG *Solanum lyratum*, CI TIAN QIE *Solanum khasianum*, LA JIAO *Capsicum frutescens*, LONG KUI *Solanum nigrum* (whole herb: content = 0.20%<sup>[5508]</sup>), QIAN NIAN BU LAN XIN *Solanum dulcamara*. Ref: 6, 658, 660, 5508.

**20045  $\beta$ -Solamargine**

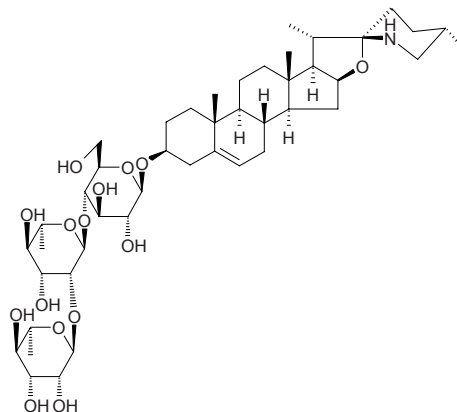
$C_{39}H_{63}NO_{11}$  (721.94). Source: YE DIAN QIE *Solanum surattense*. Ref: 6.

**20046  $\alpha$ -Solamarine**

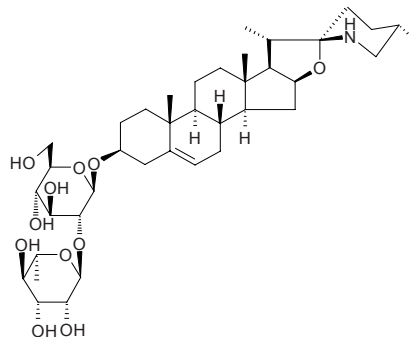
$C_{45}H_{73}NO_{16}$  (884.08). mp 278–281°C (dec). Source: QIAN NIAN BU LAN XIN *Solanum dulcamara*. Ref: 6, 660.

**20047  $\beta$ -Solamarine**

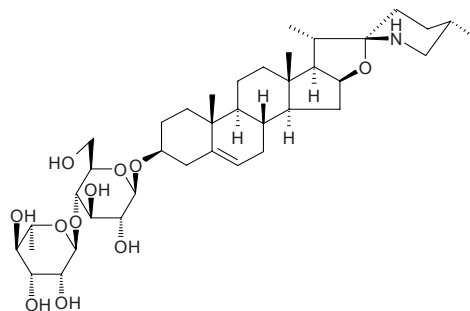
[3671-38-3]  $C_{45}H_{73}NO_{15}$  (868.08). mp 275–277°C (dec). Source: QIAN NIAN BU LAN XIN *Solanum dulcamara*. Ref: 5, 6, 660.

**20048  $\gamma_1$ -Solamarine**

$C_{39}H_{63}NO_{11}$  (721.94). mp 268–271°C (dec). Source: QIAN NIAN BU LAN XIN *Solanum dulcamara*. Ref: 6.

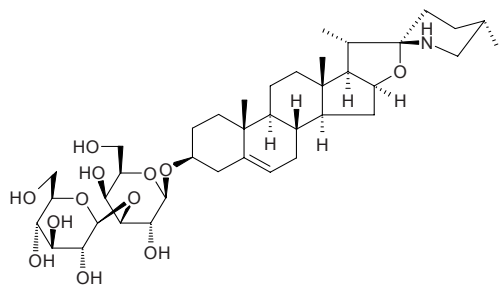
**20049  $\gamma_2$ -Solamarine**

$C_{39}H_{63}NO_{11}$  (721.94). mp 243–248°C (dec). Source: QIAN NIAN BU LAN XIN *Solanum dulcamara*. Ref: 6.

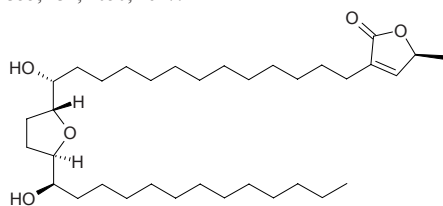


**20050  $\delta$ -Solamarine**

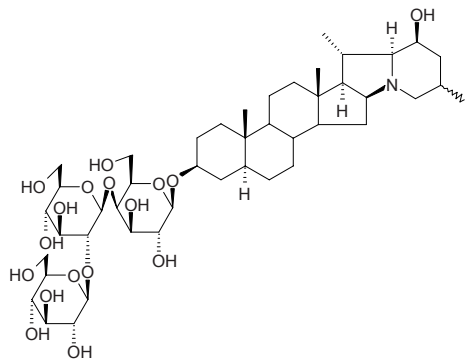
$C_{39}H_{63}NO_{12}$  (737.94). mp 265–269°C (dec). Source: QIAN NIAN BU LAN XIN *Solanum dulcamara*. Ref: 6.

**20051 Solamin**

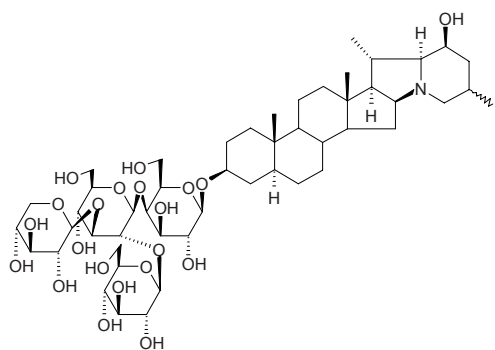
[138682-32-3]  $C_{35}H_{64}O_5$  (564.90). White crystals, mp 74–75°C. Pharm: Cytotoxic ( $P_{388}$ ,  $ED_{50} = 0.04\mu\text{g/mL}$ ; KB,  $ED_{50} = 0.3\mu\text{g/mL}$ ). Source: CI GUO FAN LI ZHI *Annona muricata* (leaf: yield = 0.00025%dw)<sup>[4617]</sup>, GUANG YE ZI YU PAN *Uvaria boniana*, NIU XIN FAN LI ZHI *Annona reticulata*. Ref: 355, 432, 1050, 4617.

**20052 (25 $\zeta$ )-Solanidan-3 $\beta$ ,23 $\beta$ -dihydroxy 3-O- $\beta$ -D-glucopyranosyl (1 $\rightarrow$ 2)- $\beta$ -D-glucopyranosyl (1 $\rightarrow$ 4)- $\beta$ -D-galactopyranoside**

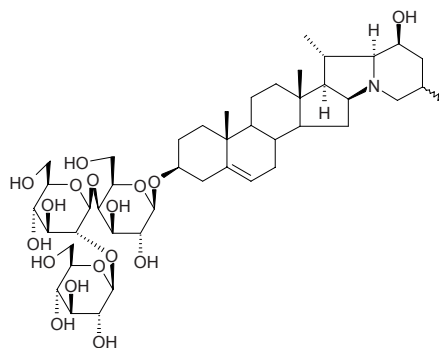
$C_{45}H_{75}NO_{17}$  (902.10). Source: BAI MAO TENG *Solanum lyratum*. Ref: 660.

**20053 (25 $\zeta$ )-Solanidan-3 $\beta$ ,23 $\beta$ -dihydroxy 3-O- $\beta$ -D-glucopyranosyl (1 $\rightarrow$ 2)- $\beta$ -D-xylopyranosyl (1 $\rightarrow$ 3)- $\beta$ -D-glucopyranosyl (1 $\rightarrow$ 4)- $\beta$ -D-galactopyranoside**

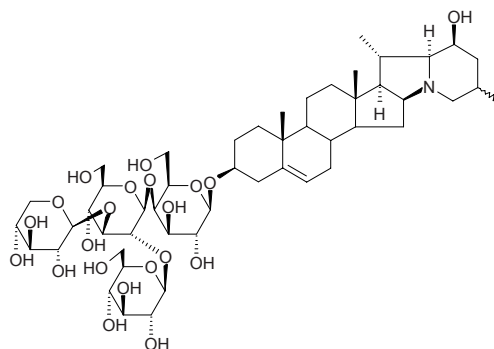
$C_{50}H_{83}NO_{21}$  (1034.21). Source: BAI MAO TENG *Solanum lyratum*. Ref: 660.

**20054 (25 $\zeta$ )-Solanid-5-en-3 $\beta$ ,23 $\beta$ -dihydroxy 3-O- $\beta$ -D-glucopyranosyl (1 $\rightarrow$ 2)- $\beta$ -D-glucopyranosyl (1 $\rightarrow$ 4)- $\beta$ -D-galactopyranoside**

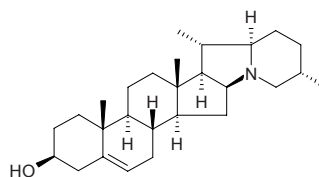
$C_{45}H_{73}NO_{17}$  (900.08). Source: BAI MAO TENG *Solanum lyratum*. Ref: 660.

**20055 (25 $\zeta$ )-Solanid-5-en-3 $\beta$ ,22 $\beta$ -dihydroxy 3-O- $\beta$ -D-glucopyranosyl (1 $\rightarrow$ 2)- $\beta$ -D-xylopyranosyl(1 $\rightarrow$ 3)- $\beta$ -D-glucopyranosyl(1 $\rightarrow$ 4)- $\beta$ -D-galactopyranoside**

$C_{50}H_{81}NO_{21}$  (1032.20). Source: BAI MAO TENG *Solanum lyratum*. Ref: 660.

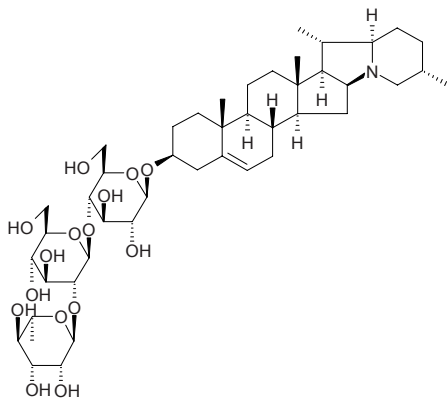
**20056 Solanidine**

[80-78-4]  $C_{27}H_{43}NO$  (397.65). mp 218–219°C. Pharm: Cardiotonic (frog heart, *in vitro*); toxin. Source: CHUAN BEI MU *Fritillaria cirrhosa*, HEI BAI HE *Fritillaria camtschatscensis*, LA JIAO *Capsicum frutescens*, LI LU *Veratrum nigrum*, LONG KUI *Solanum nigrum*, MA LING SHU *Solanum tuberosum*, MAO YE LI LU *Veratrum grandiflorum*, ZHE BEI MU *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*]. Ref: 6, 658, 2201.



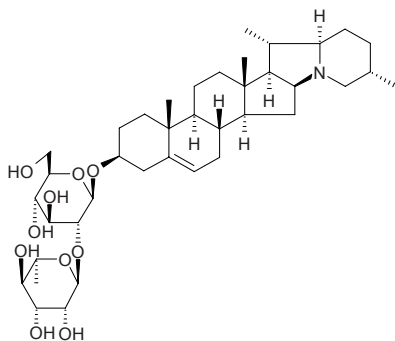
**20057 Solanidine-3-O- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranoside**

[81942-09-8] C<sub>45</sub>H<sub>73</sub>NO<sub>15</sub> (868.08). mp 278~283°C, [ $\alpha$ ]<sub>D</sub> = -58.4° (c = 0.9, pyridine). Source: ZHE BEI MU *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*]. Ref: 2201.



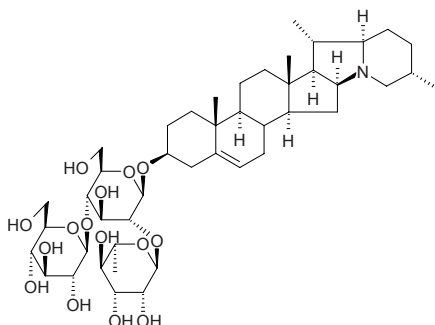
**20058 Solanidine-3-O- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranoside**

C<sub>39</sub>H<sub>63</sub>NO<sub>10</sub> (705.94). mp 287~292°C, [ $\alpha$ ]<sub>D</sub> = -52.5° (c = 0.9, pyridine). Source: ZHE BEI MU *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*]. Ref: 2201.



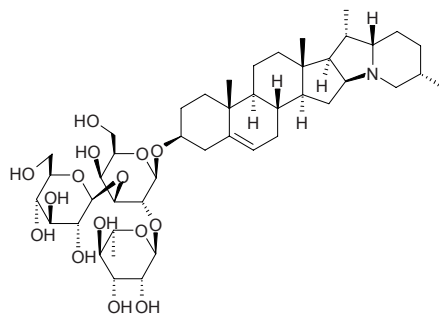
**20059 Solanidine 3-O- $\alpha$ -L-rhamnopyranosyl (1 $\rightarrow$ 2)-[ $\beta$ -D-glucopyranosyl (1 $\rightarrow$ 4)]- $\beta$ -D-glucopyranoside**

C<sub>45</sub>H<sub>73</sub>NO<sub>15</sub> (868.08). Source: JIA BAI HE *Notholirion hyacinthinum* [Syn. *Notholirion bulbuliferum*]. Ref: 660.



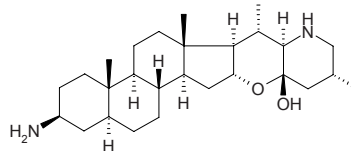
**20060 Solanine**

$\alpha$ -Solanine [20562-02-1] C<sub>45</sub>H<sub>73</sub>NO<sub>15</sub> (868.08). Tiny acicular crystals(85% ethanol), mp 190°C turn brown lump, 285 (dec), [ $\alpha$ ]<sub>D</sub><sup>22</sup> = -60° (pyridine). Pharm: Antineoplastic (S<sub>180</sub> and ascites carcinoma); antifungal (*Aspergillus niger* and *Candida albicans*); hemolytic; increases level of blood sugar (rat, ip, 5~30mg/kg, inhibits use of glucose); smooth muscle stimulant; teratogen (pregnant mus); toxin (hmn, orl, 2.8mg/kg poisoning); LD<sub>50</sub> (mus, ip, chloride) = 42mg/kg, (rat, ip, chloride) = 67mg/kg. Source: MA LING SHU *Solanum tuberosum*, LONG KUI *Solanum nigrum*, FAN QIE *Lycopersicon esculentum*. Ref: 658, 6, 1371.



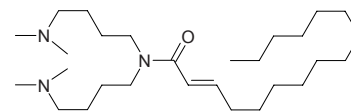
**20061 Solanocapsine**

[639-86-1] C<sub>27</sub>H<sub>46</sub>N<sub>2</sub>O<sub>2</sub> (430.68). mp 222°C. Pharm: Antibacterial (in serum, *Mycobacterium tuberculosis*, *Diplococcus pneumoniae*); slows heart rate; toxin (hmn, tolerance dose = 60~84mg). Source: YE HAI JIAO *Solanum capsicastrum*, YU SHAN HU GEN *Solanum pseudo-capsicum*. Ref: 6, 658.



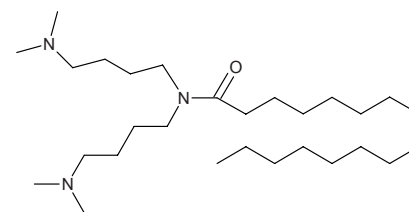
**20062 Solapalmitine**

[17232-86-9] C<sub>28</sub>H<sub>57</sub>N<sub>3</sub>O (451.79). Oil, bp 153°C/0.08mmHg (bath). Pharm: Antineoplastic (rat, W<sub>256</sub>, ED<sub>50</sub> = 0.36mg/kg); cytotoxic (KB, *in vitro*). Source: SAN LIE QIE *Solanum tripartitum*. Ref: 661.



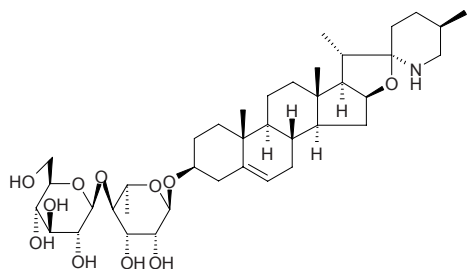
**20063 Solapalmitine**

[17232-85-8] C<sub>28</sub>H<sub>59</sub>N<sub>3</sub>O (453.80). Oil, bp 150°C/0.05mmHg (bath). Pharm: Antineoplastic (rat, W<sub>256</sub>, ED<sub>50</sub> = 0.36mg/kg); cytotoxic (KB, *in vitro*). Source: SAN LIE QIE *Solanum tripartitum*. Ref: 661.

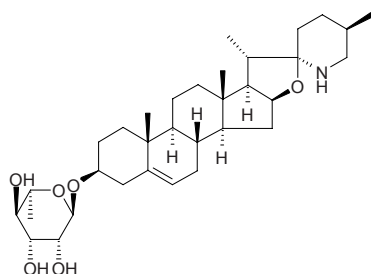


**20064 Solaplumbine**

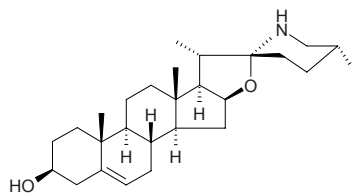
[54302-48-6] C<sub>39</sub>H<sub>63</sub>NO<sub>11</sub> (721.94). Yellowish acicular crystals(ethanol-benzene), mp 180°C,  $[\alpha]_D^{22} = -90^\circ$  ( $c = 1$ , methanol). **Pharm:** Antineoplastic (mus, W<sub>256</sub>, 15mg/kg, InRt = 87%). **Source:** HUI YE YAN CAO *Nicotiana plumbaginifolia*. **Ref:** 661.

**20065 Solaplumbinine**

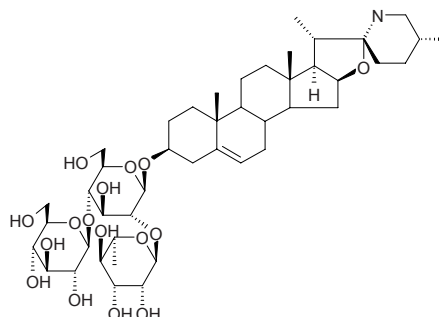
C<sub>33</sub>H<sub>53</sub>NO<sub>6</sub> (559.79). White amorphous powder, mp 184–185°C,  $[\alpha]_D^{22} = -39.5^\circ$  ( $c = 1$ , methanol). **Pharm:** Antineoplastic (mus W<sub>256</sub>, 10mg/kg, InRt = 83%, 20mg/kg, InRt = 89%). **Source:** HUI YE YAN CAO *Nicotiana plumbaginifolia*. **Ref:** 661.

**20066 Solasodine**

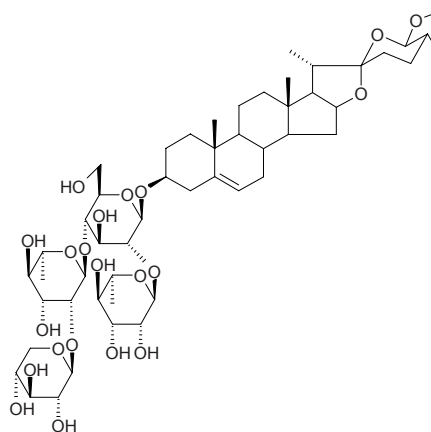
[126-17-0] C<sub>27</sub>H<sub>43</sub>NO<sub>2</sub> (413.65). mp 202°C. **Pharm:** Anti-inflammatory (reduces permeability of blood capillary and activity of hyaluronidase); antipyretic (rat, 3mg/kg sc, body temperature goes down 1.5°C and maintains 24h, mus, body temperature goes down 2.0°C and maintains 48h); increases level of blood sugar (glucocorticoid); teratogen (pregnant rat, 180mg orl, defect rate = 25.8%); LD<sub>50</sub> (mus, ip) = 898mg/kg, (rat, ip) = 395mg/kg, (gpg, ip) = 103mg/kg. **Source:** AO ZHOU QIE *Solanum aviculare* [Syn. *Solanum laciniatum*], CI TIAN QIE *Solanum khasianum*, HEI BAI HE *Fritillaria camtschaticensis*, LA JIAO *Capsicum frutescens*, LONG KUI *Solanum nigrum* (whole herb: content = 0.25%<sup>[5508]</sup>), QIAN NIAN BU LAN XIN *Solanum dulcamara*, QIE YE *Solanum melongena*, SU XIN YE BAI YING *Solanum jasminoides*, TIAN QIE ZI *Solanum indicum*. **Ref:** 6, 658, 660, 5508.

**20067 Solasodine 3-O-α-L-rhamnopyranosyl (1→2)-O-β-D-glucopyranosyl (1→4)-β-D-glucopyranoside**

C<sub>45</sub>H<sub>73</sub>NO<sub>16</sub> (884.08). **Source:** BAI HE *Lilium brownii* var. *viridulum* [Syn. *Lilium brownii* var. *colchesteri*]. **Ref:** 660.

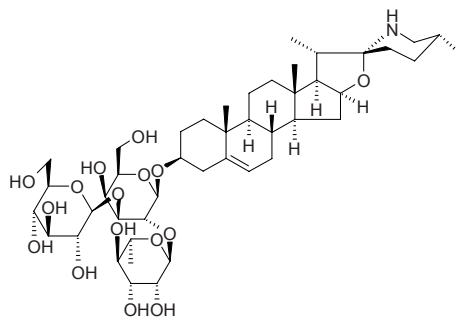
**20068 Solasodoside A**

(2*R*,26*R*)-26-Methoxyspirost-5-en-3β-ol 3-O-β-D-glucopyranosyl-(1→2)-O-β-D-xylopyranosyl-(1→2)-O-α-L-rhamnopyranosyl-(1→4)-β-D-glucopyranoside; C<sub>51</sub>H<sub>82</sub>O<sub>21</sub> (1031.21). Amorphous powder. **Pharm:** Cytotoxic (antiproliferative, HL-60 cells *in vitro*, GI<sub>50</sub> > 80.0μmol/L, control Cisplatin, GI<sub>50</sub> = 8.5μmol/L). **Source:** SUO DUO MI QIE *Solanum sodomeum* [Syn. *Solanum sodomaicum*] (underground parts: yield = 0.0036%fw). **Ref:** 1158.

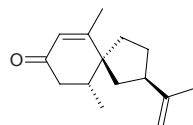


**20069 Solasonine**

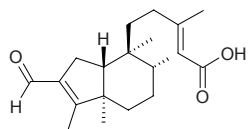
[19121-58-5]  $C_{45}H_{73}NO_{16}$  (884.08). mp 301~303°C. **Pharm:** Antineoplastic (S<sub>180</sub>); bidirectional action to CNS system (rat and rbt, stimulates in low dose, inhibits in high dose); hemolytic; platelet aggregation inhibitor; increases level of blood sugar (rat, ip, 50~100mg/kg); stimulates heart; toxin. **Source:** AO ZHOU QIE *Solanum aviculare* [Syn. *Solanum laciniatum*], BAI MAO TENG *Solanum lyratum*, CI TIAN QIE *Solanum khasianum*, HUANG GUO QIE *Solanum xanthocarpum*, HUI BAI QIE *Solanum incanum*, LA JIAO *Capsicum frutescens*, LONG KUI *Solanum nigrum*, QIAN NIAN BU LAN XIN *Solanum dulcamara*, QIE ZI *Solanum melongena*, SHUI QIE *Solanum torvum*, SU XIN YE BAI YING *Solanum jasminoides*, SUO DUO MI QIE *Solanum sodomeum* [Syn. *Solanum sodomaemum*], XIAO LU QIE *Solanum viarum*, YE DIAN QIE *Solanum surattense*, YE YAN YE *Solanum verbascifolium*, *Solanum* sp. **Ref:** 6, 658, 660.

**20070 Solavetivone**

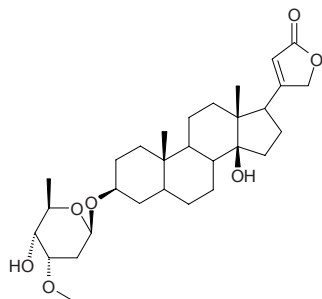
[54878-25-0]  $C_{15}H_{22}O$  (218.34). **Pharm:** Cytotoxic (*in vitro*, OVCAR-3, IC<sub>50</sub> = 0.1mmol/L)<sup>[3087]</sup>; antifungal. **Source:** MA LING SHU *Solanum tuberosum*, TIAN QIE ZI *Solanum indicum* (root)<sup>[3087]</sup>, YAN CAO *Nicotiana tabacum*. **Ref:** 658, 3087.

**20071 Solidagonal acid**

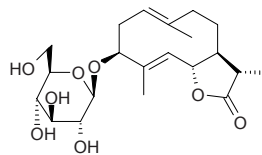
[97868-05-8]  $C_{20}H_{30}O_3$  (318.46). **Source:** GAO YI ZHI HUANG HUA *Solidago altissima*. **Ref:** 4049.

**20072 Somalin**

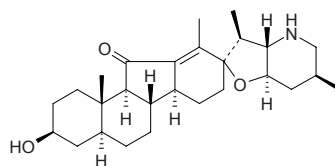
$C_{30}H_{46}O_7$  (518.70). mp 240~246°C. **Source:** FU SHOU CAO *Adonis amurensis* (root: content = 0.056%<sup>[5508]</sup>) **Ref:** 6, 1521, 5508.

**20073 Sonchuside A**

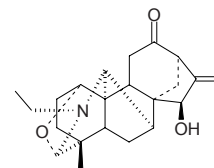
$C_{21}H_{32}O_8$  (412.48). **Source:** DAO LUAN YE PU GONG YING GEN *Taraxacum obovatum*. **Ref:** 5357.

**20074 Songbeisine**

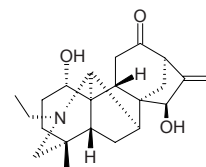
$C_{27}H_{41}NO_3$  (427.63). **Source:** AN ZI BEI MU *Fritillaria unibracteata*. **Ref:** 2.

**20075 Songoramine**

[23179-78-4]  $C_{22}H_{29}NO_3$  (355.48). Colorless oil, mp 211~212°C,  $[\alpha]_D^{26} = -44.2^\circ$  ( $c = 0.266$ ,  $CHCl_3$ ). **Source:** XUAN WEI WU TOU *Aconitum nagarum* var. *lasiandrum*, WU TOU *Aconitum carmichaeli*. **Ref:** 660, 461.

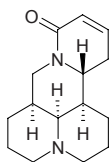
**20076 Songorine**

[509-24-0]  $C_{22}H_{31}NO_3$  (350.51). Crystals (acetone-ether), mp 201~203°C,  $[\alpha]_D^{25} = 136^\circ$  ( $c = 2.5$ , methanol). hydrochloride crystals, mp 257~258,  $[\alpha]_D^{22} = -114^\circ$  ( $c = 2$ , water). **Pharm:** CNS depressant (high dose); CNS stimulant (low dose); antihypertensive (high dose); inhibits spontaneous movement (mus, 400mg/kg, sc); sedative; antipyretic (rbi); LD<sub>50</sub> (mus, orl) = 1575mg/kg, (mus, sc) = 630mg/kg, (mus, ip) = 485mg/kg, (mus, iv) = 142.5mg/kg. **Source:** DUO GEN WU TOU *Aconitum karakolicum*, SHAN DI WU TOU *Aconitum monticola*, WU TOU *Aconitum carmichaeli*, XUAN WEI WU TOU *Aconitum nagarum* var. *lasiandrum*, ZHUN GE ER WU TOU *Aconitum soongaricum*. **Ref:** 6, 658.

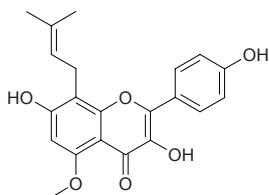


**20077 Sophocarpine**

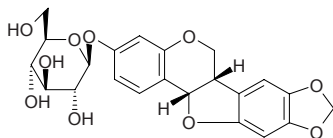
[6483-15-4]  $C_{15}H_{22}N_2O$  (246.36). mp 52~53°C, 57~58°C. **Pharm:** Antiasthmatic (gpg, asthma induced by acetylcholine chloride and histamine, mus, 12.8mg/kg orl, InRt = 88%,  $p < 0.01$ ); antineoplastic (animals, transplant tumor, InRt = (31~56)%); increases blood pressure (rbt, iv, bromide 20mg/kg, 2.23kPa); inhibits spontaneous movement (mus); stimulates heart (homother- mal animals, poikilotherms, *in vitro*); LD<sub>50</sub> (mus, orl) = 241.5mg/kg, (mus, im) = 92.41mg/kg, (rat, ip) = 120mg/kg, (rat, im) = 130mg/kg, (rat, sc) = 185mg/kg, (rat, orl) = 198mg/kg, (mus, orl, bromide) = 297.5mg/kg, (mus, im, bromide) = 101.4mg/kg, (mus, iv, bromide) = 73.64mg/kg. **Source:** BAI CI HUA *Sophora vicifolia*, GAN SU HUAI SHU *Sophora pachycarpa*, KU DOU ZI *Sophora alopecuroides* (seed: content = 0.058%<sup>[5508]</sup>), KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*] (dried root: content scope of 7 origins = 0.08%-0.73%, mean content = 0.34%<sup>[5508]</sup>), SHAN DOU GEN *Sophora subprostrata* [Syn. *Sophora tonkinensis*]. **Ref:** 4, 546, 564, 593, 658, 5501, 5508.

**20078 Sophoflavescenol**

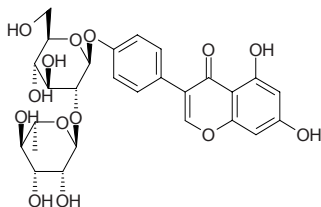
$C_{21}H_{20}O_6$  (368.39). **Source:** KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. **Ref:** 4430.

**20079 Sophojaponicin**

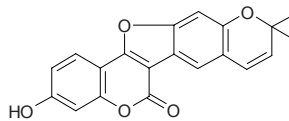
$C_{22}H_{22}O_{10}$  (446.40). Colorless prismatic or acicular crystals (methanol), mp 202~204 (dec),  $[\alpha]_D^{17} = -104^\circ$  ( $c = 0.70$ , acetic acid). **Pharm:** Antineoplastic (mus S<sub>180</sub> entity tumor); LD<sub>50</sub> (mus, ip) = 200~250mg/kg, (rat, ip) = 300mg/kg. **Source:** HUAI *Sophora japonica*. **Ref:** 661.

**20080 Sophorabioside**

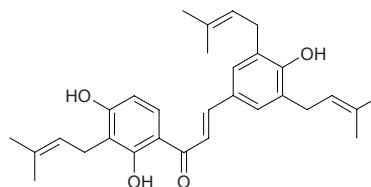
$C_{27}H_{30}O_{14}$  (578.53). mp 247°C. **Source:** HUAI *Sophora japonica* (pericarp)<sup>[3080]</sup>, HUAI JIAO *Sophora japonica*. **Ref:** 6, 3080.

**20081 Sophoracoumestan A**

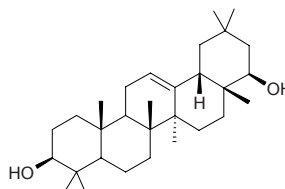
$C_{20}H_{14}O_5$  (334.33). **Source:** BU GU ZHI *Psoralea corylifolia*. **Ref:** 660.

**20082 Sophoradin**

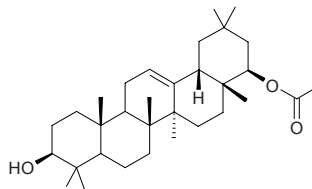
[23057-54-7]  $C_{30}H_{36}O_4$  (460.62). Yellow acicular crystals (diethyl ether-hexane), mp 161°C. **Pharm:** Antiulcerative; gastric secretion inhibitor (rat); H<sup>+</sup>, K<sup>+</sup>-ATPase inhibitor (gpg stomach *in vitro*). **Source:** SHAN DOU GEN *Sophora subprostrata* [Syn. *Sophora tonkinensis*]. **Ref:** 6, 900.

**20083 Sophoradiol**

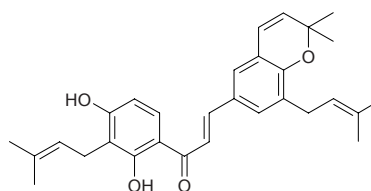
$C_{30}H_{50}O_2$  (442.73). **Source:** GE GEN *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*], HUAI *Sophora japonica*, JI GU CAO *Abrus fruticosus* [Syn. *Abrus cantoniensis*], SHAN DOU GEN *Sophora subprostrata* [Syn. *Sophora tonkinensis*], XIANG SI ZI *Abrus precatorius*. **Ref:** 660.

**20084 Sophoradiol-22-O-acetate**

$C_{32}H_{52}O_3$  (484.77). **Source:** XIANG SI ZI *Abrus precatorius*. **Ref:** 660.

**20085 Sophoradachromene**

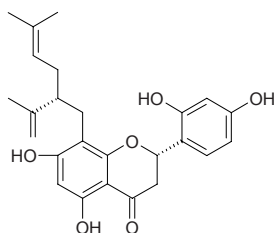
$C_{30}H_{34}O_4$  (458.60). mp 154°C. **Source:** SHAN DOU GEN *Sophora subprostrata* [Syn. *Sophora tonkinensis*]. **Ref:** 6.



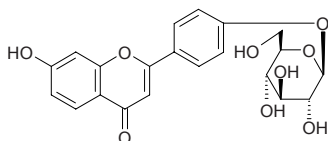


**20086 Sophoraflavanone G**

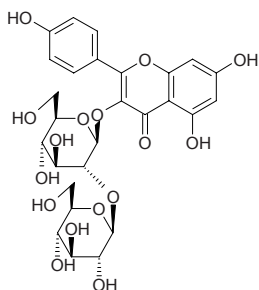
$C_{25}H_{28}O_6$  (424.50). **Pharm:** Tyrosinase inhibitor ( $IC_{50} = 44.7\mu\text{mol/L}$ , control Kojic acid,  $IC_{50} = 11.3\mu\text{mol/L}$ )<sup>[5409]</sup>. **Source:** KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. **Ref:** 4430, 5409.

**20087 Sophoraflavone B**

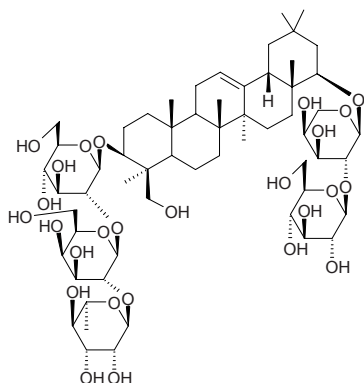
$C_{21}H_{20}O_9$  (416.39). **Source:** HUANG GAN CAO *Glycyrrhiza kansuensis*. **Ref:** 660.

**20088 Sophoraflavonolide**

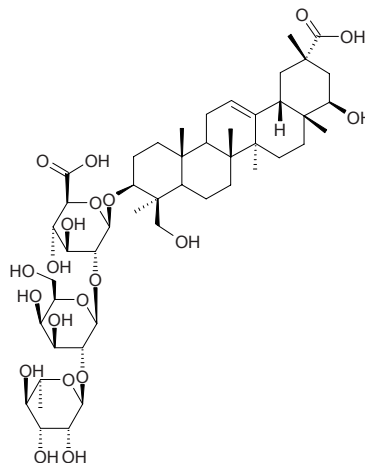
Kaempferol-3-O- $\beta$ -D-glucopyranosyl(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranoside  $C_{27}H_{30}O_{16}$  (610.53). mp 207~208°C. **Pharm:** Anti-HIV-1 (RT (RDDP) inhibitor,  $IC_{50} = 75\mu\text{mol/L}$ , positive control Adriamycin,  $IC_{50} = 27\mu\text{mol/L}$ ; DDDP inhibitor,  $IC_{50} > 100\mu\text{mol/L}$ , positive control Adriamycin,  $IC_{50} = 6\mu\text{mol/L}$ ; HIV-1 IN inhibitor,  $IC_{50} > 100\mu\text{mol/L}$ , positive control Suramin,  $IC_{50} = 2.4\mu\text{mol/L}$ )<sup>[4187]</sup>. **Source:** HUAI JIAO *Sophora japonica*, HUANG HUA JIA ZHU TAO *Thevetia nerifolia* [Syn. *Thevetia peruviana*] (leaf), ZANG HONG HUA *Crocus sativus*. **Ref:** 6, 660, 4187.

**20089 Sophoraflavoside I**

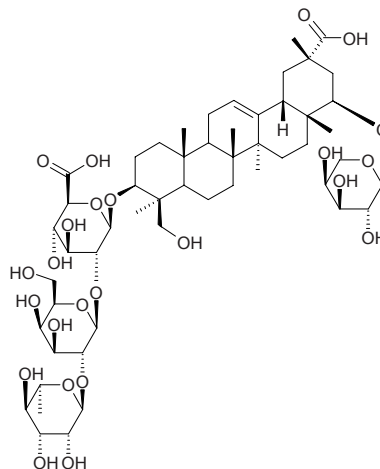
$C_{59}H_{98}O_{26}$  (1223.42). **Source:** KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. **Ref:** 2, 660, 1521.

**20090 Sophoraflavoside II**

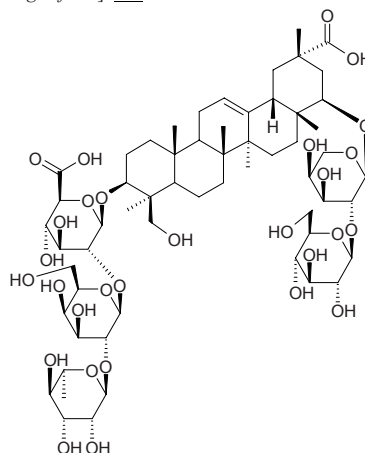
$C_{48}H_{76}O_{20}$  (973.13). **Source:** KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. **Ref:** 660.

**20091 Sophoraflavoside III**

$C_{53}H_{84}O_{24}$  (1105.25). **Source:** KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. **Ref:** 660.

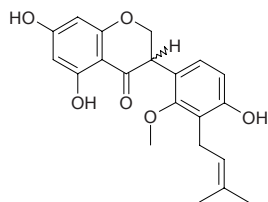
**20092 Sophoraflavoside IV**

$C_{59}H_{94}O_{29}$  (1267.39). **Source:** KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. **Ref:** 660.

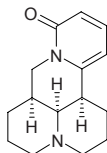


**20093 Sophoraisoflavanone A**

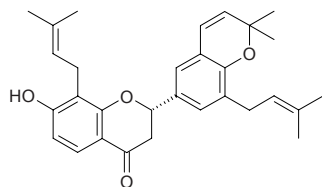
$C_{21}H_{22}O_6$  (370.41). **Pharm:** Antimicrobial (*in vitro*, *Staphylococcus aureus*, *Escherichia coli*, *Bacillus subtilis*, *Penicillium citrinum* and *Candida albicans*). **Source:** LING NAN HUAI SHU *Sophora tomentosa*. **Ref:** 658.

**20094 Sophoramine**

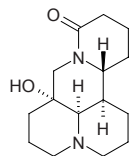
(-)-Sophoramide [6882-66-2]  $C_{15}H_{20}N_2O$  (244.34). White acicular crystals (hexane), mp 164~165°C,  $[\alpha]_D = -98^\circ$  (ethanol). **Pharm:** Antiarrhythmic (caused by aconitine, BaCl<sub>2</sub>, CHCl<sub>3</sub>, adrenalin, CaCl<sub>2</sub>); enhances myocardial contractility; immunosuppressant; reduces activity of LDH; reduces area of myocardial infarction; raises dopamine metabolite HVA (in rat striatum and marginal zone of forebrain). **Source:** BAI CI HUA *Sophora viciifolia*, KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*], KU DOU ZI *Sophora alopecuroides*. **Ref:** 2, 6, 546, 564, 900.

**20095 Sophoranochromene**

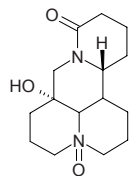
$C_{30}H_{34}O_4$  (458.60). mp 152°C. **Source:** SHAN DOU GEN *Sophora subprostrata* [Syn. *Sophora tonkinensis*]. **Ref:** 6.

**20096 Sophoranol**

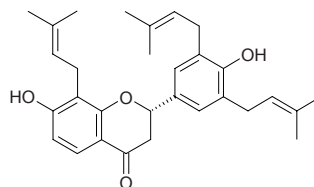
5-Hydroxymatine [3411-37-8]  $C_{15}H_{24}N_2O_2$  (264.37). mp 171°C,  $[\alpha]_D^{20} = +66^\circ$  (H<sub>2</sub>O). **Source:** FU MAO SHAN DOU GEN *Euchresta strigillosa*, KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*] (dried root: content scope of 5 origins = 0.050%~0.074%, mean content = 0.060%<sup>[5508]</sup>), SAN XIAU YE SHAN DOU GEN *Euchresta japonica*, SHAN DOU GEN *Sophora subprostrata* [Syn. *Sophora tonkinensis*]. **Ref:** 6, 660, 1521, 5508.

**20097 Sophoranol N-oxide**

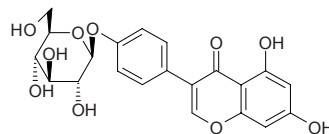
$C_{15}H_{24}N_2O_3$  (280.37). **Source:** KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. **Ref:** 2.

**20098 Sophoranone**

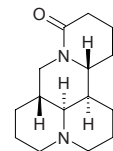
$C_{30}H_{36}O_4$  (460.62). mp 108°C. **Pharm:** Antineoplastic (gastric cancer). **Source:** SHAN DOU GEN *Sophora subprostrata* [Syn. *Sophora tonkinensis*]. **Ref:** 6, 658.

**20099 Sophoricoside**

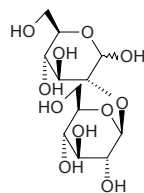
[152-95-4]  $C_{21}H_{20}O_{10}$  (432.39). mp 297°C. **Pharm:** Anti-inflammatory (rat, inflammation model induced by embedding woolball, 20mg/(kg·d) ip, 7 days, obvious effect); reduces GPT (glutamine-pyruvic transaminase). **Source:** HUAI *Sophora japonica*, HUANG HUA MU *Piptanthus nepalensis*, HUAI JIAO *Sophora japonica*. **Ref:** 6, 658.

**20100 Sophoridine**

$C_{15}H_{24}N_2O$  (248.37). **Pharm:** bidirectional action to blood pressure (iv, first increases then decreases); contracts blood vessels (peripheral and visceral); positive inotropic effect; antiarrhythmic (animal model); stimulates heart (homothermal animal, poikilotherm, *in vitro*); immunoenhancer (mus, red blood cells). **Source:** KU DOU GEN *Sophora alopecuroides*, KU DOU ZI *Sophora alopecuroides* (seed: content = 0.116%<sup>[5508]</sup>), KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*] (dried root: content scope of 7 origins = trace~0.66%, mean content = 0.29%<sup>[5508]</sup>). **Ref:** 1521, 5501, 5508.

**20101 Sophorose**

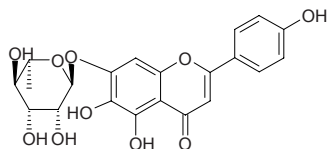
[534-46-3]  $C_{12}H_{22}O_{11}$  (342.30). mp (α) 196~198°C. **Source:** HUAI JIAO *Sophora japonica*. **Ref:** 6.



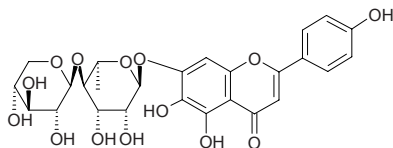
**20102 Sorbarin**

[24512-68-3]  $C_{21}H_{20}O_{10}$  (432.39). mp > 300°C. **Pharm:** Aldose reductase inhibitor (rat, eye lens, 10  $\mu$ mol/L InRt = 70.3%, 1  $\mu$ mol/L InRt = 13.9%).

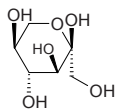
**Source:** ZHEN ZHU MEI *Sorbaria sorbifolia*. **Ref:** 6, 1631.

**20103 Sorbifolin**

$C_{26}H_{28}O_{14}$  (564.50). **Source:** ZHEN ZHU MEI *Sorbaria sorbifolia*. **Ref:** 660.

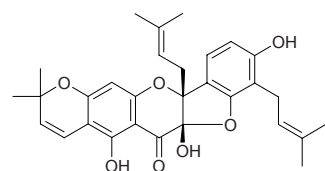
**20104 Sorbose**

$C_6H_{12}O_6$  (180.16). **Source:** OU ZHOU HUA QIU *Sorbus aucuparia*. **Ref:** 658.

**20105 Sorocein D**

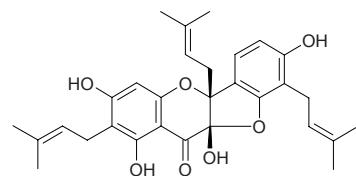
$C_{30}H_{32}O_7$  (504.59). **Pharm:** Cytotoxic (HSC-2,  $CC_{50}$  = 190  $\mu$ mol/L, 97  $\mu$ g/mL; HSG,  $CC_{50}$  = 120  $\mu$ mol/L, 61  $\mu$ g/mL; HGF,  $CC_{50}$  = 270  $\mu$ mol/L, 135  $\mu$ g/mL)<sup>[3034]</sup>.

**Source:** *Sorocea bonplandii* (root cortex). **Ref:** 1521, 3034.

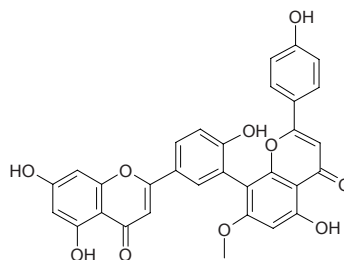
**20106 Sorocein F**

$C_{30}H_{34}O_7$  (506.6). **Pharm:** Cytotoxic (HSC-2,  $CC_{50}$  = 47  $\mu$ mol/L, 24  $\mu$ g/mL; HSG,  $CC_{50}$  = 49  $\mu$ mol/L, 25  $\mu$ g/mL; HGF,  $CC_{50}$  = 110  $\mu$ mol/L, 57  $\mu$ g/mL)<sup>[3034]</sup>.

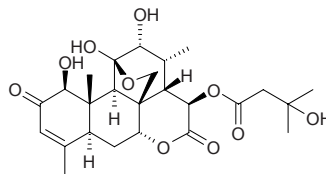
**Source:** *Sorocea ilicifolia* (root). **Ref:** 1521, 3034.

**20107 Sotetsuflavone**

$C_{31}H_{20}O_{10}$  (552.50). **Source:** YUN NAN SUI HUA SHAN *Amentotaxus yunnanensis* (leaf and twig: yield = 0.00033%dw), YUN NAN FEI SHU *Torreya yunnanensis* (leaf and twig: yield = 0.00008%dw), JUAN BAI *Selaginella tamariscina*, SU TIE YE *Cycas revoluta*. **Ref:** 660, 4707.

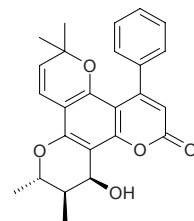
**20108 Soularbinone**

$C_{25}H_{34}O_{10}$  (494.55). **Pharm:** Antineoplastic (leukemia); antimalarial (ED = 0.006  $\mu$ g/mL). **Source:** family Simarubaceae spp. **Ref:** 658.

**20109 Soulattrolide**

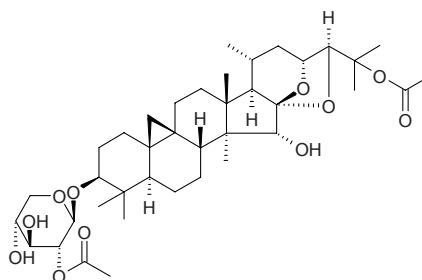
[65025-62-9]  $C_{25}H_{24}O_5$  (404.47). **Pharm:** Anti-HIV (strong HIV-RT inhibitor).

**Source:** TE SI MAN NI HU TONG *Calophyllum teysmannii*. **Ref:** 2268.

**20110 Soulieoside A**

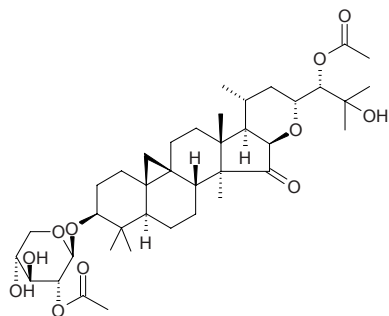
25-O-Acetylcimigenol-3-O- $\beta$ -D-(2-acetyl)xylopyranoside  $C_{39}H_{60}O_{11}$  (704.91).

White amorphous powder, mp 150~152°C (MeOH),  $[\alpha]_D^{20}$  = +22.0° (c = 0.05, CHCl<sub>3</sub>:CH<sub>3</sub>OH = 1:1). **Source:** HUANG SAN QI *Souliea vaginata* (Rhizome). **Ref:** 4291.

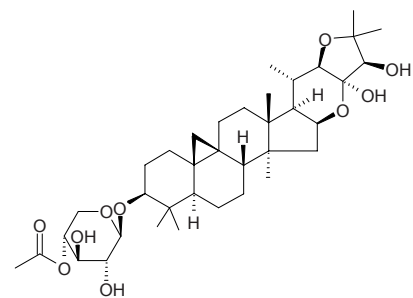


**20111 Soulieoside B**

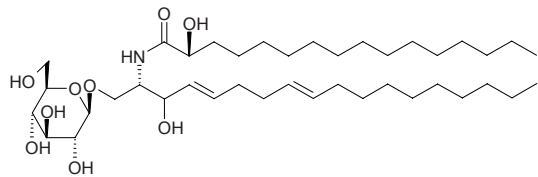
24-*O*-Acetyl-isodahurinol-3-*O*- $\beta$ -*D*-(2-acetyl)xylopyranoside C<sub>39</sub>H<sub>60</sub>O<sub>11</sub> (704.91). White amorphous powder, mp 157~160°C (MeOH),  $[\alpha]_D^{20} = +14.0^\circ$  ( $c = 0.05$ , CHCl<sub>3</sub>:CH<sub>3</sub>OH = 1:1). Source: HUANG SAN QI *Souliea vaginata* (Rhizome). Ref: 4291.

**20112 Soulieoside C**

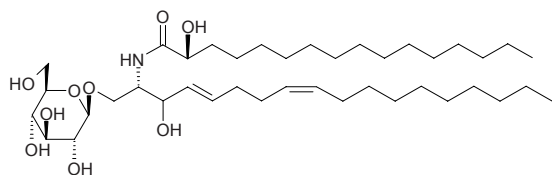
20(*S*),22(*R*),23(*S*),24(*R*)-16 $\beta$ :23,22:25-Diepoxy-3 $\beta$ ,23,24-trihydroxy-9,19-cyclolanostane-3-*O*- $\beta$ -*D*-(4-acetyl)xylopyranoside C<sub>37</sub>H<sub>58</sub>O<sub>10</sub> (662.87). White amorphous powder, mp 237~239°C (MeOH),  $[\alpha]_D^{20} = -8.6^\circ$  ( $c = 0.07$ , CHCl<sub>3</sub>:CH<sub>3</sub>OH = 1:1). Source: HUANG SAN QI *Souliea vaginata* (Rhizome). Ref: 4291.

**20113 Soyacerebroside I**

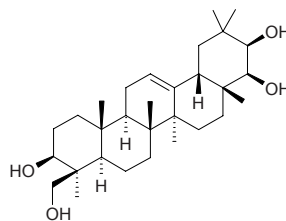
C<sub>40</sub>H<sub>75</sub>NO<sub>9</sub> (714.05). White rounded grain crystals, mp 192~197°C,  $[\alpha]_D = +9.2^\circ$  ( $c = 0.60$ , *i*-PrOH). Pharm: PAF antagonist. Source: XI LAN ROU GUI *Cinnamomum zeylanicum*. Ref: 2199.

**20114 Soyacerebroside II**

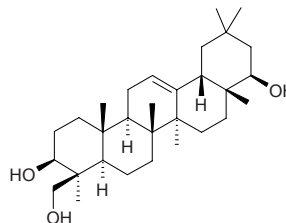
C<sub>40</sub>H<sub>75</sub>NO<sub>9</sub> (714.05). White amorphous powder, mp 262~264°C,  $[\alpha]_D = +7.9^\circ$  ( $c = 0.64$ , *i*-PrOH). Pharm: PAF antagonist. Source: XI LAN ROU GUI *Cinnamomum zeylanicum*. Ref: 2199.

**20115 Soyasapogenol A**

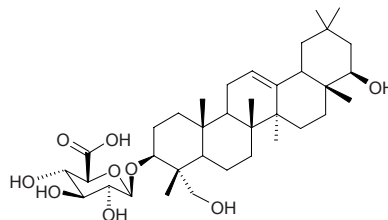
C<sub>30</sub>H<sub>50</sub>O<sub>4</sub> (474.73). mp 308~312°C. Source: HEI DA DOU *Glycine max*. Ref: 6.

**20116 Soyasapogenol B**

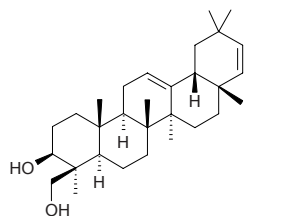
C<sub>30</sub>H<sub>50</sub>O<sub>3</sub> (458.73). mp 258~259°C. Source: HEI DA DOU *Glycine max*. Ref: 6.

**20117 Soyasapogenol B monoglucuronide**

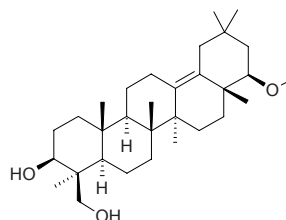
3-*O*-[ $\beta$ -*D*-Glucuronopyranosyl]soyasapogenol B C<sub>36</sub>H<sub>58</sub>O<sub>9</sub> (634.86). Pharm: Cytotoxic (*in vitro*, Hs740.T, ED<sub>50</sub> = 9.61 $\mu$ g/mL; Hs756T, ED<sub>50</sub> = 9.59 $\mu$ g/mL; Hs578T, ED<sub>50</sub> = 8.77 $\mu$ g/mL; HS742.T, ED<sub>50</sub> = 28.68 $\mu$ g/mL; DU145, ED<sub>50</sub> = 9.13 $\mu$ g/mL; LNCaP-FGC, ED<sub>50</sub> = 37.29 $\mu$ g/mL). Source: DA DOU *Glycine max* (Soybean phytochemical concentrate: yield = 0.0022%dw). Ref: 4630.

**20118 Soyasapogenol C**

C<sub>30</sub>H<sub>48</sub>O<sub>2</sub> (440.72). mp 238~239°C. Source: HEI DA DOU *Glycine max*. Ref: 6.

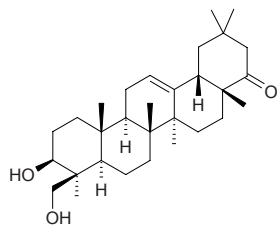
**20119 Soyasapogenol D**

[65892-76-4] C<sub>31</sub>H<sub>52</sub>O<sub>3</sub> (472.76). mp 298~299°C. Source: HEI DA DOU *Glycine max*. Ref: 6.

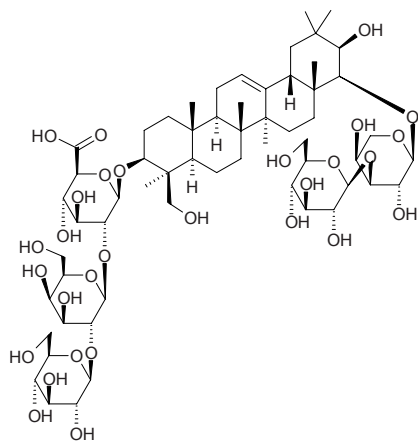


**20120 Soyasapogenol E**

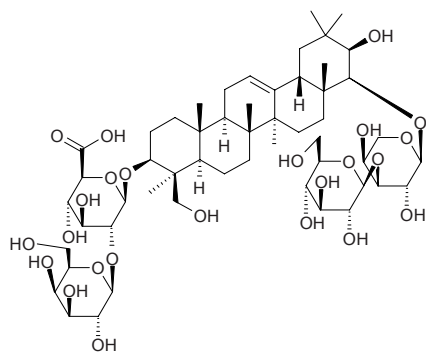
$C_{30}H_{48}O_3$  (456.72). Source: HEI DA DOU *Glycine max*. Ref: 6, 1521.

**20121 Soyasaponin A<sub>1</sub>**

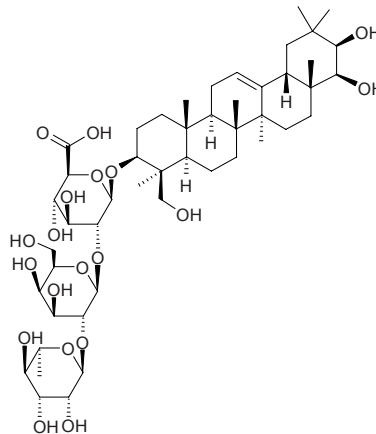
[78693-94-4]  $C_{59}H_{96}O_{29}$  (1269.41). Colorless acicular crystals (water–methanol), mp 240~242°C,  $[\alpha]_D^{26} = +23.2^\circ$  ( $c = 0.91$ , methanol). Pharm: Antithrombotic; calcium antagonist; antihypercholesterolemic; cytotoxic; antioxidant (mus heart, inhibits lipid peroxidization due to adriamycin); inhibits liver damage. Source: HEI DA DOU *Glycine max*. Ref: 658, 900.

**20122 Soyasaponin A<sub>2</sub>**

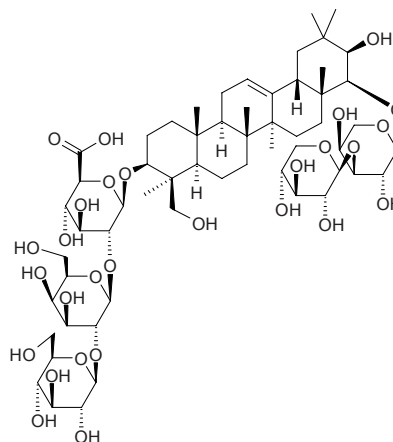
3-*O*-{[ $\beta$ -*D*-Galactopyranosyl-(1→2)- $\beta$ -*D*-glucuronopyranosyl]}-22-*O*-[ $\beta$ -*D*-glucopyranosyl(1→3)- $\alpha$ -*L*-arabinopyranosyl] soyasapogenol A [78693-93-3]  $C_{53}H_{86}O_{24}$  (1107.26). Colorless thin acicular crystals (water–methanol), mp 231~232°C,  $[\alpha]_D^{26} = +25.3^\circ$  ( $c = 1.0$ , methanol). Pharm: Calcium antagonist; antihypercholesterolemic; antioxidant (mus heart, inhibits lipid peroxidization due to adriamycin,  $ED_{50} = 17.8\text{mg/kg}$ ); inhibits liver damage; cytotoxic (*in vitro*, Hs740T,  $ED_{50} = 3.15\mu\text{g/mL}$ ; Hs756T,  $ED_{50} = 3.22\mu\text{g/mL}$ ; Hs578T,  $ED_{50} = 4.84\mu\text{g/mL}$ ; Hs742T,  $ED_{50} = 30.1\mu\text{g/mL}$ ; DU145,  $ED_{50} = 2.11\mu\text{g/mL}$ ; LNCaP-FGC,  $ED_{50} = 30.7\mu\text{g/mL}$ )<sup>[4630]</sup>. Source: DA DOU *Glycine max* (Soybean phytochemical concentrate: yield = 0.0048%dw), HEI DA DOU *Glycine max*. Ref: 900, 1521, 4630.

**20123 Soyasaponin A<sub>3</sub>**

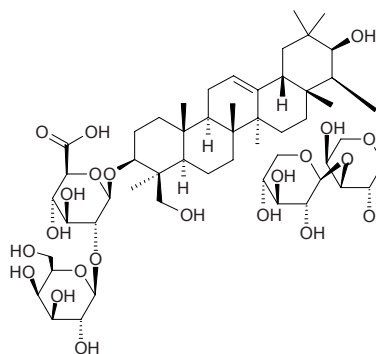
[114077-04-2]  $C_{48}H_{78}O_{19}$  (959.15). White amorphous powder,  $[\alpha]_D^{27} = -14.2^\circ$  ( $c = 0.55$ , pyridine). Pharm: Lipoxygenase inhibitor. Source: HEI DA DOU *Glycine max*, SHAN DOU GEN *Sophora subprostrata* [Syn. *Sophora tonkinensis*]. Ref: 962, 1044, 1123.

**20124 Soyasaponin A<sub>4</sub>**

[117210-06-7]  $C_{58}H_{94}O_{28}$  (1239.38). Colorless thin crystals, mp 281~285°C,  $[\alpha]_D^{16} = +21.3^\circ$  ( $c = 0.3$ , methanol). Pharm: Lipoxygenase inhibitor; prevents AIDS. Source: HEI DA DOU *Glycine max*. Ref: 900.

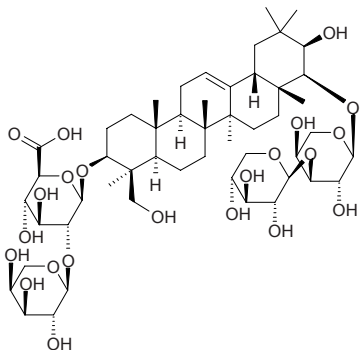
**20125 Soyasaponin A<sub>5</sub>**

[117226-04-7]  $C_{52}H_{84}O_{23}$  (1077.24). Colorless thin crystals, mp 276~279°C,  $[\alpha]_D^{16} = +19.6^\circ$  ( $c = 0.4$ , methanol). Pharm: Lipoxygenase inhibitor; prevents AIDS. Source: HEI DA DOU *Glycine max*. Ref: 900.

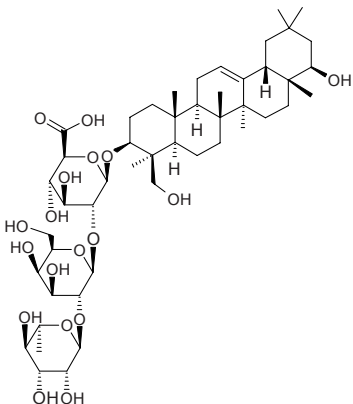


**20126 Soyasaponin A<sub>6</sub>**

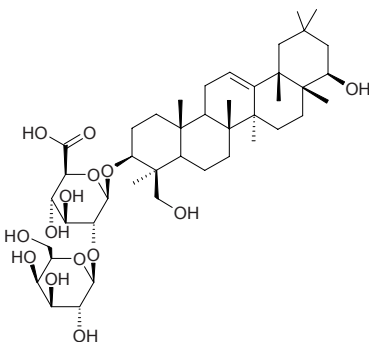
[117210-07-8] C<sub>51</sub>H<sub>82</sub>O<sub>22</sub> (1047.21). Colorless thin crystals, mp 282–285°C, [α]<sub>D</sub><sup>16</sup> = +20.2° (c = 0.3, methanol). **Pharm:** Lipoxygenase inhibitor; prevents AIDS. **Source:** HEI DA DOU *Glycine max*. **Ref:** 1015.

**20127 Soyasaponin I**

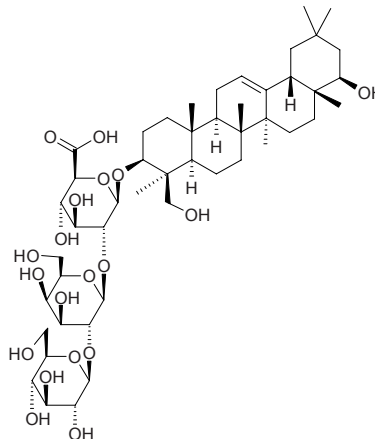
Soyasaponin Bb C<sub>48</sub>H<sub>78</sub>O<sub>18</sub> (943.15). **Pharm:** Inhibits formation of peroxidase. **Source:** BING DOU *Lens culinaris*, HEI DA DOU *Glycine max*, HUI HUI DOU *Cicer arietinum*, JI GU CAO *Abrus fruticulosus* [Syn. *Abrus cantoniensis*], KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. **Ref:** 2, 658, 718.

**20128 Soyasaponin III**

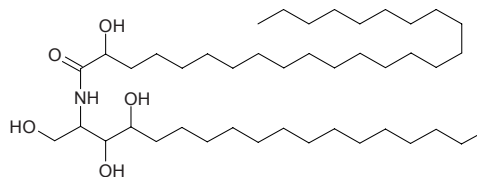
C<sub>42</sub>H<sub>68</sub>O<sub>14</sub> (797.00). **Source:** HUA I *Sophora japonica*. **Ref:** 660.

**20129 Soyasaponin V**

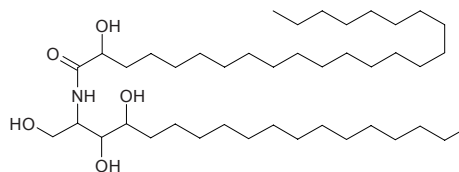
3-O-[β-D-Glucopyranosyl-(1→2)-β-D-galactopyranosyl(1→2)-β-D-glucuronopyranosyl]soyasapogenol B [114590-20-4] C<sub>48</sub>H<sub>78</sub>O<sub>19</sub> (959.15). Colorless acicular crystals, mp 217–219°C (ethanol–water), [α]<sub>D</sub><sup>22</sup> = +17.8° (c = 0.5, methanol). **Pharm:** Lipoxygenase inhibitor; cytotoxic (*in vitro*, Hs740.T, ED<sub>50</sub> = 8.97μg/mL; Hs756T, ED<sub>50</sub> = 7.36μg/mL; Hs578T, ED<sub>50</sub> = 9.87μg/mL; Hs742.T, ED<sub>50</sub> = 31.55μg/mL; DU145, ED<sub>50</sub> = 5.75μg/mL; LNCaP-FGC, ED<sub>50</sub> = 40.68μg/mL)<sup>[4630]</sup>. **Source:** BAI FAN DOU *Phaseolus vulgaris*, DA DOU *Glycine max* (Soybean phytochemical concentrate: yield = 0.0036%<sup>[4630]</sup>), HEI DA DOU *Glycine max*. **Ref:** 900, 4630.

**20130 Soyasphingosine A**

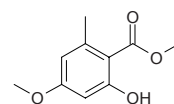
C<sub>43</sub>H<sub>87</sub>NO<sub>5</sub> (698.18). White powder (CHCl<sub>3</sub>), mp 150–151°C. **Source:** HEI DA DOU *Glycine max*. **Ref:** 2519.

**20131 Soyasphingosine B**

C<sub>42</sub>H<sub>85</sub>NO<sub>5</sub> (684.15). White powder (CHCl<sub>3</sub>), mp 150–151°C. **Source:** HEI DA DOU *Glycine max*. **Ref:** 2519.

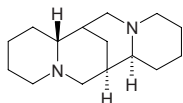
**20132 Sparassol**

C<sub>10</sub>H<sub>12</sub>O<sub>4</sub> (196.20). mp 67–68°C. **Source:** NAO YANG HUA *Rhododendron molle*. **Ref:** 6.

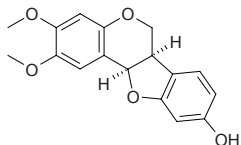


**20133 Sparteine**

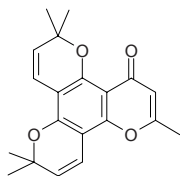
6 $\beta$ ,7 $\alpha$ ,9 $\alpha$ ,11 $\alpha$ -Pachycarpine; Lupinidine [90-39-1] C<sub>15</sub>H<sub>26</sub>N<sub>2</sub> (234.39). bp (-) 188°C/18mmHg; [ $\alpha$ ]<sub>D</sub><sup>21</sup> = -16.4° (c = 10, absolute ethanol), easily soluble in ethanol, chloroform, ether, slightly soluble in water<sup>[5507]</sup>. **Pharm:** Diuretic; oxytocic; uterine stimulant (*in vitro* and *in vivo*); toxin (insects); used in treatment of ventricular tachycardia, reduces myocardial excitability and conductivity, slows heart rate and inhibits myocardial contractility. **Source:** BAI QU CAI *Chelidonium majus*, HUANG YU SHAN DOU *Lupinus luteus*, JIN QUE ER *Cytisus scoparius* [Syn. *Spartium scoparium*], MU MA DOU *Thermopsis lanceolata*. **Ref:** 6, 658, 5507.

**20134 (-)-Sparticarpin**

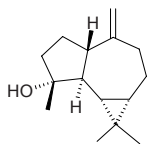
C<sub>17</sub>H<sub>16</sub>O<sub>5</sub> (300.32). **Pharm:** Antifungal. **Source:** YING ZHAO DOU *Spartium junceum*. **Ref:** 658.

**20135 Spathelia bischromene**

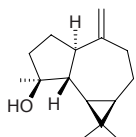
C<sub>20</sub>H<sub>20</sub>O<sub>4</sub> (324.38). **Pharm:** Antibacterial; cytotoxic (HeLa). **Source:** family Rutaceae spp. **Ref:** 658.

**20136 (-)-ent-Spathulenol**

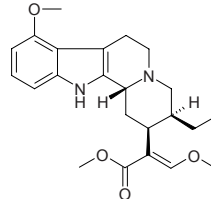
C<sub>15</sub>H<sub>24</sub>O (220.36). Colorless oil, [ $\alpha$ ]<sub>D</sub><sup>26</sup> = -2.9° (c = 1.3, CHCl<sub>3</sub>). **Source:** KUAN DONG HUA *Tussilago farfara* (flower bud). **Ref:** 3531.

**20137 Spathulenol**

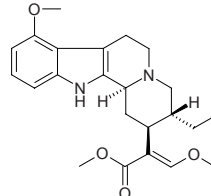
Caryolane-5 $\beta$ ,9 $\beta$ -diol [6750-60-3] C<sub>15</sub>H<sub>24</sub>O (220.36). [ $\alpha$ ]<sub>D</sub><sup>26</sup> = +60° (c = 0.1, CHCl<sub>3</sub>). **Pharm:** Cytotoxic (Mel-2, ED<sub>50</sub> = 6.3  $\mu$ g/mL); antibacterial (*Staphylococcus aureus*, moderate)<sup>[4929]</sup>; antiasthmatic; dispels phlegm; LD<sub>50</sub> (mus) = 1.726g/kg. **Source:** CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*], HUANG HAO *Artemisia scoparia* [Syn. *Artemisia capillaris* var. *scoparia*], XIONG RUI ZHUANG SHU WEI CAO *Salvia staminea*, YUN SHI *Caesalpinia decapetala* (leaf), *Esenbeckia yaaxhokob* (leaf). **Ref:** 2, 660, 1821, 1822, 4456, 4929, 5400.

**20138 Speciociliatine**

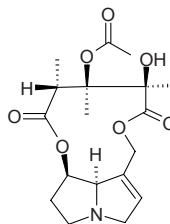
C<sub>23</sub>H<sub>30</sub>N<sub>2</sub>O<sub>4</sub> (398.51). **Pharm:** Opioid agonist (gpg ileum, pEC<sub>50</sub> = 5.55±0.15, control Morphine, pEC<sub>50</sub> = 7.15±0.05). **Source:** MEI LI MAO ZHU MU *Mitragyna speciosa* (leaf). **Ref:** 5069.

**20139 Speciogynine**

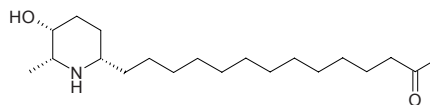
C<sub>23</sub>H<sub>30</sub>N<sub>2</sub>O<sub>4</sub> (398.51). **Pharm:** Opioid agonist (gpg ileum, pEC<sub>50</sub> = 5.61±0.06, control Morphine, pEC<sub>50</sub> = 7.15±0.05). **Source:** MEI LI MAO ZHU MU *Mitragyna speciosa* (leaf). **Ref:** 5069.

**20140 Spectabiline**

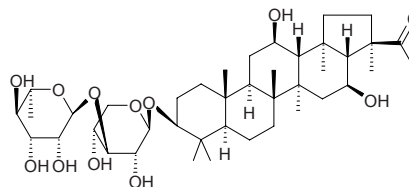
C<sub>18</sub>H<sub>25</sub>NO<sub>7</sub> (367.39). mp 185.5–186.0°C (ethanol), [ $\alpha$ ]<sub>D</sub><sup>22</sup> = +121° (c = 1.7, chloroform), +143° (c = 1.38, ethanol). **Pharm:** Antineoplastic (rat Walker carcinoma, 50mg/kg, InRt = 95%, mus glandular carcinoma 755, 60mg/kg, InRt = 82%); antispasmodic (gpg, ileum); cardiotoxic. **Source:** MEI LI ZHU SHI DOU *Crotalaria spectabilis*, AO ZHU SHI DOU *Crotalaria retusa*. **Ref:** 661.

**20141 (-)-Spectaline**

C<sub>20</sub>H<sub>39</sub>NO<sub>2</sub> (325.54). **Pharm:** Analgesic (male Swiss mouse, capsaicin- induced neurogenic pain model, ID<sub>50</sub> = 20.81  $\mu$ g/paw, control Dipyron ID<sub>50</sub> = 19.89  $\mu$ g/paw). **Source:** XIA YE JUE MING *Cassia leptophylla*. **Ref:** 5440.

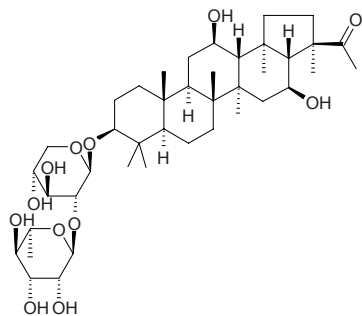
**20142 Spergulacin**

C<sub>41</sub>H<sub>68</sub>O<sub>12</sub> (752.99). Microneedles (MeOH), mp 280–282°C (dec), [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -13.7° (c = 0.76, pyridine). **Source:** *Mollugo spergula* (aerial parts). **Ref:** 5227.

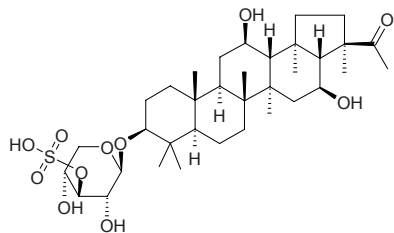


**20143 Spergulacin A**

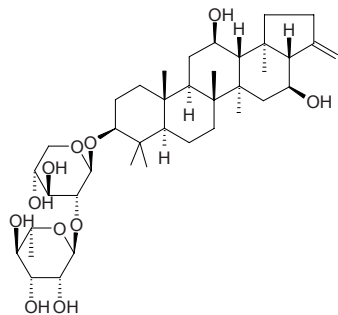
$C_{41}H_{68}O_{12}$  (752.99). Colorless needles (methanol), mp 260–262°C (dec),  $[\alpha]_D^{20} = -16.1^\circ$  ( $c = 0.77$ , pyridine). Source: *Mollugo spergula* (aerial parts). Ref: 5227.

**20144 Spergulin A**

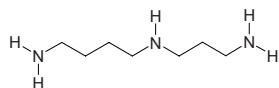
3-*O*-( $\beta$ -*D*-Xylopyranosyl 4-sulphate)-spergulagenin A  $C_{35}H_{58}O_{11}S$  (686.91). Colorless needles, mp 220–221°C (dec),  $[\alpha]_D^{25} = +19.1^\circ$  ( $c = 0.66$ , DMSO). Source: *Mollugo spergula* (aerial parts). Ref: 5227.

**20145 Spergulin B**

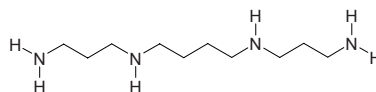
3-*O*-[ $\alpha$ -Rhamnopyranosyl (1→2)- $\beta$ -*D*-xylopyranosyl]-spergulin A  $C_{39}H_{64}O_{11}$  (708.94). Colorless powder, mp 271–273°C (dec),  $[\alpha]_D^{20} = -20.0^\circ$  ( $c = 0.85$ , pyridine). Source: *Mollugo spergula* (aerial parts). Ref: 5227.

**20146 Spermidine**

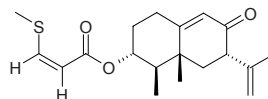
[124-20-9]  $C_7H_{19}N_3$  (145.25). Pharm: Germination inhibitor (spores of *Penicillium notatum*) Source: FAN QIE *Lycopersicon esculentum*, HEI DA DOU *Glycine max*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]<sup>[5508]</sup>, YAN CAO *Nicotiana tabacum*, YAN MAI *Avena sativa*. Ref: 658, 5508.

**20147 Spermine**

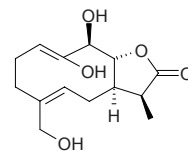
[71-44-3]  $C_{10}H_{26}N_4$  (202.35). Pharm: Germination inhibitor (spores of *Penicillium notatum*). Source: JU YU *Helianthus tuberosus*, MAI YA *Hordeum vulgare*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]<sup>[5508]</sup>, YAN MAI *Avena sativa*. Ref: 658, 5508.

**20148 Spetasin**

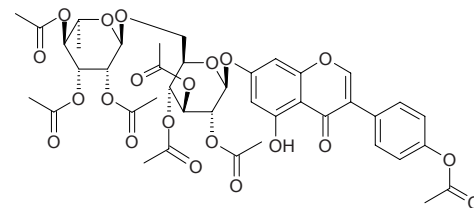
[70238-61-6]  $C_{19}H_{26}O_3S$  (334.48). mp 134–136°C,  $[\alpha]_D^{18} = +78.8^\circ$  (chloroform). Pharm: Antispasmodic; inhibits L-type Calcium current (NG108-15 neuronal cells)<sup>[5365]</sup>. Source: HUANG HUA JIA ZHU TAO *Thevetia neriifolia* [Syn. *Thevetia peruviana*], TAI WAN FENG DOU CAI *Petasites formosanus*. Ref: 661, 5365.

**20149 Sphaelactone A**

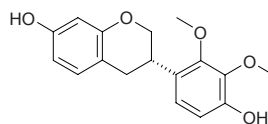
9,14-dihydroxy-1(10),4-germacatrien-12,8-olide[1(10)*E,4E,8a,9beta*]  $C_{14}H_{20}O_5$  (268.31). Yellow oleaginous substance. Source: MAO GUO HAN XIAO *Michelia spaerantha*. Ref: 668.

**20150 Sphaerobioside acetate**

$C_{41}H_{44}O_{21}$  (872.80). Pharm: Antioxidant (DPPH scavenger, 10  $\mu$ mol/L, ScRt = 18%, control BHT, 10  $\mu$ mol/L, ScRt = 43%); antibacterial (*Staphylococcus aureus* ATCC 25923, MIC > 128  $\mu$ g/mL, control Vancomycin, MIC = 2  $\mu$ g/mL; *Staphylococcus aureus* MRSA SK1, MIC > 128  $\mu$ g/mL, Vancomycin, MIC = 2  $\mu$ g/mL). Source: TIAN SHAN ZHU ZI *Garcinia dulcis* (fruit). Ref: 5319.

**20151 Spherosin**

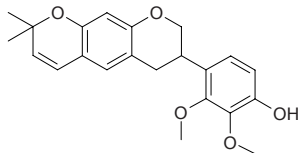
$C_{17}H_{18}O_5$  (302.33). mp 151°C. Source: KU MA DOU *Swainsonia salsula* [Syn. *Sphaerophysa salsula*]. Ref: 6, 660.



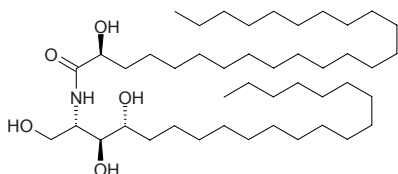


**20152 Spherosinin**

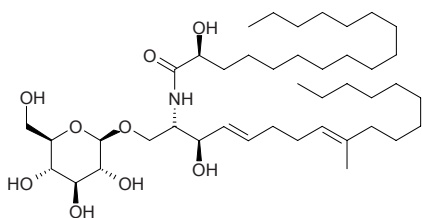
C<sub>22</sub>H<sub>24</sub>O<sub>5</sub> (368.43). mp 97~98°C. Source: KU MA DOU *Swainsonia salsula* [Syn. *Sphaerophysa salsula*]. Ref: 6.

**20153 Sphingolipid Lipids01-175**

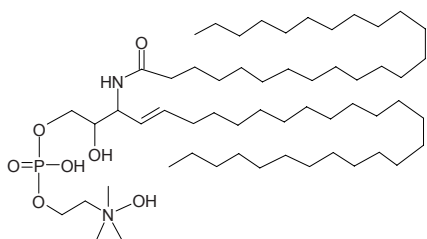
C<sub>45</sub>H<sub>91</sub>NO<sub>5</sub> (726.23). Source: LAN HUANG HONG GU *Russula cyanoxantha*. Ref: 2077.

**20154 Sphingolipid Lipids01-521**

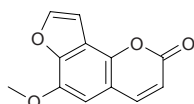
C<sub>42</sub>H<sub>79</sub>NO<sub>9</sub> (742.10). Source: AI LI SI DUO KONG JUN *Polyporus ellisii*. Ref: 2079.

**20155 Sphingomyelin**

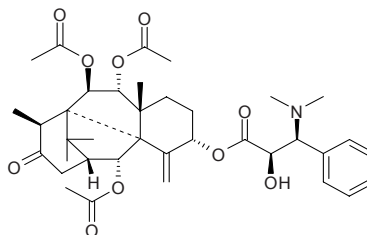
C<sub>57</sub>H<sub>117</sub>N<sub>2</sub>O<sub>7</sub>P (973.55). mp 196~198°C. Source: MU ER *Auricularia auricula*, ZHANG YU *Octopus vulgaris*. Ref: 6.

**20156 Sphondin**

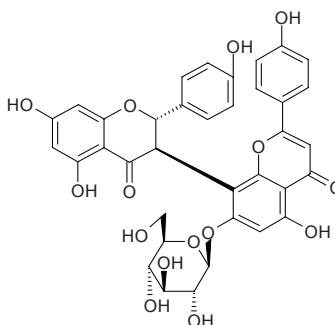
C<sub>12</sub>H<sub>8</sub>O<sub>4</sub> (216.20). mp 183~186°C, 189~191°C. Source: DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*], LANG DU *Stellera chamaejasme*, LI JIANG QIAN HU *Peucedanum govanianum* var. *bicolor*, YONG NING DU HUO *Heracleum yungningense*. Ref: 6.

**20157 Spicaledonine**

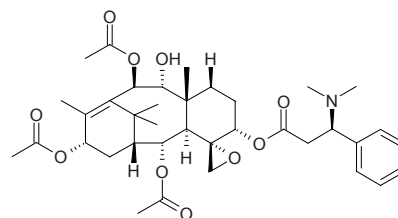
C<sub>37</sub>H<sub>49</sub>NO<sub>10</sub> (667.80). [α]<sub>D</sub> = +29° (CHCl<sub>3</sub>). Source: AO DA LI YA HONG DOU SHAN *Austrotaxus spicata*. Ref: 662.

**20158 Spicataside**

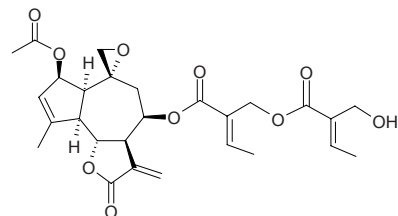
C<sub>36</sub>H<sub>30</sub>O<sub>15</sub> (702.63). mp 232~233°C (dec). Source: SHAN ZHU ZI *Garcinia multiflora*. Ref: 6.

**20159 Spicataxine**

C<sub>37</sub>H<sub>51</sub>NO<sub>10</sub> (669.82). Source: AO DA LI YA HONG DOU SHAN *Austrotaxus spicata*. Ref: 662.

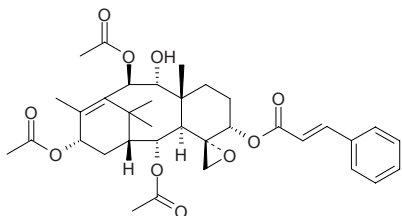
**20160 Spicatin**

C<sub>27</sub>H<sub>32</sub>O<sub>10</sub> (516.55). Resinoid, difficult to crystallize, [α]<sub>D</sub><sup>22</sup> = -146° (c = 0.20, chloroform). Pharm: Antineoplastic; cytotoxic (KB). Source: CU SHE BIAN JU *Liatris squarrosa*, MI SUI HUA SHE BIAN JU *Liatris pycnostachya*, SHE BIAN JU *Liatris spicata*, XI YE SHE BIAN JU *Liatris tenuifolia*. Ref: 661.

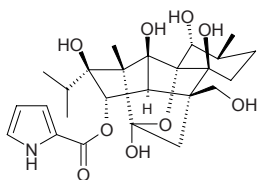


**20161 Spicatine**

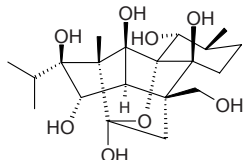
$C_{35}H_{44}O_{10}$  (624.73). Source: AO DA LI YA HONG DOU SHAN *Austrotaxus spicata*. Ref: 662.

**20162 Spiganthine**

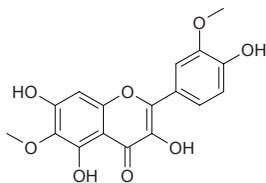
$C_{25}H_{35}NO_9$  (493.56). Crystals ( $CHCl_3$ : $Me_2CO$  = 3:1), mp 159°C,  $[\alpha]_D^{25} = +35^\circ$  ( $c = 0.5$ ). Pharm: Cardiac contraction inhibitor (guinea-pig papillary muscle, causes a prolongation of the latency time and decrease of contraction force,  $EC_{50} = 25\text{nmol/L}$ ). Source: QU CHONG CAO *Spigelia anthelmia* (aerial parts). Ref: 5139.

**20163 Spiganthol**

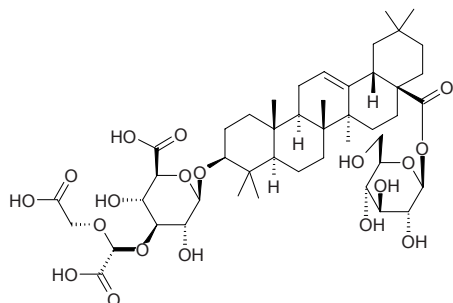
$C_{20}H_{32}O_8$  (400.47). Amorphous. Source: QU CHONG CAO *Spigelia anthelmia* (aerial parts). Ref: 5139.

**20164 Spinacetin**

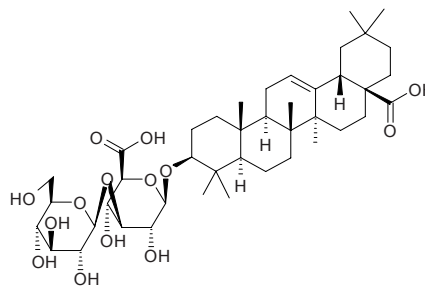
$C_{17}H_{14}O_8$  (346.30). mp 235–236°C. Source: BO CAI *Spinacia oleracea*. Ref: 6.

**20165 Spinacoside C**

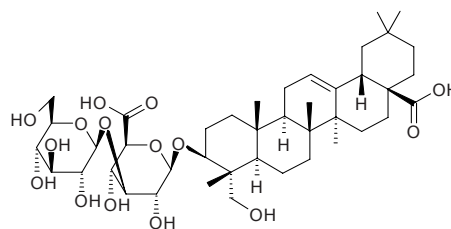
$C_{46}H_{70}O_{19}$  (927.06). Source: LUO KUI HUA *Basella rubra* (aerial parts). Ref: 3544.

**20166 Spinasaponin A**

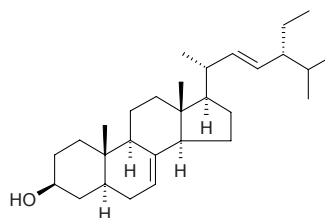
$C_{42}H_{66}O_{14}$  (794.99). Pharm: Antibacterial. Source: BO CAI *Spinacia oleracea*. Ref: 6, 658.

**20167 Spinasaponin B**

$C_{42}H_{66}O_{15}$  (810.99). Pure substance, separated by layer chromatography, sugarlike, difficult to crystallize, softening point, 195–198°C,  $[\alpha]_D^{22} = +100^\circ$  ( $c = 0.42$ , methanol). Pharm: Antibacterial. Source: BO CAI *Spinacia oleracea*. Ref: 6, 658.

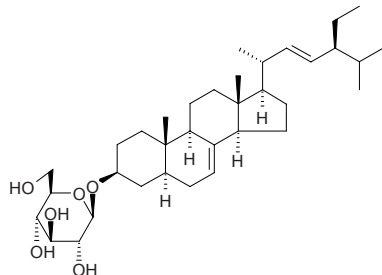
**20168  $\alpha$ -Spinasterol**

24 $\alpha$ -ethyl-5 $\alpha$ -cholesta-7-*trans*,22-dien-3 $\beta$ -ol [481-17-4]  $C_{29}H_{48}O$  (412.71). Colorless acicular crystals (ethanol), mp 159–160°C; mp 157–159°C,  $[\alpha]_D^{22} = -0.05^\circ$  ( $c = 0.055$ ,  $CHCl_3$ ). Pharm: Anti-inflammatory; diuretic; cell proliferation inhibitor (glomerular mesangial caused by high-ambient glucose,  $IC_{50} = 3.9\text{ng/mL}$ , 9.5pmol/L, inhibitory potency is about 1,000 times higher than that of positive control Simvastatin, a HMG-CoA reductase inhibitor; significantly reduces increases of serum triglycerides, renal weight and urinary protein excretion in streptozotocin-induced diabetic mouse, action can be comparable with insulin)<sup>[5012]</sup>. Source: BAI QU CAI *Chelidonium majus*, BO CAI *Spinacia oleracea*, CHAI HU *Bupleurum chinense*, DA YE CHAI HU *Bupleurum longiradiatum*, DANG SHEN *Codonopsis pilosula*, GUA LOU *Trichosanthes kirilowii* (fruit: mean content = 0.0171%<sup>[5508]</sup>), HUANG JIN FENG *Impatiens sicutifer*, JIE GENG *Platycodon grandiflorum*, JIN HUANG CHAI HU *Bupleurum aureum*, KU CAO *Vallisneria spiralis*, KU HAO *Conyza blinii*, MEI SHANG LU *Phytolacca americana* [Syn. *Phytolacca decandra*], MEI YUAN ZHI *Polygala senega*, MU XU *Medicago sativa*, NIU XI *Achyranthes bidentata*, SHUI CAI *Menyanthes trifoliata*, SI GUA *Luffa cylindrica*, TU JING JIE *Chenopodium ambrosioides*, WANG GUA *Trichosanthes cucumeroides*, XIAO HUA SUAN TENG ZI *Embelia parviflora*, YAO XI GUA *Citrullus colocynthis*, YE ZI RANG *Cocos nucifera*, occurs in many plants. Ref: 2, 6, 437, 548, 582, 604, 5012, 5508.

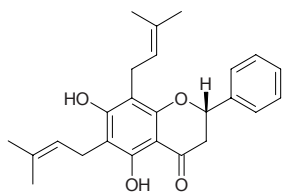


**20169  $\alpha$ -Spinasterol- $\beta$ -D-glucoside**

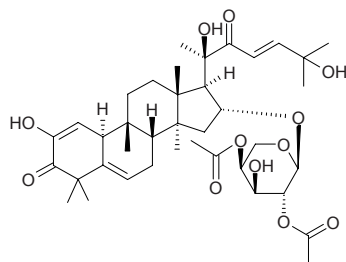
$\alpha$ -Spinasterol glucoside C<sub>35</sub>H<sub>58</sub>O<sub>6</sub> (574.85). mp 291~292°C (gasoline), [ $\alpha$ ]<sub>D</sub><sup>27</sup> = -35.0°, acicular crystals (benzene-ethanol), mp 282~283°C, [ $\alpha$ ]<sub>D</sub> = -35° (*c* = 0.4, pyridine). **Pharm:** Diuretic. **Source:** DANG SHEN *Codonopsis pilosula*, GAO YI ZHI HUANG HUA *Solidago altissima*, HUI YE DU JING SHAN *Maesa chisia*, JIE GENG *Platycodon grandiflorum*, NIU TI DOU *Pithecolobium dulce*, NIU XI *Achyranthes bidentata*, TIAN HUA FEN *Trichosanthes kirilowii*, YIN CHAI HU *Stellaria dichotoma* var. *lanceolata*, ZI HU *Bupleurum falcatum*. **Ref:** 2, 582, 661, 5501.

**20170 Spiniavanone-B**

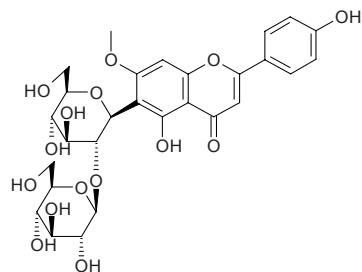
5,7-Dihydroxy-6,8-di(3-methylbut-2-enyl)flavanone C<sub>25</sub>H<sub>28</sub>O<sub>4</sub> (392.50). Oil. **Source:** *Lonchocarpus xuui* (stem cortex). **Ref:** 3973.

**20171 Spinoside A**

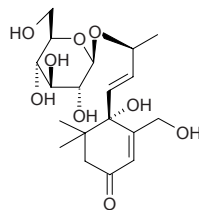
C<sub>39</sub>H<sub>56</sub>O<sub>12</sub> (716.87). **Pharm:** Cytotoxic. **Source:** DUO CI DI SHI MU *Desfontainia spinosa*. **Ref:** 658.

**20172 Spinosin**

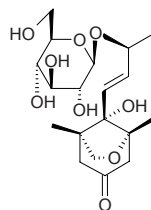
2''-O- $\beta$ -D-Glucopyranosylswertisin C<sub>28</sub>H<sub>32</sub>O<sub>15</sub> (608.56). **Source:** DA ZAO *Ziziphujuba*, SUAN ZAO REN *Ziziphujuba* var. *spinosa*. **Ref:** 2.

**20173 Spinoside A**

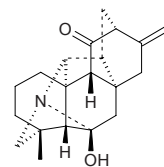
(6*S*,9*S*)-6-Hydroxyinamoside;  
(-)-(6*S*,9*S*)-9-O- $\beta$ -D-Glucopyranosyloxy-6,13-dihydroxy-3-oxo- $\alpha$ -ionol  
C<sub>19</sub>H<sub>30</sub>O<sub>9</sub> (402.45). Amorphous, [ $\alpha$ ]<sub>D</sub><sup>22</sup> = -43.0° (*c* = 0.3, MeOH). **Source:** LAO SHU GUA *Capparis spinosa*. **Ref:** 1998.

**20174 Spinoside B**

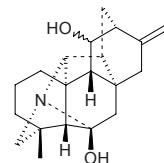
(9*S*)-Drummondol-9-O- $\beta$ -D-glucoopyranoside C<sub>19</sub>H<sub>30</sub>O<sub>9</sub> (402.45). Amorphous, [ $\alpha$ ]<sub>D</sub><sup>22</sup> = -51.2° (*c* = 2.0, MeOH). **Source:** LAO SHU GUA *Capparis spinosa*. **Ref:** 1998.

**20175 Spiradine A**

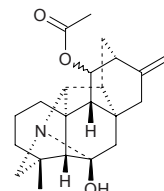
C<sub>20</sub>H<sub>25</sub>NO<sub>2</sub> (311.43). mp 281~282°C. **Source:** XIU XIAN JU YE *Spiraea japonica*. **Ref:** 6.

**20176 Spiradine B**

[19741-51-6] C<sub>20</sub>H<sub>27</sub>NO<sub>2</sub> (313.44). mp 259~260°C. **Source:** XIU XIAN JU YE *Spiraea japonica*. **Ref:** 6.

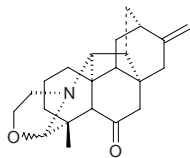
**20177 Spiradine C**

C<sub>22</sub>H<sub>29</sub>NO<sub>3</sub> (355.48). mp 248~249°C. **Source:** XIU XIAN JU YE *Spiraea japonica*. **Ref:** 6.

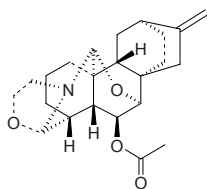


**20178 Spiradine D**

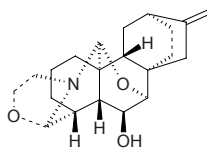
$C_{22}H_{29}NO_2$  (339.48). **Pharm:** Platelet aggregation inhibitor (*in vitro*, induced by PAF, distinct effect). **Source:** XIAO YE HUA BEI XIU XIAN JU *Spiraea fritschiana* var. *parvifolia*. **Ref:** 2198.

**20179 Spiradine F**

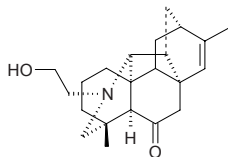
[21040-64-2]  $C_{23}H_{31}NO_4$  (385.51). **Source:** XIU XIAN JU YE *Spiraea japonica*. **Ref:** 6.

**20180 Spiradine G**

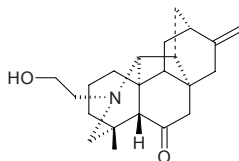
[21040-66-4]  $C_{21}H_{29}NO_3$  (343.47). mp 168~170°C. **Source:** XIU XIAN JU YE *Spiraea japonica*. **Ref:** 6.

**20181 Spirafine II**

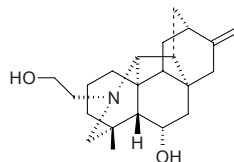
$C_{22}H_{31}NO_2$  (341.50). **Pharm:** Platelet aggregation inhibitor (*in vitro*, induced by PAF,  $IC_{50} = (40.8 \pm 11.7) \text{mg/L}$  or  $(119.6 \pm 34.3) \mu\text{mol/L}$ ). **Source:** XIAO YE HUA BEI XIU XIAN JU *Spiraea fritschiana* var. *parvifolia*. **Ref:** 2198.

**20182 Spirafine III**

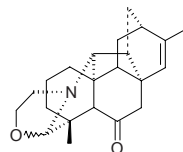
$C_{22}H_{31}NO_2$  (341.50). **Pharm:** Platelet aggregation inhibitor (*in vitro*, induced by PAF,  $IC_{50} = (43.5 \pm 17.1) \text{mg/L}$  or  $(127.5 \pm 50.1) \mu\text{mol/L}$ ). **Source:** XIAO YE HUA BEI XIU XIAN JU *Spiraea fritschiana* var. *parvifolia*. **Ref:** 2198.

**20183 Spirafine III A**

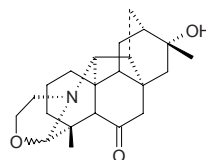
$C_{22}H_{33}NO_2$  (343.51). **Pharm:** Platelet aggregation inhibitor (*in vitro*, induced by PAF, distinct effect). **Source:** XIAO YE HUA BEI XIU XIAN JU *Spiraea fritschiana* var. *parvifolia*. **Ref:** 2198.

**20184 Spirafine IV**

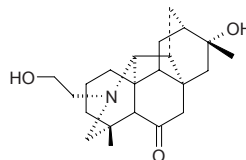
$C_{22}H_{29}NO_2$  (339.48). **Pharm:** Platelet aggregation inhibitor (*in vitro*). **Source:** XIAO YE HUA BEI XIU XIAN JU *Spiraea fritschiana* var. *parvifolia*. **Ref:** 2198.

**20185 Spirafine V**

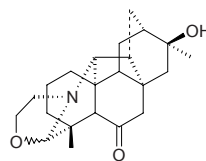
$C_{22}H_{31}NO_3$  (357.50). **Pharm:** Platelet aggregation inhibitor (*in vitro*, induced by PAF, distinct effect). **Source:** XIAO YE HUA BEI XIU XIAN JU *Spiraea fritschiana* var. *parvifolia*. **Ref:** 2198.

**20186 Spirafine VA**

$C_{22}H_{33}NO_3$  (359.51). **Pharm:** Platelet aggregation inhibitor (*in vitro*, induced by PAF, distinct effect). **Source:** XIAO YE HUA BEI XIU XIAN JU *Spiraea fritschiana* var. *parvifolia*. **Ref:** 2198.

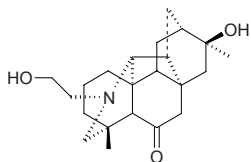
**20187 Spirafine VI**

$C_{22}H_{31}NO_3$  (357.50). **Pharm:** Platelet aggregation inhibitor (*in vitro*, induced by PAF, distinct effect). **Source:** XIAO YE HUA BEI XIU XIAN JU *Spiraea fritschiana* var. *parvifolia*. **Ref:** 2198.

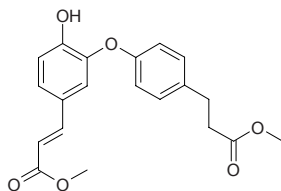


**20188 Spirafine VIA**

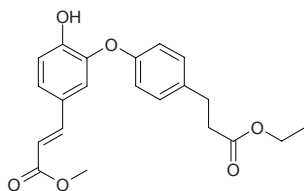
$C_{22}H_{33}NO_3$  (359.51). **Pharm:** Platelet aggregation inhibitor (*in vitro*, induced by PAF, distinct effect). **Source:** XIAO YE HUA BEI XIU XIAN JU *Spiraea fritschiana* var. *parvifolia*. **Ref:** 2198.

**20189 Spiraformin A**

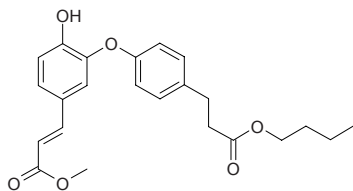
$C_{20}H_{22}O_6$  (356.38). Colorless syrup. **Source:** TAI WAN XIU XIAN JU *Spiraea formosana*. **Ref:** 2575.

**20190 Spiraformin B**

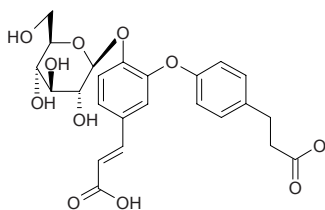
$C_{21}H_{22}O_6$  (370.41). Colorless syrup. **Source:** TAI WAN XIU XIAN JU *Spiraea formosana*. **Ref:** 2575.

**20191 Spiraformin C**

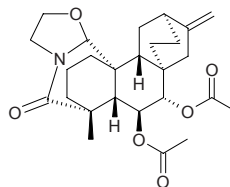
$C_{23}H_{26}O_6$  (398.46). Colorless syrup. **Source:** TAI WAN XIU XIAN JU *Spiraea formosana*. **Ref:** 2575.

**20192 Spiraformin D**

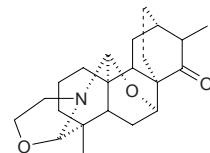
$C_{24}H_{26}O_{11}$  (490.47). Colorless syrup,  $[\alpha]_D^{25} = -2.1^\circ$  ( $c = 0.9$ , MeOH). **Source:** TAI WAN XIU XIAN JU *Spiraea formosana*. **Ref:** 2575.

**20193 Spiramide**

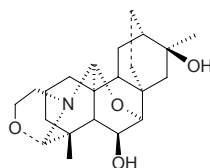
$C_{26}H_{35}NO_6$  (457.57). Amorphous powder,  $[\alpha]_D^{26} = -63.40^\circ$  ( $c = 4.2$ ,  $CHCl_3$ ). **Source:** JI JIAN XIU XIAN JU *Spiraea japonica* var. *acuta* (root: yield = 0.000011%). **Ref:** 3045.

**20194 Spiramine N<sub>6</sub>**

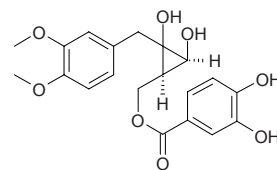
$C_{22}H_{31}NO_3$  (357.50). **Pharm:** Platelet aggregation inhibitor (*in vitro*, selectively inhibits aggregation induced by PAF with dose-response relationship,  $IC_{50} = 26\mu\text{mol/L}$ ; reduces 5-HT release induced by AA or PAF in a concentration-dependent manner,  $IC_{50} = 4.7\mu\text{mol/L}$  or  $3.5\mu\text{mol/L}$ ; obviously reduces conglutination between activated platelet and neutrophil granulocytes,  $IC_{50} = 78.6\mu\text{mol/L}$ ). **Source:** XIU XIAN JU *Spiraea japonica*. **Ref:** 4429.

**20195 Spiramine W**

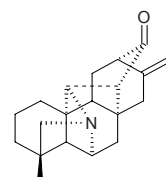
$C_{22}H_{33}NO_4$  (375.51). Acicular crystals. **Source:** JI JIAN XIU XIAN JU *Spiraea japonica* var. *acuta*. **Ref:** 896.

**20196 Spiramogolin**

$C_{20}H_{22}O_8$  (390.39). Colorless rhomboid crystals (EtOH), mp 194–196°C,  $[\alpha]_D^{22} = +70.7^\circ$  ( $c = 0.3$ , MeOH). **Source:** MENG GU XIU XIAN JU *Spiraea mongolica*. **Ref:** 421.

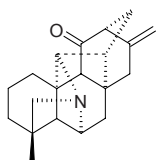
**20197 Spirasine IV**

$C_{20}H_{25}NO$  (295.43). Amorphous white powder,  $[\alpha]_D^{17} = -95.7^\circ$  ( $c = 1.1$ , chloroform). **Source:** GUANG YE FEN HUA XIU XIAN JU *Spiraea japonica* var. *fortunei*. **Ref:** 43.

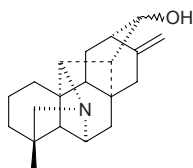


**20198 Spirasine IX**

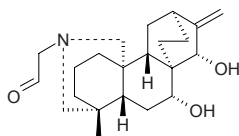
$C_{20}H_{25}NO$  (295.43). Colorless columnar crystals, mp 157–158°C,  $[\alpha]_D^{21} = +135.5^\circ$  ( $c = 1.0$ , chloroform). [Source](#): GUANG YE FEN HUA XIU XIAN JU *Spiraea japonica* var. *fortunei*. [Ref](#): 43.

**20199 Spirasine XI**

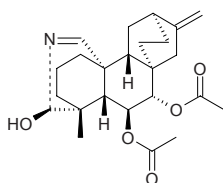
$C_{20}H_{27}NO$  (297.44). White acicular crystals, mp 286–288°C,  $[\alpha]_D^{11} = -23.8^\circ$  ( $c = 0.84$ , chloroform). [Source](#): GUANG YE FEN HUA XIU XIAN JU *Spiraea japonica* var. *fortunei*. [Ref](#): 43.

**20200 Spiratine A**

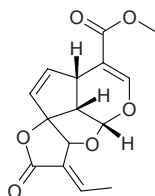
$C_{22}H_{33}NO_3$  (359.51). Amorphous powder,  $[\alpha]_D^{24} = -6.25^\circ$  ( $c = 1.0$ ,  $CH_3OH$ ). [Source](#): JI JIAN XIU XIAN JU *Spiraea japonica* var. *acuta* (root: yield = 0.00022%). [Ref](#): 3045.

**20201 Spiratine B**

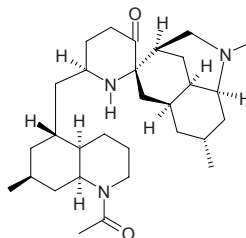
$C_{24}H_{33}NO_5$  (415.53). Amorphous powder,  $[\alpha]_D^{25} = +129.48^\circ$  ( $c = 5.0$ ,  $CHCl_3$ ). [Source](#): JI JIAN XIU XIAN JU *Spiraea japonica* var. *acuta* (root: yield = 0.00018%). [Ref](#): 3045.

**20202 Spirolactone iridoid**

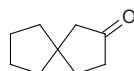
$C_{15}H_{14}O_6$  (290.28). [Source](#): SU KU BA DOU HUA *Himatanthus sucuba*. [Ref](#): 4143.

**20203 Spirolucidine**

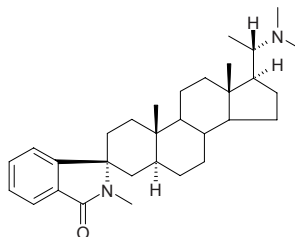
$C_{30}H_{49}N_3O_2$  (483.74). [Source](#): GUANG LIANG SHI SONG *Lycopodium lucidulum*. [Ref](#): 3927.

**20204 Spiro[4,4]nonane-2-one**

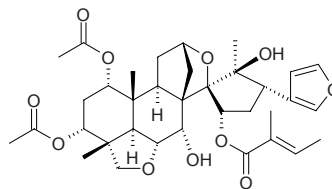
$C_9H_{14}O$  (138.21). [Source](#): YI ZHI REN *Alpinia oxyphylla*. [Ref](#): 660.

**20205 Spiropachysine**

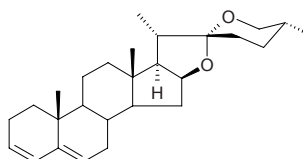
(+)-Spiropachysine [19587-41-8]  $C_{31}H_{46}N_2O$  (462.72). Acicular crystals, mp 278–280°C, mp 290–292°C,  $[\alpha]_D^{22} = +31.9^\circ$  (chloroform). [Pharm](#): Antiulcerative (mus, sc, 50mg/kg); sedative (mus, ip, 50–200mg/mL). [Source](#): XUE SHAN LIN *Pachysandra terminalis*. [Ref](#): 6, 1111, 1141.

**20206 Spirosendan**

$C_{35}H_{46}O_{11}$  (642.75). Amorphous powder,  $[\alpha]_D = -2^\circ$  ( $c = 0.07$ ). [Source](#): CHUAN LIAN PI *Melia toosendan*. [Ref](#): 2374.

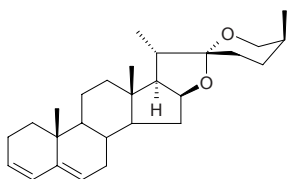
**20207 25α-Spirosta-3,5-diene**

25R-Spirosta-3,5-diene [1672-65-7]  $C_{27}H_{40}O_2$  (396.62). mp 164–165°C. [Source](#): SHAN BI XIE *Dioscorea tokoro*, CHUAN LONG SHU YU *Dioscorea nipponica*, HU LU BA *Trigonella foenum-graecum*. [Ref](#): 6, 660, 2458.

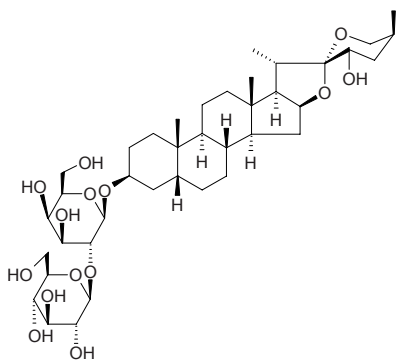


**20208 25 $\beta$ -Spirosta-3,5-diene**

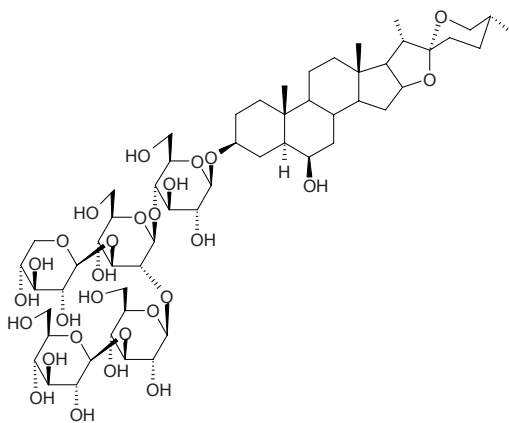
25S-Spirosta-3,5-diene [37064-21-4] C<sub>27</sub>H<sub>40</sub>O<sub>2</sub> (396.62). Source: HU LU BA *Trigonella foenum-graecum*. Ref: 2458.

**20209 (5 $\beta$ ,25S)-Spirostan-3 $\beta$ ,15 $\alpha$ ,23 $\alpha$ -diol-3-O-D-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-galactopyranoside**

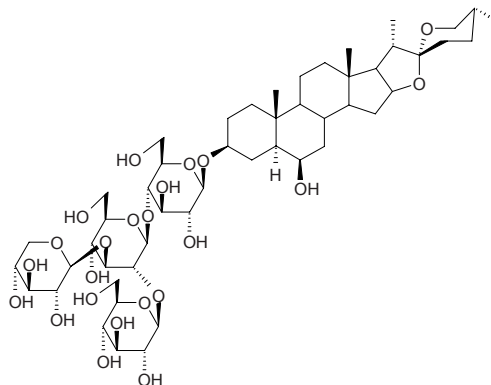
Timosaponin G C<sub>39</sub>H<sub>64</sub>O<sub>14</sub> (756.96). White powder, mp > 210°C (dec), [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -42.2° (MeOH). Source: ZHI MU *Anemarrhena asphodeloides*. Ref: 675.

**20210 (25R)-5 $\alpha$ -Spirostan-3 $\beta$ ,6 $\beta$ -diol 3-O-{O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)-O- $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 3)-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-galactopyranoside}**

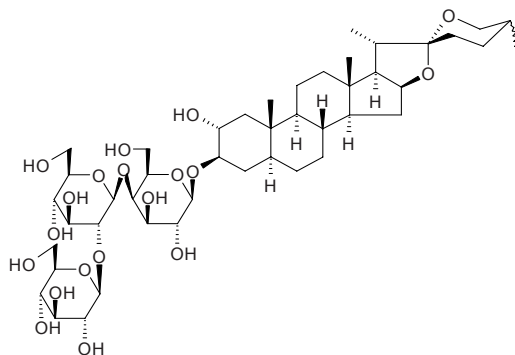
[244764-96-3] C<sub>56</sub>H<sub>92</sub>O<sub>28</sub> (1213.34). [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -56° (MeOH). Pharm: Antifungal (*Fusarium culmorum*, ED<sub>50</sub> = 30~35 $\mu$ g/mL). Source: JIU CONG *Allium porrum*. Ref: 2340.

**20211 (25R)-5 $\alpha$ -Spirostan-3 $\beta$ ,6 $\beta$ -diol 3-O-{O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)-O- $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 3)}-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-galactopyranoside}**

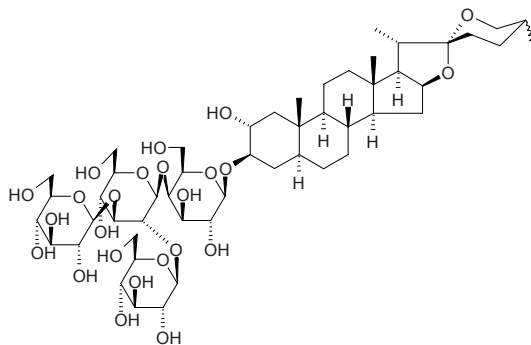
C<sub>50</sub>H<sub>82</sub>O<sub>23</sub> (1051.20). [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -57° (MeOH). Pharm: Antifungal (*Fusarium culmorum*, ED<sub>50</sub> = 30~35 $\mu$ g/mL). Source: JIU CONG *Allium porrum*. Ref: 2340.

**20212 (25R,S)-5 $\alpha$ -Spirostane-2 $\alpha$ ,3 $\beta$ -diol 3-O-[O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-galactopyranoside]**

C<sub>45</sub>H<sub>74</sub>O<sub>19</sub> (919.08). Amorphous solid, [ $\alpha$ ]<sub>D</sub><sup>28</sup> = -52° (c = 0.1, pyridine). Source: QIAO TOU *Allium chinense*. Ref: 710.

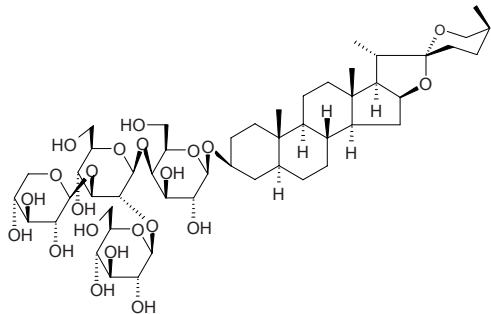
**20213 (25R,S)-5 $\alpha$ -Spirostane-2 $\alpha$ ,3 $\beta$ -diol 3-O-[O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)]-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-galactopyranoside]**

C<sub>51</sub>H<sub>84</sub>O<sub>24</sub> (1081.22). Amorphous solid, [ $\alpha$ ]<sub>D</sub><sup>26</sup> = -42° (c = 0.1, pyridine). Source: QIAO TOU *Allium chinense*. Ref: 710.



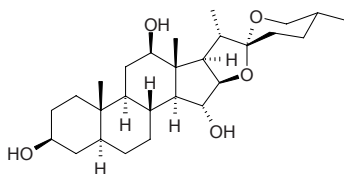
**20214 (2*S*,25*S*)-5*α*-Spirostan-3*β*-ol 3-*O*-[*O*-*β*-*D*-galactopyranosyl-(1→2)-*O*-*β*-*D*-xylopyranosyl-(1→3)]-*O*-*β*-*D*-glucopyranosyl-(1→4)-*β*-*D*-galactopyranoside]**

C<sub>50</sub>H<sub>82</sub>O<sub>22</sub> (1035.20). Amorphous powder, [α]<sub>D</sub><sup>28</sup> = -7.3° (c = 0.1, CHCl<sub>3</sub>:MeOH = 1:1). Source: *Dichelostemma multiflorum*. Ref: 738.



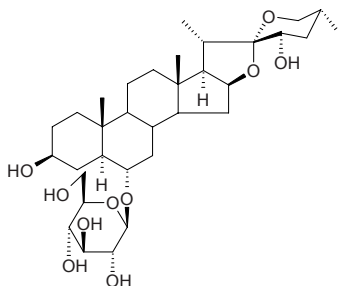
**20215 5*α*-Spirostan-3*β*,12*β*,15*α*-triol**

C<sub>27</sub>H<sub>44</sub>O<sub>5</sub> (448.65). White powder, [α]<sub>D</sub><sup>25</sup> = -19.3° (c = 0.07, CH<sub>2</sub>Cl<sub>2</sub>). Source: PA KE YE XIANG SHU *Cestrum parqui* (fresh leaf). Ref: 5327.



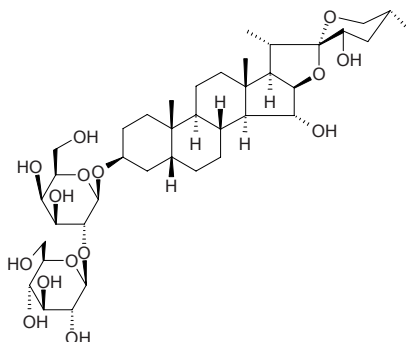
**20216 (25*R*)-5*α*-Spirostan-3*β*,6*α*,23*α*-triol-6-*O*-*β*-*D*-glucopyranoside**

C<sub>33</sub>H<sub>54</sub>O<sub>10</sub> (610.79). White amorphous powder. Source: FAN MA *Agave americana*. Ref: 2250.



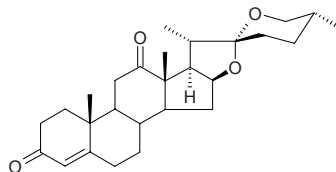
**20217 (5*β*,25*S*)-Spirostan-3*β*,15*α*,23*α*-triol-3-*O*-*D*-glucopyranosyl-(1→2)-*β*-*D*-galactopyranoside**

Timosaponin F C<sub>39</sub>H<sub>64</sub>O<sub>15</sub> (772.94). White powder, mp > 200°C (dec), [α]<sub>D</sub><sup>25</sup> = -47.8° (MeOH). Source: ZHI MU *Anemarrhena asphodeloides*. Ref: 675.



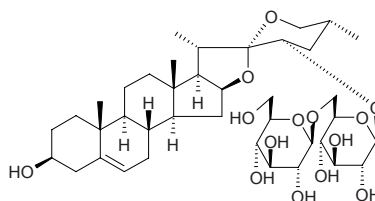
**20218 25*R*-Spirost-4-en-3,12-dione**

C<sub>27</sub>H<sub>38</sub>O<sub>4</sub> (426.60). Colorless powder (CHCl<sub>2</sub>), mp 240–241°C. Source: CI JI LI *Tribulus terrestris*. Ref: 1881.



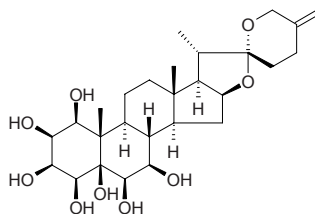
**20219 (23*S*,25*R*)-Spirost-5-ene-3*β*,23-diol 23-*O*-[*O*-*β*-*D*-glucopyranosyl-(1→6)-*β*-*D*-glucopyranoside]**

[239105-68-1] C<sub>39</sub>H<sub>62</sub>O<sub>14</sub> (754.92). Amorphous solid, [α]<sub>D</sub><sup>25</sup> = -44.0° (c = 0.10, MeOH). Source: JIA YE SHU *Ruscus aculeatus*. Ref: 2311.



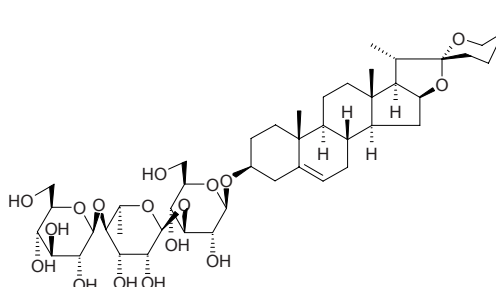
**20220 Spirost-25(27)-ene-1,2,3,4,5,6,7-heptol**

C<sub>27</sub>H<sub>42</sub>O<sub>9</sub> (510.63). Source: WAN NIAN QING GEN *Rohdea japonica* [Syn. *Orontium japonicum*]. Ref: 660.



**20221 (25*S*)-Spirost-5-en-3*β*-yl *O*-*β*-*D*-glucopyranosyl-(1→4)-*O*-*α*-*L*-rhamnopyranosyl-(1→3)-*β*-*D*-glucopyranoside**

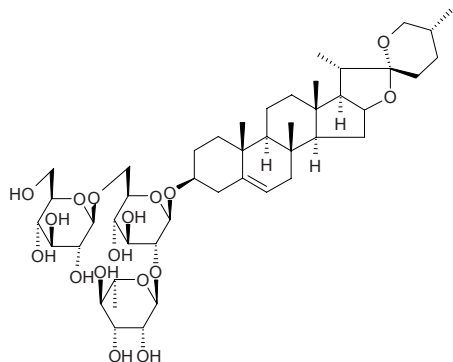
C<sub>45</sub>H<sub>72</sub>O<sub>17</sub> (885.07). Amorphous solid, [α]<sub>D</sub><sup>25</sup> = -86.0° (c = 0.10, CHCl<sub>3</sub>:MeOH = 1:1). Pharm: Cytotoxic (hmn, HL-60 promyelocytic leukemia cells, 10 μg/mL, InRt > 50%). Source: JIAN GEN SHU *Tacca chantrieri* [Syn. *Tacca minor*; *Tacca esquirolii*]. Ref: 2026.





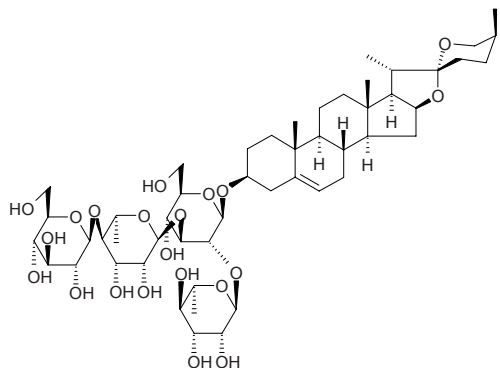
**20222 (25R)-Spirost-5-en-3 $\beta$ -yl-*O*- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)-*O*-[ $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)]- $\beta$ -D-glucopyranoside**

[244160-59-6] C<sub>45</sub>H<sub>72</sub>O<sub>17</sub> (885.07). Amorphous solid,  $[\alpha]_D^{29} = -89.6^\circ$  ( $c = 0.27$ , MeOH) **Pharm**: Na<sup>+</sup>, K<sup>+</sup>-ATPase inhibitor (IC<sub>50</sub> = 22  $\mu$ mol/L, control Ouabain, IC<sub>50</sub> = 1.0  $\mu$ mol/L). **Source**: QING LIANG BAI HE *Lilium candidum*. **Ref**: 2303.



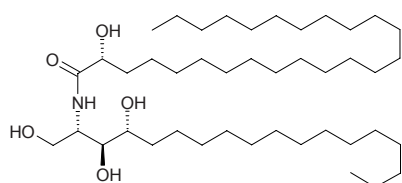
**20223 (25S)-Spirost-5-en-3 $\beta$ -yl *O*- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)-*O*-[*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -D-glucopyranoside**

C<sub>51</sub>H<sub>82</sub>O<sub>21</sub> (1031.21). Amorphous solid,  $[\alpha]_D^{25} = -86.0^\circ$  ( $c = 0.10$ , CHCl<sub>3</sub>:MeOH = 1:1). **Pharm**: Cytotoxic (hmn, HL-60 promyelocytic leukemia cells, 10  $\mu$ g/mL, InRt > 50%). **Source**: JIAN GEN SHU *Tacca chantrieri* [Syn. *Tacca minor*; *Tacca esquirolii*]. **Ref**: 2026.



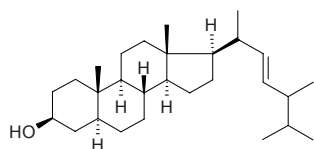
**20224 Sponge sphingolipid**

C<sub>43</sub>H<sub>87</sub>NO<sub>5</sub> (698.18).  $[\alpha]_D^{28} = +10.2^\circ$  ( $c = 0.45$ , pyridine). **Source**: XIAO BANG XIU QIU HAI MIAN *Iatrochota baculifera*. **Ref**: 4391.



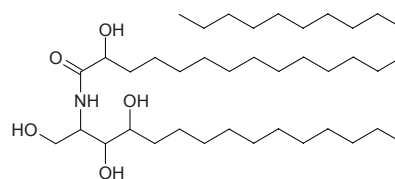
**20225 Spongesterol**

C<sub>28</sub>H<sub>48</sub>O (400.69). **Source**: QIAN HU *Angelica decursiva* [Syn. *Peucedanum decursivum*]. **Ref**: 6.



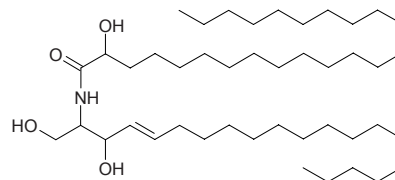
**20226 Spongiamine A**

*N*-(2'-Hydroxy-*n*-tetracosanoyl)-1,3,4-trihydroxy-*n*-pentadeca-sphingosine C<sub>39</sub>H<sub>79</sub>NO<sub>5</sub> (642.07). White powder, mp 138~139°C. **Source**: *Spongia* sp. **Ref**: 4884.



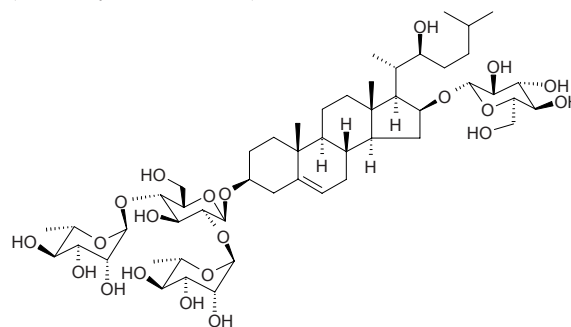
**20227 Spongiamine B**

*N*-(2'-Hydroxy-*n*-tetracosanoyl)-*n*-eicosasphinga-(4*E*)-ene C<sub>44</sub>H<sub>87</sub>NO<sub>4</sub> (694.19). White solid. **Source**: *Spongia* sp. **Ref**: 4884.



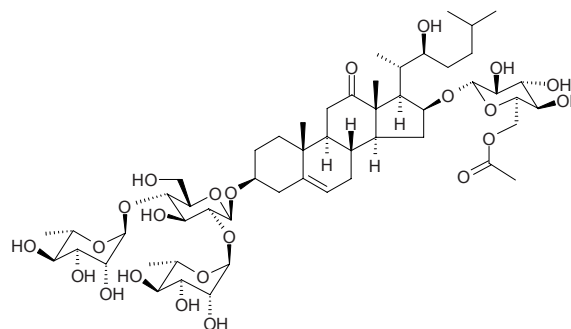
**20228 Spongioside A**

(22*S*)-16 $\beta$ -[( $\beta$ -D-Glucopyranosyl)oxy]-22-hydroxycholest-5-en-3 $\beta$ -yl *O*- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)-*O*-[ $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)]- $\beta$ -D-glucopyranoside C<sub>51</sub>H<sub>86</sub>O<sub>21</sub> (1035.24). Colorless amorphous solid,  $[\alpha]_D = -67.8^\circ$  ( $c = 0.10$ , CH<sub>3</sub>OH). **Pharm**: Bone resorption inhibitor (PTH-induced in a bone organ culture system). **Source**: HAI JIN BI XIE *Dioscorea spongiosa* (Rhizome: yield = 0.000048%). **Ref**: 4692.



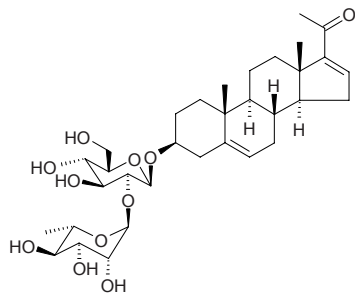
**20229 Spongioside B**

(22*S*)-16 $\beta$ -[(6-*O*-Acetyl- $\beta$ -D-glucopyranosyl)oxy]-22-hydroxy-3 $\beta$ -[(*O*- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)-*O*-[ $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)]- $\beta$ -D-glucopyranosyl)oxy]cholest-5-en-12-one C<sub>53</sub>H<sub>86</sub>O<sub>23</sub> (1091.26). Colorless amorphous solid,  $[\alpha]_D = -46.3^\circ$  ( $c = 0.25$ , CH<sub>3</sub>OH). **Source**: HAI JIN BI XIE *Dioscorea spongiosa* (Rhizome: yield = 0.000084%). **Ref**: 4692.

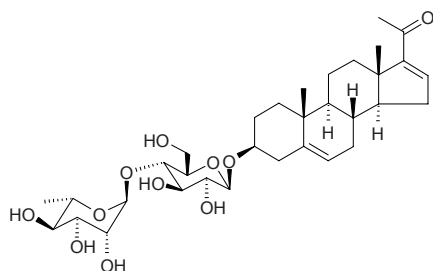


**20230 Spongipregnoside A**

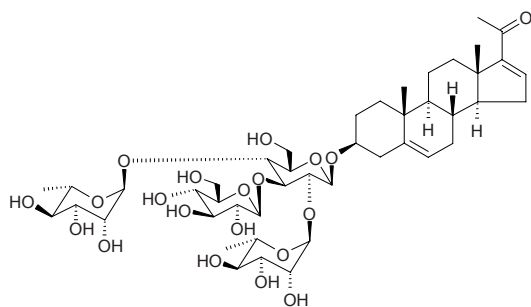
3 $\beta$ -[(*O*- $\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranosyl)oxy]-pregna-5,16-dien-20-one C<sub>33</sub>H<sub>50</sub>O<sub>11</sub> (622.76). Colorless amorphous solid, [ $\alpha$ ]<sub>D</sub> = -18.2° (*c* = 0.15, CH<sub>3</sub>OH). Source: HAI JIN BI XIE *Dioscorea spongiosa* (Rhizome: yield = 0.000096%). Ref: 4692.

**20231 Spongipregnoside B**

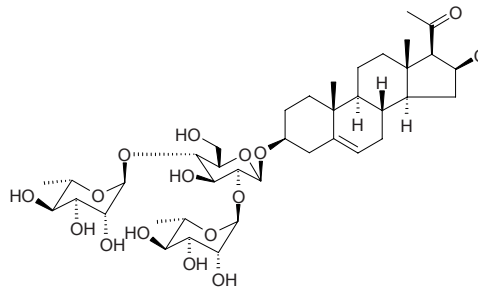
3 $\beta$ -[(*O*- $\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl)oxy]pregna-5,16-dien-20-one C<sub>33</sub>H<sub>50</sub>O<sub>11</sub> (622.76). Colorless amorphous solid, [ $\alpha$ ]<sub>D</sub> = -64.6° (*c* = 0.05, CH<sub>3</sub>OH). Source: HAI JIN BI XIE *Dioscorea spongiosa* (Rhizome: yield = 0.000060%). Ref: 4692.

**20232 Spongipregnoside C**

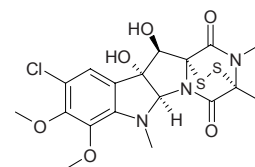
3 $\beta$ -[(*O*- $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 3)-*O*-[ $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)]-*O*-[ $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)]- $\beta$ -D-glucopyranosyl)oxy]pregna-5,16-dien-20-one C<sub>45</sub>H<sub>70</sub>O<sub>20</sub> (931.05). Colorless amorphous solid, [ $\alpha$ ]<sub>D</sub> = -68.7° (*c* = 0.10, CH<sub>3</sub>OH). Source: HAI JIN BI XIE *Dioscorea spongiosa* (Rhizome: yield = 0.000048%). Ref: 4692.

**20233 Spongipregnoside D**

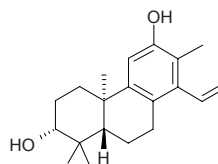
16 $\beta$ -Methoxy-3 $\beta$ -[(*O*- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)-*O*-[ $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)]- $\beta$ -D-glucopyranosyl)oxy]pregna-5,16-dien-20-one C<sub>40</sub>H<sub>64</sub>O<sub>16</sub> (800.95). Colorless amorphous solid, [ $\alpha$ ]<sub>D</sub> = -54.2° (*c* = 0.20, CH<sub>3</sub>OH). Source: HAI JIN BI XIE *Dioscorea spongiosa* (Rhizome: yield = 0.000048%). Ref: 4692.

**20234 Sporidesmin**

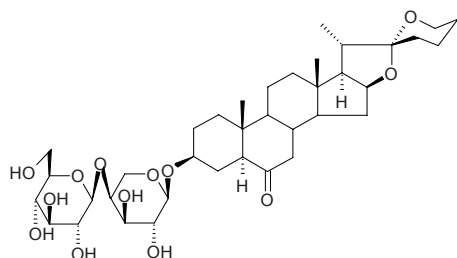
C<sub>18</sub>H<sub>20</sub>CIN<sub>3</sub>O<sub>6</sub>S<sub>2</sub> (473.96). Pharm: Antineoplastic. Source: *Pithomyces chartarum*. Ref: 658.

**20235 Spruceanol**

C<sub>20</sub>H<sub>28</sub>O<sub>2</sub> (300.44). Pharm: Cytotoxic. Source: family Euphorbiaceae spp. Ref: 658.

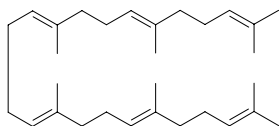
**20236 SQD<sub>4</sub>**

C<sub>38</sub>H<sub>60</sub>O<sub>13</sub> (724.89). Pharm: Antineoplastic (inhibits growth of HeLa cells, SMMC-7721 liver cancer cells, MQc80-3 gastric adenocarcinoma cells). Source: CU CAO BA QIA *Smilax lebrunii*. Ref: 2165.

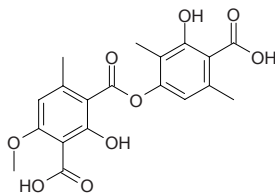


**20237 Squalene**

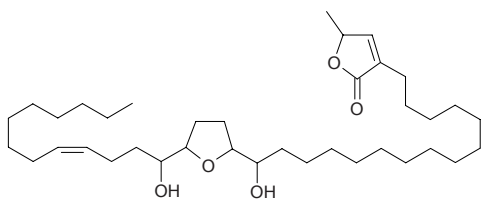
2,6,10,15,19,23-Hexamethyl-2,6,10,14,18,22-tetracosahexaene [7683-64-9]  $C_{30}H_{50}$  (410.73). bp 284–285°C/25mmHg. **Pharm:** NFAT transcription factor inhibitor inactive ( $IC_{50} > 50\mu\text{mol/L}$ , positive control Cyclosporin A,  $IC_{50} = (0.31 \pm 0.01)\mu\text{mol/L}$ )<sup>[4511]</sup>; cytotoxic ( $P_{388}$ ,  $ED_{50} > 50\mu\text{g/mL}$ , control Mithramycin,  $ED_{50} = 0.58\mu\text{g/mL}$ ; A549,  $ED_{50} > 50\mu\text{g/mL}$ , Mithramycin,  $ED_{50} = 0.073\mu\text{g/mL}$ ; HT29,  $ED_{50} > 50\mu\text{g/mL}$ , Mithramycin,  $ED_{50} = 0.076\mu\text{g/mL}$ )<sup>[5421]</sup>. **Source:** A LI HONG *Fomes officinalis*, CHAO XIAN LUO WAN *Gymnaster koraiensis* (leaf), DONG FENG CAI *Doellingeria scaber* [Syn. *Aster scaber*], DOU YOU *Glycine max*, DUAN SHU *Tilia vulgaris*, HEI DA DOU *Glycine max*, JING MI *Oryza sativa*, MI PI KANG *Oryza sativa*, SI GUA *Luffa cylindrica*, SI GUA ZI *Luffa cylindrica*, TONG YOU *Aleurites cordata* [Syn. *Aleurites fordii*], XIANG SI ZI *Abrus precatorius*, YUN SHI *Caesalpinia decapetala* (leaf), MO ZHI JIAO GU CUI *Casearia membranacea* (stem). **Ref:** 6, 4456, 4511, 5421.

**20238 Squamatic acid**

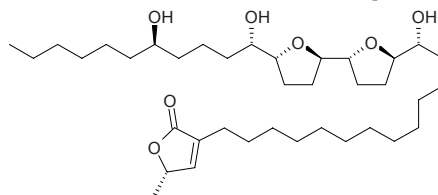
$C_{19}H_{18}O_9$  (390.35). mp 219°C. **Source:** XUE CHA *Thamnia vermicularis*. **Ref:** 6.

**20239 Squamocenin**

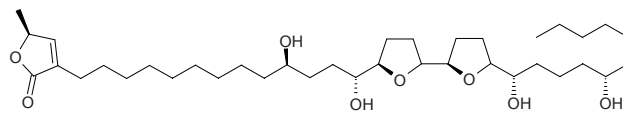
$C_{37}H_{66}O_5$  (590.94). White waxy substance. **Source:** FAN LI ZHI *Annona squamosa* (seed). **Ref:** 4860.

**20240 Squamocin**

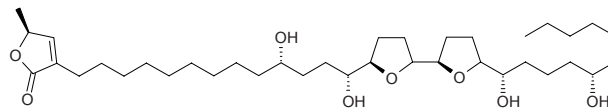
Annonin I [120298-30-8]  $C_{37}H_{66}O_7$  (622.93). Ceraceous solid, mp < 30°C,  $[\alpha]_D^{22} = +0.15^\circ$  ( $c = 1.7$ , methanol); colorless oil,  $[\alpha]_D^{24} = +20.0^\circ$  ( $c = 0.05$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic ( $L_{1210}$  *in vitro*,  $ID_{50} = 0.58\mu\text{g/mL}$ ;  $P_{388}$ ,  $ED_{50} = 10^{-8}\mu\text{g/mL}$ ); cytotoxic (hmn hepatoma cell lines HepG2,  $IC_{50} = 0.547\text{ng/mL}$ , control Adriamycin,  $IC_{50} = 0.241\mu\text{g/mL}$ ; hmn hepatoma cells transfected with hepatitis B virus Hep2,2,15,  $IC_{50} = 0.923\text{ng/mL}$ , Adriamycin,  $IC_{50} = 0.450\mu\text{g/mL}$ )<sup>[5377]</sup>; NADH ubiquinone reductase inhibitor ( $IC_{50} = 2.5\text{nmol/L}$ ); anthelmintic (*Caenorhabditis elegans*); insecticidal. **Source:** CI GUO FAN LI ZHI *Annona muricata*, FAN LI ZHI *Annona squamosa*. **Ref:** 900, 5377.

**20241 Squamocin O<sub>1</sub>**

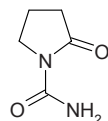
$C_{37}H_{66}O_8$  (638.93). White wax,  $[\alpha]_D^{25} = +17.7^\circ$  ( $c = 0.6$ , MeOH). **Source:** FAN LI ZHI *Annona squamosa*. **Ref:** 1944.

**20242 Squamocin O<sub>2</sub>**

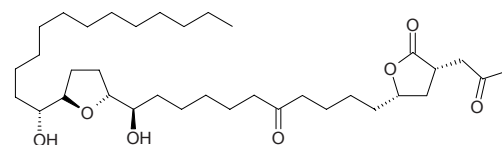
$C_{37}H_{66}O_8$  (638.93). White wax,  $[\alpha]_D^{25} = +17.4^\circ$  ( $c = 1.0$ , MeOH). **Source:** FAN LI ZHI *Annona squamosa*. **Ref:** 1944.

**20243 Squamolone**

$C_5H_8N_2O_2$  (128.13). **Pharm:** Cytotoxic (*in vitro*, HepG2,  $IC_{50} = 2.8\mu\text{g/mL}$ ; Hep2,2,15,  $IC_{50} = 1.6\mu\text{g/mL}$ ). **Source:** YOU GOU YING ZHAO *Artabotrys uncinatus* (stem). **Ref:** 3083.

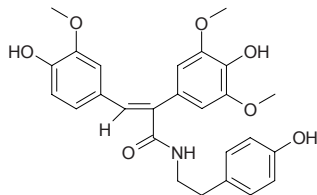
**20244 Squamone**

[126655-24-1]  $C_{35}H_{62}O_7$  (594.88). Yellowish amorphous powder, mp 87–89°C,  $[\alpha]_D^{25} = +7.0^\circ$  ( $c = 0.12$ , chloroform); white crystals, mp 95–97°C,  $[\alpha]_D^{25} = +29^\circ$  ( $c = 0.1$ , methanol). **Pharm:** Cytotoxic ( $P_{388}$ ,  $ED_{50} = 5.6\mu\text{g/mL}$ ; A549,  $ED_{50} = 1.34\mu\text{g/mL}$ ; HT29,  $ED_{50} = 1.5\mu\text{g/mL}$ ; MCF7,  $ED_{50} = 2.14\mu\text{g/mL}$ ). **Source:** NIU XIN FAN LI ZHI *Annona reticulata*, FAN LI ZHI *Annona squamosa*. **Ref:** 401, 1050, 1070.

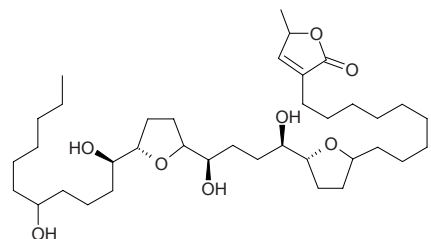


**20245 Squamosamide**

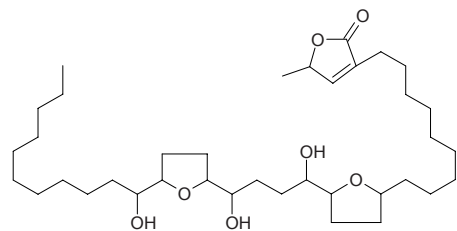
$C_{26}H_{27}NO_7$  (465.51). Yellowish crystals, mp 200~202°C. Source: FAN LI ZHI *Annona squamosa*. Ref: 221.

**20246 Squamostatin B**

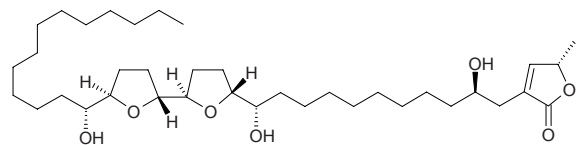
$C_{37}H_{66}O_8$  (638.93). White crystals, mp 105~106°C,  $[\alpha]_D^{22} = +13.5^\circ$  ( $c = 0.14$ , chloroform). Source: FAN LI ZHI *Annona squamosa*. Ref: 303.

**20247 Squamostatin D**

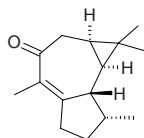
$C_{37}H_{66}O_7$  (622.93). White crystals, mp 51~53°C,  $[\alpha]_D = 8.6^\circ$  ( $c = 0.088$ , MeOH), mp 51~55°C. Source: FAN LI ZHI *Annona squamosa*. Ref: 883.

**20248 Squamotacin**

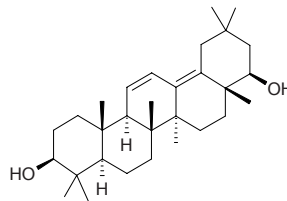
[174158-66-8]  $C_{37}H_{66}O_7$  (622.93). White powder,  $[\alpha]_D = 2.59^\circ$  ( $c = 0.0027$ ). Pharm: Cytotoxic (BST,  $LC_{50} = 0.0068\mu\text{g/mL}$ ; PC3,  $ED_{50} = 0.00000172\text{ng/mL}$ ). Source: FAN LI ZHI *Annona squamosa*. Ref: 1045.

**20249 Squamulone**

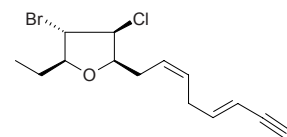
Aromadendr-1(10)-en-9-one  $C_{15}H_{22}O$  (218.34). Needles (acetone), mp 50~51°C,  $[\alpha]_D^{25} = -202^\circ$  ( $c = 1.43$ ,  $\text{CHCl}_3$ ) (lit. mp 45~46°C,  $[\alpha]_D = -234^\circ$  ( $c = 1.2$ ,  $\text{CHCl}_3$ )). Pharm: Insecticidal (adult *Cylas formicarius elegantulus*, 0.04mg/insect, 24h mortality = 10%, 48h mortality = 60%, 72h mortality = 100%). Source: LUN SHENG SHAN XIANG *Hyptis verticillata* (green stem and leaf), *Curvularia lunata*. Ref: 5140.

**20250 Squasapogenol**

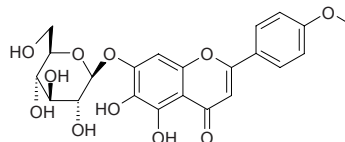
Olean-11,13(18)-diene-3 $\beta$ ,22 $\beta$ -diol  $C_{30}H_{48}O_2$  (440.72). Colorless acicular crystals (di-Ac), mp > 300°C (di-Ac). Source: YUAN GUO GAN CAO *Glycyrrhiza squamulosa*. Ref: 257.

**20251 Srilankenyne**

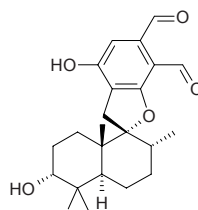
$C_{14}H_{18}BrClO$  (317.66). Source: *Aplysia oculifera*. Ref: 2306.

**20252 Stachannin A**

Scutellarein 4'-O-methylether 7-O- $\beta$ -glucopyranoside  $C_{22}H_{22}O_{11}$  (462.41). Source: *Paederota lutea*. Ref: 3832.

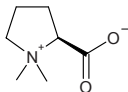
**20253 Stachybotrystrydial (Mer-NF5003F)**

$C_{23}H_{30}O_5$  (386.49). Yellow solid,  $[\alpha]_D^{28} = -20.8^\circ$  ( $c = 0.25$ ,  $\text{CHCl}_3$ ). Pharm: Antiviral (HSV-1,  $IC_{50} = (4.32\pm 0.57)\mu\text{g/mL}$ , control Acyclovir  $IC_{50} = (1.5\pm 0.5)\mu\text{g/mL}$ , colorimetric method (P. Skehan, et al., J Natl Cancer Inst 1990, 82, 1107-1112)); antimalarial (*Plasmodium falciparum*, K1 multi-drug-resistant strain, cultivated *in vitro* by Trager and Jensen method (Science, 1976, 193, 673),  $IC_{50} = (0.85\pm 0.20)\mu\text{g/mL}$  ( $n = 3$ ), control Dihydroartemisinin  $IC_{50} = (1.2\pm 0.02)\text{ng/mL}$ ); cytotoxic (Vero cells,  $IC_{50} = (24.3\pm 0.2)\mu\text{g/mL}$  ( $n = 3$ ), control Ellipticine  $IC_{50} = (0.4\pm 0.1)\mu\text{g/mL}$ , colorimetric method (P. Skehan, et al., J Natl Cancer Inst 1990, 82, 1107~1112)). Source: Fungus *Stachybotrys nephrospora*. Ref: 4078.

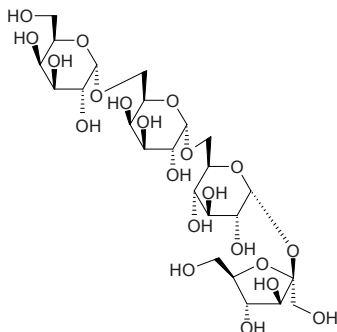


**20254 Stachydrine**

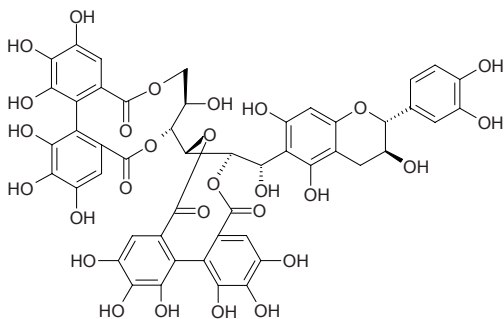
Cadabine [471-87-4] C<sub>7</sub>H<sub>13</sub>NO<sub>2</sub> (143.19). mp 235–240°C (dec). **Pharm:** Antitussive (dispels phlegm); hemostatic (dog, rbt, rat); antiasthmatic (bronchial smooth muscle relaxant); slows heart rate (frog heart); uterine stimulant; low toxin. **Source:** KUAI JING SHUI SU *Stachys tubrifera*, LAO SHU GUA *Capparis spinosa*, MU XU *Medicago sativa*, QIAN MA *Urtica cannabina*, SI CHUAN QING FENG TENG *Sabia schumanniana*, XI YE YI MU CAO *Leonurus sibiricus*, YI MU CAO *Leonurus heterophyllus* [Syn. *Leonurus artemisia*] (dried aerial parts: mean content = 0.48%<sup>[5508]</sup>), ZHE SHU *Cudrania tricuspidata*. **Ref:** 4, 658, 660, 5508.

**20255 Stachyose**

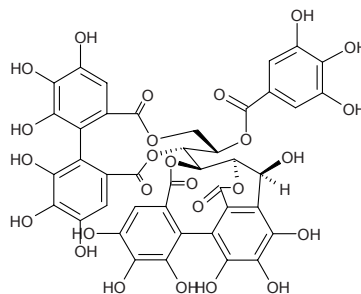
$\alpha$ -D-Galactosyl- $\alpha$ -D-galactosyl- $\alpha$ -D-glucosyl- $\beta$ -D-fructose [10094-58-3] C<sub>24</sub>H<sub>42</sub>O<sub>21</sub> (666.59). **Source:** CHE QIAN *Plantago asiatica*, GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], WU SE MEI *Lantana camara*. **Ref:** 2, 234, 660.

**20256 Stachyuranin B**

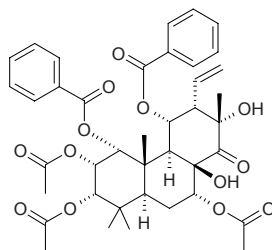
C<sub>49</sub>H<sub>38</sub>O<sub>28</sub> (1074.83). **Source:** HU TAO REN *Juglans regia*. **Ref:** 3408.

**20257 Stachyurin**

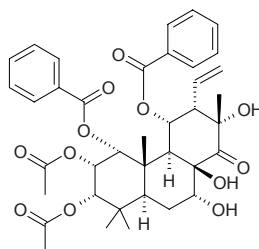
C<sub>41</sub>H<sub>28</sub>O<sub>26</sub> (936.66). **Source:** BAN LI *Castanea mollissima* (leaf), CI LI *Rosa roxburghii*. **Ref:** 660.

**20258 Staminol A**

C<sub>40</sub>H<sub>46</sub>O<sub>13</sub> (734.80). **Pharm:** NO production inhibitor (LPS-activated macrophage-like J774.1 cells, IC<sub>50</sub> = 25.5 μmol/L; control L-NMMA, IC<sub>50</sub> = 26.0 μmol/L, Polymixin B, IC<sub>50</sub> = 27.8 μg/mL, Dexamethasone IC<sub>50</sub> = 170 μmol/L). **Source:** XIONG RUI ZHUANG ZHI GUAN CAO *Orthosiphon stamineus* [Syn: *Orthosiphon aristatus*; *Orthosiphon grandiflorus*; *Orthosiphon spicatus*] (aerial parts). **Ref:** 4322.

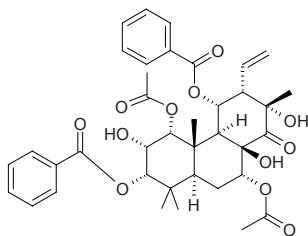
**20259 Staminol B**

C<sub>38</sub>H<sub>44</sub>O<sub>12</sub> (692.77). **Pharm:** NO production inhibitor (LPS-activated macrophage-like J774.1 cells, IC<sub>50</sub> = 67.9 μmol/L; control L-NMMA, IC<sub>50</sub> = 26.0 μmol/L, Polymixin B, IC<sub>50</sub> = 27.8 μg/mL, Dexamethasone IC<sub>50</sub> = 170 μmol/L)<sup>[4322]</sup>. **Source:** XIONG RUI ZHUANG ZHI GUAN CAO *Orthosiphon stamineus* [Syn: *Orthosiphon aristatus*; *Orthosiphon grandiflorus*; *Orthosiphon spicatus*] (aerial parts). **Ref:** 4322.

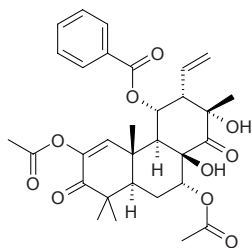


**20260 Staminol C**

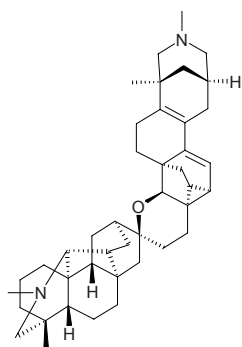
$C_{38}H_{44}O_{12}$  (692.77). Colorless amorphous solid,  $[\alpha]_D^{25} = -81.7^\circ$  ( $c = 0.067$ ,  $CHCl_3$ ). **Pharm:** NO production inhibitor (LPS-activated macrophage-like J774.1 cells,  $IC_{50} = 61.1 \mu\text{mol/L}$ ; control *L*-NMMA,  $IC_{50} = 35.7 \mu\text{mol/L}$ ). **Source:** XIONG RUI ZHUANG ZHI GUAN CAO *Orthosiphon stamineus* [Syn: *Orthosiphon aristatus*; *Orthosiphon grandiflorus*; *Orthosiphon spicatus*] (aerial parts: yield = 0.00005%dw). **Ref:** 4741.

**20261 Staminol D**

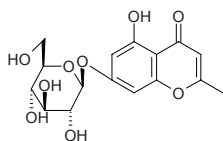
$C_{31}H_{36}O_{10}$  (568.63). Colorless amorphous solid,  $[\alpha]_D^{25} = -18.8^\circ$  ( $c = 0.293$ ,  $CHCl_3$ ). **Pharm:** NO production inhibitor (LPS-activated macrophage-like J774.1 cells,  $IC_{50} = 92 \mu\text{mol/L}$ ; control *L*-NMMA,  $IC_{50} = 35.7 \mu\text{mol/L}$ ). **Source:** XIONG RUI ZHUANG ZHI GUAN CAO *Orthosiphon stamineus* [Syn: *Orthosiphon aristatus*; *Orthosiphon grandiflorus*; *Orthosiphon spicatus*] (aerial parts: yield = 0.00018%dw). **Ref:** 4741.

**20262 Staphidine**

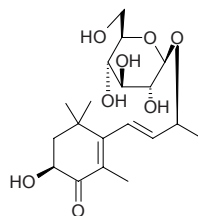
$C_{42}H_{58}N_2O$  (606.93). **Pharm:** Ectoparasiticide (floral seeds). **Source:** SI TA WEI CUI QUE HUA *Delphinium staphisagria*. **Ref:** 658.

**20263 Staphylin**

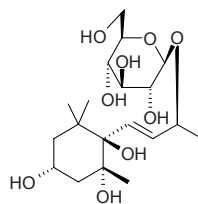
Noreugenin-7-*O*- $\beta$ -*D*-glucoside  $C_{16}H_{18}O_9$  (354.32). mp 248–251°C. **Source:** JI ZI MU *Sinoadina Racemosa* [Syn. *Adina racemosa*] (leaf, flower and twig: yield = 0.0012%dw), SHENG GU YOU *Staphylea bumalda*. **Ref:** 6, 4723.

**20264 Staphylioside A**

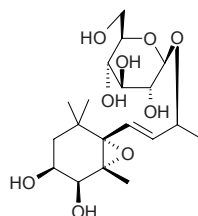
(3*S*,9*S*,5*Z*,7*E*)-Megastigma-5,7-diene-3,9-dihydroxy-4-one 9-*O*- $\beta$ -*D*-glucopyranoside  $C_{19}H_{30}O_8$  (386.45). Amorphous powder,  $[\alpha]_D^{26} = -110.7^\circ$  ( $c = 0.41$ , MeOH). **Source:** SHENG GU YOU *Staphylea bumalda* (leaf). **Ref:** 4478.

**20265 Staphylioside B**

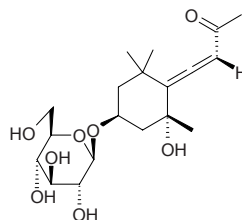
(3*R*,5*R*,6*R*,9*S*,7*E*)-Megastigman-7-ene-3,5,6,9-tetrol 9-*O*- $\beta$ -*D*-glucopyranoside  $C_{19}H_{34}O_9$  (406.48). Amorphous powder,  $[\alpha]_D^{26} = -30.0^\circ$  ( $c = 0.80$ , MeOH). **Source:** SHENG GU YOU *Staphylea bumalda* (leaf). **Ref:** 4478.

**20266 Staphylioside C**

(3*S*,4*S*,5*R*,6*S*,9*S*,7*E*)-Megastigman-7-ene-5,6-epoxy-3,4,9-triol 9-*O*- $\beta$ -*D*-glucopyranoside  $C_{19}H_{32}O_9$  (404.46). Amorphous powder,  $[\alpha]_D^{26} = -90.0^\circ$  ( $c = 0.47$ , MeOH). **Source:** SHENG GU YOU *Staphylea bumalda* (leaf). **Ref:** 4478.

**20267 Staphylioside D**

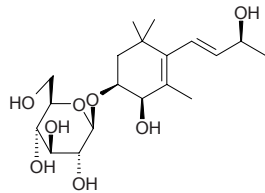
$C_{19}H_{30}O_8$  (386.45). Amorphous powder,  $[\alpha]_D^{26} = -60.8^\circ$  ( $c = 0.21$ , MeOH). **Source:** SHENG GU YOU *Staphylea bumalda* (leaf). **Ref:** 4478.



**20268 Staphylioside E**

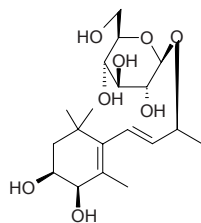
$C_{19}H_{32}O_8$  (388.46). Amorphous powder,  $[\alpha]_D^{23} = -99.0^\circ$  ( $c = 0.67$ , MeOH).

Source: SHENG GU YOU *Staphylea bumalda* (leaf). Ref: 4478.

**20269 Staphylioside F**

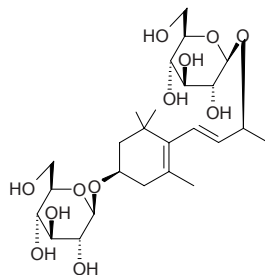
$C_{19}H_{32}O_8$  (388.46). Amorphous powder,  $[\alpha]_D^{26} = -118.1^\circ$  ( $c = 0.53$ , MeOH).

Source: SHENG GU YOU *Staphylea bumalda* (leaf). Ref: 4478.

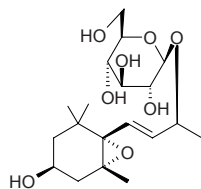
**20270 Staphylioside G**

$C_{25}H_{42}O_{12}$  (534.61). Amorphous powder,  $[\alpha]_D^{26} = -99.4^\circ$  ( $c = 1.21$ , MeOH).

Source: SHENG GU YOU *Staphylea bumalda* (leaf). Ref: 4478.

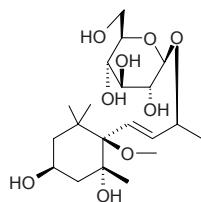
**20271 Staphylioside H**

Epoxyactinidinonide; (3*S*,5*R*,6*R*,9*S*,7*E*)-Megastigman-5-ene-3,9-diol 9-*O*- $\beta$ -*D*-glucopyranoside  $C_{19}H_{32}O_8$  (388.46). Amorphous powder,  $[\alpha]_D^{26} = -78.8^\circ$  ( $c = 3.40$ , MeOH). Source: MAO JIAN QIU LUO *Lychnis coranaria*, SHENG GU YOU *Staphylea bumalda* (leaf). Ref: 2189, 4478.

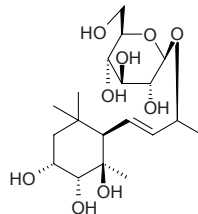
**20272 Staphylioside I**

$C_{20}H_{36}O_9$  (420.50). Amorphous powder,  $[\alpha]_D^{28} = -34.4^\circ$  ( $c = 0.41$ , MeOH).

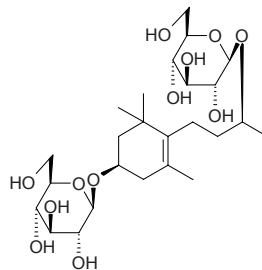
Source: SHENG GU YOU *Staphylea bumalda* (leaf). Ref: 4478.

**20273 Staphylioside J**

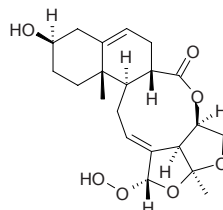
(3*R*,4*R*,5*R*,6*R*,9*S*,7*E*)-Megastigman-7-ene-3,4,5,9-tetra 9-*O*- $\beta$ -*D*-glucopyranoside  $C_{19}H_{34}O_9$  (406.48). Amorphous powder,  $[\alpha]_D^{28} = -37.6^\circ$  ( $c = 1.46$ , MeOH). Source: SHENG GU YOU *Staphylea bumalda* (leaf). Ref: 4478.

**20274 Staphylioside K**

(3*S*,9*S*)-Megastigman-5-ene-3,9-diol 3,9-di-*O*- $\beta$ -*D*-glucopyranoside  $C_{25}H_{44}O_{12}$  (536.62). Amorphous powder,  $[\alpha]_D^{28} = -67.5^\circ$  ( $c = 0.53$ , MeOH). Source: SHENG GU YOU *Staphylea bumalda* (leaf). Ref: 4478.

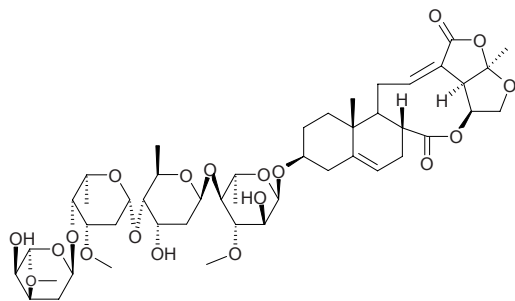
**20275 Stauntonine**

3 $\beta$ -Hydroxy-18-hydroperoxy-15,20*a*:18,20 $\beta$ -diepoxy-13,14:14,15-disecopregna-5,12-dien-14-oic acid 16-oxy-lactone  $C_{21}H_{28}O_7$  (392.45). Colorless prisms, mp 173–175°C (EtOAc),  $[\alpha]_D^{25} = -46.97^\circ$  ( $c = 0.132$ , MeOH). Pharm: Vasodilator (*in vitro*, rat isolated aortic rings with endothelium, pre-contracted by 0.1  $\mu$ mol/L Phenylephrine,  $IC_{50} = 5.37 \mu$ mol/L,  $pIC_{50} = 5.24 \pm 0.87$ , control Nitroglycerine  $pIC_{50} = 8.28 \pm 0.63$ ; with endothelium pre-contracted by 100mmol/L KCl, 10mmol/L, relaxation percentage = (53.4 $\pm$ 7.3)%, control 1.0  $\mu$ mol/L Verapamil, relaxation percentage = (97.36 $\pm$ 8.51)%). Source: LIU YE BAI QIAN *Cynanchum stauntonii*. Ref: 4077.

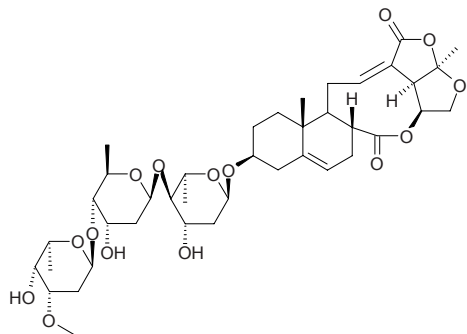


**20276 Stauntoside A**

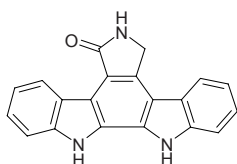
Stauntogenin 3-*O*-[ $\alpha$ -*L*-diginopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*L*-cymaropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-thevetopyranoside] [261636-64-0]  
 $C_{48}H_{72}O_{19}$  (953.10). Amorphous powder,  $[\alpha]_D = -63.4^\circ$  ( $c = 0.88$ , MeOH).  
 Source: LIU YE BAI QIAN *Cynanchum stauntonii*. Ref: 2395.

**20277 Stauntoside B**

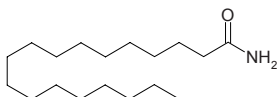
Stauntogenin 3-*O*-[ $\alpha$ -*L*-Cymaropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-3-demethyl-2-deoxy-thevetopyranoside]; Stauntogenin 3-*O*-[ $\alpha$ -*L*-Cymaropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranosyl-(1 $\rightarrow$ 4)-2,6-dideoxy- $\beta$ -*D*-ribo-hexopyranoside] [261636-66-2]  $C_{40}H_{58}O_{15}$  (778.90). Amorphous powder,  $[\alpha]_D = -39.10^\circ$  ( $c = 0.585$ , MeOH). Source: LIU YE BAI QIAN *Cynanchum stauntonii*. Ref: 2395.

**20278 Staurosporinone**

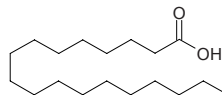
[85753-43-1]  $C_{20}H_{13}N_3O$  (311.35). Pharm: Cytotoxic (HeLa cells,  $IC_{50} = 8.9\mu\text{g/mL}$ ). Source: FEN LIU JUN *Lycogala epidendrum* (wild sporocarp). Ref: 4465.

**20279 Stearamide**

$C_{18}H_{37}NO$  (283.50). Source: BAI JIANG CAN *Bombyx mori*. Ref: 660.

**20280 Stearic acid**

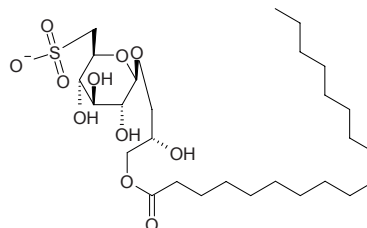
Octadecanoic acid [57-11-4]  $C_{18}H_{36}O_2$  (284.49). mp  $71.5\sim 72.0^\circ\text{C}$ . Source: AN ZI BEI MU *Fritillaria unibracteata*, BA DOU *Croton tiglium*, BAN WEN LU HUI *Aloe vera* var. *chinensis*, BING LANG *Areca catechu*, BU GU ZHI *Psoralea corylifolia*, CHAI HU *Bupleurum chinense*, CI WU JIA *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*], CU LIU GUO *Hippophae rhamnoides*, DA ZAO *Ziziphus jujuba*, DONG CHONG XIA CAO *Cordyceps sinensis*, GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], GUA LOU *Trichosanthes kirilowii*, GUANG JIN QIAN CAO *Desmodium styracifolium*, HONG HUA *Carthamus tinctorius*, JI GUAN ZI *Celosia cristata* (seed), LANG DANG ZI *Hyoscyamus niger* (dried ripe seed: content = 1.6%)<sup>[5508]</sup>, LI JIANG QIAN HU *Peucedanum govianum* var. *bicolor*, MAN JING ZI *Vitex trifolia*, PU HUANG *Typha angustata*, QIANG HUO *Notopterygium incisum*, QUAN XIE *Buthus martensi*, ROU CONG RONG *Cistanche deserticola*, SHAN ZHA *Crataegus pinnatifida*, SHUANG BIAN GUA LOU *Trichosanthes rosthornii* [Syn. *Trichosanthes uniflora*], SHUI LIU DOU *Pongamia pinnata* (stem cortex: yield = 0.0015%)<sup>[4721]</sup>, WU JIA PI *Acanthopanax gracilistylus*, WU SE MEI *Lantana camara* (aerial parts), XI YANG SHEN *Panax quinquefolium*, XING REN *Prunus armeniaca*, YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*], YIN CHEN HAO *Artemisia capillaris*, YIN YANG HUO *Epimedium brevicornum*, YONG NING DU HUO *Heracleum yungningense*, YU XING CAO *Houttuynia cordata*, YUN QIAN HU *Peucedanum rubricaulis*, occurs in many plants. Ref: 2, 177, 260, 530, 541, 557, 660, 4307, 4721, 5508.

**20281 Stearin**

[555-43-1]  $C_{57}H_{110}O_6$  (891.51). mp ( $\alpha$ -)  $55^\circ\text{C}$ , ( $\beta$ -)  $73^\circ\text{C}$ , ( $\beta'$ -)  $64^\circ\text{C}$ . Source: BAI E GAO *Anser cygnoides domestica*, ZHONG GUO XUAN FU HUA *Inula britannica* var. *chinensis*. Ref: 6, 660.

**20282 (2S)-1-Stearoyl-3-O-(6-sulpho- $\alpha$ -D-quinovopyranosyl)-glycerol**

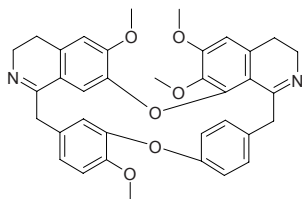
$C_{27}H_{51}O_{11}S^-$  (583.76). Source: KA SHI QIAN GOU ZAO *Amphidinium carterae*. Ref: 4448.



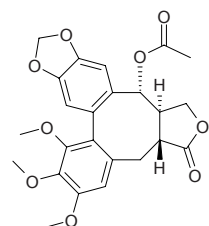


**20283 Stebisimine**

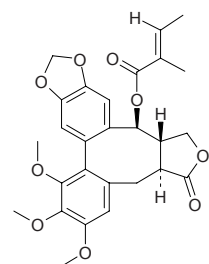
[5692-04-6] C<sub>36</sub>H<sub>34</sub>N<sub>2</sub>O<sub>6</sub> (590.68). mp 233~235°C. **Pharm:** Cytotoxic (HeLa, ED<sub>50</sub> = 16µg/mL). **Source:** QIAN JIN TENG *Stephania japonica*. **Ref:** 6, 1791.

**20284 Steganacin**

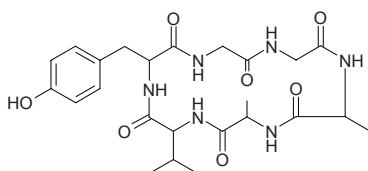
C<sub>24</sub>H<sub>24</sub>O<sub>9</sub> (456.46). [α]<sub>D</sub><sup>23</sup> = -114° (c = 0.74, chloroform). **Pharm:** Antimitotic; cytotoxic (mus P<sub>388</sub> and hmn KB, 0.001~0.1µg/mL; HeLa). **Source:** WU JIA QIAN HU *Steganotaenia araliacea*. **Ref:** 661.

**20285 Steganagin**

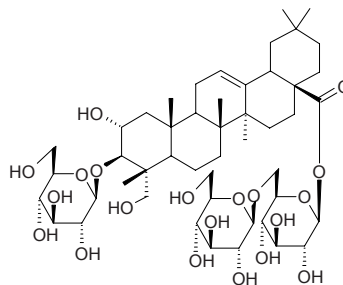
C<sub>27</sub>H<sub>28</sub>O<sub>9</sub> (496.52). mp 142.5~143°C, [α]<sub>D</sub><sup>23</sup> = -113° (c = 0.72, chloroform). **Pharm:** Cytotoxic (mus P<sub>388</sub> and hmn KB, 0.001~0.1µg/mL). **Source:** WU JIA QIAN HU *Steganotaenia araliacea*. **Ref:** 661.

**20286 Stellarria cyclopeptide**

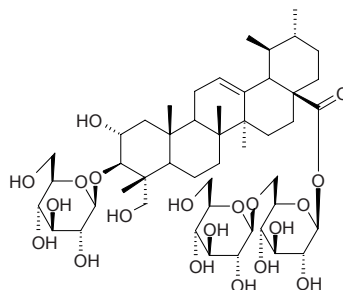
C<sub>24</sub>H<sub>34</sub>N<sub>6</sub>O<sub>7</sub> (518.57). White lamellar crystals, mp > 300°C, [α]<sub>D</sub><sup>22</sup> = +0.151° (c = 1.0, C<sub>5</sub>H<sub>5</sub>N). **Source:** YIN CHAI HU *Stellaria dichotoma* var. *lanceolata*. **Ref:** 238.

**20287 Stelmatotriterpenoside E**

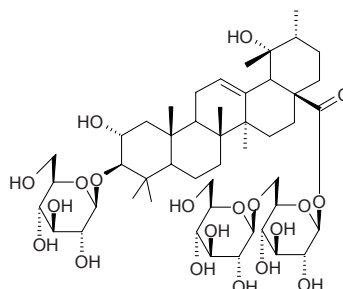
2α,3β,23-Trihydroxyolean-12-en-28-oic acid-3-O-β-D-glucopyranosyl-28-O-β-D-glucopyranosyl-(1→6)-β-D-glucopyranosyl ester C<sub>48</sub>H<sub>78</sub>O<sub>20</sub> (975.14). White powder, mp 226~229°C (dec), [α]<sub>D</sub><sup>25</sup> = -43.5° (c = 0.18, MeOH). **Source:** SHENG TENG *Stelmatocrypton khasianum* (stem). **Ref:** 4340.

**20288 Stelmatotriterpenoside F**

2α,3β,23-Trihydroxy-urs-12-en-28-oic acid-3-O-β-D-glucopyranosyl-28-O-β-D-glucopyranosyl-(1→6)-β-D-glucopyranosylester C<sub>48</sub>H<sub>78</sub>O<sub>20</sub> (975.14). White powder, mp 217~220°C (dec), [α]<sub>D</sub><sup>25</sup> = -14.9° (c = 0.27, MeOH). **Source:** SHENG TENG *Stelmatocrypton khasianum* (stem). **Ref:** 4340.

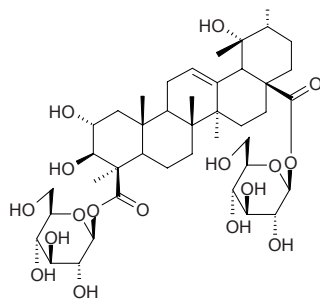
**20289 Stelmatotriterpenoside G**

2α,3β,19α-Trihydroxy-urs-12-en-28-oic acid-3-O-β-D-glucopyranosyl-28-O-β-D-glucopyranosyl-(1→2)-β-D-glucopyranosyl ester C<sub>48</sub>H<sub>78</sub>O<sub>20</sub> (975.14). White powder, mp 185~187°C, [α]<sub>D</sub><sup>25</sup> = -138.0° (c = 0.06, MeOH). **Source:** SHENG TENG *Stelmatocrypton khasianum* (stem). **Ref:** 4340.

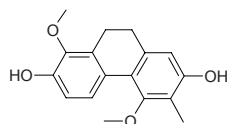


**20290 Stelmatotriterpenoside H**

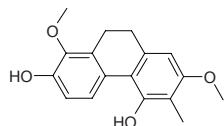
2 $\beta$ ,3 $\beta$ ,19 $\alpha$ -Trihydroxy-urs-12-en-24,28-dioic acid-24-*O*- $\beta$ -D-glucopyranosyl-28-*O*- $\beta$ -D-glucopyranosyl diester C<sub>42</sub>H<sub>66</sub>O<sub>17</sub> (842.98). White powder, mp 219~221°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +200° (*c* = 0.02, MeOH). Source: SHENG TENG *Stelmatocrypton khasianum* (stem). Ref: 4340.

**20291 Stemanthrene A**

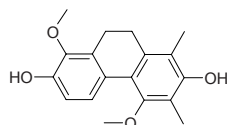
2,7-Dihydroxy-1,5-dimethoxy-6-methyl-9,10-dihydrophenanthrene C<sub>17</sub>H<sub>18</sub>O<sub>4</sub> (286.33). Colorless crystals, mp 130~132°C. Source: *Stemona* cf. *pierrei* (underground parts). Ref: 3751.

**20292 Stemanthrene B**

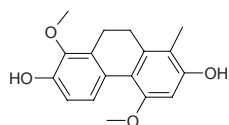
2,5-Dihydroxy-1,7-dimethoxy-6-methyl-9,10-dihydrophenanthrene C<sub>17</sub>H<sub>18</sub>O<sub>4</sub> (286.33). Colorless crystals, mp 198~200°C. Source: *Stemona* cf. *pierrei* (underground parts). Ref: 3751.

**20293 Stemanthrene C**

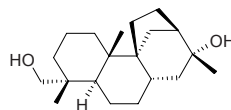
2,7-Dihydroxy-4,8-dimethoxy-1,3-dimethyl-9,10-dihydrophenanthrene C<sub>18</sub>H<sub>20</sub>O<sub>4</sub> (300.36). Colorless crystals, mp 169~171°C. Source: *Stemona* cf. *pierrei* (underground parts). Ref: 3751.

**20294 Stemanthrene D**

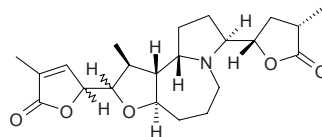
C<sub>17</sub>H<sub>18</sub>O<sub>4</sub> (286.33). Source: *Stemona* cf. *pierrei* (underground parts). Ref: 3751.

**20295 Stemarin**

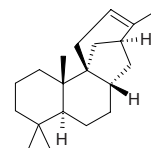
Stemodinol C<sub>20</sub>H<sub>34</sub>O<sub>2</sub> (306.49). Source: DAO GEN MEI *Rhizopus oryzae*. Ref: 3781.

**20296 Stemocochinin**

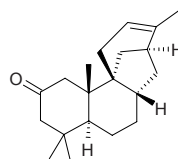
3-Methyl-5-[(2*Z*,3*aR*)-1*t*-methyl-8*t*-((2*S*)-4*c*-methyl-5-oxo-tetrahydrofuran-2*r*-yl)-(3*ar*,10*at*,10*bt*)-decahydro-2*H*-furo[3,2-*c*]pyrrolo[1,2-*a*]azepin-2-yl]-5*H*-furan-2-one C<sub>22</sub>H<sub>31</sub>NO<sub>5</sub> (389.50). Amorphous, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -52° (*c* = 0.2, MeOH). Pharm: Insecticidal (neonate larvae of *Spodoptera littoralis*, LC<sub>50</sub> = 170mg/L, EC<sub>50</sub> = 61mg/L). Source: DI TANG BAI BU *Stemona kerrii*, YIN DU ZHI NA BAI BU *Stemona cochinchinensis*, *Stemona curtisii*. Ref: 3409.

**20297 Stemod-12-ene**

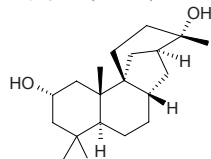
C<sub>20</sub>H<sub>32</sub> (272.48). Amorphous solid, mp 43~45°C, [ $\alpha$ ]<sub>D</sub><sup>27</sup> = +33.6° (*c* = 5.77, CHCl<sub>3</sub>). Source: DAO GEN MEI *Rhizopus oryzae*. Ref: 3781.

**20298 Stemod-12-en-2-one**

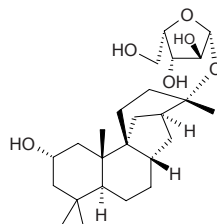
C<sub>20</sub>H<sub>30</sub>O (286.46). Amorphous crystals, mp 73~75°C, [ $\alpha$ ]<sub>D</sub><sup>27</sup> = +34.2° (*c* = 1.90, Me<sub>2</sub>CO). Source: DAO GEN MEI *Rhizopus oryzae*. Ref: 3781.

**20299 Stemodin**

C<sub>20</sub>H<sub>34</sub>O<sub>2</sub> (306.49). Source: DAO GEN MEI *Rhizopus oryzae*. Ref: 3781.

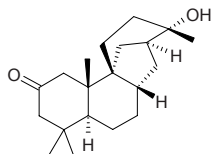
**20300 Stemodin- $\alpha$ -L-arabinofuranoside**

C<sub>25</sub>H<sub>42</sub>O<sub>6</sub> (438.61). Needles, mp 215~217°C, [ $\alpha$ ]<sub>D</sub><sup>27</sup> = -40.8° (*c* = 0.91, MeOH). Source: DAO GEN MEI *Rhizopus oryzae*. Ref: 3781.

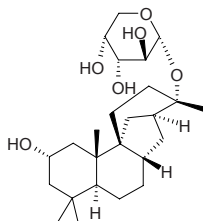


**20301 Steminone**

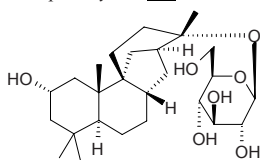
$C_{20}H_{32}O_2$  (304.48). Needles, mp 209–210°C,  $[\alpha]_D^{27} = +10.2^\circ$  ( $c = 1.25$ , Me<sub>2</sub>CO). Source: DAO GEN MEI *Rhizopus oryzae*. Ref: 3781.

**20302 Steminoside A**

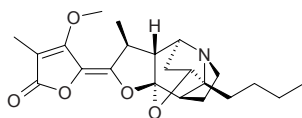
Steminin- $\alpha$ -L-arabinopyranoside  $C_{25}H_{42}O_6$  (438.61). Source: DAO GEN MEI *Rhizopus oryzae*. Ref: 3781.

**20303 Steminoside B**

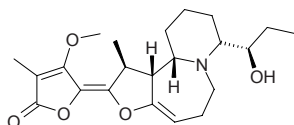
Steminin- $\beta$ -D-glucopyranoside  $C_{26}H_{44}O_7$  (468.64). Source: DAO GEN MEI *Rhizopus oryzae*. Ref: 3781.

**20304 Stemofoline**

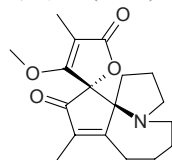
[29881-57-0]  $C_{22}H_{29}NO_5$  (387.48). Pharm: Insecticidal (neonate larvae of *Spodoptera littoralis*,  $LC_{50} = 2.0$ mg/L,  $EC_{50} = 1.5$ mg/L)<sup>[3409]</sup>. Source: WAN SHENG BAI BU *Stemona japonica* (in 1970, the compound was isolated from the plant by H.Irie et al.)<sup>[5505]</sup>, YIN DU ZHI NA BAI BU *Stemona cochinchinensis*, *Stemona curtisii*. Ref: 660, 3409, 5505.

**20305 Stemokerrin**

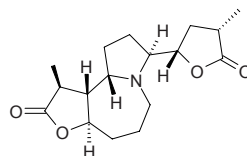
4-Methoxy-3-methyl-5-[(2Z,11aS)-8t-((1R)-1-hydroxypropyl)-1c-methyl-(11a r,11bc)-1,2,5,6,8,9,10,11,11a,11b-decahydro-furo[3,2-c]pyrido[1,2-a]azepin-2-ylidene]-5H-furan-2-one  $C_{22}H_{31}NO_5$  (389.50). Colorless plates, mp 138–141°C,  $[\alpha]_D^{20} = +136^\circ$  ( $c = 0.3$ , MeOH). Pharm: Insecticidal (neonate larvae of *Spodoptera littoralis*,  $LC_{50} = 58$ mg/L,  $EC_{50} = 14.1$ mg/L). Source: DI TANG BAI BU *Stemona kerrii*. Ref: 3409.

**20306 Stemonamine**

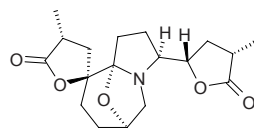
$C_{19}H_{27}NO_4$  (333.43). Source: WAN SHENG BAI BU *Stemona japonica*. Ref: 660.

**20307 Stemonine**

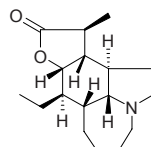
[27498-90-1]  $C_{17}H_{25}NO_4$  (307.39). mp 169°C. Pharm: Antibacterial; antiviral; antitussive; CNS depressant; analgesic. Source: BAI BU *Stemona tuberosa*, WAN SHENG BAI BU *Stemona japonica* (in 1970, the compound was isolated from the plant by H.Irie et al.)<sup>[5505]</sup>, ZHI LI BAI BU *Stemona sessilifolia*, *Stemona cf. pierrei* (underground parts). Ref: 6, 660, 3751, 5501, 5505.

**20308 Stemotinine**

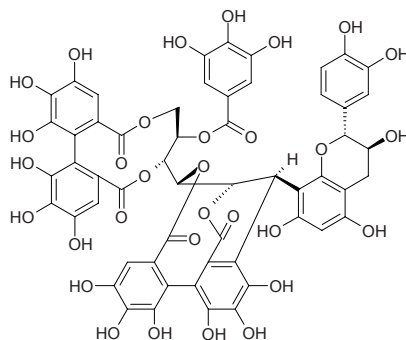
[85644-15-1]  $C_{18}H_{25}NO_5$  (335.40). Source: BAI BU *Stemona tuberosa*. Ref: 660.

**20309 Stenine**

$C_{17}H_{27}NO_2$  (277.41). mp 65–67°C. Source: BAI BU *Stemona tuberosa*. Ref: 6.

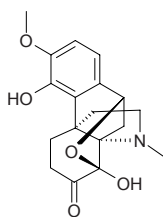
**20310 Stenophyllanin A**

[97775-88-7]  $C_{56}H_{40}O_{31}$  (1208.92). Pharm: Antioxidant (SOD-like activity,  $EC_{50} = 35.6$ μmol/L, control Gallic acid,  $EC_{50} = 31.7$ μmol/L, *L*-Ascorbic acid,  $EC_{50} = 34.6$ μmol/L); antioxidant (DPPH free radical scavenger,  $EC_{50} = 0.41$ μmol/L, control Gallic acid,  $EC_{50} = 5.88$ μmol/L, *L*-Ascorbic acid,  $EC_{50} = 6.25$ μmol/L). Source: HU TAO REN *Juglans regia*. Ref: 3408.

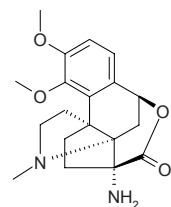


**20311 Stephabyssine**

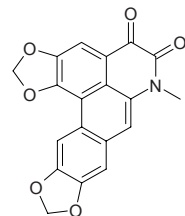
$C_{18}H_{21}NO_5$  (331.37). Source: FEN JI DU *Stephania longa*. Ref: 660.

**20312 Stephadiamine**

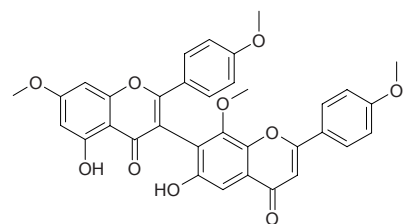
$C_{19}H_{24}N_2O_4$  (344.41). Source: QIAN JIN TENG *Stephania japonica*. Ref: 660.

**20313 Stephadione**

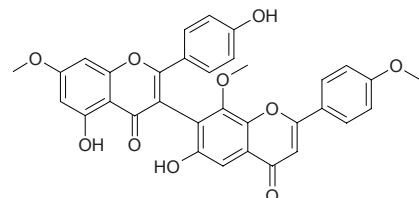
$C_{19}H_{11}NO_6$  (349.30). Red powder, mp > 300°C. Source: FANG JI *Stephania tetrandra*. Ref: 9.

**20314 Stephaflavone A**

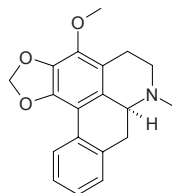
Stephaniaflavone A; 5,5''-Dihydroxy-7,4',7'',4'''-tetramethoxy-[3→6'']-biflavone  $C_{34}H_{26}O_{10}$  (594.58). Yellow cubic crystals ( $C_6H_6$ ), mp 237~239°C. Source: FANG JI *Stephania tetrandra* (aerial parts). Ref: 9, 5194.

**20315 Stephaflavone B**

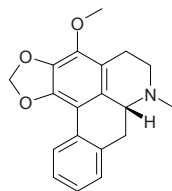
Stephaniaflavone B; 5,4',5''-Trihydroxy-7,7'',4'''-trimethoxy-[3→6'']-biflavone  $C_{33}H_{24}O_{10}$  (580.55). Yellow cubic crystals ( $CHCl_3$ ), mp 192~194°C. Source: FANG JI *Stephania tetrandra* (aerial parts). Ref: 9, 5194.

**20316 Stephalagine**

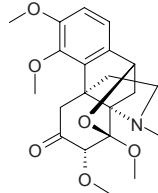
$C_{19}H_{19}NO_3$  (309.37). Pharm: Cytotoxic inactive (yeast assay: RS321NYCp50(gal), RS321NpRAD52(gal), RS321NpRAD52(glu)). Source: DING KE LA QIAN JIN TENG *Stephania dinklagei* (stem). Ref: 5457.

**20317 (-)-Stephalagine**

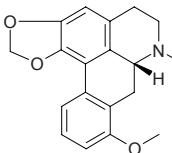
$C_{19}H_{19}NO_3$  (309.37). Source: YOU GOU YING ZHAO *Artabotrys uncinatus* (stem). Ref: 3083.

**20318 Stephamiersine**

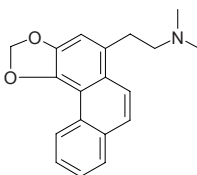
$C_{21}H_{27}NO_6$  (389.45). Source: QIAN JIN TENG *Stephania japonica*. Ref: 660.

**20319 Stephanine**

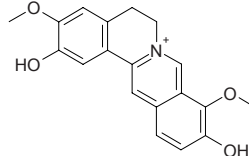
[517-63-5]  $C_{19}H_{19}NO_3$  (309.37). mp (-) 160~161°C, (±) 131~133°C. Source: DI BU RONG *Stephania delavayi* [Syn. *Stephania epigaea*], QIAN JIN TENG *Stephania japonica*, YE HE HUA *Magnolia coco*. Ref: 4.

**20320 Stephanthrine**

Stephanthrine  $C_{19}H_{19}NO_2$  (293.37). White acicular crystals (methanol), mp 234~236°C (HBr). Source: FANG JI *Stephania tetrandra*. Ref: 2, 44, 660.

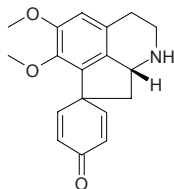
**20321 Stepharanine**

$C_{19}H_{18}NO_4^+$  (324.36). Source: QING NIU DAN *Tinospora sagittata*. Ref: 660.

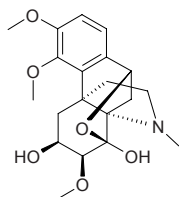


**20322 Stepharine**

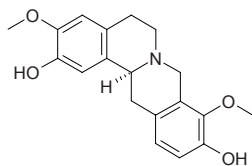
$C_{18}H_{19}NO_3$  (297.36). mp 179~181°C. Source: DA ZAO *Ziziphus jujuba*, QING FENG TENG *Sinomenium acutum*, YOU GOU YING ZHAO *Artabotrys uncinatus* (root, stem and leaf)<sup>[3083]</sup>. Ref: 2, 660, 3083.

**20323 Stephasunoline**

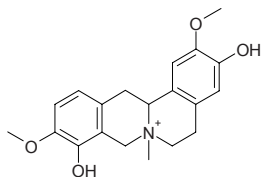
$C_{20}H_{27}NO_6$  (377.44). Source: QIAN JIN TENG *Stephania japonica*. Ref: 660.

**20324 Stepholidine**

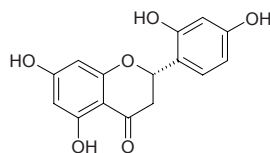
[16562-13-3]  $C_{19}H_{21}NO_4$  (327.38). mp 126~128°C, 161~163°C. Pharm: Dopamine receptor antagonist (stronger than levo-tetrahydropalmatine and tetrahydroberberine); dopamine  $D_2$  receptor antagonist (rat, anterior pituitary); used in treatment of restless extrapyramidal dyskinesia); antispasmodic (mus, inhibits spontaneous motion,  $ED_{50}$  = 258mg/kg); analgesic (mus, acetic acid-induced writhing model  $ED_{50}$  = 223mg/kg, electrostimulation model, hot plate model); used in treatment of vascular headache and bilious headache; antihypertensive (dog and rat; treatment of primary hypertension, slow action with enduring curative effects); antioxidant (microsome, lipid peroxidation induced by  $Fe^{2+}/VC$ ,  $CCl_4/NADPH$ , or  $Fe^{3+}/NADPH$ , presents dose-response relationship). Source: BIAN FU GE GEN *Menispermum dauricum*. Ref: 6, 627, 630, 647, 695, 919, 922.

**20325 Steponine**

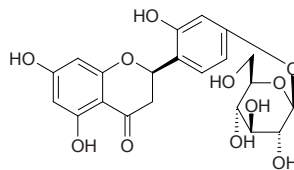
$C_{20}H_{24}NO_4$  (342.42). Source: QIAN JIN TENG *Stephania japonica*. Ref: 6.

**20326 Steppogenin**

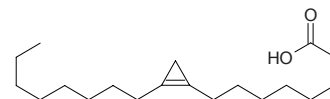
(2*S*)-5,7,2',4'-Tetrahydroxyflavanone  $C_{15}H_{12}O_6$  (288.26). Pharm: Cytotoxic (cyclooxygenase-1 inhibitor,  $IC_{50}$  = 1.7 $\mu$ g/mL)<sup>[5038]</sup>; cytotoxic (mouse mammary organ culture assay, 67% at 10 $\mu$ g/mL)<sup>[5038]</sup>; aromatase inhibitor (*in vitro*,  $IC_{50}$  = 2.2 $\mu$ mol/L; control Aminoglutethimide,  $IC_{50}$  = 6.4 $\mu$ mol/L)<sup>[3090]</sup>. Source: DA DA HE MIAN BAO GUO *Artocarpus dadah*, GOU SHU *Broussonetia papyrifera*. Ref: 3090, 5038.

**20327 Steppogenin 4'-O- $\beta$ -D-glucoside**

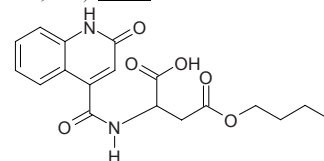
$C_{21}H_{24}O_{11}$  (450.40). Colorless amorphous solid, mp 259~263°C (MeOH/H<sub>2</sub>O). Source: ZHUO SE SANG CHENG *Maclura tinctoria*. Ref: 2353.

**20328 Sterculic acid**

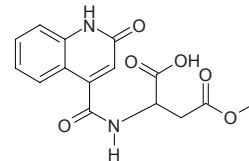
$C_{19}H_{34}O_2$  (294.48). mp 18.2~18.3°C. Source: JIA MA SHU *Sterculia foetida*, MU JIN ZI *Hibiscus syriacus*, WU TONG ZI *Firmiana simplex*. Ref: 6.

**20329 Sterculinine I**

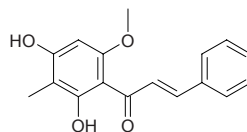
2-[(2-Oxo-1,2-dihydro-quinoline-4-carbonyl)-amino]-succinic acid 4-*n*-butyl ester  $C_{18}H_{20}N_2O_6$  (360.37). White powder, mp 184~186°C,  $[\alpha]_D^{20}$  = +24.2° ( $c$  = 0.50, H<sub>2</sub>O). Source: PANG DA HAI *Sterculia lychnophora* (seed). Ref: 3394.

**20330 Sterculinine II**

2-[(2-Oxo-1,2-dihydro-quinoline-4-carbonyl)-amino]-succinic acid 4-methyl ester  $C_{15}H_{14}N_2O_6$  (318.29). White powder, mp 176~178°C,  $[\alpha]_D^{20}$  = +25° ( $c$  = 0.50, H<sub>2</sub>O). Source: PANG DA HAI *Sterculia lychnophora* (seed). Ref: 3394.

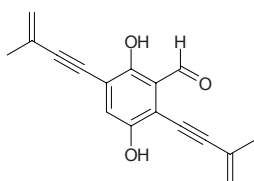
**20331 Stercurensin**

$C_{17}H_{16}O_4$  (284.31). Source: YANG PU TAO YE *Syzygium samarangense*. Ref: 4100.

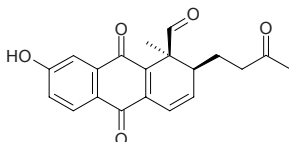


**20332 Sterehirsutinal**

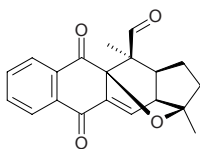
$C_{17}H_{14}O_3$  (266.30). Yellow solid. Pharm: Phytotoxin (callus of *Vitis vinifera*, GI<sub>50</sub> = 100 $\mu$ mol/L). Source: MAO REN GE JUN *Stereum hirsutum*. Ref: 3930.

**20333 Sterekunthal A**

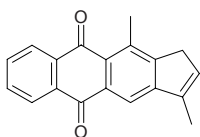
$C_{20}H_{18}O_5$  (338.36). Yellow oil,  $[\alpha]_D^{22} = -10^\circ$  ( $c = 0.44$ ,  $CHCl_3$ ). Pharm: Antimalarial (antiplasmodial); toxic (endothelial cell line ECV-304). Source: WU GAN DA YU YE QIU *Stereospermum kunthianum*. Ref: 2019.

**20334 Sterekunthal B**

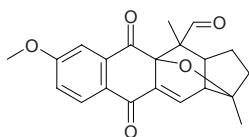
$C_{20}H_{18}O_4$  (322.36). Colorless oil. Pharm: Antimalarial (antiplasmodial); toxic (endothelial cell line ECV-304). Source: WU GAN DA YU YE QIU *Stereospermum kunthianum*. Ref: 2019.

**20335 Sterequinone A**

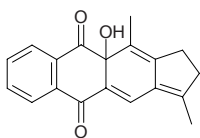
$C_{19}H_{14}O_2$  (274.32). Pale yellow semi solid. Source: JIA MIAN YU YE QIU *Stereospermum personatum*. Ref: 3424.

**20336 Sterequinone B**

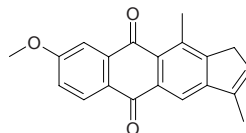
$C_{21}H_{20}O_5$  (352.39). Yellow solid, mp 138°C. Source: JIA MIAN YU YE QIU *Stereospermum personatum*. Ref: 3424.

**20337 Sterequinone C**

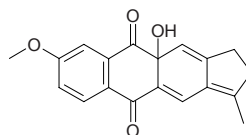
$C_{19}H_{16}O_3$  (292.34). Pale yellow solid, mp 199°C. Source: JIA MIAN YU YE QIU *Stereospermum personatum*. Ref: 3424.

**20338 Sterequinone D**

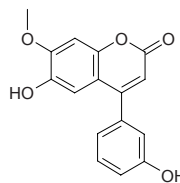
$C_{20}H_{16}O_3$  (304.35). Yellow syrup. Source: JIA MIAN YU YE QIU *Stereospermum personatum*. Ref: 3424.

**20339 Sterequinone E**

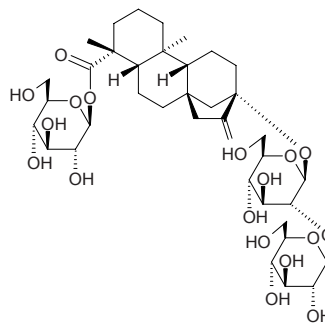
$C_{19}H_{16}O_4$  (308.34). Semi solid. Source: JIA MIAN YU YE QIU *Stereospermum personatum*. Ref: 3424.

**20340 Stevenin**

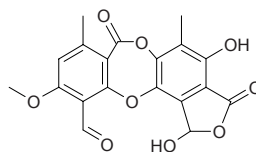
Stevein; Stevenine [36286-69-8]  $C_{16}H_{12}O_5$  (284.27). Source: JIANG ZHEN XIANG *Dalbergia odorifera*. Ref: 716.

**20341 Stevioside**

$C_{38}H_{60}O_{18}$  (804.89). Hygroscopic crystals, mp 198°C,  $[\alpha]_D^{25} = -39.3^\circ$  ( $c = 5.7$ , water). Pharm: Hypoglycemic; antihypertensive; promotes metabolism; used in treatment of gastric hyperacidity; toxin (rat, orl, 5g/(kg-d) for 90 days, no pathological change observed); LD<sub>50</sub> (rat, ip)  $\geq 3400$ mg/kg. Source: TIAN CHA *Rubus suavissimus*, TIAN YE JU *Eupatorium rebaudianum* (dried leaf: content scope = 3.47%~16.00%, mean content = 9.66%<sup>[5508]</sup>). Ref: 661, 5508.

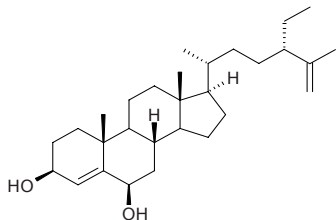
**20342 Stictic acid**

$C_{19}H_{14}O_9$  (386.32). Source: XIAO LA BA *Cladonia verticillata*. Ref: 660.

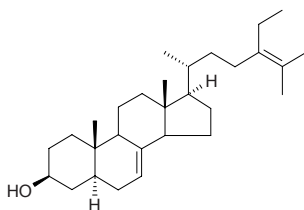


**20343 Stigmasta-4,25-dien-3 $\beta$ ,6 $\beta$ -diol**

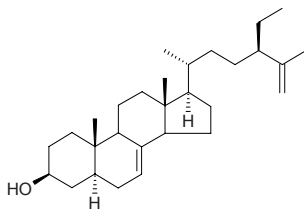
$C_{29}H_{48}O_2$  (428.70). Colorless acicular crystals, mp 242~243°C. Source: LUE DA AO DING ZAO *Laurencia majuscula*. Ref: 2152.

**20344 7,24-Stigmastadienol**

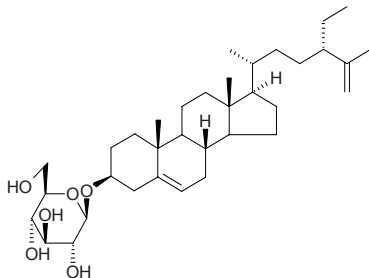
$C_{29}H_{48}O$  (412.71). Source: GUA LOU *Trichosanthes kirilowii*. Ref: 2.

**20345 7,25-Stigmastadienol**

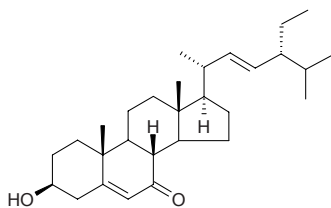
$C_{29}H_{48}O$  (412.71). Source: GUA LOU *Trichosanthes kirilowii*. Ref: 2.

**20346 5,25-Stigmastadien-3 $\beta$ -ol- $\beta$ -D-glucoside**

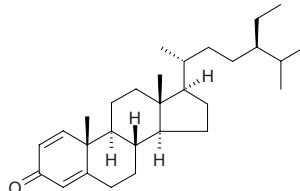
$C_{35}H_{58}O_6$  (574.85). Source: KU GUA *Momordica charantia*. Ref: 6.

**20347 Stigmasta-5,22-dien-3 $\beta$ -ol-7-one**

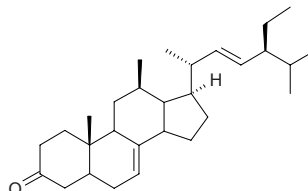
$C_{29}H_{46}O_2$  (426.69). Source: MA GEN *Cannabis sativa*. Ref: 660.

**20348 (22E,24R)-Stigmasta-1,4-dien-3-one**

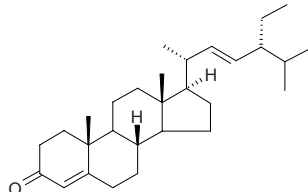
$C_{29}H_{46}O$  (410.69). Colorless needles (MeOH), mp 89~91°C,  $[\alpha]_D^{24} = +22.8^\circ$  ( $c = 0.33$ ,  $CHCl_3$ ). Pharm: Platelet aggregation inhibitor (washed rabbit platelets, 100 $\mu$ g/mL, 100 $\mu$ mol/L AA-induced, AggRt = 2.4%, control 50 $\mu$ mol/L Aspirin, AggRt = 100%; 10 $\mu$ g/mL collagen-induced, AggRt = 1.8%, 100 $\mu$ mol/L Aspirin, AggRt = 4.9%; 0.1U/mL thrombin-induced, AggRt = 5.2%, 100 $\mu$ mol/L Aspirin, AggRt = 1.7%; 2ng/mL PAF-induced, AggRt = 4.2%, 100 $\mu$ mol/L Aspirin, AggRt = 2.1%). Source: SAN QI CAO *Gynura segetum* [Syn. *Gynura japonica*] (rhizome). Ref: 5427.

**20349 (22E,20S,24S)-Stigmasta-7,22-dien-3-one**

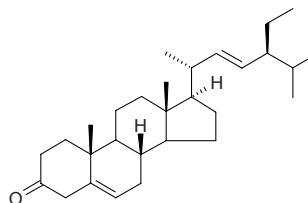
$C_{29}H_{46}O$  (410.69). Source: XIA KU CAO *Prunella vulgaris*. Ref: 2508.

**20350 Stigmasta-4,22-dien-3-one**

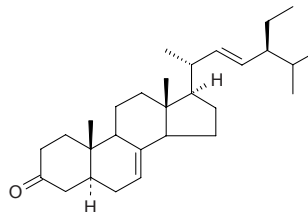
$C_{29}H_{46}O$  (410.69). Source: MA GEN *Cannabis sativa*. Ref: 660.

**20351 Stigmasta-5,22-dien-3-one**

$C_{29}H_{46}O$  (410.69). Source: DANG SHEN *Codonopsis pilosula*. Ref: 2.

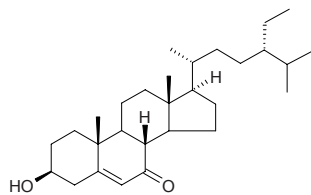
**20352 5 $\alpha$ -Stigmasta-7,22-dien-3-one**

$C_{29}H_{46}O$  (410.69). Source: DANG SHEN *Codonopsis pilosula*. Ref: 2.

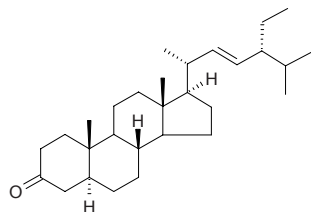


**20353 Stigmasta-5-en-3 $\beta$ -ol-7-one**

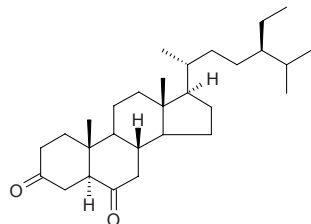
$C_{29}H_{48}O_2$  (428.70). Source: MA GEN *Cannabis sativa*. Ref: 660.

**20354 5 $\alpha$ -Stigmasta-22-en-3-one**

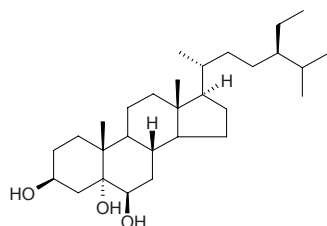
$C_{29}H_{48}O$  (412.71). Source: MA GEN *Cannabis sativa*. Ref: 660.

**20355 5 $\alpha$ -Stigmastan-3,6-dione**

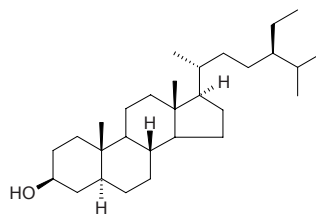
$C_{29}H_{48}O_2$  (428.70). Colorless amorphous crystals, mp 192–194°C,  $[\alpha]_D^{25} = +26.7^\circ$  ( $c = 0.19$ ,  $CHCl_3$ ). Pharm: Antimutagenic (*E. coli* PQ37, antigenotoxicity test, for mutagen MNNG shows 30% reduction of induction factor, for mutagen NQO, shows 40% reduction of induction factor)<sup>[4459]</sup>. Source: BAO XING WEI MAO *Euonymus mupinensis*, PU HUANG *Typha angustata*, ZAO JIA CI *Gleditsia sinensis* [Syn. *Gleditsia horrida*] (thorn). Ref: 2, 278, 4459.

**20356 Stigmastane-3 $\beta$ ,5 $\alpha$ ,6 $\beta$ -triol**

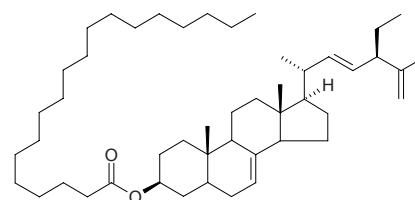
$C_{29}H_{52}O_3$  (448.74). Pharm: Cytotoxic ( $P_{388}$ ,  $ED_{50} > 50\mu g/mL$ , control Mithramycin,  $ED_{50} = 0.58\mu g/mL$ ; A549,  $ED_{50} > 50\mu g/mL$ , Mithramycin,  $ED_{50} = 0.073\mu g/mL$ ; HT29,  $ED_{50} > 50\mu g/mL$ , Mithramycin,  $ED_{50} = 0.076\mu g/mL$ ). Source: MO ZHI JIAO GU CUI *Casearia membranacea* (stem). Ref: 5421.

**20357 Stigmastanol**

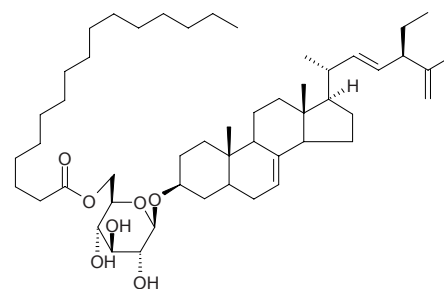
[19466-47-8]  $C_{29}H_{52}O$  (416.74). White lamellar crystals, mp 110–112°C. Source: GUA LOU *Trichosanthes kirilowii*, LU CAO *Rhaponticum carthamoides*. Ref: 2, 698.

**20358 Stigmasta-7,22,25-triene-3-nonadecanoic acid ester**

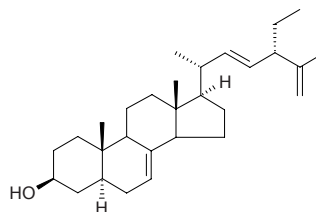
$C_{48}H_{82}O_2$  (691.19). Colorless lamellar crystals (acetone), mp 100–101°C. Source: JIA BEI MU *Bolbostemma paniculatum* (bulb). Ref: 4819.

**20359 Stigmasta-7,22,25-triene-3-O- $\beta$ -D-(6'-palmitoyl)glucopyranoside**

$C_{51}H_{86}O_7$  (811.25). White waxy solid, mp 84–86°C. Source: JIA BEI MU *Bolbostemma paniculatum* (bulb). Ref: 4819.

**20360 7,22,25-Stigmastatrienol**

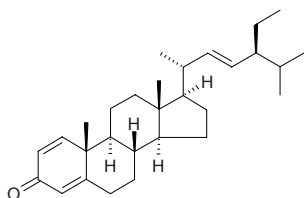
$C_{29}H_{46}O$  (410.69). Source: GUA LOU *Trichosanthes kirilowii*. Ref: 2.



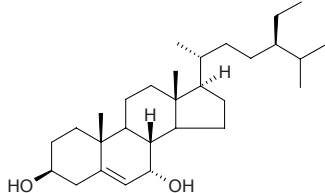


**20361 (22E,24S)-Stigmasta-1,4,22-trien-3-one**

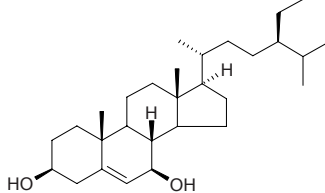
$C_{29}H_{44}O$  (408.67). Colorless needles (MeOH), mp 100~101°C,  $[\alpha]_D^{27} = +25.5^\circ$  ( $c = 0.03$ ,  $CHCl_3$ ). **Pharm:** Platelet aggregation inhibitor (washed rabbit platelets, 100 $\mu$ g/mL, 100 $\mu$ mol/L AA-induced, AggRt = 1.5%, control 50 $\mu$ mol/L Aspirin, AggRt = 100%; 10 $\mu$ g/mL collagen-induced, AggRt = 0.4%, 100 $\mu$ mol/L Aspirin, AggRt = 4.9%; 0.1U/mL thrombin-induced, AggRt = 4.2%, 100 $\mu$ mol/L Aspirin, AggRt = 1.7%; 2ng/mL PAF-induced, AggRt = 3.4%, 100 $\mu$ mol/L Aspirin, AggRt = 2.1%). **Source:** SAN QI CAO *Gynura segetum* [Syn. *Gynura japonica*] (rhizome). **Ref:** 5427.

**20362 Stigmast-5-ene-3 $\beta$ ,7 $\alpha$ -diol**

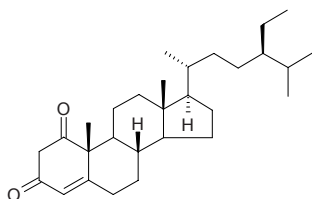
$C_{29}H_{50}O_2$  (430.72). **Pharm:** Cytotoxic ( $P_{388}$ ,  $ED_{50} = 31.31\mu$ g/mL, control Mithramycin,  $ED_{50} = 0.58\mu$ g/mL; A549,  $ED_{50} > 50\mu$ g/mL, Mithramycin,  $ED_{50} = 0.073\mu$ g/mL; HT29,  $ED_{50} = 28.87\mu$ g/mL, Mithramycin,  $ED_{50} = 0.076\mu$ g/mL). **Source:** MO ZHI JIAO GU CUI *Casearia membranacea* (stem). **Ref:** 5421.

**20363 Stigmast-5-ene-3 $\beta$ ,7 $\beta$ -diol**

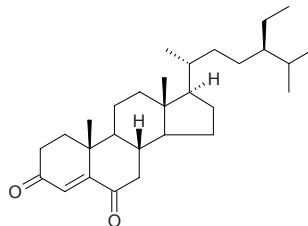
$C_{29}H_{50}O_2$  (430.72). **Pharm:** Cytotoxic ( $P_{388}$ ,  $ED_{50} = 6.39\mu$ g/mL, control Mithramycin,  $ED_{50} = 0.58\mu$ g/mL; A549,  $ED_{50} = 10.95\mu$ g/mL, Mithramycin,  $ED_{50} = 0.073\mu$ g/mL; HT29,  $ED_{50} = 8.09\mu$ g/mL, Mithramycin,  $ED_{50} = 0.076\mu$ g/mL). **Source:** MO ZHI JIAO GU CUI *Casearia membranacea* (stem). **Ref:** 5421.

**20364 Stigmast-4-ene-1,3-dione**

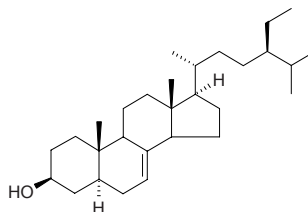
$C_{29}H_{46}O_2$  (426.69). White plate crystals, mp 144~146°C. **Source:** SHA REN *Amomum villosum*. **Ref:** 518.

**20365 Stigmast-4-ene-3,6-dione**

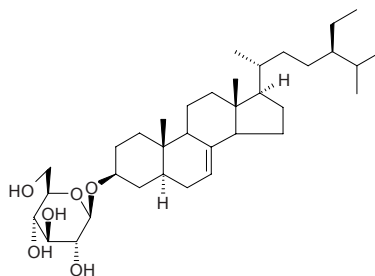
$C_{29}H_{46}O_2$  (426.69). Colorless amorphous crystals, mp 168~169°C,  $[\alpha]_D^{25} = -21.4^\circ$  ( $c = 0.15$ ,  $CHCl_3$ ). **Pharm:** Antimutagenic (*E. coli* PQ37, antigenotoxicity test, for mutagen MNNG shows 30% reduction of induction factor, for mutagen NQO, shows 25% reduction of induction factor). **Source:** ZAO JIA CI *Gleditsia sinensis* [Syn. *Gleditsia horrida*] (thorn). **Ref:** 4459.

**20366 5 $\alpha$ -Stigmast-7-en-3 $\beta$ -ol**

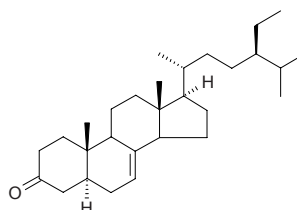
$C_{29}H_{50}O$  (414.72). mp 137~140°C. **Source:** XIA KU CAO *Prunella vulgaris*, YAO YONG PU GONG YING *Taraxacum officinale*. **Ref:** 6, 660, 2508.

**20367 7-Stigmastenol-3-O- $\beta$ -D-glucoside**

$C_{35}H_{60}O_6$  (576.86). **Source:** DANG SHEN *Codonopsis pilosula*, SHUANG BIAN GUA LOU *Trichosanthes rosthornii* [Syn. *Trichosanthes uniflora*], TIAN HUA FEN *Trichosanthes kirilowii*, SAN QI HUA LEI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*] (flower bud: yield = 0.0006%dw). **Ref:** 2, 660, 4702.

**20368 7-Stigmastenone-3**

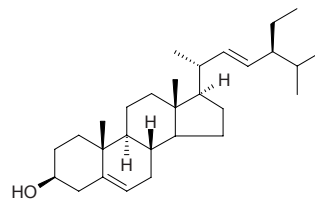
$C_{29}H_{48}O$  (412.71). **Source:** DANG SHEN *Codonopsis pilosula*, SHUANG BIAN GUA LOU *Trichosanthes rosthornii* [Syn. *Trichosanthes uniflora*]. **Ref:** 2, 660.



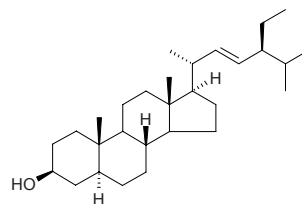
**20369 Stigmasterol**

(22E)-Stigmasta-5,22-dien-3 $\beta$ -ol [83-48-7] C<sub>29</sub>H<sub>48</sub>O (412.71). mp 170°C, [ $\alpha$ ]<sub>D</sub><sup>27</sup> = -42.9° (c = 1.2, CHCl<sub>3</sub>). **Pharm:** Antihypercholesterolemic (chick, reduces the level of cholesterol in serum); antimutagenic (*E. coli* PQ37, antigenotoxicity test, for mutagen MNNG shows 51.2% reduction of induction factor, for mutagen NQO, shows 64.2% reduction of induction factor)<sup>[4459]</sup>; cytotoxic inactive (A2780 ovarian cancer cell line, IC<sub>50</sub> = 26.3mg/mL)<sup>[5379]</sup>; cytotoxic inactive (*in vitro*, HeLa, Vero, K562, Raji, Wish, and Calu1 tumor cell lines, IC<sub>50</sub> > 100 $\mu$ mol/L)<sup>[3057]</sup>; antileishmanial (*Leishmania donovani* promastigotes, IC<sub>50</sub> > 1209 $\mu$ mol/L, control Pentamidine, IC<sub>50</sub> = 0.40 $\mu$ mol/L, amastigotes, IC<sub>50</sub> > 90 $\mu$ mol/L, control Pentostam, IC<sub>50</sub> = 9.75 $\mu$ g/mL)<sup>[5127]</sup>; antimalarial (*Plasmodium falciparum* K1, IC<sub>50</sub> > 1209 $\mu$ mol/L, control Chloroquine, IC<sub>50</sub> = 0.59 $\mu$ mol/L)<sup>[5127]</sup>; antitrypanosomal (*Trypanosoma brucei brucei* blood stream trypomastigotes, IC<sub>50</sub> > 30 $\mu$ mol/L, control Pentamidine, IC<sub>50</sub> = 0.00034 $\mu$ mol/L)<sup>[5127]</sup>; cytotoxic (KB cells, IC<sub>50</sub> > 1272 $\mu$ mol/L, control Pentamidine, IC<sub>50</sub> = 0.17 $\mu$ mol/L)<sup>[5127]</sup>; platelet aggregation inhibitor (washed rabbit platelets, 100 $\mu$ g/mL, 100 $\mu$ mol/L AA-induced, InRt = 0.5%, control 50 $\mu$ mol/L Aspirin, InRt = 100%; 10 $\mu$ g/mL collagen-induced, InRt = 1.7%, 100 $\mu$ mol/L Aspirin, InRt = 4.9%; 0.1U/mL Thrombin-induced, InRt = 4.6%, 100 $\mu$ mol/L Aspirin, InRt = 1.7%; 2ng/mL PAF-induced, InRt = 2.8%, 100 $\mu$ mol/L Aspirin, InRt = 2.1%)<sup>[5427]</sup>; antiviral (*in vitro*, Para3 Virus, IC<sub>50</sub> = 10.3 $\mu$ g/mL, TC<sub>50</sub> = 165 $\mu$ g/mL, TI = 3.6; control Ribavirin, IC<sub>50</sub> = 2.6 $\mu$ g/mL, TC<sub>50</sub> = 62.5 $\mu$ g/mL, TI = 24.0)<sup>[3089]</sup>. **Source:** AI YE *Artemisia argyi*, BAI FAN DOU *Phaseolus vulgaris*, BAI GUO *Ginkgo biloba*, BAI HE *Lilium brownii* var. *viridulum* [Syn. *Lilium brownii* var. *colchesteri*], BAI HUA SHE SHE CAO *Oldenlandia diffusa* [Syn. *Hedyotis diffusa*], BEI SHA SHEN *Glehnia littoralis* (root: mean content = 0.0178%)<sup>[5508]</sup>, BIAN DOU *Dolichos lablab*, BU GU ZHI *Psoralea corylifolia*, CANG ER *Xanthium sibiricum* [Syn. *Xanthium strumarium*], CHAI HU *Bupleurum chinense*, CHAO XIAN BAI TOU WENG *Pulsatilla cernua*, CHE QIAN *Plantago asiatica*, CHE SANG ZI YE *Dodonaea viscosa*, CHI BAN YAN HU SUO *Corydalis remota* [Syn. *Corydalis bulbosa* var. *typica*], CHUAN DANG SHEN *Codonopsis tangshen* (dried root: content = 0.0227%)<sup>[5508]</sup>, CU LIU GUO *Hippophae rhamnoides*, DA CHE QIAN *Plantago major*, DA JI<sup>(4)</sup> *Cirsium japonicum*, DA ZAO *Ziziphus jujuba*, DANG GUI *Angelica sinensis*, DANG SHEN *Codonopsis pilosula* (dried root: mean content = 0.0125%)<sup>[5508]</sup>, DONG FENG JU GEN *Atalantia buxifolia* [Syn. *Severinia buxifolia*] (root cortex), DU BIAN DOU *Physostigma venenosum*, E BU SHI CAO *Centipeda minima*, GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], GAN ZHE *Saccharum sinensis*, GOU QI ZI *Lycium chinense*, GU SUI BU *Drynaria fortunei*, GUA LOU *Trichosanthes kirilowii*, GUAN MU TONG *Aristolochia manshuriensis* (stem)<sup>[4706]</sup>, GUANG JING QIAN CAO *Rubia wallichiana* (stem), *Guarea rhopalocarpa* (leaf), HAI FENG TENG *Piper kadsura* [Syn. *Piper futokadsura*], HEI DA DOU *Glycine max*, HUANG HUA HAO *Artemisia annua*, HUANG HUA YUAN ZHI *Polygala arillata*, HUANG QIN *Scutellaria baicalensis*, HUI HUI SU *Perilla frutescens* var. *crispa*, HUI XIANG *Foeniculum vulgare*, JIA SUAN JIANG *Nicandra physaloides*, JIAN ZI SU YE *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*], JIAO GAN *Citrus tankan*, JIN YIN HUA *Lonicera japonica*, JING MI *Oryza sativa*, KAI KOU JIAN *Tupistra chinensis* (underground part)<sup>[4676]</sup>, KU DI DAN *Elephantopus scaber*, KU SHI LIAN *Caesalpinia minax* (seed)<sup>[3089]</sup>, KUAI JING GE

*Pueraria tuberosa*, LANG YU PI *Ulmus parvifolia*, LONG YAN YE *Euphoria longan* [Syn. *Dimocarpus longan*], LU BIAN QING *Clerodendron cyrtophyllum*, LU ZHU GEN *Arundo donax*, LUO HUA SHENG *Arachis hypogaea*, MAI DONG *Ophiopogon japonicus*, MAN JIU JIE *Psychotria serpens*, MANG QI GU *Dicranopteris pedata* [Syn. *Polypodium pedatum*; *Dicranopteris dichotoma*], MIAN MAO MA DOU LING *Aristolochia mollissima* (dried root and stem: yield = 0.0031%<sup>[3026]</sup>), MING DANG SHEN *Changium smyrnioides*, MU SHU DI SHANG BU FEN *Manihot esculenta*, MU TONG *Akebia quinata*, MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*], PU DI WU GONG *Lycopodium cernuum*, QING FENG TENG *Sinomenium acutum*, QIU HUA DANG SHEN *Codonopsis subglobosa* (dried root: content = 0.0283%<sup>[5508]</sup>), REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], SAN QI CAO *Gynura segetum* [Syn. *Gynura japonica*] (rhizome), SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*], SAN ZUAN FENG *Lindera obtusiloba*, SHAN GAN CAO *Mussaenda pubescens*, SHAN WO JU *Lactuca indica*, SHAN YAO *Dioscorea batatas* [Syn. *Dioscorea opposita*], SHENG HONG JI *Ageratum conyzoides*, SHUI TUAN HUA *Adina pilulifera* [Syn. *Cephalanthus pilulifera*], SHUI XIAN CAO *Hedyotis corymbosa* [Syn. *Oldenlandia corymbosa*], SU HUA DANG SHEN *Codonopsis pilosula* var. *modesta* [Syn. *Codonopsis modesta*] (dried root: mean content = 0.0176%<sup>[5508]</sup>), TAI WAN FU RONG *Hibiscus taiwanensis*, TAI WAN GE NA XIANG *Goniothalamus amuyon* (fresh stem and leaf)<sup>[4686]</sup>, TAI WAN JIN GU CAO *Ajuga taiwanensis* (whole herb), TAI WAN PU GONG YING *Taraxacum formosanum* (fresh root), TIAN MING JING *Carpesium abrotanoides*, WU GENG WU JIA PI *Acanthopanax sessiliflorus*, XI XIAN *Siegesbeckia orientalis*, XIANG PI MU *Alstonia scholaris*, XIANG SI ZI *Abrus precatorius*, XIAO HONG SHEN *Rubia yunnanensis* (root)<sup>[4646]</sup>, YANG JIAO TENG *Morinda umbellata*, YANG SHI CAO *Achillea millefolium*, YAO YONG PU GONG YING *Taraxacum officinale*, YE ZI RANG *Cocos nucifera*, YI HE GUO *Ventilago leiocarpa* (stem)<sup>[3057]</sup>, YI MI *Coix lacryma-jobi*, YING HE *Scleropyrum wallichianum* (twig), YING SU *Papaver somniferum*, YU SHU SHU *Zea mays*, YU SHU *Ulmus pumila*, YUN SHI *Caesalpinia decapetala* (leaf), ZAN BI XI BA DOU *Croton zambesicus* (leaf), ZAO JIA *Gleditsia sinensis* [Syn. *Gleditsia horrida*], ZHU YE LAN *Arundina chinensis*, occurs in many plants. Ref: 2, 345, 372, 511, 658, 660, 2529, 3026, 3057, 3075, 3089, 3807, 4369, 4456, 4459, 4483, 4488, 4520, 4646, 4676, 4686, 4706, 5127, 5379, 5427, 5501, 5508.

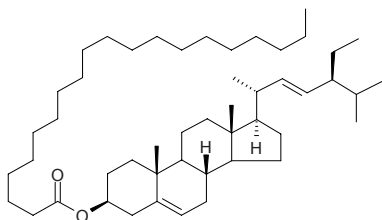
**20370 22-Stigmasterol**

C<sub>29</sub>H<sub>50</sub>O (414.72). mp 158–159°C. **Source:** CHAI HU *Bupleurum chinense*. Ref: 6.

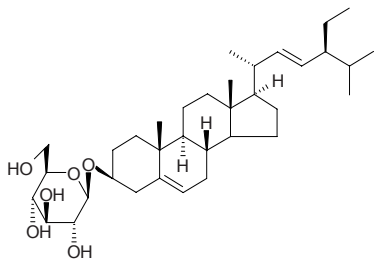


**20371 Stigmasterol arachidate**

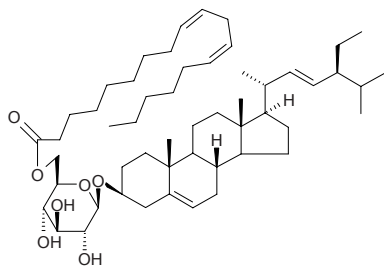
$C_{49}H_{86}O_2$  (707.23). White lamellar crystals, (*n*-hexane) mp 96–98°C. Source: KUI BAN ER YE TAI *Frullania muscicola*. Ref: 2117.

**20372 Stigmasterol- $\beta$ -D-glucoside**

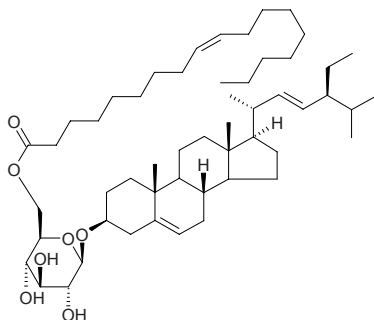
Stigmasterol 3-*O*- $\beta$ -D-glucoside  $C_{35}H_{58}O_6$  (574.85). Source: BIAN ZHONG CHANG YE AN LUO *Polyalthia longifolia* var. *pendula*, DANG SHEN *Codonopsis pilosula*, DANG GUI *Angelica sinensis*, HUANG HUA YUAN ZHI *Polygala arillata*, MANG QI GU *Dicranopteris pedata* [Syn. *Polypodium pedatum*; *Dicranopteris dichotoma*], SAN QI HUA LEI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*] (flower bud: yield = 0.0047%dw)<sup>[4702]</sup>, SHUI LIU DOU *Pongamia pinnata* (stem cortex: yield = 0.0013%)<sup>[4721]</sup>. Ref: 2, 345, 4702, 4721, 5386.

**20373 Stigmasterol-3-(6-linoleoyl)glucopyranoside**

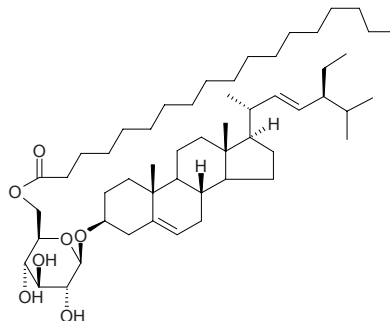
$C_{53}H_{88}O_7$  (837.29). Source: REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. Ref: 660.

**20374 Stigmasterol-3-(6-oleoyl)glucopyranoside**

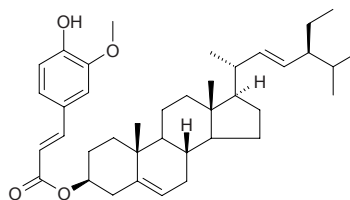
$C_{53}H_{90}O_7$  (839.30). Source: REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. Ref: 660.

**20375 Stigmasterol-3-(6-stearoyl)glucopyranoside**

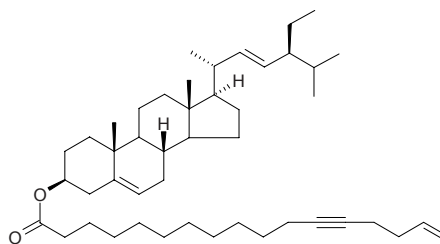
$C_{53}H_{92}O_7$  (841.32). Source: REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. Ref: 660.

**20376 Stigmasteryl ferulate**

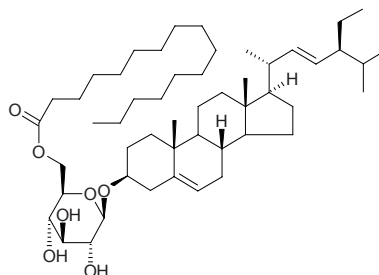
$C_{39}H_{56}O_4$  (588.88). Source: MI PI KANG *Oryza sativa*. Ref: 6.

**20377 Stigmasteryl-3-*O*-scleropyrate**

$C_{46}H_{74}O_2$  (659.10). Amorphous. Pharm: Antitubercular inactive (*Mycobacterium tuberculosis* H<sub>37</sub>Ra); antiplasmodial inactive (parasite *Plasmodium falciparum* K1 multidrug-resistant strain). Source: YING HE *Scleropyrum wallichianum* (twig). Ref: 4520.

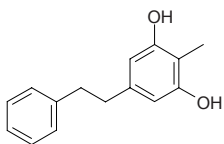
**20378 Stigmast-3-*O*- $\beta$ -D-glucopyranosyl-6-hexadecanoate**

$C_{51}H_{88}O_7$  (813.27). White amorphous powder (methanol). Source: JI YE QIU HAI TANG *Begonia limprichtii*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. Ref: 431, 660.

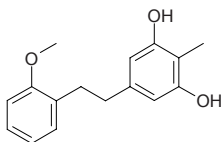


**20379 Stilbostemin B**

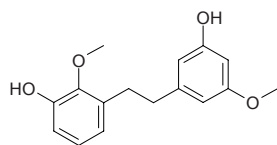
$C_{15}H_{16}O_2$  (228.29). Source: *Stemona cf. pierrei* (underground parts). Ref: 3751.

**20380 Stilbostemin D**

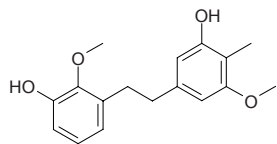
$C_{16}H_{18}O_3$  (256.32). Source: *Stemona cf. pierrei* (underground parts). Ref: 3751.

**20381 Stilbostemin E**

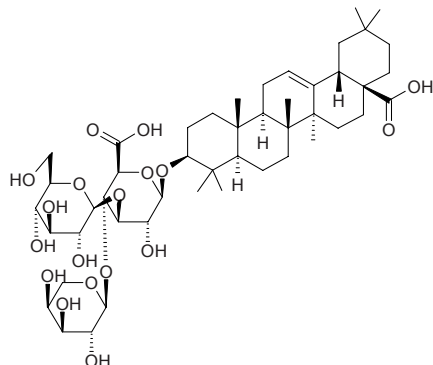
$C_{16}H_{18}O_4$  (274.32). Source: *Stemona cf. pierrei* (underground parts). Ref: 3751.

**20382 Stilbostemin G**

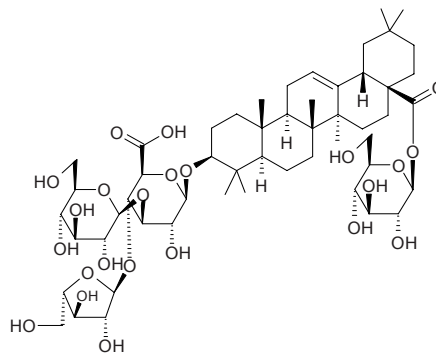
1-(3-Hydroxy-5-methoxy-4-methylphenyl)-2-(3-hydroxy-2-methoxyphenyl)-ethane  $C_{17}H_{20}O_4$  (288.35). Pharm: Antifungal (*Pyricularia grisea*,  $EC_{50} > 200\mu\text{g/mL}$ ,  $EC_{90} > 200\mu\text{g/mL}$ ; *Cladosporium herbarum*,  $EC_{50} = 71\mu\text{g/mL}$ ,  $EC_{90} > 200\mu\text{g/mL}$ ; *Fusarium avenaceum*,  $EC_{50} = 48\mu\text{g/mL}$ ,  $EC_{90} > 200\mu\text{g/mL}$ ; *Alternaria citri*,  $EC_{50} = 144\mu\text{g/mL}$ ,  $EC_{90} > 200\mu\text{g/mL}$ ; *Botrytis cinerea*,  $EC_{50} > 200\mu\text{g/mL}$ ,  $EC_{90} > 200\mu\text{g/mL}$ ). Source: *Stemona cf. pierrei* (underground parts). Ref: 3751.

**20383 Stipuleanoside R<sub>1</sub>**

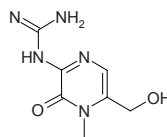
Tatasaponin I [96627-79-1]  $C_{47}H_{74}O_{18}$  (927.10). White amorphous powder, mp 223–225°C; 285–290°C. Pharm: Hypoglycemic (rat, 100mg/mL orl); inhibits alcohol in blood (rat, orl, 100mg/kg). Source: LIAO DONG CONG MU *Aralia elata*. Ref: 900.

**20384 Stipuleanoside R<sub>2</sub>**

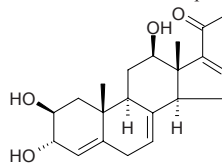
[96627-72-4]  $C_{53}H_{84}O_{23}$  (1089.25). White powder crystals, mp 260–263°C (dec) (methanol–acetone),  $[\alpha]_D^{23.8} = -17.92^\circ$  ( $c = 1$ , methanol). Pharm: Inhibits alcohol in blood (rat orl, 100mg/kg). Source: LIAO DONG CONG MU *Aralia elata*. Ref: 900.

**20385 Stizolamine**

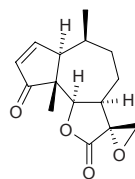
$C_7H_{11}N_5O_2$  (197.20). Source: HUI JIAO *Sophora japonica*, YE GUAN MEN *Lespedeza cuneata*. Ref: 660.

**20386 Stizophyllin**

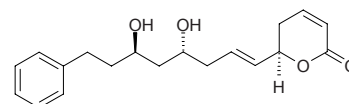
2 $\beta$ ,3 $\alpha$ ,12 $\beta$ -Trihydroxypregna-4,7,16-trien-20-one  $C_{21}H_{28}O_4$  (344.45). Amorphous yellowish solid,  $[\alpha]_D^{20} = +79.1^\circ$  ( $c = 0.58$ ,  $CHCl_3$ ). Source: LU SHENG GE JUN *Thelephora terrestris*. Ref: 4446.

**20387 Stramonin B**

$C_{15}H_{18}O_4$  (262.31). Pharm: Antineoplastic; cytotoxic. Source: family Asteraceae spp. Ref: 658.

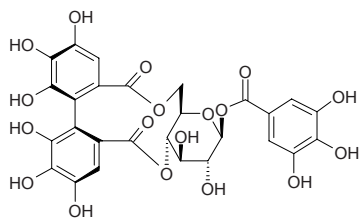
**20388 Strictifolione**

$C_{19}H_{24}O_4$  (316.40). Fine colorless needles, mp 119–121°C,  $[\alpha]_D^{24} = +81.5^\circ$  ( $c = 0.52$ ,  $CHCl_3$ ). Source: ZHI LI YE HOU KE GUI *Cryptocarya strictifolia* (stem cortex). Ref: 5082.

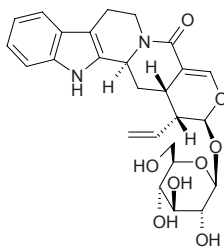


**20389 Strictinin**

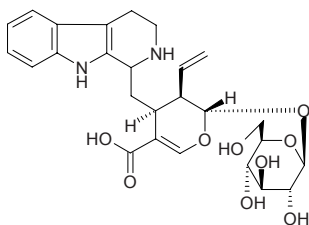
[517-46-4]  $C_{27}H_{22}O_{18}$  (634.46). white-like amorphous powder,  $[\alpha]_D = -3^\circ$  ( $c = 0.4$ , methanol). **Pharm:** Cytotoxic (malanotic carcinoma RPMI-7951,  $ED_{50} = 4.86\mu\text{g/mL}$ ); inhibits lipolysis (rat fat cells, induced by adrenalin); DNA topoisomerase II inhibitor (*in vitro*,  $IC_{100} = 0.5\mu\text{mol/L}$ ); HIV-1 reverse transcriptase inhibitor ( $IC_{50} = 0.087\mu\text{mol/L}$ ); antioxidant (SOD-like activity,  $EC_{50} = 48.9\mu\text{mol/L}$ , control Gallic acid,  $EC_{50} = 31.7\mu\text{mol/L}$ , *L*-Ascorbic acid,  $EC_{50} = 34.6\mu\text{mol/L}$ )<sup>[3408]</sup>; antioxidant (DPPH scavenger,  $EC_{50} = 26.8\mu\text{mol/L}$ , control Gallic acid,  $EC_{50} = 5.88\mu\text{mol/L}$ , *L*-Ascorbic acid,  $EC_{50} = 6.25\mu\text{mol/L}$ )<sup>[3408]</sup>. **Source:** BAI SHAO *Paeonia albiflora* [Syn. *Paeonia lactiflora*] (fresh fruit: yield = 0.0076%fw)<sup>[4695]</sup>, BAN LI *Castanea mollissima* (leaf), CHI YANG *Alnus japonica*, DING XIANG *Syzygium aromaticum* [Syn. *Eugenia caryophyllata*], FAN SHI LIU YE *Psidium guajava*, HU TAO REN *Juglans regia*, HUA XIANG SHU YE *Platycarya strobilacea*, MEI GUI HUA *Rosa rugosa*. **Ref:** 660, 900, 3408, 4695.

**20390 Strictosamide**

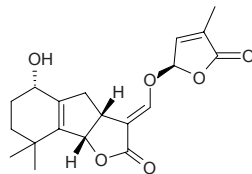
$C_{26}H_{30}N_2O_8$  (498.54). Yellowish amorphous solid, mp 176–177°C (MeOH),  $[\alpha]_D^{22} = -56.3^\circ$  ( $c = 0.15$ , MeOH). **Pharm:** Antibacterial (*in vitro*: *Staphylococcus aureus*, *Bacillus subtilis*, *Bacillus coli*, *Bacillus diphtheriae*, *Streptococcus* sp., *Salmonella* sp., *Bacillus proteus*, *Aspergillus niger*, *Bacillus lactis*, *Klebsiella* sp.); antileishmanial. **Source:** DONG FANG WU TAN *Nauclea orientalis* (bark)<sup>[3074]</sup>, GOU TENG *Uncaria rhynchophylla* [Syn. *Nauclea rhynchophylla*], JI ZI MU *Sinoadina Racemosa* [Syn. *Adina racemosa*] (leaf, flower and twig: yield = 0.00024%dw)<sup>[4723]</sup>, KUAN YE WU TAN *Nauclea latifolia* (bark and wood: yield = 0.15%), LIU QIU SHE GEN CAO *Ophiorrhiza liukiensis* (whole herb). **Ref:** 2, 2178, 3074, 4303, 4527, 4723.

**20391 Strictosidinic acid**

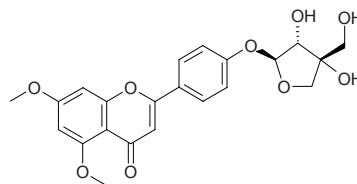
$C_{26}H_{32}N_2O_9$  (516.55). **Source:** XI SHU *Camptotheca acuminata*. **Ref:** 4097.

**20392 Strigol**

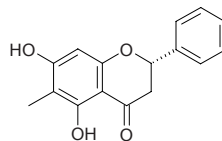
$C_{19}H_{22}O_6$  (346.39). **Pharm:** Promotes germination (seeds of *Striga lutea*). **Source:** LU DI MIAN *Gossypium hirsutum* [Syn. *Gossypium mexicanum*]. **Ref:** 658.

**20393 Strobilanthin**

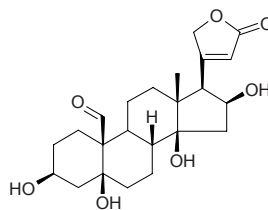
5,7-Dimethoxy-4'-hydroxyflavone-4'-O-apioside  $C_{22}H_{22}O_9$  (430.42). Yellowish crystalline powder, mp 214–216°C. **Source:** HONG ZE LAN *Strobilanthes japonicus* [Syn. *Championella japonica*]. **Ref:** 654.

**20394 (–)-Strobopinin**

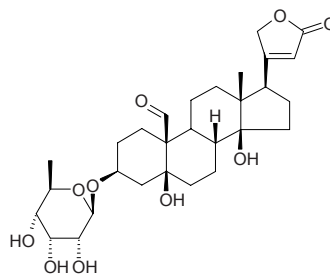
6-Methylpinocembrin  $C_{16}H_{14}O_4$  (270.29).  $[\alpha]_D^{25} = -83.3^\circ$  ( $c = 0.42$ , acetone). **Pharm:** Inhibits cell proliferation of PBMC (activated by phytohemagglutinin (PHA),  $IC_{50} = 36.3\mu\text{mol/L}$ , inhibitory mechanism may involve the blocking of IL-2 and IFN- $\gamma$  production). **Source:** YANG PU TAO YE *Syzygium samarangense*. **Ref:** 4100.

**20395 Strophadogenin**

[808-18-4]  $C_{23}H_{32}O_7$  (420.51). mp 233–237°C,  $[\alpha]_D = +50.1^\circ$ . **Source:** HEI GANG LIU *Periploca nigrescens*. **Ref:** 1521, 2498.

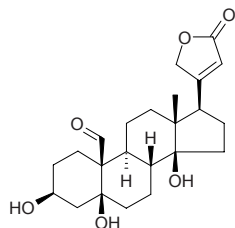
**20396 Strophalloside**

$C_{29}H_{42}O_{10}$  (550.65). **Source:** JIAN XUE FENG HOU *Antiaris toxicaria* [Syn. *Ambora toxicaria*]. **Ref:** 660.

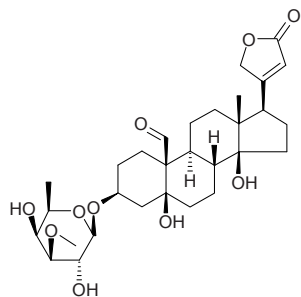


**20397 Strophanthidin**

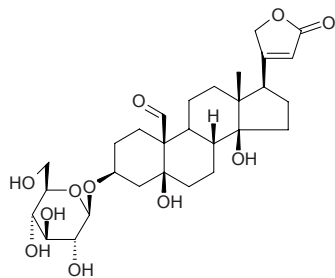
Apocynarin [66-28-4]  $C_{23}H_{32}O_6$  (404.51). Crystals, +2H<sub>2</sub>O (H<sub>2</sub>O), mp 169~170°C,  $[\alpha]_D^{25} = +43.1^\circ$  (MeOH); mp 235°C (anhydride). **Pharm:** Cytotoxic (*in vitro*, HL-60 IC<sub>50</sub> > 10µg/mL; PC-3M-1E8 IC<sub>50</sub> = 4.48µg/mL; BGC823 IC<sub>50</sub> = 0.0225µg/mL; MDA-MB-435 IC<sub>50</sub> = 0.142µg/mL; Bel7402 IC<sub>50</sub> = 2.34µg/mL; HeLa IC<sub>50</sub> = 0.541µg/mL)<sup>[2548]</sup>. **Source:** BO NIANG HAO *Descurainia Sophia* (seeds), KANG PI DU MAO XUAN HUA *Strophanthus kombe*, HEI GANG LIU *Periploca nigrescens*, LUO BU MA *Apocynum venetum*, GUI ZHU TANG JIE *Erysimum cheiranthoides*, FU SHOU CAO *Adonis amurensis*. **Ref:** 5, 1521, 2498, 2548.

**20398 Strophanthidin-β-D-digitaloside**

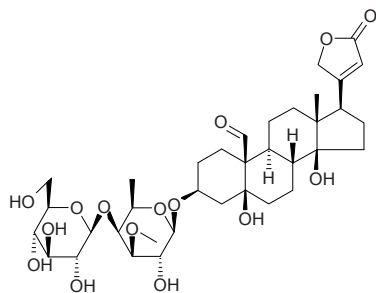
$C_{30}H_{44}O_{10}$  (564.68). **Source:** LUO BU MA *Apocynum venetum*. **Ref:** 2.

**20399 Strophanthidin-glucoside**

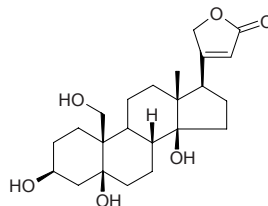
$C_{29}H_{42}O_{11}$  (566.65). mp 163~168°C. **Source:** HEI GANG LIU *Periploca nigrescens*. **Ref:** 1521, 2498.

**20400 Strophanthidin-β-D-glucosyl-(1→4)-β-D-digitaloside**

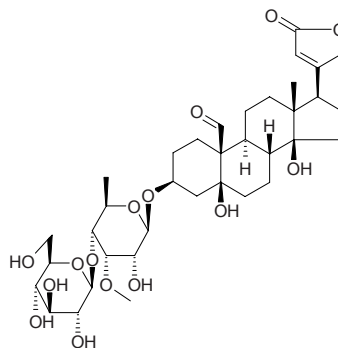
$C_{36}H_{54}O_{15}$  (726.82). **Source:** LUO BU MA *Apocynum venetum*. **Ref:** 2.

**20401 Strophanthidol**

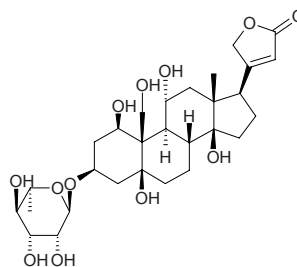
$C_{23}H_{34}O_6$  (406.52). **Source:** HEI GANG LIU *Periploca nigrescens*. **Ref:** 1521, 2498.

**20402 Strophanthin**

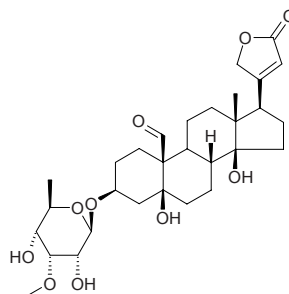
$C_{36}H_{54}O_{15}$  (726.82). mp 195°C. **Source:** FU SHOU CAO *Adonis amurensis*. **Ref:** 6.

**20403 Strophanthin G**

**Ouabain**  $C_{29}H_{44}O_{12}$  (584.67). **Pharm:** Cardiotonic; used in treatment of acute heart failure with edema of lungs and cardiogenic shock; toxin (vertebrate); LD<sub>50</sub> (rat, iv) = 14mg/kg, (cat, iv) = 0.11g/kg, (male Swiss webster mus, ip) = 6.5mg/kg. **Source:** XUAN HUA YANG JIAO AO *Strophanthus gratus*, YANG JIAO AO ZI *Strophanthus divaricatus*. **Ref:** 658, 661, 1395.

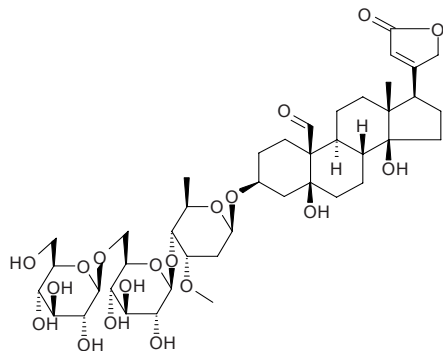
**20404 Strophantojavoside**

$C_{30}H_{40}O_{10}$  (564.68). **Source:** JIAN XUE FENG HOU *Antiaris toxicaria* [Syn. *Ambora toxicaria*]. **Ref:** 660.

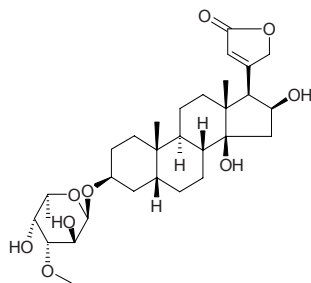


**20405 k-Strophantylside**

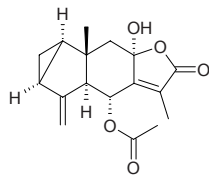
$C_{42}H_{64}O_{19}$  (872.97). mp 199~200°C. **Pharm:** Cardiac glycoside (fast-acting); LD<sub>50</sub> (rat, iv) = 15mg/kg. **Source:** FU SHOU CAO *Adonis amurensis* (root: content = 0.26%), KANG PI DU MAO XUAN HUA *Strophanthus kombe*, YANG JIAO AO ZI *Strophanthus divaricatus*. **Ref:** 4, 5508.

**20406 Strosposide**

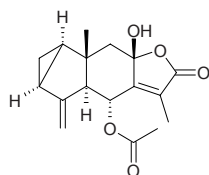
[595-21-1]  $C_{30}H_{46}O_9$  (550.70). mp 246~250°C. **Source:** JIA ZHU TAO *Nerium indicum*, MAO DI HUANG *Digitalis purpurea* (dried leaf: content = 0.002%)<sup>[5508]</sup>. **Ref:** 6, 5508.

**20407 Strychnistenolide 6-O-acetate A**

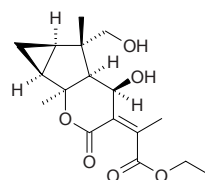
$C_{17}H_{20}O_5$  (304.35). **Pharm:** Anti-HIV-1 inactive (HIV-1 IN inhibitor, IC<sub>50</sub> > 100μmol/L, positive control Suramin, IC<sub>50</sub> = 2.4μmol/L). **Source:** DING HU DIAO ZHANG *Lindera chunii* (root). **Ref:** 4224.

**20408 Strychnistenolide 6-O-acetate B**

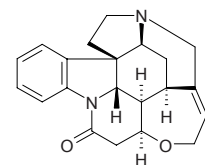
$C_{17}H_{20}O_5$  (304.35). **Pharm:** Anti-HIV-1 inactive (HIV-1 IN inhibitor, IC<sub>50</sub> > 100μmol/L, positive control Suramin, IC<sub>50</sub> = 2.4μmol/L). **Source:** DING HU DIAO ZHANG *Lindera chunii* (root). **Ref:** 4224.

**20409 Strychnilactone**

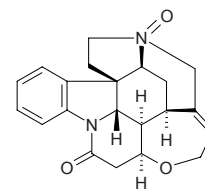
$C_{17}H_{24}O_6$  (324.38). Colorless rods (CHCl<sub>3</sub>-MeOH), mp 181~182°C,  $[\alpha]_D^{20} = -267.6^\circ$  ( $c = 0.2$ , MeOH). **Source:** WU YAO *Lindera strychnifolia* [Syn. *Lindera aggregata*] (root: yield = 0.00059%). **Ref:** 3041.

**20410 Strychnine**

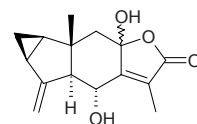
(-)-Strychnine; Strychnidin-10-one [57-24-9]  $C_{21}H_{22}N_2O_2$  (334.42). Colorless cubes (chloroform-ether), mp 286~288°C, bp 270°C/5mmHg,  $[\alpha]_D^{18} = -104.3^\circ$  ( $c = 0.254$ , ethanol),  $[\alpha]_D^{25} = -139^\circ$  ( $c = 0.4$ , chloroform), soluble in chloroform, slightly soluble in ethanol, methanol, benzene, ether, very slightly soluble in peridine<sup>[5507]</sup>. **Pharm:** Stimulant; LD<sub>50</sub> (mus, orl) = 5.0mg/kg, (mus, orl, nitrate) = 3.0mg/kg, (mus, sc, nitrate) = 0.83mg/kg, (mus, im, nitrate) = 0.63mg/kg, (mus, ip, nitrate) = 1.46mg/kg, (mus, iv, nitrate) = 0.5mg/kg, (rat, orl, nitrate) = 9.75mg/kg, (rat, im, nitrate) = 1.40mg/kg, (rat, ip, nitrate) = 1.67mg/kg, (rat, iv, nitrate) = 0.58mg/kg. **Source:** LI JI SAN CHU MAI MA QIAN *Strychnos triplinervia*, LV SONG GUO *Strychnos ignatii* (discovered by P. J. Pelletier and J. B. Caventou from seed of the plant in 1818)<sup>[5507]</sup>, MA QIAN ZI *Strychnos nux-vomica* (dried ripe seed: mean content = 3.67%)<sup>[5508]</sup>, MAO ZHU MA QIAN *Strychnos nitida*. **Ref:** 4, 542, 576, 658, 5501, 5507, 5508.

**20411 Strychnine N-oxide**

$C_{21}H_{22}N_2O_3$  (350.42). **Source:** MA QIAN ZI *Strychnos nux-vomica*. **Ref:** 542.

**20412 Strychnistenolide**

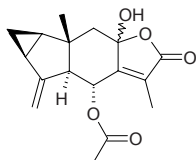
$C_{13}H_{18}O_4$  (262.31). Colorless needles (*n*-hexane-EtOAc), mp 185~186°C,  $[\alpha]_D^{20} = +36.3^\circ$  ( $c = 0.3$ , MeOH). **Source:** WU YAO *Lindera strychnifolia* [Syn. *Lindera aggregata*] (root: yield = 0.014%). **Ref:** 3041.



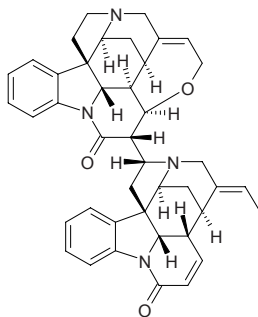


**20413 Strychnistenolide 6-O-acetate**

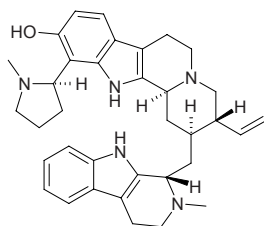
$C_{17}H_{20}O_5$  (304.35). Colorless amorphous powder (*n*-hexane–EtOAc). Source: WU YAO *Lindera strychnifolia* [Syn. *Lindera aggregata*] (root; yield = 0.0035%). Ref: 3041.

**20414 Strychnogucine C**

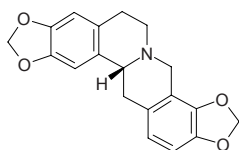
$C_{42}H_{42}N_4O_3$  (650.83). White-yellowish amorphous powder. Pharm: Antimalarial (antiplasmodial). Source: ZHONG FEI MA QIAN *Strychnos icaja*. Ref: 2018.

**20415 Strychnopentamine**

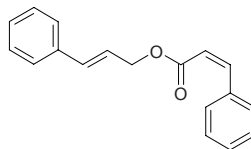
$C_{35}H_{43}N_5O$  (549.77). Pharm: Antiplasmodial (chloroquine-sensitive line:  $IC_{50} = (117 \pm 33) \text{ nmol/L}$ ,  $IC_{90} = 443 \text{ nmol/L}$ , control Quinine,  $IC_{50} = (269 \pm 6) \text{ nmol/L}$ ,  $IC_{90} = 1910 \text{ nmol/L}$ ; chloroquine-resistant line:  $IC_{50} = (145 \pm 20) \text{ nmol/L}$ ,  $IC_{90} = 2982 \text{ nmol/L}$ , Quinine,  $IC_{50} = (413 \pm 11) \text{ nmol/L}$ ,  $IC_{90} = 1720 \text{ nmol/L}$ ). Source: DONG FEI MA QIAN *Strychnos usambarensis* (leaf). Ref: 4925.

**20416 Stylopine**

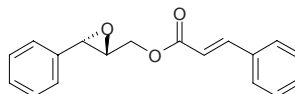
$C_{19}H_{17}NO_4$  (323.35). mp (–) 204°C; (±) 222–223°C. Source: BAI QU CAI *Chelidonium majus*, HE QING HUA *Hylomecon japonica*, JU HUA HUANG LIAN *Corydalis pallida*, YAN HU SUO *Corydalis yanhusuo* [Syn. *Corydalis turtschaninovii* f. *Yanhusuo*]. Ref: 6.

**20417 Styrcin**

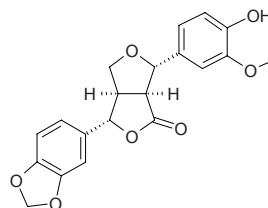
Cinnamoyl cinnamate  $C_{18}H_{16}O_2$  (264.33). Source: AN XI XIANG *Styrax benzoin*, LU LU TONG *Liquidambar formosana* [Syn. *Liquidambar taiwaniana*], SU HE XIANG *Liquidambar orientalis*. Ref: 660.

**20418 Styrcin epoxide**

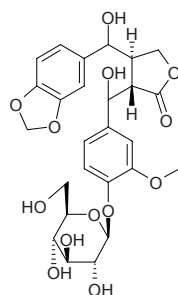
$C_{18}H_{16}O_3$  (280.33). Source: LU LU TONG *Liquidambar formosana* [Syn. *Liquidambar taiwaniana*]. Ref: 660.

**20419 Styrcin**

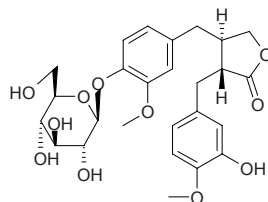
$C_{20}H_{18}O_7$  (370.36). Pharm: Antineoplastic. Source: YAO YONG AN XI XIANG *Styrax officinalis*. Ref: 658.

**20420 Styrcin japonoside A**

7,7'-Dihydroxyburshehnerin 4- $\beta$ -D-glucoside  $C_{26}H_{30}O_{13}$  (550.52). Colorless crystals, mp 156.8–156.9°C (dec),  $[\alpha]_D^{25} = +0.25^\circ$  ( $c = 0.5$ , MeOH). Source: RI BEN AN XI XIANG JING PI *Styrax japonica*. Ref: 2546.

**20421 Styrcin japonoside B**

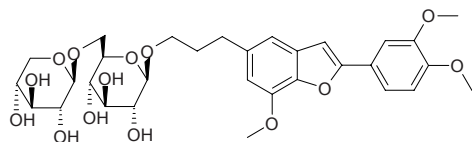
$C_{26}H_{32}O_{11}$  (520.54). Colorless crystals, mp 84–86°C (dec),  $[\alpha]_D^{25} = -5.09^\circ$  ( $c = 0.3$ , MeOH). Pharm: Matrix metalloproteinase-1 (MMP-1) inhibitor; prevents UV-induced changes in MMP-1 expression. Source: RI BEN AN XI XIANG JING PI *Styrax japonica*. Ref: 2546.



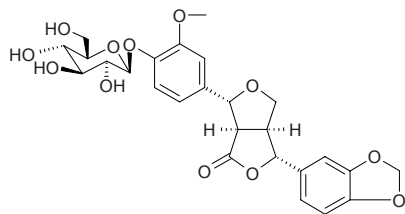


**20422 Styxalignolide A**

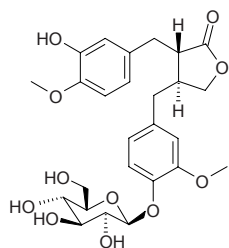
5-(3''-Hydroxypropyl)-7-methoxy-2-(3',4'-dimethoxyphenyl)-benzofuran 3''-*O*-[ $\beta$ -*D*-xylopyranoside-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside] C<sub>31</sub>H<sub>40</sub>O<sub>14</sub> (636.66). White amorphous powder,  $[\alpha]_D^{22} = -53.7^\circ$  ( $c = 0.8$ , MeOH). **Pharm:** Anticomplement activity (IC<sub>50</sub> = 123 $\mu$ mol/L, ligand only inactive, control Rosmarinic acid, IC<sub>50</sub> = 182 $\mu$ mol/L). **Source:** RI BEN AN XI XIANG JING PI *Styrax japonica*. **Ref:** 4096.

**20423 Styxalignolide B**

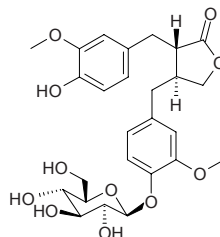
2 $\alpha$ -(4'-Hydroxy-3'-methoxyphenyl)-6 $\alpha$ -(3'',4''-methylenedioxyphenyl)-8-oxo-3,7-dioxabicyclo[3.3.0]octane 4'-*O*-[ $\beta$ -*D*-glucopyranoside] C<sub>26</sub>H<sub>28</sub>O<sub>12</sub> (532.51). Brown plates (MeOH), mp 111~113°C,  $[\alpha]_D^{23} = -96.8^\circ$  ( $c = 0.31$ , MeOH). **Pharm:** Antioxidant inactive (*in vitro*, DPPH radical scavenger, IC<sub>50</sub> > 500 $\mu$ mol/L; control Vitamin E, IC<sub>50</sub> = 20.1 $\mu$ mol/L). **Source:** RI BEN AN XI XIANG JING PI *Styrax japonica* (stem cortex: yield = 0.00017%dw). **Ref:** 4787.

**20424 Styxalignolide C**

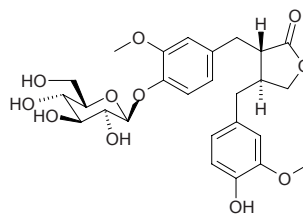
(2*S*,3*S*)-2 $\alpha$ -(3''-Hydroxy-4''-methoxybenzyl)-3 $\beta$ -(4'-hydroxy-3'-methoxybenzyl)- $\gamma$ -butyrolactone 4'-*O*-[ $\beta$ -*D*-glucopyranoside] C<sub>26</sub>H<sub>32</sub>O<sub>11</sub> (520.54). Colorless plates (MeOH), mp 106~108°C,  $[\alpha]_D^{23} = -8.7^\circ$  ( $c = 0.23$ , MeOH). **Pharm:** Antioxidant (*in vitro*, DPPH radical scavenger, IC<sub>50</sub> = 380 $\mu$ mol/L; control Vitamin E, IC<sub>50</sub> = 20.1 $\mu$ mol/L). **Source:** RI BEN AN XI XIANG JING PI *Styrax japonica* (stem cortex: yield = 0.0058%dw). **Ref:** 4787.

**20425 Styxalignolide D**

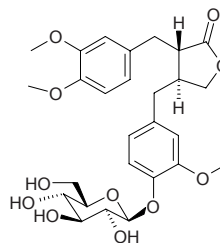
(2*S*,3*S*)-2 $\alpha$ -(4''-Hydroxy-3''-methoxybenzyl)-3 $\beta$ -(4'-hydroxy-3'-methoxybenzyl)- $\gamma$ -butyrolactone 4'-*O*-[ $\beta$ -*D*-glucopyranoside] C<sub>26</sub>H<sub>32</sub>O<sub>11</sub> (520.54). Colorless plates (MeOH), mp 100~102°C,  $[\alpha]_D^{23} = -10.0^\circ$  ( $c = 0.28$ , MeOH). **Pharm:** Antioxidant (*in vitro*, DPPH radical scavenger, IC<sub>50</sub> = 278 $\mu$ mol/L; control Vitamin E, IC<sub>50</sub> = 20.1 $\mu$ mol/L). **Source:** RI BEN AN XI XIANG JING PI *Styrax japonica* (stem cortex: yield = 0.0028%dw). **Ref:** 4787.

**20426 Styxalignolide E**

(2*S*,3*S*)-2 $\alpha$ -(4''-Hydroxy-3''-methoxybenzyl)-3 $\beta$ -(4'-hydroxy-3'-methoxybenzyl)- $\gamma$ -butyrolactone 4'-*O*-[ $\beta$ -*D*-glucopyranoside] C<sub>26</sub>H<sub>32</sub>O<sub>11</sub> (520.54). Colorless plates (MeOH), mp 102~104°C,  $[\alpha]_D^{23} = -10.4^\circ$  ( $c = 0.23$ , MeOH). **Pharm:** Antioxidant (*in vitro*, DPPH radical scavenger, IC<sub>50</sub> = 194 $\mu$ mol/L; control Vitamin E, IC<sub>50</sub> = 20.1 $\mu$ mol/L). **Source:** RI BEN AN XI XIANG JING PI *Styrax japonica* (stem cortex: yield = 0.0021%dw). **Ref:** 4787.

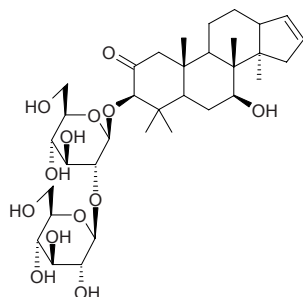
**20427 Styxalignolide F**

(2*S*,3*S*)-2 $\alpha$ -(3'',4''-Dimethoxybenzyl)-3 $\beta$ -(4'-hydroxy-3'-methoxybenzyl)- $\gamma$ -butyrolactone 4'-*O*-[ $\beta$ -*D*-glucopyranoside] C<sub>27</sub>H<sub>34</sub>O<sub>11</sub> (534.57). Colorless plates (MeOH), mp 128~130°C,  $[\alpha]_D^{23} = -24.8^\circ$  ( $c = 0.25$ , MeOH). **Pharm:** Antioxidant inactive (*in vitro*, DPPH radical scavenger, IC<sub>50</sub> > 500 $\mu$ mol/L; control Vitamin E, IC<sub>50</sub> = 20.1 $\mu$ mol/L). **Source:** RI BEN AN XI XIANG JING PI *Styrax japonica* (stem cortex: yield = 0.0089%dw). **Ref:** 4787.

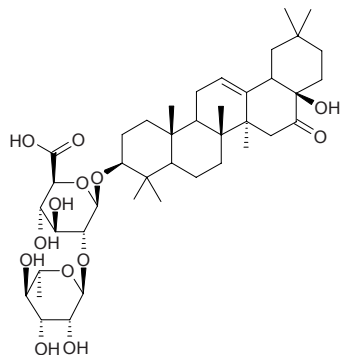


**20428 Styraxoside A**

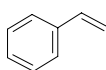
3 $\beta$ ,7 $\beta$ -Dihydroxy-4 $\alpha$ -4 $\beta$ ,8 $\beta$ ,10 $\beta$ ,14 $\alpha$ -pentamethyl-5 $\alpha$ -gon-16-en-2-one  
3-*O*-[ $\beta$ -D-glucopyranoside-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranoside] C<sub>34</sub>H<sub>54</sub>O<sub>13</sub> (670.80).  
White amorphous powder,  $[\alpha]_D^{26} = -11.0^\circ$  ( $c = 0.1$ , MeOH). **Pharm:** Anticomplement activity (IC<sub>50</sub> > 200 $\mu$ mol/L, inactive, control Rosmarinic acid, IC<sub>50</sub> = 182 $\mu$ mol/L). **Source:** RI BEN AN XI XIANG JING PI *Styrax japonica*. **Ref:** 4096.

**20429 Styraxoside B**

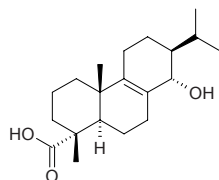
3 $\beta$ ,17 $\beta$ -Dihydroxy-28-norolean-12-en-16-one  
3-*O*-[ $\alpha$ -L-rhamopyranoside-(1 $\rightarrow$ 2)- $\beta$ -D-glucuronopyranoside] C<sub>41</sub>H<sub>64</sub>O<sub>13</sub>  
(764.96). White amorphous powder,  $[\alpha]_D^{26} = -43.7^\circ$  ( $c = 0.9$ , MeOH). **Pharm:** Anticomplement activity (IC<sub>50</sub> = 65 $\mu$ mol/L, ligand only inactive, control Rosmarinic acid, IC<sub>50</sub> = 182 $\mu$ mol/L). **Source:** RI BEN AN XI XIANG JING PI *Styrax japonica*. **Ref:** 4096.

**20430 Styrene**

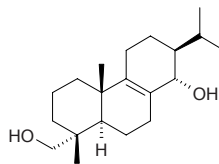
Phenylethylene [100-42-5] C<sub>8</sub>H<sub>8</sub> (104.15). mp -55°C, bp 145.0~145.8°C.  
**Source:** AN XI XIANG *Styrax benzoin*. **Ref:** 6.

**20431 Suaveolic acid**

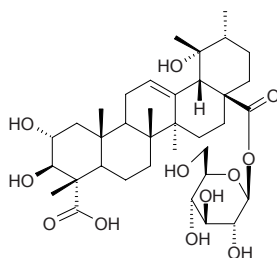
C<sub>20</sub>H<sub>32</sub>O<sub>3</sub> (320.48). mp 198~201°C (dec). **Source:** SHE BAI ZI *Hyptis suaveolens*. **Ref:** 6.

**20432 Suaveolol**

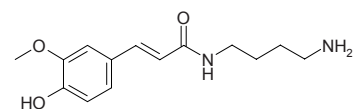
C<sub>20</sub>H<sub>34</sub>O<sub>2</sub> (306.49). mp 186~187°C. **Source:** SHE BAI ZI *Hyptis suaveolens*. **Ref:** 6.

**20433 Suavissimoside R<sub>1</sub>**

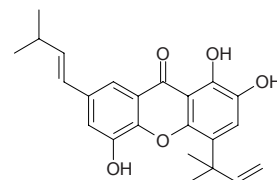
Suavissimoside F<sub>1</sub> C<sub>36</sub>H<sub>56</sub>O<sub>12</sub> (680.84). **Source:** DI YU *Sanguisorba officinalis*, RI BEN LUO SHI *Trachelospermum asiaticum*, TIAN CHA *Rubus suavissimus*. **Ref:** 660, 1521.

**20434 Subaphylline**

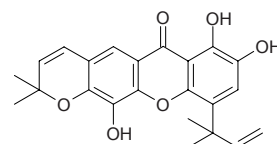
C<sub>14</sub>H<sub>20</sub>N<sub>2</sub>O<sub>3</sub> (264.33). **Pharm:** Antiviral; antihypertensive. **Source:** FENG LI *Ananas comosus*, PU TAO YOU *Citrus paradisi*, QIAN RI HONG *Gomphrena globosa*, YU SHU SHU *Zea mays*, ZHI KE *Citrus aurantium*, *Salix* sp. **Ref:** 658.

**20435 Subelliptenone B**

[155545-30-5] C<sub>23</sub>H<sub>24</sub>O<sub>5</sub> (380.44). **Source:** *Garcinia vilsersiana* (bark). **Ref:** 3902.

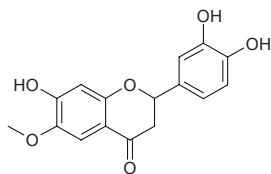
**20436 Subelliptenone H**

C<sub>23</sub>H<sub>22</sub>O<sub>6</sub> (394.43). **Source:** *Garcinia vilsersiana* (bark). **Ref:** 3902.

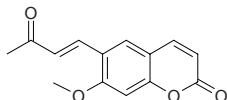


**20437 Suberectin**

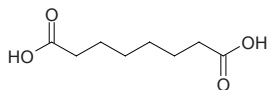
$C_{16}H_{14}O_6$  (302.29). Yellow-green powder, mp 164–165°C. Source: MI HUA DOU *Spatholobus suberectus*. Ref: 2241.

**20438 Suberenone**

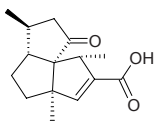
$C_{14}H_{12}O_4$  (244.25). Source: CHOU CAO *Ruta graveolens*. Ref: 6.

**20439 Suberic acid**

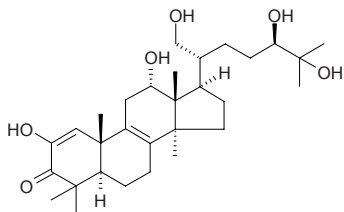
1,6-Hexanedicarboxylic acid [505-48-6]  $C_8H_{14}O_4$  (174.20). mp 144°C. Source: BI MA ZI *Ricinus communis*, CHAN SU *Bufo bufo gargarizans*; *Bufo melanostictus*, MU JIN PI *Hibiscus syriacus*. Ref: 2, 6, 519.

**20440 Suberogorgin**

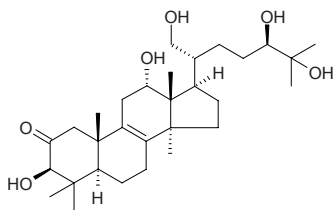
$C_{15}H_{20}O_3$  (248.32). Pharm: AChE inhibitor. Source: LIU SHAN HU *Gorgoniae suberogorgia*. Ref: 658.

**20441 Sublateriol A**

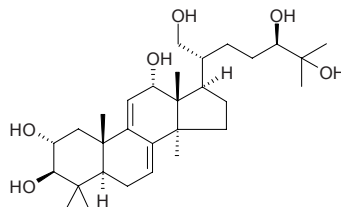
(24*R*)-2,12 $\alpha$ ,21,24,25-Pentahydroxylanosta-1,8-dien-3-one  $C_{30}H_{48}O_6$  (504.71). Amorphous powder,  $[\alpha]_D^{30} = +82.4^\circ$  ( $c = 0.09$ ,  $CHCl_3$ ). Source: ZHUAN HONG REN SAN *Naematoloma sublateritium*. Ref: 3526.

**20442 Sublateriol B**

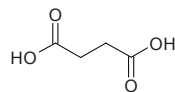
(24*R*)-3 $\beta$ ,12 $\alpha$ ,21,24,25-Pentahydroxylanost-8-en-2-one  $C_{30}H_{50}O_6$  (506.73). Amorphous powder,  $[\alpha]_D^{32} = +89.7^\circ$  ( $c = 0.2$ ,  $CHCl_3$ ). Source: ZHUAN HONG REN SAN *Naematoloma sublateritium*. Ref: 3526.

**20443 Sublateriol C**

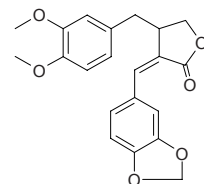
(24*R*)-Lanosta-7,9(11)-diene-2 $\alpha$ ,3 $\beta$ ,12 $\alpha$ ,21,24,25-hexaol  $C_{30}H_{50}O_6$  (506.73). Amorphous powder,  $[\alpha]_D^{28} = +63.4^\circ$  ( $c = 0.07$ ,  $CHCl_3$ ). Source: ZHUAN HONG REN SAN *Naematoloma sublateritium*. Ref: 3526.

**20444 Succinic acid**

1,2-Ethanedicarboxylic acid [110-15-6]  $C_4H_6O_4$  (118.09). mp 150°C, 185–189°C, bp 235°C. Pharm: Analgesic (hot plate method); antibacterial (*Staphylococcus aureus*, *Coccus catarrhal*, *Bacillus pyocyaneus*, *Bacillus proteus*, *B. Typhosus* and *Bacillus dysenteriae*, EC = 2mg/mL); antiulcerative (rat, gastric ulcer induced by pylorus ligation, 50mg/kg, ip or orl); antidote (mus, cobra-poisoning); CNS depressant (mus, rat, gpg, rbt, cat and dog, ip, anti-convulsion); Antipyretic; sedative; used in treatment of tympanitis, onychia lateralis, viral herpes, burn infection, suppurative amygdalitis and enteritis. Source: BAI BU *Stemona tuberosa*, BAI RUI CAO *Thesium chinense*, BAN BIAN LIAN *Lobelia chinensis* [Syn. *Lobelia radicans*], CU LIU GUO *Hippophae rhamnoides*, DANG GUI *Angelica sinensis*, GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], JIU JIE CHA *Sarcandra glabra* [Syn. *Chloranthus glaber*], JU YUAN *Citrus medica*, KU HAO *Conyza blinii*, KUAN YE XIANG PU *Typha latifolia*, LU HUI *Aloe vera* [Syn. *Aloe barbadensis*], MAO GENG XI XIAN *Siegesbeckia orientalis* var. *glabrescens* [Syn. *Siegesbeckia glabrescens*], MING DANG SHEN *Changium smyrnioides*, MU XU *Medicago sativa*, MU ZEI *Equisetum hiemale*, PU HUANG *Typha angustata*, QUE MEI TENG *Sageretia theezans* [Syn. *Sageretia thea*], REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], ROU CONG RONG *Cistanche deserticola*, SHAN ZHA *Crataegus pinnatifida* (dried ripe fruit: mean content of 2 origins = 1.55%<sup>[5508]</sup>), SHI GAN ZI *Pothos chinensis*, TIAN MA *Gastrodia elata*, TIAN QIAO MAI GEN *Fagopyrum cymosum* [Syn. *Polygonum cymosum*], XIAO QIAO MU ZI JIN NIU *Ardisia arborescens* (whole herb)<sup>[4769]</sup>, YE GUAN MEN *Lespedeza cuneata*, YI ZHU QIAN MA *Urtica dioica*, YUN NAN SHAN ZHA *Crataegus scabrifolia* (dried ripe fruit: mean content of 2 origins = 1.58%<sup>[5508]</sup>), ZI QI *Osmunda japonica*, occurs in many plants. Ref: 2, 4, 411, 476, 502, 515, 529, 594, 604, 658, 660, 4769, 5501, 5508.

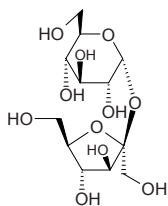
**20445 Suchilactone**

$C_{21}H_{20}O_6$  (368.39). Source: DA JIN NIU CAO *Polygala chinensis* [Syn. *Polygala glomerata*]. Ref: 6.

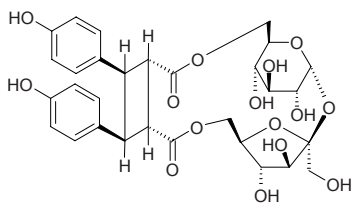


**20446 Sucrose**

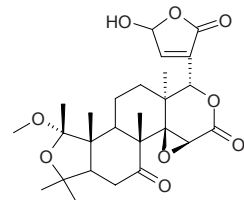
*D*-(+)-Sucrose [57-50-1] C<sub>12</sub>H<sub>22</sub>O<sub>11</sub> (342.30). mp 184–185°C. Source: AN ZI BEI MU *Fritillaria unibracteata*, CHE QIAN *Plantago asiatica*, CHUAN XU DUAN *Dipsacus asperoides*, CI WU JIA *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*], DA QING YE *Isatis indigotica*, FANG FENG *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*], HUANG QI *Astragalus membranaceus*, HUANG QIN *Scutellaria baicalensis*, LU HUI *Aloe vera* [Syn. *Aloe barbadensis*], LU SHAN SHI WEI *Pyrrosia shearerii*, MENG GU HUANG QI *Astragalus mongholicus*, QIANG HUO *Notopterygium incisum*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], SHAN FAN GEN *Symplocos caudata*, SHI WEI *Pyrrosia lingua*, TANG QI *Acer saccharum*, TIAN CAI *Beta vulgaris*, TIAN MA *Gastrodia elata*, XI YANG SHEN *Panax quinquefolium*, YAO YONG GAN ZHE *Saccharum officinarum*, YAO YONG PU GONG YING *Taraxacum officinale*, occurs in many plants. Ref: 2, 660, 2535.

**20447 6,6'-Sucrose ester of (1a,2a,3β,4β)-3,4-bis(4-hydroxyphenyl)-1,2-cyclobutanedicarboxylic acid**

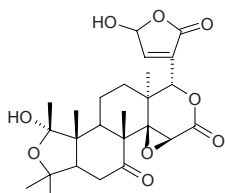
C<sub>30</sub>H<sub>34</sub>O<sub>15</sub> (634.60). White amorphous powder, [α]<sub>D</sub> = +37.1° (*c* = 0.65, MeOH). Pharm: Antihistamine (inhibits histamine release, rat mast cell, induced by antigen-antibody reaction, IC<sub>50</sub> = 41.2 μg/mL, control Indomethacin, IC<sub>50</sub> = 89.5 μg/mL); PGE<sub>2</sub> production inhibitor inactive (30 μg/mL, InRt = 1%). Source: XIAO HUA GUI ZHEN *Bidens parviflora*. Ref: 3364.

**20448 Sudachinoid A**

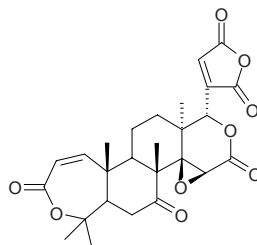
C<sub>26</sub>H<sub>34</sub>O<sub>9</sub> (490.56). Colorless oil, [α]<sub>D</sub><sup>25</sup> = +51.1° (*c* = 0.6, MeOH). Source: SU DA QI GAN JU *Citrus sudachii* (seed). Ref: 3532.

**20449 Sudachinoid B**

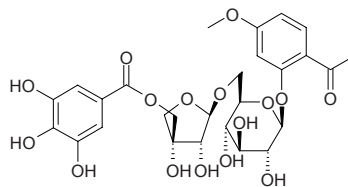
C<sub>25</sub>H<sub>32</sub>O<sub>9</sub> (476.53). Colorless oil, [α]<sub>D</sub><sup>25</sup> = +18.5° (*c* = 0.7, MeOH). Source: SU DA QI GAN JU *Citrus sudachii* (seed). Ref: 3532.

**20450 Sudachinoid C**

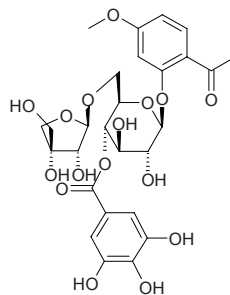
C<sub>26</sub>H<sub>28</sub>O<sub>9</sub> (484.51). Colorless oil, [α]<sub>D</sub><sup>25</sup> = -31.7° (*c* = 0.4, MeOH). Source: SU DA QI GAN JU *Citrus sudachii* (seed). Ref: 3532.

**20451 Suffruticoside A**

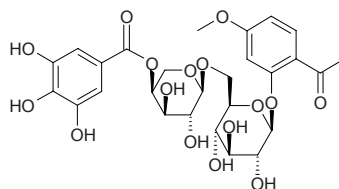
[145898-94-8] C<sub>27</sub>H<sub>32</sub>O<sub>16</sub> (612.54). White powder, [α]<sub>D</sub> = -57.8° (methanol). Pharm: Antioxidant (stronger than vitamin E). Source: MU DAN PI *Paeonia moutan* [Syn. *Paeonia suffruticosa*]. Ref: 985.

**20452 Suffruticoside B**

[145898-95-9] C<sub>27</sub>H<sub>32</sub>O<sub>16</sub> (612.54). White powder, [α]<sub>D</sub> = -32.7° (methanol). Pharm: Antioxidant (stronger than vitamin E). Source: MU DAN PI *Paeonia moutan* [Syn. *Paeonia suffruticosa*]. Ref: 985.

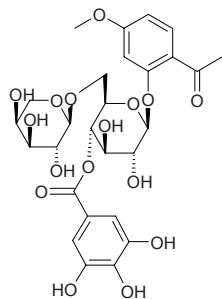
**20453 Suffruticoside C**

[145898-96-0] C<sub>27</sub>H<sub>32</sub>O<sub>16</sub> (612.54). White powder, [α]<sub>D</sub> = -8.8° (methanol). Pharm: Antioxidant (stronger than vitamin E). Source: MU DAN PI *Paeonia moutan* [Syn. *Paeonia suffruticosa*]. Ref: 985.

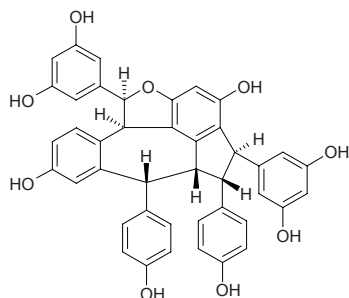


**20454 Suffruticoside D**

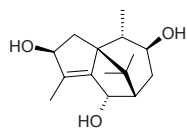
[145898-97-1] C<sub>27</sub>H<sub>32</sub>O<sub>16</sub> (612.54). White powder,  $[\alpha]_D = -5.3^\circ$  (methanol).  
**Pharm:** Antioxidant (stronger than vitamin E). **Source:** MU DAN PI *Paeonia moutan* [Syn. *Paeonia suffruticosa*]. **Ref:** 985.

**20455 Suffruticosol A**

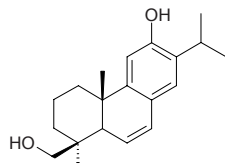
C<sub>42</sub>H<sub>32</sub>O<sub>9</sub> (680.72). **Source:** MU DAN PI *Paeonia moutan* [Syn. *Paeonia suffruticosa*]. **Ref:** 2234.

**20456 Sugetriol**

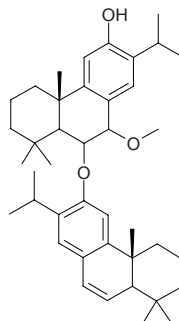
C<sub>15</sub>H<sub>24</sub>O<sub>3</sub> (252.36). **Source:** XIANG FU *Cyperus rotundus*. **Ref:** 660.

**20457 Sugikurojin A**

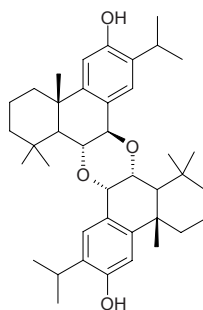
C<sub>20</sub>H<sub>28</sub>O<sub>2</sub> (300.44). Colorless solid,  $[\alpha]_D^{25} = +32.8^\circ$  ( $c = 0.39$ , CHCl<sub>3</sub>). **Source:** RI BEN LIU SHAN *Cryptomeria japonica* (black heartwood). **Ref:** 4268.

**20458 Sugikurojin B**

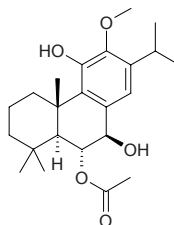
C<sub>41</sub>H<sub>58</sub>O<sub>3</sub> (598.92). Colorless solid,  $[\alpha]_D^{25} = +148.2^\circ$  ( $c = 1.57$ , CHCl<sub>3</sub>). **Source:** RI BEN LIU SHAN *Cryptomeria japonica* (black heartwood). **Ref:** 4268.

**20459 Sugikurojin C**

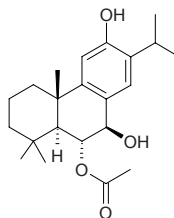
C<sub>40</sub>H<sub>56</sub>O<sub>4</sub> (600.89). Colorless solid,  $[\alpha]_D^{20} = -35.9^\circ$  ( $c = 0.62$ , CHCl<sub>3</sub>). **Source:** RI BEN LIU SHAN *Cryptomeria japonica* (black heartwood). **Ref:** 4268.

**20460 Sugikurojin D**

6 $\alpha$ -Acetoxy-7 $\beta$ ,11-dihydroxy-12-methoxy-8,11,13-abietatriene C<sub>23</sub>H<sub>34</sub>O<sub>5</sub> (390.52). Colorless solid,  $[\alpha]_D^{25} = +45.5^\circ$  ( $c = 1.2$ , CHCl<sub>3</sub>). **Source:** RI BEN LIU SHAN *Cryptomeria japonica* (bark: yield = 0.0009%). **Ref:** 1710.

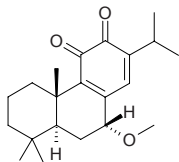
**20461 Sugikurojin E**

6 $\alpha$ -Acetoxy-7 $\beta$ ,12-dihydroxy-8,11,13-abietatriene C<sub>22</sub>H<sub>32</sub>O<sub>4</sub> (360.50). Colorless solid,  $[\alpha]_D^{25} = +30.0^\circ$  ( $c = 1.2$ , CHCl<sub>3</sub>). **Source:** RI BEN LIU SHAN *Cryptomeria japonica* (bark: yield = 0.0004%). **Ref:** 1710.

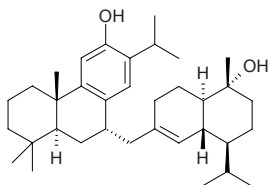


**20462 Sugikurojin F**

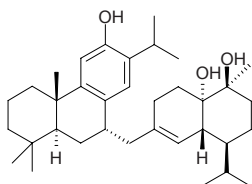
7 $\alpha$ -Methoxy-8,13-abietadien-11,12-dione C<sub>21</sub>H<sub>30</sub>O<sub>3</sub> (330.47). Colorless solid, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -43.9° (*c* = 0.4, CHCl<sub>3</sub>). Source: RI BEN LIU SHAN *Cryptomeria japonica* (bark: yield = 0.00095%). Ref: 1710.

**20463 Sugikurojin G**

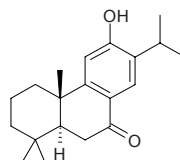
C<sub>35</sub>H<sub>54</sub>O<sub>2</sub> (506.82). Colorless solid, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -5.2° (*c* = 1.5, CHCl<sub>3</sub>). Pharm: Cytotoxic (HL-60, IC<sub>50</sub> = 35.4  $\mu$ mol/L; HCT15, IC<sub>50</sub> = 100  $\mu$ mol/L). Source: RI BEN LIU SHAN *Cryptomeria japonica* (bark: yield = 0.00085%). Ref: 1710.

**20464 Sugikurojin H**

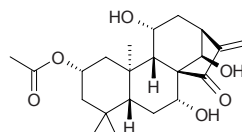
C<sub>35</sub>H<sub>54</sub>O<sub>3</sub> (522.82). Colorless solid, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -6.1° (*c* = 0.2, CHCl<sub>3</sub>). Source: RI BEN LIU SHAN *Cryptomeria japonica* (bark: yield = 0.00075%). Ref: 1710.

**20465 Sugiol**

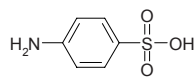
[511-05-7] C<sub>20</sub>H<sub>28</sub>O<sub>2</sub> (300.44). [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +28.3° (*c* = 2.0, pyridine); mp 289–291°C (*n*-hexane–EtOAc), [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +24.8° (*c* = 0.44, EtOH); mp 292–294°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +26°, mp (+) 298–299°C (dec); mp 281.3°C, [ $\alpha$ ]<sub>D</sub><sup>22</sup> = -5.0° (*c* = 0.5, EtOH). Pharm: Cytotoxic (EBV-EA inhibitor TPA-induced, mol ratio/TPA = 1000, InRt = 100%)<sup>[5352]</sup>; cytotoxic inactive (KB oral epidermoid carcinoma, ED<sub>50</sub> > 10  $\mu$ g/mL, Hep3B hepatoma cells, ED<sub>50</sub> > 10  $\mu$ g/mL, HeLa, ED<sub>50</sub> > 10  $\mu$ g/mL, Colon205, ED<sub>50</sub> > 10  $\mu$ g/mL)<sup>[4253]</sup>; antiproliferative (*in vitro*, MTT assay, CEM, IC<sub>50</sub> = 10.3  $\mu$ mol/L, control Doxorubicin, IC<sub>50</sub> = 0.036  $\mu$ mol/L, HeLa, IC<sub>50</sub> = 7.7  $\mu$ mol/L, control Doxorubicin, IC<sub>50</sub> = 0.027  $\mu$ mol/L, HCT8, IC<sub>50</sub> = 75.0  $\mu$ mol/L, control Doxorubicin, IC<sub>50</sub> = 0.024  $\mu$ mol/L, MCF7, IC<sub>50</sub> > 83.3  $\mu$ mol/L, control Doxorubicin, IC<sub>50</sub> = 0.183  $\mu$ mol/L, B-16, IC<sub>50</sub> > 83.3  $\mu$ mol/L, control Doxorubicin, IC<sub>50</sub> = 0.056  $\mu$ mol/L)<sup>[4940]</sup>; 12(S)-LOX inhibitor inactive (hmn Platelets, 100  $\mu$ g/mL, 12(S)-HETE Production inhibitor inactive)<sup>[4980]</sup>. Source: CHANG GENG CU FEI *Cephalotaxus harringtonia* var. *drupacea*, DU SONG SHI *Juniperus rigida*, GAN XI SHU WEI CAO *Salvia przewalskii*, LU BIAN QING *Clerodendron cyrtophyllum*, RI BEN XIANG BAI JING PI *Thuja standishii*, SAN YE SHU WEI CAO *Salvia trijuga*, TAI WAN CU FEI *Cephalotaxus wilsoniana* (twig), ZHU TAI SHU WEI CAO *Salvia candelabrum*, *Aegiphila lhotzkyana* (root), OU ZHOU CI BAI *Juniperus communis* (wood). Ref: 6, 182, 660, 4253, 4538, 5352, 5376, 5401, 4940, 4980.

**20466 Suimiyain A**

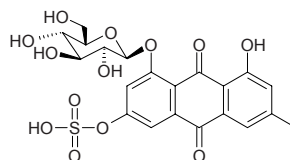
C<sub>22</sub>H<sub>32</sub>O<sub>6</sub> (392.50). mp 248–249°C. Source: DONG LING CAO *Rabdosia rubescens*. Ref: 4067.

**20467 Sulfanilic acid**

4-Aminobenzenesulfonic acid [121-57-3] C<sub>6</sub>H<sub>7</sub>NO<sub>3</sub>S (173.19). Source: JI CAI *Capsella bursa-pastoris*. Ref: 6.

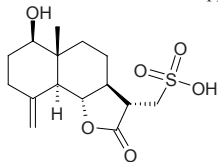
**20468 Sulfemodin-8-O- $\beta$ -D-glucoside**

Emodin 8-O- $\beta$ -D-glucopyranosyl-6-O-sulfate C<sub>21</sub>H<sub>20</sub>O<sub>13</sub>S (512.45). Dark orange amorphous substance. Source: ZANG BIAN DA HUANG *Rheum emodi* [Syn. *Rheum australe*] (root: yield = 0.0011%dw). Ref: 4711.

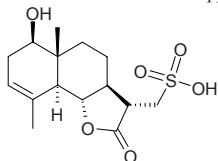


**20469 13-Sulfo-dihydroreynosin**

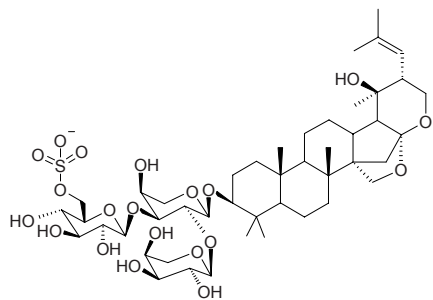
$C_{15}H_{22}O_6S$  (330.40). mp  $>300^{\circ}C$ ,  $[\alpha]_D^{20} = +48.3^{\circ}$  ( $c = 0.002$ , MeOH). Source: MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*]. Ref: 4485.

**20470 13-Sulfo-dihydrosantamarine**

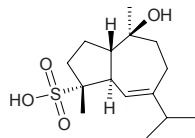
$C_{15}H_{22}O_6S$  (330.40). mp  $>300^{\circ}C$ ,  $[\alpha]_D^{20} = +22.5^{\circ}$  ( $c = 0.002$ , MeOH). Source: MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*]. Ref: 4485.

**20471 3-O-[6-O-Sulfonyl-β-D-glucopyranosyl-(1→3)]-[α-L-arabinopyranosyl-(1→2)]-α-L-arabinopyranosyl-pseudojujubogenin**

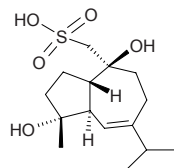
$C_{46}H_{73}O_{20}S^{-}$  (978.15). Source: JIA MA CHI XIAN *Bacopa monniera* (whole herb: yield = 0.0020%fw). Ref: 4664.

**20472 Sulfoorientalol A**

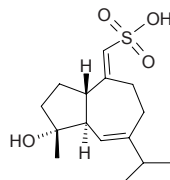
[151171-36-7]  $C_{15}H_{26}O_4S$  (302.44). White powder,  $[\alpha]_D^{22} = \pm 0^{\circ}$  ( $c = 1.0$ , methanol). Pharm: Bladder smooth muscle relaxant (gpg, *in vitro*, induced by carbacholine, 100 μmol/L, contractive rate = 52%). Source: ZE XIE *Alisma orientale* [Syn. *Alisma plantago-aquatica* var. *orientale*] (tuber: content = 0.002%<sup>[5501]</sup>). Ref: 987, 988, 5501.

**20473 Sulfoorientalol B**

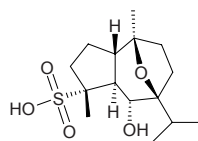
[151171-38-9]  $C_{15}H_{26}O_5S$  (318.43). White powder,  $[\alpha]_D^{22} = \pm 0^{\circ}$  ( $c = 1.0$ , methanol). Pharm: Bladder smooth muscle relaxant (gpg, *in vitro*, induced by carbacholine, 100 μmol/L, contractive rate = 51.3%). Source: ZE XIE *Alisma orientale* [Syn. *Alisma plantago-aquatica* var. *orientale*] (tuber: content = 0.0008%<sup>[5501]</sup>). Ref: 987, 988, 5501.

**20474 Sulfoorientalol C**

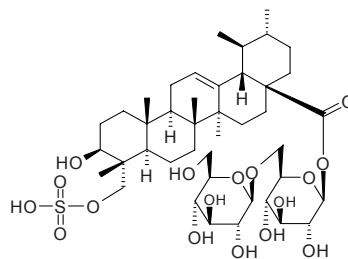
[150975-28-3]  $C_{15}H_{24}O_4S$  (300.42). White powder,  $[\alpha]_D^{22} = \pm 0^{\circ}$ . Pharm: Bladder smooth muscle relaxant (gpg, *in vitro*, induced by carbacholine). Source: ZE XIE *Alisma orientale* [Syn. *Alisma plantago-aquatica* var. *orientale*] (tuber: content = 0.0002%<sup>[5501]</sup>). Ref: 987, 5501.

**20475 Sulfoorientalol D**

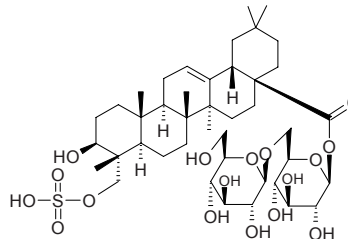
[151171-37-8]  $C_{15}H_{26}O_5S$  (318.43). White powder,  $[\alpha]_D^{22} = \pm 0.9^{\circ}$  ( $c = 0.9$ , methanol). Pharm: Bladder smooth muscle relaxant (gpg, *in vitro*, induced by carbacholine, 100 μmol/L, contractive rate 46.2%). Source: ZE XIE *Alisma orientale* [Syn. *Alisma plantago-aquatica* var. *orientale*] (tuber: content = 0.0004%<sup>[5501]</sup>). Ref: 987, 988, 5501.

**20476 Sulfopatrinoside I**

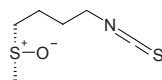
Sulfopatrinoside I  $C_{42}H_{68}O_{17}S$  (877.06). Pharm: Anti-HIV. Source: HUANG HUA BAI JIANG *Patrinia scabiosaefolia*. Ref: 2, 660, 1843.

**20477 Sulfopatrinoside II**

Sulfopatrinoside II  $C_{42}H_{68}O_{17}S$  (877.06). Pharm: Anti-HIV. Source: HUANG HUA BAI JIANG *Patrinia scabiosaefolia*. Ref: 2, 660, 1843.

**20478 Sulforathane**

[4478-93-7]  $C_6H_{11}NOS_2$  (177.29). bp 130–135°C/0.03 mmHg,  $[\alpha]_D = -79.3^{\circ}$  ( $c = 1.2$ ,  $CHCl_3$ ). Pharm: Cancer-preventing activity (animal trial, stronger). Source: MAO DU XING CAI *Lepidium draba*. Ref: 1521, 1582.

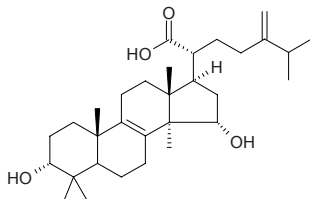


**20479 Sulfur dioxide**

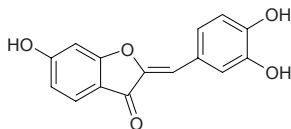
[7446-09-5] O<sub>2</sub>S (64.06). Source: DA SUAN *Allium sativum*. Ref: 2.

**20480 3 $\alpha$ -Sulfurenic acid**

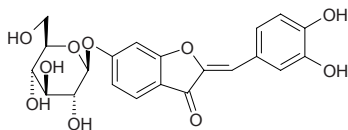
3 $\alpha$ ,15 $\alpha$ -Dihydroxy-24-methylene-lanost-8-en-21-oic acid C<sub>31</sub>H<sub>50</sub>O<sub>4</sub> (486.74). White amorphous powder, mp 252–254°C, mp 203–205°C, [ $\alpha$ ]<sub>D</sub><sup>22</sup> = +26.7° (c = 0.04, CHCl<sub>3</sub>:MeOH = 1:1). Source: ALI HONG *Fomes officinalis*. Ref: 6, 2566.

**20481 Sulfuretin**

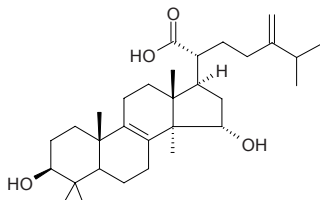
C<sub>15</sub>H<sub>10</sub>O<sub>5</sub> (270.24). Orange-yellow prisms (MeOH), mp 280–285°C (dec). Pharm: Iodine-induced thyronine deiodinase inhibitor (rat, microsome membrane of hepatic cells); cytotoxic (antioxidant assay)<sup>[5038]</sup>; anti-rheumatoid arthritis (oral administration 30mg/kg, significantly decreased rheumatoid arthritis (RA) and C-reactive protein (CRP) factors in Freund's complete adjuvant)<sup>[5460]</sup>. Source: HUANG LU *Cotinus coggygia*, QI ZI *Rhus verniciflua* [Syn. *Toxicadendron verniciflum*], *Cotinus* sp, XIAO YE HONG *GUANG SHU Knema globularia*. Ref: 6, 658, 2209, 5038, 5460.

**20482 Sulfuretin glucoside**

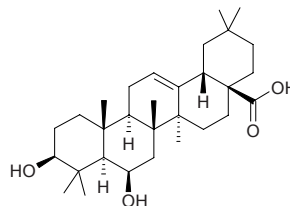
C<sub>21</sub>H<sub>20</sub>O<sub>10</sub> (432.39). mp 200°C (dec). Pharm: Cytotoxic (antioxidant assay). Source: HUANG LU *Cotinus coggygia*. Ref: 6, 5038.

**20483 3 $\beta$ -Sulphurenic acid**

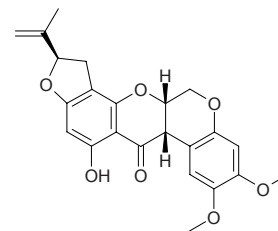
C<sub>31</sub>H<sub>50</sub>O<sub>4</sub> (486.74). Source: ALI HONG *Fomes officinalis*. Ref: 660.

**20484 Sumaresinolic acid**

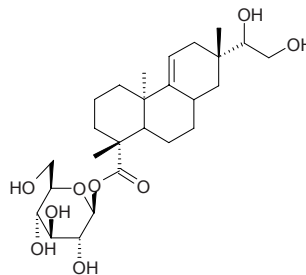
C<sub>30</sub>H<sub>48</sub>O<sub>4</sub> (472.71). mp 298–299°C. Source: AN XI XIANG *Styrax benzoin*. Ref: 6.

**20485 Sumatrol**

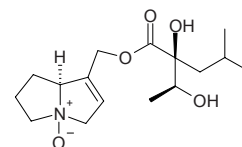
C<sub>23</sub>H<sub>22</sub>O<sub>7</sub> (410.43). Pharm: Antineoplastic (Inhibition of DMBA-induced preneoplastic lesions *in vitro*, MMOC assay, IC<sub>50</sub> > 47 μmol/L; control Sulforaphane, IC<sub>50</sub> = 11 μmol/L)<sup>[4718]</sup>, pesticide. Source: DU HUI MAO DOU *Tephrosia toxicaria* (stem: yield = 0.0093% dw)<sup>[4718]</sup>, MA LIU JIA YU TENG *Derris malaccensis*. Ref: 658, 4718.

**20486 Sumogaside**

[132210-61-8] C<sub>26</sub>H<sub>42</sub>O<sub>9</sub> (498.62). White crystals, mp 210–214°C. Pharm: IL-8 secretion inhibitor (TNF- $\alpha$ -stimulated hmn colon adenocarcinoma cell line HT29, 1 μmol/L, 10 μmol/L and 100 μmol/L, InRt = 14.0%, 34.7% and 42.5%, respectively); TNF- $\alpha$  secretion inhibitor (trypsin-stimulated hmn leukemic mast cell line HMC-1, 1 μmol/L, 10 μmol/L and 100 μmol/L, InRt = 0.2%, 7.9% and 10.2%, respectively). Source: CHAO XIAN WU JIA *Acanthopanax koreanum* (root). Ref: 4346.

**20487 Supinidine N-oxide 2S-hydroxy-2S-(1S-hydroxyethyl)-4-methylpentanoyl ester**

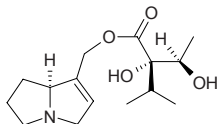
C<sub>16</sub>H<sub>27</sub>NO<sub>5</sub> (313.40). Orange oil, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -4.3° (c = 0.1, MeOH). Source: CU MAO NIU SHE CAO *Anchusa strigosa*. Ref: 5441.



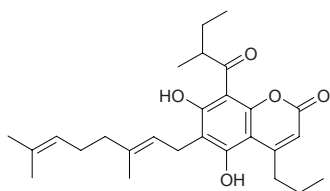


**20488 Supinine**

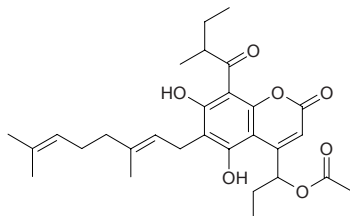
$C_{15}H_{25}NO_4$  (283.37). **Pharm:** Anticholinergic; teratogen (chromosome in plant cells); hepatotoxin. **Source:** DA MA YE ZE LAN *Eupatorium cannabinum*, DA WEI YAO *Heliotropium indicum*, DUO XU GONG *Eupatorium stoechadosmum*, WAN HUA ZE LAN *Eupatorium serotinum*, YANG XIN TIAN JIE CAI *Heliotropium supinum*. **Ref:** 658.

**20489 Surangin A**

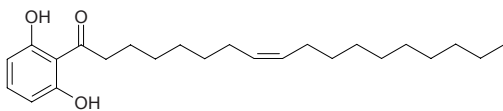
$C_{27}H_{36}O_5$  (440.58). Crystals (hexane), mp 83–85°C,  $[\alpha]_D^{26} = -1.6^\circ$  ( $c = 0.3$ , chloroform). **Pharm:** Antibacterial (*Staphylococcus* sp., *in vitro*, 7.8 µg/mL). **Source:** CHANG YE MAN MI PING GUO *Mammea longifolia*. **Ref:** 661.

**20490 Surangin B**

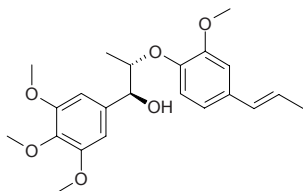
$C_{29}H_{38}O_7$  (498.62). Crystals (dichloroethane–hexane), mp 98–100°C,  $[\alpha]_D^{24} = -30^\circ$ . **Pharm:** Against neurovaccine; pesticide (larvae of mosquito, mustard beetles and houseflies, 0.05 µg/mL); LD<sub>50</sub> (mus, ip) = 50 mg/kg. **Source:** CHANG YE MAN MI PING GUO *Mammea longifolia*, MEI ZHOU MAN MI PING GUO *Mammea americana*. **Ref:** 661.

**20491 Suranone**

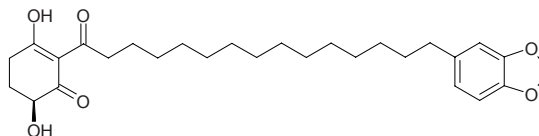
1-(2,6-Dihydroxyphenyl)-octadec-8-en-1-one  $C_{24}H_{38}O_3$  (374.57). Yellowish oil,  $[\alpha]_D^{25} = \pm 0^\circ$  ( $c = 0.15$ ,  $CHCl_3$ ). **Source:** *Peperomia sui*. **Ref:** 3401.

**20492 Surinamensin**

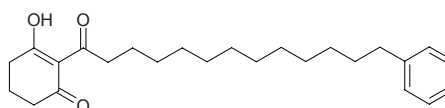
$C_{22}H_{28}O_6$  (388.47). **Pharm:** Schistosomacide. **Source:** SU LI NAN ROU DOU KOU *Virola surinamensis* [Syn. *Myristica surinamensis*] (leaf). **Ref:** 658, 5099.

**20493 Surinone A**

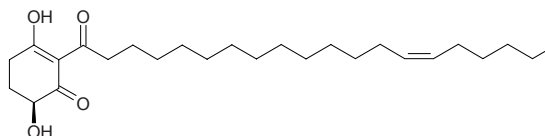
(-)-2-(15-Benzo[1,3]dioxol-5-yl-pentadecanoyl)-3,6-dihydroxy-cyclohex-2-enone  $C_{28}H_{40}O_6$  (472.63). Yellowish oil,  $[\alpha]_D^{25} = -15.8^\circ$  ( $c = 0.070$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (*in vitro*, HONE-1 cell line, 50 µmol/L, cell growth InRt = 31%; NUGC-3 cell line, 50 µmol/L, cell growth InRt = 38%). **Source:** *Peperomia sui*. **Ref:** 3401.

**20494 Surinone B**

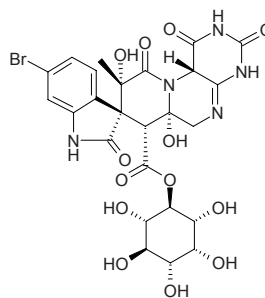
3-Hydroxy-2-(13-phenyltridecanoyl)-cyclohex-2-enone  $C_{25}H_{36}O_3$  (384.56). Yellowish oil. **Source:** *Peperomia sui*. **Ref:** 3401.

**20495 Surinone C**

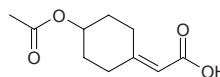
(Z)-(-)-3,6-Dihydroxy-2-icos-14-enoyl-cyclohex-2-enone  $C_{26}H_{44}O_4$  (420.64). Colorless gum,  $[\alpha]_D^{25} = -29.1^\circ$  ( $c = 0.075$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (*in vitro*, HONE-1 cell line, 50 µmol/L, cell growth InRt = 39%; NUGC-3 cell line, 50 µmol/L, cell growth InRt = 27%). **Source:** *Peperomia sui*. **Ref:** 3401.

**20496 Surugatoxin**

Surugatoxin  $C_{25}H_{26}BrN_5O_{13}$  (684.42). **Pharm:** Blocks self-discipline nerve; cytotoxic; mydriatic (mus, MED = 0.02 µg/kg); nicotine antagonist. **Source:** NI DONG FENG LUO *Babylonia lutosa*. **Ref:** 658.

**20497 Suspenolic acid**

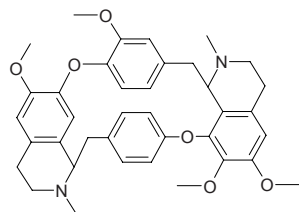
$C_{10}H_{14}O_4$  (198.22). Amorphous powder, mp 74–76°C,  $[\alpha]_D^{20} = +4.7^\circ$  ( $c = 0.1010$ ,  $CHCl_3$ ). **Source:** LIAN QIAO *Forsythia suspensa*. **Ref:** 8.



**20498 Sutchuensine**

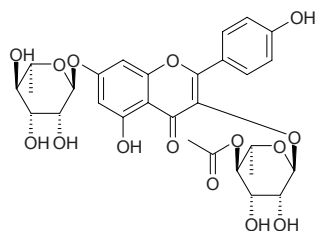
$C_{38}H_{42}N_2O_6$  (622.77). Colorless powder,  $[\alpha]_D^{27} = -110^\circ$  ( $c = 0.13$ , EtOH).

**Source:** LUN HUAN TENG *Cyclea racemosa*. **Ref:** 274.

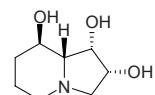
**20499 Sutchuenside A**

Kaempferol 3-*α*-L-(4-*O*-acetyl)rhamnopyranoside-7-*α*-L-rhamnopyranoside

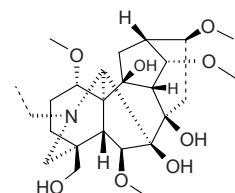
$C_{29}H_{31}O_{15}$  (620.57). Pale yellow amorphous powder,  $[\alpha]_D = -170^\circ$  ( $c = 0.1$ , MeOH). **Pharm:** Anti-HIV-1 (RT (RDDP) inhibitor,  $IC_{50} = 405\mu\text{mol/L}$ , positive control Adriamycin,  $IC_{50} = 46\mu\text{mol/L}$ ; DDDP inhibitor,  $IC_{50} = 23\mu\text{mol/L}$ , positive control Adriamycin,  $IC_{50} = 6\mu\text{mol/L}$ ; RnaseH inhibitor,  $IC_{50} > 500\mu\text{mol/L}$ , positive control Illimaquinone,  $IC_{50} = 50\mu\text{mol/L}$ ). **Source:** GUAN ZHONG *Dryopteris crassirhizoma*. **Ref:** 3522.

**20500 Swainsonine**

$C_8H_{15}NO_3$  (173.22). **Pharm:**  $\alpha$ -Mannosidase inhibitor<sup>[2617]</sup>; toxin (livestock)<sup>[2617]</sup>; antineoplastic (potent activity)<sup>[2617]</sup>. **Source:** DAN HUANG KU MA DOU *Swainsonia luteola*, HUI BAI KU MA DOU *Swainsonia canescens*, SHAN YANG DOU YE KU MA DOU *Swainsonia galegifolia*. **Ref:** 658, 2617.

**20501 Swatinine**

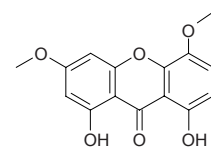
$C_{25}H_{41}NO_8$  (483.61). Amorphous powder,  $[\alpha]_D^{30} = +12.5^\circ$  ( $c = 2$ ,  $CHCl_3$ ). **Pharm:** Anti-inflammatory (modified assay of Berridge,  $100\mu\text{g/mL}$ ,  $\text{InRt} = 22.82\%$ ); tyrosinase inhibitor inactive (control Kojic acid,  $IC_{50} = (16.67 \pm 0.52)\mu\text{mol/L}$ , *L*-Mimosine,  $IC_{50} = (3.68 \pm 0.02)\mu\text{mol/L}$ ); antioxidant (DPPH scavenger,  $1\mu\text{mol/L}$ ,  $\text{ScRt} = 54.1\%$ ; control 3-*t*-Butyl-4-hydroxyanisole,  $1\mu\text{mol/L}$ ,  $\text{ScRt} = 92.5\%$ ). **Source:** *Aconitum leave* (aerial parts). **Ref:** 5271.

**20502 Swerchirin**

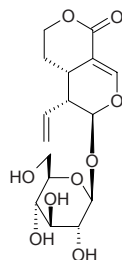
$C_{15}H_{12}O_6$  (288.26). Yellow acicular crystals, mp  $194\sim 195^\circ\text{C}$ . **Pharm:**

Antihepatotoxin (animal model); monoamine oxidase A inhibitor (*in vitro*).

**Source:** BAO E ZHANG YA CAI *Swertia calycina*, RU BAI LONG DAN *Gentiana lactea*, QI RUI TA ZHANG YA CAI *Swertia chirata*. **Ref:** 634, 658.

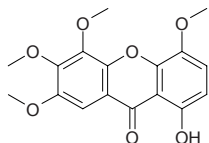
**20503 Sweroside**

[14215-86-2]  $C_{16}H_{22}O_9$  (358.35).  $[\alpha]_D^{27} = -190.6^\circ$  ( $c = 0.83$ , MeOH). **Pharm:** Hepatoprotective (inhibits SGPT, SGOT, ALP (reduces the raised activity of SGPT, SGOT, ALP due to acute liver injury induced by GAIN)). **Source:** BAO E ZHANG YA CAI *Swertia calycina* (whole herb: content =  $0.1543\%$ )<sup>[5508]</sup>, CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochera rosea*], CHUAN XU DUAN *Dipsacus asperoides*, CU HUA ZHANG YA CAI *Swertia fasciculata* (whole herb: content =  $3.540\%$ )<sup>[5508]</sup>, CU JING QIN JIAO *Gentiana crassicaulis* (root: mean content =  $0.04\%$ )<sup>[5534]</sup>, DA ZI ZHANG YA CAI *Swertia macrosperma* (whole herb: content =  $0.3242\%$ )<sup>[5508]</sup>, DANG YAO *Swertia chinensis* (the compound was isolated from the plant by H.Inouye et al. in 1966)<sup>[5505]</sup>, HONG ZHI ZHANG YA CAI *Swertia erythrosticta* (whole herb: content =  $3.138\%$ )<sup>[5508]</sup>, JI ZI MU *Sinoadina Racemosa* [Syn. *Adina racemosa*] (leaf, flower and twig: yield =  $0.019\%dw$ )<sup>[4723]</sup>, LIU QIU SHE GEN CAO *Ophiorrhiza liukuensis* (whole herb), LONG DAN *Gentiana scabra*, MAO ZHANG YA CAI *Swertia pubescens* (whole herb: content =  $1.705\%$ )<sup>[5508]</sup>, QING YE DAN *Swertia mileensis* (whole herb: content =  $0.696\%$ )<sup>[5501]</sup>, RI BEN SHUANG HU DIE *Tripterosperrum japonicum*, SHAN ZHU YU *Cornus officinalis* [Syn. *Macrocarpium officinale*], WU SHI REN DONG *Lonicera quinquelocularis* (root), XI NAN ZHANG YA CAI *Swertia cincta* (whole herb: content =  $0.4531\%$ )<sup>[5508]</sup>, XIA YE ZHANG YA CAI *Swertia angustifolia*, XIAN MAI ZHANG YA CAI *Swertia nervosa* (whole herb: content =  $0.7165\%$ )<sup>[5508]</sup>, ZHANG YA CAI *Swertia pseudochinensis* (whole herb: content =  $0.2965\%$ )<sup>[5508]</sup>, ZI HONG ZHANG YA CAI *Swertia punicea* (whole herb: content =  $1.179\%$ )<sup>[5508]</sup>. **Ref:** 2, 6, 220, 272, 660, 3533, 3926, 4527, 4723, 5501, 5505, 5508, 5534.

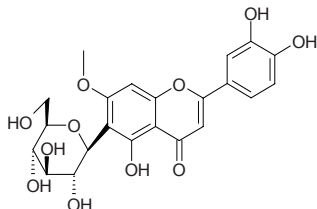


**20504 Swertiadecoraxanthone**

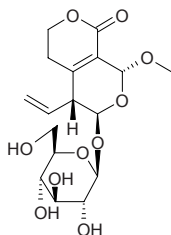
1-Hydroxy-4,5,6,7-tetramethoxy-9*H*-xanthen-9-one C<sub>17</sub>H<sub>16</sub>O<sub>7</sub> (332.31). Orange-yellow cuboid mass crystals, mp 163~165°C (acetone). Source: GUAN SHANG ZHANG YA CAI *Swertia decora*. Ref: 4598.

**20505 Swertiajaponin**

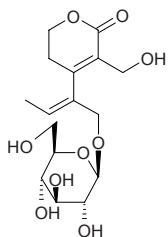
C<sub>22</sub>H<sub>22</sub>O<sub>11</sub> (462.41). mp 265°C (dec). Pharm: Hepatoprotective (rat, inhibits SGPT, reduces the raised SGPT due to acute liver injury induced by CCl<sub>4</sub>). Source: DOU CHI CAO *Iris sanguinea*, QING YE DAN *Swertia mileensis*, RI BEN ZHANG YA CAI *Swertia japonica*, XI YE SHI *Achillea leptophylla*, XIAN ZHOU MAI MA TENG *Gnetum gnemon*, *Tragopogon* sp. Ref: 6, 658, 5501.

**20506 Swertiajaposide A**

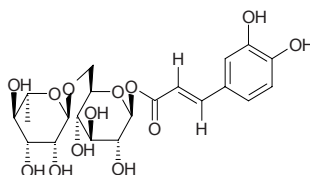
C<sub>17</sub>H<sub>24</sub>O<sub>10</sub> (388.37). Amorphous powder, [α]<sub>D</sub><sup>25</sup> = -121° (c = 0.061, MeOH). Source: RI BEN ZHANG YA CAI *Swertia japonica*. Ref: 2528.

**20507 Swertiajaposide B**

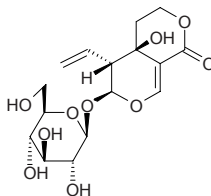
C<sub>16</sub>H<sub>24</sub>O<sub>9</sub> (360.36). Amorphous powder, [α]<sub>D</sub><sup>25</sup> = -25.6° (c = 0.117, MeOH). Source: RI BEN ZHANG YA CAI *Swertia japonica*. Ref: 2528.

**20508 Swertiamacroside**

*trans*-Caffeic acid-1-*O*-rutinose ester C<sub>21</sub>H<sub>28</sub>O<sub>13</sub> (488.45). Yellowish amorphous powder. Source: DA ZI ZHANG YA CAI *Swertia macrosperma*. Ref: 149.

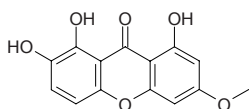
**20509 Swertiamarin**

[17388-39-5] C<sub>16</sub>H<sub>22</sub>O<sub>10</sub> (374.35). mp 103~104°C. Pharm: Analgesic; anticonvulsant (mus, ip, inhibits spontaneous movement and convulsion induced by corazol); anti-inflammatory (rat, swollen foot model caused by carrageenan); sedative. Source: BAO E ZHANG YA CAI *Swertia calycina* (whole herb: content = 0.0222%)<sup>[5508]</sup>, BAO JING ZHANG YA CAI *Swertia franchetiana* (whole herb: content = 1.08%)<sup>[5508]</sup>, CHUAN DONG ZHANG YA CAI *Swertia davidii* (whole herb: content = 1.70%)<sup>[5508]</sup>, CU HUA ZHANG YA CAI *Swertia fasciculata* (whole herb: content = 0.765%)<sup>[5508]</sup>, CU JING QIN JIAO *Gentiana crassicaulis* (root: mean content = 0.94%)<sup>[5534]</sup>, CU ZHUANG LONG DAN *Gentiana robusta* (root: content = 0.55%)<sup>[5508]</sup>, DA ZI ZHANG YA CAI *Swertia macrosperma* (whole herb: mean content = 0.08%)<sup>[5508]</sup>, DAN HUANG ZHANG YA CAI *Swertia punicea* var. *lutescens* (whole herb: content = 1.15%)<sup>[5508]</sup>, DANG YAO *Swertia chinensis* (the compound was isolated from the plant by T.Kubota et al. in 1961)<sup>[5505]</sup>, DIAN LONG DAN *Gentiana rigescens* (root: mean content of 8 origins = 0.06%)<sup>[5508]</sup>, DONG BEI LONG DAN *Gentiana manshurica* (root: mean content of 3 origins = 0.04%)<sup>[5508]</sup>, GUI ZHOU ZHANG YA CAI *Swertia kouitchensis* (whole herb: content = 4.08%)<sup>[5508]</sup>, HONG HUA LONG DAN *Gentiana rhodantha* (aerial parts: mean content of 2 origins = 0.03%)<sup>[5508]</sup>, HONG ZHI ZHANG YA CAI *Swertia erythrosticta* (whole herb: content = 0.113%)<sup>[5508]</sup>, LONG DAN *Gentiana scabra* (root: mean content collected in Jun. to Sep. = 0.157%)<sup>[5508]</sup>, MAO ZHANG YA CAI *Swertia pubescens* (whole herb: content = 0.095%)<sup>[5508]</sup>, QI RUI TA ZHANG YA CAI *Swertia chirata*, RI BEN ZHANG YA CAI *Swertia japonica*, TOU HUA LONG DAN *Gentiana cephalantha* (whole herb: content = 0.11%)<sup>[5508]</sup>, XI NAN ZHANG YA CAI *Swertia cincta* (whole herb: mean content = 0.05%)<sup>[5508]</sup>, XIE JING ZHANG YA CAI *Swertia angustifolia* (whole herb: content = 3.420%)<sup>[5508]</sup>, XIA YE ZHANG YA CAI *Swertia patens*, XIAN MAI ZHANG YA CAI *Swertia nervosa* (whole herb: content = 0.072%)<sup>[5508]</sup>, ZHANG YA CAI *Swertia pseudochinensis* (whole herb: mean content = 0.52%)<sup>[5508]</sup>, ZHE JIANG ZHANG YA CAI *Swertia hickinii* (whole herb: content = 7.67%)<sup>[5508]</sup>, ZI HONG ZHANG YA CAI *Swertia punicea* (whole herb: mean content = 1.85%)<sup>[5508]</sup>. Ref: 6, 220, 272, 658, 5501, 5505, 5507, 5508, 5534.

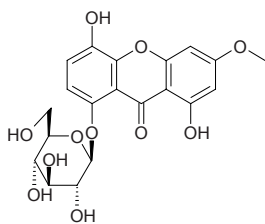


**20510 Swertianin**

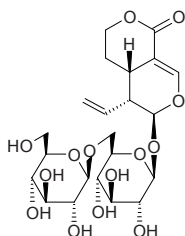
1,2,8-Trihydroxy-6-methoxyxanthone;  $C_{14}H_{10}O_6$  (274.23). **Pharm:** Vasodilator (rat aortic preparations, pre-contracted by  $3\mu\text{mol/L}$  arterenol,  $pIC_{50} = 4.95 \pm 0.068$ ;  $20\mu\text{mol/L}$  KCl,  $pIC_{50} = 4.59 \pm 0.069$ )<sup>[5434]</sup>; mutagen (*Salmonella typhimurium*); **Source:** BA FA LI YA LONG DAN *Gentiana bavarica*, BAO E ZHANG YA CAI *Swertia calycina* (whole herb: content = 0.0315%)<sup>[5508]</sup>, CU HUA ZHANG YA CAI *Swertia fasciculata* (whole herb: content = 2.670%)<sup>[5508]</sup>, DA ZI ZHANG YA CAI *Swertia macrosperma* (whole herb: content = 0.1020%)<sup>[5508]</sup>, DAN HUANG ZHANG YA CAI *Swertia punicea* var. *lutescens* (whole herb: content = 0.6130%)<sup>[5508]</sup>, DUAN YE LONG DAN *Gentiana brachyphylla*, HONG ZHI ZHANG YA CAI *Swertia erythrosticta* (whole herb: content = 0.9507%)<sup>[5508]</sup>, KU HE LONG DAN *Gentiana kochiana*, RI BEN LONG DAN *Gentiana japonica*, XIA YE ZHANG YA CAI *Swertia angustifolia* (whole herb: content = trace)<sup>[5508]</sup>, XIAN MAI ZHANG YA CAI *Swertia nervosa* (whole herb: content = 0.0303%)<sup>[5508]</sup>, XUE LONG DAN *Gentiana nivalis*, ZHANG YA CAI *Swertia pseudochinensis* (whole herb: content = 0.0201%)<sup>[5508]</sup>, ZI HONG ZHANG YA CAI *Swertia punicea* (whole herb: content = 0.3990%)<sup>[5508]</sup>. **Ref:** 658, 5434, 5508.

**20511 Swertianolin**

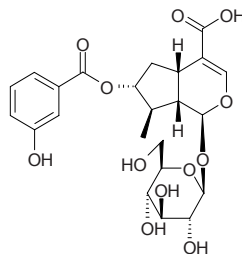
Bellidifolin 8-*O*- $\beta$ -glucopyranoside  $C_{20}H_{20}O_{11}$  (436.38). Yellowish powder, mp 227–229°C. **Pharm:** Antibacterial (*Mycobacterium tuberculosis*); AChE inhibitor (MIC = 0.08 $\mu\text{g}$  = 0.18nmol; control Galanthamine MIC = 0.01 $\mu\text{g}$  = 0.03nmol, Physostigmine MIC = 0.005 $\mu\text{g}$  = 0.002nmol, Huperzine A MIC = 0.002 $\mu\text{g}$  = 0.0008nmol)<sup>[5039]</sup>. **Source:** BAO E ZHANG YA CAI *Swertia calycina*, DE GUO LONG DAN *Gentiana germanica*, DUO ZHI LONG DAN *Gentiana ramosa*, RI BEN ZHANG YA CAI *Swertia japonica*, SHANG ZUO ZHOU ZHANG YA CAI *Swertia tosaensis*, SU GEN ZHANG YA CAI *Swertia perennis*, TIAN YE LONG DAN *Gentiana campestris*, ZI SE ZHANG YA CAI *Swertia purpurascens*. **Ref:** 634, 658, 5039.

**20512 Swertiapunimarin**

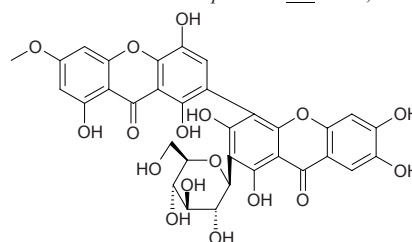
6'-*O*- $\beta$ -D-Glucopyranosylsweroside  $C_{22}H_{32}O_{14}$  (520.49). White powder, mp 95–97°C,  $[\alpha]_D^{26} = -169^\circ$  ( $H_2O$ ). **Source:** RI BEN ZHANG YA CAI *Swertia japonica*, ZI HONG ZHANG YA CAI *Swertia punicea*. **Ref:** 272, 2573.

**20513 Swertiaside A**

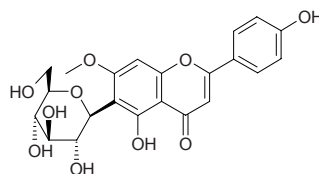
$C_{23}H_{28}O_{12}$  (496.47). **Source:** LIU QIU SHE GEN CAO *Ophiorrhiza liukiensis* (whole herb). **Ref:** 4527.

**20514 Swertipunicoside**

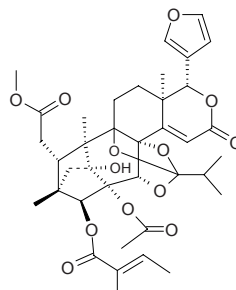
[137570-21-9]  $C_{33}H_{26}O_{17}$  (694.55). Yellow powder, mp > 360°C. **Pharm:** HIV-1 reverse transcriptase inhibitor ( $EC_{50} = 3\mu\text{g/mL}$ ). **Source:** ZI HONG ZHANG YA CAI *Swertia punicea*. **Ref:** 1055, 1076.

**20515 Swertisin**

[6991-10-2]  $C_{22}H_{22}O_{10}$  (446.41). mp 248°C (dec). **Pharm:** Xanthinoxidase inhibitor (50 $\mu\text{g/mL}$ , InRt = 24.9%); flu virus sialidase inhibitor (91 $\mu\text{g/mL}$ , InRt = 7.5%); antihepatotoxin (rat, liver toxicosis induced by  $CCl_4$  and GalN, 1.0mg/mL); hepatic sialidase inhibitor (mus). **Source:** DA ZAO *Ziziphus jujuba*, SUAN ZAO REN *Ziziphus jujuba* var. *spinosa*. **Ref:** 2, 1632, 1675, 1676, 1677.

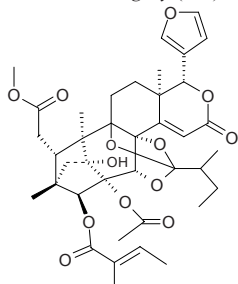
**20516 Swietephragmin A**

$C_{38}H_{46}O_{13}$  (710.78). White amorphous powder. **Source:** TAO HUA XIN MU *Swietenia mahogany* (leaf). **Ref:** 4420.

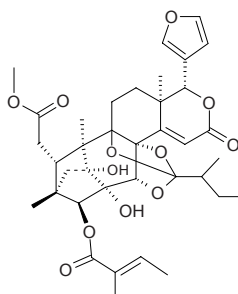


**20517 Swietephragmin B**

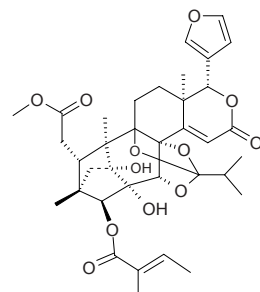
$C_{39}H_{48}O_{13}$  (724.81). White amorphous powder. Source: TAO HUA XIN MU *Swietenia mahogany* (leaf). Ref: 4420.

**20518 Swietephragmin C**

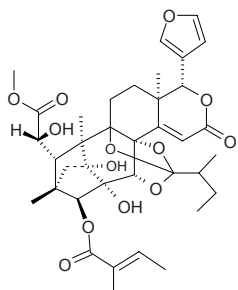
$C_{37}H_{46}O_{12}$  (682.77). White amorphous powder. Source: TAO HUA XIN MU *Swietenia mahogany* (leaf). Ref: 4420.

**20519 Swietephragmin D**

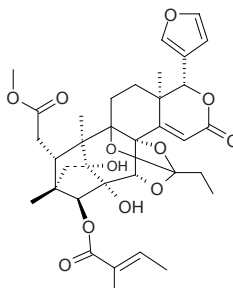
$C_{36}H_{44}O_{12}$  (668.74). White amorphous powder. Source: TAO HUA XIN MU *Swietenia mahogany* (leaf). Ref: 4420.

**20520 Swietephragmin E**

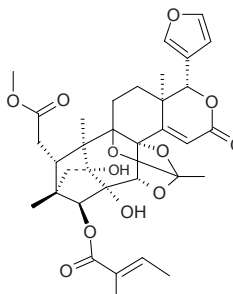
$C_{37}H_{46}O_{13}$  (698.77). White amorphous powder. Source: TAO HUA XIN MU *Swietenia mahogany* (leaf). Ref: 4420.

**20521 Swietephragmin F**

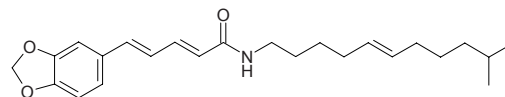
$C_{35}H_{42}O_{12}$  (654.72). White amorphous powder. Source: TAO HUA XIN MU *Swietenia mahogany* (leaf). Ref: 4420.

**20522 Swietephragmin G**

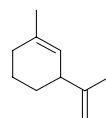
$C_{34}H_{40}O_{12}$  (640.69). White amorphous powder. Source: TAO HUA XIN MU *Swietenia mahogany* (leaf). Ref: 4420.

**20523 Sylvatine**

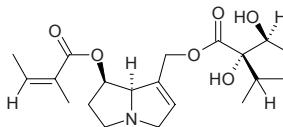
$C_{24}H_{33}NO_3$  (383.54). Source: BI BA *Piper longum*. Ref: 660.

**20524 Sylvestrene**

(*R*)-(+)-*m*-Mentha-6,8-diene [1461-27-4]  $C_{10}H_{16}$  (136.24). Source: DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*]. Ref: 2.

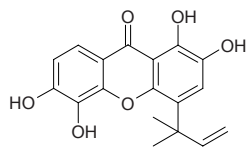
**20525 Symlandine**

$C_{20}H_{31}NO_6$  (381.47). Gum,  $[\alpha]_D = +4.4^\circ$  ( $c = 0.3$ ,  $CHCl_3$ ). Source: XI MEN FEI CAO *Symphytum officinale* (root; yield = 0.00015%dw). Ref: 3039.

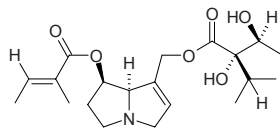


**20526 Symphoxanthone**

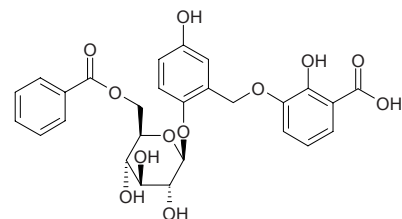
$C_{18}H_{16}O_6$  (328.32). Source: KA MAI LONG XIN FO NI A *Symphonia globulifera*, *Garcinia vilsersiana* (bark). Ref: 1521, 3902.

**20527 Symphytine**

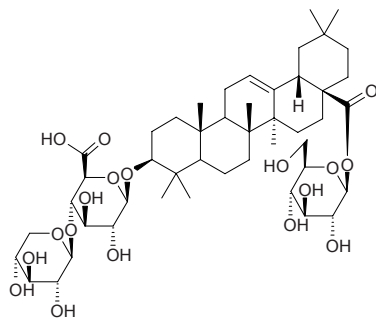
$C_{20}H_{31}NO_6$  (381.48). Pharm: Carcinogen (liver). Source: E GUO XI MEN FEI CAO *Symphytum x uplandicum*, DONG FANG XI MEN FEI CAO *Symphytum orientale*, XI MEN FEI CAO *Symphytum officinale* (root: yield = 0.00040%dw)<sup>[3039]</sup>. Ref: 658, 3039.

**20528 Symplocoside**

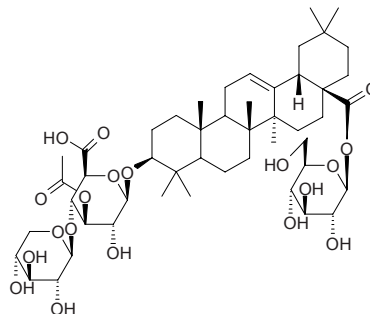
$C_{27}H_{26}O_{12}$  (542.50). White powder. Pharm: Phosphodiesterase I inhibitor (*in vitro*,  $IC_{50} = (122 \pm 0.02) \mu\text{mol/L}$ , control Cysteine,  $IC_{50} = (274 \pm 0.07) \mu\text{mol/L}$ ); thymidine phosphorylase inhibitor (*in vitro*,  $IC_{50} = (190 \pm 1) \mu\text{mol/L}$ , control 7-Deazaxanthine,  $IC_{50} = (38.68 \pm 4.42) \mu\text{mol/L}$ ); urease inhibitor ( $IC_{50} = (54.13 \pm 0.71) \mu\text{mol/L}$ , control Thiourea,  $IC_{50} = (21.01 \pm 0.93) \mu\text{mol/L}$ ). Source: ZHU ZI SHU *Symplocos racemosa*. Ref: 4093.

**20529 Symplocos glomerata saponin 1**

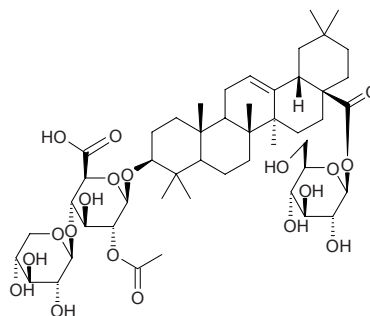
3-*O*-[ $\beta$ -*D*-Xylopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucuronopyranosyl]-28-*O*-[ $\beta$ -*D*-glucopyranosyl]-oleanolic acid; Salsolside C  $C_{47}H_{74}O_{18}$  (927.10). Source: TUAN HUA SHAN FAN *Symplocos glomerata* (stem cortex), TU DANG GUI *Aralia cordata*, *Salsola micranthera*. Ref: 3783.

**20530 Symplocos glomerata saponin 2**

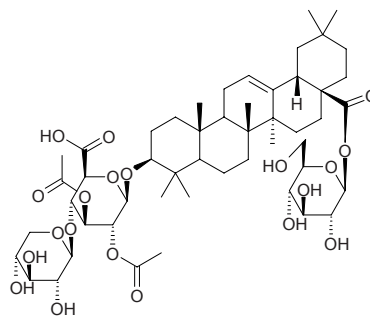
3-*O*-[ $\beta$ -*D*-Xylopyranosyl-(1 $\rightarrow$ 4)-[3-*O*-acetyl]- $\beta$ -*D*-glucuronopyranosyl]-28-*O*-[ $\beta$ -*D*-glucopyranosyl]-oleanolic acid; 3'-*O*-Acetylsalsolside C  $C_{49}H_{76}O_{19}$  (969.14). White powder,  $[\alpha]_D^{21} = +9^\circ$  ( $c = 0.5$ , MeOH). Source: TUAN HUA SHAN FAN *Symplocos glomerata* (stem cortex). Ref: 3783.

**20531 Symplocos glomerata saponin 3**

3-*O*-[ $\beta$ -*D*-Xylopyranosyl-(1 $\rightarrow$ 4)-[2-*O*-acetyl]- $\beta$ -*D*-glucuronopyranosyl]-28-*O*-[ $\beta$ -*D*-glucopyranosyl]-oleanolic acid; 2'-*O*-Acetylsalsolside C  $C_{49}H_{76}O_{19}$  (969.14). White powder,  $[\alpha]_D^{21} = 0^\circ$  ( $c = 0.46$ , MeOH). Source: TUAN HUA SHAN FAN *Symplocos glomerata* (stem cortex). Ref: 3783.

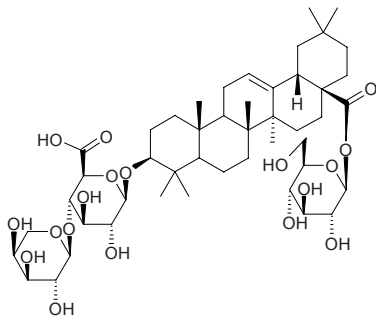
**20532 Symplocos glomerata saponin 4**

3-*O*-[ $\beta$ -*D*-Xylopyranosyl-(1 $\rightarrow$ 4)-[2,3-*O*-diacetyl]- $\beta$ -*D*-glucuronopyranosyl]-28-*O*-[ $\beta$ -*D*-glucopyranosyl]-oleanolic acid; 2',3'-*O*-Diacetylsalsolside C  $C_{51}H_{78}O_{20}$  (1011.18). White powder,  $[\alpha]_D^{21} = +1.5^\circ$  ( $c = 0.2$ , MeOH). Source: TUAN HUA SHAN FAN *Symplocos glomerata* (stem cortex). Ref: 3783.

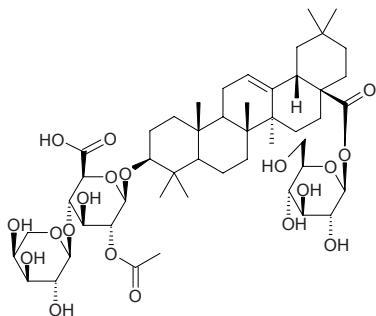


**20533 *Symplocos glomerata* saponin 5**

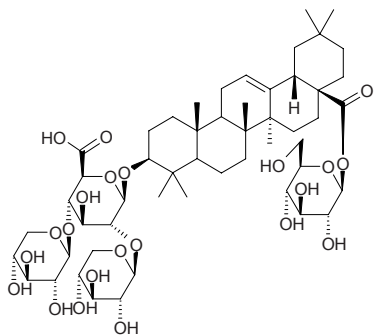
3-*O*-[ $\alpha$ -*L*-Arabinopyranosyl-(1 $\rightarrow$ 4)]- $\beta$ -*D*-glucuronopyranosyl]-28-*O*-[ $\beta$ -*D*-glucopyranosyl]-oleanolic acid C<sub>47</sub>H<sub>74</sub>O<sub>18</sub> (927.10). White powder,  $[\alpha]_D^{21} = +4.7^\circ$  ( $c = 0.38$ , MeOH). **Source:** TUAN HUA SHAN FAN *Symplocos glomerata* (stem cortex). **Ref:** 3783.

**20534 *Symplocos glomerata* saponin 6**

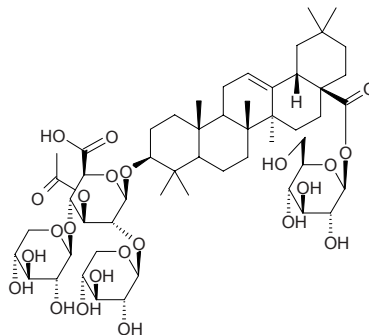
3-*O*-[ $\alpha$ -*L*-Arabinopyranosyl-(1 $\rightarrow$ 4)]-2-*O*-acetyl]- $\beta$ -*D*-glucuronopyranosyl]-28-*O*-[ $\beta$ -*D*-glucopyranosyl]-oleanolic acid C<sub>49</sub>H<sub>76</sub>O<sub>19</sub> (969.14). White powder,  $[\alpha]_D^{21} = +8^\circ$  ( $c = 0.55$ , MeOH). **Source:** TUAN HUA SHAN FAN *Symplocos glomerata* (stem cortex). **Ref:** 3783.

**20535 *Symplocos glomerata* saponin 7**

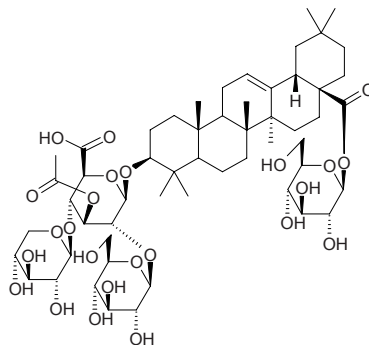
3-*O*-{[ $\beta$ -*D*-Xylopyranosyl(1 $\rightarrow$ 2)]-[ $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 4)]- $\beta$ -*D*-glucuronopyranosyl}-28-*O*-[ $\beta$ -*D*-glucopyranosyl]-oleanolic acid; Salsolside E C<sub>52</sub>H<sub>82</sub>O<sub>22</sub> (1059.22). **Source:** TUAN HUA SHAN FAN *Symplocos glomerata* (stem cortex). **Ref:** 3783.

**20536 *Symplocos glomerata* saponin 8**

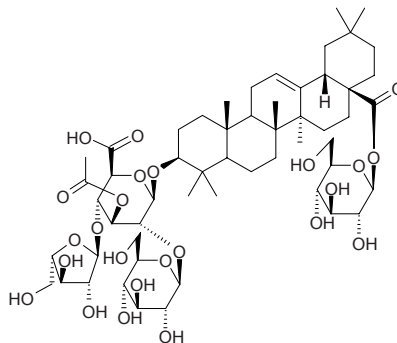
3-*O*-{[ $\beta$ -*D*-Xylopyranosyl-(1 $\rightarrow$ 2)]-[ $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 4)]-[3-*O*-acetyl]- $\beta$ -*D*-glucuronopyranosyl]-28-*O*-[ $\beta$ -*D*-glucopyranosyl]-oleanolic acid C<sub>54</sub>H<sub>84</sub>O<sub>23</sub> (1101.26). White powder,  $[\alpha]_D^{21} = +1.4^\circ$  ( $c = 0.416$ , pyridine). **Source:** TUAN HUA SHAN FAN *Symplocos glomerata* (stem cortex). **Ref:** 3783.

**20537 *Symplocos glomerata* saponin 9**

3-*O*-{[ $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 2)]-[ $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 4)]-[3-*O*-acetyl]- $\beta$ -*D*-glucuronopyranosyl]-28-*O*-[ $\beta$ -*D*-glucopyranosyl]-oleanolic acid C<sub>55</sub>H<sub>86</sub>O<sub>24</sub> (1131.28). White powder,  $[\alpha]_D^{21} = +7.7^\circ$  ( $c = 0.21$ , pyridine). **Source:** TUAN HUA SHAN FAN *Symplocos glomerata* (stem cortex). **Ref:** 3783.

**20538 *Symplocos glomerata* saponin 10**

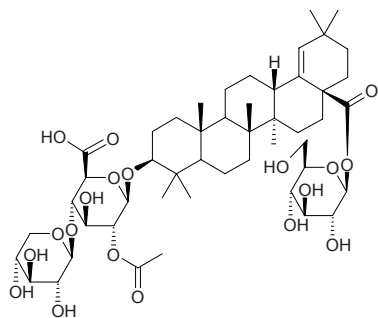
3-*O*-{[ $\beta$ -*D*-Glucopyranosyl(1 $\rightarrow$ 2)][ $\alpha$ -*L*-arabinofuranosyl-(1 $\rightarrow$ 4)]-[3-*O*-acetyl]- $\beta$ -*D*-glucuronopyranosyl]-28-*O*-[ $\beta$ -*D*-glucopyranosyl]-oleanolic acid C<sub>55</sub>H<sub>86</sub>O<sub>24</sub> (1131.28). White powder,  $[\alpha]_D^{21} = -10.8^\circ$  ( $c = 0.61$ , MeOH). **Source:** TUAN HUA SHAN FAN *Symplocos glomerata* (stem cortex). **Ref:** 3783.



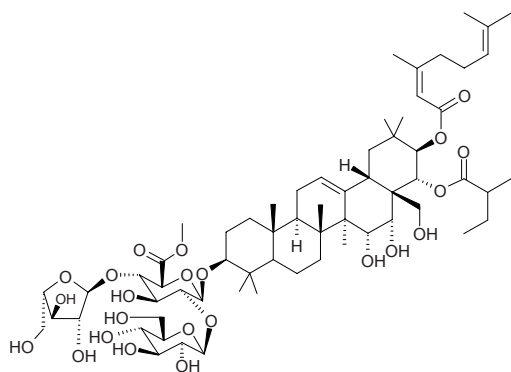


**20539 *Symplocos glomerata* saponin 11**

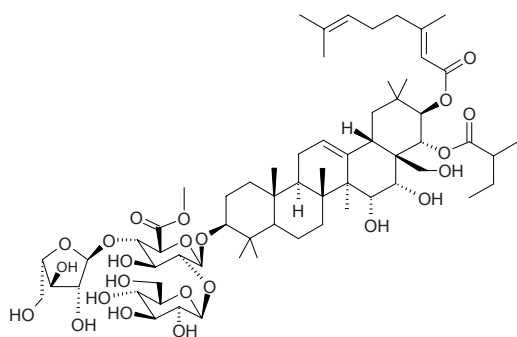
3 $\beta$ -O-[ $\beta$ -D-Xylopyranosyl(1 $\rightarrow$ 4)-[2-O-acetyl]- $\beta$ -D-glucuronopyranosyl]-28-O-[ $\beta$ -D-glucopyranosyl]-morolic acid C<sub>49</sub>H<sub>76</sub>O<sub>19</sub> (969.14). [ $\alpha$ ]<sub>D</sub><sup>21</sup> = -8.1° (*c* = 0.28, MeOH). Source: TUAN HUA SHAN FAN *Symplocos glomerata* (stem cortex). Ref: 3783.

**20540 Symplocoside A**

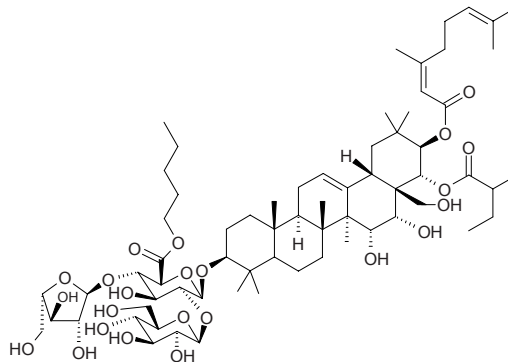
C<sub>63</sub>H<sub>100</sub>O<sub>23</sub> (1225.49). White amorphous powder, mp 189–191°C, [ $\alpha$ ]<sub>D</sub><sup>18</sup> = -29° (*c* = 0.99, MeOH). Pharm: Cytotoxic (*in vitro*, KB, IC<sub>50</sub> = 1.72  $\mu$ g/mL; HCT8, IC<sub>50</sub> = 4.31  $\mu$ g/mL; A549, IC<sub>50</sub> = 0.67  $\mu$ g/mL; normal hmn embryo lung fibroblasts HELF, IC<sub>50</sub> = 4.62  $\mu$ g/mL). Source: HUA SHAN FAN *Symplocos chinensis* (root). Ref: 4785.

**20541 Symplocoside B**

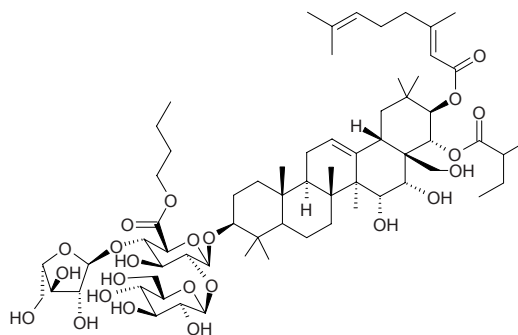
C<sub>63</sub>H<sub>100</sub>O<sub>23</sub> (1225.49). White amorphous powder, mp 189–191°C, [ $\alpha$ ]<sub>D</sub><sup>18</sup> = -23° (*c* = 1.02, MeOH). Source: HUA SHAN FAN *Symplocos chinensis* (root). Ref: 4785.

**20542 Symplocoside C**

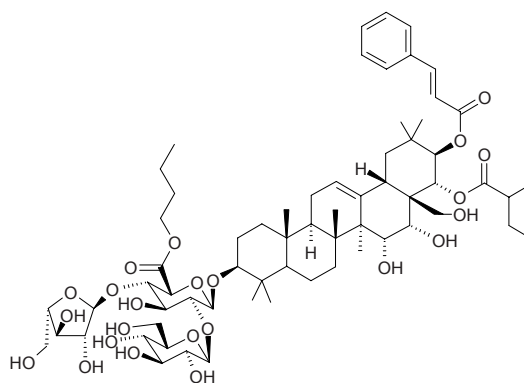
C<sub>66</sub>H<sub>106</sub>O<sub>23</sub> (1267.57). White amorphous powder, mp<sup>21</sup> 7–219°C, [ $\alpha$ ]<sub>D</sub><sup>24</sup> = -23.3° (*c* = 1.03, MeOH). Pharm: Cytotoxic (*in vitro*, HCT8, IC<sub>50</sub> = 2.86  $\mu$ g/mL; BGC823, IC<sub>50</sub> = 7.29  $\mu$ g/mL). Source: HUA SHAN FAN *Symplocos chinensis* (root). Ref: 4785.

**20543 Symplocoside D**

C<sub>66</sub>H<sub>106</sub>O<sub>23</sub> (1267.57). White amorphous powder, mp 213–215°C, [ $\alpha$ ]<sub>D</sub><sup>24</sup> = -15.8° (*c* = 0.70, MeOH). Source: HUA SHAN FAN *Symplocos chinensis* (root). Ref: 4785.

**20544 Symplocoside E**

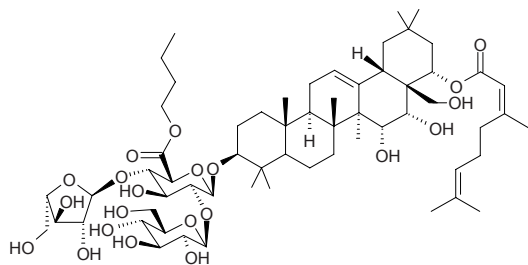
C<sub>65</sub>H<sub>98</sub>O<sub>23</sub> (1247.49). White amorphous powder, mp 211–213°C, [ $\alpha$ ]<sub>D</sub><sup>24</sup> = -21.4° (*c* = 1.02, MeOH). Source: HUA SHAN FAN *Symplocos chinensis* (root). Ref: 4785.



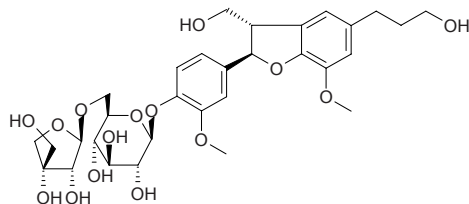


**20545 Symplocoside F**

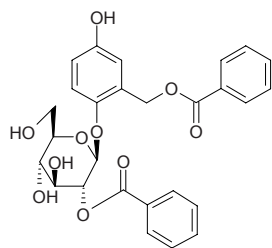
$C_{61}H_{98}O_{21}$  (1167.45). White amorphous powder, mp 234~236°C,  $[\alpha]_D^{24} = -24.3^\circ$  ( $c = 0.70$ , MeOH). **Pharm:** Cytotoxic (*in vitro*, HCT8,  $IC_{50} = 4.04\mu\text{g/mL}$ ).  
**Source:** HUA SHAN FAN *Symplocos chinensis* (root). **Ref:** 4785.

**20546 Symploglignanoside A**

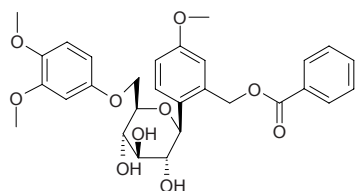
$C_{31}H_{42}O_{15}$  (654.67). White powder, mp 130~132°C,  $[\alpha]_D^{25} = -24.8^\circ$  ( $c = 0.05$ , MeOH). **Source:** SHAN FAN GEN *Symplocos caudata*. **Ref:** 2535.

**20547 Symploside**

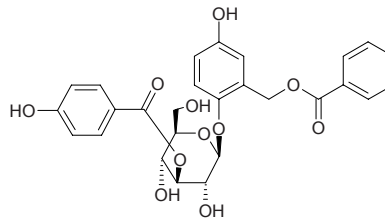
$C_{27}H_{26}O_{10}$  (510.50). White powder. **Pharm:** Phosphodiesterase I inhibitor (*in vitro*,  $IC_{50} = (722\pm 0.03)\mu\text{mol/L}$ , control Cysteine,  $IC_{50} = (274\pm 0.07)\mu\text{mol/L}$ ); thymidine phosphorylase inhibitor (*in vitro*,  $IC_{50} = (208\pm 1)\mu\text{mol/L}$ , control 7-Deazaxanthine,  $IC_{50} = (38.68\pm 4.42)\mu\text{mol/L}$ ). **Source:** ZHU ZI SHU *Symplocos racemosa*. **Ref:** 4093.

**20548 Symploveroside**

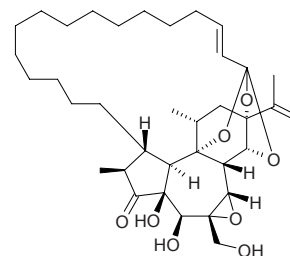
$C_{29}H_{32}O_{10}$  (540.57). Colorless amorphous solid. **Pharm:** Phosphodiesterase I inhibitor (*in vitro*,  $IC_{50} = (909\pm 0.1)\mu\text{mol/L}$ , control Cysteine,  $IC_{50} = (274\pm 0.07)\mu\text{mol/L}$ ); thymidine phosphorylase inhibitor (*in vitro*,  $IC_{50} = (489\pm 4)\mu\text{mol/L}$ , control 7-Deazaxanthine,  $IC_{50} = (38.68\pm 4.42)\mu\text{mol/L}$ ). **Source:** ZHU ZI SHU *Symplocos racemosa*. **Ref:** 4093.

**20549 Symponoside**

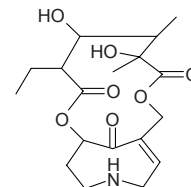
$C_{27}H_{26}O_{11}$  (526.50). White powder. **Pharm:** Phosphodiesterase I inhibitor (*in vitro*,  $IC_{50} = (698\pm 0.06)\mu\text{mol/L}$ , control Cysteine,  $IC_{50} = (274\pm 0.07)\mu\text{mol/L}$ ); thymidine phosphorylase inhibitor (*in vitro*,  $IC_{50} = (196\pm 2)\mu\text{mol/L}$ , control 7-Deazaxanthine,  $IC_{50} = (38.68\pm 4.42)\mu\text{mol/L}$ ). **Source:** ZHU ZI SHU *Symplocos racemosa*. **Ref:** 4093.

**20550 Synaptolepis factor K<sub>1</sub>**

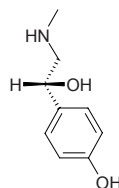
$C_{36}H_{54}O_8$  (614.83). **Pharm:** Irritant. **Source:** family Thymelaeaceae spp. **Ref:** 658.

**20551 Syneilesine**

$C_{18}H_{27}NO_7$  (369.42). **Source:** TU ER SAN *Syneilesis palmata* (in 1974, the compound was isolated from the plant by M.Hikichi et al.). **Ref:** 5505.

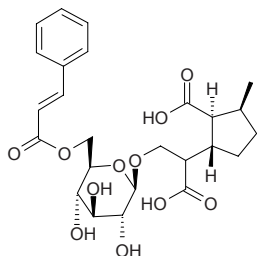
**20552 Synephrine**

Oxedrine [94-07-5]  $C_9H_{13}NO_2$  (167.21). mp 151~152°C, 184~185°C, 118~119°C (dec). **Source:** GAN PI *Citrus chachiensis* (dried ripe pericarp: content = 0.023%)<sup>[5508]</sup>, JU PI *Citrus reticulata* (dried ripe pericarp: content = 0.28%)<sup>[5508]</sup>, content = 0.058%<sup>[5501]</sup>, WU ZHU YU *Evodia rutaecarpa* (fruit: content = 0.19%)<sup>[5501]</sup>, ZHI SHI *Citrus aurantium* (young fruit: content scope = 0.24%~1.45%)<sup>[5501]</sup>. **Ref:** 4, 5501, 5508.

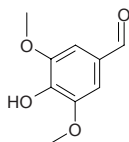


**20553 Syringafghanoside**

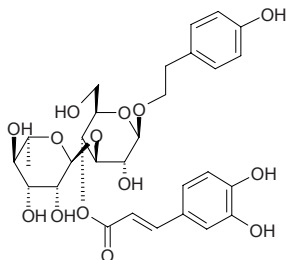
$C_{25}H_{32}O_{11}$  (508.53). Colorless amorphous powder,  $[\alpha]_D^{28} = -28^\circ$  ( $c = 1.01$ , MeOH). Source: A FU HAN DING XIANG *Syringa afghanica*. Ref: 2006.

**20554 Syringaldehyde**

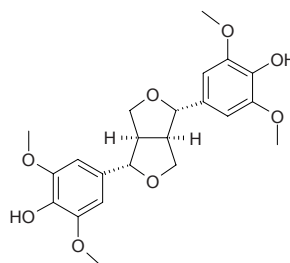
[134-96-3]  $C_9H_{10}O_4$  (182.18). Pharm: Cytotoxic ( $P_{388}$ ,  $ED_{50} > 50\mu\text{g/mL}$ , control Mithramycin,  $ED_{50} = 0.58\mu\text{g/mL}$ ; A549,  $ED_{50} > 50\mu\text{g/mL}$ , Mithramycin,  $ED_{50} = 0.073\mu\text{g/mL}$ ; HT29,  $ED_{50} > 50\mu\text{g/mL}$ , Mithramycin,  $ED_{50} = 0.076\mu\text{g/mL}$ )<sup>[5421]</sup>; cytotoxic inactive (*in vitro*, HONE-1 and NUGC cancer cell lines, no significant activity)<sup>[3069]</sup>. Source: DANG SHEN *Codonopsis pilosula*, TAI WAN FU RONG *Hibiscus taiwanensis*, TAI WAN PU GONG YING *Taraxacum formosanum* (fresh root), ZHONG GUO XIU QIU *Hydrangea chinensis* (root), MO ZHI JIAO GU CUI *Casearia membranacea* (stem). Ref: 2, 2529, 3069, 4488, 5421.

**20555 Syringalide 3'- $\alpha$ -L-rhamnopyranoside**

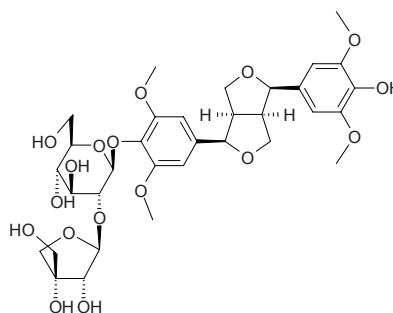
$C_{29}H_{36}O_{14}$  (608.60). Source: ROU CONG RONG *Cistanche deserticola*, GUAN HUA ROU CONG RONG *Cistanche tubulosa*. Ref: 2448.

**20556 (+)-Syringaresinol**

Lirioresinol B [21453-69-0]  $C_{22}H_{26}O_8$  (418.45). Colorless prismatic crystals ( $\text{CH}_3\text{OH}$ ), mp 169–171°C;  $[\alpha]_D^{24} = -7.47^\circ$  ( $c = 0.3$ ,  $\text{CHCl}_3$ ). Pharm: Cytotoxic (Meth-A sarcoma cell line,  $ED_{50} > 10\mu\text{g/mL}$ , LLC cell line,  $ED_{50} > 10\mu\text{g/mL}$ ); aldose reductase inhibitor inactive ( $IC_{50} > 100\mu\text{mol/L}$ ,  $100\mu\text{mol/L}$  InRt = 13%, control Epalrestat,  $IC_{50} = 0.072\mu\text{mol/L}$ )<sup>[4530]</sup>; NO production inhibitor ( $IC_{50} = 53.5\mu\text{mol/L}$ )<sup>[4526]</sup>; DPPH scavenger ( $IC_{50} = 19.5\mu\text{mol/L}$ )<sup>[4526]</sup>; antioxidant (superoxide anion scavenger ( $100\mu\text{mol/L}$ , InRt =  $(55.1 \pm 0.3)\%$ , positive control (+)-Catechin,  $IC_{50} = (3.67 \pm 0.14)\mu\text{mol/L}$ )<sup>[4514]</sup>; bone resorption inhibitor (bones were cultured with PTH  $200\mu\text{mol/L}$ ,  $^{45}\text{Ca}$  release =  $(23.3 \pm 1.9)\%$ ,  $p < 0.001$ , control  $^{45}\text{Ca}$  release =  $(15.4 \pm 1.3)\%$ )<sup>[4921]</sup>. Source: HAI JIN BI XIE *Dioscorea spongiosa* (rhizome), HOU PO *Magnolia officinalis*, HUO YAN HUA *Phlogacanthus curviflorus* (root: yield = 0.00031%dw)<sup>[4799]</sup>, KAI KOU JIAN *Tupistra chinensis* (underground part)<sup>[4676]</sup>, LANG DU *Stellera chamaejasme*, LEI GONG TENG *Tripterygium wilfordii*, LIAO GE WANG GEN *Wikstroemia indica*, MAO CI JIN JI ER *Caragana tibetica* (stem), OU ZHOU SHUI QING GANG *Fagus sylvatica*, QING FENG TENG *Sinomenium acutum*, QING HAO *Artemisia apiacea* [Syn. *Artemisia carvifolia*; *Artemisia caruifolia*] (aerial parts), SHUI MU XUE LIAN HUA *Saussurea medusa* (whole herb), TAI WAN FU RONG *Hibiscus taiwanensis*, WU GENG WU JIA PI *Acanthopanax sessiliflorus*, *Populus* sp., *Wikstroemia* sp. Ref: 2, 660, 683, 658, 2529, 3510, 4514, 4526, 4530, 4676, 4799, 4921.

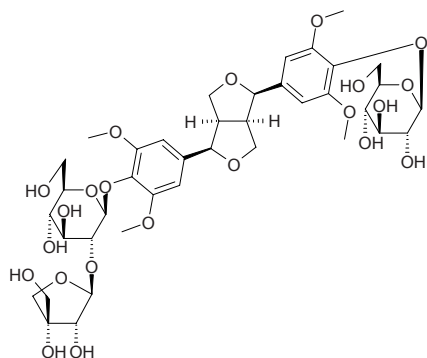
**20557 Syringaresinol-4-O- $\beta$ -D-apiofuranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranoside**

[136997-64-3]  $C_{33}H_{44}O_{17}$  (712.71). Source: HE HUAN PI *Albizzia julibrissin*. Ref: 660.



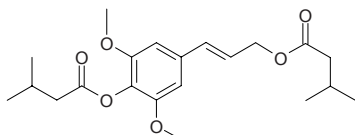
**20558 Syringaresinol-4-O-β-D-apiofuranosyl-(1→2)-β-D-glucopyranosyl-4'-O-β-D-glucopyranoside**

[136997-65-4] C<sub>39</sub>H<sub>54</sub>O<sub>22</sub> (874.85). Source: HE HUAN PI *Albizia julibrissin*. Ref: 660.



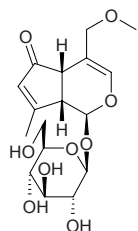
**20559 Syringenin diisovalerate**

Sinapyl alcohol diisovalerate [112561-77-0] C<sub>21</sub>H<sub>30</sub>O<sub>6</sub> (378.47). Crystals (hexane), mp 68–59°C. Source: *Artemisia assoana*. Ref: 1521.



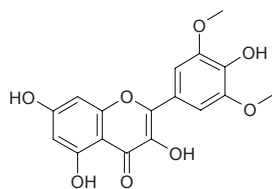
**20560 Syringenone**

[58546-53-5] C<sub>17</sub>H<sub>24</sub>O<sub>9</sub> (372.37). Amorphous. Source: OU DING XIANG *Syringa vulgaris*. Ref: 1521.



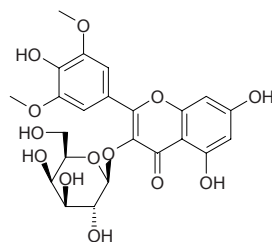
**20561 Syringetin**

C<sub>17</sub>H<sub>14</sub>O<sub>8</sub> (346.30). Source: BAI GUO YE *Ginkgo biloba*. Ref: 660.



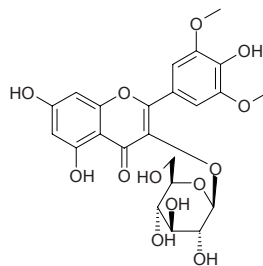
**20562 Syringetin-3-O-β-D-galactopyranoside**

C<sub>23</sub>H<sub>24</sub>O<sub>13</sub> (508.44). Source: TIAN CONG *Philydrum lanuginosum*. Ref: 6.



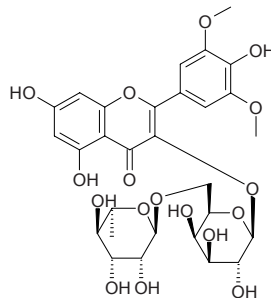
**20563 Syringetin-3-O-β-D-glucoside**

C<sub>23</sub>H<sub>24</sub>O<sub>13</sub> (508.44). Yellow powder. Source: LUO TUO CI *Alhagi pseudalhagi*. Ref: 498.



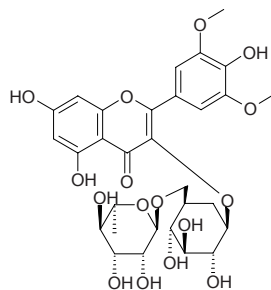
**20564 Syringetin-3-O-robinobioside**

Syringetin-3-O-α-L-rhamnopyranosyl-(1→6)-β-D-galactopyranoside C<sub>29</sub>H<sub>34</sub>O<sub>17</sub> (654.58). Amorphous yellow powder. Source: CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochera rosea*]. Ref: 1885.



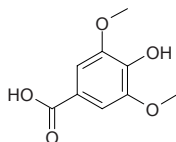
**20565 Syringetin-3-rutinoside**

C<sub>30</sub>H<sub>36</sub>O<sub>16</sub> (652.61). Source: BAI GUO YE *Ginkgo biloba*. Ref: 660.

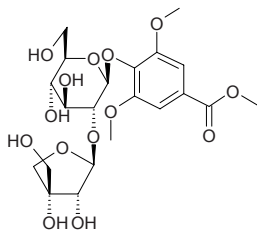


**20566 Syringic acid**

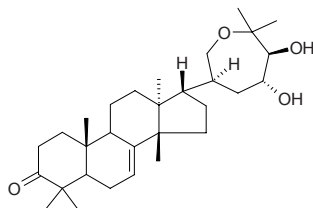
4-Hydroxy-3,5-dimethoxybenzoic acid [530-57-4] C<sub>9</sub>H<sub>10</sub>O<sub>5</sub> (198.18). mp 204–205°C. **Pharm:** Antioxidant (hydroxyl radical scavenger, IC<sub>50</sub> = 2.61 μmol/L, control EGCG, IC<sub>50</sub> = 0.43 μmol/L, superoxide anion radical scavenger, IC<sub>50</sub> = 3.46 μmol/L, control EGCG, IC<sub>50</sub> = 0.53 μmol/L)<sup>[4499]</sup>; antibacterial; antifungal; local anesthetic; sedative; β-Hexosaminidase inhibitor inactive (RBL-2H3 cells, inhibits release of β-hexosaminidase, 100 μmol/L, InRt = (7.6±5.4)%<sup>[4347]</sup>); NO production inhibitor (*in vitro*, LPS-activated mouse peritoneal macrophages, 3 μmol/L, 10 μmol/L, 30 μmol/L, 100 μmol/L, InRt = 9.3%, 7.5%, 7.2%, 28%, respectively; control L-NMMA, 3 μmol/L, 10 μmol/L, 30 μmol/L, 100 μmol/L, InRt = 10.3%, 15%, 34.1%, 63.1%, respectively)<sup>[4691]</sup>. **Source:** BAI HUA YING SHAN HONG *Rhododendron mucronatum*, BAN LAN GEN *Isatis indigotica* (dried root: mean content of 5 origins = 0.00029%)<sup>[5508]</sup>, DA CHE QIAN *Plantago major*, DA YE JIN HUA CAO *Stenoloma chusanum*, HEI DA DOU *Glycine max*, HUI XIANG *Foeniculum vulgare*, HUI XIANG JING YE *Foeniculum vulgare*, JI XING ZI *Impatiens balsamina*, KAI KOU JIAN *Tupistra chinensis* (underground part)<sup>[4676]</sup>, MAN SHAN HONG *Rhododendron dauricum*, MO SHI ZI *Quercus infectoria* (parasitic bee: *Cynips gallae-tinctoriae*), QI ZHOU YI ZHI HAO *Conyza canadensis* [Syn. *Erigeron canadensis*], SANG HUANG *Phellinus igniarius* (sporocarp: yield = 0.00060%<sup>[4747]</sup>), TAI WAN FU RONG *Hibiscus taiwanensis*, TAI WAN PU GONG YING *Taraxacum formosanum* (fresh root), TU FU LING *Smilax glabra*, XIAN MAO *Curculigo orchioides* (rhizome), XIAO HONG SHEN *Rubia yunnanensis* (root: yield = 0.0021%<sup>[4747]</sup>), XUAN FU HUA *Inula britannica*, YAO SHU KUI *Althaea officinalis*, YING SHAN HONG *Rhododendron mucronulatum*, ZHAO SHAN BAI *Rhododendron micranthum*, ZI BAI PI *Catalpa ovata*, *Citrus* sp., occurs in many plants. **Ref:** 6, 336, 658, 660, 2529, 4347, 4488, 4499, 4676, 4691, 4747, 5508.

**20567 Syringic acid methyl ester-4-O-β-D-apiofuranosyl-(1→2)-β-D-glucopyranoside**

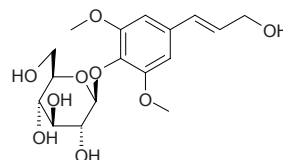
C<sub>21</sub>H<sub>30</sub>O<sub>14</sub> (506.46). **Source:** HE HUAN PI *Albizia julibrissin*. **Ref:** 660.

**20568 Syringic aldehyde**

C<sub>30</sub>H<sub>48</sub>O<sub>4</sub> (472.71). **Source:** *Eurycoma* sp. **Ref:** 4556.

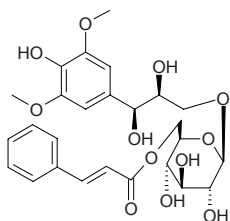
**20569 Syringin**

Sinapyl alcohol 4'-O-β-glucopyranoside; Magnolenin; Shashenoside I; Syringopicroside [118-34-3] C<sub>17</sub>H<sub>24</sub>O<sub>6</sub> (372.38). White granular crystals, mp 192°C (MeOH). **Pharm:** Anti-inflammatory (mouse, inhibits increased vascular permeability by acetic acid, 30mg/(kg·d), orl, InRt = 25%, control Indomethacin, 100mg/(kg·d), orl, InRt = 45%)<sup>[4073]</sup>; anti-inflammatory (rat, acute paw edema by carrageen, 30mg/(kg·d), orl, 1h,3h,5h, InRt = 8%, 31%, 16%, control Ibuprofen, 100mg/(kg·d), orl, 1h,3h,5h, InRt = 42%, 55%, 47%)<sup>[4073]</sup>; analgesic (mouse: acetic acid induced writhing, 30mg/(kg·d), orl, InRt = 37%, control Aspirin, 100mg/(kg·d), orl, InRt = 68%; hot plate test, 30mg/(kg·d), orl, increased action time = 51%; control Morphine, increased action time = 138%)<sup>[4073]</sup>; anti-inflammatory (inhibits production of COX metabolite PGE<sub>2</sub>, IC<sub>50</sub> = 35.5 μmol/L; reduces TXB2 level, IC<sub>50</sub> = 29.3 μmol/L)<sup>[4455]</sup>; antioxidant inactive (*in vitro*, DPPH scavenger, IC<sub>50</sub> > 500 μmol/L; control Vitamin E, IC<sub>50</sub> = 20.1 μmol/L)<sup>[4787]</sup>; α-glucosidase inhibitor inactive (type VI, control 1-Deoxyojirimycin, IC<sub>50</sub> = 0.3 mmol/L)<sup>[4155]</sup>; thrombin inhibitor inactive<sup>[4155]</sup>; β-glucuronidase inhibitor inactive<sup>[4155]</sup>. **Source:** CANG ZHU *Atractylodes lancea*, CHANG MAO FENG MAO JU *Saussurea superba* [Syn. *Saussurea hieracioides*] (whole herb: content = 0.0304%)<sup>[5508]</sup>, CHUAN DANG SHEN *Codonopsis tangshen*, CI WU JIA *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*] (root and rhizome: mean content = 0.069%<sup>[5508]</sup>), DANG SHEN *Codonopsis pilosula*, DONG BEI CI REN SHEN *Oplopanax elatus*, DU ZHONG *Eucommia ulmoides*, DUN BAO XUE LIAN *Saussurea nigrescens* (whole herb: content = 0.0304%)<sup>[5508]</sup>, HE HUA XUE LIAN *Saussurea phaeantha* (whole herb: content = 0.0102%)<sup>[5508]</sup>, HE HUA YU LAN *Magnolia grandiflora*, HE YE FENG MAO JU *Saussurea graminea* (whole herb: content = 0.0154%)<sup>[5508]</sup>, HONG MAO WU JIA PI *Acanthopanax giraldii* [Syn. *Acanthopanax giraldii* var. *inermis*; *Eleutherococcus giraldii*] (root and stem: content = 0.035%)<sup>[5508]</sup>, KUO YE OU NV ZFEN *Phillyrea latifolia* (leaf), LIU CHUAN YU *Linaria vulgaris*, LIU YE CEN *Fraxinus stylosa*, MAO PAO TONG *Paulownia tomentosa*, MEI HUA FENG MAO JU *Saussurea pulchella* (whole herb: content = 0.0138%)<sup>[5508]</sup>, MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*], PAO TONG *Paulownia fortunei*, RI BEN AN XI XIANG JING PI *Syrax japonica* (stem cortex: yield = 0.00077%<sup>[4787]</sup>), *Saussurea amarafisch* (whole herb: content = 0.0241%)<sup>[5508]</sup>, *Saussurea prostrata* (whole herb: content = 0.0636%)<sup>[5508]</sup>, *Saussurea soroseris* (whole herb: content = 0.0044%)<sup>[5508]</sup>, SHI LUO ZI *Anethum graveolens* (fruit), SHU QU FENG MAO JU *Saussurea gnaphaloides* (whole herb: content = 0.0327%)<sup>[5508]</sup>, SI JI QING *Ilex chinensis* [Syn. *Ilex purpurea*], TIAN NV MU LAN *Magnolia sieboldii* (stem cortex), WU JIA PI *Acanthopanax gracilistylus* (dried root cortex: mean content = 0.0228%)<sup>[5508]</sup>, XIAO HUA FENG MAO JU *Saussurea parviflora* (whole herb: content = 0.0176%)<sup>[5508]</sup>, XUE LIAN *Saussurea involucreta* (whole herb: content = 0.0232%)<sup>[5508]</sup>, YUN NAN TU SI ZI *Cuscuta reflexa*, ZI DING XIANG *Syringia oblata* (leaf: content = 0.144%)<sup>[5508]</sup>. **Ref:** 2, 6, 450, 523, 527, 660, 1227, 4073, 4155, 4177, 4237, 4348, 4415, 4787, 5508.

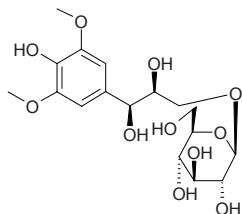


**20570 (7*S*,8*S*)-Syringoylglycerol 9-*O*-(6'-*O*-cinnamoyl)- $\beta$ -*D*-glucopyranoside**

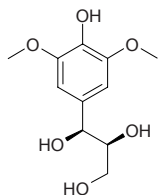
$C_{26}H_{32}O_{12}$  (536.54). Colorless oil,  $[\alpha]_D^{23} = -31.5^\circ$  ( $c = 1.0$ , MeOH). **Pharm:**  $\alpha$ -Glucosidase inhibitor (rat intestinal  $\alpha$ -glucosidase, 3mmol/L, InRt = 54%; control 1-Deoxynojirimycin, 0.3 $\mu$ mol/L, InRt = 58%). **Source:** SHEN XIANG CAO *Hyssopus officinalis* (leaf). **Ref:** 3750.

**20571 (7*S*,8*S*)-Syringoylglycerol 9-*O*- $\beta$ -*D*-glucopyranoside**

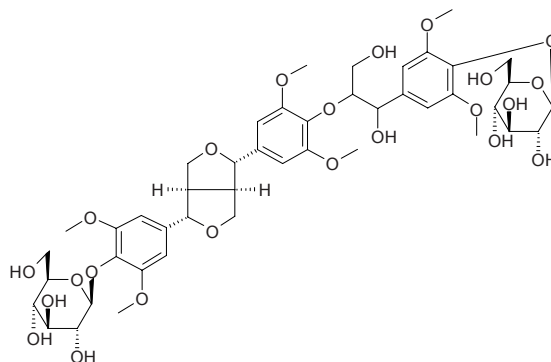
$C_{17}H_{26}O_{11}$  (406.39). Colorless oil,  $[\alpha]_D^{23} = -17.7^\circ$  ( $c = 0.5$ , MeOH). **Pharm:**  $\alpha$ -Glucosidase inhibitor (rat intestinal  $\alpha$ -glucosidase, 3mmol/L, InRt = 53%; control 1-Deoxynojirimycin, 0.3 $\mu$ mol/L, InRt = 58%). **Source:** SHEN XIANG CAO *Hyssopus officinalis* (leaf). **Ref:** 3750.

**20572 erythro-1-*C*-Syringylglycerol**

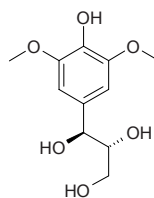
$C_{11}H_{16}O_6$  (244.25). **Source:** *Eurycoma* sp. **Ref:** 4556.

**20573 Syringylglycerol- $\beta$ -syringaresinol ether-4'',4'''-di-*O*- $\beta$ -*D*-glucopyranoside**

$C_{45}H_{60}O_{23}$  (968.97). **Source:** DU ZHONG *Eucommia ulmoides*. **Ref:** 2.

**20574 threo-1-*C*-Syringylglycerol**

$C_{11}H_{16}O_6$  (244.25). **Source:** *Eurycoma* sp. **Ref:** 4556.



Jiaju Zhou · Guirong Xie · Xinjian Yan

# Encyclopedia of Traditional Chinese Medicines

Molecular Structures, Pharmacological Activities,  
Natural Sources and Applications

## Vol.5

Isolated Compounds T-Z  
References, TCM Plants and Congeners

 Springer

Encyclopedia of Traditional Chinese Medicines  
Molecular Structures, Pharmacological Activities,  
Natural Sources and Applications





Jiaju Zhou • Guirong Xie • Xinjian Yan

Encyclopedia of  
Traditional Chinese Medicines  
Molecular Structures, Pharmacological  
Activities, Natural Sources and Applications

Vol. 5: Isolated Compounds T-Z

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# Encyclopedia of Traditional Chinese Medicines

Molecular Structures, Pharmacological Activities, Natural Sources and Applications

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# Preface

A significant preoccupation of modern traditional Chinese medicine (TCM) research has been the characterization of TCM components, such as pertain to their isolation, purification, structural determination, and pharmacological activity. As a reference tool, this *Encyclopedia of Traditional Chinese Medicines* presents a comprehensive and integrative work on surveying TCM plant sources, chemistry, pharmacology and medicinal effects and indications in a systematic manner.

This encyclopedia is an integrated achievement of a long-term TCM research project by the authors at the Chinese Academy of Sciences<sup>[1-4]</sup>, involving three parts and now organized in six volumes:

Part I (Volumes 1 to 4 and part of Volume 5) provides structural, physical, pharmacological and natural source information on 23,033 isolated chemicals captured from 5,535 references, basically up to year 2005. A great deal of effort has been paid on overlapping or contradictory data in order to provide readers with an accurate and reliable resource.

Part II (last part of Volume 5) describes 6,926 TCM plants and congeners, together with their medicinal effects and indications. The contents of Part I and Part II are all organized in alphabetical order.

Part III (Volume 6) includes seven indexes produced by a computer program. Based on the indexes, users can readily find concerned contents in multiple ways.

With this encyclopedia, the authors attempt to provide a bridge for the communication between the TCM system and Western medicinal systems, and a platform with multiple-subjects in support of research and development of the health sciences.

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# Introduction

This encyclopedia mainly consists two parts - compound and plant. Its core content is the structural and pharmacological information of 23,033 phytochemicals, as well as medical effects and indications of 6,926 plant species from which the phytochemicals were isolated. The compounds, i.e. phytochemicals, are ordered alphabetically, and their ordinal numbers are used as compound unique codes. The plant species are coded from T0001 to T6926. With this code system, the complicated “many to many” relationship between compounds and plants can be clearly expressed, and any individual compound or plant could be located easily in this 6 volumes book.

## 1. Compound Entry

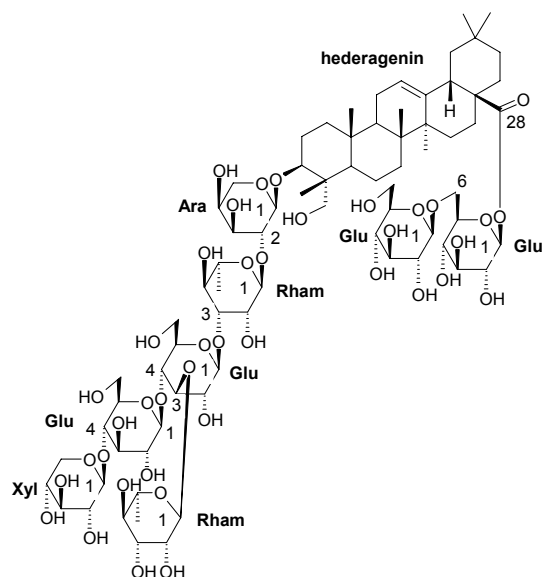
**Format of Compound Entry.** A compound entry starts with a title line, in which there are two items: the compound’s unique code and main name. Following the title line is the compound physical, pharmacological and source information, which may include 8 items:

**Title line (code number, main name)**

- A. Synonyms of the compound (if any);
- B. CASRN number (if any);
- C. Formula (relative molecular mass);
- D. Physicochemical properties;
- E. Pharmacological data (if any);
- F. Source(s);
- G. Reference(s);
- H. Graphic structure.

**Chemical Names and Synonyms.** Generally, a compound may have one scientific name and several trivial names. In the encyclopedia, based on original articles, we select one name as the “main name” (appeared at the title line of each compound entry), and use it to alphabetically order the 23,033 compounds in the first 5 volumes. The main name is either a scientific name or a trivial name. All of other names of each compound, if any, are presented after the title line.

**Stereochemistry of Chemical Structure.** We protracted all compound structures down to atom-bond level including complicated glycosides, with stereo-chemical information based on the data in the original papers. For example, the structure with full stereochemistry of compound 22,834 (isolated from CHUAN XU DUAN *Dipsacus asperoides*) is:



3-*O*-[ $\beta$ -*D*-Xylopyranosyl(1 $\rightarrow$ 4)]- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 4)]  
 [ $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 3)-  
 $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl hederagenin-  
 28-*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside

**Normalization of Pharmacological Data.** More than 8,000 TCM components in this encyclopedia have a variety of pharmacological data, which are valuable not only for the study of TCM, but also for the development of Western medicine. Because different expressions are used for the same kind of data in different articles, we have to define and normalize thousands pharmacological terms, so that the data could be expressed by a unified way, and be easily understood by readers.

The pharmacological terms in the encyclopedia are presented by a multi-layered structure. In the top layer, there are around 20 types of pharmacological activity terms, they are cytotoxic (*in vitro* anticancer), antineoplastic (*in vivo* anticancer), antibacterial, antifungal, antiviral, anti-HIV, anti-inflammatory, antioxidant, antimalarial, enzyme inhibitors, NO production inhibitors, cardiovascular activity, smooth muscle relaxant and stimulant, toxin and medium lethal dose LD<sub>50</sub>, and so forth. For each term there is a regulation about how to describe related pharmacological data. The following is an example:

**Term name** (*in vitro/in vivo*,  
 target cell **1**, quantitative data,  
 control Compound, control's data;  
 target cell **2**, quantitative data,  
 control Compound, control's data;  
 target cell **3**, quantitative data,  
 control Compound, control's data;  
 terse description of related mechanism if any).



Under the subtitle “Pharm:” of compound entry 248 (17-Acetoxyabda-7,12(*E*),14-triene), a set of bio-data is presented as follows:

Pharm: **Cytotoxic** (*in vitro*,  
 BT474 human galactophore cancer cell, IC<sub>50</sub> = 4.7µg/mL,  
 control Doxorubicin hydrochloride, IC<sub>50</sub> = 0.08µg/mL;  
 CHAGO human undifferentiated lung cancer cell, IC<sub>50</sub> = 5.7µg/mL,  
 control Doxorubicin hydrochloride, IC<sub>50</sub> = 2.3µg/mL;  
 HepG2 human liver cancer cell, IC<sub>50</sub> = 6.5µg/mL,  
 control Doxorubicin hydrochloride, IC<sub>50</sub> = 0.9µg/mL;  
 Kato3 human gastric cancer cell, IC<sub>50</sub> = 5.3µg/mL,  
 control Doxorubicin hydrochloride, IC<sub>50</sub> = 1.7µg/mL;  
 SW620 human colorectal adenocarcinoma cell, IC<sub>50</sub> = 5.6µg/mL,  
 control Doxorubicin hydrochloride, IC<sub>50</sub> = 1.1µg/mL).

In order to standardize abbreviations of cancer cells, such as BT474, CHAGO, etc., we defined and used 270 cancer cell codes (CCC) in the encyclopedia. For explanations of these codes, please see “Cancer Cell Codes in the Pharmacological Models” in Volume 1 of the encyclopedia.

By means of the formatted and structuralized methods, we normalized expressions of most pharmacological data appeared in the encyclopedia. For complete information of all 3367 normalized pharmacological activity terms, please see “Compound Pharmacological Activities Index” in Volume 6.

## 2. Plant Entry

**One Species One Entry.** Conventionally, a TCM name may include more than one plant species that have the same medical functions; therefore, a plant may not have an independent TCM entry and may be described under a TCM name. In this book, modern botany classification regulation is adopted and each plant species has an independent entry.

For example, traditional Chinese medicine DAN SHEN includes three species. They are equivalent in both effects and indications in TCM practice. In this encyclopedia, we defined three plant entries for each one of them.

T5680 *Salvia miltiorrhiza* (Lamiaceae); DAN SHEN; Danshen;  
 T5681 *Salvia miltiorrhiza* f. *alba* (Lamiaceae); BAI HUA DAN SHEN; Whiteflower Danshen;  
 T5688 *Salvia przewalskii* (Lamiaceae); GAN XI SHU WEI CAO; Przewalsk Sage.

With this method, we are able to smoothly link TCM information with that of modern botany.

**Simplified Latin Name.** For each TCM plant or TCM congener, four names are used in the encyclopedia. They are Latin name, English name, PIN-YIN name and Chinese

name, while the Chinese name only appears in TCM Plants PIN-YIN/Chinese Names Index” not in the main part of the book. For plant Latin name (e.g. scientific name), we use a simplified nomenclature, in which the nomenclator(s) information is not included. For example the Latin name of Chinese Angelica (DANG GUI) in the encyclopedia is “*Angelica sinensis*”, not “*Angelica sinensis* (Oliv.) Diels”.

**Family Name.** According to the “International Code of Botanical Nomenclature” (2007), the following eight authoritative family names are used in the encyclopedia. The family names of long usage, which are not used in are the encyclopedia, indicated in parentheses:

Apiaceae (Umbelliferae);  
 Arecaceae (Palmae);  
 Asteraceae (Compositae);  
 Brassicaceae (Cruciferae);  
 Clusiaceae (Guttiferae);  
 Fabaceae (Leguminosae);  
 Lamiaceae (Labiatae) and  
 Poaceae (Gramineae).

**PIN-YIN Name and Chinese Name.** A simplified PIN-YIN name system is used in the encyclopedia. That is not to include the four-tone mark. However, there are exceptions. Among the thousand PIN-YIN names in the book, there are seven confusing cases. For each mistakable name, a superscript is attached to the name for indicating its four-tone in order to distinguish it from other plant species. For example: BAI MAO GEN<sup>(1)</sup> and BAI MAO GEN<sup>(4)</sup> are two different TCM plants:

T3416 *Imperata cylindrica* var. *major* (Poaceae); BAI MAO GEN<sup>(1)</sup>; Lalang Grass Rhizome.  
 T3309 *Hydrastis canadensis* (Ranunculaceae); BAI MAO GEN<sup>(4)</sup>; Golden-seal.

Other six cases are:

T1449 *Cirsium japonicum* (Asteraceae); DA JI<sup>(4)</sup>; Japanese Thistle.  
 T2608 *Euphorbia pekinensis* (Euphorbiaceae); DA JI<sup>(3)</sup>; Peking Euphorbia.  
 T4124 *Matricaria chamomilla* [Syn. *Matricaria recutita*] (Asteraceae); MU<sup>(3)</sup> JU; Mayweed.  
 T0197 *Aegle marmelos* (Rutaceae); MU<sup>(4)</sup> JU; Sepiaria.  
 T1039 *Bruguiera gymnorrhiza* (Rhizophoraceae); MU LAN<sup>(3)</sup>; Common Bruguiera.  
 T3423 *Indigofera tinctoria* (Fabaceae); MU LAN<sup>(2)</sup>; True Indigo.  
 T6798 *Vitis vinifera* (Vitaceae); PU<sup>(2)</sup> TAO; European Grape.  
 T6267 *Syzygium jambos* (Myrtaceae); PU<sup>(3)</sup> TAO; Roseapple.  
 T2107 *Dendrobium nobile* (Orchidaceae); SHI HU<sup>(4)</sup>; Noble Dendrobium.  
 T2646 *Evodia rutaecarpa* var. *officinalis* (Rutaceae); SHI HU<sup>(3)</sup>; Official Evodia.  
 T1221 *Caryopteris divaricata* (Verbenaceae); YOU<sup>(2)</sup>; Divaricate Bluebeard.  
 T1478 *Citrus grandis* (Rutaceae); YOU<sup>(4)</sup>; Pummelo.

**Translation of TCM Effects Terms.** In the Volume 5 of the encyclopedia, 6,926 TCM Plant entries list in alphabetical order of *Latin names*, including 2,923 original TCM plants (including few of animals)<sup>[R01-R04]</sup> and 4,003 congeners (including a few of non-TCM medicinal plants). For each TCM plant, two most important features are traditional TCM effects and indications.

For preparing this encyclopedia, one of the greatest challenges is how to correctly translate each TCM term into correspondent English, so that Western readers are able to understand the true meaning of the content in the book. After comparing several translation systems, we decided to use Wiseman's terminological system<sup>[R05-R07]</sup> for this book.

Wiseman's system obeys two most important principles: (1). The English-language terms should be faithful to the original concepts in traditional Chinese medicine. (2). The English-language TCM terminology should be flexible enough to allow modifications and extensions so that derivative effects can be described by a structuralized manner. For instance, the term "quicken blood" describes a general effect meaning "activating blood flow" or "promoting blood circulation". Elaboration of this term produces "quicken blood and transform stasis", "quicken blood and relieve pain", "quicken blood and regulate menstruation", and so on. The following illustrations are an example of the structuralized expressions related to the term "quicken blood":

quicken blood and disinhibit water  
 quicken blood and dispel stasis  
 quicken blood and dispel wind  
 quicken blood and disperse swelling  
 quicken blood and disperse welling abscess  
 quicken blood and dissipate binds  
 quicken blood and dissipate stasis  
 quicken blood and free menstruation  
 quicken blood and free network vessels  
 quicken blood and free vessels  
 quicken blood and joint bones  
 quicken blood and move *qi*  
 quicken blood and move stasis  
 quicken blood and nourish heart  
 quicken blood and promote milk  
 quicken blood and quiet spirit  
 quicken blood and regulate menstruation  
 quicken blood and relieve pain  
 quicken blood and resolve toxin  
 quicken blood and settle pain  
 quicken blood and soothe sinews  
 quicken blood and stanch bleeding  
 quicken blood and strengthen sinews  
 quicken blood and transform stasis  
 quicken blood and vessels

**Translation of TCM Indications Terms.** Based on Wiseman's terminological system, "Chinese-English Dictionary of Traditional Chinese Medicine" compiled by Guangzhen Gao *et al.*<sup>[R08]</sup>, "An English-Chinese Medical Dictionary, Second Edition" compiled by Weiyi Chen *et al.*<sup>[R09]</sup>, and other reference dictionaries, we defined over 3,800 standard indication terms for translating TCM indications terms from Chinese to English. Among the 3,800 terms, 2,526 terms are actually used in the encyclopedia, in which 85% terms are traditional TCM terms and the rest 15% are common modern medicinal terms. Some typical examples of traditional TCM indication terms are as follows:

*yin* vacuity internal heat  
*yin* vacuity lung dryness  
*yin* vacuity tidal fever  
 chest impediment  
 chest impediment and heart pain  
 chest impediment and heart pain over back  
 chest oppression and pain  
 chest oppression with breathe hard  
 distention pain in rib-side  
 distention pain in stomach duct  
 distention pain in stomach duct and abdomen  
 externally contracted summer heat-damp  
 externally contracted wind evil  
 externally contracted wind-cold  
 externally contracted wind-heat  
 knocks and falls  
 sores  
 sores clove boil  
 swelling of sores and boils  
 sore scab and lichen  
 toxin swelling of sores

In summary, this encyclopedia provides a collection of more than 23,000 TCM chemical components isolated from natural resources and a large number of pharmacological activity data of these components. It may be used not only as a handbook to look for structures and pharmacological activities of TCM chemical components and source plant information, but also a fundamental platform for studying TCM with a systematic and integrative approach.

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- R30** J. G. Harris and M. W. Harris, (Yufei Wang, et al., translated) *Plant Identification Terminology: An Illustrated Glossary*, Spring Lake Publishing, Payson UT, 2001, Science Press, Beijing, 2001
- R31** Rensheng Xu, et al., *Chemistry of Natural Products*, Second Edition, Science Press, Beijing, 2004
- R32** Jingying Tan, *English-Chinese Biological Dictionary of Biochemistry and Molecular Biology*, Second Edition, Science Press, Beijing, 2007
- R33** Wenbao Chang, et al., *Dictionary of Chemistry*, Science Press, Beijing, 2008





# How to Use the Books

## 1. Three Kinds of “Many to Many” Relationships

To help readers effectively search and use of the books, authors strongly suggest readers being familiar with the structure of the encyclopedia and certain important linkers or pointers between different data sets.

Firstly, in order to avoid confusing cases, please keep in mind the following three features of the book:

(a) In the encyclopedia, all of pharmacological data belong to compounds, not to plants. In other words, the encyclopedia doesn't include plants' pharmacological data.

(b) All effect and indication terms belong to TCM plants, not to compounds. And almost all of effect terms as well as 85% indication terms are pure Chinese traditional concepts.

(c) In the encyclopedia, there are three kinds of “many to many” relationships: (i), compounds to plants, which is the most important relationship. (ii), pharmacological data to compounds in the molecular level only. (iii), plants to effects/indications in the species level.

Pharm. data ↔ Compound 1		Plant T0001 ↔ effects, indications
Pharm. data ↔ Compound 2		Plant T0002 ↔ effects, indications
Pharm. data ↔ Compound 3	↔	Plant T0003 ↔ effects, indications
.....		.....
Pharm. data ↔ Compound 23032		Plant T6925 ↔ effects, indications
Pharm. data ↔ Compound 23033		Plant T6926 ↔ effects, indications
(Molecular level)		(Species level)

### Sketch Map of Three Important “Many to Many” Relationships

## 2. Seven Useful Indexes

In Volume 6, there are seven indexes for data searching.

The indexes 1-3 are tools to search compounds from different starting-points:

**Index 1** (Compound Pharmacological Activity Index) links pharmacological terms

with related compound codes. For example, if there is a question as:

“Which compounds have *in vitro* cytotoxic activity against human breast cancer cells?”

From the index 1, the answer can easily be obtained as follows:

Cytotoxic, BC hmn breast cancer cells 24, 349, 526, 2244, 3416, 3429, 3708, 4775, 5095, 6759, 6759, 6759, 12453, 12454, 15494, 15495, 18515, 20671.

Cytotoxic, BC-1 hmn breast cancer cells 1277, 2260, 5064, 5327, 6759, 6759, 8220, 8221, 8222, 8235, 10250, 10297, 10511, 11353, 13489, 13490, 13491, 13492, 13493, 13494, 13495, 15919, 17008, 18866, 20809.

Cytotoxic, BCA-1 hmn breast cancer cells 6759, 13468, 13469, 13470, 15739.

Cytotoxic, Bcap37 hmn breast cancer cells 843, 11392, 13123, 16183, 17717, 18499.

Then, from compounds code numbers, one can get detailed data for each compound.

**Index 2** (Compound Molecular Formula Index) connects a molecular formula to its all isomers. For example, there are five isomers with formula  $C_{45}H_{76}O_{18}$ :

$C_{45}H_{76}O_{18}$

Abutiloside F, 40

Asp-IV, 1905

Asp-V, 1906

Trigoneoside IIIa, 21669

Trigoneoside IIIb, 21670

**Index 3** (Compound Synonym Index) is useful for searching a compound from a known name. A strong suggestion to readers is that when searching a compound from a known name, to search twice probably is necessary: firstly from entry title in the encyclopedia text and then from the index 3.

The indexes 4–7 are tools to search TCM plants:

**Index 4** (TCM Plant English Name Index) links a Plant English Name to other names of the plant, for example:

Chinese Angelica = T0495 *Angelica sinensis* = DANG GUI

Siberian Phlojodicarpus = T4804 *Phlojodicarpus sibiricus* = ZHANG GUO QIN

Dahurian Angelica = T0478 *Angelica dahurica* [Syn. *Angelica porphyrocaulis*] = BAI ZHI

Gigantic Angelica = T0483 *Angelica gigas* = CHAO XIAN DANG GUI

Narrowleaf Angelica = T0476 *Angelica anomala* = XIA YE DANG GUI

**Index 5** (TCM Plant PIN-YIN and Chinese Name Index) links PIN-YIN name to Latin name and/or English name, for example:

BAI HUA QIAN HU = T4768 *Peucedanum praeruptorum* = Whiteflower Hogfennel

BAI HUA SHE GAN = T3457 *Iris dichotoma* = Vesper Iris

BAI HUA SHE SHE CAO = T4485 *Oldenlandia diffusa* [Syn. *Hedyotis diffusa*] = Spreading Hedyitis

**Index 6** (TCM Plant Traditional Effects Index) and **Index 7** (TCM Plant Traditional Indications Index) connect specific effect and/or indication to related plants.

For example, to search all plants with effect “nourish heart and quiet spirit”, the result is:

**nourish heart and quiet spirit:**

T0944 *Biota orientalis* [Syn. *Thuja orientalis*; *Platyclusus orientalis*],  
 T1292 *Celastrus orbiculatus* [Syn. *Celastrus articulatus*],  
 T1381 *Choerospondias axillaris*,  
 T4194 *Menyanthes trifoliata*,  
 T4400 *Nelumbo nucifera*,  
 T4902 *Pimpinella thelungiana*,  
 T5108 *Polygonum multiflorum*,  
 T5497 *Rhodiola kirilowii*,  
 T5701 *Salvia yunnanensis*.

If searching all plants with indication “angina pectoris” (a modern medicinal term), “externally contracted wind-cold” (a TCM term), and “externally contracted wind-heat” (a TCM term), you will obtain the following results:

**angina pectoris:** T1215 *Carthamus tinctorius*, T1395 *Chrysanthemum morifolium* [Syn. *Dendranthema morifolium*], T1775 *Crataegus pinnatifida*, T1778 *Crataegus pinnatifida* var. *major*, T2274 *Dryobalanops aromatica*, T2389 *Epimedium acuminatum*, T2390 *Epimedium brevicornum*, T2392 *Epimedium davidii*, T2394 *Epimedium elongatum*, T2398 *Epimedium koreanum*, T2401 *Epimedium pubescens*, T2402 *Epimedium sagittatum*, T2404 *Epimedium sutchuenense*, T2406 *Epimedium wushanense*, T2846 *Ganoderma japonicum* [Syn. *Ganoderma sinense*], T2848 *Ganoderma lucidum*, T2964 *Ginkgo biloba*, T3388 *Ilex chinensis* [Syn. *Ilex purpurea*], T3396 *Ilex pubescens*, T3397 *Ilex pubescens* var. *glaber*, T3875 *Liriope spicata* var. *prolifera*, T3925 *Loranthus parasiticus* [Syn. *Loranthus chinensis*; *Taxillus chinensis*], T3926 *Loropetalum chinense*, T4303 *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*, T4507 *Ophiopogon japonicus*, T4608 *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*], T4953 *Piper longum*, T5312 *Pueraria edulis*, T5313 *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*], T5316 *Pueraria omeiensis*, T5318 *Pueraria phaseoloides*, T5320 *Pueraria thomsonii*, T5680 *Salvia miltiorrhiza*, T5681 *Salvia miltiorrhiza* f. *alba*, T5688 *Salvia przewalskii*, T6510 *Trichosanthes kirilowii*, T6513 *Trichosanthes rosthornii* [Syn. *Trichosanthes uniflora*], T6584 *Typha angustata*, T6585 *Typha angustifolia*, T6587 *Typha latifolia*.

**externally contracted wind-cold:** T4039 *Magnolia grandiflora*, T4445 *Notopterygium forbesii* [Syn. *Notopterygium franchetii*], T4446 *Notopterygium incisum*, T4956 *Piper mullesua*, T5727 *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*].

**externally contracted wind-heat:** T0480 *Angelica decursiva* [Syn. *Peucedanum decursivum*], T1395 *Chrysanthemum morifolium* [Syn. *Dendranthema morifolium*], T1933 *Cyclea sutchuenensis*, T2798 *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*], T3819 *Ligusticum brachylobum*, T4413 *Nepeta cataria*, T4761 *Peucedanum longshengens*, T4768 *Peucedanum praeruptorum*, T4769 *Peucedanum rubricaulis*, T6791 *Vitex rotundifolia* [Syn. *Vitex trifolia* var. *simplicifolia*], T6793 *Vitex trifolia*.

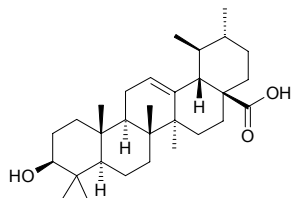
### 3. Data Survey Example of Compound Entry

At last, we would like to take Ursolic acid (compound code 22270 in the books) as a data survey example. Under this compound there are a quite number of data as follows:

**22270 Ursolic acid**

$\beta$ -Ursolic acid [77-52-1] C<sub>30</sub>H<sub>48</sub>O<sub>3</sub> (456.72).

White solid powder (chloroform–methanol), mp 298~294°C, 265~267°C.

**Pharm: (27 items)**

- Cytotoxic** (KB, ED<sub>50</sub> > 25μg/mL, control Doxorubicin, ED<sub>50</sub> = 0.12μg/mL; Hep3B, ED<sub>50</sub> > 25μg/mL, control Doxorubicin, ED<sub>50</sub> = 0.14μg/mL; Colon205, ED<sub>50</sub> > 25μg/mL, control Doxorubicin, ED<sub>50</sub> = 0.10μg/mL; HeLa, ED<sub>50</sub> > 25μg/mL, control Doxorubicin, ED<sub>50</sub> = 0.11μg/mL)<sup>[4369]</sup>;
- cytotoxic** (*in vitro*, HONE-1 cell, IC<sub>50</sub> = (8.8±1.5)μmol/L, control Etoposide, IC<sub>50</sub> = (0.5±0.2)μmol/L, *cis*-Platin, IC<sub>50</sub> = (3.2±0.5)μmol/L; KB cell, IC<sub>50</sub> = (8.2±2.7)μmol/L, Etoposide, IC<sub>50</sub> = (0.9±0.3)μmol/L, *cis*-Platin, IC<sub>50</sub> = (4.4±0.9)μmol/L; HT29 cell, IC<sub>50</sub> = (4.7±1.5)μmol/L, Etoposide, IC<sub>50</sub> = (2.4±0.5)μmol/L, *cis*-Platin, IC<sub>50</sub> = (5.7±1.1)μmol/L)<sup>[5254]</sup>;
- antineoplastic** (liver cancer cells *in vitro*, mus ascites carcinoma *in vivo*, life was prolonged);
- antibacterial** (*Escherichia coli*, IZD = 13~15mm, control Chloramphenicol, IZD = 16~20mm, control DMSO (4%), IZD < 10mm; *Staphylococcus aureus*, IZD = 10~12mm, control Chloramphenicol, IZD = 16~20mm, control DMSO (4%), IZD < 10mm; *Bacillus subtilis*, IZD = 13~15mm; control Chloramphenicol, IZD = 16~20mm, control DMSO (4%), IZD < 10mm)<sup>[5315]</sup>;
- antibacterial** (*Staphylococcus* spp. *in vitro*, MIC = 300μg/mL, gram-positive bacteria *in vitro*, MIC = 50~400μg/mL, gram-negative bacteria *in vitro*, MIC = 200~800μg/mL, microzyme *in vitro*, MIC = 100~700μg/mL);
- antitubercular** (*Mycobacterium tuberculosis*, MIC = 41.9μg/mL, cytotoxic, Vero cells, IC<sub>50</sub> = 46.5μg/mL, SI (IC<sub>50</sub>/MIC) = 1.11, positive control Rifampin, MIC = 0.03μg/mL, IC<sub>50</sub> = 98.3μg/mL, SI = 3277)<sup>[4986]</sup>;
- anticonvulsant** (induced by corazol);
- anti-inflammatory** (rat, induced by embedding woolball, 12.5mg/(kg·d) ip, 7 days, effective);
- anti-inflammatory** (*in vitro*, murine macrophage RAW264.7 Cells, inhibits LPS-induced NO and PGE<sub>2</sub> release)<sup>[5016]</sup>;
- COX-2 enzyme selective inhibitor** (mean IC<sub>50</sub> of isomers = 130μmol/L)<sup>[4415]</sup>;
- COX-2 enzyme inhibitor** (PMA-treated hmn mammary and oral epithelial cells, molecular mechanisms is mediated by a cAMP response element in the COX-2 promoter, associated with inhibition of protein kinases)<sup>[4415]</sup>;
- antipyretic** (clearly reduces normal body temperature of rat);
- reduces serum transaminase** (animal, 100mg/kg);
- antitrypanosomal** (epimastigotes of *Trypanosoma cruzi*, MLC = 6.2μmol/L, control Gentian violet, MLC = 6.2μmol/L)<sup>[2579]</sup>;
- mucin release stimulator** (acts directly on airway mucin-secreting cells, increased mucin release (40~50)% above control at the highest concentrations 0.00001~0.001mol/L, possible use to treatment of chronic airway diseases)<sup>[4084]</sup>;
- platelet aggregation inhibitor** (2~5mg/mL collagen-induced, IC<sub>50</sub> = (511±4)μmol/L, control ASA, IC<sub>50</sub> = (420±3)μmol/L; 1~4μmol/L epinephrine-induced with 0.8~1.0mg/mL collagen, IC<sub>50</sub> = (82.6±2.8)μmol/L, ASA, IC<sub>50</sub> = (53.0±4.5)μmol/L; 10~40μmol/L Sodium arachidonate-induced with 0.8~1.0mg/mL collagen, IC<sub>50</sub> =

(669±12)μmol/L, ASA, IC<sub>50</sub> = (66.0±2.1)μmol/L; 1~5μmol/L PGH<sub>2</sub>/TXA<sub>2</sub> receptor agonist U46619-induced with 0.8~1.0mg/mL collagen, IC<sub>50</sub> > 1000μmol/L, ASA, IC<sub>50</sub> = (340±12)μmol/L)<sup>[4994]</sup>;

**tissue factor inhibitor inactive**<sup>[5387]</sup>;

**antirheumatic**<sup>[5341]</sup>;

**anti-diabetic**<sup>[5341]</sup>;

**antiulcer**<sup>[5341]</sup>;

**hypolipidemic**<sup>[5341]</sup>;

**anti-atherosclerotic**<sup>[5341]</sup>;

**anti-HIV**<sup>[5341]</sup>;

**TGF-β1 antagonist** (inhibits the binding of <sup>125</sup>I-TGF-β1 to its receptor in Balb/c 3T3 cell, IC<sub>50</sub> = (6.9±0.8)μmol/L, suggests TGF-β1 antagonistic activity is responsible, at least in part, for therapeutic efficacy of *Clerodendranthus spicatus* to treat humans with renal disease)<sup>[5496]</sup>;

**glucocorticoid** (enhances glycogen in liver, reduces glycogen in heart and striated muscles);

**LD<sub>50</sub>** (mus, ip) = 680mg/kg.

### Sources: (52 species)

BAI HUA SHE SHE CAO *Oldenlandia diffusa* [Syn. *Hedyotis diffusa*] (whole herb: mean content of 16 origins = 0.211%)<sup>[5508]</sup>;

BI LU GOU TENG *Uncaria tomentosa*,

CHE QIAN *Plantago asiatica* (whole herb: content scope = 0.28%~2.32%, mean content = 0.97%)<sup>[5508]</sup>;

CHI NAN *Syzygium buxifolium*,

CHONG YA YAO *Isodon ternifolius*,

CI WU JIA YE *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*],

DA CHE QIAN *Plantago major*,

DA ZAO *Ziziphus jujuba* (ripe fruit: mean content = 0.016%)<sup>[5508]</sup>,

DAN SHEN *Salvia miltiorrhiza*,

DIAN NAN HONG HOU KE *Calophyllum polyanthum* (seed: yield = 0.0064%dw),

DONG LING CAO *Rabdosia rubescens* (whole herb: mean content = 0.414%)<sup>[5508]</sup>; leaf: mean content = 0.573%)<sup>[5508]</sup>;

DU ZHONG *Eucommia ulmoides*,

DUAN TING SHAN MAI DONG *Liriope muscari* (tuber),

GOU GU YE *Ilex cornuta* (leaf: mean content = 0.96%)<sup>[5508]</sup>,

GUANG JING QIAN CAO *Rubia wallichiana* (stem),

HONG HUA LU TI CAO *Pyrola incarnata* (whole herb: content = 2.06%)<sup>[5508]</sup>,

HU BEI SHAN ZHA *Crataegus hupehensis* (dried ripe fruit: mean content = 0.455%),

JIAN YE TOU WU GEN *Ligularia sagitta*,

LIAN QIAN CAO *Glechoma lungituba*,

LIAN QIAO *Forsythia suspensa*,

LIU QIU SHE GEN CAO *Ophiorrhiza liukiensis* (whole herb),

MA BIAN CAO *Verbena officinalis* (whole herb: mean content of 5 batch samples = 0.227%)<sup>[5508]</sup>,

MAO CAO LONG *Ludwigia octovalvis* (whole herb: yield = 0.00012%dw),

MAO PAO TONG *Paulownia tomentosa*,

MAO XU CAO *Clerodendranthus spicatus*,

MU GUA *Chaenomeles sinensis*,

NV ZHEN ZI *Ligustrum lucidum*,

PI PA YE *Eriobotrya japonica* (dried leaf: mean content = 0.677%)<sup>[5508]</sup>,

PI PA YE *Eriobotrya japonica* (stem and leaf),

PING CHE QIAN *Plantago depressa* (whole herb: mean content = 0.276%)<sup>[5508]</sup>,

RI BEN LU TI CAO *Pyrola japonica*,

RONG SHU *Ficus microcarpa* (aerial root),  
 SHAN DI XIANG CHA CAI *Isodon oresbia*,  
 SHAN LI HONG *Crataegus pinnatifida* var. *major*,  
 SHAN ZHA *Crataegus pinnatifida* (fruit: content scope = 0.31%~0.56%)<sup>[5501]</sup>,  
 SHAN ZHU YU *Cornus officinalis* [Syn. *Macrocarpium officinale*] (dried ripe fruit: content  
 scope = 0.24%~0.32%)<sup>[5501]</sup>, mean content = 0.263%)<sup>[5508]</sup>,  
 SHI NAN *Photinia serrulata* (leaf: mean content = 1.50%)<sup>[5508]</sup>,  
 SHI SHENG BIAN LEI *Gentianopsis paludosa*,  
 SHI YE *Diospyros kaki* (dried leaf: mean content = 0.784%)<sup>[5508]</sup>,  
 SHU HUA JIE CAO *Valeriana laxiflora* (aerial parts and root),  
 SUAN ZAO *Ziziphus jujuba* var. *spinosa* (ripe fruit: content = 0.030%)<sup>[5508]</sup>,  
 SUO YANG *Cynomorium songaricum* (fleshy stem: content = 0.78%)<sup>[5508]</sup>,  
 WEI LING CAI *Potentilla chinensis*,  
 WU GENG WU JIA PI *Acanthopanax sessiliflorus* (fruit),  
 XIA KU CAO *Prunella vulgaris* (dried spike: content = 0.780%)<sup>[5508]</sup>,  
 YANG MEI SHU PI *Myrica rubra* (bark: content = 0.027%),  
 YE SHAN ZHA *Crataegus cuneata* (dried ripe fruit: mean content of 3 origins =  
 0.399%)<sup>[5508]</sup>,  
 YI LANG QING LAN *Dracocephalum kotschyi*,  
 ZHI ZI *Gardenia jasminoides* [Syn. *Gardenia florida*] (dried ripe fruit: mean content =  
 0.041%)<sup>[5508]</sup>,  
 ZHOU YE LU TI CAO *Pyrola rugosa* (whole herb: content = 3.00%)<sup>[5508]</sup>,  
*Cussonia bancoensis*,  
 Occurs in many plants.

**Ref:** 4, 367, 428, 454, 501, 592, 595, 600, 658, 660, 2579, 3005, 3061, 4084, 4163, 4369,  
 4415, 4527, 4767, 4772, 4986, 4994, 5016, 5254, 5315, 5382, 5387, 5341, 5496, 5501,  
 5508.

# Abbreviations and Symbols

12(S)-HETE	12(S)-Hydroxy-5,8,10,14-EicosaTetraEnoic acid	cAMP-PDE	cAMP-phosphodiesterase
<sup>125</sup> I-TGF- $\beta$ 1	<sup>125</sup> I-Transforming Growth Factor- $\beta$ 1	CAPE	Caffeic Acid Phenethyl Ester
5-FU	5-FluoroUracil	CB	cytochalasin B
5-HT	5-HydroxyTryptamine (serotonin)	CC	macrophage inflammatory protein (MIP-1 $\beta$ ), monocyte chemotactic protein (MCP-2), and C lymphotactin (Itn) (a chemokine family)
95%FL (=CI <sub>95</sub> )	95% Fiducial Limits (=95% Confidence Interval)	CC <sub>0</sub>	Minimum cytotoxic concentration
AA	Arachidonic Acid	CC <sub>50</sub>	IC <sub>50</sub> of cytotoxicity (concentration of the 50% cytotoxic effect)
AAPH	2,2'-Azo-bis-(2-AmidinoPropane)-diHydrochloride	CCR1	chemokine receptor 1
ABTS <sup>+</sup>	2,2'-Azino-Bis-(3-ethylbenzThiazoline 6-Sulphonic acid), radical	CD	concentration required to double enzyme (induction) activity
ACAT	Acyl-CoA Cholesterol acyltransferase	CD	Concentration required to double quinone reductase (induction) activity
ACE	Angiotensin Converting Enzyme	CD <sub>50</sub>	medium Convulsive Dose
Ach	Acetylcholine	cGMP	cyclic guanosine monophosphate
AChE	Acetylcholinesterase	cGMP-PDE	cGMP-phosphodiesterase
ACTH	AdrenoCorticoTropic Hormone	CGN	<i>cis</i> -Golgi network
AD	Alzheimer's disease	CGRP	Calcitonin gene-related peptide
ADM	adriamycin	CHO	Chinese hamster ovarian
ADP	adenosine diphosphate	CI	Chemopreventive index (=IC <sub>50</sub> /CD)
AG	aminoguanidine	CI <sub>95</sub> (=95%FL)	95% Confidence Interval (=95% Fiducial Limits)
AggRt	aggregation rate	CIC	complete inhibiting concentration
AIDS	acquired immunodeficiency syndrome	CIMC	complete inhibiting minimum concentration
ALS	amyotrophic lateral sclerosis	CINC-1	cytokine-induced neutrophil chemoattractant 1
ALT	alanine aminotransferase	CMV	Cytomegalovirus
AMP	adenosine monophosphate	CNQX	6-Cyano-7-nitroquinoxaline-2,3-dione (non-NMDA receptor antagonist)
AMV	avian myeloblastosis virus	CNS	central nervous system
AP	angina pectoris	ConA	concanavalin A
AP-1	activator protein-1	COX	cyclooxygenase
APN	Aminopeptidase N	COX-1	cyclooxygenase-1
APV	<i>dl</i> -2-Amino-5-phosphonovaleric acid (a competitive antagonist of the NMDA receptor)	COX-2	cyclooxygenase-2
aq.	aqueous solution	CPT	camptothecin
ASA	AcetylSalicylic Acid	CRF	corticotrophin releasing factor
AST	aspartate transaminase; aspartate aminotransferase	CRH-1	corticotrophin releasing hormone-1
AT-III	Antithrombase-III	CRP	C-reactive protein
ATPase	Adenosine triphosphatase	CV-3988	<i>rac</i> -3-( <i>N</i> -octadecylcarbomoyloxy)-2-methoxypropyl 2-thiazoliethyl phosphate
AZT	3'-azido-3'-deoxythymidine	CVS	cardiac vascular system
BACE1	$\beta$ -Secretase	CXC	Stromal cell-derived factor (SDF)-1 $\alpha$ and IL-8 (a chemokine)
BChE	Butyrylcholinesterase	CYP1A	Cytochrome P450 1A
bFGF	basic Fibroblast Growth Factor	CYP2D6	Cytochrome P450 2D6
BHA	Butylated HydroxyAnisole; 3- <i>tert</i> -Butyl-4-HydroxyAnisole	CYP3A4	Cytochrome P450 3A4
BHT	Butylated HydroxyToluene	d	day
bid	bis in die (Latin)	DCFH	2',7'-dichlorodihydrofluorescein dye
BLM	bleomycin	DDDP	DNA-dependent DNA polymerase
bp	boiling point	dec	decomposition
BST	Brine Shrimp lethality bioassay = Brine Shrimp Test	D-GalN	D-galactosamine
c	concentration		
C5a	complement 5a		
cAMP	cyclic adenosine monophosphate		

DGAT	Diacylglycerol acyltransferase	GSH	Glutathione; <i>N</i> -( <i>N</i> - <i>L</i> - $\gamma$ -Glutamyl- <i>L</i> -cysteinyl)glycine
dil.	dilute	GTP	Guanosine TriPhosphate
DIZ	Diameter of Inhibitory Zone	GVHR	Graft-Versus-HostReaction
DMBA	9,10-dimethyl-1,2-benzanthracene (carcinogen); 7,12-dimethylbenz[a]anthracene (carcinogen)	h	hour
DMDP	(2 <i>R</i> ,3 <i>R</i> ,4 <i>R</i> ,5 <i>R</i> )-2,5-DihydroxyMethyl-3,4-Dihydroxy-Pyrrolidine	HAD	hmn immunodeficiency virus associated dementia
DMSO	DiMethyl SulphOxide	HBeAg	hmn type B Hepatitis, e Antigen
DNA	deoxyribonucleic acid	HBsAg	hmn type B Hepatitis, Surface Antigen
DNJ	1-Deoxynojirimucin (one kind of polyhydroxy alkaloid, glucosidase inhibitor)	HBV	Hepatitis B Virus
DOX	doxorubicin	HC <sub>50</sub>	medium Hemolytic Concentration
DPI	Diphenyleneiodonium	HCoV-229E	hmn coronavirus strain 229E
DPPH	1,1-DiPhenyl-2-PicrylHydrazyl free radical	HD	Huntington's disease
DS8000	Dextran sulphate, prepared from average Mr 8000	HER rat	Hypertensive Essential Rat
DSCG	DiSodium ChromoGlycate (anti-allergic agent)	HIV	hmn immunodeficiency virus
dw	dried weight	HIV-1	hmn immunodeficiency virus type 1
E.A.	Enzyme Activity	HIV-1 IN	hmn immunodeficiency virus type 1 integrase
EBV-EA	Epstein-Barr Virus Early Antigen	HIV-1 RT	hmn immunodeficiency virus type 1 reverse transcriptase
EC	Effective Concentration	HIV-RT	hmn immunodeficiency virus reverse transcriptase
EC <sub>50</sub>	medium Effective Concentration	hmn	human
ED	Effective Dose	HSV-1	herpes simplex virus 1
ED <sub>25</sub>	Effective Dose for 25%	HSV-2	herpes simplex virus 2
ED <sub>50</sub>	medium Effective Dose (in some cases for the medium Effective Concentration)	HVA	homovanillic acid
EGCG (EGCg)	(-)-Epigallocatechin gallate	hydroxyl radical	OH <sup>•</sup>
EGF	Epidermal Growth Factor (it protects MPP <sup>+</sup> -induced cell death)	ia	intra-arterial injection
EGFR	Epidermal Growth Factor Receptor	IAA	indole-3-acetic acid
ELAM-1	Endothelial-Leukocyte Adhesion Molecule-1	IC	Inhibiting Concentration
ELISA	Enzyme-Linked ImmunoSorbent Assay	IC <sub>50</sub>	median Inhibiting Concentration
eotaxin	eosinophilous cytotoxin	IC <sub>100</sub>	Absolute Inhibiting Concentration
ERK	Extracellular signal-Regulated Kinase	ICAM-1	Intercellular Cell Adhesion Molecule-1
ET	experimental times	ICR	Imprinting Control Region mouse
FAG	Fagomine (one kind of polyhydroxy alkaloid, glucosidase inhibitor)	id	intradermal injection
FCA	Freund's complete adjuvant	ID	Inhibiting Dose
FI	Feeding Index (= ((C-T)/(C+T)×100)	ID <sub>50</sub>	Median Inhibiting Dose
Flu-A	influenza virus type A	IFN	interferon
fMLP	<i>N</i> -formyl- <i>L</i> -Methionyl- <i>L</i> -Leucyl- <i>L</i> -Phenylalanine	IFN- $\gamma$	Interferon- $\gamma$
fp	freezing point	IgE	Immunoglobulin E
FR <sub>50</sub>	Feeding ratio when the consumed area of control disc (CCD) is 50% [FR = CTD(consumed area of treated disc)/CCD]	IgG	Immunoglobulin G
fw	fresh weight	IL	interleukin
G6PD	Glucose-6-Phosphate Dehydrogenase	IL-1	Interleukin-1
GABA	$\gamma$ -aminobutyric acid	IL-1 $\alpha$	interleukin-1 $\alpha$
GaIN	galactosamine	IL-1 $\beta$	interleukin-1 $\beta$
GI	growth inhibition	IL-2	Interleukin-2
GI <sub>50</sub>	the concentration of sample necessary to inhibit the growth to 50% of the control	IL-4	Interleukin-4
Glu	glutamate	IL-6	Interleukin-6
GOT	Glutamate-Oxaloacetate Transaminase	IL-8	Interleukin-8
Gp	Gastro protective effect	IL-10	Interleukin-10
gpg	guinea pig	IL-12	Interleukin-12
GPT	GlutamicPyruvic Transaminase	im	intramuscular injection
GRO	Growth-Related Oncogene	<i>in vitro</i>	<i>in vitro</i>
		<i>in vivo</i>	<i>in vivo</i>
		Indo	indomethacin
		iNOS	inducible Nitric Oxide Synthase
		InRt	inhibitive rate
		ip	intraperitoneal injection



i.t.	intrathecal injection	MMP	Matrix MetalloProteinases
iv	intravenous injection	MMP-2	Matrix MetalloProteinase-2
IZA	Inhibition Zone Area (mm <sup>2</sup> )	mp	melting point
IZD	Inhibition Zone Diameter (mm)	mPGES	microsomal ProstaGlandin E Synthase
J774.A1	murine monocyte/macrophage cell J774.A1	MPP+	1-methyl-4-phenylpyridinium ion (neurotoxin)
JNK	c-Jun NH <sub>2</sub> -terminal kinase	MRSA	Methicillin-Resistant <i>Staphylococcus aureus</i>
KD <sub>50</sub>	Dose required to Knock down 50% of the population of insects	MSSA	Methicillin-Sensitive <i>Staphylococcus aureus</i>
LC <sub>50</sub>	concentration at which only 50% of the cell are viable	MTC	Minimal Toxic Concentration
LC <sub>50</sub>	concentration of inhibiting luminous intensity 50%	MTT	A Cytotoxicity measurement method (tetrazolium-based colorimetric assay used for cytotoxicity bioassay, see Rubinstein L. V., et al., <i>Nat. Cancer Inst.</i> , 82, 1113-1118, 1990)
LCIC	Lowest Complete Inhibition Concentration	mus	mouse
LD	Lethal Dose	<i>n</i>	number of parallel experiments
LD <sub>100</sub>	100% Lethal Dose	nAChR	neuronal nicotinic AcetylCholine Receptor
LD <sub>50</sub>	medium Lethal Dose	NADH	reduced nicotinamide adenine dinucleotide
LDH	lactate dehydrogenase	NADPH	cytochrome C reductase
LDL	Low Density Lipoprotein	NCCLS	A standard antibacterial activity test method (see Wayne P. A., "National Committee for Clinical Laboratory Standards Performance Standards for Antimicrobial Disk Susceptibility Tests," 6th ed., Approved standards M2-A6. NCCLS, 1997)
L-NA	N <sup>o</sup> -L-nitroarginine	NDGA	Nordihydroguaiaretic acid
L-NMMA	N <sup>G</sup> -monomethyl-L-arginine	NEP	Neutral EndoPeptidase
LOX	Lipoxygenase	NF	Nuclear Factor
LPO	lipid peroxidation	NF-κB	Nuclear Factor κB
LPS	lipopolysaccharide	NFAT	Nuclear Factor of Activated T cell
LTB <sub>4</sub>	Leukotriene B <sub>4</sub>	NGF	Nerve Growth Factor
LTC <sub>4</sub>	Leukotriene C <sub>4</sub>	NMDA	N-methyl-D-aspartate
LTD <sub>4</sub>	Leukotriene D <sub>4</sub>	NO	nitric oxide
MA	maytenfolic acid	non-oral	paraoral
MA	maslinic acid	NOR1	(+/-)-(E)-4-methyl-2-[(E)-hydroxyimino]-5-nitro-6-methoxy-3-hexenamid
MA	minimal amount	NOS-2	Nitric oxide synthase type-2
MABA	Microplate Alamar Blue Assay	OCIF	OsteoClastogenesis-Inhibitory Factor
MAC-1	integrin MAC-1	oral	oral
MAO-A	Monoamine oxidase A	OVA	ovalbumin
MAO-B	Monoamine oxidase B	oxazolone	oxazolone
MAPK	Mitogen-Activated Protein Kinase	OZ	opsonized zymosan
MCC	Minimum Cytocidal Concentration	P450	Cytochrome P450
MCP	Monocyte Chemotactic Protein	PAF	Platelet Activating Factor
MCTHBE	Minimum Concentration for Total Haemolysis of Bovine Erythrocytes (µg/mL)	PAF	Platelet Aggregation Factor
MDA	Methylene Dihydroxy Amphetamine	PAI-1	Plasminogen Activator Inhibitor type 1
MDA	Malondialdehyde	Para-3 (=PIV3)	Parainfluenza type 3 virus
MDR	MultiDrug Resistance	PBMC	hmN Peripheral Blood Mononuclear Cell
MED	Minimal Effective Dose	PCA reaction	Passive Cutaneous Anaphylaxis reaction
MFC	Minimal Fungicidal Concentration	PD	Parkinson's Disease
MIA	Minimal Inhibitory Amounts (µg/disc)	PD	a cytotoxic model
MIC	Minimum Inhibitory Concentration	pD2 (=pEC <sub>50</sub> )	negative logarithm (-logM) of the concentration required to produce 50% of the maximum response (EC <sub>50</sub> )
MIC <sub>80</sub>	Minimal Inhibitive Concentration for 80%	PDE	phosphodiesterase
MIC <sub>90</sub>	Minimal Inhibitive Concentration for 90%	PDTC	pyrrolidine dithiocarbamate
min	minute	PEBP2αA	polyoma enhancer binding protein 2αA
MIP-1α/β	macrophage inflammatory protein	pEC <sub>50</sub>	negative logarithm (-logM) of the concentration required to produce 50% of the maximum response (EC <sub>50</sub> )
MIQ	Minimum inhibitory quantity (µg)		
MK-801	dizocipline maleate (a non-competitive antagonist of the NMDA receptor)		
MLC	Minimum Lethal Concentration		
MLD	Minimum Lethal Dose		
MMDC	Minimal Morphological Deformation Concentration		
MMOC	Mouse Mammary Organ Culture model		

PEG	PolyEthylene Glycol	Singlet oxygen	$^1\text{O}_2$
PEP	Prolyl endopeptidase (a serine protease)	SIZ	sulfisoxazole
pet. ether	petroleum ether	SNP	sodium nitroprusside
PFTase	farnesylprenyltransferase	SOD	Superoxide dismutase
PGD <sub>2</sub>	prostaglandin D <sub>2</sub>	sp.	species
PGE <sub>2</sub>	prostaglandin E <sub>2</sub>	SP-A	pulmonary surfactant Protein A
PGF <sub>2<math>\alpha</math></sub>	prostaglandin F <sub>2<math>\alpha</math></sub>	spp.	species (plural)
PGH <sub>2</sub>	prostaglandin H <sub>2</sub>	SRSA	Slow-Reacting Substance of Anaphylaxis
PGI <sub>2</sub>	prostacyclin (prostaglandin I <sub>2</sub> )	StRt	Stimulatory Rate
PHA	phytohemagglutinin	STZ	streptozotocin
Phe	Phenylephrine	superoxide anion	$\text{O}_2^{\bullet-}$
pIC <sub>50</sub>	negative logarithm (-logM) of IC <sub>50</sub>	SuRt	survival rate
PK	protein kinase	Syn.(= ‡)	Synonym
PKC	protein kinase C	T/C	survival ratio
PLA <sub>2</sub>	phospholipase A <sub>2</sub>	TACE	$\alpha$ -Secretase (a serine protease)
PMA (=TPA)	Phorbol-12-Myristate-13-Acetate	TBARS	ThioBarbituric Acid Reactive Substance assay
PMNs	polymorphonuclear cell	TC <sub>50</sub>	50% cytoToxic Concentration
pNPPase	<i>p</i> -nitrophenylphosphate enzyme	TCM	Traditional Chinese Medicines
POA	pentacyclic oxindole alkaloids	TFP	Trifluoperazine (calmodulin antagonist)
PPase1	Protein serine/threonine Phosphatase	TGF- $\beta_1$	Transforming Growth Factor- $\beta_1$
PRA	Plaque Reduction Assay	TGI	Total Growth Inhibition, concentration at which no growth was observed
PTH	parathyroid hormone	TI	Therapeutic Index (=IC <sub>50</sub> /EC <sub>50</sub> )
PTN	parthenolide	TNF- $\alpha$	Tumor Necrosis Factor- $\alpha$
PTP1B	Protein Tyrosine Phosphatase 1B	TOA	tetracyclic oxindole alkaloids
QR	quinone reductase	topo II	DNA topoisomerase II
RA	rheumatoid arthritis	TP	Thymidine phosphorylase
Raji	EBV-transformed B cell line	tPA	tissue Plasminogen Activator
rat	white rat	TPA (=PMA)	12- <i>O</i> -tetradecanoyl phorbol 13-acetate
rbt	rabbit	TrkA	proto-oncogene TrkA
RDDP	RNA-dependent DNA polymerase	TXA <sub>2</sub>	thromboxane A <sub>2</sub>
RDS	Respiratory Distress Syndrome	TXB <sub>2</sub>	thromboxane B <sub>2</sub>
rel-InRt	relative inhibitive rate (taking the control compound as 100%)	UDP-MurNac	UDP- <i>N</i> -acetylmuramic acid
RM	Relative Mobility	VCAM-1	Vascular Cell Adhesion Molecule-1
RNA	ribonucleic acid	VCR	vincristine
RNase H	inherent ribonuclease H	VEGF	Vascular Endothelial Growth Factor
ROS	reactive oxygen species (they are involved in the genesis of various cancers, arteriosclerosis, rheumatism and ageing)	Veraguensin	veraguensin
RSV	Respiratory Syncytial Virus	VHR DS-PTPase	VHR Dual-Specificity Protein Tyrosine Phosphatase
RT	Reverse Transcriptase	VHR protein	Vaccina open reading-frame H1-Related protein phosphatase
RT-PCR	reverse-transcribed polymerase chain reaction	VP-16	A positive control for cytotoxic assay (Sigma product)
sALT	serum alanine transaminase	VRE	Vancomycin-Resistant <i>Enterococci</i> sp
sAST	serum aspartate transaminase	VSE	Vancomycin-Sensitive <i>Enterococci</i> sp
sc	subcutaneous injection	VSV	Vesicular Stomatitis Virus
SC <sub>50</sub>	Half-maximal radical Scavenging Concentration	ww	wet weight
SC <sub>50</sub>	50% Scavenging Concentration	XTT	sodium 3'-[1-(phenylaminocarbonyl)-3,4-tetrazolium] bis(4-methoxy-6-nitrobenzene)sulfonic acid
ScRt	scavenging rate	†	homonym mark
SDF	Stromal cell-Derived Factor	‡ (=Syn.)	synonym mark
SGOT	serum Glutamic Oxalacetic Transaminase	*	the name is given by the authors of the books
SGPT	serum Glutamic Pyruvic Transaminase		
SHR rat	Spontaneously Hypertensive Rats		
SI	Selective index = cytotoxic CC <sub>50</sub> /target EC <sub>50</sub>		
SI	Selective index = cytotoxic IC <sub>50</sub> /target IC <sub>50</sub>		
SI	Selective index = cytotoxic IC <sub>50</sub> /target MIC		

# Cancer Cell Codes

This set of codes for 270 cancer cells, named as **CCC code**, are defined and tried out in the books for the first time by the authors.

<b>1A9</b>	hmn ovarian cancer (cell).	<b>CaEs-17</b>	hmn esophageal cancer (cell).
<b>212</b>	inducible <i>Ha-ras</i> oncogene transformed from the NIH/3T3 cell line.	<b>CAKI</b>	hmn renal cancer (cell).
<b>308</b>	cultured mouse epidermal cells.	<b>CAKI-1</b>	hmn renal cancer (cell).
<b>3LL</b>	mus Lewis lung cancer (cell).	<b>Calu1</b>	hmn lung cancer (cell).
<b>3PS</b>	mouse leukemia (cell).	<b>Capan1</b>	pancreas cancer (cell).
<b>780-6</b>	renal cancer (cell).	<b>Capan2</b>	pancreas cancer (cell).
<b>9KB</b>	hmn epidermoid nasopharyngeal carcinoma (cell).	<b>CaSki</b>	hmn cervical carcinoma (cell).
<b>9L</b>	rat glioma (cell).	<b>CEM</b>	leukemia (cell).
<b>9PS</b>	mouse lymphocytic leukemia (cell).	<b>CHAGO</b>	hmn undifferentiated lung cancer (cell).
<b>A2780</b>	hmn ovarian cancer (cell).	<b>CNE</b>	hmn nasopharyngeal carcinoma (cell).
<b>A375</b>	hmn melanoma (cell).	<b>Col1</b>	hmn colorectal cancer (cell).
<b>A431</b>	hmn epidermic cancer (cell).	<b>Col2</b>	hmn colorectal cancer (cell).
<b>A498</b>	hmn renal cancer (cell).	<b>COLO320DM</b>	hmn colorectal cancer (cell).
<b>A549</b>	hmn non-small cell lung cancer (cell).	<b>Colon205</b>	colorectal cancer (cell).
<b>ACHN</b>	hmn renal cancer (cell).	<b>Colon26-L5</b>	mus colorectal cancer (cell).
<b>AGS</b>	gastric adenocarcinoma (cell).	<b>COS-7</b>	monkey kidney cells.
<b>APM1840</b>	hmn leukemia (cell).	<b>CPAE</b>	calf pulmonary arterial endothelial cells.
<b>B16</b>	mouse melanoma (cell).	<b>CT-26</b>	mus colorectal cancer (cell).
<b>B16(F-10)</b>	mouse melanoma (cell).	<b>CTV1</b>	hmn leukemia (cell).
<b>BAEC</b>	bovine aortic endothelial cells.	<b>CXF94L</b>	hmn tumor (cell).
<b>BC</b>	hmn breast cancer (cell).	<b>DLD</b>	hmn colorectal adenocarcinoma (cell).
<b>BC-1</b>	hmn breast cancer (cell).	<b>DLD-1</b>	hmn colorectal adenocarcinoma (cell).
<b>BCA-1</b>	hmn breast cancer (cell).	<b>DMS114</b>	hmn lung cancer (cell).
<b>Bcap37</b>	hmn breast cancer (cell).	<b>DMS273</b>	hmn lung cancer (cell).
<b>Bel7402</b>	hmn liver cancer (cell).	<b>DU145</b>	prostatic cancer (cell).
<b>Bel7405</b>	hmn liver cancer (cell).	<b>EAC</b>	Ehrlich ascites cancer (cell).
<b>BGC823</b>	hmn gastric cancer (cell).	<b>EJ-1</b>	hmn bladder cancer (cell).
<b>BIU87</b>	bladder cancer (cell).	<b>FM3A</b>	mus breast cancer (cell).
<b>BL6</b>	mouse melanoma (cell).	<b>H.Ep.-2</b>	hmn cutis cancer cells in throat.
<b>Bowes</b>	skin cancer cells.	<b>H116</b>	hmn colorectal cancer (cell).
<b>Bre04</b>	hmn breast cancer (cell).	<b>H9</b>	lymphocytes.
<b>BSY1</b>	breast cancer (cell).	<b>HBC4</b>	breast cancer (cell).
<b>BT474</b>	hmn galactophore cancer (cell).	<b>HBC5</b>	breast cancer (cell).
<b>BT549</b>	hmn galactophore cancer (cell).	<b>HCC2998</b>	hmn colorectal cancer (cell).
<b>BXPC3</b>	pancreas cancer (cell).	<b>HCT</b>	hmn colorectal cancer (cell).
<b>C6</b>	rat glioma (cell).	<b>HCT116</b>	hmn colorectal cancer (cell).
<b>CA</b>	hmn liver cancer (cell).	<b>HCT15</b>	hmn colorectal cancer (cell).

**HCT8** hmn colorectal cancer (cell).  
**HEK-293** hmn epithelial kidney cell.  
**HEL** hmn embryonic lung fibrocytes.  
**HeLa** culture cervical epithelial cancer (cell) from Henrietta Lack.  
**HeLa ATCC-17** hmn cervical epithelial cancer (cell).  
**HeLa-S3** hmn cervical epithelial cancer (cell).  
**HELF** normal hmn embryo lung fibroblasts.  
**Hep2** hmn liver cancer (cell).  
**Hep2,2,15** hmn liver cancer (cell) transfected with hepatitis B virus.  
**Hep3B** hmn liver cancer (cell).  
**Hepa** hmn liver cancer (cell).  
**Hepa1c1c7** mus liver cancer (cell).  
**Hepa59T/VGH** hmn liver cancer (cell).  
**HepG2** hmn liver cancer (cell).  
**HEPZ** hmn epithelial cancer (cell).  
**HFF** hmn foreskin fibroblasts.  
**HGF** normal hmn gingival fibroblast cells.  
**HL-60** hmn acute promyelocytic leukemia (cell).  
**HM02** hmn melanoma (cell).  
**HMC-1** hmn leukemic mast cells.  
**HMEC** hmn microvascular endothelial cells.  
**HO-8910** hmn ovarian cancer (cell).  
**HOG.R5** green fluorescent protein (GFP)-based reporter cell.  
**HONE-1** hmn nasopharyngeal carcinoma (cell).  
**HOP-62** non-small cell lung cancer (cell).  
**Hs578T** hmn breast cancer (cell).  
**Hs740T** hmn gastric cancer (cell).  
**Hs742T** hmn breast cancer (cell).  
**Hs756T** hmn gastric cancer (cell).  
**HSC-2** hmn oral squamous cell carcinoma cells.  
**HSG** hmn salivary gland tumor (cell).  
**HT** sarcoma (cell).  
**HT1080** hmn fibrosarcoma (cell).  
**HT29** hmn colorectal cancer (cell).  
**HT3** hmn cervical carcinoma (cell).  
**hTERT-RPE1** hmn telomerase reverse transcriptase-retinal pigment epithelial cells.  
**Huh7** hmn hepatoma (cell).  
**HUVEC** hmn umbilical vein endothelial cell.  
**Jurkat-T** hmn T-cell leukemia (cell).  
**K562** hmn leukemia (cell).  
**K562/ADM** hmn leukemia (cell) of adriamycin-resistant.  
**Kato3** hmn gastric cancer (cell).  
**KB** hmn nasopharyngeal carcinoma (cell).  
**KB15** hmn nasopharyngeal carcinoma (cell).  
**KB16** hmn nasopharyngeal carcinoma (cell).  
**KB3** hmn nasopharyngeal carcinoma (cell).  
**KBV200** MDR nasopharyngeal carcinoma (cell).  
**KB-VIN** vincristine-resistant nasopharyngeal carcinoma (cell).  
**Ketr3** hmn renal cancer (cell).  
**KG-1** hmn leukemia (cell).  
**KM12** hmn colorectal cancer (cell).  
**KM20L2** hmn colorectal cancer (cell).  
**KU-1** hmn bladder cancer (cell).  
**L<sub>1210</sub>** Lymphocytic leukemia (cell).  
**L5178Y** lymphosarcoma (cell).  
**L-6** rat skeletal myoblasts.  
**L<sub>615</sub>** mouse spleen leukemia (cell).  
**L<sub>7212</sub>** mouse leukemia (cell).  
**L-929** fibrosarcoma (cell).  
**LLC** mouse Lewis lung cancer (cell).  
**LMTK** mouse fiber cells.  
**LNCaP** hmn prostatic cancer (cell).  
**LNCaP-FGC** hmn prostatic cancer (cell).  
**LO2** hmn liver cell.  
**LoVo** hmn colorectal cancer (cell).  
**LoVo/Doxo** hmn colorectal cancer cell, drug-resistant subclone.  
**LOX** melanoma (cell).  
**LOX-IMVI** melanoma (cell).  
**LS174T** colorectal cancer (cell).  
**Lu04** hmn lung cancer (cell).  
**Lu1** hmn lung cancer (cell).  
**LXFL529L** hmn large cell lung cancer (cell).  
**M1** mus myelocytic leukemia (cell).  
**M14** melanoma (cell).  
**M4BEU** hmn melanoma (cell).  
**M5076** ovarian sarcoma (cell).  
**Ma7373** mus breast cancer (cell).  
**MALME-3M** melanoma (cell).  
**MBT-2** mus bladder cancer (cell).  
**MCF7** hmn breast cancer (cell).  
**MCF7/6** hmn breast cancer (cell).  
**MCF7/ADR-RES** hmn breast cancer (cell).  
**MCF7-ras** hmn breast cancer (cell).  
**MDA231** hmn breast cancer (cell).  
**MDA-MB-231** hmn breast cancer (cell).  
**MDA-MB-435** hmn breast cancer (cell).  
**MDCK** Madin-Darby Canine.  
**MEL-28** hmn melanoma cell.  
**Meth-A** Meth-A sarcoma (cell).  
**MGc803** hmn gastric adenocarcinoma (cell).  
**MH-60** mus leukemia (cell).  
**MI4** melanoma (cell).  
**MIA-PaCa-2** hmn pancreas cancer (cell).  
**MK1** hmn gastric cancer (cell).  
**MKN1** hmn gastric cancer (cell).  
**MKN28** hmn gastric cancer (cell).  
**MKN45** hmn gastric cancer (cell).  
**MKN7** hmn gastric cancer (cell).  
**MKN74** hmn gastric cancer (cell).  
**MM1** highly invasive clone isolated from parental rat ascites hepatoma AH130 cells.  
**Molt4** hmn lymphoma (cell).  
**Mono-Mac-6** mononuclear cells.  
**MQc80-3** gastric adenocarcinoma (cell).  
**MRC-5** hmn diploid embryonic cells.

**MS301** mus breast cancer (cell).  
**MS310** mus breast cancer (cell).  
**N04** hmn neuroma (cell).  
**NCI-H1417** hmn small cell lung cancer (cell).  
**NCI-H187** hmn small cell lung cancer (cell).  
**NCI-H226** hmn non-small cell lung cancer (cell).  
**NCI-H23** hmn lung cancer (cell).  
**NCI-H460** hmn lung cancer (cell).  
**NCI-H522** hmn lung cancer (cell).  
**NK/LY** ascites cancer (cell).  
**NSCLC-N6** hmn non-small cell lung cancer (cell).  
**NUGC** hmn gastric cancer (cell).  
**NUGC-3** hmn gastric cancer (cell).  
**NUGC-4** hmn gastric cancer (cell).  
**OVCAR-2780** ovarian adenocarcinoma (cell).  
**OVCAR-3** ovarian adenocarcinoma (cell).  
**OVCAR-4** ovarian adenocarcinoma (cell).  
**OVCAR-5** ovarian adenocarcinoma (cell).  
**OVCAR-8** ovarian adenocarcinoma (cell).  
**P1534** mus, transplanted leukemia (cell).  
**P<sub>388</sub>** mouse lymphocytic leukemia (cell).  
**P<sub>388</sub>/ADM** mouse lymphocytic leukemia (cell) of adriamycin-resistant.  
**PACA-2** hmn pancreas cancer (cell) .  
**PANC1** pancreas cancer (cell).  
**PBMC** peripheral blood mononuclear cells.  
**PC12** hmn lung cancer (cell).  
**PC3** hmn prostatic cancer (cell).  
**PC-6** hmn lung cancer (cell).  
**PLC/PRF/5** hmn liver cancer (cell).  
**PSN1** hmn pancreas cancer (cell).  
**PTX10** ovarian cancer cells with  $\beta$ -tubulin mutation.  
**QGY-7703** hmn liver cancer (cell).  
**RAW264.7** mouse macrophages.  
**RBL-2H3** rat basophilic cells.  
**RL33** rbt lung cancer (cell).  
**RPMI-7951** melanoma (cell).  
**RPMI-8226** leukemia (cell).  
**RXF-393** renal cancer (cell).  
**RXF-631L** renal cancer (cell).  
**S<sub>180</sub>** mouse sarcoma (cell).  
**S37** mouse sarcoma (cell).  
**Sca7901** hmn gastric adenocarcinoma (cell).  
**SCL** hmn gastric cancer (cell).  
**SCL-37'6** hmn gastric cancer (cell).  
**SCL-6** hmn gastric cancer (cell).  
**SCL-9** hmn gastric cancer (cell).  
**SF268** hmn brain tumor (cell).  
**SF295** hmn brain tumor (cell).  
**SF539** hmn brain tumor (cell).  
**SGC** hmn gastric cancer (cell).  
**SGC7901** hmn gastric cancer (cell).  
**SiHa** hmn cervical carcinoma (cell).  
**SKBR3** hmn breast cancer (cell).  
**SKCO1** colorectal cancer (cell).  
**SK-MEL** hmn caucasian melanoma (cell).  
**SK-MEL-2** hmn melanoma (cell).  
**SK-MEL-28** hmn melanoma (cell).  
**SK-MEL-5** hmn melanoma (cell).  
**SK-MES-1** bronchogenic carcinoma cell.  
**SK-OV-3** ovarian adenocarcinoma (cell).  
**SMMC-7721** hmn liver cancer (cell).  
**SNB75** hmn brain tumor (cell).  
**SNB78** hmn brain tumor (cell).  
**SNU638** hmn gastric adenocarcinoma (cell).  
**SR** leukemia (cell).  
**St4** gastric cancer (cell).  
**SVR** mouse endothelial cells.  
**SW620** hmn colorectal adenocarcinoma (cell).  
**T24** hmn liver cancer (cell).  
**T24S** hmn bladder cancer (cell).  
**T47D** hmn breast cancer (cell).  
**T98G** hmn caucasian glioblastoma (cell).  
**TK10** renal cancer (cell).  
**Tmolt3** hmn leukemia (cell).  
**U14** mouse cervical carcinoma (cell).  
**U251** brain tumor (cell).  
**U373** caucasian glioblastoma (cell).  
**U4** mouse cervical carcinoma (cell).  
**U-87-MG** caucasian glioblastoma (cell).  
**U937** hmn monocytic leukemia (cell).  
**UACC62** melanoma (cell).  
**UO-31** renal cancer (cell).  
**Vero** green monkey kidney tumour (cell).  
**W<sub>256</sub>** rat Walker sarcoma (cell).  
**WEHI-164** mus fibrosarcoma (cell).  
**WHCO1** hmn esophageal cancer (cell).  
**WI-38** hmn lung fibrocyte (normal hmn diploid fibrocyte).  
**WiDr** colorectal adenocarcinoma (cell).  
**Wish** transformed epithelial tumour (cell).  
**XF-498** hmn tumor (cell).  
**ZR-75-1** hmn breast cancer (cell).



# **Volume 5**

## **Isolated Compounds (T-Z)**

### **References**

## **TCM Plants and Congeners**

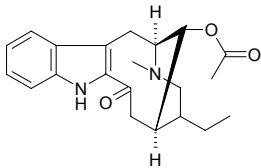




# T

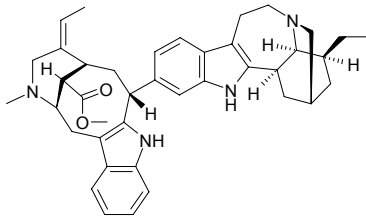
## 20575 Tabernaemontanine

$C_{21}H_{26}N_2O_3$  (354.45). Acicular crystals (ethyl acetate), mp 219–222°C,  $[\alpha]_D^{25} = -57.5^\circ$  ( $c = 1$ , chloroform); hydrochloride crystals (acetone), mp 230–233°C. **Pharm:** Antibacterial (against 30 different pathogenic bacterial strains, 3.7% solution, InRt = 17%); cytotoxic (KB); used in treatment of arteriosclerosis, cerebral wounds and dysemia; vasodilator (dog, iv, 0.5–5.0mg/kg). **Source:** DONG FANG GOU YA HUA *Ervatamia orientalis*. **Ref:** 658.



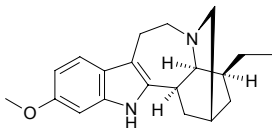
## 20576 Tabernamine

$C_{40}H_{48}N_4O_2$  (616.85). **Pharm:** Antineoplastic (P<sub>388</sub>). **Source:** YUE HAN SI TONG SHAN MA CHA *Tabernaemontana johnstonii*. **Ref:** 658.



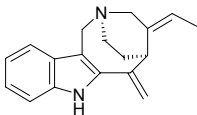
## 20577 Tabernanthine

$C_{20}H_{26}N_2O$  (310.44). **Pharm:** CNS activity; binding activity to benzodiazepine receptor. **Source:** family Apocynaceae spp. **Ref:** 658.



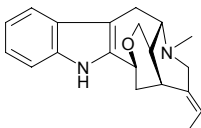
## 20578 Tabernoschizine

Pericalline [2122-36-3]  $C_{18}H_{20}N_2$  (264.37). mp 198–199°C. **Pharm:** Analgesic; antibacterial (*Shigella* sp., *Salmonella* sp., *Escherichia* sp., *Bacillus termo*, *Pseudomonas maltophilia*, *Staphylococcus* sp.); antiviral (spodiomyelitis virus). **Source:** CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochera rosea*], CU MAO GUO BAI JIAN MU *Aspidosperma dasycarpon*. **Ref:** 6, 658, 1521.



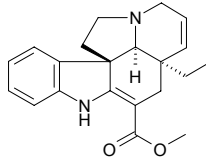
## 20579 19-(Z)-Taberpsychine

$C_{20}H_{24}N_2O$  (308.43). Oil,  $[\alpha]_D = -180^\circ$ . **Source:** GOU WEN *Gelsemium elegans*. **Ref:** 14, 411, 416.



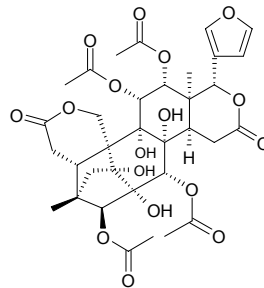
## 20580 Tabersonine

$C_{21}H_{24}N_2O_2$  (336.44). **Pharm:** Antihypertensive. **Source:** CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochera rosea*]. **Ref:** 2, 658.



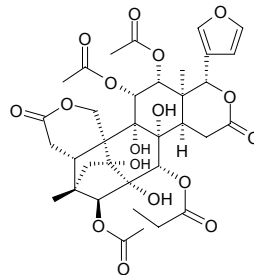
## 20581 Tabulalide A

$C_{34}H_{40}O_{17}$  (720.69). White amorphous powder,  $[\alpha]_D = -44^\circ$  ( $c = 0.21$ , MeOH). **Source:** MA LIAN *Chukrasia tabularis* (root cortex). **Ref:** 3868.



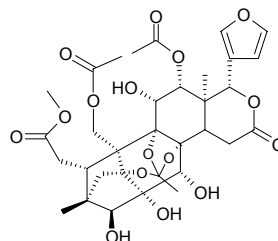
## 20582 Tabulalide B

$C_{35}H_{42}O_{17}$  (734.71). White amorphous powder,  $[\alpha]_D = -37^\circ$  ( $c = 0.14$ , MeOH). **Source:** MA LIAN *Chukrasia tabularis* (root cortex). **Ref:** 3868.



## 20583 Tabulalide C

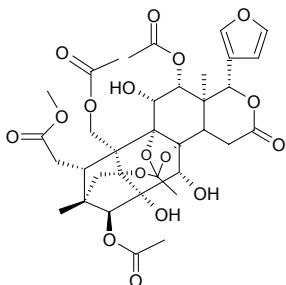
$C_{33}H_{40}O_{16}$  (692.68). White amorphous powder,  $[\alpha]_D = -49^\circ$  ( $c = 0.28$ , MeOH). **Source:** MA LIAN *Chukrasia tabularis* (root cortex). **Ref:** 3868.



**20584 Tabulalide D**

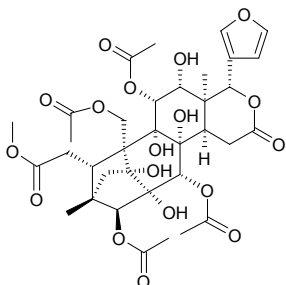
$C_{35}H_{42}O_{17}$  (734.71). White amorphous powder,  $[\alpha]_D = -52^\circ$  ( $c = 0.16$ , MeOH).

Source: MA LIAN *Chukrasia tabularis* (root cortex). Ref: 3868.

**20585 Tabulalide E**

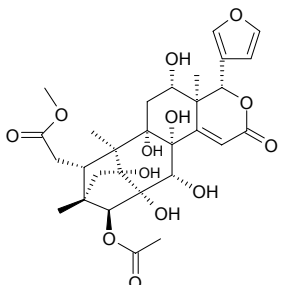
$C_{35}H_{44}O_{18}$  (752.73). White amorphous powder,  $[\alpha]_D = -2.9^\circ$  ( $c = 0.07$ , MeOH).

Source: MA LIAN *Chukrasia tabularis* (root cortex). Ref: 3868.

**20586 Tabularin**

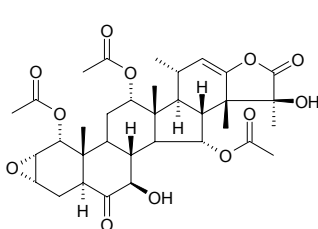
$C_{29}H_{36}O_{13}$  (592.60). White amorphous powder,  $[\alpha]_D = +41^\circ$  ( $c = 0.19$ , MeOH).

Source: MA LIAN *Chukrasia tabularis* (root cortex). Ref: 3868.

**20587 Taccalonolide E**

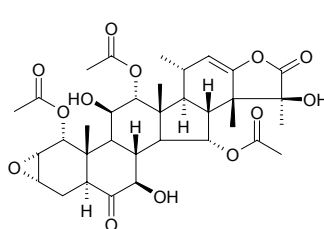
$C_{34}H_{44}O_{12}$  (644.72). Source: LIE GUO SHU *Tacca plantaginea* [Syn.

*Schizocapsa plantaginea*]. Ref: 293.

**20588 Taccalonolide F**

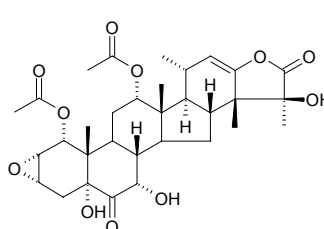
$C_{34}H_{44}O_{13}$  (660.72). Source: LIE GUO SHU *Tacca plantaginea* [Syn.

*Schizocapsa plantaginea*]. Ref: 293.

**20589 Taccalonolide G**

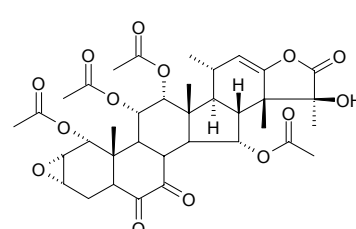
$C_{32}H_{42}O_{11}$  (602.68). Source: LIE GUO SHU *Tacca plantaginea* [Syn.

*Schizocapsa plantaginea*]. Ref: 293.

**20590 Taccalonolide H**

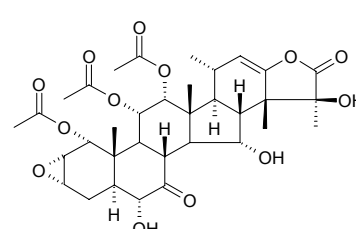
$C_{36}H_{44}O_{14}$  (700.74). Source: LIE GUO SHU *Tacca plantaginea* [Syn.

*Schizocapsa plantaginea*]. Ref: 293.

**20591 Taccalonolide I**

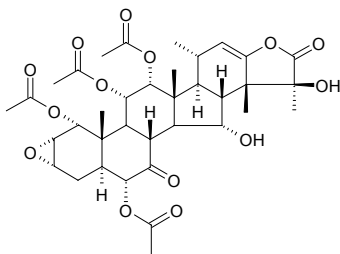
$C_{34}H_{44}O_{13}$  (660.72). Source: LIE GUO SHU *Tacca plantaginea* [Syn.

*Schizocapsa plantaginea*]. Ref: 293.

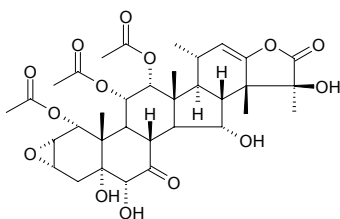


**20592 Taccalonolide J**

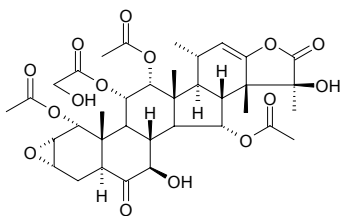
$C_{36}H_{46}O_{14}$  (702.76). Source: LIE GUO SHU *Tacca plantaginea* [Syn. *Schizocapsa plantaginea*]. Ref: 293.

**20593 Taccalonolide K**

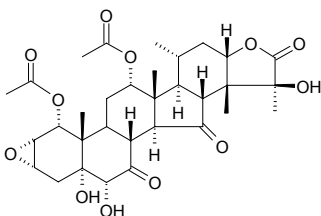
$C_{34}H_{44}O_{14}$  (676.72). Source: LIE GUO SHU *Tacca plantaginea* [Syn. *Schizocapsa plantaginea*]. Ref: 293.

**20594 Taccalonolide L**

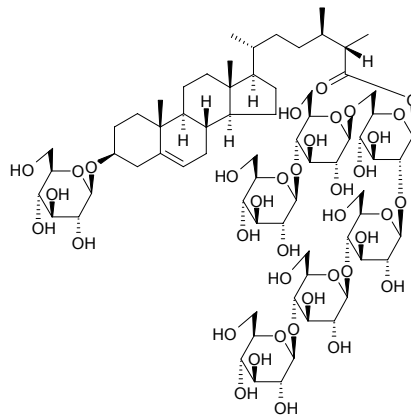
$C_{36}H_{46}O_{15}$  (718.76). Source: LIE GUO SHU *Tacca plantaginea* [Syn. *Schizocapsa plantaginea*]. Ref: 293.

**20595 Taccalonolide M**

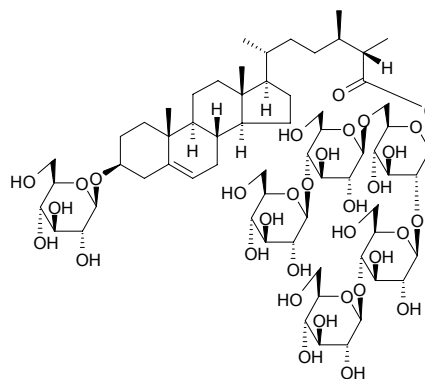
$C_{32}H_{42}O_{12}$  (618.68). Source: LIE GUO SHU *Tacca plantaginea* [Syn. *Schizocapsa plantaginea*]. Ref: 293.

**20596 Taccasteroside A**

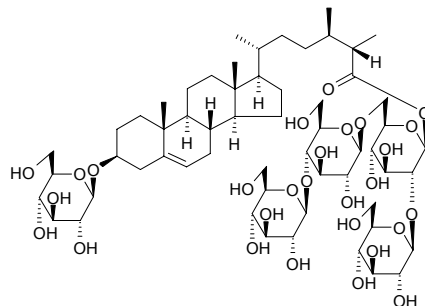
(24*R*,25*S*)-3β-[(β-*D*-Glucopyranosyl)oxy]ergost-5-en-26-oic acid *O*-β-*D*-glucopyranosyl-(1→4)-*O*-β-*D*-glucopyranosyl-(1→4)-*O*-β-*D*-glucopyranosyl-(1→2)-*O*-[*O*-β-*D*-glucopyranosyl-(1→4)-β-*D*-glucopyranosyl-(1→6)]-β-*D*-glucopyranosyl ester  $C_{70}H_{116}O_{38}$  (1565.68). Source: JIAN GEN SHU *Tacca chantrieri* [Syn. *Tacca minor*; *Tacca esquirolii*]. Ref: 2568.

**20597 Taccasteroside B**

(24*R*,25*S*)-3β-[(β-*D*-Glucopyranosyl)oxy]ergost-5-en-26-oic acid *O*-β-*D*-glucopyranosyl-(1→4)-*O*-β-*D*-glucopyranosyl-(1→2)-*O*-[*O*-β-*D*-glucopyranosyl-(1→4)-β-*D*-glucopyranosyl-(1→6)]-β-*D*-glucopyranosyl ester  $C_{64}H_{106}O_{33}$  (1403.54). Source: JIAN GEN SHU *Tacca chantrieri* [Syn. *Tacca minor*; *Tacca esquirolii*]. Ref: 2568.

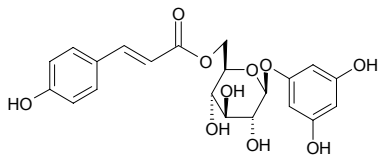
**20598 Taccasteroside C**

(24*R*,25*S*)-3β-[(β-*D*-Glucopyranosyl)-oxy]ergost-5-en-26-oic acid *O*-β-*D*-glucopyranosyl-(1→2)-*O*-[*O*-β-*D*-glucopyranosyl-(1→4)-β-*D*-glucopyranosyl-(1→6)]-β-*D*-glucopyranosyl ester  $C_{58}H_{96}O_{28}$  (1241.40). Source: JIAN GEN SHU *Tacca chantrieri* [Syn. *Tacca minor*; *Tacca esquirolii*]. Ref: 2568.

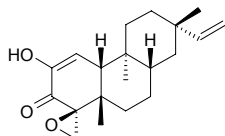


**20599 Tadehaginoside**

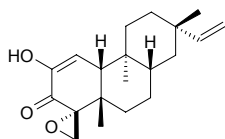
$C_{21}H_{22}O_{10}$  (434.40). White acicular crystals ( $CH_3OH$ ), mp 121~123°C,  $[\alpha]_D^{28} = -14.7^\circ$  ( $c = 0.2$ ,  $CH_3OH$ ). Source: HU LU CHA *Tadehagi triquetrum*. Ref: 777.

**20600 Tagalsin A**

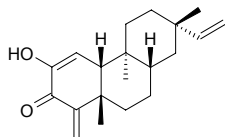
$C_{20}H_{28}O_3$  (316.44). Pale yellow needle crystals, mp 67~69°C,  $[\alpha]_D^{25} = +69.26^\circ$  ( $c = 0.054$ ,  $CHCl_3$ ). Source: JIAO GUO MU *Ceriops tagal* [Syn. *Rhizophora tagal*] (stem and twig). Ref: 5293.

**20601 Tagalsin B**

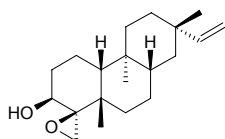
$C_{20}H_{28}O_3$  (316.44). White solid, mp 66~68°C,  $[\alpha]_D^{25} = +165^\circ$  ( $c = 0.06$ ,  $CHCl_3$ ). Source: JIAO GUO MU *Ceriops tagal* [Syn. *Rhizophora tagal*] (stem and twig). Ref: 5293.

**20602 Tagalsin C**

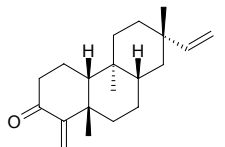
$C_{20}H_{28}O_2$  (300.44). Yellow oil,  $[\alpha]_D^{25} = +92.3^\circ$  ( $c = 0.05$ ,  $CHCl_3$ ). Source: JIAO GUO MU *Ceriops tagal* [Syn. *Rhizophora tagal*] (stem and twig). Ref: 5293.

**20603 Tagalsin D**

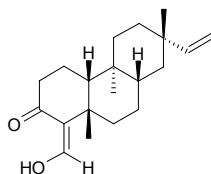
$C_{20}H_{32}O_2$  (304.48). White solid, mp 64~66°C,  $[\alpha]_D^{25} = +38.4^\circ$  ( $c = 0.074$ ,  $CHCl_3$ ). Source: JIAO GUO MU *Ceriops tagal* [Syn. *Rhizophora tagal*] (stem and twig). Ref: 5293.

**20604 Tagalsin E**

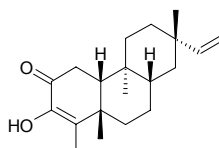
$C_{20}H_{30}O$  (286.46). Yellow solid, mp 73~75°C,  $[\alpha]_D^{25} = +7.85^\circ$  ( $c = 0.07$ ,  $CHCl_3$ ). Source: JIAO GUO MU *Ceriops tagal* [Syn. *Rhizophora tagal*] (stem and twig). Ref: 5293.

**20605 Tagalsin F**

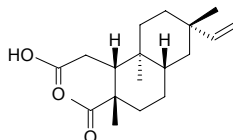
$C_{20}H_{30}O_2$  (302.46). White solid, mp 98~99°C,  $[\alpha]_D^{25} = +34.86^\circ$  ( $c = 0.072$ ,  $CHCl_3$ ). Source: JIAO GUO MU *Ceriops tagal* [Syn. *Rhizophora tagal*] (stem and twig). Ref: 5293.

**20606 Tagalsin G**

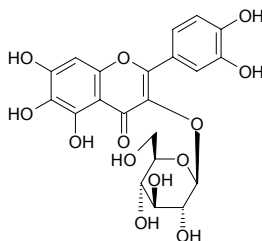
$C_{20}H_{30}O_2$  (302.46). Colorless oil,  $[\alpha]_D^{25} = +55.97^\circ$  ( $c = 0.09$ ,  $CHCl_3$ ). Source: JIAO GUO MU *Ceriops tagal* [Syn. *Rhizophora tagal*] (stem and twig). Ref: 5293.

**20607 Tagalsin H**

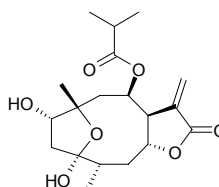
$C_{19}H_{30}O_3$  (306.45). White powder, mp 101~102°C. Source: JIAO GUO MU *Ceriops tagal* [Syn. *Rhizophora tagal*] (stem and twig). Ref: 5293.

**20608 Tagetiin**

$C_{21}H_{20}O_{13}$  (480.39). mp 203°C (dec). Source: WAN SHOU JU *Tagetes erecta*. Ref: 6.

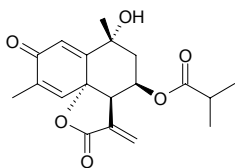
**20609 Tagitinin A**

$C_{19}H_{28}O_7$  (368.43). Source: ZHONG BIN JU *Tithonia diversifolia* (aerial parts). Ref: 4622.

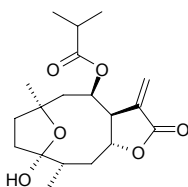


**20610 Tagitinin C**

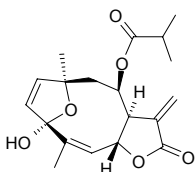
$C_{19}H_{22}O_6$  (346.38). **Pharm:** Cytotoxic (antiproliferative, Col2 cells,  $IC_{50} = 0.7\mu\text{g/mL}$ ); cytotoxic (cellular differentiation inducer, hmn promyelocytic leukemia HL-60 cells,  $4\mu\text{g/mL}$ , activity denotes percentage of cells differentiated = 20.2%); cytotoxic (MMOC model, inhibits DMBA-induced preneoplastic lesion formation,  $10\mu\text{g/mL}$ , rel-InRt = 44.4%, control DMBA, rel-InRt = 100%). **Source:** ZHONG BIN JU *Tithonia diversifolia* (aerial parts, 13.9%dw). **Ref:** 4622.

**20611 Tagitinin D**

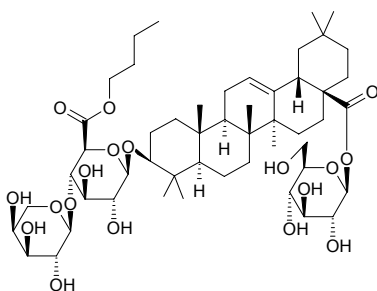
Tirotundin [56377-67-4]  $C_{19}H_{28}O_6$  (352.43). **Source:** ZHONG BIN JU *Tithonia diversifolia* (aerial parts). **Ref:** 4622.

**20612 Tagitinin F**

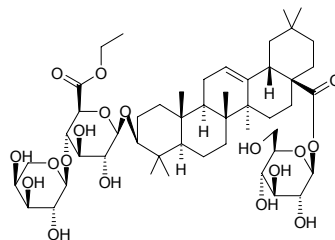
$C_{19}H_{24}O_6$  (348.40). Colorless acicular crystals (benzene-hexane), mp  $128\sim 130^\circ\text{C}$ ,  $[\alpha]_D = -144^\circ$  ( $c = 1$ , ethanol). **Pharm:** Antineoplastic (mus P<sub>388</sub>, 1.25mg/kg, biotic prolonged rate = 61%). **Source:** MO XI GE XIANG RI KUI *Tithonia tagiliflora*. **Ref:** 661.

**20613 Taibaienoside I**

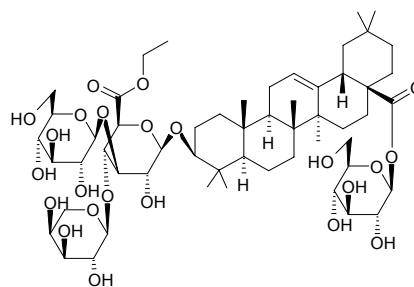
3-*O*-[ $\alpha$ -*L*-Arabinofuranosyl (1 $\rightarrow$ 4)-6'-*O*-*n*-butyl- $\beta$ -*D*-glucuronopyranosyl]-oleanolic acid-28-*O*- $\beta$ -*D*-glucopyranoside  $C_{51}H_{82}O_{18}$  (983.21). White acicular crystals (chloroform-methanol), mp  $177\sim 180^\circ\text{C}$ ,  $[\alpha]_D^{20} = -20.23^\circ$  ( $c = 0.54$ , methanol). **Source:** TAI BAI CONG MU *Aralia taibaiensis*. **Ref:** 394.

**20614 Taibaienoside II**

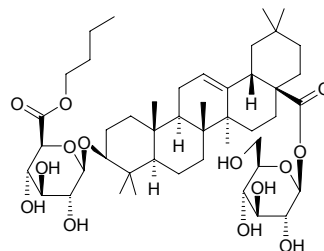
3-*O*-[ $\alpha$ -*L*-Arabinofuranosyl-(1 $\rightarrow$ 4)-6'-*O*-ethyl- $\beta$ -*D*-glucuronopyranosyl]-oleanolic acid-28-*O*- $\beta$ -*D*-glucopyranoside  $C_{49}H_{78}O_{18}$  (955.16). White crystalline powder, mp  $194\sim 195^\circ\text{C}$ ,  $[\alpha]_D^{20} = -22.85^\circ$  ( $c = 0.41$ , methanol). **Source:** TAI BAI CONG MU *Aralia taibaiensis*. **Ref:** 394.

**20615 Taibaienoside III**

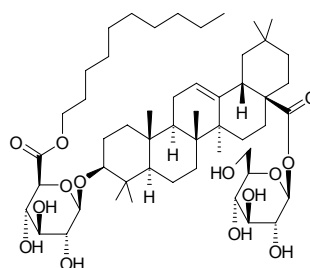
3-*O*-[ $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 3)[ $\alpha$ -*L*-arabinofuranosyl-(1 $\rightarrow$ 4)]-6'-*O*-ethyl- $\beta$ -*D*-glucuronopyranosyl]-oleanolic acid-28-*O*- $\beta$ -*D*-glucopyranoside  $C_{55}H_{88}O_{23}$  (1117.30). White crystalline powder, mp  $194\sim 195^\circ\text{C}$ ,  $[\alpha]_D^{20} = -22.85^\circ$  ( $c = 0.41$ , methanol). **Source:** TAI BAI CONG MU *Aralia taibaiensis*. **Ref:** 394.

**20616 Taibaienoside IV**

$C_{46}H_{74}O_{14}$  (851.09). White crystalline powder, mp  $181\sim 184^\circ\text{C}$ ,  $[\alpha]_D^{20} = +8.12^\circ$  ( $c = 0.23$ , MeOH). **Source:** TAI BAI CONG MU *Aralia taibaiensis*. **Ref:** 470.

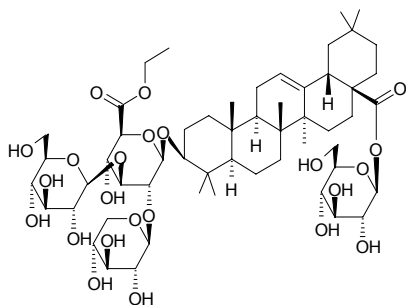
**20617 Taibaienoside V**

$C_{52}H_{86}O_{14}$  (935.26). White crystalline powder, mp  $162\sim 164^\circ\text{C}$ . **Source:** TAI BAI CONG MU *Aralia taibaiensis*. **Ref:** 470.

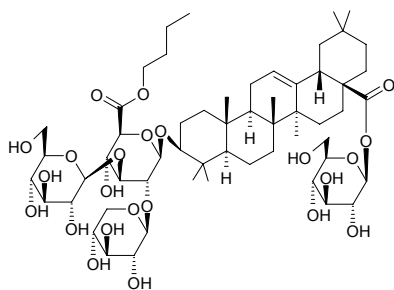


**20618 Taibaienoside VII**

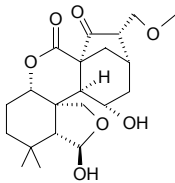
3-*O*-[ $\beta$ -*D*-Xylopyranosyl-(1 $\rightarrow$ 2)][ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)]-6'-*O*-ethyl- $\beta$ -*D*-glucuronopyranosyl] oleanolic acid-28-*O*- $\beta$ -*D*-glucopyranoside C<sub>55</sub>H<sub>88</sub>O<sub>23</sub> (1117.30). White crystalline powder, mp 207~209°C. Source: TAI BAI CONG MU *Aralia taibaiensis*. Ref: 359.

**20619 Taibaienoside VIII**

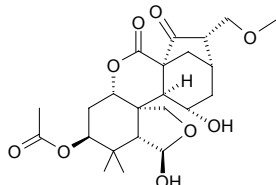
3-*O*-[ $\beta$ -*D*-Xylopyranosyl-(1 $\rightarrow$ 2)][ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)]-6'-*O*-butyl- $\beta$ -*D*-glucuronopyranosyl]oleano-lic acid-28-*O*- $\beta$ -*D*-glucopyranoside C<sub>57</sub>H<sub>92</sub>O<sub>23</sub> (1145.35). White crystalline powder, mp 212~213°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +4.90° (*c* = 0.82, methanol). Source: TAI BAI CONG MU *Aralia taibaiensis*. Ref: 359.

**20620 Taibaijaponicain A**

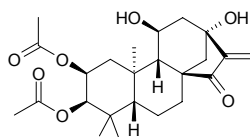
6 $\beta$ ,11 $\alpha$ -Dihydroxy-16 $\alpha$ -methoxymethyl-6,20-epoxy-6,7-seco-*ent*-kaur-15-one-1,7-olide C<sub>21</sub>H<sub>30</sub>O<sub>7</sub> (394.47). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>17</sup> = -104.7° (*c* = 0.49, acetone). Source: MAO YE XIANG CHA CAI *Isodon japonica* [Syn. *Rabdosia japonica*] (leaf and branch). Ref: 5192.

**20621 Taibaijaponicain B**

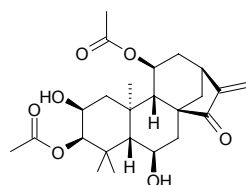
3 $\beta$ -Acetoxy-6 $\beta$ ,11 $\alpha$ -dihydroxy-16 $\alpha$ -methoxymethyl-6,20-epoxy-6,7-seco-*ent*-kaur-15-one-1,7-olide C<sub>23</sub>H<sub>32</sub>O<sub>9</sub> (452.51). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>17</sup> = -98.6° (*c* = 0.5, acetone). Source: MAO YE XIANG CHA CAI *Isodon japonica* [Syn. *Rabdosia japonica*] (leaf and branch). Ref: 5192.

**20622 Taibairubescensin A**

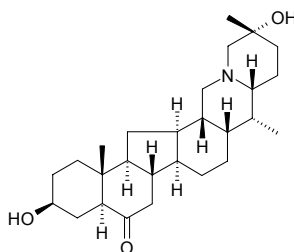
2 $\beta$ ,3 $\beta$ -Diacetoxy-11 $\beta$ ,13 $\alpha$ -dihydroxy-*ent*-kaur-16-en-15-one C<sub>24</sub>H<sub>34</sub>O<sub>7</sub> (434.53). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>17</sup> = 49.3° (*c* = 0.5, CHCl<sub>3</sub>). Source: DONG LING CAO *Rabdosia rubescens*. Ref: 765, 4067.

**20623 Taibairubescensin B**

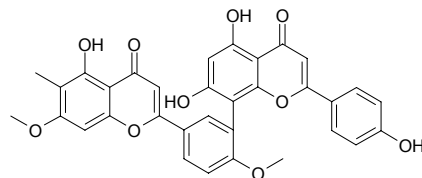
3 $\beta$ ,11 $\beta$ -Diacetoxy-2 $\beta$ ,6 $\alpha$ -dihydroxy-*ent*-kaur-16-en-15-one C<sub>24</sub>H<sub>34</sub>O<sub>7</sub> (434.53). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>17</sup> = -34° (*c* = 1, CHCl<sub>3</sub>). Source: DONG LING CAO *Rabdosia rubescens*. Ref: 765, 4067.

**20624 Taipaienine**

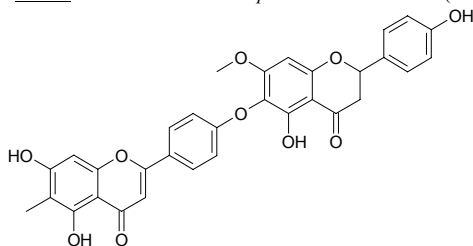
C<sub>27</sub>H<sub>43</sub>NO<sub>3</sub> (429.65). Acicular crystals, mp 120~122°C, [ $\alpha$ ]<sub>D</sub><sup>28</sup> = +12.9° (*c* = 0.31, MeOH). Source: NING XIA BEI MU *Fritillaria taipaiensis* var. *ningxiaensis*. Ref: 271.

**20625 Taiwanhomoflavone A**

C<sub>33</sub>H<sub>24</sub>O<sub>10</sub> (580.55). Source: TAI WAN CU FEI *Cephalotaxus wilsoniana* (leaf: yield = 0.00087%dw). Ref: 4759.

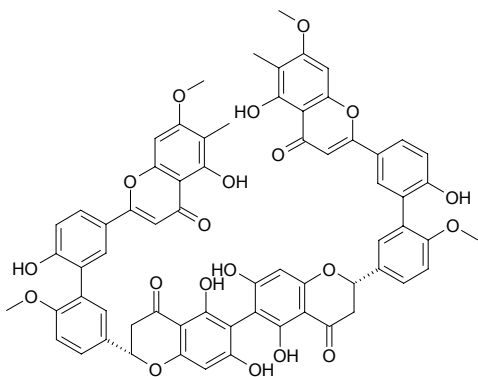
**20626 Taiwanhomoflavone B**

C<sub>32</sub>H<sub>24</sub>O<sub>10</sub> (568.54). Pale yellow powder. Pharm: Cytotoxic (KB oral epidermoid carcinoma, ED<sub>50</sub> = 3.8 $\mu$ g/mL, Hep3B hepatoma cells, ED<sub>50</sub> = 3.5 $\mu$ g/mL). Source: TAI WAN CU FEI *Cephalotaxus wilsoniana* (twig). Ref: 4253.

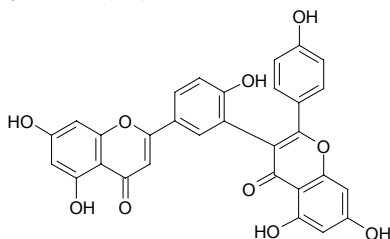


**20627 Taiwanhomoflavone C**

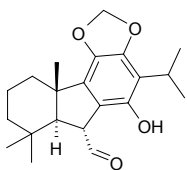
Di(5,7,4"-trihydroxy-2,3-dihydro-4',7"-dimethoxy-6"-methyl-3',3"-biflavanyl)-6,6-tetraflavone C<sub>66</sub>H<sub>50</sub>O<sub>20</sub> (1163.12). Yellow amorphous solid,  $[\alpha]_D^{28} = +44^\circ$  ( $c = 0.114$ , MeOH). **Source:** TAI WAN CU FEI *Cephalotaxus wilsoniana* (leaf; yield = 0.00096%dw). **Ref:** 4759.

**20628 Taiwaniaflavone**

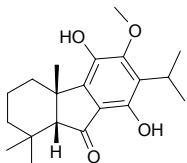
C<sub>30</sub>H<sub>18</sub>O<sub>10</sub> (538.47). **Source:** TAI WAN CUI BAI *Calocedrus macrolepis* var. *formosana* (leaf). **Ref:** 4297.

**20629 Taiwaniaquinol A**

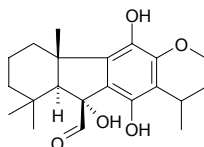
C<sub>21</sub>H<sub>28</sub>O<sub>4</sub> (344.45).  $[\alpha]_D^{22} = +80.5^\circ$  ( $c = 0.38$ , CHCl<sub>3</sub>). **Pharm:** Cytotoxic (*in vitro*, KB cells, IC<sub>50</sub> = (8.3±0.4)μmol/L, control Etoposide, IC<sub>50</sub> = (1.1±0.02)μmol/L). **Source:** TAI WAN SHAN *Taiwania cryptomerioides* (bark). **Ref:** 5045.

**20630 Taiwaniaquinol B**

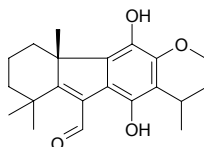
C<sub>20</sub>H<sub>28</sub>O<sub>4</sub> (332.44).  $[\alpha]_D^{22} = -50.1^\circ$  ( $c = 0.27$ , CHCl<sub>3</sub>). **Pharm:** Cytotoxic (*in vitro*, KB cells, IC<sub>50</sub> > 10μmol/L, control Etoposide, IC<sub>50</sub> = (1.1±0.02)μmol/L). **Source:** TAI WAN SHAN *Taiwania cryptomerioides* (bark). **Ref:** 5045.

**20631 Taiwaniaquinol C**

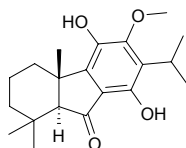
C<sub>21</sub>H<sub>30</sub>O<sub>5</sub> (362.47). Yellowish amorphous,  $[\alpha]_D^{23} = -10.5^\circ$  ( $c = 0.32$ , CHCl<sub>3</sub>);  $[\alpha]_D^{22} = -10.5^\circ$  ( $c = 0.32$ , CHCl<sub>3</sub>). **Pharm:** Cytotoxic (*in vitro*, KB cells, IC<sub>50</sub> = (8.1±0.7)μmol/L, control Etoposide, IC<sub>50</sub> = (1.1±0.02)μmol/L)<sup>[5045]</sup>. **Source:** TAI WAN SHAN *Taiwania cryptomerioides* (bark). **Ref:** 4409, 5045.

**20632 Taiwaniaquinol D**

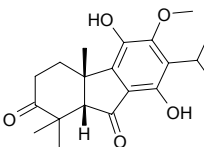
C<sub>21</sub>H<sub>28</sub>O<sub>4</sub> (344.45). Red-orange gum,  $[\alpha]_D^{23} = -80.2^\circ$  ( $c = 0.32$ , CHCl<sub>3</sub>);  $[\alpha]_D^{22} = -80.2^\circ$  ( $c = 0.32$ , CHCl<sub>3</sub>). **Pharm:** Cytotoxic (*in vitro*, KB cells, IC<sub>50</sub> = (3.5±0.1)μmol/L, control Etoposide, IC<sub>50</sub> = (1.1±0.02)μmol/L)<sup>[5045]</sup>. **Source:** TAI WAN SHAN *Taiwania cryptomerioides* (bark). **Ref:** 4409, 5045.

**20633 Taiwaniaquinol E**

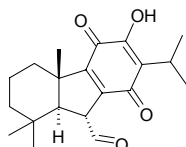
C<sub>20</sub>H<sub>28</sub>O<sub>4</sub> (332.44). Yellowish gum,  $[\alpha]_D^{22} = -8.3^\circ$  ( $c = 0.32$ , CHCl<sub>3</sub>). **Pharm:** Cytotoxic (*in vitro*, KB cells, IC<sub>50</sub> > 10μmol/L, control Etoposide, IC<sub>50</sub> = (1.1±0.02)μmol/L). **Source:** TAI WAN SHAN *Taiwania cryptomerioides* (bark). **Ref:** 5045.

**20634 Taiwaniaquinol F**

C<sub>20</sub>H<sub>26</sub>O<sub>5</sub> (346.43). Yellowish gum,  $[\alpha]_D^{22} = -5.2^\circ$  ( $c = 0.32$ , CHCl<sub>3</sub>). **Pharm:** Cytotoxic (*in vitro*, KB cells, IC<sub>50</sub> > 10μmol/L, control Etoposide, IC<sub>50</sub> = (1.1±0.02)μmol/L). **Source:** TAI WAN SHAN *Taiwania cryptomerioides* (bark). **Ref:** 5045.

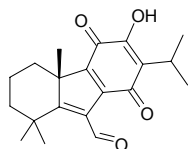
**20635 Taiwaniaquinone A**

C<sub>20</sub>H<sub>26</sub>O<sub>4</sub> (330.43).  $[\alpha]_D^{22} = -210.5^\circ$  ( $c = 0.34$ , CHCl<sub>3</sub>). **Pharm:** Cytotoxic (*in vitro*, KB cells, IC<sub>50</sub> = (6.9±0.3)μmol/L, control Etoposide, IC<sub>50</sub> = (1.1±0.02)μmol/L). **Source:** TAI WAN SHAN *Taiwania cryptomerioides* (bark). **Ref:** 5045.

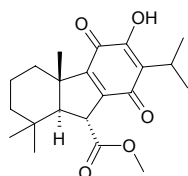


**20636 Taiwaniaquinone D**

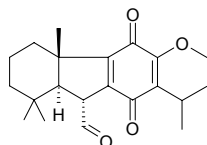
$C_{20}H_{24}O_4$  (328.41).  $[\alpha]_D^{22} = -5.6^\circ$  ( $c = 0.54$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (*in vitro*, KB cells,  $IC_{50} = (7.2 \pm 0.05) \mu\text{mol/L}$ , control Etoposide,  $IC_{50} = (1.1 \pm 0.02) \mu\text{mol/L}$ ). **Source:** TAI WAN SHAN *Taiwania cryptomerioides* (bark). **Ref:** 5045.

**20637 Taiwaniaquinone E**

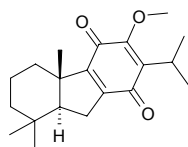
$C_{21}H_{28}O_5$  (360.45).  $[\alpha]_D^{22} = -205.5^\circ$  ( $c = 0.34$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (*in vitro*, KB cells,  $IC_{50} > 10 \mu\text{mol/L}$ , control Etoposide,  $IC_{50} = (1.1 \pm 0.02) \mu\text{mol/L}$ ). **Source:** TAI WAN SHAN *Taiwania cryptomerioides* (bark). **Ref:** 5045.

**20638 Taiwaniaquinone F**

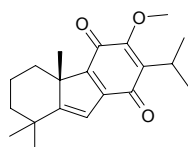
$C_{21}H_{28}O_4$  (344.45). Orange amorphous,  $[\alpha]_D^{23} = -166.2^\circ$  ( $c = 0.29$ ,  $CHCl_3$ );  $[\alpha]_D^{22} = -116.2^\circ$  ( $c = 0.29$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (*in vitro*, KB cells,  $IC_{50} = (4.4 \pm 0.34) \mu\text{mol/L}$ , control Etoposide,  $IC_{50} = (1.1 \pm 0.02) \mu\text{mol/L}$ )<sup>[5045]</sup>. **Source:** TAI WAN SHAN *Taiwania cryptomerioides* (bark). **Ref:** 4409, 5045.

**20639 Taiwaniaquinone G**

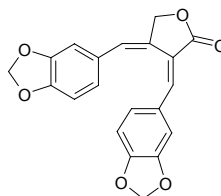
$C_{20}H_{28}O_3$  (316.44). Yellowish amorphous solid,  $[\alpha]_D^{22} = -120.8^\circ$  ( $c = 0.29$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (*in vitro*, KB cells,  $IC_{50} > 10 \mu\text{mol/L}$ , control Etoposide,  $IC_{50} = (1.1 \pm 0.02) \mu\text{mol/L}$ ). **Source:** TAI WAN SHAN *Taiwania cryptomerioides* (bark). **Ref:** 5045.

**20640 Taiwaniaquinone H**

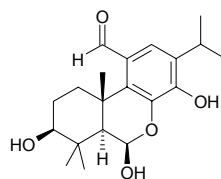
$C_{20}H_{26}O_3$  (314.43). Red-orange amorphous solid,  $[\alpha]_D^{22} = -9.0^\circ$  ( $c = 0.29$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (*in vitro*, KB cells,  $IC_{50} > 10 \mu\text{mol/L}$ , control Etoposide,  $IC_{50} = (1.1 \pm 0.02) \mu\text{mol/L}$ ). **Source:** TAI WAN SHAN *Taiwania cryptomerioides* (bark). **Ref:** 5045.

**20641 Taiwanin A**

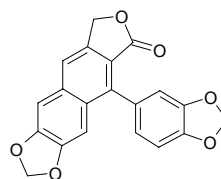
$C_{20}H_{14}O_6$  (350.33). **Pharm:** Cytotoxic (A549,  $ED_{50} = 0.2 \mu\text{mol/L}$ ,  $ED_{50} = 0.4 \mu\text{g/mL}$ , control Adriamycin,  $ED_{50} = 0.01 \mu\text{mol/L}$ ,  $ED_{50} = 0.02 \mu\text{g/mL}$ ; MCF7,  $ED_{50} = 0.2 \mu\text{mol/L}$ ,  $ED_{50} = 0.5 \mu\text{g/mL}$ , Adriamycin,  $ED_{50} = 0.1 \mu\text{mol/L}$ ,  $ED_{50} = 0.1 \mu\text{g/mL}$ ; HT29,  $ED_{50} = 0.1 \mu\text{mol/L}$ ,  $ED_{50} = 0.3 \mu\text{g/mL}$ , Adriamycin,  $ED_{50} = 0.1 \mu\text{mol/L}$ ,  $ED_{50} = 0.1 \mu\text{g/mL}$ ). **Source:** TAI WAN SHAN *Taiwania cryptomerioides* (heartwood). **Ref:** 5088.

**20642 Taiwaninal**

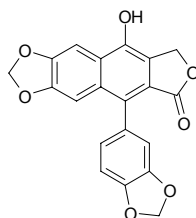
$C_{20}H_{28}O_5$  (348.44). Yellowish solid, mp 160~162°C,  $[\alpha]_D^{25} = -23.5^\circ$  ( $c = 0.19$ ,  $CHCl_3$ ). **Source:** TAI WAN SHAN *Taiwania cryptomerioides*. **Ref:** 2526.

**20643 Taiwanin C**

$C_{20}H_{12}O_6$  (348.32). **Pharm:** Cytotoxic (A549,  $ED_{50} = 5.8 \mu\text{mol/L}$ ,  $ED_{50} = 16.7 \mu\text{g/mL}$ , control Adriamycin,  $ED_{50} = 0.01 \mu\text{mol/L}$ ,  $ED_{50} = 0.02 \mu\text{g/mL}$ ; MCF7,  $ED_{50} = 4.1 \mu\text{mol/L}$ ,  $ED_{50} = 11.7 \mu\text{g/mL}$ , Adriamycin,  $ED_{50} = 0.1 \mu\text{mol/L}$ ,  $ED_{50} = 0.1 \mu\text{g/mL}$ ; HT29,  $ED_{50} = 14.3 \mu\text{mol/L}$ ,  $ED_{50} = 41.1 \mu\text{g/mL}$ , Adriamycin,  $ED_{50} = 0.1 \mu\text{mol/L}$ ,  $ED_{50} = 0.1 \mu\text{g/mL}$ ). **Source:** TAI WAN SHAN *Taiwania cryptomerioides* (heartwood). **Ref:** 5088.

**20644 Taiwanin E**

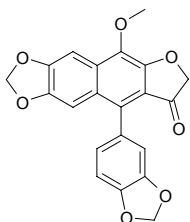
$C_{20}H_{12}O_7$  (364.31). **Pharm:** Cytotoxic (A549,  $ED_{50} = 1.2 \mu\text{mol/L}$ ,  $ED_{50} = 3.4 \mu\text{g/mL}$ , control Adriamycin,  $ED_{50} = 0.01 \mu\text{mol/L}$ ,  $ED_{50} = 0.02 \mu\text{g/mL}$ ; MCF7,  $ED_{50} = 0.5 \mu\text{mol/L}$ ,  $ED_{50} = 1.4 \mu\text{g/mL}$ , Adriamycin,  $ED_{50} = 0.1 \mu\text{mol/L}$ ,  $ED_{50} = 0.1 \mu\text{g/mL}$ ; HT29,  $ED_{50} = 0.6 \mu\text{mol/L}$ ,  $ED_{50} = 1.5 \mu\text{g/mL}$ , Adriamycin,  $ED_{50} = 0.1 \mu\text{mol/L}$ ,  $ED_{50} = 0.1 \mu\text{g/mL}$ ). **Source:** TAI WAN SHAN *Taiwania cryptomerioides* (heartwood). **Ref:** 5088.



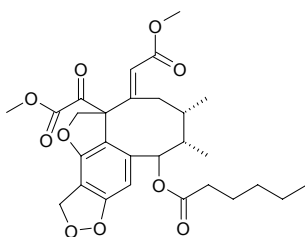


**20645 Taiwanin E methyl ether**

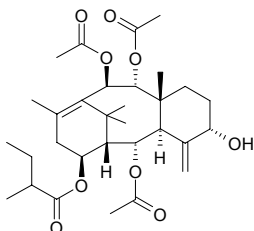
$C_{21}H_{14}O_7$  (378.34). mp 227~230°C. Source: JUE CHUANG *Rostellularia procumbens* [Syn. *Justicia procumbens*], QIANG DAO YAO *Hypoestes purpurea* [Syn. *Justicia purpurea*; *Hypoestes sinica*] (whole herb: yield = 0.0045%dw). Ref: 6, 4712.

**20646 Taiwanschirin D**

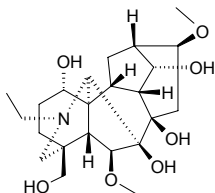
$C_{28}H_{34}O_{10}$  (530.58). Source: *Kadsura matsudai*. Ref: 2436.

**20647 Taiwanxan**

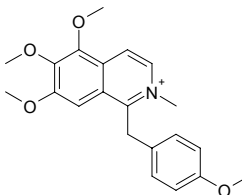
$C_{31}H_{46}O_9$  (562.71). Source: MEI LI HONG DOU SHAN *Taxus mairei*. Ref: 662.

**20648 Takaosamine**

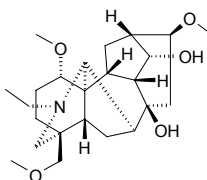
[71239-56-0]  $C_{23}H_{37}NO_7$  (439.55). mp 174~175°C,  $[\alpha]_D^{20} = +61.2^\circ$  ( $c = 0.41$ ,  $CHCl_3$ ). Source: RI BEN WU TOU *Aconitum japonicum*. Ref: 1521.

**20649 Takatonine**

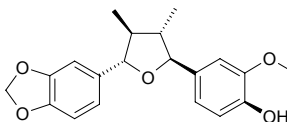
$C_{21}H_{24}NO_4$  (354.43). Source: XIAO TANG SONG CAO *Thalictrum minus*, YAN GUO CAO *Thalictrum thunbergii*. Ref: 6, 1521.

**20650 Talatisamine**

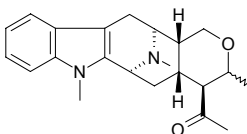
$C_{24}H_{39}NO_5$  (421.58). Colorless crystals, mp 151~152°C. Pharm: Anti-inflammatory; blocks sympathetic ganglia (dog iv, 20mg/kg); antihypertensive; LD<sub>50</sub> (mus iv) = 115mg/kg. Source: BAN HUA WU TOU *Aconitum variegatum*, DA DU WU TOU *Aconitum franchetii* (dried tuberoid: content = 0.017%)<sup>[5508]</sup>, FU ZI *Aconitum carmichaeli*, GAN QING WU TOU *Aconitum tanguticum*, GUA YE WU TOU *Aconitum hemsleyanum*, LIN DI WU TOU *Aconitum nemorum*, MIAN NING WU TOU *Aconitum legendrei*, TA LA WU TOU *Aconitum talassicum*, WU TOU *Aconitum carmichaeli*, ZHUA KUI GUA YE WU TOU *Aconitum hemsleyanum* var. *leueanthus* (tuberoid: yield = 0.019%dw)<sup>[4678]</sup>. Ref: 2, 658, 2203, 3171, 4678, 5508.

**20651 Talaumidin**

(7*S*,7'*S*,8*S*,8'*S*)-4-Hydroxy-3-methoxy-3',4'-methylenedioxy-7,7'-epoxilignan  $C_{20}H_{22}O_5$  (342.40). Pharm: Neurotrophic (primary culture of rat cortical neurons; trophic withdrawal model, 3~30μmol/L, protects cell death caused by deprivation of serum). Source: GONG XING MA DOU LING *Aristolochia arcuata* (root). Ref: 4999.

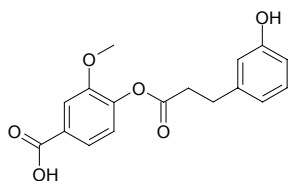
**20652 Talcarpine**

$C_{22}H_{28}N_2O_2$  (352.48). Source: DA YE TANG JIAO SHU *Alstonia macrophylla* (leaf: yield = 0.0026%). Ref: 3020.

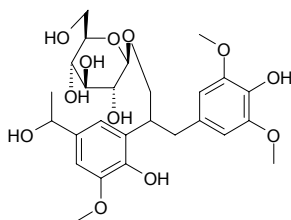


**20653 Tamariscina ester A**

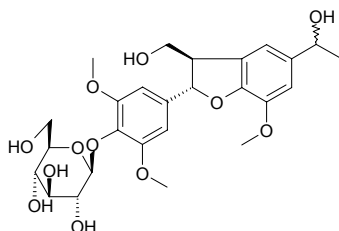
$C_{17}H_{16}O_6$  (316.31). White needles (MeOH), mp 109~110°C. Source: JUAN BAI *Selaginella tamariscina* (whole herb). Ref: 4828.

**20654 Tamariscinoid B**

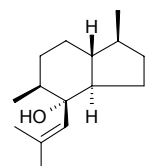
1-Hydroxy-2-[2-hydroxy-3-methoxy-5-(1-hydroxyethyl)-phenyl]-3-(4-hydroxy-3,5-dimethoxy)propane-1-*O*- $\beta$ -D-glucuronopyranoside  $C_{26}H_{36}O_{12}$  (540.57). White amorphous powder, mp 241~242°C,  $[\alpha]_D^{25} = -24^\circ$  ( $c = 0.75$ ,  $H_2O$ ). Source: JUAN BAI *Selaginella tamariscina* (whole herb). Ref: 4835.

**20655 Tamariscinoid C**

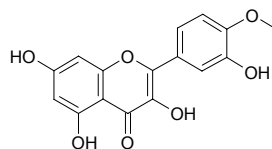
(7*S*,8*R*)-7,8-Dihydro-7-(4-hydroxy-3,5-dimethoxyphenyl)-8-hydroxymethyl-[1'-(7-hydroxyethyl)-5'-methoxyl] benzofuran-4-*O*- $\beta$ -D-glucopyranoside  $C_{26}H_{34}O_{12}$  (538.55). Colorless powder, easily soluble in MeOH and  $H_2O$ , mp 238~240°C. Source: JUAN BAI *Selaginella tamariscina* (whole herb). Ref: 4850.

**20656 Tamariscol**

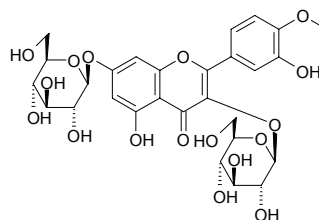
$C_{15}H_{26}O$  (222.37). Source: CHUAN ZHU ER YE TAI *Frullania tamarisci* ssp. *moniliata* [Syn. *Frullania moniliata*]. Ref: 660.

**20657 Tamarixetin**

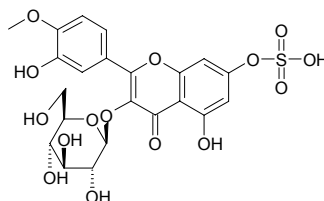
3,5,7,3'-Tetrahydroxy-4'-methoxy flavone  $C_{16}H_{12}O_7$  (316.27). Source: HUANG HUA HAO *Artemisia annua*. Ref: 660.

**20658 Tamarixetin 3-*O*- $\beta$ -D-glucopyranoside 7-*O*- $\beta$ -D-glucopyranoside**

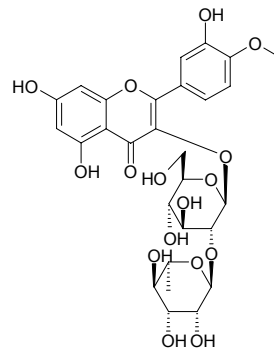
$C_{28}H_{32}O_{17}$  (640.56). Source: *Zanthoxylum* sp. Ref: 2176.

**20659 Tamarixetin 3-glucoside-7-sulphate**

$C_{23}H_{22}O_{15}S$  (538.42). Source: SHUI LIAO *Polygonum hydropiper*. Ref: 660.

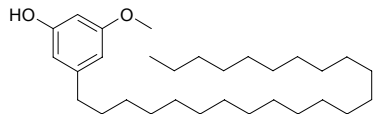
**20660 Tamarixetin 3-*O*-neohesperidoside**

3-[[2-*O*-(6-Deoxy- $\alpha$ -L-mannopyranosyl)- $\beta$ -D-glucopyranosyl]oxy]-5,7-dihydroxy-2-(3-hydroxy-4-methoxyphenyl)-4*H*-1-benzopyran-4-one  $C_{28}H_{32}O_{16}$  (624.56). Yellow amorphous powder (MeOH), mp 180~190°C (dec),  $[\alpha]_D^{20} = -78^\circ$  ( $c = 0.001$ , DMSO). Pharm: Nitric oxide production inhibitor inactive ( $IC_{50} > 100\mu g/mL$ ). Source: SUI ZHUANG BI QIAO JIANG *Costus spicatus* (leaf) Ref: 3898.

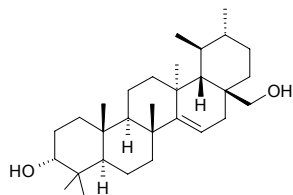


**20661 Tamarixinol**

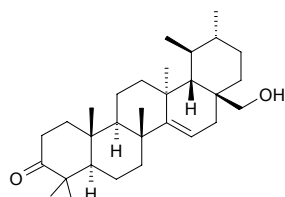
$C_{30}H_{54}O_2$  (446.75). Yellow white granular crystals, mp 77~78°C (anhydrous ethanol), easily soluble in hexane, chloroform and anhydrous ethanol. Source: CHENG LIU *Tamarix chinensis*. Ref: 115.

**20662 Tamarixol**

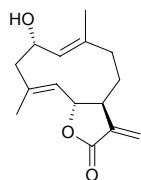
$C_{30}H_{50}O_2$  (442.73). White acicular crystals, mp 252~253°C (acetic ester). Source: CHENG LIU *Tamarix chinensis*. Ref: 115.

**20663 Tamarixone**

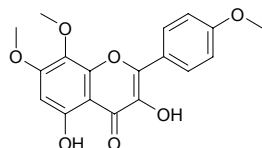
$C_{30}H_{48}O_2$  (440.72). White crystalline powder, mp 238~240°C (anhydrous ethanol). Source: CHENG LIU *Tamarix chinensis*. Ref: 115.

**20664 Tamaulipin A**

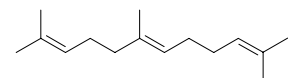
$C_{15}H_{20}O_3$  (248.33). Pharm: Antineoplastic; cytotoxic. Source: MI HUA TUN CAO *Ambrosia confertiflora*, BAI CI GUO TUN CAO *Ambrosia dumosa*. Ref: 658.

**20665 Tambulin**

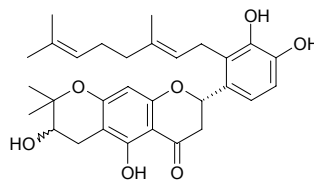
$C_{18}H_{16}O_7$  (344.32). Source: CI HUA JIAO *Zanthoxylum acanthopodium*, SHUANG SE JIN GUANG JU *Rudbeckia bicolor*. Ref: 1521.

**20666 Tanacetene**

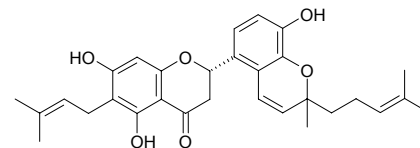
2,6,11-Trimethyl-dodesa-2,6,10-triene  $C_{15}H_{26}$  (206.37). Yellowish oil. Source: CHANG YE AI JU *Tanacetum longifolium*. Ref: 1934.

**20667 Tanariflavanone A**

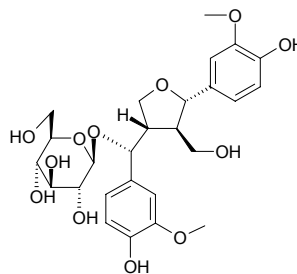
$C_{30}H_{36}O_7$  (508.62). Greenish oil,  $[\alpha]_D^{24.6} = +26.8^\circ$  ( $c = 0.6$ ,  $CHCl_3$ ). Source: XUE TONG *Macaranga tanarius* (fallen leaf). Ref: 3062.

**20668 Tanariflavanone B**

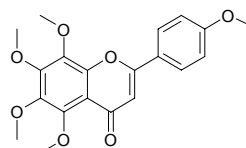
$C_{30}H_{34}O_6$  (490.6). Brownish oil,  $[\alpha]_D^{24.6} = +28.2^\circ$  ( $c = 0.5$ ,  $CHCl_3$ ). Source: XUE TONG *Macaranga tanarius* (fallen leaf). Ref: 3062.

**20669 Tanegoside**

$C_{26}H_{34}O_{12}$  (538.55). Source: ZHONG HUA QING NIU DAN *Tinospora sinensis* (stem). Ref: 4292.

**20670 Tangeretin**

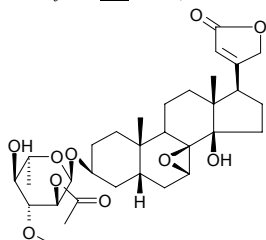
5,6,7,8,4'-Pentamethoxyflavone [481-53-8]  $C_{20}H_{20}O_7$  (372.38). Rods or needles (EtOAc), mp 154°C, mp 150~151°C. Pharm: Antineoplastic (induces leucocyte inhibiting growth of HL-60 leukemia cell, dissolves cancer cell); cytotoxic (number of tumor cell lines, antiproliferative, induces differentiation of HL-60 cells *in vitro* in a concentration-dependent manner)<sup>[5369]</sup>; cytotoxic (inhibits invasion of mus MO4 cells into embryonic chick heart fragments *in vitro*)<sup>[5369]</sup>; antiviral; antibacterial; antifungal; feeding pregnant rat (10mg/kg, death rate of filial generation 83%); smooth muscle relaxant. Source: HUA ZHOU YOU *Citrus grandis* var. *tomentosa*, JIN GAN *Fortunella japonica*, JIN JU *Fortunella margarita*, JU PI *Citrus reticulata*, ZHI SHI *Citrus aurantium*, *Citrus* sp. Ref: 2, 6, 658, 979, 1521, 2194, 2867, 5369.



**20671 Tanghinin**

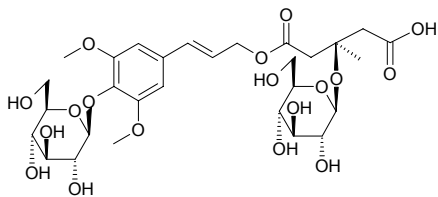
[25390-16-3] C<sub>32</sub>H<sub>46</sub>O<sub>10</sub> (590.72). **Pharm:** Cytotoxic (KB, ED<sub>50</sub> = 1.29 μg/mL, BC, ED<sub>50</sub> = 0.77 μg/mL, NCI-H187, ED<sub>50</sub> = 2.3 μg/mL)<sup>[2594]</sup>; cardiotoxic.

**Source:** NIU XIN QIE ZI *Cerbera manghas*, TAN MANG GUO *Tanghinia venenifera*. **Ref:** 1521, 2594.

**20672 Tangshenoside I**

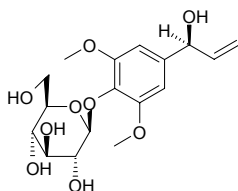
C<sub>29</sub>H<sub>42</sub>O<sub>18</sub> (678.65). **Source:** CHUAN DANG SHEN *Codonopsis tangshen*, DANG SHEN *Codonopsis pilosula* (dried root: mean content = 0.073%<sup>[5508]</sup>).

**Ref:** 2, 660, 5508.

**20673 Tangshenoside II**

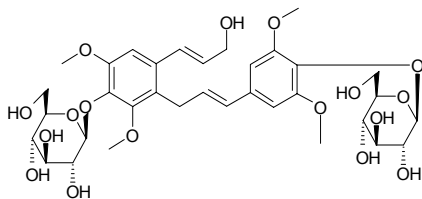
C<sub>17</sub>H<sub>24</sub>O<sub>9</sub> (372.38). **Source:** CHUAN DANG SHEN *Codonopsis tangshen*.

**Ref:** 2, 660.

**20674 Tangshenoside III**

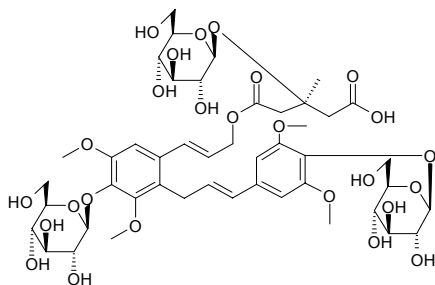
C<sub>34</sub>H<sub>46</sub>O<sub>17</sub> (726.74). **Source:** CHUAN DANG SHEN *Codonopsis tangshen*.

**Ref:** 2, 660.

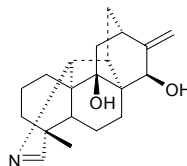
**20675 Tangshenoside IV**

C<sub>46</sub>H<sub>64</sub>O<sub>26</sub> (1033.01). **Source:** CHUAN DANG SHEN *Codonopsis tangshen*.

**Ref:** 2, 660.

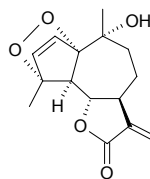
**20676 Tangutimine**

C<sub>20</sub>H<sub>27</sub>NO<sub>2</sub> (313.44). Colorless crystals, mp 252–253°C, [α]<sub>D</sub><sup>20</sup> = +93.0° (c = 0.166, CH<sub>3</sub>OH). **Source:** GAN QING WU TOU *Aconitum tanguticum*. **Ref:** 2203.

**20677 Tanparthin-α-peroxide**

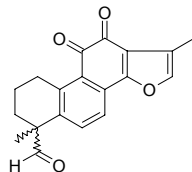
C<sub>15</sub>H<sub>18</sub>O<sub>5</sub> (278.31). **Source:** YI KUA *Artemisia myriantha* (aerial parts).

**Ref:** 4618.

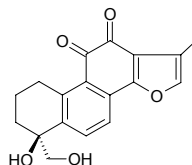
**20678 Tanshinaldehyde**

Tanshinaldehyde II C<sub>19</sub>H<sub>16</sub>O<sub>4</sub> (308.34). Dark red acicular crystals, mp 223–225°C. **Source:** BAI HUA DAN SHEN *Salvia miltiorrhiza* f. *alba*.

**Ref:** 185.

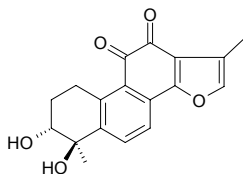
**20679 Tanshindiol A**

(+)-Tanshindiol A [97411-46-6] C<sub>18</sub>H<sub>16</sub>O<sub>5</sub> (312.33). Orange red scale substance (EtOAc), mp 222°C; jacinth acicular crystals, mp 222–223°C, [α]<sub>D</sub> = +10.5° (c = 0.55, methanol). **Pharm:** Tuberculostatic (hmn *Mycobacterium tuberculosis* H37Rv, MIC = 5 mg/L); cytotoxic (A549, SK-OV-3, SK-MEL-2, XF-498, and HCT15, IC<sub>50</sub> = 0.2–0.8 μg/mL); restores miocardia force after anoxia (rat, 5 μmol/L, restoring rate = 33.3%). **Source:** DAN SHEN *Salvia miltiorrhiza*. **Ref:** 660, 721, 900, 1521.

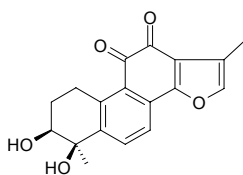


**20680 Tanshindiol B**

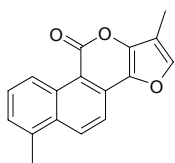
Przewaquinone D [97465-70-8] C<sub>18</sub>H<sub>16</sub>O<sub>5</sub> (312.33). Jacinth lamellar crystals (ethyl acetate), mp 210°C, [α]<sub>D</sub> = -30.0° (c = 0.02, chloroform). **Pharm:** Tuberculostatic (hmn *Mycobacterium tuberculosis* H37Rv MIC = 5mg/L); cytotoxic (A549, SK-OV-3, SK-MEL-2, XF-498, and HCT15, IC<sub>50</sub> = 0.4~1.0μg/mL); restores miocardia force after anoxia (rat, 25μmol/L, restoring rate = 34.3%). **Source:** DAN SHEN *Salvia miltiorrhiza*. **Ref:** 660, 721, 900.

**20681 Tanshindiol C**

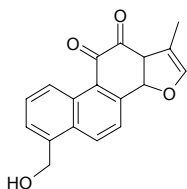
Przewaquinone E [97465-71-9] C<sub>18</sub>H<sub>16</sub>O<sub>5</sub> (312.33). Jacinth lamellar crystals (ethyl acetate), mp 222°C; 213~215°C. **Pharm:** Tuberculostatic (hmn *Mycobacterium tuberculosis* H37Rv MIC = 5mg/L); cytotoxic (A549, SK-OV-3, SK-MEL-2, XF-498, and HCT15, IC<sub>50</sub> = 0.3~0.9μg/mL); restores miocardia force after anoxia (rat, 25μmol/L, restoring rate = 27.5%). **Source:** DAN SHEN *Salvia miltiorrhiza*. **Ref:** 660, 721.

**20682 Tanshinlactone**

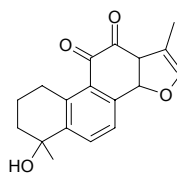
C<sub>17</sub>H<sub>12</sub>O<sub>3</sub> (264.28). **Source:** DAN SHEN *Salvia miltiorrhiza*. **Ref:** 2.

**20683 Tanshinol A**

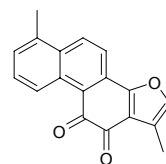
[189290-28-6] C<sub>18</sub>H<sub>12</sub>O<sub>4</sub> (292.29). Amaranth acicular crystals (dichloromethane), mp 230~235°C. **Pharm:** Induces hyperplasia (hmn A549, SK-OV-3, SK-MEL-2, XF-498, and HCT15, IC<sub>50</sub> = 0.7~3.0μg/mL). **Source:** DAN SHEN *Salvia miltiorrhiza*. **Ref:** 721, 1157.

**20684 Tanshinol B**

[319490-69-2] C<sub>18</sub>H<sub>16</sub>O<sub>4</sub> (296.33). Red acicular crystals (dichloromethane), mp 185~189°C, [α]<sub>D</sub> = 0° (c = 0.1, methanol). **Pharm:** Induces hyperplasia (hmn A549, SK-OV-3, SK-MEL-2, XF-498, and HCT15, IC<sub>50</sub> = 0.8~3.7μg/mL). **Source:** DAN SHEN *Salvia miltiorrhiza*. **Ref:** 721, 1157.

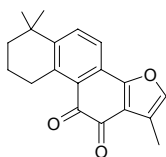
**20685 Tanshinone I**

[568-73-0] C<sub>18</sub>H<sub>12</sub>O<sub>3</sub> (276.29). mp 233~234°C. **Pharm:** Antibacterial; estrogenic activity; acetylcholinesterase (AChE) inhibitor (IC<sub>50</sub> > 50μmol/L, Argentinin A, IC<sub>50</sub> = 42.8μmol/L)<sup>[4944]</sup>; MAO A inhibitor (hmn recombinant MAO A, IC<sub>50</sub> = 84μmol/L)<sup>[5032]</sup>; iNOS inhibitor (RAW267.4 cells, LPS-induced, IC<sub>50</sub> = 13.5μmol/L)<sup>[5032]</sup>; immunosuppressant (lymphocyte transformation assay control group concanavalin A, 5μg/mL, InRt = 12%, 20μg/mL, InRt = 22%, 80μg/mL, InRt = 37%, control Dexamethasone, 50μg/mL, InRt = 63%)<sup>[4260]</sup>. **Source:** DAN SHEN *Salvia miltiorrhiza* (dried root: mean content = 0.123%<sup>[5508]</sup>), the compound was isolated from the plant by Manzo Nakao et al. in 1941<sup>[5505]</sup>, GAN XI SHU WEI CAO *Salvia przewalskii* (dried root: content = 0.16%<sup>[5508]</sup>), HONG GEN CAO *Salvia prionitis* (dried root: content = 0.035%<sup>[5508]</sup>), HUANG HUA SHU WEI CAO *Salvia flava* (dried root: content = 0.002%<sup>[5508]</sup>), JI YE SHU WEI CAO *Salvia bulleyana* (dried root: content = 0.002%<sup>[5508]</sup>), KA LA BA DAN SHEN *Salvia karabachensis*, LI SE SHU WEI CAO *Salvia castanea* (dried root: content = 0.021%<sup>[5508]</sup>), MAO DI HUANG SHU WEI CAO *Salvia digitaloides* (dried root: content = 0.007%<sup>[5508]</sup>), NAN DAN SHEN *Salvia bowleyana* (dried root: content = 0.024%<sup>[5508]</sup>), NI DAN SHEN *Salvia sinica* (dried root: content = 0.009%<sup>[5508]</sup>), SAN YE SHU WEI CAO *Salvia trijuga* (dried root: content = 0.154%<sup>[5508]</sup>), YUN NAN SHU WEI CAO *Salvia yunnanensis* (dried root: mean content = 0.12%<sup>[5508]</sup>), ZHAN LONG JIAN *Veronicastrum sibiricum* (aerial parts), ZI DAN SHEN *Salvia przewalskii* var. *mandarinorum* (dried root: content = 0.090%<sup>[5508]</sup>). **Ref:** 4, 658, 4260, 4538, 4944, 5032, 5505, 5508.



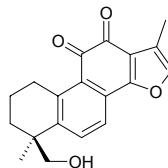
**20686 Tanshinone IIa**

[568-72-9] C<sub>19</sub>H<sub>18</sub>O<sub>3</sub> (294.35). mp 198~200°C. **Pharm:** Antibacterial (*Escherichia coli*, MIC = 50µg/mL; *Staphylococcus aureus* ATCC-25923, MIC = 100µg/mL; *Bacillus pyocyaneus* ATCC-27853, MIC = 50µg/mL; hemolytic streptococcus, MIC = 12.5µg/mL); antithrombotic; used in treatment of myocardial ischemia and myocardial infarction; acetylcholinesterase (AChE) inhibitor (IC<sub>50</sub> > 140µmol/L, Argentinin A, IC<sub>50</sub> = 42.8µmol/L)<sup>[4944]</sup>; iNOS inhibitor (RAW267.4 cells, LPS-induced, IC<sub>50</sub> > 50µmol/L)<sup>[5032]</sup>; anti-inflammatory (NO, IL-1β, IL-6 and TNF-α production inhibitor, suppresses expression of iNOS)<sup>[5481]</sup>; immunosuppressant (lymphocyte transformation assay, control group Concanavalin A, 5µg/mL, InRt = -24%, 20µg/mL, InRt = 35%, 80µg/mL, InRt = 46%, control Dexamethasone, 50µg/mL, InRt = 63%)<sup>[4260]</sup>. **Source:** DAN SHEN *Salvia miltiorrhiza* (dried root: content scope = 0.068%~1.52%, mean content = 0.609%<sup>[5508]</sup>), GAN XI SHU WEI CAO *Salvia przewalskii* (dried root: mean content = 0.942%<sup>[5508]</sup>), HONG GEN CAO *Salvia prionitis* (dried root: content = 0.019%<sup>[5508]</sup>), HUANG HUA SHU WEI CAO *Salvia flava* (dried root: content = trace)<sup>[5508]</sup>, JI YE SHU WEI CAO *Salvia bulleyana* (dried root: content = 0.004%<sup>[5508]</sup>), LI SE SHU WEI CAO *Salvia castanea* (dried root: content = 0.168%<sup>[5508]</sup>), MAO DI HUANG SHU WEI CAO *Salvia digitaloides* (dried root: content = 0.118%<sup>[5508]</sup>), NAN DAN SHEN *Salvia bowleyana* (dried root: content = 0.095%<sup>[5508]</sup>), NAN OU DAN SHEN *Salvia sclarea*, NI DAN SHEN *Salvia sinica* (dried root: content = 0.002%<sup>[5508]</sup>), SAN YE SHU WEI CAO *Salvia trijuga* (dried root: content = 0.462%<sup>[5508]</sup>), YUN NAN SHU WEI CAO *Salvia yunnanensis* (dried root: content = 0.193%<sup>[5508]</sup>), ZHAN LONG JIAN *Veronicastrum sibiricum* (aerial parts), ZI DAN SHEN *Salvia przewalskii* var. *mandarinorum* (dried root: content = 0.398%<sup>[5508]</sup>). **Ref:** 2, 4, 658, 4260, 4538, 4909, 4944, 5032, 5481, 5501, 5508.

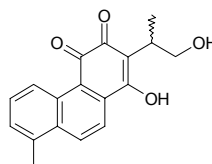
**20687 Tanshinone IIb**

C<sub>19</sub>H<sub>18</sub>O<sub>4</sub> (310.35). mp 200~204°C. **Pharm:** Antibacterial (*Escherichia coli*, MIC = 25µg/mL; *Staphylococcus aureus* ATCC-25923, MIC = 50µg/mL; *Bacillus pyocyaneus* ATCC-27853, MIC = 25µg/mL; hemolytic streptococcus, MIC = 25µg/mL; *Staphylococcus aureus* and its drug-resistant strains). **Source:** DAN SHEN *Salvia miltiorrhiza* (dried root: content = 0.020%<sup>[5508]</sup>), GAN XI SHU WEI CAO *Salvia przewalskii* (dried root: content = 0.015%<sup>[5508]</sup>), HONG GEN CAO *Salvia prionitis* (dried root: content = 0.001%<sup>[5508]</sup>), HUANG HUA SHU WEI CAO *Salvia flava* (dried root: content = trace<sup>[5508]</sup>), JI YE SHU WEI CAO *Salvia bulleyana* (dried root: content = trace<sup>[5508]</sup>), LI SE SHU WEI CAO *Salvia castanea* (dried root: content = 0.003%<sup>[5508]</sup>), MAO DI HUANG SHU WEI CAO *Salvia digitaloides* (dried root: content =

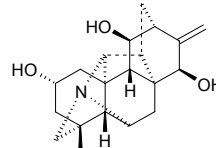
0.001%<sup>[5508]</sup>), NAN DAN SHEN *Salvia bowleyana* (dried root: content = 0.006%<sup>[5508]</sup>), NI DAN SHEN *Salvia sinica* (dried root: content = 0.001%<sup>[5508]</sup>), SAN YE SHU WEI CAO *Salvia trijuga* (dried root: content = 0.034%<sup>[5508]</sup>), YUN NAN SHU WEI CAO *Salvia yunnanensis* (dried root: content = 0.015%<sup>[5508]</sup>), ZI DAN SHEN *Salvia przewalskii* var. *mandarinorum* (dried root: content = 0.026%<sup>[5508]</sup>). **Ref:** 2, 4, 658, 4909, 5508.

**20688 Tanshinone VI**

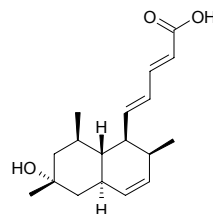
[121064-74-2] C<sub>18</sub>H<sub>16</sub>O<sub>4</sub> (296.32). Jacinth acicular crystals, mp 185~189°C (dec), [α]<sub>D</sub><sup>30</sup> = +47.0° (c = 0.1, chloroform). **Pharm:** Protects cardiac muscle from lack of blood; restores miocardia force after anoxia. **Source:** DAN SHEN *Salvia miltiorrhiza*. **Ref:** 932, 1162.

**20689 Tanwusine**

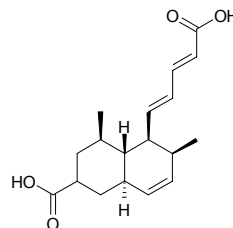
C<sub>20</sub>H<sub>27</sub>NO<sub>3</sub> (329.44). **Source:** GAN QING WU TOU *Aconitum tanguticum*. **Ref:** 660.

**20690 Tanzawaic acid E**

C<sub>18</sub>H<sub>26</sub>O<sub>3</sub> (290.41). Yellowish oil, [α]<sub>D</sub><sup>20</sup> = +45.5° (c = 0.110, MeOH). **Source:** *Penicillium steckii*. **Ref:** 3960.

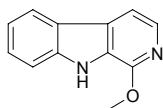
**20691 Tanzawaic acid F**

C<sub>18</sub>H<sub>24</sub>O<sub>4</sub> (304.39). Yellowish oil, [α]<sub>D</sub><sup>20</sup> = +10.0° (c = 0.040, MeOH). **Source:** *Penicillium steckii*. **Ref:** 3960.

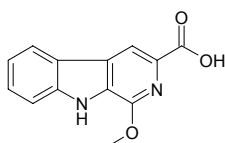


**20692 Taraxacine A**

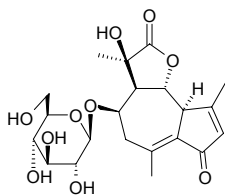
$C_{12}H_{10}N_2O$  (198.23). Pale yellow syrup. Source: TAI WAN PU GONG YING *Taraxacum formosanum* (fresh aerial parts). Ref: 4345.

**20693 Taraxacine B**

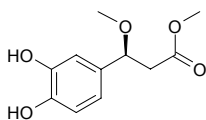
$C_{13}H_{10}N_2O_3$  (242.24). Pale yellow syrup. Source: TAI WAN PU GONG YING *Taraxacum formosanum* (fresh aerial parts). Ref: 4345.

**20694 Taraxafolide**

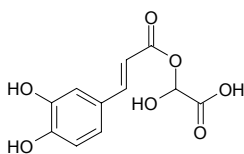
$C_{21}H_{28}O_{10}$  (440.45). Colorless oil,  $[\alpha]_D = -9.47^\circ$  ( $c = 0.09$ ,  $H_2O$ ). Source: TAI WAN PU GONG YING *Taraxacum formosanum* (fresh root). Ref: 4488.

**20695 Taraxafolin**

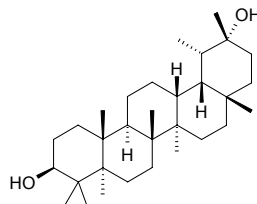
$C_{11}H_{14}O_5$  (226.23). Colorless syrup. Source: TAI WAN PU GONG YING *Taraxacum formosanum* (fresh aerial parts). Ref: 4345.

**20696 (+)-Taraxafolin B**

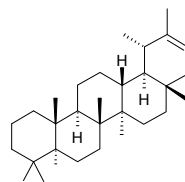
$C_{11}H_{10}O_7$  (254.20). Brown powder (MeOH). mp > 280°C,  $[\alpha]_D = +130^\circ$  ( $c = 0.56$ ,  $H_2O$ ). Pharm: Antioxidant (DPPH scavenger, weaker than control Vitamin E). Source: TAI WAN PU GONG YING *Taraxacum formosanum* (fresh root). Ref: 4488.

**20697 Taraxastane-3β,20α-diol**

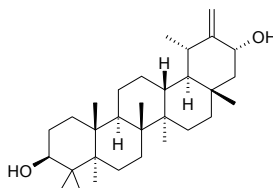
$C_{30}H_{50}O_2$  (444.75). Pharm: Cytotoxic (SMMC-7721,  $IC_{50} = (104.1 \pm 4.3) \mu g/mL$ , control Vincristine,  $IC_{50} = (63.2 \pm 1.8) \mu g/mL$ ; B16,  $IC_{50} = (79.7 \pm 5.6) \mu g/mL$ , Vincristine,  $IC_{50} = (70.7 \pm 2.8) \mu g/mL$ ; HeLa,  $IC_{50} = (71.8 \pm 4.4) \mu g/mL$ , Vincristine,  $IC_{50} = (67.2 \pm 2.2) \mu g/mL$ ); antibacterial (*Bacillus subtilis*, IZD =  $(13.7 \pm 0.7) mm$ , control Chloramphenicol, IZD =  $(14.5 \pm 1.1) mm$ ; *Escherichia coli*, IZD =  $(14.8 \pm 0.8) mm$ , Chloramphenicol, IZD =  $(14.9 \pm 1.3) mm$ ; *Staphylococcus aureus*, IZD =  $(14.5 \pm 1.6) mm$ , Chloramphenicol, IZD =  $(15.1 \pm 1.2) mm$ ). Source: *Saussurea petrovii* (whole herb). Ref: 5219.

**20698 ψ-Taraxastene**

20-Taraxastene  $C_{30}H_{50}$  (410.73). Source: SHUI LONG GU *Polypodium niponicum*. Ref: 660.

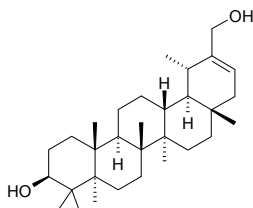
**20699 Taraxast-20(30)-ene-3β,21α-diol**

$C_{30}H_{50}O_2$  (442.73). Colorless crystals, mp 256~258°C ( $CHCl_3$ -MeOH),  $[\alpha]_D^{25} = +225^\circ$  ( $c = 0.09$ ,  $CHCl_3$ ). Pharm: Cytotoxic (SMMC-7721,  $IC_{50} = (125.3 \pm 4.7) \mu g/mL$ , control Vincristine,  $IC_{50} = (63.2 \pm 1.8) \mu g/mL$ ; B16,  $IC_{50} = (87.4 \pm 4.7) \mu g/mL$ , Vincristine,  $IC_{50} = (70.7 \pm 2.8) \mu g/mL$ ; HeLa,  $IC_{50} = (98.7 \pm 2.2) \mu g/mL$ , Vincristine,  $IC_{50} = (67.2 \pm 2.2) \mu g/mL$ ); antibacterial (*Bacillus subtilis*, IZD =  $(11.5 \pm 0.7) mm$ , control Chloramphenicol, IZD =  $(14.5 \pm 1.1) mm$ ; *Escherichia coli*, IZD =  $(14.5 \pm 1.9) mm$ , Chloramphenicol, IZD =  $(14.9 \pm 1.3) mm$ ; *Staphylococcus aureus*, IZD =  $(8.5 \pm 1.9) mm$ , Chloramphenicol, IZD =  $(15.1 \pm 1.2) mm$ ). Source: *Saussurea petrovii* (whole herb). Ref: 5219.

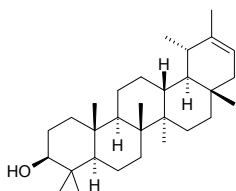


**20700 Taraxast-20-ene-3 $\beta$ ,30-diol**

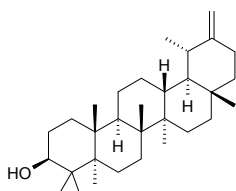
$C_{30}H_{50}O_2$  (442.73). Colorless crystals, mp 198–200°C (CHCl<sub>3</sub>–MeOH),  $[\alpha]_D^{25} = +116^\circ$  ( $c = 0.35$ , CHCl<sub>3</sub>). **Pharm:** Cytotoxic (SMMC-7721, IC<sub>50</sub> = (176.3±2.4)μg/mL, control Vincristine, IC<sub>50</sub> = (63.2±1.8)μg/mL; B16, IC<sub>50</sub> = (20.1±2.6)μg/mL, Vincristine, IC<sub>50</sub> = (70.7±2.8)μg/mL; HeLa, IC<sub>50</sub> = (86.3±5.0)μg/mL, Vincristine, IC<sub>50</sub> = (67.2±2.2)μg/mL); antibacterial (*Bacillus subtilis*, IZD = (14.0±1.0)mm, control Chloramphenicol, IZD = (14.5±1.1)mm; *Escherichia coli*, IZD = (13.7±1.4)mm, Chloramphenicol, IZD = (14.9±1.3)mm; *Staphylococcus aureus*, IZD = (14.7±1.5)mm, Chloramphenicol, IZD = (15.1±1.2)mm). **Source:** *Saussurea petrovii* (whole herb). **Ref:** 5219.

**20701 Taraxast-20-ene-3 $\beta$ -ol**

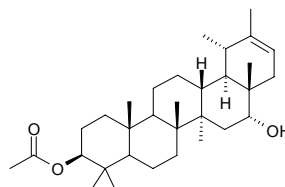
$C_{30}H_{50}O$  (426.73). **Pharm:** Cytotoxic (SMMC-7721, IC<sub>50</sub> = (131.8±1.9)μg/mL, control Vincristine, IC<sub>50</sub> = (63.2±1.8)μg/mL; B16, IC<sub>50</sub> = (86.4±4.5)μg/mL, Vincristine, IC<sub>50</sub> = (70.7±2.8)μg/mL; HeLa, IC<sub>50</sub> = (123.6±2.2)μg/mL, Vincristine, IC<sub>50</sub> = (67.2±2.2)μg/mL); antibacterial (*Bacillus subtilis*, IZD = (12.0±0.6)mm, control Chloramphenicol, IZD = (14.5±1.1)mm; *Escherichia coli*, IZD = (13.6±0.6)mm, Chloramphenicol, IZD = (14.9±1.3)mm; *Staphylococcus aureus*, IZD = (9.1±1.4)mm, Chloramphenicol, IZD = (15.1±1.2)mm). **Source:** *Saussurea petrovii* (whole herb). **Ref:** 5219.

**20702 Taraxast-20(30)-ene-3 $\beta$ -ol**

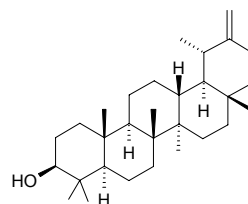
$C_{30}H_{50}O$  (426.73). **Pharm:** Cytotoxic (SMMC-7721, IC<sub>50</sub> = (142.7±3.3)μg/mL, control Vincristine, IC<sub>50</sub> = (63.2±1.8)μg/mL; B16, IC<sub>50</sub> = (98.2±3.1)μg/mL, Vincristine, IC<sub>50</sub> = (70.7±2.8)μg/mL; HeLa, IC<sub>50</sub> = (117.3±4.6)μg/mL, Vincristine, IC<sub>50</sub> = (67.2±2.2)μg/mL); antibacterial (*Bacillus subtilis*, IZD = (11.1±1.2)mm, control Chloramphenicol, IZD = (14.5±1.1)mm; *Escherichia coli*, IZD = (12.8±1.3)mm, Chloramphenicol, IZD = (14.9±1.3)mm; *Staphylococcus aureus*, IZD = (8.3±0.5)mm, Chloramphenicol, IZD = (15.1±1.2)mm). **Source:** *Saussurea petrovii* (whole herb). **Ref:** 5219.

**20703 Taraxaster-20-en-3 $\beta$ ,16 $\alpha$ -diol-3-acetate**

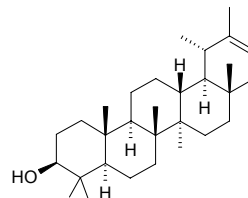
$C_{32}H_{52}O_3$  (484.77). Colorless acicular crystals (CHCl<sub>3</sub>), mp 244–246°C,  $[\alpha]_D^{20} = -32.0^\circ$  ( $c = 0.1$ , CHCl<sub>3</sub>). **Source:** BAO JING KU MAI CAI *Ixeris sonchifolia*. **Ref:** 2110.

**20704 Taraxasterol**

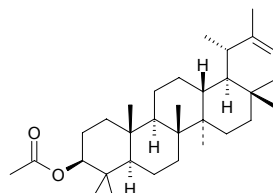
[1059-14-9]  $C_{30}H_{50}O$  (426.73). **Source:** JIN FEI CAO *Inula japonica*, MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*], PU GONG YING *Taraxacum mongolicum*, XUAN FU HUA *Inula britannica*, YAO YONG PU GONG YING *Taraxacum officinale*, ZHONG GUO XUAN FU HUA *Inula britannica* var. *chinensis*. **Ref:** 2, 660.

**20705  $\psi$ -Taraxasterol**

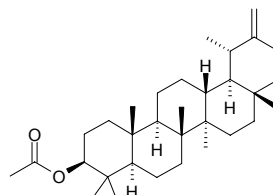
$C_{30}H_{50}O$  (426.73). mp 217–219°C. **Source:** YAO YONG PU GONG YING *Taraxacum officinale*. **Ref:** 6, 660.

**20706  $\psi$ -Taraxasteryl acetate**

$C_{32}H_{52}O_2$  (468.77). **Source:** DA JI<sup>(4)</sup> *Cirsium japonicum*, XIAO JI *Cirsium setosum* [Syn. *Cerratula setosa*; *Cirsium segetum*; *Cephalanoplos segetum*], XU DUAN JU *Sonchus asper* [Syn. *Sonchus oleraceus* var. *asper*]. **Ref:** 660.

**20707 Taraxasteryl acetate**

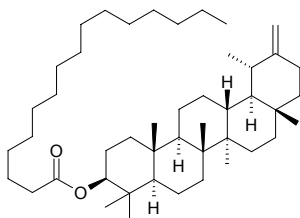
$C_{32}H_{52}O_2$  (468.77). mp 256–257°C. **Source:** CHENG GAN CAO *Eupatorium japonicum*, DA JI<sup>(4)</sup> *Cirsium japonicum*. **Ref:** 6.



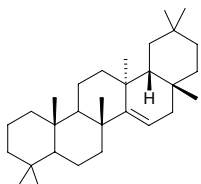


**20708 Taraxasteryl palmitate**

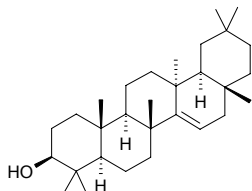
$C_{46}H_{80}O_2$  (665.15). **Source:** CHENG GAN CAO *Eupatorium japonicum*, E BU SHI CAO *Centipeda minima*, PEI LAN *Eupatorium fortunei*, ZAN SHI LONG DAN *Gentiana thunbergii*. **Ref:** 6, 660.

**20709 Taraxer-14-ene**

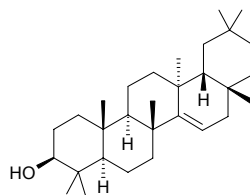
$C_{30}H_{50}$  (410.73). **Source:** DAO LUAN YE FU SHI JUE *Lemmaphyllum microphyllum* var. *obovatum*, SHUI LONG GU *Polypodium niponicum*. **Ref:** 660.

**20710 Taraxer-14-en-3β-ol**

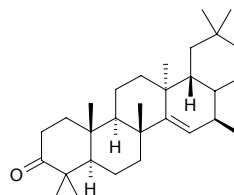
$C_{30}H_{50}O$  (426.73). mp 278~280°C,  $[\alpha]_D^{20} = +2^\circ$ . **Pharm:** Anti-inflammatory (*in vivo*, mouse ear edema induced by TPA, 0.5mg/ear, orl, InRt = 57.06%). **Source:** JIA MA SHU *Sterculia foetida* (leaf). **Ref:** 4924.

**20711 Taraxerol**

[127-22-0]  $C_{30}H_{50}O$  (426.73). mp 282~283°C. **Pharm:** Antiulcerative; inhibits gastric acid secretion; cytotoxic inactive (*in vitro*, HeLa, Vero, K562, Raji, Wish, and Calu1 tumor cell lines,  $IC_{50} > 100\mu\text{mol/L}$ )<sup>[3057]</sup>; cytotoxic inactive (A2780 ovarian cancer cell line,  $IC_{50} = 16.6\text{mg/mL}$ )<sup>[5379]</sup>; inhibits degranulation and release of  $\beta$ -hexosaminidase (RBL-2H3 cells, 100 $\mu\text{mol/L}$ , InRt = (-3.0±0.9)%, control Curcumin, 100 $\mu\text{mol/L}$ , InRt = (62.6±1.0)%, did not affect the enzyme activity of  $\beta$ -hexosaminidase)<sup>[4163]</sup>; antioxidant inactive (*in vitro*, DPPH scavenger,  $IC_{50} > 500\mu\text{mol/L}$ ; control Vitamin E,  $IC_{50} = 20.1\mu\text{mol/L}$ )<sup>[4784]</sup>. **Source:** BIAN TAO *Mangifera persiciformis*, CHUAN DANG SHEN *Codonopsis tangshen* (dried root: content = 0.0117%)<sup>[5508]</sup>, DANG SHEN *Codonopsis pilosula* (dried root: mean content = 0.0100%)<sup>[5508]</sup>, JIN CAO *Hedyotis acutangula*, MU SHU DI SHANG BU FEN *Manihot esculenta*, QIU HUA DANG SHEN *Codonopsis subglobosa* (dried root: content = 0.0050%)<sup>[5508]</sup>, QUE MEI TENG *Sageretia theezans* [Syn. *Sageretia thea*], RI BEN AN XI XIANG JING PI *Styrax japonica* (stem cortex: yield = 0.00073%dw)<sup>[4787]</sup>, SU HUA DANG SHEN *Codonopsis pilosula* var. *modesta* [Syn. *Codonopsis modesta*] (dried root: mean content = 0.0276%)<sup>[5508]</sup>, YANG MEI SHU PI *Myrica rubra* (bark: yield = 0.014%), YAO YONG PU GONG YING *Taraxacum officinale*, YI HE GUO *Ventilago leiocarpa* (stem)<sup>[3057]</sup>, *Diospyros* sp., *Lithocarpus* sp., *Canarium* sp. **Ref:** 2, 515, 550, 658, 660, 3057, 4163, 4787, 5379, 5508.

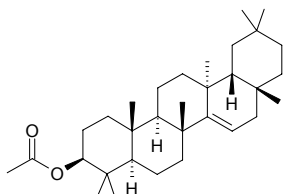
**20712 Taraxerone**

$C_{30}H_{48}O$  (424.72). mp 242~244°C. **Pharm:** Cytotoxic inactive (A2780 ovarian cancer cell line,  $IC_{50} = 25.8\text{mg/mL}$ )<sup>[5379]</sup>. **Source:** FU RONG JU GEN *Crossostephium chinense*, HUO YANG LE *Euphorbia antiquorum*, JU QU *Cichorium intybus*, MU SHU DI SHANG BU FEN *Manihot esculenta*. **Ref:** 6, 620, 5379.

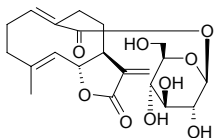


**20713 Taraxeryl acetate**

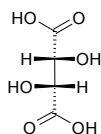
$C_{32}H_{52}O_2$  (468.77). mp 301~302°C ( $C_6H_6$ -EtOAc), 304~305°C. Source: BI LI *Ficus pumila*, CHUAN DANG SHEN *Codonopsis tangshen* (dried root: content = 0.0077%<sup>[5508]</sup>), CI SAN JIA *Acanthopanax trifoliatum*, DANG SHEN *Codonopsis pilosula* (dried root: mean content = 0.0041%<sup>[5508]</sup>), FU SANG YE *Hibiscus rosa-sinensis*, FU RONG JU GEN *Crossostephium chinense*, MAO LIAN HAO *Artemisia vestita*, QIU HUA DANG SHEN *Codonopsis subglobosa*, SU HUA DANG SHEN *Codonopsis pilosula* var. *modesta* [Syn. *Codonopsis modesta*] (dried root: content = 0.0075%<sup>[5508]</sup>), XIE WEI JU *Koelipnia linearis* (aerial parts). Ref: 2, 6, 474, 660, 3912, 5508.

**20714 Taraxinic acid-1'-O-β-D-glucopyranoside**

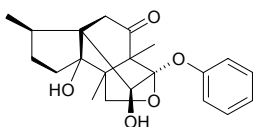
$C_{21}H_{28}O_9$  (424.45). Colorless needles (EtOH-Et<sub>2</sub>O), mp 186~188°C,  $[\alpha]_D^{22} = -57.7^\circ$  ( $CH_3OH$ ,  $c = 0.45$ ). Pharm: Antiulcer (gastrelcoma, mus *in vivo*, protects gastric mucosa, in dose 80mg/kg orl effectly inhibits stomach damaga due to aspirin). Source: DAO LUAN YE PU GONG YING GEN *Taraxacum obovatum*, TAI WAN PU GONG YING *Taraxacum formosanum* (fresh root), YUAN JING HUAN YANG SHEN *Crepis napifera*. Ref: 2216, 4488, 5357.

**20715 Tartaric acid**

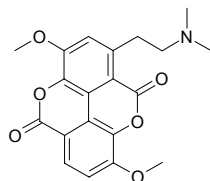
2,3-Dihydroxybutanedioic acid [526-83-0]  $C_4H_6O_6$  (150.09). mp (L) 170°C. Source: CU LIU GUO *Hippophae rhamnoides*, DA ZAO *Ziziphus jujuba*, DU ZHONG *Eucommia ulmoides*, HU ZHANG YE *Polygonum cuspidatum*, PU<sup>(2)</sup> TAO *Vitis vinifera*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], SHAN ZHU YU *Cornus officinalis* [Syn. *Macrocarpium officinale*], SUAN JIAO *Tamarindus indica*, *Pelargonium* sp. Ref: 2, 660.

**20716 Tashironin**

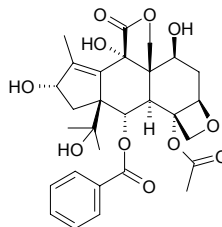
$C_{21}H_{26}O_5$  (358.44). Pharm: Neurotrophic bioassay inactive (primary culture of rat cortical neurons, 0.1~10μmol/L). Source: *Illicium merrillianum* (pericarp). Ref: 3046.

**20717 Taspine**

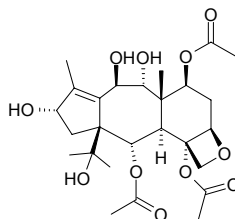
Thaspine  $C_{20}H_{19}NO_6$  (369.38). Pharm: Antibacterial (*Mycobacterium tuberculosis*, EC = 1:100000); antineoplastic (RNA tumor virus); anti-inflammatory (rat, swollen foot model caused by carrageenan); LD<sub>50</sub> (orl, chloride) = 518mg/kg. Source: DE LA KE BA DOU *Croton draconoide*, HONG MAO QI *Leontice robustum*, LAI KE BA DOU *Croton lechleri*, SI MI SHI MU DAN CAO *Leontice smirnowii*. Ref: 6, 658, 660.

**20718 Tasumatrol A**

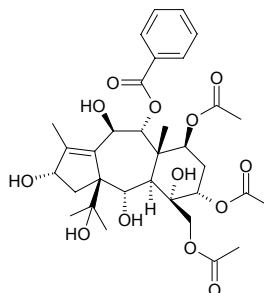
$C_{29}H_{34}O_{11}$  (558.59). Amorphous solid,  $[\alpha]_D^{25} = -12^\circ$  ( $c = 0.1$ , MeOH). Source: SU MEN DA LA HONG DOU SHAN *Taxus sumatrana* (leaf and twig). Ref: 4359.

**20719 Tasumatrol B**

$C_{26}H_{38}O_{11}$  (526.59). Amorphous solid,  $[\alpha]_D^{25} = -7.6^\circ$  ( $c = 0.2$ , MeOH). Source: SU MEN DA LA HONG DOU SHAN *Taxus sumatrana* (leaf and twig). Ref: 4359.

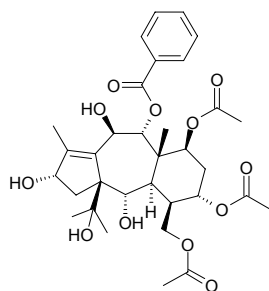
**20720 Tasumatrol E**

$C_{33}H_{44}O_{13}$  (648.71). Colorless powder,  $[\alpha]_D^{25} = +36^\circ$  ( $c = 0.1$ , MeOH). Pharm: Cytotoxic (*in vitro*, 30μg/mL: A498, InRt = 100%; NCI-H226, InRt = 84.8%; A549, InRt = 91.3%; PC3, InRt = 94.7%; control Taxol, 30μg/mL: A498, InRt = 98.2%; NCI-H226, InRt = 71.2%; A549, InRt = 79.7%; PC3, InRt = 91.7%). Source: SU MEN DA LA HONG DOU SHAN *Taxus sumatrana* (leaf and twig). Ref: 4800.

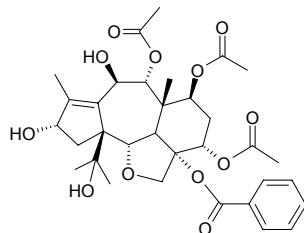


**20721 Tasumatrol F**

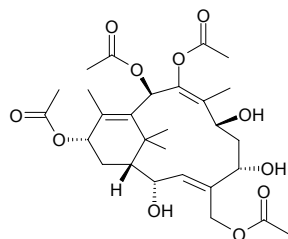
$C_{33}H_{44}O_{12}$  (632.71). Colorless powder,  $[\alpha]_D^{25} = +28^\circ$  ( $c = 0.1$ , MeOH). **Pharm:** Cytotoxic (*in vitro*, 30 $\mu$ g/mL: A498, InRt = 83.0%; NCI-H226, InRt = 78.5%; A549, InRt = 72.6%; PC3, InRt = 95.0%; control Taxol, 30 $\mu$ g/mL: A498, InRt = 98.2%; NCI-H226, InRt = 71.2%; A549, InRt = 79.7%; PC3, InRt = 91.7%). **Source:** SU MEN DA LA HONG DOU SHAN *Taxus sumatrana* (leaf and twig). **Ref:** 4800.

**20722 Tasumatrol G**

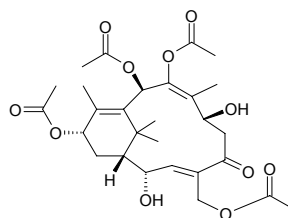
$C_{33}H_{42}O_{12}$  (630.70). Colorless powder,  $[\alpha]_D^{25} = -32^\circ$  ( $c = 0.1$ , MeOH). **Pharm:** Cytotoxic (*in vitro*, 30 $\mu$ g/mL: A498, InRt = 15.3%; NCI-H226, InRt = 78.9%; A549, InRt = 24.1%; PC3, InRt = 58.9%; control Taxol, 30 $\mu$ g/mL: A498, InRt = 98.2%; NCI-H226, InRt = 71.2%; A549, InRt = 79.7%; PC3, InRt = 91.7%). **Source:** SU MEN DA LA HONG DOU SHAN *Taxus sumatrana* (leaf and twig). **Ref:** 4800.

**20723 Tasumatrol M**

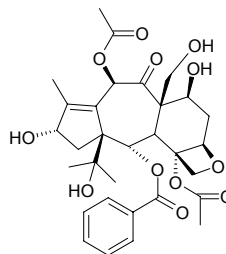
$C_{28}H_{40}O_{11}$  (552.62). Colorless powder,  $[\alpha]_D^{25} = +43^\circ$  ( $c = 0.2$ , MeOH). **Source:** SU MEN DA LA HONG DOU SHAN *Taxus sumatrana* (leaf and twig). **Ref:** 4479.

**20724 Tasumatrol N**

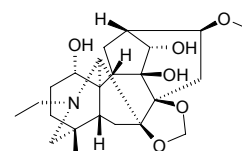
$C_{28}H_{38}O_{11}$  (550.61). Colorless powder,  $[\alpha]_D^{25} = +14^\circ$  ( $c = 0.2$ , MeOH). **Source:** SU MEN DA LA HONG DOU SHAN *Taxus sumatrana* (leaf and twig). **Ref:** 4479.

**20725 Tasumatrol O**

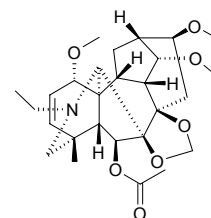
$C_{31}H_{38}O_{12}$  (602.64). Colorless powder,  $[\alpha]_D^{25} = -40^\circ$  ( $c = 0.2$ , MeOH). **Source:** SU MEN DA LA HONG DOU SHAN *Taxus sumatrana* (leaf and twig). **Ref:** 4479.

**20726 Tatsidine**

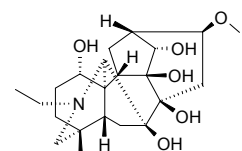
$C_{23}H_{35}NO_6$  (421.54). **Source:** KANG DING CUI QUE HUA *Delphinium tatsienense*. **Ref:** 660.

**20727 Tatsiensine**

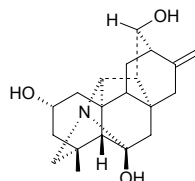
$C_{27}H_{39}NO_7$  (489.61). White amorphous powder. **Source:** QIN LING CUI QUE HUA *Delphinium giraldii*, KANG DING CUI QUE HUA *Delphinium tatsienense*, ZHAN MAO CUI QUE HUA *Delphinium kamaonense* var. *glabrescens*. **Ref:** 660, 2506.

**20728 Tatsinine**

$C_{22}H_{35}NO_6$  (409.53). **Source:** KANG DING CUI QUE HUA *Delphinium tatsienense*. **Ref:** 660.

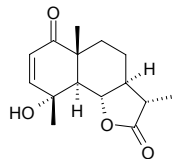
**20729 Tatsirine**

$C_{20}H_{27}NO_3$  (329.44). **Source:** KANG DING CUI QUE HUA *Delphinium tatsienense*. **Ref:** 660.

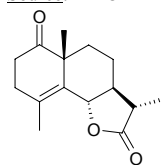


**20730 Tauremisin A**

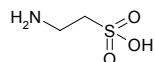
Vulgarin; Tauremisin; Judaicin  $C_{15}H_{20}O_4$  (264.32). Colorless acicular crystals (ethanol), mp 174–175°C,  $[\alpha]_{546nm}^{27} = +48.7^\circ$  ( $c = 3.86$ , chloroform). **Pharm:** Antineoplastic; cardiotoxic; cytotoxic; diuretic (rat, orl, 10mg/kg, amount of urine increases 44%); CNS activity (increases coronary flow and slows heart rate, cat and rbt, 1mg/kg iv). **Source:** NIU HAO *Artemisia taurica*, BEI AI *Artemisia vulgaris*, LU DE WEI HAO *Artemisia ludoviciana*. **Ref:** 660, 661.

**20731 Taurin**

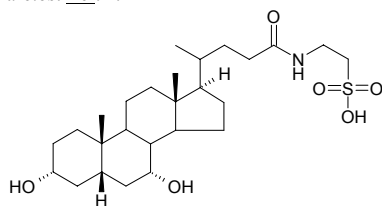
[23522-05-6]  $C_{15}H_{20}O_3$  (248.32). Colorless acicular crystals, mp 110–113°C. **Source:** MAO LIAN HAO *Artemisia vestita*. **Ref:** 474.

**20732 Taurine**

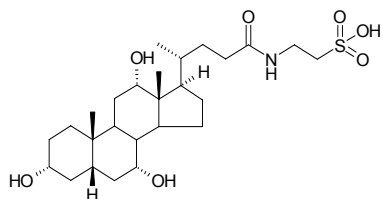
[107-35-7]  $C_2H_7NO_3S$  (125.15). mp 317°C (dec), 328°C. **Pharm:** Antiarrhythmic; antibacterial (*Staphylococcus* spp.); anti-inflammatory; antipyretic; cardiotoxic; choleric; antihepatotoxic; hypoglycemic (rbt, iv; dog, orl); antihypertensive (rat, cat and rbt, injection in ventricle); skeletal muscle relaxant; antagonist to muscle rigidity. **Source:** QUAN XIE *Buthus martensi*, GOU QI ZI *Lycium chinense*, NIU HUANG *Bos taurus domesticus*; *Bubalus bubalis* (gallstone: content scope = 0.54%–0.89%<sup>[5501]</sup>). **Ref:** 2, 658, 660, 5501.

**20733 Taurochenodeoxycholic acid**

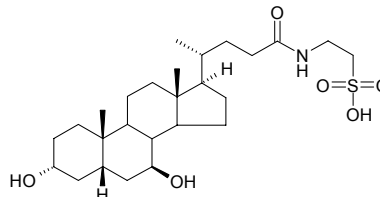
$C_{26}H_{45}NO_6S$  (499.72). **Source:** XIONG DAN *Selenarctos thibetanus*; *Ursus arctos*. **Ref:** 2.

**20734 Taurocholic acid**

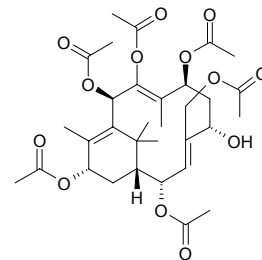
Cholaic acid; Cholytaurine; N-Choloyl-taurine [81-24-3]  $C_{26}H_{45}NO_7S$  (515.72). mp 125°C (dec). **Pharm:** Lipase accelerator; Choleric (bile secretion promotor). **Source:** XIONG DAN *Selenarctos thibetanus*; *Ursus arctos*. **Ref:** 2, 658.

**20735 Tauroursodeoxycholic acid**

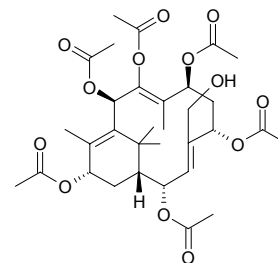
$C_{26}H_{45}NO_6S$  (499.72). **Source:** XIONG DAN *Selenarctos thibetanus*; *Ursus arctos*. **Ref:** 1496, 1521.

**20736 Taxachitriene A**

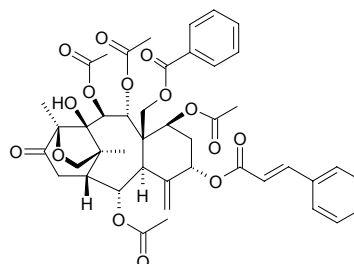
$C_{32}H_{44}O_{13}$  (636.70). mp 99–101°C,  $[\alpha]_D = -9.9^\circ$  ( $CHCl_3$ ). **Source:** HONG DOU SHAN *Taxus chinensis*. **Ref:** 662.

**20737 Taxachitriene B**

$C_{32}H_{44}O_{13}$  (636.70). mp 22.5–22.7°C,  $[\alpha]_D = +29^\circ$  ( $CHCl_3$ ). **Source:** HONG DOU SHAN *Taxus chinensis*. **Ref:** 662.

**20738 Taxacin**

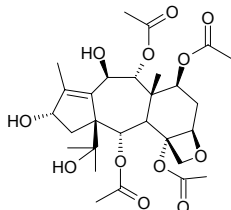
$C_{44}H_{48}O_{15}$  (816.86). **Source:** ZI SHAN *Taxus cuspidata* (seed). **Ref:** 660, 662.



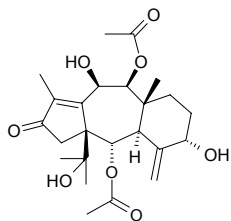
**20739 Taxacustin**

10,13-Deacetyl-abeo-baccatin IV  $C_{28}H_{40}O_{12}$  (568.62). mp 225–227°C,  $[\alpha]_D = -38.4^\circ$  (MeOH); mp 220–222°C,  $[\alpha]_D = -34^\circ$  (MeOH). **Pharm:** Cytotoxic (*in vitro*, 30  $\mu\text{g}/\text{mL}$ : A498, InRt = 21.7%; NCI-H226, InRt = 19.9%; A549, InRt = 27.1%; PC3, InRt = 1.9%; control Taxol, 30  $\mu\text{g}/\text{mL}$ : A498, InRt = 98.2%; NCI-H226, InRt = 71.2%; A549, InRt = 79.7%; PC3, InRt = 91.7%)<sup>[4800]</sup>.

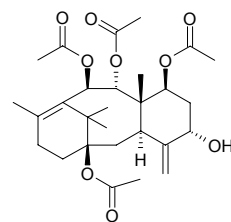
**Source:** SU MEN DA LA HONG DOU SHAN *Taxus sumatrana* (twig and leaf)<sup>[4800]</sup>, XI MA LA YA HONG DOU SHAN *Taxus wallichiana*, ZI SHAN *Taxus cuspidata*. **Ref:** 291, 662, 4800.

**20740 Taxacustone**

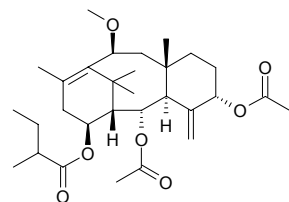
$C_{24}H_{34}O_8$  (450.53).  $[\alpha]_D = -14.6^\circ$  ( $\text{CHCl}_3$ ), mp 268–270°C. **Source:** ZI SHAN *Taxus cuspidata*. **Ref:** 662.

**20741 Taxa-4(20),11-diene-5 $\alpha$ -hydroxy-1 $\beta$ ,7 $\beta$ ,9 $\alpha$ ,10 $\beta$ -tetraacetate**

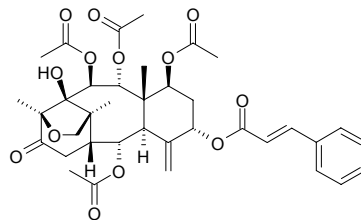
$C_{28}H_{40}O_9$  (520.63). **Source:** JIANG GUO ZI SHAN *Taxus baccata*. **Ref:** 662.

**20742 Taxa-4(20),11-diene-10 $\beta$ -methoxy-2 $\alpha$ ,5 $\alpha$ -diacetoxy-14 $\beta$ -( $\alpha$ -methyl)butyrate**

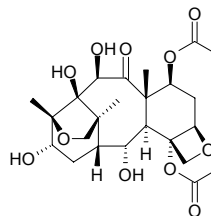
$C_{30}H_{46}O_7$  (518.70). **Source:** JIANG GUO ZI SHAN *Taxus baccata*. **Ref:** 662.

**20743 Taxagifin**

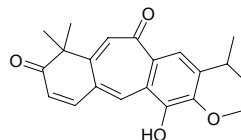
[81489-69-2]  $C_{37}H_{44}O_{13}$  (696.76). Colorless needles. **Pharm:** Cytotoxic ( $L_{1210}$ ,  $IC_{50} = 1.3 \mu\text{g}/\text{mL}$ ; KB,  $IC_{50} = 0.86 \mu\text{g}/\text{mL}$ ). **Source:** HONG DOU SHAN *Taxus chinensis*, JIA NA DA HONG DOU SHAN *Taxus canadensis* (needle leaf), JIANG GUO ZI SHAN *Taxus baccata*, ZI SHAN *Taxus cuspidata* (seed). **Ref:** 660, 662, 1775, 3958.

**20744 Taxagifin III**

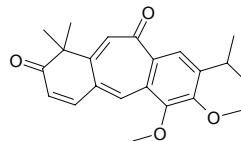
$C_{24}H_{34}O_{11}$  (498.53).  $[\alpha]_D = +31.4^\circ$  (MeOH), mp 246–247°C. **Source:** HONG DOU SHAN *Taxus chinensis*. **Ref:** 662.

**20745 Taxamairin A**

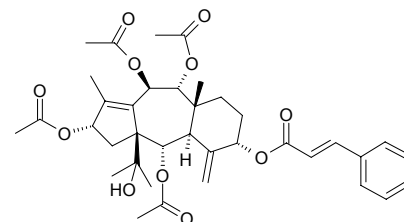
[110300-76-0]  $C_{21}H_{22}O_4$  (338.40). Golden crystals (ethanol), mp 223–224°C. **Pharm:** Antineoplastic (hepatocarcinoma,  $IC_{50} = 30.21 \mu\text{g}/\text{mL}$ ). **Source:** MEI LI HONG DOU SHAN *Taxus mairei*. **Ref:** 968, 1183.

**20746 Taxamairin B**

[110300-77-1]  $C_{22}H_{24}O_4$  (352.43). mp 138–139°C (ethanol). **Pharm:** Antineoplastic (hepatocarcinoma,  $IC_{50} = 26.78 \mu\text{g}/\text{mL}$ ). **Source:** MEI LI HONG DOU SHAN *Taxus mairei*. **Ref:** 968, 1183.

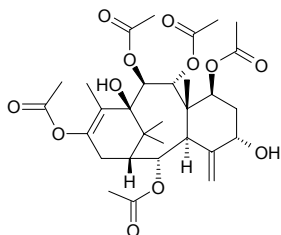
**20747 Taxamedin A**

$C_{37}H_{46}O_{11}$  (666.77). **Source:** ZA JIAO JIE ZHI HONG DOU SHAN *Taxus media*. **Ref:** 662.

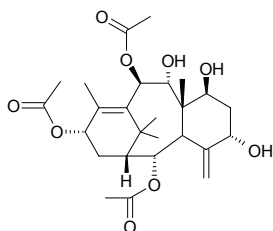


**20748 Taxane 1**

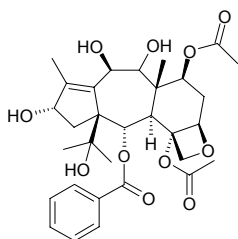
2,7,9,10,13-Pentaacetyl-4(20),12-taxadiene-2,5,7,9,10,11,13-heptol  
[247116-45-6] C<sub>30</sub>H<sub>42</sub>O<sub>12</sub> (594.66). [Source](#): JIA NA DA HONG DOU SHAN  
*Taxus canadensis*. [Ref](#): 694.

**20749 Taxane 2**

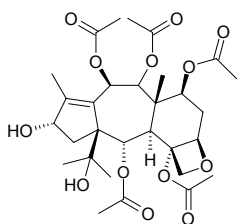
2,10,13-Triacetyl-4(20),11-taxadiene-2,5,7,9,10,13-hexol [247116-46-7]  
C<sub>26</sub>H<sub>38</sub>O<sub>9</sub> (494.59). [Source](#): JIA NA DA HONG DOU SHAN *Taxus*  
*canadensis*. [Ref](#): 694.

**20750 Taxane 3**

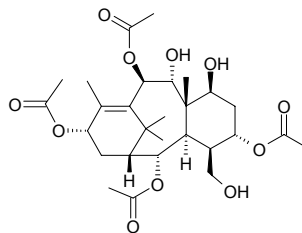
Taxuspinanane F [205436-31-3] C<sub>31</sub>H<sub>40</sub>O<sub>11</sub> (588.66). [Source](#): JIA NA DA  
HONG DOU SHAN *Taxus canadensis*. [Ref](#): 694.

**20751 Taxane 4**

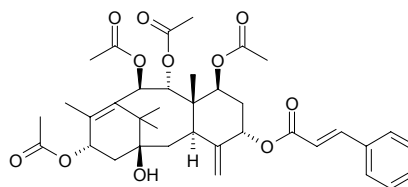
Taxayuntin H [214211-87-7] C<sub>30</sub>H<sub>42</sub>O<sub>13</sub> (610.66). [Source](#): JIA NA DA HONG  
DOU SHAN *Taxus canadensis*. [Ref](#): 694.

**20752 Taxane 5**

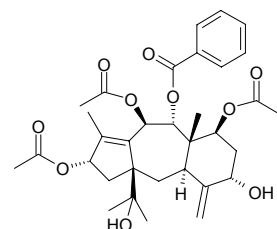
2,5,10,13-Tetraacetyl-11-taxene-2,5,7,9,10,13,20-heptol [247116-47-8]  
C<sub>28</sub>H<sub>42</sub>O<sub>11</sub> (554.64). [Source](#): JIA NA DA HONG DOU SHAN *Taxus*  
*canadensis*. [Ref](#): 694.

**20753 Taxawallin A**

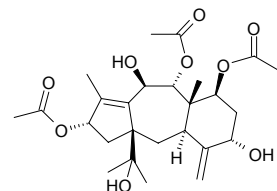
1-Hydroxy-2-deacetytaxinine J C<sub>37</sub>H<sub>46</sub>O<sub>11</sub> (666.77). mp 122~124°C, [α]<sub>D</sub> =  
+64° (CHCl<sub>3</sub>), [α]<sub>D</sub> = +60.45° (CHCl<sub>3</sub>), [Source](#): XI MA LA YA HONG DOU  
SHAN *Taxus wallichiana*. [Ref](#): 662.

**20754 Taxawallin D**

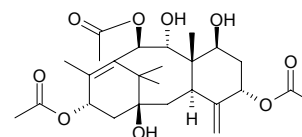
9-Benzoyl-2-deacetoxy-9-deacetyl-10-debenzoyl-10,13-diacetyltaxchinin A  
C<sub>33</sub>H<sub>42</sub>O<sub>10</sub> (598.70). mp 122~124°C. [Source](#): XI MA LA YA HONG DOU  
SHAN *Taxus wallichiana*. [Ref](#): 662.

**20755 Taxawallin F**

13-Acetyl-2-deacetoxy-10-debenzoyltaxchinin A C<sub>26</sub>H<sub>38</sub>O<sub>9</sub> (494.59). mp  
124~125°C. [Source](#): XI MA LA YA HONG DOU SHAN *Taxus wallichiana*.  
[Ref](#): 662.

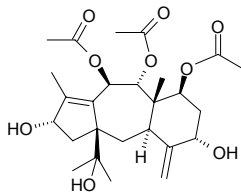
**20756 Taxawallin G**

1β,7β,9α-Trihydroxy-5α,10β,13α-triacetytaxa-4(20),11-diene C<sub>26</sub>H<sub>38</sub>O<sub>9</sub>  
(494.59). mp 270°C. [Source](#): XI MA LA YA HONG DOU SHAN *Taxus*  
*wallichiana*. [Ref](#): 662.

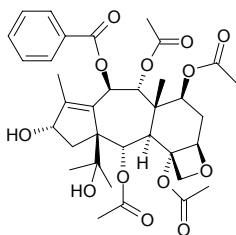


**20757 Taxawallin H**

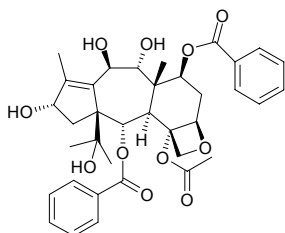
10-Acetyl-2-deacetoxy-10-debenzoyltaxchinin A  $C_{26}H_{38}O_9$  (494.59). mp 72~74°C. Source: XI MA LA YA HONG DOU SHAN *Taxus wallichiana*. Ref: 662.

**20758 Taxayunnansin A**

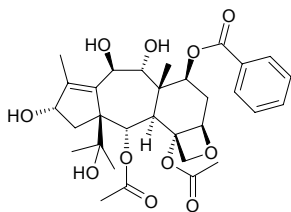
Taxayuntin  $C_{35}H_{44}O_{13}$  (672.73). Colorless massive crystals, mp 249~250°C (Me<sub>2</sub>CO),  $[\alpha]_D^{27} = -53.3^\circ$  (methanol), mp 225~226°C,  $[\alpha]_D = -38^\circ$  (MeOH). Source: XI MA LA YA HONG DOU SHAN *Taxus wallichiana*, YUN NAN HONG DOU SHAN *Taxus yunnanensis*. Ref: 300, 662.

**20759 Taxayuntin A**

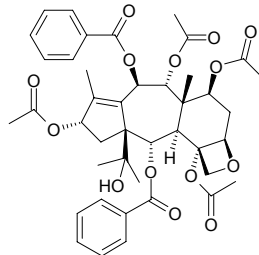
2 $\alpha$ ,7 $\beta$ ,9 $\alpha$ -Triacetyl-2 $\alpha$ ,7 $\beta$ -dibenzoyl-10 $\beta$ -debenzoyltaxayuntin  $C_{36}H_{42}O_{11}$  (650.73). White powder, mp 160~163°C,  $[\alpha]_D^{22} = \pm 0^\circ$  ( $c = 0.05$ , chloroform). Source: YUN NAN HONG DOU SHAN *Taxus yunnanensis*. Ref: 383, 662.

**20760 Taxayuntin B**

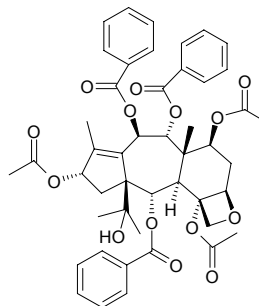
2 $\alpha$ -Debenzoyl-2 $\alpha$ -acetyl taxayuntin  $C_{31}H_{40}O_{11}$  (588.66). White acicular crystals, mp 225~228°C (methanol),  $[\alpha]_D^{12} = +25.1^\circ$  ( $c = 0.13$ , chloroform). Source: YUN NAN HONG DOU SHAN *Taxus yunnanensis*. Ref: 383, 662.

**20761 Taxayuntin C**

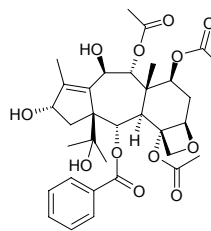
2 $\alpha$ -Deacetyl-2 $\alpha$ -benzoyl-13 $\alpha$ -acetyltaxayuntin  $C_{42}H_{48}O_{14}$  (776.84). White granular crystals, mp 226~230°C (Abs ethanol),  $[\alpha]_D^{17} = -36.2^\circ$  ( $c = 0.17$ , methanol). Source: DUAN YE HONG DOU SHAN *Taxus brevifolia*, HONG DOU SHAN *Taxus chinensis*, YUN NAN HONG DOU SHAN *Taxus yunnanensis*. Ref: 383, 662, 2488.

**20762 Taxayuntin D**

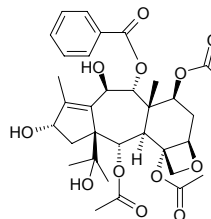
9 $\alpha$ -Deacetyl-9 $\alpha$ -debenzoyl taxayuntin; Taxchinin C [152110-14-0]  $C_{47}H_{50}O_{14}$  (838.91). White granular crystals, mp 210~214°C (methanol),  $[\alpha]_D^{17} = -40.4^\circ$  ( $c = 0.16$ , methanol);  $[\alpha]_D = -45.6^\circ$  (CH<sub>2</sub>Cl<sub>2</sub>), mp 212~214°C. Source: ZI SHAN *Taxus cuspidata*, DUAN YE HONG DOU SHAN *Taxus brevifolia*, YUN NAN HONG DOU SHAN *Taxus yunnanensis*. Ref: 291, 383, 662.

**20763 Taxayuntin E**

$C_{33}H_{42}O_{12}$  (630.70). mp 185~186°C,  $[\alpha]_D = +8.7^\circ$  (MeOH). Source: YUN NAN HONG DOU SHAN *Taxus yunnanensis*. Ref: 662.

**20764 Taxayuntin F**

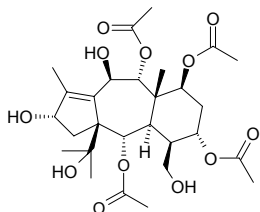
Taxchinin L  $C_{33}H_{42}O_{12}$  (630.70). mp 185~186°C,  $[\alpha]_D = -19.0^\circ$  (MeOH), mp 263~264°C,  $[\alpha]_D = -40^\circ$  (CHCl<sub>3</sub>). Source: HONG DOU SHAN *Taxus chinensis*, YUN NAN HONG DOU SHAN *Taxus yunnanensis*. Ref: 662.



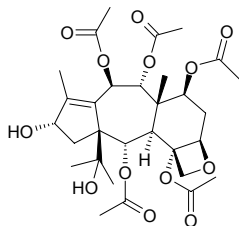
**20765 Taxayuntin G**

$C_{28}H_{42}O_{12}$  (570.64). mp 205–206°C,  $[\alpha]_D = +56^\circ$  (MeOH). **Pharm:** Cytotoxic (*in vitro*, 30 $\mu$ g/mL: A498, InRt = 21.2%; NCI-H226, InRt = 29.3%; A549, InRt = 0%; PC3, InRt = 1.4%; control Taxol, 30 $\mu$ g/mL: A498, InRt = 98.2%; NCI-H226, InRt = 71.2%; A549, InRt = 79.7%; PC3, InRt = 91.7%)<sup>[4800]</sup>.

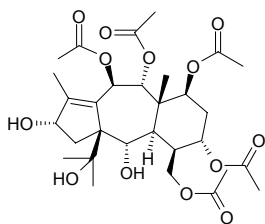
**Source:** SU MEN DA LA HONG DOU SHAN *Taxus sumatrana* (twig and leaf)<sup>[4800]</sup>, YUN NAN HONG DOU SHAN *Taxus yunnanensis*. **Ref:** 662, 4800.

**20766 Taxayuntin H**

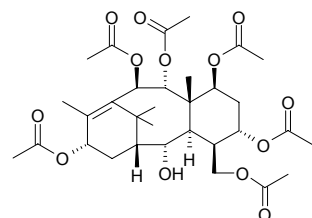
$C_{30}H_{42}O_{13}$  (610.66). mp 249–250°C,  $[\alpha]_D = -66.7^\circ$  (CHCl<sub>3</sub>). **Source:** YUN NAN HONG DOU SHAN *Taxus yunnanensis*. **Ref:** 662.

**20767 Taxayuntin J**

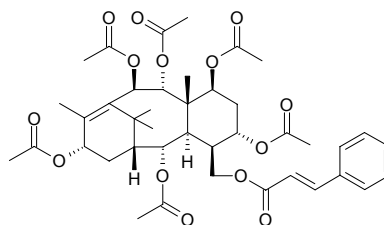
$C_{30}H_{44}O_{13}$  (612.68). mp 125–127°C,  $[\alpha]_D = -54^\circ$  (MeOH). **Source:** YUN NAN HONG DOU SHAN *Taxus yunnanensis*. **Ref:** 662.

**20768 Taxchin A**

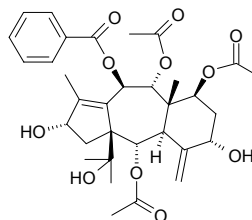
$C_{32}H_{46}O_{13}$  (638.72). mp 284–286°C. **Source:** HONG DOU SHAN *Taxus chinensis*. **Ref:** 662.

**20769 Taxchin B**

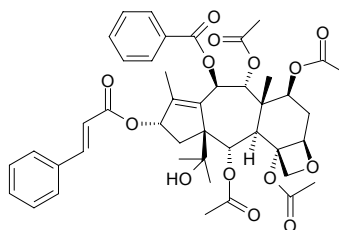
$C_{41}H_{52}O_{14}$  (768.86). mp 124–126°C,  $[\alpha]_D = +39.74^\circ$  (CHCl<sub>3</sub>). **Source:** HONG DOU SHAN *Taxus chinensis*. **Ref:** 662.

**20770 Taxchinin A**

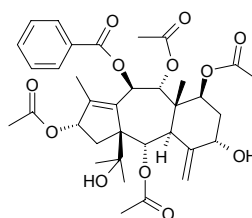
2 $\alpha$ -Acetoxybrevifoliol [158243-08-4]  $C_{33}H_{42}O_{11}$  (614.70). mp 208–210°C,  $[\alpha]_D = -34.62^\circ$  (CH<sub>2</sub>Cl<sub>2</sub>); mp 198°C,  $[\alpha]_D = -24^\circ$  (CHCl<sub>3</sub>). **Source:** HONG DOU SHAN *Taxus chinensis*, JIANG GUO ZI SHAN *Taxus baccata*. **Ref:** 662.

**20771 Taxchinin B**

[152110-13-9]  $C_{44}H_{50}O_{14}$  (802.88). mp 176–178°C,  $[\alpha]_D = +7.40^\circ$  (CH<sub>2</sub>Cl<sub>2</sub>). **Pharm:** Cytotoxic (L<sub>1210</sub>, IC<sub>50</sub> = 3.8 $\mu$ g/mL). **Source:** HONG DOU SHAN *Taxus chinensis*. **Ref:** 662, 1775.

**20772 Taxchinin D**

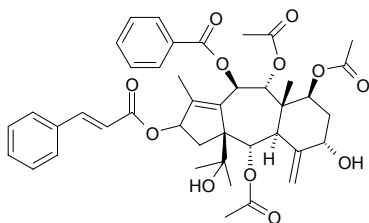
$C_{35}H_{44}O_{12}$  (656.73). mp 138–141°C. **Source:** HONG DOU SHAN *Taxus chinensis*. **Ref:** 662.



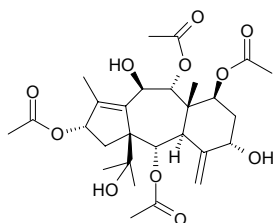


**20773 Taxchinin E**

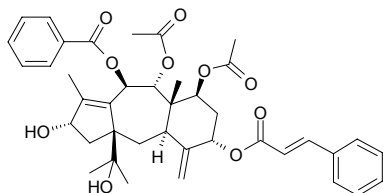
$C_{42}H_{48}O_{12}$  (744.84). mp 134~136°C,  $[\alpha]_D = -17.49^\circ$  ( $CHCl_3$ ). Source: HONG DOU SHAN *Taxus chinensis*. Ref: 662.

**20774 Taxchinin G**

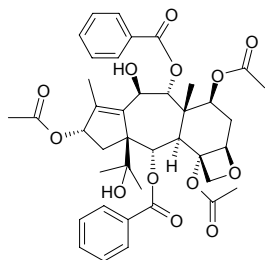
$C_{28}H_{40}O_{11}$  (552.62). mp 140~143°C. Source: HONG DOU SHAN *Taxus chinensis*. Ref: 662.

**20775 Taxchinin H**

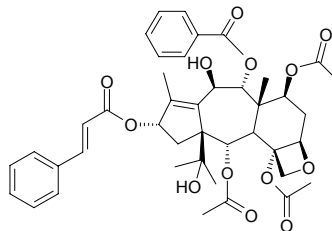
Taxawallin C  $C_{40}H_{46}O_{10}$  (686.81). mp 115~118°C,  $[\alpha]_D = -65.29^\circ$  ( $CHCl_3$ ). Source: HONG DOU SHAN *Taxus chinensis*. Ref: 662.

**20776 Taxchinin I**

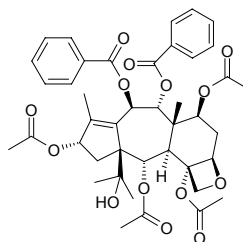
9-*O*-Benzoyl-9,10-dide-*O*-acetyl-11(15→1)-abeo-baccatin VI  $C_{40}H_{46}O_{13}$  (734.80). mp 238°C,  $[\alpha]_D = -30.5^\circ$  ( $CHCl_3$ ), mp 235~237°C,  $[\alpha]_D = -6.08^\circ$  ( $CHCl_3$ ). Source: ZA JIAO JIE ZHI HONG DOU SHAN *Taxus x media*, HONG DOU SHAN *Taxus chinensis*. Ref: 662.

**20777 Taxchinin J**

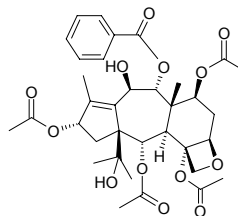
$C_{42}H_{48}O_{13}$  (760.84). mp 238~240°C,  $[\alpha]_D = +23.36^\circ$  ( $CHCl_3$ ). Source: HONG DOU SHAN *Taxus chinensis*. Ref: 662.

**20778 Taxchinin K**

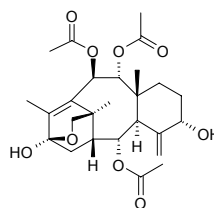
$C_{42}H_{48}O_{14}$  (776.84). mp 217~219°C,  $[\alpha]_D = -30.0^\circ$  ( $CHCl_3$ ). Source: HONG DOU SHAN *Taxus chinensis*. Ref: 662.

**20779 Taxchinin M**

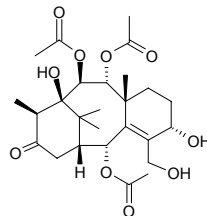
$C_{35}H_{44}O_{13}$  (672.73). mp 239~242°C,  $[\alpha]_D = -19.6^\circ$  ( $CHCl_3$ ). Source: HONG DOU SHAN *Taxus chinensis*, DUAN YE HONG DOU SHAN *Taxus brevifolia*. Ref: 662.

**20780 Taxezopidine A**

$C_{26}H_{36}O_9$  (492.57).  $[\alpha]_D = +5^\circ$  ( $CHCl_3$ ). Source: ZI SHAN *Taxus cuspidata*. Ref: 662.

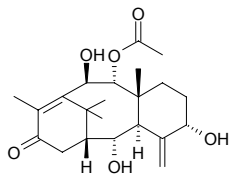
**20781 Taxezopidine B**

$C_{26}H_{38}O_{10}$  (510.59).  $[\alpha]_D = +10.4^\circ$  ( $CHCl_3$ ). Source: ZI SHAN *Taxus cuspidata*. Ref: 662.

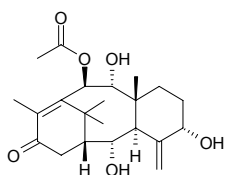


**20782 Taxezopidine C**

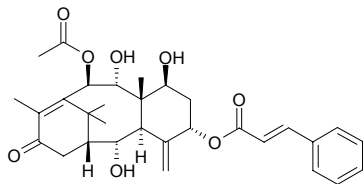
$C_{22}H_{32}O_6$  (392.50).  $[\alpha]_D = +17.3^\circ$  ( $CHCl_3$ ). Source: ZI SHAN *Taxus cuspidata*.  
Ref: 662.

**20783 Taxezopidine D**

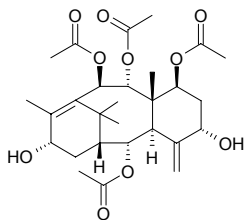
$C_{22}H_{32}O_6$  (392.50).  $[\alpha]_D = +8.4^\circ$  ( $CHCl_3$ ). Source: ZI SHAN *Taxus cuspidata*.  
Ref: 662.

**20784 Taxezopidine E**

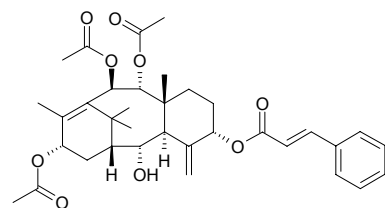
$C_{31}H_{38}O_8$  (538.64).  $[\alpha]_D = +24^\circ$  ( $CHCl_3$ ). Source: ZI SHAN *Taxus cuspidata*.  
Ref: 662.

**20785 Taxezopidine F**

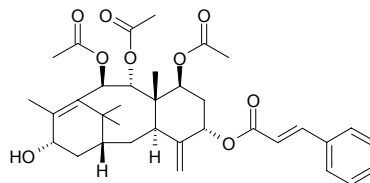
$C_{28}H_{40}O_{10}$  (536.63).  $[\alpha]_D = -13.4^\circ$  ( $CHCl_3$ ). Source: ZI SHAN *Taxus cuspidata*. Ref: 662.

**20786 Taxezopidine G**

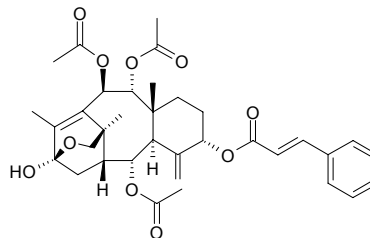
$C_{35}H_{44}O_9$  (608.74).  $[\alpha]_D = +25.2^\circ$  ( $CHCl_3$ ). Source: YUN NAN HONG DOU SHAN *Taxus yunnanensis* (aerial parts), ZI SHAN *Taxus cuspidata*. Ref: 662, 4611.

**20787 Taxezopidine H**

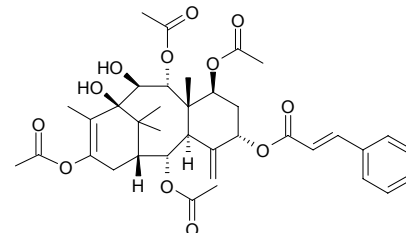
$C_{35}H_{44}O_9$  (608.74).  $[\alpha]_D = +5.6^\circ$  ( $CHCl_3$ ). Source: YUN NAN HONG DOU SHAN *Taxus yunnanensis* (aerial parts), ZI SHAN *Taxus cuspidata*. Ref: 662, 4611.

**20788 Taxezopidine J**

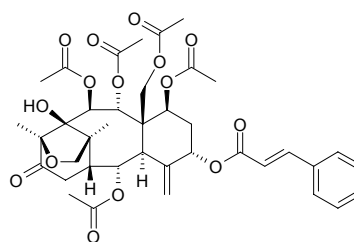
$C_{35}H_{42}O_{10}$  (622.72).  $[\alpha]_D = +48^\circ$  ( $CHCl_3$ ). Source: ZI SHAN *Taxus cuspidata*.  
Ref: 662.

**20789 Taxezopidine K**

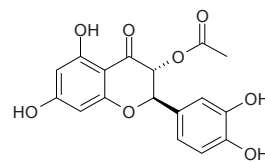
$C_{37}H_{46}O_{12}$  (682.77).  $[\alpha]_D = +53^\circ$  ( $CHCl_3$ ). Source: ZI SHAN *Taxus cuspidata*.  
Ref: 662.

**20790 Taxezopidine L**

19-Acetoxytaxagifine  $C_{39}H_{46}O_{15}$  (754.79). mp 106~108°C,  $[\alpha]_D = +94^\circ$  ( $CHCl_3$ ),  $[\alpha]_D = -2.4^\circ$  (MeOH). Source: HONG DOU SHAN *Taxus chinensis*, ZI SHAN *Taxus cuspidata*. Ref: 662.

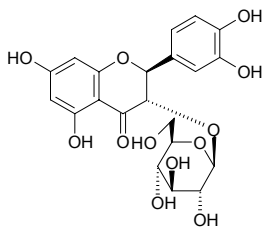
**20791 Taxifolin 3-O-acetate**

$C_{17}H_{14}O_8$  (346.30). Pharm: Sweetener. Source: NIAN XING TU MU XIANG *Inula viscosa*. Ref: 658.

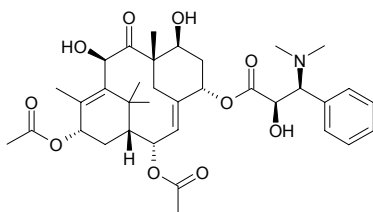


**20792 (2S,3S)-(-)-Taxifolin-3-O-β-D-glucopyranoside**

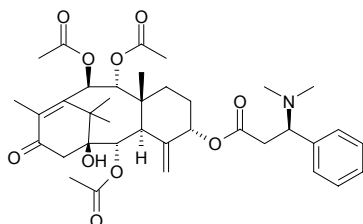
$C_{21}H_{22}O_{12}$  (466.40). White acicular crystals, mp 166–168°C,  $[\alpha]_D^{14} = -119.4^\circ$  ( $c = 0.5$ , methanol). Source: XIAN HE CAO *Agrimonia pilosa* var. *japonica*. Ref: 152.

**20793 Taxine A**

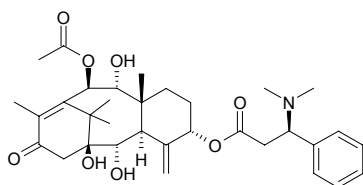
[1361-49-5]  $C_{35}H_{47}NO_{10}$  (641.77).  $[\alpha]_D = -140^\circ$  ( $CHCl_3$ ), mp 204–206°C. Source: JIANG GUO ZI SHAN *Taxus baccata*. Ref: 662.

**20794 Taxine A'**

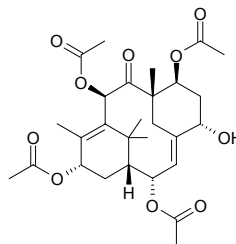
Diacetyltaxine B  $C_{37}H_{49}NO_{10}$  (667.80). mp 121–124°C. Source: ZI SHAN *Taxus cuspidata*. Ref: 6.

**20795 Taxine B**

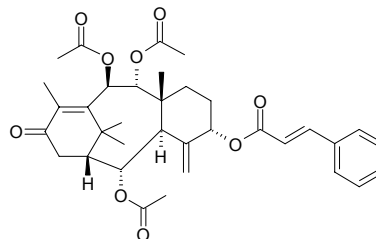
Taxine I  $C_{33}H_{45}NO_8$  (583.73). mp 115°C, mp 113°C,  $[\alpha]_D = +119^\circ$  ( $CHCl_3$ ),  $[\alpha]_D = +116^\circ$  (MeOH). Source: JIANG GUO ZI SHAN *Taxus baccata*, HONG DOU SHAN *Taxus chinensis*. Ref: 662.

**20796 Taxine B'**

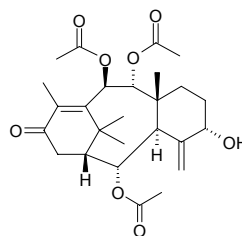
$C_{28}H_{38}O_{10}$  (534.61). mp 166–167°C,  $[\alpha]_D = -239.5^\circ$  ( $CHCl_3$ ). Source: SU MEN DA LA HONG DOU SHAN *Taxus sumatrana* (leaf and twig: yield = 0.00005% dw)<sup>[4666]</sup>, YUN NAN HONG DOU SHAN *Taxus yunnanensis*. Ref: 662, 4666.

**20797 Taxinine**

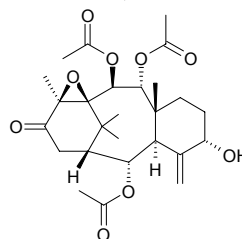
O-Cinnamoyltaxicin II triacetate [3835-52-7]  $C_{35}H_{42}O_9$  (606.72). mp 265–267°C, mp 266–267°C, mp 264–265°C, mp 237–239°C,  $[\alpha]_D = +137^\circ$  ( $CHCl_3$ ),  $[\alpha]_D = +128^\circ$  ( $CHCl_3$ ). Pharm: Cytotoxic (mus,  $L_{1210}$ , 10 μg/mL InRt = 10.5%; hmn, KB, 10 μg/mL InRt = 4.8%). Source: HONG DOU SHAN *Taxus chinensis*, JIANG GUO ZI SHAN *Taxus baccata*, MEI LI HONG DOU SHAN *Taxus mairei*, YUN NAN HONG DOU SHAN *Taxus yunnanensis* (aerial parts)<sup>[4611]</sup>, ZI SHAN *Taxus cuspidata*. Ref: 6, 291, 662, 1776, 4611.

**20798 Taxinine A**

[18530-09-1]  $C_{26}H_{36}O_8$  (476.57). mp 254–255°C,  $[\alpha]_D = +106^\circ$  ( $CHCl_3$ ). Pharm: Cytotoxic (mus  $L_{1210}$ ,  $IC_{50} = 8.9 \mu\text{g/mL}$ , hmn KB, 10 μg/mL InRt = 30.7%). Source: ZI SHAN *Taxus cuspidata*, HONG DOU SHAN *Taxus chinensis*. Ref: 6, 662, 1776.

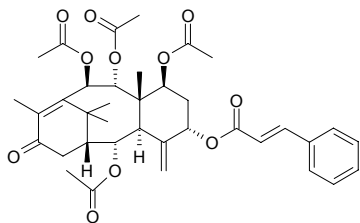
**20799 Taxinine A 11,12-epoxide**

5α-Hydroxy-2α,9α,10β-triacetoxy-11,12-epoxy-taxa-4(20)-en-13-one  $C_{26}H_{36}O_9$  (492.57). White amorphous solid, mp 162–163°C,  $[\alpha]_D^{17} = +7.5^\circ$  ( $c = 0.06$ , MeOH). Source: ZI SHAN *Taxus cuspidata*. Ref: 2415.

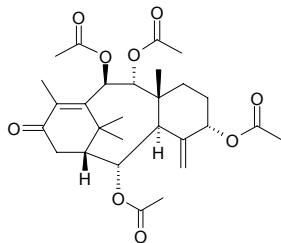


**20800 Taxinine B**

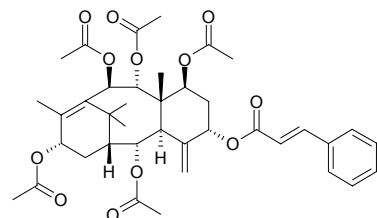
7 $\beta$ -Acetate-*O*-taxinine A [18457-44-8] C<sub>37</sub>H<sub>44</sub>O<sub>11</sub> (664.76). mp 261~262°C, mp 265~266°C, [ $\alpha$ ]<sub>D</sub> = +84.4° (CHCl<sub>3</sub>), [ $\alpha$ ]<sub>D</sub> = +93.8° (CHCl<sub>3</sub>). **Pharm:** Cytotoxic (mus, L<sub>1210</sub>, 10 $\mu$ g/mL InRt = 45.9%; hmn, KB, 10 $\mu$ g/mL InRt = 28.8%; inhibits Ca<sup>2+</sup>-induced depolymerization of tubulin to overcome resistance of cancer cells). **Source:** MEI LI HONG DOU SHAN *Taxus mairei*, SU MEN DA LA HONG DOU SHAN *Taxus sumatrana* (twig and leaf: yield = 0.00001%dw)<sup>[4666]</sup>, YUN NAN HONG DOU SHAN *Taxus yunnanensis* (aerial parts)<sup>[3079,4611]</sup>, ZI SHAN *Taxus cuspidata*. **Ref:** 662, 1776, 3079, 4611, 4666.

**20801 Taxinine H**

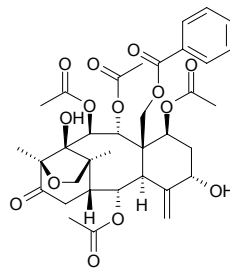
C<sub>28</sub>H<sub>38</sub>O<sub>9</sub> (518.61). mp 166~167°C, [ $\alpha$ ]<sub>D</sub> = +96° (CHCl<sub>3</sub>). **Source:** ZI SHAN *Taxus cuspidata*. **Ref:** 6, 662.

**20802 Taxinine J**

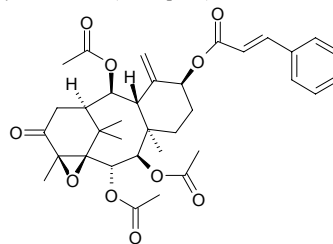
[18457-46-0] C<sub>39</sub>H<sub>48</sub>O<sub>12</sub> (708.81). Colorless crystals (acetone), mp 260~262°C, [ $\alpha$ ]<sub>D</sub><sup>14</sup> = -37.7° (*c* = 0.09, chloroform); [ $\alpha$ ]<sub>D</sub><sup>28</sup> = +36.0° (*c* = 1.1, chloroform). **Pharm:** Antineoplastic (hepatocarcinoma). **Source:** HONG DOU SHAN *Taxus chinensis*, MEI LI HONG DOU SHAN *Taxus mairei*, YUN NAN HONG DOU SHAN *Taxus yunnanensis*<sup>[4611]</sup>, ZI SHAN *Taxus cuspidata*. **Ref:** 662, 900, 4611.

**20803 Taxinine M**

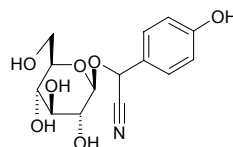
[135730-55-1] C<sub>35</sub>H<sub>42</sub>O<sub>14</sub> (686.72). [ $\alpha$ ]<sub>D</sub> = -24° (MeOH). **Pharm:** Cytotoxic (BST, LC<sub>50</sub> = 620 $\mu$ g/mL; KB, IC<sub>50</sub> = 9.4 $\mu$ g/mL); cytotoxic (*in vitro*, 30 $\mu$ g/mL: A498, InRt = 24.3%; NCI-H226, InRt = 11.1%; A549, InRt = 14.6%; PC3, InRt = 0%; control Taxol, 30 $\mu$ g/mL: A498, InRt = 98.2%; NCI-H226, InRt = 71.2%; A549, InRt = 79.7%; PC3, InRt = 91.7%)<sup>[4800]</sup>. **Source:** DUAN YE HONG DOU SHAN *Taxus brevifolia*, SU MEN DA LA HONG DOU SHAN *Taxus sumatrana* (twig and leaf<sup>[4800]</sup>: yield = 0.0021%dw<sup>[4666]</sup>). **Ref:** 662, 1775, 4666, 4800.

**20804 Taxinine N,N-4**

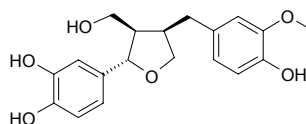
C<sub>35</sub>H<sub>42</sub>O<sub>10</sub> (622.72). **Source:** YUN NAN HONG DOU SHAN *Taxus yunnanensis* (aerial parts). **Ref:** 3079.

**20805 Taxiphyllin**

Phyllanthin; Phyllanthoside C<sub>14</sub>H<sub>17</sub>NO<sub>7</sub> (311.29). **Source:** HAI JIU CAI *Triglochin maritimum*, LA MEI HUA *Chimonanthus fragrans* [Syn. *Chimonanthus praecox*], *Taxus* spp. **Ref:** 660.

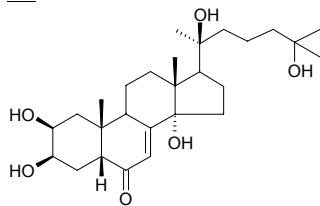
**20806 Taxiresinol**

[40951-69-7] C<sub>19</sub>H<sub>22</sub>O<sub>6</sub> (346.38). **Pharm:** Hepatoprotective (mouse, 50mg/kg, TNF- $\alpha$  level = (264.1 $\pm$ 103.4)pg/mL, 10mg/kg, TNF- $\alpha$  level = (350.0 $\pm$ 194.2)pg/mL)<sup>[4917]</sup>; antioxidant (DPPH free radical scavenger, IC<sub>50</sub> = 18.4 $\mu$ mol/L, control Caffeic acid, IC<sub>50</sub> = 25.5 $\mu$ mol/L)<sup>[5407]</sup>; NO production inhibitor (IC<sub>50</sub> = 163 $\mu$ mol/L, control *L*-NMMA, IC<sub>50</sub> = 28.5 $\mu$ mol/L)<sup>[5407]</sup>. **Source:** JIANG GUO ZI SHAN *Taxus baccata*, YUN NAN HONG DOU SHAN *Taxus yunnanensis* (wood: yield = 0.10%dw). **Ref:** 1521, 4661, 4917, 5407.

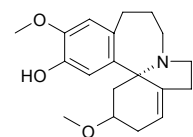


**20807 Taxisterone**

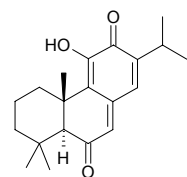
22-Deoxyecdysterone C<sub>27</sub>H<sub>44</sub>O<sub>6</sub> (464.65). Source: ZI SHAN *Taxus cuspidata*. Ref: 660.

**20808 Taxodine**

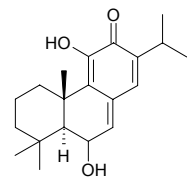
C<sub>19</sub>H<sub>25</sub>NO<sub>3</sub> (315.42). Source: SAN JIAN SHAN *Cephalotaxus fortunei*. Ref: 2.

**20809 Taxodione**

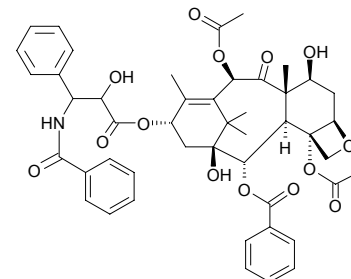
[19026-31-4] C<sub>20</sub>H<sub>26</sub>O<sub>3</sub> (314.43). mp 115~116°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +525° (c = 1.0, CHCl<sub>3</sub>). Pharm: Antineoplastic (rat W<sub>256</sub>, 50mg/kg, InRt = 93%); cytotoxic (KB, ED<sub>50</sub> = 3μg/mL); cytotoxic (Col2, IC<sub>50</sub> = 0.7μg/mL, control Ellipticine, IC<sub>50</sub> = 0.3μg/mL; LNCaP, IC<sub>50</sub> = 0.7μg/mL, Ellipticine, IC<sub>50</sub> = 0.8μg/mL; P<sub>388</sub>, IC<sub>50</sub> = 0.3μg/mL, Ellipticine, IC<sub>50</sub> = 0.1μg/mL; A2780, IC<sub>50</sub> = 9.0μg/mL, control Actinomycin D, IC<sub>50</sub> = 0.001μg/mL; KB-VI, IC<sub>50</sub> = 4.1μg/mL, Ellipticine, IC<sub>50</sub> = 0.3μg/mL; KB, IC<sub>50</sub> = 3.4μg/mL, Ellipticine, IC<sub>50</sub> = 0.04μg/mL; Lu1, IC<sub>50</sub> = 5.1μg/mL, Ellipticine, IC<sub>50</sub> = 0.02μg/mL; BC1, IC<sub>50</sub> = 1.2μg/mL, Ellipticine, IC<sub>50</sub> = 0.2μg/mL)<sup>[5400]</sup>. Source: LUO YU SHAN *Taxodium distichum*, XIONG RUI ZHUANG SHU WEI CAO *Salvia staminea*. Ref: 5, 658, 5400.

**20810 Taxodone**

[19039-02-2] C<sub>20</sub>H<sub>28</sub>O<sub>3</sub> (316.44). mp 164~166°C. Pharm: Antineoplastic (rat W<sub>256</sub>, 25mg/kg, InRt = 91%); cytotoxic (KB, ED<sub>50</sub> = 1.8μg/mL or 0.6μg/mL). Source: LUO YU SHAN *Taxodium distichum*. Ref: 5, 658.

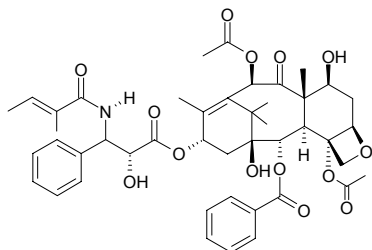
**20811 Taxol**

Paclitaxel [33069-62-4] C<sub>47</sub>H<sub>51</sub>NO<sub>14</sub> (853.93). [ $\alpha$ ]<sub>D</sub> = -49° (MeOH), mp 213~216°C, [ $\alpha$ ]<sub>D</sub> = -54° (MeOH), mp 194~197°C, [ $\alpha$ ]<sub>D</sub> = -42° (MeOH), mp 198~203°C, [ $\alpha$ ]<sub>D</sub> = -54° (MeOH), mp 205~208°C, [ $\alpha$ ]<sub>D</sub> = -21° (pyridine). Pharm: Cytotoxic (MCF7, GI<sub>50</sub> = (0.102±0.009)μg/mL; MDA-MB-231, GI<sub>50</sub> = (0.099±0.001)μg/mL; OVCAR-3, GI<sub>50</sub> = (0.028±0.006)μg/mL; A549, GI<sub>50</sub> = (0.030±0.001)μg/mL; HT29, GI<sub>50</sub> = (0.032±0.003)μg/mL; ACHN, GI<sub>50</sub> = (0.088±0.004)μg/mL); cytotoxic (*in vitro*, PC3, IC<sub>50</sub> = 0.016μmol/L; Hep3B, IC<sub>50</sub> = 0.031μmol/L)<sup>[3010]</sup>; cytotoxic (hmn PC3 tumor cells, IC<sub>50</sub> = 0.16μmol/L)<sup>[4258]</sup>; cytotoxic (*in vitro*, KB, IC<sub>50</sub> = 0.001μg/mL; Hepa59T/VGH, IC<sub>50</sub> = 0.001μg/mL)<sup>[4666]</sup>; antiproliferative and cytotoxic (*in vitro*, L-929, GI<sub>50</sub> = 0.1μg/mL; K562, GI<sub>50</sub> = 0.01μg/mL; HeLa, CC<sub>50</sub> = 0.01μg/mL)<sup>[4770]</sup>; cytotoxic (*in vitro*, 30μg/mL: A498, InRt = 98.2%; NCI-H226, InRt = 71.2%; A549, InRt = 79.7%; PC3, InRt = 91.7%)<sup>[4800]</sup>; cytotoxic (Lu1, ED<sub>50</sub> = 0.002μg/mL, Col2, ED<sub>50</sub> = 0.003μg/mL, KB, ED<sub>50</sub> = 0.0005μg/mL, LNCaP, ED<sub>50</sub> = 0.001μg/mL, hTERT-RPE1, ED<sub>50</sub> = 0.004μg/mL, HUVEC, ED<sub>50</sub> = 0.008μg/mL)<sup>[4991]</sup>; cytotoxic (HL-60, IC<sub>50</sub> = (4.1±1.1)×10<sup>-4</sup>μmol/L; MCF7, IC<sub>50</sub> = (15.3±2.6)μmol/L; Bel7402, IC<sub>50</sub> = (0.3±0.1)μmol/L; HeLa, IC<sub>50</sub> = (33.0±6.1)μmol/L; KB, IC<sub>50</sub> > 100μmol/L)<sup>[5015]</sup>; apoptosis inducer (HL-60 cells, 15μmol/L, control sub-G1 population = (5.4±3.2)%, sub-G1 population = (40.5±0.2)%)<sup>[5015]</sup>; cytotoxic (Bel7402 cancer cell, IC<sub>50</sub> = (0.3±0.1)μmol/L; HeLa, IC<sub>50</sub> = (33.0±6.1)μmol/L; HL-60, IC<sub>50</sub> = (4.1±1.1)×10<sup>-4</sup>μmol/L; MCF7, IC<sub>50</sub> = (15.3±2.6)μmol/L)<sup>[5410]</sup>; cytotoxic (K562, GI<sub>50</sub> > 100ng/mL; HL-60, GI<sub>50</sub> = 77ng/mL; DU145, GI<sub>50</sub> = 40ng/mL; PC3, GI<sub>50</sub> = 44ng/mL; A549, GI<sub>50</sub> = 30ng/mL; NCI-H460, GI<sub>50</sub> = 20ng/mL; MCF7, GI<sub>50</sub> = 80ng/mL; MDA-MB-231, GI<sub>50</sub> = 40ng/mL; ACHN, GI<sub>50</sub> > 100ng/mL; UO-31, GI<sub>50</sub> > 100ng/mL; HT29, GI<sub>50</sub> = 40ng/mL; Colon205, GI<sub>50</sub> = 40ng/mL)<sup>[5450]</sup>; cytotoxic (Bel7402 cell lines, IC<sub>50</sub> = 0.52μmol/L; BGC<sub>823</sub>, IC<sub>50</sub> > 500μmol/L; HeLa, IC<sub>50</sub> = 34.25μmol/L; HL-60, IC<sub>50</sub> = 3.5×10<sup>-4</sup>μmol/L; MCF7, IC<sub>50</sub> = 12.64μmol/L)<sup>[5454]</sup>; antineoplastic (used in treatment of ovarian cancer, breast cancer, lung cancer, and nasopharyngeal carcinoma). Source: DUAN YE HONG DOU SHAN *Taxus brevifolia* (bark: content = 0.0630%, needle leaf: content = 0.0110%)<sup>[5508]</sup>, HAI NAN CU FEI *Cephalotaxus hainanensis* [Syn. *Cephalotaxus mannii*], HONG DOU SHAN *Taxus chinensis* (branch-leaf: content = 0.0025%)<sup>[5508]</sup>, JIANG GUO ZI SHAN *Taxus baccata* (branch-leaf: content = 0.0043%)<sup>[5508]</sup>, JIE ZHI HONG DOU SHAN *Taxus media* (bark: content = 0.0350%, needle leaf: content = 0.0130%)<sup>[5508]</sup>, MEI LI HONG DOU SHAN *Taxus mairei* (branch-leaf: content = 0.0030%)<sup>[5508]</sup>, SU MEN DA LA HONG DOU SHAN *Taxus sumatrana* (twig and leaf: yield = 0.00009%dw)<sup>[4666]</sup>, XI MA LA YA HONG DOU SHAN *Taxus wallichiana*, YUN NAN HONG DOU SHAN *Taxus yunnanensis* (branch-leaf: content = 0.0100%)<sup>[5508]</sup>, ZI SHAN *Taxus cuspidata* (branch-leaf: content = 0.0038%)<sup>[5508]</sup>. Ref: 5, 6, 202, 662, 3010, 4258, 4666, 4770, 4800, 4991, 4992, 5015, 5410, 5450, 5454, 5508.

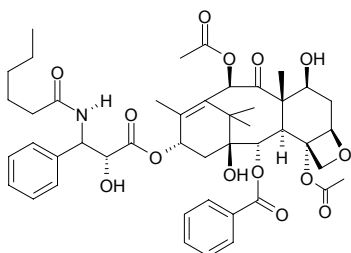


**20812 Taxol B**

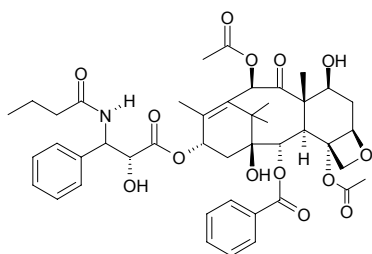
Cephalomannine [71610-00-9]  $C_{45}H_{53}NO_{14}$  (831.92).  $[\alpha]_D = -41^\circ$  (MeOH), mp 181~184°C,  $[\alpha]_D = -41^\circ$  (MeOH), mp 184~186°C, mp 180~183°C. Source: JIANG GUO ZI SHAN *Taxus baccata*, XI MA LA YA HONG DOU SHAN *Taxus wallichiana*, YUN NAN HONG DOU SHAN *Taxus yunnanensis*. Ref: 563, 662.

**20813 Taxol C**

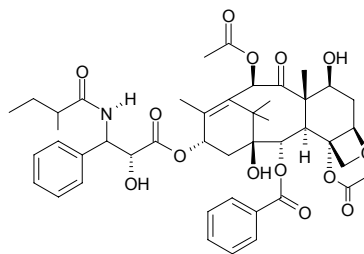
Taxuyunnanine A; *N*-Debenzoyl-*N*-hexanoyltaxol [153415-45-3]  $C_{46}H_{57}NO_{14}$  (847.97). Yellow amorphous solid, mp 150°C (methanol),  $[\alpha]_D^{14} = -107^\circ$  ( $c = 0.054$ , methanol), mp 204~205°C,  $[\alpha]_D^{20} = -64.7^\circ$  ( $c = 1.2$ ,  $CHCl_3$ ). Pharm: Cytotoxic (in NCI hm clonal selection, showing strongly selective cytotoxic, especially against parvicellular and non-parvicellular lung cancer;  $L_{1210}$ ,  $IC_{50} = 0.21 \mu\text{g/mL}$ ; KB,  $IC_{50} = 0.0066 \mu\text{g/mL}$ ). Source: YUN NAN HONG DOU SHAN *Taxus yunnanensis*, ZA JIAO JIE ZHI HONG DOU SHAN *Taxus x media*, ZI SHAN *Taxus cuspidata*. Ref: 662, 900.

**20814 Taxol D**

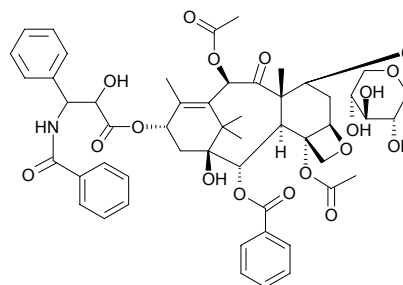
Taxcultine; *N*-Debenzoyl-*N*-butanoyltaxol [153415-46-4]  $C_{44}H_{53}NO_{14}$  (819.91).  $[\alpha]_D = -7.54^\circ$  (MeOH), mp 155°C,  $[\alpha]_D = -16^\circ$  ( $CHCl_3$ ), mp 206~208°C. Pharm: Cytotoxic ( $L_{1210}$ ,  $IC_{50} = 0.21 \mu\text{g/mL}$ ; KB,  $IC_{50} = 0.0016 \mu\text{g/mL}$ ); antineoplastic (ox brain, tubulin assay,  $ED_{50} = 2.35 \mu\text{g/mL}$ ). Source: JIANG GUO ZI SHAN *Taxus baccata*, ZA JIAO JIE ZHI HONG DOU SHAN *Taxus x media*. Ref: 662, 1649, 1775.

**20815 Taxoline**

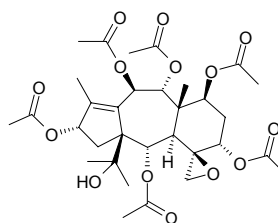
[213539-42-5]  $C_{45}H_{55}NO_{14}$  (833.94). White powdery crystals, mp 184~186°C. Pharm: Antineoplastic ( $P_{388}$ , inhibits DNA synthesize,  $ID_{50} = 1.12 \mu\text{g/mL}$ ). Source: YUN NAN HONG DOU SHAN *Taxus yunnanensis*. Ref: 813.

**20816 Taxol C-7-xylose**

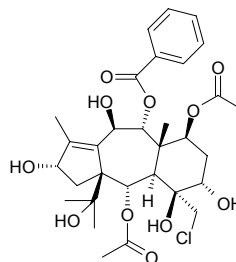
$C_{52}H_{59}NO_{18}$  (986.05). Source: YUN NAN HONG DOU SHAN *Taxus yunnanensis*. Ref: 563.

**20817 Taxuchin A**

$C_{32}H_{44}O_{14}$  (652.70). mp 248~250°C,  $[\alpha]_D = -64.8^\circ$  ( $CHCl_3$ ). Source: HONG DOU SHAN *Taxus chinensis*. Ref: 662.

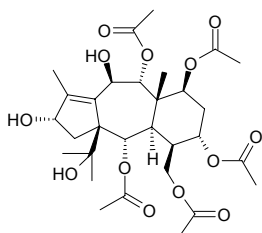
**20818 Taxuchin B**

$C_{31}H_{41}ClO_{11}$  (625.12). Source: HONG DOU SHAN *Taxus chinensis*. Ref: 662.

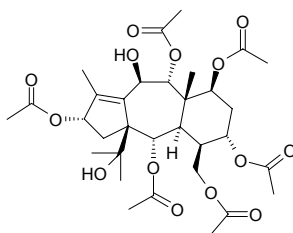


**20819 Taxumain A**

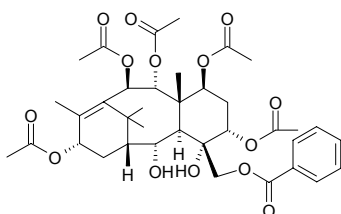
$C_{30}H_{44}O_{13}$  (612.68). mp 284–286°C,  $[\alpha]_D = -11.1^\circ$  ( $CHCl_3$ ). Source: MEI LI HONG DOU SHAN *Taxus mairei*. Ref: 662.

**20820 Taxumain B**

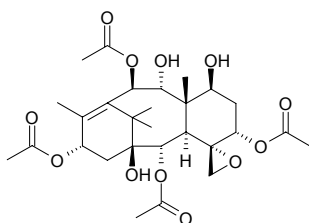
$C_{32}H_{46}O_{14}$  (654.72).  $[\alpha]_D = -15.2^\circ$  ( $CHCl_3$ ). Source: MEI LI HONG DOU SHAN *Taxus mairei*. Ref: 662.

**20821 Taxumairol A**

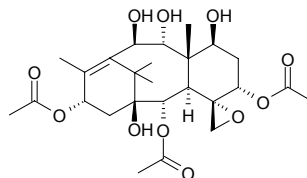
5 $\alpha$ ,7 $\beta$ ,9 $\alpha$ ,10 $\beta$ ,13 $\alpha$ -Pentaacetoxy-20(benzoyloxy)-2 $\alpha$ ,4 $\alpha$ -dihydroxytax-11-ene  $C_{37}H_{48}O_{14}$  (716.79).  $[\alpha]_D = +46^\circ$  (MeOH). Source: MEI LI HONG DOU SHAN *Taxus mairei*. Ref: 662.

**20822 Taxumairol B**

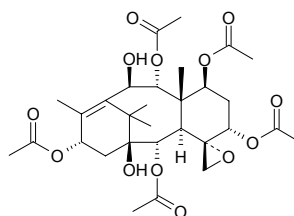
$C_{28}H_{40}O_{12}$  (568.62).  $[\alpha]_D = +65.84^\circ$  ( $CHCl_3$ ),  $[\alpha]_D = +15^\circ$  (MeOH). Source: JIA NA DA HONG DOU SHAN *Taxus canadensis*, MEI LI HONG DOU SHAN *Taxus mairei*, SU MEN DA LA HONG DOU SHAN *Taxus sumatrana* (twig and leaf: yield = 0.00060%dw)<sup>[4666]</sup>. Ref: 662, 4666.

**20823 Taxumairol C**

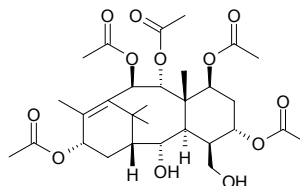
7 $\beta$ ,9 $\alpha$ ,10 $\beta$ -Trideacetyl-1 $\beta$ -hydroxybaccatin I  $C_{28}H_{38}O_{11}$  (526.59).  $[\alpha]_D = +78^\circ$  ( $CHCl_3$ ). Source: MEI LI HONG DOU SHAN *Taxus mairei*, SU MEN DA LA HONG DOU SHAN *Taxus sumatrana* (twig and leaf: yield = 0.00016%dw)<sup>[4666]</sup>. Ref: 662, 4666.

**20824 Taxumairol D**

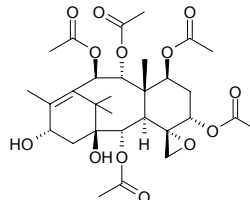
1 $\beta$ -Hydroxy-10-deacetylbaccatin I  $C_{30}H_{42}O_{13}$  (610.66).  $[\alpha]_D = +75^\circ$  ( $CHCl_3$ ). Source: YUN NAN HONG DOU SHAN *Taxus yunnanensis*, MEI LI HONG DOU SHAN *Taxus mairei*. Ref: 662.

**20825 Taxumairol E**

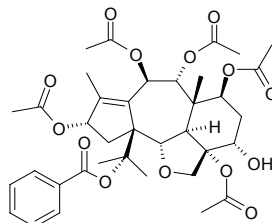
5 $\alpha$ ,7 $\beta$ ,9 $\alpha$ ,10 $\beta$ ,13 $\alpha$ -Pentaacetoxy-2 $\alpha$ ,20-dihydroxytax-11-ene  $C_{30}H_{44}O_{12}$  (596.68).  $[\alpha]_D = +54.9^\circ$  ( $CHCl_3$ ). Source: MEI LI HONG DOU SHAN *Taxus mairei*. Ref: 662.

**20826 Taxumairol F**

$C_{30}H_{42}O_{13}$  (610.66).  $[\alpha]_D = +13^\circ$  ( $CHCl_3$ ). Source: MEI LI HONG DOU SHAN *Taxus mairei*. Ref: 662.

**20827 Taxumairol G**

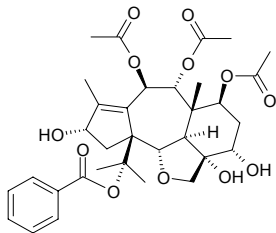
$C_{37}H_{46}O_{14}$  (714.77). Amorphous solid,  $[\alpha]_D^{25} = +5.5^\circ$  ( $c = 0.2$ ,  $CH_2Cl_2$ ). Source: MEI LI HONG DOU SHAN *Taxus mairei* (root). Ref: 4199.



**20828 Taxumairol H**

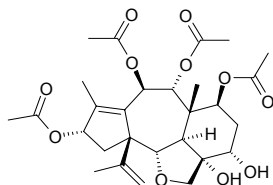
$C_{33}H_{42}O_{12}$  (630.70). Amorphous solid,  $[\alpha]_D^{25} = +2.6^\circ$  ( $c = 0.2$ ,  $CH_2Cl_2$ ).

Source: MEI LI HONG DOU SHAN *Taxus mairei* (root). Ref: 4199.

**20829 Taxumairol I**

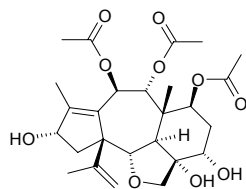
$C_{28}H_{38}O_{11}$  (550.61). Amorphous solid,  $[\alpha]_D^{25} = +73.5^\circ$  ( $c = 0.2$ ,  $CH_2Cl_2$ ).

Source: MEI LI HONG DOU SHAN *Taxus mairei* (root). Ref: 4199.

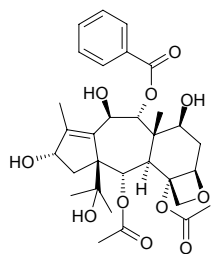
**20830 Taxumairol J**

$C_{26}H_{36}O_{10}$  (508.57). Amorphous solid,  $[\alpha]_D^{25} = +9.8^\circ$  ( $c = 0.2$ ,  $CH_2Cl_2$ ).

Source: MEI LI HONG DOU SHAN *Taxus mairei* (root). Ref: 4199.

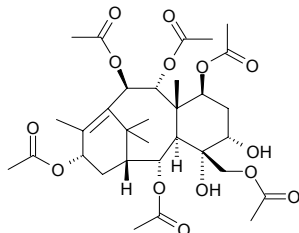
**20831 Taxumairol K**

9 $\alpha$ -(Benzyloxy)-2 $\alpha$ ,4 $\alpha$ -diacetoxy-5 $\beta$ ,20-epoxy-1 $\beta$ ,7 $\beta$ ,10 $\beta$ ,13 $\alpha$ -tetrahydroxy-11(15 $\rightarrow$ 1)-abeo-taxene  $C_{31}H_{40}O_{11}$  (588.66).  $[\alpha]_D = -8.5^\circ$  (MeOH). Source: MEI LI HONG DOU SHAN *Taxus mairei*. Ref: 662.

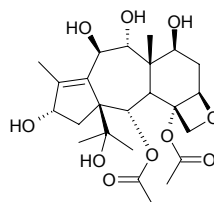
**20832 Taxumairol L**

$C_{32}H_{46}O_{14}$  (654.72). Amorphous solid,  $[\alpha]_D^{25} = +12.8^\circ$  ( $c = 0.2$ , MeOH).

Source: MEI LI HONG DOU SHAN *Taxus mairei* (root). Ref: 4199.

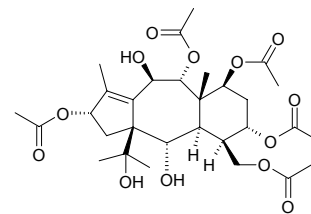
**20833 Taxumairol Q**

$C_{24}H_{36}O_{10}$  (484.55). White amorphous solid. Pharm: Cytotoxic (*in vitro*, KB,  $IC_{50} = 16.25\mu g/mL$ ; Hepa59T/VGH,  $IC_{50} = 14.52\mu g/mL$ ; control Paclitaxel, KB,  $IC_{50} = 0.001\mu g/mL$ ; Hepa59T/VGH,  $IC_{50} = 0.001\mu g/mL$ ). Source: SU MEN DA LA HONG DOU SHAN *Taxus sumatrana* (leaf and twig: yield = 0.000076%dw). Ref: 4666.

**20834 Taxumairol U**

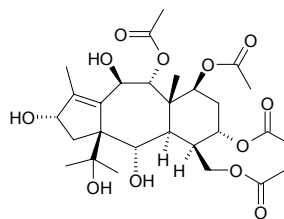
5 $\alpha$ ,7 $\beta$ ,9 $\alpha$ ,13 $\alpha$ ,20-Pentaacetoxy-2 $\alpha$ ,10 $\beta$ ,15-trihydroxy-11(15 $\rightarrow$ 1)-abeo-taxene  $C_{30}H_{44}O_{13}$  (612.68). Amorphous solid,  $[\alpha]_D^{25} = -18^\circ$  ( $c = 0.05$ ,  $CH_2Cl_2$ ).

Pharm: Cytotoxic (*in vitro*, KB,  $IC_{50} = 10.3\mu g/mL$ ; Hepa,  $IC_{50} = 0.3\mu g/mL$ )<sup>[3070]</sup>. Source: MEI LI HONG DOU SHAN *Taxus mairei* (stem cortex), SU MEN DA LA HONG DOU SHAN *Taxus sumatrana* (twig and leaf: yield = 0.00022%dw)<sup>[4666]</sup>. Ref: 3070, 4666.

**20835 Taxumairol V**

5 $\alpha$ ,7 $\beta$ ,9 $\alpha$ ,20-Tetraacetoxy-2 $\alpha$ ,10 $\beta$ ,13 $\alpha$ ,15-tetrahydroxy-11-(15 $\rightarrow$ 1)-abeo-taxene  $C_{28}H_{42}O_{12}$  (570.64). Amorphous powder,  $[\alpha]_D^{25} = -13^\circ$  ( $c = 0.05$ ,  $CH_2Cl_2$ ).

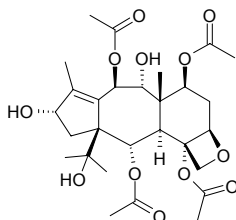
Pharm: Cytotoxic (*in vitro*, KB,  $IC_{50} = 3.9\mu g/mL$ ; Hepa,  $IC_{50} = 1.6\mu g/mL$ )<sup>[3070]</sup>. Source: MEI LI HONG DOU SHAN *Taxus mairei* (stem cortex), SU MEN DA LA HONG DOU SHAN *Taxus sumatrana* (twig and leaf: yield = 0.00006%dw)<sup>[4666]</sup>. Ref: 3070, 4666.



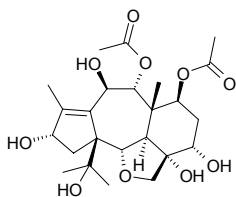


**20836 Taxumairol W**

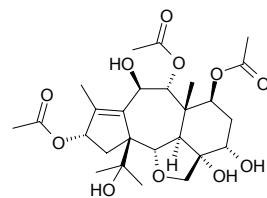
2 $\alpha$ ,4 $\alpha$ ,7 $\beta$ ,10 $\beta$ -Tetraacetoxy-5 $\beta$ ,20-epoxy-9 $\alpha$ ,13 $\alpha$ ,15-trihydroxy-11(15 $\rightarrow$ 1)-abeo-taxene C<sub>28</sub>H<sub>40</sub>O<sub>12</sub> (568.62). Amorphous solid,  $[\alpha]_D^{25} = -54^\circ$  ( $c = 0.05$ , CH<sub>2</sub>Cl<sub>2</sub>). **Pharm:** Cytotoxic (*in vitro*, KB, IC<sub>50</sub> > 20 $\mu$ g/mL; Hepa, IC<sub>50</sub> = 7 $\mu$ g/mL)<sup>[3070]</sup>. **Source:** MEI LI HONG DOU SHAN *Taxus mairei* (stem cortex), SU MEN DA LA HONG DOU SHAN *Taxus sumatrana* (twig and leaf: yield = 0.00004%dw)<sup>[4666]</sup>. **Ref:** 3070, 4359, 4666.

**20837 Taxumairol X**

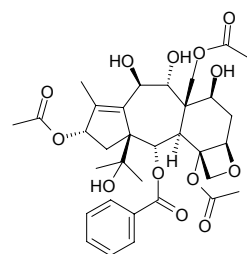
C<sub>24</sub>H<sub>36</sub>O<sub>10</sub> (484.55). Amorphous powder,  $[\alpha]_D^{25} = +14.6^\circ$  ( $c = 0.2$ , CH<sub>2</sub>Cl<sub>2</sub>). **Source:** MEI LI HONG DOU SHAN *Taxus mairei* (root). **Ref:** 4250.

**20838 Taxumairol Y**

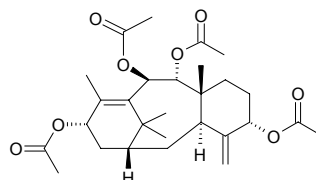
C<sub>26</sub>H<sub>38</sub>O<sub>11</sub> (526.59). Amorphous powder,  $[\alpha]_D^{25} = +72.6^\circ$  ( $c = 0.2$ , CH<sub>2</sub>Cl<sub>2</sub>). **Source:** MEI LI HONG DOU SHAN *Taxus mairei* (root). **Ref:** 4250.

**20839 Taxumairol Z**

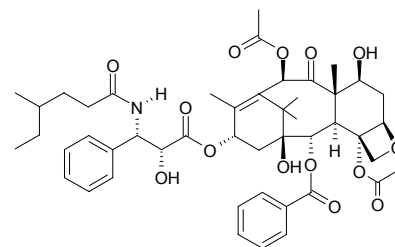
C<sub>33</sub>H<sub>42</sub>O<sub>13</sub> (646.69). Amorphous powder,  $[\alpha]_D^{25} = -25^\circ$  ( $c = 0.2$ , CH<sub>2</sub>Cl<sub>2</sub>). **Source:** MEI LI HONG DOU SHAN *Taxus mairei* (root). **Ref:** 4250.

**20840 Taxusin**

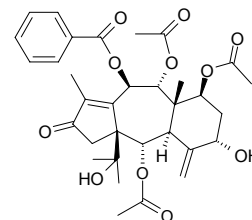
5 $\alpha$ ,9 $\alpha$ ,10 $\beta$ ,13 $\alpha$ -Tetraacetoxytaxa-4(20),11-diene C<sub>28</sub>H<sub>40</sub>O<sub>8</sub> (504.63). mp 126°C, mp 129~131°C, mp 124~126°C, mp 124~126°C, mp 131~132°C,  $[\alpha]_D = +110^\circ$ ,  $[\alpha]_D = +120^\circ$  (CHCl<sub>3</sub>),  $[\alpha]_D = +95^\circ$  (MeOH),  $[\alpha]_D = +168^\circ$  (CHCl<sub>3</sub>). **Pharm:** Cytotoxic (*in vitro*, Colon26-L5, EC<sub>50</sub> = 61.4 $\mu$ g/mL; HT1080, EC<sub>50</sub> = 51.7 $\mu$ g/mL; control 5-Fluorouracil, Colon26-L5, EC<sub>50</sub> = 0.29 $\mu$ g/mL; HT1080, EC<sub>50</sub> = 0.07 $\mu$ g/mL)<sup>[4661]</sup>; antioxidant (DPPH scavenger, IC<sub>50</sub> > 200 $\mu$ mol/L, control Caffeic acid, IC<sub>50</sub> = 25.5 $\mu$ mol/L); NO production inhibitor (IC<sub>50</sub> = 22.1 $\mu$ mol/L, control L-NMMA, IC<sub>50</sub> = 28.5 $\mu$ mol/L)<sup>[5407]</sup>. **Source:** JIANG GUO ZI SHAN *Taxus baccata*, MEI LI HONG DOU SHAN *Taxus mairei*, YUN NAN HONG DOU SHAN *Taxus yunnanensis* (wood: yield = 0.011%dw)<sup>[4661]</sup>, ZI SHAN *Taxus cuspidata*. **Ref:** 6, 563, 662, 4661, 5407.

**20841 Taxuspinanane A**

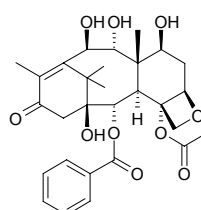
C<sub>47</sub>H<sub>50</sub>NO<sub>14</sub> (861.99).  $[\alpha]_D = -40.2^\circ$  (MeOH). **Source:** ZI SHAN *Taxus cuspidata*. **Ref:** 662.

**20842 Taxuspinanane B**

C<sub>33</sub>H<sub>40</sub>O<sub>11</sub> (612.68).  $[\alpha]_D = +26.6^\circ$  (MeOH). **Source:** ZI SHAN *Taxus cuspidata*. **Ref:** 662.

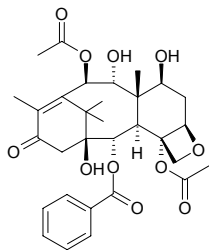
**20843 Taxuspinanane C**

[198207-98-6] C<sub>29</sub>H<sub>36</sub>O<sub>10</sub> (544.60). mp 152~154°C,  $[\alpha]_D = +60^\circ$  (MeOH). **Pharm:** Cytotoxic (P<sub>388</sub>, IC<sub>50</sub> = 10 $\mu$ g/mL). **Source:** ZI SHAN *Taxus cuspidata*. **Ref:** 662, 1790.

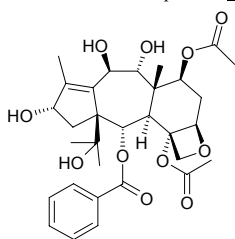


**20844 Taxuspinanane D**

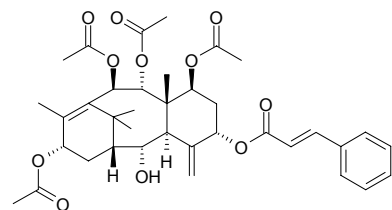
13-Oxo-7,9-bis-deacetylbaaccatin VI C<sub>31</sub>H<sub>38</sub>O<sub>11</sub> (586.64). [ $\alpha$ ]<sub>D</sub> = -40.2° (MeOH). Source: ZI SHAN *Taxus cuspidata*. Ref: 662.

**20845 Taxuspinanane F**

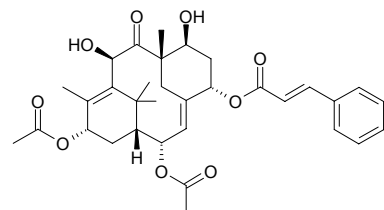
9-Deacetyltaayuntin E C<sub>31</sub>H<sub>40</sub>O<sub>11</sub> (588.66). [ $\alpha$ ]<sub>D</sub> = -23.2° (CHCl<sub>3</sub>). Source: ZI SHAN *Taxus cuspidata*. Ref: 662.

**20846 Taxuspinanane G**

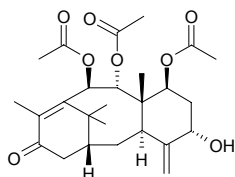
2 $\alpha$ -Deacetyltaxinine J C<sub>37</sub>H<sub>46</sub>O<sub>11</sub> (666.77). [ $\alpha$ ]<sub>D</sub> = -54.9° (CHCl<sub>3</sub>). Source: ZI SHAN *Taxus cuspidata*. Ref: 662.

**20847 Taxuspinanane H**

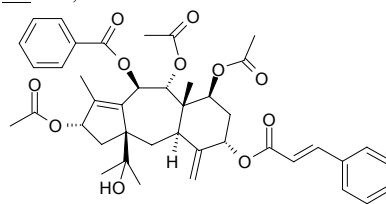
Deaminoacylcinnamoyltaxine A C<sub>33</sub>H<sub>40</sub>O<sub>9</sub> (580.68). [ $\alpha$ ]<sub>D</sub> = -42° (CHCl<sub>3</sub>). Source: ZI SHAN *Taxus cuspidata*. Ref: 662.

**20848 Taxuspinanane K**

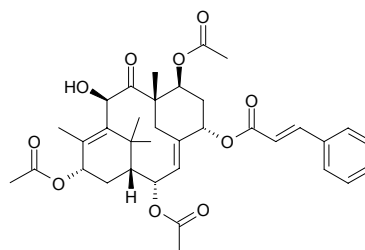
C<sub>26</sub>H<sub>36</sub>O<sub>8</sub> (476.57). [ $\alpha$ ]<sub>D</sub> = +95.2° (CHCl<sub>3</sub>). Source: ZI SHAN *Taxus cuspidata*. Ref: 662.

**20849 Taxuspine A**

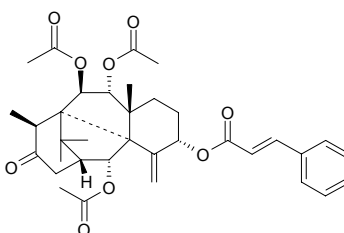
[157374-28-2] C<sub>42</sub>H<sub>48</sub>O<sub>11</sub> (728.84). [ $\alpha$ ]<sub>D</sub> = -3.4° (CHCl<sub>3</sub>). Pharm: Cytotoxic (mus, L<sub>1210</sub>, IC<sub>50</sub> = 5.8 $\mu$ g/mL; hmn, KB, 10 $\mu$ g/mL InRt = 8.9%). Source: ZI SHAN *Taxus cuspidata*, DUAN YE HONG DOU SHAN *Taxus brevifolia*. Ref: 662, 1776.

**20850 Taxuspine B**

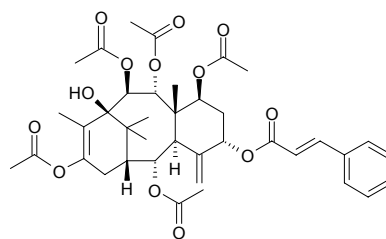
[157414-05-6] C<sub>35</sub>H<sub>42</sub>O<sub>10</sub> (622.72). [ $\alpha$ ]<sub>D</sub> = -40.6° (CHCl<sub>3</sub>). Pharm: Cytotoxic (mus, L<sub>1210</sub>, IC<sub>50</sub> = 18 $\mu$ g/mL; hmn, KB, 10 $\mu$ g/mL InRt = 11.8%; inhibits Ca<sup>2+</sup>-induced depolymerization of tubulin to overcome resistance of cancer cells). Source: YUN NAN HONG DOU SHAN *Taxus yunnanensis* (aerial parts)<sup>[3079]</sup>, *Taxus* sp. Ref: 662, 1776, 3079.

**20851 Taxuspine C**

[146278-50-4] C<sub>35</sub>H<sub>42</sub>O<sub>9</sub> (606.72). [ $\alpha$ ]<sub>D</sub> = +7.4° (CHCl<sub>3</sub>). Pharm: Cytotoxic (mus, L<sub>1210</sub>, IC<sub>50</sub> = 5.8 $\mu$ g/mL; hmn, KB, 10 $\mu$ g/mL InRt = 8.9%). Source: YUN NAN HONG DOU SHAN *Taxus yunnanensis* (aerial parts)<sup>[3079]</sup>, ZI SHAN *Taxus cuspidata*. Ref: 662, 1776, 3079.

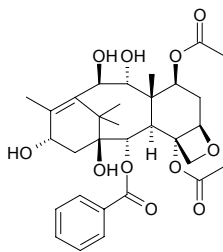
**20852 Taxuspine D**

[166990-12-1] C<sub>39</sub>H<sub>48</sub>O<sub>13</sub> (724.81). [ $\alpha$ ]<sub>D</sub> = -32.2° (MeOH). Pharm: Cytotoxic (*in vitro*, L<sub>1210</sub>, IC<sub>50</sub> = 3.0 $\mu$ g/mL; KB, IC<sub>50</sub> = 1.8 $\mu$ g/mL). Source: ZI SHAN *Taxus cuspidata*. Ref: 662, 1777.

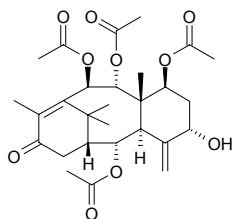


**20853 Taxuspine E**

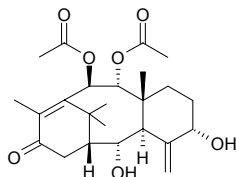
[165074-73-7]  $C_{31}H_{40}O_{11}$  (588.66).  $[\alpha]_D = -17^\circ$  ( $CHCl_3$ ). **Pharm:** Cytotoxic ( $L_{1210}$ ,  $IC_{50} = 0.27\mu g/mL$ ; KB,  $IC_{50} = 0.08\mu g/mL$ ). **Source:** ZI SHAN *Taxus cuspidata*. **Ref:** 662, 1775.

**20854 Taxuspine F**

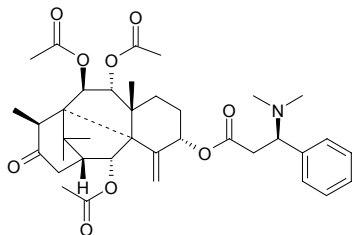
$C_{28}H_{38}O_{10}$  (534.61).  $[\alpha]_D = +50^\circ$  ( $CHCl_3$ ). **Source:** SU MEN DA LA HONG DOU SHAN *Taxus sumatrana* (twig and leaf: yield = 0.00023%dw)<sup>[4666]</sup>, ZI SHAN *Taxus cuspidata*. **Ref:** 662, 4666.

**20855 Taxuspine G**

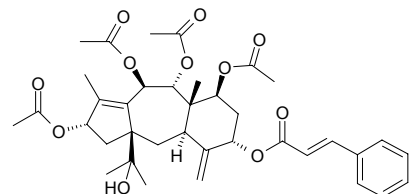
2-Deacetyltaxinine A  $C_{24}H_{34}O_7$  (434.53). mp 295–298°C,  $[\alpha]_D = +97^\circ$  ( $CHCl_3$ ). **Source:** ZI SHAN *Taxus cuspidata*. **Ref:** 662.

**20856 Taxuspine H**

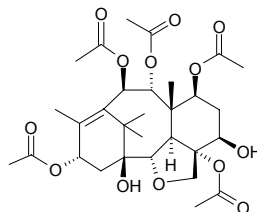
[164991-81-5]  $C_{37}H_{49}NO_9$  (651.80).  $[\alpha]_D = +6.8^\circ$  ( $CHCl_3$ ). **Pharm:** Cytotoxic (KB,  $IC_{50} = 1.6\mu g/mL$ ). **Source:** ZI SHAN *Taxus cuspidata*. **Ref:** 662, 1775.

**20857 Taxuspine J**

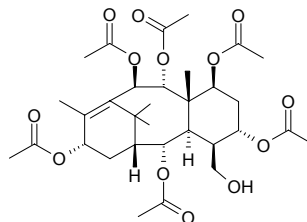
$C_{37}H_{46}O_{11}$  (666.77). **Source:** ZI SHAN *Taxus cuspidata*. **Ref:** 662.

**20858 Taxuspine K**

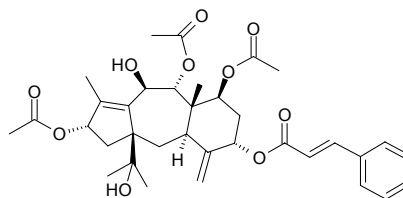
$C_{30}H_{42}O_{13}$  (610.66).  $[\alpha]_D = +14^\circ$  ( $CHCl_3$ ). **Source:** ZI SHAN *Taxus cuspidata*. **Ref:** 662.

**20859 Taxuspine L**

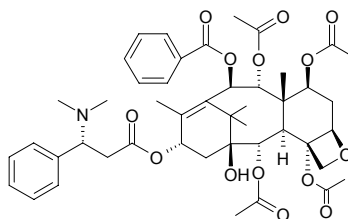
$C_{32}H_{46}O_{13}$  (638.72).  $[\alpha]_D = +108^\circ$  ( $CHCl_3$ ). **Source:** ZI SHAN *Taxus cuspidata*. **Ref:** 662.

**20860 Taxuspine M**

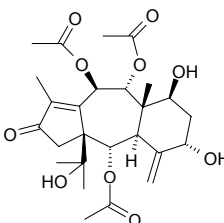
$C_{35}H_{44}O_{10}$  (624.73).  $[\alpha]_D = +35^\circ$  ( $CHCl_3$ ). **Source:** ZI SHAN *Taxus cuspidata*. **Ref:** 662.

**20861 Taxuspine N**

$C_{46}H_{57}NO_{14}$  (847.97).  $[\alpha]_D = -6.0^\circ$  ( $CHCl_3$ ). **Source:** ZI SHAN *Taxus cuspidata*. **Ref:** 662.

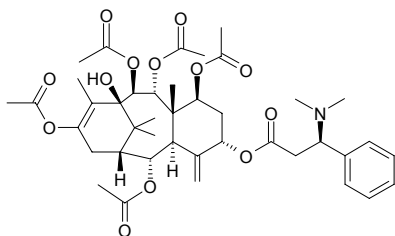
**20862 Taxuspine O**

$C_{26}H_{36}O_{10}$  (508.57).  $[\alpha]_D = +79.7^\circ$  (MeOH). **Source:** ZI SHAN *Taxus cuspidata*. **Ref:** 662.

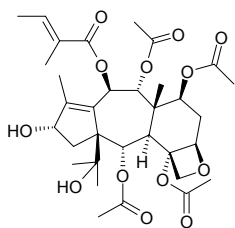


**20863 Taxuspine P**

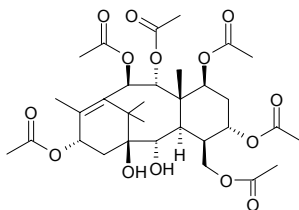
2 $\alpha$ ,7 $\beta$ ,9 $\alpha$ ,10 $\beta$ ,13-Pentaacetoxy-11 $\beta$ -hydroxy-5 $\alpha$ -(3'-*N,N*-dimethylamino-3'-phenyl)-propionyloxytaxa-4(20),12-diene C<sub>41</sub>H<sub>55</sub>NO<sub>13</sub> (769.89). Amorphous solid,  $[\alpha]_D^{22} = +39^\circ$  (*c* = 0.2, CHCl<sub>3</sub>),  $[\alpha]_D = +32.7^\circ$  (MeOH). Source: JIA NA DA HONG DOU SHAN *Taxus canadensis* (needle leaf), ZI SHAN *Taxus cuspidata*. Ref: 662, 3886.

**20864 Taxuspine Q**

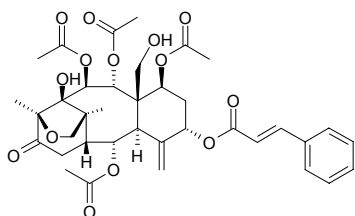
C<sub>33</sub>H<sub>46</sub>O<sub>13</sub> (650.73).  $[\alpha]_D = -8.2^\circ$  (CHCl<sub>3</sub>). Source: ZI SHAN *Taxus cuspidata*. Ref: 662.

**20865 Taxuspine R**

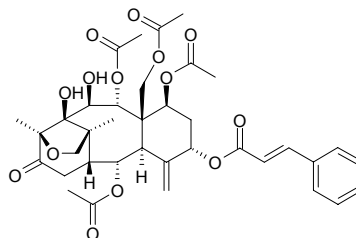
C<sub>32</sub>H<sub>46</sub>O<sub>14</sub> (654.72).  $[\alpha]_D = +68^\circ$  (CHCl<sub>3</sub>). Source: ZI SHAN *Taxus cuspidata*. Ref: 662.

**20866 Taxuspine S**

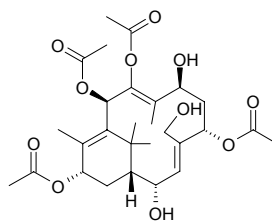
C<sub>37</sub>H<sub>44</sub>O<sub>14</sub> (712.75).  $[\alpha]_D = -4.4^\circ$  (CHCl<sub>3</sub>). Source: HONG DOU SHAN *Taxus chinensis*. Ref: 662.

**20867 Taxuspine T**

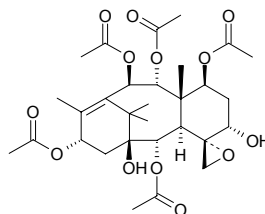
C<sub>37</sub>H<sub>44</sub>O<sub>14</sub> (712.75).  $[\alpha]_D = -13.4^\circ$  (CHCl<sub>3</sub>). Source: HONG DOU SHAN *Taxus chinensis*. Ref: 662.

**20868 Taxuspine U**

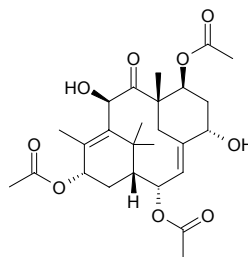
C<sub>28</sub>H<sub>40</sub>O<sub>11</sub> (552.62).  $[\alpha]_D = +18^\circ$  (MeOH). Source: ZI SHAN *Taxus cuspidata*. Ref: 662.

**20869 Taxuspine V**

1 $\beta$ -Hydroxy-5 $\alpha$ -deacetylbaccatin I C<sub>30</sub>H<sub>42</sub>O<sub>13</sub> (610.66). mp 230~232°C,  $[\alpha]_D = +56^\circ$  (CHCl<sub>3</sub>), mp 273~275°C,  $[\alpha]_D = +138.7^\circ$  (CHCl<sub>3</sub>). Source: YUN NAN HONG DOU SHAN *Taxus yunnanensis*, ZI SHAN *Taxus cuspidata*. Ref: 662.

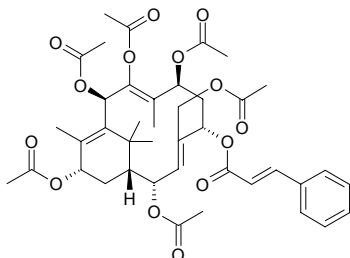
**20870 Taxuspine W**

2 $\alpha$ ,7 $\beta$ ,13 $\alpha$ -Triacetoxy-5 $\alpha$ ,10 $\beta$ -dihydroxy-9-keto-2(3 $\rightarrow$ 20)-abeo-taxane C<sub>26</sub>H<sub>36</sub>O<sub>9</sub> (492.57). mp 172~174°C,  $[\alpha]_D = -94.7^\circ$  (MeOH),  $[\alpha]_D = -147^\circ$ . Source: ZA JIAO JIE ZHI HONG DOU SHAN *Taxus x media*, ZI SHAN *Taxus cuspidata*. Ref: 662.

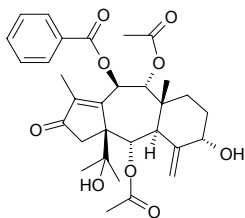


**20871 Taxuspine X**

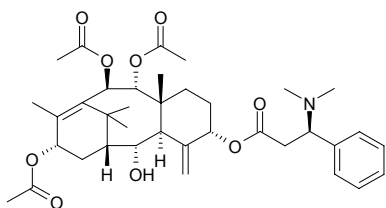
[194782-02-0] C<sub>41</sub>H<sub>50</sub>O<sub>14</sub> (766.85). Colorless amorphous solid,  $[\alpha]_D^{22} = +31.7^\circ$  ( $c = 0.13$ , chloroform). **Pharm:** Cytotoxic (mus, L<sub>1210</sub>, *in vitro*, IC<sub>50</sub> = 4.2 μg/mL). **Source:** YUN NAN HONG DOU SHAN *Taxus yunnanensis* (aerial parts)<sup>[4611]</sup>, ZI SHAN *Taxus cuspidata*. **Ref:** 662, 963, 4611.

**20872 Taxuspine Y**

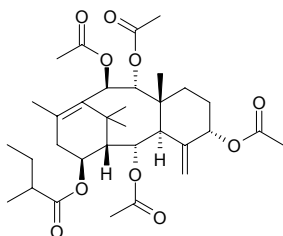
[194782-03-1] C<sub>31</sub>H<sub>38</sub>O<sub>9</sub> (554.64). Colorless amorphous solid,  $[\alpha]_D^{31} = -25.4^\circ$  ( $c = 0.17$ , chloroform). **Pharm:** Cytotoxic (mus, L<sub>1210</sub>, *in vitro*, IC<sub>50</sub> = 5.4 μg/mL). **Source:** ZI SHAN *Taxus cuspidata*. **Ref:** 662, 963.

**20873 Taxuspine Z**

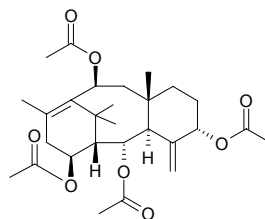
[194782-04-2] C<sub>37</sub>H<sub>51</sub>NO<sub>9</sub> (653.82). Colorless amorphous solid,  $[\alpha]_D^{28} = +31.2^\circ$  ( $c = 0.08$ , chloroform). **Pharm:** Cytotoxic (KB, *in vitro*, IC<sub>50</sub> = 6.2 μg/mL). **Source:** ZI SHAN *Taxus cuspidata*. **Ref:** 662, 963.

**20874 Taxuyunnanine B**

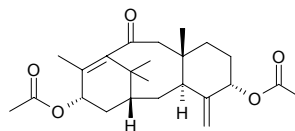
C<sub>33</sub>H<sub>48</sub>O<sub>10</sub> (604.74).  $[\alpha]_D = +58.2^\circ$  ( $c = 1.2$ , CHCl<sub>3</sub>). **Source:** YUN NAN HONG DOU SHAN *Taxus yunnanensis*. **Ref:** 662.

**20875 Taxuyunnanine C**

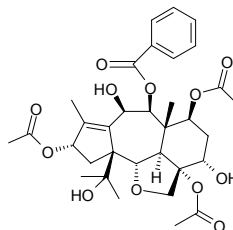
2α,5α,10β,14β-Tetraacetoxytaxa-4(20),11-diene C<sub>28</sub>H<sub>40</sub>O<sub>8</sub> (504.63).  $[\alpha]_D = +41.1^\circ$  ( $c = 1.2$ , CHCl<sub>3</sub>). **Source:** YUN NAN HONG DOU SHAN *Taxus yunnanensis*<sup>[3079]</sup>, HONG DOU SHAN *Taxus chinensis*. **Ref:** 662, 3079.

**20876 Taxuyunnanine D**

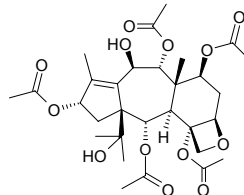
C<sub>24</sub>H<sub>34</sub>O<sub>5</sub> (402.54).  $[\alpha]_D = -61.0^\circ$  (CHCl<sub>3</sub>). **Source:** YUN NAN HONG DOU SHAN *Taxus yunnanensis*. **Ref:** 662.

**20877 Taxuyunnanine E**

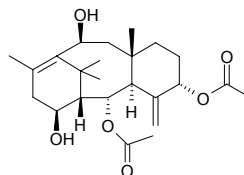
[167425-73-2] C<sub>33</sub>H<sub>42</sub>O<sub>12</sub> (630.70).  $[\alpha]_D = +3.3^\circ$  (CHCl<sub>3</sub>). **Pharm:** Cytotoxic (*in vitro*, Colon26-L5, EC<sub>50</sub> > 100 μg/mL; HT1080, EC<sub>50</sub> > 100 μg/mL; control 5-Fluorouracil, Colon26-L5, EC<sub>50</sub> = 0.29 μg/mL; HT1080, EC<sub>50</sub> = 0.07 μg/mL)<sup>[4661]</sup>; NO production inhibitor (IC<sub>50</sub> = 54.8 μmol/L, control L-NMMA, IC<sub>50</sub> = 28.5 μmol/L)<sup>[5407]</sup>. **Source:** YUN NAN HONG DOU SHAN *Taxus yunnanensis* (wood; yield = 0.0022% dw)<sup>[4661]</sup>. **Ref:** 662, 4661, 5407.

**20878 Taxuyunnanine F**

C<sub>30</sub>H<sub>42</sub>O<sub>13</sub> (610.66).  $[\alpha]_D = -22.6^\circ$  (CHCl<sub>3</sub>). **Source:** YUN NAN HONG DOU SHAN *Taxus yunnanensis*. **Ref:** 662.

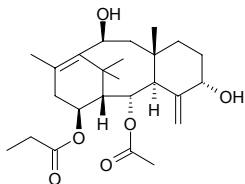
**20879 Taxuyunnanine G**

C<sub>24</sub>H<sub>36</sub>O<sub>6</sub> (420.55).  $[\alpha]_D = +40.6^\circ$  (CHCl<sub>3</sub>). **Source:** YUN NAN HONG DOU SHAN *Taxus yunnanensis*. **Ref:** 662.

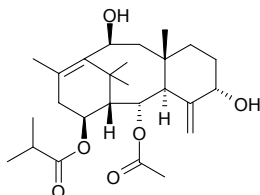


**20880 Taxuyunnanine H**

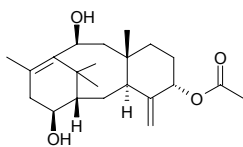
$C_{25}H_{38}O_6$  (434.58).  $[\alpha]_D^{25} = +101.8^\circ$  ( $CHCl_3$ ). [Source](#): YUN NAN HONG DOU SHAN *Taxus yunnanensis*. [Ref](#): 662.

**20881 Taxuyunnanine I**

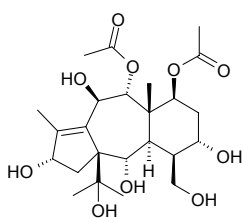
$C_{26}H_{40}O_6$  (448.61).  $[\alpha]_D^{25} = +27.1^\circ$  ( $CHCl_3$ ). [Source](#): YUN NAN HONG DOU SHAN *Taxus yunnanensis*. [Ref](#): 662.

**20882 Taxuyunnanine J**

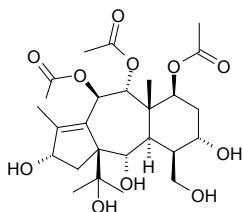
$C_{22}H_{34}O_4$  (362.51).  $[\alpha]_D^{25} = +71.3^\circ$  ( $CHCl_3$ ). [Source](#): YUN NAN HONG DOU SHAN *Taxus yunnanensis*. [Ref](#): 662.

**20883 Taxuyunnanine P**

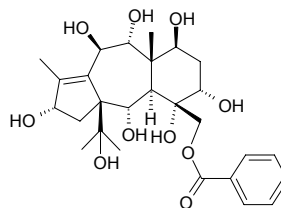
$C_{24}H_{38}O_{10}$  (486.56). White powder,  $[\alpha]_D^{28} = -12.7^\circ$  ( $c = 0.65$ , MeOH). [Source](#): YUN NAN HONG DOU SHAN *Taxus yunnanensis* (bark). [Ref](#): 5188.

**20884 Taxuyunnanine Q**

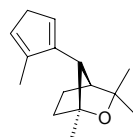
$C_{26}H_{40}O_{11}$  (528.60). White powder,  $[\alpha]_D^{28} = -44.0^\circ$  ( $c = 0.25$ , MeOH). [Source](#): YUN NAN HONG DOU SHAN *Taxus yunnanensis* (bark). [Ref](#): 5188.

**20885 Taxuyunnanine R**

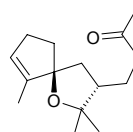
$C_{27}H_{38}O_{10}$  (522.60). White powder,  $[\alpha]_D^{28} = -5.0^\circ$  ( $c = 0.10$ , MeOH). [Source](#): YUN NAN HONG DOU SHAN *Taxus yunnanensis* (bark). [Ref](#): 5188.

**20886 (-)-(6S,7S,10R)-Taylocyclane**

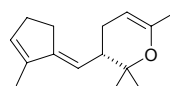
1,3,3-Trimethyl-7-(5-methylcyclopenta-1,4-dien-1-yl)-2-oxabicyclo[2,2,1]heptane  $C_{15}H_{22}O$  (218.34). Colorless oil. [Source](#): XIAO E TAI *Mylia taylorii* (essential oil), LUO XIAO E TAI *Mylia nuda* (essential oil). [Ref](#): 3840.

**20887 (5S\*,7S\*)-Taylofuran**

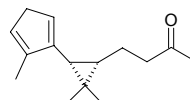
4-(2,2,6-Trimethyl-1-oxaspiro[4,4]non-6-en-3-yl)-butan-2-one  $C_{15}H_{24}O_2$  (236.36). Colorless oil. [Source](#): XIAO E TAI *Mylia taylorii* (essential oil), LUO XIAO E TAI *Mylia nuda* (essential oil). [Ref](#): 3840.

**20888 (-)-(7S)-(E)-Taylopyran**

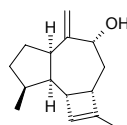
2,2,6-Trimethyl-3-[(E)(2-methylcyclopenta-2-en-1-ylidene)methyl]-3,4-dihydro-2H-pyran  $C_{15}H_{22}O$  (218.34). Colorless oil. [Source](#): XIAO E TAI *Mylia taylorii* (essential oil), LUO XIAO E TAI *Mylia nuda* (essential oil). [Ref](#): 3840.

**20889 (-)-(6R,7S)-α-Taylorione**

4-[2,2-Dimethyl-3-(5-methylcyclopenta-1,4-dien-1-yl)-cyclopropyl]-butan-2-one  $C_{15}H_{22}O$  (218.34). Colorless oil. [Source](#): XIAO E TAI *Mylia taylorii* (essential oil), LUO XIAO E TAI *Mylia nuda* (essential oil). [Ref](#): 3840.

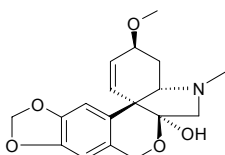
**20890 (1R\*,4S\*,5S\*,6R\*,7S\*,9R\*)-Taynudol**

2,8-Dimethyl-5-methylene-2a,3,4,5,5a,6,7,8,8a,8b-decahydro-cyclobuta[e]azulen-4-ol  $C_{15}H_{22}O$  (218.34). Colorless oil. [Source](#): XIAO E TAI *Mylia taylorii* (essential oil), LUO XIAO E TAI *Mylia nuda* (essential oil). [Ref](#): 3840.

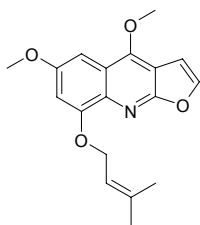


**20891 Tazettine**

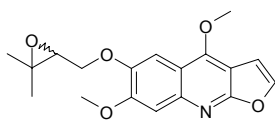
Sekisanine; Seqisanoline; Ungermine [507-79-9]  $C_{18}H_{21}NO_5$  (331.37). mp 210~211°C (vacuum), mp 237~238°C,  $[\alpha]_D^{25} = +150.3^\circ$  (chloroform), soluble in methanol, ethanol, chloroform, slightly soluble in ether.<sup>[5507]</sup> **Pharm:** AChE inhibitor ( $IC_{50} = (705 \pm 63) \mu\text{mol/L}$ ; control Galanthamine,  $IC_{50} = (1.9 \pm 0.16) \mu\text{mol/L}$ )<sup>[4944]</sup>. **Source:** DA YI ZHI JIAN *Lycoris aurea*, GAN FENG CAO *Zephyranthes candida*, SHI SUAN *Lycoris radiata* [Syn. *Amaryllis radiata*], SHUI GUI JIAO YE *Hymenocallis littoralis* [Syn. *Hymenocallis americana*; *Pancratium littoralis*], DUO HUA SHUI XIAN *Narcissus tazetta* (in 1956, the compound was isolated from the plant by T.Ikeda et al.)<sup>[5505]</sup>, SHUI XIAN GEN *Narcissus tazetta* var. *chinensis*, WEN SHU LAN *Crinum asiaticum* var. *sinicum*, *Cyrtanthus falcatius*. **Ref:** 6, 4952, 5505, 5507.

**20892 Tecleabine**

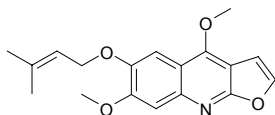
4,6-Dimethoxy-8-prenyloxyfuroquinoline  $C_{18}H_{19}NO_4$  (313.36). Needles, mp 107~108°C. **Source:** GAO GUI YOU MU YUN XIANG *Teclea nobilis* (aerial parts). **Ref:** 3503.

**20893 Tecleanatalensine A**

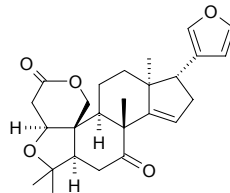
Tecleoxine; 6-[(2,3-Epoxy-3-methylbutyl)oxy]-4,7-dimethoxyfuro[2,3-b]quinoline  $C_{18}H_{19}NO_5$  (329.36). Needles, mp 120~12°C,  $[\alpha]_D = +10^\circ$  ( $c = 0.05$ , MeOH); pale yellow gum,  $[\alpha]_D = +11^\circ$  ( $c = 0.19$ ,  $CH_2Cl_2$ ). **Source:** GAO GUI YOU MU YUN XIANG *Teclea nobilis* (aerial parts), *Teclea natalensis* (leaf). **Ref:** 3503, 5267.

**20894 Tecleanatalensine B**

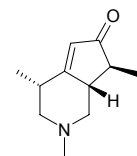
4,7-Dimethoxy-6-[(3-methyl-2-butenyl)oxy]furo[2,3-b]quinoline  $C_{18}H_{19}NO_4$  (313.36). Pale yellow gum. **Source:** *Teclea natalensis* (leaf). **Ref:** 5267.

**20895 Tecleanin**

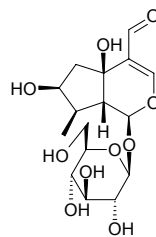
$C_{26}H_{32}O_5$  (424.54). **Source:** DA YE YOU MU YUN XIANG *Teclea grandifolia*, *Teclea oubanguiensis*, *Turraea wakefieldii* (root cortex). **Ref:** 3459.

**20896 Tecomanine**

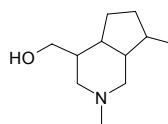
$C_{11}H_{17}NO$  (179.26). Liquid, bp 125°C/0.1mmHg,  $[\alpha]_D^{24} = -175^\circ$  ( $c = 1.17$ , chloroform). **Pharm:** Hypoglycemic; LD (mus) = 300mg/kg. **Source:** HUANG ZHONG HUA *Tecoma stans*. **Ref:** 1437.

**20897 Tecomoside**

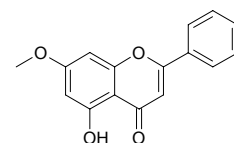
$C_{16}H_{24}O_{10}$  (376.36). **Source:** ZI WEI JING YE *Campsis grandiflora*. **Ref:** 660.

**20898 Tecostanine**

$C_{11}H_{21}NO$  (183.30). mp 85°C,  $[\alpha]_D^{20} = (0 \pm 2)^\circ$  (methanol); hydrochloride: mp 262°C, methyl iodide: mp 245°C. **Pharm:** Hypoglycemic. **Source:** HUANG ZHONG HUA *Tecoma stans*. **Ref:** 661.

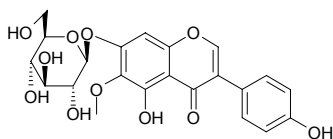
**20899 Tectochrysin**

5-Hydroxy-7-methoxyflavone  $C_{16}H_{12}O_4$  (268.27). Yellow slice crystals (methanol), mp 163°C. **Pharm:** Anti-inflammatory (NO production inhibitor, *in vitro*, LPS-activated mouse peritoneal macrophages,  $IC_{50} = 23 \mu\text{mol/L}$ ; control *L*-NMMA,  $IC_{50} = 28 \mu\text{mol/L}$ )<sup>[4655]</sup>;  $\beta$ -hexosaminidase release inhibitor (RBL-2H3 Cells, 100  $\mu\text{mol/L}$ , InRt = 75.1%; control Curcumin, InRt = 62.6%)<sup>[4655]</sup>. **Source:** SHAN YANG *Populus davidiana*, *Nuxia sphaerocephala* (leaf), YI ZHI REN *Alpinia oxyphylla* (fruit: yield = 0.0013%dw)<sup>[4655]</sup>. **Ref:** 2212, 4419, 4655.

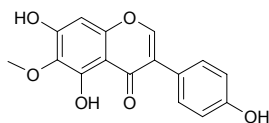


**20900 Tectoridin**

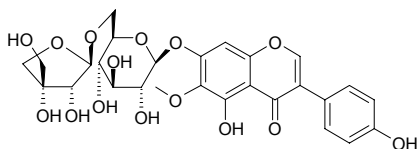
Tectorigin; Shekanin C<sub>22</sub>H<sub>22</sub>O<sub>11</sub> (462.41). mp 258°C. **Pharm:** Antioxidant (OH• radical scavenger)<sup>[2452]</sup>; anti-inflammatory (TPA-stimulated rat peritoneal macrophages, inhibits PGE<sub>2</sub> production)<sup>[4415]</sup>; anti-angiogenic (chick embryo, 30µg/egg, InRt = 35.0%, control *trans*-Retinoic acid, 1µg/egg, InRt = 77.3%)<sup>[5423]</sup>; antiproliferative (CPAE cell, 100µmol/L, InRt = 43.6%, control Genistein, InRt = 56.4%, IC<sub>50</sub> = 66.9µmol/L)<sup>[5423]</sup>; antineoplastic (ICR mouse bearing sarcoma 180, ip dose of 30mg/(kg·d) for 10days, inhibition of tumor volume by 24.8%)<sup>[5423]</sup>. **Source:** BAI HUA SHE GAN *Iris dichotoma* (dried rhizome: mean content = 0.86%)<sup>[5508]</sup>, HE AN HUANG TAN *Dalbergia riparia*, SHE GAN *Belamcanda chinensis* (dried rhizome: mean content = 1.72%)<sup>[5508]</sup>, YUAN WEI *Iris tectorum*. **Ref:** 6, 658, 2452, 4128, 4415, 5423, 5508.

**20901 Tectorigenin**

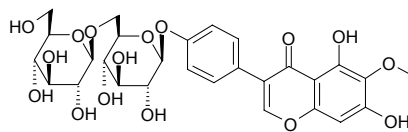
C<sub>16</sub>H<sub>12</sub>O<sub>6</sub> (300.27). mp 227°C (dec). **Pharm:** Antifungal<sup>[2452]</sup>; free radical scavenger (O<sub>2</sub><sup>-</sup>, ·OH and H<sub>2</sub>O<sub>2</sub> free radical)<sup>[2452]</sup>; anti-inflammatory (TPA-stimulated rat peritoneal macrophages, inhibits PGE<sub>2</sub> production)<sup>[4415]</sup>; anti-angiogenic (chick embryo, 30µg/egg, InRt = 80.0%, control *trans*-Retinoic acid, 1µg/egg, InRt = 77.3%)<sup>[5423]</sup>; antiproliferative (CPAE cell, 100µmol/L, InRt = 55.0%, IC<sub>50</sub> = 67.9µmol/L, control Genistein, InRt = 56.4%, IC<sub>50</sub> = 66.9µmol/L)<sup>[5423]</sup>; antineoplastic (mouse implanted with murine Lewis lung carcinoma (LLC), sc dose of 30mg/(kg·d) for 20 days, inhibition of tumor volume by 30.8%)<sup>[5423]</sup>; antineoplastic (ICR mouse bearing sarcoma 180, ip dose of 30mg/(kg·d) for 10days, inhibition of tumor volume by 44.2%)<sup>[5423]</sup>. **Source:** BAI HUA SHE GAN *Iris dichotoma* (dried rhizome: content = 0.87%)<sup>[5508]</sup>, CI MANG BING HUA *Ononis spinosa*, DE GUO YUAN WEI *Iris germanica*, SHE GAN *Belamcanda chinensis* (dried rhizome: content = 1.37%)<sup>[5508]</sup>, YUAN WEI *Iris tectorum* (dried rhizome: content = 3.14%)<sup>[5508]</sup>, *Dalbergia* sp. **Ref:** 6, 658, 2452, 4128, 4415, 5423, 5501, 5508.

**20902 Tectorigenin-7-O-β-D-apiofuranosyl-(1→6)-β-D-glucopyranoside**

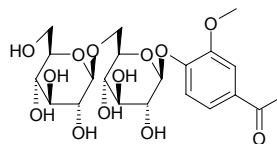
C<sub>27</sub>H<sub>30</sub>O<sub>15</sub> (594.53). Yellow amorphous powder, [α]<sub>D</sub><sup>25</sup> = -67.0° (c = 0.28, MeOH). **Source:** YIN DU HUANG TAN *Dalbergia sissoo* (stem and leaf-bark). **Ref:** 5172.

**20903 Tectorigenin-4'-glucosyl(1→6)glucoside**

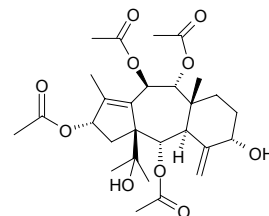
C<sub>28</sub>H<sub>32</sub>O<sub>16</sub> (624.56). Yellow amorphous powder. **Source:** AI JI ZHONG ZHI YUAN WEI *Iris carthaliniae*. **Ref:** 1880.

**20904 Tectoruside**

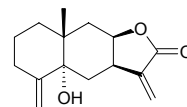
C<sub>21</sub>H<sub>30</sub>O<sub>13</sub> (490.47). mp 207~209°C. **Source:** YUAN WEI *Iris tectorum* (rhizome). **Ref:** 6, 660.

**20905 Teixidol**

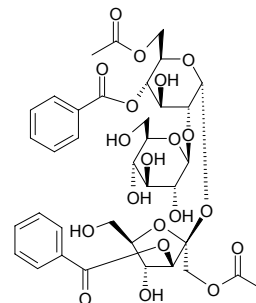
C<sub>28</sub>H<sub>40</sub>O<sub>10</sub> (536.63). mp 159°C, [α]<sub>D</sub> = -15.91° (CHCl<sub>3</sub>). **Source:** JIANG GUO ZI SHAN *Taxus baccata*. **Ref:** 662.

**20906 Telekin**

C<sub>15</sub>H<sub>20</sub>O<sub>3</sub> (248.32). **Source:** TIAN MING JING *Carpesium abrotanoides*, MEI LI TE LE JU *Telekia spectiosa*. **Ref:** 660.

**20907 Telephiose A**

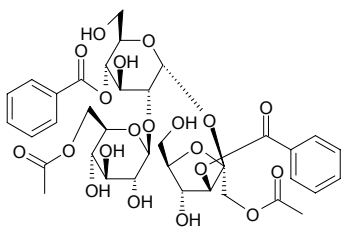
C<sub>36</sub>H<sub>44</sub>O<sub>20</sub> (796.74). [α]<sub>D</sub> = -11.0°. **Source:** XIAO HUA YUAN ZHI *Polygala telephioides*. **Ref:** 2184, 4044.



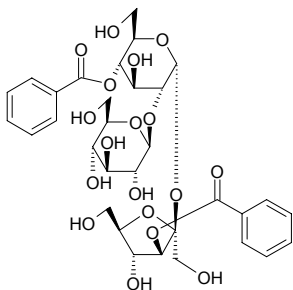


**20908 Telephiose B**

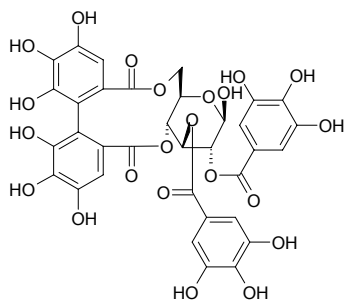
$C_{36}H_{44}O_{20}$  (796.74).  $[\alpha]_D = -17.6^\circ$ . Source: XIAO HUA YUAN ZHI *Polygala telephioides*. Ref: 2184, 4044.

**20909 Telephiose C**

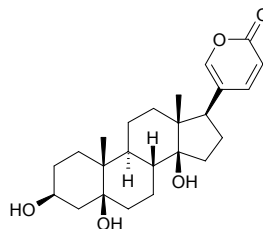
$C_{32}H_{40}O_{18}$  (712.66).  $[\alpha]_D = -19.5^\circ$ . Source: XIAO HUA YUAN ZHI *Polygala telephioides*. Ref: 2184, 4044.

**20910 Tellimagrandin I**

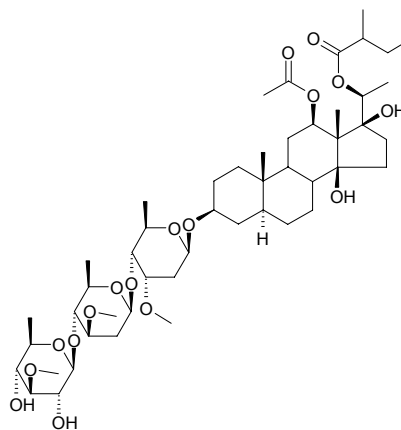
1-Desgalloylloganin  $C_{34}H_{26}O_{22}$  (786.57). Pharm: Antihepatotoxin; inhibits lipolysis (rat fat cells, induced by adrenaline); antioxidant (SOD-like activity,  $EC_{50} = 53.4 \mu\text{mol/L}$ , control Gallic acid,  $EC_{50} = 31.7 \mu\text{mol/L}$ , *L*-Ascorbic acid,  $EC_{50} = 34.6 \mu\text{mol/L}$ )<sup>[3408]</sup>; antioxidant (DPPH scavenger,  $EC_{50} = 0.79 \mu\text{mol/L}$ , control Gallic acid,  $EC_{50} = 5.88 \mu\text{mol/L}$ , *L*-Ascorbic acid,  $EC_{50} = 6.25 \mu\text{mol/L}$ )<sup>[3408]</sup>. Source: BAI SHAO *Paeonia albiflora* [Syn. *Paeonia lactiflora*] (fresh fruit: yield = 0.019%fw)<sup>[4695]</sup>, DING XIANG *Syzygium aromaticum* [Syn. *Eugenia caryophyllata*], DUO ZHI AN *Eucalyptus viminalis*, FAN SHI LIU GAN *Psidium guajava*, FEI YUE GUO *Feijoa sellowiana*, HU TAO REN *Juglans regia*, SHAN CHA *Camellia japonica*, SHUI YANG MEI *Geum japonicum*, XIN SHAO NA CAO *Tellima grandifolia*, *Rosa* sp., *Quercus* sp., *Fuchsia* sp. Ref: 658, 3408, 4695.

**20911 Telocinobufagin**

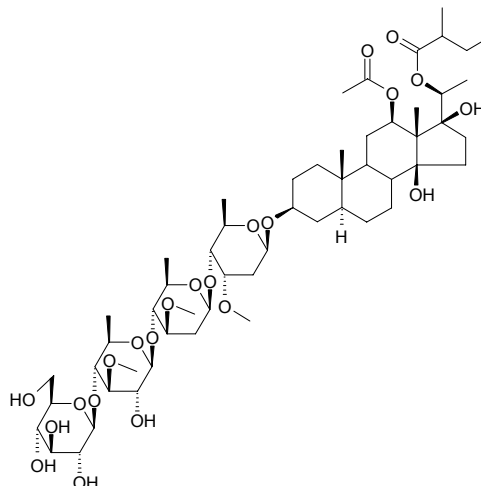
$C_{24}H_{34}O_5$  (402.54). mp  $160^\circ\text{C}$ ,  $207\sim 211^\circ\text{C}$ . Pharm: Cytotoxic (*in vitro*, KB,  $IC_{50} = 1.3 \mu\text{g/mL}$ ; HL-60,  $IC_{50} < 0.01 \mu\text{g/mL}$ ; MH-60,  $IC_{50} > 25 \mu\text{g/mL}$ )<sup>[3082]</sup>. Source: CHAN SU *Bufo bufo gargarizans* (dried secretion: content = 0.44%)<sup>[5508]</sup>; *Bufo melanostictus* (dried secretion: content = 0.03%)<sup>[5508]</sup>. Ref: 2, 3082, 5508.

**20912 Telosmoside A<sub>1</sub>**

Telosmogenin I 3-*O*- $\beta$ -D-thevetopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-cymaropyranoside  $C_{49}H_{82}O_{17}$  (943.19). White amorphous powder,  $[\alpha]_D^{30} = -9.6^\circ$  ( $c = 2.80$ , MeOH). Source: WO JING YE LAI XIANG *Telosma procumbens* (stem). Ref: 3518.

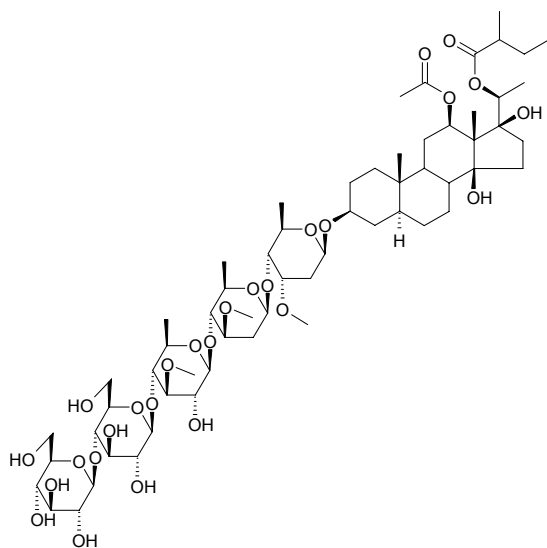
**20913 Telosmoside A<sub>2</sub>**

Telosmogenin I 3-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-thevetopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-cymaropyranoside  $C_{55}H_{92}O_{22}$  (1105.33). White amorphous powder,  $[\alpha]_D^{31} = -2.2^\circ$  ( $c = 1.79$ , MeOH). Pharm: Bitter. Source: WO JING YE LAI XIANG *Telosma procumbens* (stem). Ref: 3518.

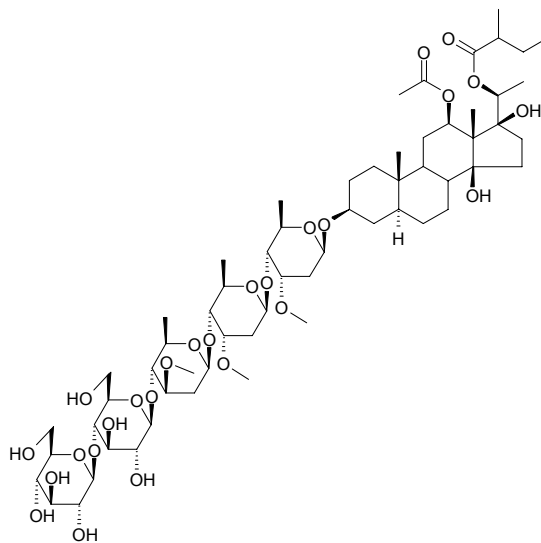


**20914 Telosmoside A<sub>3</sub>**

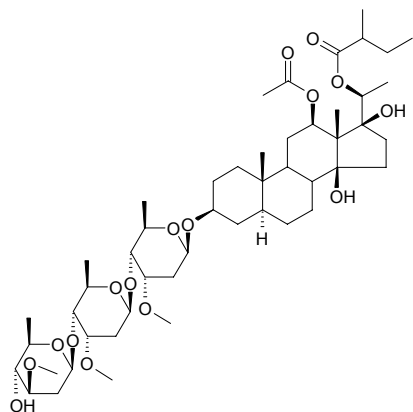
C<sub>61</sub>H<sub>102</sub>O<sub>27</sub> (1267.48). White amorphous powder,  $[\alpha]_D^{31} = -0.7^\circ$  ( $c = 1.49$ , MeOH). Source: WO JING YE LAI XIANG *Telosma procumbens* (stem). Ref: 3518.

**20916 Telosmoside A<sub>5</sub>**

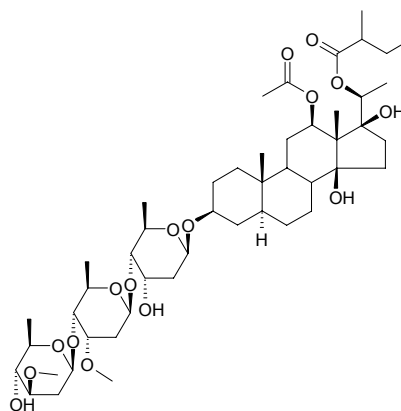
C<sub>61</sub>H<sub>102</sub>O<sub>26</sub> (1251.48). White amorphous powder,  $[\alpha]_D^{21} = +2.0^\circ$  ( $c = 0.51$ , MeOH). Source: WO JING YE LAI XIANG *Telosma procumbens* (stem). Ref: 3518.

**20915 Telosmoside A<sub>4</sub>**

Telosmogenin I 3-*O*- $\beta$ -*D*-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-cymaropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-cymaropyranoside C<sub>49</sub>H<sub>82</sub>O<sub>16</sub> (927.19). White amorphous powder,  $[\alpha]_D^{30} = +1.2^\circ$  ( $c = 0.87$ , MeOH). Source: WO JING YE LAI XIANG *Telosma procumbens* (stem). Ref: 3518.

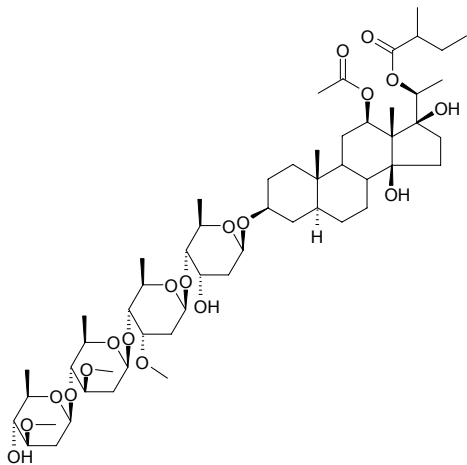
**20917 Telosmoside A<sub>6</sub>**

Telosmogenin I 3-*O*- $\beta$ -*D*-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-cymaropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranoside C<sub>48</sub>H<sub>80</sub>O<sub>16</sub> (913.16). White amorphous powder,  $[\alpha]_D^{30} = -6.8^\circ$  ( $c = 1.76$ , MeOH). Source: WO JING YE LAI XIANG *Telosma procumbens* (stem). Ref: 3518.

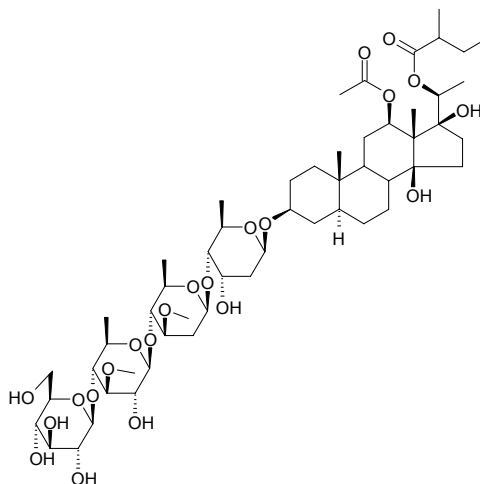


**20918 Telosmoside A<sub>7</sub>**

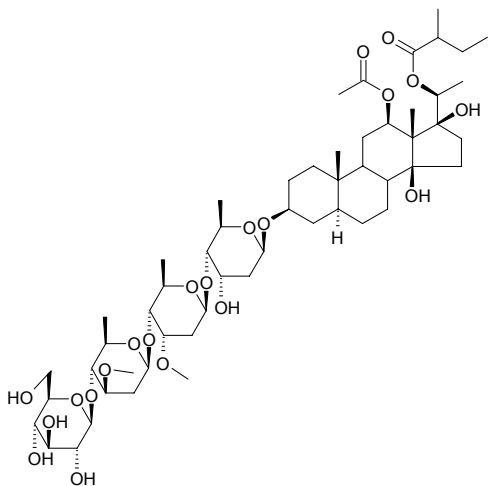
C<sub>55</sub>H<sub>92</sub>O<sub>19</sub> (1057.19). White amorphous powder,  $[\alpha]_D^{30} = -8.3^\circ$  ( $c = 1.92$ , MeOH). Source: WO JING YE LAI XIANG *Telosma procumbens* (stem). Ref: 3518.

**20920 Telosmoside A<sub>9</sub>**

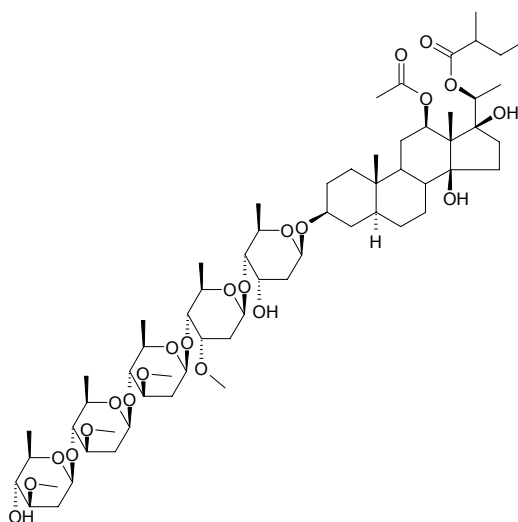
Telosmogenin I 3-*O*-β-*D*-glucopyranosyl-(1→4)-β-*D*-thevetopyranosyl-(1→4)-β-*D*-oleandropyranosyl-(1→4)-β-*D*-digitoxopyranoside C<sub>54</sub>H<sub>90</sub>O<sub>22</sub> (1091.31). White amorphous powder,  $[\alpha]_D^{30} = -6.0^\circ$  ( $c = 0.67$ , MeOH). Pharm: Sweetener. Source: WO JING YE LAI XIANG *Telosma procumbens* (stem). Ref: 3518.

**20919 Telosmoside A<sub>8</sub>**

C<sub>54</sub>H<sub>90</sub>O<sub>21</sub> (1075.31). White amorphous powder,  $[\alpha]_D^{30} = -2.3^\circ$  ( $c = 0.89$ , MeOH). Pharm: Sweetener. Source: WO JING YE LAI XIANG *Telosma procumbens* (stem). Ref: 3518.

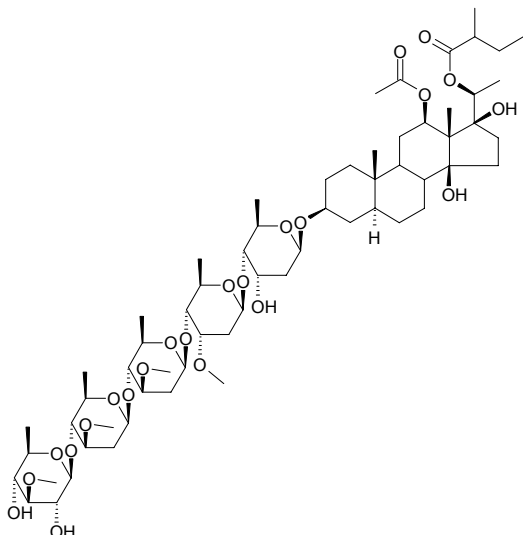
**20921 Telosmoside A<sub>10</sub>**

C<sub>62</sub>H<sub>104</sub>O<sub>22</sub> (1201.51). White amorphous powder,  $[\alpha]_D^{21} = +7.6^\circ$  ( $c = 0.53$ , MeOH). Pharm: Sweetener. Source: WO JING YE LAI XIANG *Telosma procumbens* (stem). Ref: 3518.

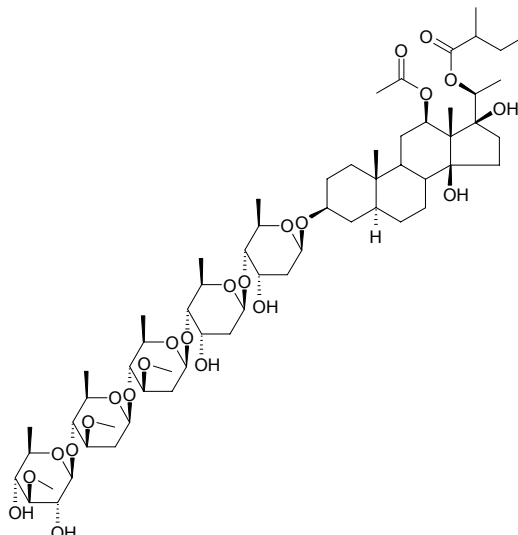


**20922 Telosmoside A<sub>11</sub>**

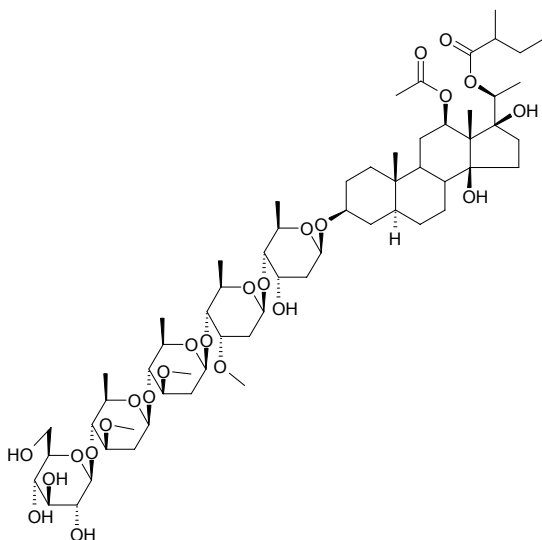
C<sub>62</sub>H<sub>104</sub>O<sub>23</sub> (1217.51). White amorphous powder,  $[\alpha]_D^{31} = -7.0^\circ$  ( $c = 1.85$ , MeOH). **Pharm:** Sweetener. **Source:** WO JING YE LAI XIANG *Telosma procumbens* (stem). **Ref:** 3518.

**20924 Telosmoside A<sub>13</sub>**

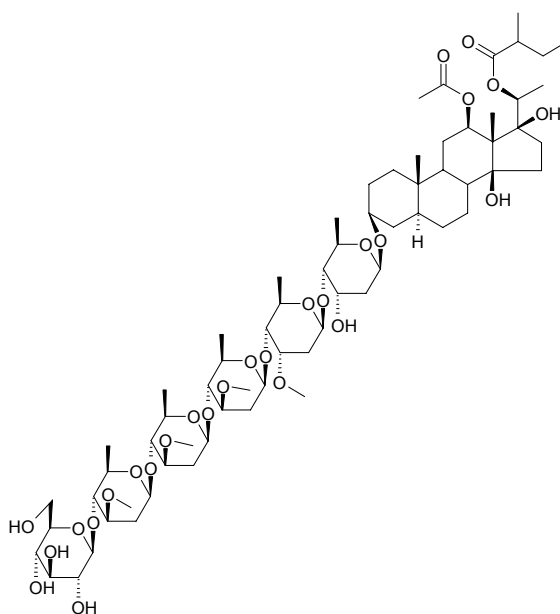
C<sub>61</sub>H<sub>102</sub>O<sub>23</sub> (1203.48). White amorphous powder,  $[\alpha]_D^{31} = -16.3^\circ$  ( $c = 1.41$ , MeOH). **Pharm:** Sweetener. **Source:** WO JING YE LAI XIANG *Telosma procumbens* (stem). **Ref:** 3518.

**20923 Telosmoside A<sub>12</sub>**

C<sub>61</sub>H<sub>102</sub>O<sub>24</sub> (1219.48). White amorphous powder,  $[\alpha]_D^{30} = -5.0^\circ$  ( $c = 2.38$ , MeOH). **Pharm:** Sweetener. **Source:** WO JING YE LAI XIANG *Telosma procumbens* (stem). **Ref:** 3518.

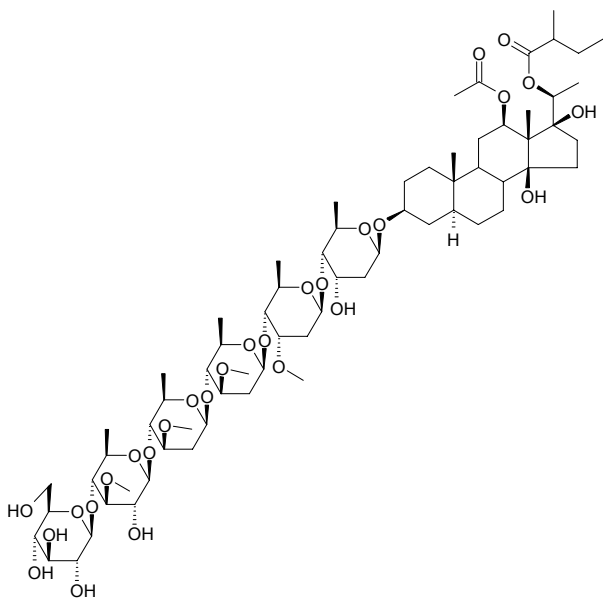
**20925 Telosmoside A<sub>14</sub>**

C<sub>68</sub>H<sub>114</sub>O<sub>27</sub> (1363.65). White amorphous powder,  $[\alpha]_D^{21} = -7.5^\circ$  ( $c = 3.05$ , MeOH). **Pharm:** Sweetener. **Source:** WO JING YE LAI XIANG *Telosma procumbens* (stem). **Ref:** 3518.

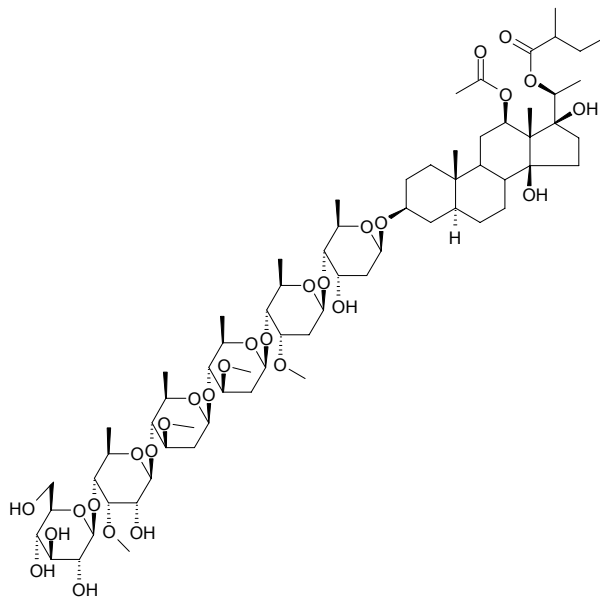


**20926 Telosmoside A<sub>15</sub>**

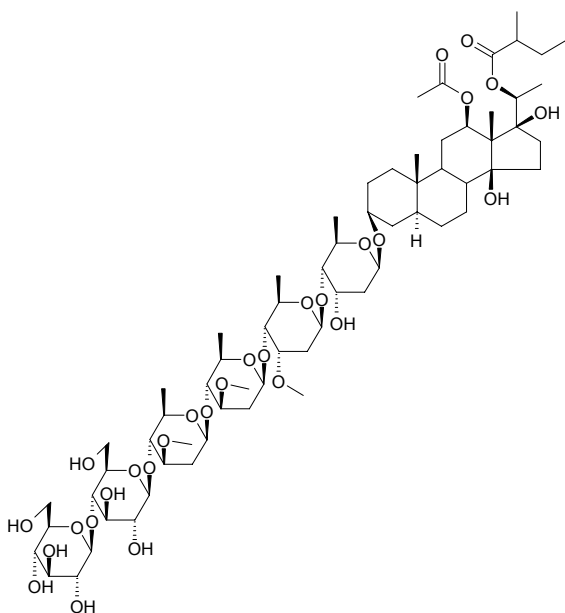
$C_{68}H_{114}O_{28}$  (1379.65). White amorphous powder,  $[\alpha]_D^{31} = +3.7^\circ$  ( $c = 1.35$ , MeOH). **Pharm:** Sweetener (its sweetness intensity is 1000 times greater than that of sucrose). **Source:** WO JING YE LAI XIANG *Telosma procumbens* (stem). **Ref:** 3518.

**20928 Telosmoside A<sub>17</sub>**

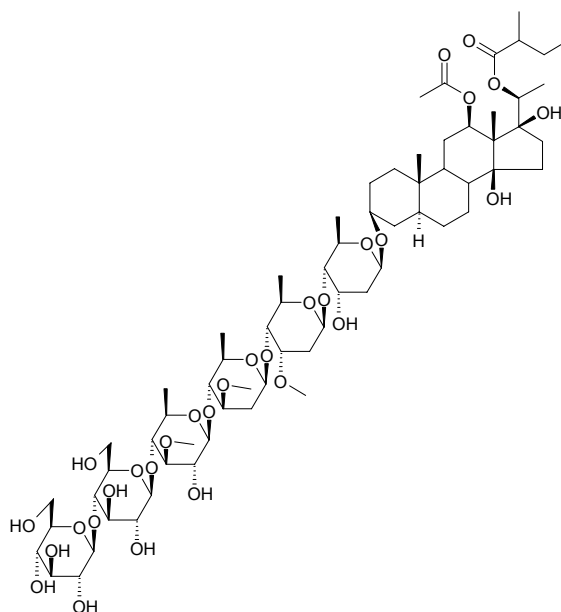
$C_{68}H_{114}O_{28}$  (1379.65). White amorphous powder,  $[\alpha]_D^{30} = +2.0^\circ$  ( $c = 2.51$ , MeOH). **Pharm:** Sweetener. **Source:** WO JING YE LAI XIANG *Telosma procumbens* (stem). **Ref:** 3518.

**20927 Telosmoside A<sub>16</sub>**

$C_{67}H_{112}O_{29}$  (1381.62). White amorphous powder,  $[\alpha]_D^{30} = +6.0^\circ$  ( $c = 2.51$ , MeOH). **Pharm:** Sweetener. **Source:** WO JING YE LAI XIANG *Telosma procumbens* (stem). **Ref:** 3518.

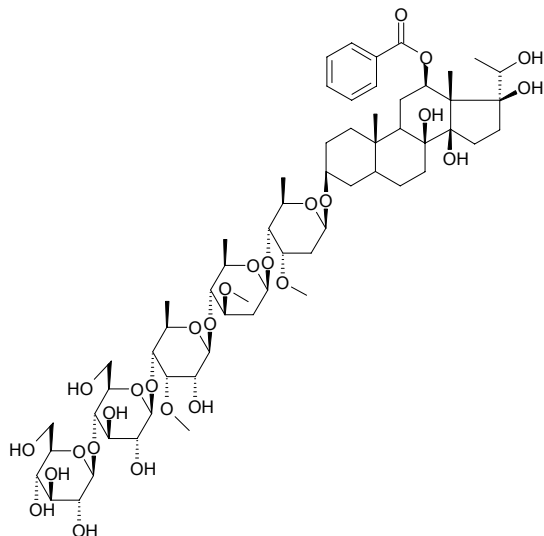
**20929 Telosmoside A<sub>18</sub>**

$C_{67}H_{112}O_{30}$  (1397.62). White amorphous powder,  $[\alpha]_D^{31} = +4.7^\circ$  ( $c = 1.93$ , MeOH). **Pharm:** Sweetener. **Source:** WO JING YE LAI XIANG *Telosma procumbens* (stem). **Ref:** 3518.

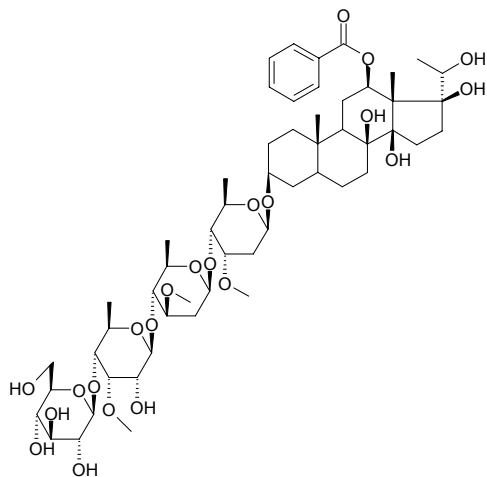


**20930 Tenacissoside J**

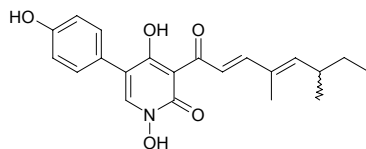
$C_{61}H_{96}O_{27}$  (1261.43). White powder ( $CHCl_3$ ). Source: TONG GUANG TENG *Marsdenia tenacissima*. Ref: 4837.

**20931 Tenacissoside K**

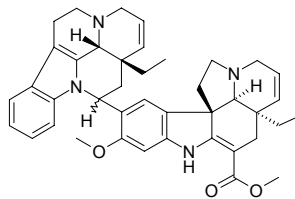
$C_{55}H_{86}O_{22}$  (1099.29). White powder ( $CHCl_3$ ). Source: TONG GUANG TENG *Marsdenia tenacissima*. Ref: 4837.

**20932 Tenellin**

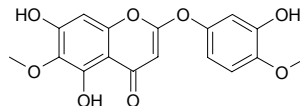
$C_{21}H_{23}NO_5$  (369.42). Source: BAI JIANG CAN *Bombyx mori*, BAI JIANG JUN *Beauveria bassiana*. Ref: 660.

**20933 Tenuicausine**

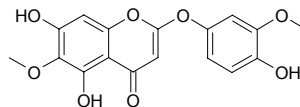
[119212-24-7]  $C_{41}H_{46}N_4O_3$  (642.85). Source: BO YE SHAN CHENG *Melodinus tenuicaudatus*. Ref: 553.

**20934 Tenuiflorin A**

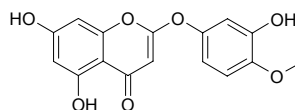
5,7-Dihydroxy-2-(3-hydroxy-4-methoxyphenoxy)-6-methoxychromone  $C_{17}H_{14}O_8$  (346.30). White-brownish crystals, mp 185~187°C. Source: XI HUA HAN XIU CAO *Mimosa tenuiflora* (leaf). Ref: 4990.

**20935 Tenuiflorin B**

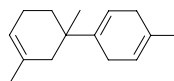
5,7-Dihydroxy-2-(4-hydroxy-3-methoxyphenoxy)-6-methoxychromone  $C_{17}H_{14}O_8$  (346.30). White-brownish crystals, mp 212~214°C. Source: XI HUA HAN XIU CAO *Mimosa tenuiflora* (leaf). Ref: 4990.

**20936 Tenuiflorin C**

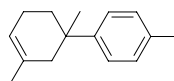
5,7-Dihydroxy-2-(3-hydroxy-4-methoxyphenoxy)chromone  $C_{16}H_{12}O_7$  (316.27). White-brownish crystals, mp 283~285°C. Source: XI HUA HAN XIU CAO *Mimosa tenuiflora* (leaf). Ref: 4990.

**20937 Tenuifolene**

4-(1,3-Dimethylcyclohexenyl)-1-methyl-1,4-cyclohexadiene  $C_{15}H_{20}$  (200.33). Colorless oil. Source: XIAO HUA SHA ZHEN *Osyris tenuifolia* (essential oil). Ref: 3821.

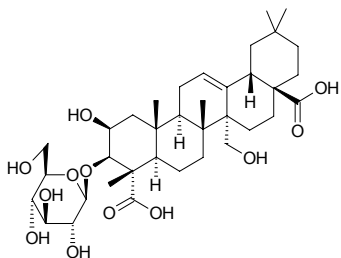
**20938 ar-Tenuifolene**

4-(1,3-Dimethylcyclohexenyl)-1-methylbenzene  $C_{15}H_{22}$  (202.34). Colorless oil. Source: XIAO HUA SHA ZHEN *Osyris tenuifolia* (essential oil). Ref: 3821.

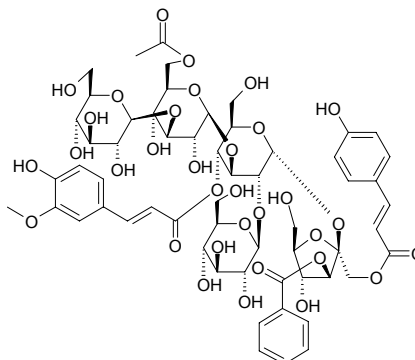


**20939 Tenuifolin**

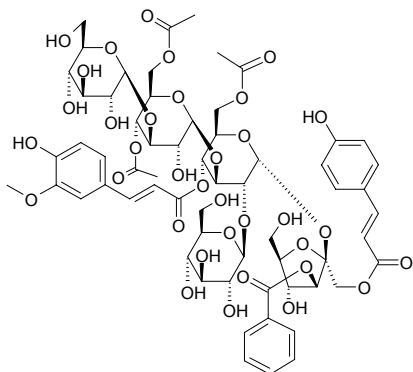
$C_{36}H_{56}O_{12}$  (680.84). mp 298–300°C. Source: YUAN ZHI *Polygala tenuifolia*.  
Ref: 2.

**20942 Tenuifoliose C**

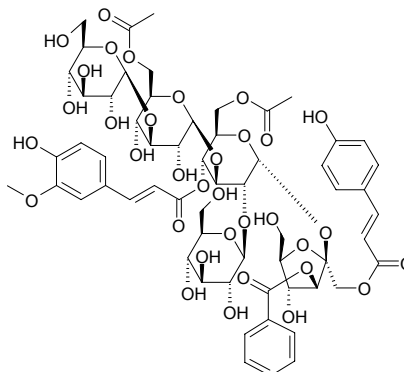
$C_{58}H_{72}O_{33}$  (1297.20).  $[\alpha]_D = -52.8^\circ$ . Source: KU WEI YUAN ZHI *Polygala amarella*, YUAN ZHI *Polygala tenuifolia*. Ref: 660, 2184.

**20940 Tenuifoliose A**

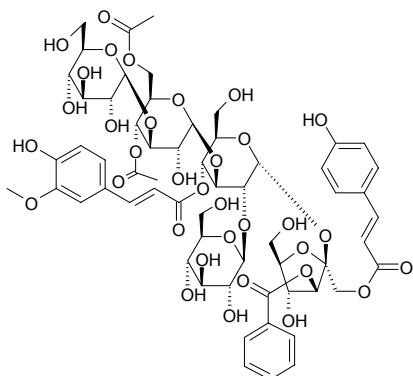
$C_{62}H_{76}O_{35}$  (1381.28).  $[\alpha]_D = -32.8^\circ$ . Source: KU WEI YUAN ZHI *Polygala amarella*, YUAN ZHI *Polygala tenuifolia*. Ref: 660, 2184.

**20943 Tenuifoliose D**

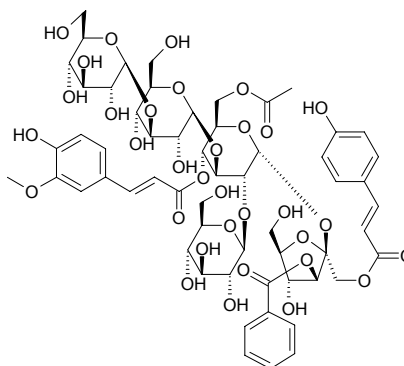
$C_{60}H_{74}O_{34}$  (1339.24). Source: KU WEI YUAN ZHI *Polygala amarella*, YUAN ZHI *Polygala tenuifolia*. Ref: 660, 2184.

**20941 Tenuifoliose B**

$C_{60}H_{74}O_{34}$  (1339.24). Source: KU WEI YUAN ZHI *Polygala amarella*, YUAN ZHI *Polygala tenuifolia*. Ref: 660, 2184.

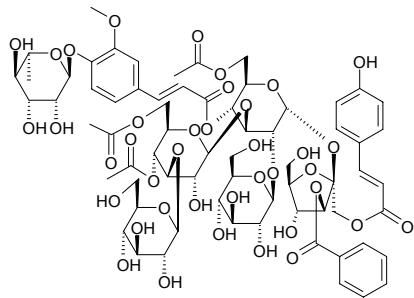
**20944 Tenuifoliose E**

$C_{58}H_{72}O_{33}$  (1297.20). Source: KU WEI YUAN ZHI *Polygala amarella*, YUAN ZHI *Polygala tenuifolia*. Ref: 660, 2184.

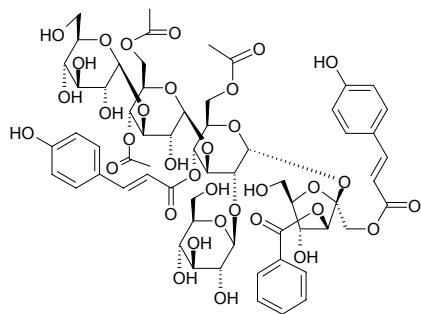


**20945 Tenuifoliose F**

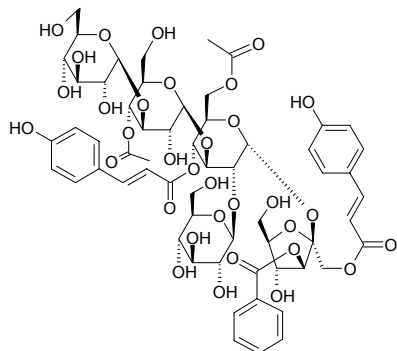
$C_{68}H_{86}O_{39}$  (1527.42). Source: YUAN ZHI *Polygala tenuifolia*. Ref: 660.

**20946 Tenuifoliose H**

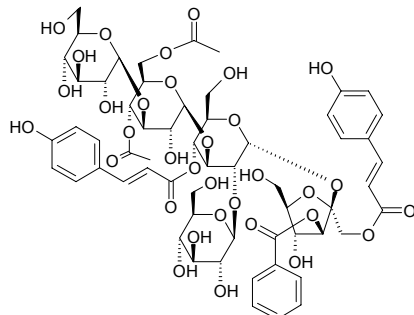
$C_{61}H_{74}O_{34}$  (1351.25).  $[\alpha]_D = -26.3^\circ$ . Source: KU WEI YUAN ZHI *Polygala amarella*. Ref: 2184.

**20947 Tenuifoliose I**

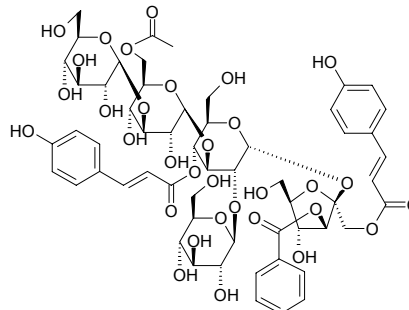
$C_{59}H_{72}O_{33}$  (1309.21).  $[\alpha]_D = -9.1^\circ$ . Source: KU WEI YUAN ZHI *Polygala amarella*. Ref: 2184.

**20948 Tenuifoliose J**

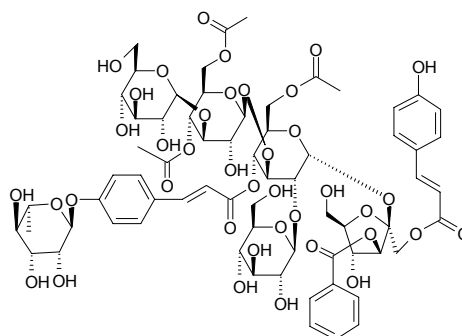
$C_{59}H_{72}O_{33}$  (1309.21).  $[\alpha]_D = -35.9^\circ$ . Source: KU WEI YUAN ZHI *Polygala amarella*. Ref: 2184.

**20949 Tenuifoliose K**

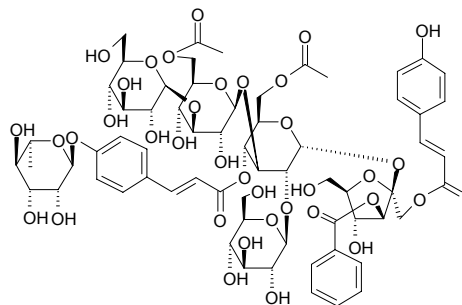
$C_{57}H_{70}O_{32}$  (1267.17).  $[\alpha]_D = -3.2^\circ$ . Source: KU WEI YUAN ZHI *Polygala amarella*. Ref: 2184.

**20950 Tenuifoliose L**

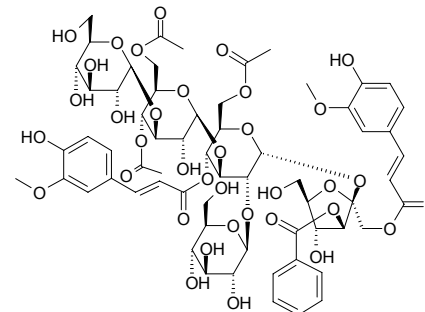
$C_{67}H_{84}O_{39}$  (1513.39).  $[\alpha]_D = -59.2^\circ$ . Source: KU WEI YUAN ZHI *Polygala amarella*. Ref: 1521, 2184.

**20951 Tenuifoliose M**

$C_{65}H_{82}O_{37}$  (1455.36).  $[\alpha]_D = -29.2^\circ$ . Source: KU WEI YUAN ZHI *Polygala amarella*. Ref: 1521, 2184.

**20952 Tenuifoliose N**

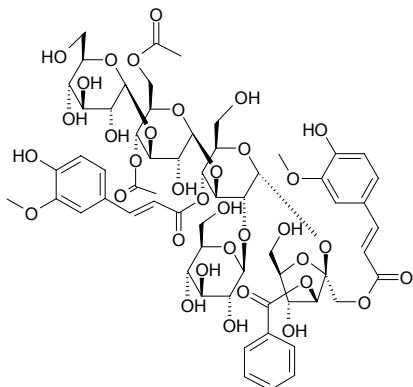
$C_{63}H_{78}O_{36}$  (1411.30).  $[\alpha]_D = -26.6^\circ$ . Source: KU WEI YUAN ZHI *Polygala amarella*. Ref: 2184.



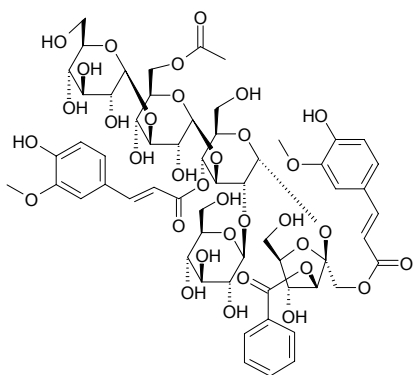


**20953 Tenuifoliose O**

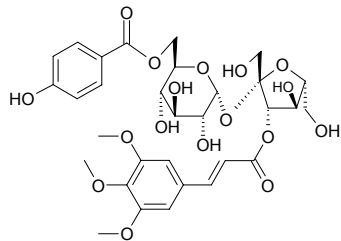
$C_{61}H_{76}O_{35}$  (1369.26).  $[\alpha]_D = -17.4^\circ$ . Source: KU WEI YUAN ZHI *Polygala amarella*. Ref: 2184.

**20954 Tenuifoliose P**

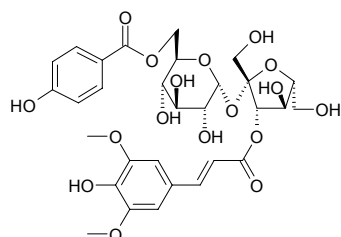
$C_{59}H_{74}O_{34}$  (1327.23).  $[\alpha]_D = -7.7^\circ$ . Source: KU WEI YUAN ZHI *Polygala amarella*. Ref: 2184.

**20955 Tenuifoliside A**

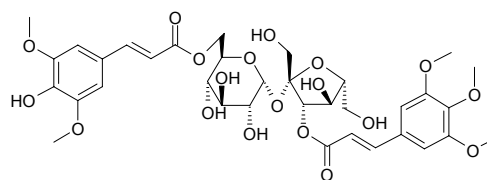
$C_{31}H_{38}O_{17}$  (682.64). Source: YUAN ZHI *Polygala tenuifolia*. Ref: 660.

**20956 Tenuifoliside B**

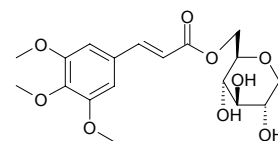
$C_{30}H_{36}O_{17}$  (668.61). Source: YUAN ZHI *Polygala tenuifolia*. Ref: 660.

**20957 Tenuifoliside C**

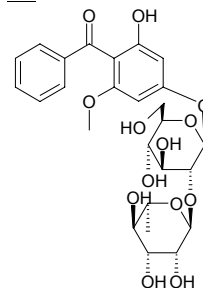
[139726-37-7]  $C_{35}H_{44}O_{19}$  (768.73). Source: KU WEI YUAN ZHI *Polygala amarella*, YUAN ZHI *Polygala tenuifolia*. Ref: 660, 2184.

**20958 Tenuifoliside D**

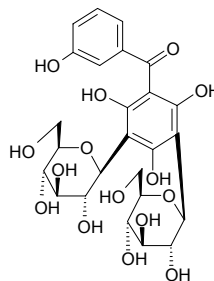
[139726-38-8]  $C_{18}H_{24}O_9$  (384.39). Source: KU WEI YUAN ZHI *Polygala amarella*, YUAN ZHI *Polygala tenuifolia*. Ref: 660, 2184.

**20959 Tenuiphenone A**

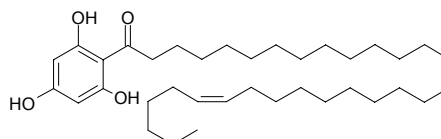
4-*O*-[ $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl]-2-hydroxyl-6-methoxybenzophenone  $C_{26}H_{32}O_{13}$  (552.54). Yellow amorphous powder,  $[\alpha]_D^{25} = +62.3^\circ$  ( $c = 0.10$ , MeOH). Source: YUAN ZHI *Polygala tenuifolia* (cortex). Ref: 4507.

**20960 Tenuiphenone B**

3,5-Di-*C*- $\beta$ -glucopyranosyl-2,4,6,3'-tetrahydroxybenzophenone  $C_{25}H_{30}O_{15}$  (570.51). Yellow amorphous powder,  $[\alpha]_D^{25} = +61.3^\circ$  ( $c = 0.11$ , MeOH). Source: YUAN ZHI *Polygala tenuifolia* (cortex). Ref: 4507.

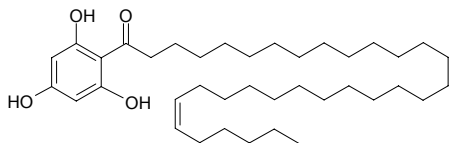
**20961 Tenuiphenone C**

2',4',6'-Trihydroxyphenyl-(2*Z*)-triacontene-1-one  $C_{36}H_{62}O_4$  (558.89). White solid (acetone), mp 197–200°C. Source: YUAN ZHI *Polygala tenuifolia* (cortex). Ref: 4507.

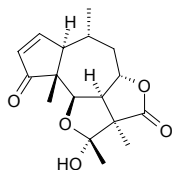


**20962 Tenuiphenone D**

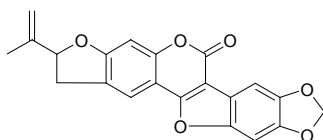
2',4',6'-Trihydroxyphenyl-(26Z)-dotriacontene-1-one C<sub>38</sub>H<sub>66</sub>O<sub>4</sub> (586.95).  
White solid (acetone), mp 197~200°C. Source: YUAN ZHI *Polygala tenuifolia* (cortex). Ref: 4507.

**20963 Tenulin**

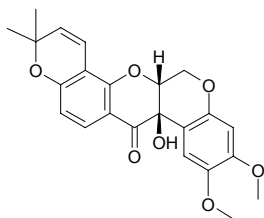
[19202-92-7] C<sub>17</sub>H<sub>22</sub>O<sub>5</sub> (306.36). mp 188~189°C, 196~198°C. Pharm: Anti-neoplastic (rat 2.5mg/(kg·d), mus 25mg/(kg·d), ip, W<sub>256</sub>, biotic prolonged rate = 166%; leukemia P<sub>388</sub>, biotic prolonged rate = 35%; EAC, InRt = 97%; KB *in vitro*, ED<sub>50</sub> = 26mg/mL); cytotoxic (Hep2 cells); toxin (field mus, mus and sheep); LD<sub>50</sub> (rat, ip) = 184.65mg/kg. Source: DUI XIN JU *Helenium autumnale*, KU WEI DUI XIN JU *Helenium amarum*, WEI MAO DUI XIN JU *Helenium puberulum*, XI YE DUI XIN JU *Helenium tenuifolium*, YA MEI DUI XIN JU *Helenium elegans*. Ref: 5, 658.

**20964 Tephcalostan**

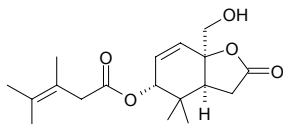
C<sub>21</sub>H<sub>14</sub>O<sub>6</sub> (362.34). Colorless needles (CHCl<sub>3</sub>), mp 251~252°C, [α]<sub>D</sub><sup>25</sup> = -52° (c = 0.001, MeOH). Source: MEI LI YE HUI MAO DOU *Tephrosia calophylla* (whole herb). Ref: 4312.

**20965 (-)-Tephrosin**

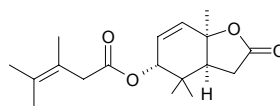
C<sub>23</sub>H<sub>22</sub>O<sub>7</sub> (410.43). mp 198°C. Pharm: Insect antifeedant. Source: GAO HUI MAO DOU *Tephrosia elata*, HUI YE GEN *Tephrosia purpurea*, YU TENG *Derris trifoliata*, ZI SUI HUAI *Amorpha fruticosa*. Ref: 6, 658, 4982.

**20966 3-Teracrylmelazolide A**

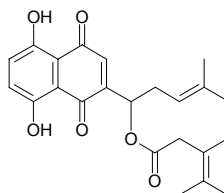
(-)-(3a*S*,5*R*,7a*R*)-4,4-Dimethyl-7a-hydroxymethyl-2-oxo-2,3,3a,4,5,7a-hexahydrobenzo[*b*]furan-5-yl 3,4-dimethyl-3-pentenoate C<sub>18</sub>H<sub>26</sub>O<sub>5</sub> (322.40). [α]<sub>D</sub> = -226° (c = 0.26, EtOH). Source: KU LIAN PI *Melia azedarach*. Ref: 1962.

**20967 3-Teracrylmelazolide B**

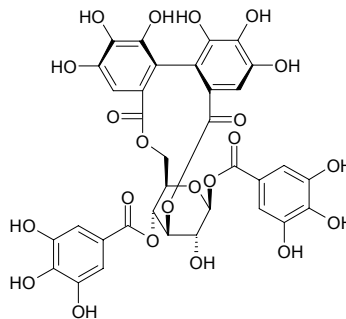
(3a*S*,5*R*,7a*R*)-4,4,7a-Trimethyl-2-oxo-2,3,3a,4,5,7a-hexahydrobenzo[*b*]furan-5-yl 3,4-dimethyl-3-pentenoate C<sub>18</sub>H<sub>26</sub>O<sub>4</sub> (306.41). Source: KU LIAN PI *Melia azedarach*. Ref: 1962.

**20968 3,4-Teracrylshikonin**

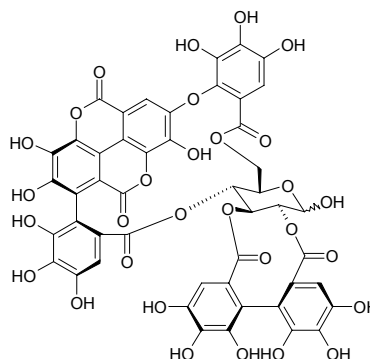
Teracrylshikonin [52438-11-6] C<sub>23</sub>H<sub>26</sub>O<sub>6</sub> (398.46). Red-purple amorphous substance, [α]<sub>600nm</sub><sup>22</sup> = -92° (ethanol). Pharm: Antibacterial (*Bacillus subtilis*, *Staphylococcus aureus*, *Sarcina gamboge*); enhances contractility of main artery (rat, caused by adrenalin); platelet aggregation inhibitor (due to collagen, IC<sub>50</sub> = 2.8 μmol/L). Source: XIN ZANG JIA ZI CAO *Arnebia euchroma*, JIA ZI CAO *Arnebia guttata*, ZI CAO *Lithospermum erythrorhizon*. Ref: 2, 900, 2193.

**20969 Tercatain**

C<sub>34</sub>H<sub>26</sub>O<sub>22</sub> (786.57). Source: AN MO LE *Phyllanthus emblica* (fruit juice). Ref: 3094.

**20970 Terchebulin**

C<sub>48</sub>H<sub>28</sub>O<sub>30</sub> (1084.74). Source: HE ZI *Terminalia chebula*. Ref: 660.

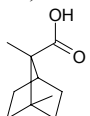


**20971 Teresantaldehyde**

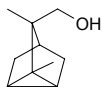
Teresantaldehyde  $C_{10}H_{14}O$  (150.22). Source: TAN XIANG *Santalum album*. Ref: 660.

**20972  $\alpha$ -Teresantallic acid**

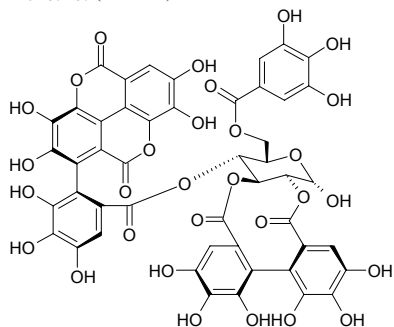
$C_{10}H_{14}O_2$  (166.22). mp 158°C. Source: TAN XIANG *Santalum album*. Ref: 6, 660, 1521.

**20973 Teresantalol**

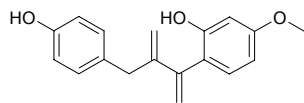
$C_{10}H_{16}O$  (152.24). Source: TAN XIANG *Santalum album*. Ref: 660.

**20974 Terflavin A**

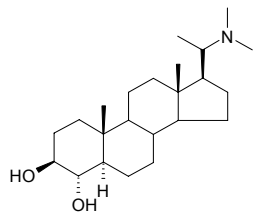
$C_{48}H_{30}O_{30}$  (1086.76). Source: HE ZI *Terminalia chebula*. Ref: 660.

**20975 Termilignan**

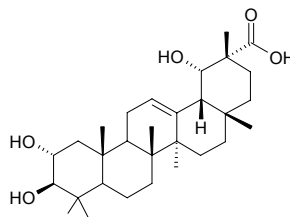
$C_{18}H_{18}O_3$  (282.34). Pharm: Anti-HIV; antimalarial; antifungal. Source: WEI MAO HE ZI *Terminalia chebula* var. *tomentella*. Ref: 2268.

**20976 Terminaline**

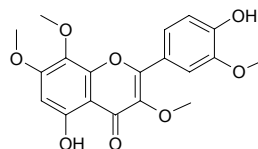
$C_{23}H_{41}NO_2$  (363.59). mp 243~244°C. Source: XUE SHAN LIN *Pachysandra terminalis*. Ref: 6.

**20977 Terminoic acid**

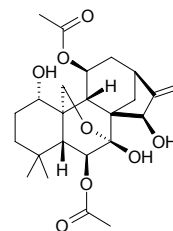
$C_{30}H_{48}O_5$  (488.71). Source: HE ZI *Terminalia chebula*. Ref: 660.

**20978 Ternatin**

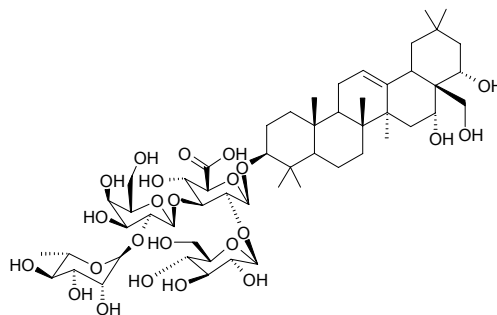
4',5-Dihydroxy-3,3',7,8-tetramethoxyflavone  $C_{19}H_{18}O_8$  (374.35). Pharm: Anti-inflammatory (inhibits thioglycolate-elicited rat peritoneal neutrophil accumulation and LPS-activated nitric oxide production in murine macrophages)<sup>[5448]</sup>. Source: GUANG JIE QIU HAI TANG *Begonia glabra*, MAO CHOU TAN *Evodia madagascariensis*, NIAN XING AI LEI JU *Egletes viscosa*, SAN CHI LA RUI A *Larrea tridentata*, *Melicope* spp. Ref: 660, 1521, 5448.

**20979 Ternifolin**

$C_{24}H_{34}O_8$  (450.53). mp 223~225°C,  $[\alpha]_D^{29} = -48.09^\circ$  ( $c = 0.815$ ,  $C_5H_5N$ ). Source: NIU WEI CAO *Isodon ternifolia*. Ref: 4067.

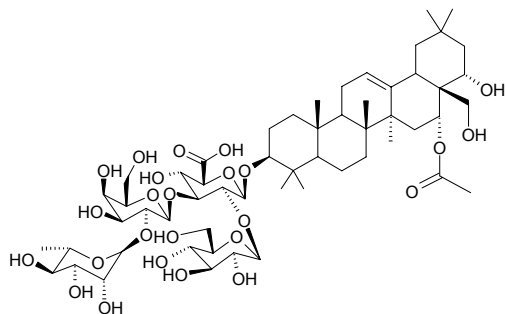
**20980 Ternstroemiaside A**

$C_{54}H_{88}O_{24}$  (1121.29). Colorless needles, mp 239~242°C,  $[\alpha]_D^{20} = -29.3^\circ$  ( $c = 0.3$ , MeOH). Source: RI BEN HOU PI XIANG *Ternstroemia japonica* (fresh fruit: yield = 0.00061%fw). Ref: 4730.

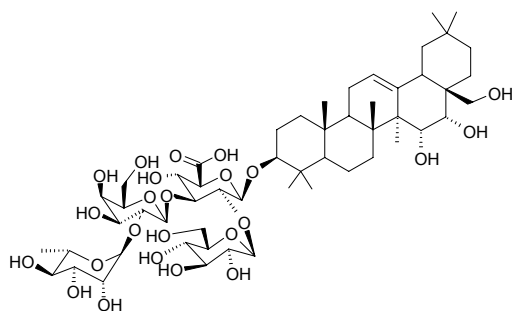


**20981 Ternstroemiaside B**

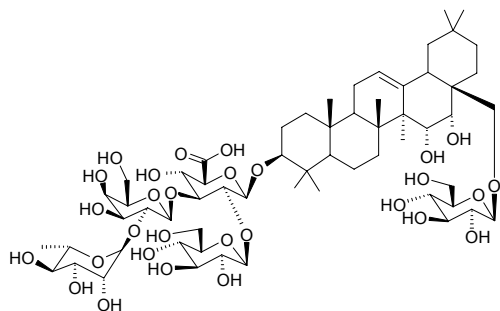
$C_{56}H_{90}O_{25}$  (1163.33). Colorless needles, mp 225–230°C,  $[\alpha]_D^{20} = -30.9^\circ$  ( $c = 0.5$ , MeOH). Source: RI BEN HOU PI XIANG *Ternstroemia japonica* (fresh fruit: yield = 0.0012%fw). Ref: 4730.

**20982 Ternstroemiaside C**

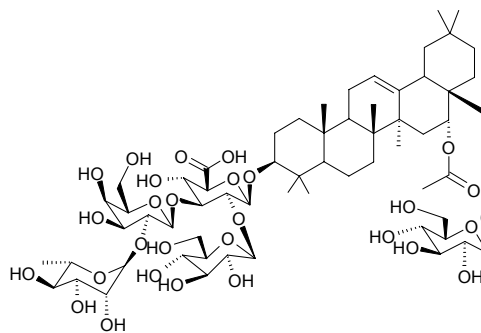
$C_{54}H_{88}O_{24}$  (1121.29). Colorless needles, mp 230–237°C,  $[\alpha]_D^{20} = -18.3^\circ$  ( $c = 0.5$ , MeOH). Source: RI BEN HOU PI XIANG *Ternstroemia japonica* (fresh fruit: yield = 0.00077%fw). Ref: 4730.

**20983 Ternstroemiaside D**

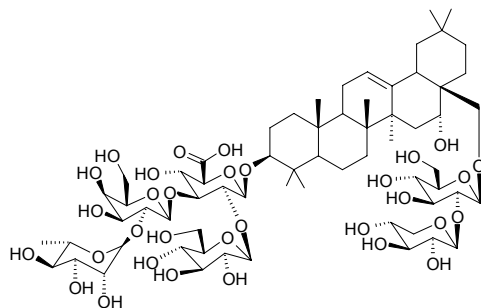
$C_{60}H_{98}O_{29}$  (1283.43). Colorless crystals, mp 231°C,  $[\alpha]_D^{20} = -32.1^\circ$  ( $c = 1.3$ , MeOH). Source: RI BEN HOU PI XIANG *Ternstroemia japonica* (fresh fruit: yield = 0.0043%fw). Ref: 4730.

**20984 Ternstroemiaside E**

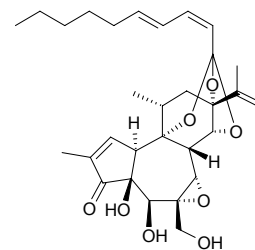
$C_{62}H_{100}O_{29}$  (1309.47). Colorless crystals, mp 228–230°C,  $[\alpha]_D^{20} = -38.2^\circ$  ( $c = 1.6$ , MeOH). Source: RI BEN HOU PI XIANG *Ternstroemia japonica* (fresh fruit: yield = 0.00027%fw). Ref: 4730.

**20985 Ternstroemiaside F**

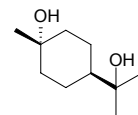
$C_{65}H_{106}O_{32}$  (1399.55). Colorless crystals, mp 216–222°C,  $[\alpha]_D^{20} = -39.0^\circ$  ( $c = 0.5$ , MeOH). Source: RI BEN HOU PI XIANG *Ternstroemia japonica* (fresh fruit: yield = 0.00093%fw). Ref: 4730.

**20986 Terpenoid EA-1**

Excoecariotoxin; Excoecaria factor A<sub>3</sub>; Excoecaria factor B<sub>3</sub> [92219-48-2]  
 $C_{30}H_{40}O_8$  (528.65). Pharm: Fish toxin. Source: HAI QI *Excoecaria agallocha*.  
Ref: 658, 1515.

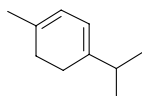
**20987 Terpin**

$C_{10}H_{20}O_2$  (172.27). *R*-hydrate, rhomboid crystals (water), mp 116–117°C, heated slowly to 100°C, sublimating; anhydride, mp 104–105°C, bp 258°C. Pharm: Antitussive (dispels phlegm, *cis*-form hydrate). Source: XUE SONG *Cedrus deodara*. Ref: 661.

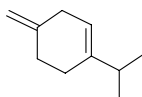


**20988  $\alpha$ -Terpinene**

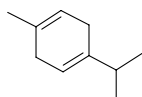
[99-86-5] C<sub>10</sub>H<sub>16</sub> (136.24). bp 173.5~174.8°C/755mmHg. **Pharm:** Anti-inflammatory (NO production inhibitor)<sup>[4415]</sup>. **Source:** DA YE XIANG RU *Mosla dianthera*, DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*], DU QIN GEN *Cicuta virosa*, FENG XIANG SHU *Liquidambar formosana* [Syn. *Liquidambar taiwaniana*], HU SUI ZI *Coriandrum sativum*, HUI XIANG *Foeniculum vulgare*, HUO MA REN *Cannabis sativa*, JU PI *Citrus reticulata*, NAN HE SHI *Daucus carota*, TIAN MING JING *Carpesium abrotanoides*, WU WEI ZI *Schisandra chinensis*, XIANG ZHANG *Cinnamomum parthenoxylum* [Syn. *Cinnamomum porrectum*], YIN CHEN HAO *Artemisia capillaris*. **Ref:** 2, 660, 4415.

**20989  $\beta$ -Terpinene**

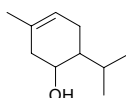
C<sub>10</sub>H<sub>16</sub> (136.24). bp 173~174°C. **Source:** HONG CHAI HU *Bupleurum scorzonerifolium*, HUANG HUA HAO *Artemisia annua*. **Ref:** 2, 660.

**20990  $\gamma$ -Terpinene**

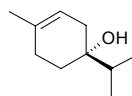
[99-85-4] C<sub>10</sub>H<sub>16</sub> (136.24). bp 183°C. **Pharm:** Antifungal (*Aspergillus niger* KCCM11239, MFC = 0.78mg/mL; *Aspergillus flavus* KCCM11453, MFC = 6.25mg/mL; *Candida albicans* KCCM11282, MFC > 6.25mg/mL; *Candida utilis* KCCM11356, MFC > 6.25mg/mL; *Cryptococcus neoformans* KCCM0564, MFC > 6.25mg/mL; *Trichosporon mucoides* KCCM50570, MFC = 3.12mg/mL; *Trichophyton rubrum* ATCC6345, MFC = 0.39mg/mL; *Blastoschizomyces capitatus* KCCM50270, MFC > 6.25mg/mL)<sup>[4079]</sup>. **Source:** HUANG HUA HAO *Artemisia annua*, JU PI *Citrus reticulata*, KUAN YE QIANG HUO *Notopterygium forbesii* [Syn. *Notopterygium franchetii*], LIAN QIAO *Forsythia suspensa*, LIAO XI XIN *Asarum heterotropoides* var. *mandshuricum*, QIANG HUO *Notopterygium incisum*, SHENG JIANG *Zingiber officinale*, WU WEI ZI *Schisandra chinensis*, CHAO XIAN DA BAI LI XIANG *Thymus magnus*, WU MAI BAI LI XIANG *Thymus quinquecostatus*. **Ref:** 2, 660, 4079.

**20991 1-Terpinen-5-ol**

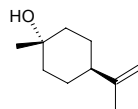
C<sub>10</sub>H<sub>18</sub>O (154.25). **Source:** HU JIAO *Piper nigrum*. **Ref:** 660.

**20992 Terpinen-4-ol**

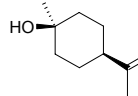
Terpinen-4-ol [562-74-3] C<sub>10</sub>H<sub>18</sub>O (154.25). **Pharm:** Antiasthmatic; antibacterial (*Bacillus thuringiensis*, *in vitro*); anti-inflammatory (modulator of cytokine network: suppresses formation of TNF- $\alpha$ , IL-1 $\beta$ , IL-8, IL-10 in LPS-activated hmn peripheral blood monocytes)<sup>[4416]</sup>. **Source:** AI YE *Artemisia argyi* (leaf: content scope = 0.013%~0.018%<sup>[5501]</sup>), HOU PO *Magnolia officinalis*, HUA JIAO *Zanthoxylum bungeanum*, KUAN YE QIANG HUO *Notopterygium forbesii* [Syn. *Notopterygium franchetii*], LIAN QIAO *Forsythia suspensa*, NAN HE SHI *Daucus carota*, QIANG HUO *Notopterygium incisum*, SHE XIANG CAO *Thymus vulgaris*, SHENG JIANG *Zingiber officinale*, WU WEI ZI *Schisandra chinensis*, XI XIN *Asarum sieboldii*, HU SHENG YE BAI QIAN CENG *Melaleuca alternifolia*. **Ref:** 2, 658, 660, 4416, 5501.

**20993 cis- $\beta$ -Terpineol**

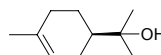
C<sub>10</sub>H<sub>18</sub>O (154.25). mp 32~33°C. **Source:** HONG CHAI HU *Bupleurum scorzonerifolium*, MI DIE XIANG *Rosmarinus officinalis*, MA HUANG *Ephedra sinica*. **Ref:** 2, 6, 660.

**20994 trans- $\beta$ -Terpineol**

C<sub>10</sub>H<sub>18</sub>O (154.25). mp 32~33°C. **Source:** HONG CHAI HU *Bupleurum scorzonerifolium*, MI DIE XIANG *Rosmarinus officinalis*, MA HUANG *Ephedra sinica*. **Ref:** 2, 6, 660.

**20995  $\alpha$ -Terpineol**

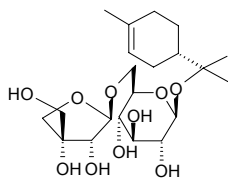
[98-55-5] C<sub>10</sub>H<sub>18</sub>O (154.25). mp (+) 36.9°C, (-) 37°C, ( $\pm$ ) 40~41°C, bp (+) 104°C/15mmHg, ( $\pm$ ) 218.8~219.4°C/752mmHg. **Pharm:** Antiasthmatic (bronchial smooth muscle relaxant, gpg); LD<sub>50</sub> (mus, orl) = 12.08mL/kg. **Source:** AI YE *Artemisia argyi* (leaf: content scope = 0.0094%~0.0105%<sup>[5501]</sup>), BAI DOU KOU *Amomum kravanh* [Syn. *Amomum cardamomum*], BAI LI XIANG *Thymus serpyllum*, CHA YE *Camellia sinensis* [Syn. *Thea sinensis*], CHAI HU *Bupleurum chinense*, GANG SONG *Baeckea frutescens*, HOU PO *Magnolia officinalis*, HUA JIAO *Zanthoxylum bungeanum* (pericarp: content scope = 0.00302%~0.00604%<sup>[5501]</sup>), HUANG HUA HAO *Artemisia annua*, JIN XIAN CAO *Glechoma longituba*, JIN YIN HUA *Lonicera japonica*, JU PI *Citrus reticulata*, KUAN YE QIANG HUO *Notopterygium forbesii* [Syn. *Notopterygium franchetii*], KUO YE XIE CAO *Valeriana officinalis* var. *latifolia*, LIAN QIAO *Forsythia suspensa*, LIAO XI XIN *Asarum heterotropoides* var. *mandshuricum*, LUO HUA SHENG *Arachis hypogaea*, MA HUANG *Ephedra sinica*, MAN JING ZI *Vitex trifolia*, MI DIE XIANG *Rosmarinus officinalis*, SHAN XING REN *Prunus armeniaca* var. *ansu*, SHE XIANG CAO *Thymus vulgaris*, SHENG JIANG *Zingiber officinale*, WU WEI ZI *Schisandra chinensis*, XI XIN *Asarum sieboldii*, XING REN *Prunus armeniaca*, YIN CHEN HAO *Artemisia capillaris*, occurs in many plants. **Ref:** 2, 658, 660, 5501.



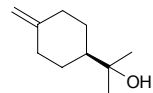
**20996 (4S)- $\alpha$ -Terpineol****O- $\beta$ -D-Apiofuranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside**

$C_{21}H_{36}O_{10}$  (448.52). Amorphous powder,  $[\alpha]_D^{22} = -65^\circ$  ( $c = 0.28$ , MeOH).

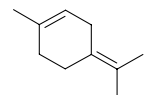
**Source:** XIAO LONG YE KUO BAO JU *Baccharis dracunculifolia* (aerial parts). **Ref:** 4184.

**20997  $\delta$ -Terpineol**

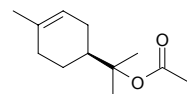
$C_{10}H_{18}O$  (154.25). **Source:** BAI DOU KOU *Amomum kravanh* [Syn. *Amomum cardamomum*]. **Ref:** 6.

**20998 Terpinolene**

*p*-Mentha-1,4(8)-diene; Isoterpinene [586-62-9]  $C_{10}H_{16}$  (136.24). bp  $186^\circ\text{C}$ . **Source:** DAI DAI HUA *Citrus aurantium* var. *amara*, FEI ZHOU LUO LE *Ocimum kilimandscharicum*, HUI XIANG *Foeniculum vulgare*, JU PI *Citrus reticulata*, KONG SHI CHUN *Ulva pertusa*, LIAO XI XIN *Asarum heterotropoides* var. *mandshuricum*, QIANG HUO *Notopterygium incisum*, SHAN XING REN *Prunus armeniaca* var. *ansu*, SHENG JIANG *Zingiber officinale*, SHUI QIN *Oenanthe javanica*, SHUI SONG *Codium fragile*, XI XIN *Asarum sieboldii*, XIE CAO *Valeriana officinalis*, XING REN *Prunus armeniaca*, ZI CAI *Porphyra tenera*. **Ref:** 2, 660.

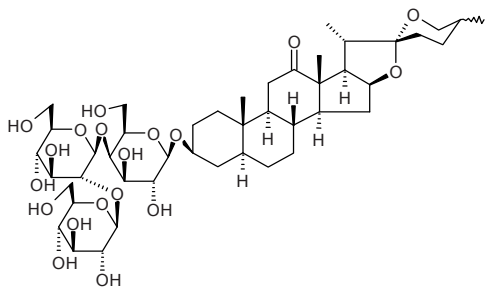
**20999 Terpinyl acetate**

Terpeneol acetate [80-26-2]  $C_{12}H_{20}O_2$  (196.29). bp (+)  $140^\circ\text{C}/40\text{mmHg}$ , ( $\pm$ )  $104\text{--}106^\circ\text{C}/11\text{mmHg}$ . **Source:** MAN JING YE *Vitex trifolia*, HUANG HUA HAO *Artemisia annua*. **Ref:** 6, 660.

**21000 Terreside A**

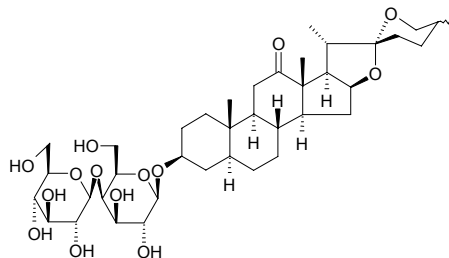
Neohecogenin-3-O- $\beta$ -D-glucopyranosyl(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranosyl(1 $\rightarrow$ 4)- $\beta$ -D-galactopyranoside  $C_{45}H_{72}O_{19}$  (917.06). White powder, mp  $273\text{--}275^\circ\text{C}$ .

**Source:** CI JI LI *Tribulus terrestris*. **Ref:** 2128.

**21001 Terreside B**

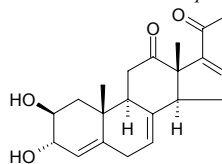
Neohecogenin-3-O- $\beta$ -D-glucopyranosyl(1 $\rightarrow$ 4)- $\beta$ -D-galactopyranoside

$C_{39}H_{62}O_{14}$  (754.92). White powder, mp  $263\text{--}265^\circ\text{C}$ . **Source:** CI JI LI *Tribulus terrestris*. **Ref:** 2128.

**21002 Terresterone A**

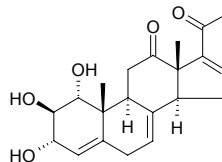
2 $\beta$ ,3 $\alpha$ -Dihydroxypregna-4,7,16-trien-12,20-dione  $C_{21}H_{26}O_4$  (342.44).

Amorphous yellowish solid,  $[\alpha]_D^{20} = +502.5^\circ$  ( $c = 0.04$ ,  $\text{CHCl}_3$ ). **Source:** LU SHENG GE JUN *Thelephora terrestris*. **Ref:** 4446.

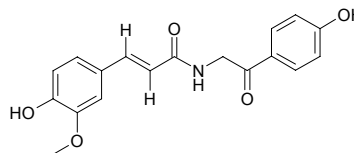
**21003 Terresterone B**

1 $\alpha$ ,2 $\beta$ ,3 $\alpha$ -Trihydroxypregna-4,7,16-trien-12,20-dione  $C_{21}H_{26}O_5$  (358.44).

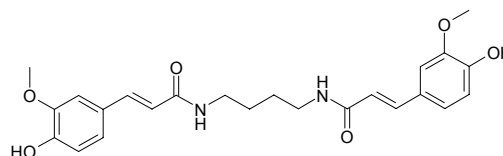
Amorphous colorless solid,  $[\alpha]_D^{20} = +108.6^\circ$  ( $c = 1.0$ ,  $\text{CHCl}_3$ ). **Source:** LU SHENG GE JUN *Thelephora terrestris*. **Ref:** 4446.

**21004 Terrestriamide**

$C_{18}H_{17}NO_5$  (327.34). Yellowish crystals, mp  $218\text{--}220^\circ\text{C}$ . **Source:** CI JI LI *Tribulus terrestris*. **Ref:** 295.

**21005 Terrestribisamide**

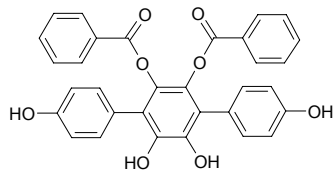
$C_{24}H_{28}N_2O_6$  (440.50). Colorless powder (MeOH), mp  $143\text{--}145^\circ\text{C}$ . **Source:** CI JI LI *Tribulus terrestris*. **Ref:** 1881.



**21006 Terrestrin A**

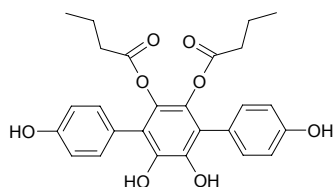
$C_{34}H_{26}O_8$  (562.58). Colorless crystals (methanol–water), mp 220–223°C.

Source: LU SHENG GE JUN *Thelephora terrestris*. Ref: 5276.

**21007 Terrestrin B**

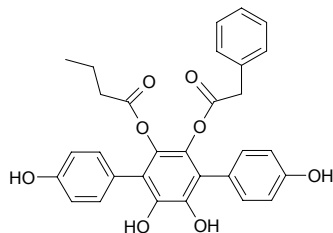
$C_{26}H_{26}O_8$  (466.49). Reddish violet solid. Source: LU SHENG GE JUN

*Thelephora terrestris*. Ref: 5276.

**21008 Terrestrin C**

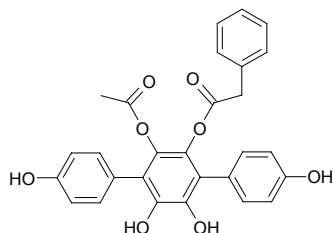
$C_{30}H_{26}O_8$  (514.54). Reddish solid. Source: LU SHENG GE JUN *Thelephora*

*terrestris*. Ref: 5276.

**21009 Terrestrin D**

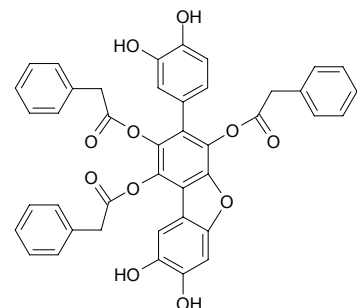
$C_{28}H_{22}O_8$  (486.48). Grayish violet solid. Source: LU SHENG GE JUN

*Thelephora terrestris*. Ref: 5276.

**21010 Terrestrin E**

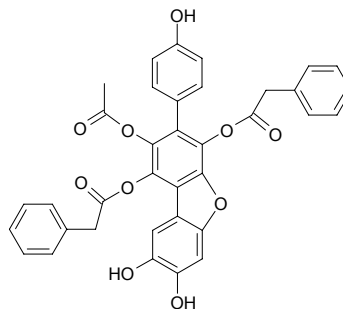
$C_{42}H_{30}O_{11}$  (710.70). Greenish gray solid. Source: LU SHENG GE JUN

*Thelephora terrestris*. Ref: 5276.

**21011 Terrestrin F**

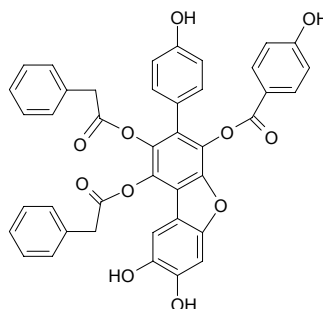
$C_{36}H_{26}O_{10}$  (618.60). Bluish solid. Source: LU SHENG GE JUN *Thelephora*

*terrestris*. Ref: 5276.

**21012 Terrestrin G**

$C_{41}H_{28}O_{11}$  (696.67). Grayish solid. Source: LU SHENG GE JUN *Thelephora*

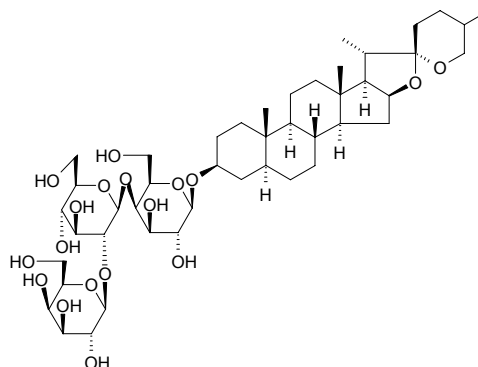
*terrestris*. Ref: 5276.

**21013 Terrestrosin A**

(3 $\beta$ ,5 $\alpha$ )-Spirostan-3-yl *O*- $\beta$ -D-galactopyranosyl-(1 $\rightarrow$ 2)-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-galactopyranoside [179799-23-6]  $C_{45}H_{74}O_{18}$  (903.08).

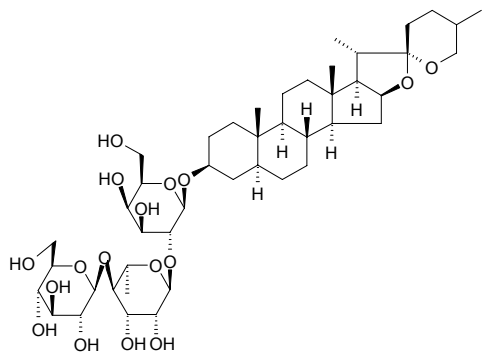
Acicular crystals (MeOH), mp 227–230°C,  $[\alpha]_D^{24} = -56.5^\circ$  ( $c = 0.65$ , pyridine).

Source: CI JI LI *Tribulus terrestris*. Ref: 706.

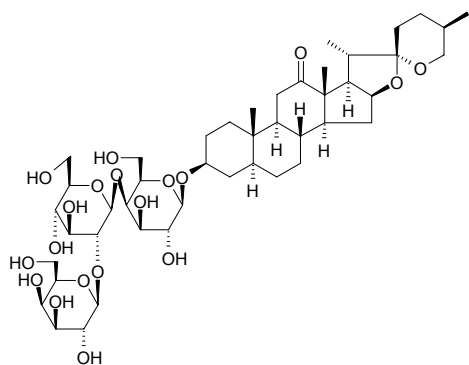


**21014 Terrestrosin B**

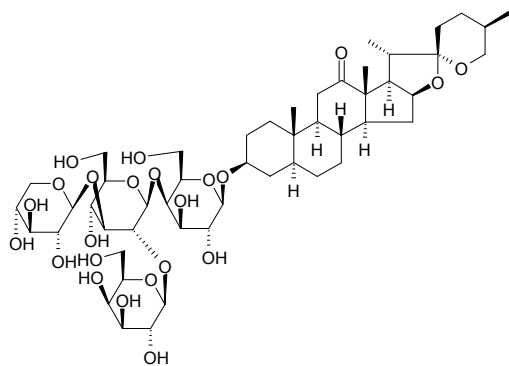
(3 $\beta$ ,5 $\alpha$ )-Spirostan-3-yl *O*-6-deoxy- $\alpha$ -*L*-mannopyranosyl-(1 $\rightarrow$ 2)-*O*-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)]- $\beta$ -*D*-galactopyranoside [179464-22-3] C<sub>45</sub>H<sub>74</sub>O<sub>17</sub> (887.08). Acicular crystals (MeOH-CHCl<sub>3</sub>), mp 296~300°C, [ $\alpha$ ]<sub>D</sub><sup>24</sup> = -90.5° (*c* = 0.22, pyridine). Source: CI JI LI *Tribulus terrestris*. Ref: 706.

**21015 Terrestrosin C**

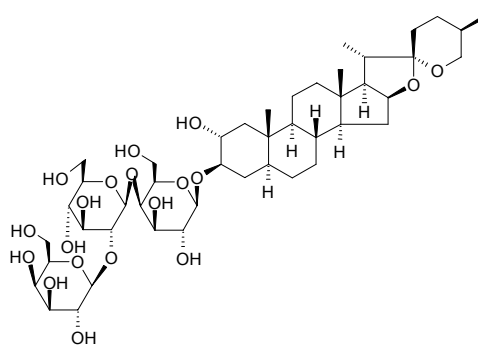
(3 $\beta$ ,5 $\alpha$ )-3-[(*O*- $\beta$ -*D*-Galactopyranosyl-(1 $\rightarrow$ 2)-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-galactopyranosyl)oxy]-spirostan-12-one [179799-24-7] C<sub>45</sub>H<sub>72</sub>O<sub>19</sub> (917.06). Microneedles (MeOH), mp 213~215°C, [ $\alpha$ ]<sub>D</sub><sup>24</sup> = -16.4° (*c* = 0.91, pyridine). Source: CI JI LI *Tribulus terrestris*. Ref: 706.

**21016 Terrestrosin D**

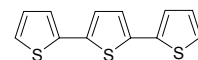
(3 $\beta$ ,5 $\alpha$ ,25*R*)-3-[(*O*- $\beta$ -*D*-Galactopyranosyl-(1 $\rightarrow$ 2)-*O*-[ $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 3)]-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-galactopyranosyl)oxy]-spirostan-12-one [179464-23-4] C<sub>50</sub>H<sub>80</sub>O<sub>23</sub> (1049.18). Microneedles (MeOH), mp 277~279°C, [ $\alpha$ ]<sub>D</sub><sup>24</sup> = -20.4° (*c* = 1.13, pyridine). Source: CI JI LI *Tribulus terrestris*. Ref: 706.

**21017 Terrestrosin E**

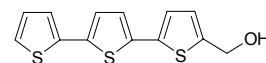
(2 $\alpha$ ,3 $\beta$ ,5 $\alpha$ )-Hydroxyspirostan-3-yl *O*- $\beta$ -*D*-galactopyranosyl-(1 $\rightarrow$ 2)-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-galactopyranoside [179799-25-8] C<sub>45</sub>H<sub>72</sub>O<sub>19</sub> (919.08). Acicular crystals (MeOH), mp 222~225°C, [ $\alpha$ ]<sub>D</sub><sup>24</sup> = -30° (*c* = 1.14, pyridine). Source: CI JI LI *Tribulus terrestris*. Ref: 706.

**21018  $\alpha$ -Terthienyl**

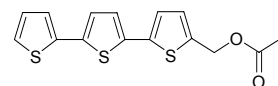
[1081-34-1] C<sub>12</sub>H<sub>8</sub>S<sub>3</sub> (248.39). mp 92~93°C. Pharm: Antibacterial; nematocide. Source: MO HAN LIAN *Eclipta prostrata* [Syn. *Eclipta alba*], WAN SHOU JU *Tagetes erecta*. Ref: 6, 619, 658.

**21019  $\alpha$ -Terthienyl methanol**

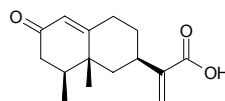
C<sub>13</sub>H<sub>10</sub>OS<sub>3</sub> (278.42). mp 150~151°C. Source: MO HAN LIAN *Eclipta prostrata* [Syn. *Eclipta alba*]. Ref: 6.

**21020  $\alpha$ -Terthienyl methyl acetate**

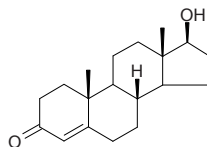
C<sub>15</sub>H<sub>12</sub>O<sub>2</sub>S<sub>3</sub> (320.45). mp 114~116°C. Source: MO HAN LIAN *Eclipta prostrata* [Syn. *Eclipta alba*]. Ref: 6.

**21021 Tessaric acid**

C<sub>15</sub>H<sub>20</sub>O<sub>3</sub> (248.32). Colorless needles (Me<sub>2</sub>CO), mp 157~158°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -156.2° (*c* = 0.3, CHCl<sub>3</sub>). Source: LIU LENG JU *Laggera alata* (aerial parts; yield = 0.00083%dw). Ref: 4709.

**21022 Testosterone**

17 $\beta$ -Hydroxyandros-4-en-3-one [58-22-0] C<sub>19</sub>H<sub>28</sub>O<sub>2</sub> (288.43). mp 154.0~154.5°C. Pharm: Androgen; antibacterial (*Bacillus subtilis*, *Escherichia coli* and *Sarcina citrea*). Source: OU ZHOU CHI SONG *Pinus sylvestris*, SHE XIANG *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*. Ref: 2, 658.

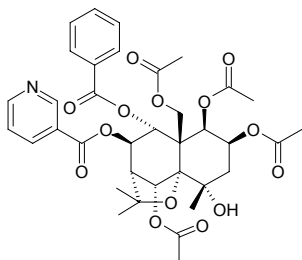




**21023 1 $\beta$ ,2 $\beta$ ,5 $\alpha$ ,11-Tetraacetoxy-8 $\alpha$ -benzoyl-4 $\alpha$ -hydroxy-7 $\beta$ -nicotinoyl-dihydroagarofuran**

C<sub>36</sub>H<sub>41</sub>NO<sub>14</sub> (711.73). Amorphous powder,  $[\alpha]_D^{25} = -38.4^\circ$  ( $c = 1.0$ , MeOH).

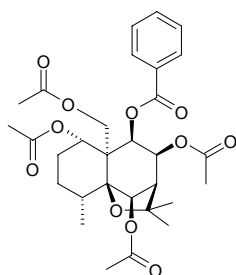
Source: LEI GONG TENG *Tripterygium wilfordii*. Ref: 758.



**21024 1 $\alpha$ ,6 $\beta$ ,8 $\beta$ ,14-Tetraacetoxy-9 $\beta$ -benzoyloxydihydro- $\beta$ -agarofuran**

C<sub>30</sub>H<sub>38</sub>O<sub>11</sub> (574.63). White amorphous powder,  $[\alpha]_D^{25} = -4.18^\circ$  ( $c = 0.19$ , MeOH).

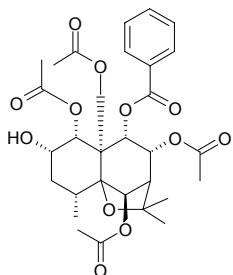
Pharm: Intestinal smooth muscle relaxant (*in vitro*, rat ileum, 1  $\mu$ g/mL, relaxant effect = (26.9 $\pm$ 3.7)%, control Papaverine, relaxant effect = (28.6 $\pm$ 7.3)%,  $p < 0.05$ ). Source: DENG YOU TENG ZI *Celastrus paniculatus*. Ref: 5002.



**21025 1 $\alpha$ ,6 $\beta$ ,8 $\alpha$ ,13-Tetraacetoxy-9 $\alpha$ -benzoyloxy-2 $\alpha$ -hydroxy- $\beta$ -dihydro-agarofuran**

C<sub>30</sub>H<sub>38</sub>O<sub>12</sub> (590.63). Amorphous white powder, mp 99~100°C,  $[\alpha]_D^{24} = -19.9^\circ$

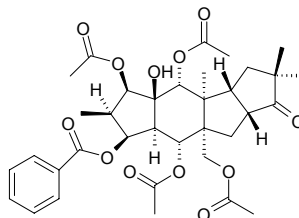
( $c = 0.66$ , CHCl<sub>3</sub>). Pharm: Insecticidal (*Mythimna separata*, KD<sub>50</sub> = 388.0  $\mu$ g/g). Source: DIAO GAN MA *Celastrus angulatus* (root cortex). Ref: 5228.



**21026 1 $\beta$ ,5 $\alpha$ ,14 $\alpha$ ,17 $\alpha$ -Tetraacetoxy-3 $\beta$ -benzoyloxy-15 $\beta$ -hydroxy-9-oxo-paraliane**

C<sub>35</sub>H<sub>44</sub>O<sub>12</sub> (656.73). Amorphous solid,  $[\alpha]_D^{25} = -31.8^\circ$  ( $c = 0.10$ , CHCl<sub>3</sub>).

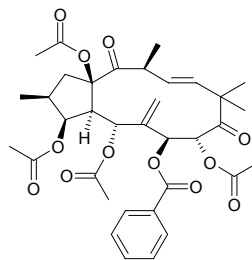
Pharm: Multidrug resistance (MDR) reversing activity (hmn MDR1 gene transfected mouse lymphoma cells, FSC: forward scatter count = 558.42, DMSO control = 519.74; SSC: side scatter count = 235.41, DMSO control = 234.67; FL-1: fluorescence intensity = 25.68, DMSO control = 5.92). Source: BO TE LAN DA JI *Euphorbia portlandica* (whole herb). Ref: 4919.



**21027 3 $\beta$ ,5 $\alpha$ ,8 $\alpha$ ,15 $\beta$ -Tetraacetoxy-7 $\beta$ -benzoyloxyjatropa-6(17),11E-dien-9,14-dione**

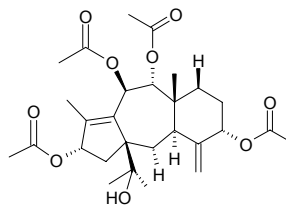
C<sub>35</sub>H<sub>42</sub>O<sub>12</sub> (654.72). Colorless crystals, mp 230~231°C,  $[\alpha]_D^{25} = +88.3^\circ$  ( $c = 0.49$ ,

CHCl<sub>3</sub>). Pharm: Cytotoxic (*in vitro*, B16 melanoma cell line, IC<sub>50</sub> > 5  $\mu$ g/mL, no significant cytotoxicity); irritant inactive (mouse ear inflammation model, ID<sub>50</sub> > 100  $\mu$ g/ear). Source: *Euphorbia turczaninowii* (whole herb). Ref: 3078.

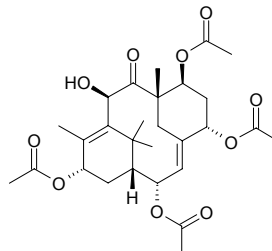


**21028 5 $\alpha$ ,9 $\alpha$ ,10 $\beta$ ,13 $\alpha$ -Tetraacetoxy-15-hydroxy-11(15→1)-abeo-taxa-4(20),11-diene**

C<sub>28</sub>H<sub>40</sub>O<sub>9</sub> (520.63). Oily compound,  $[\alpha]_D^{20} = +85^\circ$  (MeOH). Source: XI MA LA YA HONG DOU SHAN *Taxus wallichiana* (bark). Ref: 4245.

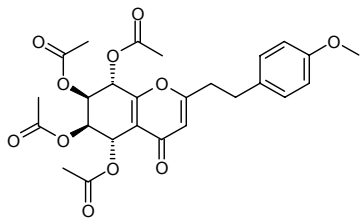


**21029 2 $\alpha$ ,5 $\alpha$ ,7 $\beta$ ,13 $\alpha$ -Tetraacetoxy-10 $\beta$ -hydroxy-2(3→20)abeotaxan-9-one**  
[260367-31-5] C<sub>28</sub>H<sub>38</sub>O<sub>10</sub> (534.61). Colorless gum,  $[\alpha]_D^{25} = -11.2^\circ$  ( $c = 0.002$ , CHCl<sub>3</sub>). Source: MEI LI HONG DOU SHAN *Taxus mairei*. Ref: 2414.



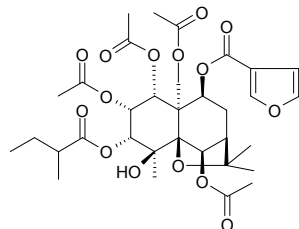
**21030 5 $\alpha$ ,6 $\beta$ ,7 $\beta$ ,8 $\alpha$ -Tetraacetoxy-2-[2-(4'-methoxyphenyl)ethyl]-5,6,7,8-tetrahydro-chromone**

AH1a C<sub>26</sub>H<sub>28</sub>O<sub>11</sub> (516.51). Amorphous crystals, mp 58~60°C (dec), [ $\alpha$ ]<sub>D</sub> = -14.3°. Source: CHEN XIANG *Aquilaria agallocha*. Ref: 13.



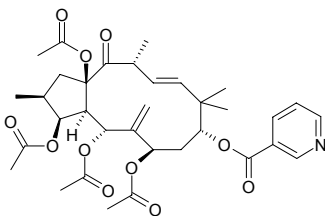
**21031 1 $\alpha$ ,2 $\alpha$ ,6 $\beta$ ,15-Tetraacetoxy-3 $\alpha$ -( $\alpha$ -methyl)-butanoyl-4 $\beta$ -hydroxy-9 $\beta$ -( $\beta$ -)furoxyloxy- $\beta$ -dihydroagarofuran**

C<sub>33</sub>H<sub>44</sub>O<sub>15</sub> (680.71). Colorless gum, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +26° (c = 1.10, CHCl<sub>3</sub>). Pharm: Cytotoxic (*in vitro*, Bel7402 liver carcinoma, IC<sub>50</sub> = 50.69 $\mu$ g/mL, control Etoposide, IC<sub>50</sub> = 7.00 $\mu$ g/mL). Source: *Euonymus nanoides* (seed). Ref: 4962.



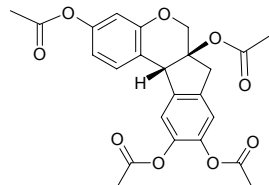
**21032 3,5,7,15-Tetraacetoxy-9-nicotinoyloxy-14-oxojatropha-6(17),11-diene**

C<sub>34</sub>H<sub>43</sub>NO<sub>11</sub> (641.72). Source: BO AI DA JI *Euphorbia peplus*. Ref: 2309.



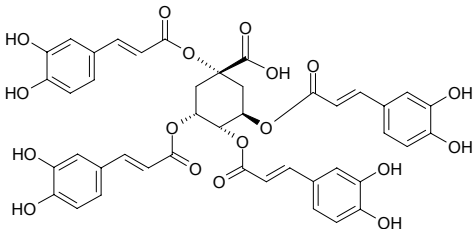
**21033 Tetraacetylbrazilin**

C<sub>24</sub>H<sub>22</sub>O<sub>9</sub> (454.44). mp 155~157°C. [ $\alpha$ ]<sub>D</sub><sup>23</sup> = +64.0° (c = 1.08, CHCl<sub>3</sub>). Source: SU MU *Caesalpinia sappan*. Ref: 508.



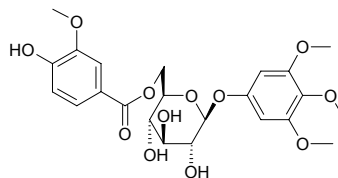
**21034 1,3,4,5-Tetracaffeoylquinic acid**

C<sub>43</sub>H<sub>36</sub>O<sub>18</sub> (840.75). Pharm: Antibacterial (*Bacillus subtilis*, *Escherichia coli* and *Sarcina citrea*). Source: family Asteraceae spp. Ref: 658.



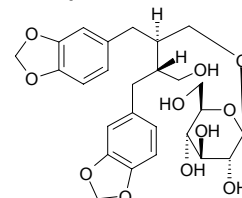
**21035 Tetracentronside A**

3,4,5-Trimethoxyphenyl-O-6'-O-vanilloyl- $\beta$ -D-glucopyranoside C<sub>23</sub>H<sub>28</sub>O<sub>12</sub> (496.47). White acicular crystals, mp 125~126°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -43.6° (c = 0.234, MeOH). Source: SHUI QING SHU *Tetracentron sinense*. Ref: 770.



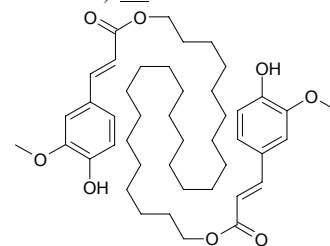
**21036 Tetracentronside B**

(8*R*,8'*R*) 9- $\beta$ -D-Glucopyranosyl dihydrocubebin C<sub>26</sub>H<sub>32</sub>O<sub>11</sub> (520.54). White acicular crystals, mp 156~157°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -12.1° (c = 0.28, MeOH). Source: SHUI QING SHU *Tetracentron sinense*. Ref: 770.



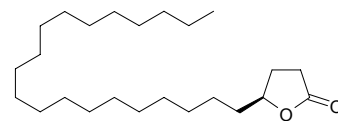
**21037 1,24-Tetracosanediol diferulate**

C<sub>44</sub>H<sub>66</sub>O<sub>8</sub> (723.01). Pharm: Cytotoxic inactive (*in vitro*, LNCaP, IC<sub>50</sub> > 100 $\mu$ mol/L). Source: LANG DANG ZI *Hyoscyamus niger* (seed; yield = 0.0002%dw). Ref: 4607.



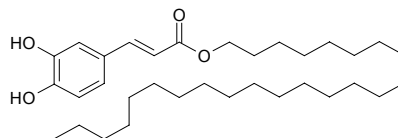
**21038 Tetracosan-4-olide**

C<sub>24</sub>H<sub>46</sub>O<sub>2</sub> (366.63). White powder, mp 68°C (Hexane:EtOAc = 9:1). Pharm: Phytotoxin inactive (doesn't inhibit radicle growth of *Amaranthus hypochondriacus* and *Echinochloa crusgalli*); CaM interactor inactive. Source: FU CHUI FE LAO JU *Flourensia cernua*. Ref: 3433.



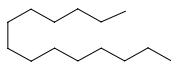
**21039 Tetracosyl caffeate**

C<sub>33</sub>H<sub>56</sub>O<sub>4</sub> (516.81). Brown grained crystals (EtOAc), mp 93.2~94.7°C. Source: XIA CAO *Gypsophila oldhamiana* (root), ZI CAO *Lithospermum erythrorhizon*. Ref: 2193, 4877.

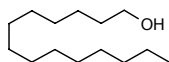


**21040 Tetradecane**

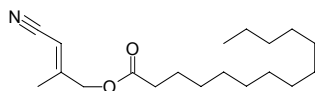
[629-59-4] C<sub>14</sub>H<sub>30</sub> (198.40). Source: REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. Ref: 2.

**21041 1-Tetradecanol**

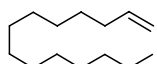
Myristic alcohol [112-72-1] C<sub>14</sub>H<sub>30</sub>O (214.39). Source: BAI ZHI *Angelica dahurica* [Syn. *Angelica porphyrocaulis*], DANG GUI *Angelica sinensis*. Ref: 2.

**21042 3-O-Tetradecanoyl-1-cyano-2-methyl-1-propene**

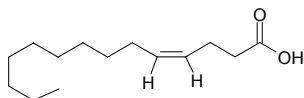
3-Methyl-4-tetradecanoyloxy-2-butenitrile C<sub>19</sub>H<sub>33</sub>NO<sub>2</sub> (307.48). White solid, mp 49–51°C. Source: LUAN SHU *Koelreuteria paniculata*. Ref: 849.

**21043 1-Tetradecene**

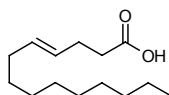
[1120-36-1] C<sub>14</sub>H<sub>28</sub> (196.38). Source: BAI ZHI *Angelica dahurica* [Syn. *Angelica porphyrocaulis*], DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*]. Ref: 2.

**21044 cis-4-Tetradecenoic acid**

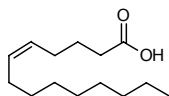
C<sub>14</sub>H<sub>26</sub>O<sub>2</sub> (226.36). mp 18.0–18.5°C, bp 185–188°C/13mmHg. Source: ZHEN CAI *Litsea pungens*. Ref: 6.

**21045 Tetradecenoic acid A**

Tsuzuic acid C<sub>14</sub>H<sub>26</sub>O<sub>2</sub> (226.36). Source: BING LANG *Areca catechu*, SAN ZUAN FENG *Lindera obtusiloba* (seed oil). Ref: 2, 660.

**21046 Tetradecenoic acid B**

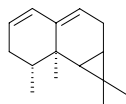
Physeteric acid; 5-Tetradecenoic acid [5684-70-8] C<sub>14</sub>H<sub>26</sub>O<sub>2</sub> (226.36). mp 20°C, bp 192–197°C/15mmHg, d<sub>4</sub><sup>15</sup> = 0.908, n<sub>D</sub><sup>15</sup> = 1.4571. Source: BING LANG *Areca catechu*, MO XIANG JING *Physeter catodon*, XI XIAO LUO ZAO *Euglena gracilis*. Ref: 2, 1521.

**21047 Tetradec-8,10,12-triyn-6-ene-3-one**

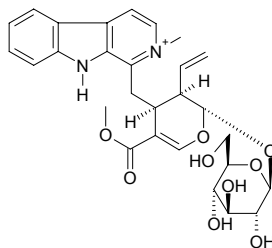
C<sub>14</sub>H<sub>14</sub>O (198.27). Source: AI YE *Artemisia argyi*. Ref: 6.

**21048 1,2,9,10-Tetrahydroaristolane**

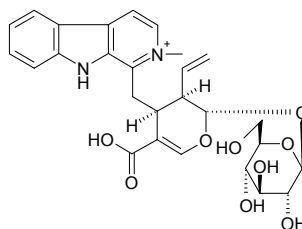
C<sub>15</sub>H<sub>22</sub> (202.34). Source: GAN SONG *Nardostachys chinensis*. Ref: 6.

**21049 3,4,5,6-Tetrahydrodolicchantoside**

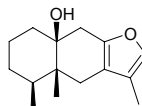
C<sub>28</sub>H<sub>33</sub>N<sub>2</sub>O<sub>9</sub><sup>+</sup> (541.58). Brownish-yellow amorphous powder. Source: *Strychnos meliodora*. Ref: 2345.

**21050 3,4,5,6-Tetrahydropalicoside**

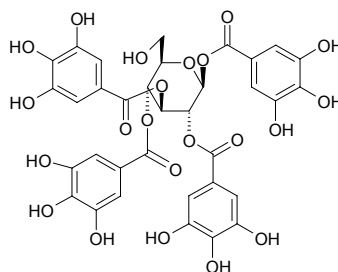
C<sub>27</sub>H<sub>31</sub>N<sub>2</sub>O<sub>9</sub><sup>+</sup> (527.56). Brownish-yellow amorphous powder. Source: *Strychnos meliodora*, *Strychnos vanprukii* (stem). Ref: 2345, 3471.

**21051 Tetradyamol**

C<sub>15</sub>H<sub>22</sub>O<sub>2</sub> (234.34). Pharm: Hepatotoxin; LD<sub>50</sub> (mus, orl) = 250mg/kg. Source: GUANG SI SHI JU *Tetradymia glabrata*. Ref: 658.

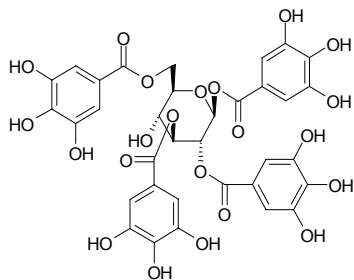
**21052 1,2,3,4-Tetragalloyl-α-D-glucose**

C<sub>34</sub>H<sub>28</sub>O<sub>22</sub> (788.59). Pharm: Antibacterial (*Staphylococcus aureus* and *Proteus vulgaris*). Source: BAN YE PING PENG CAO *Nuphar variegatum*. Ref: 658.

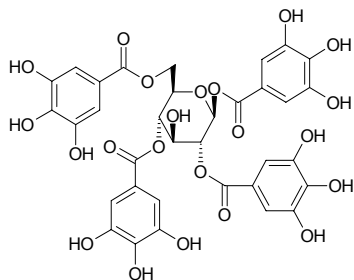


**21053 1,2,3,6-Tetra-O-galloyl- $\beta$ -D-glucose**

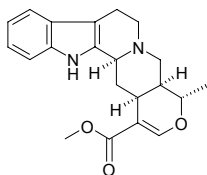
[79886-50-3]  $C_{34}H_{28}O_{22}$  (788.59). **Pharm:** Aldose reductase inhibitor (rat, eye lens,  $1.0\mu\text{mol/L}$  InRt = 77.6%,  $IC_{50} = 0.63\mu\text{g/mL}$ ); xanthinoxidase inhibitor ( $IC_{50} = 12\mu\text{mol/L}$ ); topoisomerase II inhibitor ( $IC_{100} = 0.2\mu\text{mol/L}$ ). **Source:** AN MO LE *Phyllanthus emblica* (fruit juice)<sup>[3094]</sup>, BAI SHAO *Paeonia albiflora* [Syn. *Paeonia lactiflora*] (fresh fruit: yield = 0.0017%fw)<sup>[4695]</sup>, CHI SHAO *Paeonia lactiflora* wild, SHAN ZHU YU *Cornus officinalis* [Syn. *Macrocarpum officinale*], YOU GAN YE *Phyllanthus emblica* (leaf and branch). **Ref:** 2, 660, 1704, 1705, 1706, 3094, 4205, 4695.

**21054 1,2,4,6-Tetra-O-galloyl- $\beta$ -D-glucose**

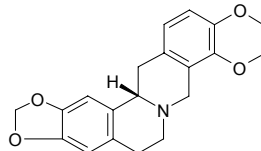
$C_{34}H_{28}O_{22}$  (788.59). **Source:** YOU GAN YE *Phyllanthus emblica* (leaf and branch). **Ref:** 4205.

**21055 Tetrahydroalstonine**

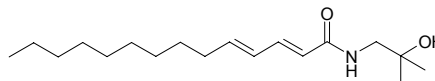
(3 $\alpha$ )-3,4,5,6-Tetrahydroalstonine  $C_{21}H_{24}N_2O_3$  (352.44). White crystals, mp 300~310°C,  $[\alpha]_D^{23.2} = -106.77^\circ$  ( $c = 0.48$ ,  $CHCl_3$ ). **Pharm:** Antibacterial (40 types of bacteria and fungi); anti-inflammatory (rat, swollen foot caused by carrageenan, 125mg/kg orl); hypoglycemic (rat, hyperglycemia induced by alloxan, 125mg/kg, orl); used in treatment of cerebral thrombosis and atherosclerosis; vasodilator (cerebral and peripheral). **Source:** CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochera rosea*], CUI TU LUO FU MU *Rauwolfia vomitoria*, XIANG PI MU *Alstonia scholaris*, YANG JIAO MIAN *Alstonia mairei*, YOU XIAN YA JIAO SHU *Alstonia stricta*. **Ref:** 4, 633, 658, 660.

**21056 (-)-Tetrahydroberberine**

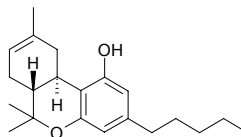
[29074-38-2]  $C_{20}H_{21}NO_4$  (339.39). **Pharm:** Anti-HIV inactive (H9 lymphocytes, control AZT,  $IC_{50} = 500\mu\text{g/mL}$ ,  $EC_{50} = 0.0317\mu\text{g/mL}$ , TI = 15800)<sup>[5364]</sup>. **Source:** JI YING SU *Argemone mexicana*, YAN HU SUO *Corydalis yanhusuo* [Syn. *Corydalis turtchaninovi* f. *yanhusuo*] (rhizome: mean content of 4 origins = yield = 0.019%<sup>[5508]</sup>). **Ref:** 2, 5364, 5508.

**21057 Tetrahydrobungeanol**

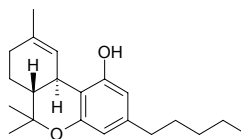
$C_{18}H_{33}NO_2$  (295.47). **Pharm:** Platelet aggregation inhibitor. **Source:** QUAN YUAN YE HUA JIAO *Zanthoxylum integrifolium*. **Ref:** 2176.

**21058  $\Delta^8$ -Tetrahydrocannabinol**

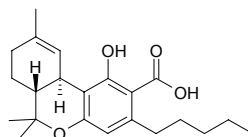
$\Delta^8$ -THC  $C_{21}H_{30}O_2$  (314.47). **Source:** MA HUA *Cannabis sativa*. **Ref:** 6.

**21059  $\Delta^9$ -Tetrahydrocannabinol**

$\Delta^9$ -THC [1972-08-3]  $C_{21}H_{30}O_2$  (314.47). bp  $D(-)$  155~157°C/0.05mmHg, 200°C/0.05mmHg. **Pharm:** Antemetic; anti-inflammatory; antiviral (HSV-1, HSV-2); hallucinogen; used in treatment of glaucoma. **Source:** HUO MA REN *Cannabis sativa* (seed oil: content = 0.024%<sup>[5508]</sup>), MA HUA *Cannabis sativa*. **Ref:** 4, 658, 5508.

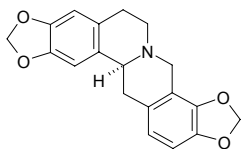
**21060  $\Delta^1$ -Tetrahydrocannabinolic acid A**

$\Delta^1$ -THC;  $\Delta^1$ -Tetrahydrocannabinolic acid  $C_{22}H_{30}O_4$  (358.48). mp 158~160°C (dec). **Pharm:** Antispasmodic (rat ileum, spasm caused by acetylcholine,  $BaCl_2$ , or histamine, rat uterus, spasm caused by neurohypophyseal hormone). **Source:** HUO MA REN *Cannabis sativa*, MA YE *Cannabis sativa*. **Ref:** 6, 658.

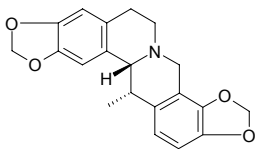


**21061 (-)-Tetrahydrocoptisine**

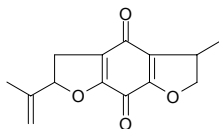
$C_{19}H_{17}NO_4$  (323.35). mp (-) 204°C, ( $\pm$ ) 222~223°C, bp ( $\pm$ ) 260°C/0.01mmHg. Source: BAI QU CAI *Chelidonium majus* (whole herb: mean content of 5 origins = 0.025%)<sup>[5508]</sup>, CHI BAN YAN HU SUO *Corydalis remota* [Syn. *Corydalis bulbosa* var. *typica*] (rhizome: content = 0.01%)<sup>[5508]</sup>, KU DI DING *Corydalis bungeana* (whole herb with root: content scope of 4 origins = 0.007%~0.069%, mean content = 0.033%)<sup>[5508]</sup>, QUAN YE YAN HU SUO *Corydalis repens* (rhizome: content = 0.01%)<sup>[5508]</sup>, XIA TIAN WU *Corydalis decumbens* [Syn. *Corydalis amabilis*] (rhizome: content = 0.03%)<sup>[5508]</sup>, YAN HU SUO *Corydalis yanhusuo* [Syn. *Corydalis turtschaninovi* f. *yanhusuo*] (rhizome: mean content of 5 origins = 0.020%)<sup>[5508]</sup>. Ref: 2, 6, 5508.

**21062 Tetrahydrocorysamine**

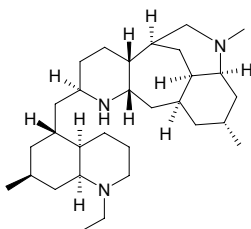
$C_{20}H_{19}NO_4$  (337.38). mp (-) 136~137°C, ( $\pm$ ) 202~203°C. Source: JU HUA HUANG LIAN *Corydalis pallida*, YAN HU SUO *Corydalis yanhusuo* [Syn. *Corydalis turtschaninovi* f. *yanhusuo*], ZI HUA YU DENG CAO *Corydalis incisa*. Ref: 6.

**21063 Tetrahydrocyperaguinone**

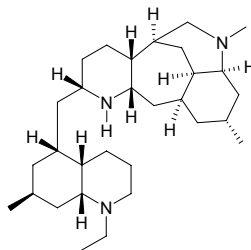
$C_{14}H_{14}O_4$  (246.27). mp 138~140°C. Source: PIAO FU CAO *Fimbristylis dichotoma*. Ref: 6.

**21064 Tetrahydrodeoxylicudine A**

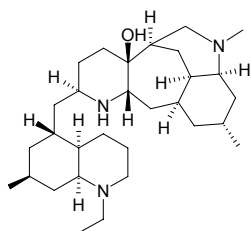
$C_{30}H_{53}N_3$  (455.78). Source: GUANG LIANG SHI SONG *Lycopodium lucidulum*. Ref: 3927.

**21065 Tetrahydrodeoxylicudine B**

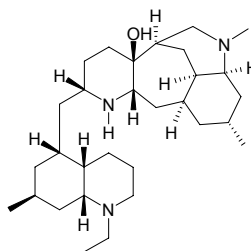
$C_{30}H_{53}N_3$  (455.78). Source: GUANG LIANG SHI SONG *Lycopodium lucidulum*. Ref: 3927.

**21066 Tetrahydrodeoxyoxolucidine A**

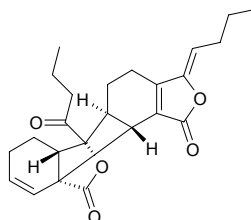
$C_{30}H_{53}N_3O$  (471.78). Source: GUANG LIANG SHI SONG *Lycopodium lucidulum*. Ref: 3927.

**21067 Tetrahydrodeoxyoxolucidine B**

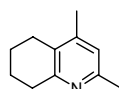
$C_{30}H_{53}N_3O$  (471.78). Source: GUANG LIANG SHI SONG *Lycopodium lucidulum*. Ref: 3927.

**21068 Z-3',8',3'a,7'a-Tetrahydro-6,3',7,7'a-diligustilide-8'-one**

$C_{24}H_{28}O_5$  (396.49). White amorphous powder, mp 110°C,  $[\alpha]_D^{25} = +50^\circ$  ( $c = 0.08$ ,  $CHCl_3$ ). Source: DANG GUI *Angelica sinensis*. Ref: 4857.

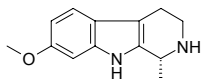
**21069 5,6,7,8-Tetrahydro-2,4-dimethylquinoline**

$C_{11}H_{15}N$  (161.25). Source: GAN CAO *Glycyrrhiza uralensis*. Ref: 2.

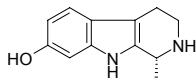


**21070 Tetrahydroharmine**

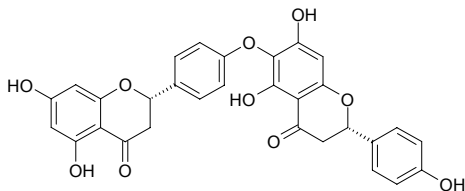
$C_{13}H_{16}N_2O$  (216.29). mp (+) 198.4~199.8°C. Source: LUO TUO PENG ZI *Peganum harmala*. Ref: 6.

**21071 Tetrahydroharmol**

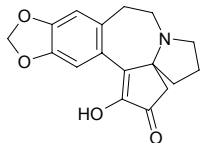
$C_{12}H_{14}N_2O$  (202.26). mp 254~255°C. Source: SHA ZAO SHU PI *Elaeagnus angustifolia*. Ref: 6.

**21072 Tetrahydrohinokiflavone**

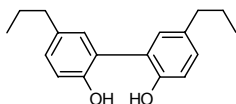
$C_{30}H_{22}O_{10}$  (542.50). Source: NAN YIN DU SU TIE SHU GUO *Cycas beddomei* (stem). Ref: 3929.

**21073 5,6,8,9-Tetrahydro-1-hydro-4H-cyclopenta[a]-[1,3]dioxolo[4,5-h]pyrrolo[2,1-b][3]benzaepin-2(3H)-one**

$C_{17}H_{17}NO_4$  (299.33). Brownish powder,  $[\alpha]_D^{28} = +52^\circ$  ( $c = 0.03$ , MeOH). Source: TAI WAN CU FEI *Cephalotaxus wilsoniana* (heartwood: yield = 0.00019%dw). Ref: 4759.

**21074 Tetrahydromagnolol**

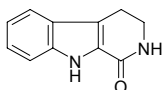
$C_{18}H_{22}O_2$  (270.37). Source: HOU PO *Magnolia officinalis*, AO YE HOU PO *Magnolia biloba*. Ref: 2, 660.

**21075 5,6,7,8-Tetrahydro-4-methylquinoline**

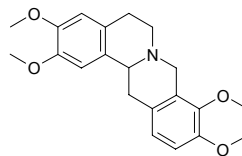
$C_{10}H_{13}N$  (147.22). Source: GAN CAO *Glycyrrhiza uralensis*. Ref: 2.

**21076 1,2,3,4-Tetrahydro-1-oxo-β-carboline**

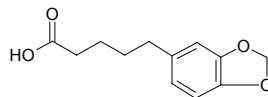
1-Oxo-1,2,3,4-tetrahydro-β-carboline  $C_{11}H_{10}N_2O$  (186.22). White acicular crystals, mp 168~170°C; white crystals, mp 168~167°C. Source: WU ZHU YU *Evodia rutaecarpa*. Ref: 9, 347, 877.

**21077 Tetrahydropalmatine**

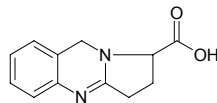
Caseanine; Corydalis; Hyndarine; Rotundine [2934-97-6]  $C_{21}H_{25}NO_4$  (355.44). mp (+) 143°C, (-) 141~142°C, (±) 148°C. Pharm: Analgesic (mus, hot plate method, ip, 15~20mg/kg); hypnotic (potentiates hypnotic effect of cyclobarital); antiarrhythmic (selective, arrhythmia induced by  $CHCl_3$ ,  $BaCl_2$ ,  $CHCl_3$ -adrenalin, Strophanthin G, no action for arrhythmia induced by aconitine); antispasmodic (rat *in vitro*, relaxes uterus, induced by KCl or pitocin); calcium antagonist (uterine smooth muscle);  $LD_{50}$  (mus, iv) = 151~158mg/kg. Source: CHI BAN YAN HU SUO *Corydalis remota* [Syn. *Corydalis bulbosa* var. *typica*] (rhizome: content = 0.03%<sup>[5508]</sup>), JIN BU HUAN *Stephania sinica*, JU HUA HUANG LIAN *Corydalis pallida*, TU YE HUANG PI SHU *Phellodendron chinense* var. *glabriusculum*, XIA TIAN WU *Corydalis decumbens* [Syn. *Corydalis amabilis*] (rhizome: content = 0.18%<sup>[5508]</sup>), XIAO HUA HUANG JIN *Corydalis racemosa*, YAN HU SUO *Corydalis yanhusuo* [Syn. *Corydalis turtshchaninovii* f. *yanhusuo*] (rhizome: mean content of 22 origins = 0.066%<sup>[5508]</sup>; 0.042%~0.130%<sup>[5501]</sup>). Ref: 4, 6, 660, 5501, 5507, 5508.

**21078 Tetrahydropiperic acid**

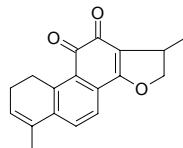
Tetrahydropiperinic acid  $C_{12}H_{14}O_4$  (222.24). Source: BI BA *Piper longum*. Ref: 6.

**21079 1,2,3,9-Tetrahydropyrrolo(2,1-b)quinazolin-1-carboxylic acid**

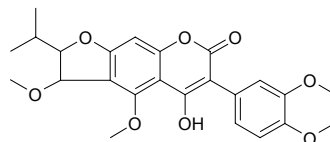
$C_{12}H_{12}N_2O_2$  (216.24). Colorless needles (MeOH), mp 218 °C (dec),  $[\alpha]_D^{18} = -217^\circ$  ( $c = 0.01$ , MeOH). Source: LIU CHUAN YU *Linaria vulgaris*. Ref: 4237.

**21080 1,2,15,16-Tetrahydrotanshinone I**

1,2,15,16-Tetrahydrotanshinone I [126979-84-8]  $C_{18}H_{16}O_3$  (280.33). Violet-red columnar crystals (methanol), mp 140~142°C. Pharm: Cytotoxic ( $P_{388}$ ). Source: BAI HUA DAN SHEN *Salvia miltiorrhiza* f. *alba*. Ref: 185.

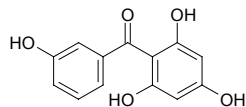
**21081 1'',2'',3'',4''-TetrahydrothoningineC**

$C_{24}H_{26}O_8$  (442.47). Colorless oil. Source: *Milletia thonningii*. Ref: 2326.

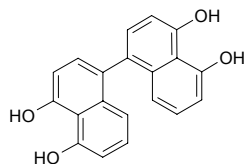


**21082 2,4,6,3'-Tetrahydroxybenzophenone**

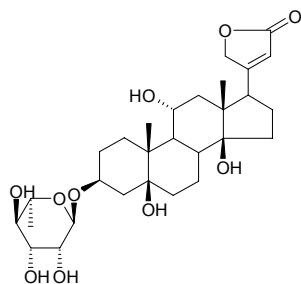
$C_{13}H_{10}O_5$  (246.22). **Pharm:** Cytotoxic (BST,  $LD_{50} > 100 \mu\text{mol/L}$ ; control Berberine,  $LD_{50} = 67 \mu\text{mol/L}$ ); antioxidant (DPPH radical scavenger,  $IC_{50} = 66.3 \mu\text{mol/L}$ ; control Catechin,  $IC_{50} = 2.53 \mu\text{mol/L}$ ). **Source:** SHAN ZHU ZI *Garcinia multiflora* (stem: yield = 0.00011%dw). **Ref:** 4708.

**21083 4,5,4',5'-Tetrahydroxy-1:1'-binaphthyl**

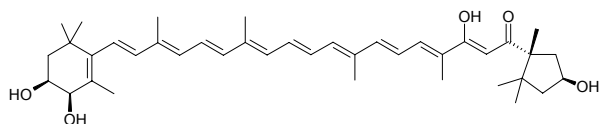
$C_{20}H_{14}O_4$  (318.33). **Pharm:** Antioxidant (DPPH scavenger,  $IC_{50} = 18.2 \mu\text{mol/L}$ , control Ascorbic acid,  $IC_{50} = 16.5 \mu\text{mol/L}$ ). **Source:** AN ZONG TAN TUAN *JUN Hypoxylon fuscum*. **Ref:** 3771.

**21084 3β,5β,11α,14β-Tetrahydroxy-5β-card-20(22)enolide-3α-L-rhamnoside**

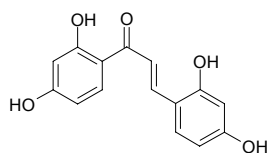
$C_{29}H_{44}O_{10}$  (552.67). **Source:** LING LAN *Convallaria keiskei* [Syn. *Convallaria majalis*]. **Ref:** 6.

**21085 3,4,3',8'-Tetrahydroxy-β,κ-caroten-6'-one**

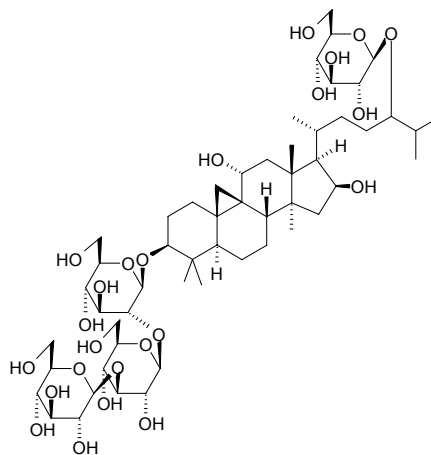
$C_{40}H_{56}O_5$  (616.89). Reddish solid. **Source:** MU LI (Oyster) *Crassostrea gigas*. **Ref:** 4515.

**21086 2,4,2',4'-Tetrahydroxychalcone**

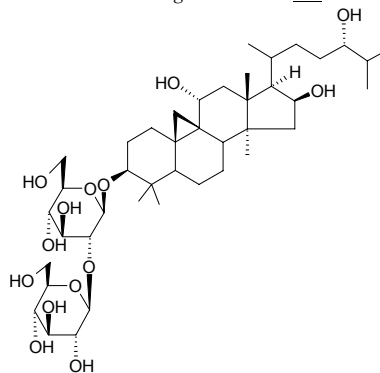
$C_{15}H_{12}O_5$  (272.26). **Pharm:** Aromatase inhibitor inactive (*in vitro*,  $IC_{50} > 40 \mu\text{mol/L}$ ; control Aminoglutethimide,  $IC_{50} = 6.4 \mu\text{mol/L}$ ). **Source:** GOU SHU *Broussonetia papyrifera*. **Ref:** 3090.

**21087 (24S)-3β,11α,16β,24-Tetrahydroxycycloartane-3-O-[\beta-D-glucopyranosyl(1→3)-\beta-D-glucopyranosyl(1→2)-\beta-D-glucopyranosyl]-24-O-\beta-D-glucopyranoside**

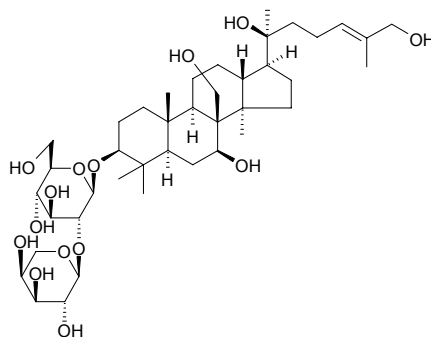
$C_{54}H_{92}O_{24}$  (1125.32). White amorphous powder,  $[\alpha]_D^{25} = -9.33^\circ$  ( $c = 0.75$ , MeOH). **Source:** XIAN MAO *Curculigo orchoides*. **Ref:** 2485.

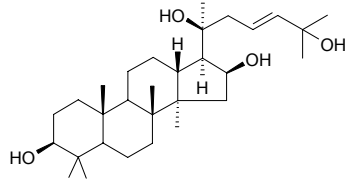
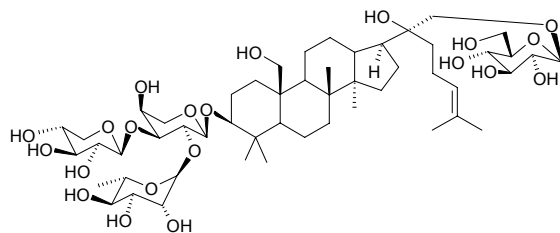
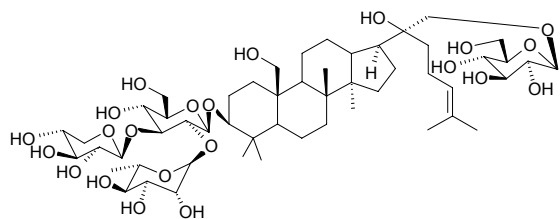
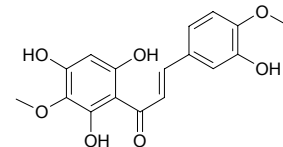
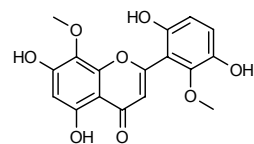
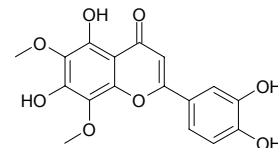
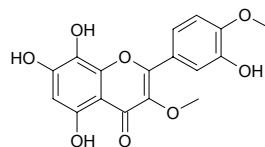
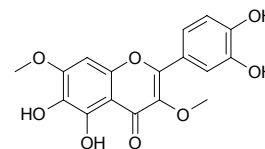
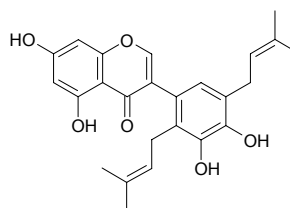
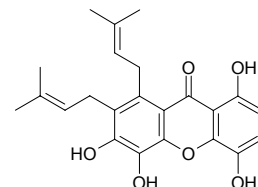
**21088 24S,3β,11α,16β,24-Tetrahydroxycycloartanol-3-O-\beta-D-glucopyranosyl-(1→2)-\beta-D-glucopyranoside**

$C_{42}H_{72}O_{14}$  (801.03). White powder (MeOH), mp 215~217°C (dec). **Source:** XIAN MAO *Curculigo orchoides*. **Ref:** 884.

**21089 7β,18,20,26-Tetrahydroxy-(20S)-dammar-24E-en-3-O-\alpha-L-arabinopyranosyl-(1→2)-\beta-D-glucopyranoside**

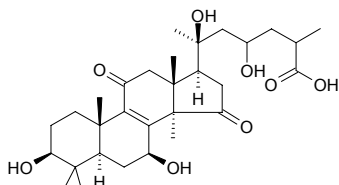
$C_{41}H_{70}O_{14}$  (787.01). Microneedles (MeOH), mp 184~186°C,  $[\alpha]_D^{20} = +5.38^\circ$  ( $c = 0.56$ , MeOH). **Pharm:** Antiviral (Vero cells, HSV-1,  $TC_{50} = 577.3 \mu\text{g/mL}$ , Acyclovir,  $TC_{50} > 1000 \mu\text{g/mL}$ ). **Source:** JIA BEI MU *Bolbostemma paniculatum* (bulb). **Ref:** 4977.



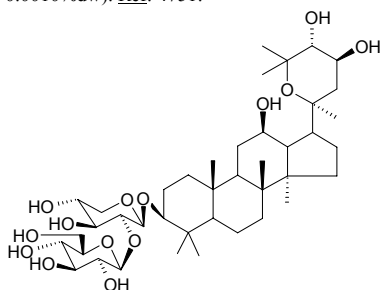
**21090 3 $\beta$ ,16 $\beta$ ,20(S),25-Tetrahydroxydammar-23-ene**C<sub>30</sub>H<sub>52</sub>O<sub>4</sub> (476.75). Colorless needles, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +13.6° (c = 1.0, CH<sub>2</sub>Cl<sub>2</sub>).Source: KU A MO YAO *Commiphora kua* (resin). Ref: 4334.**21091 3 $\beta$ ,19,20S,21-Tetrahydroxydammar-24-ene 3-O-[[ $\alpha$ -L-rhamnopyranosyl(1→2)][ $\beta$ -D-xylopyranosyl(1→3)]- $\alpha$ -L-arabinopyranosyl]-21-O- $\beta$ -D-glucopyranoside**C<sub>52</sub>H<sub>88</sub>O<sub>21</sub> (1049.27). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -12.2° (c = 1.14, MeOH).Source: JIAO GU LAN *Gynostemma pentaphyllum* (aerial parts: yield = 0.0036%dw). Ref: 4751.**21092 3 $\beta$ ,19,20S,21-Tetrahydroxydammar-24-ene 3-O-[[ $\alpha$ -L-rhamnopyranosyl(1→2)][ $\beta$ -D-xylopyranosyl(1→3)]- $\beta$ -D-glucopyranosyl]-21-O- $\beta$ -D-glucopyranoside**C<sub>53</sub>H<sub>90</sub>O<sub>22</sub> (1079.3). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -6.0° (c = 1.00, MeOH).Source: JIAO GU LAN *Gynostemma pentaphyllum* (aerial parts: yield = 0.0015%dw). Ref: 4751.**21093 3,2',4',6'-Tetrahydroxy-4,3'-dimethoxy chalcone**C<sub>17</sub>H<sub>16</sub>O<sub>7</sub> (332.31). Source: DA JIN QIAN CAO *Lysimachia christinae*. Ref: 2.**21094 5,7,2',5'-Tetrahydroxy-8,6'-dimethoxy flavone**C<sub>17</sub>H<sub>14</sub>O<sub>8</sub> (346.30). Source: CHUAN HUANG QIN *Scutellaria hypericifolia*, GAN SU HUANG QIN *Scutellaria rehderiana*, HUANG QIN *Scutellaria baicalensis*, NIAN MAO HUANG QIN *Scutellaria viscidula*. Ref: 2, 660.**21095 5,7,3',4'-Tetrahydroxy-6,8-dimethoxy flavone**[57093-50-2] C<sub>17</sub>H<sub>14</sub>O<sub>8</sub> (346.30). Yellow acicular crystals, mp 254~256°C.Source: MAO LIAN HAO *Artemisia vestita*. Ref: 474.**21096 5,7,8,3'-Tetrahydroxy-3,4'-dimethoxy flavone**C<sub>17</sub>H<sub>14</sub>O<sub>8</sub> (346.30). Source: HUANG HUA HAO *Artemisia annua*. Ref: 2, 660.**21097 5,6,3',4'-Tetrahydroxy-3,7-dimethoxyflavone**[59171-23-2] C<sub>17</sub>H<sub>14</sub>O<sub>8</sub> (346.29). Pharm: Aldose reductase inhibitor (ox eye lens, IC<sub>50</sub> = 2.1 μmol/L, rat eye lens, IC<sub>50</sub> = 0.8 μmol/L). Source: HUANG HUA HAO *Artemisia annua*. Ref: 900.**21098 5,7,3',4'-Tetrahydroxy-2',5'-di(3-methylbut-2-enyl)isoflavone**C<sub>25</sub>H<sub>26</sub>O<sub>6</sub> (422.48). Amorphous yellow solid. Source: FEI LV BIN QIAN JIN BA *Moghania philippinensis* (root). Ref: 3500.**21099 1,4,5,6-Tetrahydroxy-7,8-di(3-methylbut-2-enyl)xanthone**C<sub>23</sub>H<sub>24</sub>O<sub>6</sub> (396.44). Yellow needles, mp 188~190°C. Pharm: Neurite outgrowth activity (NGF-mediated, PC12D cells, EC = 10 μmol/L). Source: DA YE TENG HUANG *Garcinia xanthochymus* (wood). Ref: 3473.



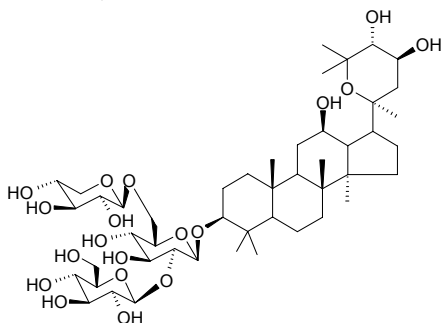
**21100** **3 $\beta$ ,7 $\beta$ ,20,23 $\xi$ -Tetrahydroxy-11,15-dioxolanosta-8-en-26-oic acid**  
 C<sub>30</sub>H<sub>46</sub>O<sub>8</sub> (534.7). Colorless amorphous solid,  $[\alpha]_D^{26} = +117.5^\circ$  ( $c = 0.211$ , CHCl<sub>3</sub>). **Source:** SHU SHE *Ganoderma applanatum* (sporocarp: yield = 0.0057%). **Ref:** 4756.



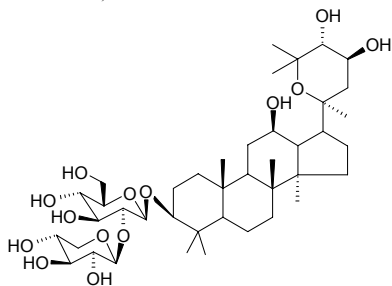
**21101** **3 $\beta$ ,12 $\beta$ ,23S,24R-Tetrahydroxy-20S,25-epoxydammarane 3-O- $\beta$ -D-glucopyranosyl(1 $\rightarrow$ 2)]- $\beta$ -D-xylopyranoside**  
 C<sub>41</sub>H<sub>70</sub>O<sub>14</sub> (787.01). Amorphous powder,  $[\alpha]_D^{20} = +17.8^\circ$  ( $c = 0.30$ , MeOH). **Source:** JIAO GU LAN *Gynostemma pentaphyllum* (aerial parts: yield = 0.0010%dw). **Ref:** 4751.



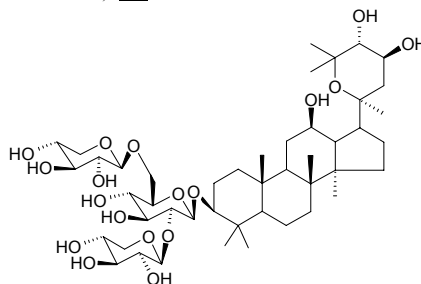
**21102** **3 $\beta$ ,12 $\beta$ ,23S,24R-Tetrahydroxy-20S,25-epoxydammarane 3-O- $\beta$ -D-glucopyranosyl(1 $\rightarrow$ 2)] $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 6)]- $\beta$ -D-glucopyranoside**  
 C<sub>47</sub>H<sub>80</sub>O<sub>19</sub> (949.15). Amorphous powder,  $[\alpha]_D^{20} = 0^\circ$  ( $c = 0.54$ , MeOH). **Source:** JIAO GU LAN *Gynostemma pentaphyllum* (aerial parts: yield = 0.0012%dw). **Ref:** 4751.



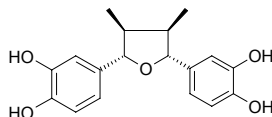
**21103** **3 $\beta$ ,12 $\beta$ ,23S,24R-Tetrahydroxy-20S,25-epoxydammarane 3-O- $\beta$ -D-xylopyranosyl(1 $\rightarrow$ 2)]- $\beta$ -D-glucopyranoside**  
 C<sub>41</sub>H<sub>70</sub>O<sub>14</sub> (787.01). Amorphous powder,  $[\alpha]_D^{20} = +18.1^\circ$  ( $c = 0.48$ , MeOH). **Source:** JIAO GU LAN *Gynostemma pentaphyllum* (aerial parts: yield = 0.0010%dw). **Ref:** 4751.



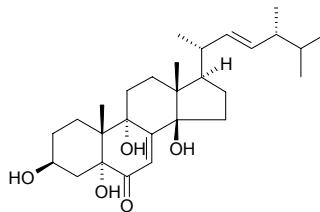
**21104** **3 $\beta$ ,12 $\beta$ ,23S,24R-Tetrahydroxy-20S,25-epoxydammarane 3-O- $\beta$ -D-xylopyranosyl(1 $\rightarrow$ 2)] $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 6)]- $\beta$ -D-glucopyranoside**  
 C<sub>46</sub>H<sub>78</sub>O<sub>18</sub> (919.12). Amorphous powder,  $[\alpha]_D^{20} = 0^\circ$  ( $c = 0.34$ , MeOH). **Source:** JIAO GU LAN *Gynostemma pentaphyllum* (aerial parts: yield = 0.0019%dw). **Ref:** 4751.



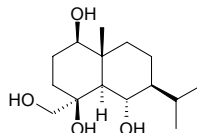
**21105** **meso-(rel-7S,8S,7'R,8'R)-3,4,3',4'-Tetrahydroxy-7,7'-epoxyignan**  
 C<sub>18</sub>H<sub>20</sub>O<sub>5</sub> (316.36). Off-white powder,  $[\alpha]_D^{25} = 0^\circ$  ( $c = 0.0012$ , MeOH). **Pharm:** Antioxidant (Takamatsu DCFH method, myelomonocytic HL-60 cells, IC<sub>50</sub> = (7.5±2.0)μg/mL; control NDGA, IC<sub>50</sub> = (0.7±0.3)μg/mL, Vitamin C, IC<sub>50</sub> = (1.9±0.7)μg/mL, Trolox, IC<sub>50</sub> = (1.4±0.5)μg/mL); cytotoxic (XTT assay, HL-60 cells, IC<sub>50</sub> > 50.0μg/mL; control NDGA, IC<sub>50</sub> = (2.6±0.2)μg/mL, Vitamin C, IC<sub>50</sub> > 10.0μg/mL, Trolox, IC<sub>50</sub> > 10.0μg/mL). **Source:** SAN CHI LA RUI A *Larrea tridentata* (leaf). **Ref:** 3850.



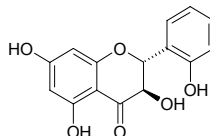
**21106** **3 $\beta$ ,5 $\alpha$ ,9 $\alpha$ ,14 $\beta$ -Tetrahydroxy-(22E)-ergosta-7,22-dien-6-one**  
 C<sub>28</sub>H<sub>44</sub>O<sub>5</sub> (460.66). Amorphous powder,  $[\alpha]_D^{18} = -73.7^\circ$  ( $c = 0.1$ , CHCl<sub>3</sub>). **Source:** SONG XUN *Tricholoma matsutake* [Syn. *Armillaria matsutake*]. **Ref:** 3526.



**21107** **1 $\beta$ ,4 $\beta$ ,6 $\alpha$ ,15-Tetrahydroxyeudesmane**  
 C<sub>15</sub>H<sub>28</sub>O<sub>4</sub> (272.39).  $[\alpha]_D^{17} = -200^\circ$  ( $c = 0.20$ , CHCl<sub>3</sub>). **Source:** YI NIAN PENG *Erigeron annuus* (aerial parts). **Ref:** 5073.

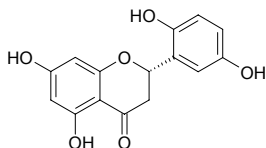


**21108** **(2R,3R)-2',3,5,7-tetrahydroxyflavanone**  
 C<sub>15</sub>H<sub>12</sub>O<sub>6</sub> (288.26). Yellowish rhomboid crystals, mp 119~120°C. **Source:** DIAN HUANG QIN *Scutellaria amoena*. **Ref:** 124.

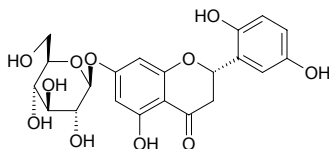


**21109 (2S)-5,7,2',5'-Tetrahydroxyflavanone**

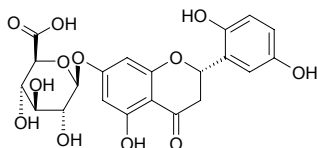
$C_{15}H_{12}O_6$  (288.26). Colorless needles (MeOH), mp 266–267°C (dec). Source: KE AI HUANG QIN *Scutellaria amabilis* (root: yield = 0.0053%dw). Ref: 2072.

**21110 (2S)-5,7,2',5'-Tetrahydroxy-flavanone 7-O-β-D-glucopyranoside**

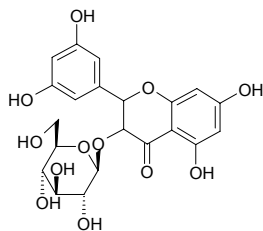
$C_{21}H_{22}O_{11}$  (450.40). Colorless needles (MeOH), mp 194–195°C (dec),  $[\alpha]_D^{25} = -151.0^\circ$  ( $c = 0.045$ , MeOH). Source: KE AI HUANG QIN *Scutellaria amabilis* (root: yield = 0.0009%dw). Ref: 2072.

**21111 (2S)-5,7,2',5'-Tetrahydroxyflavanone 7-O-β-D-glucuronopyranoside**

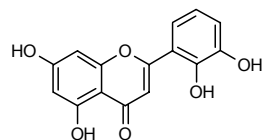
$C_{21}H_{20}O_{12}$  (464.39). Colorless needles (MeOH), mp 179–180°C (dec),  $[\alpha]_D^{25} = -129.8^\circ$  ( $c = 0.045$ , MeOH). Source: KE AI HUANG QIN *Scutellaria amabilis* (root: yield = 0.0049%dw). Ref: 2072.

**21112 5,7,3',5'-Tetrahydroxyflavanonol-3-O-β-D-glucoside**

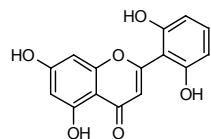
$C_{21}H_{22}O_{12}$  (466.40). mp 187–189°C. Source: SAN LENG *Sparganium stoloniferum*. Ref: 573.

**21113 5,7,2',3'-Tetrahydroxyflavone**

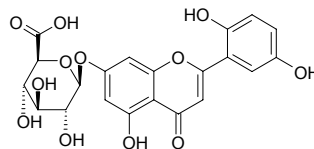
$C_{15}H_{10}O_6$  (286.24). Source: HUANG QIN *Scutellaria baicalensis*. Ref: 2.

**21114 5,7,2',6'-Tetrahydroxyflavone**

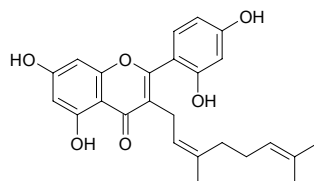
$C_{15}H_{10}O_6$  (286.24). Source: HUANG QIN *Scutellaria baicalensis*, DIAN HUANG QIN *Scutellaria amoena*. Ref: 2, 660.

**21115 5,7,2',5'-Tetrahydroxyflavone 7-O-β-D-glucuronopyranoside**

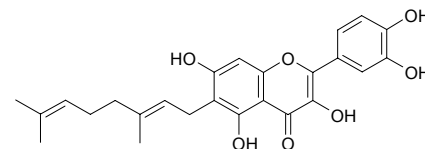
$C_{21}H_{18}O_{12}$  (462.37). Yellow needles (MeOH), mp 226–227°C (dec),  $[\alpha]_D^{25} = -69.1^\circ$  ( $c = 0.039$ , MeOH). Source: KE AI HUANG QIN *Scutellaria amabilis* (root: yield = 0.0011%dw). Ref: 2072.

**21116 5,7,2',4'-Tetrahydroxy-3-geranylflavone**

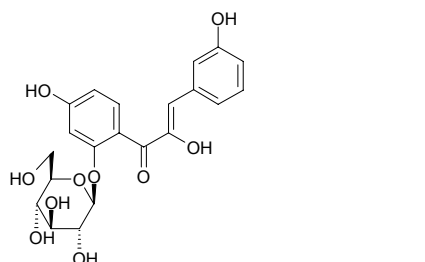
$C_{25}H_{26}O_6$  (422.48). Brown powder, mp 94–95°C. Pharm: Aromatase inhibitor (*in vitro*,  $IC_{50} = 24\mu\text{mol/L}$ ; control Aminoglutethimide,  $IC_{50} = 6.4\mu\text{mol/L}$ ). Source: GOU SHU *Broussonetia papyrifera*. Ref: 3090.

**21117 5,7,3',4'-Tetrahydroxy-6-geranylflavonol**

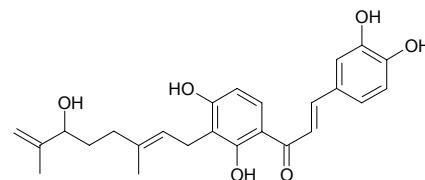
$C_{25}H_{26}O_7$  (438.48). Brown powder, mp 158–156°C. Pharm: Aromatase inhibitor inactive (*in vitro*,  $IC_{50} > 40\mu\text{mol/L}$ ; control Aminoglutethimide,  $IC_{50} = 6.4\mu\text{mol/L}$ ). Source: GOU SHU *Broussonetia papyrifera*. Ref: 3090.

**21118 1α,3,2',4'-Tetrahydroxy-2'-O-β-D-glucopyranosylchalcone**

$C_{21}H_{22}O_{10}$  (434.40). Yellow powder,  $[\alpha]_D^{20} = -89.2^\circ$  ( $c = 0.24$ , MeOH). Source: GUI ZHEN CAO *Bidens bipinnata* (aerial parts). Ref: 4566.

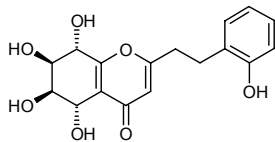
**21119 2',3,4,4'-Tetrahydroxy-3'-[6-hydroxy-3,7-dimethyl-2(E),7-octadienyl]chalcone**

$C_{25}H_{28}O_6$  (424.50). Amorphous solid. Pharm: Antifungal (*Cladosporium cladosporioides*, TLC bioautography method, 15μg/spot, control Benlate); antioxidant (DPPH scavenger, TLC bioautography method, 1μg/spot, control Vitamin E, 1μg/spot). Source: GAO GUI BO LUO MI *Artocarpus nobilis* (leaf). Ref: 3813.



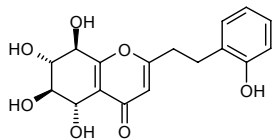
**21120 5 $\alpha$ ,6 $\beta$ ,7 $\beta$ ,8 $\alpha$ -Tetrahydroxy-2-[2-(2'-hydroxy phenyl)ethyl]-5,6,7,8-tetrahydrochromone**

AH23 C<sub>17</sub>H<sub>18</sub>O<sub>7</sub> (334.33). Colorless acicular crystals, mp 143~145°C. Source: CHEN XIANG *Aquilaria agallocha*. Ref: 13.



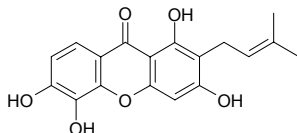
**21121 5 $\alpha$ ,6 $\beta$ ,7 $\alpha$ ,8 $\beta$ -Tetrahydroxy-2-[2-(2'-hydroxyphenyl)ethyl]-5,6,7,8-tetrahydrochromone**

AH2b C<sub>17</sub>H<sub>18</sub>O<sub>7</sub> (334.33). Colorless acicular crystals, mp 135~137°C (dec), [ $\alpha$ ]<sub>D</sub> = -40.0°. Source: CHEN XIANG *Aquilaria agallocha*. Ref: 13.



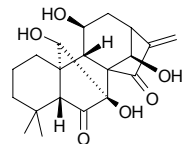
**21122 1,3,5,6-Tetrahydroxy-2-isoprenylxanthone**

C<sub>18</sub>H<sub>16</sub>O<sub>6</sub> (328.32). Pharm: Anti-hypotension (PAF-induced, ID<sub>50</sub> = (17.0±3.2)μmol/kg, control Ginkgolide B, ID<sub>50</sub> = (38.5±2.7)μmol/kg, CV-3988, ID<sub>50</sub> = (2.4±1.2)μmol/kg). Source: *Calophyllum austroindium* (stem wood). Ref: 5050.



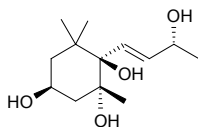
**21123 7 $\beta$ ,11 $\beta$ ,14 $\beta$ ,20-Tetrahydroxy-ent-kaur-16-en-6,15-dione**

C<sub>20</sub>H<sub>26</sub>O<sub>6</sub> (362.43). Colorless acicular crystals, mp 262~264°C. Source: ZI MAO XIANG CHA CAI *Isodon enanderianus*. Ref: 653.



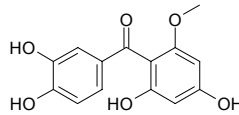
**21124 (3S,5R,6R,7E,9R)-3,5,6,9-Tetrahydroxy-7-megastigmene**

C<sub>13</sub>H<sub>24</sub>O<sub>4</sub> (244.33). Colorless oil, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +33.8° (c = 0.53, MeOH). Pharm: Phytotoxin (inhibits germination and growth of *Lactuca sativa*). Source: PA KE YE XIANG SHU *Cestrum parqui* (leaf). Ref: 3776.



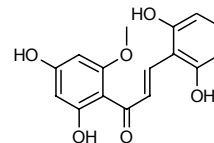
**21125 4,6,3',4'-Tetrahydroxy-2-methoxybenzophenone**

C<sub>14</sub>H<sub>12</sub>O<sub>6</sub> (276.25). Yellow oil. Pharm: Cytotoxic (BST, LD<sub>50</sub> > 100μmol/L; control Berberine, LD<sub>50</sub> = 67μmol/L); antioxidant (DPPH radical scavenger, IC<sub>50</sub> = 7.8μmol/L; control Catechin, IC<sub>50</sub> = 2.53μmol/L). Source: SHAN ZHU ZI *Garcinia multiflora* (stem; yield = 0.0002%dw). Ref: 4708.



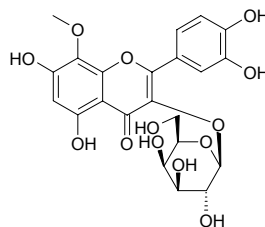
**21126 2,6,2',4'-Tetrahydroxy-6'-methoxychalcone**

C<sub>16</sub>H<sub>14</sub>O<sub>6</sub> (302.29). Source: HUANG QIN *Scutellaria baicalensis*. Ref: 2.



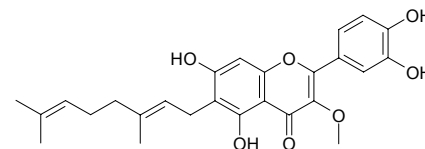
**21127 5,7,3',4'-Tetrahydroxy-8-methoxyflavonol-3-O-β-D-galactoside**

C<sub>22</sub>H<sub>22</sub>O<sub>13</sub> (494.41). Source: DI YANG QUE *Lotus corniculatus*. Ref: 6.



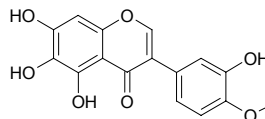
**21128 5,7,3',4'-Tetrahydroxy-3-methoxy-6-geranylflavone**

C<sub>26</sub>H<sub>28</sub>O<sub>7</sub> (452.51). Brown powder, mp 98~99°C. Pharm: Aromatase inhibitor inactive (*in vitro*, IC<sub>50</sub> > 40μmol/L; control Aminoglutethimide, IC<sub>50</sub> = 6.4μmol/L). Source: GOU SHU *Broussonetia papyrifera*. Ref: 3090.



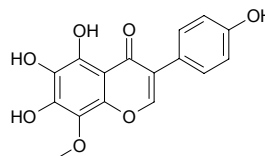
**21129 5,6,7,3'-Tetrahydroxy-4'-methoxyisoflavone**

C<sub>16</sub>H<sub>12</sub>O<sub>7</sub> (316.27). Pale yellow amorphous powder. Source: SHE GAN *Belamcanda chinensis* (rhizome). Ref: 4128.



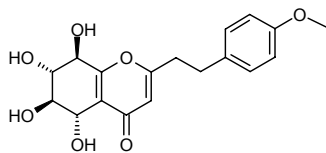
**21130 5,6,7,4'-Tetrahydroxy-8-methoxyisoflavone**

C<sub>16</sub>H<sub>12</sub>O<sub>7</sub> (316.27). Pharm: Free radical scavenger (-OH free radical)<sup>[2542]</sup>. Source: SHE GAN *Belamcanda chinensis*. Ref: 1521, 2452.



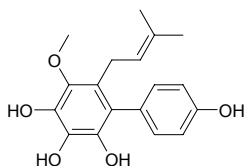
**21131 5 $\alpha$ ,6 $\beta$ ,7 $\beta$ ,8 $\alpha$ -Tetrahydroxy-2-[2-(4'-methoxyphenyl)ethyl]-5,6,7,8-tetrahydrochromone**

AH2a C<sub>18</sub>H<sub>20</sub>O<sub>7</sub> (348.36). Colorless acicular crystals, mp 198–199°C (dec), [ $\alpha$ ]<sub>D</sub> = –67.7°. Source: CHEN XIANG *Aquilaria agallocha*. Ref: 13.



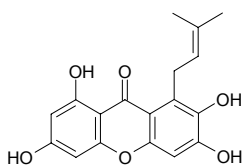
**21132 2,3,4,4'-Tetrahydroxy-5-methoxy-6-prenyl-biphenyl**

C<sub>18</sub>H<sub>20</sub>O<sub>5</sub> (316.36). Colorless viscous liquid. Pharm: Antibacterial (methicillin-resistant *Staphylococcus aureus* (MRSA), MIC = 64  $\mu$ g/mL). Source: *Garcinia bancana* (twig and leaf). Ref: 4452.



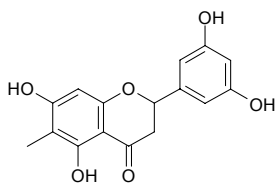
**21133 1,3,6,7-Tetrahydroxy-8-(3-methyl-2-butenyl)-9H-xanthen-9-one**

C<sub>18</sub>H<sub>16</sub>O<sub>6</sub> (328.32). Source: DAO NIAN ZI *Garcinia mangostana* (fruit hull). Ref: 3066.



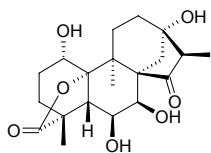
**21134 5,7,3',5'-Tetrahydroxy-6-methylflavanone**

C<sub>16</sub>H<sub>14</sub>O<sub>6</sub> (302.29). Colorless powder, mp 243–245°C. Source: HUANG SHAN *Pseudotsuga sinensis*. Ref: 2229.



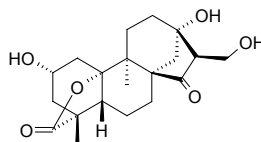
**21135 1 $\alpha$ ,7 $\beta$ ,10 $\alpha$ ,13 $\alpha$ -Tetrahydroxy-9 $\alpha$ -methyl-15-oxo-20-nor-kauran-19-oic acid  $\gamma$ -lactone**

C<sub>20</sub>H<sub>28</sub>O<sub>7</sub> (380.44). Pale-yellow crystals, mp 152–160°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +20.0° (*c* = 0.1, MeOH). Pharm: Cytotoxic inactive (Lu1, Col2, KB, LNCaP, hTERT-RPE1, HUVEC; control Taxol, ED<sub>50</sub> = 0.002  $\mu$ g/mL, 0.003  $\mu$ g/mL, 0.0005  $\mu$ g/mL, 0.001  $\mu$ g/mL, 0.004  $\mu$ g/mL, 0.008  $\mu$ g/mL, respectively). Source: *Parinari sprucei* (leaf). Ref: 4991.



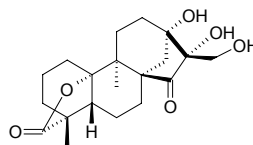
**21136 2 $\alpha$ ,10 $\alpha$ ,13 $\alpha$ ,17-Tetrahydroxy-9 $\alpha$ -methyl-15-oxo-20-nor-kauran-19-oic acid (19,10)-lactone**

C<sub>20</sub>H<sub>28</sub>O<sub>6</sub> (364.44). White solid, mp 200°C (dec), [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +18.0° (*c* = 0.1, MeOH). Source: *Parinari sprucei* (leaf). Ref: 4991.



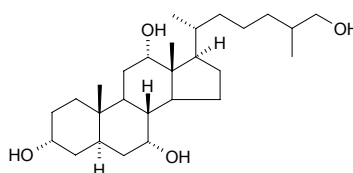
**21137 10 $\alpha$ ,13 $\alpha$ ,16 $\alpha$ ,17-Tetrahydroxy-9 $\alpha$ -methyl-15-oxo-20-nor-kauran-19-oic acid  $\gamma$ -lactone**

C<sub>20</sub>H<sub>28</sub>O<sub>6</sub> (364.44). Yellow crystals, mp 88–93°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +24.3° (*c* = 0.1, MeOH). Pharm: Cytotoxic inactive (Lu1, Col2, KB, LNCaP, hTERT-RPE1, HUVEC; control Taxol, ED<sub>50</sub> = 0.002  $\mu$ g/mL, 0.003  $\mu$ g/mL, 0.0005  $\mu$ g/mL, 0.001  $\mu$ g/mL, 0.004  $\mu$ g/mL, 0.008  $\mu$ g/mL, respectively). Source: *Parinari sprucei* (leaf). Ref: 4991.



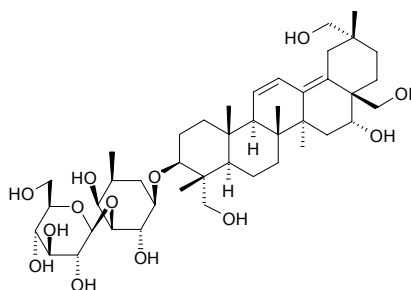
**21138 Tetrahydroxynorbufostane**

Cholestane-3,7,12,26-tetrol C<sub>27</sub>H<sub>48</sub>O<sub>4</sub> (436.68). mp 148°C. Source: CHAN CHU DAN *Bufo bufo gargarizans*; *Bufo melanostictus*. Ref: 6.

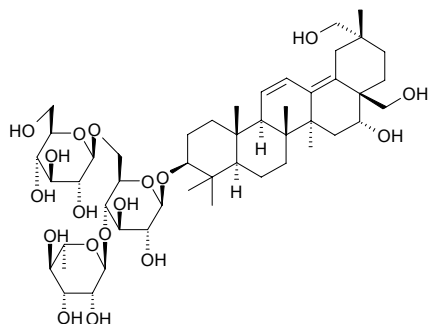


**21139 16 $\alpha$ ,23,28,30-Tetrahydroxyolean-11,13(18)-dien-3 $\beta$ -yl- $\beta$ -D-glucopyranosyl-(1→3)- $\beta$ -D-fucopyranoside**

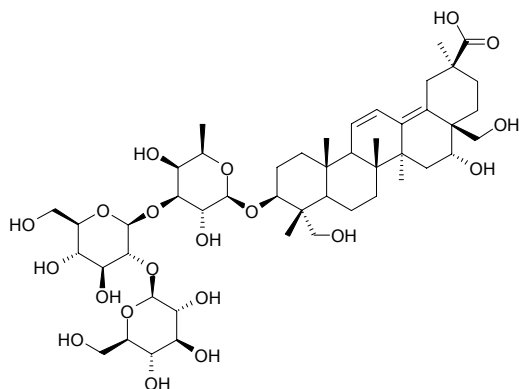
C<sub>43</sub>H<sub>70</sub>O<sub>13</sub> (795.03). Source: CHAI HU *Bupleurum chinense*, ZI HU *Bupleurum falcatum*, HEI CHAI HU *Bupleurum smithii*. Ref: 2247.



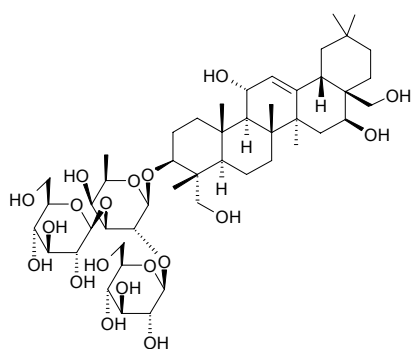
**21140** *3β,16α,28,30-Tetrahydroxyolean-11,13(18)-dien-3β-yl-β-D-glucopyranosyl-(1→6)-β-D-[α-L-rhamnopyranosyl-(1→4)]-β-D-glucopyranoside*  
 C<sub>48</sub>H<sub>78</sub>O<sub>18</sub> (943.15). Source: KUN MING CHAI HU *Bupleurum kunmingense*, DUO ZHI CHAI HU *Bupleurum polyclonum*, WEN CHUAN CHAI HU *Bupleurum wenchuanense*. Ref: 2247.



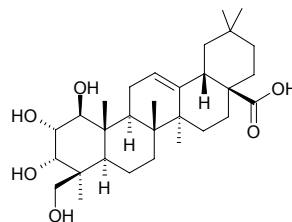
**21141** *3β,16α,23,28-Tetrahydroxyolean-11,13(18)-dien-30-oic acid 3-O-β-D-glucopyranosyl-(1→2)-β-D-glucopyranosyl-(1→3)-β-D-fucopyranoside*  
 C<sub>48</sub>H<sub>76</sub>O<sub>20</sub> (973.13). White powder, mp 210~213°C, [α]<sub>D</sub><sup>25</sup> = +17.1° (c = 0.1, MeOH). Source: ZHI BU LUO TUO CAI HU *Bupleurum gibraltarium* (root). Ref: 3980.



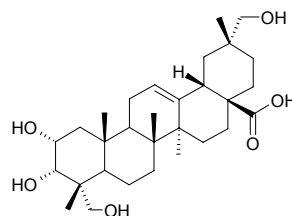
**21142** *11α,16β,23,28-Tetrahydroxyolean-12-en-3β-yl-β-D-glucopyranosyl-(1→2)-β-D-glucopyranosyl-(1→3)-β-D-fucopyranoside*  
 C<sub>48</sub>H<sub>80</sub>O<sub>19</sub> (961.16). Source: GUAN MU CHAI HU *Bupleurum fruticosum*. Ref: 2247.



**21143** *1β,2α,3α,24-Tetrahydroxyolean-12-en-28-oic acid*  
 C<sub>30</sub>H<sub>48</sub>O<sub>6</sub> (504.71). Pharm: Antifungal. Source: TAO *Prunus persica* (peel of unripe fruits). Ref: 2371.

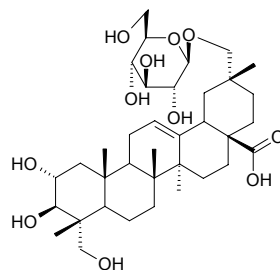


**21144** *2α,3α,23,29-Tetrahydroxyolean-12-en-28-oic acid*  
 C<sub>30</sub>H<sub>48</sub>O<sub>6</sub> (504.71). White needles (MeOH), mp 271~273°C, [α]<sub>D</sub><sup>20</sup> = +22.4° (c = 0.20, MeOH). Source: SI CHI SI LENG CAO *Schnabelia tetradonta* (aerial parts: yield = 0.00007%dw). Ref: 4665.



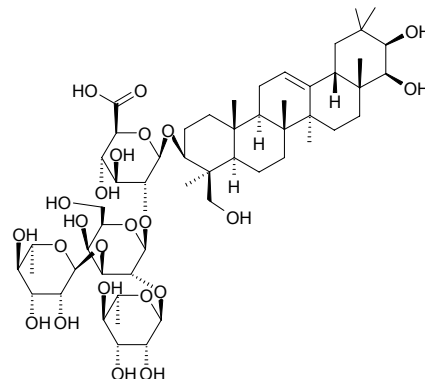
**21145** *2α,3β,23,29-Tetrahydroxyolean-12-en-28-oic acid 29-O-β-D-glucopyranoside*

C<sub>36</sub>H<sub>58</sub>O<sub>11</sub> (666.86). Amorphous powder, [α]<sub>D</sub><sup>25</sup> = +14° (c = 0.1, MeOH). Source: CU MAO NIU SHE CAO *Anchusa strigosa*. Ref: 5441.



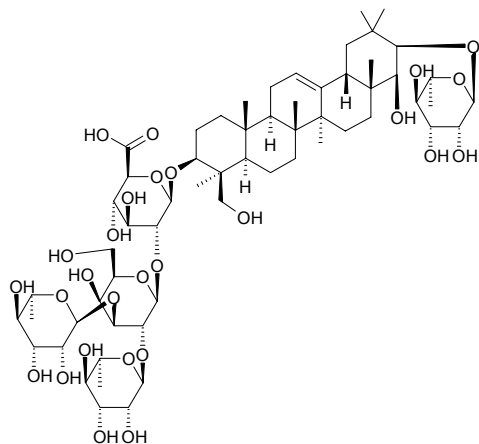
**21146** *3β,21β,22β,24-Tetrahydroxyolean-12-en-3-O-α-L-rhamnopyranosyl-(1→3)-[α-L-rhamnopyranosyl-(1→2)]-β-D-galactopyranosyl-(1→2)-β-D-glucuronopyranoside*

C<sub>54</sub>H<sub>88</sub>O<sub>23</sub> (1105.29). white amorphous solid, [α]<sub>D</sub><sup>25</sup> = -2.9° (c = 0.83, MeOH). Pharm: Antifungal (*Candida albicans*, MIC = 25μg/mL). Source: AI SAI E BI YA YU SHAN DOU *Lupinus angustifolius*. Ref: 2025.



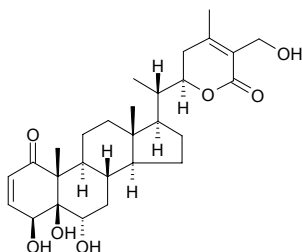
**21147 3 $\beta$ ,21 $\beta$ ,22 $\beta$ ,24-Tetrahydroxyolean-12-en-3-O- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 3)-[ $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -D-galactopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucuronopyranosyl-21-O- $\alpha$ -L-rhamnopyranoside**

C<sub>60</sub>H<sub>98</sub>O<sub>27</sub> (1251.43). white amorphous solid,  $[\alpha]_D^{25} = -8.4^\circ$  ( $c = 0.83$ , MeOH). **Pharm:** Antifungal (*Candida albicans*, MIC = 30 $\mu$ g/mL). **Source:** AI SAI E BI YA YU SHAN DOU *Lupinus angustifolius*. **Ref:** 2025.



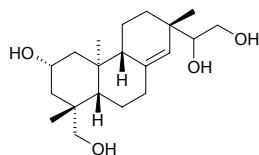
**21148 (20S,22R)-4 $\beta$ ,5 $\beta$ ,6 $\alpha$ ,27-Tetrahydroxy-1-oxowitha-2,24-dienolide**

C<sub>28</sub>H<sub>40</sub>O<sub>7</sub> (488.63). **Pharm:** Neurite outgrowth activity (hmn neuroblastoma SH-SY5Y cell line, 1 $\mu$ mol/L). **Source:** CUI MIAN SHUI QIE *Withania somnifera* (root). **Ref:** 4198.



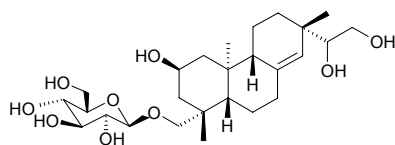
**21149 ent-2 $\alpha$ ,15,16,19-Tetrahydroxypimar-8(14)-ene**

C<sub>20</sub>H<sub>34</sub>O<sub>4</sub> (338.49). White amorphous powder,  $[\alpha]_D^{20} = -18.4^\circ$  ( $c = 0.50$ , MeOH). **Source:** XI XIAN *Siegesbeckia orientalis* (aerial parts: yield = 0.0002%). **Ref:** 4764.



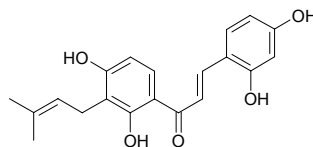
**21150 ent-2 $\beta$ ,15,16,19-Tetrahydroxypimar-8(14)-en-19-O- $\beta$ -glucopyranoside**

C<sub>26</sub>H<sub>44</sub>O<sub>9</sub> (500.64). Pale gum,  $[\alpha]_D^{20} = -35.9^\circ$  ( $c = 1.32$ , MeOH). **Source:** XI XIAN *Siegesbeckia orientalis* (aerial parts: yield = 0.0011%). **Ref:** 4764.



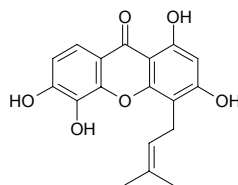
**21151 2,4,2',4'-Tetrahydroxy-3'-prenylchalcone**

Anticancer Flavonoid PMV70P691-113 C<sub>20</sub>H<sub>20</sub>O<sub>5</sub> (340.38). **Pharm:** Aromatase inhibitor (*in vitro*, IC<sub>50</sub> = 4.6 $\mu$ mol/L; control Aminoglutethimide, IC<sub>50</sub> = 6.4 $\mu$ mol/L). **Source:** GOU SHU *Broussonetia papyrifera*. **Ref:** 3090, 5038.



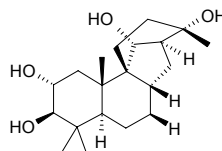
**21152 1,3,5,6-Tetrahydroxy-4-prenylxanthone**

C<sub>18</sub>H<sub>16</sub>O<sub>6</sub> (328.32). Pale yellow crystals. **Source:** DI ER CAO *Hypericum japonicum*, HENG LI DI ER CAO *Hypericum henryi*. **Ref:** 775.



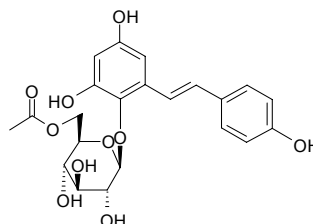
**21153 2 $\alpha$ ,3 $\beta$ ,13(S),16 $\alpha$ -Tetrahydroxystemodane**

C<sub>20</sub>H<sub>34</sub>O<sub>4</sub> (338.49). Prisms, mp 239–240°C,  $[\alpha]_D^{27} = -17.9^\circ$  ( $c = 0.47$ , MeOH). **Source:** DAO GEN MEI *Rhizopus oryzae*. **Ref:** 3781.



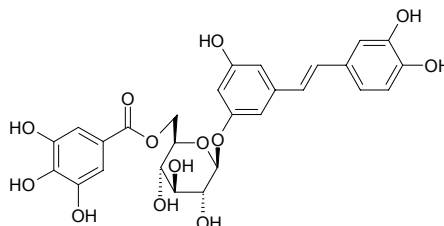
**21154 2,3,5,4'-Tetrahydroxystilbene-2-O-(6''-O-acetyl)- $\beta$ -D-glucopyranoside**

C<sub>22</sub>H<sub>24</sub>O<sub>10</sub> (448.43). Colorless acicular crystals, mp 173–174°C. **Source:** HE SHOU WU *Polygonum multiflorum*. **Ref:** 847.



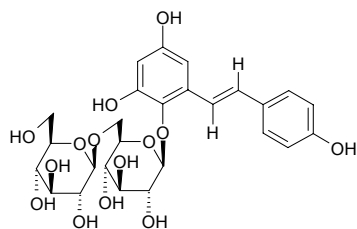
**21155 (E)-3,5,3',4'-Tetrahydroxystilbene 3-O- $\beta$ -D-(6-O-galloyl)glucopyranoside**

C<sub>27</sub>H<sub>26</sub>O<sub>13</sub> (558.50). Colorless needles, mp 173–174°C,  $[\alpha]_D^{27} = -84.6^\circ$  ( $c = 0.14$ , MeOH). **Source:** *Eskemukerjea megacarpum* (underground part: yield = 0.010%dw). **Ref:** 924.



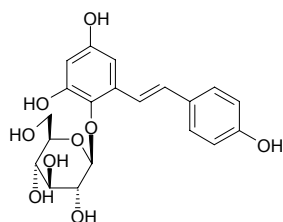
**21156 2,3,5,4'-Tetrahydroxystilbene-2-O-(6''-O- $\alpha$ -D-glucopyranosyl)- $\beta$ -D-glucopyranoside**

$C_{26}H_{32}O_{14}$  (568.54). Light brown acicular crystals, mp 203~204°C. **Pharm:** Inhibits cell proliferation (SMC, strong). **Source:** HE SHOU WU *Polygonum multiflorum*. **Ref:** 864.



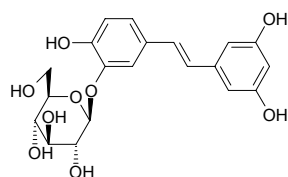
**21157 2,3,5,4'-Tetrahydroxystilbene-2-O- $\beta$ -D-glucoside**

[55327-45-2]  $C_{20}H_{22}O_9$  (406.39). Yellowish acicular crystals, mp 183~184°C,  $[\alpha]_D^{17} = +31.6^\circ$  ( $c = 0.95$ , methanol). **Pharm:** Antithrombotic; protects liver; antioxidant (inhibits lipid peroxidation induced by ADP and NADPH in microsome of rat hepatic cells, 50~100mg/kg, orl, reduces GOT and GPT level in rat serum). **Source:** HU ZHANG *Polygonum cuspidatum*, HE SHOU WU *Polygonum multiflorum* (dried tuberoid (crude): content scope of 9 batch samples = 0.143%~6.852%, mean content = 3.474%<sup>[5508]</sup>). **Ref:** 2, 900, 5501, 5508.



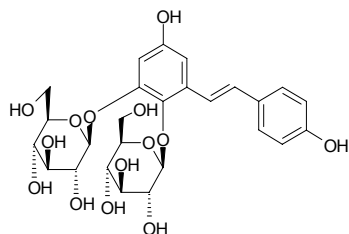
**21158 3,4,3',5'-Tetrahydroxystilbene-3-glucoside**

Piceatannol 3'-O- $\beta$ -D-glucopyranoside  $C_{20}H_{22}O_9$  (406.39). **Source:** ZHANG YE DA HUANG *Rheum palmatum*, TANG GU TE DA HUANG *Rheum tanguticum*, YU DA HUANG *Rheum* sp.<sup>[4064]</sup>. **Ref:** 2, 660, 2834, 4064.



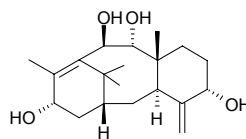
**21159 2,3,5,4'-Tetrahydroxystilbene-2,3-O- $\beta$ -D-diglucoside**

$C_{26}H_{32}O_{14}$  (568.54). Colorless acicular crystals, mp 265~267°C. **Source:** HE SHOU WU *Polygonum multiflorum*. **Ref:** 292.



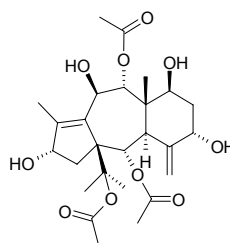
**21160 Tetrahydroxytaxadiene**

5 $\alpha$ ,9 $\alpha$ ,10 $\beta$ ,13 $\alpha$ -Tetrahydroxy-4(20),11-taxadiene  $C_{20}H_{32}O_4$  (336.48). mp 195~198°C,  $[\alpha]_D = +134^\circ$ . **Source:** JIANG GUO ZI SHAN *Taxus baccata*, HONG DOU SHAN *Taxus chinensis*. **Ref:** 662.



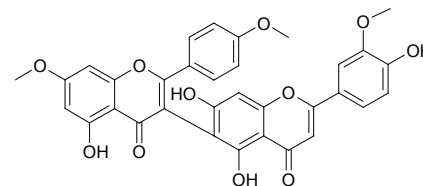
**21161 5 $\alpha$ ,7 $\beta$ ,10 $\beta$ ,13 $\alpha$ -Tetrahydroxy-2 $\alpha$ ,9 $\alpha$ ,15-triacetoxy-11(15→1)-abeo-taxa-4(20),11-diene**

$C_{26}H_{38}O_{10}$  (510.59). Oily compound,  $[\alpha]_D^{20} = +112^\circ$  (MeOH). **Source:** XI MA LA YA HONG DOU SHAN *Taxus wallichiana* (bark). **Ref:** 4245.



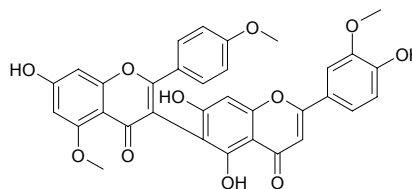
**21162 4''',5',7''-Tetrahydroxy-3''',4',7-trimethoxy-3,6''-biflavone**

$C_{33}H_{24}O_{11}$  (596.55). Yellow solid, mp 230~232°C (Me<sub>2</sub>CO),  $[\alpha]_D^{25} = -33.7^\circ$  ( $c = 0.6100$ , Me<sub>2</sub>CO). **Source:** *Aristolochia ridicula* (stem). **Ref:** 5111.



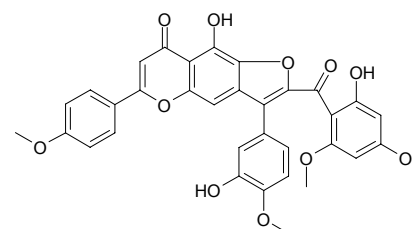
**21163 4''',5',7,7''-Tetrahydroxy-3''',4',7-trimethoxy-3,6''-biflavone**

$C_{33}H_{24}O_{11}$  (596.55). Yellow solid, mp 224~226°C (Me<sub>2</sub>CO),  $[\alpha]_D^{25} = +30.1^\circ$  ( $c = 2.0000$ , Me<sub>2</sub>CO). **Source:** *Aristolochia ridicula* (stem). **Ref:** 5111.



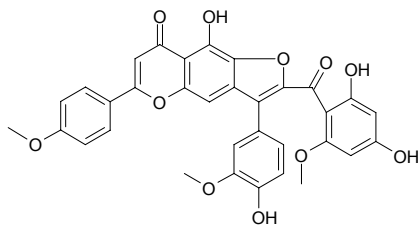
**21164 3''',5,5'',7''-Tetrahydroxy-3''',4',4''-trimethoxy-6-O- $\alpha$ ,7- $\beta$ -flavone-chalcone**

$C_{33}H_{24}O_{11}$  (596.55). Yellow solid, mp 254~256°C (Me<sub>2</sub>CO),  $[\alpha]_D^{25} = +17.4^\circ$  ( $c = 0.9000$ , Me<sub>2</sub>CO). **Source:** *Aristolochia ridicula* (stem). **Ref:** 5111.

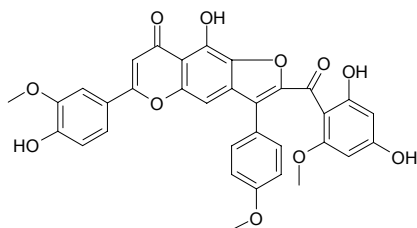


**21165 4''',5,5'',7''-Tetrahydroxy-3',3''',4'-trimethoxy-6-O- $\alpha$ ,7- $\beta$ -flavone-chalcone**

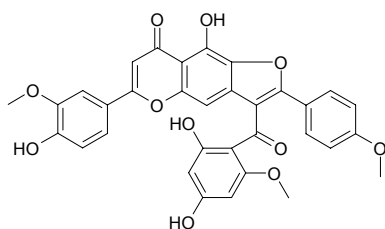
$C_{33}H_{24}O_{11}$  (596.55). Yellow solid, mp 253~255°C (Me<sub>2</sub>CO),  $[\alpha]_D^{25} = +15.5^\circ$  ( $c = 1.0000$ , Me<sub>2</sub>CO). Source: *Aristolochia ridicula* (stem). Ref: 5111.

**21166 4',5,5'',7''-Tetrahydroxy-3',3''',4''-trimethoxy-6-O- $\alpha$ ,7- $\beta$ -flavone-chalcone**

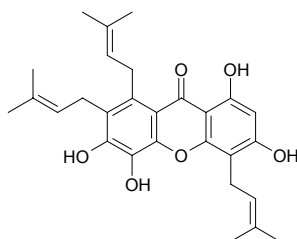
$C_{33}H_{24}O_{11}$  (596.55). Yellow solid, mp 236~238°C (Me<sub>2</sub>CO),  $[\alpha]_D^{25} = +23.1^\circ$  ( $c = 0.8002$ , Me<sub>2</sub>CO). Source: *Aristolochia ridicula* (stem). Ref: 5111.

**21167 4',5,5'',7''-Tetrahydroxy-3',3''',4''-trimethoxy-6-O- $\beta$ ,7- $\alpha$ -flavone-chalcone**

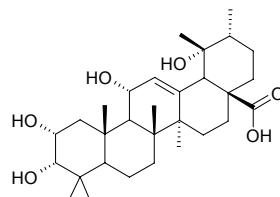
$C_{33}H_{24}O_{11}$  (596.55). Yellow solid, mp 250~253°C (Me<sub>2</sub>CO),  $[\alpha]_D^{25} = -30.1^\circ$  ( $c = 0.90$ , Me<sub>2</sub>CO). Source: *Aristolochia ridicula* (stem). Ref: 5111.

**21168 1,3,5,6-Tetrahydroxy-4,7,8-tri(3-methyl-2-butenyl)xanthone**

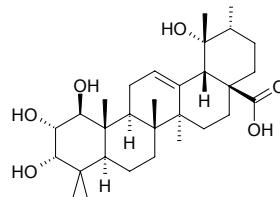
$C_{28}H_{32}O_6$  (464.56). Yellow powder (MeOH), mp 190~192°C. Pharm: Neurite outgrowth enhancer (PC12D cells, 3 $\mu$ mol/L, NGF-mediated neurite outgrowth, to enhance the ability of NGF, may be useful in the treatment of neurological disorders). Source: DA YE TENG HUANG *Garcinia xanthochymus* (wood). Ref: 4404.

**21169 2 $\alpha$ ,3 $\alpha$ ,11 $\alpha$ ,19 $\alpha$ -Tetrahydroxy-urs-12-en-28-oic acid**

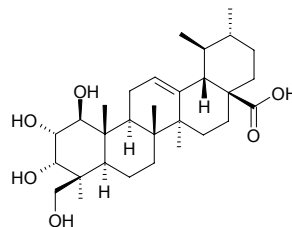
$C_{30}H_{48}O_6$  (504.71). White amorphous powder. Source: FEI LONG ZHANG XUE *Toddalia asiatica* [Syn. *Toddalia aculeata*; *Paullinia asiatica*] (stem). Ref: 4561.

**21170 1 $\beta$ ,2 $\alpha$ ,3 $\alpha$ ,19 $\alpha$ -Tetrahydroxyurs-12-en-28-oic acid**

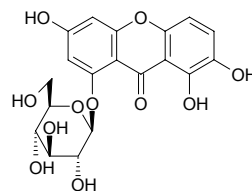
$C_{30}H_{48}O_6$  (504.71). Pharm: Cytotoxic (HSC-2, IC<sub>50</sub> = 100 $\mu$ g/mL; HGF, IC<sub>50</sub> > 200 $\mu$ g/mL). Source: DI YU *Sanguisorba officinalis*. Ref: 5160.

**21171 1 $\beta$ ,2 $\alpha$ ,3 $\alpha$ ,24-Tetrahydroxyurs-12-en-28-oic acid**

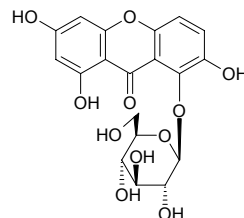
$C_{30}H_{48}O_6$  (504.71). Pharm: Antifungal. Source: TAO *Prunus persica* (peel of unripe fruits). Ref: 2371.

**21172 1,3,7,8-Tetrahydroxyxanthone-1-O- $\beta$ -D-glucopyranoside**

$C_{19}H_{18}O_{11}$  (422.35). Yellow crystalline powder, mp 255~258°C. Source: BAO E ZHANG YA CAI *Swertia calycina*. Ref: 634.

**21173 1,3,7,8-Tetrahydroxyxanthone-8-O- $\beta$ -D-glucopyranoside**

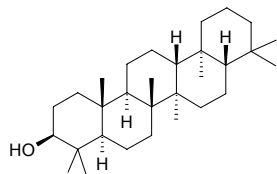
$C_{19}H_{18}O_{11}$  (422.35). Cream white powder, mp 256~260°C. Source: BAO E ZHANG YA CAI *Swertia calycina*. Ref: 634.



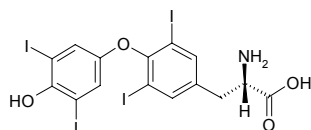


**21174 Tetrahymanol**

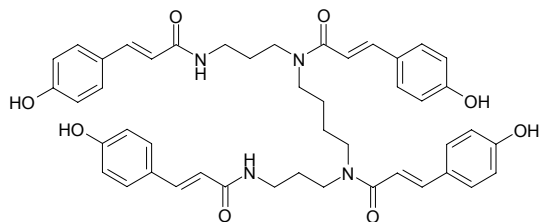
3 $\beta$ -Hydroxy  $\gamma$ -cerane C<sub>30</sub>H<sub>52</sub>O (428.75). Source: DAO LUAN YE FU SHI JUE *Lemnaphyllum microphyllum* var. *obovatum*. Ref: 660.

**21175 3,5,3',5'-Tetraiodothyronine**

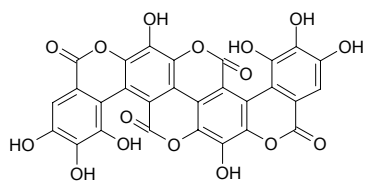
Thyrosine [300-30-1] C<sub>15</sub>H<sub>11</sub>I<sub>4</sub>NO<sub>4</sub> (776.88). mp (-) 235°C, ( $\pm$ ) 220°C (changing to black), 231–233°C (dec). Source: NIU YE *Bos taurus domesticus*; *Bubalus bubalis*. Ref: 6.

**21176 N1,N5,N10,N14-Tetrakis[3-(4-hydroxyphenyl)-2-propenoyl]-1,5,10,14-tetraazatetradecane**

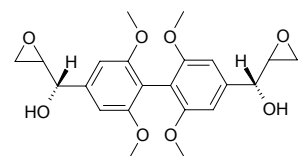
C<sub>46</sub>H<sub>50</sub>N<sub>4</sub>O<sub>8</sub> (786.93). Pharm: Nonpeptide tachykinin NK<sub>1</sub> receptor antagonist (guinea pig ileum, K<sub>i</sub> = 21.9nmol/L, hmN NK<sub>1</sub> receptors on CHO cells, K<sub>i</sub> = 3.3nmol/L, K<sub>i</sub> is the concentration of compound which displaces the log concentration response curve by log 2). Source: GAO GUI CHUN HUANG JU *Anthemis nobilis*, MU<sup>(3)</sup> JU *Matricaria chamomilla* [Syn. *Matricaria recutita*] (dried flower). Ref: 4062.

**21177 Tetrameric gallic acid**

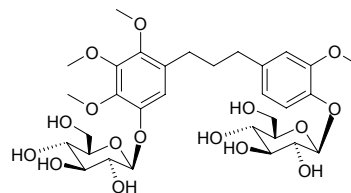
C<sub>28</sub>H<sub>10</sub>O<sub>16</sub> (602.38). Source: SHI LIU PI *Punica granatum*. Ref: 660.

**21178 2,6,2',6'-Tetramethoxy-4,4'-bis(2,3-epoxy-1-hydroxypropyl) biphenyl**

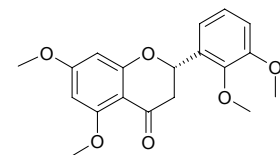
C<sub>22</sub>H<sub>26</sub>O<sub>8</sub> (418.45). Colorless needles (CHCl<sub>3</sub>), mp 175–176°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +75° (c = 0.11, CHCl<sub>3</sub>). Source: BAI WEI *Cynanchum atratum* (root). Ref: 3054.

**21179 2',3',4',3''-Tetramethoxy-1,3-diphenylpropane 5',4''-di-O- $\beta$ -D-glucopyranoside**

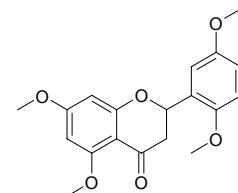
C<sub>31</sub>H<sub>44</sub>O<sub>16</sub> (672.69). Colorless amorphous solid. Source: LENG ZHI HU JI SHENG *Viscum angulatum* (whole herb: yield = 0.00086%dw). Ref: 4626.

**21180 (2S)-5,7,2',3'-Tetramethoxyflavanone**

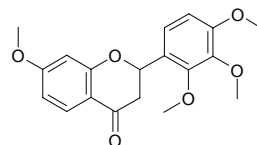
C<sub>19</sub>H<sub>20</sub>O<sub>6</sub> (344.37). Colorless solid (CHCl<sub>3</sub>), mp 164–166°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -34.8° (c = 0.01, MeOH). Source: CHUAN XIN LIAN *Andrographis paniculata* [Syn. *Justicia paniculata*] (whole herb). Ref: 3841.

**21181 5,7,2',5'-Tetramethoxyflavanone**

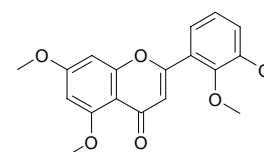
C<sub>19</sub>H<sub>20</sub>O<sub>6</sub> (344.37). Colorless solid (MeOH), mp 198–200°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -18.6° (c = 0.14, MeOH). Source: *Andrographis rothii* (whole herb). Ref: 4311.

**21182 7,2',3',4'-Tetramethoxyflavanone**

C<sub>19</sub>H<sub>20</sub>O<sub>6</sub> (344.37). Amorphous powder, mp 180–182°C (MeOH), [ $\alpha$ ]<sub>D</sub><sup>28</sup> = -16.3° (c = 0.12, MeOH). Source: WU CI ZHU YING HUA *Calliandra inermis*. Ref: 2588.

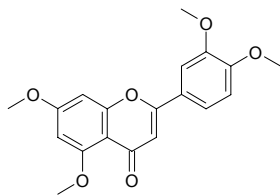
**21183 5,7,2',3'-Tetramethoxyflavone**

C<sub>19</sub>H<sub>18</sub>O<sub>6</sub> (342.35). Yellowish solid (MeOH), mp 152–154°C. Source: NAN YIN DU CHUAN XIN LIAN *Andrographis viscosula* (whole herb). Ref: 4406.

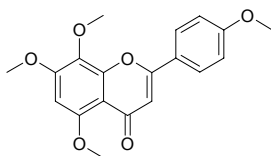


**21184 5,7,3',4'-Tetramethoxyflavone**

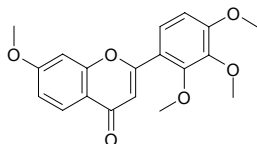
$C_{19}H_{18}O_6$  (342.35). Yellow crystals. Source: BAI YE XIANG CHA CAI *Isodon leucophyllus*. Ref: 2489.

**21185 5,7,8,4'-Tetramethoxyflavone**

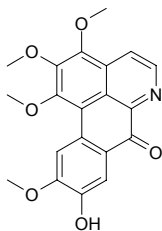
Tetra-*O*-methylisoscutelearein [6601-66-7]  $C_{19}H_{18}O_6$  (342.35). Colorless rhombic crystals (methanol), mp 216–217°C. Pharm: Induces cell differentiation (mus myelocytic leukemia cells, 50  $\mu$ mol/L, growing rate = 47%, 5  $\mu$ mol/L, growing rate = 78%, 50  $\mu$ mol/L, activity of macrophages > 25%, 5  $\mu$ mol/L, activity of macrophages > 78%, HL-60, 100  $\mu$ mol/L, growing rate = (50–65)%, 50  $\mu$ mol/L, growing rate = (73–79)%, 100  $\mu$ mol/L, activity of macrophages > 25%, 50  $\mu$ mol/L, activity of macrophages > 10%). Source: ZHI SHI *Citrus aurantium*, YOU<sup>(4)</sup> *Citrus grandis*, JU PI *Citrus reticulata*, JIAO GAN *Citrus tankan*. Ref: 900.

**21186 7,2',3',4'-Tetramethoxyflavone**

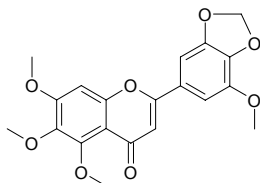
$C_{19}H_{18}O_6$  (342.35). Amorphous powder, mp 192–194°C (MeOH). Source: WU CI ZHU YING HUA *Calliandra inermis*. Ref: 2588.

**21187 1,2,3,10-Tetramethoxy-9-hydroxy-4,5,6,6 $\alpha$ -dehydro-7-aporphhinone**

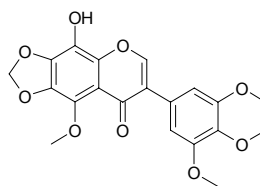
$C_{20}H_{17}NO_6$  (367.36). Nacarat powder (MeOH), mp 166–168°C. Source: XIAO YE TANG SONG CAO *Thalictrum elegans* (whole herb). Ref: 4579.

**21188 5,6,7,5'-Tetramethoxy-3',4'-methylenedioxyflavone**

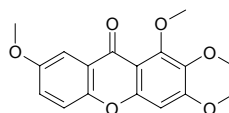
$C_{20}H_{18}O_8$  (386.36). White needles (acetone). Source: LONG XU TENG *Bauhinia championii* (stem). Ref: 4548.

**21189 5,3',4',5'-Tetramethoxy-6,7-methylenedioxyisoflavone**

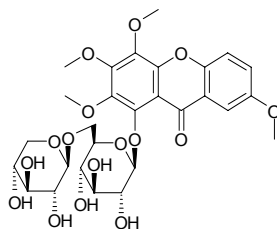
$C_{20}H_{18}O_9$  (402.36). Source: JUAN QIAO YUAN WEI *Iris potaninii* (underground part). Ref: 4235.

**21190 1,2,3,7-Tetramethoxyxanthone**

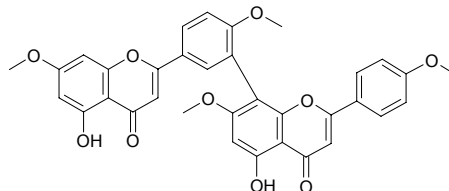
$C_{17}H_{16}O_6$  (316.31). Source: HONG CHAI HU *Bupleurum scorzoniferolium* (root). Ref: 3498.

**21191 2,3,4,7-Tetramethoxyxanthone-1-*O*- $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside**

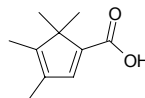
$C_{28}H_{34}O_{16}$  (626.57). Yellowish acicular crystals, mp 134–135°C,  $[\alpha]_D^{25} = -125^\circ$  ( $c = 0.4\%$ , pyridine). Source: HUANG QIN JIAO *Veratilla baillonii*. Ref: 328.

**21192 7,4',7'',4'''-Tetra-*O*-methylamentoflavone**

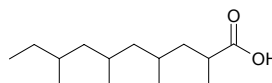
$C_{34}H_{26}O_{10}$  (594.58). Source: DA YE CAI *Selaginella doederleinii*. Ref: 660.

**21193 3,4,5,5-Tetramethylcyclopenta-1,3-dienecarboxylic acid**

$C_{10}H_{14}O_2$  (166.22). White solid. Source: *Lavandula luisieri* (essential oil). Ref: 5301.

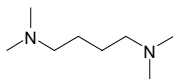
**21194 (-)-2*D*,4*D*,6*D*,8*D*-Tetramethyl decanoic acid**

$C_{14}H_{28}O_2$  (228.38). Source: E CUI *Anser cygnoides domestica*. Ref: 6.

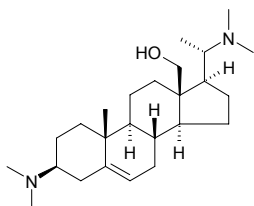


**21195 Tetramethyl diaminobutane**

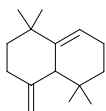
[111-51-3] C<sub>8</sub>H<sub>20</sub>N<sub>2</sub> (144.26). bp 169°C. Source: LANG DANG GEN *Hyoscyamus niger*, LANG DANG ZI *Hyoscyamus niger*. Ref: 6.

**21196 N,N,N',N'-Tetramethyl-holarrhimine**

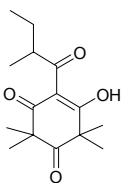
C<sub>25</sub>H<sub>44</sub>N<sub>2</sub>O (388.64). mp 233~235°C. Source: ZHI XIE MU PI *Holarrhena antidysenterica*. Ref: 6, 660.

**21197 1,1,5,5-Tetramethyl-4-methano-2,3,4,6,7,10-hexahydronaphthalene**

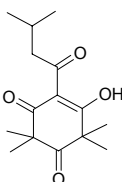
C<sub>15</sub>H<sub>24</sub> (204.36). Source: SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. Ref: 2.

**21198 2,2,4,4-Tetramethyl-6-(2-methyl-1-oxobutyl)-1,3,5-cyclohexanetrione**

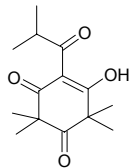
[5009-05-2] C<sub>15</sub>H<sub>22</sub>O<sub>4</sub> (266.34). Source: YUAN ZHI YE AO ZHOU CHA *Leptospermum polygalifolium* ssp. *polygalifolium* (foliage). Ref: 3485.

**21199 2,2,4,4-Tetramethyl-6-(3-methyl-1-oxobutyl)-1,3,5-cyclohexanetrione**

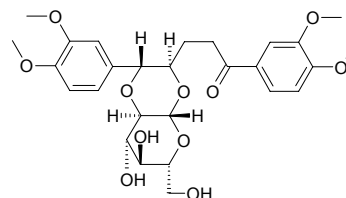
Leptospermonone; Leptospermol [567-75-9] C<sub>15</sub>H<sub>22</sub>O<sub>4</sub> (266.34). Source: YUAN ZHI YE AO ZHOU CHA *Leptospermum polygalifolium* ssp. *polygalifolium* (foliage). Ref: 3485.

**21200 2,2,4,4-Tetramethyl-6-(2-methyl-1-oxopropyl)-1,3,5-cyclohexanetrione**

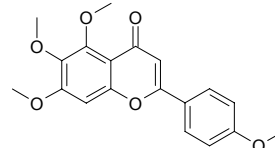
Flavesone [22595-45-5] C<sub>14</sub>H<sub>20</sub>O<sub>4</sub> (252.31). Source: YUAN ZHI YE AO ZHOU CHA *Leptospermum polygalifolium* ssp. *polygalifolium* (foliage). Ref: 3485.

**21201 Tetra-O-methylpilosidine**

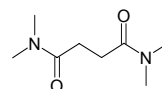
C<sub>27</sub>H<sub>34</sub>O<sub>11</sub> (534.57). Crystals (MeOH-EtOAc), mp 166~168°C, [α]<sub>D</sub><sup>20</sup> = +58.4° (c = 0.5, CHCl<sub>3</sub>:MeOH = 1:1). Source: MAO XIAN MAO *Curculigo pilosa* (rhizome). Ref: 5095.

**21202 Tetramethylscutellarein**

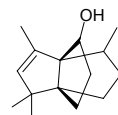
[1168-42-9] C<sub>19</sub>H<sub>18</sub>O<sub>6</sub> (342.35). Source: RI BEN ZI ZHU *Callicarpa japonica*, XIONG RUI ZHUANG ZHI GUAN CAO *Orthosiphon stamineus* [Syn: *Orthosiphon aristatus*; *Orthosiphon grandiflorus*; *Orthosiphon spicatus*] (aerial parts: yield = 0.0028%dw), YANG OU XIA ZHI CAO *Marrubium peregrinum*, YAO YONG DAN SHEN YE *Salvia officinalis*. Ref: 1521, 3053.

**21203 N,N,N',N'-Tetramethylsuccinamide**

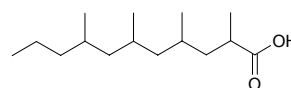
C<sub>8</sub>H<sub>16</sub>N<sub>2</sub>O<sub>2</sub> (172.23). Source: XIAN MAO *Curculigo orchioides*. Ref: 660.

**21204 6,6,8,9-Tetramethyltricyclo[3.3.3.0]undec-7-en-2-ol**

C<sub>15</sub>H<sub>24</sub>O (220.36). Colorless to white needles, mp 62°C, [α]<sub>D</sub><sup>20</sup> = +8° (c = 1, CH<sub>2</sub>Cl<sub>2</sub>). Source: *Psiadia anchusifolia* (fresh leaf). Ref: 3787.

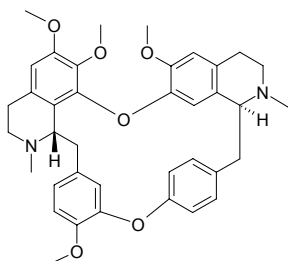
**21205 (-)-2D,4D,6D,8D-Tetramethyl undecanoic acid**

C<sub>15</sub>H<sub>30</sub>O<sub>2</sub> (242.41). Source: E CUI *Anser cygnoides domestica*. Ref: 6.

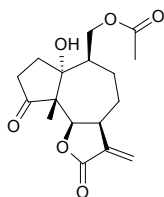


**21206 Tetrandrine**

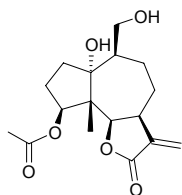
Fanchinin; Hanfangchin A [518-34-3]  $C_{38}H_{42}N_2O_6$  (622.77). mp ( $\pm$ ) 257~258°C, mp (+) 217~218°C,  $[\alpha]_D^{26} = +252.4^\circ$  (chloroform), soluble in ethanol, ether, chloroform, insoluble in water, petroleum ether<sup>[5507]</sup>. **Pharm:** Analgesic; antiallergic; antiarrhythmic (negative inotropic action); antibacterial (*Mycobacterium tuberculosis*, *in vitro* and *in vivo*); antineoplastic (mus, EAC and S<sub>180</sub>, *in vivo*); anti-inflammatory (modulator of cytokine network: prevents integrin-mediated neutrophil adhesion and fMLP- or leukotriene B<sub>4</sub>-induced transmigration, IC<sub>50</sub> = 1~5  $\mu$ g/mL)<sup>[4416]</sup>; IL-6 inhibitor (*in vitro*, IC<sub>50</sub> > 6  $\mu$ mol/L)<sup>[4416]</sup>; cytotoxic (HeLa, *in vitro*); platelet aggregation inhibitor (rbt); antihypertensive; muscle relaxant; used in treatment of silicosis. **Source:** BAI YAO ZI *Stephania cepharantha*, BIAN FU GE GEN *Menispermum dauricum* (rhizome: mean content = 0.994%<sup>[5508]</sup>), CAI WEN QIAN JIN TENG *Stephania discolor*, FANG JI *Stephania tetrandra* (dried root: content scope = 1.187%~3.537%<sup>[5501]</sup>, mean content of 6 origins = 1.915%<sup>[5508]</sup>), HAN FANG JI *Aristolochia heterophylla*, QING MU XIANG *Aristolochia debilis* [Syn. *Aristolochia longa*], XI SHENG TENG *Cissampelos pareira*, YIN BU HUAN *Cyclea barbata*. **Ref:** 5, 658, 660, 4416, 5501, 5507, 5508.

**21207 Tetraneurin A**

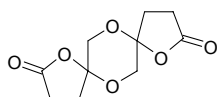
$C_{17}H_{22}O_6$  (322.36). **Pharm:** Dermatitic (causes contact dermatitis); insect antifeedant. **Source:** family Asteraceae spp. **Ref:** 658.

**21208 Tetraneurin E**

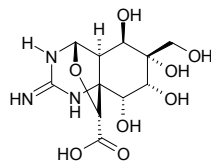
$C_{17}H_{24}O_6$  (324.38). **Pharm:** larvacide (insect larva growth inhibitor). **Source:** family Asteraceae spp. **Ref:** 658.

**21209 (5R,8R)-1,6,9,13-Tetraoxadispiro[4.2.4.2]tetradecane-2,10-dione**

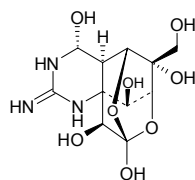
$C_{10}H_{12}O_6$  (228.20). **Source:** A ER TAI YIN LIAN HUA *Anemone altaica* **Ref:** 660.

**21210 Tetrodonic acid**

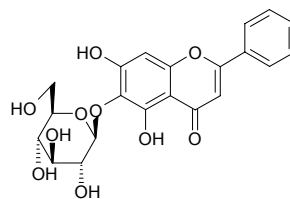
$C_{11}H_{17}N_3O_8$  (319.27). **Source:** HE TUN *Fugu ocellatus*. **Ref:** 6.

**21211 Tetrodotoxin**

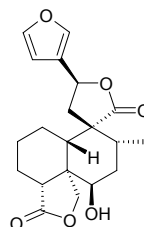
Tarichatoxin; Spheridine; Tetrodotoxin; Fugu poison; Maculotoxin; Araregai toxin  $C_{11}H_{17}N_3O_8$  (319.27). Colorless prismatic crystals,  $[\alpha]_D^{25} = -8.64^\circ$  ( $c = 8.55$ , diluted acetic acid), soluble in diluted acetic acid, slightly soluble in water, absolute ethanol, ether, insoluble in other common organic solvents.<sup>[5507]</sup> **Pharm:** Blocks permeation of sodium through membranes of nerval fibrocyte; MLD (hmn) = 7  $\mu$ g/kg; LD<sub>50</sub> (mus, ip) = 10  $\mu$ g/kg. **Source:** HE TUN *Fugu ocellatus* (in 1909, isolated for the first time<sup>[5507]</sup>). **Ref:** 6, 658, 5507.

**21212 Tetuin**

$C_{21}H_{20}O_{10}$  (432.39). mp 114°C. **Source:** MU HU DIE *Oroxylum indicum*. **Ref:** 6.

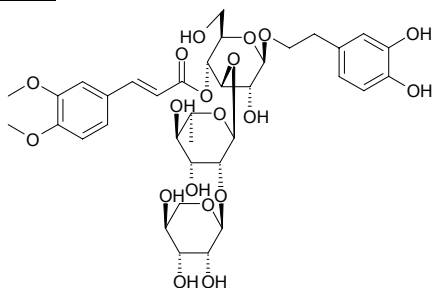
**21213 Teucrins H<sub>2</sub>**

$C_{20}H_{24}O_6$  (360.41). **Pharm:** Insect antifeedant (*Spodoptera litura*, 10  $\mu$ g/cm<sup>2</sup>, antifeedant activity = (72.0 $\pm$ 2.7)%; control Azadirachtin A, 0.5  $\mu$ g/cm<sup>2</sup>, antifeedant activity = (79 $\pm$ 2)%; *Plutella xylostella*, 10  $\mu$ g/cm<sup>2</sup>, antifeedant activity = (78.7 $\pm$ 2.3)%; control Azadirachtin A, 0.5  $\mu$ g/cm<sup>2</sup>, antifeedant activity = (71 $\pm$ 2)%). **Source:** RONG MAO XIANG KE KE *Teucrium tomentosum* (aerial parts), SUAN WEI XIANG KE KE *Teucrium scordium*. **Ref:** 3478.

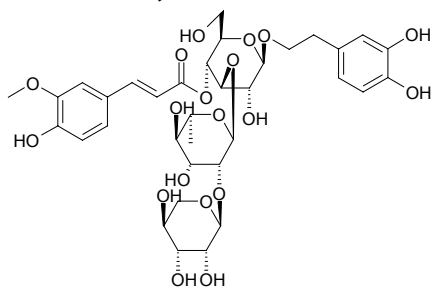


**21214 Teucroside-3'''',4''''-O-dimethylether**

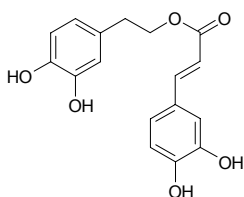
2-(3,4-Dihydroxyphenethyl)-*O*- $\alpha$ -L-lyxopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 3)-4-*O*-3,4-dimethoxy-*trans*-cinnamoyl- $\beta$ -D-glucopyranoside C<sub>36</sub>H<sub>48</sub>O<sub>19</sub> (784.77). White powder,  $[\alpha]_D^{25} = -60.0^\circ$  ( $c = 0.0007$ , MeOH). Source: SHI CAN XIANG KE KE *Teucrium chamaedrys*. Ref: 3431.

**21215 Teucroside-3'''',4''''-O-methylether**

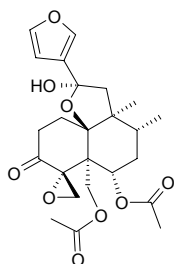
2-(3,4-Dihydroxyphenethyl)-*O*- $\alpha$ -L-lyxopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 3)-4-*O*-*trans*-feruloyl- $\beta$ -D-glucopyranoside C<sub>35</sub>H<sub>46</sub>O<sub>19</sub> (770.75).  $[\alpha]_D^{25} = -87.5^\circ$  ( $c = 0.0008$ , MeOH). Source: SHI CAN XIANG KE KE *Teucrium chamaedrys*. Ref: 3431.

**21216 Teucrol**

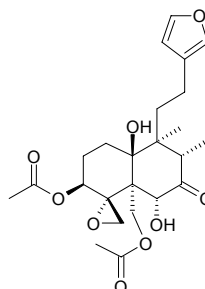
3,4-Dihydroxy- $\beta$ -phenylethyl caffeate, 9'-Decarboxyrosmarinic acid C<sub>17</sub>H<sub>16</sub>O<sub>6</sub> (316.31). Off-white amorphous powder. Source: CHANG MAO XIANG KE KE *Teucrium pilosum* [Syn. *Teucrium japonicum* var. *pilosum*] (whole herb). Ref: 5117.

**21217 Teucrolivin A**

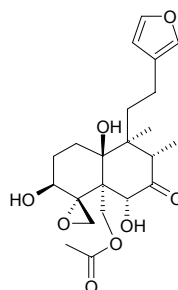
C<sub>24</sub>H<sub>30</sub>O<sub>9</sub> (462.50). Pharm: Insect antifeedant (*Spodoptera littoralis* FI<sub>50</sub> = 3mg/L, *Heliocoverpa armigera* FI<sub>50</sub> = 70mg/L, *Spodoptera frugiperda*). Source: DONG FANG XIANG KE KE *Teucrium orientale*. Ref: 2552.

**21218 Teucrolivin B**

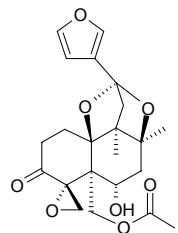
C<sub>24</sub>H<sub>32</sub>O<sub>9</sub> (464.52). Pharm: Insect antifeedant (*Spodoptera littoralis* FI<sub>50</sub> = 650mg/L, *Heliocoverpa armigera* FI<sub>50</sub> > 1000mg/L, *Spodoptera frugiperda*). Source: DONG FANG XIANG KE KE *Teucrium orientale*. Ref: 2552.

**21219 Teucrolivin C**

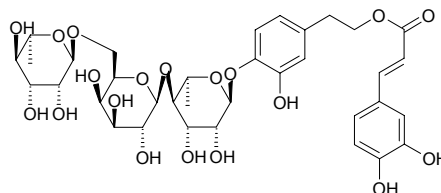
C<sub>22</sub>H<sub>30</sub>O<sub>8</sub> (422.48). Pharm: Insect antifeedant (*Spodoptera littoralis* FI<sub>50</sub> > 1000mg/L, *Heliocoverpa armigera* FI<sub>50</sub> > 1000mg/L, *Spodoptera frugiperda*). Source: DONG FANG XIANG KE KE *Teucrium orientale*. Ref: 2552.

**21220 Teucrolivin H**

C<sub>22</sub>H<sub>26</sub>O<sub>8</sub> (418.45). Source: DONG FANG XIANG KE KE *Teucrium orientale*. Ref: 2552.

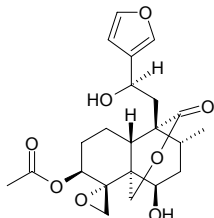
**21221 Teucroside**

Teucrol-4'-*O*- $\alpha$ -rhamnopyranosyl-(1''' $\rightarrow$ 6''')- $\beta$ -*O*-galacto-pyranosyl-(1''' $\rightarrow$ 4''')- $\alpha$ -*O*-rhamnopyranoside; 9'-Decarboxyrosmarinic acid 4'-*O*- $\alpha$ -rhamnosyl-(1''' $\rightarrow$ 6''')-*O*- $\beta$ -galactosyl-(1''' $\rightarrow$ 4''')-*O*- $\alpha$ -rhamnoside C<sub>35</sub>H<sub>46</sub>O<sub>19</sub> (770.75). Faint brown amorphous powder. Source: CHANG MAO XIANG KE KE *Teucrium pilosum* [Syn. *Teucrium japonicum* var. *pilosum*] (whole herb). Ref: 5117.

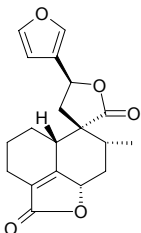


**21222 Teuctosin**

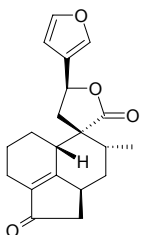
$C_{22}H_{28}O_8$  (420.46). White solid, mp 198~200°C,  $[\alpha]_D = +88^\circ$  ( $c = 0.25$ , MeOH). **Pharm:** Insect antifeedant (*Spodoptera litura*, 10 $\mu$ g/cm<sup>2</sup>, antifeedant activity = (71.5 $\pm$ 2.0)%; control Azadirachtin A, 0.5 $\mu$ g/cm<sup>2</sup>, antifeedant activity = (79 $\pm$ 2)%; *Plutella xylostella*, 10 $\mu$ g/cm<sup>2</sup>, antifeedant activity = (77.4 $\pm$ 2.1)%; control Azadirachtin A, 0.5 $\mu$ g/cm<sup>2</sup>, antifeedant activity = (71 $\pm$ 2)%). **Source:** RONG MAO XIANG KE KE *Teucrium tomentosum* (aerial parts). **Ref:** 3478.

**21223 Teucvin**

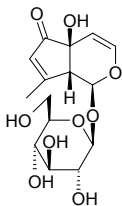
[51918-98-0]  $C_{19}H_{20}O_5$  (328.37). **Source:** ER CHI XIANG KE KE *Teucrium bidentatum*. **Ref:** 577.

**21224 Teuffin**

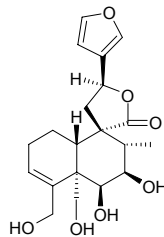
$C_{20}H_{22}O_4$  (326.40). **Pharm:** Insect antifeedant (*Spodoptera litura*, 10 $\mu$ g/cm<sup>2</sup>, antifeedant activity = (80.2 $\pm$ 2.1)%; control Azadirachtin A, 0.5 $\mu$ g/cm<sup>2</sup>, antifeedant activity = (79 $\pm$ 2)%; *Plutella xylostella*, 10 $\mu$ g/cm<sup>2</sup>, antifeedant activity = (84.2 $\pm$ 2.9)%; control Azadirachtin A, 0.5 $\mu$ g/cm<sup>2</sup>, antifeedant activity = (71 $\pm$ 2)%). **Source:** MAN HUO XIANG KE KE *Teucrium viscidum* var. *miquelianum*, RONG MAO XIANG KE KE *Teucrium tomentosum* (aerial parts). **Ref:** 3478.

**21225 Teuhircoside**

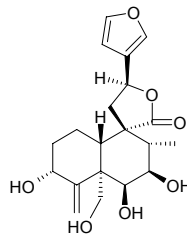
$C_{15}H_{20}O_9$  (344.32). **Source:** TAI WAN JIN GU CAO *Ajuga taiwanensis* (whole herb). **Ref:** 4483.

**21226 Teulolin A**

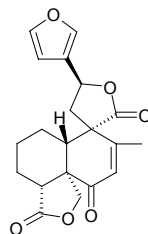
15,16-Epoxy-6 $\beta$ ,7 $\beta$ ,18,19-tetrahydroxy-neo-cleroda-3(4),13(16),14-trien-20,12(S)-olide  $C_{20}H_{26}O_7$  (378.43). Colorless amorphous powder,  $[\alpha]_D^{20} = -34^\circ$  ( $c = 0.2$ ,  $CHCl_3$ ). **Source:** HUI BAI SHI CAN *Teucrium polium*. **Ref:** 2325.

**21227 Teulolin B**

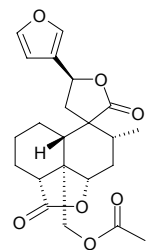
15,16-Epoxy-3 $\alpha$ ,6 $\beta$ ,7 $\beta$ ,18,19-tetrahydroxy-neo-cleroda-4(18),13(16),14-trien-20,12(S)-olide  $C_{20}H_{26}O_7$  (378.43). Colorless amorphous powder,  $[\alpha]_D^{20} = +14^\circ$  ( $c = 0.31$ ,  $CHCl_3$ ). **Source:** HUI BAI SHI CAN *Teucrium polium*. **Ref:** 2325.

**21228 Teuperinin A**

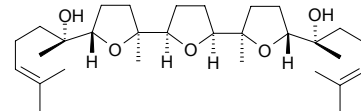
[135650-34-9]  $C_{20}H_{20}O_6$  (356.38). mp 196~198°C. **Source:** ER CHI XIANG KE KE *Teucrium bidentatum*. **Ref:** 577.

**21229 Teuquadrin B**

$C_{22}H_{26}O_7$  (402.45). Colorless acicular crystals, mp 236~239°C,  $[\alpha]_D^{26} = +46.27^\circ$  ( $c = 0.13$ ,  $CHCl_3$ ). **Source:** TIE ZHOU CAO *Teucrium quadrifarium*. **Ref:** 277.

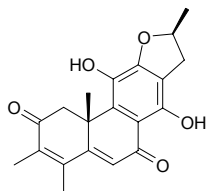
**21230 Teurilene**

$C_{30}H_{52}O_5$  (492.75). **Source:** *Eurycoma* sp. **Ref:** 4556.

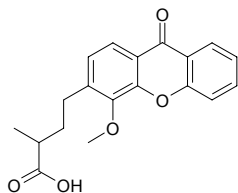


**21231 Teuvinenone E**

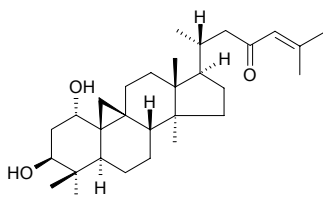
$C_{20}H_{20}O_5$  (340.38). mp 197.3°C,  $[\alpha]_D^{20} = +32.0^\circ$  ( $c = 0.85$ ,  $CHCl_3$ ). **Pharm:** Antiproliferative (*in vitro*, MTT assay, CEM,  $IC_{50} = 19.4\mu\text{mol/L}$ , control Doxorubicin,  $IC_{50} = 0.036\mu\text{mol/L}$ , HeLa,  $IC_{50} = 18.4\mu\text{mol/L}$ , Doxorubicin,  $IC_{50} = 0.027\mu\text{mol/L}$ , HCT8,  $IC_{50} = 37.8\mu\text{mol/L}$ , Doxorubicin,  $IC_{50} = 0.024\mu\text{mol/L}$ , MCF7,  $IC_{50} = 35.6\mu\text{mol/L}$ , Doxorubicin,  $IC_{50} = 0.183\mu\text{mol/L}$ , B16,  $IC_{50} > 78.1\mu\text{mol/L}$ , Doxorubicin,  $IC_{50} = 0.056\mu\text{mol/L}$ ). **Source:** *Aegiphila thotzkiana* (root). **Ref:** 4940.

**21232 Teysmannic acid**

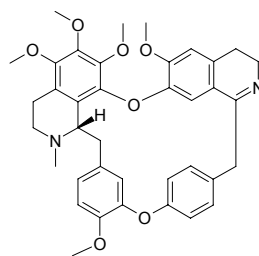
3-(3'-Carboxybutyl)-4-methoxyxanthone  $C_{19}H_{18}O_5$  (326.35). Viscous liquid. **Source:** TE SI MAN NI HU TONG BIAN ZHONG *Calophyllum teysmannii* var. *inophylloide* (wood). **Ref:** 3937.

**21233 Thailandiol**

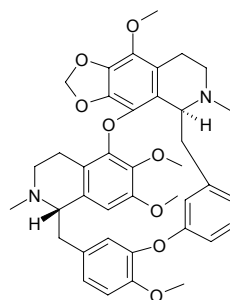
$C_{30}H_{48}O_3$  (456.72). Colorless needles, mp 75.5~76.4°C (MeOH),  $[\alpha]_{589\text{nm}}^{30} = +40^\circ$  ( $c = 0.15$ , MeOH). **Pharm:** Anti-HIV-1 (syncytium assay:  $IC_{50} = 33.4\mu\text{g/mL}$ ,  $EC_{50} = 14.2\mu\text{g/mL}$ ; HIV-1 RT assay:  $200\mu\text{g/mL}$ , InRt = 61.5%,  $IC_{50} = 156.8\mu\text{g/mL}$ , Fagaronine chloride  $IC_{50} = 10.9\mu\text{g/mL}$ , Nevirapine  $IC_{50} = 1.8\mu\text{g/mL}$ ). **Source:** TAI GUO ZHI ZI *Gardenia thailandica* (leaf and twig). **Ref:** 4963.

**21234 Thalcimine**

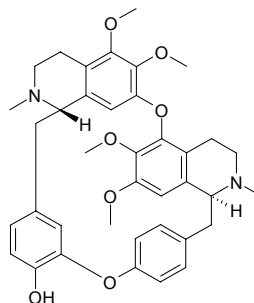
Thalsimine  $C_{38}H_{40}N_2O_7$  (636.75). mp 140~142°C. **Pharm:** Analgesic; antineoplastic (mus and rat, lymphatic carcinoma NK/CY, hepatoma PC-1 and lymphatic sarcoma); anti-inflammatory; antihypertensive (anesthetic cat, 1~5mg/kg iv, blood pressure is lowered by 2.67~10.00kPa); antipyretic (mus, 1000mg/kg, sc, body temperature lowers by 2.5~2.7°C in 2h and 5.5~6.0°C in 18h); nootropic (mus, maze model, reduces completion time); sedative (mus, 500mg/kg sc, potentiates hypnotic effect of cyclobarbital by factor of 2); LD (anesthetic cat) = 10mg/kg. **Source:** MA WEI LIAN *Thalictrum foliolosum*, YING SHUI HUANG LIAN *Thalictrum simplex* [Syn. *Thalictrum simplex* var. *brevipes*], ZOU WEN TANG SONG CAO *Thalictrum rugosum*. **Ref:** 5, 6, 658.

**21235 Thalfinine**

Thalpinine  $C_{39}H_{42}N_2O_8$  (666.78). Amorphous solid, mp 117~119°C,  $[\alpha]_D^{26} = +141^\circ$  ( $c = 0.25$ , methanol). **Pharm:** Antibacterial (*Mycobacterium smegmatis*, 50μg/mL); antihypertensive (rbt, 0.1~1.0mg/kg iv, blood pressure lowers by 1.33~3.07kPa and the action lasts 0.5min). **Source:** XIANG TANG SONG CAO *Thalictrum foetidum*, XIAO TANG SONG CAO *Thalictrum minus*, DA YE TANG SONG CAO *Thalictrum faberi*. **Ref:** 6, 660, 661.

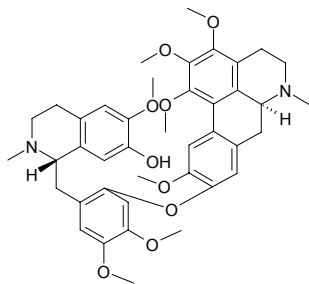
**21236 Thalfotidine**

$C_{38}H_{42}N_2O_7$  (638.77). mp 168~170°C. **Pharm:** Antibacterial (*Mycobacterium tuberculosis*, EC (without serum) = 62.5μg/mL, EC (with serum) = 125μg/mL); antineoplastic (rat  $W_{256}$  and mus Lewis lung cancer). **Source:** XIANG TANG SONG CAO *Thalictrum foetidum*. **Ref:** 6, 658, 660.

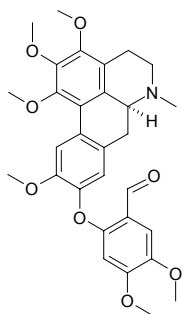


**21237 Thaliadanine**

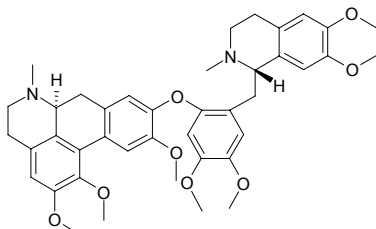
$C_{41}H_{48}N_2O_9$  (712.85). Amorphous solid,  $[\alpha]_D^{26} = +81^\circ$  ( $c = 0.41$ , methanol). **Pharm:** Antibacterial (*Mycobacterium smegmatis*, MIC = 100 $\mu$ g/mL); antihypertensive (rbt, 0.1mg/kg, blood pressure lowers by 2.00kPa and the action lasts 1.5min). **Source:** XIAO TANG SONG CAO *Thalictrum minus*. **Ref:** 661.

**21238 Thaliadine**

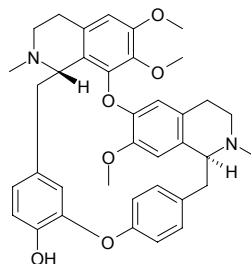
$C_{30}H_{33}NO_8$  (353.60). Yellow petaline crystals (methanol), mp 143.5–144.5°C,  $[\alpha]_D^{26} = 0^\circ$  ( $c = 0.22$ , chloroform or methanol). **Pharm:** Antihypertensive (rbt, 0.1mg/kg, blood pressure lowers by 2.93–3.59kPa and the action lasts 2.0–3.5min). **Source:** XIAO TANG SONG CAO *Thalictrum minus*. **Ref:** 661.

**21239 Thalicarpine**

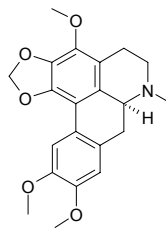
$C_{41}H_{48}N_2O_8$  (696.85). Acicular crystals (ethyl acetate), mp 160–161°C,  $[\alpha]_D^{25} = +133^\circ$  ( $c = 0.83$ , methanol),  $[\alpha]_D^{25} = +89^\circ$  ( $c = 0.88$ , chloroform). **Pharm:** Antibacterial (*Mycobacterium* sp., MIC = 100 $\mu$ g/mL; *Staphylococcus aureus*, MIC = 1mg/mL); antineoplastic (rat  $W_{256}$ , InRt = 90%; mus Lewis lung cancer, InRt = 74%; mus EAC, 250mg/kg ip, biotic prolonged rate = 114%; mus, ascites lymphoma, 250mg/kg ip, biotic prolonged rate = 137.2%); antifungal (*Candida albicans*, MIC = 1mg/mL); cytotoxic (HeLa,  $ED_{50} = 5\mu$ mol/L); inhibits cardiac muscles (dog and monkey, iv, *in vivo*, reduces myocardial contractility and slows heart rate); antihypertensive (vasodilator, dog and monkey, *in vivo*). **Source:** CU GUO TANG SONG CAO *Thalictrum dasycarpum*, HUANG TANG SONG CAO *Thalictrum flavum*, WAI JUAN TANG SONG CAO *Thalictrum revolutum*, YI XING TANG SONG CAO *Thalictrum dioicum*, ZA XING TANG SONG CAO *Thalictrum polygamum*. **Ref:** 661.

**21240 Thalicerine**

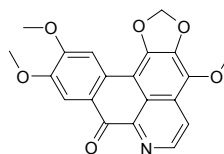
[602-83-5]  $C_{37}H_{40}N_2O_6$  (608.74). Needles, +1H<sub>2</sub>O, mp 161°C,  $[\alpha]_D = +231.2^\circ$ ,  $[\alpha]_D^{25} = +210^\circ$  ( $c = 0.02$ , MeOH). **Pharm:** Antineoplastic (mus, EAC, 62.5mg/mL, biotic prolonged rate = 50%); cytotoxic (HeLa, *in vitro*,  $ED_{50} = 13\mu$ g/mL). **Source:** TOU MING TANG SONG CAO *Thalictrum lucidum*, XIAO TANG SONG CAO *Thalictrum minus*, YAN GUO CAO *Thalictrum thunbergii* (in 1959, the compound was isolated from the plant)<sup>[5505]</sup>. **Ref:** 6, 1521, 1791, 5505.

**21241 Thalicmine**

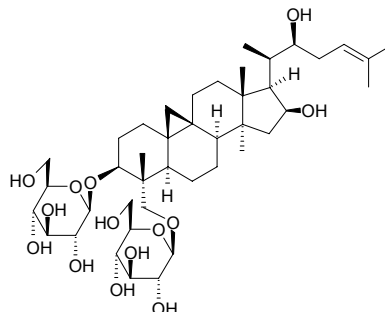
Ocoteine [3246-21-7]  $C_{21}H_{23}NO_5$  (369.42). mp 137–138°C. **Source:** YING SHUI HUANG LIAN *Thalictrum simplex* [Syn. *Thalictrum simplex* var. *brevipes*]. **Ref:** 5, 6.

**21242 Thalicminine**

$C_{20}H_{15}NO_6$  (365.35). mp 263–265°C (chloroform), 274–275°C (chloroform-ethanol). **Source:** YING SHUI HUANG LIAN *Thalictrum simplex* [Syn. *Thalictrum simplex* var. *brevipes*]. **Ref:** 6.

**21243 Thalicoside A**

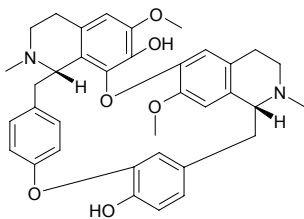
$C_{42}H_{70}O_{14}$  (799.02). **Pharm:** Antineoplastic. **Source:** XIAO TANG SONG CAO *Thalictrum minus*. **Ref:** 658.



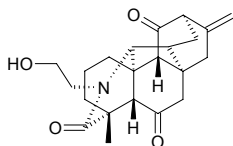


**21244 Thalicerine**

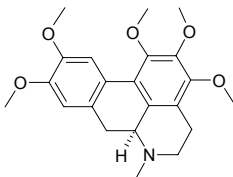
$C_{36}H_{38}N_2O_6$  (594.71). Source: YAN GUO CAO *Thalictrum thunbergii*. Ref: 6.

**21245 Thalicesessine**

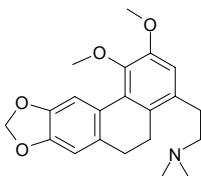
$C_{22}H_{27}NO_4$  (369.47). Pharm: Analgesic; anti-inflammatory. Source: WU BING TANG SONG CAO *Thalictrum sessile*. Ref: 658.

**21246 Thalicsimidine**

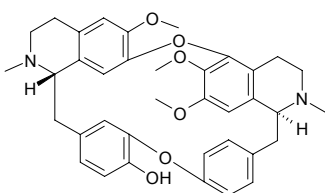
Purpureine [19775-47-4]  $C_{22}H_{27}NO_5$  (385.46). Crystals ( $Me_2CO$ ), mp 131~132°C,  $[\alpha]_D = +66.9^\circ$  ( $c = 1.42$ , EtOH). Source: BI ZHI TANG SONG CAO *Thalictrum strictum*, DUN YE TANG SONG CAO *Thalictrum ichangense* [Syn. *Thalictrum tripeltatum*; *Thalictrum multipeltatum*], GAO YUAN TANG SONG CAO *Thalictrum cultratum*, HUA TANG SONG CAO *Thalictrum filamentosum*, XIAO GUO TANG SONG CAO *Thalictrum microgynum* (root: content = 0.184%<sup>[5508]</sup>), YING SHUI HUANG LIAN *Thalictrum simplex* [Syn. *Thalictrum simplex* var. *brevipes*], ZI FAN LI ZHI *Annona purpurea*, *Phoebe molicella*. Ref: 6, 1521, 2981, 3111, 3116, 5508.

**21247 Thaliithuberine**

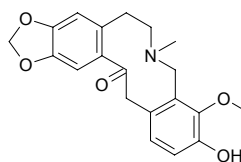
$C_{21}H_{25}NO_4$  (355.44). mp 126~127°C. Source: YAN GUO CAO *Thalictrum thunbergii*. Ref: 6.

**21248 Thalictine**

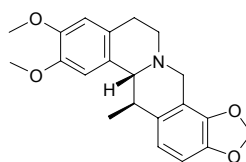
$C_{37}H_{40}N_2O_6$  (608.74). Source: GAO YUAN TANG SONG CAO *Thalictrum cultratum*, YAN GUO CAO *Thalictrum thunbergii*. Ref: 660.

**21249 Thalicticine**

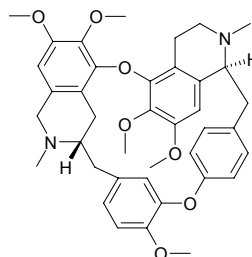
Thalicticine  $C_{20}H_{21}NO_5$  (355.39). mp 261~263°C. Source: YING SHUI HUANG LIAN *Thalictrum simplex* [Syn. *Thalictrum simplex* var. *brevipes*]. Ref: 6.

**21250 Thalictrifoline**

$C_{21}H_{23}NO_4$  (353.42). Source: YAN HUANG LIAN *Corydalis thalictrifolia*. Ref: 660.

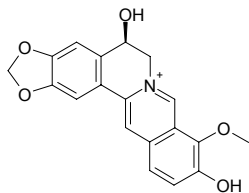
**21251 Thalidasine**

$C_{39}H_{44}N_2O_7$  (652.79). Yellowish amorphous solid, mp 105~107°C,  $[\alpha]_D^{27} = -70^\circ$  ( $c = 0.89$ , methanol). Pharm: Antibacterial (*Staphylococcus* sp., *Streptococcus faecalis*, *Bacillus coli*, *Bacillus pneumoniae*, *Bacillus pyocyaneus*, *Bacillus septicus*, *Bacillus dysenteriae*, *Bacillus proteus*, *Salmonella typhimurium* and *Salmonella gallinarum*, MIC = 100µg/mg, *Bacillus mycoides*, MIC = 25µg/mL, *Mycobacterium smegmatis*, *in vivo*); antineoplastic (rat  $W_{256}$ , ED = 200mg/kg; mus EAC, 70mg/(kg·d), InRt = 50%; mus  $S_{180}$ , 70mg/(kg·d), InRt = 50%; mus Lewis lung cancer, 100mg/(kg·d), InRt = 58%); antihypertensive (rbt, 4mg/kg iv, *in vivo*, blood pressure lowers by 2.40kPa and the action lasts 3min); used in treatment of cancer of stomach; LD<sub>50</sub> (mus, ip) = 520mg/kg, (mus, iv) = 120mg/kg. Source: CHENG KOU TANG SONG CAO *Thalictrum fargesii* (root: content = 0.196%<sup>[5508]</sup>), CU GUO TANG SONG CAO *Thalictrum dasycarpum*, DA YE TANG SONG CAO *Thalictrum faberi*, GAO SHAN TANG SONG CAO *Thalictrum alpinum*, TOU MING TANG SONG CAO *Thalictrum lucidum*, WAI JUAN TANG SONG CAO *Thalictrum revolutum*, XIAO TANG SONG CAO *Thalictrum minus*, ZHAN ZHI TANG SONG CAO *Thalictrum squarrosum* (root: mean content of 3 origins = 0.108%<sup>[5508]</sup>), ZOU WEN TANG SONG CAO *Thalictrum rugosum*. Ref: 661, 658, 5508.

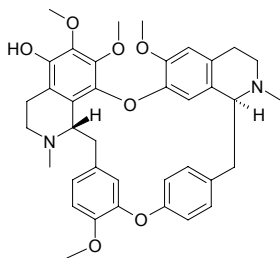


**21252 Thalidastine**

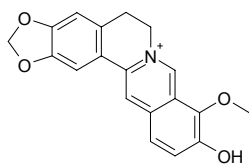
$C_{19}H_{17}NO_5$  (339.35). Source: NAN TIAN ZHU GENG *Nandina domestica*, XIANG TANG SONG CAO *Thalictrum foetidum*. Ref: 660.

**21253 Thalidezine**

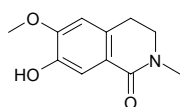
$C_{38}H_{42}N_2O_7$  (638.77). mp 158~159°C. Pharm: Antibacterial (*Bacillus pneumoniae* and *Mycobacterium* sp.); antifungal (*Candida albicans*, MIC = 100µg/mL). Source: BAN RUI TANG SONG CAO *Thalictrum petaloideum* (root: content < 0.001%)<sup>[5508]</sup>, BING GUO TANG SONG CAO *Thalictrum podocarpum*, DA YE TANG SONG CAO *Thalictrum faberi* (root: content < 0.001%)<sup>[5508]</sup>, FEN SHI TANG SONG CAO *Thalictrum fendleri*, JIN SI MA WEI LIAN *Thalictrum glandulosissimum* (root: content < 0.005%)<sup>[5508]</sup>, MA WEI LIAN *Thalictrum foliolosum* (root: content = 0.50%)<sup>[5508]</sup>, XIA XU TANG SONG CAO *Thalictrum atriplex* (root: content < 0.001%)<sup>[5508]</sup>, XIAO GUO TANG SONG CAO *Thalictrum microgynum* (root: content < 0.001%)<sup>[5508]</sup>, YAN GUO CAO *Thalictrum thunbergii* (root: content = 0.16%)<sup>[5508]</sup>, YING SHUI HUANG LIAN *Thalictrum simplex* [Syn. *Thalictrum simplex* var. *brevipes*] (root: content < 0.001%)<sup>[5508]</sup>. Ref: 6, 658, 5508.

**21254 Thalifendine**

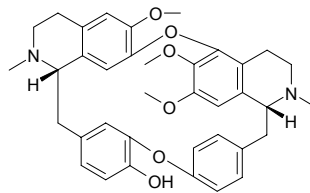
[18207-71-1]  $C_{19}H_{16}NO_4$  (322.34). Source: HE NAN TANG SONG CAO *Thalictrum honanense*, MA WEI LIAN *Thalictrum foliolosum*. Ref: 537, 660.

**21255 Thalifoline**

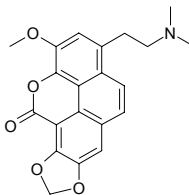
$C_{11}H_{13}NO_3$  (207.23). Source: JI YING SU *Argemone mexicana*, BIAN FU GE GEN *Menispermum dauricum*, CHANG YE HOU KE GUI *Cryptocarya longifolia* (leaf, stem, root and fruit), TIE XIAN JUE YE TANG SONG CAO *Thalictrum minus* var. *adiantifolium* (root). Ref: 660, 1521, 3792.

**21256 Thalifortine**

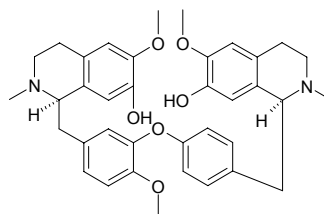
$C_{37}H_{40}N_2O_6$  (608.74). Source: HUA DONG TANG SONG CAO *Thalictrum fortunei* Ref: 660.

**21257 Thaligluconone**

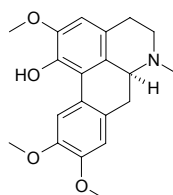
$C_{21}H_{19}NO_5$  (365.39). Yellow acicular crystals (methanol), mp 197°C; 190~191°C, 115°C melts then resolidifies, 188~190°C, melts again. Pharm: Antibacterial (*Staphylococcus aureus*, *Bacillus coli* and *Bacillus pneumoniae*, MIC = 100µg/mL, *Mycobacterium smegmatis*, MIC = 25µg/mL); antifungal (*Candida albicans*, MIC = 50µg/mL); antihypertensive (dog, 1.0mg/kg, blood pressure lowers by 4.00kPa, rbt). Source: BING GUO TANG SONG CAO *Thalictrum podocarpum*, LV TANG SONG CAO *Thalictrum glaucum*, TOU MING TANG SONG CAO *Thalictrum lucidum*, WAI JUAN TANG SONG CAO *Thalictrum revolutum*, XIAO TANG SONG CAO *Thalictrum minus*, ZA XING TANG SONG CAO *Thalictrum polygamum*, ZOU WEN TANG SONG CAO *Thalictrum rugosum*. Ref: 661.

**21258 (+)-Thaligrisine**

$C_{37}H_{42}N_2O_6$  (610.76). Pharm: Mitochondrial respiratory chain complex I inhibitor (IC<sub>50</sub> = (1.27±0.18)µmol/L, Rolliniastatin-1, IC<sub>50</sub> = (0.6±0.04)nmol/L, Rotenone, IC<sub>50</sub> = (5.10±0.90)nmol/L)<sup>[4954]</sup>. Source: GE LUN BI YA MU BAN SHU *Xylopiya columbiana* (fruit). Ref: 4954.

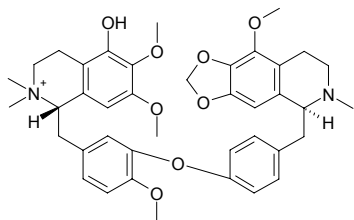
**21259 Thaliporphine**

$C_{20}H_{23}NO_4$  (341.41). Source: DUN YE TANG SONG CAO *Thalictrum ichangense* [Syn. *Thalictrum tripeltatum*; *Thalictrum multipeltatum*], GAO SHAN TANG SONG CAO *Thalictrum alpinum*, YAN HU SUO *Corydalis yanhusuo* [Syn. *Corydalis turtschaninovii* f. *yanhusuo*]. Ref: 660.

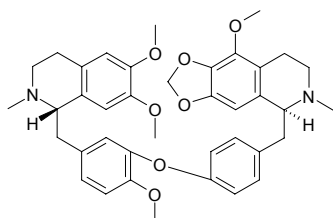


**21260 Thalirabine**

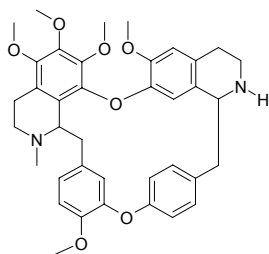
$C_{40}H_{47}N_2O_8^+$  (683.83). Hydroxide, cream-colored amorphous solid, mp 131~132°C (dec),  $[\alpha]_D^{26} = +142^\circ$  ( $c = 0.548$ , methanol). **Pharm:** Antibacterial (*Mycobacterium smegmatis*, EC = 100 $\mu$ g/mL); antihypertensive. **Source:** XIAO TANG SONG CAO *Thalictrum minus*. **Ref:** 661.

**21261 Thaliracebine**

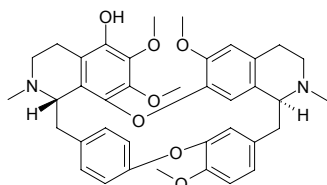
$C_{39}H_{44}N_2O_7$  (652.79). Amorphous solid, mp 83~84°C,  $[\alpha]_D^{26} = +121^\circ$  ( $c = 0.28$ , methanol). **Pharm:** Antibacterial (*Mycobacterium smegmatis*, EC = 100 $\mu$ g/mL); antihypertensive (rbt, 0.1mg/kg iv, blood pressure lowers by 2.67~2.93kPa and the action lasts 0.5min). **Source:** DA YE TANG SONG CAO *Thalictrum faberi*, XIAO TANG SONG CAO *Thalictrum minus*. **Ref:** 661.

**21262 Thaliamine**

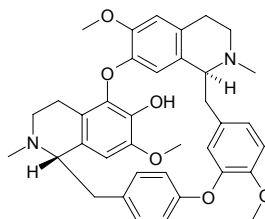
$C_{38}H_{42}N_2O_7$  (638.77). mp 191~194°C. **Source:** YING SHUI HUANG LIAN *Thalictrum simplex* [Syn. *Thalictrum simplex* var. *brevipes*]. **Ref:** 6.

**21263 Thalispine**

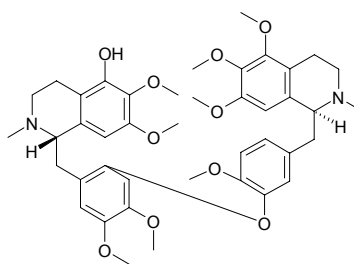
$C_{38}H_{42}N_2O_7$  (638.77). Colorless acicular crystals (water-methanol), mp 151~153°C, 143~145°C,  $[\alpha]_D = -109^\circ$  ( $c = 0.17$ , methanol). **Pharm:** Antiarrhythmic (animal, induced by aconitine); antispasmodic (rbt and rat intestine); inhibits cardiac fibrillation (animal, induced by electrostimulation, 10mg/kg iv); CNS depressant (mus); antihypertensive (dog, cat and rbt); LD (rat, orl, death on third day) = 612mg/kg. **Source:** MA WEI LIAN *Thalictrum foliolosum*, ZI JIN YE TANG SONG CAO *Thalictrum isopyroides*, ZOU WEN TANG SONG CAO *Thalictrum rugosum*. **Ref:** 658.

**21264 Thalmine**

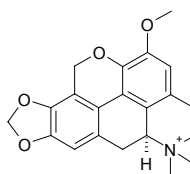
$C_{37}H_{40}N_2O_6$  (608.74). Crystals (50% ethanol), mp 140~142°C,  $[\alpha]_D^{25} = +36.1^\circ$  ( $c = 0.92$ , ethanol). **Pharm:** Antineoplastic (rat and mus, ascites lymphoma, *in vivo*); anti-inflammatory (animal model). **Source:** *Thalictrum* sp. **Ref:** 658.

**21265 Thalmineline**

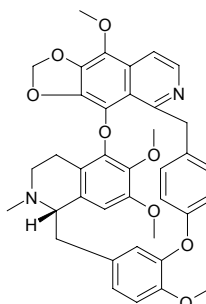
$C_{45}H_{52}N_2O_{10}$  (744.89). **Source:** GAO YUAN TANG SONG CAO *Thalictrum cultratum*, E MEI TANG SONG CAO *Thalictrum omeiense*. **Ref:** 660.

**21266 Thalphenine**

$C_{21}H_{22}NO_4^+$  (352.39). Chloride: colorless acicular crystals (acetone-methanol), mp 186~187°C (dec),  $[\alpha]_D = +69^\circ$  ( $c = 1.3$ , ethanol); bitter acid salt: mp 180~182°C (dec). **Pharm:** Antibacterial (*Staphylococcus aureus* and *Mycobacterium smegmatis*, MIC = 1000 $\mu$ g/mL); antifungal (*Candida albicans*, MIC = 1000 $\mu$ g/mL). **Source:** TAI WAN HUANG BO *Phellodendron amurense* var. *wilsonii*, WAI JUAN TANG SONG CAO *Thalictrum revolutum*, XIAO TANG SONG CAO *Thalictrum minus*, ZA XING TANG SONG CAO *Thalictrum polygamum*, ZOU WEN TANG SONG CAO *Thalictrum rugosum*. **Ref:** 661.

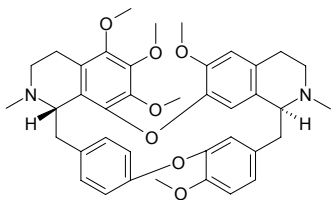
**21267 Thalphine**

$C_{38}H_{36}N_2O_8$  (648.72). **Source:** XIANG TANG SONG CAO *Thalictrum foetidum*. **Ref:** 6, 660.

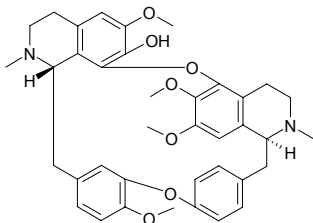


**21268 Thalrugosaminine**

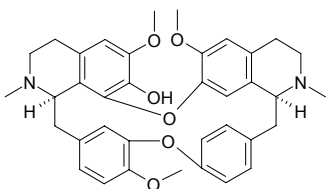
$C_{39}H_{44}N_2O_7$  (652.79). Yellowish amorphous solid, mp 103~105°C,  $[\alpha]_D^{25} = -90.4^\circ$  ( $c = 0.104$ , methanol). **Pharm:** Antibacterial (*Mycobacterium smegmatis*, MIC = 50µg/mL); antihypertensive (rbt). **Source:** GAO SHAN TANG SONG CAO *Thalictrum alpinum*, MA WEI LIAN *Thalictrum foliolosum*, WAI JUAN TANG SONG CAO *Thalictrum revolutum*, XIAO TANG SONG CAO *Thalictrum minus*, ZOU WEN TANG SONG CAO *Thalictrum rugosum*. **Ref:** 661.

**21269 Thalrugosidine**

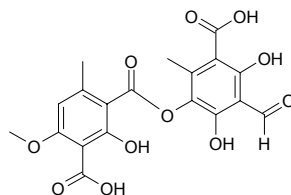
$C_{38}H_{42}N_2O_7$  (638.77). Colorless acicular crystals (methanol), mp 172~174°C,  $[\alpha]_D^{30} = -185^\circ$  (methanol). **Pharm:** Antibacterial (*Staphylococcus aureus*, *Streptococcus faecalis*, *Bacillus coli*, *Bacillus pneumoniae*, *Bacillus pyocyaneus*, *Bacillus dysenteriae*, *Bacillus proteus*, *Bacillus septicus*, *Mycobacterium smegmatis* and *Salmonella typhimurium*, MIC = 100µg/mL). **Source:** GAO SHAN TANG SONG CAO *Thalictrum alpinum*, MA WEI LIAN *Thalictrum foliolosum*, ZOU WEN TANG SONG CAO *Thalictrum rugosum*. **Ref:** 661.

**21270 Thalrugosine**

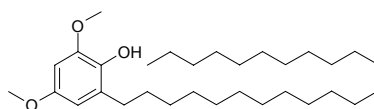
$C_{37}H_{40}N_2O_6$  (608.74). Colorless acicular crystals (absolute ether), mp 216~218°C,  $[\alpha]_D^{30} = +128^\circ$  (methanol),  $[\alpha]_D^{21} = +162.9^\circ$  ( $c = 1.16$ , methanol). **Pharm:** Antibacterial (*Staphylococcus aureus*, *Streptococcus faecalis*, *Bacillus coli*, *Bacillus pneumoniae*, *Bacillus pyocyaneus*, *Bacillus dysenteriae*, *Bacillus proteus*, *Bacillus septicus*, *Mycobacterium smegmatis* and *Salmonella typhimurium*, MIC = 100µg/mL); antifungal (*Candida albicans*, MIC = 100µg/mL); antihypertensive (dog, 0.5mg/kg and 1.0mg/kg, blood pressure lowered by 1.33kPa and 6.90kPa respectively). **Source:** PU FU SHI DA GONG LAO *Mahonia repens*, TOU MING TANG SONG CAO *Thalictrum lucidum*, XIAO TANG SONG CAO *Thalictrum minus*, YIN BU HUAN *Cyclea barbata*, ZOU WEN TANG SONG CAO *Thalictrum rugosum*. **Ref:** 661.

**21271 Thamnic acid**

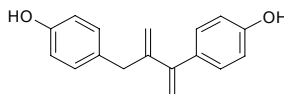
$C_{19}H_{16}O_{11}$  (420.33). mp 223°C. **Source:** XUE CHA *Thamnia vermicularis*. **Ref:** 6.

**21272 Thamnin**

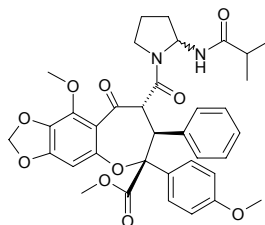
$C_{31}H_{56}O_3$  (476.79). Amorphous substance. **Source:** XUE CHA *Thamnia vermicularis*. **Ref:** 2256.

**21273 Thannilignan**

$C_{17}H_{16}O_2$  (252.32). **Source:** WEI MAO HE ZI *Terminalia chebula* var. *tomentella*. **Ref:** 2268.

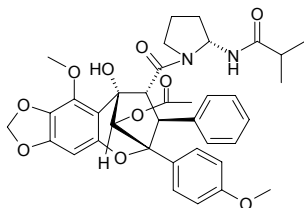
**21274 Thapoxepine A**

(+)-(2*R*,3*S*,4*R*,2'*RS*)-1-[2,3,4,5-Tetrahydro-2-methoxycarbonyl-2-(4-methoxyphenyl)-6-methoxy-7,8-methylenedioxy-5-oxo-3-phenyl-1-benzoxepin-4-carbonyl]-2-(2-methylpropanoylamino)-pyrrolidine  $C_{36}H_{38}N_2O_{10}$  (658.71). Epimeric mixture of (2'*S*:2'*R* = 2:1),  $[\alpha]_D^{20} = +55^\circ$  ( $c = 0.6$ ,  $CHCl_3$ ). **Pharm:** Insecticidal inactive (neonate larvae of *Spodoptera littoralis*, survival rate  $LC_{50} > 50\mu\text{g/g}$ , control Azadirachtin, survival rate  $LC_{50} = 6.1\mu\text{g/g}$ ; growth inhibition  $EC_{50} > 50\mu\text{g/g}$ , Azadirachtin, growth inhibition  $EC_{50} = 0.11\mu\text{g/g}$ ). **Source:** KE SHI MI ZI LAN *Aglaia edulis*. **Ref:** 2355.

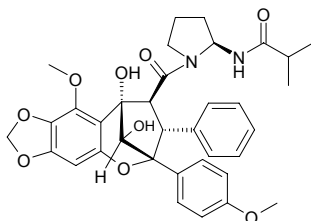


**21275 Thapsakin A 10-O-acetate**

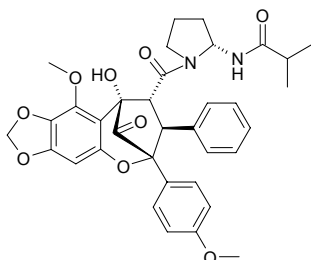
(-)-(2*R*,3*S*,4*R*,5*R*,10*S*,2'*S*)-1-[2,3,4,5-Tetrahydro-10-acetyloxy-5-hydroxy-2-(4-methoxyphenyl)-6-methoxy-7,8-methylenedioxy-3-phenyl-2,5-methano-1-benzoxepin-4-carbonyl]-2-(2-methylpropanoylamino)-pyrrolidine C<sub>37</sub>H<sub>40</sub>N<sub>2</sub>O<sub>10</sub> (672.74). mp. 150~152°C, [α]<sub>D</sub><sup>20</sup> = -24° (c = 0.5, CHCl<sub>3</sub>). **Pharm:** Insecticidal inactive (neonate larvae of *Spodoptera littoralis*, survival rate LC<sub>50</sub> > 50μg/g, control Azadirachtin, survival rate LC<sub>50</sub> = 6.1μg/g; growth inhibition EC<sub>50</sub> > 50μg/g, Azadirachtin, growth inhibition EC<sub>50</sub> = 0.11μg/g). **Source:** KE SHI MI ZI LAN *Aglaiia edulis*. **Ref:** 2355.

**21276 Thapsakin B**

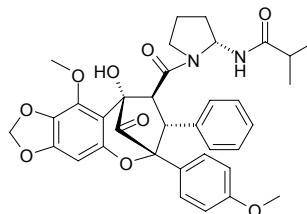
(+)-(2*R*,3*R*,4*S*,5*R*,10*S*,2'*R**S*)-1-[2,3,4,5-Tetrahydro-5,10-dihydroxy-2-(4-methoxyphenyl)-6-methoxy-7,8-methylenedioxy-3-phenyl-2,5-methano-1-benzoxepin-4-carbonyl]-2-(2-methylpropanoylamino)-pyrrolidine [250161-87-6] C<sub>35</sub>H<sub>38</sub>N<sub>2</sub>O<sub>9</sub> (630.70). [α]<sub>D</sub><sup>20</sup> = +24° (c = 0.4, CHCl<sub>3</sub>). **Source:** KE SHI MI ZI LAN *Aglaiia edulis*. **Ref:** 2355.

**21277 Thapsakone A**

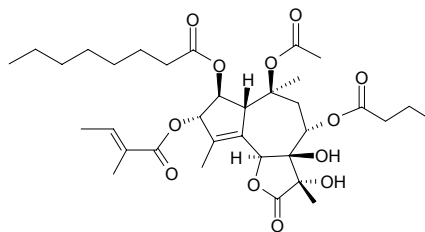
(+)-(2*R*,3*S*,4*R*,5*R*,2'*S*)-1-[2,3,4,5-Tetrahydro-5-hydroxy-2-(4-methoxyphenyl)-6-methoxy-7,8-methylenedioxy-10-oxo-3-phenyl-2,5-methano-1-benzoxepin-4-carbonyl]-2-(2-methylpropanoylamino)-pyrrolidine C<sub>35</sub>H<sub>36</sub>N<sub>2</sub>O<sub>9</sub> (628.69). [α]<sub>D</sub><sup>20</sup> = +23° (c = 0.6, CHCl<sub>3</sub>). **Source:** KE SHI MI ZI LAN *Aglaiia edulis*. **Ref:** 2355.

**21278 Thapsakone B**

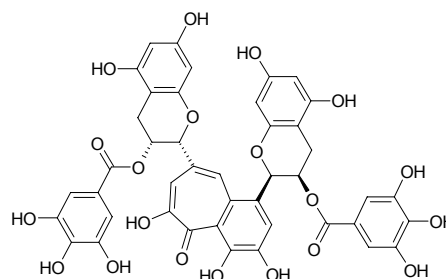
(+)-(2*R*,3*R*,4*S*,5*R*,2'*S*)-1-[2,3,4,5-Tetrahydro-5-hydroxy-2-(4-methoxyphenyl)-6-methoxy-7,8-methylenedioxy-10-oxo-3-phenyl-2,5-methano-1-benzoxepin-4-carbonyl]-2-(2-methylpropanoylamino)-pyrrolidine C<sub>35</sub>H<sub>36</sub>N<sub>2</sub>O<sub>9</sub> (628.69). [α]<sub>D</sub><sup>20</sup> = +8° (c = 0.2, CHCl<sub>3</sub>). **Source:** KE SHI MI ZI LAN *Aglaiia edulis*. **Ref:** 2355.

**21279 Thapsigargin**

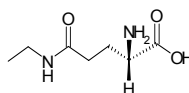
C<sub>34</sub>H<sub>50</sub>O<sub>12</sub> (650.77). **Pharm:** Activates basophylic cells; activates mastocytes; activates neutrophile granulocytes (during inflammatory reaction). **Source:** DU HU LUO BO *Thapsia garganica*. **Ref:** 658.

**21280 Theaflavin 3,3'-digallate**

C<sub>43</sub>H<sub>32</sub>O<sub>20</sub> (868.72). **Pharm:** Anti-inflammatory (NO production inhibitor)<sup>[44][51]</sup>. **Source:** WU LONG CHA *Camellia sinensis* var. *viridis*. **Ref:** 1521. 4415.

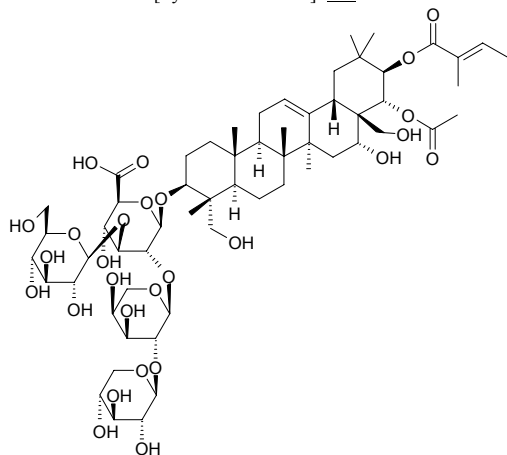
**21281 Theanine**

C<sub>7</sub>H<sub>14</sub>N<sub>2</sub>O<sub>3</sub> (174.20). mp 217~218°C (dec). **Source:** CHA ZI XIN *Camellia oleifera*, CHA ZI *Camellia sinensis* [Syn. *Thea sinensis*], YOU CHA GEN PI *Camellia oleifera*. **Ref:** 6.

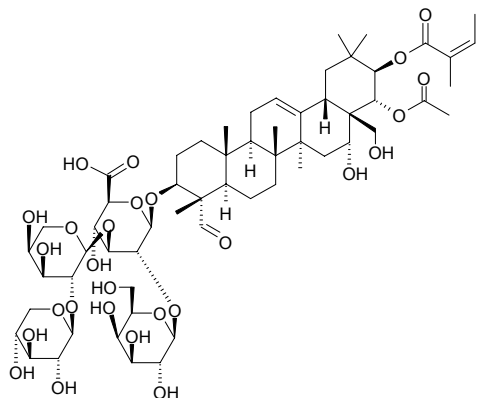


**21282 Theasaponin**

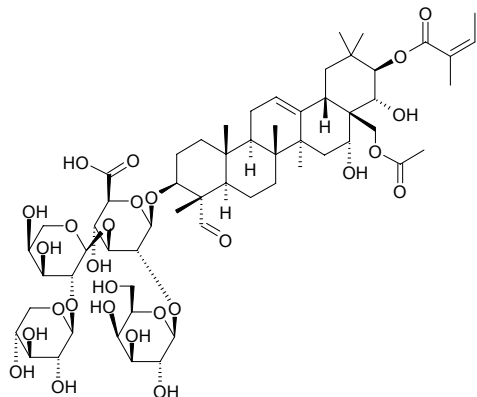
$C_{59}H_{92}O_{27}$  (1233.37). **Pharm:** Hemolytic; anti-exudation. **Source:** CHA YE *Camellia sinensis* [Syn. *Thea sinensis*]. **Ref:** 658.

**21283 Theasaponin E<sub>1</sub>**

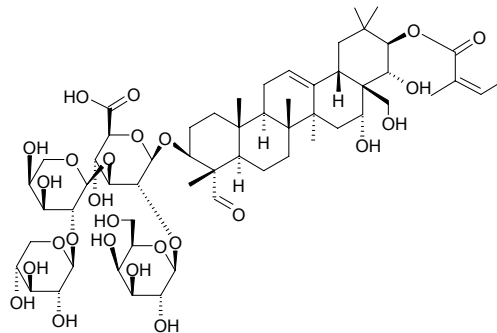
$C_{59}H_{90}O_{27}$  (1231.36). **Pharm:** Inhibits ethanol-induced gastric mucosal lesions (rat, 5.0mg/kg, orl). **Source:** CHA ZI *Camellia sinensis* [Syn. *Thea sinensis*]. **Ref:** 4537.

**21284 Theasaponin E<sub>2</sub>**

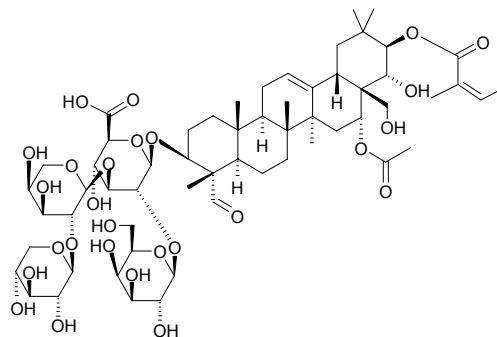
$C_{59}H_{90}O_{27}$  (1231.36). **Pharm:** Inhibits ethanol-induced gastric mucosal lesions (rat, 5.0mg/kg, orl). **Source:** CHA ZI *Camellia sinensis* [Syn. *Thea sinensis*]. **Ref:** 4537.

**21285 Theasaponin E<sub>3</sub>**

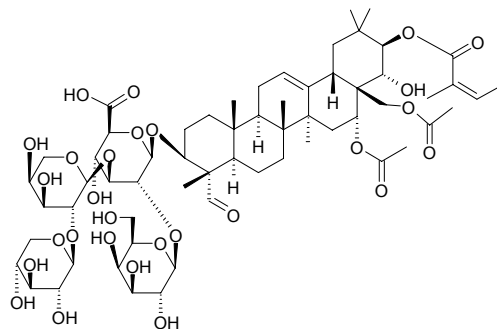
21-*O*-Angeloyltheasa-21-*O*-angeloyltheasapogenol E 3-*O*- $\beta$ -*D*-galactopyranosyl(1 $\rightarrow$ 2)[ $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucopyranosiduronic acid  $C_{57}H_{88}O_{26}$  (1189.32). Colorless fine crystals ( $CHCl_3$ -MeOH), mp 214.4~215.5°C,  $[\alpha]_D^{27} = +17.0^\circ$  ( $c = 0.95$ , MeOH). **Source:** CHA ZI *Camellia sinensis* [Syn. *Thea sinensis*]. **Ref:** 4537.

**21286 Theasaponin E<sub>4</sub>**

16-*O*-Acetyl-21-*O*-angeloyltheasapogenol E 3-*O*- $\beta$ -*D*-galactopyranosyl(1 $\rightarrow$ 2)[ $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucopyranosiduronic acid  $C_{59}H_{90}O_{27}$  (1231.36). Colorless fine crystals ( $CHCl_3$ -MeOH), mp 238.8~224.3°C,  $[\alpha]_D^{27} = +17.4^\circ$  ( $c = 1.00$ , MeOH). **Source:** CHA ZI *Camellia sinensis* [Syn. *Thea sinensis*]. **Ref:** 4537.

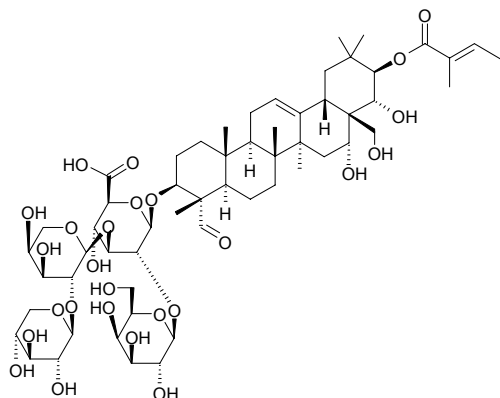
**21287 Theasaponin E<sub>5</sub>**

16,28-Di-*O*-acetyl-21-*O*-angeloyltheasapogenol E 3-*O*- $\beta$ -*D*-galactopyranosyl(1 $\rightarrow$ 2)[ $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucopyranosiduronic acid  $C_{61}H_{92}O_{28}$  (1273.40). Colorless fine crystals ( $CHCl_3$ -MeOH), mp 216.2~216.4°C,  $[\alpha]_D^{27} = +21.5^\circ$  ( $c = 1.00$ , MeOH). **Pharm:** Inhibits ethanol-induced gastric mucosal lesions (rat, 5.0mg/kg, orl). **Source:** CHA ZI *Camellia sinensis* [Syn. *Thea sinensis*]. **Ref:** 4537.

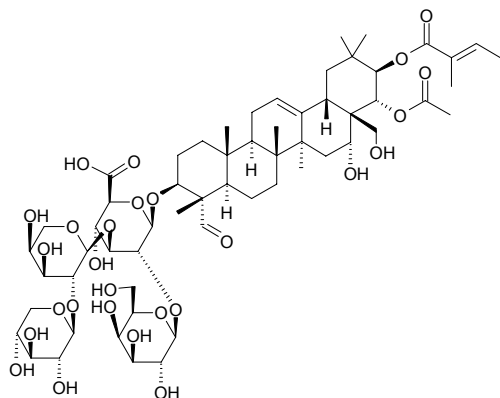


**21288 Theasaponin E<sub>6</sub>**

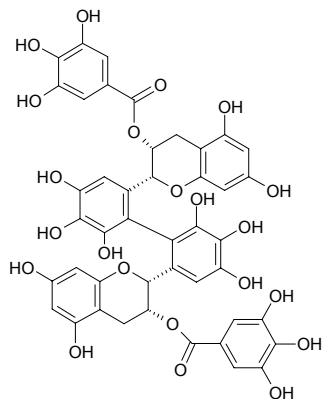
21-*O*-Tigloyltheasapogenol E 3-*O*-β-*D*-galactopyranosyl(1→2)[β-*D*-xylopyranosyl(1→2)-α-*L*-arabinopyranosyl(1→3)]-β-*D*-glucopyranosiduronic acid C<sub>57</sub>H<sub>88</sub>O<sub>26</sub> (1189.32). Colorless fine crystals (CHCl<sub>3</sub>-MeOH), mp 209.1~210.0°C, [α]<sub>D</sub><sup>27</sup> = +18.2° (c = 1.50, MeOH). Source: CHA ZI *Camellia sinensis* [Syn. *Thea sinensis*]. Ref: 4537.

**21289 Theasaponin E<sub>7</sub>**

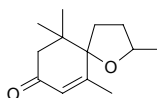
21-*O*-Tigloyl-22-*O*-acetyltheasapogenol E 3-*O*-β-*D*-galactopyranosyl(1→2)[β-*D*-xylopyranosyl(1→2)-α-*L*-arabinopyranosyl(1→3)]-β-*D*-glucopyranosiduronic acid C<sub>59</sub>H<sub>90</sub>O<sub>27</sub> (1231.36). Colorless fine crystals (CHCl<sub>3</sub>-MeOH), mp 196.4~198.0°C, [α]<sub>D</sub><sup>27</sup> = +10.9° (c = 3.00, MeOH). Source: CHA ZI *Camellia sinensis* [Syn. *Thea sinensis*]. Ref: 4537.

**21290 Theasinensin A**

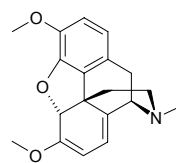
C<sub>44</sub>H<sub>34</sub>O<sub>22</sub> (914.75). Source: CHA YE *Camellia sinensis* [Syn. *Thea sinensis*]. Ref: 658.

**21291 Theaspirone**

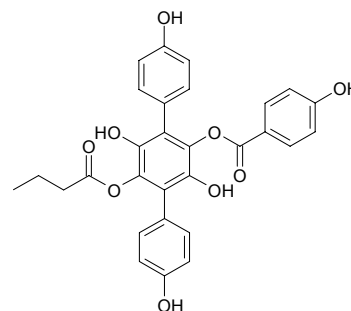
C<sub>13</sub>H<sub>20</sub>O<sub>2</sub> (208.30). Source: CHA YE *Camellia sinensis* [Syn. *Thea sinensis*]. Ref: 6.

**21292 Thebaine**

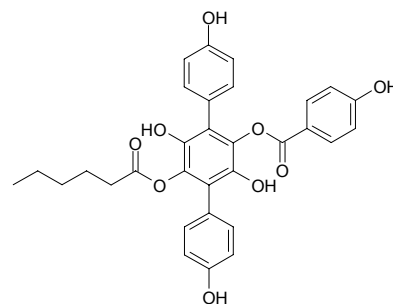
[115-37-7] C<sub>19</sub>H<sub>21</sub>NO<sub>3</sub> (311.38). mp 193°C. Pharm: Analgesic (habit forming); anesthetic; CNS depressant (low dose); paralyzes respiration (high dose); spasmogenic (high dose); LD<sub>50</sub> (mus, ip) = 20mg/kg, (mus, sc) = 31mg/kg, (rbt, sc) = 14mg/kg. Source: LI CHUN HUA *Papaver commutatum* [Syn. *Papaver rhoeas*], LI CHUN HUA *Papaver commutatum* [Syn. *Papaver rhoeas*], YA PIAN *Papaver somniferum*, YING SU *Papaver somniferum*, YING SU KE *Papaver somniferum*. Ref: 6, 658.

**21293 Thelephantin A**

C<sub>29</sub>H<sub>24</sub>O<sub>9</sub> (516.51). Grayish solid. Source: JIN HUANG GE JUN *Thelephora aurantiotincta*. Ref: 2038.

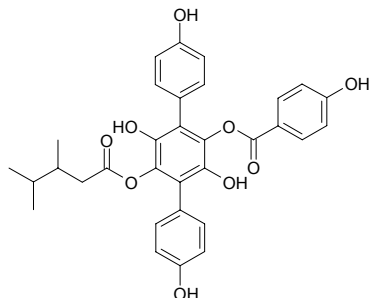
**21294 Thelephantin B**

C<sub>31</sub>H<sub>28</sub>O<sub>9</sub> (544.56). Grayish solid. Source: JIN HUANG GE JUN *Thelephora aurantiotincta*. Ref: 2038.

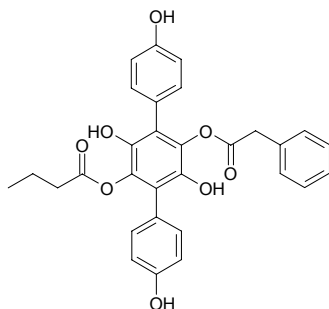


**21295 Thelephantin C**

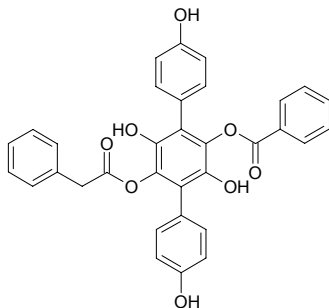
$C_{32}H_{30}O_9$  (558.58). Grayish solid,  $[\alpha]_D^{20} = +3.75^\circ$  ( $c = 1.01$ , MeOH). Source: JIN HUANG GE JUN *Thelephora aurantiotincta*. Ref: 2038.

**21296 Thelephantin D**

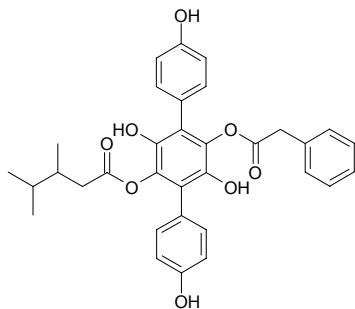
$C_{30}H_{26}O_8$  (514.54). Light red brown solid. Source: JIN HUANG GE JUN *Thelephora aurantiotincta*. Ref: 3423.

**21297 Thelephantin E**

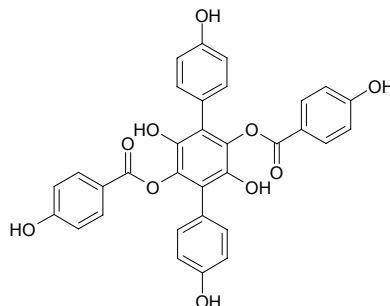
$C_{33}H_{24}O_8$  (548.55). Light red brown solid. Source: JIN HUANG GE JUN *Thelephora aurantiotincta*. Ref: 3423.

**21298 Thelephantin F**

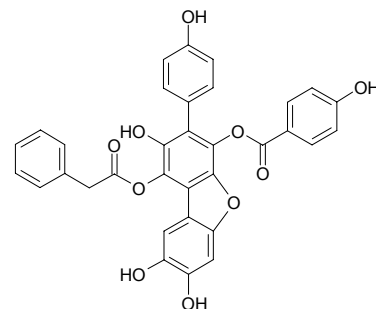
$C_{33}H_{32}O_8$  (556.62). Grayish solid,  $[\alpha]_D^{20} = +2.93^\circ$  ( $c = 0.82$ ,  $CH_3OH$ ). Source: JIN HUANG GE JUN *Thelephora aurantiotincta*. Ref: 3423.

**21299 Thelephantin G**

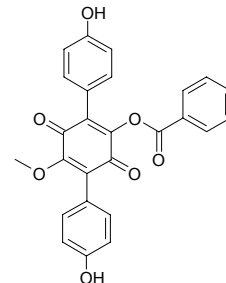
$C_{32}H_{22}O_{10}$  (556.53). Light green brown solid. Source: JIN HUANG GE JUN *Thelephora aurantiotincta*. Ref: 3423.

**21300 Thelephantin H**

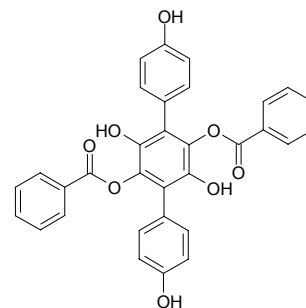
$C_{33}H_{22}O_{10}$  (578.54). Grayish solid. Source: JIN HUANG GE JUN *Thelephora aurantiotincta*. Ref: 3423.

**21301 Thelephantin I**

4,4''-Dihydroxy-2'-benzoyloxy-5'-methoxy [1,1':4',1''-terphenyl]-3',6'-dione  $C_{26}H_{18}O_7$  (442.43). Reddish orange solid. Source: LAN SE YA CHI JUN *Hydnellum caeruleum*. Ref: 3809.

**21302 Thelephantin J**

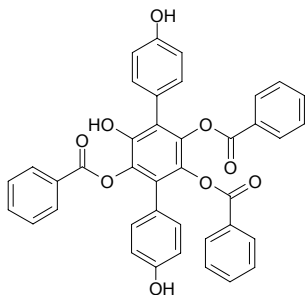
3',4,4'',6'-Tetrahydroxy-2',5'-dibenzoyloxy [1,1':4',1''-terphenyl]  $C_{32}H_{22}O_8$  (534.53). Grayish solid. Source: LAN SE YA CHI JUN *Hydnellum caeruleum*. Ref: 3809.



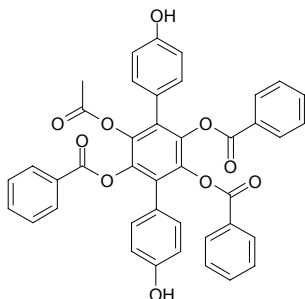


**21303 Thelephantin K**

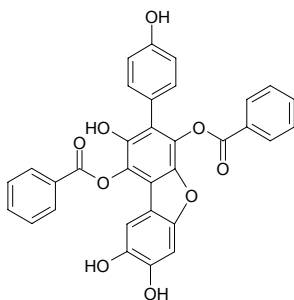
4,4'',6''-Trihydroxy-2',3',5'-tribenzoyloxy [1,1':4',1''-terphenyl] C<sub>39</sub>H<sub>26</sub>O<sub>9</sub> (638.64). Grayish solid. Source: LAN SE YA CHI JUN *Hydnellum caeruleum*. Ref: 3809.

**21304 Thelephantin L**

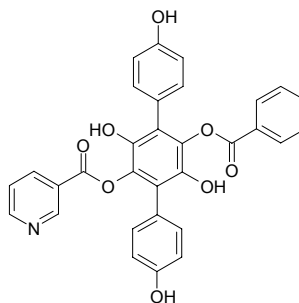
4,4''-Dihydroxy-2',3',5'-tribenzoyloxy-6'-acetyloxy[1,1':4',1''-terphenyl] C<sub>41</sub>H<sub>28</sub>O<sub>10</sub> (680.67). Grayish solid. Source: LAN SE YA CHI JUN *Hydnellum caeruleum*. Ref: 3809.

**21305 Thelephantin M**

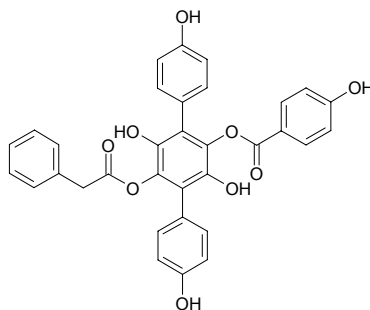
Di[benzoic acid]2,7,8-trihydroxy-3-(4-hydroxyphenyl)dibenzofuran-1,4-diyl C<sub>32</sub>H<sub>20</sub>O<sub>9</sub> (548.51). Yellow brown solid. Source: LAN SE YA CHI JUN *Hydnellum caeruleum*. Ref: 3809.

**21306 Thelephantin N**

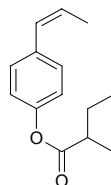
3',4,4'',6''-Tetrahydroxy-2'-benzoyloxy-5'-(3-pyridinecarboxyl)[1,1':4',1''-terphenyl] C<sub>31</sub>H<sub>21</sub>NO<sub>8</sub> (535.51). Grayish solid. Source: LAN SE YA CHI JUN *Hydnellum caeruleum*. Ref: 3809.

**21307 Thelephorin A**

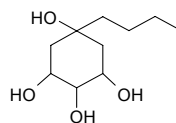
C<sub>33</sub>H<sub>24</sub>O<sub>9</sub> (564.55). Source: JIN HUANG GE JUN *Thelephora aurantiotincta*. Ref: 3423.

**21308 Thellungianin F**

C<sub>14</sub>H<sub>18</sub>O<sub>2</sub> (218.30). Colorless liquid. Source: YANG HONG SHAN *Pimpinella thelungiana*. Ref: 806.

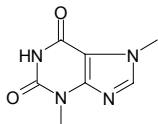
**21309 Thellungianol**

1-Butyl-3,4,5-trihydroxy-cyclohexanol C<sub>10</sub>H<sub>20</sub>O<sub>4</sub> (204.27). Colorless acicular crystals, mp 156~160°C. Source: YANG HONG SHAN *Pimpinella thelungiana*. Ref: 805.

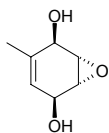


**21310 Theobromine**

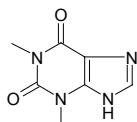
3,7-Dimethylxanthine [83-67-0] C<sub>7</sub>H<sub>8</sub>N<sub>4</sub>O<sub>2</sub> (180.17). Acicular crystals, mp 357°C, 290~295°C (sub), slightly soluble in ethanol, water, almost insoluble in benzene, chloroform, ether.<sup>[5507]</sup> **Pharm:** Coronary vasodilator; diuretic; CNS stimulant; used in treatment of hepatic edema; inhibits cancer cell invasion inactive (MM1 cells, *in vitro*, 10µg/mL)<sup>[4329]</sup>. **Source:** BA XI XIANG WU HUAN ZI *Paullinia cupana*, CHA YE *Camellia sinensis* [Syn. *Thea sinensis*], HEI ZI LI GUO JI SHENG *Scurrura atropurpurea*, KE KE *Theobroma cacao*, SU DAN KE LE GUO *Cola acuminata*. **Ref:** 6, 658, 4329, 5507.

**21311 Theobroxide**

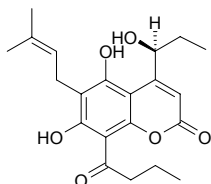
C<sub>7</sub>H<sub>10</sub>O<sub>3</sub> (142.16). **Pharm:** Potato micro-tuber inducer (10µmol/L). **Source:** *Lasiodiplodia theobromae*. **Ref:** 3966.

**21312 Theophylline**

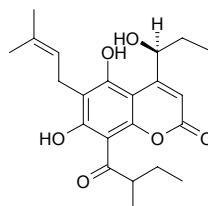
Theocin; Theolix; Theograd; Armophylline [58-55-9] C<sub>7</sub>H<sub>8</sub>N<sub>4</sub>O<sub>2</sub> (180.17). mp 264°C; soluble in water, ethanol, chloroform, slightly ether.<sup>[5507]</sup> **Pharm:** Coronary vasodilator; diuretic; reduces vasa publica permeability and prevents exudative pulmonary edema (gpg); antiasthmatic (bronchial smooth muscle relaxant); stimulates center and cardiac muscles; used in treatment of angina pectoris, asthma, and cardiac edema. **Source:** CHA YE *Camellia sinensis* [Syn. *Thea sinensis*] (in 1889, discovered by Kossel<sup>[5507]</sup>), BA XI XIANG WU HUAN ZI *Paullinia cupana*. **Ref:** 6, 658, 5507.

**21313 Theraphin A**

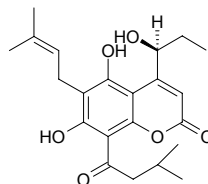
C<sub>21</sub>H<sub>26</sub>O<sub>6</sub> (374.44). Yellowish oil, [α]<sub>D</sub> = -6.2° (c = 0.1, MeOH). **Pharm:** Cytotoxic (Lu1, IC<sub>50</sub> = 7.5µmol/L, Col2, IC<sub>50</sub> = 7.2µmol/L, KB, IC<sub>50</sub> = 3.5µmol/L, LNCaP, IC<sub>50</sub> = 3.5µmol/L); antomalarial (*Plasmodium falciparum* clone D6, IC<sub>50</sub> = 9.7µmol/L, SI = 0.36; *Plasmodium falciparum* clone W2, IC<sub>50</sub> = 7.7µmol/L, SI = 0.45; control Chloroquine, IC<sub>50</sub> = 0.012, 0.13µmol/L, SI = 4500, 149, respectively). **Source:** *Kayea assamica*. **Ref:** 3437.

**21314 Theraphin B**

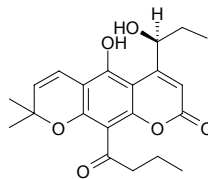
C<sub>22</sub>H<sub>28</sub>O<sub>6</sub> (388.46). Yellowish oil, [α]<sub>D</sub> = -12.7° (c = 0.2, MeOH). **Pharm:** Cytotoxic (Lu1, IC<sub>50</sub> = 16.2µmol/L, Col2, IC<sub>50</sub> = 7.2µmol/L, KB, IC<sub>50</sub> = 5.7µmol/L, LNCaP, IC<sub>50</sub> = 3.4µmol/L); antomalarial (*Plasmodium falciparum* clone D6, IC<sub>50</sub> = 9.8µmol/L, SI = 0.58; *Plasmodium falciparum* clone W2, IC<sub>50</sub> = 9.6µmol/L, SI = 0.59; control Chloroquine, IC<sub>50</sub> = 0.012, 0.13µmol/L, SI = 4500, 149, respectively). **Source:** *Kayea assamica*. **Ref:** 3437.

**21315 Theraphin C**

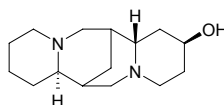
C<sub>22</sub>H<sub>28</sub>O<sub>6</sub> (388.46). Yellowish oil, [α]<sub>D</sub> = -7.1° (c = 0.2, MeOH). **Pharm:** Cytotoxic (Lu1, IC<sub>50</sub> = 42.8µmol/L, Col2, IC<sub>50</sub> = 13.1µmol/L, KB, IC<sub>50</sub> = 6.2µmol/L, LNCaP, IC<sub>50</sub> = 6.4µmol/L); antomalarial (*Plasmodium falciparum* clone D6, IC<sub>50</sub> = 9.5µmol/L, SI = 0.65; *Plasmodium falciparum* clone W2, IC<sub>50</sub> = 5.1µmol/L, SI = 1.22; control Chloroquine, IC<sub>50</sub> = 0.012, 0.13µmol/L, SI = 4500, 149, respectively). **Source:** *Kayea assamica*. **Ref:** 3437.

**21316 Theraphin D**

C<sub>21</sub>H<sub>24</sub>O<sub>6</sub> (372.42). Yellowish oil, [α]<sub>D</sub> = -118.8° (c = 0.1, MeOH). **Pharm:** Cytotoxic (Lu1, IC<sub>50</sub> > 53.8µmol/L, Col2, IC<sub>50</sub> > 53.8µmol/L, KB, IC<sub>50</sub> = 52.2µmol/L, LNCaP, IC<sub>50</sub> = 6.4µmol/L); antomalarial (*Plasmodium falciparum* clone D6, IC<sub>50</sub> = 11.1µmol/L, SI = 4.70; *Plasmodium falciparum* clone W2, IC<sub>50</sub> = 10.4µmol/L, SI = 5.0; control Chloroquine, IC<sub>50</sub> = 0.012, 0.13µmol/L, SI = 4500, 149, respectively). **Source:** *Kayea assamica*. **Ref:** 3437.

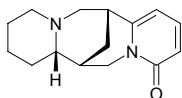
**21317 Thermopsamine**

C<sub>15</sub>H<sub>26</sub>N<sub>2</sub>O (250.39). mp 154-155°C. **Source:** MU MA DOU *Thermopsis lanceolata*. **Ref:** 6.

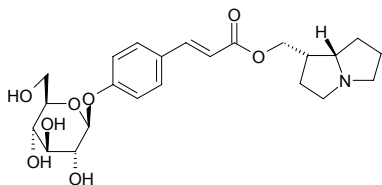


**21318 Thermopsine**

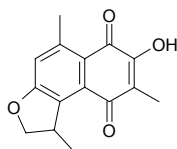
$C_{15}H_{20}N_2O$  (244.34). mp (+) 207°C, (-) 206.5°C, ( $\pm$ ) 171~172°C. Source: GAO SHAN HUANG HUA *Thermopsis alpina*, MU MA DOU *Thermopsis lanceolata*, YE JUE MING *Thermopsis lupinoides*. Ref: 6.

**21319 Thesinine-4'-O- $\beta$ -D-glucoside**

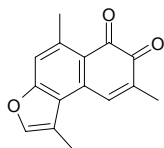
$C_{23}H_{31}NO_8$  (449.50). Colorless amorphous solid. Source: LIU LI JU *Borago officinalis*. Ref: 1958.

**21320 Thespesone**

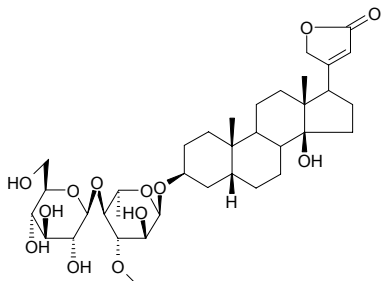
$C_{15}H_{14}O_4$  (258.28). Pharm: Antineoplastic (hmn thymocyte MCF7); inhibits cytochrome C and P450; antioxidant, inhibits lipid peroxidation. Source: YANG YE XIAO JIN *Thespesia populnea* [Syn. *Hibiscus populneus*]. Ref: 2069, 2074.

**21321 Thespone**

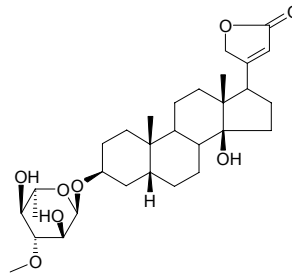
$C_{15}H_{12}O_3$  (240.26). Pharm: Antineoplastic (hmn thymocyte MCF7); inhibits cytochrome C and P450; antioxidant, inhibits lipid peroxidation. Source: YANG YE XIAO JIN *Thespesia populnea* [Syn. *Hibiscus populneus*]. Ref: 2069, 2074.

**21322 Thevebioside**

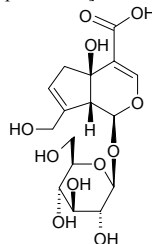
$C_{36}H_{56}O_{13}$  (696.84). Source: HUANG HUA JIA ZHU TAO *Thevetia nerifolia* [Syn. *Thevetia peruviana*]. Ref: 6.

**21323 Thevefoline**

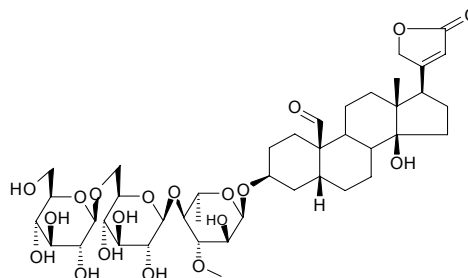
$C_{30}H_{46}O_8$  (534.70). mp 260°C. Source: HUANG HUA JIA ZHU TAO *Thevetia nerifolia* [Syn. *Thevetia peruviana*]. Ref: 6.

**21324 Theveside**

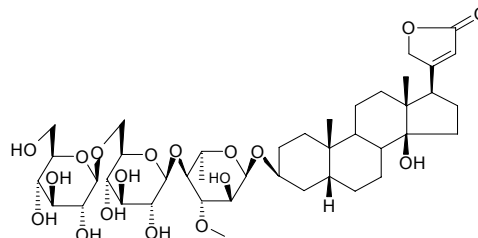
$C_{16}H_{22}O_{11}$  (390.35). Pharm: Anti-HIV-1 (RT (RDDP) inhibitor,  $IC_{50} > 100\mu\text{mol/L}$ , positive control Adriamycin,  $IC_{50} = 27\mu\text{mol/L}$ ; DDDP inhibitor,  $IC_{50} > 100\mu\text{mol/L}$ , positive control Adriamycin,  $IC_{50} = 6\mu\text{mol/L}$ ; HIV-1 IN inhibitor,  $IC_{50} > 100\mu\text{mol/L}$ , positive control Suramin,  $IC_{50} = 2.4\mu\text{mol/L}$ ). Source: HUANG HUA JIA ZHU TAO *Thevetia nerifolia* [Syn. *Thevetia peruviana*]. Ref: 6, 4187.

**21325 Thevetin A**

$C_{42}H_{64}O_{19}$  (872.97). mp 208~210°C. Pharm: Antiarrhythmic; cardiotoxic; toxin (vertebrates). Source: HUANG HUA JIA ZHU TAO *Thevetia nerifolia* [Syn. *Thevetia peruviana*], AO DAO LA MU HAI MANG GUO *Cerbera odollam*. Ref: 6, 658.

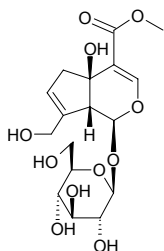
**21326 Thevetin B**

$C_{42}H_{66}O_{18}$  (858.98). mp 197~201°C. Pharm: Antiarrhythmic; cardiotoxic; toxin. Source: AO DAO LA MU HAI MANG GUO *Cerbera odollam*, HUANG HUA JIA ZHU TAO *Thevetia nerifolia* [Syn. *Thevetia peruviana*], NIU XIN QIE ZI *Cerbera manghas*. Ref: 6, 658.

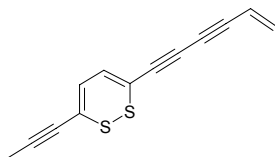


**21327 Theviridoside**

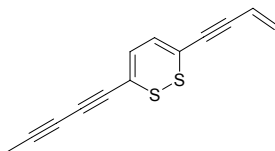
$C_{17}H_{24}O_{11}$  (404.37). **Pharm:** Anti-HIV-1 (RT (RDDP) inhibitor,  $IC_{50} > 100\mu\text{mol/L}$ , positive control Adriamycin,  $IC_{50} = 27\mu\text{mol/L}$ ; DDDP inhibitor,  $IC_{50} > 100\mu\text{mol/L}$ , positive control Adriamycin,  $IC_{50} = 6\mu\text{mol/L}$ ; HIV-1 IN inhibitor,  $IC_{50} > 100\mu\text{mol/L}$ , positive control Suramin,  $IC_{50} = 2.4\mu\text{mol/L}$ )<sup>[4187]</sup>. **Source:** HUANG HUA JIA ZHU TAO *Thevetia nerifolia* [Syn. *Thevetia peruviana*], WU SE MEI *Lantana camara*. **Ref:** 6, 234, 4187.

**21328 Thiarubrin A**

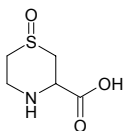
[63543-09-9]  $C_{13}H_8S_2$  (228.32). **Pharm:** Antibacterial; antifungal (*Candida albicans*); antiviral; cytotoxic (*Bacillus coli*, *Bacillus subtilis* and nematode); light sensitive; nematocide; photosensitive agent. **Source:** TUN CAO *Ambrosia artemisiifolia*, family Asteraceae spp. **Ref:** 658, 900.

**21329 Thiarubrin B**

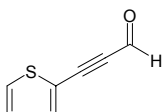
$C_{13}H_8S_2$  (228.34). **Pharm:** Antifungal. **Source:** family Asteraceae spp. **Ref:** 658.

**21330 1,4-Thiazane-3-carboxylic acid S-oxide**

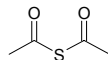
$C_5H_9NO_3S$  (163.20). mp 248~250°C (dec). **Source:** QUN DAI CAI *Undaria pinnatifida*. **Ref:** 6, 660.

**21331 3-(2-Thienyl) propargyl aldehyde**

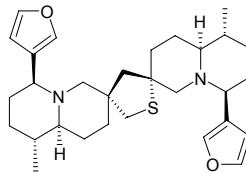
$C_7H_4OS$  (136.17). **Source:** YANG SHI CAO *Achillea millefolium*. **Ref:** 6.

**21332 Thioacetic anhydride**

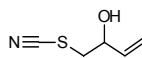
$C_4H_6O_2S$  (118.16). Colorless crystals, mp 141~145°C. **Source:** HUANG BAI HONG GU *Russula ochroleuca*. **Ref:** 2143.

**21333 Thiobinupharidine**

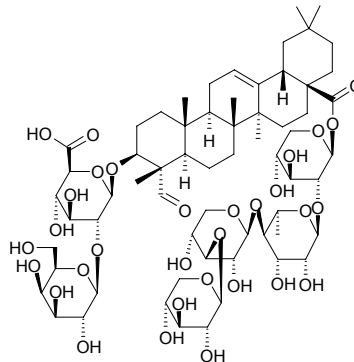
$C_{30}H_{42}N_2O_2S$  (494.75). **Pharm:** Antibacterial. **Source:** OU ZHOU PING PENG CAO *Nuphar luteum*. **Ref:** 658.

**21334 1-Thiocyanato-2-hydroxy-3-butene**

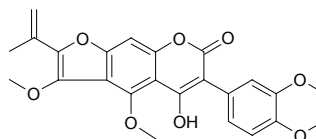
$C_5H_7NOS$  (129.18). **Source:** DA QING YE *Isatis indigotica*. **Ref:** 2.

**21335 Thladioside H<sub>1</sub>**

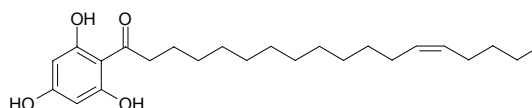
$C_{63}H_{98}O_{31}$  (1351.46). White powder, mp 220°C (dec). **Source:** XIN YE CHI BO *Thladiantha cordifolia*. **Ref:** 425.

**21336 Thonningine C**

5-Hydroxy-4,9-dimethoxy-6-(3,4-dimethoxyphenyl)-2-(1-methylethenyl)-7H-furan[3,2-g]chromen-7-one  $C_{24}H_{22}O_8$  (438.44). Yellow granules (petrol), mp 199~200°C. **Source:** *Millettia thonningii*. **Ref:** 2326.

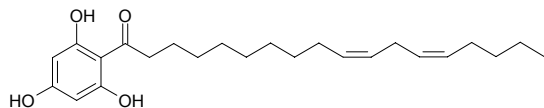
**21337 Thouvenol A**

$C_{24}H_{38}O_4$  (390.57). Colorless oil. **Pharm:** Cytotoxic (*in vitro*, A2780 ovarian cancer cell line,  $IC_{50} = 11\mu\text{g/mL}$ , marginal activity, control Actinomycin D,  $IC_{50} = 1\sim 3\text{ng/mL}$ ). **Source:** *Protorhus thouvenotii* (dried fruit). **Ref:** 5006.

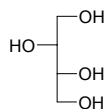


**21338 Thouvenol B**

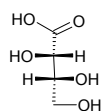
$C_{24}H_{36}O_4$  (388.55). Colorless oil. **Pharm:** Cytotoxic (*in vitro*, A2780 ovarian cancer cell line,  $IC_{50} = 11\mu\text{g/mL}$ , marginal activity, control Actinomycin D,  $IC_{50} = 1\sim 3\text{ng/mL}$ ). **Source:** *Protorus thouvenotii* (dried fruit). **Ref:** 5006.

**21339 (D)-Threitol**

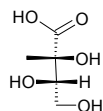
$C_4H_{10}O_4$  (122.12). Amorphous powder,  $[\alpha]_D^{23} = -7^\circ$ . **Source:** BEI SHA SHEN *Glehnia littoralis* (fruit), SHI LUO ZI *Anethum graveolens* (fruit). **Ref:** 3525, 4177.

**21340 (D)-Threonic acid**

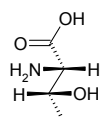
$C_4H_8O_5$  (136.11). **Source:** QIAN MA *Urtica cannabina*. **Ref:** 660.

**21341 (L)-Threonic acid**

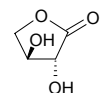
$C_4H_8O_5$  (136.11). **Source:** QIAN MA *Urtica cannabina*. **Ref:** 660.

**21342 Threonine**

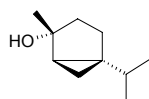
$C_4H_9NO_3$  (119.12). **Source:** BAN XIA *Pinellia ternata* (dried tuber: content scope of 4 origins = 0.27%~0.82%, mean content = 0.59%)<sup>[5521]</sup>, widely distributed in nature (a product of protein hydrolysates). **Ref:** 660, 5521.

**21343 Threono-1,4-lactone**

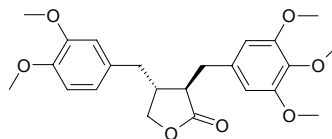
$C_4H_6O_4$  (118.09). **Source:** QIAN MA *Urtica cannabina*. **Ref:** 660.

**21344 Thujanol-4**

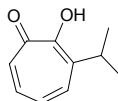
$C_{10}H_{18}O$  (154.25). *cis*-(+) mp 36.5~7.2°C, *trans*-(+) mp 60~61°C, bp 193~198°C. **Source:** SHE XIANG CAO *Thymus vulgaris*. **Ref:** 6.

**21345 (-)-Thujaplicatin trimethyl ether**

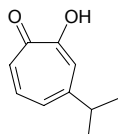
$C_{23}H_{28}O_7$  (416.48). **Pharm:** CYP3A4 inhibitor and CYP2D6 inhibitor (*in vitro*, CYP3A4,  $IC_{50} = 1.1\mu\text{mol/L}$ ; CYP2D6,  $IC_{50} > 100\mu\text{mol/L}$ ; control Ketoconazole, CYP3A4,  $IC_{50} = 0.72\mu\text{mol/L}$ ; control Quinidine, CYP2D6,  $IC_{50} = 0.082\mu\text{mol/L}$ ). **Source:** BI CHENG QIE *Piper cubeba* (fruit: yield = 0.000069%dw). **Ref:** 4797.

**21346 α-Thujaplicin**

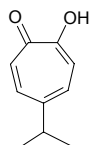
$C_{10}H_{12}O_2$  (164.21). mp 82°C. **Source:** SHAN CI BAI *Juniperus taiwaniana*. **Ref:** 6.

**21347 β-Thujaplicin**

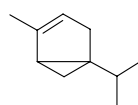
$C_{10}H_{12}O_2$  (164.21). mp 52.0~52.5°C. **Pharm:** Antifungal. **Source:** AI SHI BAI MU *Cupressus abramsiana*, BEI MEI XIANG BAI *Thuja plicata*, DA GUO BAI MU *Cupressus macrocarpa*, SA JIN TE BAI MU *Cupressus sargentii*, SHAN CI BAI *Juniperus taiwaniana*. **Ref:** 6, 658.

**21348 γ-Thujaplicin**

$C_{10}H_{12}O_2$  (164.21). **Pharm:** Antifungal. **Source:** AI SHI BAI MU *Cupressus abramsiana*, BEI MEI XIANG BAI *Thuja plicata*, DA GUO BAI MU *Cupressus macrocarpa*, SA JIN TE BAI MU *Cupressus sargentii*, SHAN CI BAI *Juniperus taiwaniana*. **Ref:** 6, 658.

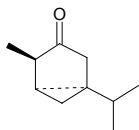
**21349 Thujene**

$C_{10}H_{16}$  (136.24). bp (+) 152.0~152.5°C, (-) 151°C. **Source:** JU PI *Citrus reticulata*, QIANG HUO *Notopterygium incisum*, SHENG JIANG *Zingiber officinale*, HUANG HUA HAO *Artemisia annua*. **Ref:** 2, 660.

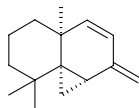


**21350 1-Thujone**

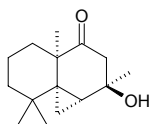
$C_{10}H_{16}O$  (152.24). **Pharm:** Anthelmintic; anti-stimulation; spasmogenic; LD (mus, ip) = 240mg/kg. **Source:** AI YE *Artemisia argyi*, BEI AI *Artemisia vulgaris*, BEI MEI YA BAI *Thuja occidentalis*, BEI YE JU *Chrysanthemum boreale*, CE BAI YE *Thuja orientalis* [Syn. *Platyclusus orientalis*; *Biota orientalis*], HUANG HAO *Artemisia scoparia* [Syn. *Artemisia capillaris* var. *scoparia*], JU HAO *Tanacetum vulgare*, MU HAO *Artemisia japonica*, QING HAO *Artemisia apiacea* [Syn. *Artemisia carvifolia*; *Artemisia caruifolia*], SHI JI NING *Mosla scabra* [Syn. *Mosla punctata*], YAN XIANG JU *Chrysanthemum lavandulifolium*, YANG SHI CAO *Achillea millefolium*, YE JU *Chrysanthemum indicum*, YIN CHEN HAO *Artemisia capillaris*, ZHONG YA KU HAO *Artemisia absinthium*. **Ref:** 2, 658, 660, 5501.

**21351 Thujopsadiene**

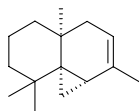
$C_{15}H_{22}$  (202.34). bp 115°C/10mmHg. **Source:** CE BAI ZHI JIE *Thuja orientalis* [Syn. *Platyclusus orientalis*; *Biota orientalis*]. **Ref:** 6.

**21352 Thujopsan-7β-ol**

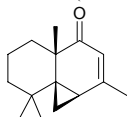
$C_{15}H_{24}O_2$  (236.36). **Source:** DI SUO LUO *Marchantia polymorpha*. **Ref:** 660.

**21353 Thujopsene**

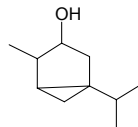
[470-40-6]  $C_{15}H_{24}$  (204.36). bp 121~122°C/12mmHg. **Source:** WU WEI ZI *Schisandra chinensis*. **Ref:** 2.

**21354 Thujopsenone**

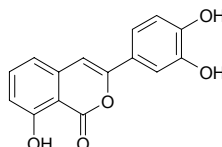
$C_{15}H_{22}O$  (218.34). **Source:** DI SUO LUO *Marchantia polymorpha*. **Ref:** 660.

**21355 Thujylalcohol**

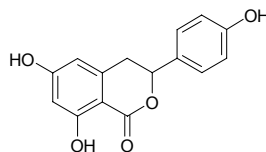
$C_{10}H_{16}O$  (152.24). mp (-) 66~67°C. **Source:** YIN CHEN HAO *Artemisia capillaris*. **Ref:** 2.

**21356 Thunberginol A**

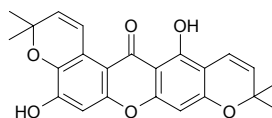
[147666-80-6]  $C_{15}H_{10}O_5$  (270.24). Yellow rhombic crystals, mp 240°C (methanol-water). **Pharm:** Antiallergic; antibacterial (*Fusobacterium nucleatum*, MIC = 10mg/L; *Ristella melaninogenica*, MIC = 5mg/L). **Source:** DI SUO LUO *Marchantia polymorpha*. **Ref:** 900.

**21357 Thunberginol C**

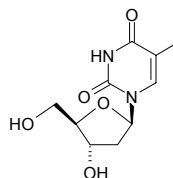
$C_{15}H_{12}O_5$  (272.26). **Pharm:** Antioxidant (DPPH scavenger,  $IC_{50}$  = (115.6±12.6)μg/mL; control Ascorbic acid,  $IC_{50}$  = (2.49±0.32)μg/mL; Caffeic acid,  $IC_{50}$  = (1.78±0.03)μg/mL; Chlorogenic acid,  $IC_{50}$  = (1.28±0.38)μg/mL). **Source:** SUAN YE PO LUO MEN SHEN *Tragopogon porrifolius* (subaerial parts). **Ref:** 5307.

**21358 Thwaitesixanthone**

$C_{23}H_{20}O_6$  (392.41). **Pharm:** Cytotoxic inactive (KB cancer cell lines; BC-1; NCI-H187). **Source:** DAO NIAN ZI *Garcinia mangostana* (young fruit: yield = 0.0034%dw). **Ref:** 1619.

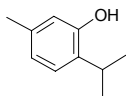
**21359 Thymidine**

Thymine-2-desoxyribose [50-89-5]  $C_{10}H_{14}N_2O_5$  (242.23). Colorless acicular crystals, mp 184.0~186.5°C (methanol),  $[\alpha]_D^{25}$  = +30.6° (water)<sup>[5507]</sup>. **Source:** AN HUI BEI MU *Fritillaria anhuiensis*, GAN SU BEI MU *Fritillaria przewalskii*, NAN FANG TU SI ZI *Cuscuta australis*, PING BEI MU *Fritillaria ussuriensis*, SHI LUO ZI *Anethum graveolens* (fruit), ZHE BEI MU *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*], *Tylotella* sp. **Ref:** 459, 569, 689, 4177, 5507.

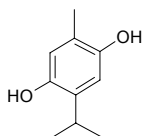


**21360 Thymol**

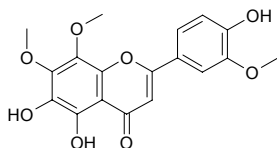
[89-83-8] C<sub>10</sub>H<sub>14</sub>O (150.22). mp 51.5°C, bp 211~212°C/745mmHg. **Pharm:** Antibacterial; anthelmintic; acaricide (1% solution, 30min, mortality = 100%; 0.03% solution, 24h, mortality = 100%); antifungal (*Aspergillus niger* KCCM11239, MFC = 0.78mg/mL; *Aspergillus flavus* KCCM11453, MFC = 0.39mg/mL; *Candida albicans* KCCM11282, MFC = 0.39mg/mL; *Candida utilis* KCCM11356, MFC = 0.39mg/mL; *Cryptococcus neoformans* KCCM0564, MFC = 0.39mg/mL; *Trichosporon mucoides* KCCM50570, MFC = 0.19mg/mL; *Trichophyton rubrum* ATCC6345, MFC = 0.09mg/mL; *Blastoschyzomyces capitatus* KCCM50270, MFC = 0.39mg/mL)<sup>[4079]</sup>; antiseptic (tooth decay cavity); dispels phlegm (promotes movement of trachea cilium, benefits mucous secretion); free radical scavenger; LD<sub>50</sub> (rat, orl) = 980mg/kg. **Source:** A YU WEI *Trachyspermum ammi*, BAI LI XIANG *Thymus serpyllum*, CHAI HU *Bupleurum chinense*, DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*], JU PI *Citrus reticulata*, SHE XIANG CAO *Thymus vulgaris*, SHI XIANG RU *Mosla chinensis* [Syn. *Orthodon chinensis*] (dried aerial parts: content scope of 10 origins = 0.06%~0.46%, mean content = 0.22%<sup>[5508]</sup>), TU XIANG RU *Origanum vulgare*, XIANG QING LAN *Dracocephalum moldavicum*, CHAO XIAN DA BAI LI XIANG *Thymus magnus*, WU MAI BAI LI XIANG *Thymus quinquecostatus*. **Ref:** 2, 4, 658, 4079, 5501, 5508.

**21361 Thymolhydroquinone**

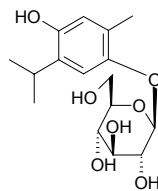
C<sub>10</sub>H<sub>14</sub>O<sub>2</sub> (166.22). mp 143°C, bp 290°C. **Source:** PEI LAN *Eupatorium fortunei*. **Ref:** 6.

**21362 Thymonin**

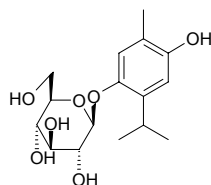
[76844-67-2] C<sub>18</sub>H<sub>16</sub>O<sub>8</sub> (360.33). **Pharm:** Aldose reductase inhibitor (rat eye lens, 10μmol/L InRt = 33%, 1μmol/L InRt = 16%; ox eye lens, 10μmol/L InRt = 46%, 1μmol/L InRt = 11%); sucrose inhibitor (in small intestine, 50μmol/L, InRt = 14%); maltase inhibitor (50μmol/L, InRt = 9%); antispasmodic; smooth muscle relaxant; antibacterial (*Staphylococcus aureus*, 62.5μg/mL); low toxic (mus, orl, 2g/kg, innocuity) **Source:** SHE XIANG CAO *Thymus vulgaris*. **Ref:** 658, 1771, 1772, 1773, 1774.

**21363 Thymoquinol 2-O-β-glucopyranoside**

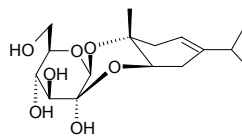
C<sub>16</sub>H<sub>24</sub>O<sub>7</sub> (328.37). **Source:** XU LI YA NIU ZHI *Origanum syriacum* (aerial parts). **Ref:** 5223.

**21364 Thymoquinol 5-O-β-glucopyranoside**

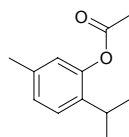
C<sub>16</sub>H<sub>24</sub>O<sub>7</sub> (328.37). **Source:** XU LI YA NIU ZHI *Origanum syriacum* (aerial parts). **Ref:** 5223.

**21365 Thymuside A**

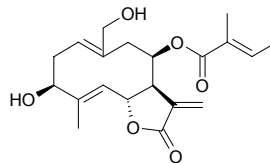
C<sub>16</sub>H<sub>26</sub>O<sub>7</sub> (330.38). Amorphous powder, [α]<sub>D</sub><sup>22</sup> = +2° (c = 0.5, MeOH). **Source:** SHE XIANG CAO *Thymus vulgaris* (leaf). **Ref:** 3895.

**21366 Thymyl acetate**

C<sub>12</sub>H<sub>16</sub>O<sub>2</sub> (192.26). **Pharm:** Analgesic; antiseptic. **Source:** SHE XIANG CAO *Thymus vulgaris*. **Ref:** 658.

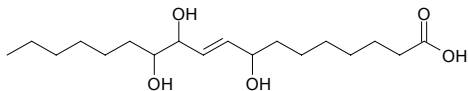
**21367 8β-Tigloyloxy-3β,14-dihydroxy-6βH,7αH-germacra-1(10)Z,AE, 11(13)-trien-6,12-olide**

C<sub>20</sub>H<sub>26</sub>O<sub>6</sub> (362.43). **Source:** CHENG GAN SHENG MA *Eupatorium lindleyanum* (whole herb: yield = 0.00041%dw). **Ref:** 4762.

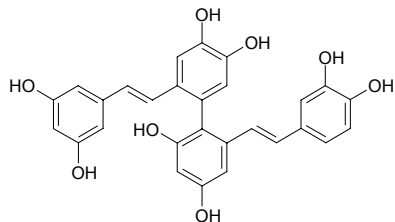


**21368 Tianshic acid**

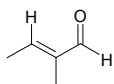
$C_{18}H_{34}O_5$  (330.47). White powder, mp 102~103°C. Source: SUO LUO ZI *Aesculus wilsonii*. Ref: 843.

**21369 Tibeticanol**

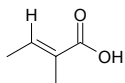
$C_{28}H_{22}O_8$  (486.48). Amorphous brown powders. Pharm: Antioxidant (superoxide anion scavenger,  $IC_{50} = (1.33 \pm 0.01) \mu\text{mol/L}$ , control (+)-Catechin,  $IC_{50} = (3.67 \pm 0.14) \mu\text{mol/L}$ ). Source: MAO CI JIN JI ER *Caragana tibetica* (stem). Ref: 4514.

**21370 Tiglaldehyde**

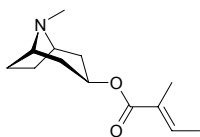
(*E*)-2-Methyl-2-butenal; Tiglic aldehyde; *trans*-Tiglaldehyde; (*E*)-2-Methylcrotonaldehyde; *trans*-2-Methyl-2-butenal;  $\alpha$ -Methylcrotonaldehyde; (*E*)-2-Methylbut-2-en-1-al [497-03-0]  $C_5H_8O$  (84.12). bp 116.5~117.5°C/738mmHg. Source: XI XIANG CONG *Allium schoenoprasum*. Ref: 6.

**21371 Tiglic acid**

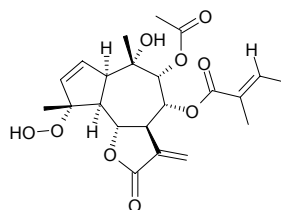
(*E*)-2-Methyl-2-butenic acid; *trans*-2-Methyl-2-butenic acid [80-59-1]  $C_5H_8O_2$  (100.12). Source: YUAN DANG GUI *Angelica archangelica*, BA DOU *Croton tiglium*, DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*], NAN HE SHI *Daucus carota*. Ref: 2, 660.

**21372 Tigloidine**

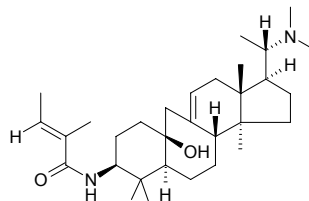
3 $\alpha$ -Tigloyloxytropine  $C_{13}H_{21}NO_2$  (223.32). mp 181.5~183.0°C. Pharm: Anticholinergic; CNS depressant; used in treatment of muscle rigidity and Parkinson's disease. Source: SUAN JIANG *Physalis alkekengi*, GUA JIN DENG *Physalis alkekengi* var. *franchetii*, MAO MAN TUO LUO HUA *Datura innoxia*, YANG JIN HUA *Datura metel*. Ref: 6, 658, 1521.

**21373 8-O-Tigloyl-9-O-acetylanthemolide B**

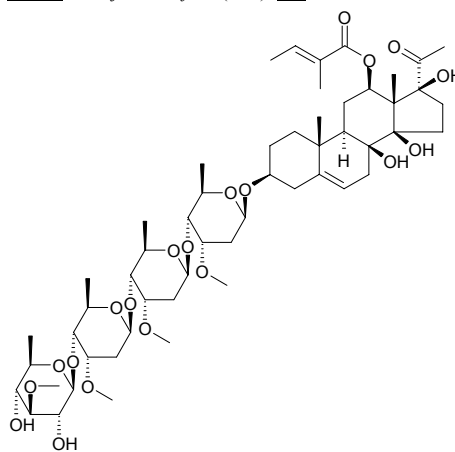
$C_{22}H_{28}O_9$  (436.46). Colorless gum. Source: *Anthemis carpatica* (aerial parts). Ref: 3974.

**21374 N-Tigloylbuxahyrcanine**

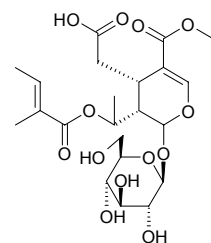
$C_{31}H_{52}N_2O_2$  (484.77). Colorless amorphous powder, mp 245.5°C,  $[\alpha]_D^{29} = +62^\circ$  ( $c = 0.096$ ,  $CHCl_3$ ). Pharm: AChE inhibitor (*in vitro*,  $IC_{50} = 443.6 \mu\text{mol/L}$ ; control Eserine,  $IC_{50} = 0.041 \mu\text{mol/L}$ ); BChE inhibitor (*in vitro*,  $IC_{50} = 31.2 \mu\text{mol/L}$ ; control Eserine,  $IC_{50} = 0.0857 \mu\text{mol/L}$ ). Source: HE KAN I YA HUANG YANG *Buxus hyrcana* (leaf). Ref: 4694.

**21375 12-O-Tigloyldeacylmetaplexigenin**

$C_{54}H_{86}O_{20}$  (1055.28). Amorphous powder,  $[\alpha]_D^{22} = +15.8^\circ$  ( $c = 1.27$ , MeOH). Source: *Araujia sericifera* (root). Ref: 4377.

**21376 8-O-Tigloyldideroside**

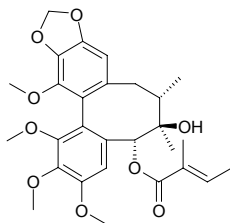
$C_{22}H_{32}O_{13}$  (504.49). Amorphous powder,  $[\alpha]_D^{25} = -78.8^\circ$  ( $c = 1.5$ , MeOH). Source: *Calycophyllum spruceanum*. Ref: 3439.





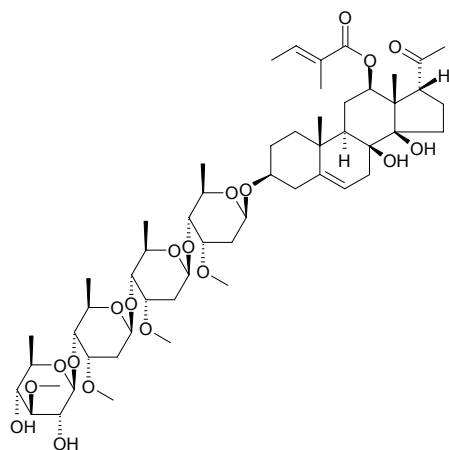
**21377 Tigloylgomisin P**

$C_{28}H_{34}O_9$  (514.58). Source: WU WEI ZI *Schisandra chinensis*. Ref: 2.

**21378 12-O-Tigloyllineolon**

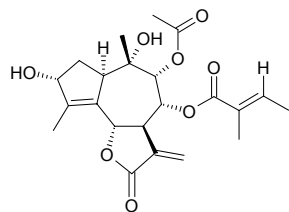
$C_{54}H_{86}O_{19}$  (1039.28). Amorphous powder,  $[\alpha]_D^{22} = +2.1^\circ$  ( $c = 0.66$ , MeOH).

Source: *Araujia sericifera* (root). Ref: 4377.

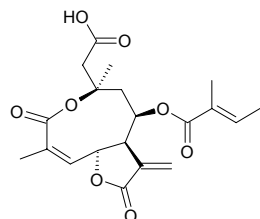
**21379 8 $\alpha$ -Tigloyloxyanthemolide C**

$C_{22}H_{28}O_8$  (420.46). Colorless gum,  $[\alpha]_D^{25} = +57^\circ$  ( $c = 0.11$ , MeOH). Source:

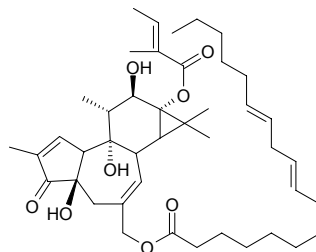
*Anthemis carpatica* (aerial parts). Ref: 3974.

**21380 8 $\beta$ -Tigloyloxy-2,3-seco-6 $\beta$ H,7 $\alpha$ H-helianga-4Z,11(13)-diene-3,10 $\beta$ ; 6,12-dioid-2-oic acid**

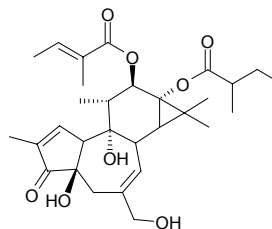
$C_{20}H_{24}O_8$  (392.41). Source: CHENG GAN SHENG MA *Eupatorium lindleyanum* (whole herb: yield = 0.00036%dw). Ref: 4762.

**21381 13-O-Tigloylphorbol-20-linoleate**

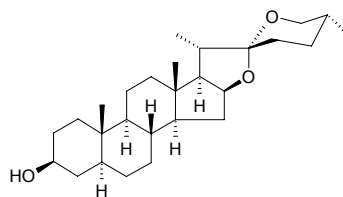
13-O-Tigloylphorbol-20-(9Z,12Z-octadecadienoate)  $C_{43}H_{64}O_8$  (708.98). Oil,  $[\alpha]_D = +98.3^\circ$  ( $c = 0.05$ ,  $CHCl_3$ ). Pharm: Anti-HIV-1 (MT-4 cells, HIV-1-induced cytopathic effect inhibitor,  $IC_{100} = 7.81 \mu\text{g/mL}$ ,  $CC_0 = 62.5 \mu\text{g/mL}$ , control DS8000,  $IC_{100} = 3.9 \mu\text{g/mL}$ ,  $CC_0 > 1000 \mu\text{g/mL}$ ); PKC activator (10ng/mL, activity rate = 14%). Source: BA DOU *Croton tiglium*. Ref: 3921.

**21382 12-O-Tigloylphorbol-13-(2-methylbutyrate)**

$C_{30}H_{42}O_8$  (530.66). Oil,  $[\alpha]_D = +20.0^\circ$  ( $c = 0.03$ ,  $CHCl_3$ ). Pharm: Anti-HIV-1 (MT-4 cells, HIV-1-induced cytopathic effect inhibitor,  $IC_{100} = 31.3 \mu\text{g/mL}$ ,  $CC_0 = 62.5 \mu\text{g/mL}$ , control DS8000,  $IC_{100} = 3.9 \mu\text{g/mL}$ ,  $CC_0 > 1000 \mu\text{g/mL}$ ); PKC activator (10ng/mL, activity rate = 10%). Source: BA DOU *Croton tiglium*. Ref: 3921.

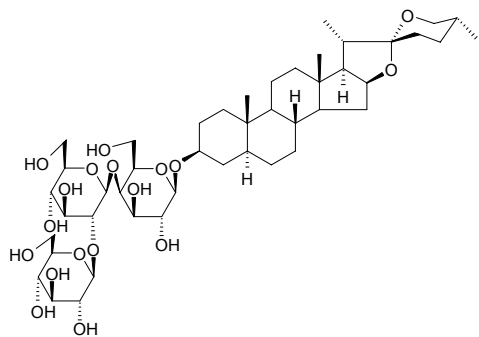
**21383 Tigogenin**

[77-60-1]  $C_{27}H_{44}O_3$  (416.65). mp 201~203°C; mp 205~206°C. Pharm: Raw material for synthesis of hormonal corticosteroid drugs. Source: DAN SHEN *Salvia miltiorrhiza*, DONG YI HAO JIAN MA *Agave east-one*, DUAN YE LONG SHE LAN *Agave angustifolia*, FAN MA *Agave americana*, HU LU BA *Trigonella foenum-graecum*, JIAN MA *Agave sisalana*, JIAN YE TIE SHU YE *Cordyline stricta*, LONG KUI *Solanum nigrum*, NIAN YU XU *Smilax sieboldii*, QIAN NIAN BU LAN XIN *Solanum dulcamara*, QIE ZI *Solanum melongena*, WAN XIANG YU *Polianthes tuberosa*, WU CI FAN MA *Agave americana* var. *marginata* [Syn. *Agave americana* var. *variegata*], XIA YE LONG SHE LAN *Agave cantala*, ZHANG LIU TOU *Costus speciosus*, *Agave lecheguilla*. Ref: 6, 10, 660, 2503.



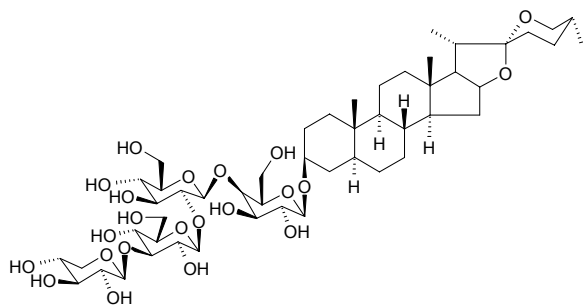
**21384 Tigogenin-3-O- $\beta$ -D-glucopyranosyl(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranosyl(1 $\rightarrow$ 4)- $\beta$ -D-galactopyranoside**

C<sub>45</sub>H<sub>74</sub>O<sub>18</sub> (903.08). Source: BAI MAO TENG *Solanum lyratum*. Ref: 660.



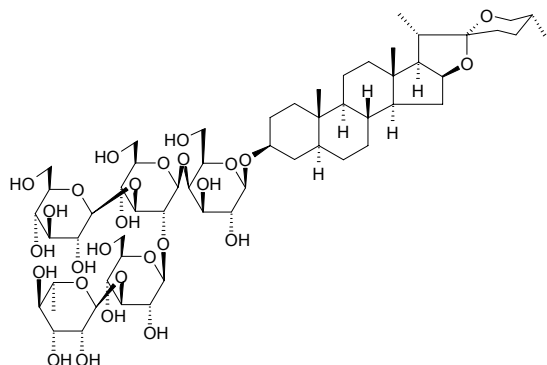
**21385 Tigogenin 3-O- $\beta$ -D-glucopyranosyl(1 $\rightarrow$ 2)- $\beta$ -D-xylopyranosyl(1 $\rightarrow$ 3)- $\beta$ -D-glucopyranosyl(1 $\rightarrow$ 4)- $\beta$ -D-galactopyranoside**

C<sub>50</sub>H<sub>82</sub>O<sub>22</sub> (1035.2). Pharm: Cytotoxic (*in vitro*, HeLa, IC<sub>50</sub> = 3.5  $\mu$ g/mL; control cis-Platin, IC<sub>50</sub> = 0.75  $\mu$ g/mL). Source: WAN XIANG YU *Polianthes tuberosa* (tuber: yield = 0.017%fw). Ref: 3002.



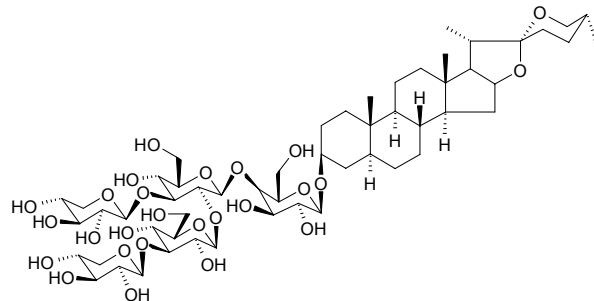
**21386 Tigogenin-3-O- $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 3)- $\beta$ -D-glucopyranosyl(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranosyl(1 $\rightarrow$ 3)- $\beta$ -D-glucopyranosyl(1 $\rightarrow$ 4)- $\beta$ -D-galactopyranoside**

C<sub>57</sub>H<sub>94</sub>O<sub>27</sub> (1211.37). Amorphous. Source: FAN MA *Agave americana*. Ref: 2259.



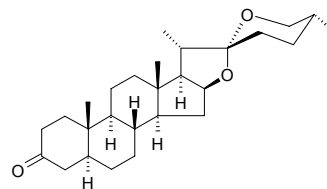
**21387 Tigogenin 3-O- $\beta$ -D-xylopyranosyl(1 $\rightarrow$ 3)- $\beta$ -D-glucopyranosyl(1 $\rightarrow$ 2)- $\beta$ -D-xylopyranosyl(1 $\rightarrow$ 3)- $\beta$ -D-glucopyranosyl(1 $\rightarrow$ 4)- $\beta$ -D-galactopyranoside**

C<sub>55</sub>H<sub>90</sub>O<sub>26</sub> (1167.31). Pharm: Cytotoxic (*in vitro*, HeLa, IC<sub>50</sub> = 7.2  $\mu$ g/mL; control cis-Platin, IC<sub>50</sub> = 0.75  $\mu$ g/mL). Source: WAN XIANG YU *Polianthes tuberosa* (tuber: yield = 0.0040%fw). Ref: 3002.



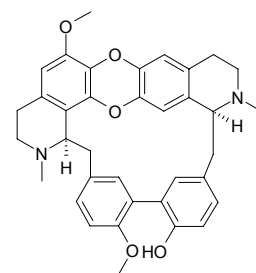
**21388 Tigogenone**

C<sub>27</sub>H<sub>42</sub>O<sub>3</sub> (414.63). Source: WU CI FAN MA *Agave americana* var. *marginata* [Syn. *Agave americana* var. *variegata*]. Ref: 10.



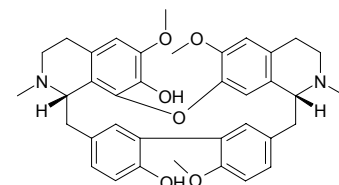
**21389 Tiliacorine**

C<sub>36</sub>H<sub>36</sub>N<sub>2</sub>O<sub>5</sub> (576.70). Pharm: Antimalarial (*Plasmodium falciparum*). Source: family Menispermaceae spp. Ref: 658.



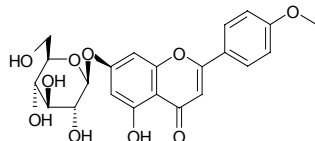
**21390 Tiliageine**

C<sub>37</sub>H<sub>40</sub>N<sub>2</sub>O<sub>6</sub> (608.74). Pharm: Antitrypanosomal (inhibits trypomastigote form of *Trypanosoma cruzi*, strain Y, IC<sub>50</sub> = 175.1  $\mu$ g/mL, IC<sub>90</sub> = 370.7  $\mu$ g/mL); antimalarial (*Plasmodium falciparum* D6, LC<sub>50</sub> = 48.9 ng/mL, SI = 65; *Plasmodium falciparum* W2, LC<sub>50</sub> = 107.7 ng/mL, SI = 30); cytotoxic (KB, LC<sub>50</sub> = 3200 ng/mL). Source: *Guatteria boliviana* (stem cortex). Ref: 3976.

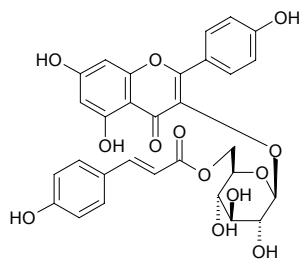


**21391 Tilianin**

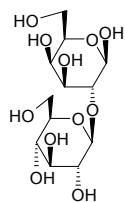
Acacetin-7-O-glucoside  $C_{22}H_{22}O_{10}$  (446.41). Crystals (+2.5H<sub>2</sub>O, MeOH), mp 259–260°C (anhyd.),  $[\alpha]_D^{20} = -63.3^\circ$  (pyridine:EtOH = 7:3). **Source:** BAN BIAN SU *Elsholtzia ciliata*, DA LI HUA *Dahlia pinnata* [Syn. *Dahlia variabilis*], HUA DONG DUAN *Tilia japonica* (leaf), HUO XIANG *Agastache rugosus*, JU HUA *Chrysanthemum morifolium* [Syn. *Dendranthema morifolium*], XIANG RU *Elsholtzia splendens*, ZHI JIA HUA YE *Lawsonia inermis*. **Ref:** 2, 660, 1521.

**21392 Tiliroside**

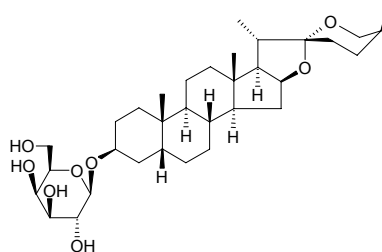
Potengriffoside A; Kaempferol-3-O-(6''-coumaroyl)-glucoside  $C_{30}H_{26}O_{13}$  (594.53). Yellow needles, mp 246–248°C,  $[\alpha]_D^{26} = -57^\circ$  ( $c = 0.045$ , MeOH); yellow powder, mp 214–215°C,  $[\alpha]_D^{26} = -62^\circ$  ( $c = 0.28$ , MeOH). **Pharm:** Anti-inflammatory (inhibits mouse paw oedema induced by phospholipase A<sub>2</sub>, ID<sub>50</sub> = 35.6mg/kg; inhibits mouse ear inflammation induced by TPA, ID<sub>50</sub> = 357mg/ear)<sup>[4415]</sup>; antioxidant (inhibits lipid peroxidation: enzymatic, IC<sub>50</sub> = 12.6μmol/L; non-enzymatic, IC<sub>50</sub> = 28μmol/L)<sup>[4415]</sup>; CYP3A4 inhibitor (hmn CYP3A4, enzyme activity was monitored by nifedipine oxidation, IC<sub>50</sub> = 0.7μmol/L)<sup>[4778]</sup>; ACE inhibitor (IC<sub>50</sub> > 350μmol/L, control Lisinopril, IC<sub>50</sub> = 1nmol/L)<sup>[5034]</sup>; NEP inhibitor (IC<sub>50</sub> = 250μmol/L, control Phosphoramidon, IC<sub>50</sub> = 9nmol/L)<sup>[5034]</sup>; APN inhibitor inactive<sup>[5034]</sup>; CYP3A4 inhibitor (hmn CYP3A4, enzyme activity was monitored by nifedipine oxidation, IC<sub>50</sub> = 0.7μmol/L)<sup>[4778]</sup>. **Source:** CAO MEI *Fragaria ananassa* (fruit: yield = 0.00038%)<sup>[4778]</sup>, CHANG ROU MAO WEI LING CAI *Potentilla griffithii* var. *velutina*, HONG KUAI ZI *Chamaenerion angustifolium* [Syn. *Epilobium angustifolium*], YI DA LI LA JU *Helichrysum italicum*, YI MU CAO *Leonurus heterophyllus* [Syn. *Leonurus artemisia*], YUAN HUA *Daphne genkwa* (dried bud: mean content of 19 origins = 0.176%)<sup>[5535]</sup>, *Tilia* spp. **Ref:** 6, 784, 1521, 2522, 4415, 4778, 5034, 5535.

**21393 Timobiose**

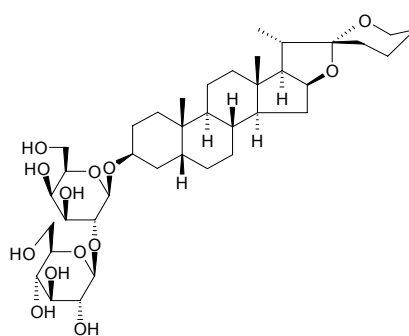
$C_{12}H_{22}O_{11}$  (342.30). mp 164–170°C. **Source:** ZHI MU *Anemarrhena asphodeloides*. **Ref:** 2.

**21394 Timosaponin A<sup>1</sup>**

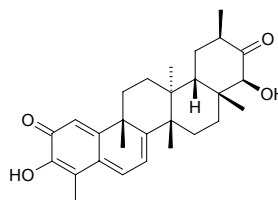
$C_{33}H_{54}O_8$  (578.79). **Source:** ZHI MU *Anemarrhena asphodeloides*. **Ref:** 2.

**21395 Timosaponin A<sub>3</sub>**

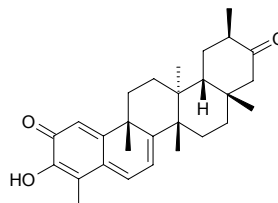
$C_{39}H_{64}O_{13}$  (740.94). mp 317–322°C (dec). **Source:** ZHI MU *Anemarrhena asphodeloides*, LEI GONG TENG *Tripterygium wilfordii*. **Ref:** 6.

**21396 Tingenin B**

[50656-68-3]  $C_{28}H_{36}O_4$  (436.60). **Pharm:** Antioxidant (DPPH scavenger, for 40μmol/L DPPH radical, SC<sub>50</sub> = 8.5μmol/L). **Source:** SUO LA MU *Salacia prinoides* [Syn. *Salacia chinensis*] (stem). **Ref:** 4378.

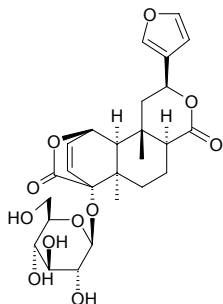
**21397 Tingenone**

[50802-21-6]  $C_{28}H_{36}O_3$  (420.60). Crystals, mp 203–204°C. **Pharm:** Antitrypanosomal; germination inhibitor (seeds of haricot); inhibits biosynthesis of DNA, RNA and protein; antineoplastic; antioxidant (DPPH scavenger, for 40μmol/L DPPH radical, SC<sub>50</sub> = 13μmol/L)<sup>[4378]</sup>; anti-inflammatory (modulator of cytokine network: inhibits LPS-stimulated IL-1β production on hmn monocytes, mean IC<sub>50</sub> = 58nmol/L)<sup>[4416]</sup>. **Source:** SUO LA MU *Salacia prinoides* [Syn. *Salacia chinensis*], JIA NA LI MEI DENG MU *Maytenus canariensis*, *Maytenus* sp., *Salacia* sp. **Ref:** 658, 1521, 4378, 4416.

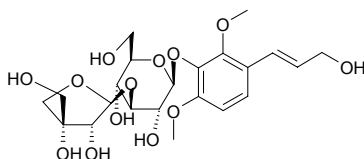


**21398 Tinoside**

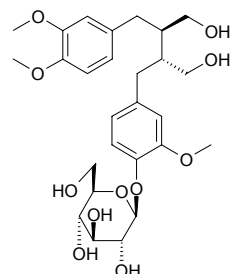
Palmitoside D C<sub>26</sub>H<sub>32</sub>O<sub>11</sub> (520.54). Source: QING NIU DAN *Tinospora sagittata*. Ref: 660.

**21399 Tinosinen**

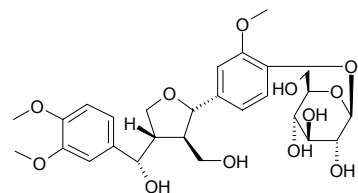
C<sub>22</sub>H<sub>32</sub>O<sub>13</sub> (504.49). Source: ZHONG HUA QING NIU DAN *Tinospora sinensis* (stem). Ref: 4292.

**21400 Tinosposide A**

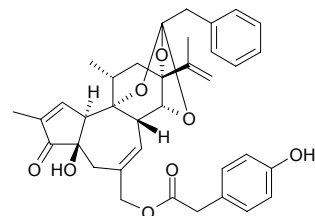
C<sub>27</sub>H<sub>38</sub>O<sub>11</sub> (538.60). Amorphous powder,  $[\alpha]_D^{25} = -39^\circ$  ( $c = 1.0$ , MeOH). Source: ZHONG HUA QING NIU DAN *Tinospora sinensis* (stem). Ref: 4292.

**21401 Tinosposide B**

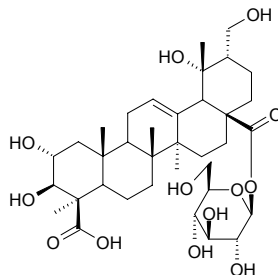
C<sub>27</sub>H<sub>38</sub>O<sub>12</sub> (552.58). Amorphous powder,  $[\alpha]_D^{25} = -10^\circ$  ( $c = 0.3$ , MeOH). Source: ZHONG HUA QING NIU DAN *Tinospora sinensis* (stem). Ref: 4292.

**21402 Tinyatoxin**

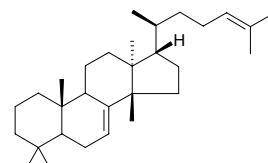
C<sub>36</sub>H<sub>38</sub>O<sub>8</sub> (598.70). Pharm: Toxin (causes inflammation of skin). Source: PO SEN DA JI *Euphorbia poissonii*. Ref: 658.

**21403 Tirlocularoside A**

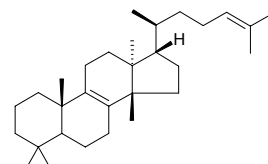
2 $\alpha$ ,3 $\beta$ ,19 $\alpha$ ,30-Tetrahydroxyurs-12-en-24,28-dioic acid 28-O- $\beta$ -D-glucopyranosyl ester C<sub>36</sub>H<sub>56</sub>O<sub>13</sub> (696.84). Amorphous solid, mp 187~189°C (dec),  $[\alpha]_D^{25} = +12.12^\circ$  ( $c = 0.198$ , MeOH). Source: SAN SHI HUANG MA *Corchorus trilocularis*. Ref: 4356.

**21404 Tirucalla-7,24-diene**

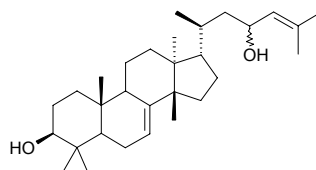
Eupha-7,24-diene [87827-68-7] C<sub>30</sub>H<sub>50</sub> (410.73). Source: DAO LUAN YE FU SHI JUE *Lemnaphyllum microphyllum* var. *obovatum*. Ref: 660.

**21405 Tirucalla-8,24-diene**

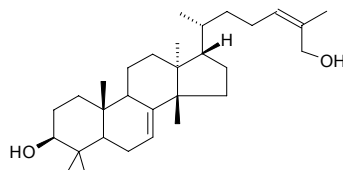
Eupha-8,24-diene C<sub>30</sub>H<sub>50</sub> (410.73). Source: DAO LUAN YE FU SHI JUE *Lemnaphyllum microphyllum* var. *obovatum*. Ref: 660.

**21406 Tirucalla-7,24-diene-3 $\beta$ ,23-diol**

C<sub>30</sub>H<sub>50</sub>O<sub>2</sub> (442.73). White powder, mp 80~83°C. Source: HAI NAN JIAN MU *Dysoxylum hainanense* (bark). Ref: 3987.

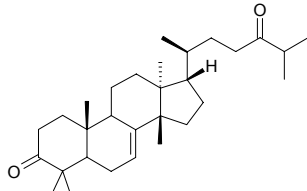
**21407 (24Z)-7,24-Tirucalladien-3 $\beta$ ,26-diol**

(24Z)-7,24-Euphadien-3 $\beta$ ,26-diol [6138-94-9] C<sub>30</sub>H<sub>50</sub>O<sub>2</sub> (442.73). Source: KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. Ref: 12.

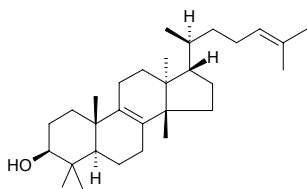


**21408 Tirucall-7-en-3,24-dione**

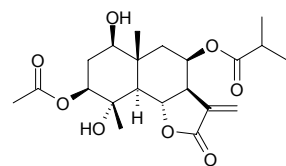
Eupha-7-en-3,24-dione C<sub>30</sub>H<sub>48</sub>O<sub>2</sub> (470.72). Amorphous powder,  $[\alpha]_D^{25} = +5.93^\circ$  ( $c = 0.3$ , MeOH). Source: NAN RI BEN LEI GONG TENG *Tripterygium doianum*. Ref: 1916.

**21409 Tirucallol**

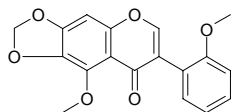
Kanzuol; 20-Epieuphol C<sub>30</sub>H<sub>50</sub>O (426.73). Source: GAN SUI *Euphorbia kansui*, RU XIANG *Boswellia carterii*. Ref: 660.

**21410 Tithofolinolide**

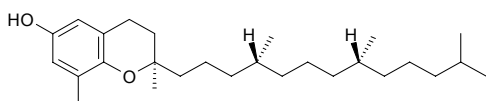
(1*R*,3*S*,4*S*)-3-Acetoxy-1,4-dihydroxy-8-isobutyloxyeudesm-11(13)-en-6,12-olide; Anticancer Sesquiterpene Lactone PMV70P691-037 C<sub>21</sub>H<sub>30</sub>O<sub>8</sub> (410.47). Colorless gel,  $[\alpha]_D^{25} = -33.5^\circ$  ( $c = 0.47$ , MeOH). Pharm: Cytotoxic (antiproliferative, Col2 cells, IC<sub>50</sub> > 20 μg/mL)<sup>[4622]</sup>; cytotoxic (cellular differentiation inducer, hmn promyelocytic leukemia HL-60 cells, 4 μg/mL, activity denotes percentage of cells differentiated = 37.4%)<sup>[4622, 5038]</sup>; cytotoxic (MMOC model, inhibits DMBA-induced preneoplastic lesion formation, 10 μg/mL, rel-InRt = 40.2%, control DMBA, rel-InRt = 100%)<sup>[4622]</sup>. Source: ZHONG BIN JU *Tithonia diversifolia* (aerial parts: yield = 0.0021%dw). Ref: 4622, 5038.

**21411 Tlatancuayin**

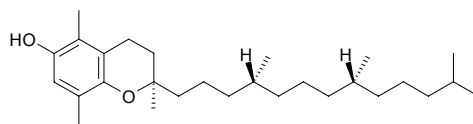
C<sub>18</sub>H<sub>14</sub>O<sub>6</sub> (326.31). Source: BENG GE YUAN WEI *Iris bungei* (underground part). Ref: 3063.

**21412 δ-Tocopherol‡**

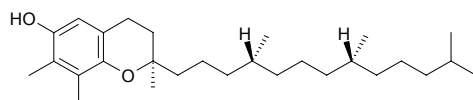
C<sub>27</sub>H<sub>46</sub>O<sub>2</sub> (402.67). Source: MU JIN ZI *Hibiscus syriacus*. Ref: 660. ‡Note: see compound 22560.

**21413 β-Tocopherol‡**

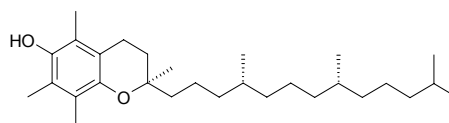
C<sub>28</sub>H<sub>48</sub>O<sub>2</sub> (416.69). Source: MU JIN ZI *Hibiscus syriacus*, ZUO JIANG CAO *Oxalis corniculata* [Syn. *Oxalis Repens*], YOU GAN LAN *Olea europaea*. Ref: 660. ‡Note: See compound 22559.

**21414 γ-Tocopherol‡**

C<sub>28</sub>H<sub>48</sub>O<sub>2</sub> (416.69). Source: MAN JING ZI *Vitex trifolia*. Ref: 660. ‡Note: See compound 22561.

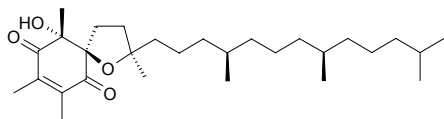
**21415 α-Tocopherol**

Vitamin E; 5,7,8-Trimethyltolcal; Covitol; Viteolin [59-02-9] C<sub>29</sub>H<sub>50</sub>O<sub>2</sub> (430.72). Brown oleaginous liquid, bp (+) 140°C/0.000001 mmHg, insoluble in water, easily soluble in ether, acetone, benzene, chloroform<sup>[5507]</sup>. Pharm: Antioxidant (prevents oxidation of unsaturated fatty acid components to stabilize cell membranes); antioxidant (DPPH scavenger, EC<sub>50</sub> = 0.134 mmol/L<sup>[4121]</sup>, IC<sub>50</sub> = 0.48 mmol/L<sup>[4211]</sup>, SC<sub>50</sub> = 5.2 mmol/L<sup>[4464]</sup>, IC<sub>50</sub> = 20.7 μmol/L<sup>[3452]</sup>, IC<sub>50</sub> = 22.8 μmol/L<sup>[5483]</sup>, IC<sub>50</sub> = 20.1 μmol/L<sup>[4787]</sup>, EC<sub>50</sub> = 0.138 μg/mL<sup>[3874]</sup>, IC<sub>50</sub> = 0.15 mg/mL<sup>[2587]</sup>); antioxidant (DPPH scavenger, DPPH 15 μmol/L, Vitamin E, 10 μmol/L, ScRt = 41.1%)<sup>[3846]</sup>; antioxidant (DPPH radical scavenger, TLC bioautography method, 1 μg/spot)<sup>[3813]</sup>; antioxidant (lipid peroxidation inhibitor, IC<sub>50</sub> = 5.3 μmol/L)<sup>[3452]</sup>; antioxidant (lipid peroxidation inhibitor, IC<sub>50</sub> = 40.4 μg/mL)<sup>[4506]</sup>; antioxidant (lipid peroxidation inhibitor, microsomal lipid peroxidation induced by ferrous-cysteine *in vitro*, determined by the content of malondialdehyde, 10 μmol/L, InRt = 18.2%)<sup>[2570]</sup>; antioxidant (lipid peroxidation inhibitor, ADP/Fe<sup>2+</sup>-induced, IC<sub>50</sub> = 235 μmol/L<sup>[3475]</sup>, IC<sub>50</sub> = 250 μmol/L<sup>[4710]</sup>); antioxidant (to determine inhibitory rates of malondialdehyde (MDA) (Lu and Liu, 1991), 10 μmol/L, InRt = 33.4%)<sup>[3891]</sup>; antioxidant (superoxide anion scavenger, 100 μmol/L, InRt < 50%)<sup>[3452]</sup>; antioxidant (0.5 mmol/L, peroxidation value = 14.7%)<sup>[4508]</sup>; antioxidant (100 μmol/L, InRt of MDA = 81.5%; 10 μmol/L, InRt of MDA = 33.9%)<sup>[5013]</sup>. Source: BO CAI *Spinacia oleracea*, CU LIU GUO *Hippophae rhamnoides* (fruit oil: content = 0.17%)<sup>[5508]</sup>, HONG HUA *Carthamus tinctorius* (flower oil: content scope of 4 origins = 0.0718%~0.1051%, mean content = 0.0865%)<sup>[5508]</sup>, LUO HUA SHENG *Arachis hypogaea*, MAO JIAN QIU LUO *Lychnis coronaria*, MU JIN ZI *Hibiscus syriacus*, WU WEI ZI *Schisandra chinensis*, XIAO MAI *Triticum aestivum* [Syn. *Triticum vulgare*], YE ZI RANG *Cocos nucifera*, occurs in many plants (in many vegetable oils). Ref: 2, 6, 658, 660, 1521, 2189, 2570, 2587, 3452, 3475, 3813, 3846, 3874, 3891, 4121, 4211, 4464, 4506, 4508, 4710, 4787, 5013, 5483, 5507, 5508.

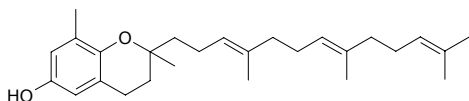


**21416 (-)- $\alpha$ -Tocospirone**

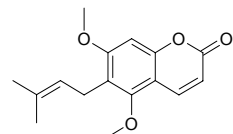
$C_{29}H_{50}O_4$  (462.72). Colorless oil,  $[\alpha]_D^{21} = -50.8^\circ$  ( $c = 0.045$ ,  $CHCl_3$ ). Source: SAN QI CAO *Gynura segetum* [Syn. *Gynura japonica*] (rhizome). Ref: 5427.

**21417  $\delta$ -Tocotrienol**

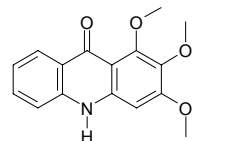
$C_{27}H_{40}O_2$  (396.62). Pharm: Antioxidant (DPPH scavenger,  $EC_{50} = 0.160\mu g/mL$ , control BHA,  $EC_{50} = 0.136\mu g/mL$ , Vitamin E,  $EC_{50} = 0.138\mu g/mL$ ). Source: DUO ZHI ZHI TENG HUANG *Garcinia virgata* (stem cortex). Ref: 3874.

**21418 Toddaculine**

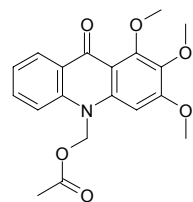
$C_{16}H_{18}O_4$  (274.32). mp  $95^\circ C$ . Source: FEI LONG ZHANG XUE *Toddalia asiatica* [Syn. *Toddalia aculeata*; *Paullinia asiatica*]. Ref: 6.

**21419 Toddaliopsin A**

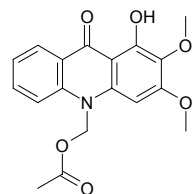
1,2,3-Trimethoxyacridone  $C_{16}H_{15}NO_4$  (285.30). Yellow glass. Pharm: Anti-inflammatory (chemiluminescence assay,  $IC_{50} = 27.3\mu g/mL$ ). Source: *Toddaliopsis bremekampii* (leaf). Ref: 5312.

**21420 Toddaliopsin B**

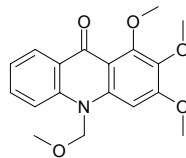
1,2,3-Trimethoxy-10-acetoxymethylacridone  $C_{19}H_{19}NO_6$  (357.37). Yellow glass. Pharm: Anti-inflammatory (chemiluminescence assay,  $IC_{50} = 48.3\mu g/mL$ ). Source: *Toddaliopsis bremekampii* (leaf). Ref: 5312.

**21421 Toddaliopsin C**

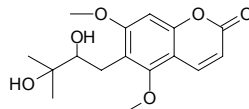
1-Hydroxy-2,3-dimethoxy-10-acetoxymethylacridone  $C_{18}H_{17}NO_6$  (343.34). Yellow glass. Pharm: Anti-inflammatory (chemiluminescence assay,  $IC_{50} = 4.21\mu g/mL$ ). Source: *Toddaliopsis bremekampii* (leaf). Ref: 5312.

**21422 Toddaliopsin D**

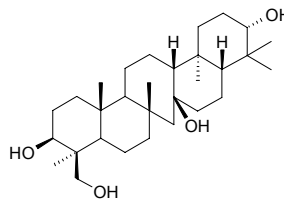
1-2,3-Trimethoxy-10-methoxymethylacridone  $C_{18}H_{19}NO_5$  (329.36). Yellow glass. Pharm: Anti-inflammatory (chemiluminescence assay,  $IC_{50} = 79.1\mu g/mL$ ). Source: *Toddaliopsis bremekampii* (leaf). Ref: 5312.

**21423 Toddalolactone**

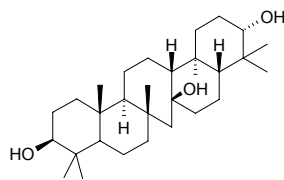
$C_{16}H_{20}O_6$  (308.33). mp  $132^\circ C$ . Source: FEI LONG ZHANG XUE *Toddalia asiatica* [Syn. *Toddalia aculeata*; *Paullinia asiatica*]. Ref: 6.

**21424 Tohogeninol**

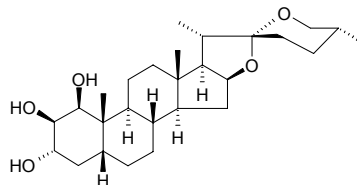
Serratetetrol  $C_{30}H_{52}O_4$  (476.75). Source: QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*]. Ref: 660.

**21425 Tohogenol**

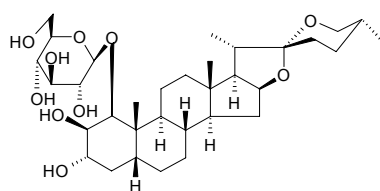
$C_{30}H_{52}O_3$  (460.75). mp  $242\text{--}244^\circ C$ . Source: GUO JIANG LONG *Lycopodium complanatum*, QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*]. Ref: 6.

**21426 Tokorogenin**

$C_{27}H_{44}O_5$  (448.65). mp  $266\text{--}268^\circ C$ . Source: SHAN BI XIE *Dioscorea tokoro*, XI BING SHU YU *Dioscorea tenuipes*. Ref: 6, 660, 1521.

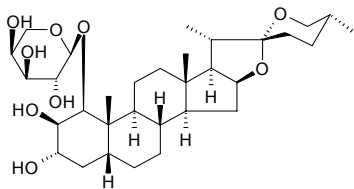
**21427 Tokorogenin-L-O- $\beta$ -D-glucopyranoside**

$C_{33}H_{54}O_{10}$  (610.79). Source: SHAN BI XIE *Dioscorea tokoro*. Ref: 6, 660.

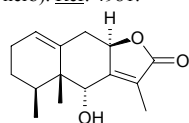


**21428 Tokoronin**

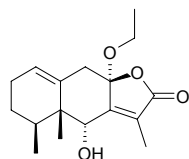
$C_{33}H_{54}O_9$  (594.79). mp 270~274°C (dec). Source: SHAN BI XIE *Dioscorea tokoro*. Ref: 6, 660.

**21429 Toluccanolide A**

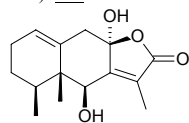
$C_{15}H_{20}O_3$  (248.32). Source: *Ligularia virgaurea* ssp. *oligocephala* (whole herb). Ref: 4981.

**21430 Toluccanolide B**

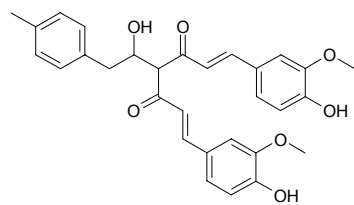
$C_{17}H_{24}O_4$  (292.38). Source: *Ligularia virgaurea* ssp. *oligocephala* (whole herb). Ref: 4981.

**21431 Toluccanolide C**

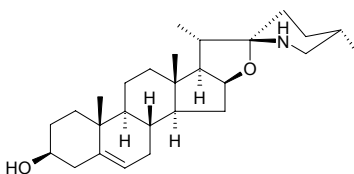
$C_{15}H_{20}O_4$  (264.32). Source: *Ligularia virgaurea* ssp. *oligocephala* (whole herb). Ref: 4981.

**21432 p-Tolyl-methyl carbinol diferuloyl methane**

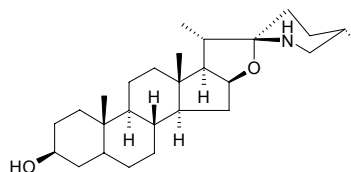
$C_{30}H_{30}O_7$  (502.57). Source: YU JIN *Curcuma aromatica*. Ref: 6.

**21433 Tomatidenol**

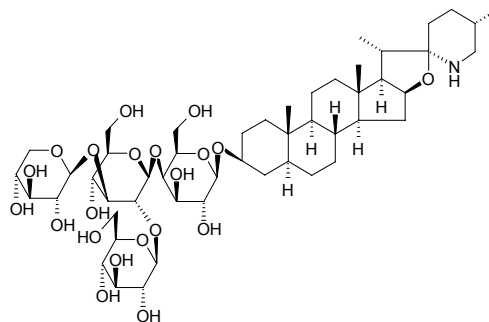
[546-40-7]  $C_{27}H_{43}NO_2$  (413.65). mp 235~238°C, 206°C. Source: QIAN NIAN BU LAN XIN *Solanum dulcamara*. Ref: 6, 660.

**21434 Tomatidine**

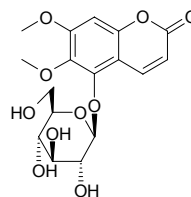
$C_{27}H_{45}NO_2$  (415.66). Pharm: Antifungal; detumescent; cholinesterase inhibitor; dermatitis suppressant (used in treatment of dermatitis). Source: FAN QIE *Lycopersicon esculentum*, AI QIE *Solanum demissum*. Ref: 658.

**21435 Tomatine**

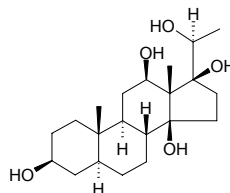
Lycopersicin; Lycopersidin; Tomatin;  $\alpha$ -Tomatine [17406-45-0]  $C_{50}H_{83}NO_{21}$  (1034.21). mp 263~268°C,  $[\alpha]_D^{20} = -18^\circ$  ( $c = 0.55$ , pyridine), soluble in MeOH, EtOH, dioxane, glycol, insoluble in water, ether, petroleum ether<sup>[5507]</sup>. Pharm: Antineoplastic (rat lymphatic sarcoma, ip); cytotoxic (MCF7 cells,  $IC_{50} = 15\mu\text{mol/L}$ , cytotoxicity of compounds was measured using the WST-8 proliferation reagent, see M. Ishiyama, et al., *Talanta*, 1999, 44, 1299)<sup>[4317]</sup>; antihypertensive (rat, iv, 0.5~2.0mg/kg, action lasts short time); antifungal (dermatophyte, *Trichophyton mentagrophytes*, *Microsporum audouini* and *Aspergillus niger*, CIC = 0.1mg/mL, *Candida albicans*, CIC = 0.1mg/mL); antihistamine (*in vitro*); anti-inflammatory (rat, swollen foot model caused by carrageenan, im 1.0~10mg/kg or orl 15~30mg/kg); cardiotoxic (frog heart);  $LD_{50}$  (mus, iv) = 18mg/kg. Source: FAN QIE *Lycopersicon esculentum* (fruit: yield = 0.0032%fw). Ref: 4, 658, 4317, 5507.

**21436 Tomenin**

5-Hydroxy-6,7-dimethoxy-coumarin-5-O-glucoside  $C_{17}H_{20}O_{10}$  (384.34). Source: SHAN YING TAO *Prunus tomentosa*. Ref: 6.

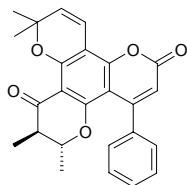
**21437 Tomentogenin**

$C_{21}H_{36}O_5$  (368.52). mp 256.5~259.5°C. Source: XU CHANG QING *Cynanchum paniculatum*. Ref: 6.

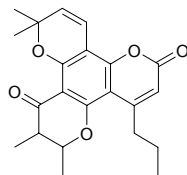


**21438 Tomentolide A**

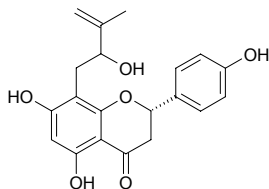
$C_{25}H_{22}O_5$  (402.45). mp 201~205°C. **Pharm:** Anti-inflammatory (rat, swollen foot model caused by carrageenan, 40mg/kg ip, InRt = 39.2%). **Source:** RONG MAO HU TONG *Calophyllum tomentosum*. **Ref:** 661.

**21439 Tomentolide B**

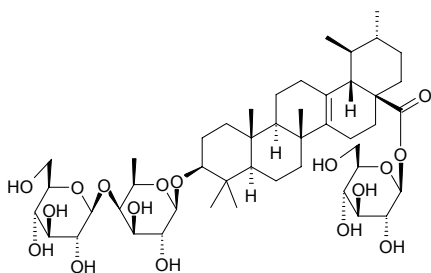
$C_{22}H_{24}O_5$  (368.43). mp 158~160°C. **Pharm:** Anti-inflammatory (rat, swollen foot model caused by carrageenan, 40mg/kg ip, InRt = 24.5%). **Source:** RONG MAO HU TONG *Calophyllum tomentosum*. **Ref:** 661.

**21440 Tomentosanol D**

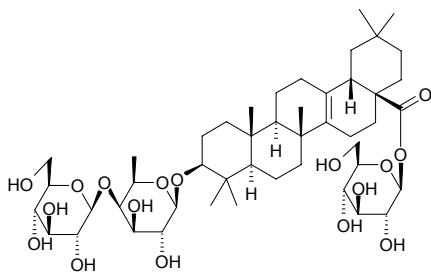
$C_{20}H_{20}O_6$  (356.38). **Pharm:** Cytotoxic (cyclooxygenase-2 inhibitor,  $IC_{50}$  = 9.8 $\mu$ g/mL); cytotoxic (mouse mammary organ culture assay, 68% at 10 $\mu$ g/mL). **Source:** ZHEN YE XUE TONG *Macaranga conifera*. **Ref:** 5038.

**21441 Tomentoside A**

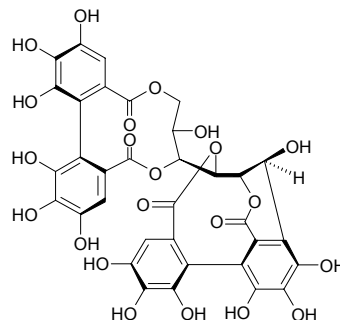
$C_{47}H_{76}O_{17}$  (913.12). **Source:** BI LU GOU TENG *Uncaria tomentosa*. **Ref:** 5341.

**21442 Tomentoside B**

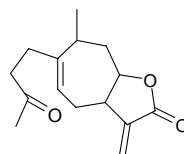
$C_{47}H_{76}O_{17}$  (913.12). **Source:** BI LU GOU TENG *Uncaria tomentosa*. **Ref:** 5341.

**21443 Tomentosin**

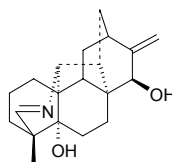
$C_{34}H_{24}O_{22}$  (784.56). Brown amorphous powder; easily soluble in MeOH and  $Me_2CO$ . **Source:** TAO JIN NIANG *Rhodomyrtus tomentosa*, JIN FEI CAO *Inula japonica*. **Ref:** 429, 660.

**21444 Tomentosin‡**

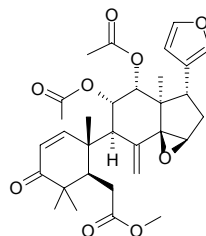
Xanthalongin  $C_{15}H_{20}O_3$  (248.32). **Source:** JIN FEI CAO *Inula japonica*. **Ref:** 660.

**21445 Tongolinine**

$C_{20}H_{27}NO_2$  (313.44). Colorless needles. **Source:** QIN LING CUI QUE HUA *Delphinium giraldii*. **Ref:** 2504.

**21446 Toonacilin**

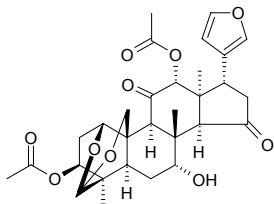
$C_{31}H_{38}O_9$  (554.65). Acicular crystals (methanol), mp 118~119°C,  $[\alpha]_D^{20}$  = +69° ( $c$  = 1, chloroform). **Pharm:** Insect antifeedant (*Epilachna varivestis*). **Source:** HONG CHUN *Toona ciliata*. **Ref:** 658.



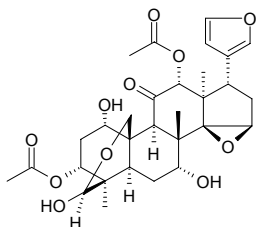


**21447 Toosendanal**

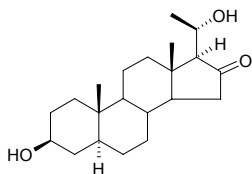
$C_{30}H_{36}O_{10}$  (556.62). Colorless needles, mp 272.0~273.5°C,  $[\alpha]_D^{18} = -32.7^\circ$  ( $c = 0.1$ , MeOH). **Pharm:** Cytotoxic (inhibits KB cell's growth,  $IC_{50} > 10\mu\text{g/mL}$ , control Adriamycin,  $IC_{50} = 0.066\mu\text{g/mL}$ ). **Source:** CHUAN LIAN PI *Melia toosendan*. **Ref:** 2314.

**21448 Toosendanin**

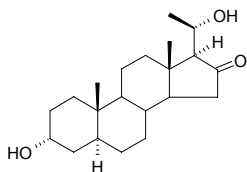
Azedarachin; Chuanliansu; 12- $\alpha$ -Acetoxymoorastatin  $C_{30}H_{38}O_{11}$  (574.63). mp 178~180°C,  $[\alpha]_D^{28} = -13.1^\circ$  (acetone), easily soluble in methanol, ethanol, acetone, slightly soluble in benzene, chloroform, almost insoluble in water.<sup>[5507]</sup> **Pharm:** Cytotoxic (inhibits KB cell's growth,  $IC_{50} = 3.82\mu\text{g/mL}$ , control Adriamycin,  $IC_{50} = 0.066\mu\text{g/mL}$ )<sup>[2314]</sup>; anthelmintic (roundworm, slow and persistent); neuromuscular blocker (mus, *in vitro*);  $LD_{50}$  (mus, ip) = 13.8mg/kg, (mus, iv) = 14.6mg/kg, (mus, sc) = 14.3mg/kg, (mus, orl) = 244.2mg/kg, (rat, sc) = 9.8mg/kg, (rbt, iv) = 4.2mg/kg. **Source:** CHUAN LIAN ZI *Melia toosendan*, CHUN BAI PI *Toona sinensis*, KU LIAN PI *Melia azedarach* (dried stem or root cortex: content = 0.4%), CHUAN LIAN PI *Melia toosendan* (dried stem or root cortex: content = 0.4%). **Ref:** 4, 660, 2314, 5501, 5507.

**21449 Toosendansterol A**

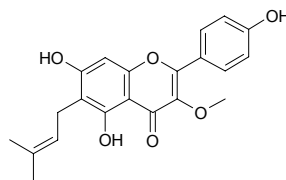
$C_{21}H_{34}O_3$  (334.50). **Source:** KU LIAN YE *Melia azedarach*. **Ref:** 660.

**21450 Toosendansterol B**

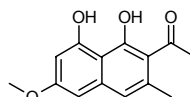
$C_{21}H_{34}O_3$  (334.50). **Source:** KU LIAN YE *Melia azedarach*. **Ref:** 660.

**21451 Topazolin**

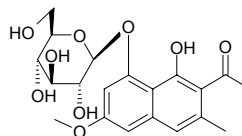
4',5,7-Trihydroxy-3-methoxy-6-prenylflavone  $C_{21}H_{20}O_6$  (368.39). **Source:** CU MAO GAN CAO *Glycyrrhiza aspera*. **Ref:** 660.

**21452 Torachryson**

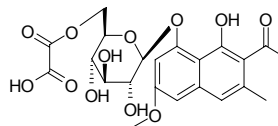
$C_{14}H_{14}O_4$  (246.27). **Source:** JUE MING ZI *Cassia tora*. **Ref:** 2.

**21453 Torachryson-8-O- $\beta$ -D-glucoside**

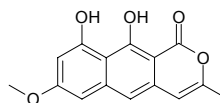
$C_{20}H_{24}O_9$  (408.41). **Pharm:** Antioxidant (DPPH scavenger,  $IC_{50} = 18.5\mu\text{g/mL}$ ; control Ascorbic acid,  $IC_{50} = 3.9\mu\text{g/mL}$ )<sup>[4711]</sup>. **Source:** ZANG BIAN DA HUANG *Rheum emodi* [Syn. *Rheum australe*] (root: yield = 0.067%dw)<sup>[4711]</sup>, DA HUANG *Rheum officinale*, HU ZHANG *Polygonum cuspidatum*. **Ref:** 2, 4711.

**21454 Torachryson-8-O- $\beta$ -D-(6'-oxayl)-glucoside**

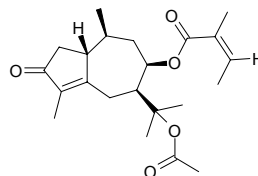
$C_{22}H_{24}O_{12}$  (480.43). **Source:** DA HUANG *Rheum officinale*. **Ref:** 2.

**21455 Toralactone**

$C_{15}H_{12}O_5$  (272.26). mp 253~254°C. **Source:** JUE MING ZI *Cassia tora*. **Ref:** 2, 6.

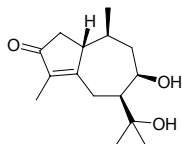
**21456 Torilin**

[13018-10-5]  $C_{22}H_{32}O_5$  (376.50). White needles, mp 76~77°C,  $[\alpha]_D^{20} = -38.92^\circ$  ( $c = 10.25$ , MeOH); mp 77~78°C,  $[\alpha]_D^{14} = -45.3^\circ$  ( $c = 0.085$ , EtOH). **Pharm:** 5 $\alpha$ -Reductase inhibitor ( $IC_{50} = (31.7\pm 4.2)\mu\text{mol/L}$ ; control Finasteride,  $IC_{50} = (0.38\pm 0.06)\mu\text{mol/L}$ ;  $\alpha$ -Linolenic acid,  $IC_{50} = (160.3\pm 24.6)\mu\text{mol/L}$ )<sup>[5398]</sup>. **Source:** HUA NAN HE SHI *Torilis japonica*. **Ref:** 6, 5398.

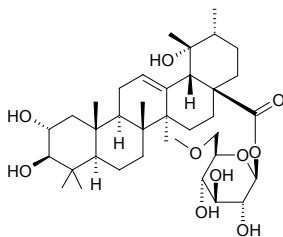


**21457 Torilolone**

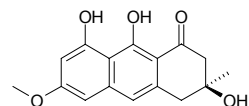
$C_{15}H_{24}O_3$  (252.36). mp 136~137°C. Source: HUA NAN HE SHI *Torilis japonica*. Ref: 6.

**21458 Tormentac acid-6-methoxy  $\beta$ -D-glucopyranosyl ester**

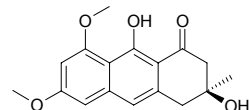
$C_{37}H_{60}O_{10}$  (664.88). Source: JIN YING ZI *Rosa laevigata*. Ref: 660.

**21459 Torosachryson**

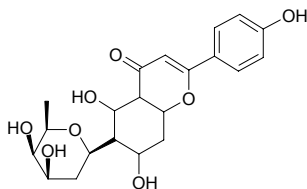
$C_{16}H_{16}O_5$  (288.30). Source: DUN YE JUE MING *Cassia obtusifolia*, *Cortinarius* spp. Ref: 660, 3799.

**21460 Torosachryson 8-O-methyl ether**

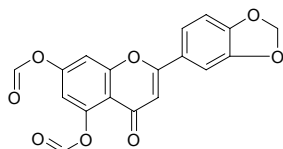
$C_{17}H_{18}O_5$  (302.33). Source: *Cortinarius* spp. Ref: 3799.

**21461 Torosaflavone A**

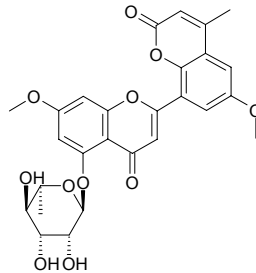
$C_{21}H_{26}O_8$  (406.44). Source: ER RUI HE LIAN DOU *Driedmaria diandra* [Syn. *Driedmaria cordata* ssp. *diandra*] (whole herb: yield = 0.00016%dw). Ref: 4758.

**21462 Torreyaflavone**

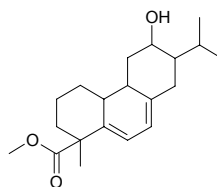
$C_{18}H_{10}O_8$  (354.28). Source: FEI SHU *Torreya grandis* (twig and leaf). Ref: 660.

**21463 Torreyaflavonoid**

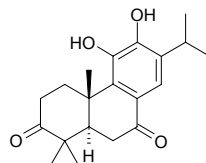
$C_{27}H_{26}O_{11}$  (526.50). Source: FEI SHU *Torreya grandis* (twig and leaf). Ref: 660.

**21464 Torreyagrandate**

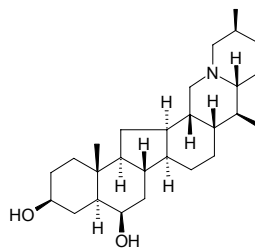
$C_{20}H_{30}O_3$  (318.46). Source: FEI SHU *Torreya grandis* (twig and leaf). Ref: 660.

**21465 Torreayunnin**

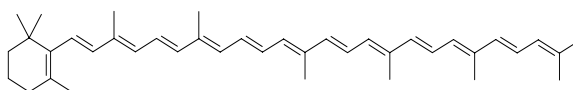
$C_{20}H_{26}O_4$  (330.43). Pale yellow needles (from acetone), mp 232°C,  $[\alpha]_D^{19.8} = +87.09^\circ$  ( $c = 0.24$ , MeOH). Source: YUN NAN FEI SHU *Torreya yunnanensis* (leaf and twig: yield = 0.000044%dw). Ref: 4707.

**21466 Tortifoline**

$C_{27}H_{45}NO_2$  (415.67). Source: XI BEI MU *Fritillaria imperialis* (bulb). Ref: 4217.

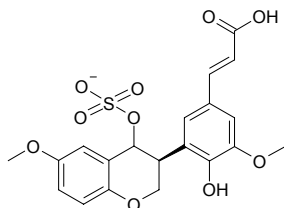
**21467 Torulene**

$C_{40}H_{54}$  (534.87). Source: occurs in many fungi. Ref: 658.

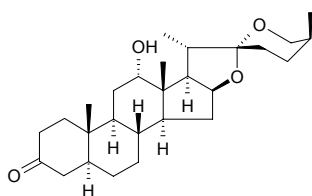


**21468 Torvanol A**

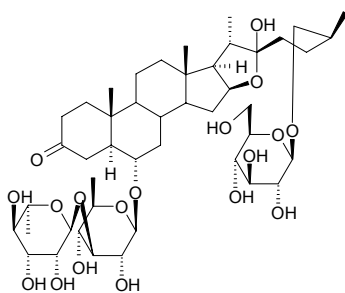
$C_{20}H_{19}O_{10}S^-$  (451.43). Amorphous powder, mp > 300°C,  $[\alpha]_D^{29} = -50^\circ$  ( $c = 0.280$ , H<sub>2</sub>O). Source: SHUI QIE *Solanum torvum*. Ref: 1999.

**21469 Torvogenin**

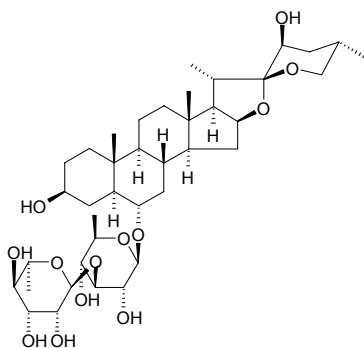
Torvogenin  $C_{27}H_{42}O_4$  (430.63). Source: SHUI QIE *Solanum torvum*. Ref: 6.

**21470 Torvoside H**

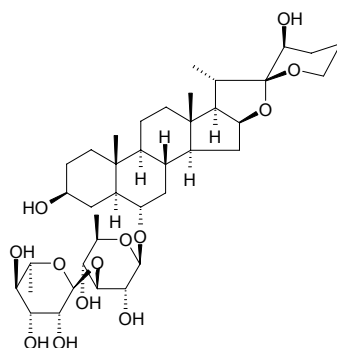
(25*S*)-26-*O*-β-*D*-Glucopyranosyl-6α-26-dihydroxy-5α-spirosten-3-one 6-*O*-[α-*L*-rhamnopyranosyl-(1→3)-β-*D*-quinovopyranoside]  $C_{45}H_{74}O_{18}$  (903.08). Amorphous powder, mp 170–172°,  $[\alpha]_D^{29} = -58.15^\circ$  ( $c = 0.114$ , MeOH). Source: SHUI QIE *Solanum torvum*. Ref: 1999.

**21471 Torvoside J**

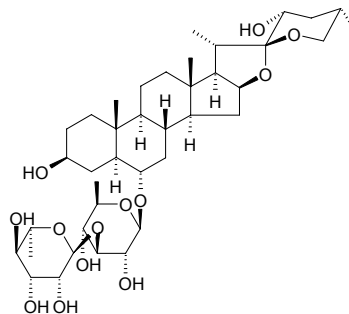
6-*O*-α-*L*-Ghamnopyranosyl-(1→3)-β-*D*-quinovopyranosyl-(22*R*,23*S*,25*S*)-3β,6α,23-trihydroxy-5α-spirostanane  $C_{39}H_{64}O_{13}$  (740.94). Amorphous powder,  $[\alpha]_D = -53.1^\circ$  ( $c = 0.4$ , MeOH). Source: SHUI QIE *Solanum torvum* (fruit). Ref: 4503.

**21472 Torvoside K**

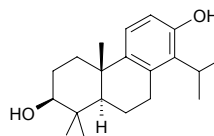
6-*O*-α-*L*-Ghamnopyranosyl-(1→3)-β-*D*-quinovopyranosyl (22*R*,23*S*,25*R*)-3β,6α,23-trihydroxy-5α-spirostanane  $C_{39}H_{64}O_{13}$  (740.94). Amorphous powder,  $[\alpha]_D = -59.3^\circ$  ( $c = 0.4$ , MeOH). Source: SHUI QIE *Solanum torvum* (fruit). Ref: 4503.

**21473 Torvoside L**

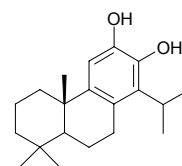
6-*O*-α-*L*-Rhamnopyranosyl-(1→3)-β-*D*-quinovopyranosyl (22*R*,23*R*,25*S*)-3β,6α,23-trihydroxy-5α-spirostanane  $C_{39}H_{64}O_{13}$  (740.94). Amorphous powder,  $[\alpha]_D = -3.8^\circ$  ( $c = 0.4$ , MeOH). Source: SHUI QIE *Solanum torvum* (fruit). Ref: 4503.

**21474 Totaradiol**

$C_{20}H_{30}O_2$  (302.46). Source: ZHU BAI GEN *Myrica nagi* [Syn. *Podocarpus nagi*]. Ref: 660.

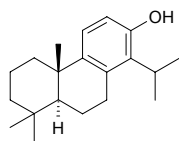
**21475 (+)-8,11,13-Totaratriene-12,13-diol**

$C_{20}H_{30}O_2$  (302.46). Orange crystalline solid,  $[\alpha]_D^{26.5} = +95.0^\circ$  ( $c = 0.842$ , CHCl<sub>3</sub>). Pharm: Antiplasmodial (*in vitro Plasmodium falciparum* K1, IC<sub>50</sub> = (0.83±0.07)μg/mL, Chloroquine IC<sub>50</sub> = (0.18±0.01)μg/mL; D10, IC<sub>50</sub> = (0.76±0.09)μg/mL, Chloroquine IC<sub>50</sub> = (0.012±0.001)μg/mL); cytotoxic (*in vitro* Chinese hamster ovarian CHO cells, IC<sub>50</sub> = (51.45±7.76)μg/mL; control Daunorubicin IC<sub>50</sub> = (1.53±0.15)μg/mL; HepG2 IC<sub>50</sub> = (59.01±5.76)μg/mL, Daunorubicin IC<sub>50</sub> = (1.46±0.20)μg/mL). Source: NAN FEI GOU MA *Harpagophytum procumbens*. Ref: 5438.

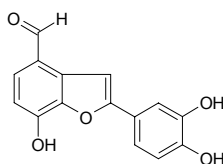


**21476 Totarol**

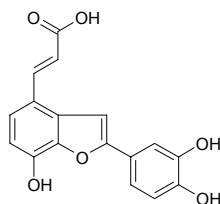
C<sub>20</sub>H<sub>30</sub>O (286.46). mp 132°C. Source: LUO HAN SONG YE *Podocarpus macrophyllus*. Ref: 6.

**21477 Tournefolal**

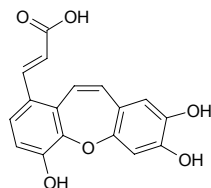
7-Hydroxy-2-(3,4-dihydroxyphenyl)benzofuran-4-al C<sub>15</sub>H<sub>10</sub>O<sub>5</sub> (270.24). Pale yellow crystals (ethanol), mp 210–212°C. Pharm: Antioxidant (*in vitro*, Cu<sup>2+</sup>-induced LDL peroxidation assay, IC<sub>50</sub> = 4.3 μmol/L; control Probuco, IC<sub>50</sub> = 4.7 μmol/L). Source: ZI DAN TENG *Tournefortia sarmentosa* (stem: yield = 0.00013%). Ref: 4628.

**21478 Tournefolic acid A**

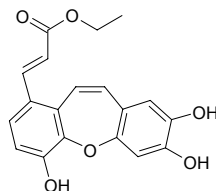
7-Hydroxy-2-(3,4-dihydroxyphenyl)-4-(1*E*-propenoyl-3-oic acid)benzofuran C<sub>17</sub>H<sub>12</sub>O<sub>6</sub> (312.28). Yellow crystals (EtOH), mp 197–198°C. Pharm: Antioxidant (*in vitro*, Cu<sup>2+</sup>-induced LDL peroxidation assay, IC<sub>50</sub> = 4.81 μmol/L; control Probuco, IC<sub>50</sub> = 4.7 μmol/L). Source: ZI DAN TENG *Tournefortia sarmentosa* (stem: yield = 0.00011%). Ref: 4628.

**21479 Tournefolic acid B**

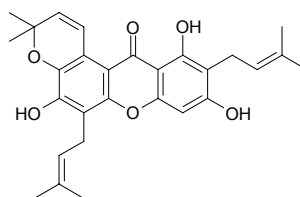
3-(4,7,8-Trihydroxydibenzo-[*b,f*]oxepin-1-yl)acrylic acid C<sub>17</sub>H<sub>12</sub>O<sub>6</sub> (312.28). Yellow crystals (EtOH), mp 242–245°C. Pharm: Antioxidant (*in vitro*, Cu<sup>2+</sup>-induced LDL peroxidation assay, IC<sub>50</sub> = 2.32 μmol/L; control Probuco, IC<sub>50</sub> = 4.7 μmol/L). Source: ZI DAN TENG *Tournefortia sarmentosa* (stem: yield = 0.00063%). Ref: 4628.

**21480 Tournefolic acid B ethyl ester**

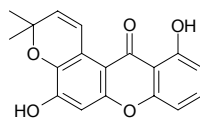
C<sub>19</sub>H<sub>16</sub>O<sub>6</sub> (340.34). Yellow crystals (EtOH), mp 225–227°C. Pharm: Antioxidant (*in vitro*, Cu<sup>2+</sup>-induced LDL peroxidation assay, IC<sub>50</sub> = 0.51 μmol/L; control Probuco, IC<sub>50</sub> = 4.7 μmol/L). Source: ZI DAN TENG *Tournefortia sarmentosa* (stem: yield = 0.00075%). Ref: 4628.

**21481 Tovophyllin A**

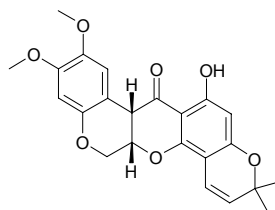
C<sub>28</sub>H<sub>30</sub>O<sub>6</sub> (462.55). Source: DAO NIAN ZI *Garcinia mangostana* (fruit hull), TIAN SHAN ZHU ZI *Garcinia dulcis* (fruit). Ref: 3066, 5319.

**21482 Tovoxanthone**

C<sub>18</sub>H<sub>14</sub>O<sub>5</sub> (310.31). Source: HEI XIAN TIAO TENG HUANG *Garcinia nigrolineata* (stam bark). Ref: 3482.

**21483 α-Toxicarol**

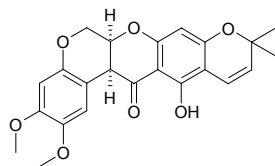
[82-09-7] C<sub>23</sub>H<sub>22</sub>O<sub>7</sub> (410.43). Yellowish solid, mp 98–102°C; mp (–) 125–127°C, (±) 219–223°C. Pharm: Antineoplastic (Inhibition of DMBA-induced preneoplastic lesions *in vitro*, MMOC assay, IC<sub>50</sub> > 47 μmol/L; control Sulforaphane, IC<sub>50</sub> = 11 μmol/L)<sup>[4718]</sup>; cytotoxic (mouse mammary organ culture assay, 80% at 10 μg/mL)<sup>[5038]</sup>; nematocide (*in vitro*, 0.1 mg/mL, larva *Toxocara canis*, after 6h cultivation, RM = 4h, after 24h, RM = 0); pesticide; anti-tumor promotor (*in vivo*, mouse skin tumor, inhibits TPA-induced EBV-EA activation, 100 mol ratio/32 pmol TPA, EBV-EA positive cells = 71.9% viability, positive control β-Carotene, EBV-EA positive cells = 82.7% viability)<sup>[4982]</sup>. Source: DU HUI MAO DOU *Tephrosia toxicaria* (stem: yield = 0.023% dw)<sup>[4718]</sup>, HUI YE GEN *Tephrosia purpurea*, MAO YU TENG *Derris elliptica*, YU TENG *Derris trifoliata*, YU TENG *Derris trifoliata* (stem). Ref: 6, 900, 4718, 4982, 5038.



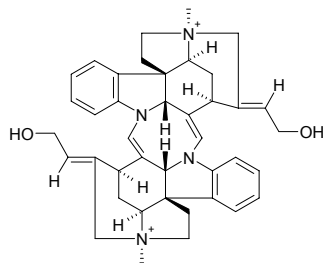
**21484  $\beta$ -Toxicarol**

$C_{23}H_{22}O_7$  (410.43). mp ( $\pm$ ) 169~170°C. Source: YU TENG *Derris trifoliata*.

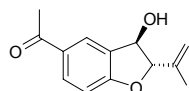
Ref: 6.

**21485 Toxiferine I**

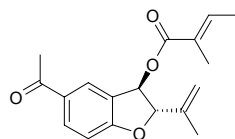
$C_{40}H_{46}N_4O_2^{2+}$  (614.84). Dichloride:  $C_{40}H_{46}Cl_2N_4O_2$  crystals,  $[\alpha]_D^{22} = -546^\circ$  ( $c = 0.30$ ); di-bitter acid salt:  $C_{52}H_{50}N_{10}O_{16}$ , dark yellow tiny lamellar crystals, mp 257~260°C (dec). Pharm: Paralyzes muscle (monkey iv,  $ED_{50} = 5.5$  or  $6.5 \mu\text{g}/\text{kg}$  bi-chloride, gpg, iv,  $ED_{50} = 9.35 \mu\text{g}/\text{kg}$ ); muscle relaxant (neuromuscular blocker of competitive type);  $LD_{50}$  (monkey, iv) =  $8.9 \mu\text{g}/\text{kg}$ , (monkey, sc) =  $17.82 \mu\text{g}/\text{kg}$ , (gpg, sc) =  $14.4 \mu\text{g}/\text{kg}$ . Source: DU MA QIAN *Strychnos toxifera*, FU SHI MA QIAN ZI *Strychnos froesii*. Ref: 661.

**21486 Toxol**

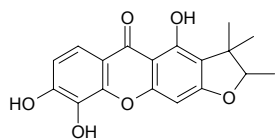
$C_{13}H_{14}O_3$  (218.26). Pharm: Antibacterial; antineoplastic. Source: family Asteraceae spp. Ref: 658.

**21487 Toxyl angelate**

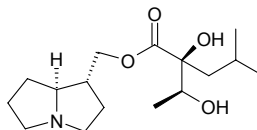
$C_{18}H_{20}O_4$  (300.36). Pharm: Antineoplastic (P<sub>388</sub>). Source: family Asteraceae spp. Ref: 658.

**21488 Toxyloxanthone C**

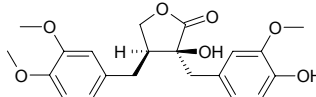
$C_{18}H_{16}O_6$  (328.32). Pharm: Antifungal (*Candida glabrata*, *Cryptococcus neoformans* and *Aspergillus fumigatus*, MIC =  $8 \mu\text{g}/\text{mL}$ )<sup>[4713]</sup>. Source: GOU JI *Cudrania cochinchinensis* (root: yield = 0.00023%dw<sup>[3025]</sup>; yield = 0.00039%dw<sup>[4713]</sup>). Ref: 3025, 4713.

**21489 Trachelanthamidine 2S-hydroxy-2S-(1S-hydroxyethyl)-4-methylpentanoyl ester**

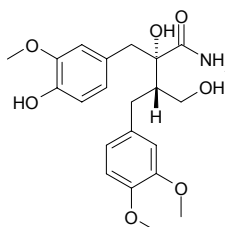
$C_{16}H_{29}NO_4$  (299.41). Yellow oil,  $[\alpha]_D^{25} = +2.0^\circ$  ( $c = 0.1$ , MeOH). Source: CU MAO NIU SHE CAO *Anchusa strigosa*. Ref: 5441.

**21490 Trachelogenin**

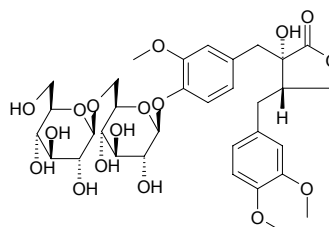
$C_{21}H_{24}O_7$  (388.42). Pharm: Calcium antagonist; cytotoxic (lymphoma cells). Source: WU ZHAO LONG *Ipomoea cairica* [Syn. *Ipomoea palmata*]. Ref: 658.

**21491 Trachelogenin amide**

$C_{21}H_{27}NO_7$  (405.45). White amorphous solid,  $[\alpha]_D^{25} = -9^\circ$  ( $c = 0.55$ , MeOH). Source: LUO SHI TENG *Trachelospermum jasminoides* (leaf and stem). Ref: 5051.

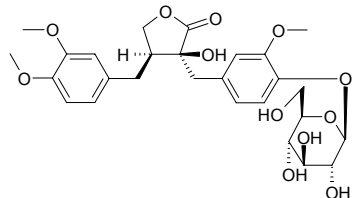
**21492 Trachelogenin 4'-O- $\beta$ -gentiobioside**

$C_{33}H_{44}O_{17}$  (712.71). Source: LUO SHI TENG *Trachelospermum jasminoides* (leaf and stem). Ref: 5051.

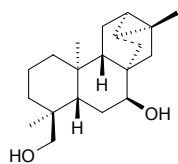


**21493 Tracheloside**

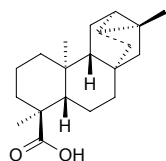
$C_{27}H_{34}O_{12}$  (550.56). mp 168–170°C. **Pharm:** Activity of trachelogenin: calcium antagonist (gpg,  $K^+$ -induced contraction of colon bands,  $IC_{50}$  = 1.1  $\mu$ mol/L); antihypertensive (spontaneous hypertensive rat, strong and permanent action); cAMP phosphodiesterase inhibitor ( $IC_{50}$  = 227  $\mu$ mol/L); antihistamine (inhibits histamine release, rat mastocyte, ConA-reduced histamine release,  $IC_{50}$  = 19  $\mu$ mol/L); platelet aggregation inhibitor (due to ADP, 0.5mg/mL InRt = 35.4%); PAF antagonist; smooth muscle relaxant (tracheal, EC = 0.1mg/mL); cytotoxic (mus, lymphoma L5178Y cell,  $ED_{50}$  = 2.0  $\mu$ mol/L); anti-HIV (*in vitro*, inhibits replication of HIV-1, 0.5  $\mu$ mol/L, InRt to HIV-1 protein p17 and p24 = 60%–70%). **Source:** LUO SHI TENG *Trachelospermum jasminoides*, RI BEN LUO SHI *Trachelospermum asiaticum* (the compound was isolated from the plant by Chugi Kono in 1958)<sup>[5505]</sup>. **Ref:** 6, 1757, 1758, 1759, 1760, 1761, 1762, 5505.

**21494 Trachyloban-7 $\beta$ ,18-diol**

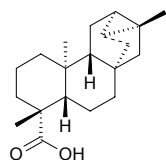
$C_{20}H_{32}O_2$  (304.48). **Source:** ZAN BI XI BA DOU *Croton zambesicus*. **Ref:** 4552.

**21495 Trachyloban-18-oic acid**

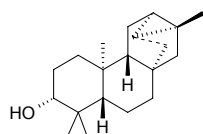
$C_{20}H_{30}O_2$  (302.46). **Source:** CHANG SUI BA DOU *Croton macrostachys*. **Ref:** 4552.

**21496 Trachyloban-19-oic acid**

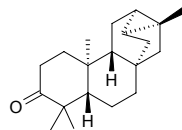
$C_{20}H_{30}O_2$  (302.46). **Source:** CHANG SUI BA DOU *Croton macrostachys*. **Ref:** 4552.

**21497 ent-Trachyloban-3 $\beta$ -ol**

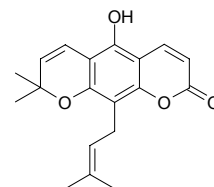
$C_{20}H_{32}O$  (288.48). **Pharm:** Cytotoxic (hmn cervical carcinoma cells,  $IC_{50}$  = 7.3  $\mu$ g/mL). **Source:** ZAN BI XI BA DOU *Croton zambesicus*. **Ref:** 4552.

**21498 ent-Trachyloban-3-one**

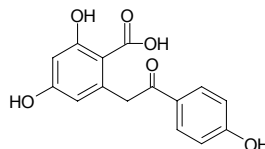
$C_{20}H_{30}O$  (286.46). Colorless oil,  $[a]_D^{22}$  =  $-37^\circ$  ( $c$  = 0.1,  $CH_2Cl_2$ ). **Pharm:** Cytotoxic (HeLa,  $IC_{50}$  = (9.6 $\pm$ 1.6)  $\mu$ g/mL, control Camptothecin,  $IC_{50}$  = 0.5  $\mu$ mol/mL; HL-60,  $IC_{50}$  = (12.4 $\pm$ 1.9)  $\mu$ g/mL, Camptothecin,  $IC_{50}$  = 0.1  $\mu$ mol/mL; WI-38,  $IC_{50}$  = (23.8 $\pm$ 3.2)  $\mu$ g/mL, Camptothecin,  $IC_{50}$  = 0.6  $\mu$ mol/mL). **Source:** ZAN BI XI BA DOU *Croton zambesicus* (leaf). **Ref:** 3807.

**21499 Trachyphyllin**

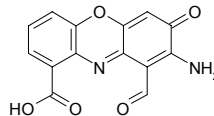
$C_{19}H_{20}O_4$  (312.37). **Pharm:** Antineoplastic (Raji cells, antitumor promotor, *in vivo*, inhibits TPA-induced EBV-EA activation, compound concentration = 500mol ratio/32 pmol TPA: EBV-EA-positive cells = (45.3 $\pm$ 1.5)% (viability > 80%),  $\beta$ -Carotene, EBV-EA-positive cells = (34.3 $\pm$ 1.1)% (viability > 80%), Curcumin, EBV-EA-positive cells = (22.8 $\pm$ 1.8)% (viability > 80%), compound  $IC_{50}$  = 467mol ratio/32 pmol TPA,  $\beta$ -Carotene,  $IC_{50}$  = 400mol ratio/32 pmol TPA, Curcumin,  $IC_{50}$  = 341mol ratio/32 pmol TPA). **Source:** LI HUA JU *Citrus tachibana*, *Citrus tamurana*. **Ref:** 5048.

**21500 Tragopogonic acid**

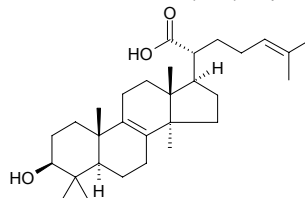
$C_{15}H_{12}O_6$  (288.26). Colorless crystals, 161°C (dec). **Pharm:** Antioxidant (DPPH scavenger,  $IC_{50}$  = (14.22 $\pm$ 3.79)  $\mu$ g/mL; control Ascorbic acid,  $IC_{50}$  = (2.49 $\pm$ 0.32)  $\mu$ g/mL; Caffeic acid,  $IC_{50}$  = (1.78 $\pm$ 0.03)  $\mu$ g/mL; Chlorogenic acid,  $IC_{50}$  = (1.28 $\pm$ 0.38)  $\mu$ g/mL). **Source:** SUAN YE PO LUO MEN SHEN *Tragopogon porrifolius* (subaerial parts). **Ref:** 5307.

**21501 Tramesanguin**

$C_{14}H_8N_2O_5$  (284.23). **Source:** HONG SHUAN JUN *Trametes cinnabarina* [Syn. *Polyporus cinnabarinus*; *Boletus cinnabarinus*]. **Ref:** 660.

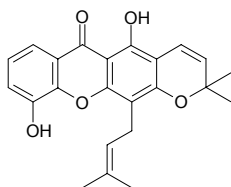
**21502 Trametenolic acid**

Trametenolic acid B  $C_{30}H_{48}O_3$  (456.72). **Source:** FU LING *Poria cocos*, YI LYE GAN LAO JUN *Tyromyces fissilis* (sporocarp). **Ref:** 660, 4414.

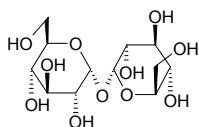


**21503 Trapezifolixanthone**

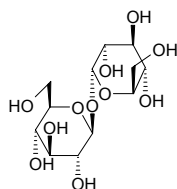
Toxyloxanthone A [50816-23-4]  $C_{23}H_{22}O_5$  (378.43). **Pharm:** Antitubercular (*Mycobacterium tuberculosis*, MIC = 12.5 $\mu$ g/mL). **Source:** DAO NIAN ZI *Garcinia mangostana* (fruit). **Ref:** 4358.

**21504 Trehalose ( $\alpha:\alpha$ )**

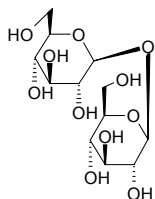
$C_{12}H_{22}O_{11}$  (342.30). mp 97°C (containing water), 210°C (anhydrite). **Source:** JUAN BAI *Selaginella tamariscina*, MO GU *Agaricus campestris*, XIANG XUN *Lentinus edodes*, YAN ZHOU JUAN BAI *Selaginella involvens*, YUAN CAN ZI *Bombyx mori*. **Ref:** 6.

**21505 Trehalose ( $\alpha:\beta$ )**

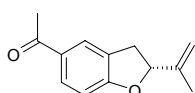
$C_{12}H_{22}O_{11}$  (342.30). mp 210~220°C. **Source:** JUAN BAI *Selaginella tamariscina*, MO GU *Agaricus campestris*, XIANG XUN *Lentinus edodes*, YAN ZHOU JUAN BAI *Selaginella involvens*, YUAN CAN ZI *Bombyx mori*. **Ref:** 6.

**21506 Trehalose ( $\beta:\beta$ )**

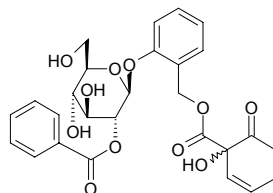
$C_{12}H_{22}O_{11}$  (342.30). mp 135~140°C. **Source:** JUAN BAI *Selaginella tamariscina*, MO GU *Agaricus campestris*, XIANG XUN *Lentinus edodes*, YAN ZHOU JUAN BAI *Selaginella involvens*, YUAN CAN ZI *Bombyx mori*. **Ref:** 6.

**21507 Tremetone**

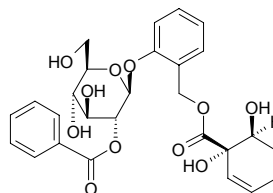
$C_{13}H_{14}O_2$  (202.26). **Pharm:** Causes hmn mammary diseases; fish toxin. **Source:** QIAN MA YE ZE LAN *Eupatorium urticaefolium*, ZHOU YE ZE LAN *Eupatorium rugosum*, *Ligularia* sp., *Grindelia* sp., *Liatis* sp. **Ref:** 658.

**21508 Tremulacin**

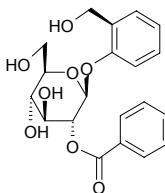
$C_{27}H_{28}O_{11}$  (528.52). Colorless crystals (ethyl acetate), mp 122~123°C; Colorless prisms, mp 122~125°C. **Pharm:** Antiviral (HSV-1, EC<sub>50</sub> = 87 $\mu$ mol/L; HSV-2, EC<sub>50</sub> = 86 $\mu$ mol/L; HIV-1, EC<sub>50</sub> = 52 $\mu$ mol/L; control Acyclovir, HSV-1, EC<sub>50</sub> = 1.1 $\mu$ mol/L; HSV-2, EC<sub>50</sub> = 1 $\mu$ mol/L; control Azidothymidine, HIV-1, EC<sub>50</sub> = 0.02 $\mu$ mol/L)<sup>[4742]</sup>; antipyretic; diuretic; used in treatment of trachitis. **Source:** CHAN YANG *Populus tremuloides*, OU ZHOU SHAN YANG *Populus tremula*, TIAN LIAO MU *Homalium cochinchinensis* (root cortex: yield = 0.438%)<sup>[4742]</sup>, YI YE YANG *Populus heterophylla*. **Ref:** 661, 4742.

**21509 Tremulacinalol**

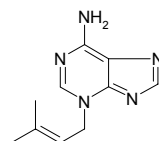
$C_{27}H_{30}O_{11}$  (530.53). Colorless amorphous mass. **Pharm:** Antiviral inactive (HSV-1 and HSV-2). **Source:** TIAN LIAO MU *Homalium cochinchinensis* (root cortex: yield = 0.114%). **Ref:** 4742.

**21510 Tremuloidin**

$C_{20}H_{22}O_8$  (390.39). Colorless powder, mp 162~168°C. **Pharm:** Antiviral inactive (HSV-1 and HSV-2)<sup>[4742]</sup>. **Source:** TIAN LIAO MU *Homalium cochinchinensis* (root cortex: yield = 0.002%), CHAN YANG *Populus tremuloides*, MAO BAI YANG *Populus tomentosa*. **Ref:** 660, 4742.

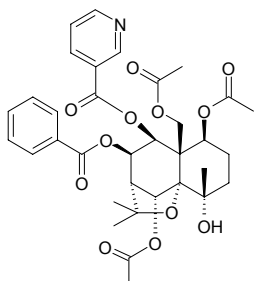
**21511 Triacanthine**

Triacanthin [10091-84-6]  $C_{10}H_{13}N_5$  (203.25). mp 228~229°C. **Pharm:** Antineoplastic (Zajdela ascites carcinoma); antispasmodic (gpg); coronary vasodilator (dog, iv); vulnerary; inhibits respiration; antihypertensive (cat, rbt, and gpg iv); enhances myocardial contractility (rbt, heart, *in vitro*); sedative (mus); slows heart rate ((rbt, iv, increases amplitude and controlling rhythm); used in treatment of hypertension, bronchial asthma, ulcer of digestive tract, and chronic enteritis; LD<sub>50</sub> (mus iv) = 147mg/kg. **Source:** SAN CI ZAO JIA *Gleditsia triacanthos*, WEN ROU ZHI XIE MU *Holarrhena mitis*, ZAO JIA *Gleditsia sinensis* [Syn. *Gleditsia horrida*], ZAO JIA YE *Gleditsia sinensis* [Syn. *Gleditsia horrida*], ZAO JIA GEN PI *Gleditsia sinensis* [Syn. *Gleditsia horrida*]. **Ref:** 4, 658.



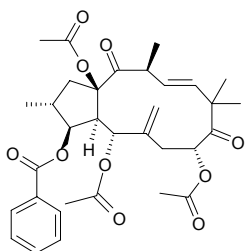
**21512 1 $\beta$ ,5 $\alpha$ ,11-Triacetoxo-7 $\beta$ -benzoyl-4 $\alpha$ -hydroxy-8 $\beta$ -nicotinoyl-dihydroagarofuran**

C<sub>34</sub>H<sub>39</sub>NO<sub>12</sub> (653.69). Amorphous powder,  $[\alpha]_D^{25} = -52.4^\circ$  ( $c = 0.4$ , MeOH). Source: LEI GONG TENG *Tripterygium wilfordii*. Ref: 758.



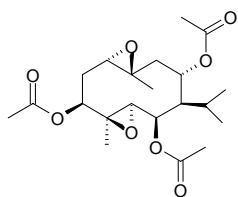
**21513 (2R\*,3S\*,4R\*,5R\*,8R\*,13S\*,15R\*)-5,8,15-Triacetoxo-3-benzoyloxy-9,14-dioxajatropha-6(17),11E-diene**

C<sub>33</sub>H<sub>40</sub>O<sub>10</sub> (596.68). Colorless to white needles. Source: HAI BO NA DA JI *Euphorbia hyberna*. Ref: 2153.



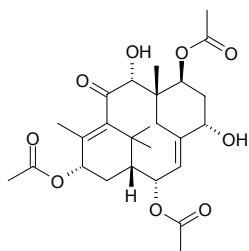
**21514 3 $\beta$ ,6 $\beta$ ,8 $\alpha$ -Triacetoxo-4 $\beta$ ,5 $\alpha$ :1 $\alpha$ ,10 $\beta$ -diepoxygermacrane**

C<sub>21</sub>H<sub>32</sub>O<sub>8</sub> (412.48). Colorless gum,  $[\alpha]_D^{26} = +5.0^\circ$  ( $c = 2.0$ , CHCl<sub>3</sub>). Source: NIAN MAO SHU WEI CAO *Salvia roborowskii*. Ref: 5439.



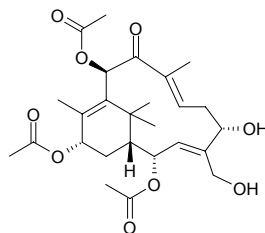
**21515 2 $\alpha$ ,7 $\beta$ ,13 $\alpha$ -Triacetoxo-5 $\alpha$ ,9 $\alpha$ -dihydroxy-2(3→20)abeotaxa-4(20),11-dien-10-one**

C<sub>26</sub>H<sub>36</sub>O<sub>9</sub> (492.57). Colorless gum,  $[\alpha]_D^{24} = -13^\circ$  ( $c = 0.01$ , CHCl<sub>3</sub>). Source: YUN NAN HONG DOU SHAN *Taxus yunnanensis* (seed). Ref: 3991.



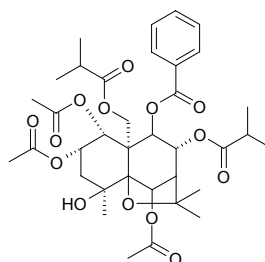
**21516 (3E,7E)-2 $\alpha$ ,10 $\beta$ ,13 $\alpha$ -Triacetoxo-5 $\alpha$ ,20-dihydroxy-3,8-seco-taxa-3,7,11-trien-9-one**

C<sub>26</sub>H<sub>36</sub>O<sub>9</sub> (492.57). mp 77~78°C,  $[\alpha]_D = -60^\circ$  (CHCl<sub>3</sub>). Source: HONG DOU SHAN *Taxus chinensis*. Ref: 662.



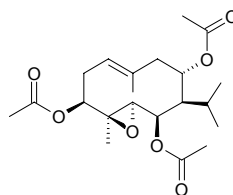
**21517 1 $\alpha$ ,2 $\alpha$ ,6 $\beta$ -Triacetoxo-8 $\alpha$ ,13-diisobutanoyloxy-9 $\beta$ -benzoyloxy-4 $\beta$ -hydroxy- $\beta$ -dihydroagarofuran**

C<sub>36</sub>H<sub>48</sub>O<sub>14</sub> (704.78). White amorphous powder, mp 94~95°C,  $[\alpha]_D^{24} = -34.3^\circ$  ( $c = 0.35$ , CHCl<sub>3</sub>). Pharm: Insecticidal (larval of *Mythimna separata*, KD<sub>50</sub> = 271.5 $\mu$ g/g). Source: DIAO GAN MA *Celastrus angulatus* (root cortex: yield = 0.00032%dw). Ref: 3044.



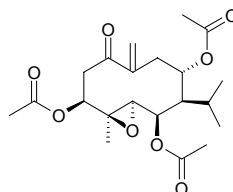
**21518 3 $\beta$ ,6 $\beta$ ,8 $\alpha$ -Triacetoxo-4 $\beta$ ,5 $\alpha$ -epoxygermacr-1(10)E-ene**

C<sub>21</sub>H<sub>32</sub>O<sub>7</sub> (396.48). Colorless gum,  $[\alpha]_D^{26} = -12.7^\circ$  ( $c = 16.5$ , CHCl<sub>3</sub>). Source: NIAN MAO SHU WEI CAO *Salvia roborowskii*. Ref: 5439.



**21519 3 $\beta$ ,6 $\beta$ ,8 $\alpha$ -Triacetoxo-4 $\beta$ ,5 $\alpha$ -epoxy-1-oxogermacr-10(14)-ene**

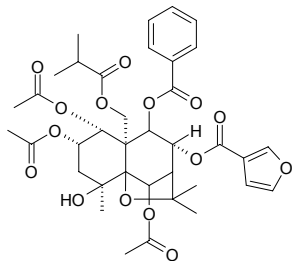
C<sub>21</sub>H<sub>30</sub>O<sub>8</sub> (410.47). Colorless gum,  $[\alpha]_D^{26} = +29.0^\circ$  ( $c = 2.0$ , CHCl<sub>3</sub>). Source: NIAN MAO SHU WEI CAO *Salvia roborowskii*. Ref: 5439.





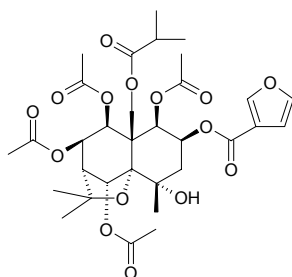
**21520 1 $\alpha$ ,2 $\alpha$ ,6 $\beta$ -Triacetoxo-8 $\alpha$ -( $\beta$ -furancarboxyloxy)-9 $\beta$ -benzoyloxy-13-isobutanoyloxy-4 $\beta$ -hydroxy- $\beta$ -dihydroagarofuran**

C<sub>37</sub>H<sub>44</sub>O<sub>15</sub> (728.75). White amorphous powder, mp 109~110°C, [ $\alpha$ ]<sub>D</sub><sup>24</sup> = -25.9° (c = 0.58, CHCl<sub>3</sub>). **Pharm:** Insecticidal (larval of *Mythimna separata*, KD<sub>50</sub> = 58.9 $\mu$ g/g). **Source:** DIAO GAN MA *Celastrus angulatus* (root cortex: yield = 0.00048%dw). **Ref:** 3044.



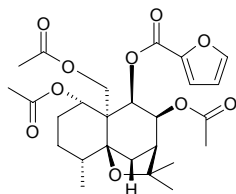
**21521 1 $\beta$ ,7 $\beta$ ,8 $\alpha$ -Triacetoxo-2 $\beta$ -furanoyl-4 $\alpha$ -hydroxy-11-isobutyryloxy-dihydroagarofuran**

C<sub>32</sub>H<sub>42</sub>O<sub>15</sub> (666.68). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -13.1° (c = 1.7, MeOH). **Pharm:** Immunosuppressant (inhibits lymphocyte transformation, 80 $\mu$ g/mL, InRt = 28%, control Dexamethasone, 50 $\mu$ g/mL, InRt = 61%). **Source:** LEI GONG TENG *Tripterygium wilfordii* (xylem). **Ref:** 4466.



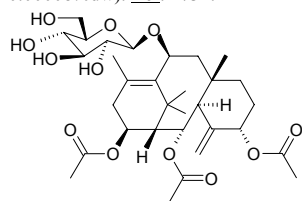
**21522 1 $\alpha$ ,8 $\beta$ ,14-Triacetoxo-9 $\beta$ -furoxyldihydro- $\beta$ -agarofuran**

C<sub>26</sub>H<sub>34</sub>O<sub>10</sub> (506.55). White amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -8.68° (c = 0.32, MeOH). **Pharm:** Intestinal smooth muscle relaxant (*in vitro*, rat ileum, 1 $\mu$ g/mL, relaxant effect = (30.6 $\pm$ 7.2)%, control Papaverine, relaxant effect = (28.6 $\pm$ 7.3)%, *p* < 0.05). **Source:** DENG YOU TENG ZI *Celastrus paniculatus*. **Ref:** 5002.



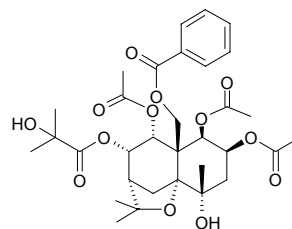
**21523 2 $\alpha$ ,5 $\alpha$ ,14 $\beta$ -Triacetoxo-10 $\beta$ -O-( $\beta$ -D-glucopyranosyl)taxa-4(20),11-diene**

C<sub>32</sub>H<sub>48</sub>O<sub>12</sub> (624.73). Amorphous solid, [ $\alpha$ ]<sub>D</sub><sup>22</sup> = +39° (c = 0.2, CHCl<sub>3</sub>). **Source:** JIA NA DA HONG DOU SHAN *Taxus canadensis* (needle: yield = 0.00008%dw). **Ref:** 4734.



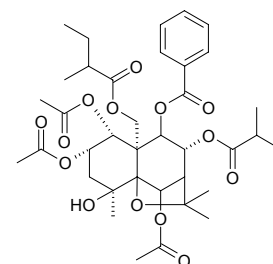
**21524 1 $\beta$ ,2 $\beta$ ,9 $\alpha$ -Triacetoxo-8 $\alpha$ -(2-hydroxy-isobutyryloxy)-15-benzoyloxy-4 $\alpha$ -hydroxy- $\beta$ -dihydroagarofuran**

C<sub>32</sub>H<sub>42</sub>O<sub>13</sub> (634.68). Amorphous white powder. **Source:** DIAO GAN MA *Celastrus angulatus*. **Ref:** 824.



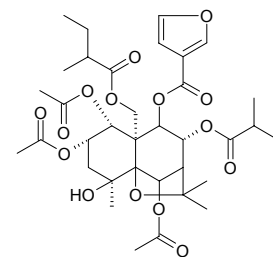
**21525 1 $\alpha$ ,2 $\alpha$ ,6 $\beta$ -Triacetoxo-8 $\alpha$ -isobutanoyloxy-9 $\beta$ -benzoyloxy-13-( $\alpha$ -methyl)butanoyloxy-4 $\beta$ -hydroxy- $\beta$ -dihydroagarofuran**

C<sub>37</sub>H<sub>50</sub>O<sub>14</sub> (718.8). White amorphous powder, mp 95~96°C, [ $\alpha$ ]<sub>D</sub><sup>24</sup> = -17.9° (c = 0.60, CHCl<sub>3</sub>). **Pharm:** Insecticidal (larval of *Mythimna separata*, KD<sub>50</sub> = 168.8 $\mu$ g/g). **Source:** DIAO GAN MA *Celastrus angulatus* (root cortex: yield = 0.00042%dw). **Ref:** 3044.



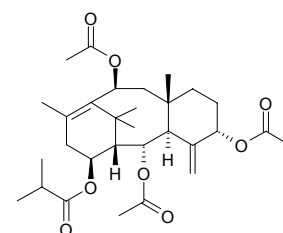
**21526 1 $\alpha$ ,2 $\alpha$ ,6 $\beta$ -Triacetoxo-8 $\beta$ -isobutanoyloxy-9 $\beta$ -( $\beta$ -furancarboxyloxy)-13-( $\alpha$ -methyl)butanoyloxy-4 $\beta$ -hydroxy- $\beta$ -dihydroagarofuran**

C<sub>35</sub>H<sub>48</sub>O<sub>15</sub> (708.76). White amorphous powder, mp 78~79°C, [ $\alpha$ ]<sub>D</sub><sup>24</sup> = -25.8° (c = 0.60, CHCl<sub>3</sub>). **Pharm:** Insecticidal (larval of *Mythimna separata*, KD<sub>50</sub> = 91.4 $\mu$ g/g). **Source:** DIAO GAN MA *Celastrus angulatus* (root cortex: yield = 0.00098%dw). **Ref:** 3044.



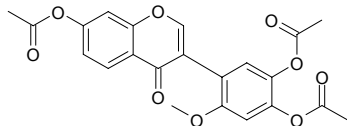
**21527 2 $\alpha$ ,5 $\alpha$ ,10 $\beta$ -Triacetoxo-14 $\beta$ -iso-butyryloxytaxa-4(20),11-diene**

C<sub>30</sub>H<sub>44</sub>O<sub>8</sub> (532.68). mp 183°C, [ $\alpha$ ]<sub>D</sub> = +33.96° (MeOH). **Source:** HONG DOU SHAN *Taxus chinensis*. **Ref:** 662.

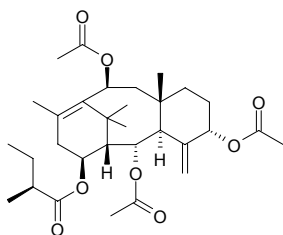


**21528 4',5',7-Triacetoxy-2'-methoxyisoflavone**

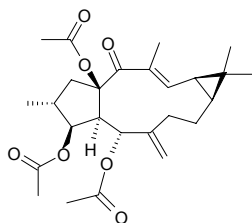
$C_{22}H_{18}O_9$  (426.38). Yellow-brown solid. Source: GUANG LIANG HUANG TAN *Dalbergia nitidula*. Ref: 1992.

**21529 2 $\alpha$ ,5 $\alpha$ ,10 $\beta$ -Triacetoxy-14 $\beta$ -((S)2-methyl)butyryloxytaxa-4(20),11-diene**

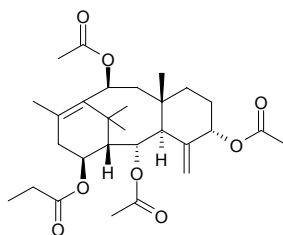
$C_{31}H_{46}O_8$  (546.71). mp 106°C,  $[\alpha]_D = +36.96^\circ$  (MeOH). Pharm: Cytotoxic (*in vitro*, Colon26-L5,  $EC_{50} = 84.9\mu\text{g/mL}$ ; HT1080,  $EC_{50} = 84.1\mu\text{g/mL}$ ; control 5-Fluorouracil, Colon26-L5,  $EC_{50} = 0.29\mu\text{g/mL}$ ; HT1080,  $EC_{50} = 0.07\mu\text{g/mL}$ )<sup>[4661]</sup>. Source: HONG DOU SHAN *Taxus chinensis*, JIANG GUO ZI SHAN *Taxus baccata*, YUN NAN HONG DOU SHAN *Taxus yunnanensis* (wood: yield = 0.0080%dw)<sup>[4661]</sup>, ZI SHAN *Taxus cuspidata*. Ref: 662, 4661, 5407.

**21530 (2R\*,3S\*,4R\*,5R\*,9S\*,11S\*,15R\*)-3,5,15-Triacetoxy-14-oxolathyra-6(17),12E-diene**

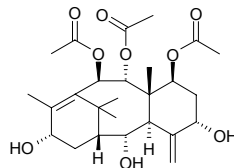
$C_{26}H_{36}O_7$  (460.57). Colorless oil. Source: HAI BO NA DA JI *Euphorbia hyberna*. Ref: 2153.

**21531 2 $\alpha$ ,5 $\alpha$ ,10 $\beta$ -Triacetoxy-14 $\beta$ -propionyloxytaxa-4(20),11-diene**

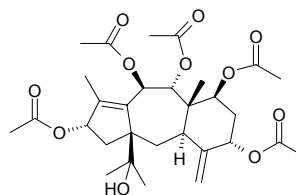
$C_{29}H_{42}O_8$  (518.65). mp 195°C,  $[\alpha]_D = +41.37^\circ$  (MeOH). Source: HONG DOU SHAN *Taxus chinensis*. Ref: 662.

**21532 7 $\beta$ ,9 $\alpha$ ,10 $\beta$ -Triacetoxy-2 $\alpha$ ,5 $\alpha$ ,13 $\alpha$ -trihydroxy-4(20),11-taxadiene**

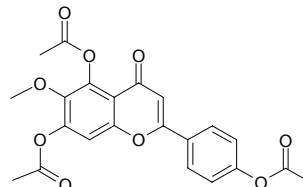
$C_{26}H_{38}O_9$  (494.59).  $[\alpha]_D = +129^\circ$  (CHCl<sub>3</sub>). Source: AO DA LI YA HONG DOU SHAN *Austrotaxus spicata*. Ref: 662.

**21533 5,10,13-Triacetyl-10-debenzoyl brevifoliol**

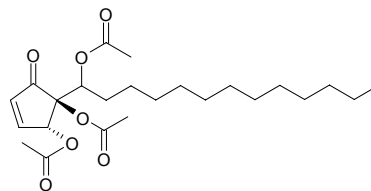
5,10,13-Acetyl-10-debenzoyl brevifoliol  $C_{30}H_{42}O_{11}$  (578.66). Oil,  $[\alpha]_D = -50^\circ$  ( $c = 1.0$ , CHCl<sub>3</sub>). Source: XI MA LA YA HONG DOU SHAN *Taxus wallichiana*. Ref: 662, 1874.

**21534 Triacetylhispidulin**

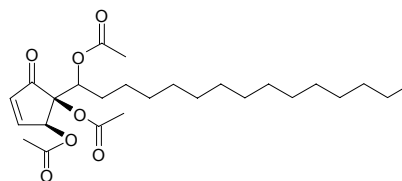
$C_{22}H_{18}O_9$  (426.38). mp 168.7°C. Source: CHANG GUAN JIA MO LI *Clerodendron indicum*. Ref: 6.

**21535 4,5,6-Tri-O-acetyl hygrophorone A<sup>12</sup>**

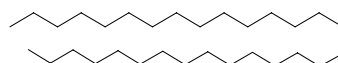
4,5-*trans*-4,5-Diacetoxy-5-(1-hydroxytridecyl)-2-cyclopenten-1-one  $C_{24}H_{38}O_7$  (438.57). Colorless oil. Source: *Hygrophorus persoonii*. Ref: 3800.

**21536 4,5,6-Tri-O-acetyl hygrophorone B<sup>14</sup>**

4,5-*cis*-4,5-Diacetoxy-(1-acetoxypentadecyl)-2-cyclopenten-1-one  $C_{26}H_{42}O_7$  (466.62). Colorless oil. Source: *Hygrophorus olivaceoalbus*. Ref: 3800.

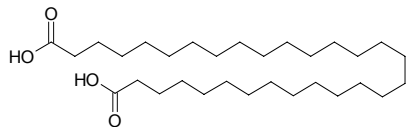
**21537 Triacotane**

[638-68-6]  $C_{30}H_{62}$  (422.83). Source: BU GU ZHI *Psoralea corylifolia*. Ref: 2.

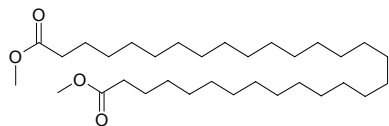


**21538 Triacontanedioic acid**

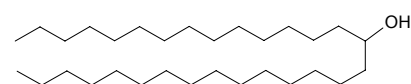
$C_{30}H_{58}O_4$  (482.79). mp 108°C; 123~125°C. Source: WEN JING *Equisetum arvense*. Ref: 6.

**21539 Triacontanedioic acid dimethyl ester**

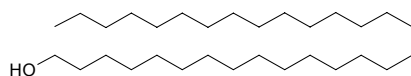
$C_{32}H_{62}O_4$  (510.85). Source: WEN JING *Equisetum arvense*. Ref: 6.

**21540 16-Triacontanol**

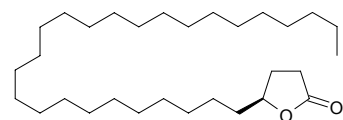
$C_{30}H_{62}O$  (438.83). Source: LONG YAN YE *Euphoria longan* [Syn. *Dimocarpus longan*]. Ref: 6.

**21541 n-Triacontanol**

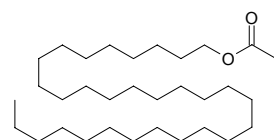
[593-50-0]  $C_{30}H_{62}O$  (438.83). mp 76~78°C; 83~84°C. Pharm: Plant growth regulator. Source: DU ZHONG *Eucommia ulmoides*, KU HAO *Conyza blinii*, MA HUANG *Ephedra sinica*, ROU CONG RONG *Cistanche deserticola*, SAN XIAO CAO *Trifolium repens*, XIAO QIAO MU ZI JIN NIU *Ardisia arborescens* (whole herb)<sup>[4769]</sup>, YE JIE *Brassica oleracea*. Ref: 2, 529, 614, 658, 660, 4769.

**21542 Triacontan-4-olide**

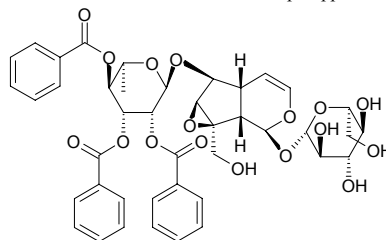
$C_{30}H_{58}O_2$  (450.80). Source: FU CHUI FE LAO JU *Flourensia cernua*. Ref: 3433.

**21543 Triacontanyl acetate**

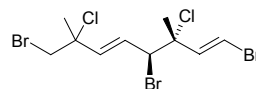
$C_{32}H_{64}O_2$  (480.87). Source: DUI YE RONG *Ficus hispida*. Ref: 660.

**21544 6-O-α-L-(2''-O-,3''-O-,4''-O-Tribenzoyl)rhamnopyranosylcatalpol**

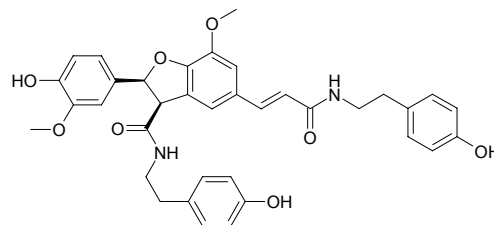
$C_{42}H_{44}O_{17}$  (820.81). White amorphous powder,  $[\alpha]_D^{22} = -56^\circ$  (c = 0.11, MeOH). Source: FEI LV BIN SHI ZI *Gmelina philippensis* (aerial parts). Ref: 3954.

**21545 1,4,8-Tribromo-3,7-dichloro-3,7-dimethyl-1E,5E-octadiene**

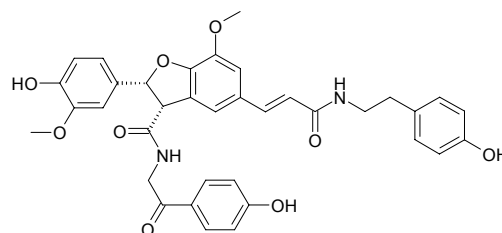
$C_{10}H_{13}Br_3Cl_2$  (443.83). Pharm: Cytotoxic (*in vitro*, WHCO1,  $IC_{50} = 18.1\mu\text{mol/L}$  control *cis*-Platin,  $IC_{50} = 13\mu\text{mol/L}$ ). Source: SHAN HU GEN HAI TOU HONG *Plocamium corallorrhiza*. Ref: 5277.

**21546 Tribulusamide A**

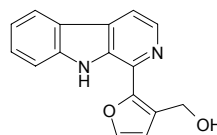
[218622-84-5]  $C_{36}H_{36}N_2O_8$  (624.70).  $[\alpha]_D^{25} = -10.9^\circ$ . Source: CI JI LI *Tribulus terrestris*. Ref: 715.

**21547 Tribulusamide B**

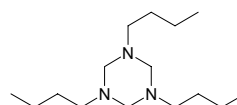
$C_{36}H_{34}N_2O_9$  (638.68). Source: CI JI LI *Tribulus terrestris*. Ref: 715.

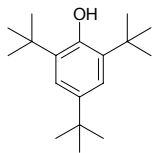
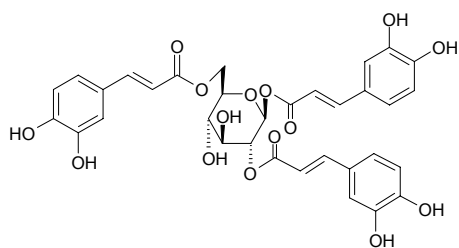
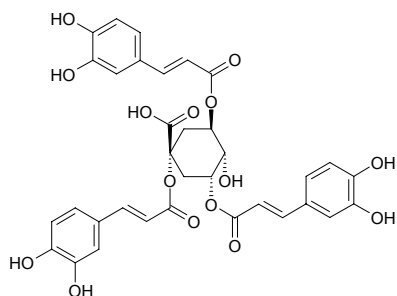
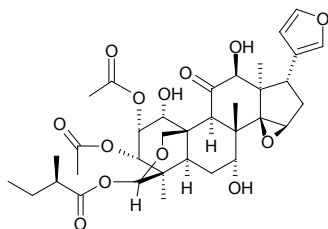
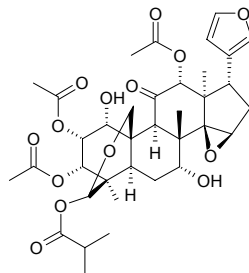
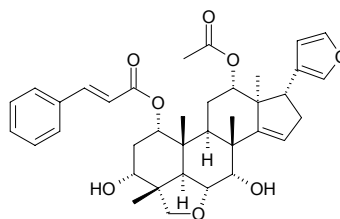
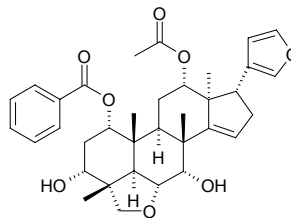
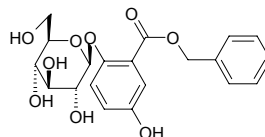
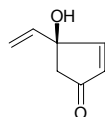
**21548 Tribusterin**

$C_{16}H_{12}N_2O_2$  (264.29). Yellowish powder ( $CHCl_3$ ), mp 184~185°C. Source: CI JI LI *Tribulus terrestris*. Ref: 1881.

**21549 1,3,5-Tributylhexahydro-1,3,5-triazine**

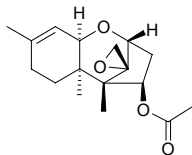
$C_{13}H_{33}N_3$  (255.45). Source: LA MEI HUA *Chimonanthus fragrans* [Syn. *Chimonanthus praecox*]. Ref: 660.



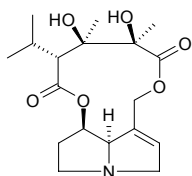
**21550 2,4,6-Tri-*t*-butyl phenol**C<sub>18</sub>H<sub>30</sub>O (262.44). Source: CHUAN XU DUAN *Dipsacus asperoides*.Ref: 660.**21551 1,2,6-Tri-*O*-(*E*)-caffeoyl- $\beta$ -*D*-glucopyranose**C<sub>33</sub>H<sub>30</sub>O<sub>15</sub> (666.60). Yellow amorphous powder,  $[\alpha]_D^{15} = -218.6^\circ$  ( $c = 0.4$ , MeOH). Source: GE XUN *Balanophora japonica* (underground part: yield = 0.0150%). Ref: 4101.**21552 1,3,5-Tri-*O*-caffeoyl quinic acid**C<sub>34</sub>H<sub>30</sub>O<sub>15</sub> (678.61). Source: CANG ER *Xanthium sibiricum* [Syn. *Xanthium strumarium*] (fruit). Ref: 660.**21553 Trichilin A**C<sub>35</sub>H<sub>46</sub>O<sub>13</sub> (674.75). Pharm: Insect antifeedant. Source: family Meliaceae spp. Ref: 658.**21554 Trichilin H**C<sub>36</sub>H<sub>46</sub>O<sub>14</sub> (702.76). Pharm: Cytotoxic (inhibits KB cell's growth, IC<sub>50</sub> = 0.11 μg/mL, control Adriamycin, IC<sub>50</sub> = 0.066 μg/mL)<sup>[2314]</sup>. Source: CHUAN LIAN PI *Melia toosendan*, KU LIAN SHI *Melia azedarach* (ripe fruit). Ref: 2314, 4528.**21555 Trichilin D**C<sub>37</sub>H<sub>44</sub>O<sub>8</sub> (616.76). Amorphous powder,  $[\alpha]_D = +96^\circ$  ( $c = 0.14$ ). Source: CHUAN LIAN PI *Melia toosendan*. Ref: 2374.**21556 Trichilin E**C<sub>35</sub>H<sub>42</sub>O<sub>8</sub> (590.72). Amorphous powder,  $[\alpha]_D = +45^\circ$  ( $c = 0.03$ ). Source: CHUAN LIAN PI *Melia toosendan*. Ref: 2374.**21557 Trichocarpin**C<sub>20</sub>H<sub>22</sub>O<sub>9</sub> (406.40). Pharm: Antifungal (*Dothichiza populea*). Source: MAO GUO YANG *Populus trichocarpa*. Ref: 658.**21558 Trichodenone A**[203243-21-4] C<sub>7</sub>H<sub>8</sub>O<sub>2</sub> (124.14). Source: *Myrothecium* sp. Ref: 4457.

**21559 Trichodermin**

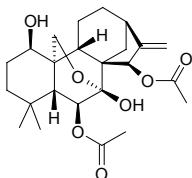
$C_{17}H_{24}O_4$  (292.38). **Pharm:** Antifungal (*Candida albicans*); cytotoxic. **Source:** LV SE MU MEI *Trichoderma virida*, *Myrothecium roridum*. **Ref:** 658.

**21560 Trichodesmine**

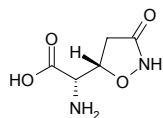
$C_{18}H_{27}NO_6$  (353.42). mp 160~161°C. **Source:** HUA JIN DAN *Crotalaria tetragona*, SHU MA *Crotalaria juncea*, YE BAI HE *Crotalaria sessiliflora*. **Ref:** 6, 660, 1521.

**21561 Trichokaurin**

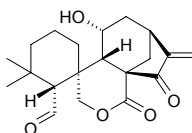
Enmenin  $C_{24}H_{34}O_7$  (434.53). mp 184~185°C,  $[\alpha]_D^{17} = -93^\circ$  ( $c = 1.0$ ,  $CHCl_3$ ). **Source:** MAO GUO XIANG CHA CAI *Isodon trichocarpa*, SHAN DI XIANG CHA CAI *Isodon oresbia* (aerial parts). **Ref:** 3808, 4067.

**21562 Tricholomic acid**

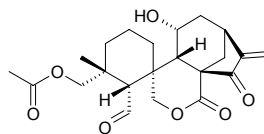
$C_5H_8N_2O_4$  (160.13). Colorless columnar crystals (water), mp 207°C (dec),  $[\alpha]_D = +80^\circ$  ( $c = 0.2$ , water). **Pharm:** Antineoplastic (mus, 5~50mg/kg); CNS stimulant. **Source:** *Tricholoma muscarium*. **Ref:** 661.

**21563 Trichorabdal A**

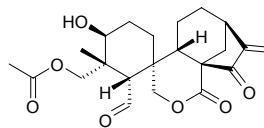
$C_{20}H_{26}O_5$  (346.43). mp 202~204°C,  $[\alpha]_D^{25} = -63.9^\circ$  ( $c = 0.001$ , EtOH). **Source:** MAO GUO XIANG CHA CAI *Isodon trichocarpa*, SHAN DI XIANG CHA CAI *Isodon oresbia* (aerial parts). **Ref:** 3808, 4067.

**21564 Trichorabdal B**

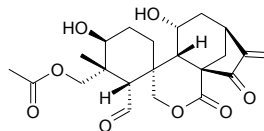
$C_{22}H_{28}O_7$  (404.46). Colorless acicular crystals, mp 160~162°C,  $[\alpha]_D^{25} = -120.3^\circ$  ( $c = 1.0$ , EtOH). **Source:** MAO GUO XIANG CHA CAI *Isodon trichocarpa*, ZI MAO XIANG CHA CAI *Isodon enanderianus*. **Ref:** 653, 4067.

**21565 Trichorabdal C**

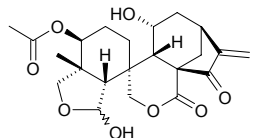
$C_{22}H_{28}O_7$  (404.46). mp 146.5~149°C,  $[\alpha]_D^{25} = +31.5^\circ$  ( $c = 1.0$ , EtOH). **Source:** MAO GUO XIANG CHA CAI *Isodon trichocarpa*. **Ref:** 4067.

**21566 Trichorabdal D**

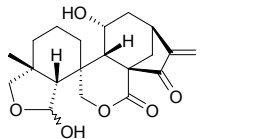
$C_{22}H_{28}O_8$  (420.46). mp 213~215°C,  $[\alpha]_D^{25} = -89.2^\circ$  ( $c = 0.01$ , EtOH). **Source:** MAO GUO XIANG CHA CAI *Isodon trichocarpa*. **Ref:** 4067.

**21567 Trichorabdal E**

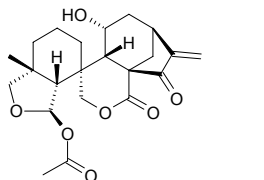
$C_{22}H_{28}O_8$  (420.46). mp 291°C,  $[\alpha]_D^{25} = -98.4^\circ$  ( $c = 0.02$ , EtOH). **Source:** MAO GUO XIANG CHA CAI *Isodon trichocarpa*. **Ref:** 4067.

**21568 Trichorabdal F**

$C_{20}H_{26}O_6$  (362.43). mp 227~230°C. **Source:** MAO GUO XIANG CHA CAI *Isodon trichocarpa*. **Ref:** 4067.

**21569 Trichorabdal F acetate**

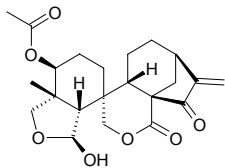
$C_{22}H_{28}O_7$  (404.46). mp 221~223°C,  $[\alpha]_D^{25} = -78.0^\circ$  ( $c = 0.05$ , EtOH). **Source:** MAO GUO XIANG CHA CAI *Isodon trichocarpa*. **Ref:** 4067.



**21570 Trichorabdal G**

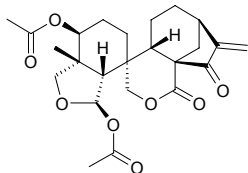
$C_{22}H_{28}O_7$  (404.46). Amorphous powder,  $[\alpha]_D^{27} = -48.9^\circ$  ( $c = 0.47$ , MeOH).

Source: MAO GUO XIANG CHA CAI *Isodon trichocarpa*. Ref: 4067.

**21571 Trichorabdal G acetate**

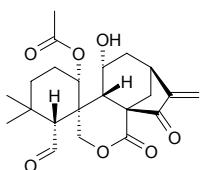
$C_{24}H_{30}O_8$  (446.50). mp 214~215°C,  $[\alpha]_D^{25} = -65.2^\circ$  ( $c = 0.05$ , EtOH). Source:

MAO GUO XIANG CHA CAI *Isodon trichocarpa*. Ref: 4067.

**21572 Trichorabdal H**

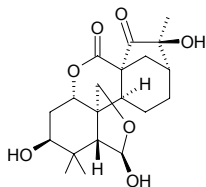
Trichodonin [92533-54-5]  $C_{22}H_{28}O_7$  (404.46). mp 217~219°C,  $[\alpha]_D^{25} = +19.4^\circ$  ( $c = 0.05$ , MeOH). Source: MAO GUO XIANG CHA CAI *Isodon trichocarpa*,

MAO YE XIANG CHA CAI *Isodon japonica* [Syn. *Rabdosia japonica*]. Ref: 575, 4067.

**21573 Trichorabdonin**

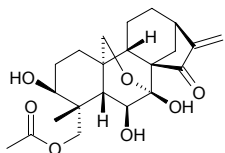
$C_{20}H_{28}O_7$  (380.44). mp > 300°C,  $[\alpha]_D^{24} = -75.0^\circ$  ( $c = 0.12$ , MeOH). Source:

MAO GUO XIANG CHA CAI *Isodon trichocarpa*. Ref: 4067.

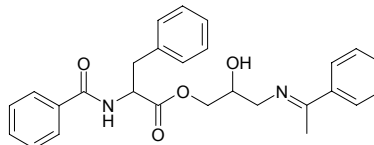
**21574 Trichoranin**

$C_{22}H_{30}O_7$  (406.48). mp 210~212°C,  $[\alpha]_D^{29} = -88.9^\circ$  ( $c = 0.90$ , MeOH). Source:

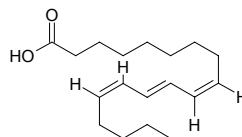
MAO GUO XIANG CHA CAI *Isodon trichocarpa*. Ref: 4067.

**21575 Trichosanatine**

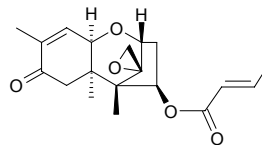
3-[(1-Phenyl)ethylidene]amino-2-hydroxy-propyl  $\alpha$ -(benzoyl amino)benzenepropanoate  $C_{27}H_{28}N_2O_4$  (444.54). Colorless acicular crystals, mp 175.5~176.0°C. Source: SHUANG BIAN GUA LOU *Trichosanthes rosthornii* [Syn. *Trichosanthes uniflora*]. Ref: 331.

**21576 Trichosanic acid**

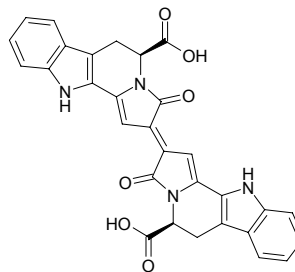
$C_{18}H_{30}O_2$  (278.44). mp 44°C. Pharm: Platelet aggregation inhibitor (induced by ADP, collagen and adrenaline). Source: GUA LOU *Trichosanthes kirilowii*, GUA LOU ZI *Trichosanthes kirilowii*, SUAN SHI LIU *Punica granatum*, WANG GUA ZI *Trichosanthes cucumeroides*. Ref: 2, 660, 5501.

**21577 Trichothecin**

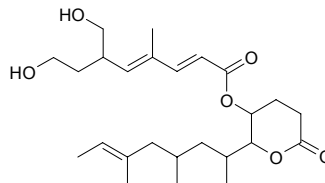
$C_{19}H_{24}O_5$  (332.40). Pharm: Antibacterial; LD<sub>50</sub> (mus, iv) = 300mg/kg. Source: *Trichothecium roseum*. Ref: 658.

**21578 Trichotomine**

$C_{30}H_{20}N_4O_6$  (532.52). Pharm: Bronchial smooth muscle relaxant; antihypertensive; sedative. Source: CHOU WU TONG *Clerodendron trichotomum*, DOU FU CHAI *Premna microphylla*. Ref: 658.

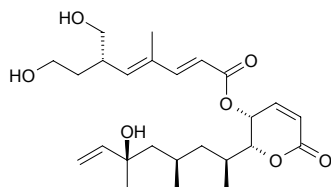
**21579 Trichurusin B**

$C_{25}H_{40}O_6$  (436.59). Colorless amorphous powder,  $[\alpha]_D^{24} = +18.4^\circ$  ( $c = 0.71$ , MeOH). Pharm: Immunosuppressant (mus splenic lymphocyte, ConA-induced proliferation, IC<sub>50</sub> = 2.0µg/mL, control Cyclosporin, IC<sub>50</sub> = 0.04µg/mL; LPS-induced proliferation, IC<sub>50</sub> = 0.8µg/mL, control Cyclosporin, IC<sub>50</sub> = 0.07µg/mL). Source: MAO SHU MEI *Trichurus terrophilus*. Ref: 4491.

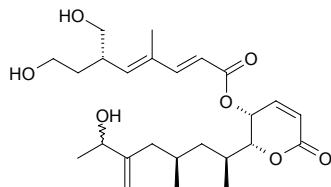


**21580 Trichurusin C**

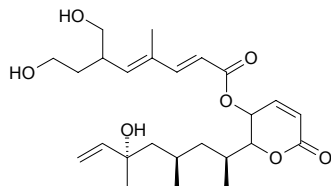
$C_{25}H_{38}O_7$  (450.58). Colorless amorphous powder,  $[\alpha]_D^{25} = -166.6^\circ$  ( $c = 1.08$ , MeOH). **Pharm:** Immunosuppressant (mus splenic lymphocyte, ConA-induced proliferation,  $IC_{50} = 1.2\mu\text{g/mL}$ , control Cyclosporin,  $IC_{50} = 0.04\mu\text{g/mL}$ ; LPS-induced proliferation,  $IC_{50} = 0.4\mu\text{g/mL}$ , control Cyclosporin,  $IC_{50} = 0.07\mu\text{g/mL}$ ). **Source:** MAO SHU MEI *Trichurus terrophilus*. **Ref:** 4491.

**21581 Trichurusin D**

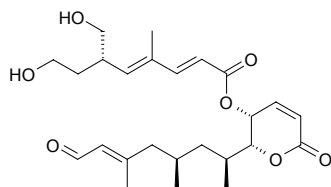
$C_{25}H_{38}O_7$  (450.58). White amorphous powder,  $[\alpha]_D^{25} = -78.1^\circ$  ( $c = 1.44$ , MeOH). **Pharm:** Immunosuppressant (mus splenic lymphocyte, ConA-induced proliferation,  $IC_{50} = 0.9\mu\text{g/mL}$ , control Cyclosporin,  $IC_{50} = 0.04\mu\text{g/mL}$ ; LPS-induced proliferation,  $IC_{50} = 0.4\mu\text{g/mL}$ , control Cyclosporin,  $IC_{50} = 0.07\mu\text{g/mL}$ ). **Source:** MAO SHU MEI *Trichurus terrophilus*. **Ref:** 4491.

**21582 Trichurusin E**

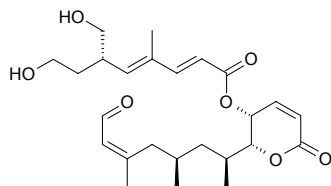
$C_{25}H_{38}O_7$  (450.38). White amorphous powder. **Source:** MAO SHU MEI *Trichurus terrophilus*. **Ref:** 4491.

**21583 Trichurusin F**

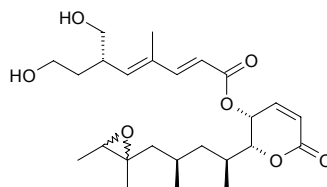
$C_{25}H_{36}O_7$  (448.56). White amorphous powder. **Source:** MAO SHU MEI *Trichurus terrophilus*. **Ref:** 4491.

**21584 Trichurusin G**

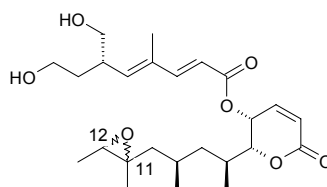
$C_{25}H_{36}O_7$  (448.56). White amorphous powder. **Source:** MAO SHU MEI *Trichurus terrophilus*. **Ref:** 4491.

**21585 Trichurusin H**

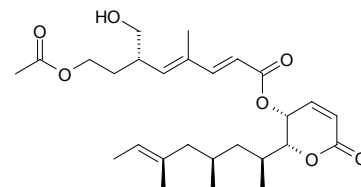
$C_{25}H_{38}O_7$  (450.58). White amorphous powder,  $[\alpha]_D^{25} = -124.9^\circ$  ( $c = 0.80$ , MeOH). **Pharm:** Immunosuppressant (mus splenic lymphocyte, ConA-induced proliferation,  $IC_{50} = 6.2\mu\text{g/mL}$ , control Cyclosporin,  $IC_{50} = 0.04\mu\text{g/mL}$ ; LPS-induced proliferation,  $IC_{50} = 6.0\mu\text{g/mL}$ , control Cyclosporin,  $IC_{50} = 0.07\mu\text{g/mL}$ ). **Source:** MAO SHU MEI *Trichurus terrophilus*. **Ref:** 4491.

**21586 Trichurusin I**

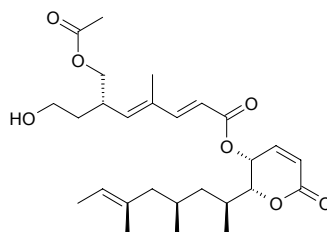
$C_{25}H_{38}O_7$  (450.58). White amorphous powder,  $[\alpha]_D^{25} = -167.3^\circ$  ( $c = 2.9$ , MeOH). **Pharm:** Immunosuppressant (mus splenic lymphocyte, ConA-induced proliferation,  $IC_{50} = 4.7\mu\text{g/mL}$ , control Cyclosporin,  $IC_{50} = 0.04\mu\text{g/mL}$ ; LPS-induced proliferation,  $IC_{50} = 4.5\mu\text{g/mL}$ , control Cyclosporin,  $IC_{50} = 0.07\mu\text{g/mL}$ ). **Source:** MAO SHU MEI *Trichurus terrophilus*. **Ref:** 4491.

**21587 Trichurusin J**

$C_{27}H_{40}O_7$  (476.62). Colorless amorphous powder,  $[\alpha]_D^{24} = -135.1^\circ$  ( $c = 0.17$ , MeOH). **Pharm:** Immunosuppressant (mus splenic lymphocyte, LPS-induced proliferation,  $IC_{50} = 6.4\mu\text{g/mL}$ , control Cyclosporin,  $IC_{50} = 0.07\mu\text{g/mL}$ ). **Source:** MAO SHU MEI *Trichurus terrophilus*. **Ref:** 4491.

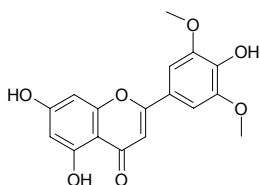
**21588 Trichurusin K**

$C_{27}H_{40}O_7$  (476.62). White amorphous powder,  $[\alpha]_D^{25} = -122.3^\circ$  ( $c = 0.23$ , MeOH). **Pharm:** Immunosuppressant (mus splenic lymphocyte, ConA-induced proliferation,  $IC_{50} = 6.9\mu\text{g/mL}$ , control Cyclosporin,  $IC_{50} = 0.04\mu\text{g/mL}$ ; LPS-induced proliferation,  $IC_{50} = 6.9\mu\text{g/mL}$ , control Cyclosporin,  $IC_{50} = 0.07\mu\text{g/mL}$ ). **Source:** MAO SHU MEI *Trichurus terrophilus*. **Ref:** 4491.

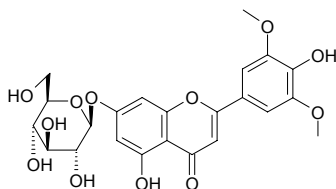


**21589 Tricin**

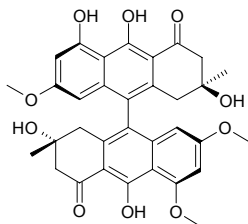
[520-32-1] C<sub>17</sub>H<sub>14</sub>O<sub>7</sub> (330.30). Yellow powder. **Pharm:** Antineoplastic; smooth muscle relaxant; antitubercular (*Mycobacterium tuberculosis*, MIC = 58.5 μg/mL; cytotoxic, Vero cells, IC<sub>50</sub> = 20.2 μg/mL, SI (IC<sub>50</sub>/MIC) = 0.35, positive control Rifampin, MIC = 0.03 μg/mL, IC<sub>50</sub> = 98.3 μg/mL, SI = 3300)<sup>[4986]</sup>. **Source:** CHAO XIAN YIN YANG HUO *Epimedium koreanum*, CU MAO YIN YANG HUO *Epimedium acuminatum*, HU LU BA *Trigonella foenum-graecum*, LIAO GE WANG GEN *Wikstroemia indica*, LU GEN *Phragmites communis*, MANG JING *Miscanthus sinensis*, MU XU *Medicago sativa*, SHUANG BIAN GUA LOU *Trichosanthes rosthornii* [Syn. *Trichosanthes uniflora*], YAN DI HE *Spartina cynosuroides*, ZHEN KUI *Phoenix canariensis*, SHU HUA JIE CAO *Valeriana laxiflora* (aerial parts and root). **Ref:** 4, 458, 539, 615, 658, 660, 4986.

**21590 Tricin-7-O-β-D-glucopyranoside**

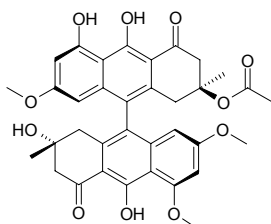
C<sub>23</sub>H<sub>24</sub>O<sub>12</sub> (492.44). Yellow needle crystals (methanol), mp 186–188°C, mp 246–248°C. **Source:** HU LU BA *Trigonella foenum-graecum*, MAO JIAN QIU LUO *Lychnis coronaria*. **Ref:** 615, 2189.

**21591 Tricolorin A**

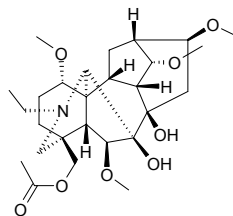
C<sub>33</sub>H<sub>32</sub>O<sub>10</sub> (588.62). **Source:** SAN SE BAI ZHUANG GU *Leucopaxillus tricolor*. **Ref:** 3799.

**21592 Tricolorin A acetate**

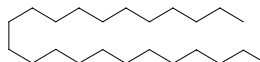
C<sub>35</sub>H<sub>34</sub>O<sub>11</sub> (630.65). **Source:** SAN SE BAI ZHUANG GU *Leucopaxillus tricolor*. **Ref:** 3799.

**21593 Tricornine**

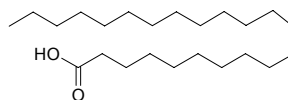
C<sub>27</sub>H<sub>43</sub>NO<sub>8</sub> (509.65). **Pharm:** Bidirectional action to neuromuscular transmission (in high dose, first enhances and then inhibits); enhances neuromuscular transmission (low dose). **Source:** SAN JU AI CUI QUE *Delphinium tricorne*. **Ref:** 658.

**21594 n-Tricosane**

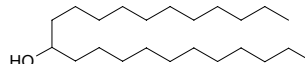
C<sub>23</sub>H<sub>48</sub> (324.64). **Source:** GAN CAO *Glycyrrhiza uralensis*, GOU QI GEN PI *Lycium chinense*. **Ref:** 660.

**21595 n-Tricosanoic acid**

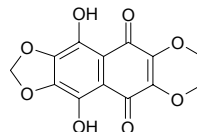
[2433-96-7] C<sub>23</sub>H<sub>46</sub>O<sub>2</sub> (354.62). **Source:** QIANG HUO *Notopterygium incisum*. **Ref:** 2.

**21596 12-Tricosanol**

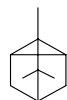
C<sub>23</sub>H<sub>48</sub>O (340.64). **Source:** BEI AI *Artemisia vulgaris*. **Ref:** 660.

**21597 Tricozarin A**

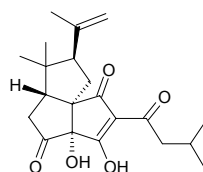
C<sub>13</sub>H<sub>10</sub>O<sub>8</sub> (294.22). **Pharm:** Antimicrobial (gram-positive bacteria, fungi and microzymes). **Source:** XIONG HUANG LAN *Tritonia crocosmaeflora*. **Ref:** 658.

**21598 Tricyclene**

Cyclene; Teresantanane [508-32-7] C<sub>10</sub>H<sub>16</sub> (136.24). **Source:** SHENG JIANG *Zingiber officinale*, HUANG HUA HAO *Artemisia annua*. **Ref:** 2, 660.

**21599 Tricyclodehydroisohumulone**

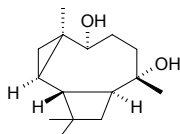
C<sub>21</sub>H<sub>28</sub>O<sub>5</sub> (360.45). **Pharm:** Bitter principle. **Source:** PI JIU HUA *Humulus lupulus*. **Ref:** 658.



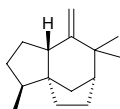


**21600 Tricyclohumuladiol**

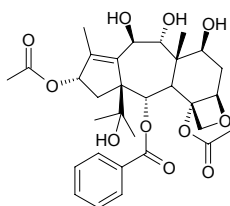
$C_{15}H_{26}O_2$  (238.37). **Pharm:** CYP3A4 inhibitor inactive ( $IC_{50} > 100\mu\text{mol/L}$ , control Ketoconazole  $IC_{50} = 0.24\mu\text{mol/L}$ ); CYP2D6 inhibitor inactive ( $IC_{50} > 100\mu\text{mol/L}$ , control Quinidine  $IC_{50} = 0.068\mu\text{mol/L}$ ). **Source:** FANG XIANG JIANG *Zingiber aromaticum* (rhizome). **Ref:** 4449.

**21601 Tricyclovetivene**

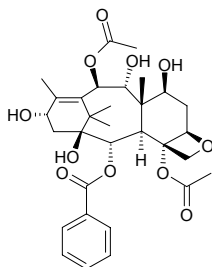
$C_{15}H_{24}$  (204.36). bp 120~122°C/10mmHg. **Source:** HUA JIN DAN *Crotalaria tetragona*. **Ref:** 6.

**21602 7,9,10-Trideacetyl-abeo-baccatin VI**

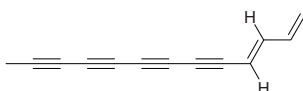
$C_{31}H_{40}O_{11}$  (588.66).  $[\alpha]_D = -25^\circ$  ( $\text{CHCl}_3$ ). **Source:** JIANG GUO ZI SHAN *Taxus baccata*. **Ref:** 662.

**21603 7,9,13-Trideacetyl-baccatin VI**

$C_{31}H_{40}O_{11}$  (588.66). Gum. **Source:** JIA NA DA HONG DOU SHAN *Taxus canadensis* (needle leaf). **Ref:** 3958.

**21604 1,3E-Tridecadiene-5,7,9,11-tetrayne**

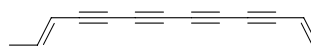
$C_{13}H_8$  (164.21). **Source:** HONG HUA *Carthamus tinctorius*. **Ref:** 660.

**21605 1,3Z-Tridecadiene-5,7,9,11-tetrayne**

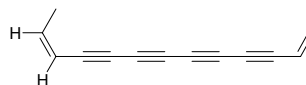
$C_{13}H_8$  (164.21). **Source:** HONG HUA *Carthamus tinctorius*. **Ref:** 660.

**21606 1,11E-Tridecadiene-3,5,7,9-tetrayne**

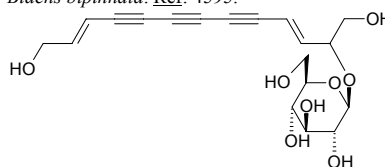
$C_{13}H_8$  (164.21). **Source:** NIU BANG GEN *Arctium lappa*. **Ref:** 6.

**21607 1,11Z-Tridecadiene-3,5,7,9-tetrayne**

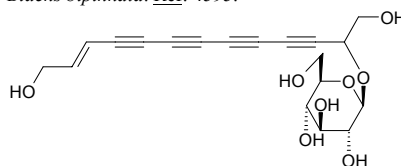
$C_{13}H_8$  (164.21). **Source:** HONG HUA *Carthamus tinctorius*, NIU BANG GEN *Arctium lappa*. **Ref:** 660.

**21608 Trideca-2β-D-glucopyranosyl-1,13-dihydroxy-3(E),11(E)-dien-5,7,9-triyn**

$C_{19}H_{22}O_8$  (378.38). Off-white powder (30% EtOH). **Source:** GUI ZHEN CAO *Bidens bipinnata*. **Ref:** 4595.

**21609 Trideca-2β-D-glucopyranosyl-1,13-dihydroxy-11(E)-en-3,5,7,9-tetrayne**

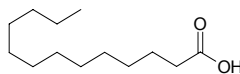
$C_{19}H_{20}O_8$  (376.37). Off-white powder (30% EtOH). **Source:** GUI ZHEN CAO *Bidens bipinnata*. **Ref:** 4595.

**21610 n-Tridecane**

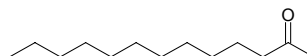
Tridecane [629-50-5]  $C_{13}H_{28}$  (184.37). **Source:** CHAI HU *Bupleurum chinense*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], LANG DU *Stellera chamaejasme*. **Ref:** 2, 660.

**21611 Tridecanoic acid**

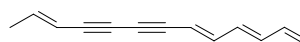
[638-53-9]  $C_{13}H_{26}O_2$  (214.35). **Source:** BAI ZHI *Angelica dahurica* [Syn. *Angelica porphyrocaulis*]. **Ref:** 2.

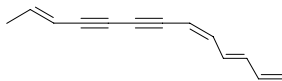
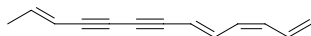
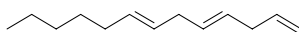
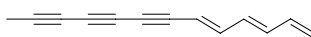
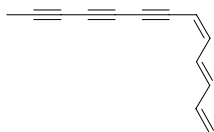
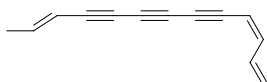
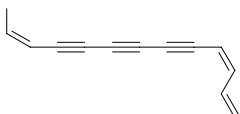
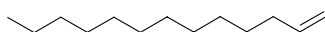
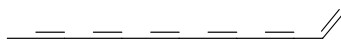
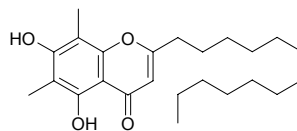
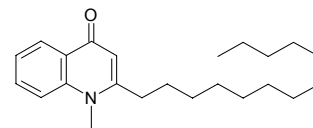
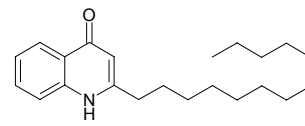
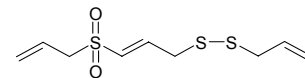
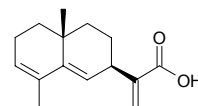
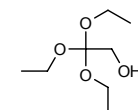
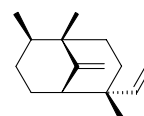
**21612 2-Tridecanone**

$C_{13}H_{26}O$  (198.35). **Source:** DENG XIN CAO *Juncus effusus*, MEI GUI HUA *Rosa rugosa*, TIAN SHAN HUA QIU *Sorbus tianschanica*, YAN CAO *Nicotiana tabacum*. **Ref:** 660.

**21613 (E,E,E)-1,3,5,11-Tridecatetraene-7,9-diyne**

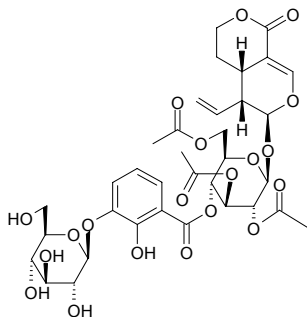
$C_{13}H_{12}$  (168.24). **Source:** HONG HUA *Carthamus tinctorius*. **Ref:** 660.



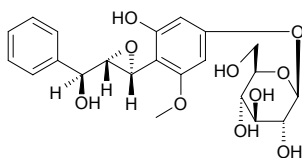
**21614 (E,Z,E)-1,3,5,11-Tridecatetraene-7,9-diyne**C<sub>13</sub>H<sub>12</sub> (168.24). Source: HONG HUA *Carthamus tinctorius*. Ref: 660.**21615 (Z,E,E)-1,3,5,11-Tridecatetraene-7,9-diyne**C<sub>13</sub>H<sub>12</sub> (168.24). Source: HONG HUA *Carthamus tinctorius*. Ref: 660.**21616 1,4,7-Tridecatriene**C<sub>13</sub>H<sub>22</sub> (178.32). Source: FENG DOU CAI *Petasites japonicus*. Ref: 6.**21617 (E,E)-1,3,5-Tridecatriene-7,9,11-triyne**C<sub>13</sub>H<sub>10</sub> (166.22). Source: HONG HUA *Carthamus tinctorius*. Ref: 660.**21618 (E,Z)-1,3,5-Tridecatriene-7,9,11-triyne**C<sub>13</sub>H<sub>10</sub> (166.22). mp 88~93°C. Source: HONG HUA *Carthamus tinctorius*, YANG SHI CAO *Achillea millefolium*. Ref: 6, 660.**21619 (Z,E)-1,3,11-Tridecatriene-5,7,9-triyne**C<sub>13</sub>H<sub>10</sub> (166.22). Source: HONG HUA *Carthamus tinctorius*, NIU BANG GEN *Arctium lappa*, NIU BANG GEN *Arctium lappa*. Ref: 6.**21620 (Z,Z)-1,3,11-Tridecatriene-5,7,9-triyne**C<sub>13</sub>H<sub>10</sub> (166.22). Source: HONG HUA *Carthamus tinctorius*, NIU BANG GEN *Arctium lappa*. Ref: 660.**21621 Tridecene**[2437-56-1] C<sub>13</sub>H<sub>26</sub> (182.35). mp -22.2°C, bp 102°C/10mmHg. Source: SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. Ref: 2.**21622 1-Tridecene-3,5,7,9,11-pentyne**C<sub>13</sub>H<sub>6</sub> (162.19). Source: BI MA GEN *Ricinus communis*, HONG TOU CAO *Blumea lacera*. Ref: 6.**21623 2-n-Tridecyl-5,7-dihydroxy-6,8-dimethyl chromone**C<sub>24</sub>H<sub>36</sub>O<sub>4</sub> (388.55). Source: KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. Ref: 660.**21624 2-Tridecyl-1-methyl-4(1H)-quinolone**C<sub>23</sub>H<sub>35</sub>NO (341.54). Source: WU ZHU YU *Evodia rutaecarpa*. Ref: 877, 2085.**21625 2-Tridecyl-4(1H)-quinolone**C<sub>22</sub>H<sub>33</sub>NO (327.51). Amorphous powder, mp 132~134°C. Source: WU ZHU YU *Evodia rutaecarpa*. Ref: 9.**21626 E-1,7,11-Triene-4,5,9-trithiadodeca-9,9-dioxide**C<sub>9</sub>H<sub>14</sub>O<sub>2</sub>S<sub>3</sub> (250.40). Yellowish oil liquid. Source: DA SUAN *Allium sativum*. Ref: 2118.**21627 3,5,11(13)-Trieneudesma-12-oic acid**C<sub>13</sub>H<sub>20</sub>O<sub>2</sub> (232.33). Colorless gum, [α]<sub>D</sub><sup>20</sup> = +7.5° (c = 0.4, CHCl<sub>3</sub>). Source: LIU LENG JU *Laggeta alata* (aerial parts: yield = 0.00031%dw). Ref: 4709.**21628 2,2,2-Triethoxyl-ethanol**C<sub>8</sub>H<sub>18</sub>O<sub>4</sub> (178.23). Source: SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. Ref: 2.**21629 (-)-Trifara-9,14-diene**C<sub>15</sub>H<sub>24</sub> (204.36). Source: YE TAI *Trocholejeunea sandvicensis*. Ref: 735.

**21630 Trifloroside**

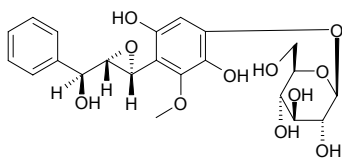
$C_{35}H_{42}O_{20}$  (782.71). Source: LONG DAN *Gentiana scabra*. Ref: 2.

**21631 Trifoalcanolioside I**

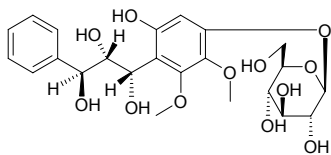
2-Methoxy-4,6-dihydroxy- $\alpha'$ -chalcanol- $\alpha,\beta$ -epoxide-4-*O*- $\beta$ -D-glucopyranoside  $C_{22}H_{26}O_{10}$  (450.45). Amorphous powder. Source: AI JI CHE ZHOU CAO *Trifolium alexandrinum* (seed). Ref: 3917.

**21632 Trifoalcanolioside II**

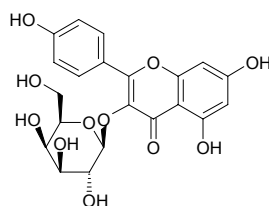
2-Methoxy-3,4,6-trihydroxy- $\alpha'$ -chalcanol- $\alpha,\beta$ -epoxide-4-*O*- $\beta$ -D-glucopyranoside  $C_{22}H_{26}O_{11}$  (466.45). Amorphous powder. Source: AI JI CHE ZHOU CAO *Trifolium alexandrinum* (seed). Ref: 3917.

**21633 Trifoalcanolioside III**

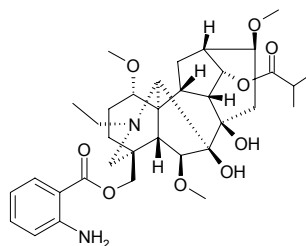
2,3-Dimethoxy-4,6, $\alpha,\beta$ -tetrahydroxy- $\alpha'$ -chalcanol-4-*O*- $\beta$ -D-glucopyranoside  $C_{23}H_{30}O_{12}$  (498.48). Amorphous powder. Source: AI JI CHE ZHOU CAO *Trifolium alexandrinum* (seed). Ref: 3917.

**21634 Trifolin**

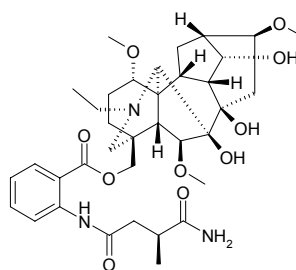
Kaempferol 3-*O*- $\beta$ -D-galactopyranoside [23627-87-4]  $C_{21}H_{20}O_{11}$  (448.39). mp 260°C. Pharm: Xanthinoxidase inhibitor (50 $\mu$ g/mL, InRt = 16.1%); antioxidant (DPPH scavenger, 250 $\mu$ mol/L, InRt = 4.5%; control Vitamin E, IC<sub>50</sub> = 8.3 $\mu$ mol/L)<sup>[4722]</sup>. Source: CI BO *Rubus hirsutus*, DA JIN QIAN CAO *Lysimachia christinae*, GAO CONG ZHEN ZHU MEI *Sorbaria arborea*, GOU TENG *Uncaria rhynchophylla* [Syn. *Nauclea rhynchophylla*], HONG CHE ZHOU CAO *Trifolium pratense*, HU ZHI ZI *Lespedeza bicolor*, JI ZI MU *Sinoadina Racemosa* [Syn. *Adina racemosa*] (leaf, flower and twig: yield = 0.0031%dw)<sup>[4723]</sup>, LV BEI GUI HUA *Excoecaria cochinchinensis* var. *viridis*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], SAN XIAO CAO *Trifolium repens*, SHI WEI *Pyrrosia lingua*, TAI WAN HUANG BO *Phellodendron amurense* var. *wilsonii* (leaf: yield = 0.00072%dw)<sup>[4722]</sup>, TAO HUA *Prunus persica*, XI SHU *Camptotheca acuminata*, XIAO XUE REN SHEN *Lespedeza tomentosa*, ZHEN ZHU MEI *Sorbaria sorbifolia*. Ref: 2, 6, 660, 1841, 4097, 4544, 4722, 4723.

**21635 Trifoliolasine A**

$C_{35}H_{50}N_2O_9$  (642.80). Colorless granule crystals, mp 125~127°C,  $[\alpha]_D^{20} = +44.2^\circ$  ( $c = 0.53$ ,  $CHCl_3$ ). Source: SAN XIAO YE CUI QUE HUA *Delphinium trifoliolatum* (whole herb). Ref: 4272.

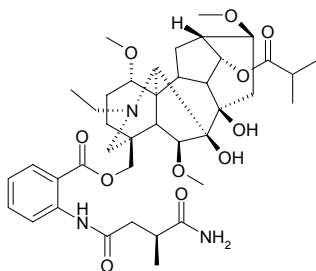
**21636 Trifoliolasine B**

$C_{36}H_{51}N_3O_{10}$  (685.82). White amorphous powder, mp 103~105°C,  $[\alpha]_D^{20} = +36.6^\circ$  ( $c = 0.48$ ,  $CHCl_3$ ). Source: SAN XIAO YE CUI QUE HUA *Delphinium trifoliolatum* (whole herb). Ref: 4272.

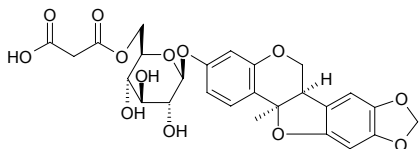


**21637 Trifolioliasine C**

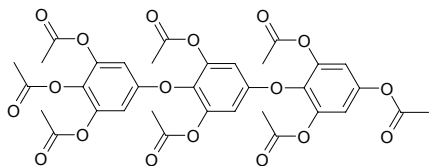
$C_{40}H_{58}N_3O_{11}$  (755.91). White amorphous powder, mp 117~118°C,  $[\alpha]_D^{20} = +24.0^\circ$  ( $c = 0.3$ ,  $CHCl_3$ ). **Source:** SAN XIAO YE CUI QUE HUA *Delphinium trifoliolatum* (whole herb). **Ref:** 4272.

**21638 Trifolirhizin-6''-O-malonate**

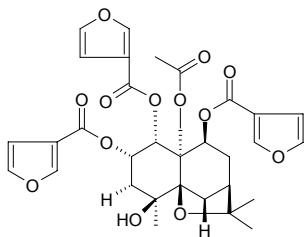
$C_{25}H_{24}O_{13}$  (532.46). **Source:** KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. **Ref:** 660.

**21639 Trifuhalol A octaacetate**

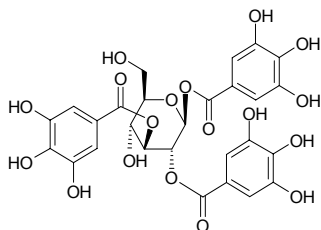
$C_{34}H_{30}O_{18}$  (726.61). **Source:** SHENG ZAO *Chorda filum*. **Ref:** 660.

**21640 1α,2α,9β-Tri-(β)-furoxyloxy-4β-hydroxy-15-acetoxy-β-dihydroagarofuran**

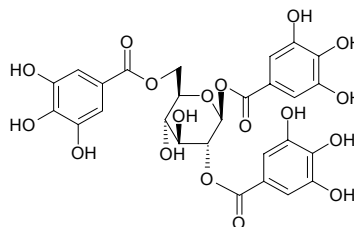
$C_{32}H_{34}O_{13}$  (626.62). Colorless gum,  $[\alpha]_D^{20} = +73^\circ$  ( $c = 1.04$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (*in vitro*, Bel7402 liver carcinoma,  $IC_{50} = 49.86\mu g/mL$ , control Etoposide,  $IC_{50} = 7.00\mu g/mL$ ). **Source:** *Euonymus nanoides* (seed). **Ref:** 4962.

**21641 1,2,3-Tri-O-galloyl-β-D-glucose**

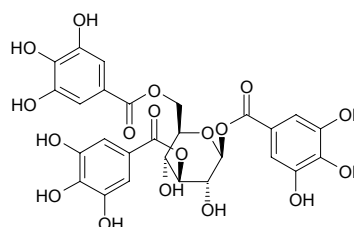
$C_{27}H_{24}O_{18}$  (636.48). **Source:** BAI SHAO *Paeonia albiflora* [Syn. *Paeonia lactiflora*] (fresh fruit: yield = 0.0060%fw), SHAN ZHU YU *Cornus officinalis* [Syn. *Macrocarpum officinale*]. **Ref:** 4695.

**21642 1,2,6-Tri-O-galloyl-β-D-glucose**

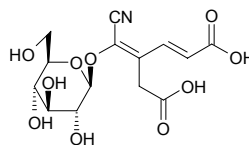
$C_{27}H_{24}O_{18}$  (636.48). **Source:** BAI SHAO *Paeonia albiflora* [Syn. *Paeonia lactiflora*] (fresh fruit: yield = 0.0058%fw), DA HUANG *Rheum officinale*, ZHANG YE DA HUANG *Rheum palmatum*, SHAN ZHU YU *Cornus officinalis* [Syn. *Macrocarpum officinale*], TANG GU TE DA HUANG *Rheum tanguticum*. **Ref:** 2, 660, 4695.

**21643 1,3,6-Trigalloyl-β-D-glucose**

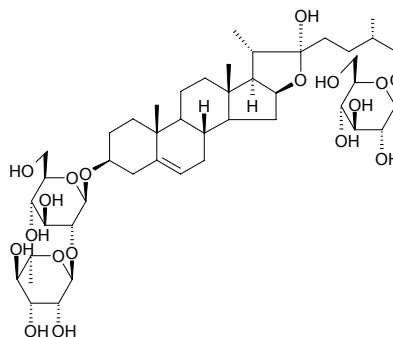
$C_{27}H_{24}O_{18}$  (636.48). **Source:** BAI SHAO *Paeonia albiflora* [Syn. *Paeonia lactiflora*] (fresh fruit: yield = 0.0014%fw), HE ZI *Terminalia chebula*. **Ref:** 4695.

**21644 Triglochinin**

$C_{14}H_{17}NO_{10}$  (359.25). **Pharm:** Toxin (ox, sheep). **Source:** HAI JIU CAI *Triglochin maritimum*, YUAN YE FENG LING CAO *Campanula rotundifolia*. **Ref:** 6, 658, 1521.

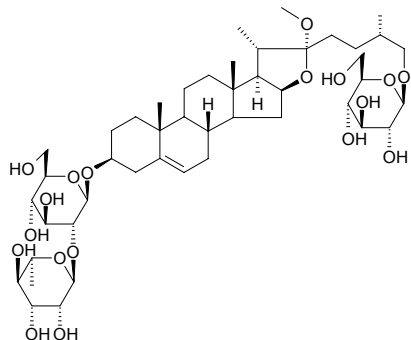
**21645 Trigofenoside A**

[99705-66-5]  $C_{45}H_{74}O_{18}$  (903.08). **Source:** HU LU BA *Trigonella foenum-graecum*. **Ref:** 2458.

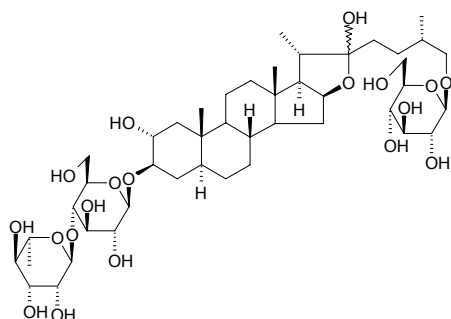


**21646 Trigofenoside A<sub>1</sub>**

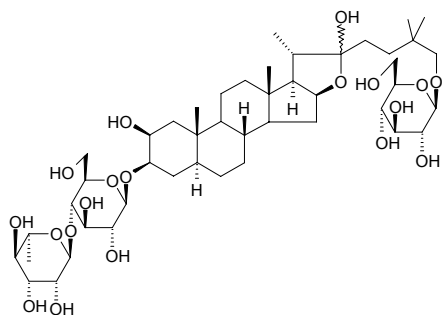
$C_{46}H_{76}O_{18}$  (917.11). Source: HU LU BA *Trigonella foenum-graecum*. Ref: 2458.

**21647 Trigofenoside B**

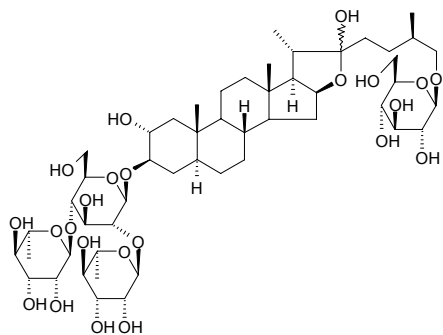
[99753-11-4]  $C_{45}H_{76}O_{19}$  (921.10). Source: HU LU BA *Trigonella foenum-graecum*. Ref: 2458.

**21648 Trigofenoside B<sub>1</sub>**

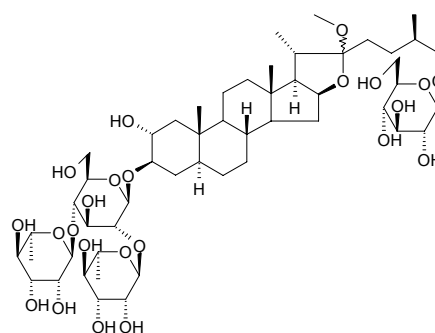
$C_{46}H_{78}O_{19}$  (935.12). Source: HU LU BA *Trigonella foenum-graecum*. Ref: 2458.

**21649 Trigofenoside C**

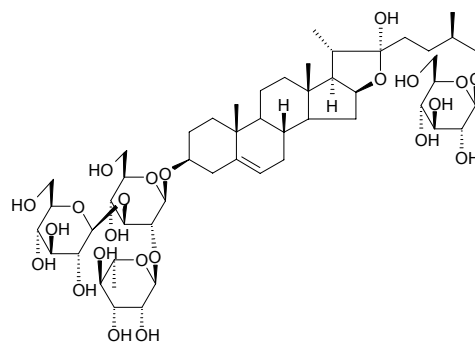
[99753-12-5]  $C_{51}H_{86}O_{23}$  (1067.24). Source: HU LU BA *Trigonella foenum-graecum*. Ref: 2458.

**21650 Trigofenoside C<sub>1</sub>**

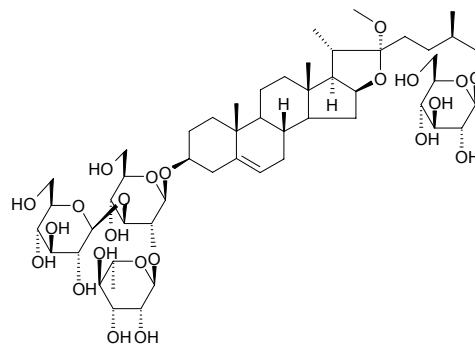
$C_{52}H_{88}O_{23}$  (1081.27). Source: HU LU BA *Trigonella foenum-graecum*. Ref: 2458.

**21651 Trigofenoside D**

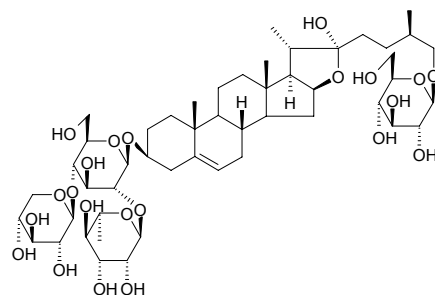
[99664-39-8]  $C_{51}H_{84}O_{23}$  (1065.22). Source: HU LU BA *Trigonella foenum-graecum*. Ref: 2458.

**21652 Trigofenoside D<sub>1</sub>**

$C_{52}H_{86}O_{23}$  (1079.25). Source: HU LU BA *Trigonella foenum-graecum*. Ref: 2458.

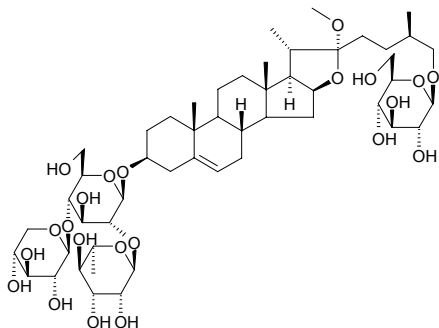
**21653 Trigofenoside E**

$C_{50}H_{82}O_{22}$  (1035.20). Source: HU LU BA *Trigonella foenum-graecum*. Ref: 2458.

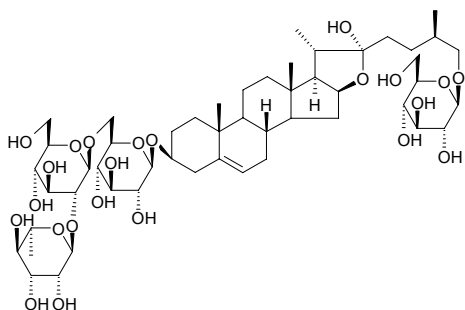


**21654 Trigofenoside E<sub>1</sub>**

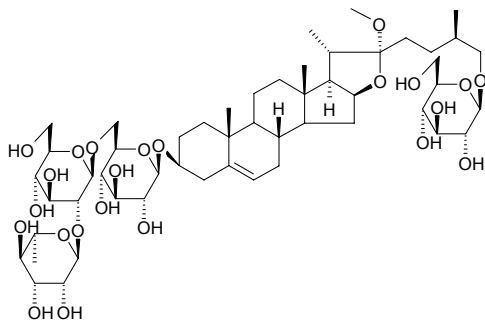
[191910-70-7] C<sub>51</sub>H<sub>84</sub>O<sub>22</sub> (1049.22). Source: HU LU BA *Trigonella foenum-graecum*. Ref: 2458.

**21655 Trigofenoside F**

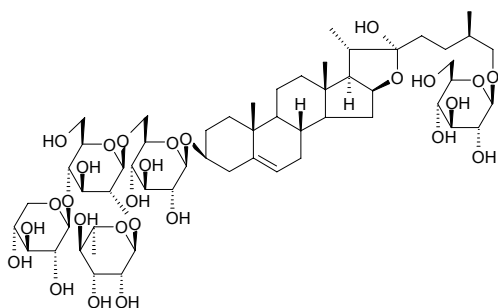
[94714-56-4] C<sub>51</sub>H<sub>84</sub>O<sub>23</sub> (1065.22). Source: HU LU BA *Trigonella foenum-graecum*. Ref: 2458.

**21656 Trigofenoside F<sub>1</sub>**

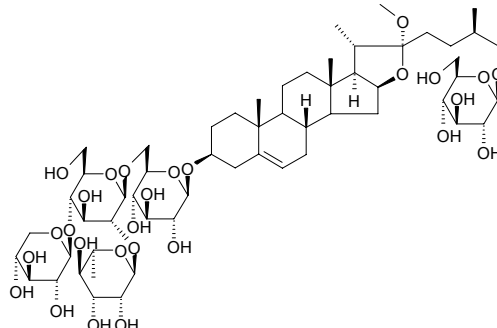
C<sub>52</sub>H<sub>86</sub>O<sub>23</sub> (1079.25). Source: HU LU BA *Trigonella foenum-graecum*. Ref: 2458.

**21657 Trigofenoside G**

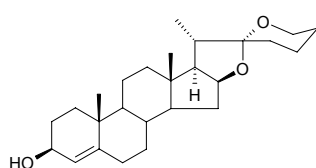
[94714-57-5] C<sub>56</sub>H<sub>92</sub>O<sub>27</sub> (1197.34). Source: HU LU BA *Trigonella foenum-graecum*. Ref: 2458.

**21658 Trigofenoside G<sub>1</sub>**

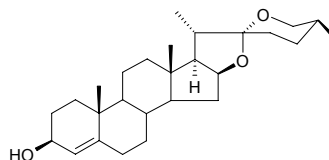
C<sub>57</sub>H<sub>94</sub>O<sub>27</sub> (1211.37). Source: HU LU BA *Trigonella foenum-graecum*. Ref: 2458.

**21659 Trigonegenin A**

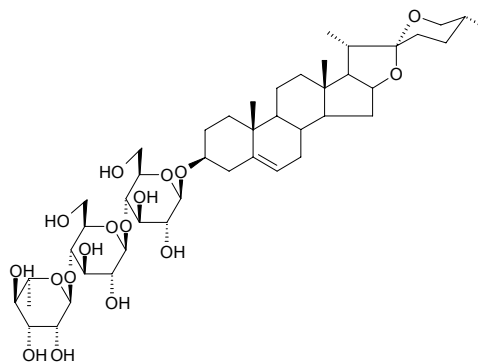
C<sub>27</sub>H<sub>42</sub>O<sub>3</sub> (414.63). Source: HU LU BA *Trigonella foenum-graecum*. Ref: 2458.

**21660 Trigonegenin B**

C<sub>27</sub>H<sub>42</sub>O<sub>3</sub> (414.63). Source: HU LU BA *Trigonella foenum-graecum*. Ref: 2458.

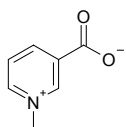
**21661 Trigonella-glucoside A**

Diosgenin-3-*O*- $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranoside C<sub>45</sub>H<sub>72</sub>O<sub>17</sub> (885.07). White granular crystals, mp 208~211°C (dec), [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -67.42° (c = 0.5636, MeOH). Source: HU LU BA *Trigonella foenum-graecum*. Ref: 2454.

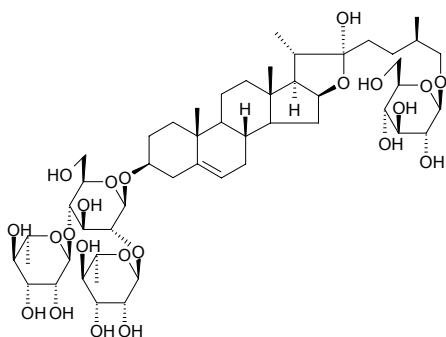


**21662 Trigonelline**

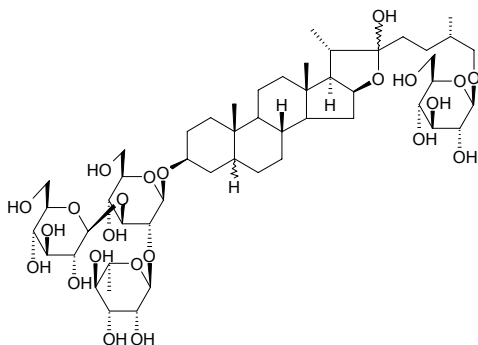
[535-83-1]  $C_7H_7NO_2$  (137.14). mp 218°C (dec). **Pharm:** Antineoplastic (mus, leukemia P<sub>388</sub>, 12.5mg/kg, biotic prolonged rate = 31%); inhibits growth of cell and tissue (animals and plants); causes glucopenia; LD<sub>50</sub> (rat, sc) = 5.0mg/kg. **Source:** BAI XIAN PI *Dictamnus dasycarpus*, BAN XIA *Pinellia ternata*, DONG GUA ZI *Benincasa hispida*, FAN QIE *Lycopersicon esculentum*, HU LU BA *Trigonella foenum-graecum* (dried ripe seed: content scope of 18 origins = 0.132%~0.343%, mean content = 0.261%<sup>[5508]</sup>), HUO MA REN *Cannabis sativa*, MA HUA *Cannabis sativa*, MU XU *Medicago sativa*, NAN GUA *Cucurbita moschata*, QIE YE *Solanum melongena*, QIE ZI *Solanum melongena*, SANG YE *Morus alba*, SHI JUN ZI *Quisqualis indica*, SHI JUN ZI YE *Quisqualis indica*, WAN DOU *Pisum sativum*, XIANG SI ZI *Abrus precatorius*, YANG SHI CAO *Achillea millefolium*, ZI MO LI YE *Mirabilis jalapa*, ZI YUN YING *Astragalus sinicus*, *Strophanthus* sp. **Ref:** 6, 658, 5501, 5508.

**21663 Trigonelloside C**

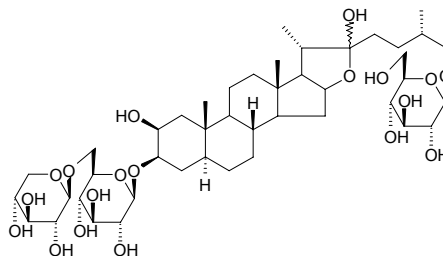
[60478-69-5]  $C_{51}H_{84}O_{22}$  (1049.22). **Source:** HU LU BA *Trigonella foenum-graecum*. **Ref:** 2458.

**21664 Trigoneoside 1**

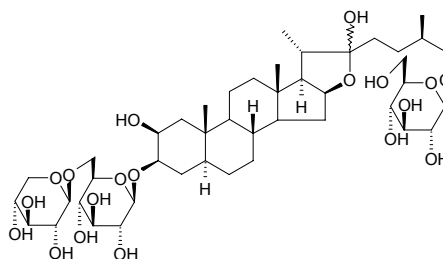
$C_{51}H_{86}O_{23}$  (1067.24). **Source:** HU LU BA *Trigonella foenum-graecum*. **Ref:** 2458.

**21665 Trigoneoside Ia**

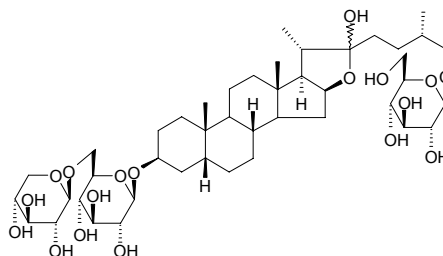
$C_{44}H_{74}O_{19}$  (907.07). **Source:** HU LU BA *Trigonella foenum-graecum*. **Ref:** 2458.

**21666 Trigoneoside Ib**

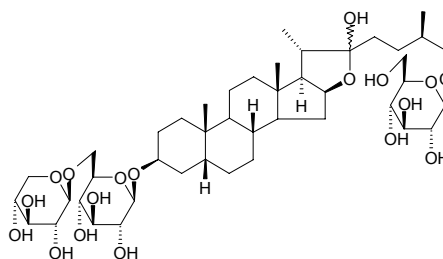
$C_{44}H_{74}O_{19}$  (907.07). **Source:** HU LU BA *Trigonella foenum-graecum*. **Ref:** 2458.

**21667 Trigoneoside IIa**

$C_{44}H_{74}O_{18}$  (891.07). **Source:** HU LU BA *Trigonella foenum-graecum*. **Ref:** 2458.

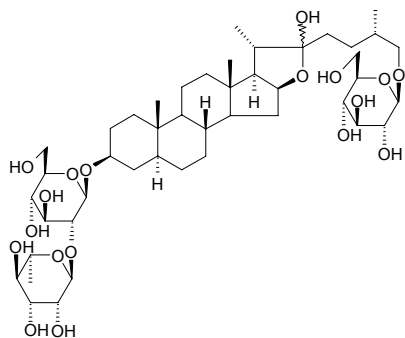
**21668 Trigoneoside IIb**

$C_{44}H_{74}O_{18}$  (891.07). **Source:** HU LU BA *Trigonella foenum-graecum*. **Ref:** 2458.

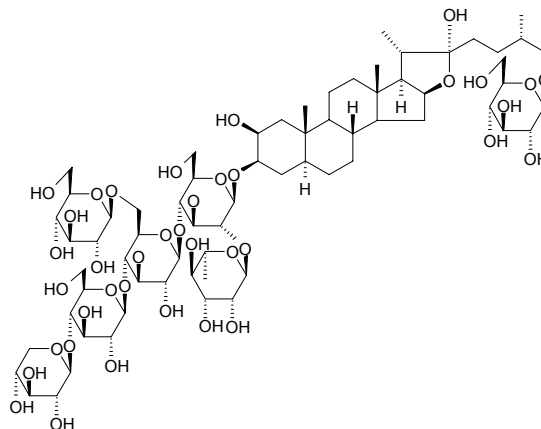


**21669 Trigoneoside IIIa**

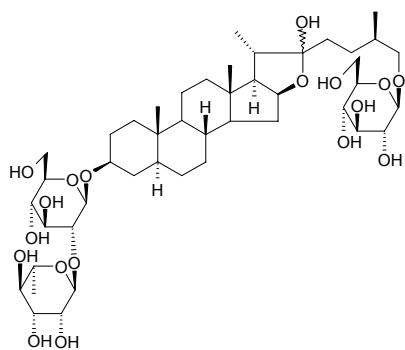
$C_{45}H_{76}O_{18}$  (905.10). Source: HU LU BA *Trigonella foenum-graecum*. Ref: 2458.

**21672 Trigoneoside Vb**

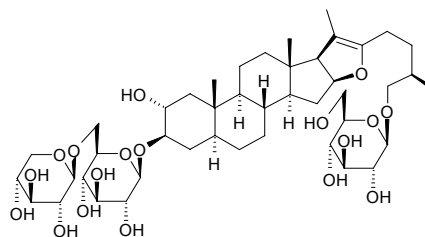
$C_{68}H_{114}O_{38}$  (1539.64). Source: HU LU BA *Trigonella foenum-graecum*. Ref: 2458.

**21670 Trigoneoside IIIb**

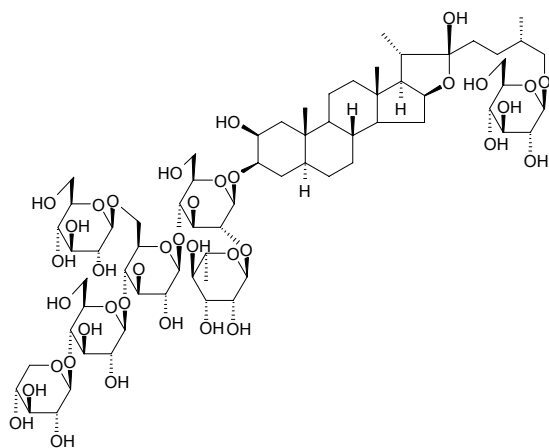
$C_{45}H_{76}O_{18}$  (905.10). Source: HU LU BA *Trigonella foenum-graecum*. Ref: 2458.

**21673 Trigoneoside VIII**

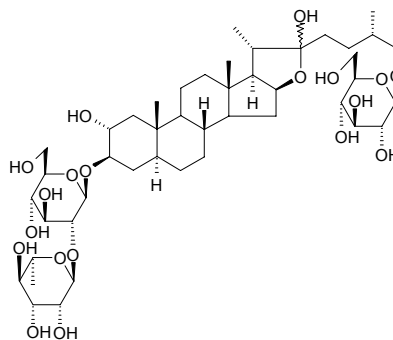
26-*O*- $\beta$ -*D*-Glucopyranosyl-25(*R*)-5 $\alpha$ -furostan-20(22)-en-2 $\alpha$ ,3 $\beta$ ,26-triol-3-*O*- $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside  $C_{44}H_{72}O_{18}$  (889.05). Colorless acicular crystals, mp 173~175°C. Source: HU LU BA *Trigonella foenum-graecum*. Ref: 2132.

**21671 Trigoneoside Va**

$C_{68}H_{114}O_{38}$  (1539.64). Source: HU LU BA *Trigonella foenum-graecum*. Ref: 2458.

**21674 Trigoneoside Xa**

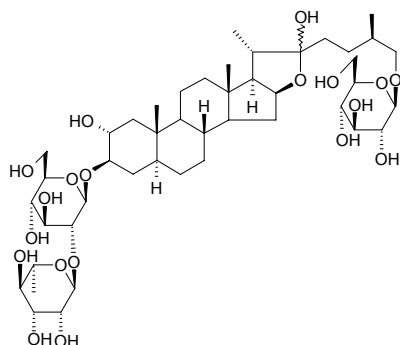
[290347-38-5]  $C_{45}H_{76}O_{19}$  (921.10). Source: HU LU BA *Trigonella foenum-graecum*. Ref: 2458.



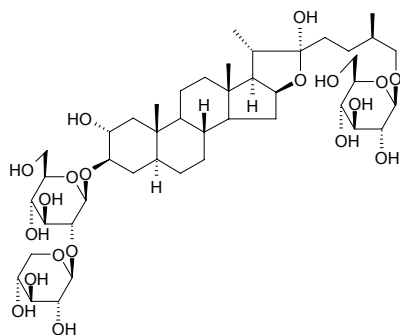


**21675 Trioneoside Xb**

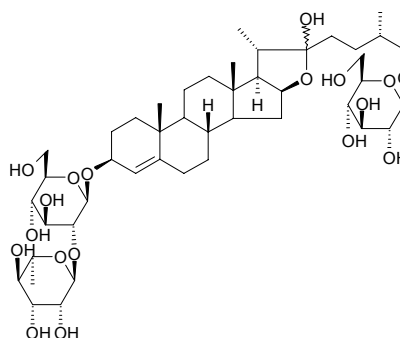
[290347-51-2] C<sub>45</sub>H<sub>76</sub>O<sub>19</sub> (921.10). Source: HU LU BA *Trigonella foenum-graecum*. Ref: 2458.

**21676 Trioneoside XIb**

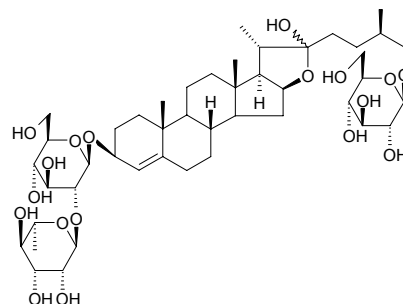
[290347-58-9] C<sub>44</sub>H<sub>74</sub>O<sub>19</sub> (907.07). Source: HU LU BA *Trigonella foenum-graecum*. Ref: 2458.

**21677 Trioneoside XIIa**

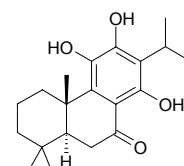
[290347-97-6] C<sub>45</sub>H<sub>74</sub>O<sub>18</sub> (903.08). Source: HU LU BA *Trigonella foenum-graecum*. Ref: 2458.

**21678 Trioneoside XIIb**

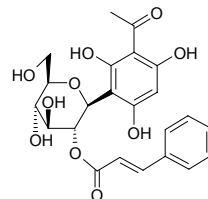
[290348-00-4] C<sub>45</sub>H<sub>74</sub>O<sub>18</sub> (903.08). Source: HU LU BA *Trigonella foenum-graecum*. Ref: 2458.

**21679 11,12,14-Trihydroxyabieta-8,11,13-trien-7-one**

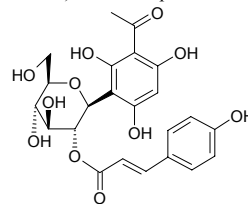
C<sub>20</sub>H<sub>28</sub>O<sub>4</sub> (332.44). Yellowish solid,  $[\alpha]_D^{23} = +92.0^\circ$  ( $c = 0.4$ , CHCl<sub>3</sub>). Source: TAI WAN SHAN *Taiwania cryptomerioides* (bark). Ref: 4443.

**21680 2,4,6-Trihydroxyacetophenone 3-C-β-(2'-O-E-cinnamoyl)-glucopyranoside**

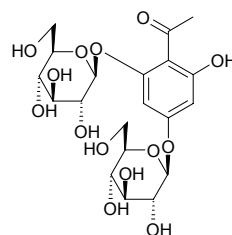
C<sub>23</sub>H<sub>24</sub>O<sub>10</sub> (460.44). White amorphous powder,  $[\alpha]_D = -79^\circ$  ( $c = 0.08$ , MeOH). Source: *Upuna borneensis* (stem). Ref: 3834.

**21681 2,4,6-Trihydroxyacetophenone 3-C-β-(2'-O-E-coumaroyl)-glucopyranoside**

C<sub>23</sub>H<sub>24</sub>O<sub>11</sub> (476.44). White amorphous powder,  $[\alpha]_D = -104^\circ$  ( $c = 0.10$ , MeOH). Source: *Upuna borneensis* (stem). Ref: 3834.

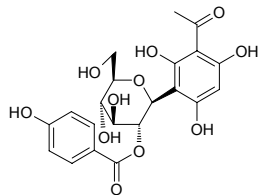
**21682 2,4,6-Trihydroxyacetophenone-2,4-di-O-β-D-glucopyranoside**

C<sub>20</sub>H<sub>28</sub>O<sub>14</sub> (492.44). White amorphous powder,  $[\alpha]_D = -75.4^\circ$  ( $c = 0.77$ , MeOH). Source: TU FU LING *Smilax glabra* (rhizome). Ref: 4589.

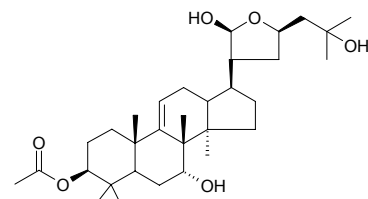


**21683 2,4,6-Trihydroxyacetophenone 3-C- $\beta$ -(2'-O-*p*-hydroxybenzoyl)-glucopyranoside**

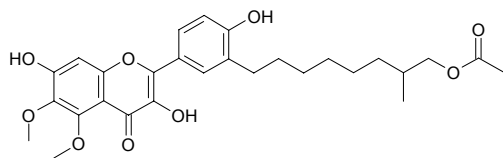
C<sub>21</sub>H<sub>22</sub>O<sub>11</sub> (450.40). White amorphous powder,  $[\alpha]_D = -70^\circ$  ( $c = 0.24$ , MeOH).  
 Source: *Upuna borneensis* (stem). Ref: 3834.

**21684 7 $\alpha$ ,21S,25-Trihydroxy-3 $\beta$ -acetoxy-21S,23R-epoxy-9(11)-en-dammarane**

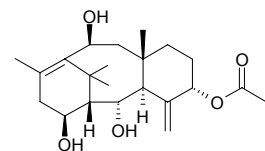
C<sub>32</sub>H<sub>52</sub>O<sub>6</sub> (532.77). Colorless acicular crystals (CHCl<sub>3</sub>), mp 201°C,  $[\alpha]_D^{21.5} = -32^\circ$  ( $c = 1.0$ , CHCl<sub>3</sub>). Source: XIANG GANG JIAN MU *Dysoxylum hongkongense*. Ref: 422.

**21685 3,7,4'-Trihydroxy-3'-(8''-acetoxy-7''-methyloctyl)-5,6-dimethoxyflavone**

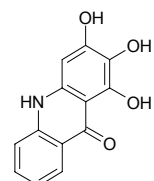
C<sub>28</sub>H<sub>34</sub>O<sub>9</sub> (514.58). Yellowish gummy solid,  $[\alpha]_D^{24} = +11.8^\circ$  ( $c = 0.06$ , MeOH).  
 Pharm:  $\alpha$ -Glucosidase inhibitor (IC<sub>50</sub> = (757.8 $\pm$ 65.5) $\mu$ mol/L, control Deoxynojirimycin, IC<sub>50</sub> = (425.6 $\pm$ 8.1) $\mu$ mol/L). Source: JIA LIAN QIAO YE *Duranta repens*. Ref: 4050.

**21686 2 $\alpha$ ,10 $\beta$ ,14 $\beta$ -Trihydroxy-5 $\alpha$ -acetoxytaxa-4(20),11-diene**

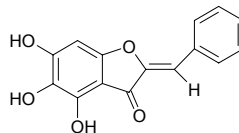
C<sub>22</sub>H<sub>34</sub>O<sub>5</sub> (378.51). mp 67–69°C,  $[\alpha]_D = +39.2^\circ$  (MeOH). Source: YUN NAN HONG DOU SHAN *Taxus yunnanensis*. Ref: 662.

**21687 1,2,3-Trihydroxyacridone**

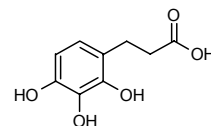
C<sub>13</sub>H<sub>9</sub>NO<sub>4</sub> (243.22). Source: DONG FENG JU GEN *Atalantia buxifolia* [Syn. *Severinia buxifolia*] (root cortex). Ref: 3075.

**21688 4,5,6-Trihydroxy-aurone**

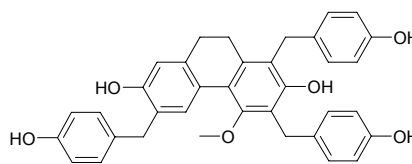
C<sub>15</sub>H<sub>10</sub>O<sub>5</sub> (270.24). Yellow acicular crystals (CHCl<sub>3</sub>–MeOH), mp 190–192°C.  
 Source: CAO CONG RONG *Boschniakia rossica*. Ref: 686.

**21689 2,3,4-Trihydroxy-benzenepropanoic acid**

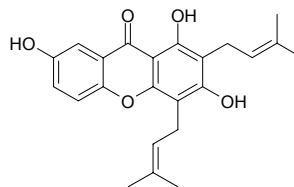
C<sub>9</sub>H<sub>10</sub>O<sub>5</sub> (198.18). Source: HUANG LIAN *Coptis chinensis*. Ref: 2.

**21690 1,3,6-Tri(4-hydroxybenzyl)-4-methoxydihydrophenanthrene-2,7-diol**

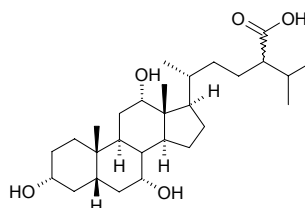
C<sub>36</sub>H<sub>32</sub>O<sub>6</sub> (560.65). Pale yellow amorphous powder. Source: LAN YU BAI JI *Bletilla formosana* (whole herb). Ref: 4500.

**21691 1,3,7-Trihydroxy-2,4-bis(3-methyl-2-butenyl)-xanthone**

C<sub>23</sub>H<sub>24</sub>O<sub>5</sub> (388.40). Pharm: Antioxidant (DPPH scavenger, 50 $\mu$ mol/L, ScRt = 20.7%; control BHT, 50 $\mu$ mol/L, ScRt = 51.7%, IC<sub>50</sub> = 28.9 $\mu$ mol/L). Source: HUANG NIU MU *Cratogeomys cochinchinense* (root). Ref: 4423.

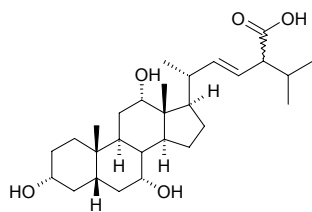
**21692 Trihydroxybufosterocholanic acid**

C<sub>28</sub>H<sub>48</sub>O<sub>5</sub> (464.69). mp 200°C. Source: CHAN CHU DAN *Bufo bufo gargarizans*; *Bufo melanostictus*. Ref: 6.

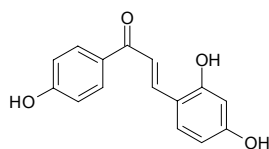


**21693 Trihydroxybufosterolenic acid**

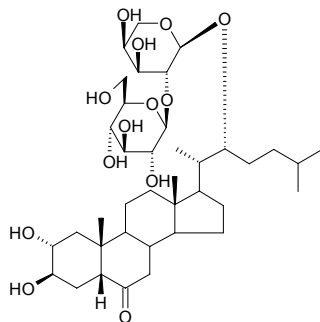
(3 $\alpha$ ,5 $\beta$ ,7 $\alpha$ ,12 $\alpha$ ,24 $\zeta$ )-3,7,12-Trihydroxy-ergost-22-en-28-oic acid [53939-26-7]  
 C<sub>28</sub>H<sub>46</sub>O<sub>5</sub> (462.68). mp 160°C. Source: CHAN CHU DAN *Bufo bufo*  
*gargarizans*; *Bufo melanostictus*. Ref: 6.

**21694 2,4,4'-Trihydroxychalcone**

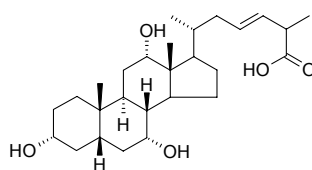
Isoliquiritigenin C<sub>15</sub>H<sub>12</sub>O<sub>4</sub> (256.26). Source: GAN CAO *Glycyrrhiza uralensis*.  
Ref: 6.

**21695 2 $\alpha$ ,3 $\beta$ -(22R)-Trihydroxycholestan-6-one-22-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranoside**

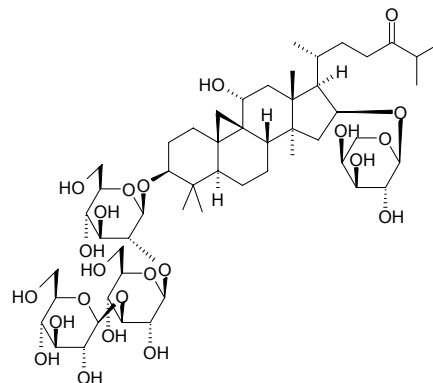
[235741-24-9] C<sub>38</sub>H<sub>64</sub>O<sub>13</sub> (728.93). Needles (MeOH), mp 219°C, [ $\alpha$ ]<sub>D</sub> = -30.5° (c = 0.1, MeOH). Source: WU SU LI WA WEI *Lepisorus ussuriensis*.  
Ref: 2294.

**21696 2<sup>23</sup>-3 $\alpha$ ,7 $\alpha$ ,12 $\alpha$ -Trihydroxy coprostenic acid**

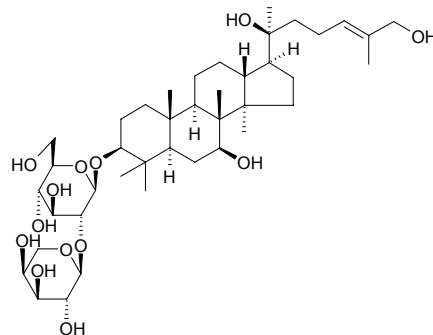
C<sub>27</sub>H<sub>44</sub>O<sub>5</sub> (448.65). mp 176–179°C. Source: CHAN CHU DAN *Bufo bufo*  
*gargarizans*; *Bufo melanostictus*. Ref: 6.

**21697 3 $\beta$ ,11 $\alpha$ ,16 $\beta$ -Trihydroxycycloartane-24-one-3-O-[ $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranosyl]-16-O- $\alpha$ -L-arabinopyranoside**

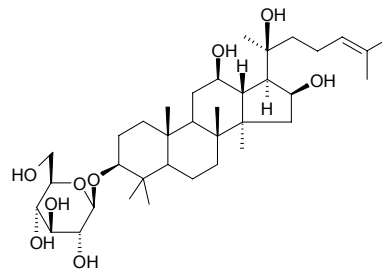
C<sub>53</sub>H<sub>88</sub>O<sub>23</sub> (1093.28). White amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +5.59° (c = 1.70, MeOH). Source: XIAN MAO *Curculigo orchoides*. Ref: 2485.

**21698 7 $\beta$ ,20,26-Trihydroxy-(20S)-dammar-24E-en-3-O- $\alpha$ -L-arabinopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranoside**

C<sub>41</sub>H<sub>70</sub>O<sub>13</sub> (771.01). White crystalline powder (MeOH), mp 164–166°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +3.85° (c = 0.52, MeOH). Pharm: Antiviral (Vero cells, HSV-1, TC<sub>50</sub> = 1414.2 $\mu$ g/mL, Acyclovir, TC<sub>50</sub> > 1000 $\mu$ g/mL; IC<sub>50</sub> = 500 $\mu$ g/mL, Acyclovir, IC<sub>50</sub> = 2.60 $\mu$ g/mL). Source: JIA BEI MU *Bolbostemma paniculatum* (bulb).  
Ref: 4977.

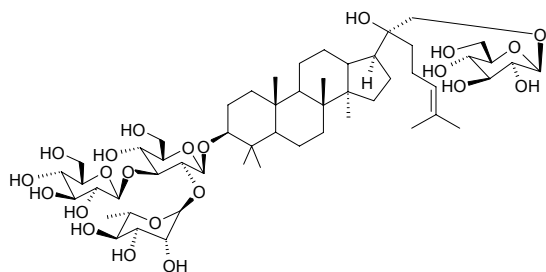
**21699 (20S)-12 $\beta$ ,16 $\beta$ -Trihydroxydammar-24-ene-3 $\beta$ -O- $\beta$ -glucopyranoside**

C<sub>36</sub>H<sub>62</sub>O<sub>9</sub> (638.89). Colorless crystals, mp >250°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +40° (c = 0.5, CH<sub>2</sub>Cl<sub>2</sub>).  
Source: HUN XIAO MO YAO *Commiphora confusa* (resin). Ref: 4335.



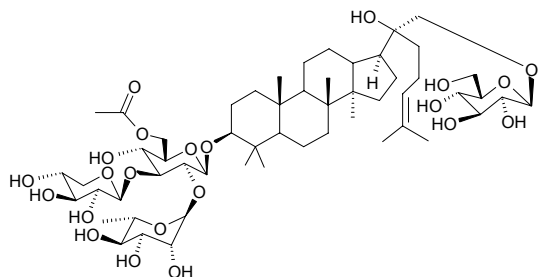
**21700** 3 $\beta$ ,20S,21-Trihydroxydammar-24-ene 3-O- $\{[\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 2)] $\}[\beta$ -D-glucopyranosyl(1 $\rightarrow$ 3)]- $\beta$ -D-glucopyranosyl}-21-O- $\beta$ -D-glucopyranoside

C<sub>54</sub>H<sub>90</sub>O<sub>22</sub> (1093.32). Amorphous powder,  $[\alpha]_D^{20} = -1.9^\circ$  ( $c = 1.29$ , MeOH).  
**Source:** JIAO GU LAN *Gynostemma pentaphyllum* (aerial parts: yield = 0.0055%dw). **Ref:** 4751.



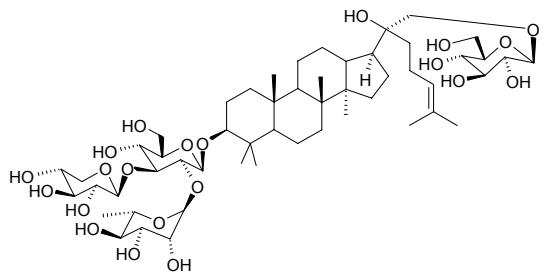
**21701** 3 $\beta$ ,20S,21-Trihydroxydammar-24-ene 3-O- $\{[\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 2)] $\}[\beta$ -D-xylopyranosyl(1 $\rightarrow$ 3)]- $\beta$ -D-[6-O-acetylglucopyranosyl]-21-O- $\beta$ -D-glucopyranoside

C<sub>55</sub>H<sub>92</sub>O<sub>22</sub> (1105.33). Amorphous powder,  $[\alpha]_D^{20} = -2.6^\circ$  ( $c = 0.97$ , MeOH).  
**Source:** JIAO GU LAN *Gynostemma pentaphyllum* (aerial parts: yield = 0.005%dw). **Ref:** 4751.



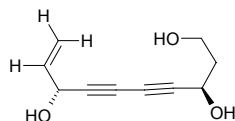
**21702** 3 $\beta$ ,20S,21-Trihydroxydammar-24-ene 3-O- $\{[\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 2)] $\}[\beta$ -D-xylopyranosyl(1 $\rightarrow$ 3)]- $\beta$ -D-glucopyranosyl}-21-O- $\beta$ -D-glucopyranoside

C<sub>53</sub>H<sub>90</sub>O<sub>21</sub> (1063.3). Amorphous powder,  $[\alpha]_D^{20} = -6.6^\circ$  ( $c = 0.69$ , MeOH).  
**Source:** JIAO GU LAN *Gynostemma pentaphyllum* (aerial parts: yield = 0.015%dw). **Ref:** 4751.

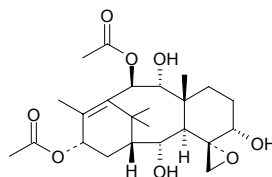


**21703** 1,3R,8R-Trihydroxydec-9-en-4,6-yne

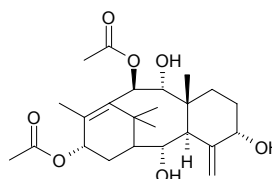
C<sub>10</sub>H<sub>12</sub>O<sub>3</sub> (180.21). **Pharm:** 12-Lipoxygenase inhibitor (10 $\mu$ g/mL, InRt = 32.17%; 30 $\mu$ g/mL, InRt = 18.15%; control Baicalein, 10 $\mu$ g/mL, InRt = 56.23%). **Source:** DAN ZI HAO *Artemisia monosperma*. **Ref:** 5249.



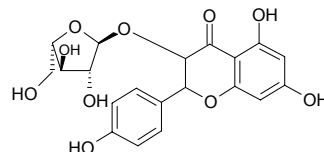
**21704** 2 $\alpha$ ,5 $\alpha$ ,9 $\alpha$ -Trihydroxy-10 $\beta$ ,13 $\alpha$ -diacetoxy-4 $\beta$ ,20-epoxytaxa-11-ene  
 C<sub>24</sub>H<sub>36</sub>O<sub>8</sub> (452.55). mp 216–218°C. **Source:** HONG DOU SHAN *Taxus chinensis*. **Ref:** 662.



**21705** 2 $\alpha$ ,5 $\alpha$ ,9 $\alpha$ -Trihydroxy-10 $\beta$ ,13 $\alpha$ -diacetoxytaxa-4(20),11-diene  
 Trihydroxydiacetoxytaxadiene C<sub>24</sub>H<sub>36</sub>O<sub>7</sub> (436.55). mp 186–188°C. **Source:** HONG DOU SHAN *Taxus chinensis*. **Ref:** 662.

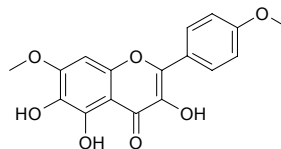


**21706** 5,7,4'-Trihydroxy dihydroflavonol-3-O- $\alpha$ -L-arabinofuranoside  
 C<sub>20</sub>H<sub>20</sub>O<sub>10</sub> (420.38). Yellow crystals (CHCl<sub>3</sub>-MeOH), mp 120–122°C. **Source:** XI QUE MEI TENG *Sageretia gracilis*. **Ref:** 2501.



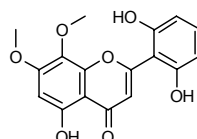
**21707** 3,5,6-Trihydroxy-7,4'-dimethoxyflavone

C<sub>17</sub>H<sub>14</sub>O<sub>7</sub> (330.30). Yellow crystals, mp 234–235°C, soluble in acetone and methanol, hardly soluble in chloroform and water. **Source:** FO SHOU *Citrus medica* var. *sarcodactylis*. **Ref:** 31.



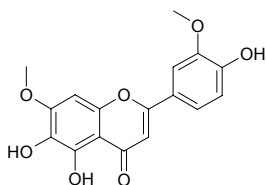
**21708** 5,2',6'-Trihydroxy-7,8-dimethoxyflavone

C<sub>17</sub>H<sub>14</sub>O<sub>7</sub> (330.30). **Source:** HUANG QIN *Scutellaria baicalensis*. **Ref:** 2.

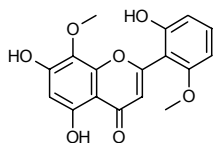


**21709 5,6,4'-Trihydroxy-7,3'-dimethoxyflavone**

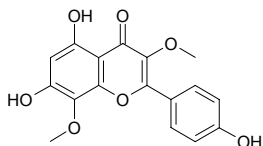
[25782-25-6] C<sub>17</sub>H<sub>14</sub>O<sub>7</sub> (330.30). Pale yellow powder, mp 268–270°C. **Pharm:** PFTase inhibitor (100µg/mL, InRt = 84%, IC<sub>50</sub> = 63µg/mL)<sup>[5378]</sup>; cytotoxic (inhibits growth of hmn cancer cells: SW620, GI<sub>50</sub> = (5.0±0.4)µmol/L, control Adriamycin, GI<sub>50</sub> = 0.34µmol/L; A549, GI<sub>50</sub> = (11±3)µmol/L, Adriamycin, GI<sub>50</sub> = 0.21µmol/L; PC3, GI<sub>50</sub> = (3.4±0.3)µmol/L, Adriamycin, GI<sub>50</sub> = 0.39µmol/L; LOX-IMVI, GI<sub>50</sub> = (2.6±0.3)µmol/L, Adriamycin, GI<sub>50</sub> = 0.12µmol/L; HCT15, GI<sub>50</sub> = (4.1±0.3)µmol/L, Adriamycin, GI<sub>50</sub> = 0.84µmol/L)<sup>[5378]</sup>; cytotoxic inactive (hmn breast cancer cell lines: MDA-MB-231, MCF7, T47D, 20µg/mL)<sup>[5378]</sup>; angiogenesis inhibitor (chicken embryo chorioallantoic membrane (CAM) assay, 10µg, InRt = 55%)<sup>[5378]</sup>; antineoplastic (nude mouse, hum,an tumor xenograft model, SW620 hmn colon cancer, 0.5% tween 80, ip 60mg/(kg·d) for 22 days, reduces tumor volume 14.6% at final day and no loss of body weight; good candidate as antitumor agents)<sup>[5378]</sup>. **Source:** AI YE *Artemisia argyi*, TA HUA BAI LI XIANG *Thymus satureioides* (aerial parts), *Thymbra* spp. **Ref:** 1521, 5378.

**21710 5,7,2'-Trihydroxy-8,6'-dimethoxyflavone**

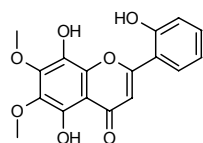
C<sub>17</sub>H<sub>14</sub>O<sub>7</sub> (330.30). **Source:** HUANG QIN *Scutellaria baicalensis*. **Ref:** 2.

**21711 5,7,4'-Trihydroxy-3,8-dimethoxyflavone**

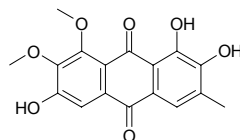
C<sub>17</sub>H<sub>14</sub>O<sub>7</sub> (330.30). **Pharm:** Antioxidant (Takamatsu DCFH method, myelomonocytic HL-60 cells, IC<sub>50</sub> = (21.1±4.5)µg/mL; control NDGA, IC<sub>50</sub> = (0.7±0.3)µg/mL, Vitamin C, IC<sub>50</sub> = (1.9±0.7)µg/mL, Trolox, IC<sub>50</sub> = (1.4±0.5)µg/mL)<sup>[3850]</sup>; cytotoxic (XTT assay, HL-60 cells, IC<sub>50</sub> = (36.7±4.4)µg/mL; control NDGA, IC<sub>50</sub> = (2.6±0.2)µg/mL, Vitamin C, IC<sub>50</sub> > 10.0µg/mL, Trolox, IC<sub>50</sub> > 10.0µg/mL)<sup>[3850]</sup>. **Source:** SAN CHI LA RUI A *Larrea tridentata* (leaf), SAN JIAO FEN YE JUE *Pityrogramma triangularis*, *Baccharis sarothroides*, *Gutierrezia microcephala*, *Cyanostegia angustifolia* (leaf), *Cyanostegia microphylla*, *Geraea canescens*. **Ref:** 1521, 3850.

**21712 5,8,2'-Trihydroxy-6,7-dimethoxyflavone**

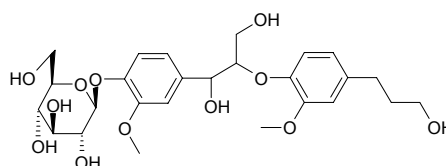
C<sub>17</sub>H<sub>14</sub>O<sub>7</sub> (330.30). **Source:** HUANG QIN *Scutellaria baicalensis*. **Ref:** 2.

**21713 1,2,6-Trihydroxy-7,8-dimethoxy-3-methylanthraquinone**

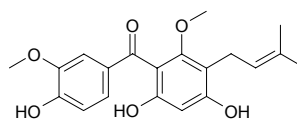
C<sub>17</sub>H<sub>14</sub>O<sub>7</sub> (330.3). Yellow needles (EtOAc-*n*-hexane), mp 271–273°C. **Pharm:** Cytotoxic inactive (*in vitro*, HeLa, Vero, K562, Raji, Wish, and Calu1 tumor cell lines, IC<sub>50</sub> > 100µmol/L). **Source:** YI HE GUO *Ventilago leiocarpa* (stem). **Ref:** 3057.

**21714 7,9,9'-Trihydroxy-3,3'-dimethoxy-8-O-4'-neolignan-4-O-β-D-glucopyranoside**

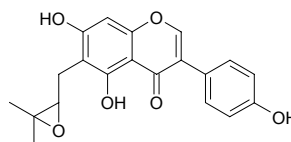
C<sub>26</sub>H<sub>36</sub>O<sub>12</sub> (540.57). [α]<sub>D</sub><sup>25</sup> = -68.6° (c = 0.11, MeOH). **Source:** SHAN FAN GEN *Symplocos caudata*. **Ref:** 2535.

**21715 4,6,4'-Trihydroxy-2,3'-dimethoxy-3-prenylbenzophenone**

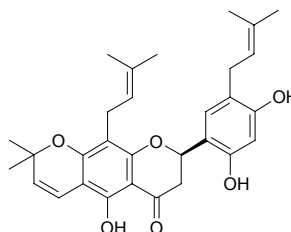
C<sub>20</sub>H<sub>22</sub>O<sub>6</sub> (358.39). Yellow oil. **Source:** SHAN ZHU ZI *Garcinia multiflora* (stem: yield = 0.00052%dw). **Ref:** 4708.

**21716 5,7,4'-Trihydroxy-6-(3,3-dimethylallyloxiranylmethyl)isoflavone**

C<sub>20</sub>H<sub>18</sub>O<sub>6</sub> (354.36). Yellow amorphous powder, mp 252–254°C, [α]<sub>D</sub><sup>20</sup> = 10.8° (c = 0.1, MeOH). **Source:** CI TONG *Erythrina variegata* [Syn. *Erythrina indica*] (stem cortex: yield = 0.000008%fw). **Ref:** 2269.

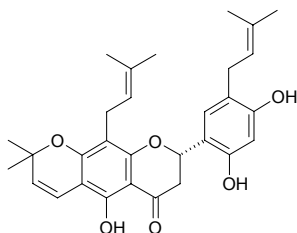
**21717 (2R)-5,2',4'-Trihydroxy-8,5'-di(3-methylbut-2-enyl)-6,7-(3,3-dimethylpyrano)flavanone**

C<sub>30</sub>H<sub>34</sub>O<sub>6</sub> (490.60). Yellow oil, [α]<sub>D</sub> = +73.3° (c = 0.15, CHCl<sub>3</sub>). **Source:** FEI LV BIN QIAN JIN BA *Moghania philippinensis* (root). **Ref:** 3500.



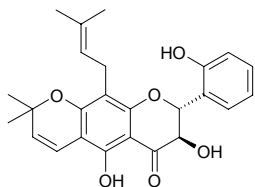
**21718 (2S)-5,2',4'-Trihydroxy-8,5'-di(3-methylbut-2-enyl)-6,7-(3,3-dimethylpyrano)flavanone**

C<sub>30</sub>H<sub>34</sub>O<sub>6</sub> (490.60). Yellow oil,  $[\alpha]_D = -84.0^\circ$  ( $c = 0.25$ , CHCl<sub>3</sub>). Source: FEI LV BIN QIAN JIN BA *Moghania philippinensis* (root). Ref: 3500.



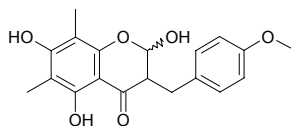
**21719 2',3,5-Trihydroxy-6,7-(2'',2''-dimethylchromene)-8-(3''',3'''-dimethylallyl)-flavanone**

Jayacanol C<sub>25</sub>H<sub>26</sub>O<sub>6</sub> (422.48). Viscous yellowish oil,  $[\alpha]_D^{20} = -54.43^\circ$  ( $c = 0.625$ , CH<sub>2</sub>Cl<sub>2</sub>). Source: *Lonchocarpus atropurpureus*. Ref: 2423.



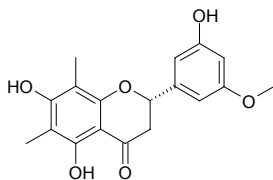
**21720 2,5,7-Trihydroxy-6,8-dimethyl-3-(4'-methoxybenzyl)chroman-4-one**

C<sub>19</sub>H<sub>20</sub>O<sub>6</sub> (344.37). Amorphous powder,  $[\alpha]_D^{22} = -8^\circ$  ( $c = 0.22$ , MeOH). Source: MAI DONG *Ophiopogon japonicus*. Ref: 2044.



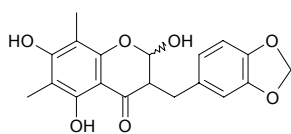
**21721 2(S)-5,7,3'-Trihydroxy-6,8-dimethyl-5'-methoxy-flavanone**

C<sub>18</sub>H<sub>18</sub>O<sub>6</sub> (330.34). Pale yellow powder, mp 202°C,  $[\alpha]_D^{23} = -4.54^\circ$  ( $c = 0.56$ , MeOH). Source: QIAN LIE LIN MAO JUE *Dryopteris sublaeta*. Ref: 4869.



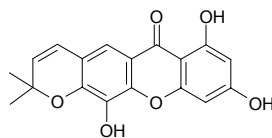
**21722 2,5,7-Trihydroxy-6,8-dimethyl-3-(3',4'-methylenedioxybenzyl)-chroman-4-one**

C<sub>19</sub>H<sub>18</sub>O<sub>7</sub> (358.35). Amorphous powder,  $[\alpha]_D^{22} = -0.5^\circ$  ( $c = 0.5$ , MeOH). Source: MAI DONG *Ophiopogon japonicus*. Ref: 2044.



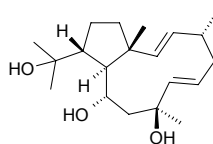
**21723 1,3,5-Trihydroxy-13,13-dimethyl-2H-pyran[6,7-b]-xanthen-9-one**

C<sub>18</sub>H<sub>14</sub>O<sub>6</sub> (326.31). Yellow solid, mp 275~277°C. Source: DAO NIAN ZI *Garcinia mangostana* (heartwood). Ref: 5311.



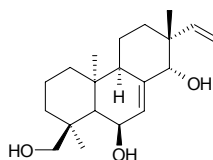
**21724 8,10,18-Trihydroxy-2,6-dolabelladiene**

C<sub>20</sub>H<sub>32</sub>O<sub>3</sub> (322.49). Colorless needles, mp 168~170°C,  $[\alpha]_D^{25} = -22^\circ$  ( $c = 0.5$ , CHCl<sub>3</sub>). Pharm: Anti-HSV-1 (Vero cells infected by HSV-1, 50μmol/L, (81±4)% of cytopathic effect inhibition of herpes virus); cytotoxic inactive (200μmol/L); HIV-1 RT inhibitor (40μmol/L, InRt = 80%, positive control AZT, 0.01μmol/L, InRt = 85%). Source: BA XI ZONG ZAO *Dictyota paffii*. Ref: 5023.



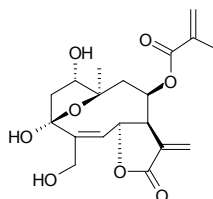
**21725 6β,14α,18-Trihydroxy-9-epi-ent-pimara-7,15-diene**

C<sub>20</sub>H<sub>32</sub>O<sub>3</sub> (320.48). Source: TENG CANG CHI MEI *Gibberella fujikuroi*. Ref: 3916.



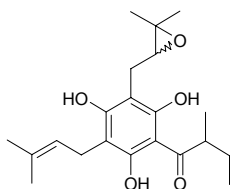
**21726 1α,3α,15-Trihydroxy-3,10-epoxy-8β-O-methacryloyl-4,11-germacradiene,6α,12-olide**

C<sub>19</sub>H<sub>24</sub>O<sub>8</sub> (380.40). Source: *Viguiera eriophora* ssp. *eriophora* (aerial parts). Ref: 5090.



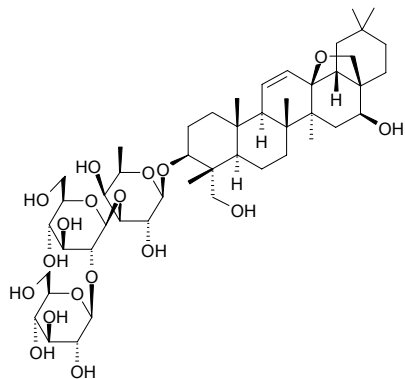
**21727 1,3,5-Trihydroxy-6-[2''',3'''-epoxy-3'''-methyl-butyl]-2-[2''-methyl-butanoyl]-4-[3'-methyl-2'-butenyl]-benzene**

$C_{21}H_{30}O_5$  (362.47). Pale yellow oil,  $[\alpha]_D^{21} = +80^\circ$  ( $c = 0.075$ ,  $CHCl_3$ ). **Pharm:** Antibacterial (multidrug-resistant strains of *Staphylococcus aureus*: ATCC 25923, MIC = 32 $\mu$ g/mL, control Norfloxacin, MIC = 2 $\mu$ g/mL, Erythromycin, MIC = 0.25 $\mu$ g/mL, Tetracycline, MIC = 0.25 $\mu$ g/mL; SA-1199B(NorA), MIC = 16 $\mu$ g/mL, Norfloxacin, MIC = 32 $\mu$ g/mL, Erythromycin MIC = 0.25 $\mu$ g/mL, Tetracycline MIC = 0.25 $\mu$ g/mL; RN4220(MsrA), MIC = 16 $\mu$ g/mL, Norfloxacin, MIC = 2 $\mu$ g/mL, Erythromycin MIC = 128 $\mu$ g/mL, Tetracycline MIC = 0.25 $\mu$ g/mL; XU212(TetK, *mecA*), MIC = 16 $\mu$ g/mL, Norfloxacin, MIC = 16 $\mu$ g/mL, Erythromycin MIC > 256 $\mu$ g/mL, Tetracycline MIC = 128 $\mu$ g/mL). **Source:** DUO YE JIN SI TAO *Hypericum foliosum*. **Ref:** 5294.



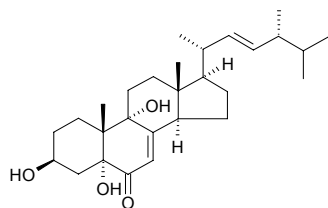
**21728 3 $\beta$ ,16 $\beta$ ,23-Trihydroxy-13,28-epoxyolean-11-en-3 $\beta$ -yl-[ $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)]-[ $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)]-[ $\beta$ -D-fucopyranoside**

$C_{48}H_{78}O_{18}$  (943.15). Amorphous powder,  $[\alpha]_D^{25} = +15.7^\circ$  ( $c = 0.06$ , MeOH). **Source:** GUAN MU CHAI HU *Bupleurum fruticosum*, ZHI BU LUO TUO CAI HU *Bupleurum gibraltarium* (root). **Ref:** 2247, 3980.



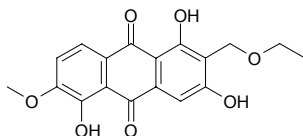
**21729 3 $\beta$ ,5 $\alpha$ ,9 $\alpha$ -Trihydroxy-(22E)-ergosta-7,22-dien-6-one**

$C_{28}H_{44}O_4$  (444.66). **Source:** *Pleurotus eryngii*. **Ref:** 4183.



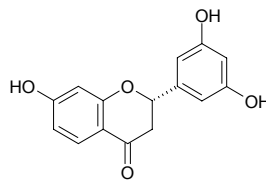
**21730 1,3,5-Trihydroxy-2-ethoxymethyl-6-methoxy-anthraquinone**

$C_{18}H_{16}O_7$  (344.32). Orange-red needles ( $CHCl_3$ ), mp 189–191°C. **Source:** HONG YA DA JI *Knoxia valerianoides* (root). **Ref:** 4866.



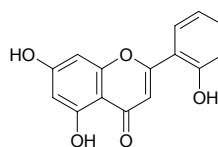
**21731 7,3',5'-Trihydroxyflavanone**

$C_{15}H_{12}O_5$  (272.26). Yellow powder, mp 223–225°C,  $[\alpha]_D^{25} = -22.88^\circ$  ( $c = 0.08$ , acetone). **Source:** ZHONG JIAN JIN JI ER *Caragana intermedia*. **Ref:** 2472.



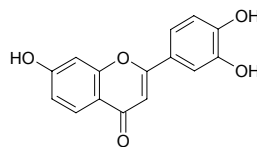
**21732 5,7,2'-Trihydroxyflavone**

[73046-40-9]  $C_{15}H_{10}O_5$  (270.24). **Source:** HUANG QIN *Scutellaria baicalensis*. **Ref:** 2.



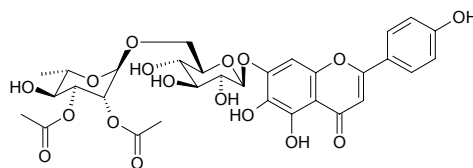
**21733 7,3',4'-Trihydroxyflavone**

[2150-11-0]  $C_{15}H_{10}O_5$  (270.24). **Source:** BAI CI HUA ZI *Sophora viciifolia*. **Ref:** 561.



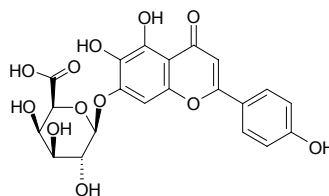
**21734 5,6,4'-Trihydroxyflavone 7-O- $\alpha$ -L-2,3-di-O-acetyl-rhamnopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside**

$C_{31}H_{34}O_{17}$  (678.61). Yellow powder (MeOH), mp 168–171°C,  $[\alpha]_D^{27} = -55.4^\circ$  ( $c = 0.9$ , MeOH). **Pharm:** Neurite outgrowth enhancer inactive (PC12D cells, nerve growth factor-mediated, 10–100 $\mu$ mol/L). **Source:** YE GAN CAO *Scoparia dulcis* (aerial parts: yield = 0.001%). **Ref:** 4745.



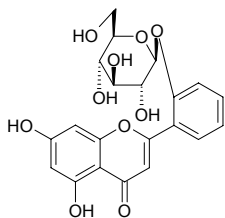
**21735 5,6,4'-Trihydroxyflavone 7-O- $\beta$ -D-galactonic acid**

$C_{21}H_{18}O_{12}$  (462.37). Yellow powder. **Source:** DENG ZHAN XI XIN *Erigeron breviscapus*. **Ref:** 785.

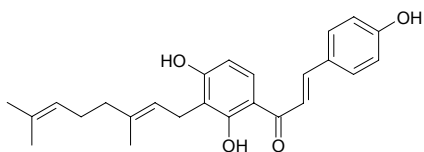


**21736 5,7,2'-Trihydroxyflavone 2'-O-β-D-glucopyranoside**

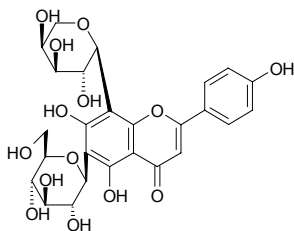
C<sub>21</sub>H<sub>20</sub>O<sub>10</sub> (432.39). Yellow needles (MeOH), mp 252~253°C (dec), [α]<sub>D</sub><sup>25</sup> = -67.6° (c = 0.042, MeOH). Source: KE AI HUANG QIN *Scutellaria amabilis* (root). Ref: 2072.

**21737 2',4,4'-Trihydroxy-3'-geranylchalcone**

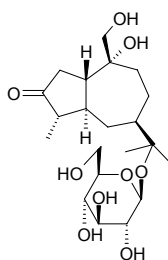
C<sub>25</sub>H<sub>28</sub>O<sub>4</sub> (392.50). mp 141~143°C. Pharm: Antifungal (*Cladosporium cladosporioides*, TLC bioautography method, 5μg/spot, control Benlate); antioxidant (DPPH scavenger, TLC bioautography method, 1μg/spot, control Vitamin E, 1μg/spot). Source: GAO GUI BO LUO MI *Artocarpus nobilis* (leaf). Ref: 3813.

**21738 5,7,4'-Trihydroxy-6-C-glucoside-8-C-arabinoside flavone**

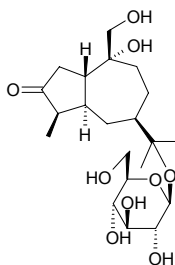
C<sub>26</sub>H<sub>28</sub>O<sub>14</sub> (564.50). Source: HUANG QIN *Scutellaria baicalensis*. Ref: 2.

**21739 (1S,4S,5S,7R,10R)-10,11,14-Trihydroxyguai-3-one 11-O-β-D-glucopyranoside**

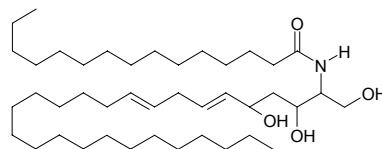
C<sub>21</sub>H<sub>36</sub>O<sub>9</sub> (432.52). Amorphous powder, [α]<sub>D</sub><sup>22</sup> = +3° (c = 1.2, MeOH). Source: CANG ZHU *Atractylodes lancea*, GUAN CANG ZHU *Atractylodes japonica* (fresh rhizome). Ref: 4310, 4348.

**21740 (1S,4S,5S,7R,10S)-10,11,14-Trihydroxyguai-3-one 11-O-β-D-glucopyranoside**

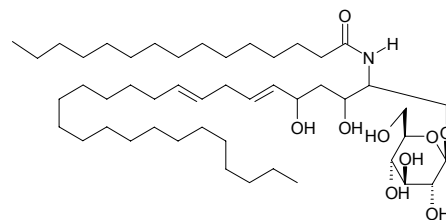
C<sub>21</sub>H<sub>36</sub>O<sub>9</sub> (432.52). Amorphous powder, [α]<sub>D</sub><sup>22</sup> = +1° (c = 0.7, MeOH). Source: CANG ZHU *Atractylodes lancea*. Ref: 4348.

**21741 1,3,5-Trihydroxy-2-hexadecanoylamino-(6E,9E)-heptacosdiene**

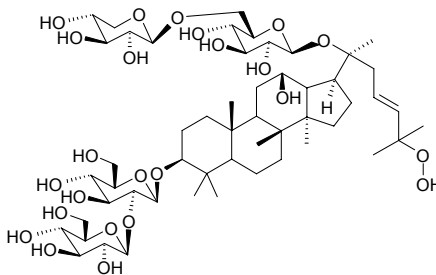
C<sub>42</sub>H<sub>81</sub>NO<sub>4</sub> (664.12). Colorless gummy solid, [α]<sub>D</sub><sup>25</sup> = -26.2° (c = 0.10, pyridine). Source: QI ZHOU YI ZHI HAO *Conyza canadensis* [Syn. *Erigeron canadensis*]. Ref: 4249.

**21742 1,3,5-Trihydroxy-2-hexadecanoylamino-(6E,9E)-heptacosdiene-1-O-glucopyranoside**

C<sub>48</sub>H<sub>91</sub>NO<sub>9</sub> (826.26). Colorless gummy solid, [α]<sub>D</sub><sup>25</sup> = -33.2° (c = 0.12, pyridine). Source: QI ZHOU YI ZHI HAO *Conyza canadensis* [Syn. *Erigeron canadensis*]. Ref: 4249.

**21743 3β,12,20S-Trihydroxy-25-hydroperoxydammar-23-ene 3-O-[[β-D-glucopyranosyl(1→2)-β-D-glucopyranosyl]-20-O-[[β-D-xylopyranosyl(1→6)]-β-D-glucopyranoside]**

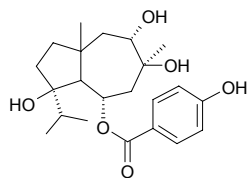
C<sub>53</sub>H<sub>90</sub>O<sub>24</sub> (1111.29). Amorphous powder, [α]<sub>D</sub><sup>20</sup> = +20.3° (c = 0.83, MeOH). Source: JIAO GU LAN *Gynostemma pentaphyllum* (aerial parts: yield = 0.0015%dw). Ref: 4751.



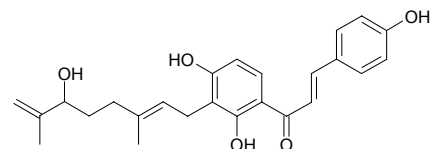


**21744 4 $\beta$ ,8 $\beta$ ,9 $\alpha$ -Trihydroxy-6 $\alpha$ -*p*-hydroxybenzoyloxydaucane**

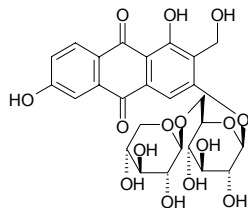
C<sub>22</sub>H<sub>32</sub>O<sub>6</sub> (392.50). Source: YI LANG A WEI *Ferula kuhistanica* (root). Ref: 3977.

**21745 2',4,4'-Trihydroxy-3'-[6-hydroxy-3,7-dimethyl-2(*E*),7-octadienyl] chalcone**

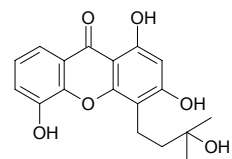
C<sub>25</sub>H<sub>28</sub>O<sub>5</sub> (408.50). Amorphous solid. Pharm: Antifungal (*Cladosporium cladosporioides*, TLC bioautography method, 5 $\mu$ g/spot, control Benlate); antioxidant (DPPH scavenger, TLC bioautography method, 1 $\mu$ g/spot, control Vitamin E, 1 $\mu$ g/spot). Source: GAO GUI BO LUO MI *Artocarpus nobilis* (leaf). Ref: 3813.

**21746 1,3,6-Trihydroxy-2-hydroxymethyl-9,10-anthraquinone 3-O- $\beta$ -Primeveroside**

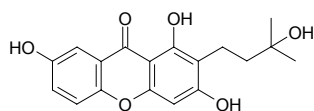
C<sub>26</sub>H<sub>28</sub>O<sub>15</sub> (580.50). Yellow powder. Source: MA LAI BAN DAO RAN MU SHU *Saprosma scortechinii* (leaf and stem). Ref: 4219.

**21747 1,3,5-Trihydroxy-4-(3-hydroxy-3-methylbutyl)xanthone**

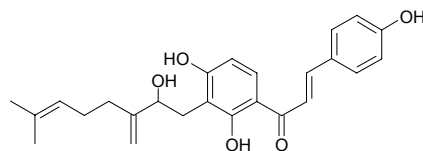
C<sub>18</sub>H<sub>18</sub>O<sub>6</sub> (330.34). Source: HEI XIAN TIAO TENG HUANG *Garcinia nigrolineata* (stam bark). Ref: 3482.

**21748 1,3,7-Trihydroxy-2-(3-hydroxy-3-methylbutyl)xanthone**

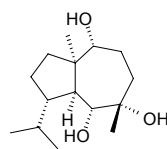
C<sub>18</sub>H<sub>18</sub>O<sub>6</sub> (330.34). Source: HEI XIAN TIAO TENG HUANG *Garcinia nigrolineata* (stam bark). Ref: 3482.

**21749 2',4',4'-Trihydroxy-3'-[2-hydroxy-7-methyl-3-methylene-6-octae-nyl]chalcone**

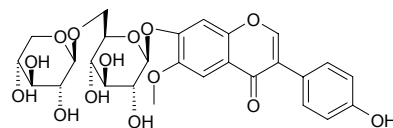
C<sub>25</sub>H<sub>28</sub>O<sub>5</sub> (408.50). Amorphous solid. Pharm: Antifungal (*Cladosporium cladosporioides*, TLC bioautography method, 5 $\mu$ g/spot, control Benlate); antioxidant (DPPH scavenger, TLC bioautography method, 1 $\mu$ g/spot, control Vitamin E, 1 $\mu$ g/spot). Source: GAO GUI BO LUO MI *Artocarpus nobilis* (leaf). Ref: 3813.

**21750 6,7,10-Trihydroxyisodaucane**

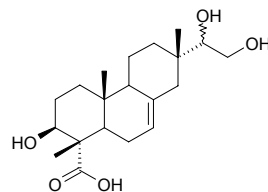
C<sub>15</sub>H<sub>28</sub>O<sub>3</sub> (256.39). Colorless crystals (*n*-hexane:CH<sub>2</sub>Cl<sub>2</sub> = 7:3), mp 143–145°C, [ $\alpha$ ]<sub>D</sub><sup>22</sup> = -5.6° (*c* = 0.55, MeOH). Source: *Reneilmia cincinnata* (fruits). Ref: 2383.

**21751 4',6,7-Trihydroxyisoflavone-6-methylether-7-O- $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside**

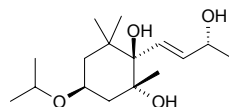
C<sub>27</sub>H<sub>30</sub>O<sub>14</sub> (578.53). Colorless needles (MeOH), mp > 300°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -54.3° (*c* = 0.15, DMSO). Source: GE GEN *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*]. Ref: 2281.

**21752 3 $\beta$ ,15 $\alpha$ ,16-Trihydroxy-isopimaric acid**

C<sub>20</sub>H<sub>32</sub>O<sub>5</sub> (352.48). White acicular crystals, mp 256–258°C, [ $\alpha$ ]<sub>D</sub><sup>21</sup> = +27.9° (*c* = 0.05, methanol). Source: WU LING ZHI *Trogopterus xanthipes*; *Pteromys volans*. Ref: 88.

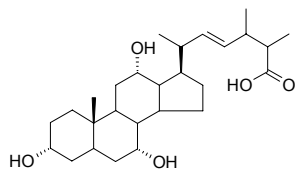
**21753 (3*S*,5*R*,6*R*,7*E*,9*R*)-5,6,9-Trihydroxy-3-isopropoxy-7-megastigmene**

C<sub>16</sub>H<sub>30</sub>O<sub>4</sub> (286.42). Colorless oil, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -11.7° (*c* = 0.02, MeOH). Source: PA KE YE XIANG SHU *Cestrum parqui* (fresh leaf). Ref: 5327.

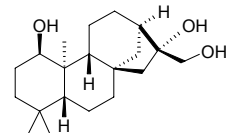


**21754 Trihydroxy-isosterocholenic acid**

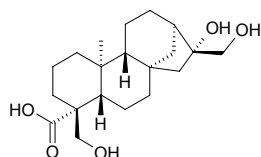
$C_{27}H_{44}O_5$  (448.65). mp 227°C. Source: CHAN CHU DAN *Bufo bufo* gargarizans; *Bufo melanostictus*. Ref: 6.

**21755 1 $\beta$ ,16 $\alpha$ ,17-Trihydroxy-ent-kaurane**

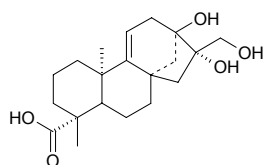
$C_{20}H_{34}O_3$  (322.49). White solid, mp 182°C,  $[\alpha]_D^{25} = +6.0^\circ$  ( $c = 0.1$ , MeOH). Pharm: Cytotoxic inactive (Lu1, Col2, KB, LNCaP, hTERT-RPE1, HUVEC; control Taxol,  $ED_{50} = 0.002\mu\text{g/mL}$ ,  $0.003\mu\text{g/mL}$ ,  $0.0005\mu\text{g/mL}$ ,  $0.001\mu\text{g/mL}$ ,  $0.004\mu\text{g/mL}$ ,  $0.008\mu\text{g/mL}$ , respectively). Source: *Parinari sprucei* (leaf). Ref: 4991.

**21756 ent-16 $\beta$ ,17,18-Trihydroxy-kauran-19-oic acid**

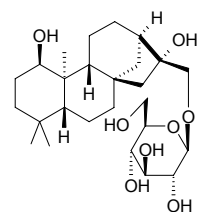
$C_{20}H_{30}O_5$  (352.48). White acicular crystals, mp 244–246°C, solving in methanol and acetone, hard to solve in water. Source: XIAN GENG XI XIAN *Siegesbeckia orientalis* var. *pubescens* [Syn. *Siegesbeckia pubescens*]. Ref: 2174.

**21757 13,16 $\alpha$ ,17-Trihydroxy-ent-9(11)-kauren-19-oic acid**

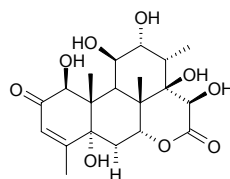
$C_{20}H_{30}O_5$  (350.46). White amorphous solid,  $[\alpha]_D^{20} = +67.4^\circ$  ( $c = 0.5$ ,  $\text{CHCl}_3:\text{MeOH} = 1:1$ ). Source: MU LAN<sup>(3)</sup> *Bruguiera gymnorrhiza* (stem; yield = 0.000084%). Ref: 4770.

**21758 1 $\beta$ ,16 $\alpha$ ,17-Trihydroxy-ent-kaur-17-O- $\beta$ -D-glucopyranoside**

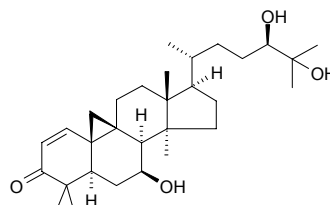
$C_{26}H_{44}O_8$  (484.64). White amorphous solid, mp 270°C (dec),  $[\alpha]_D^{25} = +9.0^\circ$  ( $c = 0.1$ , MeOH). Pharm: Cytotoxic inactive (Lu1, Col2, KB, LNCaP, hTERT-RPE1, HUVEC; control Taxol,  $ED_{50} = 0.002\mu\text{g/mL}$ ,  $0.003\mu\text{g/mL}$ ,  $0.0005\mu\text{g/mL}$ ,  $0.001\mu\text{g/mL}$ ,  $0.004\mu\text{g/mL}$ ,  $0.008\mu\text{g/mL}$ , respectively). Source: *Parinari sprucei* (leaf). Ref: 4991.

**21759 5 $\alpha$ ,14 $\beta$ ,15 $\beta$ -Trihydroxyklaineaneone**

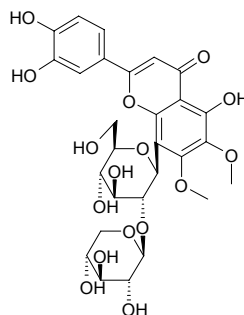
$C_{20}H_{28}O_9$  (412.44). Source: *Eurycoma* sp. Ref: 4556.

**21760 (24R)-7 $\beta$ ,24,25-Trihydroxy-9,19-cycloart-1-en-3-one**

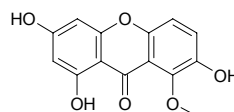
Sphaerophysone A  $C_{30}H_{48}O_4$  (472.71). Colorless needles (MeOH), mp 178–180°C. Source: KU MA DOU *Swainsonia salsula* [Syn. *Sphaerophysa salsula*]. Ref: 2512.

**21761 5,3',4'-Trihydroxyl-6,7-dimethoxyl-8-C-[ $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -D-glucopyranosyl flavone**

$C_{28}H_{32}O_{16}$  (624.56). Yellow amorphous powder, mp 192–194°C,  $[\alpha]_D^{25} = -22.9^\circ$  ( $c = 0.46$ , MeOH). Source: SHI DAN CAO *Coraliodiscus flabellatus* [Syn. *Didissandra flabellata*] (whole herb). Ref: 4830.

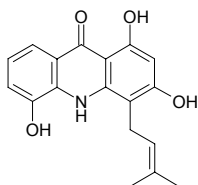
**21762 1,3,7-Trihydroxyl-8-methoxyxanthone**

$C_{14}H_{10}O_6$  (274.23). Yellow long acicular crystals, mp 224–225°C. Source: BAO E ZHANG YA CAI *Swertia calycina*. Ref: 634.

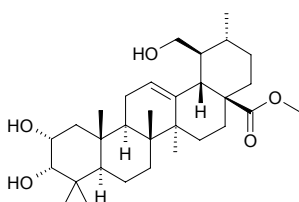


**21763 1,3,5-Trihydroxy-4-prenylacridone**

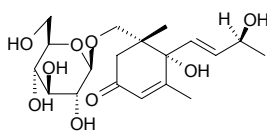
1,3,5-Trihydroxy-4-( $\gamma$ ,  $\gamma$ -dimethylallyl)acridone C<sub>18</sub>H<sub>17</sub>NO<sub>4</sub> (311.34). Yellow powder (MeOH), mp 250°C,  $[\alpha]_D^{25} = +51.6^\circ$  ( $c = 0.62$ , MeOH). **Pharm:**  $\alpha$ -Glucosidase inhibitor (IC<sub>50</sub> = (17±1)μmol/L, control Deoxynojirimycin, IC<sub>50</sub> = (330±8)mmol/L); antioxidant (DPPH Scavenger, IC<sub>50</sub> = (119±4)μmol/L, control BHA, IC<sub>50</sub> = (44.20±0.02)μmol/L). **Source:** *Oriopsis glaberrima* (stem cortex: yield = 0.00063%dw). **Ref:** 1590.

**21764 2 $\alpha$ ,3 $\alpha$ ,24-Trihydroxyursa-12-en-28-oate**

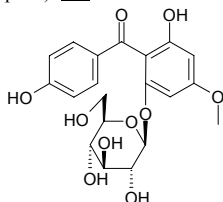
C<sub>31</sub>H<sub>50</sub>O<sub>5</sub> (502.74). **Source:** XIA KU CAO *Prunella vulgaris*. **Ref:** 2508.

**21765 (1R,6R,9S)-6,9,11-Trihydroxy-4,7-megastigmadien-3-one 11-O-β-D-glucopyranoside**

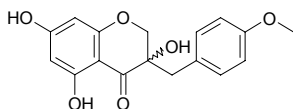
C<sub>19</sub>H<sub>30</sub>O<sub>9</sub> (402.45). White powder,  $[\alpha]_D = +85.9^\circ$  ( $c = 0.32$ , MeOH). **Pharm:** Antibacterial (*Helicobacter pylori* NCTC11637, MIC = 100μg/mL, NCTC11916, MIC = 100μg/mL, OCO1, MIC = 100μg/mL, control Hinokitiol (Nat. or Syn.), MIC = 100μg/mL, 100μg/mL, 50μg/mL, respectively). **Source:** OU ZHOU CI BAI BIAN ZHONG *Juniperus communis* var. *depressa* (twig with leaf). **Ref:** 4477.

**21766 2,4',6-Trihydroxy-4-methoxybenzophenone-2-O-glucoside**

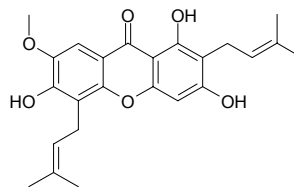
C<sub>20</sub>H<sub>22</sub>O<sub>10</sub> (422.39). Light-yellow powder, mp 133~135°C,  $[\alpha]_D^{21} = -23^\circ$  ( $c = 0.1$ , MeOH). **Source:** ZONG BAO GE NI DI MU *Gnidia involucrata* (aerial parts). **Ref:** 3996.

**21767 3,5,7-Trihydroxy-3-(4'-methoxybenzyl)-4-chromanone**

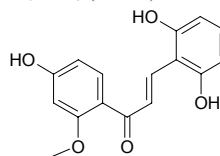
C<sub>17</sub>H<sub>16</sub>O<sub>6</sub> (316.31). Brown gum. **Source:** HE CAO YE JIA BEI FANG FENG *Ledebouria graminifolia* (tuber). **Ref:** 3368.

**21768 1,3,6-Trihydroxy-7-methoxy-2,5-bis(3-methyl-2-butenyl)-xanthone**

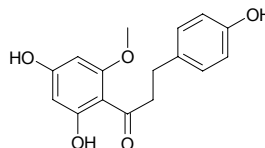
C<sub>24</sub>H<sub>26</sub>O<sub>6</sub> (410.47). **Pharm:** Antioxidant (DPPH scavenger, IC<sub>50</sub> > 200μmol/L, control BHT, IC<sub>50</sub> = 5.10μg/mL; crude latex of *Garcinia cowa*, IC<sub>50</sub> = 13.20μg/mL)<sup>[5281]</sup>. **Source:** TIAN SHAN ZHU ZI *Garcinia dulcis* (flower), YUN NAN SHAN ZHU ZI *Garcinia cowa* (latex). **Ref:** 4422, 5281.

**21769 7,2',6'-Trihydroxy-5-methoxychalcone**

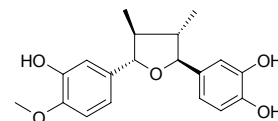
C<sub>16</sub>H<sub>14</sub>O<sub>5</sub> (286.29). **Source:** HUANG QIN *Scutellaria baicalensis*. **Ref:** 2.

**21770 4,2',4'-Trihydroxy-6'-methoxydihydrochalcone**

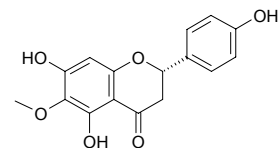
C<sub>16</sub>H<sub>16</sub>O<sub>5</sub> (288.30). Pale amorphous solid. **Source:** CHANG YE GE NA XIANG *Goniothalamus gardneri* (aerial parts). **Ref:** 5096.

**21771 (7S,8S,7'S,8'S)-3,3',4'-Trihydroxy-4-methoxy-7,7'-epoxyignan**

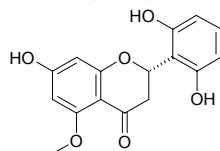
C<sub>19</sub>H<sub>22</sub>O<sub>5</sub> (330.38). Reddish-brown powder,  $[\alpha]_D^{25} = -60^\circ$  ( $c = 0.001$ , MeOH). **Pharm:** Antioxidant (Takamatsu DCFH method, myelomonocytic HL-60 cells, IC<sub>50</sub> = (1.3±0.4)μg/mL; control NDGA, IC<sub>50</sub> = (0.7±0.3)μg/mL, Vitamin C, IC<sub>50</sub> = (1.9±0.7)μg/mL, Trolox, IC<sub>50</sub> = (1.4±0.5)μg/mL); cytotoxic (XTT assay, HL-60 cells, IC<sub>50</sub> = (17.3±1.5)μg/mL; control NDGA, IC<sub>50</sub> = (2.6±0.2)μg/mL, Vitamin C, IC<sub>50</sub> > 10.0μg/mL, Trolox, IC<sub>50</sub> > 10.0μg/mL). **Source:** SAN CHI LA RUI A *Larrea tridentata* (leaf). **Ref:** 3850.

**21772 5,7,4'-Trihydroxy-6-methoxyflavanone**

C<sub>16</sub>H<sub>14</sub>O<sub>6</sub> (302.29). **Source:** HUANG QIN *Scutellaria baicalensis*. **Ref:** 2.

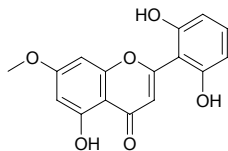
**21773 7,2',6'-Trihydroxy-5-methoxyflavanone**

C<sub>16</sub>H<sub>14</sub>O<sub>6</sub> (302.39). **Source:** HUANG QIN *Scutellaria baicalensis*. **Ref:** 2.

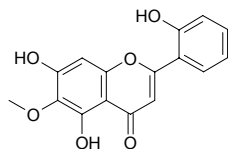


**21774 5,2',6'-Trihydroxy-7-methoxyflavone**

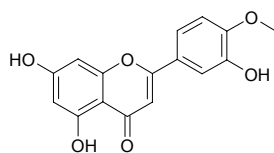
$C_{16}H_{12}O_6$  (300.27). Yellow needles, mp 210~211°C (MeOH). Source: SHEN CHANG CHUAN XIN LIAN *Andrographis elongata* (whole herb). Ref: 4149.

**21775 5,7,2'-Trihydroxy-6-methoxyflavone**

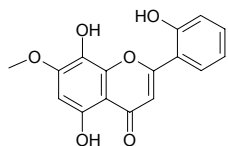
$C_{16}H_{12}O_6$  (300.27). Source: HUANG QIN *Scutellaria baicalensis*, DIAN HUANG QIN *Scutellaria amoena*. Ref: 2, 660.

**21776 5,7,3'-Trihydroxy-4'-methoxyflavone**

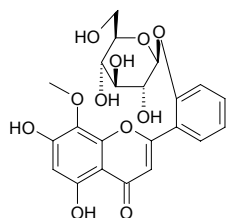
$C_{16}H_{12}O_6$  (300.27). Pharm: Antitubercular (*Mycobacterium tuberculosis*, MIC > 128µg/mL, cytotoxic, Vero cells, IC<sub>50</sub> = 65.0µg/mL, positive control Rifampin, MIC = 0.03µg/mL, IC<sub>50</sub> = 98.3µg/mL, SI = 3300). Source: SHU HUA JIE CAO *Valeriana laxiflora* (aerial parts and root). Ref: 4986.

**21777 5,8,2'-Trihydroxy-7-methoxyflavone**

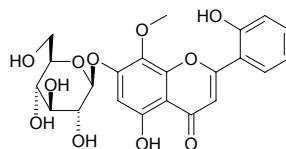
$C_{16}H_{12}O_6$  (300.27). Source: HUANG QIN *Scutellaria baicalensis*. Ref: 2.

**21778 5,7,2'-Trihydroxy-8-methoxyflavone 2'-O-β-D-glucopyranoside**

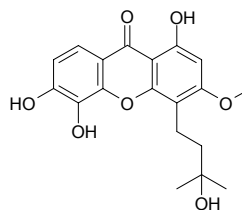
$C_{22}H_{22}O_{11}$  (462.41). Yellow needles (MeOH), mp 266~267°C (dec),  $[\alpha]_D^{25} = -51.3$  ( $c = 0.048$ , MeOH). Source: KE AI HUANG QIN *Scutellaria amabilis* (root: yield = 0.0025%dw). Ref: 2072.

**21779 5,7,2'-Trihydroxy-8-methoxyflavone 7-O-β-D-glucopyranoside**

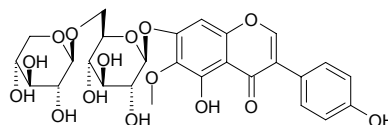
$C_{22}H_{22}O_{11}$  (462.41). Yellow needles (MeOH), mp 263~264°C (dec),  $[\alpha]_D^{25} = -77.5^\circ$  ( $c = 0.035$ , MeOH). Source: KE AI HUANG QIN *Scutellaria amabilis* (root: yield = 0.0006%dw). Ref: 2072.

**21780 1,5,6-Trihydroxy-3-methoxy-4-(3-hydroxyl-3-methylbutyl)xanthone**

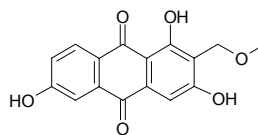
$C_{19}H_{20}O_7$  (360.37). Pale yellow amorphous powder. Source: YUN NAN SHAN ZHU ZI *Garcinia cowa* (stem: yield = 0.0010%dw). Ref: 916.

**21781 4',5,7-Trihydroxy-6-methoxyisoflavone 7-O-β-D-xylopyranoside (1→6)-β-D-glucopyranoside**

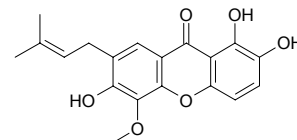
$C_{27}H_{30}O_{15}$  (594.53). Pale yellowish powder (MeOH), mp = > 300°C,  $[\alpha]_D^{25} = -43.3^\circ$  ( $c = 0.15$ , DMSO). Source: GE GEN *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*]. Ref: 2281.

**21782 1,3,6-Trihydroxy-2-methoxymethyl-9,10-anthraquinone**

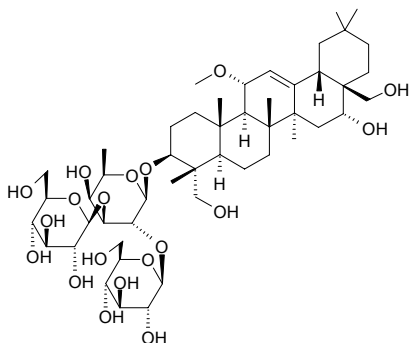
$C_{16}H_{12}O_6$  (300.27). Orange powder. Source: MA LAI BAN DAO RAN MU SHU *Saprosma scortechinii* (leaf and stem). Ref: 4219.

**21783 1,2,6-Trihydroxy-5-methoxy-7-(3-methylbut-2-enyl)xanthone**

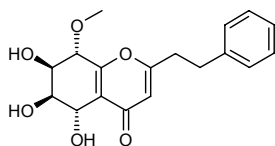
$C_{19}H_{18}O_6$  (342.35). Yellow needles, mp 220~222°C. Pharm: Neurite outgrowth activity (NGF-mediated, PC12D cells, EC = 10-30µmol/L). Source: DA YE TENG HUANG *Garcinia xanthochymus* (wood). Ref: 3473.



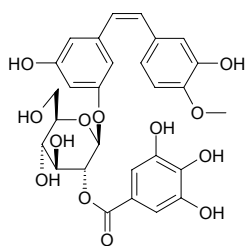
**21784** 16 $\alpha$ ,23,28-Trihydroxy-11 $\alpha$ -methoxyolean-12-en-3 $\beta$ -yl- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -D-fucopyranoside  
C<sub>49</sub>H<sub>82</sub>O<sub>19</sub> (975.19). Source: GUAN MU CHAI HU *Bupleurum fruticosum*.  
Ref: 2247.



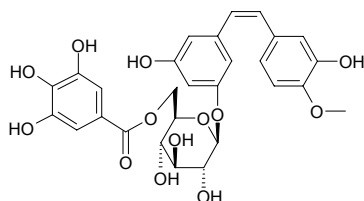
**21785** 5 $\alpha$ ,6 $\beta$ ,7 $\beta$ -Trihydroxy-8 $\alpha$ -methoxy-2-(2-phenylethyl)-5,6,7,8-tetrahydro chromone  
C<sub>18</sub>H<sub>20</sub>O<sub>6</sub> (332.36). White powder, mp 130~135°C, [ $\alpha$ ]<sub>D</sub> = +1.94°. Source: CHEN XIANG *Aquilaria agallocha*. Ref: 13.



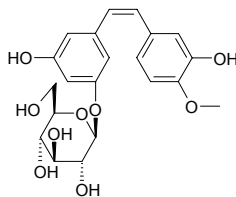
**21786** *cis*-3,5,3'-Trihydroxy-4'-methoxystilbene-3-O- $\beta$ -D-(2''-O-galloyl) glucopyranoside  
C<sub>28</sub>H<sub>28</sub>O<sub>13</sub> (572.53). Source: ZHANG YE DA HUANG *Rheum palmatum*. Ref: 660.



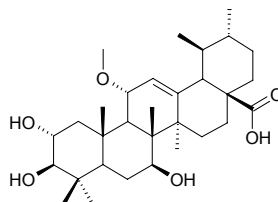
**21787** *cis*-3,5,3'-Trihydroxy-4'-methoxystilbene-3-O- $\beta$ -D-(6''-O-galloyl) glucopyranoside  
C<sub>28</sub>H<sub>28</sub>O<sub>13</sub> (572.53). Source: ZHANG YE DA HUANG *Rheum palmatum*.  
Ref: 660.



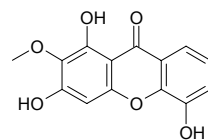
**21788** *cis*-3,5,3'-Trihydroxy-4'-methoxystilbene-3-O- $\beta$ -D-glucopyranoside  
C<sub>21</sub>H<sub>24</sub>O<sub>9</sub> (420.42). Source: ZHANG YE DA HUANG *Rheum palmatum*. Ref: 660.



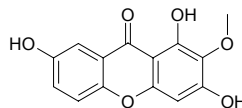
**21789** 2 $\alpha$ ,3 $\beta$ ,7 $\beta$ -Trihydroxy-11 $\alpha$ -methoxyurs-12-en-28-oic acid  
C<sub>31</sub>H<sub>50</sub>O<sub>6</sub> (518.74). Source: DUN XING CHI AN YE *Eucalyptus camaldulensis* var. *obtus* (fresh leaf). Ref: 3993.



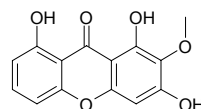
**21790** 1,3,5-Trihydroxy-2-methoxyxanthone  
C<sub>14</sub>H<sub>10</sub>O<sub>6</sub> (274.23). Pharm: Antifungal (*Aspergillus fumigatus* CBS113.26, MIC<sub>80</sub> = 31 $\mu$ g/mL, control Amphotericin B, MIC<sub>80</sub> = 8 $\mu$ g/mL; *Aspergillus flavus* IHEM37.19, MIC<sub>80</sub> = 31 $\mu$ g/mL, Amphotericin B, MIC<sub>80</sub> = 8 $\mu$ g/mL; *Aspergillus niger* IHEM2951, MIC<sub>80</sub> = 62 $\mu$ g/mL, Amphotericin B, MIC<sub>80</sub> = 16 $\mu$ g/mL; *Aspergillus terreus* 5029.2000, MIC<sub>80</sub> = 125 $\mu$ g/mL; Amphotericin B, MIC<sub>80</sub> = 16 $\mu$ g/mL; *Candida albicans* ATCC663.90, MIC<sub>80</sub> = 62 $\mu$ g/mL; Amphotericin B, MIC<sub>80</sub> = 1 $\mu$ g/mL). Source: SU GE LAN HU TONG *Calophyllum caledonicum* (stem cortex). Ref: 4995.



**21791** 1,3,7-Trihydroxy-2-methoxyxanthone  
C<sub>14</sub>H<sub>10</sub>O<sub>6</sub> (274.23). Source: CHAN YI TENG *Securidaca inappendiculata* (stem). Ref: 5238.

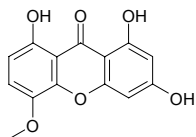


**21792** 1,3,8-Trihydroxy-2-methoxyxanthone  
C<sub>14</sub>H<sub>10</sub>O<sub>6</sub> (274.23). Source: CHAN YI TENG *Securidaca inappendiculata* (stem). Ref: 5238.

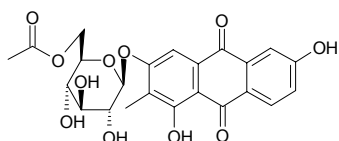


**21793 1,3,8-Trihydroxy-5-methoxyxanthone**

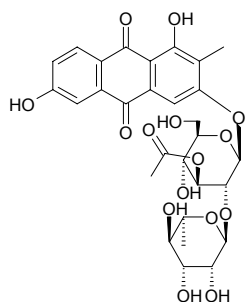
$C_{14}H_{10}O_6$  (274.23). Yellow needles, mp 262–264°C (sub.). Source: CHUAN DONG ZHANG YA CAI *Swertia davidii*. Ref: 2214.

**21794 1,3,6-Trihydroxy-2-methyl-9,10-anthra-quinone-3-O-(6'-O-acetyl)-β-D-glucoside**

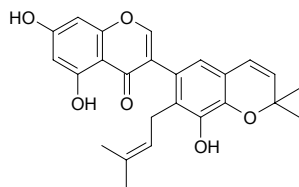
$C_{23}H_{22}O_{11}$  (474.43). Yellow crystals powder (methanol), mp 263–264°C; yellow needles (MeOH), mp 268–269°C. Source: QIAN CAO GEN *Rubia cordifolia*. Ref: 8, 174, 660.

**21795 1,3,6-Trihydroxy-2-methylanthraquinone-3-O-α-rhamnosyl (1→2)-3'-O-acetylglucoside**

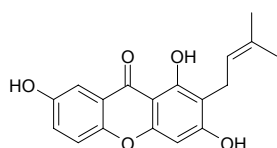
$C_{29}H_{32}O_{15}$  (620.57). Source: QIAN CAO GEN *Rubia cordifolia*. Ref: 660.

**21796 5,7,3'-Trihydroxy-2'-(3-methylbut-2-enyl)-4',5'-(3,3-dimethylpyrano)isoflavone**

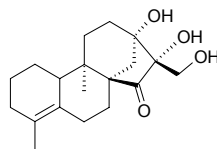
$C_{25}H_{24}O_6$  (420.47). Amorphous yellow solid. Source: FEI LV BIN QIAN JIN BA *Moghania philippinensis* (root). Ref: 3500.

**21797 1,3,7-Trihydroxy-2-(3-methylbut-2-enyl)xanthone**

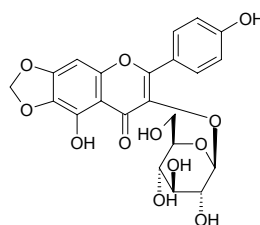
$C_{18}H_{16}O_5$  (312.33). Pharm: Cytotoxic (HSC-2 cells,  $CC_{50} > 0.64$ mmol/L; HGF,  $CC_{50} > 0.64$ mmol/L). Source: GOU JI *Cudrania cochinchinensis* (root; yield = 0.00057%dw). Ref: 3025.

**21798 13α,16α,17-Trihydroxy-9α-methyl-19,20-di-nor-kauran-4-en-15-one**

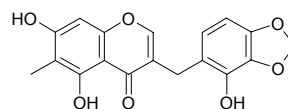
$C_{19}H_{28}O_4$  (320.43). Pale-yellow crystals, mp 100–103°C,  $[\alpha]_D^{25} = +23.3^\circ$  ( $c = 0.1$ , MeOH). Pharm: Cytotoxic inactive (Lu1, Col2, KB, LNCaP, hTERT-RPE1, HUVEC; control Taxol,  $ED_{50} = 0.002$ μg/mL, 0.003μg/mL, 0.0005μg/mL, 0.001μg/mL, 0.004μg/mL, 0.008μg/mL, respectively). Source: *Parinari sprucei* (leaf). Ref: 4991.

**21799 3,5,4'-Trihydroxy-6,7-methylenedioxyflavone-3-O-β-D-glucopyranoside**

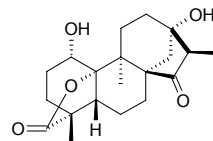
$C_{22}H_{20}O_{12}$  (476.40). Source: LIAO LAN YE *Polygonum tinctorium*. Ref: 660.

**21800 5,7,2'-Trihydroxy-6-methyl-3-(3',4'-methylenedioxybenzyl) chromone**

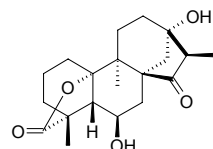
$C_{18}H_{14}O_7$  (342.31). Source: MAI DONG *Ophiopogon japonicus* (tuber). Ref: 4663.

**21801 1α,10α,13α-Trihydroxy-9α-methyl-15-oxo-20-nor-kauran-19-oic acid γ-lactone**

$C_{20}H_{28}O_5$  (348.44). White amorphous solid, mp 187–200°C,  $[\alpha]_D^{25} = +23.0^\circ$  ( $c = 0.1$ , MeOH). Pharm: Cytotoxic inactive (Lu1, Col2, KB, LNCaP, hTERT-RPE1, HUVEC; control Taxol,  $ED_{50} = 0.002$ μg/mL, 0.003μg/mL, 0.0005μg/mL, 0.001μg/mL, 0.004μg/mL, 0.008μg/mL, respectively). Source: *Parinari sprucei* (leaf). Ref: 4991.

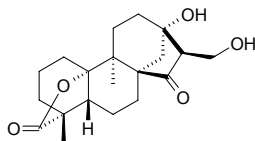
**21802 6β,10α,13α-Trihydroxy-9α-methyl-15-oxo-20-nor-kauran-19-oic acid (19,10)-lactone**

$C_{20}H_{28}O_5$  (348.44). White amorphous solid, mp 167–170°C,  $[\alpha]_D^{25} = +18.0^\circ$  ( $c = 0.1$ , MeOH). Source: *Parinari sprucei* (leaf). Ref: 4991.



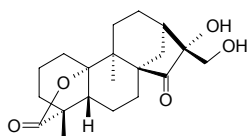
**21803 10 $\alpha$ ,13 $\alpha$ ,17-Trihydroxy-9 $\alpha$ -methyl-15-oxo-20-nor-kauran-19-oic acid  $\gamma$ -lactone**

C<sub>20</sub>H<sub>28</sub>O<sub>5</sub> (348.44). White amorphous solid, mp 193~200°C (dec), [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +24.0° (c = 0.1, MeOH). **Pharm:** Cytotoxic (Lu1, Col2, KB, LNCaP, hTERT-RPE1, HUVEC, ED<sub>50</sub> = 10~20 $\mu$ g/mL; control Taxol, ED<sub>50</sub> = 0.002 $\mu$ g/mL, 0.003 $\mu$ g/mL, 0.0005 $\mu$ g/mL, 0.001 $\mu$ g/mL, 0.004 $\mu$ g/mL, 0.008 $\mu$ g/mL, respectively). **Source:** *Parinari sprucei* (leaf). **Ref:** 4991.



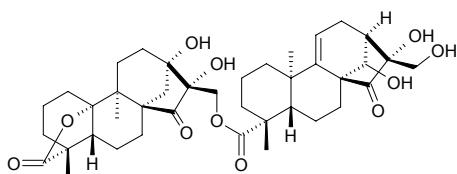
**21804 10 $\alpha$ ,16 $\alpha$ ,17-Trihydroxy-9 $\alpha$ -methyl-15-oxo-20-nor-kauran-19-oic acid  $\gamma$ -lactone**

C<sub>20</sub>H<sub>28</sub>O<sub>5</sub> (348.44). White crystals, mp 95°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +16.0° (c = 0.1, MeOH). **Pharm:** Cytotoxic inactive (Lu1, Col2, KB, LNCaP, hTERT-RPE1, HUVEC; control Taxol, ED<sub>50</sub> = 0.002 $\mu$ g/mL, 0.003 $\mu$ g/mL, 0.0005 $\mu$ g/mL, 0.001 $\mu$ g/mL, 0.004 $\mu$ g/mL, 0.008 $\mu$ g/mL, respectively). **Source:** *Parinari sprucei* (leaf). **Ref:** 4991.



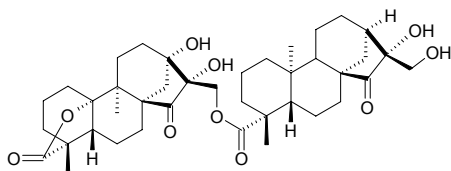
**21805 10 $\alpha$ ,13 $\alpha$ ,16 $\alpha$ -Trihydroxy-9 $\alpha$ -methyl-15-oxo-20-nor-kauran-19-oic acid  $\gamma$ -lactone-17-yl-14' $\alpha$ ,16' $\alpha$ ,17'-trihydroxy-15'-oxo-ent-kaur-11'-en-19'-oate**

C<sub>40</sub>H<sub>54</sub>O<sub>11</sub> (710.87). White amorphous solid, mp 175~180°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +28.3° (c = 0.1, MeOH). **Pharm:** Cytotoxic inactive (Lu1, Col2, KB, LNCaP, hTERT-RPE1, HUVEC; control Taxol, ED<sub>50</sub> = 0.002 $\mu$ g/mL, 0.003 $\mu$ g/mL, 0.0005 $\mu$ g/mL, 0.001 $\mu$ g/mL, 0.004 $\mu$ g/mL and 0.008 $\mu$ g/mL, respectively). **Source:** *Parinari sprucei* (leaf). **Ref:** 4991.



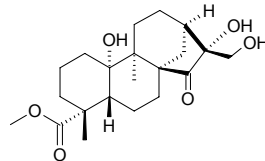
**21806 10 $\alpha$ ,13 $\alpha$ ,16 $\alpha$ -Trihydroxy-9 $\alpha$ -methyl-15-oxo-20-nor-kauran-19-oic acid  $\gamma$ -lactone-17-yl-16' $\alpha$ ,17'-dihydroxy-15'-oxo-ent-kaur-19'-oate**

C<sub>40</sub>H<sub>56</sub>O<sub>10</sub> (696.89). White crystals, mp 100~104°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +11.3° (c = 0.1, MeOH). **Pharm:** Cytotoxic inactive (Lu1, Col2, KB, LNCaP, hTERT-RPE1, HUVEC; control Taxol, ED<sub>50</sub> = 0.002 $\mu$ g/mL, 0.003 $\mu$ g/mL, 0.0005 $\mu$ g/mL, 0.001 $\mu$ g/mL, 0.004 $\mu$ g/mL, 0.008 $\mu$ g/mL, respectively). **Source:** *Parinari sprucei* (leaf). **Ref:** 4991.



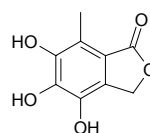
**21807 10 $\alpha$ ,16 $\alpha$ ,17-Trihydroxy-9 $\alpha$ -methyl-15-oxo-20-nor-kauran-19-oic acid methyl ester**

C<sub>21</sub>H<sub>32</sub>O<sub>6</sub> (380.49). White solid, mp 103~108°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +23.0° (c = 0.1, MeOH). **Pharm:** Cytotoxic inactive (Lu1, Col2, KB, LNCaP, hTERT-RPE1, HUVEC; control Taxol, ED<sub>50</sub> = 0.002 $\mu$ g/mL, 0.003 $\mu$ g/mL, 0.0005 $\mu$ g/mL, 0.001 $\mu$ g/mL, 0.004 $\mu$ g/mL, 0.008 $\mu$ g/mL, respectively). **Source:** *Parinari sprucei* (leaf). **Ref:** 4991.



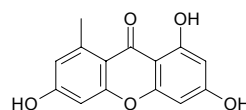
**21808 4,5,6-Trihydroxy-7-methylphthalide**

C<sub>9</sub>H<sub>8</sub>O<sub>5</sub> (196.16). White transparent crystalline solid, mp 249~250°C. **Pharm:** Antioxidant (DPPH scavenger, 25 $\mu$ g/mL, ScRt = 95%; control BHT, 25 $\mu$ g/mL, ScRt = 18.6%); antioxidant (TBARS assay, inhibits peroxidation of linolenic acid, 37mg/mL, InRt = 62%, control BHT, 37mg/mL, InRt = 73.9%). **Source:** fungus *Epicoccum* sp. **Ref:** 5445.



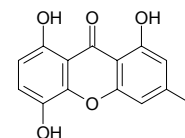
**21809 1,3,6-Trihydroxy-8-methylxanthone**

C<sub>14</sub>H<sub>10</sub>O<sub>5</sub> (258.23). Yellow powder, mp 226~228°C. **Source:** HE CAO YE JIA BEI FANG FENG *Ledebouria graminifolia* (tuber). **Ref:** 3368.



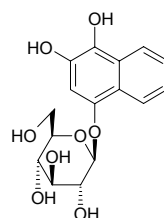
**21810 1,5,8-Trihydroxy-3-methylxanthone**

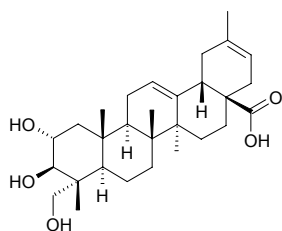
C<sub>14</sub>H<sub>10</sub>O<sub>5</sub> (258.23). Yellow needles (MeOH), mp 276.5~278°C. **Source:** RI BEN XIAO HE YI *Pyrenula japonica*. **Ref:** 2362.



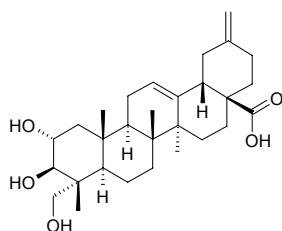
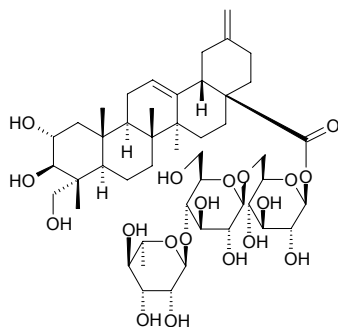
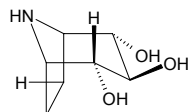
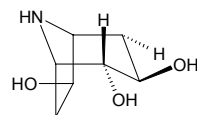
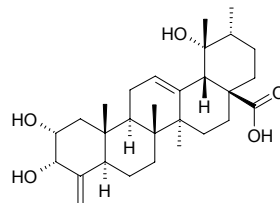
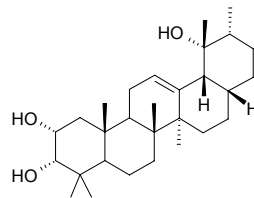
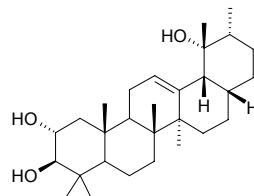
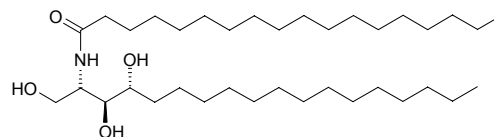
**21811 1,2,4-Trihydroxynaphthalene-4-glucoside**

C<sub>16</sub>H<sub>18</sub>O<sub>8</sub> (338.32). **Source:** FENG XIAN *Impatiens balsamina*. **Ref:** 6.



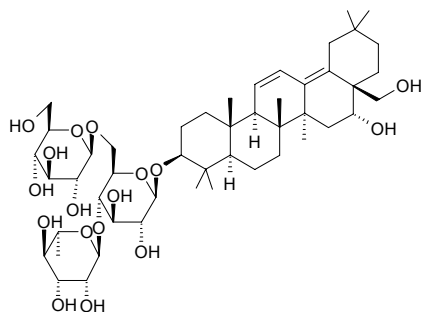
**21812 2 $\alpha$ ,3 $\beta$ ,23-Trihydroxy-30-noroleana-12,20(21)-dien-28-oic acid**C<sub>29</sub>H<sub>44</sub>O<sub>5</sub> (472.67). Amorphous solid, [ $\alpha$ ]<sub>D</sub><sup>27</sup> = +72.0° (*c* = 0.10, MeOH).Source: SAN YE MU TONG *Akebia trifoliata* (stem). Ref: 4545.**21813 2 $\alpha$ ,3 $\beta$ ,23-Trihydroxy-30-noroleana-12,20(29)-dien-28-oic acid**C<sub>29</sub>H<sub>44</sub>O<sub>5</sub> (472.67). Source: SAN YE MU TONG *Akebia trifoliata* (stem). Ref:

4545.

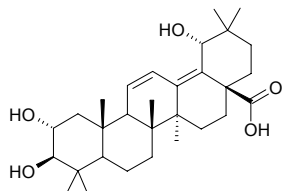
**21814 2 $\alpha$ ,3 $\beta$ ,23-Trihydroxy-30-norolean-12-en-28-oic acid *O*- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl ester**C<sub>47</sub>H<sub>74</sub>O<sub>19</sub> (943.10). Source: SAN YE MU TONG *Akebia trifoliata* (stem).Ref: 4545.**21815 2 $\alpha$ ,3 $\beta$ ,4 $\alpha$ -Trihydroxynortropane**C<sub>7</sub>H<sub>13</sub>NO<sub>3</sub> (159.19). Colorless powder, [ $\alpha$ ]<sub>D</sub> = 0° (*c* = 0.40, H<sub>2</sub>O). Pharm: $\alpha$ -Glucosidase inhibitor (IC<sub>50</sub> = 15mmol/L, control 1-Deoxynojirimucin, IC<sub>50</sub> = 0.98mmol/L, Fagoming, IC<sub>50</sub> = 15mmol/L). Source: SANG SHI *Morus alba*.Ref: 4161.**21816 2 $\alpha$ ,3 $\beta$ ,6-*exo*-Trihydroxynortropane**C<sub>7</sub>H<sub>13</sub>NO<sub>3</sub> (159.19). Colorless powder, [ $\alpha$ ]<sub>D</sub> = -27.3° (*c* = 0.55, H<sub>2</sub>O). Pharm: $\alpha$ -Glucosidase inhibitor (IC<sub>50</sub> = 25mmol/L, control 1-Deoxynojirimucin, IC<sub>50</sub> = 0.98mmol/L, Fagoming, IC<sub>50</sub> = 15mmol/L). Source: SANG SHI *Morus alba*.Ref: 4161.**21817 2 $\alpha$ ,3 $\alpha$ ,19 $\alpha$ -Trihydroxy-24-norurs-4(23),12-dien-28-oic acid**C<sub>29</sub>H<sub>44</sub>O<sub>5</sub> (472.67). White powder, mp 234~236°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +73.0° (*c* = 0.05,MeOH). Source: YANG TI *Rumex japonicus* (stem). Ref: 4541.**21818 2 $\alpha$ ,3 $\alpha$ ,19 $\alpha$ -Trihydroxy-28-norurs-12-ene**C<sub>29</sub>H<sub>48</sub>O<sub>3</sub> (444.70). Amorphous powder, mp [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +8° (*c* = 0.125, MeOH).Source: DONG E LUO DU WU *Ligularia tongolensis* (root). Ref: 4523.**21819 2 $\alpha$ ,3 $\beta$ ,19 $\alpha$ -Trihydroxy-28-norurs-12-ene**C<sub>29</sub>H<sub>48</sub>O<sub>3</sub> (444.70). Amorphous powder, mp [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -14° (*c* = 0.125, MeOH).Source: DONG E LUO DU WU *Ligularia tongolensis* (root). Ref: 4523.**21820 (2S,3S,4R)-N-[2-(1,3,4-Trihydroxy-octadecanyl)]-octadecamide**C<sub>36</sub>H<sub>73</sub>NO<sub>4</sub> (583.99). White amorphous powder, mp 113~115°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> =+13.2° (*c* = 0.2, pyridine). Source: *Lophytum* sp. Ref: 4885.



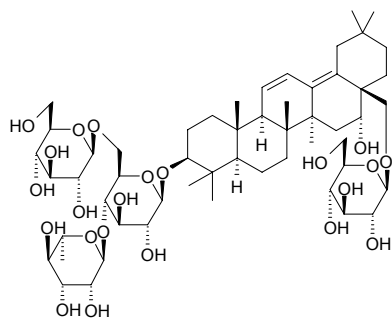
**21821** 3 $\beta$ ,16 $\alpha$ ,28-Trihydroxyolean-11,13(18)-dien-3 $\beta$ -yl- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-[ $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)]- $\beta$ -D-glucopyranoside  
 C<sub>48</sub>H<sub>78</sub>O<sub>17</sub> (927.15). Source: KUN MING CHAI HU *Bupleurum kunmingense*, DUO ZHI CHAI HU *Bupleurum polyclonum*, WEN CHUAN CHAI HU *Bupleurum wenchuanense*. Ref: 2247.



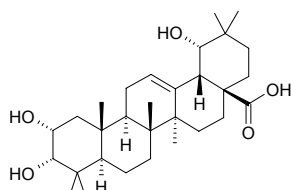
**21822** 2 $\alpha$ ,3 $\beta$ ,19 $\alpha$ -Trihydroxy-olean-11,13(18)-dien-28-oic acid  
 C<sub>30</sub>H<sub>46</sub>O<sub>5</sub> (486.70). White amorphous powder. Source: FEI LONG ZHANG XUE *Toddalia asiatica* [Syn. *Toddalia aculeata*; *Paullinia asiatica*] (stem). Ref: 4561.



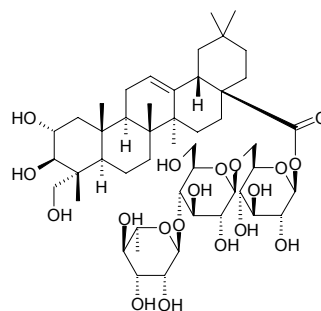
**21823** 3 $\beta$ ,16 $\alpha$ ,28-Trihydroxyolean-11,13(18)-dien-3 $\beta$ -yl- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)-[ $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)]- $\beta$ -D-glucopyranoside-28-O- $\beta$ -D-glucopyranoside  
 C<sub>54</sub>H<sub>88</sub>O<sub>22</sub> (1089.29). Source: KUN MING CHAI HU *Bupleurum kunmingense*, DUO ZHI CHAI HU *Bupleurum polyclonum*, WEN CHUAN CHAI HU *Bupleurum wenchuanense*. Ref: 2247.



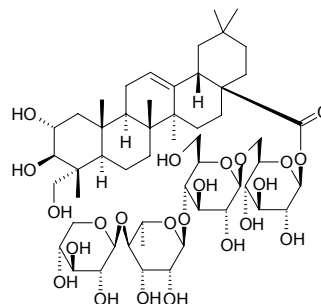
**21824** 2 $\alpha$ ,3 $\alpha$ ,19 $\alpha$ -Trihydroxy-12-oleanen-28-oic acid  
 C<sub>30</sub>H<sub>48</sub>O<sub>5</sub> (488.71). White powder. Source: SAN YE MU TONG *Akebia trifoliata* (stem), TAI WAN PI PA *Eriobotrya deflexa* (leaf), WU PAO ZI *Rubus parkeri*. Ref: 2162, 3064, 4545.



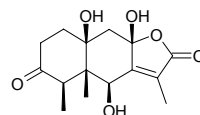
**21825** 2 $\alpha$ ,3 $\beta$ ,23-Trihydroxyolean-12-en-28-oic acid O- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl ester  
 C<sub>48</sub>H<sub>78</sub>O<sub>19</sub> (959.15). Source: SAN YE MU TONG *Akebia trifoliata* (stem). Ref: 4545.



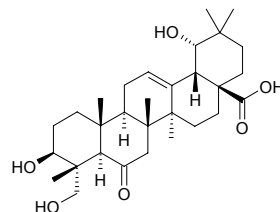
**21826** 2 $\alpha$ ,3 $\beta$ ,23-Trihydroxyolean-12-en-28-oic acid O- $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 3)-O- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl ester  
 C<sub>53</sub>H<sub>86</sub>O<sub>23</sub> (1091.26). Source: SAN YE MU TONG *Akebia trifoliata* (stem). Ref: 4545.



**21827** 6 $\beta$ ,8 $\beta$ ,10 $\beta$ -Trihydroxy-3-oxoeremophilenolide  
 C<sub>15</sub>H<sub>20</sub>O<sub>6</sub> (296.32). Colorless gum, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +143.0° (c = 0.20, CHCl<sub>3</sub>). Source: TU ER FENG XIE JIA CAO *Cacalia ainsliaeflora*. Ref: 5428.

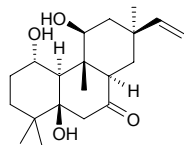


**21828** 3 $\beta$ ,19 $\alpha$ ,23-Trihydroxy-6-oxo-olean-12-en-28-oic acid  
 C<sub>30</sub>H<sub>46</sub>O<sub>6</sub> (502.70). Colorless amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +17.2° (c = 0.11, MeOH). Source: BI LU GOU TENG *Uncaria tomentosa*. Ref: 2581.

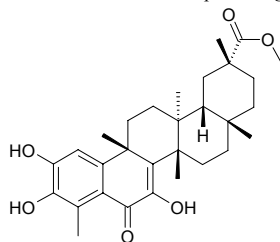


**21829 1 $\alpha$ ,5 $\beta$ ,11 $\beta$ -Trihydroxy-7-oxo-ros-15-ene**

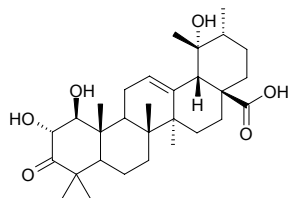
C<sub>20</sub>H<sub>32</sub>O<sub>4</sub> (336.48). [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +76° (*c* = 0.17, CHCl<sub>3</sub>). Source: *Gackstroemia decipiens*. Ref: 3907.

**21830 2,3,7-Trihydroxy-6-oxo-1,3,5(10),7-tetraene-24-nor-friedelane-29-oic acid methylester**

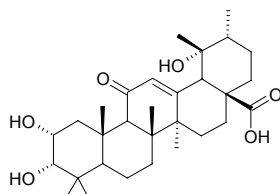
C<sub>30</sub>H<sub>40</sub>O<sub>6</sub> (496.65). Yellow powder, [ $\alpha$ ]<sub>D</sub><sup>24</sup> = -45.5° (*c* = 3.03, MeOH). Pharm: Cytotoxic (KB, IC<sub>50</sub> = (9.48±0.35)μmol/L, control Podophyllotoxin, IC<sub>50</sub> = 0.014μmol/L); antibacterial (*Bacillus cereus*, MIC = 129.03μmol/L, control Chloramphenicol, MIC = 6.19μmol/L; *Staphylococcus epidermidis*, MIC = 129.03μmol/L, Chloramphenicol, MIC = 12.38μmol/L; *Micrococcus luteus*, MIC = 32.26μmol/L, Chloramphenicol, MIC = 6.19μmol/L). Source: GAO MEI YING BAN *Crossopetalum gaumeri* (root). Ref: 3969.

**21831 1 $\beta$ ,2 $\alpha$ ,19 $\alpha$ -Trihydroxy-3-oxo-12-ursen-28-oic acid**

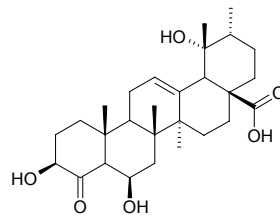
C<sub>30</sub>H<sub>46</sub>O<sub>6</sub> (502.7). White amorphous powder, mp 218–220°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +29.7° (*c* = 0.59, MeOH). Pharm: Immunosuppressant (hmn mononuclear cells antiproliferation, involving T lymphocytes, B lymphocytes, and macrophages isolated from peripheral blood, IC<sub>50</sub> = 26.9μmol/L; control Cyclosporine A, IC<sub>50</sub> = 0.012μmol/L). Source: TAI WAN PI PA *Eriobotrya deflexa* (leaf). Ref: 3064.

**21832 2 $\alpha$ ,3 $\alpha$ ,19 $\alpha$ -Trihydroxy-11-oxo-urs-12-en-28-oic acid**

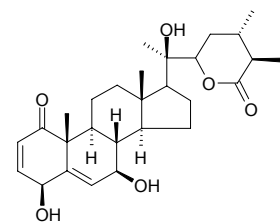
C<sub>30</sub>H<sub>46</sub>O<sub>6</sub> (502.70). White amorphous powder. Source: FEI LONG ZHANG XUE *Toddalia asiatica* [Syn. *Toddalia aculeata*; *Paullinia asiatica*] (stem). Ref: 4561.

**21833 3 $\beta$ ,6 $\beta$ ,19 $\alpha$ -Trihydroxy-23-oxo-urs-12-en-28-oic acid**

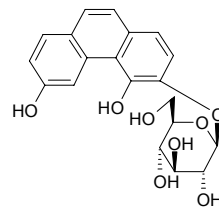
C<sub>28</sub>H<sub>42</sub>O<sub>6</sub> (474.64). Source: BI LU GOU TENG *Uncaria tomentosa*. Ref: 5341.

**21834 4 $\beta$ ,7 $\beta$ ,20R-Trihydroxy-1-oxowitha-2,5-dien-22,26-olide**

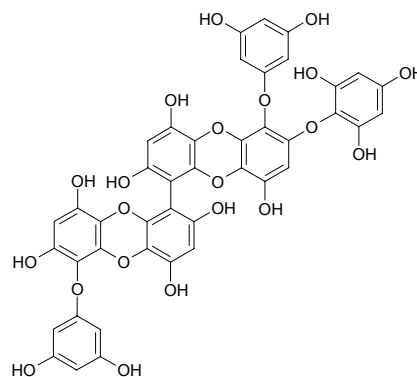
C<sub>28</sub>H<sub>40</sub>O<sub>6</sub> (472.63). White amorphous solid, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -26° (*c* = 0.082, CH<sub>3</sub>CN). Pharm: Quinone reductase inducer (mus Hepa1c1c7 cells, CD = (1.12±0.46)μmol/L, IC<sub>50</sub> = (23.9±5.2)μmol/L, CI = 21, positive control Sulforaphane, CD = (0.36±0.17)μmol/L, IC<sub>50</sub> = (9.9±2.1)μmol/L, CI = 28). Source: FEI CHENG SUAN JIANG *Physalis philadelphica* (leaf and stem). Ref: 4337.

**21835 3,4,6-Trihydroxyphenanthrene-3-O- $\beta$ -D-glucopyranoside**

C<sub>20</sub>H<sub>20</sub>O<sub>8</sub> (388.38). Amorphous solid, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -16° (*c* = 0.25, MeOH). Pharm: Antifungal inactive (hmn pathogenic yeasts *Candida albicans*, *Candida glabrata* and *Candida tropicalis*). Source: SHAN YAO *Dioscorea batatas* [Syn. *Dioscorea opposita*]. Ref: 2576.

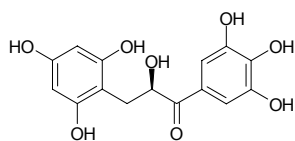
**21836 2-O-(2,4,6-Trihydroxyphenyl)-6,6'-bieckol**

2-O-Phloro-6,6'-bieckol [89079-38-9] C<sub>42</sub>H<sub>26</sub>O<sub>21</sub> (866.65). Colorless amorphous powder. Pharm: Antifibrinolysis ( $\alpha_2$ -macroglobulin *in vitro*, IC<sub>50</sub> = 1.9μg/mL,  $\alpha_2$ -fibrinolysin *in vitro*, IC<sub>50</sub> = 0.7μg/mL, fibrinolysin *in vitro*, IC<sub>50</sub> = 13μg/mL). Source: HEI KUN BU *Ecklonia kurome*. Ref: 1020.



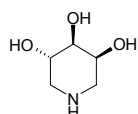
**21837 1-(3,4,5-Trihydroxyphenyl)-3-(2,4,6-trihydroxyphenyl)-2-hydroxy-1-propanone**

$C_{15}H_{14}O_8$  (322.27). Red amorphous powder,  $[\alpha]_D = +234.6^\circ$  ( $c = 0.8$ , MeOH).  
Source: XIAO GUO YE JIAO *Musa acuminata* (fruit). Ref: 3913.



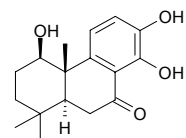
**21838 3β,4β,5α-Trihydroxypiperidine**

[130114-77-1]  $C_5H_{11}NO_3$  (133.15). Colorless oil,  $[\alpha]_D = +66.7^\circ$  ( $c = 0.3$ , methanol). Pharm: α-Glucosidase inhibitor ( $IC_{50} = 1.88\mu\text{mol/L}$ ); β-galactosidase inhibitor ( $IC_{50} = 3.76\mu\text{mol/L}$ ). Source: PEI LAN *Eupatorium fortunei*. Ref: 1192.



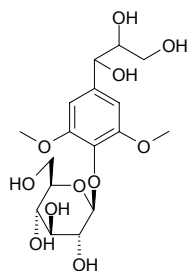
**21839 1β,13,14-Trihydroxy-8,11,13-podocarpatrien-7-one**

$C_{17}H_{22}O_4$  (290.36). Source: TAI WAN SHAN *Taiwania cryptomerioides* (bark). Ref: 4182.



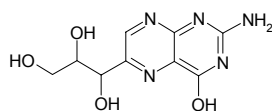
**21840 4-(1,2,3-Trihydroxypropyl)-2,6-dimethoxyphenyl-1-O-β-D-glucopyranoside**

$C_{17}H_{26}O_{11}$  (406.39). Colorless crystals (MeOH), mp 185–187°C. Source: BAN LAN GEN *Isatis indigotica*. Ref: 4599.



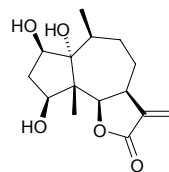
**21841 Trihydroxypropylpterisin**

$C_9H_{11}N_5O_4$  (253.22). mp 250°C (dec). Source: CHAN PI *Bufo bufo gargarizans*; *Bufo melanostictus*. Ref: 6.



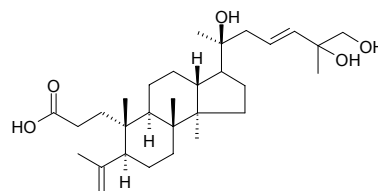
**21842 1α,2β,4β-Trihydroxypseudoguaian-6β,12-olide**

$C_{15}H_{22}O_5$  (282.34). Amorphous solid (Me<sub>2</sub>CO). Source: YIN JIAO JU *Parthenium hysterophorus* (aerial parts). Ref: 5106.



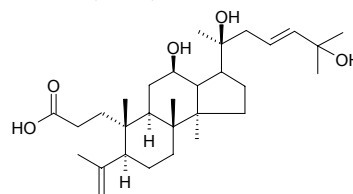
**21843 (23E,20S)-20,25,26-Trihydroxy-3,4-secodammara-4(28),23-dien-3-oic acid**

$C_{30}H_{50}O_5$  (490.73). Source: CHI YANG *Alnus japonica*. Ref: 660.



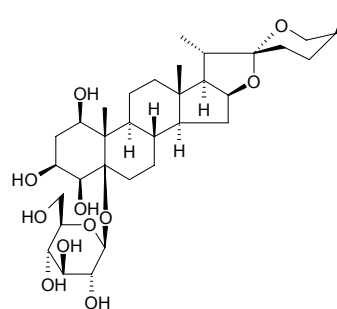
**21844 (23E,12R,20S)-12,20,25-Trihydroxy-3,4-secodammara-4(28),23-dien-3-oic acid**

$C_{30}H_{50}O_5$  (490.73). Source: CHI YANG *Alnus japonica*. Ref: 660.



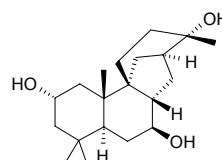
**21845 (25S)-1β,3β,4β-Trihydroxyspirostan-5β-yl-O-β-D-glucopyranoside**

Convallagenin B 5-O-β-D-glucopyranoside  $C_{33}H_{54}O_{11}$  (626.79). Pharm: Cytotoxic (MTT assay, K562,  $IC_{50} = 44.52\mu\text{mol/L}$ ; positive control *cis*-dichlorodiamine platinum,  $IC_{50} = 69.33\mu\text{mol/L}$ ). Source: WAN RUI KAI KOU JIAN *Tupistra wattii* [Syn. *Campylandra wattii*] (fresh rhizome). Ref: 4324.



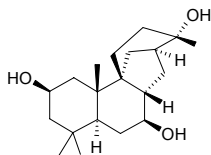
**21846 2α,7β,13(S)-Trihydroxystemodane**

$C_{30}H_{39}O_3$  (322.49). Cubes, mp 240–241°C,  $[\alpha]_D^{27} = +22.6^\circ$  ( $c = 0.44$ , MeOH). Source: DAO GEN MEI *Rhizopus oryzae*. Ref: 3781.

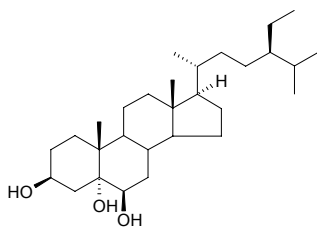


**21847 2 $\beta$ ,7 $\beta$ ,13(S)-Trihydroxystemodane**

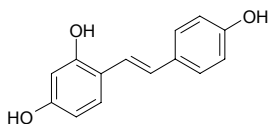
C<sub>20</sub>H<sub>34</sub>O<sub>3</sub> (322.49). Gum,  $[\alpha]_D^{27} = +24.6^\circ$  ( $c = 3.6$ , MeOH). Source: DAO GEN MEI *Rhizopus oryzae*. Ref: 3781.

**21848 3 $\beta$ ,5 $\alpha$ ,6 $\beta$ -Trihydroxystigmastane**

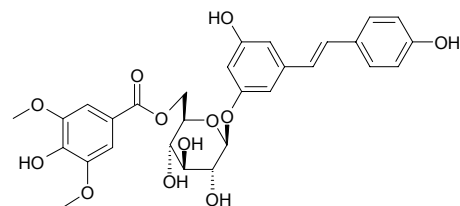
C<sub>29</sub>H<sub>52</sub>O<sub>3</sub> (448.74). Source: YU BAI SHI SONG *Lycopodium obscurum*. Ref: 660.

**21849 2,4,4'-Trihydroxystilbene**

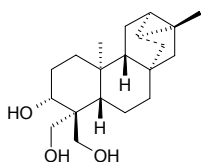
C<sub>14</sub>H<sub>12</sub>O<sub>3</sub> (228.25). Pharm: Cytotoxic (cyclooxygenase-1 inhibitor)<sup>[5038]</sup>. Source: PU<sup>(2)</sup> TAO *Vitis vinifera* (cell culture). Ref: 5038.

**21850 (E)-3,5,4'-Trihydroxystilbene 3-O- $\beta$ -D-(6-O-galloyl)glucopyranoside**

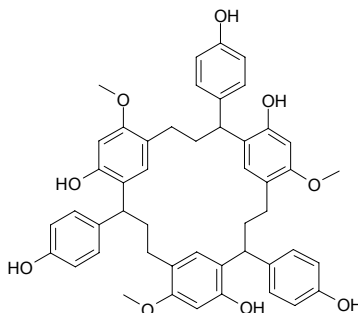
C<sub>29</sub>H<sub>30</sub>O<sub>12</sub> (570.56). Colorless needles, mp 168–169°C,  $[\alpha]_D^{27} = -60.3^\circ$  ( $c = 0.12$ , MeOH). Source: Eskemurjea *megacarpum* (underground part: yield = 0.0025%dw). Ref: 924.

**21851 3 $\alpha$ ,18,19-Trihydroxy trachylobane**

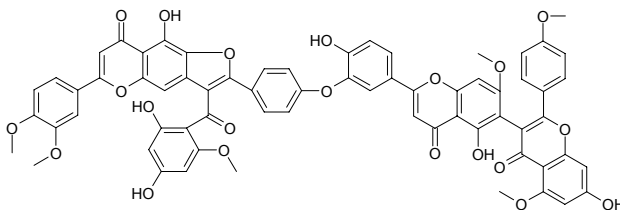
C<sub>20</sub>H<sub>32</sub>O<sub>3</sub> (320.48). mp 180–181°C,  $[\alpha]_D^{18} = -39^\circ$  ( $c = 3$ , CHCl<sub>3</sub>:MeOH = 1:1). Source: CHANG SUI BA DOU *Croton macrostachys*. Ref: 3983, 4552.

**21852 3,12,21-Trihydroxy-1,10,19-tri(4-hydroxyphenyl)-5,14,23-trimethoxy[3.3.3]metacyclopentane**

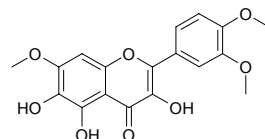
C<sub>48</sub>H<sub>48</sub>O<sub>9</sub> (768.91). Pinkish amorphous powder, mp 293°C. Source: ZHU HONG LONG XUE SHU *Dracaena cinnabari*. Ref: 1941.

**21853 (4''',5''',7'-Trihydroxy-4',5,7''-trimethoxy-3,6''-bi-flavone)-3'''-O-4'''-(5,5'',7''-trihydroxy-3',3'',4'-trimethoxy-6-O- $\beta$ -7- $\alpha$ -flavone-chalcone)**

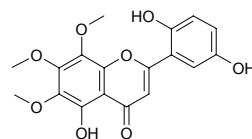
C<sub>66</sub>H<sub>46</sub>O<sub>21</sub> (1175.09). Yellow solid, mp 243–246°C (Me<sub>2</sub>CO). Source: *Aristolochia ridicula* (stem). Ref: 5111.

**21854 3,5,6-Trihydroxy-7,3',4'-trimethoxyflavone**

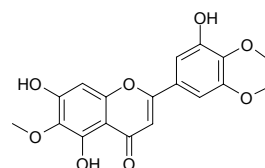
C<sub>18</sub>H<sub>16</sub>O<sub>8</sub> (360.32). Orange crystals, mp 272°C (dec), soluble in acetone and methanol, hardly soluble in chloroform and water. Source: FO SHOU *Citrus medica* var. *sarcodactylis*. Ref: 31.

**21855 5,2',5'-Trihydroxy-6,7,8-trimethoxyflavone**

C<sub>18</sub>H<sub>16</sub>O<sub>8</sub> (360.32). Source: HUANG QIN *Scutellaria baicalensis*. Ref: 2.

**21856 5,7,3'-Trihydroxy-6,4',5'-trimethoxyflavone**

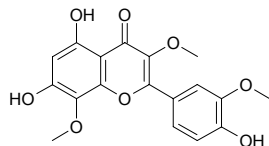
C<sub>18</sub>H<sub>16</sub>O<sub>8</sub> (360.32). Pale yellow powder, mp 252–256°C. Pharm: PFTase inhibitor (100 $\mu$ g/mL, InRt = 65%); cytotoxic inactive (hmn breast cancer lines: MDA-MB-231, MCF7, T47D, 20 $\mu$ g/mL); angiogenesis inhibitor inactive (chicken embryo chorioallantoic membrane (CAM) assay, 10 $\mu$ g). Source: AI YE *Artemisia argyi*. Ref: 5378.



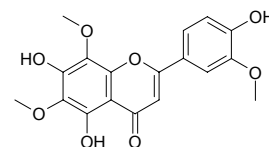
**21857 5,7,4'-Trihydroxy-3,8,3'-trimethoxyflavone**

$C_{18}H_{16}O_8$  (360.32). **Pharm:** Antioxidant inactive (Takamatsu DCFH method, myelomonocytic HL-60 cells, control NDGA,  $IC_{50} = (0.7 \pm 0.3) \mu\text{g/mL}$ , Vitamin C,  $IC_{50} = (1.9 \pm 0.7) \mu\text{g/mL}$ , Trolox,  $IC_{50} = (1.4 \pm 0.5) \mu\text{g/mL}$ )<sup>[3850]</sup>; cytotoxic (XTT assay, HL-60 cells,  $IC_{50} > 50.0 \mu\text{g/mL}$ ; control NDGA,  $IC_{50} = (2.6 \pm 0.2) \mu\text{g/mL}$ , Vitamin C,  $IC_{50} > 10.0 \mu\text{g/mL}$ , Trolox,  $IC_{50} > 10.0 \mu\text{g/mL}$ )<sup>[3850]</sup>.

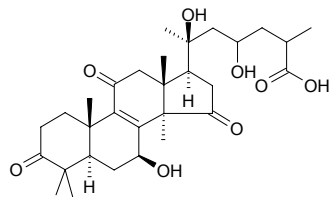
**Source:** SAN CHI LA RUI A *Larrea tridentata* (leaf), *Cyanostegia angustifolia* (leaf), *Geraea canescens*, *Gutierrezia* spp. **Ref:** 1521, 3850.

**21858 5,7,4'-Trihydroxy-6,8,3'-trimethoxy flavone**

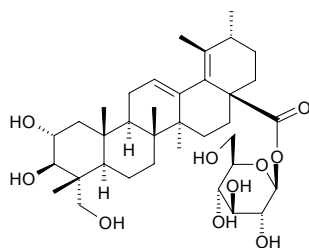
Sudachiflavone  $C_{18}H_{16}O_8$  (360.32). **Source:** JU PI *Citrus reticulata*. **Ref:** 660.

**21859 7β,20,23ξ-Trihydroxy-3,11,15-trioxolanosta-8-en-26-oic acid**

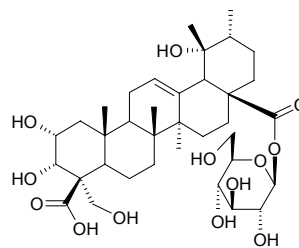
$C_{30}H_{44}O_8$  (532.68). Colorless amorphous solid,  $[\alpha]_D^{26} = +225.5^\circ$  ( $c = 0.216$ ,  $\text{CHCl}_3$ ). **Source:** SHU SHE *Ganoderma applanatum* (sporocarp; yield = 0.0071%). **Ref:** 4756.

**21860 2α,3β,24-Trihydroxyurs-12,18-dien-28-oic acid 28-O-β-D-glucopyranosyl ester**

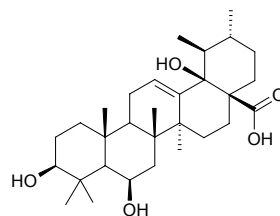
$C_{36}H_{56}O_{10}$  (648.84). White powder,  $[\alpha]_D^{25} = +77.4^\circ$  ( $c = 0.19$ , MeOH). **Source:** GANG MAO TENG SHAN LIU *Clematoclethra scanden*. **Ref:** 2133.

**21861 2α,3α,23-Trihydroxyurs-12-en-24,28-dioic acid 28-β-D-glucopyranosylester**

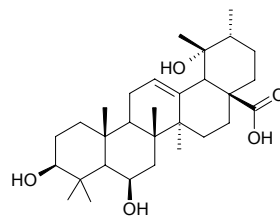
$C_{36}H_{56}O_{13}$  (696.84). White amorphous powder,  $[\alpha]_D^{23} = +34.1^\circ$  ( $c = 2.7$ , MeOH). **Source:** DI YU *Sanguisorba officinalis*. **Ref:** 5304.

**21862 3β,6β,18β-Trihydroxyurs-12-en-28-oic acid**

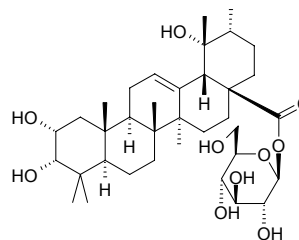
$C_{30}H_{48}O_5$  (488.71). **Pharm:** Anti-inflammatory; antiviral. **Source:** TUO YUAN GOU TENG *Uncaria elliptica*, *Uncaria thwaitesii*. **Ref:** 5341.

**21863 3β,6β,19α-Trihydroxyurs-12-en-28-oic acid**

$C_{30}H_{48}O_5$  (488.71). **Source:** BI LU GOU TENG *Uncaria tomentosa*, MIAN MAO GOU TENG *Uncaria lanosa*, TUO YUAN GOU TENG *Uncaria elliptica*. **Ref:** 5341.

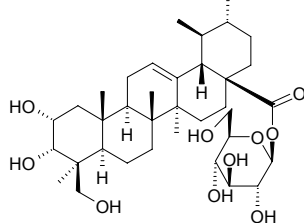
**21864 2α,3α,19α-Trihydroxyurs-12-en-28-oic acid 28-β-D-glucopyranosyl ester**

Kajjichigoside F1  $C_{36}H_{58}O_{10}$  (650.86). White needles (MeOH), mp 231–233°C. **Pharm:** Cytotoxic inactive (HSC-2,  $IC_{50} > 200 \mu\text{g/mL}$ ; HGF,  $IC_{50} > 200 \mu\text{g/mL}$ )<sup>[5160]</sup>. **Source:** DI YU *Sanguisorba officinalis*, GUANG LIANG YANG TONG *Adinandra nitida*. **Ref:** 5160, 2518.

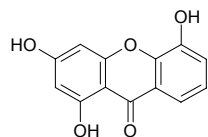


**21865 2 $\alpha$ ,3 $\alpha$ ,24-Trihydroxyurs-12-en-28-oic acid-28-O- $\beta$ -D-glucopyranosyl ester**

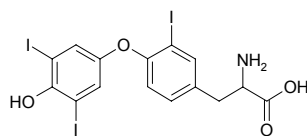
$C_{36}H_{58}O_{10}$  (650.86). White amorphous powder,  $[\alpha]_D^{20} = -25^\circ$  ( $c = 0.08$ , MeOH). Source: YE SHENG SHAN YING TAO *Prunus serrulata* var. *spontanea* (leaf). Ref: 4263.

**21866 1,3,5-Trihydroxyxanthone**

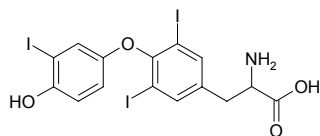
$C_{13}H_8O_5$  (244.21). Pharm: Antibacterial (*Mycobacterium tuberculosis*). Source: *Allanblackia floribunda*. Ref: 658.

**21867 3,3',5'-Triiodothyronine**

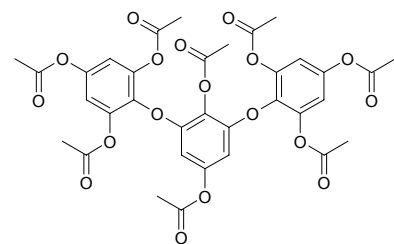
$C_{15}H_{12}I_3NO_4$  (650.98). Source: NIU YE *Bos taurus domesticus*; *Bubalus bubalis*. Ref: 6.

**21868 3,5,3'-Triiodothyronine**

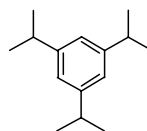
[6893-02-3]  $C_{15}H_{12}I_3NO_4$  (650.98). mp 236–237°C (dec). Source: NIU YE *Bos taurus domesticus*; *Bubalus bubalis*. Ref: 6.

**21869 Triisofuhalol octaacetate**

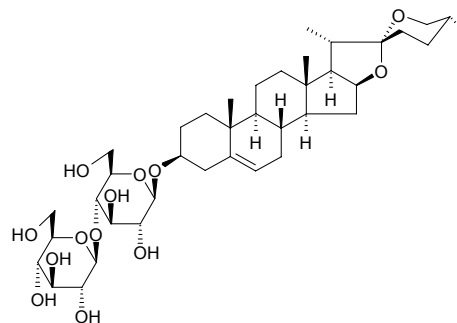
$C_{34}H_{30}O_{18}$  (726.61). Source: SHENG ZAO *Chorda filum*. Ref: 660.

**21870 1,3,5-Triisopropylphene**

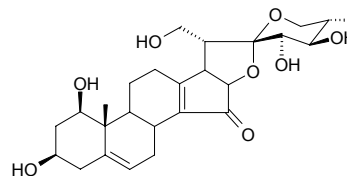
[717-74-8]  $C_{15}H_{24}$  (204.36). Source: XI YANG SHEN *Panax quinquefolium*. Ref: 2.

**21871 Trillarlin**

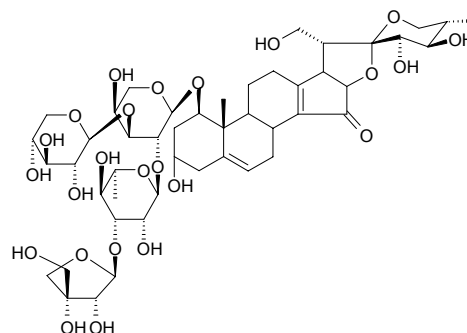
[55639-73-1]  $C_{39}H_{62}O_{13}$  (738.92). mp 197–200°C. Source: HE HUA YAN LING CAO *Trillium erectum*, YAN LING CAO *Trillium tschonoskii*. Ref: 6, 660, 1521.

**21872 Trillenogenin**

$C_{26}H_{36}O_8$  (476.57). Source: JI LIN YAN LING CAO *Trillium kamschaticum* (underground part). Ref: 4403.

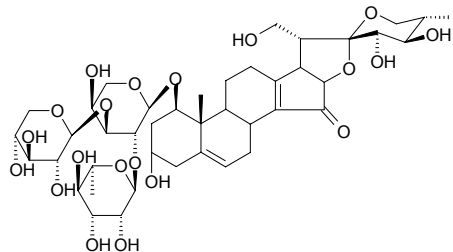
**21873 Trillenoside A**

$C_{47}H_{70}O_{24}$  (1019.07). Amorphous powder,  $[\alpha]_D^9 = -92.0^\circ$  ( $c = 2.7$ , MeOH). Source: JI LIN YAN LING CAO *Trillium kamschaticum* (underground part). Ref: 4403.

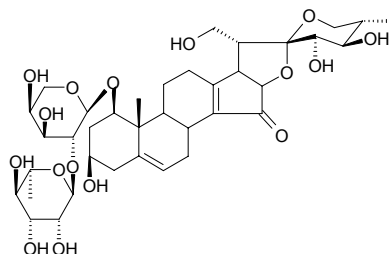


**21874 Trillenoside B**

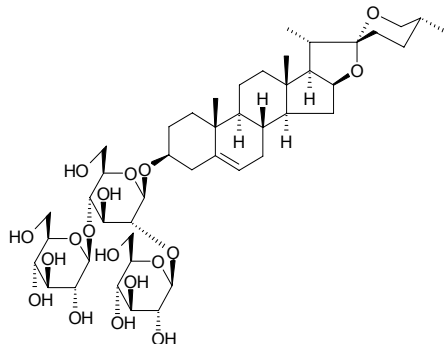
$C_{42}H_{62}O_{20}$  (886.95). Amorphous powder,  $[\alpha]_D^{20} = -132.0^\circ$  ( $c = 0.8$ , MeOH).  
 Source: JI LIN YAN LING CAO *Trillium kamschaticum* (underground part).  
 Ref: 4403.

**21875 Trillenoside C**

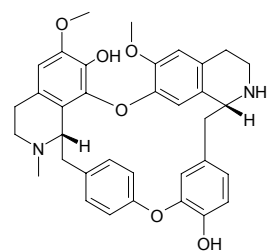
$C_{37}H_{54}O_{16}$  (754.83). Source: JI LIN YAN LING CAO *Trillium kamschaticum* (underground part). Ref: 4403.

**21876 Trilloside B**

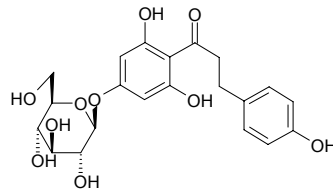
$C_{45}H_{72}O_{18}$  (901.06). Source: YU ER QI *Trillium kamschaticum*. Ref: 6.

**21877 Trilobamine**

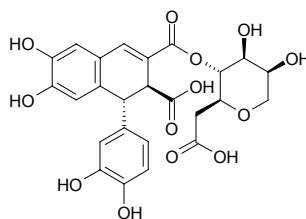
$C_{35}H_{36}N_2O_6$  (580.69). Crystals (chloroform), mp 194~196°C,  $[\alpha]_D^{20} = +459^\circ$  ( $c = 0.3$ , chloroform). Pharm: CNS depressant; paralyzes respiration; vasodilator.  
 Source: MU FANG JI *Cocculus trilobus* [Syn. *Cocculus sarmentosus*]. Ref: 6, 658, 660.

**21878 Trilobatin**

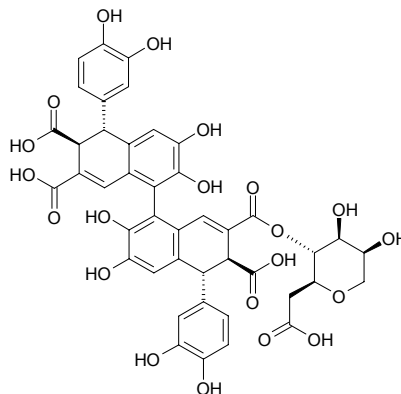
$C_{21}H_{24}O_{10}$  (436.42). Source: DUO SUI SHI KE YE *Lithocarpus polystachyus*.  
 Ref: 660.

**21879 Trilobatin D**

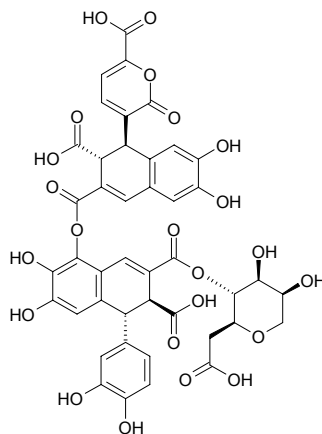
$C_{25}H_{24}O_{13}$  (532.46).  $[\alpha]_D^{20} = -146.7^\circ$  ( $c = 0.23$ , MeOH). Source: BIAN TAI *Bazzania trilobata*. Ref: 3366.

**21880 Trilobatin E**

$C_{43}H_{36}O_{21}$  (888.75). Source: BIAN TAI *Bazzania trilobata*. Ref: 3366.

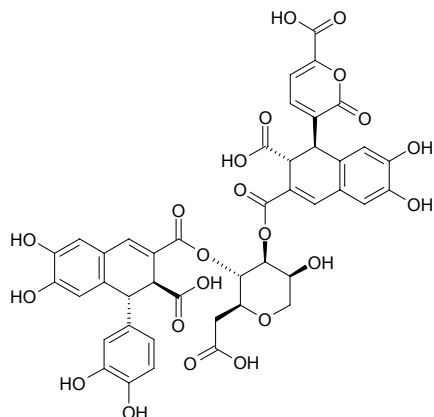
**21881 Trilobatin F**

$C_{43}H_{34}O_{23}$  (918.74).  $[\alpha]_D^{20} = -75.3^\circ$  ( $c = 0.27$ , MeOH). Source: BIAN TAI *Bazzania trilobata*. Ref: 3366.

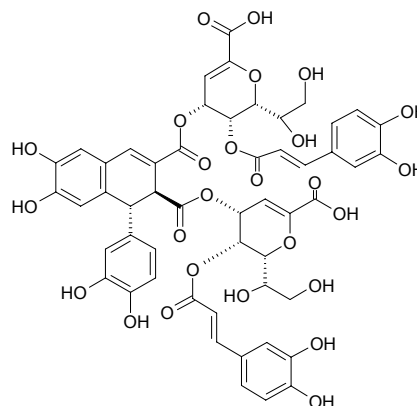


**21882 Trilobatin G**

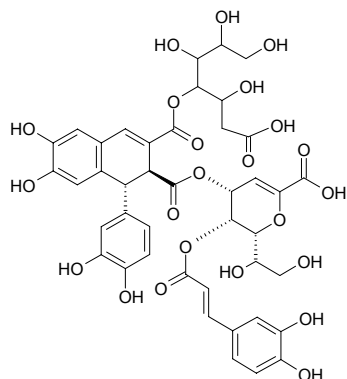
$C_{43}H_{34}O_{22}$  (902.74).  $[\alpha]_D^{20} = -20.0^\circ$  ( $c = 0.11$ , MeOH). Source: BIAN TAI  
*Bazzania trilobata*. Ref: 3366.

**21885 Trilobatin J**

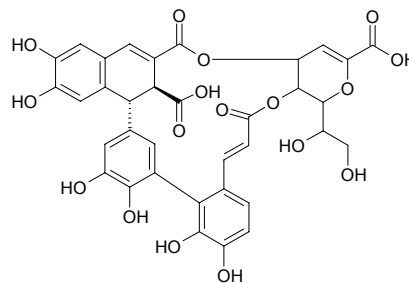
$C_{52}H_{46}O_{26}$  (1086.93).  $[\alpha]_D^{20} = -164.6^\circ$  ( $c = 0.33$ , MeOH). Source: BIAN TAI  
*Bazzania trilobata*. Ref: 3366.

**21883 Trilobatin H**

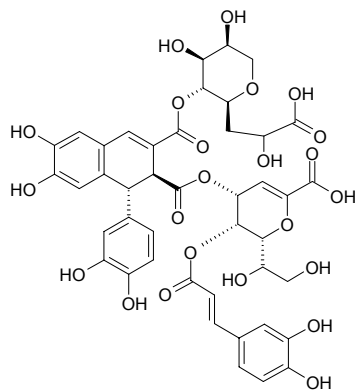
$C_{42}H_{42}O_{23}$  (914.79).  $[\alpha]_D^{20} = -164.6^\circ$  ( $c = 0.33$ , MeOH). Source: BIAN TAI  
*Bazzania trilobata*. Ref: 3366.

**21886 Trilobatin K**

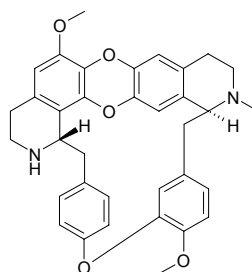
$C_{35}H_{28}O_{17}$  (720.60).  $[\alpha]_D^{20} = -12.3^\circ$  ( $c = 0.23$ , MeOH). Source: BIAN TAI  
*Bazzania trilobata*. Ref: 3366.

**21884 Trilobatin I**

$C_{43}H_{42}O_{23}$  (926.80).  $[\alpha]_D^{20} = -84.0^\circ$  ( $c = 0.07$ , MeOH). Source: BIAN TAI  
*Bazzania trilobata*. Ref: 3366.

**21887 Trilobine**

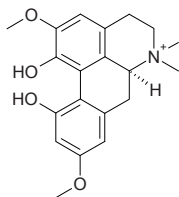
[6138-73-4]  $C_{35}H_{34}N_2O_5$  (562.67). mp 237°C. Pharm: Analgesic (rbt); anti-inflammatory; antipyretic (rbt); cytotoxic (HeLa-S3 cells); CNS depressant; platelet aggregation inhibitor (rat, induced by ADP, *in vitro* and *in vivo*); antihypertensive; muscle relaxant; paralyzes cardiac and skeletal muscle (frog); used in treatment of hypertension and rheumatalgia; MLD (rbt, iv) = 50mg/kg, (rbt, sc) = 150mg/kg, (frog, sc) = 500-100mg/kg, (mus, sc) = 500-100mg/kg. Source: BAI YAO ZI *Stephania cepharantha*, HENG ZHOU WU YAO *Cocculus laurifolius*, MU FANG JI *Cocculus trilobus* [Syn. *Cocculus sarmentosus*]. Ref: 4, 658, 660.



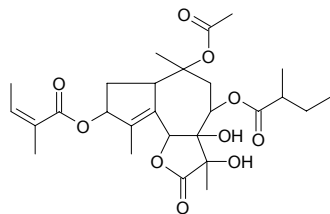


**21888 Trilobinine**

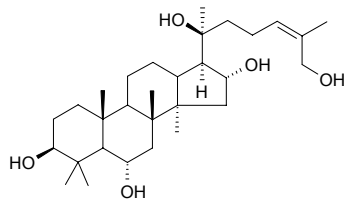
$C_{20}H_{24}NO_4^+$  (342.42). Source: JIAN YE TANG SONG CAO *Thalictrum acutifolium*. Ref: 660.

**21889 Trilobolide**

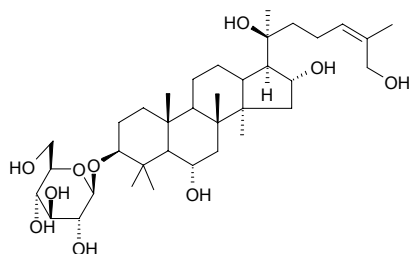
Silerin [50657-07-3]  $C_{27}H_{38}O_{10}$  (522.60). mp 191~192°C. Pharm: Antineoplastic; cytotoxic; insect antifeedant. Source: *Siler trilobum*. Ref: 5, 658, 1521.

**21890 Trilocularol A**

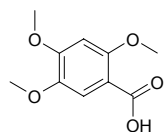
3 $\beta$ ,6 $\alpha$ ,16 $\alpha$ ,20(S),27-Pentahydroxydammar-24(Z)-ene  $C_{30}H_{52}O_5$  (492.75). Amorphous solid, mp 90~92°C (dec),  $[\alpha]_D^{25} = +17.39^\circ$  ( $c = 0.138$ , MeOH). Source: SAN SHI HUANG MA *Corchorus trilocularis*. Ref: 4356.

**21891 Trilocularol A 3-glucoside**

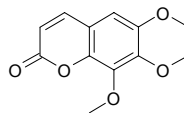
3 $\beta$ -D-Glucopyranosyloxy-6 $\alpha$ ,16 $\alpha$ ,20(S),27-tetrahydroxydammar-24(Z)-ene  $C_{36}H_{62}O_{10}$  (654.89). Gummy material,  $[\alpha]_D^{25} = +10.0^\circ$  ( $c = 0.15$ , MeOH). Source: SAN SHI HUANG MA *Corchorus trilocularis*. Ref: 4356.

**21892 2,4,5-Trimethoxybenzoic acid**

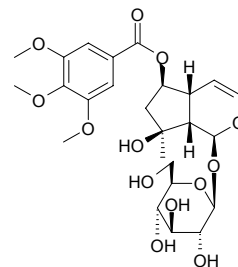
$C_{10}H_{12}O_5$  (212.20). Source: SHAN SHAN JIANG *Alpinia flabellata* (leaf; yield = 0.0014%dw). Ref: 4614.

**21893 6,7,8-Trimethoxy-2H-1-benzopyran-2-one**

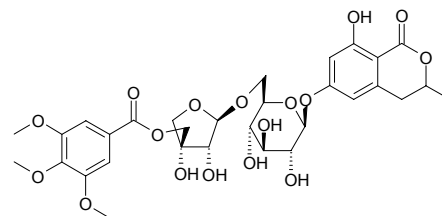
[6035-49-0]  $C_{12}H_{12}O_5$  (236.23). Pharm:  $\alpha$ -Glucosidase inhibitor inactive (type VI, control 1-Deoxynojirimycin,  $IC_{50} = 0.3\text{mmol/L}$ ); thrombin inhibitor inactive;  $\beta$ -glucuronidase inhibitor inactive. Source: YUN NAN TU SI ZI *Cuscuta reflexa*. Ref: 4155.

**21894 6-O-(3,4,5-Trimethoxybenzoyl)-ajugol**

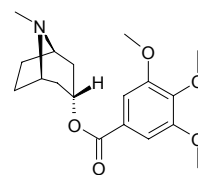
$C_{25}H_{34}O_{13}$  (542.54). Amorphous powder,  $[\alpha]_D^{22} = -130^\circ$  ( $c = 2.65$ , MeOH). Source: BAN ZHEN ZHONG HUA SHU *Tabebuia impetiginosa* (bark). Ref: 3817.

**21895  $\beta$ -D-[5-O-(3,4,5-Trimethoxybenzoyl)]-apiofuranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl**

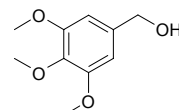
$C_{31}H_{38}O_{17}$  (682.64). Amorphous powder,  $[\alpha]_D^{24} = -95^\circ$  ( $c = 0.40$ , MeOH). Source: BAN ZHEN ZHONG HUA SHU *Tabebuia impetiginosa* (bark). Ref: 3817.

**21896 3 $\alpha$ -(3',4',5'-Trimethoxybenzoyloxy)tropane**

$C_{18}H_{25}NO_5$  (335.40). Colorless semisolid. Source: XI LAN GU KE *Erythroxylum zeylanicum* (root). Ref: 3919.

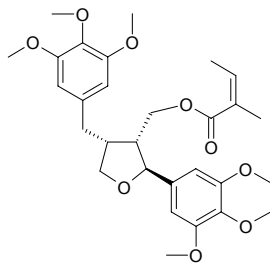
**21897 3,4,5-Trimethoxy-benzyl alcohol**

$C_{10}H_{14}O_4$  (198.22). Source: MAO GUO QI *Acer nikoense* (stem cortex). Ref: 4304.



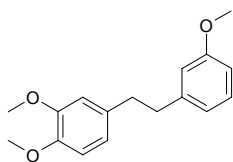
**21898** [(2*S*,3*R*,4*R*)-4-(3,4,5-Trimethoxybenzyl)-2-(3,4,5-trimethoxyphenyl)-tetrahydrofuran-3-yl]-methyl (2*Z*)-2-methylbut-2-en-oate

C<sub>29</sub>H<sub>38</sub>O<sub>9</sub> (530.62). Colorless gum, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +21.37°, (*c* = 0.496, MeOH). Source: GAO SHAN HUO RONG CAO *Leontopodium alpinum* (root). Ref: 5037.



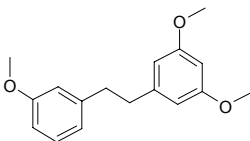
**21899** 3,4,3'-Trimethoxybibenzil

C<sub>17</sub>H<sub>20</sub>O<sub>3</sub> (272.35). Colorless oil. Source: BA XI ER YE TAI *Frullania brasiliensis*. Ref: 1981.



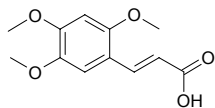
**21900** 3,5,3'-Trimethoxybibenzil

C<sub>17</sub>H<sub>20</sub>O<sub>3</sub> (272.35). Source: BAI JI *Bletilla striata*. Ref: 660.



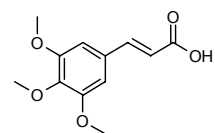
**21901** 2,4,5-Trimethoxycinnamic acid

C<sub>12</sub>H<sub>14</sub>O<sub>5</sub> (238.24). Source: SHAN SHAN JIANG *Alpinia flabellata* (leaf; yield = 0.00024%dw). Ref: 4614.



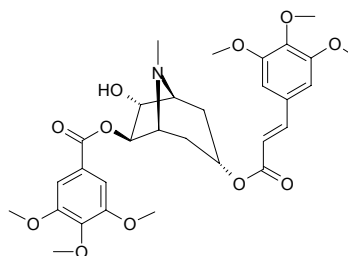
**21902** 3,4,5-Trimethoxy cinnamic acid

[90-50-6] C<sub>12</sub>H<sub>14</sub>O<sub>5</sub> (238.24). Source: YUAN ZHI *Polygala tenuifolia*. Ref: 2.



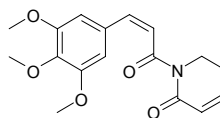
**21903** 3 $\alpha$ -(3,4,5-Trimethoxy-cinnamoyloxy)-7 $\beta$ -(3,4,5-trimethoxybenzoyloxy)-6 $\alpha$ -hydroxy-tropane

C<sub>30</sub>H<sub>37</sub>NO<sub>11</sub> (587.63). mp 176°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -20.8° (*c* = 0.1, EtOH). Source: YUAN XING YE GU KE *Erythroxylon rotundifolium* (leaf and stem cortex). Ref: 3999.



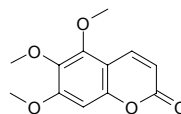
**21904** 8(*Z*)-*N*-(12,13,14-Trimethoxycinnamoyl)-*D*<sup>3</sup>-pyridin-2-one

C<sub>17</sub>H<sub>19</sub>NO<sub>5</sub> (317.34). Amorphous solid. Pharm: Antifungal (*Cladosporium sphaerospermum*, MIA = 5.0 $\mu$ g, control Nystatin, MIA = 0.5 $\mu$ g). Source: LIU TU HU JIAO *Piper tuberculatum* (seed). Ref: 5102.



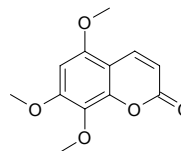
**21905** 5,6,7-Trimethoxycoumarin

C<sub>12</sub>H<sub>12</sub>O<sub>5</sub> (236.23). Pharm: Tyrosinase inhibitor (IC<sub>50</sub> = (8.65 $\pm$ 0.95) $\mu$ mol/L, control Kojic acid, IC<sub>50</sub> = (16.67 $\pm$ 0.52) $\mu$ mol/L, *L*-Mimosine IC<sub>50</sub> = (3.68 $\pm$ 0.02) $\mu$ mol/L)<sup>[2544]</sup>; antimalarial. Source: SHEN YE TIAN ZHU KUI *Pelargonium reniforme*, TONG YOU *Aleurites cordata* [Syn. *Aleurites fordii*], A FU HAN DU JUAN HUA *Rhododendron collettianum*. Ref: 658, 2544.



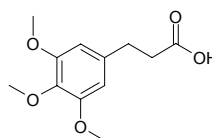
**21906** 5,7,8-Trimethoxycoumarin

C<sub>12</sub>H<sub>12</sub>O<sub>5</sub> (236.23). mp 179–180°C. Source: YAN JIAO CAO *Boenninghausenia albiflora*. Ref: 2495.

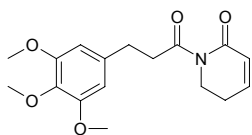


**21907** 3,4,5-Trimethoxydihydrocinnamic acid

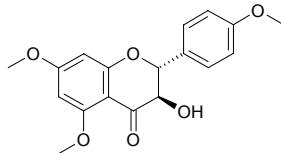
C<sub>12</sub>H<sub>16</sub>O<sub>5</sub> (240.26). Source: CHANG GUO BI BA *Piper retrofractum*. Ref: 660.



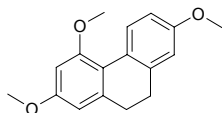
**21908** *N*-(12,13,14-Trimethoxydihydrocinnamoyl)-*A*<sup>3</sup>-pyridin-2-one  
 C<sub>17</sub>H<sub>21</sub>NO<sub>5</sub> (319.36). **Pharm:** Antifungal (*Cladosporium sphaerospermum*,  
 MIA = 0.1μg, control Nystatin, MIA = 0.5μg). **Source:** LIU TU HU JIAO  
*Piper tuberculatum* (seed). **Ref:** 5102.



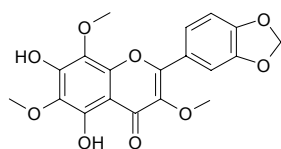
**21909** (2*R*,3*R*)-(+)-4',5,7-Trimethoxydihydroflavonol  
 C<sub>18</sub>H<sub>18</sub>O<sub>6</sub> (330.34). Colorless powder (EtOAc), [α]<sub>D</sub><sup>24</sup> = 30° (c = 0.2, MeOH).  
**Source:** HOU PI SHU *Lansea grandis* [Syn. *Lansea coromandelica*]. **Ref:** 739.



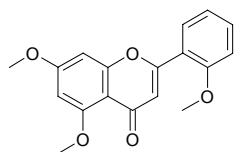
**21910** 2,4,7-Trimethoxy-9,10-dihydrophenanthrene  
 C<sub>17</sub>H<sub>18</sub>O<sub>3</sub> (270.33). **Source:** BAI JI *Bletilla striata*. **Ref:** 660.



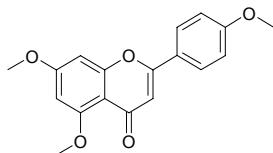
**21911** 3,6,8-Trimethoxy-5,7-dihydroxy-3',4'-methylenedioxyflavone  
 C<sub>19</sub>H<sub>16</sub>O<sub>9</sub> (388.33). Yellow crystals. **Source:** RU NI WENG DAO MI ZHU  
 YU *Melicope coodeana*. **Ref:** 1975.



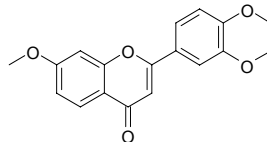
**21912** 5,7,2'-Trimethoxyflavone  
 C<sub>18</sub>H<sub>16</sub>O<sub>5</sub> (312.33). Colorless needles (CHCl<sub>3</sub>), mp 177~178°C. **Source:** NAN  
 YIN DU CHUAN XIN LIAN *Andrographis viscosula*. **Ref:** 1936.



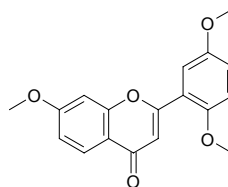
**21913** 5,7,4'-Trimethoxyflavone  
 5,7,4'-Trimethoxyapigenin; Apigenin trimethyl ether [5631-70-9] C<sub>18</sub>H<sub>16</sub>O<sub>5</sub>  
 (312.32). Colorless rhombic crystals (methanol), mp 158.5~159.5°C. **Pharm:**  
 Induces cell differentiation (mus myelocytic leukemia cells, 50μmol/L,  
 growing rate =35%, 5μmol/L, growing rate =85%); inhibits activity of EBV  
 early antigen EBV-EA induced by TPA; AMV-reverse transcriptase inhibitor  
 (1.0mmol/L, InRt = 45.6%). **Source:** HUA ZHOU YOU *Citrus grandis* var.  
*tomentosa*, JU PI *Citrus reticulata*, TIAN CHENG *Citrus sinensis*, YOU<sup>(4)</sup>  
*Citrus grandis*, ZHI SHI *Citrus aurantium*. **Ref:** 660, 900.



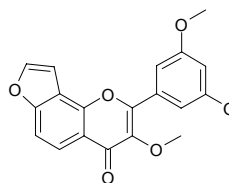
**21914** 7,2',4'-Trimethoxyflavone  
 C<sub>18</sub>H<sub>16</sub>O<sub>5</sub> (312.33). Yellow amorphous powder, mp 128~130°C (MeOH).  
**Source:** XIANG HE HUAN *Albizzia odoratissima* (root cortex). **Ref:** 4229.



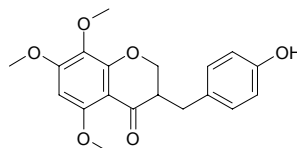
**21915** 7,2',5'-Trimethoxyflavone  
 C<sub>18</sub>H<sub>16</sub>O<sub>5</sub> (312.33). Yellow amorphous solid (MeOH), mp 136~138°C. **Source:**  
 NAN YIN DU CHUAN XIN LIAN *Andrographis viscosula* (whole herb). **Ref:**  
 4406.



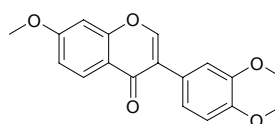
**21916** 3,3',5'-Trimethoxy furo[8,7:4'',5'']flavone  
 C<sub>20</sub>H<sub>16</sub>O<sub>6</sub> (352.35). White crystals (MeOH), mp 184°C. **Source:** SHUI LIU  
 DOU *Pongamia pinnata* (fruit). **Ref:** 3767.



**21917** 5,7,8-Trimethoxy-3-(4'-hydroxybenzyl)-4-chromanone  
 C<sub>19</sub>H<sub>20</sub>O<sub>6</sub> (344.37). Yellow gum. **Source:** HE CAO YE JIA BEI FANG FENG  
*Ledebouria graminifolia* (tuber). **Ref:** 3368.

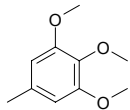


**21918** 7,3',4'-Trimethoxyisoflavone  
 Anticancer Flavonoid PMV70P691-115 C<sub>18</sub>H<sub>16</sub>O<sub>5</sub> (312.33). **Pharm:**  
 Hepatoprotective (mus primary cultured hepatocytes, antihepatotoxin induced  
 by *D*-galactosamine (GalN), 100μmol/L, InRt = (6.6±0.8)%, inactive, control  
 Silybin, 100μmol/L, InRt = (77.0±5.5)%<sup>[4095]</sup>), cytotoxic (quinone reductase  
 induction assay in cultured Hepa1c1c7 mouse hepatoma cells)<sup>[5038]</sup>. **Source:**  
 GUANG BU DING GONG TENG *Erycibe expansa*, YA MAI JIA YING TAO  
*Muntingia calabura*. **Ref:** 4095, 5038.

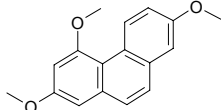


**21919 1,2,3-Trimethoxy-5-methyl benzene**

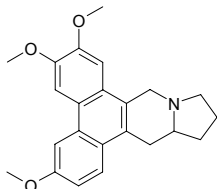
3,4,5-Trimethoxytoluene [6443-69-2] C<sub>10</sub>H<sub>14</sub>O<sub>3</sub> (182.22). Source: HONG HUA *Carthamus tinctorius*, XI XIN *Asarum sieboldii*. Ref: 2, 660.

**21920 2,4,7-Trimethoxyphenanthrene**

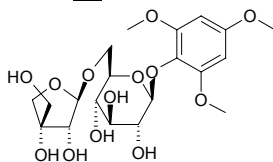
C<sub>17</sub>H<sub>16</sub>O<sub>3</sub> (268.32). Source: BAI JI *Bletilla striata*. Ref: 660.

**21921 3,6,7-Trimethoxyphenanthroindolizidine**

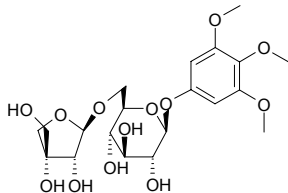
C<sub>23</sub>H<sub>25</sub>NO<sub>3</sub> (363.46). Source: DUI YE RONG *Ficus hispida*. Ref: 660.

**21922 2,4,6-Trimethoxyphenyl 1-O-β-D-apiofuranosyl-(1→6)-β-D-glucopyranoside**

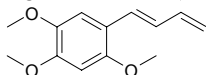
C<sub>20</sub>H<sub>30</sub>O<sub>13</sub> (478.45). Yellow powder. Source: XI YE SHUI TUAN HUA *Adina rubella*. Ref: 797.

**21923 3,4,5-Trimethoxyphenyl 1-O-β-D-apiofuranosyl-(1→6)-β-D-glucopyranoside**

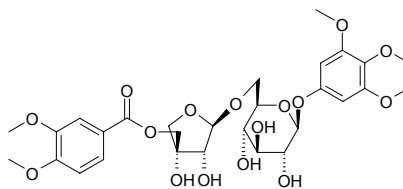
Kelampayoside A C<sub>20</sub>H<sub>30</sub>O<sub>13</sub> (478.45). Amorphous powder, [α]<sub>D</sub><sup>19</sup> = -137.5° (c = 0.6, MeOH); [α]<sub>D</sub><sup>25</sup> = +27.5° (c = 0.52, MeOH). Source: DONG FANG WU TAN *Nauclea orientalis* (bark)<sup>[3074]</sup>, MAO GUO QI *Acer nikoense* (stem cortex), ROU GUI *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*], SHAN FAN GEN *Symplocos caudata*, TAI GUO BA JI *Morinda coreia*. Ref: 660, 2002, 2535, 3074, 4304.

**21924 4-(2,4,5-Trimethoxyphenyl)-but-1,3-diene**

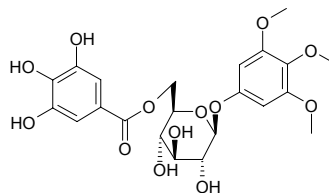
C<sub>13</sub>H<sub>16</sub>O<sub>3</sub> (220.27). Pharm: Cytotoxic (A549, Col2, SNU638, HT1080, all IC<sub>50</sub> > 50 μmol/L, control Ellipticine, IC<sub>50</sub> = 0.8~1.6 μmol/L)<sup>[4081]</sup>; COX-2 inhibitor (RAW264.7 cells, LPS-induced PGE<sub>2</sub> production, IC<sub>50</sub> = 14.97 μmol/L, control Celecoxib, IC<sub>50</sub> = 0.52 nmol/L)<sup>[4532]</sup>. Source: YE JIANG *Zingiber cassumunar* (rhizome). Ref: 4081, 4532.

**21925 3,4,5-Trimethoxyphenyl 1-O-β-D-[5-O-(3,4-dimethoxybenzoyl)]-apiofuranosyl-(1→6)-β-D-glucopyranoside**

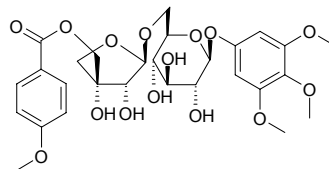
C<sub>29</sub>H<sub>38</sub>O<sub>16</sub> (642.62). Amorphous powder, [α]<sub>D</sub><sup>22</sup> = -78° (c = 0.76, MeOH). Source: BAN ZHEN ZHONG HUA SHU *Tabebuia impetiginosa* (bark). Ref: 3817.

**21926 3,4,5-Trimethoxyphenyl (6'-O-galloyl)-β-D-glucopyranoside**

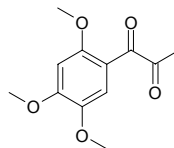
C<sub>22</sub>H<sub>26</sub>O<sub>13</sub> (498.44). Pharm: Antiplasmodial. Source: *Tristanopsis calobuxus* (bark). Ref: 5361.

**21927 3,4,5-Trimethoxyphenyl 1-O-β-D-[5-O-(4-methoxybenzoyl)]-apiofuranosyl-(1→6)-β-D-glucopyranoside**

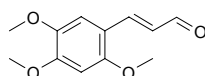
C<sub>28</sub>H<sub>36</sub>O<sub>15</sub> (512.59). Amorphous powder, [α]<sub>D</sub><sup>22</sup> = -79.1° (c = 2.05, MeOH). Pharm: NO production inhibitor (LPS-activated macrophage-like J774.1 cells, IC<sub>50</sub> = 35.6 μg/mL, control L-NMMA, IC<sub>50</sub> = 27.4 μg/mL)<sup>[4473]</sup>. Source: BAN ZHEN ZHONG HUA SHU *Tabebuia impetiginosa* (bark), HE SE ZHONG HUA SHU *Tabebuia avellanedae* (inner bark). Ref: 3817, 4473.

**21928 1-(2,4,5-Trimethoxyphenyl)-1,2-propanedione**

C<sub>12</sub>H<sub>14</sub>O<sub>5</sub> (238.24). Pharm: CYP3A4 inhibitor and CYP2D6 inhibitor (*in vitro*, CYP3A4, IC<sub>50</sub> = 74 μmol/L; CYP2D6, IC<sub>50</sub> > 100 μmol/L; control Ketoconazole, CYP3A4, IC<sub>50</sub> = 0.72 μmol/L; control Quinidine, CYP2D6, IC<sub>50</sub> = 0.082 μmol/L). Source: BI CHENG QIE *Piper cubeba* (fruit: yield = 0.000019% dw). Ref: 4797.

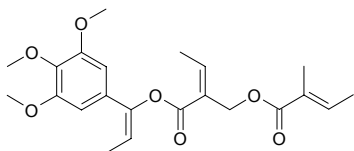
**21929 Z-3-(2,4,5-Trimethoxyphenyl)-2-propenal**

C<sub>12</sub>H<sub>14</sub>O<sub>4</sub> (222.24). Source: BAI CHANG *Acorus calamus*. Ref: 660.



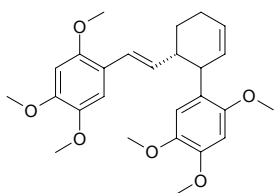
**21930 1-(3,4,5-Trimethoxyphenyl)-2-propenyl 2-(2-methyl-2Z-butenoyloxymethyl)-2Z-butenolate**

$C_{22}H_{28}O_7$  (404.46). Pharm: Anti-inflammatory (NF- $\kappa$ B inhibitor, hmn monocytes, prevents LPS-induced cytokines (IL-1, IL-6, TNF, IL-8) release and PGE<sub>2</sub> synthesis: unstimulated control: PGE<sub>2</sub> = 0.54pg/mL, IL-6 = 0.97pg/mL, IL-1 $\beta$  = 0pg/mL, TNF- $\alpha$  = 0.02pg/mL, IL-8 = 3.45pg/mL; LPS (10ng/mL): PGE<sub>2</sub> = 19.24pg/mL, IL-6 = 71.42pg/mL, IL-1 $\beta$  = 3.61pg/mL, TNF- $\alpha$  = 2.66pg/mL, IL-8 = 235.18pg/mL; LPS (10ng/mL + compound 1  $\mu$ g/mL): PGE<sub>2</sub> = 3.49pg/mL, IL-6 = 21.94pg/mL, IL-1 $\beta$  = 0.86pg/mL, TNF- $\alpha$  = 0.53pg/mL, IL-8 = 41.78pg/mL). Source: GUAN MU CHAI HU *Bupleurum fruticosum* (aerial parts). Ref: 5033.



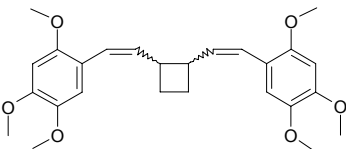
**21931 ( $\pm$ )-trans-3-(2,4,5-Trimethoxyphenyl)-4-[(E)-2,4,5-trimethoxystyryl]-cyclohexene**

$C_{26}H_{32}O_6$  (440.54). Colorless powder (ether-hexane), mp 115–116°C,  $[\alpha]_D^{30} = 0^\circ$  ( $c = 1.0$ , CHCl<sub>3</sub>). Source: SHAN SHAN JIANG *Alpinia flabellata*. Ref: 1884.



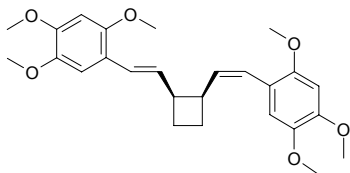
**21932 1,2-bis(2,4,5-Trimethoxy-Z-styryl)cyclobutane**

$C_{26}H_{32}O_6$  (440.54). Oil. Source: SHAN SHAN JIANG *Alpinia flabellata* (leaf). Ref: 5122.



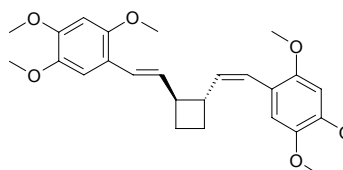
**21933 cis-1-(2,4,5-Trimethoxy-E-styryl)-2-(2,4,5-trimethoxy-Z-styryl)cyclobutane**

$C_{26}H_{32}O_6$  (440.54). White powder, mp 122–124°C,  $[\alpha]_D^{21} = -11.5^\circ$  ( $c = 0.1$ , CHCl<sub>3</sub>). Source: SHAN SHAN JIANG *Alpinia flabellata* (leaf). Ref: 5122.



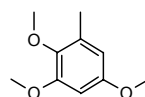
**21934 trans-1-(2,4,5-Trimethoxy-E-styryl)-2-(2,4,5-trimethoxy-Z-styryl)cyclobutane**

$C_{26}H_{32}O_6$  (440.54). Powder, mp 94–96°C,  $[\alpha]_D^{21} = +0.2^\circ$  ( $c = 0.1$ , CHCl<sub>3</sub>). Source: SHAN SHAN JIANG *Alpinia flabellata* (leaf). Ref: 5122.



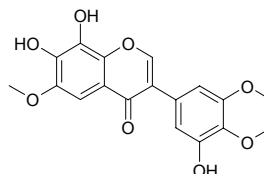
**21935 2,3,5-Trimethoxytoluene**

$C_{10}H_{14}O_3$  (182.22). Source: XI XIN *Asarum sieboldii*. Ref: 2.



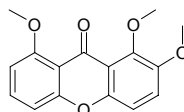
**21936 6,3',4'-Trimethoxy-7,8,5'-trihydroxyisoflavone**

$C_{18}H_{16}O_8$  (360.32). Amorphous powder. Source: JUAN QIAO YUAN WEI *Iris potaninii* (underground part). Ref: 4235.



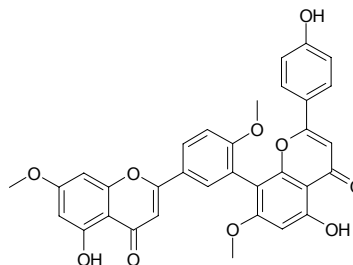
**21937 1,2,8-Trimethoxyxanthone**

$C_{16}H_{14}O_5$  (286.29). mp 139–141°C (MeOH). Source: TE SI MAN NI HU TONG BIAN ZHONG *Calophyllum teysmannii* var. *inophylloide* (wood). Ref: 3937.



**21938 7,4',7''-Tri-O-methyl amentoflavone**

[23132-13-0]  $C_{33}H_{24}O_{10}$  (580.55). Source: ZHAI YE NAN YANG SHAN *Araucaria angustifolia* (seeding root), TAI WAN CU FEI *Cephalotaxus wilsoniana* (twig). Ref: 4253, 5098.



**21939 Trimethylamine**

*N*-Trimethylamine [75-50-3]  $C_3H_9N$  (59.11). Source: CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*], QUAN XIE *Buthus martensi*. Ref: 2.

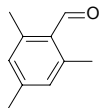


**21940 Trimethylamine oxide**

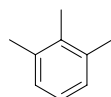
Triox; *N,N*-Dimethylmethanamine *N*-oxide [1184-78-7] C<sub>3</sub>H<sub>9</sub>NO (75.11). mp 255~257°C. Source: HAI XIA *Penaeus orientalis*. Ref: 6.

**21941 2,4,6-Trimethylbenzaldehyde**

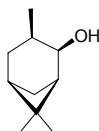
C<sub>10</sub>H<sub>12</sub>O (148.21). Source: DANG GUI *Angelica sinensis*. Ref: 660.

**21942 1,2,3-Trimethylbenzene**

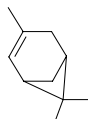
[526-73-8] C<sub>9</sub>H<sub>12</sub> (120.20). Source: SHAN ZHA *Crataegus pinnatifida*. Ref: 2.

**21943 3,6,6-Trimethyl bicyclo[3.1.1]-2-heptanol**

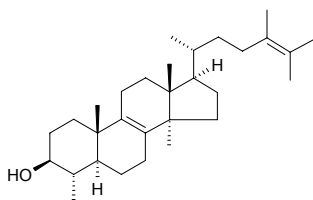
C<sub>10</sub>H<sub>18</sub>O (154.25). Source: MENG GU HAO *Artemisia mongolica*. Ref: 660.

**21944 3,6,6-Trimethyl-bicyclo[3.1.1]-2-heptene**

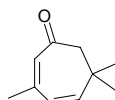
C<sub>10</sub>H<sub>16</sub> (136.24). Source: HANG BAI ZHI *Angelica taiwaniana*. Ref: 2, 660.

**21945 4α,14α,24-Trimethylcholesta-8,24-dienol**

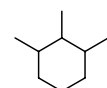
C<sub>30</sub>H<sub>50</sub>O (426.73). Source: GOU QI ZI *Lycium chinense*. Ref: 660.

**21946 3,6,6-Trimethyl-2,4-cycloheptadien-1-one**

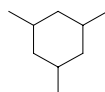
C<sub>10</sub>H<sub>14</sub>O (150.22). Source: AI YE *Artemisia argyi*. Ref: 660.

**21947 1,2,3-Trimethyl-cyclohexane**

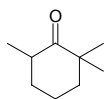
[1678-97-3] C<sub>9</sub>H<sub>18</sub> (126.24). Source: SHAN ZHA *Crataegus pinnatifida*. Ref: 2.

**21948 1,3,5-Trimethylcyclohexane**

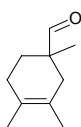
[1839-63-0] C<sub>9</sub>H<sub>18</sub> (126.24). Source: SHAN ZHA *Crataegus pinnatifida*. Ref: 2.

**21949 2,2,6-Trimethyl cyclohexanone**

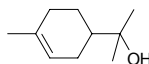
C<sub>9</sub>H<sub>16</sub>O (140.23). Source: CHA YE *Camellia sinensis* [Syn. *Thea sinensis*]. Ref: 660.

**21950 1,3,4-Trimethyl-3-cyclohexene-1-carboxaldehyde**

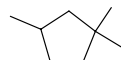
[40702-26-9] C<sub>10</sub>H<sub>16</sub>O (152.24). Source: MA HUANG *Ephedra sinica*. Ref: 2.

**21951 α,α,4-Trimethyl-3-cyclohexene methanol**

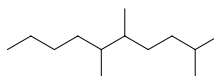
C<sub>10</sub>H<sub>18</sub>O (154.25). Source: CHUAN XU DUAN *Dipsacus asperoides*. Ref: 660.

**21952 1,1,3-Trimethylcyclopentane**

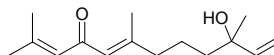
C<sub>8</sub>H<sub>16</sub> (112.22). Source: SHAN ZHA *Crataegus pinnatifida*. Ref: 2.

**21953 2,5,6-Trimethyldecane**

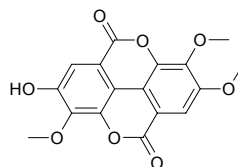
C<sub>13</sub>H<sub>28</sub> (184.37). Source: SHAN NAI *Kaempferia galanga* Ref: 660.

**21954 3,7,11-Trimethyldodeca-1,7,10-trien-3-ol-9-one**

C<sub>15</sub>H<sub>24</sub>O<sub>2</sub> (236.36). Source: ZHANG SHU YE *Cinnamomum camphora*. Ref: 6.

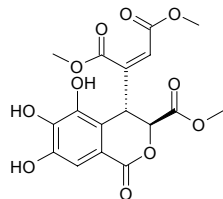
**21955 3,3',4-Tri-*O*-methyl ellagic acid**

3,3',4'-Tri-*O*-methyl ellagic acid [5145-53-9] C<sub>17</sub>H<sub>12</sub>O<sub>8</sub> (344.28). mp 297°C (dec). Pharm: Antioxidant (*in vitro*, effect on conjugated diene formation of LDL or MDA level in rat brain)<sup>[4792]</sup>; hemostatic; analgesic; astringent. Source: DI YU *Sanguisorba officinalis*, SHI LIU ZHONG ZI *Punica granatum* (seed: yield = 0.00045%)<sup>[4792]</sup>, XI SHU *Camptotheca acuminata*, ZI WEI GEN *Lagerstroemia indica*. Ref: 6, 658, 4097, 4792, 5501.

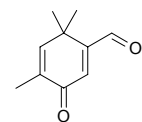


**21956 Trimethyl ester dehydrochebulic acid**

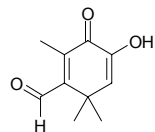
$C_{17}H_{16}O_{11}$  (396.31). White acicular crystals, mp 204~206°C,  $[\alpha]_D = +28.5^\circ$  (MeOH). Source: YE XIA ZHU *Phyllanthus urinaria*. Ref: 283.

**21957 1,1,5-Trimethyl-2-formyl-cyclohexa-2,5-diene-4-one**

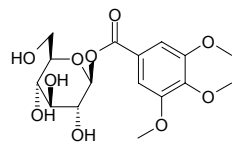
$C_{10}H_{12}O_2$  (164.21). Source: DANG GUI *Angelica sinensis*. Ref: 660.

**21958 2,4,4-Trimethyl-3-formyl-6-hydroxy-2,5-cyclohexadien-1-one**

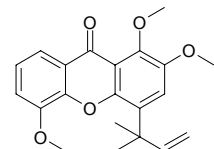
$C_{10}H_{12}O_3$  (180.21). Source: ZANG HONG HUA *Crocus sativus* (pollen). Ref: 4233.

**21959 Trimethylgalloylglucose**

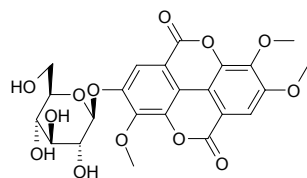
$C_{16}H_{22}O_{10}$  (374.35). Source: HUANG LU ZHI YE *Cotinus coggygia* var. *cinerea*. Ref: 6.

**21960 1,2,5-Tri-O-methylglobuxanthone**

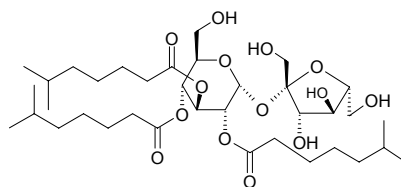
$C_{21}H_{22}O_5$  (354.41). Pale yellow needles, mp 124~126°C (CH<sub>2</sub>Cl<sub>2</sub>-hexane). Source: *Garcinia vilersiana* (bark). Ref: 3902.

**21961 3,3',4'-O-Trimethyl-4'-O-β-D-glucopyranosylelagic acid**

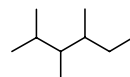
$C_{23}H_{22}O_{13}$  (506.42). Source: XI SHU *Camptotheca acuminata*. Ref: 4097.

**21962 2,3,4-Tri(6-methylheptanoyl)-α-D-glucopyranosyl-β-D-fructofuranoside**

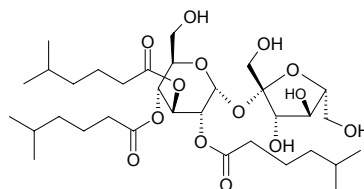
$C_{36}H_{64}O_{14}$  (720.92). Source: ZI MO LI HUA BI DONG QIE *Petunia nyctaginiflora*. Ref: 3396.

**21963 2,3,4-Trimethylhexane**

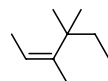
$C_9H_{20}$  (128.26). Source: SHAN ZHA *Crataegus pinnatifida*. Ref: 2.

**21964 2,3,4-Tri(5-methylhexanoyl)-α-D-glucopyranosyl-β-D-fructofuranoside**

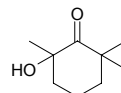
$C_{33}H_{58}O_{14}$  (678.82). Source: ZI MO LI HUA BI DONG QIE *Petunia nyctaginiflora*. Ref: 3396.

**21965 3,4,4-Trimethyl-2-hexene**

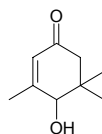
[53941-19-8]  $C_9H_{18}$  (126.24). Source: SHAN ZHA *Crataegus pinnatifida*. Ref: 2.

**21966 2,6,6-Trimethyl-2-hydroxycyclohexanone**

$C_9H_{16}O_2$  (156.23). Source: CHA YE *Camellia sinensis* [Syn. *Thea sinensis*]. Ref: 660.

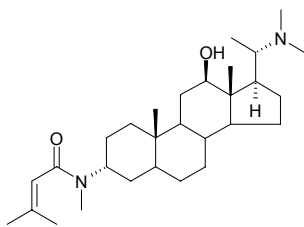
**21967 3,5,5-Trimethyl-4-hydroxy-1-cyclohexanon-2-ene**

4-Hydroxy-3,5,5-trimethyl-2-cyclohexen-1-one  $C_9H_{14}O_2$  (154.21). Pharm: Tyrosinase inhibitor (333.3 μmol/L, InRt = 13.3%; control Kojic acid, 333.3 μmol/L, InRt = 59.8%). Source: ZANG HONG HUA *Crocus sativus* (pollen). Ref: 4233.



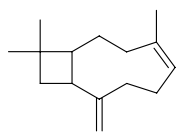
**21968** *N*<sup>3</sup>,*N*<sup>20</sup>,*N*<sup>20</sup>-Trimethyl-*N*<sup>3</sup>-(3-methyl-2-butenyl)-3,20-diamino-pregnan-12-ol

Anticancer Alkaloid PMV70P691-002 C<sub>29</sub>H<sub>50</sub>N<sub>2</sub>O<sub>2</sub> (458.73). **Pharm:** Cytotoxic (estrone sulfatase assay). **Source:** YANG WO BAN DENG GUO *Pachysandra procumbens*. **Ref:** 5038.



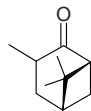
**21969** *cis*-4,11,11-Trimethyl-8-methylenebicyclo[7.2.0]-undeca-4-ene

C<sub>15</sub>H<sub>24</sub> (204.36). **Source:** HANG BAI ZHI *Angelica taiwaniana*, MAN SHAN HONG *Rhododendron dauricum*. **Ref:** 2, 660.



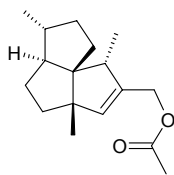
**21970** 3,6,6-Trimethyl norpinan-2-one

C<sub>10</sub>H<sub>16</sub>O (152.24). **Source:** RU XIANG *Boswellia carterii*. **Ref:** 660.



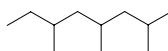
**21971** [(1*R*\*,3*aS*,6*R*)-1,3*a*,6-Trimethyl-1,3*a*,4,5,5*a*,6,7,8-octahydrocyclopenta[*c*]pentalen-2-yl]methyl acetate

C<sub>17</sub>H<sub>26</sub>O<sub>2</sub> (262.40). **Pharm:** Anti-Inflammatory (anti-oedema, control oedema = (7.8±0.3)mg, 100µg/cm<sup>2</sup>, oedema = (4.3±0.4)mg, *p*<0.05, reduction = 45%, Indomethacin oedema = (3.4±0.3)mg, *p*<0.05, reduction = 56%). **Source:** GAO SHAN HUO RONG CAO *Leontopodium alpinum* (root). **Ref:** 4985.



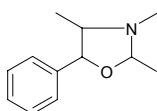
**21972** 2,4,6-Trimethyl octane

C<sub>11</sub>H<sub>24</sub> (156.31). **Source:** SHAN NAI *Kaempferia galanga*. **Ref:** 660.



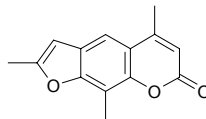
**21973** 2,3,4-Trimethyl-5-phenyloxazolidine

C<sub>12</sub>H<sub>17</sub>NO (191.28). **Source:** MA HUANG *Ephedra sinica*. **Ref:** 2.



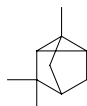
**21974** 4,5',8-Trimethyl psoralen

[3902-71-4] C<sub>14</sub>H<sub>12</sub>O<sub>3</sub> (228.25). **Pharm:** Dermatitic (causes contact dermatitis). **Source:** HAN QIN *Apium graveolens*. **Ref:** 658.



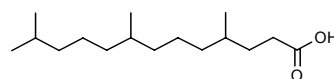
**21975** 1,3,3-Trimethyltricyclo[2.2.1.0<sup>2,6</sup>]heptane

C<sub>10</sub>H<sub>16</sub> (136.24). **Source:** SHENG JIANG *Zingiber officinale*. **Ref:** 2.



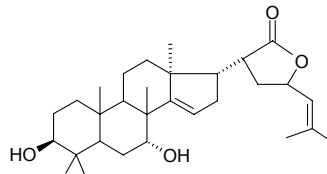
**21976** 4,8,12-Trimethyl tridecanoic acid

C<sub>16</sub>H<sub>32</sub>O<sub>2</sub> (256.43). **Source:** QIANG HUO *Notopterygium incisum*. **Ref:** 2.



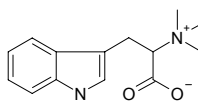
**21977** 4,4,8-Trimethyl-3β,7α,23-trihydroxy-chola-14,24-dien-21-oic acid-21,23-lactone

C<sub>30</sub>H<sub>46</sub>O<sub>4</sub> (470.70). **Source:** KU LIAN PI *Melia azedarach*. **Ref:** 6.



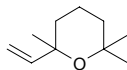
**21978** Trimethyl tryptophan

C<sub>14</sub>H<sub>18</sub>N<sub>2</sub>O<sub>2</sub> (246.13). **Source:** XIANG SI ZI *Abrus precatorius*. **Ref:** 660.



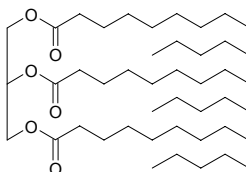
**21979** 2,2,6-Trimethyl-6-vinyl-tetrahydropyran

[7392-19-0] C<sub>10</sub>H<sub>18</sub>O (154.25). **Source:** XIANG YE *Pelargonium graveolens*. **Ref:** 6.



**21980** Trimyristin

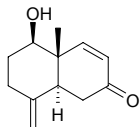
C<sub>45</sub>H<sub>86</sub>O<sub>6</sub> (723.18). **Source:** ROU DOU KOU *Myristica fragrans*. **Ref:** 660.



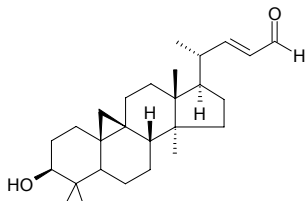


**21981 7-Trinoreudesm-4(15),8-dien-1 $\beta$ -ol-7-one**

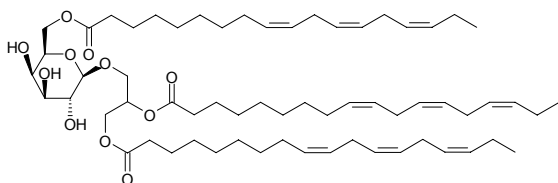
$C_{12}H_{16}O_2$  (192.26). Colorless gum,  $[\alpha]_D^{20} = +128^\circ$  ( $c = 0.1$ ,  $CHCl_3$ ). Source: ZHONG JIAN JIN JI ER *Caragana intermedia* (aerial parts). Ref: 4786.

**21982 (22E)-25,26,27-Trinor-3 $\beta$ -hydroxycycloart-22-en-24-al**

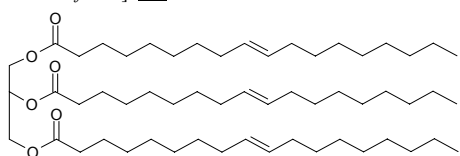
$C_{27}H_{42}O_2$  (398.36). mp 110–113°C,  $[\alpha]_D^{25} = +47.9^\circ$  ( $c = 0.2$ ,  $CHCl_3$ ). Source: RONG SHU *Ficus microcarpa* (aerial root). Ref: 3524.

**21983 (2S)-1,2,6'-Tri-O-[(9Z,12Z,15Z)-octadeca-9,12,15-trienoyl]-3-O- $\beta$ -D-galactopyranosyl glycerol**

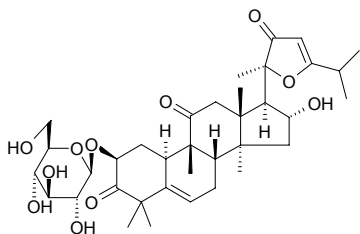
$C_{63}H_{102}O_{11}$  (1035.51). Oil,  $[\alpha]_D = +6.9^\circ$  ( $c = 1.11$ , EtOH). Source: FEI YUE GUO *Feijoa sellowiana* (leaf). Ref: 3878.

**21984 Triolein**

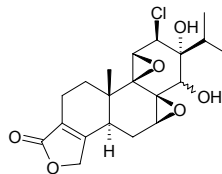
[537-39-3]  $C_{57}H_{104}O_6$  (885.46). mp  $-4^\circ C$ , bp 235–240°C/18mmHg. Source: BAI E GAO *Anser cygnoides domestica*, TONG YOU *Aleurites cordata* [Syn. *Aleurites fordii*]. Ref: 6.

**21985 3,11,22-Trioxo-16 $\alpha$ -hydroxy-(20S,24)-epoxy-cucurbit-5,23-diene-2 $\beta$ -O- $\beta$ -D-glucopyranoside**

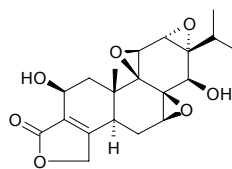
$C_{36}H_{52}O_{11}$  (660.81). White amorphous powder,  $[\alpha]_D^{26} = +35.9^\circ$  ( $c = 0.167$ , MeOH). Source: KU XUAN SHEN *Picria feltrrae* (whole herb). Ref: 4856.

**21986 Tripchlorolide**

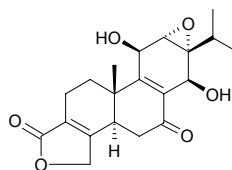
$C_{20}H_{25}ClO_6$  (396.87). Source: LEI GONG TENG *Tripterygium wilfordii*. Ref: 660.

**21987 Triptidiolide**

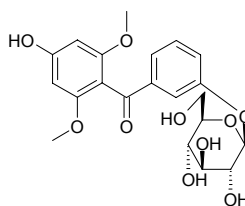
$C_{20}H_{24}O_7$  (376.41). mp 210–211°C, 226–228°C. Pharm: Antineoplastic (KB,  $ED_{50} = 0.0042\mu g/mL$ ); antineoplastic (mus  $L_{1210}$ , 1mg/kg, biotic prolonged rate  $\geq 130\%$ ). Source: LEI GONG TENG *Tripterygium wilfordii*, KUN MING SHAN HAI TANG *Tripterygium hypoglaucum*. Ref: 4, 256, 658.

**21988 Triptiotolide**

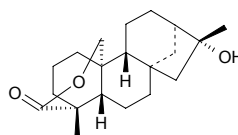
$C_{20}H_{24}O_6$  (360.41). Colorless hyaloid rhabdoid crystals, mp 222–224°C. Source: LEI GONG TENG *Tripterygium wilfordii*. Ref: 256.

**21989 Triptephenoside**

$C_{21}H_{24}O_{10}$  (436.42). Amorphous powder,  $[\alpha]_D^{27} = -54.5^\circ$  ( $c = 0.56$ , MeOH). Source: RI BEN SHUANG HU DIE *Tripterospermum japonicum*. Ref: 3533.

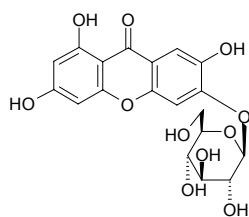
**21990 Tripterfordin**

Tripterifordine [139122-81-9]  $C_{20}H_{30}O_3$  (318.46). White loose crystals ( $CHCl_3$ ), mp 253–255°C. Pharm: Anti-HIV (lymphocyte H9, against HIV replication,  $EC_{50} = 1\mu g/mL$ ). Source: LEI GONG TENG *Tripterygium wilfordii*. Ref: 660, 683, 1764.

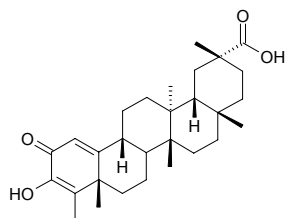


**21991 Tripteroside**

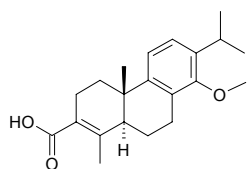
$C_{19}H_{18}O_{11}$  (422.35). **Pharm:** CNS depressant (animal model). **Source:** TAI WAN SHUANG HU DIE *Tripterospermum taiwanense*. **Ref:** 658.

**21992 Tripterygone**

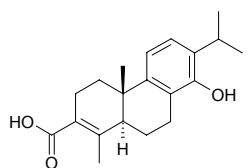
3-Hydroxy-25-norfriedel-3,1(10)-dien-2-one-30-oic acid  $C_{29}H_{42}O_4$  (454.66). Colorless acicular crystals, mp 286~287°C. **Source:** LEI GONG TENG *Tripterygium wilfordii*. **Ref:** 190, 660.

**21993 Triptinin A**

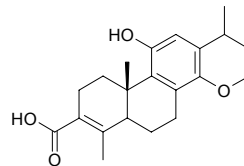
Triptoditerpenic acid B [189389-02-4]  $C_{21}H_{28}O_3$  (328.45). Amorphous powder,  $[\alpha]_D = +26^\circ$  ( $c = 0.42$ , methanol); white acicular crystals, mp 209~211°C. **Pharm:** Antiallergic (50µg/mL, leukotriene D<sub>4</sub> antagonist, dissociation constant  $K_D = 0.000124$ ). **Source:** KUN MING SHAN HAI TANG *Tripterygium hypoglaucum*, LEI GONG TENG *Tripterygium wilfordii*. **Ref:** 252, 1102.

**21994 Triptinin B**

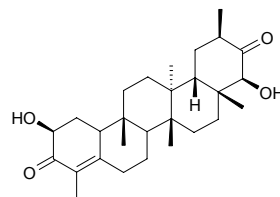
[189389-05-7]  $C_{20}H_{26}O_3$  (314.43). Amorphous powder,  $[\alpha]_D = +17.1^\circ$  ( $c = 0.49$ , methanol). **Pharm:** Antiallergic (50µg/mL, leukotriene D<sub>4</sub> antagonist, dissociation constant  $K_D = 0.000034$ ). **Source:** LEI GONG TENG *Tripterygium wilfordii*. **Ref:** 1102.

**21995 Triptobenzene H**

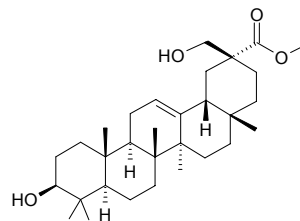
$C_{21}H_{28}O_4$  (344.45). **Source:** LEI GONG TENG *Tripterygium wilfordii*. **Ref:** 2073.

**21996 Triptocalline A**

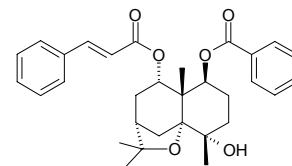
[201534-10-3]  $C_{28}H_{42}O_4$  (442.64). **Pharm:** DPPH scavenger inactive (for 40µmol/L DPPH radical,  $SC_{50} > 40\mu\text{mol/L}$ )<sup>[4378]</sup>. **Source:** LEI GONG TENG *Tripterygium wilfordii*, SUO LA MU *Salacia prinoides* [Syn. *Salacia chinensis*] (stem). **Ref:** 1521, 4378.

**21997 Triptodihydroxy acid methyl ester**

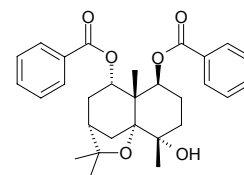
$C_{31}H_{50}O_4$  (486.74). **Source:** LEI GONG TENG *Tripterygium wilfordii*. **Ref:** 2.

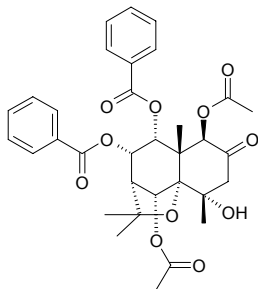
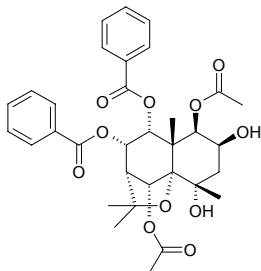
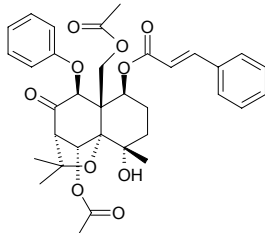
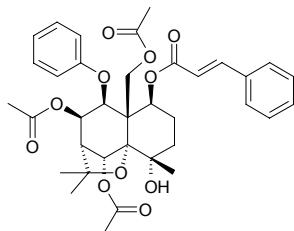
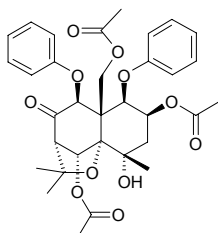
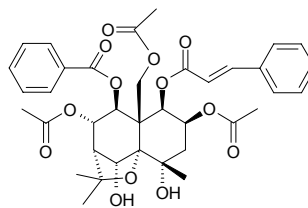
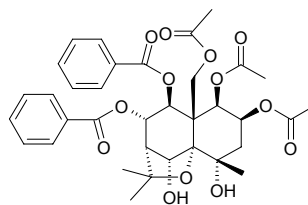
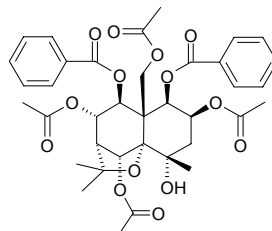
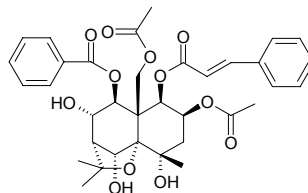
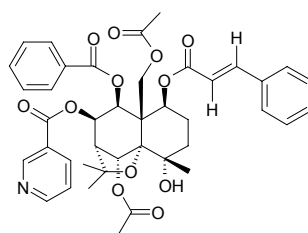
**21998 Triptofordin A**

$C_{31}H_{36}O_6$  (504.63). **Source:** LEI GONG TENG *Tripterygium wilfordii*. **Ref:** 2.

**21999 Triptofordin B<sub>1</sub>**

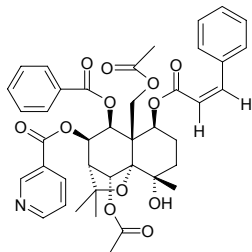
$C_{29}H_{34}O_6$  (478.59). **Source:** LEI GONG TENG *Tripterygium wilfordii*. **Ref:** 2.



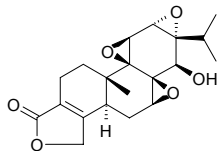
**22000 Triptofordin B<sub>2</sub>**C<sub>33</sub>H<sub>36</sub>O<sub>11</sub> (608.65). Source: LEI GONG TENG *Tripterygium wilfordii*. Ref: 2.**22001 Triptofordin C<sub>2</sub>**C<sub>33</sub>H<sub>38</sub>O<sub>11</sub> (610.66). Source: LEI GONG TENG *Tripterygium wilfordii*. Ref: 2.**22002 Triptofordin D<sub>1</sub>**C<sub>34</sub>H<sub>38</sub>O<sub>10</sub> (606.68). Source: LEI GONG TENG *Tripterygium wilfordii*. Ref: 2.**22003 Triptofordin D<sub>2</sub>**C<sub>34</sub>H<sub>42</sub>O<sub>11</sub> (650.73). Source: LEI GONG TENG *Tripterygium wilfordii*. Ref: 2.**22004 Triptofordin E**C<sub>33</sub>H<sub>38</sub>O<sub>11</sub> (610.66). Source: LEI GONG TENG *Tripterygium wilfordii*. Ref: 2.**22005 Triptofordin F<sub>1</sub>**C<sub>37</sub>H<sub>42</sub>O<sub>13</sub> (694.74). Source: LEI GONG TENG *Tripterygium wilfordii*. Ref: 2.**22006 Triptofordin F<sub>2</sub>**C<sub>35</sub>H<sub>40</sub>O<sub>13</sub> (668.70). Source: LEI GONG TENG *Tripterygium wilfordii*. Ref: 2.**22007 Triptofordin F<sub>3</sub>**C<sub>37</sub>H<sub>42</sub>O<sub>14</sub> (710.74). Source: LEI GONG TENG *Tripterygium wilfordii*. Ref: 2.**22008 Triptofordin F<sub>4</sub>**C<sub>35</sub>H<sub>40</sub>O<sub>12</sub> (652.70). Source: LEI GONG TENG *Tripterygium wilfordii*. Ref: 2.**22009 Triptofordinine A<sub>1</sub>**C<sub>41</sub>H<sub>43</sub>NO<sub>12</sub> (741.80). Source: LEI GONG TENG *Tripterygium wilfordii*. Ref: 2.

**22010 Triptofordinine A<sub>2</sub>**

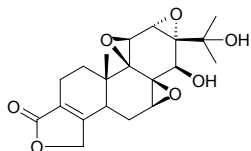
C<sub>41</sub>H<sub>43</sub>NO<sub>12</sub> (741.80). Source: LEI GONG TENG *Tripterygium wilfordii*. Ref: 2.

**22011 Triptolide**

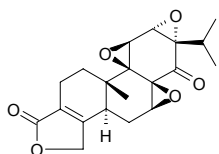
C<sub>20</sub>H<sub>24</sub>O<sub>6</sub> (360.41). mp 227~228°C. Pharm: Antineoplastic (mus L<sub>1210</sub>, 0.1mg/kg, biotic prolonged rate > 159%; mus P<sub>388</sub>, 0.25mg/kg, biotic prolonged rate > 159%; mus KB, *in vitro*, ED<sub>50</sub> = 0.0017μg/mL; mus S37 liver cancer and rat W<sub>256</sub>); anti-fertility agent; mutagen; used in treatment of psoriasis, rheumatic arthritis and leukemia; cytotoxic (Bel7402 cell lines, IC<sub>50</sub> > 100μmol/L, control Taxol, IC<sub>50</sub> = 0.52μmol/L; BGC<sub>823</sub>, IC<sub>50</sub> = 0.09μmol/L, Taxol, IC<sub>50</sub> > 500μmol/L; HeLa, IC<sub>50</sub> = 0.04μmol/L, Taxol, IC<sub>50</sub> = 34.25μmol/L; HL-60, IC<sub>50</sub> = 0.03μmol/L, Taxol, IC<sub>50</sub> = 3.5 × 10<sup>-4</sup> μmol/L; KB, IC<sub>50</sub> = 0.03μmol/L, Taxol, not tested; MCF7, IC<sub>50</sub> = 0.07μmol/L, Taxol, IC<sub>50</sub> = 12.64μmol/L)<sup>[5454]</sup>; LD<sub>50</sub> (rat, orl) = 1195μg/kg, (rat, sc) = 1136μg/kg. Source: LEI GONG TENG *Tripterygium wilfordii* (root: mean content of 3 origins = 0.0013%<sup>[5508]</sup>), LEI GONG TENG *Tripterygium wilfordii* (structural modification of triptonide by *Aspergillus niger*), KUN MING SHAN HAI TANG *Tripterygium hypoglaucum*. Ref: 4, 658, 5454, 5508.

**22012 Triptolidenol**

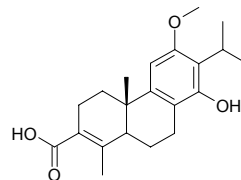
C<sub>20</sub>H<sub>24</sub>O<sub>7</sub> (376.41). Source: LEI GONG TENG *Tripterygium wilfordii* (root heart: mean content = 0.0033%<sup>[5508]</sup>). Ref: 256, 5508.

**22013 Triptonide**

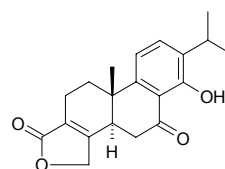
[38647-11-9] C<sub>20</sub>H<sub>22</sub>O<sub>6</sub> (358.39). Colorless crystals (dichloroethane-ether), mp 227~228°C, [α]<sub>D</sub><sup>25</sup> = -154° (c = 0.369, dichloromethane). Pharm: Cytotoxic (KB, ED<sub>50</sub> = 10<sup>-4</sup>~10<sup>-3</sup> μg/mL and 0.021μg/mL); cytotoxic (Bel7402 cell lines, IC<sub>50</sub> > 100μmol/L, control Taxol, IC<sub>50</sub> = 0.52μmol/L; BGC<sub>823</sub>, IC<sub>50</sub> = 0.85μmol/L, Taxol, IC<sub>50</sub> > 500μmol/L; HeLa, IC<sub>50</sub> = 0.03μmol/L, Taxol, IC<sub>50</sub> = 34.25μmol/L; HL-60, IC<sub>50</sub> = 0.02μmol/L, Taxol, IC<sub>50</sub> = 3.5E-4μmol/L; KB, IC<sub>50</sub> = 0.01μmol/L, Taxol, not tested; MCF7, IC<sub>50</sub> = 0.10μmol/L, Taxol, IC<sub>50</sub> = 12.64μmol/L)<sup>[5454]</sup>. Source: LEI GONG TENG *Tripterygium wilfordii*, KUN MING SHAN HAI TANG *Tripterygium hypoglaucum*. Ref: 5, 661, 5454.

**22014 Triptonoditerpenic acid**

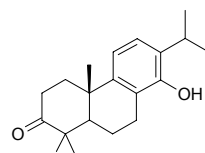
C<sub>21</sub>H<sub>28</sub>O<sub>4</sub> (344.45). White acicular crystals, mp 189~191°C. Source: KUN MING SHAN HAI TANG *Tripterygium hypoglaucum*. Ref: 197.

**22015 Triptonolide**

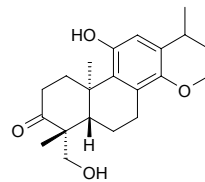
[79548-61-1] C<sub>20</sub>H<sub>22</sub>O<sub>4</sub> (326.40). Pharm: Inhibits hyperplasia of lymphocyte (ConA induced, 1ng/mL, InRt = 32.6%, 0.1ng/mL, InRt = 8.7%). Source: LEI GONG TENG *Tripterygium wilfordii*. Ref: 2, 923.

**22016 Triptonoterpene**

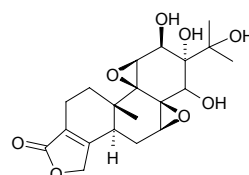
14-Hydroxy-abieta-8,11,13-trien-3-one C<sub>20</sub>H<sub>28</sub>O<sub>2</sub> (300.45). Source: LEI GONG TENG *Tripterygium wilfordii*. Ref: 2.

**22017 Triptonoterpenol**

C<sub>21</sub>H<sub>30</sub>O<sub>4</sub> (346.47). Colorless columnar crystals, mp 197~199°C. Source: KUN MING SHAN HAI TANG *Tripterygium hypoglaucum*, LEI GONG TENG *Tripterygium wilfordii*. Ref: 78, 660.

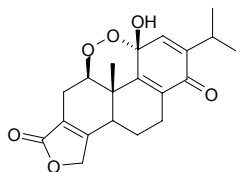
**22018 Triptotetraolide**

C<sub>20</sub>H<sub>26</sub>O<sub>8</sub> (394.43). Source: LEI GONG TENG *Tripterygium wilfordii*. Ref: 660.

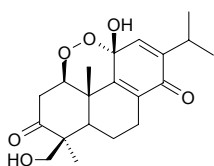


**22019 Triptotin A**

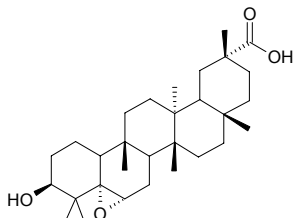
$C_{20}H_{22}O_6$  (358.39). Source: LEI GONG TENG *Tripterygium wilfordii*. Ref: 2076.

**22020 Triptotin B**

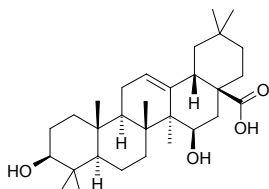
$C_{20}H_{26}O_6$  (362.43). Source: LEI GONG TENG *Tripterygium wilfordii*. Ref: 2076.

**22021 Triptotin C**

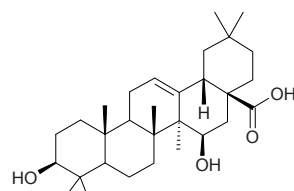
$C_{30}H_{48}O_4$  (472.71). White acicular crystals, mp 250–252°C. Source: LEI GONG TENG *Tripterygium wilfordii*. Ref: 670.

**22022 Triptotriterpenic acid A**

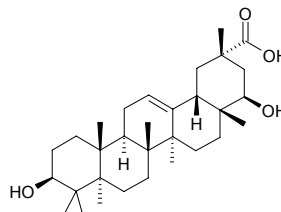
[95753-41-6]  $C_{30}H_{48}O_4$  (472.71). Source: LEI GONG TENG *Tripterygium wilfordii*. Ref: 2.

**22023 Triptotriterpenic acid A\*‡**

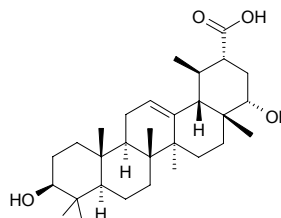
$C_{30}H_{48}O_4$  (472.71). White acicular crystals, mp 249–251°C, 304–308°C (dec), (two melting points),  $[\alpha]_D^{13} = +61.5^\circ$  ( $c = 0.2$ , absolute ethanol). Pharm: Anti-inflammatory (mus, edema on ears caused by oleum crotonis, edema in rat joints caused by agar); Ileal smooth muscle relaxant (gpg, due to histamine). Source: KUN MING SHAN HAI TANG *Tripterygium hypoglaucum*, LEI GONG TENG *Tripterygium wilfordii*. Ref: 903, 905. ‡Note: see compound 22022.

**22024 Triptotriterpenic acid B**

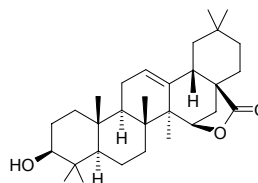
[128301-32-6]  $C_{30}H_{48}O_4$  (472.71). Source: LEI GONG TENG *Tripterygium wilfordii*. Ref: 2.

**22025 Triptotriterpenic acid C**

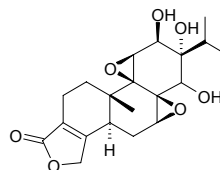
Tripterygic acid A  $C_{30}H_{48}O_4$  (472.71). White amorphous powder, mp 247.5–249.5°C. Pharm: DPPH scavenger inactive (for 40μmol/L DPPH radical,  $SC_{50} > 40\mu\text{mol/L}$ )<sup>[4378]</sup>. Source: LEI GONG TENG *Tripterygium wilfordii*, SUO LA MU *Salacia prinoides* [Syn. *Salacia chinensis*] (stem). Ref: 660, 125, 4378.

**22026 Triptotriterpenoid lactone A**

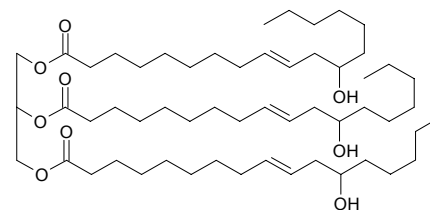
$C_{30}H_{46}O_3$  (454.70). Source: LEI GONG TENG *Tripterygium wilfordii*. Ref: 2.

**22027 Triptriolide**

$C_{20}H_{26}O_7$  (378.43). Source: LEI GONG TENG *Tripterygium wilfordii*. Ref: 660.

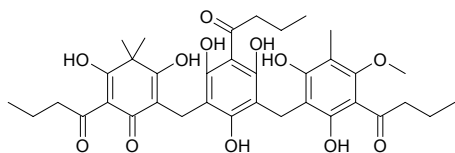
**22028 Triricinolein**

$C_{57}H_{104}O_9$  (933.46). Source: BI MA YOU *Ricinus communis*. Ref: 6.

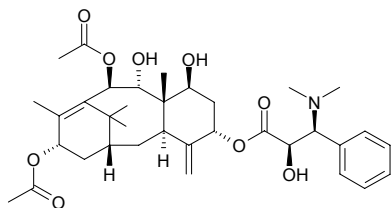


**22029 Trisaspidin**

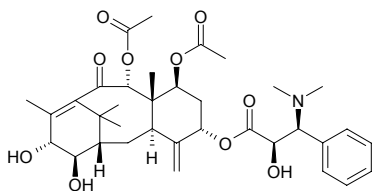
$C_{36}H_{44}O_{12}$  (668.74). Source: AO DI LI LIN MAO JUE *Dryopteris austriaca*.  
Ref: 660.

**22030 2',7β,9α-Trisdeacetylaustrospicatine**

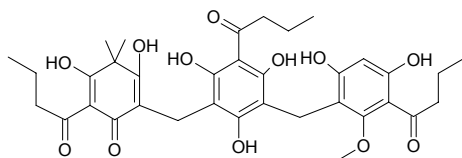
$C_{35}H_{49}NO_9$  (627.78).  $[\alpha]_D = +41^\circ$  (CHCl<sub>3</sub>). Source: AO DA LI YA HONG  
DOU SHAN *Austrotaxus spicata*. Ref: 662.

**22031 2',13α,14β-Trisdeacetylaustrotaxine**

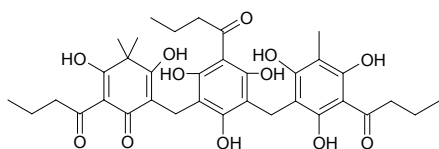
$C_{35}H_{47}NO_{10}$  (641.77).  $[\alpha]_D = -21^\circ$  (CHCl<sub>3</sub>). Source: AO DA LI YA HONG  
DOU SHAN *Austrotaxus spicata*. Ref: 662.

**22032 Trisdesaspidin BBB**

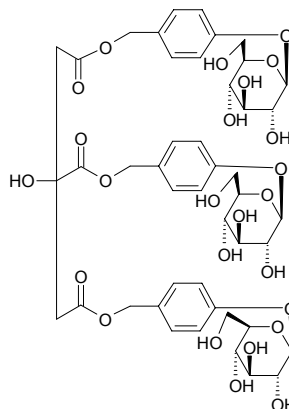
Trisdesaspidin  $C_{35}H_{42}O_{12}$  (654.72). Source: AO DI LI LIN MAO JUE *Dryopteris austriaca*, MAO GUAN ZHONG *Dryopteris championii*. Ref: 660.

**22033 Trisflavaspidic acid**

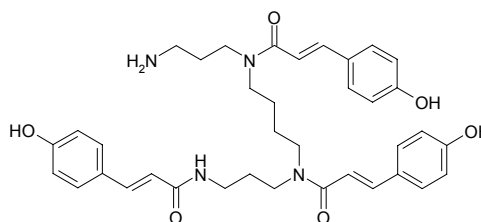
$C_{35}H_{42}O_{12}$  (654.72). Source: AO DI LI LIN MAO JUE *Dryopteris austriaca*,  
MAO GUAN ZHONG *Dryopteris championii*. Ref: 660.

**22034 Tris-[4-(β-D-glucopyranosyloxy)benzyl]citrate**

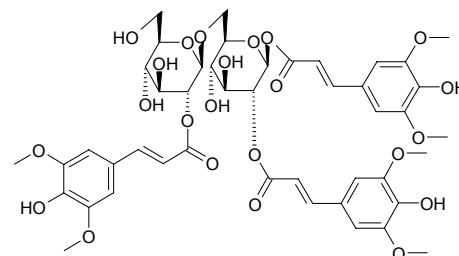
$C_{45}H_{56}O_{25}$  (996.93). Source: TIAN MA *Gastrodia elata*. Ref: 660.

**22035 N1,N5,N10-Tris[3-(4-hydroxyphenyl)-2-propenoyl]-1,5,10,14-tetraazatetradecane**

$C_{37}H_{44}N_4O_6$  (640.79). Pharm: Nonpeptide tachykinin NK1 receptor antagonist inactive (guinea pig ileum,  $K_i > 1000\text{nmol/L}$ , hmn NK<sub>1</sub> receptors on CHO cells,  $K_i > 1000\text{nmol/L}$ ,  $K_i$  is the concentration of compound which displaces the log concentration response curve by log 2). Source: DA BO SI JU *Cosmos bipinnata*, GAO GUI CHUN HUANG JU *Anthemis nobilis*, MU<sup>(3)</sup> JU *Matricaria chamomilla* [Syn. *Matricaria recutita*] (dried flower). Ref: 4062.

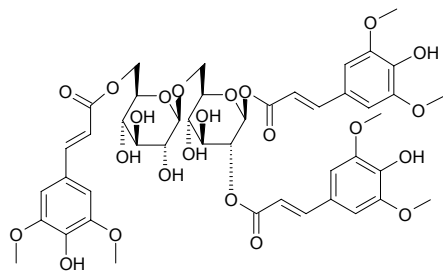
**22036 1,2,2'-Tri-O-E-sinapoyl-β-gentiobiose**

$C_{45}H_{52}O_{23}$  (960.90). Source: OU ZHOU YOU CAI *Brassica napus* (seed). Ref: 5289.

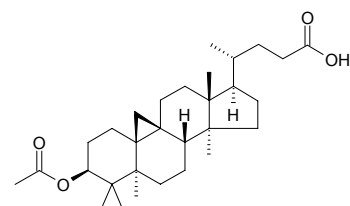


**22037 1,2,6'-Tri-*O*-*E*-sinapoyl- $\beta$ -gentiobiose**

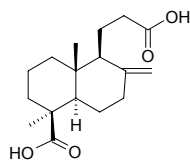
$C_{45}H_{52}O_{23}$  (960.90). Source: OU ZHOU YOU CAI *Brassica napus* (seed). Ref: 5289.

**22038 Trisnorcycloartenoloic acid acetate**

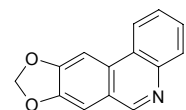
$C_{29}H_{46}O_4$  (458.69). Source: HONG ZU HAO *Artemisia rubripes*. Ref: 660.

**22039 14,15,16-Trisnor-8(17)-labdene-13,19-dioic acid**

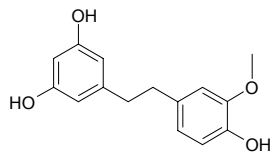
$C_{17}H_{26}O_4$  (294.39). Source: BAI ZI REN *Biota orientalis* [Syn. *Thuja orientalis*; *Platycladus orientalis*]. Ref: 660.

**22040 Trisphaeridine**

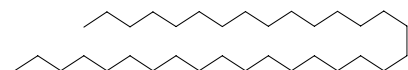
$C_{14}H_9NO_2$  (223.23). Pharm: Antiretroviral and cytotoxic ( $ID_{50} = 5.0 \mu\text{g/mL}$ ,  $TC_{50} = 7.5 \mu\text{g/mL}$ ,  $TI_{50}$  ( $TC_{50}/ID_{50}$ ) = 1.5)<sup>[5026]</sup>. Source: SAN QIU BO SI SHI SUAN *Ungernia trisphaera* (leaf), *Pancreatium maritimum* (aerial parts). Ref: 1521, 5026.

**22041 Tristin**

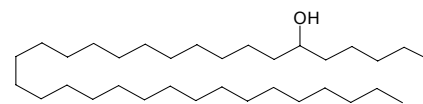
$C_{15}H_{16}O_4$  (260.29). Source: MI HUA SHI HU *Dendrobium densiflorum* (stem). Ref: 5171.

**22042 *n*-Tritriacontane**

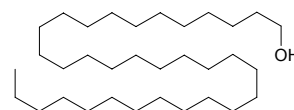
[630-05-7]  $C_{33}H_{68}$  (464.91). mp 72°C, bp 208°C/0mmHg. Source: GUANG JIN QIAN CAO *Desmodium styracifolium*, JI CHANG LANG DU *Euphorbia esula*. Ref: 6.

**22043 6-Tritriacontanol**

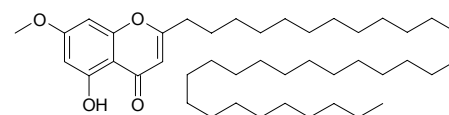
$C_{33}H_{68}O$  (480.91). Source: XIA YE XIANG PU *Typha angustifolia*. Ref: 2, 660.

**22044 Tritriacontanol**

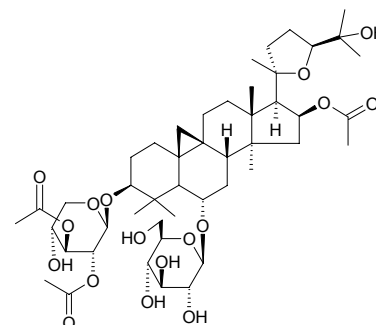
$C_{33}H_{68}O$  (480.91). Source: JI CHANG LANG DU *Euphorbia esula*, JIA MA BIAN *Stachytarpheta jamaicensis*, QIU SUI QIAN JIN BA *Flemingia strobilifera*, TU NIU XI *Achyranthes aspera*, ZHI KE *Citrus aurantium*. Ref: 660, 1521.

**22045 2-Tritriacontyl-5-hydroxy-7-methoxychromone**

[144049-68-3]  $C_{43}H_{74}O_4$  (655.06). Colorless rhombic crystals (petroleum ether-ethyl acetate), mp 83°C. Pharm: Antibacterial (*Bacillus pyocyaneus*, *Bacillus coli*). Source: FAN MA *Agave americana*. Ref: 1170.

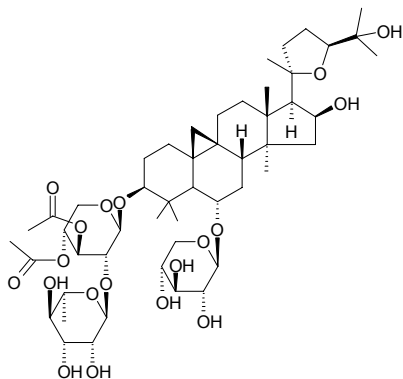
**22046 Trojanoside I**

3-*O*- $\beta$ -(2',3'-Di-*O*-acetyl)-*D*-xylopyranosyl-6-*O*- $\beta$ -*D*-glucopyranosyl-16-*O*-acetoxy-20(*R*),24(*S*)-epoxycycloartane-3 $\beta$ ,6 $\alpha$ ,16 $\beta$ ,25-tetrol  $C_{47}H_{74}O_{17}$  (911.10). White powder. Source: TE LUO YI HUANG QI *Astragalus trojanus* (aerial parts). Ref: 4145.

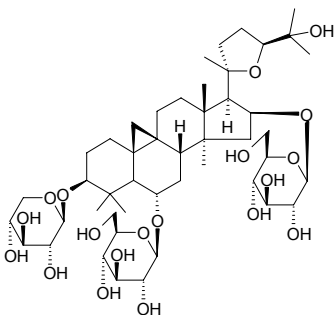


**22047 Trojanoside J**

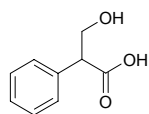
3-*O*-[ $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -(3',4'-di-*O*-acetyl)-*D*-xylopyranosyl]-6-*O*- $\beta$ -*D*-xylopyranosyl-20(*R*),24(*S*)-epoxycycloartane-3 $\beta$ ,6 $\alpha$ ,16 $\beta$ ,25-tetrol C<sub>50</sub>H<sub>80</sub>O<sub>19</sub> (985.18). White powder. Source: TE LUO YI HUANG QI *Astragalus trojanus* (aerial parts). Ref: 4145.

**22048 Trojanoside K**

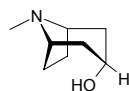
3-*O*- $\beta$ -*D*-Xylopyranosyl-6,16-di-*O*- $\beta$ -*D*-glucopyranosyl-20(*R*),24(*S*)-epoxycycloartane-3 $\beta$ ,6 $\alpha$ ,16 $\beta$ ,25-tetrol C<sub>47</sub>H<sub>78</sub>O<sub>19</sub> (947.13). White powder. Source: TE LUO YI HUANG QI *Astragalus trojanus* (aerial parts). Ref: 4145.

**22049 Tropic acid**

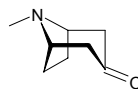
[529-64-6] C<sub>9</sub>H<sub>10</sub>O<sub>3</sub> (166.18). mp ( $\pm$ ) 118°C. Source: OU MAN TUO LUO GEN *Datura stramonium*. Ref: 6, 660.

**22050 Tropine**

3-Tropanol [120-29-6] C<sub>8</sub>H<sub>15</sub>NO (141.21). mp 63°C, bp 229°C. Source: LANG DANG GEN *Hyoscyamus niger*, MAN TUO LUO GEN *Datura metel*, MAN TUO LUO ZI *Datura metel*, MAO MAN TUO LUO GEN *Datura innoxia*, SAI LANG DANG *Anisodus luridus*, ZANG QIE *Anisodus tanguticus* [Syn. *Scopolia tangutica*]. Ref: 6, 660.

**22051 Tropinone**

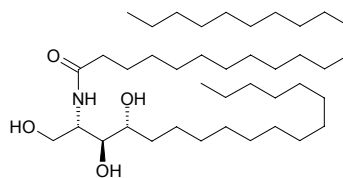
[532-24-1] C<sub>8</sub>H<sub>13</sub>NO (139.20). mp 42°C, bp 224~225°C. Source: JIA SUAN JIANG *Nicandra physaloides*. Ref: 6.

**22052 Tropolone**

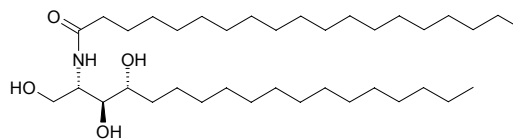
Purpurocatechol; 2-Hydroxy-2,4,6-cycloheptatrien-1-one [533-75-5] C<sub>7</sub>H<sub>6</sub>O<sub>2</sub> (122.12). mp 49~50°C. Source: SHAN CI BAI *Juniperus taiwaniana*. Ref: 6.

**22053 Trufflesphingolipid A**

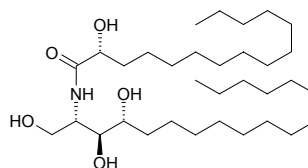
C<sub>40</sub>H<sub>81</sub>NO<sub>4</sub> (640.10). Source: YIN DU KUAI JUN *Tuber indicum*. Ref: 2075.

**22054 Trufflesphingolipid B**

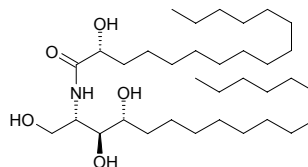
C<sub>37</sub>H<sub>75</sub>NO<sub>4</sub> (598.01). Source: YIN DU KUAI JUN *Tuber indicum*. Ref: 2075.

**22055 Trufflesphingolipid C**

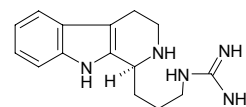
C<sub>33</sub>H<sub>67</sub>NO<sub>5</sub> (557.91). Pharm: Phospholipase PLA<sub>2</sub>inhibitor. Source: YIN DU KUAI JUN *Tuber indicum*. Ref: 2075.

**22056 Trufflesphingolipid D**

C<sub>34</sub>H<sub>69</sub>NO<sub>5</sub> (571.93). Source: YIN DU KUAI JUN *Tuber indicum*. Ref: 2075.

**22057 Trypargine**

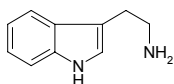
C<sub>15</sub>H<sub>21</sub>N<sub>5</sub> (271.37). Pharm: LD (mus, iv) = 10mg/kg. Source: African frog. Ref: 658.



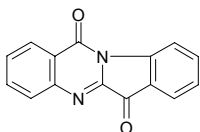


**22058 Tryptamine**

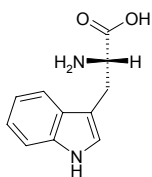
3-(2-Aminoethyl)indole [61-54-1]  $C_{10}H_{12}N_2$  (160.22). mp 116–117°C, bp 137°C/0.15mmHg. **Pharm:** Precursor of indoleacetic acid. **Source:** CHAN SU *Bufo bufo gargarizans*; *Bufo melanostictus*, FAN QIE *Lycopersicon esculentum*, HUANG GUA *Cucumis sativus*, MA LING SHU *Solanum tuberosum*, MAI YA *Hordeum vulgare*, YAN CAO *Nicotiana tabacum*, YU SHU SHU *Zea mays*. **Ref:** 2, 658.

**22059 Tryptanthrine**

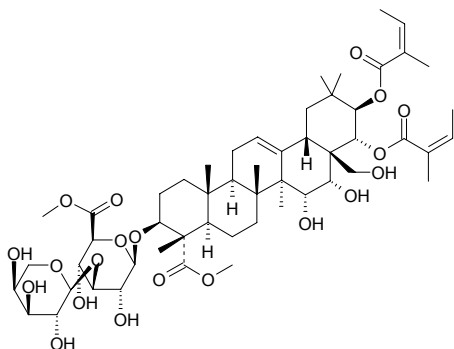
[13220-57-0]  $C_{15}H_8N_2O_2$  (248.24). **Pharm:** Antibacterial (*Bacillus subtilis*, MIC = 25 µg/mL, *Bacillus* spp.); antifungal (*Trichophyton* spp., MIC = 3.1 µg/mL, cutaneous fungi); anti-inflammatory (inhibits synthesis of prostaglandin and leukotriene; iNOS inhibitor)<sup>[4986]</sup>. **Source:** BAN LAN GEN *Isatis indigotica*, DA QING YE *Isatis indigotica*, LIAO LAN GUO *Polygonum tinctorium*, MA LAN GEN *Baphicacanthus cusia* [Syn. *Strobilanthes cusia*], OU ZHOU SONG LAN *Isatis tinctoria*, OU ZHOU SONG LAN *Isatis tinctoria* (leaf). **Ref:** 2, 658, 660, 4967, 5001.

**22060 Tryptophan**

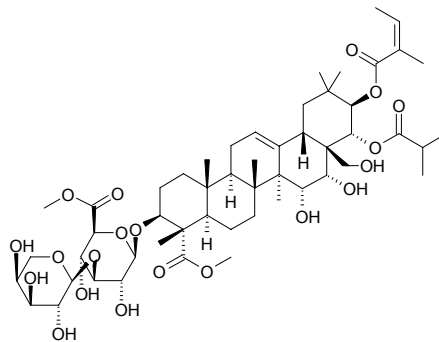
2-Amino-3-(3-indolyl)propanoic acid [73-22-3]  $C_{11}H_{12}N_2O_2$  (204.23). mp (+) 275–282°C, (–) 289°C (dec), (±) 283–285°C. **Pharm:** Antidepressant; essential amino acid. **Source:** CAN JIAN *Bombyx mori*, CANG ZHU *Atractylodes lancea*, DA QING YE *Isatis indigotica*, GUI GAI *Coprinus atramentarius*, GOU QI ZI *Lycium chinense*, HAI FENG TENG *Piper kadsura* [Syn. *Piper futokadsura*], HU ZHANG *Polygonum cuspidatum*. **Ref:** 6, 658, 660, 1521, 2537, 4186, 4348.

**22061 TR-saponin A**

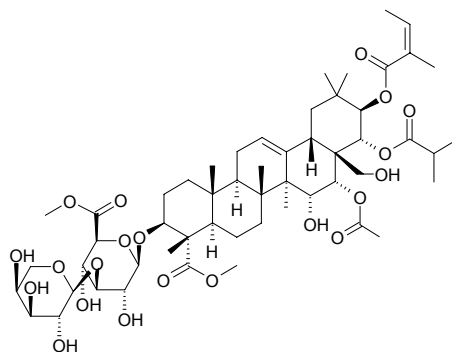
$C_{53}H_{80}O_{20}$  (1037.22). **Source:** PU ER CHA *Camellia sinensis* var. *assamica*. **Ref:** 768.

**22062 TR-saponin B**

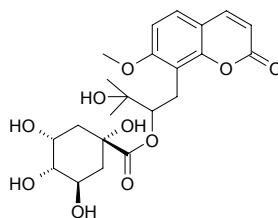
$C_{53}H_{82}O_{20}$  (1039.23). **Source:** PU ER CHA *Camellia sinensis* var. *assamica*. **Ref:** 768.

**22063 TR-saponin C**

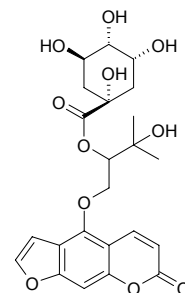
$C_{53}H_{84}O_{21}$  (1081.27). **Source:** PU ER CHA *Camellia sinensis* var. *assamica*. **Ref:** 768.

**22064 Tschimganic ester A**

$C_{22}H_{28}O_{10}$  (452.46).  $[\alpha]_D^{25} = -5.0^\circ$  ( $c = 0.2$ , MeOH). **Source:** *Prangos tschimganica* (aerial parts). **Ref:** 3552.

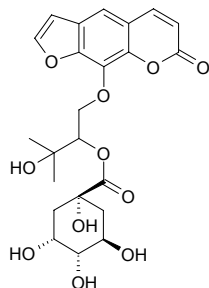
**22065 Tschimganic ester B**

$C_{23}H_{26}O_{11}$  (478.46).  $[\alpha]_D^{25} = -8.0^\circ$  ( $c = 0.2$ , MeOH). **Source:** *Prangos tschimganica* (aerial parts). **Ref:** 3552.

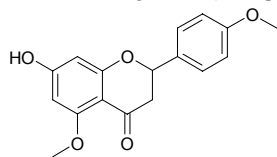


**22066 Tschimganic ester C**

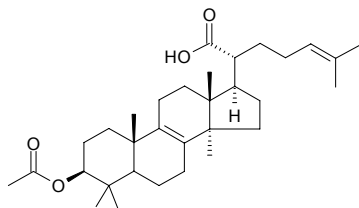
$C_{23}H_{26}O_{11}$  (478.46).  $[\alpha]_D^{25} = -8.4^\circ$  ( $c = 0.2$ , MeOH). Source: *Prangos tschimganica* (aerial parts). Ref: 3552.

**22067 Tsugafolin**

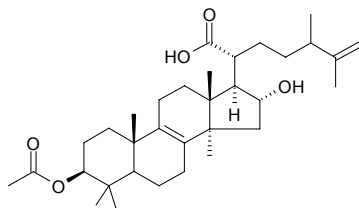
7-Hydroxy-5,4'-dimethoxyflavanone  $C_{17}H_{16}O_5$  (300.31). Prisms (EtOH), mp  $203^\circ\text{C}$  (lit. mp  $208\text{--}210^\circ\text{C}$ ),  $[\alpha]_D^{19.9} = -32.2^\circ$  ( $c = 0.310$ ,  $C_5H_5N$ );  $[\alpha]_D^{23} = +7.0^\circ$  ( $c = 0.46$ ,  $C_5H_5N$ ). Source: CHANG YE GE NA XIANG *Goniothalamus gardneri* (aerial parts). Ref: 5096.

**22068 Tsugaric acid A**

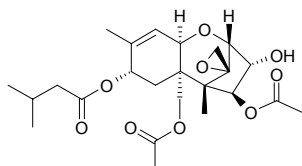
$C_{32}H_{50}O_4$  (498.75). mp  $181\text{--}182^\circ\text{C}$ ,  $[\alpha]_D = +6^\circ$ . Source: LING ZHI *Ganoderma lucidum*. Ref: 2235, 4045.

**22069 Tsugaric acid B**

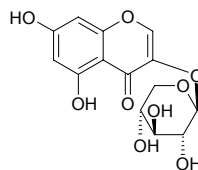
$C_{33}H_{52}O_5$  (528.78). mp  $240\text{--}242^\circ\text{C}$ ,  $[\alpha]_D = +6^\circ$ . Source: LING ZHI *Ganoderma lucidum*. Ref: 2235, 4045.

**22070 T2 Toxin**

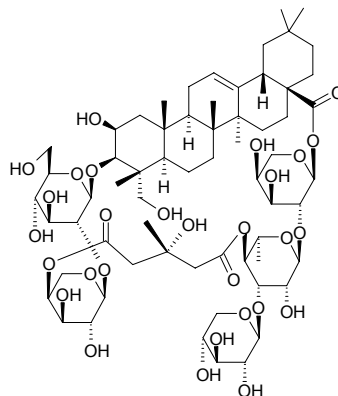
$C_{24}H_{34}O_9$  (466.54). Pharm: Irritant (to skin); supertoxic agent. Source: *Fusarium tricinctum*. Ref: 658.

**22071 3,5,7-Trihydroxychromone 3-O-β-D-xylopyranoside**

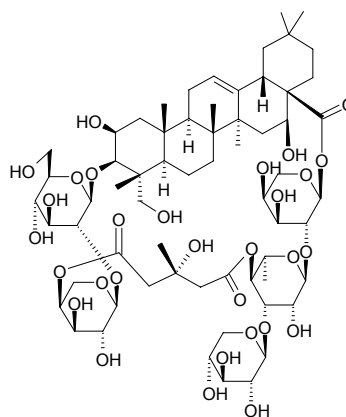
$C_{14}H_{14}O_9$  (326.26). Achromatous prisms, mp  $226\text{--}228^\circ\text{C}$ ,  $[\alpha]_D^{25} = -81.4^\circ$  ( $c = 0.07$ , MeOH). Source: MA YIN HUA *Rhododendron ovatum* [Syn. *Rhododendron lamprophyllum*; *Azalea ovata*]. Ref: 4859.

**22072 Tubeimoside A**

Tubeimoside I  $C_{63}H_{98}O_{29}$  (1319.47). Pharm: Antineoplastic (*in vivo*); cytotoxic (strong activity against cancer and cancer promoter). Source: JIA BEI MU *Bolbostemma paniculatum* (tuber: content scope of 10 batch samples =  $0.84\%\text{--}2.01\%$ <sup>[5501, 5508]</sup>; mean content =  $1.204\%$ <sup>[5508]</sup>). Ref: 658, 5501, 5508.

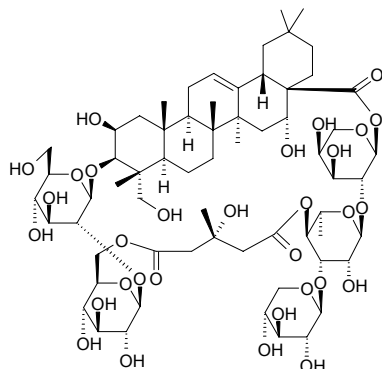
**22073 Tubeimoside B**

Tubeimoside II  $C_{63}H_{98}O_{30}$  (1335.47). Source: JIA BEI MU *Bolbostemma paniculatum*. Ref: 5501.

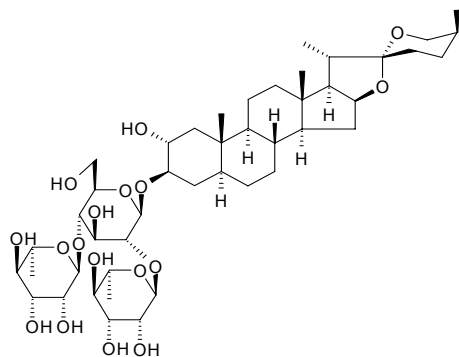


**22074 Tubeimoside C**

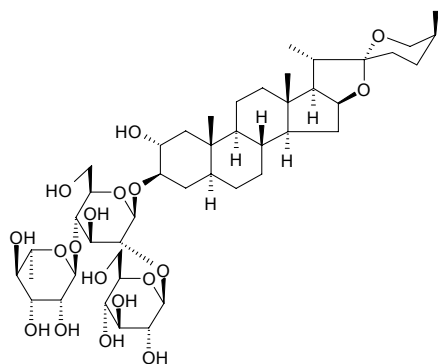
Tubeimoside III C<sub>64</sub>H<sub>100</sub>O<sub>31</sub> (1365.49). Source: JIA BEI MU *Bolbostemma paniculatum*. Ref: 5501.

**22075 Tubeimoside D**

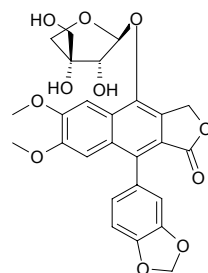
C<sub>45</sub>H<sub>74</sub>O<sub>17</sub> (887.08). Amorphous solid,  $[\alpha]_D^{24} = -31.2$  ( $c = 0.33$ , MeOH). Source: JIA BEI MU *Bolbostemma paniculatum*, JIU CAI *Allium tuberosum*. Ref: 692, 5501.

**22076 Tubeimoside E**

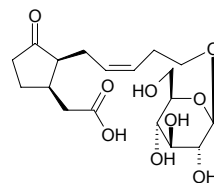
C<sub>45</sub>H<sub>74</sub>O<sub>18</sub> (903.08). Amorphous solid,  $[\alpha]_D^{24} = -29.5^\circ$  ( $c = 0.30$ , MeOH). Source: JIA BEI MU *Bolbostemma paniculatum*, JIU CAI *Allium tuberosum*. Ref: 692, 5501.

**22077 Tuberculatin**

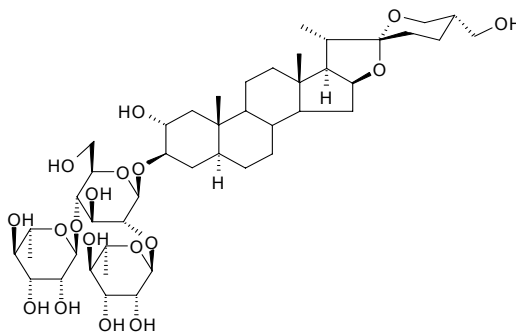
[90706-10-8] C<sub>26</sub>H<sub>24</sub>O<sub>11</sub> (512.47). Pharm: Cytotoxic (hmn LoVo Cell Line *in Vitro*, IC<sub>50</sub> = (13.92±1.26)μl/mL)<sup>[4206]</sup>; cytotoxic (*in vitro*, ED<sub>50</sub> = 0.0019μg/mL; Hep3B, ED<sub>50</sub> = 0.014μg/mL, control 5-Fluorouracil, ED<sub>50</sub> = 0.0715μg/mL; SiHa, ED<sub>50</sub> = 0.12μg/mL, control Actinomycin D, ED<sub>50</sub> = 0.00081μg/mL; HepG2, ED<sub>50</sub> = 0.040μg/mL, control 5-Fluorouracil, ED<sub>50</sub> = 0.033μg/mL; HT29, ED<sub>50</sub> = 0.29μg/mL, control 5-Fluorouracil, ED<sub>50</sub> = 0.074μg/mL; HCT116, ED<sub>50</sub> = 0.28μg/mL, control 5-Fluorouracil, ED<sub>50</sub> = 0.48μg/mL; MCF7, ED<sub>50</sub> = 0.97μg/mL; MCF7-ras, ED<sub>50</sub> = 0.090μg/mL)<sup>[4612]</sup>; enhances TNF-α formation (mouse macrophage-like TRAW264.7 cells, stimulated by LPS, strong activity)<sup>[4612]</sup>. Source: JUE CHUANG *Rostellularia procumbens* [Syn. *Justicia procumbens*] (whole herb: yield = 0.0004%dw)<sup>[4612]</sup>, LIU ZHUANG DAN YE YUN XIANG *Ruta tuberculata* [Syn. *Haplophyllum tuberculatum*], *Haplophyllum patavinum* (shoot). Ref: 1521, 4206, 4612.

**22078 Tuberonic acid glucoside**

C<sub>18</sub>H<sub>28</sub>O<sub>9</sub> (388.42). Source: YOU GAN YE *Phyllanthus emblica* (leaf and branch). Ref: 4205.

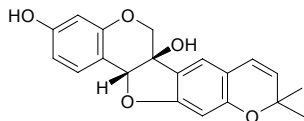
**22079 Tuberoside A**

(2α,3β,5α,25S)-2,3,27-Trihydroxyspirosterane 3-O-α-L-rhamnopyranoyl-(1→2)-O-[α-L-rhamnopyranoyl-(1→4)]-β-D-glucopyranoside C<sub>45</sub>H<sub>74</sub>O<sub>18</sub> (903.08). Amorphous powder, mp 292~293°C,  $[\alpha]_D^{25} = -33^\circ$  ( $c = 0.02$ , MeOH). Source: JIU CAI *Allium tuberosum* (seed). Ref: 5166.

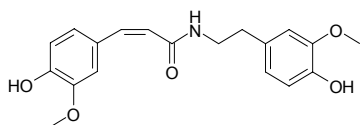


**22080 Tuberosin**

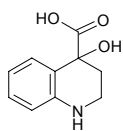
Kakkonein C<sub>20</sub>H<sub>18</sub>O<sub>5</sub> (338.36). Acicular crystals (chloroform–ethane), mp 213°C, [ $\alpha$ ]<sub>D</sub> = +216° (acetone). **Pharm:** Antibacterial (*Staphylococcus* sp., EC = 250µg/mL; *Mycobacterium tuberculosis*, EC = 125µg/mL); antifungal; anti-inflammatory (swollen foot caused by carrageenan). **Source:** GE GEN *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*], KUAI JING GE *Pueraria tuberosa*, MA LING SHU *Solanum tuberosum*. **Ref:** 2, 661.

**22081 Tuberosine A**

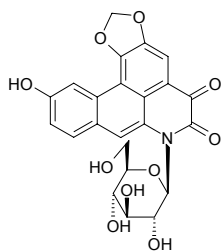
*N-cis-Feruloyl-3-methyl-dopamine* C<sub>19</sub>H<sub>21</sub>NO<sub>5</sub> (343.38). Colorless oil. **Source:** JIU ZI *Allium tuberosum*. **Ref:** 782.

**22082 Tuberosine B**

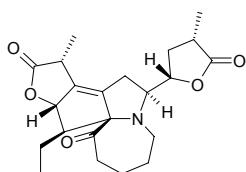
1,2,3,4-Tetrahydro-4-hydroxy-4-quinolin carboxylic acid C<sub>10</sub>H<sub>11</sub>NO<sub>3</sub> (193.20). Yellowish powder, [ $\alpha$ ]<sub>D</sub><sup>17</sup> = +3.65° (*c* = 0.62, acetone). **Source:** JIU ZI *Allium tuberosum*. **Ref:** 878.

**22083 Tuberosinone-N-β-glucoside**

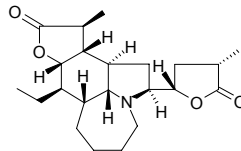
C<sub>23</sub>H<sub>19</sub>NO<sub>10</sub> (469.41). **Source:** KUAI JING MA DOU LING *Aristolochia tuberosa*. **Ref:** 660.

**22084 Tuberostemoenone**

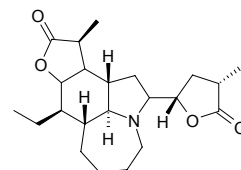
C<sub>22</sub>H<sub>29</sub>NO<sub>5</sub> (387.48). Colorless oleaginous substance. **Source:** BAI BU *Stemona tuberosa*. **Ref:** 673.

**22085 Tuberostemonine**

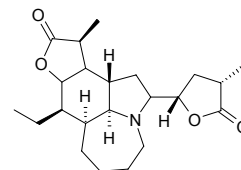
[6879-01-2] C<sub>22</sub>H<sub>33</sub>NO<sub>4</sub> (375.51). mp 86–88°C. **Source:** BAI BU *Stemona tuberosa* (in 1934, the compound was isolated from the plant)<sup>[5505]</sup>, ZHI LI BAI BU *Stemona sessilifolia*. **Ref:** 6, 660, 5505.

**22086 Tuberostemonine H**

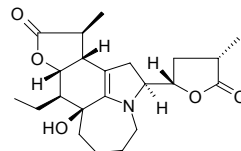
C<sub>22</sub>H<sub>33</sub>NO<sub>4</sub> (375.51). mp 183–185°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +77.6° (*c* = 0.1, MeOH). **Pharm:** Antitussive (guinea pig cough model, 133µmol/kg ip, cough InRt = 57%, *p* < 0.05). **Source:** BAI BU *Stemona tuberosa*. **Ref:** 5463.

**22087 Tuberostemonine J**

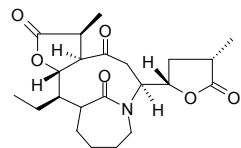
C<sub>22</sub>H<sub>33</sub>NO<sub>4</sub> (375.51). mp 180–182°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +36.4° (*c* = 0.1, MeOH). **Pharm:** Antitussive (guinea pig cough model, 133µmol/kg ip, cough InRt = 45%, *p* < 0.05). **Source:** BAI BU *Stemona tuberosa*. **Ref:** 5463.

**22088 Tuberostemonol**

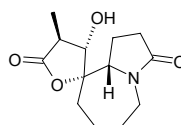
C<sub>22</sub>H<sub>31</sub>NO<sub>5</sub> (389.50). **Source:** BAI BU *Stemona tuberosa*. **Ref:** 660.

**22089 Tuberostemonone**

C<sub>22</sub>H<sub>31</sub>NO<sub>6</sub> (405.50). Colorless prismatic crystals. **Source:** BAI BU *Stemona tuberosa*. **Ref:** 660, 673.

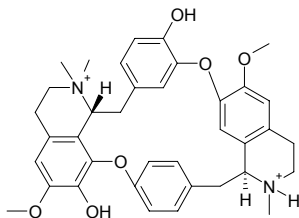
**22090 Tuberostemospirine**

C<sub>13</sub>H<sub>19</sub>NO<sub>4</sub> (253.30). **Source:** BAI BU *Stemona tuberosa*. **Ref:** 660.

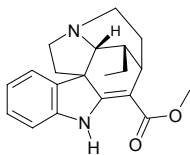


**22091 (+)-Tubocurarine**

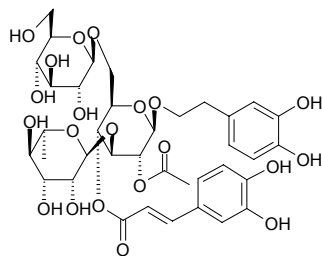
$C_{37}H_{42}N_2O_6^{2+}$  (610.76). **Pharm:** Skeletal muscle relaxant. **Source:** NAN MEI FANG JI *Chondrodendron tomentosum*. **Ref:** 658, 1521.

**22092 20(S)-Tubotaiwine**

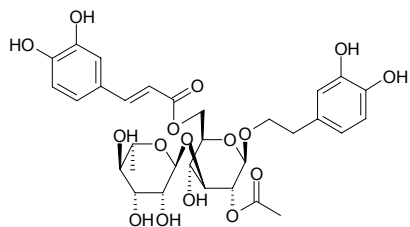
$C_{20}H_{24}N_2O_2$  (324.43). **Source:** XIANG PI MU *Alstonia scholaris* (leaf). **Ref:** 5283.

**22093 Tubuloside A**

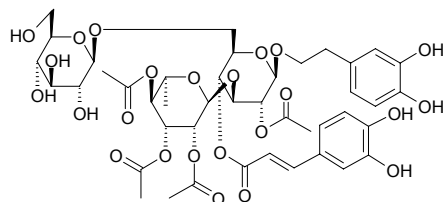
$C_{37}H_{48}O_{21}$  (828.78). **Source:** ROU CONG RONG *Cistanche deserticola*, GUAN HUA ROU CONG RONG *Cistanche tubulosa*. **Ref:** 2448.

**22094 Tubuloside B**

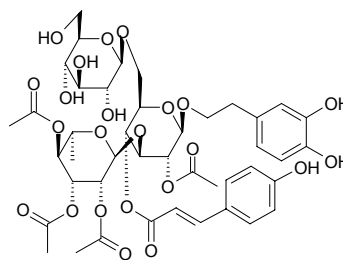
[112516-04-8]  $C_{31}H_{38}O_{16}$  (666.64). **Pharm:** inhibits onset of senility (rat, hepatic microsome,  $Fe^{2+}/VC$ -induced lipid peroxidation  $IC_{50} = 8.6\text{mmol/L}$ ,  $Fe^{3+}/ADP/NADPH$ -induced lipid peroxidation  $IC_{50} = 28.0\text{mmol/L}$ ; free radical scavenger). **Source:** ROU CONG RONG *Cistanche deserticola*. **Ref:** 717, 1707.

**22095 Tubuloside C**

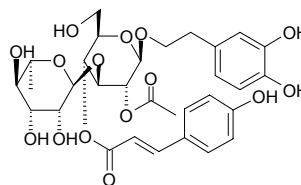
$C_{43}H_{54}O_{24}$  (954.90). **Source:** GUAN HUA ROU CONG RONG *Cistanche tubulosa*. **Ref:** 2448.

**22096 Tubuloside D**

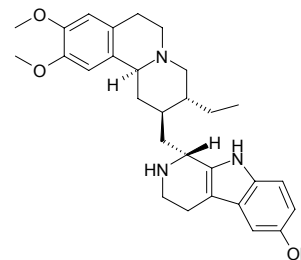
$C_{43}H_{54}O_{23}$  (938.90). **Source:** GUAN HUA ROU CONG RONG *Cistanche tubulosa*. **Ref:** 2448.

**22097 Tubuloside E**

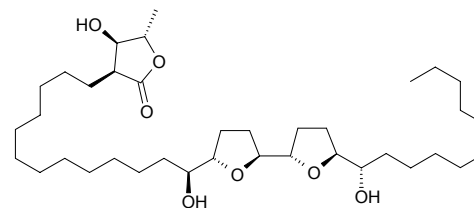
$C_{31}H_{38}O_{15}$  (650.64). **Source:** GUAN HUA ROU CONG RONG *Cistanche tubulosa*. **Ref:** 2448.

**22098 Tubulosine**

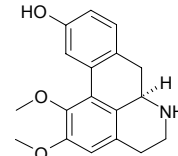
$C_{29}H_{37}N_3O_3$  (475.64). **Pharm:** Antiamebic; antineoplastic; supertoxic agent. **Source:** TU GEN *Cephaelis ipecacuanha*. **Ref:** 658.

**22099 Tucumanin**

$C_{37}H_{68}O_7$  (624.95). **Wax.** **Pharm:** Mitochondrial complex I selective inhibitor (NADH oxidase  $IC_{50} = (0.57 \pm 0.07)\text{nmol/L}$ ,  $p < 0.001$ , control Rotenone,  $IC_{50} = (5.10 \pm 0.09)\text{nmol/L}$ ). **Source:** MAO YE FAN LI ZHI *Annona cherimolia* (seed). **Ref:** 5024.

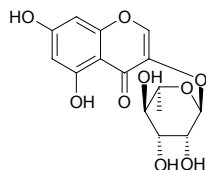
**22100 Tuduranine**

$C_{18}H_{19}NO_3$  (297.36). **Source:** QING FENG TENG *Sinomenium acutum*. **Ref:** 6.



**22101 Tufulingoside**

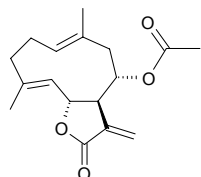
5,7-Dihydroxy-chromone-3- $\alpha$ -L-rhamnopyranoside C<sub>15</sub>H<sub>16</sub>O<sub>9</sub> (340.29). Yellowish clustered crystals (MeOH-CHCl<sub>3</sub>), mp 227~229°C. Source: TU FU LING *Smilax glabra*. Ref: 499.

**22102 Tulipalin**

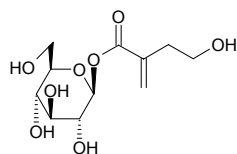
Tulipalin A [547-65-9] C<sub>5</sub>H<sub>6</sub>O<sub>2</sub> (98.10). mp 85~86°C. Source: YU JIN XIANG *Tulipa gesneriana*. Ref: 5.

**22103 Tulipinolide**

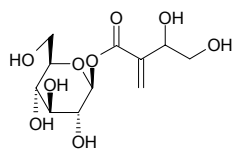
[24164-12-3] C<sub>17</sub>H<sub>22</sub>O<sub>4</sub> (290.36). mp 181°C (dec). Pharm: Cytotoxic (KB, ED<sub>50</sub> = 0.46µg/mL). Source: BEI MEI E ZHANG QIU *Liriodendron tulipifera*, MO XI GE HAO *Artemisia mexicana* var. *angustifolia*, SHE TAI *Conocephalum conicum*, *Pyrethrum* sp. Ref: 5.

**22104 Tuliposide A**

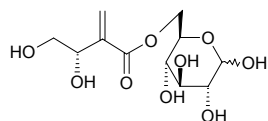
C<sub>11</sub>H<sub>18</sub>O<sub>8</sub> (278.26). Pharm: Allergen; antifungal. Source: YU JIN XIANG ZA JIAO ZHONG *Tulipa hybrida*, YU JIN XIANG *Tulipa gesneriana*. Ref: 6, 658.

**22105 Tuliposide B**

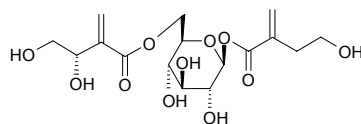
C<sub>11</sub>H<sub>18</sub>O<sub>9</sub> (294.26). Pharm: Allergen; antifungal. Source: YU JIN XIANG ZA JIAO ZHONG *Tulipa hybrida*, YU JIN XIANG *Tulipa gesneriana*. Ref: 6, 658.

**22106 6-Tuliposide B**

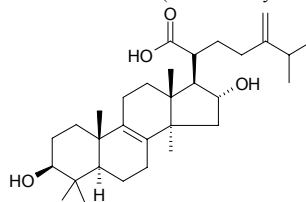
6-((S)-3,4-Dihydroxy-2-methylenebutanoate)-D-glucopyranose C<sub>11</sub>H<sub>18</sub>O<sub>9</sub> (294.26). Syrup. Source: TU ER QI YU JIN XIANG *Tulipa turkestanii*. Ref: 2330.

**22107 Tuliposide F**

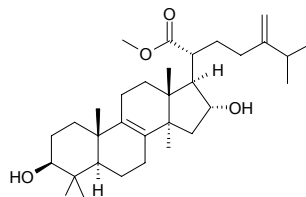
1-(4-Hydroxy-2-methylenebutanoate)-6-((S)-3,4-dihydroxy-2-methylenebutanoate)- $\beta$ -D-glucopyranose C<sub>16</sub>H<sub>24</sub>O<sub>11</sub> (392.36). Syrup. Source: TU ER QI YU JIN XIANG *Tulipa turkestanii*. Ref: 2330.

**22108 Tumulosic acid**

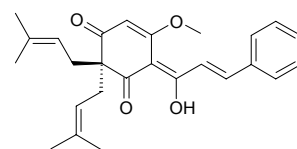
C<sub>31</sub>H<sub>50</sub>O<sub>4</sub> (486.74). mp 306°C (dec). Pharm: Antineoplastic (EBV-EA induced by TPA, mol ratio/TPA = 1000, relative percentage of EBV-EA = 0% (positive control value 32pmol, 20ng TPA = 100%), viability of Raji cells = 70%; reference compound  $\beta$ -Carotene, relative percentage = 8.6%)<sup>[4616]</sup>. Source: FU LING *Poria cocos* (sclerotium: yield = 0.00025%dw)<sup>[4616]</sup>. Ref: 2, 6, 4616.

**22109 Tumulosic acid methyl ester**

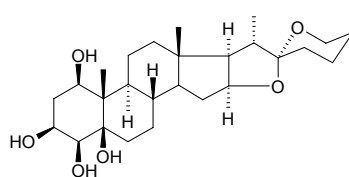
C<sub>32</sub>H<sub>52</sub>O<sub>4</sub> (500.77). Source: FU LING *Poria cocos*. Ref: 660.

**22110 Tunicatachalcone**

3',3'-Di-( $\gamma,\gamma$ -dimethylallyl)-2',4'-di-oxo-enolchalcone C<sub>26</sub>H<sub>30</sub>O<sub>4</sub> (406.53). mp 68~69°C. Source: BAO MO HUI MAO DOU *Tephrosia tunicata*. Ref: 5109.

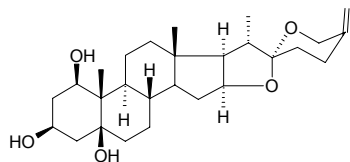
**22111 Tupichigenin D**

Spirost-25(27)-en-1 $\beta$ ,3 $\alpha$ ,4 $\beta$ ,5 $\beta$ -tetraol C<sub>27</sub>H<sub>42</sub>O<sub>6</sub> (462.63). White amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>24</sup> = -83.6° (c = 0.16, CHCl<sub>3</sub>). Source: KAI KOU JIAN *Tupistra chinensis* (underground part). Ref: 4676.

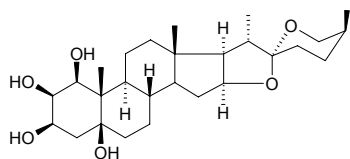


**22112 Tupichigenin E**

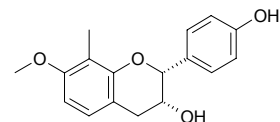
Spirost-25(27)-en-1 $\beta$ ,3 $\beta$ ,5 $\beta$ -triol C<sub>27</sub>H<sub>42</sub>O<sub>5</sub> (446.63). White amorphous powder,  $[\alpha]_D^{24} = -24.4^\circ$  ( $c = 0.18$ , CHCl<sub>3</sub>). Source: KAI KOU JIAN *Tupistra chinensis* (underground part). Ref: 4676.

**22113 Tupichigenin F**

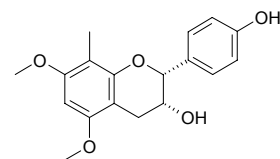
(25S)-Spirost-1 $\beta$ ,2 $\beta$ ,3 $\beta$ ,5 $\beta$ -tetraol C<sub>27</sub>H<sub>44</sub>O<sub>6</sub> (464.65). White amorphous powder,  $[\alpha]_D^{24} = -61.8^\circ$  ( $c = 0.17$ , CHCl<sub>3</sub>). Source: KAI KOU JIAN *Tupistra chinensis* (underground part). Ref: 4676.

**22114 Tupichinol A**

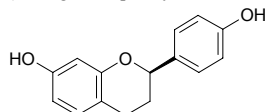
(2*R*,3*R*)-3,4'-Dihydroxy-7-methoxy-8-methylflavan C<sub>17</sub>H<sub>18</sub>O<sub>4</sub> (286.33). Colorless prisms (EtOAc), mp 141~142°C,  $[\alpha]_D^{24} = -40.1^\circ$  ( $c = 0.034$ , MeOH). Pharm: Cytotoxic (*in vitro*, hmh gastric tumor cell NUGC, 50 $\mu$ mol/L, InRt = 80%)<sup>[4676]</sup>. Source: KAI KOU JIAN *Tupistra chinensis* (underground part: yield = 0.083%dw). Ref: 4676.

**22115 Tupichinol B**

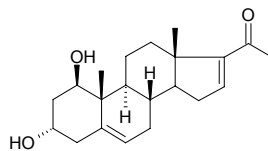
(2*R*,3*R*)-3,4'-Dihydroxy-5,7-dimethoxy-8-methylflavan C<sub>18</sub>H<sub>20</sub>O<sub>5</sub> (316.36). Colorless prisms (CHCl<sub>3</sub>-MeOH), mp 158~159°C,  $[\alpha]_D^{24} = -64.5^\circ$  ( $c = 0.048$ , MeOH). Source: KAI KOU JIAN *Tupistra chinensis* (underground part: yield = 0.066%dw). Ref: 4676.

**22116 Tupichinol C**

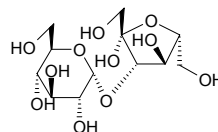
(2*R*)-7,4'-Dihydroxyflavan C<sub>15</sub>H<sub>14</sub>O<sub>3</sub> (242.28). Colorless plates,  $[\alpha]_D^{24} = +190.0^\circ$  ( $c = 0.04$ , CHCl<sub>3</sub>). Source: KAI KOU JIAN *Tupistra chinensis* (underground part: yield = 0.007%dw). Ref: 4676.

**22117 Tupipregnenolone**

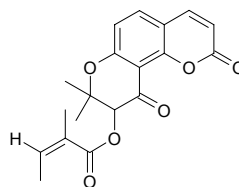
1 $\beta$ ,3 $\alpha$ -Dihydroxypregna-5,16-dien-20-one C<sub>21</sub>H<sub>30</sub>O<sub>3</sub> (330.47). White amorphous solid,  $[\alpha]_D^{24} = -19.3^\circ$  ( $c = 0.88$ , CHCl<sub>3</sub>). Source: KAI KOU JIAN *Tupistra chinensis* (underground part). Ref: 4676.

**22118 Turanose**

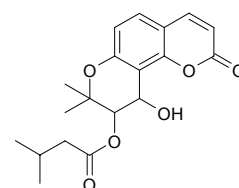
3-*O*- $\alpha$ -D-Glucopyranosyl- $\beta$ -D-fructopyranose [58166-22-6] C<sub>12</sub>H<sub>22</sub>O<sub>11</sub> (342.30). mp 157°C (dec). Source: KUAN YE XIANG PU *Typha latifolia*. Ref: 6, 660.

**22119 Turgeniifolin A**

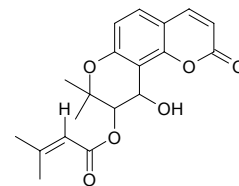
C<sub>19</sub>H<sub>18</sub>O<sub>6</sub> (342.35). Source: QIAN HU *Angelica decursiva* [Syn. *Peucedanum decursivum*]. Ref: 9.

**22120 Turgeniifolin B**

C<sub>19</sub>H<sub>22</sub>O<sub>6</sub> (346.38). Colorless needles (petroleum ether), mp 132~134°C,  $[\alpha]_D^{12} = 0^\circ$  ( $c = 0.51$ , CHCl<sub>3</sub>). Source: QIAN HU *Angelica decursiva* [Syn. *Peucedanum decursivum*]. Ref: 9.

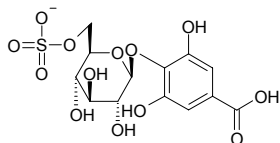
**22121 Turgeniifolin C**

C<sub>19</sub>H<sub>20</sub>O<sub>6</sub> (344.37). Colorless needles (petroleum ether), mp 202~203°C,  $[\alpha]_D^{12} = 0^\circ$  ( $c = 0.23$ , CHCl<sub>3</sub>). Source: QIAN HU *Angelica decursiva* [Syn. *Peucedanum decursivum*]. Ref: 9.

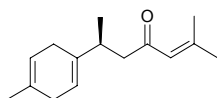


**22122 Turgorin**

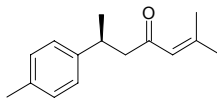
$C_{13}H_{15}O_{13}S^-$  (411.33). **Pharm:** Phytohormone. **Source:** CI HUAI HUA *Robinia pseudoacacia*, HAN XIU CAO *Mimosa pudica*, KA LUO JIN HE HUAN *Acacia karroo*, SAN CI ZAO JIA *Gleditsia triacanthos*, SHAN ZUO JIANG CAO *Oxalis acetosella*. **Ref:** 658.

**22123 Turmerone**

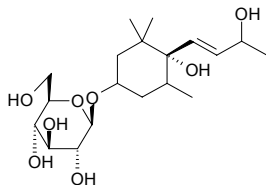
$\beta$ -Turmerone  $C_{15}H_{22}O$  (218.34). bp 159–160°C/10mmHg. **Pharm:** Anti-inflammatory (RAW264.7 cells, inhibits LPS-induced PGE<sub>2</sub> production)<sup>[44151]</sup>. **Source:** JIANG HUANG *Curcuma longa*, YU JIN *Curcuma aromatica*, PING E SHU *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*]. **Ref:** 6, 660, 4415.

**22124 (+)-*ar*-Turmerone**

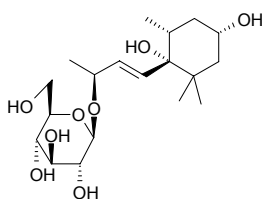
$C_{15}H_{20}O$  (216.33). **Pharm:** NO production inhibitor (mus peritoneal macrophages, induced by LPS, 100 $\mu$ mol/L, InRt = (52.9 $\pm$ 2.8)%), control *L*-NMMA, 100 $\mu$ mol/L, InRt = (79.2 $\pm$ 0.9)%,  $p < 0.01$ )<sup>[4150]</sup>; anti-inflammatory (RAW264.7 cells, inhibits LPS-induced PGE<sub>2</sub> production)<sup>[44151]</sup>. **Source:** JIANG HUANG *Curcuma longa*, PING E SHU *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*]. **Ref:** 660, 4150, 4415.

**22125 Turpinionoside A**

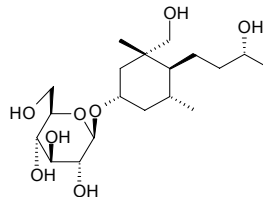
(3*S*,5*R*,6*S*,9*S*)-3,6,9-Trihydroxymegastigman-7-ene 3-*O*- $\beta$ -D-glucopyranoside  $C_{19}H_{34}O_8$  (390.48). Amorphous powder,  $[\alpha]_D^{22} = -38.4^\circ$  ( $c = 0.86$ , MeOH). **Source:** SAN CHU SHAN XIANG YUAN *Turpinia ternata* (leaf). **Ref:** 4188.

**22126 Turpinionoside B**

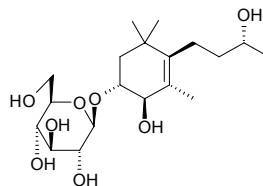
(3*S*,5*R*,6*S*,9*S*)-3,6,9-Trihydroxymegastigman-7-ene 9-*O*- $\beta$ -D-glucopyranoside  $C_{19}H_{34}O_8$  (390.48). Amorphous powder,  $[\alpha]_D^{22} = -76.3^\circ$  ( $c = 0.77$ , MeOH). **Source:** SAN CHU SHAN XIANG YUAN *Turpinia ternata* (leaf), YAO YONG HEI MIAN SHEN YE *Breynia officinalis* (leaf). **Ref:** 2583, 4188.

**22127 Turpinionoside C**

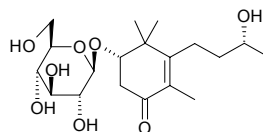
(1*S*,3*S*,5*R*,6*S*,9*R*)-3,9,12-Trihydroxymegastigmane 3-*O*- $\beta$ -D-glucopyranoside  $C_{19}H_{36}O_8$  (392.49). Amorphous powder,  $[\alpha]_D^{22} = -17.3^\circ$  ( $c = 0.87$ , MeOH). **Source:** SAN CHU SHAN XIANG YUAN *Turpinia ternata* (leaf). **Ref:** 4188.

**22128 Turpinionoside D**

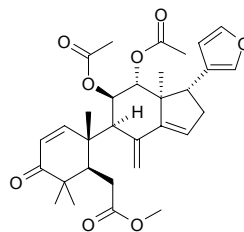
(3*S*,4*R*,9*R*)-3,4,6-Trihydroxymegastigman-5-ene 3-*O*- $\beta$ -D-glucopyranoside  $C_{19}H_{34}O_8$  (390.48). Amorphous powder,  $[\alpha]_D^{22} = -58.6^\circ$  ( $c = 0.43$ , MeOH). **Source:** SAN CHU SHAN XIANG YUAN *Turpinia ternata* (leaf). **Ref:** 4188.

**22129 Turpinionoside E**

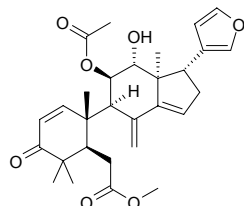
(2*S*,9*R*)-2,9-Dihydroxymegastigman-5-en-4-one 2-*O*- $\beta$ -D-glucopyranoside  $C_{19}H_{32}O_8$  (388.46). Amorphous powder,  $[\alpha]_D^{22} = -9.7^\circ$  ( $c = 0.21$ , MeOH). **Source:** SAN CHU SHAN XIANG YUAN *Turpinia ternata* (leaf). **Ref:** 4188.

**22130 Turraflorin A**

$C_{31}H_{38}O_8$  (538.64). White crystals, mp 142–144°C,  $[\alpha]_D = +17^\circ$  ( $c = 0.071$ ,  $CHCl_3$ ). **Source:** DUO HUA U LIAN *Turraea floribunda* (seed). **Ref:** 3819.

**22131 Turraflorin B**

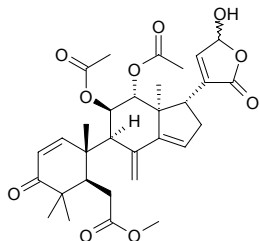
$C_{29}H_{36}O_7$  (496.61). White crystals, mp 139–142°C,  $[\alpha]_D = +89^\circ$  ( $c = 0.178$ ,  $CHCl_3$ ). **Source:** DUO HUA U LIAN *Turraea floribunda* (seed). **Ref:** 3819.



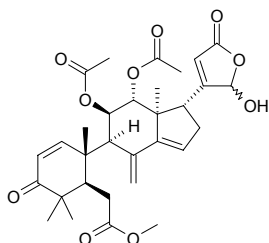


**22132 Turraflorin D**

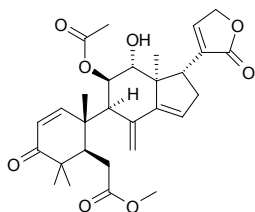
$C_{31}H_{38}O_{10}$  (570.64). Amorphous. Source: DUO HUA U LIAN *Turraea floribunda* (seed). Ref: 3819.

**22133 Turraflorin E**

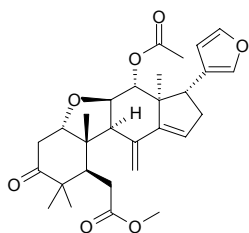
$C_{31}H_{38}O_{10}$  (570.64). Yellow amorphous. Source: DUO HUA U LIAN *Turraea floribunda* (seed). Ref: 3819.

**22134 Turraflorin F**

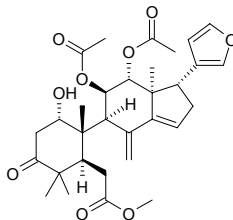
$C_{29}H_{36}O_8$  (512.61). Pale yellow amorphous,  $[\alpha]_D = +97^\circ$  ( $c = 0.092$ ,  $CHCl_3$ ). Source: DUO HUA U LIAN *Turraea floribunda* (seed). Ref: 3819.

**22135 Turraflorin G**

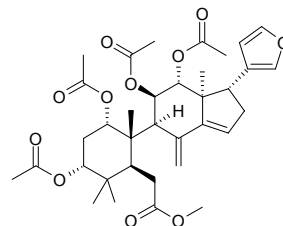
$C_{29}H_{36}O_7$  (496.61). White crystals, mp 122~124°C ( $CH_2Cl_2-CH_3OH$ ),  $[\alpha]_D = +77^\circ$  ( $c = 0.218$ ,  $CHCl_3$ ). Source: DUO HUA U LIAN *Turraea floribunda* (seed). Ref: 3819.

**22136 Turraflorin H**

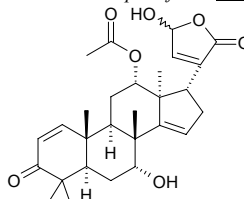
$C_{31}H_{40}O_9$  (556.66). Fine white crystals, mp 134~135°C,  $[\alpha]_D = +23^\circ$  ( $c = 0.119$ ,  $CHCl_3$ ). Source: DUO HUA U LIAN *Turraea floribunda* (seed). Ref: 3819.

**22137 Turraflorin I**

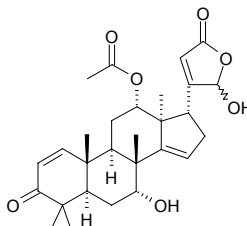
$C_{35}H_{46}O_{11}$  (642.75). Fine white crystals, mp 143~145°C ( $CH_2Cl_2-CH_3OH$ ),  $[\alpha]_D = +14^\circ$  ( $c = 0.074$ ,  $CHCl_3$ ). Source: DUO HUA U LIAN *Turraea floribunda* (seed). Ref: 3819.

**22138 Turraparvin A**

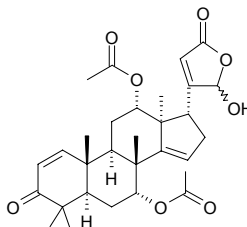
$C_{28}H_{36}O_7$  (484.59). White crystals, mp 108~110°C. Source: XIAO YE DU LIAN *Turraea parvifolia*. Ref: 2052.

**22139 Turraparvin B**

$C_{28}H_{36}O_7$  (484.59). White crystals, mp 142~144°C. Source: XIAO YE DU LIAN *Turraea parvifolia*. Ref: 2052.

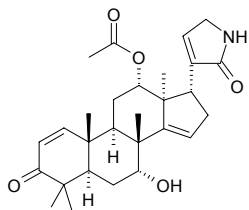
**22140 Turraparvin C**

$C_{30}H_{38}O_8$  (526.63). White crystals, mp 117~119°C. Source: XIAO YE DU LIAN *Turraea parvifolia*. Ref: 2052.

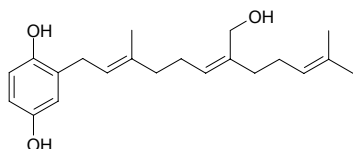


**22141 Turrarparvin D**

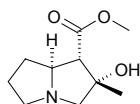
$C_{28}H_{37}NO_5$  (467.61). White crystals, mp 131~133°C. Source: XIAO YE DU LIAN *Turraea parvifolia*. Ref: 2052.

**22142 Turricolol E**

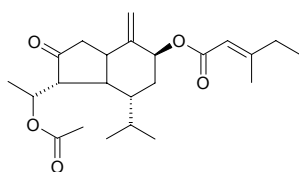
$C_{21}H_{30}O_3$  (330.47). Pharm: Dermatitic (causes contact dermatitis). Source: family Hydrophyllaceae spp. Ref: 658.

**22143 Tussilagine**

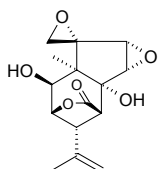
$C_{10}H_{17}NO_3$  (199.25). Source: KUAN DONG HUA *Tussilago farfara*. Ref: 660.

**22144 Tussilagone**

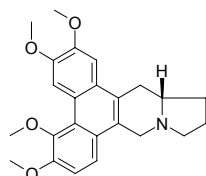
Tussilagin [80489-85-6]  $C_{23}H_{34}O_5$  (390.52). White pillar crystals, mp 100~102°C. Pharm: Increases blood pressure (cat, spinal cord iv, 0.2mg/kg, blood pressure is increased by (16.6±3.5)kPa ((125±27)mmHg); cat, vertebral artery ia, 0.02mg/kg, blood pressure is lowered by (1.73±0.4)kPa ((13±3)mmHg), respiratory stimulant); Contracts blood vessels (dog, stronger than dopamine, increases blood pressure of hemorrhagic shock for long time); calcium antagonist ( $IC_{50} = 1\mu\text{g/mL}$ ); platelet aggregation inhibitor (due to PAF). Source: KUAN DONG HUA *Tussilago farfara*. Ref: 660, 1092, 1178, 5501.

**22145 Tutin**

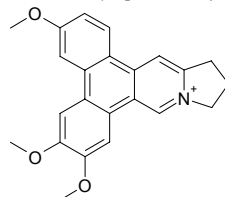
$C_{15}H_{18}O_6$  (294.31). mp 211~213°C. Pharm: CNS activity (stimulates cerebral respiration center, vasomotor center and cardiac inhibitory center). Source: MA SANG *Coriaria sinica* [Syn. *Coriaria nepalensis*], MA SANG YE *Coriaria sinica* [Syn. *Coriaria nepalensis*], RI BEN MA SANG *Coriaria japonica* (seed), XIA MA SANG *Coriaria angustissima*, *Coriaria* sp. Ref: 4, 6, 658, 4497.

**22146 Tylocrebrine**

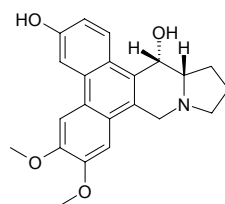
$C_{24}H_{27}NO_4$  (393.49). mp (-) 218~220°C (dec). Pharm: Antiamebic; antineoplastic (*L*-tylocrebrine, adenocarcinoma 755, lymphatic sarcoma, KB, P<sub>388</sub> and L<sub>1210</sub>); toxin (hmn); vesicant. Source: MI HUA WA ER TENG *Tylophora crebriflora*, WA ER TENG *Tylophora floribunda*. Ref: 6, 658.

**22147 Tylophoridicine C**

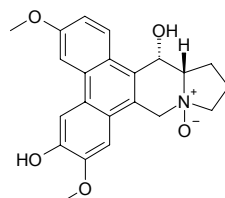
$C_{23}H_{22}NO_3^+$  (360.44). Yellow amorphous powder, mp 295~310°C,  $[\alpha]_D^{16} = +0.5^\circ$  ( $c = 1.0$ , MeOH). Pharm: Cytotoxic (*in vitro*, KB cell,  $IC_{50} > 25.00\mu\text{mol/L}$ , control Adriamycin,  $IC_{50} = (0.40\pm 0.12)\mu\text{mol/L}$ ; HCT8 cell,  $IC_{50} = (8.09\pm 3.40)\mu\text{mol/L}$ , Adriamycin,  $IC_{50} = (0.20\pm 0.11)\mu\text{mol/L}$ ). Source: SAN FEN DAN *Tylophora atrofolliculata* (root). Ref: 4974.

**22148 Tylophoridicine D**

$C_{22}H_{23}NO_4$  (365.43). Brown amorphous solid (CHCl<sub>3</sub>-MeOH), mp 225~226°C,  $[\alpha]_D^{16} = +21.0^\circ$  ( $c = 0.74$ , CHCl<sub>3</sub>). Pharm: Cytotoxic (*in vitro*, KB cell,  $IC_{50} < 0.01\mu\text{mol/L}$ , control Adriamycin,  $IC_{50} = (0.40\pm 0.12)\mu\text{mol/L}$ ; HCT8 cell,  $IC_{50} < 0.01\mu\text{mol/L}$ , Adriamycin,  $IC_{50} = (0.20\pm 0.11)\mu\text{mol/L}$ ). Source: SAN FEN DAN *Tylophora atrofolliculata* (root). Ref: 4974.

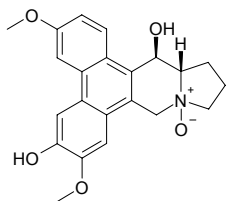
**22149 Tylophoridicine E**

$C_{22}H_{23}NO_5$  (381.43). White powder(CHCl<sub>3</sub>), mp 234~237°C,  $[\alpha]_D^{16} = +17.1^\circ$  ( $c = 0.37$ , CHCl<sub>3</sub>). Pharm: Cytotoxic (*in vitro*, KB cell,  $IC_{50} > 25.00\mu\text{mol/L}$ , control Adriamycin,  $IC_{50} = (0.40\pm 0.12)\mu\text{mol/L}$ ; HCT8 cell,  $IC_{50} = (11.54\pm 4.67)\mu\text{mol/L}$ , Adriamycin,  $IC_{50} = (0.20\pm 0.11)\mu\text{mol/L}$ ). Source: SAN FEN DAN *Tylophora atrofolliculata* (root). Ref: 4974.

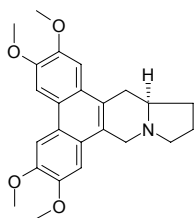


**22150 Tylophoridicine F**

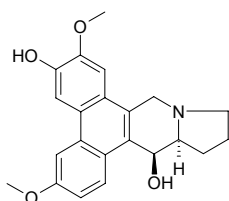
$C_{22}H_{23}NO_5$  (381.43). White solid( $CHCl_3$ ), mp 214~217°C,  $[\alpha]_D^{16} = -17.0^\circ$  ( $c = 0.40$ ,  $CHCl_3$ ). **Pharm:** Cytotoxic (*in vitro*, KB cell,  $IC_{50} = (18.99 \pm 4.02)\mu mol/L$ , control Adriamycin,  $IC_{50} = (0.40 \pm 0.12)\mu mol/L$ ; HCT8 cell,  $IC_{50} > 25.00\mu mol/L$ , Adriamycin,  $IC_{50} = (0.20 \pm 0.11)\mu mol/L$ ). **Source:** SAN FEN DAN *Tylophora atrofoliculata* (root). **Ref:** 4974.

**22151 Tylophorine**

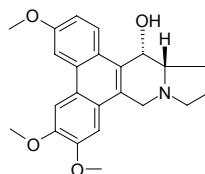
[482-20-2]  $C_{24}H_{27}NO_4$  (393.49). mp 292°C (dec). **Pharm:** Antineoplastic; inhibits biosynthesis of protein; anti-inflammatory (rat, swollen foot model caused by carrageenan, tampon granuloma model); CNS depressant; toxin (high toxicity for frog, low toxicity for higher animals); used in treatment of trachitis and dysentery. **Source:** FU YE RONG *Ficus septica*, MI HUA WA ER TENG *Tylophora crebriflora*, WA ER TENG *Tylophora floribunda*, YAO YONG BAI QIAN *Vincetoxicum officinale* [Syn. *Cynanchum vincetoxicum*], YIN DU WA ER TENG *Tylophora asthmatica* [Syn. *Tylophora indica*]. **Ref:** 4, 658.

**22152 Tylophorinidine**

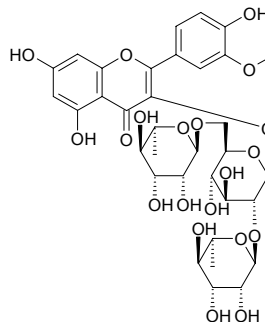
$C_{22}H_{23}NO_4$  (365.43). mp 213~214°C (dec),  $[\alpha]_D^{25} = +108^\circ$  ( $c = 1.91$ , methanol). white lamellar crystals (chloroform–acetone–methanol), mp 219~222°C (dec),  $[\alpha]_D^{29} = -139.6^\circ$  ( $c = 0.8$ , chloroform). **Pharm:** Antineoplastic. **Source:** LUAN YE WA ER TENG *Tylophora ovata*, MIAN MAO WA ER TENG *Tylophora mollissima*, SAN FEN DAN *Tylophora atrofoliculata*, YIN DU WA ER TENG *Tylophora asthmatica* [Syn. *Tylophora indica*]. **Ref:** 658.

**22153 Tylophorinine**

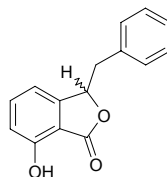
$C_{23}H_{25}NO_4$  (379.46). mp 248~249°C. **Pharm:** Antineoplastic; inhibits cardiac muscles; stimulates striated muscles and smooth muscles; toxin (high toxicity for paramecia, low toxicity for higher animals); used in treatment of trachitis and dysentery. **Source:** LUAN YE WA ER TENG *Tylophora ovata*, MI HUA WA ER TENG *Tylophora crebriflora*, MIAN MAO WA ER TENG *Tylophora mollissima*, SAN FEN DAN *Tylophora atrofoliculata*, WA ER TENG *Tylophora floribunda*, YIN DU WA ER TENG *Tylophora asthmatica* [Syn. *Tylophora indica*]. **Ref:** 5, 658, 1521.

**22154 Typhaneoside**

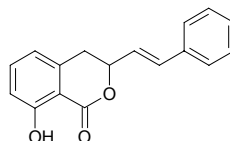
Isorhamnetin-3-*O*-(2<sup>G</sup>- $\alpha$ -L-rhamnopyranosyl)- $\alpha$ -L-rhamnopyranosyl-(1→6)- $\beta$ -D-glucopyranoside  $C_{34}H_{42}O_{20}$  (770.70). Yellow amorphous powder, mp 148~150°C,  $[\alpha]_D^{20} = -58^\circ$  ( $c = 1.3$ , methanol), easily soluble in water, methanol; soluble in ethanol; slightly soluble in acetone and acetic ester. **Source:** JIN ZHAN JU *Calendula officinalis*, KUAN YE XIANG PU *Typha latifolia* (dried pollen: content = 0.214%)<sup>[5508]</sup>, PU HUANG *Typha angustata* (dried pollen: content = 0.293%)<sup>[5508]</sup>, XIA YE XIANG PU *Typha angustifolia*. **Ref:** 55, 660, 5508.

**22155 Typhaphthalide**

7-Hydroxy-3-benzylphthalide  $C_{15}H_{12}O_3$  (240.26). mp 75~77°C,  $[\alpha]_D^{25} = -9.2^\circ$  ( $c = 0.136$ , MeOH). **Source:** HAO WANG JIAO XIANG PU *Typha capensis*. **Ref:** 1939.

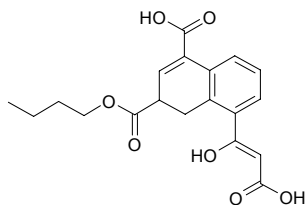
**22156 Typharin**

$C_{17}H_{14}O_3$  (266.30). Yellow solid,  $[\alpha]_D^{25} = +3.6^\circ$  ( $c = 0.07$ , MeOH). **Source:** HAO WANG JIAO XIANG PU *Typha capensis*. **Ref:** 1939.

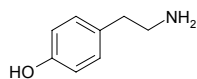


**22157 Typhic acid**

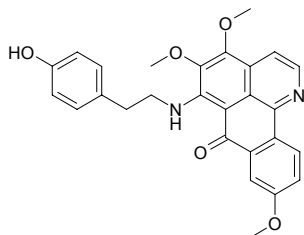
$C_{19}H_{20}O_7$  (360.37). White massive crystals, mp 248–250°C. Source: PU HUANG *Typha angustata*. Ref: 2, 80, 660.

**22158 Tyramine**

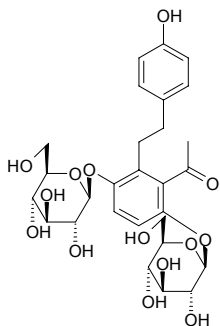
[51-67-2]  $C_8H_{11}NO$  (137.18). mp 164.0–164.5°C. Pharm: Antifungal; radioprotector (rat); parasymphomimetic; respiratory center stimulant. Source: AN LU LONG SHE LAN *Lophophora williamsii*, BAI QU CAI *Chelidonium majus*, DUO HUA HEI MAI CAO *Lolium multiflorum*, GE CONG *Allium victorialis*, JI CAI *Capsella bursa-pastoris*, JIANG *Glycine max*, LUAN YE HU JI SHENG *Viscum album*, MAI JIAO *Claviceps purpurea*, MAI YA *Hordeum vulgare*, MAO MAN TUO LUO HUA *Datura innoxia*, MAO MAN TUO LUO YE *Datura innoxia*, SHUI FEI JI *Silybum marianum*, YE HUA HUI MAO DOU *Tephrosia noctiflora*, YE ZHI MA *Lamium barbatum*. Ref: 6, 658, 660.

**22159 Tyraminoporphine**

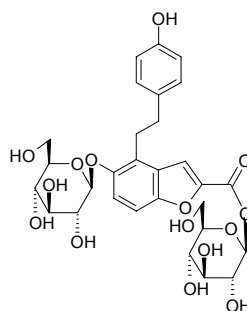
$C_{27}H_{24}N_2O_5$  (456.50). mp 229°C (dec). Source: BIAN FU GE GEN *Menispermum dauricum*. Ref: 2402.

**22160 Tyrololibenzyl E**

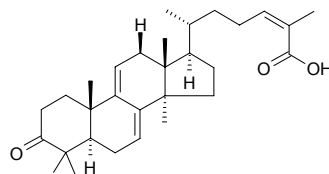
$C_{28}H_{36}O_{14}$  (596.59). Amorphous solid. Source: AI SHENG YA CONG *Scorzonera humilis*. Ref: 2067.

**22161 Tyrololibenzyl F**

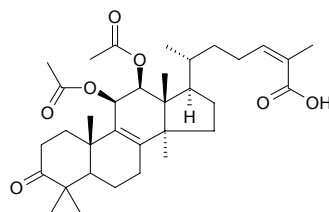
$C_{29}H_{34}O_{15}$  (622.59). Amorphous solid. Source: AI SHENG YA CONG *Scorzonera humilis*. Ref: 2067.

**22162 Tyromycic acid**

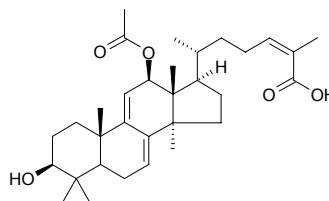
$C_{30}H_{44}O_3$  (452.68). Source: YI LYE GAN LAO JUN *Tyromyces fissilis* (sporocarp). Ref: 4414.

**22163 Tyromycic acid B**

(24Z)-3-Oxo-11R,12S-diacetoxylanosta-8,24-dien-26-oic acid  $C_{34}H_{50}O_7$  (570.55). Oil,  $[\alpha]_D^{20} = -9.6^\circ$  ( $c = 0.1$ ,  $CHCl_3$ ). Source: YI LYE GAN LAO JUN *Tyromyces fissilis* (sporocarp; yield = 0.083%dw). Ref: 3008.

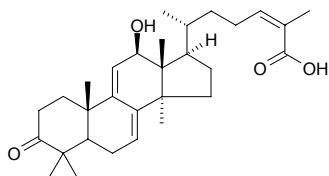
**22164 Tyromycic acid C**

3β-Hydroxy-12β-acetoxylanosta-7,9(11),24(Z)-trien-26-oic acid  $C_{32}H_{48}O_5$  (512.74). Oil,  $[\alpha]_D^{20} = -53.1^\circ$  ( $c = 0.11$ ,  $CHCl_3$ ). Source: YI LYE GAN LAO JUN *Tyromyces fissilis* (sporocarp; yield = 0.0072%dw). Ref: 3008.

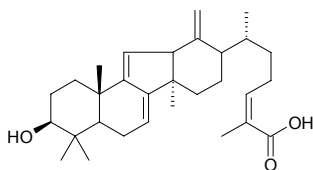


**22165 Tyromyic acid D**

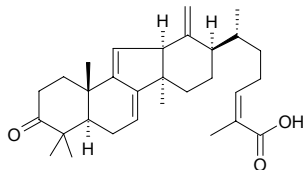
3-Oxo-12 $\beta$ -hydroxy lanosta-7,9(11),24(Z)-trien-26-oic acid C<sub>30</sub>H<sub>44</sub>O<sub>4</sub> (468.68). Oil, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -52.2° (*c* = 0.1, CHCl<sub>3</sub>). Source: YI LYE GAN LAO JUN *Tyromyces fissilis* (sporocarp: yield = 0.036%dw). Ref: 3008.

**22166 Tyromyic acid E**

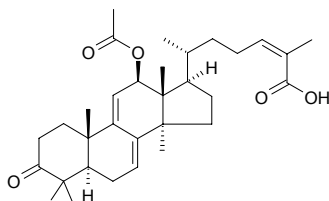
(24Z)-3 $\beta$ -Hydroxy-14(13 $\rightarrow$ 12)abeo-lanosta-7,9(11),13(18),24-tetraen-26-oic acid C<sub>30</sub>H<sub>44</sub>O<sub>3</sub> (452.68). Oil, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -94.3° (*c* = 0.11, CHCl<sub>3</sub>). Source: YI LYE GAN LAO JUN *Tyromyces fissilis* (sporocarp: yield = 0.077%dw). Ref: 3008.

**22167 Tyromyic acid F**

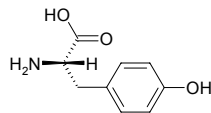
(24Z)-3-Oxo-14(13 $\rightarrow$ 12)abeo-lanosta-7,9(11),13(18),24-tetraen-26-oic acid C<sub>30</sub>H<sub>42</sub>O<sub>3</sub> (450.67). Oil, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -103.1° (*c* = 0.1, CHCl<sub>3</sub>). Source: YI LYE GAN LAO JUN *Tyromyces fissilis* (sporocarp). Ref: 4414.

**22168 Tyromyic acid G**

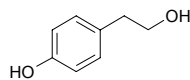
(24Z)-12 $\beta$ -Acetoxylanosta-7,9(11),24-trien-26-oic acid C<sub>32</sub>H<sub>46</sub>O<sub>5</sub> (510.72). Oil, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = -99.1° (*c* = 0.08, CHCl<sub>3</sub>). Source: YI LYE GAN LAO JUN *Tyromyces fissilis* (sporocarp). Ref: 4414.

**22169 (S)-Tyrosine**

C<sub>9</sub>H<sub>11</sub>NO<sub>3</sub> (181.19). Source: BAN XIA *Pinellia ternata* (dried tuber: content scope of 4 origins = 0.39%~0.87%, mean content = 0.54%)<sup>[5521]</sup>, occurs in many plants. Ref: 660, 5508.

**22170 Tyrosol**

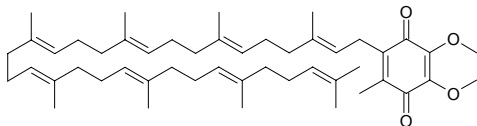
4-Hydroxyphenethyl alcohol [501-94-0] C<sub>8</sub>H<sub>10</sub>O<sub>2</sub> (138.17). mp 93°C. Source: DA CHE QIAN *Plantago major*, DA HUA HONG JING TIAN *Rhodiola crenulata* [Syn. *Rhodiola euryphylla*], MENG ZI CAO HU JIAO *Peperomia duclouxii* (whole herb: yield = 0.0032%)<sup>[4733]</sup>, SHENG DI HONG JING TIAN *Rhodiola sacra*, XIA YE HONG JING TIAN *Rhodiola kirilowii*, ZANG HONG HUA *Crocus sativus* (pollen). Ref: 218, 516, 660, 4233, 4733.



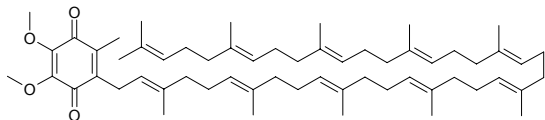
## U

**22171 Ubiquinone 8**

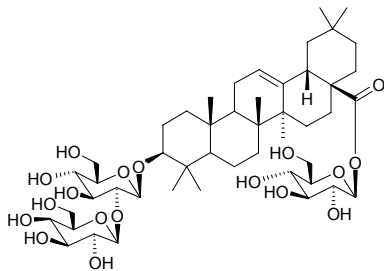
$C_{49}H_{74}O_4$  (727.13). Source: DI SUO LUO *Marchantia polymorpha*. Ref: 660.

**22172 Ubiquinone 10**

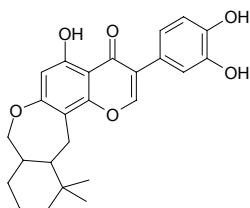
[303-98-0]  $C_{59}H_{90}O_4$  (863.37). Pharm: Used to treatment of congestive heart failure, assists in treatment of heart failure, coronary heart disease, hypertension and arrhythmia, involved with electron-transfer in cyto blasts; anti-myocardial infarction; anti-ischemia, myocardial. Source: occurs in many plants. Ref: 658.

**22173 Udosaponin B**

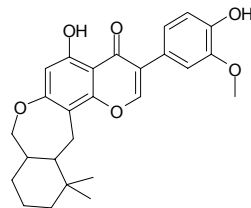
3-*O*-[ $\beta$ -*D*-Galactopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucuronopyranosyl]-28-*O*- $\beta$ -*D*-glucopyranosylolean-12-en-28-oic acid  $C_{48}H_{78}O_{18}$  (943.15). Source: TIAN HU SUI *Hydrocotyle sibthorpioides* (whole herb: yield = yield = 0.0037%dw), WU JIA QIAN HU *Steganotaenia araliacea*. Ref: 3013.

**22174 Ugonin A**

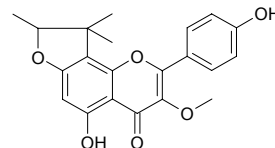
[50982-42-8]  $C_{25}H_{26}O_6$  (422.48). mp 225~226°C. Source: RU DI WU GONG *Helminthostachys zeylanica*. Ref: 6.

**22175 Ugonin B**

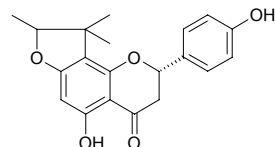
[50982-43-9]  $C_{26}H_{28}O_6$  (436.51). mp 252~254°C. Source: RU DI WU GONG *Helminthostachys zeylanica*. Ref: 6.

**22176 Ugonin C**

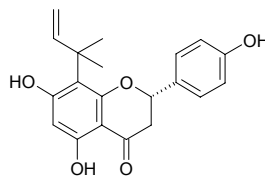
[50868-48-9]  $C_{21}H_{20}O_6$  (368.39). mp (-) 236~237°C. Source: RU DI WU GONG *Helminthostachys zeylanica*. Ref: 6.

**22177 Ugonin D**

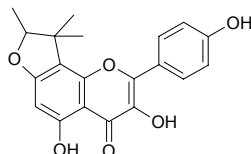
[50868-49-0]  $C_{20}H_{20}O_5$  (340.38). mp 183°C. Source: RU DI WU GONG *Helminthostachys zeylanica*. Ref: 6.

**22178 Ugonin E**

5,7,4'-Trihydroxy-8-(1,1-dimethylallyl)flavanone  $C_{20}H_{20}O_5$  (340.38). Yellow powder,  $[\alpha]_D^{25} = -45.4^\circ$  ( $c = 0.11$ , MeOH). Source: RU DI WU GONG *Helminthostachys zeylanica* (rhizome). Ref: 3484.

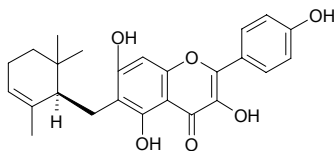
**22179 Ugonin F**

4'',5''-Dihydro-3,5,4'-trihydroxy-4'',4'',5''-trimethylfuran[2'',3'':7,8]flavone  $C_{20}H_{18}O_6$  (354.36). Yellow powder,  $[\alpha]_D^{25} = 3.1^\circ$  ( $c = 0.32$ , MeOH). Source: RU DI WU GONG *Helminthostachys zeylanica* (rhizome). Ref: 3484.

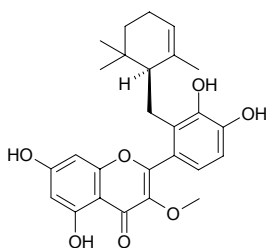


**22180 Ugonin G**

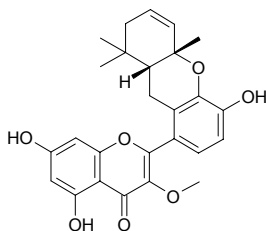
3,5,7,4'-Tetrahydroxy-6-(2,6,6-trimethyl-2-cyclohexenylmethyl)flavone C<sub>25</sub>H<sub>26</sub>O<sub>6</sub> (422.48). Yellow powder,  $[\alpha]_D^{25} = 98.9^\circ$  ( $c = 0.94$ , MeOH). **Pharm:** Antioxidant (DPPH free radical scavenger, IC<sub>20</sub> = (12.63±0.42)μmol/L, control Trolox, IC<sub>20</sub> = (10.39±0.56)μmol/L). **Source:** RU DI WU GONG *Helminthostachys zeylanica* (rhizome). **Ref:** 3484.

**22181 Ugonin H**

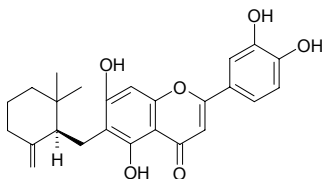
5,7,3',4'-Tetrahydroxy-3-methoxy-2'-(2,6,6-trimethyl-2-cyclohexenylmethyl)flavone C<sub>26</sub>H<sub>28</sub>O<sub>7</sub> (452.51). Yellow powder,  $[\alpha]_D^{25} = 130.5^\circ$  ( $c = 0.95$ , MeOH). **Pharm:** Antioxidant (DPPH free radical scavenger, IC<sub>20</sub> = (9.84±0.22)μmol/L, control Trolox, IC<sub>20</sub> = (10.39±0.56)μmol/L). **Source:** RU DI WU GONG *Helminthostachys zeylanica* (rhizome). **Ref:** 3484.

**22182 Ugonin I**

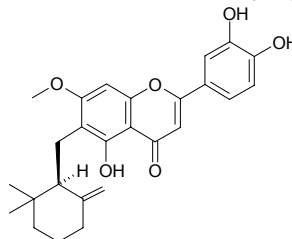
4''a,5'',6'',7'',8''a-Hexahydro-3',4'-dihydroxy-7-methoxy-5'',5'',8''a-trimethyl-4H-chromeno[2'',3'':3',2']flavone C<sub>26</sub>H<sub>26</sub>O<sub>7</sub> (450.49). Yellow powder,  $[\alpha]_D^{25} = -45^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Antioxidant inactive (DPPH free radical scavenger, IC<sub>20</sub> > 100μmol/L, control Trolox, IC<sub>20</sub> = (10.39±0.56)μmol/L). **Source:** RU DI WU GONG *Helminthostachys zeylanica* (rhizome). **Ref:** 3484.

**22183 Ugonin J**

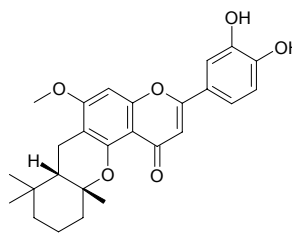
5,7,3',4'-Tetrahydroxy-6-(6,6-dimethyl-2-methylene-cyclohexylmethyl)flavone C<sub>25</sub>H<sub>26</sub>O<sub>6</sub> (422.48). Yellow powder,  $[\alpha]_D^{25} = 50^\circ$  ( $c = 0.30$ , MeOH). **Pharm:** Antioxidant (DPPH free radical scavenger, IC<sub>20</sub> = (5.29±0.32)μmol/L, control Trolox, IC<sub>20</sub> = (10.39±0.56)μmol/L). **Source:** RU DI WU GONG *Helminthostachys zeylanica* (rhizome). **Ref:** 3484.

**22184 Ugonin K**

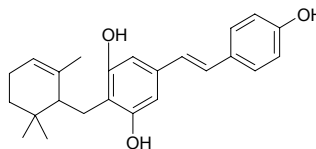
5,3',4'-Trihydroxy-7-methoxy-6-(6,6-dimethyl-2-methylene-cyclohexylmethyl)flavone C<sub>26</sub>H<sub>28</sub>O<sub>6</sub> (436.51). Yellow powder,  $[\alpha]_D^{25} = -18.7^\circ$  ( $c = 0.16$ , MeOH). **Pharm:** Antioxidant (DPPH free radical scavenger, IC<sub>20</sub> = (7.23±0.22)μmol/L, control Trolox, IC<sub>20</sub> = (10.39±0.56)μmol/L). **Source:** RU DI WU GONG *Helminthostachys zeylanica* (rhizome). **Ref:** 3484.

**22185 Ugonin L**

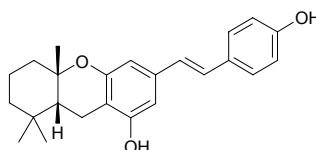
4''a,5'',6'',7'',8''a-Hexahydro-3',4'-dihydroxy-7-methoxy-5'',5'',8''a-trimethyl-4H-chromeno[2'',3'':5,6]flavone C<sub>26</sub>H<sub>28</sub>O<sub>6</sub> (436.51). Yellow powder,  $[\alpha]_D^{25} = 81.8^\circ$  ( $c = 0.22$ , MeOH). **Pharm:** Antioxidant (DPPH free radical scavenger, IC<sub>20</sub> = (7.93±0.31)μmol/L, control Trolox, IC<sub>20</sub> = (10.39±0.56)μmol/L). **Source:** RU DI WU GONG *Helminthostachys zeylanica* (rhizome). **Ref:** 3484.

**22186 Ugonstilbene A**

C<sub>24</sub>H<sub>28</sub>O<sub>3</sub> (364.49). Yellow powder,  $[\alpha]_D^{25} = +162^\circ$  ( $c = 1.18$ , MeOH). **Pharm:** Antioxidant (DPPH scavenger, IC<sub>20</sub> = (11.31±1.11)μmol/L, control Trolox, IC<sub>20</sub> = (8.70±0.95)μmol/L). **Source:** RU DI WU GONG *Helminthostachys zeylanica* (rhizome). **Ref:** 5471.

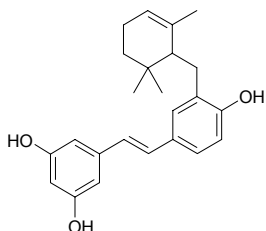
**22187 Ugonstilbene B**

C<sub>24</sub>H<sub>28</sub>O<sub>3</sub> (364.49). Yellow powder,  $[\alpha]_D^{25} = -25^\circ$  ( $c = 0.54$ , MeOH). **Pharm:** Antioxidant (DPPH scavenger, IC<sub>20</sub> = (38.72±0.47)μmol/L, control Trolox, IC<sub>20</sub> = (8.70±0.95)μmol/L). **Source:** RU DI WU GONG *Helminthostachys zeylanica* (rhizome). **Ref:** 5471.

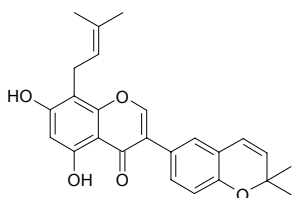


**22188 Ugonstilbene C**

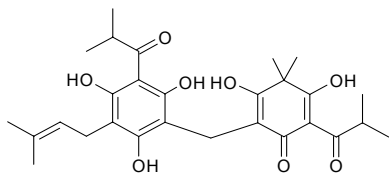
$C_{24}H_{28}O_3$  (364.49). Yellow powder,  $[\alpha]_D^{25} = +46^\circ$  ( $c = 0.30$ , MeOH). **Pharm:** Antioxidant (DPPH scavenger,  $IC_{20} = (30.80 \pm 1.19) \mu\text{mol/L}$ , control Trolox,  $IC_{20} = (8.70 \pm 0.95) \mu\text{mol/L}$ ). **Source:** RU DI WU GONG *Helminthostachys zeylanica* (rhizome). **Ref:** 5471.

**22189 Ulexone A**

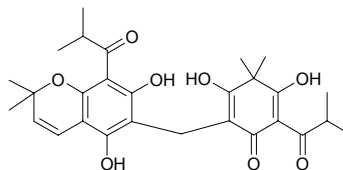
$C_{25}H_{24}O_5$  (404.47). **Source:** PAN YUAN YU TENG *Derris scandens* (stem). **Ref:** 3810.

**22190 Uliginosin A**

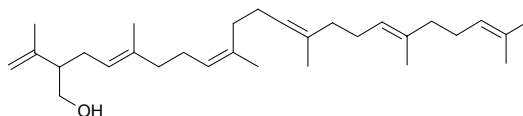
[19809-78-0]  $C_{28}H_{36}O_8$  (500.65). Yellowish crystals (acetonitrile–chloroform), mp 160.5–161.5°C. **Pharm:** Antibacterial (*Staphylococcus aureus*, *in vitro*); antifungal (*Trichophyton mentagrophytes*); used in treatment of diarrhea. **Source:** SHI SHENG JIN SI TAO *Hypericum uliginosum*. **Ref:** 661.

**22191 Uliginosin B**

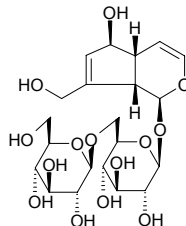
[19809-79-1]  $C_{28}H_{34}O_8$  (498.58). Yellowish tiny lamellar crystals (nitromethane), mp 139.5–142.0°C. **Pharm:** Antibacterial (*Staphylococcus aureus*, *in vitro*); antifungal (*Trichophyton mentagrophytes*). **Source:** SHI SHENG JIN SI TAO *Hypericum uliginosum*. **Ref:** 661.

**22192 Ulmoprenol**

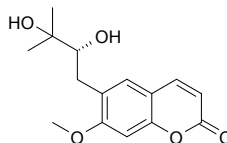
[70475-06-8]  $C_{30}H_{50}O$  (426.73). **Source:** DU ZHONG *Eucommia ulmoides*. **Ref:** 2.

**22193 Ulmoside**

[67708-72-9]  $C_{21}H_{32}O_{14}$  (508.48). **Source:** DU ZHONG *Eucommia ulmoides*. **Ref:** 2, 1521.

**22194 Ulopterol**

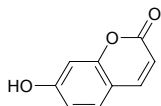
$C_{15}H_{18}O_5$  (278.31). **Pharm:** Antineoplastic (Raji cells, antitumor promotor, *in vivo*, inhibits TPA-induced EBV-EA activation, compound concentration = 500mol ratio/32 pmol TPA: EBV-EA-positive cells = (10.6±1.5)% (viability > 80%),  $\beta$ -Carotene, EBV-EA-positive cells = (34.3±1.1)% (viability > 80%), Curcumin, EBV-EA-positive cells = (22.8±1.8)% (viability > 80%), compound  $IC_{50} = 126$ mol ratio/32 pmol TPA,  $\beta$ -Carotene,  $IC_{50} = 400$ mol ratio/32 pmol TPA, Curcumin,  $IC_{50} = 341$ mol ratio/32 pmol TPA). **Source:** SAN ZHONG JU ZA JIAO ZHONG [*Citrus unshiu* x *Citrus sinensis*] x *Citrus iyo*. **Ref:** 5048.



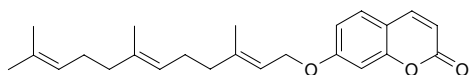


**22195 Umbelliferone**

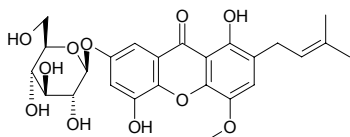
7-Hydroxycoumarin [93-35-6]  $C_9H_6O_3$  (162.15). mp 225~228°C. **Pharm:** Antineoplastic (Raji cells, antitumor promotor, *in vivo*, inhibits TPA-induced EBV-EA activation, compound concentration = 500mol ratio/32 pmol TPA, EBV-EA-positive cells =  $(56.3 \pm 2.3)\%$  (viability > 80%),  $\beta$ -Carotene, EBV-EA-positive cells =  $(34.3 \pm 1.1)\%$  (viability > 80%), Curcumin, EBV-EA-positive cells =  $(22.8 \pm 1.8)\%$  (viability > 80%);  $IC_{50} = 571$  mol ratio/32 pmol TPA,  $\beta$ -Carotene,  $IC_{50} = 400$  mol ratio/32 pmol TPA, Curcumin  $IC_{50} = 341$  mol ratio/32 pmol TPA)<sup>[5048]</sup>; cytotoxic (KB,  $ED_{50} = 33.0 \mu\text{g/mL}$ ); cytotoxic inactive (*in vitro*, HONE-1 and NUGC cancer cell lines, no significant activity)<sup>[3069]</sup>; NO Production inhibitor (LPS-activated mouse peritoneal macrophages,  $100 \mu\text{mol/L}$ , InRt =  $(44.7 \pm 9.6)\%$ , control *L*-NMMA,  $100 \mu\text{mol/L}$ , InRt =  $(79.2 \pm 0.9)\%$ )<sup>[4454]</sup>; AChE inhibitor (*in vitro*,  $IC_{50} = 29 \text{ mmol/L}$ )<sup>[3058]</sup>; antihypertensive (dog iv, 10mg/kg, blood pressure is lowered by 10% for 7min); antibacterial (*Bacillus coli* and *Bacillus subtilis*, CIC = 65mg/L, the main antibacterial effective component of DI JIN CAO *Euphorbia humifusa*); antifungal (*Trichophyton mentagrophytes*, *Trichophyton purpureatum* and *Candida albicans*); antispasmodic; sedative. **Source:** BAI ZHI *Angelica dahurica* [Syn. *Angelica porphyrocaulis*], CHOU CAO *Ruta graveolens*, DI JIN CAO *Euphorbia humifusa*, DIAN QIE *Atropa belladonna*, DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*], DUO BIAN XIAO GUAN HUA *Coronilla varia*, FEN CHA DANG GUI *Angelica furcijuga* (flower), FEN TUAN HUA *Hydrangea paniculata*, FU SHOU CAO *Adonis amurensis*, HUI XIANG *Foeniculum vulgare*, LANG DU *Stellera chamaejasme*, LONG YAN DU HUO *Aralia fargesii*, MA TI YE *Caltha palustris*, MU<sup>(4)</sup> JU *Aegle marmelos*, NAN HE SHI *Daucus carota*, PI HAN CAO *Melilotus suaveolens*, QING JIAO *Zanthoxylum schinifolium*, RI BEN HUANG BAI *Phellodendron japonicum* (leaf), RUI XIANG HUA *Daphne odora*, SHENG DI HONG JING TIAN *Rhodiola sacra*, TAI WAN HUANG BO *Phellodendron amurense* var. *wilsonii* (leaf: yield = 0.00061%dw), CHAO XIAN DANG GUI *Angelica gigas* (underground part), XUN DAO NIU *Biebersteinia heterostemon*, YOU<sup>(4)</sup> *Citrus grandis*, ZHONG GUO XIU QIU *Hydrangea chinensis* (root), *Citrus medica* var. *etrog*, *Citrus sulcata*, *Apium* sp., *Pimpinella* sp., *Heraclium* sp., occurs in many plants (including *Angelica* spp.; *Artemisia* spp.; *Coronilla* spp.; *Ferula* spp.; *Ruta* spp.). **Ref:** 4, 207, 324, 556, 571, 658, 660, 3058, 3069, 4454, 4502, 4722, 5048, 5501.

**22196 Umbelliprenin**

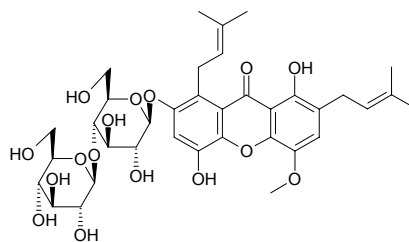
7-Hydroxycoumarin farnesyl ether [23838-17-7]  $C_{24}H_{30}O_3$  (366.50). mp 61~63°C. **Source:** SHI LUO ZI *Anethum graveolens*. **Ref:** 6.

**22197 Umbilicaxanthoside A**

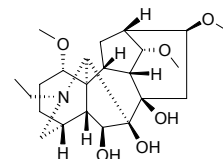
$C_{25}H_{28}O_{11}$  (504.50). Pale yellow needles, mp 114°C,  $[\alpha]_D^{23} = -35^\circ$ . **Source:** WU LA ER DI YI *Umbilicaria proboscidea*. **Ref:** 2048.

**22198 Umbilicaxanthoside B**

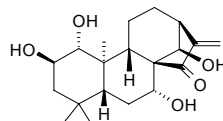
$C_{36}H_{46}O_{16}$  (734.76). Pale yellow needles, mp 133 °C,  $[\alpha]_D^{23} = -47^\circ$ . **Source:** WU LA ER DI YI *Umbilicaria proboscidea*. **Ref:** 2048.

**22199 Umbrofine**

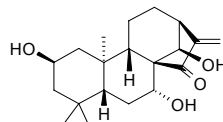
$C_{23}H_{37}NO_6$  (423.55). **Source:** BEI FANG WU TOU *Aconitum septentrionale*, CAO DI WU TOU *Aconitum umbrosum*. **Ref:** 1521.

**22200 Umbrosianin**

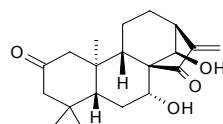
$C_{20}H_{30}O_5$  (350.46). mp 180~182°C,  $[\alpha]_D^{22} = -81.5^\circ$  ( $c = 0.18$ , MeOH). **Source:** YIN DI XIANG CHA CAI *Isodon umbrosa*. **Ref:** 4067.

**22201 Umbrosin A**

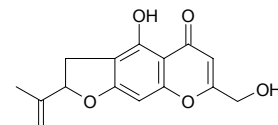
$C_{20}H_{30}O_4$  (334.46). mp 225~228°C,  $[\alpha]_D = -126^\circ$  ( $c = 1.0$ ,  $C_5H_5N$ ). **Source:** YIN DI XIANG CHA CAI *Isodon umbrosa*. **Ref:** 4067.

**22202 Umbrosin B**

$C_{20}H_{28}O_4$  (332.44). mp 262~265°C,  $[\alpha]_D = -150^\circ$  ( $c = 1.0$ ,  $C_5H_5N$ ). **Source:** YIN DI XIANG CHA CAI *Isodon umbrosa*. **Ref:** 4067.

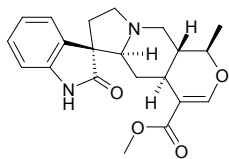
**22203 Umtatin**

$C_{15}H_{14}O_5$  (274.28). **Source:** SHE CHUANG ZI *Cnidium monnieri*. **Ref:** 660.

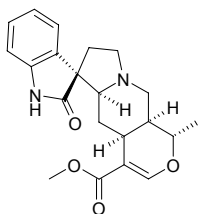


**22204 Uncarine B**

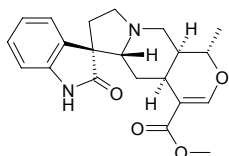
Formosanine C<sub>21</sub>H<sub>24</sub>N<sub>2</sub>O<sub>4</sub> (368.44). **Source:** BAI GOU TENG *Uncaria sessilifructus* [Syn. *Nauclea sessilifructus*], DONG FANG GOU TENG *Uncaria orientalis*, ER CHA GOU TENG *Uncaria gambir*, MAO GOU TENG *Uncaria hirsuta*, PING HUA FA LIANG GOU TENG *Uncaria laevigata*, TUO YUAN GOU TENG *Uncaria elliptica*, XIA GOU TENG *Uncaria attenuata*. **Ref:** 5341.

**22205 Uncarine C**

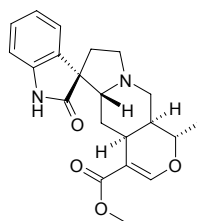
[5629-60-7] C<sub>21</sub>H<sub>24</sub>N<sub>2</sub>O<sub>4</sub> (368.44). **Pharm:** Cytotoxic (SK-MEL, IC<sub>50</sub> > 50 μg/mL, control Doxorubicin, IC<sub>50</sub> < 1.1 μg/mL; KB, IC<sub>50</sub> > 50 μg/mL, Doxorubicin, IC<sub>50</sub> = 1.7 μg/mL; BT549, IC<sub>50</sub> > 50 μg/mL, Doxorubicin, IC<sub>50</sub> = 2.0 μg/mL; SK-OV-3, IC<sub>50</sub> = 37 μg/mL, Doxorubicin, IC<sub>50</sub> = 1.9 μg/mL; Vero, IC<sub>50</sub> > 50 μg/mL, Doxorubicin, IC<sub>50</sub> > 10 μg/mL). **Source:** BI LU GOU TENG *Uncaria tomentosa* (inner bark). **Ref:** 5161.

**22206 Uncarine D**

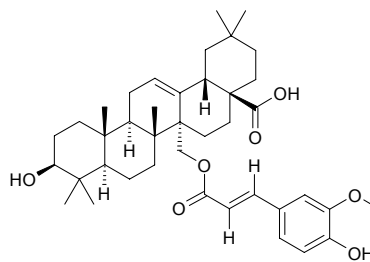
Speciophylline [4697-68-1] C<sub>21</sub>H<sub>24</sub>N<sub>2</sub>O<sub>4</sub> (368.44). **Pharm:** Cytotoxic (SK-MEL, IC<sub>50</sub> = 30 μg/mL, control Doxorubicin, IC<sub>50</sub> < 1.1 μg/mL; KB, IC<sub>50</sub> = 35 μg/mL, Doxorubicin, IC<sub>50</sub> = 1.7 μg/mL; BT549, IC<sub>50</sub> = 34 μg/mL, Doxorubicin, IC<sub>50</sub> = 2.0 μg/mL; SK-OV-3, IC<sub>50</sub> = 30 μg/mL, Doxorubicin, IC<sub>50</sub> = 1.9 μg/mL; Vero, IC<sub>50</sub> = 39 μg/mL, Doxorubicin, IC<sub>50</sub> > 10 μg/mL)<sup>[5161]</sup>; cytotoxic (SKMEL, KB, BT549, SK-OV-3 and Vero cell lines, IC<sub>50</sub> = 30-40 μg/mL)<sup>[5341]</sup>; immunostimulant (maybe by increasing phagocytosis of hmn granulocytes and macrophages and blocking proliferation of myeloid cell lines)<sup>[5341]</sup>. **Source:** BEI YUE GOU TENG *Uncaria homomalla* [Syn. *Uruparia homomalla*; *Uruparia tonkinensis*; *Uruparia lanosa* var. *parviflora*], BI LU GOU TENG *Uncaria tomentosa*, CHANG HUA GOU TENG *Uncaria longiflora*, DONG FANG GOU TENG *Uncaria orientalis*, DUAN RONG MAO GOU TENG *Uncaria velutina*, GUI YA NA GOU TENG *Uncaria guianensis*, HUA GOU TENG *Uncaria sinensis*, MIAN MAO GOU TENG *Uncaria lanosa*, PAN ZHI GOU TENG *Uncaria scandens* [Syn. *Nauclea pilosa*; *Uruparia pilosa*; *Uncaria pilosa*], PING HUA FA LIANG GOU TENG *Uncaria laevigata*, XIA GOU TENG *Uncaria attenuata*, *Uncaria bernaysii*, *Uncaria donisii*, *Uncaria perrottetii*, *Uncaria roxburghiana*, *Uncaria sterrophylla*. **Ref:** 5161, 5341.

**22207 Uncarine F**

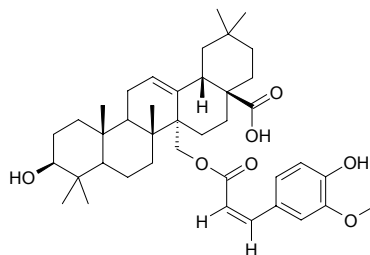
C<sub>21</sub>H<sub>24</sub>N<sub>2</sub>O<sub>4</sub> (368.44). **Pharm:** Immunostimulant (maybe by increasing phagocytosis of hmn granulocytes and macrophages and blocking proliferation of myeloid cell lines). **Source:** BAI GOU TENG *Uncaria sessilifructus* [Syn. *Nauclea sessilifructus*], BEI YUE GOU TENG *Uncaria homomalla* [Syn. *Uruparia homomalla*; *Uruparia tonkinensis*; *Uruparia lanosa* var. *parviflora*], CHANG HUA GOU TENG *Uncaria longiflora*, DONG FANG GOU TENG *Uncaria orientalis*, DUAN RONG MAO GOU TENG *Uncaria velutina*, HUA GOU TENG *Uncaria sinensis*, MIAN MAO GOU TENG *Uncaria lanosa*, PAN ZHI GOU TENG *Uncaria scandens* [Syn. *Nauclea pilosa*; *Uruparia pilosa*; *Uncaria pilosa*], *Uncaria bernaysii*, *Uncaria donisii*, *Uncaria perrottetii*, *Uncaria roxburghiana*, *Uncaria sterrophylla*. **Ref:** 5341.

**22208 Uncarinic acid A**

C<sub>40</sub>H<sub>56</sub>O<sub>7</sub> (648.89). **Pharm:** Anti-HIV (H9 lymphocytic cells, inhibits replication, IC<sub>50</sub> (concentration that inhibits uninfected H9 cell growth by 50%) = 19.87 μg/mL, EC<sub>50</sub> (concentration that inhibits viral replication by 50%) = 1.53 μg/mL, TI(IC<sub>50</sub>/EC<sub>50</sub>) = 12.95, control AZT IC<sub>50</sub> = 500 μg/mL, EC<sub>50</sub> = 0.0007 μg/mL, TI = 740000)<sup>[2529]</sup>; cytotoxic (hmn, A549 EC<sub>50</sub> = 4.6 μg/mL, MCF7 EC<sub>50</sub> = 7.7 μg/mL)<sup>[2529]</sup>; cytotoxic (inhibits growth of hmn cancer cell lines A549, HCT15, MCF7 and HT1197)<sup>[5341]</sup>; phospholipase PLCγ1 inhibitor (IC<sub>50</sub> = 35.66 μmol/L)<sup>[5341]</sup>. **Source:** GOU TENG *Uncaria rhynchophylla* [Syn. *Nauclea rhynchophylla*], TAI WAN FU RONG *Hibiscus taiwanensis*. **Ref:** 1521, 2529, 5341.

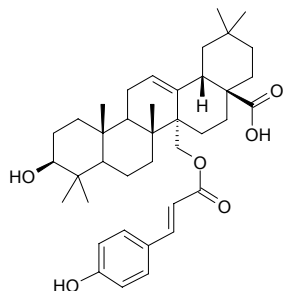
**22209 Uncarinic acid B**

C<sub>40</sub>H<sub>56</sub>O<sub>7</sub> (648.89). **Pharm:** Cytotoxic (inhibits growth of hmn cancer cell lines A549, HCT15, MCF7 and HT1197); phospholipase PLCγ1 inhibitor (IC<sub>50</sub> = 35.66 μmol/L). **Source:** GOU TENG *Uncaria rhynchophylla* [Syn. *Nauclea rhynchophylla*]. **Ref:** 5341.

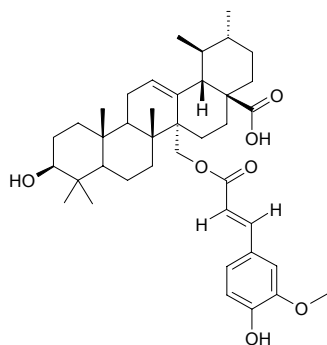


**22210 Uncarinic acid C**

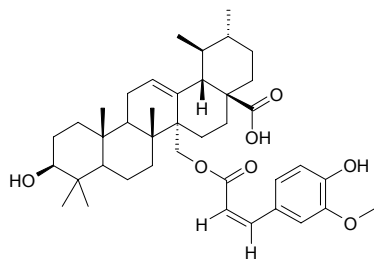
$C_{39}H_{54}O_6$  (618.86). **Pharm:** Cytotoxic (phospholipase PLC $\gamma$ 1 inhibitor,  $IC_{50}$  = 4.6~9.5 $\mu$ mol/L); cytotoxic (inhibits growth of hmn cancer cell lines,  $IC_{50}$  = 0.5~6.5 $\mu$ g/mL). **Source:** GOU TENG *Uncaria rhynchophylla* [Syn. *Nauclea rhynchophylla*]. **Ref:** 5341.

**22211 Uncarinic acid D**

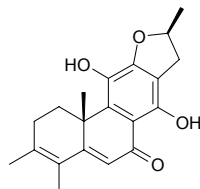
$C_{40}H_{56}O_7$  (648.89). **Pharm:** Cytotoxic (phospholipase PLC $\gamma$ 1 inhibitor,  $IC_{50}$  = 4.6~9.5 $\mu$ mol/L); cytotoxic (inhibits growth of hmn cancer cell lines,  $IC_{50}$  = 0.5~6.5 $\mu$ g/mL). **Source:** GOU TENG *Uncaria rhynchophylla* [Syn. *Nauclea rhynchophylla*]. **Ref:** 5341.

**22212 Uncarinic acid E**

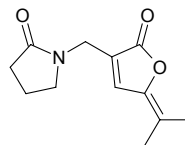
$C_{40}H_{56}O_7$  (648.89). **Pharm:** Phospholipase PLC $\gamma$ 1 inhibitor ( $IC_{50}$  = 4.6~9.5 $\mu$ mol/L); cytotoxic (inhibits growth of hmn cancer cell lines,  $IC_{50}$  = 0.5~6.5 $\mu$ g/mL). **Source:** GOU TENG *Uncaria rhynchophylla* [Syn. *Nauclea rhynchophylla*]. **Ref:** 5341.

**22213 Uncinatone**

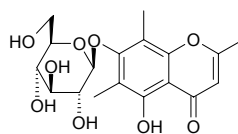
$C_{20}H_{22}O_4$  (326.40). mp 193.2°C,  $[\alpha]_D^{20}$  = -111.0° ( $c$  = 0.5,  $CHCl_3$ ). **Pharm:** Antiproliferative (*in vitro*, MTT assay, CEM,  $IC_{50}$  = 5.5 $\mu$ mol/L, control Doxorubicin,  $IC_{50}$  = 0.036 $\mu$ mol/L, HeLa,  $IC_{50}$  = 4.6 $\mu$ mol/L, Doxorubicin,  $IC_{50}$  = 0.027 $\mu$ mol/L, HCT8,  $IC_{50}$  = 56.7 $\mu$ mol/L, Doxorubicin,  $IC_{50}$  = 0.024 $\mu$ mol/L, MCF7,  $IC_{50}$  = 50.3 $\mu$ mol/L, Doxorubicin,  $IC_{50}$  = 0.183 $\mu$ mol/L, B16,  $IC_{50}$  > 76.7 $\mu$ mol/L, Doxorubicin,  $IC_{50}$  = 0.056 $\mu$ mol/L)<sup>[4940]</sup>; antifungal (*Cladosporium cucumerinum*). **Source:** *Clerodendrum nucinatum*, *Aegiphila thotzkyana* (root). **Ref:** 658, 4940.

**22214 Uncinine**

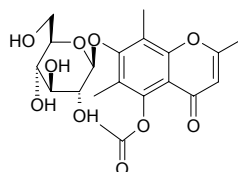
$C_{12}H_{15}NO_3$  (221.26). White amorphous powder. **Pharm:** Cytotoxic (*in vitro*, HepG $_2$ ,  $IC_{50}$  = 6.1 $\mu$ g/mL; Hep2,2,15,  $IC_{50}$  = 7.4 $\mu$ g/mL). **Source:** YOU GOU YING ZHAO *Artabotrys uncinatus* (leaf). **Ref:** 3083.

**22215 Uncinoside A**

5-Hydroxy-2,6,8-trimethylchromone 7-*O*- $\beta$ -D-glucopyranoside  $C_{18}H_{22}O_9$  (382.37). Slight-yellow powder, mp 273~274°C. **Pharm:** Antiviral (respiratory syncytial virus (RSV),  $IC_{50}$  = 6.9 $\mu$ g/mL,  $TC_{50}$  = 82.5 $\mu$ g/mL, TI =  $TC_{50}/IC_{50}$  = 12.0, control Ribavirin,  $IC_{50}$  = 2.6 $\mu$ g/mL,  $TC_{50}$  = 62.5 $\mu$ g/mL, TI =  $TC_{50}/IC_{50}$  = 24.0; parainfluenza type 3 virus (Para-3),  $IC_{50}$  = 13.8 $\mu$ g/mL,  $TC_{50}$  = 82.5 $\mu$ g/mL, TI =  $TC_{50}/IC_{50}$  = 6.0, control Ribavirin,  $IC_{50}$  = 5.2 $\mu$ g/mL,  $TC_{50}$  = 62.5 $\mu$ g/mL, TI =  $TC_{50}/IC_{50}$  = 12.0). **Source:** CUI YUN CAO *Selaginella uncinata* (whole herb). **Ref:** 4398.

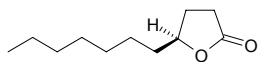
**22216 Uncinoside B**

5-Acetoxy-2,6,8-trimethylchromone 7-*O*- $\beta$ -D-glucopyranoside  $C_{20}H_{24}O_{10}$  (424.41). White powder, mp 165~167°C. **Pharm:** Antiviral (respiratory syncytial virus (RSV),  $IC_{50}$  = 1.3 $\mu$ g/mL,  $TC_{50}$  = 83.3 $\mu$ g/mL, TI =  $TC_{50}/IC_{50}$  = 64.0, control Ribavirin,  $IC_{50}$  = 2.6 $\mu$ g/mL,  $TC_{50}$  = 62.5 $\mu$ g/mL, TI =  $TC_{50}/IC_{50}$  = 24.0; parainfluenza type 3 virus (Para-3),  $IC_{50}$  = 20.8 $\mu$ g/mL,  $TC_{50}$  = 83.3 $\mu$ g/mL, TI =  $TC_{50}/IC_{50}$  = 4.0, control Ribavirin,  $IC_{50}$  = 5.2 $\mu$ g/mL,  $TC_{50}$  = 62.5 $\mu$ g/mL, TI =  $TC_{50}/IC_{50}$  = 12.0). **Source:** CUI YUN CAO *Selaginella uncinata* (whole herb). **Ref:** 4398.

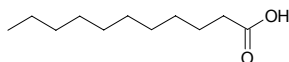


**22217  $\gamma$ -Undecalactone**

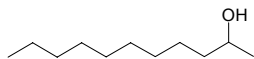
5-Heptyldihydrofuranone [104-67-6] C<sub>11</sub>H<sub>20</sub>O<sub>2</sub> (184.28). Pharm: Flavorant. Source: CHAI HU *Bupleurum chinense*, TAO *Prunus persica*. Ref: 2, 658.

**22218 Undecanoic acid**

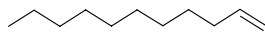
Undecanoic acid [112-37-8] C<sub>11</sub>H<sub>22</sub>O<sub>2</sub> (186.30). Source: FU LING *Poria cocos*. Ref: 2.

**22219 Undecan-2-ol**

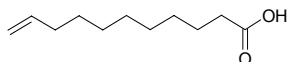
C<sub>11</sub>H<sub>24</sub>O (172.31). mp (+) 12°C, bp (-) 231~233°C, ( $\pm$ ) 228~229°C. Source: CHOU CAO *Ruta graveolens*. Ref: 6.

**22220 Undecene**

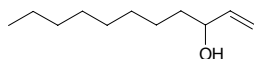
[821-95-4] C<sub>11</sub>H<sub>22</sub> (154.30). bp 192~195°C. Source: BAI ZHI *Angelica dahurica* [Syn. *Angelica porphyrocaulis*]. Ref: 2.

**22221 10-Undecenoic acid**

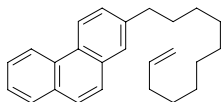
Undecylenic acid. [112-38-9] C<sub>11</sub>H<sub>20</sub>O<sub>2</sub> (184.28). Source: BAI ZHI *Angelica dahurica* [Syn. *Angelica porphyrocaulis*]. Ref: 2.

**22222 1-Undecen-3-ol**

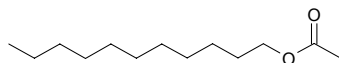
C<sub>11</sub>H<sub>22</sub>O (170.30). Source: KUAN DONG HUA *Tussilago farfara*. Ref: 660.

**22223 Undecenyl phenanthrene**

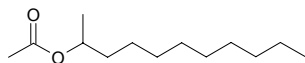
C<sub>25</sub>H<sub>30</sub> (330.52). Source: LUO DI SHENG GEN *Bryophyllum pinnatum*. Ref: 660.

**22224 n-Undecyl acetate**

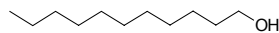
[1731-81-3] C<sub>13</sub>H<sub>26</sub>O<sub>2</sub> (214.35). Source: HEI MA YI *Formica fusca*. Ref: 6.

**22225 2-Undecyl acetate**

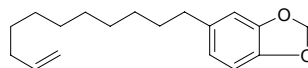
C<sub>13</sub>H<sub>26</sub>O<sub>2</sub> (214.35). Source: CHOU CAO *Ruta graveolens*. Ref: 6.

**22226 Undecyl alcohol**

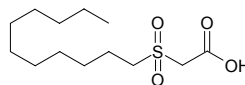
Undecanol [112-42-5] C<sub>11</sub>H<sub>24</sub>O (172.31). mp 19~11°C, bp 147°C/25mmHg. Source: HEI MA YI *Formica fusca*. Ref: 6.

**22227 1-Undecylenyl-3,4-methylenedioxybenzene**

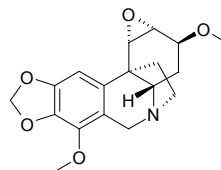
C<sub>18</sub>H<sub>28</sub>O<sub>2</sub> (276.42). Source: BI BA *Piper longum*. Ref: 6.

**22228 Undecyl sulfonyl acetic acid**

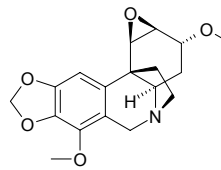
C<sub>13</sub>H<sub>26</sub>O<sub>4</sub>S (278.41). Source: A WEI *Ferula assafoetida*. Ref: 660.

**22229 (+)-Undulatine**

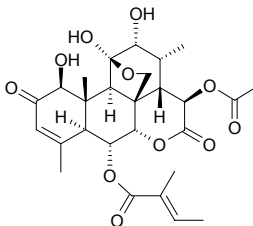
C<sub>18</sub>H<sub>21</sub>NO<sub>5</sub> (331.37). Source: *Crinum moorei*. Ref: 4952.

**22230 (-)-Undulatine**

C<sub>18</sub>H<sub>21</sub>NO<sub>5</sub> (331.37). Pharm: Antimalarial inactive (*Plasmodium falciparum* strain NF-54, stage IEF). Source: GUAN MU WEN SHU LAN *Crinum macowanii* (bulb). Ref: 4000.

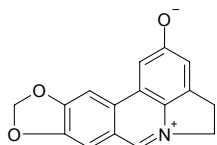
**22231 Undulatone**

[70993-77-0] C<sub>27</sub>H<sub>34</sub>O<sub>11</sub> (534.57). Pharm: Antineoplastic (leukemia). Source: BO YE KU MU *Hannoa undulata*. Ref: 658.

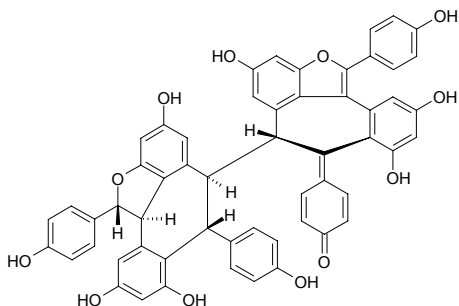


**22232 Ungeremine**

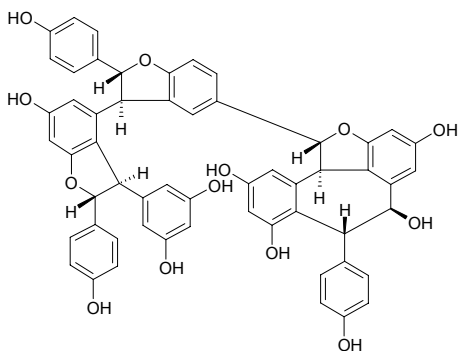
Lecobettaine [2121-12-2]  $C_{16}H_{11}NO_3$  (265.27). mp 270~272°C. **Pharm:** Antineoplastic (active in the treatment of cervical, ovarian, gastric and other cancers in clinical trials; overall response in 233 cases of different cancers was reported to be about 35%; no significant myelotoxic, cardiotoxic and hepatotoxic side effects have been observed)<sup>[5369]</sup>; antineoplastic (mouse or rats ip, Ehrlich ascites carcinoma, ascites hepatoma, leukemia L<sub>1210</sub>, leukemia P<sub>388</sub>, Lewis lung carcinoma and Yoshida ascites sarcoma)<sup>[5369]</sup>; antineoplastic (nude mouse bearing hmn gastric cancer xenografts, extends survival time and decreases the tumor size)<sup>[5369]</sup>; cytotoxic (*in vitro*, S180, KB)<sup>[5369]</sup>; cytotoxic (*in vitro*, stomach cancer cells, direct cytotoxic effect to arrest carcinoma cells in the G2/M phase)<sup>[5369]</sup>; cytotoxic (calf thymus DNA, intercalates with DNA base pairs, especially the GC-pair, does not bind covalently to DNA)<sup>[5369]</sup>; topoisomerase I and II inhibitor (strongly inhibits growth of hmn tumor xenografts *in vitro* and *in vivo*, in the clonogenic assay against 21 hmn tumor xenografts of various tumor types  $IC_{50} = 0.002\sim 27.5\mu\text{mol/L}$  with mean  $IC_{50} = 0.8\mu\text{mol/L}$ )<sup>[5369]</sup>; LD<sub>50</sub> (rat, ori) = 90mg/kg<sup>[5369]</sup>. **Source:** SHI SUAN *Lycoris radiata* [Syn. *Amaryllis radiata*], XIAO BO SI SHI SUAN *Ungernia minor* (leaf), YA ZHOU WEN SHU LAN *Crinum asiaticum* (fruit). **Ref:** 4, 1521, 5369.

**22233 Upunaphenol B**

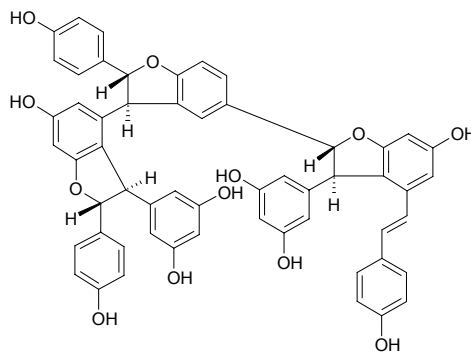
$C_{56}H_{38}O_{12}$  (902.92). Yellow amorphous powder,  $[\alpha]_D^{25} = -530^\circ$  ( $c = 0.1$ , MeOH). **Source:** *Upuna borneensis* (stem). **Ref:** 4435.

**22234 Upunaphenol C**

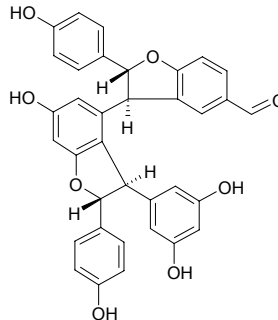
$C_{56}H_{42}O_{13}$  (922.95). Pale yellow amorphous powder,  $[\alpha]_D^{25} = -175^\circ$  ( $c = 0.1$ , MeOH). **Source:** *Upuna borneensis* (stem). **Ref:** 4435.

**22235 Upunaphenol D**

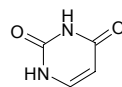
$C_{56}H_{42}O_{12}$  (906.95). Yellow amorphous powder,  $[\alpha]_D^{25} = -229^\circ$  ( $c = 0.1$ , MeOH). **Source:** *Upuna borneensis* (stem). **Ref:** 4435.

**22236 Upunaphenol E**

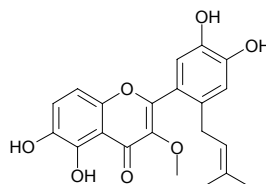
$C_{35}H_{26}O_8$  (574.59). Yellow amorphous powder,  $[\alpha]_D^{25} = -147^\circ$  ( $c = 0.1$ , MeOH). **Source:** *Upuna borneensis* (stem). **Ref:** 4435.

**22237 Uracil**

2,4-Pyrimidinediol [66-22-8]  $C_4H_4N_2O_2$  (112.09). mp 335°C. **Pharm:** Tyrosinase inhibitor (333.3 $\mu\text{mol/L}$ , InRt = 5.3%; control Kojic acid, 333.3 $\mu\text{mol/L}$ , InRt = 59.8%)<sup>[4233]</sup>; enhances myocardial contractility; strengthens vasoconstriction. **Source:** DANG GUI *Angelica sinensis*, DONG CHONG XIA CAO *Cordyceps sinensis* (dried fungal stroma growing on larva of a caterpillar: content = 0.050%<sup>[5512]</sup>), FU ZI *Aconitum carmichaeli* (daughter root: mean content = 0.021%<sup>[5508]</sup>), REN GONG YONG CHONG CAO *Cordyceps militaris* cv. (sclerotium and stroma: content = 0.054%<sup>[5512]</sup>), WU TOU *Aconitum carmichaeli*, ZANG HONG HUA *Crocus sativus* (pollen), ZANG HONG HUA *Crocus sativus* (stigma: yield = 0.0020%dw), ZHANG YE BAN XIA *Pinellia pedatisecta*. **Ref:** 2, 239, 658, 660, 4233, 4653, 5508, 5512.

**22238 Uralene**

5,6,3',4'-Tetrahydroxy-3-methoxy-6'-isoprenyl flavone  $C_{21}H_{20}O_7$  (384.39). Yellowish lamellar crystals, mp 216~218°C. **Source:** GAN CAO *Glycyrrhiza uralensis*. **Ref:** 251, 660.



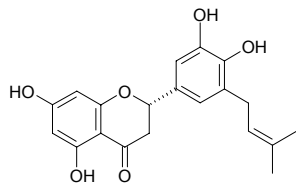
**22239 Uralenin**

5,7,3',4'-Tetrahydroxy-5'-prenylflavoanone [87746-47-2] C<sub>20</sub>H<sub>20</sub>O<sub>6</sub> (356.38).

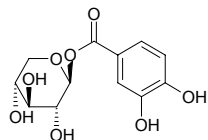
White crystalline powder, mp 212.5~214.0°C; yellow acicular, mp 213~215°C.

**Pharm:** Antibacterial (gram-positive bacteria, *Staphylococcus aureus* and *Bacillus subtilis* EC = 50mg/L); antioxidant (inhibits formation of superoxide in macrophage). **Source:** GAN CAO *Glycyrrhiza uralensis*, CHAO XIAN

YIN YANG HUO *Epimedium koreanum*. **Ref:** 171, 342, 1747, 1748.

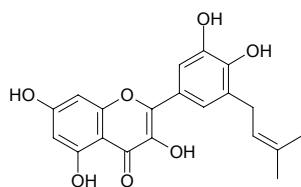
**22240 Uralenneoside**

1-O-Protocatechuy-β-D-xylopyranose C<sub>12</sub>H<sub>14</sub>O<sub>8</sub> (286.24). White granular crystals, mp 185~187°C. **Source:** GAN CAO *Glycyrrhiza uralensis*. **Ref:** 231.

**22241 Uralenol**

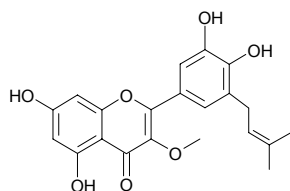
3,5,7,3',4'-Pentahydroxy-5'-isoprenylflavone C<sub>20</sub>H<sub>18</sub>O<sub>7</sub> (370.36). Yellow

acicular crystals, mp 170.5~172.5°C. **Source:** GAN CAO *Glycyrrhiza uralensis*. **Ref:** 171.

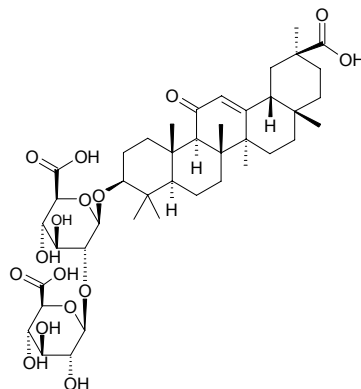
**22242 Uralenol-3-methylether**

5,7,3',4'-Tetrahydroxy-3-methoxy-5'-isoprenyl flavone C<sub>21</sub>H<sub>20</sub>O<sub>7</sub> (384.39).

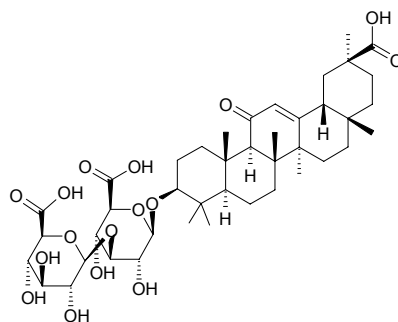
Dark yellow lamellar crystals, mp 104~109°C. **Source:** GAN CAO *Glycyrrhiza uralensis*. **Ref:** 251, 660.

**22243 Uralsaponin A**

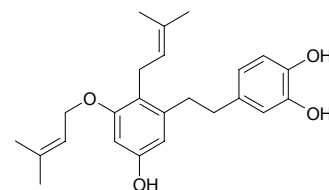
3β-Hydroxy-11-oxo-olean-12-en-30-oic acid-3-O-β-D-glucuronopyranosyl-(1→2)-β-D-glucuronopyranoside [103000-77-7] C<sub>42</sub>H<sub>62</sub>O<sub>16</sub> (822.95). White granular crystals, mp 235°C, [α]<sub>D</sub><sup>18</sup> = +42.7° (c = 0.45, 90% methanol). **Source:** GAN CAO *Glycyrrhiza uralensis*, HUANG GAN CAO *Glycyrrhiza kansuensis*. **Ref:** 57, 660.

**22244 Uralsaponin B**

3β-Hydroxy-11-oxo-olean-12-en-30-oic acid-3-O-β-D-glucuronopyranosyl-(1→3)-β-D-glucuronopyranoside [105038-43-5] C<sub>42</sub>H<sub>62</sub>O<sub>16</sub> (822.95). White granular crystals, mp 244°C, [α]<sub>D</sub><sup>18</sup> = +31.0° (c = 0.29, 90% methanol). **Source:** GAN CAO *Glycyrrhiza uralensis* (root and rhizome: content = 0.436%<sup>[5508]</sup>), GUANG GUO GAN CAO *Glycyrrhiza glabra* (root and rhizome: content = 0.813%<sup>[5508]</sup>), HUANG GAN CAO *Glycyrrhiza kansuensis*, ZHANG GUO GAN CAO *Glycyrrhiza inflata* (root and rhizome: content = 0.932%<sup>[5508]</sup>). **Ref:** 57, 195, 660, 5508.

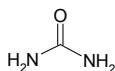
**22245 Uralstilbene**

C<sub>24</sub>H<sub>30</sub>O<sub>4</sub> (382.50). Amorphous solid. **Source:** GAN CAO *Glycyrrhiza uralensis* (leaf). **Ref:** 4387.

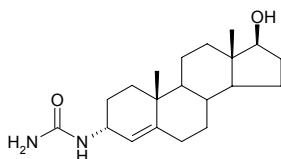


**22246 Urea**

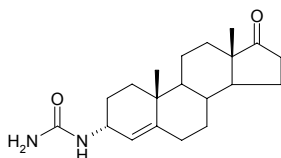
Carbamoylamine [57-13-6] CH<sub>4</sub>N<sub>2</sub>O (63.06). mp 132°C. Source: DONG GUA ZI *Benincasa hispida*, LI SHU PI *Castanea mollissima*, MA BO *Lasiosphaera fenzlii*, NIU DAN *Bos taurus domesticus*; *Bubalus bubalis*, NIU XUE *Bos taurus domesticus*; *Bubalus bubalis*, REN NIAO *Homo sapiens*, REN ZHONG BAI *Homo sapiens*, WU LING ZHI *Trogopterus xanthipes*; *Pteromys volans*, XIA TIAN GAO *Bos taurus domesticus*, YE MING SHA *Vespertilio superans*. Ref: 6.

**22247 3 $\alpha$ -Ureido-androst-4-en-17 $\beta$ -ol**

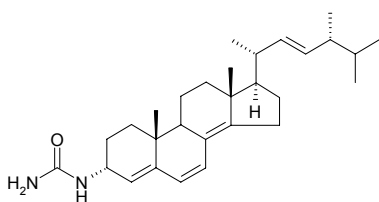
C<sub>20</sub>H<sub>32</sub>N<sub>2</sub>O<sub>2</sub> (332.49). Amorphous powder, mp 220~223°C °, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +115° (c = 0.002, MeOH). Source: SHE XIANG *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*. Ref: 4190.

**22248 3 $\alpha$ -Ureido-androst-4-en-17-one**

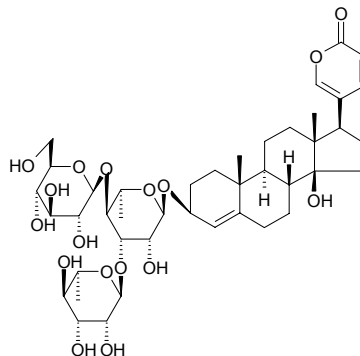
C<sub>20</sub>H<sub>30</sub>N<sub>2</sub>O<sub>2</sub> (330.47). Amorphous powder, mp 210~212°C (>215°C), [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +250° (c = 0.02, MeOH). Source: SHE XIANG *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*. Ref: 4190.

**22249 (22E,24R)-3 $\alpha$ -Ureido-ergosta-4,6,8(14),22-tetraene**

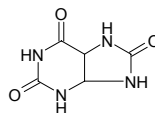
C<sub>29</sub>H<sub>44</sub>NO (436.69). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +364.5° (c = 0.3, MeOH). Source: *Chlorophyllum molybdites*. Ref: 4112.

**22250 Uarginin**

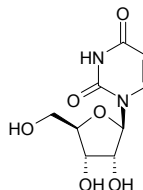
14 $\beta$ -Hydroxybufa-4,20,22-trienolide 3 $\beta$ -O-{ $\alpha$ -L-rhamnopyranosyl-[(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -L-rhamnopyranoside]} C<sub>42</sub>H<sub>62</sub>O<sub>17</sub> (838.95). Pale yellow crystals, mp 178~182°C (MeOH), [ $\alpha$ ]<sub>D</sub> = -55.15° (c = 0.0068). Source: GAO HAI CONG *Urginea altissima* (bulb), *Drimia robusta* (bulb). Ref: 5193.

**22251 Uric acid**

2,6,8-Trihydroxy-purine [69-93-2] C<sub>5</sub>H<sub>4</sub>N<sub>4</sub>O<sub>3</sub> (170.13). No melting point, > 400°C (dec). Source: MA BO *Lasiosphaera fenzlii*, NIU XUE *Bos taurus domesticus*; *Bubalus bubalis*, REN NIAO *Homo sapiens*, REN ZHONG BAI *Homo sapiens*, XIA TIAN GAO *Bos taurus domesticus*, YE MING SHA *Vespertilio superans*, YUAN CAN ZI *Bombyx mori*. Ref: 6.

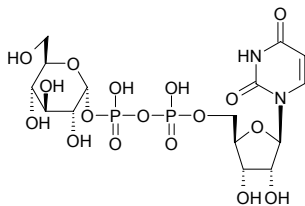
**22252 Uridine**

C<sub>9</sub>H<sub>12</sub>N<sub>2</sub>O<sub>6</sub> (244.21). Pharm: Antioxidant inactive (DPPH scavenger, EC<sub>50</sub> > 200 $\mu$ g/mL, control Ascorbic acid, EC<sub>50</sub> = 1.6 $\mu$ g/mL = 9.1 $\mu$ mol/L)<sup>[4154]</sup>. Source: BEI SHA SHEN *Glehnia littoralis* (underground part), CANG ZHU *Atractylodes lancea*, DANG GUI *Angelica sinensis* (root: content = 0.015%)<sup>[5514]</sup>, DONG CHONG XIA CAO *Cordyceps sinensis* (dried fungal stroma growing on larva of a caterpillar: content = 0.111%)<sup>[5512]</sup>, GUAN HUA ROU CONG RONG *Cistanche tubulosa* (fleshy stem: content = 0.016%)<sup>[5514]</sup>, HUANG QI *Astragalus membranaceus* (root: content = 0.027%)<sup>[5514]</sup>, MAI DONG *Ophiopogon japonicus* (tuberoid: content = 0.005%)<sup>[5514]</sup>, REN GONG YONG CHONG CAO *Cordyceps militaris* cv. (sclerotium and stroma: content = 0.306%)<sup>[5512]</sup>, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*] (root: content = 0.028%)<sup>[5514]</sup>, SHI LUO ZI *Anethum graveolens* (fruit), SHU DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*] (steamed and shined root: content = 0.017%)<sup>[5514]</sup>. Ref: 4154, 4177, 4348, 5512, 5514.

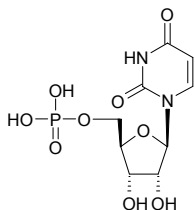


**22253 Uridine diphosphate glucose**

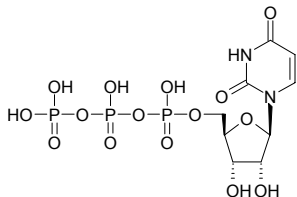
[133-89-1]  $C_{15}H_{24}N_2O_{17}P_2$  (566.32). **Pharm:** Involves the metabolism of carbohydrates. **Source:** occurs in many plants (biosynthetic product from the uridyl transferase catalysed reaction of UTP and glucose 1-phosphate). **Ref:** 658.

**22254 Uridine monophosphate**

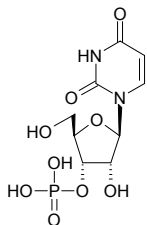
5'-Uridylic acid  $C_9H_{13}N_2O_9P$  (324.19). mp 198.5°C. **Source:** MO GU *Agaricus campestris*. **Ref:** 6.

**22255 Uridine-5'-triphosphatemonophosphate**

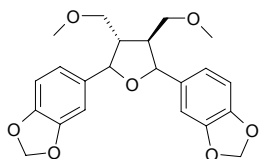
[63-39-8]  $C_9H_{15}N_2O_{15}P_3$  (484.15). **Source:** Yeast and other biological sources. **Ref:** 1521.

**22256 Uridylic acid**

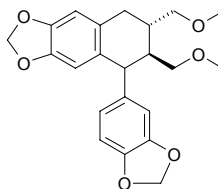
$C_9H_{13}N_2O_9P$  (324.19). mp 195°C (dec). **Source:** GOU QI YE *Lycium chinense*. **Ref:** 6.

**22257 Urinaligran**

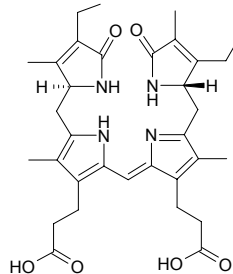
$C_{22}H_{24}O_7$  (400.43). Colorless liquid,  $[\alpha]_D^{25} = +19.0^\circ$  ( $c = 1.0$ ). **Source:** YE XIA ZHU *Phyllanthus urinaria*. **Ref:** 3410.

**22258 Urinatetralin**

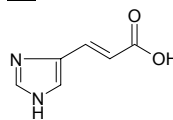
$C_{22}H_{24}O_6$  (384.43). Liquid,  $[\alpha]_D^{25} = +7.0^\circ$  ( $c = 1.0$ ). **Source:** YE XIA ZHU *Phyllanthus urinaria*. **Ref:** 3410.

**22259 Urobilin**

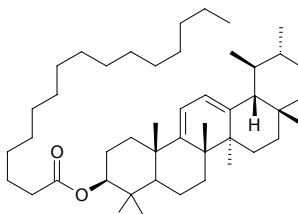
[1856-98-0]  $C_{33}H_{42}N_4O_6$  (590.73). mp 177°C. **Source:** REN NIAO *Homo sapiens*. **Ref:** 6.

**22260 Urocanic acid**

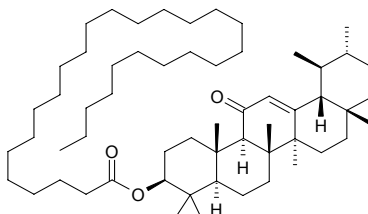
4-Imidazoleacrylic acid [104-98-3]  $C_6H_6N_2O_2$  (138.13). mp [ $\alpha$  (*trans*)] 218–224°C, [ $\beta$  (*cis*)] 175–176°C. **Source:** GUI GAI *Coprinus atramentarius*. **Ref:** 6.

**22261 9(11),12-Ursadien-3β-ol 3-O-palmitate**

$C_{46}H_{78}O_2$  (663.13). Amorphous,  $[\alpha]_D^{25} = +150.2^\circ$  ( $c = 0.36$ ,  $CHCl_3$ ), artificial diene derivative. **Source:** HUANG LONG DAN *Gentiana lutea* (rhizomes and root). **Ref:** 4364.

**22262 Ursa-12-ene-11-one-3-ol octocosate**

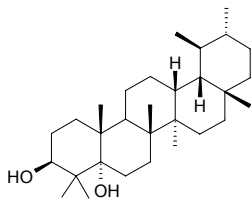
Ursa-12-ene-11-one-3-ol octocosate  $C_{58}H_{102}O_3$  (847.46). White solid mp 80–82°C. **Source:** TONG QIAO SHE GU *Balanophora involucreta*. **Ref:** 793.



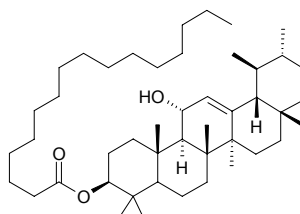


**22263 Ursan-3 $\beta$ ,5 $\alpha$ -diol**

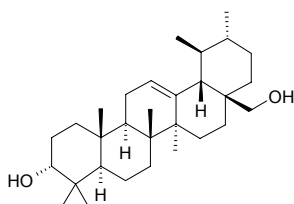
C<sub>30</sub>H<sub>52</sub>O<sub>2</sub> (444.75). Source: LEI GONG TENG *Tripterygium wilfordii*. Ref: 660.

**22267 12-Ursene-3 $\beta$ , 11 $\alpha$ -diol 3-O-palmitate**

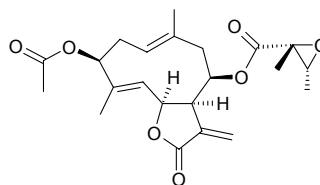
C<sub>46</sub>H<sub>80</sub>O<sub>3</sub> (681.15). Amorphous,  $[\alpha]_D^{25} = +31.1^\circ$  ( $c = 0.27$ , CHCl<sub>3</sub>). Source: HUANG LONG DAN *Gentiana lutea* (rhizomes and root). Ref: 4364.

**22264 Urs-12-en-3 $\beta$ ,28-diol**

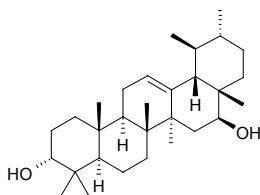
C<sub>30</sub>H<sub>50</sub>O<sub>2</sub> (442.73). Source: XIA KU CAO *Prunella vulgaris*. Ref: 2508.

**22268 Ursiniolide A**

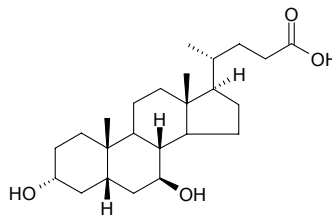
[52677-96-0] C<sub>22</sub>H<sub>28</sub>O<sub>7</sub> (404.47). Pharm: Antineoplastic; cytotoxic. Source: *Ursinia anthemoides*. Ref: 658.

**22265 Urs-12-ene-3 $\alpha$ ,16 $\beta$ -diol**

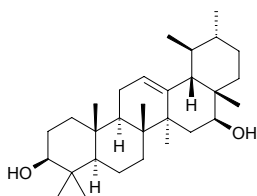
[122475-43-8] C<sub>30</sub>H<sub>50</sub>O<sub>2</sub> (442.73). mp 127~128°C,  $[\alpha]_D^{23} = +43^\circ$  ( $c = 1.0$ , chloroform). Pharm: Antihepatotoxin (rat, hepatodamage caused by galactosamine). Source: QING GUO *Canarium album*. Ref: 660, 1147.

**22269 Ursodeoxycholic acid**

[128-13-2] C<sub>24</sub>H<sub>40</sub>O<sub>4</sub> (392.58). Pharm: Antispasmodic (mus, small intestine); choleric; antidote; enhances activity of esterase; hypoglycemic (rht, hyperglycemia model induced by alloxan, 0.4g/(kg-d) orl 5 days, having obvious effect, also lowers urine sugar); antihypercholesterolemic (reduces the level of cholesterol and triglyceride in serum); LD<sub>50</sub> (mus, sc) = 1250mg/kg. Source: XIONG DAN *Selenarctos thibetanus*; *Ursus arctos*. Ref: 2, 658.

**22266 Urs-12-ene-3 $\beta$ ,16 $\beta$ -diol**

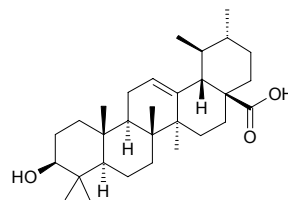
[465-08-7] C<sub>30</sub>H<sub>50</sub>O<sub>2</sub> (442.73). mp 225~227°C,  $[\alpha]_D^{28} = +49^\circ$  ( $c = 1.0$ , chloroform). Pharm: Antihepatotoxin (rat, hepatodamage caused by galactosamine). Source: QING GUO *Canarium album*. Ref: 660, 1147.



**22270 Ursolic acid**

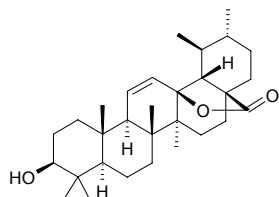
$\beta$ -Ursolic acid [77-52-1] C<sub>30</sub>H<sub>48</sub>O<sub>3</sub> (456.72). White solid powder (chloroform–methanol), mp 298–294°C, 265–267°C. **Pharm:** Cytotoxic (KB, ED<sub>50</sub> > 25 µg/mL, control Doxorubicin, ED<sub>50</sub> = 0.12 µg/mL; Hep3B, ED<sub>50</sub> > 25 µg/mL, control Doxorubicin, ED<sub>50</sub> = 0.14 µg/mL; Colon205, ED<sub>50</sub> > 25 µg/mL, control Doxorubicin, ED<sub>50</sub> = 0.10 µg/mL; HeLa, ED<sub>50</sub> > 25 µg/mL, control Doxorubicin, ED<sub>50</sub> = (0.11 µg/mL)<sup>[4369]</sup>; cytotoxic (*in vitro*, HONE-1 cell, IC<sub>50</sub> = (8.8±1.5) µmol/L, control Etoposide, IC<sub>50</sub> = (0.5±0.2) µmol/L, *cis*-Platin, IC<sub>50</sub> = (3.2±0.5) µmol/L; KB cell, IC<sub>50</sub> = (8.2±2.7) µmol/L, Etoposide, IC<sub>50</sub> = (0.9±0.3) µmol/L, *cis*-Platin, IC<sub>50</sub> = (4.4±0.9) µmol/L; HT29 cell, IC<sub>50</sub> = (4.7±1.5) µmol/L, Etoposide, IC<sub>50</sub> = (2.4±0.5) µmol/L, *cis*-Platin, IC<sub>50</sub> = (5.7±1.1) µmol/L)<sup>[5254]</sup>; antineoplastic (liver cancer cells *in vitro*, mus ascites carcinoma *in vivo*, life was prolonged); antibacterial (*Escherichia coli*, IZD = 13–15mm, control Chloramphenicol, IZD = 16–20mm, control DMSO (4%), IZD < 10mm; *Staphylococcus aureus*, IZD = 10–12mm, control Chloramphenicol, IZD = 16–20mm, control DMSO (4%), IZD < 10mm; *Bacillus subtilis*, IZD = 13–15mm; control Chloramphenicol, IZD = 16–20mm, control DMSO (4%), IZD < 10mm)<sup>[5315]</sup>; antibacterial (*Staphylococcus* spp. *in vitro*, MIC = 300 µg/mL, gram-positive bacteria *in vitro*, MIC = 50–400 µg/mL, gram-negative bacteria *in vitro*, MIC = 200–800 µg/mL, microzyme *in vitro*, MIC = 100–700 µg/mL); antitubercular (*Mycobacterium tuberculosis*, MIC = 41.9 µg/mL, cytotoxic, Vero cells, IC<sub>50</sub> = 46.5 µg/mL, SI (IC<sub>50</sub>/MIC) = 1.11, positive control Rifampin, MIC = 0.03 µg/mL, IC<sub>50</sub> = 98.3 µg/mL, SI = 3277)<sup>[4986]</sup>; anticonvulsant (induced by corazol); anti-inflammatory (rat, induced by embedding woolball, 12.5mg/(kg·d) ip, 7 days, effective); anti-inflammatory (*in vitro*, murine macrophage RAW264.7 Cells, inhibits LPS-induced NO and PGE<sub>2</sub> release)<sup>[5016]</sup>; COX-2 enzyme selective inhibitor (mean IC<sub>50</sub> of isomers = 130 µmol/L)<sup>[4415]</sup>; COX-2 inhibitor (PMA-treated hmn mammary and oral epithelial cells, molecular mechanisms is mediated by a cAMP response element in the COX-2 promoter, associated with inhibition of protein kinases)<sup>[4415]</sup>; antipyretic (clearly reduces normal body temperature in rat); reduces serum transaminase (animal, 100mg/kg); antitrypanosomal (epimastigotes of *Trypanosoma cruzi*, MLC = 6.2 µmol/L, control Gentian violet, MLC = 6.2 µmol/L)<sup>[2579]</sup>; mucin release stimulator (acts directly on airway mucin-secreting cells, increased mucin release (40–50)% above control at the highest concentrations 0.0001–0.001 mol/L, possible use to treatment of chronic airway diseases)<sup>[4084]</sup>; platelet aggregation inhibitor (2–5mg/mL collagen-induced, IC<sub>50</sub> = (511±4) µmol/L, control ASA, IC<sub>50</sub> = (420±3) µmol/L; 1–4 µmol/L epinephrine-induced with 0.8–1.0mg/mL collagen, IC<sub>50</sub> = (82.6±2.8) µmol/L, ASA, IC<sub>50</sub> = (53.0±4.5) µmol/L; 10–40 µmol/L Sodium arachidonate-induced with 0.8–1.0mg/mL collagen, IC<sub>50</sub> = (669±12) µmol/L, ASA, IC<sub>50</sub> = (66.0±2.1) µmol/L; 1–5 µmol/L PGH<sub>2</sub>/TXA<sub>2</sub> receptor agonist U46619-induced with 0.8–1.0mg/mL collagen, IC<sub>50</sub> > 1000 µmol/L, ASA, IC<sub>50</sub> = (340±12) µmol/L)<sup>[4994]</sup>; tissue factor inhibitor inactive<sup>[5387]</sup>; antirheumatic<sup>[5341]</sup>; anti-diabetic<sup>[5341]</sup>; antiulcer<sup>[5341]</sup>; hypolipidemic<sup>[5341]</sup>; anti-atherosclerotic<sup>[5341]</sup>; anti-HIV<sup>[5341]</sup>; TGF- $\beta$ 1 antagonist (inhibits the binding of <sup>125</sup>I-TGF- $\beta$ 1 to its receptor in Balb/c 3T3 cell, IC<sub>50</sub> = (6.9±0.8) µmol/L, suggests TGF- $\beta$ 1 antagonistic activity is responsible, at least in part, for therapeutic efficacy of *Clerodendranthus spicatus* to treat humans with renal disease)<sup>[5496]</sup>; glucocorticoid (enhances glycogen in liver, reduces glycogen in heart and striated muscles); LD<sub>50</sub> (mus, ip) = 680mg/kg. **Source:** BAI HUA SHE SHE CAO *Oldenlandia diffusa* [Syn.

*Hedyotis diffusa*] (whole herb: mean content of 16 origins = 0.211%<sup>[5508]</sup>), BI LU GOU TENG *Uncaria tomentosa*, CHE QIAN *Plantago asiatica* (whole herb: content scope = 0.28%–2.32%, mean content = 0.97%<sup>[5508]</sup>), CHI NAN *Syzygium buxifolium*, CHONG YA YAO *Isodon ternifolius*, CI WU JIA YE *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*], DA CHE QIAN *Plantago major*, DA ZAO *Ziziphus jujuba* (ripe fruit: mean content = 0.016%<sup>[5508]</sup>), DAN SHEN *Salvia miltiorrhiza*, DIAN NAN HONG HOU KE *Calophyllum polyanthum* (seed: yield = 0.0064%dw), DONG LING CAO *Rabdosia rubescens* (whole herb: mean content = 0.414%<sup>[5508]</sup>; leaf: mean content = 0.573%<sup>[5508]</sup>), DU ZHONG *Eucommia ulmoides*, DUAN TING SHAN MAI DONG *Liriope muscari* (tuber), GOU GU YE *Ilex cornuta* (leaf: mean content = 0.96%<sup>[5508]</sup>), GUANG JING QIAN CAO *Rubia wallichiana* (stem), HONG HUA LU TI CAO *Pyrola incarnata* (whole herb: content = 2.06%<sup>[5508]</sup>), HU BEI SHAN ZHA *Crataegus hupehensis* (dried ripe fruit: mean content = 0.455%), JIAN YE TOU WU GEN *Ligularia sagitta*, LIAN QIAN CAO *Glechoma lungituba*, LIAN QIAO *Forsythia suspensa*, LIU QIU SHE GEN CAO *Ophiorrhiza liukuensis* (whole herb), MA BIAN CAO *Verbena officinalis* (whole herb: mean content of 5 batch samples = 0.227%<sup>[5508]</sup>), MAO CAO LONG *Ludwigia octovalvis* (whole herb: yield = 0.00012%dw), MAO PAO TONG *Paulownia tomentosa*, MAO XU CAO *Clerodendranthus spicatus*, MU GUA *Chaenomeles sinensis*, NV ZHEN ZI *Ligustrum lucidum*, PI PA YE *Eriobotrya japonica* (dried leaf: mean content = 0.677%<sup>[5508]</sup>), PI PA YE *Eriobotrya japonica* (stem and leaf), PING CHE QIAN *Plantago depressa* (whole herb: mean content = 0.276%<sup>[5508]</sup>), RI BEN LU TI CAO *Pyrola japonica*, RONG SHU *Ficus microcarpa* (aerial root), SHAN DI XIANG CHA CAI *Isodon oresbia*, SHAN LI HONG *Crataegus pinnatifida* var. *major*, SHAN ZHA *Crataegus pinnatifida* (fruit: content scope = 0.31%–0.56%<sup>[5501]</sup>), SHAN ZHU YU *Cornus officinalis* [Syn. *Macrocarpium officinale*] (dried ripe fruit: content scope = 0.24%–0.32%<sup>[5501]</sup>, mean content = 0.263%<sup>[5508]</sup>), SHI NAN *Photinia serrulata* (leaf: mean content = 1.50%<sup>[5508]</sup>), SHI SHENG BIAN LEI *Gentianopsis paludosa*, SHI YE *Diospyros kaki* (dried leaf: mean content = 0.784%<sup>[5508]</sup>), SHU HUA JIE CAO *Valeriana laxiflora* (aerial parts and root), SUAN ZAO *Ziziphus jujuba* var. *spinosa* (ripe fruit: content = 0.030%<sup>[5508]</sup>), SUO YANG *Cynomorium songaricum* (fleshy stem: content = 0.78%<sup>[5508]</sup>), WEI LING CAI *Potentilla chinensis*, WU GENG WU JIA PI *Acanthopanax sessiliflorus* (fruit), XIA KU CAO *Prunella vulgaris* (dried spike: content = 0.780%<sup>[5508]</sup>), YANG MEI SHU PI *Myrica rubra* (bark: content = 0.027%), YE SHAN ZHA *Crataegus cuneata* (dried ripe fruit: mean content of 3 origins = 0.399%<sup>[5508]</sup>), YI LANG QING LAN *Dracocephalum kotschyi*, ZHI ZI *Gardenia jasminoides* [Syn. *Gardenia florida*] (dried ripe fruit: mean content = 0.041%<sup>[5508]</sup>), ZHOU YE LU TI CAO *Pyrola rugosa* (whole herb: content = 3.00%<sup>[5508]</sup>), *Cussonia bancoensis*, occurs in many plants. **Ref:** 4, 367, 428, 454, 501, 592, 595, 600, 658, 660, 2579, 3005, 3061, 4084, 4163, 4369, 4415, 4527, 4767, 4772, 4986, 4994, 5016, 5254, 5315, 5382, 5387, 5341, 5496, 5501, 5508.

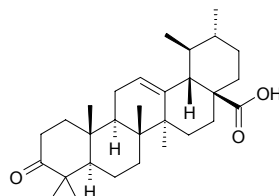


**22271 Ursolic acid lactone**

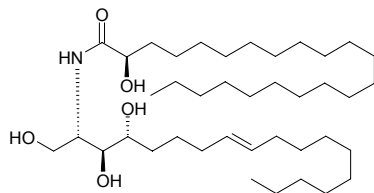
$C_{30}H_{46}O_3$  (454.70). Needles (EtOH), mp 262–264°C. **Pharm:** Nerve growth factor (NGF) enhancer. **Source:** MA BIAN CAO *Verbena officinalis* (white herb). **Ref:** 4902.

**22272 Ursonic acid**

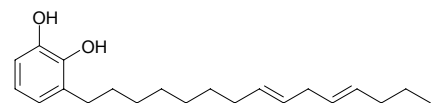
$C_{30}H_{46}O_3$  (454.70). Colorless solid, mp 271–275°C,  $[\alpha]_D^{25} = +56.7^\circ$  ( $c = 0.9$ ,  $CHCl_3$ ). **Pharm:** Inhibits degranulation and release of  $\beta$ -hexosaminidase (RBL-2H3 cells, 100  $\mu$ mol/L, InRt = (20.2  $\pm$  1.3)%, control Curcumin, 100  $\mu$ mol/L, InRt = (62.6  $\pm$  1.0)%,  $p < 0.01$ , did not affect the enzyme activity of  $\beta$ -hexosaminidase<sup>[4163]</sup>; cytotoxic (*in vitro*, HONE-1 cell,  $IC_{50} = (5.2 \pm 0.7) \mu$ mol/L, control Etoposide,  $IC_{50} = (0.5 \pm 0.2) \mu$ mol/L, *cis*-Platin,  $IC_{50} = (3.2 \pm 0.5) \mu$ mol/L; KB cell,  $IC_{50} = (4.0 \pm 2.1) \mu$ mol/L, Etoposide,  $IC_{50} = (0.9 \pm 0.3) \mu$ mol/L, *cis*-Platin,  $IC_{50} = (4.4 \pm 0.9) \mu$ mol/L; HT29 cell,  $IC_{50} = (6.3 \pm 1.8) \mu$ mol/L, Etoposide,  $IC_{50} = (2.4 \pm 0.5) \mu$ mol/L, *cis*-Platin,  $IC_{50} = (5.7 \pm 1.1) \mu$ mol/L)<sup>[5254]</sup>. **Source:** DUO SUI PO BU MU *Cordia multispicata* (leaf), RONG SHU *Ficus microcarpa* (aerial root), YANG MEI SHU PI *Myrica rubra* (bark; yield = 0.0067%). **Ref:** 4106, 4163, 5254.

**22273 Urtica ceramide**

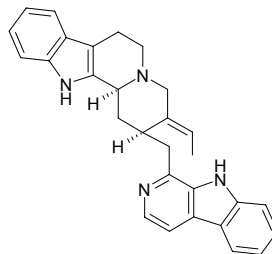
$C_{40}H_{79}NO_5$  (654.08). **Source:** LIAO DONG CONG MU YE *Aralia elata*. **Ref:** 4471.

**22274 Urushiol III**

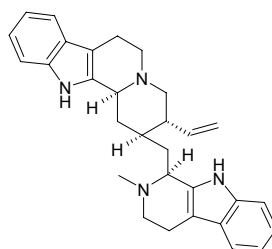
$C_{21}H_{32}O_2$  (316.49). **Pharm:** Dermatitic (causes contact dermatitis); inhibits metabolism of arachidonic acid. **Source:** DU QI TENG *Toxicodendron radicans*. **Ref:** 658.

**22275 Usambarensine**

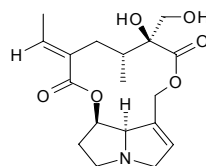
[36150-14-8]  $C_{29}H_{28}N_4$  (432.57). **Pharm:** Muscarinic inhibitor (rat intestine, *in vitro*). **Source:** DONG FEI MA QIAN *Strychnos usambarensis*. **Ref:** 658.

**22276 Usambarine**

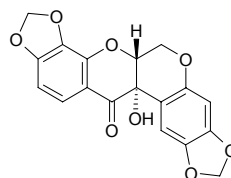
[35226-29-0]  $C_{30}H_{34}N_4$  (450.63). **Pharm:** Toxin. **Source:** DONG FEI MA QIAN *Strychnos usambarensis*. **Ref:** 658.

**22277 Usaramine**

[15503-87-4]  $C_{18}H_{25}NO_6$  (351.40). mp (*trans*) 182.5–183.5°C. **Pharm:** Antihypertensive; similar action with atropine; toxic (hepatic and pulmonary toxicity). **Source:** DUAN YE ZHU SHI DOU *Crotalaria brevifolia*, GUANG E ZHU SHI DOU *Crotalaria usaramoensis*, GUANG YE ZHU SHI DOU *Crotalaria incana*, XI YE ZHU SHI DOU *Crotalaria intermedia*, XIANG LING CAO *Crotalaria ferruginea*, ZHU SHI DOU *Crotalaria mucronata*. **Ref:** 6, 658.

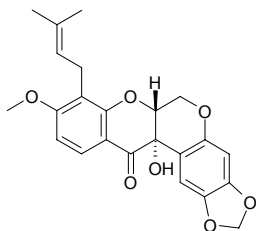
**22278 Usararotenoid A**

$C_{18}H_{12}O_8$  (356.29). **Pharm:** Antimalarial (antiplasmodial, chloroquine-resistant W2 strain of *Plasmodium falciparum*,  $IC_{50} = 66.6 \mu$ mol/L, control Chloroquine,  $IC_{50} = 0.094 \mu$ mol/L, control Quinine,  $IC_{50} = 0.209 \mu$ mol/L; chloroquine-sensitive D6 strain of *Plasmodium falciparum*,  $IC_{50} = 60.7 \mu$ mol/L, control Chloroquine,  $IC_{50} = 0.009 \mu$ mol/L, control Quinine,  $IC_{50} = 0.044 \mu$ mol/L). **Source:** *Milletia usaramensis* ssp. *usaramensis*. **Ref:** 3454.

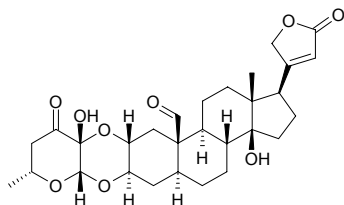


**22279 Usararotenoid C**

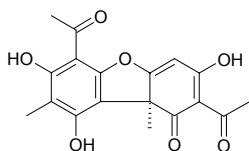
(6a*R*,12a*S*)-2,3-Methylenedioxy-9-methoxy-8-(3,3-dimethylallyl)-12ahydroxy rotenoid C<sub>23</sub>H<sub>22</sub>O<sub>7</sub> (410.43). White crystals (CH<sub>2</sub>Cl<sub>2</sub>), mp 162–164°C, [α]<sub>D</sub><sup>20</sup> = +342° (*c* = 0.6, MeOH). **Pharm:** Antimalarial (antiplasmodial, chloroquine-resistant W2 strain of *Plasmodium falciparum*, IC<sub>50</sub> = 25.8 μmol/L, control Chloroquine, IC<sub>50</sub> = 0.094 μmol/L, control Quinine, IC<sub>50</sub> = 0.209 μmol/L; chloroquine-sensitive D6 strain of *Plasmodium falciparum*, IC<sub>50</sub> = 70.1 μmol/L, control Chloroquine, IC<sub>50</sub> = 0.009 μmol/L, control Quinine, IC<sub>50</sub> = 0.044 μmol/L). **Source:** *Millettia usaramensis* ssp. *usaramensis*. **Ref:** 3454.

**22280 Uscharidin**

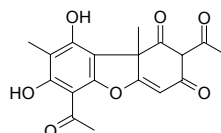
[20304-48-7] C<sub>29</sub>H<sub>38</sub>O<sub>9</sub> (530.62). **Pharm:** Toxin (vertebrate); LD<sub>50</sub> (cat, iv) = 1.4 mg/kg, (male Swiss Webster mus, ip) = 11.8 mg/kg. **Source:** CHANG NIU JIAO GUA *Calotropis procera*. **Ref:** 658.

**22281 (–)-Usnic acid**

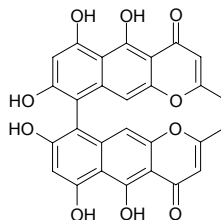
C<sub>18</sub>H<sub>16</sub>O<sub>7</sub> (344.32). Yellow powder, [α]<sub>D</sub><sup>20</sup> = –486° (*c* = 0.4, CHCl<sub>3</sub>). **Pharm:** Cytotoxic (L1210, IC<sub>50</sub> = (6.0±0.5) μg/mL, control Etoposide, IC<sub>50</sub> = (0.3±0.2) μg/mL; 3LL, IC<sub>50</sub> = (12.1±3.7) μg/mL, Etoposide, IC<sub>50</sub> = (2.6±0.8) μg/mL; DU145, IC<sub>50</sub> = (15.8±2.4) μg/mL, Etoposide, IC<sub>50</sub> = (0.9±0.2) μg/mL; MCF7, IC<sub>50</sub> = (17.8±2.5) μg/mL, Etoposide, IC<sub>50</sub> = (12.2±0.5) μg/mL; K562, IC<sub>50</sub> = (8.2±1.3) μg/mL, Etoposide, IC<sub>50</sub> = (2.1±1.3) μg/mL; U251, IC<sub>50</sub> = (6.8±1.6) μg/mL, Etoposide, IC<sub>50</sub> = (0.28±0.06) μg/mL). **Source:** ZONG JUAN SHI RUI *Cladonia convoluta*. **Ref:** 5027.

**22282 Usnic acid**

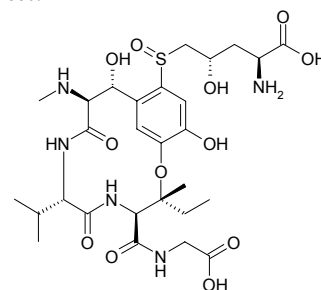
Usnic acid [125-46-2] C<sub>18</sub>H<sub>16</sub>O<sub>7</sub> (344.32). mp 202–204°C. **Pharm:** Antibacterial (*Diplococcus pneumoniae*, *Bacillus diphtheriae*, *Mycobacterium tuberculosis* and hemolytic streptococcus *in vitro*, EC = 1–5 μg/mL, CIC = 50 μg/mL, hmn *Mycobacterium tuberculosis in vitro*, CIC = 20–50 μg/mL, *Bacillus pertussis*, *Bacillus subtilis*, *Bacillus coli* and *Bacillus proteus*); antineoplastic (rat, ascites carcinoma AH130 and AH1974); novel α-glycero-phosphoric acid tetrazole reductase inhibitor (mitochondria); anti-inflammatory; antiprotozoal and *Trichomonas vaginalis*; antispasmodic (gpg aorta, *in vitro*, 0.6 mmol/L, action of antihistamine); used in treatment of suppurated wound, burn, and skin infection; LD<sub>50</sub> (mus, iv) = 25 mg/kg, (mus, sc, *d*-usnic acid) = 700 mg/kg, (mus, sc, usnic acid sodium) = 35 mg/kg, (rbt, iv, *D*-usnic acid) = 30 mg/kg, (rbt, orl, usnic acid sodium) = 100–150 mg/kg, (dog iv) = 40 mg/kg. **Source:** JIN SHUA BA *Cladonia fallax*, SONG LUO *Usnea longissima*, HUAN JIE SONG LUO *Usnea diffracta*, TAI BAI HUA *Cladonia stellaris* [Syn. *Cladonia alpestris*], *Cladonia* sp. **Ref:** 4, 658, 660.

**22283 Ustilaginoidin A**

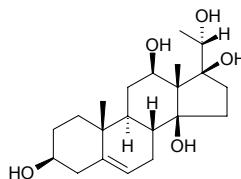
C<sub>28</sub>H<sub>18</sub>O<sub>10</sub> (514.45). mp > 300°C. **Source:** JING GU NU *Ustilagoidea virens*. **Ref:** 6.

**22284 Ustiloxin**

C<sub>28</sub>H<sub>43</sub>N<sub>5</sub>O<sub>12</sub>S (673.75). **Source:** JING GU NU *Ustilagoidea virens*. **Ref:** 660.

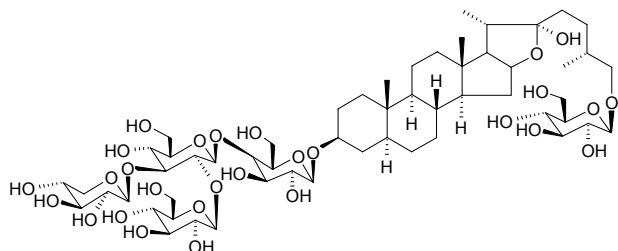
**22285 Utendin**

[28417-32-5] C<sub>21</sub>H<sub>34</sub>O<sub>5</sub> (366.50). **Source:** LUO MO *Metaplexis japonica*. **Ref:** 6, 1521.

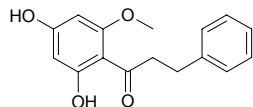


**22286 Uttroside B**

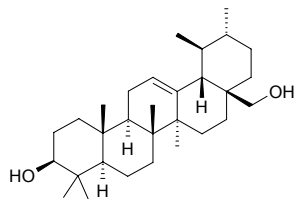
26-*O*- $\beta$ -D-Glucopyranosyl-(25*R*)-5 $\alpha$ -furost-3 $\beta$ ,22 $\alpha$ ,26-triol 3-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)-[ $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-galactopyranoside C<sub>56</sub>H<sub>94</sub>O<sub>28</sub> (1215.36). **Pharm:** Cytotoxic (*in vitro*, HeLa, IC<sub>50</sub> = 18.8 $\mu$ g/mL; control *cis*-Platin, IC<sub>50</sub> = 0.75 $\mu$ g/mL). **Source:** WAN XIANG YU *Polianthes tuberosa* (tuber: yield = 0.0043%fw). **Ref:** 3002.

**22287 Uvangoletin**

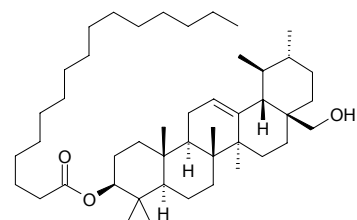
[76444-56-9] C<sub>16</sub>H<sub>16</sub>O<sub>4</sub> (272.30). Needles (EtOAc–petroleum ether), mp 189–190°C, colorless crystals, mp 185–187°C (CHCl<sub>3</sub>). **Pharm:** Cytotoxic inactive (hmn promyelocytic leukemia HL-60 cells, IC<sub>50</sub> > 50 $\mu$ mol/L)<sup>[4261]</sup>. **Source:** GUAN ZI YU PAN *Uvaria angolensis*, JIAN ZI YU PAN *Uvaria acuminata* (root), YANG PU TAO YE *Syzygium samarangense*. **Ref:** 1521, 4100, 4261.

**22288 Uvaol**

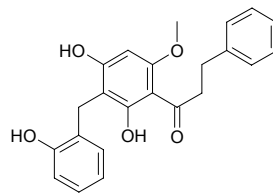
[545-46-0] C<sub>30</sub>H<sub>50</sub>O<sub>2</sub> (442.73). mp 233°C. **Source:** DA YE DONG QING *Ilex latifolia*. **Ref:** 6.

**22289 Uvaol 3-*O*-palmitate**

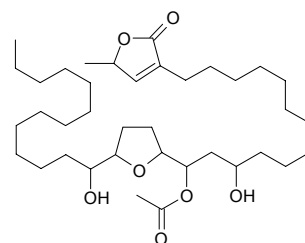
C<sub>46</sub>H<sub>80</sub>O<sub>3</sub> (681.15). **Source:** HUANG LONG DAN *Gentiana lutea* (rhizome and root). **Ref:** 4307.

**22290 Uvaretin**

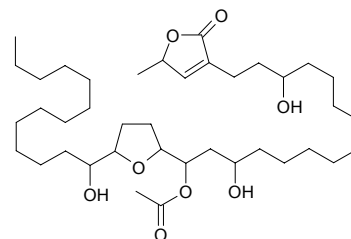
[58449-06-2] C<sub>23</sub>H<sub>22</sub>O<sub>5</sub> (378.43). Colorless crystals, mp 167–169°C (CHCl<sub>3</sub>). **Pharm:** Cytotoxic (hmn promyelocytic leukemia HL-60 cells, IC<sub>50</sub> = 9.3 $\mu$ mol/L)<sup>[4261]</sup>; antimicrobial. **Source:** GUAN ZI YU PAN *Uvaria angolensis*, JIAN ZI YU PAN *Uvaria acuminata* (root). **Ref:** 658, 4261.

**22291 Uvaribonianin**

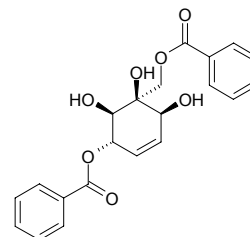
C<sub>37</sub>H<sub>66</sub>O<sub>7</sub> (622.93). Colorless gelatinoid, [ $\alpha$ ]<sub>D</sub><sup>15</sup> = +13° (*c* = 0.01, chloroform). **Source:** GUANG YE ZI YU PAN *Uvaria boniana*. **Ref:** 355.

**22292 Uvaribonin**

C<sub>30</sub>H<sub>70</sub>O<sub>8</sub> (666.99). White waxy solid, mp 50–52°C, [ $\alpha$ ]<sub>D</sub><sup>15</sup> = +13° (*c* = 0.02, chloroform). **Source:** GUANG YE ZI YU PAN *Uvaria boniana*. **Ref:** 355.

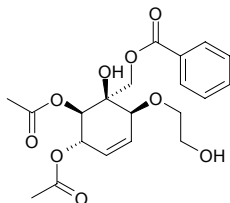
**22293 Uvaribonol D**

C<sub>21</sub>H<sub>20</sub>O<sub>7</sub> (384.39). White solid, mp 65–67°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +40.1° (*c* = 0.02, methanol). **Source:** GUANG YE ZI YU PAN *Uvaria boniana*. **Ref:** 406.

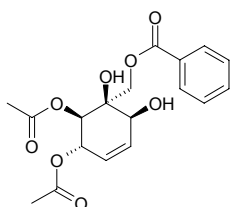


**22294 Uvaribonol E**

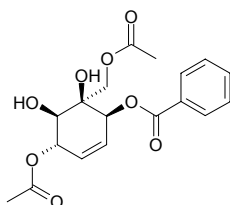
$C_{20}H_{24}O_9$  (408.41). White solid, mp 125~127°C,  $[\alpha]_D^{24} = -33.4^\circ$  ( $c = 0.04$ , methanol). Source: GUANG YE ZI YU PAN *Uvaria boniana*. Ref: 406.

**22295 Uvaribonol F**

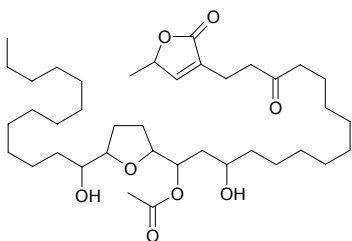
$C_{18}H_{20}O_8$  (364.36). White acicular crystals, mp 148~149°C,  $[\alpha]_D^{24} = +40.0^\circ$  ( $c = 0.02$ , methanol). Source: GUANG YE ZI YU PAN *Uvaria boniana*. Ref: 406.

**22296 Uvaribonol G**

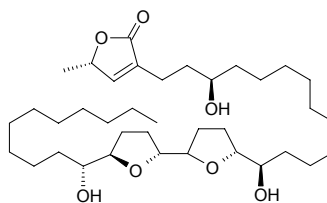
$C_{18}H_{20}O_8$  (364.32). White prismatic crystals, mp 98~100°C,  $[\alpha]_D^{24} = -120.6^\circ$  ( $c = 0.07$ , methanol). Source: GUANG YE ZI YU PAN *Uvaria boniana*. Ref: 406.

**22297 Uvaribonone**

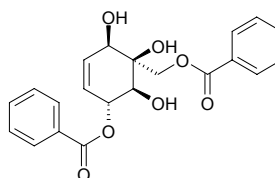
$C_{39}H_{68}O_8$  (664.97). White waxy solid, mp 42~44°C,  $[\alpha]_D^{15} = +15^\circ$  ( $c = 0.06$ , chloroform). Source: GUANG YE ZI YU PAN *Uvaria boniana*. Ref: 355.

**22298 Uvarigrandin A**

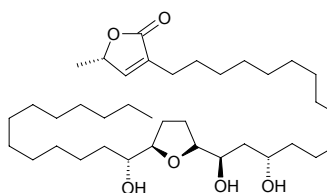
$C_{37}H_{66}O_7$  (622.93). White waxy solid. Source: DA HUA ZI YU PAN *Uvaria grandiflora*. Ref: 378.

**22299 Uvarigranol G**

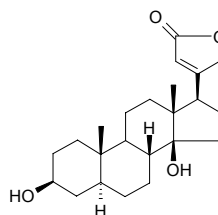
$C_{21}H_{20}O_7$  (384.39). Pharm: Cytotoxic (MTT assay, A549 bronchogenic carcinoma cell,  $IC_{50} = 28\mu\text{g/mL}$ , SK-MES-1 bronchogenic carcinoma cell,  $IC_{50} = 26\mu\text{g/mL}$ , NCI-H446 bronchogenic carcinoma cell,  $IC_{50} = 30\mu\text{g/mL}$ )<sup>[4481]</sup>. Source: DA HUA ZI YU PAN *Uvaria grandiflora*, LIU GUO ZI YU PAN *Uvaria kweichowensis* (leaf). Ref: 1521, 4481.

**22300 Uvarigrin**

$C_{37}H_{68}O_6$  (608.95). Colorless lamellar crystals (acetone), mp 85~86°C,  $[\alpha]_D^{21} = +30.5^\circ$  ( $c = 0.02$ , methanol). Source: DA HUA ZI YU PAN *Uvaria grandiflora*. Ref: 378.

**22301 Uzarigenin**

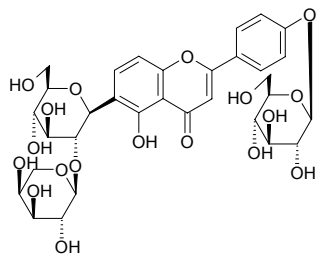
[466-09-1]  $C_{23}H_{34}O_4$  (374.53). mp 246°C. Pharm: Cardiotonic; cytotoxic (KB,  $EC = 1.0\text{--}3.5\mu\text{g/mL}$ ); diuretic. Source: LIAN SHENG GUI ZI HUA *Asclepias curassavica*, BIAN BAI MA LI JIN *Asclepias albicans*. Ref: 5, 6, 658.



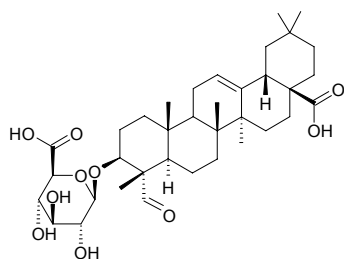
## V

**22302 Vaccarin**

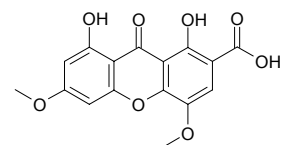
$C_{32}H_{38}O_{18}$  (710.65). Source: WANG BU LIU XING *Vaccaria segetalis* [Syn. *Vaccaria pyramidata*]. Ref: 660.

**22303 Vaccaroside**

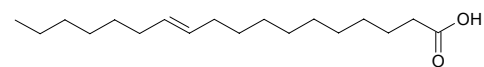
Gypsogenin-3- $\beta$ -D-glucuronoside  $C_{36}H_{54}O_{10}$  (646.83). Source: WANG BU LIU XING *Vaccaria segetalis* [Syn. *Vaccaria pyramidata*]. Ref: 660.

**22304 Vaccaxanthone**

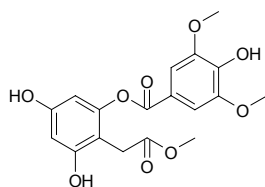
$C_{16}H_{12}O_8$  (332.27). Source: WANG BU LIU XING *Vaccaria segetalis* [Syn. *Vaccaria pyramidata*]. Ref: 660.

**22305 Vaccenic acid**

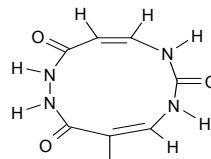
[693-72-1]  $C_{18}H_{34}O_2$  (282.47). Pharm: Growth-Stimulating factor (rat). Source: XU LI YA MA LI JIN *Asclepias syriaca*. Ref: 658.

**22306 Vacciheïn A**

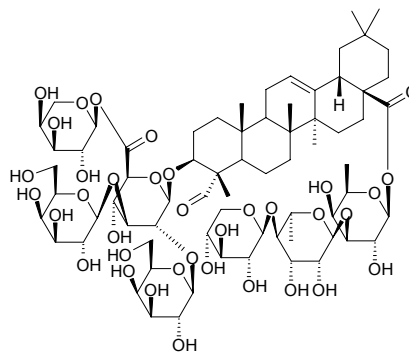
$C_{18}H_{18}O_9$  (378.34). White powder. Pharm: Antioxidant (ferric thiocyanate method, moderate activity); DPPH scavenger. Source: *Vaccinium ashei* (fruit). Ref: 4240.

**22307 Vachellin**

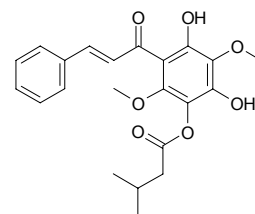
$C_8H_{10}N_4O_3$  (210.19). White powder, mp 228~230°C. Source: WA SHI MA WEI ZAO *Sargassum vachellianum*. Ref: 837.

**22308 Vacsegoside B**

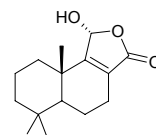
$C_{70}H_{110}O_{36}$  (1527.64). Source: WANG BU LIU XING *Vaccaria segetalis* [Syn. *Vaccaria pyramidata*]. Ref: 660.

**22309 Valalofone**

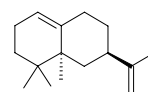
$C_{22}H_{24}O_7$  (400.43). Source: YU LIAO *Polygonum lapathifolium*. Ref: 660.

**22310 Valdiviolide**

$C_{15}H_{22}O_3$  (250.34). Source: SHUI LIAO *Polygonum hydropiper*. Ref: 660.

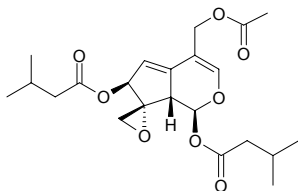
**22311 Valencene**

[4630-07-3]  $C_{16}H_{26}$  (218.39). bp 123°C/11mmHg. Source: GUANG HUO XIANG *Pogostemon cablin* [Syn. *Mentha cablin*], SHANG ZUO JIAN YE GUANG E TAI *Porella acutifolia* ssp. *tosana*. Ref: 2, 660, 3932.

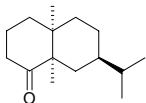


**22312 Valepotriate**

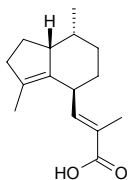
Valtrate; Valtratum [18296-44-1] C<sub>22</sub>H<sub>30</sub>O<sub>8</sub> (422.48). **Pharm:** Sedative. **Source:** CHANG XU XIE CAO *Valeriana hardwickii* (root and rhizome: content = 2.3%)<sup>[5508]</sup>, HEI SHUI XIE CAO *Valeriana amurensis* (root and rhizome: content = 3.1%)<sup>[5508]</sup>, KUO YE XIE CAO *Valeriana officinalis* var. *latifolia* (root and rhizome: content = 2.7%)<sup>[5508]</sup>, MAO JIE XIE CAO *Valeriana alternifolia* var. *stolonifera* (root and rhizome: content = 2.9%)<sup>[5508]</sup>, XIE CAO *Valeriana officinalis* (root and rhizome: content = 1.1%)<sup>[5508]</sup>, ZHI ZHU XIANG *Valeriana jatamansii* [Syn. *Valeriana wallichii*] (rhizome and root: yield = 0.000040%dw), *Valeriana* spp., *Centranthus* spp. **Ref:** 6, 658, 660, 4672, 5508.

**22313 Valeranone**

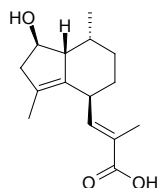
Jatamansone [5090-54-0] C<sub>15</sub>H<sub>26</sub>O (222.37). bp (-) 155–156°C/11mmHg. **Source:** GAN SONG *Nardostachys chinensis*, XIE CAO *Valeriana officinalis*, KUO YE XIE CAO *Valeriana officinalis* var. *latifolia*. **Ref:** 6, 660.

**22314 Valerenic acid**

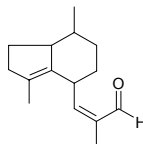
[3569-10-6] C<sub>15</sub>H<sub>22</sub>O<sub>2</sub> (234.34). mp 140–142°C. **Pharm:** Antispasmodic; CNS depressant. **Source:** CHANG XU XIE CAO *Valeriana hardwickii* (root and rhizome: content = 0.00007%)<sup>[5508]</sup>, KUO YE XIE CAO *Valeriana officinalis* var. *latifolia* (root and rhizome: content = 0.00053%)<sup>[5508]</sup>, XIE CAO *Valeriana officinalis* (root and rhizome: content = 0.08%)<sup>[5508]</sup>. **Ref:** 6, 658, 660, 5508.

**22315 Valerenolic acid**

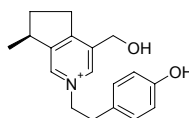
[1619-16-5] C<sub>15</sub>H<sub>22</sub>O<sub>3</sub> (250.34). mp 171–173°C. **Source:** XIE CAO *Valeriana officinalis*. **Ref:** 6, 660, 1521.

**22316 Valerenone**

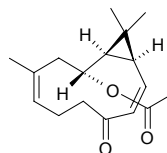
C<sub>15</sub>H<sub>22</sub>O (218.34). bp 87–89°C/0.05mmHg. **Source:** XIE CAO *Valeriana officinalis* (root and rhizome: content = 0.01%)<sup>[5508]</sup>. **Ref:** 6, 5508.

**22317 Valerianae alkaloid B**

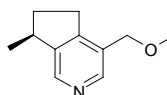
C<sub>18</sub>H<sub>22</sub>NO<sub>2</sub> (284.38). mp 220–227°C (dec). **Source:** XIE CAO *Valeriana officinalis*. **Ref:** 6.

**22318 Valeriana-sesquiterpene CPB2006542**

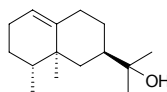
C<sub>17</sub>H<sub>24</sub>O<sub>3</sub> (276.38). White powder. **Pharm:** Neurite outgrowth enhancer (PC 12D cells, NGF-induced). **Source:** XIE CAO *Valeriana officinalis* (rhizome and root: yield = 0.0002%). **Ref:** 915.

**22319 Valerianine**

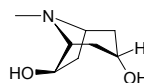
[30634-66-3] C<sub>11</sub>H<sub>15</sub>NO (177.25). mp 134°C. **Source:** XIE CAO *Valeriana officinalis*. **Ref:** 6.

**22320 Valerianol**

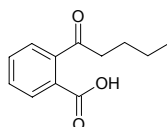
[20489-45-6] C<sub>15</sub>H<sub>26</sub>O (222.37). bp 120°C/0.01mmHg. **Source:** XIE CAO *Valeriana officinalis*. **Ref:** 6, 1521.

**22321 Valerine**

C<sub>8</sub>H<sub>15</sub>NO<sub>2</sub> (157.21). mp 209–210°C. **Pharm:** Antibacterial (gram-positive bacteria). **Source:** XIE CAO *Valeriana officinalis*, BI LU GU KE *Erythroxylum novogranatense*. **Ref:** 6, 658.

**22322 n-Valerophenone-O-carboxylic acid**

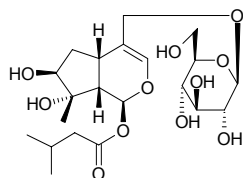
[550-37-8] C<sub>12</sub>H<sub>14</sub>O<sub>3</sub> (206.24). **Source:** DANG GUI *Angelica sinensis*. **Ref:** 2.



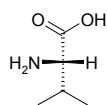


**22323 Valerosidatum**

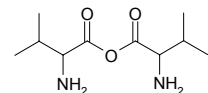
[29505-31-5]  $C_{21}H_{34}O_{11}$  (462.50). mp 78~80°C. Source: XIE CAO *Valeriana officinalis*, ZHI ZHU XIANG *Valeriana jatamansii* [Syn. *Valeriana wallichii*]. Ref: 6.

**22324 Valine**

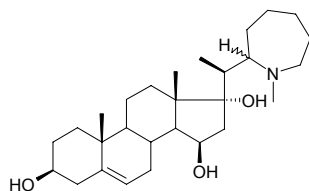
$C_5H_{11}NO_2$  (117.15). Source: BAN XIA *Pinellia ternata* (dried tuber: content scope of 4 origins = 0.43%~1.11%, mean content = 0.84%), widely distributed in nature (as one of the principal protein amino acids). Ref: 660, 5521.

**22325 L-Valine-L-valine anhydride**

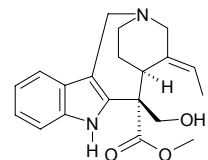
$C_{10}H_{20}N_2O_3$  (216.28). Source: CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*]. Ref: 2.

**22326 Valivine**

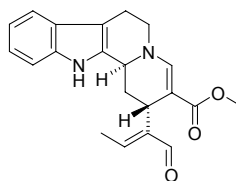
$C_{28}H_{47}NO_3$  (445.69). Source: XIN JIANG BEI MU *Fritillaria walujewii*. Ref: 660.

**22327 19,20-(E)-Vallesamine**

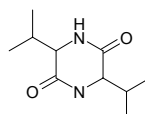
$C_{20}H_{24}N_2O_3$  (340.43). Source: XIANG PI MU *Alstonia scholaris* (leaf). Ref: 5283.

**22328 Vallesiachotamine**

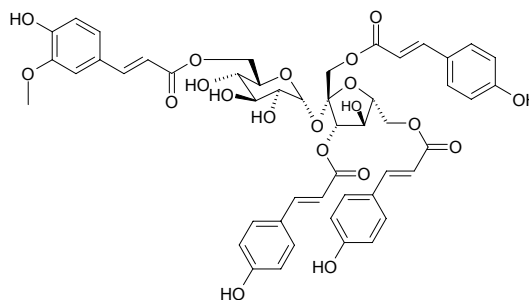
[5523-37-5]  $C_{21}H_{22}N_2O_3$  (350.42). Source: GOU TENG *Uncaria rhynchophylla* [Syn. *Nauclea rhynchophylla*]. Ref: 2.

**22329 L-Valyl-L-valine anhydride**

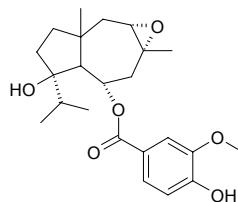
$C_{10}H_{18}N_2O_2$  (198.27). Source: ZHANG YE BAN XIA *Pinellia pedatisecta*. Ref: 660.

**22330 Vanicoside B**

$C_{49}H_{48}O_{20}$  (956.92). Amorphous powder,  $[\alpha]_D = 29.47^\circ$  ( $c = 0.54$ , MeOH). Source: YU LIAO *Polygonum lapathifolium* (aerial parts). Ref: 3091.

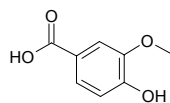
**22331 5α-Vanillate of 2,3-epoxy-jaeschkeanadiol**

$C_{23}H_{32}O_6$  (404.51). Source: YI LANG A WEI *Ferula kuhistanica* (stem). Ref: 3977.

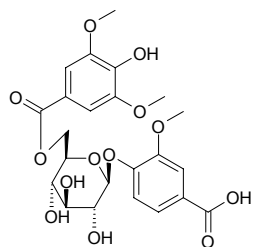


**22332 Vanillic acid**

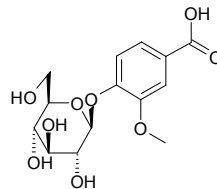
*p*-Hydroxy-*m*-methoxy-benzonic acid [121-34-6] C<sub>8</sub>H<sub>8</sub>O<sub>4</sub> (168.15). mp 210°C (sub). **Pharm:** Antibacterial; antifungal; anti-inflammatory (*in vitro*); anti-sickling of cells; anthelmintic; DPPH scavenger (SC<sub>50</sub> = 60 μmol/L)<sup>[4247]</sup>; antioxidant (superoxide anion radical scavenger, superoxide dismutase method, IC<sub>50</sub> for Formazan formation activity > 100 μmol/L)<sup>[4247]</sup>; NO production inhibitor (*in vitro*, LPS-activated mouse peritoneal macrophages, 3, 10, 30, 100 μmol/L, InRt = 16.2%, 8.2%, -3.6%, 5.9%, respectively; control *L*-NMMA, 3 μmol/L, 10 μmol/L, 30 μmol/L, 100 μmol/L, InRt = 10.3%, 15%, 34.1%, 63.1%, respectively)<sup>[4691]</sup>; antioxidant (DPPH free radical scavenger, EC<sub>50</sub> > 50 μg/mL, 50 μg/mL InRt = 43%, control Ascorbic acid, EC<sub>50</sub> = 1.6 μg/mL = 9.1 μmol/L)<sup>[4154]</sup>; antioxidant (DPPH free radical scavenger, IC<sub>50</sub> = 59.4 μmol/L, control Vitamin E, IC<sub>50</sub> = 27.0 μmol/L)<sup>[4502]</sup>; cytotoxic (P<sub>388</sub>, ED<sub>50</sub> > 50 μg/mL, control Mithramycin, ED<sub>50</sub> = 0.58 μg/mL; A549, ED<sub>50</sub> > 50 μg/mL, Mithramycin, ED<sub>50</sub> = 0.073 μg/mL; HT29, ED<sub>50</sub> > 50 μg/mL, Mithramycin, ED<sub>50</sub> = 0.076 μg/mL)<sup>[5421]</sup>; cytotoxic inactive (*in vitro*, LNCaP, IC<sub>50</sub> > 100 μmol/L)<sup>[4607]</sup>; β-hexosaminidase inhibitor inactive (RBL-2H3 cells, inhibits release of β-hexosaminidase, 100 μmol/L, InRt = (12.1 ± 1.5)%)<sup>[4304]</sup>; β-hexosaminidase inhibitor inactive (RBL-2H3 cells, inhibits release of β-hexosaminidase, 100 μmol/L, InRt = (-6.6 ± 6.0)%)<sup>[4347]</sup>. **Source:** BEI SHA SHEN *Glehnia littoralis* (underground part), GUA LOU *Trichosanthes kirilowii*, GUAN MU TONG *Aristolochia manshuriensis* (stem: yield = 0.0006%)<sup>[4706]</sup>, XI ZANG HU HUANG LIAN *Picrorhiza scrophulariiflora* (dried rhizome: content scope = 1.40%~3.32%)<sup>[5508]</sup>, KAI KOU JIAN *Tupistra chinensis* (underground part)<sup>[4676]</sup>, LANG DANG ZI *Hyoscyamus niger* (seed: yield = 0.0008% dw)<sup>[4607]</sup>, MAO GUO QI *Acer nikoense* (stem cortex), MO ZHI JIAO GU CUI *Casearia membranacea* (stem), QIANG HUO *Notopterygium incisum*, RI BEN HUANG BAI *Phellodendron japonicum* (leaf), TAI WAN FU RONG *Hibiscus taiwanensis*, TAI WAN HUANG BO *Phellodendron amurense* var. *wilsonii* (leaf: yield = 0.00032% dw)<sup>[4722]</sup>, TAI WAN JIN GU CAO *Ajuga taiwanensis* (whole herb), TAI WAN PU GONG YING *Taraxacum formosanum* (fresh root), XI ZANG HU HUANG LIAN *Picrorhiza scrophulariiflora* (dried rhizome: content scope = 1.40%~3.32%)<sup>[5508]</sup>, XIAN REN ZHANG *Opuntia dillenii* (fresh stem: yield = 0.00035%)<sup>[4247]</sup>, XIAO HONG SHEN *Rubia yunnanensis* (root: yield = 0.0019% dw)<sup>[4691]</sup>. **Ref:** 507, 1521, 2529, 4154, 4247, 4304, 4347, 4483, 4488, 4502, 4607, 4676, 4691, 4706, 4722, 5421, 5501, 5508

**22333 1-O-Vanillic acid-6-O-(3'',5''-dimethoxy-galloyl)-β-D-glycoside**

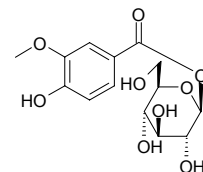
C<sub>23</sub>H<sub>26</sub>O<sub>13</sub> (510.46). White needles (MeOH), mp 234~235°C. **Source:** DA XUE TENG *Sargentodoxa cuneata* (stem). **Ref:** 4870.

**22334 Vanillic acid 4-O-β-D-glucopyranoside**

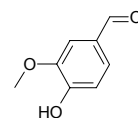
C<sub>14</sub>H<sub>18</sub>O<sub>9</sub> (330.29). **Source:** HAI ZHOU GU SUI BU *Davallia mariesii*. **Ref:** 660.

**22335 Vanillic acid β-D-glucopyranosyl ester**

C<sub>14</sub>H<sub>18</sub>O<sub>9</sub> (330.29). **Source:** SUO SHA MI *Amomum xanthioides* (seed). **Ref:** 4365.

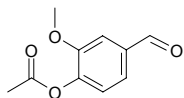
**22336 Vanillin**

[121-33-5] C<sub>8</sub>H<sub>8</sub>O<sub>3</sub> (152.15). mp 80~81°C. **Pharm:** Antifungal; sedative (mus, ip, 200mg/kg, clearly inhibits spontaneous motion); hypnotic (mus, ip, 200mg/kg, potentiates hypnotic effect of hexobarbital); anticonvulsant (rbt, iv, 40mg/kg, raises electroconvulsive threshold value; mouse ip, 300mg/kg, anti-convulsion induced by corazol); antioxidant (DPPH free radical scavenger, IC<sub>50</sub> > 200 μmol/L, control Caffeic acid, IC<sub>50</sub> = 25.5 μmol/L)<sup>[5407]</sup>; NO production inhibitor (IC<sub>50</sub> > 200 μmol/L, control *L*-NMMA, IC<sub>50</sub> = 28.5 μmol/L)<sup>[5407]</sup>; platelet aggregation inhibitor (washed rabbit platelets, 100 μg/mL, 100 μmol/L AA-induced, InRt = 100%, control 50 μmol/L Aspirin, InRt = 100%; 10 μg/mL collagen-induced, InRt = 6.9%, 100 μmol/L Aspirin, InRt = 4.9%; 0.1 U/mL Thrombin-induced, InRt = 1.9%, 100 μmol/L Aspirin, InRt = 1.7%; 2 ng/mL PAF-induced, InRt = 3.8%, 100 μmol/L Aspirin, InRt = 2.1%)<sup>[5427]</sup>; LD<sub>50</sub> (mus, ip) = 946 mg/kg, (rat, orl) = 3000 mg/kg. **Source:** AN XI XIANG *Styrax benzoin*, CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*], DANG GUI *Angelica sinensis*, DING XIANG *Syzygium aromaticum* [Syn. *Eugenia caryophyllata*], KAI KOU JIAN *Tupistra chinensis* (underground part), KONG SHI CHUN *Ulva pertusa*, LI MENG *Citrus limonia*, MAN JING ZI *Vitex trifolia*, MU ZEI *Equisetum hiemale*, SAN QI CAO *Gynura segetum* [Syn. *Gynura japonica*] (rhizome), SU HE XIANG *Liquidambar orientalis*, TAI WAN FU RONG *Hibiscus taiwanensis*, TAI WAN PU GONG YING *Taraxacum formosanum* (fresh root), TIAN MA *Gastrodia elata*, XIANG ZI LAN *Vanilla planifolia*, XIN JIANG GAO BEN *Conioselinum vaginatum*, YI ZHU QIAN MA *Urtica dioica*, YIN CHEN HAO *Artemisia capillaris*, YUN NAN HONG DOU SHAN *Taxus yunnanensis* (wood), *Ruta* sp., *Spiraea* sp., *Gymnadenia* sp., *Vanilla* sp., *Dahlia* sp., *Asparagus* sp., *Beta* sp., occurs in many plants. **Ref:** 2, 4, 333, 648, 658, 660, 2529, 4488, 4676, 5407, 5427, 5501.

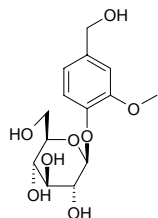


**22337 Vanillin acetate**

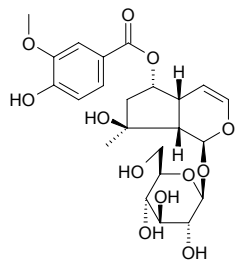
[881-68-5] C<sub>10</sub>H<sub>10</sub>O<sub>4</sub> (194.19). Source: CHAI HU *Bupleurum chinense*. Ref: 2.

**22338 Vanilloside**

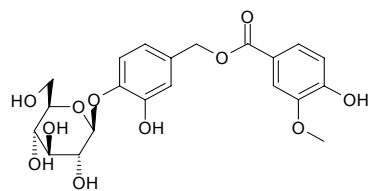
C<sub>14</sub>H<sub>20</sub>O<sub>8</sub> (316.31). Pharm: Proliferation stimulator (B cells *in vitro*, 0.00001mol/L,  $p < 0.05$ ); proliferation inhibitor (T cells *in vitro*, 0.0000001mol/L,  $p < 0.05$ , without any obvious cytotoxic effects). Source: XI JING SHI HU *Dendrobium moniliforme* (stem: yield = 0.0003%dw). Ref: 4717.

**22339 6-O-Vanilloylajugol**

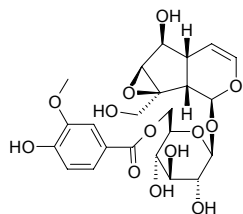
C<sub>23</sub>H<sub>30</sub>O<sub>12</sub> (498.49). Source: GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*]. Ref: 2.

**22340 Vanilloyl calleryanin**

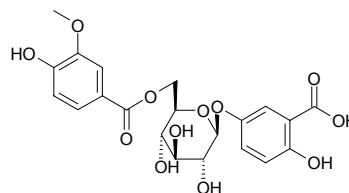
C<sub>21</sub>H<sub>24</sub>O<sub>11</sub> (452.42). Source: YE LI ZHI YE *Pyrus calleryana*. Ref: 6.

**22341 6'-O-Vanilloyl catalpol**

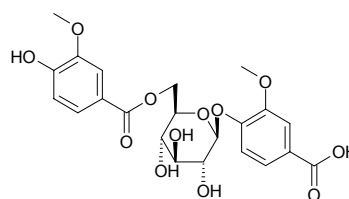
C<sub>23</sub>H<sub>28</sub>O<sub>13</sub> (512.47). Source: HU HUANG LIAN *Picrorhiza kurrooa*. Ref: 660.

**22342 5-O-β-D-(6-O-Vanilloyl glucopyranosyl) gentisic acid**

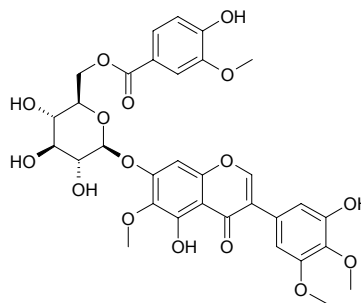
C<sub>21</sub>H<sub>22</sub>O<sub>12</sub> (466.40). Source: HAI ZHOU GU SUI BU *Davallia mariesii*. Ref: 660.

**22343 4-O-β-D-(6-O-Vanilloyl glucopyranosyl) vanillic acid**

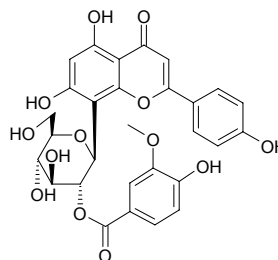
C<sub>22</sub>H<sub>24</sub>O<sub>12</sub> (480.43). Source: HAI ZHOU GU SUI BU *Davallia mariesii*. Ref: 660.

**22344 6''-O-Vanilloyliridin**

C<sub>32</sub>H<sub>32</sub>O<sub>16</sub> (672.60). Pale yellow amorphous powder,  $[\alpha]_D^{20} = +5.7^\circ$  ( $c = 1.0$ , MeOH). Source: SHE GAN *Belamcanda chinensis* (rhizome). Ref: 4128.

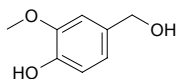
**22345 2''-O-Vanilloylvitexin**

C<sub>29</sub>H<sub>26</sub>O<sub>13</sub> (582.52). Yellow powder, mp 266–267°C,  $[\alpha]_D^{20} = -221.1^\circ$  ( $c = 0.038$ , MeOH). Source: DUAN BAN JIN LIAN HUA *Trollius ledebourii* (flower). Ref: 5278.

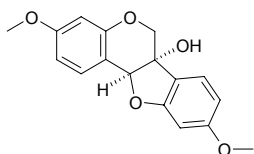


**22346 Vanillyl alcohol**

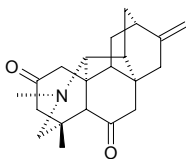
4-Hydroxy-3-methoxybenzyl alcohol [498-00-0] C<sub>8</sub>H<sub>10</sub>O<sub>3</sub> (154.17). mp 115°C. **Pharm:** Sedative (mus, ip, 200mg/kg, clearly inhibits spontaneous motion); hypnotic (mus, ip, 200mg/kg, potentiates hypnotic effect of hexobarbital); anticonvulsant (rbt, iv, 400mg/kg, raises electroconvulsive threshold value, effective arrest effectively arrests epilepsy attack, control epileptic discharge in electro-encephalogram, anticonvulsant caused by corazol); choleric (bile secretion promotor); LD<sub>50</sub> (mouse, ip) = (891.3±31.7)mg/kg. **Source:** TIAN MA *Gastrodia elata*. **Ref:** 4, 5501.

**22347 (-)-Variabilin**

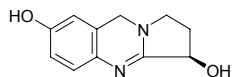
[3187-52-8] C<sub>17</sub>H<sub>16</sub>O<sub>5</sub> (300.32). **Pharm:** Antifungal. **Source:** YI BIAN HUANG TAN *Dalbergia variabilis*. **Ref:** 658.

**22348 Variegatine**

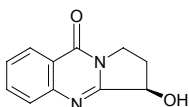
C<sub>21</sub>H<sub>27</sub>NO<sub>2</sub> (325.45). Amorphous solid, [α]<sub>D</sub><sup>20</sup> = +20.5° (c = 0.41, CHCl<sub>3</sub>). **Source:** BAN HUA WU TOU *Aconitum variegatum* (aerial parts). **Ref:** 5270.

**22349 Vasicinol**

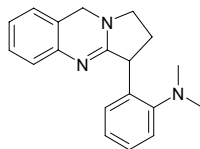
[5081-51-6] C<sub>11</sub>H<sub>12</sub>N<sub>2</sub>O<sub>2</sub> (204.23). mp 260°C. **Pharm:** Reduces fertility in insects; antihistamine; cholinesterase inhibitor; insect antifeedant; antihypertensive. **Source:** DA BO GU *Adhatoda vasica*, HUANG HUA ZI *Sida cordifolia*. **Ref:** 6, 658.

**22350 Vasicinone**

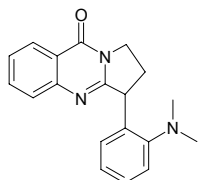
*L*-Vasicinone; (*R*)-2,3-Dihydro-3-hydroxy-pyrrolo[2,1-*b*]quinazolin-9(1*H*)-one [486-64-6] C<sub>11</sub>H<sub>10</sub>N<sub>2</sub>O<sub>2</sub> (202.21). mp (-) 200~201°C, (±) 211~212°C. **Pharm:** Antiallergic; antispasmodic (gpg, bronchial contraction induced by histamine). **Source:** DA BO GU *Adhatoda vasica*, HUANG HUA ZI *Sida cordifolia*, LUO TUO HAO *Peganum nigellastrum*, LUO TUO PENG *Peganum harmala*, LUO TUO PENG ZI *Peganum harmala*. **Ref:** 6, 658.

**22351 Vasicoline**

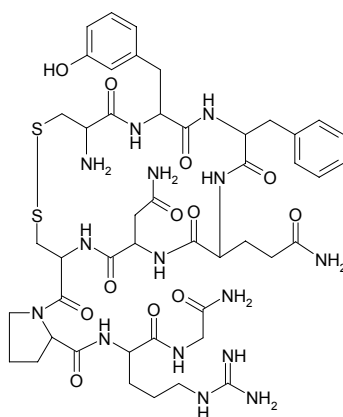
[33903-13-8] C<sub>19</sub>H<sub>21</sub>N<sub>3</sub> (291.40). mp 135°C. **Source:** DA BO GU *Adhatoda vasica*. **Ref:** 6.

**22352 Vasicolinone**

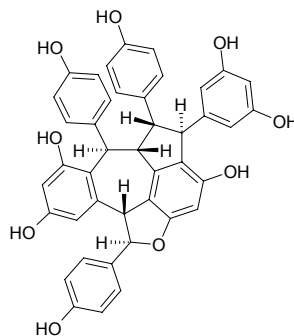
[33903-15-0] C<sub>19</sub>H<sub>19</sub>N<sub>3</sub>O (305.38). mp 152°C. **Source:** DA BO GU *Adhatoda vasica*. **Ref:** 6.

**22353 Vasopressin**

C<sub>46</sub>H<sub>65</sub>N<sub>15</sub>O<sub>12</sub>S<sub>2</sub> (1084.25). **Source:** NIU NAO *Bos taurus domesticus*; *Bubalus bubalis*. **Ref:** 6.

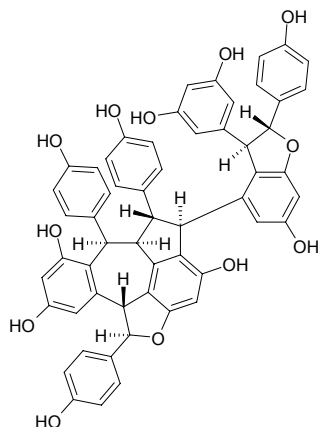
**22354 Vaticanol A**

C<sub>42</sub>H<sub>32</sub>O<sub>9</sub> (680.72). Pale yellow amorphous solid, [α]<sub>D</sub><sup>24</sup> = -165° (c = 0.1, MeOH). **Source:** QING MEI *Vatica rassak* (stem cortex). **Ref:** 3950.

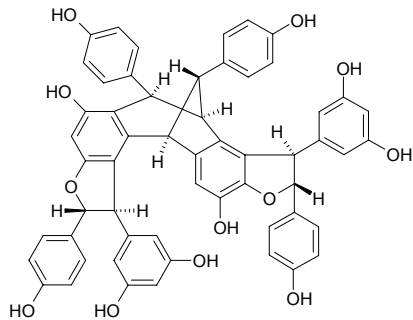


**22355 Vaticanol B**

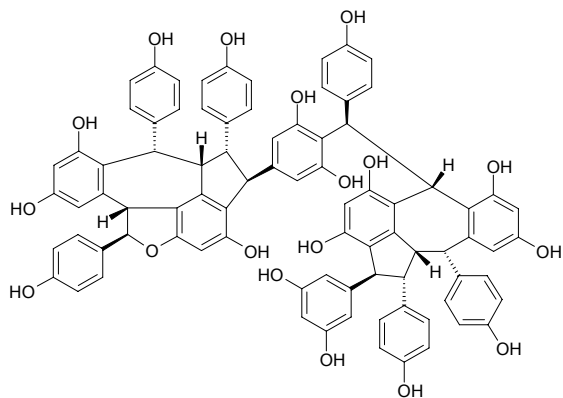
$C_{56}H_{42}O_{12}$  (906.95). Pale yellow amorphous solid,  $[\alpha]_D^{25} = -14^\circ$  ( $c = 0.1$ , MeOH). Source: QING MEI *Vatica rassak* (stem cortex). Ref: 3950.

**22356 Vaticanol C**

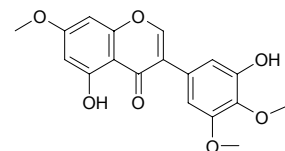
$C_{56}H_{42}O_{12}$  (906.95). Pale yellow amorphous solid,  $[\alpha]_D^{25} = -38^\circ$  ( $c = 0.1$ , MeOH). Source: QING MEI *Vatica rassak* (stem cortex). Ref: 3950.

**22357 Vaticanol D**

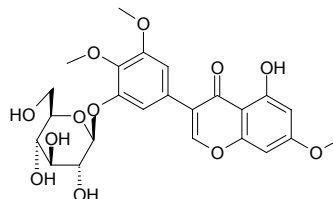
$C_{84}H_{64}O_{18}$  (1361.44). Source: QING MEI *Vatica rassak*. Ref: 2234.

**22358 Vavain**

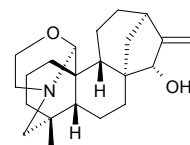
Pentandrin  $C_{18}H_{16}O_7$  (344.32). Pale yellow amorphous powder (MeOH); mp 162~163°C. Source: JI BEI *Ceiba pentandra* (bark). Ref: 4171.

**22359 Vavain 3'-O-β-D-glucopyranoside**

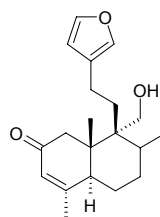
Pentandrin glucoside  $C_{24}H_{26}O_{12}$  (506.47). White amorphous powder (MeOH), mp 127~128°C,  $[\alpha]_D^{20} = -14.5^\circ$  ( $c = 0.2$ , pyridine),  $-4.0^\circ$  ( $c = 0.1$ , EtOH). Source: JI BEI *Ceiba pentandra* (bark). Ref: 4171.

**22360 Veatchine**

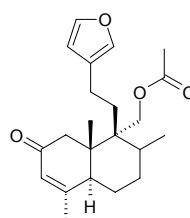
[76-53-9]  $C_{22}H_{33}NO_2$  (343.51). Pharm: Toxin (causes asthma, convulsion and breath faintness). Source: *Garrya veatchii*. Ref: 658.

**22361 Velamolone**

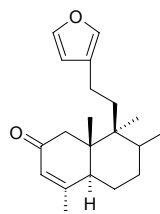
$C_{20}H_{28}O_3$  (316.44). Source: PING YUAN BA DOU *Croton campestris*. Ref: 4552.

**22362 Velamolone acetate**

$C_{22}H_{30}O_4$  (358.48). Source: PING YUAN BA DOU *Croton campestris*. Ref: 4552.

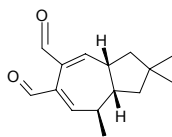
**22363 Velamone**

$C_{20}H_{28}O_2$  (300.44). Source: PING YUAN BA DOU *Croton campestris*. Ref: 4552.

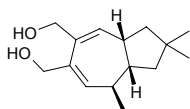


**22364 Velleral**

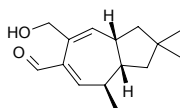
$C_{15}H_{20}O_2$  (232.33). Source: LA RU GU *Lactarius piperatus* [Syn. *Agaricus piperatus*], RONG BAI RU GU *Lactarius vellereus*. Ref: 660.

**22365 Vellerdiol**

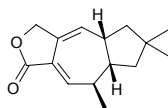
$C_{15}H_{24}O_2$  (236.36). Source: RONG BAI RU GU *Lactarius vellereus*. Ref: 660.

**22366 Vellerol**

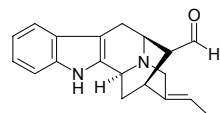
$C_{15}H_{22}O_2$  (234.34). Source: RONG BAI RU GU *Lactarius vellereus*. Ref: 660.

**22367 Vellerolactone**

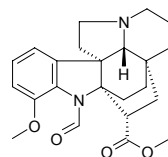
$C_{15}H_{20}O_2$  (232.33). Source: RONG BAI RU GU *Lactarius vellereus*. Ref: 660.

**22368 Vellosimine**

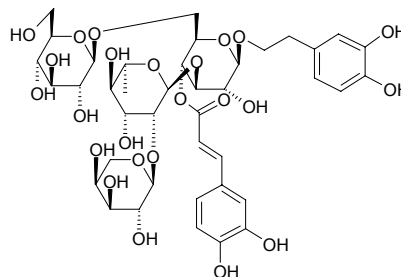
[6874-98-2]  $C_{19}H_{20}N_2O$  (292.38). Crystals (methanol), mp 305~306°C, mp 260°C. Pharm: Antineoplastic (mus, W<sub>256</sub>, Lewis lung cancer, melanotic carcinoma B16). Source: DIAN JI GU CHANG SHAN *Alstonia yunnanensis*, LUO FU MU *Rauvolfia verticillata*, HAI NAN LUO FU MU *Rauvolfia verticillata* var. *hainanensis*. Ref: 6, 42, 660, 1521.

**22369 Vellosine**

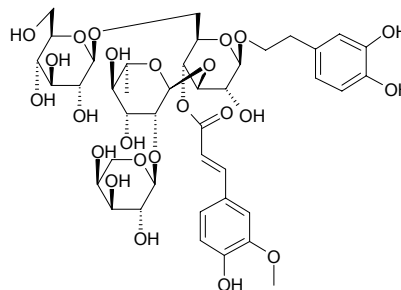
$C_{23}H_{28}N_2O_4$  (396.49). Source: SI YANG SHU YE BAI JIAN MU *Aspidosperma populifolium*, *Aspidosperma refractum*. Ref: 660.

**22370 Velutinoside I**

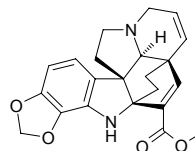
$C_{40}H_{54}O_{24}$  (918.86). Amorphous yellow powder,  $[\alpha]_D^{20} = -6.1^\circ$  ( $c = 0.21$ , MeOH). Source: DUAN RONG MAO OU XIA ZHI CAO *Marrubium velutinum* (aerial parts). Ref: 3448.

**22371 Velutinoside II**

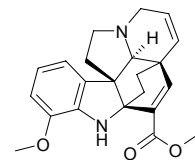
$C_{41}H_{56}O_{24}$  (932.89). Amorphous yellow powder,  $[\alpha]_D^{20} = -6.6^\circ$  ( $c = 0.05$ , MeOH). Source: DUAN RONG MAO OU XIA ZHI CAO *Marrubium velutinum* (aerial parts). Ref: 3448.

**22372 Venacarpine A**

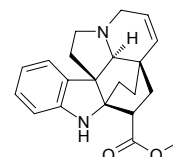
$C_{22}H_{22}N_2O_4$  (378.43). Colorless oil,  $[\alpha]_D = +18^\circ$  ( $c = 0.43$ ,  $CHCl_3$ ). Source: HONG HUA RUI MU *Kopsia fruticosa* (leaf). Ref: 3830.

**22373 Venacarpine B**

$C_{22}H_{24}N_2O_3$  (364.45). Colorless oil,  $[\alpha]_D = +12^\circ$  ( $c = 0.20$ ,  $CHCl_3$ ). Source: HONG HUA RUI MU *Kopsia fruticosa* (leaf). Ref: 3830.

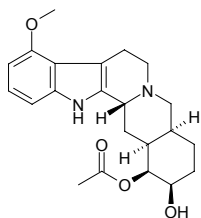
**22374 Venalstonine**

$C_{21}H_{24}N_2O_2$  (336.44). Source: HONG HUA RUI MU *Kopsia fruticosa* (leaf). Ref: 3830.

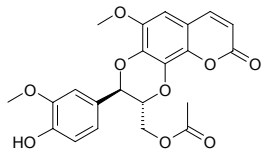


**22375 Venenatine**

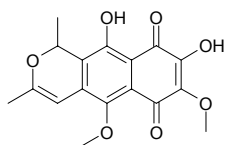
[1055-75-0]  $C_{22}H_{28}N_2O_4$  (384.48). Colorless acicular crystals (methanol), mp 123~125°C (dec),  $[\alpha]_D = -76.1^\circ$ . **Pharm:** Sedative; hypnotic (potentiates hypnotic effect of cyclobarbital). **Source:** YIN DU YA JIAO SHU *Alstonia venenata*. **Ref:** 661.

**22376 Venkatasin**

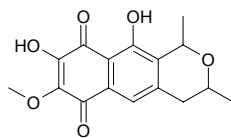
$C_{22}H_{20}O_9$  (428.40). Yellow crystals (MeOH), mp 113~115°C,  $[\alpha]_D^{25} = +16.0^\circ$  ( $c = 0.09$ ,  $CHCl_3$ ). **Source:** LANG DANG ZI *Hyoscyamus niger* (seed: yield = 0.00018% dw). **Ref:** 2096.

**22377 Ventilagolin**

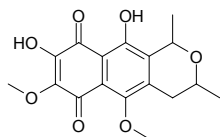
$C_{17}H_{16}O_7$  (332.31). Red lamellar crystals, mp 165~167°C. **Source:** YI HE GUO *Ventilago leiocarpa*. **Ref:** 258.

**22378 Ventiloquinone I**

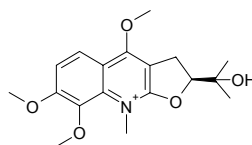
$C_{16}H_{16}O_6$  (304.3). **Pharm:** Cytotoxic inactive (*in vitro*, HeLa, Vero, K562, Raji, Wish, and Calu1 tumor cell lines,  $IC_{50} > 100\mu\text{mol/L}$ ). **Source:** YI HE GUO *Ventilago leiocarpa* (stem). **Ref:** 3057.

**22379 Ventiloquinone K**

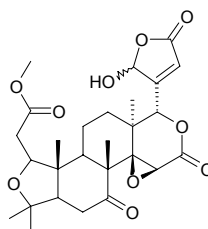
$C_{17}H_{18}O_7$  (334.33). **Pharm:** Cytotoxic inactive (*in vitro*, HeLa, Vero, K562, Raji, Wish, and Calu1 tumor cell lines,  $IC_{50} > 100\mu\text{mol/L}$ ). **Source:** YI HE GUO *Ventilago leiocarpa* (stem). **Ref:** 3057.

**22380 Veprisinium**

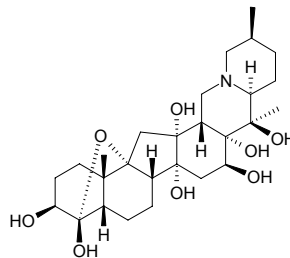
[79808-98-3]  $C_{18}H_{24}NO_5^+$  (334.40). **Pharm:** Antibacterial (*Staphylococcus aureus*). **Source:** LU YI CI JU *Vepris louisii*. **Ref:** 658.

**22381 Veprisonic acid**

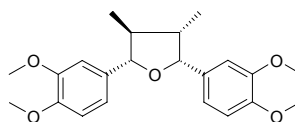
23-Oxo-21 $\xi$ -hydroxy-21,23-dihydroveprisonic acid  $C_{27}H_{34}O_{10}$  (518.57). White amorphous solid. **Source:** *Bouchardatia neurococca*. **Ref:** 3445.

**22382 Veracevine**

[5876-23-3]  $C_{27}H_{43}NO_8$  (509.65). **Pharm:** Anthelmintic. **Source:** WEI JING BAI HE *Schoenocoulon officinale*. **Ref:** 658.

**22383 Veraguensin**

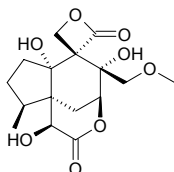
(-)-Veraguensin [19950-55-1]  $C_{22}H_{28}O_5$  (372.47). **Pharm:** PAF antagonist; NO production inhibitor (mus, macrophage-like cell line RAW264.7 activated by LPS/IFN,  $IC_{50} = 35.1\mu\text{mol/L}$ , control Quercetin,  $IC_{50} = 26.8\mu\text{mol/L}$ )<sup>[2537]</sup>. **Source:** HAI FENG TENG *Piper kadsura* [Syn. *Piper futokadsura*], JIAN JIAN MU LAN *Magnolia acuminata*, YU LAN *Magnolia denudata* [Syn. *Magnolia heptapata*], XIN YI *Magnolia liliflora*, MEI ZHOU SAN BAI CAO *Saururus cernuus*. **Ref:** 660, 658, 2537.



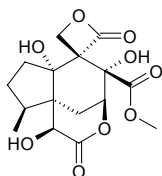
**22384 Veranisatin A**

[153445-92-2] C<sub>16</sub>H<sub>20</sub>O<sub>8</sub> (342.35). Colorless prismatic crystals (ethyl acetate), mp 181~182°C, [α]<sub>D</sub><sup>22</sup> = -14.8° (c = 1.0, methanol). **Pharm:** Antipyretic (mus, orl, 1mg/kg, body temperature lowers by 4.2°C); analgesic (mus, orl, 0.1mg/kg, competitor to AcOH and crushing); sedative (mus, orl, 0.1mg/kg, reduces activity induced by methylamphetamine); LD<sub>100</sub> (orl) = 3mg/kg.

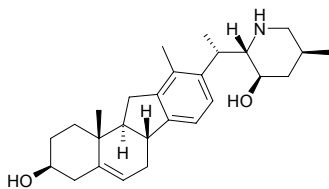
**Source:** BA JIAO HUI XIANG *Illicium verum*. **Ref:** 956, 1005.

**22385 Veranisatin B**

[153445-93-3] C<sub>16</sub>H<sub>20</sub>O<sub>9</sub> (356.33). Colorless prismatic crystals (ethyl acetate), mp 212~213°C, [α]<sub>D</sub><sup>22</sup> = -15° (c = 1.0, methanol). **Pharm:** Antipyretic (mus, orl, 1mg/kg body temperature lowers by 4.2Cels-degree); LD<sub>100</sub> (orl) = 3mg/kg. **Source:** BA JIAO HUI XIANG *Illicium verum*. **Ref:** 956, 1005.

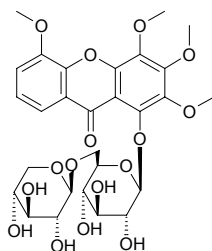
**22386 Veratramine**

[60-70-8] C<sub>27</sub>H<sub>39</sub>NO<sub>2</sub> (409.62). **Pharm:** Antihypertensive. **Source:** LV LI LU *Veratrum viride*, MAO YE LI LU *Veratrum grandiflorum*. **Ref:** 658.

**22387 Veratriloside C**

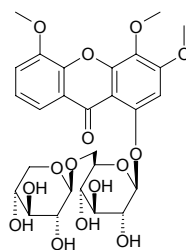
2,3,4,5-Tetramethoxy-xanthone-1-O-β-D-glucopyranosyl-(1→6)-β-D-xylopyranoside C<sub>28</sub>H<sub>34</sub>O<sub>16</sub> (626.57). Light yellow brown powder, mp 205~206°C.

**Source:** HUANG QIN JIAO *Veratrilla baillonii*. **Ref:** 696.

**22388 Veratriloside D**

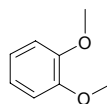
3,4,5-Trimethoxy-xanthone-1-O-β-D-glucopyranosyl-(1→6)-β-D-xylopyranoside C<sub>27</sub>H<sub>32</sub>O<sub>15</sub> (596.55). White acicular crystals, mp 175~178°C.

**Source:** HUANG QIN JIAO *Veratrilla baillonii*. **Ref:** 696.

**22389 Veratrole**

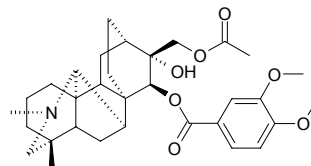
Catechol dimethyl ether [91-16-7] C<sub>8</sub>H<sub>10</sub>O<sub>2</sub> (138.17). mp 22.5°C.

**Source:** FENG DOU CAI *Petasites japonicus*. **Ref:** 6.

**22390 15-Veratroyl-17-acetyldictizine**

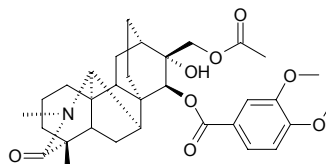
C<sub>32</sub>H<sub>43</sub>NO<sub>7</sub> (553.70). Amorphous solid, [α]<sub>D</sub><sup>25</sup> = +69.1° (c = 0.81, CHCl<sub>3</sub>).

**Source:** BAN HUA WU TOU *Aconitum variegatum* (aerial parts). **Ref:** 5270.

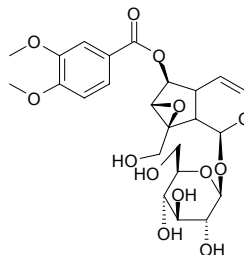
**22391 15-Veratroyl-17-acetyl-19-oxodictizine**

C<sub>32</sub>H<sub>41</sub>NO<sub>8</sub> (567.69). Amorphous solid, [α]<sub>D</sub><sup>25</sup> = +49.3° (c = 0.15, CHCl<sub>3</sub>).

**Source:** BAN HUA WU TOU *Aconitum variegatum* (aerial parts). **Ref:** 5270.

**22392 6-O-Veratroyl-catalpol**

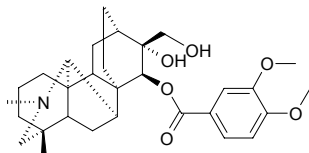
C<sub>24</sub>H<sub>30</sub>O<sub>13</sub> (526.50). **Source:** A LA BO PO PO NA *Veronica persica* (aerial parts). **Ref:** 4211.



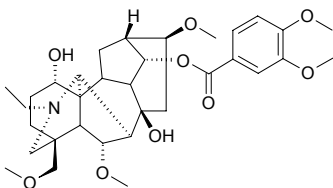


**22393 15-Veratroyldictizine**

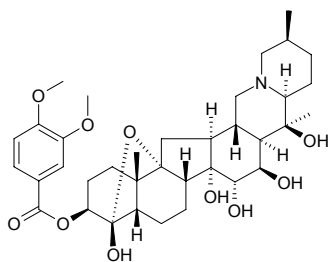
$C_{30}H_{41}NO_6$  (511.66). Amorphous solid,  $[\alpha]_D^{20} = +79.6^\circ$  ( $c = 0.72$ ,  $CHCl_3$ ).  
**Source:** BAN HUA WU TOU *Aconitum variegatum* (aerial parts). **Ref:** 5270.

**22394 14-O-Veratroylneoline**

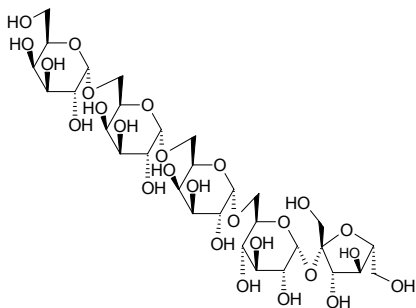
$C_{33}H_{47}NO_9$  (601.74). Amorphous powder (MeOH),  $[\alpha]_D^{23} = +22.1^\circ$  ( $c = 0.75$ ,  $CHCl_3$ ). **Source:** FU ZI *Aconitum carmichaeli* (tuber). **Ref:** 4373.

**22395 Veratroyl zygadenine**

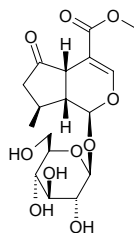
$C_{36}H_{51}NO_{10}$  (657.81). mp 270~271°C. **Pharm:** Antihypertensive (dog iv or im, 0.5~10µg/kg); LD<sub>50</sub> (mus) = 8.9mg/kg. **Source:** BAI LI LU *Veratrum album*, LI LU *Veratrum nigrum*, BAN BIAN LIAN ZHUANG LI LU *Veratrum album* var. *lobelianum* [Syn. *Veratrum lobelianum*]. **Ref:** 6, 658.

**22396 Verbascose**

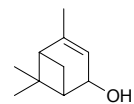
[546-62-3]  $C_{30}H_{52}O_{26}$  (828.73). mp 219~220°C. **Source:** GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], WU SE MEI *Lantana camara*. **Ref:** 2, 234.

**22397 Verbenalin**

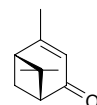
[548-37-8]  $C_{17}H_{24}O_{10}$  (388.37). Colorless bitter acicular crystals or rhomboid lamellar crystals (ethanol), mp 182~183°C,  $[\alpha]_D^{25} = -173^\circ$  ( $c = 3.98$ , water). **Pharm:** Choleric (bile secretion promotor); laxative (mus, ED<sub>50</sub> = 0.11g/kg); parasympathomimetic; bidirectional action to sympathetic fibers (excites sympathetic fibers in low dose and inhibits them in high dose). **Source:** JI YE MA BIAN CAO *Verbena hastata*, JIAN TING MA BIAN CAO *Verbena stricta*, MA BIAN CAO *Verbena officinalis*, SHAN ZHU YU *Cornus officinalis* [Syn. *Macrocarpum officinale*]. **Ref:** 6, 661, 5501.

**22398 Verbenol**

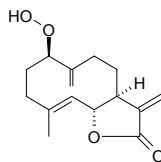
2-Pinen-4-ol [473-67-6]  $C_{10}H_{16}O$  (152.24). (+) (*cis*) mp 15.5°C, bp 90°C/10mmHg, (+) (*trans*) mp 24°C, bp 92°C/10mmHg. **Source:** MI DIE XIANG *Rosmarinus officinalis*. **Ref:** 6.

**22399 Verbenone**

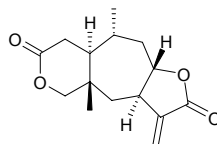
2-Pinen-4-one [18309-32-5]  $C_{10}H_{14}O$  (150.22). **Pharm:** LD<sub>50</sub> (mus, ip) = 250mg/kg. **Source:** SAN YE MA BIAN CAO *Verbena triphylla* [Syn. *Lippia citriodora*]. **Ref:** 658.

**22400 Verlotorin**

Peroxykostenolide  $C_{15}H_{20}O_4$  (264.32). **Source:** YUE GUI YE *Laurus nobilis*. **Ref:** 660.

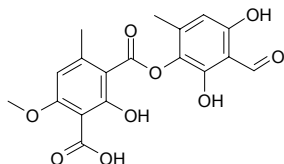
**22401 Vermeerin**

[16983-23-6]  $C_{15}H_{20}O_4$  (264.33). **Pharm:** Toxin (mammal). **Source:** family Asteraceae spp. **Ref:** 658.

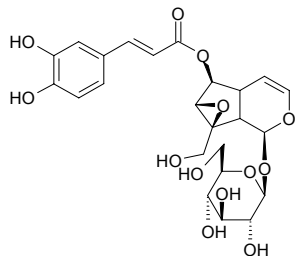


**22402 Vermicularin**

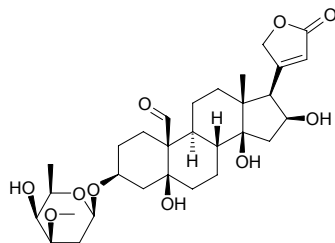
$C_{18}H_{16}O_9$  (376.32). Source: XUE CHA *Thamnia vermicularis*. Ref: 660.

**22403 Verminoside**

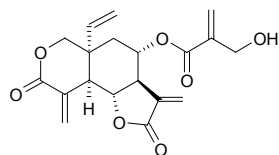
$C_{24}H_{28}O_{13}$  (524.48). Source: A LA BO PO PO NA *Veronica persica* (aerial parts). Ref: 4211.

**22404 Vernadigin**

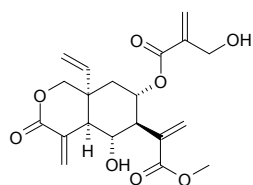
$C_{30}H_{44}O_{10}$  (564.68). Pharm: Antiarrhythmic; toxin (vertebrate). Source: CHUN FU SHOU CAO *Adonis vernalis*. Ref: 658.

**22405 Vernodalin**

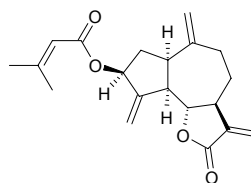
[21871-10-3]  $C_{19}H_{20}O_7$  (360.37). Pharm: Antineoplastic; cytotoxic (KB, *in vitro*,  $ED_{50} = 1.8\mu\text{g/mL}$ ); insect antifeedant. Source: BIAN TAO ZHUANG BAN JIU JU *Vernonia amygdalina*, BAN JIU JU *Vernonia esculenta*. Ref: 5, 661.

**22406 Vernodalol**

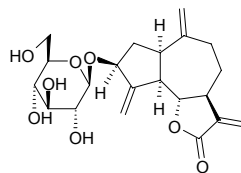
[65388-17-2]  $C_{20}H_{24}O_8$  (392.41). Crystals ( $\text{CHCl}_3$ ), mp 133~134°C,  $[\alpha]_D = +36.5^\circ$  ( $c = 1$ ,  $\text{CHCl}_3$ ). Pharm: Insect antifeedant. Source: QU CHONG BAN JIU JU *Vernonia anthelmintica*, *Vernonia lasiopus*. Ref: 658, 1521, 5359.

**22407 Vernoflexin**

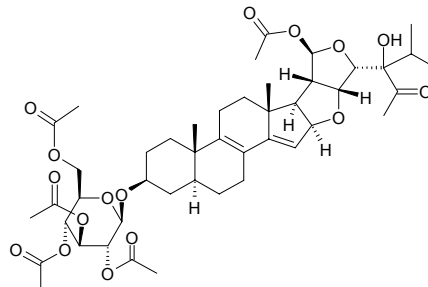
[57576-43-9]  $C_{20}H_{24}O_4$  (328.41). Pharm: Antineoplastic; cytotoxic. Source: WAN YAN BAN JIU JU *Vernonia flexuosa*, ZHONG GUO BAN JIU JU *Vernonia chinense*. Ref: 658.

**22408 Vernoflexuaside**

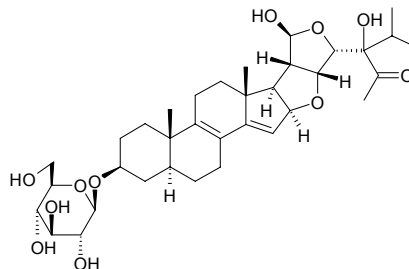
[57576-33-7]  $C_{21}H_{28}O_8$  (408.46). Pharm: Cytotoxic (L-5178Y,  $ID_{50} = 20.6\mu\text{g/mL}$ ); cell growth regulator (root of onion, antimitotic). Source: WAN YAN BAN JIU JU *Vernonia flexuosa*. Ref: 658, 1738.

**22409 Vernoguinoside**

16 $\beta$ ,22R;21,23S-Diepoxy-3 $\beta$ -O- $\beta$ -D-glucopyranosyloxy-21S,24-dihydroxystigmasta-8,14-dien-28-one  $C_{45}H_{62}O_{16}$  (858.99). White powder (MeOH), mp 112~114 °C,  $[\alpha]_D^{22} = -15.3^\circ$  ( $c = 2.3$ ,  $\text{CHCl}_3$ ). Pharm: Antitrypanosomal (inhibits four strains of bloodstream trypanomastigotes *Trypanosoma brucei rhodesiense*,  $IC_{50} = 3\text{--}5\text{mg/mL}$ ). Source: JI NEI YA BAN JIU JU *Vernonia guineensis*. Ref: 2031.

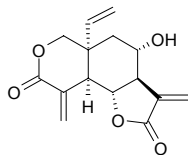
**22410 Vernoguinsterol**

16 $\beta$ ,22R;21,23S-Diepoxy-3 $\beta$ ,21S,24-trihydroxystigmasta-8,14-dien-28-one  $C_{35}H_{52}O_{11}$  (648.80). White powder (acetone). Pharm: Antitrypanosomal (inhibits four strains of bloodstream trypanomastigotes *Trypanosoma brucei rhodesiense*,  $IC_{50} = 3\text{--}5\text{mg/mL}$ ). Source: JI NEI YA BAN JIU JU *Vernonia guineensis*. Ref: 2031.

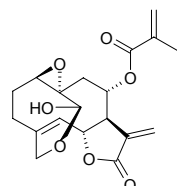


**22411 Vernolepin**

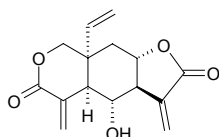
[18542-37-5] C<sub>15</sub>H<sub>16</sub>O<sub>5</sub> (276.29). Colorless prismatic crystals (chloroform–petroleum ether), mp 181–182°C, [ $\alpha$ ]<sub>D</sub><sup>28</sup> = +72° (*c* = 1.04, acetone). **Pharm:** Antineoplastic (rat W<sub>256</sub>, 10mg/kg, biotic prolonged rate = 46%, 12mg/kg, biotic prolonged rate = 32%); cytotoxic (KB *in vitro*, ED<sub>50</sub> = 1.7μg/mL, leukemia cells *in vitro*, ID<sub>50</sub> 0.43 = μmol/L); plant growth regulator. **Source:** BAN JIU JU *Vernonia esculenta*. **Ref:** 5, 661, 5507.

**22412 Vernolide**

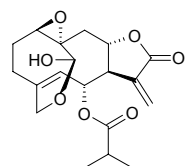
[27428-86-0] C<sub>19</sub>H<sub>22</sub>O<sub>7</sub> (362.38). Lamellar crystals (acetone–petroleum ether), mp 180–183°C (dec), [ $\alpha$ ]<sub>D</sub> = +230° (chloroform). **Pharm:** Cytotoxic (KB *in vitro*, ED<sub>50</sub> = 2.0μg/mL). **Source:** BIAN TAO ZHUANG BAN JIU JU *Vernonia amygdalina*, YOU SE BAN JIU JU *Vernonia colorata*. **Ref:** 5, 661.

**22413 Vernomenin**

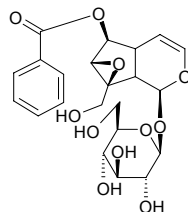
[20107-26-0] C<sub>15</sub>H<sub>16</sub>O<sub>5</sub> (276.29). **Pharm:** Antineoplastic; cytotoxic (KB *in vitro*, ED<sub>50</sub> = 20μg/mL). **Source:** BAN JIU JU *Vernonia esculenta*. **Ref:** 5, 661.

**22414 Vernomygdin**

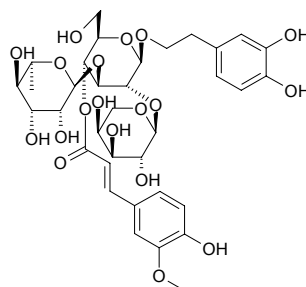
[21871-14-7] C<sub>19</sub>H<sub>24</sub>O<sub>7</sub> (364.40). mp 208–210°C. **Pharm:** Antineoplastic; cytotoxic (KB *in vitro*, ED<sub>50</sub> = 1.5μg/mL). **Source:** BIAN TAO ZHUANG BAN JIU JU *Vernonia amygdalina*, BAN JIU JU *Vernonia esculenta*. **Ref:** 5, 661.

**22415 Veronicoside**

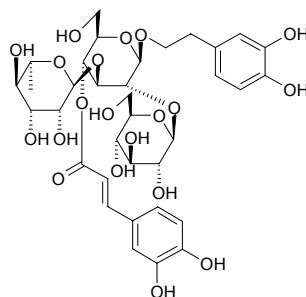
C<sub>22</sub>H<sub>26</sub>O<sub>11</sub> (466.45). **Source:** A LA BO PO PO NA *Veronica persica*, HU HUANG LIAN *Picrorhiza kurroa*. **Ref:** 660, 4211.

**22416 Verpectoside A**

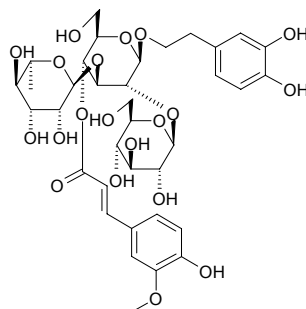
2-(3,4-Dihydroxyphenyl)ethyl-*O*- $\alpha$ -L-arabinopyranosyl-(1→2)-[ $\alpha$ -L-rhamnopyranosyl-(1→3)]-(4-*O*-*trans*-feruloyl)- $\beta$ -D-glucopyranoside C<sub>35</sub>H<sub>46</sub>O<sub>19</sub> (770.75). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>23</sup> = –59° (*c* = 0.03, MeOH). **Pharm:** Antioxidant (DPPH scavenger, 0.5mmol/L, InRt = 13%, control BHA, 0.5mmol/L, InRt = 30%). **Source:** SHU CHI PO PO NA *Veronica pectinata* var. *glandulosa* (aerial parts). **Ref:** 4191.

**22417 Verpectoside B**

2-(3,4-Dihydroxyphenyl)ethyl-*O*- $\beta$ -D-glucopyranosyl-(1→2)-[ $\alpha$ -L-rhamnopyranosyl-(1→3)]-(4-*O*-*trans*-caffeoyl)- $\beta$ -D-glucopyranoside C<sub>35</sub>H<sub>46</sub>O<sub>20</sub> (786.74). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>23</sup> = +135° (*c* = 0.08, MeOH). **Pharm:** Antioxidant (DPPH scavenger, 0.5mmol/L, InRt = 52%, control BHA, 0.5mmol/L, InRt = 30%). **Source:** SHU CHI PO PO NA *Veronica pectinata* var. *glandulosa* (aerial parts). **Ref:** 4191.

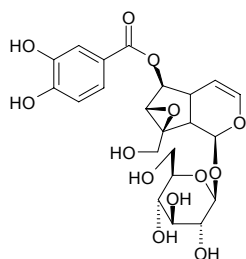
**22418 Verpectoside C**

2-(3,4-Dihydroxyphenyl)ethyl-*O*- $\beta$ -D-glucopyranosyl-(1→2)-[ $\alpha$ -L-rhamnopyranosyl-(1→3)]-(4-*O*-*trans*-feruloyl)- $\beta$ -D-glucopyranoside C<sub>36</sub>H<sub>48</sub>O<sub>20</sub> (800.77). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>23</sup> = +228° (*c* = 0.11, MeOH). **Pharm:** Antioxidant (DPPH scavenger, 0.5mmol/L, InRt = 28%, control BHA, 0.5mmol/L, InRt = 30%). **Source:** SHU CHI PO PO NA *Veronica pectinata* var. *glandulosa* (aerial parts). **Ref:** 4191.

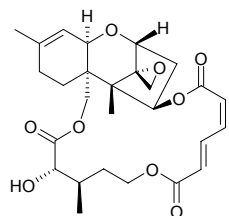


**22419 Verproside**

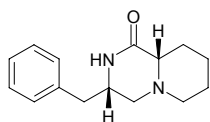
$C_{22}H_{26}O_{13}$  (498.44). Source: A LA BO PO PO NA *Veronica persica* (aerial parts). Ref: 4211.

**22420 Verrucarin A**

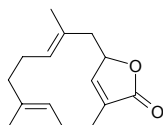
[3148-09-2]  $C_{27}H_{34}O_9$  (502.57). Pharm: Antibacterial; cytotoxic;  $LD_{50}$  (mus, iv) = 1.5mg/kg, (rat, iv) = 0.87mg/kg, (rbt, iv) = 0.54mg/kg. Source: *Myrothecium verrucaria*. Ref: 658.

**22421 Verruculotoxin**

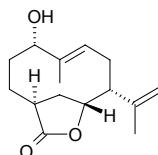
[56092-63-8]  $C_{15}H_{20}N_2O$  (244.34). Pharm:  $LD_{50}$  (one-day-old chicken) = 20mg/kg. Source: *Penicillium verruculosum*. Ref: 658.

**22422 Versicolactone A**

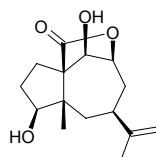
Neoaristolactone [136315-17-8]  $C_{15}H_{20}O_2$  (232.32). White acicular crystals, mp 138~140°C,  $[\alpha]_D^{15} = +38^\circ$  ( $c = 1.0$ , ethanol); colorless prismatic crystals, slightly soluble in cold petroleum ether, soluble in hot petroleum ether and other organic solvents, mp 130~132°C (petroleum ether),  $[\alpha]_D^6 = +486^\circ$  ( $c = 0.1276$ , chloroform). Pharm: Antineoplastic (hmn liver cancer QGY-7703) Source: MIAN MAO MA DOU LING *Aristolochia mollissima*, BIAN SE MA DOU LING *Aristolochia versicolor*. Ref: 209, 215, 1201.

**22423 Versicolactone B**

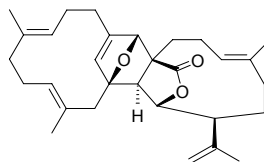
$C_{15}H_{22}O_3$  (250.34). White snowflake-like crystals, mp 135~136°C. Source: BIAN SE MA DOU LING *Aristolochia versicolor*, MIAN MAO MA DOU LING *Aristolochia mollissima* (dried root and stem: yield = 0.0099%dw)<sup>[3026]</sup>. Ref: 51, 3026.

**22424 Versicolactone C**

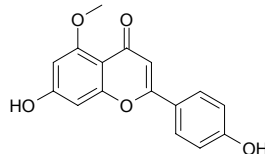
$C_{15}H_{22}O_4$  (266.34). White short claviform crystals, mp 181~182°C  $[\alpha]_D^{36} = -11.4^\circ$  ( $c = 2.6$ , ethanol). Source: BIAN SE MA DOU LING *Aristolochia versicolor*. Ref: 51.

**22425 Versicolactone D**

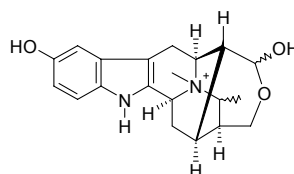
$C_{30}H_{40}O_3$  (448.65). Colorless hyaloid crystals, mp 172.0~172.5°C. Source: BIAN SE MA DOU LING *Aristolochia versicolor*. Ref: 146.

**22426 Vertia flavone**

[29376-68-9]  $C_{16}H_{12}O_5$  (284.27). mp 325~327°C. Source: HUANG HUA JIA ZHU TAO *Thevetia nerifolia* [Syn. *Thevetia peruviana*]. Ref: 6.

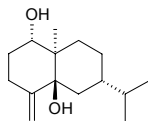
**22427 Verticillatine**

[98243-58-4]  $C_{20}H_{25}N_2O_3$  (341.43). Colorless acicular crystals, mp 324~326°C (dec). Pharm: Antihypertensive (normal and hypertensive animal model, reduces blood pressure rapidly and presents dose-response relationship, shows obvious curative effect for serious and moderate hypertension patients with low side effects); ganglionic blocker. Source: HONG GUO LUO FU MU *Rauwolfia verticillata* f. *rubrocarpa*, HAI NAN LUO FU MU *Rauwolfia verticillata* var. *hainanensis*. Ref: 26, 660, 925, 1521.

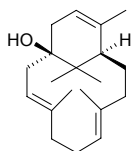


**22428 Verticillatol**

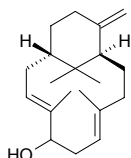
$C_{15}H_{26}O_2$  (238.37). Colorless oil,  $[\alpha]_D^{25} = -41.2^\circ$  ( $c = 0.13$ ,  $CHCl_3$ ). Source: DIE DA LAO *Litsea verticillata*. Ref: 1984.

**22429 ent-Verticilla-4,9,13-trien-2 $\alpha$ -ol**

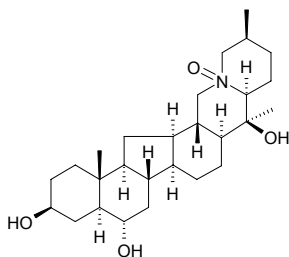
$C_{20}H_{32}O$  (288.48). Colorless crystals (*n*-hexane), mp 93–95°C,  $[\alpha]_D^{20} = -208.9^\circ$  ( $c = 2.83$ ). Source: ZHAO WA JIA KE TAI *Jackiella javanica*. Ref: 5303.

**22430 ent-Verticilla-4(18),9,13-trien-12 $\alpha$ -ol**

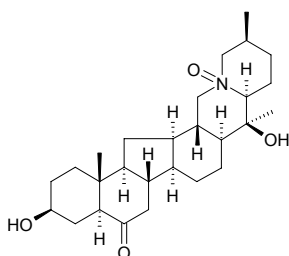
$C_{20}H_{32}O$  (288.48). Colorless crystals (*n*-hexane), mp 116–117°C,  $[\alpha]_D^{17} = -150.8^\circ$  ( $c = 0.91$ ). Source: ZHAO WA JIA KE TAI *Jackiella javanica*. Ref: 5303.

**22431 Verticine-N-oxide**

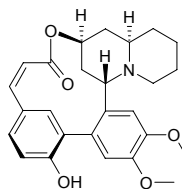
$C_{27}H_{45}NO_4$  (447.66). Source: ZHE BEI MU *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*]. Ref: 660.

**22432 Verticinone-N-oxide**

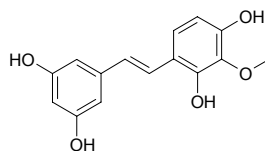
$C_{27}H_{43}NO_4$  (445.65). Source: ZHE BEI MU *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*]. Ref: 660.

**22433 Vertine**

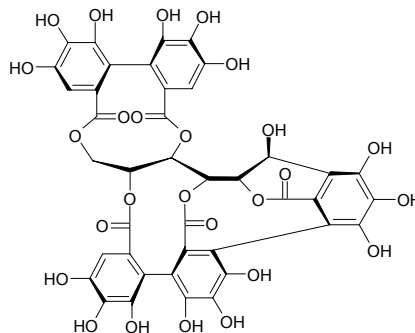
[10308-13-1]  $C_{26}H_{29}NO_5$  (435.53). mp 245°C,  $[\alpha]_D = +39^\circ$  (chloroform). Pharm: Anti-inflammatory (swollen foot model caused by carrageenan); antihypertensive; sedative. Source: DI KE DONG *Decodon verticillatus*, HUANG WEI *Heimia myrtifolia*, FU RUI ZI WEI *Lagerstroemia fauriei*. Ref: 661.

**22434 Verussustilbene**

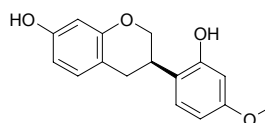
*trans*-3-Methoxy-2,3',4,5'-tetrahydroxystilbene  $C_{15}H_{14}O_5$  (274.28). Yellowish amorphous powder. Source: WU SU LI LI LU *Veratrum nigrum* var. *ussuriense*. Ref: 438.

**22435 Vescalagin**

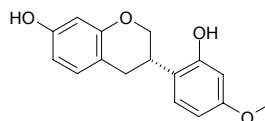
[36001-47-5]  $C_{41}H_{26}O_{26}$  (934.65). Prismatic crystals (water),  $[\alpha]_{578nm}^{20} = -105.2^\circ$  ( $c = 1$ , water). Pharm: Cytotoxic (malanotic carcinoma RPMI-7951,  $ED_{50} = 0.58\mu g/mL$ ). Source: BAN LI *Castanea mollissima* (leaf), LI SHU PI *Castanea mollissima*. Ref: 660,900.

**22436 (3R)-Vestitol**

$C_{16}H_{16}O_4$  (272.30). Pharm: Antifungal. Source: JIANG ZHEN XIANG *Dalbergia odorifera*. Ref: 660.

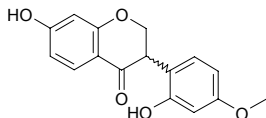
**22437 (3S)-Vestitol**

$C_{16}H_{16}O_4$  (272.30). Pharm: Antifungal. Source: YI BIAN HUANG TAN *Dalbergia variabilis*. Ref: 658.

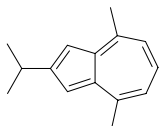


**22438 Vestitone**

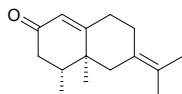
[57462-46-1] C<sub>16</sub>H<sub>14</sub>O<sub>5</sub> (286.29). Pharm: Antifungal. Source: LV DOU *Onobrychis viciifolia*. Ref: 658.

**22439 Vetivazulene**

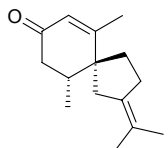
4,8-Dimethyl-2-(1-methylethyl)-azulene C<sub>15</sub>H<sub>18</sub> (198.31). Violet oil. Source: YING ZHI YE TAI *Lepidozia vitrea* (essential oil). Ref: 5209.

**22440 α-Vetivone**

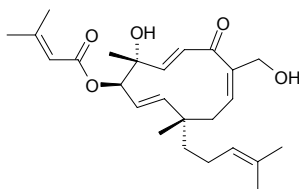
[15764-04-2] C<sub>15</sub>H<sub>22</sub>O (218.34). Pharm: Flavorant. Source: YAN LAN CAO *Vetiveria zizanioides*. Ref: 658.

**22441 β-Vetivone**

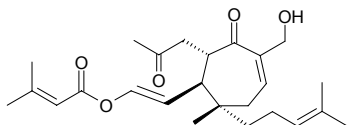
[18444-79-6] C<sub>15</sub>H<sub>22</sub>O (218.34). Pharm: Flavorant. Source: YAN LAN CAO *Vetiveria zizanioides*. Ref: 658.

**22442 Vibsantin B**

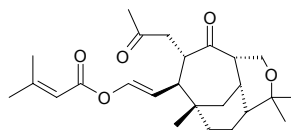
C<sub>25</sub>H<sub>36</sub>O<sub>5</sub> (416.56). Source: XIANG QI JIA MI *Viburnum odoratissimum* (leaf and flower: yield = 0.0055%). Ref: 4638.

**22443 Vibsantin C**

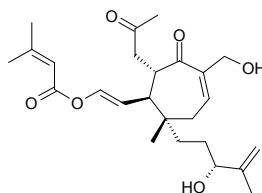
C<sub>25</sub>H<sub>36</sub>O<sub>5</sub> (416.56). Pharm: Cytotoxic (KB cells, IC<sub>50</sub> = 11.3 μmol/L)<sup>[4168]</sup>. Source: RI BEN JIA MI *Viburnum awabuki* (leaf), XIANG QI JIA MI *Viburnum odoratissimum* (leaf and flower: yield = 0.00034%dw). Ref: 3004, 4168.

**22444 Vibsantin E**

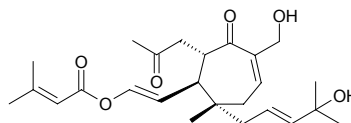
C<sub>25</sub>H<sub>36</sub>O<sub>5</sub> (416.56). Source: RI BEN JIA MI *Viburnum awabuki* (leaf), XIANG QI JIA MI *Viburnum odoratissimum* (leaf and flower: yield = 0.005%). Ref: 4168, 4638.

**22445 Vibsantin G**

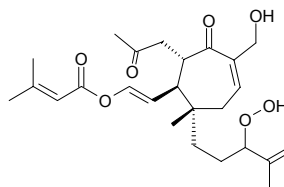
C<sub>25</sub>H<sub>36</sub>O<sub>6</sub> (432.56). Source: XIANG QI JIA MI *Viburnum odoratissimum* (leaf and flower: yield = 0.00045%dw). Ref: 3004.

**22446 Vibsantin H**

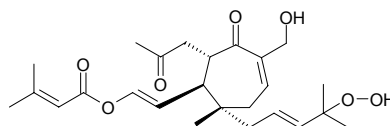
C<sub>25</sub>H<sub>36</sub>O<sub>6</sub> (432.56). Source: RI BEN JIA MI *Viburnum awabuki* (leaf), XIANG QI JIA MI *Viburnum odoratissimum* (leaf and flower: yield = 0.00023%dw). Ref: 3004, 4168.

**22447 Vibsantin I**

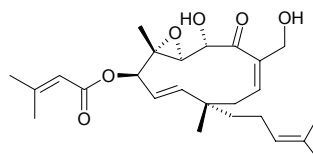
C<sub>25</sub>H<sub>36</sub>O<sub>7</sub> (448.56). Colorless oil, [α]<sub>D</sub><sup>20</sup> = +73.6° (c = 0.56, CHCl<sub>3</sub>). Source: XIANG QI JIA MI *Viburnum odoratissimum* (leaf). Ref: 3512.

**22448 Vibsantin K**

C<sub>25</sub>H<sub>36</sub>O<sub>7</sub> (448.56). Source: RI BEN JIA MI *Viburnum awabuki* (leaf). Ref: 4168.

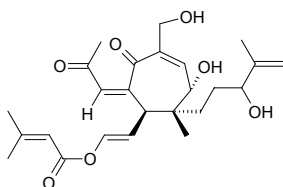
**22449 Vibsantin L**

C<sub>25</sub>H<sub>36</sub>O<sub>6</sub> (432.56). Colorless oil, [α]<sub>D</sub><sup>20</sup> = -61.6° (c = 0.20, CHCl<sub>3</sub>). Source: XIANG QI JIA MI *Viburnum odoratissimum* (leaf). Ref: 3512.

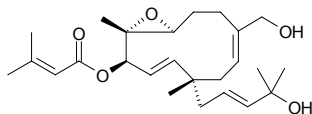


**22450 Vibsantin M**

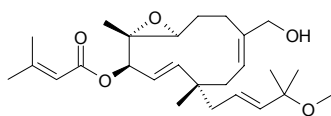
$C_{25}H_{34}O_7$  (446.55). Colorless amorphous solid,  $[\alpha]_D^{26} = +9.1^\circ$  ( $c = 0.8$ ,  $CHCl_3$ ). Source: XIANG QI JIA MI *Viburnum odoratissimum* (leaf and flower: yield = 0.00002%dw). Ref: 3004.

**22451 Vibsantin P**

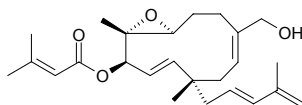
$C_{25}H_{38}O_5$  (418.58). Colorless amorphous solid,  $[\alpha]_D^{25} = +24^\circ$  ( $c = 0.3$ ,  $CHCl_3$ ). Pharm: Cytotoxic (*in vitro*,  $P_{388}$ ,  $ED_{50} = 2.25\mu g/mL$ ; A549,  $ED_{50} = 4.62\mu g/mL$ ; HT29,  $ED_{50} = 9.97\mu g/mL$ ). Source: RI BEN JIA MI *Viburnum awabuki* (leaf and twig). Ref: 3011.

**22452 Vibsantin Q**

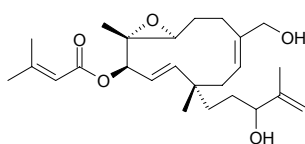
$C_{26}H_{40}O_5$  (432.61). Colorless amorphous solid,  $[\alpha]_D^{25} = +23^\circ$  ( $c = 0.4$ ,  $CHCl_3$ ). Pharm: Cytotoxic (*in vitro*,  $P_{388}$ ,  $ED_{50} < 10\mu g/mL$ ). Source: RI BEN JIA MI *Viburnum awabuki* (leaf and twig). Ref: 3011.

**22453 Vibsantin R**

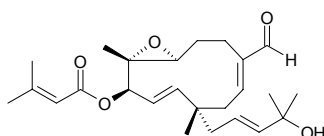
$C_{25}H_{36}O_4$  (400.56). Colorless amorphous solid,  $[\alpha]_D^{25} = +43^\circ$  ( $c = 0.5$ ,  $CHCl_3$ ). Pharm: Cytotoxic (*in vitro*,  $P_{388}$ ,  $ED_{50} < 10\mu g/mL$ ). Source: RI BEN JIA MI *Viburnum awabuki* (leaf and twig). Ref: 3011.

**22454 Vibsantin S**

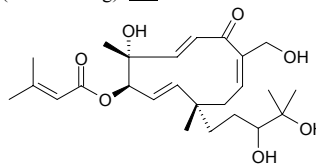
$C_{25}H_{38}O_5$  (418.58). Oil,  $[\alpha]_D^{25} = +25^\circ$  ( $c = 0.3$ ,  $CHCl_3$ ). Pharm: Cytotoxic (*in vitro*,  $P_{388}$ ,  $ED_{50} < 10\mu g/mL$ ). Source: RI BEN JIA MI *Viburnum awabuki* (leaf and twig). Ref: 3011.

**22455 Vibsantin T**

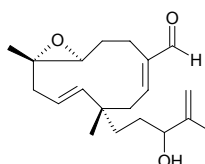
$C_{25}H_{36}O_5$  (416.56). Oil,  $[\alpha]_D^{25} = +46^\circ$  ( $c = 0.4$ ,  $CHCl_3$ ). Pharm: Cytotoxic (*in vitro*,  $P_{388}$ ,  $ED_{50} < 10\mu g/mL$ ). Source: RI BEN JIA MI *Viburnum awabuki* (leaf and twig). Ref: 3011.

**22456 Vibsantin U**

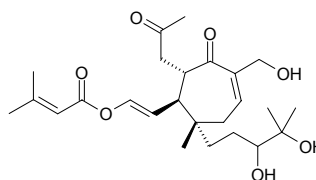
$C_{25}H_{38}O_7$  (450.58). Gum,  $[\alpha]_D^{25} = +21^\circ$  ( $c = 0.6$ ,  $CHCl_3$ ). Pharm: Cytotoxic (*in vitro*,  $P_{388}$ ,  $ED_{50} < 10\mu g/mL$ ). Source: RI BEN JIA MI *Viburnum awabuki* (leaf and twig). Ref: 3011.

**22457 Vibsantin V**

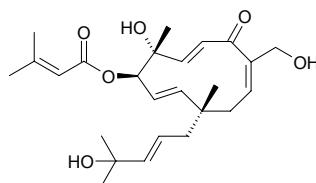
$C_{20}H_{30}O_3$  (318.46). Colorless amorphous solid,  $[\alpha]_D^{25} = +30^\circ$  ( $c = 0.5$ ,  $CHCl_3$ ). Pharm: Cytotoxic (*in vitro*,  $P_{388}$ ,  $ED_{50} < 10\mu g/mL$ ). Source: RI BEN JIA MI *Viburnum awabuki* (leaf and twig). Ref: 3011.

**22458 Vibsantin W**

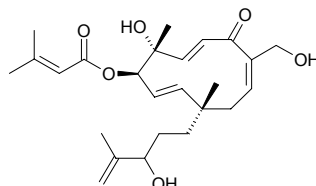
$C_{25}H_{38}O_7$  (450.58). Colorless amorphous solid,  $[\alpha]_D^{25} = +16^\circ$  ( $c = 0.3$ ,  $CHCl_3$ ). Pharm: Cytotoxic (*in vitro*,  $P_{388}$ ,  $ED_{50} = 2.18\mu g/mL$ ; A549,  $ED_{50} = 5.6\mu g/mL$ ; HT29,  $ED_{50} = 8.15\mu g/mL$ ). Source: RI BEN JIA MI *Viburnum awabuki* (leaf and twig). Ref: 3011.

**22459 Vibsanol A**

$C_{25}H_{36}O_6$  (432.56). Colorless oil,  $[\alpha]_D^{26} = +5.6^\circ$  ( $c = 0.05$ ,  $CHCl_3$ ). Pharm: Cytotoxic (*in vitro*, gastric tumour NUGC,  $10\mu mol/L$ ,  $InRt = 85\%$ ; control Antinomycin D,  $10\mu mol/L$ ,  $InRt = (98-100)\%$ ). Source: XIANG QI JIA MI *Viburnum odoratissimum* (leaf and flower: yield = 0.0055%). Ref: 4638.

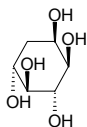
**22460 Vibsanol B**

$C_{25}H_{36}O_6$  (432.56). Colorless oil,  $[\alpha]_D^{26} = +17.4^\circ$  ( $c = 0.05$ ,  $CHCl_3$ ). Pharm: Cytotoxic inactive (*in vitro*, gastric tumour NUGC,  $10\mu mol/L$ ,  $InRt < 50\%$ ; control Antinomycin D,  $10\mu mol/L$ ,  $InRt = (98-100)\%$ ). Source: XIANG QI JIA MI *Viburnum odoratissimum* (leaf and flower: yield = 0.0036%). Ref: 4638.

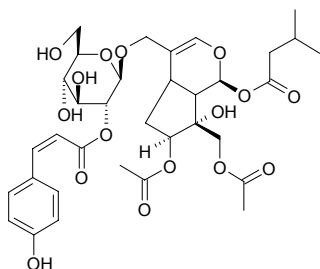


**22461 Viburnitol**

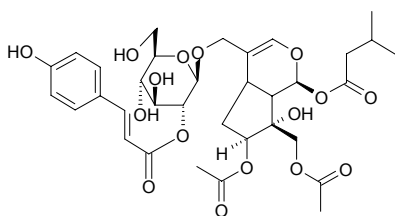
$C_6H_{12}O_5$  (164.16). mp 180~181°C. Source: YANG SHI CAO *Achillea millefolium*. Ref: 6.

**22462 Viburtinoside B**

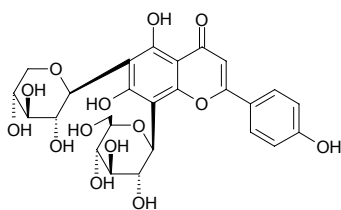
$C_{34}H_{44}O_{16}$  (708.72). Creamy-white amorphous powder,  $[\alpha]_D = -61^\circ$  ( $c = 0.23$ , MeOH). Source: *Viburnum tinus* (leaf). Ref: 5339.

**22463 Viburtioside A**

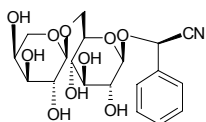
$C_{34}H_{44}O_{16}$  (708.72). Creamy-white amorphous powder,  $[\alpha]_D = -59^\circ$  ( $c = 0.26$ , MeOH). Source: *Viburnum tinus* (leaf). Ref: 5339.

**22464 Vicenin 1**

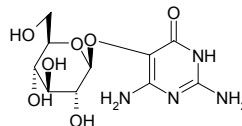
6-C-Xylopyranosyl-8-C-glucopyranosylapigenin  $C_{26}H_{28}O_{14}$  (564.50). Source: HU LU BA *Trigonella foenum-graecum*, YA MA *Linum usitatissimum*. Ref: 660.

**22465 Vicianin**

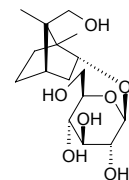
[155-57-7]  $C_{19}H_{25}NO_{10}$  (427.41). mp 147~148°C. Pharm: Toxin. Source: DA CHAO CAI *Vicia sativa*, FU LANG HUA *Gerbera jamesonii*, JIAN ZI SU YE *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*], WANG BU LIU XING *Vaccaria segetalis* [Syn. *Vaccaria pyramidata*], ZHAI YE YE WAN DOU *Vicia angustifolia*, *Davallia* sp. Ref: 6, 658, 660.

**22466 Vicine**

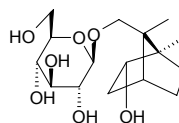
2,6-Diamino-4,5-dihydroxy pyrimidine-5- $\beta$ -glucoside.  $C_{10}H_{16}N_4O_7$  (304.26). mp 243~244°C (dec). Pharm: Antiarrhythmic; reduces G6PD in hematis. Source: CAN DOU *Vicia faba*, DA CHAO CAI *Vicia sativa*, KU GUA *Momordica charantia*, MA CAN DOU *Vicia faba* var. *equina*, WAN DOU *Pisum sativum*. Ref: 6, 176, 658.

**22467 (1S,2R,4S,7R)-Vicodiol 2-O- $\beta$ -D-glucopyranoside**

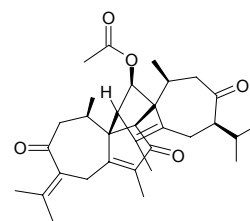
$C_{16}H_{28}O_7$  (332.40). Amorphous powder,  $[\alpha]_D^{22} = -48^\circ$  ( $c = 1.7$ , MeOH). Source: SHE XIANG CAO *Thymus vulgaris* (leaf). Ref: 3895.

**22468 (1R,2S,4R,7S)-Vicodiol 9-O- $\beta$ -D-glucopyranoside**

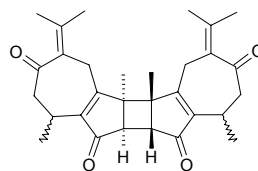
$C_{16}H_{28}O_7$  (332.40). Colorless needles (MeOH), mp 173~174°C,  $[\alpha]_D^{23} = -16^\circ$  ( $c = 4.4$ , MeOH). Source: SUO SHA MI *Amomum xanthioides* (seed). Ref: 4365.

**22469 Vielanin A**

$C_{32}H_{42}O_5$  (506.69). Crystals (MeOH), mp 190~191°C,  $[\alpha]_D^{27} = -8^\circ$  ( $c = 0.5$ ,  $CHCl_3$ ). Source: MU BAN SHU *Xylopiya vielana* (leaf). Ref: 5131.

**22470 Vielanin B**

$C_{30}H_{36}O_4$  (460.62). mp 210~212°C (EtOAc). Source: MU BAN SHU *Xylopiya vielana* (leaf). Ref: 5131.

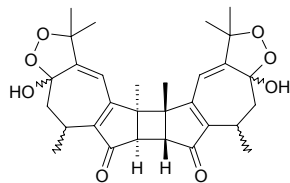




**22471 Vielanin C**

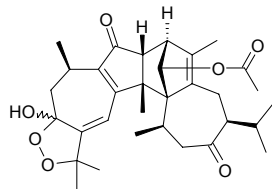
$C_{30}H_{36}O_8$  (524.62). mp 108~110°C (acetone),  $[\alpha]_D^{26} = -120^\circ$  ( $c = 0.5$ ,  $CHCl_3$ ).

Source: MU BAN SHU *Xylopi* *vielana* (leaf). Ref: 5131.

**22472 Vielanin D**

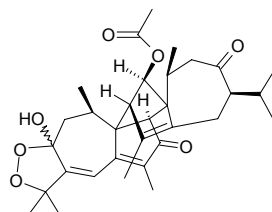
$C_{32}H_{42}O_7$  (538.69). Amorphous, mp 213~215°C (*n*-hexane-EtOAc),  $[\alpha]_D^{25} =$

$-45^\circ$  ( $c = 0.5$ ,  $CHCl_3$ ). Source: MU BAN SHU *Xylopi* *vielana* (leaf). Ref: 3458.

**22473 Vielanin E**

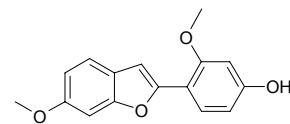
$C_{32}H_{42}O_7$  (538.69). Amorphous, mp 220~222°C (MeOH),  $[\alpha]_D^{25} = +31^\circ$  ( $c =$

0.5,  $CHCl_3$ ). Source: MU BAN SHU *Xylopi* *vielana* (leaf). Ref: 3458.

**22474 Vignafuran**

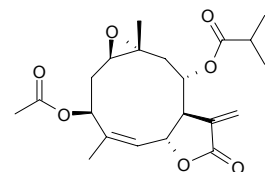
[57800-41-6]  $C_{16}H_{14}O_4$  (270.29). Pharm: Antifungal. Source: JIANG DOU

*Vigna unguiculata*. Ref: 658, 1521.

**22475 Vigiuestin**

Vigiuestenin [69440-10-4]  $C_{21}H_{28}O_7$  (392.46). Pharm: Antineoplastic;

cytotoxic. Source: *Viguiera stenoloba*. Ref: 658.

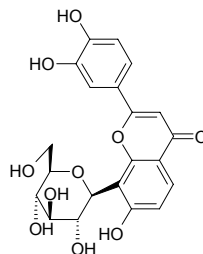
**22476 Vijayoside**

8-(*C*- $\beta$ -*D*-Glucopyranosyl)-7,3',4'-trihydroxyflavone  $C_{21}H_{22}O_{10}$  (432.29).

Yellow needles ( $H_2O:MeOH=19:1$ ), mp 202~204°C,  $[\alpha]_D^{19} = +25.6^\circ$  ( $c = 0.5$ ,

MeOH). Source: NANG ZHUANG ZI TAN *Pterocarpus marsupium*

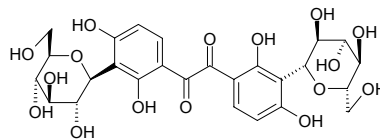
(heartwood). Ref: 3789.

**22477 Vijayosine**

1,2-Bis(2,4-dihydroxy,3-*C*-glucopyranosyl)-ethanedione  $C_{26}H_{30}O_{16}$  (598.52).

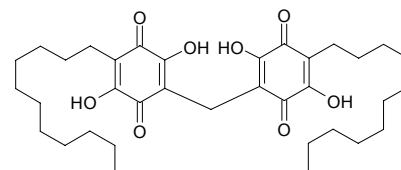
Pale yellow amorphous powder,  $[\alpha]_D^{29} = +32.14^\circ$  ( $c = 0.056$ , DMSO). Source:

NANG ZHUANG ZI TAN *Pterocarpus marsupium* (heartwood). Ref: 3789.

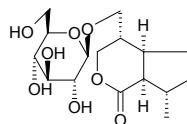
**22478 Vilangin**

[4370-68-7]  $C_{35}H_{52}O_8$  (600.80). mp 264~265°C (dec). Source: XIAN SUAN

QIANG *Embelia ribes*. Ref: 6.

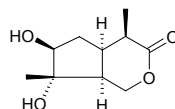
**22479 Villoside**

[50276-99-8]  $C_{16}H_{26}O_8$  (346.38). Source: BAI JIANG *Patrinia villosa*. Ref: 2.

**22480 Villosol**

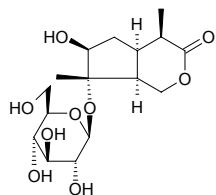
[99933-29-6]  $C_{10}H_{16}O_4$  (200.24). White crystals, mp 143~145°C,  $[\alpha]_D^{18} =$

$+170.73^\circ$  ( $c = 0.5$ , MOH). Source: BAI JIANG *Patrinia villosa*. Ref: 34.

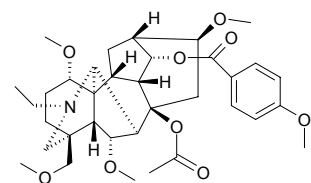


**22481 Villosolside**

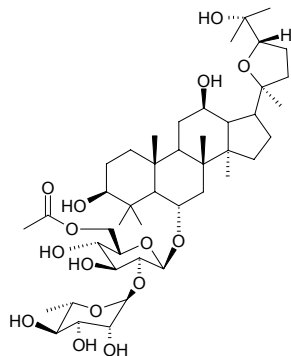
[99933-30-9] C<sub>16</sub>H<sub>26</sub>O<sub>9</sub> (362.38). White crystals, mp 228~230°C, [ $\alpha$ ]<sub>D</sub><sup>35</sup> = +93.37° (c = 0.5, H<sub>2</sub>O). Source: BAI JIANG *Patrinia villosa*. Ref: 36.

**22482 Vilmorrianine C**

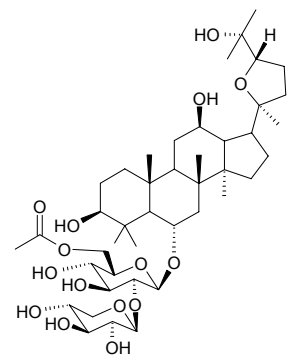
Foresaconitine [73870-35-6] C<sub>35</sub>H<sub>49</sub>NO<sub>9</sub> (627.78). Crystals (Me<sub>2</sub>CO-MeOH), mp 153~154°C, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +30.5° (CHCl<sub>3</sub>). Source: DIAN XI WU TOU *Aconitum bulleyanum*, FU ZI *Aconitum carmichaeli* (tuber), LI JIANG WU TOU *Aconitum forrestii* [Syn. *Aconitum likiangense*]. Ref: 618, 1521, 4373.

**22483 Vina-ginsenoside R<sub>1</sub>**

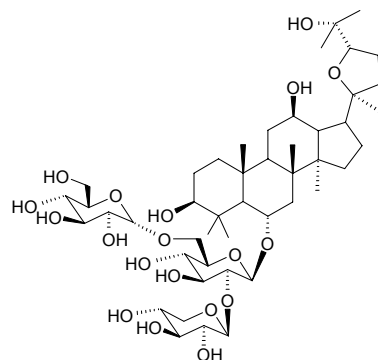
C<sub>44</sub>H<sub>74</sub>O<sub>15</sub> (843.07). Source: ZHU JIE SAN QI *Panax pseudo-ginseng* var. *japonicus* (underground part: yield = 0.008%dw). Ref: 4610.

**22484 Vina-ginsenoside R<sub>2</sub>**

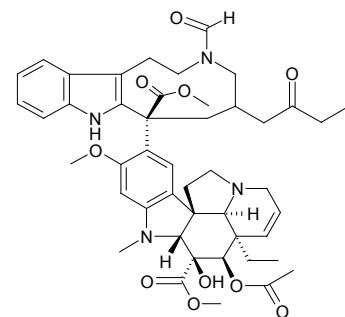
C<sub>43</sub>H<sub>72</sub>O<sub>15</sub> (829.94). Source: ZHU JIE SAN QI *Panax pseudo-ginseng* var. *japonicus* (underground part: yield = 0.11%dw). Ref: 4610.

**22485 Vina-ginsenoside R<sub>6</sub>**

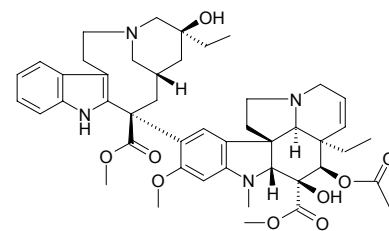
C<sub>47</sub>H<sub>80</sub>O<sub>19</sub> (949.15). Source: ZHU JIE SAN QI *Panax pseudo-ginseng* var. *japonicus* (underground part: yield = 0.0058%dw). Ref: 4610.

**22486 Vinamidine**

[58511-83-4] C<sub>46</sub>H<sub>56</sub>N<sub>4</sub>O<sub>10</sub> (824.98). Source: CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochnera rosea*]. Ref: 2, 1521.

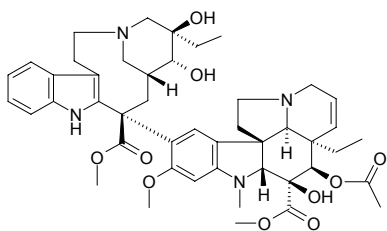
**22487 Vinblastine**

Vincalculoblastine [865-21-4] C<sub>46</sub>H<sub>58</sub>N<sub>4</sub>O<sub>9</sub> (811.00). acicular crystals (MeOH), mp 211~216°C, [ $\alpha$ ]<sub>D</sub><sup>26</sup> = +42° (CHCl<sub>3</sub>), soluble in ethanol, chloroform, acetic ether, acetone, insoluble in water.<sup>[5507]</sup> Pharm: Inhibits mitosis (especially in formation of spindle fibre); used in treatment of Hodgkin's disease, chorion cancer, lymphatic sarcoma (sulfate); used in treatment of rheumatic arthritis; LD<sub>50</sub> (mus, iv, sulfate) = 9.5mg/kg. Source: CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochnera rosea*] (whole herb: content = 0.0383%<sup>[5508]</sup>; isolated from the plant in 1958)<sup>[5507]</sup>. Ref: 5, 658, 5507, 5508.

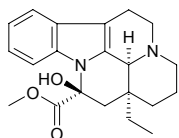


**22488 Vincadioline**

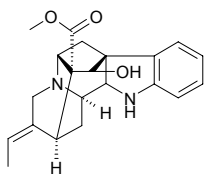
15 $\alpha$ -Hydroxyvincaleukoblastine [56897-74-6] C<sub>46</sub>H<sub>58</sub>N<sub>4</sub>O<sub>10</sub> (827.00). mp 218~221°C. **Pharm:** Antimitotic. **Source:** CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochera rosea*]. **Ref:** 5, 658.

**22489 Vincamine**

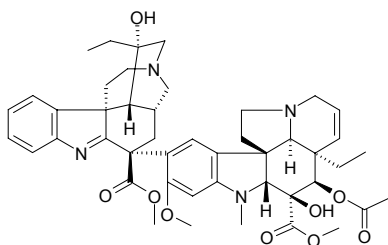
Minorine [1617-90-9] C<sub>21</sub>H<sub>26</sub>N<sub>2</sub>O<sub>3</sub> (354.45). mp 232~233°C. **Pharm:** Antihypertensive (rat, 0.8mg/kg, arterial pressure lowered by 30%); muscle relaxant; vasodilator (rat, iv, 2mg/kg); LD<sub>50</sub> (mus, iv) = 75mg/kg. **Source:** CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochera rosea*], DA CHANG CHUN HUA *Vinca herbacea* [Syn. *Vinca major*], MAN CHANG CHUN HUA *Vinca minor*. **Ref:** 4, 658.

**22490 Vincarin**

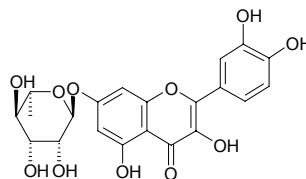
[21641-60-1] C<sub>21</sub>H<sub>24</sub>N<sub>2</sub>O<sub>3</sub> (352.44). mp 263~264°C. **Pharm:** Antiarrhythmic (rat, induced by aconitine, 5~10mg/kg); CNS depressant (mus, ip, 10mg/kg); antihypertensive (anesthetic dog, 0.1~3.0mg/kg). **Source:** DA CHANG CHUN HUA *Vinca herbacea* [Syn. *Vinca major*], CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochera rosea*]. **Ref:** 4, 658.

**22491 Vincathicine**

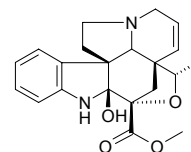
[57665-10-8] C<sub>46</sub>H<sub>56</sub>N<sub>4</sub>O<sub>9</sub> (808.98). No free alkali crystals. Sulfate, tiny lamellar crystals (ethanol), mp > 320°C (dec). **Pharm:** Antimitotic; dissolves oncocytes. **Source:** CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochera rosea*], LUAN YUAN CHANG CHUN HUA *Catharanthus ovalis*. **Ref:** 661.

**22492 Vincetoxicose B**

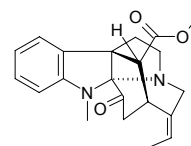
Quercetin-7-O-rhamnoside C<sub>21</sub>H<sub>20</sub>O<sub>11</sub> (448.37). **Pharm:** Anti-hepatitis. **Source:** BAI CI *Nitraria tangutorum*, CE BAI YE *Thuja orientalis* [Syn. *Platyclusus orientalis*; *Biota orientalis*], DI ER CAO *Hypericum japonicum*, GUI ZHU XIANG *Cheiranthus cheiri*, HUA BEI BAI QIAN *Cynanchum hancockianum*, LI ZI *Prunus salicina*, YAO YONG BAI QIAN *Vincetoxicum officinale* [Syn. *Cynanchum vincetoxicum*]. **Ref:** 658, 660, 1417, 4008, 4009, 4010, 4011.

**22493 Vincoline**

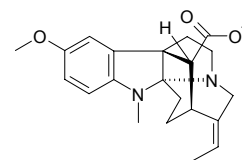
[11034-66-5] C<sub>21</sub>H<sub>24</sub>N<sub>2</sub>O<sub>4</sub> (368.44). mp 230~233°C. **Source:** CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochera rosea*], DAN MU *Nauclea officinalis*. **Ref:** 2, 118, 1521.

**22494 Vincordinine**

C<sub>21</sub>H<sub>24</sub>N<sub>2</sub>O<sub>3</sub> (352.44). **Source:** DA YE TANG JIAO SHU *Alstonia macrophylla* (leaf: yield = 0.0002%). **Ref:** 3020.

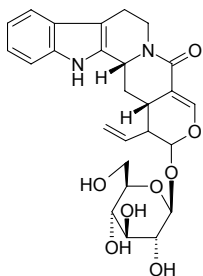
**22495 Vincorine**

C<sub>22</sub>H<sub>28</sub>N<sub>2</sub>O<sub>3</sub> (368.48). **Source:** DA YE TANG JIAO SHU *Alstonia macrophylla* (leaf: yield = 0.0004%), MAN CHANG CHUN HUA *Vinca minor*. **Ref:** 1521, 3020.

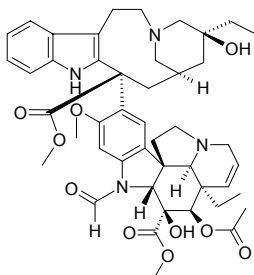


**22496 Vincosamide**

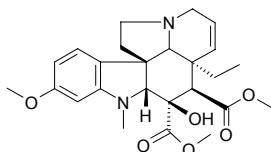
Vincoside lactam [23141-27-7]  $C_{26}H_{30}N_2O_8$  (498.54). Yellowish amorphous solid, mp 194~196°C (MeOH),  $[\alpha]_D^{22} = -48.6^\circ$  ( $c = 0.15$ , MeOH); mp 200~203°C,  $[\alpha]_D = -54.9^\circ$  ( $c = 0.24$ , MeOH), mp 210°C. **Pharm:** Antibacterial (*in vitro*: *Staphylococcus aureus*, *Bacillus subtilis*, *Bacillus coli*, *Bacillus diphtheriae*, *Streptococcus* sp., *Streptobacillus* sp., *Salmonella* sp., *Bacillus proteus*, *Bacillus lactis*, *Klebsiella pneumoniae*); antileishmanial; antifungal (*Aspergillus niger*). **Source:** DONG FANG WU TAN *Nauclea orientalis* (bark)<sup>[3074]</sup>, GOU TENG *Uncaria rhynchophylla* [Syn. *Nauclea rhynchophylla*], JI ZI MU *Sinoadina Racemosa* [Syn. *Adina racemosa*] (leaf, flower and twig: yield = 0.00089%<sub>dw</sub>)<sup>[4723]</sup>, XI SHU *Camptotheca acuminata*. **Ref:** 2, 2178, 3074, 4097, 4723.

**22497 Vincristine**

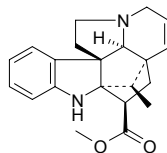
Lauroristine; VCR [57-22-7]  $C_{46}H_{56}N_4O_{10}$  (824.98). mp 218~220°C (dec). **Pharm:** Antineoplastic; cytotoxic (SMMC-7721,  $IC_{50} = (30.35 \pm 2.23) \mu\text{g/mL}$ ; HO-8910,  $IC_{50} = (20.74 \pm 1.91) \mu\text{g/mL}$ <sup>[4736]</sup>; cytotoxic (*in vitro*, BGC823 hmn tumor cells,  $IC_{50} = 0.066 \mu\text{g/mL}$ )<sup>[4760]</sup>; cytotoxic (SMMC-7721,  $IC_{50} = (63.2 \pm 1.8) \mu\text{g/mL}$ ; B16,  $IC_{50} = (70.7 \pm 2.8) \mu\text{g/mL}$ ; HeLa,  $IC_{50} = (67.2 \pm 2.2) \mu\text{g/mL}$ )<sup>[5219, 5244]</sup>; antithrombotic (mus, sulfate); LD<sub>50</sub> (mus, ip) = 5.2mg/kg. **Source:** CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochera rosea*] (whole herb: content = 0.0054%<sup>[5508]</sup>). **Ref:** 4, 658, 1521, 4736, 4760, 5219, 5244, 5508.

**22498 Vindoline**

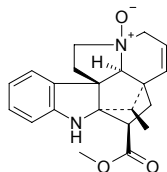
[2182-14-1]  $C_{25}H_{32}N_2O_6$  (456.54). mp 154~155°C. **Pharm:** Diuretic (animal model); hypoglycemic (animal model); antihypercholesterolemic (mus, ip); inhibits pathogenic bacteria. **Source:** CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochera rosea*] (whole herb: content = 0.244%<sup>[5508]</sup>), CHANG YE CHANG CHUN HUA *Catharanthus longifolius*, LUAN YUAN CHANG CHUN HUA *Catharanthus ovalis*, XI XIAO CHANG CHUN HUA *Catharanthus pusillus*. **Ref:** 2, 658, 5508.

**22499 Vindolinine**

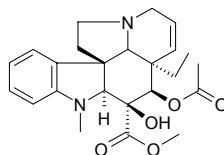
[5980-02-9]  $C_{21}H_{24}N_2O_2$  (336.44). mp 214~218°C. **Pharm:** Antibacterial (against 40 different bacteria); diuretic (animal model); hypoglycemic (animal model). **Source:** CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochera rosea*], CHANG YE CHANG CHUN HUA *Catharanthus longifolius*, LUAN YUAN CHANG CHUN HUA *Catharanthus ovalis*, NAN SHE TENG ZHUANG SHAN CHENG *Melodinus celastroides*. **Ref:** 2, 658, 1521.

**22500 Vindolinine N-oxide**

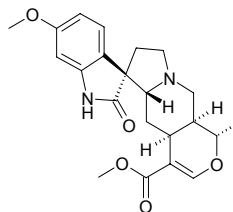
$C_{21}H_{24}N_2O_3$  (352.44). **Source:** CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochera rosea*]. **Ref:** 2.

**22501 Vindorosine**

Vindolidine [5231-60-7]  $C_{24}H_{30}N_2O_5$  (426.52). mp 244~250°C (dec). **Source:** CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochera rosea*]. **Ref:** 2, 1521.

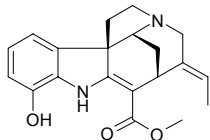
**22502 Vineridine**

Isocaboxine A [3489-06-3]  $C_{22}H_{26}N_2O_5$  (398.46). mp 179~180°C (acetone),  $[\alpha]_D^{22} = 22.7^\circ$  ( $c = 2.32$ , pyridine), 42.4 ( $c = 1.7$ , methanol), 40.5 ( $c = 2.395$ , chloroform). **Pharm:** CNS depressant (mus, *in vivo*,  $\geq 10\text{mg/kg}$  chlorine, ip, potentiates hypnotic effect of pentobarbital); antihypertensive (anesthetic cat, 1~20mg/kg, iv, arterial pressure lowered by 1.33~12.00kPa); respiratory stimulant; uterine stimulant (rbt, *in vivo* and *in vitro*, 1mg/kg iv); LD<sub>50</sub> = 125mg/kg. **Source:** CU SHENG KA BU MU *Cabucala fasciculata*, ZHI LI CHANG CHUN HUA *Vinca erecta*. **Ref:** 658, 660.

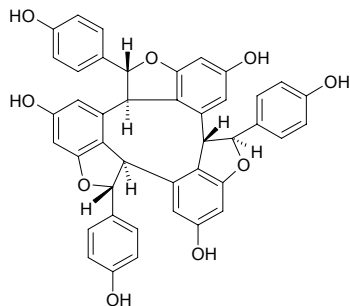


**22503 Vinervine**

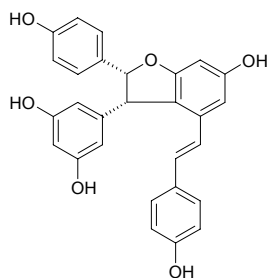
[1963-86-6]  $C_{20}H_{22}N_2O_3$  (388.41). mp 154~155°C (dec),  $[\alpha]_D^{32} = -505^\circ$  (methanol), hydrochloride mp 199~200°C,  $[\alpha]_D^{32} = -511.4^\circ$ . **Pharm:** Antihypertensive (chloride, anesthetic cat by urethan and anesthetic dog by urethan-morphine); uterine stimulant (rbt, *in vitro*). **Source:** ZHI LI CHANG CHUN HUA *Vinca erecta*. **Ref:** 658.

**22504  $\alpha$ -Viniferin**

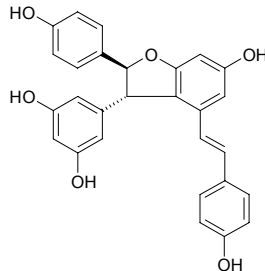
$C_{42}H_{30}O_9$  (678.70). **Pharm:** PKC inhibitor ( $IC_{50} = 62.5\mu\text{mol/L}$ ); anti-inflammatory (mouse, carrageenin-induced paw edema, dose > 30mg/kg orl or > 3mg/kg iv)<sup>[5432]</sup>; anti-inflammatory (COX-2 inhibitor,  $IC_{50} = 4.9\mu\text{mol/L}$ ; very weak COX-1 inhibitor,  $100\mu\text{mol/L}$ , InRt = (55.2±2.1)%, control, InRt = 100%)<sup>[5432]</sup>; inhibits synthesis of COX-2 transcript (LPS-activated murine macrophages Raw264.7, 3~10 $\mu\text{mol/L}$ )<sup>[5432]</sup>; NO production inhibitor (LPS-activated Raw264.7 cells treated simultaneously by  $\alpha$ -viniferin and LPS,  $IC_{50} = 2.7\mu\text{mol/L}$ , but did not inhibit the NO production when  $\alpha$ -viniferin was treated at 12h after LPS stimulation)<sup>[5432]</sup>; inhibits synthesis of iNOS transcript ( $IC_{50} = 4.7\mu\text{mol/L}$ )<sup>[5432]</sup>. **Source:** PU<sup>(2)</sup> TAO *Vitis vinifera*, JIN JI ER *Caragana chamlagu*, XIA YE JIN JI ER *Caragana stenophylla* (root). **Ref:** 2234, 2557, 5432.

**22505  $\epsilon$ -Viniferin**

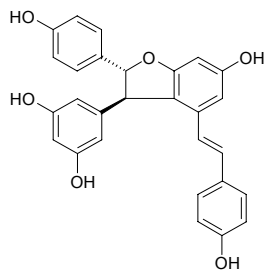
7*a*,8*a*-*cis*- $\epsilon$ -Viniferin [62218-08-0]  $C_{28}H_{22}O_6$  (454.48). **Pharm:** Antifungal (*Botrytis cinerea*, *Cladosporium cucumerinum* and *Plasmopara viticola*); antioxidant (super oxide scavenger,  $IC_{50} = 20\mu\text{mol/L}$ ; lipid peroxide inhibitory activity,  $IC_{50} = 33\mu\text{mol/L}$ )<sup>[4306]</sup>. **Source:** PU<sup>(2)</sup> TAO *Vitis vinifera*, QING MEI *Vatica rassak* (stem cortex), SHAN PU TAO *Vitis amurensis*. **Ref:** 658, 1521, 2233, 2234, 3950, 4306.

**22506 (+)- $\epsilon$ -Viniferin**

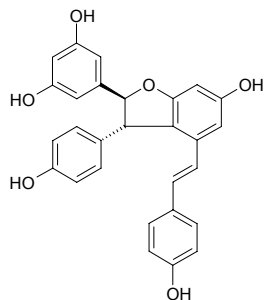
$C_{28}H_{22}O_6$  (454.48). **Source:** SHAN PU TAO *Vitis amurensis*. **Ref:** 2233, 2234.

**22507 (-)- $\epsilon$ -Viniferin**

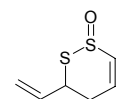
$C_{28}H_{22}O_6$  (454.48). **Source:** PU<sup>(2)</sup> TAO *Vitis vinifera*. **Ref:** 2233, 2234.

**22508  $\epsilon$ -iso-Viniferin**

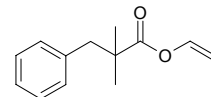
$C_{28}H_{22}O_6$  (454.48). **Source:** SHAN PU TAO *Vitis amurensis*. **Ref:** 2233, 2234.

**22509 3-Vinyl-3,4-dihydro-1,2-dithiin-1-oxide**

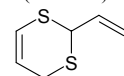
$C_6H_8S_2O$  (160.26). Yellowish oil liquid. **Source:** DA SUAN *Allium sativum*. **Ref:** 2186.

**22510 Vinyl-2,2-dimethyl-3-phenyl-propionate**

$C_{13}H_{16}O_2$  (204.27). **Source:** AI YE *Artemisia argyi*. **Ref:** 660.

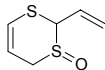
**22511 2-Vinyl-1,3-dithia-4-cyclohexene**

[80028-57-5]  $C_6H_8S_2$  (144.26). **Pharm:** Platelet aggregation inhibitor (derivants-induced); antithrombotic; 5-lipoxygenase inhibitor (50 $\mu\text{mol/L}$ , InRt = (20.4±8.8)%). **Source:** DA SUAN *Allium sativum*. **Ref:** 2, 1827, 1828.

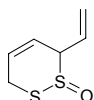
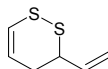
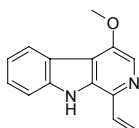
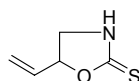
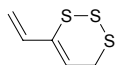
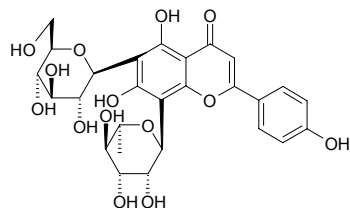
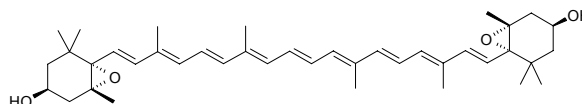
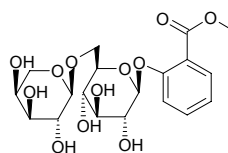
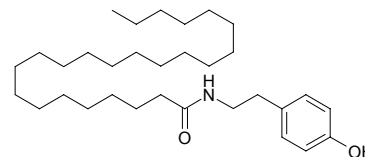
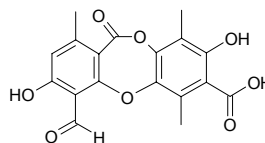
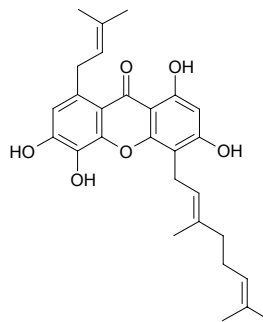


**22512 2-Vinyl-1,3-dithia-4-cyclohexene-3-oxide**C<sub>6</sub>H<sub>8</sub>OS<sub>2</sub> (160.26). Colorless oil liquid. Source: DA SUAN *Allium sativum*.

Ref: 2118.

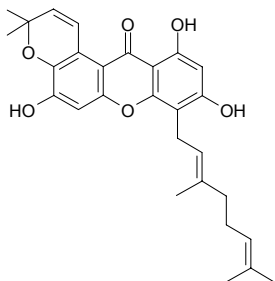
**22513 3-Vinyl-1,2-dithia-4-cyclohexene**C<sub>6</sub>H<sub>8</sub>S<sub>2</sub> (144.26). Source: DA SUAN *Allium sativum*. Ref: 2, 660.**22514 3-Vinyl-1,2-dithia-4-cyclohexene-2-oxide**C<sub>6</sub>H<sub>8</sub>OS<sub>2</sub> (160.26). Colorless oil liquid. Source: DA SUAN *Allium sativum*.

Ref: 2118.

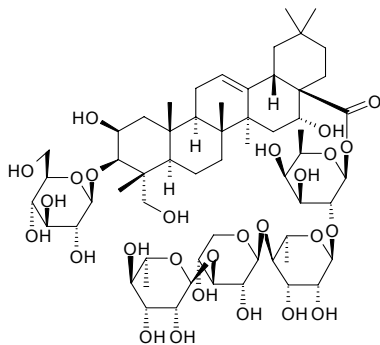
**22515 3-Vinyl-1,2-dithia-5-cyclohexene**C<sub>6</sub>H<sub>8</sub>S<sub>2</sub> (144.26). Source: DA SUAN *Allium sativum*. Ref: 2, 660.**22516 1-Vinyl-4-methoxy-β-carboline**C<sub>14</sub>H<sub>12</sub>N<sub>2</sub>O (224.26). Source: KU SHU PI *Picrasma quassioides* [Syn.*Picrasma ailanthoides*]. Ref: 12.**22517 L-5-Vinyl-2-thiooxazolidone**[500-12-9] C<sub>5</sub>H<sub>7</sub>NOS (129.18). Source: GAN LAN *Brassica oleracea* var. *capitata*. Ref: 6.**22518 4-Vinyl-1,2,3-trithia-4-cyclohexene**C<sub>5</sub>H<sub>6</sub>S<sub>3</sub> (162.30). Source: DA SUAN *Allium sativum*. Ref: 2.**22519 Violanthin**C<sub>27</sub>H<sub>30</sub>O<sub>14</sub> (578.53). Source: HUANG GAN CAO *Glycyrrhiza kansuensis*, SAN SE JIN *Viola tricolor*, *Glycyrrhiza* sp. Ref: 660, 2431.**22520 Violaxanthin**[126-29-4] C<sub>40</sub>H<sub>56</sub>O<sub>4</sub> (600.89). mp 208°C. Pharm: Yellow pigment. Source: DAO CAO *Oryza sativa*, FAN MU GUA *Carica papaya*, JIN ZHAN JU *Calendula officinalis*, JING MI *Oryza sativa*, KONG QUE CAO *Tagetes patula*, LI MENG *Citrus limonia*, LI MENG YE *Citrus limonia*, MANG GUO *Mangifera indica*, NING MENG *Citrus limon*, SUAN MO *Rumex acetosa*, SUAN MO YE *Rumex acetosa*, SUAN SHUI CAO *Potamogeton perfoliatus*, YAO YONG PU GONG YING *Taraxacum officinale*, YI ZHU QIAN MA *Urtica dioica*. Ref: 6, 658, 660.**22521 Violutoside**C<sub>19</sub>H<sub>26</sub>O<sub>12</sub> (446.41). mp 173°C (dec). Source: SAN SE JIN *Viola tricolor*. Ref: 6.**22522 Violydoenamide**Tetracosanoyl-*p*-hydroxy phenethylamine C<sub>32</sub>H<sub>57</sub>NO<sub>2</sub> (487.82). Source: ZI HUA DI DING *Viola yedoensis*. Ref: 660.**22523 Virensic acid**[68-14-4] C<sub>18</sub>H<sub>14</sub>O<sub>8</sub> (358.31). mp 245–247°C. Source: JIN SI DAI *Alectoria vivens*. Ref: 6.**22524 Virgataxanthone A**1,3,5,6-Tetrahydroxy-4-[(2*E*)-3,7-dimethylocta-2,6-dienyl]-8-(3-methylbut-2-enyl)xanthone C<sub>28</sub>H<sub>32</sub>O<sub>6</sub> (464.56). Orange amorphous. Pharm: Antioxidant (DPPH scavenger, EC<sub>50</sub> = 0.240μg/mL, control BHA, EC<sub>50</sub> = 0.136μg/mL, Vitamin E, EC<sub>50</sub> = 0.138μg/mL). Source: DUO ZHI ZHI TENG HUANG *Garcinia virgata* (stem cortex). Ref: 3874.

**22525 Virgataxanthone B**

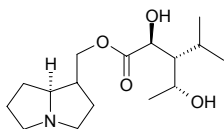
1,3,6-Trihydroxydimethylpyrano-4-[(2E)-3,7-dimethylocta-2,6-dienyl]-xanthone C<sub>28</sub>H<sub>30</sub>O<sub>6</sub> (462.55). Yellow amorphous. Source: DUO ZHI ZHI TENG HUANG *Garcinia virgata* (stem cortex). Ref: 3874.

**22526 Virgaureasaponin 1**

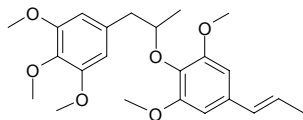
C<sub>59</sub>H<sub>96</sub>O<sub>27</sub> (1237.41). Pharm: Antifungal (microzyme, such as *Candida albicans*). Source: MAO GUO YI ZHI HUANG HUA *Solidago virgaurea*, CHU JU *Bellis perennis*. Ref: 658.

**22527 Viridiflorine**

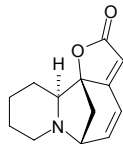
[551-57-5] C<sub>16</sub>H<sub>29</sub>NO<sub>4</sub> (299.41). mp 102.5~103.5°C. Source: YAO YONG DAO TI HU *Cynoglossum officinale*. Ref: 6, 1521.

**22528 (±)-Virolongin**

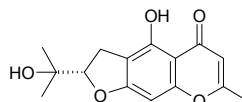
Virolongin [94608-22-7] C<sub>23</sub>H<sub>30</sub>O<sub>6</sub> (402.49). Colorless oil, [α]<sub>D</sub><sup>28</sup> = +16.0° (c = 0.25, chloroform). Pharm: Platelet aggregation inhibitor (PAF trial, 25 μmol/L InRt = 72%, IC<sub>50</sub> = 14.0 μmol/L); PAF receptor antagonist (<sup>3</sup>H] PAF receptor combination trial, IC<sub>50</sub> = 7.0 μmol/L). Source: ZHANG YE HU JIAO *Piper polysyphorum*. Ref: 900.

**22529 Virosecurinine**

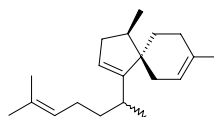
C<sub>13</sub>H<sub>15</sub>NO<sub>2</sub> (217.27). Yellow needles (EtOH), mp 140~142°C, [α]<sub>D</sub><sup>20</sup> = +1040° (c = 0.1, CHCl<sub>3</sub>). Source: YI YE QIU *Securinega suffruticosa* (branch leaf). Ref: 4818.

**22530 Visamminol**

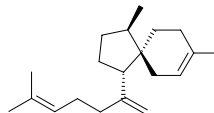
[492-52-4] C<sub>15</sub>H<sub>16</sub>O<sub>5</sub> (276.28). Colorless acicular crystals (petroleum ether-acetone), mp 160°C, [α]<sub>D</sub> = +92° (c = 0.2, chloroform). Pharm: Antispasmodic (male gpg, jejunum, caused by 0.1 μg/mL acetylcholine, 1 μg/mL histamine chloride, or BaCl<sub>2</sub>, ED<sub>50</sub> = 50 μg/mL). Source: CHI A MI *Ammi visnaga*, RI BEN DANG GUI *Angelica japonica*, XING AN SHENG MA *Cimicifuga dahurica*. Ref: 658, 660, 5501.

**22531 Viscida-3,9,14-triene**

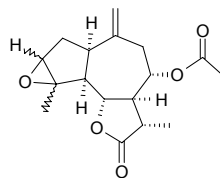
(1-(1,5-Dimethylhex-4-enyl)-4,8-dimethylspiro[4.5]deca-1,7-diene) C<sub>20</sub>H<sub>32</sub> (272.48). Colorless oil. Source: NING BIAN E TAI *Radula perrottetii* (essential oil). Ref: 5272.

**22532 Viscida-3,11(18),14-triene**

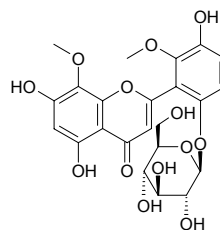
(1,8-Dimethyl-4-(5-methyl-1-methylenehex-4-enyl)spiro[4.5]dec-7-ene) C<sub>20</sub>H<sub>32</sub> (272.48). Colorless oil. Source: NING BIAN E TAI *Radula perrottetii* (essential oil). Ref: 5272.

**22533 Viscidulin B**

[35144-10-6] C<sub>17</sub>H<sub>22</sub>O<sub>5</sub> (306.36). Pharm: Plant growth regulator. Source: NIAN HAO *Artemisia cana* ssp. *viscidula*. Ref: 658.

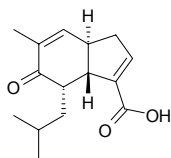
**22534 Viscidulin III-6'-O-β-D-glucopyranoside**

C<sub>23</sub>H<sub>24</sub>O<sub>13</sub> (508.44). Source: HUANG QIN *Scutellaria baicalensis*. Ref: 660.

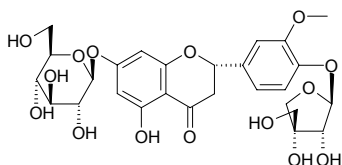


**22535 Viscosmic acid**

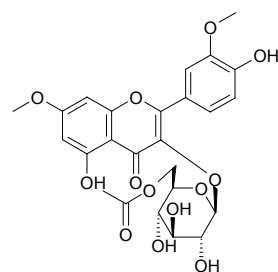
4-Isobutyl-6-methyl-5-oxo-3a,4,5,7a-tetrahydro-1*H*-inden-13-oic acid  
 $C_{15}H_{20}O_3$  (248.32). Amorphous. Source: NIAN MAO LIAO *Polygonum viscosum* (whole herbs). Ref: 3955.

**22536 Viscumneoside I**

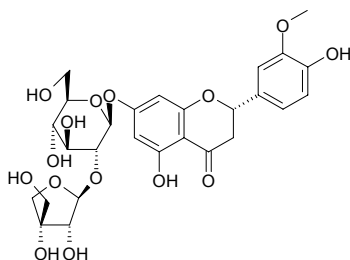
$C_{27}H_{32}O_{15}$  (596.55). Source: FENG XIANG JI SHENG *Viscum articulatum*,  
 HU JI SHENG *Viscum coloratum*. Ref: 660, 1521.

**22537 Viscumneoside II**

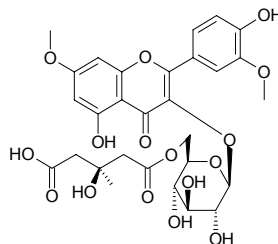
[108886-00-6]  $C_{25}H_{26}O_{13}$  (534.48). Source: HU JI SHENG *Viscum coloratum*.  
Ref: 660, 1521.

**22538 Viscumneoside III**

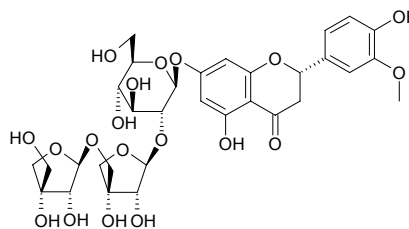
Homoeriodictyol-7-*O*- $\beta$ -*D*-apiosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranoside [118985-27-6]  
 $C_{27}H_{32}O_{15}$  (596.55). White amorphous powder, mp 208–210°C,  $[\alpha]_D^{18} = -67.3^\circ$  ( $c = 0.42$ , methanol). Source: HU JI SHENG *Viscum coloratum*  
 (stem-leaf: content scope on different hosts = 0.05%–0.74%, mean content = 0.30%<sup>[5508]</sup>). Ref: 111, 5508.

**22539 Viscumneoside IV**

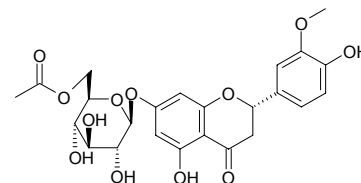
Rhamnazin-*O*- $\beta$ -*D*-(6''- $\beta$ -hydroxy- $\beta$ -methylglutaryl) glucoside [119725-29-0]  
 $C_{29}H_{32}O_{16}$  (637.57). Yellow acicular crystals, mp 195–197°C,  $[\alpha]_D^{20} = +14.64^\circ$   
 ( $c = 0.25$ , methanol). Source: HU JI SHENG *Viscum coloratum*. Ref: 113.

**22540 Viscumneoside V**

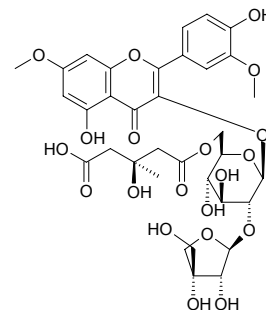
Homoeriodictyol-7-*O*- $\beta$ -*D*-apiosyl-(1 $\rightarrow$ 5)- $\beta$ -*D*-apiosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyra-  
 noside [119016-92-1]  $C_{32}H_{40}O_{19}$  (728.66). White amorphous powder, mp  
 136–139°C,  $[\alpha]_D^{20} = -127.0^\circ$  ( $c = 0.42$ , methanol). Source: LENG ZHI HU JI  
 SHENG *Viscum angulatum* (whole herb: yield = 0.0050%<sup>[4626]</sup>), HU JI  
 SHENG *Viscum coloratum* (stem-leaf: content scope on different hosts =  
 0.00%–0.38%, mean content = 0.21%<sup>[5508]</sup>). Ref: 111, 4626, 5508.

**22541 Viscumneoside VI**

Homoeriodictyol-7-*O*- $\beta$ -*D*-(6''-*O*-acetyl)-glucopyranoside [118985-26-5]  
 $C_{24}H_{26}O_{12}$  (506.47). White amorphous powder, mp 124–126°C,  $[\alpha]_D = -78.2^\circ$   
 ( $c = 0.29$ , methanol). Source: HU JI SHENG *Viscum coloratum*. Ref: 111.

**22542 Viscumneoside VII**

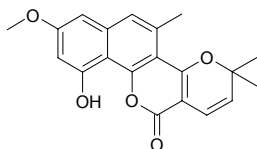
Rhamnazin-3-*O*- $\beta$ -*D*-apiosyl-(1 $\rightarrow$ 2)-[6''-*O*-(3-hydroxy-3-methylglutarate)]glu-  
 coside  $C_{34}H_{40}O_{20}$  (768.69). Yellow ropy liquid,  $[\alpha]_D^{23} = -31.0^\circ$  ( $c = 0.32$ ,  
 methanol). Source: HU JI SHENG *Viscum coloratum*. Ref: 163, 660.



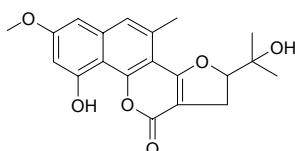


**22543 Vismiaguianin A**

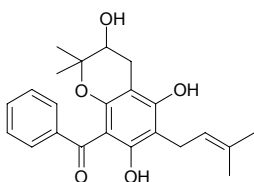
$C_{20}H_{18}O_5$  (338.36). Light yellow needles (MeOH), mp 191~192°C. **Pharm:** Cytotoxic (KB,  $EC_{50} = (1.3 \pm 0.8) \mu\text{g/mL}$ ); DNA strand-scission inactive (DNA strand-scission assay, control 0.025  $\mu\text{g/mL}$  Bleomycin sulfate). **Source:** *Vismia guianensis* (root). **Ref:** 5083.

**22544 Vismiaguianin B**

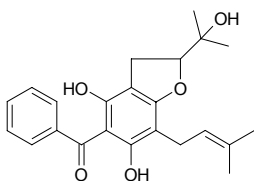
$C_{20}H_{20}O_6$  (356.38). Pale yellow powder (MeOH), mp 222~224°C,  $[\alpha]_D^{22} = +18.0^\circ$  ( $c = 0.05$ ,  $\text{CHCl}_3$ ). **Pharm:** Cytotoxic (KB,  $EC_{50} > 20 \mu\text{g/mL}$ ); DNA strand-scission inactive (DNA strand-scission assay, control 0.025  $\mu\text{g/mL}$  Bleomycin sulfate). **Source:** *Vismia guianensis* (root). **Ref:** 5083.

**22545 Vismiaguianone A**

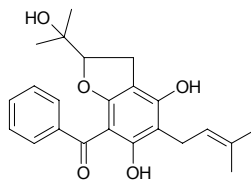
$C_{23}H_{26}O_5$  (382.46). Yellow powder (MeOH), mp 140~142°C,  $[\alpha]_D^{22} = +10.9^\circ$  ( $c = 0.11$ ,  $\text{CHCl}_3$ ). **Pharm:** Cytotoxic (KB,  $EC_{50} > 20 \mu\text{g/mL}$ ); DNA strand-scission inactive (DNA strand-scission assay, control 0.025  $\mu\text{g/mL}$  Bleomycin sulfate). **Source:** *Vismia guianensis* (root). **Ref:** 5083.

**22546 Vismiaguianone B**

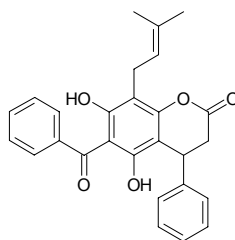
$C_{23}H_{26}O_5$  (382.46). Yellow powder (MeOH), mp 58~60°C,  $[\alpha]_D^{22} = +5.0^\circ$  ( $c = 0.14$ ,  $\text{CHCl}_3$ ). **Pharm:** Cytotoxic (KB,  $EC_{50} > 20 \mu\text{g/mL}$ ); DNA strand-scission activity (DNA strand-scission assay, 2.5  $\mu\text{g/mL}$ , (43  $\pm$  12)% nicked, control 0.025  $\mu\text{g/mL}$  Bleomycin sulfate). **Source:** *Vismia guianensis* (root). **Ref:** 5083.

**22547 Vismiaguianone C**

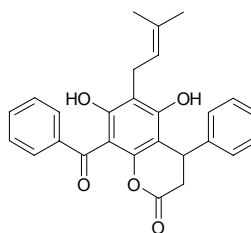
$C_{23}H_{26}O_5$  (382.46). Yellow powder (MeOH), mp 162~164°C,  $[\alpha]_D^{22} = +2.7^\circ$  ( $c = 0.15$ ,  $\text{CHCl}_3$ ). **Pharm:** Cytotoxic (KB,  $EC_{50} > 20 \mu\text{g/mL}$ ); DNA strand-scission inactive (DNA strand-scission assay, control 0.025  $\mu\text{g/mL}$  Bleomycin sulfate). **Source:** *Vismia guianensis* (root). **Ref:** 5083.

**22548 Vismiaguianone D**

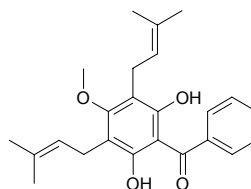
$C_{27}H_{24}O_5$  (428.49). Light yellow needles (MeOH), mp 171~172°C,  $[\alpha]_D^{22} = -147.2^\circ$  ( $c = 0.25$ ,  $\text{CHCl}_3$ ). **Pharm:** Cytotoxic (KB,  $EC_{50} = (2.4 \pm 0.9) \mu\text{g/mL}$ ); DNA strand-scission inactive (DNA strand-scission assay, control 0.025  $\mu\text{g/mL}$  Bleomycin sulfate). **Source:** *Vismia guianensis* (root). **Ref:** 5083.

**22549 Vismiaguianone E**

$C_{27}H_{24}O_5$  (428.49). Light yellow powder (MeOH), mp 70~72°C,  $[\alpha]_D^{22} = +198.9^\circ$  ( $c = 0.37$ ,  $\text{CHCl}_3$ ). **Pharm:** Cytotoxic (KB,  $EC_{50} = (3.3 \pm 1.5) \mu\text{g/mL}$ ); DNA strand-scission inactive (DNA strand-scission assay, control 0.025  $\mu\text{g/mL}$  Bleomycin sulfate). **Source:** *Vismia guianensis* (root). **Ref:** 5083.

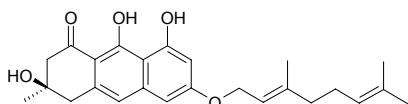
**22550 Vismiaphenone C**

2,6-Dihydroxy-4-methoxy-3,5-bis(3-methyl-2-butenyl)benzophenone  
 $C_{24}H_{28}O_4$  (380.49). Yellow gum. **Source:** FEI JI TENG HUANG *Garcinia pseudoguttifera* (heartwood). **Ref:** 3911.

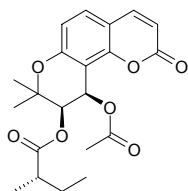


**22551 Vismione D**

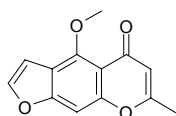
[87605-72-9] C<sub>25</sub>H<sub>30</sub>O<sub>5</sub> (410.52). [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -98.0° (c = 0.102, MeOH). **Pharm:** Antineoplastic (hmn, adenocarcinoma in colon ascendens); antitrypanosomal (*Trypanosoma brucei*, IC<sub>50</sub> = (9.0±3.5)μg/mL, control Melarsoprol, IC<sub>50</sub> = (0.0015±0.0009)μg/mL; *Trypanosoma cruzi*, IC<sub>50</sub> = (4.6±1.6)μg/mL, control Benznidazole, IC<sub>50</sub> = (0.39±0.15)μg/mL)<sup>[5008]</sup>; antileishmanial (*Leishmania donovani*, IC<sub>50</sub> = (0.37±0.03)μg/mL, control Miltefosine, IC<sub>50</sub> = (0.23±0.03)μg/mL)<sup>[5008]</sup>; antimalarial (*Plasmodium falciparum*, IC<sub>50</sub> = (1.01±0.13)μg/mL, control Chloroquine, IC<sub>50</sub> = (0.055±0.02)μg/mL, control Artemisinin, IC<sub>50</sub> = (0.0011±0.0006)μg/mL)<sup>[5008]</sup>; cytotoxic (L-6, IC<sub>50</sub> = (4.1±1.0)μg/mL, control Podophyllotoxin, IC<sub>50</sub> = 0.0075μg/mL; BST, IC<sub>50</sub> = 73.3μg/mL, control Cyclophosphamide, IC<sub>50</sub> = 16.33μg/mL)<sup>[5008]</sup>. **Source:** DONG FANG WEI SI MU *Vismia orientalis* (stem cortex), PU SUO MU *Psorospermum febrifugum*. **Ref:** 658, 5008.

**22552 Visnadine**

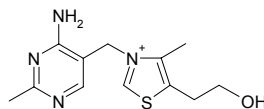
Visnamine [477-32-7] C<sub>21</sub>H<sub>24</sub>O<sub>7</sub> (388.42). **Pharm:** Antispasmodic (animal model); increases coronary flow (anesthetic dog, endarterial injection 10mg/kg, increase of blood flow 30~100% for 29 min); antihypercholesterolemic (rbt, orl, 3~5mg/(kg·d), reduces the level of cholesterol in serum); used in treatment of asthmatic bronchitis (gpg); vasodilator (animal model); LD<sub>50</sub> (mus, orl) = 2240mg/kg, (mus, sc) ≥ 370mg/kg, (mus, ip) = 500mg/kg, (rat, orl) ≥ 4000mg/kg, (rbt, iv) = 50mg/kg, (rbt, orl) ≥ 600mg/kg, (dog iv) = 20mg/kg, (dog orl) ≥ 200mg/kg. **Source:** CHI A MI *Ammi visnaga*, ZHANG GUO QIN *Phlojodicarpus sibiricus*, *Anethum* sp., *Ferula* sp., *Phlojodicarpus* sp. **Ref:** 4, 658.

**22553 Visnagin**

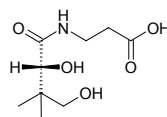
[82-57-5] C<sub>13</sub>H<sub>10</sub>O<sub>4</sub> (230.22). Acicular crystals (water or petroleum ether-acetone), mp 142~145°C. **Pharm:** Antispasmodic (gpg jejunum, spasm caused by 3mg BaCl<sub>2</sub>, ED = 4.5mg, rat, therapy dose 9mg/kg); phototoxic (green algae and phage T4, M13); LD<sub>50</sub> (mus, orl) > 309mg/kg. **Source:** CHI A MI *Ammi visnaga*, XING AN SHENG MA *Cimicifuga dahurica*. **Ref:** 660, 661, 5501.

**22554 Vitamin B<sub>1</sub>**

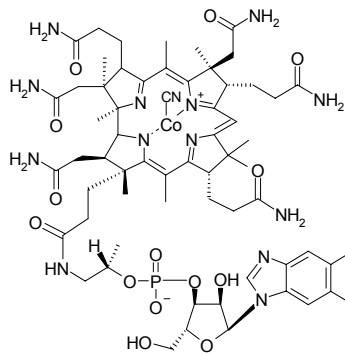
Thiamine C<sub>12</sub>H<sub>17</sub>N<sub>4</sub>O<sub>5</sub><sup>+</sup> (265.36). **Pharm:** Coenzyme (in decarboxylating reaction during sugar metabolism). **Source:** CU LIU GUO *Hippophae rhamnoides*, DA ZAO *Ziziphus jujuba*, DONG CHONG XIA CAO *Cordyceps sinensis*, GOU QI ZI *Lycium chinense*, HU LU BA *Trigonella foenum-graecum*, JI GUAN ZI *Celosia cristata* (seed), LU GEN *Phragmites communis*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], SANG YE *Morus alba* (leaf: content scope of 8 origins = 0.00034%~0.0019%, mean content = 0.00068%)<sup>[5508]</sup>, ZI SU *Perilla frutescens* var. *arguta*. **Ref:** 2, 661, 658, 1521, 5508.

**22555 Vitamin B<sub>5</sub>**

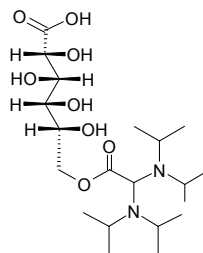
*N*-(2,4-Dihydroxy-3,3-dimethyl-1-oxobutyl)-β-alanine [79-83-4] C<sub>9</sub>H<sub>17</sub>NO<sub>5</sub> (219.24). Viscous oil, mp 271°C (dec), [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +37.5° (H<sub>2</sub>O), hygroscopic. **Source:** YE ZI RANG *Cocos nucifera*. **Ref:** 6, 660, 1521.

**22556 Vitamin B<sub>12</sub>**

5,6-Dimethylbenzimidazolyl cyanocobamide [68-19-9] C<sub>63</sub>H<sub>88</sub>CoN<sub>14</sub>O<sub>14</sub>P (1355.40). **Pharm:** Coenzyme. **Source:** CHUN *Brasenia schreberi*, CU LIU GUO *Hippophae rhamnoides*, DANG GUI *Angelica sinensis*, DONG CHONG XIA CAO *Cordyceps sinensis*, HEI DA DOU *Glycine max*, KONG SHI CHUN *Ulva pertusa*, QUN DAI CAI *Undaria pinnatifida*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. **Ref:** 2, 658, 1521.

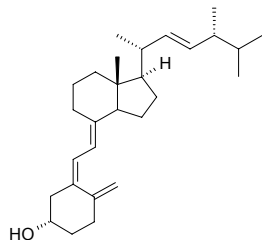
**22557 Vitamin B<sub>15</sub>**

[11006-56-7] C<sub>20</sub>H<sub>40</sub>N<sub>2</sub>O<sub>8</sub> (436.55). **Source:** MI PI KANG *Oryza sativa*. **Ref:** 6.

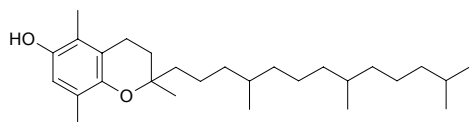


**22558 Vitamin D<sub>2</sub>**

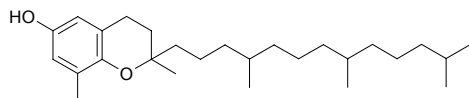
Ergocalciferol [50-14-6] C<sub>28</sub>H<sub>44</sub>O (396.66). White crystals, mp 115.8°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +82.6° (acetone), insoluble in water, easily soluble in EtOH, ether, chloroform.<sup>[5507]</sup> **Pharm:** Antirachitic vitamin. **Source:** MAI JIAO *Claviceps purpurea*, SONG XUN *Tricholoma matsutake* [Syn. *Armillaria matsutake*]. **Ref:** 6, 1521, 5507.

**22559 Vitamin E $\beta$** 

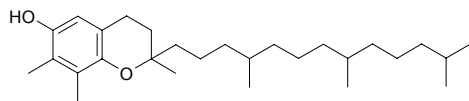
$\beta$ -Tocopherol C<sub>28</sub>H<sub>48</sub>O<sub>2</sub> (416.69). **Source:** CU LIU GUO *Hippophae rhamnoides*, MU JIN ZI *Hibiscus syriacus*, WU WEI ZI *Schisandra chinensis*. **Ref:** 2, 6, 7. ‡Note: see compound 21413.

**22560 Vitamin E $\delta$** 

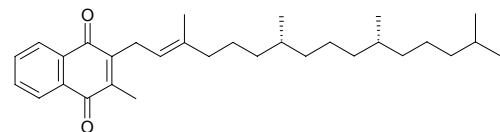
$\delta$ -Tocopherol C<sub>27</sub>H<sub>46</sub>O<sub>2</sub> (402.67). bp (+) 150°C/0.001mmHg. **Source:** CU LIU GUO *Hippophae rhamnoides*, MU JIN ZI *Hibiscus syriacus*, WU WEI ZI *Schisandra chinensis*. **Ref:** 2, 6. ‡Note: see compound 21412.

**22561 Vitamin E $\gamma$** 

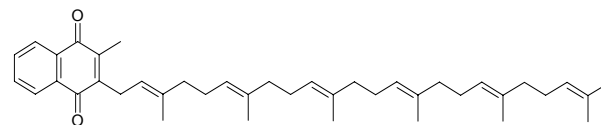
$\gamma$ -Tocopherol C<sub>28</sub>H<sub>48</sub>O<sub>2</sub> (416.69). mp -3°C~+2°C. **Source:** CU LIU GUO *Hippophae rhamnoides*, LUO HUA SHENG *Arachis hypogaea*, WU WEI ZI *Schisandra chinensis*, YE ZI RANG *Cocos nucifera*. **Ref:** 2, 6. ‡Note: see compound 21414.

**22562 Vitamin K<sub>1</sub>**

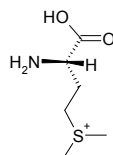
2-Methyl-3-phytyl-1,4-naphthoquinone [84-80-0] C<sub>31</sub>H<sub>46</sub>O<sub>2</sub> (450.71). mp -20°C. **Pharm:** Analgesic; antidote (diphacin poisoning); hemostatic; used in treatment of hypoprothrombinemia disease. **Source:** CU LIU GUO *Hippophae rhamnoides*. **Ref:** 2, 658.

**22563 Vitamin K<sub>2</sub>**

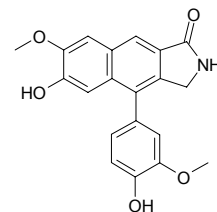
Farnophae [84-81-1] C<sub>41</sub>H<sub>56</sub>O<sub>2</sub> (580.90). **Source:** CU LIU GUO *Hippophae rhamnoides*. **Ref:** 2.

**22564 Vitamin U**

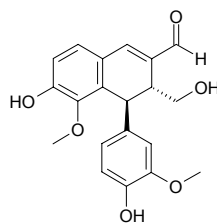
Cabagin-U; Vitas-U [1115-84-0] C<sub>6</sub>H<sub>14</sub>NO<sub>2</sub><sup>+</sup> (164.25). **Pharm:** Used in treatment of gastric disorders; antihistamine. **Source:** GAN LAN *Brassica oleracea* var. *capitata*. **Ref:** 6, 1521, 5507.

**22565 Vitidoamine A**

6-Hydroxy-4-(4-hydroxy-3-methoxyphenyl)-7-methoxy-3-nicotinmethyl-2-naphthoic acid- $\gamma$ -lactam C<sub>20</sub>H<sub>17</sub>NO<sub>5</sub> (351.36). Amorphous powder. **Pharm:** Antioxidant (ferric thiocyanate method, 0.5mmol/L, stronger than control Vitamin E; DPPH radical scavenger, DPPH 0.1mmol/L, 0.02mmol/L, stronger than control *L*-Cysteine). **Source:** HUANG JING ZHONG ZI *Vitex negundo* (seed: yield = 0.00195%). **Ref:** 4791.

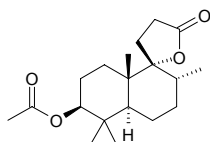
**22566 Vitidoin A**

6-Hydroxy-4 $\beta$ -(4-hydroxy-3-methoxyphenyl)-3 $\alpha$ -hydroxymethyl-5-methoxy-3,4-dihydro-2-naphthaldehyde C<sub>20</sub>H<sub>20</sub>O<sub>6</sub> (356.38). Amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>13</sup> = -79.4° (*c* = 3.2, MeOH). **Pharm:** Antioxidant (ferric thiocyanate method, 0.5mmol/L, stronger than control Vitamin E; DPPH radical scavenger, DPPH 0.1mmol/L, 0.02mmol/L, stronger than control *L*-Cysteine). **Source:** HUANG JING ZHONG ZI *Vitex negundo* (seed: yield = 0.015%). **Ref:** 4791.

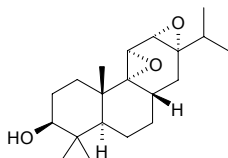


**22567 Vitedoin B**

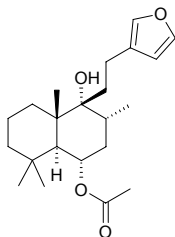
(*rel*-3*S*,5*S*,8*R*,9*R*,10*S*)-3-Acetoxy-14,15,16-trinor-13,9-labdanolide C<sub>19</sub>H<sub>30</sub>O<sub>4</sub> (322.45). Colorless needles (hexane–EtOAc), mp 95–96°C, [ $\alpha$ ]<sub>D</sub><sup>29</sup> = +4.7° (*c* = 0.9, CHCl<sub>3</sub>). Source: HUANG JING ZHONG ZI *Vitex negundo* (seed: yield = 0.00097%). Ref: 4791.

**22568 Vitetrifolin A**

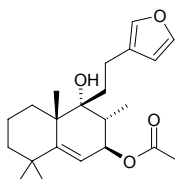
C<sub>20</sub>H<sub>32</sub>O<sub>3</sub> (320.48). Colorless acicular crystals (hexane–EtOAc), mp 174–175°C, [ $\alpha$ ]<sub>D</sub><sup>19</sup> = –11.7° (*c* = 0.9, acetone). Source: MAN JING ZI *Vitex trifolia*. Ref: 746.

**22569 Vitetrifolin B**

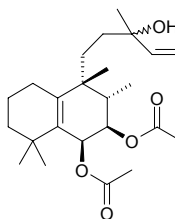
C<sub>22</sub>H<sub>34</sub>O<sub>4</sub> (362.51). Colorless syrup, [ $\alpha$ ]<sub>D</sub><sup>29</sup> = –56.3° (*c* = 1.4, acetone). Source: MAN JING ZI *Vitex trifolia*. Ref: 746.

**22570 Vitetrifolin C**

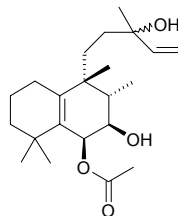
C<sub>22</sub>H<sub>32</sub>O<sub>4</sub> (360.5). Colorless syrup, [ $\alpha$ ]<sub>D</sub><sup>19</sup> = 93.4° (*c* = 1, acetone). Source: MAN JING ZI *Vitex trifolia*. Ref: 746.

**22571 Vitetrifolin D**

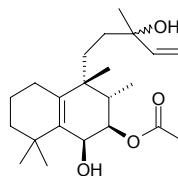
(*rel*-6*S*,7*R*,8*S*,9*R*)-6,7-Diacetoxy-5(10),14-halimadien-13-ol C<sub>24</sub>H<sub>38</sub>O<sub>5</sub> (406.57). Colorless syrup, [ $\alpha$ ]<sub>D</sub><sup>28</sup> = +107.8° (*c* = 0.9, acetone). Source: DAN YE MAN JING ZI *Vitex rotundifolia* [Syn. *Vitex trifolia* var. *simplicifolia*] (seed: yield = 0.00027%dw)<sup>[4623]</sup>, MAN JING ZI *Vitex trifolia* (fruit). Ref: 4126, 4623.

**22572 Vitetrifolin E**

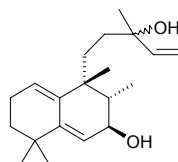
(*rel*-6*S*,7*R*,8*S*,9*R*)-6-Acetoxy-5(10),14-halimadien-7,13-diol C<sub>22</sub>H<sub>36</sub>O<sub>4</sub> (364.53). Colorless needles (hexane–acetone), mp 143–144°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +126.6° (*c* = 1.4, acetone). Source: MAN JING ZI *Vitex trifolia*. Ref: 4126.

**22573 Vitetrifolin F**

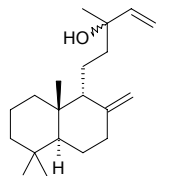
(*rel*-6*S*,7*R*,8*S*,9*R*)-7-Acetoxy-5(10),14-halimadien-6,13-diol C<sub>22</sub>H<sub>36</sub>O<sub>4</sub> (364.53). Colorless syrup, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +94.6° (*c* = 1.1, acetone). Source: MAN JING ZI *Vitex trifolia*. Ref: 4126.

**22574 Vitetrifolin G**

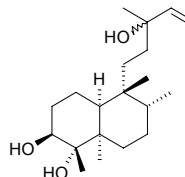
(*rel*-7*S*,8*S*,9*R*)-1(10),5,14-Halimatrien-7,13-diol C<sub>20</sub>H<sub>32</sub>O<sub>2</sub> (304.48). Colorless needles (hexane–acetone), mp 146–147°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = –44.0° (*c* = 0.4, acetone). Source: MAN JING ZI *Vitex trifolia*. Ref: 4126.

**22575 Vitexifolin A**

C<sub>20</sub>H<sub>34</sub>O (290.49). Colorless syrup, [ $\alpha$ ]<sub>D</sub><sup>19</sup> = +5.2° (*c* = 0.7, acetone). Source: DAN YE MAN JING ZI *Vitex rotundifolia* [Syn. *Vitex trifolia* var. *simplicifolia*] (seed: yield = 0.00024%dw). Ref: 4623.

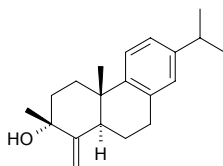
**22576 Vitexifolin B**

(*rel*-3*S*,4*S*,5*R*,8*R*,9*R*,10*S*)-14-Clerodene-3,4,13-triol C<sub>20</sub>H<sub>36</sub>O<sub>3</sub> (324.51). Colorless syrup, [ $\alpha$ ]<sub>D</sub><sup>21</sup> = +0.4° (*c* = 2.3, acetone). Source: DAN YE MAN JING ZI *Vitex rotundifolia* [Syn. *Vitex trifolia* var. *simplicifolia*] (seed: yield = 0.00079%dw). Ref: 4623.

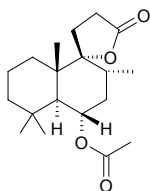


**22577 Vitexifolin C**

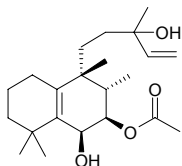
(*rel*-3*R*,5*R*,10*S*)-19(4→3)-Abeo-4(18),8,11,13-abietatetraen-3-ol C<sub>20</sub>H<sub>28</sub>O (284.45). Colorless syrup,  $[\alpha]_D^{17} = +168.1^\circ$  ( $c = 0.7$ , acetone). **Source:** DAN YE MAN JING ZI *Vitex rotundifolia* [Syn. *Vitex trifolia* var. *simplicifolia*] (seed: yield = 0.00021%dw). **Ref:** 4623.

**22578 Vitexifolin D**

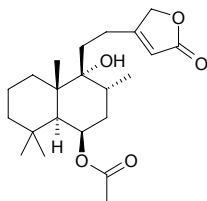
(*rel*-5*S*,6*S*,8*R*,9*R*,10*S*)-14,15,16-Trinor-13,9-labdanolide C<sub>19</sub>H<sub>30</sub>O<sub>4</sub> (322.45). Colorless needles (hexane–EtOAc), mp 100–101°C,  $[\alpha]_D^{17} = -4.4^\circ$  ( $c = 2.8$ , acetone). **Source:** DAN YE MAN JING ZI *Vitex rotundifolia* [Syn. *Vitex trifolia* var. *simplicifolia*] (seed: yield = 0.00034%dw). **Ref:** 4623.

**22579 Vitexifolin F**

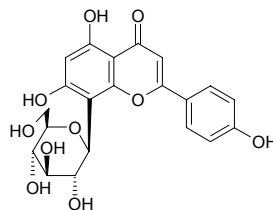
C<sub>22</sub>H<sub>36</sub>O<sub>4</sub> (364.53). Colorless oil,  $[\alpha]_D = +69.1^\circ$  ( $c = 0.35$ , acetone),  $[\alpha]_D = +94.6^\circ$  ( $c = 1.1$ , acetone). **Pharm:** Antitrypanosomal (epimastigotes of *Trypanosoma cruzi*, *in vitro*, MLC = 34 μmol/L)<sup>[2550]</sup>. **Source:** MAN JING ZI *Vitex trifolia*. **Ref:** 2550.

**22580 Vitexilactone**

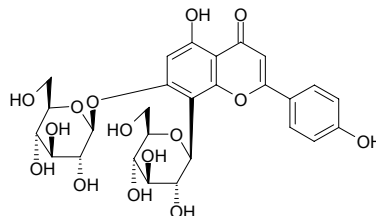
C<sub>22</sub>H<sub>34</sub>O<sub>5</sub> (378.51). Colorless needles (hexane–acetone), mp 148–149°C, mp 144–146°C,  $[\alpha]_D = -11.2^\circ$  ( $c = 0.85$ , CHCl<sub>3</sub>),  $[\alpha]_D = -12.4^\circ$  ( $c = 1.11$ , CHCl<sub>3</sub>). **Pharm:** Antitrypanosomal (epimastigotes of *Trypanosoma cruzi*, *in vitro*, MLC = 66 μmol/L)<sup>[2550]</sup>, cytotoxic (*in vitro*, PC12, GI<sub>50</sub> > 5 μg/mL, control Cisplatin, GI<sub>50</sub> = 0.111 μg/mL; HCT116, GI<sub>50</sub> > 5 μg/mL, control Cisplatin, GI<sub>50</sub> = 0.794 μg/mL)<sup>[4623]</sup>. **Source:** DAN YE MAN JING ZI *Vitex rotundifolia* [Syn. *Vitex trifolia* var. *simplicifolia*] (seed: yield = 0.0065%dw)<sup>[4623]</sup>, MAN JING ZI *Vitex trifolia*. **Ref:** 2550, 4623.

**22581 Vitexin**

Apigenin-8-*C*-β-*D*-glucopyranoside [3681-93-4] C<sub>21</sub>H<sub>20</sub>O<sub>10</sub> (432.39). mp 258–259°C, 263°C, 269–270°C (dec),  $[\alpha]_D^{20} = -14.5^\circ$  ( $c = 2.79$ , pyridine). **Pharm:** Antineoplastic; anti-inflammatory; antispasmodic; thyroid peroxidase inhibitor; antihypertensive (weak); antioxidant (DPPH scavenger, 10 μmol/L, ScRt = 17%, control BHT, 10 μmol/L, ScRt = 43%)<sup>[5319]</sup>; anti-ischemia myocardial (anesthetic dog iv, 20 mg/kg, protects complete ischemia myocardial, the longest active time = 120 min, longer than propranolol); phytoalexin<sup>[4727]</sup>; β-glucosidase inhibitor<sup>[4727]</sup>; pectinase inhibitor<sup>[4727]</sup>. **Source:** BIN MU JING *Vitex littoralis* (the compound was isolated from the plant in 1963)<sup>[5505]</sup>, CHANG BAN JIN LIAN HUA *Trollius macropetalus* (flower: mean content = 0.457%)<sup>[5508]</sup>, GAN SU SHAN ZHA *Crataegus kansuensis* (dried ripe fruit: content = 0.031%)<sup>[5508]</sup>, HU BEI SHAN ZHA *Crataegus hupehensis* (dried ripe fruit: mean content of 5 origins = 0.084%)<sup>[5508]</sup>, HU LU BA *Trigonella foenum-graecum* (dried ripe seed: content scope of 18 origins = 0.0029%–0.0184%, mean content = 0.0087%)<sup>[5508]</sup>, HUANG GUA *Cucumis sativus* (leaf)<sup>[4727]</sup>, JIN LIAN HUA *Trollius chinensis* [Syn. *Trollius asiaticus* var. *chinensis*], LIAO NING SHAN ZHA *Crataegus sanguinea* (dried ripe fruit: content = 0.038%)<sup>[5508]</sup>, LV CAO *Humulus japonicus* [Syn. *Humulus scandens*], MAN JING ZI *Vitex trifolia* (dried ripe fruit: mean content of 16 origins = 0.0489%)<sup>[5508]</sup>, MAO SHAN ZHA *Crataegus maximowiczii* (dried ripe fruit: content = 0.306%)<sup>[5508]</sup>, SHAN DI XIANG CHA CAI *Isodon oresbia* (aerial parts), SHAN LI HONG *Crataegus pinnatifida* var. *major* (dried ripe fruit: mean content of 4 origins = 0.031%)<sup>[5508]</sup>, SHAN ZHA *Crataegus pinnatifida* (dried ripe fruit: content scope = 0.018%–0.31%)<sup>[5501]</sup>, mean content of 3 origins = 0.068%)<sup>[5508]</sup>, SHUI WU GONG *Kyllinga brevifolia*, SUAN JIAO *Tamarindus indica*, TIAN SHAN ZHU ZI *Garcinia dulcis* (fruit), WU MAO SHAN ZHA *Crataegus pinnatifida* var. *psilosa* (dried ripe fruit: content = 0.042%)<sup>[5508]</sup>, XIN XI LAN MU JING *Vitex lucens*, YE GUAN MEN *Lespedeza cuneata*, YING GUO SHAN ZHA *Crataegus oxyacantha*, YUN NAN SHAN ZHA *Crataegus scabrifolia* (dried ripe fruit: content = 0.081%)<sup>[5508]</sup>, occurs in many plants (*Adonis* spp., *Alsophila* spp., *Larix* spp., *Lespedeza* spp., *Prosopis* spp. and other plants). **Ref:** 2, 245, 615, 658, 660, 1521, 3808, 4727, 5319, 5501, 5505, 5508.

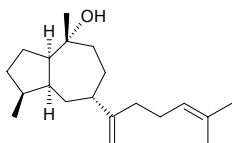
**22582 Vitexin-7-glucoside**

C<sub>27</sub>H<sub>30</sub>O<sub>15</sub> (594.53). **Source:** HU LU BA *Trigonella foenum-graecum*. **Ref:** 6.

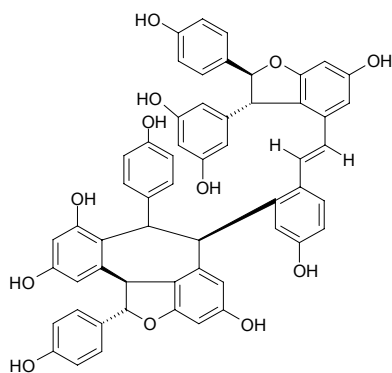


**22583 (+)-(1*R*\*,4*S*\*,5*S*\*,7*S*\*,10*S*\*)-Viticulol**

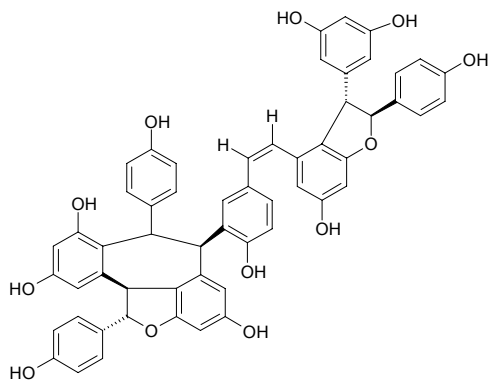
(+)-(1*S*\*,3*aR*\*,4*S*\*,7*S*\*,8*aS*\*)-1,4-Dimethyl-7-(5-methyl-1-methylene-hex-4-enyl)-decahydroazulen-4-ol C<sub>20</sub>H<sub>34</sub>O (290.49). Colorless oil. [Source](#): *Saccogyna viticulosa* (essential oil). [Ref](#): 3839.

**22584 (+)-Vitisin A**

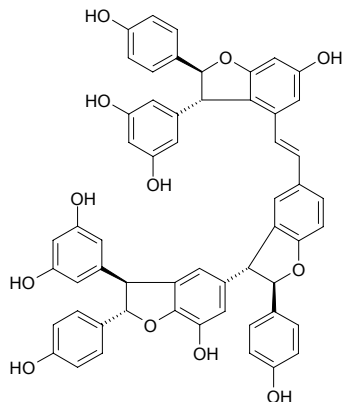
C<sub>56</sub>H<sub>42</sub>O<sub>12</sub> (906.95). [Source](#): SHAN PU TAO *Vitis amurensis*. [Ref](#): 2233, 2234.

**22585 (+)-cis-Vitisin A**

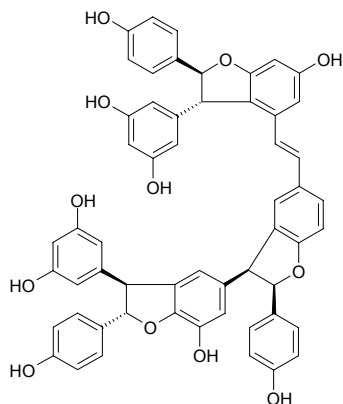
C<sub>56</sub>H<sub>42</sub>O<sub>12</sub> (906.95). [Source](#): SHAN PU TAO *Vitis amurensis*. [Ref](#): 2233, 2234.

**22586 Vitisin B**

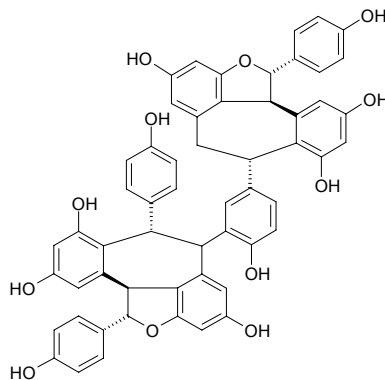
C<sub>56</sub>H<sub>42</sub>O<sub>12</sub> (906.95). [Pharm](#): TNF inhibitor. [Source](#): XIE PU TAO *Vitis coignetiae*. [Ref](#): 2233, 2234.

**22587 Vitisin C**

[180580-73-8] C<sub>56</sub>H<sub>42</sub>O<sub>12</sub> (906.94). [α]<sub>D</sub> = +239.9° (c = 0.5, methanol). [Pharm](#): TNF inhibitor. [Source](#): PU<sup>(2)</sup> TAO *Vitis vinifera*. [Ref](#): 1168.

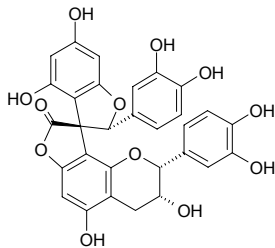
**22588 (+)-Vitisin D**

C<sub>56</sub>H<sub>42</sub>O<sub>12</sub> (906.95). [Source](#): SHAN PU TAO *Vitis amurensis*. [Ref](#): 2233, 2234.

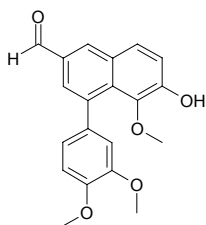


**22589 Vitisinol**

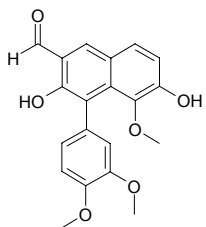
$C_{30}H_{22}O_{12}$  (574.50). White powder,  $[\alpha]_D^{22} = -90^\circ$  ( $c = 0.1$ , MeOH). Source: SHAN PU TAO *Vitis amurensis*. Ref: 772.

**22590 Vitrofolal A**

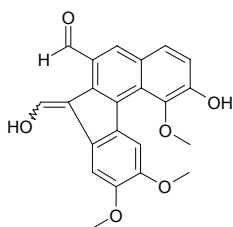
$C_{20}H_{18}O_5$  (338.36). Source: DAN YE MAN JING *Vitex rotundifolia* [Syn. *Vitex trifolia* var. *simplicifolia*] (underground part). Ref: 3052.

**22591 Vitrofolal B**

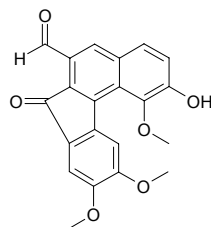
$C_{20}H_{18}O_6$  (354.36). Source: DAN YE MAN JING *Vitex rotundifolia* [Syn. *Vitex trifolia* var. *simplicifolia*] (underground part). Ref: 3052.

**22592 Vitrofolal C**

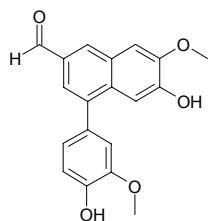
$C_{22}H_{18}O_6$  (378.39). Pharm: Antibacterial (18 Methicillin-resistant *Staphylococcus aureus* MRSA, MIC = or > 64 $\mu$ g/mL). Source: DAN YE MAN JING *Vitex rotundifolia* [Syn. *Vitex trifolia* var. *simplicifolia*] (underground part). Ref: 3052.

**22593 Vitrofolal D**

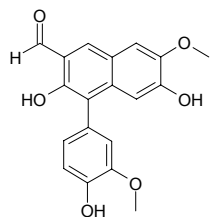
$C_{21}H_{16}O_6$  (364.36). Red amorphous solid. Pharm: Antibacterial (18 Methicillin-resistant *Staphylococcus aureus* MRSA, MIC = 16, 32, or >64 $\mu$ g/mL). Source: DAN YE MAN JING *Vitex rotundifolia* [Syn. *Vitex trifolia* var. *simplicifolia*] (underground part: yield = 0.00023%dw). Ref: 3052.

**22594 Vitrofolal E**

$C_{19}H_{16}O_5$  (324.34). Yellowish amorphous solid. Pharm: Antibacterial (18 Methicillin-resistant *Staphylococcus aureus* MRSA, MIC = or > 64 $\mu$ g/mL)<sup>[3052]</sup>, antioxidant (ferric thiocyanate method, 0.5mmol/L, stronger than control Vitamin E; DPPH radical scavenger, DPPH 0.1mmol/L, 0.02mmol/L, stronger than control L-Cysteine)<sup>[4791]</sup>. Source: DAN YE MAN JING *Vitex rotundifolia* [Syn. *Vitex trifolia* var. *simplicifolia*] (underground part: yield = 0.00011%dw), HUANG JING ZHONG ZI *Vitex negundo* (seed: yield = 0.00039%). Ref: 3052, 4791.

**22595 Vitrofolal F**

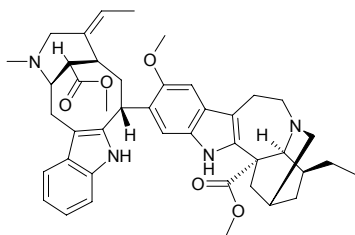
$C_{19}H_{16}O_6$  (340.34). Yellowish amorphous solid. Pharm: Antioxidant (ferric thiocyanate method, 0.5mmol/L, stronger than control Vitamin E; DPPH radical scavenger, DPPH 0.1mmol/L, 0.02mmol/L, stronger than control L-Cysteine)<sup>[4791]</sup>. Source: DAN YE MAN JING *Vitex rotundifolia* [Syn. *Vitex trifolia* var. *simplicifolia*] (underground part: yield = 0.000040%dw), HUANG JING ZHONG ZI *Vitex negundo* (seed: yield = 0.00039%). Ref: 3052, 4791.



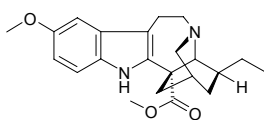
**22596 Voacamine**

[3371-85-5]  $C_{43}H_{52}N_4O_5$  (704.92). Prismatic crystals (methanol–acetone), mp 223°C (dec),  $[\alpha]_D^{20} = -52^\circ$  ( $c = 1$ , chloroform),  $[\alpha]_D^{22} = -46^\circ$  ( $c = 1.4$ , chloroform).

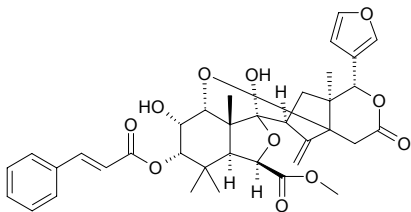
**Pharm:** Antibacterial (gram-positive bacteria); antineoplastic (mus, leukemia P<sub>388</sub>, ED<sub>50</sub> = 2.6 μg/mL). **Source:** family Apocynaceae spp. **Ref:** 661.

**22597 Voacangine**

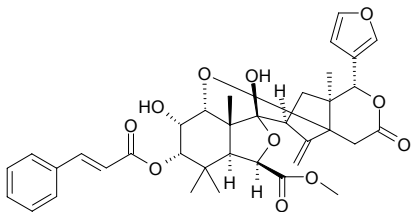
$C_{22}H_{28}N_2O_3$  (368.48). **Source:** LUO SHI TENG *Trachelospermum jasminoides*. **Ref:** 660.

**22598 Voamatin A**

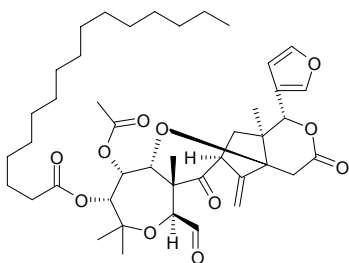
$C_{36}H_{40}O_{11}$  (648.71). **Source:** *Astrotrichilia voamatata* (stem cortex). **Ref:** 3903.

**22599 Voamatin B**

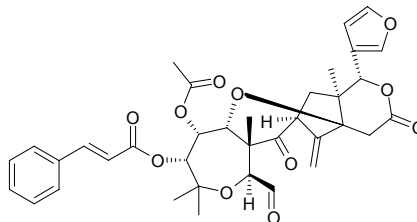
$C_{36}H_{40}O_{11}$  (648.71). **Source:** *Astrotrichilia voamatata* (stem cortex). **Ref:** 3903.

**22600 Voamatin C**

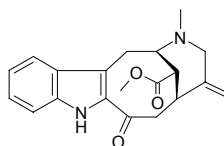
$C_{43}H_{62}O_{11}$  (754.97). Amorphous. **Source:** *Astrotrichilia voamatata* (stem cortex). **Ref:** 3903.

**22601 Voamatin D**

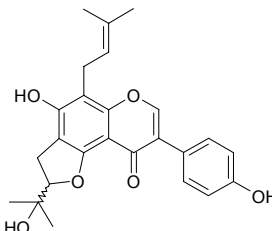
$C_{36}H_{38}O_{11}$  (646.70). Amorphous. **Source:** *Astrotrichilia voamatata* (stem cortex). **Ref:** 3903.

**22602 Vobasine**

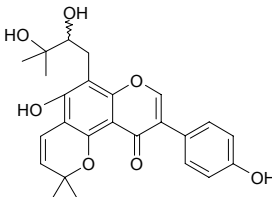
[2124-83-0]  $C_{21}H_{24}N_2O_3$  (352.44). **Pharm:** Analgesic; antipyretic. **Source:** HAI NAN GOU YA HUA *Ervatamia hainanensis*, LUO SHI TENG *Trachelospermum jasminoides*, family Apocynaceae spp. **Ref:** 658, 660.

**22603 Vogelin H**

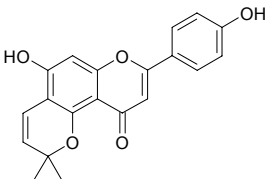
7,4'-Dihydroxy-8-( $\gamma,\gamma$ -dimethylallyl)-2'' $\zeta$ -(4''-hydroxyisopropyl)dihydrofurano [1'',3''-:5,6]isoflavone  $C_{25}H_{26}O_6$  (422.48). Pale yellow powder, mp 195–197°C,  $[\alpha]_D^{20} = -38^\circ$  ( $c = 0.0015$ ,  $CHCl_3$ ). **Source:** *Erythrina vogelii*. **Ref:** 4421.

**22604 Vogelin I**

7,4'-Dihydroxy-8-[(2'' $\zeta$ ,3'''-dihydroxy-3'''-methyl)butyl]-2'',2''-dimethyl-3'',4''-dehydropyrano[1'',4''-:5,6]isoflavone  $C_{25}H_{26}O_7$  (438.48). Pale yellow powder, mp 248–249°C,  $[\alpha]_D^{20} = -42^\circ$  ( $c = 0.0050$ ,  $CHCl_3$ ). **Source:** *Erythrina vogelii*. **Ref:** 4421.

**22605 Vogelin J**

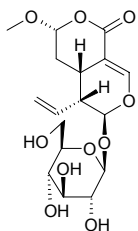
7,4'-Dihydroxy-2'',2''-dimethyl-3'',4''-dehydropyrano[1'',4''-:5,6]flavone  $C_{20}H_{16}O_5$  (336.35). Pale yellow needles, mp 238–239°C. **Source:** *Erythrina vogelii*. **Ref:** 4421.



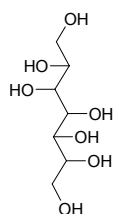


**22606 Vogeloside**

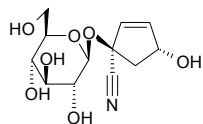
$C_{17}H_{24}O_{10}$  (388.37). Source: HUA MAO *Halenia corniculata*, REN DONG TENG *Lonicera japonica*, JI ZI MU *Sinoadina Racemosa* [Syn. *Adina racemosa*] (leaf, flower and twig: yield = 0.0076%dw). Ref: 660, 4723.

**22607 Volemitol**

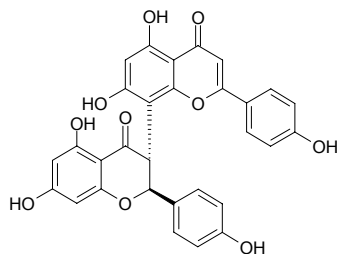
[488-38-0]  $C_7H_{16}O_7$  (212.21). Pharm: Sweetener. Source: GAO BAO CHUN *Primula elatior*, HEI SHI ER *Dermatocarpon minutum*. Ref: 658, 660.

**22608 Volkenin**

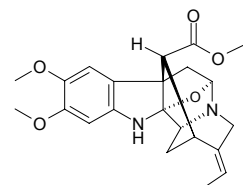
[66574-40-4]  $C_{12}H_{17}NO_7$  (287.28). Pharm: Toxin. Source: *Barteria fistulosa*. Ref: 658.

**22609 Volkensiflavone**

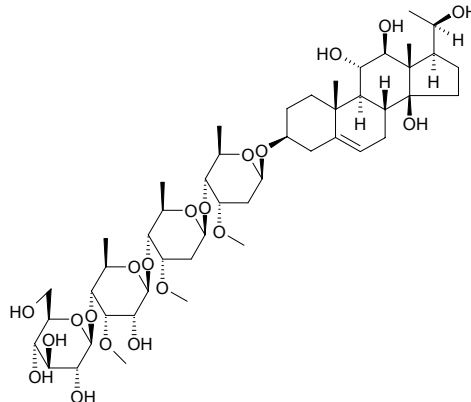
[27542-37-6]  $C_{30}H_{20}O_{10}$  (540.49). mp (+) 300°C (dec). Pharm: Antioxidant inactive (DPPH scavenger, 10 $\mu$ mol/L, ScRt = 5%; control BHT, 10 $\mu$ mol/L, ScRt = 43%, IC<sub>50</sub> = 19.00 $\mu$ mol/L)<sup>[4422]</sup>. Source: SHAN ZHU ZI *Garcinia multiflora*, TIAN SHAN ZHU ZI *Garcinia dulcis* (flower). Ref: 6, 4422.

**22610 Volkensine**

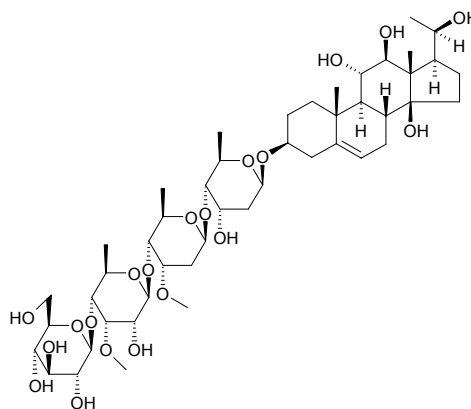
$C_{22}H_{26}N_2O_5$  (398.46). Source: DA YE TANG JIAO SHU *Alstonia macrophylla* (leaf: yield = 0.0002%). Ref: 3020.

**22611 Volubiloside A**

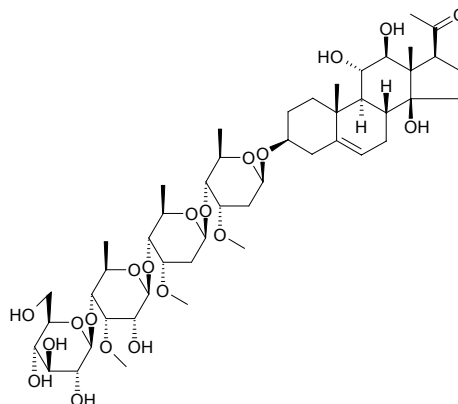
$C_{48}H_{80}O_{20}$  (977.16). Colorless needles (MeOH), mp 181~182 °C (dec),  $[\alpha]_D^{25} = -16.7^\circ$  ( $c = 0.2$ , MeOH). Source: NAN SHAN TENG *Dregea volubilis*. Ref: 1920.

**22612 Volubiloside B**

$C_{47}H_{78}O_{20}$  (963.13). Crystals (MeOH-CH<sub>3</sub>CN), mp 178~179 °C (dec),  $[\alpha]_D^{25} = -17.6^\circ$  ( $c = 0.2$ , MeOH). Source: NAN SHAN TENG *Dregea volubilis*. Ref: 1920.

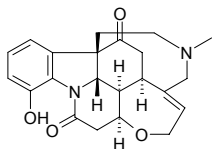
**22613 Volubiloside C**

$C_{48}H_{78}O_{20}$  (975.14). Crystals (MeOH-CH<sub>3</sub>CN), mp 218~220 °C (dec),  $[\alpha]_D^{25} = +23.8^\circ$  ( $c = 0.14$ , MeOH). Source: NAN SHAN TENG *Dregea volubilis*. Ref: 1920.

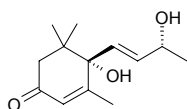


**22614 Vomisine**

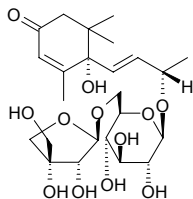
[125-15-5] C<sub>22</sub>H<sub>24</sub>N<sub>2</sub>O<sub>4</sub> (380.45). mp 278~280°C. Source: MA QIAN ZI *Strychnos nux-vomica*. Ref: 2, 542, 1521.

**22615 Vomifoliol**

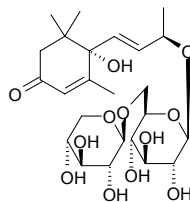
Blumenol A [23526-45-6] C<sub>13</sub>H<sub>20</sub>O<sub>3</sub> (224.30). Colorless rhombic crystals (benzene), mp 112~114°C, [α]<sub>D</sub><sup>18</sup> = +215.3° (c = 1.0, methanol); [α]<sub>D</sub><sup>25</sup> = +111.4° (c = 0.14, CHCl<sub>3</sub>). Pharm: Antineoplastic (HL-60, ED<sub>50</sub> = 20 μg/mL); cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells)<sup>[5038]</sup>; platelet aggregation inhibitor (rbt platelets induced by thrombin, 100 μg/mL, add thrombin 0.1 u/mL, AggRt = (92.1±0.1)%, control AggRt = (92.6±0.4)%; add AA, 100 μmol/L, 100 μg/mL, AggRt = (87.6±1.3)%, control AggRt = (87.8±0.3)%, Aspirin 50 μg/mL, AggRt = (11.7±10.1)%; add collagen 10 μg/mL, 100 μg/mL, AggRt = (88.2±0.2)%, control AggRt = (89.3±0.5)%, Aspirin 100 μg/mL, AggRt = (81.3±0.5)%; add PAF 2 ng/mL, 100 μg/mL, AggRt = (92.7±0.1)%, control AggRt = (93.0±0.6)%<sup>[4938]</sup>. Source: BAI SHOU WU *Cynanchum bungei*, DA ZAO *Ziziphys jujuba*, HUANG HUA REN *Sida acuta*, JI DAN GUO *Passiflora edulis*, JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*], MAO DONG QING *Ilex pubescens* (leaf), TAI WAN HU JIAO *Piper taiwanense* (stem), XING ZI *Prunus armeniaca*, YU XING CAO *Houttuynia cordata*, ZHU BAI *Myrica nagi* [Syn. *Podocarpus nagi*]. Ref: 660, 900, 4938, 5038.

**22616 (6S,9R)-Vomifoliol-9-O-β-apiofuranosyl-(1''→6')-O-β-glucopyranoside**

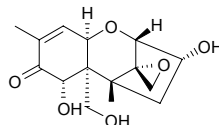
C<sub>24</sub>H<sub>38</sub>O<sub>12</sub> (518.56). Amorphous powder, [α]<sub>D</sub><sup>23</sup> = +37.2° (c = 1.2, MeOH); [α]<sub>D</sub><sup>25</sup> = +37.5° (c = 0.1, MeOH). Pharm: Antifungal inactive (*Candida albicans*, MIC > 200 μg/mL, control Amphotericin B, MIC = 1~4 μg/mL)<sup>[5021]</sup>; antibacterial inactive<sup>[5021]</sup>. Source: PI PA YE *Eriobotrya japonica* (stem and leaf), *Baseonema acuminatum* (leaf). Ref: 3061, 5021.

**22617 (6S,9R)-Vomifoliol-9-O-β-xylopyranosyl-(1''→6')-O-β-glucopyranoside**

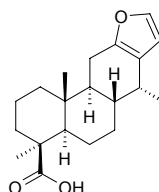
(6S,7E,9R)-Vomifoliol-9-O-β-D-xylopyranosyl-(1→6)-O-β-D-glucopyranoside C<sub>24</sub>H<sub>38</sub>O<sub>12</sub> (518.56). Amorphous powder, [α]<sub>D</sub><sup>23</sup> = +22.8° (c = 1.0, MeOH); white amorphous powder, [α]<sub>D</sub> = +48.8° (MeOH). Source: DUO LIE WEI LING CAI *Potentilla multifida* (whole herb), PI PA YE *Eriobotrya japonica* (stem and leaf). Ref: 3061, 4821.

**22618 Vomitoxin**

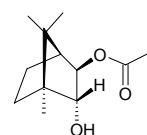
[51481-10-8] C<sub>15</sub>H<sub>20</sub>O<sub>6</sub> (296.32). Pharm: LD<sub>50</sub> (mus, ip) = 170 mg/kg. Source: *Fusarium roseum*. Ref: 658.

**22619 (+)-Vouacapenic acid**

C<sub>20</sub>H<sub>28</sub>O<sub>3</sub> (316.44). Source: MEI GUO KE YA SHU *Vouacapoua Americana* (wood). Ref: 4315.

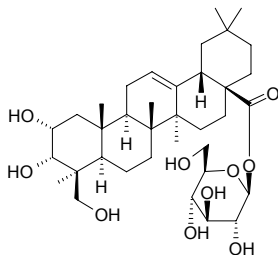
**22620 Vulgarole**

2-Acetoxy-3-bornanol C<sub>12</sub>H<sub>20</sub>O<sub>3</sub> (212.29). Source: BEI AI *Artemisia vulgaris*. Ref: 660.

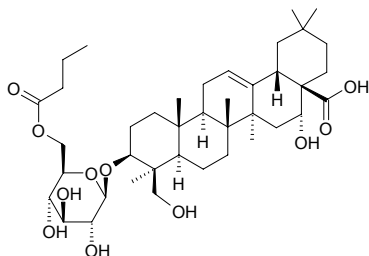


**22621 Vulgarsaponin**

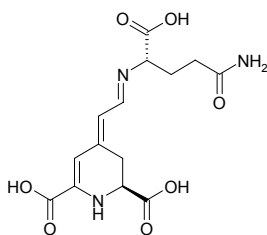
2 $\alpha$ ,3 $\alpha$ ,24-Trihydroxy-olean-12-ene-28-oic acid-28-*O*- $\beta$ -D-glucopyranosyl ester C<sub>36</sub>H<sub>58</sub>O<sub>10</sub> (650.86). White powder. Source: XIA KU CAO *Prunella vulgaris*. Ref: 838.

**22622 Vulgarsaponin B**

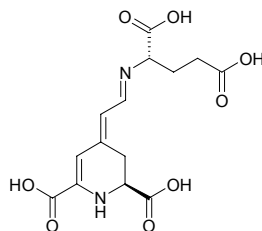
3 $\beta$ ,16 $\alpha$ ,24-Trihydroxyoleana-12-en-28-oic acid-3-*O*-(6'-butyryl)- $\beta$ -D-glucopyranoside C<sub>40</sub>H<sub>64</sub>O<sub>11</sub> (720.95). Colorless acicular crystals (MeOH), mp 262~264°C. Source: XIA KU CAO *Prunella vulgaris*. Ref: 684.

**22623 Vulgaxanthin I**

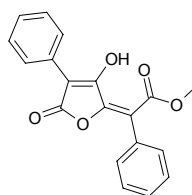
[904-62-1] C<sub>14</sub>H<sub>17</sub>N<sub>3</sub>O<sub>7</sub> (339.31). Pharm: Yellow pigment. Source: TIAN CAI *Beta vulgaris*, ZI MO LI GEN *Mirabilis jalapa*. Ref: 6.

**22624 Vulgaxanthin II**

[1047-87-6] C<sub>14</sub>H<sub>16</sub>N<sub>2</sub>O<sub>8</sub> (340.30). Source: MAO MA CHI XIAN *Portulaca pilosa*, TIAN CAI *Beta vulgaris*. Ref: 658, 660, 1521.

**22625 Vulpinic acid**

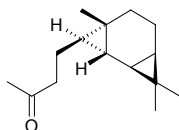
Vulpic acid [521-52-8] C<sub>19</sub>H<sub>14</sub>O<sub>5</sub> (322.32). mp 148~149°C. Source: JIN SI DAI *Alectoria vivens*. Ref: 6.



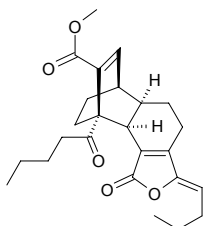
## W

**22626 Waitziacuminone**

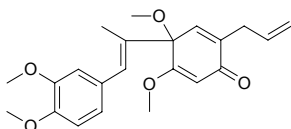
$C_{15}H_{24}O$  (220.36). Source: YUAN YE TAI *Jamesoniella colorata*. Ref: 3375.

**22627 Wallichilide**

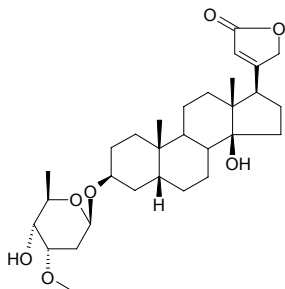
$C_{25}H_{32}O_5$  (412.53). Source: CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*]. Ref: 660.

**22628 Wallichinine**

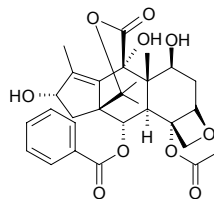
Wallichinin [125292-97-9]  $C_{22}H_{26}O_5$  (370.46). Colorless oil,  $[\alpha]_D^{30} = 0^\circ$  ( $c = 0.86$ , dichloromethane),  $[\alpha]_D^{24} = -21.0^\circ$  ( $c = 0.712$ ,  $CHCl_3$ ). Pharm: Platelet aggregation inhibitor (28  $\mu\text{mol/L}$ , induced by PAF, InRt = 100%); PAF receptor antagonist ( $[^3H]$  PAF receptor combination trial,  $IC_{50} = 1.4 \mu\text{mol/L}$ ). Source: MAO JU *Piper puberulum* (stem-leaf or whole herb: content = 0.35%)<sup>[5508]</sup>, SHAN JU *Piper hancei* (stem-leaf or whole herb: content = 0.60%)<sup>[5508]</sup>, SHI NAN TENG *Piper wallichii* [Syn. *Piper wallichii* var. *hupehense*] (stem-leaf or whole herb: content = 0.63%)<sup>[5508]</sup>, XIAN MAI JU *Piper bavinum* (stem-leaf or whole herb: content = 0.31%)<sup>[5508]</sup>, ZHANG YE HU JIAO *Piper polysyphorum*. Ref: 130, 660, 1165, 1578, 5508.

**22629 Wallichoside**

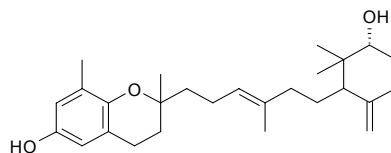
[31087-88-4]  $C_{30}H_{46}O_7$  (518.70). mp 193~196°C. Pharm: Cardiotonic (anesthetic cat). Source: QING MING HUA *Beaumontia grandiflora*. Ref: 6, 658.

**22630 Wallifoliol**

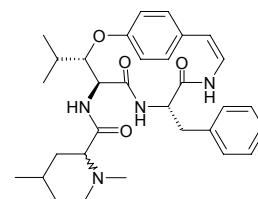
$C_{29}H_{34}O_{10}$  (542.59).  $[\alpha]_D = -108^\circ$  (MeOH). Pharm: Cytotoxic (*in vitro*, KB,  $IC_{50} = 0.56 \mu\text{g/mL}$ ; Hepa59T/VGH,  $IC_{50} = 0.1 \mu\text{g/mL}$ ; control Taxol, KB,  $IC_{50} = 0.001 \mu\text{g/mL}$ ; Hepa59T/VGH,  $IC_{50} = 0.001 \mu\text{g/mL}$ )<sup>[4666]</sup>; cytotoxic (*in vitro*, 30  $\mu\text{g/mL}$ : A498, InRt = 27.9%; NCI-H226, InRt = 29.1%; A549, InRt = 16.7%; PC3, InRt = 6.4%; control Taxol, 30  $\mu\text{g/mL}$ : A498, InRt = 98.2%; NCI-H226, InRt = 71.2%; A549, InRt = 79.7%; PC3, InRt = 91.7%)<sup>[4800]</sup>. Source: SU MEN DA LA HONG DOU SHAN *Taxus sumatrana* (twig and leaf)<sup>[4800]</sup>; yield = 0.0011% dw<sup>[4666]</sup>, XI MA LA YA HONG DOU SHAN *Taxus wallichiana*<sup>[662]</sup>. Ref: 662, 4666, 4800.

**22631 Walsurol**

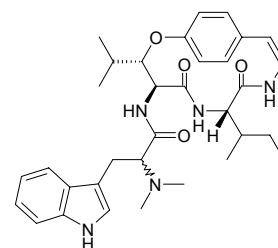
$C_{27}H_{40}O_3$  (412.62). Viscous oil,  $[\alpha]_D^{28} = -15.8^\circ$  ( $c = 0.36$ ,  $CHCl_3$ ). Source: YUN NAN GE SHE SHU *Walsura yunnanensis*. Ref: 2144.

**22632 Waltherine A**

$C_{31}H_{42}N_4O_4$  (534.70). Needles ( $CHCl_3$ - $Et_2O$ ), mp 234~235°C,  $[\alpha]_D^{20} = -229.8^\circ$  ( $c = 0.24$ , MeOH) Source: *Waltheria douradinha*. Ref: 2296.

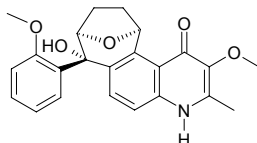
**22633 Waltherine B**

$C_{33}H_{43}N_5O_4$  (573.74). Needles ( $CHCl_3$ -MeOH), mp 243~243°C,  $[\alpha]_D^{20} = -201.8^\circ$  ( $c = 0.21$ , MeOH),  $[\alpha]_D^{20} = -356.7^\circ$  ( $c = 0.5$ ,  $CHCl_3$ ). Source: *Waltheria douradinha*. Ref: 2296.

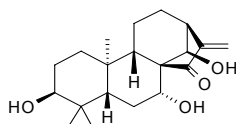


**22634 Waltherione A**

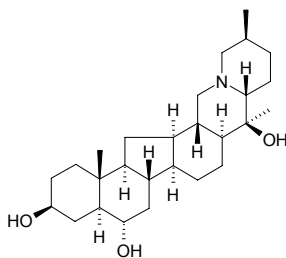
9-Hydroxy-3-methoxy-2-methyl-9-(2-methoxyphenyl)-14-oxa-biciclo [3.2.1]-octa-[f]quinolinone C<sub>23</sub>H<sub>23</sub>NO<sub>5</sub> (393.44). White solid (CHCl<sub>3</sub>-MeOH), mp 206.0~207.5°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = -25.5° (c = 0.04, CHCl<sub>3</sub>). **Pharm:** Antibacterial inactive (*Staphylococcus aureus*, *Streptococcus epidermidis*, *Micrococcus luteus*, *Klebsiella pneumoniae*, *Salmonella setubal* and *Escherichia coli*). **Source:** *Waltheria douradinha* (root cortex). **Ref:** 5284.

**22635 Wanghzaozin A**

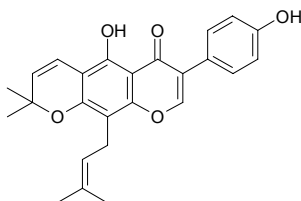
C<sub>20</sub>H<sub>30</sub>O<sub>4</sub> (334.46). mp 225~227°C, [ $\alpha$ ]<sub>D</sub> 10 = -77° (c = 0.35, CHCl<sub>3</sub>). **Source:** XIANG CHA CAI *Isodon amethystoides*. **Ref:** 4067.

**22636 Wanpeinine A**

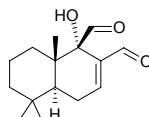
5 $\alpha$ ,14 $\alpha$ ,22 $\beta$ -Cevanine-3 $\beta$ ,6 $\alpha$ ,20 $\beta$ -triol. C<sub>27</sub>H<sub>45</sub>NO<sub>3</sub> (431.66). White clustered crystals, mp 281~283°C (dec), [ $\alpha$ ]<sub>D</sub> = -8.71°. **Source:** AN HUI BEI MU *Fritillaria anhuiensis*. **Ref:** 65.

**22637 Warangalone**

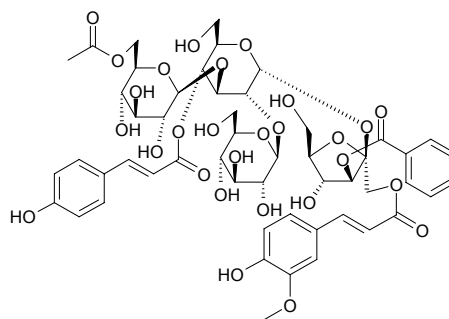
Scandenone C<sub>25</sub>H<sub>24</sub>O<sub>5</sub> (404.47). **Source:** GAO HUI MAO DOU *Tephrosia elata*, PAN YUAN YU TENG *Derris scandens*, SAI NEI JIA ER CI TONG *Erythrina senegalensis*, SAN XIAU YE SHAN DOU GEN *Euchresta japonica*, *Erythrina vogelii*. **Ref:** 1521, 4421.

**22638 Warburganal**

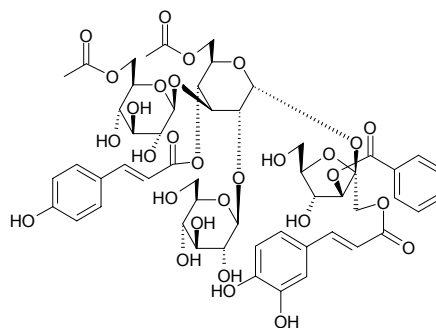
[62994-47-2] C<sub>15</sub>H<sub>22</sub>O<sub>3</sub> (250.34). **Pharm:** Antifungal; inhibits microzymes; insect antifeedant (*Spodoptera littoralis* and *S. exempta*); plant growth regulator. **Source:** SHUI LIAO *Polygonum hydropiper*, *Warburgia salutaris*. **Ref:** 658, 660.

**22639 Watterose A**

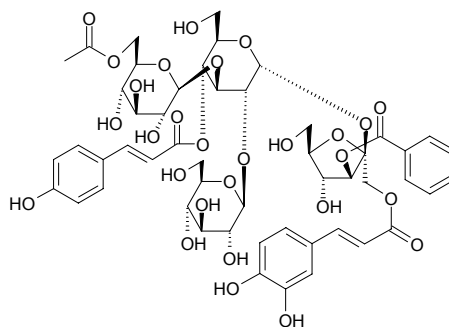
C<sub>52</sub>H<sub>62</sub>O<sub>28</sub> (1135.06). [ $\alpha$ ]<sub>D</sub> = -20.5°. **Source:** CHANG MAO ZI YUAN ZHI *Polygala wattersii*. **Ref:** 2184.

**22640 Watterose B**

C<sub>53</sub>H<sub>62</sub>O<sub>29</sub> (1163.27). [ $\alpha$ ]<sub>D</sub> = -5.0°. **Source:** CHANG MAO ZI YUAN ZHI *Polygala wattersii*. **Ref:** 2184.

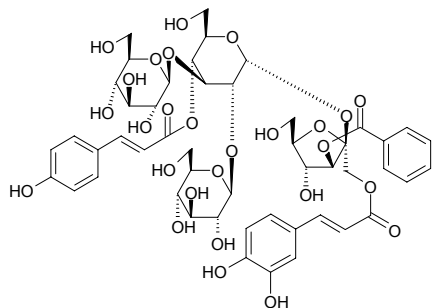
**22641 Watterose C**

C<sub>51</sub>H<sub>60</sub>O<sub>28</sub> (1121.03). [ $\alpha$ ]<sub>D</sub> = -6.6°. **Source:** CHANG MAO ZI YUAN ZHI *Polygala wattersii*. **Ref:** 2184.

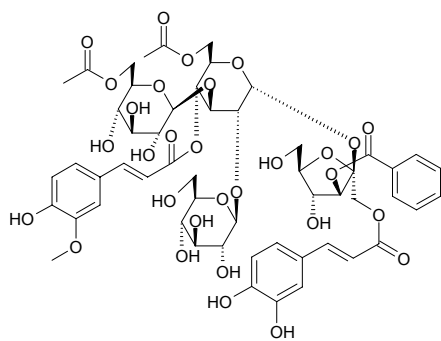


**22642 Watterose D**

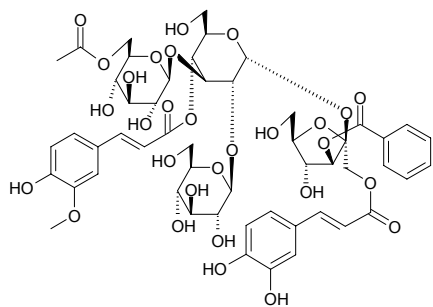
$C_{49}H_{58}O_{27}$  (1078.99).  $[\alpha]_D = +17.5^\circ$ . Source: CHANG MAO ZI YUAN ZHI  
*Polygala wattersii*. Ref: 2184.

**22643 Watterose E**

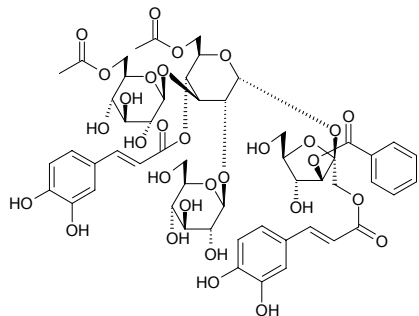
$C_{54}H_{64}O_{30}$  (1193.09).  $[\alpha]_D = -9.1^\circ$ . Source: CHANG MAO ZI YUAN ZHI  
*Polygala wattersii*. Ref: 2184.

**22644 Watterose F**

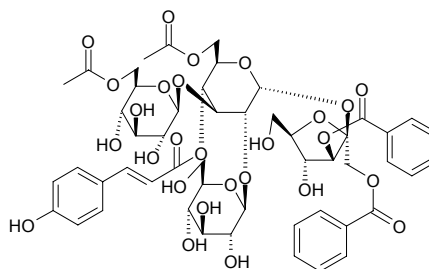
$C_{52}H_{62}O_{29}$  (1151.06).  $[\alpha]_D = -8.0^\circ$ . Source: CHANG MAO ZI YUAN ZHI  
*Polygala wattersii*. Ref: 2184.

**22645 Watterose G**

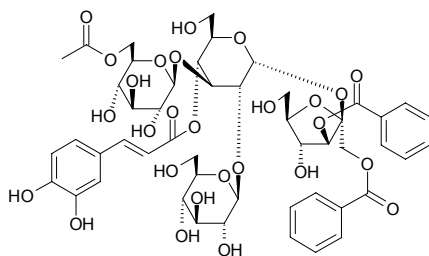
$C_{53}H_{62}O_{30}$  (1179.07).  $[\alpha]_D = -12.1^\circ$ . Source: CHANG MAO ZI YUAN ZHI  
*Polygala wattersii*. Ref: 2184.

**22646 Watterose H**

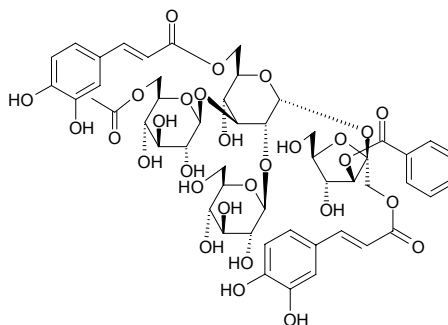
$C_{51}H_{60}O_{27}$  (1105.03).  $[\alpha]_D = -41.2^\circ$ . Source: CHANG MAO ZI YUAN ZHI  
*Polygala wattersii*. Ref: 2184.

**22647 Watterose I**

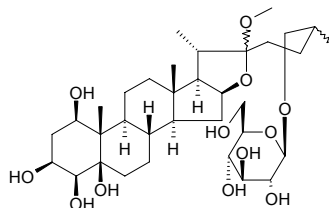
$C_{49}H_{58}O_{27}$  (1078.99).  $[\alpha]_D = +46.8^\circ$ . Source: CHANG MAO ZI YUAN ZHI  
*Polygala wattersii*. Ref: 2184.

**22648 Watterose J**

$C_{51}H_{60}O_{29}$  (1137.03).  $[\alpha]_D = -39.0^\circ$ . Source: CHANG MAO ZI YUAN ZHI  
*Polygala wattersii*. Ref: 2184.

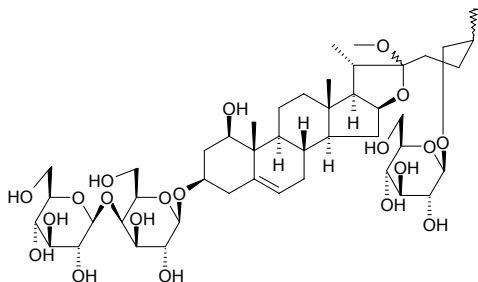
**22649 Wattoside B**

22-O-Methyl-25(*R,S*)-furost-1 $\beta$ ,3 $\beta$ ,4 $\beta$ ,5 $\beta$ ,22 $\zeta$ ,26 $\beta$ -hexol-26-*O*- $\beta$ -*D*-glucopyranoside  $C_{34}H_{58}O_{12}$  (658.83). White powder,  $[\alpha]_D^{18} = -18.7^\circ$  ( $c = 0.68$ , MeOH). Source: WAN RUI KAI KOU JIAN *Tupistra wattii* [Syn. *Campylandra wattii*]. Ref: 2141.

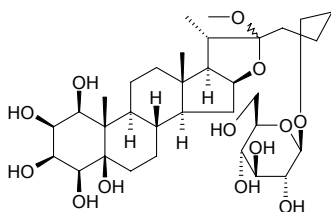


**22650 Wattoside C**

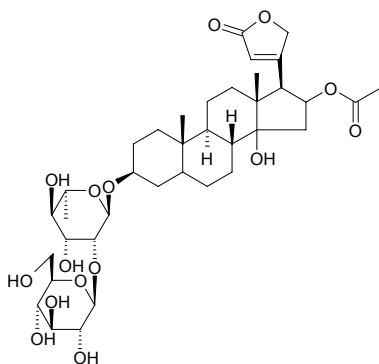
22-*O*-Methyl-26-*O*- $\beta$ -*D*-glycopyranosyl-25(*S*)-furost-5-en-1 $\beta$ ,3 $\beta$ ,22 $\zeta$ ,26 $\beta$ -tetrol-3-*O*-[*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 4)]- $\beta$ -*D*-galactopyranoside C<sub>46</sub>H<sub>76</sub>O<sub>20</sub> (949.11). White powder,  $[\alpha]_D^{20} = -44.30^\circ$  ( $c = 0.82$ , MeOH). **Source:** WAN RUI KAI KOU JIAN *Tupistra wattii* [Syn. *Campylandra wattii*], YU ZHU *Polygonatum odoratum* [Syn. *Polygonatum officinale*]. **Ref:** 660, 2141.

**22651 Wattoside D**

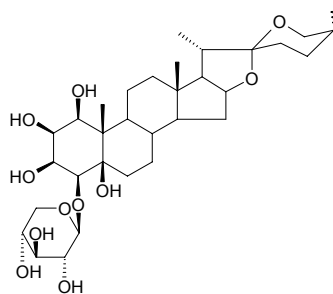
22-*O*-Methyl-25(*S*)-furost-1 $\beta$ ,2 $\beta$ ,3 $\beta$ ,4 $\beta$ ,5 $\beta$ ,22 $\zeta$ ,26 $\beta$ -heptol-26-*O*- $\beta$ -*D*-glucopyranoside C<sub>33</sub>H<sub>56</sub>O<sub>13</sub> (660.81). White powder,  $[\alpha]_D^{20} = -45.70^\circ$  ( $c = 0.26$ , MeOH). **Source:** WAN RUI KAI KOU JIAN *Tupistra wattii* [Syn. *Campylandra wattii*]. **Ref:** 2141.

**22652 Wattoside E**

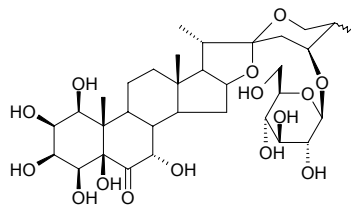
Oleandrigenin-3-*O*-[*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 2)]-*alpha*-*L*-rhamnopyranoside C<sub>37</sub>H<sub>56</sub>O<sub>15</sub> (740.85). White powder,  $[\alpha]_D^{26} = -39.9^\circ$  ( $c = 0.57$ , MeOH). **Source:** WAN RUI KAI KOU JIAN *Tupistra wattii* [Syn. *Campylandra wattii*]. **Ref:** 2141.

**22653 Wattoside G**

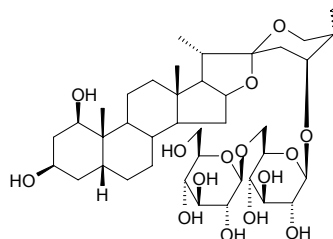
(2*R*)-1 $\beta$ ,2 $\beta$ ,3 $\beta$ ,5 $\beta$ -Tetrahydroxyspirostan-4 $\beta$ -yl-*O*- $\beta$ -*D*-xylopyranoside C<sub>32</sub>H<sub>52</sub>O<sub>11</sub> (612.76). Amorphous powder (MeOH), mp 214~216°C,  $[\alpha]_D^{20} = -65.5^\circ$  ( $c = 0.03$ , MeOH). **Pharm:** Cytotoxic (MTT assay, K562, IC<sub>50</sub> = 35.67 $\mu$ mol/L, positive control *cis*-Dichlorodiamine platinum, IC<sub>50</sub> = 69.33 $\mu$ mol/L). **Source:** WAN RUI KAI KOU JIAN *Tupistra wattii* [Syn. *Campylandra wattii*] (fresh rhizome). **Ref:** 4324.

**22654 Wattoside H**

(2*S*,25*S*)-24-[( $\beta$ -*D*-Glucopyranosyl)oxy]-1 $\beta$ ,2 $\beta$ ,3 $\beta$ ,4 $\beta$ ,5 $\beta$ ,7 $\beta$ -hexahydroxyspirostan-6-one C<sub>33</sub>H<sub>52</sub>O<sub>15</sub> (688.77). Amorphous powder (MeOH), mp 200~203°C,  $[\alpha]_D^{20} = -78.0^\circ$  ( $c = 0.014$ , MeOH). **Pharm:** Cytotoxic (MTT assay, K562, IC<sub>50</sub> = 76.16 $\mu$ mol/L, positive control *cis*-Dichlorodiamine platinum, IC<sub>50</sub> = 69.33 $\mu$ mol/L). **Source:** WAN RUI KAI KOU JIAN *Tupistra wattii* [Syn. *Campylandra wattii*] (fresh rhizome). **Ref:** 4324.

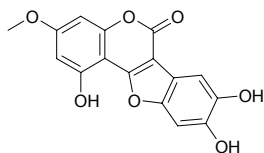
**22655 Wattoside I**

(2*S*,25*S*)-1 $\beta$ ,3 $\beta$ -Dihydroxy-5 $\beta$ -spirostan-24-yl-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside C<sub>39</sub>H<sub>64</sub>O<sub>15</sub> (772.94). Amorphous powder (MeOH), mp 205~207°C,  $[\alpha]_D^{20} = -76.2^\circ$  ( $c = 0.027$ , MeOH). **Pharm:** Cytotoxic (MTT assay, K562, IC<sub>50</sub> = 76.96 $\mu$ mol/L, positive control *cis*-Dichlorodiamine platinum, IC<sub>50</sub> = 69.33 $\mu$ mol/L). **Source:** WAN RUI KAI KOU JIAN *Tupistra wattii* [Syn. *Campylandra wattii*] (fresh rhizome). **Ref:** 4324.

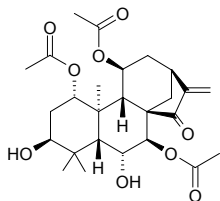


**22656 Wedelolactone**

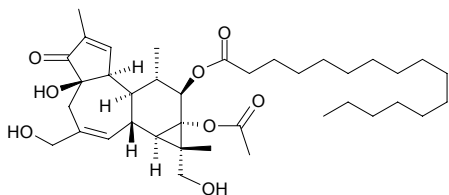
[524-12-9] C<sub>16</sub>H<sub>10</sub>O<sub>7</sub> (314.26). mp 327~330°C (dec). **Pharm:** Antihepatotoxin. **Source:** CE BAI ZHI JIE *Thuja orientalis* [Syn. *Platyclusus orientalis*; *Biota orientalis*]. **Ref:** 6, 658.

**22657 Weisiensin A**

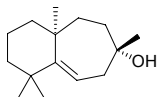
C<sub>26</sub>H<sub>36</sub>O<sub>9</sub> (492.57). mp 298~300°C. **Pharm:** Cytotoxic (*in vitro*, K562, IC<sub>50</sub> = 3.3 μg/mL; control *cis*-Platin, IC<sub>50</sub> = 1.9 μg/mL)<sup>[4640]</sup>. **Source:** WEI XI XIANG CHA CAI *Isodon weisiensis*, XIAN HUA XIANG CHA CAI *Rabdosia adenantha* (leaf: yield = 0.0018%dw)<sup>[4640]</sup>. **Ref:** 4067, 4640.

**22658 Welensalifactor F1**

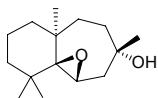
C<sub>38</sub>H<sub>60</sub>O<sub>8</sub> (644.90). **Pharm:** Carcinogen assistant. **Source:** DAN HUANG BA DOU *Croton flavens*. **Ref:** 658.

**22659 Widdrol**

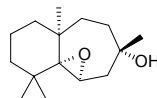
[6982-80-4] C<sub>15</sub>H<sub>26</sub>O (222.37). mp (+) 98°C, (±) 86~87°C. **Source:** CE BAI ZHI JIE *Thuja orientalis* [Syn. *Platyclusus orientalis*; *Biota orientalis*], REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. **Ref:** 2, 6.

**22660 cis-Widdrol α-epoxide**

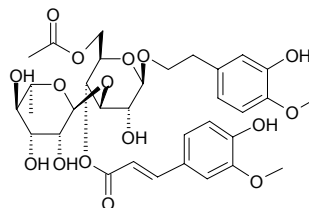
C<sub>15</sub>H<sub>26</sub>O<sub>2</sub> (238.37). mp (*cis*) 154°C. **Source:** CE BAI ZHI JIE *Thuja orientalis* [Syn. *Platyclusus orientalis*; *Biota orientalis*]. **Ref:** 6.

**22661 trans-Widdrol α-epoxide**

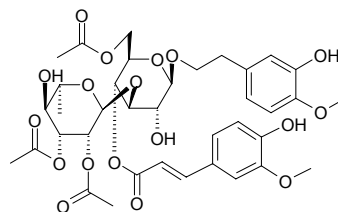
C<sub>15</sub>H<sub>26</sub>O<sub>2</sub> (238.37). mp (*trans*) 119°C. **Source:** CE BAI ZHI JIE *Thuja orientalis* [Syn. *Platyclusus orientalis*; *Biota orientalis*]. **Ref:** 6.

**22662 Wiedemannioside A**

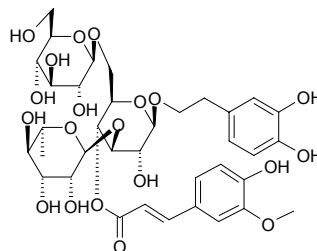
6'-*O*-Acetylmartynoside C<sub>33</sub>H<sub>42</sub>O<sub>16</sub> (694.69). Colorless amorphous powder, [α]<sub>D</sub><sup>20</sup> = -50° (c = 0.1, MeOH). **Source:** ZI HUA GUAN MAO RUI HUA *Verbascum wiedemannianum*. **Ref:** 5449.

**22663 Wiedemannioside B**

C<sub>37</sub>H<sub>46</sub>O<sub>18</sub> (778.77). Colorless amorphous powder, [α]<sub>D</sub><sup>20</sup> = -120° (c = 0.1, MeOH). **Source:** ZI HUA GUAN MAO RUI HUA *Verbascum wiedemannianum*. **Ref:** 5449.

**22664 Wiedemannioside C**

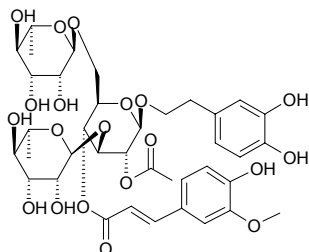
Jionoside A<sub>1</sub> [120444-60-2] C<sub>36</sub>H<sub>48</sub>O<sub>20</sub> (800.77). Colorless amorphous powder, [α]<sub>D</sub><sup>20</sup> = -80° (c = 0.1, MeOH); amorphous powder, [α]<sub>D</sub><sup>24</sup> = -59.8° (c = 0.38, MeOH). **Pharm:** Immunosuppressant (mus, 100mg/kg, orl, inhibits formation of hemolytic patch formative cell HPFC in spleen, InRt = 23.0%). **Source:** GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], ZI HUA GUAN MAO RUI HUA *Verbascum wiedemannianum*. **Ref:** 2, 1521, 1785, 5449.



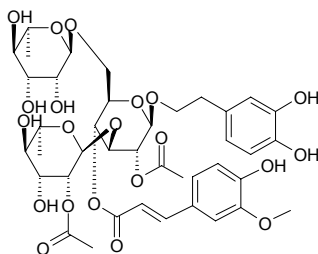


**22665 Wiedemannioside D**

$C_{38}H_{50}O_{20}$  (826.81). Colorless amorphous powder,  $[\alpha]_D^{20} = -72^\circ$  ( $c = 0.1$ , MeOH). Source: ZI HUA GUAN MAO RUI HUA *Verbascum wiedemannianum*. Ref: 5449.

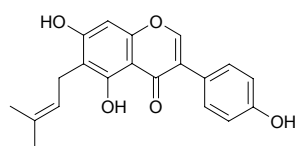
**22666 Wiedemannioside E**

$C_{40}H_{52}O_{21}$  (868.85). Colorless amorphous powder,  $[\alpha]_D^{20} = -59^\circ$  ( $c = 0.1$ , MeOH). Source: ZI HUA GUAN MAO RUI HUA *Verbascum wiedemannianum*. Ref: 5449.

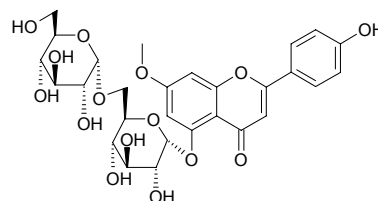
**22667 Wightone**

5,7,4'-Trihydroxy-6-prenyl-isoflavone [51225-30-0]  $C_{20}H_{18}O_5$  (338.36). Pharm: Cytotoxic (HSC-2 cells,  $CC_{50} = 0.12\text{mmol/L}$ ; HGF,  $CC_{50} = 0.25\text{mmol/L}$ )<sup>[3025]</sup>; cytotoxic (KB,  $EC_{50} = 0.78\mu\text{g/mL}$ )<sup>[5220]</sup>; hepatoprotective (mus primary cultured hepatocytes, antihepatotoxin induced by *D*-galactosamine (GalN),  $100\mu\text{mol/L}$ ,  $\text{InRt} = (-17.8 \pm 0.5)\%$ , counteractive, control Silybin,  $100\mu\text{mol/L}$ ,  $\text{InRt} = (77.0 \pm 5.5)\%$ )<sup>[4095]</sup>; antibacterial (*Escherichia coli*, MIA =  $0.05\mu\text{g}$ , control Chloramphenicol, MIA =  $0.001\mu\text{g}$ ; *Bacillus subtilis*, MIA =  $0.01\mu\text{g}$ , Chloramphenicol, MIA =  $0.001\mu\text{g}$ ; *Staphylococcus aureus*, MIA =  $0.01\mu\text{g}$ , Chloramphenicol, MIA =  $0.001\mu\text{g}$ )<sup>[3785]</sup>; antifungal (*Candida mycoderma*, MIA =  $0.05\mu\text{g}$ , Miconazole, MIA =  $0.0001\mu\text{g}$ )<sup>[3785]</sup>; antifungal (*Aspergillus fumigatus* and *Aspergillus nidulan*, MIC =  $2\text{--}4\mu\text{g/mL}$ ; *Cryptococcus neoformans*, MIC =  $4\mu\text{g/mL}$ )<sup>[4713]</sup>; antioxidant (DPPH scavenger, TLC detection limit =  $1.0\mu\text{g}$ ,  $\text{IC}_{50} = 2100\mu\text{g/mL}$ ; control Quercetin, TLC detection limit  $< 0.05\mu\text{g}$ ,  $\text{IC}_{50} = 7\mu\text{g/mL}$ ; Gallic acid, TLC detection limit  $< 0.05\mu\text{g}$ ,  $\text{IC}_{50} = 4\mu\text{g/mL}$ ; Ascorbic acid, TLC detection limit  $< 0.10\mu\text{g}$ ,  $\text{IC}_{50} = 18\mu\text{g/mL}$ )<sup>[3785]</sup>; antibacterial (*Enterococcus faecalis* JCM7783 (VSE) (= ATCC19434), MIC =  $6.25\mu\text{g/mL}$ , control Linezolid, MIC =  $1.56\mu\text{g/mL}$ ; *Enterococcus faecalis* JU1856(VRE, VanA), MIC =  $6.25\mu\text{g/mL}$ , Linezolid, MIC =  $0.78\mu\text{g/mL}$ ; *Enterococcus faecalis* JU1782(VRE, VanB), MIC =  $6.25\mu\text{g/mL}$ , Linezolid, MIC =  $0.78\mu\text{g/mL}$ ; *Enterococcus faecium* JCM5804 (VSE) (= ATCC 29212), MIC =  $6.25\mu\text{g/mL}$ , Linezolid, MIC =  $1.56\mu\text{g/mL}$ ; *Enterococcus faecium* JU1858 (VRE, VanA), MIC =  $6.25\mu\text{g/mL}$ , Linezolid,

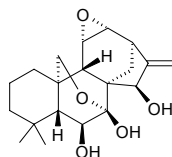
MIC =  $0.78\mu\text{g/mL}$ ; *Enterococcus faecium* JU1777 (VRE, VanB), MIC =  $6.25\mu\text{g/mL}$ , Linezolid, MIC =  $1.56\mu\text{g/mL}$ ; *Enterococcus gallinarum* JU2786 (VRE, VanC), MIC =  $6.25\mu\text{g/mL}$ , Linezolid, MIC =  $0.78\mu\text{g/mL}$ ; *Staphylococcus aureus* JCM2874 (MSSA) (=ATCC29213), MIC =  $6.25\mu\text{g/mL}$ , Linezolid, MIC =  $1.56\mu\text{g/mL}$ ; *Staphylococcus aureus* (MRSA, 10 strains), MIC =  $6.25\mu\text{g/mL}$ , Linezolid, MIC =  $0.78\mu\text{g/mL}$ ; *Staphylococcus aureus* (MRSA, 8 strains), mean  $\text{MIC}_{80} = 6.25\mu\text{g/mL}$ , Linezolid, mean  $\text{MIC}_{80} = 0.78\mu\text{g/mL}$ )<sup>[5007]</sup>. Source: BAI YU SHAN DOU *Lupinus albus*, CI TONG *Erythrina variegata* [Syn. *Erythrina indica*] (stem cortex)<sup>[5220]</sup>, GOU JI *Cudrania cochinchinensis* (root: yield =  $0.0131\% \text{dw}$ )<sup>[3025]</sup>; yield =  $0.000034\% \text{dw}$ )<sup>[4713]</sup>, GUANG GUO GAN CAO *Glycyrrhiza glabra* (leaf)<sup>[4685]</sup>, *Lupinus* sp., GUANG BU DING GONG TENG *Erycibe expansa*, *Bolusanthus speciosus* (root wood)<sup>[3785]</sup>. Ref: 658, 3025, 3785, 4095, 4685, 4713, 5007, 5220.

**22668 Wikstroemin**

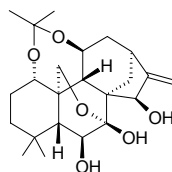
$C_{28}H_{32}O_{15}$  (608.56). mp  $200\text{--}202^\circ\text{C}$ ,  $270\text{--}272^\circ\text{C}$ . Pharm: Diuretic (anesthetic dog,  $2\text{--}4\text{mg/kg}$  iv). Source: LIAO GE WANG GEN *Wikstroemia indica*. Ref: 6, 658.

**22669 Wikstroemioidin A**

$C_{20}H_{28}O_5$  (348.44). mp  $196\text{--}197^\circ\text{C}$ ,  $[\alpha]_D^{25} = -204.3^\circ$  ( $c = 0.23$ , pyridine). Source: YAO HUA XIANG CHA CAI *Isodon wikstroemioides*. Ref: 4067.

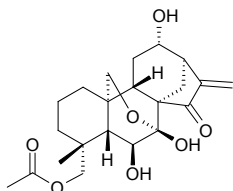
**22670 Wikstroemioidin B**

$C_{23}H_{34}O_6$  (406.52). mp  $110\text{--}112^\circ\text{C}$ ,  $[\alpha]_D^{25} = -17.6^\circ$  ( $c = 0.23$ , pyridine). Source: YAO HUA XIANG CHA CAI *Isodon wikstroemioides*. Ref: 4067.

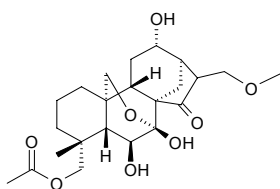


**22671 Wikstroemioidin C**

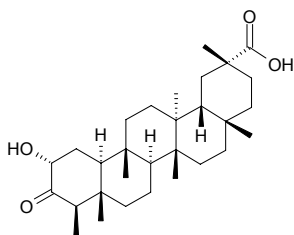
$C_{22}H_{30}O_7$  (406.48).  $[\alpha]_D^{25} = -71.4^\circ$  ( $c = 0.17$ , pyridine). Source: YAO HUA XIANG CHA CAI *Isodon wikstroemioides*. Ref: 4067.

**22672 Wikstroemioidin D**

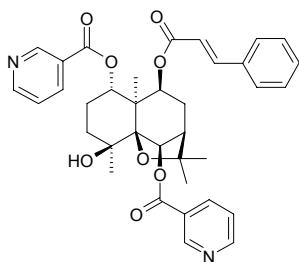
$C_{23}H_{34}O_8$  (438.52).  $[\alpha]_D^{25} = -57.1^\circ$  ( $c = 0.14$ , pyridine). Source: YAO HUA XIANG CHA CAI *Isodon wikstroemioides*. Ref: 4067.

**22673 Wilfolie acid C**

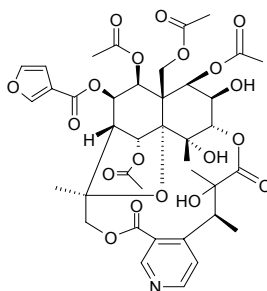
$C_{30}H_{48}O_4$  (472.71). Pharm: DPPH scavenger inactive (for  $40\mu\text{mol/L}$  DPPH radical,  $SC_{50} > 40\mu\text{mol/L}$ ). Source: SUO LA MU *Salacia prinoides* [Syn. *Salacia chinensis*] (stem). Ref: 4378.

**22674 Wilfordicine**

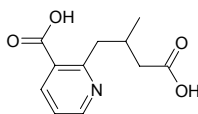
$C_{36}H_{38}N_2O_8$  (626.71). Source: LEI GONG TENG *Tripterygium wilfordii*. Ref: 660.

**22675 Wilfordconine**

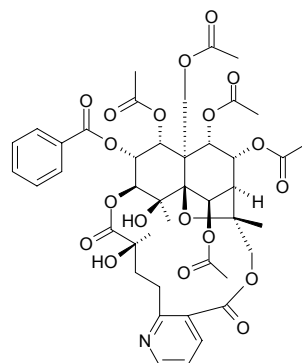
$C_{39}H_{45}NO_{19}$  (831.79). Colorless columnar crystals, mp  $192\text{--}193^\circ\text{C}$ . Source: LEI GONG TENG *Tripterygium wilfordii*. Ref: 868.

**22676 Wilfordic acid**

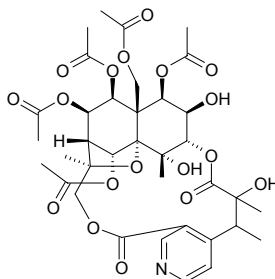
$C_{11}H_{13}NO_4$  (223.23). Source: LEI GONG TENG *Tripterygium wilfordii*. Ref: 2.

**22677 Wilfordine**

[37329-51-3]  $C_{43}H_{49}NO_{19}$  (883.87). mp  $175\text{--}176^\circ\text{C}$ . Pharm: Insecticidal. Source: LEI GONG TENG *Tripterygium wilfordii*, GUI JIAN YU *Euonymus alatus*. Ref: 2, 655, 658.

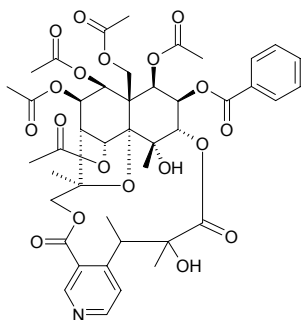
**22678 Wilfordlongine**

$C_{36}H_{45}NO_{18}$  (779.76). Colorless columnar crystals, mp  $179\text{--}180^\circ\text{C}$ . Source: LEI GONG TENG *Tripterygium wilfordii*. Ref: 2221.

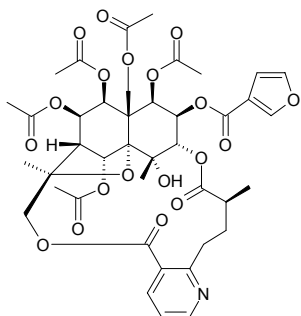


**22679 Wilfordside**

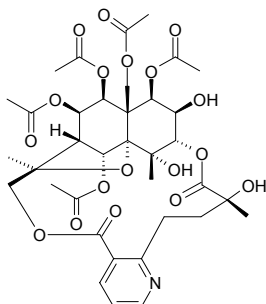
[171090-83-8]  $C_{43}H_{49}NO_{19}$  (883.87). Colorless columnar crystals, mp 176~178°C. **Pharm:** Mmunosuppressant (mus, ip, 50mg/kg, maximum hemolytic dilution ratio = 1:512; ip, 100mg/kg, maximum hemolytic dilution ratio = 1:256; 10mg/kg cytoxin control, maximum hemolytic dilution ratio = 1:256). **Source:** LEI GONG TENG *Tripterygium wilfordii*. **Ref:** 330.

**22680 Wilforgine**

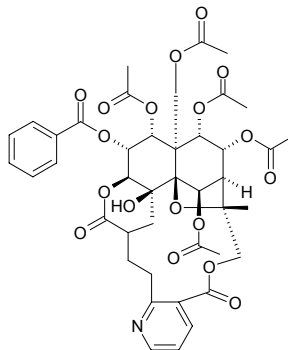
[37239-47-7]  $C_{41}H_{47}NO_{19}$  (857.83). **Source:** KUN MING SHAN HAI TANG *Tripterygium hypoglaucum*, LEI GONG TENG *Tripterygium wilfordii*. **Ref:** 655, 660.

**22681 Wilfordine**

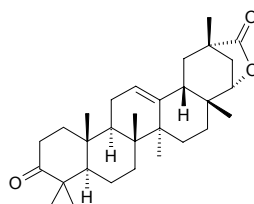
$C_{36}H_{45}NO_{18}$  (779.76). **Source:** LEI GONG TENG *Tripterygium wilfordii*. **Ref:** 660.

**22682 Wilforine**

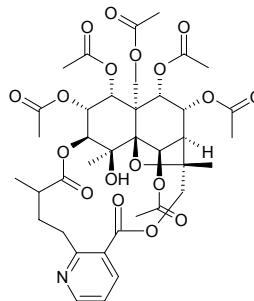
[11088-09-8]  $C_{43}H_{49}NO_{18}$  (867.87). **Source:** LEI GONG TENG *Tripterygium wilfordii* (root: mean content of 2 origins = 0.0581%<sup>[5508]</sup>). **Ref:** 2, 655, 5508.

**22683 Wilforide B**

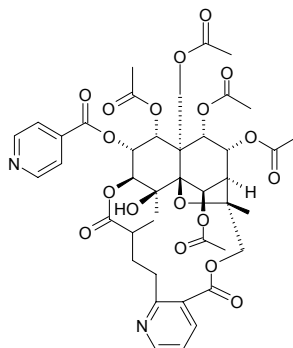
[84104-70-1]  $C_{30}H_{44}O_3$  (452.68). **Source:** BAO XING WEI MAO *Euonymus mupinensis*, LEI GONG TENG *Tripterygium wilfordii*. **Ref:** 2, 278.

**22684 Wilformine**

[41758-69-4]  $C_{38}H_{47}NO_{18}$  (805.79). **Source:** LEI GONG TENG *Tripterygium wilfordii*. **Ref:** 2, 1521.

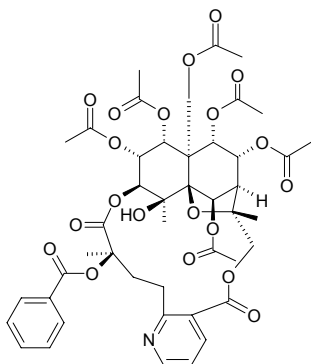
**22685 Wilforine**

[112899-84-0]  $C_{42}H_{48}N_2O_{18}$  (868.85). **Pharm:** immunosuppressant (mus, 80mg/kg, inhibits formation of hemolysin). **Source:** LEI GONG TENG *Tripterygium wilfordii*. **Ref:** 2, 1614.

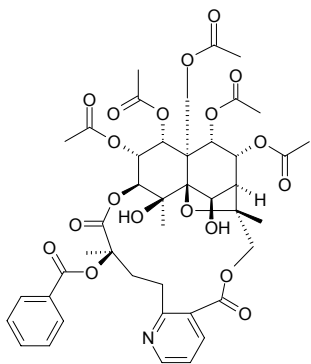


**22686 Wilfornine A**

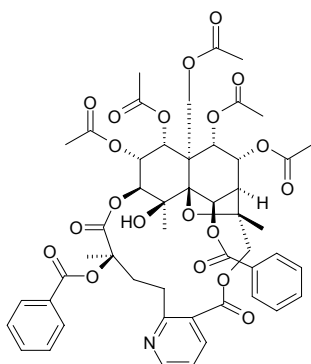
$C_{45}H_{51}NO_{20}$  (925.90). **Pharm:** Anti-inflammatory (modulator of cytokine network: inhibits production of pro-inflammatory cytokines, including TNF- $\alpha$ , IL-1 $\beta$ , IL-4, IL-2 and IFN- $\gamma$  in hmn peripheral mononuclear cells, 10 $\mu$ g/mL). **Source:** LEI GONG TENG *Tripterygium wilfordii*. **Ref:** 4416.

**22687 Wilfornine B**

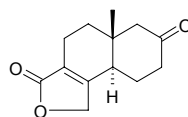
$C_{43}H_{49}NO_{19}$  (883.87). **Pharm:** Anti-inflammatory (modulator of cytokine network: inhibits production of pro-inflammatory cytokines, including TNF- $\alpha$ , IL-1 $\beta$ , IL-4, IL-2 and IFN- $\gamma$  in hmn peripheral mononuclear cells, 10 $\mu$ g/mL). **Source:** LEI GONG TENG *Tripterygium wilfordii*. **Ref:** 4416.

**22688 Wilfornine C**

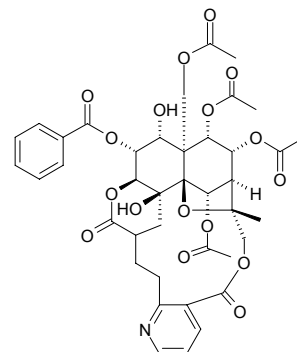
$C_{50}H_{53}NO_{20}$  (987.97). **Pharm:** Anti-inflammatory (modulator of cytokine network: inhibits production of pro-inflammatory cytokines, including TNF- $\alpha$ , IL-1 $\beta$ , IL-4, IL-2 and IFN- $\gamma$  in hmn peripheral mononuclear cells, 10 $\mu$ g/mL). **Source:** LEI GONG TENG *Tripterygium wilfordii*. **Ref:** 4416.

**22689 Wilforonide**

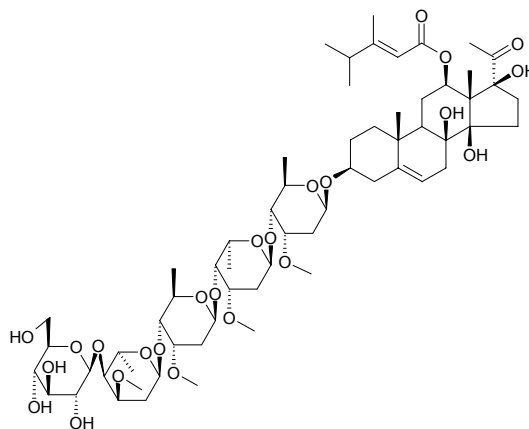
$C_{13}H_{16}O_3$  (220.27). **Source:** LEI GONG TENG *Tripterygium wilfordii*. **Ref:** 2.

**22690 Wilforzine**

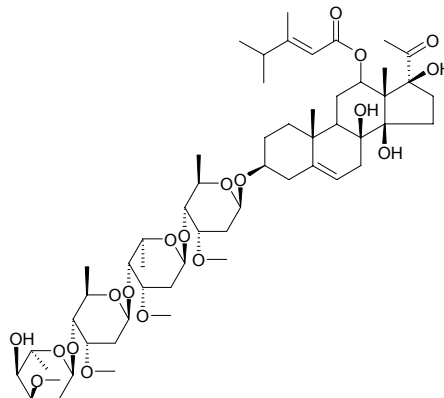
[37239-46-6]  $C_{41}H_{47}NO_{17}$  (825.83). **Source:** LEI GONG TENG *Tripterygium wilfordii*. **Ref:** 2, 655.

**22691 WilfosideC<sub>1</sub>G**

$C_{62}H_{100}O_{24}$  (1229.47). **Source:** ER YE NIU PI XIAO *Cynanchum auriculatum*, GE SHAN XIAO *Cynanchum wilfordii* [Syn. *Cynoctonum wilfordii*]. **Ref:** 660.

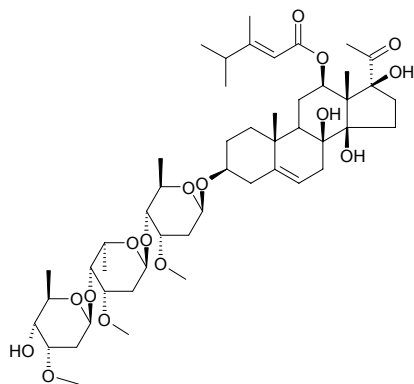
**22692 WilfosideC<sub>1</sub>N**

$C_{56}H_{90}O_{19}$  (1067.33). **Source:** ER YE NIU PI XIAO *Cynanchum auriculatum*, GE SHAN XIAO *Cynanchum wilfordii* [Syn. *Cynoctonum wilfordii*]. **Ref:** 660.

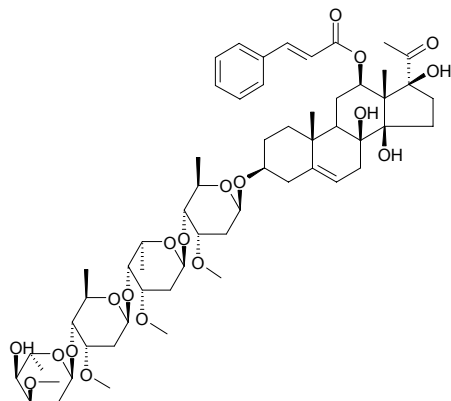


**22693 WilfosideC<sub>3</sub>N**

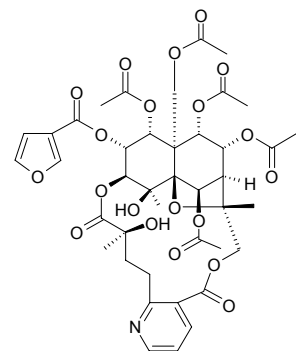
C<sub>49</sub>H<sub>78</sub>O<sub>16</sub> (923.16). Source: ER YE NIU PI XIAO *Cynanchum auriculatum*, GE SHAN XIAO *Cynanchum wilfordii* [Syn. *Cynoctonum wilfordii*]. Ref: 660.

**22694 WilfosideK<sub>1</sub>N**

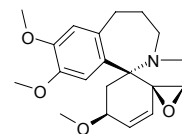
C<sub>58</sub>H<sub>86</sub>O<sub>19</sub> (1087.32). Source: ER YE NIU PI XIAO *Cynanchum auriculatum*, GE SHAN XIAO *Cynanchum wilfordii* [Syn. *Cynoctonum wilfordii*]. Ref: 660.

**22695 Wilfotrine**

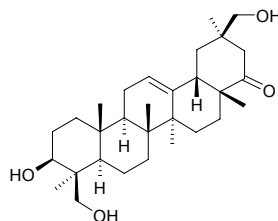
[37239-48-8] C<sub>41</sub>H<sub>47</sub>NO<sub>20</sub> (873.83). Colorless lamellar crystals, mp 235–237°C (acetone–methanol). Pharm: Immunosuppressant (mus, 80mg/kg ip, inhibits formation of hemolysin, mus, 160mg/kg ip, inhibits cellular immunity, based on a GVHR index). Source: KUN MING SHAN HAI TANG *Tripterygium hypoglaucom*, LEI GONG TENG *Tripterygium wilfordii*. Ref: 2, 655, 900.

**22696 Wilsonine**

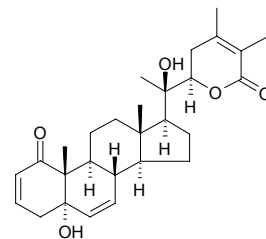
[39024-12-9] C<sub>20</sub>H<sub>25</sub>NO<sub>4</sub> (343.43). Crystals (Et<sub>2</sub>O), mp 150–151°C, [α]<sub>D</sub> = –51.4° (c = 0.55, CHCl<sub>3</sub>), [α]<sub>D</sub> = –36° (c = 0.55, EtOH). Source: RI BEN CU FEI *Cephalotaxus harringtonia* (seed), SAN JIAN SHAN *Cephalotaxus fortunei*, SAN JIAN SHAN *Cephalotaxus fortunei* (drupe: yield = 0.024%)<sup>[4675]</sup>, TAI WAN CU FEI *Cephalotaxus wilsoniana* (twig and leaf), ZHONG GUO CU FEI ZHI YE *Cephalotaxus sinensis* [Syn. *Cephalotaxus harringtonia* var. *sinensis*]. Ref: 2, 660, 1521, 4675.

**22697 Wistariasapogenol A**

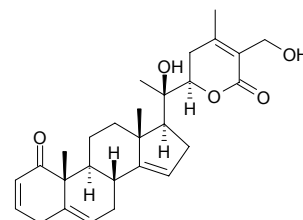
[124657-60-9] C<sub>30</sub>H<sub>48</sub>O<sub>4</sub> (472.71). Colorless prismatic crystals, mp 265–267°C, [α]<sub>D</sub><sup>27</sup> = +53.9° (c = 0.17, methanol). Pharm: Inhibits promoter of cancer, inhibits activity of EBV induced by TPA. Source: SHAN DOU GEN *Sophora subprostrata* [Syn. *Sophora tonkinensis*]. Ref: 1003, 1004, 1014.

**22698 Withacoagin**

C<sub>28</sub>H<sub>38</sub>O<sub>5</sub> (454.61). Source: CUI MIAN SHUI QIE *Withania somnifera* (root). Ref: 4198.

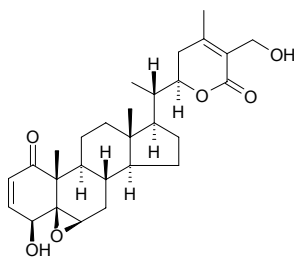
**22699 Withacoagulin**

20β,27-Dihydroxy-1-oxo-(22R)-witha-2,5,24-tetraenolide C<sub>28</sub>H<sub>36</sub>O<sub>5</sub> (452.60). [α]<sub>D</sub><sup>25</sup> = +37° (c = 0.081, CHCl<sub>3</sub>). Source: NING GU SHUI QIE *Withania coagulans*. Ref: 3378.

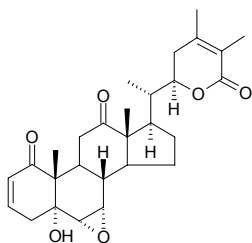


**22700 Withaferin A**

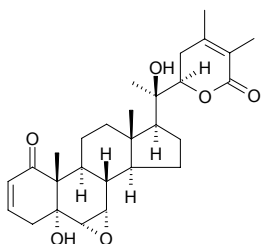
[5119-48-2]  $C_{28}H_{38}O_6$  (470.61). mp 252–253°C. **Pharm:** Antibacterial; antineoplastic ( $S_{180}$ , EC = 40  $\mu\text{g}/\text{mL}$ , mus, melanoma, EAC and E0771 mammary cancer); antifungal; anti-inflammatory (mus, swollen foot model,  $ED_{50} = 12.0\text{mg}/\text{kg}$ ); AChE inhibitor ( $IC_{50} = (84.0 \pm 1.5)\mu\text{mol}/\text{L}$ , control Galanthamine  $IC_{50} = (0.50 \pm 0.001)\mu\text{mol}/\text{L}$ , Eserine  $IC_{50} = (0.04 \pm 0.0001)\mu\text{mol}/\text{L}$ )<sup>[2563]</sup>; butyrylcholinesterase (BChE) inhibitor ( $IC_{50} = (125 \pm 3.2)\mu\text{mol}/\text{L}$ , control Galanthamine  $IC_{50} = (8.2 \pm 0.01)\mu\text{mol}/\text{L}$ , Eserine  $IC_{50} = (0.85 \pm 0.0001)\mu\text{mol}/\text{L}$ )<sup>[2563]</sup>. **Source:** CUI MIAN SHUI QIE *Withania somnifera*, CUI MIAN SHUI QIE *Withania somnifera* (root), CUI MIAN SHUI QIE *Withania somnifera* (leaf), SHUI QIE *Solanum torvum*. **Ref:** 5, 2563, 4198, 5329.

**22701 Withanicandrin**

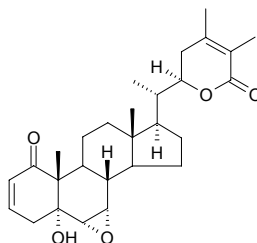
[39262-28-7]  $C_{28}H_{36}O_6$  (468.60). mp 267–269°C. **Source:** JIA SUAN JIANG *Nicandra physaloides*. **Ref:** 6.

**22702 Withanolide A**

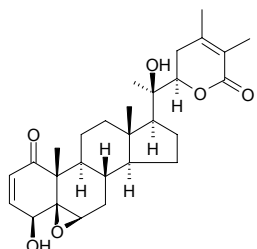
$C_{28}H_{38}O_6$  (470.61). **Pharm:** Neurite outgrowth activity (hmn neuroblastoma SH-SY5Y cell line,  $1\mu\text{mol}/\text{L}$ )<sup>[4198]</sup>. **Source:** CUI MIAN SHUI QIE *Withania somnifera* (root, leaf), GOU QI YE *Lycium chinense*, NING GU SHUI QIE *Withania coagulans*. **Ref:** 660, 4198, 5329.

**22703 Withanolide B**

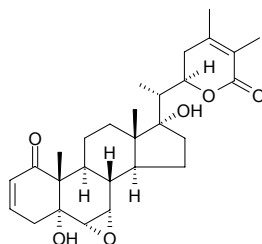
$C_{28}H_{38}O_5$  (454.61). **Source:** GOU QI YE *Lycium chinense*. **Ref:** 660.

**22704 Withanolide D**

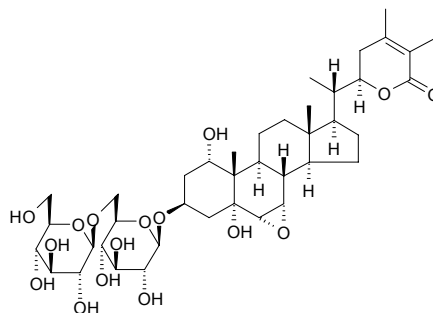
[30655-48-2]  $C_{28}H_{38}O_6$  (470.61). mp 253–255°C. **Pharm:** Antibacterial (gram-positive bacteria); antineoplastic ( $S_{180}$ , 40  $\text{mg}/\text{mL}$ ). **Source:** CUI MIAN SHUI QIE *Withania somnifera* (root), SHUI QIE *Solanum torvum*. **Ref:** 5, 658, 4198.

**22705 Withanone**

$C_{28}H_{36}O_6$  (470.61). **Pharm:** Cytotoxic (mouse mammary organ culture assay, 69% at  $10\mu\text{g}/\text{mL}$ )<sup>[5038]</sup>. **Source:** CUI MIAN SHUI QIE *Withania somnifera* (leaf), FEI CHENG SUAN JIANG *Physalis philadelphica*. **Ref:** 5038, 5329.

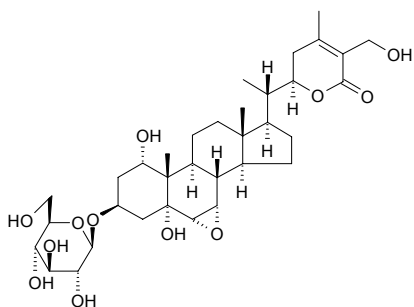
**22706 Withanoside II**

$C_{40}H_{62}O_{16}$  (798.93). **Source:** CUI MIAN SHUI QIE *Withania somnifera* (root). **Ref:** 4198.

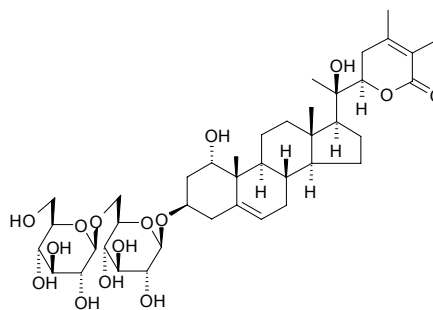


**22707 Withanoside III**

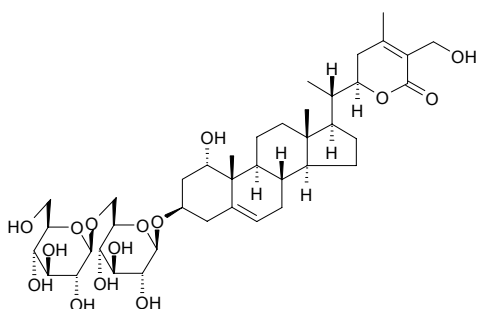
$C_{34}H_{52}O_{12}$  (652.79). Source: CUI MIAN SHUI QIE *Withania somnifera* (root).  
Ref: 4198.

**22710 Withanoside VI**

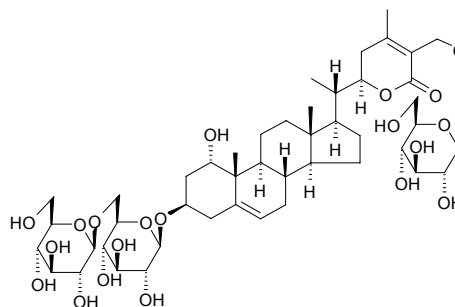
$C_{40}H_{62}O_{15}$  (782.93). Pharm: Neurite outgrowth activity (hmn neuroblastoma SH-SY5Y cell line,  $1\mu\text{mol/L}$ ). Source: CUI MIAN SHUI QIE *Withania somnifera* (root). Ref: 4198.

**22708 Withanoside IV**

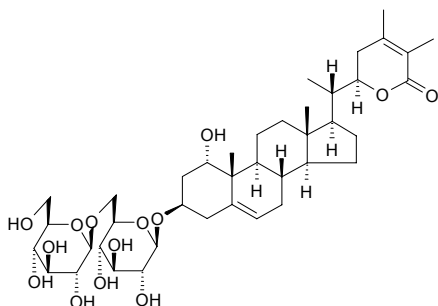
$C_{40}H_{62}O_{15}$  (782.93). Pharm: Neurite outgrowth activity (hmn neuroblastoma SH-SY5Y cell line,  $1\mu\text{mol/L}$ ). Source: CUI MIAN SHUI QIE *Withania somnifera* (root). Ref: 4198.

**22711 Withanoside VIII**

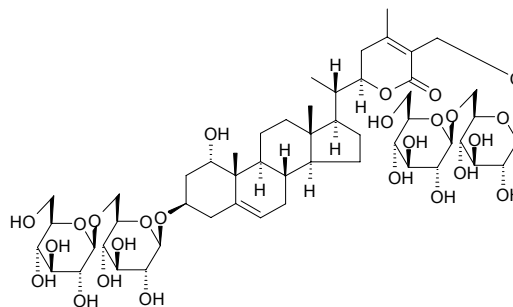
27-*O*- $\beta$ -*D*-Glucopyranosylpubesensinolide 3-*O*- $\beta$ -*D*-glucopyranosyl (1 $\rightarrow$ 6)  $\beta$ -*D*-glucopyranoside  $C_{46}H_{72}O_{20}$  (945.07). Amorphous powder,  $[\alpha]_D^{23} = +10.4^\circ$  ( $c = 0.264$ , MeOH). Source: CUI MIAN SHUI QIE *Withania somnifera* (root). Ref: 4198.

**22709 Withanoside V**

$C_{40}H_{62}O_{14}$  (766.93). Source: CUI MIAN SHUI QIE *Withania somnifera* (root).  
Ref: 4198.

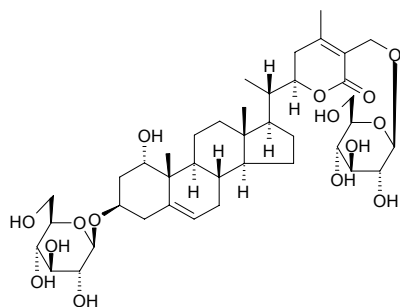
**22712 Withanoside IX**

27-*O*- $\beta$ -*D*-Glucopyranosyl (1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosylpubesensinolide 3-*O*- $\beta$ -*D*-glucopyranosyl (1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside  $C_{52}H_{82}O_{25}$  (1107.22). Amorphous powder,  $[\alpha]_D^{23} = +16.7^\circ$  ( $c = 0.096$ , MeOH). Source: CUI MIAN SHUI QIE *Withania somnifera* (root). Ref: 4198.

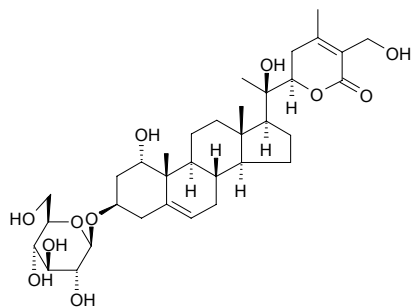


**22713 Withanoside X**

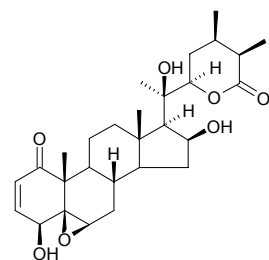
27-*O*- $\beta$ -D-Glucopyranosylpubesanolide 3-*O*- $\beta$ -D-glucopyranoside C<sub>40</sub>H<sub>62</sub>O<sub>15</sub> (782.93). Amorphous powder,  $[\alpha]_D^{23} = +21.1^\circ$  ( $c = 0.11$ , MeOH). **Source:** CUI MIAN SHUI QIE *Withania somnifera* (root). **Ref:** 4198.

**22714 Withanoside XI**

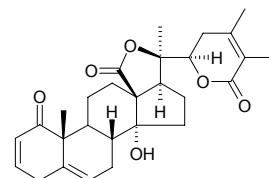
(20*R*,22*R*)-1 $\alpha$ ,3 $\beta$ ,20,27-Tetrahydroxywitha-5,24-dienolide 3-*O*- $\beta$ -D-glucopyranoside C<sub>34</sub>H<sub>52</sub>O<sub>11</sub> (636.79). Amorphous powder,  $[\alpha]_D^{23} = +18.8^\circ$  ( $c = 0.101$ , MeOH). **Source:** CUI MIAN SHUI QIE *Withania somnifera* (root). **Ref:** 4198.

**22715 Withaphysacarpin**

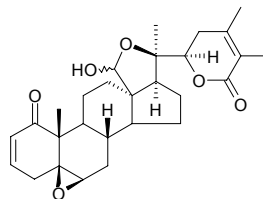
C<sub>28</sub>H<sub>40</sub>O<sub>7</sub> (488.63). **Pharm:** Cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells, IC<sub>50</sub> = 0.015  $\mu$ g/mL); cytotoxic (soft agar transformation assay with JB6 cells, IC<sub>50</sub> = 0.020  $\mu$ g/mL); cytotoxic (mouse mammary organ culture assay, 88% at 10  $\mu$ g/mL). **Source:** FEI CHENG SUAN JIANG *Physalis philadelphica*. **Ref:** 5038.

**22716 Withaphysalin A**

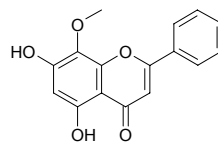
[57423-72-0] C<sub>28</sub>H<sub>34</sub>O<sub>6</sub> (466.58). **Source:** TIAN PAO ZI *Physalis minima*. **Ref:** 6.

**22717 Withaphysalin B**

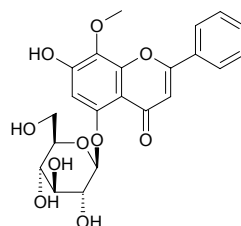
[57423-73-1] C<sub>28</sub>H<sub>36</sub>O<sub>6</sub> (468.60). **Source:** TIAN PAO ZI *Physalis minima*. **Ref:** 6.

**22718 Wogonin**

[632-85-9] C<sub>16</sub>H<sub>12</sub>O<sub>5</sub> (284.27). mp 203°C. **Pharm:** Antineoplastic; antispasmodic (mus intestine, *in vitro*); diuretic; estrogenic activity (rat); cytotoxic (hmn peripheral blood T cells, dose = 2.0  $\mu$ g/mL, T cell survival rate = 69%)<sup>[3498]</sup>; immunosuppressant (inhibits IL-2 secretion costimulated by CD28, dose = 2.0  $\mu$ g/mL, InRt = 77%)<sup>[3498]</sup>; anti-inflammatory (modulator of cytokine network: increases TNF- $\alpha$  level in RAW264.7 cells)<sup>[4416]</sup>; anti-inflammatory (hmn retinal pigment epithelial cell lines, IL-6 and IL-8 blocker, blocking production and expression of IL-6 and IL-8, IC<sub>50</sub> = 1~40  $\mu$ mol/L)<sup>[4416]</sup>; anti-inflammatory (hmn platelets 12-LOX inhibitor, without affecting level of cyclooxygenase; macrophages, COX-2 inhibitor, inhibits COX-2 expression)<sup>[4415]</sup>; anti-inflammatory (NO production inhibitor)<sup>[4415]</sup>; hypolipidemic; antioxidant; cytotoxic (KU-1 hmn bladder cancer cell line, EJ-1 hmn bladder cancer cell line, MBT-2 murine bladder cancer cell line, inhibits cell proliferation *in vitro* in a dose-dependent manner, less active than baicalin)<sup>[5369]</sup>; cytotoxic (LXFL529L hmn large cell lung carcinoma cell line and HL-60, inhibits cell growth at a micromolar range)<sup>[5369]</sup>; xanthine oxidase inhibitor (strong action, indicating that it might be useful for the remission of brain tumors, since xanthine oxidase serum levels are increased in tissues of brain tumors)<sup>[5369]</sup>; tyrosine kinase inhibitor (tyrosine kinase of EGFR, IC<sub>50</sub> > 60  $\mu$ mol/L)<sup>[5369]</sup>. **Source:** BAN ZHI LIAN *Scutellaria barbata* [Syn. *Scutellaria rivularis*], CHUAN HUANG QIN *Scutellaria hypericifolia*, DIAN HUANG QIN *Scutellaria amoena*, GAN SU HUANG QIN *Scutellaria rehderiana*, HONG CHAI HU *Bupleurum scorzonerifolium* (root), HUANG QIN *Scutellaria baicalensis* (dried root: content scope of 10 samples = 0.04%~2.59%, mean content = 0.66%<sup>[5508]</sup>), LI JIANG HUANG QIN *Scutellaria likiangensis*, SHAN TENG *Anodendron affine*, YIN CHAI HU *Stellaria dichotoma* var. *lanceolata*, NIAN MAO HUANG QIN *Scutellaria viscidula*. **Ref:** 2, 658, 660, 3498, 4415, 4416, 5369, 5501, 5508.

**22719 Wogonin 5- $\beta$ -D-glucoside**

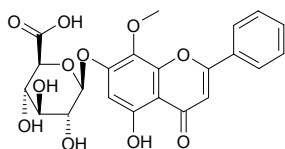
C<sub>22</sub>H<sub>22</sub>O<sub>10</sub> (446.41). **Source:** HUANG QIN *Scutellaria baicalensis*. **Ref:** 660.



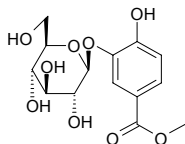


**22720 Wogonoside**

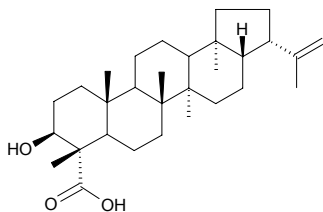
Wogonin-7-*O*-glucuronide [51059-44-0] C<sub>22</sub>H<sub>20</sub>O<sub>11</sub> (460.40). Yellow needles (MeOH), mp 228–229°C. **Pharm:** cAMP phosphodiesterase inhibitor (IC<sub>50</sub> = 42 μmol/L); antihistamine (rat, inhibits histamine release in peritoneum giant cell, IC<sub>50</sub> = 140 μmol/L); liver sialidase inhibitor (mus, 10 μg/mL, InRt = 12.6%); anti-inflammatory (mus, swollen foot model caused by carrageenan, inhibits leucocyte aggregation in inflammatory exudate); cytotoxic (LXFL529L hmn large cell lung carcinoma cell line and HL-60, inhibits cell growth at a micromolar range)<sup>[5369]</sup>; tyrosine kinase inhibitor (tyrosine kinase of EGFR, IC<sub>50</sub> > 60 μmol/L)<sup>[5369]</sup>. **Source:** LIAN QIAO *Forsythia suspensa*, CHUAN HUANG QIN *Scutellaria hypericifolia*, DIAN HUANG QIN *Scutellaria amoena*, HUANG QIN *Scutellaria baicalensis* (dried root: content scope of 10 samples = 1.07%~3.24%, mean content = 2.34%<sup>[5508]</sup>), NIAN MAO HUANG QIN *Scutellaria viscidula*. **Ref:** 2, 660, 1652, 1654, 1655, 1656, 2509, 5369, 5508.

**22721 Woodorien**

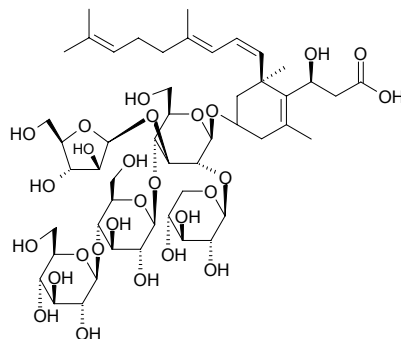
[155112-92-8] C<sub>14</sub>H<sub>18</sub>O<sub>9</sub> (330.29). Gray-white amorphous powder, [α]<sub>D</sub> = -2° (c = 0.15, ethanol). **Pharm:** Antiviral (HSV-1, 100 μg/mL). **Source:** DONG FANG GOU JI *Woodwardia orientalis*. **Ref:** 964.

**22722 Woodwardic acid**

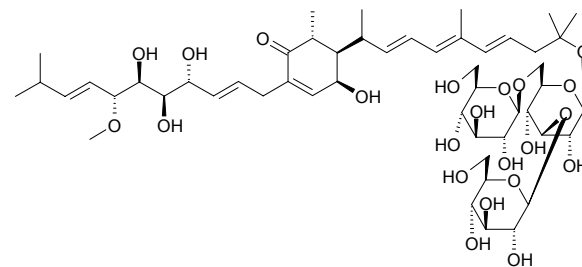
[32214-81-6] C<sub>30</sub>H<sub>48</sub>O<sub>3</sub> (456.72). mp 273–274°C (dec). **Source:** DONG FANG GOU JI *Woodwardia orientalis*. **Ref:** 6.

**22723 Woodwardinoside**

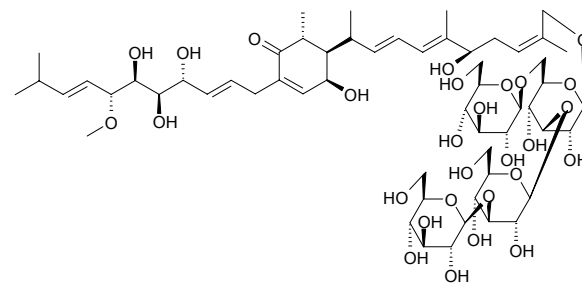
(4'*R*)-4'-*O*-[β-*D*-Glucopyranosyl-(1→4)]-β-*D*-arabinofuranosyl-(1→3)-β-*D*-glucopyranosyl-(1→4)]-[β-*D*-xylopyranosyl-(1→2)]-β-*D*-glucopyranosyl-1-4-woodwardine C<sub>50</sub>H<sub>80</sub>O<sub>27</sub> (1113.18). Colorless powder, [α]<sub>D</sub><sup>23</sup> = -42.0°. **Source:** FU JI NI YA GOU JI JUE *Woodwardia virginica*. **Ref:** 3415.

**22724 woodwardinoside B**

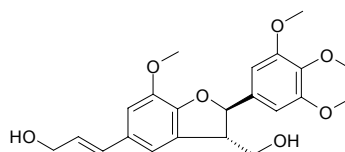
9-*O*-β-*D*-Glucopyranosyl-(1→3)-[β-*D*-glucopyranosyl-(1→6)]-β-*D*-Glucopyranoside C<sub>51</sub>H<sub>82</sub>O<sub>22</sub> (1047.21). Colorless powder, [α]<sub>D</sub><sup>23</sup> = -85.0° (c = 0.10, MeOH). **Source:** FU JI NI YA GOU JI JUE *Woodwardia virginica*. **Ref:** 3425.

**22725 Woodwardinoside C**

10'-*O*-[β-*D*-Glucopyranosyl-(1→6)]-β-*D*-glucopyranosyl-(1→3)-β-*D*-glucopyranosyl-(1→3)-β-*D*-glucopyranoside C<sub>57</sub>H<sub>92</sub>O<sub>28</sub> (1225.35). Colorless powder, [α]<sub>D</sub><sup>23</sup> = -142.0° (c = 0.09, MeOH). **Source:** FU JI NI YA GOU JI JUE *Woodwardia virginica*. **Ref:** 3425.

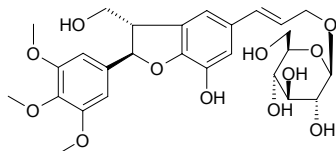
**22726 Woorenoenin**

[166990-13-2] C<sub>22</sub>H<sub>26</sub>O<sub>7</sub> (462.45). **Source:** RI BEN HUANG LIAN *Coptis japonica* (rhizome). **Ref:** 5506.

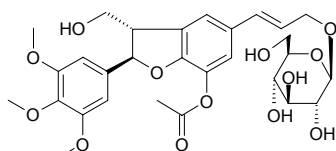


**22727 Woorenoside I**

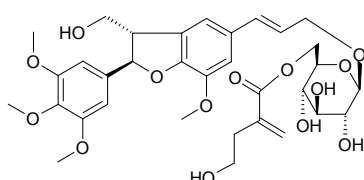
$C_{27}H_{34}O_{12}$  (550.56). **Pharm:** Anti-inflammatory (modulator of cytokine network: concentration-dependently blocks TNF- $\alpha$  production by LPS-stimulated RAW264.7 macrophages,  $IC_{50}$  = 15–60 $\mu$ mol/L). **Source:** RI BEN HUANG LIAN *Coptis japonica* (rhizome). **Ref:** 4416.

**22728 Woorenoside II**

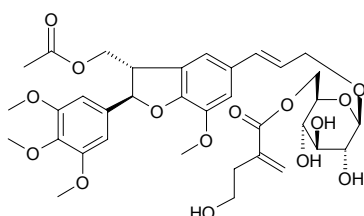
$C_{29}H_{36}O_{13}$  (592.60). **Pharm:** Anti-inflammatory (modulator of cytokine network: concentration-dependently blocks TNF- $\alpha$  production by LPS-stimulated RAW264.7 macrophages,  $IC_{50}$  = 15–60 $\mu$ mol/L). **Source:** RI BEN HUANG LIAN *Coptis japonica* (rhizome). **Ref:** 4416.

**22729 Woorenoside III**

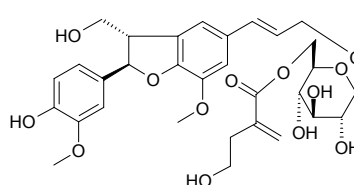
$C_{33}H_{42}O_{14}$  (662.69). **Pharm:** Anti-inflammatory (modulator of cytokine network: concentration-dependently blocks TNF- $\alpha$  production by LPS-stimulated RAW264.7 macrophages,  $IC_{50}$  = 15–60 $\mu$ mol/L). **Source:** RI BEN HUANG LIAN *Coptis japonica* (rhizome). **Ref:** 4416.

**22730 Woorenoside IV**

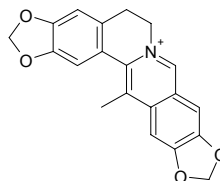
[166990-17-6]  $C_{35}H_{44}O_{15}$  (704.73). **Pharm:** Anti-inflammatory (modulator of cytokine network: concentration-dependently blocks TNF- $\alpha$  production by LPS-stimulated RAW264.7 macrophages,  $IC_{50}$  = 15–60 $\mu$ mol/L). **Source:** RI BEN HUANG LIAN *Coptis japonica* (rhizome). **Ref:** 4416.

**22731 Woorenoside V**

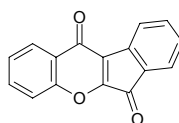
$C_{31}H_{38}O_{13}$  (618.64). **Pharm:** Anti-inflammatory (modulator of cytokine network: concentration-dependently blocks TNF- $\alpha$  production by LPS-stimulated RAW264.7 macrophages,  $IC_{50}$  = 15–60 $\mu$ mol/L). **Source:** RI BEN HUANG LIAN *Coptis japonica* (rhizome). **Ref:** 4416.

**22732 Worenine**

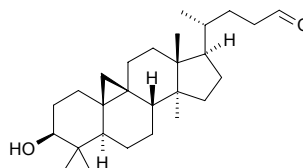
Corysamine [38763-29-0]  $C_{20}H_{16}NO_4^+$  (334.35). mp 212–213°C. **Source:** BAI QU CAI *Chelidonium majus*, JU HUA HUANG LIAN *Corydalis pallida*, ZI HUA YU DENG CAO *Corydalis incisa*. **Ref:** 2, 6, 1521.

**22733 Wrightiadione**

[148180-61-4]  $C_{16}H_8O_3$  (248.24). mp 228–230°C,  $[\alpha]_D = 0^\circ$  ( $c = 0.1$ , chloroform). **Pharm:** Antineoplastic (EAC,  $S_{180}$ , HCS, ARS, and  $P_{388}$ ,  $p < 0.05$ ). **Source:** YAN MU *Wrightia tomentosa*. **Ref:** 1107.

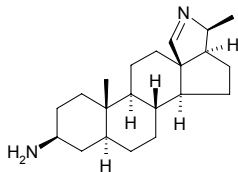
**22734 Wrightial**

$C_{27}H_{44}O_2$  (400.65). **Source:** BO TE LAN DA JI *Euphorbia portlandica* (whole herb). **Ref:** 5019.

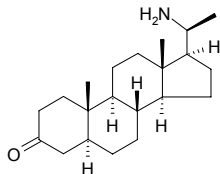


**22735 Wrightiamine A**

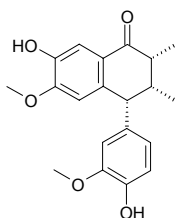
$C_{21}H_{34}N_2$  (314.52). Colorless amorphous solid,  $[\alpha]_D^{25} = -14^\circ$  ( $c = 0.2$ , MeOH). **Pharm:** Cytotoxic (VCR-resistant murine leukemia P<sub>388</sub> cells, IC<sub>50</sub> in presence of VCR 12.5ng/mL = 2.0μg/mL, IC<sub>50</sub> in absence of VCR = 3.1μg/mL). **Source:** ZHAO WA DAO DIAO BI *Wrightia javanica* (leaf). **Ref:** 4352.

**22736 Wrightiamine B**

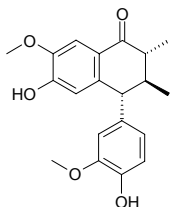
$C_{21}H_{35}NO$  (317.52). Colorless amorphous solid,  $[\alpha]_D^{25} = +5^\circ$  ( $c = 0.04$ , MeOH). **Pharm:** Cytotoxic (VCR-resistant murine leukemia P<sub>388</sub> cells, IC<sub>50</sub> in presence of VCR 12.5ng/mL = 22μg/mL, IC<sub>50</sub> in absence of VCR = 25μg/mL). **Source:** ZHAO WA DAO DIAO BI *Wrightia javanica* (leaf). **Ref:** 4352.

**22737 Wulignan A<sub>1</sub>**

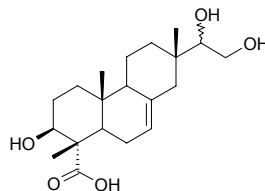
$C_{20}H_{22}O_5$  (342.40). **Source:** YI GENG WU WEI ZI *Schisandra henryi*. **Ref:** 660.

**22738 Wulignan A<sub>2</sub>**

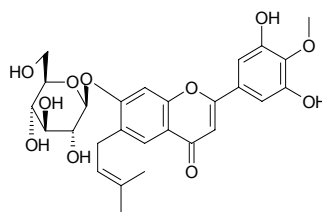
$C_{20}H_{22}O_5$  (342.40). **Source:** YI GENG WU WEI ZI *Schisandra henryi*. **Ref:** 660.

**22739 Wulingzhiic acid**

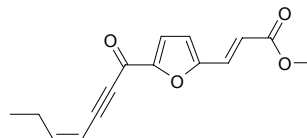
3β,15ζ,16-Trihydroxy isopimaric acid  $C_{20}H_{32}O_5$  (352.48). **Source:** WU LING ZHI *Trogopterus xanthipes*; *Pteromys volans*. **Ref:** 660.

**22740 Wushanicariin**

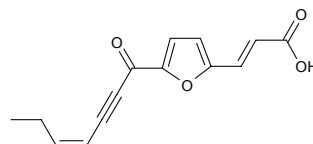
$C_{27}H_{30}O_{11}$  (530.53). Yellow acicular crystals, easily soluble in pyridine; soluble in ethanol, methanol, acetone; slightly soluble in chloroform, mp 252°C. **Source:** WU SHAN YIN YANG HUO *Epimedium wushanense*, YIN YANG HUO *Epimedium brevicornum*. **Ref:** 92, 623.

**22741 Wyerone**

[20079-30-5]  $C_{15}H_{14}O_4$  (258.28). **Pharm:** Antifungal (plant antitoxin). **Source:** CAN DOU *Vicia faba*, BING DOU *Lens culinaris*. **Ref:** 658.

**22742 Wyerone acid**

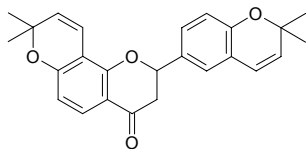
[54954-14-2]  $C_{14}H_{12}O_4$  (244.25). **Pharm:** Antifungal (plant antitoxin). **Source:** CAN DOU *Vicia faba*. **Ref:** 658.



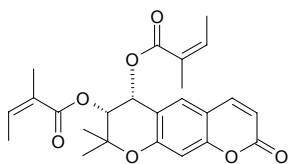
## X

**22743 Xambioona**

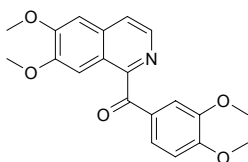
$C_{25}H_{24}O_4$  (388.47). Source: *Glycyrrhiza* sp. Ref: 2431.

**22744 Xanthalin**

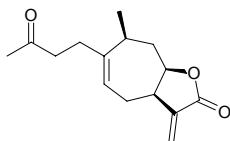
[21800-48-6]  $C_{24}H_{26}O_7$  (426.47). White powder, mp 110~112°C,  $[\alpha]_D = -163^\circ$  (EtOH). Source: MO GUO QIN *Sphallerocarpus gracilis*. Ref: 2500.

**22745 Xanthaline**

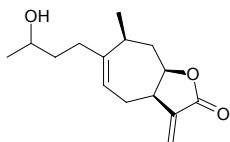
Papaveraldine [522-57-6]  $C_{20}H_{19}NO_5$  (353.38). mp 210°C. Source: YA PIAN *Papaver somniferum*. Ref: 6.

**22746 Xanthalongin**

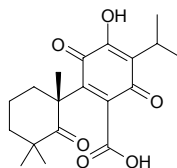
$C_{15}H_{20}O_3$  (248.32). Source: JIN FEI CAO *Inula japonica*. Ref: 1521, 5422.

**22747 4H-Xanthalongin**

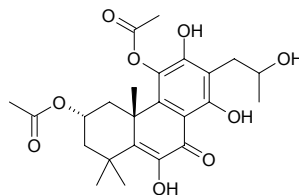
$C_{15}H_{22}O_3$  (250.34). Source: JIN FEI CAO *Inula japonica*. Ref: 5422.

**22748 Xanthanthusin E**

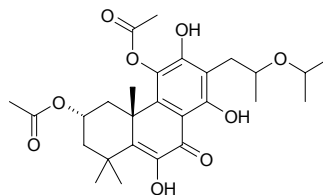
$C_{19}H_{24}O_6$  (348.4). Pharm: Cytotoxic (*in vitro*, K562,  $IC_{50} = 34.3\mu\text{g/mL}$ ; control Mitoxanthrone,  $IC_{50} = 2\mu\text{g/mL}$ ). Source: HUANG QIAO RUI HUA *Coleus xanthanthus* (aerial parts: yield = 0.00023%dw). Ref: 4625.

**22749 Xanthanthusin F**

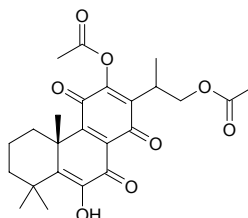
17-(15→16)-Abeo-2 $\alpha$ ,11-diacetoxy-6,12,14,16-tetrahydroxyabieta-5,8,11,13-tetraen-7-one  $C_{24}H_{30}O_9$  (462.6). Yellow amorphous powder,  $[\alpha]_D^{25.8} = +39.4^\circ$  ( $c = 0.40$ ,  $CHCl_3$ ). Source: HUANG QIAO RUI HUA *Coleus xanthanthus* (aerial parts: yield = 0.00013%dw). Ref: 4625.

**22750 Xanthanthusin G**

17-(15→6)-Abeo-2 $\alpha$ ,11-diacetoxy-16-*O*-isopropyl-6,12,14-trihydroxyabieta-5,8,11,13-tetraen-7-one  $C_{27}H_{36}O_9$  (504.58). Yellow amorphous powder,  $[\alpha]_D^{25.7} = +35.0^\circ$  ( $c = 0.35$ ,  $CHCl_3$ ). Source: HUANG QIAO RUI HUA *Coleus xanthanthus* (aerial parts: yield = 0.00005%dw). Ref: 4625.

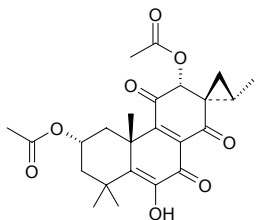
**22751 Xanthanthusin H**

12,16-Diacetoxy-6-hydroxyabieta-5,8,12-trien-7,11,14-trione  $C_{24}H_{28}O_8$  (444.49). Yellow amorphous powder,  $[\alpha]_D^{25.7} = -135.0^\circ$  ( $c = 0.10$ ,  $CHCl_3$ ). Pharm: Cytotoxic (*in vitro*, K562,  $IC_{50} = 12.9\mu\text{g/mL}$ ; control Mitoxanthrone,  $IC_{50} = 2\mu\text{g/mL}$ ). Source: HUANG QIAO RUI HUA *Coleus xanthanthus* (aerial parts: yield = 0.00035%dw). Ref: 4625.

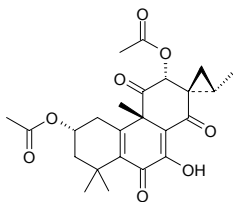


**22752 Xanthanthusin I**

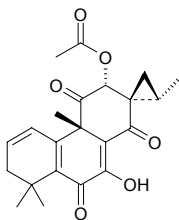
(13*S*,15*S*)-2 $\alpha$ ,12 $\alpha$ -Diacetoxy-6-hydroxy-13,16-cycloabieta-5,8-dien-7,11,14-trione C<sub>24</sub>H<sub>28</sub>O<sub>8</sub> (444.49). Yellow amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>24.8</sup> = -49.5° (*c* = 0.46, CHCl<sub>3</sub>). **Source:** HUANG QIAO RUI HUA *Coleus xanthanthus* (aerial parts: yield = 0.0031%dw). **Ref:** 4625.

**22753 Xanthanthusin J**

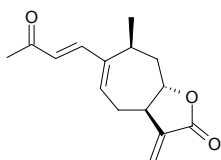
(9*S*,13*S*,15*S*)-20-(10→9)-abeo-2 $\alpha$ ,12 $\alpha$ -Diacetoxy-7-hydroxy-13,16-cycloabiet a-5(10),7-dien-6,11,14-trione C<sub>24</sub>H<sub>28</sub>O<sub>8</sub> (444.49). Yellow amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>13.6</sup> = +261.3° (*c* = 0.35, CHCl<sub>3</sub>). **Source:** HUANG QIAO RUI HUA *Coleus xanthanthus* (aerial parts: yield = 0.00043%dw). **Ref:** 4625.

**22754 Xanthanthusin K**

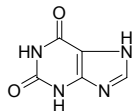
(9*S*,13*S*,15*S*)-20-(10→9)-Abeo-12 $\alpha$ -acetoxy-7-hydroxy-13,16-cycloabieta-1,5(10),7-trien-6,11,14-trione C<sub>22</sub>H<sub>24</sub>O<sub>6</sub> (384.43). Yellow amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>13.6</sup> = +261.9° (*c* = 0.44, CHCl<sub>3</sub>). **Source:** HUANG QIAO RUI HUA *Coleus xanthanthus* (aerial parts: yield = 0.00020%dw). **Ref:** 4625.

**22755 Xanthatin**

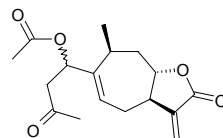
[26791-73-1] C<sub>15</sub>H<sub>18</sub>O<sub>3</sub> (246.31). **Pharm:** Antibacterial; antifungal; insect larva growth inhibitor. **Source:** BIN XI FA NI YA CANG ER *Xanthium pennsylvanicum*, CANG ER *Xanthium sibiricum* [Syn. *Xanthium strumarium*], XIAO XI CANG ER *Xanthium riparium*, *Xanthium* sp. **Ref:** 658.

**22756 Xanthine**

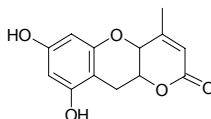
3,7-Dihydropurine-2,6-dione [69-89-6] C<sub>5</sub>H<sub>4</sub>N<sub>4</sub>O<sub>2</sub> (152.11). mp > 150°C (dec). **Source:** CHA YE *Camellia sinensis* [Syn. *Thea sinensis*], QIU YIN *Pheretima aspergillum*, *Allolobophora caliginosa trapezoides*, XIA TIAN GAO *Bos taurus domesticus*. **Ref:** 6.

**22757 Xanthinin**

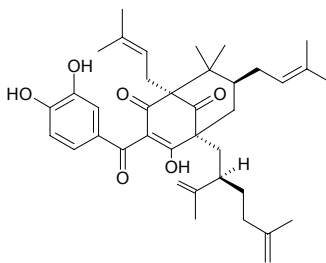
[580-49-4] C<sub>17</sub>H<sub>22</sub>O<sub>5</sub> (306.36). mp 121~122°C. **Pharm:** Phytohormone active against auxin. **Source:** CANG ER *Xanthium sibiricum* [Syn. *Xanthium strumarium*], DONG FANG CANG ER *Xanthium orientale*, PU TONG CANG ER *Xanthium commune*. **Ref:** 6, 658.

**22758 Xanthocerin**

C<sub>13</sub>H<sub>12</sub>O<sub>5</sub> (248.24). Colorless acicular crystals, mp 262~264°C. **Source:** WEN GUAN MU *Xanthoceras sorbifolia*. **Ref:** 842.

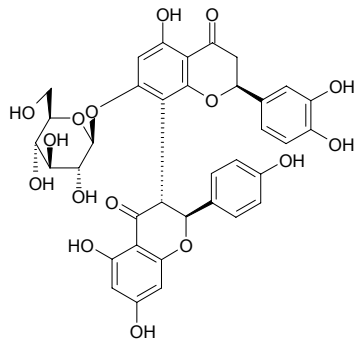
**22759 Xanthochymol**

[52617-32-0] C<sub>38</sub>H<sub>50</sub>O<sub>6</sub> (602.82). **Pharm:** antioxidant (DPPH radical scavenger, 10 $\mu$ mol/L, ScRt = 61%, IC<sub>50</sub> = 8.50 $\mu$ mol/L; control BHT, 10 $\mu$ mol/L, ScRt = 43%, IC<sub>50</sub> = 19.00 $\mu$ mol/L)<sup>[4422]</sup>; antibacterial (*Staphylococcus aureus*, penicillin-sensitive strain ATCC 25923, MIC = 8 $\mu$ g/mL; Methicillin-resistant strain MRSA SK1, MIC = 8 $\mu$ g/mL)<sup>[4422]</sup>. **Source:** DA YE TENG HUANG *Garcinia xanthochymus*, LUAN YE TENG HUANG *Garcinia ovalifolia*, MAN TENG HUANG *Garcinia mannii*, TIAN SHAN ZHU ZI *Garcinia dulcis* (flower). **Ref:** 658, 660, 4422.

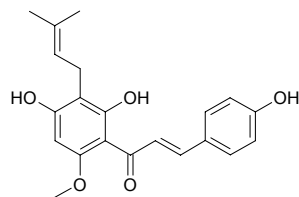


**22760 Xanthochymusside**

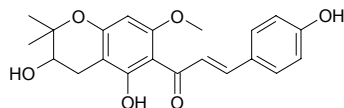
[31654-49-6]  $C_{36}H_{32}O_{16}$  (720.65). mp 219°C. **Pharm:** Antioxidant (DPPH radical scavenger, 10  $\mu\text{mol/L}$ , ScRt = 36%; control BHT, 10  $\mu\text{mol/L}$ , ScRt = 43%,  $IC_{50}$  = 19.00  $\mu\text{mol/L}$ )<sup>[4422]</sup>. **Source:** SHAN ZHU ZI *Garcinia multiflora*, TIAN SHAN ZHU ZI *Garcinia dulcis* (flower). **Ref:** 6, 1521, 4422.

**22761 Xanthohumol**

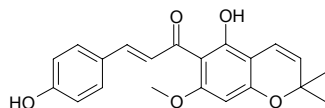
[569-83-5]  $C_{21}H_{22}O_5$  (354.41). mp 172°C. **Pharm:** Cytotoxic (inhibits cellular hyperplasia of mammary cancer, colon cancer and ovary cancer A-2780); anti-inflammatory (NO production inhibitor, *in vitro*, macrophage RAW264.7 cells, induced by LPS/IFN- $\gamma$ ,  $IC_{50}$  = 8.3  $\mu\text{mol/L}$ , without showing cytotoxicity at concentrations lower than 10  $\mu\text{mol/L}$ , cell viability > 95%)<sup>[4795]</sup>. **Source:** KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*], PI JIU HUA *Humulus lupulus* (strobile)<sup>[4789,4795]</sup>. **Ref:** 6, 1582, 4789, 4795.

**22762 Xanthohumol B**

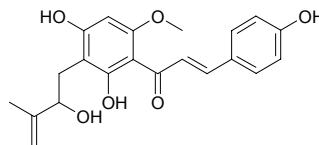
$C_{21}H_{22}O_6$  (370.41). **Pharm:** Anti-inflammatory (NO production inhibitor, *in vitro*, macrophage RAW264.7 cells, induced by LPS/IFN- $\gamma$ ,  $IC_{50}$  = 5.6  $\mu\text{mol/L}$ , without showing cytotoxicity at concentrations lower than 10  $\mu\text{mol/L}$ , cell viability > 95%)<sup>[4795]</sup>. **Source:** PI JIU HUA *Humulus lupulus* (strobile)<sup>[4789,4795]</sup>. **Ref:** 4789, 4795.

**22763 Xanthohumol C**

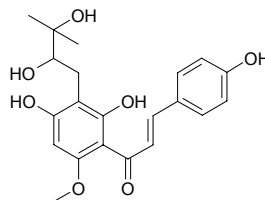
$C_{21}H_{20}O_5$  (352.39). **Source:** PI JIU HUA *Humulus lupulus* (strobile). **Ref:** 4789.

**22764 Xanthohumol D**

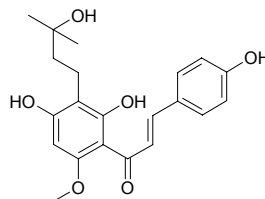
$C_{21}H_{22}O_6$  (370.41). **Pharm:** Anti-inflammatory (NO production inhibitor, *in vitro*, macrophage RAW264.7 cells, induced by LPS/IFN- $\gamma$ ,  $IC_{50}$  = 9.4  $\mu\text{mol/L}$ , without showing cytotoxicity at concentrations lower than 10  $\mu\text{mol/L}$ , cell viability > 95%)<sup>[4795]</sup>. **Source:** PI JIU HUA *Humulus lupulus* (strobile)<sup>[4789,4795]</sup>. **Ref:** 4789, 4795.

**22765 Xanthohumol G**

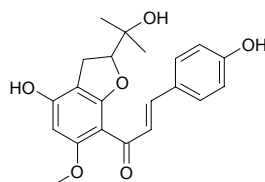
$\pm$ {(2*E*)-1-[2,4-Dihydroxy-3-(2,3-dihydroxy-3-methylbutyl)-6-methoxyphenyl]-3-(4-hydroxyphenyl)-2-propen-1-one}  $C_{21}H_{24}O_7$  (388.42). Yellow-orange powder. **Source:** PI JIU HUA *Humulus lupulus* (strobile). **Ref:** 4789.

**22766 Xanthohumol H**

(2*E*)-1-[2,4-Dihydroxy-3-(3-hydroxy-3-methylbutyl)-6-methoxyphenyl]-3-(4-hydroxyphenyl)-2-propen-1-one  $C_{21}H_{24}O_6$  (372.42). Yellow-orange solid. **Source:** PI JIU HUA *Humulus lupulus* (strobile). **Ref:** 4789.

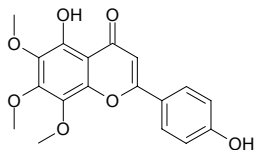
**22767 Xanthohumol I**

(2*E*)-1-[2,3-Dihydro-4-hydroxy-2-(1-hydroxy-1-methylethyl)-6-methoxy-5-benzofuranyl]-3-(4-hydroxyphenyl)-2-propen-1-one; XH-I  $C_{21}H_{22}O_6$  (370.41). Orange powder. **Source:** PI JIU HUA *Humulus lupulus* (strobile). **Ref:** 4789.

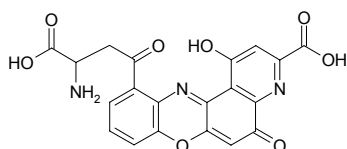


**22768 Xanthomicrol**

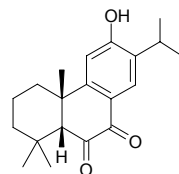
[16545-23-6] C<sub>18</sub>H<sub>16</sub>O<sub>7</sub> (344.32). mp 227~230°C. **Pharm:** Cytotoxic (KB, ED<sub>50</sub> = 0.7~100µg/mL); antineoplastic (Friend virus leukemia, T/C < 140%); antispasmodic; antifungal (solanum-shape *Fusarium*, *Aspergillus parasiticus*, *Oidium tropioale*). **Source:** LA BO HE *Mentha piperita*, MEI SHANG LU *Phytolacca americana* [Syn. *Phytolacca decandra*], SU DA QI GAN JU *Citrus sudachii*, *Baccharis* spp., *Sideritis* spp., *Thymus* spp. **Ref:** 6, 1767, 1769, 1770, 1521.

**22769 Xanthomatin**

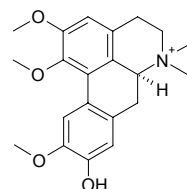
[521-58-4] C<sub>20</sub>H<sub>13</sub>N<sub>3</sub>O<sub>8</sub> (423.32). **Source:** YUAN CAN ZI *Bombyx mori*. **Ref:** 6.

**22770 Xanthoperol**

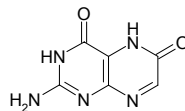
[564-23-8] C<sub>20</sub>H<sub>26</sub>O<sub>3</sub> (314.43). mp (+) 255~270°C (dec). **Source:** DU SONG SHI *Juniperus rigida*. **Ref:** 6.

**22771 Xanthoplanine**

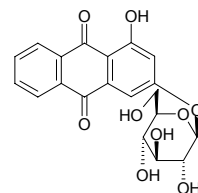
[6872-88-4] C<sub>21</sub>H<sub>26</sub>NO<sub>4</sub><sup>+</sup> (356.45). **Source:** ZHU YE JIAO *Zanthoxylum planispinum*, ZHU YE JIAO GEN *Zanthoxylum planispinum*, MA WEI LIAN *Thalictrum foliolosum*. **Ref:** 6, 660.

**22772 Xanthopterin**

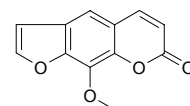
[119-44-8] C<sub>6</sub>H<sub>5</sub>N<sub>5</sub>O<sub>2</sub> (179.14). mp > 410°C, (> 360°C, carbonization). **Source:** JIN YU *Carassius auratus*. **Ref:** 6.

**22773 Xanthopurpurin-3-O-β-D-glucoside**

1,3-Dihydroxy-9,10-anthraquinone 3-O-β-D-glucoside C<sub>20</sub>H<sub>18</sub>O<sub>9</sub> (402.36). **Source:** QIAN CAO GEN *Rubia cordifolia*. **Ref:** 660.

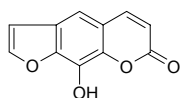
**22774 Xanthotoxin**

8-Methoxyxpsoralen [298-81-7] C<sub>12</sub>H<sub>8</sub>O<sub>4</sub> (216.20). mp 148°C. **Pharm:** Antibacterial (broad spectrum, hmn *Mycobacterium tuberculosis*, EC = 100µg/mL, enhances antibacterial action of phage by over 100 times); photosensitizer; antispasmodic; piscicide; cytotoxic (24h: HL-60, IC<sub>50</sub> > 50µg/mL, control Adriamycin IC<sub>50</sub> < 0.10µg/mL; P<sub>388</sub>, IC<sub>50</sub> = 50µg/mL, Adriamycin IC<sub>50</sub> < 0.10µg/mL; CoLo205, IC<sub>50</sub> = 35.3µg/mL, Adriamycin IC<sub>50</sub> = 0.63µg/mL; HeLa, IC<sub>50</sub> > 50µg/mL, Adriamycin IC<sub>50</sub> = 0.15µg/mL)<sup>[5486]</sup>; AChE inhibitor (*in vitro*, IC<sub>50</sub> = 54µmol/L)<sup>[3058]</sup>; LD<sub>50</sub> (mus, orl) ≥ 1000mg/kg, (rat, orl) ≥ 4000mg/kg, (rat, im) = 160mg/kg, (rat, ip) = 470mg/kg. **Source:** AO PA CAO *Oppopanax chironium* (root), BAI HUA QIAN HU *Peucedanum praeruptorum* (root: mean content = 0.0105%)<sup>[5508]</sup>, BU GU ZHI *Psoralea corylifolia*, CHAO XIAN DANG GUI *Angelica gigas* (underground part)<sup>[3058]</sup>, DA A MI *Ammi majus*, DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*], HANG BAI ZHI *Angelica taiwaniana*, NIU FANG FENG *Heracleum sphondylium*, OU FANG FENG *Pastinaca sativa*, SHE CHUANG ZI *Cnidium monnieri* (fruit), SHE CHUANG ZI *Cnidium monnieri* (ripe seed: mean content of 26 origins = 0.129%)<sup>[5508]</sup>, YAO YONG DANG GUI *Angelica officinalis*, YUAN DANG GUI *Angelica archangelica*, YUN NAN QIANG HUO *Pleurospermum rivulorum*, *Niphogeton ternata*, *Fagara* sp., *Ruta* sp. **Ref:** 5, 558, 658, 3058, 4156, 4071, 5486, 5501, 5508.

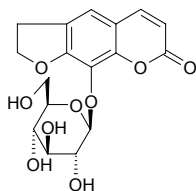


**22775 Xanthotoxol**

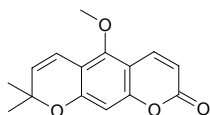
[2009-24-7] C<sub>11</sub>H<sub>6</sub>O<sub>4</sub> (202.17). mp 251~252°C. **Pharm:** Cytotoxic (HeLa); antioxidant (DPPH scavenger, EC<sub>50</sub> = 25.7 μg/mL = 192 μmol/L, control Ascorbic acid, EC<sub>50</sub> = 1.6 μg/mL = 9.1 μmol/L)<sup>[4154]</sup>; NO Production inhibitor (LPS-activated mouse peritoneal macrophages, 100 μmol/L, InRt = (45.1±4.0)%, control L-NMMA, 100 μmol/L, InRt = (79.2±0.9)%)<sup>[4454]</sup>. **Source:** BEI SHA SHEN *Glehnia littoralis* (underground part), FEN CHA DANG GUI *Angelica furcijuga* (flower), GOU JU *Poncirus trifoliata*, HANG BAI ZHI *Angelica taiwaniana*, OU FANG FENG *Pastinaca sativa*, QIANG HUO *Notopterygium incisum*, SHE CHUANG ZI *Cnidium monnieri* (ripe seed: mean content of 4 samples = 0.015%)<sup>[5508]</sup>, YA ZHOU DU HUO *Heracleum lanatum* var. *asiaticum*, YUAN DANG GUI *Angelica archangelica*, YUN NAN QIANG HUO *Pleurospermum rivulorum*, YUN QIAN HU *Peucedanum rubricaulis*. **Ref:** 2, 177, 325, 507, 558, 658, 660, 4154, 4454, 5508.

**22776 Xanthotoxol 8-O-β-D-glucopyranoside**

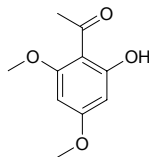
C<sub>17</sub>H<sub>16</sub>O<sub>9</sub> (366.33). Amorphous powder, [α]<sub>D</sub><sup>22</sup> = -24°. **Source:** BEI SHA SHEN *Glehnia littoralis* (fruit). **Ref:** 3525.

**22777 Xanthoxyletin**

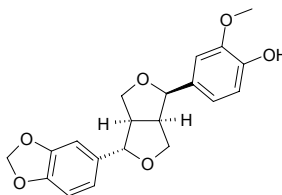
Xanthoxylin N [84-99-1] C<sub>15</sub>H<sub>14</sub>O<sub>4</sub> (258.28). **Pharm:** Antineoplastic (Raji cells, antitumor promotor, *in vivo*, inhibits TPA-induced EBV-EA activation, compound concentration = 500 mol ratio/32 pmol TPA, EBV-EA-positive cells = (44.6±1.3)% (viability > 80%); β-Carotene, EBV-EA-positive cells = (34.3±1.1)% (viability > 80%); Curcumin, EBV-EA-positive cells = (22.8±1.8)% (viability > 80%); IC<sub>50</sub> = 463 mol ratio/32 pmol TPA, β-Carotene, IC<sub>50</sub> = 400 mol ratio/32 pmol TPA, Curcumin IC<sub>50</sub> = 341 mol ratio/32 pmol TPA)<sup>[5048]</sup>; cytotoxic (inhibits biosynthesis of NDA by means of blocking thymidine to go into leukemia cell HL-60); antibacterial inactive (*Mycobacterium tuberculosis*, control Isoniazide, MIC = (0.040~0.090) μg/mL, Kanamycin sulfate, MIC = 2.0~5.0 μg/mL)<sup>[5367]</sup>; antifungal inactive (*Candida albicans*, control Amphotericin, IC<sub>50</sub> = 0.01 μg/mL)<sup>[5367]</sup>. **Source:** CHENG ZI *Citrus junos*, SHAN HUANG PI *Clausena excavata*, MEI ZHOU HUA JIAO *Zanthoxylum americanum* [Syn. *Xanthoxylum americanum*], *Citrus taurunana*, *Citrus hassaku*. **Ref:** 703, 2176, 5048, 5367.

**22778 Xanthoxylin**

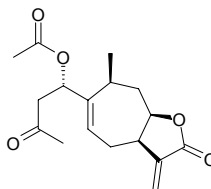
Phloracetophenone [90-24-4] C<sub>10</sub>H<sub>12</sub>O<sub>4</sub> (196.20). **Pharm:** Cytotoxic (EAC); prostaglandin biosynthetase inhibitor; 5-lipoxygenase inhibitor. **Source:** AI NA XIANG *Blumea balsamifera*, DUAN YE JUAN HAO *Artemisia brevifolia*, MA FENG MU *Hippomane mancinella*, WU JIU MU GEN PI *Sapium sebiferum*. **Ref:** 6, 658.

**22779 Xanthoxylol**

[54983-95-8] C<sub>20</sub>H<sub>20</sub>O<sub>6</sub> (356.38). Crystals, mp 140~142°C, [α]<sub>D</sub> = -117° (CHCl<sub>3</sub>). **Pharm:** Cancer-preventing activity. **Source:** HU JIAO HUA JIAO *Zanthoxylum piperitum*, QIANG DAO YAO *Hypoestes purpurea* [Syn. *Justicia purpurea*; *Hypoestes sinica*] (whole herb: yield = 0.00073% dw)<sup>[4712]</sup>, occurs in many human foods. **Ref:** 1521, 1582, 4712.

**22780 Xanthumin**

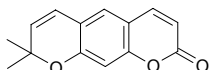
[26791-72-0] C<sub>17</sub>H<sub>22</sub>O<sub>5</sub> (306.36). mp 101°C (ether-chloroform), 97.0~98.5 °C (ether). **Pharm:** Insect antifeedant. **Source:** CAI SI CANG ER *Xanthium chasei*, CANG ER *Xanthium sibiricum* [Syn. *Xanthium strumarium*], XI FANG CANG ER *Xanthium occidentale*, ZHONG GUO CANG ER *Xanthium chinense*. **Ref:** 6, 658.



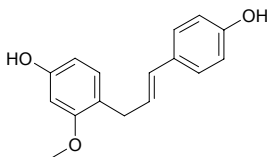


**22781 Xanthyletin**

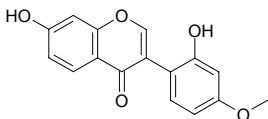
[553-19-5]  $C_{14}H_{12}O_3$  (228.25). mp 131.5°C, bp 140~145°C/0.1mmHg. **Pharm:** Antibacterial; antispasmodic; phyto-growth inhibitor (100µg/mL, *Amaranthus hypochondriacus*, InRt = (0.0±0.0)%,  $p < 0.05$ ; *E. crusgalli*, InRt = (69.7±2.1)%,  $p < 0.05$ )<sup>[5253]</sup>; cytotoxic (*in vitro*, A549, ED<sub>50</sub> = 79.8µg/mL, control Adriamycin, ED<sub>50</sub> = 0.0322µg/mL; MCF7, ED<sub>50</sub> = 18.4µg/mL, Adriamycin, ED<sub>50</sub> = 0.0204µg/mL; HT29, ED<sub>50</sub> = 47.4µg/mL, Adriamycin, ED<sub>50</sub> = 0.0421µg/mL; A498, ED<sub>50</sub> = 64.8µg/mL, Adriamycin, ED<sub>50</sub> = 0.00348µg/mL; PC3, ED<sub>50</sub> = 45.2µg/mL, Adriamycin, ED<sub>50</sub> = 0.241µg/mL; PACA-2, ED<sub>50</sub> = 5.5µg/mL, Adriamycin, ED<sub>50</sub> = 0.0120µg/mL)<sup>[5253]</sup>; cytotoxic (HeLa *in vitro*, ID<sub>50</sub> = 10µg/mL); antineoplastic (Raji cells, antitumor promotor, *in vivo*, inhibits TPA-induced EBV-EA activation, compound concentration = 500mol ratio/32 pmol TPA, EBV-EA-positive cells = (48.4±1.1)% (viability > 80%), β-Carotene, EBV-EA-positive cells = (34.3±1.1)% (viability > 80%), Curcumin, EBV-EA-positive cells = (22.8±1.8)% (viability > 80%); IC<sub>50</sub> = 479mol ratio/32 pmol TPA, β-Carotene, IC<sub>50</sub> = 400mol ratio/32 pmol TPA, Curcumin IC<sub>50</sub> = 341mol ratio/32 pmol TPA)<sup>[5048]</sup>; AChE inhibitor (*in vitro*, IC<sub>50</sub> = 150µmol/L)<sup>[3058]</sup>. **Source:** CHOU CAO *Ruta graveolens*, CHU YE HUA JIAO *Zanthoxylum ailanthoides*, CHU YE HUA JIAO PI *Zanthoxylum ailanthoides*, JIAO GAN *Citrus tankan*, LAI MENG *Citrus aurantifolia*, LI HUA JU *Citrus tachibana*, MEI ZHOU HUA JIAO *Zanthoxylum americanum* [Syn. *Xanthoxylum americanum*], NING MENG *Citrus limon*, NING MENG GEN *Citrus limon*, SAN YE TENG JU *Luvunga scandens*, CHAO XIAN DANG GUI *Angelica gigas* (underground part)<sup>[3058]</sup>, YAN JIAO CAO *Boeninghausenia albiflora*, *Citrus medica* var. *etrog*, *Citrus rugulosa*, *Citrus jambhiri*, *Citrus tamurana*, *Citrus hassaku*, *Stauranthus perforatus* (root). **Ref:** 5, 6, 658, 660, 3058, 5048, 5253.

**22782 Xenognosin A**

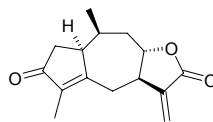
[7690-79-4]  $C_{16}H_{16}O_3$  (256.30). **Pharm:** Stress-induced plant metabolite. **Source:** WAN DOU *Pisum sativum*. **Ref:** 658.

**22783 Xenognosin B**

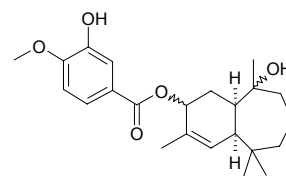
2',7-Dihydroxy-4'-methoxyisoflavone [1890-99-9]  $C_{16}H_{12}O_5$  (284.27). **Source:** JIANG ZHEN XIANG *Dalbergia odorifera*. **Ref:** 716.

**22784 Xerantholide**

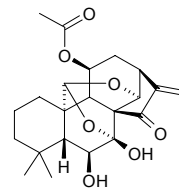
[65017-97-2]  $C_{15}H_{18}O_3$  (246.31). mp 175~177°C. **Pharm:** Cytotoxic (HeLa, ID<sub>50</sub> = 1.45µg/mL, KB, ED<sub>50</sub> = 1.503µg/mL); insect antifeedant. **Source:** CHANG TONG HAN HUA *Xeranthemum cylindraceum*. **Ref:** 5, 658.

**22785 Xeroferin**

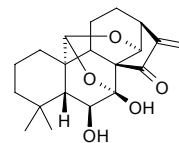
[69184-32-3]  $C_{22}H_{30}O_8$  (422.48). Crystals, (acetic ether-cyclohexane), mp 118~120°C. **Source:** *Ferula xeromorpha* **Ref:** 2273.

**22786 Xerophilusin A**

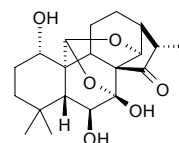
$C_{22}H_{28}O_7$  (404.46). Amorphous powder,  $[\alpha]_D^{23.4} = -139.4^\circ$  ( $c = 0.57$ , MeOH). **Source:** HAN SHENG XIANG CHA CAI *Isodon xerophilus*. **Ref:** 4067.

**22787 Xerophilusin B**

$C_{20}H_{26}O_5$  (346.43). mp 173~174°C,  $[\alpha]_D^{22.9} = -150.0^\circ$  ( $c = 0.46$ , pyridine). **Source:** HAN SHENG XIANG CHA CAI *Isodon xerophilus*. **Ref:** 4067.

**22788 Xerophilusin C**

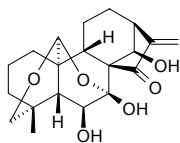
[272459-38-8]  $C_{20}H_{28}O_6$  (364.44). **Source:** HAN SHENG XIANG CHA CAI *Isodon xerophilus*. **Ref:** 4067.



**22789 Xerophilusin D**

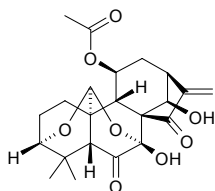
$C_{20}H_{26}O_6$  (362.43). mp 209~210°C,  $[\alpha]_D^{23.1} = -120.8^\circ$  ( $c = 0.389$ , pyridine).

Source: HAN SHENG XIANG CHA CAI *Isodon xerophilus*. Ref: 4067.

**22790 Xerophilusin E**

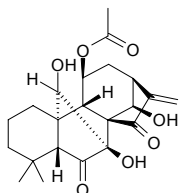
$C_{22}H_{26}O_8$  (418.45). mp 223~225°C,  $[\alpha]_D^{20} = -32.0^\circ$  ( $c = 0.0625$ , MeOH).

Source: HAN SHENG XIANG CHA CAI *Isodon xerophilus*. Ref: 4067.

**22791 Xerophilusin F**

$C_{22}H_{28}O_7$  (404.46). mp 193~195°C,  $[\alpha]_D^{22.8} = +12.2^\circ$  ( $c = 0.308$ , pyridine).

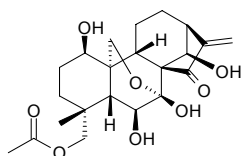
Source: HAN SHENG XIANG CHA CAI *Isodon xerophilus*. Ref: 4067.

**22792 Xerophilusin G**

1 $\beta$ ,6 $\beta$ ,7 $\beta$ ,14 $\beta$ -Tetrahydroxy-19-acetoxy-7 $\alpha$ ,20-epoxy-ent-kaur-16-en-15-one

$C_{22}H_{30}O_8$  (422.48). Colorless acicular crystals (MeOH), mp 216~218°C,

$[\alpha]_D^{22.7} = -116.3^\circ$  ( $c = 0.432$ , pyridine). Pharm: Cytotoxic (K562,  $IC_{50} = 138.84\mu\text{g/mL}$ , control Mitoxantrone,  $IC_{50} = 0.29\mu\text{g/mL}$ ; HL-60,  $IC_{50} = 3.93\mu\text{g/mL}$ , Mitoxantrone,  $IC_{50} = 0.29\mu\text{g/mL}$ )<sup>[5182]</sup>. Source: HAN SHENG XIANG CHA CAI *Isodon xerophilus* (leaf). Ref: 894, 4067, 5182.

**22793 Xerophilusin I**

1 $\beta$ ,6 $\beta$ ,7 $\beta$ -Trihydroxy-7 $\alpha$ ,20-epoxy-ent-kaur-16-en-15-one  $C_{20}H_{28}O_5$  (348.44).

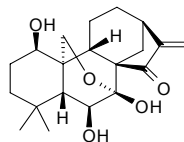
White Amorphous powder,  $[\alpha]_D^{22.7} = -146.3^\circ$  ( $c = 0.405$ , pyridine). Pharm:

Cytotoxic (K562,  $IC_{50} = 2.75\mu\text{g/mL}$ , control Mitoxantrone,  $IC_{50} = 0.29\mu\text{g/mL}$ ;

HL-60,  $IC_{50} = 0.19\mu\text{g/mL}$ , Mitoxantrone,  $IC_{50} = 0.29\mu\text{g/mL}$ ; MKN28,  $IC_{50} =$

$0.07\mu\text{g/mL}$ , Mitoxantrone,  $IC_{50} = 0.02\mu\text{g/mL}$ )<sup>[5182]</sup>. Source: HAN SHENG

XIANG CHA CAI *Isodon xerophilus* (leaf). Ref: 894, 4067, 5182.

**22794 Xerophilusin J**

$C_{22}H_{30}O_8$  (422.48). Colorless needles (MeOH), mp 165~166°C,  $[\alpha]_D^{23} = -80.7^\circ$

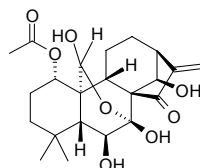
( $c = 0.41$ ,  $C_5H_5N$ ); mp 165~166°C,  $[\alpha]_D^{22.9} = -80.7^\circ$  ( $c = 0.409$ , pyridine).

Pharm: Cytotoxic (K562,  $IC_{50} = 4.26\mu\text{g/mL}$ , control Mitoxantrone,  $IC_{50} =$

$0.29\mu\text{g/mL}$ ; HL-60,  $IC_{50} = 2.08\mu\text{g/mL}$ , Mitoxantrone,  $IC_{50} = 0.29\mu\text{g/mL}$ ;

MKN28,  $IC_{50} = 1.54\mu\text{g/mL}$ , Mitoxantrone,  $IC_{50} = 0.02\mu\text{g/mL}$ )<sup>[5182]</sup>. Source: HAN

SHENG XIANG CHA CAI *Isodon xerophilus*. Ref: 4067, 5182.

**22795 Xerophilusin K**

$C_{22}H_{30}O_7$  (406.48). Colorless needles (MeOH), mp 189~190°C,  $[\alpha]_D^{23} =$

$-44.3^\circ$  ( $c = 0.30$ ,  $C_5H_5N$ ); mp 189~190°C,  $[\alpha]_D^{23} = -44.3^\circ$  ( $c = 0.299$ ,

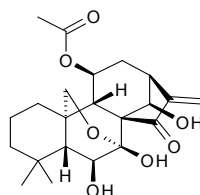
pyridine). Pharm: Cytotoxic (K562,  $IC_{50} = 2.95\mu\text{g/mL}$ , control Mitoxantrone,

$IC_{50} = 0.29\mu\text{g/mL}$ ; HL-60,  $IC_{50} = 2.29\mu\text{g/mL}$ , Mitoxantrone,  $IC_{50} =$

$0.29\mu\text{g/mL}$ ; HCT,  $IC_{50} = 15.35\mu\text{g/mL}$ , Mitoxantrone,  $IC_{50} = 1.54\mu\text{g/mL}$ ;

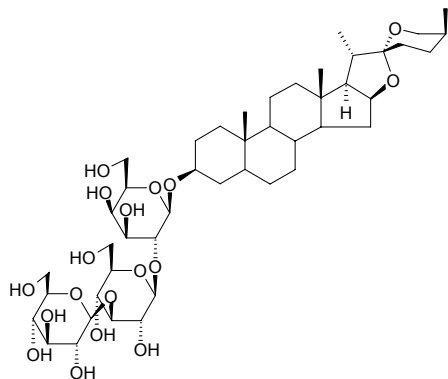
MKN28,  $IC_{50} = 2.23\mu\text{g/mL}$ , Mitoxantrone,  $IC_{50} = 0.02\mu\text{g/mL}$ )<sup>[5182]</sup>. Source:

HAN SHENG XIANG CHA CAI *Isodon xerophilus*. Ref: 4067, 5182.

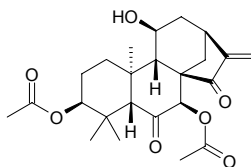


**22796 Xilingsaponin B**

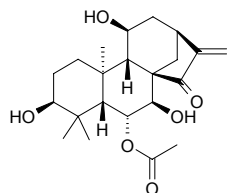
Sarsasapogenin-3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-galactopyranoside C<sub>45</sub>H<sub>74</sub>O<sub>18</sub> (903.08). White amorphous powder crystals, mp 178~180°C (dec),  $[\alpha]_D^{20} = -22.96^\circ$  ( $c = 0.6$ , MeOH). Source: ZHI MU *Anemarrhena asphodeloides*. Ref: 679.

**22797 Xindongnin A**

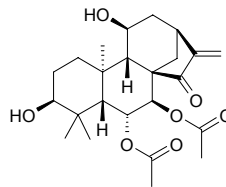
C<sub>24</sub>H<sub>32</sub>O<sub>7</sub> (432.52). mp 212~214°C,  $[\alpha]_D^{13} = -44.2^\circ$  ( $c = 0.86$ , C<sub>5</sub>H<sub>5</sub>N),  $[\alpha]_D^{25.7} = -11.8^\circ$  ( $c = 0.338$ , MeOH). Pharm: Cytotoxic (hmn tumor K562 cells, IC<sub>50</sub> = 0.9 $\mu$ g/mL, control *cis*-Platin IC<sub>50</sub> = 1.1 $\mu$ g/mL)<sup>[4299,4955]</sup>. Source: DONG LING CAO *Rabdosia rubescens*. Ref: 4067, 4299, 4955.

**22798 Xindongnin B**

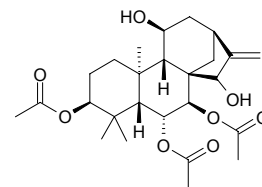
C<sub>22</sub>H<sub>32</sub>O<sub>6</sub> (392.50). mp 269~271°C,  $[\alpha]_D = -72.5^\circ$  ( $c = 0.69$ , C<sub>5</sub>H<sub>5</sub>N),  $[\alpha]_D^{25.8} = -67.8^\circ$  ( $c = 0.369$ , MeOH). Pharm: Cytotoxic (hmn tumor K562 cells, IC<sub>50</sub> = 1.2 $\mu$ g/mL, control *cis*-Platin IC<sub>50</sub> = 1.1 $\mu$ g/mL)<sup>[4299,4955]</sup>; cytotoxic (*in vitro*, BGC823 hmn tumor cells, IC<sub>50</sub> = 9.45 $\mu$ g/mL, control VCR, IC<sub>50</sub> = 0.066 $\mu$ g/mL)<sup>[4760]</sup>. Source: BAO YE XIANG CHA CAI *Isodon melissoides* (aerial parts: yield = 0.0026%dw)<sup>[4760]</sup>, DONG LING CAO *Rabdosia rubescens*. Ref: 4067, 4299, 4760, 4955.

**22799 Xindongnin C**

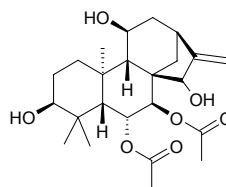
C<sub>24</sub>H<sub>34</sub>O<sub>7</sub> (434.53). Colorless crystals (MeOH), mp 304~306°C,  $[\alpha]_D^{21.7} = -72.5^\circ$  ( $c = 0.401$ , acetone). Pharm: Cytotoxic (hmn tumor K562 cells, IC<sub>50</sub> = 5.6 $\mu$ g/mL, control *cis*-Platin IC<sub>50</sub> = 1.1 $\mu$ g/mL). Source: DONG LING CAO *Rabdosia rubescens* (leaf). Ref: 4955.

**22800 Xindongnin D**

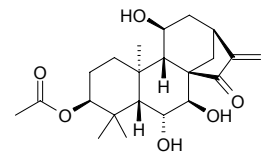
C<sub>26</sub>H<sub>38</sub>O<sub>8</sub> (478.59). White amorphous powder,  $[\alpha]_D^{22} = -9.26^\circ$  ( $c = 0.108$ , acetone). Pharm: Cytotoxic inactive (hmn tumor K562 cells). Source: DONG LING CAO *Rabdosia rubescens* (leaf). Ref: 4955.

**22801 Xindongnin E**

C<sub>24</sub>H<sub>36</sub>O<sub>7</sub> (436.55). White amorphous powder,  $[\alpha]_D^{24.5} = -3.1^\circ$  ( $c = 0.324$ , MeOH). Pharm: Cytotoxic inactive (hmn tumor K562 cells). Source: DONG LING CAO *Rabdosia rubescens* (leaf). Ref: 4955.

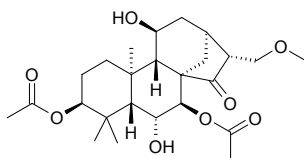
**22802 Xindongnin F**

C<sub>22</sub>H<sub>32</sub>O<sub>6</sub> (392.90). White amorphous powder,  $[\alpha]_D^{22} = -17.0^\circ$  ( $c = 0.470$ , MeOH). Pharm: Cytotoxic (hmn tumor K562 cells, IC<sub>50</sub> = 7.3 $\mu$ g/mL, control *cis*-Platin, IC<sub>50</sub> = 1.1 $\mu$ g/mL). Source: DONG LING CAO *Rabdosia rubescens* (leaf). Ref: 4955.

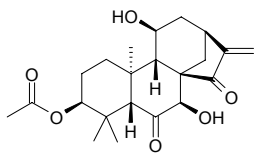


**22803 Xindongnin G**

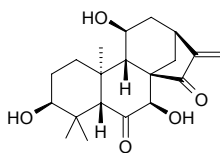
$C_{25}H_{38}O_8$  (466.58). White amorphous powder,  $[\alpha]_D^{22.2} = -17.0^\circ$  ( $c = 0.470$ , MeOH). **Pharm:** Cytotoxic inactive (hmn tumor K562 cells). **Source:** DONG LING CAO *Rabdosia rubescens* (leaf). **Ref:** 4955.

**22804 Xindongnin H**

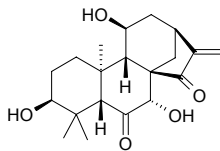
$C_{22}H_{30}O_6$  (390.48). White amorphous powder,  $[\alpha]_D^{25} = -11.6^\circ$  ( $c = 0.30$ , MeOH). **Source:** DONG LING CAO *Rabdosia rubescens*. **Ref:** 4299.

**22805 Xindongnin I**

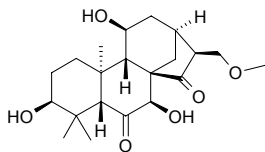
$C_{26}H_{28}O_5$  (348.44). White amorphous powder,  $[\alpha]_D^{25} = -51.6^\circ$  ( $c = 0.19$ , MeOH). **Source:** DONG LING CAO *Rabdosia rubescens*. **Ref:** 4299.

**22806 Xindongnin J**

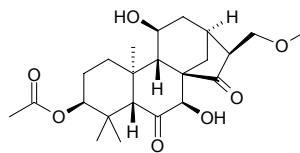
$C_{20}H_{28}O_5$  (348.44). White amorphous powder,  $[\alpha]_D^{25} = -54.1^\circ$  ( $c = 0.22$ , MeOH). **Source:** DONG LING CAO *Rabdosia rubescens*. **Ref:** 4299.

**22807 Xindongnin K**

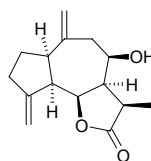
$C_{21}H_{32}O_6$  (380.49). White amorphous powder,  $[\alpha]_D^{25} = -30.7^\circ$  ( $c = 0.29$ , MeOH). **Source:** DONG LING CAO *Rabdosia rubescens*. **Ref:** 4299.

**22808 Xindongnin L**

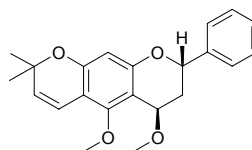
$C_{23}H_{34}O_7$  (422.52). White amorphous powder,  $[\alpha]_D^{25} = -11.8^\circ$  ( $c = 0.21$ , MeOH). **Source:** DONG LING CAO *Rabdosia rubescens*. **Ref:** 4299.

**22809 Xuelianlactone**

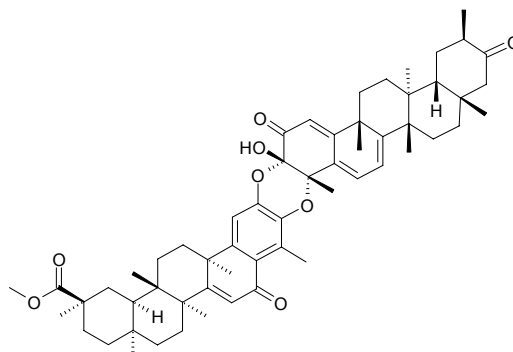
$C_{15}H_{20}O_3$  (248.32). Colorless acicular crystals, mp 129–131°C,  $[\alpha]_D = +32.34^\circ$ . **Source:** XUE LIAN *Saussurea involucrata*. **Ref:** 62.

**22810 Xuulanin**

4 $\beta$ ,5-Dimethoxy-6''-dimethyl-2H-pyrano-(2'',3'':7,6)-flavan  $C_{22}H_{24}O_4$  (352.43). Yellow oil. **Source:** *Lonchocarpus xuul* (stem cortex). **Ref:** 3973.

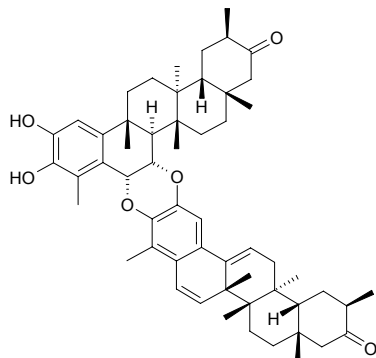
**22811 Xuxuarine Fa**

$C_{58}H_{74}O_8$  (899.23). Yellow amorphous solid. **Source:** QIU SHI MEI DENG *Maytenus chuchuhuasca*(bark). **Ref:** 4295.

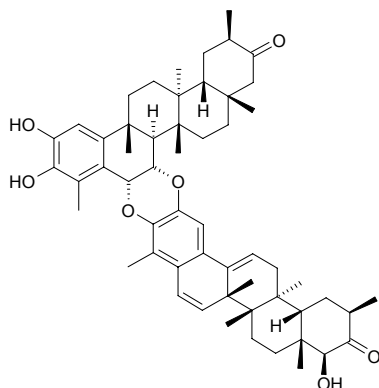


**22812 Xuxuasin A**

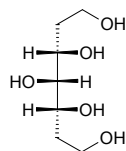
$C_{56}H_{72}O_6$  (841.19). Colorless amorphous solid. Source: QIU SHI MEI DENG *MU Maytenus chuchuhuasca*. Ref: 2586.

**22813 Xuxuasin B**

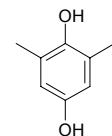
$C_{56}H_{72}O_7$  (857.19). Colorless amorphous solid. Source: QIU SHI MEI DENG *MU Maytenus chuchuhuasca*. Ref: 2586.

**22814 Xylitol**

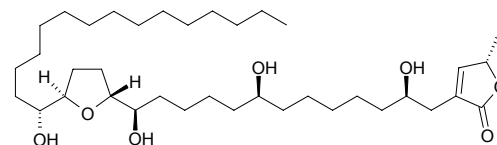
Klinit [87-99-0]  $C_7H_{16}O_5$  (180.20). mp 93–94°C, bp 215–217°C/1mmHg. Source: MO GU *Agaricus campestris*. Ref: 6.

**22815 m-Xylohydroquinone**

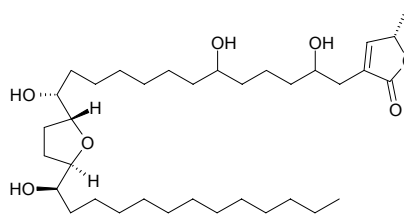
[654-42-2]  $C_8H_{10}O_2$  (138.16). Acicular crystals (dimethyl benzene), mp 149–150°C. Pharm: Antibacterial (*Staphylococcus aureus*, MIC = 62.5 µg/mL; *Enterococcus* sp., MIC = 62.5 µg/mL; *Bacillus typhosus*, MIC = 500 µg/mL); anti-fertility agent (rat); pesticide. Source: WAN DOU *Pisum sativum*. Ref: 661.

**22816 Xylomaticin**

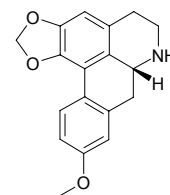
[155969-86-1]  $C_{37}H_{68}O_7$  (624.95). Source: CI GUO FAN LI ZHI *Annona muricata* (seed: yield = 0.0015%dw), FANG XIANG MU BAN SHU *Xylopiia aromatica*. Ref: 1521, 4617.

**22817 Xylopianan**

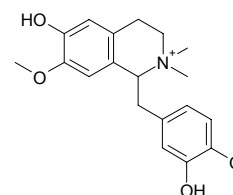
$C_{35}H_{64}O_7$  (596.90). Source: FANG XIANG MU BAN SHU *Xylopiia aromatica*, SHAN FAN LI ZHI *Annona montana* (seed). Ref: 1521, 5035.

**22818 Xylopine**

*O*-Methylanolobine [517-71-5]  $C_{18}H_{17}NO_3$  (295.34). mp 124–125°C,  $[\alpha]_D^{25} = -23.4^\circ$  ( $c = 1.92$ , methanol);  $[\alpha]_D^{22} = -28.18^\circ$  ( $c = 0.001$ , MeOH). Pharm: Adrenergic  $\alpha_1$ -receptor blocker; analgesic; antibacterial (*Bacillus cereus*, *Micrococcus* sp., *Staphylococcus aureus*); antimalarial (*Plasmodium falciparum*, chloroquine-sensitive strain D6, EC = 440ng/mL, chloroquine-endured strain W2, ED<sub>50</sub> = 2270ng/mL); cytotoxic; CNS depressant; platelet aggregation inhibitor (due to collagen, ADP and arachidonic acid); antileishmanial (*Leishmania panamensis*, IC<sub>50</sub> = (6±0.07) µmol/L, control Amphotericin B, IC<sub>50</sub> = (0.1±0.004) µmol/L; *Leishmania mexicana*, IC<sub>50</sub> = (3±0.27) µmol/L, Amphotericin B, IC<sub>50</sub> = (0.1±0.004) µmol/L; macrophage, IC<sub>50</sub> = (112±0.2) µmol/L, SI = 37.3; HFF, IC<sub>50</sub> = (115±0.1) µmol/L, SI = 38.3)<sup>[5424]</sup>. Source: DA YE GUA TAI MU *Guatteria amplifolia*, NIU XIN FAN LI ZHI *Annona reticulata*, XI SHU MU BAN SHU *Xylopiia discreta*. Ref: 658, 900, 5424.

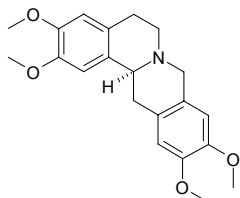
**22819 Xylopinidine**

6,7,3',4'-Tetrasubstituted tetrahydrobenzylisoquinoline alkaloid  $C_{20}H_{26}NO_4^+$  (344.43). Colorless amorphous powder,  $[\alpha]_D^{22} = 0^\circ$  ( $c = 0.36$ , MeOH). Source: XIAO HUA MU BAN SHU *Xylopiia parviflora* (bark and root). Ref: 3794.

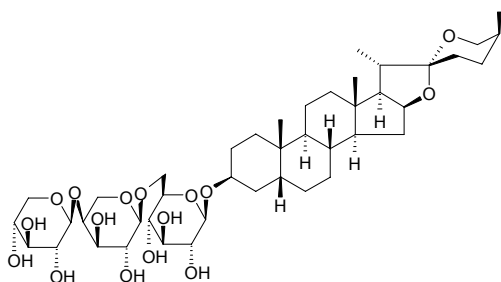


**22820 Xylopinine**

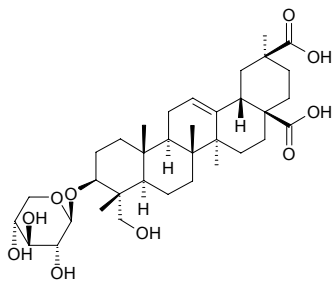
[4126-86-8] C<sub>21</sub>H<sub>25</sub>NO<sub>4</sub> (355.44). Crystals (ethanol), mp 181~182°C, [ $\alpha$ ]<sub>D</sub><sup>15</sup> = -177.2° (*c* = 4.07, chloroform). Pharm: Adrenergic  $\alpha$ -receptor blocker; hypnotic (hypnotic synergism with chloral hydrate, rat, 20mg/kg); LD<sub>50</sub> (mus, sc) = 108mg/kg, LD<sub>50</sub> (mus, iv) = 51.5mg/kg. Source: HUANG YE DI BU RONG *Stephania viridiflavens*. Ref: 661, 658.

**22821 3-O-{\beta-D-Xylopyranosyl(1→4)}[α-L-arabinopyranosyl(1→6)]-β-D-glucopyranosyl-(25S)-5β-spirostan-3β-ol**

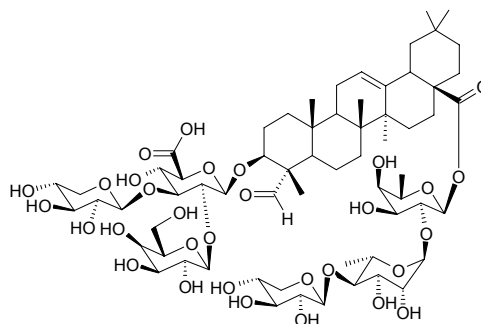
C<sub>43</sub>H<sub>70</sub>O<sub>16</sub> (843.03). [ $\alpha$ ]<sub>D</sub><sup>21</sup> = -28° (*c* = 0.50, MeOH). Source: GE BI TIAN MEN *Asparagus gobicus* (root). Ref: 4975.

**22822 3-O-β-D-Xylopyranosyl-esculentic acid**

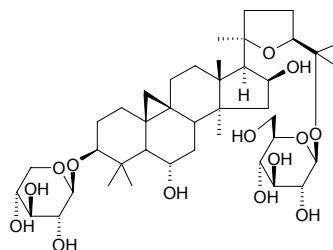
C<sub>35</sub>H<sub>54</sub>O<sub>10</sub> (634.85). White acicular crystals, mp 219~221°C. Source: MEI SHANG LU *Phytolacca americana* [Syn. *Phytolacca decandra*]. Ref: 169.

**22823 3-O-β-D-Xylopyranosyl-(1→3)-[β-D-galactopyranosyl-(1→2)]-β-D-glucuronopyranosylgypsogenin-28-O-β-D-xylopyranosyl-(1→4)-α-L-rhamnopyranosyl-(1→2)-β-D-fucopyranoside**

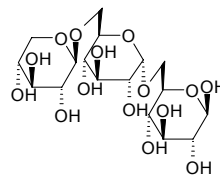
C<sub>64</sub>H<sub>100</sub>O<sub>31</sub> (1365.49). White amorphous powder, [ $\alpha$ ]<sub>D</sub><sup>20</sup> = +13° (*c* = 0.10, MeOH). Source: LAO NIU JIN *Arenaria juncea* (root). Ref: 3095.

**22824 3-O-β-D-Xylopyranosyl-25-O-β-D-glucopyranosyl cycloastragenol**

C<sub>41</sub>H<sub>68</sub>O<sub>14</sub> (784.99). Source: MENG GU HUANG QI *Astragalus mongholicus*. Ref: 660.

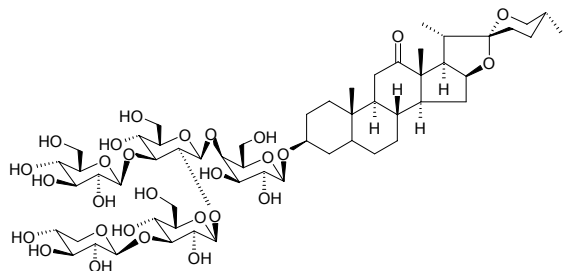
**22825 β-D-Xylopyranosyl-(1→6)-α-D-glucopyranosyl-(1→6)-β-D-glucopyranoside**

C<sub>17</sub>H<sub>30</sub>O<sub>15</sub> (474.42). Colorless powder. Source: XI YANG SHEN *Panax quinquefolium*. Ref: 788.



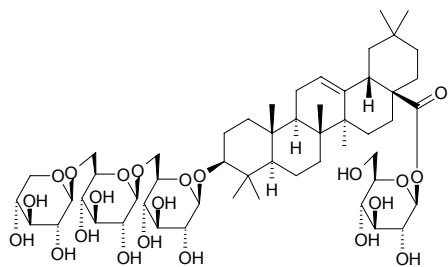
**22826 (25R)-3β-[(O-β-D-Xylopyranosyl-(1→3)-β-D-glucopyranosyl-(1→2)-O-β-D-glucopyranosyl-(1→3)]-O-β-D-glucopyranosyl-(1→4)-β-D-galactopyranosyl]oxy]-5α-spirostan-12-one**

C<sub>56</sub>H<sub>90</sub>O<sub>28</sub> (1211.32). Amorphous solid,  $[\alpha]_D^{26} = -34.0^\circ$  ( $c = 0.10$ , MeOH). **Pharm:** Cytotoxic (*in vitro*, HL-60, IC<sub>50</sub> = 3.9 μg/mL; HSC-2, IC<sub>50</sub> = 7.8 μg/mL; control Etoposide: HL-60, IC<sub>50</sub> = 0.3 μg/mL; HSC-2, IC<sub>50</sub> = 24.4 μg/mL). **Source:** WAN XIANG YU *Polianthes tuberosa* (underground part: yield = 0.0060% dw). **Ref:** 4651.



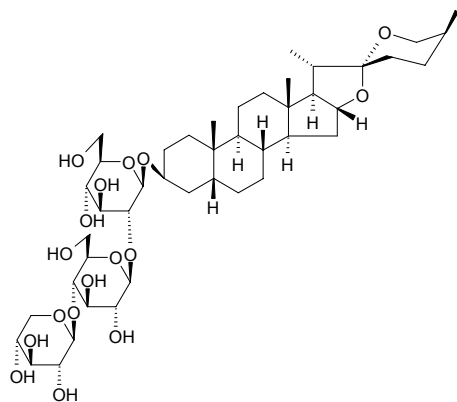
**22827 3-O-β-D-Xylopyranosyl-(1→6)-β-D-glucopyranosyl-(1→6)-β-D-glucopyranosyl oleanolic acid 28-O-β-D-glucopyranosyl ester**

C<sub>53</sub>H<sub>86</sub>O<sub>22</sub> (1075.26). Amorphous powder, mp 212~215°C,  $[\alpha]_D^{20} = -9.6^\circ$  ( $c = 0.2$ , MeOH). **Source:** CHI GENG TENG *Gymnema sylvestre*. **Ref:** 766.



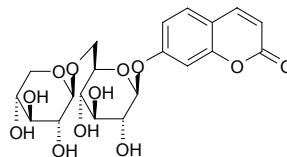
**22828 3-O-β-D-Xylopyranosyl(1→4)-β-D-glucopyranosyl(1→2)-β-D-glucopyranosyl]- (25S)-5β-spirostan-3β-ol**

C<sub>44</sub>H<sub>72</sub>O<sub>17</sub> (873.05). White amorphous powder, mp 274~275°C (MeOH),  $[\alpha]_D^{21} = -40.0^\circ$  ( $c = 0.25$ , C<sub>5</sub>H<sub>5</sub>N). **Pharm:** Cytotoxic (*in vitro*, HO-8910, IC<sub>50</sub> = (5.2±0.1) μmol/L, Vincristine, IC<sub>50</sub> = (25.1±1.9) μmol/L; Bel7405, IC<sub>50</sub> = (5.2±0.3) μmol/L, Vincristine, IC<sub>50</sub> = (31.4±3.4) μmol/L). **Source:** GE BI TIAN MEN *Asparagus gobicus* (root). **Ref:** 4975.



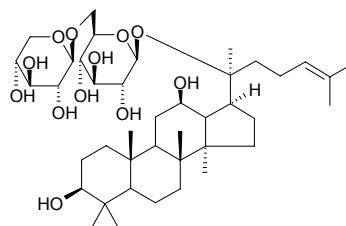
**22829 O-β-D-Xylopyranosyl(1→6)-β-D-glucopyranosyl] 7-hydroxy-coumarin**

C<sub>20</sub>H<sub>24</sub>O<sub>12</sub> (456.41). White amorphous powder,  $[\alpha]_D^{26} = -83.4^\circ$  ( $c = 1.0$ , H<sub>2</sub>O). **Source:** LANG DU *Stellera chamaejasme*. **Ref:** 4159.



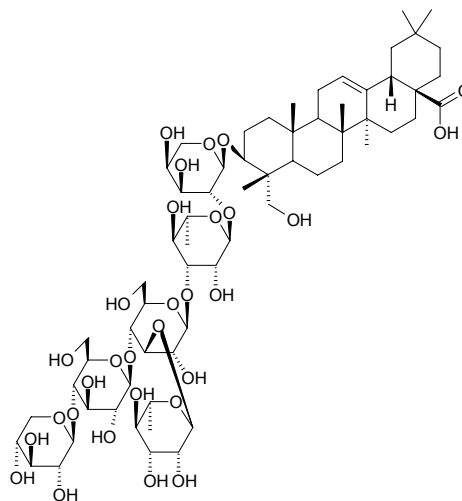
**22830 20-O-β-D-Xylopyranosyl(1→6)-β-D-glucopyranosyl-20(S)-protopanaxadiol**

C<sub>41</sub>H<sub>70</sub>O<sub>12</sub> (755.01). Amorphous powder (MeOH-EtOAc), mp 162.5~165°C,  $[\alpha]_D^{24} = +12.6^\circ$  ( $c = 0.3$ , MeOH). **Pharm:** Cytotoxic and partial reversal of doxorubicin resistance (hmn breast cancer cell line MCF7, IC<sub>50</sub> = (48.5±7.27) μg/mL, resistant subline MCF7/ADM, IC<sub>50</sub> = (58.2±8.57) μg/mL). **Source:** SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*] (leaf). **Ref:** 4433.

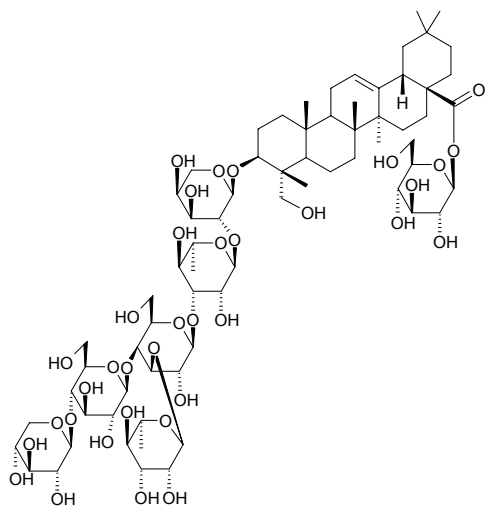


**22831 3-O-β-D-Xylopyranosyl (1→4)-β-D-glucopyranosyl (1→4)]-α-L-rhamnopyranosyl (1→3)-β-D-glucopyranosyl (1→3)-α-L-rhamnopyranosyl (1→2)-α-L-arabinopyranosyl hederagenin**

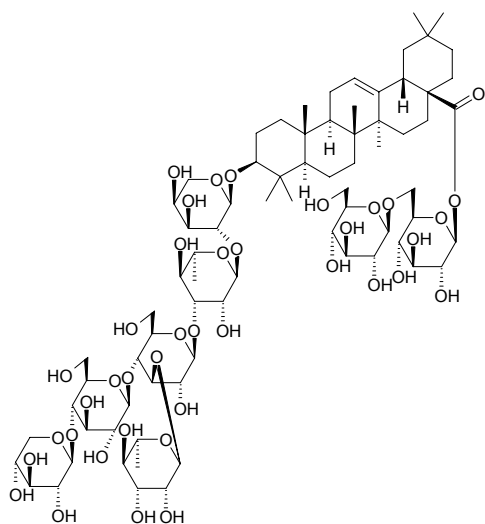
C<sub>64</sub>H<sub>104</sub>O<sub>30</sub> (1353.52). **Source:** CHUAN XU DUAN *Dipsacus asperoides*. **Ref:** 660.



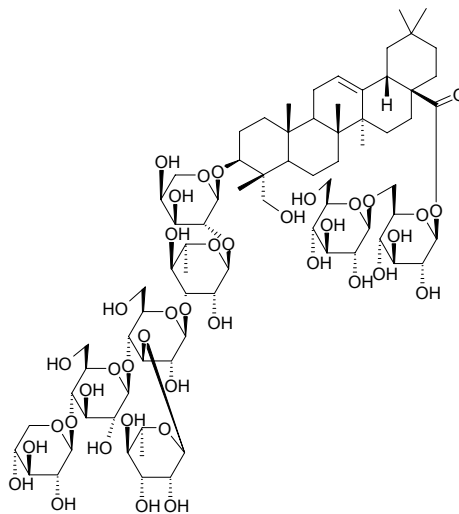
**22832** 3-*O*-[ $\beta$ -*D*-Xylopyranosyl(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 4)] [ $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl hederagenin-28-*O*- $\beta$ -*D*-glucopyranoside  
 $C_{70}H_{114}O_{35}$  (1515.67). Source: CHUAN XU DUAN *Dipsacus asperoides*. Ref: 660.



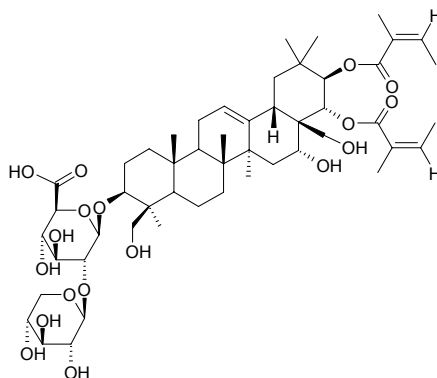
**22833** 3-*O*-[ $\beta$ -*D*-Xylopyranosyl(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 4)] [ $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl oleanolic acid-28-*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside  
 $C_{76}H_{124}O_{39}$  (1661.81). Source: CHUAN XU DUAN *Dipsacus asperoides*. Ref: 660.



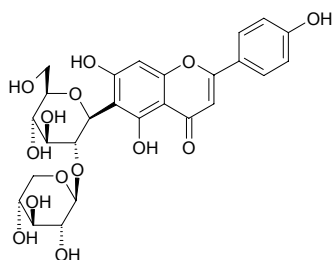
**22834** 3-*O*-[ $\beta$ -*D*-Xylopyranosyl(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 4)] [ $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl hederagenin-28-*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside  
 $C_{76}H_{124}O_{40}$  (1677.81). Source: CHUAN XU DUAN *Dipsacus asperoides*. Ref: 660.



**22835** 3-*O*- $\beta$ -*D*-Xylopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-glucuronopyranosyl-21 $\beta$ ,22 $\alpha$ -di-*O*-angeloylprotoaescigenin  
 $C_{51}H_{78}O_{18}$  (979.18).  $[\alpha]_D^{21} = -3.76^\circ$  ( $c = 0.13$ , MeOH). Source: NAN SU GE LAN JIA SHAN LUO *Harpullia austro-caledonica* (stem cortex). Ref: 5269.



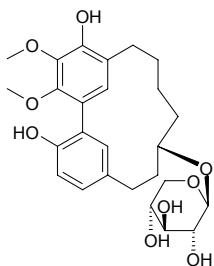
**22836** 2''-*O*- $\beta$ -*D*-Xylopyranosylisovitexin  
 $C_{26}H_{28}O_{14}$  (564.50).  $[\alpha]_D^{27} = -22.3^\circ$  ( $c = 1.03$ , pyridine). Source: RI BEN SHUANG HU DIE *Tripterospermum japonicum*. Ref: 3533.



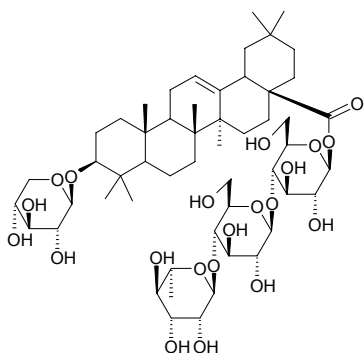


**22837 11-O-β-D-Xylopyranosylmyricanol**

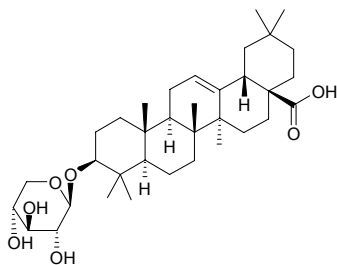
C<sub>26</sub>H<sub>34</sub>O<sub>9</sub> (490.56). Colorless needles (CH<sub>2</sub>Cl<sub>2</sub>), mp 229–231°C, [α]<sub>D</sub><sup>22</sup> = –46° (c = 0.55, MeOH). **Source:** QIAO MU ZHUANG YANG MEI *Myrica arborea* (stem and root cortex). **Ref:** 5079.

**22838 3β-D-O-(β-D-Xylopyranosyl)-olean-12-ene-28-O-(α-L-rhamnopyranosyl-(1→4)-β-D-glucopyranosyl-(1→4)-β-D-glucopyranosyl) ester**

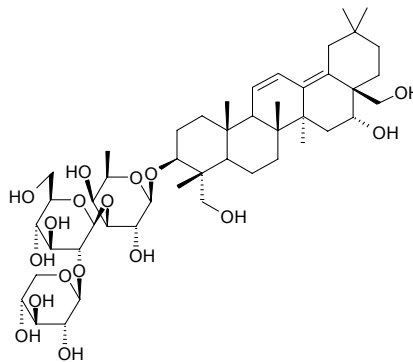
C<sub>53</sub>H<sub>86</sub>O<sub>21</sub> (1059.26). White powder, [α]<sub>D</sub><sup>25</sup> = +68°, (c = 1, MeOH). **Pharm:** Cytotoxic (antiproliferative *in vitro*: J774.A1 cell line, IC<sub>50</sub> = 0.52 μmol/L, HEK-293 cell line, IC<sub>50</sub> = 1.3 μmol/L, WEHI-164 cell line, IC<sub>50</sub> = 2.1 μmol/L; control 6-Mercaptopurine, J774.A1 cell line, IC<sub>50</sub> = 0.003 μmol/L, HEK-293 cell line, IC<sub>50</sub> = 0.007 μmol/L, WEHI-164 cell line, IC<sub>50</sub> = 0.015 μmol/L). **Source:** YUAN YE E ZHANG CHAI *Schefflera rotundifolia* (aerial parts). **Ref:** 5036.

**22839 3-O-β-D-Xylopyranosyloleanolic acid**

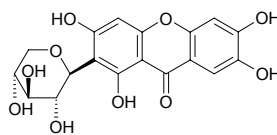
C<sub>35</sub>H<sub>56</sub>O<sub>7</sub> (588.83). **Pharm:** Cytotoxic (A2780, IC<sub>50</sub> = (8.9±0.6) μg/mL; control Actinomycin D, IC<sub>50</sub> = 2–5 ng/mL). **Source:** ZHUN GE ER LAN PEN HUA *Scabiosa soongorica*, *Dialium guineense*. **Ref:** 5397.

**22840 2''-O-β-D-Xylopyranosylsaikosaponin b<sub>2</sub>**

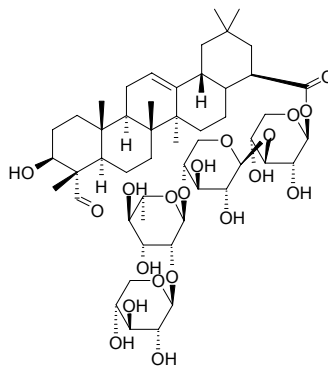
C<sub>47</sub>H<sub>76</sub>O<sub>17</sub> (913.12). **Source:** WEN CHUAN CHAI HU *Bupleurum wenchuanense*. **Ref:** 2247.

**22841 2-C-β-D-Xylopyranosyl-1,3,6,7-tetrahydroxyxanthone**

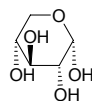
C<sub>18</sub>H<sub>16</sub>O<sub>10</sub> (392.32). **Source:** KUO YE GU SUI BU *Davallia solida*. **Ref:** 2422.

**22842 β-D-Xylopyranosyl-(1→3)-β-D-xylopyranosyl-(1→4)-α-L-rhamnopyranosyl-(1→2)-β-D-xylopyranosyl gypsogenin**

C<sub>51</sub>H<sub>80</sub>O<sub>20</sub> (1013.19). White crystals, mp 210–215°C. **Source:** XIN YE CHI BO *Thladiantha cordifolia*. **Ref:** 425.

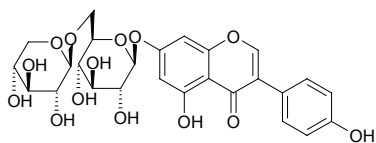
**22843 Xylose**

*D*-Xylose [58-86-6] C<sub>5</sub>H<sub>10</sub>O<sub>5</sub> (150.13). **Source:** CHUAN DANG SHEN *Codonopsis tangshen*, DANG SHEN *Codonopsis pilosula*, GUAN HUA DANG SHEN *Codonopsis tubulosa*, HUI MAO DANG SHEN *Codonopsis canescens*, LU HUI *Aloe vera* [Syn. *Aloe barbadensis*], QIU HUA DANG SHEN *Codonopsis subglobosa*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], XIA YE XIANG PU *Typha angustifolia*. **Ref:** 2, 660.

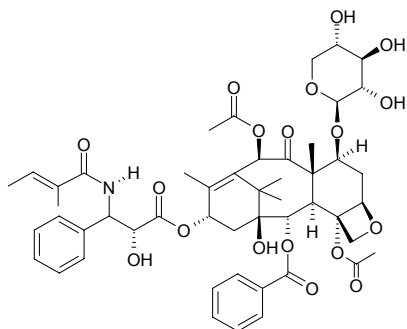


**22844 6''-β-D-Xylose-genistin**

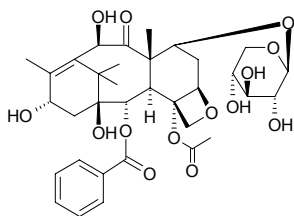
C<sub>26</sub>H<sub>28</sub>O<sub>14</sub> (564.50). Amaranth powder, easily soluble in methanol and alcohol, soluble in water. Source: HEI DA DOU *Glycine max*. Ref: 2457.

**22845 7-(β-Xylosyl)cephalomannine**

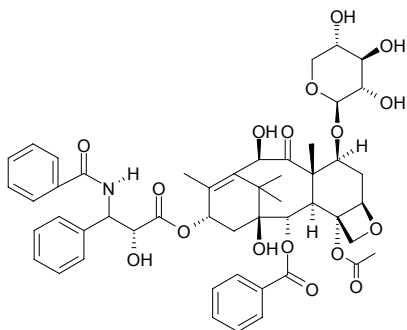
[90352-19-5] C<sub>50</sub>H<sub>61</sub>NO<sub>18</sub> (964.04). [α]<sub>D</sub> = -26° (pyridine). Source: JIANG GUO ZI SHAN *Taxus baccata*. Ref: 662.

**22846 7-(β-Xylosyl)-10-deacetylbaaccatin III**

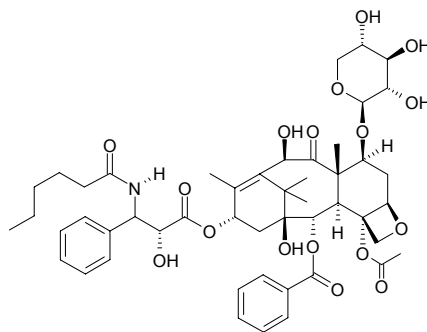
C<sub>34</sub>H<sub>44</sub>O<sub>14</sub> (676.72). White crystalline powder, mp 244~246°C (methanol), [α]<sub>D</sub><sup>30</sup> = -26.9° (methanol). Source: YUN NAN HONG DOU SHAN *Taxus yunnanensis*. Ref: 296, 662.

**22847 7-(β-Xylosyl)-10-deacetyltaxol**

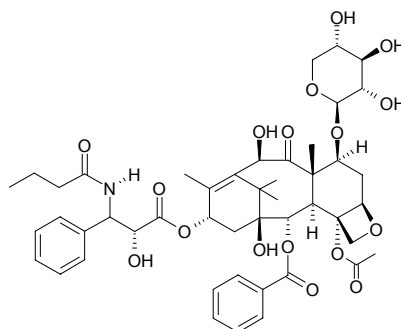
C<sub>50</sub>H<sub>57</sub>NO<sub>17</sub> (944.01). [α]<sub>D</sub> = -2° (pyridine), mp 246~248°C. Source: JIANG GUO ZI SHAN *Taxus baccata*. Ref: 662.

**22848 7-(β-Xylosyl)-10-deacetyltaxol C**

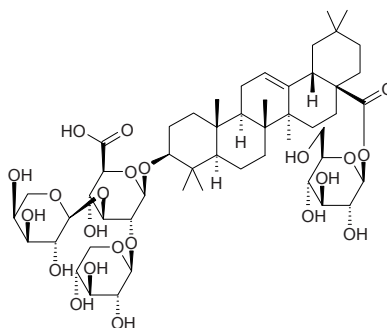
C<sub>49</sub>H<sub>63</sub>NO<sub>17</sub> (938.04). [α]<sub>D</sub> = +3° (pyridine), mp 215~217°C. Source: JIANG GUO ZI SHAN *Taxus baccata*. Ref: 662.

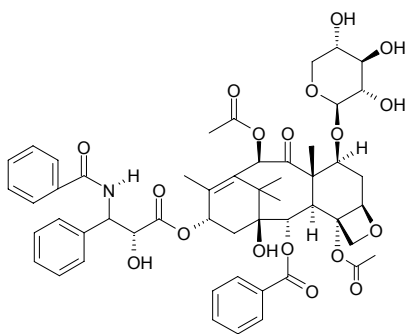
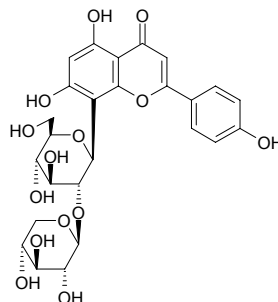
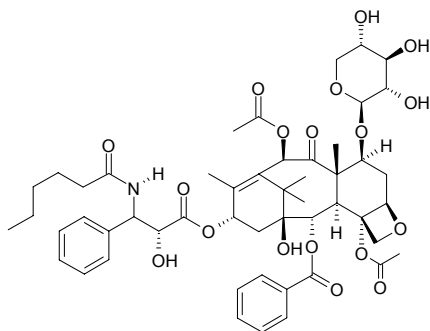
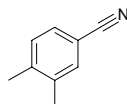
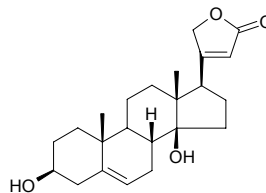
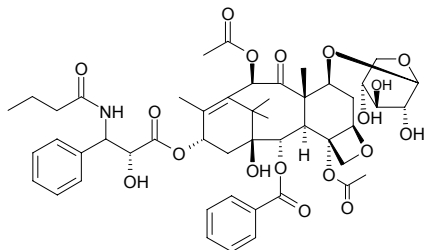
**22849 7-(β-xylosyl)-10-deacetyltaxol D**

[172486-23-6] C<sub>47</sub>H<sub>59</sub>NO<sub>17</sub> (909.99). [α]<sub>D</sub> = -14.3° (MeOH). Source: JIANG GUO ZI SHAN *Taxus baccata*. Ref: 662.

**22850 3-O-[(2'-O-Xylosyl)-(3'-O-arabinosyl)]-glucuronyloleanolic acid-28-O-β-D-glucopyranoside**

C<sub>52</sub>H<sub>82</sub>O<sub>22</sub> (1059.22). Source: HOU TOU JUN *Hericium erinaceus* [Syn. *Hydnum erinaceus*]. Ref: 660.

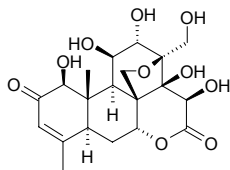


**22851 7-( $\beta$ -Xylosyl)taxol**[90332-66-4] C<sub>52</sub>H<sub>59</sub>NO<sub>18</sub> (986.05). [ $\alpha$ ]<sub>D</sub> = -23° (pyridine), mp 236~238°C.Source: JIANG GUO ZI SHAN *Taxus baccata*. Ref: 662.**22854 O-D-Xylosylvitexin**C<sub>26</sub>H<sub>28</sub>O<sub>14</sub> (564.50). mp 210°C. Source: TIAN CHENG *Citrus sinensis*. Ref: 6.**22852 7-( $\beta$ -Xylosyl)taxol C**[90332-67-5] C<sub>51</sub>H<sub>65</sub>NO<sub>18</sub> (980.08). [ $\alpha$ ]<sub>D</sub> = -4° (pyridine), mp 229~231°C.Source: JIANG GUO ZI SHAN *Taxus baccata*. Ref: 662.**22855 Xylylic acid nitrile**[22884-95-3] C<sub>9</sub>H<sub>9</sub>N (131.18). mp 66°C. Source: MU TIAN LIAO *Actinidia polygama*. Ref: 6.**22856 Xysmalogenin**C<sub>23</sub>H<sub>32</sub>O<sub>4</sub> (372.51). Crystals, mp 235~237°C, [ $\alpha$ ]<sub>D</sub><sup>22</sup> = 21° (c = 0.8, EtOH).Source: XIANG JIA PI *Periploca sepium*. Ref: 660, 1521, 2498.**22853 7-( $\beta$ -Xylosyl)taxol D**C<sub>49</sub>H<sub>61</sub>NO<sub>18</sub> (952.03). White powder, [ $\alpha$ ]<sub>D</sub><sup>28</sup> = -25.0° (c = 0.25, MeOH).Source: YUN NAN HONG DOU SHAN *Taxus yunnanensis* (bark). Ref: 5188.

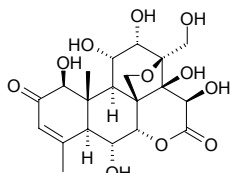
## Y

**22857 Yadanzliolide A**

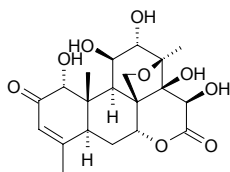
$C_{20}H_{26}O_{11}$  (426.42). **Source:** YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*] (seed: yield = 0.00018%dw). **Ref:** 660, 4748.

**22858 Yadanzliolide B**

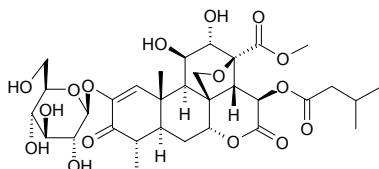
$C_{20}H_{26}O_{11}$  (442.42). **Source:** YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*]. **Ref:** 660.

**22859 Yadanzliolide C**

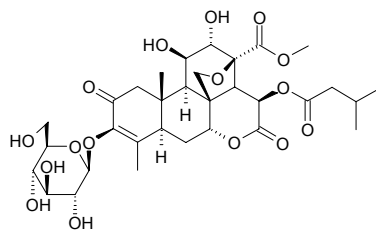
[95258-12-1]  $C_{20}H_{26}O_9$  (410.42). Colorless prismatic crystals (methanol–diethyl ether), mp 292–297°C (dec),  $[\alpha]_D^{23} = +29^\circ$  ( $c = 1.2$ , methanol). **Pharm:** Induces cell differentiation (hmn premyelocytic leukemia and HL-60,  $ED_{50} = 0.6\mu\text{g/mL}$ ). **Source:** YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*] (seed: yield = 0.000015%dw)<sup>[4748]</sup>. **Ref:** 660, 935, 1108, 4748.

**22860 Yadanzioside A**

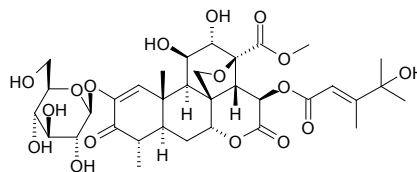
2-*O*-( $\beta$ -*D*-Glucosyl) brucein A [95258-15-4]  $C_{32}H_{44}O_{16}$  (684.69). Amorphous solid, mp 200–204°C (dec),  $[\alpha]_D^{26} = +3^\circ$  ( $c = 1.8$ , ethanol). **Pharm:** Antineoplastic (mouse  $P_{388}$ , 10mg/kg, biotic prolonged rate = 7.1%); insecticidal (*Plutella xylostella*). **Source:** YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*] (dried fruit: content scope = 0.5%–1.43%<sup>[5501]</sup>, mean content = 0.96%<sup>[5508]</sup>). **Ref:** 660, 937, 4748, 5501, 5508.

**22861 Yadanzioside B**

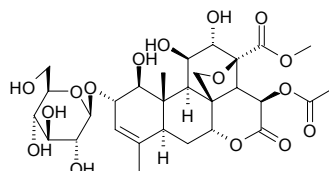
3-*O*-( $\beta$ -*D*-Glucopyranosyl) brucein A [95258-18-7]  $C_{32}H_{44}O_{16}$  (684.69). Amorphous solid, mp 189–195°C (dec),  $[\alpha]_D^{26} = -8.1^\circ$  ( $c = 0.84$ , ethanol). **Pharm:** Antineoplastic (mouse  $P_{388}$ , 10mg/kg, biotic prolonged rate = 4.1%); insecticidal (*Plutella xylostella*). **Source:** YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*] (seed: yield = 0.0007%dw)<sup>[4748]</sup>. **Ref:** 660, 937, 4748.

**22862 Yadanzioside C**

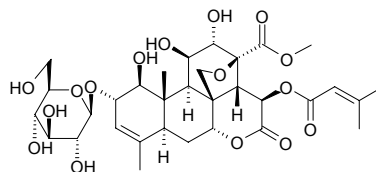
2-*O*-( $\beta$ -*D*-Glucopyranosyl) brucein C [95258-16-5]  $C_{34}H_{46}O_{17}$  (726.73). Amorphous solid, mp 204–209°C (dec),  $[\alpha]_D^{26} = +20^\circ$  ( $c = 0.92$ , ethanol). **Pharm:** Antineoplastic (mouse  $P_{388}$ , 10mg/kg, biotic prolonged rate = 2.0%); insecticidal (*Plutella xylostella*). **Source:** YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*] (seed: yield = 0.00013%dw)<sup>[4748]</sup>. **Ref:** 660, 937, 4748.

**22863 Yadanzioside D**

[95258-19-8]  $C_{29}H_{40}O_{16}$  (644.63). Amorphous solid, mp 207–212°C (dec),  $[\alpha]_D^{20} = +38^\circ$  ( $c = 0.98$ , ethanol). **Pharm:** Antineoplastic (mouse  $P_{388}$ , 10mg/kg, biotic prolonged rate = 9.2%); antiviral. **Source:** YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*] (seed: yield = 0.00039%dw)<sup>[4748]</sup>. **Ref:** 660, 937, 4748.

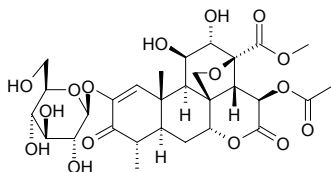
**22864 Yadanzioside E**

[95258-20-1]  $C_{32}H_{44}O_{16}$  (684.70). Amorphous solid, mp 190–195°C (dec),  $[\alpha]_D^{23} = +59^\circ$  ( $c = 1.6$ , ethanol). **Pharm:** Antineoplastic (mouse  $P_{388}$ , 10mg/kg, biotic prolonged rate = 7.1%). **Source:** YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*] (seed: yield = 0.0011%dw)<sup>[4748]</sup>. **Ref:** 660, 937, 4748.

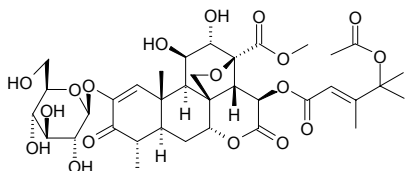


**22865 Yadanzioside F**

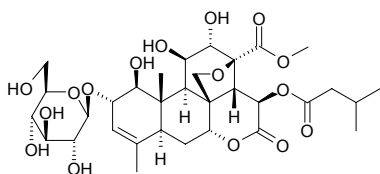
2-*O*-( $\beta$ -*D*-Glucosyl) brucein B [95258-11-0] C<sub>29</sub>H<sub>38</sub>O<sub>16</sub> (642.61). White powder (methanol), mp 190–195°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = +8.2° (c = 1.1, methanol). **Pharm:** Antineoplastic (mouse P<sub>388</sub>); insect antifeedant (*Plutella xylostella*); reduces normal body temperature of mus. **Source:** YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*] (seed: yield = 0.0011%dw)<sup>[4748]</sup>. **Ref:** 660, 900, 4748.

**22866 Yadanzioside G**

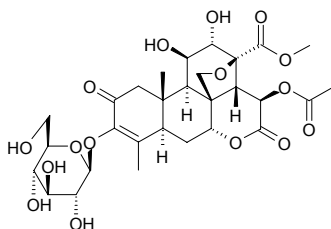
2-*O*-( $\beta$ -*D*-Glucopyranosyl) bruceantinol [95258-17-6] C<sub>36</sub>H<sub>48</sub>O<sub>18</sub> (768.77). Amorphous solid, mp 180–185°C (dec), [ $\alpha$ ]<sub>D</sub><sup>22</sup> = +19° (c = 1.2, ethanol). **Pharm:** Antineoplastic (mouse P<sub>388</sub>, 10mg/kg, biotic prolonged rate = 4.1%); insecticidal (*Plutella xylostella*). **Source:** YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*] (seed: yield = 0.0155%dw). **Ref:** 660, 937, 4748.

**22867 Yadanzioside H**

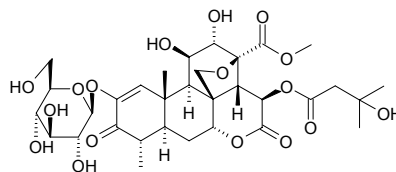
C<sub>32</sub>H<sub>46</sub>O<sub>16</sub> (686.71). **Source:** YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*]. **Ref:** 660.

**22868 Yadanzioside I**

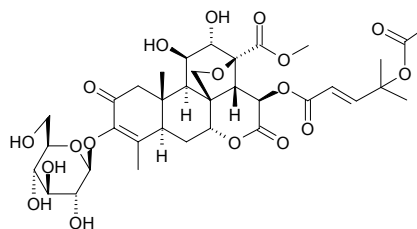
3-*O*-( $\beta$ -*D*-Glucosyl) brucein B [99132-95-3] C<sub>29</sub>H<sub>38</sub>O<sub>16</sub> (642.62). Colorless rhombic crystals (ethanol), mp 287–290°C, [ $\alpha$ ]<sub>D</sub><sup>28</sup> = –21° (c = 1.0, methanol). **Pharm:** Antineoplastic (mouse P<sub>388</sub>). **Source:** YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*] (seed: yield = 0.0001%dw)<sup>[4748]</sup>. **Ref:** 660, 935, 4748.

**22869 Yadanzioside J**

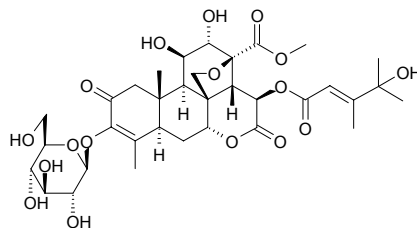
[99132-96-4] C<sub>32</sub>H<sub>44</sub>O<sub>17</sub> (700.69). Amorphous solid, mp 198–202°C, [ $\alpha$ ]<sub>D</sub><sup>22</sup> = –6.4° (c = 2.8, methanol). **Pharm:** Antineoplastic (mouse P<sub>388</sub>). **Source:** YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*]. **Ref:** 660, 935.

**22870 Yadanzioside K**

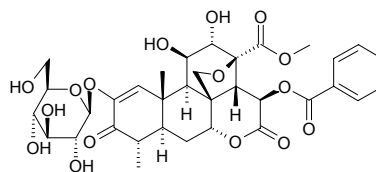
[101559-98-2] C<sub>35</sub>H<sub>46</sub>O<sub>18</sub> (754.75). Crystals (methanol), mp 214.5–216.5°C, [ $\alpha$ ]<sub>D</sub><sup>23</sup> = +15° (c = 1.0, ethanol); [ $\alpha$ ]<sub>D</sub><sup>18</sup> = –31° (c = 0.9, pyridine). **Pharm:** Antineoplastic (mouse P<sub>388</sub>). **Source:** YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*] (seed: yield = 0.00051%dw)<sup>[4748]</sup>. **Ref:** 660, 900, 1521, 4748.

**22871 Yadanzioside L**

3-*O*-( $\beta$ -*D*-Glucosyl) brucein C [99132-97-5] C<sub>34</sub>H<sub>46</sub>O<sub>17</sub> (726.73). Colorless rhombic crystals (ethanol–diethyl ether), mp 199–204°C, [ $\alpha$ ]<sub>D</sub><sup>26</sup> = –0.7° (c = 6.2, methanol). **Pharm:** Antineoplastic (mouse P<sub>388</sub>); insecticidal (*Plutella xylostella*). **Source:** YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*] (seed: yield = 0.000942%dw)<sup>[4748]</sup>. **Ref:** 660, 935, 4748.

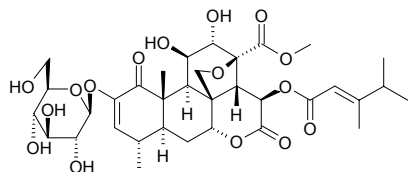
**22872 Yadanzioside M**

[101559-99-3] C<sub>34</sub>H<sub>40</sub>O<sub>16</sub> (704.69). **Source:** YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*] (seed: yield = 0.00057%dw)<sup>[4748]</sup>. **Ref:** 2, 660, 4748.

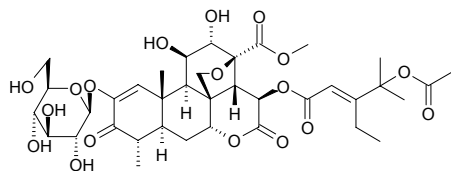


**22873 Yadanzioside N**

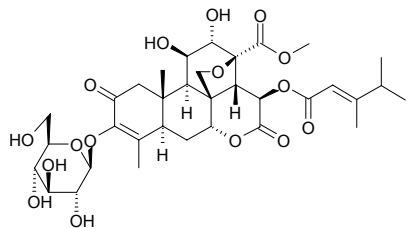
[101560-00-3] C<sub>34</sub>H<sub>46</sub>O<sub>16</sub> (710.74). Source: YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*] (seed: yield = 0.000062%dw)<sup>[4748]</sup>. Ref: 2, 660, 4748.

**22874 Yadanzioside O**

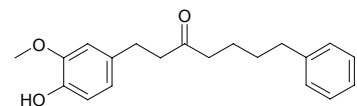
[101560-01-4] C<sub>37</sub>H<sub>50</sub>O<sub>18</sub> (782.80). Source: YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*] (seed: yield = 0.00048%dw)<sup>[4748]</sup>. Ref: 2, 660, 1521, 4748.

**22875 Yadanzioside P**

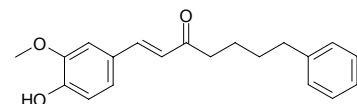
Bruceantioside B [79439-84-2] C<sub>34</sub>H<sub>46</sub>O<sub>16</sub> (710.74). Colorless amorphous powder, mp 193–198°C, mp 200°C (dec), [α]<sub>D</sub><sup>23</sup> = +7.0° (c = 0.57, ethanol); [α]<sub>D</sub><sup>25</sup> = –45° (c = 1.7, pyridine), [α]<sub>D</sub><sup>25</sup> = –3.6° (c = 0.5, pyridine). Pharm: Antineoplastic (mouse P<sub>388</sub>, 5mg/(kg-d), survival rate = 15.5%, 10mg/(kg-d), survival rate = 28.9%). Source: KANG LI YA DAN ZI *Brucea antidysenterica*, YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*] (seed: yield = 0.00029%dw)<sup>[4748]</sup>. Ref: 2, 658, 660, 661, 1012, 1064, 4748.

**22876 Yakuchinone A**

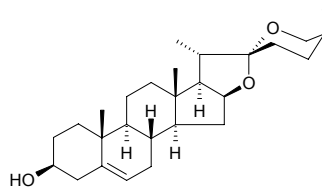
C<sub>20</sub>H<sub>24</sub>O<sub>3</sub> (312.41). Pharm: Anti-inflammatory (NO production inhibitor)<sup>[4415]</sup>. Source: YI ZHI REN *Alpinia oxyphylla*. Ref: 1521, 4415.

**22877 Yakuchinone B**

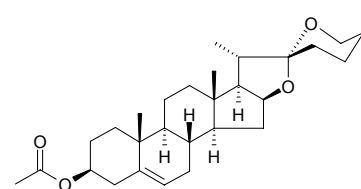
1-4-(Hydroxy-3-methoxyphenyl)-7-phenyl-1-hepten-3-one C<sub>20</sub>H<sub>22</sub>O<sub>3</sub> (310.40). Pharm: Anti-inflammatory (NO production inhibitor)<sup>[4415]</sup>. Source: YI ZHI REN *Alpinia oxyphylla*. Ref: 660, 1521, 4415.

**22878 Yamogenin**

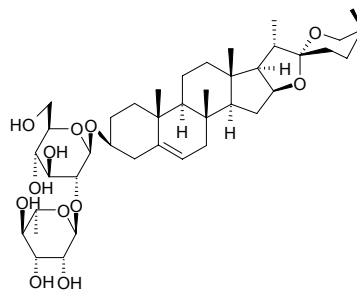
[512-06-1] C<sub>27</sub>H<sub>42</sub>O<sub>3</sub> (414.63). Source: BI XIE *Dioscorea hypoglauca* [Syn. *Dioscorea colletii* var. *hypoglauca*], CHA RUI SHU YU *Dioscorea colletii*, HU LU BA *Trigonella foenum-graecum*, QIAN NIAN BU LAN XIN *Solanum dulcamara*, SHAN BI XIE *Dioscorea tokoro*, XIAN XI SHU YU *Dioscorea gracillima*, XIAO HUA DUN YE SHU YU *Dioscorea parviflora*. Ref: 6, 10, 660.

**22879 Yamogenin acetate**

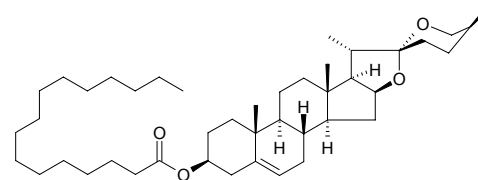
C<sub>29</sub>H<sub>44</sub>O<sub>4</sub> (456.67). Source: BI XIE *Dioscorea hypoglauca* [Syn. *Dioscorea colletii* var. *hypoglauca*]. Ref: 10, 660.

**22880 Yamogenin 3-O-neohesperidoside**

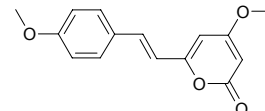
C<sub>40</sub>H<sub>64</sub>O<sub>12</sub> (736.95). Pharm: Molluscicide (*Biomphalaria glabrata* snail, LD<sub>100</sub> = 25mg/L). Source: WEN ZHU *Asparagus setaceus* [Syn. *Asparagus plumosus*]. Ref: 658.

**22881 Yamogenin palmitate**

C<sub>43</sub>H<sub>72</sub>O<sub>4</sub> (653.05). Source: CHA RUI SHU YU *Dioscorea colletii*, BI XIE *Dioscorea hypoglauca* [Syn. *Dioscorea colletii* var. *hypoglauca*]. Ref: 10, 660.

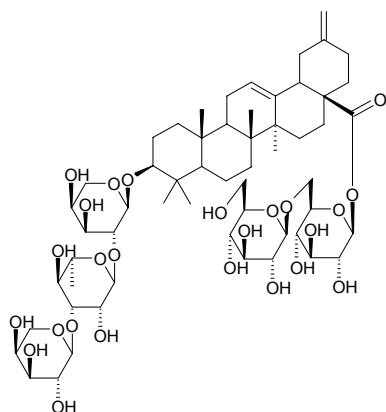
**22882 Yangonin**

[500-62-9] C<sub>15</sub>H<sub>14</sub>O<sub>4</sub> (258.28). Pharm: Antispasmodic. Source: KA WA HU JIAO *Piper methysticum*. Ref: 658.

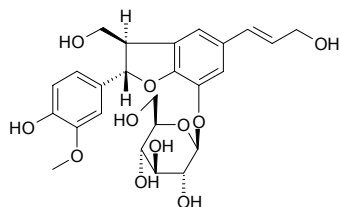


**22883 Yemuoside I**

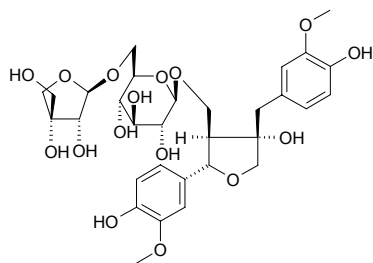
$C_{57}H_{90}O_{25}$  (1175.34). Source: YE MU GUA *Stauntonia chinensis*. Ref: 660.

**22884 Yemuoside YM<sub>1</sub>**

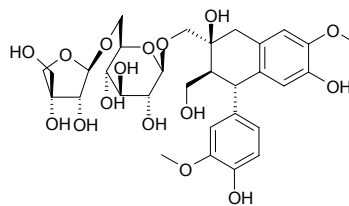
$C_{25}H_{30}O_{11}$  (506.51). Source: YE MU GUA *Stauntonia chinensis*. Ref: 660.

**22885 Yemuoside YM<sub>2</sub>**

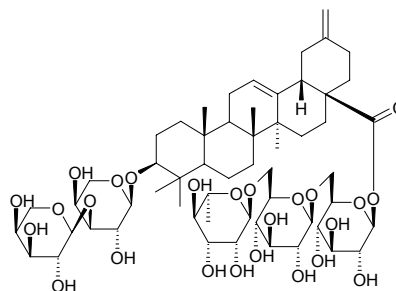
$C_{31}H_{42}O_{16}$  (670.67). Source: YE MU GUA *Stauntonia chinensis*. Ref: 660.

**22886 Yemuoside YM<sub>6</sub>**

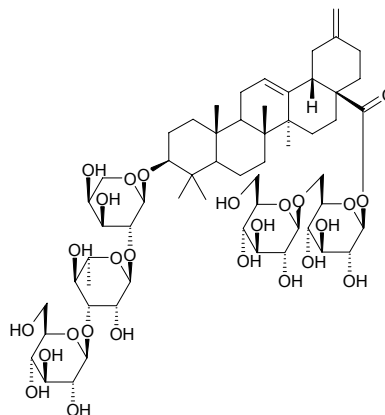
$C_{31}H_{42}O_{16}$  (670.67). Source: YE MU GUA *Stauntonia chinensis*. Ref: 660.

**22887 Yemuoside YM<sub>7</sub>**

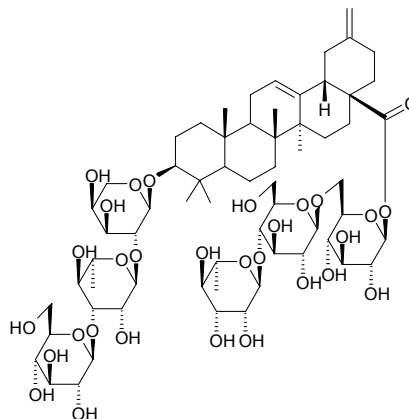
$C_{57}H_{90}O_{25}$  (1175.34). Source: YE MU GUA *Stauntonia chinensis*. Ref: 660.

**22888 Yemuoside YM<sub>8</sub>**

$C_{58}H_{92}O_{26}$  (1205.36). Source: YE MU GUA *Stauntonia chinensis*. Ref: 660.

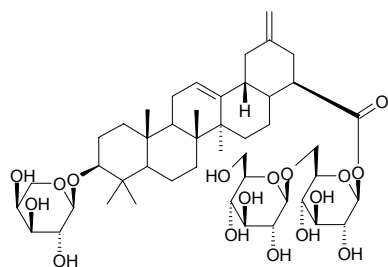
**22889 Yemuoside YM<sub>9</sub>**

$C_{64}H_{102}O_{30}$  (1351.51). Source: YE MU GUA *Stauntonia chinensis*. Ref: 660.

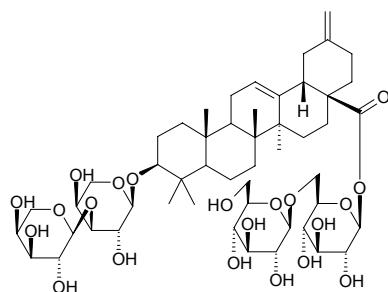


**22890 Yemuoside YM<sub>11</sub>**

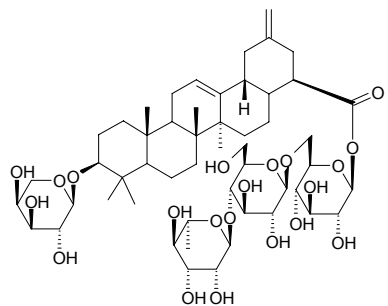
C<sub>46</sub>H<sub>72</sub>O<sub>17</sub> (897.08). Source: YE MU GUA *Stauntonia chinensis*. Ref: 660.

**22891 Yemuoside YM<sub>13</sub>**

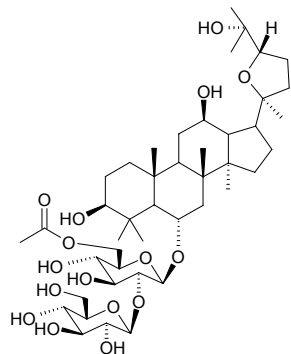
C<sub>51</sub>H<sub>80</sub>O<sub>21</sub> (1029.19). Source: YE MU GUA *Stauntonia chinensis*. Ref: 660.

**22892 Yemuoside YM<sub>14</sub>**

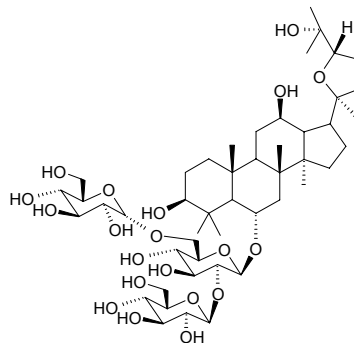
C<sub>52</sub>H<sub>82</sub>O<sub>21</sub> (1043.22). Source: YE MU GUA *Stauntonia chinensis*. Ref: 660.

**22893 Yesanchinoside A**

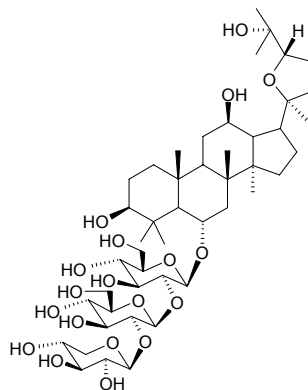
6-*O*-β-*D*-Glucopyranosyl-(1→2)-6-*O*-acetyl-β-*D*-glucopyranosyl 20(*S*),24(*S*)-epoxydammane-3β,6α,12β,25-tetrol C<sub>44</sub>H<sub>74</sub>O<sub>16</sub> (859.07). White amorphous powder, [α]<sub>D</sub><sup>20</sup> = +7.1° (*c* = 0.1, 40% CH<sub>3</sub>CN). Source: ZHU JIE SAN QI *Panax pseudo-ginseng* var. *japonicus* (underground part: yield = 0.002%dw). Ref: 4610.

**22894 Yesanchinoside B**

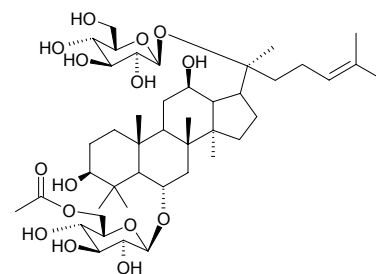
6-*O*-[α-*D*-Glucopyranosyl-(1→6)]-β-*D*-glucopyranosyl-(1→2)-β-*D*-glucopyranosyl 20(*S*),24(*S*)-epoxydammane-3β,6α,12β,25-tetrol C<sub>48</sub>H<sub>82</sub>O<sub>20</sub> (979.18). White amorphous powder, [α]<sub>D</sub><sup>20</sup> = +11.3° (*c* = 0.1, 40% CH<sub>3</sub>CN). Source: ZHU JIE SAN QI *Panax pseudo-ginseng* var. *japonicus* (underground part: yield = 0.0044%dw). Ref: 4610.

**22895 Yesanchinoside C**

6-*O*-β-*D*-Xylopyranosyl-(1→2)-β-*D*-glucopyranosyl-(1→2)-β-*D*-glucopyranosyl 20(*S*),24(*S*)-epoxydammane-3β,6α,12β,25-tetrol C<sub>47</sub>H<sub>80</sub>O<sub>19</sub> (848.15). White amorphous powder, [α]<sub>D</sub><sup>20</sup> = +5.9° (*c* = 0.1, 40% CH<sub>3</sub>CN). Source: ZHU JIE SAN QI *Panax pseudo-ginseng* var. *japonicus* (underground part: yield = 0.0047%dw). Ref: 4610.

**22896 Yesanchinoside D**

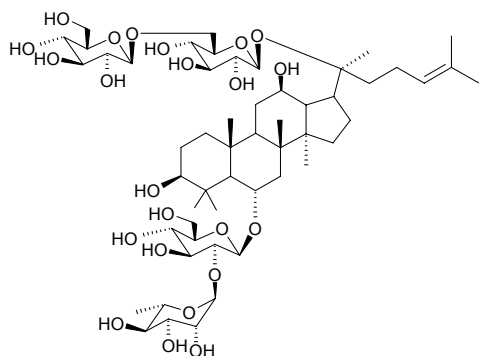
6-*O*-[6-*O*-Acetyl-β-*D*-glucopyranosyl]-20-*O*-(β-*D*-glucopyranosyl)-20(*S*)-propanaxatriol C<sub>44</sub>H<sub>74</sub>O<sub>15</sub> (843.07). White amorphous powder, [α]<sub>D</sub><sup>20</sup> = +13.6° (*c* = 0.1, 40% CH<sub>3</sub>CN). Source: ZHU JIE SAN QI *Panax pseudo-ginseng* var. *japonicus* (underground part: yield = 0.0016%dw). Ref: 4610.



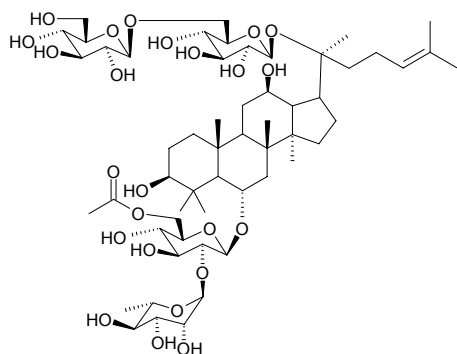


**22897 Yesaninoside E**

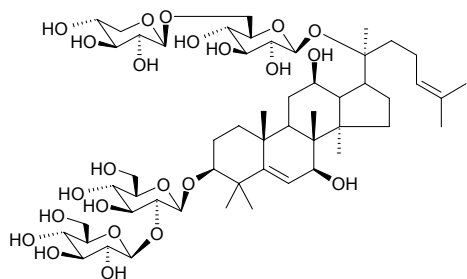
6-*O*-[ $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl]-20-*O*-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl]-20(*S*)-protopanaxatriol C<sub>54</sub>H<sub>92</sub>O<sub>23</sub> (1109.32). White amorphous powder,  $[\alpha]_D^{20} = +1.5^\circ$  ( $c = 0.1$ , 40% CH<sub>3</sub>CN). Source: ZHU JIE SAN QI *Panax pseudo-ginseng* var. *japonicus* (underground part: yield = 0.0049%dw). Ref: 4610.

**22898 Yesaninoside F**

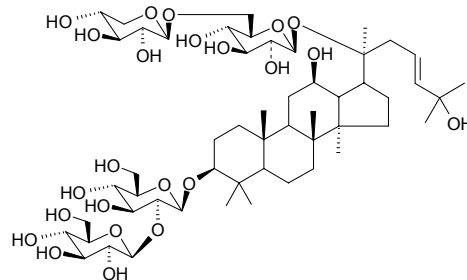
6-*O*-[ $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 2)-6-*O*-acetyl- $\beta$ -*D*-glucopyranosyl]-20-*O*-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl]-20(*S*)-protopanaxatriol C<sub>56</sub>H<sub>94</sub>O<sub>24</sub> (1151.36). White amorphous powder,  $[\alpha]_D^{20} = +3.3^\circ$  ( $c = 0.1$ , 40% CH<sub>3</sub>CN). Source: ZHU JIE SAN QI *Panax pseudo-ginseng* var. *japonicus* (underground part: yield = 0.0014%dw). Ref: 4610.

**22899 Yesaninoside G**

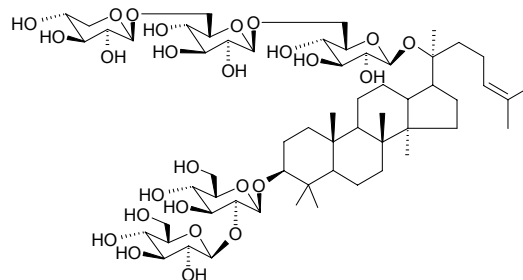
3-*O*-[ $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl]-20-*O*-[ $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl-3 $\beta$ ,7 $\beta$ ,12 $\beta$ ,20(*S*)-tetrahydroxydammar-5,24-diene C<sub>53</sub>H<sub>88</sub>O<sub>23</sub> (1093.28). White amorphous powder,  $[\alpha]_D^{20} = +28.6^\circ$  ( $c = 0.1$ , 40% CH<sub>3</sub>CN). Source: ZHU JIE SAN QI *Panax pseudo-ginseng* var. *japonicus* (underground part: yield = 0.0035%dw). Ref: 4647.

**22900 Yesaninoside H**

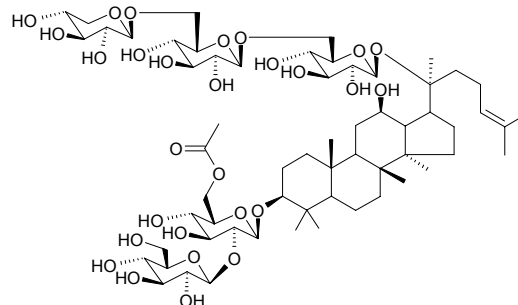
3-*O*-[ $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl]-20-*O*-[ $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl-3 $\beta$ ,12 $\beta$ ,20(*S*),25-tetrahydroxydammar-23-ene C<sub>53</sub>H<sub>90</sub>O<sub>23</sub> (1095.29). White amorphous powder,  $[\alpha]_D^{20} = +35.5^\circ$  ( $c = 0.1$ , 40% CH<sub>3</sub>CN). Source: ZHU JIE SAN QI *Panax pseudo-ginseng* var. *japonicus* (underground part: yield = 0.0014%dw). Ref: 4647.

**22901 Yesaninoside I**

3-*O*-[ $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl]-20-*O*-[ $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl-3 $\beta$ ,20(*S*)-dihydroxy dammar-24-ene C<sub>59</sub>H<sub>100</sub>O<sub>26</sub> (1225.44). White amorphous powder,  $[\alpha]_D^{20} = -2.2^\circ$  ( $c = 0.1$ , 40% CH<sub>3</sub>CN). Source: ZHU JIE SAN QI *Panax pseudo-ginseng* var. *japonicus* (underground part: yield = 0.0017%dw). Ref: 4647.

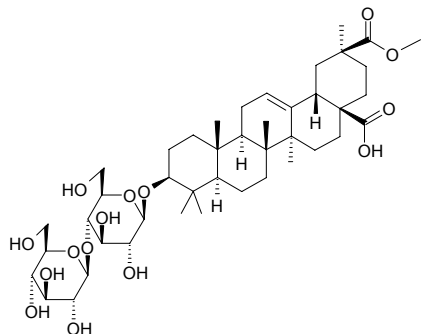
**22902 Yesaninoside J**

3-*O*-[ $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 2)-6-*O*-acetyl- $\beta$ -*D*-glucopyranosyl]-20-*O*-[ $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl-3 $\beta$ ,12 $\beta$ ,20(*S*)-trihydroxydammar-24-ene C<sub>61</sub>H<sub>102</sub>O<sub>28</sub> (1283.48). White amorphous powder,  $[\alpha]_D^{20} = +0.73^\circ$  ( $c = 0.1$ , 40% CH<sub>3</sub>CN). Source: ZHU JIE SAN QI *Panax pseudo-ginseng* var. *japonicus* (underground part: yield = 0.0081%dw). Ref: 4647.

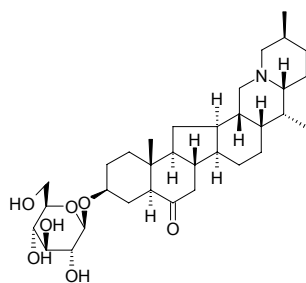


**22903 Yiamolosite B**

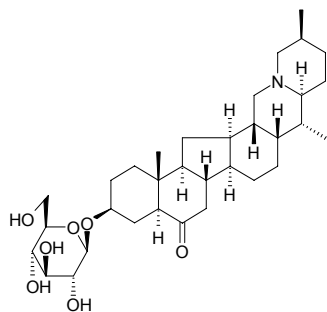
[80311-28-0] C<sub>43</sub>H<sub>68</sub>O<sub>15</sub> (825.01). **Pharm:** Antifungal. **Source:** AO ZHOU SHANG LU *Phytolacca octandra*. **Ref:** 658.

**22904 Yibeinoside A**

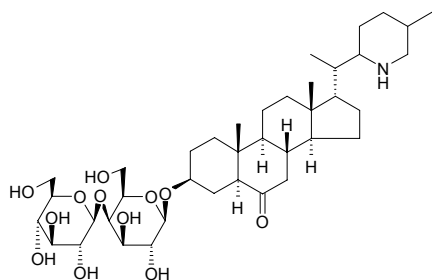
Sinpeinine-3-*O*- $\beta$ -glucoside C<sub>33</sub>H<sub>53</sub>NO<sub>7</sub> (575.79). Colorless acicular crystals, mp 248–250°C, [ $\alpha$ ]<sub>D</sub><sup>15</sup> = –59° (*c* = 0.1, methanol). **Source:** YI BEI MU *Fritillaria pallidiflora*. **Ref:** 172.

**22905 Yibeinoside B**

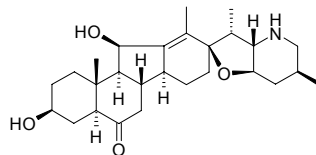
C<sub>33</sub>H<sub>53</sub>NO<sub>7</sub> (575.79). Colorless acicular crystals (MeOH), mp 202–204°C. **Source:** YI BEI MU *Fritillaria pallidiflora*. **Ref:** 259.

**22906 Yibeinoside C**

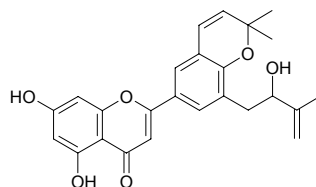
22,26-Epiminocholest-6-one-3-*O*- $\beta$ -*D*-glucopyranosyl-(1→4)- $\beta$ -*D*-galactopyranoside C<sub>39</sub>H<sub>65</sub>NO<sub>12</sub> (739.95). Colorless acicular crystals, mp 209–211°C. **Source:** YI BEI MU *Fritillaria pallidiflora*. **Ref:** 656.

**22907 Yibeissine**

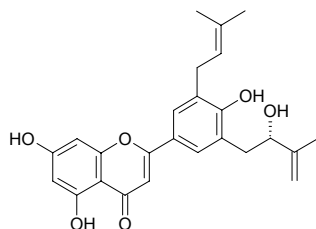
22,26-Imino-17,23-oxidojerv-12-en-6-oxo-3 $\beta$ ,11 $\alpha$ -diol C<sub>27</sub>H<sub>41</sub>NO<sub>4</sub> (443.63). Colorless acicular crystals, mp 164.5–166.0°C, [ $\alpha$ ]<sub>D</sub><sup>25</sup> = –47.6° (*c* = 0.13, ethanol). **Source:** YI BEI MU *Fritillaria pallidiflora*. **Ref:** 219.

**22908 Yinyanghuo A**

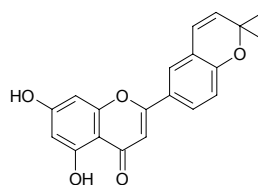
C<sub>25</sub>H<sub>24</sub>O<sub>6</sub> (420.47). **Source:** YIN YANG HUO *Epimedium brevicornum*. **Ref:** 635.

**22909 Yinyanghuo B**

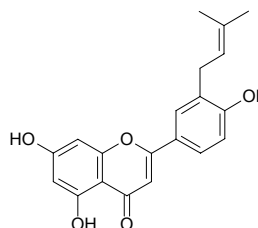
C<sub>25</sub>H<sub>26</sub>O<sub>6</sub> (422.48). **Source:** YIN YANG HUO *Epimedium brevicornum*. **Ref:** 635.

**22910 Yinyanghuo C**

C<sub>20</sub>H<sub>16</sub>O<sub>5</sub> (336.35). **Source:** YIN YANG HUO *Epimedium brevicornum*. **Ref:** 635.

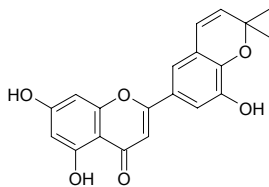
**22911 Yinyanghuo D**

C<sub>20</sub>H<sub>18</sub>O<sub>5</sub> (338.36). **Source:** YIN YANG HUO *Epimedium brevicornum*. **Ref:** 635.

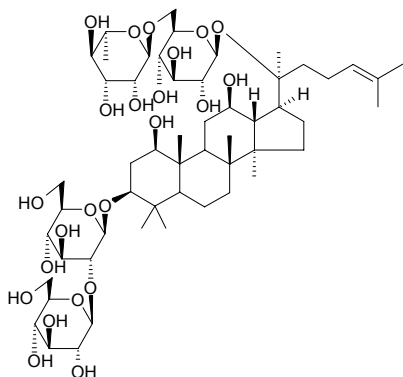


**22912 Yinyanghuo E**

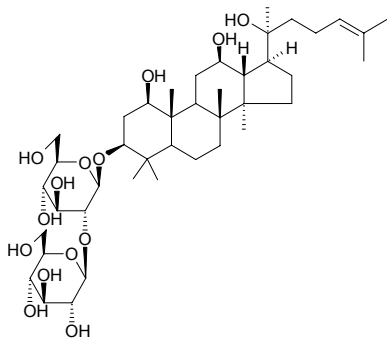
$C_{20}H_{16}O_6$  (352.35). Source: YIN YANG HUO *Epimedium brevicornum*. Ref: 635.

**22913 Yixinoside A**

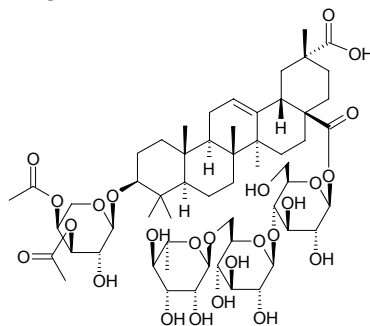
$C_{54}H_{92}O_{23}$  (1109.32). White powder, mp 201~202°C,  $[\alpha]_D^{14} = +11.28^\circ$  ( $c = 0.98$ , methanol). Source: HUI GUO JIAO GU LAN *Gynostemma yixingense*. Ref: 329.

**22914 Yixinoside B**

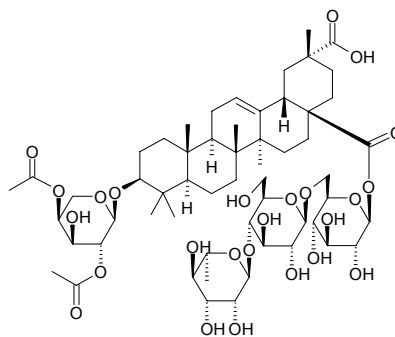
$C_{42}H_{72}O_{14}$  (801.03). White powder, mp 181~184°C. Source: HUI GUO JIAO GU LAN *Gynostemma yixingense*. Ref: 329.

**22915 Yiyeliangwanoside I**

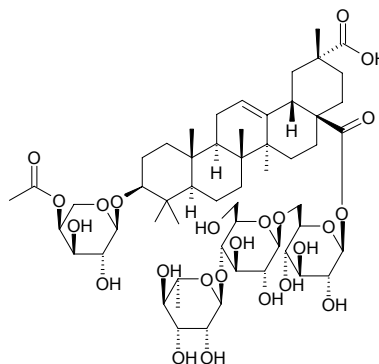
3-*O*- $\alpha$ -(3',4'-*O*-Dioic-acetyl)-*L*-arabino-pyranosyl-3 $\beta$ -hydroxyolean-12-ene-28, 29-dioic acid-28-*O*-[ $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glycopyranosyl(1 $\rightarrow$ 4)- $\beta$ -*D*-glycopyranosyl] ester  $C_{57}H_{88}O_{25}$  (1173.32). White powder, mp 203~205°C,  $[\alpha]_D^{25} = -3.47^\circ$  ( $c = 0.1$ , methanol). Source: YI YE LIANG WANG CHA *Nothopanax davidii*. Ref: 187.

**22916 Yiyeliangwanoside III**

3-*O*- $\alpha$ -(2',4'-*O*-Diacetyl)-*L*-arabinopyranosyl-3 $\beta$ -hydroxyolean-12-ene-28,29-dioic acid-28-*O*-[ $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl] ester  $C_{57}H_{88}O_{25}$  (1173.32). White powder (methanol), mp 206~210°C,  $[\alpha]_D^{22} = +2.37^\circ$  ( $c = 0.1$ , methanol). Source: YI YE LIANG WANG CHA *Nothopanax davidii*. Ref: 216.

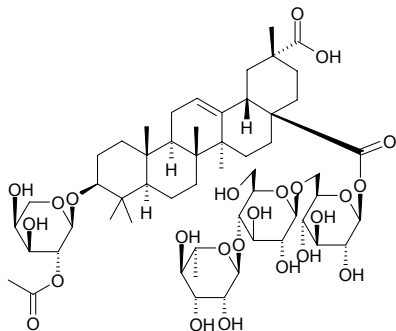
**22917 Yiyeliangwanoside IX**

[162795-92-8]  $C_{55}H_{86}O_{24}$  (1131.28). Powder, mp 228~230°C (dec),  $[\alpha]_D^{12} = -9.43^\circ$  ( $c = 0.053$ , MeOH). Source: YI YE LIANG WANG CHA *Nothopanax davidii*. Ref: 708.

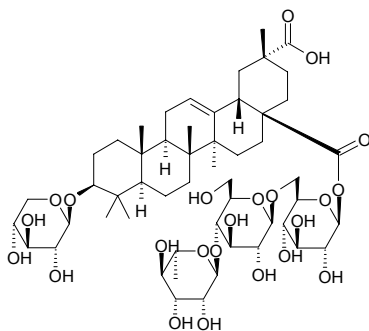


**22918 Yiyeliangwenoside X**

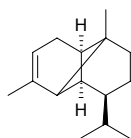
[162762-98-3] C<sub>55</sub>H<sub>86</sub>O<sub>24</sub> (1131.28). Powder, mp 210~212°C (dec), [α]<sub>D</sub><sup>20</sup> = -3.9° (c = 0.1, MeOH). Source: YI YE LIANG WANG CHA *Nothopanax davidii*. Ref: 708.

**22919 Yiyeliangwenoside XI**

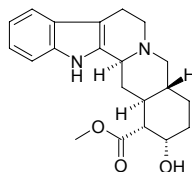
(-)-Yiyeliangwenoside XI [162811-51-0] C<sub>53</sub>H<sub>84</sub>O<sub>23</sub> (1089.25). Powder, mp 219~224°C, [α]<sub>D</sub><sup>12</sup> = -21.62° (c = 0.093, MeOH). Source: YI YE LIANG WANG CHA *Nothopanax davidii*. Ref: 708.

**22920 α-Ylangene**

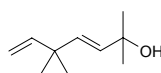
[14912-44-8] C<sub>15</sub>H<sub>24</sub> (204.36). Pharm: Flavorant. Source: CI GUI *Juniperus oxycedrus*, XIANG YUAN *Citrus wilsonii*, YI LAN *Cananga odorata*, *Betula* sp. Ref: 658, 660.

**22921 Yohimbine**

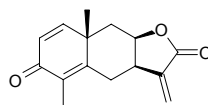
Corinine; Aphrodine; Quebrachine [146-48-5] C<sub>21</sub>H<sub>26</sub>N<sub>2</sub>O<sub>3</sub> (354.45). Colorless acicular crystals, mp 241°C, [α]<sub>D</sub><sup>20</sup> = +50.9° ~62.2° (ethanol), slightly soluble in water, soluble in ethanol, chloroform, hot benzene.<sup>[5507]</sup> Pharm: Anti-diuretic; anti-adrenaline; mydriatic; serotonin antagonist. Source: CUI TU LUO FU MU *Rauwolfia vomitoria*, GUANG LIANG LUO FU MU *Rauwolfia nitida*, KE NAN SHU *Corynanthe johimbe* (in 1896, isolated from the plant for the first time)<sup>[5507]</sup>, YIN DU LUO FU MU *Rauwolfia serpentina*, YUN NAN LUO FU MU *Rauwolfia yunnanensis*. Ref: 6, 658, 660, 1521, 5507.

**22922 Yomogi alcohol A**

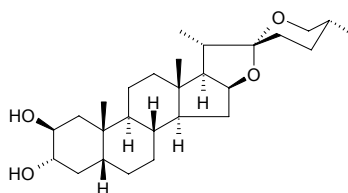
[26127-98-0] C<sub>10</sub>H<sub>18</sub>O (154.25). Source: AI YE *Artemisia argyi*. Ref: 6.

**22923 Yomogin**

[10067-18-2] C<sub>15</sub>H<sub>16</sub>O<sub>3</sub> (244.29). Colorless acicular crystals, mp 202~204°C. Pharm: Cytotoxic (A549 IC<sub>50</sub> = 0.14 μg/mL, HCT IC<sub>50</sub> = 1.3 μg/mL). Source: MAO LIAN HAO *Artemisia vestita*. Ref: 474, 1685.

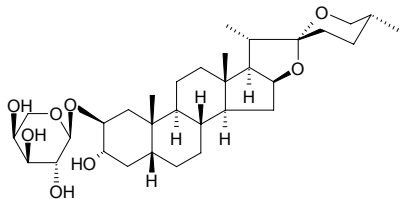
**22924 Yonogenin**

[2460-96-0] C<sub>27</sub>H<sub>44</sub>O<sub>4</sub> (432.65). mp 210~213°C. Source: SHAN BI XIE *Dioscorea tokoro*. Ref: 6, 660.

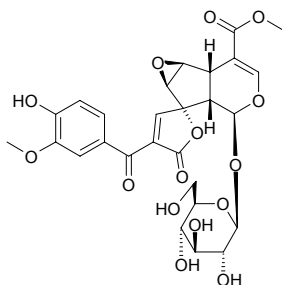


**22925 Yononin**

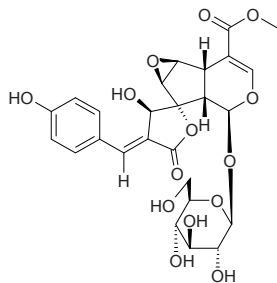
$C_{32}H_{52}O_8$  (564.77). mp 238~240°C (dec). Source: SHAN BI XIE *Dioscorea tokoro*. Ref: 6, 660.

**22926 Yopaoside A**

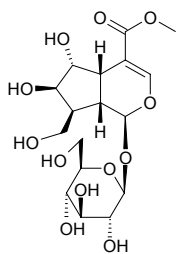
$C_{27}H_{28}O_{15}$  (592.52). Yellow amorphous powder,  $[\alpha]_D^{19} = -19.3^\circ$  ( $c = 2.1$ , MeOH). Source: TAI GUO BA JI *Morinda coreia*. Ref: 2002.

**22927 Yopaoside B**

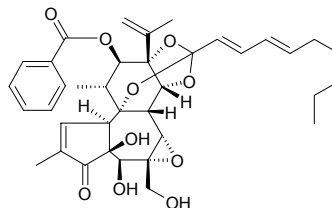
$C_{26}H_{28}O_{14}$  (564.50). Yellow amorphous powder,  $[\alpha]_D^{19} = -66.1^\circ$  ( $c = 1.6$ , MeOH). Source: TAI GUO BA JI *Morinda coreia*. Ref: 2002.

**22928 Yopaoside C**

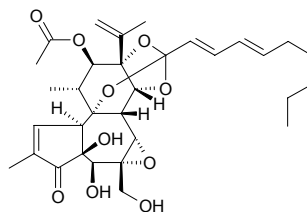
$C_{17}H_{26}O_{12}$  (422.39). Amorphous powder,  $[\alpha]_D^{19} = -128.5^\circ$  ( $c = 0.6$ , MeOH). Source: TAI GUO BA JI *Morinda coreia*. Ref: 2002.

**22929 Yuanhuacin**

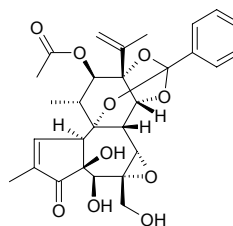
Yuanhuacin A  $C_{37}H_{44}O_{10}$  (648.76). Pharm: Uterine stimulant (mus, *in vitro*); inhibits biosynthesis of DNA (mus embryo, *in vitro*, 20 $\mu$ g/mL); antineoplastic (mus, P<sub>388</sub>). Source: HE SHUO YAO HUA *Wikstroemia chamaedaphne*, YUAN HUA *Daphne genkwa* (dried bud: content scope of 4 origins = 0.0022%~0.0094%, mean content = 0.0070%<sup>[5508]</sup>), YUAN HUA GEN *Daphne genkwa*. Ref: 660, 5501, 5508.

**22930 Yuanhuadin**

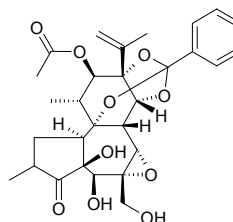
Yuanhuadin B  $C_{32}H_{42}O_{10}$  (586.69). Source: YUAN HUA *Daphne genkwa*, YUAN HUA GEN *Daphne genkwa*. Ref: 660.

**22931 Yuanhuafin**

$C_{29}H_{32}O_{10}$  (540.57). Source: YUAN HUA *Daphne genkwa*. Ref: 660.

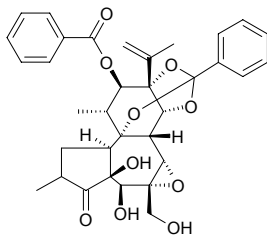
**22932 Yuanhuapin**

[104901-03-]  $C_{29}H_{34}O_{10}$  (542.59). Source: YUAN HUA *Daphne genkwa*. Ref: 660.

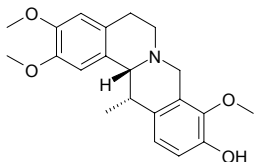


**22933 Yuanhuatin**

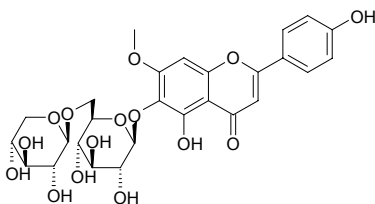
$C_{34}H_{36}O_{10}$  (604.66). Source: YUAN HUA *Daphne genkwa*. Ref: 660.

**22934 Yuanhunine**

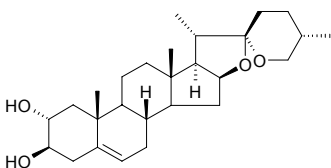
[104387-15-7]  $C_{21}H_{25}NO_4$  (355.44). Colorless rhomboid crystals, mp 166~168°C,  $[\alpha]_D^{23} = +229.7^\circ$  ( $c = 0.16$ , 95% ethanol). Source: YAN HU SUO *Corydalis yanhusuo* [Syn. *Corydalis turtschaninovii* f. *yanhusuo*]. Ref: 56, 1521.

**22935 Yuankanin**

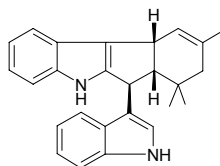
Genkwanin-5-O-xylosylglucoside  $C_{27}H_{30}O_{15}$  (594.53). Source: ZONG BAO GE NI DI MU *Gnidia involucrata* (aerial parts). Ref: 3996.

**22936 Yuccagenin**

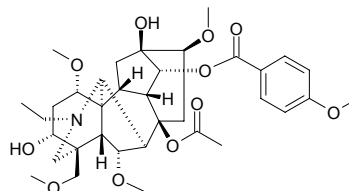
$C_{27}H_{42}O_4$  (430.63). mp 245°C. Source: HU LU BA *Trigonella foenum-graecum*, XIAN MAO *Curculigo orchoides*, Agave lecheguilla. Ref: 660, 2458, 2503.

**22937 Yuechukene**

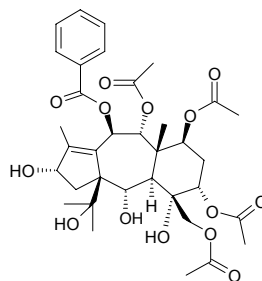
[96624-37-2]  $C_{26}H_{26}N_2$  (366.51). White amorphous powder, mp 127°C,  $[\alpha]_D = 0^\circ$ . Pharm: Antiestrogenic; pregnancy terminator (pregnant rat, 2.5mg/kg orl). Source: JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*], JIU LI XIANG GEN *Murraya paniculata* [Syn. *Chalcas paniculata*], XIAO GAN *Micromelum falcatum*. Ref: 600, 660, 900, 5501.

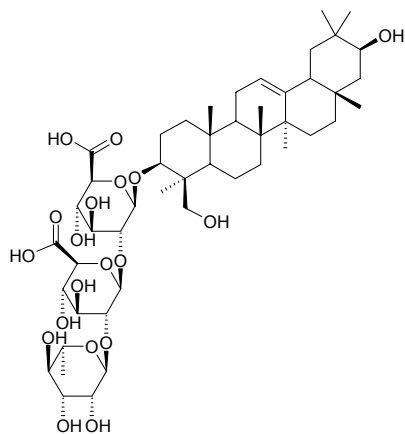
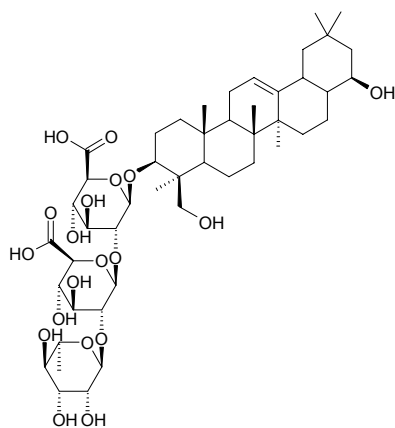
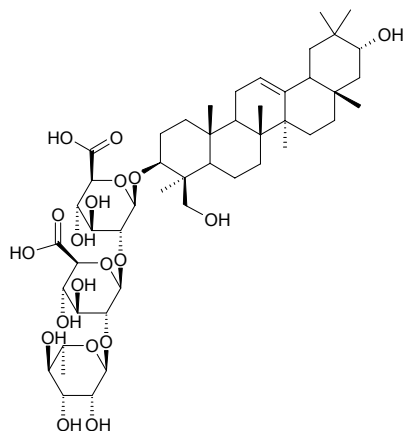
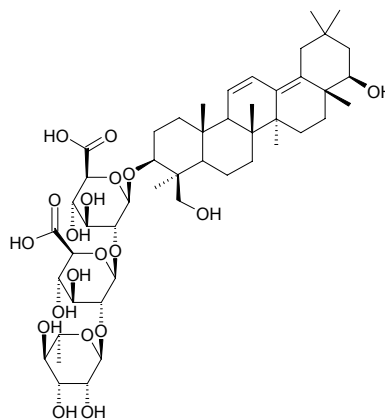
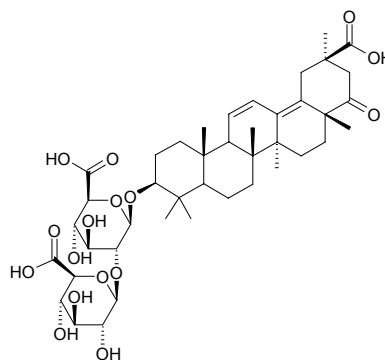
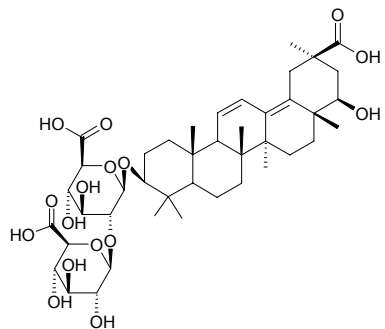
**22938 Yunaconitine**

[70578-24-4]  $C_{35}H_{49}NO_{11}$  (659.78). Pharm: Anti-inflammatory (mus, swollen foot model, tampon granuloma model, inhibits blood capillary permeability and plano-leucocyte); analgesic (weak action); antipyretic (rat, yeast-induced); immunoenhancer (mus, ip, 50µg/kg, extends planted myocardial survival time in ear region); local anesthetic; LD<sub>50</sub> (mus, orl) = 2.97mg/kg, (rat, orl) = 540µg/kg. Source: BEI WU TOU *Aconitum kusnezoffii*, DIAN XI WU TOU *Aconitum bulleyanum*, GAO WU TOU *Aconitum sinomontanum*, GUA YE WU TOU *Aconitum hemsleyanum*, LI JIANG WU TOU *Aconitum forrestii* [Syn. *Aconitum likiangense*], SONG PAN WU TOU *Aconitum sungpanense*, XI BAN WU TOU *Aconitum geniculatum*. Ref: 618, 660, 1587, 1588.

**22939 Yunantaxusin A**

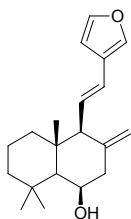
[160928-37-0]  $C_{35}H_{46}O_{14}$  (690.75). Source: YUN NAN HONG DOU SHAN *Taxus yunnanensis*. Ref: 662.



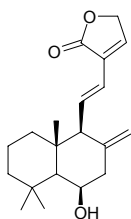
**22940 Yunganoside A<sub>1</sub>**C<sub>48</sub>H<sub>76</sub>O<sub>19</sub> (957.13). Source: YUN NAN GAN CAO *Glycyrrhiza yunnanensis*.Ref: 660.**22941 Yunganoside B<sub>1</sub>**C<sub>47</sub>H<sub>74</sub>O<sub>19</sub> (943.10). Source: YUN NAN GAN CAO *Glycyrrhiza yunnanensis*.Ref: 660.**22942 Yunganoside C<sub>1</sub>**C<sub>48</sub>H<sub>76</sub>O<sub>19</sub> (957.13). Source: YUN NAN GAN CAO *Glycyrrhiza yunnanensis*.Ref: 660.**22943 Yunganoside D<sub>1</sub>**C<sub>48</sub>H<sub>74</sub>O<sub>19</sub> (955.11). Source: YUN NAN GAN CAO *Glycyrrhiza yunnanensis*.Ref: 660.**22944 Yunganoside E<sub>2</sub>**C<sub>42</sub>H<sub>60</sub>O<sub>16</sub> (820.94). Source: YUN NAN GAN CAO *Glycyrrhiza yunnanensis*.Ref: 660.**22945 Yunganoside F<sub>2</sub>**C<sub>42</sub>H<sub>62</sub>O<sub>16</sub> (822.95). Source: YUN NAN GAN CAO *Glycyrrhiza yunnanensis*.Ref: 660.

**22946 Yunnancoronarin A**

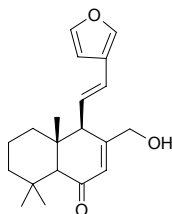
$C_{20}H_{28}O_2$  (300.44). Source: DIAN JIANG HUA *Hedychium yunnanense*. Ref: 1521.

**22947 Yunnancoronarin B**

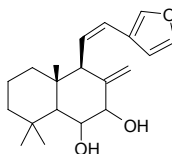
$C_{20}H_{28}O_3$  (316.44). Source: DIAN JIANG HUA *Hedychium yunnanense*. Ref: 1521.

**22948 Yunnancoronarin D**

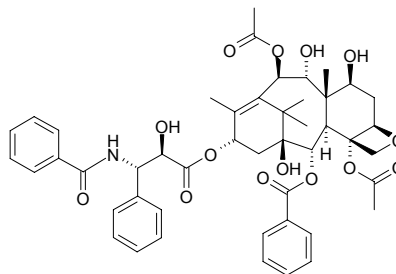
$C_{20}H_{26}O_3$  (314.43). Source: DIAN JIANG HUA *Hedychium yunnanense*. Ref: 1521.

**22949 Yunnancoronarin E**

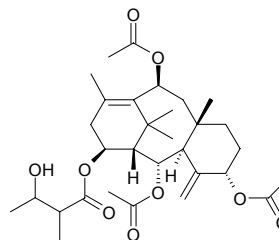
13 $\beta$ -Furanolabda-8(17),11-dien-6 $\beta$ ,7 $\alpha$ -diol  $C_{20}H_{28}O_3$  (316.44). Colorless oil. Source: DIAN JIANG HUA *Hedychium yunnanense*. Ref: 892.

**22950 Yunnanxamine**

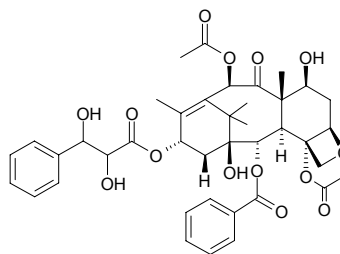
9-Deoxo-9 $\alpha$ -hydroxytaxol [148584-53-6]  $C_{47}H_{53}NO_{14}$  (855.94). White powder, mp 174~176°C,  $[\alpha]_D^{22} = -13.1^\circ$  ( $c = 0.08$ , chloroform). Source: YUN NAN HONG DOU SHAN *Taxus yunnanensis*. Ref: 316.

**22951 Yunnanxane**

Taxa-4(20),11-diene-2 $\alpha$ ,5 $\alpha$ ,10 $\beta$ ,14 $\beta$ -tetraol-2 $\alpha$ ,5 $\alpha$ ,10 $\beta$ -triacetate-14 $\beta$ - $\alpha$ -methyl- $\beta$ -hydroxyl butyrate [139713-81-8]  $C_{31}H_{46}O_9$  (562.71). Colorless transparent massive crystals, mp 165~167°C,  $[\alpha]_D^{17} = +41.6^\circ$  (methanol). Pharm: Anti-neoplastic. Source: MEI LI HONG DOU SHAN *Taxus mairei*, YUN NAN HONG DOU SHAN *Taxus yunnanensis* (aerial parts). Ref: 202, 900, 4611.

**22952 Yunnanxol**

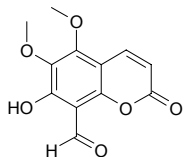
13(2',3'-Dihydroxy-3'-phenyl)propionyl baccatin III  $C_{40}H_{46}O_{14}$  (750.80). White powder, mp 154~157°C,  $[\alpha]_D^{12} = -75.2^\circ$  ( $c = 0.055$ , chloroform). Source: YUN NAN HONG DOU SHAN *Taxus yunnanensis*. Ref: 316, 662.



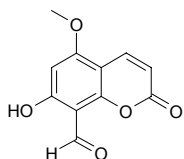


**22953 Yunngnin A**

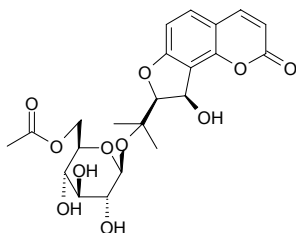
8-Formyl-7-hydroxy-5,6-dimethoxy coumarin  $C_{12}H_{10}O_6$  (250.21). Colorless crystalline powder, mp 158~160°C. Source: YONG NING DU HUO *Heracleum yungningense* (root). Ref: 4472.

**22954 Yunngnin B**

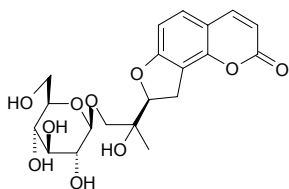
$C_{11}H_8O_5$  (220.18). Colorless crystalline powder, mp 179~180°C. Source: YONG NING DU HUO *Heracleum yungningense* (root). Ref: 4472.

**22955 Yunngnoside A**

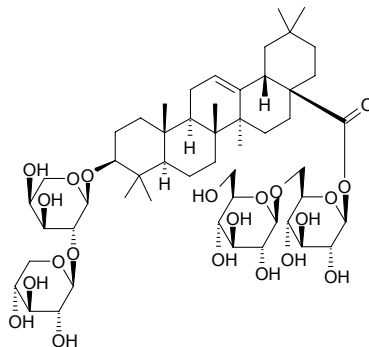
$C_{22}H_{26}O_{11}$  (466.45). Colorless crystalline powder, mp 240~242°C. Source: YONG NING DU HUO *Heracleum yungningense* (root). Ref: 4472.

**22956 Yunngnoside B**

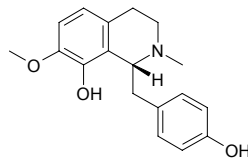
$C_{20}H_{24}O_{10}$  (424.41). Pale yellow viscous oil. Source: YONG NING DU HUO *Heracleum yungningense* (root). Ref: 4472.

**22957 Yuzhizioside**

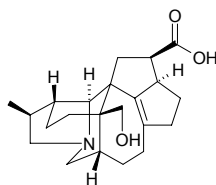
3-*O*- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl oleanolic acid 28-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside  $C_{52}H_{84}O_{21}$  (1045.24). White acicular crystals, mp 213~216°C. Source: BAI MU TONG *Akebia trifoliata* var. *australis*. Ref: 299.

**22958 Yuziphine**

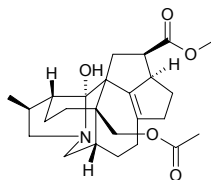
Juziphine  $C_{18}H_{21}NO_3$  (299.37). Source: KU DI DING *Corydalis bungeana*. Ref: 660.

**22959 Yuzurimic acid B**

$C_{22}H_{31}NO_3$  (357.5). Microcrystals (MeOH), mp 253~255°C,  $[\alpha]_D^{22} = +11^\circ$  ( $c = 0.3$ , MeOH). Source: NIU ER FENG ZI *Daphniphyllum calycinum* (fruit: yield = 0.0013%). Ref: 4754.

**22960 Yuzurimine E**

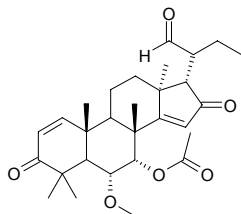
$C_{25}H_{35}NO_5$  (429.56). Colorless amorphous solid,  $[\alpha]_D^{22} = -33^\circ$  ( $c = 0.3$ , MeOH). Source: NIU ER FENG ZI *Daphniphyllum calycinum* (fruit: yield = 0.00042%). Ref: 4754.



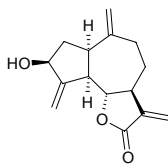
## Z

**22961 Zafaral**

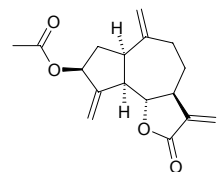
[24,25,26,27-Tetranorapotirucalla-(apoeupha)-6 $\alpha$ -methoxy-7 $\alpha$ -acetoxy-1,14-dien-3,16-dione-21-al] C<sub>29</sub>H<sub>40</sub>O<sub>6</sub> (484.64). Crystalline, mp 71~72°C, [ $\alpha$ ]<sub>D</sub><sup>27</sup> = +41.0° (*c* = 0.02, CHCl<sub>3</sub>). Source: YIN DU LIAN *Azadiractica indica* (leaf). Ref: 3844.

**22962 Zaluzanin C**

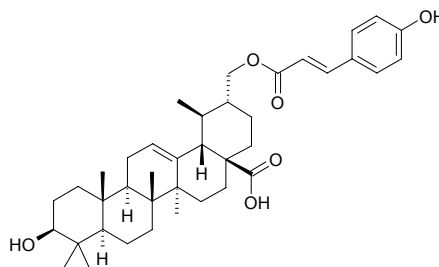
[16838-87-2] C<sub>15</sub>H<sub>18</sub>O<sub>3</sub> (246.31). mp 94~95°C. Pharm: Antineoplastic (mus P<sub>388</sub>, 150mg/kg, biotic prolonged rate = 61%); cytotoxic (*in vitro*, HepG<sub>2</sub>, CD<sub>50</sub> = 34 $\mu$ g/mL; HeLa, CD<sub>50</sub> = 22 $\mu$ g/mL; OVCAR-3, CD<sub>50</sub> = 15 $\mu$ g/mL; control Cisplatin, HepG<sub>2</sub>, CD<sub>50</sub> = 2.8 $\mu$ g/mL; HeLa, CD<sub>50</sub> = 5.2 $\mu$ g/mL; OVCAR-3, CD<sub>50</sub> = 3 $\mu$ g/mL; without significant antibacterial effect)<sup>[4720]</sup>. Source: MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*] (root: yield = 0.0023%dw)<sup>[4720]</sup>, SHE TAI *Conocephalum conicum*. Ref: 5, 658, 4720.

**22963 Zaluzanin D**

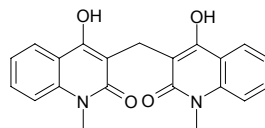
C<sub>17</sub>H<sub>20</sub>O<sub>4</sub> (288.35). Pharm: Antitrypanosomal (epimastigotes of *Trypanosoma cruzi*, MLC = 2.5 $\mu$ mol/L)<sup>[4248]</sup>. Source: SHE TAI *Conocephalum conicum*, YUE GUI YE *Laurus nobilis*. Ref: 660, 4248.

**22964 Zamanic acid**

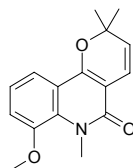
C<sub>39</sub>H<sub>54</sub>O<sub>6</sub> (618.86). [ $\alpha$ ]<sub>D</sub><sup>27</sup> = +26° (*c* = 0.15, CHCl<sub>3</sub>). Source: DUN XING JI DAN HUA *Plumeria obtusa* (leaf). Ref: 2385.

**22965 Zanthobisquinolone**

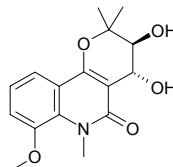
C<sub>21</sub>H<sub>18</sub>N<sub>2</sub>O<sub>4</sub> (362.39). Pharm: Platelet aggregation inhibitor; DNA isomerase inhibitor; antibacterial; cytotoxic. Source: *Zanthoxylum* sp. Ref: 2176.

**22966 Zanthobungeanine**

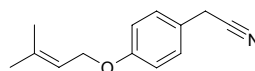
[64190-94-9] C<sub>16</sub>H<sub>17</sub>NO<sub>3</sub> (271.30). Pharm: Antifungal (yeast-like pathogenic bacteria, subcutaneous pathogenic bacteria, skin pathogenic bacteria). Source: HUA JIAO *Zanthoxylum bungeanum*. Ref: 658.

**22967 Zanthodioline**

C<sub>16</sub>H<sub>19</sub>NO<sub>5</sub> (305.33). Source: YE HUA JIAO YE *Zanthoxylum simulans*. Ref: 2176.

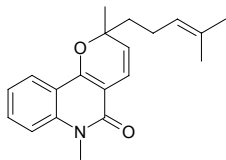
**22968 Zanthonitrile**

C<sub>13</sub>H<sub>13</sub>NO (201.27). Source: *Zanthoxylum* sp. Ref: 2176.

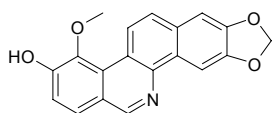


**22969 Zanthosimuline**

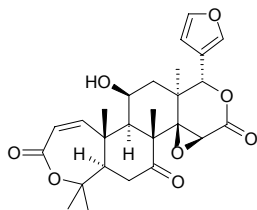
[155416-20-9] C<sub>20</sub>H<sub>23</sub>NO<sub>2</sub> (309.41). Oil, [ $\alpha$ ]<sub>D</sub> = +7° (c = 0.1, chloroform). **Pharm:** Cytotoxic (ED<sub>50</sub> = 5.2–30.4 μmol/L); platelet aggregation inhibitor; DNA isomerase inhibitor. **Source:** YE HUA JIAO YE *Zanthoxylum simulans*, HUA JIAO *Zanthoxylum bungeanum*. **Ref:** 1052, 1120, 2176.

**22970 Zanthoxyline**

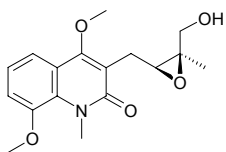
C<sub>19</sub>H<sub>13</sub>NO<sub>4</sub> (319.32). **Pharm:** Platelet aggregation inhibitor; DNA isomerase inhibitor; antibacterial; cytotoxic. **Source:** *Zanthoxylum* sp. **Ref:** 2176.

**22971 Zapoterin**

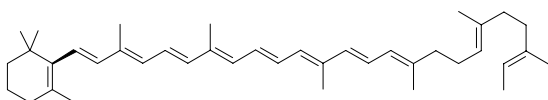
11-β-Hydroxybacunone. [35796-71-5] C<sub>26</sub>H<sub>30</sub>O<sub>8</sub> (470.52). **Source:** SHAN HUANG PI *Clausena excavata*. **Ref:** 703.

**22972 Zascanol epoxide**

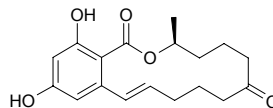
C<sub>17</sub>H<sub>21</sub>NO<sub>5</sub> (319.36). **Pharm:** Platelet aggregation inhibitor; DNA isomerase inhibitor; antibacterial; cytotoxic. **Source:** *Zanthoxylum* sp. **Ref:** 2176.

**22973 β-Zeacarotene**

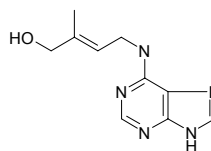
C<sub>40</sub>H<sub>58</sub> (538.91). **Source:** HAI YUN *Nemacystus decipiens* [Syn. *Mesogloea decipiens*; *Cladosiphon decipiens*]. **Ref:** 660.

**22974 Zearalenone**

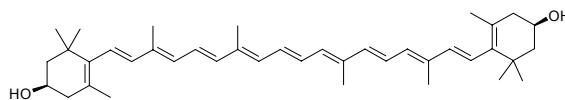
C<sub>18</sub>H<sub>22</sub>O<sub>5</sub> (318.37). **Pharm:** Induces geno-defect (animal model). **Source:** DAO CHI MEI JUN *Gibberella zeae*. **Ref:** 658.

**22975 Zeatin**

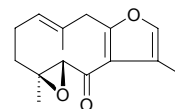
[1637-39-4] C<sub>10</sub>H<sub>13</sub>N<sub>5</sub>O (219.25). mp 207–208°C. **Pharm:** Anti-caducity of plants; plant growth regulator; promotes cell division of plants; used in treatment of hepatitis virus. **Source:** HUO MA REN *Cannabis sativa*, MI HOU TAO *Actinidia chinensis*, BIAN DOU *Dolichos lablab*, TAO NAN GUA *Cucurbita pepo* var. *akoda*, XI HU LU *Cucurbita pepo*, YI NIAN SHENG SHAN DIAN *Mercurialis annua*, YU SHU SHU *Zea mays*. **Ref:** 6, 660, 658.

**22976 Zeaxanthin**

[144-68-3] C<sub>40</sub>H<sub>56</sub>O<sub>2</sub> (568.89). mp 215.5°C. **Pharm:** Yellow pigment. **Source:** CU LIU GUO *Hippophae rhamnoides*, GOU QI ZI *Lycium chinense*, HONG HAI JIAO *Capsicum annuum*, HUANG BAI HE *Lilium hansonii*, JIN YU *Carassius auratus*, JU PI *Citrus reticulata*, NING XIA GOU QI ZI *Lycium barbarum*, SU TIE SHU GUO *Cycas revoluta*, YU SHU SHU *Zea mays*, ZANG HONG HUA *Crocus sativus*, ZHI KE *Citrus aurantium*. **Ref:** 2, 658.

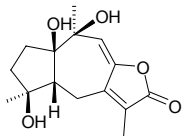
**22977 Zederone**

[7727-79-9] C<sub>15</sub>H<sub>18</sub>O<sub>3</sub> (246.31). mp 153.5–154.0°C. **Pharm:** NO production inhibitor (mus peritoneal macrophages, induced by LPS, 100 μmol/L, InRt = (29.9±2.4)%, control L-NMMA, 100 μmol/L, InRt = (79.2±0.9)%, p<0.01)<sup>[4150]</sup>. **Source:** PING E SHU *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*]. **Ref:** 6, 1521, 4150.

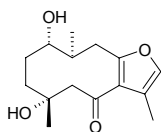


**22978 Zedoalactone B**

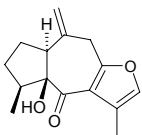
$C_{15}H_{20}O_5$  (280.32). **Pharm:** NO production inhibitor inactive (mus peritoneal macrophages, induced by LPS, 100 $\mu$ mol/L, InRt = (7.1 $\pm$ 7.6)%, control *L*-NMMA, 100 $\mu$ mol/L, InRt = (79.2 $\pm$ 0.9)%). **Source:** PING E SHU *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*]. **Ref:** 4150.

**22979 Zedoarofuran**

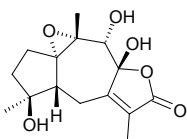
$C_{15}H_{22}O_4$  (266.34). Colorless oil,  $[\alpha]_D^{24} = +26.0^\circ$  ( $c = 0.10$ ,  $CHCl_3$ ). **Source:** PING E SHU *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*]. **Ref:** 4150.

**22980 Zedoarol**

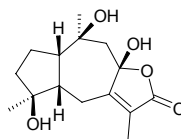
$C_{15}H_{18}O_3$  (246.31). **Source:** PING E SHU *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*]. **Ref:** 660.

**22981 Zedoarolide A**

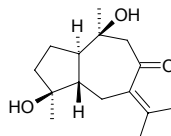
$C_{15}H_{20}O_6$  (296.32). Colorless oil,  $[\alpha]_D^{18} = -32.5^\circ$  ( $c = 0.10$ ,  $CHCl_3$ ). **Pharm:** NO production inhibitor inactive (mus peritoneal macrophages, induced by LPS, 100 $\mu$ mol/L, InRt = (-3.9 $\pm$ 4.3)%, control *L*-NMMA, 100 $\mu$ mol/L, InRt = (79.2 $\pm$ 0.9)%). **Source:** PING E SHU *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*]. **Ref:** 4150.

**22982 Zedoarolide B**

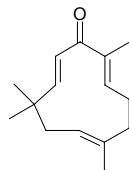
$C_{15}H_{22}O_5$  (282.34). Colorless oil,  $[\alpha]_D^{21} = -20.6^\circ$  ( $c = 1.80$ , MeOH). **Pharm:** NO production inhibitor inactive (mus peritoneal macrophages, induced by LPS, 100 $\mu$ mol/L, InRt = (10.9 $\pm$ 4.4)%, control *L*-NMMA, 100 $\mu$ mol/L, InRt = (79.2 $\pm$ 0.9)%). **Source:** PING E SHU *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*]. **Ref:** 4150.

**22983 Zedoarondiol**

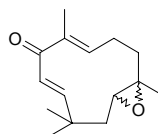
$C_{15}H_{24}O_3$  (252.36). **Pharm:** NO production inhibitor inactive (mus peritoneal macrophages, induced by LPS, 100 $\mu$ mol/L, InRt = (10.3 $\pm$ 2.0)%, control *L*-NMMA, 100 $\mu$ mol/L, InRt = (79.2 $\pm$ 0.9)%,  $p < 0.01$ )<sup>[4150]</sup>. **Source:** JIANG HUANG *Curcuma longa*, PING E SHU *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*], YU JIN *Curcuma aromatica*. **Ref:** 660, 4150.

**22984 Zerumbone**

2,6,9-Humulatrien-8-one  $C_{15}H_{22}O$  (218.34). **Pharm:** NO production inhibitor (cultured RAW264.7 macrophages, induced by LPS,  $IC_{50} = 5.4\mu$ mol/L, control *L*-NMMA,  $IC_{50} = 21.3\mu$ mol/L)<sup>[4481]</sup>, CYP3A4 inhibitor ( $IC_{50} = 21.8\mu$ mol/L, control Ketoconazole,  $IC_{50} = 0.245\mu$ mol/L)<sup>[4669]</sup>, CYP2D6 inhibitor inactive ( $IC_{50} > 100\mu$ mol/L, control Quinidine,  $IC_{50} = 0.078\mu$ mol/L)<sup>[4669]</sup>, antineoplastic (inhibits growth of P388D1 cells,  $IC_{50} = 22.6\mu$ g/mL, control Adriamycin,  $IC_{50} = 0.20\mu$ g/mL)<sup>[5067]</sup>. **Source:** FANG XIANG JIANG *Zingiber aromaticum* (rhizome: yield = 0.0025%dw), HONG QIU JIANG *Zingiber zerumbet* (rhizome), YU YE DING XIANG *Syringa pinnatifolia*. **Ref:** 1521, 4481, 4669, 5067.

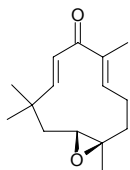
**22985 Zerumbone epoxide**

2,3-Epoxy-6,9-humuladien-8-one  $C_{15}H_{22}O_2$  (234.34). **Pharm:** CYP3A4 inhibitor ( $IC_{50} = 48.4\mu$ mol/L, control Ketoconazole,  $IC_{50} = 0.245\mu$ mol/L)<sup>[4669]</sup>; CYP2D6 inhibitor inactive ( $IC_{50} > 100\mu$ mol/L, control Quinidine,  $IC_{50} = 0.078\mu$ mol/L)<sup>[4669]</sup>. **Source:** FANG XIANG JIANG *Zingiber aromaticum* (rhizome: yield = 0.0050%dw), HONG QIU JIANG *Zingiber zerumbet*. **Ref:** 1521, 4669.

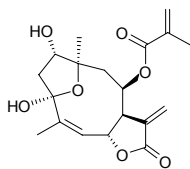


**22986 Zerumboneoxide**

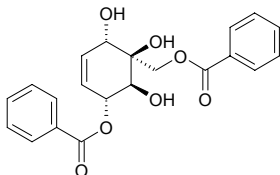
$C_{15}H_{22}O_2$  (234.34). Colorless crystals, mp 96–97°C,  $[\alpha]_D^{20} = 0.0^\circ$  ( $c = 0.24$ ,  $CHCl_3$ ). **Pharm:** NO production inhibitor (cultured RAW264.7 macrophages, induced by LPS,  $IC_{50} = 23.5\mu\text{mol/L}$ , control *L*-NMMA,  $IC_{50} = 21.3\mu\text{mol/L}$ )<sup>1</sup>. **Source:** HONG QIU JIANG *Zingiber zerumbet* (rhizome). **Ref:** 4481.

**22987 Zexbrevin B**

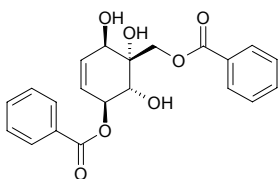
[34302-19-7]  $C_{19}H_{24}O_7$  (364.40). **Pharm:** Antineoplastic; cytotoxic. **Source:** DUAN YE PENG QI JU *Zexmenia brevifolia*. **Ref:** 658.

**22988 Zeylenol**

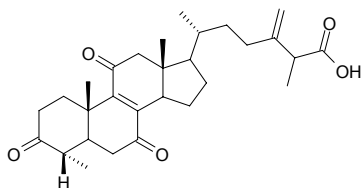
$C_{21}H_{20}O_7$  (384.39). **Pharm:** Cytotoxic (MTT assay, A549 bronchogenic carcinoma cell,  $IC_{50} = 25\mu\text{g/mL}$ , SK-MES-1 bronchogenic carcinoma cell,  $IC_{50} = 23\mu\text{g/mL}$ , NCI-H446 bronchogenic carcinoma cell,  $IC_{50} = 26\mu\text{g/mL}$ ). **Source:** LIU GUO ZI YU PAN *Uvaria kweichowensis* (leaf). **Ref:** 4481.

**22989 (+)-Zeylenol**

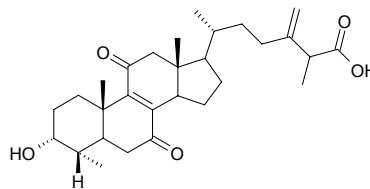
$C_{21}H_{20}O_7$  (384.39). **Source:** BI CHENG QIE *Piper cubeba*. **Ref:** 660.

**22990 Zhankuic acid A**

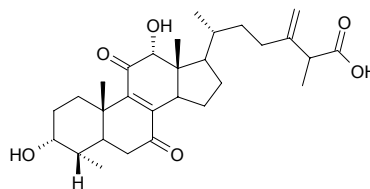
$C_{29}H_{40}O_5$  (468.64). **Pharm:** Anti-inflammatory. **Source:** *Antrodia camphorata* (fruit body). **Ref:** 4960.

**22991 Zhankuic acid B**

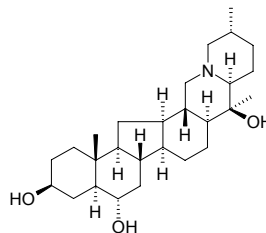
$C_{29}H_{42}O_5$  (470.66). **Source:** *Antrodia camphorata* (fruit body). **Ref:** 4960.

**22992 Zhankuic acid C**

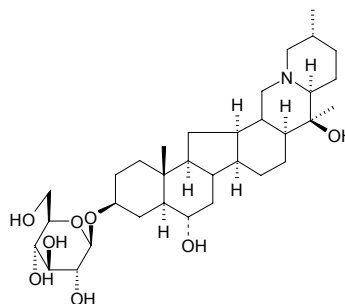
$C_{29}H_{42}O_6$  (486.65). **Source:** *Antrodia camphorata* (fruit body). **Ref:** 4960.

**22993 Zhebeinine**

5 $\alpha$ ,14 $\alpha$ -22 $\alpha$ -Cevanine-3 $\beta$ ,6 $\alpha$ ,20 $\beta$ -triol [135636-54-3]  $C_{27}H_{45}NO_3$  (431.66). White acicular crystals, mp 222–224°C,  $[\alpha]_D^{25} = -21.3^\circ$  ( $c = 0.5$ , ethanol). **Source:** ZHE BEI MU *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*]. **Ref:** 186, 528.

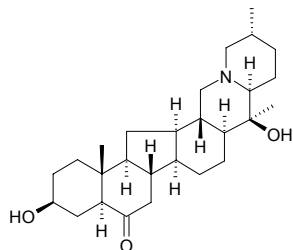
**22994 Zhebeininoside**

$C_{33}H_{55}NO_8$  (593.81). **Source:** ZHE BEI MU *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*]. **Ref:** 660.

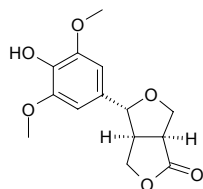


**22995 Zhebeinone**

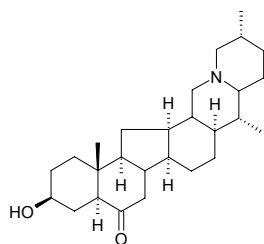
5 $\alpha$ ,14 $\alpha$ -Cevanine-3 $\beta$ ,20 $\beta$ -dihydroxy-6-one C<sub>27</sub>H<sub>43</sub>NO<sub>3</sub> (429.65). Colorless crystals (acetone), mp 181~183°C, [ $\alpha$ ]<sub>D</sub><sup>10</sup> = -48.76° (c = 0.035, chloroform). Source: ZHE BEI MU *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*]. Ref: 233, 660

**22996 Zhebeiresinol**

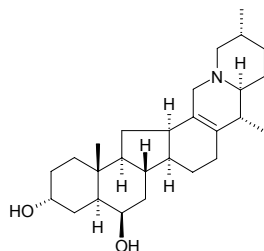
2-(3',5'-Dimethoxy-4'-hydroxyphenyl)-3,7-dioxabicyclo[3.3.0]octan-6-one. C<sub>14</sub>H<sub>16</sub>O<sub>6</sub> (280.28). Yellowish prismatic crystals, mp 193~194°C. Source: ZHE BEI MU *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*]. Ref: 262.

**22997 Zhebeirine**

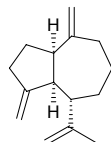
C<sub>27</sub>H<sub>43</sub>NO<sub>2</sub> (413.65). Source: ZHE BEI MU *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*]. Ref: 660.

**22998 Ziebeimine**

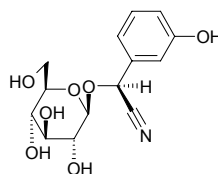
5 $\alpha$ ,14 $\alpha$ -Cevanine-13,17-dehydro-3 $\alpha$ ,6 $\beta$ -diol C<sub>27</sub>H<sub>43</sub>NO<sub>2</sub> (413.65). Colorless crystals, mp 186~188°C, [ $\alpha$ ]<sub>D</sub><sup>23</sup> = +10.6° (c = 0.09 CHCl<sub>3</sub>). Source: ZI HUA E BEI BEI MU *Fritillaria ebeiensis* var. *purpurea*. Ref: 136.

**22999 Zierene**

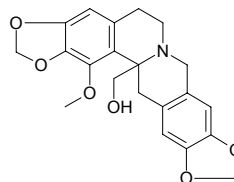
(+)-(1*R*\*,5*R*\*,6*S*\*)-Zierene C<sub>15</sub>H<sub>22</sub> (202.34). Source: *Saccogyna viticulosa* (essential oil). Ref: 3839.

**23000 Zierin**

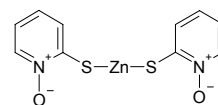
[645-02-3] C<sub>14</sub>H<sub>17</sub>NO<sub>7</sub> (311.30). Pharm: Toxin. Source: TUN CAO ZI WAN *Aster ptarmicoides*, TIAN YE JI DOU *Oxytropis campestris*, XI YANG JIE GU MU *Sambucus nigra*. Ref: 658.

**23001 Zijinlongine**

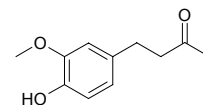
[133086-83-6] C<sub>21</sub>H<sub>21</sub>NO<sub>6</sub> (383.40). Colorless lamellar crystals, mp 166~167°C. Source: ZI HUA E BEI BEI MU *Fritillaria ebeiensis* var. *purpurea*. Ref: 162.

**23002 Zincpolyanemine**

[13463-41-7] C<sub>10</sub>H<sub>8</sub>N<sub>2</sub>O<sub>2</sub>S<sub>2</sub>Zn (317.69). Pharm: Antibacterial; antifungal; antimalarial (rat malaria, ED = 50mg/kg). Source: LING SHUI AN LUO *Polyalthia nemoralis*. Ref: 658, 1271.

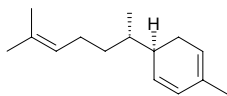
**23003 Zingerone**

[122-48-5] C<sub>11</sub>H<sub>14</sub>O<sub>3</sub> (194.23). mp 40~41°C, bp 190°C/16mmHg. Pharm: Anesthetic; antemetic; antipyretic (rat, 100~150mg/kg, body temperature goes down 2~3°C); paralyzes motor nerve (iv). Source: GAN JIANG *Zingiber officinale*, SHENG JIANG *Zingiber officinale* (rhizome: content = 0.48%<sup>[5508]</sup>). Ref: 2, 658, 5508.

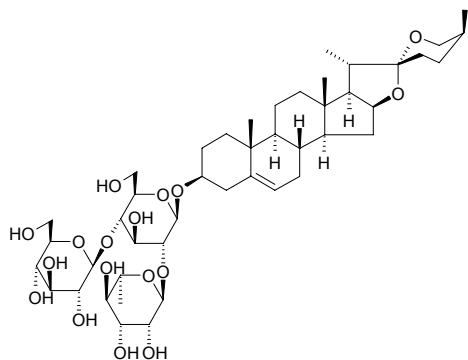


**23004 Zingiberene**

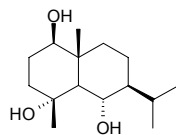
[*S*-(*R*\*,*S*\*)]-5-(1,5-Dimethyl-4-hexenyl)-2-methyl-1,3-cyclohexadiene.  
[495-60-3] C<sub>15</sub>H<sub>24</sub> (204.36). (–) bp 134°C/14mmHg. **Pharm:** Analgesic.  
**Source:** GAN JIANG *Zingiber officinale*, SHENG JIANG *Zingiber officinale*,  
*Curcuma* sp. **Ref:** 2, 658.

**23005 Zingiberoside A<sub>3</sub>**

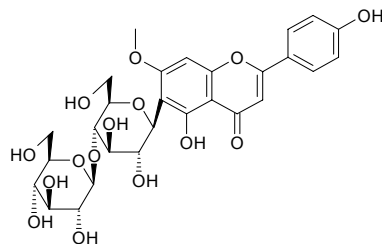
Balanitin 6 [99661-97-9] C<sub>45</sub>H<sub>72</sub>O<sub>17</sub> (885.05). Acicular crystals (ethanol), mp 278–280°C; 282–289°C, [ $\alpha$ ]<sub>D</sub><sup>29</sup> = –89° (*c* = 0.67, pyridine). **Pharm:** Cytotoxic (mus P<sub>388</sub>, ED<sub>50</sub> = 0.21 µg/mL). **Source:** DUN YE SHU YU *Dioscorea zingiberensis*. **Ref:** 901, 1051.

**23006 Zingibertriol**

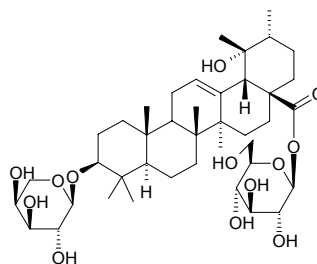
C<sub>15</sub>H<sub>28</sub>O<sub>3</sub> (256.39). **Source:** ZHOU YE MU LAN *Magnolia praecoccisima* (seed). **Ref:** 4181.

**23007 Zivulgarin**

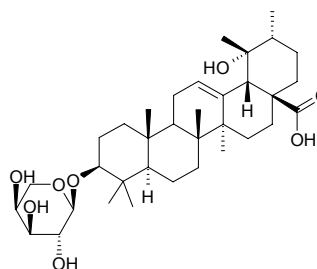
4"-β-D-Glucopyranosyl swertisin [108657-24-5] C<sub>28</sub>H<sub>32</sub>O<sub>15</sub> (608.56).  
Yellowish acicular crystals, mp 275–277°C (methanol). **Source:** SUAN ZAO  
REN *Ziziphus jujuba* var. *spinosa*. **Ref:** 73.

**23008 Ziyu glycoside I**

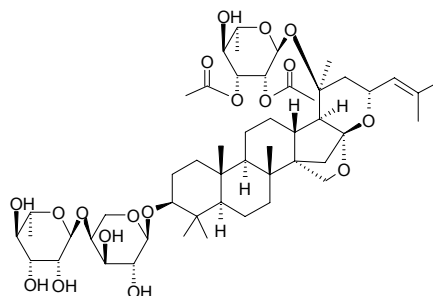
C<sub>41</sub>H<sub>66</sub>O<sub>13</sub> (766.98). mp 256–260°C. **Source:** DI YU *Sanguisorba officinalis*.  
**Ref:** 6.

**23009 Ziyu glycoside II**

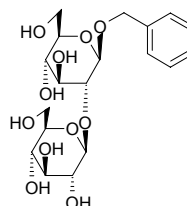
C<sub>35</sub>H<sub>56</sub>O<sub>8</sub> (604.83). **Source:** DI YU *Sanguisorba officinalis*. **Ref:** 6.

**23010 Ziziphin**

[73667-51-3] C<sub>51</sub>H<sub>80</sub>O<sub>18</sub> (981.20). **Pharm:** Flavorant, conditioning agent.  
**Source:** DA ZAO *Ziziphus jujuba*. **Ref:** 658, 1521.

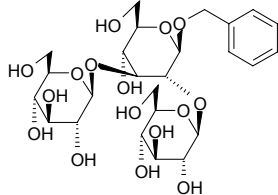
**23011 Zizybeoside I**

[76819-28-8] C<sub>19</sub>H<sub>28</sub>O<sub>11</sub> (432.43). **Source:** CHA RU SHI WAN CUO  
*Asystasia intrusa*, WU CI ZAO *Ziziphus jujuba* var. *inermis*. **Ref:** 2, 2589.

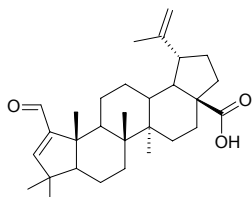


**23012 Zizyboaside II**

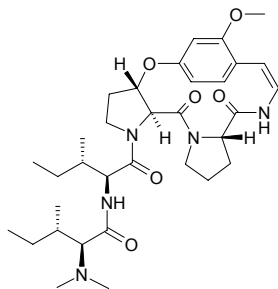
[81417-79-0] C<sub>25</sub>H<sub>38</sub>O<sub>16</sub> (594.57). Source: WU CI ZAO *Ziziphus jujuba* var. *inermis*. Ref: 2.

**23013 Zizyberenic acid**

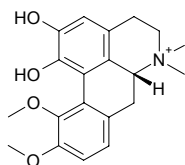
C<sub>30</sub>H<sub>44</sub>O<sub>3</sub> (452.68). White powder, mp 214~216°C, [α]<sub>D</sub><sup>18</sup> = +24° (c = 0.5, MeOH). Pharm: Cytotoxic (K562, ED<sub>50</sub> > 20 μmol/L, control Adriamycin, ED<sub>50</sub> = (0.09±0.03) μmol/L; B16(F-10), ED<sub>50</sub> > 20 μmol/L, Adriamycin, ED<sub>50</sub> = (0.06±0.10) μmol/L; SK-MEL-2, ED<sub>50</sub> > 20 μmol/L, Adriamycin, ED<sub>50</sub> = (0.09±0.3) μmol/L; PC3, ED<sub>50</sub> = (19.9±0.9) μmol/L, Adriamycin, ED<sub>50</sub> = (0.83±0.18) μmol/L; LOX-IMVI, ED<sub>50</sub> = (15.0±1.3) μmol/L, Adriamycin, ED<sub>50</sub> = (0.38±0.33) μmol/L; A549, ED<sub>50</sub> > 20 μmol/L, Adriamycin, ED<sub>50</sub> = (0.67±0.21) μmol/L). Source: DA ZAO *Ziziphus jujuba*. Ref: 5479.

**23014 Zizyphine A**

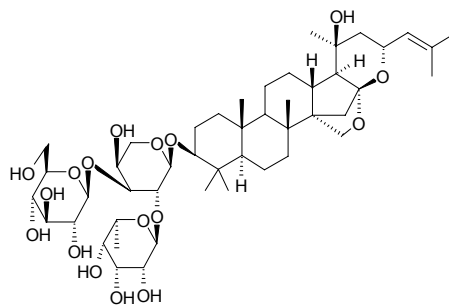
[51059-42-8] C<sub>33</sub>H<sub>49</sub>N<sub>5</sub>O<sub>6</sub> (611.79). Pharm: Antibacterial (gram-positive bacteria and low fungi); inhibits oxidative phosphorylation (plants). Source: XIAO GUO ZAO *Ziziphus oenoplia* (in 1965, the compound was isolated from the plant by E.Zbiral et al.)<sup>[5505]</sup>. Ref: 658, 5505.

**23015 (R)-Zizyphusine**

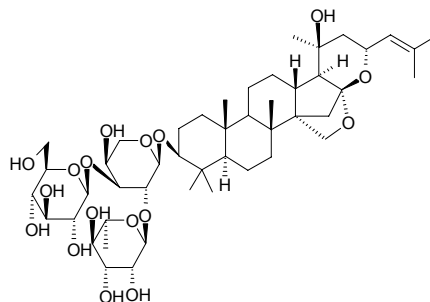
C<sub>20</sub>H<sub>24</sub>NO<sub>4</sub><sup>+</sup> (342.42). Source: DA ZAO *Ziziphus jujuba*, SUAN ZAO REN *Ziziphus jujuba* var. *spinosa*. Ref: 660.

**23016 Zizyphussaponin I**

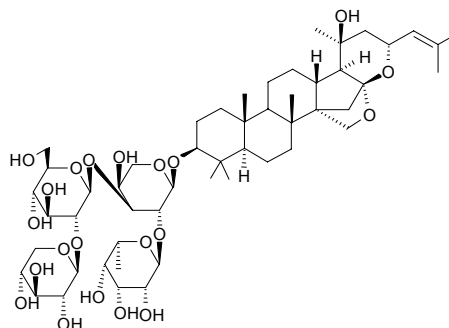
[77943-56-7] C<sub>47</sub>H<sub>76</sub>O<sub>17</sub> (913.12). Colorless acicular crystals, mp 269~272°C (methanol). Pharm: Anti-sweetener (1 mmol/L, inhibits 0.1 mol/L sugar). Source: DA ZAO *Ziziphus jujuba*. Ref: 2, 970, 992.

**23017 Zizyphussaponin II**

[77943-83-0] C<sub>47</sub>H<sub>76</sub>O<sub>17</sub> (913.12). Pharm: Anti-sweetener (1 mmol/L, inhibits 0.1 mol/L sugar). Source: DA ZAO *Ziziphus jujuba*. Ref: 2, 1754.

**23018 Zizyphussaponin III**

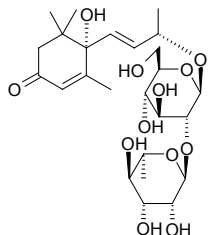
[77943-54-5] C<sub>52</sub>H<sub>84</sub>O<sub>21</sub> (1045.24). Colorless lamellar crystals, mp 229~233°C (pyridine-water). Pharm: Anti-sweetener (1 mmol/L, inhibits 0.2 mol/L sugar). Source: DA ZAO *Ziziphus jujuba*. Ref: 2, 970, 992.



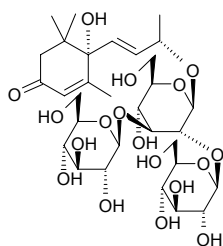


**23019 Zizyoside I**

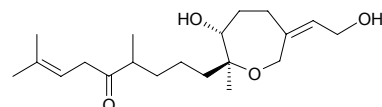
[425-28-7] C<sub>25</sub>H<sub>40</sub>O<sub>12</sub> (532.59). Source: HAI JIN BI XIE *Dioscorea spongiosa* (Rhizome: yield = 0.00020%)<sup>[4692]</sup>, WU CI ZAO *Ziziphus jujuba* var. *inermis*. Ref: 2, 4692.

**23020 Zizyoside II**

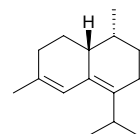
[81425-29-8] C<sub>31</sub>H<sub>50</sub>O<sub>18</sub> (710.73). Source: WU CI ZAO *Ziziphus jujuba* var. *inermis*. Ref: 2.

**23021 Zoapatanol**

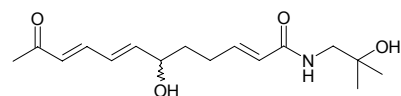
[71117-51-6] C<sub>20</sub>H<sub>34</sub>O<sub>4</sub> (338.49). Pharm: Anti-pregnancy. Source: *Montanoa tomentosa*. Ref: 658.

**23022 Zonarene**

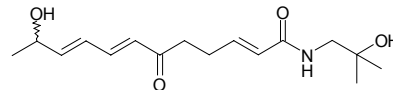
[41929-05-9] C<sub>15</sub>H<sub>24</sub> (204.36). Source: SHENG JIANG *Zingiber officinale*. Ref: 2.

**23023 ZP-amide A**

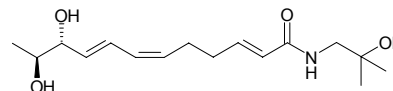
(6*RS*)-(2*E*,7*E*,9*E*)-6-Hydroxy-*N*-(2-hydroxy-2-methylpropyl)-11-oxo-2,7,9-dodecatrienamide C<sub>16</sub>H<sub>25</sub>NO<sub>4</sub> (295.38). Unstable colorless syrup, [α]<sub>D</sub> = 0° (c = 2, acetone). Source: HU JIAO HUA JIAO *Zanthoxylum piperitum* (fruit). Ref: 3862.

**23024 ZP-amide B**

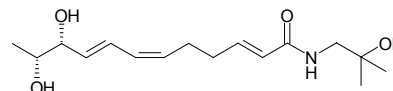
(11*RS*)-(2*E*,7*E*,9*E*)-11-Hydroxy-*N*-(2-hydroxy-2-methylpropyl)-6-oxo-2,7,9-dodecatrienamide C<sub>16</sub>H<sub>25</sub>NO<sub>4</sub> (295.38). Unstable colorless syrup, [α]<sub>D</sub> = 0° (c = 1, MeOH). Source: HU JIAO HUA JIAO *Zanthoxylum piperitum* (fruit). Ref: 3862.

**23025 ZP-amide C**

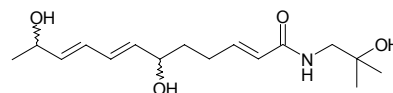
(10*RS*,11*RS*)-(2*E*,6*Z*,8*E*)-10,11-Dihydroxy-*N*-(2-hydroxy-2-methylpropyl)-2,6,8-dodecatrienamide C<sub>16</sub>H<sub>27</sub>NO<sub>4</sub> (297.40). Unstable colorless syrup, [α]<sub>D</sub> = 0° (c = 1, MeOH). Source: HU JIAO HUA JIAO *Zanthoxylum piperitum* (fruit). Ref: 3862.

**23026 ZP-amide D**

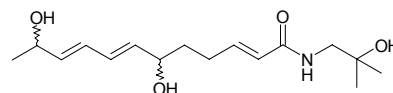
(10*RS*,11*RS*)-(2*E*,6*Z*,8*E*)-10,11-Dihydroxy-*N*-(2-hydroxy-2-methylpropyl)-2,6,8-dodecatrienamide C<sub>16</sub>H<sub>27</sub>NO<sub>4</sub> (297.40). Unstable colorless syrup, [α]<sub>D</sub> = 0° (c = 1, MeOH). Source: HU JIAO HUA JIAO *Zanthoxylum piperitum* (fruit). Ref: 3862.

**23027 ZP-amide E**

(6*RS*,11*RS*)-(2*E*,7*E*,9*E*)-6,11-Dihydroxy-*N*-(2-hydroxy-2-methylpropyl)-2,7,9-dodecatrienamides C<sub>16</sub>H<sub>27</sub>NO<sub>4</sub> (297.40). Unstable colorless syrup, [α]<sub>D</sub> = 0° (c = 1, MeOH). Source: HU JIAO HUA JIAO *Zanthoxylum piperitum* (fruit). Ref: 3862.

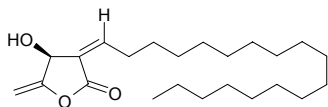
**23028 ZP-amide F**

(6*RS*,11*RS*)-(2*E*,7*E*,9*E*)-6,11-Dihydroxy-*N*-(2-hydroxy-2-methylpropyl)-2,7,9-dodecatrienamides C<sub>16</sub>H<sub>27</sub>NO<sub>4</sub> (297.40). Unstable colorless syrup, [α]<sub>D</sub> = 0° (c = 1, MeOH). Source: HU JIAO HUA JIAO *Zanthoxylum piperitum* (fruit). Ref: 3862.

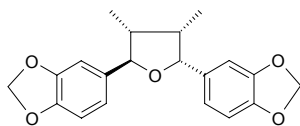


**23029 Zuihoenalide**

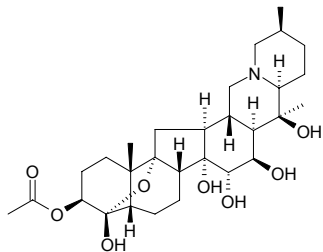
(4*S*,3*Z*)-4-Hydroxy-5-methylene-3-octadecylidene-di-hydro-furan-2-one  
 $C_{23}H_{40}O_3$  (364.57). Colorless oil,  $[\alpha]_D^{25} = -50.2^\circ$  ( $c = 0.015$ ,  $CHCl_3$ ). **Pharm:**  
 Cytotoxic inactive (*in vitro*, 20  $\mu$ g/mL, NUGC-3 cell line, HONE-1 cancer cell  
 line). **Source:** TAI WAN RUI FANG RUN NAN *Machilus zuihoensis* (stem  
 wood). **Ref:** 5287.

**23030 (-)-Zuonin A**

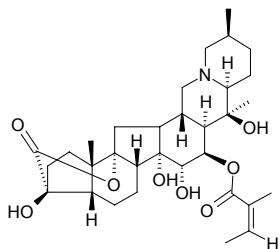
$C_{20}H_{20}O_5$  (340.38). **Pharm:** NO production inhibitor (mus, macrophage-like  
 cell line RAW264.7 activated by LPS/IFN,  $IC_{50} = 88.5 \mu$ mol/L, control  
 Quercetin,  $IC_{50} = 26.8 \mu$ mol/L). **Source:** HAI FENG TENG *Piper kadsura* [Syn.  
*Piper futokadsura*]. **Ref:** 2537.

**23031 Zygacine**

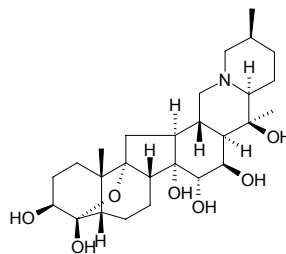
[2777-79-9]  $C_{29}H_{45}NO_8$  (535.68). **Source:** LI LU *Veratrum nigrum*. **Ref:** 6.

**23032 Zygadenilic acid  $\delta$ -lactone-16-angelate**

$C_{32}H_{47}NO_8$  (573.73). mp 235°C. **Source:** LI LU *Veratrum nigrum*. **Ref:** 6.

**23033 Zygadenine**

[545-45-9]  $C_{27}H_{43}NO_7$  (493.65). **Pharm:** Antineoplastic; antihypertensive.  
**Source:** BAI LI LU *Veratrum album*. **Ref:** 658.



(The end of isolated compounds)

# References for Isolated Compounds

## Abbreviations:

*ABY* = *Acta Botanica Yunnanica* (Yunnan Zhiwu Yanjiu)

*APS* = *Acta Pharmaceutica Sinica* (Yaoxue Xuebao)

*CCMM* = *China Journal of Chinese Materia Medica* (Zhongguo Zhongyao Zazhi)

*CTHD* = *Chinese Traditional and Herbal Drugs* (Zhongcaoyao)

*JNP* = *Journal of Natural Products*

*NPRD* = *Natural Product Research and Development* (Tianran Chanwu Yanjiu Yu Kaifa)

*ZYZ* = *Chinese Pharmaceutical Journal* (Zhongguo Yaoxue Zazhi)

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## TCM Plants and Congeners

In this part of the encyclopedia, 2923 TCM original plants (including a few of animals) and 4003 their congeners (with small number of other medicinal plants) list in alphabetical order of *Latin names*. Total number of plants described in the encyclopedia are 6926, which are coded as T0001 to T6926.

For each TCM plant entry in 2923 TCM plants, data terms are listed as following format:

Plant code (a specific code from T0001 to T6926)  
*Latin name* (family); PIN-YIN name; English name.  
 Equivalent plant: if any, a sequence of Latin names.  
Used part: a particular description for the plant.  
TCM Effects: a sequence of traditional TCM effects terms.  
TCM Indications: a sequence of traditional TCM indications terms.  
Isolated compounds: a sequence of compounds codes.

For each congeneric plant and other medicinal plant entry in 4003 plants, data terms are listed as following format:

Plant code (a specific code from T0001 to T6926)  
*Latin name* (family); PIN-YIN name; English name.  
Isolated compounds: a sequence of compounds codes.

### A

T0001 *Abelmoschus manihot* (Malvaceae); HUANG SHU KUI HUA; Setose Abelmoschus. Used part: flower. TCM Effects: To disinhibit urine and free strangury, quicken blood and stanch bleeding, resolve toxin and disperse swelling. TCM Indications: Strangury syndrome, blood ejection, spontaneous external bleeding, flooding and spotting [= metrorrhagia and metrostaxis], retention of afterbirth, swollen welling abscess and sore toxin, burns and scalds. Isolated compounds: 10887, 11642, 15170, 18317, 18390.

T0002 *Abelmoschus moschatus* [Syn. *Hibiscus abelmoschus*] (Malvaceae); HUANG KUI; Musk-mallow. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, promote lactation and free stool. TCM Indications: Ardent fever incessant, lung heat cough, dysentery, constipation, postpartum galactostasis, fracture, welling abscess with pus swelling, innominate toxin swelling, burns and scalds. Isolated compounds: 1027, 7734, 19987.

T0003 *Abies alba* (Pinaceae); OU ZHOU LENG SHAN; European Silver Fir. Isolated compounds: 12843.

T0004 *Abies balsamea* (Pinaceae); XIANG ZHI LENG SHAN; Balsam Fir. Isolated compounds: 3241, 3242, 3243, 4935, 7751, 9669, 11987.

T0005 *Abies koreana* (Pinaceae); CHAO XIAN LENG SHAN; Korean Fir. Isolated compounds: 16370, 19622, 19983, 19987.

T0006 *Abies nephrolepis* (Pinaceae); CHOU LENG SHAN; Khingan Fir. Used part: leaf and bark. TCM Effects: To dispel damp and relieve pain. TCM Indications: Pain in lumbus and legs. Isolated compounds: 1935, 6201.

T0007 *Abies sibirica* (Pinaceae); XI BO LI YA LENG SHAN; Siberian Fir. Isolated compounds: 1935, 15332.

T0008 *Abies* sp. (Pinaceae). Isolated compounds: 3194, 3981, 13594, 18003.

T0009 *Abies tazaotana* (Pinaceae). Isolated compounds: 16088.  
*Abrus cantoniensis* = *Abrus fruticosus*

T0010 *Abrus fruticosus* [Syn. *Abrus cantoniensis*] (Fabaceae); JI GU CAO; Canton Abrus. Used part: whole herb. TCM Effects: To clear heat and disinhibit damp, dissipate stasis and relieve pain. TCM Indications:

- Icterohepatitis, stomachache, wind-damp bone pain, stasis pain from knocks and falls, mammary welling abscess. Isolated compounds: 13, 14, 15, 16, 17, 18, 19, 20, 22, 31, 12113, 12307, 20083, 20127.
- T0011 *Abrus precatorius* (Fabaceae); XIANG SI TENG; Coralhead Plant Vine. Used part: stem-leaf. TCM Effects: To clear heat and resolve toxin, disinhibit urine. TCM Indications: Common cold, swelling pain in throat, lung heat cough, mammary welling abscess, sore and boil, hepatitis. Isolated compounds: 11, 24, 26, 27, 30, 32, 33, 34, 35, 18576, 18582.
- T0012 *Abrus precatorius* (Fabaceae); XIANG SI ZI; Coralhead Plant. Used part: ripe seed. TCM Effects: To clear heat and resolve toxin, dispel phlegm, kill worms, check vomiting. TCM Indications: Vomiting, welling abscess, parotitis, scab and lichen, wind-damp bone pain. Isolated compounds: 12, 13, 21, 23, 24, 25, 27, 28, 29, 30, 31, 36, 1113, 3040, 3575, 4473, 8095, 8846, 9267, 10877, 12114, 14428, 17772, 20083, 20084, 20237, 20369, 21662, 21978.
- T0013 *Abuta imene* (Menispermaceae); YI MEI NI A BU TA CAO. Isolated compounds: 15792.
- T0014 *Abuta rufescens* (Menispermaceae); HONG A BU TA CAO. Isolated compounds: 15792.
- T0015 *Abutilon indicum* (Malvaceae); MO PAN CAO; Indian Abutilon. Used part: whole herb. TCM Effects: To course wind and clear heat, relieve cough and transform phlegm, resolve toxin and disperse swelling. TCM Indications: Common cold, fever, cough, diarrhea, otitis media, deafness, pharyngitis, parotitis, urinary tract infection, swelling toxin of sore and welling abscess, knocks and falls. Isolated compounds: 4446, 8965, 8966.
- T0016 *Acacia arabica* (Fabaceae); A LA BO JIN HE HUAN; Arabian Acacia. Isolated compounds: 7441, 8095, 12714, 17174.
- T0017 *Acacia auriculaeformis* (Fabaceae); ER XING JIN HE HUAN; Auriculate Acacia. Isolated compounds: 2016.
- T0018 *Acacia caffra* (Fabaceae). Isolated compounds: 6982, 6984, 6986, 16197.
- T0019 *Acacia catechu* (Fabaceae); HAI ER CHA; Catechu. Used part: dry decocted paste of branch and trunk without bark. TCM Effects: To contract damp, close sores and engender flesh. TCM Indications: Enduring sores, eczema, mouth sore, painful wound from knocks and falls, bleeding due to external injury, suppurative infection. Isolated compounds: 677, 3308, 6853, 6854, 7802, 18305.
- T0020 *Acacia dealbata* (Fabaceae); YIN BAI JIN HE HUAN; Silver Wattle. Isolated compounds: 7821.
- T0021 *Acacia galpinii* (Fabaceae). Isolated compounds: 6982, 6983, 6984, 6985, 6986, 6987, 16197, 16198.
- T0022 *Acacia karroo* (Fabaceae); KA LUO JIN HE HUAN; Karroo Acacia. Isolated compounds: 22122.
- T0023 *Acacia luederitzii* (Fabaceae); LE SHI JIN HE HUAN; Luederitz Acacia\*. Isolated compounds: 9079.
- T0024 *Acacia mearnsii* (Fabaceae); HEI JING SHU; Wattle. Isolated compounds: 18857, 18858.
- T0025 *Acacia melanoxylon* (Fabaceae); HEI MU JIN HE HUAN; Australian Blackwood. Isolated compounds: 62, 10887.
- T0026 *Acacia mellifera* (Fabaceae); JU MI JIN HE HUAN; Honeyed Acacia. Isolated compounds: 2331, 2334, 2338, 10340, 10342, 10573, 13097, 13098, 16373.
- T0027 *Acacia mollissima* (Fabaceae); ROU JIN HE HUAN; Black Wattle. Isolated compounds: 14899.
- T0028 *Acacia nilotica* (Fabaceae); A LA BO JIAO JIN HE HUAN; Gum-arabic Tree. Isolated compounds: 205, 3308, 3551, 5510, 6853, 6921, 12715, 18317, 18856.
- T0029 *Acacia sieberiana* (Fabaceae); XI BO JIN HE HUAN; Sieber Acacia\*. Isolated compounds: 9467, 17863.
- T0030 *Acacia* sp. (Fabaceae). Isolated compounds: 862, 1057, 1282, 5351, 6533, 7482, 9467, 13296.
- T0031 *Acacia spirorbis* (Fabaceae); LUO XUAN JIN HE HUAN; Spiral Acacia\*. Isolated compounds: 9646.
- T0032 *Acacia* spp. (Fabaceae). Isolated compounds: 59, 9598, 17083.
- T0033 *Acacia tortilis* ssp. *raddiana* (Fabaceae); NIU XUAN JIN HE HUAN; Tortile Acacia\*. Isolated compounds: 18454, 18455.
- T0034 *Acacia victoria* (Fabaceae); WEI DUO LI YA JIN HE HUAN; Bramble Acacia. Isolated compounds: 2036, 2038.
- T0035 *Acalypha hispida* (Euphorbiaceae); CU YING MAO TIE XIAN CAI; Chenille Plant, Red-hot Cat's-tail. Isolated compounds: 4440.
- T0036 *Acanthopanax giraldii* [Syn. *Acanthopanax giraldii* var. *inermis*; *Eleutherococcus giraldii*] (Araliaceae); HONG MAO WU JIA PI; Girald Acanthopanax Root-bark. Used part: stem cortex or root cortex. TCM Effects: To dispel wind-damp, strengthen sinews and bones, quicken blood and disinhibit water. TCM Indications: Wind-cold-damp impediment, hypertonicity and pain, limp wilting sinew and bone, inability of legs and knees, pain in heart and abdomen, mounting *qi* [=hernia], knocks and falls, fracture, vacuity and edema. Isolated compounds: 618, 3342, 9276, 16053, 20569.
- T0037 *Acanthopanax giraldii* var. *hispidus* (Araliaceae); MAO GENG HONG MAO WU JIA; Hispidus Girald Acanthopanax. Isolated compounds: 11465.
- Acanthopanax giraldii* var. *inermis* = *Acanthopanax giraldii*
- T0038 *Acanthopanax gracilistylus* (Araliaceae); WU JIA PI; Slenderstyle Acanthopanax Root-bark. Equivalent plant: *Acanthopanax sessiliflorus*, *Acanthopanax senticosus*. Used part: root cortex. TCM Effects: To dispel wind-damp, supplement liver and kidney, strengthen sinews and bones, quicken blood and vessels. TCM Indications: Wind-cold-damp impediment, pain in lumbus and knees, limp wilting sinew and bone, infant retardation of walking, vacuity and marked emaciation, knocks and falls, fracture, edema, beriberi, damp itchy in genitals. Isolated compounds: 6754, 12893, 14717, 19777, 19983, 20280, 20569.
- T0039 *Acanthopanax japonicus* (Araliaceae); RI BEN WU JIA; Japanese Acanthopanax\*. Isolated compounds: 64, 65, 66, 67, 68, 69, 70, 71, 72.
- T0040 *Acanthopanax koreanum* (Araliaceae); CHAO XIAN WU JIA; Korean Acanthopanax\*. Isolated compounds: 73, 74, 75, 79, 82, 83, 20486.
- T0041 *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*] (Araliaceae); CI WU JIA; Manyprickle Acanthopanax. Used part: root and rhizome. TCM Effects: To boost *qi* and fortify spleen, supplement kidney and quiet spirit, increase appetite. TCM Indications: Spleen-kidney *yang* vacuity, vacuity and hypodynamia, inappetence, aching in lumbus and knees, insomnia and frequent dreaming. Isolated

- compounds: 1102, 1576, 3781, 3782, 3783, 4680, 6115, 6204, 6756, 7439, 9265, 11428, 11429, 11503, 12916, 13641, 15942, 17412, 18317, 18734, 19777, 19983, 20280, 20446, 20569.
- T0042 *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*] (Araliaceae); CI WU JIA PI; Manyprickle Acanthopanax Root-bark. Used part: root cortex. TCM Effects: See *Acanthopanax gracilistylus*. TCM Indications: See *Acanthopanax gracilistylus*. Isolated compounds: 7439.
- T0043 *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*] (Araliaceae); CI WU JIA YE; Manyprickle Acanthopanax Leaf. Isolated compounds: 819, 3519, 3520, 6755, 6756, 15365, 16050, 19983, 22270.
- T0044 *Acanthopanax sessiliflorus* (Araliaceae); WU GENG WU JIA PI; Sessileflower Acanthopanax Root-bark. Used part: root cortex. TCM Effects: See *Acanthopanax gracilistylus*. TCM Indications: See *Acanthopanax gracilistylus*. Isolated compounds: 85, 86, 87, 88, 3040, 3519, 3520, 4680, 16050, 19427, 19777, 19983, 19983, 20369, 20556, 22270.
- T0045 *Acanthopanax trifoliatum* (Araliaceae); CI SAN JIA; Trifoliolate Acanthopanax. Used part: root or root cortex. TCM Effects: To clear heat and resolve toxin, dispel wind and disinherit damp, soothe sinews and quicken blood. TCM Indications: Common cold with fever, sore pharynx, headache, chest pain due to cough, pain in stomach duct, diarrhea and dysentery, pain in rib-side, jaundice, stone strangury, vaginal discharge, wind-damp impediment pain, aching in lumbus and legs, hypertonicity of sinews and bones, fracture due to knocks and falls, epidemic parotitis, mammary welling abscess, toxin swelling of sores, snake or insect bites. Isolated compounds: 91, 92, 93, 11753, 12178, 13264, 17371, 20713.
- T0046 *Acanthospermum glabratum* (Asteraceae); GUANG CI BAO JU; Glabrous Acanthospermum\*. Isolated compounds: 76, 78, 84, 89, 90, 5537, 8489, 10148.
- T0047 *Acanthus ebracteatus* (Acanthaceae); XIAO HUA LAO SHU LE; Smallflower Acanthus\*. Used part: fruit. TCM Effects: To resolve toxin and disperse swelling. TCM Indications: sore and boil with swelling of clove. Isolated compounds: 3815, 6663, 6664, 6665, 6666.
- T0048 *Acanthus ilicifolius* (Acanthaceae); LAO SHU LE; Hollyleaf Acanthus. Used part: root or branch-leaf. TCM Effects: To clear heat and resolve toxin, transform phlegm and disinherit damp, dissipate stasis and relieve pain. TCM Indications: Mumps, scrofula, liver spleen enlargement, stomachache, taxation damage in lumbar muscle, phlegm-heat cough asthma, jaundice, white turbidity, acute hepatitis, chronic hepatitis. Isolated compounds: 63, 77, 1476, 1494, 1557, 2229, 3554, 4136, 4137, 5765, 5766, 8666, 10988, 10989, 10990, 11642, 15935, 18317.
- T0049 *Acer ginnala* (Aceraceae); CHA TIAO QI; Amur Maple. Used part: tender leaf. TCM Effects: To clear liver and brighten eyes. TCM Indications: Headache due to externally contracted wind-heat, liver fire and red eyes, clouded flowery vision. Isolated compounds: 95, 7441.
- T0050 *Acer nikoense* (Aceraceae); MAO GUO QI; Nikoo Maple. Isolated compounds: 96, 97, 98, 100, 101, 102, 103, 104, 105, 106, 1522, 2296, 3308, 3399, 3831, 3832, 4055, 5786, 6233, 6853, 6923, 7007, 7942, 7944, 8311, 10384, 10614, 15595, 18740, 18795, 18797, 19175, 19542, 21897, 21923, 22332.
- T0051 *Acer okamotoanum* (Aceraceae); CHAO XIAN WU JIAO FENG; Okamoto Maple. Isolated compounds: 18340.
- T0052 *Acer platanoides* (Aceraceae); NUO WEI QI; Norway Maple. Isolated compounds: 16836.
- T0053 *Acer pseudoplatanus* (Aceraceae); OU YA QI; Great Maple. Isolated compounds: 14358.
- T0054 *Acer rubrum* (Aceraceae); HONG HUA QI; Red Maple. Isolated compounds: 8118, 8971.
- T0055 *Acer saccharinum* (Aceraceae); YIN BAI QI; Silver Maple. Isolated compounds: 3983, 8971, 19910.
- T0056 *Acer saccharum* (Aceraceae); TANG QI; Sugar Maple. Isolated compounds: 20446.
- T0057 *Acer* sp. (Aceraceae). Isolated compounds: 4055, 8311.
- T0058 *Achillea ageratifolia* (Asteraceae); XI LA SHI CAO; Greek Yarrow. Isolated compounds: 14692.
- T0059 *Achillea alexandri-regis* (Asteraceae); SAI ER WEI YA SHI CAO; Serbian Yarrow. Isolated compounds: 1110, 1113, 1750, 1751, 1752, 1753, 3695, 5414, 10346, 10347, 10348, 10349, 13497, 13498, 13499, 13500, 17415, 19087, 19983.
- T0060 *Achillea alpina* [Syn. *Achillea sibirica*] (Asteraceae); YI ZHI HAO; Alpine Yarrow. Used part: herb. TCM Effects: To dispel wind and relieve pain, quicken blood, resolve toxin. TCM Indications: Bleeding of digestive tract, bleeding from hemorrhoids, acute enteritis, infection from wounds, gastrointestinal ulcer, common cold with fever, head wind headache, toothache, wind-damp impediment pain, abdominal pain, amenorrhea due to blood stasis, abdominal lump glomus, knocks and falls, swelling toxin of welling abscess and sore, snake bite. Isolated compounds: 538, 552, 553, 3048, 3464, 4749, 8228.
- T0061 *Achillea asiatica* (Asteraceae); YA ZHOU SHI; Asiatic Yarrow. Isolated compounds: 1201, 1202, 1203.
- T0062 *Achillea fragrantissima* (Asteraceae); JI XIANG SHI CAO; Extreme-fragrant Yarrow\*. Isolated compounds: 3743.
- T0063 *Achillea holosericea* (Asteraceae); XI LA SI MAO SHI; Greek Silk-hair Yarrow\*. Isolated compounds: 287, 16432.
- T0064 *Achillea leptophylla* (Asteraceae); XI YE SHI; Fine-leaved Yarrow. Isolated compounds: 20505.
- T0065 *Achillea millefolium* (Asteraceae); YANG SHI CAO; Common Yarrow. Used part: whole herb. TCM Effects: To dispel wind, quicken blood, relieve pain, resolve toxin. TCM Indications: Wind-damp impediment pain, knocks and falls, amenorrhea due to blood stasis, swelling toxin of welling abscess and sore, bleeding from hemorrhoids. Isolated compounds: 538, 1476, 1792, 2071, 2325, 2550, 2555, 2557, 2887, 3241, 3242, 4550, 4749, 7521, 7557, 7881, 8031, 11754, 14757, 14854, 19211, 20369, 21331, 21350, 21618, 21662, 22461.
- T0066 *Achillea moschata* (Asteraceae); SHE XIANG SHI CAO; Musky Yarrow. Isolated compounds: 2325, 3464, 7521.  
*Achillea sibirica* = *Achillea alpina*
- T0067 *Achillea* sp. (Asteraceae). Isolated compounds: 552, 2044, 5236, 13605.
- T0068 *Achillea* spp. (Asteraceae). Isolated compounds: 17719, 19312.
- T0069 *Achillea wilsoniana* (Asteraceae); YUN NAN SHI; Wilson Yarrow.

- Used part: whole herb. TCM Effects: To dispel wind and eliminate damp, dissipate stasis and relieve pain, resolve toxin and disperse swelling. TCM Indications: Wind-damp pain, stomachache, toothache, stasis swelling from knocks and falls, amenorrhea and dysmenorrhea, swelling toxin of welling abscess and sore, snake or insect bites. Isolated compounds: 538.
- T0070 *Achras* spp. (Sapotaceae). Isolated compounds: 13098.
- T0071 *Achyranthes aspera* (Amaranthaceae); TU NIU XI; Common Achyranthes. Equivalent plant: *Achyranthes aspera* var. *indica*. Used part: root and rhizome. TCM Effects: To quicken blood and dissipate stasis, dispel damp and disinhibit urine, clear heat and resolve toxin. TCM Indications: Amenorrhea, dysmenorrhea, menstrual disorder, knocks and falls, pain in joints due to rheumatism, strangury, edema, fever due to external contraction, malaria, dysentery, sore pharynx, swollen welling abscess and clove sores. Isolated compounds: 539, 540, 541, 542, 6679, 22044.
- T0072 *Achyranthes aspera* var. *indica* (Amaranthaceae); DUN YE TU NIU XI; Obtuseleaf Achyranthes. Used part: root and rhizome. TCM Effects: See *Achyranthes aspera*. TCM Indications: See *Achyranthes aspera*. Isolated compounds: 6679.
- T0073 *Achyranthes bidentata* (Amaranthaceae); NIU XI; Twotooth Achyranthes. Used part: root. TCM Effects: To supplement liver and kidney, strengthen sinews and bones, quicken blood and regulate menstruation, disinhibit urine and free strangury. TCM Indications: Aching in lumbus and knees, amenorrhea due to blood stasis, dysmenorrhea, postpartum blood stasis abdominal pain, concretion and conglomeration, retention of placenta, heat strangury, blood strangury, knocks and falls, swollen welling abscess and malign sore, swelling pain in throat. Isolated compounds: 543, 544, 2363, 2364, 3525, 3615, 5404, 6679, 11067, 11068, 11069, 16050, 19043, 20168, 20169.
- T0074 *Achyranthes fauriei* (Amaranthaceae); RI BEN NIU XI; Japanese Achyranthes. Isolated compounds: 11067.
- T0075 *Acnistus arborescens* (Solanaceae); BA XI YE YAN; Brazilian Wild Tobacco, Marianeira. Isolated compounds: 302, 5324.
- T0076 *Aconitum anthora* (Ranunculaceae); HUANG WU TOU; Yellow Monkshood. Isolated compounds: 1964.
- T0077 *Aconitum balfourii* (Ranunculaceae); YA DONG WU TOU; Yadong Monkshood. Used part: tuberoid. TCM Effects: See *Aconitum carmichaeli*. TCM Indications: See *Aconitum carmichaeli*. Isolated compounds: 18017.
- T0078 *Aconitum barbatum* var. *puberulum* [Syn. *Aconitum ochranthum*] (Ranunculaceae); NIU BIAN; Puberulent Monkshood. Used part: root. TCM Effects: To dispel wind and relieve pain, relieve cough and transform phlegm, calm asthma. TCM Indications: Wind-damp with painful swollen joints, pain in lumbus and legs, asthma and cough, scrofula, scab and lichen. Isolated compounds: 12510, 13169, 18166, 18167, 18168, 18169, 18531.
- T0079 *Aconitum brachypodium* (Ranunculaceae); XUE SHANG YI ZHI HAO; Shortstalk Monkshood. Equivalent plant: *Aconitum nagarum* var. *lasiandrum*. Used part: root. TCM Effects: To dispel wind and eliminate damp, quicken blood and relieve pain. TCM Indications: Wind-damp bone pain, knocks and falls, pain in limbs, toothache, toxin swelling of sores, pain from carcinoma, pain in joints. Isolated compounds: 554, 2741, 2742, 13189.
- Aconitum bullatifolium* = *Aconitum nagarum* var. *heterotrichum*
- T0080 *Aconitum bullatifolium* var. *homotrichum* [Syn. *Aconitum nagarum*] (Ranunculaceae); BAO SHAN WU TOU; Paoshan Monkshood. Used part: tuberoid. TCM Effects: To dispel wind and overcome damp, free network vessels and relieve pain. TCM Indications: Wind-cold-damp impediment, headache. Isolated compounds: 551, 2737, 2738, 2739, 2740, 10875.
- T0081 *Aconitum bulleyanum* (Ranunculaceae); DIAN XI WU TOU; Yunnanwest Monkshood. Isolated compounds: 4211, 22482, 22938.
- T0082 *Aconitum campylorrhynchum* (Ranunculaceae); WAN ZHUO WU TOU; Curvebeak Monkshood. Isolated compounds: 384.
- T0083 *Aconitum carmichaeli* (Ranunculaceae); FU ZI; Prepared Common Monkshood Daughter Root. Equivalent plant: *Aconitum carmichaeli* cv. Used part: daughter root. TCM Effects: To return yang and treat collapse, supplement fire and reinforce yang. TCM Indications: Yang-collapse vacuity desertion, cold limbs and faint pulse, impotence, uterus cold, cold pain in heart and abdomen, vacuity cold chronic diarrhea and dysentery, yin cold edema, yang vacuity external contraction, wind-cold-damp impediment, yin flat abscess and sores. Isolated compounds: 554, 1059, 1060, 1061, 1292, 2738, 2739, 3201, 3713, 4211, 4992, 4999, 5000, 5001, 5007, 5008, 5033, 5034, 5036, 5037, 5067, 5071, 5072, 5136, 5149, 5166, 5458, 8042, 10875, 11373, 11728, 12161, 12898, 12899, 13794, 15418, 20650, 22237, 22394, 22482.
- T0084 *Aconitum carmichaeli* (Ranunculaceae); WU TOU; Common Monkshood. Equivalent plant: *Aconitum karakolicum*, *Aconitum balfourii*. Used part: tuberoid. TCM Effects: To dispel wind and eliminate damp, warm channels, dissipate cold and relieve pain. TCM Indications: Wind-cold-damp impediment, pain in joints, numbness in limbs, hemiplegia, head wind headache, cold pain in heart and abdomen, cold mounting with pain, stasis pain from knocks and falls, swelling toxin of flat abscess. Isolated compounds: 554, 877, 2247, 2738, 2742, 3201, 3712, 5067, 9574, 9575, 10875, 10962, 11083, 11084, 11085, 11373, 11728, 12161, 13794, 19198, 19701, 19702, 19703, 20075, 20076, 20650, 22237.
- T0085 *Aconitum carmichaeli* cv (Ranunculaceae); ZHONG BA E ZHANG YE FU ZI; Zhongba Monkshood Daughter Root\*. Used part: daughter root. TCM Effects: See *Aconitum carmichaeli*. TCM Indications: See *Aconitum carmichaeli*. Isolated compounds: 12162, 19701.
- T0086 *Aconitum chasmanthum* (Ranunculaceae); ZHAN HUA WU TOU; Patentflower Monkshood. Used part: tuberoid. TCM Effects: To dispel wind and overcome damp, relieve pain. TCM Indications: Wind-cold-damp impediment, pain in joints. Isolated compounds: 3483, 11012.
- T0087 *Aconitum chrysotrichum* (Ranunculaceae); HUANG MAO WU TOU; Yellowhair Monkshood. Isolated compounds: 3483.
- T0088 *Aconitum coreanum* (Ranunculaceae); HUANG HUA WU TOU; Korean Monkshood. Used part: tuberoid. TCM Effects: To dispel wind and transform phlegm, settle fright epilepsy, dissipate cold and relieve pain. TCM Indications: Wind stroke with congesting phlegm, deviated eyes and mouth, epilepsy, migraine, headache, wind-phlegm dizziness,

- tetanus, infant fright wind, wind-damp impediment pain, sores scab and lichen, damp itchy skin. Isolated compounds: 9045, 9046, 9047, 9048, 9049, 9050, 9051, 9052, 10875.
- T0089 *Aconitum crassicaule* (Ranunculaceae); CU JING WU TOU; Thickstem Monkshood. Isolated compounds: 3483, 4210, 15228.
- T0090 *Aconitum delavayi* (Ranunculaceae); MA ER SHAN WU TOU; Delavy Monkshood. Used part: tuberoid. TCM Effects: To dispel wind-damp, relieve pain. TCM Indications: Wind-cold-damp impediment, pain in joints. Isolated compounds: 4993.
- T0091 *Aconitum excelsum* (Ranunculaceae); ZI HUA GAO WU TOU; Purpleflower High Monkshood. Isolated compounds: 5073, 7673, 12510, 14513, 14570, 14798.
- T0092 *Aconitum falconeri* (Ranunculaceae); FA KANG WU TOU; Falcon Monkshood\*. Isolated compounds: 7706, 11012, 18017.
- T0093 *Aconitum ferox* (Ranunculaceae); NI BO ER WU TOU; Nepal Monkshood. Isolated compounds: 2372, 11012, 18017.
- T0094 *Aconitum finetianum* (Ranunculaceae); GAN WAN WU TOU; Finet Monkshood. Used part: root. TCM Effects: To dispel wind and relieve pain, harmonize blood and vanquish toxin. TCM Indications: Wind-damp impediment pain, knocks and falls. Isolated compounds: 2042, 4741, 4745, 4771, 5009, 5035, 7800, 11112, 11476, 12510, 15658, 18168, 18531.
- T0095 *Aconitum fischeri* (Ranunculaceae); BO YE WU TOU; Azure Monkshood. Isolated compounds: 11867.
- T0096 *Aconitum Forrestii* [Syn. *Aconitum likiangense*] (Ranunculaceae); LI JIANG WU TOU; Likiang Monkshood\*. Used part: tuberoid. TCM Effects: To dispel wind-damp, settle pain. TCM Indications: Painful joints due to rheumatism, knocks and falls. Isolated compounds: 3483, 7880, 12781, 12935, 22482, 22938.
- T0097 *Aconitum franchetii* (Ranunculaceae); DA DU WU TOU; Franchet Monkshood. Isolated compounds: 20650.
- T0098 *Aconitum geniculatum* (Ranunculaceae); XI BAN WU TOU; Genuiculate Monkshood. Used part: tuberoid. TCM Effects: To dispel wind and dissipate cold, quicken blood and relieve pain, resolve toxin and disperse swelling. TCM Indications: Wind-cold-damp impediment, reversal cold of limbs, knocks and falls, sore toxin. Isolated compounds: 8270, 22938.
- T0099 *Aconitum gymnanthum* (Ranunculaceae); LU RUI WU TOU; Nakedstamen Monkshood. Used part: root, leaf and flower. TCM Effects: To dispel wind-damp, warm center and dissipate cold, kill worms and relieve pain. TCM Indications: Rheumatism numbness, pain in joints, leprosy, stomachache, common cold, influenza, intestinal parasitic disease. Isolated compounds: 9103, 14478.
- T0100 *Aconitum Hemsleyanum* var. *circinatum* (Ranunculaceae); QUAN JU GUA YE WU TOU; Circinate Hemsley Monkshood. Used part: tuberoid. TCM Effects: See *Aconitum Hemsleyanum*. TCM Indications: See *Aconitum Hemsleyanum*. Isolated compounds: 3735, 3736.
- T0101 *Aconitum Hemsleyanum* (Ranunculaceae); GUA YE WU TOU; Hemsley Monkshood. Equivalent plant: *Aconitum Hemsleyanum* var. *circinatum*. Used part: tuberoid. TCM Effects: To dispel wind and eliminate damp, quicken blood and relieve pain. TCM Indications: Painful joints due to rheumatism, pain in lumbus and legs, knocks and falls, innominate toxin swelling, lichen sore. Isolated compounds: 1366, 2738, 3483, 4792, 6915, 9356, 11012, 18016, 19107, 19702, 20650, 22938.
- T0102 *Aconitum Hemsleyanum* var. *leueanthus* (Ranunculaceae); ZHUA KUI GUA YE WU TOU; Unguiculate Hemsley Monkshood. Isolated compounds: 3483, 4210, 4774, 5473, 7700, 7935, 12728, 12729, 12730, 12731, 20650.
- T0103 *Aconitum heterophyllum* (Ranunculaceae); YI YE WU TOU; Heteroleaf Monkshood\*. Isolated compounds: 1964, 9459, 9472.
- T0104 *Aconitum japonicum* (Ranunculaceae); RI BEN WU TOU; Japanese Monkshood\*. Isolated compounds: 5067, 11728, 20648.
- T0105 *Aconitum karakolicum* (Ranunculaceae); DUO GEN WU TOU; Manyroot Monkshood. Used part: tuberoid. TCM Effects: See *Aconitum Carmichaeli*. TCM Indications: See *Aconitum Carmichaeli*. Isolated compounds: 551, 3201, 12160, 15250, 17127, 20076.
- T0106 *Aconitum kirinense* (Ranunculaceae); JI LIN WU TOU; Kirin Monkshood\*. Used part: root. TCM Effects: To dispel wind and eliminate damp, dissipate cold and relieve pain. TCM Indications: Wind-cold-damp impediment, hypertonicity of limbs, cold pain in heart and abdomen, swelling toxin of welling abscess and sore, toothache. Isolated compounds: 388, 392, 821, 7673, 8378, 12668, 12669.
- T0107 *Aconitum kongboense* (Ranunculaceae); GONG BU WU TOU; Gongbo Monkshood. Used part: tuberoid. TCM Effects: To dispel wind and eliminate damp, relieve pain. TCM Indications: Painful joints due to rheumatism, knocks and falls, poisonous insect stings. Isolated compounds: 7936, 12259.
- T0108 *Aconitum kusnezoffii* (Ranunculaceae); BEI WU TOU; Kusnezoff Monkshood. Used part: tuberoid. TCM Effects: To dispel wind and overcome damp, warm channels and dissipate cold, disperse swelling and relieve pain. TCM Indications: Wind-cold-damp impediment, pain in joints, head wind headache, wind stroke with hemiplegia, cold pain in heart and abdomen, cold mounting with pain, knocks and falls, blood stasis swelling and pain, swelling toxin of flat abscess, anesthesia. Isolated compounds: 304, 554, 2214, 2231, 10875, 12668, 13794, 17672, 22938.
- T0109 *Aconitum leave* (Ranunculaceae). Isolated compounds: 508, 5008, 12510, 13872, 18169, 20501.
- T0110 *Aconitum legendrei* (Ranunculaceae); MIAN NING WU TOU; Legendre Monkshood. Isolated compounds: 20650.
- T0111 *Aconitum leucostomum* (Ranunculaceae); BAI HOU WU TOU; Whitethroat Monkshood. Isolated compounds: 508, 6227, 12668. *Aconitum likiangense* = *Aconitum Forrestii*
- T0112 *Aconitum lijestradii* (Ranunculaceae); GONG GA SHAN WU TOU; Konka Mountain Monkshood. Isolated compounds: 4792, 4806, 8271, 13065, 18016, 19107.
- T0113 *Aconitum lucidusculum* (Ranunculaceae); GUANG ZE WU TOU; Lucid Monkshood\*. Isolated compounds: 13057.
- T0114 *Aconitum lycocotum* (Ranunculaceae); LANG DU WU TOU; Badgersbane. Isolated compounds: 13169, 13189.
- T0115 *Aconitum monticola* (Ranunculaceae); SHAN DI WU TOU; Country Monkshood. Isolated compounds: 5035, 20076. *Aconitum nagarum* = *Aconitum bullatifolium* var. *homotrichum*
- T0116 *Aconitum nagarum* var. *heterotrichum* [Syn. *Aconitum bullatifolium*]

- (Ranunculaceae); XIAO BAI CHENG; Unequalhair Paoshan Monkshood. Used part: tuberoid. TCM Effects: To dispel wind and eliminate damp, quicken blood and relieve pain. TCM Indications: Wind-damp pain, taxation damage in lumbar muscle, sprain in joints, intercostal neuralgia, wind stroke paralysis, early stage of welling abscess and flat abscess. Isolated compounds: 15228.
- T0117 *Aconitum nagarum* var. *lasiandrum* (Ranunculaceae); XUAN WEI WU TOU; Haoryanther Paoshan Monkshood. Used part: root. TCM Effects: See *Aconitum brachypodum*. TCM Indications: See *Aconitum brachypodum*. Isolated compounds: 304, 20075, 20076.
- T0118 *Aconitum napellus* (Ranunculaceae); OU WUTOU; Aconite. Isolated compounds: 552, 554, 10875, 13794, 15250.
- T0119 *Aconitum napellus* ssp. *neomontanum* (Ranunculaceae). Isolated compounds: 12030, 12034, 18333.
- T0120 *Aconitum nemorum* (Ranunculaceae); LIN DI WU TOU; Woodland Monkshood. Isolated compounds: 20650.  
*Aconitum ochranthum* = *Aconitum barbatum* var. *puberulum*
- T0121 *Aconitum orientale* (Ranunculaceae); GAO JIA SUO WU TOU; Eastern Monkshood. Isolated compounds: 2042, 12510.
- T0122 *Aconitum pendulum* (Ranunculaceae); TIE BANG CHUI; Pendulous Monkshood. Used part: tuberoid. TCM Effects: To quicken blood and dispel stasis, dispel wind and eliminate damp, disperse swelling and relieve pain. TCM Indications: Knocks and falls, fracture, wind-damp lumbago, swollen welling abscess and malign sore, innominate toxin swelling, scrofula, frostbite, poisonous snake bite. Isolated compounds: 2231, 16803, 16808.
- T0123 *Aconitum polyschistum* (Ranunculaceae); DUO LIE WU TOU; Manypltted Monkshood. Used part: tuberoid. TCM Effects: To dispel wind and overcome damp, dissipate cold and relieve pain. TCM Indications: Wind-cold-damp impediment, hypertonicity of limbs, knocks and falls, innominate toxin swelling. Isolated compounds: 2231, 17672, 17673, 17674, 17675.
- T0124 *Aconitum pseudohuiliense* (Ranunculaceae); LEI BO WU TOU; Leabo Monkshood. Isolated compounds: 12667, 12668, 12669.
- T0125 *Aconitum pseudostapfianum* (Ranunculaceae); NI YU LONG WU TOU; Pseudostapfia Monkshood. Used part: tuberoid. TCM Effects: To dispel wind-damp, relieve pain. TCM Indications: Wind-damp impediment pain, pain in lumbus and legs. Isolated compounds: 2248.
- T0126 *Aconitum pukeese* (Ranunculaceae); PU GE WU TOU; Pukee Monkshood. Isolated compounds: 18189.
- T0127 *Aconitum sachalinense* (Ranunculaceae); KU YE WU TOU; Sachalin Monkshood\*. Isolated compounds: 11867.
- T0128 *Aconitum sanyoense* (Ranunculaceae); SHAN YANG WU TOU; Shanyang Monkshood\*. Isolated compounds: 15658.
- T0129 *Aconitum septentrionale* (Ranunculaceae); BEI FANG WU TOU; Northern Monkshood\*. Isolated compounds: 12510, 18168, 22199.
- T0130 *Aconitum sinomontanum* (Ranunculaceae); GAO WU TOU; Tall Monkshood. Used part: root. TCM Effects: To dispel wind and eliminate damp, rectify *qi* and relieve pain, quicken blood and disperse swelling. TCM Indications: Wind-damp impediment pain, swelling pain in joints, knocks and falls, stomachache, distention fullness in chest and abdomen, acute bacillary dysentery, chronic bacillary dysentery, acute enteritis, chronic enteritis, scrofula, sore and boil. Isolated compounds: 12510, 18531, 19956, 19957, 22938.
- T0131 *Aconitum soongaricum* (Ranunculaceae); ZHUN GE ER WU TOU; Dzungaria Monkshood. Isolated compounds: 20076.
- T0132 *Aconitum* sp. (Ranunculaceae). Isolated compounds: 1964, 12736, 12737, 12738.
- T0133 *Aconitum spicatum* (Ranunculaceae); SUI ZHUANG WU TOU; Spiked Monkshood. Isolated compounds: 2372, 18017.
- T0134 *Aconitum subcuneatum* (Ranunculaceae); XIE XING WU TOU; Cuneate Monkshood\*. Isolated compounds: 3483, 11867.
- T0135 *Aconitum sungpanense* (Ranunculaceae); SONG PAN WU TOU; Sungpan Monkshood. Used part: root. TCM Effects: To dispel wind and overcome damp, dissipate cold and relieve pain, dissipate stasis and disperse swelling. TCM Indications: Wind-cold-damp impediment, pain in joints, toothache, knocks and falls, swelling toxin of welling abscess and sore, neuralgia. Isolated compounds: 331, 5473, 22938.
- T0136 *Aconitum talassicum* (Ranunculaceae); TA LA WU TOU; Tala Monkshood\*. Isolated compounds: 11728, 20650.
- T0137 *Aconitum tanguticum* (Ranunculaceae); GAN QING WU TOU; Tangut Monkshood. Used part: whole herb with root. TCM Effects: To clear heat and resolve toxin, disinhibit damp. TCM Indications: Hepatitis, cholecystitis, pneumonia, pharyngolaryngitis, gastroenteritis, common cold with fever. Isolated compounds: 2243, 9459, 9472, 9646, 20650, 20676, 20689.
- T0138 *Aconitum umbrosum* (Ranunculaceae); CAO DI WU TOU; Meadow Monkshood. Used part: root. TCM Effects: To dispel wind and dissipate cold, dispel damp and relieve pain. TCM Indications: Wind-cold-damp impediment, pain in limbs, hypertonicity of limbs, neuralgia, knocks and falls, osteoarthritis, cold pain in heart and abdomen, welling abscess and flat abscess with clove sore. Isolated compounds: 781, 22199.
- T0139 *Aconitum variegatum* (Ranunculaceae); BAN HUA WU TOU; Manchurian Monkshood. Isolated compounds: 396, 4867, 7415, 7447, 9895, 20650, 22348, 22390, 22391, 22393.
- T0140 *Aconitum violaceum* (Ranunculaceae); ZI WU TOU; Violet Monkshood\*. Isolated compounds: 2372, 11012.
- T0141 *Aconitum zeravschanicum* (Ranunculaceae); ZE WU TOU. Isolated compounds: 9459, 15658.
- T0142 *Acorus calamus* (Araceae); BAI CHANG; Drug Sweetflag. Used part: rhizome. TCM Effects: To transform phlegm and open orifices, dispel damp and fortify stomach, kill worms and relieve itch. TCM Indications: Stupor due to phlegm reversal, wind stroke, epilepsy, fright palpitation and amnesia, tinnitus and deafness, food accumulation abdominal pain, diarrhea and dysentery, wind-damp pain, eczema, scab sore. Isolated compounds: 550, 560, 561, 564, 565, 566, 957, 1835, 1840, 2435, 2550, 2934, 2939, 3048, 3241, 3242, 4398, 7019, 7521, 9486, 11193, 11302, 11408, 11713, 11717, 13141, 14530, 14531, 17809, 19852, 21929.
- T0143 *Acorus calamus* var. *angustatus* (Araceae); RI BEN CHANG PU; Japanese Sweetflag\*. Isolated compounds: 1835.
- T0144 *Acorus gramineus* (Araceae); JIN QIAN PU; Grassleaf Sweetflag. Used part: Rhizome. TCM Effects: See *Acorus tatarinowii*. TCM Indications: See *Acorus tatarinowii*. Isolated compounds: 957, 1835, 2435, 3241, 3242, 9669, 13883, 14531.

- T0145 *Acorus gramineus* (Araceae); JIN QIAN PU YE; Grassleaf Sweetflag Leaf. Used part: leaf. TCM Indications: Great wind sore, scab sore. Isolated compounds: 957, 1835.
- T0146 *Acorus tatarinowii* (Araceae); SHI CHANG PU; Grassleaved Sweetflag. Equivalent plant: *Acorus gramineus*. Used part: Rhizome. TCM Effects: To transform phlegm and open orifices, transform damp and move *qi*, dispel wind and eliminate impediment, disperse swelling and relieve pain. TCM Indications: Febrile diseases clouded spirit, phlegm reversal, amnesia, tinnitus, deafness, distending pain in stomach duct and abdomen, food-denying dysentery, wind-damp impediment pain, knocks and falls, scab and lichen with welling abscess and flat abscess. Isolated compounds: 1834, 1835, 7056, 7521, 7523, 11194.
- T0147 *Acritopappus* spp. Isolated compounds: 419.
- T0148 *Acronychia baueri* (Rutaceae); BAO RUI SHAN YOU GAN; Bauer Acronychia. Isolated compounds: 569, 570.
- T0149 *Acronychia haplophylla* (Rutaceae); DAN YE YOU GAN; Singleleaf Acronychia\*. Isolated compounds: 570.
- T0150 *Acronychia laurifolia* (Rutaceae); YUE GUI YE SHAN YOU GAN; Laurel-leaf Acronychia\*. Isolated compounds: 14364.
- T0151 *Acronychia pedunculata* (Rutaceae); SHA TANG MU; Pedunculate Acronychia. Used part: wood or root. TCM Effects: To move *qi* and quicken blood, fortify spleen and suppress cough. TCM Indications: Wind-damp pain in lumbus and legs, stasis pain from knocks and falls, *qi* pain in heart and stomach, bronchitis, common cold, cough. Isolated compounds: 570, 571, 572, 573, 574, 575, 577, 2169, 5852, 6022.
- T0152 *Acronychia* sp. (Rutaceae). Isolated compounds: 12254.
- T0153 *Acronychia vestita* (Rutaceae); BAO SHAN YOU GAN; Vested Acronychia\*. Isolated compounds: 577.
- T0154 *Acroptilon repens* (Asteraceae); DING YU JU; Creeping Acroptilon. Used part: aerial parts. TCM Effects: To dispel wind-damp, resolve heat toxin. TCM Indications: Swelling toxin of welling abscess and sore, rheumatic arthritis. Isolated compounds: 576, 17127, 18627.
- T0155 *Actinidia arguta* (Actinidiaceae); MI HOU LI; Bower Actinidia. Used part: fruit. TCM Effects: To enrich *yin* and clear heat, eliminate vexation and allay thirst, free strangury. TCM Indications: Febrile diseases fluid damage, sand strangury, stone strangury, hypovitaminosis C, gum hemorrhage, hepatitis. Isolated compounds: 582, 2887, 3308, 5763, 9818.
- T0156 *Actinidia arguta* (Actinidiaceae); MI HOU LI GEN; Bower Actinidia Root\*. Used part: root. TCM Effects: To clear heat and disinhibit damp, dispel wind and eliminate impediment, resolve toxin and disperse swelling, stanch bleeding. TCM Indications: Jaundice, indigestion, vomiting, wind-damp impediment pain, carcinoma in digestive tract, welling abscess and sores with sore and boil, knocks and falls, bleeding due to external injury, breast milk stoppage. Isolated compounds: 12080, 18385.
- T0157 *Actinidia callosa* var. *henryi* (Actinidiaceae); JING LI MI HOU TAO; Henry Actinidia. Used part: root cortex. TCM Effects: To clear heat, disinhibit damp, disperse edema, relieve pain. TCM Indications: Damp-heat edema, intestinal welling abscess, swelling toxin of welling abscess and sore. Isolated compounds: 2887, 5763, 9818.
- T0158 *Actinidia chinensis* (Actinidiaceae); MI HOU TAO; Yangtao Actinidia. Used part: fruit. TCM Effects: To resolve heat, allay thirst, fortify stomach, free strangury. TCM Indications: Heat vexation, diabetes mellitus, dry cough due to lung dryness, indigestion, damp-heat jaundice, stone strangury, hemorrhoids. Isolated compounds: 582, 2887, 3765, 5763, 9818, 18838, 22975.
- T0159 *Actinidia chrysantha* (Actinidiaceae); JIN HUA MI HOU TAO; Goldflower Actinidia. Isolated compounds: 2887, 5763, 9818.
- T0160 *Actinidia deliciosa* (Actinidiaceae); MEI WEI MI HOU TAO; Delicious Actinidia. Isolated compounds: 2887, 5763, 9818.
- T0161 *Actinidia eriantha* (Actinidiaceae); MAO HUA MI HOU TAO; Hairyflower Actinidia. Used part: root and root cortex. TCM Effects: To resolve toxin and disperse swelling, clear heat and disinhibit damp. TCM Indications: Heat toxin swollen welling abscess, mammary welling abscess, aphonia due to lung heat, damp-heat dysentery, strangury-turbidity and vaginal discharge, wind-damp impediment pain, carcinoma of stomach, carcinoma of esophagus, mastocarcinoma, knocks and falls. Isolated compounds: 2887, 5763, 9818.
- T0162 *Actinidia glaucophylla* (Actinidiaceae); HUA NAN MI HOU TAO; Greyleaf Actinidia. Isolated compounds: 2887, 5763, 9818.
- T0163 *Actinidia latifolia* (Actinidiaceae); KUO YE MI HOU TAO; Broadleaf Actinidia. Used part: fruit. TCM Effects: To boost *qi* and nourish *yin*. TCM Indications: Enduring illness vacuity, tuberculosis. Isolated compounds: 2887, 5763, 9818.
- T0164 *Actinidia polygama* (Actinidiaceae); MU TIAN LIAO; Silvertine Actinidia. Used part: branchlet-leaf. TCM Effects: To dispel wind-damp, warm channels and relieve pain, disperse concretion and conglomeration. TCM Indications: Wind stroke with hemiplegia, wind-cold-damp impediment, lumbago, mounting *qi*, concretion conglomeration accumulation and gathering, *qi* dysentery. Isolated compounds: 581, 582, 583, 584, 937, 2284, 2887, 5680, 5763, 6320, 9818, 10008, 10365, 11144, 11145, 11149, 11181, 11196, 11378, 11467, 11559, 11560, 12080, 13596, 13597, 13598, 15434, 15437, 15484, 18385, 22855.
- T0165 *Actinidia rubricaulis* var. *coriacea* (Actinidiaceae); GE YE MI HOU TAO; Coriaceousleaf Actinidia. Used part: fruit. TCM Effects: Anticarcinoma. TCM Indications: Tumor. Isolated compounds: 2887, 5763, 9818.
- T0166 *Actinodaphne lancifolia* (Lauraceae); PI ZHEN YE HUANG ROU NAN; Lanceleaf Actinodaphne\*. Isolated compounds: 586, 587.
- T0167 *Adenanthera pavonina* (Fabaceae); HAI HONG DOU; Sandal Beadtree. Used part: seed. TCM Effects: To course wind and clear heat, dry damp and resolve itch, moisten skin. TCM Indications: Wandering wind of head and face. Isolated compounds: 6632, 12800, 15935.
- T0168 *Adenium obesum* (Apocynaceae); SHA MO QIANG WEI; Desert Rose. Isolated compounds: 15497.
- T0169 *Adenophora triphylla* var. *japonica* (Campanulaceae); RI BEN SAN YE SHA SEN; Japanese Trileaf Ladybell\*. Isolated compounds: 2792, 7437.
- T0170 *Adhatoda vasica* (Acanthaceae); DA BO GU; Malabanut. Used part: branchlet-leaf. TCM Effects: To quicken blood and relieve pain, joint sinews and bones, stanch bleeding. TCM Indications: Sinew and bone wound, sprain, blood stasis swelling and pain, wind-damp impediment pain, lumbago, profuse menstruation, flooding and spotting. Isolated

- compounds: 627, 1291, 2318, 16770, 22349, 22350, 22351, 22352.
- T0171 *Adiantum capillus-veneris* (Adiantaceae); ZHU ZONG CAO; Southern Maidenhair. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, disinhibit water and free strangury. TCM Indications: Common cold with fever, lung heat cough, damp-heat diarrhea, dysentery, strangury-turbidity, vaginal discharge, mammary welling abscess, scrofula, poisonous snake bite. Isolated compounds: 632, 1935, 2901, 7099, 7760, 10123, 10541, 12098, 16042, 16043, 18373, 18414.
- T0172 *Adiantum caudatum* (Adiantaceae); BIAN YE TIE XIAN JUE; Walking Maidenhair. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, disinhibit water and disperse edema. TCM Indications: Dysentery, edema, dribbling and inhibited voidings of urination, mammary welling abscess, poisonous snake bite, oral ulcer. Isolated compounds: 632, 10119, 10120, 10402, 11197, 15363, 15756.
- T0173 *Adiantum lunulatum* (Adiantaceae); BAN YUE XING TIE XIAN JUE; Philippine Maidenhair\*. Used part: whole herb. TCM Effects: To clear lung and relieve cough, disinhibit water and free strangury, disperse welling abscess and promote lactation. TCM Indications: Lung heat cough, dribbling pain of urination, mammary welling abscess with swelling and pain, breast milk stoppage. Isolated compounds: 7178.
- T0174 *Adiantum monochlamys* (Adiantaceae); DAN GAI TIE XIAN JUE; Monochlamys Maidenhair. Used part: whole herb. TCM Effects: To clear heat and resolve phlegm, resolve toxin. TCM Indications: Lung heat cough, common cold with fever, swollen welling abscess and toxin of clove. Isolated compounds: 629, 630, 9641.
- T0175 *Adiantum pedatum* (Adiantaceae); TIE SI QI; American Maidenhair Fern. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, disinhibit water and free strangury. TCM Indications: Lung heat cough, dysentery, jaundice, dribbling and inhibited voidings of urination, swollen welling abscess, scrofula, scalds. Isolated compounds: 632, 641, 7757, 7758, 7795, 7796, 9642, 11197, 11425, 15405, 15406.
- T0176 *Adiantum* sp. (Adiantaceae). Isolated compounds: 15286, 18815.
- T0177 *Adiantum* spp. (Adiantaceae). Isolated compounds: 15406.
- T0178 *Adiantum sulphureum* (Adiantaceae); LIU HUANG TIE XIAN JUE; Sulphur Maidenhair Fern\*. Isolated compounds: 5969.
- T0179 *Adiantum venustum* (Adiantaceae); XI YE TIE XIAN JUE; Venus Maidenhair. Isolated compounds: 633, 634, 635.
- T0180 *Adina pilulifera* [Syn. *Cephalanthus pilulifera*] (Rubiaceae); SHUI TUAN HUA; Pilular Adina. Used part: whole herb, or flower and fruit. TCM Effects: To clear heat and disinhibit damp, disperse stasis and settle pain, engender flesh and stanch bleeding. TCM Indications: Dysentery, enteritis, edema, swelling toxin of welling abscess and sore, eczema, foot rot, enduring sores, bleeding due to external injury. Isolated compounds: 3676, 14979, 18427, 20369.
- Adina racemosa* = *Sinoadina racemosa*
- T0181 *Adina rubella* (Rubiaceae); XI YE SHUI TUAN HUA; Thinleaf Adina. Used part: stem-leaf or inflorescence. TCM Effects: To clear heat and resolve toxin. TCM Indications: dysentery with ardent fever, wind-fire toothache, eczema, bleeding due to external injury. Isolated compounds: 18437, 18438, 21922.
- Adina sessilifolia* = *Neonauclea sessilifolia*
- T0182 *Adinandra nitida* (Theaceae); GUANG LIANG YANG TONG; Shining Adinandra\*. Isolated compounds: 15540, 16766, 21864.
- T0183 *Adlumia cirrhosa* [Syn. *Adlumia fungosa*] (Papaveraceae); XUN ZHUANG SHAN YUAN CAO; Climbing Fumitory. Used part: whole herb. TCM Effects: To settle pain. TCM Indications: Various pain. Isolated compounds: 642, 643.
- Adlumia fungosa* = *Adlumia cirrhosa*
- T0184 *Adonis amurensis* (Ranunculaceae); FU SHOU CAO; Amur Adonis. Used part: whole herb. TCM Effects: To strengthen heart, disinhibit urine, calm. TCM Indications: Cardiac insufficiency, atrial fibrillation, congestive cardiac failure, edema due to heart disease, CNS depression. Isolated compounds: 644, 2246, 4012, 4036, 4547, 4548, 5525, 7992, 7993, 11497, 11643, 12880, 15529, 15530, 16034, 16917, 19375, 19542, 20072, 20397, 20402, 20405, 22195.
- T0185 *Adonis annua* (Ranunculaceae); QIU FU SHOU CAO; Annual Adonis\*. Isolated compounds: 647.
- T0186 *Adonis chrysocyatha* (Ranunculaceae); JIN HUANG CE JIN ZHAN HUA; Golden Adonis. Isolated compounds: 4547.
- T0187 *Adonis mongolica* (Ranunculaceae); MENG GU CE JIN ZHAN HUA; Mongolian Adonis\*. Isolated compounds: 4036, 7320, 16084.
- T0188 *Adonis sibirica* (Ranunculaceae); BEI CE JIN ZHAN HUA; Siberian Adonis. Isolated compounds: 646.
- T0189 *Adonis* spp. (Ranunculaceae). Isolated compounds: 22581.
- T0190 *Adonis sutchuenensis* (Ranunculaceae); SHU CE JIN ZHAN HUA; Szechwan Adonis. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, dry damp, strengthen heart and calm. TCM Indications: Swelling toxin of welling abscess and sore, red eyes with gall, vomiting and diarrhea, dysentery, palpitation and insomnia, epilepsy. Isolated compounds: 3306.
- T0191 *Adonis vernalis* (Ranunculaceae); CHUN FU SHOU CAO; Yellow Adonis. Isolated compounds: 646, 4547, 6204, 22404.
- T0192 *Adonis wolgensis* (Ranunculaceae); FU ER JIA CE JIN ZHAN HUA; Volga Adonis. Isolated compounds: 646.
- T0193 *Adoxa moschatellina* (Adoxaceae); WU FU HUA; Muskroot. Isolated compounds: 14982.
- T0194 *Aegiceris corniculatum* (Myrsinaceae); LA ZHU GUO; Corniculate Aegiceris. Isolated compounds: 465, 4987, 5867, 5975, 5976, 6767, 7436, 10485, 14042, 14347, 14347, 18546.
- T0195 *Aeginetia indica* (Orobanchaceae); YE GU; Indian Aeginetia. Used part: whole herb. TCM Effects: To clear heat and resolve toxin. TCM Indications: Swelling pain in throat, urinary tract infection, medullitis, clove sore. Isolated compounds: 656, 657, 18656.
- T0196 *Aegiphila lhotzkyana*. Isolated compounds: 4590, 7080, 20465, 21231, 22213.
- T0197 *Aegle marmelos* (Rutaceae); MU<sup>(4)</sup> JU; Sepiaria. Used part: young fruit. TCM Effects: To check dysentery and diarrhea, disinhibit throat and disperse swelling. TCM Indications: Chronic diarrhea, abdominal pain, dysentery, swelling pain in throat. Isolated compounds: 933, 4863, 7703, 13571, 19540, 22195.
- T0198 *Aesculus assamica* (Hippocastanaceae); CHANG BING QI YE SHU; Assam Horsechestnut. Isolated compounds: 1913, 1914.
- T0199 *Aesculus californica* (Hippocastanaceae); JIA ZHOU QI YE SHU; Californian Buckeye. Isolated compounds: 6853.



- T0200 *Aesculus carnea* (Hippocastanaceae); HONG QI YE SHU; Red Horsechestnut. Isolated compounds: 6853.
- T0201 *Aesculus chinensis* (Hippocastanaceae); QI YE SHU; Chinese Buckeye. Used part: ripe fruit without shell. TCM Effects: See *Aesculus wilsonii*. TCM Indications: See *Aesculus wilsonii*. Isolated compounds: 660, 661, 662, 665, 667, 7361, 7362, 7363, 7364, 7365, 11416, 11417.
- T0202 *Aesculus hippocastanum* (Hippocastanaceae); OU ZHOU QI YE SHU; Horsechestnut. Used part: ripe fruit without shell. TCM Effects: See *Aesculus wilsonii*. TCM Indications: See *Aesculus wilsonii*. Isolated compounds: 660, 663, 664, 7942, 7944, 17867, 17876, 17888, 18411.
- T0203 *Aesculus* spp. (Hippocastanaceae). Isolated compounds: 17869.
- T0204 *Aesculus turbinata* (Hippocastanaceae); RI BEN QI YE SHU; Japanese Buckeye. Isolated compounds: 659, 663, 2152, 3829, 3830, 5271, 7942, 17964.
- T0205 *Aesculus wilsonii* (Hippocastanaceae); SUO LUO ZI; Wilson Buckeye Seed. Equivalent plant: *Aesculus chinensis*, *Aesculus hippocastanum*. Used part: ripe fruit without shell. TCM Effects: To soothe liver, rectify *qi*, loosen center, relieve pain. TCM Indications: Distending pain in chest and rib-side, distending pain in breast, dysmenorrhea, pain in stomach duct, pain in chest and abdomen. Isolated compounds: 660, 21368.
- T0206 *Aframomum daniellin* (Zingiberaceae); DUO NI FEI SHA REN. Isolated compounds: 675.
- T0207 African frog FEI ZHOU WA; African frog. Isolated compounds: 22057.
- T0208 *Afromosia elata* XI FEI HONG DOU SHU; West Africa Afromosia. Isolated compounds: 676.
- T0209 *Agapanthus africanus* (Liliaceae); FEI ZHOU BAI ZI LIAN; African Lily. Isolated compounds: 6195.
- T0210 *Agaricus bisporus* (Agaricaceae); SHUANG BAO MO GU; Bispore Mushroom\*. Used part: sporocarp. TCM Effects: See *Agaricus campestris*. TCM Indications: See *Agaricus campestris*. Isolated compounds: 701, 7250, 13608.
- T0211 *Agaricus campestris* (Agaricaceae); MO GU; Mushroom. Equivalent plant: *Agaricus bisporus*. Used part: sporocarp. TCM Effects: To fortify spleen and promote digestion, calm liver and raise spirit. TCM Indications: Non-digestion of food accumulation, torpid intake, scant breast milk, hypertension, fatigued spirit and desire to sleep. Isolated compounds: 625, 701, 1040, 1055, 3205, 3774, 4223, 4591, 5350, 5351, 7853, 9602, 10357, 12399, 18261, 18266, 19360, 21504, 21505, 21506, 22254, 22814.  
*Agaricus piperatus* = *Lactarius piperatus*
- T0212 *Agastache rugosus* (Lamiaceae); HUO XIANG; Wrinkled Gianthyssop. Used part: aerial parts. TCM Effects: To dispel summerheat and resolve exterior, harmonize stomach and transform damp. TCM Indications: Summer common cold, cold-heat headache, glomus and oppression in chest and stomach duct, vomiting and diarrhea, diarrhea in pregnancy, deep-source nasal congestion. Isolated compounds: 56, 61, 708, 709, 1186, 1282, 2851, 2940, 2941, 2943, 3241, 3242, 4219, 4550, 4680, 6059, 6741, 6918, 7385, 7730, 7951, 9522, 9524, 9670, 11200, 12843, 12849, 13883, 14359, 15978, 15979, 16050, 16498, 16711, 17376, 17377, 18668, 19983, 21391.
- T0213 *Agathis dammara* (Araucariaceae); BEI KE SHAN; Amboina Pitch Tree. Isolated compounds: 710.
- T0214 *Agathis palmerstoni* (Araucariaceae); PA SHI BEI KE SHAN; Palmerston Pitch Tree\*. Isolated compounds: 4376.
- T0215 *Agave americana* (Amaryllidaceae); FAN MA; American Agave. Used part: leaf. TCM Effects: To resolve toxin and draw out pus, kill worms, stanch bleeding. TCM Indications: Sores with welling abscess and flat abscess, scab and lichen, pelvic inflammation, flooding. Isolated compounds: 697, 698, 699, 712, 713, 714, 715, 716, 725, 727, 3552, 4928, 4945, 7008, 8457, 9253, 13510, 17479, 18893, 20216, 21383, 21386, 22045.
- T0216 *Agave americana* var. *marginata* [Syn. *Agave americana* var. *variegata*] (Amaryllidaceae); WU CI FAN MA; Spineless Agave. Used part: leaf. TCM Effects: To moisten lung, transform phlegm, suppress cough. TCM Indications: Vacuity taxation cough, blood ejection, asthma. Isolated compounds: 3552, 4928, 4945, 9192, 9253, 12126, 13510, 15463, 15525, 21383, 21388.  
*Agave americana* var. *variegata* = *Agave americana* var. *marginata*
- T0217 *Agave angustifolia* (Amaryllidaceae); DUAN YE LONG SHE LAN; Narrowleaf Agave. Isolated compounds: 3552, 9253, 13510, 21383.
- T0218 *Agave angustifolia* var. *marginata* (Amaryllidaceae); YIN BIAN LONG SHE LAN; Silveredge Agave. Isolated compounds: 3552, 9253.
- T0219 *Agave cantala* (Amaryllidaceae); XIA YE LONG SHE LAN; Shortleaf Agave. Isolated compounds: 717, 718, 719, 720, 721, 722, 723, 724, 3089, 3090, 3091, 3092, 3093, 3552, 9253, 13510, 15364, 15463, 21383.
- T0220 *Agave deserti* (Amaryllidaceae). Isolated compounds: 4928, 4945.
- T0221 *Agave east-one* (Amaryllidaceae); DONG YI HAO JIAN MA; Cultivate Sisalan Agave East-1. Isolated compounds: 3552, 6553, 6554, 6555, 6556, 6557, 9253, 13510, 18893, 21383.
- T0222 *Agave huahucensis* (Amaryllidaceae). Isolated compounds: 726.
- T0223 *Agave lecheguilla* (Amaryllidaceae). Isolated compounds: 19065, 21383, 22936.
- T0224 *Agave rigidissima* (Amaryllidaceae); JI JIAN LONG SHE LAN; Very-hard Agave\*. Isolated compounds: 14823.
- T0225 *Agave roezliana* (Amaryllidaceae). Isolated compounds: 15435.
- T0226 *Agave sisalana* (Amaryllidaceae); JIAN MA; Sisal Hemp-plant. Used part: leaf. TCM Effects: To cool blood and stanch bleeding, resolve toxin and disperse swelling. TCM Indications: Tuberculosis and hemoptysis, spontaneous external bleeding, hematochezia, dysentery, welling abscess, hemorrhoids. Isolated compounds: 2150, 3552, 7008, 8588, 9192, 9253, 9630, 15463, 15467, 17784, 18893, 19977, 21383.
- T0227 *Agave striata* (Amaryllidaceae); TIAO WEN LONG SHE LAN; Stria Agave\*. Isolated compounds: 15433.
- T0228 *Agave yuccaefolia* (Amaryllidaceae). Isolated compounds: 19230.
- T0229 *Ageratum conyzoides* (Asteraceae); SHENG HONG JI; Tropic Ageratum. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, stanch bleeding, relieve pain. TCM Indications: Common cold with fever, swelling pain in throat, hemoptysis, spontaneous external bleeding, flooding and spotting, pain in stomach duct and abdomen, wind-damp impediment pain, knocks and falls, bleeding due to external injury, swelling toxin of welling abscess and sore, eczema titillation. Isolated compounds: 9509, 19929, 20369.

- T0230 *Ageratum houstonianum* (Asteraceae); XIONG ER CAO; Mexican Ageratum. Isolated compounds: 9306, 11647, 17776, 18661.
- T0231 *Aglaiia argentea* (Meliaceae); YIN SE MI ZI LAN; Argenti Aglaiia\*. Isolated compounds: 16002.
- T0232 *Aglaiia duperreana* (Meliaceae). Isolated compounds: 375, 495, 5463, 10097, 10098, 10677, 14714, 18883.
- T0233 *Aglaiia edulis* (Meliaceae); KE SHI MI ZI LAN; Edible Aglaiia\*. Isolated compounds: 736, 737, 740, 741, 9623, 11739, 16618, 21274, 21275, 21276, 21277, 21278.
- T0234 *Aglaiia elliptica* (Meliaceae); TUE YUAN MI ZI LAN; Elliptic Aglaiia\*. Isolated compounds: 307, 738, 6824, 16002, 18887, 18888, 18889.
- T0235 *Aglaiia elliptifolia* (Meliaceae); DA YE SHU LAN; Largeleaf Aglaiia\*. Isolated compounds: 4955, 6760, 6761, 7932, 10790, 17475, 18892.
- T0236 *Aglaiia foveolata* (Meliaceae); FENG CHAO MI ZI LAN; Foveolate Aglaiia\*. Isolated compounds: 7932.
- T0237 *Aglaiia grandis* (Meliaceae); JU DA MI ZI LAN; Grand Aglaiia\*. Isolated compounds: 5756, 8974, 8975, 8976.
- T0238 *Aglaiia lawii* (Meliaceae); Law Aglaiia\*. Isolated compounds: 744, 745, 746, 747.
- T0239 *Aglaiia leucophylla* (Meliaceae); BAI YE MI ZI LAN; Whiteleaf Aglaiia\*. Isolated compounds: 15598.
- T0240 *Aglaiia odorata* (Meliaceae); MI ZI LAN; Chu-lan Tree. Used part: flower or leaf. TCM Effects: To dispel wind-damp, dissipate stasis and disperse swelling. TCM Indications: Distention fullness in chest and diaphragm, dysphagia-occlusion, cough and heavy head (flower), knocks and falls, flat abscess (leaf). Isolated compounds: 739, 5753, 9768, 9769, 9981, 10379, 10677, 11966, 14714, 16002, 16003, 18262, 18882, 18883.
- T0241 *Aglaiia oligophylla* (Meliaceae). Isolated compounds: 18891.
- T0242 *Aglaiia pirifera* (Meliaceae); LI MI ZI LAN; Pear Aglaiia\*. Isolated compounds: 17475.
- T0243 *Aglaiia ponapensis* (Meliaceae). Isolated compounds: 1382, 1383, 14714, 19910.
- T0244 *Aglaiia roxburghiana* (Meliaceae); LUO KE SI BAO MI ZI LAN; Roxburg Aglaiia\*. Isolated compounds: 16002, 16003.
- T0245 *Aglaiia spectabilis* (Meliaceae). Isolated compounds: 10677, 14714, 18883, 18884, 18885, 18886, 18887, 18888, 18889, 18890, 18891.
- T0246 *Aglaiia tomentosa* (Meliaceae); RONG MAO MI ZI LAN; Tomentose Aglaiia\*. Isolated compounds: 742, 743, 744, 745, 746, 747.
- T0247 *Agrimonia japonica* (Rosaceae); RI BEN LONG YA CAO; Japanese Agrimonia\*. Isolated compounds: 757, 758, 759, 17750.
- T0248 *Agrimonia pilosa* (Rosaceae); LONG YA CAO; Hairyvein Agrimonia. Used part: aerial parts. TCM Effects: To promote astriction and stanch bleeding, check dysentery, kill worms. TCM Indications: Hemoptysis, blood ejection, hematuria, hematochezia, dysentery, flooding and spotting with vaginal discharge, bleeding due to external injury, malaria, trichomoniasis. Isolated compounds: 754, 759, 762, 10887, 17361, 17362, 17363, 17386, 17750.
- T0249 *Agrimonia pilosa* var. *japonica* (Rosaceae); XIAN HE CAO; Japanese Argimonia. Used part: aerial parts. TCM Effects: To promote astriction and stanch bleeding, interrupt malaria, check dysentery, resolve toxin. TCM Indications: Hemoptysis, blood ejection, flooding and spotting, malaria, blood dysentery, swelling toxin of welling abscess and sore, pudendal itch, Vaginal discharge. Isolated compounds: 753, 754, 755, 756, 760, 761, 762, 1492, 2887, 3308, 3674, 6757, 8095, 10887, 15660, 16261, 18019, 18317, 19087, 19983, 20792.
- T0250 *Agrimonia pilosa* var. *japonica* (Rosaceae); XIAN HE CAO GEN; Japanese Agrimonia Root. Used part: root. TCM Effects: To resolve toxin and kill worms. TCM Indications: Red and white dysentery, amenorrhea, toxin swelling, taeniasis. Isolated compounds: 5699.
- T0251 *Agrimonia pilosa* var. *japonica* (Rosaceae); XIAN HE CAO GEN YA; Japanese Argimonia Rhizome. Used part: rhizome. TCM Effects: To expel tapeworm. TCM Indications: Taeniasis. Isolated compounds: 762.
- T0252 *Agrostemma githago* (Caryophyllaceae); MAI XIAN WENG; Githago Agrostemma. Isolated compounds: 765, 9183, 9297.
- T0253 *Agrostophyllum brevipes* (Orchidaceae); DUAN BING HE YE LAN; Short-stipe Agrostophyllum\*. Isolated compounds: 766, 767.
- T0254 *Agrostophyllum callosum* (Orchidaceae); YING PI HE YE LAN; Callose Agrostophyllum. Isolated compounds: 767.
- T0255 *Ailanthus altissima* (Simaroubaceae); CHU BAI PI; Tree of Heaven Ailanthus Bast. Used part: bast. TCM Effects: To eliminate heat and dry damp, astringe intestines and stanch bleeding, kill worms. TCM Indications: Chronic dysentery, chronic diarrhea, duodenal ulcer, intestinal wind bleeding, flooding and spotting, vaginal discharge, emission, white turbidity, ascariasis. Isolated compounds: 312, 774, 777, 778, 779, 780, 1018, 3096, 3481, 6204, 13865, 15454, 18299, 19826, 19827.
- T0256 *Ailanthus excelsa* (Simaroubaceae); GAO CHU; High Ailanthus\*. Isolated compounds: 777, 5612, 8509, 13865, 18300, 18301.
- T0257 *Ailanthus integrifolia* ssp. *calycina* (Simaroubaceae); QUAN YUAN CHU; Integrifolious Ailanthus\*. Isolated compounds: 3481.
- T0258 *Ailanthus malabarica* (Simaroubaceae); MA LA BA CHU; Hairyleaf South Ailanthus. Isolated compounds: 3158.
- T0259 *Aiphanes aculeata* (Arecaceae); CI JI NU ZONG LV; Aculeate Ruffie Palm. Isolated compounds: 1448, 11672.
- T0260 *Ajania fruticulosa* (Asteraceae); GUAN MU YA JU; Shrubby Ajania. Isolated compounds: 7107, 7206, 7207.
- T0261 *Ajuga chamaepitys* (Lamiaceae); HUANG JIN GU CAO; Yellow Bugle. Isolated compounds: 794, 4455, 13411.
- T0262 *Ajuga ciliata* (Lamiaceae); JIN GU CAO; Ciliate Bugle. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, cool blood and disperse swelling. TCM Indications: Swelling pain in throat, lung heat hemoptysis, painful swelling from knocks and falls. Isolated compounds: 4455.
- T0263 *Ajuga decumbens* (Lamiaceae); BAI MAO XIA KU CAO; Decumbent Bugle. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, relieve cough and transform phlegm, cool blood and dissipate blood. TCM Indications: Swelling pain in throat, lung heat cough, pulmonary welling abscess, red eyes with gall, dysentery, swollen welling abscess and clove sores, poisonous snake bite, knocks and falls. Isolated compounds: 409, 788, 789, 790, 791, 792, 793, 794, 801, 802, 803, 805, 806, 807, 810, 811, 4455, 4860, 6679, 12952, 17662.
- T0264 *Ajuga forrestii* (Lamiaceae); LI ZHI HAO; Forrest Bugle. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, disinhibit

- water and free strangury, dissipate stasis and relieve pain, expel worms. TCM Indications: Lung heat cough, swelling pain in throat, dysentery, jaundice, heat strangury, edema, mastitis, angitis, swollen sore of welling abscess and boil, knocks and falls, bleeding due to external injury, ascariasis. Isolated compounds: 56, 409, 786, 787.
- T0265 *Ajuga iva* (Lamiaceae); AI WA JIN GU CAO; Iva Bugle\*. Isolated compounds: 7768.
- T0266 *Ajuga macrosperma* (Lamiaceae); DA ZI JIN GU CAO; Largeseed Bugle. Used part: whole herb. TCM Effects: To clear heat and cool blood, dissipate stasis and relieve pain. TCM Indications: Lung heat cough, blood ejection, spontaneous external bleeding, red dysentery, strangury with pain, wind-damp impediment pain, painful swelling from knocks and falls. Isolated compounds: 800.
- T0267 *Ajuga nipponensis* (Lamiaceae); ZI BEI JIN PAN; Japanese Bugle. Used part: whole herb or root. TCM Effects: To clear heat and resolve toxin, cool blood and dissipate stasis, disperse swelling and relieve pain. TCM Indications: Lung heat cough, hacking of blood, sore swollen throat, mammary welling abscess, intestinal welling abscess, swelling toxin of sore and boil, bleeding hemorrhoids, painful swelling from knocks and falls, bleeding due to external injury, burns and scalds, poisonous snake bites. Isolated compounds: 801, 802, 803, 805, 806, 807, 810.
- T0268 *Ajuga parviflora* (Lamiaceae); XIAO HUA XIA KU CAO; Smallflower Bugle\*. Isolated compounds: 812, 813, 814.
- T0269 *Ajuga pseudoiva* (Lamiaceae); Pseudoiva Bugle\*. Isolated compounds: 9246, 9247, 9248.
- T0270 *Ajuga remota* (Lamiaceae); YUAN JU JIN GU CAO; Manybracteole Bugle. Isolated compounds: 809.
- T0271 *Ajuga reptans* (Lamiaceae); PU FU JIN GU CAO; Creeping Bugle. Isolated compounds: 409, 794, 816, 4455, 17662, 18628.
- T0272 *Ajuga taiwanensis* (Lamiaceae); TAI WAN JIN GU CAO; Taiwan Bugle\*. Isolated compounds: 346, 409, 794, 795, 796, 797, 798, 799, 800, 804, 808, 4455, 8094, 9237, 11361, 12020, 15528, 17140, 17141, 19983, 19987, 20369, 21225, 22332.
- T0273 *Akebia quinata* (Lardizabalaceae); MU TONG; Fiveleaf Akebia. Equivalent plant: *Akebia trifoliata* var. *australis*, *Akebia trifoliata*. Used part: stem. TCM Effects: To clear heat and disinhibit urine, quicken blood and free vessels. TCM Indications: Acute urethritis, short voidings of reddish urine, strangury-turbidity, edema, nephritis with edema, galactostasis, heat vexation in chest, throat pain, mouth sore, tongue sores, wind-damp impediment pain, galactostasis, amenorrhea, dysmenorrhea. Isolated compounds: 819, 820, 1691, 4450, 4680, 9260, 11083, 13799, 15753, 15754, 15755, 15783, 16050, 16402, 18419, 19316, 19983, 19987, 20369.
- T0274 *Akebia quinata* (Lardizabalaceae); MU TONG GEN; Fiveleaf Akebia Root. Equivalent plant: *Akebia trifoliata* var. *australis*, *Akebia trifoliata*. Used part: root. TCM Effects: To dispel wind and eliminate damp, move *qi* and quicken blood, disinhibit urine, resolve toxin. TCM Indications: Wind-damp impediment pain, knocks and falls, amenorrhea, mounting *qi*, painful swollen testes, distention oppression in stomach duct, inhibited urination, vaginal discharge, snake or insect bites. Isolated compounds: 819, 820, 4680, 19987.
- T0275 *Akebia quinata* (Lardizabalaceae); YU ZHI ZI; Fiveleaf Akebia Seed. Used part: seed. TCM Effects: To course liver and harmonize stomach, quicken blood and relieve pain, soften hardness and dissipate binds, disinhibit urine. TCM Indications: Liver stomach *qi* stagnation, distending pain in stomach duct, distending pain in rib-side, non-digestion of food accumulation, dysentery, mounting *qi*, lumbago, amenorrhea and dysmenorrhea, goiter and tuberculosis, scrofula, carcinoma. Isolated compounds: 8814, 8815, 8816, 9274, 9276, 15712, 16050, 17945.
- T0276 *Akebia* spp. (Lardizabalaceae). Isolated compounds: 12642.
- T0277 *Akebia trifoliata* (Lardizabalaceae); SAN YE MU TONG; Threeleaf Akebia. Used part: stem. TCM Effects: See *Akebia quinata*. TCM Indications: See *Akebia quinata*. Isolated compounds: 819, 984, 1854, 5953, 6050, 6051, 6058, 6059, 6138, 6139, 6981, 8608, 8640, 8719, 8720, 8747, 8766, 9275, 18419, 21812, 21813, 21814, 21824, 21825, 21826.
- T0278 *Akebia trifoliata* (Lardizabalaceae); SAN YE MU TONG GEN; Threeleaf Akebia Root. Used part: root. TCM Effects: See *Akebia quinata*. TCM Indications: See *Akebia quinata*. Isolated compounds: 4680.
- T0279 *Akebia trifoliata* var. *australis* (Lardizabalaceae); BAI MU TONG; Austral Akebia. Used part: stem. TCM Effects: See *Akebia quinata*. TCM Indications: See *Akebia quinata*. Isolated compounds: 9775, 22957.
- T0280 *Akebia trifoliata* var. *australis* (Lardizabalaceae); BAI MU TONG GEN; Austral Akebia Root. Used part: root. TCM Effects: See *Akebia quinata*. TCM Indications: See *Akebia quinata*. Isolated compounds: 4680.
- T0281 *Alangium chinense* (Alangiaceae); BA JIAO FENG; Chinese Alangium. Equivalent plant: *Alangium platanifolium*. Used part: root. TCM Effects: To dispel wind and eliminate damp, soothe sinews and quicken network vessels, dissipate stasis and relieve pain. TCM Indications: Wind-damp impediment pain, rheumatic arthritis, numbness in limbs, knocks and falls, adjuvant in anesthesia. Isolated compounds: 1125, 2277, 8731, 8751.
- T0282 *Alangium kurzii* (Alangiaceae); MAO BA JIAO FENG; Kurz Alangium. Used part: lateral root or fibril. TCM Effects: To soothe sinews and quicken blood, dissipate stasis and relieve pain. TCM Indications: Stasis swelling from knocks and falls, fracture. Isolated compounds: 1124, 1293.
- T0283 *Alangium lamarckii* (Alangiaceae); AN GE LA BA JIAO FENG; Angola Alangium\*. Isolated compounds: 828, 829, 830, 831, 1293, 3400, 18095.
- T0284 *Alangium platanifolium* var. *platanifolium* (Alangiaceae); GUA MU BIAN ZHONG; Planeleaf Alangium Variety\*. Isolated compounds: 17521, 17522, 17523, 17524, 17525, 17526, 17527.
- T0285 *Alangium platanifolium* (Alangiaceae); GUA MU; Planeleaf Alangium. Used part: root. TCM Effects: See *Alangium chinense*. TCM Indications: See *Alangium chinense*. Isolated compounds: 1124.
- T0286 *Alangium premnifolium* (Alangiaceae). Isolated compounds: 13644, 13645.
- T0287 *Albatrellus confluens* (Polyporaceae); YUN NAN DI HUA JUN; Yunnan Landflower Mushroom\*. Isolated compounds: 843.
- T0288 *Albatrellus ovinus* (Polyporaceae); RE BEN MO GU; Japanese

- Mushroom\*(Sheep Polypore). Isolated compounds: 7906, 7910, 10538.
- T0289 *Albertisia papuana* (Menispermaceae). Isolated compounds: 9597, 16439.
- T0290 *Albizzia adinocephala* (Fabaceae); BA NA MA HE HUAN; Panamanian Albizia\*. Isolated compounds: 2700, 2701.
- T0291 *Albizzia anthelmintica* (Fabaceae); QU CHONG HE HUAN; Musenna Albizia. Isolated compounds: 5251, 15131.
- T0292 *Albizzia julibrissin* (Fabaceae); HE HUAN PI; Silktree Albizia Bark. Used part: bark. TCM Effects: To quiet spirit and resolve depression, quicken blood and disperse welling abscess. TCM Indications: Disquieted heart spirit, depression, insomnia, welling abscess and sores, knocks and falls. Isolated compounds: 59, 60, 855, 856, 862, 3171, 11916, 11917, 11918, 11919, 11920, 11921, 11922, 11923, 11924, 11925, 11926, 11927, 11928, 11929, 11930, 11931, 11932, 11933, 11934, 11935, 11936, 11937, 11938, 11939, 11940, 11941, 11942, 13288, 13289, 15708, 20557, 20558, 20567.
- T0293 *Albizzia lebeck* (Fabaceae); KUO JIA HE HUAN; Siris-acacia. Used part: bark. TCM Effects: To disperse swelling and relieve pain, promote astriction and check drain. TCM Indications: Painful swelling from knocks and falls, sore and boil, toxin swelling, ophthalmia, gum erosion, hemorrhoids, diarrhea. Isolated compounds: 7951, 18407.
- T0294 *Albizzia lophantha* (Fabaceae); YU ZHUANG HE HUAN; Cape Leeuwin Wattle. Isolated compounds: 862, 6533.
- T0295 *Albizzia odoratissima* (Fabaceae); XIANG HE HUAN; Fragrant Albizia\*. Used part: root and bark. TCM Effects: To clear heat and resolve toxin, quicken blood and relieve pain, quiet spirit. TCM Indications: Rheumatic arthritis, fracture due to knocks and falls, bleeding due to external injury, sores, scab and lichen, insomnia. Isolated compounds: 6240, 6264, 21914.
- T0296 *Alchornea floribunda* (Euphorbiaceae); DUO HUA SHAN MA GAN; Manyflower Christmasbush\*. Isolated compounds: 871.
- T0297 *Alchornea trewioides* (Euphorbiaceae); HONG BEI SHAN MA GAN; Redback Christmashush. Used part: leaf and root. TCM Effects: To clear heat and disinhibit damp, cool blood and resolve toxin, kill worms and relieve itch. TCM Indications: Dysentery, heat strangury, stone strangury, hematuria, flooding and spotting with vaginal discharge, wind papules, eczema, scab and lichen, decayed toothache, bedsore. Isolated compounds: 13438.
- T0298 *Alectoria vivens* (Usneaceae); JIN SI DAI; Green Alectoria Filament. Used part: filament. TCM Effects: To eliminate wind-damp, stanch bleeding and relieve pain, quicken blood and regulate menstruation, quiet spirit and calm, fortify spleen and stomach. TCM Indications: Taxation damage pain in lumbus and legs, bleeding due to external injury, menstrual disorder, prolapse of uterus, vaginal discharge, mental disease, epilepsy, hemiplegia, impotence, dizziness and dim vision. Isolated compounds: 1596, 22523, 22625.
- T0299 *Aleurites cordata* [Syn. *Aleurites fordii*] (Euphorbiaceae); TONG YOU; Tung Oil. Used part: seed oil. TCM Effects: To promote vomiting and expel phlegm drool, clear heat and resolve toxin, contract damp and kill worms. TCM Indications: Scab and lichen, shank sore, burns and scalds, cracking from frostbite. Isolated compounds: 4055, 6748, 6749, 13438, 16564, 20237, 21905, 21984.
- Aleurites fordii* = *Aleurites cordata*
- T0300 *Aleurites moluccana* (Lamiaceae); SHI LI ZI; Belgaum Walnut Seed. Used part: seed. TCM Effects: To quicken blood, moisten intestines. TCM Indications: Amenorrhea, intestinal dry and constipation. Isolated compounds: 8808.
- T0301 *Aleuritopteris argentea* (Sinopteridaceae); TONG JING CAO; Silvery Aleuritopteris. Used part: whole herb. TCM Effects: To regulate menstruation, suppress cough, dispel damp. TCM Indications: Cough, menstrual disorder, red and white vaginal discharge. Isolated compounds: 886.
- T0302 *Alhagi pseudalhagi* (Fabaceae); LUO TUO CI; Manaplant Alhagi Sweet Secretion. Used part: sweet secretion. TCM Effects: To clear heat and resolve toxin, disperse swelling and relieve pain. TCM Indications: Steaming bone vexation thirst, blood dysentery, diarrhea, abdominal pain, headache. Isolated compounds: 7807, 9646, 14583, 20563.
- T0303 *Alisma orientale* [Syn. *Alisma plantago-aquatica* var. *orientale*] (Alismataceae); ZE XIE; Oriental Waterplantain. Used part: tuber. TCM Effects: To lower cholesterol, disinhibit water and percolate damp, drain heat and free strangury, lower blood sugar levels. TCM Indications: Hyperlipemia, inhibited urination, heat strangury with inhibited pain, edema distention fullness, diarrhea, phlegm-rheum dizziness, emission. Isolated compounds: 888, 891, 892, 893, 894, 895, 896, 897, 898, 902, 903, 1257, 1258, 5151, 7050, 7051, 8011, 15336, 16184, 16185, 16189, 16190, 16191, 16192, 16193, 16194, 20472, 20473, 20474, 20475.
- Alisma plantago-aquatica* var. *orientale* = *Alisma orientale*
- T0304 *Alkanna tinctoria* (Boraginaceae); OU ZI CAO; Dyer's Alkanet. Isolated compounds: 909, 6302.
- T0305 *Allanblackia floribunda*. Isolated compounds: 21866.
- T0306 *Allanblackia monticola*. Isolated compounds: 918, 919.
- T0307 *Allemanda cathartica* (Apocynaceae); RUAN ZHI HUANG CHAN; Common Allemanda. Isolated compounds: 913, 914, 915, 11607, 17570.
- T0308 *Allemanda neriifolia* (Apocynaceae); HUANG CHAN; Oleanderleaf Allemanda. Isolated compounds: 7487.
- T0309 *Allium ampeloprasum* (Liliaceae); DA TOU SUAN; Wild Leek. Isolated compounds: 17864, 17865, 17913.
- T0310 *Allium ascalonicum* (Liliaceae); HU CONG; Shallot. Used part: bulb. TCM Effects: To resolve exterior, free yang, resolve toxin. TCM Indications: Wind-cold common cold, yin cold abdominal pain, urinary stoppage, swelling toxin of welling abscess and flat abscess, painful swelling from knocks and falls. Isolated compounds: 11504, 18343, 18346, 18368, 18410.
- T0311 *Allium cepa* (Liliaceae); YANG CONG; Common Onion. Used part: bulb. TCM Effects: To fortify stomach and rectify qi, resolve toxin and kill worms, lower blood-fat. TCM Indications: Reduced food intake with abdominal distention, wound, ulcer, trichomoniasis, hyperlipemia. Isolated compounds: 618, 921, 948, 953, 3182, 3183, 4048, 4134, 4438, 4442, 4443, 4444, 6342, 7768, 14277, 14278, 14690, 16902, 16903, 17174, 17181, 17912, 17913, 18343, 18346, 19912.
- T0312 *Allium cepa* var. *agrogatum* (Liliaceae); FEN NIE CONG TOU; Tillering Onion. Isolated compounds: 925, 17952.

- T0313 *Allium chinense* (Liliaceae); QIAO TOU; Chinese Onion. Used part: bulb. TCM Effects: See *Allium macrostemon*. TCM Indications: See *Allium macrostemon*. Isolated compounds: 3529, 12591, 12592, 12593, 12594, 20212, 20213.
- T0314 *Allium fistulosum* (Liliaceae); CONG BAI; Fistular Onion. Used part: fresh bulb. TCM Effects: To effuse exterior, free *yang*, resolve toxin, kill worms. TCM Indications: Wind-cold common cold, *yin* cold abdominal pain, inhibited urine and stool, dysentery, swelling pain of welling abscess and sore, abdominal pain due to worm accumulation. Isolated compounds: 920, 953.
- T0315 *Allium macleanii* (Liliaceae); MAI KE LIN JIU; MacLean Leek\*. Isolated compounds: 4297.
- T0316 *Allium macrostemon* (Liliaceae); XIE BAI; Longstamen Onion. Equivalent plant: *Allium chinense*. Used part: bulb. TCM Effects: To promote *yang* and dissipate binds, rectify *qi* and loosen chest. TCM Indications: Chest impediment, phlegm-rheum cough asthma, diarrhea and tenesmus. Isolated compounds: 618, 952, 3528, 3579, 4296, 8669, 8671, 13326, 13327, 13328, 13329, 13330, 13331, 13332, 13333, 13334, 14436, 14755, 14770, 14793, 17939, 17952, 17953, 19231, 19232, 20026.
- T0317 *Allium porrum* (Liliaceae); JIU CONG; Leek. Isolated compounds: 4296, 12068, 12069, 12206, 19634, 20210, 20211.
- T0318 *Allium sativum* (Liliaceae); DA SUAN; Garlic. Used part: bulb. TCM Effects: To warm center and move stagnation, resolve toxin, kill worms. TCM Indications: Cold pain in stomach duct and abdomen, diarrhea, dysentery, bacillary dysentery, amebic dysentery, tuberculosis, epidemic encephalitis, cholera, trichomoniasis, laryngeal carcinoma, pertussis, throat impediment, dry cough, common cold, malaria, edema, swelling toxin of welling abscess and boil, intestinal welling abscess, lichen sore, snake or insect bites, ancylostomiasis, oxyuria disease, taenia infection, vaginal discharge and pudendal itch, clavus. Isolated compounds: 618, 785, 920, 921, 923, 924, 926, 944, 947, 948, 950, 951, 952, 953, 954, 3760, 4296, 5349, 5486, 6342, 6407, 6417, 6501, 6524, 6531, 8312, 10663, 11414, 14126, 14127, 14128, 14278, 14327, 14328, 14329, 14582, 14690, 14691, 14694, 14759, 16876, 17919, 17921, 17937, 17972, 17978, 19396, 20479, 21626, 22509, 22511, 22512, 22513, 22514, 22515, 22518.
- T0319 *Allium schoenoprasum* (Liliaceae); XI XIANG CONG; Chive-like. Used part: herb. TCM Effects: To resolve exterior, free *qi* and effuse sweat. TCM Indications: Wind-heat common cold, headache, cold-damp red swelling, pain wind, sore. Isolated compounds: 14662, 14691, 17927, 21370.
- T0320 *Allium senescens* (Liliaceae); SHAN JIU; Aging Leek. Isolated compounds: 4297.
- T0321 *Allium* sp. (Liliaceae). Isolated compounds: 6501.
- T0322 *Allium tuberosum* (Liliaceae); JIU CAI; Tuber Onion. Used part: leaf. TCM Effects: To supplement kidney, warm center, move *qi*, dissipate stasis, resolve toxin. TCM Indications: Kidney vacuity impotence, cold pain in abdomen, dysphagia-occlusion and stomach reflux, chest impediment, blood ejection, spontaneous external bleeding, hematuria, dysentery, hemorrhoids, swelling toxin of welling abscess and sore, lacquer sore, knocks and falls. Isolated compounds: 618, 948, 6342, 6414, 14126, 14690, 22075, 22076, 22079.
- T0323 *Allium tuberosum* (Liliaceae); JIU ZI; Tuber Onion Seed. Used part: seed. TCM Effects: To supplement liver and kidney, invigorate *yang* and secure essence. TCM Indications: Kidney vacuity impotence, limp aching lumbus and knees, emission, frequent urination, urinary turbidity, Vaginal discharge. Isolated compounds: 8710, 8742, 18720, 22081, 22082.
- T0324 *Allium victorialis* (Liliaceae); GE CONG; Longroot Onion. Used part: bulb. TCM Effects: To dissipate stasis, stanch bleeding, resolve toxin. TCM Indications: Knocks and falls, blood stasis swelling and pain, spontaneous external bleeding, swelling pain of welling abscess and sore. Isolated compounds: 948, 952, 12195, 14126, 15424, 22158.
- T0325 *Alnus crispa* (Betulaceae); MEI ZHOU LU QI MU; American Green Alder. Isolated compounds: 17421.
- T0326 *Alnus glutinosa* (Betulaceae); OU ZHOU QI MU; European Alder. Isolated compounds: 3388.
- T0327 *Alnus hirsute* var. *microphylla* (Betulaceae); XIAO YE YING MAO QI MU; Smallleaf-hirsute Alder\*. Isolated compounds: 17754.
- T0328 *Alnus japonica* (Betulaceae); CHI YANG; Japanese Alder. Used part: bark, tender branchlet-leaf. TCM Effects: To clear heat and downbear fire, stanch bleeding. TCM Indications: Incessant nosebleed, bleeding due to external injury, water diarrhea. Isolated compounds: 958, 959, 960, 961, 963, 964, 965, 1110, 1113, 4930, 5829, 7445, 8788, 9219, 9550, 9551, 12082, 13097, 14489, 16174, 16175, 17547, 17548, 17754, 18411, 19211, 19312, 19609, 19610, 20389, 21843, 21844.
- T0329 *Alnus oregana* (Betulaceae); AO LEI TONG QI MU; Oregon Alder. Isolated compounds: 2331.
- T0330 *Alnus pendula* (Betulaceae); CHUI QI MU; Drooping Alder\*. Isolated compounds: 966, 8081.
- T0331 *Alnus sieboldiana* (Betulaceae); XI BO DE QI MU; Siebold Alder\*. Isolated compounds: 962, 17420, 17421.
- T0332 *Alnus* spp. (Betulaceae). Isolated compounds: 5763, 17547, 19312.
- T0333 *Alocasia cucullata* [Syn. *Arum cucullatum*] (Araceae); JIAN WEI YU; Chinese Taro. Used part: rhizome. TCM Effects: To clear heat and resolve toxin, dissipate binds and relieve pain. TCM Indications: Influenza, leptospirosis, early stage of sores and welling abscess toxin, scrofula, phlegmon, chronic osteomyelitis, poisonous snake bites, poisonous bee stings. Isolated compounds: 8012.
- T0334 *Aloe arborescens* var. *natalensis* (Liliaceae); WU GONG ZHANG; Arborescent Aloe\*. Used part: fresh juice of leaf. TCM Effects: To drain fire and resolve toxin, free stool. TCM Indications: Liver fire and red eyes, dizziness, lung heat cough asthma, repletion heat constipation, swelling pain of welling abscess and sore, erythematous lupus. Isolated compounds: 981.
- T0335 *Aloe ballyi* (Liliaceae); BEI LI LU HUI; Bally Aloe\*. Isolated compounds: 3979.
- Aloe barbadensis* = *Aloe vera*
- T0336 *Aloe cremonophila* (Liliaceae). Isolated compounds: 9615.
- T0337 *Aloe distans* (Liliaceae). Isolated compounds: 9615.
- T0338 *Aloe ferox* (Liliaceae); HAO WANG JIAO LU HUI; Cape of Good Hope Aloe Dried Juice. Used part: solid residue obtained by evaporating liquid which drains from leaves. TCM Effects: See *Aloe vera*. TCM Indications: See *Aloe vera*. Isolated compounds: 967, 974, 975, 977, 978, 980, 981, 7755, 7761, 7762, 7763, 11204.

- T0339 *Aloe gililandii* (Liliaceae); JI SHI LU HUI; Gililand Aloe\*. Isolated compounds: 3979.
- T0340 *Aloe jacksonii* (Liliaceae). Isolated compounds: 9615.
- T0341 *Aloe marlothii* (Liliaceae); MA SHI LU HUI; Marloth Aloe. Isolated compounds: 9772, 9774, 14129, 14130.
- T0342 *Aloe perryi* (Liliaceae); PEI LI LU HUI; Perry Aloe\*. Isolated compounds: 981.
- T0343 *Aloe ruspoliana* (Liliaceae); LA SHI LU HUI; Ruspol Aloe\*. Isolated compounds: 3979.
- T0344 *Aloe sabaea* (Liliaceae); SA BA LU HUI; Saba Aloe. Isolated compounds: 3543, 3979, 6332.
- T0345 *Aloe* sp. (Liliaceae). Isolated compounds: 967.
- T0346 *Aloe* spp. (Liliaceae); DUO ZHONG LU HUI TI QU WU; Extracts of *Aloe* spp. Isolated compounds: 973.
- T0347 *Aloe vera* [Syn. *Aloe barbadensis*] (Liliaceae); LU HUI; Kulaso Aloe Dried Juice. Equivalent plant: *Aloe ferox*, *Aloe vera* var. *chinensis*. Used part: solid residue obtained by evaporating liquid which drains from leaves. TCM Effects: To clear liver and relieve constipation. TCM Indications: Constipation, child *gan* accumulation, ascariasis, fright wind, lichen. Isolated compounds: 967, 972, 973, 976, 981, 1365, 3040, 3046, 3138, 3585, 3615, 4135, 4146, 4672, 7771, 8761, 9333, 9486, 9615, 9773, 11205, 11409, 12436, 13368, 13507, 13508, 16831, 18739, 19087, 20444, 20446, 22843.
- T0348 *Aloe vera* var. *chinensis* (Liliaceae); BAN WEN LU HUI; Chinese Aloe Dried Juice. Used part: solid residue obtained by evaporating liquid which drains from leaves. TCM Effects: See *Aloe vera*. TCM Indications: See *Aloe vera*. Isolated compounds: 967, 979, 981, 3209, 12569, 12891, 12893, 16561, 20280.
- T0349 *Alomia myriadenia*. Isolated compounds: 2048, 7078, 10296, 10297, 18682.
- T0350 *Alphonsea sclerocarpa* (Annonaceae). Isolated compounds: 12641.
- T0351 *Alphonsea* spp. (Annonaceae). Isolated compounds: 15751.
- T0352 *Alpinia allughas* (Zingiberaceae); A LU HA LIANG JIANG; Allugha Galangal\*. Isolated compounds: 17055.
- T0353 *Alpinia blepharocalyx* (Zingiberaceae); YUN NAN CAO KOU; Yunnan Galangal. Used part: fruit. TCM Effects: To dry damp, warm stomach, fortify spleen. TCM Indications: Stomach cold abdominal pain, distention fullness in stomach duct, dysphagia-occlusion, belching, stomach reflux, cold-damp vomiting and diarrhea. Isolated compounds: 2468, 2498, 2499, 2500, 3012, 3014, 3015, 3016, 3018, 3019, 3020, 3021, 3022, 4135, 4882, 4900, 4936, 5156, 5548, 5777, 5778, 5779, 5780, 5788, 5804, 6217, 6844, 6846, 6847, 6848, 6849, 9300, 9815, 9974, 10099, 10100, 10411, 10412, 13859, 14254, 14500, 14613, 15351, 15352, 17174, 19987.
- T0354 *Alpinia chinensis* (Zingiberaceae); LIAN JIANG; Chinese Galangal. Used part: rhizome. TCM Effects: To warm stomach and dissipate cold, disperse food and relieve pain. TCM Indications: Stomachache with distention and oppression, dysphagia-occlusion and stomach reflux, abdominal pain and diarrhea, rheumatism, cold pain of joints. Isolated compounds: 985, 9669, 11806.
- T0355 *Alpinia flabellata* (Zingiberaceae); SHAN SHAN JIANG; Flabellate Galangal\*. Isolated compounds: 10042, 10043, 10791, 10801, 12419, 21892, 21901, 21931, 21932, 21933, 21934.
- T0356 *Alpinia galanga* (Zingiberaceae); DA LIANG JIANG; Galanga Galangal. Used part: rhizome. TCM Effects: To warm stomach, dissipate cold, relieve pain. TCM Indications: *Qi* pain in heart and stomach, stomach cold, food damage vomiting and diarrhea. Isolated compounds: 140, 195, 675, 3048, 7521, 8079, 8080, 8081, 8082, 13896, 14245, 15987, 17923.
- T0357 *Alpinia japonica* (Zingiberaceae); TU SHA REN; Japanese Galangal. Used part: fruit or seed. TCM Effects: To move *qi*, regulate center, fortify stomach. TCM Indications: Glomus, abdominal distention and pain, vomiting, diarrhea. Isolated compounds: 989, 3048, 12331, 18682.
- T0358 *Alpinia katsumadai* (Zingiberaceae); CAO DOU KOU; Katsumada Galangal. Used part: seed. TCM Effects: To dispel damp and strengthen spleen, warm stomach and check vomiting. TCM Indications: Spleen-stomach Cold-damp obstructing, distention fullness and pain in stomach duct and abdomen, vomiting, diarrhea. Isolated compounds: 966, 985, 3187, 6487.
- T0359 *Alpinia officinarum* (Zingiberaceae); GAO LIANG JIANG; Lesser Galangal. Used part: rhizome. TCM Effects: To warm stomach, dispel wind, dissipate cold, move *qi*, relieve pain. TCM Indications: Cold pain in stomach duct and abdomen, vomiting, diarrhea. Isolated compounds: 2052, 2850, 6185, 6488, 7481, 7521, 8081, 9498, 9855, 10027, 10186, 10188, 10191, 10214, 10215, 10450, 10451, 10630, 12015, 13921, 13962, 13967, 14245, 15965, 17376, 18317, 19997.
- T0360 *Alpinia oxyphylla* (Zingiberaceae); YI ZHI REN; Sharpleaf Galangal. Used part: fruit. TCM Effects: To warm spleen, check diarrhea, warm kidney, reduce urine, secure essence. TCM Indications: Spleen-stomach vacuity cold, vomiting and diarrhea, cold pain in abdomen, drooling, enuresis due to kidney vacuity, frequent urination, emission, white turbidity. Isolated compounds: 11364, 11614, 11806, 12403, 12800, 12891, 12893, 14536, 15438, 15704, 15705, 16066, 16461, 16462, 16463, 16464, 16465, 16466, 16467, 16468, 16561, 19689, 20204, 20899, 22876, 22877.
- T0361 *Alpinia pinnanensis* (Zingiberaceae); ZHU SUI SHAN JIANG; Pinnan Galangal. Isolated compounds: 986, 987, 988, 3013, 3017, 6843, 6845.
- T0362 *Alpinia* sp. (Zingiberaceae). Isolated compounds: 3695.
- T0363 *Alpinia speciosa* (Zingiberaceae); DA CAO KOU; Beautiful Galangal. Used part: seed. TCM Effects: To dissipate cold and dry damp, dispel phlegm and interrupt malaria, fortify spleen and warm stomach. TCM Indications: Cold pain in heart and abdomen, distention fullness in chest and abdomen, cold-damp accumulation and obstruction, indigestion, vomiting and diarrhea. Isolated compounds: 985, 2550, 3187, 4936, 9669, 14245, 15204.  
*Alsomitra graciliflora* = *Hemsleya graciliflora*
- T0364 *Alsophila spinulosa* (Cyatheaceae); SUO LUO; Spiny Alsophila. Used part: stem. TCM Effects: To dispel wind and eliminate damp, quicken blood and free network vessels, relieve cough and calm asthma, clear heat and resolve toxin, kill worms. TCM Indications: Wind-damp impediment pain, kidney vacuity lumbago, knocks and falls, intestinal pain due to *qi* disorder, wind-fire toothache, cough, asthma, scab and lichen, ascariasis, oxyuria disease, prevention of influenza. Isolated compounds: 9286, 9287.
- T0365 *Alsophila* spp. (Cyatheaceae). Isolated compounds: 22581.

- T0366 *Alstonia angustifolia* (Apocynaceae); XIA YE JI GU CHANG SHAN; Narrowleaf Alstonia\*. Isolated compounds: 670, 995, 5058, 5059, 12451, 13879.
- T0367 *Alstonia boonei* (Apocynaceae); GAN LAO JI GU CHANG SHAN; Boone Alstonia. Isolated compounds: 6699.
- T0368 *Alstonia constricta* (Apocynaceae); SHU JI GU CHANG SHAN; Constricted Alstonia\*. Isolated compounds: 1002, 18623.
- T0369 *Alstonia legouixiae* (Apocynaceae). Isolated compounds: 18303.
- T0370 *Alstonia macrophylla* (Apocynaceae); DA YE TANG JIAO SHU; Deviltree Alstonia. Isolated compounds: 310, 669, 994, 996, 997, 998, 999, 1000, 1001, 1003, 1004, 1005, 1006, 5060, 5061, 6259, 6270, 9776, 9777, 9977, 9978, 13316, 13837, 13878, 14036, 14724, 16292, 16293, 18302, 18303, 20652, 22494, 22495, 22610.
- T0371 *Alstonia mairei* (Apocynaceae); YANG JIAO MIAN; Maire Alstonia. Used part: leaf. TCM Effects: To resolve toxin, stanch bleeding. TCM Indications: Swelling toxin of welling abscess and sore, bleeding due to external injury. Isolated compounds: 942, 17375, 18074, 19386, 21055.
- T0372 *Alstonia quaternata* (Apocynaceae); SI SHU JI GU CHANG SHAN; Quaternary Alstonia\*. Isolated compounds: 18303.
- T0373 *Alstonia restricta* (Apocynaceae); YOU XIAN YA JIAO SHU; Limited Alstonia\*. Isolated compounds: 21055.
- T0374 *Alstonia scholaris* (Apocynaceae); XIANG PI MU; Common Alstonia. Used part: bark or leaf. TCM Effects: To clear heat and resolve toxin, relieve cough and dispel phlegm, stanch bleeding and disperse swelling. TCM Indications: Common cold with fever, lung heat cough asthma, pertussis, icterohepatitis, stomachache, vomiting and diarrhea, malaria, swollen welling abscess and sores, painful swelling from knocks and falls, bleeding due to external injury. Isolated compounds: 1110, 1111, 1249, 3040, 3760, 6698, 6699, 13100, 13501, 14138, 17296, 17329, 18752, 18753, 19612, 20369, 21055, 22092, 22327.
- T0375 *Alstonia spatulata* (Apocynaceae); DAO ZHUANG JI GU CHANG SHAN; Spatulate Alstonia\*. Isolated compounds: 6699.
- T0376 *Alstonia spectabilis* (Apocynaceae); ZHUANG GUAN JI GU CHANG SHAN; Spectacular Alstonia\*. Isolated compounds: 6699.
- T0377 *Alstonia venenata* (Apocynaceae); YIN DU YA JIAO SHU; Venenous Alstonia\*. Isolated compounds: 1007, 12268, 22375.
- T0378 *Alstonia yunnanensis* (Apocynaceae); DIAN JI GU CHANG SHAN; Yunnan Alstonia. Used part: root or branchlet-leaf. TCM Effects: To interrupt malaria, clear heat and resolve toxin, stanch bleeding and disperse swelling. TCM Indications: Malaria, common cold with fever, lung heat cough, swelling pain in throat, mouth and tongue sores, swelling toxin of welling abscess and sore, knocks and falls, bleeding due to external injury. Isolated compounds: 4768, 7012, 16379, 18633, 22368.
- T0379 *Alternanthera philoxeroides* (Amaranthaceae); KONG XIN XIAN; Alligator Alternanthera. Used part: fresh aerial parts. TCM Effects: To clear heat and cool blood, resolve toxin, disinherit urine. TCM Indications: Viral infection, toxic hepatitis, icterohepatitis, epidemic hemorrhagic conjunctivitis, hemoptysis, hematuria, common cold with fever, hemorrhagic fever, measles papules, encephalitis of early stage, encephalitis B, jaundice, strangury-turbidity, epidemic parotitis, eczema, swollen welling abscess, sore and boil, poisonous snake bite. Isolated compounds: 2973, 9588, 9589, 16052, 18743.
- T0380 *Alternanthera repens* (Amaranthaceae); CI HUA LIAN ZI CAO; Spinyflower Alternanthera. Isolated compounds: 6171, 6172, 6173, 6174.
- T0381 *Aithaea officinalis* (Malvaceae); YAO SHU KUI; Marshmallow. Isolated compounds: 20566.
- T0382 *Aithaea rosea* (Malvaceae); SHU KUI HUA; Hollyhock Flower. Used part: flower. TCM Effects: To harmonize blood and stanch bleeding, resolve toxin and dissipate binds. TCM Indications: Blood ejection, spontaneous external bleeding, profuse menstruation, red and white vaginal discharge, urinary and fecal stoppage, child wind papules, malaria, welling abscess and flat abscess with swollen boil, scorpion sting, burns and scalds. Isolated compounds: 9424.
- T0383 *Alyxia sinensis* (Apocynaceae); LIAN ZHU TENG; China Alyxia. Used part: whole herb with root. TCM Effects: To dispel wind and eliminate damp, quicken blood and relieve pain. TCM Indications: Wind-damp impediment pain, blood stasis and menstrual block, stomachache, diarrhea, knocks and falls, damp beriberi. Isolated compounds: 2170.
- T0384 *Amanita pantherina* (Amanitaceae); BAO BAN E GAO; Leopard Leather Mushroom\*; Tengutake (in Japanese). Isolated compounds: 1052, 10592, 10744.
- T0385 *Amanita phalloides* (Amanitaceae); DU E GAO; Death Cap. Isolated compounds: 17040.
- T0386 *Amanita* spp. (Amanitaceae). Isolated compounds: 10938.
- T0387 *Amaranthus caudatus* (Amaranthaceae); WEI SUI XIAN; Love-lies-bleeding. Used part: root. TCM Effects: To fortify spleen, disperse gan. TCM Indications: Fatigue hypodynamia due to spleen-stomach vacuity, reduced food intake, child gan accumulation. Isolated compounds: 1013, 2318.
- T0388 *Amaranthus lividus* (Amaranthaceae); AO TOU XIAN; Emarginate Amaranth. Used part: whole herb or root. TCM Effects: To clear heat and resolve toxin, disinherit urine. TCM Indications: Dysentery, diarrhea, swelling toxin of clove sore, poisonous snake bites, stings, inhibited urination [=dysuria], edema. Isolated compounds: 16901.
- T0389 *Amaranthus tricolor* (Amaranthaceae); YAN LAI HONG; Three-coloured Amaranth. Used part: herb. TCM Effects: To clear heat and resolve toxin, disinherit urine and free stool. TCM Indications: Dysentery, urinary and fecal stoppage, snake or insect bites, sore toxin. Isolated compounds: 1013.
- T0390 *Amaryllis belladonna* (Amaryllidaceae); GU TING HUA; Jersey Lily. Isolated compounds: 1016, 1021, 3152, 4241, 9547, 10826, 13241, 16600.
- T0391 *Amaryllis belladonna* [hybrida] (Amaryllidaceae); GU TING HUA ZA JIAO ZHONG; Jersey Lily Hybrid. Isolated compounds: 2219. *Amaryllis radiata* = *Lycoris radiata*
- T0392 *Amberboa lippi* (Asteraceae); LI PU PO JU; Lipp Amberboa\*. Isolated compounds: 1022.
- T0393 *Amberboa muricata* (Asteraceae); AN BEI JU; Muricate Amberboa\*. Isolated compounds: 4565.
- T0394 *Amberboa ramosa* (Asteraceae); FEN ZHI PO JU; Ramose Amberboa\*. Isolated compounds: 1476, 14452, 14511.
- T0395 *Ambrosia acanthicarpa* (Asteraceae); CI GUO TUN CAO; Bur Sage.

- Isolated compounds: 3467.
- T0396 *Ambrosia ambrosioides* (Asteraceae); PU TONG TUN CAO; Ragweed. Isolated compounds: 4624.
- T0397 *Ambrosia artemisiaefolium* (Asteraceae); MEI ZHOU TUN CAO; American Ragweed\*. Isolated compounds: 1028.
- T0398 *Ambrosia artemisiifolia* (Asteraceae); TUN CAO; Common Ragweed. Used part: herb. TCM Effects: To kill snails. Isolated compounds: 4624, 4625, 18081, 18082, 18083, 21328.
- T0399 *Ambrosia chamissonis* (Asteraceae); CHA MI SEN TUN CAO; Chamisson Ragweed. Isolated compounds: 7030.
- T0400 *Ambrosia confertiflora* (Asteraceae); MI HUA TUN CAO; Denseflower Ragweed\*. Isolated compounds: 3972, 19308, 20664.
- T0401 *Ambrosia dumosa* (Asteraceae); BAI CI GUO TUN CAO; White Bur Sage. Isolated compounds: 3972, 7030, 20664.
- T0402 *Ambrosia hispida* (Asteraceae); CU YING MAO TUN CAO; Hispid Ragweed\*. Isolated compounds: 9564.
- T0403 *Ambrosia maritima* (Asteraceae); YAN HAI TUN CAO; Oak-of-Cappadocia. Isolated compounds: 1029.
- T0404 *Ambrosia polystachya* (Asteraceae); DUO SUI TUN CAO; Manyspike Ragweed. Isolated compounds: 8982.
- T0405 *Ambrosia psilostachya* (Asteraceae); LUO SUI TUN CAO; Perennial Ragweed. Isolated compounds: 16674, 18081, 18082, 18083.
- T0406 *Ambrosia psilostachya* var. *coronifolia* (Asteraceae); GUAN LUO SUI TUN CAO; Crestedspike Ragweed. Isolated compounds: 4087.
- T0407 *Ambrosia* spp. (Asteraceae). Isolated compounds: 16675.
- T0408 *Amelanchier* spp. (Rosaceae). Isolated compounds: 17287.
- T0409 *Amentotaxus yunnanensis* (Taxaceae); YUN NAN SUI HUA SHAN; Yunnan Amentotaxus. Isolated compounds: 5600, 6199, 13126, 19756, 19757, 19983, 20107.
- T0410 *Ammi majus* (Apiaceae); DA A MI; Big Ammi. Isolated compounds: 933, 22774.
- T0411 *Ammi* sp. (Apiaceae). Isolated compounds: 2309.
- T0412 *Ammi visnaga* (Apiaceae); CHI A MI; Tooth Ammi. Isolated compounds: 1960, 5707, 12221, 19227, 22530, 22552, 22553.
- T0413 *Ammocharis coranica* (Amaryllidaceae). Isolated compounds: 472, 4237, 13241, 14352, 14389.
- T0414 *Ammopiptanthus mongolicus* [Syn. *Piptanthus mongolicus*] (Fabaceae); SHA DONG QING; Mongolian Ammopiptanthus. Equivalent plant: *Piptanthus nanus*. Used part: stem-leaf. TCM Effects: To dispel wind and eliminate damp, soothe sinews and quicken blood. TCM Indications: Rheumatic pain in joints, frostbite. Isolated compounds: 16206.
- T0415 *Amomum aculeatum* (Zingiberaceae); CI DOU KOU; Aculeate Amomum\*. Isolated compounds: 589, 10159.
- T0416 *Amomum kravanh* [Syn. *Amomum cardamomum*] (Zingiberaceae); BAI DOU KOU; Round Cardamom. Used part: seed. TCM Effects: To transform damp and move *qi*, warm center and check vomiting, increase appetite and disperse food. TCM Indications: Spleen-stomach *qi* stagnation due to damp obstructing middle-jiao, vomiting with stomach cold, vomiting of milk in infants with stomach cold. Isolated compounds: 2550, 3237, 3241, 3242, 9669, 9671, 9672, 9673, 13771, 20995, 20997.
- T0417 *Amomum longiligulare* (Zingiberaceae); HAI NAN SHA REN; Hainan Amomum. Used part: ripe fruit or seed. TCM Effects: See *Amomum villosum*. TCM Indications: See *Amomum villosum*. Isolated compounds: 2557.
- T0418 *Amomum muricarpum* (Zingiberaceae); YOU GUO DOU KOU; Wartyfruit Amomum. Used part: fruit. TCM Effects: To warm center and transform damp, fortify stomach and disperse food, check vomiting and quiet fetus. TCM Indications: Cold pain in stomach duct, vomiting, diarrhea, malign obstruction in pregnancy, stirring fetus disquieted. Isolated compounds: 15080, 15081.
- T0419 *Amomum villosum* (Zingiberaceae); SHA REN; Villous Amomum. Equivalent plant: *Amomum xanthioides*, *Amomum longiligulare*. Used part: ripe fruit or seed. TCM Effects: To move *qi* and regulate center, harmonize stomach and arouse spleen. TCM Indications: Abdominal pain glomus distention, food stagnation in torpid stomach, dysphagia-occlusion, vomiting, cold dysentery, stirring fetus in pregnancy. Isolated compounds: 2550, 2557, 3048, 15500, 20364.
- T0420 *Amomum xanthioides* (Zingiberaceae); SUO SHA MI; Locklebur-like Amomum. Used part: ripe fruit or seed. TCM Effects: See *Amomum villosum*. TCM Indications: See *Amomum villosum*. Isolated compounds: 1192, 2276, 2548, 2549, 2550, 2557, 9880, 9881, 15976, 22335, 22468.
- T0421 *Amorpha fruticosa* (Fabaceae); ZI SUI HUAI; Indigobush Amorpha. Used part: leaf. TCM Effects: To clear heat and resolve toxin, dispel damp and disperse swelling. TCM Indications: Welling abscess, burns and scalds, eczema. Isolated compounds: 1071, 7481, 7883, 20965.
- T0422 *Amorphophallus* sp. (Araceae). Isolated compounds: 11025.
- T0423 *Ampelopsis brevipedunculata* (Vitaceae); SHE PU TAO; Ampelopsis. Used part: stem-leaf. TCM Effects: To disinhibit urine, clear heat, eliminate inflammation, allay thirst. TCM Indications: Chronic nephritis, hepatitis, pain of hot urine, stomach heat vomiting, wind papules, sore toxin, bleeding due to external injury. Isolated compounds: 1113, 1764, 7441, 12020, 14892, 18643.
- T0424 *Ampelopsis brevipedunculata* var. *hancei* (Vitaceae); GUANG YE SHE PU TAO; Hance Snakegrape. Used part: root and root cortex. TCM Effects: To clear heat and disinhibit damp, resolve toxin and disperse swelling. TCM Indications: Damp-heat jaundice, enteritis, dysentery, innominate toxin swelling, knocks and falls. Isolated compounds: 1075, 1077, 1078, 16550.
- Ampelopsis cantoniensis* var. *grossedentata* = *Ampelopsis grossedentata*
- T0425 *Ampelopsis chaffanjonii* (Vitaceae); YU YE SHE PU TAO; Chaffanjon Ampelopsis. Isolated compounds: 1079.
- T0426 *Ampelopsis grossedentata* [Syn. *Ampelopsis cantoniensis* var. *grossedentata*] (Vitaceae); XIAN CHI SHE PU TAO; Bigdentate Ampelopsis. Used part: stem-leaf or root. TCM Effects: To clear heat and resolve toxin, disinhibit damp and disperse swelling. TCM Indications: Common cold with fever, swelling pain in throat, icterohepatitis, red eyes with gall, swollen sore of welling abscess and boil. Isolated compounds: 1026, 1074, 15170, 15184.
- T0427 *Ampelopsis japonica* [Syn. *Paullinia japonica*] (Vitaceae); BAI LIAN; Japanese Ampelopsis. Used part: tuberoid. TCM Effects: To clear heat and resolve toxin, dissipate binds and relieve pain, close sores and engender flesh. TCM Indications: Swelling toxin of sore and welling abscess, burns and scalds, scrofula, damp sore, warm malaria, fright



- epilepsy, blood dysentery, intestinal wind, hemorrhoids and fistulas, leukorrhea, knocks and falls, bleeding due to external injury. Isolated compounds: 1074, 2687, 8095, 16836.
- T0428 *Ampelopsis megalophylla* (Vitaceae); DA YE SHE PU TAO; Largeleaf Ampelopsis. Used part: branch-leaf. TCM Effects: To clear heat and disinhibit damp, calm liver and lower blood pressure, quicken blood and free network vessels. TCM Indications: Dysentery, diarrhea, dribbling pain of urination, hypertension, dizzy head and distention eyes, knocks and falls. Isolated compounds: 1074.
- T0429 *Amphidium carterae* (Gymmodiniaceae); KA SHI QIAN GOU ZAO. Isolated compounds: 6426, 6519, 20282.
- T0430 *Amphimedon paraviridis* Sponge Amphimedon paraviridis. Isolated compounds: 6364.
- T0431 *Amphipterygium adstringens* (Julianaceae); SHOU LIAN LIANG YI MU; Cuachalalate (local name). Isolated compounds: 6980, 10364, 19983.
- T0432 *Amphoricarpos neumayeri* ssp. *murbeckii* (Asteraceae). Isolated compounds: 314, 5335, 11756, 11757.
- T0433 *Amphoricarpos neumayeri* ssp. *neumayeri* (Asteraceae). Isolated compounds: 314, 5335, 11756, 11757.
- T0434 *Amsonia sinensis* (Apocynaceae); SHUI GAN CAO; China Amsonia. Used part: whole herb. TCM Effects: To clear heat and resolve toxin. TCM Indications: Children wind-heat, erysipelas, sore toxin. Isolated compounds: 1088, 1089, 19916.
- T0435 *Anabasis aphylla* (Chenopodiaceae); WU YE JIA MU ZEI; Leafless Anabasis. Used part: twig. TCM Effects: To kill worms. Isolated compounds: 1124, 1474, 13104.
- T0436 *Anabasis brevifolia* (Chenopodiaceae); DUAN YE JIA MU ZEI; Shortleaf Anabasis. Isolated compounds: 8625, 10799, 14175.
- T0437 *Anabasis salsa* (Chenopodiaceae); YAN SHENG JIA MU ZEI; Salliving Anabasis. Isolated compounds: 8625, 10799, 14175.
- T0438 *Anacardium occidentale* (Anacardiaceae); DU XIAN ZI; Common Cashew Fruit. Used part: fruit. TCM Effects: To moisten lung and transform phlegm, eliminate vexation and allay thirst. TCM Indications: Cough and counterflow, vexation and thirst. Isolated compounds: 1128, 2380, 3188, 8403, 15279.
- T0439 *Anadenanthera colubrina* (Fabaceae); XI CHANG NAN MEI DOU. Isolated compounds: 1110, 1131, 13097, 13098.
- T0440 *Anagallis arvensis* (Primulaceae); LIU LI FAN LV; Scarlet Pimpernel. Used part: whole herb. TCM Effects: To dispel wind and dissipate cold, quicken blood and resolve toxin. TCM Indications: Crane's knee wind, *yin* syndrome with sores, poisonous snake bites, rabid dog bite. Isolated compounds: 1132, 1133, 1825, 1826, 1827.
- T0441 *Anagyris foetida* (Fabaceae); CHOU WEI HONG DOU; Bean Trefoil. Isolated compounds: 1134.
- T0442 *Anamirta cocculus* (Menispermaceae). Isolated compounds: 6097, 17348.
- T0443 *Anamirta paniculata* (Menispermaceae); YIN DU FANG JI. Isolated compounds: 17347.
- T0444 *Ananas comosus* (Bromeliaceae); FENG LI; Pineapple. Used part: pericarp. TCM Effects: To resolve toxin, check dysentery, relieve cough. TCM Indications: Dysentery, cough. Isolated compounds: 4451, 10967, 13126, 20434.
- T0445 *Anaphalis contorta* (Asteraceae); XUAN YE XIANG QING; Coiledleaf Pearleverlasting. Isolated compounds: 7751.
- T0446 *Anaphalis margaritacea* (Asteraceae); DA YE BAI TOU WENG; Common Pearleverlasting. Used part: whole herb with root. TCM Effects: To clear heat and drain fire, dry damp, expel worms. TCM Indications: Blood ejection, stomach fire toothache, damp-heat dysentery, ascariasis, mammary welling abscess, scrofula, ulcer of lower limb. Isolated compounds: 3564, 4947, 6027, 10048.
- T0447 *Anchusa officinalis* (Boraginaceae); YAO YONG NIU SHE CAO; Alkanet. Isolated compounds: 3847, 12925.
- T0448 *Anchusa strigosa* (Boraginaceae); CU MAO NIU SHE CAO; Hemnhem (in Jordan). Isolated compounds: 2454, 9319, 10181, 18663, 18664, 18665, 18666, 20487, 21145, 21489.
- T0449 *Ancistrocladus heyneanus* (Ancistrocladaceae); HAI NI GOU ZHI TENG; Indian Liana. Isolated compounds: 1141, 1142, 1143, 1144, 1145, 1147.
- T0450 *Ancistrocladus korupensis* (Ancistrocladaceae); GOU ZHI TENG; Ancistrocladus\*. Isolated compounds: 14831.
- T0451 *Ancistrocladus likoko* (Ancistrocladaceae); ZHONG FEI GOU ZHI TENG; Central-African Ancistrocladus\*. Isolated compounds: 1146.
- T0452 *Andira inermis* (Fabaceae); WU CI KE YA SHU; Angelin-tree. Isolated compounds: 676, 1928, 3004, 3005, 3006, 3007, 3700, 5659, 7883, 13281, 13638.
- T0453 *Andrographis echinoides* (Acanthaceae); LAN JI CHUAN XIN LIAN; Echiniumlike Andrographis. Isolated compounds: 5604.
- T0454 *Andrographis elongata* (Acanthaceae); SHEN CHANG CHUAN XIN LIAN; Elongate Andrographis\*. Isolated compounds: 10026, 20004, 20007, 20008, 21774.
- T0455 *Andrographis lineata* (Acanthaceae); TIAO WEN CHUAN XIN LIAN; Linea Andrographis\*. Isolated compounds: 5717, 10785, 16869.
- T0456 *Andrographis neesiana* (Acanthaceae). Isolated compounds: 6696, 9506, 10794.
- T0457 *Andrographis paniculata* [Syn. *Justicia paniculata*] (Acanthaceae); CHUAN XIN LIAN; Common Andrographis. Used part: dried aerial parts. TCM Effects: To clear heat and resolve toxin, drain fire, dry damp. TCM Indications: Infection of upper respiratory tract, fever, wind-heat common cold, bacillary dysentery, diarrhea, tonsillitis, pneumonia, tuberculosis, lung heat cough, pulmonary welling abscess, postlithotripsy urinary tract infection, warm disease fever, pertussis, swelling pain in throat, damp-heat jaundice, strangury syndrome, erysipelas, sore and welling abscess, eczema, poisonous snake bite. Isolated compounds: 1149, 1150, 1151, 1152, 1153, 1154, 1155, 1156, 1157, 1158, 1159, 4680, 4876, 4901, 5152, 5167, 5183, 5200, 10024, 10793, 10795, 14137, 14928, 15337, 16609, 16610, 16611, 19987, 20004, 21180.
- T0458 *Andrographis rothii* (Acanthaceae). Isolated compounds: 6695, 10022, 21181.
- T0459 *Andrographis serpyllifolia* (Acanthaceae); BAI LI XIANG YE CHUN XIN LIAN; Andrographis\*. Isolated compounds: 20005, 20006.
- T0460 *Andrographis viscosula* (Acanthaceae); NAN YIN DU CHUAN XIN LIAN; South-India Andrographis\*. Isolated compounds: 10789, 16870, 21183, 21912, 21915.
- T0461 *Andropogon* sp. (Poaceae). Isolated compounds: 17455.

- T0462 *Anemarrhena asphodeloides* (Liliaceae); ZHI MU; Common Anemarrhena. Used part: rhizome. TCM Effects: To clear heat and drain fire, enrich *yin* and moisten dryness, eliminate vexation and allay thirst. TCM Indications: Diabetes mellitus, warm heat disease, ardent fever with vexation and thirst, cough and asthma, dry cough, constipation, steaming bone tidal fever, vacuity vexation and insomnia, strangury-turbidity. Isolated compounds: 1171, 1172, 1173, 1174, 1175, 1176, 1177, 3589, 4298, 4870, 8401, 8670, 9546, 10615, 11524, 13331, 13481, 13569, 13570, 14926, 15397, 15526, 15528, 16827, 19390, 20025, 20027, 20209, 20217, 21393, 21394, 21395, 22796.
- T0463 *Anemone altaica* (Ranunculaceae); A ER TAI YIN LIAN HUA; Altai Anemone\*. Used part: rhizome. TCM Effects: To transform phlegm and open orifices, quiet spirit, diffuse damp and arouse spleen, resolve toxin. TCM Indications: Febrile diseases clouded spirit, epilepsy, *qi*-block deafness, heavy dreams and amnesia, oppression in chest and abdomen distention, inappetence, wind-damp impediment pain, welling abscess and flat abscess, scab and lichen. Isolated compounds: 21209.
- T0464 *Anemone anhuiensis* (Ranunculaceae); AN HUI YIN LIAN HUA; Anhui Anemone\*. Isolated compounds: 1253, 1254, 1255, 1256.
- T0465 *Anemone begoniifolia* (Ranunculaceae); LUAN YE YIN LIAN HUA; Ovateleaf Anemone. Isolated compounds: 2211, 2212, 2213, 14573, 14574.
- T0466 *Anemone coronaria* (Ranunculaceae); HUA GUAN YIN LIAN HUA; St. Brigid. Isolated compounds: 4436, 5013, 5014, 5015, 5016.
- T0467 *Anemone flaccida* (Ranunculaceae); E ZHANG CAO; Flaccid Anemone. Used part: rhizome. TCM Effects: To dispel wind-damp, disinhibit sinews and bones. TCM Indications: Wind-damp pain, knocks and falls. Isolated compounds: 7806.
- T0468 *Anemone hupehensis* (Ranunculaceae); DA PO WAN HUA HUA; Hupeh Anemone. Used part: root. TCM Effects: To clear heat and disinhibit damp, resolve toxin and kill worms, dissipate stasis and disperse swelling. TCM Indications: Dysentery, diarrhea, malaria, ascariasis, swollen welling abscess, sore and boil, scrofula, knocks and falls, acute icterohepatitis. Isolated compounds: 1178.
- T0469 *Anemone obtusiloba* (Ranunculaceae); DUN LIE YIN LIAN HUA; Obtuselobed Anemone. Isolated compounds: 15905, 15906, 15907.
- T0470 *Anemone raddeana* (Ranunculaceae); DUO BEI YIN LIAN HUA; Radde Windflower. Used part: rhizome. TCM Effects: To dispel wind-damp, dissipate cold and relieve pain, disperse swollen welling abscess. TCM Indications: Wind-cold-damp impediment, hypertonicity of limbs, aching pain in joints, swelling pain of welling abscess and sore. Isolated compounds: 6755, 6756, 16059, 18516, 18517, 18518, 18520, 18521.
- T0471 *Anemone rivularis* (Ranunculaceae); HU ZHANG CAO; Brooklet Anemone. Used part: root. TCM Effects: To clear heat and resolve toxin, quicken blood and soothe sinews, disperse swelling, relieve pain. TCM Indications: Swelling pain in throat, mumps, scrofula, swelling toxin of welling abscess and flat abscess, malaria, cough, damp-heat jaundice, wind-damp pain, stomachache, toothache, knocks and falls. Isolated compounds: 2334, 9692, 9693, 9694, 9695, 16060, 18855.
- T0472 *Anethum graveolens* (Apiaceae); SHI LUO ZI; Dill Fruit. Used part: fruit. TCM Effects: To warm spleen and kidney, increase appetite, move *qi*, dissipate cold, resolve toxin of fish and meat. TCM Indications: Sand foulness retching, cold pain in abdomen, cold mounting, glomus fullness. Isolated compounds: 2276, 3237, 5177, 5207, 5209, 5220, 5808, 5810, 6141, 6142, 6193, 7334, 7443, 8237, 8808, 8810, 9841, 10433, 10471, 10953, 12843, 13741, 13747, 13753, 13754, 13777, 13778, 13877, 14419, 20569, 21339, 21359, 22196, 22252.
- T0473 *Anethum* sp. (Apiaceae). Isolated compounds: 12420, 22552.
- T0474 *Angelica acutiloba* [Syn. *Ligusticum acutilobum*] (Apiaceae); DONG DANG GUI; Acute-lobed Angelica. Used part: root. TCM Effects: To supplement blood and quicken blood, regulate menstruation and relieve pain, moisten dryness and lubricate intestines. TCM Indications: Blood vacuity, menstrual disorder, dysmenorrhea, amenorrhea, postpartum abdominal pain, intestinal dry and constipation. Isolated compounds: 2797, 2803, 4550, 7852, 11690, 12825.
- T0475 *Angelica acutiloba* var. *sugiyamae* (Apiaceae); BEI HAI DANG GUI; Northsea Angelica\*. Isolated compounds: 4550, 7852.
- T0476 *Angelica anomala* (Apiaceae); XIA YE DANG GUI; Narrowleaf Angelica. Used part: root. TCM Effects: To dispel wind and eliminate damp, disperse swelling and relieve pain. TCM Indications: Wind-cold common cold, headache and nasal congestion, deep-source nasal congestion, gum swelling and pain, swelling of sores, vaginal discharge. Isolated compounds: 1347.
- T0477 *Angelica archangelica* (Apiaceae); YUAN DANG GUI; Angelica. Isolated compounds: 1619, 12395, 16261, 16263, 16457, 21371, 22774, 22775.
- T0478 *Angelica dahurica* [Syn. *Angelica porphyrocaulis*] (Apiaceae); BAI ZHI; Dahurian Angelica. Used part: root. TCM Effects: To dispel wind and resolve exterior, dispel damp and relieve pain. TCM Indications: Wind-cold common cold, nasal congestion, headache (especially in forehead and superciliary region), toothache, infections, acute mastitis, sores, excessive leukorrhea, stomachache. Isolated compounds: 933, 934, 1191, 2041, 2833, 4597, 4598, 4599, 4600, 4601, 4602, 4603, 5098, 6371, 7455, 7672, 9088, 9379, 9486, 11001, 11462, 13571, 13571, 14269, 14391, 14656, 14925, 15348, 15647, 15695, 15699, 15950, 15957, 16457, 16460, 16488, 16833, 17056, 17077, 19542, 19704, 21041, 21043, 21611, 22195, 22220, 22221.
- T0479 *Angelica dahurica* cv. *qibaizhi* (Apiaceae); QI BAI ZHI; Qibaizhi Angelica\*. Used part: root. TCM Effects: See *Angelica taiwaniana*. TCM Indications: See *Angelica taiwaniana*. Isolated compounds: 618, 11001, 11462, 14204, 17077.
- T0480 *Angelica decursiva* [Syn. *Peucedanum decursivum*] (Apiaceae); QIAN HU; Common Hogfennel. Equivalent plant: *Peucedanum praeruptorum*, *Peucedanum longshengens*, *Peucedanum rubricale*, *Ligusticum brachylobum*. Used part: root. TCM Effects: To course wind and dissipate heat, downbear *qi* and transform phlegm. TCM Indications: Cough, externally contracted wind-heat, lung heat phlegm depression, cough and asthma with abundant phlegm, sticky phlegm, retching counterflow and reduced food intake, fullness and oppression in chest and diaphragm. Isolated compounds: 213, 4677, 4678, 4859, 4862, 4863, 7385, 9786, 9787, 12527, 15645, 15647, 16772, 17028, 20225, 22119, 22120, 22121.

- T0481 *Angelica furcijuga* (Apiaceae); FEN CHA DANG GUI; Furcate Angelica\*. Isolated compounds: 1213, 1214, 1523, 1536, 2041, 3857, 6838, 7411, 7768, 9835, 10922, 10923, 10924, 10925, 10926, 10927, 11001, 11412, 11462, 11637, 12020, 16456, 16459, 17034, 17757, 18282, 22195, 22775.
- T0482 *Angelica genuflexa* (Apiaceae); QU XI DANG GUI; Genuflex Angelica\*. Isolated compounds: 17375.
- T0483 *Angelica gigas* (Apiaceae); CHAO XIAN DANG GUI; Gigantic Angelica. Used part: root. TCM Effects: To extinguish wind and harmonize blood. TCM Indications: Pain in joints, wrenching and contusion. Isolated compounds: 4862, 4863, 5098, 7052, 7053, 9968, 10197, 10765, 11462, 13571, 14078, 15645, 15647, 17035, 22195, 22774, 22781.
- T0484 *Angelica glabra* (Apiaceae); GUANG HUA DANG GUI; Glabrate Angelica\*. Isolated compounds: 1193, 2833, 17077.
- T0485 *Angelica japonica* (Apiaceae); RI BEN DANG GUI; Japanese Angelica\*. Isolated compounds: 22530.
- T0486 *Angelica keiskei* (Apiaceae); BIN HAI DANG GUI; Seashore Angelica\*. Isolated compounds: 9992.
- T0487 *Angelica keiskei* (Apiaceae); KAI SHI DANG GUI; Keislce Angelica\*. Isolated compounds: 1619.
- T0488 *Angelica longeradiata* (Apiaceae); CHANG BIAN HUA DANG GUI; Longradiate Angelica\*. Isolated compounds: 1619.
- T0489 *Angelica officinalis* (Apiaceae); YAO YONG DANG GUI; Medicinal Angelica\*. Isolated compounds: 22774.
- T0490 *Angelica pachycarpa* (Apiaceae); HOU GUO DANG GUI; Thickfruit Angelica\*. Isolated compounds: 13571, 14204, 16263.
- T0491 *Angelica polymorpha* (Apiaceae); GUAI QIN; Polymorphic Angelica. Used part: root. TCM Effects: To dispel wind and effuse exterior, warm center and dissipate cold, rectify *qi* and relieve pain. TCM Indications: Wind-cold exterior syndrome, wind-damp impediment pain, pain in stomach duct and abdomen, chest and rib-side pain, knocks and falls. Isolated compounds: 1195.  
*Angelica porphyrocaulis* = *Angelica dahurica*  
*Angelica pubescens* = *Angelica pubescens* f. *biserrata*
- T0492 *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*] (Apiaceae); DU HUO; Doubleteeth Pubescent Angelica. Equivalent plant: *Heracleum lanatum*. Used part: root. TCM Effects: To dispel wind and eliminate damp, dissipate cold and relieve pain. TCM Indications: Wind-cold-damp impediment (especially in lower part of body), pain in lumbus and knees, headache, toothache. Isolated compounds: 1048, 1188, 1191, 1193, 1194, 1196, 1197, 1198, 1199, 1200, 1349, 2306, 2411, 2412, 3351, 3935, 3936, 3937, 3938, 4029, 4234, 4497, 4550, 6412, 6485, 6494, 6546, 6741, 7229, 8002, 9044, 9669, 11221, 11249, 11462, 11601, 11628, 13572, 13781, 13827, 14272, 14323, 14324, 14349, 14621, 14631, 14792, 15146, 15219, 15500, 15645, 15647, 15683, 15974, 16261, 16708, 16829, 17055, 17376, 18086, 19542, 20156, 20524, 20988, 21043, 21360, 21371, 22195, 22774.
- T0493 *Angelica radix* (Apiaceae); ZHI GEN DANG GUI; Taproot Angelica\*. Isolated compounds: 2797.
- T0494 *Angelica shkiokiana* (Apiaceae); SHI SHI DANG GUI; Shkioki Angelica\*. Isolated compounds: 7054.
- T0495 *Angelica sinensis* (Apiaceae); DANG GUI; Chinese Angelica. Equivalent plant: *Phlojodicarpus sibiricus*. Used part: root. TCM Effects: To nourish blood and regulate menstruation, quicken blood, relieve pain, moisten intestines and relieve constipation. TCM Indications: Women's diseases, blood deficiency syndrome, menstrual disorder, amenorrhea and dysmenorrhea, dysmenorrhea due to anemia, thrombophlebitis, neuralgia, arthritis, chronic nephritis, constrictive aortitis, blood vacuity, pernicious anemia, anemia due to folic acid deficiency, dysentery, hepatitis, Raynaud's disease, lumbago, various pains due to blood stasis and rheumatic impediment, sores, welling abscess, constipation, ulcer in gastrointestinal tract, skin diseases, eczema, dermatitis, neurodermatitis, psoriasis. Isolated compounds: 555, 556, 557, 558, 617, 618, 939, 1190, 1284, 2056, 2351, 2412, 2600, 2791, 2797, 3045, 3051, 3231, 3350, 3466, 3589, 3855, 4233, 4234, 5442, 5693, 5749, 6317, 6330, 6373, 6398, 6406, 6542, 7472, 7473, 7477, 7768, 7853, 9021, 9071, 9486, 9618, 9619, 11336, 11421, 12800, 12825, 12826, 14330, 15203, 15528, 17056, 17089, 17204, 18656, 19542, 19596, 20369, 20372, 20444, 21041, 21068, 21941, 21957, 22237, 22252, 22322, 22336, 22556.
- T0496 *Angelica* spp. (Apiaceae). Isolated compounds: 22195.
- T0497 *Angelica sylvestris* (Apiaceae); LIN BAI ZHI; Wild Angelica. Isolated compounds: 1960, 11578, 16263.
- T0498 *Angelica taiwaniana* (Apiaceae); HANG BAI ZHI; Taiwan Angelica. Equivalent plant: *Angelica dahurica* cv. *Qibaizhi*. Used part: root. TCM Effects: To dispel wind and eliminate damp, free orifices and relieve pain, disperse swelling and expel pus. TCM Indications: Common cold with headache, eyebrow bone pain, toothache, nasal congestion, deep-source nasal congestion, enduring diarrhea due to damp, leukorrhea, sores with welling abscess and flat abscess, poisonous snake bites. Isolated compounds: 934, 1238, 1347, 2309, 2834, 3856, 11001, 11301, 11462, 11578, 13968, 15348, 17077, 21944, 21969, 22774, 22775.
- T0499 *Angelica ursina* (Apiaceae); BEI FANG DANG GUI; Northern Angelica\*. Isolated compounds: 1193, 9419, 18165.
- T0500 *Anguilla japonica* (Anguillidae); MAN LI YU; Japanese Eel. Used part: meat or whole fish. TCM Effects: To fortify spleen and supplement lung, dispel wind and eliminate damp, resolve toxin and kill worms. TCM Indications: Indigestion, child *gan* accumulation, tuberculosis with cough, impotence, flooding and spotting with vaginal discharge, beriberi with edema, wind-damp bone pain, intestinal wind, dysentery, sore, hemorrhoids and fistulas, malaria, intestinal parasitic disease. Isolated compounds: 1350, 3205, 9568.  
*Anisodus acutangulus* = *Scopolia acutangula*
- T0501 *Anisodus luridus* (Solanaceae); SAI LANG DANG; Common Anisodus. Used part: root. TCM Effects: To resolve spasm and relieve pain. TCM Indications: Stomachache, cholecystalgia, acute gastroenteritis, chronic gastroenteritis. Isolated compounds: 2001, 4417, 19541, 22050.
- T0502 *Anisodus tanguticus* [Syn. *Scopolia tangutica*] (Solanaceae); ZANG QIE; Tangut Anisodus. Used part: root and seed. TCM Effects: To anesthetize and settle pain, resolve tetany and disperse swelling. TCM Indications: Shock, shock due to acute infectious diseases, cerebral thrombosis, acute spinal cord inflammation, spasm of biliary ducts or duodenum, acute gastroenteritis, chronic gastroenteritis, contracture

- pain in stomach duct and abdomen, ascariidosis in biliary tract, gallstones, swelling toxin of welling abscess and flat abscess, knocks and falls, fracture. Isolated compounds: 663, 1287, 1288, 4417, 10870, 10872, 10873, 22050.
- T0503 *Anisomeles indica* [Syn. *Epimeredi indica*] (Lamiaceae); GUANG FANG FENG; Indian Epimeredi. Used part: whole herb. TCM Effects: To dispel wind-damp, disperse sore toxin. TCM Indications: Common cold with fever, wind-damp impediment pain, swelling toxin of welling abscess and sore, eczema of skin, snake or insect bites. Isolated compounds: 6965, 16161, 16280, 16444.
- T0504 *Annona bullata* (Annonaceae); PAO ZHUANG FAN LI ZHI; Bullate Custardapple\*. Isolated compounds: 2735, 16677.
- T0505 *Annona cherimolia* (Annonaceae); MAO YE FAN LI ZHI; Cherimoya. Isolated compounds: 1297, 1298, 1299, 1303, 1304, 1305, 1317, 3512, 3513, 3514, 3515, 6827, 6828, 11793, 12452, 14906, 16266, 18899, 18907, 22099.
- T0506 *Annona glabra* (Annonaceae); YUAN HUA FAN LI ZHI; Glabrous Custardapple. Isolated compounds: 1301, 1307, 1318, 3294, 8494, 8495, 15781, 17041, 18655.
- T0507 *Annona glauca* (Annonaceae); ROU MAO FAN LI ZHI; Glauous Custardapple\*. Isolated compounds: 8508.
- T0508 *Annona montana* (Annonaceae); SHAN FAN LI ZHI; Montana Custardapple\*. Isolated compounds: 1306, 1307, 1308, 1313, 1314, 1315, 1316, 1324, 1325, 8379, 8946, 14934, 14935, 14936, 14937, 14938, 14939, 14940, 14941, 14942, 14943, 22817.
- T0509 *Annona muricata* (Annonaceae); CI GUO FAN LI ZHI; Guanabana. Isolated compounds: 1294, 1295, 1296, 1302, 1307, 1308, 1310, 1311, 1312, 1313, 1315, 1320, 1321, 1322, 1679, 1856, 2735, 4089, 4090, 4091, 4135, 5240, 8946, 11864, 12956, 15082, 15083, 15084, 15084, 15085, 15085, 15087, 15088, 15089, 15090, 15091, 15092, 15093, 15094, 15095, 15096, 15097, 15098, 15099, 15339, 18898, 19096, 20051, 20240, 22816.
- T0510 *Annona purpurea* (Annonaceae); ZI FAN LI ZHI; Soncoya. Isolated compounds: 8524, 16339, 16414, 18211, 18214, 18215, 21246.
- T0511 *Annona reticulata* (Annonaceae); NIU XIN FAN LI ZHI; Bullocksheart Custardapple. Used part: fruit. TCM Effects: To clear heat and check dysentery, expel worms. TCM Indications: Heat toxin dysentery, intestinal parasitic disease. Isolated compounds: 1306, 1317, 1324, 1348, 11223, 11224, 11225, 12917, 14906, 15099, 18653, 18655, 18899, 19198, 20051, 20244, 22818.
- T0512 *Annona spinescens* (Annonaceae); CI ZHUANG FAN LI ZHI; Spined Custardapple\*. Isolated compounds: 17006.
- T0513 *Annona squamosa* (Annonaceae); FAN LI ZHI; Custard Apple. Used part: fruit. TCM Effects: To supplement stomach and spleen, clear heat and resolve toxin, kill worms. TCM Indications: Malign sore and swelling toxin, intestinal parasitic disease. Isolated compounds: 1309, 1319, 1326, 1327, 1328, 1329, 1330, 1331, 1348, 2735, 2736, 5928, 5929, 5930, 5932, 6972, 7788, 9706, 9722, 9723, 9757, 10275, 10276, 10277, 10542, 12178, 12917, 14906, 15766, 18655, 20239, 20240, 20241, 20242, 20244, 20245, 20246, 20247, 20248.
- T0514 *Anodendron affine* (Apocynaceae); SHAN TENG; Common Anodendron. Isolated compounds: 1935, 15493, 22718.
- T0515 *Anredera cordifolia* [Syn. *Baussingaultia cordifolia*; *Baussingaultia gracilis* f. *pseudobaselloides*; *Baussingaultia gracilis* var. *pseudobaselloides*] (Basellaceae); LUO KUI SHU. Used part: dried strumose bulbel in vine. TCM Effects: To supplement kidney and strengthen lumbus, dissipate stasis and disperse swelling. TCM Indications: Impediment pain in lumbus and knees, weakness during convalescence, knocks and falls, fracture. Isolated compounds: 12526.
- T0516 *Anser cygnoides domestica* (Anatidae); BAI E GAO; Goose Fat. Used part: fat of goose. TCM Effects: To moisten skin, disperse swollen welling abscess. TCM Indications: Cracking, deafness, otitis media, dysphagia-occlusion and stomach reflux, drug poisoning, swollen welling abscess, scab and lichen. Isolated compounds: 3511, 20281, 21984.
- T0517 *Anser cygnoides domestica* (Anatidae); E CUI; Goose Tail-meat. Used part: tail meat. TCM Indications: Otitis media, deafness. Isolated compounds: 21194, 21205.
- T0518 *Antennaria geyeri* (Asteraceae). Isolated compounds: 6065, 10567.
- T0519 *Antenoron neofiliforme* (Polygonaceae) DUAN MAO JIN XIAN CAO GEN; Shorthairy Antenoron. Isolated compounds: 17869, 17881.
- T0520 *Anthemis altissima* (Asteraceae); GAO CHUN HUANG JU; Tall Camomile. Isolated compounds: 1352, 1353.
- T0521 *Anthemis carpatica* (Asteraceae). Isolated compounds: 148, 1354, 1356, 1357, 4355, 4715, 5148, 7048, 9730, 10078, 11292, 11293, 11298, 11299, 17932, 21373, 21379.
- T0522 *Anthemis cretica* ssp. *cretica* [Syn. *Anthemis montana*] (Asteraceae); MENG DA NA CHUN HUANG JU; Montana Chamomile\*. Isolated compounds: 1204, 1355.
- T0523 *Anthemis nobilis* (Asteraceae); GAO GUI CHUN HUANG JU; Common Chamomile. Isolated compounds: 1502, 2887, 7768, 15637, 21176, 22035.
- T0524 *Anthemis* sp. (Asteraceae). Isolated compounds: 19545.
- T0525 *Anthemis* spp. (Asteraceae). Isolated compounds: 549.
- T0526 *Anthopleura stell* (Actiniidae); LV HAI KUI; Green Anemone. Isolated compounds: 14816.
- T0527 *Anthoxanthum* sp. (Poaceae). Isolated compounds: 5440.
- T0528 *Anthriscus cerefolium* (Apiaceae); XUE WEI CAI; Garden Chervil. Isolated compounds: 17028.
- T0529 *Anthriscus sylvestris* (Apiaceae); E SHEN; Woodland Beakchervil. Used part: root. TCM Effects: To supplement spleen and boost qi, disperse swelling. TCM Indications: Spleen vacuity and food distention, stomachache, lassitude in limbs, cough and asthma due to lung vacuity, senile nocturia, blood ejection from knocks and falls. Isolated compounds: 1232, 1280, 1372, 1621, 2764, 5543, 6367, 9544, 9789, 10833, 11228, 14966, 15647, 16263, 17592, 18832.
- T0530 *Anthyllis sericea* (Fabaceae). Isolated compounds: 6194.
- T0531 *Anthyllis vulneraria* (Fabaceae); LIAO SHANG RONG MAO HUA; Kidney Vetch. Isolated compounds: 7802.
- T0532 *Antiaris africana* (Moraceae); FEI ZHOU JIAN XUE FENG HOU; African Antiaris\*. Isolated compounds: 1377.
- T0533 *Antiaris toxicaria* [Syn. *Ambora toxicaria*] (Moraceae); JIAN XUE FENG HOU; Common Antiaris. Used part: juice and seed. TCM Effects: To strengthen heart, promote vomiting, drain precipitation, anesthetize (juice), resolve heat (seed), promote lactation. TCM Indications: Scrofula (juice), dysentery (seed). Isolated compounds:

- 1374, 1375, 1376, 1377, 1378, 1461, 1462, 13418, 16937, 16959, 20396, 20404.
- T0534 *Antiaris welwitschii* (Moraceae); GANG GUO JIAN XUE FENG HOU; Congo Antiaris\*. Isolated compounds: 1377.
- T0535 *Antidesma bunius* (Euphorbiaceae); WU YUE CHA; Bignay Chinalaurel. Used part: root, leaf and fruit. TCM Effects: To fortify spleen, engender liquid, quicken blood, resolve toxin. TCM Indications: Reduced food intake and diarrhea, fluid damage and thirst, knocks and falls, swelling toxin of welling abscess and sore. Isolated compounds: 4616.
- T0536 *Antirhea acutata* (Moraceae); JIAN RUI MAO CHA; Acute Antirhea\*. Isolated compounds: 1398, 1449, 1450.
- T0537 *Antirrhinum majus* (Scrophulariaceae); JIN YU CAO; Common Snapdragon. Used part: whole herb. TCM Effects: To clear summerheat and resolve toxin, quicken blood and disperse swelling. TCM Indications: Toxin swelling of sores, knocks and falls. Isolated compounds: 1494, 4446.
- T0538 *Antrodia camphorata* (Poliporaceae); Niu-Chang chih; Jang Jy (in Taiwan). Isolated compounds: 1351, 7251, 10234, 10235, 11277, 11278, 11279, 22990, 22991, 22992.
- T0539 *Apis cerana* (Apidae); FENG DU; Apisin. Used part: apisin. TCM Effects: To dispel wind and eliminate damp, relieve pain. TCM Indications: Rheumatic arthritis, aching pain in lumbus muscle, neuralgia, hypertension, urticaria, asthma. Isolated compounds: 9568.
- T0540 *Apis cerana* (Apidae); FENG MI; Honey. Used part: honey. TCM Effects: To supplement stomach and spleen, relax tension and relieve pain, moisten lung and relieve cough, moisten intestines and free stool, moisten skin and engender flesh, resolve toxin. TCM Indications: Pain in stomach duct and abdomen, lung heat dry cough, intestinal dry and constipation, red eyes, mouth sore, enduring sores, wind papule itching, burns and scalds, cracking of hands and feet. Isolated compounds: 351, 7853, 18261.
- T0541 *Apis cerana* (Apidae); FENG RU; Royal Jelly. Used part: royal jelly. TCM Effects: To enrich and supplement, enrich and invigorate, boost liver, fortify spleen. TCM Indications: Weakness during convalescence, gan accumulation, senile vacuity weakness, septicemia, chronic hepatitis, duodenal ulcer, rheumatic arthritis, hypertension, diabetes mellitus, dysfunctional uterine bleeding, infertility. Isolated compounds: 351, 2393, 7853, 9966, 9967, 11083, 11084, 11085, 12399.
- T0542 *Apis cerana* (Apidae); MI LA; Bee Wax. Used part: bee wax. TCM Effects: To resolve toxin, engender flesh, check dysentery, stanch bleeding, settle pain. TCM Indications: Effusion of back from welling abscess and flat abscess, enduring sores, acute heart pain, dysentery with pus and blood, chronic diarrhea, stirring fetus with bleeding, emission, Vaginal discharge. Isolated compounds: 10895, 15190, 15191, 16823, 18096.
- T0543 *Apis mellifera ligustica* (Apidae); FENG JIAO; Propolis. Used part: bee glue. TCM Effects: To eliminate inflammation and relieve pain, moisten skin and engender flesh. TCM Indications: Gastric ulcer, oral ulcer, cervical erosion, zoster, psoriasis, skin chap and pain, clavus, wound, carcinoma. Isolated compounds: 56, 1476, 2330, 2890, 3600, 6399, 6499, 8081, 9967, 11806, 12020, 18317, 18679.
- T0544 *Apium graveolens* (Apiaceae); HAN QIN; Wildcelery. Used part: herb. TCM Effects: To calm liver, clear heat, dispel wind, disinhibit water, stanch bleeding, resolve toxin, lower blood pressure. TCM Indications: Hypertension, hypercholesterolemia, headache and dizziness, red face and eyes, blood strangury, swollen welling abscess. Isolated compounds: 1502, 2791, 3372, 3373, 3374, 3375, 3376, 3377, 3378, 3379, 3380, 3381, 3382, 3604, 3855, 8827, 8990, 9021, 13439, 15204, 16884, 17021, 19784, 21974.
- T0545 *Apium graveolens* var. *dulce* (Apiaceae); HAN QIN BIAN ZHONG; Wildcelery Variety. Isolated compounds: 1476, 2803.
- T0546 *Apium leptophyllum* (Apiaceae); XIAN YE QIN; Thinleaf Celery. Isolated compounds: 19784.
- T0547 *Apium* sp. (Apiaceae). Isolated compounds: 22195.
- T0548 *Aplysia dactylomela* (Aplysiidae). Isolated compounds: 4595.
- T0549 *Aplysia oculifera* (Aplysiidae). Isolated compounds: 20251.
- T0550 *Apocynum androsaemifolium* (Apocynaceae); DIAN DI MEI YE CHA YE HUA; Spreading Dogbane. Isolated compounds: 117, 4549.
- T0551 *Apocynum cannabinum* (Apocynaceae); JIA ZHU TAO MA; Black Indian Hemp. Isolated compounds: 117, 4549.
- T0552 *Apocynum lancifolium* (Apocynaceae); HONG MA; Lanceleaf Dogbane\*. Isolated compounds: 11642, 18317.
- T0553 *Apocynum venetum* (Apocynaceae); LUO BU MA; Dogbane. Used part: whole herb. TCM Effects: To clear heat and calm liver, disinhibit water and disperse edema, check hyperactivity, lower blood pressure. TCM Indications: Cardiac failure, hypertension, edema, cirrhosis with ascites, edema in pregnancy, dizziness, headache, palpitation, insomnia, scant urine with edema, chronic bronchitis, influenza. Isolated compounds: 1367, 1527, 1528, 1529, 1530, 1935, 3308, 4547, 4549, 10887, 11642, 12020, 15416, 18317, 18363, 20397, 20398, 20400.
- T0554 *Aquilaria agallocha* (Thymelaeaceae); CHEN XIANG; Eaglewood. Equivalent plant: *Aquilaria sinensis*. Used part: resinous wood. TCM Effects: To calm, move *qi* and relieve pain, warm center and downbear counterflow, check vomiting, accept *qi* and calm asthma. TCM Indications: Cold pain in stomach duct and abdomen, *qi* counterflow with asthma, stomach cold with retching counterflow, vacuity cold in lumbus and knees, vacuity constipation, *qi* strangury. Isolated compounds: 275, 703, 704, 705, 706, 707, 768, 769, 770, 771, 772, 2111, 2114, 2274, 3831, 4934, 5539, 5660, 5807, 6083, 6486, 6912, 7101, 7179, 8863, 9029, 9030, 9032, 9034, 9036, 9708, 9996, 10211, 10212, 10441, 10617, 11199, 11869, 11870, 11871, 12164, 12375, 12917, 13852, 13906, 13997, 14057, 14058, 14477, 14522, 14725, 14726, 15447, 15768, 17113, 17114, 17119, 17120, 17121, 17122, 19677, 19678, 19682, 19683, 19685, 21030, 21120, 21121, 21131, 21785.
- T0555 *Aquilaria sinensis* (Thymelaeaceae); BAI MU XIANG; Chinese Eaglewood. Used part: resinous wood. TCM Effects: See *Aquilaria agallocha*. TCM Indications: See *Aquilaria agallocha*. Isolated compounds: 704, 706, 1284, 2111, 2112, 2113, 2114, 3566, 4881, 5660, 5996, 6082, 6084, 6258, 6283, 10210, 10439, 10440, 10616, 11245, 11869, 13852, 13999, 14000, 14058, 17113, 19924, 19925.
- T0556 *Aquilaria* sp. (Thymelaeaceae). Isolated compounds: 14057.
- T0557 *Aquilegia ecalcarata* (Ranunculaceae); WU JU LOU DOU CAI;

- Spurless Columbine. Used part: whole herb with root. TCM Effects: To resolve exterior and abate fever, draw out toxin and engender flesh. TCM Indications: Common cold with headache, putrefying sore, yellow-water sore. Isolated compounds: 1476, 1541, 10024, 11233, 13137.
- T0558 *Aquilegia vulgaris* (Ranunculaceae); OU ZHOU LOU DOU CAI; European Columbine. Isolated compounds: 1542, 1543, 1544, 1545, 1546, 1547, 1548, 1549, 1550, 1551.
- T0559 *Arachis hypogaea* (Fabaceae); LUO HUA SHENG; Peanut. Used part: seed. TCM Effects: To fortify spleen and nourish stomach, moisten lung and transform phlegm. TCM Indications: Stomach reflux, scant breast milk, beriberi, lung heat dry cough, dry stool. Isolated compounds: 1056, 1598, 3040, 3585, 5789, 6489, 6855, 6856, 6858, 6859, 6860, 6861, 12714, 12892, 13137, 14350, 14385, 17842, 17866, 17867, 17869, 17884, 17886, 18209, 18643, 20369, 20995, 21415, 22561.
- T0560 *Arachis hypogaea* (Fabaceae); LUO HUA SHENG YOU; Peanut Oil. Used part: seed oil. TCM Effects: To lubricate intestines and precipitate accumulation. TCM Indications: Ileus due to roundworm, mazi-schisis, scalds. Isolated compounds: 8045, 10895.
- T0561 *Arachis hypogaea* (Fabaceae); LUO HUA SHENG ZHI YE; Peanut Branch-leaf. Used part: branchlet-leaf. TCM Effects: To clear heat and resolve toxin, quiet heart and spirit, lower blood pressure. TCM Indications: Knocks and falls, sore toxin. Isolated compounds: 16889.
- T0562 *Arachniodes dimorphophylla* (Dryopteridaceae); Twoshape Arachniodes. Isolated compounds: 11239, 11240.
- T0563 *Arachniodes exilis* (Dryopteridaceae); CI TOU FU YE ER JUE. Used part: rhizome. TCM Effects: To clear heat and resolve toxin, close sores. TCM Indications: Dysentery, burns and scalds. Isolated compounds: 11239, 11240.
- T0564 *Arachniodes nipponica* (Dryopteridaceae); Guizhou Arachniodes. Isolated compounds: 11239, 11240.
- T0565 *Arachniodes simplicior* (Dryopteridaceae); CHANG WEI FU YE ER JUE; Simple Arachniodes. Used part: rhizome. TCM Effects: To clear heat and resolve toxin. TCM Indications: Internal heat and abdominal pain. Isolated compounds: 11239, 11240.
- T0566 *Aragoa cundinamarcensis* (Plantaginaceae). Isolated compounds: 1602.
- T0567 *Aralia armata* (Araliaceae); HU CI CONG MU; Spine Aralia. Used part: root, root cortex, branch-leaf. TCM Effects: To dissipate stasis, dispel wind, disinherit damp, resolve toxin. TCM Indications: Knocks and falls, wind-damp impediment pain, damp-heat jaundice, strangury-turbidity, edema, dysentery, leukorrhea, pain in stomach duct, headache, swelling pain in throat, mammary welling abscess, innominate toxin swelling, scrofula. Isolated compounds: 2973.
- T0568 *Aralia chinensis* (Araliaceae); CONG MU; Japanese Aralia. Equivalent plant: *Aralia dasyphylla*. Used part: bast. TCM Effects: To dispel wind and eliminate damp, disinherit water and harmonize center, quicken blood and resolve toxin. TCM Indications: Pain in joints due to rheumatism, aching in lumbus and legs, kidney vacuity and edema, diabetes mellitus, knocks and falls, fracture, pain in stomach duct, blood ejection, spontaneous external bleeding, malaria, lacquer sore, medullitis, deep pus ulcer. Isolated compounds: 1608, 1611, 16050, 19540.
- T0569 *Aralia cordata* (Araliaceae); TU DANG GUI; Udo. Equivalent plant: *Aralia fargesii*. Used part: rhizome and root. TCM Effects: To dispel wind and eliminate damp, soothe sinews and quicken network vessels, harmonize blood and relieve pain. TCM Indications: Wind-damp pain, aching in lumbus and knees, wilting-impediment of limbs, taxation damage in lumbar muscle, crane's knee wind, sprain of hands and feet, fracture, head wind, headache, toothache. Isolated compounds: 3241, 5930, 9669, 10647, 10648, 12178, 12205, 16050, 17371, 17372, 20529.
- T0570 *Aralia dasyphylla* (Araliaceae); TOU XU CONG MU; Hairyleaf Aralia. Used part: bast. TCM Effects: See *Aralia chinensis*. TCM Indications: See *Aralia chinensis*. Isolated compounds: 9266, 10551.
- T0571 *Aralia decaisneana* (Araliaceae); HUANG MAO CONG MU; Yellowhair Aralia. Used part: root. TCM Effects: To dispel wind and eliminate damp, quicken blood and free menstruation, resolve toxin and disperse swelling. TCM Indications: Wind-heat common cold and headache, cough, wind-damp impediment pain, aching in lumbus and legs, damp-heat jaundice, edema, strangury-turbidity, vaginal discharge, menstrual block, postpartum wind pain, painful swelling from knocks and falls, pain in stomach duct, swelling pain in throat, gum swelling and pain. Isolated compounds: 1601.
- T0572 *Aralia elata* (Araliaceae); LIAO DONG CONG MU; Liaodong Aralia. Used part: root cortex or bark. TCM Effects: To supplement *qi* and quiet spirit, strengthen essence and enrich kidney, dispel wind and quicken blood, dispel damp and relieve pain. TCM Indications: Neurasthenia, rheumatic arthritis, hepatitis, diabetes mellitus, gastrospasm, constipation, bleeding due to external injury. Isolated compounds: 1603, 1604, 1605, 1606, 1607, 1608, 1609, 1610, 3976, 3977, 3978, 14335, 14629, 16050, 18534, 20383, 20384.
- T0573 *Aralia elata* (Araliaceae); LIAO DONG CONG MU YE; Liaodong Aralia Leaf\*. Used part: tender leaf and gemma. TCM Effects: To clear heat and disinherit damp. TCM Indications: Damp-heat diarrhea, dysentery, edema. Isolated compounds: 1690, 6641, 9272, 16049, 22273.
- T0574 *Aralia fargesii* (Araliaceae); LONG YAN DU HUO; Farges Aralia. Used part: rhizome and root. TCM Effects: See *Aralia cordata*. TCM Indications: See *Aralia cordata*. Isolated compounds: 663, 7707, 19540, 19542, 22195.
- T0575 *Aralia subcapitata* (Araliaceae); AN HUI CONG MU; Subcapitate Aralia. Isolated compounds: 16402.
- T0576 *Aralia taibaiensis* (Araliaceae); TAI BAI CONG MU; Taibaien Aralia. Isolated compounds: 3521, 16052, 20613, 20614, 20615, 20616, 20617, 20618, 20619.
- T0577 *Araucaria angustifolia* (Araucariaceae); ZHAI YE NAN YANG SHAN; Candelabar Tree. Isolated compounds: 7512, 9546, 12520, 15959, 15960, 15961, 17409, 19514, 21938.
- T0578 *Araucaria bidwillii* (Araucariaceae); DA YE NAN YANG SHAN; Bunya Bunya. Isolated compounds: 710, 4376.
- T0579 *Araucaria imbricata* (Araucariaceae). Isolated compounds: 10996.
- T0580 *Araucaria* sp. (Araucariaceae). Isolated compounds: 18864.
- T0581 *Araujia sericifera* (Asclepiadaceae). Isolated compounds: 2230, 2232, 2269, 17785, 17786, 17787, 17788, 17789, 17790, 17791, 17792,

- 17793, 17794, 17795, 17796, 17797, 17798, 17799, 17800, 19189, 19190, 21375, 21378.
- T0582 *Archangelica brevicaulis* [Syn. *Angelica brevicaulis*; *Angelica brevicaulis*] (Apiaceae); DUA JING GU DANG GUI; Shortstem Archangelica\*. Used part: root. TCM Effects: To dispel wind and eliminate damp, relieve pain. TCM Indications: Wind-cold-damp impediment, cold pain in lumbus and knees, headache, toothache. Isolated compounds: 17375.
- T0583 *Archangelica decurrens* (Apiaceae); XIA YAN GU DANG GUI; Decurrent Archangelica. Used part: root. TCM Effects: To dispel wind and disperse macula. TCM Indications: White patch wind. Isolated compounds: 17077.
- T0584 *Arctium lappa* (Asteraceae); NIU BANG GEN; Great Burdock Root. Used part: root. TCM Effects: To dispel wind-heat, disperse swelling toxin. TCM Indications: Wind-heat common cold, headache, cough, wind toxin swollen face, swelling pain in throat, gingiva painful swelling, wind-damp impediment pain, concretion and conglomeration, welling abscess and boil, hemorrhoids, prolapse of rectum. Isolated compounds: 1620, 7419, 7881, 9385, 9521, 11267, 11754, 17090, 21606, 21607, 21619, 21619, 21620.
- T0585 *Arctium lappa* (Asteraceae); NIU BANG YE; Great Burdock Leaf\*. Isolated compounds: 16119.
- T0586 *Arctium lappa* (Asteraceae); NIU BANG ZI; Great Burdock Fruit. Used part: fruit. TCM Effects: To course wind and dissipate heat, diffuse lung and outthrust papules, resolve toxin and disinhibit throat. TCM Indications: Wind-heat common cold, cough with profuse phlegm, measles papules, wind papules, swelling pain in throat, epidemic parotitis, erysipelas, swollen welling abscess and sore toxin. Isolated compounds: 1621, 1623, 11236, 12513, 12514, 12515, 12516, 12517, 12518, 12519, 15340.
- T0587 *Arctostaphylos pumila* (Asteraceae); AI SHENG XIONG GUO; Low Bearberry\*. Isolated compounds: 5332, 5333.
- T0588 *Arctostaphylos uva-ursi* (Ericaceae); XIONG GUO; Bearberry. Isolated compounds: 1618, 14933.
- T0589 *Arcyria cinerea* (Trichiaceae); HUI JIN SE TUAN WANG JUN; Grey Arcyria\*. Isolated compounds: 1625, 2476, 3690, 3691.
- T0590 *Arcyria denudata* (Trichiaceae); AN HONG TUAN WANG JUN; Carnival Candy Slime. Isolated compounds: 2476.
- T0591 *Ardisia arborescens* (Myrsinaceae); XIAO QIAO MU ZI JIN NIU; Small-tree Ardisia\*. Used part: stem cortex. TCM Effects: To resolve exterior and allay fever, diffuse lung and calm panting, quicken blood and dissipate stasis. TCM Indications: Common cold with fever, asthma and abundant phlegm, menstrual disorder, postpartum persistent flow of lochia. Isolated compounds: 1110, 1645, 1646, 1647, 1648, 1649, 4680, 19983, 20444, 21541.
- T0592 *Ardisia colorata* (Myrsinaceae); YOU SE ZI JIN NIU; Colorate Ardisia\*. Isolated compounds: 911, 912, 1650, 1651, 1652, 2312, 2380, 5042, 6767, 8095, 11642, 12018, 15170, 15719, 18317.
- T0593 *Ardisia cornudentata* (Myrsinaceae); XIAN CHI ZI JIN NIU; Glandtooth Ardisia\*. Isolated compounds: 1628, 4061.
- T0594 *Ardisia crenata* (Myrsinaceae); ZHU SHA GEN; Coral Ardisia. Used part: root. TCM Effects: To clear heat and resolve toxin, quicken blood and relieve pain. TCM Indications: Swelling pain in throat, wind-damp-heat impediment, jaundice, dysentery, knocks and falls, fire flow, mastitis, testitis. Isolated compounds: 6767, 15719, 18546.
- T0595 *Ardisia crispa* (Myrsinaceae); BAI LIANG JIN; Crispatelaf Ardisia. Used part: root and rhizome. TCM Effects: To clear heat and disinhibit throat, dispel phlegm and disinhibit damp, quicken blood and resolve toxin. TCM Indications: Swelling pain in throat, cough with inhibited phlegm, damp-heat jaundice, dribbling pain of urination, wind-damp impediment pain, knocks and falls, clove sore, innominate toxin swelling, snake bite. Isolated compounds: 2312.
- T0596 *Ardisia hortorum* (Myrsinaceae); TING YUAN ZI JIN NIU; Curtilage Ardisia\*. Isolated compounds: 2312.
- T0597 *Ardisia humilis* (Myrsinaceae); AI ZI JIN NIU; Low Ardisia\*. Isolated compounds: 6767.
- T0598 *Ardisia japonica* (Myrsinaceae); ZI JIN NIU; Japanese Ardisia. Used part: stem-leaf. TCM Effects: To suppress cough, dispel phlegm, quicken blood, disinhibit urine, resolve toxin. TCM Indications: Chronic trachitis, hepatitis, acute nephritis, chronic nephritis, tuberculosis and hemoptysis, blood ejection, dysentery, hypertension, mounting *qi*, taxation damage and strength desertion, aching sinews and bones, toxin swelling. Isolated compounds: 1643, 1644, 2169, 2312, 6767, 10431, 14221, 15184, 18411.
- T0599 *Ardisia japonica* (Myrsinaceae); ZI JIN NIU GEN; Japanese Ardisia Root. Used part: root. TCM Effects: To dispel wind-phlegm. TCM Indications: Seasonal diaphragm *qi*. Isolated compounds: 14879, 14880, 14881, 14882.
- T0600 *Ardisia mamillata* [Syn. *Tinus mamillata*] (Myrsinaceae); HU SHE HONG; Teat-shaped Ardisia. Used part: whole herb. TCM Effects: To dispel wind and disinhibit damp, clear heat and resolve toxin, quicken blood and stanch bleeding. TCM Indications: Wind-damp impediment pain, jaundice, dysentery, hacking of blood, blood ejection, bloody stool, menstrual block, postpartum persistent flow of lochia, knocks and falls, mammary welling abscess, clove sore. Isolated compounds: 1638, 1639, 1640, 1641, 1642, 4458.
- T0601 *Ardisia pusilla* (Myrsinaceae); CHUAN CHAN JIU JIE LONG; Tiny Ardisia. Used part: whole herb. TCM Effects: To clear heat and disinhibit damp, quicken blood and disperse swelling. TCM Indications: Wind-damp impediment pain, jaundice, blood dysentery, dysmenorrhea, knocks and falls, swelling toxin of welling abscess and sore, snake bite. Isolated compounds: 1626, 1627.
- T0602 *Ardisia quinquegona* (Myrsinaceae); LUO SAN SHU; Pentagonal Ardisia. Used part: stem, leaf or root. TCM Effects: To clear heat and resolve toxin, dissipate stasis and relieve pain. TCM Indications: Swelling pain in throat, swelling of sore welling abscess and boil, knocks and falls, wind-damp impediment pain. Isolated compounds: 1628.
- T0603 *Ardisia sieboldii* DONG YA ZI JIN NIU. Isolated compounds: 1629, 1630, 1631, 1632, 1633, 1634.
- T0604 *Ardisia* spp. (Myrsinaceae). Isolated compounds: 18546.
- T0605 *Ardisia teysmanniana* (Myrsinaceae). Isolated compounds: 1635, 1636, 1637.
- T0606 *Areca catechu* (Arecaceae); BING LANG; Betenutpalm. Used part: seed. TCM Effects: To expel worms, disperse accumulation, precipitate *qi*, move water, interrupt malaria. TCM Indications: Worm

- accumulation, food stagnation, distending pain in stomach duct and abdomen, diarrhea and tenesmus, beriberi, edema, malaria. Isolated compounds: 1654, 1655, 1656, 1657, 1658, 3138, 3308, 6544, 9092, 9093, 9486, 9595, 12569, 12891, 15203, 15205, 17093, 17869, 17876, 17884, 20280, 21045, 21046.
- T0607 *Arenaria juncea* (Caryophyllaceae); LAO NIU JIN; Junc-like Sandwort. Used part: root. TCM Effects: See *Gypsophila pacifica*. TCM Indications: See *Gypsophila pacifica*. Isolated compounds: 1565, 1566, 22823.
- T0608 *Arenaria kansuensis* [Syn. *Arenaria kumaonensis*] (Caryophyllaceae); XUE LING ZHI; Kansu Sandwort. Used part: whole herb. TCM Effects: To clear heat and relieve cough, disinherit damp and abate jaundice, relieve pain due to impediment. TCM Indications: Fever due to external contraction, lung heat cough, jaundice, strangury-turbidity, wind-damp impediment pain, hypertension. Isolated compounds: 1659, 1660, 1661, 1662, 9634.
- T0609 *Arenaria kansuensis* var. *ovatepetala* (Caryophyllaceae); LUAN BAN ZAO ZHUI; Ovatepetal Sandwort. Isolated compounds: 7768.
- T0610 *Argemone mexicana* (Papaveraceae); JI YING SU; Mexican Pricklepoppy. Used part: whole herb. TCM Effects: To effuse sweat and disinherit water, clear heat and resolve toxin, relieve pain and itch. TCM Indications: Common cold without sweating, jaundice, strangury, edema, eyelid laceration, mounting *qi*, scab and *lai*, syphilis. Isolated compounds: 112, 930, 1665, 1666, 1667, 2303, 3498, 4290, 16446, 17983, 18376, 19284, 21056, 21255.
- T0611 *Argemone platyceras* (Papaveraceae); KUO GUO JI YING SU; Platyangle Pricklepoppy\*. Isolated compounds: 4459.
- T0612 *Argemone* spp. (Papaveraceae). Isolated compounds: 3498.
- T0613 *Argyrea mollis* (Convolvulaceae); RUAN YIN BEI TENG; Soft *Argyrea*\*. Isolated compounds: 18377.
- T0614 *Argyrea nervosa* (Convolvulaceae); YE MAI YIN BEI TENG; Veined *Argyrea*. Isolated compounds: 16808.
- T0615 *Argyrea populifolia* (Convolvulaceae); YANG YE YIN BEI TENG; Poplar-leaf *Argyrea*\*. Isolated compounds: 7950.
- T0616 *Argyrea speciosa* (Convolvulaceae); MEI LI YIN BEI TENG; Woolly Morning Glory. Isolated compounds: 7950.
- T0617 *Arisaema amurense* (Araceae); DONG BEI TIAN NAN XING; Amur Jackintheulpit. Used part: tuber. TCM Effects: See *Arisaema consanguineum*. TCM Indications: See *Arisaema consanguineum*. Isolated compounds: 3419, 3420, 19983.
- T0618 *Arisaema consanguineum* (Araceae); TIAN NAN XING; Reddish Jackintheulpit. Equivalent plant: *Pinellia pedatisecta*, *Arisaema heterophyllum*, *Arisaema amurense*. Used part: tuber. TCM Effects: To dispel wind and check tetany, transform phlegm and dissipate binds. TCM Indications: Wind stroke with congesting phlegm, deviated eyes and mouth, hemiplegia, deadlimb, wind-phlegm dizziness, epilepsy, fright wind, tetanus, spasm, neuralgia, cough with profuse phlegm, swollen welling abscess, scrofula, poisonous snake bite, knocks and falls, carcinoma of uterine cervix. Isolated compounds: 617, 11697, 13504, 19463, 19983.
- T0619 *Arisaema curvatum* (Araceae); WAN QU TIAN NAN XING; Curvatura Jackintheulpit\*. Isolated compounds: 3911.
- T0620 *Arisaema heterophyllum* (Araceae); YI YE TIAN NAN XING; Diversileaf Jackintheulpit. Used part: tuber. TCM Effects: See *Arisaema consanguineum*. TCM Indications: See *Arisaema consanguineum*. Isolated compounds: 11697, 19463, 19983.
- T0621 *Aristolochia arcuata* (Aristolochiaceae); GONG XING MA DOU LING; Bow-shaped Dutchmanspipe\*. Isolated compounds: 2494, 5853, 5854, 5855, 5862, 6033, 20651.
- T0622 *Aristolochia chamissonis* (Aristolochiaceae); BA XI MA DOU LING; Brazilian Dutchmanspipe\*. Isolated compounds: 2, 6988, 9731, 10291, 10292.
- T0623 *Aristolochia chilensis* (Aristolochiaceae); ZHI LI MA DOU LING; *Aristolochia chilensis*. Isolated compounds: 17429.
- T0624 *Aristolochia contorta* (Aristolochiaceae); BEI MA DOU LING; Northern Dutchmanspipe. Used part: fruit. TCM Effects: See *Aristolochia debilis*. TCM Indications: See *Aristolochia debilis*. Isolated compounds: 1713, 1715, 13374, 19983.
- T0625 *Aristolochia contorta* (Aristolochiaceae); BEI MA DOU LING GEN; Northern Dutchmanspipe Root. Used part: root. TCM Effects: See *Aristolochia debilis*. TCM Indications: See *Aristolochia debilis*. Isolated compounds: 917, 1713, 4680, 13258, 13374, 19983.
- T0626 *Aristolochia debilis* [Syn. *Aristolochia longa*] (Aristolochiaceae); MA DOU LING; Slender Dutchmanspipe. Equivalent plant: *Aristolochia contorta*, *Aristolochia indica*, *Aristolochia maxima*, *Aristolochia triangularis*. Used part: fruit. TCM Effects: To clear lung and downbear *qi*, relieve cough and calm asthma, clear and discharge large intestines. TCM Indications: Lung heat cough asthma, phlegm congestion and hasty *qi*, lung vacuity enduring cough, intestinal heat bleeding from hemorrhoids, swelling pain from hemorrhoids, edema. Isolated compounds: 917, 1691, 1703, 1713, 9799, 13374.
- T0627 *Aristolochia debilis* [Syn. *Aristolochia longa*] (Aristolochiaceae); QING MU XIANG; Slender Dutchmanspipe Root. Equivalent plant: *Aristolochia contorta*. Used part: root. TCM Effects: To lower blood pressure, calm liver and relieve pain, resolve toxin and disperse swelling. TCM Indications: Hypertension, gastrospasm, stomachache, infections, chronic bone marrow infection, chronic bronchitis, infection of skin, dizziness and headache, distending pain in chest and abdomen, swollen welling abscess and clove sores, snake or insect bites. Isolated compounds: 917, 1618, 1713, 1714, 4814, 13374, 13843, 16360, 21206.
- T0628 *Aristolochia fangchi* (Aristolochiaceae); GUANG FANG JI; Fangchi. Used part: root. TCM Effects: To dispel wind and relieve pain, clear heat and disinherit water. TCM Indications: Damp-heat generalized pain, wind-damp impediment pain, edema in lower limb, inhibited urination. Isolated compounds: 917, 1698, 1713, 13374, 19983.
- T0629 *Aristolochia heterophylla* (Aristolochiaceae); HAN FANG JI; Yellowmouth Dutchmanspipe. Used part: root. TCM Effects: To dispel wind and relieve pain, clear heat and disinherit water. TCM Indications: Rheumatic pain in joints, damp-heat pain in limbs, edema, inhibited urination, beriberi with edema. Isolated compounds: 1713, 1729, 9799, 13374, 21206.
- T0630 *Aristolochia indica* (Aristolochiaceae); YIN DU MA DOU LING; Indian Dutchmanspipe\*. Used part: fruit. TCM Effects: See *Aristolochia debilis*. TCM Indications: See *Aristolochia debilis*. Isolated compounds: 1710, 1713, 12604.



- T0631 *Aristolochia kaempferi* (Aristolochiaceae); ZHU SHA LIAN; Kaempfer Dutchmanspipe. Used part: tuber. TCM Effects: To move *qi* and relieve pain, clear heat and resolve toxin, lower blood pressure. TCM Indications: *Qi* stagnation and distention in stomach duct, stomachache, abdominal pain, pain in joints due to rheumatism, summerheat-damp diarrhea, swelling of welling abscess and boil, poisonous snake bite, hypertension. Isolated compounds: 1713, 3747, 4459.
- T0632 *Aristolochia manshuriensis* (Aristolochiaceae); GUAN MU TONG; Manchurian Dutchmanspipe. Used part: stem. TCM Effects: To clear heart fire, disinhibit urine, free menstruation and milk. TCM Indications: Mouth sore, tongue sores, vexation and reddish urine, edema, heat strangury with inhibited pain, leukorrhea, amenorrhea and scant milk, damp-heat impediment pain. Isolated compounds: 1691, 1692, 1698, 1699, 1708, 1713, 1716, 1717, 1718, 1720, 1725, 1728, 3340, 4135, 4189, 4957, 5062, 7768, 7777, 7788, 9260, 9818, 11253, 13374, 13512, 13842, 14804, 16050, 19983, 19987, 20369, 22332.
- T0633 *Aristolochia maxima* (Aristolochiaceae); DA MA DOU LING; Maxima Dutchmanspipe\*. Used part: fruit. TCM Effects: See *Aristolochia debilis*. TCM Indications: See *Aristolochia debilis*. Isolated compounds: 12749.
- T0634 *Aristolochia mollissima* (Aristolochiaceae); MIAN MAO MA DOU LING; Woolly Dutchmanspipe. Used part: rhizome or whole herb. TCM Effects: To dispel wind and eliminate damp, quicken blood and free network vessels, relieve pain. TCM Indications: Wind-damp impediment pain, numbness in limbs, hypertonicity of sinews and bones, pain in stomach duct and abdomen, painful wound from knocks and falls, bleeding due to external injury, mammary welling abscess, suppurative infection. Isolated compounds: 917, 1692, 1693, 1694, 1697, 1698, 1700, 1711, 1712, 1713, 1716, 1719, 1726, 1727, 1729, 2550, 3408, 3723, 4188, 6466, 7163, 7394, 7395, 11253, 11669, 13339, 13340, 13341, 13342, 13343, 13344, 13345, 13346, 13347, 13348, 13512, 13842, 13844, 14898, 19981, 19983, 20369, 22422, 22423.
- T0635 *Aristolochia moupinensis* (Aristolochiaceae); HUAI TONG; Moupin Dutchmanspipe. Used part: stem or root. TCM Effects: To clear heat and eliminate damp, dispel wind and relieve pain. TCM Indications: Abdominal pain and diarrhea, damp-heat edema, inhibited voidings of reddish urine, hematuria, wind-damp-heat impediment, swollen welling abscess and malign sore, eczema, poisonous snake bite. Isolated compounds: 1713, 7788, 13374, 19983.
- T0636 *Aristolochia pubescens* (Aristolochiaceae); DUAN ROU MAO MA DOU LING; Shortfluff Dutchmanspipe\*. Isolated compounds: 1721, 1722, 5596, 5597.
- T0637 *Aristolochia ridicula* (Aristolochiaceae). Isolated compounds: 18844, 18845, 18846, 21162, 21163, 21164, 21165, 21166, 21167, 21853.
- T0638 *Aristolochia siphon* (Aristolochiaceae); OU ZHOU MA DOU LING; Dutchmanspipe. Isolated compounds: 13374.
- T0639 *Aristolochia* sp. (Aristolochiaceae). Isolated compounds: 1709, 1730.
- T0640 *Aristolochia triangularis* (Aristolochiaceae); SAN JIAO MA DOU LING; Triangular Dutchmanspipe\*. Used part: fruit. TCM Effects: See *Aristolochia debilis*. TCM Indications: See *Aristolochia debilis*. Isolated compounds: 4306, 8085, 12170.
- T0641 *Aristolochia tuberosa* (Aristolochiaceae); KUAI JING MA DOU LING; Tuberos Dutchmanspipe. Used part: tuberoid. TCM Effects: To clear heat and resolve toxin, rectify *qi* and relieve pain. TCM Indications: Damp-heat dysentery, diarrhea, pain in stomach duct and abdomen, swelling pain in throat, tuberculosis, poisonous snake bite, swollen welling abscess. Isolated compounds: 1693, 1713, 14370, 22083.
- T0642 *Aristolochia tubiflora* (Aristolochiaceae); GUAN HUA MA DOU LING; Tubeflower Dutchmanspipe. Used part: root. TCM Effects: To clear heat and resolve toxin, move *qi* and relieve pain. TCM Indications: Swelling of sores and boils, poisonous snake bite, pain in stomach duct, enteritis and dysentery, diarrhea, pain in joints due to rheumatism, dysmenorrhea, knocks and falls. Isolated compounds: 1724.
- T0643 *Aristolochia versicolor* (Aristolochiaceae); BIAN SE MA DOU LING; Versicolorous Dutchmanspipe. Used part: tuberoid. TCM Effects: To clear heat and resolve toxin, disperse swelling and relieve pain. TCM Indications: Enteritis and diarrhea, bacillary dysentery, swelling pain in throat, parotitis, scrofula, mammary welling abscess, eczema. Isolated compounds: 22422, 22423, 22424, 22425.  
*Armillaria matsutake* = *Tricholoma matsutake*
- T0644 *Armillaria mellea* (Tricholomataceae); MI HUAN JUN; Armillaria Mushroom\*. Used part: sporocarp. TCM Effects: To calm liver and extinguish wind, dispel wind and free network vessels, strengthen sinews and bones. TCM Indications: Dizzy head, headache, sleepless, numbness in limbs, pain in lumbus and legs, coronary heart disease, hypertension, vascular headache, dizziness syndrome, epilepsy. Isolated compounds: 1739, 1740, 1741.
- T0645 *Armillariella mellea* (Tricholomataceae); ZHEN MO; Mellea Armillaria Sporocarp. Used part: sporocarp. TCM Effects: To calm liver and extinguish wind, dispel wind and quicken network vessels, strengthen sinews and bones. TCM Indications: Dizziness, headache, insomnia, numbness in limbs, pain in lumbus and legs, epilepsy. Isolated compounds: 1039, 7250, 7334.
- T0646 *Armillariella tabescens* (Tricholomataceae); LIANG JUN; Armillariella Tabescens. Used part: mycelium. TCM Effects: To eliminate inflammation. TCM Indications: Cholecystitis, hepatitis, appendicitis, otitis media. Isolated compounds: 1742, 1743.
- T0647 *Armoracia lapathifolia* (Brassicaceae); LA GEN; Horseradish. Used part: root. TCM Effects: To disperse food and harmonize center, disinhibit gallbladder, disinhibit urine. TCM Indications: Indigestion, inhibited urination, cholecystitis, arthritis. Isolated compounds: 8591, 8598, 8760, 9614, 19935.
- T0648 *Arnebia euchroma* (Boraginaceae); XIN ZANG JIA ZI CAO; Sinkiang-Tibet Arnebia. Used part: root. TCM Effects: See *Lithospermum erythrorhizon*. TCM Indications: See *Lithospermum erythrorhizon*. Isolated compounds: 244, 309, 514, 909, 1233, 1234, 1259, 1744, 1746, 1747, 5214, 5258, 6178, 6302, 6303, 6495, 10266, 11300, 14120, 15850, 15851, 15852, 15853, 15854, 17747, 19819, 19822, 19823, 20032, 20036, 20968.
- T0649 *Arnebia guttata* (Boraginaceae); JIA ZI CAO; Common Arnebia. Used part: root. TCM Effects: See *Lithospermum erythrorhizon*. TCM Indications: See *Lithospermum erythrorhizon*. Isolated compounds: 309, 514, 5214, 6303, 10266, 19819, 20968.
- T0650 *Arnebia nobilis* (Boraginaceae); GAO GUI JIA ZI CAO; Noble

- Arnebia\*. Isolated compounds: 909, 910, 1745.  
*Arnica japonica* = *Ligularia japonica*
- T0651 *Arnica montana* (Asteraceae); SHAN JIN CHE; Mountain Tobacco. Isolated compounds: 1748.
- T0652 *Arnica* spp. (Asteraceae). Isolated compounds: 10792.
- T0653 *Artabotrys hexapetalus* [Syn. *Annona hexapetalus*] (Annonaceae); YING ZHAO; Sixpetal Tailgrape. Used part: root. TCM Effects: To interrupt malaria. TCM Indications: Malaria. Isolated compounds: 1775, 1776, 1777, 1778, 12917.
- T0654 *Artabotrys maingayi* (Annonaceae); MAN GE YING ZHAO; Mainge Tailgrape\*. Isolated compounds: 15797.
- T0655 *Artabotrys odoratissimus* (Annonaceae); JI XIANG YING ZHAO; Extreme-fragrant Tailgrape\*. Isolated compounds: 15797.
- T0656 *Artabotrys suaveolens* (Annonaceae); XIANG YING ZHAO; Fragrant Tailgrape\*. Isolated compounds: 11344.
- T0657 *Artabotrys uncinatus* (Annonaceae); YOU GOU YING ZHAO; Uncinate Tailgrape\*. Isolated compounds: 473, 1348, 1771, 1772, 1773, 1774, 1780, 1857, 1961, 3746, 5076, 7815, 11344, 11593, 12917, 14535, 14608, 14626, 14827, 15763, 15797, 18655, 19200, 20243, 20317, 20322, 22214.
- T0658 *Artabotrys venustus* (Annonaceae); XIU LI YING ZHAO; Venus Tailgrape\*. Isolated compounds: 15797.
- T0659 *Artemisia absinthium* (Asteraceae); ZHONG YA KU HAO; Common Wormwood. Used part: leaf and stem with flower. TCM Effects: To clear heat and dry damp, expel roundworm, fortify stomach. TCM Indications: Swelling pain in joints, eczema titillation, sore toxin of sore and boil, ascariasis, inappetence. Isolated compounds: 37, 1779, 3464, 12920, 19777, 19783, 21350.
- T0660 *Artemisia annua* (Asteraceae); HUANG HUA HAO; Sweet Wormwood. Equivalent plant: *Artemisia apiacea*. Used part: whole herb. TCM Effects: To clear heat, resolve summerheat, eliminate steam, interrupt malaria. TCM Indications: Summerheat-heat, summerheat-damp, damp warmth, *yin* vacuity fever, malaria, jaundice. Isolated compounds: 336, 872, 1334, 1341, 1345, 1653, 1782, 1783, 1784, 1785, 1786, 1786, 1792, 1794, 1795, 1797, 1799, 1800, 1801, 1935, 2044, 2273, 2295, 2560, 2570, 2850, 2851, 2852, 2853, 3045, 3048, 3195, 3234, 3235, 3241, 3242, 3300, 3300, 3602, 3624, 3674, 3689, 3741, 3743, 3745, 4029, 4140, 4354, 4878, 5587, 5606, 5755, 5787, 6146, 6151, 6236, 6741, 6742, 6891, 7055, 7069, 7108, 7109, 7504, 7583, 7588, 7730, 7735, 7751, 7951, 9726, 10017, 10091, 10108, 10109, 10261, 10262, 10750, 11226, 11259, 11260, 11261, 11428, 11642, 11648, 12020, 12843, 12849, 12850, 13137, 13284, 13982, 14147, 15146, 15665, 15705, 15709, 15710, 15758, 16297, 16298, 16452, 16453, 16725, 16727, 16801, 16851, 17254, 17376, 17377, 17719, 18060, 18288, 18308, 18317, 18376, 18679, 18682, 19087, 19187, 19314, 19540, 19542, 19545, 19983, 20369, 20657, 20989, 20990, 20995, 20999, 21096, 21097, 21349, 21598.
- T0661 *Artemisia anomala* (Asteraceae); LIU JI NU; Diverse Worm-wood. Used part: Whole herb with flower. TCM Effects: To break stasis and free menstruation, stanch bleeding and disperse swelling, disperse food and transform accumulation. TCM Indications: Menstrual block, dysmenorrhea, postpartum stasis stagnation abdominal pain, persistent flow of lochia, concretion and conglomeration, knocks and falls, incised wound and bleeding, wind-damp impediment pain, hematochezia, hematuria, swelling toxin of welling abscess and sore, scalds, food accumulation abdominal pain, diarrhea and dysentery. Isolated compounds: 1126, 1345, 1781, 1787, 1788, 19211, 19635, 19901.
- T0662 *Artemisia apiacea* [Syn. *Artemisia carvifolia*; *Artemisia caruifolia*] (Asteraceae); QING HAO; Celery Wormwood. Used part: whole herb. TCM Effects: See *Artemisia annua*. TCM Indications: See *Artemisia annua*. Isolated compounds: 1792, 3227, 3228, 3229, 3230, 3241, 3242, 4029, 4648, 5378, 9486, 10229, 10230, 10317, 10539, 14205, 19777, 19783, 20556, 21350.
- T0663 *Artemisia arbuscula* (Asteraceae); BEI MEI AI HAO; Low Sagebrush. Isolated compounds: 1617.
- T0664 *Artemisia argyi* (Asteraceae); AI YE; Argy Wormwood Leaf. Equivalent plant: *Artemisia mongolica*, *Artemisia princeps*, *Artemisia lavandulaefolia*, *Artemisia rubripes*, *Artemisia vulgaris*. Used part: leaf. TCM Effects: To dissipate cold and relieve pain, warm menstruation and stanch bleeding. TCM Indications: Cold pain in abdomen, menstrual disorder due to cold, infertility due to uterus cold, blood ejection, spontaneous external bleeding, flooding and spotting, fetal spotting, itchy skin. Isolated compounds: 1110, 1111, 2850, 3235, 3242, 4471, 4946, 6162, 7759, 9390, 9500, 9564, 10751, 11083, 11084, 11085, 11603, 12448, 13718, 13822, 13900, 14354, 15002, 15003, 15515, 16288, 16289, 17126, 17453, 17938, 18304, 18843, 20369, 20992, 20995, 21047, 21350, 21709, 21856, 21946, 22510, 22922.
- T0665 *Artemisia ashurbajevii* (Asteraceae); A SHI HAO; Ashurbajev Wormwood\*. Isolated compounds: 8982.
- T0666 *Artemisia assoana* (Asteraceae). Isolated compounds: 20559.
- T0667 *Artemisia brevifolia* (Asteraceae); DUAN YE JUAN HAO; Shortleaf Wormwood\*. Isolated compounds: 22778.
- T0668 *Artemisia campestris* (Asteraceae); TIAN YE HAO; Campestral Mugwort. Isolated compounds: 9604, 19174.
- T0669 *Artemisia cana* (Asteraceae); QING AI; Graywhite Wormwood\*. Isolated compounds: 18843.
- T0670 *Artemisia cana* ssp. *viscidula* (Asteraceae); NIAN HAO; Viscid Wormwood\*. Isolated compounds: 1796, 3591, 11615, 22533.
- T0671 *Artemisia canariensis* (Asteraceae); JIA NA LI HAO; Canary Island Wormwood\*. Isolated compounds: 217, 5891, 17375.
- T0672 *Artemisia capillaris* (Asteraceae); YIN CHEN HAO; Capillary Wormwood. Equivalent plant: *Artemisia scoparia*. Used part: aerial parts. TCM Effects: To clear heat and disinhibit damp, abate jaundice. TCM Indications: Hepatitis, jaundice, infective cholecystitis, hyperlipemia, inhibited urination, damp sore, itchy skin. Isolated compounds: 336, 1653, 1807, 1808, 2306, 2843, 2850, 2887, 3116, 3117, 3118, 3119, 3120, 3121, 3122, 3130, 3138, 3139, 3237, 3242, 3741, 3745, 4232, 4233, 4234, 4550, 4914, 4915, 5043, 5049, 6741, 7472, 7473, 7521, 7523, 7577, 7588, 8011, 8289, 8313, 9669, 10482, 10887, 11235, 11648, 11659, 12843, 12891, 13870, 14212, 14213, 15146, 15203, 15354, 15687, 15724, 16066, 17089, 17123, 17376, 17377, 18317, 18682, 19540, 19542, 19983, 20280, 20988, 20995, 21350, 21355, 22336.
- T0673 *Artemisia caruthii* (Asteraceae); KA SI HAO; Caruth Wormwood\*. Isolated compounds: 13605.

*Artemisia cina* = *Seriphidium cinum*

- T0674 *Artemisia compacta* (Asteraceae); MI HAO; Compact Wormwood\*. Isolated compounds: 19314.
- T0675 *Artemisia douglasiana* (Asteraceae); DAO SHI HAO; Douglas Wormwood\*. Isolated compounds: 1789.
- T0676 *Artemisia dracunculus* (Asteraceae); XIA YE QING HAO; Tarragon. Used part: whole herb or root. TCM Effects: To dispel wind and dissipate cold, diffuse lung and suppress cough. TCM Indications: Wind-cold common cold, cough and asthma. Isolated compounds: 13883, 15445, 15446, 15724.
- Artemisia finita* = *Seriphidium finitum*
- T0677 *Artemisia glabella* (Asteraceae); WU MAO HAO; Glabrous Wormwood\*. Isolated compounds: 1675.
- T0678 *Artemisia japonica* (Asteraceae); MU HAO; Japanese Wormwood. Used part: whole herb. TCM Effects: To clear heat, cool blood, resolve toxin. TCM Indications: Summer common cold, tuberculosis tidal fever, hemoptysis, child *gan* fever, spontaneous external bleeding, hematochezia, flooding and spotting, vaginal discharge, icterohepatitis, erysipelas, poisonous snake bite. Isolated compounds: 1793, 2570, 2853, 3241, 3242, 4029, 7735, 21350.
- T0679 *Artemisia klotzschiana* (Asteraceae); KE SHI HAO; Klotzsch Wormwood\*. Isolated compounds: 7521.
- T0680 *Artemisia lactiflora* (Asteraceae); YA JIAO AI; Ghostplant Wormwood. Used part: whole herb. TCM Effects: To quicken blood and dissipate stasis, rectify *qi* and transform damp. TCM Indications: Dysmenorrhea, amenorrhea, postpartum stasis stagnation abdominal pain, chronic hepatitis, liver spleen enlargement, food accumulation abdominal distention, cold-damp diarrhea, mounting *qi*, beriberi, knocks and falls, burns and scalds. Isolated compounds: 9452, 12437, 12438.
- T0681 *Artemisia lavandulaefolia* (Asteraceae); YE AI HAO; Lavenderleaf Wormwood. Used part: leaf. TCM Effects: See *Artemisia argyi*. TCM Indications: See *Artemisia argyi*. Isolated compounds: 17453.
- T0682 *Artemisia ludoviciana* (Asteraceae); LU DE WEI HAO; Western Sage. Isolated compounds: 13072, 20730.
- T0683 *Artemisia maritima* (Asteraceae); BIN HAO; Santonica. Isolated compounds: 1798, 7481, 11689, 19313.
- T0684 *Artemisia mexicana* var. *angustifolia* (Asteraceae); MO XI GE HAO; Mexico Wormwood\*. Isolated compounds: 13072, 22103.
- T0685 *Artemisia mongolica* (Asteraceae); MENG GU HAO; Mongolian Wormwood. Used part: leaf. TCM Effects: See *Artemisia argyi*. TCM Indications: See *Artemisia argyi*. Isolated compounds: 14173, 14357, 17090, 17453, 21943.
- T0686 *Artemisia monosperma* (Asteraceae); DAN ZI HAO; Monoseed Wormwood\*. Isolated compounds: 4913, 5801, 6023, 21703.
- T0687 *Artemisia myriantha* (Asteraceae); YI KUA; Manyflower Wormwood. Used part: whole herb. TCM Effects: To clean heat, dispel summerheat, cool blood and stanch bleeding. TCM Indications: Summer common cold, summerheat stroke with fever, steaming bone tidal fever, blood ejection, spontaneous external bleeding. Isolated compounds: 124, 1675, 1803, 1804, 1805, 1806, 4749, 4941, 7066, 9037, 9796, 20677.
- T0688 *Artemisia porrecta* (Asteraceae); SHEN HAO; Porrect Wormwood\*. Isolated compounds: 1186.
- T0689 *Artemisia princeps* (Asteraceae); KUI HAO; First Wormwood. Used part: leaf. TCM Effects: See *Artemisia argyi*. TCM Indications: See *Artemisia argyi*. Isolated compounds: 14386, 17453.
- T0690 *Artemisia roxburgiana* (Asteraceae); HUI BAO HAO; Roxburgh Wormwood. Isolated compounds: 1110, 1111, 1112, 6575, 7951, 14944, 15935.
- T0691 *Artemisia rubripes* (Asteraceae); HONG ZU HAO; Redfoot Wormwood. Used part: leaf. TCM Effects: See *Artemisia argyi*. TCM Indications: See *Artemisia argyi*. Isolated compounds: 2170, 7582, 22038.
- T0692 *Artemisia rupestris* [Syn. *Artemisia dentata*; *Artemisia viridis*; *Artemisia viridifolia*] (Asteraceae); XIN JIANG YI ZHI HAO; Rock Wormwood. Used part: whole herb. TCM Effects: To dispel wind and resolve exterior, disperse accumulation and fortify stomach, quicken blood and dissipate stasis. TCM Indications: Wind-cold common cold, food accumulation and *qi* stagnation, distending pain in stomach duct and abdomen, stasis swelling from knocks and falls, wind papules, snake bite. Isolated compounds: 549, 11687, 19068.
- T0693 *Artemisia sativum* (Asteraceae); YUN XIANG YE HAO; Rueleaf Wormwood\*. Isolated compounds: 3048.
- T0694 *Artemisia schrenkiana* (Asteraceae); XUE LING HAO; Schrenk Wormwood\*. Isolated compounds: 19314.
- T0695 *Artemisia scoparia* [Syn. *Artemisia capillaris* var. *scoparia*] (Asteraceae); HUANG HAO; Virgate Wormwood. Used part: aerial parts. TCM Effects: See *Artemisia capillaris*. TCM Indications: See *Artemisia capillaris*. Isolated compounds: 764, 1520, 1792, 2056, 2787, 3117, 3120, 3121, 3122, 3237, 3243, 3300, 3551, 3589, 3688, 3745, 4390, 4550, 5065, 6776, 7521, 8011, 8313, 9749, 11421, 11702, 14146, 15146, 16285, 16587, 17376, 17377, 18393, 18682, 19087, 19187, 19540, 19542, 20137, 21350.
- T0696 *Artemisia sieversiana* (Asteraceae); BAI HAO; Sievers Wormwood. Used part: whole herb. TCM Effects: To clear heat and disinhibit damp, cool blood and stanch bleeding. TCM Indications: Wind-cold-damp impediment, jaundice, heat dysentery, scab and *lai*. Isolated compounds: 37, 1779, 19881, 19882.
- T0697 *Artemisia* sp. (Asteraceae). Isolated compounds: 2044, 3076, 3635, 5236, 5414, 15279, 19308, 19313, 19545.
- T0698 *Artemisia* spp. (compositae). Isolated compounds: 17719, 22195.
- T0699 *Artemisia sublessingiana* (Asteraceae); YA LIE XING HAO; Sublessing Wormwood\*. Isolated compounds: 19314.
- T0700 *Artemisia sylvatica* (Asteraceae); LIN DI HAO; Woodland Wormwood. Isolated compounds: 1790, 1791, 1802, 4746, 7195, 7196, 7197, 14097, 15002.
- T0701 *Artemisia taurica* (Asteraceae); NIU HAO; Taurine Wormwood\*. Isolated compounds: 20730.
- T0702 *Artemisia tridentata* (Asteraceae); SAN CHI HAO; Big Sagebrush. Isolated compounds: 1617, 18843.
- T0703 *Artemisia tridentata* ssp. *vaseyana* (Asteraceae); WA SI YA NA SAN CHI HAO; Vaseyana Big Sagebrush\*. Isolated compounds: 11615.
- T0704 *Artemisia tripartita* (Asteraceae); SAN LIE HAO; Tripartite Wormwood\*. Isolated compounds: 18843.
- T0705 *Artemisia vestita* (Asteraceae); MAO LIAN HAO; Hairy Wormwood. Used part: whole herb. TCM Effects: To clear heat, resolve toxin, eliminate steam. TCM Indications: Scourge epidemic with fever,

- steaming bone taxation fever. Isolated compounds: 1110, 4680, 7556, 7951, 9455, 10017, 16758, 20713, 20731, 21095, 22923.
- T0706 *Artemisia vulgaris* (Asteraceae); BEI AI; Mugwort. Used part: leaf. TCM Effects: See *Artemisia argyi*. TCM Indications: See *Artemisia argyi*. Isolated compounds: 2047, 11261, 11742, 14013, 15688, 16331, 20730, 21350, 21596, 22620.
- T0707 *Arthraxon hispidus* (Poaceae); JIN CAO; Hispid Arthraxon. Used part: whole herb. TCM Effects: To relieve cough and asthma, kill worms. TCM Indications: Enduring cough and asthma, hepatitis, pharyngolaryngitis, nasitis, lymphroditis, mastitis, sores scab and lichen. Isolated compounds: 552, 553, 1371.
- T0708 *Arthromeris mairei* [Syn. *Polypodium mairei*] (Polypodiaceae); FENG WEI PA SHAN HU; Mary Arthromeris. Used part: rhizome. TCM Effects: To dispel wind and quicken network vessels, disperse accumulation and free stool, downbear fire, relieve pain, disinhibit urine. TCM Indications: Wind-damp pain in sinew and bone, sciatica, fracture, food accumulation abdominal distention, constipation, red eyes, toothache, headache, inhibited urination, strangury-turbidity. Isolated compounds: 15068.  
*Arthropodium scoparium* = *Hammada scoparia*
- T0709 *Artocarpus altilis* (Moraceae); FEI HOU MIAN BAO GUO; Fleshy Artocarpus\*. Isolated compounds: 4517.
- T0710 *Artocarpus champeden* (Moraceae); YIN NI MIAN BAO GUO; Cempedak. Isolated compounds: 1815, 1816, 1817, 1818.
- T0711 *Artocarpus dadah* (Moraceae); DA DA HE MIAN BAO GUO; Dadah Artocarpus\*. Isolated compounds: 1387, 1412, 1417, 1421, 1442, 1443, 1444, 1765, 4337, 5679, 14962, 15714, 18643, 20326.
- T0712 *Artocarpus fretessi* (Moraceae). Isolated compounds: 1819, 1820, 1821, 14995, 15038.
- T0713 *Artocarpus heterophyllus* (Moraceae); BO LUO MI; Diversileaf Artocarpus. Used part: fruit. TCM Effects: To engender liquid and eliminate vexation, resolve liquor and arouse spleen. Isolated compounds: 1345, 1821, 4495, 15714.
- T0714 *Artocarpus incisa* [Syn. *Artocarpus communis*] (Moraceae); MIAN BAO GUO; Common Artocarpus\*. Isolated compounds: 1810, 1811, 1812, 1813, 1814, 4517, 8330.
- T0715 *Artocarpus integra* (Moraceae); QUAN YUAN GUI MU; Integerleaf Artocarpus. Isolated compounds: 13918, 14183, 17841.
- T0716 *Artocarpus integrifolia* (Moraceae); QUAN YUAN YE BO LUO MI; Integrifolious Artocarpus\*. Isolated compounds: 14971.
- T0717 *Artocarpus lakoocha* (Moraceae); LA KOU SHA MIAN BAO GUO; Lakoocha Artocarpus\*. Isolated compounds: 4337, 12453, 12454.
- T0718 *Artocarpus nobilis* (Moraceae); GAO GUI BO LUO MI; Noble Artocarpus\*. Isolated compounds: 8330, 21119, 21737, 21745, 21749.  
*Arum cucullatum* = *Alocasia cucullata*
- T0719 *Arum italicum* (Araceae); YI DA LI JIASNG NAN XING; Italian Arum. Isolated compounds: 12525.
- T0720 *Arum* sp. (Araceae). Isolated compounds: 19459.
- T0721 *Arundina chinensis* (Orchidaceae); ZHU YE LAN; Chinese Arundina. Used part: whole herb and rooty stem. TCM Effects: To clear heat and resolve toxin, dispel wind and disinhibit damp, dissipate stasis and relieve pain. TCM Indications: Jaundice, heat strangury, edema, beriberi, mounting *qi*, wind-damp impediment pain, poisonous snake bite, swelling toxin of sore and welling abscess, knocks and falls. Isolated compounds: 3040, 20369.
- T0722 *Arundo donax* (Poaceae); LU ZHU GEN; Giantreed Rhizome. Used part: rhizome. TCM Effects: To clear heat and drain fire, engender liquid and eliminate vexation, disinhibit urine. TCM Indications: Febrile diseases with vexation and thirst, vacuity taxation with steaming bone, blood ejection, heat strangury, inhibited urination, wind-fire toothache. Isolated compounds: 1111, 1112, 2472, 2725, 2726, 3040, 6418, 6419, 6736, 8971, 8972, 8973, 14038, 20369.
- T0723 *Asarum canadense* (Aristolochiaceae); JIA NA DA XI XIN; Canadian Snakeroot. Isolated compounds: 1713, 3455, 3456.
- T0724 *Asarum caulescens* (Aristolochiaceae); SHUANG YE XI XIN; Caulescent Wildginger. Equivalent plant: *Asarum fukienense*. Used part: whole herb. TCM Effects: To dispel wind and dissipate cold, relieve pain, warm lung and transform rheum. TCM Indications: Wind-cold common cold, headache, toothache, wind-damp impediment pain, phlegm-rheum cough asthma. Isolated compounds: 1469, 1832, 2550, 6745, 7495, 9862, 19684.
- T0725 *Asarum europaeum* (Aristolochiaceae); OU XI XIN; Asarabacca. Isolated compounds: 1835, 1840, 14531, 19912.
- T0726 *Asarum forbesii* (Aristolochiaceae); DU HENG; Forbes Wildginger. Used part: rhizome and root or whole herb. TCM Effects: To dispel wind and dissipate cold, disperse phlegm and move water, quicken blood and relieve pain, resolve toxin. TCM Indications: Wind-cold common cold, phlegm-rheum cough asthma, edema, wind-cold-damp impediment, knocks and falls, headache, toothache, stomachache, sand *qi* abdominal pain, scrofula, toxin swelling, snake bite. Isolated compounds: 1832, 1836, 1837, 1838, 1839, 6745, 7521, 12115, 12891, 19121.
- T0727 *Asarum fukienense* (Aristolochiaceae); FU JIAN XI XIN; Fukien Wildginger. Used part: whole herb. TCM Effects: See *Asarum caulescens*. TCM Indications: See *Asarum caulescens*. Isolated compounds: 17116.
- T0728 *Asarum heterotropoides* var. *mandshuricum* (Aristolochiaceae); LIAO XI XIN; Manchurian Wildginger. Used part: whole herb. TCM Effects: See *Asarum sieboldii*. TCM Indications: See *Asarum sieboldii*. Isolated compounds: 336, 1713, 1832, 1833, 3045, 3689, 4276, 4550, 6294, 6745, 7385, 7483, 7523, 12115, 12843, 15146, 15204, 16830, 17376, 19099, 19121, 19777, 20990, 20995, 20998.
- T0729 *Asarum maximum* (Aristolochiaceae); DA HUA XI XIN; Largeflower Wildginger. Used part: whole herb with root. TCM Effects: To dispel wind and dissipate cold, relieve cough and dispel phlegm, quicken blood and resolve toxin, relieve pain. TCM Indications: Wind-cold common cold, headache, cough and asthma, wind-damp pain, knocks and falls. Isolated compounds: 1832.
- T0730 *Asarum sagittarioides* (Aristolochiaceae); SHAN CI GU; Arrowhead-like Wildginger. Used part: whole herb. TCM Effects: To dispel wind and dissipate cold, resolve toxin and relieve pain. TCM Indications: Common cold, stomachache, toothache, knocks and falls, snake bite. Isolated compounds: 3911, 7702.
- T0731 *Asarum sieboldii* (Aristolochiaceae); XI XIN; Siebold Wildginger. Equivalent plant: *Asarum heterotropoides* var. *mandshuricum*, *Asarum sieboldii* var. *seoulensis*. Used part: whole herb. TCM Effects: To

- dispel wind and dissipate cold, free orifices and relieve pain, warm lung and transform rheum. TCM Indications: Wind-cold common cold, influenza, headache, toothache, local anesthesia, nasal congestion, deep-source nasal congestion, wind-damp impediment pain, phlegm-rheum cough asthma. Isolated compounds: 336, 1713, 1832, 1833, 1834, 3045, 3196, 3231, 3689, 4276, 4550, 6294, 6745, 7385, 7521, 7523, 8340, 11626, 12843, 14810, 15146, 15204, 15252, 16830, 17376, 19099, 19121, 19777, 20992, 20995, 20998, 21919, 21935.
- T0732 *Asarum sieboldii* var. *seoulensis* (Aristolochiaceae); HAN CHENG XI XIN; Seoul Siebold Wildginger. Used part: whole herb. TCM Effects: See *Asarum sieboldii*. TCM Indications: See *Asarum sieboldii*. Isolated compounds: 1713, 19777.
- T0733 *Asarum* spp. (Aristolochiaceae). Isolated compounds: 1834.
- T0734 *Asarum taitoense* (Aristolochiaceae); TAI DONG XI XIN; Taiton Wildginger. Isolated compounds: 1841.
- T0735 *Asclepias albicans* (Asclepiadaceae); BIAN BAI MA LI JIN; White Milkweed. Isolated compounds: 22301.
- T0736 *Asclepias curassavica* (Asclepiadaceae); LIAN SHENG GUI ZI HUA; Bloodflower Milkweed. Used part: herb. TCM Effects: To clear heat and resolve toxin, quicken blood and stanch bleeding, disperse swelling and relieve pain. TCM Indications: Swelling pain in throat, lung heat cough, heat strangury, amenorrhea, flooding and spotting, vaginal discharge, swelling toxin of welling abscess and sore, eczema, intractable lichen, bleeding due to external injury. Isolated compounds: 1844, 2937, 2996, 4077, 4092, 22301.
- T0737 *Asclepias eriocarpa* (Asclepiadaceae); MAO GUO MA LI JIN; Hairyfruit Milkweed\*. Isolated compounds: 7272, 12421, 12422.
- T0738 *Asclepias incarnata* (Asclepiadaceae); ROU HONG MA LI JIN; Incarnate Milkweed\*. Isolated compounds: 448, 449, 450, 451, 452, 453, 4796, 4797, 10248, 10249, 10327, 10328, 10329, 10330, 10331, 10332, 10333, 10965, 10966, 11497, 11498, 11499, 11500, 11501, 11502, 12880, 12881, 12882, 12883, 12884, 12885, 13813, 13814, 13815, 13816, 13817, 13818, 15531, 15532, 15533, 18937.
- T0739 *Asclepias speciosa* (Asclepiadaceae); MEI LI MA LI JIN; Beautiful Milkweed\*. Isolated compounds: 1887.
- T0740 *Asclepias syriaca* (Asclepiadaceae); XU LI YA MA LI JIN; Milkweed. Isolated compounds: 1887, 15527, 22305.
- T0741 *Asclepias tuberosa* (Asclepiadaceae); KUAI JING MA LI JIN; Tuberosus Milkweed. Isolated compounds: 7951.
- T0742 *Ascochyta sonchi*. Isolated compounds: 1846.
- T0743 *Asimina parviflora* (Annonaceae); XIAO HUA PAO PAO; Smallflower Pawpaw. Isolated compounds: 16676, 16677.
- T0744 *Asimina triloba* (Annonaceae); PAO PAO SHU; Pawpaw. Isolated compounds: 1858, 1859, 16677.
- T0745 *Asparagus adscendens* (Liliaceae); SHANG JU TIAN MEN DONG; Ascendent Asparagus\*. Isolated compounds: 1868, 1869, 1878, 1879, 1880, 1881, 1883, 1884.
- T0746 *Asparagus cochinchinensis* [Syn. *Asparagus lucidus*] (Liliaceae); TIAN MEN DONG; Cochinchinese Asparagus. Used part: tuberoid. TCM Effects: To enrich *yin* and moisten dryness, clear lung and downbear fire. TCM Indications: *Yin* vacuity fever, cough with blood ejection, lung wilting, pulmonary welling abscess, swelling pain in throat, diabetes mellitus, constipation. Isolated compounds: 1863, 1864, 1865, 1866, 1885, 1905, 1906, 1907, 1908, 3982, 6090, 9546, 10396, 13845, 14023, 14045, 18056, 18711, 19390.
- T0747 *Asparagus curillus* (Liliaceae); WAN QU TIAN MEN DONG; curillus Asparagus\*. Isolated compounds: 1870, 1871, 1872, 1873, 1874, 1875, 1876, 1877, 1882, 9086, 9087, 19391.
- T0748 *Asparagus dumosus* (Liliaceae); GUAN MU TIAN MEN DONG; Shrubby Asparagus\*. Isolated compounds: 6636.
- T0749 *Asparagus filicinus* (Liliaceae); TU BAI BU; Fernlike Asparagus. Used part: tuberoid. TCM Effects: To moisten lung and relieve cough, kill worms and relieve itch. TCM Indications: *Yin* vacuity lung dryness, tuberculosis with cough, cough with inhibited phlegm, phlegm containing blood, scab and lichen with itching. Isolated compounds: 1860, 1861, 1862.
- T0750 *Asparagus gobicus* (Liliaceae); GE BI TIAN MEN; Desertliving Asparagus\*. Used part: whole herb. TCM Effects: To dispel wind, kill worms, relieve itch, disperse welling abscess and dissipate binds. TCM Indications: Neurodermatitis, psoriasis, body lichen, swollen welling abscess of sore and boil. Isolated compounds: 1860, 8631, 8632, 8656, 8903, 8904, 9546, 11201, 14044, 14052, 19755, 19997, 22821, 22828.
- T0751 *Asparagus officinalis* (Liliaceae); SHI DIAO BAI; Curinary Asparagus. Used part: tender stem. TCM Effects: To clear heat and disinhibit damp, quicken blood and dissipate binds. TCM Indications: Hepatitis, psoriasis, hyperlipemia, hyperplasia of mammary glands. Isolated compounds: 1396, 1422, 1423, 1830, 1831, 1860, 1861, 7768, 14698, 14931.
- T0752 *Asparagus officinalis* (Liliaceae); XIAO BAI BU; Officinal Asparagus. Used part: tuberoid. TCM Effects: To warm lung, suppress cough, kill worms. TCM Indications: Wind-cold common cold, pertussis, tuberculosis, senile cough and asthma, scab and lichen. Isolated compounds: 1673, 1862, 1866, 1867, 3142, 3501, 4140, 8785.
- T0753 *Asparagus setaceus* [Syn. *Asparagus plumosus*] (Liliaceae); WEN ZHU; Setose Asparagus. Used part: tuberoid or whole herb. TCM Effects: To cool blood and resolve toxin, disinhibit urine and free strangury. TCM Indications: *Yin* vacuity lung dryness, cough, hemoptysis, dribbling urination. Isolated compounds: 9253, 22880.
- T0754 *Asparagus* sp. (Liliaceae). Isolated compounds: 3981, 22336.
- T0755 *Aspergillus fumigatus* (Aspergillaceae); YAN QU MEI. Isolated compounds: 5047.
- T0756 *Aspergillus terreus* (Aspergillaceae). Isolated compounds: 18297.
- T0757 *Asperula odorata* (Rubiaceae); XIANG CHE YE CAO; Sweet Woodruff. Isolated compounds: 899, 901, 1892, 13041, 18222.
- T0758 *Asphodelus* spp. (Liliaceae). Isolated compounds: 3615.
- T0759 *Aspidistra elatior* (Liliaceae); ZHI ZHU BAO DAN; Common Aspidistra. Used part: rhizome. TCM Effects: To quicken blood and relieve pain, clear lung and relieve cough, disinhibit urine and free strangury. TCM Indications: Knocks and falls, wind-damp impediment pain, lumbago, amenorrhea and dysmenorrhea, lung heat cough, sand strangury, inhibited urination. Isolated compounds: 1898, 1899, 1902.
- T0760 *Aspidosperma album* (Apocynaceae). Isolated compounds: 1900.
- T0761 *Aspidosperma campus-belus* (Apocynaceae); BAI JIAN MU; Campus-belu Aspidosperma. Isolated compounds: 16085.
- T0762 *Aspidosperma cuspa* (Apocynaceae); JIAN BAI JIAN MU; Cuspate.

- Isolated compounds: 1901.
- T0763 *Aspidosperma dasycarpon* (Apocynaceae); CU MAO GUO BAI JIAN MU; Hirsutefruit White Quebracho\*. Isolated compounds: 1901, 20578.
- T0764 *Aspidosperma formasanum* (Apocynaceae). Isolated compounds: 1900.
- T0765 *Aspidosperma marcgravianum* (Apocynaceae). Isolated compounds: 1900, 11718.
- T0766 *Aspidosperma meglacarpum* (Apocynaceae). Isolated compounds: 1900.
- T0767 *Aspidosperma multiflorum* (Apocynaceae); DUO HUA BAI JIAN MU; Multiflower White Quebracho\*. Isolated compounds: 12268.
- T0768 *Aspidosperma neblinae* (Apocynaceae). Isolated compounds: 1900.
- T0769 *Aspidosperma nigricans* (Apocynaceae); HEI BAI JIAN MU; Black White Quebracho\*. Isolated compounds: 16085.
- T0770 *Aspidosperma olivaceum* (Apocynaceae); HE LU BAI JIAN MU; Olive-green White Quebracho\*. Isolated compounds: 16085.
- T0771 *Aspidosperma populifolium* (Apocynaceae); SI YANG SHU YE BAI JIAN MU; Poplar-leaf-like White Quebracho\*. Isolated compounds: 12268, 22369.
- T0772 *Aspidosperma quebracho-blanco* (Apocynaceae); PU TONG BAI JIAN MU; Common White Quebracho. Isolated compounds: 1903, 1904.
- T0773 *Aspidosperma refractum* (Apocynaceae). Isolated compounds: 22369.
- T0774 *Aspidosperma rhombeosignatum* (Apocynaceae); LENG ZHUANG BAI JIAN MU; Rhombicsign White Quebracho\*. Isolated compounds: 1904.
- T0775 *Aspidosperma subincanum* (Apocynaceae); WEI BAI BAI JIAN MU; Microwhite White Quebracho\*. Isolated compounds: 6759.
- T0776 *Asplenium prolongatum* (Aspleniaceae); CHANG SHENG TIE JIAO JUE; Prolongated Spleenwort. Used part: whole herb or leaf. TCM Effects: To clear heat and remove damp, transform stasis and stanch bleeding. TCM Indications: Cough and abundant phlegm, wind-damp impediment pain, enteritis and dysentery, urinary tract infection, mastitis, blood ejection, bleeding due to external injury, knocks and falls, burns and scalds. Isolated compounds: 12085.
- T0777 *Aster ageratoides* var. *ovatus* (Asteraceae); LUAN YE SAN ZHE MAI ZI WAN; Ovate-leaf Threevein Aster\*. Isolated compounds: 728, 729, 730, 731, 732, 733, 734, 735.
- T0778 *Aster albescens* (Asteraceae); XIAO SHE ZI WAN; Smallligulatecorolla Aster. Isolated compounds: 7951.
- T0779 *Aster cultivars* (Asteraceae); ZAI PEI ZI WAN; Cultivated Aster\*. Isolated compounds: 3594.
- T0780 *Aster ptarmicoides* (Asteraceae); TUN CAO ZI WAN; Upland White Aster. Isolated compounds: 23000.
- T0781 *Aster tataricus* (Asteraceae); ZI WAN; Tatarion Aster. Used part: root and rhizome. TCM Effects: To moisten lung and precipitate *qi*, relieve cough and dispel phlegm. TCM Indications: Cough and asthma with abundant phlegm, consumption cough and hemoptysis. Isolated compounds: 1186, 1922, 1923, 1927, 1929, 1930, 1931, 1932, 1933, 6918, 7951, 12429, 12430, 18317, 19830, 19831, 19832, 19833.
- T0782 *Asterina pectinifera* HAI YAN. Isolated compounds: 3587, 11622.
- T0783 *Asteriscus vogelii* (Compositae). Isolated compounds: 1924, 1925, 1926, 14492, 14645, 14646, 16346, 16347, 16348, 16427.
- T0784 *Astilbe chinensis* (Saxifragaceae); LUO XIN FU; Chinese Astilbe. Used part: whole herb. TCM Effects: To dispel wind, clear heat, suppress cough. TCM Indications: Wind-heat common cold, headache and generalized pain, cough. Isolated compounds: 2312, 9717, 10607.
- T0785 *Astilbe macroflora* (Saxifragaceae); DA HUA LUO XIN FU; Largeflower Astilbe. Isolated compounds: 2312.
- T0786 *Astragalus atropubescens* (Fabaceae); ROU MAO HUANG QI; Darkhairy Milkvetch\*. Isolated compounds: 14885.
- T0787 *Astragalus bisulcatus* (Fabaceae); ER GOU HUANG QI; Bisulcate Milkvetch\*. Isolated compounds: 19691.
- T0788 *Astragalus canadensis* var. *brevidens* (Fabaceae); DUAN CHI HUANG QI; Shorttooth Milkvetch\*. Isolated compounds: 3634.
- T0789 *Astragalus canadensis* var. *mortonii* (Fabaceae); JIA NA DA HUANG QI; Canadian Milkvetch\*. Isolated compounds: 3634.
- T0790 *Astragalus caprinus* (Fabaceae); SHAN YANG HUANG QI. Isolated compounds: 12101, 12102, 12103, 12104, 12105.
- T0791 *Astragalus chrysopterus* (Fabaceae); JIN YI HUANG QI; Golden-wing Milkvetch\*. Used part: root. TCM Effects: See *Astragalus membranaceus*. TCM Indications: See *Astragalus membranaceus*. Isolated compounds: 1934.
- T0792 *Astragalus cibarius* (Fabaceae); SHI YONG HUANG QI; Edible Milkvetch\*. Isolated compounds: 3634, 4078.
- T0793 *Astragalus complanatus* (Fabaceae); BIAN JING HUANG QI; Flatstem Milkvetch. Used part: seed. TCM Effects: To supplement kidney and secure essence, boost liver and brighten eyes. TCM Indications: Liver kidney vacuity, lumbago and limp leg, emission and premature ejaculation, frequent urination, dizziness and tinnitus, clouded flowery vision. Isolated compounds: 1944, 3949, 11503, 15188, 15371, 15941, 18684, 18707, 18708, 18737, 18738.
- T0794 *Astragalus ernestii* (Fabaceae); SUO GUO HUANG QI; Ernest Milkvetch\*. Used part: root. TCM Effects: See *Astragalus membranaceus*. TCM Indications: See *Astragalus membranaceus*. Isolated compounds: 1851, 1852.
- T0795 *Astragalus falcatus* (Fabaceae); LIAN XING HUANG QI; Falcate Milkvetch\*. Isolated compounds: 3634, 4078, 18859.
- T0796 *Astragalus flexuosus* (Fabaceae); WAN YAN HUANG QI; Flexuous Milkvetch\*. Isolated compounds: 3634, 4078.
- T0797 *Astragalus kahiricus* (Fabaceae); KAI LUO HUANG QI; Cairo Milkvetch\*. Isolated compounds: 12107, 12108, 12109, 12110.
- T0798 *Astragalus membranaceus* (Fabaceae); HUANG QI; Membranous Milkvetch. Equivalent plant: *Astragalus mongholicus*, *Astragalus chrysopterus*, *Astragalus ernestii*. Used part: root. TCM Effects: To boost *qi* and secure exterior, disinherit urine and draw toxin, expel pus, close sores and engender flesh. TCM Indications: Common cold, influenza, chronic wound ulcer, chronic glomerulonephritis, diabetes mellitus due to internal heat, *qi* vacuity edema, chronic gastritis, *qi* vacuity and hypodynamia, reduced food intake and sloppy stool, center *qi* fall, chronic diarrhea, prolapse of rectum, hemochezia, flooding and spotting, spontaneous sweating due to exterior vacuity. Isolated compounds: 326, 617, 618, 1936, 1937, 1938, 1939, 1940, 1941, 1942, 1943, 1945, 1946, 2318, 3004, 3063, 3589, 4476, 6291, 7852, 7853, 7883, 8761, 9071, 9486, 10031, 11242, 11243, 12020, 12331, 13638, 18317, 19983, 20446, 22252.

- T0799 *Astragalus miser* var. *oblongifolia* (Fabaceae); JU YUAN YE HUANG QI; Oblongleaf Milkvetch\*. Isolated compounds: 14885.
- T0800 *Astragalus mongholicus* (Fabaceae); MENG GU HUANG QI; Mongolian Milkvetch. Used part: root. TCM Effects: See *Astragalus membranaceus*. TCM Indications: See *Astragalus membranaceus*. Isolated compounds: 1936, 1937, 1938, 1939, 3004, 6291, 7883, 10251, 10413, 10520, 11544, 11545, 11546, 12020, 12520, 12891, 12893, 13638, 14533, 15022, 19983, 20446, 22824.
- T0801 *Astragalus oleifolius* (Fabaceae); YOU YE HUANG QI; Oily-leaf Milkvetch\*. Isolated compounds: 1937, 1939, 4478, 16067, 16068.
- T0802 *Astragalus pterocarpus* (Fabaceae); CHI GUO HUANG QI; Wingfruit Milkvetch\*. Isolated compounds: 14885.
- T0803 *Astragalus shikokianus* (Fabaceae); SI GUO HUANG QI; Siko Milkvetch\*. Isolated compounds: 1950, 12075, 18859.
- T0804 *Astragalus sieversianus* (Fabaceae); MIAN MAO HUANG QI; Sieversia Milkvetch. Isolated compounds: 1948, 1949.
- T0805 *Astragalus sinicus* (Fabaceae); ZI YUN YING; Chinese Milkvetch. Used part: herb. TCM Effects: To clear heat and resolve toxin, dispel wind and brighten eyes, cool blood and stanch bleeding. TCM Indications: Pain in throat, wind-phlegm cough, red eyes with gall, clove sore, zoster, scab and lichen, hemorrhoids, gum hemorrhage, bleeding due to external injury, menstrual disorder, vaginal discharge, thrombocytopenic purpura. Isolated compounds: 617, 1935, 3063, 21662.
- T0806 *Astragalus sinicus* (Fabaceae); ZI YUN YING ZI; Chinese Milkvetch Seed. Used part: seed. TCM Effects: To dispel wind and brighten eyes. TCM Indications: Red eyes with gall. Isolated compounds: 9620, 9804.
- T0807 *Astragalus* sp. (Fabaceae). Isolated compounds: 12050, 19676.
- T0808 *Astragalus tetraplerus* (Fabaceae); SI CHI HUANG QI; Fourwing Milkvetch\*. Isolated compounds: 14885.
- T0809 *Astragalus trojanus* (Fabaceae); TE LUO YI HUANG QI; Trojan Milkvetch\*. Isolated compounds: 1947, 22046, 22047, 22048.
- T0810 *Astrantia major* (Rutaceae); DA XING QIN; Astrantia. Isolated compounds: 12420, 16050.
- T0811 *Astrotrichilia voamatata* (Meliaceae). Isolated compounds: 22598, 22599, 22600, 22601.
- T0812 *Asystasia intrusa* (Acanthaceae); CHA RU SHI WAN CUO; Ya-Yaa (Thai name). Isolated compounds: 580, 815, 1952, 2276, 3306, 8613, 18918, 23011.
- T0813 *Atalantia buxifolia* [Syn. *Severinia buxifolia*] (Rutaceae); DONG FENG JU GEN; Boxleaf Atalantia Root. Used part: root. TCM Effects: To dispel stasis and relieve pain, normalize *qi* and transform phlegm. TCM Indications: Painful swelling from knocks and falls, wind-damp pain, fracture, mounting *qi*, common cold, cough, malaria, stomachache. Isolated compounds: 1953, 1957, 1958, 1959, 2010, 2823, 2824, 2825, 2826, 2827, 2828, 2829, 2830, 3777, 3778, 8320, 8825, 11758, 11759, 14149, 14443, 19302, 19790, 19983, 20369, 21687.
- T0814 *Atalantia buxifolia* [Syn. *Severinia buxifolia*] (Rutaceae); DONG FENG JU YE; Boxleaf Atalantia Leaf. Used part: root and leaf. TCM Effects: To dispel wind and resolve exterior, relieve cough and transform phlegm, move *qi* and quicken blood, relieve pain. TCM Indications: Common cold with cough, malaria, stomachache, mounting *qi*, wind-damp impediment pain, painful swelling from knocks and falls. Isolated compounds: 1954, 5147, 14174.
- T0815 *Atalantia monophylla* (Rutaceae); DAN YE DONG FENG JU; Monoleaf Atalantia\*. Isolated compounds: 1955, 18272.
- T0816 *Atalantia racemosa* (Rutaceae); ZONG ZHUANG DONG FENG JU YE; Racemose Atalantia Leaf\*. Isolated compounds: 1956.
- T0817 *Atherosperma moschatum* (Atherospermataceae); SHE XIANG MANG ZI. Isolated compounds: 1961.
- T0818 *Athyrium filix-femina* (Athyriaceae); TI GAI JUE; Painted Fern. Isolated compounds: 1897.
- T0819 *Atractylodes chinensis* (Asteraceae); BEI CANG ZHU; Chinese Atractylodes. Used part: rhizome. TCM Effects: See *Atractylodes lancea*. TCM Indications: See *Atractylodes lancea*. Isolated compounds: 327, 1966, 1969, 1970, 1971, 2452, 6746, 7495, 7514, 9542, 10493, 11763, 11764, 12847, 19687.
- T0820 *Atractylodes gummifera* (Asteraceae); OU CANG ZHU; Gummy Atractylodes\*. Isolated compounds: 1972.
- T0821 *Atractylodes japonica* (Asteraceae); GUAN CANG ZHU; Japanese Atractylodes. Used part: rhizome. TCM Effects: See *Atractylodes lancea*. TCM Indications: See *Atractylodes lancea*. Isolated compounds: 1965, 1966, 1969, 5534, 5902, 6833, 7495, 7514, 9542, 9806, 9907, 10432, 17087, 19606, 21739.
- T0822 *Atractylodes koreana* (Asteraceae); CHAO XIAN CANG ZHU; Korean Atractylodes. Isolated compounds: 1966, 1969.
- T0823 *Atractylodes lancea* (Asteraceae); CANG ZHU; Swordlike Atractylodes. Equivalent plant: *Atractylodes chinensis*, *Atractylodes japonica*. Used part: rhizome. TCM Effects: To dispel damp and strengthen spleen, dispel wind, brighten eyes. TCM Indications: Spleen-stomach damp turbidity, fatigue hypodynamia, glomus in chest, abdominal distention, inappetence, vomiting and diarrhea, phlegm-rheum, damp edema, exterior damp, heavy head and generalized pain, damp impediment, aching pain in limbs, crippling wilt, night blindness. Isolated compounds: 125, 618, 1966, 1969, 1971, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 3242, 3466, 4818, 4842, 5902, 6741, 6746, 6833, 7495, 7513, 7514, 8011, 9041, 9042, 9044, 9542, 9669, 9807, 10953, 11634, 13284, 14316, 14782, 19544, 19606, 19687, 20569, 21739, 21740, 22060, 22252.
- T0824 *Atractylodes macrocephala* [Syn. *Atractylis macrocephala*] (Asteraceae); BAI ZHU; Largehead Atractylodes. Used part: root. TCM Effects: To boost *qi* and fortify spleen, dry damp and disinhibit water, check sweating, quiet fetus. TCM Indications: Spleen *qi* vacuity, fatigue hypodynamia, reduced food intake with abdominal distention, sloppy stool, water-rheum collecting internally, inhibited urination, edema, phlegm-rheum dizziness, damp impediment, *qi* vacuity, spontaneous sweating, stirring fetus in pregnancy. Isolated compounds: 1965, 1967, 1968, 1971, 7396, 7495, 11966, 14189, 14190, 14191, 14192.
- T0825 *Atropa belladonna* (Solanaceae); DIAN QIE; Common Atropa. Used part: whole herb. TCM Effects: To resolve spasm and relieve pain, inhibit secretion. TCM Indications: Gastric ulcer, duodenal ulcer, colic of gastrointestinal tract, cholecystalgia, renal colic, vomiting nausea, night sweating, drooling. Isolated compounds: 1526, 2001, 2218, 4417,

- 10870, 10872, 19542, 22195.
- T0826 *Atropa* spp. (Solanaceae). Isolated compounds: 10870.  
*Aucklandia lappa* = *Saussurea lappa*
- T0827 *Aucuba chinensis* ssp. *omeiensis* (Cornaceae); TIAN JIAO BAN; Chinese Aucuba. Used part: leaf. TCM Effects: To clear heat and resolve toxin, disperse swelling and relieve pain. TCM Indications: Swelling toxin of welling abscess and flat abscess, scratch, knocks and falls, burns and scalds, hemorrhoids, frostbite. Isolated compounds: 2003, 2004.
- T0828 *Aucuba japonica* (Cornaceae); DONG YING SHAN HU MU; Japanese Aucuba. Isolated compounds: 2004.
- T0829 *Aulacomnium androgynum* (Aulacomniaceae); ZHOU SHUO XIAN. Isolated compounds: 17147.
- T0830 *Auricularia auricula* (Auriculariaceae); MU ER; Jew's Ear. Equivalent plant: *Auricularia delicata*. Used part: sporocarp. TCM Effects: To supplement *qi* and nourish blood, moisten lung and relieve cough, stanch bleeding, lower blood pressure, anticancer. TCM Indications: *Qi* vacuity and blood depletion, lung vacuity enduring cough, hemoptysis, spontaneous external bleeding, blood dysentery, bleeding from hemorrhoids, flooding and spotting, hypertension, eyeground hemorrhage, carcinoma of uterine cervix, carcinoma of vagina, painful wound from knocks and falls. Isolated compounds: 3039, 7250, 20155.
- T0831 *Auricularia delicata* (Auriculariaceae); ZHOU MU ER; Delicate Jew's Ear\*. Used part: sporocarp. TCM Effects: See *Auricularia auricula*. TCM Indications: See *Auricularia auricula*. Isolated compounds: 16218.
- T0832 *Austrotaxus spicata* (Taxaceae); AO DA LI YA HONG DOU SHAN; Australia Yew. Isolated compounds: 127, 150, 365, 366, 1062, 2024, 2025, 2437, 3958, 4702, 4703, 4718, 4719, 4720, 4773, 4849, 5087, 5322, 6140, 9959, 14136, 15523, 15524, 20157, 20159, 20161, 21532, 22030, 22031.  
*Autonoë madeirensis* = *Scilla maderensis*
- T0833 *Avena sativa* (Poaceae); YAN MAI; Oat. Isolated compounds: 2029, 2030, 2031, 2032, 2033, 15855, 20146, 20147.
- T0834 *Averrhoa carambola* (Oxalidaceae); YANG TAO; Carambola; Country Gooseberry. Used part: fruit. TCM Effects: To clear heat, engender liquid, disinhibit urine, resolve toxin. TCM Indications: Wind-heat cough, sore pharynx, vexation and thirst, stone strangury, oral putrescence, toothache, malaria with splenomegaly, resolve liquor toxin. Isolated compounds: 17264.
- T0835 *Axinyssa* sp. Isolated compounds: 2046, 4880, 11360.
- T0836 *Azadiractica indica* (Meliaceae); YIN DU LIAN; Neem Tree. Isolated compounds: 364, 2051, 12847, 13662, 13663, 15655, 22961.  
*Azalea ovata* = *Rhododendron ovatum*
- T0837 *Azalea* sp. (Ericaceae). Isolated compounds: 491.
- T0838 *Azolla imbricata* [Syn. *Salvinia imbricata*] (Azollaceae); MAN JIANG HONG; Imbricate Mosquito Fern. Used part: leaf. TCM Effects: To resolve exterior and outthrust papules, dispel wind and overcome damp, resolve toxin. TCM Indications: Common cold with cough, non-eruption of measles, wind-damp pain, inhibited urination, edema, urticaria, itchy of skin, sores, cinnabar toxin, burns and scalds. Isolated compounds: 13148.
- T0839 *Azorella compacta* (Apiaceae); MI XIAO YING QIN. Isolated compounds: 261, 262, 10531, 15062.
- T0840 *Azorella cryptantha* (Apiaceae); YIN HUA YAO XIAO YING QIN. Isolated compounds: 2062, 5545.
- T0841 *Azorella yareta* (Apiaceae). Isolated compounds: 2061, 9809, 9810, 15059, 15062.

## B

- T0842 *Babylonia japonica* (Buccinidae); RI BEN DONG FENG LUO. Isolated compounds: 15461.
- T0843 *Babylonia lutosa* (Buccinidae); NI DONG FENG LUO. Used part: meat. TCM Effects: To stanch bleeding, moisten dryness. TCM Indications: Nosebleed(epistaxis), dry stool. Isolated compounds: 20496.
- T0844 *Baccharis dracunculifolia* (Asteraceae); XIAO LONG YE KUO BAO JU; Dracunculi-leaf Pluchea\*. Isolated compounds: 85, 5415, 6580, 6581, 6582, 6583, 6584, 6585, 6586, 6587, 6588, 6589, 6590, 6591, 6592, 6593, 6594, 6595, 6596, 6597, 17410, 17415, 20996.
- T0845 *Baccharis flabellata* (Asteraceae); SHAN XING KUO BAO JU; Sector Pluchea. Isolated compounds: 5497, 7176, 7199.
- T0846 *Baccharis gaudichaudiana* (Asteraceae). Isolated compounds: 2080.
- T0847 *Baccharis indica* [Syn. *Pluchea indica*] (Asteraceae); KUO BAO JU; Indian Pluchea. Used part: stem-leaf or root. TCM Effects: To warm stomach and eliminate accumulation, soften hardness and dissipate binds, dispel wind and eliminate damp. TCM Indications: Child food accumulation, goiter and carcinoma of neck, phlegm node, wind-damp bone pain. Isolated compounds: 17085.
- T0848 *Baccharis latifolia* (Asteraceae); KUAN YE KUO BAO JU; Broadleaf Pluchea\*. Isolated compounds: 17809.
- T0849 *Baccharis ramosissima* (Asteraceae); DUO ZHI KUO BAO JU; Ramose Pluchea\*. Isolated compounds: 14119.
- T0850 *Baccharis sarothroides* (Asteraceae). Isolated compounds: 21711.
- T0851 *Baccharis* spp. (Asteraceae). Isolated compounds: 3551, 16041, 17399, 22768.
- T0852 *Bacopa monniera* (Scrophulariaceae); JIA MA CHI XIAN; Coastal Waterhyssop. Used part: whole herb. TCM Effects: To clear heat and cool blood, resolve toxin and disperse swelling. TCM Indications: Dysentery, red eyes with gall, swelling pain from hemorrhoids, elephantiasis. Isolated compounds: 1476, 1574, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 8604, 11908, 13137, 13580, 14917, 14918, 14919, 15975, 17507, 17508, 20471.
- T0853 *Baeckea frutescens* (Myrtaceae); GANG SONG; Shrubby Baeckea. Used part: leaf, flower and fruit. TCM Effects: To transform stasis and relieve pain, clear heat and resolve toxin, disinhibit urine and free strangury, kill worms and relieve itch. TCM Indications: Stasis swelling from knocks and falls, cirrhosis, heat strangury, heat diarrhea, inhibited urination, pudendal itch, beriberi, eczema, itchy skin, scab and lichen, burns and scalds, snake or insect bites. Isolated compounds: 2097, 2339, 2340, 2341, 2369, 2550, 2555, 4550, 6482, 7752, 8105, 8106, 8618, 8619, 12843, 20995.
- T0854 *Baileya multiradiata* (Asteraceae); BAI LAI SHI JU; Bailai's Chrysanthemum. Isolated compounds: 2109, 7739, 7740, 15071,



- 15073, 15074, 15991, 17557, 18523.
- T0855 *Baileya pauciradiata* (Asteraceae); SHAO BIAN HUA BAI LAI SHI JU; Fewradiate Bailai's Chrysanthemum\*. Isolated compounds: 15991, 16733.
- T0856 *Baileya pleniradiata* (Asteraceae); DUO BIAN HUA BAI LAI SHI JU; Manyradiate Bailai's Chrysanthemum\*. Isolated compounds: 2109, 16733, 17558.
- T0857 *Balanophora abbreviata* (Balanophoraceae); DUAN SHE GU; Abbreviate Balanophora\*. Isolated compounds: 10628.
- T0858 *Balanophora indica* [Syn. *Langodorfia indica*] (Balanophoraceae); YIN DU SHE GU; Indian Balanophora. Isolated compounds: 1122, 13099.
- T0859 *Balanophora involucrata* (Balanophoraceae); TONG QIAO SHE GU; Invulcrate Balanophora. Used part: whole herb. TCM Effects: To moisten lung and relieve cough, move *qi* and fortify stomach, clear heat and disinhibit damp, cool blood and stanch bleeding. TCM Indications: Lung heat cough, pain in stomach duct and abdomen, jaundice, swelling pain from hemorrhoids, knocks and falls, hemoptysis, menstrual disorder, flooding and spotting, bleeding due to external injury, dizziness, emission. Isolated compounds: 14249, 22262.
- T0860 *Balanophora japonica* (Balanophoraceae); GE XUN; Japanese Balanophora. Used part: herb. TCM Effects: To clear heat and resolve toxin, arouse liquor. TCM Indications: Wind-heat macular eruption, lung heat cough, blood ejection, flooding, hemorrhoids. Isolated compounds: 1113, 2125, 2126, 2127, 2128, 2129, 2895, 2897, 2898, 2899, 2902, 2903, 2904, 2905, 2908, 2929, 4167, 5406, 5407, 5408, 5410, 5516, 8612, 11481, 21551.
- T0861 *Baliospermum montanum* (Euphorbiaceae); BAN ZI MU; Montane Baliospermum. Isolated compounds: 2130, 14945.
- T0862 *Ballota limbata* (Lamiaceae); Bui; Phut kandu (local names). Isolated compounds: 2131, 2132.
- T0863 *Ballota nigra* (Lamiaceae); HEI BA LUO CAO; Black Bui\*. Isolated compounds: 2133.
- T0864 *Balsamorhiza macrophylla* (Asteraceae); Cut-leaf Balsamroot. Isolated compounds: 5141, 5143, 14406.
- T0865 *Balsamorhiza sagittata* (Asteraceae); Arrowleaf Balsamroot. Isolated compounds: 5141, 5143, 14406.
- T0866 *Baphicacanthus cusia* [Syn. *Strobilanthes cusia*] (Acanthaceae); MA LAN GEN; Common Baphicacanthus Root. Used part: root and rhizome. TCM Effects: To clear heat and resolve toxin, cool blood and disperse swelling. TCM Indications: Warm toxin macular eruption, ardent fever with headache, massive head scourge, erysipelas, epidemic parotitis, viral hepatitis, influenza, pneumonia, swelling of sores, zoster. Isolated compounds: 580, 4419, 4420, 6230, 6231, 11024, 11463, 13098, 13250, 13251, 22059.
- T0867 *Baphicacanthus cusia* [Syn. *Strobilanthes cusia*] (Acanthaceae); MA LAN YE; Common Baphicacanthus Leaf. Used part: stem-leaf. TCM Effects: To clear heat and resolve toxin, cool blood and stanch bleeding. TCM Indications: Warm heat disease, ardent fever with headache, macular eruption, lung heat cough, damp-heat diarrhea dysentery, jaundice, scarlatina, measles papules, swelling pain in throat, mouth sore, epidemic parotitis, lymphadenitis, liver welling abscess, intestinal welling abscess, blood ejection, spontaneous external bleeding, gum hemorrhage, flooding and spotting, sore and boil, snake or insect bites. Isolated compounds: 18287.
- T0868 *Baptisia australis* (Fabaceae); AO DA LI YA YAN DIAN. Isolated compounds: 7883.
- T0869 *Baptisia* spp. (Fabaceae). Isolated compounds: 3004, 7883, 16209.
- T0870 *Barbarea vulgaris* (Brassicaceae); OU ZHOU SHAN JIE; Upland Cress. Isolated compounds: 8599.
- T0871 *Barleria lupulina* (Acanthaceae); HUA YE JIA DU JUAN. Used part: whole herb. TCM Effects: To free channels and network vessels, joint sinews and bones, resolve toxin and disperse swelling. TCM Indications: Painful swelling from knocks and falls, fracture, bleeding due to external injury, swollen welling abscess and sore toxin, poisonous snake bites. Isolated compounds: 330, 509, 510, 511, 11129, 13108, 15134, 19795, 19796.
- T0872 *Barleria strigosa* (Acanthaceae); CAO MAO JIA DU JUAN. Isolated compounds: 4154, 10620.
- T0873 *Barleria fistulosa* (Acanthaceae). Isolated compounds: 22608.
- T0874 *Bartramia pomiformis* (Bartramiaceae); LI SHUO ZHU XIAN. Isolated compounds: 1261.
- T0875 *Basella rubra* (Basellaceae); LUO KUI HUA; Red Vinespinach flower. Used part: flower. TCM Effects: To cool blood and resolve toxin. TCM Indications: Cracked nipple. Isolated compounds: 2157, 2158, 2159, 2160, 2323, 9588, 14910, 20165.
- T0876 *Baseonema acuminatum* (Asclepiadaceae); Mamiaho (in Malagasy language, Madagascar). Isolated compounds: 2286, 2296, 5518, 5547, 8107, 12048, 13965, 14101, 15152, 18359, 22616.
- T0877 *Bauhinia championii* (Fabaceae); LONG XU TENG; Champion Bauhinia. Used part: root or stem. TCM Effects: To dispel wind and eliminate damp, move *qi* and quicken blood. TCM Indications: Wind-damp impediment pain, knocks and falls, pain in stomach duct, hemiplegia, *gan* accumulation, dysentery. Isolated compounds: 9509, 16871, 19929, 21188.
- T0878 *Bauhinia malabarica* (Fabaceae); MA LA BA YANG TI JIA; Malaba Bauhinia\*. Isolated compounds: 5095, 17846, 17847, 18515.
- T0879 *Bauhinia purpurea* (Fabaceae); ZI YANG TI JIA; Purple Bauhinia. Used part: leaf. TCM Effects: To clear heat and resolve toxin. TCM Indications: Sore and boil, burns and scalds, stasis swelling from knocks and falls. Isolated compounds: 18281.
- T0880 *Bauhinia racemosa* (Fabaceae); ZONG ZHUANG HUA YANG TI JIA; Racemose Bauhinia\*. Isolated compounds: 18515.
- T0881 *Bauhinia variegata* (Fabaceae); CAI BAN YANG TI JIA; Variegate Bauhinia\*. Used part: root. TCM Effects: To fortify spleen and eliminate damp, stanch bleeding. TCM Indications: Indigestion, acute gastroenteritis, hepatitis, cough and hemoptysis, pain in joints, knocks and falls. Isolated compounds: 5591, 6263.
- Baussingaultia cordifolia* = *Anredera cordifolia*  
*Baussingaultia gracilis* f. *pseudobaselloides* = *Anredera cordifolia*  
*Baussingaultia gracilis* var. *pseudobaselloides* = *Anredera cordifolia*
- T0882 *Bazzania decrescens* (Fabaceae). Isolated compounds: 10395.
- T0883 *Bazzania japonica* (Lepidoziaceae); RI BEN BIAN TAI; Japanese Flagelliform Liverwort\*. Isolated compounds: 1702, 1705, 6977, 6978, 6979.

- T0884 *Bazzania madagassa* (Lepidoziaceae). Isolated compounds: 559, 5290.
- T0885 *Bazzania trilobata* (Lepidoziaceae); BIAN TAI; Flagelliform Liverwort\*. Isolated compounds: 5797, 21879, 21880, 21881, 21882, 21883, 21884, 21885, 21886.
- T0886 *Beaumontia grandiflora* (Apocynaceae); QING MING HUA; Easter Heraldtrumpet. Used part: root and leaf. TCM Effects: To dispel wind and eliminate damp, quicken blood, relieve pain. TCM Indications: Wind-damp impediment pain, taxation damage in lumbar muscle, knocks and falls, swelling pain from fracture. Isolated compounds: 400, 2187, 2190, 14718, 16031, 22629.
- T0887 *Beauveria bassiana* BAI JIANG JUN. Isolated compounds: 2847, 2855, 5784, 9870, 9872, 9873, 9874, 9875, 9876, 20932.
- T0888 *Beesia calthaeifolia* (Ranunculaceae); TIE PO LUO; Marshmarigold-leaved Beesia. Used part: rhizome or whole herb. TCM Effects: To clear heat, resolve toxin, dispel wind. TCM Indications: Wind-heat common cold, wind-damp bone pain, throat pain, red eyes with gall, sore and boil, poisonous snake bites. Isolated compounds: 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 4465, 9455.
- T0889 *Begonia glabra* (Begoniaceae); GUANG JIE QIU HAI TANG; Glabrate Begonia\*. Isolated compounds: 16498, 20978.
- T0890 *Begonia limprichtii* (Begoniaceae); JI YE QIU HAI TANG; Limpricht Begonia. Used part: whole herb with rhizome. TCM Effects: To cool blood and stanch bleeding, dispel stasis and relieve pain. TCM Indications: Flooding and spotting with vaginal discharge, blood ejection, dysentery, stasis pain from knocks and falls, poisonous snake bite. Isolated compounds: 20378.
- T0891 *Begonia nantoensis* (Begoniaceae); NAN TOU QIU HAI TANG; Nantou Begonia\*. Isolated compounds: 27, 2006, 2210, 3309, 4317, 4320, 4323, 5573, 5574, 5789, 11029, 14473, 15249.
- T0892 *Belamcanda chinensis* (Iridaceae); SHE GAN; Blackberrylily. Used part: rhizome. TCM Effects: To clear heat and resolve toxin, disperse phlegm, disinhibit throat. TCM Indications: Heat toxin and phlegm-fire stasis, swelling pain in throat, cough and asthma. Isolated compounds: 439, 2215, 2216, 2217, 5647, 9826, 11141, 11142, 11154, 11164, 11164, 11466, 13481, 16691, 18682, 19797, 19798, 19799, 20900, 20901, 21129, 21130, 22344.
- T0893 *Bellis perennis* (Asteraceae); CHU JU; English Daisy. Isolated compounds: 22526.
- T0894 *Benincasa hispida* (Cucurbitaceae); DONG GUA PI; Chinese Waxgourd Peel. Used part: exocarp. TCM Effects: To clear heat and disinhibit water, disperse swelling. TCM Indications: Edema, inhibited urination [=dysuria], diarrhea, swelling of sores. Isolated compounds: 11548, 15528, 19901.
- T0895 *Benincasa hispida* (Cucurbitaceae); DONG GUA ZI; Chinese Waxgourd Seed. Used part: seed. TCM Effects: To clear lung and transform phlegm, disperse welling abscess and expel pus, disinhibit damp. TCM Indications: Phlegm-heat cough, pulmonary welling abscess, intestinal welling abscess, white turbidity, vaginal discharge, beriberi, edema, strangury syndrome. Isolated compounds: 3774, 19901, 21662, 22246.
- T0896 *Berberis actinacantha* (Berberidaceae); CU CI XIAO BO; Actino-spiny Barberry. Isolated compounds: 2304.
- T0897 *Berberis amurensis* (Berberidaceae); XIAO BO; Amur Barberry. Used part: root and branchlet. TCM Effects: To clear heat and dry damp, resolve toxin. TCM Indications: Enteritis, dysentery, chronic cholecystitis, acute hepatitis, chronic hepatitis, bacillary dysentery, infection of upper respiratory tract, urinary tract infection, leukopenic complications of carcinoma, innominate toxin swelling, erysipelas, eczema, red eyes, mouth sore. Isolated compounds: 2301, 3934, 11851, 13374, 16439, 16441, 16555.
- T0898 *Berberis baluchistanica* (Berberidaceae); BI LU ZHI XIAO BO; Baluchistan Barberry. Isolated compounds: 4100, 4101, 16537.
- T0899 *Berberis buxifolia* (Berberidaceae); HUANG YANG XIAO BO; Box-leaved Barberry. Isolated compounds: 2938.
- T0900 *Berberis calliobotrys* (Berberidaceae); MEI SUI XIAO BO; Beautiful-raceme Barberry. Isolated compounds: 16537.
- T0901 *Berberis darwinii* (Berberidaceae); DA ER WEN XIAO BO; Darwin Barberry. Isolated compounds: 2304.
- T0902 *Berberis diaphana* (Berberidaceae); XIAN HUANG XIAO BO; Reddrop Barberry. Used part: endoderm root bark and branch bark. TCM Effects: To clear damp heat, resolve heat toxin. TCM Indications: Damp-heat dysentery, jaundice, vaginal discharge, heat toxin swollen welling abscess. Isolated compounds: 2300, 2303, 11851, 16555.
- T0903 *Berberis dubia* (Berberidaceae); ZHI YI XIAO BO; Dubious Barberry. Isolated compounds: 2300, 2303, 11851, 16555.
- T0904 *Berberis floribunda* (Berberidaceae); DUO HUA XIAO BO; Free-flowering Barberry. Isolated compounds: 6835, 16439.
- T0905 *Berberis integerrima* (Berberidaceae); QUAN YUAN YE XIAO BO; Integrifolious Barberry. Isolated compounds: 16439.
- T0906 *Berberis julianae* (Berberidaceae); TU HUANG LIAN; Wintergreen Barberry. Used part: root or whole herb. TCM Effects: To clear heat and disinhibit damp, drain fire and resolve toxin. TCM Indications: Damp-heat diarrhea dysentery, heat strangury, red eyes with gall, gum swelling, swelling pain in throat, epidemic parotitis, erysipelas, eczema, heat toxin sores. Isolated compounds: 2303, 4122, 11851, 16439, 16537.
- T0907 *Berberis kawakamii* (Berberidaceae); TAI WAN XIAO BO; Taiwan Barberry. Used part: root or leaf. TCM Effects: To clear heat and dry damp, drain fire. TCM Indications: Damp-heat diarrhea, dysentery, mouth sore, toxin swelling of sores. Isolated compounds: 13374.
- T0908 *Berberis lambertii* (Berberidaceae); LAN BO TE XIAO BO; Lambert Barberry. Isolated compounds: 16439.
- T0909 *Berberis laurina* (Berberidaceae); YUE GUI XIAO BO; Laurel-like Barberry. Isolated compounds: 2302, 14756.
- T0910 *Berberis oblonga* (Berberidaceae); CHANG YUAN YE XIAO BO; Oblong-leaved Barberry. Isolated compounds: 16439.
- T0911 *Berberis orthobotrys* (Berberidaceae); ZHI ZONG ZHUANG HUA XU XIAO BO; Straight-raceme Barberry. Isolated compounds: 16439, 16537.
- T0912 *Berberis poiretii* (Berberidaceae); XI YE XIAO BO; Poiret Barberry. Used part: root, stem and bark. TCM Effects: To clear heat and dry damp, drain fire and resolve toxin. TCM Indications: Bacillary dysentery, damp-heat dysentery, diarrhea, jaundice, infection of upper respiratory tract, sore pharynx, urinary tract infection, cholecystitis, leukopenic complications of carcinoma, eczema, sores, mouth sore,

- red eyes. Isolated compounds: 11851, 16555.
- T0913 *Berberis potaninii* SHAO CHI XIAO BO; Potanin Barberry. Isolated compounds: 2300, 2303, 11851, 16555.
- T0914 *Berberis* sp. (Berberidaceae). Isolated compounds: 3142, 7821.
- T0915 *Berberis* spp. (Berberidaceae). Isolated compounds: 16439, 16555.
- T0916 *Berberis thunbergii* (Berberidaceae); RI BEN XIAO BO; Japanese Barberry. Used part: root, root cortex, stem-leaf. TCM Effects: To clear heat and dry damp, drain fire and resolve toxin. TCM Indications: Damp-heat diarrhea dysentery, stomach heat pain, red eyes with gall, mouth sore, swelling pain in throat, acute eczema, scalds. Isolated compounds: 2300, 2303, 3934, 11736, 11851, 13374, 16439, 16555.
- T0917 *Berberis tschonoskiana* (Berberidaceae); HUANG XIAO BO; Yellow Barberry. Isolated compounds: 15881, 15885, 16439.
- T0918 *Berberis valdiviana* (Berberidaceae); WA SHI XIAO BO; Valdiv Barberry. Isolated compounds: 2304, 4353, 16537.
- T0919 *Berberis vulgaris* (Berberidaceae); OU ZHOU XIAO BO; European Barberry. Isolated compounds: 2300, 2304, 16439.
- T0920 *Berberis wilsonae* (Berberidaceae); JIN HUA XIAO BO; Wilson Barberry. Used part: root. TCM Effects: To clear heat and dry damp, drain fire and resolve toxin. TCM Indications: Bacillary dysentery, damp-heat diarrhea dysentery, infection of upper respiratory tract, lung heat cough, urinary tract infection, cholecystitis, leukopenic complications of carcinoma, jaundice, red eyes with gall, infant mouth sore, heat toxin swollen welling abscess. Isolated compounds: 2303.
- T0921 *Berberis zycium* (Berberidaceae); GOU QI XIAO BO; Medlar Barberry\*. Isolated compounds: 7327, 18207.
- T0922 *Berchemia polyphylla* var. *leioclada* (Rhamnaceae); GUANG ZHI GOU ER CHA; Smoothbranched Supplejack. Used part: stem vine or root. TCM Effects: To resolve toxin and disperse swelling, stanch bleeding and settle pain, dispel wind and eliminate damp. TCM Indications: Welling abscess and flat abscess with clove sores, cough and hemoptysis, bleeding of digestive tract, knocks and falls, scalds, wind-damp bone pain, wind-fire toothache. Isolated compounds: 19087.
- T0923 *Bergenia crassifolia* (Saxifragaceae); HOU YE YAN BAI CAI; Thicketleaf Bergenia. Used part: whole herb. TCM Effects: To supplement vacuity and stanch bleeding, relieve cough and settle asthma. TCM Indications: Dizziness, cough, asthma, blood ejection, hemoptysis. Isolated compounds: 1618, 2312.
- T0924 *Bergenia purpurascens* (Saxifragaceae); YAN BAI CAI; Purple Bergenia. Used part: whole herb. TCM Effects: To enrich and supplement, check vomiting and stanch bleeding. TCM Indications: Vacuity with dizziness, taxation damage cough, blood ejection, hemoptysis, strangury-turbidity, vaginal discharge, toxin swelling. Isolated compounds: 2312, 17884.
- T0925 *Berlandiera pumila* AI SHENG BO LAN DI. Isolated compounds: 18198.
- T0926 *Berneuxia tibetica* (Diapensiaceae); YAN JIN CAI; Tibet Berneuxine. Used part: whole herb. TCM Effects: To dispel wind and dissipate cold, relieve cough and calm asthma, quicken blood and free network vessels. TCM Indications: Wind-cold common cold, asthma, cough, knocks and falls. Isolated compounds: 2221, 2313, 2314, 2315.
- T0927 *Beta* sp. (Chenopodiaceae). Isolated compounds: 22336.
- T0928 *Beta vulgaris* (Chenopodiaceae); TIAN CAI; Common Beet. Isolated compounds: 2057, 2317, 2318, 2319, 2973, 7768, 8784, 11082, 13439, 16050, 17770, 19459, 20446, 22623, 22624.
- T0929 *Betonica officinalis* (Lamiaceae); YAO SHUI SU; Medicinal Betonica. Isolated compounds: 2325, 11327.
- T0930 *Betula alba* (Betulaceae). Isolated compounds: 2329.
- T0931 *Betula ermanii* (Betulaceae); YUE HUA; Ermans Birch. Used part: bark. TCM Effects: To clear heat and resolve toxin. TCM Indications: Swelling toxin of welling abscess and sore. Isolated compounds: 2330, 12045, 14157.
- T0932 *Betula luminifera* (Betulaceae); LIANG YE HUA PI; Shingleleaf Birch Bark. Used part: bark. TCM Effects: To dispel damp and dissipate cold, disperse stagnation and harmonize center, resolve toxin. TCM Indications: Common cold, wind-damp impediment pain, food accumulation distention and fullness, short voidings of reddish urine, mammary welling abscess, sore toxin, wind papules. Isolated compounds: 2336, 2337, 3318.
- T0933 *Betula platyphylla* (Betulaceae); HONG HUA PI; Japanese White Birch Bark. Used part: bark. TCM Effects: See *Betula platyphylla*. TCM Indications: See *Betula platyphylla*. Isolated compounds: 266, 2326, 2327, 2328, 17547.
- T0935 *Betula platyphylla* var. *japonica* (Betulaceae); HUA MU PI; Asian White Birch Bark. Equivalent plant: *Betula platyphylla* var. *japonica*. Used part: bark. TCM Effects: To clear heat and disinherit damp, relieve cough and dispel phlegm, resolve toxin and disperse swelling. TCM Indications: Pneumonia, dysentery, diarrhea, jaundice, nephritis, urinary tract infection, chronic trachitis, acute tonsillitis, periodontitis, acute mastitis, swollen boil, itchy papules, scalds. Isolated compounds: 1379, 2331, 10967, 16532, 17547.
- T0934 *Betula pubescens* (Betulaceae); MAO ZHI HUA; Pubescent Birch\*. Isolated compounds: 17876, 17884.
- T0936 *Betula* sp. (Betulaceae). Isolated compounds: 9021, 18794, 19174, 22920.
- T0937 *Betula* spp. (Betulaceae). Isolated compounds: 10887, 17876, 17884, 19312.
- T0938 *Bidens bipinnata* (Asteraceae); GUI ZHEN CAO; Beggarticks. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, dispel wind and eliminate damp, quicken blood and disperse swelling. TCM Indications: Swelling pain in throat, dysentery, diarrhea, jaundice, intestinal welling abscess, swelling toxin of clove sore, snake or insect bites, wind-damp impediment pain, knocks and falls. Isolated compounds: 2358, 2362, 9381, 11573, 19122, 21118, 21608, 21609.
- T0939 *Bidens parviflora* (Asteraceae); XIAO HUA GUI ZHEN; Smallflower Beggarticks. Isolated compounds: 2359, 2360, 2361, 2362, 4158, 4159, 5155, 6351, 20447.
- T0940 *Bidens* sp. (Asteraceae). Isolated compounds: 16024.
- T0941 *Bidens tripartita* (Asteraceae); LANG PA CAO; Bur Beggarticks. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, disinherit damp, free menstruation. TCM Indications: Lung heat cough, hemoptysis, swelling pain in throat, red and white dysentery, jaundice, menstrual disorder, amenorrhea, child *gan* accumulation, scrofula, eczema, lichen sore, poisonous snake bite. Isolated compounds: 663, 1476, 11573, 13137, 18317.

- T0942 *Biebersteinia heterostemon* (Geraniaceae); XUN DAO NIU; Heterostemonous Biebersteinia. Used part: fruit. TCM Effects: To clear heat and settle fright, move *qi* and relieve pain. TCM Indications: Warm heat disease with fever, common cold with fever, infant ardent fever convulsion, abdominal distention and pain, hemorrhoids. Isolated compounds: 14184, 22195.
- T0943 *Bifurcaria bifurcata* (Cystoseiraceae); SHUANG CHA ZAO; Brown Alga *Bifurcaria bifurcata*. Isolated compounds: 4920, 7086, 10142, 10143, 10144, 10145, 10146, 10758, 16736.  
*Biota orientalis* = *Thuja orientalis*
- T0944 *Biota orientalis* [Syn. *Thuja orientalis*; *Platyclusus orientalis*] (Cupressaceae); BAI ZI REN; Chinese Arborvitae Kernel\*. Used part: kernel. TCM Effects: To nourish heart and quiet spirit, constrain sweat, moisten intestines and free stool. TCM Indications: Fright palpitation and fearful throbbing, sleepless and amnesia, night sweating, intestinal dry and constipation. Isolated compounds: 2488, 2489, 11597, 14070, 17422, 22039.
- T0945 *Bischofia javanica* [Syn. *Bischofia trifoliata*] (Euphorbiaceae); QIU FENG MU; Javan Bishopwood. Used part: root, bark. TCM Effects: To dispel wind and eliminate damp, transform stasis and disperse accumulation. TCM Indications: Wind-damp bone pain (root cortex branchlet-leaf), depression of *qi* and blood, abscess, sore (leaf), red and white dysentery (root). Isolated compounds: 1113, 6918, 6919, 7950, 7952, 14158.
- T0946 *Bituminaria morisiana* (Fabaceae). Isolated compounds: 2365, 2495, 4190, 4604, 5851, 5973, 7295, 10047, 17830.
- T0947 *Bixa orellana* (Bixaceae); HONG MU; Anatto tree. Used part: root cortex, leaf, sarcocarp and seed. TCM Effects: To abate fever, interrupt malaria, resolve toxin. TCM Indications: Fever, malaria, sore pharynx, jaundice, dysentery, erysipelas, poisonous snake bite, sores. Isolated compounds: 2496, 8317, 8318, 8319, 15720.
- T0948 *Blainvillea acmella* [Syn. *Verbesina acmella*; *Eclipta latifolia*; *Blainvillea latifolia*] (Asteraceae); YU LIN CAI; Broadleaf *Blainvillea*\*. Used part: whole herb. TCM Effects: To course wind and clear heat, relieve cough. TCM Indications: Common cold with fever, lung vacuity consumption cough, hemoptysis, sprain and contusion. Isolated compounds: 19046.
- T0949 *Blasia pusilla* (Blasiaceae); HU BAO TAI; *Blasia*\*. Isolated compounds: 18225.
- T0950 *Blatta orientalis* (Blattidae); ZHANG LANG; Cockroach. Used part: body. TCM Effects: To dissipate stasis, transform accumulation, resolve toxin. TCM Indications: Child *gan* accumulation, concretion conglomeration accumulation and gathering, throat impediment, nipple moth, swelling toxin of welling abscess and sore, snake or insect bites. Isolated compounds: 7816.
- T0951 *Blechnum minus* (Blechnaceae); XIAO WU MAO JUE; Minus Hard-fern\*. Isolated compounds: 6678.
- T0952 *Blechnum orientale* (Blechnaceae); WU MAO JUE; Oriental *Blechnum* Frond. Used part: rhizome. TCM Effects: To clear heat and resolve toxin, quicken blood and stanch bleeding, expel worms. TCM Indications: Common cold, headache, parotitis, swollen welling abscess, knocks and falls, nosebleed(epistaxis), blood ejection, flooding, vaginal discharge, intestinal parasitic disease. Isolated compounds: 2596, 3551.
- T0953 *Blepharostoma trichophyllum* (Blepharostomataceae); JIE MAO TAI; *Blepharostoma*\*. Isolated compounds: 2503, 5943, 12405, 12406, 12407, 12408.
- T0954 *Bletilla formosana* (Orchidaceae); LAN YU BAI JI; Taiwan *Bletilla*\*. Isolated compounds: 1476, 2456, 2460, 2461, 2509, 5763, 5771, 8237, 9837, 9838, 9845, 9846, 9848, 11648, 12020, 12062, 13912, 13980, 17968, 21690.
- T0955 *Bletilla striata* (Orchidaceae); BAI JI; Common *Bletilla*. Used part: rhizome. TCM Effects: To promote astringency and stanch bleeding, disperse swelling and engender flesh. TCM Indications: Hemoptysis, blood ejection, spontaneous external bleeding, hematochezia, bleeding due to external injury, swelling toxin of welling abscess and sore, burns and scalds, cracking of hands and feet, splitting of anus. Isolated compounds: 2165, 2457, 2460, 2461, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 9847, 9848, 10176, 14154, 21900, 21910, 21920.
- T0956 *Blighia sapida* (Sapindaceae); XI FEI LI ZHI GUO; Akee. Isolated compounds: 8776, 10898.
- T0957 *Blumea balsamifera* (Asteraceae); AI NA XIANG; Balsamiferous *Blumea*. Used part: Branchlet-leaf. TCM Effects: To dispel wind and eliminate damp, warm center and check diarrhea, quicken blood and resolve toxin. TCM Indications: Wind-cold common cold, head wind headache, wind-damp impediment pain, cold-damp diarrhea and dysentery, taeniasis, poisonous snake bite, painful wound from knocks and falls, lichen sore. Isolated compounds: 2518, 2519, 2520, 2521, 2550, 2555, 5763, 17968, 22778.
- T0958 *Blumea glomerata* (Asteraceae); TUAN JI AI NA XIANG; Glomerate *Blumea*\*. Isolated compounds: 2021, 4283, 6338, 9406, 9509, 10595, 14417, 14737, 15635, 16873, 19174.
- T0959 *Blumea lacera* (Asteraceae); HONG TOU CAO; Malay *Blumea*. Used part: aerial parts. TCM Effects: To clear heat and drain fire, resolve toxin and disperse swelling. TCM Indications: Lung heat cough, swelling pain in throat, mouth and tongue sores, stomach fire toothache, epidemic parotitis, swelling toxin of welling abscess and sore. Isolated compounds: 3208, 3987, 21622.
- T0960 *Bocconia frutescens* (Papaveraceae); GUAN ZHUANG MEI YING SU. Isolated compounds: 16628.
- T0961 *Bocconia* spp. (Papaveraceae). Isolated compounds: 3498.
- T0962 *Boehmeria platanifolia* [Syn. *Boehmeria tricuspis*] (Urticaceae); CHI MA; Tricuspidate Falsenettle. Used part: root or tender stem-leaf. TCM Effects: To promote astringency and stanch bleeding, clear heat and resolve toxin. TCM Indications: Hemoptysis, spontaneous external bleeding, hematochezia, hematuria, flooding and spotting, knocks and falls, innominate toxin swelling, sores. Isolated compounds: 2039, 2527, 2530, 6776.
- T0963 *Boehmeria siamensis* (Urticaceae); SHU XU ZHU MA; Siam Falsenettle. Used part: whole herb. TCM Effects: To clear heat and remove damp, dispel wind and relieve itch, quicken blood and regulate menstruation. TCM Indications: Abdominal pain, diarrhea, wind-damp impediment pain, eczema, itchy skin, menstrual block, lump glomus. Isolated compounds: 2528, 2529.
- T0964 *Boenninghausenia albiflora* (Rutaceae); YAN JIAO CAO; White

- Chinaure. Used part: whole herb. TCM Effects: To clear heat and cool blood, soothe sinews and quicken blood, eliminate inflammation. TCM Indications: Common cold, pharyngolaryngitis, hepatitis, hemoptysis, spontaneous external bleeding, lumbago, knocks and falls, subcutaneous static blood. Isolated compounds: 858, 859, 860, 1189, 2309, 2342, 2531, 2780, 4919, 5445, 6300, 6312, 9420, 10194, 10196, 11865, 11978, 13152, 13607, 14845, 15104, 15146, 15646, 19085, 21906, 22781.
- T0965 *Boenninghausenia albiflora* var. *japonica* (Rutaceae); RI BEN BAI SONG FENG CAO; Japanese White Chinaure\*. Isolated compounds: 5445, 10194, 10196.
- T0966 *Boenninghausenia japonica* (Rutaceae); RI BEN CHOU JIE CAO; Japanese Chinaure\*. Isolated compounds: 13607, 19085.
- T0967 *Boenninghausenia sessilicarpa* (Rutaceae); SHI JIAO CAO; Sessile-fruit Chinaure. Used part: whole herb. TCM Effects: To course wind and resolve exterior, clear heat and resolve toxin, move *qi* and quicken blood. TCM Indications: Common cold, tonsillitis, bronchitis, pneumonia, nephropylitis, stomachache and abdominal distention, thromboangiitis obliterans, lumbago, knocks and falls. Isolated compounds: 2342, 2531, 6300, 11865, 19804.
- T0968 *Boenninghausenia* sp. (Rutaceae). Isolated compounds: 3457.
- T0969 *Boerhavia diffusa* (Nyctaginaceae); HUANG XI XIN; Diffuse Boerhavia. Used part: root. TCM Effects: To quicken blood and dissipate stasis, strengthen sinews and bones, regulate menstruation, disperse *gan*. TCM Indications: Knocks and falls, pain in sinews and bones, menstrual disorder [= menoxenia], child *gan* accumulation. Isolated compounds: 2532, 2533, 2534, 2535, 2536, 2537.
- T0970 *Boesenbergia pandurata* (Zingiberaceae); QIN ZHUANG AO CHUN JIANG; Lyrate Boesenbergia\*. Isolated compounds: 16867.
- T0971 *Bolbostemma paniculatum* (Cucurbitaceae); JIA BEI MU; Paniculate Bolbostemma. Used part: bulb. TCM Effects: To clear heat and resolve phlegm, dissipate binds and draw out toxin. TCM Indications: Mammary welling abscess, scrofula with phlegm node, toxin swelling of sores, wart, snake or insect bites. Isolated compounds: 17578, 17579, 17580, 17581, 17582, 20358, 20359, 21089, 21698, 22072, 22073, 22074, 22075, 22076.  
*Boletus cinnabarinus* = *Trametes cinnabarina*  
*Boletus fomentarius* = *Fomes fomentarius*
- T0972 *Bolusanthus speciosus* (Fabaceae); Tree Wisteria. Isolated compounds: 2539, 3004, 5235, 7883, 8136, 8278, 11434, 13107, 13637, 16209, 16545, 22667.
- T0973 *Bombax malabaricum* [Syn. *Gossampinus malabarica*] (Bombacaceae); MU MIAN HUA; Common Bombax Flower. Used part: flower. TCM Effects: To clear heat, disinhibit damp, resolve toxin, stanch bleeding. TCM Indications: Diarrhea, dysentery, hemoptysis, blood ejection, flooding, incised wound and bleeding, sore toxin, eczema. Isolated compounds: 7441, 8078, 9869, 11453, 13481, 15069.
- T0974 *Bombyx batryticatus* (Bombycidae); JIANG CAN. Isolated compounds: 13995.
- T0975 *Bombyx mori* (Bombycidae); BAI JIANG CAN; Silkworm Larva. Used part: dried larva. TCM Effects: To dispel wind and resolve tetany, transform phlegm and dissipate binds, resolve toxin and disinhibit throat. TCM Indications: Epilepsy, fright wind and convulsion, swelling pain in throat, acute infection of upper respiratory tract, epidemic parotitis, diabetes mellitus, temporomandibular lymphnoiditis, facial paralysis, itchy skin. Isolated compounds: 2161, 2162, 2188, 2189, 3585, 6538, 6678, 6723, 6724, 7250, 13098, 15952, 16559, 20279, 20932.
- T0976 *Bombyx mori* (Bombycidae); CAN JIAN; Silk Cocoon. Used part: silk covering spun by larva. TCM Effects: To stanch bleeding, allay thirst, resolve toxin and cure sores. TCM Indications: Hematochezia, hematuria, flooding, diabetes mellitus, stomach reflux, *gan* disease, swollen welling abscess. Isolated compounds: 13098, 18341, 18405, 22060.
- T0977 *Bombyx mori* (Bombycidae); YUAN CAN E; Silkworm King. Used part: silkworm king. TCM Effects: To supplement kidney and invigorate *yang*, rough essence, stanch bleeding, resolve toxin and disperse swelling. TCM Indications: Impotence and emission, white turbidity, blood strangury, incised wound and bleeding, swelling pain in throat, mouth and tongue sores, swelling toxin of welling abscess and sore, frostbite, snake bite. Isolated compounds: 6678, 15528.
- T0978 *Bombyx mori* (Bombycidae); YUAN CAN SHA; Silkworm Feculae. Used part: silkworm dried feces. TCM Effects: To dispel wind and eliminate damp, harmonize stomach and transform turbidity, quicken blood and free menstruation. TCM Indications: Wind-damp impediment pain, paralysis, wind papule itching, vomiting and diarrhea with cramp, amenorrhea, flooding and spotting. Isolated compounds: 7250, 11031, 13098, 17140, 17141, 17265, 19987.
- T0979 *Bombyx mori* (Bombycidae); YUAN CAN ZI; Silkworm Egg. Used part: silkworm egg. TCM Effects: To dispel wind and clear heat, check tetany. TCM Indications: Heat blood strangury, difficult delivery, tetanus. Isolated compounds: 3893, 3894, 6632, 7814, 7816, 10294, 13824, 21504, 21505, 21506, 22251, 22769.
- T0980 *Bonamia spectabilis* (Convolvulaceae). Isolated compounds: 2541, 2542, 2543, 2544, 15344, 15345.
- T0981 *Borago officinalis* (Boraginaceae); LIU LI JU; Common Borage. Isolated compounds: 5283, 13235, 21319.
- T0982 *Bos taurus domesticus* (Bovidae); HUANG MING JIAO; Oxhide Gelatin. Used part: gelatin made from hide of ox. TCM Effects: To enrich *yin* and moisten dryness, nourish blood and stanch bleeding, quicken blood and disperse swelling, resolve toxin. TCM Indications: Vacuity taxation lung wilting, cough and hemoptysis, blood ejection, spontaneous external bleeding, flooding and spotting, diarrhea with hematochezia, knocks and falls, sore toxin of welling abscess and flat abscess, scalds. Isolated compounds: 10660.
- T0983 *Bos taurus domesticus* (Bovidae); XIA TIAN GAO; Concentrated Beef Extract. Used part: beef extract. TCM Effects: To fortify spleen and stomach, supplement *qi* and blood, moisten dryness and transform phlegm. TCM Indications: Vacuity taxation with marked emaciation, wind stroke with hemiplegia, phlegm-rheum and glomus accumulation. Isolated compounds: 1350, 3205, 3205, 4221, 10913, 22246, 22251, 22756.
- T0984 *Bos taurus domesticus*; *Bubalus bubalis* (Bovidae); NIU DAN; Ox Gall. Used part: gall. TCM Effects: To clear liver and brighten eyes, disinhibit gallbladder and free intestines, resolve toxin and disperse swelling. TCM Indications: Wind-heat red eye, jaundice, cough with

- profuse phlegm, infant fright wind, swollen welling abscess, constipation, hemorrhoids. Isolated compounds: 8823, 22246.
- T0985 *Bos taurus domesticus*; *Bubalus bubalis* (Bovidae); NIU FEI; Ox Lung. Used part: lung. TCM Effects: To boost lung, relieve cough and asthma. TCM Indications: Lung vacuity, cough and counterflow. Isolated compounds: 14472.
- T0986 *Bos taurus domesticus*; *Bubalus bubalis* (Bovidae); NIU GAN; Ox Liver. Used part: liver. TCM Effects: To nourish blood, supplement liver, brighten eyes. TCM Indications: Vacuity taxation with marked emaciation, anemia with yellow complexion, clear-eye blindness, night blindness, fright epilepsy. Isolated compounds: 6721.
- T0987 *Bos taurus domesticus*; *Bubalus bubalis* (Bovidae); NIU HUANG; Cow-bezoar (Ox-gallstone). Used part: gallstone. TCM Effects: To clear heart and cool liver, clear heat and resolve toxin, lower blood pressure. TCM Indications: Ardent fever, coma, fright epilepsy, convulsion, febrile diseases clouded spirit, wind stroke with orifice block, acute infant fright wind, swelling pain in throat, mouth and tongue sores, welling abscess and flat abscess with clove sore. Isolated compounds: 2374, 2375, 3511, 3585, 3588, 5161, 7250, 8823, 12923, 20732.
- T0988 *Bos taurus domesticus*; *Bubalus bubalis* (Bovidae); NIU NAO; Ox Brain. Used part: brain. TCM Effects: To supplement brain and dispel wind, allay thirst, disperse glomus. TCM Indications: Head wind dizziness, brain leak, diabetes mellitus, glomus *qi*. Isolated compounds: 8753, 8770, 8771, 8773, 8774, 8775, 8781, 8783, 16478, 22353.
- T0989 *Bos taurus domesticus*; *Bubalus bubalis* (Bovidae); NIU RU; Cow Milk. Used part: milk. TCM Effects: To supplement vacuity detriment, boost lung and stomach, nourish blood, engender liquid and moisten dryness, resolve toxin. TCM Indications: Vacuity taxation detriment, stomach reflux and dysphagia-occlusion, diabetes mellitus, anemia and constipation, *qi* vacuity and dysentery, jaundice. Isolated compounds: 7853, 11083, 11084, 11085, 15528, 16214, 18261.
- T0990 *Bos taurus domesticus*; *Bubalus bubalis* (Bovidae); NIU SHEN; Ox Kidney. Used part: kidney. TCM Effects: To supplement kidney and boost essence, strengthen lumbus and knees, relieve pain due to impediment. TCM Indications: Vacuity taxation with kidney depletion, impotence, limp aching lumbus and knees, damp impediment pain. Isolated compounds: 653, 880, 4096, 4097, 4887, 5163, 9937, 9986, 15708.
- T0991 *Bos taurus domesticus*; *Bubalus bubalis* (Bovidae); NIU XUE; Ox Blood. Used part: blood. TCM Effects: To fortify spleen and supplement center, nourish blood and quicken blood. TCM Indications: Spleen vacuity and marked emaciation, amenorrhea, hematochezia, blood dysentery, incised wound. Isolated compounds: 4221, 4223, 9338, 17984, 22246, 22251.
- T0992 *Bos taurus domesticus*; *Bubalus bubalis* (Bovidae); NIU YE; Ox Thyroid. Used part: thyroid. TCM Effects: To disinhibit throat and disperse goiter. TCM Indications: Throat impediment, *qi* goiter. Isolated compounds: 6186, 6187, 21175, 21867, 21868.
- T0993 *Boschniakia rossica* (Orobanchaceae); CAO CONG RONG; Russian Boschniakia. Used part: whole herb. TCM Effects: To supplement kidney and invigorate *yang*, moisten intestines and free stool, stanch bleeding. TCM Indications: Kidney vacuity impotence, emission, cold pain in lumbus and knees, dribbling urination, hematuria, infertility due to uterus cold, vaginal discharge, flooding and spotting, intestinal dry and constipation. Isolated compounds: 2565, 2566, 4145, 4680, 10470, 18927, 18928, 18929, 21688.
- T0994 *Boswellia carterii* (Anacardiaceae); RU XIANG; Olibanum. Used part: balsam. TCM Effects: To move *qi* and quicken blood, free menstruation and relieve pain, disperse swelling and engender flesh. TCM Indications: Pain in heart and abdomen, wind-damp impediment pain, amenorrhea, dysmenorrhea, stasis pain from knocks and falls, swelling toxin of welling abscess and flat abscess, intestinal welling abscess, enduring sores. Isolated compounds: 440, 444, 2567, 2568, 6482, 10341, 12197, 12843, 13091, 13772, 14112, 15220, 15706, 17054, 21409, 21970.
- T0995 *Boswellia ovalifoliolata* (Anacardiaceae); TUO YUAN YE RU XIANG SHU; Ellipticleaf Olibanum\*. Isolated compounds: 99, 16275, 16276.
- T0996 *Botryococcus braunii* (Botryococcaceae); CONG LI ZAO. Isolated compounds: 13201, 13202, 13203, 13204, 13205, 13206, 13207, 13208, 13209, 13210, 13211.
- T0997 *Botryodiplodia theobromae* tropical fungus *Botryodiplodia theobromae*. Isolated compounds: 10269.
- T0998 *Bouchardatia neurococca* (Rutaceae); Union Nut. Isolated compounds: 2569, 6112, 11769, 22381.
- T0999 *Bougainvillea glabra* (Nyctaginaceae); GUANG YE ZI HUA; Naked Leafyflower. Used part: flower. TCM Effects: To quicken blood and regulate menstruation, transform damp and check discharge. TCM Indications: Blood stasis and menstrual block, menstrual disorder, red and white vaginal discharge. Isolated compounds: 2321, 11251.
- T1000 *Bowdichia* spp. Isolated compounds: 3004.
- T1001 *Brachystemma calycinum* (Caryophyllaceae); DUAN BAN HUA; Shortpetalflower. Used part: root or whole herb. TCM Effects: To quicken blood and transform stasis, free strangury and transform turbid, resolve toxin and disperse swelling. TCM Indications: Blood stasis and dysmenorrhea, menstrual block, aberratio mensium, concretion and conglomeration with mass, heat strangury, blood strangury, white turbidity, leukorrhea, impediment pain into network vessels, hypertonicity of sinews and vessels, knocks and falls, swelling toxin of welling abscess and sore, nipple moth, diphtheria. Isolated compounds: 2578, 2579, 2580, 2581, 2582, 2583.
- T1002 *Brackenridgea zanguebarica* (Ochnaceae); SANG DAO BU SHI MU. Isolated compounds: 2985, 4045, 5551, 15916.
- T1003 *Brandisia hancei* (Scrophulariaceae); LAI JIANG TENG; Hance Brandisia. Used part: whole herb. TCM Effects: To dispel wind and disinhibit damp, clear heat and resolve toxin. TCM Indications: Wind-damp pain in sinew and bone, edema, diarrhea, jaundice, taxation damage and blood ejection, medullitis, periostitis, sore and boil. Isolated compounds: 6073.
- T1004 *Brasenia schreberi* (Nymphaeaceae); CHUN; Common Watershield. Used part: stem-leaf. TCM Effects: To disinhibit water and disperse edema, clear heat and resolve toxin. TCM Indications: Damp-heat dysentery, jaundice, edema, inhibited urination, heat toxin swollen welling abscess. Isolated compounds: 8078, 9568, 22556.
- Brassica alba* = *Sinapis alba*

- T1005 *Brassica campestris* [Syn. *Brassica campestris* var. *oleifera*] (Brassicaceae); YUN TAI ZI; Bird Rape. Used part: seed. TCM Effects: To quicken blood and transform stasis, dissipate binds and disperse swelling, moisten intestines and free stool. TCM Indications: Postpartum persistent flow of lochia, blood stasis and abdominal pain, dysmenorrhea, intestinal wind bleeding, blood dysentery, pain in joints due to rheumatism, swollen welling abscess, erysipelas, mammary welling abscess, constipation. Isolated compounds: 2596, 3040, 3585, 7291, 13861.
- T1006 *Brassica chinensis* (Brassicaceae); CHEN DONG CAI LU ZHI; Mature Winter-vegetable Spiced Juice. Used part: juice from whole herb. TCM Effects: To eliminate vexation and heat, engender liquid and allay thirst, clear lung and transform phlegm, free intestines and stomach. TCM Indications: Phlegm fire cough, swelling pain in throat. Isolated compounds: 4031.  
*Brassica hirta* = *Sinapis alba*
- T1007 *Brassica juncea* (Brassicaceae); JIE CAI; India Mustard. Used part: tender stem and leaf. TCM Effects: To disinhibit lung and transform phlegm, disperse swelling and dissipate binds. TCM Indications: Cold rheum cough, phlegm stagnation and *qi* counterflow, fullness and oppression in chest and diaphragm, sand strangury, stone strangury, gum swelling erosion, mammary welling abscess, swelling hemorrhoids, frostbite (kibe), lacquer sore. Isolated compounds: 2597, 8599, 9863, 10598, 17117.
- T1008 *Brassica juncea* (Brassicaceae); JIE ZI; India Mustard Seed. Used part: seed. TCM Effects: To warm center and dissipate cold, break phlegm and disinhibit orifices, free network vessels and disperse swelling. TCM Indications: Vomiting with stomach cold, pain in heart and abdomen, lung cold cough, impediment pain, throat impediment, flowing phlegm, knocks and falls. Isolated compounds: 949, 2294, 2782, 2798, 2799, 8599, 10232, 11625, 14539, 14762, 16888, 17117, 17125, 17903, 19912, 19917, 19935.
- T1009 *Brassica napus* (Brassicaceae); OW ZHOU YOU CAI; Rape. Isolated compounds: 2596, 2598, 2905, 3040, 6508, 6509, 6510, 8589, 12092, 12094, 12095, 12096, 13861, 15400, 18411, 22036, 22037.
- T1010 *Brassica napus* var. *napobrassica* (Brassicaceae); WU JING GAN LAN; Swede Seed. Isolated compounds: 8591, 8595, 8596, 14336.
- T1011 *Brassica napus* var. *napus* (Brassicaceae); YOU CAI ZI; Rapeseed\*. Isolated compounds: 17903.
- T1012 *Brassica nigra* (Brassicaceae); HEI JIE; Black Mustard. Isolated compounds: 8599.
- T1013 *Brassica oleracea* (Brassicaceae); YE JIE; Wild Cabbage. Isolated compounds: 19912, 21541.
- T1014 *Brassica oleracea* var. *botrytis* (Brassicaceae); HUA YE CAI; Cauliflower. Isolated compounds: 8591, 8598.
- T1015 *Brassica oleracea* var. *botrytis* subvar. *cauliflora* (Brassicaceae); JING HUA HUA YE CAI; Cauliflory Brassica\*. Isolated compounds: 15400.
- T1016 *Brassica oleracea* var. *botrytis* subvar. *cymosa* (Brassicaceae); JU SAN HUA YE CAI; Cymose Brassica\*. Isolated compounds: 8752, 15400.
- T1017 *Brassica oleracea* var. *capitata* (Brassicaceae); GAN LAN; Cabbage. Used part: leaf. TCM Effects: To clear heat and disinhibit damp, dissipate binds and relieve pain, boost kidney and supplement vacuity. TCM Indications: Damp-heat jaundice, pain from ulcer in digestive tract, stiffness in joints, vacuity detriment. Isolated compounds: 949, 2782, 3551, 8589, 8595, 8598, 8752, 9614, 11026, 14728, 14730, 17903, 22517, 22564.
- T1018 *Brassica oleracea* var. *gemmifera* (Brassicaceae); BAO ZI GAN LAN; Brussels Sprout. Isolated compounds: 8589, 8595, 8598, 8752, 15400.
- T1019 *Brassica oleracea* var. *gongyolodes* (Brassicaceae); PIE LAN; Kohl-rabi. Isolated compounds: 8598, 15400.
- T1020 *Brassica oleracea* var. *sabauda* (Brassicaceae); YU YI GAN LAN; Savoy Cabbage. Isolated compounds: 8598.
- T1021 *Brassica rapa* (Brassicaceae); WU QING; Turnip. Used part: root or leaf. TCM Effects: To disperse food and precipitate *qi*, resolve toxin and disperse swelling. TCM Indications: Indigestion of overnight food, cold pain in heart and abdomen, cough, swollen welling abscess and toxin of clove. Isolated compounds: 2596, 11655.
- T1022 *Brassica rutabaga* (Brassicaceae); RUI DIAN GAN LAN; Swedish Turnip. Isolated compounds: 13212.
- T1023 *Bredia tuberculata* (Melastomataceae); HONG MAO YE HAI TANG; Tuberculate Bredia. Used part: whole herb. TCM Effects: To dispel wind and eliminate damp, quicken blood and regulate menstruation. Isolated compounds: 15641, 15642.
- T1024 *Brenania brieyi*. Isolated compounds: 8065.
- T1025 *Bretschneidera sinensis* (Bretschneideraceae); BO LE SHU; Chinese Bretschneidera. Used part: bark. TCM Effects: To quicken blood and dispel wind. TCM Indications: Pain in sinews and bones. Isolated compounds: 17399.
- T1026 *Breynia officinalis* (Euphorbiaceae); YAO YONG HEI MIAN SHEN YE; Medicinal Breynia Leaf\*. Isolated compounds: 1618, 2329, 2607, 2608, 2609, 2610, 2611, 2612, 7695, 11682, 18877, 22126.
- T1027 *Brickellia arguta* var. *odontolepis* JIAN CHI BU LI KE ER CAO. Isolated compounds: 16726, 16729.
- T1028 *Bridelia retusa* (Euphorbiaceae); SI LI LAN KA TU MI SHU; Sri-Lankan Bridelia. Isolated compounds: 6390, 6391, 6392, 6393, 11322, 19777.
- T1029 *Brodiaea californica* (Liliaceae); Triplet Lily. Isolated compounds: 4295, 4300.
- T1030 *Brosimum acutifolium* (Moraceae); JIAN YE BAO SHI MU. Isolated compounds: 2626, 2627.
- T1031 *Broussonetia kazinoki* (Moraceae); XIAO GOU SHU; Kazinoki Papermulberry. Used part: whole herb or root, root cortex. TCM Effects: To dispel wind and eliminate damp, dissipate stasis and disperse swelling. TCM Indications: Wind-damp impediment pain, diarrhea, dysentery, jaundice, edema, welling abscess and boil, knocks and falls. Isolated compounds: 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2652, 2653, 2654, 2655, 2656, 12188, 12189.
- T1032 *Broussonetia papyrifera* (Moraceae); GOU SHU; Common Papermulberry. Used part: branch. TCM Effects: To dispel wind, brighten eyes, disinhibit urine. TCM Indications: Wind papules, red eyes with gall, inhibited urination [=dysuria]. Isolated compounds: 51, 846, 1397, 1402, 1764, 2172, 2629, 2630, 2635, 2650, 2651, 4108, 5086, 5746, 5894, 6001, 6088, 6102, 6103, 7485, 8141, 8262, 8262,

- 10445, 10506, 11490, 12681, 13571, 14956, 14961, 14962, 14964, 15279, 18643, 20326, 21086, 21116, 21117, 21128, 21151.
- T1033 *Broussonetia papyrifera* (Simaroubaceae); GOU SHU BAI PI; Common Papermulberry Bast\*. Used part: endoderm bark. TCM Effects: To disinhibit water, stanch bleeding. TCM Indications: Inhibited urination [=dysuria], edema distention fullness, hematochezia, flooding and spotting [= metrorrhagia and metrostaxis]. Isolated compounds: 2629, 2630, 2631, 2632, 12186, 12187.
- T1034 *Broussonetia papyrifera* (Simaroubaceae); GOU SHU GEN; Common Papermulberry Root\*. Used part: tender root or root cortex. TCM Effects: To cool blood and dissipate stasis, clear heat and disinhibit damp. TCM Indications: Cough with blood ejection, flooding and spotting [= metrorrhagia and metrostaxis], edema, knocks and falls. Isolated compounds: 2633, 2634.
- T1035 *Broussonetia papyrifera* (Moraceae); GOU SHU GUO; Common Papermulberry Fruit. Used part: fruit. TCM Effects: To enrich *yin* and supplement kidney, clear liver and brighten eyes, fortify spleen and disinhibit water. TCM Indications: Limp aching lumbus and knees due to kidney vacuity, impotence, dim vision, eye screen, edema, scant urine. Isolated compounds: 2628, 2647, 2648, 2649, 17403.
- T1036 *Brucea amarissima* (Simaroubaceae); KU YA DAN ZI; Bitter Brucea\*. Isolated compounds: 2664, 2665, 2667, 11860, 11861, 11862, 11863.
- T1037 *Brucea antidysenterica* (Simaroubaceae); KANG LI YA DAN ZI; Antidysenteric Brucea\*. Isolated compounds: 2660, 2661, 2662, 22875.
- T1038 *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*] (Simaroubaceae); YA DAN ZI; Java Brucea. Used part: fruit. TCM Effects: To clear heat and dry damp, resolve toxin and kill worms. TCM Indications: Malaria, amebic dysentery, dysentery with pus and blood, tenesmus, corn and common wart. Isolated compounds: 748, 1424, 1441, 2616, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2684, 3829, 4680, 6193, 7398, 7824, 7931, 9486, 11427, 11852, 11853, 11854, 11855, 11856, 11857, 11858, 11859, 12891, 13143, 13286, 16066, 19692, 19693, 20280, 22857, 22858, 22859, 22860, 22861, 22862, 22863, 22864, 22865, 22866, 22867, 22868, 22869, 22870, 22871, 22872, 22873, 22874, 22875.
- T1039 *Bruguiera gymnorrhiza* (Rhizophoraceae); MU LAN<sup>(3)</sup>; Common Bruguiera. Used part: leaf. TCM Effects: To resolve toxin and interrupt malaria. TCM Indications: Malaria. Isolated compounds: 2680, 2681, 2682, 3548, 5929, 5933, 5937, 9864, 10277, 10281, 10559, 10625, 12171, 12177, 12180, 14304, 14305, 21757.
- T1040 *Bruguiera parviflora* (Rhizophoraceae); XIAO HUA MU LAN GUO; Smallflower Bruguiera Fruit\*. Isolated compounds: 2910, 2911, 4168, 6451, 13097, 13098.
- T1041 *Brunsvigia radulosa* (Amaryllidaceae); BU LANG WEI JI. Isolated compounds: 472, 1276, 1532.
- T1042 *Bryonia alba* (Cucurbitaceae); BAI XIE GEN; White Bryony. Isolated compounds: 4317, 4319, 4320, 4323, 4324, 4327.
- T1043 *Bryophyllum pinnatum* (Crassulaceae); LUO DI SHENG GEN; Air-plant. Used part: root or whole herb. TCM Effects: To cool blood and stanch bleeding, clear heat and resolve toxin. TCM Indications: Blood ejection, bleeding due to external injury, knocks and falls, swollen welling abscess and clove sores, mammary welling abscess, mammary rock, erysipelas, ulcer, scalds, stomachache, pain in joints, swelling pain in throat, lung heat cough. Isolated compounds: 1110, 1113, 1935, 2688, 2689, 2690, 2691, 2692, 2693, 16028, 18408, 22223.
- T1044 *Bryum argenteum* (Bryaceae); ZHEN XIAN. Used part: plant body. TCM Effects: To clear heat and resolve toxin, stanch bleeding. TCM Indications: Bacillary dysentery, jaundice, nasosinusitis, swelling toxin of welling abscess and sore, burns and scalds, spontaneous external bleeding, coughing of blood. Isolated compounds: 11705.
- T1045 *Bubalus bubalis* (Bovidae); SHUI NIU JIAO; Buffalo Horn. Used part: horn. TCM Effects: To clear heat, resolve toxin, cool blood, settle fright. TCM Indications: Headache due to febrile disease, ardent fever with clouded spirit, macular eruption and papules, blood ejection, spontaneous external bleeding, stasis heat yellowing, infant fright wind, swelling pain in throat, mouth and tongue sores. Isolated compounds: 9067.
- T1046 *Buddleja davidii* (Loganiaceae); DA YE ZUI YU CAO; Orangeeye Butterflybush. Used part: branchlet-leaf, root cortex. TCM Effects: To dispel wind and dissipate cold, quicken blood and relieve pain, resolve toxin and kill worms. TCM Indications: Wind-cold cough, impediment pain, knocks and falls, swollen welling abscess, sore and boil, pudendal itch of women, leprosy, foot lichen. Isolated compounds: 2125, 2697, 3245, 11529, 11885, 12725, 17509.
- T1047 *Buddleja globosa* (Loganiaceae); QIU HUA ZUI YU CAO; Orange-ball-tree. Isolated compounds: 580, 14222.
- T1048 *Buddleja officinalis* (Loganiaceae); MI MENG HUA; Pale Butterflybush. Used part: flower. TCM Effects: To clear heat and nourish liver, eliminate screen and brighten eyes. TCM Indications: Red eyes with gall, delacrimation and photophobia, liver vacuity dim vision, dim vision, malaria. Isolated compounds: 56, 61, 580, 1476, 13137, 13887, 14866, 14867, 15347.
- T1049 *Bufo bufo gargarizans*; *Bufo melanostictus* (Bufonidae); CHAN CHU; Toad. Used part: whole body. TCM Effects: To resolve toxin and dissipate binds, disperse accumulation and disinhibit water, kill worms and disperse *gan*. TCM Indications: Welling abscess and flat abscess, clove sore, effusion of back, scrofula, malign sore, concretion and accumulation, ascites, edema, child *gan* accumulation, tetanus, chronic cough and asthma. Isolated compounds: 2715, 2716, 2726, 2728, 3729, 9329, 18637.
- T1050 *Bufo bufo gargarizans*; *Bufo melanostictus* (Bufonidae); CHAN CHU DAN; Toad Gall. Used part: gall. TCM Effects: To suppress cough and dispel phlegm, resolve toxin and dissipate binds. TCM Indications: Trachitis, child aphonia, scrofula in early stage, clove sore of nose. Isolated compounds: 2719, 7730, 16841, 21138, 21692, 21693, 21696, 21754.
- T1051 *Bufo bufo gargarizans*; *Bufo melanostictus* (Bufonidae); CHAN PI; Toad Skin. Used part: skin. TCM Effects: To clear heat and resolve toxin, disinhibit water and disperse distention. TCM Indications: Welling abscess and flat abscess, toxin swelling, scrofula, eczema, *gan* accumulation, chronic trachitis. Isolated compounds: 2724, 8122, 18637, 21841.
- T1052 *Bufo bufo gargarizans*; *Bufo melanostictus* (Bufonidae); CHAN SU;



- Toad Skin Secretion Cake. Used part: dried secretion of skin glands. TCM Effects: To resolve toxin, relieve pain, open orifices and arouse spirit. TCM Indications: Welling abscess and flat abscess with clove sores, swelling pain in throat, summerheat stroke with vomiting and diarrhea, abdominal pain and clouded spirit, local anesthesia. Isolated compounds: 653, 1048, 1664, 2714, 2715, 2716, 2717, 2718, 2721, 2722, 2723, 2726, 2727, 3040, 3585, 3729, 3730, 3731, 3732, 3733, 4884, 5237, 5238, 5239, 7190, 7191, 7192, 7193, 7912, 8121, 8123, 9859, 9861, 9904, 9917, 9918, 9993, 10672, 10673, 13566, 14981, 16296, 16312, 16329, 18636, 18637, 18638, 19760, 19983, 20439, 20911, 22058.
- T1053 *Bulbophyllum odoratissimum* [Syn. *Stelis odoratissimum*] (Orchidaceae); MI HUA SHI DOU LAN; Flowery Stonebean-orchis. Used part: whole herb. TCM Effects: To moisten lung and transform phlegm, free network vessels and relieve pain. TCM Indications: Tuberculosis and hemoptysis, chronic trachitis, chronic pharyngitis, mounting *qi* pain, menstrual disorder, wind-damp impediment pain, knocks and falls. Isolated compounds: 17399.
- T1054 *Bulbophyllum vaginatum* (Orchidaceae); QIAO SHI DOU LAN; Vaginate Stonebean-orchis\*. Isolated compounds: 2398, 10504, 13911, 13913, 14050, 14051.
- T1055 *Bupleurum angustissimum* (Apiaceae); XIAN YE CHAI HU; Linearleaf Thorowax. Used part: root. TCM Effects: See *Bupleurum chinense*. TCM Indications: See *Bupleurum chinense*. Isolated compounds: 15218, 19142, 19148.
- T1056 *Bupleurum aureum* (Apiaceae); JIN HUANG CHAI HU; Goldenyellow Thorowax. Used part: root. TCM Effects: See *Bupleurum chinense*. TCM Indications: See *Bupleurum chinense*. Isolated compounds: 20168.
- T1057 *Bupleurum bicaule* ZHUI YE CHAI HU; Acicular Thorowax. Isolated compounds: 19142, 19148.
- T1058 *Bupleurum chaishoui* (Apiaceae); CHAI SHOU; Chaishou Thorowax. Used part: root. TCM Effects: See *Bupleurum chinense*. TCM Indications: See *Bupleurum chinense*. Isolated compounds: 15705, 16893.
- T1059 *Bupleurum chinense* (Apiaceae); CHAI HU; Chinese Thorowax. Equivalent plant: *Bupleurum scorzoniferifolium*, *Bupleurum smithii* var. *parvifolium*, *Bupleurum aureum*, *Bupleurum longiradiatum*, *Bupleurum marginatum*, *Bupleurum marginatum* var. *stenophyllum*, *Bupleurum angustissimum*, *Bupleurum chaishoui*, *Bupleurum wenchuanense*, *Bupleurum sibiricum*, *Bupleurum yinchowense*. Used part: root. TCM Effects: To harmonize exterior and interior, soothe liver and upbear *yang*. TCM Indications: Common cold, influenza, malaria, acute pancreatitis, pleuritis, neuritis, gastritis, acute cholecystitis, hepatitis, fever due to external contraction, keratitis, cold-heat in turn, liver depression and rib-side pain, mammary distention, dizziness and headache, menstrual disorder, prolapse of rectum due to *qi* vacuity fall, prolapse of uterus, gastroptosis. Isolated compounds: 645, 1191, 3139, 3140, 3237, 4305, 6795, 7521, 8312, 9021, 9402, 9415, 9486, 9669, 11642, 12018, 12800, 12843, 12849, 12893, 12955, 12969, 12980, 14275, 15146, 15218, 15221, 15684, 15694, 15705, 15971, 15982, 16884, 17021, 17022, 17089, 18190, 19130, 19131, 19133, 19134, 19135, 19142, 19147, 19148, 19157, 19158, 19161, 19162, 19164, 19165, 19166, 20168, 20280, 20369, 20370, 20995, 21139, 21360, 21610, 22217, 22337.
- T1060 *Bupleurum falcatum* (Apiaceae); ZI HU; Sickle-leaved Hare's-ear. Isolated compounds: 502, 2753, 2754, 2755, 2756, 10685, 10686, 10687, 11584, 13448, 13449, 17081, 17082, 19132, 19142, 19143, 19144, 19145, 19148, 19149, 20169, 21139.
- T1061 *Bupleurum fruticosum* (Apiaceae); MU CHAI HU; Fruticose Thorowax\*. Isolated compounds: 19540.
- T1062 *Bupleurum fruticosum* (Apiaceae); GUAN MU CHAI HU; Shrub Thorowax (Shrubby Hare's-ear). Isolated compounds: 214, 6288, 21142, 21728, 21784, 21930.
- T1063 *Bupleurum gibraltarium* (Apiaceae); ZHI BU LUO TUO CAI HU; Gibraltar Thorowax\*. Isolated compounds: 21141, 21728.
- T1064 *Bupleurum kunmingense* (Apiaceae); KUN MING CHAI HU; Kunming Thorowax\*. Isolated compounds: 19146, 21140, 21821, 21823.
- T1065 *Bupleurum longiradiatum* (Apiaceae); DA YE CHAI HU; Bigleaf Thorowax. Used part: root. TCM Effects: See *Bupleurum chinense*. TCM Indications: See *Bupleurum chinense*. Isolated compounds: 340, 2752, 2757, 2758, 19148, 20168.
- T1066 *Bupleurum marginatum* (Apiaceae); ZHU YE CHAI HU; Bambooleaf Thorowax. Used part: root. TCM Effects: See *Bupleurum chinense*. TCM Indications: See *Bupleurum chinense*. Isolated compounds: 14087, 15218, 17941, 19142, 19144, 19147, 19148, 19149.
- T1067 *Bupleurum marginatum* var. *stenophyllum* (Apiaceae); ZHAI ZHU YE CHAI HU; Narrowbambooleaf Thorowax. Used part: root. TCM Effects: See *Bupleurum chinense*. TCM Indications: See *Bupleurum chinense*. Isolated compounds: 498, 14087, 15218, 15705, 19140, 19141, 19144, 19145.
- T1068 *Bupleurum polyclonum* (Apiaceae); DUO ZHI CHAI HU; Ramose Thorowax\*. Isolated compounds: 19143, 19149, 21140, 21821, 21823.
- T1069 *Bupleurum rigidum* (Apiaceae); JIAN YING CHAI HU; Thorowax. Isolated compounds: 19245, 19246, 19247, 19248, 19249.
- T1070 *Bupleurum rockii* (Apiaceae); LI JIANG CHAI HU; Rock Thorowax. Isolated compounds: 19143, 19149.
- T1071 *Bupleurum rotundifolium* (Apiaceae); YUAN YE CHAI HU; Roundleaf Thorowax\*. Isolated compounds: 11642, 17918, 18944, 18945, 18946, 18947, 18948, 18949, 18950, 18951, 18952, 18953, 18956, 18957.
- T1072 *Bupleurum scorzoniferifolium* (Apiaceae); HONG CHAI HU; Red Thorowax. Used part: root. TCM Effects: See *Bupleurum chinense*. TCM Indications: See *Bupleurum chinense*. Isolated compounds: 501, 503, 1763, 3045, 3451, 3531, 4029, 5543, 6741, 7519, 7729, 7750, 9500, 9669, 10829, 11318, 11470, 12106, 12604, 15331, 15705, 16216, 16705, 19137, 19138, 19139, 19142, 19147, 19148, 19159, 19160, 19162, 19163, 19164, 19167, 19515, 19563, 19564, 19565, 20989, 20993, 20994, 21190, 22718.
- T1073 *Bupleurum sibiricum* (Apiaceae); XING AN CHAI HU; Siberia Thorowax. Used part: root. TCM Effects: See *Bupleurum chinense*. TCM Indications: See *Bupleurum chinense*. Isolated compounds: 17805.
- T1074 *Bupleurum smithii* (Apiaceae); HEI CHAI HU; Black Thorowax. Isolated compounds: 19136, 19142, 19143, 19147, 19148, 19150,

- 19151, 19152, 19153, 21139.
- T1075 *Bupleurum smithii* var. *parvifolium* (Apiaceae); XIAO YE HEI CHAI HU; Smallleaf Black Thorowax. Used part: root. TCM Effects: See *Bupleurum chinense*. TCM Indications: See *Bupleurum chinense*. Isolated compounds: 15218, 19134, 19135, 19136, 19142, 19148, 19154, 19155, 19156.
- T1076 *Bupleurum spinosum* (Apiaceae); DUO CI CHAI HU; Spiny Thorowax\*. Isolated compounds: 16857.
- T1077 *Bupleurum* spp. (Apiaceae). Isolated compounds: 19142, 19147, 19148.
- T1078 *Bupleurum wenchuanense* (Apiaceae); WEN CHUAN CHAI HU; Wenchuan Thorowax\*. Used part: root. TCM Effects: See *Bupleurum chinense*. TCM Indications: See *Bupleurum chinense*. Isolated compounds: 499, 500, 5346, 8730, 17942, 21140, 21821, 21823, 22840.
- T1079 *Bupleurum yinchowense* (Apiaceae); YIN ZHOU CHAI HU; Yinchow Thorowax. Used part: root. TCM Effects: See *Bupleurum chinense*. TCM Indications: See *Bupleurum chinense*. Isolated compounds: 19142, 19143, 19148.
- T1080 *Bursera graveolens* (Burseraceae); LIE WEI LIE LAN; Bursera\*. Isolated compounds: 2769, 6954, 13098, 17343.
- T1081 *Bursera microphylla* (Burseraceae); XIAO YE LIE LAN; Elephant Tree. Isolated compounds: 1372, 2768.
- T1082 *Bursera tonkinensis* (Burseraceae); YUE NAN LIE LAN; Tonkin Bursera\*. Isolated compounds: 2765, 2766, 2767, 5074, 5075, 5582, 10446, 11477, 13907.
- T1083 *Butea monosperma* (Fabaceae); DAN ZI ZI MAO; Bengal Kino. Isolated compounds: 2786.
- T1084 *Buthus martensi* (Buthidae); QUAN XIE; Scorpion. Used part: body. TCM Effects: To calm, dispel wind and check tetany, free network vessels and relieve pain, attack toxin and dissipate binds. TCM Indications: Infant fright wind, convulsion, spasm, wind stroke with deviated eyes and mouth, hemiplegia, tetanus, wind-damp impediment, migraine, headache, toothache, deafness, hypertension, swelling toxin of welling abscess and sore, scrofula with phlegm node, snake bite, burns, wind papules, intractable lichen. Isolated compounds: 3585, 9486, 20280, 20732, 21939.
- T1085 *Buxus argentea* (Buxaceae); YIN BAI HUANG YANG; Argentine Box\*. Isolated compounds: 4543.
- T1086 *Buxus balearica* (Buxaceae); XI BAN YA HUANG YANG; Balearic Box. Isolated compounds: 4531.
- T1087 *Buxus bodinieri* (Buxaceae); QUE SHE HUANG YANG; Bodinier Box. Used part: root, leaf or flowe. TCM Effects: To clear heat and resolve toxin, suppress cough, stanch bleeding. TCM Indications: Cough, coughing of blood, toxin swelling of sores. Isolated compounds: 2818, 2819, 2820, 2821, 2822.
- T1088 *Buxus harlandii* (Buxaceae); XI YE HUANG YANG; Harland Box. Isolated compounds: 4477.
- T1089 *Buxus hyrcana* (Buxaceae); HE KA NI YA HUANG YANG; Hyrcanian Box\*. Isolated compounds: 2233, 4477, 11291, 21374.
- T1090 *Buxus malaiana* (Buxaceae); MA LAI XI YA HUANG YANG; Malaysian Box\*. Isolated compounds: 4531, 4543.
- T1091 *Buxus microphylla* (Buxaceae); XIAO YE HUANG YANG; Small-leaved Box. Isolated compounds: 4477, 4543.
- T1092 *Buxus microphylla* var. *sinica* (Buxaceae); HUANG YANG MU YE; Chinese Box Juvenile Leaf. Used part: tender leaf. TCM Effects: To clear heat and resolve toxin, dissipate binds and disperse swelling. TCM Indications: Wind-damp impediment pain, *qi* distention in chest and abdomen, mounting *qi*, toothache, painful wound from knocks and falls. Isolated compounds: 2817, 2831, 2832, 4502, 4544, 11702.
- T1093 *Buxus papillosa* (Buxaceae); DUO RU TOU HUANG YANG; Papillose Box\*. Isolated compounds: 2813, 2814, 2815, 4516, 4532, 4542, 19696.
- T1094 *Buxus sempervirens* (Buxaceae); JIN SHU HUANG YANG; European Boxwood. Isolated compounds: 2191, 2816, 4477, 4531, 4543.
- T1095 *Buxus wallichiana* (Buxaceae); WA LI XI HUANG YANG; Himalayan Box. Isolated compounds: 4477, 4543.

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- T1096 *Cabucala fasciculata* CU SHENG KA BU MU. Isolated compounds: 22502.
- T1097 *Cacalia ainsliaeflora* (Asteraceae); TU ER FENG XIE JIA CAO; Ainsliaefolious Cacalia. Used part: tuber. TCM Effects: To dissipate stasis, resolve toxin, kill worms. TCM Indications: Wind-damp edema, innominate toxin swelling, *lai* lichen. Isolated compounds: 1215, 1217, 1218, 1222, 1227, 1231, 5356, 21827.
- T1098 *Cacospongia scalaris* . Isolated compounds: 6113.
- T1099 *Cadia* spp. (Fabaceae). Isolated compounds: 3004.
- T1100 *Caesalpinia crista* (Fabaceae); CI GUO SU MU; Nickernut Caesalpinia. Used part: ripe seed. TCM Effects: To quicken blood and relieve pain, resolve toxin and disperse swelling. TCM Indications: Stomach duck pain, abdominal pain, red eyes with gall, sores. Isolated compounds: 137, 138, 2862, 2865, 2870, 2871, 2872, 2873, 2874, 2875, 2876, 2877, 2878, 2879, 2880, 2881, 2882, 2883, 2884, 2885, 15349, 15350, 15722, 15723.
- T1101 *Caesalpinia decapetala* (Fabaceae); YUN SHI YE; Caesalpinia\*. Used part: leaf. TCM Effects: To clear heat and resolve toxin, dispel stasis and relieve pain, expel worms, free stool. TCM Indications: Intervallic fever, acute gastritis, chronic gastritis, gastric ulcer, dysentery, indigestion, intestinal worm accumulation, constipation, swollen boil. Isolated compounds: 1935, 2860, 3243, 13098, 18317, 18643, 20137, 20237, 20369.
- T1102 *Caesalpinia digyna* (Fabaceae); ER CI YUN SHI; Digyna Caesalpinia\*. Isolated compounds: 2312.
- T1103 *Caesalpinia echinata* (Fabaceae); JI YUN SHI; Brazil-wood. Isolated compounds: 2594.
- T1104 *Caesalpinia japonica* (Fabaceae); RI BEN SU MU; Japanese Caesalpinia\*. Isolated compounds: 17988.
- T1105 *Caesalpinia major* (Fabaceae); DA YUN SHI; Large Caesalpinia\*. Isolated compounds: 2862.
- T1106 *Caesalpinia minax* (Fabaceae); KU SHI LIAN; Whiteflower Caesalpinia. Used part: seed. TCM Effects: To clear heat and transform damp. TCM Indications: Wind-heat common cold, dysentery, strangury-turbidity, retching counterflow, swollen welling abscess, sore and lichen, knocks and falls, poisonous snake bite. Isolated compounds: 2863, 2864, 2865, 2866, 2867, 2868, 2869,

- 20369.
- T1107 *Caesalpinia pulcherrima* (Fabaceae); JI MEI YUN SHI; Prettiest Caesalpinia. Isolated compounds: 2244, 2283, 2861, 3244, 3708, 6263, 10748, 11258, 11777, 11778, 11779, 11780.
- T1108 *Caesalpinia sappan* (Fabaceae); SU MU; Sappan Caesalpinia. Used part: heartwood. TCM Effects: To quicken blood and dispel stasis, disperse swelling and relieve pain. TCM Indications: Amenorrhea and dysmenorrhea, postpartum blood stasis, stabbing pain in chest and abdomen, swelling pain due to external injury. Isolated compounds: 2594, 5195, 5211, 5212, 8095, 9337, 10177, 14099, 14159, 14402, 14403, 14700, 14720, 14721, 15451, 15457, 15935, 17985, 17986, 17987, 17988, 17989, 17990, 17991, 19346, 19347, 19347, 19348, 19348, 21033.
- T1109 *Caesalpinia tinctoria* (Fabaceae); SE ZE YUN SHI; Tinctorial Caesalpinia\*. Isolated compounds: 2108.
- T1110 *Calceolaria inamoena* (Scrophulariaceae); BU MEI HE BAO HUA; Chile Calceolaria\*. Isolated compounds: 10073, 10074, 10075, 10076.
- T1111 *Calea urticifolia* (Compositae); YOU KA MEI JU; Juanislama (in Salvador). Isolated compounds: 2956, 2957, 2958, 2964, 7060, 7153, 11895.
- T1112 *Calendula arvensis* (Asteraceae); XIAO JIN ZHAN HUA; Field Marigold. Used part: whole herb or flower. TCM Effects: To clear heat and stanch bleeding. TCM Indications: Intestinal wind bleeding, bleeding from hemorrhoids. Isolated compounds: 1828, 3211.
- T1113 *Calendula officinalis* (Asteraceae); JIN ZHAN JU; Potmarigold Calendula. Used part: flower and root. TCM Effects: To move *qi* and quicken blood (root), cool blood and stanch bleeding (flower). TCM Indications: Cold pain in stomach duct and abdomen, mounting *qi*, concretion and conglomeration (root), intestinal wind bleeding (flower). Isolated compounds: 1749, 1829, 2965, 2966, 2967, 2968, 2969, 2970, 2971, 2972, 2973, 2974, 3866, 7821, 9588, 10948, 11659, 11662, 11667, 11669, 12980, 13212, 13287, 13479, 14233, 14980, 16015, 16016, 16017, 16018, 16041, 18190, 18378, 18378, 19039, 22154, 22520.
- T1114 *Calendula* sp. (Asteraceae). Isolated compounds: 15135.
- T1115 *Calliandra inermis* (Fabaceae); WU CI ZHU YING HUA; Spineless Powderpuff\*. Isolated compounds: 6240, 21182, 21186.
- T1116 *Callicarpa arborea* (Verbenaceae); QIAO MU ZI ZHU; Tree Beautyberry. Used part: root and leaf. TCM Effects: To cool blood and stanch bleeding. TCM Indications: Bleeding due to external injury, bleeding of digestive tract, spontaneous external bleeding, flooding and spotting. Isolated compounds: 2169, 14158, 19994.
- T1117 *Callicarpa candicans* (Verbenaceae); BAI MAO ZI ZHU; Whitehairy Beautyberry. Isolated compounds: 2976.
- T1118 *Callicarpa formosana* (Verbenaceae); DU HONG HUA; Taiwan Beautyberry. Equivalent plant: *Callicarpa japonica*. Used part: leaf. TCM Effects: To promote contraction and stanch bleeding, clear heat and resolve toxin. TCM Indications: Hemoptysis, retching blood, spontaneous external bleeding, gum hemorrhage, bloody urine, bloody stool, flooding and spotting, purpuric dermatosis, bleeding due to external injury, swelling toxin of welling abscess and flat abscess, poisonous snake bites, burns. Isolated compounds: 580, 16867.
- T1119 *Callicarpa japonica* (Verbenaceae); RI BEN ZI ZHU; Japanese Beautyberry. Used part: leaf. TCM Effects: See *Callicarpa formosana*. TCM Indications: See *Callicarpa formosana*. Isolated compounds: 21202.
- T1120 *Callicarpa macrophylla* (Verbenaceae); DA YE ZI ZHU; Bigleaf Beautyberry. Used part: root or leaf. TCM Effects: To stanch bleeding and relieve pain, dissipate stasis and disperse swelling. TCM Indications: Hemoptysis, spontaneous external bleeding, bleeding due to external injury, bleeding from dental extraction, painful swelling from knocks and falls, wind-damp bone pain. Isolated compounds: 1494, 2979, 2980.
- T1121 *Calocedrus macrolepis* var. *formosana* (Cupressaceae); TAI WAN CUI BAI; Taiwan Incense Cedar. Isolated compounds: 5806, 6092, 7886, 7887, 7888, 10696, 11563, 14069, 15146, 15513, 15891, 15892, 15896, 15897, 20628.
- T1122 *Caloglossa leprieurii* (Delesseriaceae); ZHE GU CAI; Leprieur Caloglossa Frond. Used part: frond. TCM Effects: To expel roundworm. TCM Indications: Ascariasis. Isolated compounds: 936, 3585.
- T1123 *Calophyllum austroindium* (Clusiaceae). Isolated compounds: 2989, 21122.
- T1124 *Calophyllum blancoi* (Clusiaceae). Isolated compounds: 335, 1470, 1471, 1472, 2997, 9857, 11086, 11230, 11231, 11232, 11645, 18251, 18562.
- T1125 *Calophyllum brasiliense* (Clusiaceae); BA XI HU TONG; Brazilian Calaba. Isolated compounds: 2590, 2591, 2592, 2593, 6011, 11262, 11263, 11264, 11808.
- T1126 *Calophyllum caledonicum* (Clusiaceae); SU GE LAN HU TONG; Caledonian Beautyleaf\*. Isolated compounds: 1470, 2961, 2962, 2963, 2988, 3001, 5844, 6181, 10463, 10464, 10831, 10832, 11230, 11303, 13808, 21790.
- T1127 *Calophyllum cordato-oblongum* (Clusiaceae); CHANG YUAN XIN XING HU TONG; Cordate-oblong Beautyleaf\*. Isolated compounds: 4038, 11341.
- T1128 *Calophyllum dispar* (Clusiaceae); BU DENG HONG HOU KE; Disparate Beautyleaf\*. Isolated compounds: 6513, 6514, 6515, 6516, 11380, 13465, 13466.
- T1129 *Calophyllum inophyllum* (Clusiaceae); HAI TANG GUO; Kalofilum. Used part: root and leaf. TCM Effects: To dispel stasis and relieve pain. TCM Indications: Wind-damp pain, knocks and falls, dysmenorrhea, bleeding due to external injury. Isolated compounds: 2590, 2694, 2945, 2989, 2990, 2991, 2998, 2999, 3000, 5184, 5184, 6181, 7951, 9857, 11064, 11065, 11066, 11070, 11071, 11072, 11073, 11074, 11075, 11076, 11077, 11078, 11079, 11080, 11086, 11464, 11808, 13809, 17718.
- T1130 *Calophyllum polyanthum* (Clusiaceae); DIAN NAN HONG HOU KE; S. Yunnan Beautyleaf. Used part: Seed. Isolated compounds: 2942, 2992, 2993, 2994, 2995, 4680, 5763, 5963, 6202, 8095, 10382, 16209, 19983, 22270.
- T1131 *Calophyllum* sp. (Clusiaceae). Isolated compounds: 11808.
- T1132 *Calophyllum* spp. (Clusiaceae). Isolated compounds: 6181.
- T1133 *Calophyllum teysmannii* (Clusiaceae); TE SI MAN NI HU TONG; Teysmanni Beautyleaf\*. Isolated compounds: 20109.
- T1134 *Calophyllum teysmannii* var. *inophylloide* (Clusiaceae); TE SI MAN

- NI HU TONG BIAN ZHONG; Teysmanni Beautyleaf Variaty\*. Isolated compounds: 3163, 10757, 10805, 10806, 12607, 19567, 21232, 21937.
- T1135 *Calophyllum tomentosum* (Clusiaceae); RONG MAO HU TONG; Tomentose Calaba. Isolated compounds: 21438, 21439.
- T1136 *Calotropis procera* (Asclepiadaceae); CHANG NIU JIAO GUA; Long Calotrope\*. Isolated compounds: 17870, 22280.
- T1137 *Caltha palustris* (Ranunculaceae); MA TI YE; Common Marshmarigold. Used part: whole herb. TCM Effects: To expel wind, resolve summerheat, quicken blood and disperse swelling. TCM Indications: Wind damage common cold, summerheat stroke with sand, knocks and falls, burns and scalds. Isolated compounds: 1178, 1179, 4123, 4293, 4680, 9259, 9276, 9330, 13374, 15477, 15527, 16576, 19542, 19983, 22195.
- T1138 *Caltha polypetala* (Ranunculaceae); DUO BAN LV TI CAO; Manypetal Marshmarigold. Isolated compounds: 8067, 8068.
- T1139 *Calycanthus floridus* (Calycanthaceae); MEI GUO XIA LA MEI; Carolina Allspice. Isolated compounds: 3002, 7481.
- T1140 *Calycanthus occidentalis* (Calycanthaceae); JIA ZHOU XIA LA MEI; Californian Allspice. Isolated compounds: 3002.
- T1141 *Calycophyllum spruceanum* (Rubiaceae). Isolated compounds: 376, 5477, 13905, 19636, 21376.
- T1142 *Calycopteris floribunda* (Combretaceae); E CHI TENG. Isolated compounds: 3003, 3008, 3009, 5051, 6871, 6872.
- T1143 *Calystegia hederacea* (Convolvulaceae); MIAN GEN TENG; Ivy Glorybind. Used part: herb or root. TCM Effects: To fortify spleen, disinherit damp, regulate menstruation. TCM Indications: Strangury, vaginal discharge, menstrual disorder, child *gan* accumulation. Isolated compounds: 3939.
- T1144 *Camassia leichtlinii* (Liliaceae). Isolated compounds: 8653, 8654, 8655, 8687, 8721, 8722, 10716, 10717, 10718, 10719, 10720, 10721.
- T1145 *Camellia japonica* (Theaceae); SHAN CHA; Japanese Camellia. Used part: flower. TCM Effects: To cool blood and stanch bleeding, dissipate stasis and disperse swelling. TCM Indications: Blood ejection, spontaneous external bleeding, hemoptysis, hematochezia, bleeding from hemorrhoids, red and white dysentery, flooding, blood strangury, vaginal discharge, scalds, knocks and falls. Isolated compounds: 3036, 3037, 6853, 13546, 16765, 20910.
- T1146 *Camellia oleifera* (Theaceae); CHA ZI XIN; Oiltea Camellia. Used part: seed. TCM Effects: To soothe stagnation and move *qi*. TCM Indications: *Qi* stagnation with abdominal pain and diarrhea, itchy skin, burns and scalds. Isolated compounds: 2151, 3030, 3031, 3032, 3033, 3034, 8769, 10096, 21281.
- T1147 *Camellia oleifera* (Theaceae); YOU CHA GEN PI; Oiltea Camellia Root-bark. Used part: root cortex. TCM Effects: To dissipate stasis and disperse swelling, quicken blood and joint bones. TCM Indications: Fracture, sprain and contusion, abdominal pain, itchy skin, burns and scalds. Isolated compounds: 8769, 21281.
- T1148 *Camellia saluenensis* (Theaceae); NU JIANG SHAN CHA; Salwin Camellia. Used part: leaf and tender gemma. TCM Effects: To clear heat and disinherit urine. Isolated compounds: 19199.
- T1149 *Camellia sasanqua* (Theaceae); CHA MEI; Sasanqua Camellia. Isolated compounds: 10096.
- T1150 *Camellia sinensis* [Syn. *Thea sinensis*] (Theaceae); CHA HUA; Tea Flower. Used part: flower. TCM Effects: To clear lung and calm liver. TCM Indications: *Gan* of nose, hypertension. Isolated compounds: 17617.
- T1151 *Camellia sinensis* [Syn. *Thea sinensis*] (Theaceae); CHA SHU GEN; Tea Root. Used part: root. TCM Effects: To strengthen heart and disinherit urine, quicken blood and regulate menstruation, clear heat and resolve toxin. TCM Indications: Edema due to heart disease, hepatitis, dysmenorrhea, toxin swelling of sores, mouth sore, burns and scalds, zoster, psoriasis. Isolated compounds: 2892, 7807, 7820.
- T1152 *Camellia sinensis* [Syn. *Thea sinensis*] (Theaceae); CHA YE; Common Tea. Used part: tender leaf or tender bud. TCM Effects: To clear head and eyes, eliminate vexation and allay thirst, disperse food, transform phlegm, disinherit urine, resolve toxin. TCM Indications: Headache, dim vision, red eyes, desire to sleep, common cold, vexation and thirst, food accumulation, bad breath, phlegm asthma, epilepsy, inhibited urination, diarrhea, throat swelling, swelling of sores and boils, burns and scalds. Isolated compounds: 2285, 2892, 3035, 3038, 3039, 3308, 3551, 3761, 4439, 5018, 5022, 5608, 6384, 6853, 6864, 6921, 6922, 6923, 8025, 8098, 9413, 9414, 9416, 9417, 9526, 11025, 11642, 11740, 11824, 12203, 14649, 14671, 15963, 17100, 17115, 18274, 19185, 20995, 21282, 21290, 21291, 21310, 21312, 21949, 21966, 22756.
- T1153 *Camellia sinensis* [Syn. *Thea sinensis*] (Theaceae); CHA ZI; Tea Seed. Used part: seed. TCM Effects: To downbear fire, transform phlegm and calm asthma. TCM Indications: Phlegm-heat cough, ringing in head. Isolated compounds: 21281, 21283, 21284, 21285, 21286, 21287, 21288, 21289.
- T1154 *Camellia sinensis* var. *assamica* (Theaceae); PU ER CHA; Assam Tea. Used part: leaf. TCM Effects: To engender liquid and allay thirst, expel phlegm and precipitate *qi*. TCM Indications: Sand *qi* abdominal pain, cholera, dysentery. Isolated compounds: 1235, 1236, 1237, 1915, 1916, 1917, 1918, 1919, 1920, 5243, 7832, 15279, 17884, 22061, 22062, 22063.
- T1155 *Camellia sinensis* var. *viridis* (Theaceae); WU LONG CHA; Oolong Tea. Isolated compounds: 16124, 16125, 21280.
- T1156 *Campanula medium* (Campanulaceae); FENG LING CAO; Canterburybells. Isolated compounds: 12939.
- T1157 *Campanula rotundifolia* (Campanulaceae); YUAN YE FENG LING CAO; Harebell. Isolated compounds: 21644.
- T1158 *Campanula* sp. (Campanulaceae). Isolated compounds: 7944.
- T1159 *Campomanesia lineatifolia* (Myrtaceae); Champa; Palillo (in local names). Isolated compounds: 3472, 3473, 3474.
- T1160 *Campsis grandiflora* (Bignoniaceae); ZI WEI; Chinese Trumpetreeper. Used part: flower. TCM Effects: To clear heat and cool blood, transform stasis and dissipate binds, dispel wind and relieve itch. TCM Indications: Blood stagnation and menstrual block, dysmenorrhea, concretion and conglomeration, flooding and spotting, wind papule itching due to blood heat, urticari with sore and scab, brandy nose. Isolated compounds: 1476, 16050.
- T1161 *Campsis grandiflora* (Bignoniaceae); ZI WEI JING YE; Chinese Trumpetreeper Stem-leaf. Used part: stem-leaf. TCM Effects: To clear heat, cool blood, dissipate stasis. TCM Indications: Wind due to blood heat, itchy body, wind papules, limp aching numbness in limbs,

- swelling pain in throat. Isolated compounds: 2839, 2840, 2841, 2842, 9878, 15284, 20897.
- T1162 *Camptotheca acuminata* (Nyssaceae); XI SHU; Common Camptothecae. Used part: fruit or root. TCM Effects: To clear heat and resolve toxin, dissipate binds and disperse concretion, anticancer. TCM Indications: Acute leukemia, chronic leukemia, psoriasis, swollen liver and spleen due to bilharziosis, carcinoma of esophagus, carcinoma of cardia, carcinoma of intestine, carcinoma of liver, carcinoma of stomach, swelling of sores. Isolated compounds: 341, 1935, 2334, 3053, 5157, 7896, 7971, 8291, 8667, 9882, 9883, 10887, 11642, 13831, 13863, 13864, 14139, 14365, 14366, 14377, 15880, 18199, 18317, 20391, 21634, 21955, 21961, 22496.  
*Campylandra wattii* = *Tupistra wattii*
- T1163 *Campylotropis hirtella* (Fabaceae); MAO HANG ZI SHAO; Hairy Clovershrub. Used part: root. TCM Effects: To quicken blood and regulate menstruation, rectify *qi* and relieve pain, clear heat and disinherit damp. TCM Indications: Menstrual disorder, amenorrhea, dysmenorrhea, vaginal discharge, dysentery, pain in stomach duct, bleeding due to external injury, yellow-water sore, burns and scalds. Isolated compounds: 17869, 17876, 17888, 17893.
- T1164 *Cananga odorata* (Annonaceae); YI LAN; Fragrant Gananga. Isolated compounds: 3060, 4284, 7515, 7516, 11421, 11690, 22920.
- T1165 *Canarium album* (Burseraceae); QING GUO; Olive. Used part: fruit. TCM Effects: To clear heat, disinherit throat, engender liquid, resolve toxin. TCM Indications: Swelling pain in throat, cough, vexation and thirst, poisoning of fish or crab. Isolated compounds: 1110, 2602, 3231, 7481, 8095, 16039, 22265, 22266.
- T1166 *Canarium commune* (Burseraceae); ZHAO WA GAN LAN; Java Almond Canary-tree. Isolated compounds: 6745.
- T1167 *Canarium* sp. (Burseraceae). Isolated compounds: 20711.
- T1168 *Canavalia ensiformis* (Fabaceae); YANG DAO DOU; Sword-bean. Used part: seed. TCM Effects: See *Canavalia gladiata*. TCM Indications: See *Canavalia gladiata*. Isolated compounds: 3059, 3063, 13103.
- T1169 *Canavalia gladiata* (Fabaceae); DAO DOU; Sword Jackbean. Equivalent plant: *Canavalia ensiformis*. Used part: seed. TCM Effects: To warm center, precipitate *qi*, check hiccups. TCM Indications: Vacuity cold and hiccough, vomiting. Isolated compounds: 1045, 1054, 3059, 3061, 3062, 9620.
- T1170 *Canis familiaris* (Canidae); GOU ROU; Dog Meat. Used part: meat. TCM Effects: To supplement spleen and warm stomach, warm kidney and invigorate *yang*, replenish essence. TCM Indications: Distention fullness in stomach duct and abdomen, edema, lumbago and limp leg, impotence, cold malaria, enduring vanquished sore. Isolated compounds: 3205, 4221.
- T1171 *Canis familiaris* (Canidae); GOU XIN; Dog Heart. Used part: heart. TCM Effects: To quiet spirit, dispel wind, stanch bleeding, resolve toxin. TCM Indications: Wind impediment, *qi* depression, nosebleed (epistaxis), sore in lower body. Isolated compounds: 4221.
- T1172 *Canna edulis* (Cannaceae); JIAO YU; Edible Canna. Used part: Rhizome. TCM Effects: To clear heat, resolve toxin, disinherit damp. TCM Indications: Dysentery, diarrhea, jaundice, swelling toxin of welling abscess and sore. Isolated compounds: 4157, 5441.
- T1173 *Cannabis sativa* (Moraceae); HUO MA REN; Hemp Fimble Seed. Used part: ripe seed. TCM Effects: To moisten dryness, lubricate intestines, free stool. TCM Indications: Blood and liquid depletion, intestinal dry and constipation. Isolated compounds: 3077, 3079, 3082, 7788, 15126, 20988, 21059, 21060, 21662, 22975.
- T1174 *Cannabis sativa* (Moraceae); MA GEN; Hemp Fimble Root. Used part: root. TCM Effects: To dissipate stasis, stanch bleeding, disinherit urine. TCM Indications: Knocks and falls, difficult delivery, retention of placenta, flooding, strangury syndrome, vaginal discharge. Isolated compounds: 1262, 15516, 20347, 20350, 20353, 20354.
- T1175 *Cannabis sativa* (Moraceae); MA HUA; Hemp Fimble Flower\*. Used part: male-flower. TCM Effects: To dispel wind, quicken blood, engender hairs. TCM Indications: Numbness in limbs, itchy body, shedding of eyebrow and hair, amenorrhea. Isolated compounds: 3079, 3080, 3081, 3082, 7521, 12853, 15125, 17450, 19680, 19681, 21058, 21059, 21662.
- T1176 *Cannabis sativa* (Moraceae); MA YE; Hemp Fimble Leaf. Used part: leaf. TCM Effects: To interrupt malaria, expel roundworm, settle asthma. TCM Indications: Malaria, asthma, ascariasis. Isolated compounds: 342, 402, 1262, 3078, 3080, 3083, 21060.
- T1177 *Cannabis sativa* var. *indica* (Moraceae); YIN DU DA MA; Indian Hemp\*. Isolated compounds: 3079, 3080.
- T1178 *Canthium berberidifolium* (Rubiaceae); SI XIAO BO SHUANG YE YU GU MU; Barberry-like-dileaf Canthium. Isolated compounds: 1516, 3099, 3100, 3101, 3102.
- T1179 *Capparis masaikai* (Capparidaceae); MA BING LANG; Masaikai Caper. Used part: seed. TCM Effects: To clear heat and resolve toxin, engender liquid and allay thirst, hasten delivery or stop delivery. TCM Indications: Cold damage febrile disease, summerheat-heat and thirst, laryngitis, throat pain, food stagnation distention and fullness, measles papules swelling toxin. Isolated compounds: 10103, 16286.
- T1180 *Capparis spinosa* (Capparidaceae); LAO SHU GUA; Common Caper. Used part: root cortex, leaf and fruit. TCM Effects: To dispel wind, dissipate cold, eliminate damp. TCM Indications: Acute rheumatic arthritis, chronic rheumatic arthritis. Isolated compounds: 3136, 3137, 4035, 7768, 19912, 20173, 20174, 20254.
- T1181 *Capra hircus*; *Ovis aries* (Bovidae); YANG PI; Goat Hide. Used part: hide. TCM Effects: To supplement vacuity, dispel stasis, disperse swelling. TCM Indications: Vacuity taxation with emaciation and weakness, painful swelling from knocks and falls, bleeding due to tympanites. Isolated compounds: 13659.
- T1182 *Capra hircus*; *Ovis aries* (Bovidae); YANG RU; Goat Milk. Used part: milk. TCM Effects: To supplement vacuity, moisten dryness, harmonize stomach, resolve toxin. TCM Indications: Vacuity taxation with emaciation and weakness, diabetes mellitus, heartache, stomach reflux, vomiting, mouth sore, lacquer sore, spider bite. Isolated compounds: 6544, 15528.
- T1183 *Capra hircus*; *Ovis aries* (Bovidae); YANG YI; Goat Pancreas. Used part: pancreas. TCM Effects: To moisten lung and relieve cough, moisten skin, check discharge. TCM Indications: Lung heat enduring cough, Vaginal discharge. Isolated compounds: 11083, 11084, 11085.
- T1184 *Capsella bursa-pastoris* (Brassicaceae); JI CAI; Shepherdspurse. Used part: whole herb with root. TCM Effects: To cool liver and stanch

- bleeding, calm liver and brighten eyes, clear heat and disinhibit damp. TCM Indications: Blood ejection, spontaneous external bleeding, hemoptysis, hematuria, flooding and spotting, red eyes with gall, eyeground hemorrhage, hypertension, red and white dysentery, nephritis with edema, chyluria. Isolated compounds: 351, 645, 5613, 5614, 6454, 6632, 7996, 8963, 9458, 12015, 13149, 18281, 18857, 19935, 20467, 22158.
- T1185 *Capsella bursa-pastoris* (Brassicaceae); JI CAI ZI; Shepherdspurse Seed. Used part: seed. TCM Effects: To dispel wind and brighten eyes. TCM Indications: Eye pain, eye screen, clear-eye blindness. Isolated compounds: 6454.
- T1186 *Capsicum annuum* (Solanaceae); HONG HAI JIAO; Sweet Pepper. Equivalent plant: *Capsicum frutescens*. Used part: fruit. TCM Effects: To warm center and dissipate cold, precipitate *qi* and disperse food. TCM Indications: Stomach cold and *qi* stagnation, distending pain in stomach duct, vomiting, diarrhea, wind-damp pain, frostbite. Isolated compounds: 1358, 3104, 3105, 3106, 3107, 3108, 3109, 3110, 3111, 3112, 3113, 3141, 3142, 3145, 3146, 3209, 3210, 4188, 4189, 4293, 5158, 5472, 5588, 6607, 7788, 7789, 7790, 9599, 9603, 9888, 9889, 12520, 13017, 13139, 15477, 15740, 18281, 22976.
- T1187 *Capsicum frutescens* (Solanaceae); LA JIAO; Bush Redpepper. Used part: fruit. TCM Effects: See *Capsicum annuum*. TCM Indications: See *Capsicum annuum*. Isolated compounds: 3141, 3142, 3144, 3145, 3209, 4858, 5553, 15702, 15740, 20044, 20056, 20066, 20069.
- T1188 *Caragana chamlagu* (Fabaceae); JIN JI ER; Peashrub\*. Used part: flower. TCM Effects: To fortify spleen and boost kidney, harmonize blood and dispel wind, resolve toxin. TCM Indications: Vacuity taxation cough, dizzy head and tinnitus, limp aching lumbus and knees, *qi* vacuity, vaginal discharge, child *gan* accumulation, pox without coming out, mammary welling abscess, pain wind, knocks and falls. Isolated compounds: 22504.
- T1189 *Caragana intermedia* (Fabaceae); ZHONG JIAN JIN JI ER; Intermediate Peashrub. Used part: whole herb. TCM Effects: To enrich *yin* and supplement blood, quicken blood. TCM Indications: Menstrual disorder [= menoxenia]. Isolated compounds: 6909, 7504, 7505, 7506, 7507, 10109, 21731, 21981.
- T1190 *Caragana jubata* (Fabaceae); GUI JIAN JIN JI ER; Shagspine Peashrub. Used part: root, branch-leaf. TCM Effects: To clear heat and resolve toxin, lower blood pressure. TCM Indications: Mammary welling abscess, swelling toxin of sore and boil, hypertension. Isolated compounds: 2843, 11652, 11663, 15170, 15184, 18379, 18407.
- T1191 *Caragana sinica* (Fabaceae); JIN QUE GEN; Chinese Peashrub Root. Used part: root and root cortex. TCM Effects: To supplement lung and boost spleen, dispel wind and quicken blood. TCM Indications: Vacuity taxation, lung vacuity enduring cough, flooding, vaginal discharge, scant breast milk, wind-damp bone pain, pain wind, hemiplegia, hypertension, knocks and falls. Isolated compounds: 3434, 4680, 10420, 16550.
- T1192 *Caragana stenophylla* (Fabaceae); XIA YE JIN JI ER; Narrowleaf Peashrub. Isolated compounds: 3149, 12239, 14892, 22504.
- T1193 *Caragana tibetica* (Fabaceae); MAO CI JIN JI ER; Tibet Peasshrub. Isolated compounds: 3289, 3291, 11672, 12258, 17278, 18643, 19394, 19531, 19532, 20556, 21369.
- T1194 *Carassius auratus* (Cyprinidae); JIN YU; Crucian Carp. Used part: meat or body. TCM Effects: To clear heat, disinhibit water, resolve toxin. TCM Indications: Cough, jaundice, ascites ulcer. Isolated compounds: 653, 1921, 2393, 3095, 6190, 6560, 9853, 11784, 11785, 11806, 12201, 13126, 15708, 18530, 22772, 22976.
- T1195 *Cardaria draba* (Brassicaceae); QUN XIN CAI; Common Cardaria. Isolated compounds: 7323, 14728.
- T1196 *Cardiospermum grandiflorum* (Sapindaceae); DA HUA DAO DI LING; Bigflower Heartseed\*. Isolated compounds: 3190.
- T1197 *Cardiospermum halicacabum* (Sapindaceae); JIA KU GUA; Balloonvine Heartseed. Used part: whole herb. TCM Effects: To clear heat and disinhibit water, cool blood and resolve toxin. TCM Indications: Jaundice, strangury, clove sore, vesicle sore, scab and *lai*, snake bite. Isolated compounds: 4453, 4454.
- T1198 *Cardiospermum hirsutum* (Sapindaceae); MAO DAO DI LING; Hairy Heartseed\*. Isolated compounds: 3190.
- T1199 *Carduus acanthoides* (Asteraceae); JIE MAO FEI LIAN; Welled Thistle. Used part: root or whole herb. TCM Effects: See *Carduus crispus*. TCM Indications: See *Carduus crispus*. Isolated compounds: 80.
- T1200 *Carduus crispus* (Asteraceae); FEI LIAN; Curly Bristlethistle. Equivalent plant: *Carduus acanthoides*. Used part: root or whole herb. TCM Effects: To dispel wind, clear heat, disinhibit damp, cool blood and stanch bleeding, quicken blood and disperse swelling. TCM Indications: Common cold with cough, headache and dizziness, infection of urinary system, chyluria, vaginal discharge, jaundice, wind-heat impediment pain, blood ejection, spontaneous external bleeding, hematuria, profuse menstruation, dysfunctional uterine bleeding, knocks and falls, clove sore and swollen boil, toxin swelling from hemorrhoids, scalds. Isolated compounds: 80, 81.
- T1201 *Carex fedia* var. *miyabei* (Cyperaceae). Isolated compounds: 14892.
- T1202 *Carex kobomugi* (Cyperaceae); SHA ZUAN TAI CAO; Sieve Sedge. Used part: fruit. TCM Effects: To fortify spleen and boost *qi*, downbear counterflow and check vomiting. TCM Indications: Spleen-stomach vacuity, vomiting and hiccough. Isolated compounds: 12239.
- T1203 *Carex pendula* (Cyperaceae); XIA CHUI TAI CAO; Drooping Sedge\*. Isolated compounds: 12240, 14890, 14891.
- T1204 *Careya arborea* KA LI YU RUI. Isolated compounds: 3193.
- T1205 *Carica papaya* (Caricaceae); FAN MU GUA; Papaya Fruit. Used part: fruit. TCM Effects: To disperse food and promote lactation, dispel damp and free network vessels, resolve toxin and kill worms. TCM Indications: Stomachache, dysentery, inhibited urine and stool, wind impediment, foot rot. Isolated compounds: 1358, 2294, 3209, 3210, 3214, 3215, 3218, 4293, 4294, 8760, 15135, 17263, 17264, 19650, 22520.
- T1206 *Carica papaya* (Caricaceae); FAN MU GUA YE; Papaya Leaf. Used part: leaf. TCM Effects: To resolve toxin, joint bones. TCM Indications: Toxin swelling of sores, fracture. Isolated compounds: 18022.
- T1207 *Carissa edulis* (Apocynaceae); AI JI JIA HU CI; Egyptian Carissa. Isolated compounds: 15806.
- T1208 *Carlina acaulis* (Asteraceae); CHAO XIAN JI; Stemless Carline

- Thistle. Isolated compounds: 3200.
- T1209 *Carnegiea gigantea* (Cactaceae); JU REN ZHU. Isolated compounds: 16746.
- T1210 *Carpesium abrotanoides* (Asteraceae); TIAN MING JING; Common Carpesium. Used part: root, stem-leaf. TCM Effects: To clear heat, transform phlegm, resolve toxin, kill worms, break stasis, stanch bleeding. TCM Indications: Nipple moth, throat impediment, acute fright wind, chronic fright wind, toothache, swelling toxin of clove sore, hemorrhoids and fistulas, Itchy papules, poisonous snake bite, worm accumulation, blood conglomeration, blood ejection, spontaneous external bleeding, blood strangury, bleeding due to external injury. Isolated compounds: 2850, 3147, 3220, 3241, 3242, 8313, 8313, 8982, 11468, 11796, 20369, 20906, 20988.
- T1211 *Carpesium abrotanoides* (Asteraceae); TIAN MING JING GUO; Common Carpesium Fruit. Used part: fruit. TCM Effects: To kill worms. TCM Indications: Ascariasis, oxyuria disease, ancylostomiasis, taeniasis, child *gan* accumulation. Isolated compounds: 3147, 3220.
- T1212 *Carpesium eximium* (Asteraceae); DA HUA JIN WA ER; Bigflower Carpesium\*. Used part: whole herb or root cortex. TCM Effects: To cool blood and stanch bleeding, dispel stasis. TCM Indications: Bleeding due to external injury, knocks and falls. Isolated compounds: 3147.
- T1213 *Carpesium longifolium* (Asteraceae); CHANG YE TIAN MING JING; Longleaf Carpesium. Isolated compounds: 191, 5498, 5648, 5689, 7147, 10020, 11203, 14828, 16675, 19983.
- T1214 *Carpesium triste* var. *manshuricum* (Asteraceae); DONG BEI AN HUA JIN WA ER; Northeast Dim-flower Carpesium\*. Isolated compounds: 7074, 7076.
- T1215 *Carthamus tinctorius* (Asteraceae); HONG HUA; Safflower. Used part: flower. TCM Effects: To quicken blood and free menstruation, dissipate stasis and relieve pain. TCM Indications: Amenorrhea, dysmenorrhea, retention of lochia, angina pectoris, cerebral thrombosis, neurodermatitis, concretion and conglomeration, lump glomus, knocks and falls, swollen pain due to bleeding. Isolated compounds: 618, 1598, 2228, 3223, 3224, 3225, 3226, 3844, 4966, 6101, 9385, 9486, 9493, 9515, 9516, 10273, 10684, 11754, 12020, 12569, 12891, 12893, 15203, 15358, 15660, 15662, 16108, 16109, 17090, 17771, 17915, 18317, 18833, 19087, 19110, 19111, 19122, 19983, 20280, 21415, 21604, 21605, 21607, 21613, 21614, 21615, 21617, 21618, 21619, 21620, 21919.
- T1216 *Carum ajowan* (Apiaceae); YIN DU ZANG HUI XIANG; India Caraway\*. Isolated compounds: 5154, 5171, 6093, 10039, 10378, 10763, 10764, 13761, 13762, 13767.
- T1217 *Carum carvi* (Apiaceae); GE LU ZI; Caraway. Used part: fruit. TCM Effects: To rectify *qi* and promote digestion, dissipate cold and relieve pain. TCM Indications: Cold pain in stomach duct and abdomen, retching counterflow, indigestion, mounting *qi*, cold stagnation lumbago. Isolated compounds: 3237, 5809, 5810, 7975, 9896, 11964, 12843, 13729, 13730, 13731, 13732, 13733, 13734, 13735, 13736, 13737, 13738, 13752, 13754, 13763, 13966, 16927.
- T1218 *Carya illinoensis* (Juglandaceae); MEI GUO SHAN HE TAO; Pecan. Isolated compounds: 11903.
- T1219 *Carya ovata* (Juglandaceae); CU PI SHAN HE TAO; Shagbark Hickory. Isolated compounds: 11903.
- T1220 *Caryopteris clandonensis* (Verbenaceae); ZA JIAO YOU<sup>(2)</sup>; Hybrid Bluebeard\*. Isolated compounds: 356, 3785, 3786, 3787, 6818.
- T1221 *Caryopteris divaricata* (Verbenaceae); YOU<sup>(2)</sup>; Divaricate Bluebeard. Isolated compounds: 3246.
- T1222 *Caryopteris glutinosa* (Verbenaceae); NIAN YE YOU<sup>(2)</sup>; Glutinous Bluebeard. Used part: aerial parts. TCM Effects: To clear heat and resolve toxin. Isolated compounds: 8787.
- T1223 *Casearia guianensis* (Flacourtiaceae). Isolated compounds: 3269, 3270, 3272, 3273.
- T1224 *Casearia membranacea* (Flacourtiaceae); MO ZHI JIAO GU CUI; Membranous Casearia\*. Isolated compounds: 1367, 3257, 3258, 3259, 3260, 3261, 3262, 3263, 3264, 3265, 3266, 3267, 3268, 3271, 3274, 5297, 7788, 7789, 7951, 14484, 19981, 19983, 19985, 20237, 20356, 20362, 20363, 20554, 22332.
- T1225 *Casearia sylvestris* var. *lingua* (Flacourtiaceae); SHE XING LIN SHENG JIAO GU CUI; Lingual Forest-in Casearia\*. Isolated compounds: 184, 3258.
- T1226 *Casimiroa edulis* (Rutaceae); XIANG ROU GUO; Edible Casimiroa. Isolated compounds: 3275, 16559.
- T1227 *Casimiroa tetrameria* (Rutaceae); SI JI XIANG ROU GUO; Tetrabase Casimiroa\*. Isolated compounds: 9508, 13963, 16868.
- T1228 *Cassia absus* (Fabaceae); A SU JUE MING; Absus Senna\*. Isolated compounds: 3452.
- T1229 *Cassia acutifolia* (Fabaceae); JIAN YE FAN XIE YE; Sharpleaf Senna Leaf. Used part: leaf. TCM Effects: See *Cassia angustifolia*. TCM Indications: See *Cassia angustifolia*. Isolated compounds: 967, 3615, 6368, 12020, 17247, 18759, 19749, 19750, 19751, 19752.
- T1230 *Cassia angustifolia* (Fabaceae); FAN XIE YE; Narrowleaf Senna Leaf. Equivalent plant: *Cassia acutifolia*. Used part: leaf. TCM Effects: To drain heat and move stagnation, free stool, disinherit water. TCM Indications: Heat bind and accumulation, constipation with abdominal pain, edema distention fullness. Isolated compounds: 968, 3615, 12020, 17247, 18759, 19749, 19750, 19751, 19752.
- T1231 *Cassia dentata* (Fabaceae); CHI CHI JUE MING; Toothwing Senna\*. Isolated compounds: 18643.
- T1232 *Cassia fistula* (Fabaceae); PO LUO MEN ZAO JIA; Goldenshower Senna Fruit. Used part: fruit. TCM Effects: To clear heat and free stool, transform stagnation and relieve pain. TCM Indications: Heat wind in heart and diaphragm, steaming bone fever and chills, three worms. Isolated compounds: 2289, 2291, 3615, 3620, 7804, 10205, 10218, 10493, 10603, 17869.
- T1233 *Cassia garrettiana* (Fabaceae); JIA LEI JUE MING; Garretti Senna\*. Isolated compounds: 3285, 3286, 3287, 3288, 3289, 3290, 3291, 17968.
- T1234 *Cassia italika* (Fabaceae); YI DA LI JUE MING ZI; Italian Senna\*. Isolated compounds: 6016.
- T1235 *Cassia kleinii* (Fabaceae); KE LEI NI JUE MING; Kleini Senna\*. Isolated compounds: 12233, 12234, 12235, 12236.
- T1236 *Cassia laevigata* [Syn. *Cassia floribunda*] (Fabaceae); GUANG YE JUE MING; Nitidleaf Senna\*. Used part: root and leaf. TCM Effects: To clear liver and brighten eyes, free stool. TCM Indications: Common cold with fever, liver heat and red eyes, eye screen,

- constipation. Isolated compounds: 8054.
- T1237 *Cassia leptophylla* (Fabaceae); XIA YE JUE MING; Narrowleaf Senna\*. Isolated compounds: 20141.
- T1238 *Cassia mimosoides* (Fabaceae); SHAN BIAN DOU ZI; Sensitiveplant-like Senna. Used part: seed. TCM Effects: To clear heat and resolve toxin, fortify spleen and disinhibit damp, free stool. TCM Indications: Jaundice, summerheat-heat and vomiting diarrhea, child *gan* accumulation, edema, inhibited urination, habitual constipation, poisonous snake bite. Isolated compounds: 967, 3615, 18759.
- T1239 *Cassia nodosa* (Fabaceae); SHEN HUANG DOU; Jointwood Senna. Used part: fruit. TCM Effects: To resolve toxin. TCM Indications: Papules, pox. Isolated compounds: 2064, 15651, 15654.
- T1240 *Cassia obtusifolia* (Fabaceae); DUN YE JUE MING; Obtuseleaf Senna\*. Equivalent plant: *Cassia tora*. Used part: ripe seed. TCM Effects: To clear liver and brighten eyes, disinhibit water and free stool. TCM Indications: Red eyes with gall, delacrimation and photophobia, clear-eye blindness, night blindness, dizziness and headache, dim vision, cirrhosis with ascites, inhibited urination, habitual constipation, toxin swelling, skin lichen. Isolated compounds: 967, 2009, 3613, 3615, 6776, 8649, 8696, 11744, 17247, 21459.
- T1241 *Cassia occidentalis* (Fabaceae); WANG JIANG NAN; Coffee Senna. Used part: stem-leaf. TCM Effects: To clear lung, clear liver, calm asthma, disinhibit urine, free stool, resolve toxin and disperse swelling, lower blood pressure. TCM Indications: Cough and asthma, hypertension, headache and red eyes, dribbling urination, constipation, swelling toxin of welling abscess and sore, snake or insect bites. Isolated compounds: 967, 3281, 3282, 3283, 3599, 3615, 6776, 9333, 9791, 15914, 15915, 19933.
- T1242 *Cassia occidentalis* (Fabaceae); WANG JIANG NAN ZI; Coffee Senna Seed. Used part: seed. TCM Effects: To clear liver, fortify stomach, free stool, resolve toxin. TCM Indications: Red eyes with gall, dizzy and distended head, indigestion, stomachache, dysentery, constipation, swollen welling abscess and toxin of clove. Isolated compounds: 967, 6776, 17247.
- T1243 *Cassia quinquangula* (Fabaceae); WU LENG JUE MING; Fiveangular Senna\*. Isolated compounds: 18444, 19041.
- T1244 *Cassia siamea* (Fabaceae); TIE DAO MU; Siamese Senna. Isolated compounds: 3598, 3615, 14521.
- T1245 *Cassia sieberiana* (Fabaceae); XI BO JUE MING; Sieber Senna. Isolated compounds: 6819.
- T1246 *Cassia singueana* (Fabaceae); DONG FEI JUE MING; East-African Senna\*. Isolated compounds: 19933, 19934.
- T1247 *Cassia sophera* (Fabaceae); JIANG MANG; Inflatedfruit Senna. Used part: seed. TCM Effects: To dispel phlegm and allay thirst, regulate center. TCM Indications: Red eyes with gall, dizzy and distended head, oral ulcer, habitual constipation, child *gan* accumulation, dysentery, malaria. Isolated compounds: 4879.
- T1248 *Cassia* sp. (Fabaceae). Isolated compounds: 1282.
- T1249 *Cassia* spp. (Fabaceae). Isolated compounds: 3615.
- T1250 *Cassia tora* (Fabaceae); JUE MING ZI; Sickle Senna Seed. Used part: ripe seed. TCM Effects: See *Cassia obtusifolia*. TCM Indications: See *Cassia obtusifolia*. Isolated compounds: 967, 1514, 2008, 3284, 3598, 3612, 3613, 3615, 3617, 6776, 6777, 6779, 8644, 8645, 8649, 8696, 15791, 15900, 15908, 17247, 17250, 18759, 19041, 19042, 21452, 21455.
- T1251 *Cassytha filiformis* (Lauraceae); WU YE TENG; Filiform Cassytha. Used part: herb. TCM Effects: To clear heat and disinhibit damp, cool blood and resolve toxin. TCM Indications: Common cold with fever, heat strangury, stone strangury, damp-heat jaundice, diarrhea, dysentery, hemoptysis, nosebleed(epistaxis), wind-fire eye, knocks and falls, bleeding due to external injury, ulcerating sores, burns and scalds, scab and *lai*. Isolated compounds: 585, 3293, 3295, 5417, 6632, 12574, 15431.
- T1252 *Cassytha glabella* (Lauraceae); WU MAO WU GEN TENG; Glabrous Cassytha\*. Isolated compounds: 3294.
- T1253 *Cassytha melantha* (Lauraceae); HEI HUA WU GEN TENG; Blackflower Cassytha\*. Isolated compounds: 3294.
- T1254 *Castanea mollissima* (Fagaceae); BAN LI; Chinese Chestnut. Used part: kernel. TCM Effects: To boost *qi* and fortify spleen, supplement kidney and strengthen sinews, quicken blood and disperse swelling, stanch bleeding. TCM Indications: Spleen vacuity diarrhea, stomach reflux vomiting, limp aching in legs and knees, sinew and bone wound with swelling pain, scrofula, blood ejection, spontaneous external bleeding, bloody stool. Isolated compounds: 3297, 3298, 11482, 19277, 20257, 20389, 22435.
- T1256 *Castanea mollissima* (Fagaceae); LI SHU PI; Chinese Chestnut Bast. Used part: bast. TCM Effects: To resolve toxin and disperse swelling, promote astriction and stanch bleeding. TCM Indications: Erysipelas, *lai*, mouth sore, lacquer sore, knocks and falls. Isolated compounds: 7441, 15372, 22246, 22435.
- T1255 *Castanea sativa* (Fagaceae); OU ZHOU LI; Spanish Chestnut. Isolated compounds: 9202.
- T1257 *Castilla elastica* . Isolated compounds: 9336, 16958, 16959.
- T1258 *Casuarina equisetifolia* (Casuarinaceae); MU MA HUANG; Horsetail Beefwood. Used part: tender branchlet-leaf or bark. TCM Effects: To diffuse lung and suppress cough, move *qi* and relieve pain, warm center and check diarrhea, disinhibit damp. TCM Indications: Common cold with fever, cough, mounting *qi*, abdominal pain, diarrhea, dysentery, inhibited urination, beriberi. Isolated compounds: 3040, 4149, 4150, 4155, 4156, 4177, 4178, 5571, 11642, 14454.
- T1259 *Casuarina stricta* (Casuarinaceae); XIAO MU MA HUANG; Small Beefwood\*. Isolated compounds: 16765.
- T1260 *Catalpa bignonioides* (Bignoniaceae); MEI GUO ZI; Southern Catalpa. Isolated compounds: 3307.
- T1261 *Catalpa ovata* (Bignoniaceae); ZI BAI PI; Ovate Catalpa Bast. Used part: bast. TCM Effects: To clear heat and disinhibit damp, downbear counterflow and check vomiting, kill worms and relieve itch. TCM Indications: Damp-heat jaundice, sore and scab, eczema, itchy skin. Isolated compounds: 3307, 4135, 5188, 7768, 9455, 20566.
- T1262 *Catalpa ovata* (Bignoniaceae); ZI MU; Ovate Catalpa. Used part: wood. TCM Effects: To promote vomiting, relieve pain. TCM Indications: Pain wind in limbs, cholera. Isolated compounds: 2004, 3305, 3306, 12502, 15256, 15257, 15258, 15259, 15260, 15261.
- T1263 *Catalpa ovata* (Bignoniaceae); ZI SHI; Ovate Catalpa Fruit. Used part: fruit. TCM Effects: To disinhibit water and disperse edema. TCM Indications: Inhibited urination, edema, ascites. Isolated compounds:



- 3304, 3307.
- T1264 *Catalpa ovata* (Bignoniaceae); ZI YE; Ovate Catalpa Leaf. Used part: leaf. TCM Effects: To clear heat and resolve toxin, kill worms and relieve itch. TCM Indications: Infant ardent fever, scab sore, itchy skin. Isolated compounds: 3307, 4152, 4153, 4171, 4172, 4173, 4174, 4175, 4176, 5767, 6363, 7446, 9821, 9828, 10443, 14497, 16277, 16281.
- T1265 *Catalpa speciosa* (Bignoniaceae); HUANG JIN SHU; Northern Catalpa. Isolated compounds: 3307.
- T1266 *Catha edulis* (Celastraceae); QIAO CHA; Khat. Used part: leaf. TCM Effects: To clear heat, resolve toxin, raise spirit, allay thirst. Isolated compounds: 3326, 3327, 15789, 17862.
- T1267 *Catharanthus lanceus* (Apocynaceae); JIAN ZHUANG CHANG CHUN HUA; Lanceolate Periwinkle\*. Isolated compounds: 12734.
- T1268 *Catharanthus longifolius* (Apocynaceae); CHANG YE CHANG CHUN HUA; Longleaf Periwinkle\*. Isolated compounds: 3321, 12734, 22498, 22499.
- T1269 *Catharanthus ovalis* (Apocynaceae); LUAN YUAN CHANG CHUN HUA; Oval Periwinkle\*. Isolated compounds: 3321, 12734, 22491, 22498, 22499.
- T1270 *Catharanthus pusillus* (Apocynaceae); XI XIAO CHANG CHUN HUA; Slender Periwinkle\*. Isolated compounds: 12734, 22498.
- T1271 *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochera rosea*] (Apocynaceae); CHANG CHUN HUA; Madagascar Periwinkle. Used part: whole herb. TCM Effects: To resolve toxin, clear heat and calm liver, anticancer. TCM Indications: Hypertension, swelling toxin of welling abscess and sore, scalds. Isolated compounds: 618, 783, 823, 1002, 1111, 3320, 3321, 3322, 3323, 4080, 4709, 4943, 5716, 5737, 7839, 7840, 8905, 11083, 11084, 11085, 11489, 11718, 12732, 12733, 12734, 12944, 12945, 12946, 12947, 12950, 14889, 16921, 16966, 17555, 18073, 18918, 19762, 20000, 20503, 20564, 20578, 20580, 21055, 22486, 22487, 22488, 22489, 22490, 22491, 22493, 22497, 22498, 22499, 22500, 22501.
- T1272 *Caulerpa sertularioides* (Caulerpaceae); BANG YE JUE ZAO; Howe. Isolated compounds: 19776.
- T1273 *Caulophyllum* spp. (Berberidaceae). Isolated compounds: 12642.
- T1274 *Cayaponia tayuya* (Cucurbitaceae); TA YOU XIE GUA; Taiuia Root\*. Isolated compounds: 4328, 5573.
- T1275 *Cayratia japonica* (Vitaceae); WU LIAN MEI; Japanese Cayratia. Used part: whole herb or root. TCM Effects: To clear heat and disinhibit damp, resolve toxin and disperse swelling. TCM Indications: Swollen welling abscess, clove sore, epidemic parotitis, erysipelas, wind-damp pain, jaundice, dysentery, hematuria, white turbidity. Isolated compounds: 3344, 9500.
- T1276 *Ceanothus integerrimus* (Rhamnaceae); QUAN YUAN YE MEI ZHOU CHA; Deerbrush. Isolated compounds: 11092.
- T1277 *Cedrela odorata* (Meliaceae); YAN YANG CHUN; Cigarbox Cedrela. Isolated compounds: 15992.
- T1278 *Cedrela sinensis* (Meliaceae); ZHONG GUO YANG CHUN; Chinese Cedrela\*. Used part: leaf. TCM Effects: To dispel summerheat and transform damp, resolve toxin, kill worms. TCM Indications: Summerheat-damp and damage center, nausea and vomiting, inappetence, diarrhea, dysentery, swelling toxin of welling abscess and flat abscess, scabies, bald white scalp sore. Isolated compounds: 9927, 10544, 16301, 16397, 16398.
- T1279 *Cedrelopsis gracilis* (Pinaceae). Isolated compounds: 3347, 3348.
- T1280 *Cedrelopsis grevei* (Pinaceae). Isolated compounds: 2599, 3349, 14223, 15721, 19540.
- T1281 *Cedrus atlantica* (Pinaceae); BEI FEI XUE SONG; Atlas Cedar. Isolated compounds: 5284, 5295, 5313, 6897, 9747.
- T1282 *Cedrus deodara* (Pinaceae); XUE SONG; Deodar Cedar. Used part: leaf and wood. TCM Effects: To clear heat and disinhibit damp, stanch bleeding and dissipate stasis. TCM Indications: Dysentery, intestinal wind bleeding, edema, wind-damp impediment pain, leprosy. Isolated compounds: 932, 3394, 9541, 11315, 20987.
- T1283 *Cedrus* sp. (Pinaceae). Isolated compounds: 1074.
- T1284 *Ceiba pentandra* (Bombacaceae); JI BEI; Kapok Ceiba. Isolated compounds: 10798, 11452, 11454, 22358, 22359.
- T1285 *Celastrus angulatus* (Celastraceae); DIAO GAN MA; Angled Bittersweet. Used part: root or root cortex. TCM Effects: To dispel wind and eliminate damp, quicken blood and regulate menstruation, resolve toxin and kill worms. TCM Indications: Wind-damp impediment pain, swelling pain from fracture, amenorrhea, ulcerating sores, tinea capitis, pudendal itch. Isolated compounds: 3536, 3537, 5300, 5312, 9043, 12336, 12337, 12338, 12339, 15534, 15535, 15536, 15537, 16817, 21025, 21517, 21520, 21524, 21525, 21526.
- T1286 *Celastrus flagellaris* (Celastraceae); CI NAN SHE TENG; Hookedspine Bittersweet. Used part: root, fruit or stem. TCM Effects: To dispel wind and eliminate damp, quicken blood and relieve pain, resolve toxin and disperse swelling. TCM Indications: Wind-damp impediment pain, numbness in limbs, knocks and falls, amenorrhea, dysentery, welling abscess and flat abscess, poisonous snake bite. Isolated compounds: 3367, 3369, 9717.
- T1287 *Celastrus hypoleucus* (Celastraceae); MIAN TENG; Pale Bittersweet. Used part: root. TCM Effects: To transform stasis and disperse swelling. TCM Indications: Wound swelling from knocks and falls. Isolated compounds: 12018, 18387.
- T1288 *Celastrus orbiculatus* [Syn. *Celastrus articulatus*] (Celastraceae); NAN SHE TENG; Oriental Bittersweet. Used part: stem vine. TCM Effects: To dispel wind and eliminate damp, free menstruation and relieve pain, quicken blood and resolve toxin. TCM Indications: Painful joints due to rheumatism, numbness in limbs, paralysis, headache, toothache, mounting *qi* [=hernia], dysmenorrhea, menstrual block, infant fright wind, sprain from knocks and falls, dysentery, sand, zoster. Isolated compounds: 6819, 6853, 6865.
- T1289 *Celastrus orbiculatus* [Syn. *Celastrus articulatus*] (Celastraceae); NAN SHE TENG GEN; Oriental Bittersweet Root. Used part: root. TCM Effects: To dispel wind and overcome damp, move *qi* and dissipate blood, resolve toxin and disperse swelling. TCM Indications: Wind-damp impediment pain, painful swelling from knocks and falls, amenorrhea, headache, lumbago, mounting *qi*, dysentery, intestinal wind bleeding, swelling toxin of welling abscess and flat abscess, burns and scalds, poisonous snake bite. Isolated compounds: 3362, 3363, 3364, 3365, 3366, 3368, 6766, 13090, 13095, 13096, 13623, 16027, 16045, 16162, 16163, 16164, 16165, 16166, 16167.
- T1290 *Celastrus orbiculatus* [Syn. *Celastrus articulatus*] (Celastraceae); NAN SHE TENG YE; Oriental Bittersweet Leaf. Used part: leaf.

- TCM Effects: To dispel wind and eliminate damp, resolve toxin and disperse swelling, quicken blood and relieve pain. TCM Indications: Wind-damp impediment pain, swelling of sores and boils, zoster, eczema, knocks and falls, snake or insect bites. Isolated compounds: 6819, 12060, 12083, 18352, 18367.
- T1291 *Celastrus orbiculatus* [Syn. *Celastrus articulatus*] (Celastraceae); NAN SHE TENG GUO; Oriental Bittersweet Fruit. Used part: fruit. TCM Effects: To nourish heart and quiet spirit, harmonize blood and relieve pain. TCM Indications: Palpitation and insomnia, amnesia and heavy dreams, toothache, pain in sinews and bones, numbness in lumbus and leg, painful wound from knocks and falls. Isolated compounds: 131, 132, 155, 292, 5285, 5292.
- T1292 *Celastrus paniculatus* (Celastraceae); DENG YOU TENG ZI; Panicled Bittersweet Seed. Used part: seed. TCM Effects: To dispel wind and relieve pain, free stool, promote vomiting. TCM Indications: Wind-damp impediment pain, constipation, food accumulation and distending pain in stomach duct. Isolated compounds: 3361, 5286, 13421, 13422, 21024, 21522.
- T1293 *Celastrus scandens* (Celastraceae); MEI ZHOU NAN SHE TENG; American Bittersweet. Isolated compounds: 3368.
- T1294 *Celastrus stephanotifolius* (Celastraceae). Isolated compounds: 3362, 3363, 13090, 16027.
- T1295 *Celastrus strigillosus* (Celastraceae); CU MAO NAN SHE TENG; Hirsute Bittersweet\*. Isolated compounds: 3368.
- T1296 *Celosia argentea* (Amaranthaceae); QIANG XIANG; Feather Cockscomb. Used part: seed. TCM Effects: To dispel wind-heat, clear liver fire, brighten eyes and eliminate eye screens. TCM Indications: Red eyes with gall, eye screen, dizziness and dim vision, hypertension, nosebleed(epistaxis), wind-heat itching of skin, sore and lichen. Isolated compounds: 3384, 13179, 13180, 19983.
- T1297 *Celosia cristata* (Amaranthaceae); JI GUAN ZI; Common Cockscomb Seed. Isolated compounds: 12569, 12891, 12893, 15203, 16066, 18656, 20280, 22554.
- T1299 *Celosia cristata* (Amaranthaceae); JI GUAN HUA; Common Cockscomb Flower. Used part: inflorescence. TCM Effects: To cool blood and stanch bleeding, check discharge, check diarrhea. TCM Indications: Bleeding, vaginal discharge, diarrhea, dysentery. Isolated compounds: 1013, 2319.
- T1298 *Celtis philippinensis* (Ulmaceae); FEI LV BIN PIAO SHU; Philippine Nettle. Isolated compounds: 7784, 19920.
- T1300 *Celtis* sp. (Ulmaceae). Isolated compounds: 19545.
- T1301 *Centaurea aspera* ssp. *aspera* (Asteraceae); CU CAO SHI CHE JU; Rough Star Thistle. Isolated compounds: 14113, 14514, 16351.
- T1302 *Centaurea aspera* subsp. *stenophylla* (Asteraceae); XIA YE CU CAO SHI CHE JU; Narrow Rough Star Thistle\*. Isolated compounds: 14113, 14514, 16351.
- T1303 *Centaurea attica* ssp. *attica* (Asteraceae). Isolated compounds: 206, 357, 2002, 3853, 6030, 9760, 13416, 14312.
- T1304 *Centaurea bracteata* (Asteraceae); BAO PIAN SHI CHE JU; Bracteole Centaurea\*. Isolated compounds: 2585, 3387, 3398.
- T1305 *Centaurea cyanus* (Asteraceae); SHI CHE JU; Cornflower. Used part: whole herb, ray flower. TCM Effects: to clear heat and resolve toxin, quicken blood and disperse swelling, brighten eyes (whole herb), disinhibit urine (flower). Isolated compounds: 3392, 3393, 4451, 11327, 14998, 14999.
- T1306 *Centaurea nicolai* (Asteraceae); NI GU LA SHI CHE JU; Nicola Centaurea\*. Isolated compounds: 504, 4712, 19193.
- T1307 *Centaurea pseudoscabiosa* ssp. *pseudoscabiosa* (Asteraceae); DONG AN NA TUO LI YA SHI CHE JU; East-Anatolia Centaurea\*. Isolated compounds: 2105, 3601, 17406.
- T1308 *Centaurea* sp. (Asteraceae). Isolated compounds: 3635, 19122.
- T1309 *Centaurea thessala* ssp. *drakiensis* (Asteraceae). Isolated compounds: 206, 357, 3853, 6030, 9759, 10082, 14312.
- T1310 *Centaureum spicatum* (Gentianaceae); SUI ZHUANG BAI JIN HUA; Spicate Centaureum\*. Isolated compounds: 18400, 18401, 18402, 18403.
- T1311 *Centella asiatica* (Apiaceae); JI XUE CAO; Asiatic Pennywort. Used part: whole herb with root. TCM Effects: To clear heat and disinhibit damp, resolve toxin and disperse swelling, lower blood pressure. TCM Indications: Sand *qi* abdominal pain, summerheat-heat diarrhea, dysentery, damp-heat jaundice, sand strangury, blood strangury, blood ejection, spontaneous external bleeding, red eyes, swollen throat, wind papules, scab and lichen, swelling toxin of clove welling abscess, knocks and falls, hypertension. Isolated compounds: 1853, 1854, 1855, 2586, 3395, 3396, 3397, 11738, 13336, 13337, 13338, 19460.
- T1312 *Centipeda minima* (Asteraceae); E BU SHI CAO; Small Centipeda. Used part: herb with flower. TCM Effects: To free nasal orifices, relieve cough. TCM Indications: Wind-cold common cold, cough with profuse phlegm, nasal congestion, deep-source nasal congestion and runny nose. Isolated compounds: 1345, 1749, 2602, 6402, 18376, 20369, 20708.
- T1313 *Centranthus longiflorus* ssp. *longiflorus* (Valerianaceae); CHANG HUA XIE CAO; Longflower Valerian\*. Isolated compounds: 5185, 5186.
- T1314 *Centranthus* spp. (Valerianaceae). Isolated compounds: 22312.
- T1315 *Cephaelis ipecacuanha* (Rubiaceae); TU GEN; Ipecacuanha. Used part: root. TCM Effects: To dispel phlegm, effuse sweat, promote vomiting, disinhibit gallbladder. TCM Indications: Dysentery. Isolated compounds: 3400, 6772, 22098.
- T1316 *Cephalanthus occidentalis* (Rubiaceae); FENG XIANG SHU YE; Common Butterbush. Used part: leaf or bud. TCM Effects: To clear heat and resolve toxin, contract damp and relieve itch. TCM Indications: Itching sore of skin, heaven-borne sore, foot rot, knocks and falls, toothache, dysentery, enteritis. Isolated compounds: 1458, 9553, 18827.  
*Cephalanthus pilulifera* = *Adina pilulifera*
- T1317 *Cephalotaxus drupacea* (Cephalotaxaceae); HE GUO CU FEI; Drupaceous Plumyew\*. Isolated compounds: 9609.
- T1318 *Cephalotaxus fortunei* (Cephalotaxaceae); SAN JIAN SHAN; Fortune Plumyew. Used part: branchlet-leaf. TCM Effects: Anticancer. TCM Indications: Carcinoma of stomach, carcinoma of rectum, carcinoma of lung, carcinoma of esophagus, lymphatic sarcoma, leukaemia. Isolated compounds: 348, 1030, 1270, 1476, 3401, 3403, 3404, 3405, 3406, 3407, 3602, 3947, 5066, 5160, 5181, 6608, 6916, 6969, 7014, 7041, 7929, 8401, 9191, 9194, 9195, 9239, 9609, 9900, 9901, 9901, 9902, 11316, 11317, 11449, 11449, 14527, 14738, 15403, 19514,

- 19757, 19785, 20808, 22696, 22696.
- T1319 *Cephalotaxus hainanensis* [Syn. *Cephalotaxus mannii*] (Cephalotaxaceae); HAI NAN CU FEI; Hainan Plumyew. Used part: branchlet and bark. TCM Effects: Anticancer. TCM Indications: Carcinoma. Isolated compounds: 3402, 3404, 5066, 5181, 6608, 7014, 9191, 9194, 9195, 9239, 9609, 11449, 20811.
- T1320 *Cephalotaxus harringtonia* (Cephalotaxaceae); RI BEN CU FEI; Japanese Plumyew. Isolated compounds: 3404, 5181, 8401, 9239, 9609, 11449, 22696.
- T1321 *Cephalotaxus harringtonia* var. *drupacea* (Cephalotaxaceae); CHANG GENG CU FEI; Longstalk Plumyew\*. Isolated compounds: 7, 5467, 5747, 7764, 9744, 20465.
- T1322 *Cephalotaxus oliveri* (Cephalotaxaceae); BI ZI CU FEI; Oliver Plumyew. Used part: Branchlet-leaf and seed. TCM Effects: Anticancer. TCM Indications: Carcinoma. Isolated compounds: 9239, 16086.
- T1323 *Cephalotaxus sinensis* [Syn. *Cephalotaxus harringtonia* var. *sinensis*] (Cephalotaxaceae); ZHONG GUO CU FEI ZHI YE; Chinese Plumyew Branch-leaf. Used part: branchlet-leaf. TCM Effects: Anticancer. TCM Indications: Carcinoma. Isolated compounds: 3404, 5066, 5181, 6608, 7041, 9194, 9239, 9609, 9901, 11449, 22696.
- T1324 *Cephalotaxus sinensis* [Syn. *Cephalotaxus harringtonia* var. *sinensis*] (Cephalotaxaceae); ZHONG GUO CU FEI ZI; Chinese Plumyew Seed. Isolated compounds: 9194, 11449.
- T1325 *Cephalotaxus wilsoniana* (Cephalotaxaceae); TAI WAN CU FEI; Wilson Plumyew. Isolated compounds: 1476, 1492, 3404, 7041, 7042, 7043, 9194, 11449, 11600, 14614, 20465, 20625, 20626, 20627, 21073, 21938, 22696.  
*Cerasus humilis* = *Prunus humilis*  
*Cerasus japonica* = *Prunus japonica*
- T1326 *Ceratonia siliqua* (Fabaceae); CHANG JIAO DOU; Carob. Isolated compounds: 832, 18265.
- T1327 *Ceratostigma minus* (Plumbaginaceae); XIAO JIAO ZHU HUA; Creeping Ceratostigma, Creeping Bluesnow. Used part: root. TCM Effects: To dispel wind-damp, free channels and network vessels, relieve pain. TCM Indications: Wind-damp numbness, pain in stomach duct, abdomen and rib-side, knocks and falls, fracture, angitis, parotitis. Isolated compounds: 17569.
- T1328 *Ceratostigma plumbaginoides* (Plumbaginaceae); JIAO ZHU HUA; Blue Ceratostigma, Blue Bluesnow. Used part: root. TCM Effects: See *Ceratostigma willmottianum*. TCM Indications: See *Ceratostigma willmottianum*. Isolated compounds: 17568.
- T1329 *Ceratostigma willmottianum* (Plumbaginaceae); ZI JIN LIAN; Willmott Ceratostigma. Equivalent plant: *Ceratostigma plumbaginoides*. Used part: root. TCM Effects: To move *qi*, quicken blood, settle pain. TCM Indications: Knocks and falls, fracture. Isolated compounds: 17568.
- T1330 *Cerbera manghas* (Apocynaceae); NIU XIN QIE ZI; Common Cerberustree. Used part: kernel. TCM Indications: Anesthesia. Isolated compounds: 349, 526, 1389, 1390, 3416, 3417, 4775, 13479, 15494, 20671, 21326.
- T1331 *Cerbera odollam* (Apocynaceae); AO DAO LA MU HAI MANG GUO; Odollam Cerberustree\*. Isolated compounds: 349, 3416, 3429, 15494, 15495, 21325, 21326.
- T1332 *Cercidiphyllum japonicum* (Cercidiphyllaceae); RI BEN LIAN XIANG SHU; Japanese Katsura-tree. Used part: ripe fruit. TCM Effects: To dispel wind and settle fright, check tetany. TCM Indications: Infant fright wind, convulsion with cold limbs. Isolated compounds: 1074, 3418.
- T1333 *Cercidiphyllum japonicum* var. *sinense* (Cercidiphyllaceae); LIAN XIANG SHU; Katsura-tree. Isolated compounds: 3318.
- T1334 *Cereus pectenaboriginum* (Cactaceae). Isolated compounds: 16746.
- T1335 *Ceriops decandra* (Rhizophoraceae); SHI XIONG RUI JIAO GUO MU; Ten-stamen Ceriops\*. Isolated compounds: 3423, 3424, 3425, 3426, 3427, 3428.
- T1336 *Ceriops tagal* [Syn. *Rhizophora tagal*] (Rhizophoraceae); JIAO GUO MU; Common Ceriops. Used part: bark. TCM Effects: To resolve toxin, stanch bleeding, close sores. TCM Indications: Bleeding due to external injury, ulcerating sores. Isolated compounds: 20600, 20601, 20602, 20603, 20604, 20605, 20606, 20607.
- T1337 *Cervus nippon*; *Cervus elaphus* (Cervidae); LU RONG; Hairy Antler. Used part: non-ossifying young horn of male deer or stag. TCM Effects: To supplement kidney and invigorate *yang*, boost essence and blood, strengthen sinews and bones, regulate thoroughfare and controlling vessels, draw sore toxin. TCM Indications: Impotence and emission, infertility due to uterus cold, marked emaciation, thrombocytopenia, septicemia, fatigued spirit, aversion of cold, dizziness, tinnitus and deafness, aching pain in lumbus and back, limp wilting sinew and bone, flooding and spotting with vaginal discharge, enduring *yin* flat abscess. Isolated compounds: 626, 3585, 7383, 7384, 7387, 8076, 8753, 10913, 17954, 18656.
- T1338 *Cestrum nocturnum* (Solanaceae); YE XIANG SHU; Nightblooming Cestrum. Used part: leaf. TCM Effects: To clear heat and disperse swelling. TCM Indications: Mammary welling abscess, welling abscess and sores. Isolated compounds: 1177, 5982, 5983, 6128, 6129, 6130, 6447, 7521, 8657, 8658, 8659, 8660, 8693, 8695, 8698, 8748, 10722, 10727.
- T1339 *Cestrum parqui* (Solanaceae); PA KE YE XIANG SHU; Parqui Cestrum. Isolated compounds: 5956, 5957, 5958, 7079, 7123, 10366, 10367, 10368, 10369, 10370, 10371, 11583, 15967, 20215, 21124, 21753.
- T1340 *Cestrum sendtnerianum* (Solanaceae). Isolated compounds: 6124, 6125, 6126, 6127, 6131.
- T1341 *Cetraria islandica* (Parmeliaceae); BING DAO YI; Iceland Moss. Used part: lichen. TCM Effects: To regulate digestive system, increase appetite. Isolated compounds: 17979.
- T1342 *Chaenomeles lagenaria* [Syn. *Chaenomeles speciosa*] (Rosaceae); QIU MU GUA; Common Floweringquince. Used part: fruit. TCM Effects: To soothe sinews and quicken network vessels, harmonize stomach and transform damp. TCM Indications: Wind-damp impediment pain, aching and weightiness of limbs, hypertonicity of sinews and vessels, vomiting and diarrhea with cramp, beriberi. Isolated compounds: 530, 2978, 3594, 4439, 9717, 16050, 16785.

- T1343 *Chaenomeles sinensis* (Rosaceae); MU GUA; Chinese Floweringquince. Used part: fruit. TCM Effects: To harmonize stomach and soothe the sinews, dispel wind-damp, disperse phlegm and allay thirst. TCM Indications: Vomiting and diarrhea with cramp, wind-damp impediment pain, cough and abundant phlegm, diarrhea, dysentery, painful wound from knocks and falls, beriberi with edema. Isolated compounds: 8621, 16050, 22270.
- T1344 *Chaetomium quadrangulatum* SI LENG JIAO MAO KE JUN. Isolated compounds: 3440, 3441, 3442, 3443, 3444, 3445, 3446, 3447, 3448, 3449, 3450.
- T1345 *Chaetomium thielavioideum*. Isolated compounds: 3439.
- T1346 *Chaetomorpha basiretorsa* LV ZAO JI GEN YING MAO ZAO. Isolated compounds: 4361.  
*Chalcas paniculata* = *Murraya paniculata*
- T1347 *Chamaecyparis formosensis* (Cupressaceae); HONG GUI; Formosan False Cypress. Isolated compounds: 4234, 5170, 10300, 10301, 10372, 10373, 10575, 10657, 13646, 14679.
- T1348 *Chamaecyparis nootkatensis* (Cupressaceae); HUANG BIAN BAI; Yellow Cedar. Isolated compounds: 15705.
- T1349 *Chamaecyparis obtusa* (Cupressaceae); RI BEN BIAN BAI; Hinoki False Cypress. Isolated compounds: 4310, 9546, 11353.
- T1350 *Chamaecyparis pisifera* (Cupressaceae); RI BEN HUA BAI; Sawara False Cypress. Isolated compounds: 1476, 1764, 11353, 14680, 17371, 17486, 17487, 17488, 17489, 17490, 17491, 19428, 19429.
- T1351 *Chamaecyparis* spp. (Cupressaceae). Isolated compounds: 15664.
- T1352 *Chamaenerion angustifolium* [Syn. *Epilobium angustifolium*] (Onagraceae); HONG KUAI ZI; Great Willowherb (Firewood). Used part: herb. TCM Effects: To disinhibit water and percolate damp, rectify *qi* and disperse swelling, quicken blood and regulate menstruation. TCM Indications: Edema, diarrhea, food accumulation distention and fullness, menstrual disorder, galactostasis, scrotal enlargement, itch-pain in sore and papules. Isolated compounds: 4088, 6757, 8095, 10887, 11642, 16011, 16050, 18358, 18371, 18411, 21392.  
*Championella japonica* = *Strobilanthes japonicus*
- T1353 *Changium smyrnioides* (Apiaceae); MING DANG SHEN; Medicinal Changium. Used part: root. TCM Effects: To moisten lung and transform phlegm, nourish *yin* and harmonize stomach, resolve toxin. TCM Indications: Lung heat cough, vomiting nausea, reduced food intake with dry mouth, anemia, dizziness, leukorrhea, clove toxin sores. Isolated compounds: 1048, 11503, 11574, 15515, 20369, 20444.
- T1354 *Chartolepis intermedia* (Asteraceae); BO LIN JU; Intermediate Chartolepis. Isolated compounds: 9015.
- T1355 *Chasmanthera* spp. (Menispermaceae). Isolated compounds: 15751.
- T1356 *Cheiranthus cheiri* (Brassicaceae); GUI ZHU XIANG; Common Wallflower. Used part: flower. TCM Effects: To moisten intestines and free stool, free menstruation. TCM Indications: Constipation, menstrual disorder, amenorrhea, dysmenorrhea. Isolated compounds: 922, 7291, 8591, 11651, 11661, 22492.
- T1357 *Chelidonium majus* (Papaveraceae); BAI QU CAI; Greater Celandine. Used part: whole herb. TCM Effects: To settle pain and relieve cough, disinhibit urine and resolve toxin. TCM Indications: Pain in sensory nerve endings, pain from ulcer in digestive tract, stomachache, abdominal pain, enteritis, dysentery, chronic bronchitis, pertussis, cough, jaundice, edema, ascites, scab and lichen with swelling of sores, snake or insect bites. Isolated compounds: 930, 2303, 3498, 3499, 3500, 3501, 3502, 3507, 3508, 4032, 4290, 5708, 7250, 7820, 9568, 9600, 9903, 13880, 14133, 15659, 15664, 16302, 16473, 17983, 19284, 20133, 20168, 20416, 21061, 22158, 22732.
- T1358 *Chelidonium* spp. (Papaveraceae). Isolated compounds: 3498.
- T1359 *Chenopodium album* (Chenopodiaceae); LI; Lambsquarters Juvenile. Used part: juvenile whole herb. TCM Effects: To clear heat and dispel damp, resolve toxin and disperse swelling, kill worms and relieve itch. TCM Indications: Fever, cough, dysentery, diarrhea, abdominal pain, mounting *qi*, decayed toothache, eczema, scab and lichen, white patch wind, swelling pain of sores, poisonous insect stings. Isolated compounds: 7777, 7778, 7788, 14444, 14445, 15957.
- T1360 *Chenopodium amaranticolor* (Chenopodiaceae); XIAN SE LI; Amaranthinecolor Goosefoot\*. Isolated compounds: 1013.
- T1361 *Chenopodium ambrosioides* (Chenopodiaceae); TU JING JIE; Mexican Tea. Used part: fruiting aerial parts. TCM Effects: To dispel wind and eliminate damp, kill worms and relieve itch, quicken blood and disperse swelling. TCM Indications: Ancylostomiasis, ascariasis, oxyuria disease, head louse, eczema of skin, scab and lichen, wind-damp impediment pain, amenorrhea, dysmenorrhea, mouth and tongue sores, swelling pain in throat, knocks and falls, snake or insect bites. Isolated compounds: 1731, 1842, 4550, 12083, 12091, 13719, 13720, 13721, 13722, 17402, 20168.
- T1362 *Chenopodium botrys* (Chenopodiaceae); XIANG LI; Feathered Geranium. Isolated compounds: 1842, 7751.
- T1363 *Chenopodium championii* (Chenopodiaceae); ZONG ZHUANG HUA LI; Racemose Goosefoot\*. Isolated compounds: 19929.
- T1364 *Chenopodium murale* (Chenopodiaceae); BI SHENG LI; Mural Goosefoot\*. Isolated compounds: 12086.
- T1365 *Chiloscyphus polyanthus* (Lophocoleaceae); LIE E TAI; Polybract Split-calyx Liverwort\*. Isolated compounds: 3167, 3168, 3177, 7501, 7508.
- T1366 *Chimonanthus fragrans* [Syn. *Chimonanthus praecox*] (Calycanthaceae); LA MEI HUA; Wintersweet Bud. Used part: flower bud. TCM Effects: To clear heat and resolve summerheat, rectify *qi* and open depression. TCM Indications: Summerheat-heat vexation and thirst, dizziness, oppression in chest due to glomus, globus hystericus, swelling pain in throat, pertussis, child measles, burns and scalds. Isolated compounds: 2273, 2550, 3002, 3527, 7734, 7944, 11025, 14632, 18342, 20805, 21549.
- T1367 *Chiococca alba* (Rubiaceae); BAI XUE GUO MU. Isolated compounds: 867, 868, 869, 870.
- T1368 *Chionodoxa luciliae* (Liliaceae); XUE GUANG HUA; Glory-of-the-snow. Isolated compounds: 1505, 1506, 1509, 7083, 7133, 7134, 7135, 7136, 7137, 19517.
- T1369 *Chionographis japonica* (Liliaceae); RI BEN BAI SI CAO; Japanese Chionographis\*. Isolated compounds: 16809.
- T1370 *Chirita micronusa* (Gesneriaceae); CHUN ZHU JU TAI; Chirita. Isolated compounds: 3432.  
*Chloranthus glaber* = *Sarcandra glabra*
- T1371 *Chloranthus japonicus* (Chloranthaceae); YIN XIAN CAO; Japanese

- Chloranthus. Used part: whole herb or root and rhizome. TCM Effects: To quicken blood and move stasis, dispel wind and eliminate damp, resolve toxin. TCM Indications: Knocks and falls, wind-damp impediment pain, wind-cold common cold, swelling toxin sores, poisonous snake bites. Isolated compounds: 8014, 11702, 19839, 19840, 19841, 19842, 19843, 19844, 19845.
- T1372 *Chloranthus serratus* (Chloranthaceae); JI JI; Serrate Chloranthus. Used part: root. TCM Effects: To quicken blood and dissipate stasis, dispel wind and relieve pain, resolve toxin and kill worms. TCM Indications: Knocks and falls, fracture, amenorrhea, wind-damp impediment pain, clove boil, scab and lichen, itchy skin, poisonous snake bite. Isolated compounds: 560, 5697, 8014, 10537, 15334, 19843, 19844.
- T1373 *Chloranthus serratus* (Chloranthaceae); JI JI JING YE; Serrate Chloranthus Stem-leaf. Used part: stem-leaf. TCM Effects: To dispel wind quicken blood, resolve toxin and relieve itch. TCM Indications: Common cold, cough, wind-damp pain, knocks and falls, welling abscess and boil, menstrual disorder [= menoxenia]. Isolated compounds: 17084, 17086.
- T1374 *Chloranthus spicatus* (Chloranthaceae); JIN SU LAN; Chulan Tree. Used part: whole herb or root and leaf. TCM Effects: To dispel wind-damp, quicken blood and relieve pain, kill worms. TCM Indications: Knocks and falls, migraine, intractable lichen. Isolated compounds: 8014, 19840.
- T1375 *Chlorella* spp. Isolated compounds: 17729.
- T1376 *Chlorophora excelsa* (Moraceae); GAO HUANG LU SANG; Iroko Fustic-tree. Isolated compounds: 3567, 10054.
- T1377 *Chlorophora* sp. (Moraceae). Isolated compounds: 15715.
- T1378 *Chlorophora tinctoria* (Moraceae); HUANG YAN MU. Isolated compounds: 13296, 17823.
- T1379 *Chlorophyllum molybdites* (Agaricaceae). Isolated compounds: 6902, 22249.
- T1380 *Chlorophytum malayense* (Liliaceae); DA YE DIAO LAN; Bigleaf Breaketplant. Isolated compounds: 3563.
- T1381 *Choerospondias axillaris* NAN SUAN ZAO; Axillary Southern Wildjujube. Used part: Fresh fruit or seed. TCM Effects: To move *qi* and quicken blood, nourish heart and quiet spirit, disperse accumulation, resolve toxin. TCM Indications: *Qi* stagnation and blood stasis, chest pain, palmus and breathe hard, neurasthenia, insomnia, bronchitis, food stagnation and abdominal fullness, diarrhea, mounting *qi* (hernia), burns and scalds. Isolated compounds: 8095.
- T1382 *Chondria armata* [Syn. *Lophura armata*] (Rhodomelaceae); RUAN GU ZAO. Used part: frond. TCM Effects: To expel worms. TCM Indications: Oxyuria disease, ascariasis. Isolated compounds: 3333, 11387, 11388, 11389, 11390, 15742, 16894.
- T1383 *Chondrodendron tomentosum* (Menispermaceae); NAN MEI FANG JI. Isolated compounds: 22091.
- T1384 *Chondrus ocelladus* (Gigartinales); JIAO CHA CAI. Used part: frond. TCM Effects: To clear heat and resolve toxin, harmonize stomach and free stool. TCM Indications: Common cold with fever and chills, mumps, swelling pain in throat, knocks and falls, pain in stomach duct, intestinal dry and constipation. Isolated compounds: 18798.
- T1385 *Chorda filum* (Chordaria); SHENG ZAO. Used part: frond. TCM Effects: To soften hardness, dispel phlegm, disinhibit urine, lower blood pressure. TCM Indications: Scrofula, goiter and carcinoma of neck, hypertension. Isolated compounds: 16860, 21639, 21869.
- T1386 *Chrozophora* spp. (Euphorbiaceae). Isolated compounds: 3551.
- T1387 *Chrysanthemum boreale* (Asteraceae); BEI YE JU; Boreal Wild Chrysanthemum. Used part: whole herb and root. TCM Effects: See *Chrysanthemum indicum*. TCM Indications: See *Chrysanthemum indicum*. Isolated compounds: 61, 251, 1476, 2547, 3689, 4135, 5314, 21350.
- T1388 *Chrysanthemum cinerariaefolium* (Asteraceae); CHU CHONG JU; Dalmatian Pyrethrum. Equivalent plant: *Chrysanthemum coccineum*. Used part: capitulum and whole herb. TCM Effects: To kill worms. TCM Indications: Scab and lichen. Isolated compounds: 3388, 3593, 3692, 18257.
- T1389 *Chrysanthemum coccineum* (Asteraceae); HONG HUA CHU CHONG JU; Pyrethrum. Used part: capitulum and whole herb. TCM Effects: See *Chrysanthemum cinerariaefolium*. TCM Indications: See *Chrysanthemum cinerariaefolium*. Isolated compounds: 18257.
- T1390 *Chrysanthemum coronarium* (Asteraceae); TONG HAO; Crowndaisy Chrysanthemum. Equivalent plant: *Chrysanthemum segetum*. Used part: stem-leaf. TCM Effects: To harmonize spleen and stomach, disperse phlegm rheum, quiet heart and spirit. TCM Indications: Spleen-stomach disharmony, urinary and fecal stoppage, cough with profuse phlegm, heat vexation and disquiet. Isolated compounds: 4079, 15135.
- T1391 *Chrysanthemum frutescens* (Asteraceae); MU TONG HAO; Marguerite. Isolated compounds: 3122.
- T1392 *Chrysanthemum indicum* (Asteraceae); YE JU; Indian Wild Chrysanthemum. Equivalent plant: *Chrysanthemum lavandulifolium*, *Chrysanthemum boreale*. Used part: whole herb and root. TCM Effects: To clear heat and resolve toxin. TCM Indications: Common cold, trachitis, hepatitis, hypertension, dysentery, swollen welling abscess, clove sore, red eyes and distending pain, scrofula, eczema. Isolated compounds: 1789, 3237, 3592, 3594, 3595, 8753, 15705, 21350.
- T1393 *Chrysanthemum indicum* (Asteraceae); YE JU HUA; Indian Wild Chrysanthemum Flower. Used part: flower-head. TCM Effects: To lower blood pressure, clear heat and resolve toxin. TCM Indications: Hypertension, headache and dizziness, insomnia, common cold, influenza, meningitis, swollen welling abscess and clove sores, red eyes with gall. Isolated compounds: 56, 57, 61, 1492, 3551, 3594, 3597, 3674, 6453, 7283, 7284, 7582, 9218, 11021, 13137, 13147, 17097, 18345.
- T1394 *Chrysanthemum lavandulifolium* (Asteraceae); YAN XIANG JU; Lavandulaleaf Chrysanthemum. Used part: whole herb and root. TCM Effects: See *Chrysanthemum indicum*. TCM Indications: See *Chrysanthemum indicum*. Isolated compounds: 4941, 10405, 21350.
- T1395 *Chrysanthemum morifolium* [Syn. *Dendranthema morifolium*] (Asteraceae); JU HUA; Florists Chrysanthemum Flower. Used part: capitulum. TCM Effects: To course wind and clear heat, calm liver and brighten eyes, resolve toxin and disperse swelling. TCM Indications: Angina pectoris, hypertension, externally contracted wind-heat, wind warmth, fever and headache, dizziness, common cold, red eyes, red

- eyes with gall, swelling toxin of clove sore. Isolated compounds: 56, 617, 1064, 1483, 1492, 2550, 2843, 3545, 3551, 3594, 3596, 3674, 5750, 11287, 11288, 11289, 12987, 13137, 21391.
- T1396 *Chrysanthemum parthenium* (Asteraceae). Isolated compounds: 16713.
- T1397 *Chrysanthemum segetum* (Asteraceae); NAN TONG HAO; South Chrysanthemum. Used part: stem-leaf. TCM Effects: See *Chrysanthemum coronarium*. TCM Indications: See *Chrysanthemum coronarium*. Isolated compounds: 15724.
- T1398 *Chrysanthemum* sp. (Asteraceae). Isolated compounds: 7821, 19308.
- T1399 *Chrysanthemum* spp. (compositae). Isolated compounds: 9496, 16675, 17719.
- T1400 *Chrysanthemum vulgare* (Asteraceae); AI JU; Tansy. Isolated compounds: 3048.
- T1401 *Chrysobalanus icaco* (Chrysobalanaceae); YI KOU KE MEI; Coco-plum. Isolated compounds: 12748.
- T1402 *Chrysosplenium alternifolium* (Saxifragaceae); JIN YAO; Alternate-leaved Golden-saxifrage. Used part: whole herb. TCM Effects: To clear heat and disinherit damp. TCM Indications: Strangury syndrome, jaundice, bleeding. Isolated compounds: 3623.
- T1403 *Chrysosplenium grayanum* (Saxifragaceae); JIN QIAN KU YE CAO; Goldsaxifrage Herb. Used part: herb. TCM Indications: Clove sore. Isolated compounds: 3611, 3625, 3626, 14602.
- T1404 *Chrysosplenium japonicum* (Saxifragaceae); RI BEN JIN YAO; Japanese Goldsaxifrage. Isolated compounds: 3300, 3622.
- T1405 *Chrysosplenium maximowiczii* (Saxifragaceae); MA SHI JIN YAO; Maximowicz Goldsaxifrage\*. Isolated compounds: 3623.
- T1406 *Chrysosplenium nudicaule* (Saxifragaceae); ZANG YAO LUO JING JIN YAO; Naked-caule Goldsaxifrage. Used part: whole herb. TCM Effects: To clear heat and remove damp, soothe the liver and disinherit gallbladder. TCM Indications: Jaundice, pain in rib-side, concretion and conglomeration, cholecystitis, gallstones. Isolated compounds: 16798.
- T1407 *Chrysosplenium oppositifolium* (Saxifragaceae); DUI YE JIN YAO; Oppositeleaf Goldsaxifrage\*. Isolated compounds: 3623.
- T1408 *Chrysosplenium tosaense* (Saxifragaceae); SHANG ZUO ZHOU JIN YAO; Tosa Goldsaxifrage\*. Isolated compounds: 3300, 3622.
- T1409 *Chrysothamnus viscidiflorus* NIAN ZHI JIN ZHI JU. Isolated compounds: 416.
- T1410 *Chukrasia tabularis* (Meliaceae); MA LIAN; Chittagong Chickrassy. Used part: root cortex. TCM Effects: To course wind and clear heat. TCM Indications: Common cold with fever. Isolated compounds: 20581, 20582, 20583, 20584, 20585, 20586.
- T1411 *Cibotium barometz* [Syn. *Polypodium barometz*] (Dicksoniaceae); JIN MAO GOU; Scythian Lamb. Used part: rhizome. TCM Effects: To strengthen lumbus and knees, dispel wind-damp, disinherit joints. TCM Indications: Kidney vacuity lumbar pain and back rigidity, inability of legs and knees, wind-damp impediment pain, frequent urination, emission, excessive leukorrhea. Isolated compounds: 2887, 5763, 16098, 16099, 16100, 18098, 18153, 18161.
- T1412 *Cicer arietinum* (Fabaceae); HUI HUI DOU; Gram Chickpea. Used part: seed. TCM Effects: To clear heat and resolve toxin. TCM Indications: Diabetes mellitus. Isolated compounds: 2384, 2386, 4645, 7883, 8202, 9606, 11504, 12908, 13636, 14260, 17765, 18281, 20127.
- T1413 *Cicer* spp. (Fabaceae). Isolated compounds: 12908.
- T1414 *Cicerbita alpina* (Asteraceae); GAO SHAN YAN SHEN; Alpine Sowthistle. Isolated compounds: 16263.
- T1415 *Cichorium intybus* (Asteraceae); JU QU; Common Chicory. Used part: aerial parts. TCM Effects: To clear heat and resolve exterior, disinherit urine and disperse edema. TCM Indications: Damp-heat jaundice, nephritis with edema, distending pain in stomach duct, inappetence. Isolated compounds: 663, 664, 1110, 3518, 3635, 5021, 5028, 5187, 5585, 11797, 12446, 12447, 13377, 14920, 20712.
- T1416 *Cicuta virosa* (Apiaceae); DU QIN GEN; European Waterhemlock Root. Used part: root. TCM Effects: To draw out toxin, dispel stasis, relieve pain. TCM Indications: Medullitis, pain wind, wind-damp pain (external use with high toxicity). Isolated compounds: 3636, 3637, 3988, 4354, 20988.
- T1417 *Cimicifuga acerina* (Ranunculaceae); SAN MIAN DAO; Small Bugbane. Used part: rhizome. TCM Effects: To clear heat and resolve toxin, course wind and outthrust papules, quicken blood and relieve pain, lower blood pressure. TCM Indications: Sore pharynx, swollen boil, non-eruption of macula, taxation damage, pain in lumbus and legs, knocks and falls, hypertension. Isolated compounds: 94, 353, 354, 3649, 3651, 9455, 9764, 9906, 14242, 14243, 14244, 19800.
- T1418 *Cimicifuga asiatica* (Ranunculaceae); LEI YE SHENG MA; Asica Baneberry. Isolated compounds: 9455.
- T1419 *Cimicifuga dahurica* (Ranunculaceae); XING AN SHENG MA; Dahurian Bugbane. Used part: rhizome. TCM Effects: See *Cimicifuga foetida*. TCM Indications: See *Cimicifuga foetida*. Isolated compounds: 352, 1561, 2887, 3652, 3653, 3654, 3655, 3656, 3658, 3670, 3671, 3672, 3673, 5464, 5752, 7768, 9455, 9762, 10316, 11331, 14181, 19800, 19983, 22530, 22553.
- T1420 *Cimicifuga foetida* (Ranunculaceae); SHENG MA; Bugbane. Equivalent plant: *Cimicifuga dahurica*, *Cimicifuga heracleifolia*. Used part: rhizome. TCM Effects: To clear heat and resolve toxin, effuse exterior and outthrust papules, upbear yang and raise fall. TCM Indications: Prevention of ptosis, women's hormone dysfunction diseases, seasonal epidemic fire toxin, mouth sore, sore pharynx, macula, cold-heat headache, swelling toxin of welling abscess and sore, center qi fall, spleen vacuity diarrhea, chronic dysentery, vaginal discharge, flooding. Isolated compounds: 141, 512, 2887, 3650, 3657, 3658, 5466, 7768, 9455, 19187.
- T1421 *Cimicifuga heracleifolia* (Ranunculaceae); DA SAN YE SHENG MA; Cowparsnipleaf Bugbane. Used part: rhizome. TCM Effects: See *Cimicifuga foetida*. TCM Indications: See *Cimicifuga foetida*. Isolated compounds: 7768, 9455.
- T1422 *Cimicifuga japonica* (Ranunculaceae); RI BEN SHENG MA; Japanese Bugbane\*. Isolated compounds: 513, 3660, 5162, 14244.
- T1423 *Cimicifuga nanchuanensis* (Ranunculaceae); NAN CHUAN SHENG MA; Nanchuan Bugbane\*. Used part: rhizome. TCM Effects: To clear heat and resolve toxin, course wind and outthrust papules, upbear yang and raise fall. TCM Indications: Non-eruption of macula, swelling pain in throat, taxation damage, center qi fall, diarrhea, knocks and falls. Isolated compounds: 9455, 15726.
- T1424 *Cimicifuga racemosa* (Ranunculaceae); ZONG ZHUANG SHENG

- MA; Racemose Bugbane\*. Isolated compounds: 414, 477, 512, 579, 3658, 3659, 3666, 3667, 3668, 3669, 5150, 5790, 9455, 9905, 13881.
- T1425 *Cimicifuga simplex* (Ranunculaceae); YE SHENG MA; Kamchatka Bugbane. Used part: rhizome. TCM Effects: To effuse exterior and outthrust papules, clear heat and resolve toxin. TCM Indications: Wind-heat common cold, child measles, heat toxin macula, swelling pain in throat, swollen welling abscess and sores, *yang* brightness headache, chronic diarrhea, prolapse of rectum, flooding and spotting, Vaginal discharge. Isolated compounds: 352, 354, 1066, 2729, 2730, 2731, 2732, 2888, 3649, 3651, 3652, 3658, 3661, 3662, 3663, 3664, 3665, 9455, 12222, 14241, 14243, 14244.
- T1426 *Cimicifuga* sp. (Ranunculaceae). Isolated compounds: 237, 238, 280, 3649, 3652, 5488, 5489, 10697.
- T1427 *Cinchona cuprea* (Rubiaceae); TONG SE JI NA SHU; Cupreous Cinchona\*. Isolated compounds: 2887.
- T1428 *Cinchona ledgeriana* (Rubiaceae); JIN JI LE; Ledger Cinchona. Equivalent plant: *Cinchona officinalis*, *Cinchona succirubra*. Used part: bark. TCM Effects: To interrupt malaria and abate fever, resolve liquor and arouse spleen. TCM Indications: Malaria, externally contracted ardent fever, drunkenness. Isolated compounds: 1680, 3599, 3675, 3682, 3684, 3685, 3686, 3687, 4004, 4373, 5522, 7003, 7004, 9738, 9739, 18407, 18421, 18422, 18423, 18424, 18425.
- T1429 *Cinchona officinalis* (Rubiaceae); ZHENG JI NA SHU; Medicinal Cinchona. Used part: bark. TCM Effects: See *Cinchona ledgeriana*. TCM Indications: See *Cinchona ledgeriana*. Isolated compounds: 9738.
- T1430 *Cinchona robusta* (Rubiaceae); CU ZHUANG JIN JI NA; Robust Cinchona\*. Isolated compounds: 18869, 18870, 18871, 18872, 18873, 18874, 18875, 18876.
- T1431 *Cinchona* sp. (Rubiaceae). Isolated compounds: 5522.
- T1432 *Cinchona* spp. (Rubiaceae). Isolated compounds: 3551.
- T1433 *Cinchona succirubra* (Rubiaceae); HONG SE JIN JI NA SHU; Redbark Cinchona. Used part: bark. TCM Effects: See *Cinchona ledgeriana*. TCM Indications: See *Cinchona ledgeriana*. Isolated compounds: 18425.
- T1434 *Cinnamomum bejolghota* [Syn. *Cinnamomum obtusifolium*; *Laurus bejolghota*] (Lauraceae); DUN YE GUI PI; Obtuseleaf Cassia Bark, Wild Cinnamon Bark. Used part: bark. TCM Effects: To dispel wind and dissipate cold, warm menstruation and quicken blood, relieve pain. TCM Indications: Bleeding due to external injury (external use), wind-cold impediment pain, lumbago, menstrual block, dysmenorrhea, painful swelling from knocks and falls, cold pain in stomach duct, abdominal pain, vacuity cold diarrhea, snake bite. Isolated compounds: 17869, 17888.
- T1435 *Cinnamomum camphora* (Lauraceae); ZHANG MU; Camphortree. Used part: wood. TCM Effects: To dispel wind and dissipate cold, warm center and rectify *qi*, quicken blood and free network vessels. TCM Indications: Wind-cold common cold, stomach cold distending pain, cold-damp vomiting and diarrhea, wind-damp impediment pain, beriberi, painful wound from knocks and falls, scab and lichen with itching. Isolated compounds: 1520, 2071, 2846, 2850, 2935, 2940, 2941, 3047, 3048, 3049, 3050, 3231, 3241, 3242, 4076, 7481, 7521, 7751, 9669, 11566, 12375, 12573, 15205, 15500, 15500, 18655, 19121, 19302, 19303.
- T1436 *Cinnamomum camphora* (Lauraceae); ZHANG SHU PI; Camphortree Bark. Used part: bark. TCM Effects: To dispel wind and eliminate damp, warm stomach and harmonize center, kill worms and cure sores. TCM Indications: Wind-damp impediment pain, pain in stomach duct, vomiting and diarrhea, leg *qi* swelling and pain, knocks and falls, scab and lichen with sore toxin, poisonous insect stings. Isolated compounds: 15902, 16884, 17869, 17876, 17890, 17893.
- T1437 *Cinnamomum camphora* (Lauraceae); ZHANG SHU YE; Camphortree Leaf. Used part: leaf. TCM Effects: To dispel wind, eliminate damp, kill worms, resolve toxin. TCM Indications: Wind-damp impediment pain, stomachache, burns and scalds, toxin swelling of sores, shank sore, scab and lichen, itchy skin, poisonous insect stings. Isolated compounds: 16333, 16334, 21954.
- T1438 *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*] (Lauraceae); GUI ZHI; Cassiabarktree Twig. Used part: twig. TCM Effects: To dissipate cold and resolve exterior, warm channels and free network vessels, promote *yang* and transform *qi*. TCM Indications: Wind-cold exterior syndrome, cold-damp impediment pain, reversal cold of limbs, amenorrhea and dysmenorrhea, concretion and conglomeration, chest impediment, palpitation, phlegm-rheum, inhibited urination. Isolated compounds: 1263, 1264, 3693, 3695, 3696, 4140, 5665, 5763, 9908, 13678, 13882, 13882, 17869, 19983.
- T1439 *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*] (Lauraceae); ROU GUI; Cassiabarktree. Used part: bark. TCM Effects: To supplement fire and reinforce *yang*, return fire to its source, dissipate cold and relieve pain, quicken blood and free menstruation. TCM Indications: Impotence, uterus cold, cold pain in lumbus and knees, kidney vacuity asthma, *yang* vacuity dizziness, red eyes and sore pharynx, cold pain in heart and abdomen, vacuity cold vomiting and diarrhea, cold mounting, running piglet, amenorrhea, dysmenorrhea. Isolated compounds: 3693, 3695, 3726, 4140, 6857, 7430, 13678, 17869, 17876, 17878, 17888, 17890, 17893, 21923.
- T1440 *Cinnamomum glanduliferum* (Lauraceae); YUN NAN ZHANG; Nepal Camphortree. Used part: fruit or wood. TCM Effects: To dispel wind and dissipate cold, move *qi* and relieve pain. TCM Indications: Wind-cold common cold, cough, wind-damp impediment pain, distending pain in stomach duct, diarrhea. Isolated compounds: 6745, 15204.
- T1441 *Cinnamomum japonicum* (Lauraceae); GUI PI; Japanese Cinnamon. Used part: bark. TCM Effects: To warm spleen and stomach, warm liver and kidney, dispel cold and relieve pain, dissipate stasis and disperse swelling. TCM Indications: Cold pain in stomach duct and abdomen, vomiting and diarrhea, aching cold in lumbus and knees, cold mounting with abdominal pain, cold-damp impediment pain, dysmenorrhea, blood dysentery, intestinal wind, painful swelling from knocks and falls. Isolated compounds: 3693, 3695, 7521.
- T1442 *Cinnamomum loureirii* (Lauraceae); MU GUI; Loureir Cinnamon\*. Isolated compounds: 4140.
- T1443 *Cinnamomum parthenoxylum* [Syn. *Cinnamomum porrectum*] (Lauraceae); XIANG ZHANG; Yellow Cinnamon. Used part: root, bark or leaf. TCM Effects: To dispel wind and dissipate cold, warm center and relieve pain, move *qi* and quicken blood. TCM Indications:

- Wind-cold common cold, wind-damp impediment pain, stomach cold abdominal pain, diarrhea, dysentery, knocks and falls, menstrual disorder. Isolated compounds: 7521, 20988.
- T1444 *Cinnamomum tamala* (Lauraceae); SAN TIAO JIN; Tibet Cinnamon Bark. Used part: bark or leaf. TCM Effects: To warm channels and free network vessels, move *qi* and relieve pain. TCM Indications: Cold-damp impediment pain, pain in stomach duct and abdomen, dysmenorrhea, knocks and falls. Isolated compounds: 3693, 7521.
- T1445 *Cinnamomum zeylanicum* (Lauraceae); XI LAN ROU GUI; Ceylon Cinnamon. Isolated compounds: 3693, 8392, 8393, 9490, 15940, 20113, 20114.
- T1446 *Cipadessa baccifera* (Meliaceae); YA LUO CHUN; Bacciform Cipadessa. Used part: root, leaf. TCM Effects: To course wind and resolve exterior, interrupt malaria. TCM Indications: Common cold, itchy skin, malaria. Isolated compounds: 3734, 6100, 7117, 7118.
- T1447 *Cirsium japonica* var. *takaoense* (Asteraceae); TAI WAN JI; Taiwan Thistle\*. Isolated compounds: 16756.
- T1448 *Cirsium chinense* (Asteraceae); KU AO; Chinese Thistle. Used part: herb. TCM Effects: To clear heat and resolve toxin, cool blood and quicken blood. TCM Indications: Vexation and oppression due to summerheat-heat, flooding and spotting, blood ejection from knocks and falls, hemorrhoids, clove sore. Isolated compounds: 3742, 3744.
- T1449 *Cirsium japonicum* (Asteraceae); DA JI<sup>(4)</sup>; Japanese Thistle. Used part: aerial parts or root. TCM Effects: To cool blood and stanch bleeding, dispel stasis and disperse swelling. TCM Indications: Spontaneous external bleeding, blood ejection, hematuria, hematochezia, flooding and spotting, bleeding due to external injury, swelling toxin of welling abscess and sore. Isolated compounds: 1110, 1112, 1113, 9497, 16756, 20369, 20706, 20707.
- T1450 *Cirsium lineare* (Asteraceae); TIAO YE JI; Linearleaf Thistle. Used part: root or whole herb. TCM Effects: To quicken blood and dissipate stasis, resolve toxin and disperse swelling. TCM Indications: Menstrual disorder, amenorrhea, dysmenorrhea, mastitis, knocks and falls, urinary tract infection, welling abscess and boil, snake bite. Isolated compounds: 3743.
- T1451 *Cirsium setosum* [Syn. *Cerratula setosa*; *Cirsium segetum*; *Cephalanoplos segetum*] (Asteraceae); XIAO JI; Setose Thistle. Used part: whole herb or root. TCM Effects: To cool blood and stanch bleeding, clear heat and disperse swelling. TCM Indications: Coughing of blood, blood ejection, spontaneous external bleeding, hematuria, blood strangury, hematochezia, blood dysentery, flooding and spotting, bleeding due to external injury, swelling toxin of welling abscess and flat abscess. Isolated compounds: 3551, 19087, 20706.
- T1452 *Cissampelos pareira* (Menispermaceae); XI SHENG TENG; Common Cissampelos. Used part: whole herb. TCM Effects: To relieve pain, stanch bleeding, engender flesh. TCM Indications: Knocks and falls, asthma, heart disease. Isolated compounds: 2191, 3747, 3748, 4461, 9250, 9251, 9252, 11329, 14266, 15762, 15792, 16660, 16661, 16662, 18410, 21206.
- T1453 *Cissampelos pareira* var. *hirsute* (Menispermaceae); YA HU NU; Hirsute Cissampelos\*. Used part: whole herb. TCM Effects: To relieve pain, stanch bleeding, engender flesh. TCM Indications: Knocks and falls, wind-damp lumbago, heart disease. Isolated compounds: 16660.
- T1454 *Cissus pallida* (Vitaceae); CANG BAI FEN TENG; Pale Treebine\*. Isolated compounds: 16550.
- T1455 *Cistanche deserticola* (Orobanchaceae); ROU CONG RONG; Desertliving Cistanche. Equivalent plant: *Cistanche salsa*. Used part: fleshy stem. TCM Effects: To supplement kidney and invigorate *yang*, boost essence and blood, moisten intestines and free stool. TCM Indications: Impotence, infertility, backache, limp aching lumbus and knees, weakness in sinews and bones, intestinal dry and constipation. Isolated compounds: 305, 580, 815, 2156, 2318, 2356, 2446, 2449, 2564, 3749, 3750, 3752, 3753, 3754, 3755, 3757, 3758, 3759, 4680, 4830, 5159, 5189, 6343, 6353, 6422, 6472, 6720, 6952, 8277, 8768, 9359, 9360, 9378, 10141, 12916, 14435, 14525, 14693, 15134, 15669, 15671, 16252, 17093, 18221, 19983, 19996, 20280, 20444, 20555, 21541, 22093, 22094.
- T1456 *Cistanche salsa* (Orobanchaceae); YAN SHENG ROU CONG RONG; Saline Cistanche. Used part: fleshy stem. TCM Effects: See *Cistanche deserticola*. TCM Indications: See *Cistanche deserticola*. Isolated compounds: 580, 3753, 3754, 3755, 3757, 3758, 18221.
- T1457 *Cistanche* sp. (Orobanchaceae). Isolated compounds: 17080.
- T1458 *Cistanche tubulosa* (Orobanchaceae); GUAN HUA ROU CONG RONG; Tubeshaped Flower Cistanche. Isolated compounds: 618, 652, 4225, 4902, 4903, 5159, 9071, 10061, 10141, 11725, 15134, 20555, 22093, 22095, 22096, 22097, 22252.
- T1459 *Cistus parviflorus* (Cistaceae); XIAO XING HUA YAN QIANG WEI. Isolated compounds: 9423.
- T1460 *Citrullus colocynthis* (Cucurbitaceae); YAO XI GUA; Wild Gourd. Isolated compounds: 4317, 4327, 20168.
- T1461 *Citrullus ecirrhosus* (Cucurbitaceae); WU JUAN XU XI GUA; Non-cirrose Citrullus\*. Isolated compounds: 4324, 4327.
- T1462 *Citrullus naudinianus* (Cucurbitaceae); NA SHI XI GUA; Naudin Citrullus\*. Isolated compounds: 4324.
- T1463 *Citrullus* sp. (Cucurbitaceae). Isolated compounds: 4322.
- T1464 *Citrullus vulgaris* [Syn. *Citrullus lanatus*] (Cucurbitaceae); XI GUA; Watermelon. Used part: fruit. TCM Effects: To clear heat and resolve summerheat, resolve summerheat and engender liquid, disinhibit urine. TCM Indications: Summerheat-heat vexation and thirst, exuberant heat fluid damage, inhibited urination, throat impediment, mouth sore. Isolated compounds: 1046, 1048, 1063, 3774, 8826, 11752, 17264.
- T1465 *Citrullus vulgaris* [Syn. *Citrullus lanatus*] (Cucurbitaceae); XI GUA ZI REN; Watermelon Seed. Used part: seed. TCM Effects: To clear lung and transform phlegm, harmonize center and moisten intestines. TCM Indications: Hemoptysis, enduring cough, constipation. Isolated compounds: 1063.
- T1466 *Citrus auratifolia* (Rutaceae); LAI MENG; Lime. Isolated compounds: 11716, 22781.
- T1467 *Citrus aurantium* (Rutaceae); ZHI KE; Seville Orange Unripe Fruit. Equivalent plant: *Poncirus trifoliata*. Used part: unripe fruit. TCM Effects: To break *qi* and move phlegm, harmonize stomach and disperse accumulation. TCM Indications: Phlegm stagnation in chest and diaphragm, glomus in chest, distention in rib-side, food accumulation, retching counterflow. Isolated compounds: 9458, 14796, 15286, 15635, 15882, 19784, 19929, 20434, 22044, 22976.
- T1468 *Citrus aurantium* (Rutaceae); ZHI SHI; Seville Orange Young Fruit.



- Equivalent plant: *Citrus wilsonii*, *Poncirus trifoliata*. Used part: young fruit. TCM Effects: To break *qi* and dissipate glomus, disperse phlegm and transform accumulation. TCM Indications: Shock, indigestion, ptosis of anus or uterus, cardiac failure, distention fullness in chest and abdomen, phlegm aggregation. Isolated compounds: 1497, 9458, 9964, 11493, 11716, 12847, 12987, 14796, 15286, 15404, 15656, 15657, 19929, 20552, 20670, 21185, 21913.
- T1469 *Citrus aurantium* var. *amara* (Rutaceae); DAI DAI HUA; Bitter Citrus. Used part: dried flower bud. TCM Effects: To regulate *qi*, soothe liver, harmonize stomach. TCM Indications: Oppression in chest due to glomus, distending pain in stomach duct and abdomen, vomiting, reduced food intake. Isolated compounds: 3763, 3764, 3768, 7734, 11824, 14142, 15498, 15500, 20998.
- T1470 *Citrus bergamia* (Rutaceae); XIANG NING MENG; Bergamot Orange. Isolated compounds: 2309.
- T1471 *Citrus chachiensis* (Rutaceae); GAN; Chachi Citrus. Equivalent plant: *Citrus unshiu*, *Citrus tankan*, *Citrus cultivars*, *Citrus decumana*. Used part: fruit. TCM Effects: To engender liquid and allay thirst, arouse liquor, disinhibit urine. TCM Indications: Heat vexation in chest, drunkenness, inhibited urination. Isolated compounds: no.
- T1472 *Citrus chachiensis* (Rutaceae); GAN PI; Chachi Citrus Pericarp. Equivalent plant: *Citrus tankan*. Used part: pericarp. TCM Effects: To precipitate *qi* and regulate center, transform phlegm, arouse liquor. TCM Indications: Dietary imbalance after illness, *qi* ascent with vexation and fullness, liquor damage with thirst. Isolated compounds: 4473, 9458, 14796, 20552.
- T1473 *Citrus cultivars* (Rutaceae); ZAI PEI GAN JU; Cultivated Citrus\*. Used part: fruit. TCM Effects: See *Citrus chachiensis*. TCM Indications: See *Citrus chachiensis*. Isolated compounds: 8307.
- T1474 *Citrus decumana* (Rutaceae); ZHU LUAN; Pomelo. Used part: fruit. TCM Effects: See *Citrus chachiensis*. TCM Indications: See *Citrus chachiensis*. Isolated compounds: 15286, 17829.
- T1475 *Citrus depressa* (Rutaceae); BIAN PING JU; Depressed Orange. Isolated compounds: 17829.
- T1476 *Citrus erythroa* (Rutaceae); ZHU JU; Red Orange. Used part: fruit. TCM Effects: See *Citrus tangemna*. TCM Indications: See *Citrus tangemna*. Isolated compounds: 3241, 4029, 9669, 15655.
- T1477 *Citrus funadoko* (Rutaceae); ZHOU CHANG JU; Funadoko Orange\*. Isolated compounds: 17829.
- T1478 *Citrus grandis* (Rutaceae); YOU<sup>(4)</sup>; Pummelo. Used part: fruit. TCM Effects: To disperse food, transform phlegm, arouse liquor. TCM Indications: Food stagnation, inappetence, drunkenness. Isolated compounds: 1497, 14142, 15279, 15282, 15286, 15882, 17705, 21185, 21913, 22195.
- T1479 *Citrus grandis* (Rutaceae); YOU HE; Pummelo Seed. Used part: seed. TCM Effects: To course liver and rectify *qi*, diffuse lung and suppress cough. TCM Indications: Mounting *qi*, lung cold cough. Isolated compounds: 4757, 15882.
- T1480 *Citrus grandis* cv. x *Citrus paradisi* (Rutaceae); YOU PU TAO YOU ZA JIAO ZHONG. Isolated compounds: 7904.
- T1481 *Citrus grandis* f. *buntan* (Rutaceae); WEN DAN YOU; Buntan Pummelo\*. Isolated compounds: 17829.
- T1482 *Citrus grandis* f. *hakunikuju* (Rutaceae); BAI YOU; White Pummelo\*. Isolated compounds: 17829.
- T1483 *Citrus grandis* var. *tomentosa* (Rutaceae); HUA ZHOU YOU; Tomentase Pummelo. Used part: maturescent exocarp. TCM Effects: To dry damp and transform phlegm, rectify *qi*, disperse food. TCM Indications: Wind-cold cough and asthma with abundant phlegm, vomiting and hiccough, non-digestion of food accumulation, distending pain in stomach duct and abdomen. Isolated compounds: 1497, 11716, 15279, 15286, 19929, 20670, 21913.
- T1484 *Citrus hassaku* (Rutaceae). Isolated compounds: 5063, 5686, 8981, 11970, 14092, 15737, 16257, 16260, 19784, 22777, 22781.
- T1485 *Citrus jambhiri* (Rutaceae). Isolated compounds: 3788, 5098, 15737, 17706, 22781.
- T1486 *Citrus junos* (Rutaceae); CHENG ZI; Fragrant Citrus. Used part: fruit. TCM Effects: To loosen chest and disinhibit *qi*, harmonize center and promote digestion, resolve liquor, resolve toxin of fish and crab. TCM Indications: Nausea and vomiting, oppression in chest and abdomen distention, goiter and tuberculosis, drunkenness. Isolated compounds: 3761, 3788, 5134, 6498, 7909, 11493, 12847, 15655, 15656, 15737, 15882, 16260, 17706, 19784, 22777.
- T1487 *Citrus junos* (Rutaceae); CHENG ZI HE; Fragrant Citrus Seed. Used part: seed. TCM Effects: To rectify *qi* and relieve pain. TCM Indications: Mounting *qi*, strangury, lumbago. Isolated compounds: 12847, 15655, 15882.
- T1488 *Citrus junos* (Rutaceae); CHENG ZI PI; Pericarp. Used part: pericarp. TCM Effects: To transform phlegm, disinhibit diaphragm, disperse food, check vomiting. TCM Indications: *Qi* stagnation in chest and diaphragm, cough with profuse phlegm, non-digestion of food accumulation, nausea and vomiting, drunkenness. Isolated compounds: 3761, 8343, 8344.
- T1489 *Citrus kinokuni* (Rutaceae); RU JU; Kinokuni Citrus. Isolated compounds: 10593, 16865, 16866.
- T1490 *Citrus limon* (Rutaceae); NING MENG; Lemon. Equivalent plant: *Citrus limonia*. Used part: fruit. TCM Effects: To engender liquid and allay thirst, dispel summerheat, quiet fetus. TCM Indications: Stomach heat fluid damage, summerheat stroke with vexation and thirst, inappetence, glomus distention in stomach duct and abdomen, lung heat dry cough, vomiting in pregnancy. Isolated compounds: 1956, 2887, 3760, 3767, 3770, 4135, 6454, 8313, 9044, 9456, 9458, 11492, 12839, 12841, 12850, 13126, 15286, 18421, 19912, 22520, 22781.
- T1491 *Citrus limon* (Rutaceae); NING MENG GEN; Lemon Root. Equivalent plant: *Citrus limonia*. Used part: root. TCM Effects: To dispel stasis and relieve pain. TCM Indications: Knocks and falls, rabid dog bite. Isolated compounds: 4134, 7768, 10640, 10641, 22781.
- T1492 *Citrus limon* (Rutaceae); NING MENG PI; Lemon Pericarp. Equivalent plant: *Citrus limonia*. Used part: pericarp. TCM Effects: To soothe stagnation and move *qi*, fortify stomach and relieve pain. TCM Indications: Blood stasis and abdominal pain, menstrual disorder, no thought of food and drink. Isolated compounds: 2011, 2012, 2455, 2887, 6454, 7768, 8313, 9458, 11650, 15286, 15404, 18344, 19912.
- T1493 *Citrus limon* (Rutaceae); NING MENG YE; Lemon Leaf. Equivalent plant: *Citrus limonia*. Used part: leaf. TCM Effects: To relieve cough and transform phlegm, rectify *qi* and harmonize stomach, check diarrhea. TCM Indications: Cough and asthma, abdominal distention,

- diarrhea. Isolated compounds: 663, 4134, 17168.
- T1494 *Citrus limonia* (Rutaceae); LI MENG; Lemonlike Citrus. Used part: fruit. TCM Effects: See *Citrus limon*. TCM Indications: See *Citrus limon*. Isolated compounds: 663, 3760, 3767, 13126, 22336, 22520.
- T1495 *Citrus limonia* (Rutaceae); LI MENG GEN; Lemonlike Citrus Root. Used part: root. TCM Effects: See *Citrus limon*. TCM Indications: See *Citrus limon*. Isolated compounds: 4133, 8307, 10608, 10642, 19912.
- T1496 *Citrus limonia* (Rutaceae); LI MENG PI; Lemonlike Citrus Pericarp. Used part: pericarp. TCM Effects: See *Citrus limon*. TCM Indications: See *Citrus limon*. Isolated compounds: 9458, 19983, 19984.
- T1497 *Citrus limonia* (Rutaceae); LI MENG YE; Lemonlike Citrus Leaf. Used part: leaf. TCM Effects: See *Citrus limon*. TCM Indications: See *Citrus limon*. Isolated compounds: 7768, 8307, 10608, 13126, 19912, 22520.
- T1498 *Citrus medica* (Rutaceae); JU YUAN; Medicinal Citron. Equivalent plant: *Citrus wilsonii*. Used part: fruit. TCM Effects: To rectify *qi* and downbear counterflow, strengthen spleen, transform phlegm. TCM Indications: Oppression in chest, pain in rib-side, distending pain in stomach duct, belching and low food intake, vomiting due to liver stomach *qi* stagnation, phlegm-damp congestion, cough with profuse phlegm. Isolated compounds: 3760, 3766, 3770, 4680, 8313, 9458, 12843, 12850, 13419, 15882, 17055, 17264, 20444.
- T1499 *Citrus medica* (Rutaceae); JU YUAN YE; Medicinal Citron Leaf. Isolated compounds: 3770, 11601.
- T1500 *Citrus medica* var. *etrog* (Rutaceae). Isolated compounds: 3788, 7913, 9643, 11970, 15737, 17706, 19540, 19542, 22195, 22781.
- T1501 *Citrus medica* var. *sarcodactylis* (Rutaceae); FO SHOU; Fleshfingered Citron. Used part: fruit. TCM Effects: To rectify *qi* and relieve pain, fortify stomach and resolve phlegm. TCM Indications: Stomachache, distention in rib-side, vomiting, dysphagia-occlusion, phlegm-rheum cough asthma. Isolated compounds: 3770, 4493, 4494, 6454, 9458, 12836, 12837, 21707, 21854.
- T1502 *Citrus nobilis* (Rutaceae); CHUAN JU; King Orange. Isolated compounds: 15635.
- T1503 *Citrus paradisi* (Rutaceae); PU TAO YOU; Grapefruit. Isolated compounds: 15286, 15705, 20434.
- T1505 *Citrus paradisi* x *Citrus tangerina* (Rutaceae); PU TAO YOU DA HONG JU ZA JIAO ZHONG. Isolated compounds: 3779, 13002.
- T1504 *Citrus reticulata* (Rutaceae); JU HE; Tangerine Seed. Used part: seed. TCM Effects: To rectify *qi* and relieve pain, resolve binds. TCM Indications: Mounting *qi*, painful swollen testes, mammary welling abscess, lumbago, bladder *qi* pain. Isolated compounds: 15655, 15882.
- T1506 *Citrus reticulata* (Rutaceae); JU PI; Tangerine Pericarp. Used part: pericarp. TCM Effects: To rectify *qi* and downbear counterflow, regulate center and increase appetite, dry damp and transform phlegm. TCM Indications: Spleen-stomach *qi* stagnation and damp obstruction, lung *qi* block, cough with profuse phlegm, mammary welling abscess, indigestion, vomiting. Isolated compounds: 2225, 2275, 2452, 3195, 3231, 3762, 3767, 3768, 4550, 4833, 5088, 6385, 7582, 7729, 9458, 9510, 9674, 10594, 10751, 10752, 10796, 11617, 11618, 11619, 11716, 12843, 12847, 12849, 13728, 15146, 15286, 15498, 15635, 15636, 15925, 15973, 15977, 16871, 16930, 17055, 17376, 19039, 19100, 19211, 19927, 19929, 19983, 20552, 20670, 20988, 20990, 20995, 20998, 21185, 21349, 21360, 21858, 21913, 22976.
- T1507 *Citrus rugulosa* (Rutaceae). Isolated compounds: 5098, 7909, 11970, 16257, 16260, 17706, 19784, 22781.
- T1508 *Citrus sinensis* (Rutaceae); TIAN CHENG; Sweet Orange. Used part: ripe fruit. TCM Effects: To move *qi*, precipitate *qi*, relieve pain, disperse distention, free milk. TCM Indications: Galactostasis. Isolated compounds: 3214, 3760, 9456, 11692, 12839, 12848, 15135, 15266, 15283, 15287, 15500, 15636, 15882, 17171, 19927, 19928, 19929, 21913, 22854.
- T1509 *Citrus* sp. (Rutaceae). Isolated compounds: 2833, 11025, 13126, 13212, 15287, 15393, 16261, 17376, 17705, 20566, 20670.
- T1510 *Citrus* spp. (Rutaceae). Isolated compounds: 12840, 12847, 15278, 17090.
- T1511 *Citrus sudachii* (Rutaceae); SU DA QI GAN JU; Sudach Citrus\*. Isolated compounds: 9564, 10958, 12847, 14524, 15882, 20448, 20449, 20450, 22768.
- T1512 *Citrus sulcata* (Rutaceae). Isolated compounds: 5098, 7909, 9643, 10710, 16257, 16260, 19540, 22195.
- T1513 *Citrus tachibana* (Rutaceae); LI HUA JU; Japanese Tachibana. Isolated compounds: 5098, 11970, 12220, 16260, 17706, 19784, 21499, 22781.
- T1514 *Citrus tamurana* (Rutaceae). Isolated compounds: 3788, 5098, 7203, 8980, 9643, 10710, 14092, 15737, 16257, 16260, 17706, 19540, 21499, 22777, 22781.
- T1515 *Citrus tangemna* (Rutaceae); FU JU; Blessing Citrus\*. Equivalent plant: *Citrus erythroa*. Used part: fruit. TCM Effects: To moisten lung and engender liquid, rectify *qi* and harmonize stomach. TCM Indications: Diabetes mellitus, retching counterflow, *qi* bind in chest and diaphragm. Isolated compounds: 3241, 4029, 9669, 15655, 15882.
- T1516 *Citrus tankan* (Rutaceae); JIAO GAN; Tankan Citrus. Used part: fruit. TCM Effects: See *Citrus chachiensis*. TCM Indications: See *Citrus chachiensis*. Isolated compounds: 9458, 11716, 15635, 19929, 20369, 21185, 22781.
- T1517 *Citrus tankan* (Rutaceae); JIAO GAN PI; Tankan Citrus Pericarp. Used part: pericarp. TCM Effects: See *Citrus chachiensis*. TCM Indications: See *Citrus chachiensis*. Isolated compounds: 9458, 15635.
- T1518 *Citrus unshiu* (Rutaceae); WU HE MI JU; Satsuma. Used part: fruit. TCM Effects: See *Citrus chachiensis*. TCM Indications: See *Citrus chachiensis*. Isolated compounds: 9456, 9458, 11691, 15279, 15286, 15404.
- T1519 [*Citrus unshiu* x *Citrus sinensis*] x *Citrus iyo* (Rutaceae); SAN ZHONG JU ZA JIAO ZHONG [xx. Isolated compounds: 22194.
- T1520 *Citrus wilsonii* (Rutaceae); XIANG YUAN; Wilson Citron. Used part: fruit. TCM Effects: See *Citrus medica*. TCM Indications: See *Citrus medica*. Isolated compounds: 2017, 3770, 13127, 15882, 22920.
- T1521 *Citrus wilsonii* (Rutaceae); XIANG YUAN ZHI SHI; Wilson Orange Young Fruit. Used part: young fruit. TCM Effects: See *Citrus aurantium*. TCM Indications: See *Citrus aurantium*. Isolated compounds: 14796.
- T1522 *Citrus yuko* (Rutaceae); YU KE GAN JU; Yuko Citrus\*. Isolated compounds: 15882.
- T1523 *Cladonia chlorophaea* (Cladoniaceae); LA BA FEN SHI RUI. Isolated compounds: 16571.
- T1524 *Cladonia convoluta* (Cladoniaceae); ZONG JUAN SHI RUI. Isolated

- compounds: 7998, 14697, 17970, 22281.
- T1525 *Cladonia fallax* (Cladoniaceae); JIN SHUA BA; Fallax Cladonia Lichen. Used part: lichen. TCM Effects: To relieve pain, calm. TCM Indications: Epilepsy, schizophrenia, neurasthenia, dizziness and dim vision. Isolated compounds: 7996, 7998, 22282.
- T1526 *Cladonia rangiferina* (Cladoniaceae); SHI RUI; Reindeer Moss. Used part: herb. TCM Effects: To clear heat, moisten dryness, cool liver, transform phlegm, disinhibit damp. TCM Indications: heat vexation and disquiet, dry throat and phlegm node, dim vision and eye screen, heat strangury, jaundice. Isolated compounds: 1990, 7996, 7998.
- T1527 *Cladonia* sp. (Cladoniaceae). Isolated compounds: 22282.
- T1528 *Cladonia stellaris* [Syn. *Cladonia alpestris*] (Cladoniaceae); TAI BAI HUA; Stellate Cladonia. Used part: branch-like body. TCM Effects: To calm liver and brighten eyes, regulate menstruation and stanch bleeding. TCM Indications: Wind yang harassing upper body, dizziness and dim vision, migraine, eye diseases, nosebleed(epistaxis), menstrual disorder, leukorrhea. Isolated compounds: 7951, 16967, 18090, 22282.
- T1529 *Cladonia verticillata* (Cladoniaceae); XIAO LA BA; Verticillate Cladonia. Used part: herb. TCM Effects: To cool blood and stanch bleeding. TCM Indications: Cough, bleeding due to external injury, scalds. Isolated compounds: 7661, 15798, 20342.  
*Cladosiphon decipiens* = *Nemacystus decipiens*
- T1530 *Cladostachys amaranthoides* [Syn. *Achyranthes amaranthoides*; *Cladostachys frutescens*; *Deeringia amaranthoides*] (Rutaceae); JIU CENG FENG. Used part: whole herb. TCM Effects: To dispel wind and remove damp, clear heat and resolve toxin. TCM Indications: Wind-damp impediment pain, dysentery, diarrhea. Isolated compounds: 18722, 18723, 18727.
- T1531 *Cladrastis* spp. (Fabaceae). Isolated compounds: 3004.
- T1532 *Clausena anisata* (Rutaceae); BA JIAO HUANG PI; Octet Wampee\*. Isolated compounds: 1186, 16261.
- T1533 *Clausena dentata* (Rutaceae); YE HUANG PI; Henry Wampee. Used part: leaf and root. TCM Effects: To soothe wind and rectify qi, dispel damp and transform stasis. TCM Indications: Common cold, measles papules, asthma, stomachache, rheumatism, edema, sprain and contusion, fracture, dislocation. Isolated compounds: 5134, 15737.
- T1534 *Clausena dunniana* (Rutaceae); HEI GUO HUANG PI; Dunn Wampee. Used part: leaf and root. TCM Effects: To soothe wind and rectify qi, dispel damp and transform stasis. TCM Indications: Common cold, measles papules, asthma, stomachache, rheumatism, edema, sprain and contusion, fracture, dislocation. Isolated compounds: 6637, 6638.  
*Clausena euchrestifolia* = *Murraya euchrestifolia*
- T1535 *Clausena excavata* (Rutaceae); SHAN HUANG PI; Hollowed Wampee. Used part: branchlet-leaf. TCM Effects: To course wind and resolve exterior, move qi and relieve pain, interrupt malaria, kill worms. TCM Indications: Infection of upper respiratory tract, influenza, malaria, abdominal pain, knocks and falls, fracture. Isolated compounds: 3788, 3790, 3791, 3792, 3793, 3794, 3795, 3796, 3797, 3798, 3799, 3800, 3801, 3802, 3803, 3804, 3805, 3806, 3807, 3808, 5134, 6296, 7897, 8832, 9410, 10126, 10478, 14216, 14217, 14254, 15027, 15028, 15118, 15737, 22777, 22971.
- T1536 *Clausena heptaphylla* (Rutaceae); QI YE HUANG PI; Heptaleaf Wampee\*. Isolated compounds: 9410, 14144, 14216.
- T1537 *Clausena lansium* (Rutaceae); HUANG PI GEN; Chinese Wampee Root. Used part: root. TCM Effects: To move qi and relieve pain. TCM Indications: Qi stagnation stomachache, abdominal pain, mounting pain, wind-damp bone pain, dysmenorrhea. Isolated compounds: 16154.
- T1538 *Clausena lansium* (Rutaceae); HUANG PI YE; Chinese Wampee Leaf. Used part: leaf. TCM Effects: To course wind and resolve exterior, move qi and transform phlegm. TCM Indications: Warm disease fever, cough and asthma, qi distention abdominal pain, yellow swelling, malaria, inhibited urination, heat toxin scab and lai. Isolated compounds: 3789, 4484, 15366.
- T1539 *Clausena* sp. (Rutaceae). Isolated compounds: 16261.
- T1540 *Claviceps paspali* (Clavicipitaceae); QUE BAI MAI JIAO; Paspalum Ergot\*. Isolated compounds: 11516.
- T1541 *Claviceps purpurea* (Clavicipitaceae); MAI JIAO; Ergot. Used part: sclerotium. TCM Effects: To contract uterus and stanch bleeding, relieve pain. TCM Indications: Postpartum bleeding, migraine. Isolated compounds: 351, 749, 763, 3477, 3814, 4125, 6765, 7231, 7232, 7233, 7234, 7235, 7236, 7237, 7238, 7240, 7241, 7242, 7243, 7244, 7250, 7252, 7253, 7254, 9071, 9530, 9568, 11516, 11712, 13256, 14133, 14410, 14411, 14412, 14413, 16808, 19599, 19600, 19601, 19602, 19605, 19789, 22158, 22558.
- T1542 *Clavularia viridis* CHONG SHENG RUAN SHAN HU; Okinawan Softcoral Clavularia viridis. Isolated compounds: 17773, 17774, 17775.
- T1543 *Cleistanthus collinus* (Euphorbiaceae); QIU SHENG BI HUA MU. Isolated compounds: 3816.
- T1544 *Cleistocalyx operculatus* (Myrtaceae); SHUI RONG; Lidded Cleistocalyx. Used part: bud. TCM Effects: To clear heat and resolve toxin, dispel summerheat and engender liquid, disperse stagnation and disinhibit damp. TCM Indications: Fever and headache due to external contraction, summerheat-heat and vexation and thirst, heat toxin diarrhea dysentery, accumulation with abdominal distention. Isolated compounds: 7903, 7905.
- T1545 *Clematis chinensis* (Ranunculaceae); WEI LING XIAN; Chinese Clematis. Used part: root. TCM Effects: To dispel wind and eliminate damp, free network vessels and relieve pain. TCM Indications: Common cold, tonsillitis, acute icterohepatitis, laryngitis, rheumatic arthritis, wind-damp impediment pain, numbness in limbs, hypertonicity of sinews and vessels, bone stuck in throat. Isolated compounds: 1178, 1179, 3340, 3818, 3822, 3824, 3825, 3826, 3827, 5209, 6767, 8727, 8728, 8729, 9260, 9276, 16055, 16056, 16057, 16058, 16060, 16061, 16063, 17943, 17944, 17946, 17947, 17948, 17949, 17950, 18714, 18715, 18716, 18835, 18836.
- T1546 *Clematis tangutica* (Ranunculaceae); GAN QING TIE XIAN LIAN; Tangut Clematis. Used part: whole herb or stem-leaf. TCM Effects: To fortify stomach and disperse accumulation, resolve toxin and transform damp. TCM Indications: Non-digestion of food accumulation, abdominal fullness with glomus and congestion, abdominal pain and diarrhea, welling abscess and sores, damp sore. Isolated compounds: 1572, 8606.
- T1547 *Clematis terniflora* [Syn. *Clematis maximowicziana*] (Ranunculaceae);

- BAI HUA TENG; Threeflower Clematis. Used part: root. TCM Effects: To dispel wind and eliminate damp, resolve toxin and disperse swelling, cool blood and stanch bleeding. TCM Indications: Wind-damp impediment pain, swelling toxin of clove sore, throat impediment, snake bite, dog bite, blood ejection, hemoptysis, flooding and spotting. Isolated compounds: 17965.
- T1548 *Clematis tibetana* (Ranunculaceae); XI ZANG TIE XIAN LIAN; Tibet Clematis\*. Isolated compounds: 819, 3343, 3819, 3820, 3821, 9275, 9276, 9573, 9695, 17946, 17947, 17949.
- T1549 *Clematoclethra scanden* (Actinidiaceae); GANG MAO TENG SHAN LIU; Hisped Vineclethra. Isolated compounds: 21860.
- T1550 *Cleome gynandra* [Syn. *Gynandropsis gynandra*] (Capparidaceae); BAI HUA CAI ZI; Common Spiderflower Seed. Used part: seed. TCM Effects: To dispel wind and dissipate cold, quicken blood and relieve pain. TCM Indications: Wind-cold sinew and bone numbness, aching pain in back and shoulder, lumbago, swelling pain due to external injury, bone tuberculosis, hemorrhoids and fistulas. Isolated compounds: 3828.
- T1551 *Cleome icosandra* (Capparidaceae); DUO RUI BAI HUA CAI; Multipistillate Spiderflower\*. Isolated compounds: 3829.
- T1552 *Cleome viscosa* (Capparidaceae); HUANG HUA CAO; Yellowflower Spiderflower\*. Used part: whole herb. TCM Effects: To dissipate stasis and disperse swelling, dispel wind and relieve pain, engender flesh and cure sores. TCM Indications: Painful swelling from knocks and falls, taxation damage and lumbago, mounting *qi* (hernia), headache, dysentery, ulcerating sores, purulence in ear top, red eyes and itch-pain, strangury-turbidity and vaginal discharge. Isolated compounds: 3829.
- T1553 *Clerodendranthus spicatus* (Lamiaceae); MAO XU CAO; Spicate Clerodendranthus. Used part: whole herb. TCM Effects: To clear heat and dispel damp, expel stone and disinhibit water. TCM Indications: Acute nephritis, chronic nephritis, cystitis, urethral stone, rheumatic arthritis. Isolated compounds: 11085, 16050, 19211, 19929, 22270.
- T1554 *Clerodendron cyrtophyllum* (Verbenaceae); LU BIAN QING; Manyflower Glorybower Leaf. Used part: stem-leaf. TCM Effects: To clear heat and resolve toxin, cool blood and stanch bleeding. TCM Indications: Febrile diseases due to external contraction, exuberant heat and vexation thirst, swelling pain in throat, mouth sore, jaundice, heat toxin dysentery, acute enteritis, swelling toxin of welling abscess and flat abscess, spontaneous external bleeding, blood strangury, bleeding due to external injury. Isolated compounds: 3842, 3844, 4589, 7951, 16822, 19984, 20369, 20465.
- T1555 *Clerodendron fortunatum* (Verbenaceae); GUI DENG LONG; Redcalyx Glotybower. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, suppress cough and dispel wind. TCM Indications: Common cold, throat pain, cough, lung disease, stomachache, abdominal pain, swollen boil, knocks and falls, rheumatism. Isolated compounds: 3841, 3842, 3843, 3844.
- T1556 *Clerodendron fragrans* (Verbenaceae); CHOU MO LI; Fragrant Glorybower. Used part: root and leaf. TCM Effects: To dispel wind and eliminate damp, quicken blood and disperse swelling. TCM Indications: Wind-damp bone pain, beriberi, edema, hemorrhoids, prolapse of rectum, itchy papules, scab sore, chronic medullitis. Isolated compounds: 4434, 7428, 9564, 10351, 16777, 19582, 19587.
- T1557 *Clerodendron indicum* (Verbenaceae); CHANG GUAN JIA MO LI; Indian Glorybower. Used part: whole herb. TCM Effects: To eliminate inflammation and disinhibit urine, quicken blood and disperse swelling, dispel wind-damp. TCM Indications: Urinary tract infection, cystitis, sprain from knocks and falls, wind-damp bone pain. Isolated compounds: 9564, 21534.
- T1558 *Clerodendron inerme* (Verbenaceae); SHUI HU MAN; Unarmed Glorybower. Used part: branchlet-leaf. TCM Effects: To dispel stasis, disperse swelling, eliminate damp, kill worms. TCM Indications: Stasis swelling from knocks and falls, eczema, sore and scab. Isolated compounds: 3585, 7428, 19211.
- T1559 *Clerodendron infortunatum* (Verbenaceae); QIAN YU DA QING; Unfortunate Glorybower. Isolated compounds: 3841.
- T1560 *Clerodendron myricoides* (Verbenaceae); YANG MEI CHANG SHAN; Bayberry Glorybower\*. Isolated compounds: 15189.
- T1561 *Clerodendron serratum* (Verbenaceae); SAN TAI HONG HUA; Serrate Glorybower. Equivalent plant: *Clerodendrum serratum* var. *amplexifolium*. Used part: whole herb. TCM Effects: To clear heat and disinhibit damp, dissipate stasis and relieve pain, resolve toxin and disperse swelling, interrupt malaria. TCM Indications: Damp-heat dysentery, strangury syndrome, wind-damp-heat impediment, blood stasis and dysmenorrhea, knocks and falls, swelling pain in throat, swelling toxin of welling abscess and flat abscess, urticaria, malaria. Isolated compounds: 13504, 18415, 19765.
- T1562 *Clerodendron trichotomum* (Verbenaceae); CHOU WU TONG; Harlequin Glorybower Leaf. Used part: leaf. TCM Effects: To dispel wind-damp, lower blood pressure, interrupt malaria. TCM Indications: Hypertension, malaria, wind-damp impediment, numbness in limbs, hemiplegia, migraine, dysentery, hemorrhoids, welling abscess and flat abscess, scab sore. Isolated compounds: 58, 3837, 21578.
- T1563 *Clerodendron trichotomum* (Verbenaceae); CHOU WU TONG GEN; Harlequin Glorybower Root. Used part: root. TCM Effects: To dispel wind and relieve pain, move *qi* and disperse food. TCM Indications: Malaria, wind-damp impediment pain, hypertension, food accumulation, child *gan* accumulation, knocks and falls. Isolated compounds: 3842, 3843, 3844.
- T1564 *Clerodendron trichotomum* var. *fargesii* (Verbenaceae); AI TONG ZI; Farges Glorybower\*. Isolated compounds: 3839.
- T1565 *Clerodendrum bungei* (Verbenaceae); CHOU MU DAN; Rose Glorybower (Clerodendrum). Used part: stem-leaf. TCM Effects: To resolve toxin and disperse swelling, dispel wind-damp, lower blood pressure. TCM Indications: Welling abscess and flat abscess, clove sore, effusion of back, mammary welling abscess, hemorrhoids, eczema, erysipelas, wind-damp impediment pain, hypertension. Isolated compounds: 2746, 3838.
- T1566 *Clerodendrum inerme* (Verbenaceae); KU LANG SHU; Unarmed Glorybower. TCM Effects: To dispel stasis and stanch bleeding, dry damp and kill worms. TCM Indications: Knocks and falls, blood stasis swelling and pain, blood ejection due to internal damage, bleeding due to external injury, sore lichen and scab *lai*, eczema with pruritus. Isolated compounds: 5670, 7429, 11033, 11034, 14432, 15667, 16825, 18599, 19228, 19229.

- T1567 *Clerodendrum mandarinorum* (Verbenaceae); HAI TONG; Tomentose Glorybower. Used part: branch-leaf. TCM Effects: To dispel wind and free network vessels. TCM Indications: Hemiplegia, sequel of poliomyelitis. Isolated compounds: 13477.
- T1568 *Clerodendrum nucinatum* (Verbenaceae). Isolated compounds: 22213.
- T1569 *Clerodendrum serratum* var. *amplexifolium* (Verbenaceae); SAN TAI HUA; Amplexifolious Glorybower. Used part: whole herb. TCM Effects: See *Clerodendron serratum*. TCM Indications: See *Clerodendron serratum*. Isolated compounds: 19775.
- T1570 *Clerodendrum thomsonae* (Verbenaceae); LONG TU ZHU; Bleedingheart Glorybower. Used part: whole herb. TCM Effects: To resolve toxin. TCM Indications: Knocks and falls, chronic tympanitis. Isolated compounds: 409, 816, 2004, 13710, 18628.
- T1571 *Cleyera ochracea* [Syn. *Cleyera japonica*] (Theaceae); YANG TONG; Japanese Cleyera. Isolated compounds: 10513.
- T1572 *Clinacanthus siamensis* (Acanthaceae); TAI GUO NIU XU HUA; Thailand Clinacanthus\*; Lin-Nguu-Hao (Thai name). Isolated compounds: 6809, 6810, 14729, 14731, 14758.
- T1573 *Clinopodium chinense* (Lamiaceae); FENG LUN CAI; Chinese Clinopodium. Used part: whole herb. TCM Effects: To course wind and clear heat, resolve toxin and disperse swelling. TCM Indications: Common cold, summerheat stroke, acute cholecystitis, hepatitis, enteritis, dysentery, parotitis, mastitis, swelling toxin of clove sore, allergic dermatitis, acute conjunctivitis. Isolated compounds: 3845, 11691.
- T1574 *Clintonia alpina* (Liliaceae); LEI GONG QI; Common Broadlily. Used part: whole herb. TCM Effects: To dissipate stasis and relieve pain. TCM Indications: Knocks and falls. Isolated compounds: 9334.
- T1575 *Cliona celata* (Clonidae) YIN JU CHUAN BEI HAI MIAN; Burrowing sponge. Isolated compounds: 17729.
- T1576 *Clitocybe clavipes* (Tricholomataceae) BANG BING BEI SAN; Fat-footed Clitocybe. Isolated compounds: 3811, 3812.
- T1577 *Clitoria ternatea* (Fabaceae); HU DIE HUA DOU; Asian Pigeonwings. Used part: seed. TCM Effects: To relieve pain. TCM Indications: Pain in joints. Isolated compounds: 618, 5029, 5030, 12088, 15175, 18389.
- T1578 *Clivia miniata* (Amaryllidaceae); JUN ZI LAN; Scarlet Kafirily. Isolated compounds: 9547, 13241.
- T1579 *Cneorum pulverulentum* (Cneoraceae); BEI FEN NAI AO LE MU. Isolated compounds: 18097.
- T1580 *Cnicus benedictu* DI ZHONG HAI JU. Isolated compounds: 15806, 15809.
- T1581 *Cnidium japonicum* (Apiaceae); BING SHE CHUANG; Japanese Cnidium. Isolated compounds: 1619.
- T1582 *Cnidium monnieri* (Apiaceae); SHE CHUANG ZI; Common Cnidium. Used part: fruit. TCM Effects: To warm kidney and invigorate yang, dispel wind, dry damp, kill worms. TCM Indications: Impotence, scrotal damp itch, vaginal discharge, pudendal itch, trichomoniasis, eczema, infertility due to uterus cold, wind-damp impediment pain, scab and lichen, damp sore. Isolated compounds: 316, 933, 1619, 2309, 2309, 3854, 3857, 3935, 3936, 3937, 6709, 11001, 11297, 11601, 11755, 11761, 13725, 16261, 18443, 22203, 22774, 22774, 22775.
- T1583 *Cnidium officinale* [Syn. *Ligusticum officinale*] (Apiaceae); YAO YONG SHE CHUANG; Medicinal Ligusticum. Used part: rhizome. TCM Effects: See *Ligusticum chuanxiong*. TCM Indications: See *Ligusticum chuanxiong*. Isolated compounds: 2797, 12825.
- T1584 *Cocculus carolinus* (Menispermaceae); MEI GUO QING TENG; Carolina Snailseed\*. Isolated compounds: 3864.
- T1585 *Cocculus indicus* (Menispermaceae); YIN DU MU FANG JI; Indian Snailseed\*. Isolated compounds: 17347, 17349.
- T1586 *Cocculus laurifolius* (Menispermaceae); HENG ZHOU WU YAO; Laurelleaf Snailseed. Used part: root or whole herb. TCM Effects: To normalize qi and loosen chest, dispel wind and relieve pain. TCM Indications: Hypertension, headache, mounting qi, abdominal pain, rheumatic pain in legs. Isolated compounds: 3862, 3863, 3878, 7337, 11337, 12571, 14247, 18655, 21887.
- T1587 *Cocculus laeabe* (Menispermaceae); Cocculus laeabe. Isolated compounds: 16439.
- T1588 *Cocculus pendulus* (Menispermaceae); CHUI MU FANG JI; Drooping Snailseed\*. Isolated compounds: 3881, 3882, 3883, 4877, 12351, 12352.
- T1589 *Cocculus trilobus* [Syn. *Cocculus sarmentosus*] (Menispermaceae); MU FANG JI; Japanese Snailseed. Used part: root. TCM Effects: To dispel wind and eliminate damp, free channels and quicken network vessels, resolve toxin, disperse swelling and settle pain. TCM Indications: Wind-damp impediment pain, pain from arthritis, edema, pulmonary edema, edema due to heart disease, neuralgia, dribbling pain of urination, amenorrhea, knocks and falls, swelling pain in throat, toxin swelling of sores, eczema, poisonous snake bite. Isolated compounds: 3864, 3865, 3879, 7024, 11747, 11748, 13374, 13713, 15777, 21877, 21887.
- T1590 *Cocculus trilobus* [Syn. *Cocculus sarmentosus*] (Menispermaceae); QING TENG XIANG; Japanese Snailseed Stem. Used part: stem-leaf. TCM Effects: To dispel wind and eliminate damp, regulate qi and relieve pain, disinherit water and disperse edema. TCM Indications: Wind-damp impediment pain, knocks and falls, stomachache, abdominal pain, edema, strangury syndrome. Isolated compounds: 3864.
- T1591 *Cocos nucifera* (Arecaceae); YE ZI; Coconut. Used part: sarcocarp. TCM Effects: To boost qi and fortify spleen, kill worms, disperse gan. TCM Indications: Gan accumulation, fasciolopsiasis. Isolated compounds: 7387.
- T1592 *Cocos nucifera* (Arecaceae); YE ZI PI; Coconut Root-bark. Used part: root cortex. TCM Effects: To stanch bleeding, relieve pain. TCM Indications: Nosebleed(epistaxis), stomachache, vomiting and diarrhea. Isolated compounds: 3880.
- T1593 *Cocos nucifera* (Arecaceae); YE ZI RANG; Coconut Albumen. Used part: albumen. TCM Effects: To boost qi and fortify spleen, kill worms, disperse gan. TCM Indications: Fasciolopsiasis, gan accumulation. Isolated compounds: 3138, 3139, 3140, 6632, 12569, 15680, 19983, 20168, 20369, 21415, 22555, 22561.
- T1594 *Cocos nucifera* (Arecaceae); YE ZI YOU; Coconut Oil. Used part: oil. TCM Effects: To kill worms and relieve itch, close sores. TCM Indications: Scab and lichen, frostbite. Isolated compounds: 7978.
- T1595 *Codium fragile* (Codiaceae); SHUI SONG; Fragile Codium Frond. Used part: frond. TCM Effects: To clear summerheat and resolve toxin, disinherit water and disperse edema, expel worms. TCM Indications:

- Edema, stream toxin, inhibited urination, ascariasis, hasten delivery. Isolated compounds: 578, 2222, 3844, 6407, 8011, 8025, 8312, 14450, 19964, 19965, 20998.
- T1596 *Codonopsis canescens* (Campanulaceae); HUI MAO DANG SHEN; Greyhair Asiabell. Used part: root. TCM Effects: See *Codonopsis pilosula*. TCM Indications: See *Codonopsis pilosula*. Isolated compounds: 13507, 22843.
- T1597 *Codonopsis clematidea* (Campanulaceae); XIN JIANG DANG SHEN; Clematis Asiabell. Used part: root. TCM Effects: See *Codonopsis pilosula*. TCM Indications: See *Codonopsis pilosula*. Isolated compounds: 3886.
- T1598 *Codonopsis convolvulacea* (Campanulaceae); JI DAN SHEN; Convolvulate Asiabell. Used part: root. TCM Effects: To supplement *qi* and nourish blood, moisten lung and engender liquid. TCM Indications: Blood vacuity, spontaneous sweating, scant breast milk, lung vacuity cough, neurasthenia, mounting *qi*. Isolated compounds: 7465.
- T1599 *Codonopsis pilosula* (Campanulaceae); DANG SHEN; Pilose Asiabell. Equivalent plant: *Codonopsis pilosula* var. *modesta*, *Codonopsis tangshen*, *Codonopsis tubulosa*, *Codonopsis subglobosa*, *Codonopsis canescens*, *Codonopsis clematidea*. Used part: root. TCM Effects: To fortify spleen and supplement lung, boost *qi* and engender liquid. TCM Indications: Spleen-stomach vacuity, reduced food intake and sloppy stool, lassitude in limbs, cough and asthma due to lung vacuity, shortness of breath and spontaneous sweating, *qi*-blood depletion. Isolated compounds: 1966, 1967, 2056, 2788, 3139, 3140, 3589, 3887, 4390, 4672, 6188, 6534, 6795, 7438, 7469, 7768, 7951, 7971, 8012, 8817, 9042, 9359, 9360, 9378, 9486, 9531, 10493, 10669, 12569, 13507, 13823, 13931, 14023, 14053, 14215, 14484, 14610, 14629, 14655, 15203, 15527, 15528, 15671, 15675, 15678, 15684, 15948, 16830, 16831, 16968, 17093, 17376, 18267, 18739, 18837, 20168, 20169, 20351, 20352, 20367, 20368, 20369, 20372, 20554, 20569, 20672, 20711, 20713, 22843.
- T1600 *Codonopsis pilosula* var. *modesta* [Syn. *Codonopsis modesta*] (Campanulaceae); SU HUA DANG SHEN; Moderate Asiabell. Used part: root. TCM Effects: See *Codonopsis pilosula*. TCM Indications: See *Codonopsis pilosula*. Isolated compounds: 7951, 8817, 13823, 16968, 17093, 20369, 20711, 20713.
- T1601 *Codonopsis subglobosa* (Campanulaceae); QIU HUA DANG SHEN; Subglobose Asiabell. Used part: root. TCM Effects: See *Codonopsis pilosula*. TCM Indications: See *Codonopsis pilosula*. Isolated compounds: 1967, 7951, 8817, 13507, 13823, 17093, 20369, 20711, 20713, 22843.
- T1602 *Codonopsis tangshen* (Campanulaceae); CHUAN DANG SHEN; Szechwan Tangshen. Used part: root. TCM Effects: See *Codonopsis pilosula*. TCM Indications: See *Codonopsis pilosula*. Isolated compounds: 1967, 3887, 7951, 8817, 9525, 9527, 9528, 9529, 9532, 9533, 13507, 13823, 16968, 17093, 20369, 20569, 20672, 20673, 20674, 20675, 20711, 20713, 22843.
- T1603 *Codonopsis tubulosa* (Campanulaceae); GUAN HUA DANG SHEN; Tubularflower Asiabell. Used part: root. TCM Effects: See *Codonopsis pilosula*. TCM Indications: See *Codonopsis pilosula*. Isolated compounds: 13507, 22843.
- T1604 *Coeloglossum viride* [Syn. *Coeloglossum viride* var. *bracteatum*] (Orchidaceae); AO SHE LAN; Frog Orchid. Used part: tuber. TCM Effects: See *Gymnadenia conopsea*. TCM Indications: See *Gymnadenia conopsea*. Isolated compounds: 3892, 10627, 16168.
- T1605 *Coelogyne cristata* (Orchidaceae); MAO CHUN BEI MU LAN; Cristate Coelogyne. Isolated compounds: 3889, 3890, 3891.
- T1606 *Coelogyne ovalis* (Orchidaceae); BEI MU LAN; Common Coelogyne. Isolated compounds: 3889, 7811.
- T1607 *Coelospermum billardieri* (Rubiaceae); XIN SU GE LAN XUE GUO MU; Newcaledonian Coelospermum\*. Isolated compounds: 3888.
- T1608 *Coffea arabica* (Rubiaceae); XIAO GUO KA FEI; Arabian Coffeetree. Equivalent plant: *Coffea liberica*. Used part: seed. TCM Effects: To arouse spirit, disinhibit urine, fortify stomach. TCM Indications: Fatigued spirit, inappetence. Isolated compounds: 1866, 2887, 2892, 3551, 5414, 14166, 14167, 14178.
- T1609 *Coffea excelsa* (Rubiaceae); GAO KA FEI; High Coffee\*. Isolated compounds: 2892.
- T1610 *Coffea liberica* (Rubiaceae); DA GUO KA FEI; Liberian Coffee. Used part: seed. TCM Effects: See *Coffea arabica*. TCM Indications: See *Coffea arabica*. Isolated compounds: 2892.
- T1611 *Coffea robusta* (Rubiaceae); CU ZHUANG KA FEI; Robust Coffee\*. Isolated compounds: 5414.
- T1612 *Coffea* sp. (Rubiaceae). Isolated compounds: 1886, 2886, 11328.
- T1613 *Coix lacryma-jobi* (Poaceae); YI MI; Adlay. Isolated compounds: 3907, 20369.
- T1614 *Coix lacryma-jobi* var. *ma-yuen* (Poaceae); YI YI REN; Jobstears Seed. Used part: seed. TCM Effects: To fortify spleen and percolate damp, eliminate impediment and check diarrhea, clear heat and expel pus. TCM Indications: Edema, beriberi, inhibited urination, damp impediment and hypertonicity, spleen vacuity diarrhea, pulmonary welling abscess, intestinal welling abscess, flat wart. Isolated compounds: 3906, 3907.
- T1615 *Cola acuminata* (Sterculiaceae); SU DAN KE LE GUO; Acuminata Colanut. Used part: seed. TCM Effects: To raise spirit. Isolated compounds: 2892, 17867, 21310.
- T1616 *Colchicum autumnale* (Liliaceae); QIU SHUI XIAN; Meadow Saffron. Used part: corm. Isolated compounds: 3909, 3910, 3911, 3912.
- T1617 *Coleonema pulchellum* (Rutaceae); MEI LI BU KU; Rutaceae Diosma. Isolated compounds: 17777.
- T1618 *Coleostephus myconis* (Asteraceae); QIAO GUAN JU; Common Coleostephus. Isolated compounds: 15142.
- T1619 *Coleus barbatus* (Lamiaceae); RAN MAO QIAO RUI HUA; Forskahl Coleus. Isolated compounds: 2147.
- T1620 *Coleus forskahlii* (Lamiaceae); MAO HOU QIAO RUI HUA; Forskahl Coleus. Isolated compounds: 3915, 3917, 3918.  
*Coleus wulfenoides* = *Orthosiphon wulfenoides*
- T1621 *Coleus xanthanthus* (Lamiaceae); HUANG QIAO RUI HUA; Yellowflower Coleus. Isolated compounds: 146, 358, 3919, 3920, 3921, 7062, 22748, 22749, 22750, 22751, 22752, 22753, 22754.
- T1622 *Collinsonia canadensis* ER RUI ZI SU. Isolated compounds: 3927.
- T1623 *Collybia albuminosa* (Tricholomataceae); JI ZONG; Collybia Albuminosa Sporocarp. Used part: sporocarp. TCM Effects: To fortify spleen and harmonize stomach. TCM Indications: Distention fullness

- in stomach duct and abdomen, indigestion, fatigued spirit, hemorrhoids. Isolated compounds: 7250.
- T1624 *Colocasia antiquorum* (Araceae); YE YU; Taro. Used part: rhizome. TCM Effects: To clear heat and resolve toxin, dissipate stasis and disperse swelling. TCM Indications: Mammary welling abscess, toxin swelling, leprosy, scab and lichen, knocks and falls, bee sting. Isolated compounds: 8076, 8078.
- T1625 *Colochirous anceps* KE YI YI SHOU SHEN. Isolated compounds: 3928.
- T1626 *Colophospermum mopane*. Isolated compounds: 5622, 5623, 14546.
- T1627 *Colubrina asiatica* (Rhamnaceae); SHE TENG; Asian Colubrina. Isolated compounds: 3929, 3933.
- T1628 *Colubrina* spp. (Rhamnaceae). Isolated compounds: 15751.
- T1629 *Colysis pothifolia* [Syn. *Hemionitis pothifolia*] (Polypodiaceae); KUAN YU XIAN JUE; Broad-pinna Colysis. Used part: rhizome or whole herb. TCM Effects: To dispel wind and free network vessels, dissipate stasis and relieve pain. TCM Indications: Wind-damp lumbago, knocks and falls. Isolated compounds: 16110.
- T1630 *Combretum albopunctatum* (Combretaceae); BAI DIAN FENG CHE ZI; White-punctated Combretum\*. Isolated compounds: 5480, 5966.
- T1631 *Combretum imberbe* (Combretaceae); WU MAO FENG CHE ZI; Glabrous Combretum\*. Isolated compounds: 9741, 10227, 10228, 10995.
- T1632 *Combretum yunnanensis* (Combretaceae); YUN NAN FENG CHE ZI; Yunnan Combretum\*. Used part: seed. TCM Effects: To kill worms and disperse accumulation. TCM Indications: Abdominal pain due to worm accumulation. Isolated compounds: 492, 6757, 18697.
- T1633 *Commelina communis* (Commelinaceae); YA ZHI CAO; Common Dayflower. Used part: aerial parts. TCM Effects: To clear heat and resolve toxin, disperse edema. TCM Indications: Common cold, wind-heat common cold, influenza, noninfectious fever, ardent fever incessant, ascites, edema, hordeolum, swelling pain in throat, scant urine with edema, heat strangury with inhibited pain, swollen welling abscess and toxin of clove. Isolated compounds: 5010, 7817, 7951, 12952, 13440, 13504.
- T1634 *Commiphora confusa* (Bursaceae); HUN XIAO MO YAO; Confuse Myrrh tree\*. Isolated compounds: 286, 294, 16844, 21699.
- T1635 *Commiphora kua* (Bursaceae); KU A MO YAO; Kua Myrrh tree\*. Isolated compounds: 295, 10497, 21090.
- T1636 *Commiphora kua* var. *gowlollo* (Bursaceae); KEN NI YA MO YAO; Kenya Myrrh tree\*. Isolated compounds: 229, 10361.
- T1637 *Commiphora mukul* (Bursaceae); MU KU ER MO YAO; Muhul Myrrh tree\*. Isolated compounds: 15208, 15209, 16781.
- T1638 *Commiphora myrrha* [Syn. *Commiphora molmol*] (Bursaceae); MO YAO; Myrrh. Used part: balsam. TCM Effects: To quicken blood and relieve pain, disperse swelling and engender flesh. TCM Indications: Stasis pain in chest and abdomen, amenorrhea, dysmenorrhea, concretion and conglomeration, knocks and falls, swollen welling abscess and sores, intestinal welling abscess, red eyes with gall. Isolated compounds: 3693, 3943, 4232, 4354, 4416, 6482, 7100, 7521, 13932, 13935, 13936, 14115.
- T1639 *Commiphora wightii* (Bursaceae); A MAN SU DAN MO YAO; Sultanate-Oman Myrrh tree\*. Isolated compounds: 4925, 9075, 9076, 15124.
- T1640 *Coniogramme japonica* [Syn. *Hemionitis japonica*] (Hemionitidaceae); FENG YA JUE; Japanese Coniogramme. Used part: rhizome or whole herb. TCM Effects: To dispel wind and eliminate damp, dissipate blood and relieve pain, clear heat and resolve toxin. TCM Indications: Painful joints due to rheumatism, abdominal pain due to static blood, menstrual block, knocks and falls, red eyes with gall, mammary welling abscess, early stage of toxin swelling. Isolated compounds: 15932, 18159, 18160.
- T1641 *Conioselinum vaginatum* (Apiaceae); XIN JIANG GAO BEN; Vaginate Hemlockparsley. Used part: rhizome. TCM Effects: To dispel wind and eliminate damp, dissipate cold and relieve pain. TCM Indications: Wind-cold common cold, headache, wind-cold-damp impediment, cold-damp abdominal pain, diarrhea, scab and lichen, acne. Isolated compounds: 2803, 3990, 7768, 11552, 12825, 12826, 14012, 15203, 15204, 17805, 22336.
- T1642 *Conium maculatum* (Apiaceae); DU SHEN; Poisonhemlock. Isolated compounds: 2887, 3979, 3988, 14250, 18023.
- T1643 *Connarus ritchiei* (Connaraceae). Isolated compounds: 6767.
- T1644 *Conocephalum conicum* (Urticaceae); SHE TAI; Conic Conocephalus\*. Used part: thallus. TCM Effects: To clear heat and resolve toxin, disperse swelling and relieve pain. TCM Indications: Swelling toxin of welling abscess and sore, burns and scalds, poisonous snake bite, fracture. Isolated compounds: 1493, 2351, 2562, 2587, 2588, 2589, 2596, 13146, 13608, 17811, 22103, 22962, 22963.
- T1645 *Consolida ajacis* [Syn. *Delphinium ajacis*] (Ranunculaceae); FEI YAN CAO; Rocket Consolida. Used part: root and seed. TCM Effects: To promote vomiting, drain precipitation, kill worms. TCM Indications: Scab sore, head louse, knocks and falls. Isolated compounds: 781, 782, 5004, 5010, 5035, 6734.
- T1646 *Consolida ambigua* (Ranunculaceae); LIANG SI FEI YAN CAO; Ambiguous Consolida\*. Isolated compounds: 338.
- T1647 *Consolida orientalis* (Ranunculaceae); DONG FANG FEI YAN CAO; Oriental Consolida\*. Isolated compounds: 518, 4899, 4998, 5053, 10496.
- T1648 *Consolida pubescens* (Ranunculaceae); DUAN ROU MAO FEI YAN CAO; Shortfluff Consolida\*. Isolated compounds: 18174.
- T1649 *Convallaria keiskei* [Syn. *Convallaria majalis*] (Liliaceae); LING LAN; Lily of Valley. Used part: whole herb with root. TCM Effects: To warm yang and disperse water, dispel wind and quicken blood. TCM Indications: Congestive cardiac failure, rheumatic heart disease, paroxysmal tachycardia, edema. Isolated compounds: 2057, 2400, 3501, 4005, 4008, 4009, 4010, 4011, 4012, 4013, 4014, 4871, 6853, 7320, 8592, 8593, 10887, 11642, 11674, 12190, 16960, 18781, 21084.
- T1650 *Convolvulus arvensis* (Convolvulaceae); TIAN XUAN HUA; Field Bindweed. Used part: herb and flower. TCM Effects: To dispel wind, relieve pain, relieve itch. TCM Indications: Wind-damp impediment pain, neurodermatitis, toothache. Isolated compounds: 14122.  
*Convolvulus batatas* = *Ipomoea batatas*
- T1651 *Convolvulus cneorum* (Convolvulaceae). Isolated compounds: 3960.
- T1652 *Convolvulus erinaceus* (Convolvulaceae); JI XUAN HUA; Mucronate Glorybind\*. Isolated compounds: 4417.  
*Convolvulus repens* = *Ipomoea aquatica*

- T1653 *Convolvulus sabatius* ssp. *sabatius* (Convolvulaceae). Isolated compounds: 5566.
- T1654 *Convolvulus scammonia* (Convolvulaceae); SI GE MENG XUAN HAU; Scammony Glorybind. Isolated compounds: 19542.
- T1655 *Conyza blinii* (Asteraceae); KU HAO; Blin Conyza. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, drain fire and stanch bleeding. TCM Indications: Chronic trachitis, tonsillitis, pharyngolaryngitis, stomatitis, nephritis, icterohepatitis, conjunctivitis, otitis media, sores, toothache, nosebleed(epistaxis), hematochezia, flooding and spotting, bleeding due to external injury. Isolated compounds: 2887, 4015, 4016, 4017, 4018, 4019, 4020, 4021, 4022, 4023, 4024, 4025, 4026, 4027, 6918, 18317, 20168, 20444, 21541.
- T1656 *Conyza bonariensis* [Syn. *Erigeron bonariensis*; *Erigeron linifolius*; *Erigeron crispus*] (Asteraceae); XIANG SI CAO; Bona Conyza. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, eliminate damp and relieve pain, stanch bleeding. TCM Indications: Common cold, malaria, rheumatic arthritis, swelling and pus of sores, bleeding due to external injury. Isolated compounds: 2540, 3318, 10006, 10670.
- T1657 *Conyza canadensis* [Syn. *Erigeron canadensis*] (Asteraceae); QI ZHOU YI ZHI HAO *Conyza canadensis* *Erigeron canadensis*; Horseweed Fleabane. Used part: whole herb. TCM Effects: To clear heat and disinhibit damp, dissipate stasis and disperse swelling. TCM Indications: Dysentery, enteritis, hepatitis, cholecystitis, knocks and falls, wind-damp bone pain, swelling pain of sore and boil, bleeding due to external injury, psoriasis. Isolated compounds: 2281, 3391, 4360, 4946, 5904, 12894, 13603, 20566, 21741, 21742.
- T1658 *Conyza stricta* (Asteraceae); JIAN TENG BAI JIU CAO; Strict Conyza. Isolated compounds: 9423.
- T1659 *Coprinopsis episcopalis* Fungus *Coprinopsis episcopalis*. Isolated compounds: 10991, 10992, 10993, 10994.
- T1660 *Coprinus atramentarius* (Agaricaceae); GUI GAI; Coprinus Sporocarp. Used part: sporocarp. TCM Effects: To boost intestines and stomach, rectify *qi* and transform phlegm, resolve toxin and disperse swelling. TCM Indications: Inappetence, cough with phlegm, child epilepsy, swelling of clove, malign sore. Isolated compounds: 617, 4030, 9067, 10913, 10997, 10998, 10999, 11219, 13098, 17083, 22060, 22260.
- T1661 *Coprosma linearifolia* (Rubiaceae). Isolated compounds: 15734.
- T1662 *Coptis chinensis* (Ranunculaceae); HUANG LIAN; Chinese Goldthread. Equivalent plant: *Coptis deltoidea*, *Coptis omeiensis*, *Coptis teetoides*, *Coptis chinensis* var. *breviseipala*. Used part: rhizome. TCM Effects: To clear heat and dry damp, drain fire and resolve toxin, lower blood pressure. TCM Indications: Febrile infectious diseases, dysentery, blood ejection, spontaneous external bleeding, diphtheria, infection of upper respiratory tract, scarlatina, typhoid fever, acute conjunctivitis, otitis media, acute surgical infection, septicemia, hepatitis, trichomoniasis, eruptive dermatitis, hypertension, vexation and agitation, clouded spirit with delirious speech, damp-heat glomus in chest, damp-heat diarrhea dysentery, insomnia and vexation due to effulgent fire, stomach heat vomiting, swift digestion with rapid hungering, red eyes with pain due to liver fire, heat toxin sores, clove sore running yellow, gum swelling and pain, mouth sore, tongue sores, genital swelling, bleeding from hemorrhoids, eczema, scalds. Isolated compounds: 2303, 3174, 3934, 4032, 6081, 6835, 7768, 11851, 12847, 13374, 15882, 16555, 21689.
- T1663 *Coptis chinensis* var. *breviseipala* (Ranunculaceae); DUAN E HUANG LIAN; Shortsepal Goldthread. Used part: rhizome. TCM Effects: See *Coptis chinensis*. TCM Indications: See *Coptis chinensis*. Isolated compounds: 2303, 4032, 11851, 16555.
- T1664 *Coptis deltoidea* (Ranunculaceae); SAN JIAO YE HUANG LIAN; Deltoid Goldthread. Used part: rhizome. TCM Effects: See *Coptis chinensis*. TCM Indications: See *Coptis chinensis*. Isolated compounds: 2303, 4032, 6835, 11851, 13374, 16555.
- T1665 *Coptis groenlandica* (Ranunculaceae). Isolated compounds: 9011.
- T1666 *Coptis gulinensis* GU LIN YE LIAN; Gulin Goldthread\*. Isolated compounds: 2303, 4032, 11851, 16555.
- T1667 *Coptis japonica* (Ranunculaceae); RI BEN HUANG LIAN; Japanese Goldthread\*. Isolated compounds: 2302, 4032, 12523, 17409, 22726, 22727, 22728, 22729, 22730, 22731.
- T1668 *Coptis lineariseipala* XIAN E HUANG LIAN; Lineariseipal Goldthread\*. Isolated compounds: 2303, 4032, 11851, 16555.
- T1669 *Coptis omeiensis* (Ranunculaceae); E MEI YE HUANG LIAN; Omei Mountain Goldthread. Used part: rhizome. TCM Effects: See *Coptis chinensis*. TCM Indications: See *Coptis chinensis*. Isolated compounds: 2303, 4032, 11851, 16555.
- T1670 *Coptis teetoides* [Syn. *Coptis teeta*] (Ranunculaceae); YUN NAN HUANG LIAN; Yunnan Goldthread. Used part: rhizome. TCM Effects: See *Coptis chinensis*. TCM Indications: See *Coptis chinensis*. Isolated compounds: 2303, 4032, 11851, 13374, 16555.
- T1671 *Coptis trifolia* (Ranunculaceae); SAN YE HUANG LIAN; Three-leaf Goldthread. Isolated compounds: 6835.
- T1672 *Corallodiscus flabellatus* [Syn. *Didissandra flabellat*] (Gesneriaceae); SHI DAN CAO; Fan-shaped Corallodiscus. Used part: whole herb. TCM Effects: To clear damp heat, resolve sore toxin, quicken blood and relieve pain. TCM Indications: Damp-heat impediment pain, toxin swelling of sores, swelling pain in throat, red and white vaginal discharge, knocks and falls, bleeding due to external injury. Isolated compounds: 5949, 6076, 6077, 6078, 6079, 6080, 6085, 21761.
- T1673 *Corchorus capsularis* (Tiliaceae); HUANG MA YE; Roundpod Jute Leaf. Used part: leaf. TCM Effects: To rectify *qi* and stanch bleeding, expel pus and engender flesh. TCM Indications: Abdominal pain, dysentery, flooding, sore and welling abscess. Isolated compounds: 4036, 4037, 7320, 9335, 16084.
- T1674 *Corchorus capsularis* (Tiliaceae); HUANG MA ZI; Roundpod Jute Seed. Used part: seed. TCM Effects: To strengthen heart, anesthetize. TCM Indications: Flooding, cough harmful to lung. Isolated compounds: 4036, 7320, 9335, 16084.
- T1675 *Corchorus olitorius* (Tiliaceae); CHANG SHUO HUANG MA; Jews-mallow. Used part: whole herb. TCM Effects: To course wind, relieve cough, disinhibit damp. TCM Indications: Common cold with cough, dysentery, eczema. Isolated compounds: 7320, 9335, 16084.
- T1676 *Corchorus trilocularis* (Tiliaceae); SAN SHI HUANG MA; Three-room Roundpod Jute\*. Isolated compounds: 21403, 21890, 21891.
- T1677 *Cordia globosa* (Boraginaceae); QIU ZHUANG PO BU MU; Globe Cordia\*. Isolated compounds: 6221, 14843.



- T1678 *Cordia multispicata* (Boraginaceae); DUO SUI PO BU MU; Manyspike Cordia\*. Isolated compounds: 4039, 4040, 4041, 4042, 4043, 4044, 7001, 10960, 12490, 12491, 12493, 12496, 16358, 16498, 22272.
- T1679 *Cordia spinescens* (Boraginaceae); YOU CI PO BU MU; Spined Cordia\*. Isolated compounds: 2955, 13369, 13371.
- T1680 *Cordyceps militaris* (Clavicipitaceae); YONG CHONG CAO; Scarlet Caterpillar Fungus. Equivalent plant: REN GONG YONG CHONG CAO. Used part: sclerotium and stroma. TCM Effects: To supplement lung and boost kidney. TCM Indications: Tuberculosis, phlegm containing blood, night sweating, blood vacuity, lumbago. Isolated compounds: 618, 3180, 3413, 3414, 3415, 4048, 6034, 7250, 10426, 10427, 18258.
- T1681 *Cordyceps militaris* cv (Clavicipitaceae); REN GONG YONG CHONG CAO; Cultivated Scarlet Caterpillar Fungus\*. Used part: sclerotium and stroma. TCM Effects: To supplement lung and boost kidney. TCM Indications: Tuberculosis, phlegm containing blood, night sweating, blood vacuity, lumbago. Isolated compounds: 343, 617, 618, 4047, 4048, 7250, 9070, 9071, 11082, 22237, 22252.
- T1682 *Cordyceps ophioglossoides* (Clavicipitaceae); DA TUAN NANG CHONG CAO; Goldenthread Cordyceps. Used part: stroma. TCM Effects: To quicken blood, stanch bleeding, regulate menstruation. TCM Indications: Flooding, menstrual disorder [= menoxenia]. Isolated compounds: 16130.
- T1683 *Cordyceps sinensis* (Clavicipitaceae); DONG CHONG XIA CAO; Aweto (Chinese Caterpillar Fungus). Used part: a drug consisting of dried fungal stroma growing on larva of a caterpillar. TCM Effects: To supplement lung and boost kidney, stanch bleeding and transform phlegm. TCM Indications: Impotence and emission, neurasthenia, backache, aching in lumbus and knees, enduring cough and vacuity asthma, taxation damage hemoptysis. Isolated compounds: 617, 618, 4046, 4048, 5770, 6720, 6907, 7173, 7250, 9070, 9071, 9486, 10913, 10914, 11082, 11624, 12891, 12893, 13504, 19983, 20280, 22237, 22252, 22554, 22556.
- T1684 *Cordyline stricta* (Liliaceae); JIAN YE TIE SHU YE; Strictleaf Dracaena Leaf. Used part: leaf. TCM Effects: To dissipate stasis and disperse swelling, cool blood and stanch bleeding. TCM Indications: Knocks and falls, bleeding due to external injury, hematochezia, hematuria, nosebleed(epistaxis), cough with blood ejection, asthma, child gan accumulation, dysentery. Isolated compounds: 4049, 21383.
- T1685 *Coreopsis lanceolata* (Asteraceae); XIAN YE JIN JI JU; Lance Coreopsis. Used part: leaf. TCM Effects: To resolve heat toxin, disperse swollen welling abscess. TCM Indications: Toxin swelling of sores. Isolated compounds: 12466, 12678.
- T1686 *Coreopsis* sp. (Asteraceae). Isolated compounds: 16024.
- T1687 *Coriandrum sativum* (Apiaceae); HU SUI ZI; Coriander Seed. Used part: dried ripe fruit. TCM Effects: To outthrust papules, fortify stomach. TCM Indications: Food accumulation, inappetence, dysentery, hemorrhoids. Isolated compounds: 1596, 3048, 3771, 3772, 5811, 5812, 5813, 5814, 5897, 6482, 9879, 10005, 10014, 10040, 10326, 10604, 10605, 10944, 10953, 12843, 14423, 14425, 17528, 17911, 20988.
- T1688 *Coriaria angustissima* (Coriariaceae); XIA MA SANG; Narrow Coriaria\*. Isolated compounds: 22145.
- T1689 *Coriaria arborea* (Coriariaceae); CAI SHI MU MA SANG; Arboreous Coriaria\*. Isolated compounds: 13711.
- T1690 *Coriaria japonica* (Coriariaceae); RI BEN MA SANG; Japanese Coriaria\*. Isolated compounds: 4051, 4052, 4053, 4054, 5732, 7518, 8311, 19057, 22145.
- T1691 *Coriaria myrtifolia* (Coriariaceae); DI ZHONG HAI MA SANG; Mediterranean Coriaria. Isolated compounds: 4051.
- T1692 *Coriaria sinica* [Syn. *Coriaria nepalensis*] (Coriariaceae); MA SANG; Chinese Coriaria. Used part: root. TCM Effects: To dispel wind and eliminate damp, clear heat and resolve toxin. TCM Indications: Rheumatism numbness, wind-fire toothache, phlegm-rheum, lump glomus, scrofula, knocks and falls, acute conjunctivitis, burns and scalds. Isolated compounds: 1535, 4051, 8095, 9935, 22145.
- T1693 *Coriaria sinica* [Syn. *Coriaria nepalensis*] (Coriariaceae); MA SANG YE; Chinese Coriaria Leaf. Used part: leaf. TCM Effects: To clear heat and resolve toxin, disperse swelling and relieve pain, kill worms. TCM Indications: Welling abscess and flat abscess, toxin swelling, scab and *lai*, yellow-water sore, scalds. Isolated compounds: 4051, 4057, 8095, 22145.
- T1694 *Coriaria* sp. (Coriariaceae). Isolated compounds: 22145.
- T1695 *Coriaria thymifolia* (Coriariaceae); BAI LI XIANG YE MA SANG; Thymeleaf Coriaria\*. Isolated compounds: 4051.
- T1696 *Cornus capitata* [Syn. *Dendrobenthamia capitata*] (Cornaceae); JI SU ZI; Evergreen Dogwood. Used part: fruit. TCM Effects: To disperse accumulation and kill worms, clear heat and resolve toxin, disinhibit water and disperse edema. TCM Indications: Hepatitis, food accumulation, lung heat cough, ascariasis, edema. Isolated compounds: 5567, 5568, 6345, 9869, 17171.
- T1697 *Cornus controversa* [Syn. *Bothrocaryum controversum*] (Cornaceae); DENG TAI SHU; Giant Dogwood. Used part: bark or root cortex, leaf. TCM Effects: To clear heat and calm liver, disperse swelling and relieve pain. TCM Indications: Headache, dizziness, swelling pain in throat, aching pain in joints, painful swelling from knocks and falls. Isolated compounds: 2928, 5513, 8103.
- T1698 *Cornus officinalis* [Syn. *Macrocarpium officinale*] (Cornaceae); SHAN ZHU YU; Asiatic Cornelian Cherry. Used part: fruit. TCM Effects: To supplement liver and kidney, rough essence and stem desertion. TCM Indications: Dizziness and tinnitus, aching in lumbus and knees, impotence and emission, enuresis and frequent urination, flooding and spotting with vaginal discharge, vacuity and profuse sweating, vacuity desertion due to great sweating, diabetes mellitus due to internal heat, dysmenorrhea. Isolated compounds: 957, 1723, 1832, 2282, 4060, 4062, 4063, 4064, 4065, 4943, 4951, 5520, 5764, 6745, 7518, 7523, 8011, 8095, 9486, 11218, 11268, 11735, 12891, 12950, 13419, 13849, 14607, 14982, 16050, 18656, 20503, 20715, 21053, 21641, 21642, 22270, 22397.
- T1699 *Cornus suecica* (Cornaceae); AI LAI MU; Dwarf Cornel. Isolated compounds: 8276, 14933.
- T1700 *Cornutia grandifolia* var. *intermedia* (Verbenaceae); ZHONG JIAN DA YE KE NU CAO; Intermediate Largeleaf Chastetree\*. Isolated compounds: 4066, 4067, 4068, 4069, 4070, 4071, 4072, 4073, 4074, 4075.

- T1701 *Coronilla* spp. (Fabaceae). Isolated compounds: 22195.
- T1702 *Coronilla varia* (Fabaceae); DUO BIAN XIAO GUAN HUA; Crown Vetch. Isolated compounds: 10915, 19542, 22195.
- T1703 *Corsinia coriandrina* (Corsiaceae); GE ZHI HUA DI QIAN. Isolated compounds: 4093, 4094, 4095, 6292.
- T1704 *Cortinarius* spp. (Cortinariaceae). Isolated compounds: 1999, 21459, 21460.
- T1705 *Corydalis adunca* (Papaveraceae); HUI LV YAN HU SUO; Greyish-green Corydalis. Used part: whole herb. TCM Effects: To clear lung and relieve cough, clear liver and disinhibit gallbladder, relieve pain. TCM Indications: Lung heat cough, fever and chest pain, liver-gallbladder damp-heat, pain in rib-side, fever, anorexy for greasy food, jaundice, damp-heat diarrhea. Isolated compounds: 2303, 4032, 4103, 4889, 4890, 16555, 17983.
- T1706 *Corydalis ambigua* var. *amurensis* [Syn. *Corydalis ambigua*] (Papaveraceae); DONG BEI YAN HU SUO; Amur Corydalis. Equivalent plant: *Corydalis repens*. Used part: tuber. TCM Effects: To quicken blood and dissipate stasis, rectify *qi* and relieve pain. TCM Indications: Pain in lumbus and knees, pain in heart and abdomen, dysmenorrhea, menstrual disorder, postpartum stasis stagnation abdominal pain, flooding and spotting, concretion and conglomeration, knocks and falls. Isolated compounds: 930, 1023, 2350, 4032, 4103, 4889, 8513, 14252, 16555, 17983.
- T1707 *Corydalis aurea* (Papaveraceae); JIN HUANG JIN; Golden Corydalis. Isolated compounds: 3114, 4121.
- T1708 *Corydalis bulbosa* [Syn. *Corydalis solida*] (Papaveraceae); SHAN YAN HU SUO; Bird-in-a-bush. Isolated compounds: 2734, 8513, 15917, 15918.
- T1709 *Corydalis bungeana* (Papaveraceae); KU DI DING; Bunge Corydalis. Used part: whole herb. TCM Effects: To clear heat toxin, disperse swollen welling abscess. TCM Indications: Influenza, infection of upper respiratory tract, tonsillitis, infective hepatitis, enteritis, dysentery, nephritis, parotitis, conjunctivitis, acute appendicitis, clove sore and swollen welling abscess, scrofula. Isolated compounds: 359, 2350, 2744, 4116, 9938, 12028, 12029, 14360, 14372, 15817, 17983, 18327, 18328, 21061, 22958.
- T1710 *Corydalis campulicarpa* (Papaveraceae). Isolated compounds: 16128.
- T1711 *Corydalis caucasica* (Papaveraceae); GAO JIA SUO ZI JIN; Caucasian Corydalis\*. Isolated compounds: 2734.
- T1712 *Corydalis cava* (Papaveraceae); AO XIAN ZI JIN; Bulbous Corydalis. Isolated compounds: 2734, 3057, 11256, 11344, 11348.
- T1713 *Corydalis cheilanthifolia* (Papaveraceae); HUA ZI JIN; Chinese Corydalis. Isolated compounds: 3057, 16128.
- T1714 *Corydalis claviculata* (Papaveraceae); BANG ZHUANG ZI JIN; Climbing Corydalis. Isolated compounds: 4350, 4351, 4353, 12641.
- T1715 *Corydalis decumbens* [Syn. *Corydalis amabilis*] (Papaveraceae); XIA TIAN WU; Decumbent Corydalis. Used part: tuber. TCM Effects: To move *qi* and quicken blood, free network vessels and relieve pain. TCM Indications: Pain in deep tissues, neuralgia, swelling pain from fracture, hypertension, hemiplegia, sequel of poliomyelitis, sciatica, rheumatic arthritis, knocks and falls. Isolated compounds: 642, 643, 2001, 2350, 2734, 4032, 4103, 7768, 13716, 16555, 17983, 21061, 21077.
- T1716 *Corydalis gigantea* (Papaveraceae); JU ZI JIN; Gigantic Corydalis\*. Used part: whole herb. TCM Effects: To settle pain and calm. TCM Indications: Various pains. Isolated compounds: 2350, 5708.
- T1717 *Corydalis gortschakovii* (Papaveraceae); GE CAI KE SHI ZI JIN; Gortschakov Corydalis\*. Isolated compounds: 6552.
- T1718 *Corydalis goviana* (Papaveraceae); KU MANG HUANG JIN; Govan Corydalis. Isolated compounds: 16128, 18519.
- T1719 *Corydalis incisa* (Papaveraceae); ZI HUA YU DENG CAO; Incised Corydalis. Used part: whole herb or root. TCM Effects: To resolve toxin and kill worms, relieve pain. TCM Indications: Toxin swelling of sores, scab and *lai*, intractable lichen, eczema, poisonous snake bite. Isolated compounds: 359, 438, 642, 3494, 4032, 4050, 4099, 4102, 4105, 4116, 4117, 4122, 6874, 7899, 9938, 11346, 16303, 16547, 18655, 19200, 19284, 19566, 21062, 22732.
- T1720 *Corydalis ledebouriana* (Papaveraceae); DUI YE YUAN HU; Ledebour Corydalis\*. Isolated compounds: 2303, 4032, 4103, 4889, 5708, 12599, 12600, 12602, 12603, 16555, 17983.
- T1721 *Corydalis linearoides* (Papaveraceae); TIAO LIE HUANG JIN; Linearsegmented Corydalis. Used part: whole herb or tuber. TCM Effects: To dispel wind and eliminate damp, quicken blood and relieve pain. TCM Indications: Wind-damp impediment pain, itchy skin, knocks and falls. Isolated compounds: 643.
- T1722 *Corydalis longicalcarata* (Papaveraceae); CHANG JU YAN HU SUO; Longspur Corydalis\*. Isolated compounds: 2303, 4032, 4103, 4889, 4890, 16555, 17983.
- T1723 *Corydalis lutea* (Papaveraceae); SHEN HUANG ZI JIN; Dark-yellow Corydalis. Isolated compounds: 11344, 11851.
- T1724 *Corydalis marschalliana* (Papaveraceae); MA CHANG LI ZI JIN; Marschall Corydalis \*. Isolated compounds: 2734, 4106.
- T1725 *Corydalis micrantha* (Papaveraceae); XIAO HUA ZI JIN; Micranthine Corydalis\*. Isolated compounds: 3114.
- T1726 *Corydalis montana* (Papaveraceae); MENG DA NA ZI JIN; Montana Corydalis\*. Isolated compounds: 3114.
- T1727 *Corydalis mucronifera* (Papaveraceae); BIAN BING HUANG JIN; Flatstiped Corydalis. Used part: whole herb with root. TCM Effects: To clear heat and resolve toxin, relieve pain. TCM Indications: Influenza, warm disease fever, gastritis, ulcer, dysentery, sciatica, swelling pain of sore and boil. Isolated compounds: 642, 2350.
- T1728 *Corydalis ochotensis* (Papaveraceae); HUANG ZI JIN; Ochotsk Corydalis. Used part: whole herb. TCM Effects: To clear heat and resolve toxin. TCM Indications: Swollen pain of sore toxin, dysentery, tuberculosis and hemoptysis. Isolated compounds: 11571, 12797, 15917, 15918.
- T1729 *Corydalis ochotensis* var. *raddeana* (Papaveraceae); XIAO HUANG ZI JIN; Small Ochotsk Corydalis. Isolated compounds: 15917, 15918, 18519.
- T1730 *Corydalis ophiocarpa* (Papaveraceae); SHE GUO HUANG JIN; Snakefruit Corydalis. Used part: whole herb. TCM Effects: To quicken blood and relieve pain, dispel wind and relieve itch. TCM Indications: Knocks and falls, itchy skin. Isolated compounds: 643, 4121, 16128, 16129.
- T1731 *Corydalis pallida* (Papaveraceae); JU HUA HUANG LIAN; Yellowflower Corydalis. Used part: root. TCM Effects: To clear heat

- and resolve toxin, disperse swelling and relieve pain. TCM Indications: Welling abscess and boil, innominate toxin swelling. Isolated compounds: 2734, 3114, 3115, 4032, 4104, 4121, 4290, 5708, 7451, 15659, 16473, 16547, 19200, 19284, 19566, 20416, 21062, 21077, 22732.
- T1732 *Corydalis pallida* var. *tenuis* (Papaveraceae); XI SHEN SHAN ZI JIN; Tenuous Corydalis\*. Isolated compounds: 3114, 4889, 19200.
- T1733 *Corydalis racemosa* (Papaveraceae); XIAO HUA HUANG JIN; Racemose Corydalis. Used part: whole herb or root. TCM Effects: To clear heat and disinherit damp, resolve toxin and kill worms. TCM Indications: Damp-heat diarrhea, dysentery, jaundice, red eyes with gall, otitis media, sore toxin, scab and lichen, poisonous snake bite. Isolated compounds: 21077.
- T1734 *Corydalis remota* [Syn. *Corydalis bulbosa* var. *typica*] (Papaveraceae); CHI BAN YAN HU SUO; Toothedpetal Corydalis. Used part: tuber. TCM Effects: To quicken blood and dissipate stasis, move *qi* and relieve pain. TCM Indications: Pain in lumbus and knees, pain in heart and abdomen, dysmenorrhea, postpartum stasis stagnation abdominal pain, painful swelling from knocks and falls. Isolated compounds: 930, 2303, 4032, 4103, 4106, 16555, 17983, 20369, 21061, 21077.
- T1735 *Corydalis repens* (Papaveraceae); QUAN YE YAN HU SUO; Creeping Corydalis. Used part: tuber. TCM Effects: See *Corydalis ambigua* var. *amurensis*. TCM Indications: See *Corydalis ambigua* var. *amurensis*. Isolated compounds: 642, 4032, 16555, 17983, 21061.
- T1736 *Corydalis repens* var. *humosides* (Papaveraceae); TU YAN HU; Repent Corydalis\*. Isolated compounds: 642.
- T1737 *Corydalis rosea* (Papaveraceae); MEI GUI HONG JIN; Rose Corydalis\*. Isolated compounds: 643.
- T1738 *Corydalis rotundatour* (Papaveraceae); YUAN YE SHAN WU GUI; Roundleaf Corydalis\*. Isolated compounds: 3057.
- T1739 *Corydalis scouleri* (Papaveraceae); SI KAO LE ZI JIN; Scouler Corydalis\*. Isolated compounds: 643.
- T1740 *Corydalis sempervirens* (Papaveraceae); CANG BAI ZI JIN; Pale Corydalis. Isolated compounds: 643.
- T1741 *Corydalis sewerzowi* (Papaveraceae); XIE SHI ZI JIN; Sewerzow Corydalis\*. Isolated compounds: 4058.
- T1742 *Corydalis sibirica* (Papaveraceae); BEI ZI JIN; Siberian Corydalis. Isolated compounds: 4058, 15918.
- T1743 *Corydalis* spp. (Papaveraceae). Isolated compounds: 3498, 16900.
- T1744 *Corydalis stricta* (Papaveraceae); ZHI LI ZI JIN. Isolated compounds: 9704.
- T1745 *Corydalis suaveolens* [Syn. *Corydalis sheareri*] (Papaveraceae); JIAN JU ZI JIN; Sharpspur Corydalis. Used part: whole herb or tuber. TCM Effects: To quicken blood and relieve pain, clear heat and resolve toxin. TCM Indications: Stomachache, abdominal pain and diarrhea, knocks and falls, swelling toxin of welling abscess and sore, red eyes with gall. Isolated compounds: 4116, 6552, 17983.
- T1746 *Corydalis taliensis* (Papaveraceae); WU WEI CAO; Tali Corydalis. Used part: whole herb. TCM Effects: To dispel wind, clear heat, relieve pain, clear liver and brighten eyes. TCM Indications: Wind-heat common cold, lung heat cough, tuberculosis and coughing of blood, hepatitis, wind-damp pain in sinews and bones, toothache, red eyes, eye screen. Isolated compounds: 2350, 15664.
- T1747 *Corydalis thalictrifolia* (Papaveraceae); YAN HUANG LIAN; Rockliving Corydalis. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, disinherit damp, stanch bleeding and relieve pain. TCM Indications: Hepatitis, oral ulcer, acute conjunctivitis nephelium, dysentery, abdominal pain and diarrhea, bleeding from hemorrhoids. Isolated compounds: 642, 21250.
- T1748 *Corydalis tuberosa* (Papaveraceae); KUAI JING ZI JIN; Tuberos Corydalis\*. Isolated compounds: 11344.
- T1749 *Corydalis vaginans* (Papaveraceae). Isolated compounds: 15918.
- T1750 *Corydalis yanhusuo* [Syn. *Corydalis turtschaninovii* f. *yanhusuo*] (Papaveraceae); YAN HU SUO; Yanhusuo. Used part: rhizome. TCM Effects: To quicken blood, disinherit *qi*, relieve pain. TCM Indications: Chest and rib-side pain, pain in stomach duct and abdomen, neuralgia, gastrointestinal spasm, amenorrhea and dysmenorrhea, postpartum stasis stagnation abdominal pain, painful swelling from knocks and falls. Isolated compounds: 930, 2303, 2350, 3057, 3934, 4032, 4098, 4103, 4104, 4106, 4122, 4888, 4889, 4890, 7996, 8513, 11344, 11348, 12641, 12918, 14550, 15763, 16555, 17983, 18654, 19566, 20416, 21056, 21061, 21062, 21077, 21259, 22934.
- T1751 *Corylus heterophylla* (Betulaceae); ZHEN; Siberian Hazelnut. Used part: kernel. TCM Effects: To fortify spleen and harmonize stomach, moisten lung and relieve cough. TCM Indications: weakness during convalescence, spleen vacuity diarrhea, inappetence, cough. Isolated compounds: 9469.
- T1752 *Corynanthe johimbe* (Rubiaceae); KE NAN SHU; Corinan Tree\*. Isolated compounds: 22921.
- T1753 *Cosmos bipinnata* (Asteraceae); DA BO SI JU; Mexican Aster. Used part: inflorescence, seedor whole herb. TCM Effects: To clear heat and resolve toxin, brighten eyes and transform damp. Isolated compounds: 1492, 22035.
- T1754 *Costus afer* (Zingiberaceae); FEI ZHOU BI QIAO JIANG; African Costus\*. Isolated compounds: 668.
- T1755 *Costus* sp. (Zingiberaceae). Isolated compounds: 6437, 8968.
- T1756 *Costus speciosus* (Zingiberaceae); ZHANG LIU TOU; Canereed Spiralflag. Used part: rhizome. TCM Effects: To move water and disperse swelling. TCM Indications: Ascites, white turbidity, swollen welling abscess, malign sore. Isolated compounds: 6440, 8968, 12488, 17973, 17975, 19987, 21383.
- T1757 *Costus spicatus* (Zingiberaceae); SUI ZHUANG BI QIAO JIANG; Cana do brejo (in Brazil). Isolated compounds: 12016, 20660.
- T1758 *Cotinus coggygia* (Anacardiaceae); HUANG LU; Common Smoketree. Used part: wood. TCM Effects: To eliminate heat vexation, resolve liquor jaundice. TCM Indications: Icterohepatitis, red eyes, lacquer sore, burns and scalds. Isolated compounds: 1399, 1400, 8095, 14454, 20481, 20482.
- T1759 *Cotinus coggygia* var. *cinerea* (Anacardiaceae); HUANG LU ZHI YE; Common Smoketree Branch-leaf. Used part: branchlet-leaf. TCM Effects: To clear damp heat. TCM Indications: Jaundice, lacquer sore, burns and scalds. Isolated compounds: 4439, 8095, 17027, 21959.
- T1760 *Cotinus* sp. (Anacardiaceae). Isolated compounds: 16836, 20481.
- T1761 *Cotoneaster pannosus* (Rosaceae); ZHAN MAO XUN ZI; Silverleaf Cotoneaster. Isolated compounds: 2384.
- T1762 *Cotoneaster* spp. (Rosaceae). Isolated compounds: 17869.

- T1763 *Cotylelobium lanceolatum* (Dipterocarpaceae). Isolated compounds: 4130, 4131, 4132.
- T1764 *Couepia ulei*. Isolated compounds: 1384, 7670.
- T1765 *Coussarea brevicaulis*. Isolated compounds: 2149, 4194, 7023, 19586.
- T1766 *Cowania mexicana* (Rosaceae); XUAN YA MEI GUI; Cliffrose. Isolated compounds: 16304, 16314.
- T1767 *Craibiodendron yunnanese* (Ericaceae); JIN YE ZI; Yunnan Craibiodendron. Used part: leaf. TCM Effects: To dispel wind and quicken blood, free network vessels and relieve pain. TCM Indications: Impediment pain, hemiplegia, knocks and falls. Isolated compounds: 1850, 8996, 12727.
- T1768 *Crassostrea gigas* (Ostreidae); MU LI; Oyster. Isolated compounds: 5874, 7217, 21085.
- T1769 *Crataegus cuneata* (Rosaceae); YE SHAN ZHA; Nippon Hawthorn. Equivalent plant: *Crataegus sanguinea*, *Crataegus kansuensis*, *Crataegus maximowiczii*, *Crataegus scabrifolia*. Used part: fruit. TCM Effects: To fortify spleen and disperse food, quicken blood and transform stasis. TCM Indications: Food stagnation, meat-type food accumulation, distending pain in stomach duct, postpartum blood stasis abdominal pain, lacquer sore, frostbite. Isolated compounds: 3551, 3766, 6854, 10887, 13419, 19087, 22270.
- T1770 *Crataegus hupehensis* HU BEI SHAN ZHA; Hupeh Hawthorn. Isolated compounds: 10887, 19087, 22270, 22581.
- T1771 *Crataegus kansuensis* GAN SU SHAN ZHA; Kansu Hawthorn. Used part: fruit. TCM Effects: See *Crataegus cuneata*. TCM Indications: See *Crataegus cuneata*. Isolated compounds: 10887, 19087, 22581.
- T1772 *Crataegus maximowiczii* MAO SHAN ZHA; Maximowicz Hawthorn. Used part: fruit. TCM Effects: See *Crataegus cuneata*. TCM Indications: See *Crataegus cuneata*. Isolated compounds: 10887, 19087, 22581.
- T1773 *Crataegus monogyna* (Rosaceae); DAN ZI SHAN ZHA; Common Hawthorn. Isolated compounds: 6853, 17876.
- T1774 *Crataegus oxyacantha* (Rosaceae); YING GUO SHAN ZHA; Hawthorn. Isolated compounds: 664, 1102, 3551, 22581.
- T1775 *Crataegus pinnatifida* (Rosaceae); SHAN ZHA; Chinese Hawthorn. Equivalent plant: *Crataegus pinnatifida* var. *major*. Used part: fruit. TCM Effects: To fortify stomach and disperse food, move *qi* and dissipate stasis, lower cholesterol. TCM Indications: Hyperlipemia, myocardial ischemia, angina pectoris, meat-type food accumulation, distention fullness in stomach duct, abdominal pain and diarrhea, amenorrhea due to blood stasis, postpartum stasis stagnation abdominal pain, stabbing pain in heart and abdomen, mounting *qi*. Isolated compounds: 351, 1102, 1845, 2790, 2887, 3551, 3766, 4217, 4218, 4219, 4834, 6318, 6329, 6334, 6335, 6356, 6421, 6854, 7281, 7431, 7434, 7462, 7464, 9408, 9486, 10887, 12891, 12893, 14155, 14270, 14274, 14482, 14488, 14622, 14631, 16285, 17920, 17936, 19087, 20280, 20444, 21942, 21947, 21948, 21952, 21963, 21965, 22270, 22581.
- T1776 *Crataegus pinnatifida* (Rosaceae); SHAN ZHA HUA; Chinese Hawthorn Flower. Used part: flower. TCM Effects: To lower blood pressure. TCM Indications: Hypertension. Isolated compounds: 2394.
- T1777 *Crataegus pinnatifida* (Rosaceae); SHAN ZHA YE; Chinese Hawthorn Leaf. Used part: leaf. TCM Effects: To relieve itch, close sores, lower blood pressure. TCM Indications: Hypertension, lacquer sore, enduring sores. Isolated compounds: 351, 4219, 12714.
- T1778 *Crataegus pinnatifida* var. *major* (Rosaceae); SHAN LI HONG; Red Fruit. Used part: fruit. TCM Effects: See *Crataegus pinnatifida*. TCM Indications: See *Crataegus pinnatifida*. Isolated compounds: 1110, 3551, 3766, 6854, 10887, 17393, 17394, 17395, 17396, 17397, 19087, 22270, 22581.
- T1779 *Crataegus pinnatifida* var. *psilosa* WU MAO SHAN ZHA; Hairless Chinese Hawthorn. Isolated compounds: 10887, 19087, 22581.
- T1780 *Crataegus sanguinea* LIAO NING SHAN ZHA; Redhaw Hawthorn. Used part: fruit. TCM Effects: See *Crataegus cuneata*. TCM Indications: See *Crataegus cuneata*. Isolated compounds: 10887, 19087, 22581.
- T1781 *Crataegus scabrifolia* YUN NAN SHAN ZHA; Yunnan Hawthorn. Used part: fruit. TCM Effects: See *Crataegus cuneata*. TCM Indications: See *Crataegus cuneata*. Isolated compounds: 1845, 3766, 10887, 19087, 20444, 22581.
- T1782 *Crataegus* spp. (Rosaceae). Isolated compounds: 17083, 17869.
- T1783 *Cratoxylum arborescens* (Clusiaceae); QIAO MU ZHUANG HUANG NIU MU; Genonggang. Isolated compounds: 5827, 6183, 8032, 8315, 8325.
- T1784 *Cratoxylum cochinchinense* (Clusiaceae); HUANG NIU MU; Common Oxwood. Used part: root, bark or stem-leaf. TCM Effects: To clear heat and resolve toxin, transform damp and disperse stagnation, dispel stasis and disperse swelling. TCM Indications: Common cold, summerheat stroke with fever, diarrhea, jaundice, knocks and falls, swelling welling abscess and sore and boil. Isolated compounds: 3370, 3870, 3871, 3872, 3873, 5044, 8219, 8221, 8323, 9857, 13492, 13493, 17661, 21691.
- T1785 *Cratoxylum prunifolium* (Clusiaceae); KU DING CHA; Plumleaf Cratoxylum. Used part: tender leaf. TCM Effects: To clear heat and resolve summerheat, transform damp and disperse stagnation. TCM Indications: Common cold, summerheat stroke with fever, jaundice, acute gastroenteritis, bacillary dysentery, sore and boil. Isolated compounds: 15715.
- T1786 *Cremanthodium ellisii* (Asteraceae); KUAI GEN CHUI TOU JU; Root-tuber Cremanthodium. Used part: whole herb. TCM Effects: To relieve cough and dispel phlegm, loosen chest and disinhibit *qi*. TCM Indications: Cough of phlegm asthma, taxation damage, senile vacuity weakness headache. Isolated compounds: 14627.
- T1787 *Cremastra appendiculata* (Orchidaceae); DU JUAN LAN; Appendiculate Cremastra. Used part: pseudobulb. TCM Effects: To clear heat and resolve toxin, disperse swelling and dissipate binds. TCM Indications: Malign sores with welling abscess and flat abscess, scrofula, throat pain and throat impediment, snake or insect bites. Isolated compounds: 5910.
- T1788 *Crepis mollis* (Asteraceae); ROU SE HUAN YANG SHEN; Soft Hawksbeard. Isolated compounds: 10745.
- T1789 *Crepis napifera* (Asteraceae); YUAN JING HUAN YANG SHEN; Turnip-shaped Hawksbeard. Used part: root or whole herb. TCM Effects: To clear lung and relieve cough, nourish liver and brighten eyes. TCM Indications: Lung heat cough, pertussis, night blindness. Isolated compounds: 5724, 15262, 20714.

- T1790 *Crepis tingitana* (Asteraceae); NAN XI BAN YA HUAN YANG SHEN; Southern-Spain Hawksbeard\*. Isolated compounds: 8706.
- T1791 *Crescentia cujete* (Bignoniaceae); PAO DAN GUO; Calabash-tree. Isolated compounds: 12225.
- T1792 *Crinodendron hookerianum* (Elaeocarpaceae); HONG BAI HE MU; Lantern-tree. Isolated compounds: 4319, 4321, 4322.
- T1793 *Crinum amabile* (Amaryllidaceae); SU MEN DA LA WEN SHU LAN; Lovely Crinum\*. Isolated compounds: 9547.
- T1794 *Crinum asiaticum* (Amaryllidaceae); YA ZHOU WEN SHU LAN; Grand Crinum. Isolated compounds: 4237, 4238, 4239, 22232.
- T1795 *Crinum asiaticum* var. *japonicum* (Amaryllidaceae); RI BEN WEN SHU LAN; Japanese Crinum. Isolated compounds: 4235, 10403, 13241, 15750, 17769.
- T1796 *Crinum asiaticum* var. *sinicum* (Amaryllidaceae); WEN SHU LAN; Chinese Crinum. Used part: root and bulb. TCM Effects: To clear heat and resolve toxin, dispel stasis and relieve pain. TCM Indications: Cough, throat pain, knocks and falls, toothache. Isolated compounds: 13241, 20891.
- T1797 *Crinum bulbispermum* (Amaryllidaceae); LIN JING ZHONG ZI WEN SHU LAN; Bulb-spermo Crinum\*. Isolated compounds: 408, 4235, 4237, 5255, 5256, 5978, 7414, 9946, 10018, 10404, 11484, 14369.
- T1798 *Crinum kirkii* (Amaryllidaceae); KEN NI YA WEN SHU LAN; Kenya Crinum\*. Isolated compounds: 506, 4866, 15716.
- T1799 *Crinum latifolium* (Amaryllidaceae); XI NAN WEN SHU LAN; Broadleaf Crinum. Used part: leaf. TCM Effects: To quicken blood and dispel stasis, free network vessels and relieve pain, clear heat and resolve toxin. TCM Indications: Wound swelling from knocks and falls, fracture, pain in joints, toothache, malign sore and swelling toxin, hemorrhoids, zoster, psoriasis. Isolated compounds: 9547, 13241.
- T1800 *Crinum laurentii* (Amaryllidaceae); LAO SHI WEN SHU LAN; Laurent Crinum\*. Isolated compounds: 1021.
- T1801 *Crinum macowanii* (Amaryllidaceae); GUAN MU WEN SHU LAN; Shrubby Crinum\* 'bush' or 'march lily'. Isolated compounds: 2751, 3516, 4240, 4982, 6882, 9206, 12296, 13241, 13297, 17751, 22230.
- T1802 *Crinum macrantherum* (Amaryllidaceae); DA HUA YAO WEN SHU LAN; Macroanther Crinum\*. Isolated compounds: 2219.
- T1803 *Crinum moorei* (Amaryllidaceae). Isolated compounds: 460, 3516, 4236, 4241, 6842, 6883, 7038, 17751, 22229.
- T1804 *Cristaria plicata*; *Hyriopsis cumingii* ZHEN ZHU MU; Mother-of-pearl. Used part: shell. TCM Effects: To calm liver and subdue yang, quiet spirit and settle fright, clear liver and brighten eyes. TCM Indications: Headache and dizziness, palpitation and insomnia, mania and withdrawal, fright epilepsy, liver heat and red eyes, eye screen. Isolated compounds: 17730.
- T1805 *Crocus antalyensis* (Iridaceae). Isolated compounds: 12041.
- T1806 *Crocus antalyensis* cv (Iridaceae); HE LAN ZHONG ZHI FAN HONG HUA; Holland Planted Saffron\*. Isolated compounds: 5025, 17023.
- T1807 *Crocus chrysanthus-biflorus* (Iridaceae); SHUANG HUA FAN HONG HUA; Biflower Crocus\*. Isolated compounds: 12054, 12055, 12056, 15182, 18366.
- T1808 *Crocus sativus* (Iridaceae); ZANG HONG HUA; Saffron Crocus Stigma. Used part: stigma. TCM Effects: To quicken blood and transform stasis, dissipate depression and open binds. TCM Indications: Anxiety and depression, glomus and oppression in chest and diaphragm, blood ejection, cold damage mania, fright palpitation, amenorrhea, postpartum blood stasis abdominal pain, painful swelling from knocks and falls. Isolated compounds: 618, 618, 2224, 4245, 4245, 4246, 4247, 4248, 4250, 4251, 4252, 4253, 4254, 4255, 4256, 4257, 4258, 4259, 4260, 4261, 4262, 4263, 4264, 5763, 5783, 8300, 9301, 9818, 9824, 10524, 10626, 10807, 10807, 10808, 10809, 11656, 11659, 11668, 12015, 12020, 12051, 12062, 13480, 13931, 14652, 14802, 15526, 17263, 17264, 17330, 17330, 17967, 17971, 18259, 18259, 18834, 19120, 20088, 21958, 21967, 22170, 22237, 22237, 22976.
- T1809 *Crocus speciosus* (Iridaceae); MEI LI FAN HONG HUA; Pretty Crocus. Isolated compounds: 4249, 12041.
- T1810 *Croonia japonica* (Stemonaceae); JIN GANG DA; Japanese Croomia. Used part: root and rhizome. TCM Effects: To clear heat and resolve toxin, quicken blood and relieve pain. TCM Indications: Swelling pain in throat, poisonous snake bite, knocks and falls. Isolated compounds: 4265, 16501.
- T1811 *Crossopetalum gaumeri* (Celastraceae); GAO MEI YING BAN; Gaumei Fringe-petal\*. Isolated compounds: 3368, 6049, 10692, 17862, 19373, 19376, 19637, 19638, 21830.
- T1812 *Crossostephium chinense* (Asteraceae); FU RONG JU GEN; Chinese Crossostephium Root. Used part: root. TCM Effects: To dispel wind-damp, warm center and relieve pain. TCM Indications: Rheumatic arthritis, cold pain in stomach duct. Isolated compounds: 20712, 20713.
- T1813 *Crotalaria albida* (Fabaceae); HUANG HUA DI DING; Diluteyellow Crotalaria. Used part: whole herb. TCM Effects: To drain lung and disperse phlegm, clear heat and disinherit damp, resolve toxin and disperse swelling. TCM Indications: Cough and asthma with abundant phlegm, damp-heat diarrhea dysentery, jaundice, dribbling pain of urination, insomnia and vexation, mammary welling abscess, swelling toxin of welling abscess and sore. Isolated compounds: 4244, 12113.
- T1814 *Crotalaria anagyroides* (Fabaceae); MEI ZHOU YE BAI HE; American Crotalaria\*. Isolated compounds: 4266.
- T1815 *Crotalaria assamica* (Fabaceae); ZI XIAO RONG ZI; Assam Crotalaria Seed. Used part: seed. TCM Effects: To dispel wind and eliminate damp, stanch bleeding and disperse swelling, kill worms. TCM Indications: Wind-damp bone pain, knocks and falls, bleeding due to external injury, child gan accumulation. Isolated compounds: 1912, 14923.
- T1816 *Crotalaria breviflora* (Fabaceae); DUAN HUA ZHU SHI DOU; Shortflower Crotalaria\*. Isolated compounds: 11091.
- T1817 *Crotalaria brevifolia* (Fabaceae); DUAN YE ZHU SHI DOU; Shortleaf Crotalaria\*. Isolated compounds: 22277.
- T1818 *Crotalaria crispata* (Fabaceae); ZOU BO ZHUANG ZHU SHI DOU; Crispate Crotalaria\*. Isolated compounds: 7994, 14923.
- T1819 *Crotalaria ferruginea* (Fabaceae); XIANG LING CAO; Rust-coloured Crotalaria. Used part: whole herb with root. TCM Effects: To enrich liver and nourish kidney, relieve cough and calm asthma, resolve toxin and disinherit damp. TCM Indications: Tinnitus, dizziness and dim vision, emission, profuse menstruation, vaginal discharge, enduring cough with bloody phlegm, asthma, nephritis, inhibited urination,

- tonsillitis, parotitis, swelling toxin of clove sore. Isolated compounds: 15018, 15596, 22277.
- T1820 *Crotalaria fulva* (Fabaceae); AN HUANG ZHU SHI DOU; Flavescent Crotalaria\*. Isolated compounds: 7994.
- T1821 *Crotalaria incana* (Fabaceae); GUANG YE ZHU SHI DOU; Shackshack Crotalaria. Isolated compounds: 4266, 11091, 22277.
- T1822 *Crotalaria intermedia* (Fabaceae); XI YE ZHU SHI DOU; Slender-leaf Crotalaria. Isolated compounds: 22277.
- T1823 *Crotalaria juncea* (Fabaceae); SHU MA; Sunn Crotalaria. Used part: root. TCM Effects: To disinhibit urine and resolve toxin. TCM Indications: Opacity of urine, dribbling pain of urination, urethral stone, scab and lichen, knocks and falls. Isolated compounds: 18842, 19712, 21560.
- T1824 *Crotalaria laburnifolia* (Fabaceae); JIN LIAN HUA ZHU SHI DOU; Laburnum Crotalaria\*. Isolated compounds: 4266, 19731.
- T1825 *Crotalaria madurensis* (Fabaceae); MA DU LA ZHU SHI DOU; Madura Crotalaria\*. Isolated compounds: 7994.
- T1826 *Crotalaria mucronata* (Fabaceae); ZHU SHI DOU; Striped Crotalaria. Used part: whole herb. TCM Effects: To clear heat and disinhibit damp, resolve toxin and dissipate binds. TCM Indications: Chronic diarrhea, damp-heat diarrhea, dysentery, edema, pelvic inflammation, frequent urination in children, dribbling urination, child *gan* accumulation, mastitis, neurasthenia, insomnia. Isolated compounds: 15018, 22277.
- T1827 *Crotalaria nana* (Fabaceae); XIAO ZHU SHI DOU; Small Rattle-box. Isolated compounds: 14923.
- T1828 *Crotalaria paniculata* (Fabaceae); YUAN ZHUI ZHU SHI DOU; Paniculate Crotalaria\*. Isolated compounds: 7994.
- T1829 *Crotalaria quinquefolia* (Fabaceae); WU YE ZHU SHI DOU; Fiveleaf Crotalaria\*. Isolated compounds: 14923.
- T1830 *Crotalaria retusa* (Fabaceae); AO ZHU SHI DOU; Yellow-flowering Pea. Isolated compounds: 14923, 20140.
- T1831 *Crotalaria sessiliflora* (Fabaceae); YE BAI HE; Purpleflower Crotalaria. Used part: whole herb. TCM Effects: To clear heat, resolve toxin, disinhibit damp, disperse accumulation. TCM Indications: Dysentery, heat strangury, cough and asthma, wind-damp impediment pain, clove sore and swollen boil, poisonous snake bite, child *gan* accumulation, carcinoma of uterine cervix, carcinoma of esophagus, carcinoma of lung, carcinoma of liver, carcinoma of stomach, squamous carcinoma of skin. Isolated compounds: 14923, 21560.
- T1832 *Crotalaria* sp. (Fabaceae). Isolated compounds: 9318.
- T1833 *Crotalaria spartioides* (Fabaceae); YING ZHAO DOU ZHU SHI DOU; Sparteine Crotalaria\*. Isolated compounds: 18667.
- T1834 *Crotalaria spectabilis* (Fabaceae); MEI LI ZHU SHI DOU; Beautiful Crotalaria. Isolated compounds: 14923, 20140.
- T1835 *Crotalaria stipularia* (Fabaceae); TUO YE ZHU SHI DOU; Stipular Crotalaria\*. Isolated compounds: 14923.
- T1836 *Crotalaria tetragona* (Fabaceae); HUA JIN DAN; Tetragonal Crotalaria. Used part: whole herb or root. TCM Effects: To transform stagnation and relieve pain. TCM Indications: Abdominal pain, iron or wood intake. Isolated compounds: 21560, 21601.
- T1837 *Crotalaria usaramoensis* (Fabaceae); GUANG E ZHU SHI DOU; Glabroussepel Crotalaria. Isolated compounds: 18667, 22277.
- T1838 *Croton balsamifera* (Euphorbiaceae); XIANG BA DOU; Balsam Croton\*. Isolated compounds: 7837.
- T1839 *Croton cajucara* (Euphorbiaceae); KA ZHU BA DOU. Isolated compounds: 2932, 4893.
- T1840 *Croton campestris* (Euphorbiaceae); PING YUAN BA DOU. Isolated compounds: 22361, 22362, 22363.
- T1841 *Croton caudatus* var. *tomentosus* (Euphorbiaceae); MAO YE BA DOU; Tomentose Caudate Croton. Used part: whole herb. TCM Effects: To interrupt malaria and settle pain, soothe sinews and quicken blood. TCM Indications: Malaria with ardent fever, fright epilepsy, convulsion, wind-damp impediment pain, fracture, knocks and falls. Isolated compounds: 1113.
- T1842 *Croton cumingii* (Euphorbiaceae); KA MING BA DOU; Cuming Croton\*. Isolated compounds: 13374.
- T1843 *Croton draconoide* (Euphorbiaceae); DE LA KE BA DOU; Drac Croton\*. Isolated compounds: 20717.
- T1844 *Croton eluteria* (Euphorbiaceae); KU XIANG SHU; Cascarilla. Isolated compounds: 3248, 3249, 3250, 3251, 3252, 3253.
- T1845 *Croton flavens* (Euphorbiaceae); DAN HUANG BA DOU; Flavescent Croton\*. Isolated compounds: 22658.
- T1846 *Croton hovarum* (Euphorbiaceae). Isolated compounds: 3538, 5877, 5878, 6467.
- T1847 *Croton hutchinsonianus* (Euphorbiaceae). Isolated compounds: 10041, 10639.
- T1848 *Croton joufra* (Euphorbiaceae). Isolated compounds: 9971.
- T1849 *Croton lechleri* (Euphorbiaceae); LAI KE BA DOU; Lechler Croton\*. Isolated compounds: 12270, 12271, 20717.
- T1850 *Croton linearis* (Euphorbiaceae); XIAN YE BA DOU; Linear Croton\*. Isolated compounds: 11087, 17909.
- T1851 *Croton macrostachys* (Euphorbiaceae); CHANG SUI BA DOU; LongspikeCroton\*. Isolated compounds: 6156, 15367, 21495, 21496, 21851.
- T1852 *Croton nepetaefolius* (Euphorbiaceae); SI JING JIE BA DOU; Nepeta-like Croton\*. Isolated compounds: 6745, 7523.
- T1853 *Croton oblongifolius* [Syn. *Croton laevigatus*] (Euphorbiaceae); GUANG YE BA DOU; Nitidleaf Croton. Used part: leaf, root. TCM Effects: To free channels and quicken blood, interrupt malaria. TCM Indications: Swelling pain due to external injury, fracture, malaria. Isolated compounds: 225, 226, 248, 2251, 2618, 4268, 4269, 5942, 5944, 5945, 7122, 7156, 10285, 10306, 10307, 12178, 12180, 12413, 12414, 12415, 12416, 12417, 12423, 14543, 17118.
- T1854 *Croton salutaris* (Euphorbiaceae); YI KANG BA DOU; Salutory Croton\*. Isolated compounds: 7837.
- T1855 *Croton schiedeianus* (Euphorbiaceae); GE LUN BI YA BA DOU; Colombia Croton\*, Almizcillo. Isolated compounds: 4892, 5793, 7835, 9222, 9897, 9919, 9972, 11896, 13929, 14517.
- T1856 *Croton sparsiflorus* (Euphorbiaceae); SAN HUA BA DOU; Sparseflower Croton\*. Isolated compounds: 8524.
- T1857 *Croton sublyratus* (Euphorbiaceae); JIN QIN ZHUANG BA DOU; Lyrate-like Croton\*. Isolated compounds: 10523, 17549, 17550, 17551, 17552.
- T1858 *Croton tiglium* (Euphorbiaceae); BA DOU; Purging Croton. Used part: dried seed. TCM Effects: To drain precipitation and cold accumulation, expel water and disperse swelling, dispel phlegm and disinhibit throat,

- consume sore and kill worms. TCM Indications: Distention fullness and sudden pain in chest and abdomen, fecal stoppage, diarrhea and dysentery, edema and enlarged abdomen, phlegm-rheum asthma fullness, throat wind, throat impediment, concretion and conglomeration, welling abscess and flat abscess, malign sore and scab lichen. Isolated compounds: 482, 483, 484, 485, 1598, 4271, 4272, 4839, 9486, 11448, 12569, 12893, 14201, 15203, 17181, 17182, 17183, 17184, 17185, 17186, 17187, 17188, 17189, 17190, 17191, 17192, 17193, 17194, 17195, 19983, 20280, 21371, 21381, 21382.
- T1859 *Croton tonkinensis* (Euphorbiaceae); DONG JIN BA DOU; Viet Nam Croton\*; Kho Sam Cho La. Isolated compounds: 170, 171, 172, 173, 220, 221, 222, 223, 224, 247, 5305, 5306, 5307, 5309, 5936, 5939, 10282, 12183.
- T1860 *Croton urucurana* (Euphorbiaceae); WULU BA DOU; Wru Croton\*. Isolated compounds: 6967.
- T1861 *Croton zambesicus* (Euphorbiaceae); ZAN BI XI BA DOU; Zambesi Croton\*. Isolated compounds: 291, 1110, 2933, 4267, 4270, 4273, 4274, 4275, 10773, 11595, 17265, 19983, 20369, 21494, 21497, 21498.
- T1862 *Cryptocarya chinensis* (Lauraceae); HOU KE GUI; Chinese Cryptocarya. Isolated compounds: 1667, 2486, 3238, 3239, 3240, 4277, 4278, 5069, 5090, 5719, 6573, 7359, 7360, 9947, 9948, 10480, 11217, 11256, 11257, 11308, 11309, 11310, 11311, 11312, 11352, 14378, 15075, 15359, 17910.
- T1863 *Cryptocarya longifolia* (Lauraceae); CHANG YE HOU KE GUI; Longleaf Cryptocarya\*. Isolated compounds: 21255.
- T1864 *Cryptocarya strictifolia* (Lauraceae); ZHI LI YE HOU KE GUI; Strickleaf Cryptocarya\*. Isolated compounds: 20388.
- T1865 *Cryptolepis obtusa* (Asclepiadaceae); DUN XING BAI YE TENG; Obtuse Cryptolepis\*. Isolated compounds: 15909, 15912, 19987.
- T1866 *Cryptolepis sinensis* (Asclepiadaceae); BAI YE TENG; Chinese Cryptolepis. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, stanch bleeding, dissipate stasis and relieve pain. TCM Indications: Lung heat hemoptysis, tuberculosis and hemoptysis, stomach hemorrhage, swollen welling abscess, sore toxin, knife wound, knocks and falls, snake or insect bites. Isolated compounds: 5763.
- T1867 *Cryptomeria fortunei* (Taxodiaceae); LIU SHAN; Chinese Cedar. Used part: root cortex or bark. TCM Effects: To resolve toxin, kill worms, relieve itch. TCM Indications: Lichen sore, goose-foot wind, scalds. Isolated compounds: 4281, 4285, 4286, 4287, 4289, 7514, 9543, 12176, 12185, 19237.
- T1868 *Cryptomeria japonica* (Taxodiaceae); RI BEN LIU SHAN; Japanese Cedar. Isolated compounds: 2410, 3833, 3836, 4291, 7059, 7893, 13862, 20457, 20458, 20459, 20460, 20461, 20462, 20463, 20464.
- T1869 *Cryptotaenia japonica* (Apiaceae); YA ER QIN; Japanese Cryptotaenia. Used part: stem-leaf. TCM Effects: To resolve toxin and eliminate inflammation, quicken blood and disperse swelling. TCM Indications: Pneumonia, pulmonary welling abscess, strangury, mounting *qi*, wind-fire toothache, welling abscess and clove sore, zoster, itchy skin. Isolated compounds: 6482, 11535, 12843, 13800, 15926.
- T1870 *Cistus ladaniferus* (Cistaceae); SHU ZHI BAN RI HUA; Resinoid Cistus\*. Isolated compounds: 7481.
- T1871 *Cucubalus baccifer* (Caryophyllaceae); BAI NIU XI; Berry-bearing Campion. Used part: root. TCM Effects: To quicken blood and settle pain, joint bones and engender flesh. TCM Indications: Knocks and falls, fracture, wind-damp bone pain, menstrual disorder, scrofula, welling abscess and flat abscess. Isolated compounds: 11515, 13178, 14071.
- T1873 *Cucumis africanus* (Cucurbitaceae); FEI ZHOU HUANG GUA; African Cucumber\*. Isolated compounds: 4317.
- T1874 *Cucumis angolensis* (Cucurbitaceae); AN GE LA HUANG GUA; Angola Cucumber\*. Isolated compounds: 4321.
- T1874 *Cucumis hookeri* (Cucurbitaceae); HU KE HUANG GUA; Hooker Cucumber\*. Isolated compounds: 4315.
- T1875 *Cucumis leptodermus* (Cucurbitaceae); BO PI HUANG GUA; Lepto Peel Cucumber\*. Isolated compounds: 4315.
- T1876 *Cucumis melo* (Cucurbitaceae); GUA DI; Muskmelon Fruit Pedicel. Used part: fruit pedicel. TCM Effects: To promote vomiting, eliminate damp. TCM Indications: Wind stroke, epilepsy, throat impediment, indigestion of overnight food, distending pain in stomach duct, damp-heat jaundice, chronic hepatitis, cirrhosis. Isolated compounds: 3585, 4317, 4320, 6733.
- T1877 *Cucumis myriocarpus* (Cucurbitaceae); MI GUO HUANG GUA; Densefruit Cucumber\*. Isolated compounds: 4315.
- T1878 *Cucumis sativus* (Cucurbitaceae); HUANG GUA; Cucumber. Used part: fruit. TCM Effects: To clear heat, disinhibit water, resolve toxin. TCM Indications: Febrile diseases thirst, short voidings of reddish urine, burns and scalds, scant urine with edema, sweat macule, prickly heat. Isolated compounds: 4135, 4312, 4313, 4315, 4317, 4318, 4319, 9616, 11642, 11700, 11701, 11773, 11774, 11775, 11776, 14237, 14254, 15676, 15677, 15679, 16196, 22058, 22581.
- T1879 *Cucumis sativus* var. *hanzil* (Cucurbitaceae); KU HUANG GUA; Bitter Cucumber\*. Isolated compounds: 4318.
- T1880 *Cucurbita moschata* (Cucurbitaceae); NAN GUA; Cushaw. Used part: fruit. TCM Effects: To resolve toxin and disperse swelling. TCM Indications: Pulmonary welling abscess, asthma, swollen welling abscess, scalds, poisonous bee stings. Isolated compounds: 617, 2017, 3774, 4329, 14061, 21662.
- T1881 *Cucurbita moschata* (Cucurbitaceae); NAN GUA ZI; Cushaw Seed. Used part: seed. TCM Effects: To expel worms, promote lactation, disinhibit water and disperse edema. TCM Indications: Taeniasis, ascariasis, bilharziosis, ancylostomiasis, oxyuria disease, postpartum scant milk, postpartum edema, pertussis, hemorrhoids. Isolated compounds: 4329, 4330, 4331, 4332, 4333, 4334.
- T1882 *Cucurbita pepo* (Cucurbitaceae); XI HU LU; Pumpkin. Isolated compounds: 1043, 1044, 4314, 4329, 5938, 22975.
- T1883 *Cucurbita pepo* var. *akoda* (Cucurbitaceae); TAO NAN GUA; Peachliking Pumpkin. Isolated compounds: 4329, 22975.
- T1884 *Cudrania cochinchinensis* (Moraceae); GOU JI; Cochinchina Cudrania. Used part: root. TCM Effects: To dispel wind and free network vessels, clear heat and remove damp, resolve toxin and disperse swelling. TCM Indications: Wind-damp impediment pain, knocks and falls, jaundice, parotitis, phthisis, gastric ulcer, duodenal ulcer, strangury-turbidity, tympanites, menstrual block, taxation damage and coughing of blood, clove sore and swollen welling abscess. Isolated

- compounds: 993, 1010, 1764, 2309, 3868, 3869, 4335, 4338, 4339, 4340, 4341, 4342, 4344, 4345, 4346, 4347, 5184, 5826, 5832, 8354, 8355, 8357, 8358, 8359, 9857, 11206, 11248, 14638, 15279, 21488, 21797, 22667.
- T1885 *Cudrania fruticosa* (Moraceae); ZHE TENG; Fructose Cudrania. Isolated compounds: 4336, 8356.
- T1886 *Cudrania javanensis* (Moraceae); ZHAO WA ZHE SHU; Java Cudrania\*. Isolated compounds: 18643.
- T1887 *Cudrania* sp. (Moraceae). Isolated compounds: 4337.
- T1888 *Cudrania tricuspidata* (Moraceae); ZHE SHU; Tricuspid Cudrania. Used part: wood. TCM Effects: To enrich and nourish blood vessel, harmonize spleen and stomach. TCM Indications: Vacuity detriment, flooding, malaria. Isolated compounds: 1809, 4343, 20254.
- T1889 *Cuminum cyminum* (Apiaceae); ZI RAN QIN; Cumin. Used part: fruit. TCM Effects: To dissipate cold and relieve pain, rectify *qi* and regulate center. TCM Indications: Cold pain in stomach duct and abdomen, indigestion, cold mounting with abdominal pain, menstrual disorder. Isolated compounds: 4358, 4359, 5798, 7388, 9950, 9951, 13750, 13751, 13756, 13757, 13758, 13759, 13764, 13768, 13769, 14145, 14423, 14424, 14425, 17054.
- T1890 *Cunninghamia konishii* (Taxodiaceae); TAI WAN SHAN MU; Konish Chinafir. Isolated compounds: 5954, 7159, 10295, 10303, 12411.
- T1891 *Cunonia macrophylla* (Cunoniaceae); DA YE KU NUO NI. Isolated compounds: 3490, 4055, 6757, 6758, 8095, 13428, 13429.
- T1892 *Cupania latifolia* (Sapindaceae); Guara, Mestizo, or Guacharaco (in Colombia). Isolated compounds: 16875.
- T1893 *Cuphea* sp. (Lythraceae). Isolated compounds: 3138.
- T1894 *Cupressus abramsiana* (Cupressaceae); AI SHI BAI MU; Abrams Cypress\*. Isolated compounds: 21347, 21348.
- T1895 *Cupressus arizonica* (Cupressaceae); LV GAN BAI; Arizona Cypress. Isolated compounds: 4376.
- T1896 *Cupressus funebris* (Cupressaceae); BAI SHU YE; Chinese Weeping Cypress Leaf. Used part: leaf. TCM Effects: To cool blood and stanch bleeding, close sores and engender flesh. TCM Indications: Blood ejection, blood dysentery, hemorrhoids, *lai*, scalds, knife wound, poisonous snake bite. Isolated compounds: 8002, 9543, 17140.
- T1897 *Cupressus macrocarpa* (Cupressaceae); DA GUO BAI MU; Monterey Cypress. Isolated compounds: 21347, 21348.
- T1898 *Cupressus sargentii* (Cupressaceae); SA JIN TE BAI MU; Sargent Cypress. Isolated compounds: 21347, 21348.
- T1899 *Cupressus sempervirens* (Cupressaceae); DI ZHONG HAI BAI MU; Mediterranean Cypress. Isolated compounds: 3354.
- T1900 *Curculigo capitulata* [Syn. *Leucojum capitulata*] (Hypoxidaceae); DA YE XIAN MAO; Largeleaf Curculigo. Used part: rhizome. TCM Effects: To supplement kidney and invigorate *yang*, dispel wind and eliminate damp, quicken blood and regulate menstruation. TCM Indications: Kidney vacuity cough asthma, impotence and emission, white turbidity vaginal discharge, limp aching lumbus and knees, wind-damp impediment pain, infertility due to uterus cold, menstrual disorder, flooding and spotting, prolapse of uterus, knocks and falls. Isolated compounds: 6237, 15875.
- T1901 *Curculigo orchioides* (Hypoxidaceae); XIAN MAO; Common Curculigo. Used part: rhizome. TCM Effects: To supplement kidney and invigorate *yang*, strengthen sinews and bones, dispel damp and dissipate cold. TCM Indications: Impotence seminal cool, limp wilting sinew and bone, cold impediment in lumbus and knees, *yang* vacuity cold diarrhea. Isolated compounds: 345, 413, 464, 4381, 4382, 4384, 4385, 4386, 4387, 6200, 13241, 13835, 14481, 16170, 16171, 16172, 20566, 21087, 21088, 21203, 21697, 22936.
- T1902 *Curculigo pilosa* (Hypoxidaceae); MAO XIAN MAO; Pilose Curculigo\*. Isolated compounds: 4383, 4385, 15875, 17368, 17369, 17370, 21201.
- T1903 *Curcuma aromatica* (Zingiberaceae); YU JIN; Aromatic Turmeric. Used part: tuberoid. TCM Effects: See *Curcuma longa*. TCM Indications: See *Curcuma longa*. Isolated compounds: 2439, 3045, 3048, 3237, 3633, 4391, 4398, 4400, 21432, 22123, 22983.
- T1904 *Curcuma kwangsiensis* (Zingiberaceae); GUANG XI E SHU; Kwangsi Turmeric. Used part: rhizome. TCM Effects: See *Curcuma zedoaria*. TCM Indications: See *Curcuma zedoaria*. Isolated compounds: 4398.
- T1905 *Curcuma longa* (Zingiberaceae); JIANG HUANG; Common Turmeric. Equivalent plant: *Curcuma aromatica*. Used part: tuberoid. TCM Effects: To break blood and move *qi*, free menstruation and relieve pain. TCM Indications: Gallstones, jaundice, leukaemia in early stage and carcinoma of uterine cervix in early stage, chronic ulcer, chronic scab, blood stasis and *qi* stagnation, pain in chest and abdomen and rib-side, dysmenorrhea, amenorrhea, postpartum stasis stagnation abdominal pain, wind-heat impediment pain, knocks and falls, swollen welling abscess. Isolated compounds: 2427, 2428, 2439, 2466, 2467, 2469, 2470, 2960, 4391, 4398, 4398, 4399, 4488, 4895, 5045, 9498, 9855, 11613, 13950, 14642, 17874, 22123, 22124, 22983.
- T1906 *Curcuma* sp. (Zingiberaceae). Isolated compounds: 23004.
- T1907 *Curcuma wengujin* (Zingiberaceae); WEN YU JIN; Wengujin Curcuma\*. Used part: tuberoid. TCM Effects: To quicken blood and relieve pain, move *qi* and relieve depression, clear heart and cool blood, course liver and disinhibit gallbladder. TCM Indications: Pain in chest and abdomen and rib-side, dysmenorrhea, menstrual block, concretion and conglomeration with mass, febrile diseases clouded spirit, mania and withdrawal, fright epilepsy, blood ejection, spontaneous external bleeding, blood strangury, sand strangury, jaundice. Isolated compounds: 4399, 4400.
- T1908 *Curcuma xanthorrhiza* (Zingiberaceae); HUANG GEN JIANG HUANG; Xanthorrhiza Turmeric\*. Isolated compounds: 966, 4398.
- T1909 *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*] (Zingiberaceae); PING E SHU; Zedoary Turmeric. Equivalent plant: *Curcuma kwangsiensis*. Used part: rhizome. TCM Effects: To break blood and dispel stasis, move *qi* and relieve pain, anticancer. TCM Indications: Amenorrhea and dysmenorrhea, concretion conglomeration accumulation and gathering, food accumulation, distending pain in stomach duct and abdomen, indigestion, carcinoma of ovary, carcinoma of skin, genital carcinoma, malignant lymphoma, primary hepatoma, carcinoma of thyroid, carcinoma of stomach, carcinoma of lung. Isolated compounds: 658, 889, 2427, 2428, 2462, 2469, 3045, 4378, 4379, 4380, 4388, 4389, 4393, 4394, 4395, 4396, 4397, 4398, 4399, 4400, 4415, 4416, 4895, 5457, 5577, 6875, 6876, 7116, 7514, 8014, 8015, 8048, 8049, 8347, 8348, 8525, 10147, 11359, 11613, 11789, 15378, 15379, 17875, 18264, 22123, 22124, 22977, 22978, 22979, 22980,



- 22981, 22982, 22983.
- T1910 *Curvularia lunata* Fungus *Curvularia lunata*. Isolated compounds: 5757, 5758, 9800, 9801, 9802, 9803, 10083, 20249.
- T1911 *Cuscuta australis* (Convolvulaceae); NAN FANG TU SI ZI; South Dodder Seed. Used part: ripe seed. TCM Effects: See *Cuscuta chinensis*. TCM Indications: See *Cuscuta chinensis*. Isolated compounds: 1935, 2887, 2906, 3213, 4135, 12020, 13126, 13127, 18317, 19992, 21359.
- T1912 *Cuscuta chinensis* (Convolvulaceae); TU SI ZI; Chinese Dodder Seed. Equivalent plant: *Cuscuta japonica*, *Cuscuta australis*. Used part: ripe seed. TCM Effects: To supplement liver and kidney, secure essence and reduce urine, quiet fetus, brighten eyes, check diarrhea. TCM Indications: Impotence and emission, dribbling urination, enuresis and frequent urination, limp aching lumbus and knees, tinnitus and dim vision, fetal spotting due to kidney vacuity, stirring fetus in pregnancy, diarrhea due to spleen-kidney vacuity, white patch wind. Isolated compounds: 1935, 4418, 10887, 12020, 15459, 18317, 18357.
- T1913 *Cuscuta japonica* (Convolvulaceae); DA TU SI ZI; Japanese Dodder Seed. Used part: ripe seed. TCM Effects: See *Cuscuta chinensis*. TCM Indications: See *Cuscuta chinensis*. Isolated compounds: 12020, 13126, 18317.
- T1914 *Cuscuta lupuliformis* PI JIU HUA TU SI ZI; Hop-shaped Dodder. Isolated compounds: 12020, 18317.
- T1915 *Cuscuta reflexa* (Convolvulaceae); YUN NAN TU SI ZI; Yunnan Dodder. Isolated compounds: 6089, 6094, 6203, 10435, 10437, 20569, 21893.
- T1916 *Cuscuta* sp. (Convolvulaceae). Isolated compounds: 3210.
- T1917 *Cussonia bancoensis* (Araliaceae). Isolated compounds: 1573, 8679, 10820, 22270.
- T1918 *Cussonia racemosa* (Araliaceae). Isolated compounds: 4423, 4424, 4425, 4426, 4427, 4428, 4429, 4430, 4431, 4432, 4433.
- T1919 *Cyanostegia angustifolia*. Isolated compounds: 21711, 21857.
- T1920 *Cyanostegia microphylla*. Isolated compounds: 21711.
- T1921 *Cyanotis arachnoidea* [Syn. *Cyanotis bodinieri*] (Commelinaceae); ZHEN ZHU LU SHUI CAO; Spiderweb Blueeargrass, Pearl Cyanotis\*. Used part: root. TCM Effects: To free network vessels and relieve pain, disinhibit damp and disperse swelling. TCM Indications: Wind-damp impediment pain, pain in lumbus and legs, numbness in limbs, edema, eczema. Isolated compounds: 811, 16291, 16350.
- T1922 *Cyanotis vaga* (Commelinaceae); LU SHUI CAO; Common Cyanotis. Used part: root. TCM Effects: To dispel wind-damp, soothe sinews and quicken network vessels, disinhibit urine. TCM Indications: Wind-damp impediment pain, knocks and falls, edema, otitis media, eczema. Isolated compounds: 3944.
- T1923 *Cyathula capitata* (Amaranthaceae); MA NIU XI; Capitata Cyathula. Used part: root. TCM Effects: To dispel wind-damp, expel stasis blood. TCM Indications: Wind-cold-damp impediment, pain in lumbus and knees, amenorrhea due to blood stasis, postpartum persistent flow of lochia. Isolated compounds: 1014, 1015, 3131, 4455, 6679, 11361, 17741, 17778, 19730.
- T1924 *Cyathula officinalis* (Amaranthaceae); CHUAN NIU XI; Mediinal Cyathula. Used part: root. TCM Effects: To quicken blood and dispel stasis, dispel wind and disinhibit damp. TCM Indications: Amenorrhea with concretion and conglomeration, retention of placenta, impediment pain in joints, hematuria, blood strangury, knocks and falls. Isolated compounds: 4455, 6679.
- T1925 *Cycas beddomei* (Cycadaceae); NAN YIN DU SU TIE SHU GUO; South-India Sago Seed\*. Isolated compounds: 5673, 6411, 21072.
- T1926 *Cycas circinalis* (Cycadaceae); QUAN YE SU TIE; Crozier Cycas. Isolated compounds: 4456, 14134.
- T1927 *Cycas revoluta* (Cycadaceae); SU TIE SHU GUO; Sago Seed. Used part: seed. TCM Effects: To calm liver and lower blood pressure, suppress cough and dispel phlegm, promote astriction and secure astriction. TCM Indications: Hypertension, chronic hepatitis, cough with profuse phlegm, dysentery, emission, vaginal discharge, knocks and falls, knife wound. Isolated compounds: 617, 1030, 4456, 9543, 14151, 15136, 15380, 15381, 15382, 15383, 15384, 15385, 15386, 15664, 22976.
- T1928 *Cycas revoluta* (Cycadaceae); SU TIE YE; Sago Frond. Used part: leaf. TCM Effects: To rectify *qi* and relieve pain, stanch bleeding and dissipate stasis, resolve toxin and disperse swelling. TCM Indications: Diarrhea, dysentery, liver stomach *qi* pain, amenorrhea, blood ejection, hematochezia, toxin swelling, bleeding due to external injury, knocks and falls, backache. Isolated compounds: 4456, 20107.
- T1929 *Cyclamen europaeum* (Primulaceae); OU ZHOU XIAN KE LAI; Cyclamen. Isolated compounds: 4457.
- T1930 *Cyclamen persicum* (Primulaceae); XIAN KE LAI; Florists Cyclamen. Isolated compounds: 4457.
- T1931 *Cyclea barbata* (Menispermaceae); YIN BU HUAN; Barbate Cyclea. Used part: root and stem. TCM Effects: To clear heat and resolve toxin, disperse stasis and relieve pain, disinhibit urine and free strangury. TCM Indications: Wind-heat common cold, throat pain, toothache, stomachache, abdominal pain, damp-heat dysentery, malaria, dribbling pain of urination, painful wound from knocks and falls, sprain and contusion. Isolated compounds: 3878, 9597, 11329, 11736, 21206, 21270.
- T1932 *Cyclea racemosa* (Menispermaceae); LUN HUAN TENG; Racemose Cyclea. Used part: root. TCM Effects: To rectify *qi* and relieve pain, dispel damp and resolve toxin. TCM Indications: Distending pain in chest and stomach duct, abdominal pain and diarrhea, wind-damp pain, throat pain, poisonous snake bite, dog bite, swelling toxin of welling abscess and flat abscess, bleeding due to external injury. Isolated compounds: 4460, 20498.
- T1933 *Cyclea sutchuenensis* (Menispermaceae); SI CHUAN LUN HUAN TENG; Szechwan Cyclea. Used part: root. TCM Effects: To clear heat and resolve toxin, dissipate stasis and relieve pain, disinhibit urine and free strangury. TCM Indications: Externally contracted wind-heat, cough, swelling pain in throat, damp-heat diarrhea dysentery, toothache, painful wound from knocks and falls, dribbling and inhibited voidings of urination. Isolated compounds: 4461, 11362.
- T1934 *Cyclea tonkinensis* (Menispermaceae); NAN LUN HUAN TENG; Tonkin Cyclea. Used part: root. TCM Effects: To clear heat and resolve toxin, quicken blood and relieve pain. TCM Indications: Throat pain and swollen tongue, wind-damp impediment pain, pain in stomach duct and abdomen, amenorrhea and dysmenorrhea. Isolated compounds: 4459, 4461.

- T1935 *Cyclobium* spp. Isolated compounds: 3004.
- T1936 *Cyclocarya paliurus* (Juglandaceae); QING QIAN LIU; Roundwingfruit Cyclocarya. Used part: leaf. TCM Effects: To dispel wind and relieve itch. TCM Indications: Skin lichen. Isolated compounds: 4480, 4481, 4482, 4483.
- T1937 *Cydonia oblonga* (Rosaceae); WEN PO; Common Quince. Used part: fruit. TCM Effects: To warm center and precipitate *qi*, disperse food, check diarrhea, resolve liquor. TCM Indications: Non-digestion of food accumulation, glomus distention in stomach duct and abdomen, water diarrhea, vomiting of sour matter. Isolated compounds: 1102, 7463, 9418, 11574, 15700.
- T1938 *Cymbaria mongolica* (Scrophulariaceae); GUANG YAO DA HUANG HUA; Mongolian Cymbaria. Isolated compounds: 6035, 6038, 6039, 10321, 10322, 10323.
- T1939 *Cymbopogon citratus* (Poaceae); XIANG MAO; Lemongrass. Used part: whole herb. TCM Effects: To dispel wind and free network vessels, warm center and relieve pain, check diarrhea. TCM Indications: Common cold with headache, diarrhea, wind-cold impediment pain, cold pain in stomach duct and abdomen, knocks and falls. Isolated compounds: 3760, 3767, 12987, 15935.
- T1940 *Cymbopogon densiflorus* (Poaceae); MI HUA XIANG MAO; Denseflower Lemongrass\*. Isolated compounds: 3767, 6455.
- T1941 *Cymbopogon distans* (Poaceae); YUN XIANG CAO; Remote Lemongrass. Used part: aerial parts. TCM Effects: To resolve exterior, eliminate damp, relieve cough and calm asthma. TCM Indications: Wind-cold common cold, summerheat damage, vomiting diarrhea with abdominal pain, dribbling pain of urination, wind-damp impediment pain, cough and asthma, bronchial asthma. Isolated compounds: 3761, 7442, 8312, 17456.
- T1942 *Cymbopogon flexuosus* (Poaceae); WAN YAN XIANG MAO; Flexuous Lemongrass\*. Isolated compounds: 3760, 11966, 17056.
- T1943 *Cymbopogon goeringii* (Poaceae); YE XIANG MAO; Goering Lemongrass. Used part: whole herb. TCM Effects: To relieve cough and calm asthma, dispel wind and eliminate damp, free channels and relieve pain, check diarrhea. TCM Indications: Acute bronchitis, chronic bronchitis, bronchitis, rheumatic arthritis, headache, knocks and falls, diarrhea, *qi* pain in heart and stomach, abdominal pain, water diarrhea. Isolated compounds: 2555, 3241, 3242, 6745, 8313, 9669, 11408, 14531.
- T1944 *Cymbopogon nardus* (Poaceae); JING XIANG MAO; Citronella-grass. Isolated compounds: 3767.
- T1945 *Cymbopogon polyneuros* (Poaceae). Isolated compounds: 16927.
- T1946 *Cymbopogon procerus* (Poaceae); CHANG XIANG MAO; Long Lemongrass\*. Isolated compounds: 6745.
- T1947 *Cymbopogon sennaarensis* (Poaceae); XIN NONG XIANG MAO; Senna Lemongrass\*. Isolated compounds: 17456.
- T1948 *Cymbopogon winterianus* (Poaceae); WEN TE XIANG MAO; Winter Lemongrass\*. Isolated compounds: 3767.
- T1949 *Cynanchum aphyllum* (Asclepiadaceae); WU YE BAI QIAN; Leafless Swallowwort\*. Isolated compounds: 4555, 4556, 4557, 4558, 4559, 4560, 4561, 4562, 4563.
- T1950 *Cynanchum ascyrifolium* (Asclepiadaceae); CHAO FENG CAO; Acuminate Swallowwort. Used part: root. TCM Effects: See *Tylophora ovata*. TCM Indications: See *Tylophora ovata*. Isolated compounds: 4566, 4567.
- T1951 *Cynanchum atratum* (Asclepiadaceae); BAI WEI; Blackend Swallowwort. Used part: root. TCM Effects: See *Tylophora ovata*. TCM Indications: See *Tylophora ovata*. Isolated compounds: 117, 1991, 1992, 1993, 1994, 1995, 1996, 4551, 4568, 5750, 8507, 8520, 21178.
- T1952 *Cynanchum auriculatum* (Asclepiadaceae); ER YE NIU PI XIAO; Auriculate Swallowwort. Used part: tuberoid. TCM Effects: See *Cynanchum bungei*. TCM Indications: See *Cynanchum bungei*. Isolated compounds: 2115, 4552, 4553, 22691, 22692, 22693, 22694.
- T1953 *Cynanchum bungei* (Asclepiadaceae); BAI SHOU WU; Bunge Swallowwort. Equivalent plant: *Cynanchum auriculatum*. Used part: tuberoid. TCM Effects: To supplement lung and boost kidney, strengthen sinews and bones, boost essence and blood, fortify spleen and disperse food, resolve toxin and cure sores. TCM Indications: Aching in lumbus and knees, impotence and emission, dizziness and tinnitus, palpitation and insomnia, inappetence, child *gan* sore, postpartum scant milk, swelling toxin of sore and welling abscess, poisonous snake bite. Isolated compounds: 2747, 2748, 2749, 2750, 3329, 3709, 3722, 4796, 12224, 12713, 12880, 16899, 19361, 22615.
- T1954 *Cynanchum chinense* (Asclepiadaceae); E RONG TENG; Chinese Swallowwort. Used part: white juice in stem. TCM Effects: To clear heat and resolve toxin, disperse accumulation and fortify stomach, disinhibit water and disperse edema. TCM Indications: Child food accumulation, child *gan* accumulation, gastritis, gastritis with edema, duodenal ulcer, wart. Isolated compounds: 4554.
- T1955 *Cynanchum hancockianum* (Asclepiadaceae); HUA BEI BAI QIAN; Hancock Swallowwort. Used part: whole herb. TCM Effects: To quicken blood, relieve pain, eliminate inflammation. TCM Indications: Pain in joints, toothache, bald sores. Isolated compounds: 9212, 9213, 9214, 9215, 9216, 9217, 13740, 15401, 15402, 22492.
- T1956 *Cynanchum japonicum* (Asclepiadaceae); RI BEN NIU PI XIAO; Japanese Swallowwort\*. Isolated compounds: 4551.
- T1957 *Cynanchum komarovii* (Asclepiadaceae); NIU XIN PIAO ZI; Komarov Mosquitotrap. Isolated compounds: 5055, 6272.
- T1958 *Cynanchum otophyllum* (Asclepiadaceae); QING YANG SHEN; Auricledleaf Mosquitotrap. Used part: root. TCM Effects: To dispel wind-damp, boost kidney and fortify spleen, resolve snake toxin, resolve dog toxin. TCM Indications: Wind-damp impediment pain, kidney vacuity lumbago, taxation damage in lumbar muscle, wrenching and contusion from knocks and falls, food accumulation, distending pain in stomach duct and abdomen, child *gan* accumulation, snake bite, dog bite. Isolated compounds: 4751, 16270, 16271, 18291, 18936.
- T1959 *Cynanchum paniculatum* (Asclepiadaceae); XU CHANG QING; Paniculate Swallowwort. Used part: root. TCM Effects: To dispel wind and transform damp, relieve pain and itch. TCM Indications: Rheumatic arthritis, toothache, lumbago, pain after operation, dysmenorrhea, mastitis, infection of skin, eczema, neurodermatitis, urticaria, infective dermatitis, zoster, wind-damp impediment pain, knocks and falls. Isolated compounds: 5055, 11580, 12880, 15388, 15389, 16532, 19361, 21437.

- T1960 *Cynanchum stauntonii* (Asclepiadaceae); LIU YE BAI QIAN; Willowleaf Swallowwort. Used part: root and rhizome. TCM Effects: To downbear *qi*, disperse phlegm, relieve cough. TCM Indications: Stasis of lung *qi*, cough with profuse phlegm, fullness in chest and rapid asthma. Isolated compounds: 1271, 1272, 8507, 9213, 20275, 20276, 20277.
- T1961 *Cynanchum thesioides* (Asclepiadaceae); DI SHAO GUA; Bastardtoadflaxlike Swallowwort. Used part: whole herb and fruit. TCM Effects: To clear vacuity fire, boost *qi*, engender liquid, promote lactation. TCM Indications: Upflaming vacuity fire, throat pain, *qi* and *yin* vacuity, fatigued spirit and amnesia, vacuity vexation and thirst, dizziness and insomnia, postpartum vacuity weakness, scant breast milk. Isolated compounds: 1112, 7768, 7786, 8807, 19912.
- T1962 *Cynanchum versicolor* (Asclepiadaceae); WAN SHENG BAI WEI; Versicolorous Mosquitotrap. Used part: root. TCM Effects: See *Tylophora ovata*. TCM Indications: See *Tylophora ovata*. Isolated compounds: 15387.  
*Cynanchum vincetoxicum* = *Vincetoxicum officinale*
- T1963 *Cynanchum wallichii* (Asclepiadaceae); DUAN JIE SHEN; Kunming Mosquitotrap. Used part: root. TCM Effects: To supplement kidney and strengthen lumbus, strengthen sinews and bones, resolve toxin. TCM Indications: Kidney vacuity lumbago, inability of legs and knees, knocks and falls, fracture, rabid dog bite. Isolated compounds: 18291, 18936.
- T1964 *Cynanchum wilfordii* [Syn. *Cynoctonum wilfordii*] (Asclepiadaceae); GE SHAN XIAO; Wilford Swallowwort. Used part: tuberoid. TCM Effects: To supplement liver and kidney, strengthen sinews and bones, fortify spleen and stomach, resolve toxin. TCM Indications: liver kidney vacuity, dizzy head and vision, sleepless and amnesia, premature graying in beard and hair, impotence, emission, limp aching lumbus and knees, spleen vacuity and functional weakness, distention fullness in stomach duct, inappetence, diarrhea, postpartum scant milk, fish mouth sore toxin. Isolated compounds: 22691, 22692, 22693, 22694.
- T1965 *Cynara cardunculus* (Asteraceae); CI CAI JI; Cardoon. Isolated compounds: 4564, 4565.
- T1966 *Cynara scolymus* (Asteraceae); CAI JI; Globe Artichoke. Used part: leaf. TCM Effects: To course liver and disinhibit gallbladder, clear damp heat. TCM Indications: Jaundice, distending pain in chest and rib-side, damp-heat diarrhea dysentery. Isolated compounds: 4564, 4565, 9015, 11327.
- T1967 *Cynoglossum amabile* (Boraginaceae); GOU SHI HUA; Chinese Forgetmenot. Used part: whole herb. TCM Effects: To clear lung and transform phlegm, stanch bleeding and dissipate stasis, clear heat and disinhibit damp. TCM Indications: Cough, blood ejection, hepatitis, dysentery, odynuria, vaginal discharge, scrofula, knife wound, fracture. Isolated compounds: 1011, 6686.
- T1968 *Cynoglossum australe* (Boraginaceae); NAN FANG LIU LI CAO; South Houndstongue\*. Isolated compounds: 1011, 9316.
- T1969 *Cynoglossum officinale* (Boraginaceae); YAO YONG DAO TI HU; Common Houndstongue. Used part: root. TCM Effects: To clear heat and disinhibit damp, relieve cough, stanch bleeding. TCM Indications: Urinary tract infection, dysentery, vaginal discharge, *yin* vacuity cough, hemoptysis, blood ejection, spontaneous external bleeding, bleeding due to external injury. Isolated compounds: 917, 6686, 6687, 9316, 9317, 9320, 12535, 17546, 22527.
- T1970 *Cynoglossum pictum* (Boraginaceae); ZHUO SE LIU LI CAO; Picture Houndstongue\*. Isolated compounds: 9316.
- T1971 *Cynoglossum zeylanicum* [Syn. *Anchusa zeylanica*; *Cynoglossum furcatum*; *Cynoglossum formosanum*] (Boraginaceae); LIU LI CAO; Ceylon Houndstongue. Used part: root and leaf. TCM Effects: To clear heat and resolve toxin, dissipate stasis and stanch bleeding. TCM Indications: Swelling welling abscess and sore and boil, flooding and spotting, coughing of blood, painful swelling from knocks and falls, bleeding due to external injury, poisonous snake bites. Isolated compounds: 11525.
- T1972 *Cynomorium songaricum* (Cynomoriaceae); SUO YANG; Songaria Cynomorium. Used part: fleshy stem. TCM Effects: To supplement kidney and invigorate *yang*, boost essence and blood, moisten intestines and free stool. TCM Indications: Kidney vacuity impotence, emission and premature ejaculation, limp wilting of lower limb, vacuity constipation. Isolated compounds: 530, 4905, 11481, 22270.
- T1973 *Cyperus alopecuroides* (Cyperaceae); KAN MAI NIANG ZHUANG SHA CAO; Foxtail-like Galingale. Isolated compounds: 982, 3242, 4573, 4587, 6548, 7064, 7492, 7498, 7499, 7500, 18941.
- T1974 *Cyperus brevibracteatus* (Cyperaceae); DUAN BAO YE SHA CAO; Shortbractleaf Galingale\*. Isolated compounds: 2605.
- T1975 *Cyperus haspan* (Cyperaceae); QI PAN SHA CAO; Asideside Galingale. Isolated compounds: 4576.
- T1976 *Cyperus iria* (Cyperaceae); SUI MI SHA CAO; Rice Galingale. Used part: whole herb. TCM Effects: To dispel wind and eliminate damp, quicken blood and regulate menstruation. TCM Indications: Wind-damp pain in sinew and bone, paralysis, menstrual disorder, dysmenorrhea, amenorrhea, knocks and falls. Isolated compounds: 11988.
- T1977 *Cyperus papyrus* (Cyperaceae); ZHI SHA CAO; Paper Reed. Isolated compounds: 17375.
- T1978 *Cyperus rotundus* (Cyperaceae); XIANG FU; Nutgrass Galingale. Used part: rhizome. TCM Effects: To move *qi* and relieve depression, regulate menstruation and relieve pain. TCM Indications: women's diseases, menstrual disorder, amenorrhea and dysmenorrhea, liver depression and *qi* pain, distending pain in chest and rib-side, distending pain in stomach duct, indigestion, glomus and oppression in chest and stomach duct, cold mounting with abdominal pain, painful swollen breast. Isolated compounds: 4028, 4574, 4575, 4577, 4578, 4579, 4580, 4581, 6413, 7102, 11364, 11472, 11686, 12242, 15790, 16287, 16709, 16710, 16970, 18681, 18958, 18959, 18960, 20456.
- T1979 *Cyperus* sp. (Cyperaceae). Isolated compounds: 4576.
- T1980 *Cyprinus carpio* (Cyprinidae); LI YU; Carp. Used part: meat. TCM Effects: To fortify spleen and harmonize stomach, disinhibit water and precipitate *qi*, free milk, quiet fetus. TCM Indications: Stomachache, diarrhea, water-damp fullness, inhibited urination, beriberi, jaundice, cough and *qi* counterflow, stirring fetus in pregnancy, edema in pregnancy, postpartum scant milk. Isolated compounds: 4221, 4222, 9568, 15528, 19360.
- T1981 *Cyprinus carpio* (Cyprinidae); LI YU DAN; Carp Gall. Used part: gall.

- TCM Effects:** To clear heat and brighten eyes, dissipate screen and disperse swelling, disinherit throat. **TCM Indications:** Red eyes and distending pain, clear-eye blindness with internal obstruction, throat impediment. **Isolated compounds:** 929, 4582.
- T1982 *Cyprinus carpio* (Cyprinidae); LI YU PI; Carp Skin. **Used part:** skin. **TCM Effects:** To quiet fetus, stanch bleeding. **TCM Indications:** Stirring fetus in pregnancy, fetal spotting, bone stuck in throat. **Isolated compounds:** 1921, 6560, 13126.
- T1983 *Cypripedium calceolus* (Orchidaceae); SHAO LAN; European Ladyslipper. **Isolated compounds:** 4584.
- T1984 *Cypripedium macranthum* [Syn. *Cypripedium tibeticum*] (Orchidaceae); DA HUA SHAO LAN; Bigflower Ladyslipper. **Used part:** root. **TCM Effects:** To disinherit urine and disperse edema, quicken blood and relieve pain. **TCM Indications:** Edema in lower limb, strangury, leukorrhea, wind-damp impediment pain, knocks and falls. **Isolated compounds:** 4585, 4586.
- T1985 *Cyrtanthus falcatus* (Amaryllidaceae). **Isolated compounds:** 13568, 14578, 20891.
- T1986 *Cyrtomium fortunei* (Dryopteridaceae); HUN TOU JI; Fortune's Holly Fern. **Used part:** rhizome. **TCM Effects:** To clear heat and resolve toxin, cool blood and extinguish wind, stanch bleeding and dissipate stasis, expel worms. **TCM Indications:** Common cold, febrile diseases, malaria, hepatitis, maculopapular eruption, sand foulness, liver yang dizziness, headache, blood ejection, flooding, vaginal discharge, mammary welling abscess, scrofula, knocks and falls. **Isolated compounds:** 4588.
- T1987 *Cystopteris* sp. (Athyriaceae). **Isolated compounds:** 18000.
- T1988 *Cytisus laburnum* (Fabaceae); LIAN HUA JIN QUE ER; Goldregen. **Isolated compounds:** 14279.
- T1989 *Cytisus monspessulanus* (Fabaceae); FA GUO JIN QUE ER; French Broom. **Isolated compounds:** 4956.
- T1990 *Cytisus osmariensis* (Fabaceae); AO MA JIN QUE HUA; Osmarien Broom\*. **Isolated compounds:** 4594.
- T1991 *Cytisus scoparius* [Syn. *Spartium scoparium*] (Fabaceae); JIN QUE ER; Scotch Broom. **Used part:** flower or branchlet. **TCM Effects:** To strengthen heart and disinherit urine, upbear yang and effuse exterior. **TCM Indications:** Edema due to heart disease, arrhythmia, non-eruption of macula, knocks and falls. **Isolated compounds:** 3215, 6559, 11642, 13089, 14638, 15477, 15972, 16209, 20133.
- T1992 *Cytospora eucalypticola*. **Isolated compounds:** 6361, 6369.
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- T1993 *Dacrydium* sp. (Podocarpaceae). **Isolated compounds:** 8401.
- T1994 *Daemonorops draco* (Arecaceae); QI LIN JIE; Draco Yellowvine\*. **Used part:** balsam. **TCM Effects:** See *Dracaena cochinchinensis*. **TCM Indications:** See *Dracaena cochinchinensis*. **Isolated compounds:** 2224, 15743, 15744, 18163, 19236.
- T1995 *Dahlia coccinea* (Asteraceae); HONG DA LI HUA; Cocochitl. **Isolated compounds:** 10959.
- T1996 *Dahlia pinnata* [Syn. *Dahlia variabilis*] (Asteraceae); DA LI HUA; Aztec Dahlia. **Used part:** tuberoid. **TCM Effects:** To clear heat and resolve toxin, dissipate stasis and relieve pain. **TCM Indications:** Parotitis, decayed teeth, innominate toxin swelling, painful wound from knocks and falls. **Isolated compounds:** 1493, 2843, 21391.
- T1997 *Dahlia* sp. (Asteraceae). **Isolated compounds:** 15279, 22336.
- T1998 *Dalbergia cearensis* (Fabaceae); XI A LA HUANG TAN; Cearen Rosewood\*. **Isolated compounds:** 4609, 7883.
- T1999 *Dalbergia cochinchinensis* (Fabaceae); JIAO ZHI HUANG TAN; Siam Rosewood. **Isolated compounds:** 2224, 4609, 4610, 6275, 6276, 10125, 10394, 10514, 12559.
- T2000 *Dalbergia congestiflora* (Fabaceae); JU HUA HUANG TAN; Congested-flower Rosewood\*. **Isolated compounds:** 15353.
- T2001 *Dalbergia cultrata* (Fabaceae); XIAO DAO XING HUANG TAN; Cultrate Rosewood\*. **Isolated compounds:** 4609.
- T2002 *Dalbergia ecastophyllum* (Fabaceae); YI KA TUO YE HUANG TAN; Ecasto-leaf Rosewood\*. **Isolated compounds:** 7883.
- T2003 *Dalbergia ferruginea* (Fabaceae); TIE XIU SE HUANG TAN; Ferruginous Rosewood\*. **Isolated compounds:** 4191, 4192.
- T2004 *Dalbergia melanoxylon* (Fabaceae); FEI ZHOU HUANG TAN; African Rosewood. **Isolated compounds:** 4609, 13658.
- T2005 *Dalbergia miscolobium* (Fabaceae); MI SI KE HUANG TAN; Miscol Rosewood\*. **Isolated compounds:** 18001.
- T2006 *Dalbergia nitidula* (Fabaceae); GUANG LIANG HUANG TAN; Shining Rosewood\*. **Isolated compounds:** 8283, 17092, 21528.
- T2007 *Dalbergia obtusa* (Fabaceae). **Isolated compounds:** 15913.
- T2008 *Dalbergia odorifera* (Fabaceae); JIANG ZHEN XIANG; Odorate Rosewood. Equivalent plant: *Dalbergia sissoo*. **Used part:** heartwood. **TCM Effects:** To quicken blood and dissipate stasis, stanch bleeding and settle pain, downbear qi, break foul. **TCM Indications:** Chest and rib-side pain, knocks and falls, bleeding due to external injury, bleeding due to external injury. **Isolated compounds:** 2574, 3346, 4607, 4608, 4609, 5834, 10375, 10545, 11365, 11404, 11547, 12260, 12908, 13658, 13679, 13680, 13681, 13901, 14098, 14100, 14103, 14280, 14502, 14532, 14619, 14811, 15733, 15913, 16000, 16001, 19393, 20340, 22436, 22783.
- T2009 *Dalbergia oliveri* (Fabaceae); AO LI FO HUANG TAN; Oliver Rosewood\*. **Isolated compounds:** 16082, 16083.
- T2010 *Dalbergia retusa* (Fabaceae). **Isolated compounds:** 15913.
- T2011 *Dalbergia riparia* (Fabaceae); HE AN HUANG TAN; Riparian Rosewood\*. **Isolated compounds:** 4609, 20900.
- T2012 *Dalbergia sericea* (Fabaceae); JUAN MAO HUANG TAN; Sericeous-leaf Rosewood. **Isolated compounds:** 11504.
- T2013 *Dalbergia sissoo* (Fabaceae); YIN DU HUANG TAN; Sisso Rosewood. **Used part:** heartwood. **TCM Effects:** See *Dalbergia odorifera*. **TCM Indications:** See *Dalbergia odorifera*. **Isolated compounds:** 2385, 4609, 17420, 20902.
- T2014 *Dalbergia* sp. (Fabaceae). **Isolated compounds:** 18020, 20901.
- T2015 *Dalbergia* spp. (Fabaceae). **Isolated compounds:** 3004, 12908.
- T2016 *Dalbergia spruceana* (Fabaceae); QIAO HUANG TAN; Spruce Rosewood\*. **Isolated compounds:** 2224.
- T2017 *Dalbergia stevensonii* (Fabaceae); SI TE WEN HUANG TAN; Stevenson Rosewood\*. **Isolated compounds:** 4604, 4609, 7883, 11504, 12908, 13638.
- T2018 *Dalbergia variabilis* (Fabaceae); YI BIAN HUANG TAN; Variable Rosewood\*. **Isolated compounds:** 13638, 15021, 22347, 22437.
- T2019 *Dalbergia volubilis* (Fabaceae); CHAN RAO HUANG TAN; Voluble

- Rosewood\*. Isolated compounds: 2384.
- T2020 *Damnacanthus indicus* (Rubiaceae); HU CI; Indian Damnacanthus. Used part: whole herb. TCM Effects: To dispel wind and disinhibit damp, quicken blood and disperse swelling. TCM Indications: Pain wind, wind-damp impediment pain, cough of phlegm-rheum, pulmonary welling abscess, edema, lump glomus, jaundice, amenorrhea, child gan accumulation, urticaria, knocks and falls. Isolated compounds: 900, 2299, 4622, 4623, 5522, 9771, 11990, 15734, 15765.
- T2021 *Damnacanthus major* (Rubiaceae). Isolated compounds: 11990, 15734.
- T2022 *Daniellia oliveri* (Fabaceae); AO SHI DAN NI SU MU. Isolated compounds: 7161.
- T2023 *Daphne genkwa* (Thymelaeaceae); YUAN HUA; Lilac Daphne. Used part: bud. TCM Effects: To drain water and expel rheum, relieve cough and dispel phlegm, resolve toxin and kill worms. TCM Indications: Edema, ascites, hydrothorax, cough with profuse phlegm, chronic bronchitis, malaria, scalp infection, infection of skin, tinea capitis, neurodermatitis, induce abortion, toothache. Isolated compounds: 1476, 8286, 8289, 10137, 13137, 15514, 15990, 21392, 22929, 22930, 22931, 22932, 22933.
- T2024 *Daphne genkwa* (Thymelaeaceae); YUAN HUA GEN; Lilac Daphne Root. Used part: root. TCM Effects: To expel water, resolve toxin, dissipate binds. TCM Indications: Edema, scrofula, mammary welling abscess, hemorrhoids, scab sore. Isolated compounds: 4652, 4653, 4654, 4655, 4656, 11366, 22929, 22930.
- T2025 *Daphne gnidium* (Thymelaeaceae); JING YA MA YE RUI XIANG; Garou Bush. Isolated compounds: 4657.
- T2026 *Daphne mezereum* (Thymelaeaceae); OU YA RUI XIANG; Mezereon. Isolated compounds: 4649, 14826.
- T2027 *Daphne odora* (Thymelaeaceae); RUI XIANG GEN; Winter Daphne Root. Used part: root. TCM Effects: To resolve toxin, quicken blood and relieve pain. TCM Indications: Acute throat wind, pain in stomach duct, knocks and falls, poisonous snake bite. Isolated compounds: 4642, 4651, 12521, 15990, 15999.
- T2028 *Daphne odora* (Thymelaeaceae); RUI XIANG HUA; Winter Daphne Flower. Used part: flower. TCM Effects: To quicken blood and relieve pain, resolve toxin and dissipate binds. TCM Indications: Swelling pain in throat, headache, toothache, wind-damp pain, mammary welling abscess, swollen hard breast. Isolated compounds: 4645, 4646, 4650, 22195.
- T2029 *Daphne oleoides* (Thymelaeaceae); YOU RUI XIANG; Oily Daphne\*. Isolated compounds: 1127, 4641, 4644, 5995, 8287, 8288, 8899, 8900, 8901, 16069, 16070, 16737, 19651.
- T2030 *Daphne retusa* (Thymelaeaceae); AO YE RUI XIANG; Retuseleaf Daphne. Used part: stem bark and root cortex. TCM Effects: See *Daphne tangutica*. TCM Indications: See *Daphne tangutica*. Isolated compounds: 4643.
- T2031 *Daphne tangutica* (Thymelaeaceae); SHAN GAN RUI XIANG; Tangut Daphne. Equivalent plant: *Daphne retusa*. Used part: stem bark and root cortex. TCM Effects: To dispel wind and free network vessels, dissipate stasis and relieve pain. TCM Indications: Wind-damp impediment pain, numbness in limbs, headache, stomachache, lumbago, knocks and falls. Isolated compounds: 4643, 12521.
- T2032 *Daphniphyllum calycinum* (Daphniphyllaceae); NIU ER FENG ZI; Calyx-shaped Daphniphyllum Fruit. Used part: fruit. TCM Effects: To check dysentery. TCM Indications: Chronic dysentery. Isolated compounds: 4640, 7996, 10166, 22959, 22960.
- T2033 *Daphniphyllum macropodum* (Daphniphyllaceae); JIAO RANG MU; Macropodous Daphniphyllum. Used part: leaf and seed. TCM Effects: To clear heat and resolve toxin. TCM Indications: Swelling toxin of sore and boil. Isolated compounds: 1892, 4659, 4716.
- T2034 *Daphnopsis racemosa* ZONG ZHUANG JIA RUI XIANG. Isolated compounds: 17958.
- T2035 *Darlingia darlingiana*. Isolated compounds: 4660.
- T2036 *Datura innoxia* (Solanaceae); MAO MAN TUO LUO GEN; Hairy Datura Root. Used part: root. TCM Effects: See *Datura metel*. TCM Indications: See *Datura metel*. Isolated compounds: 6525, 9856, 10870, 10872, 13819, 18072, 22050.
- T2037 *Datura innoxia* (Solanaceae); MAO MAN TUO LUO HUA; Hairy Datura Flower. Used part: flower. TCM Effects: See *Datura metel*. TCM Indications: See *Datura metel*. Isolated compounds: 2001, 10872, 21372, 22158.
- T2038 *Datura innoxia* (Solanaceae); MAO MAN TUO LUO YE; Hairy Datura Leaf. Used part: leaf. TCM Effects: See *Datura metel*. TCM Indications: See *Datura metel*. Isolated compounds: 1526, 2887, 4417, 10870, 10872, 12908, 13819, 22158.
- T2039 *Datura innoxia* (Solanaceae); MAO MAN TUO LUO ZI; Hairy Datura Seed. Used part: seed or fruit. TCM Effects: See *Datura metel*. TCM Indications: See *Datura metel*. Isolated compounds: 2001, 10872, 12891, 13819, 16066.
- T2040 *Datura metaloides* XIANG MAN TUO LUO; Fragrant Datura\*. Isolated compounds: 13819.
- T2041 *Datura metel* (Solanaceae); MAN TUO LUO GEN; Hindu Datura Root. Equivalent plant: *Datura stramonium*, *Datura innoxia*. Used part: root. TCM Effects: To suppress cough, relieve pain, draw out pus. TCM Indications: Cough and asthma, wind-damp impediment pain, boil and lichen, malign sore, rabid dog bite. Isolated compounds: 10870, 10872, 18072, 22050.
- T2042 *Datura metel* (Solanaceae); MAN TUO LUO YE; Hindu Datura Leaf. Equivalent plant: *Datura innoxia*. Used part: leaf. TCM Effects: To suppress cough and calm asthma, relieve pain and draw out pus. TCM Indications: Cough and asthma, impediment pain, beriberi, prolapse of rectum. Isolated compounds: 2001, 4664, 4665, 4666, 4667, 4668, 4669, 4670, 4671, 4673, 4674, 10870, 10872.
- T2043 *Datura metel* (Solanaceae); MAN TUO LUO ZI; Hindu Datura Seed. Equivalent plant: *Datura innoxia*, *Datura stramonium*. Used part: seed or fruit. TCM Effects: To calm asthma, dispel wind, relieve pain. TCM Indications: Cough and asthma, fright epilepsy, wind-cold-damp impediment, dysentery, prolapse of rectum, knocks and falls. Isolated compounds: 3773, 4491, 10872, 12891, 15771, 15772, 15901, 16066, 22050.
- T2044 *Datura metel* (Solanaceae); YANG JIN HUA; Hindu Datura Flower. Equivalent plant: *Datura innoxia*. Used part: flower. TCM Effects: To suppress cough and calm asthma, relieve pain and settle tetany. TCM Indications: Cough and asthma without phlegm, cold pain in heart and

- abdomen, wind-damp impediment pain, knocks and falls, epilepsy, chronic fright wind, anesthesia. Isolated compounds: 1287, 2001, 10870, 10872, 21372.
- T2045 *Datura* spp. (Solanaceae). Isolated compounds: 10870.
- T2046 *Datura stramonium* (Solanaceae); OU MAN TUO LUO GEN; Jimsonweed Root. Used part: root. TCM Effects: See *Datura metel*. TCM Indications: See *Datura metel*. Isolated compounds: 664, 2001, 4417, 10872, 22049.
- T2047 *Datura stramonium* (Solanaceae); WAN TAO HUA ZI; Jimsonweed Seed\*. Used part: seed or fruit. TCM Effects: See *Datura metel*. TCM Indications: See *Datura metel*. Isolated compounds: 15772, 15773.
- T2048 *Daucus carota* (Apiaceae); HE SHI FENG; Wild Carrot. Used part: whole herb. TCM Effects: To kill worms, disperse swelling, disperse *qi*, transform phlegm. TCM Indications: Worm accumulation, *gan* accumulation, distention fullness in stomach duct and abdomen, edema, jaundice, poison from smoke, damp itchy in sore and papules, alopecia areata. Isolated compounds: 207, 208, 218, 1840, 3216, 4676, 4679, 7707, 7756, 7767, 18275.
- T2049 *Daucus carota* (Apiaceae); NAN HE SHI; Wild Carrot Fruit. Used part: fruit. TCM Effects: To kill worms, disperse accumulation, relieve itch. TCM Indications: Ascariasis, oxyuria disease, taeniasis, ancylostomiasis, abdominal pain due to worm accumulation, child *gan* accumulation, pudendal itch. Isolated compounds: 1840, 2306, 2412, 3045, 3208, 3209, 3210, 3211, 3216, 4140, 4390, 4675, 4679, 4835, 6745, 7073, 7707, 9088, 12843, 12849, 13212, 14531, 15204, 17028, 17127, 17376, 19687, 20988, 20992, 21371, 22195.
- T2050 *Daucus carota* var. *sativa* (Apiaceae); HU LUO BO; Carrot. Used part: root. TCM Effects: To fortify spleen and harmonize center, relieve cough and transform phlegm, clear heat and resolve toxin. TCM Indications: Indigestion, chronic dysentery, cough. Isolated compounds: 3208, 3212, 3215, 3241, 3242, 3760, 3768, 8313, 14586, 17264, 18275.
- T2051 *Daucus carota* var. *sativa* (Apiaceae); HU LUO BO ZI; Carrot Seed. Used part: seed. TCM Effects: To dissipate cold and dry damp, disinhibit water and kill worms. TCM Indications: Chronic dysentery, phlegm asthma. Isolated compounds: 3216, 4679, 8313.
- T2052 *Davallia divaricata* [Syn. *Davallia formosana*; *Davallia orientalis*] (Davalliaceae); DA YE GU SUI BU; Taiwan Davallia. Used part: rhizome. TCM Effects: To quicken blood and transform stasis, supplement kidney and strengthen bones, dispel wind and relieve pain. TCM Indications: Knocks and falls, kidney vacuity lumbago, wind-damp bone pain. Isolated compounds: 9635, 9639, 15406, 15748.
- T2053 *Davallia mariesii* (Davalliaceae); HAI ZHOU GU SUI BU; Squirrel's Foot Fern. Used part: rhizome. TCM Effects: To move blood and quicken network vessels, dispel wind and relieve pain, supplement kidney and strengthen bones. TCM Indications: Wind-damp impediment pain, knocks and falls, kidney vacuity toothache, lumbago, chronic diarrhea. Isolated compounds: 2889, 9637, 9638, 9639, 9640, 9642, 11457, 13567, 15254, 17869, 17888, 22334, 22342, 22343.
- T2054 *Davallia solida* (Davalliaceae); KUO YE GU SUI BU; Broadleaf Davallia. Isolated compounds: 8741, 22841.
- T2055 *Davallia* sp. (Davalliaceae). Isolated compounds: 22465.
- T2056 *Debregeasia longifolia* (Urticaceae); CHANG YE SHUI MA; Longleaf Debregeasia. Used part: stem-leaf. TCM Effects: To dispel wind and relieve cough, clear heat and disinhibit damp. TCM Indications: Wind damage and common cold, cough, heat impediment, cystitis, innominate toxin swelling, toothache. Isolated compounds: 8095.
- T2057 *Decodon verticillatus* (Lythraceae); DI KE DONG; Swamp Loosestrife. Isolated compounds: 4832, 22433.
- T2058 *Deeringia amarantoides* [Syn. *Cladostachys frutescens*] (Amaranthaceae); JIANG GUO XIAN; Frutescent Cladostachys. Used part: whole herb. TCM Effects: To dispel wind and eliminate damp, clear heat and resolve toxin. TCM Indications: Wind-damp impediment pain, dysentery, diarrhea. Isolated compounds: 18229.
- T2059 *Dehaasia triandra* (Lauraceae); SAN RUI LIAN GUI; Threestamen Dehaasia\*. Isolated compounds: 15881.
- T2060 *Delonix regia* (Fabaceae); FENG HUANG MU; Flamboyanttree. Used part: bark. TCM Effects: To calm liver and subdue *yang*. TCM Indications: Hypertension due to liver heat, dizziness, vexation. Isolated compounds: 2057, 18281.
- T2061 *Delphinium barbeyi* (Ranunculaceae); BA BI CUI QUE HUA; Barbey Larkspur\*. Isolated compounds: 1366.
- T2062 *Delphinium bonvalotii* (Ranunculaceae); CHUAN QIAN CUI QUE HUA; Bonvalot Larkspur. Used part: root. TCM Effects: See *Delphinium omeiense*. TCM Indications: See *Delphinium omeiense*. Isolated compounds: 4998.
- T2063 *Delphinium brownii* (Ranunculaceae); BAO SHI FEI YAN CAO; Brown Larkspur\*. Isolated compounds: 2657.
- T2064 *Delphinium carduchorum* (Ranunculaceae). Isolated compounds: 3191, 5002.
- T2065 *Delphinium carolinianum* (Ranunculaceae); KA LUO LAI NA CUI QUE; Carolina Larkspur\*. Isolated compounds: 782.
- T2066 *Delphinium cashmerianum* (Ranunculaceae); KE SHEN MI ER CUI QUE; Kashmir Larkspur. Isolated compounds: 2042, 12510, 13169.
- T2067 *Delphinium confusum* (Ranunculaceae); YI SI CUI QUE; Confusable Larkspur\*. Isolated compounds: 3963.
- T2068 *Delphinium consolida* (Ranunculaceae); QIANG GU FEI YAN CAO; Consolidated Larkspur\*. Isolated compounds: 5004, 5035, 13189.
- T2069 *Delphinium corumbosum* (Ranunculaceae); GUANG FEI YAN CAO; Light Larkspur\*. Isolated compounds: 5003.
- T2070 *Delphinium crispulum* (Ranunculaceae); TU ER QI CUI QUE HUA; Turkish Larkspur\*. Isolated compounds: 4242, 5009.
- T2071 *Delphinium denudatum* (Ranunculaceae); LU CUI QUE; Denuded Larkspur\*. Isolated compounds: 3963, 5136, 11728.
- T2072 *Delphinium dictyocarpum* (Ranunculaceae); WANG GUO CUI QUE HUA; Reticulatefruit Larkspur. Isolated compounds: 5036.
- T2073 *Delphinium dissectum* (Ranunculaceae); SHEN LIE CUI QUE HUA; Deeplobed Larkspur\*. Isolated compounds: 10501.
- T2074 *Delphinium elatum* (Ranunculaceae); GAO FEI YAN CAO; Alpine Larkspur. Isolated compounds: 5036, 6734, 14569.
- T2075 *Delphinium excelsum* (Ranunculaceae); GAO DA CUI QUE HUA; High Larkspur\*. Isolated compounds: 10501, 10543, 14286.
- T2076 *Delphinium giralduii* (Ranunculaceae); QIN LING CUI QUE HUA; Girald Larkspur. Isolated compounds: 4991, 5618, 8454, 8455, 20001,

- 20727, 21445.
- T2077 *Delphinium grandiflorum* (Ranunculaceae); CUI QUE HUA; Bouquet Larkspur. Used part: whole herb or root. TCM Effects: To dispel wind-damp, relieve pain, kill worms and relieve itch. TCM Indications: Wind-heat toothache, wind-damp impediment pain, sore swelling abscess and lichen *lai*. Isolated compounds: 14569.
- T2078 *Delphinium iliense* (Ranunculaceae); YI LI CUI QUE HUA; Ili Larkspur. Isolated compounds: 5036.
- T2079 *Delphinium kamaonense* var. *glabrescens* (Ranunculaceae); ZHAN MAO CUI QUE HUA; Hair Larkspur. Used part: whole herb. TCM Effects: To clear heat and dry damp, check dysentery. TCM Indications: Damp-heat dysentery, enteritis and diarrhea. Isolated compounds: 8491, 20727.
- T2080 *Delphinium occidentale* (Ranunculaceae); XI FANG CUI QUE; Occidental Larkspur\*. Isolated compounds: 5036.
- T2081 *Delphinium omeiense* (Ranunculaceae); E MEI CUI QUE HUA; Emei Larkspur. Equivalent plant: *Delphinium bonvalotii*, *Delphinium potaninii*, *Delphinium potaninii* var. *jiufengshanense*. Used part: root. TCM Effects: To dispel wind and eliminate damp, free network vessels and relieve pain, disperse swelling and resolve toxin. TCM Indications: Wind-damp pain in sinew and bone, stomachache, painful swelling from knocks and falls, swelling abscess and sores, hemorrhoids, lichen *lai*. Isolated compounds: 1366, 5005, 5006, 5033, 5034, 5035, 5038, 11372, 12372, 13189, 14569, 17745.
- T2082 *Delphinium oreophilum* (Ranunculaceae); XI SHAN CUI QUE; Montane Larkspur. Isolated compounds: 338.
- T2083 *Delphinium pentagynum* (Ranunculaceae); WU ZHU FEI YAN CAO; Fivestyle Larkspur\*. Isolated compounds: 3201, 4897, 5056, 5083, 8044.
- T2084 *Delphinium potaninii* (Ranunculaceae); HEI SHUI CUI QUE; Potanin Larkspur. Used part: root. TCM Effects: See *Delphinium omeiense*. TCM Indications: See *Delphinium omeiense*. Isolated compounds: 17743, 17744.
- T2085 *Delphinium potaninii* var. *jiufengshanense* (Ranunculaceae); HEI SHUI CUI QUE HUA BIAN ZHONG; Potanin Larkspur Variety\*. Used part: root. TCM Effects: See *Delphinium omeiense*. TCM Indications: See *Delphinium omeiense*. Isolated compounds: 1366, 6732, 8511, 11887, 11888.
- T2086 *Delphinium staphisagria* (Ranunculaceae); SI TA WEI CUI QUE HUA; Stavisacre. Isolated compounds: 5032, 20262.
- T2087 *Delphinium tatsienense* (Ranunculaceae); KANG DING CUI QUE HUA; Kangting Larkspur. Used part: root. TCM Effects: To warm center and relieve pain. TCM Indications: Cold pain in abdomen, taxation damage and sinew bone pain. Isolated compounds: 782, 5038, 9472, 20726, 20727, 20728, 20729.
- T2088 *Delphinium tricorne* (Ranunculaceae); SAN JU AI CUI QUE; Spring Larkspur. Isolated compounds: 21593.
- T2089 *Delphinium trifoliolatum* (Ranunculaceae); SAN XIAO YE CUI QUE HUA; Threefoliolate Larkspur. Isolated compounds: 21635, 21636, 21637.
- T2090 *Delphinium virescens* (Ranunculaceae); DAN LV CUI QUE; Virescent Larkspur. Isolated compounds: 782.
- T2091 *Delphinium yunnanense* (Ranunculaceae); XIAO CAO WU; Yunnan Larkspur. Used part: tuberoid. TCM Effects: To dispel wind-damp, relieve pain, settle fright. TCM Indications: Wind-cold-damp impediment, stomachache, epilepsy, infant fright wind, knocks and falls. Isolated compounds: 5004, 7521.
- T2092 *Delphinus delphis* (Delphinidae); HAI TUN YU; Dolphin. Used part: meat or fat. TCM Effects: To resolve toxin, engender flesh, settle pain. TCM Indications: Tinea capitis, sore and boil, hemorrhoids and fistulas, burns and scalds, miasmatic malaria, tympanites. Isolated compounds: 11754.
- T2093 *Dendranthema grandiflorum* (Asteraceae); DA HUA JU; Large-flowered Dendranthema\*. Isolated compounds: 5594, 13128, 13129, 13130, 13131, 13132.
- T2094 *Dendrobium aduncum* (Orchidaceae); GOU ZHUANG SHI HU; Hooked Dendrobium. Used part: stem. TCM Effects: See *Dendrobium nobile*. TCM Indications: See *Dendrobium nobile*. Isolated compounds: 654.
- T2095 *Dendrobium amoenum* (Orchidaceae); KE AI SHI HU; Delightful Dendrobium. Isolated compounds: 1070, 11216.
- T2096 *Dendrobium aurantiacum* var. *denneanum* (Orchidaceae); DIE QIAO SHI HU; Denne Dendrobium. Used part: stem. TCM Effects: See *Dendrobium nobile*. TCM Indications: See *Dendrobium nobile*. Isolated compounds: 19540.
- T2097 *Dendrobium capillipes* (Orchidaceae); DUAN BANG SHI HU; Hairstalk Dendrobium. Isolated compounds: 19540.
- T2098 *Dendrobium chrysanthum* (Orchidaceae); SHU HUA SHI HU; Goldenflower Dendrobium. Used part: stem. TCM Effects: See *Dendrobium nobile*. TCM Indications: See *Dendrobium nobile*. Isolated compounds: 3627, 10835.
- T2099 *Dendrobium chrysotoxum* (Orchidaceae); GU CHUI SHI HU; Yellowbow Dendrobium. Isolated compounds: 3627, 3628.
- T2100 *Dendrobium densiflorum* (Orchidaceae); MI HUA SHI HU; Denseflower Dendrobium. Used part: stem. TCM Effects: See *Dendrobium nobile*. TCM Indications: See *Dendrobium nobile*. Isolated compounds: 4585, 5128, 5132, 5133, 5970, 6163, 8380, 9604, 14996, 19540, 19542, 22041.
- T2101 *Dendrobium fimbriatum* (Orchidaceae); LIU SU JIN SHI HU; Fimbriate Dendrobium\*. Used part: whole herb. TCM Effects: To clear heat, moisten lung, relieve cough. TCM Indications: Cough, asthma, tuberculosis, pleuritis, fluid damage and thirst. Isolated compounds: 7799.
- T2102 *Dendrobium fimbriatum* var. *oculatum* (Orchidaceae); LIU SU SHI HU; Eyeshaped Dendrobium. Used part: stem. TCM Effects: See *Dendrobium nobile*. TCM Indications: See *Dendrobium nobile*. Isolated compounds: 3627, 19983.
- T2103 *Dendrobium findleyanum* (Orchidaceae); FEN LAI SHI HU; Findley Dendrobium\*. Isolated compounds: 5108.
- T2104 *Dendrobium gratiosissimum* (Orchidaceae); BEI QIAO SHI HU; Muchlovable Dendrobium. Isolated compounds: 3627.
- T2105 *Dendrobium loddigesii* (Orchidaceae); MEI HUA SHI HU; Loddiges Dendrobium. Used part: stem. TCM Effects: See *Dendrobium nobile*. TCM Indications: See *Dendrobium nobile*. Isolated compounds: 14997, 19802, 19803.
- T2106 *Dendrobium moniliforme* (Orchidaceae); XI JING SHI HU;

- Moliform *Dendrobium*\*. Used part: stem. TCM Effects: See *Dendrobium nobile*. TCM Indications: See *Dendrobium nobile*. Isolated compounds: 85, 3627, 5109, 5110, 5111, 5112, 5113, 5116, 5117, 5118, 5119, 5125, 10035, 10036, 22338.
- T2107 *Dendrobium nobile* (Orchidaceae); SHI HU<sup>(4)</sup>; Noble *Dendrobium*. Equivalent plant: *Dendrobium loddigesii*, *Dendrobium densiflorum*, *Dendrobium officinale*, *Dendrobium chrysanthum*, *Dendrobium fimbriatum* var. *oculatum*, *Dendrobium aduncum*, *Dendrobium moniliforme*, *Dendrobium aurantiacum* var. *denneanum*. Used part: stem. TCM Effects: To boost stomach and engender liquid, enrich *yin* and clear heat. TCM Indications: *Yin* damage liquid depletion, dry mouth with vexation and thirst, reduced food intake with dry retching, vacuity heat during convalescence, dim vision. Isolated compounds: 5106, 5107, 5108, 5120, 5121, 5122, 5123, 5124, 5125, 5126, 5127, 9982, 9983, 9984, 11585, 11586, 11587, 14288, 15639, 15640, 15705.
- T2108 *Dendrobium officinale* (Orchidaceae); TIE PI SHI HU; Iron-sheet *Dendrobium*. Used part: stem. TCM Effects: See *Dendrobium nobile*. TCM Indications: See *Dendrobium nobile*. Isolated compounds: 3627.
- T2109 *Dendrobium primulinum* (Orchidaceae); BAO CHUN SHI HU; Primrose *Dendrobium*. Isolated compounds: 3627.
- T2110 *Dendrobium thysiflorum* (Orchidaceae); JU HUA SHI HU; Thyseflower *Dendrobium*. Isolated compounds: 19540.
- T2111 *Dendrobium williamsonii* (Orchidaceae); HEI MAO SHI HU; Blackhair *Dendrobium*. Isolated compounds: 3627.
- T2112 *Dendrosicyos socotrana* (Cucurbitaceae); Cucumber Tree. Isolated compounds: 5114, 11356.
- T2113 *Dennstaedtia scabra* [Syn. *Dicksonia scabra*] (Dennstaedtiaceae); WAN JUE; Scabrous Boulder Fern. Used part: whole herb. TCM Effects: To dispel wind, clear heat and resolve exterior. TCM Indications: Common cold with headache, wind-damp impediment pain. Isolated compounds: 16102, 18098, 18157.
- T2114 *Deprea subtriflora*. Isolated compounds: 1427, 1428, 1429, 1430, 1431, 1432, 1433, 1457.
- T2115 *Dermatocarpon minutum* (Dermatocarpaceae); HEI SHI ER. Used part: lichen body. TCM Effects: To disperse food, disinherit water, lower blood pressure. TCM Indications: Indigestion, abdominal distention, dysentery, *gan* accumulation, hypertension. Isolated compounds: 22607.
- T2116 *Dermocybe* sp. Isolated compounds: 2019, 2020.
- T2117 *Derris amazonica* (Fabaceae); YA MA XUN YU TENG; Amazonian Jewelvine\*. Isolated compounds: 19394.
- T2118 *Derris elliptica* (Fabaceae); MAO YU TENG; Tubaroot Jewelvine. Isolated compounds: 4872, 6028, 18939, 21483.
- T2119 *Derris eriocarpa* (Fabaceae); MAO GUO YU TENG; Hairypod Fishvane. Used part: lianoid stem. TCM Effects: To disinherit urine and free strangury, transform phlegm and relieve cough. TCM Indications: Nephritis, cystitis, urethritis, beriberi with edema, cough. Isolated compounds: 6061, 7273, 7274.
- T2120 *Derris malaccensis* (Fabaceae); MA LIU JIA YU TENG; Malacca Jewelvine\*. Isolated compounds: 13415, 20485.
- T2121 *Derris mollis* (Fabaceae); MO LI YU TENG; Molly Jewelvine\*. Isolated compounds: 12163.
- T2122 *Derris robusta* (Fabaceae); CU ZHUANG YU TENG; Robust Jewelvine. Isolated compounds: 5235.
- T2123 *Derris scandens* (Fabaceae); PAN YUAN YU TENG; Climbing Jewelvine. Isolated compounds: 3475, 3602, 5222, 5223, 5224, 5225, 5226, 5227, 5228, 5229, 5230, 5231, 5232, 5233, 5234, 6496, 7317, 7825, 7826, 8278, 8278, 11324, 11683, 13088, 13105, 13106, 13107, 13281, 16249, 18685, 19299, 19449, 19450, 19451, 19452, 19453, 22189, 22637.
- T2124 *Derris trifoliata* (Fabaceae); YU TENG; Trifoliolate Jewelvine. Used part: root or whole herb. TCM Effects: To dissipate stasis and relieve pain, kill worms and relieve itch. TCM Indications: Painful swelling from knocks and falls, lichen. Isolated compounds: 4872, 6762, 10067, 18939, 18939, 20965, 21483, 21483, 21484.
- T2125 *Descurainia sophia* (Brassicaceae); BO NIANG HAO; Flixweed Tansymustard Seed. Used part: seed. TCM Effects: See *Lepidium apetalum*. TCM Indications: See *Lepidium apetalum*. Isolated compounds: 948, 949, 2294, 5245, 5246, 5247, 7291, 9335, 9452, 11642, 11648, 11657, 11659, 12059, 16887, 18364, 19909, 19913, 19914, 19915, 20397.
- T2126 *Desfontainia spinosa* DUO CI DI SHI MU; *Desfontainia spinosa*. Isolated compounds: 15539, 20171.
- T2127 *Desmanthus illinoensis* (Fabaceae); YI LI NUO HE HUAN CAO; Prairie Mimosa. Isolated compounds: 5252.
- T2128 *Desmodium canum* (Fabaceae); DAN HUI BAI SHAN MA HUANG; Light-hoar Tickclover\*. Isolated compounds: 5264, 5265, 14754.
- T2129 *Desmodium cephalotes* (Fabaceae); JIA MU DOU; Capitulum Tickclover\*. Isolated compounds: 9646.
- T2130 *Desmodium gangeticum* (Fabaceae); HONG MU JI CAO; Hookedhairypod Tickclover. Used part: stem-leaf. TCM Effects: To dispel stasis and regulate menstruation, resolve toxin, relieve pain. TCM Indications: Knocks and falls, prolapse of uterus, prolapse of rectum, amenorrhea, psoriasis, toothache, headache. Isolated compounds: 6370, 6418, 6420, 9646, 10590, 10877, 13920, 14008, 14750, 14796, 17083.
- T2131 *Desmodium pulchellum* [Syn. *Phylloidium pulchellum*] (Fabaceae); PAI QIAN CAO; Beautiful Phylloidium. Used part: aerial parts. TCM Effects: To clear heat and resolve toxin, dispel wind and move water, quicken blood and disperse swelling. TCM Indications: Common cold with fever, swelling pain in throat, *gan* of teeth and gum, wind-damp impediment pain, edema, ascites, liver spleen enlargement, knocks and falls, poisonous insect stings, malaria, bilharziosis. Isolated compounds: 6370, 6418, 6420, 13920, 14038.
- T2132 *Desmodium pulchellum* [Syn. *Phylloidium pulchellum*] (Fabaceae); PAI QIAN CAO GEN; Beautiful Phylloidium Root. Used part: root. TCM Effects: To transform stasis and disperse concretion, clear heat and disinherit water. TCM Indications: Concretion and conglomeration, pain in rib-side, jaundice, ascites, damp-heat impediment, amenorrhea, menstrual disorder, welling abscess and flat abscess with clove sore, knocks and falls. Isolated compounds: 1110.
- T2133 *Desmodium racemosum* [Syn. *Podocarpium podocarpum* var. *oxyphyllum*] (Fabaceae); SHAN MA HUANG; Acutifoliate Podocarpium. Used part: herb. TCM Effects: To dispel wind and eliminate damp, quicken blood and resolve toxin. TCM Indications: Wind-damp impediment pain, flooding, vaginal discharge,



- pharyngolaryngitis, mammary welling abscess, knocks and falls, poisonous snake bite. Isolated compounds: 12018.
- T2134 *Desmodium styracifolium* (Fabaceae); GUANG JIN QIAN CAO; Snowbelleaf Tickclover. Used part: aerial parts. TCM Effects: To clear heat and eliminate damp, disinhibit urine and free strangury. TCM Indications: Heat strangury, sand strangury, stone strangury, pain of hot urine, scant urine with edema, jaundice with reddish urine, urethral stone. Isolated compounds: 1598, 5266, 5267, 5698, 18706, 20280, 22042.
- T2135 *Desmodium tiliaefolium* (Fabaceae); DUAN YE SHAN MA HUANG; Lindenleaf Tickclover\*. Isolated compounds: 9646.
- T2136 *Desmos cochinchinensis* [Syn. *Desmos chinensis*] (Annonaceae); JIA YING ZHAO; Chinese Desmos. Used part: leaf. TCM Effects: To dispel wind and disinhibit damp, transform stasis and relieve pain, fortify spleen and harmonize stomach, interrupt malaria and kill worms. TCM Indications: Wind-damp impediment pain, edema, diarrhea, indigestion, distending pain in stomach duct, malaria, wind papules, knocks and falls, scab and lichen, foot rot. Isolated compounds: 5270, 5985.
- T2137 *Desmos dumosus* (Annonaceae); MAO YE JIA YING ZHAO GEN; Piloseleaf Desmos Root. Isolated compounds: 5268, 5269.
- T2138 *Dialium guineense* (Anacardiaceae); Velvet Tamarind. Isolated compounds: 22839.
- T2139 *Dianella ensifolia* (Liliaceae); SHAN MAO ER; Swordleaf Dianella. Used part: rhizome or whole herb. TCM Effects: To draw out toxin and disperse swelling, dissipate stasis and relieve pain. TCM Indications: Scrofula, sore and lichen, welling abscess and flat abscess, knocks and falls. Isolated compounds: 14639.
- T2140 *Dianella nigra* (Liliaceae); HEI JIE GENG LAN; Black Dianella\*. Isolated compounds: 382, 5019, 5026, 5031.
- T2141 *Dianella tasmanica* (Liliaceae); TA SI MA NI YA JIE GENG LAN; Flax Lily. Isolated compounds: 382, 5019, 5026, 5031.
- T2142 *Dianthus caryophyllus* (Caryophyllaceae); SHE XIANG SHI ZHU; Carnation. Isolated compounds: 5366, 5372, 5529, 5530.
- T2143 *Dianthus chinensis* (Caryophyllaceae); SHI ZHU; Chinese Pink. Used part: aerial parts. TCM Effects: See *Dianthus superbus*. TCM Indications: See *Dianthus superbus*. Isolated compounds: 2068, 2297, 5371, 7521.
- T2144 *Dianthus* sp. (Caryophyllaceae). Isolated compounds: 3454.
- T2145 *Dianthus superbus* (Caryophyllaceae); QU MAI; Lilac Pink. Equivalent plant: *Dianthus chinensis*, *Dianthus versicolor*. Used part: aerial parts. TCM Effects: To disinhibit urine and free strangury, break blood and free menstruation, anticancer. TCM Indications: Strangury, heat strangury, blood strangury, stone strangury, urinary tract infection, urinary stoppage, dripping with inhibited pain, amenorrhea, carcinoma of esophagus, carcinoma of rectum. Isolated compounds: 2280, 2297, 5358, 5359, 5367, 5368, 5369, 5370, 13903, 14718.
- T2146 *Dianthus superbus* var. *longicalycinus* (Caryophyllaceae); CHANG E QU MAI; Longcalyx Pink\*. Isolated compounds: 5358, 5364, 12954.
- T2147 *Dianthus versicolor* (Caryophyllaceae); BIAN SE SHI ZHU; Versicolorous Pink. Used part: aerial parts. TCM Effects: See *Dianthus superbus*. TCM Indications: See *Dianthus superbus*. Isolated compounds: 5358, 5359, 5360, 5361, 5362, 5363, 5364, 5365.
- T2148 *Dicentra cucullaria* (Papaveraceae); DOU ZHUANG HE BAO MU DAN; Dutchman's Breeches. Isolated compounds: 642, 4351, 4353, 15918.
- T2149 *Dicentra eximia* (Papaveraceae); SUI MAO HE BAO MU DAN; Wild Bleedingheart. Isolated compounds: 4352, 4353, 8513.
- T2150 *Dicentra formosa* (Papaveraceae); MEI LI HE BAO MU DAN; Bleedingheart. Isolated compounds: 4353.
- T2151 *Dicentra oregana* (Papaveraceae); E LE GANG HE BAO MU DAN; Oregon Bleedingheart. Isolated compounds: 4353.
- T2152 *Dicentra peregrina* (Papaveraceae); YI YANG HE BAO MU DAN; Peregrin Bleedingheart\*. Isolated compounds: 12603, 19284.
- T2153 *Dicentra pusilla* (Papaveraceae); XI XIAO HE BAO MU DAN; Little Bleedingheart\*. Isolated compounds: 5417.
- T2154 *Dicentra spectabilis* (Papaveraceae); HE BAO MU DAN GEN; Showy Bleedingheart Root. Used part: rhizome. TCM Effects: To dispel wind, quicken blood, settle pain. TCM Indications: Incised wound, sore toxin, stomachache. Isolated compounds: 3494, 3498, 3507, 3508, 4032, 4290, 18655, 19284, 19566.
- T2155 *Dicentra* spp. (Papaveraceae). Isolated compounds: 3498.
- T2156 *Dichelostemma multiflorum*. Isolated compounds: 2613, 2614, 20214.
- T2157 *Dichotomanthes tristaniaecarpa* (Rosaceae); NIU JIN TIAO; Common Oxmuscle. Used part: root cortex. TCM Effects: To clear heat and resolve toxin, suppress cough, stanch bleeding. TCM Indications: Common cold with cough, swelling pain in throat, nosebleed(epistaxis). Isolated compounds: 7276, 7277.
- T2158 *Dichroa febrifuga* (Saxifragaceae); CHANG SHAN; Antifebrile Dichroa. Used part: root. TCM Effects: To dispel phlegm and interrupt malaria. TCM Indications: Malaria, scrofula. Isolated compounds: 5435, 5436, 7747, 10171, 18420.
- T2159 *Dicksonia gigantean* (Dicksoniaceae). Isolated compounds: 16098.
- T2160 *Dicliptera riparia* (Acanthaceae); HE AN GOU GAN CAI; Riparian Dicliptera\*. Isolated compounds: 5437, 5438, 5439.
- T2161 *Dicranopteris pedata* [Syn. *Polypodium pedatum*; *Dicranopteris dichotoma*] (Gleicheniaceae); MANG QI GU; Dichotoma Forked Fern. Used part: yang leaf with petiole. TCM Effects: To transform stasis and stanch bleeding, clear heat and disinhibit urine, resolve toxin and disperse swelling. TCM Indications: Flooding, wound swelling from knocks and falls, bleeding due to external injury, damp-heat strangury pain, leukorrhea, infant diarrhea, hemorrhoids and fistulas, red eyes with gall, burns and scalds, poisonous insect stings. Isolated compounds: 5763, 10106, 12082, 18411, 19088, 19805, 19983, 19987, 20369, 20372.
- T2162 *Dicranostigma franchetianum* [Syn. *Dicranostigma leptopodium*] (Papaveraceae); TU CHUANG HUA; Slenderstalk Dicranostigma. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, disperse swelling and relieve pain, kill worms. TCM Indications: Pain in throat, toothache, scrofula, bald sores, scab and lichen, welling abscess and boil, common wart. Isolated compounds: 3502, 13716, 15664.
- T2163 *Dicranostigma* spp. (Papaveraceae). Isolated compounds: 3498.
- T2164 *Dictamnus albus* (Rutaceae); BAI SE BAI XIAN; Burning Bush. Isolated compounds: 11376, 15882, 17849, 20002.
- T2165 *Dictamnus angustifolius* (Rutaceae); XIA YE BAI XIAN; Narrowleaf

- Dittary\*. Used part: root cortex. TCM Effects: See *Dictamnus dasycarpus*. TCM Indications: See *Dictamnus dasycarpus*. Isolated compounds: 5443, 5444, 5456, 11424, 11642.
- T2166 *Dictamnus caucasicus* (Rutaceae); GAO JIA SUO BAI XIAN; Caucasian Pittany\*. Isolated compounds: 7703, 18881.
- T2167 *Dictamnus dasycarpus* (Rutaceae); BAI XIAN PI; Densfruit Pittany Root-bark. Equivalent plant: *Dictamnus angustifolius*. Used part: root cortex. TCM Effects: To clear heat and dry damp, dispel wind and relieve itch, resolve toxin. TCM Indications: Dermatitis, psoriasis, icterohepatitis, damp-heat sore and papules, profuse pus, yellow-water sore, damp ulceration on skin, itchy skin, damp-heat jaundice, damp-heat impediment. Isolated compounds: 3040, 4663, 5445, 5446, 5447, 5448, 5449, 5450, 5451, 5452, 5453, 5454, 5455, 7669, 7703, 7945, 11518, 12226, 15882, 15883, 17805, 17849, 20002, 21662.
- T2168 *Dictamnus* spp. (Rutaceae). Isolated compounds: 12847.
- T2169 *Dictyota dichotoma* (Dictyotaceae); WANG DI ZAO. Isolated compounds: 11579.
- T2170 *Dictyota linearis* (Dictyotaceae); XIAN ZHUANG WANG DI ZAO. Isolated compounds: 374, 505, 15391.
- T2171 *Dictyota pfaffii* (Dictyotaceae); BA XI ZONG ZAO; Brazilian Brown Alga *Dictyota pfaffii*. Isolated compounds: 163, 5303, 21724.
- T2172 *Didymocarpus pedicellata* (Gesneriaceae). Isolated compounds: 9305, 16697.
- T2173 *Digenea simplex* (Rhodomelaceae); HAI REN CAO; Simple *Digenea* Frond. Used part: frond. TCM Effects: To expel roundworm. TCM Indications: Ascariasis. Isolated compounds: 936, 2318, 3849.
- T2174 *Digitalis ferruginea* (Scrophulariaceae); XIU MAO DI HUANG; Rusty Foxglove. Isolated compounds: 5522, 9564.
- T2175 *Digitalis lanata* (Scrophulariaceae); MAO HUA MAO DI HUANG; Grecian Foxglove. Used part: leaf. TCM Effects: See *Digitalis purpurea*. TCM Indications: See *Digitalis purpurea*. Isolated compounds: 377, 5523, 5526, 5533, 7557, 8461, 9564, 10351, 12952, 16004.
- T2176 *Digitalis orientalis* (Scrophulariaceae); DONG FANG YANG DI HUANG; Oriental Foxglove\*. Isolated compounds: 6016.
- T2177 *Digitalis purpurea* (Scrophulariaceae); MAO DI HUANG; Common Foxglove. Equivalent plant: *Digitalis lanata*. Used part: leaf. TCM Effects: To strengthen heart and disinhibit urine. TCM Indications: Cardiac failure, edema due to heart disease. Isolated compounds: 2887, 5524, 5526, 7557, 8461, 12436, 12952, 16004, 18216, 18217, 18219, 18220, 18221, 20406.
- T2178 *Digitalis schischkinii* (Scrophulariaceae); SI SHI MAO DI HUANG; Schischkin Foxglove\*. Isolated compounds: 6016.
- T2179 *Digitalis* spp. (Scrophulariaceae). Isolated compounds: 18216, 18217.
- T2180 *Digitalis thapsii* (Scrophulariaceae); SA SHI MAO DI HUANG; Thaps Foxglove\*. Isolated compounds: 3300, 3622.
- T2181 *Dillenia indica* (Dilleniaceae); WU YA GUO; Hondapara. Used part: root or bark. TCM Effects: To promote astriction, resolve toxin. TCM Indications: Dysentery, diarrhea. Isolated compounds: 2333, 5652, 8095, 10339.
- T2182 *Dillenia pentagyna* (Dilleniaceae); XIAO HUA WU YA GUO; Pentagynous *Dillenia*. Isolated compounds: 18728.
- T2183 *Dilophus ligulatus* (Dictyotaceae); DI ZHONG HAI ZONG HAI ZAO; Mediterranean Brown Alga *Dilophus ligulatus*. Isolated compounds: 16495.
- T2184 *Dimocarpus fumatus* (Sapindaceae); YAN SE LONG YAN; Smoke Longan\*. Isolated compounds: 1592, 18718.  
*Dimocarpus longan* = *Euphoria longan*
- T2185 *Dioclea grandiflora* (Fabaceae); DA HUA DI AO DOU. Isolated compounds: 7831.
- T2186 *Dionaea muscipula* (Droseraceae); BU YING CAO; Venus's Flytrap. Isolated compounds: 17568, 17569.
- T2187 *Dionaea rotundifolia* (Droseraceae); YUAN YE BU YING CAO; Round-leaf Flytrap\*. Isolated compounds: 17569.
- T2188 *Dioscorea alata* (Dioscoreaceae); MAO SHU; Winged Yam. Used part: rhizome. TCM Effects: To fortify spleen and check diarrhea, nourish lung and enrich kidney, resolve toxin and close sores. TCM Indications: Spleen vacuity diarrhea, kidney vacuity and emission, vaginal discharge, frequent urination, vacuity taxation cough, diabetes mellitus, ulcerating sores, burns and scalds. Isolated compounds: 835, 836, 3594, 4451, 15528, 17876.
- T2189 *Dioscorea althaeoides* (Dioscoreaceae); SHU KUI YE SHU YU; Hollyhock-like Yam. Used part: rhizome. TCM Effects: To course wind and dispel damp, fortify spleen and disperse food, quicken blood and disperse swelling. TCM Indications: common cold with headache, wind-damp impediment pain, food accumulation distention and fullness, indigestion, knocks and falls. Isolated compounds: 5216, 6437, 6440, 7024, 8968, 20028.
- T2190 *Dioscorea batatas* [Syn. *Dioscorea opposita*] (Dioscoreaceae); SHAN YAO; Common Yam. Equivalent plant: *Dioscorea japonica*. Used part: rhizome. TCM Effects: To fortify spleen and nourish stomach, engender liquid and boost lung, supplement kidney and rough essence. TCM Indications: Reduced food intake due to spleen vacuity, incessant chronic diarrhea, cough and asthma due to lung vacuity, kidney vacuity and emission, vaginal discharge, frequent urination, vacuity heat and diabetes mellitus. Isolated compounds: 36, 618, 917, 2163, 2164, 2165, 2166, 2167, 3040, 3585, 5040, 5694, 6437, 6440, 6442, 6559, 9486, 14232, 14233, 14238, 14239, 17256, 19983, 20369, 21835.
- T2191 *Dioscorea bulbifera* (Dioscoreaceae); HUANG YAO ZI; Airpotato Yam. Used part: tuber. TCM Effects: To dissipate binds and disperse goiter, clear heat and resolve toxin, cool blood and stanch bleeding. TCM Indications: Goiter and tuberculosis, throat impediment, swelling toxin of welling abscess and sore, poisonous snake bite, carcinoma, blood ejection, spontaneous external bleeding, hemoptysis, pertussis, lung heat cough. Isolated compounds: 6434, 6435, 6436, 10774, 17876.
- T2192 *Dioscorea cayenensis* (Dioscoreaceae). Isolated compounds: 6437, 6447, 14699.
- T2193 *Dioscorea cirrhosa* [Syn. *Dioscorea pogonoides*] (Dioscoreaceae); SHU LIANG; Shoulang Yam. Used part: tuber. TCM Effects: To quicken blood and stanch bleeding, rectify *qi* and relieve pain, clear heat and resolve toxin. TCM Indications: Coughing of blood, hemoptysis, blood ejection, spontaneous external bleeding, hematuria, hematochezia, flooding and spotting [= metrorrhagia and metrostaxis], menstrual disorder [= menoxenia], dysmenorrhea, menstrual block,

postpartum abdominal pain, distending pain in stomach duct and abdomen, sand distention and abdominal pain, heat toxin blood dysentery, water diarrhea, pain in joints, painful swelling from knocks and falls, sore and boil, zoster, bleeding due to external injury. Isolated compounds: 17869, 17876, 17888, 17893.

- T2194 *Dioscorea colletii* (Dioscoreaceae); CHA RUI SHU YU; Collett Yam. Used part: rhizome. TCM Effects: To dispel wind and disinherit damp, free network vessels and relieve pain, clear heat and resolve toxin. TCM Indications: Wind-damp impediment pain, hypertonicity and numbness, *qi* stagnation stomachache, damp-heat jaundice, white turbidity, strangury with pain, leukorrhea, knocks and falls, damp sore with swelling toxin, wind papules, eczema, poisonous snake bite. Isolated compounds: 3922, 3923, 3924, 3925, 5197, 5216, 6440, 6445, 7013, 7024, 11554, 19392, 20028, 22878, 22881.
- T2195 *Dioscorea deltoidea* (Dioscoreaceae); SAN JIAO YE SHU YU; Deltoid Yam. Used part: rhizome. TCM Effects: To supplement stomach and spleen, boost lung and kidney. TCM Indications: Spleen vacuity diarrhea, lung vacuity enduring cough, kidney vacuity and emission, diabetes mellitus. Isolated compounds: 5040, 5041, 12488.
- T2196 *Dioscorea dumetorum* (Dioscoreaceae); JING JI SHU YU; Thorny Yam\*. Isolated compounds: 2163.
- T2197 *Dioscorea futschauensis* (Dioscoreaceae); FU ZHOU SHU YU; Foochow Yam. Equivalent plant: *Dioscorea spongiosa*. Used part: rhizome. TCM Effects: To dispel wind-damp, disinherit damp and turbidity, disperse swelling toxin. TCM Indications: Wind-damp impediment pain, strangury with pain, white turbidity, leukorrhea, damp sore. Isolated compounds: 5216, 6437, 6440, 6443, 7024, 8968, 13990, 13991, 20028.
- T2198 *Dioscorea gracillima* (Dioscoreaceae); XIAN XI SHU YU; Thinnest Yam. Used part: rhizome. TCM Effects: See *Dioscorea hypoglauca*. TCM Indications: See *Dioscorea hypoglauca*. Isolated compounds: 5216, 6437, 6440, 8968, 17973, 17975, 22878.
- T2199 *Dioscorea hirsuta* (Dioscoreaceae); CU MAO SHU YU; Hirsute Yam\*. Isolated compounds: 6439.
- T2200 *Dioscorea hispida* (Dioscoreaceae); BAI SHU LANG; Hispid Yam. Used part: tuber. TCM Effects: To clear heat and resolve toxin, disperse swelling. TCM Indications: Swelling toxin of welling abscess and flat abscess, syphilis, chancre, painful swelling from knocks and falls. Isolated compounds: 6439, 6440.
- T2201 *Dioscorea hypoglauca* [Syn. *Dioscorea colletii* var. *hypoglauca*] (Dioscoreaceae); BI XIE; Hypoglaucous Collett Yam. Equivalent plant: *Dioscorea gracillima*, *Dioscorea tokoro*. Used part: rhizome. TCM Effects: To disinherit damp and turbidity, dispel wind-damp. TCM Indications: Unctuous strangury, white turbidity, vaginal discharge, sores, wind-damp impediment pain. Isolated compounds: 5197, 5216, 6437, 6440, 6441, 6445, 7024, 17977, 17980, 22878, 22879, 22881.
- T2202 *Dioscorea japonica* (Dioscoreaceae); RI BEN SHU YU; Japanese Yam. Used part: rhizome. TCM Effects: See *Dioscorea batatas*. TCM Indications: See *Dioscorea batatas*. Isolated compounds: 6437.
- T2203 *Dioscorea nipponica* (Dioscoreaceae); CHUAN LONG SHU YU; Nippon Yam. Equivalent plant: *Dioscorea nipponica* ssp. *rosthornii*. Used part: rhizome. TCM Effects: To dispel wind and eliminate damp, quicken blood and relieve pain, relieve cough and dispel phlegm. TCM Indications: Pain in joints, rheumatic endocarditis, sciatica, chronic bronchitis, chronic trachitis, wind-cold-damp impediment, indigestion, taxation detriment and sprain, malaria, swollen welling abscess. Isolated compounds: 1889, 5216, 6437, 6440, 6443, 6448, 7024, 17479, 20028, 20207.
- T2204 *Dioscorea nipponica* ssp. *rosthornii* (Dioscoreaceae); CHAI HUANG JIANG; Rosthorn Yam. Used part: rhizome. TCM Effects: See *Dioscorea nipponica*. TCM Indications: See *Dioscorea nipponica*. Isolated compounds: 5216, 6440.
- T2205 *Dioscorea panthaica* (Dioscoreaceae); HUANG SHAN YAO; Yellow Yam. Used part: rhizome. TCM Effects: To rectify *qi* and relieve pain, resolve toxin and disperse swelling. TCM Indications: *Qi* stagnation stomachache, vomiting diarrhea with abdominal pain, taxation detriment due to knocks and falls, toxin swelling of sores, poisonous snake bite. Isolated compounds: 2492, 2493, 5216, 6437, 6438, 6440, 17654, 18056.
- T2206 *Dioscorea parviflora* (Dioscoreaceae); XIAO HUA DUN YE SHU YU; Smallflower Yam. Used part: rhizome. TCM Effects: To clear heat and resolve toxin, quicken blood and disperse swelling. TCM Indications: Swelling toxin of welling abscess and boil, soft tissue sprain, bee sting, insect bites. Isolated compounds: 4794, 5040, 5041, 5216, 6440, 8968, 14287, 14653, 16682, 17975, 22878.
- T2207 *Dioscorea rotundata* [Syn. *Dioscorea cayenensis*] (Dioscoreaceae); YUAN SHU YU; Guinea Yam. Isolated compounds: 2166, 8623, 9549, 11246, 14698.
- T2208 *Dioscorea septemloba* (Dioscoreaceae); MIAN BI XIE; Sevenlobed Yam. Used part: rhizome. TCM Effects: To disinherit damp and eliminate turbidity, dispel wind and free impediment. TCM Indications: Strangury with white turbidity, excessive leukorrhea, damp-heat sore toxin, impediment pain in lumbus and knees. Isolated compounds: 5216, 6440.
- T2209 *Dioscorea* sp. (Dioscoreaceae). Isolated compounds: 3209.
- T2210 *Dioscorea spongiosa* (Dioscoreaceae); HAI JIN BI XIE. Used part: rhizome. TCM Effects: See *Dioscorea futschauensis*. TCM Indications: See *Dioscorea futschauensis*. Isolated compounds: 4680, 6437, 6456, 6457, 6458, 6636, 8968, 10896, 11556, 14698, 15985, 17781, 17782, 17975, 19778, 20228, 20229, 20230, 20231, 20232, 20233, 20556, 23019.
- T2211 *Dioscorea tenuipes* (Dioscoreaceae); XI BING SHU YU; Thinstiped Yam. Used part: rhizome. TCM Effects: To dispel wind-damp, soothe sinews and quicken network vessels. TCM Indications: Wind-damp impediment pain, hypertonicity of sinews and vessels, numbness in limbs, knocks and falls, taxation damage hypodynamia. Isolated compounds: 21426.
- T2212 *Dioscorea tokoro* (Dioscoreaceae); SHAN BI XIE; Mountain Yam. Used part: rhizome. TCM Effects: See *Dioscorea hypoglauca*. TCM Indications: See *Dioscorea hypoglauca*. Isolated compounds: 6437, 10961, 12251, 17973, 17975, 20207, 21426, 21427, 21428, 22878, 22924, 22925.
- T2213 *Dioscorea zingiberensis* (Dioscoreaceae); DUN YE SHU YU; Peltate Yam. Used part: rhizome. TCM Effects: To clear lung and relieve cough, disinherit damp and free strangury, free network vessels and relieve pain, resolve toxin and disperse swelling. TCM Indications:

- Lung heat cough, damp-heat strangury pain, wind-damp lumbago, swollen welling abscess and malign sore, sprain from knocks and falls, bee sting, insect bites. Isolated compounds: 3924, 5216, 6440, 6442, 6443, 7024, 8968, 17904, 17975, 17997, 20028, 23005.
- T2214 *Diospyros angustifolia* (Ebenaceae). Isolated compounds: 6461, 6462, 6463.
- T2215 *Diospyros cinnabarina* (Ebenaceae); ZHU HONG SHI; Cinnabar Persimmon\*. Isolated compounds: 8095.
- T2216 *Diospyros ebenum* (Ebenaceae); WU MU XIE; Ceylon Persimmon Sawdust. Used part: sawdust. TCM Effects: To resolve toxin. TCM Indications: Cholera with vomiting. Isolated compounds: 1111, 2169, 2331, 15251.
- T2217 *Diospyros kaki* (Ebenaceae); SHI DI; Persimmon Persistent Calyx. Used part: calyx. TCM Effects: To downbear counterflow and precipitate qi. TCM Indications: Hiccough. Isolated compounds: 1935, 3208, 3210, 8095, 11642, 13212, 14790, 16050.
- T2218 *Diospyros kaki* (Ebenaceae); SHI GEN; Persimmon Root. Used part: root. TCM Effects: To clear heat and resolve toxin, cool blood and stanch bleeding. TCM Indications: Flooding, blood dysentery, hemorrhoids. Isolated compounds: 14026, 15392.
- T2219 *Diospyros kaki* (Ebenaceae); SHI QI; Immature Persimmon Fruit Juice. Used part: unripe fruit juice. TCM Effects: To calm liver. TCM Indications: Hypertension. Isolated compounds: 351.
- T2220 *Diospyros kaki* (Ebenaceae); SHI YE; Persimmon Leaf. Used part: leaf. TCM Effects: To relieve cough and settle asthma, engender liquid and allay thirst, quicken blood and stanch bleeding. TCM Indications: Cough and asthma, lung qi distention, internal bleeding. Isolated compounds: 8012, 15184, 16050, 22270.
- T2221 *Diospyros kaki* (Ebenaceae); SHI ZI; Persimmon. Used part: fruit. TCM Effects: To clear heat, engender liquid, moisten lung, resolve toxin. TCM Indications: Cough, heat vexation and thirst, blood ejection, mouth sore, heat dysentery, hematochezia. Isolated compounds: 3774.
- T2222 *Diospyros lotus* (Ebenaceae); JUN QIAN ZI; Dateplum Persimmon. Used part: fruit. TCM Effects: To clear heat, allay thirst. TCM Indications: Heat vexation, diabetes mellitus. Isolated compounds: 2331, 2478, 11379, 13098, 13463, 14541.
- T2223 *Diospyros mafiensis* (Ebenaceae); BA BU YA XIN JI NEI YA SHI; Papua-New-Guinea Persimmon\*. Isolated compounds: 2447.
- T2224 *Diospyros maritima* (Ebenaceae); HAI SHI; Maritime Persimmon\*. Isolated compounds: 2402, 2403, 3541, 6451, 7189, 7404, 7448, 7449, 11790, 14348, 19542.
- T2225 *Diospyros mollis* (Ebenaceae); RUAN SHI; Soft Persimmon\*. Isolated compounds: 6460.
- T2226 *Diospyros rhombifolia* (Ebenaceae); LAO YA SHI; Diamondleaf Persimmon. Isolated compounds: 1935, 3846, 11642, 12065, 12071, 12077, 12078, 12081, 13479, 15525, 18330, 18378, 18414, 19087.
- T2227 *Diospyros* sp. (Ebenaceae). Isolated compounds: 6459, 17568, 20711.
- T2228 *Diospyros sylvatica* (Ebenaceae). Isolated compounds: 6450, 14144, 14844.
- T2229 *Diospyros zombensis* (Ebenaceae). Isolated compounds: 18229.  
*Diphasiastrum alpinum* = *Lycopodium alpinum*
- T2230 *Diphylleia cymosa* (Berberidaceae); SHAN XI WO ER QI; American Umbrellaleaf. Isolated compounds: 17341.
- T2231 *Diphylleia grayi* (Berberidaceae); SHAN HE YE; Japanese Umbrellaleaf. Used part: rhizome. TCM Effects: See *Diphylleia sinensis*. TCM Indications: See *Diphylleia sinensis*. Isolated compounds: 4962, 6490, 12020, 17337, 17338, 17347, 17592.
- T2232 *Diphylleia sinensis* (Berberidaceae); WO ER QI; Chinese Umbrellaleaf. Equivalent plant: *Diphylleia grayi*. Used part: rhizome. TCM Effects: To dispel wind-damp, clear heat and cool blood, quicken blood and relieve pain, drain precipitation. TCM Indications: Rheumatic arthritis, pain in lumbus and legs, steaming bone taxation fever, knocks and falls, menstrual disorder, painful bind in lesser-abdomen, swollen welling abscess. Isolated compounds: 1533, 4962, 5074, 5093, 6490, 11592, 12020, 17337, 17341, 17592, 17594.
- T2233 *Diploclisia glaucescens* (Menispermaceae); CANG BAI CHENG GOU FENG; Glauculent Diploclisia. Used part: lianoid stem. TCM Effects: To dispel wind and eliminate damp, clear heat and resolve toxin. TCM Indications: Wind-damp bone pain, swelling pain in throat, cholecystitis, dysentery, urinary tract infection, poisonous snake bite. Isolated compounds: 6016, 6679, 7788, 8652, 13411, 16672, 18162, 18713.
- T2234 *Dipsacus asperoides* (Dipsacaceae); CHUAN XU DUAN; Himalayan Teasel. Equivalent plant: *Dipsacus japonicus*. Used part: root. TCM Effects: To supplement liver and kidney, strengthen sinews and bones, joint bones, check flooding and spotting. TCM Indications: Limp aching lumbus and knees, wind-damp impediment pain, flooding and spotting, profuse menstruation, fetal bleeding, knocks and falls. Isolated compounds: 323, 818, 1577, 1890, 1891, 4232, 4234, 4680, 5380, 7475, 8642, 8643, 8723, 9260, 9264, 12950, 13298, 14180, 14600, 17089, 18717, 19983, 20446, 20503, 21550, 21951, 22831, 22832, 22833, 22834.
- T2235 *Dipsacus japonicus* (Dipsacaceae); XU DUAN; Japanese Teasel. Used part: root. TCM Effects: See *Dipsacus asperoides*. TCM Indications: See *Dipsacus asperoides*. Isolated compounds: 11817.
- T2236 *Dipterus hispidus*. Isolated compounds: 15931.
- T2237 *Dipteryx odorata* (Fabaceae); XIANG DOU. Isolated compounds: 1388, 1415, 3602, 5835.
- T2238 *Discaria americana* (Rhamnaceae). Isolated compounds: 6505, 6506.
- T2239 *Distemonanthus benthamianus* (Fabaceae); NI RI LI YA LIANG RUI SU MU; Nigerian Satinwood. Isolated compounds: 3611, 16440.
- T2240 *Diuranthera inarticulata* (Liliaceae); NAN CHUAN LU SI CAO; S. Sichuan Egretgrass. Isolated compounds: 6526, 6527.
- T2241 *Dizygotheca kerchoveana*. Isolated compounds: 4161, 4162, 8638, 8639.
- T2242 *Dodonaea* spp. (Sapindaceae). Isolated compounds: 19312.
- T2243 *Dodonaea viscosa* (Sapindaceae); CHE SANG ZI YE; Clammy Hopseedbush Leaf. Used part: leaf. TCM Effects: To clear heat and percolate damp, disperse swelling and resolve toxin. TCM Indications: Dribbling urination, dribbling urinary block, shoulder swelling, clove boil, swelling pain in perineum, burns and scalds. Isolated compounds: 2887, 3551, 3829, 3831, 9249, 11648, 20369.
- T2244 *Doellingeria scaber* [Syn. *Aster scaber*] (Asteraceae); DONG FENG CAI; Scabrous Doellingeria. Used part: rhizome and whole herb. TCM Effects: To clear heat and resolve toxin, brighten eyes, disinhibit throat.

- TCM Indications: Wind-heat common cold, dizziness, red eyes with gall, red swollen in throat, acute nephritis, lung disease with blood ejection, knocks and falls, swollen welling abscess and clove sores, snake bite. Isolated compounds: 5354, 5355, 6918, 7950, 20237.
- T2245 *Dolichandrone stipulata* (Bignoniaceae); XI NAN MAO WEI SHU; Stipulate Dolichandrone. Isolated compounds: 16734.
- T2246 *Dolichos lablab* (Fabaceae); BIAN DOU; Hyacinth Dolichos Seed. Used part: white ripe seed. TCM Effects: To fortify spleen, transform damp. TCM Indications: Spleen vacuity with damp, reduced food intake and sloppy stool, excessive leukorrhea, summerheat-damp vomiting and diarrhea, vexation and thirst, oppression in chest. Isolated compounds: 3208, 17425, 20369, 22975.
- Dolichus angularis* = *Vigna angularis*
- T2247 *Dorstenia barteri* var. *subtriangularis* (Liliaceae). Isolated compounds: 2153, 2154, 2155, 6337.
- T2248 *Dorstenia elliptica* (Liliaceae); TUO YUAN DUO TAN CAO. Isolated compounds: 6304, 6389, 10812.
- T2249 *Dorstenia kameruniana* (Liliaceae). Isolated compounds: 17823.
- T2250 *Dorstenia mannii* (Liliaceae); MAN NI DUO TAN CAO. Isolated compounds: 6561, 6562, 6563, 6564, 6565, 6566, 6567, 6568, 6569, 6570, 6571, 6572.
- T2251 *Doryphora sassafras*. Isolated compounds: 6574.
- T2252 *Dracaena cinnabari* (Liliaceae); ZHU HONG LONG XUE SHU; Cinnabar Dracaena. Isolated compounds: 21852.
- T2253 *Dracaena cochinchinensis* (Liliaceae); JIAN YE LONG XUE SHU; Swordleaf Dracaena. Equivalent plant: *Daemonorops draco*. Used part: balsam. TCM Effects: To dissipate stasis and settle pain, stanch bleeding, close sores and engender flesh. TCM Indications: Knocks and falls, internal damage stasis pain, dysmenorrhea, postpartum blood stasis abdominal pain, incessant bleeding, scrofula, ulcer of lower limb, hemorrhoids. Isolated compounds: 2449, 3867, 5754, 7525, 8630, 9368, 9482, 10019, 10408, 11600, 13011, 13928, 14022, 14235, 18163.
- T2254 *Dracaena draco* (Liliaceae); LONG XUE SHU; Dragontree. Isolated compounds: 955, 5979, 5991, 6032, 6437, 6440, 6576, 6577, 6578, 6579, 10175, 11504, 13012, 14698, 19983, 19997.
- T2255 *Dracaena surculosa* (Liliaceae); DUO ZHI LONG XUE SHU. Isolated compounds: 7976, 7977, 8690, 8694.
- T2256 *Dracocephalum kotschyi* (Lamiaceae); YI LANG QING LAN; Iran Dragonhead\*. Isolated compounds: 3761, 3762, 4088, 12842, 12845, 12846, 13729, 16050, 19983, 22270.
- T2257 *Dracocephalum moldavicum* (Lamiaceae); XIANG QING LAN; Dragonhead. Used part: whole herb. TCM Effects: To course wind and clear heat, disinhibit throat and relieve cough, cool liver and stanch bleeding. TCM Indications: Common cold with fever, headache, swelling pain in throat, cough and asthma, dysentery, jaundice, blood ejection, spontaneous external bleeding, wind papule itching. Isolated compounds: 3760, 15498, 21360.
- T2258 *Dracocephalum rupestre* (Lamiaceae); YANG QING LAN; Rupestrine Dragonhead. Used part: whole herb. TCM Effects: To course wind and clear heat, cool liver and resolve toxin. TCM Indications: Common cold with headache, swelling pain in throat, cough, dysentery, jaundice. Isolated compounds: 3674.
- T2259 *Dracula chimaera* (Orchidaceae). Isolated compounds: 4445, 4446, 16904.
- T2260 *Dracula cordobae* (Orchidaceae). Isolated compounds: 4445, 4446, 16904.
- T2261 *Drechslera siccans* (Orchidaceae). Isolated compounds: 6598.
- T2262 *Dregea sinensis* (Asclepiadaceae); KU SHENG; Chinese Dregea. Used part: whole herb. TCM Effects: To dispel wind and eliminate damp, relieve cough and transform phlegm, quicken blood and resolve toxin. TCM Indications: Wind-damp impediment pain, cough of phlegm asthma, fracture due to knocks and falls, swollen sore of welling abscess and boil, galactostasis. Isolated compounds: 6599, 6600, 6601, 6602, 6603.
- T2263 *Dregea volubilis* (Asclepiadaceae); NAN SHAN TENG; Twisting Dregea. Used part: whole herb or tuber. TCM Effects: To dispel wind, eliminate damp, relieve pain, clear heat, harmonize stomach. TCM Indications: Common cold, painful joints due to rheumatalgia, lumbago, vomiting in pregnancy, cancer of esophagus, carcinoma of stomach, malaria. Isolated compounds: 22611, 22612, 22613.
- T2264 *Drimia robusta* (Liliaceae). Isolated compounds: 10693, 22250.
- T2265 *Drosera intermedia* (Droseraceae); ZHONG JIAN MAO GAO CAI; Intermediate Sundew\*. Isolated compounds: 17569.
- T2266 *Drosera peltata* (Droseraceae); DUN ZHUANG MAO GAO CAI; Peltate Sundew\*. Isolated compounds: 6605.
- T2267 *Drosera peltata* var. *lunata* (Droseraceae); MAO GAO CAI; Lunate Peltate Sundew. Used part: whole herb. TCM Effects: To dispel wind and relieve pain, quicken blood, resolve toxin. TCM Indications: Wind-damp impediment pain, knocks and falls, taxation damage in lumbar muscle, stomachache, common cold, swelling pain in throat, red and white dysentery, malaria, child *gan* accumulation, eye screen, scrofula, eczema, scab sore. Isolated compounds: 6605, 9724, 9725, 10060, 17568.
- T2268 *Drosera rotundifolia* (Droseraceae); YUAN YE MAO GAO CAI; Roundleaf Sundew. Used part: whole herb. TCM Effects: To dispel phlegm, suppress cough, calm asthma, check dysentery. TCM Indications: Cough, asthma, pertussis, dysentery. Isolated compounds: 17568, 18930.
- T2269 *Drosera* sp. (Droseraceae). Isolated compounds: 9568, 14541.
- T2270 *Drosera whittakeri* (Droseraceae); HUI TE KE MAO GAO CAI; Whittaker Sundew\*. Isolated compounds: 6605, 10060.
- T2271 *Dryanobulanops* spp. Isolated compounds: 15931.
- T2272 *Drymaria diandra* [Syn. *Drymaria cordata* ssp. *diandra*] (Caryophyllaceae); ER RUI HE LIAN DOU. Used part: whole herb. TCM Effects: To clear heat and disinhibit damp, quicken blood and resolve toxin. TCM Indications: Jaundice, edema, malaria, fright wind, leg *qi* due to wind-damp, toxin of sore welling abscess and boils, child *gan* accumulation, eye screen, outcrop. Isolated compounds: 5353, 6609, 9815, 9818, 11773, 14519, 21461.
- T2273 *Drynaria fortunei* (Drynariaceae); GU SUI BU; Fortune's Drynaria Rhizome. Equivalent plant: *Pseudodrynaria coronans*. Used part: rhizome. TCM Effects: To supplement kidney and strengthen bones, soothe sinews and relieve pain. TCM Indications: Kidney vacuity lumbago, tinnitus and deafness, tooth mobilizing, wrenching and contusion from knocks and falls, sinew and bone wound, alopecia

- areata, white patch wind. Isolated compounds: 3040, 9639, 15286, 19983, 20369.
- T2274 *Dryobalanops aromatica* (Dipterocarpaceae); BING PIAN; Borneol. Used part: resin. TCM Effects: To open orifices and free spirit, dissipate heat and relieve pain, eliminate screen and brighten eyes. TCM Indications: Angina pectoris, phlegm reversal, wind stroke, coma, convulsion, swelling pain in throat, mouth sore, swollen and painful eyes, sores, ulcer. Isolated compounds: 984, 1853, 2550, 2553, 3048, 3241, 3242, 6502, 6610, 6741, 7338, 7338, 9669, 11259, 11260, 16050.
- T2275 *Dryobalanops aromatica* (Dipterocarpaceae); LONG NAO GAO XIANG; Borneol Oil-Resin. Used part: resin. TCM Effects: To dispel wind and open orifices. TCM Indications: Deafness. Isolated compounds: 266, 12158, 12159, 14641, 15930, 15931, 16402.
- T2276 *Dryobalanops oblongifolia* (Dipterocarpaceae); JU YUAN YE LONG NAO XIANG; Oblong-leaf Borneol Oil-Resin\*. Isolated compounds: 6503, 6504.
- T2277 *Dryopteris austriaca* (Dryopteridaceae); AO DI LI LIN MAO JUE; Broad Buckler-fern. Used part: rhizome. TCM Effects: To expel worms. TCM Indications: Taeniasis. Isolated compounds: 851, 1895, 1897, 15749, 22029, 22032, 22033.
- T2278 *Dryopteris caucasica* (Dryopteridaceae); GAO JIA SUO LIN MAO JUE; Caucasian Buckler-fern\*. Isolated compounds: 7809.
- T2279 *Dryopteris championii* (Dryopteridaceae); MAO GUAN ZHONG; Champion Wood Fern. Used part: dried rhizome. TCM Effects: To clear heat and resolve toxin, calm asthma, stanch bleeding and close sores, expel worms. TCM Indications: Common cold, red eyes with gall, asthma, hematochezia, ulcerating sore toxin, scalds, ancylostomiasis. Isolated compounds: 849, 850, 851, 853, 854, 1895, 22032, 22033.
- T2280 *Dryopteris chrysocoma* (Dryopteridaceae); HUANG MAO LIN MAO JUE; Goldencoma Shield Fern. Used part: rhizome. TCM Effects: To clear heat and resolve toxin, dispel stasis and stanch bleeding. TCM Indications: Heat toxin macula, incised wound, postpartum blood qi distending pain, flooding and spotting with vaginal discharge, spontaneous external bleeding, dysentery. Isolated compounds: 7809.
- T2281 *Dryopteris crassirhizoma* (Dryopteridaceae); GUAN ZHONG; Male Fern Rhizome. Used part: rhizome. TCM Effects: To clear heat and resolve toxin, cool blood and stanch bleeding, kill worms. TCM Indications: Wind-heat common cold, warm heat macular eruption, blood ejection, hemoptysis, spontaneous external bleeding, hematochezia, flooding and spotting, blood dysentery, vaginal discharge, ancylostomiasis, ascariasis, oxyuria disease. Isolated compounds: 632, 1895, 1896, 1897, 4214, 4215, 4216, 5244, 6611, 7758, 7796, 7797, 7809, 7810, 9635, 9641, 10167, 15286, 16648, 20499.
- T2282 *Dryopteris filix-mas* (Dryopteridaceae); MIAN MA; Male-fern. Used part: rhizome. TCM Effects: To clear heat and resolve toxin, cool blood and stanch bleeding, expel worms, disinhibit water and disperse edema. TCM Indications: Common cold with fever, encephalitis B, epidemic parotitis, measles papules, flooding and spotting, intestinal parasitic disease, edema, inhibited urination. Isolated compounds: 1897, 5402, 7798, 7809, 9385.
- T2283 *Dryopteris marginalis* (Dryopteridaceae); BIAN BAO LIN MAO JUE; Evergreen Wood Fern. Isolated compounds: 13559.
- T2284 *Dryopteris marginata* (Dryopteridaceae); BIAN YUAN LIN MAO JUE; Marginated Buckler-fern\*. Isolated compounds: 13559.
- T2285 *Dryopteris pacifica* (Dryopteridaceae); TAI PING YANG LIN MAO JUE; Pacific Wood Fern. Isolated compounds: 13559.
- T2286 *Dryopteris sacrosancta* (Dryopteridaceae); RI BEN LIN MAO JUE; Brown-margin Wood Fern. Isolated compounds: 13559.
- T2287 *Dryopteris sublaeta* (Dryopteridaceae); QIAN LIE LIN MAO JUE; Fortunate Wood Fern. Isolated compounds: 6137, 21721.
- T2288 *Drypetes armoracia* (Euphorbiaceae); LA GEN HE GUO MU; Armoracia Drypetes\*. Isolated compounds: 6613, 6614.
- T2289 *Drypetes molunduan* (Euphorbiaceae). Isolated compounds: 266, 2178, 6615, 6616, 7948.
- T2290 *Duchesnea indica* (Rosaceae); SHE MEI; Indian Mockstrawberry. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, cool blood and stanch bleeding, dissipate stasis and disperse swelling. TCM Indications: Febrile diseases, fright epilepsy, common cold, dysentery, jaundice, red eyes, mouth sore, sore pharynx, epidemic parotitis, swollen boil, poisonous snake bite, blood ejection, flooding and spotting, menstrual disorder, burns and scalds, painful swelling from knocks and falls. Isolated compounds: 6619, 6620, 17696, 18916.
- T2291 *Ducrosia anethifolia*. Isolated compounds: 4809, 16488.
- T2292 *Duguetia* spp. (Annonaceae). Isolated compounds: 15751.
- T2293 *Dumortiera hirsuta* (Marchantiaceae); MAO DI QIAN. Used part: thallus. TCM Effects: To clear heat, draw out toxin, engender flesh. TCM Indications: Heat toxin sore and welling abscess, enduring sores, wound, burns and scalds. Isolated compounds: 4490, 6634, 7085, 10540.
- T2294 *Dunnia sinensis* (Rubiaceae); XIU QIU QIAN CAO; Chinese Dunnia. Used part: root. TCM Effects: To clear heat and drain fire. Isolated compounds: 6639, 6640.
- T2295 *Duranta repens* (Verbenaceae); JIA LIAN QIAO; Creeping Skyflower. Used part: fruit. TCM Effects: To quicken blood and relieve pain, interrupt malaria. TCM Indications: Malaria, painful wound from knocks and falls. Isolated compounds: 5916, 5917, 6244, 6903, 6904, 10750, 18626, 18917, 19540.
- T2296 *Duranta repens* (Verbenaceae); JIA LIAN QIAO YE; Creeping Skyflower Leaf. Used part: leaf. TCM Effects: To dissipate stasis and resolve toxin. TCM Indications: Stasis swelling from knocks and falls, swollen welling abscess. Isolated compounds: 3834, 8616, 8617, 9230, 9922, 13126, 16755, 19582, 21685.
- T2297 *Dyosma aurantiocaulis* (Berberidaceae); DUO HUA BA JIAO LIAN; Manyflower Dyosma\*. Isolated compounds: 17337, 17341.
- T2298 *Dyosma difformis* (Berberidaceae); XIAO BA JIAO LIAN; Dwarf Many-flowered May-apple. Used part: root and rhizome. TCM Effects: To transform phlegm and dissipate binds, dispel stasis and relieve pain, clear heat and resolve toxin. TCM Indications: Swelling pain in throat, swollen welling abscess, clove sore, pneumonia, parotitis, poisonous snake bite, scrofula, knocks and falls. Isolated compounds: 5074, 5093, 17592.
- T2299 *Dyosma furfuracea* (Berberidaceae); BI LIN BA JIAO LIAN;

Furfuraceous Many-flowered May-apple\*. Isolated compounds: 5074, 5093, 17592.

- T2300 *Dysosma guangxiensis* (Berberidaceae); GUANG XI BA JIAO LIAN; Guangxi Many-flowered May-apple\*. Isolated compounds: 5074, 5093, 17592.
- T2301 *Dysosma majorensis* [Syn. *Podophyllum majorensis*; *Dysosma lichuanensis*] (Berberidaceae); BAI BA JIAO LIAN; White Dysosma\*. Used part: root and rhizome. TCM Effects: To enrich *yin* and supplement kidney, clear lung and moisten dryness, resolve toxin and disperse swelling. TCM Indications: Taxation damage and sinew bone pain, impotence, stomachache, innominate toxin swelling, knife wound. Isolated compounds: 5074, 5093, 17337, 17341, 17592, 17594.
- T2302 *Dysosma pleiantha* [Syn. *Podophyllum pleianthum*] (Berberidaceae); LIU JIAO LIAN; Sixangular Dysosma. Equivalent plant: *Dysosma veitchii*, *Dysosma versipellis*. Used part: rhizome and root. TCM Effects: To transform phlegm and dissipate binds, dispel stasis and relieve pain, clear heat and resolve toxin. TCM Indications: Cough, swelling pain in throat, scrofula, goiter and tuberculosis, swollen welling abscess, clove sore, poisonous snake bite, knocks and falls, pain in joints. Isolated compounds: 1372, 1935, 4962, 5070, 5074, 5093, 11592, 17337, 17341, 17592, 17594.
- T2303 *Dysosma subrosea* (Berberidaceae); CHONG MING BA JIAO LIAN; Chongming Many-flowered May-apple\*. Isolated compounds: 5074, 5093, 17592.
- T2304 *Dysosma veitchii* (Berberidaceae); CHUAN BA JIAO LIAN; Veitch Dysosma. Used part: rhizome and root. TCM Effects: See *Dysosma pleiantha*. TCM Indications: See *Dysosma pleiantha*. Isolated compounds: 5074, 5093, 17592, 18317.
- T2305 *Dysosma versipellis* [Syn. *Podophyllum versipelle*] (Berberidaceae); GUI JIU; Common Dysosma. Used part: rhizome and root. TCM Effects: See *Dysosma pleiantha*. TCM Indications: See *Dysosma pleiantha*. Isolated compounds: 4962, 5074, 5093, 17592, 17597, 17598, 17599.
- T2306 *Dysoxylum acutangulum* (Meliaceae); RUI JIAO JIAN MU; Acuteangulus Pencilwood\*. Isolated compounds: 9877.
- T2307 *Dysoxylum alliaceum* (Meliaceae); CONG JIAN MU; Alliaceous Pencilwood\*. Isolated compounds: 9877.
- T2308 *Dysoxylum binectariferum* (Meliaceae); HONG GUO JIAN MU; Redfruit Pencilwood. Isolated compounds: 6656.
- T2309 *Dysoxylum hainanense* (Meliaceae); HAI NAN JIAN MU; Hainan Pencilwood. Isolated compounds: 235, 276, 6098, 6153, 6154, 6155, 7084, 7208, 7670, 21406.
- T2310 *Dysoxylum hongkongense* (Meliaceae); XIANG GANG JIAN MU; Hongkong Pencilwood. Used part: leaf. TCM Effects: To interrupt malaria. TCM Indications: Malaria. Isolated compounds: 7065, 9956, 9957, 21684.
- T2311 *Dysoxylum macranthum* (Meliaceae); DA HUA JIAN MU; Bigflower Pencilwood\*. Isolated compounds: 6645, 6646, 6647, 6648, 6649, 6650, 6651, 6652, 6653, 6654, 6655.
- T2312 *Dysoxylum malabaricum* (Meliaceae); MA LA BA JIAN MU; Malaba Pencilwood\*. Isolated compounds: 162, 7094.

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- T2313 *Ecballium elaterium* (Cucurbitaceae); PEN GUA; Squirting Cucumber. Isolated compounds: 4317, 4320, 4323, 4327.
- T2314 *Echinacea purpurea* (Asteraceae); ZI HUA SONG GUO JU; Purple Conedaisy. Isolated compounds: 6697.
- T2315 *Echinops giganteus* (Asteraceae); JU DA LAN CI TOU; Grand Globethistle\*. Isolated compounds: 9995, 14165.
- T2316 *Echinops grijsii* (Asteraceae); HUA DONG LAN CI TOU; East China Globethistle. Used part: root. TCM Effects: See *Rhaponticum uniflorum*. TCM Indications: See *Rhaponticum uniflorum*. Isolated compounds: 2306, 4680, 5404, 7730, 9042, 9486, 9669, 11533, 12843, 12891, 13687, 13776, 14630, 18190, 19302, 19303, 19983.
- T2317 *Echinops ritro* (Asteraceae); XIN JIANG LAN CI TOU; Sinkiang Globethistle. Used part: root. TCM Effects: See *Rhaponticum uniflorum*. TCM Indications: See *Rhaponticum uniflorum*. Isolated compounds: 1110, 1111, 4126, 4680, 6691, 6692, 19983.
- T2318 *Echinosophora koreensis*. Isolated compounds: 6690.
- T2319 *Echium plantagineum* (Boraginaceae); CHE QIAN YE LAN JI; Purple Viper's-bugloss. Isolated compounds: 6684.
- T2320 *Echium vulgare* (Boraginaceae); LAN JI; Blue Thistle. Isolated compounds: 9316, 12925.
- T2321 *Ecklonia kurome* (Alariaceae); HEI KUN BU; Tangle Thallus. Used part: dried thallus. TCM Effects: See *Laminaria japonica*. TCM Indications: See *Laminaria japonica*. Isolated compounds: 2366, 2367, 5484, 6700, 17172, 17173, 21836.
- T2322 *Ecklonia stolonifera* (Alariaceae); ZONG ZAO; Brown Alga *Ecklonia stolonifera*. Isolated compounds: 5484, 6700, 6701, 17173. *Eclipta alba* = *Eclipta prostrata*
- T2323 *Eclipta prostrata* [Syn. *Eclipta alba*] (Asteraceae); MO HAN LIAN; Yerbadetajo. Used part: aerial parts. TCM Effects: To supplement liver and kidney, cool blood and stanch bleeding. TCM Indications: Tooth mobilizing, premature graying in beard and hair, dizziness and tinnitus, limp aching lumbus and knees, *yin* vacuity blood heat, hemoptysis, blood ejection, duodenal bleeding, nosebleed(epistaxis), hematuria, blood dysentery, flooding and spotting, bleeding due to external injury, eczema of skin, bleeding of skin, snake bite. Isolated compounds: 2775, 2776, 2784, 3558, 5101, 5102, 6702, 6703, 6704, 6705, 6706, 6707, 9369, 11374, 15527, 21018, 21019, 21020.
- T2324 *Egletes viscosa* NIAN XING AI LEI JU. Isolated compounds: 20978.
- T2325 *Eichhornia crassipes* (Pontederiaceae); SHUI HU LU; Common Waterhyacinth. Used part: whole herb or root. TCM Effects: To resolve toxin and eliminate damp, dispel wind-heat. TCM Indications: Wind-heat common cold, edema, heat strangury, urethral stone, wind papules, damp sore, swollen boil. Isolated compounds: 5020, 9621, 17127.
- T2326 *Elaeagnus angustifolia* (Elaeagnaceae); SHA ZAO; Russianolive. Used part: fruit. TCM Effects: To nourish liver and boost kidney, fortify spleen and regulate menstruation. TCM Indications: Liver vacuity dim vision, kidney vacuity lumbago, spleen vacuity diarrhea, indigestion, vaginal discharge, menstrual disorder. Isolated compounds: 2843, 2977, 3308, 6853, 9234, 9235, 9236, 15363, 16050.
- T2327 *Elaeagnus angustifolia* (Elaeagnaceae); SHA ZAO SHU PI;

- Russianolive Bark. Used part: bark. TCM Effects: To clear heat and relieve cough, disinhibit damp and relieve pain, resolve toxin, stanch bleeding. TCM Indications: Chronic trachitis, stomachache, enteritis, acute nephritis, chronic nephritis, icterohepatitis, vaginal discharge, burns and scalds, bleeding due to external injury. Isolated compounds: 5625, 6736, 14747, 14751, 21071.
- T2328 *Elaeis guineensis* (Arecaceae); YOU ZONG; Oilpalm. Used part: root. TCM Effects: To dispel stasis and disperse swelling. TCM Indications: Swelling pain due to stasis accumulation. Isolated compounds: 3208, 12569, 16561.
- T2329 *Elaeocarpus mastersii* (Elaeocarpaceae); MA SI TE SI DU YING; Masters Elaecarpus. Isolated compounds: 6346, 14342.
- T2330 *Elaeocarpus parvifolius* (Elaeocarpaceae); XIAO YE DU YING; Small-leaf Elaecarpus\*. Isolated compounds: 14340, 14341, 14342, 14346.
- T2331 *Elephantopus carolinianus* (Asteraceae); KA LUO LAI NA DI DAN CAO; Carolina Elephantfoot\*. Isolated compounds: 5168.
- T2332 *Elephantopus elatus* (Asteraceae); GAO DI DAN CAO; High Elephantfoot\*. Isolated compounds: 6750, 6751.
- T2333 *Elephantopus mollis* (Asteraceae); ROU MAO DI DAN CAO; Hawaiian Elephantfoot. Isolated compounds: 14896, 14897, 17042.
- T2334 *Elephantopus scaber* (Asteraceae); KU DI DAN; Scabrous Elephantfoot. Used part: whole herb. TCM Effects: To clear heat, cool blood, resolve toxin, disinhibit damp. TCM Indications: Common cold, pertussis, tonsillitis, pharyngolaryngitis, conjunctivitis, jaundice, nephritis with edema, menstrual disorder, vaginal discharge, sore and boil, eczema, snake or insect bites. Isolated compounds: 5168, 6918, 13098, 13100, 20369.
- T2335 *Elephantus nudatus* (Asteraceae); LUO DI DAN CAO; Node Elephantfoot\*. Isolated compounds: 15857.
- T2336 *Elephas maximus* (Elephantidae); XIANG DAN; Elephant Gall. Used part: gall. TCM Effects: To clear liver and brighten eyes, resolve toxin and disperse swelling. TCM Indications: Eye screen, gan accumulation, bad breath, swelling of sores. Isolated compounds: 350.
- T2337 *Elephas maximus* (Elephantidae); XIANG GU; Elephant Bone. Used part: bone. TCM Effects: To resolve toxin and engender flesh. TCM Indications: Stomach heat vomiting, diarrhea with pus blood, ulcer of lower limb. Isolated compounds: 10660.
- T2338 *Elephas maximus* (Elephantidae); XIANG ROU; Elephant Meat. Used part: meat. TCM Indications: Bald sores. Isolated compounds: 4221.
- T2339 *Eleutherine americana* (Iridaceae); XIAO HONG SUAN; American Eleutherine. Isolated compounds: 6752, 6753.  
*Eleutherococcus giraldii* = *Acanthopanax giraldii*  
*Eleutherococcus senticosus* = *Acanthopanax senticosus*
- T2340 *Elsholtzia bodinieri* (Lamiaceae); FENG WEI CHA. Used part: whole herb. TCM Effects: To dissipate exopathogen, rectify *qi* and harmonize stomach. TCM Indications: Common cold, red swollen in throat, red eyes with gall, stomatitis, toothache, hepatitis, indigestion. Isolated compounds: 2526.
- T2341 *Elsholtzia ciliata* (Lamiaceae); BAN BIAN SU; Common Elsholtzia. Used part: whole herb. TCM Effects: To effuse sweat and resolve summerheat, transform damp and disinhibit urine. TCM Indications: Summer common cold, summerheat stroke, diarrhea, inhibited urination, edema, eczema, welling abscess. Isolated compounds: 6178, 6763, 8312, 10025, 11276, 11754, 14794, 15238, 15239, 15240, 21391.
- T2342 *Elsholtzia nipponica* (Lamiaceae); RI BEN XIANG RU; Japanese Elsholtzia\*. Isolated compounds: 17089.
- T2343 *Elsholtzia splendens* (Lamiaceae); XIANG RU; Haichow Elsholtzia. Used part: aerial parts. TCM Effects: To effuse sweat and eliminate summerheat, move water and dissipate damp, warm stomach and regulate center. TCM Indications: Fever, aversion of cold, headache, absence of sweating, abdominal pain, vomiting and diarrhea, edema and inhibited urination, beriberi. Isolated compounds: 6764, 21391.
- T2344 *Embelia barbeyana* (Myrsinaceae); BA BEI SUAN TENG ZI. Isolated compounds: 6767.
- T2345 *Embelia kilimandscharica* (Myrsinaceae). Isolated compounds: 6767.
- T2346 *Embelia oblongifolia* (Myrsinaceae); MA GUI HUA; Manyerve Embelia. Used part: fruit. TCM Effects: To expel worms, check diarrhea. TCM Indications: Taeniasis, diarrhea. Isolated compounds: 6767.
- T2347 *Embelia parviflora* (Myrsinaceae); XIAO HUA SUAN TENG ZI; Smallflower Embelia. Used part: root or vine. TCM Effects: To supplement blood, quicken blood, strengthen lumbus and knees. TCM Indications: Blood vacuity, menstrual disorder, amenorrhea, postpartum vacuity weakness, aching in lumbus and legs, fracture due to knocks and falls. Isolated compounds: 13687, 20168.
- T2348 *Embelia ribes* (Myrsinaceae); XIAN SUAN QIANG; Whiteflower Embelia. Used part: root. TCM Effects: To quicken blood and regulate menstruation, clear heat and disinhibit damp, resolve toxin and disperse swelling. TCM Indications: Amenorrhea, dysentery, diarrhea, child head sore, itchy skin, knocks and falls, bleeding due to external injury, poisonous snake bite. Isolated compounds: 6767, 22478.
- T2349 *Embelia robusta* (Myrsinaceae); CU ZHUANG SUAN TENG ZI; Robust Embelia\*. Isolated compounds: 6767.
- T2350 *Embelia schimperi* (Myrsinaceae); KEN NI YA XIAN SUAN QIANG; Kenya Embelia\*. Isolated compounds: 6768, 19466.
- T2351 *Embelia tsjersium-cottam* (Myrsinaceae). Isolated compounds: 6767.
- T2352 *Emericella purpurea* (Trichocomaceae); ZI LUO KE BAO. Isolated compounds: 6773, 6774, 6775.
- T2353 *Emericella unguis* (Trichocomaceae). Isolated compounds: 9084.
- T2354 *Emericella varicolor* (Trichocomaceae); BIAN SE HE KE BAO. Isolated compounds: 7660, 11410.
- T2355 *Emerita analoga*. Isolated compounds: 19431.
- T2356 *Emilia coccinea* (Asteraceae); FEI YI DIAN HONG; Red Tasselflower\*. Isolated compounds: 11807.
- T2357 *Emilia sonchifolia* (Asteraceae); YI DIAN HONG; Sowthistle Tasselflower. Used part: whole herb with root. TCM Effects: To clear heat and resolve toxin, dissipate stasis and disperse swelling. TCM Indications: Infection of upper respiratory tract, oral ulcer, pneumonia, mastitis, enteritis, bacillary dysentery, urinary tract infection, swollen welling abscess, sore and boil, eczema, knocks and falls. Isolated compounds: 11807, 19731, 19901.
- T2358 *Enantia polycarpa* DUO GUO YI NAN MU. Isolated compounds: 4100, 4101.
- T2359 *Endarachne binghamiae* (Scytosiphonaceae); E CHANG CAI;



- Goose-bowel Vegetable\*. Used part: frond. TCM Effects: To clear heat and resolve phlegm, soften hardness and dissipate binds. TCM Indications: Thyroid enlargement, lymphnrditis, tuberculosis. Isolated compounds: 14229.
- T2360 *Engelhardia roxburghiana* (Juglandaceae); HUANG QI II; R oxburgh Engelhardtia Root. Isolated compounds: 6801, 6836, 10186, 10460, 10747, 13873, 13978, 13979, 15137, 16050, 18588, 19983.
- T2361 *Enhydra fluctuans* (Asteraceae); ZHAO JU; Common Enhydra. Isolated compounds: 6802.
- T2362 *Enkianthus nudipes* (Ericaceae). Isolated compounds: 15864.
- T2363 *Entada phaseoloides* [Syn. *Lens phaseoloides*] (Fabaceae); KE TENG ZI; Climbing Entada Seed. Used part: seed. TCM Effects: To move *qi* and relieve pain, disinherit damp and disperse swelling. TCM Indications: Hematochezia, blood dysentery, jaundice, prolapse of rectum, hemorrhoids, throat impediment. Isolated compounds: 6811, 17050.
- T2364 *Entandrophragma cylindricum*. Isolated compounds: 19315.
- T2365 *Enteromorpha clathrata* (Ulvaaceae); TIAO HU TAI. Used part: frond. TCM Effects: To soften hardness and dissipate binds, transform phlegm and disperse accumulation, resolve toxin and disperse swelling. TCM Indications: Goiter and carcinoma of neck, scrofula, swollen welling abscess, sore and boil, food accumulation, worm accumulation, distention and oppression in stomach duct and abdomen, nosebleed(epistaxis). Isolated compounds: 9384.
- T2366 *Ephedra distachya* (Ephedraceae); SHUANG SUI MA HUANG; Jointfir Ephedra. Isolated compounds: 6815, 6816, 14395, 15745, 15789, 18024.
- T2367 *Ephedra equisetina* (Ephedraceae); MU ZEI MA HUANG; Mongolian Ephedra. Used part: herbaceous twigs. TCM Effects: See *Ephedra sinica*. TCM Indications: See *Ephedra sinica*. Isolated compounds: 3633, 3695, 3766, 4135, 5763, 6815, 6816, 9818, 13419, 14395, 14629, 14701, 15745, 15789, 16285, 18024.
- T2368 *Ephedra Gerardiana* (Ephedraceae); SHAN LING MA HUANG; Gerard Ephedra. Used part: herbaceous twigs. TCM Effects: See *Ephedra sinica*. TCM Indications: See *Ephedra sinica*. Isolated compounds: 6815, 6816, 14395, 14701, 15745, 15789, 18024.
- T2369 *Ephedra intermedia* (Ephedraceae); ZHONG MA HUANG; Intermediate Ephedra. Used part: herbaceous twigs. TCM Effects: See *Ephedra sinica*. TCM Indications: See *Ephedra sinica*. Isolated compounds: 6815, 6815, 6816, 14395, 14701, 15660, 15665, 15745, 15789, 18024.
- T2370 *Ephedra intermedia* var. *tibetica* (Ephedraceae); XI ZANG ZHONG MA HUANG; Tibet Intermediate Ephedra. Isolated compounds: 6815, 14395, 14701, 15745, 15789, 18024.
- T2371 *Ephedra lepidosperma* (Ephedraceae); BAN ZI MA HUANG; Scalysed Ephedra. Isolated compounds: 6815, 15745, 15789, 18024.
- T2372 *Ephedra likiangensis* (Ephedraceae); LI JIANG MA HUANG; Likiang Ephedra. Used part: herbaceous twigs. TCM Effects: See *Ephedra sinica*. TCM Indications: See *Ephedra sinica*. Isolated compounds: 6815, 14395, 14701, 15745, 15789, 18024.
- T2373 *Ephedra minuta* (Ephedraceae); AI MA HUANG; Small Ephedra. Used part: herbaceous twigs. TCM Effects: See *Ephedra sinica*. TCM Indications: See *Ephedra sinica*. Isolated compounds: 6816.
- T2374 *Ephedra minuta* var. *dioeca* (Ephedraceae); YI ZHU AI MA HUANG; Dioecious Small Ephedra. Isolated compounds: 6815, 14395, 14701, 15745, 15789, 18024.
- T2375 *Ephedra monosperma* (Ephedraceae); DAN ZI MA HUANG; Oneseed Ephedra. Used part: herbaceous twigs. TCM Effects: See *Ephedra sinica*. TCM Indications: See *Ephedra sinica*. Isolated compounds: 6815, 14395, 15745, 15789, 18024.
- T2376 *Ephedra procera* (Ephedraceae); SHU ZHUANG MA HUANG; Tall Ephedra. Isolated compounds: 6815, 15745, 15789, 18024.
- T2377 *Ephedra przewalskii* (Ephedraceae); MO GUO MA HUANG; Przewalsk Ephedra. Isolated compounds: 6815, 14395, 15745, 15789, 18024.
- T2378 *Ephedra regeliana* (Ephedraceae); XI ZI MA HUANG; Regel Ephedra. Isolated compounds: 6815, 15745, 15789, 18024.
- T2379 *Ephedra saxatilis* (Ephedraceae); ZANG MA HUANG; Cliff Ephedra. Used part: herbaceous twigs. TCM Effects: See *Ephedra sinica*. TCM Indications: See *Ephedra sinica*. Isolated compounds: 6815, 14395, 14701, 15745, 15789, 18024.
- T2380 *Ephedra sinica* (Ephedraceae); MA HUANG; Chinese Ephedra. Equivalent plant: *Ephedra equisetina*, *Ephedra intermedia*, *Ephedra minuta*, *Ephedra monosperma*, *Ephedra likiangensis*, *Ephedra saxatilis*, *Ephedra Gerardiana*. Used part: herbaceous twigs. TCM Effects: To effuse sweat and resolve exterior, diffuse lung and calm asthma, disinherit water and disperse edema. TCM Indications: Wind-cold exterior repletion syndrome, headache without sweating, headache and generalized pain, cough, fever, fever and aversion to wind, absence of sweating, congesting lung, non-diffusion of lung *qi*, cough and asthma, bronchial asthma, wind water edema, nasal congestion, allergic rhinitis, inhibited urination, wind-damp impediment pain, muscle numbness, wind papule itching, *yin* flat abscess and phlegm node. Isolated compounds: 1476, 1498, 3633, 6396, 6815, 6816, 8744, 9421, 12020, 12082, 12717, 13543, 13947, 14395, 14701, 15146, 15745, 15789, 17083, 18024, 20993, 20994, 20995, 21541, 21950, 21973.
- T2381 *Ephedra sinica* (Ephedraceae); MA HUANG GEN; Chinese Ephedra Root. Used part: root. TCM Effects: To check sweating. TCM Indications: Spontaneous sweating and night sweating. Isolated compounds: 6822, 13400, 13401, 13402.
- T2382 *Ephedra* sp. (Ephedraceae). Isolated compounds: 6813, 6814, 15789.
- T2383 *Ephedra tweediana* (Ephedraceae). Isolated compounds: 6815, 15745, 15789, 18024.
- T2384 *Epicauta gorhami* (Meloidae); GE SHANG TING CHANG; Bean Blister Beetle. Used part: body. TCM Effects: To expel stasis and break accumulation. TCM Indications: Amenorrhea, concretion and conglomeration, accumulation-gathering, fistula. Isolated compounds: 3094.
- T2385 *Epicoccum* sp. Isolated compounds: 258, 8012, 10376, 10377, 10495, 21808.
- T2386 *Epigynum auritum* (Apocynaceae); SI MAO TENG; Longeared Epigynum. Used part: root cortex and bark. TCM Effects: To strengthen sinews and lumbus. Isolated compounds: 6925.
- T2387 *Epilobium hirsutum* (Onagraceae); SHUI JIE GU DAN; Hairy Willowweed. Used part: whole herb. TCM Effects: To clear heat and

- resolve toxin, disinhibit damp and check diarrhea, disperse food and rectify *qi*, quicken blood and joint bones. TCM Indications: Damp-heat dysentery, food accumulation, distending pain in stomach duct, toothache, menstrual disorder, amenorrhea, vaginal discharge, fracture due to knocks and falls, swelling of sores, scalds, scab sore. Isolated compounds: 8095, 13937.
- T2388 *Epilobium* sp. (Onagraceae). Isolated compounds: 16836.
- T2389 *Epimedium acuminatum* (Berberidaceae); CU MAO YIN YANG HUO; Acuminatum Epimedium. Used part: aerial parts. TCM Effects: See *Epimedium brevicornum*. TCM Indications: See *Epimedium brevicornum*. Isolated compounds: 593, 1273, 1275, 2139, 5257, 6492, 6493, 6961, 10963, 21589.
- T2390 *Epimedium brevicornum* (Berberidaceae); YIN YANG HUO; Shorthorned Epimedium. Equivalent plant: *Epimedium sagittatum*, *Epimedium wushanense*, *Epimedium koreanum*, *Epimedium pubescens*, *Epimedium acuminatum*, *Epimedium davidii*, *Epimedium sutchuenense*. Used part: aerial parts. TCM Effects: To supplement kidney and invigorate *yang*, strengthen sinews and bones, dispel wind-damp. TCM Indications: Angina pectoris, chronic bronchitis, neurasthenia, climacteric hypertension, poliomyelitis, impotence and emission, limp wilting sinew and bone, wind-damp impediment pain, hypertonicity and numbness. Isolated compounds: 1275, 2138, 2139, 2377, 2601, 5257, 6492, 6959, 6960, 6961, 6962, 6963, 6964, 9363, 9486, 10887, 10964, 12018, 12893, 13374, 15410, 20280, 22740, 22908, 22909, 22910, 22911, 22912.
- T2391 *Epimedium brevicornum* (Berberidaceae); YIN YANG HUO GEN; Shorthorned Epimedium Root. Used part: root. TCM Effects: To supplement kidney and invigorate *yang*, dispel wind and eliminate damp. TCM Indications: Vacuity strangury, white turbidity, dizziness (for men), vaginal discharge, menstrual disorder, asthma (for women). Isolated compounds: 5257.
- T2392 *Epimedium davidii* (Berberidaceae); CHUAN DIAN YIN YANG HUO; David Epimedium. Used part: aerial parts. TCM Effects: See *Epimedium brevicornum*. TCM Indications: See *Epimedium brevicornum*. Isolated compounds: 1273, 1275, 2138, 2139, 2140, 2140, 2141, 2141, 2142, 2143, 2144, 6961.
- T2393 *Epimedium ecalcaratum* (Berberidaceae); WU JU YIN YANG HUO; Spurless Barrenwort\*. Isolated compounds: 1275.
- T2394 *Epimedium elongatum* (Berberidaceae); CHUAN XI YIN YANG HUO; Elongate Barrenwort. Used part: aerial parts. TCM Effects: See *Epimedium brevicornum*. TCM Indications: See *Epimedium brevicornum*. Isolated compounds: 1275.
- T2395 *Epimedium fargesii* (Berberidaceae); CHUAN E YIN YANG HUO; Farges Epimedium. Isolated compounds: 1275, 5257, 6492, 6960, 6961.
- T2396 *Epimedium grandiflorum* (Berberidaceae); DA HUA YIN YANG HUO; Large-flowered Epimedium. Isolated compounds: 1275, 10944, 10955.
- T2397 *Epimedium grandiflorum* var. *thumbergianum* (Berberidaceae); DA HUA YIN YANG HUO BIAN ZHONG; Large-flowered Epimedium Variety. Isolated compounds: 2276.
- T2398 *Epimedium koreanum* (Berberidaceae); CHAO XIAN YIN YANG HUO; Korean Epimedium. Used part: aerial parts. TCM Effects: See *Epimedium brevicornum*. TCM Indications: See *Epimedium brevicornum*. Isolated compounds: 1273, 1275, 2138, 2139, 3480, 3551, 6776, 6959, 6960, 6961, 8401, 10602, 10887, 10942, 10964, 11439, 12272, 12273, 12274, 12908, 18741, 18742, 21589, 22239.
- T2399 *Epimedium leptorrhizum* (Berberidaceae); QIAN LING YIN YANG HUO; Thin-rhizome Epimedium. Isolated compounds: 6961.
- T2400 *Epimedium myrianthum* (Berberidaceae); TIAN PING SHAN YIN YANG HUO; Tianpingshan Epimedium\*. Isolated compounds: 6961.
- T2401 *Epimedium pubescens* (Berberidaceae); ROU MAO YIN YANG HUO; Pubescence Epimedium. Used part: aerial parts. TCM Effects: See *Epimedium brevicornum*. TCM Indications: See *Epimedium brevicornum*. Isolated compounds: 1275, 2138, 2139, 2141, 6960, 6961, 10964, 18961.
- T2402 *Epimedium sagittatum* (Berberidaceae); JIAN YE YIN YANG HUO; Sagittate Epimedium. Used part: aerial parts. TCM Effects: See *Epimedium brevicornum*. TCM Indications: See *Epimedium brevicornum*. Isolated compounds: 1275, 2138, 2139, 3435, 6960, 6961, 10940, 10941, 10945, 10946, 10947, 10950, 10951, 10952, 10954, 10955, 10956, 10964, 12891, 16088, 17085, 18317, 19125, 19126, 19127.
- T2403 *Epimedium* spp. (Berberidaceae). Isolated compounds: 6960.
- T2404 *Epimedium sutchuenense* (Berberidaceae); SI CHUAN YIN YANG HUO; Szechuan Epimedium. Used part: aerial parts. TCM Effects: See *Epimedium brevicornum*. TCM Indications: See *Epimedium brevicornum*. Isolated compounds: 1275.
- T2405 *Epimedium wanshanense* (Berberidaceae); WAN SHAN YIN YANG HUO; Wanshan Epimedium. Isolated compounds: 1273, 1274, 6492, 6493, 10963.
- T2406 *Epimedium wushanense* (Berberidaceae); WU SHAN YIN YANG HUO; Wushan Epimedium. Used part: aerial parts. TCM Effects: See *Epimedium brevicornum*. TCM Indications: See *Epimedium brevicornum*. Isolated compounds: 1273, 1275, 2138, 6960, 6961, 10964, 17835, 18961, 22740.
- Epimeredi indica* = *Anisomeles indica*
- T2407 *Equisetum arvense* (Equisetaceae); WEN JING; Bottle-brush. Used part: aerial parts. TCM Effects: To stanch bleeding, disinhibit urine, brighten eyes. TCM Indications: Spontaneous external bleeding, blood ejection, hemoptysis, hematochezia, flooding and spotting, bleeding due to external injury, red eyes and eye screen. Isolated compounds: 7222, 8120, 8966, 11238, 11642, 12043, 14081, 15527, 15933, 16098, 17974, 21538, 21539.
- T2408 *Equisetum hiemale* (Equisetaceae); MU ZEI; Common Scouring Rush. Used part: aerial parts. TCM Effects: To dissipate wind-heat, eliminate screen. TCM Indications: Wind-heat red eye, tearing in wind, eye screen. Isolated compounds: 2316, 2887, 6408, 7768, 8962, 8966, 9422, 9815, 9817, 9818, 11238, 11642, 12020, 12042, 12043, 12087, 13884, 13885, 14471, 14802, 16574, 18317, 20444, 22336.
- T2409 *Equisetum palustre* (Equisetaceae); GU JIE CAO; Marsh Horsetail. Used part: whole herb. TCM Effects: To soothe wind and brighten eyes, quicken blood and relieve pain. TCM Indications: Red eyes and eye screen, tearing in wind, wind-damp pain, knocks and falls. Isolated compounds: 552, 553, 12043, 12083, 15527, 16573, 18391.
- T2410 *Equisetum pratense* (Equisetaceae); CAO WEN JING; Meadow Horsetail. Used part: whole herb. TCM Effects: To quicken blood,

- disinhibit urine, expel worms. TCM Indications: Atherosclerosis, pain of hot urine and inhibited urination, intestinal parasitic disease. Isolated compounds: 12043, 18391.
- T2411 *Equisetum* sp. (Equisetaceae). Isolated compounds: 18815.
- T2412 *Equisetum sylvaticum* (Equisetaceae); LIN WEN JING; Forest Horsetail. Used part: whole herb. TCM Effects: To cool blood and stanch bleeding, clear heat and disinhibit urine, dispel wind and relieve pain. TCM Indications: Hemoptysis, hematuria, strangury, pain wind, wind-damp pain, epilepsy. Isolated compounds: 11642, 12043, 18392.
- T2413 *Eremocitrus* sp. Isolated compounds: 17705.
- T2414 *Eremurus himalaicus* (Liliaceae); XI MA DU WEI CAO; Himalayan Desertcandle. Isolated compounds: 9646.
- T2415 *Erica arborea* (Ericaceae); OU SHI NAN; Tree Heath. Isolated compounds: 16169.
- T2416 *Erica australis* (Ericaceae); NAN FANG OU SHI NAN; Spanish Heath. Isolated compounds: 5763, 19912.
- T2417 *Erica cinerea* (Ericaceae); HUI SE OU SHI NAN; Bell Heather. Isolated compounds: 11428.
- T2418 *Erica umbellata* (Ericaceae); SAN XING OU SHI NAN; Umbels Heath. Isolated compounds: 16169.
- T2419 *Erica vagans* (Ericaceae); YING GUO OU SHI NAN; Cornish Heath. Isolated compounds: 663.
- T2420 *Ericerus pela* (Coccidae); CHONG BAI LA; Cera Chinensis Wax. Used part: insect wax. TCM Effects: To stanch bleeding, engender flesh, settle pain. TCM Indications: Incised wound and bleeding, hematuria, hematochezia, enduring sores. Isolated compounds: 3434, 3436, 3437, 3438, 9372, 9373, 13708, 15937.
- T2421 *Erigeron annuus* (Asteraceae); YI NIAN PENG; Annual Fleabane. Used part: root and whole herb. TCM Effects: To disperse food and check diarrhea, clear heat and resolve toxin, interrupt malaria. TCM Indications: Indigestion, gastroenteritis, malaria, poisonous snake bite. Isolated compounds: 1493, 1494, 1762, 2802, 5888, 5889, 5892, 7096, 7256, 7504, 7504, 7505, 7505, 7506, 8335, 8692, 9871, 10109, 10246, 13925, 13974, 14048, 16155, 16156, 18271, 21107.
- T2422 *Erigeron breviscapus* (Asteraceae); DENG ZHAN XI XIN; Shortscape Fleabane. Used part: whole herb. TCM Effects: To dissipate cold and resolve exterior, dispel wind and eliminate damp, quicken network vessels and relieve pain, disperse accumulation. TCM Indications: Common cold with headache and nasal congestion, wind-damp impediment pain, paralysis, acute gastritis, child *gan* accumulation, knocks and falls. Isolated compounds: 1493, 2606, 2919, 3318, 10802, 14292, 18254, 19587, 21735.
- T2423 *Erigeron multiradiatus* (Asteraceae); DUO SHE FEI PENG; Multiradiate. Isolated compounds: 1495, 2900.
- T2424 *Erigeron philadelphicus* (Asteraceae); FEI CHENG FEI PENG; Philadelphia Fleabane. Isolated compounds: 7097, 7255, 7256, 7257, 7258, 7504, 17142.
- T2425 *Erigeron* sp. (Asteraceae). Isolated compounds: 6193.
- T2426 *Erigeron sumatrensis* (Asteraceae); SU MEN BAI JIU CAO. Used part: whole herb. TCM Effects: To transform phlegm, free network vessels, stanch bleeding. TCM Indications: Cough and abundant phlegm, wind-damp impediment pain, uterine bleeding. Isolated compounds: 1762, 7096, 7256, 7504, 8335, 10246, 13925, 13974, 16155, 16156.
- T2427 *Erinaceus europaeus*; *Hemiechinus dauuricus*; *Hemiechinus auritus* (Erinaceidae); WEI NAO; Hedgehog Brain. Used part: brain. TCM Indications: Wolf-fistula. Isolated compounds: 653, 9069, 15708.
- T2428 *Erinaceus europaeus*; *Hemiechinus dauuricus*; *Hemiechinus auritus* (Erinaceidae); WEI XIN GAN; Hedgehog Heart and Liver. Used part: heart and liver. TCM Effects: To resolve toxin and cure sores. TCM Indications: Ant-fistula, bee-fistula, scrofula, malign sore. Isolated compounds: 653, 15708.
- T2429 *Erinus alpinus*. Isolated compounds: 7266.
- T2430 *Eriobotrya deflexa* (Rosaceae); TAI WAN PI PA; Taiwan Loquat. Isolated compounds: 1734, 6070, 7657, 10580, 16410, 18695, 18696, 21824, 21831.
- T2431 *Eriobotrya japonica* (Rosaceae); PI PA; Loquat. Used part: fruit. TCM Effects: To moisten lung and precipitate *qi*, allay thirst. TCM Indications: Lung heat cough asthma, vomiting of sour matter, vexation and thirst. Isolated compounds: 1102, 3048, 7729, 7734, 15498, 15500, 17264.
- T2432 *Eriobotrya japonica* (Rosaceae); PI PA HE; Loquat Seed. Used part: seed. TCM Effects: To relieve cough and transform phlegm, soothe liver and move *qi*. TCM Indications: Cough with profuse phlegm, mounting *qi*, edema, scrofula. Isolated compounds: 1102, 7657, 9717, 10518, 10519, 14390.
- T2433 *Eriobotrya japonica* (Rosaceae); PI PA YE; Loquat Leaf. Used part: leaf. TCM Effects: To clear lung and relieve cough, downbear counterflow and check vomiting. TCM Indications: Lung heat cough, *qi* counterflow with rapid asthma, stomach heat vomiting, heat vexation and thirst. Isolated compounds: 1102, 2849, 2857, 3771, 6178, 6632, 7287, 7288, 7729, 7730, 7734, 7772, 7785, 9522, 9524, 12039, 12040, 12853, 14579, 15501, 15502, 15503, 15504, 17376, 17377, 18918, 19983, 22270, 22270, 22616, 22617.
- T2434 *Eriocaulon buergerianum* (Eriocaulaceae); GU JING CAO; Pipewart. Used part: flower head with peduncle. TCM Effects: To dispel wind and dissipate heat, brighten eyes and eliminate eye screens. TCM Indications: Distended red eyes and screen, delacrimation and photophobia, night blindness, headache, deep-source nasal congestion, throat impediment, toothache, wind papule itching. Isolated compounds: 9565, 14362.
- T2435 *Eriocher sinensis* (Grapsidae); XIE KE; Mitten Crab Chelae. Used part: shell. TCM Effects: To stanch bleeding and dissipate stasis, resolve toxin and disperse swelling. TCM Indications: Blood amassment yellowing, blood stasis, flooding and spotting, swelling toxin of welling abscess and sore, galloping *gan* of teeth and gum, poisonous insect stings. Isolated compounds: 402.
- T2436 *Eriosema kraussianum* (Fabaceae); NAN FEI JI TOU SHU; South-African Eriosema\*. Isolated compounds: 12291, 12292, 12293, 12294, 12295.
- T2437 *Eriosorus flexuosus*. Isolated compounds: 18154.
- T2438 *Erodium stephanianum* (Geraniaceae); MANG NIU ER MIAO; Common Heron's Bill. Used part: aerial parts. TCM Effects: See *Geranium wilfordii*. TCM Indications: See *Geranium wilfordii*. Isolated compounds: 8312, 18317.
- T2439 *Eruca sativa* (Brassicaceae); ZHI MA CAI; Roquette. Used part: seed. TCM Effects: To precipitate *qi* and move water, dispel phlegm and

- settle asthma. TCM Indications: Cough and asthma with abundant phlegm, edema, ascites. Isolated compounds: 8595, 18394, 18397, 18404.
- T2440 *Ervatamia coronaria* (Apocynaceae); GUAN ZHUANG GOU YA HUA; Coronary Ervatamia\*. Isolated compounds: 4080.
- T2441 *Ervatamia dichotoma* (Apocynaceae); ER QI GOU YA HUA; Dichotomous Ervatamia\*. Isolated compounds: 4080.
- T2442 *Ervatamia divaricata* (Apocynaceae); DAN BAN GOU YA HUA; Divaricate Ervatamia. Used part: root, leaf. TCM Effects: To clear heat and lower blood pressure, resolve toxin and disperse swelling. TCM Indications: Hypertension, swelling pain in throat, sore toxin of welling abscess and flat abscess, knocks and falls. Isolated compounds: 4080, 7292, 7293.
- T2443 *Ervatamia hainanensis* (Apocynaceae); HAI NAN GOU YA HUA; Heyne Ervatamia\*. Isolated compounds: 22602.
- T2444 *Ervatamia heyneana* (Apocynaceae); HAI SHI GOU YA HUA; Medicinal Ervatamia. Used part: root. TCM Effects: To clear heat and lower blood pressure, disperse swelling and relieve pain. TCM Indications: Hypertension, swelling pain in throat, abdominal pain. Isolated compounds: 13864.
- T2445 *Ervatamia officinalis* (Apocynaceae); YAO YONG GOU YA HUA; Officinal Ervatamia\*. Used part: root. TCM Effects: To clear heat, lower blood pressure, disperse swelling and relieve pain. TCM Indications: Swelling pain in throat, hypertension, abdominal pain. Isolated compounds: 6885, 6893.
- T2446 *Ervatamia orientalis* (Apocynaceae); DONG FANG GOU YA HUA; Oriental Ervatamia\*. Isolated compounds: 20575.
- T2447 *Erycibe elliptilimba* (Convolvulaceae); AO MAI DING GONG TENG; Elliptical Erycibe. Used part: root and stem. TCM Effects: To dispel wind and relieve pain. Isolated compounds: 7299.
- T2448 *Erycibe expansa* (Convolvulaceae); GUANG BU DING GONG TENG; Expanse Erycibe\*. Isolated compounds: 993, 3004, 5235, 5834, 6290, 7300, 7301, 7302, 8278, 10007, 10009, 13281, 13638, 14638, 16209, 18103, 21918, 22667.
- T2449 *Erycibe obtusifolia* (Convolvulaceae); DING GONG TENG; Obtuseleaf Erycibe. Equivalent plant: *Erycibe schmidtii*. Used part: rattan. TCM Effects: To expel wind and eliminate damp, disperse swelling and relieve pain. TCM Indications: Wind-damp impediment pain, hemiplegia, painful swelling from knocks and falls. Isolated compounds: 7298, 19542, 19545.
- T2450 *Erycibe schmidtii* (Convolvulaceae); GUANG YE DING GONG TENG; Glabrousleaf Erycibe. Used part: rattan. TCM Effects: See *Erycibe obtusifolia*. TCM Indications: See *Erycibe obtusifolia*. Isolated compounds: 3551, 9486, 19542, 19545.
- T2451 *Eryngium campestre* TIAN YE CI QIN. Isolated compounds: 8724, 8725.
- T2452 *Erysimum cheiranthoides* (Brassicaceae); GUI ZHU TANG JIE; Treacle Erysimum. Used part: whole herb. TCM Effects: To strengthen heart and disinhibit urine, harmonize stomach and disperse food. TCM Indications: Cardiac failure, palpitation, edema, spleen-stomach disharmony, non-digestion of food accumulation. Isolated compounds: 956, 3495, 3496, 3497, 4036, 7296, 7297, 7303, 7320, 7321, 9335, 9336, 20397.
- T2453 *Erysimum crepidifolium* (Brassicaceae); HUAN YANG SHEN YE TANG JIE; Crepinleaf Erysimum\*. Isolated compounds: 7303, 9335.
- T2454 *Erysimum diffusum* (Brassicaceae); TANG JIE; Diffuse Erysimum. Used part: seed. TCM Effects: To constrain lung and relieve cough. TCM Indications: Vacuity taxation cough. Isolated compounds: 7320, 9335.
- T2455 *Erysimum ochroleucum* (Brassicaceae); HUANG BAI TANG JIE; Yellowish Erysimum\*. Isolated compounds: 9335.
- T2456 *Erysimum perofskianum* (Brassicaceae); A FU HAN TANG JIE; Afghanistan Erysimum\*. Isolated compounds: 7323, 8596.
- T2457 *Erythrina abyssinica* (Fabaceae); A BI XI NI YA CI TONG; Abyssinia Coralbean\*. Isolated compounds: 50, 52, 53, 54, 55, 3852, 4243, 5146, 5833, 7304, 7325, 7329, 9598, 10398, 12751, 17827, 19883, 19885, 19886, 19887, 19888.
- T2458 *Erythrina americana* (Fabaceae); MEI ZHOU CI TONG; American Coralbean\*. Isolated compounds: 7340, 7341.
- T2459 *Erythrina arborescens* (Fabaceae); QIAO MU CI TONG; Himalayan Coralbean. Equivalent plant: *Erythrina variegata*. Used part: dried bark or root cortex. TCM Effects: To dispel wind and eliminate damp, soothe sinews and quicken network vessels, kill worms and relieve itch. TCM Indications: Wind-damp impediment pain, hypertonicity in limb joints, knocks and falls, scab and lichen, eczema. Isolated compounds: 7322, 7325, 7328.
- T2460 *Erythrina berteroaana* (Fabaceae); BO SHI CI TONG; Bertero Coralbean\*. Isolated compounds: 17833, 19886.
- T2461 *Erythrina burttii* (Fabaceae); KEN NI YA CI TONG; Kenya Coralbean\*. Isolated compounds: 55, 2770, 2771, 2772, 2773, 2774, 14568.
- T2462 *Erythrina caribea* (Fabaceae); JIA LE BI CI TONG; Caribbean Coralbean\*. Isolated compounds: 7324, 7331.
- T2463 *Erythrina crysragalli* (Fabaceae); JI GUAN CI TONG; Folkers Coralbean\*. Isolated compounds: 7308.
- T2464 *Erythrina eriotriocha* (Fabaceae). Isolated compounds: 17837.
- T2465 *Erythrina folkersii* (Fabaceae); FU KE CI TONG; Folk Coralbean\*. Isolated compounds: 7325, 7328.
- T2466 *Erythrina glauca* (Fabaceae); HUI CI TONG; Grey Coralbean\*. Isolated compounds: 7326, 14206, 19251.  
*Erythrina indica* = *Erythrina variegata*
- T2467 *Erythrina latissima* (Fabaceae); JI KUAN CI TONG; Extreme-wide Coralbean\*. Isolated compounds: 51, 3004, 4243, 4604, 7305, 7306, 7307, 8278, 15342, 17048.
- T2468 *Erythrina lithosperma* (Fabaceae); YING HE CI TONG; Hardhilum Coralbean\*. Isolated compounds: 7325.
- T2469 *Erythrina lysistemon* (Fabaceae); AI JI ZAI PEI CI TONG; Egypt Cultivate Coralbean\*. Isolated compounds: 11415, 11711, 13265.
- T2470 *Erythrina melanacantha* (Fabaceae); HEI CI CI TONG; Blackstick Coralbean\*. Isolated compounds: 7324, 7331.
- T2471 *Erythrina poeppigiana* (Fabaceae); SHAN DI CI TONG; Mountain Immortelle. Isolated compounds: 2771, 2772, 4243, 7309, 7310, 7311, 7312, 7313, 7314, 7315, 7316.
- T2472 *Erythrina saclexii* (Fabaceae). Isolated compounds: 5586, 19108.
- T2473 *Erythrina salviiflora* (Fabaceae); SHU WEI CAO HUA CI TONG; Salviaflower Coralbean\*. Isolated compounds: 7325, 7328.

- T2474 *Erythrina senegalensis* (Fabaceae); SAI NEI JIA ER CI TONG; Senegal Coralbean\*. Isolated compounds: 5544, 7318, 7319, 17837, 22637.
- T2475 *Erythrina sigmoidea* (Fabaceae); AI SI XING CI TONG; S-shape Coralbean\*. Isolated compounds: 19883, 19885, 19887, 19888.
- T2476 *Erythrina* spp. (Fabaceae). Isolated compounds: 17047.
- T2477 *Erythrina suberosa* (Fabaceae); SHUAN ZHUANG CI TONG; Suberose Coralbean\*. Isolated compounds: 7327.
- T2478 *Erythrina variegata* [Syn. *Erythrina indica*] (Fabaceae); CI TONG; Coral-tree. Used part: dried bark or root cortex. TCM Effects: See *Erythrina arborescens*. TCM Indications: See *Erythrina arborescens*. Isolated compounds: 993, 5849, 5850, 5971, 6313, 7317, 7325, 7328, 7332, 7350, 7351, 7352, 7353, 11015, 11016, 16249, 17832, 21716, 22667.
- T2479 *Erythrina variegata* var. *orientalis* (Fabaceae); HAI TONG PI; Oriental Variegated Coralbean Bark. Used part: bark. TCM Effects: To dispel wind-damp, move *qi*, disinhibit urine and disperse edema. TCM Indications: Wind-damp impediment, pain in lumbus and knees, scab sore, lichen, eczema. Isolated compounds: 7330.
- T2480 *Erythrina vogelii* (Fabaceae). Isolated compounds: 1956, 2014, 3217, 5544, 6496, 17823, 17837, 22603, 22604, 22605, 22637.
- T2481 *Erythrina zeyheri* (Fabaceae). Isolated compounds: 7354, 7355, 7356, 7357, 7358.
- T2482 *Erythrophleum africanum* (Fabaceae); FEI ZHOU GE MU; African Erythrophleum. Isolated compounds: 7342.
- T2483 *Erythrophleum chlorostachyum* (Fabaceae); LU SUI GE MU; Greenspike Erythrophleum\*. Isolated compounds: 265, 15746.
- T2484 *Erythrophleum couminga* (Fabaceae); KAO MING GE MU; Couminga Erythrophleum\*. Isolated compounds: 4191, 4192, 7342, 7343.
- T2485 *Erythrophleum guineense* (Fabaceae); JI NEI YA GE MU; Red-water Tree. Isolated compounds: 3277, 3278, 7342, 7343, 7344.
- T2486 *Erythrophleum ivorense* (Fabaceae); XIANG YA HAI AN GE MU; Ivory Coast Erythrophleum. Isolated compounds: 3277, 3278, 7342, 7343.
- T2487 *Erythrophleum suaveolens* (Fabaceae); YE XIANG GE MU; Fragrant Erythrophleum. Isolated compounds: 3277, 7342, 7343.
- T2488 *Erythroxylum alaternifolium* (Erythroxylaceae). Isolated compounds: 5385.
- T2489 *Erythroxylum rotundifolium* (Erythroxylaceae); YUAN XING YE GU KE; Roundleaf Coca Shrub\*. Isolated compounds: 21903.
- T2490 *Erythroxylum cambodianum* (Erythroxylaceae); JIAN PU ZHAI GU KE; Cambodia Coca Shrub\*. Isolated compounds: 3308, 3771, 6853, 7345, 7346, 13644, 19087.
- T2491 *Erythroxylum coca* (Erythroxylaceae); GU KE; Coca Shrub. Isolated compounds: 3695, 3860, 4417, 6683, 8311.
- T2492 *Erythroxylum novogranatense* (Erythroxylaceae); BI LU GU KE; Peru Coca Shrub. Isolated compounds: 3860, 22321.
- T2493 *Erythroxylum zeylanicum* (Erythroxylaceae); XI LAN GU KE; Ceylon Coca Shrub\*. Isolated compounds: 142, 3718, 7347, 7348, 7349, 21896.
- T2494 *Escallonia* sp. (Saxifragaceae). Isolated compounds: 1892, 3600, 8081.
- T2495 *Eschscholzia californica* (Papaveraceae); HUA LING CAO; California Poppy. Used part: flower, fruit. TCM Effects: To settle pain, clear heat. Isolated compounds: 1358, 5708, 11665, 18386.
- T2496 *Eschscholzia lobbii* (Papaveraceae); LUO BO HUA LING CAO; Lobb Poppy\*. Isolated compounds: 4106.
- T2497 *Eschscholzia* spp. (Papaveraceae). Isolated compounds: 3498.
- T2498 *Esenbeckia yaaxhokob*. Isolated compounds: 7829, 8314, 20137.
- T2499 *Eskemukerjea megacarpum* (Polygonaceae); Bhote Khair. Isolated compounds: 21155, 21850.
- T2500 *Eucalyptus apodophylla* (Myrtaceae); WU BING YE AN; Non-stipe Eucalyptus\*. Isolated compounds: 1531, 11745.
- T2501 *Eucalyptus berghei* (Myrtaceae); BO SHI AN; Berghe Eucalyptus\*. Isolated compounds: 18867.
- T2502 *Eucalyptus camaldulensis* (Myrtaceae); CHI AN; Longbeak Eucalyptus. Used part: fruit. TCM Effects: To disperse accumulation and *gan*. TCM Indications: Child *gan* accumulation. Isolated compounds: 19087.
- T2503 *Eucalyptus camaldulensis* var. *obtusata* (Myrtaceae); DUN XING CHI AN YE; Obtuse Eucalyptus Leaf\*. Isolated compounds: 21789.
- T2504 *Eucalyptus camaldulensis* var. *pendula* (Myrtaceae); CHUI ZHI CHI AN YE; Pendulous Eucalyptus Leaf. Isolated compounds: 3023.
- T2505 *Eucalyptus citriodora* (Myrtaceae); NING MENG AN YE; Lemon Eucalyptus Leaf. Used part: leaf. TCM Effects: To dissipate wind and eliminate damp, fortify stomach and relieve pain, resolve toxin and relieve itch. TCM Indications: Wind-cold common cold, wind-damp bone pain, *qi* stagnation stomachache, food accumulation, sand distention and vomiting diarrhea, dysentery, asthma, malaria, sore and boil, wind papules, eczema, intractable lichen, burns and scalds. Isolated compounds: 1766, 1767, 3296, 3767, 3768, 6757, 7480, 8202, 8784, 11638, 18421, 18682.
- T2506 *Eucalyptus cladocalyx* (Myrtaceae); ZHI ZHUANG E AN. Isolated compounds: 3784, 7911, 15813.
- T2507 *Eucalyptus cypellocarpa* (Myrtaceae). Isolated compounds: 4570, 4571, 4572.
- T2508 *Eucalyptus dives* (Myrtaceae); FU AN; Dives Eucalyptus\*. Isolated compounds: 17456.
- T2509 *Eucalyptus globoidea* (Myrtaceae). Isolated compounds: 8554.
- T2510 *Eucalyptus globulus* (Myrtaceae); AN YE; Eucalyptus Leaf. Used part: leaf. TCM Effects: To soothe wind and resolve exterior, clear heat and resolve toxin, rectify *qi* and transform phlegm, kill worms and relieve itch. TCM Indications: Common cold, ardent fever with headache, lung heat cough asthma, pertussis, diarrhea, dysentery, ancylostomiasis, filariasis, wind-damp pain, swelling toxin of welling abscess and sore, eczema, scab and lichen, burns and scalds, bleeding due to external injury. Isolated compounds: 440, 441, 4354, 7480, 7481, 7527, 7528, 7529, 7530, 7531, 7532, 9021, 9044, 9620, 13315, 14337, 14338, 14339, 14343, 17402.
- T2511 *Eucalyptus grandis* (Myrtaceae); JU AN; Toolur. Isolated compounds: 5763, 8307.
- T2512 *Eucalyptus hemiphloia* (Myrtaceae); BAN PI AN; Hemihull Eucalyptus\*. Isolated compounds: 7512.
- T2513 *Eucalyptus kino* (Myrtaceae). Isolated compounds: 17174.
- T2514 *Eucalyptus maculata* (Myrtaceae); BAN WEN AN; Spotted Gum. Isolated compounds: 4135.
- T2515 *Eucalyptus phellandra* (Myrtaceae); SHUI HUI XIANG AN;

- Phellandral Eucalyptus\*. Isolated compounds: 17055.
- T2516 *Eucalyptus populnea* (Myrtaceae); YANG YE AN; Bimble Box. Isolated compounds: 18410.
- T2517 *Eucalyptus robusta* (Myrtaceae); DA YE AN YE; Swamp Mahogany Leaf. Used part: leaf. TCM Effects: To soothe wind and resolve exterior, relieve cough and dispel phlegm, clear heat and resolve toxin, kill worms and relieve itch. TCM Indications: Common cold, ardent fever with headache, lung heat cough asthma, abdominal pain and diarrhea, malaria, wind-damp impediment pain, filariasis, leptospirosis, swelling pain in throat, red eyes, eye screen, welling abscess of ear, erysipelas, swollen welling abscess, mammary welling abscess, measles papules, wind papules, eczema, scab and lichen, scalds. Isolated compounds: 7481, 8095, 18862, 18863, 18867, 18868.
- T2518 *Eucalyptus rostrata* (Myrtaceae); CHANG HUI AN; Long-rostrate Eucalyptus\*. Isolated compounds: 18323, 18361.
- T2519 *Eucalyptus* sp. (Myrtaceae). Isolated compounds: 1951, 7482, 17283.
- T2520 *Eucalyptus* spp. (Myrtaceae). Isolated compounds: 17054, 17454.
- T2521 *Eucalyptus tereticornis* (Myrtaceae); XI YE AN YE; Forest Gray Gum Leaf. Used part: leaf. TCM Effects: To diffuse lung and effuse exterior, rectify *qi* and quicken blood, resolve toxin and kill worms. TCM Indications: Common cold, cough, *qi* distention abdominal pain, diarrhea and dysentery, leptospirosis, knocks and falls, sores, erysipelas, mammary welling abscess, scab sore, lichen. Isolated compounds: 4354.
- T2522 *Eucalyptus viminalis* (Myrtaceae); DUO ZHI AN; Ribbon Gum. Isolated compounds: 3301, 3303, 20910.
- T2523 *Eucalyptus wandoo* (Myrtaceae); WO SHI AN; Wandoo Eucalyptus\*. Isolated compounds: 18643.
- T2524 *Eucharis amazonica* (Amaryllidaceae); YA MA XUN BAI HE; Amazon lily. Isolated compounds: 1532, 14049, 14687.
- T2525 *Eucheuma muricatum* (Solieriaceae); QI LIN CAI; Muriculate Eucheuma Frond. Used part: frond. TCM Effects: To clear heat and disperse phlegm. TCM Indications: Phlegm-heat cough, scrofula, goiter and tuberculosis, hemorrhoids. Isolated compounds: 1268.
- T2526 *Euchresta formosana* (Fabaceae); TAI WAN SHAN DOU GEN; Taiwan Euchresta. Isolated compounds: 7486, 7889, 7890, 7891, 7892.
- T2527 *Euchresta japonica* (Fabaceae); SAN XIAU YE SHAN DOU GEN; Trifoliate Euchresta. Isolated compounds: 6496, 20096, 22637.
- T2528 *Euchresta* spp. (Fabaceae). Isolated compounds: 16249.
- T2529 *Euchresta strigillosa* (Fabaceae); FU MAO SHAN DOU GEN; Hirsute Euchresta\*. Used part: root. TCM Effects: To rectify *qi* and relieve pain, clear heat and resolve toxin. TCM Indications: Stomachache, enteritis and diarrhea, abdominal distention, abdominal pain, swelling pain in throat. Isolated compounds: 16249, 20096.
- T2530 *Eucommia ulmoides* (Eucommiaceae); DU ZHONG; Eucommia. Used part: bark. TCM Effects: To lower blood pressure, supplement liver and kidney, strengthen sinews and bones, quiet fetus. TCM Indications: Hypertension, kidney vacuity lumbago, weakness in sinews and bones, stirring fetus in pregnancy. Isolated compounds: 85, 816, 2004, 2887, 3551, 3776, 3981, 4521, 4904, 5173, 5802, 5803, 6632, 7000, 7487, 7488, 7489, 7490, 8273, 8276, 8277, 9022, 9028, 9284, 10493, 10653, 10654, 10655, 11523, 12020, 12238, 12916, 13640, 13641, 14224, 15660, 16088, 16089, 16090, 16091, 17409, 17412, 17415, 18628, 19983, 20569, 20573, 20715, 21541, 22192, 22193, 22270.
- T2531 *Eucommia ulmoides* (Eucommiaceae); DU ZHONG YE; Eucommia Leaf. Used part: leaf. TCM Effects: To supplement liver and kidney, strengthen sinews and bones, lower blood pressure. TCM Indications: Lumbar and back pain, limp aching inability of legs and knees, hypertension. Isolated compounds: 2004, 3551, 8277, 9953, 18317, 18628.  
*Eugenia caryophyllata* = *Syzygium aromaticum*
- T2532 *Eugenia edulis* (Myrtaceae); KE SHI FAN YING TAO; Edible Eugenia\*. Isolated compounds: 8960, 8961, 15186.
- T2533 *Eugenia jambolana* [Syn. *Syzygium cumini*; *Myrtus cumini*] (Myrtaceae); WU MO. Used part: leaf. TCM Effects: To resolve toxin, kill worms, relieve itch. TCM Indications: Dysentery, swelling of sores, eczema titillation. Isolated compounds: 13626, 13628, 15172.
- T2534 *Eugenia sandwicensis* (Myrtaceae); SAN WEI ZHI FAN YING TAO; Sandwich Eugenia\*. Isolated compounds: 4151, 4179, 4180, 8095.
- T2535 *Euglena gracilis* (Euglenaceae); XI XIAO LUO ZAO. Isolated compounds: 21046.
- T2536 *Euonymus alatus* (Celastraceae); GUI JIAN YU; Winged Euonymus. Used part: winged branchlet. TCM Effects: To regulate *qi* and relieve pain, break blood and free menstruation, resolve toxin and disperse swelling, kill worms. TCM Indications: Concretion and conglomeration, pain in heart and abdomen, amenorrhea, dysmenorrhea, postpartum stasis stagnation abdominal pain, retention of lochia, mounting *qi*, joint running impediment pain, swelling of sores, painful wound from knocks and falls, burns and scalds, poisonous snake bite. Isolated compounds: 6632, 6918, 7671, 16284, 22677.
- T2537 *Euonymus atropurpureus* (Celastraceae); ZI GUO WEI MAO; Eastern Wahoo. Isolated compounds: 6632.
- T2538 *Euonymus bungeanus* (Celastraceae); SI MIAN MU; Winterberry Euonymus. Used part: root, bark, fruit, or branchlet-leaf. TCM Effects: To expel wind and eliminate damp, quicken blood and free network vessels, resolve toxin and relieve pain. TCM Indications: Rheumatic arthritis, lumbago, wound swelling from knocks and falls, thromboangiitis obliterans (Buerger's disease), pulmonary welling abscess, spontaneous external bleeding, swelling toxin of clove sore. Isolated compounds: 27, 6632.
- T2539 *Euonymus europaeus* (Celastraceae); OU ZHOU WEI MAO; European Euonymus. Isolated compounds: 160, 1738, 2438, 5508.
- T2540 *Euonymus fortunei* (Celastraceae); FU FANG TENG; Fortune Euonymus. Used part: stem-leaf. TCM Effects: To boost kidney and strengthen lumbus, soothe sinews and quicken network vessels, stanch bleeding and disperse stasis. TCM Indications: Aching in lumbus and knees, kidney vacuity, hemiplegia, wind-damp impediment pain, infant fright wind, hemoptysis, flooding, blood ejection, menstrual disorder, prolapse of uterus, fracture due to knocks and falls, bleeding due to external injury. Isolated compounds: 6632, 7536, 7537, 7538.
- T2541 *Euonymus grandiflorus* (Celastraceae); YE DU ZHONG; Largeflower Euonymus. Used part: root or bark. TCM Effects: To dispel wind and eliminate damp, quicken blood and free menstruation, transform stasis and dissipate binds. TCM Indications: Lumbago, amenorrhea due to

- blood stasis, dysmenorrhea. Isolated compounds: 9568.
- T2542 *Euonymus japonicus* (Celastraceae); TIAO JING CAO; Evergreen Euonymus. Used part: root. TCM Effects: To quicken blood and regulate menstruation, dispel wind-damp. TCM Indications: Menstrual disorder, dysmenorrhea, wind-damp impediment pain. Isolated compounds: 6918, 7950, 11754, 12061, 18367.
- T2543 *Euonymus mupinensis* (Celastraceae); BAO XING WEI MAO; Paohsing Euonymus. Isolated compounds: 30, 15078, 20355, 22683.
- T2544 *Euonymus nanoides* (Celastraceae). Isolated compounds: 2254, 5344, 6327, 6328, 14164, 14168, 21031, 21640.
- T2545 *Euonymus phellomana* (Celastraceae); SHUAN CHI WEI MAO; Corkywing Euonymus. Used part: bark of branch. TCM Effects: To quicken blood and regulate menstruation, dissipate stasis and relieve pain. TCM Indications: Menstrual disorder, postpartum abdominal pain due to stasis obstruction, knocks and falls, wind-damp impediment pain. Isolated compounds: 7536, 7537, 7538.
- T2546 *Euonymus sacrosancta* (Asteraceae); MAO YE WEI MAO; Sacred Spindle-tree. Used part: branch with wing or root. TCM Effects: To free menstruation, disperse swelling, relieve pain, kill worms. TCM Indications: Concretion and conglomeration, chest impediment, amenorrhea, menstrual disorder, postpartum stasis stagnation abdominal pain, knocks and falls, swelling pain in joints, abdominal pain due to worm accumulation. Isolated compounds: 10887.
- T2547 *Euonymus sieboldianus* (Celastraceae); XI BO SHI WEI MAO; Seibo Euonymus\*. Isolated compounds: 7535.
- T2548 *Euonymus verrucosides* (Celastraceae); YOU DIAN WEI MAO; Verrucatespot Euonymus. Isolated compounds: 7536, 7537, 7538.
- T2549 *Eupatorium adenophorum* (Asteraceae); ZI JING ZE LAN HUA; Purplestem Eupatorium Flower. Isolated compounds: 7589.
- T2550 *Eupatorium altissimum* (Asteraceae); GAO ZE LAN; Tall Eupatorium. Isolated compounds: 7591, 18847.
- T2551 *Eupatorium aschenbornianum* (Asteraceae). Isolated compounds: 318, 319, 6797, 7382.
- T2552 *Eupatorium ayapana* (Asteraceae); A YA PAN ZE LAN; Ayapana Eupatorium\*. Isolated compounds: 2048, 9452.
- T2553 *Eupatorium azureum* (Asteraceae); TIAN LAN ZE LAN; Azure Eupatorium\*. Isolated compounds: 7950.
- T2554 *Eupatorium cannabinum* (Asteraceae); DA MA YE ZE LAN; Hemp-agrimony. Used part: whole herb. TCM Effects: To clear summerheat, repel foulness, transform damp. TCM Indications: Summerheat damage, fever and headache, damp evil brew, inappetence due to glomus in stomach duct, bitter taste and slimy tongue fur. Isolated compounds: 7557, 7593, 9570, 15515, 15681, 18847, 20488.
- T2555 *Eupatorium chinense* (Asteraceae); HUA ZE LAN; Chinese Eupatorium. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, course liver and quicken blood. TCM Indications: Wind-heat common cold, chest and rib-side pain, stomach duct pain and abdominal distention, knocks and falls, swollen welling abscess and sore toxin, snake bite. Isolated compounds: 2559, 2699, 7539, 7540, 7541, 7542, 7543, 7544, 7545, 7546, 7547, 7548, 7549, 7581, 9707, 10114, 10767, 14900, 15681, 16971, 16972.
- T2556 *Eupatorium compositifolium* (Asteraceae); FU YE ZE LAN; Compositeleaf Eupatorium\*. Isolated compounds: 13235.
- T2557 *Eupatorium cuneifolium* (Asteraceae); XIE YE ZE LAN; Cuneateleaf Eupatorium\*. Isolated compounds: 7553, 7554, 7555, 7556, 7584, 7585.
- T2558 *Eupatorium formosanum* (Asteraceae); TAI WAN ZE LAN; Taiwan Agrimony. Used part: aerial parts. TCM Effects: See *Eupatorium fortunei*. TCM Indications: See *Eupatorium fortunei*. Isolated compounds: 7558, 7559, 7586.
- T2559 *Eupatorium fortunei* (Asteraceae); PEI LAN; Fortune Eupatorium. Equivalent plant: *Eupatorium formosanum*. Used part: aerial parts. TCM Effects: To resolve summerheat and transform damp, repel foulness and harmonize center. TCM Indications: Nausea and vomiting, bad breath, drooling, distended head and oppression in chest, sweet-greasy in mouth, summerheat-damp exterior syndrome. Isolated compounds: 149, 153, 186, 219, 289, 4134, 4550, 4975, 5751, 7146, 7578, 7587, 7593, 9761, 10581, 11296, 11626, 13803, 13839, 13969, 13970, 13973, 14005, 14179, 15512, 15935, 20708, 21361, 21838.
- T2560 *Eupatorium glandulosum* (Asteraceae); XIAN ZE LAN; Glandulous Eupatorium\*. Isolated compounds: 6796.  
*Eupatorium glehni* = *Eupatorium sachalinense*
- T2561 *Eupatorium gracile* (Asteraceae); XI ZE LAN; Gracile Eupatorium\*. Isolated compounds: 19791.
- T2562 *Eupatorium hyssopifolium* (Asteraceae); SHEN XIANG CAO YE ZE LAN; Hyssop-leaved Boneset. Isolated compounds: 7566.
- T2563 *Eupatorium japonicum* (Asteraceae); CHENG GAN CAO; Japanese Eupatorium. Used part: whole herb. TCM Effects: To dispel summerheat and effuse exterior, transform damp and harmonize center, rectify *qi* and quicken blood, resolve toxin. TCM Indications: Fever and headache, oppression in chest and abdomen distention, indigestion, gastroenteritis, common cold, cough, pharyngolaryngitis, tonsillitis, menstrual disorder, knocks and falls, swollen welling abscess, snake bite. Isolated compounds: 2559, 7621, 15681, 20707, 20708.
- T2564 *Eupatorium lancifolium* (Asteraceae); ZHEN YE ZE LAN; Lanceleaf Eupatorium\*. Isolated compounds: 7553.
- T2565 *Eupatorium lindleyanum* (Asteraceae); CHENG GAN SHENG MA; Lindley Eupatorium. Used part: whole herb. TCM Effects: To clear lung and relieve cough, transform phlegm and calm asthma, lower blood pressure. TCM Indications: Bronchitis, cough and asthma with abundant phlegm, hypertension. Isolated compounds: 4738, 7539, 7542, 7544, 7567, 7568, 7569, 7570, 7571, 7572, 7573, 7574, 7575, 7576, 7578, 9291, 10114, 10766, 10887, 18317, 21367, 21380.
- T2566 *Eupatorium mikanioides* (Asteraceae); WEI GAN JU ZE LAN; Mikanioid Eupatorium\*. Isolated compounds: 4739.
- T2567 *Eupatorium odoratum* (Asteraceae); FEI JI CAO; Fragrant Eupatorium. Used part: whole herb. TCM Effects: To stanch bleeding, kill worms. TCM Indications: Terrene leech bite. Isolated compounds: 1284, 4140, 11691, 15993.
- T2568 *Eupatorium quadrangularae* (Asteraceae); SI LENG ZE LAN; Four-arris Eupatorium\*. Isolated compounds: 18293.
- T2569 *Eupatorium rebaudianum* (Asteraceae); TIAN YE JU; Rebaud Eupatorium\*. Used part: leaf. TCM Effects: To engender liquid and allay thirst, lower blood pressure. TCM Indications: Diabetes mellitus, hypertension. Isolated compounds: 18561, 20341.

- T2570 *Eupatorium riparium* (Asteraceae); HE AN ZE LAN; Riparian Eupatorium, Riverside Eupatorium. Isolated compounds: 7592, 7950.
- T2571 *Eupatorium rotundifolium* (Asteraceae); YUAN YE ZE LAN; Roundleaf Eupatorium\*. Isolated compounds: 6913, 7550, 7551, 7552, 7579, 7580, 7594, 7595.
- T2572 *Eupatorium rugosum* (Asteraceae); ZHOU YE ZE LAN; Mist flower. Isolated compounds: 10775, 21507.
- T2573 *Eupatorium sachalinense* [Syn. *Eupatorium glehni*] (Asteraceae); KU YE DAO ZE LAN; Sachalin Eupatorium\*. Isolated compounds: 181, 7560, 7561, 7562, 7563, 7564, 7565, 7581, 7586, 7593, 9570, 9571, 9572.
- T2574 *Eupatorium semiserratum* (Asteraceae); BAN JU CHI ZHUANG ZE LAN; Semiserration Eupatorium\*. Isolated compounds: 4739, 7581, 7582, 7583, 7590, 7591.
- T2575 *Eupatorium serotinum* (Asteraceae); WAN HUA ZE LAN; Late-flower Boneset. Isolated compounds: 20488.
- T2576 *Eupatorium stoechadosmum* (Asteraceae); DUO XU GONG; Lavender-gustatory Eupatorium\*. Isolated compounds: 20488.
- T2577 *Eupatorium subhastatum* (Asteraceae); JIN JI ZE LAN; Halberd-like Eupatorium\*. Isolated compounds: 7278, 7556.
- T2578 *Eupatorium tinifolium* (Asteraceae); SI MIAN MAO JIA MI YE ZE LAN; Tinileaf Eupatorium\*. Isolated compounds: 12172.
- T2579 *Eupatorium urticaefolium* (Asteraceae); QIAN MA YE ZE LAN; White Snakeroot. Isolated compounds: 4976, 10775, 21507.
- T2580 *Euphorbia antiquorum* (Euphorbiaceae); HUO YANG LE; Ancients Euphorbia. Used part: stem. TCM Effects: To disinhibit urine and free stool, draw out toxin and remove putrid, kill worms and relieve itch. TCM Indications: Edema, ascites, diarrhea, dysentery, food accumulation, lump glomus, clove sore, welling abscess and flat abscess, scab and lichen. Isolated compounds: 537, 1113, 1463, 1464, 4468, 4472, 4473, 6918, 7611, 7618, 7950, 7996, 11451, 12619, 20712.
- T2581 *Euphorbia chamaesyce* (Euphorbiaceae); MAO GUO DI JIN; Groundfig Spurge. Isolated compounds: 16362.
- T2582 *Euphorbia characias* (Euphorbiaceae); DI ZHONG HAI DA JI; Mediterranean Euphorbia; Mediterranean Spurge. Isolated compounds: 7596, 7597, 7598, 7599, 7600, 7601, 7602, 7603, 7604, 7605, 7606, 7607.
- T2583 *Euphorbia decipiens* (Euphorbiaceae); MI HUO DA JI. Isolated compounds: 15215, 15216, 15217.
- T2584 *Euphorbia ebracteolata* (Euphorbiaceae); YUE XIAN DA JI; Ebracteolate Euphorbia. Equivalent plant: *Euphorbia fischeriana*. Used part: root. TCM Effects: To break accumulation, kill worms, draw out toxin, eliminate putridity, eliminate damp, relieve itch. TCM Indications: Concretion and conglomeration, scrofula, tuberculosis, welling abscess and flat abscess, flowing phlegm, scab sore, intractable lichen, chronic cough and asthma, scrotal damp itch. Isolated compounds: 2442, 5988, 5989, 6667, 6668, 6669, 6670, 6671.
- T2585 *Euphorbia esula* (Euphorbiaceae); JI CHANG LANG DU; Leafy Euphorbia. Used part: root. TCM Effects: To disinhibit water, disperse swelling, kill worms, attack gastrointestinal accumulation. TCM Indications: Edema, ascites, scrofula, itchy skin. Isolated compounds: 11057, 11058, 12065, 14352, 22042, 22044.
- T2586 *Euphorbia esula* var. *cyparissoides* (Euphorbiaceae); XI YE DA JI; Narrowleaf Euphorbia. Used part: whole herb. TCM Effects: To resolve toxin and disperse swelling. TCM Indications: Swelling of sores. Isolated compounds: 1113, 7611, 8786, 14352.
- T2587 *Euphorbia fischeriana* (Euphorbiaceae); LANG DU DA JI; Fischer Euphorbia. Used part: root. TCM Effects: See *Euphorbia ebracteolata*. TCM Indications: See *Euphorbia ebracteolata*. Isolated compounds: 245, 12480, 17958.
- T2588 *Euphorbia fortissima* (Euphorbiaceae); NONG DA JI; Dense Euphorbia\*. Isolated compounds: 6521.
- T2589 *Euphorbia helioscopia* (Euphorbiaceae); ZE QI; Sun Euphorbia. Used part: whole herb. TCM Effects: To disinhibit water and disperse edema, relieve cough and transform phlegm, resolve toxin and kill worms. TCM Indications: Edema and *qi* fullness, phlegm-rheum cough asthma, malaria, bacillary dysentery, scrofula, tuberculous fistula, medullitis. Isolated compounds: 5616, 5764, 7608, 7609, 7610, 7619, 7620, 9307, 9308, 9309, 9310, 9311, 9312, 9313, 9315, 10624, 13612, 15935, 18203, 18338.
- T2590 *Euphorbia hirta* (Euphorbiaceae); DA FEI YANG CAO; Garden Euphorbia. Used part: whole herb with root. TCM Effects: To clear heat and resolve toxin, percolate damp and relieve itch, free milk. TCM Indications: Acute enteritis, bacillary dysentery, strangury, hematuria, pulmonary welling abscess, mammary welling abscess, clove sore, toxin swelling, eczema, foot lichen, itchy skin. Isolated compounds: 1113, 6757, 7951.
- T2591 *Euphorbia humifusa* (Euphorbiaceae); DI JIN CAO; Humifusa Euphorbia. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, cool blood and stanch bleeding. TCM Indications: Dysentery, enteritis, hemoptysis, hematuria, hematochezia, flooding and spotting, swollen welling abscess, sore and boil. Isolated compounds: 8095, 11083, 11084, 11085, 12049, 18317, 19542, 22195.
- T2592 *Euphorbia hyberna* (Euphorbiaceae); HAI BO NA DA JI; Hyberna Euphorbia. Isolated compounds: 5287, 21513, 21530.
- T2593 *Euphorbia ingens* (Euphorbiaceae); JU DA JI; Enormous Euphorbia. Isolated compounds: 11063.
- T2594 *Euphorbia jolkini* (Euphorbiaceae); NAN DA JI; Jolkin Euphorbia. Isolated compounds: 11892, 11893, 14454.
- T2595 *Euphorbia kamerunica* (Euphorbiaceae). Isolated compounds: 11063.
- T2596 *Euphorbia kansui* (Euphorbiaceae); GAN SUI; Kansui Euphorbia. Used part: tuberoid. TCM Effects: To drain water and expel rheum, break accumulation and free stool. TCM Indications: Edema, ascites, flowing rheum in chest, concretion conglomeration accumulation and gathering, epilepsy, cough and asthma, urinary and fecal stoppage. Isolated compounds: 2238, 2239, 2442, 4820, 4821, 4822, 4823, 4824, 4825, 4826, 4827, 4828, 4829, 4838, 6323, 6324, 6325, 6326, 6939, 7611, 7612, 7618, 12129, 12130, 12131, 12137, 12138, 12139, 12140, 12141, 12142, 12143, 12144, 12145, 12146, 12147, 12148, 14301, 16365, 16448, 16449, 21409.
- T2597 *Euphorbia lathyris* (Euphorbiaceae); QIAN JIN ZI; Caper Euphorbia Seed. Used part: ripe seed without seed coat. TCM Effects: To expel water and disperse swelling, break blood and disperse concretion. TCM Indications: Edema, phlegm-rheum, accumulation and distention-fullness, urinary and fecal stoppage, amenorrhea due to



- blood stasis, intractable impediment, wart. Isolated compounds: 663, 664, 2331, 4645, 7615, 7617, 9489, 11059, 11060, 11422, 12543, 12544, 12545.
- T2598 *Euphorbia lathyris* (Euphorbiaceae); XU SUI ZI JING ZHONG BAI ZHI; Caper Euphorbia Latex. Used part: white juice in stem. TCM Effects: To eliminate macula and resolve toxin, close sores. TCM Indications: White patch wind, snake bite. Isolated compounds: 6558.
- T2599 *Euphorbia lunulata* (Euphorbiaceae); MAO YAN CAO; Crescent-shaped Euphorbia. Used part: whole herb. TCM Effects: To suppress cough and dispel phlegm, dissipate binds, expel water, draw out toxin, kill worms. TCM Indications: Phlegm-rheum cough asthma, edema, scrofula, scab and lichen, innominate toxin swelling. Isolated compounds: 663, 8095, 10887, 10888, 12020, 12082, 18317, 18339, 18411.
- T2600 *Euphorbia maculata* (Euphorbiaceae); BAN DI JIN; American Euphorbia. Isolated compounds: 18360.
- T2623 *Euphorbia makinoi* (Euphorbiaceae); HONG RU CAO; Red-milk Grass\*. Isolated compounds: 17754.
- T2601 *Euphorbia milii* (Euphorbiaceae); TIE HAI TANG; Crownofhorns Euphorbia. Used part: Stem-leaf and root. TCM Effects: To expel pus, resolve toxin, expel water, quicken blood. TCM Indications: Swelling toxin of welling abscess and sore, burns and scalds, knocks and falls, bubo, hepatitis, ascites ulcer. Isolated compounds: 14859, 14860, 14861.
- T2602 *Euphorbia nematocypha* (Euphorbiaceae); DA LANG DU; Large Euphorbia Root. Used part: root. TCM Effects: To transform stasis and stanch bleeding, kill worms and relieve itch. TCM Indications: Bleeding due to external injury, painful swelling from knocks and falls, scrofula, scab and lichen. Isolated compounds: 11893, 15330.
- T2603 *Euphorbia nivulia* (Euphorbiaceae); YIN DU DUO ZHI DA JI; Indian Juicy Euphorbia\*. Isolated compounds: 5325, 5326.
- T2604 *Euphorbia obtusifoli* (Euphorbiaceae); DUN YE DA JI XIANG JIANG; Obtuseleaf Euphorbia Latex\*. Isolated compounds: 9396.
- T2605 *Euphorbia obtusifolia* var. *obtusifolia* (Euphorbiaceae); DUN YE DA JI; Obtuseleaf Euphorbia\*. Isolated compounds: 154, 5202, 5476, 6892, 9395, 9396, 9397, 9398, 9399, 9400, 9401.
- T2606 *Euphorbia palustris* (Euphorbiaceae); ZHAO SHENG DA JI; Marshy Euphorbia\*. Isolated compounds: 15170.
- T2607 *Euphorbia paralias* (Euphorbiaceae); HAI YANG DA JI; Sea Euphorbia\*. Isolated compounds: 11843, 11844, 11845, 11846, 11847, 16652, 16653, 19652, 19653, 19654, 19655, 19656, 19657.
- T2608 *Euphorbia pekinensis* (Euphorbiaceae); DA JI<sup>(3)</sup>; Peking Euphorbia. Used part: tuberoid. TCM Effects: To drain water and expel rheum, dissipate binds and disperse swelling. TCM Indications: Edema, seeper in chest and abdomen, phlegm-rheum, inhibited urine and stool, swollen welling abscess, scrofula. Isolated compounds: 6220, 11428, 15954.
- T2609 *Euphorbia peplus* (Euphorbiaceae); BO AI DA JI; Petty Euphorbia. Isolated compounds: 21032.
- T2610 *Euphorbia poisonii* (Euphorbiaceae); PO SEN DA JI; Poison Euphorbia\*. Isolated compounds: 3074, 18639, 21402.
- T2611 *Euphorbia portlandica* (Euphorbiaceae); BO TE LAN DA JI; Portlan Euphorbia\*. Isolated compounds: 4694, 6604, 7883, 13098, 15482, 17731, 17732, 21026, 22734.
- T2612 *Euphorbia prolifera* (Euphorbiaceae); TU GUA LANG DU; Proliferous Euphorbia\*. Used part: root. TCM Effects: To disinhibit urine, free stool, move *qi*, dissipate stasis, kill worms, resolve toxin. TCM Indications: Edema, constipation, food accumulation, stomachache, knocks and falls, fracture, scab and lichen, sore toxin. Isolated compounds: 373.
- T2613 *Euphorbia pubescens* (Euphorbiaceae); DUAN ROU MAO DA JI; Shortfluff Euphorbia\*. Isolated compounds: 874, 7613, 7614, 11890, 11891, 18170, 18171, 18172, 18173, 19542.
- T2614 *Euphorbia pulcherrima* (Euphorbiaceae); YI PIN HONG; Common Poinsettia. Used part: whole herb. TCM Effects: To regulate menstruation and stanch bleeding, quicken blood and settle pain. TCM Indications: Profuse menstruation, painful swelling from knocks and falls, fracture, bleeding due to external injury. Isolated compounds: 12488.
- T2615 *Euphorbia quinquecostata* (Euphorbiaceae); WU ZHU MAI DA JI. Isolated compounds: 1385.
- T2616 *Euphorbia resinifera* (Euphorbiaceae); SHU ZHI DA JI; Resinoid Euphorbia\*. Isolated compounds: 18639, 18640.
- T2617 *Euphorbia royleana* (Euphorbiaceae); BA WANG BIAN; Royle Euphorbia Latex. Used part: stem-leaf or white juice in stem. TCM Effects: To dispel wind and resolve toxin, kill worms and relieve itch. TCM Indications: Sore toxin, skin lichen, edema. Isolated compounds: 4491, 6224, 7611, 7618, 8786, 8788.
- T2618 *Euphorbia* sp. (Euphorbiaceae). Isolated compounds: 8311.
- T2619 *Euphorbia* spp. (Euphorbiaceae). Isolated compounds: 13438, 17181.
- T2620 *Euphorbia stepposa* (Euphorbiaceae); CAO YUAN DA JI; Grassland Euphorbia\*. Isolated compounds: 15170.
- T2621 *Euphorbia stygiana* (Euphorbiaceae); YOU AN DI JIN; Stygian Euphorbia\*. Isolated compounds: 7954, 7955.
- T2622 *Euphorbia supina* (Euphorbiaceae); BAN YE DI JIN; Spottedleaf Euphorbia. Isolated compounds: 16362.
- T2624 *Euphorbia tirucalli* (Euphorbiaceae); LU YU SHU; Malabartree Euphorbia. Used part: whole herb. TCM Effects: To promote lactation, kill worms, resolve toxin. TCM Indications: Postpartum scant milk, lichen sore, swelling pain in joints. Isolated compounds: 7616, 15964.
- T2625 *Euphorbia turczaninowii* (Euphorbiaceae). Isolated compounds: 9474, 9475, 16818, 16819, 16820, 21027.
- T2626 *Euphorbia wallichii* (Euphorbiaceae); DA GUO DA JI; Largefruit Euphorbia\*. Isolated compounds: 1962, 3330, 5759, 5760, 9311, 9313, 9314, 9805, 11061, 11062, 11892.
- T2627 *Euphorbia longan* [Syn. *Dimocarpus longan*] (Sapindaceae); LONG YAN YE; Longan Leaf. Used part: leaf. TCM Effects: To effuse exterior and clear heat, resolve toxin, dry damp. TCM Indications: Common cold, malaria, swelling of clove, hemorrhoids, eczema. Isolated compounds: 6918, 17220, 17869, 18411, 18624, 20369, 21540.
- T2628 *Euphorbia officinalis* (Euphorbiaceae); XIAO MI CAO; Meadow Eyebright. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, disinhibit urine. TCM Indications: Febrile diseases thirst, headache, lung heat cough, swelling pain in throat, heat strangury, inhibited urination, mouth sore, swollen welling abscess. Isolated

- compounds: 2004.
- T2629 *Euphrasia regelii* (Euphorbiaceae); DUAN XIAN XIAO MI CAO; Regel Eyebright. Isolated compounds: 7533.
- T2630 *Euptelea polyandra* (Eupteleaceae= Trochodendraceae); DUO XIONG RUI LING CHUN MU; Polyandrous Euptelea\*. Isolated compounds: 7622, 7623, 7624, 7625, 7626, 7627, 7628, 7629, 7630, 7631, 7632, 7633, 7634, 7635.
- T2631 *Eurya japonica* (Theaceae); LING MU; Japanese Eurya. Used part: leaf or fruit. TCM Effects: To dispel wind and eliminate damp, disperse swelling and relieve pain. TCM Indications: Wind-damp impediment pain, ascites, fever and dry mouth, swelling of sores, painful swelling from knocks and falls, bleeding due to external injury. Isolated compounds: 3594, 18615.
- T2632 *Euryale ferox* (Nymphaeaceae); QIAN SHI GEN; Gordon Euryale Root. Used part: root. TCM Effects: To dissipate binds and relieve pain, check discharge. TCM Indications: Mounting *qi*, leukorrhea, innominate toxin swelling. Isolated compounds: 14240.
- T2633 *Eurycoma harmandiana* (Staphyleaceae). Isolated compounds: 773, 3097, 3098, 3299, 6215, 8510, 9885, 9890, 10934, 10935, 10936, 13867, 13871, 16695.
- T2634 *Eurycoma longifolia* (Staphyleaceae); CHANG YE KUAN MU. Isolated compounds: 421, 3096, 3097, 3098, 3158, 3159, 4938, 4986, 5941, 6215, 6888, 7652, 9563, 9884, 9885, 9887, 10290, 10390, 10391, 10477, 10503, 12334, 12964, 12965, 13669, 13866, 13867, 13868, 13869, 13871, 15598, 15599, 16892, 17304, 17309.
- T2635 *Eurycoma* sp. (Staphyleaceae). Isolated compounds: 378, 381, 389, 420, 421, 2571, 4740, 4986, 5334, 5609, 5610, 5611, 5681, 5893, 5941, 5960, 6214, 6252, 6253, 7011, 7638, 7639, 7640, 7641, 7642, 7643, 7644, 7645, 7646, 7647, 7648, 7649, 7650, 7651, 7653, 7654, 7655, 7943, 9884, 9886, 9887, 9890, 9999, 10021, 10115, 10116, 10192, 10290, 10390, 10391, 10392, 10393, 10477, 10503, 10788, 12521, 12575, 12576, 12964, 13866, 13868, 13869, 13871, 14006, 14007, 16693, 16694, 16695, 16696, 16892, 17480, 20031, 20033, 20035, 20039, 20568, 20572, 20574, 21230, 21759.
- T2636 *Euscaphis japonica* (Staphyleaceae); YE YA CHUN; Common Euscaphis. Used part: fruit or seed. TCM Effects: To dispel wind and dissipate cold, move *qi* and relieve pain, dissipate binds and disperse swelling. TCM Indications: Stomachache, cold mounting with abdominal pain, diarrhea, dysentery, prolapse of rectum, menstrual disorder, prolapse of uterus, painful swollen testes. Isolated compounds: 1935, 6056, 7659, 14314.
- T2637 *Evernia prunastri* LI BIAN ZHI YI. Isolated compounds: 18779.
- T2638 *Evodia austrosinensis* (Rutaceae); HUA NAN WU ZHU YU; South China Evodia. Isolated compounds: 2022, 2023, 4034, 5691, 7665, 10117, 10943.
- T2639 *Evodia baberi* (Rutaceae); YI HUA WU ZHU YU. Isolated compounds: 7665, 19081.
- T2640 *Evodia belaha* (Rutaceae). Isolated compounds: 17033.
- T2641 *Evodia leptia* [Syn. *Ilex leptia*] (Rutaceae); SAN CHA KU; Thin Evodia. Used part: leaf. TCM Effects: To clear heat and resolve toxin, dispel wind and eliminate damp. TCM Indications: Swelling pain in throat, malaria, icterohepatitis, wind-damp bone pain, eczema, dermatitis, sores. Isolated compounds: 7456, 11606, 12670, 12673, 14551, 18830.
- T2642 *Evodia madagascariensis* (Rutaceae); MA DAO CHOU TAN; Madagascar Evodia\*. Isolated compounds: 20978.
- T2643 *Evodia meliifolia* (Rutaceae); LIAN YE WU ZHU YU; Dyebark Evodia. Used part: fruit. TCM Effects: To warm center and dissipate cold, move *qi* and relieve pain. TCM Indications: Pain in stomach duct and abdomen, vomiting, headache. Isolated compounds: 15882.
- T2644 *Evodia rutaecarpa* (Rutaceae); WU ZHU YU; Medicinal Evodia. Equivalent plant: *Evodia rutaecarpa* var. *officinalis*. Used part: fruit. TCM Effects: To dispel cold, dry damp, soothe liver, precipitate *qi*, relieve pain, check vomiting. TCM Indications: Dysentery, cold pain in stomach duct and abdomen, reverting *yin* headache, mounting *qi*, dysmenorrhea, beriberi with edema, hyperchlorhydria, cold-damp diarrhea. Isolated compounds: 114, 179, 180, 1600, 4912, 6308, 6370, 6691, 7663, 7664, 7665, 7666, 7667, 7668, 7669, 7902, 8512, 8956, 8957, 8958, 8991, 10117, 10118, 10325, 11816, 12843, 14135, 14143, 14331, 14624, 14654, 14657, 14658, 14659, 14660, 14741, 14745, 14771, 14799, 14800, 14801, 15882, 15925, 19081, 19081, 19082, 20552, 21076, 21624, 21625.
- T2645 *Evodia rutaecarpa* var. *bodinieri* (Rutaceae); BO SHI WU ZHU YU; Guizhou Evodia. Isolated compounds: 7665, 19081.
- T2646 *Evodia rutaecarpa* var. *officinalis* (Rutaceae); SHI HU<sup>(3)</sup>; Official Evodia. Used part: fruit. TCM Effects: See *Evodia rutaecarpa*. TCM Indications: See *Evodia rutaecarpa*. Isolated compounds: 7665, 19081, 19801.
- T2647 *Evodia* sp. (Rutaceae). Isolated compounds: 12254.
- T2648 *Evodia* spp. (Rutaceae). Isolated compounds: 12847.
- T2649 *Evolvulus alsinoides* (Convolvulaceae); TU DING GUI; Common Evolvulus. Used part: whole herb. TCM Effects: To clear heat, disinhibit damp, resolve toxin. TCM Indications: Jaundice, dysentery, strangury-turbidity, vaginal discharge, clove sore, scab sore. Isolated compounds: 2318, 13686.
- T2650 *Excoecaria agallocha* (Euphorbiaceae); HAI QI; Bling-your-eye-tree. Used part: whole herb. TCM Effects: To drain precipitation, attack toxin. TCM Indications: Replete body and constipation, skin intractable ulcer, swelling toxin of limbs. Isolated compounds: 134, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 5491, 7685, 7686, 7687, 7688, 7689, 7690, 7691, 7692, 9852, 10080, 10299, 10562, 11241, 12173, 12404, 16326, 20986.
- T2651 *Excoecaria cochinchinensis* var. *viridis* (Euphorbiaceae); LU BEI GUI HUA. Used part: leaf. TCM Effects: To kill worms and relieve itch. TCM Indications: Psoriasis, chronic eczema. Isolated compounds: 1935, 7693, 7694, 8095, 8566, 9818, 12082, 19805, 21634.

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- T2652 *Fabiana imbricata* (Solanaceae); PI QI QIE; Peru False Heath. Isolated compounds: 1596.
- T2653 *Fagara* sp. (Rutaceae). Isolated compounds: 19777, 22774.
- T2654 *Fagara* spp. (Rutaceae). Isolated compounds: 3498.
- T2655 *Fagara vitiensis* (Rutaceae); FEI JI AI JIAO; Fiji *Fagara*\*. Isolated compounds: 18057.
- T2656 *Fagara xanthoxyloides* (Rutaceae). Isolated compounds: 113, 2761, 2762, 2763, 4422, 5578, 7701, 7702, 7704, 10474, 11269, 11284, 13098, 14182, 19777.

- T2657 *Fagopyrum cymosum* [Syn. *Polygonum cymosum*] (Polygonaceae); TIAN QIAO MAI GEN; Golden Buckwheat Root. Used part: root and rhizome. TCM Effects: To clear heat and resolve toxin, quicken blood and disperse welling abscess, dispel wind and eliminate damp. TCM Indications: Swelling pain in throat, sores, scrofula, hepatitis, pulmonary welling abscess, aching sinews and bones, head wind, stomachache, bacillary dysentery, Vaginal discharge. Isolated compounds: 9818, 14371, 17869, 17896, 18411, 19087, 19794, 20444.
- T2658 *Fagopyrum esculentum* (Polygonaceae); QIAO MAI; Common Buckwheat. Used part: seed. TCM Effects: To fortify spleen and disperse accumulation, precipitate *qi* and loosen intestines, resolve toxin and close sores. TCM Indications: Gastrointestinal accumulation, diarrhea, dysentery, intestine gripping sand, white turbidity, vaginal discharge, spontaneous sweating, night sweating, zoster, erysipelas, effusion of back from welling abscess and flat abscess, scrofula, burns and scalds. Isolated compounds: 2347, 9834, 19087, 19186, 19188.
- T2659 *Fagopyrum esculentum* (Polygonaceae); QIAO MAI JIE; Common Buckwheat Stem. Used part: stem-leaf. TCM Effects: To precipitate *qi* and disperse accumulation, clear heat and resolve toxin, stanch bleeding, lower blood pressure. TCM Indications: Dysphagia-occlusion, indigestion, dysentery, vaginal discharge, swollen welling abscess, scalds, hemoptysis, purpura, hypertension. Isolated compounds: 9616, 16196, 19087.
- T2660 *Fagopyrum* spp. (Polygonaceae). Isolated compounds: 5763.
- T2661 *Fagopyrum tataricum* (Polygonaceae); KU QIAO MAI; Tartarian Buckwheat. Isolated compounds: 19087.
- T2662 *Fagus sylvatica* (Fagaceae); OU ZHOU SHUI QING GANG; European Beech. Isolated compounds: 4439, 20556.
- T2663 family Amaryllidaceae spp. (Amaryllidaceae). Isolated compounds: 9186, 9612, 9646, 17573.
- T2664 family Apiaceae spp. (Apiaceae). Isolated compounds: 13137, 18317.
- T2665 family Apocynaceae spp. (Apocynaceae). Isolated compounds: 12020, 20577, 22596, 22602.
- T2666 family Asteraceae spp. (Asteraceae). Isolated compounds: 13137, 17719, 19194, 20016, 20387, 21034, 21207, 21208, 21328, 21329, 21486, 21487, 22401.
- T2667 family Berberidaceae spp. (Berberidaceae). Isolated compounds: 16555.
- T2668 family Brassicaceae spp. (Brassicaceae). Isolated compounds: 6812, 12020, 17117.
- T2669 family Cactaceae spp. (Cactaceae). Isolated compounds: 9646, 19513.
- T2670 family Cistaceae spp. (Cistaceae). Isolated compounds: 13137.
- T2671 family Dilleniaceae spp. (Dilleniaceae). Isolated compounds: 12020.
- T2672 family Euphorbiaceae spp. (Euphorbiaceae). Isolated compounds: 13137, 20235.
- T2673 family Fabaceae spp. (Fabaceae). Isolated compounds: 7883, 9646, 12020, 13137, 18652.
- T2674 family Fumariaceae spp. (Fumariaceae). Isolated compounds: 3498.
- T2675 family Hydrophyllaceae spp. (Hydrophyllaceae). Isolated compounds: 22142.
- T2676 family Liliaceae spp. (Liliaceae). Isolated compounds: 9339.
- T2677 family Meliaceae spp. (Meliaceae). Isolated compounds: 21553.
- T2678 family Menispermaceae spp. (Menispermaceae). Isolated compounds: 21389.
- T2679 family Papaveraceae spp. (Papaveraceae). Isolated compounds: 3498.
- T2680 family Passifloraceae spp. (Passifloraceae). Isolated compounds: 13137.
- T2681 family Poaceae spp. (Poaceae). Isolated compounds: 9646.
- T2682 family Polygonaceae spp. (Polygonaceae). Isolated compounds: 10887.
- T2683 family Pyrolaceae spp. (Pyrolaceae). Isolated compounds: 17476.
- T2684 family Ranunculaceae spp. (Ranunculaceae). Isolated compounds: 1179, 12020.
- T2685 family Resedaceae spp. (Resedaceae). Isolated compounds: 13137.
- T2686 family Rutaceae spp. (Rutaceae). Isolated compounds: 3498, 20135.
- T2687 family Sapindaceae spp. (Sapindaceae). Isolated compounds: 3498.
- T2688 family Scrophulariaceae spp. (Scrophulariaceae). Isolated compounds: 13137.
- T2689 family Simarubaceae spp. (Simarubaceae). Isolated compounds: 19221, 20108.
- T2690 family Thymelaeaceae spp. (Thymelaeaceae). Isolated compounds: 17374, 20550.
- T2691 *Farfugium japonicum* (Asteraceae); LIAN PENG CAO; Japanese Farfugium. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, cool blood and stanch bleeding, dissipate binds and disperse swelling. TCM Indications: Common cold, swelling pain in throat, cough and hemoptysis, hematochezia, hematuria, menstrual disorder, mastitis, scrofula, swelling toxin of welling abscess and boil, clove sore and eczema, knocks and falls, snake bite. Isolated compounds: 7717, 7718, 8017, 10133, 10406, 19731.
- T2692 *Fatsia* spp. (Araliaceae). Isolated compounds: 12642.
- T2693 *Feijoa sellowiana* (Myrtaceae); FEI YUE GUO; Pineapple Guava. Isolated compounds: 3303, 8813, 20910, 21983.
- T2694 *Ferula alliacea* (Apiaceae). Isolated compounds: 17077.
- T2695 *Ferula assafoetida* (Apiaceae); A WEI; Asafetida Giantfennel Resin. Used part: balsam. TCM Effects: To transform concretion and disperse accumulation, kill worms, interrupt malaria. TCM Indications: Concretion and conglomeration, lump glomus, worm accumulation, meat-type food accumulation, cold pain in heart and abdomen, malaria, dysentery. Isolated compounds: 1909, 1910, 1911, 2096, 3969, 3970, 7731, 7732, 7733, 7768, 8087, 9085, 12127, 14763, 15517, 17620, 19224, 22228.
- T2696 *Ferula badrakema* (Apiaceae). Isolated compounds: 2096.
- T2697 *Ferula borealis* (Apiaceae); SHA QIAN HU; Bunge Giantfennel. Used part: root. TCM Effects: To clear heat and resolve exterior, dispel phlegm and suppress cough. TCM Indications: Common cold, fever, headache, pneumonia, trachitis, chest oppression with cough asthma, tonsillitis, scrofula. Isolated compounds: 6479.
- T2698 *Ferula ferulaeoides* (Apiaceae); DUO SAN A WEI; Manyumbell Giantfennel. Used part: root. Isolated compounds: 5626, 5627, 5628, 5629, 5630, 5631, 5632, 5633, 5666, 5667, 5668, 5669.
- T2699 *Ferula ferulago* (Apiaceae). Isolated compounds: 7765, 7766.
- T2700 *Ferula foetida* (Apiaceae); CHOU A WEI; Foetid Giantfennel\*. Isolated compounds: 7707, 7768, 7845, 7846, 7847, 7848, 7849, 7850, 19080.
- T2701 *Ferula fukanensis* (Apiaceae); FU KANG A WEI GEN; Fukang Giantfennel Root. Isolated compounds: 5633, 5669, 7982, 7983, 7984,

- 7985.
- T2702 *Ferula kopetdaghensis* (Apiaceae). Isolated compounds: 17079.
- T2703 *Ferula kuhistanica* (Apiaceae); YI LANG A WEI; Iran Giantfennel\*. Isolated compounds: 6179, 6180, 7098, 7152, 7791, 7792, 7792, 9829, 11811, 11811, 12310, 12311, 12312, 12313, 12314, 12315, 12316, 12317, 12318, 12319, 12320, 12321, 12322, 12323, 12324, 12325, 12326, 12470, 12470, 12471, 12509, 21744, 22331.
- T2704 *Ferula persica* var. *latisecta* (Apiaceae); BO SI A WEI BIAN ZHONG; Persia Giantfennel Variety\*. Isolated compounds: 2800, 2801.
- T2705 *Ferula polyantha* (Apiaceae); DUO HUA A WEI; Manyflower Giantfennel\*. Isolated compounds: 17620.
- T2706 *Ferula pseudooreoselinum* (Apiaceae). Isolated compounds: 19225.
- T2707 *Ferula sinaica* (Apiaceae). Isolated compounds: 5890, 12469.
- T2708 *Ferula* sp. (Apiaceae). Isolated compounds: 22552.
- T2709 *Ferula* spp. (Apiaceae). Isolated compounds: 22195.
- T2710 *Ferula xeromorpha* (Apiaceae). Isolated compounds: 22785.
- T2711 *Ferulago brachyloba* (Apiaceae); LEI A WEI. Isolated compounds: 10658.
- T2712 *Ferulago capillaries* (Apiaceae); JU MAO LEI A WEI. Isolated compounds: 2308, 5080, 10658, 13571, 19709, 19710, 19711.
- T2713 *Ferulago nodosa* (Apiaceae); JIE JIE LEI A WEI; Node Ferulago\*<sup>]</sup> Isolated compounds: 15939.
- T2714 *Fibraurea chloroleuca* (Menispermaceae); LV BAI TIAN XIAN TENG; Chloro-white Fibraurea\*. Isolated compounds: 2304.
- T2715 *Fibraurea recisa* (Menispermaceae); TIAN XIAN TENG; Common Fibraurea. Used part: root, stem or leaf. TCM Effects: To clear heat and resolve toxin, disinhibit damp. TCM Indications: Acute tonsillitis, pharyngolaryngitis, infection of upper respiratory tract, conjunctivitis, jaundice, gastroenteritis, dysentery, child indigestion, food poisoning, salpingitis, acute endometritis, chronic endometritis, acute pelvic inflammation, vaginitis, sore and boil, burns and scalds. Isolated compounds: 11851, 16555.
- T2716 *Ficus beecheyana* [Syn. *Ficus erecta* var. *beecheyana*] (Moraceae); TIAN XIAN GUO; Erect Fig. Used part: fruit. TCM Effects: To clear heat and engender liquid, fortify spleen and promote digestion, resolve toxin and disperse swelling. TCM Indications: Enteritis, dysentery, constipation, hemorrhoids, throat pain, swelling abscess and sores, scab and lichen. Isolated compounds: 2424, 2425, 2463, 2464, 2465, 5907, 10037, 10180.
- T2717 *Ficus carica* (Moraceae); WU HUA GUO; Fig. Used part: fruit. TCM Effects: To clear heat and engender liquid, fortify spleen and promote digestion, resolve toxin and disperse swelling. TCM Indications: Swelling pain in throat, dry cough with hoarseness, scant breast milk, intestinal heat and constipation, inappetence, indigestion, diarrhea, dysentery, swollen swelling abscess, lichen. Isolated compounds: 671, 672, 673, 674, 2309, 4525, 7996, 11031, 13098, 14104, 14537, 18086, 18276, 18421.
- T2718 *Ficus carica* (Moraceae); WU HUA GUO YE; Fig Leaf. Used part: leaf. TCM Effects: To clear damp heat, resolve sore toxin, disperse swelling and relieve pain. TCM Indications: Damp-heat diarrhea, vaginal discharge, hemorrhoids, pain from swollen swelling abscess, scrofula. Isolated compounds: 1113, 9021, 13098.  
*Ficus erecta* var. *beecheyana* = *Ficus beecheyana*
- T2719 *Ficus fistulosa* [Syn. *Ficus harlandii*] (Moraceae); SHUI TONG MU; Harland Fig. Used part: root cortex, leaf. TCM Effects: To clear heat and disinhibit damp, quicken blood and relieve pain. TCM Indications: Damp-heat inhibited urination, diarrhea, painful swelling from knocks and falls. Isolated compounds: 446, 529.  
*Ficus harlandii* = *Ficus fistulosa*
- T2720 *Ficus hispida* (Moraceae); DUI YE RONG; Oppositeleaf Fig. Used part: root, bark or stem-leaf. TCM Effects: To course wind and clear heat, disperse accumulation and transform phlegm, fortify spleen and eliminate damp, move *qi* and dissipate stasis. TCM Indications: Common cold with fever, conjunctivitis, bronchitis, indigestion, dysentery, spleen vacuity and vaginal discharge, breast milk stoppage, painful swelling from knocks and falls, wind-damp impediment pain. Isolated compounds: 9562, 12716, 21543, 21921.
- T2721 *Ficus microcarpa* (Moraceae); RONG SHU; Smallfruit Fig. Used part: aerial root. TCM Effects: To dissipate wind-heat, dispel wind-damp, quicken blood and relieve pain. TCM Indications: Influenza, pertussis, non-eruption of measles, tonsillitis, conjunctivitis, wind-damp bone pain, sand *qi* abdominal pain, enduring dysentery, stomachache, leukorrhea, eczema, pudendal itch, knocks and falls. Isolated compounds: 174, 178, 183, 188, 189, 190, 197, 202, 203, 204, 211, 228, 249, 252, 267, 283, 332, 530, 2338, 6477, 15757, 15759, 16337, 16402, 21982, 22270, 22272.
- T2722 *Ficus nitida* (Moraceae); LIANG YE RONG; Bright Fig\*. Isolated compounds: 7950.
- T2723 *Ficus pumila* (Moraceae); BI LI; Climbing Fig. Used part: leafy stem. TCM Effects: To dispel wind and disinhibit damp, quicken blood and free network vessels, resolve toxin and disperse swelling. TCM Indications: Wind-damp impediment pain, sciatica, diarrhea, urinary strangury, edema, malaria, amenorrhea, postpartum blood stasis abdominal pain, swelling pain in throat, testitis, lacquer sore, swelling toxin of swelling abscess and sore, knocks and falls. Isolated compounds: 1112, 20713.
- T2724 *Ficus racemosa* (Moraceae); JU GUO RONG; Racemose Fig\*. Isolated compounds: 18513.
- T2725 *Ficus ruficaulis* var. *antaoensis* (Moraceae); LAN YU LUO YE RONG. Isolated compounds: 5528, 8664, 8665, 8677, 8678, 11642, 19087.
- T2726 *Ficus septica* (Moraceae); FU YE RONG; Septic Fig\*. Isolated compounds: 22151.
- T2727 *Ficus simplicissima* (Moraceae); CU YE RONG; Hispid Fig. Used part: root. TCM Effects: To fortify spleen and supplement lung, move *qi* and disinhibit damp, soothe sinews and quicken network vessels. TCM Indications: Spleen vacuity edema, reduced food intake with fatigue, tuberculosis with cough, vaginal discharge, night sweating, postpartum scant milk, wind-damp impediment pain, edema, cirrhosis with ascites, hepatitis, knocks and falls. Isolated compounds: 4140, 18086.
- T2728 *Ficus* spp. (Moraceae). Isolated compounds: 13098.  
*Filifolium sibiricum* = *Tanacetum sibiricum*
- T2729 *Filipendula ulmaria* (Rosaceae); XUAN GUO WEN ZI CAO; Queen-of-the-Meadows. Used part: root and flower. TCM Effects: To calm liver and lower blood pressure, eliminate putridity and close sores. TCM Indications: Hypertension, sores with pus blood. Isolated

- compounds: 19057.
- T2730 *Fimbristylis dichotoma* (Cyperaceae); PIAO FU CAO; Dichotomous Fimbristylis. Used part: whole herb. TCM Effects: To disinhibit urine, clear heat and resolve toxin. TCM Indications: Inhibited urination, damp-heat edema, strangury, infant fetal toxin. Isolated compounds: 5579, 21063.
- T2731 *Firmiana simplex* (Sterculiaceae); WU TONG BAI PI; Phoenix Tree Bast. Used part: bast. TCM Effects: To lower cholesterol, clear heat and calm liver, dispel wind and eliminate damp, quicken blood and relieve pain. TCM Indications: Hyperlipemia, hypertension, wind-damp impediment pain, knocks and falls, menstrual disorder, hemorrhoids, erysipelas. Isolated compounds: 13097, 15935.
- T2732 *Firmiana simplex* (Sterculiaceae); WU TONG YE; Phoenix Tree Leaf. Used part: leaf. TCM Effects: To lower cholesterol, clear heat and calm liver, dispel wind and eliminate damp, clear heat and resolve toxin. TCM Indications: Hyperlipemia, hypertension, wind-damp pain, numbness and paralysis, swelling toxin of sore and welling abscess, hemorrhoids, shank sore, bleeding due to external injury, hypertension. Isolated compounds: 1112, 1113.
- T2733 *Firmiana simplex* (Sterculiaceae); WU TONG ZI; Phoenix Tree Seed. Used part: seed. TCM Effects: To lower cholesterol, clear heat and calm liver, normalize *qi*, harmonize stomach and disperse food. TCM Indications: Hyperlipemia, food damage, stomachache, mounting *qi*, infant mouth sore. Isolated compounds: 2318, 2892, 20328.
- T2734 *Fissistigma glaucescens* [Syn. *Melodorum glaucescens*] (Annonaceae); BAI YE GUA FU MU; Glaucescent Fissistigma. Used part: root. TCM Effects: To dispel wind-damp, free menstruation and quicken blood, stanch bleeding. TCM Indications: Wind-damp impediment pain, menstrual disorder, knocks and falls, fracture, bleeding due to external injury. Isolated compounds: 12917, 15711.
- T2735 *Fissistigma oldhamii* [Syn. *Melodorum oldhamii*] (Annonaceae); GUA FU MU; Oldham Fissistigma. Used part: root. TCM Effects: To dispel wind and eliminate damp, quicken blood and relieve pain. TCM Indications: Wind-damp impediment pain, lumbago, stomachache, knocks and falls. Isolated compounds: 15711.
- T2736 *Fissistigma polyanthum* (Annonaceae); HEI FENG TENG; Manyflower Fissistigma. Used part: root and rattan. TCM Effects: To dispel wind-damp, strengthen sinews and bones, quicken blood and relieve pain, regulate menstruation. TCM Indications: Sequel of poliomyelitis, rheumatic arthritis, rheumatoid arthritis, painful swelling from knocks and falls, menstrual disorder. Isolated compounds: 7803.
- T2737 *Flemingia philippinensis* [Syn. *Moghania philippinensis*] (Fabaceae); MAN XING QIAN JIN BA; Philippine Flemingia. Used part: root. TCM Effects: To dispel wind and eliminate damp, strengthen sinews and bones, quicken blood and resolve toxin. TCM Indications: Wind-damp impediment pain, taxation damage in lumbar muscle, wilting-weakness in limbs, knocks and falls, swelling pain in throat. Isolated compounds: 7827, 12358.
- T2738 *Flemingia strobilifera* (Fabaceae); QIU SUI QIAN JIN BA; Conespike Flemingia. Used part: root or whole herb. TCM Effects: To clear heat and eliminate damp, dispel wind and free network vessels, relieve cough and transform phlegm. TCM Indications: Wind-damp impediment pain, lassitude in lumbus and knees, phlegm-heat cough, asthma, pertussis, jaundice. Isolated compounds: 15286, 22044.
- T2739 *Flindersia collina* (Rutaceae); SHAN QIU JU PAN MU; Hill Flindersia\*. Isolated compounds: 3926.
- T2740 *Flourensia cernua* (Asteraceae); FU CHUI FE LAO JU; Tarbush. Isolated compounds: 4918, 6797, 7838, 9371, 9480, 9564, 14639, 15666, 15936, 16824, 21038, 21542.
- T2741 *Flourensia riparia* (Asteraceae); HE AN FU LAO JU; Riparian Tarbush\*. Isolated compounds: 10050, 19754.
- T2742 *Flustra foliacea* (Flustridae); BEI HAI XIAN TAI CHONG; North Sea Bryozoan. Isolated compounds: 2484, 2621, 2622, 4868, 4869, 7842, 7843, 7844.
- T2743 *Flyriella parryi*. Isolated compounds: 16093.
- T2744 *Foeniculum vulgare* (Apiaceae); HUI XIANG; Fennel Fruit. Used part: fruit. TCM Effects: To warm kidney and disperse cold, rectify *qi* and harmonize stomach. TCM Indications: incarcerated hernia of intestine, effusion of vaginal coat, elephantiasis of scrotum, cold mounting, cold pain in lesser-abdomen, kidney vacuity lumbago, stomachache, vomiting, beriberi. Isolated compounds: 1183, 1186, 1282, 1284, 1289, 3695, 6482, 7385, 7751, 11574, 12843, 19784, 20369, 20566, 20988, 20998, 22195.
- T2745 *Foeniculum vulgare* (Apiaceae); HUI XIANG GEN; Fennel Root. Used part: root. TCM Effects: To warm kidney and harmonize center, move *qi* and relieve pain. TCM Indications: Cold mounting, stomach cold with retching counterflow, abdominal pain, pain in joints due to rheumatalgia. Isolated compounds: 6193, 7426.
- T2746 *Foeniculum vulgare* (Apiaceae); HUI XIANG JING YE; Fennel Stem and Leaf. Used part: stem-leaf. TCM Effects: To expel wind, normalize *qi*, relieve pain. TCM Indications: Sand *qi*, mounting *qi*, swollen welling abscess. Isolated compounds: 1284, 4134, 4879, 7768, 8307, 9043, 11574, 11897, 15325, 18421, 19912, 20566.
- T2747 *Fomes cajanderi* (Polyporaceae); FEN ROU CENG KONG JUN. Isolated compounds: 7876, 7877, 7878.
- T2748 *Fomes fomentarius* [Syn. *Pyropolyporus fomentarius*; *Boletus fomentarius*; *Polyporus fomentarius*] (Polyporaceae); MU TI CENG KONG JUN. Used part: sporocarp. TCM Effects: To disperse accumulation, transform stasis, anticancer. TCM Indications: Food accumulation, carcinoma of esophagus, carcinoma of stomach, ovarian carcinoma. Isolated compounds: 7249.
- T2749 *Fomes officinalis* (Polyporaceae); A LI HONG; Fomes Officinalis Sporocarp. Used part: sporocarp. TCM Effects: To relieve cough and calm asthma, dispel wind and eliminate damp, disperse swelling and relieve pain, disinhibit urine, resolve snake toxin. TCM Indications: Cough, asthma, chronic rheumatic arthritis, swelling pain in throat, stomachache, urethral stone, periodontitis, edema, poisonous snake bite. Isolated compounds: 4909, 4910, 6672, 6673, 6674, 6675, 6676, 7247, 7250, 7856, 7857, 7858, 7859, 12488, 16013, 20237, 20480, 20483.
- Fomes pinicola* = *Fomitopsis pinicola*
- T2750 *Fomitopsis pinicola* [Syn. *Fomes pinicola*; *Polyporus pinicola*] (Polyporaceae); HONG YUAN CENG KONG JUN; Red Belt Polypore. Used part: sporocarp. TCM Effects: To dispel wind and eliminate damp. TCM Indications: Wind-cold-damp impediment, pain

- in joints. Isolated compounds: 7860, 7861, 7862, 7866, 7867, 7868, 7869, 7870, 7871, 7872, 7873, 7874, 7875, 17273, 17388, 17389.
- T2751 *Fomitopsis spraguei* (Polyporaceae); CENG KONG JUN; Polypore. Isolated compounds: 7863, 7864, 7865.
- T2752 *Fordia cauliflora* (Fabaceae); GAN HUA DOU; Common Fordia. Used part: root, leaf. TCM Effects: To quicken blood and free network vessels, disperse swelling and relieve pain, transform phlegm and relieve cough. TCM Indications: Wind-damp impediment pain, knocks and falls, swelling pain of welling abscess and sore, cough. Isolated compounds: 3334, 3335, 6397, 12163.
- T2753 *Formica fusca* (Formicidae); HEI MA YI; Silky Ant. Used part: body. TCM Effects: To supplement kidney and boost essence, free channels and quicken network vessels, resolve toxin and disperse swelling. TCM Indications: Kidney vacuity dizziness and tinnitus, insomnia and frequent dreaming, impotence and emission, wind-damp impediment pain, wind stroke with hemiplegia, numbness in limbs, erythematous lupus, chorionitis, dermatomyositis, swollen welling abscess and clove sores, poisonous snake bite. Isolated compounds: 1053, 2393, 4865, 6545, 22224, 22226.
- T2754 *Forsythia koreana* (Oleaceae); CHAO XIAN LIAN QIAO; Korean Forsythia\*. Isolated compounds: 7924.
- T2755 *Forsythia* sp. (Oleaceae). Isolated compounds: 580, 3214, 15135, 15477.
- T2756 *Forsythia suspensa* (Oleaceae); LIAN QIAO; Weeping Forsythia. Used part: dried fruit. TCM Effects: To clear heat and resolve toxin, dissipate binds and disperse swelling. TCM Indications: Influenza in early stage, common cold in early stage, wind-heat common cold, encephalitis, hepatitis, tuberculosis, warm disease, heat strangury with inhibited pain, welling abscess, welling abscess and flat abscess, toxin swelling, scrofula, goiter and tuberculosis, throat impediment. Isolated compounds: 386, 387, 1511, 3045, 3048, 3194, 3761, 4550, 6029, 7922, 7923, 7924, 7925, 7926, 7927, 11247, 12440, 12843, 12849, 13595, 15146, 15926, 15927, 16050, 16106, 16107, 17056, 17143, 17145, 17376, 17377, 17409, 18613, 18614, 18615, 18616, 18617, 18618, 18619, 19121, 19540, 20497, 20990, 20992, 20995, 22270, 22720.
- T2757 *Forsythia viridissima* (Oleaceae); JIN ZHONG HUA; Greenstem Forsythia. Used part: proper exciple, root or leaf. TCM Effects: To clear heat and resolve toxin, dissipate binds. TCM Indications: Common cold with fever, red eyes with gall, welling abscess and sores, erysipelas, scrofula. Isolated compounds: 580, 1621, 1623, 1935, 11642, 13595.
- T2758 *Fortunella crassifolia* (Rutaceae); JIN DAN; Meiwa Kumquat. Used part: fruit. TCM Effects: See *Fortunella margarita*. TCM Indications: See *Fortunella margarita*. Isolated compounds: 7930.
- T2759 *Fortunella japonica* (Rutaceae); JIN GAN; Japanese Kumquat. Used part: fruit. TCM Effects: See *Fortunella margarita*. TCM Indications: See *Fortunella margarita*. Isolated compounds: 11716, 15635, 20670.
- T2760 *Fortunella margarita* (Rutaceae); JIN JU; Oval Kumquat. Equivalent plant: *Fortunella crassifolia*, *Fortunella japonica*. Used part: fruit. TCM Effects: To rectify *qi* and resolve depression, disperse food and transform phlegm, arouse liquor. TCM Indications: Oppression and depression in chest, liquor damage with thirst, food stagnation in torpid stomach. Isolated compounds: 7930, 11716, 20670.
- T2761 *Fortunella margarita* (Rutaceae); JIN JU YE; Oval Kumquat Leaf. Used part: leaf. TCM Effects: To soothe depressed liver *qi*, open stomach *qi*, dissipate lung *qi*. TCM Indications: Dysphagia-occlusion, scrofula. Isolated compounds: 15635.
- T2762 *Fouquieria splendens* HUA LAI CI SHU; *Fouquieria splendens*. Isolated compounds: 15930.
- T2763 *Fragaria ananassa* (Rosaceae); CAO MEI; Common Strawberry. Used part: fruit. TCM Effects: To allay thirst, fortify stomach and disperse food. TCM Indications: Thirst, inappetence, indigestion. Isolated compounds: 13261, 15681, 21392.
- T2764 *Fragaria vesca* (Rosaceae); YE CAO MEI; European Strawberry. Isolated compounds: 17876.  
*Frangula alnus* = *Rhamnus frangula*
- T2765 *Fraxinus americana* (Oleaceae); NEI GUO BAI CEN; White Ash. Isolated compounds: 5084, 7934, 7941, 10552, 10553.
- T2766 *Fraxinus bungeana* (Oleaceae); XIAO YE CEN; Bunga Ash Bark. Used part: bark. TCM Effects: See *Fraxinus rhynchophylla*. TCM Indications: See *Fraxinus rhynchophylla*. Isolated compounds: 663, 664, 7942, 7944.
- T2767 *Fraxinus chinensis* (Oleaceae); BAI LA SHU; Chinese Ash Bark. Used part: bark. TCM Effects: See *Fraxinus rhynchophylla*. TCM Indications: See *Fraxinus rhynchophylla*. Isolated compounds: 663, 7942, 16080.  
*Fraxinus chinensis* var. *acuminata* = *Fraxinus szaboana*  
*Fraxinus chinensis* var. *rhynchophylla* = *Fraxinus rhynchophylla*
- T2768 *Fraxinus excelsior* (Oleaceae); OU ZHOU BAI LA SHU; European Ash. Isolated compounds: 7944.
- T2769 *Fraxinus floribunda* (Oleaceae); XI MA BAI LA SHU; Manyflower Ash. Isolated compounds: 7942.
- T2770 *Fraxinus insularis* (Oleaceae); KU LI MU YE; Retuse Ash Leaf. Isolated compounds: 11089, 11090.
- T2771 *Fraxinus japonica* (Oleaceae); RI BEN BAI LA SHU; Japanese Ash\*. Isolated compounds: 16080, 17409.
- T2772 *Fraxinus mandshurica* (Oleaceae); SHUI QU LIU; Manchurian Ash. Used part: bark. TCM Effects: To clear heat and dry damp, clear liver and brighten eyes. TCM Indications: damp-heat diarrhea dysentery, vaginal discharge, liver heat and red eyes, eye screen, oxhide lichen. Isolated compounds: 663, 664.
- T2773 *Fraxinus ornus* (Oleaceae); HUA BAI LA SHU; Flowering Ash. Isolated compounds: 663, 664, 7942, 7944, 11513, 13504.
- T2774 *Fraxinus paxiana* (Oleaceae); QIN LING BAI LA SHU; Pax Ash. Used part: bark. TCM Effects: See *Fraxinus rhynchophylla*. TCM Indications: See *Fraxinus rhynchophylla*. Isolated compounds: 663, 664, 7944.
- T2775 *Fraxinus potamophila* (Oleaceae); TU ER QI SI TAN BAI LA SHU; Turkestan Ash. Isolated compounds: 7944.
- T2776 *Fraxinus quadrangulata* (Oleaceae); SI LENG LA SHU; Blue Ash. Isolated compounds: 3981.
- T2777 *Fraxinus rhynchophylla* [Syn. *Fraxinus chinensis* var. *rhynchophylla*] (Oleaceae); CEN PI; Largeleaf Chinese Ash Bark. Equivalent plant: *Fraxinus szaboana*, *Fraxinus chinensis*, *Fraxinus stylosa*, *Fraxinus bungeana*, *Fraxinus paxiana*. Used part: bark. TCM Effects: To clear

- heat and dry damp, promote astriction, brighten eyes. TCM Indications: Heat dysentery, diarrhea, chronic bronchitis, rheumatic arthritis, red and white vaginal discharge, red eyes with gall, eye screen. Isolated compounds: 663, 664.
- T2778 *Fraxinus* sp. (Oleaceae). Isolated compounds: 11428.
- T2779 *Fraxinus stylosa* (Oleaceae); LIU YE CEN; Willowleaf Ash Bark. Used part: bark. TCM Effects: See *Fraxinus rhynchophylla*. TCM Indications: See *Fraxinus rhynchophylla*. Isolated compounds: 663, 664, 7944, 20569.
- T2780 *Fraxinus szaboana* [Syn. *Fraxinus chinensis* var. *acuminata*] (Oleaceae); JIAN YE CEN; Acuteleaf Ash Bark. Used part: bark. TCM Effects: See *Fraxinus rhynchophylla*. TCM Indications: See *Fraxinus rhynchophylla*. Isolated compounds: 663, 664, 6204, 7944, 19542.
- T2781 *Fritillaria anhuiensis* (Liliaceae); AN HUI BEI MU; Anhui Fritillary. Isolated compounds: 618, 6658, 12181, 21359, 22636.
- T2782 *Fritillaria camtschatcensis* (Liliaceae); HEI BAI HE; Kamchatka Fritillary. Isolated compounds: 9220, 18571, 20056, 20066.
- T2783 *Fritillaria cirrhosa* (Liliaceae); CHUAN BEI MU; Tendrilleaf Fritillary. Equivalent plant: *Fritillaria unibracteata*, *Fritillaria delavayi*, *Fritillaria przewalskii*. Used part: bulb. TCM Effects: To clear heat and moisten lung, relieve cough and transform phlegm. TCM Indications: Lung heat cough, dry cough, chronic bronchitis, infection of upper respiratory tract, tuberculosis, gastric ulcer, duodenal ulcer, *yin* vacuity taxation cough, cough with phlegm and blood. Isolated compounds: 11002, 12275, 12276, 12277, 12278, 12279, 20056.
- T2784 *Fritillaria delavayi* (Liliaceae); LENG SHA BEI MU; Delavay Fritillary. Used part: bulb. TCM Effects: See *Fritillaria cirrhosa*. TCM Indications: See *Fritillaria cirrhosa*. Isolated compounds: 3630, 4996, 4997, 11002.
- T2785 *Fritillaria ebeiensis* (Liliaceae); E BEI BEI MU; Ebei Fritillary. Isolated compounds: 6658, 6660, 6661, 7959, 7961, 7962, 7963, 7964, 7967, 9680.
- T2786 *Fritillaria ebeiensis* var. *purpurea* (Liliaceae); ZI HUA E BEI BEI MU; Purpleflower Fritillary. Isolated compounds: 6657, 6659, 6660, 6661, 7958, 7965, 7966, 7968, 7969, 12168, 22998, 23001.
- T2787 *Fritillaria hupehensis* (Liliaceae); HU BEI BEI MU; Hupeh Fritillary. Used part: bulb. TCM Effects: To relieve cough and transform phlegm, resolve toxin and dissipate binds. TCM Indications: Externally contracted wind-heat cough, phlegm-heat cough, cough with profuse phlegm, scrofula, swollen welling abscess, mammary welling abscess, pulmonary welling abscess. Isolated compounds: 7960, 9679, 9680, 9681, 9682, 9683, 9684, 9685, 12168, 12169.
- T2788 *Fritillaria imperialis* (Liliaceae); XI BEI MU; Crown Imperial. Isolated compounds: 4990, 4996, 5645, 6657, 6661, 7794, 7928, 11002, 11004, 11005, 11244, 16773, 16988, 19828, 21466.
- T2789 *Fritillaria ningguoensis* (Liliaceae); NING GUO BEI MU; Ningguo Fritillary. Isolated compounds: 15613, 15614.
- T2790 *Fritillaria pallidiflora* (Liliaceae); YI BEI MU; Siberian Fritillary. Equivalent plant: *Fritillaria walujewii*. Used part: bulb. TCM Effects: To clear lung, transform phlegm, dissipate binds. TCM Indications: Lung heat cough, sticky phlegm and oppression in chest, consumption cough and hemoptysis, scrofula, swollen welling abscess. Isolated compounds: 6144, 11002, 11003, 16776, 22904, 22905, 22906, 22907.
- T2791 *Fritillaria persica* (Liliaceae); TAO BEI MU; Peach Fritillary\* Isolated compounds: 9681, 16989, 17020.
- T2792 *Fritillaria przewalskii* (Liliaceae); GAN SU BEI MU; Przewalsk Fritillary. Used part: bulb. TCM Effects: See *Fritillaria cirrhosa*. TCM Indications: See *Fritillaria cirrhosa*. Isolated compounds: 618, 3630, 4997, 11002, 21359.
- T2793 *Fritillaria puqiensis* (Liliaceae); PU QI BEI MU; Puqi Fritillary\*. Isolated compounds: 18208.
- T2794 *Fritillaria siechuanica* (Liliaceae); HUA XI BEI MU; Huaxi Fritillary. Isolated compounds: 16776.
- T2795 *Fritillaria taipaiensis* var. *ningxiaensis* (Liliaceae); NING XIA BEI MU; Ningxia Fritillary. Isolated compounds: 3630, 11002, 16776, 20624.
- Fritillaria thunbergii* = *Fritillaria verticillata* var. *thunbergii*
- T2796 *Fritillaria unibracteata* (Liliaceae); AN ZI BEI MU; Unibract Fritillary. Used part: bulb. TCM Effects: See *Fritillaria cirrhosa*. TCM Indications: See *Fritillaria cirrhosa*. Isolated compounds: 11002, 19983, 20074, 20280, 20446.
- T2797 *Fritillaria ussuriensis* (Liliaceae); PING BEI MU; Ussuri Fritillary. Used part: bulb. TCM Effects: To clear heat and moisten lung, relieve cough and transform phlegm. TCM Indications: Dry cough due to lung dryness, dry cough, *yin* vacuity taxation cough, cough with phlegm and blood. Isolated compounds: 618, 16773, 16774, 16776, 17379, 17380, 17381, 17382, 17383, 17384, 17385, 21359.
- T2798 *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*] (Liliaceae); ZHE BEI MU; Thunberg Fritillary. Used part: bulb. TCM Effects: To clear heat and resolve phlegm, dissipate binds and disperse swelling. TCM Indications: Chronic bronchitis, infection of upper respiratory tract, tuberculosis, gastric ulcer, duodenal ulcer, externally contracted wind-heat, phlegm fire cough, pulmonary welling abscess, mammary welling abscess, scrofula, sore toxin, depression in heart-chest. Isolated compounds: 618, 1475, 1963, 2110, 3945, 3946, 6658, 6661, 7155, 7157, 7957, 9220, 9221, 11244, 11770, 12168, 12169, 12181, 13984, 15767, 16773, 16774, 16775, 17337, 20056, 20057, 20058, 21359, 22431, 22432, 22993, 22994, 22995, 22996, 22997.
- T2799 *Fritillaria wabuensis* (Liliaceae); WA BU BEI MU; Wabu Fritillary\*. Isolated compounds: 11771.
- T2800 *Fritillaria walujewii* (Liliaceae); XIN JIANG BEI MU; Sinkiang Fritillary. Used part: bulb. TCM Effects: See *Fritillaria pallidiflora*. TCM Indications: See *Fritillaria pallidiflora*. Isolated compounds: 11002, 22326.
- T2801 *Frullania brasiliensis* (Frullaniaceae); BA XI ER YE TAI; Brazilian Ear-leaf Muscus\*. Isolated compounds: 6894, 6895, 21899.
- Frullania moniliata* = *Frullania tamarisci* ssp. *moniliata*
- T2802 *Frullania muscicola* (Frullaniaceae); KUI BAN ER YE TAI; Armet-petal Ear-leaf Muscus\*. Isolated compounds: 20371.
- T2803 *Frullania tamarisci* ssp. *moniliata* [Syn. *Frullania moniliata*] (Frullaniaceae); CHUAN ZHU ER YE TAI; Rosary Ear-leaf Muscus\*. Used part: frond. TCM Effects: To brighten eyes, clear heart, supplement kidney. TCM Indications: Red eyes with gall, blurred

- vision, vexation due to febrile disease. Isolated compounds: 20656.
- T2804 *Fuchsia* sp. (Onagraceae). Isolated compounds: 7518, 8311, 16836, 20910.
- T2805 *Fugu ocellatus* (Tetraodontidae); HE TUN; Globefish. Used part: meat. TCM Effects: To supplement liver and kidney, dispel damp and relieve pain. TCM Indications: Impotence, enuresis, dizziness, limp aching lumbus and knees, wind-damp impediment pain, itchy skin. Isolated compounds: 21210, 21211.
- T2806 *Fuligo candida* (Physaceae); LIANG BAI MEI RONG JUN; White Fuliga\*. Isolated compounds: 4466.
- T2807 *Fumaria officinalis* (Papaveraceae); YAO YONG QIU GUO ZI JIN; Medicinal Fumaria. Isolated compounds: 2734, 4290, 7996, 7997, 12952, 19284.
- T2808 *Fumaria parviflora* (Papaveraceae); XIAO HUA QIU GUO ZI JIN; Fine-leaved Fumitory. Isolated compounds: 4290, 5708, 16663.
- T2809 *Fumaria schleicheri* (Papaveraceae); YAN JIN; Schleicher Fumitory. Isolated compounds: 16446, 16663.
- T2810 *Fumaria vaillantii* (Papaveraceae); WEI LAN QIU GUO ZI JIN; Few-flowered Fumitory. Isolated compounds: 5708, 12602, 16663.
- T2811 *Funtumia elastica* (Apocynaceae); SI JIAO SHU; Silk-rubber Tree. Isolated compounds: 8010.
- T2812 *Fusarium acutatum*. Isolated compounds: 14451.
- T2813 *Fusarium equiseti*. Isolated compounds: 7221.
- T2814 *Fusarium nivale*. Isolated compounds: 15633.
- T2815 *Fusarium roseum*. Isolated compounds: 22618.
- T2816 *Fusarium* sp. Isolated compounds: 14719, 19296.
- T2817 *Fusarium tricinctum*. Isolated compounds: 22070.
- T2818 *Fuscoporia obliqua* (Polyporaceae); HUA HE KONG JUN; Oblique Fuscoporia\*. Isolated compounds: 8033.
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- T2819 *Gackstroemia decipiens* (Lepidolaenaceae); Liverwort. Isolated compounds: 164, 6109, 6110, 7141, 7165, 7175, 10582, 10678, 10679, 21829.
- T2820 *Gaillardia pulchella* (Asteraceae); TIAN REN JU; Rosering Gaillardia. Isolated compounds: 8047, 14205.
- T2821 *Galanthus elwelii* (Amaryllidaceae); DA XUE HUA LIAN; Giant Snowdrop. Isolated compounds: 15750.
- T2822 *Galanthus nivalis* (Amaryllidaceae); XUE HUA LIAN; Snowdrop. Isolated compounds: 8083, 15288.
- T2823 *Galanthus plicatus* ssp. *byzantinus* (Amaryllidaceae); TU ER QI XUE HUA LIAN; Turkish Snowdrop\*. Isolated compounds: 8084, 17560, 19633.
- T2824 *Galega officinalis* (Fabaceae); SHAN YANG DOU; Common Goatsrue. Isolated compounds: 8091, 10271, 11965.
- T2825 *Galeobdolon chinense* [Syn. *Lamium chinense*] (Lamiaceae); XIAO YE ZHI MA; China Weasel-snout. Used part: tuberoid. TCM Effects: To stanch bleeding. TCM Indications: Bleeding due to external injury. Isolated compounds: 580, 1496.
- T2826 *Galeola faberi* (Orchidaceae); SHAN HU LAN; Faber Galeola. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, regulate menstruation and stanch bleeding, promote astriction and stem desertion. TCM Indications: Damp-heat jaundice, dysentery with pus and blood, swelling toxin of sore and welling abscess, poisonous snake bite, menstrual disorder, flooding and spotting, prolapse of uterus, prolapse of rectum. Isolated compounds: 2453, 8237, 9833, 14056.
- T2827 *Galipea bracteata* (Rutaceae); BAO PIAN TU LA SHU; Bracteole Galipea\*. Isolated compounds: 16898, 17940.
- T2828 *Galipea longiflora* (Rutaceae); CHANG HUA TU LA SHU; Longflower Galipea\*. Isolated compounds: 16898, 17135, 17940.
- T2829 *Galipea officinalis* (Rutaceae); AN GU SI TU LA SHU; Angostura-bark Tree. Isolated compounds: 4421.
- T2830 *Galium aparine* (Rubiaceae); BA XIAN CAO; Catchweed Bedstraw. Used part: herb. TCM Effects: To clear damp heat, dissipate stasis, disperse swelling, resolve toxin. TCM Indications: Strangury-turbidity, hematuria, knocks and falls, intestinal welling abscess, swollen boil, otitis media. Isolated compounds: 1892, 6454, 9458, 11812.
- T2831 *Galium glaucum* (Rubiaceae); FEN LU ZHU YANG YANG; Glaucous Bedstraw\*. Isolated compounds: 14933.
- T2832 *Galium mollugo* (Rubiaceae); SU ZHU YANG YANG; Hedge Bedstraw. Isolated compounds: 9458, 14901.
- T2833 *Galium rivale* (Rubiaceae); XI LIU ZHU YANG YANG; River Bedstraw\*. Isolated compounds: 18850, 18851, 18852.
- T2834 *Galium* sp. (Rubiaceae). Isolated compounds: 899, 901, 13041, 18222.
- T2835 *Galium verum* (Rubiaceae); PENG ZI CAI; Yellow Bedstraw. Used part: herb. TCM Effects: To clear heat and resolve toxin, move blood and relieve itch. TCM Indications: Hepatitis, painful swelling throat moth, clove sore and swollen boil, paddy field dermatitis, urticaria, knocks and falls, blood *qi* pain. Isolated compounds: 1892, 3551, 14805, 16578, 17169, 17470, 19000.
- T2836 *Gallus gallus domesticus* (Phasianidae); JI NAO; Chicken Brain. Used part: brain. TCM Effects: To extinguish wind and check tetany. TCM Indications: Difficult delivery, child fright epilepsy, infant night crying. Isolated compounds: 2373, 3511.
- T2837 *Gallus gallus domesticus* (Phasianidae); JI ROU; Chicken. Used part: meat. TCM Effects: To warm center, boost *qi*, supplement essence and replenish marrow. TCM Indications: Vacuity taxation with marked emaciation, weakness during convalescence, reduced food intake, stomach reflux, diarrhea and dysentery, diabetes mellitus, edema, frequent urination, flooding and spotting, vaginal discharge, postpartum scant milk. Isolated compounds: 14490.
- T2838 *Gallus gallus domesticus* (Phasianidae); JI NEI JIN; Chicken's Gizzard Endothelium. Used part: dried lining membrane of gizzard. TCM Effects: To fortify spleen and disperse food, rough essence and arrest emission, disperse concretion and transform stone. TCM Indications: Indigestion, food stagnation, vomiting nausea, diarrhea and dysentery, child *gan* accumulation, emission, enuresis, frequent urination, calculus of urinary system, gallstones, amenorrhea with concretion and conglomeration, throat impediment with nipple moth, *gan* of teeth and gum, mouth sore. Isolated compounds: 1048, 1350.
- T2839 *Gallus gallus domesticus* (Phasianidae); JI ZI BAI; Hen's Egg-albumen. Used part: egg white. TCM Effects: To moisten lung and disinhibit throat, clear heat and resolve toxin. TCM Indications: Deep-lying heat sore pharynx, aphonia, red eyes, vexation and fullness, cough and counterflow, dysentery, jaundice, swelling toxin of sore and



- welling abscess, burns and scalds. Isolated compounds: 1042, 13126.
- T2840 *Gallus gallus domesticus* (Phasianidae); JI ZI HUANG; Hen's Egg Yolk. Used part: egg yolk. TCM Effects: To enrich *yin* and moisten dryness, nourish blood and extinguish wind. TCM Indications: Insomnia and vexation, febrile diseases tetanic reversal, vacuity taxation blood ejection, retching counterflow, dysentery, scalds, heat sore, hepatitis, child indigestion. Isolated compounds: 1042, 13126, 15528.
- T2841 *Gallus gallus domesticus* (Phasianidae); JI ZI KE; Hen's Egg Shell. Used part: egg shell. TCM Effects: To promote astriction, inhibit acid, strengthen bones, stanch bleeding, brighten eyes. TCM Indications: Stomach duck pain, stomach reflux, acid vomiting, rachitis in children, various hemorrhage, eye screen, *gan* sore pox toxin. Isolated compounds: 17730.
- T2842 *Galtonia candicans* (Liliaceae); XIA FENG XIN ZI; Summer-hyacinth. Isolated compounds: 1578, 3724, 6107, 7081, 8691, 8699.
- T2843 *Gambeya boukokoensis* (Sapotaceae). Isolated compounds: 8129, 8130, 8131.
- T2844 *Ganoderma applanatum* (Polyporaceae); SHU SHE; Tongue-on-tree. Used part: sporocarp. TCM Effects: To eliminate inflammation, anticancer. TCM Indications: Pharyngolaryngitis, carcinoma of esophagus, nasopharyngeal carcinoma. Isolated compounds: 6168, 8163, 8164, 10759, 14231, 14397, 14456, 14458, 14459, 21100, 21859.
- T2845 *Ganoderma capense* (Polyporaceae); BAO GAI LING ZHI; Cape Ganoderma. Isolated compounds: 8192, 8193, 8194.
- T2846 *Ganoderma japonicum* [Syn. *Ganoderma sinense*] (Polyporaceae); ZI ZHI; Japanese Ganoderma. Used part: dried sporocarp. TCM Effects: See *Ganoderma lucidum*. TCM Indications: See *Ganoderma lucidum*. Isolated compounds: 7250, 7996, 8753.
- T2847 *Ganoderma lipsiense* (Polyporaceae). Isolated compounds: 8162, 8172.
- T2848 *Ganoderma lucidum* (Polyporaceae); LING ZHI; Lucid Ganoderma. Equivalent plant: *Ganoderma japonicum*. Used part: dried sporocarp. TCM Effects: To boost *qi*-blood, quiet heart and spirit, fortify spleen and stomach, lower cholesterol. TCM Indications: Hyperlipemia, coronary heart disease, angina pectoris, septicemia, carcinoma, hepatitis, vacuity taxation, palpitation, insomnia, dizziness, fatigue hypodynamia, enduring cough and asthma, chronic bronchitis, silicosis. Isolated compounds: 618, 618, 4743, 5608, 5619, 5620, 5946, 7246, 7250, 7251, 8148, 8149, 8150, 8151, 8152, 8153, 8154, 8155, 8156, 8157, 8158, 8159, 8160, 8161, 8165, 8166, 8167, 8168, 8169, 8170, 8171, 8173, 8174, 8175, 8176, 8177, 8178, 8179, 8180, 8181, 8182, 8183, 8184, 8185, 8186, 8187, 8188, 8189, 8190, 8191, 8195, 8196, 8197, 8198, 8199, 8200, 10320, 12482, 12483, 12484, 12485, 12486, 13019, 13020, 13021, 13023, 13024, 13025, 13026, 13027, 13028, 13029, 13030, 13031, 13032, 13033, 13034, 13035, 13036, 13037, 13038, 13039, 13040, 13048, 13049, 13050, 13052, 14231, 14237, 14457, 14460, 14559, 14560, 14561, 14562, 14563, 14564, 14565, 16335, 16336, 18841, 22068, 22069.  
*Ganoderma sinense* = *Ganoderma japonicum*
- T2849 *Garcinia afzelii* (Clusiaceae); A FU ZE LI SHAN ZHU ZI; Afzeli *Garcinia*\*. Isolated compounds: 679, 680.
- T2850 *Garcinia bancana* (Clusiaceae). Isolated compounds: 8218, 21132.
- T2851 *Garcinia cambogia* (Clusiaceae); TENG HUANG SHAN ZHU ZI; Camboge *Garcinia*\*. Isolated compounds: 8218.
- T2852 *Garcinia cowa* (Clusiaceae); YUN NAN SHAN ZHU ZI; Yunnan *Garcinia*. Used part: stem-leaf. TCM Effects: To clear heat and resolve toxin, expel worms. TCM Indications: Eczema, stomatitis, periodontitis, ulcerating welling abscess and sore, burns and scalds, leech in nose. Isolated compounds: 4195, 4196, 4197, 4198, 4199, 4200, 4201, 4202, 5974, 7974, 13495, 15728, 21768, 21780.
- T2853 *Garcinia dulcis* (Clusiaceae); TIAN SHAN ZHU ZI; Dulcin *Garcinia*\*. Isolated compounds: 1476, 2334, 2685, 2685, 3029, 3475, 3850, 4196, 4200, 4202, 4202, 4220, 5227, 5276, 5926, 5926, 6622, 6623, 6624, 6625, 6626, 6627, 6628, 6629, 6630, 6631, 6633, 6853, 7991, 8218, 8218, 8219, 8219, 8221, 8235, 8246, 10662, 10803, 10887, 11514, 11527, 11564, 12018, 12060, 13088, 13492, 13492, 13493, 14969, 14969, 14988, 14988, 15951, 17588, 18674, 18755, 20150, 21481, 21768, 22581, 22609, 22759, 22760.
- T2854 *Garcinia eugenifolia* (Clusiaceae); ZHEN YE TENG HUANG; Realeaf *Garcinia*\*. Isolated compounds: 6011.
- T2855 *Garcinia gaudichaudii* (Clusiaceae); GAO DI CHA SHAN ZHU ZI; Gaudicha *Garcinia*\*. Isolated compounds: 8239.
- T2856 *Garcinia griffithii* (Clusiaceae); GE LI FEI SI TENG HUANG; Griffith *Garcinia*\*. Isolated compounds: 9091.
- T2857 *Garcinia hanburyi* (Clusiaceae); TENG HUANG SHU; Hanbury *Garcinia*\*. Used part: resin. TCM Effects: To attack toxin, disperse swelling, eliminate putridity and close sores, stanch bleeding, kill worms. TCM Indications: Swelling toxin of welling abscess and flat abscess, ulcer, damp sore, carcinoma, intractable lichen, painful swelling from knocks and falls, bleeding due to external injury, scalds. Isolated compounds: 5175, 8128, 8238, 9207, 11433, 11542, 14967, 14968, 14970, 15394.
- T2858 *Garcinia hombroniana* (Clusiaceae); SHAN FENG GUO; Mountainous *Garcinia*. Isolated compounds: 10128, 10572, 14303, 14781.
- T2859 *Garcinia indica* (Clusiaceae); YIN DU TENG HUANG; Indian *Garcinia*\*. Isolated compounds: 8218.
- T2860 *Garcinia kola* (Clusiaceae); KE LE TENG HUANG; Kola *Garcinia*\*. Isolated compounds: 9393, 12255, 12256.
- T2861 *Garcinia linii* (Clusiaceae); TAI WAN LV DAO TENG HUANG; Lanyu *Garcinia*. Isolated compounds: 2005, 2694, 5841, 5843, 6010, 6165, 6181, 6183, 8203, 8204, 8205, 8556, 10462, 12886, 12887, 12888, 13808, 14572, 18754.
- T2862 *Garcinia macrophylla* (Clusiaceae). Isolated compounds: 9089, 9090.
- T2863 *Garcinia mangostana* (Clusiaceae); DAO NIAN ZI; Mangosteen. Isolated compounds: 1277, 1928, 2685, 4196, 5064, 5276, 5276, 5925, 5926, 5926, 6158, 6629, 6853, 8206, 8207, 8208, 8209, 8219, 8219, 8220, 8221, 8221, 8222, 8222, 8235, 10199, 10250, 11526, 11526, 11527, 13296, 13484, 13485, 13486, 13487, 13488, 13489, 13490, 13491, 13492, 13492, 13492, 13493, 13493, 13494, 13494, 13495, 13496, 14577, 15715, 17866, 17867, 17869, 17888, 21133, 21358, 21481, 21503, 21723.
- T2864 *Garcinia mannii* (Clusiaceae); MAN TENG HUANG; Mann *Garcinia*\*. Isolated compounds: 13502, 22759.

- T2865 *Garcinia merguensis* (Clusiaceae). Isolated compounds: 13782.
- T2866 *Garcinia morella* (Clusiaceae); TENG HUANG; Gamboge Tree Resin. Used part: balsam. TCM Effects: To disperse swelling and resolve toxin, stanch bleeding and kill worms. TCM Indications: Swelling toxin of welling abscess and flat abscess, intractable lichen, malign sore, bleeding due to external injury, *gan* of teeth and gum, burns and scalds. Isolated compounds: 5196, 5651, 7401, 8128, 11540, 11541, 11659, 14967, 14968, 14969, 15394.
- T2867 *Garcinia multiflora* (Clusiaceae); SHAN ZHU ZI; Manyflower *Garcinia*. Used part: bark or fruit. TCM Effects: To clear heat and engender liquid. TCM Indications: Stomach heat fluid damage, vomiting, thirst, lung heat *qi* counterflow, incessant cough. Isolated compounds: 2382, 2383, 5505, 5506, 5819, 6165, 7991, 8210, 8211, 8243, 8244, 8245, 8246, 9543, 13296, 14969, 15279, 15715, 20158, 21082, 21125, 21715, 22609, 22760.
- T2868 *Garcinia nigrolineata* (Clusiaceae); HEI XIAN TIAO TENG HUANG; Nigroline *Garcinia*\*. Isolated compounds: 1135, 2595, 5184, 5276, 5925, 5926, 7951, 12560, 15572, 15573, 15574, 15575, 15576, 15577, 15578, 15579, 15580, 15581, 15582, 15583, 15584, 15585, 15586, 15587, 15588, 15589, 15590, 15591, 15592, 18755, 21482, 21747, 21748.
- T2869 *Garcinia ovalifolia* (Clusiaceae); LUAN YE TENG HUANG; Ovateleaf *Garcinia*\*. Isolated compounds: 9857, 22759.
- T2870 *Garcinia polyantha* (Clusiaceae); DUO HUA TENG HUANG; Manyflower *Garcinia*\*. Isolated compounds: 2135, 2136.
- T2871 *Garcinia pseudoguttifera* (Clusiaceae); FEI JI TENG HUANG; Fiji *Garcinia*\*. Isolated compounds: 15224, 15225, 18027, 22550.
- T2872 *Garcinia scortechinii* (Clusiaceae). Isolated compounds: 19546, 19547, 19548, 19549, 19550, 19551, 19552, 19553, 19554, 19555, 19556, 19557, 19558, 19559, 19560, 19561.
- T2873 *Garcinia smeathmannii* (Clusiaceae). Isolated compounds: 20018, 20019.
- T2874 *Garcinia* sp. (Clusiaceae). Isolated compounds: 13809.
- T2875 *Garcinia speciosa* (Clusiaceae); MEI LI TENG HUANG; Beautiful *Garcinia*\*. Isolated compounds: 274, 467, 536, 537, 5276, 5947, 6853, 7125, 7126, 7127, 8223, 8224, 8225, 8226, 10571, 10572, 14298, 14299, 14302, 14315, 14407, 14518.
- T2876 *Garcinia* spp. (Clusiaceae). Isolated compounds: 6181.
- T2877 *Garcinia subelliptica* (Clusiaceae); FU MU. Isolated compounds: 8213, 8214, 8215, 8216, 8217.
- T2878 *Garcinia vilersiana* (Clusiaceae). Isolated compounds: 8558, 9994, 14467, 20435, 20436, 20526, 21960.
- T2879 *Garcinia virgata* (Clusiaceae); DUO ZHI ZHI TENG HUANG. Isolated compounds: 5965, 6415, 6416, 9003, 21417, 22524, 22525.
- T2880 *Garcinia xanthochymus* (Clusiaceae); DA YE TENG HUANG; Yellowjuice *Garcinia*. Isolated compounds: 8212, 9994, 11782, 13808, 21099, 21168, 21783, 22759.  
*Gardenia florida* = *Gardenia jasminoides*
- T2881 *Gardenia gummifera* (Rubiaceae); JIAO ZHI ZI; Gummy *Gardenia*\*. Isolated compounds: 13264.
- T2882 *Gardenia jasminoides* [Syn. *Gardenia florida*] (Rubiaceae); ZHI ZI; Cape Jasmine Fruit. Used part: ripe fruit. TCM Effects: To drain fire and relieve dysphoria, clear heat and disinhibit urine, eliminate heat in blood, stanch bleeding. TCM Indications: Acute icterohepatitis, febrile diseases, vexation, melancholia, restlessness, stagnation of damp-heat in liver and gall, fever, jaundice, short voidings of reddish urine, blood ejection, spontaneous external bleeding, dysentery with hematochezia and hematuria. Isolated compounds: 397, 1792, 1892, 2925, 3551, 4160, 4245, 4249, 4716, 4717, 5411, 5412, 5414, 7070, 8227, 8228, 8230, 8231, 8234, 8273, 8274, 8276, 8277, 10596, 14282, 14296, 14605, 14691, 14722, 15660, 17331, 19455, 19795, 19983, 22270.
- T2883 *Gardenia jasminoides* [Syn. *Gardenia florida*] (Rubiaceae); ZHI ZI YE; Cape Jasmine Leaf. Used part: leaf. TCM Effects: To disperse swelling and resolve toxin, dispel wind and relieve pain. TCM Indications: Knocks and falls, toxin of clove sore, hemorrhoids, chancre. Isolated compounds: 6829, 8276.
- T2884 *Gardenia jasminoides* var. *grandiflora* (Rubiaceae); SHUI ZHI; Bigflower Cape Jasmine. Used part: fruit. TCM Effects: To clear heat and resolve toxin, disperse swelling and relieve pain. TCM Indications: Heat toxin, jaundice, nosebleed(epistaxis), nephritis with edema, sprain and contusion. Isolated compounds: 4249, 4717, 6632, 8231, 8274, 8276, 13504.
- T2885 *Gardenia jasminoides* var. *grandiflora* (Rubiaceae); SHUI ZHI YE; Bigflower Cape Jasmine Leaf. Used part: leaf. TCM Effects: To disperse swelling. TCM Indications: Knocks and falls. Isolated compounds: 6632, 8276.
- T2886 *Gardenia* sp. (Rubiaceae). Isolated compounds: 107.
- T2887 *Gardenia thailandica* (Rubiaceae); TAI GUO ZHI ZI; Thailand *Gardenia*\*. Isolated compounds: 6072, 6149, 8229, 9952, 10163, 10597, 18294, 21233.
- T2888 *Garrya ovata* var. *lindheimeri* (Garryaceae). Isolated compounds: 16279.
- T2889 *Garrya veatchii* (Garryaceae). Isolated compounds: 22360.
- T2890 *Gastrodia elata* (Orchidaceae); TIAN MA; Tall *Gastrodia*. Used part: stem and tuber. TCM Effects: To extinguish wind and check tetany, calm liver and subdue *yang*, dispel wind and free network vessels. TCM Indications: Convulsion, child convulsion, spasm in limbs, facial muscle spasm, trigeminal neuralgia, numbness in limbs, acute fright wind, chronic fright wind, tetanus, dizziness, headache, hemiplegia, hypertension, wind-damp impediment pain. Isolated compounds: 2458, 2459, 3766, 4680, 5866, 7412, 8236, 8237, 9486, 9815, 9833, 9839, 9849, 9850, 17968, 19983, 20444, 20446, 22034, 22336, 22346.
- T2891 *Gaultheria fragrantissima* (Ericaceae); FANG XIANG BAI ZHU; Fragrant *Gaultheria*. Isolated compounds: 8242, 13250, 13977.
- T2892 *Gaultheria griffithiana* (Ericaceae); WEI YE BAI ZHU; Long Acuminate Leaves *Gaultheria*. Isolated compounds: 8242, 13250, 13977.
- T2893 *Gaultheria leucocarpa* var. *cumingiana* (Ericaceae); BAI ZHU SHU; Common *Gaultheria*. Isolated compounds: 8242, 13250, 13977.
- T2894 *Gaultheria tetramera* (Ericaceae); SI LIE BAI ZHU; Four Sepals *Gaultheria*. Isolated compounds: 8242, 13250, 13977.
- T2895 *Gaultheria yunnanensis* (Ericaceae); DIAN BAI ZHU SHU; Yunnan *Gaultheria*. Used part: whole herb or root. TCM Effects: To dispel wind and eliminate damp, dissipate cold and relieve pain, quicken blood and free network vessels, relieve cough and transform phlegm. TCM Indications: Wind-damp impediment pain, stomach cold pain,

- knocks and falls, cough with profuse phlegm. Isolated compounds: 8240, 8241, 8242, 11479, 13250, 13976, 13977, 19187.
- T2896 *Gelasinospora santi-florii*; Fungus *Gelasinospora santi-florii*. Isolated compounds: 3164, 10527.
- T2897 *Gelsemium elegans* (Loganiaceae); GOU WEN; Graceful Jessamine. Used part: whole herb. TCM Effects: To dispel wind and attack toxin, disperse swelling and relieve pain, anticancer (itself with high toxicity). TCM Indications: Nose carcinoma, eczema, neuralgia, wind-damp impediment pain, scab and *lai*, scrofula, clove sore, knocks and falls. Isolated compounds: 161, 824, 825, 5253, 5254, 5661, 6738, 7039, 8252, 8253, 8254, 8255, 8257, 8258, 8260, 8261, 9658, 9659, 9660, 9661, 10000, 10001, 10002, 10003, 10004, 10010, 10136, 10168, 10169, 10671, 12288, 12289, 12290, 13938, 13948, 13961, 16338, 18543, 20579.
- T2898 *Gelsemium rankinii* (Loganiaceae). Isolated compounds: 9660.
- T2899 *Gelsemium sempervirens* (Loganiaceae); CHANG LV GOU WEN; Carolina Jasmine. Isolated compounds: 8256, 8257, 9016, 9017, 9018, 9019, 10698, 19697.
- T2900 *Genipa americana* (Rubiaceae); JING NI PING; Genipa. Isolated compounds: 8231, 8266, 8267, 8268, 8269, 8272, 8273, 8274, 8275, 8276, 8277.
- T2901 *Genista tinctoria* (Fabaceae); RAN LIAO MU; Common Woadwaxen. Isolated compounds: 8278, 8282.
- T2902 *Gentiana algida* (Gentianaceae); BAI HUA LONG DAN; Alpine Gentian. Used part: whole herb with root. TCM Effects: To drain fire and resolve toxin, suppress cough, disinherit damp. TCM Indications: Common cold with fever, lung heat cough, sore pharynx, red eyes, dribbling pain of urination, scrotal eczema. Isolated compounds: 1343, 5676, 5772, 6321, 7855, 8297, 8603.
- T2903 *Gentiana bavarica* (Gentianaceae); BA FA LI YA LONG DAN; Bavarian Gentian. Isolated compounds: 20510.
- T2904 *Gentiana brachyphylla* (Gentianaceae); DUAN YE LONG DAN; Shortleaf Gentian\*. Isolated compounds: 20510.
- T2905 *Gentiana burseri* (Gentianaceae); BU SHI LONG DAN; Burser Gentian\*. Isolated compounds: 8304.
- T2906 *Gentiana campestris* (Gentianaceae); TIAN YE LONG DAN; Meadow Gentian. Isolated compounds: 2220, 15718, 15800, 20511.
- T2907 *Gentiana caucasa* (Gentianaceae); GAO JIA SUO LONG DAN; Caucasian Gentian\*. Isolated compounds: 8293.
- T2908 *Gentiana cephalantha* (Gentianaceae); TOU HUA LONG DAN; Headflower Gentian. Used part: root and rhizome. TCM Effects: See *Gentiana scabra*. TCM Indications: See *Gentiana scabra*. Isolated compounds: 8304, 20509.
- T2909 *Gentiana crassicaulis* (Gentianaceae); CU JING QIN JIAO; Thickstem Gentian. Used part: dried root. TCM Effects: See *Gentiana macrophylla*. TCM Indications: See *Gentiana macrophylla*. Isolated compounds: 8297, 8304, 12949, 20503, 20509.
- T2910 *Gentiana dahurica* (Gentianaceae); DA WU LI QIN JIAO; Dahuria Gentian. Used part: dried root. TCM Effects: See *Gentiana macrophylla*. TCM Indications: See *Gentiana macrophylla*. Isolated compounds: 8297, 8304.
- T2911 *Gentiana germanica* (Gentianaceae); DE GUO LONG DAN; German Gentian. Isolated compounds: 20511.
- T2912 *Gentiana japonica* (Gentianaceae); RI BEN LONG DAN; Japanese Gentian\*. Isolated compounds: 20510.
- T2913 *Gentiana kaufmanniana* (Gentianaceae); ZHONG YA QIN JIAO; Central Asia Gentian. Used part: dried root. TCM Effects: See *Gentiana macrophylla*. TCM Indications: See *Gentiana macrophylla*. Isolated compounds: 8293.
- T2914 *Gentiana kochiana* (Gentianaceae); KU HE LONG DAN; Koch Gentian\*. Isolated compounds: 8290, 14732, 20510.
- T2915 *Gentiana kuroo* (Gentianaceae); KU RUO LONG DAN; Kuroo Gentian\*. Isolated compounds: 19540.
- T2916 *Gentiana lactea* (Gentianaceae); RU BAI LONG DAN; Milky Gentian\*. Isolated compounds: 2220, 20502.
- T2917 *Gentiana leptoclada* (Gentianaceae); MAN ZHI LONG DAN; Spread Gentian. Isolated compounds: 8304.
- T2918 *Gentiana lutea* (Gentianaceae); HUANG LONG DAN; Yellow Gentian. Isolated compounds: 1017, 1110, 1113, 2335, 6011, 7339, 8304, 8306, 10124, 11436, 12889, 12890, 13098, 13916, 19631, 19632, 22261, 22267, 22289.
- T2919 *Gentiana macrophylla* (Gentianaceae); QIN JIAO; Largeleaf Gentian. Equivalent plant: *Gentiana crassicaulis*, *Gentiana straminea*, *Gentiana dahurica*, *Gentiana tianschanica*, *Gentiana tibetica*, *Gentiana kaufmanniana*, *Gentiana siphonantha*. Used part: dried root. TCM Effects: To dispel wind-damp, clear damp heat, relieve pain due to impediment. TCM Indications: Wind-damp impediment pain, hypertonicity of sinews and vessels, aching pain in joints, late afternoon tidal fever, child *gan* accumulation with fever. Isolated compounds: 7335, 7336, 8296, 8297, 8304, 8636, 12344, 13322, 13323, 13324, 13840, 14606, 18292, 18861.
- T2920 *Gentiana makinoi* (Gentianaceae); MU YE LONG DAN; Pasture Gentian\*. Isolated compounds: 8302.
- T2921 *Gentiana manshurica* (Gentianaceae); DONG BEI LONG DAN; Linearleaf Gentian. Used part: root and rhizome. TCM Effects: See *Gentiana scabra*. TCM Indications: See *Gentiana scabra*. Isolated compounds: 1017, 1020, 8304, 20509.
- T2922 *Gentiana nivalis* (Gentianaceae); XUE LONG DAN; Snow Gentian. Isolated compounds: 8290, 20510.
- T2923 *Gentiana olgae* (Gentianaceae); AO LIE GE LONG DAN; Olga Gentian\*. Isolated compounds: 8292, 8293.
- T2924 *Gentiana olivieri* (Gentianaceae); AO SHI LONG DAN; Olivier Gentian\*. Isolated compounds: 8292, 8293, 8295.
- T2925 *Gentiana pedicellata* (Gentianaceae); HUA GENG LONG DAN; Pedicellate Gentian. Isolated compounds: 16761, 16762.
- T2926 *Gentiana ramosa* (Gentianaceae); DUO ZHI LONG DAN; Ramose Gentian\*. Isolated compounds: 20511.
- T2927 *Gentiana rhodantha* (Gentianaceae); HONG HUA LONG DAN; Redflower Gentian. Used part: whole herb with root. TCM Effects: To clear heat and disinherit damp, cool blood and resolve toxin. TCM Indications: Cough and asthma due to lung heat, consumption cough with phlegm and blood, jaundice, dysentery, bloody stool, inhibited urination, postpartum fever, infant fright wind, *gan* accumulation, toxin swelling of sores, burns and scalds, snake bite. Isolated compounds: 8304, 20509.
- T2928 *Gentiana rigescens* (Gentianaceae); DIAN LONG DAN; Rigescens

- Gentian. Used part: root and rhizome. TCM Effects: See *Gentiana scabra*. TCM Indications: See *Gentiana scabra*. Isolated compounds: 1017, 1020, 8294, 8296, 8297, 8304, 19983, 20509.
- T2929 *Gentiana robusta* (Gentianaceae); CU ZHUANG LONG DAN; Robust Gentian\*. Isolated compounds: 8304, 20509.
- T2930 *Gentiana scabra* (Gentianaceae); LONG DAN; Rough Gentian. Equivalent plant: *Gentiana manshurica*, *Gentiana triflora*, *Gentiana rigescens*, *Gentiana cephalantha*. Used part: root and rhizome. TCM Effects: To clear heat and dry damp, drain liver and settle fright, lower blood pressure. TCM Indications: Acute icterohepatitis, urinary tract infection, acute conjunctivitis, dribbling pain of urination, damp-heat jaundice, genital swelling and itch, damp-heat vaginal discharge, distended head and headache due to liver-gallbladder repletion fire, red eyes with gall, deafness, swelling in ear, pain in rib-side, bitter taste, fright wind and convulsion. Isolated compounds: 1017, 1020, 8297, 8298, 8303, 8304, 8305, 8603, 8635, 8636, 12949, 16087, 18848, 19448, 20503, 20509, 21630.
- T2931 *Gentiana scabra* var. *buesgeri* (Gentianaceae); CU CAO LONG DAN; Scabrous Gentian\*. Isolated compounds: 8304.
- T2932 *Gentiana siphonantha* (Gentianaceae); GUAN HUA QIN JIAO; Tubeflower Gentian. Used part: dried root. TCM Effects: See *Gentiana macrophylla*. TCM Indications: See *Gentiana macrophylla*. Isolated compounds: 8297.
- T2933 *Gentiana* sp. (Gentianaceae). Isolated compounds: 8307.
- T2934 *Gentiana straminea* (Gentianaceae); MA HUA JIAO; Straw-coloured Gentian. Used part: dried root. TCM Effects: See *Gentiana macrophylla*. TCM Indications: See *Gentiana macrophylla*. Isolated compounds: 8297, 8304.
- T2935 *Gentiana thunbergii* (Gentianaceae); ZAN SHI LONG DAN; Thunberg Gentian\*. Isolated compounds: 14982, 20708.
- T2936 *Gentiana tianschanica* (Gentianaceae); TIAN SHAN QIN JIAO; Tianshan Mountain Gentian. Used part: dried root. TCM Effects: See *Gentiana macrophylla*. TCM Indications: See *Gentiana macrophylla*. Isolated compounds: 8293, 8297, 8303.
- T2937 *Gentiana tibetica* (Gentianaceae); XI ZANG QIN JIAO; Tibet Gentian. Used part: dried root. TCM Effects: See *Gentiana macrophylla*. TCM Indications: See *Gentiana macrophylla*. Isolated compounds: 7435, 8291, 8297, 10174, 11435, 11517, 13321.
- T2938 *Gentiana triflora* (Gentianaceae); SAN HUA LONG DAN; Threeflower Gentian. Used part: root and rhizome. TCM Effects: See *Gentiana scabra*. TCM Indications: See *Gentiana scabra*. Isolated compounds: 1020, 8304.
- T2939 *Gentiana turkestanorum* (Gentianaceae); TU ER QI SI TAN LONG DAN; Turkestan Gentian\*. Isolated compounds: 8292, 8293, 8295.
- T2940 *Gentianella nitida* (Gentianaceae); GUANG LIANG JIA LONG DAN; Shining Gentianella\*. Isolated compounds: 1019, 4845.
- T2941 *Gentianopsis paludosa* (Gentianaceae); SHI SHENG BIAN LEI; Swampy Gentianopsis. Used part: whole herb. TCM Effects: To clear heat and disinhibit damp, resolve toxin. TCM Indications: Common cold with fever, hepatitis, cholecystitis, nephropylitis, red eyes with gall, infant diarrhea, swelling toxin of sore and boil. Isolated compounds: 13137, 22270.
- Gerardia japonica* = *Phtheiospermum japonicum*
- T2942 *Geraea canescens*. Isolated compounds: 21711, 21857.
- T2943 *Geranium nepalense* (Geraniaceae); NI BO ER LAO GUAN CAO; Nepal Cranesbill. Used part: aerial parts. TCM Effects: See *Geranium wilfordii*. TCM Indications: See *Geranium wilfordii*. Isolated compounds: 12018.
- T2944 *Geranium pratense* (Geraniaceae); CAO YUAN LAO GUAN CAO; Meadow Cranesbill. Used part: aerial parts. TCM Effects: See *Geranium wilfordii*. TCM Indications: See *Geranium wilfordii*. Isolated compounds: 1047, 3490, 5519, 6853, 8095, 8109.
- T2945 *Geranium pratense* ssp. *funitimum* (Geraniaceae); QU YU CAO DI LAO GUAN CAO. Isolated compounds: 3550, 15178.
- T2946 *Geranium robertianum* (Geraniaceae); XIAN XI LAO GUAN CAO; Robert Cranesbill. Used part: whole herb. TCM Effects: To dispel wind and eliminate damp, resolve toxin and disperse swelling. TCM Indications: Wind-damp impediment pain, sprain and contusion, swollen welling abscess, sore and boil, measles papules, prolapse of uterus. Isolated compounds: 16836.
- T2947 *Geranium sibiricum* (Geraniaceae); SHU ZHANG LAO GUAN CAO; Siberian Cranesbill. Used part: aerial parts. TCM Effects: See *Geranium wilfordii*. TCM Indications: See *Geranium wilfordii*. Isolated compounds: 6757, 8095.
- T2948 *Geranium* sp. (Geraniaceae). Isolated compounds: 8311.
- T2949 *Geranium wilfordii* (Geraniaceae); LAO GUAN CAO; Wilford Cranesbill. Equivalent plant: *Erodium stephanianum*, *Geranium sibiricum*, *Geranium nepalense*, *Geranium pratense*. Used part: aerial parts. TCM Effects: To dispel wind-damp, free channels and network vessels, check dysentery and diarrhea. TCM Indications: Wind-damp impediment pain, hypertonicity and numbness, aching sinews and bones, diarrhea and dysentery. Isolated compounds: 10887.
- T2950 *Gerbera anandria* [Syn. *Leibnitzia anandria*] (Asteraceae); DA DING CAO; Gerbera. Used part: whole herb. TCM Effects: To clear heat and disinhibit damp, resolve toxin and disperse swelling. TCM Indications: Lung heat cough, damp-heat diarrhea dysentery, heat strangury, pain in joints due to rheumatism, swelling toxin of welling abscess and boil, ulcer of lower limb, snake or insect bites, bleeding due to external injury. Isolated compounds: 5918, 5994, 8333, 8334, 14255, 14256.
- T2951 *Gerbera jamesonii* (Asteraceae); FU LANG HUA; Flameray Gerbera. Isolated compounds: 1102, 22465.
- T2952 *Gerbera piloselloides* (Asteraceae); MAO DA DING CAO; Pilose Gerbera. Used part: root. TCM Effects: See *Tylophora ovata*. TCM Indications: See *Tylophora ovata*. Isolated compounds: 4530, 5142, 5396, 5397, 10254, 10646, 17366, 17367.
- T2953 *Gerronema* spp. Isolated compounds: 8360, 8361, 8362, 8363, 8364, 8365.
- T2954 *Getonia floribunda* (Combretaceae); Nguang-Chum; Duang-Sum (local names). Isolated compounds: 3940, 3941.
- T2955 *Geum japonicum* (Rosaceae); SHUI YANG MEI; Japanese Avens. Used part: whole herb. TCM Effects: To supplement vacuity and boost kidney, quicken blood and resolve toxin. TCM Indications: Exterior vacuity and common cold, dizziness and dim vision, lassitude in limbs, emission, impotence, cough with blood ejection, vacuity cold and abdominal pain, menstrual disorder, swelling of sores, fracture. Isolated compounds: 6178, 8250, 8263, 15539, 20910.

- T2956 *Geum japonicum* (Rosaceae); SHUI YANG MEI GEN; Japanese Avens Root. Used part: root. TCM Effects: To supplement vacuity and boost kidney, quicken blood and resolve toxin. TCM Indications: wind-cold common cold, diarrhea and dysentery, kidney vacuity dizziness. Isolated compounds: 8250.
- T2957 *Geum* sp. (Rosaceae). Isolated compounds: 15477.
- T2958 *Geum urbanum* (Rosaceae); XIANG CAO SHUI YANG MEI; Herb Bennet. Isolated compounds: 18265.
- T2959 *Gibberella fujikuroi* TENG CANG CHI MEI. Isolated compounds: 272, 5872, 5873, 10084, 21725.
- T2960 *Gibberella zeae* DAO CHI MEI JUN. Isolated compounds: 22974.
- T2961 *Ginkgo biloba* (Ginkgoaceae); BAI GUO; Ginkgo Nut. Used part: nut. TCM Effects: To constrain lung and settle asthma, check turbid vaginal discharge, reduce urine. TCM Indications: AD syndrome, primary degenerative dementia of Alzheimer disease, multi-infarct dementia, improving cognitive function in elderly dementia patients, stable intermittent claudication, cerebrovascular insufficiency diseases, cough with profuse phlegm, vaginal discharge, enuresis and frequent urination. Isolated compounds: 1030, 1128, 1129, 1130, 1845, 2379, 2380, 3140, 3188, 3209, 3308, 3316, 3435, 6853, 6867, 7882, 8102, 8401, 8403, 8404, 8405, 8407, 9202, 9718, 11648, 12020, 12891, 13823, 13858, 15659, 15664, 15935, 17931, 18317, 18421, 18834, 19087, 19805, 19983, 20369.
- T2962 *Ginkgo biloba* (Ginkgoaceae); BAI GUO GEN; Ginkgo Root. Used part: root. TCM Effects: To boost *qi* and supplement vacuity. TCM Indications: Emission, enuresis, frequent urination at night, vaginal discharge, stone strangury. Isolated compounds: 8404, 8405, 8406, 8408.
- T2963 *Ginkgo biloba* (Ginkgoaceae); BAI GUO SHU PI; Ginkgo Bark. Used part: bark. TCM Effects: To boost *qi* and supplement vacuity. TCM Indications: Copper coin lichen, psoriasis. Isolated compounds: 2378.
- T2964 *Ginkgo biloba* (Ginkgoaceae); BAI GUO YE; Ginkgo Leaf. Used part: leaf. TCM Effects: To quicken blood and nourish heart, constrain lung and astringe intestines. TCM Indications: Coronary heart disease, angina pectoris, hypercholesterolemia, Parkinson's disease, peripheral arterial diseases, chest impediment and heart pain, cough of phlegm asthma, diarrhea and dysentery, vaginal discharge, emission, retinal insufficiency syndrome. Isolated compounds: 1128, 1476, 1935, 2376, 2379, 6854, 7820, 8098, 8401, 8402, 8403, 8404, 8405, 8406, 9389, 11439, 11440, 11642, 11648, 11654, 11658, 11669, 12020, 12032, 12033, 12053, 12082, 15525, 15659, 15668, 18317, 18335, 18336, 18365, 18411, 19514, 19757, 20561, 20565.
- T2965 *Gladiolus* sp. (Iridaceae). Isolated compounds: 16781.
- T2966 *Glaucium corniculatum* (Papaveraceae); XIAO JIAO HAI YING SU; Black-spot Hornpoppy. Isolated compounds: 4106.
- T2967 *Glaucium davum* (Papaveraceae); HUANG HUA HAI YING SU; Yellowflower Hornpoppy\*. Isolated compounds: 8513.
- T2968 *Glaucium fimbriigerum* (Papaveraceae); HAI YING SU; Ciliate Hornpoppy\*. Used part: fruit. TCM Effects: To settle pain and suppress cough. Isolated compounds: 4106.
- T2969 *Glaucium flavum* (Papaveraceae); HUANG HAI YING SU; Yellow Hornpoppy\*. Isolated compounds: 2734, 4923, 7996.
- T2970 *Glaucium oxylobum* (Papaveraceae); JIAN LIE HAI YING SU; Acutelobed Hornpoppy. Isolated compounds: 16339.
- T2971 *Glaucium pulchrum* (Papaveraceae); MEI LI HAI YING SU; Beautiful Hornpoppy\*. Isolated compounds: 2734.
- T2972 *Glaucium* spp. (Papaveraceae). Isolated compounds: 3498.
- T2973 *Glechoma longituba* (Lamiaceae); JIN XIAN CAO; Longtube Ground Ivy. Used part: aerial parts. TCM Effects: To disinhibit damp and free strangury, clear heat and resolve toxin, dissipate stasis and disperse swelling, lower blood pressure. TCM Indications: Heat strangury, stone strangury, damp-heat jaundice, swelling pain of welling abscess and sore, knocks and falls. Isolated compounds: 11602, 13774, 13775, 17400, 18190, 20995.
- T2974 *Glechoma lungituba* (Lamiaceae); LIAN QIAN CAO. Used part: whole herb. TCM Effects: To disinhibit damp and free strangury, clear heat and resolve toxin, dissipate stasis and disperse swelling. TCM Indications: Heat strangury, stone strangury, damp-heat jaundice, swelling and pain of sore and welling abscess, knocks and falls. Isolated compounds: 22270.
- T2975 *Gleditsia delavayi* (Fabaceae); YUN NAN ZAO JIA; Delacay Honeylocust. Used part: fruit. TCM Effects: To break phlegm and open orifices, resolve toxin and kill worms. TCM Indications: Wind stroke, epilepsy, phlegm reversal with stupor, cough asthma qith phlegm-drool and atrophicexuberant, malign sore. Isolated compounds: 8528.
- T2976 *Gleditsia fera* (Fabaceae); HUA NAN ZAO JIA; South China Honeylocust. Used part: fruit. TCM Effects: To break phlegm and open orifices, resolve toxin and kill worms. TCM Indications: Wind stroke (apoplexy), epilepsy, phlegm reversal with stupor, cough asthma qith phlegm-drool and atrophicexuberant, malign sore. Isolated compounds: 6689.
- Gleditsia horrida* = *Gleditsia sinensis*
- T2977 *Gleditsia monosperma* (Fabaceae); DAN ZHONG ZAO JIA; Monoseed Honeylocust\*. Isolated compounds: 18857.
- T2978 *Gleditsia sinensis* [Syn. *Gleditsia horrida*] (Fabaceae); ZAO JIA; Chinese Honeylocust. Used part: fruit. TCM Effects: To relieve cough and dispel phlegm, open orifices, kill worms and dissipate binds. TCM Indications: Cough of phlegm asthma, wind stroke clenched jaw, phlegm-drool and congesting lung, clouded spirit with loss of speech, epilepsy, throat impediment, urinary and fecal stoppage, swollen welling abscess, scab and lichen. Isolated compounds: 6689, 8526, 8527, 8528, 8529, 8530, 8531, 8532, 8533, 8534, 8535, 8536, 8537, 8538, 8539, 8540, 8541, 8542, 8543, 8544, 11773, 16050, 20369, 21511.
- T2979 *Gleditsia sinensis* [Syn. *Gleditsia horrida*] (Fabaceae); ZAO JIA CI; Chinese Honeylocust Thorn. Used part: thorn. TCM Effects: To disperse swelling and outthrust pus, track wind, kill worms. TCM Indications: Swelling toxin of welling abscess and flat abscess, scrofula, leprosy, sore and papules with intractable lichen, postpartum scant milk, retention of afterbirth. Isolated compounds: 7956, 19983, 20355, 20365.
- T2980 *Gleditsia sinensis* [Syn. *Gleditsia horrida*] (Fabaceae); ZAO JIA GEN PI; Chinese Honeylocust Root-bark. Used part: root cortex. TCM Effects: To resolve toxin and dissipate binds, dispel wind and kill worms. TCM Indications: Scrofula, innominate toxin swelling,

- wind-damp bone pain, scab and lichen, malign sore. Isolated compounds: 21511.
- T2981 *Gleditsia sinensis* [Syn. *Gleditsia horrida*] (Fabaceae); ZAO JIA YE; Chinese Honeylocust Leaf. Used part: leaf. TCM Effects: To dispel wind and resolve toxin, engender hairs. TCM Indications: Wind sore. Isolated compounds: 21511.
- T2982 *Gleditsia triacanthos* (Fabaceae); SAN CI ZAO JIA; Honeylocust. Isolated compounds: 21511, 22122.
- T2983 *Glehnia littoralis* (Apiaceae); BEI SHA SHEN; Coastal Glehnia. Used part: root. TCM Effects: To nourish *yin* and clear lung, boost stomach and engender liquid. TCM Indications: Dry cough due to lung dryness, vacuity taxation hemoptysis, stomach *yin* insufficiency, fluid damage and thirst. Isolated compounds: 618, 1513, 2107, 2276, 2308, 2311, 2777, 2887, 3551, 3775, 4033, 4227, 5192, 5208, 6387, 6388, 7334, 7443, 7707, 7768, 8545, 8546, 8547, 10231, 10362, 10362, 10471, 10953, 11001, 11275, 11462, 11620, 11621, 11642, 11963, 13572, 13739, 13760, 13765, 13766, 16258, 16258, 16450, 17085, 17297, 18086, 18317, 19087, 19542, 19618, 19619, 20003, 20369, 21339, 22252, 22332, 22775, 22776.
- T2984 *Glinus lotoides* [Syn. *Mollugo lotoides*] (Aizoaceae); XING SU CAO; Stellate hair Carpetweed. Used part: whole herb. TCM Effects: To clear heat and transform damp, resolve toxin and disperse swelling. TCM Indications: Damp-heat diarrhea, common cold with cough, wind papules, sore and boil, red eyes with gall. Isolated compounds: 13004, 13005, 13006, 13007, 13008, 13009.
- T2985 *Globularia davisiana* (Globulariaceae). Isolated compounds: 4698.
- T2986 *Globularia* sp. (Globulariaceae). Isolated compounds: 3695.
- T2987 *Glochidion acuminatum* (Euphorbiaceae); JIAN JIAN SUAN PAN ZI; Acuminate Glochidion\*. Isolated compounds: 590, 8559, 8560, 8561, 8562, 8564, 11442.
- T2988 *Glochidion eriocarpum* (Euphorbiaceae); MAO GUO SUAN PAN ZI; Hairypod Glochidion\*. Used part: branch-leaf. TCM Effects: To clear heat and resolve toxin, dispel damp and relieve itch. TCM Indications: Lacquer sore, paddy field dermatitis (water ulcer), itchy skin, urticaria, eczema, burns, mastitis, acute gastroenteritis, dysentery. Isolated compounds: 8563, 8569, 8570, 13092, 13093, 13098.
- T2989 *Glochidion sphaerogynum* (Euphorbiaceae); YUAN GUO SUAN PAN ZI; Roundfruit Glochidion\*. Used part: branch-leaf. TCM Effects: To clear heat and resolve toxin. TCM Indications: Common cold with fever, summerheat-heat and thirst, stomatitis, eczema, ulcerating sores. Isolated compounds: 8563, 8570.
- T2990 *Glochidion zeylanicum* (Euphorbiaceae); CHUI ZHU SUAN PAN ZI; Srilanka Glochidion. Isolated compounds: 2522, 8563, 8565, 8566, 8567, 8568, 8569, 8570, 8571, 8572, 8573, 8574, 13092, 13644, 13645.
- T2991 *Gloeophyllum odoratum*. Isolated compounds: 8575, 14054, 14589.
- T2992 *Gloeophyllum* sp. Isolated compounds: 8576, 8577, 8578, 8579, 8580, 10732.
- T2993 *Gloeostereum incarnatum* (Meruliaceae); YU ER; Incarnate Gloeostereum. Used part: sporocarp. TCM Effects: To clear heat and disinherit damp, cool blood and check diarrhea. TCM Indications: Red and white dysentery. Isolated compounds: 8581.
- T2994 *Gloiopeltis furcata* (Endocladaceae); LU JIAO CAI; Furcate Gloiopeltis Frond. Used part: frond. TCM Effects: To clear heat, disperse food, transform phlegm. TCM Indications: Taxation fever, steaming bone, diarrhea, dysentery, wind-damp impediment pain, cough, goiter and tuberculosis, hemorrhoids. Isolated compounds: 702, 1269, 14453, 14817.
- T2995 *Gloriosa superba* (Liliaceae); JIA LAN; Lovely Gloriosa. Used part: rhizome. TCM Indications: Hemiplegia, general arthralgia, convulsion due to high fever, whole body swelling. Isolated compounds: 3911.
- T2996 *Glossocalyx brevipes* (Monimiaceae). Isolated compounds: 8321, 14461, 14462.
- T2997 *Glossocarya calcicola*. Isolated compounds: 2948, 2950, 2952.
- T2998 *Glycine max* (Fabaceae); DA DOU; Soybean. Used part: yellow seed. TCM Effects: To loosen center and induce stagnation, fortify spleen and disinherit water, resolve toxin and disperse swelling. TCM Indications: Food accumulation diarrhea, abdominal distention and torpid intake, swelling toxin of sore and welling abscess, spleen vacuity edema, bleeding due to external injury. Isolated compounds: 361, 398, 2384, 4604, 4606, 5343, 5580, 5621, 8278, 8282, 8818, 8819, 18700, 18701, 20117, 20122, 20129.
- T2999 *Glycine max* (Fabaceae); DOU YOU; Soybean Oil. Used part: seed oil. TCM Effects: To resolve toxin and kill worms, moisten intestines and free stool. TCM Indications: Ileus, constipation, scab and lichen. Isolated compounds: 361, 398, 4468, 4473, 20237.
- T3000 *Glycine max* (Fabaceae); HEI DA DOU; Black Soybean. Used part: black seed. TCM Effects: To quicken blood and disinherit water, dispel wind and resolve toxin, fortify spleen and boost kidney. TCM Indications: Edema distention fullness, wind toxin and beriberi, jaundice edema, kidney vacuity lumbago, enuresis, wind impediment and hypertonicity of sinews, postpartum wind tetany, clenched jaw, swelling toxin of welling abscess and sore, drug poisoning, food poisoning. Isolated compounds: 552, 1594, 2845, 3040, 4473, 4604, 7853, 8278, 8282, 8805, 8818, 10600, 19983, 20041, 20115, 20116, 20118, 20119, 20120, 20121, 20122, 20123, 20124, 20125, 20126, 20127, 20129, 20130, 20131, 20146, 20237, 20369, 20566, 22556, 22844.
- T3001 *Glycine max* (Fabaceae); HEI DA DOU PI; Black Soybean Spermoderm. Used part: spermoderm. TCM Effects: To nourish *yin* and calm liver, dispel wind and resolve toxin. TCM Indications: *Yin* vacuity and heat vexation, night sweating, dizziness, headache, wind impediment, damp toxin, welling abscess. Isolated compounds: 3594, 5027, 12735.
- T3002 *Glycine max* (Fabaceae); HEI DA DOU YE; Black Soybean Leaf. Used part: leaf. TCM Effects: To disinherit water and free strangury, cool blood and resolve toxin. TCM Indications: Blood strangury, snake bite. Isolated compounds: 552, 553, 7853.
- T3003 *Glycine max* (Fabaceae); JIANG; Soybean Paste. Used part: seed of beans. TCM Effects: To eliminate heat, resolve toxin. TCM Indications: Bee sting, insect bites. Isolated compounds: 2845, 12252, 15528, 18230, 22158.
- T3004 *Glycine* sp. (Fabaceae). Isolated compounds: 1866.
- T3005 *Glycosmis chlorosperma* (Rutaceae); LV ZI SHAN XIAO JU. Isolated compounds: 8310, 10138, 10139, 10140, 14715, 14716, 19169, 19170.
- T3006 *Glycosmis citrifolia* (Rutaceae); SHAN XIAO JU; Citrusleaf

- Glycosmis. Used part: root and leaf. TCM Effects: To dispel wind and resolve exterior, transform phlegm and relieve cough, rectify *qi* and disperse accumulation, dissipate stasis and disperse swelling. TCM Indications: Common cold with cough, food stagnation with torpid intake, food accumulation abdominal pain, mounting *qi* (hernia), painful swelling from knocks and falls. Isolated compounds: 3153, 3154, 3155, 8820, 8821, 8848.
- T3007 *Glycosmis montana* (Rutaceae); MENG DA NA SHAN XIAO JU; Montana Glycosmis\*. Isolated compounds: 8804, 8822, 10473.
- T3008 *Glycosmis pentaphylla* (Rutaceae); JIU BING YE; Malay Glycosmis. Isolated compounds: 3153, 3154, 3155, 8851, 8852, 8853, 19669.
- T3009 *Glycosmis pseudoracemosa* (Rutaceae); JIA ZONG ZHUANG HUA XU SHAN XIAO JU; Pseudo-racemose Glycosmis\*. Isolated compounds: 19171.
- T3010 *Glycosmis stenocarpa* (Rutaceae); XIA GUO SHAN XIAO JU GEN; Narrowfruit Glycosmis Root\*. Isolated compounds: 2479, 15117, 15118.
- T3011 *Glycyrrhiza aspera* (Fabaceae); CU MAO GAN CAO; Hirsute Licorice. Used part: root and rhizome. TCM Effects: See *Glycyrrhiza uralensis*. TCM Indications: See *Glycyrrhiza uralensis*. Isolated compounds: 4924, 6307, 8500, 8796, 8797, 8798, 8799, 8800, 8801, 8802, 8803, 8839, 8841, 8846, 11443, 11444, 11505, 12771, 12775, 12795, 12913, 19695, 21451.
- T3012 *Glycyrrhiza echinata* (Fabaceae); JI GAN CAO; Echinate Licorice\*. Isolated compounds: 6685, 12774, 17836.
- T3013 *Glycyrrhiza glabra* (Fabaceae); GUANG GUO GAN CAO; Licorice. Used part: root and rhizome. TCM Effects: See *Glycyrrhiza uralensis*. TCM Indications: See *Glycyrrhiza uralensis*. Isolated compounds: 49, 259, 1886, 5144, 5725, 5726, 5729, 5730, 5731, 6024, 6025, 6307, 7484, 7883, 7885, 8289, 8487, 8487, 8490, 8493, 8496, 8497, 8498, 8499, 8500, 8501, 8841, 8846, 9557, 9558, 9985, 10149, 10152, 10153, 10247, 10499, 11441, 11504, 11505, 11642, 11697, 12152, 12153, 12154, 12155, 12156, 12751, 12752, 12753, 12754, 12755, 12757, 12767, 12772, 12793, 12903, 12907, 12908, 12913, 12914, 14025, 17403, 18001, 19463, 22244, 22667.
- T3014 *Glycyrrhiza glabra* var. *typica* (Fabaceae); OU YA GAN CAO; Typical Licorice\*. Isolated compounds: 9558, 10149, 13941, 17049.
- T3015 *Glycyrrhiza inflata* (Fabaceae); ZHANG GUO GAN CAO; Inflated Licorice. Used part: root and rhizome. TCM Effects: See *Glycyrrhiza uralensis*. TCM Indications: See *Glycyrrhiza uralensis*. Isolated compounds: 1519, 1597, 1935, 5144, 5405, 5895, 6024, 6025, 7885, 8501, 8835, 8836, 8841, 8846, 11037, 11038, 11504, 11505, 11697, 12766, 12767, 12768, 12769, 12770, 12774, 12776, 12783, 12789, 12790, 12908, 12909, 12910, 12913, 17836, 19463, 19983, 22244.
- T3016 *Glycyrrhiza kansuensis* (Fabaceae); HUANG GAN CAO; Yellow Licorice. Used part: root and rhizome. TCM Effects: See *Glycyrrhiza uralensis*. TCM Indications: See *Glycyrrhiza uralensis*. Isolated compounds: 2455, 7637, 7885, 8499, 8501, 8840, 8841, 8846, 8847, 11505, 11772, 12149, 12766, 12913, 13639, 17169, 19983, 20087, 22243, 22244, 22519.
- T3017 *Glycyrrhiza lepidota* (Fabaceae); MEI ZHOU GAN CAO; Scale Licorice\*. Isolated compounds: 8487, 8548, 8549, 8550, 8551, 17831.
- T3018 *Glycyrrhiza pallidiflora* (Fabaceae); CI GUO GAN CAO; Pricklyfruit Licorice. Used part: fruit. TCM Effects: To promote lactation. TCM Indications: Postpartum scant milk. Isolated compounds: 6254, 7883, 8850, 12756, 12759, 12760, 12761, 12762, 13286, 16545, 16546.
- T3019 *Glycyrrhiza* sp. (Fabaceae). Isolated compounds: 3574, 5835, 6401, 7333, 8144, 8145, 8552, 8837, 10335, 11446, 11697, 12331, 12751, 12756, 12758, 12759, 12763, 12773, 12796, 13281, 15525, 16173, 17046, 17403, 17825, 17826, 19695, 22519, 22743.
- T3020 *Glycyrrhiza* spp. (Fabaceae). Isolated compounds: 11772, 12779, 12908.
- T3021 *Glycyrrhiza squamulosa* (Fabaceae); YUAN GUO GAN CAO; Roundfruit Licorice. Used part: root and rhizome. TCM Effects: See *Glycyrrhiza uralensis*. TCM Indications: See *Glycyrrhiza uralensis*. Isolated compounds: 20250.
- T3022 *Glycyrrhiza uralensis* (Fabaceae); GAN CAO; Ural Licorice. Equivalent plant: *Glycyrrhiza inflata*, *Glycyrrhiza glabra*, *Glycyrrhiza kansuensis*, *Glycyrrhiza aspera*, *Glycyrrhiza yunnanensis*, *Glycyrrhiza squamulosa*. Used part: root and rhizome. TCM Effects: To supplement center and boost *qi*, relax tension and relieve pain, moisten lung and relieve cough, drain fire and resolve toxin, regulate function among herbs. TCM Indications: Hypocorticosteroidism [= Addison's disease], gastric ulcer, bronchitis, tuberculosis, peptic ulcer, hepatitis A, spleen-stomach vacuity, fatigue hypodynamia, palpitation and shortness of breath, cough with profuse phlegm, pain in stomach duct and abdomen, acute spasm in limbs, swelling toxin of welling abscess and sore. Isolated compounds: 403, 2455, 4108, 5405, 6024, 6025, 6307, 6402, 7422, 7883, 7885, 8134, 8135, 8136, 8137, 8138, 8139, 8140, 8142, 8143, 8500, 8553, 8764, 8795, 8833, 8838, 8839, 8841, 8842, 8843, 8844, 8845, 8846, 8854, 8855, 8862, 9557, 9558, 10149, 11444, 11490, 11504, 11505, 11576, 11642, 11697, 11746, 12150, 12151, 12764, 12765, 12771, 12777, 12778, 12780, 12782, 12783, 12784, 12785, 12786, 12787, 12788, 12789, 12790, 12791, 12792, 12793, 12794, 12795, 12908, 12911, 12912, 12913, 13107, 13941, 14185, 14466, 14474, 14501, 14507, 14508, 14774, 15265, 15414, 15430, 15471, 17049, 19087, 19463, 19884, 19983, 21069, 21075, 21594, 21694, 22238, 22239, 22240, 22241, 22242, 22243, 22244, 22245.
- T3023 *Glycyrrhiza yunnanensis* (Fabaceae); YUN NAN GAN CAO; Yunnan Licorice. Used part: root and rhizome. TCM Effects: See *Glycyrrhiza uralensis*. TCM Indications: See *Glycyrrhiza uralensis*. Isolated compounds: 5895, 8841, 8856, 8857, 8858, 8859, 8860, 8861, 11504, 13286, 13959, 13960, 19983, 22940, 22941, 22942, 22943, 22944, 22945.
- T3024 *Gmelina arborea* (Verbenaceae); YUN NAN SHI ZI; Malay Bushbeech. Isolated compounds: 8863, 16734.
- T3025 *Gmelina philippensis* (Verbenaceae); FEI LV BIN SHI ZI; Philippine Bushbeech\*. Isolated compounds: 2234, 3306, 5381, 5382, 5388, 5389, 5390, 6952, 8234, 8277, 8864, 13892, 13893, 18694, 19104, 21544.
- T3026 *Gnaphalium affine* [Syn. *Gnaphalium multiceps*] (Asteraceae); SHU QU CAO; Cudweed. Used part: whole herb. TCM Effects: To suppress cough and transform phlegm, dispel wind and dissipate cold. TCM Indications: Cough with profuse phlegm, asthma, wind-cold common cold, pain in sinews and bones, vaginal discharge, welling abscess and open sore. Isolated compounds: 13145.

- T3027 *Gnaphalium gaudichaudianum* (Asteraceae); A GEN TING SHU QU CAO; Argentine Cudweed\*. Isolated compounds: 17373.  
*Gnaphalium multiceps* = *Gnaphalium affine*
- T3028 *Gnetum gnemon* (Gnetaceae); XIAN ZHOU MAI MA TENG; Spinach Jointfir. Isolated compounds: 8866, 8867, 8868, 8869, 8870, 8871, 8872, 8873, 8874, 8876, 8880, 9779, 20505.
- T3029 *Gnetum gnemonoides* (Gnetaceae); MA LAI XI YA MAI MA TENG; Spinach-like Jointfir. Isolated compounds: 8875, 8877, 8880, 9779.
- T3030 *Gnetum hainanense* (Gnetaceae); HAI NAN MAI MA TENG; Hainan Jointfir. Isolated compounds: 8882, 8883, 8884, 8885, 8886, 8887, 8888, 8889, 8890, 8891.  
*Gnetum indicum* = *Gnetum parvifolium*
- T3031 *Gnetum latifolium* (Gnetaceae); KUAN YE MAI MA TENG; Broadleaf Jointfir. Isolated compounds: 12546.
- T3032 *Gnetum montanum* f. *megalocarpum* (Gnetaceae); DA ZI MAI MA TENG; Bigseed Jointfir. Isolated compounds: 8893, 8894, 8895, 8896.
- T3033 *Gnetum parvifolium* [Syn. *Gnetum indicum*] (Gnetaceae); XIAO YE MAI MA TENG; Smallleaf Jointfir. Used part: stem, leaf or root. TCM Effects: To dispel wind and eliminate damp, stanch bleeding and dissipate stasis, relieve cough and transform phlegm. TCM Indications: Wind-damp impediment pain, lumbago, crane's knee wind, knocks and falls, ulcerative bleeding, chronic trachitis. Isolated compounds: 5067, 5997, 8892, 9779, 11672, 16688, 16689, 16690, 16691, 18643.
- T3034 *Gnetum pendulum* (Gnetaceae); CHUI ZI MAI MA TENG; Pendentseed Jointfir. Isolated compounds: 8897, 8898.
- T3035 *Gnetum ula* (Gnetaceae); YIN DU MAI MA TENG; India Jointfir. Isolated compounds: 8878, 8892.
- T3036 *Gnidia involucrata* (Thymelaeaceae); ZONG BAO GE NI DI MU. Isolated compounds: 16839, 21766, 22935.
- T3037 *Gnidia lamprantha* (Thymelaeaceae); LIANG HUA GE NI DI MU. Isolated compounds: 15999.
- T3038 *Gnidia latifolia* (Thymelaeaceae); KUAN YE GE NI DI MU. Isolated compounds: 15990.
- T3039 *Gnidia polycephala* (Thymelaeaceae); DUO TOU GE NI DI MU. Isolated compounds: 8757, 14470.
- T3040 *Gomphrena globosa* (Amaranthaceae); QIAN RI HONG; Globeamaranth. Used part: inflorescence or herb. TCM Effects: To suppress cough and calm asthma, clear liver and brighten eyes, resolve toxin. TCM Indications: Cough, asthma, pertussis, infant night crying, red eyes with gall, liver heat and dizziness, headache, dysentery, sore and boil. Isolated compounds: 1013, 8927, 8928, 8929, 8930, 8931, 11207, 20434.
- T3041 *Goniothalamus amuyon* (Annonaceae); TAI WAN GE NA XIANG; Taiwan Goniothalamus. Isolated compounds: 1696, 3555, 3695, 5179, 5179, 5180, 5532, 6201, 8932, 8933, 8934, 8935, 8936, 8938, 8947, 8947, 8948, 8949, 8950, 12917, 13258, 13943, 17409, 19983, 20369.
- T3042 *Goniothalamus arvensis* (Annonaceae); TIAN YE GE NA XIANG; Field Goniothalamus\*. Isolated compounds: 241, 311, 1008.
- T3043 *Goniothalamus cardiopetalus* (Annonaceae); XIN XING BAN GE NA XIANG; Cardia-petal Goniothalamus\*. Isolated compounds: 3189.
- T3044 *Goniothalamus cheliensis* (Annonaceae); GE NA XIANG; Cheliensis Goniothalamus. Isolated compounds: 3504, 3505, 3506, 8939, 8940, 8941, 8942, 8943, 8944.
- T3045 *Goniothalamus gardneri* (Annonaceae); CHANG YE GE NA XIANG; Longleaf Goniothalamus. Isolated compounds: 5479, 5821, 5824, 7818, 8232, 8233, 10787, 15285, 21770, 22067.
- T3046 *Goniothalamus giganteus* (Annonaceae); DA GE NA XIANG; Big Goniothalamus\*. Isolated compounds: 1008, 8381, 18240, 18249.
- T3047 *Goniothalamus griffithii* (Annonaceae); DA HUA GE NA XIANG; Bigflower Goniothalamus. Isolated compounds: 404, 405, 1049, 6183, 8937, 8947, 9001, 9002, 9004, 9005, 9006, 17403.
- T3048 *Goniothalamus howii* (Annonaceae); HAI NAN GE NA XIANG; Hainan Goniothalamus. Isolated compounds: 9654, 9655.
- T3049 *Goniothalamus leiocarpus* (Annonaceae); JIN PING GE NA XIANG; Leiocarpus Goniothalamus. Isolated compounds: 1313, 4089, 8381, 8947, 15099.
- T3050 *Goniothalamus* sp. (Annonaceae). Isolated compounds: 3503, 8945, 9778, 13547, 13548, 13549.
- T3051 *Goniothalamus thwaitesii* (Annonaceae). Isolated compounds: 1339, 13628.
- T3052 *Gonystylus keithii* (Thymelaeaceae); KAI TE LENG ZHU MU; Kaith Ramin\*. Isolated compounds: 16408, 16409.
- T3053 *Gorgoniae suberogorgia* (Gorgoniidae); LIU SHAN HU; Gorgonian *Gorgoniae suberogorgia*. Isolated compounds: 20440.
- T3054 *Gossypium barbadense* (Malvaceae); HAI DAO MIAN; Barbados Cotton. Used part: tomentum of seed. TCM Effects: See *Gossypium herbaceum*. TCM Indications: See *Gossypium herbaceum*. Isolated compounds: 8967.
- T3055 *Gossypium herbaceum* (Malvaceae); MIAN HUA; Levant Cotton. Equivalent plant: *Gossypium hirsutum*, *Gossypium barbadense*. Used part: tomentum of seed. TCM Effects: To stanch bleeding. TCM Indications: Blood ejection, hematochezia, flooding, bleeding due to external injury. Isolated compounds: 2318, 8967, 9568, 11238, 11642, 12027, 19187.
- T3056 *Gossypium herbaceum* (Malvaceae); MIAN HUA GEN; Levant Cotton Root. Used part: root cortex. TCM Effects: To relieve cough and calm asthma, free menstruation and relieve pain. TCM Indications: Cough, asthma, bronchitis, menstrual disorder, flooding and spotting. Isolated compounds: 117, 6232, 8967, 9344, 13944, 13946.
- T3057 *Gossypium herbaceum* (Malvaceae); MIAN ZI YOU; Levant Cotton Oil. Used part: seed oil. TCM Effects: To resolve toxin and kill worms. TCM Indications: Malign sore, scab and lichen. Isolated compounds: 8967, 13944.
- T3058 *Gossypium hirsutum* [Syn. *Gossypium mexicanum*] (Malvaceae); LU DI MIAN; Upland Cotton. Used part: tomentum of seed. TCM Effects: See *Gossypium herbaceum*. TCM Indications: See *Gossypium herbaceum*. Isolated compounds: 36, 1866, 8967, 9344, 12432, 17089, 18409, 20392.
- T3059 *Gossypium indicum* (Malvaceae); YIN DU MIAN; Bluntleaf Cotton. Isolated compounds: 8965, 11238.  
*Gossypium mexicanum* = *Gossypium hirsutum*
- T3060 *Gossypium sturtianum* var. *nandewarene* (Malvaceae); NAN DE WA MIAN; Nandewa Cotton\*. Isolated compounds: 17056.
- T3061 *Gratiola officinalis* (Scrophulariaceae); YAO SHUI BA JIAO; Gratiola. Isolated compounds: 4320, 4323.
- T3062 *Gratiola* sp. (Scrophulariaceae). Isolated compounds: 4319.



- T3063 *Grevillea robusta* (Proteaceae); YIN HUA; Robust Silk Oak. Used part: leaf and flower. TCM Effects: To clear heat and disinhibit *qi*, quicken blood and relieve pain. TCM Indications: Knocks and falls. Isolated compounds: 8997, 8998, 8999, 9000, 18877, 18877, 18878, 18879, 18880.
- T3064 *Grevillea* spp. (Proteaceae). Isolated compounds: 8997.  
*Grewia microcos* = *Microcos paniculata*
- T3065 *Grindelia* sp. (Asteraceae). Isolated compounds: 21507.
- T3066 *Gryllus chinensis* (Gryllidae); XI SHUAI; Chinese Cricket. Used part: dried body. TCM Effects: To disinhibit urine. TCM Indications: Urinary stoppage, edema, ascites. Isolated compounds: 12200.
- T3067 *Guajacum officinale* (Zygophyllaceae); YU CHUANG MU; Lignum-vitae. Isolated compounds: 9038, 15741.
- T3068 *Guarea rhopalocarpa* (Meliaceae). Isolated compounds: 10310, 12487, 19234, 19235, 19542, 20369.
- T3069 *Guatteria amplifolia* (Annonaceae); DA YE GUA TAI MU. Isolated compounds: 15780, 22818.
- T3070 *Guatteria boliviana* (Annonaceae). Isolated compounds: 1460, 8004, 9072, 12497, 16604, 17146, 18187, 18188, 19753, 21390.
- T3071 *Guatteria dumetorum* (Annonaceae); JING JI GUA TAI MU. Isolated compounds: 4279, 15779.
- T3072 *Guioa crenulata* (Sapindaceae); New Caledonian Guioa\*. Isolated compounds: 4228, 4229, 4230, 4231.
- T3073 *Gunnera perpensa* (Haloragaceae); XUAN CHUI GEN NAI LA CAO. Isolated compounds: 10484, 10508, 14592.
- T3074 *Gutierrezia microcephala* (Asteraceae). Isolated compounds: 21711.
- T3075 *Gutierrezia* spp. (Asteraceae). Isolated compounds: 21857.
- T3076 *Gymnadenia albida* (Orchidaceae); BAI SHOU SHEN; European Gymnadenia. Isolated compounds: 16168.
- T3077 *Gymnadenia conopsea* (Orchidaceae); SHOU ZHANG SHEN; Conic Gymnadenia. Equivalent plant: *Coeloglossum viride*. Used part: tuber. TCM Effects: To relieve cough and calm asthma, fortify spleen and boost kidney, rectify *qi* and harmonize blood, relieve pain. TCM Indications: Cough and asthma due to lung vacuity, vacuity taxation with emaciation, neurasthenia, kidney vacuity, limp aching lumbus and knees, impotence, seminal efflux, frequent urination, chronic hepatitis, chronic diarrhea, blood loss, vaginal discharge, scant breast milk, knocks and falls. Isolated compounds: 2165, 2456, 2508, 5905, 9099, 9100, 9101, 9102, 9111, 9112, 9113, 9846, 9848, 13909, 13910, 14154, 14805, 17470.
- T3078 *Gymnadenia* sp. (Orchidaceae). Isolated compounds: 22336.
- T3079 *Gymnaster koraiensis* (Asteraceae); CHAO XIAN LUO WAN. Isolated compounds: 6918, 7951, 9104, 9105, 9106, 9107, 9108, 9109, 9382, 20237.
- T3080 *Gymnema sylvestre* (Asclepiadaceae); CHI GENG TENG; Australian Cowplant. Used part: root or twig. TCM Effects: To dispel wind and relieve pain, resolve toxin and disperse swelling. TCM Indications: Wind-damp impediment pain, swelling pain in throat, scrofula, mammary welling abscess, sore and boil, eczema, innominate toxin swelling, poisonous snake bite. Isolated compounds: 2271, 2272, 8647, 8648, 9110, 12981, 16062, 17748, 17749, 20037, 22827.
- T3081 *Gymnopetalum integrifolium* (Cucurbitaceae); FENG GUA; Entireleaf Gymnopetalum. Isolated compounds: 339, 2686, 5386, 12214.
- T3082 *Gynocardia odorata* (Flacourtiaceae); MA DAN GUO; Fragrant Gynocardia. Used part: seed. TCM Effects: To dispel wind, eliminate damp, resolve toxin. TCM Indications: Leprosy, elephantiasis, skin diseases. Isolated compounds: 1465, 9114.
- T3083 *Gynostemma compressum* (Cucurbitaceae); BIAN GUO JIAO GU LAN; Flatfruit Gynostemma. Isolated compounds: 9094, 9095, 9096, 9097.
- T3084 *Gynostemma longipes* (Cucurbitaceae); CHANG GENG JIAO GU LAN; longstalk Gynostemma. Isolated compounds: 9098.
- T3085 *Gynostemma pentaphyllum* (Cucurbitaceae); JIAO GU LAN; Fiveleaf Gynostemma. Used part: whole herb. TCM Effects: To clear heat, supplement vacuity, resolve toxin, lower blood sugar levels, protect hepatic function. TCM Indications: Vacuity and hypodynamia, septicemia, hyperlipemia, viral hepatitis, chronic gastroenteritis, chronic trachitis. Isolated compounds: 520, 521, 522, 4487, 6331, 7427, 8423, 8425, 8427, 9115, 9116, 9117, 9118, 9119, 9120, 9124, 9125, 9126, 9127, 9128, 9129, 9130, 9131, 9132, 9133, 9134, 9135, 9136, 9137, 9138, 9139, 9140, 9141, 9142, 9143, 9144, 9145, 9146, 9147, 9148, 9149, 9150, 9151, 9152, 9153, 9154, 9155, 9156, 9157, 9158, 9159, 9160, 9161, 9162, 9163, 9164, 9165, 9166, 9167, 9168, 9169, 9170, 9171, 9172, 9173, 9174, 9175, 9176, 9177, 9178, 9179, 9180, 9181, 9182, 9958, 13439, 13443, 13444, 13444, 13446, 14415, 14416, 16092, 16093, 16428, 16433, 16594, 19087, 21091, 21092, 21101, 21102, 21103, 21104, 21700, 21701, 21702, 21743.
- T3086 *Gynostemma yixingense* (Cucurbitaceae); HUI GUO JIAO GU LAN; Rostratefruit Gynostemma. Isolated compounds: 8423, 9151, 9153, 11648, 22913, 22914.
- T3087 *Gynura elliptica* (Asteraceae); TUO YUAN SAN QI CAO; Elliptic Gynura\*. Isolated compounds: 9121, 9122.  
*Gynura japonica* = *Gynura segetum*
- T3088 *Gynura segetum* [Syn. *Gynura japonica*] (Asteraceae); SAN QI CAO; Gynura. Used part: leaf or whole herb. TCM Effects: To stanch bleeding, dissipate stasis, disperse swelling and relieve pain. TCM Indications: Blood ejection, spontaneous external bleeding, hemoptysis, hematochezia, flooding and spotting, bleeding due to external injury, dysmenorrhea, postpartum stasis stagnation abdominal pain, knocks and falls, wind-damp pain, welling abscess and flat abscess with clove sore, snake or insect bites. Isolated compounds: 383, 424, 2224, 3434, 6204, 9123, 9486, 9735, 9736, 19713, 19983, 19993, 20348, 20361, 20369, 21416, 22336.
- T3089 *Gypsophila acutifolia* (Caryophyllaceae); HUANG JIE GU DAN; Gypsophila. Used part: root. TCM Effects: To dissipate stasis and disperse swelling, engender flesh and relieve pain. TCM Indications: Knocks and falls, fracture, bleeding due to external injury. Isolated compounds: 599.
- T3090 *Gypsophila oldhamiana* (Caryophyllaceae); XIA CAO; Oldham Gypsophila. Used part: root. TCM Effects: See *Gypsophila pacifica*. TCM Indications: See *Gypsophila pacifica*. Isolated compounds: 3927, 16026, 21039.
- T3091 *Gypsophila pacifica* (Caryophyllaceae); SHAN YIN CHAI HU; Pacific Gypsophila. Equivalent plant: *Silene jennisensis*, *Arenaria juncea*. Used part: root. TCM Effects: To clear vacuity heat, cool blood. TCM Indications: Yin vacuity tuberculosis, steaming bone tidal

fever, night sweating, child *gan* fever, enduring malaria. Isolated compounds: 9183, 9184.

*Gyrophora esculenta* = *Umbilicaria esculenta*

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- T3092 *Halenia corniculata* (Gentianaceae); HUA MAO; Corniculate Spurgentian. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, cool blood and stanch bleeding. TCM Indications: Hepatitis, angitis, gastroenteritis, infective fever due to external injury, bleeding due to external injury. Isolated compounds: 10754, 10755, 10802, 22606.
- T3093 *Haliclona variclona* (Haliclonidae); Sponge *Haliclona variclona*. Isolated compounds: 17729.  
*Haloxylon articulatum* ssp. *scoparium* = *Hammada scoparia*
- T3094 *Haloxylon salicornicum* (Chenopodiaceae); YAN JIAO CAO SUO SUO. Isolated compounds: 9200, 9201.  
*Haloxylon scoparium* = *Hammada scoparia*
- T3095 *Hamamelis virginiana* (Hamamelidaceae); MEI ZHOU JIN LV MEI; Virginia Witch Hazel. Isolated compounds: 6923, 9202.
- T3096 *Hammada scoparia* [Syn. *Arthrophytum scoparium*; *Haloxylon articulatum* ssp. *scoparium*; *Haloxylon scoparium*] (Chenopodiaceae); Rimth (in Tunisia). Isolated compounds: 11649, 11664, 11671.
- T3097 *Handelia trichophylla* (Asteraceae); TIAN SHAN SHI; Hairyleaf Handelia. Isolated compounds: 3076.
- T3098 *Hannoa undulata* (Simaroubaceae); BO YE KU MU; Undulate-leaf Quassia-wood\*. Isolated compounds: 22231.
- T3099 *Haplopappus foliosus*. Isolated compounds: 143, 9924.
- T3100 *Haplophyllum acutifolium* (Rutaceae); JIAN YE YUN XIANG CAO; Haplophyllum\*. Isolated compounds: 7830, 9223, 9225, 12374.
- T3101 *Haplophyllum glabrinum* (Rutaceae). Isolated compounds: 9224, 16910.
- T3102 *Haplophyllum hispanicum* (Rutaceae); XI BAN YA YUN XIANG CAO; Spanish Haplophyllum\*. TCM Effects: Anticarcinoma. Isolated compounds: 6491.
- T3103 *Haplophyllum patavinum* (Rutaceae). Isolated compounds: 1552, 6490, 11978, 13403, 16703, 22077.
- T3104 *Haplophyllum perforatum* (Rutaceae); DA YE YUN XIANG CAO; Perforated Haplophyllum. Isolated compounds: 6618, 7854, 9223, 9224, 16910.
- T3105 *Haplophyllum* sp. (Rutaceae). Isolated compounds: 7512, 12254.  
*Haplophyllum tuberculatum* = *Ruta tuberculata*
- T3106 *Harpagophytum procumbens* (Pedaliaceae); NAN FEI GOU MA; Devil's Clow. Used part: whole herb. TCM Effects: To relieve pain, eliminate inflammation, resolve heat. TCM Indications: Bronchial asthma, ileitis, ulcerative colitis, rheumatis, abnormal increase of lipoxigenase. Isolated compounds: 8, 306, 580, 2887, 3695, 3711, 4163, 7776, 9238, 11195, 16536, 21475.
- T3107 *Harpullia austro-caledonica* (Sapindaceae); NAN SU GE LAN JIA SHAN LUO; Southern-caledonian Tulipwood\*. Isolated compounds: 1553, 1554, 1555, 1559, 8055, 18702, 22835.
- T3108 *Harrisonia abyssinica* (Simaroubaceae); A BI XI NI YA NIU JIN GUO; Abyssinia Harrisonia\*. Isolated compounds: 5301, 14125.
- T3109 *Harrisonia perforata* (Simaroubaceae); NIU JIN GUO; Perforated Harrisonia. Used part: root. TCM Effects: To clear heat and interrupt malaria. TCM Indications: Malaria. Isolated compounds: 14125, 16912, 16913, 16914, 16915, 16916.
- T3110 *Harungana madagascariensis* (Clusiaceae); MA DAO HA NI MU; Madagascar Hani-wood\*. Used part: bark and leaf. TCM Indications: Hypertension (bark), hepatic disease and anemia (leaf). Isolated compounds: 9240, 9241, 9242, 9243.
- T3111 *Hedera colchica* (Araliaceae); QIU SHUI XIAN CHANG CHUN TENG; Colchicum Ivy\*. Isolated compounds: 3913, 3914, 9257, 9258.
- T3112 *Hedera helix* (Araliaceae); YANG CHANG CHUN TENG; English Ivy. Isolated compounds: 3340, 6756, 6772, 9275, 9276, 19316.
- T3113 *Hedera nepalensis* var. *sinensis* (Araliaceae); CHANG CHUN TENG; Chinese Ivy. Equivalent plant: *Hedera rhombea*. Used part: stem-leaf. TCM Effects: To dispel wind and disinherit damp, harmonize blood and resolve toxin. TCM Indications: Wind-damp impediment pain, paralysis, deviated eyes and mouth, spontaneous external bleeding, menstrual disorder, knocks and falls, swelling pain in throat, clove boil and swollen welling abscess, hepatitis, snake or insect bites. Isolated compounds: 2973, 9276, 11083, 11084, 11085.
- T3114 *Hedera pastuchowii* (Araliaceae). Isolated compounds: 16698, 16699, 16700, 16701, 16702.
- T3115 *Hedera rhombea* (Araliaceae); LING XING CHANG CHUN TENG; Japanese Ivy. Used part: stem-leaf. TCM Effects: See *Hedera nepalensis* var. *sinensis*. TCM Indications: See *Hedera nepalensis* var. *sinensis*. Isolated compounds: 19316.
- T3116 *Hedera* sp. (Araliaceae). Isolated compounds: 19545.
- T3117 *Hedera* spp. (Araliaceae). Isolated compounds: 12642.
- T3118 *Hedychium coronarium* (Zingiberaceae); TU QIANG HUO; Coronarius Gingerlily. Used part: rhizome. TCM Effects: To dispel wind and dissipate cold, effuse sweat and resolve exterior. TCM Indications: Headache, generalized pain, wind-damp pain in sinew and bone, knocks and falls. Isolated compounds: 4081, 4082, 4083, 4084, 4085, 4086, 7481, 9277, 9278, 9279, 9280, 9281, 9282, 10157, 10791, 12410, 15499.
- T3119 *Hedychium forrestii* (Zingiberaceae); YUAN BAN JIANG HUA; Forrest Gingerlily. Isolated compounds: 4081, 7914, 9277, 11343, 12418.
- T3120 *Hedychium spicatum* (Zingiberaceae); TU LIANG JIANG; Spiked Gingerlily. Used part: rhizome. TCM Effects: To warm stomach, dissipate cold, dry damp. TCM Indications: *Qi* pain, stomachache, abdominal pain, stomach cold pain, indigestion, malaria. Isolated compounds: 7474, 9277.
- T3121 *Hedychium yunnanense* (Zingiberaceae); DIAN JIANG HUA; Yunnan Gingerlily. Isolated compounds: 9277, 22946, 22947, 22948, 22949.
- T3122 *Hedyotis acutangula* (Rubiaceae); JIN CAO; Acuteangle Hedyotis. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, disinherit urine. TCM Indications: Hepatitis, swelling pain in throat, red eyes with gall, urinary tract infection. Isolated compounds: 1616, 11234, 20711.
- T3123 *Hedyotis auricularia* (Rubiaceae); ER CAO; Auricled Hedyotis. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, cool blood and disperse swelling. TCM Indications: Common cold with

- fever, lung heat cough, swelling pain in throat, enteritis, dysentery, bleeding from hemorrhoids, flooding and spotting, poisonous snake bite, mastitis, swelling toxin of welling abscess and boil, eczema, knocks and falls. Isolated compounds: 2013.
- T3124 *Hedyotis capitellata* (Rubiaceae); XIAO TOU LIANG HOU CHA; Capitellate Hedyotis. Used part: whole herb. TCM Effects: To dissipate cold and interrupt malaria, nourish blood and free network vessels. TCM Indications: Wind-cold common cold, malaria, menstrual disorder, postpartum galactostasis, dry cough, lacquer sore, fracture with damage. Isolated compounds: 3132, 3133, 3134, 3135, 3629, 4479, 11330, 11363.
- T3125 *Hedyotis chrysotricha* [Syn. *Oldenlandia chrysotricha*] (Rubiaceae); JIN MAO ER CAO; Goldhair Hedyotis. Used part: whole herb. TCM Effects: To clear heat, eliminate damp, soothe sinews and quicken blood. TCM Indications: Jaundice, edema, chyluria, dysentery, diarrhea, knocks and falls, innominate toxin swelling, mastitis. Isolated compounds: 325, 3629, 9283.
- T3126 *Hedyotis corymbosa* [Syn. *Oldenlandia corymbosa*] (Rubiaceae); SHUI XIAN CAO; Corymbose Hedyotis. Used part: whole herb with root. TCM Effects: See *Oldenlandia diffusa*. TCM Indications: See *Oldenlandia diffusa*. Isolated compounds: 8277, 20369.  
*Hedyotis diffusa* = *Oldenlandia diffusa*
- T3127 *Hedyotis nudicaulis* (Rubiaceae); LUO JING ER CAO; Nude-stem Eargrass\*. Isolated compounds: 15858, 15859, 15860.
- T3128 *Hedysarum multijugum* (Fabaceae); HONG HUA YAN HUANG QI; Redflower Sweetvetch. Used part: root. TCM Effects: To boost *qi* and secure exterior, disinhibit urine, draw toxin and expel pus, close sores and engender flesh. TCM Indications: Shortness of breath and palpitation, fatigue hypodynamia, spontaneous sweating and night sweating, enduring diarrhea, prolapse of rectum, prolapse of uterus, vacuity and edema, chronic nephritis, welling abscess and flat abscess. Isolated compounds: 5837.
- T3129 *Hedysarum polybotrys* (Fabaceae); DUO XU YAN HUANG QI; Manyraceme Sweetvetch. Used part: root. TCM Effects: To constrain sweat and secure exterior, supplement *qi* and disinhibit water, draw toxin and close sores. TCM Indications: *Qi* vacuity and hypodynamia, reduced food intake and sloppy stool, prolapse of rectum due to enduring diarrhea, hematochezia, flooding and spotting [=metrorrhagia and metrorrhagia], spontaneous sweating due to exterior vacuity, *qi* vacuity edema, blood vacuity with yellow complexion, enduring welling abscess and flat abscess. Isolated compounds: 1048, 9285.
- T3130 *Heimia myrtifolia* (Asteraceae); HUANG WEI; Myrtleleaf Heimia. Isolated compounds: 22433.
- T3131 *Helonium amarum* (Asteraceae); KU WEI DUI XIN JU; Bitterness Sneezeweed\*. Isolated compounds: 1012, 1768, 9289, 20963.
- T3132 *Helonium arizonicum* (Asteraceae); YA LI SANG NA DUI XIN JU; Arizona Sneezeweed\*. Isolated compounds: 11734.
- T3133 *Helonium aromaticum* (Asteraceae); FANG XIANG DUI XIN JU; Fragrant Sneezeweed\*. Isolated compounds: 1768, 9288.
- T3134 *Helonium autumnale* (Asteraceae); DUI XIN JU; Sneezeweed. Isolated compounds: 2026, 7836, 9288, 9290, 9564, 14822, 17558, 20963.
- T3135 *Helonium autumnale* var. *montanum* (Asteraceae); SHAN DI DUI XIN JU; Mountain Sneezeweed\*. Isolated compounds: 2026, 9288.
- T3136 *Helonium bigelovii* (Asteraceae); BI SHI DUI XIN JU; Bigelov Sneezeweed\*. Isolated compounds: 11734.
- T3137 *Helonium elegans* (Asteraceae); YA MEI DUI XIN JU; Elegant Sneezeweed\*. Isolated compounds: 20963.
- T3138 *Helonium mexicanum* (Asteraceae); MO XI GE DUI XIN JU; Mexico Sneezeweed\*. Isolated compounds: 14821.
- T3139 *Helonium microcephalum* (Asteraceae); XIAO TOU DUI XIN JU; Littlehead Sneezeweed. Isolated compounds: 9288, 11450, 14835, 14836, 14837.
- T3140 *Helonium puberulum* (Asteraceae); WEI MAO DUI XIN JU; Puberulent Sneezeweed\*. Isolated compounds: 20963.
- T3141 *Helonium tenuifolium* (Asteraceae); XI YE DUI XIN JU; Fine-leaved Sneezeweed. Isolated compounds: 9288, 20963.
- T3142 *Helianthus annuus* (Asteraceae); XIANG RI KUI HUA; Sunflower Flower. Used part: flower. TCM Effects: To dispel wind, calm liver, disinhibit damp. TCM Indications: Dizziness, tinnitus, dribbling urination. Isolated compounds: 9295, 9296, 12952.
- T3143 *Helianthus annuus* (Asteraceae); XIANG RI KUI JING SUI; Sunflower Stem Pith. Used part: stem pith. TCM Effects: To clear heat, disinhibit urine, relieve cough. TCM Indications: Blood strangury, urethral stone, chyluria, inhibited urination. Isolated compounds: 2918, 15363, 19545.
- T3144 *Helianthus annuus* (Asteraceae); XIANG RI KUI YE; Sunflower Leaf. Used part: leaf. TCM Effects: To lower blood pressure, interrupt malaria, resolve toxin. TCM Indications: Hypertension, malaria, clove sore. Isolated compounds: 1336, 2918, 7557, 7786, 8503, 9291, 9293, 9298, 9299, 13133, 13135, 13264, 15363, 19545.
- T3145 *Helianthus annuus* (Asteraceae); XIANG RI KUI ZI; Sunflower Seed. Used part: seed. TCM Effects: To outthrust papules, check dysentery, outthrust welling abscess and pus. TCM Indications: Blood dysentery, welling abscess with pus swelling. Isolated compounds: 2226, 7996, 9291, 9294, 12892, 15634, 18421, 19039, 19545.
- T3146 *Helianthus annuus* cv (Asteraceae); ZAI PEI XIANG RI KUI YE; Cultivated Sunflower Leaf\*. Used part: leaf. TCM Effects: To lower blood pressure, interrupt malaria, resolve toxin. TCM Indications: Malaria, clove sore, hypertension. Isolated compounds: 1335, 1337, 1338, 9324, 9325.
- T3147 *Helianthus canescens* (Asteraceae); HUI BAI XIANG RI KUI; Canescent Sunflower\*. Isolated compounds: 15634.
- T3148 *Helianthus ciliaris* (Asteraceae); YUAN MAO XIANG RI KUI; Ciliate Sunflower\*. Isolated compounds: 2946.
- T3149 *Helianthus maximiliani* (Asteraceae); MA SHI XIANG RI KUI; Maximilian's Sunflower. Isolated compounds: 15634.
- T3150 *Helianthus mollis* (Asteraceae); ROU MAO XIANG RI KUI; Pubescent Sunflower\*. Isolated compounds: 7581.
- T3151 *Helianthus niveus* (Asteraceae); XUE BAI XIANG RI KUI; Snowwhite Sunflower\*. Isolated compounds: 15634.
- T3152 *Helianthus pumilus* (Asteraceae); AI XIANG RI KUI; Dwarf Sunflower\*. Isolated compounds: 4739, 13264.
- T3153 *Helianthus* sp. (Asteraceae). Isolated compounds: 4739.
- T3154 *Helianthus strumosus* (Asteraceae); LIN DI XIANG RI KUI; Woodland Sunflower. Isolated compounds: 107.
- T3155 *Helianthus tuberosus* (Asteraceae); JU YU; Jerusalem Artichoke. Used

- part: tuber or stem-leaf. TCM Effects: To clear heat and cool blood, disperse swelling. TCM Indications: Febrile diseases, intestinal heat bleeding, knocks and falls, swelling pain from fracture. Isolated compounds: 8307, 9291, 14510, 20147.
- T3156 *Helichrysum arenarium* (Asteraceae); SHA SHENG LA JU; Yellow Everlasting. Used part: inflorescence. TCM Indications: Cholecystitis, gallstones. Isolated compounds: 15279.
- T3157 *Helichrysum caespitium* (Asteraceae); NAN FEI CONG SHENG LA JU; South-Africa Tufted Everlasting\*. Isolated compounds: 14789.
- T3158 *Helichrysum italicum* (Asteraceae); YI DA LI LA JU; Italian Everlasting\*. Isolated compounds: 8865, 10182, 10472, 17403, 21392.
- T3159 *Helichrysum* sp. (Asteraceae). Isolated compounds: 3454, 10775, 17403.
- T3160 *Helichrysum* spp. (Asteraceae). Isolated compounds: 17399.
- T3161 *Helichrysum sutherlandii* (Asteraceae). Isolated compounds: 9305.
- T3162 *Helicia nilagirica* (Proteaceae); SHEN LU SHAN LONG YAN; Nilgiris Helicia. Used part: root. TCM Effects: To astringe intestines and check diarrhea, resolve toxin. TCM Indications: Enteritis and diarrhea, food poisoning, poisoning of mushrooms. Isolated compounds: 9302, 9303.
- T3163 *Helicteres angustifolia* (Sterculiaceae); SHAN ZHI MA; Narrowleaf Screwtree. Used part: whole herb. TCM Effects: To clear heat and resolve exterior, resolve toxin and disperse swelling. TCM Indications: Common cold with fever, headache, thirst, epidemic parotitis, measles papules, dysentery, enteritis, swollen welling abscess, scrofula, sore toxin, eczema, hemorrhoids. Isolated compounds: 13515, 14479, 14480.
- T3164 *Helicteres isora* (Sterculiaceae); HUO SUO MA; Tortedfruit Screwtree. Used part: root. TCM Effects: To move *qi* and relieve pain. TCM Indications: Chronic gastritis, gastric ulcer, ileus, enteritis and diarrhea. Isolated compounds: 11706, 11707, 11708, 11709, 11710, 13126.
- T3165 *Helioniopsis orientalis*. Isolated compounds: 16809.
- T3166 *Heliopsis* sp. (Asteraceae). Isolated compounds: 13594.
- T3167 *Heliotropium amplexicaule* (Boraginaceae); BAO JING TIAN JIE CAI; Clasping Heliotrope. Isolated compounds: 11019.
- T3168 *Heliotropium arguzioides* (Boraginaceae); A GU JI TIAN JIE CAI; Arguzioid Heliotrope\*. Isolated compounds: 9320.
- T3169 *Heliotropium curassavicum* (Boraginaceae); YAN TIAN JIE CAI; Curassow Heliotrope\*. Isolated compounds: 9320, 12535.
- T3170 *Heliotropium eichwaldii* (Boraginaceae); AI SHI TIAN JIE CAI; Eichwald Heliotrope\*. Isolated compounds: 9320.
- T3171 *Heliotropium europaeum* (Boraginaceae); OU ZHOU TIAN JIE CAI; Heliotrope. Isolated compounds: 7636, 9320, 12535.
- T3172 *Heliotropium floridum* var. *latifolium* (Boraginaceae). Isolated compounds: 7834.
- T3173 *Heliotropium hirsutum* (Boraginaceae); YING MAO TIAN JIE CAI; Hairy Heliotrope\*. Isolated compounds: 12535.
- T3174 *Heliotropium indicum* (Boraginaceae); DA WEI YAO; Indian Heliotrope. Used part: whole herb or root. TCM Effects: To clear heat and resolve toxin, disinhibit urine. TCM Indications: Pneumonia, pyothorax, sore pharynx, oral ulcer, vesical calculus, swollen welling abscess. Isolated compounds: 437, 6686, 9320, 11019, 11020, 18546, 20488.
- T3175 *Heliotropium lasiocarpum* (Boraginaceae); MAO GUO TIAN JIE CAI; Hairyfruit Heliotrope\*. Isolated compounds: 12535.
- T3176 *Heliotropium olgae* (Boraginaceae); AO ER JIA TIAN JIE CAI; Olga Heliotrope\*. Isolated compounds: 9320.
- T3177 *Heliotropium ovalifolium* (Boraginaceae); LUAN YE TIAN JIE CAI; Ovateleaf Heliotrope\*. Isolated compounds: 9321, 9322.
- T3178 *Heliotropium ramosissimum* (Boraginaceae); DUO ZHI TIAN JIE CAI; Ramose Heliotrope\*. Isolated compounds: 9320.
- T3179 *Heliotropium rotundifolium* (Boraginaceae); YUAN YE TIAN JIE CAI; Roundleaf Heliotrope\*. Isolated compounds: 7636.
- T3180 *Heliotropium* sp. (Boraginaceae). Isolated compounds: 9318, 17470.
- T3181 *Heliotropium steudneri* (Boraginaceae); SI SHI TIAN JIE CAI; Steudner Heliotrope\*. Isolated compounds: 13235.
- T3182 *Heliotropium supinum* (Boraginaceae); YANG XIN TIAN JIE CAI; Supine Heliotrope\*. Isolated compounds: 9316, 20488.
- T3183 *Helleborus niger* (Ranunculaceae); TI GEN CAO; Black Hellebore. Isolated compounds: 9329, 9330.
- T3184 *Helleborus odorus* (Ranunculaceae); XIANG TIE KUAI ZI; Odorous Hellebore\*. Isolated compounds: 9330.
- T3185 *Helleborus orientalis* var. *hirsutus* (Ranunculaceae); YING MAO TI GEN CAO; Hairy Hellebore\*. Isolated compounds: 1178.
- T3186 *Helleborus purpurascens* (Ranunculaceae); ZI TI GEN CAO; Purple Hellebore\*. Isolated compounds: 9330.
- T3187 *Helleborus thibetanus* (Ranunculaceae); TIE KUAI ZI; Tibetan Hellebore. Used part: root. TCM Effects: To clear heat and resolve toxin, quicken blood and dissipate stasis, disperse swelling and relieve pain. TCM Indications: Cystitis, urethritis, swelling toxin of sore and boil, knocks and falls. Isolated compounds: 9329, 9330.
- T3188 *Helleborus torquatus* [Syn. *Helleborus serbicus*] (Ranunculaceae); NIU QU TI GEN CAO; Tortuous Hellebore\*. Isolated compounds: 9326, 9327, 9328, 10063, 10064.
- T3189 *Helleborus viridis* (Ranunculaceae); LV TI GEN CAO; Green Hellebore\*. Isolated compounds: 18318, 18326, 18331, 18730, 18731.
- T3190 *Helminthostachys zeylanica* (Helminthostachyaceae); RU DI WU GONG; Ceylan Helminthostachys. Used part: rhizome. TCM Effects: To clear lung and transform phlegm, dissipate stasis and resolve toxin. TCM Indications: Cough, asthma, sore pharynx, painful swelling from knocks and falls, welling abscess, poisonous snake bite. Isolated compounds: 10397, 22174, 22175, 22176, 22177, 22178, 22179, 22180, 22181, 22182, 22183, 22184, 22185, 22186, 22187, 22188.
- T3191 *Hemerocallis* sp. (Liliaceae). Isolated compounds: 967.
- T3192 *Hemerocallis citrina* (Liliaceae); HUANG HUA CAI; Citron Daylily. Used part: bud. TCM Effects: To clear heat and disinhibit damp, loosen chest and resolve depression, cool blood and resolve toxin. TCM Indications: Short voidings of reddish urine, jaundice, oppression in chest and vexation in heart, reduced sleep, hematochezia from hemorrhoids, sore and welling abscess. Isolated compounds: 3615.
- T3193 *Hemerocallis fulva* (Liliaceae); XUAN CAO GEN; Orange Daylily. Equivalent plant: *Hemerocallis minor*, *Hemerocallis lilio-asphodelus*. Used part: root. TCM Effects: To clear heat and disinhibit damp, cool blood and stanch bleeding, resolve toxin and disperse swelling. TCM Indications: Edema, jaundice, strangury-turbidity, vaginal discharge,

- spontaneous external bleeding, hematochezia, flooding and spotting, scrofula, mammary welling abscess, galactostasis. Isolated compounds: 3615, 7421, 10151, 14046, 16469, 17392, 18759.
- T3194 *Hemerocallis fulva* var. *kwanso* (Liliaceae); CHONG BAN XUAN CAO; Doublepetalous Daylily\*. Isolated compounds: 1048, 9341, 9342.
- T3195 *Hemerocallis lilio-asphodelus* (Liliaceae); BEI HUANG HUA CAI; Yellow Daylily. Used part: root. TCM Effects: See *Hemerocallis fulva*. TCM Indications: See *Hemerocallis fulva*. Isolated compounds: 3615.
- T3196 *Hemerocallis longituba* (Liliaceae); CHANG GUAN XUAN CAO; Longtube Daylily\*. Isolated compounds: 1866.
- T3197 *Hemerocallis minor* (Liliaceae); XIAO XUAN CAO GEN; Small Yellow Daylily. Used part: root. TCM Effects: See *Hemerocallis fulva*. TCM Indications: See *Hemerocallis fulva*. Isolated compounds: 3911, 9339, 9340.
- T3198 *Hemerocallis thunbergii* (Liliaceae); SHE XIANG XUAN; Thunberg's Daylily. Isolated compounds: 9339, 18759.
- T3199 *Hemibarbus labeo* (Cyprinidae); CHONG CHUN YU; Skin-carp. Used part: meat. TCM Effects: To supplement *qi* and disinhibit water, dispel wind-damp, strengthen sinews and bones. TCM Indications: Edema, inhibited urination, aching in lumbus and knees, slowness to work. Isolated compounds: 2845.
- T3200 *Hemidesmus indicus* (Asclepiadaceae); YIN DU BA QIA; Anantmul. Used part: root. TCM Effects: To clear heat and resolve toxin, disinhibit urine and disperse edema, enrich and supplement<sup>[5509]</sup>. TCM Indications: febrile diseases, strangury, syphilis, snake bite or scorpion sting<sup>[5509]</sup>. Isolated compounds: 5130, 9346.
- T3201 *Hemiphragma heterophyllum* (Scrophulariaceae); BIAN DA XIU QIU; Diversifolious Hemiphragma. Used part: whole herb. TCM Effects: To dispel wind and eliminate damp, clear heat and resolve toxin, quicken blood and relieve pain. TCM Indications: Wind-damp impediment pain, menstrual block and abdominal pain, scrofula, swelling of sores and damp toxin, sore pharynx, gingiva painful swelling, knocks and falls. Isolated compounds: 9348, 17510.  
*Hemistepta carthamoides* = *Hemistepta lyrata*
- T3202 *Hemistepta lyrata* [Syn. *Hemistepta carthamoides*; *Saussurea carthamoides*] (Asteraceae); NI HU CAI; Lyrate Hemistepta. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, dissipate binds and disperse swelling. TCM Indications: Hemorrhoids and fistulas, swollen welling abscess and clove sores, mammary welling abscess, lymphoditis, wind papule itching, bleeding due to external injury, fracture. Isolated compounds: 9351, 9352, 9353.
- T3203 *Hemsleya amabilis* (Cucurbitaceae); LUO GUO DI; Lovely Hemsleya. Equivalent plant: *Hemsleya macrosperma*. Used part: tuberoid. TCM Effects: To clear heat and resolve toxin, disperse swelling and relieve pain. TCM Indications: Swelling pain in throat, toothache, painful red eyes, bacillary dysentery, enteritis, stomachache, hepatitis, urinary tract infection, swelling of clove. Isolated compounds: 5575, 5576.
- T3204 *Hemsleya carnosiflora* (Cucurbitaceae); ROU HUA XUE DAN; Fleshy-flower Hemsleya. Isolated compounds: 3202, 3203, 3204.
- T3205 *Hemsleya dolichocarpa* (Cucurbitaceae); CHANG GUO XUE DAN; Longfruit Hemsleya. Isolated compounds: 5576.
- T3206 *Hemsleya gigantea* (Cucurbitaceae); JU HUA XUE DAN; Giant Hemsleya. Isolated compounds: 9354, 9355.
- T3207 *Hemsleya graciliflora* [Syn. *Alsomitra graciliflora*] (Cucurbitaceae); XI HUA XUE DAN; Smallflower Hemsleya. Isolated compounds: 4316.
- T3208 *Hemsleya macrosperma* (Cucurbitaceae); DA ZI XUE DAN; Largeseed Hemsleya. Used part: tuberoid. TCM Effects: See *Hemsleya amabilis*. TCM Indications: See *Hemsleya amabilis*. Isolated compounds: 5575, 5576.
- T3209 *Hemsleya pengxianensis* (Cucurbitaceae); PENG XIAN XUE DAN; Pengxian Hemsleya. Isolated compounds: 3524, 5575, 5576.
- T3210 *Hemsleya penxianensis* var. *gulinensis* (Cucurbitaceae); GU LIN XUE DAN; Gulin Hemsleya. Isolated compounds: 9357, 9358.
- T3211 *Heracleum canescens* (Apiaceae); HUI BAI DU HUO; Canescent Cowparsnip\*. Isolated compounds: 2284, 9419.
- T3212 *Heracleum granatense* (Apiaceae); HONG DU HUO; Red Cowparsnip\*. Isolated compounds: 2833.
- T3213 *Heracleum hemsleyanum* (Apiaceae); NIU WEI DU HUO; Hemsley Cowparsnip. Equivalent plant: *Heracleum yungningense*, *Heracleum moellendorffii*. Used part: root. TCM Effects: To dispel wind and dissipate cold, overcome damp and relieve pain. TCM Indications: Common cold, headache, toothache, wind-cold-damp impediment, pain in lumbus and knees, crane's knee wind, disseminated swelling of welling abscess and sores. Isolated compounds: 无.
- T3214 *Heracleum lanatum* (Apiaceae); RUAN MAO DU HUO; Soft-hair Cowparsnip. Used part: root. TCM Effects: See *Angelica pubescens* f. *biserrata*. TCM Indications: See *Angelica pubescens* f. *biserrata*. Isolated compounds: 18086.
- T3215 *Heracleum lanatum* var. *asiaticum* (Apiaceae); YA ZHOU DU HUO; Asian Cowparsnip\*. Isolated compounds: 22775.
- T3216 *Heracleum mantegazzianum* (Apiaceae); DA YE NIU FANG FENG; Giant Hogweed. Isolated compounds: 1194, 17077.  
*Heracleum microcarpum* = *Heracleum moellendorffii*
- T3217 *Heracleum moellendorffii* [Syn. *Heracleum microcarpum*; *Heracleum morifolium*] (Apiaceae); DUAN MAO DU HUO; Shorthair Cowparsnip. Used part: root. TCM Effects: See *Heracleum hemsleyanum*. TCM Indications: See *Heracleum hemsleyanum*. Isolated compounds: 17375.
- T3218 *Heracleum moellendorffii* var. *paucivittatum* (Apiaceae); ZOU MA QIN; Paucivitt Cowparsnip. Isolated compounds: 14894.  
*Heracleum morifolium* = *Heracleum moellendorffii*
- T3219 *Heracleum nepalense* (Apiaceae); NI BO ER DU HUO; Nepal Cowparsnip. Isolated compounds: 933.
- T3220 *Heracleum pyrenaicum* (Apiaceae); OU ZHOU DU HUO; European Cowparsnip\*. Isolated compounds: 2833.
- T3221 *Heracleum rapula* (Apiaceae); BAI YUN HUA; White Cowparsnip\*. Used part: root. TCM Effects: To dispel wind and eliminate damp, relieve cough and calm asthma, dissipate stasis and relieve pain. TCM Indications: Wind-cold common cold, wind-cold-damp impediment, lumbago, stomachache, abdominal pain, toothache, vacuity cold cough asthma, leukorrhea, amenorrhea and dysmenorrhea, mounting *qi*, stasis swelling from knocks and falls. Isolated compounds: 1510, 5535, 13571.
- T3222 *Heracleum scabridum* (Apiaceae); DIAN BAI ZHI; Scabrous

- Cowparsnip. Used part: root. TCM Effects: To dispel wind and effuse sweat, dissipate cold and dry damp. TCM Indications: Wind-cold common cold, headache, cough and asthma, deep-source nasal congestion, cold pain in stomach duct and abdomen, wind-cold-damp impediment, cold-damp vaginal discharge, dysmenorrhea, toxin swelling of sores, wind papule itching. Isolated compounds: 17375.
- T3223 *Heracleum* sp. (Apiaceae). Isolated compounds: 2309, 22195.
- T3224 *Heracleum sphondylium* (Apiaceae); NIU FANG FENG; Hogweed. Isolated compounds: 17375, 22774.
- T3225 *Heracleum* spp. (Apiaceae). Isolated compounds: 17375.
- T3226 *Heracleum thomsoni* (Apiaceae); TANG MU XUN DU HUO; Thomson Cowparsnip\*. Isolated compounds: 1536.
- T3227 *Heracleum wallichii* (Apiaceae); WA SHI DU HUO; Wallich Cowparsnip\*. Isolated compounds: 4461, 11329.
- T3228 *Heracleum yungningense* (Apiaceae); YONG NING DU HUO; Yungning Cowparsnip. Used part: root. TCM Effects: See *Heracleum hemsleyanum*. TCM Indications: See *Heracleum hemsleyanum*. Isolated compounds: 1191, 11249, 11589, 11601, 17375, 20156, 20280, 22953, 22954, 22955, 22956.
- T3229 *Heridium erinaceus* [Syn. *Hydnum erinaceus*] (Hydnaceae); HOU TOU JUN; Bearded Tooth Carphophore. Used part: sporocarp. TCM Effects: To fortify spleen and nourish stomach, quiet spirit, anticancer. TCM Indications: Vacuity and hypodynamia, indigestion, insomnia, gastric ulcer, duodenal ulcer, chronic gastritis, carcinoma in digestive tract. Isolated compounds: 7259, 7260, 7261, 7262, 7263, 7264, 7265, 9429, 9430, 9431, 9432, 9433, 9434, 9435, 9436, 9437, 9438, 9439, 10055, 22850.
- T3230 *Hernandia nymphaeifolia* (Hernandiaceae); SHUI LIAN YE TONG; Sleeping Lotusleafung. Isolated compounds: 6268, 15879, 16282, 16283, 16343.  
*Hernandia ovigera* = *Hernandia sonora*
- T3231 *Hernandia sonora* [Syn. *Hernandia ovigera*] (Hernandiaceae); LIAN YE TONG; Lotusleafung. Used part: leaf or seed. TCM Effects: To drain precipitation and free stool, anticancer. TCM Indications: Constipation, malignant tumor (therioma), nervous system diseases, cardiovascular diseases. Isolated compounds: 1426, 4056, 5543, 6832, 7180, 8814, 9440, 9443, 9451, 9453, 9454, 13945, 14251, 14483, 17342.
- T3232 *Heterocentron roseum*. Isolated compounds: 15642.
- T3233 *Heteropappus altaicus* (Asteraceae); A ER TAI ZI WAN; Altai Heteropappus. Used part: whole herb. TCM Effects: To clear heat and downbear fire, expel pus and relieve cough. TCM Indications: Febrile diseases, liver gallbladder effulgent fire, pulmonary welling abscess, hacking of pus blood, cystitis, zoster, sore and boil. Isolated compounds: 5088.
- T3234 *Heteropogon contortus* (Poaceae); DI JIN; Contorted Tanglehead. Used part: rhizome or whole herb. TCM Effects: To clear heat and allay thirst, dispel wind and eliminate damp. TCM Indications: Diabetes mellitus due to internal heat, wind-damp impediment pain, cough, vomiting and diarrhea. Isolated compounds: 11085.
- T3235 *Heteroscyphus billardieri* (Lophocoleaceae). Isolated compounds: 7194, 9923, 18915.
- T3236 *Hevea brasiliensis* (Euphorbiaceae); XIANG JIAO SHU; Para Rubbertree. Isolated compounds: 18304.
- T3237 *Hexalobus crispiflorus* (Annonaceae); FEI ZHOU FAN LI ZHI; African Custard Apple\*. Isolated compounds: 15797.  
*Hibiscus abelmoschus* = *Abelmoschus moschatus*
- T3238 *Hibiscus cannabinus* (Malvaceae); DA MA JIN; Kenaf Hibiscus. Isolated compounds: 3054, 6352, 9013, 9014.
- T3239 *Hibiscus elatus* (Malvaceae); GAO HONG JIN; Tall Hibiscus. Isolated compounds: 8863.
- T3240 *Hibiscus esculentus* (Malvaceae); KA FEI HUANG KUI; Edible Abelmoschus. Used part: root, leaf, flower or seed. TCM Effects: To disinhibit throat, free strangury, promote lactation, regulate menstruation. TCM Indications: Sore swollen throat, dribbling and inhibited voidings of urination, postpartum scant milk, menstrual disorder. Isolated compounds: 4442.
- T3241 *Hibiscus mutabilis* (Malvaceae); MU FU RONG HUA; Cottonrose Hibiscus Flower. Used part: flower. TCM Effects: To clear heat and resolve toxin, cool blood and stanch bleeding, disperse swelling and expel pus. TCM Indications: Lung heat cough, blood ejection, red eyes with gall, flooding and spotting, vaginal discharge, diarrhea, abdominal pain, swollen welling abscess, sore and boil, poisonous insect stings, burns and scalds, knocks and falls. Isolated compounds: 4447, 4451, 18368.  
*Hibiscus populneus* = *Thespesia populnea*
- T3242 *Hibiscus rosa-sinensis* (Malvaceae); FU SANG HUA; Chinese Hibiscus Flower. Used part: flower. TCM Effects: To clear lung, cool blood, transform damp, resolve toxin. TCM Indications: Lung heat cough, hemoptysis, nosebleed(epistaxis), flooding and spotting, vaginal discharge, dysentery, red and white turbidity, swelling toxin of welling abscess and sore. Isolated compounds: 4449, 18342, 18345.
- T3243 *Hibiscus rosa-sinensis* (Malvaceae); FU SANG YE; Chinese Hibiscus Leaf. Used part: leaf. TCM Effects: To clear heat and disinhibit damp, resolve toxin. TCM Indications: Vaginal discharge, strangury syndrome, swelling toxin of clove sore, parotitis, mastitis, lymphnitis. Isolated compounds: 20713.
- T3244 *Hibiscus syriacus* (Malvaceae); MU JIN HUA; Shrubalthea Flower. Used part: flower. TCM Effects: To clear heat and disinhibit damp, cool blood and resolve toxin. TCM Indications: Intestinal wind bleeding, red and white dysentery, bleeding from hemorrhoids, lung heat cough, hemoptysis, vaginal discharge, swollen welling abscess, sore and boil, scalds. Isolated compounds: 3829, 3831, 3832, 10038, 10786, 16901, 19331, 19542.
- T3245 *Hibiscus syriacus* (Malvaceae); MU JIN PI; Shrubalthea Bark. Used part: bark. TCM Effects: To clear heat and disinhibit damp, kill worms and relieve itch. TCM Indications: Damp-heat diarrhea dysentery, intestinal wind bleeding, prolapse of rectum, hemorrhoids, red and white vaginal discharge, trichomoniasis, scab and lichen, scrotal eczema. Isolated compounds: 2056, 6536, 15935, 19983, 20439.
- T3246 *Hibiscus syriacus* (Malvaceae); MU JIN ZI; Shrubalthea Fruit. Used part: fruit. TCM Effects: To clear lung and transform phlegm, relieve headache, resolve toxin. TCM Indications: Cough of phlegm asthma, bronchitis, headache, yellow-water sore, eczema. Isolated compounds: 13455, 20328, 21412, 21413, 21415, 22559, 22560.
- T3247 *Hibiscus taiwanensis* (Malvaceae); TAI WAN FU RONG; Taiwan

- Hibiscus. Used part: root and stem. TCM Effects: To clear lung and relieve cough, cool blood and resolve toxin. TCM Indications: Lung heat cough, toxin swelling of sores. Isolated compounds: 2224, 2527, 2887, 3829, 3831, 4135, 7768, 7788, 7789, 7895, 8863, 9481, 9535, 9536, 9537, 9538, 9539, 9818, 12801, 13515, 13518, 14205, 14254, 14442, 14443, 14447, 14804, 15169, 16402, 19540, 19542, 19910, 19983, 19987, 20369, 20554, 20556, 20566, 22208, 22332, 22336.
- T3248 *Hibiscus tiliaceus* (Malvaceae); HUANG JIN; Linden Hibiscus. Used part: leaf, bark or flower. TCM Effects: To clear lung and relieve cough, resolve toxin and disperse swelling. TCM Indications: Lung heat cough, swelling pain of sore and boil, cassava poisoning. Isolated compounds: 12501.
- T3249 *Hibiscus vitifolius* (Malvaceae); PU TAO YE MU JIN; Grapeleaf Hibiscus\*. Isolated compounds: 8965.
- T3250 *Hierochloe odorata* (Poaceae); MAO XIANG HUA; Vanillagrass. Used part: inflorescence. TCM Effects: To warm stomach, check vomiting. TCM Indications: Cold pain in heart and abdomen. Isolated compounds: 4142.
- T3251 *Himatanthus sucuuba* (Apocynaceae); SU KU BA DOU HUA; Bellaco-Caspi. Isolated compounds: 1114, 13100, 13101, 13102, 20202.
- T3252 *Hippomane mancinella* (Euphorbiaceae); MA FENG MU; Manchineel. Isolated compounds: 13476, 22778.
- T3253 *Hippophae neurocarpa* (Elaeagnaceae); LEI GUO SHA JI; Veinfruit Seabuckthorn. Isolated compounds: 19087.
- T3254 *Hippophae rhamnoides* (Elaeagnaceae); CU LIU GUO; Seabuckthorn Fruit. Equivalent plant: *Hippophae rhamnoides* subsp. *sinensis*, *Hippophae rhamnoides* subsp. *yunnanensis*. Used part: fruit. TCM Effects: To relieve cough and transform phlegm, fortify stomach and disperse food, quicken blood and dissipate stasis. TCM Indications: Cough with profuse phlegm, pulmonary welling abscess, indigestion, food accumulation abdominal pain, stomachache, enteritis, amenorrhea, stasis swelling from knocks and falls. Isolated compounds: 1113, 1598, 1845, 1935, 3040, 3138, 3139, 3140, 3211, 3296, 3308, 3551, 3766, 5499, 5500, 6047, 7852, 7853, 8095, 9234, 9236, 9345, 9486, 10160, 10591, 10784, 11648, 12020, 12569, 12891, 12893, 13419, 15170, 15203, 16285, 16561, 18317, 18656, 19087, 19983, 20280, 20369, 20444, 20715, 21415, 22554, 22556, 22559, 22560, 22561, 22562, 22563, 22976.
- T3255 *Hippophae rhamnoides* subsp. *gyantsensis* (Elaeagnaceae); JIANG ZI SHA JI; Jiangzi Seabuckthorn\*. Isolated compounds: 19087.
- T3256 *Hippophae rhamnoides* subsp. *sinensis* (Elaeagnaceae); ZHONG GUO SHA JI; Chinese Seabuckthorn\*. Used part: fruit. TCM Effects: See *Hippophae rhamnoides*. TCM Indications: See *Hippophae rhamnoides*. Isolated compounds: 11648, 18317, 19087.
- T3257 *Hippophae rhamnoides* subsp. *turkestanica* (Elaeagnaceae); ZHONG YA SHA JI; Central Asia Seabuckthorn\*. Isolated compounds: 18317, 19087.
- T3258 *Hippophae rhamnoides* subsp. *yunnanensis* (Elaeagnaceae); YUN NAN SHA JI; Yunnan Seabuckthorn\*. Used part: fruit. TCM Effects: See *Hippophae rhamnoides*. TCM Indications: See *Hippophae rhamnoides*. Isolated compounds: 19087.
- T3259 *Hippophae thibetana* (Elaeagnaceae); XI ZANG SHA JI; Tibet Seabuckthorn. Isolated compounds: 19087.
- T3260 *Histiopteris incisa* (Dennstaedtiaceae); LI JUE; Incised Histiopteris. Isolated compounds: 18125, 18152.
- T3261 *Hodgkinsonia frutescens* (Cucurbitaceae). Isolated compounds: 18295, 18296.
- T3262 *Holarrhena africana* (Apocynaceae); FEI ZHOU ZHI XIE MU; African Holarrhena\*. Isolated compounds: 3968, 9578, 9585.
- T3263 *Holarrhena antidyenterica* (Apocynaceae); ZHI XIE MU PI; Droughtdysentery Holarrhena Bark. Used part: bark. TCM Effects: To move *qi* and check diarrhea, kill worms. TCM Indications: Dysentery, gastrointestinal flatulence. Isolated compounds: 3959, 3961, 3966, 3967, 3968, 3989, 3991, 5562, 5563, 6873, 6931, 9576, 9577, 9578, 9579, 9580, 9581, 9582, 9583, 9584, 9585, 9586, 9587, 9591, 9932, 9937, 10547, 11340, 12345, 12346, 12347, 12348, 12349, 12350, 14350, 16659, 18585, 18586, 18587, 21196.
- T3264 *Holarrhena congolensis* (Apocynaceae); GANG GUO HE ZHI XIE MU; Congo Holarrhena\*. Isolated compounds: 3968, 8010, 9584.
- T3265 *Holarrhena febrifuga* (Apocynaceae); TUI RE ZHI XIE MU; Febrifuge Holarrhena\*. Isolated compounds: 3968, 8010, 9587, 11340.
- T3266 *Holarrhena floribunda* (Apocynaceae); FAN HUA ZHI XIE MU; Purplequeen Holarrhena\*. Isolated compounds: 3968.
- T3267 *Holarrhena mitis* (Apocynaceae); WEN ROU ZHI XIE MU; Suave Holarrhena\*. Isolated compounds: 3968, 9584, 9587, 21511.
- T3268 *Holarrhena pubescens* (Apocynaceae); DUAN ROU MAO ZHI XIE MU; Shortfluff Holarrhena\*. Isolated compounds: 273, 3968, 6469, 10557, 12347.
- T3269 *Holarrhena waltbergii* (Apocynaceae); WO SHI ZHI XIE MU; Waltberg Holarrhena\*. Isolated compounds: 3968.
- T3270 *Holboellia fargesii* (Lardizabalaceae); WU YE GUA TENG; Farges Holboellia. Used part: fruit. TCM Effects: To clear heat and disinhibit damp, quicken blood and free vessels, move *qi* and relieve pain. TCM Indications: short voidings of reddish urine, strangury-turbidity, edema, wind-damp impediment pain, knocks and falls, breast milk stoppage, mounting *qi* (hernia), prolapse of uterus, testitis. Isolated compounds: 7723, 7724, 7725, 7726, 7727.
- T3271 *Holoptelea integrifolia* (Ulmaceae); YIN MIAN YU; Vellayim. Isolated compounds: 12569.
- T3272 *Holostylis reniformis* (Aristolochiaceae). Isolated compounds: 1709, 1730, 6830, 6831, 6932, 6933, 9592, 14393, 19615, 19616.
- T3273 *Homalanthus acuminatus* (Euphorbiaceae); JIAN JIAN AO YANG; Acuminate Aussiepoplar\*. Isolated compounds: 17958.
- T3274 *Homalanthus nutans* (Euphorbiaceae); XIA CHUI AO YANG; Nutant Aussiepoplar\*. Isolated compounds: 17958.
- T3275 *Homalium cochinchinensis* (Samydaceae); TIAN LIAO MU; Cochinchina Homalium. Isolated compounds: 2224, 3874, 3875, 3876, 3877, 21508, 21509, 21510.
- T3276 *Homo sapiens* (Hominidae); REN NIAO; Human Urine. Used part: human urine. TCM Effects: To enrich *yin* and downbear fire, stanch bleeding and disperse stasis. TCM Indications: *Yin* vacuity fever, taxation damage hemoptysis, blood ejection, spontaneous external bleeding, postpartum blood stasis, blood dizziness, knocks and falls, pain of blood stasis. Isolated compounds: 1160, 4223, 5153, 5164, 9548, 9937, 11220, 22246, 22251, 22259.

- T3277 *Homo sapiens* (Hominidae); REN ZHONG BAI; Human Urine Sediment. Used part: sediment of human urine. TCM Effects: To clear heat, downbear fire, disperse stasis. TCM Indications: Taxation fever, lung wilting, spontaneous external bleeding, blood ejection, throat impediment, *gan* of teeth and gum, mouth sore, tongue sores. Isolated compounds: 22246, 22251.
- T3278 *Homo sapiens* (Hominidae); XUE YU; Human Hair. Used part: human hair. TCM Effects: To dispel stasis and stanch bleeding. TCM Indications: Blood ejection, nosebleed(epistaxis), gum hemorrhage, blood dysentery, blood strangury, flooding and spotting. Isolated compounds: 13659.
- T3279 *Homo sapiens* (Hominidae); ZI HE CHE; Human Placenta. Used part: human placenta. TCM Effects: To supplement *qi*, nourish blood, boost essence. TCM Indications: Vacuity detriment, marked emaciation, steaming bone taxation fever, cough and asthma, hemoptysis, night sweating, emission, impotence, *qi*-blood depletion, infertility, scant breast milk. Isolated compounds: 1170, 4097, 4887, 5163, 7383, 7384, 7386, 7387, 17804, 17901.
- T3280 *Hopea parviflora* (Dipterocarpaceae); XIAO HUA PO LEI; Kongu. Isolated compounds: 1076, 2124, 16678.
- T3281 *Hopea utilis* (Dipterocarpaceae); YOU YONG PO LEI; Utilizable Hopea\*. Isolated compounds: 9636, 18649.
- T3282 *Hordeum vulgare* (Poaceae); MAI YA; Barley Germinating Fruit. Used part: germinated fruit. TCM Effects: To disperse food and transform accumulation, terminate lactation. TCM Indications: Food accumulation, abdominal distention and diarrhea, nausea and vomiting, inappetence, galactostasis, distending pain in breast. Isolated compounds: 3070, 8971, 9467, 9644, 9645, 9646, 13439, 18230, 20147, 22058, 22158.
- T3283 *Hosta sieboldiana* (Liliaceae); DA YU BIAO HUA; Shortclustered Plantainlily. Used part: root or flower. TCM Effects: To clear heat and resolve toxin, rectify *qi*. TCM Indications: Sore toxin, headache. Isolated compounds: 8457.
- T3284 *Houttuynia cordata* (Saururaceae); YU XING CAO; Heartleaf Houttuynia. Used part: aerial parts. TCM Effects: To clear heat and resolve toxin, expel pus and disinhibit urine. TCM Indications: Pulmonary welling abscess with hacking of pus and blood, lung heat phlegm cough, pneumonia, chronic bronchitis, urinary tract infection, odynuria, chronic uterine cervical infection, leptospirosis, otitis media, cystitis, dysentery, mastitis, heat toxin sores, heat strangury. Isolated compounds: 336, 1695, 3045, 3138, 3242, 3409, 3551, 4833, 4837, 5462, 9486, 10887, 11642, 12082, 12570, 12849, 12891, 13474, 13475, 14623, 15146, 15725, 15816, 17376, 17463, 18317, 18411, 19087, 19397, 19405, 19406, 19983, 20280, 22615.
- T3285 *Hovenia dulcis* (Rhamnaceae); ZHI JU GEN; Japanese Raisin Tree Root. Used part: root. TCM Effects: To dispel wind and quicken network vessels, stanch bleeding, resolve liquor. TCM Indications: Vacuity taxation blood ejection, wind-damp pain in sinew and bone. Isolated compounds: 7938, 9653.
- T3286 *Hovenia dulcis* (Rhamnaceae); ZHI JU ZI; Japanese Raisin Tree Seed. Used part: fruit or seed. TCM Effects: To resolve liquor toxin, eliminate vexation and allay thirst, check vomiting, disinhibit urine and free stool. TCM Indications: Drunkenness, vexation and thirst, vomiting, inhibited urine and stool. Isolated compounds: 1074, 1764, 9652, 16847.
- T3287 *Huechys sanguinea* (Cicadidae); HONG NIANG ZI; Red Lady-bug. Used part: dried body. TCM Effects: To break stasis, dissipate binds, attack toxin. TCM Indications: Scrofula, amenorrhea due to blood stasis, lumbago, infertility, lichen sore, rabid dog bite. Isolated compounds: 3094.
- T3288 *Humulus japonicus* [Syn. *Humulus scandens*] (Moraceae); LV CAO; Japanese Hop. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, disinhibit urine and free strangury. TCM Indications: Tuberculosis, cystitis, mastitis, tonsillitis, lung heat cough, pulmonary welling abscess, vacuity heat with vexation and thirst, heat strangury, edema, inhibited urination, damp-heat diarrhea dysentery, heat toxin sores, itchy skin. Isolated compounds: 3674, 4029, 13109, 22581.
- T3289 *Humulus lupulus* (Moraceae); PI JIU HUA; European Hop Female-flower. Used part: female-flower. TCM Effects: To fortify stomach and disperse food, disinhibit urine and quiet spirit, eliminate inflammation. TCM Indications: Indigestion, abdominal distention, edema, cystitis, tuberculosis, cough, insomnia, leprosy. Isolated compounds: 628, 2936, 3241, 3242, 4076, 4819, 5261, 5262, 5263, 5742, 5743, 5911, 6497, 9657, 9665, 9669, 9670, 9671, 9672, 9675, 9676, 9677, 9678, 9815, 10830, 11248, 11459, 11460, 11754, 11783, 12714, 13109, 13110, 13111, 13112, 13113, 13114, 13115, 14176, 17808, 17839, 17843, 19681, 19987, 21599, 22761, 22762, 22763, 22764, 22765, 22766, 22767.
- Humulus scandens* = *Humulus japonicus*
- T3290 *Hunnemannia* spp. (Papaveraceae). Isolated compounds: 3498.
- T3291 *Hunteria elliptica* (Apocynaceae). Isolated compounds: 12268.
- T3292 *Hunteria zeylanica* (Apocynaceae); ZI LAN SHU; Ceylon Hunteria. Used part: root. TCM Effects: To clear heat and resolve toxin, quicken blood and relieve pain. TCM Indications: Painful swelling from knocks and falls, poisonous snake bites. Isolated compounds: 12268.
- T3293 *Huperzia miyoshiana* (Huperziaceae); DONG BEI SHI SHAN; Northeast Clubmoss\*. Isolated compounds: 3813, 6956, 7805, 13191, 13223, 13225, 13229.
- T3294 *Huperzia selago* [Syn. *Lycopodium selago*] (Huperziaceae); XIAO JIE JIN CAO; Selago-like Climbing Fern. Used part: whole herb. TCM Effects: To dispel wind and eliminate damp, disperse swelling and relieve pain, stanch bleeding. TCM Indications: Wind-damp impediment pain, knocks and falls, bleeding due to external injury, urticaria. Isolated compounds: 567, 7768, 9686, 10170, 13191, 13223, 15889, 15890, 18062, 19675.
- T3295 *Huperzia serrata* [Syn. *Lycopodium serratum*] (Huperziaceae); QIAN CENG TA; Serrate Clubmoss. Used part: whole herb. TCM Effects: To abate fever, eliminate damp, disperse stasis, stanch bleeding, clear heat and resolve toxin. TCM Indications: Lung abscess, pneumonia, cor pulmonale, taxation damage and blood ejection, bleeding from hemorrhoids, vaginal discharge, knocks and falls, toxin swelling, hematuria, cold-damp ascites, enduring sores, scalds. Isolated compounds: 459, 4748, 6116, 6117, 6118, 6119, 6120, 6121, 6122, 7017, 7142, 7143, 7144, 7168, 9686, 9687, 9688, 9689, 9690, 10644, 10699, 10700, 10701, 10703, 10704, 10705, 10706, 10707, 10708, 12400, 13046, 13177, 13187, 13190, 13191, 13225, 13226, 13227,



- 13228, 13229, 13230, 13231, 13232, 13233, 13234, 14493, 15407, 16313, 16321, 16322, 16354, 16355, 16421, 19766, 19768, 19769, 19770, 19771, 19772, 19773, 19774, 21424, 21425.
- T3296 *Hura crepitans* (Euphorbiaceae); SHA HE SHU; Sandbox-tree. Isolated compounds: 9691.
- T3297 *Hyacinthus orientalis* (Liliaceae); FENG XIN ZI; Common Hyacinth. Isolated compounds: 9696.
- T3298 *Hyacinthus* sp. (Liliaceae). Isolated compounds: 3693.
- T3299 *Hydnellum caeruleum* (Thelephoraceae); LAN SE YA CHI JUN; Inedible Mushroom. Isolated compounds: 21301, 21302, 21303, 21304, 21305, 21306.
- T3300 *Hydnocarpus anthelminticus* (Flacourtiaceae); DA FENG ZI; Chaulmoogratree Seed. Used part: seed. TCM Effects: To dispel wind and dry damp, attack toxin and kill worms. TCM Indications: Numbing wind, scab and lichen, red bayberry sore. Isolated compounds: 883, 884, 885, 3485, 8955, 9697.
- T3301 *Hydnocarpus wightiana* (Flacourtiaceae); WEI SHI DA FENG ZI; Wightiana Chaulmoogratree Seed\*. Isolated compounds: 15409.  
*Hydnum erinaceus* = *Hericium erinaceus*
- T3302 *Hydnum repandum* (Hydnaceae); MEI WEI CHI JUN; Sweet Tooth. Isolated compounds: 19357, 19358.
- T3303 *Hydrangea chinensis* (Saxifragaceae); ZHONG GUO XIU QIU; Chinese Hydrangea. Used part: root. TCM Effects: To interrupt malaria, quicken blood and relieve pain, clear heat and disinhibit urine. TCM Indications: Knocks and falls, fracture, malaria, headache, measles papules, dribbling pain of urination. Isolated compounds: 4648, 9452, 9698, 9700, 9701, 9815, 9944, 11234, 14254, 18420, 19983, 19987, 20554, 22195.
- T3304 *Hydrangea macrophylla* (Saxifragaceae); BA XIAN HUA; Largeleaf Hydrangea. Used part: root, leaf and flower. TCM Effects: To interrupt malaria. TCM Indications: Malaria, fright palpitation due to heart heat, vexation and agitation. Isolated compounds: 4647, 4648, 9699, 9700, 13084, 13085.
- T3305 *Hydrangea macrophylla* var. *thunbergii* (Saxifragaceae); SE BO GE XIU QIU; Thunberg Hydrangea\*. Isolated compounds: 9700, 17225.
- T3306 *Hydrangea paniculata* (Saxifragaceae); FEN TUAN HUA; Paniculate Hydrangea. Used part: flower. TCM Effects: To disperse damp, break blood. TCM Indications: Scrotal wind. Isolated compounds: 8078, 22195.
- T3307 *Hydrangea* sp. (Saxifragaceae). Isolated compounds: 12950.
- T3308 *Hydrangea umbellata* (Saxifragaceae); SAN XING XIU QIU; Umbellate Hydrangea. Used part: root. TCM Effects: To interrupt malaria, disperse food, clear heat and resolve toxin, dispel phlegm and dissipate binds. TCM Indications: Malaria, food accumulation abdominal distention, swelling pain in throat, skin lichen *lai*, swelling toxin of sore and boil, goiter and tuberculosis. Isolated compounds: 5435.
- T3309 *Hydrastis canadensis* (Ranunculaceae); BAI MAO GEN<sup>(4)</sup>; Golden-seal. Isolated compounds: 2302, 2303, 3055, 3057, 3058, 6366, 9702, 9703, 11348, 14567, 19985.
- T3310 *Hydroclathrus tenuis* (Scytosiphonaceae); BO YE WANG YI ZAO. Isolated compounds: 2436.
- T3311 *Hydrocotyle sibthorpioides* (Apiaceae); TIAN HU SUI; Lawn Pennywort. Used part: whole herb. TCM Effects: To clear heat and disinhibit damp, resolve toxin and disperse swelling. TCM Indications: Jaundice, dysentery, edema, strangury, eye screen, throat swelling, swelling toxin of welling abscess and sore, zoster, knocks and falls. Isolated compounds: 4140, 9710, 9711, 9712, 9713, 9714, 9715, 9716, 18332, 22173.
- T3312 *Hygrophorus latitabundus* (Hygrophoraceae). Isolated compounds: 433, 434, 435, 436, 5339, 5340, 5341, 10840.
- T3313 *Hygrophorus olivaceoalbus* (Hygrophoraceae); Slimysheathed Waxy Cap 橄欖白蜡伞. Isolated compounds: 430, 431, 5338, 10837, 10838, 21536.
- T3314 *Hygrophorus persoonii* (Hygrophoraceae). Isolated compounds: 426, 427, 428, 429, 5336, 5337, 5920, 10836, 10841, 10842, 21535.
- T3315 *Hygrophorus pustulatus* (Hygrophoraceae). Isolated compounds: 432, 10839.
- T3316 *Hylomecon japonica* (Papaveraceae); HE QING HUA; Japanese Hylomecon. Used part: root and rhizome. TCM Effects: To dispel wind and free network vessels, dissipate stasis and disperse swelling. TCM Indications: Wind-damp impediment pain, knocks and falls. Isolated compounds: 930, 3498, 3502, 3507, 3508, 4290, 19284, 20416.
- T3317 *Hylomecon* spp. (Papaveraceae). Isolated compounds: 3498.
- T3318 *Hylotelephium mingjinianum* (Crassulaceae); ZI HUA JING TIAN; Purpleflower Stonecrop. Used part: whole herb. TCM Effects: To quicken blood and stanch bleeding, clear heat and resolve toxin. TCM Indications: Blood ejection, sprain, taxation damage in lumbar muscle, scalds, poisonous snake bite, zoster, indigestion. Isolated compounds: 5763, 12083, 14872, 14873.  
*Hymenocallis americana* = *Hymenocallis littoralis*
- T3319 *Hymenocallis arenicola* (Amaryllidaceae); SHA SHENG SHUI GUI JIAO; Arenaceous Hymenocallis\*. Isolated compounds: 3197.
- T3320 *Hymenocallis littoralis* [Syn. *Hymenocallis americana*; *Pancratium littoralis*] (Amaryllidaceae); SHUI GUI JIAO YE; Tropical American Hymenocallis Leaf. Used part: leaf. TCM Effects: To soothe sinews and quicken blood, disperse swelling and relieve pain. TCM Indications: Painful swelling from knocks and falls, pain in joints due to rheumatism, hemorrhoids. Isolated compounds: 13241, 19618, 20891.
- T3321 *Hymenocallis rotata* (Amaryllidaceae); FU ZHUANG SHUI GUI JIAO; Rotate Hymenocallis\*. Isolated compounds: 15750.
- T3322 *Hymenoclea salsola* (Asteraceae); MEI GUO HAI MO JU; Burro Bush. Isolated compounds: 1029, 4087, 10843.
- T3323 *Hymenodictyon excelsum* (Rubiaceae); TU LIAN QIAO; Tall Hymenodictyon. Used part: bark. TCM Effects: To clear heat and resolve toxin, suppress cough and interrupt malaria. TCM Indications: Malaria, malign malaria, common cold, ardent fever, cough with profuse phlegm. Isolated compounds: 664, 1359, 2299, 4622, 13041, 14124, 14974, 15734, 18998, 18999.
- T3324 *Hymenophyllum barbatum* (Hymenophyllaceae); MO JUE; Barbate Filmy Fern. Used part: whole herb. TCM Effects: To stanch bleeding. TCM Indications: Bleeding due to external injury. Isolated compounds: 8689, 10844, 10845, 10846, 10847, 10848, 10849, 10850, 10851, 10852, 10853, 10854, 10855, 10856, 10857, 10858, 10859, 10860,

- 10861, 10862, 10863, 10864, 10865, 10866, 14505.
- T3325 *Hymenoxys grandiflora* (Compositae); MO ZHI JU. TCM Effects: Anticarcinoma. Isolated compounds: 16733.
- T3326 *Hymenoxys odorata* (Compositae); XIANG MO ZHI JU. TCM Effects: Anticarcinoma. Isolated compounds: 15991, 16733.
- T3327 *Hyoscyamus niger* (Solanaceae); LANG DANG GEN; Black Henbane Root. Used part: root. TCM Effects: To interrupt malaria, kill worms, attack toxin. TCM Indications: Malaria, lichen and Scab sore. Isolated compounds: 1526, 21195, 22050.
- T3328 *Hyoscyamus niger* (Solanaceae); LANG DANG YE; Black Henbane Leaf. Used part: leaf. TCM Effects: To settle pain and resolve tetany. TCM Indications: Pain in stomach duct and abdomen, toothache, cough and asthma. Isolated compounds: 2001, 10870, 10872.
- T3329 *Hyoscyamus niger* (Solanaceae); LANG DANG ZI; Black Henbane Seed. Used part: ripe seed. TCM Effects: To resolve spasm and relieve pain, quiet heart and settle epilepsy. TCM Indications: Pain in stomach duct and abdomen, wind-damp impediment pain, decayed toothache due to wind, painful wound from knocks and falls, incessant asthma and cough, prolapse of rectum due to diarrhea, mania and withdrawal, fright epilepsy, swelling toxin of welling abscess and sore. Isolated compounds: 1287, 1526, 2001, 2218, 3087, 3088, 3829, 3830, 4417, 4680, 7788, 8814, 9013, 9486, 10870, 10871, 10872, 10874, 15203, 15944, 15945, 15946, 15951, 16066, 19087, 19983, 20280, 21037, 21195, 22332, 22376.
- T3330 *Hyoscyamus orientalis* (Solanaceae); DONG FANG TIAN XIAN ZI; Oriental Henbane\*. Isolated compounds: 1526.
- T3331 *Hyoscyamus* spp. (Solanaceae). Isolated compounds: 10870.
- T3332 *Hypecoum erectum* (Papaveraceae); ZHI LI JIAO HUI XIANG; Erect Hypecoum. Used part: root or whole herb. TCM Effects: To clear heat and resolve toxin, suppress cough and relieve pain. TCM Indications: Common cold with fever, cough, swelling pain in throat, liver fire and red eyes, hepatitis, cholecystitis, dysentery, pain in joints. Isolated compounds: 10878, 10879, 10882, 14209.
- T3333 *Hypecoum japonicum* (Papaveraceae); DI TANG CAO; Japanese Hypecoum\*. Isolated compounds: 4032.
- T3334 *Hypecoum leptocarpum* (Papaveraceae); XI GUO JIAO HUI XIANG; Thinfruit Hypecoum. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, cool blood. TCM Indications: Common cold with fever, headache, throat pain, red eyes with gall, pain in joints, pneumonia, hepatitis, cholecystitis, blood ejection, spontaneous external bleeding, hematochezia. Isolated compounds: 3498, 4032, 10878, 10880, 12672, 12674, 12675, 12676, 12677, 16446, 17873, 19284.
- T3335 *Hypecoum procumbens* (Papaveraceae); PING ZHAN JIAO HUI XIANG; Procumbent Hypecoum\*. Isolated compounds: 17873.
- T3336 *Hypecoum* sp. (Papaveraceae). Isolated compounds: 7788.
- T3337 *Hypericum ancherii* (Clusiaceae); AN SHI JIN SI TAO; Ancher St.John'swort\*. Isolated compounds: 13481.
- T3338 *Hypericum androsaemum* (Clusiaceae); TU SAN JIN SI TAO; Tutsan. Isolated compounds: 15715.
- T3339 *Hypericum annulatum* (Clusiaceae); HUAN ZHUANG JIN SI TAO; Circularity St.John'swort\*. Isolated compounds: 321, 1340.
- T3340 *Hypericum ascyron* (Clusiaceae); HUANG HAI TANG; Giant St.John'swort. Used part: whole herb. TCM Effects: To cool blood and stanch bleeding, quicken blood and regulate menstruation, clear heat and resolve toxin. TCM Indications: Blood ejection due to blood heat, hemoptysis, hematuria, hematochezia, flooding and spotting, knocks and falls, bleeding due to external injury, menstrual disorder, dysmenorrhea, galactostasis, wind-heat common cold, malaria, hepatitis, dysentery, diarrhea, poisonous snake bite, scalds, eczema, yellow-water sore. Isolated compounds: 3549, 5846, 10883, 10887, 11642, 12020, 18317, 19087.
- T3341 *Hypericum aucheri* (Clusiaceae); AO SHI JIN SI TAO; Aucher St.John'swort\*. Isolated compounds: 15715.
- T3342 *Hypericum bellum* (Clusiaceae); MEI LI JIN SI TAO; Beautiful St.John'swort. Used part: fruit. TCM Effects: To clear damp heat, expel roundworms, relieve itch. TCM Indications: Hepatitis, dysentery, mouth sore, abdominal pain due to ascariasis, itchy of skin. Isolated compounds: 6339.
- T3343 *Hypericum calycinum* (Clusiaceae); DA E JIN SI TAO; Rose-of-Sharon. Isolated compounds: 10881.
- T3344 *Hypericum chinense* (Clusiaceae); JIN SI TAO GUO SHI; Chinese St.John'swort Fruit. Used part: fruit. TCM Effects: To moisten lung and relieve cough. TCM Indications: Lung disease, pertussis, vacuity heat cough. Isolated compounds: 9566.
- T3345 *Hypericum curvisepalum* (Clusiaceae); WAN E JIN SI TAO; Curvedsepal St.John'swort. Isolated compounds: 10883, 10887, 19087.
- T3346 *Hypericum degenii* (Clusiaceae); DI GEN JIN SI TAO; Degen St.John'swort\*. Isolated compounds: 8306.
- T3347 *Hypericum drummondii* (Clusiaceae); DE LA MENG DE JIN SI TAO; Drummond St.John'swort. Isolated compounds: 848, 6606.
- T3348 *Hypericum elodeoides* (Clusiaceae); TING JING BIAN DI JIN; Elodia St.John'swort. Used part: whole herb. TCM Effects: See *Hypericum wightianum*. TCM Indications: See *Hypericum wightianum*. Isolated compounds: 10883, 10887, 19087.
- T3349 *Hypericum erectum* (Clusiaceae); XIAO LIAN QIAO; Erect St.John'swort. Used part: whole herb. TCM Effects: To regulate menstruation and stanch bleeding, dissipate stasis and relieve pain, resolve toxin and disperse swelling. TCM Indications: Blood ejection, hemoptysis, spontaneous external bleeding, hematochezia, flooding and spotting, bleeding due to external injury, menstrual disorder, postpartum galactostasis, knocks and falls, pain in joints due to rheumatism, swelling toxin of sore and boil, poisonous snake bite. Isolated compounds: 5101, 7223, 7224, 7225, 10886, 16268, 16269.
- T3350 *Hypericum faberi* (Clusiaceae); YANG ZI XIAO LIAN QIAO; Faber's St.John'swort. Isolated compounds: 10883, 10886, 10887, 19087.
- T3351 *Hypericum foliosum* (Clusiaceae); DUO YE JIN SI TAO; Leafy St.John'swort\*. Isolated compounds: 21727.
- T3352 *Hypericum forrestii* (Clusiaceae); CHUAN DIAN JIN SI TAO; Forrest's St.John'swort. Isolated compounds: 10887.
- T3353 *Hypericum geminiflorum* (Clusiaceae); SHUANG HUA JIN SI TAO; Biflower St.John'swort\*. Isolated compounds: 8262.
- T3354 *Hypericum henryi* (Clusiaceae); HENG LI DI ER CAO; Henry St.John'swort. Isolated compounds: 2371, 6184, 21152.

- T3355 *Hypericum hirsutum* (Clusiaceae); YING MAO JIN SI TAO; Hairy St.John'swort. Isolated compounds: 15170.
- T3356 *Hypericum japonicum* (Clusiaceae); DI ER CAO; Japanese St.John'swort. Used part: whole herb. TCM Effects: To clear heat and disinhibit damp, resolve toxin, dissipate stasis and disperse swelling, relieve pain. TCM Indications: Damp-heat jaundice, diarrhea, dysentery, intestinal welling abscess, pulmonary welling abscess, swelling toxin of welling abscess and boil, nipple moth, mouth sore, red eyes with gall, poisonous snake bite, knocks and falls. Isolated compounds: 380, 852, 2371, 4140, 6184, 8329, 10883, 10887, 11642, 11818, 11819, 11820, 19382, 19383, 19384, 19385, 21152, 22492.
- T3357 *Hypericum lancasteri* (Clusiaceae); ZHAN E JIN SI TAO; Lancaster's St.John'swort. Isolated compounds: 10883, 10887, 18317.
- T3358 *Hypericum laricifolium* (Clusiaceae); LUO YE SONG YE JIN SI TAO; Larch-leaf St.John'swort\*. Isolated compounds: 2887, 9365, 15670, 18317.
- T3359 *Hypericum papuanum* (Clusiaceae). Isolated compounds: 6780, 6781, 6782, 8029, 10220, 10221, 10222, 10884, 10885, 10889, 10929, 10930, 10931, 10932, 10933, 16629, 16630, 16631, 16632, 16633.
- T3360 *Hypericum patulum* (Clusiaceae); JIN SI MEI; Spreading St.John'swort. Used part: whole herb. TCM Effects: To clear heat and rectify damp, resolve toxin, course liver and free network vessels, dispel stasis and relieve pain. TCM Indications: Damp-heat strangury, hepatitis, common cold, tonsillitis, mounting *qi* with unilateral sagging of one testicle, pain in sinews and bones, knocks and falls. Isolated compounds: 10883, 10887, 16730, 18317, 19087.
- T3361 *Hypericum perforatum* (Clusiaceae); GUAN YE LIAN QIAO; Common St.John'swort. Used part: whole herb with root. TCM Effects: To promote astriction and stanch bleeding, regulate menstruation and free milk, clear heat and resolve toxin, disinhibit damp. TCM Indications: Hemoptysis, blood ejection, intestinal wind bleeding, flooding and spotting, bleeding due to external injury, menstrual disorder, galactostasis, jaundice, throat pain, red eyes with gall, urinary tract infection, mouth sore, nose sores, swelling toxin of welling abscess and boil, burns and scalds. Isolated compounds: 2347, 6853, 8026, 10219, 10883, 10886, 10887, 10887, 13875, 14322, 18250, 18317, 18411, 19087, 20011, 20012, 20013, 20015.
- T3362 *Hypericum polyanthemum* (Clusiaceae). Isolated compounds: 10239, 10240, 11294.
- T3363 *Hypericum sampsonii* (Clusiaceae); YUAN BAO CAO; Sampson St.John'swort. Used part: whole herb. TCM Effects: To cool blood and stanch bleeding, clear heat and resolve toxin, quicken blood and regulate menstruation, dispel wind and free network vessels. TCM Indications: Blood ejection, hemoptysis, spontaneous external bleeding, blood strangury, bleeding from wounds, enteritis, dysentery, mammary welling abscess, swollen welling abscess and toxin of clove sore, scalds, snake bite, menstrual disorder, menstrual pain, leukorrhea, knocks and falls, wind-damp impediment pain, pain in lumbus and leg, tinea capitis, mouth sore, eye screen. Isolated compounds: 2915, 5901, 5908, 5909, 6014, 10883, 10886, 10887, 10890, 18317, 20014.
- T3364 *Hypericum* spp. (Clusiaceae). Isolated compounds: 2347, 3551, 16587.
- T3365 *Hypericum subsessile* (Clusiaceae); JI WU BING JIN SI TAO; Subsessile St.John'swort. Isolated compounds: 10883, 10887, 18317.
- T3366 *Hypericum triquetrifolium* (Clusiaceae); SAN LENG YE JIN SI TAO; Triangular-leaf St.John'swort\*. Isolated compounds: 18028.
- T3367 *Hypericum uliginosum* (Clusiaceae); SHI SHENG JIN SI TAO; Wetland St.John'swort\*. Isolated compounds: 22190, 22191.
- T3368 *Hypericum wightianum* (Clusiaceae); BIAN DI JIN; Wight's St.John'swort. Equivalent plant: *Hypericum elodeoides*. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, arrest diarrhea. TCM Indications: White mouth sore in children, infant pneumonia, stomatitis, mammary welling abscess, yellow-water sore, poisonous snake bites, diarrhea, enduring dysentery. Isolated compounds: 5182, 10883, 10886, 10887, 18317, 19087.
- T3369 *Hypericum wightianum* subsp. *axillare* (Clusiaceae); CHA YU BIAN DI JIN; Chayu St.John'swort. Isolated compounds: 10887.
- T3370 *Hyphantria cunea*; Female fall webworm moth. Isolated compounds: 15938.
- T3371 *Hypocrella bambusae* (Hypocreaceae); ZHU HONG JUN; Bambusa Hypocrella\*. Used part: stroma. TCM Effects: To dispel wind and eliminate damp, resolve toxin and relieve itch. TCM Indications: Rheumatic arthritis, leukoplakia of vulva. Isolated compounds: 16974.
- T3372 *Hypodematium sinense* (Hypodematiaceae); SHAN DONG ZHONG ZU JUE; Shandong Hypodematium. Used part: whole herb or leaf. TCM Effects: To harmonize stomach and check vomiting, calm liver and quiet spirit. TCM Indications: Nausea, vomiting, dizziness, insomnia. Isolated compounds: 10891.
- T3373 *Hypoestes purpurea* [Syn. *Justicia purpurea*; *Hypoestes sinica*] (Acanthaceae); QIANG DAO YAO; Purple Hypoestes. Used part: whole herb. TCM Effects: To clear lung and relieve cough, cool blood and stanch bleeding, dissipate stasis and resolve toxin. TCM Indications: Lung heat cough, hemoptysis, blood ejection, spontaneous external bleeding, flooding and spotting, jaundice, diarrhea, stasis swelling from knocks and falls, bleeding knife wound, fracture. Isolated compounds: 2331, 3817, 4983, 9323, 9534, 10164, 10909, 10910, 10911, 10912, 11972, 11973, 11974, 11975, 11978, 11981, 13098, 14264, 14265, 15320, 19777, 20645, 22779.
- T3374 *Hypoestes rosea* (Acanthaceae); DAN HONG QIANG DAO YAO; Rose Hypoestes\*. Isolated compounds: 10894.
- T3375 *Hypoestes serpens* (Acanthaceae); PU FU QIANG DAO YAO; Creeping Hypoestes\*. Isolated compounds: 242, 5923, 6549, 8034, 10257, 10258, 10260, 19761.  
*Hypoestes sinica* = *Hypoestes purpurea*
- T3376 *Hypolepis punctata* [Syn. *Polypodium punctatum*] (Dennstaedtiaceae); JI JUE; Punctate Flakelot Fern. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, promote contraction and stanch bleeding. TCM Indications: Burns and scalds, bleeding due to external injury. Isolated compounds: 10876, 10901, 10902, 10903, 16098, 18098, 18140, 18141, 18143, 18144, 18161.
- T3377 *Hypomyces* sp. (Hypomycetaceae). Isolated compounds: 10904, 10905.
- T3378 *Hypoxylon fuscum* (Xylariaceae); AN ZONG TAN TUAN JUN. Isolated compounds: 4611, 4612, 4613, 21083.
- T3379 *Hyptis fasciculata* (Lamiaceae); CU SHENG SHAN XIANG; Fascicled Bushmint\*. Isolated compounds: 13926, 13927, 14041.
- T3380 *Hyptis pectinata* (Lamiaceae); ZHI SHAN XIANG; Pectinat

Bushmint\*. Used part: leaf. TCM Effects: To resolve heat, relieve cough, expel roundworms<sup>[5509]</sup>. Isolated compounds: 16747, 16748, 16749, 16750, 16751, 16752, 16753, 16754.

T3381 *Hyptis suaveolens* (Lamiaceae); SHE BAI ZI; Wild Spikenard. Used part: stem-leaf. TCM Effects: To resolve exterior and disinhibit damp, move *qi* and dissipate stasis. TCM Indications: Common cold, wind-damp impediment pain, abdominal distention, diarrhea, dysentery, knocks and falls, eczema, dermatitis. Isolated compounds: 20431, 20432.

T3382 *Hyptis tomentosa* (Lamiaceae); RONG MAO SHAN XIANG; Tomentose Bushmint\*. Isolated compounds: 19777.

T3383 *Hyptis verticillata* (Lamiaceae); LUN SHENG SHAN XIANG; Verticillate Bushmint\*. Isolated compounds: 2847, 5074, 20249.

*Hyssopus lophanthoides* = *Isodon lophanthoides*

T3384 *Hyssopus officinalis* (Lamiaceae); SHEN XIANG CAO; Medicinal Hyssop. Isolated compounds: 20570, 20571.

## I

T3385 *Iberis amara* (Brassicaceae); QU QU HUA; Rocket Candytuft. Isolated compounds: 4323, 8598.

T3386 *Iberis umbellata* (Brassicaceae); SAN XING QU QU HUA; Globe Candytuft. Isolated compounds: 4317, 4319, 4320.

T3387 *Idesia polycarpa* (Flacourtiaceae); SHAN TONG ZI; Manyfruit Idesia. Used part: leaf. TCM Effects: To clear heat and cool blood, dissipate stasis and disperse swelling. TCM Indications: Fracture, burns and scalds, bleeding due to external injury, blood ejection. Isolated compounds: 5068.

T3388 *Ilex chinensis* [Syn. *Ilex purpurea*] (Aquifoliaceae); SI JI QING; Purpleflower Holly. Used part: leaf. TCM Effects: To clear heat and resolve toxin, close sores and engender flesh, quicken blood and stanch bleeding. TCM Indications: Angina pectoris, coronary heart disease, thrombophlebitis, thromboangiitis obliterans (Buerger's disease), lung heat cough, swelling pain in throat, dysentery, diarrhea, infection of biliary tract, urinary tract infection, burns and scalds, heat toxin swollen welling abscess, ulcer of lower limb, eczema, frostbite, cracking, wound, bleeding due to external injury. Isolated compounds: 2887, 5763, 10982, 16767, 17968, 18942, 20569.

T3389 *Ilex cornuta* (Aquifoliaceae); GOU GU SHU PI; Chinese Holly Bark. Used part: bark. TCM Effects: To supplement *yin*, boost liver and kidney, strengthen lumbus and legs. TCM Indications: Liver kidney vacuity, weakness in lumbus and knees. Isolated compounds: 618, 2858, 2892, 13098.

T3390 *Ilex cornuta* (Aquifoliaceae); GOU GU YE; Chinese Holly Leaf. Used part: leaf. TCM Effects: To clear vacuity heat, boost liver and kidney, dispel wind-damp. TCM Indications: *Yin* vacuity taxation fever, cough and hemoptysis, dizzy head and vision, limp aching lumbus and knees, wind-damp impediment pain, white patch wind. Isolated compounds: 618, 10985, 10986, 17697, 22270.

T3391 *Ilex dumosa* (Aquifoliaceae); GUAN CONG DONG QING; Shrubby Holly\*. Isolated compounds: 19342, 19343, 19344, 19345.

T3392 *Ilex kudingcha* (Aquifoliaceae); KU DING CHA DONG QING; Kudinchia Holly. Used part: leaf. TCM Effects: See *Ilex latifolia*. TCM Indications: See *Ilex latifolia*. Isolated compounds: 10968, 10969,

10970, 10971, 10972, 10973, 10974, 10975, 10976, 10977, 10978, 10979, 10980, 12297, 12298, 12299, 12300, 12301, 12302, 12303, 12304, 12305, 12306.

T3393 *Ilex latifolia* (Aquifoliaceae); DA YE DONG QING; Broadleaf Holly. Equivalent plant: *Ilex kudingcha*. Used part: leaf. TCM Effects: To dissipate wind-heat, clear head and eyes, eliminate vexation and allay thirst. TCM Indications: Headache, toothache, red eyes, otitis media, febrile diseases with vexation and thirst, dysentery. Isolated compounds: 1113, 12547, 12548, 12549, 12550, 12551, 12552, 12553, 12554, 12555, 12556, 12557, 12558, 13098, 22288.

*Ilex leptota* = *Evodia leptota*

T3394 *Ilex paraguariensis* (Aquifoliaceae); BA LA GUI CHA; Paraguay Tea. Used part: leaf. TCM Effects: To clear heat and resolve toxin, eliminate inflammation, suppress cough and dispel phlegm, promote contraction, disinhibit urine, free stool, induce sweat<sup>[5509]</sup>. TCM Indications: Rheumatis, scurvy, heart disease, stomach disease, diabetes<sup>[5509]</sup>. Isolated compounds: 2892, 13599, 13600, 13601, 13602.

T3395 *Ilex pedunculosa* (Aquifoliaceae); CHANG GENG DONG QING; Longpedicel Holly. Used part: leaf, branch-leaf. TCM Effects: To dispel wind and eliminate damp, dissipate stasis and stanch bleeding. TCM Indications: Wind-damp impediment pain, bleeding due to external injury, knocks and falls, cracking of skin, scar. Isolated compounds: 16766.

T3396 *Ilex pubescens* (Aquifoliaceae); MAO DONG QING; Pubescent Holly. Equivalent plant: *Ilex pubescens* var. *glaber*. Used part: root. TCM Effects: To clear heat and resolve toxin, quicken blood and free network vessels. TCM Indications: Angina pectoris, acute myocardial infarction, cerebral thrombosis, thrombophlebitis, thromboangiitis obliterans (Buerger's disease), central retinitis, central angiospastic retinitis, wind-heat common cold, lung heat cough asthma, sore pharynx, nipple moth, gum swelling and pain, chest impediment and heart pain, wind stroke with hemiplegia, erysipelas, burns and scalds, welling abscess and flat abscess. Isolated compounds: 6175, 10981, 22615.

T3397 *Ilex pubescens* var. *glaber* (Aquifoliaceae); TU MAO DONG QING; Glabrous Holly\*. Used part: root. TCM Effects: See *Ilex pubescens*. TCM Indications: See *Ilex pubescens*. Isolated compounds: 5750, 19542.

*Ilex purpurea* = *Ilex chinensis*

T3398 *Ilex rotunda* (Aquifoliaceae); JIU BI YING; Ovateleaf Holly. Used part: bark. TCM Effects: To clear heat and resolve toxin, disinhibit damp and relieve pain. TCM Indications: Common cold with fever, swelling pain in throat, stomachache, summerheat-damp diarrhea, jaundice, dysentery, knocks and falls, wind-damp impediment pain, eczema, sore and boil. Isolated compounds: 1113, 4246, 16766, 18942, 19089, 19911.

T3399 *Illicium anisatum* (Illiciaceae); RI BEN MANG CAO; Japanese Anisetree. Isolated compounds: 1283, 1285, 1286, 18018.

T3400 *Illicium difengpi* (Illiciaceae); DI FENG PI; Difengpi Anisetree. Equivalent plant: *Illicium majus*. Used part: bark. TCM Effects: To dispel wind and eliminate damp, move *qi* and relieve pain. TCM Indications: Pain in joints due to rheumatism, taxation damage in lumbar muscle, centipede bite. Isolated compounds: 462, 5504, 13482,

- 13483.
- T3401 *Illicium henryi* (Illiciaceae); HONG HUI XIANG; Henry Anisetree. Used part: fruit. TCM Effects: To quicken blood and relieve pain, dispel wind and eliminate damp. TCM Indications: Knocks and falls, wind-cold-damp impediment, pain in lumbus and legs. Isolated compounds: 1283, 5204, 18018.
- T3402 *Illicium jiadifengpi* (Illiciaceae); JIA DI FENG PI; Jiadifengpi Anisetree. Isolated compounds: 5, 4952, 4953, 6817, 6887, 7010, 9975, 11868, 13409, 15432, 16308, 16309, 16395.
- T3403 *Illicium majus* (Illiciaceae); DA BA JIAO; Big Anisetree\*. Used part: bark. TCM Effects: See *Illicium difengpi*. TCM Indications: See *Illicium difengpi*. Isolated compounds: 15432, 18051.
- T3404 *Illicium merrillianum* (Illiciaceae). Isolated compounds: 320, 1283, 1285, 1286, 2809, 2812, 4523, 4811, 4896, 4917, 5193, 5203, 5474, 5805, 9954, 9955, 9969, 9987, 9989, 10667, 13789, 16219, 16679, 18051, 20716.
- T3405 *Illicium minwanense* (Illiciaceae); MIN WAN BA JIAO; Minwan Anisetree. Isolated compounds: 4, 5204, 7068, 9989, 9990, 9991, 10668, 14704, 14875, 14876, 14877, 14877, 16413, 18018, 18051, 19805.
- T3406 *Illicium religiosum* (Illiciaceae); DONG DU HUI; Religious Anisetree\*. Isolated compounds: 19121, 19805.
- T3407 *Illicium simonsii* (Illiciaceae); YUN NAN BA JIAO; Yunnan Anisetree. Used part: ripe fruit or leaf. TCM Effects: To engender flesh and kill worms. TCM Indications: Enduring sores, scab sore. Isolated compounds: 16311.
- T3408 *Illicium tsangii* (Illiciaceae); DU AI BA JIAO; Poisonous-shrub Anise\*. Isolated compounds: 9733, 9734, 10242, 10243, 10689, 10690, 11304.
- T3409 *Illicium verum* (Illiciaceae); BA JIAO HUI XIANG; Star Anise. Used part: fruit. TCM Effects: To warm yang and dissipate cold, rectify qi and relieve pain. TCM Indications: Cold mounting with abdominal pain, kidney vacuity lumbago, vomiting with stomach cold, cold pain in stomach duct and abdomen, septicemia. Isolated compounds: 1184, 1185, 1186, 1282, 1284, 1289, 6310, 7385, 7853, 13883, 14062, 14063, 14064, 14065, 14066, 14067, 18261, 18407, 22384, 22385.
- T3410 *Impatiens balsamina* (Balsaminaceae); FENG XIAN; Garden Balsam. Used part: stem. TCM Effects: To dispel wind-damp, quicken blood and relieve pain, resolve toxin. TCM Indications: Wind-damp impediment pain, pain from arthritis, painful swelling from knocks and falls, amenorrhea, dysmenorrhea, swollen welling abscess, erysipelas, goose-foot wind, snake or insect bites. Isolated compounds: 1500, 11027, 21811.
- T3411 *Impatiens balsamina* (Balsaminaceae); FENG XIAN HUA; Garden Balsam Flower. Used part: flower. TCM Effects: To dispel wind and quicken blood, disperse swelling and relieve pain. TCM Indications: Rheumatism numbness, lumbar and rib-side pain, amenorrhea and dysmenorrhea, postpartum blood stasis, knocks and falls, welling abscess and flat abscess, clove sore, goose-foot wind, ashen nail. Isolated compounds: 5011, 12580, 13456, 16777.
- T3412 *Impatiens balsamina* (Balsaminaceae); JI XING ZI; Garden Balsam Seed. Used part: ripe seed. TCM Effects: To break blood and soften hard, disperse accumulation. TCM Indications: Concretion and conglomeration, lump glomus, amenorrhea, dysphagia-occlusion. Isolated compounds: 1500, 5200, 9651, 12580, 16667, 20566.
- T3413 *Impatiens nolitangere* (Balsaminaceae); SHUI JIN FENG; Lightyellow Snapweed. Used part: root or whole herb. TCM Effects: To quicken blood and regulate menstruation, dispel wind and eliminate damp. TCM Indications: Menstrual disorder [ = menoxenia], dysmenorrhea, menstrual block, knocks and falls, wind-damp impediment pain, leg qi swelling and pain, damp-swelling in scrotum, lichen sore, lai sore. Isolated compounds: 13127.
- T3414 *Impatiens sicutifer* (Balsaminaceae); HUANG JIN FENG; Incurvedspur Snapweed. Used part: whole herb. TCM Effects: To dispel wind and eliminate damp, quicken blood and disperse swelling, clear heat and resolve toxin. TCM Indications: Wind-damp bone pain, rheumatism numbness, knocks and falls, burns and scalds. Isolated compounds: 4140, 20168.
- T3415 *Imperata cylindrica* (Poaceae); YIN DU BAI MAO; Cogon Satintail. Isolated compounds: 11234.
- T3416 *Imperata cylindrica* var. *major* (Poaceae); BAI MAO GEN<sup>(1)</sup>; Lalang Grass Rhizome. Used part: rhizome. TCM Effects: To cool blood and stanch bleeding, clear heat and engender liquid, disinhibit urine and free strangury. TCM Indications: Acute nephritis with edema, acute glomerulonephritis, chronic glomerulonephritis, acute hepatitis, blood ejection due to blood heat, spontaneous external bleeding, hematuria, febrile diseases with vexation and thirst, jaundice, edema, heat strangury with inhibited pain, measles papules. Isolated compounds: 1178, 1823, 3907, 4545, 4546, 11000, 19901.
- T3417 *Imperata cylindrica* var. *major* (Poaceae); MAO CAO YE; Lalang Grass Leaf. Used part: leaf. TCM Effects: To dispel wind and eliminate damp. TCM Indications: Wind-damp impediment pain, wind papules. Isolated compounds: 1615, 1616, 4546, 7759, 16294.
- T3418 *Incarvillea arguta* (Bignoniaceae); MA TONG HUA; Sharptooth Incarvillea. Used part: whole herb with rhizome. TCM Effects: To fortify spleen and disinhibit damp, move qi and quicken blood. TCM Indications: Diarrhea, dysentery, stomachache, pain in rib-side, wind-damp pain, menstrual disorder, swollen welling abscess, fracture. Isolated compounds: 1676, 1677, 1678, 4995, 5189.
- T3419 *Incarvillea dissectifoliola* (Bignoniaceae); SHEN LIE YE JIAO HAO; Deep-lobed-leaf Incarvillea\*. Isolated compounds: 6518.
- T3420 *Incarvillea sinensis* (Bignoniaceae); JIAO HAO; Chinese Incarvillea. Used part: whole herb. TCM Effects: To dispel wind-damp, resolve toxin, kill worms. TCM Indications: Wind-damp impediment pain, knocks and falls, mouth sore, gingiva ulcerating, ear sore, eczema, scab and lichen, trichomonas vaginalis. Isolated compounds: 11006, 11007, 11008, 11009, 11010, 11011.
- T3421 *Indigofera arrecta* (Fabaceae); ZHI LI DIAN LAN. Isolated compounds: 12018.
- T3422 *Indigofera heteranthazha* (Fabaceae); YI HUA MU LAN; Different-flowered Indigo. Isolated compounds: 13252, 13261, 16886.
- T3423 *Indigofera tinctoria* (Fabaceae); MU LAN<sup>(2)</sup>; True Indigo. Used part: stem-leaf. TCM Effects: To clear heat and resolve toxin, cool blood and stanch bleeding. TCM Indications: Encephalitis B, parotitis, acute pharyngolaryngitis, red eyes, lymphnoditis, mouth sore, swollen welling abscess, sore and boil, erysipelas, scab and lichen, snake or insect bites, blood ejection. Isolated compounds: 4872, 4898, 11014,

- 11023, 11024.
- T3424 *Inga umbellifera* (Fabaceae); SAN XING HUA XU YIN JIA; Inga\*. Isolated compounds: 3310, 3311, 3312, 3313, 3314.
- T3425 *Inonotus hispidus* (Polyporaceae); CU YING MAO XIAN KONG JUN. Isolated compounds: 9567.
- T3426 *Inula britannica* (Asteraceae); DA HUA XUAN FU HUA CAO; British Inula Herb. Used part: aerial parts. TCM Effects: See *Inula japonica*. TCM Indications: See *Inula japonica*. Isolated compounds: 2615, 10353, 16035, 18372, 18399.
- T3427 *Inula britannica* (Asteraceae); XUAN FU HUA; British Inula. Equivalent plant: *Inula linariaefolia*, *Inula britannica* var. *chinensis*. Used part: capitulum. TCM Effects: To downbear *qi*, disperse phlegm, move water, check vomiting. TCM Indications: Wind-cold cough, glomus fullness in chest and diaphragm, cough and asthma, abundant phlegm, vomiting and eructation, hard glomus below heart. Isolated compounds: 2052, 2887, 3551, 4135, 5763, 6918, 7557, 7768, 9818, 11111, 11642, 12020, 16728, 17765, 18316, 18317, 19187, 19542, 20566, 20704.
- T3428 *Inula britannica* var. *chinensis* (Asteraceae); ZHONG GUO XUAN FU HUA; Chinese Inula. Used part: capitulum. TCM Effects: See *Inula britannica*. TCM Indications: See *Inula britannica*. Isolated compounds: 2052, 4680, 8047, 11111, 12020, 15203, 17765, 18317, 20281, 20704.
- T3429 *Inula eupatorioides* (Asteraceae); ZE LAN YANG ER JU; Eupatoriumlike Inula. Isolated compounds: 7075.
- T3430 *Inula grandis* (Asteraceae); DA YE TU MU XIANG; Largeleaf Inula. Isolated compounds: 834, 8982, 11203.
- T3431 *Inula helenium* (Asteraceae); TU MU XIANG; Elecampane Inula. Equivalent plant: *Inula racemosa*. Used part: root. TCM Effects: To fortify spleen and harmonize stomach, regulate *qi* and resolve depression, relieve pain and quiet fetus. TCM Indications: Distending pain in chest and rib-side, distending pain in stomach duct, vomiting and diarrhea, contusion in chest and rib-side, forking *qi* with pain, stirring fetus in pregnancy. Isolated compounds: 149, 834, 5648, 11203.
- T3432 *Inula helianthus-aquatica* (Asteraceae); SHUI CHAO YANG; Aquatic-sunflower Inula. Used part: flower. TCM Effects: To dispel wind and downbear fire, eliminate inflammation and move water, resolve toxin. TCM Indications: Common cold with headache, chest oppression with cough asthma, ascites, acute conjunctivitis, wind-fire toothache, mammary welling abscess. Isolated compounds: 7239.
- T3433 *Inula japonica* (Asteraceae); JIN FEI CAO; Japanese Inula. Equivalent plant: *Inula britannica*. Used part: aerial parts. TCM Effects: To downbear *qi*, disperse phlegm, move water. TCM Indications: Wind-cold cough, phlegm congestion and *qi* counterflow, glomus fullness in chest and diaphragm, cough and asthma with abundant phlegm, painful swelling from clove sore. Isolated compounds: 236, 1888, 2615, 5648, 5741, 6114, 9754, 9756, 9770, 10111, 11108, 11109, 11110, 11111, 11120, 11203, 11795, 13137, 20704, 21443, 21444, 22746, 22747.
- T3434 *Inula linariaefolia* (Asteraceae); XIAN YE XUAN FU HUA; Linearleaf Inula. Used part: capitulum. TCM Effects: See *Inula britannica*. TCM Indications: See *Inula britannica*. Isolated compounds: 2615, 11111.
- T3435 *Inula magnifica* (Asteraceae); MEI LI XUAN FU HUA; Beautiful Inula\*. Isolated compounds: 834.
- T3436 *Inula nervosa* (Asteraceae); XIAN MAI XUAN FU HUA; Veined Inula. Used part: root. TCM Effects: To dispel wind-damp, free channels and network vessels, disperse accumulation and relieve pain. TCM Indications: Wind-damp pain, cold pain in stomach duct and abdomen, food accumulation abdominal distention, dysphagia-occlusion, beriberi. Isolated compounds: 5921, 6375.
- T3437 *Inula racemosa* (Asteraceae); ZONG ZHUANG TU MU XIANG; Racemose Inula. Used part: root. TCM Effects: See *Inula helenium*. TCM Indications: See *Inula helenium*. Isolated compounds: 834, 11203, 11203.
- T3438 *Inula royleana* (Asteraceae); XI MA XUAN FU HUA; Himalayan Inula. Isolated compounds: 1366, 11203, 13189, 18971.
- T3439 *Inula* sp. (Asteraceae). Isolated compounds: 11794.
- T3440 *Inula verbascifolia* (Asteraceae); MAO RUI HUA YE TU MU XIANG; Mulleinleaf Inula\*. Isolated compounds: 474, 475, 14667.
- T3441 *Inula viscosa* (Asteraceae); NIAN XING TU MU XIANG; Woody Fleabane. Isolated compounds: 20791.
- T3442 *Iotrochota baculifera* XIAO BANG XIOU QIOU HAI MIAN; Sponge *Iotrochota baculifera*. Isolated compounds: 11124, 20224.
- T3443 *Iphigenia indica* (Liliaceae); CAO BEI MU; Indian Iphigenia. Used part: bulb. TCM Effects: To dissipate binds and relieve pain. TCM Indications: Carcinoma of mammary glands, nasopharyngeal carcinoma, carcinoma of salivary gland, scrofula, swelling of skin, pain wind. Isolated compounds: 3911, 4059, 7901, 13073.
- T3444 *Ipomoea aquatica* [Syn. *Convolvulus repens*; *Ipomoea reptans*] (Convolvulaceae); WENG CAI; Aquatic Morning Glory. Used part: stem-leaf. TCM Effects: To cool blood and clear heat, disinhibit damp and resolve toxin. TCM Indications: Nosebleed(epistaxis), hematochezia, hematuria, constipation, strangury-turbidity, hemorrhoids, swollen welling abscess, fracture, snake or insect bites. Isolated compounds: 13127, 14487.
- T3445 *Ipomoea argyrophylla* (Convolvulaceae); YIN YE SHU; Silverleaf Morningglory\*. Isolated compounds: 3477, 7240, 13255.
- T3446 *Ipomoea asarifolia* (Convolvulaceae); XI XIN YE QIAN NIU; Wildginger-leaf Morning Glory\*. Isolated compounds: 4435, 4437.
- T3447 *Ipomoea batatas* [Syn. *Convolvulus batatas*] (Convolvulaceae); GAN SHU; Sweet Potato. Used part: tuberoid. TCM Effects: To supplement center and harmonize blood, boost *qi* and engender liquid, loosen intestines and stomach, free stool. TCM Indications: Spleen vacuity edema, constipation, toxin swelling of sores. Isolated compounds: 3209, 11130, 11131, 16333.
- T3448 *Ipomoea cairica* [Syn. *Ipomoea palmata*] (Convolvulaceae); WU ZHAO LONG; Cairo Morningglory. Used part: Root or stem-leaf. TCM Effects: To clear heat and resolve toxin, disinhibit water and free strangury. TCM Indications: Lung heat cough, inhibited urination, strangury, edema, swollen welling abscess and toxin of clove. Isolated compounds: 1621, 7232, 15086, 15806, 21490.
- T3449 *Ipomoea hederacea* (Convolvulaceae); LIE YE QIAN NIU; Lobedleaf Morningglory\*. Isolated compounds: 16808.
- T3450 *Ipomoea obscura* (Convolvulaceae); XIAO XIN YE SHU;

- Smallheartleaved Morningglory. Isolated compounds: 11125, 11126, 11127.
- Ipomoea palmata* = *Ipomoea cairica*
- T3451 *Ipomoea regnellii* (Convolvulaceae); RUI SHI QIAN NIU; Regnell Morningglory\*. Isolated compounds: 18349, 18406.
- Ipomoea reptans* = *Ipomoea aquatica*
- T3452 *Ipomoea tricolor* (Convolvulaceae); SAN SE QIAN NIU; Trichroism Morningglory\*. Isolated compounds: 3477, 13255.
- T3453 *Ipomoea violacea* (Convolvulaceae); QING ZI QIAN NIU; Violet Morningglory\*. Isolated compounds: 3477, 13255.
- T3454 *Iris bungei* (Iridaceae); BENG GE YUAN WEI; Bunge Iris\*. Isolated compounds: 11155, 11156, 11157, 11160, 11161, 11162, 11163, 11166, 11167, 11168, 11169, 11170, 21411.
- T3455 *Iris carthaliniae* (Iridaceae); AI JI ZHONG ZHI YUAN WEI; Egypt Planted Iris. Isolated compounds: 6241, 11180, 14740, 20903.
- T3456 *Iris cristata* (Iridaceae); SHI GUAN YUAN WEI; Crest Iris. Isolated compounds: 7067, 7120, 7148.
- T3457 *Iris dichotoma* (Iridaceae); BAI HUA SHE GAN; Vesper Iris. Used part: root or whole herb. TCM Effects: To clear heat and resolve toxin, quicken blood and disperse swelling, relieve pain, relieve cough. TCM Indications: Swelling pain in throat, gum swelling and pain, epidemic parotitis, mammary welling abscess, stomachache, hepatitis, liver spleen enlargement, lung heat cough, knocks and falls. Isolated compounds: 5426, 11141, 11154, 11164, 20900, 20901.
- T3458 *Iris florentina* (Iridaceae); XI OU YUAN WEI; Orris. Isolated compounds: 11141, 11141, 11153, 11183, 11184, 15203.
- T3459 *Iris germanica* (Iridaceae); DE GUO YUAN WEI; German Iris. Isolated compounds: 8349, 8350, 11133, 11141, 11152, 11154, 11158, 11159, 11165, 11171, 11172, 20901.
- T3460 *Iris halophila* (Iridaceae); XI YAN YUAN WEI; Salt-loving Iris. Used part: seed. TCM Effects: See *Iris lactea* var. *chinensis*. TCM Indications: See *Iris lactea* var. *chinensis*. Isolated compounds: 9198, 9199.
- T3461 *Iris japonica* (Iridaceae); HU DIE HUA; Fringed Iris. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, disperse swelling and relieve pain. TCM Indications: Hepatitis, liver enlargement, pain in hepatic zone, stomachache, swelling pain in throat, hematochezia. Isolated compounds: 2215, 6769, 11466.
- T3462 *Iris komonoensis* (Iridaceae); RI BEN YUAN WEI; Japanese Iris\*. Isolated compounds: 11141.
- T3463 *Iris kumaonensis* (Iridaceae); XI MA LA YA YUAN WEI; Himalayan Iris\*. Isolated compounds: 11173, 11174, 11175, 11176, 11177, 11178.
- T3464 *Iris lactea* var. *chinensis* [Syn. *Iris pallasii* var. *chinensis*] (Iridaceae); MA LIN ZI; Chinese Iris. Equivalent plant: *Iris halophila*. Used part: seed. TCM Effects: To clear heat and dispel damp, resolve toxin and kill worms, stanch bleeding and settle pain. TCM Indications: Jaundice, strangury-turbidity, inhibited urination [=dysuria], intestinal welling abscess, worm accumulation, malaria, wind-damp pain, throat impediment, toothache, blood ejection, spontaneous external bleeding, hematochezia, flooding and spotting [=metrorrhagia and metrostaxis], swelling of sores, scrofula, mounting *qi* [=hernia], hemorrhoids, scalds, snake bite. Isolated compounds: 11179, 16543, 16544.
- Iris pallasii* var. *chinensis* = *Iris lactea* var. *chinensis*
- T3465 *Iris pallasii* var. *chinensis* (Iridaceae); MA LIN; Chinese Iris. Isolated compounds: 11179.
- T3466 *Iris potaninii* (Iridaceae); JUAN QIAO YUAN WEI; Potanin Iris. Used part: seed. TCM Effects: To clear heat and resolve toxin, expel worms. TCM Indications: Intestinal welling abscess, ascariasis, oxyuria. Isolated compounds: 5426, 6248, 6295, 6338, 11152, 11153, 13964, 21189, 21936.
- T3467 *Iris pseudacorus* (Iridaceae); HUANG CHANG PU; Yellowflag Iris. Isolated compounds: 11179.
- T3468 *Iris sanguinea* (Iridaceae); DOU CHI CAO; Bloodred Iris. Used part: rhizome and root. TCM Effects: To disperse accumulation and move water. TCM Indications: Stomachache, abdominal pain. Isolated compounds: 20505.
- T3469 *Iris* sp. (Iridaceae). Isolated compounds: 117.
- T3470 *Iris spuria* (Iridaceae); JIA YUAN WEI; False Iris\*. Isolated compounds: 11134, 11135, 11136, 11137, 11138, 11139, 11140.
- T3471 *Iris tectorum* (Iridaceae); YUAN WEI; Roof Iris. Used part: leaf or whole herb. TCM Effects: To clear heat and resolve toxin, dispel wind and disinherit damp, disperse swelling and relieve pain. TCM Indications: Swelling pain in throat, hepatitis, liver enlargement, cystitis, wind-damp pain, painful swelling from knocks and falls, sore and boil, itchy skin. Isolated compounds: 6769, 11150, 11151, 11154, 11181, 11182, 14144, 20900, 20901, 20904.
- T3472 *Iris tingitana* (Iridaceae); DAN JI ER YUAN WEI; Tingit Iris. Isolated compounds: 833.
- T3473 *Iris unguicularis* (Iridaceae); A ER JI LI YA YUAN WEI; Algerian Iris. Isolated compounds: 11141.
- T3474 *Iryanthera polyneura*. Isolated compounds: 9598.
- T3475 *Isatis indigotica* (Brassicaceae); BAN LAN GEN; Indigowoad Root. Used part: root. TCM Effects: To clear heat and resolve toxin, cool blood and disinherit throat. TCM Indications: Epidemic encephalitis, measles papulis, parotitis, influenza, warm toxin macular eruption, ardent fever with headache, massive head scourge, throat pain, maculopapular eruption, epidemic parotitis, erysipelas, hepatitis, swelling toxin of sore and welling abscess. Isolated compounds: 618, 1048, 2224, 2806, 5637, 6235, 10643, 11014, 11022, 11023, 11024, 11028, 11030, 11186, 11187, 11190, 12227, 19187, 19909, 19935, 19983, 19984, 20566, 21840, 22059.
- T3476 *Isatis indigotica* (Brassicaceae); DA QING YE; Indigo-coloured Woad Leaf. Equivalent plant: LU BIAN QING. Used part: leaf. TCM Effects: To clear heat and resolve toxin, cool blood and disperse macula. TCM Indications: Acute parotitis, encephalitis, hepatitis, lung abscess, acute gastroenteritis, infection of upper respiratory tract, warm evil in construction, ardent fever with clouded spirit, macular eruption and papules, jaundice, heat dysentery, epidemic parotitis, throat impediment, erysipelas, swollen welling abscess. Isolated compounds: 618, 8589, 8590, 9486, 11014, 11023, 11024, 11188, 15400, 18287, 19983, 19984, 20446, 21334, 22059, 22060.
- T3477 *Isatis tinctoria* (Brassicaceae); OU ZHOU SONG LAN; Dyers Woad. Isolated compounds: 18287, 22059.
- T3478 *Isodon albopilosus* (Lamiaceae); BAI ROU MAO XIANG CHA CAI; Whitepilose Rabdosia. Isolated compounds: 865.
- T3479 *Isodon amethystoides* (Lamiaceae); XIANG CHA CAI; Common

- Rabdosia. Used part: aerial parts or root. TCM Effects: Aerial parts: To clear heat and disinhibit damp, quicken blood and dissipate stasis, resolve toxin and disperse swelling; Root: To clear heat and resolve toxin, dispel stasis and relieve pain. TCM Indications: Aerial parts: Damp-heat jaundice, strangury, edema, swelling pain in throat, impediment pain in joints, menstrual block, mammary welling abscess, hemorrhoids, effusion of back, knocks and falls, poisonous snake bite; Root: Poisonous snake bites, swelling toxin of sore and boil, aching sinews and bones, knocks and falls, burns and scalds. Isolated compounds: 528, 1037, 1038, 22635.
- T3480 *Isodon angustifolia* (Lamiaceae); XIA YE XIANG CHA CAI; Narrowleaf Rabdosia\*. Used part: root. TCM Effects: To fortify stomach and harmonize center, quicken blood and free network vessels. TCM Indications: Indigestion, Kersan disease with hypertonicity and pain, carcinoma. Isolated compounds: 1245, 6520.
- T3481 *Isodon angustifolius* var. *glabrescens* (Lamiaceae); MAO GENG XIA YE XIANG CHA CAI; Hairstalk Narrowleaf Rabdosia\*. Isolated compounds: 458, 8462, 8463, 8464, 8465, 8466, 8467, 8468, 8469, 8470, 8471, 8472, 8473, 8474, 8475, 8476, 8477, 8478, 8479, 8480, 8481, 8482, 8483, 8484, 8485, 8486, 18461.
- T3482 *Isodon bulleyana* (Lamiaceae); CANG SHAN XIANG CHA CAI; Cangshan Rabdosia. Isolated compounds: 2743.
- T3483 *Isodon calcicola* (Lamiaceae); JIN WU MAO HUI YAN XIANG CHA CAI; Calcicole Rabdosia. Isolated compounds: 2947, 2949, 2951, 2953, 2954.
- T3484 *Isodon dawoensis* (Lamiaceae); DAO FU XIANG CHA CAI; Dawo Rabdosia. Isolated compounds: 4701.
- T3485 *Isodon effusa* (Lamiaceae); KAI ZHAN XIANG CHA CAI; Spreading Rabdosia\*. Isolated compounds: 6710, 6711, 6712, 6713, 6714, 6715.
- T3486 *Isodon enanderianus* (Lamiaceae); ZI MAO XIANG CHA CAI; Purplehair Rabdosia. Isolated compounds: 6783, 6784, 6785, 6786, 6787, 6788, 6789, 6790, 6791, 6792, 6793, 6794, 6826, 10797, 13649, 13650, 18456, 18457, 18459, 21123, 21564.
- T3487 *Isodon eriocalyx* var. *laxiflora* (Lamiaceae); SHU HUA MAO E XIANG CHA CAI; Laxflower Hairysepal Rabdosia. Isolated compounds: 12583, 12584, 12585, 12586, 12587, 12588, 12589, 12590, 13523, 13537.
- T3488 *Isodon flavidus* (Lamiaceae); DAN HUANG XIANG CHA CAI; Yellowish Rabdosia. Isolated compounds: 7812, 7813, 9545, 10122, 19876.
- T3489 *Isodon flexicaulis* (Lamiaceae); ROU JING XIANG CHA CAI; Flexedstem Rabdosia. Isolated compounds: 7828.
- T3490 *Isodon forrestii* (Lamiaceae); ZI E XIANG CHA CAI; Forrest Rabdosia\*. Isolated compounds: 7915, 7916, 7917, 7918, 7919, 7920, 7921, 11383, 18461, 18462.
- T3491 *Isodon gesnerioides* (Lamiaceae); JU TAI XIANG CHA CAI; Gesnerialike Rabdosia. Isolated compounds: 8366, 8367, 8368, 8369, 8370.
- T3492 *Isodon glutinosa* (Lamiaceae); JIAO NIAN XIANG CHA CAI; Slimy Rabdosia. Isolated compounds: 8791, 8792, 8793, 11384, 11385, 17489.
- T3493 *Isodon henryi* (Lamiaceae); E XI XIANG CHA CAI; Henry Rabdosia. Isolated compounds: 6929, 9362.
- T3494 *Isodon inflexa* [Syn. *Rabdosia inflexa*] (Lamiaceae); NEI ZHE XIANG CHA CAI; Inflexed Rabdosia. Isolated compounds: 11039, 11040, 11041, 11042, 11043, 11044, 11045, 11046, 11047, 11048, 11049, 11050, 11051, 11052, 11053, 11054, 11055, 11056, 18464, 18465, 18484, 18485.
- T3495 *Isodon irrorata* (Lamiaceae); LU ZHU XIANG CHA CAI; Dew Rabdosia. Used part: whole herb or root. TCM Effects: To clear heat and resolve toxin. TCM Indications: Common cold, innominate toxin swelling, massive head scourge. Isolated compounds: 11185.
- T3496 *Isodon japonica* [Syn. *Rabdosia japonica*] (Lamiaceae); MAO YE XIANG CHA CAI; Japanese Rabdosia. Used part: leaf. TCM Effects: To clear heat and resolve toxin, quicken blood and disperse swelling. TCM Indications: Hepatitis, gastritis, mastitis, amenorrhea, knocks and falls, pain in joints, snake or insect bites. Isolated compounds: 6804, 6805, 6975, 6976, 11381, 11382, 11392, 11394, 11402, 12123, 12537, 13319, 13544, 13545, 15652, 15653, 15988, 16183, 17717, 18496, 18497, 18498, 18499, 18500, 18978, 19815, 20040, 20620, 20621, 21572.
- T3497 *Isodon japonica* var. *glaucoalyx* (Lamiaceae); LAN E XIANG CHA CAI; Bluesepal Rabdosia\*. Isolated compounds: 393, 8514, 8515, 8516, 8517, 8518, 8519.
- T3498 *Isodon kameba* (Lamiaceae); KA MEI XIANG CHA CAI; Kamei Rabdosia\*. Isolated compounds: 12121, 12122, 12123, 12124, 12125, 12708, 12709, 12710, 12711, 12712.
- T3499 *Isodon kunmingensis* (Lamiaceae); KUN MING XIANG CHA CAI; Kunming Rabdosia\*. Isolated compounds: 18470, 18471, 18472, 18473, 18474.
- T3500 *Isodon lasiocarpa* (Lamiaceae); CU GUO XIANG CHA CAI; Roughfruit Rabdosia\*. Isolated compounds: 3219, 12534, 12536, 12538, 12539, 12540, 18475.
- T3501 *Isodon lasiocarpus* (Lamiaceae); MIAN MAO GUO XIANG CHA CAI; Woollyfruit Rabdosia\*. Isolated compounds: 12537, 16183.
- T3502 *Isodon latifolia* var. *reniformis* (Lamiaceae); SHEN XING XIANG CHA CAI; Reniform Rabdosia\*. Isolated compounds: 18621, 18622.
- T3503 *Isodon leucophyllus* (Lamiaceae); BAI YE XIANG CHA CAI; Whiteleaf Rabdosia\*. Isolated compounds: 2116, 2117, 2118, 3165, 6834, 10749, 10751, 11642, 12719, 12720, 12721, 12722, 12723, 12724, 21184.
- T3504 *Isodon liangshanica* (Lamiaceae); LIANG SHAN XIANG CHA CAI; Liangshan Rabdosia. Isolated compounds: 12739, 12740, 12741, 12742, 12743, 12744, 12745.
- T3505 *Isodon lihsienensis* (Lamiaceae); LI XIAN XIANG CHA CAI; Lihsien Rabdosia. Isolated compounds: 12831.
- T3506 *Isodon lophanthoides* (Lamiaceae); XIAN WEN XIANG CHA CAI; Linearstripe Rabdosia. Isolated compounds: 12990.
- T3507 *Isodon lophanthoides* [Syn. *Rabdosia lophanthoides*; *Hyssopus lophanthoides*; *Plectranthus striatus*; *Isodon striatus*] (Lamiaceae); XI HUA XIAN WEN XIANG CHA CAI; Linearstripe Rabdosia. Used part: whole herb. TCM Effects: See *Rabdosia serra*. TCM Indications: See *Rabdosia serra*. Isolated compounds: 12993, 12994, 12995, 12996, 12997, 12998.
- T3508 *Isodon lophanthoides* var. *gerardiana* (Lamiaceae); XIA JI XIAN WEN XIANG CHA CAI; Gerard Linearstripe Rabdosia\*. Isolated



- compounds: 8331, 8332, 10256, 12991, 12992.
- T3509 *Isodon loxothyrsa* (Lamiaceae); WAN ZHUI XIANG CHA CAI; Bowedconical Rabdosia\*. Isolated compounds: 13013, 18478, 18479.
- T3510 *Isodon lungshengensis* (Lamiaceae); LONG SHENG XIANG CHA CAI; Longshen Rabdosia. Isolated compounds: 11053, 13076, 13077, 13078, 13079, 13080, 13081, 13082, 13083, 13118.
- T3511 *Isodon macrocalyx* (Lamiaceae); DA E XIANG CHA CAI; Largesepal Rabdosia. Isolated compounds: 13304, 13305, 13306, 13307, 13308, 13309, 13310.
- T3513 *Isodon macrocalyx* (Lamiaceae); DA E BIAN XING XIANG CHA CAI; Largesepal Rabdosia. Isolated compounds: 11056, 13311, 13312, 13313, 13314.
- T3512 *Isodon macrocalyx* var. *jiuhua* (Lamiaceae); JIU HUA DA E XIANG CHA CAI; Jiuhua Largesepal Rabdosia. Isolated compounds: 11889.
- T3514 *Isodon megathyrsus* (Lamiaceae); DA ZHUI XIANG CHA CAI; Bigthyrsus Rabdosia. Isolated compounds: 13649, 13650.
- T3515 *Isodon melissoides* (Lamiaceae); BAO YE XIANG CHA CAI; Bractleaf Rabdosia. Isolated compounds: 4701, 13688, 13689, 13690, 13691, 13692, 13693, 13694, 13695, 13696, 13697, 13698, 13699, 13700, 13701, 13702, 13703, 13704, 13705, 13706, 13707, 22798.
- T3516 *Isodon oresbia* (Lamiaceae); SHAN DI XIANG CHA CAI; Montane Rabdosia. Isolated compounds: 620, 6178, 6714, 6804, 6806, 6807, 13529, 15338, 15652, 16176, 16177, 16178, 20040, 21561, 21563, 22270, 22581.
- T3517 *Isodon parvifolia* (Lamiaceae); XIAO YE XIANG CHA CAI; Smallleaf Rabdosia\*. Isolated compounds: 243, 11599, 16683, 16684, 16685, 16686, 16687.
- T3518 *Isodon pharicus* (Lamiaceae); CHUAN ZANG XIANG CHA CAI; Szechwan-Tibet Rabdosia. Isolated compounds: 5696, 11395, 11396, 11397, 11398, 11399, 18075, 18076, 18077, 18078, 18079, 18080.
- T3519 *Isodon phyllostachys* (Lamiaceae); YE SUI XIANG CHA CAI; Leafspike Rabdosia. Isolated compounds: 17226, 17227, 17228.
- T3520 *Isodon rosthornii* (Lamiaceae); YING HUA XIANG CHA CAI; Rosthorn Rabdosia. Used part: whole herb. TCM Effects: To course wind and overcome damp, transform phlegm and relieve cough, dissipate stasis and relieve pain. TCM Indications: Wind damage and common cold, wind-damp impediment pain, cough and abundant phlegm, stasis swelling from knocks and falls. Isolated compounds: 18931, 18932, 18933, 18934, 18935.
- T3521 *Isodon rubescens* var. *lushanensis* (Lamiaceae); LU SHAN XIANG CHA CAI; Lushan Rabdosia\*. Isolated compounds: 6808, 6975, 11055, 11392, 11394, 12536, 13116, 13117, 13118, 13119, 13120, 13121, 13122, 13123, 13124, 16183, 17717, 18499, 18501, 18502.
- T3522 *Isodon rubescens* var. *lushiensis* (Lamiaceae); LU SHI DONG LING CAO; Lushien Rabdosia\*. Isolated compounds: 1245, 6826, 9080, 9081, 9082, 13066, 13067, 13068, 13069, 13070, 13071, 16758, 18317, 19579.
- T3523 *Isodon rugosus* [Syn. *Rabdosia rugosa*] (Lamiaceae); ZHOU YE XIANG CHA CAI; Rugose Rabdosia\*. Isolated compounds: 5554, 5650, 5704, 6710, 6711, 6714, 12537, 16183, 19049, 19061.
- T3524 *Isodon sculponeata* [Syn. *Rabdosia sculponeata*] (Lamiaceae); HUANG HUA XIANG CHA CAI; Yellowflower Rabdosia. Used part: whole herb. TCM Effects: To resolve toxin, disinhibit damp, rectify qi.
- TCM Indications: Dysentery abdominal pain, foot lichen. Isolated compounds: 19574, 19575, 19576, 19577, 19578.
- T3525 *Isodon setschwanensis* (Lamiaceae); SI CHUAN XIANG CHA CAI; Sichuna Rabdosia. Isolated compounds: 18490, 18491, 18492, 18493.
- T3527 *Isodon shikokiana* var. *occidentalis* (Lamiaceae); XI SI GUO XIANG CHA CAI; West-Shiko Rabdosia\*. Isolated compounds: 7201, 14409, 14727, 19806, 19807.
- T3526 *Isodon shikokiana* var. *intermedius* (Lamiaceae); JIAN XING SI GUO XIANG CHA CAI; Intermediate Shiko Rabdosia\*. Isolated compounds: 11386, 19808, 19809, 19810, 19811, 19812.
- Isodon striatus* = *Isodon lophanthoides*
- T3528 *Isodon ternifolia* (Lamiaceae); NIU WEI CAO XIANG CHA CAI; Ternateleaf Rabdosia. Used part: whole herb or root. TCM Effects: To clear heat, disinhibit damp, resolve toxin, stanch bleeding. TCM Indications: Common cold, influenza, cough with profuse phlegm, swelling pain in throat, toothache, jaundice, heat strangury, edema, dysentery, enteritis, bleeding due to external injury. Isolated compounds: 11393, 11400, 11401, 18501, 18502, 18503, 18504, 18505, 18506, 18507, 20979.
- T3529 *Isodon ternifolius* (Lamiaceae); CHONG YA YAO; Ternateleaf Rabdosia. Used part: whole herb or root. TCM Effects: To clear heat, disinhibit damp, resolve toxin, stanch bleeding. TCM Indications: Common cold, influenza, cough with profuse phlegm, swelling pain in throat, toothache, jaundice, heat strangury, edema, dysentery, enteritis, bleeding due to external injury. Isolated compounds: 11400, 11401, 18508, 22270.
- T3530 *Isodon trichocarpa* (Lamiaceae); MAO GUO XIANG CHA CAI; Hairyfruit Rabdosia\*. Isolated compounds: 5605, 6770, 6771, 6803, 6804, 6806, 6808, 16183, 21561, 21563, 21564, 21565, 21566, 21567, 21568, 21569, 21570, 21571, 21572, 21573, 21574.
- T3531 *Isodon trichocarpus* (Lamiaceae); HEI HUA YAN MING CAO; Blackflawer Rabdosia\*. Isolated compounds: 11382, 15652.
- T3532 *Isodon umbrosa* (Lamiaceae); YIN DI KUAN YE XIANG CHA CAI; Shady Broadleaf Rabdosia\*. Isolated compounds: 3950, 3952, 3954, 3955, 3957, 18509, 22200, 22201, 22202.
- T3533 *Isodon umbrosa* var. *latifolia* (Lamiaceae); YIN DI XIANG CHA CAI; Shady Rabdosia\*. Isolated compounds: 12121, 12122, 12123, 12124, 12125, 12712, 13629, 18463, 18476.
- T3534 *Isodon weisiensis* (Lamiaceae); WEI XI XIANG CHA CAI; Weisi Rabdosia. Isolated compounds: 22657.
- T3535 *Isodon wikstroemioides* (Lamiaceae); YAO HUA XIANG CHA CAI; Stringbushlike Rabdosia. Isolated compounds: 22669, 22670, 22671, 22672.
- T3536 *Isodon xerophilus* (Lamiaceae); HAN SHENG XIANG CHA CAI; Dry-living Rabdosia. Isolated compounds: 6785, 12958, 18504, 18931, 22786, 22787, 22788, 22789, 22790, 22791, 22792, 22793, 22794, 22795.
- T3537 *Isolona cauliflora* (Annonaceae); JING SHENG HUA AI SUO LUO NA. Isolated compounds: 3336, 3337, 3338, 3339.
- T3538 *Isolona maitlandii* (Annonaceae). Isolated compounds: 15797.
- T3539 *Isoplexis scaptrum* (Plantaginaceae). Isolated compounds: 19462.
- T3540 *Isopyrum thalictroides* (Ranunculaceae); TANG SONG CAO ZHUANG BIAN GUO CAO; Meadowruelike Isopyrum. Isolated

compounds: 11640, 11641, 11737.

- T3541 *Isotoma longiflora* [Syn. *Laurentia longiflora*] (Campanulaceae); TONG BAN CAO; Longflower *Laurentia*. Isolated compounds: 12937.
- T3542 *Iva asperifolia* (Asteraceae); CAO YE YI WA JU. Isolated compounds: 1888.
- T3543 *Iva frutescens* (Asteraceae); YI WA JU; Sumpweed. Isolated compounds: 3388, 9564.
- T3544 *Iva microcephala* (Asteraceae). Isolated compounds: 18029.
- T3545 *Iva nevadensis* (Asteraceae); NEI HUA YI WA JU. Isolated compounds: 16674.
- T3546 *Iva* sp. (Asteraceae). Isolated compounds: 4087.
- T3547 *Ixeris chinensis* (Asteraceae); SHAN KU MAI; China *Ixeris*. Used part: whole herb or root. TCM Effects: To clear heat and resolve toxin, disperse swelling and expel pus, cool blood and stanch bleeding. TCM Indications: Intestinal welling abscess, pulmonary welling abscess, lung heat cough, enteritis, dysentery, cholecystitis, pelvic inflammation, swelling toxin of sore and boil, scrotal eczema, blood ejection, spontaneous external bleeding, flooding, knocks and falls. Isolated compounds: 3533, 3534, 3535, 11798, 11802, 11803, 12446.
- T3548 *Ixeris sonchifolia* (Asteraceae); BAO JING KU MAI CAI; Sowthistle-leaf *Ixeris*. Used part: whole herb. TCM Effects: To relieve pain and disperse swelling, clear heat and resolve toxin. TCM Indications: Headache, toothache, stomachache, postoperative pain, painful wound from knocks and falls, appendicitis, enteritis, pulmonary abscess, sore swollen throat, swelling welling abscess and sore and boil. Isolated compounds: 618, 11799, 11800, 11801, 20703.
- T3549 *Ixora chinensis* (Rubiaceae); LONG CHUAN HUA; Chinese *Ixora*. Used part: flower. TCM Effects: To clear heat and cool blood, dissipate stasis and relieve pain. TCM Indications: Hypertension, menstrual disorder, amenorrhea, knocks and falls, swelling of sores and boils. Isolated compounds: 8277.
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- T3550 *Jackiella javanica* (Hepaticae); ZHAO WA JIA KE TAI; Japanese liverwort. Isolated compounds: 4303, 7218, 7502, 22429, 22430.
- T3551 *Jamesonia scammanae*. Isolated compounds: 18154.
- T3552 *Jamesoniella autumnalis* (Jungermanniaceae); QIU YUAN YE TAI. Isolated compounds: 6999.
- T3553 *Jamesoniella colorata* (Jungermanniaceae); YUAN YE TAI; *Jamesoniella colorata*. Isolated compounds: 6474, 9478, 10302, 10568, 10569, 10570, 11813, 11814, 11815, 16369, 22626.
- T3554 *Jasminum grandiflorum* (Oleaceae); SU XIN HUA; Largeflower Jasmine\*. Used part: flower bud. TCM Effects: To soothe the liver and resolve depression, move *qi* and relieve pain. TCM Indications: Pain in stomach duct and rib-side due to liver *qi* depression, abdominal pain and diarrhea. Isolated compounds: 11824, 11825.
- T3555 *Jasminum nudiflorum* (Oleaceae); YING CHUN HUA; Winter Jasmine. Used part: leaf. TCM Effects: To clear heat, resolve toxin, disinhibit damp. TCM Indications: Common cold with fever, dribbling pain of urination, pruritus of vulva, swelling toxin malign sore, knocks and falls, bleeding knife wound. Isolated compounds: 11575, 11826, 11827, 11828, 11829, 11830, 11831, 11832, 15863.
- T3556 *Jasminum officinale* (Oleaceae); SU FANG HUA; Common White Jasmine. Isolated compounds: 11824.
- T3557 *Jasminum sambac* (Oleaceae); MO LI HUA; Arabian Jasmine. Used part: flower. TCM Effects: To rectify *qi* and relieve pain, repel foulness and open depression. TCM Indications: Dysentery, dizziness and headache, red eyes, sore toxin. Isolated compounds: 7391, 11824, 12851, 14540.
- T3558 *Jasminum* sp. (Oleaceae). Isolated compounds: 11025.
- T3559 *Jateorhiza palmata* (Menispermaceae); FEI ZHOU FANG JI; Calumba Root. Isolated compounds: 3484, 16551, 16555.
- T3560 *Jatropha curcas* (Euphorbiaceae); MA FENG SHU; Leprous Tree. Used part: bark and leaf. TCM Effects: To dissipate stasis and disperse swelling, stanch bleeding, relieve pain, kill worms and relieve itch. TCM Indications: Stasis swelling from knocks and falls, fracture and pain, contusion in joints, bleeding from wounds, leprosy (leprosy), scab and lichen, eczema, tinea capitis, ulcer of lower limb, foot lichen, trichomonas vaginalis. Isolated compounds: 254, 385, 3510, 6043, 11836, 11837, 11838, 11839, 11840, 11841, 11842, 11848, 11850, 16552, 16553, 16554.
- T3561 *Jatropha gossypifolia* (Euphorbiaceae); MIAN YE MA FENG SHU; Cotton-leaf Leprous Tree\*. Isolated compounds: 11849.
- T3562 *Joannesia princeps* (Euphorbiaceae); BA XI QIAO AN MU; Brazilian Joan-wood\*. Isolated compounds: 2440, 11212, 11213, 11214, 11215, 11612, 17860.
- T3563 *Juglans cinerea* (Juglandaceae); HUI HU TAO; Butternut. Isolated compounds: 3983.
- T3564 *Juglans mandshurica* (Juglandaceae); HU TAO QIU; Manchurian Walnut. Used part: bark. TCM Effects: To clear heat and dry damp, drain liver and brighten eyes. TCM Indications: Damp-heat dysentery, yellow thick vaginal discharge, red eyes with gall, sty, tearing with wind, bone tuberculosis. Isolated compounds: 5373, 5374, 5375, 10187, 10747, 18588.
- T3565 *Juglans mandshurica* var. *sieboldiana* (Juglandaceae); DONG BEI HU TAO; Northeast Walnut\*. Isolated compounds: 6005, 6006, 6007, 6145, 10460, 10461, 10746, 10747, 11898, 11899, 11900, 11901, 11902, 15253, 18588.
- T3566 *Juglans nigra* (Juglandaceae); HEI HU TAO; Black Walnut. Isolated compounds: 11903, 15184, 19910.
- T3567 *Juglans regia* (Juglandaceae); HU TAO QING PI; English Walnut Exocarp. Used part: exocarp. TCM Effects: To relieve pain, relieve cough, check diarrhea, resolve toxin, kill worms. TCM Indications: Pain in stomach duct and abdomen, dysmenorrhea, enduring cough, chronic diarrhea and dysentery, swelling toxin of welling abscess and sore, intractable lichen, bald sores, white patch wind. Isolated compounds: 9719, 9720.
- T3568 *Juglans regia* (Juglandaceae); HU TAO REN; English Walnut Seed. Used part: seed. TCM Effects: To supplement kidney and boost essence, warm lung and settle asthma, moisten intestines and free stool. TCM Indications: Enduring cough and asthma, bronchitis, lumbago and limp leg, frequent urination, enuresis, impotence, emission, intestinal dry and constipation, stone strangury, sores and scrofula. Isolated compounds: 617, 618, 2331, 3301, 3303, 3774, 5521, 7518, 8504, 8505, 8506, 9502, 9719, 9720, 10536, 11903, 12850, 14612,

- 15255, 16765, 17754, 19056, 19277, 20256, 20310, 20389, 20910.
- T3569 *Juglans regia* (Juglandaceae); HU TAO SHU PI; English Walnut Bark. Used part: bark. TCM Effects: To astringe intestines and check diarrhea, resolve toxin, relieve itch. TCM Indications: Diarrhea, dysentery, leprosy, scrotal wind, itchy skin. Isolated compounds: 18588.
- T3570 *Juglans regia* (Juglandaceae); HU TAO YE; English Walnut Leaf. Used part: leaf. TCM Effects: To promote contraction and check discharge, kill worms, disperse swelling. TCM Indications: Vaginal discharge, scab sore, elephantiasis. Isolated compounds: 6731, 8095, 9721, 11897, 15926.
- T3571 *Juglans* sp. (Juglandaceae). Isolated compounds: 19174.
- T3572 *Juglans* spp. (Juglandaceae). Isolated compounds: 10887, 16765.
- T3573 *Juliania adstringens* (Julianiaceae). Isolated compounds: 6470, 6471, 6478, 10089, 10090, 10363, 10364, 10585, 10586, 13591, 15931, 16050, 16402, 19983.
- T3574 *Junceella fragilis* (Gorgonidae); CUI DENG XIN LIU SHAN HU; Gorgonian *Junceella fragilis*. Isolated compounds: 5296, 11944, 11947, 11948, 17755.
- T3575 *Junceella gemmacea* (Gorgonidae); LEI DENG XIN LIU SHAN HU; Gorgonian *Junceella gemmacea*. Isolated compounds: 5296.
- T3576 *Junceella juncea* (Gorgonidae); DENG XIN LIU SHAN HU; Gorgonian *Junceella juncea*. Isolated compounds: 8264, 8265, 10548, 11945, 11946, 11949, 11950, 11951, 11952, 11953, 11954, 11955, 11956, 11957, 17755.
- T3577 *Juncus acutus* (Juncaceae); JIAN DENG XIN CAO; Acute Rush\*. Isolated compounds: 5861, 6046, 6223, 7403, 17274.
- T3578 *Juncus effusus* (Juncaceae); DENG XIN CAO; Common Rush. Used part: whole herb. TCM Effects: To disinhibit water and free strangury, clear heart and downbear fire. TCM Indications: Strangury, edema, inhibited urination, damp-heat jaundice, insomnia and vexation, infant night crying, throat impediment, mouth sore, wound. Isolated compounds: 9500, 9893, 9894, 10101, 10102, 11958, 11959, 11960, 13772, 13924, 14922, 15814, 21612.
- T3579 *Jungermannia exsertifolia* ssp. *cordifolia* (Jungermanniaceae); XIN XING SHEN YE YE TAI. Isolated compounds: 3167, 3168, 3177.
- T3580 *Jungermannia* sp. (Jungermanniaceae); XIN XI LAN YE TAI. Isolated compounds: 10274, 10287, 11962, 12167.
- T3581 *Jungermannia truncata* (Jungermanniaceae); JIE XING YE TAI. Isolated compounds: 172, 201, 5703, 5934, 5935, 7103, 7158, 10278, 10279, 10280, 10283, 10284, 10286, 10287, 10288, 12174, 12182, 18938.
- T3582 *Juniperus chinensis* var. *kaizuka* (Cupressaceae); LONG BAI; Dragon Juniper. Isolated compounds: 6476, 7047, 9745, 16418.
- T3583 *Juniperus communis* (Cupressaceae); OU ZHOU CI BAI; Common Juniper. Isolated compounds: 9, 2850, 3354, 4281, 4916, 6819, 11961, 11966, 15705, 19983, 20465.
- T3584 *Juniperus communis* var. *depressa* (Cupressaceae); OU ZHOU CI BAI BIAN ZHONG; Common Juniper Variety\*. Isolated compounds: 4035, 13642, 13643, 16079, 21765.
- T3585 *Juniperus conferta* (Cupressaceae); AN CI BAI; Shore Juniper. Isolated compounds: 15412.
- T3586 *Juniperus erectopatens* (Cupressaceae); ZHI LI CI BAI; Erect Juniper\*. Isolated compounds: 17780.
- T3587 *Juniperus excelsa* (Cupressaceae); GAO DA CI BAI; High Juniper\*. Isolated compounds: 11967.
- T3588 *Juniperus formosana* (Cupressaceae); CI BAI; Taiwan Juniper. Used part: root and root cortex or branch-leaf. TCM Effects: To clear heat and resolve toxin, dry damp and relieve itch. TCM Indications: Measles papules with ardent fever, eczema, lichen sore. Isolated compounds: 12402, 12412.
- T3589 *Juniperus horizontalis* (Cupressaceae); PING PU YUAN BAI; Creeping Juniper. Isolated compounds: 4376.
- T3590 *Juniperus macropoda* (Cupressaceae); CHANG BING YUAN BAI; Longpetiole Juniper\*. Isolated compounds: 11141.
- T3591 *Juniperus occidentalis* (Cupressaceae); XI FANG CI BAI; Western Juniper. Isolated compounds: 1030, 4376, 10688, 11968, 11969.
- T3592 *Juniperus oxycedrus* (Cupressaceae); CI GUI; Prickly Juniper. Isolated compounds: 15705, 22920.
- T3593 *Juniperus phoenicea* (Cupressaceae); FEI NI JI CI BAI; Poenician Juniper. Isolated compounds: 10271, 11760, 11965, 13897, 14317, 14495, 14496, 14504, 14644, 14647.
- T3594 *Juniperus rigida* (Cupressaceae); DU SONG SHI; Stiffleaf Juniper Fruit. Used part: fruit. TCM Effects: To dispel wind, settle pain, eliminate damp, disinhibit urine. TCM Indications: Rheumatic arthritis, pain wind, nephritis, edema, urinary tract infection. Isolated compounds: 555, 556, 557, 562, 563, 1030, 1186, 2412, 2550, 2935, 2936, 3194, 3241, 3242, 3768, 4281, 4550, 4916, 5747, 6198, 7410, 7729, 7764, 9543, 9669, 10688, 13825, 13826, 15412, 17588, 20465, 22770.
- T3595 *Juniperus sabina* (Cupressaceae); CHA ZI YUAN BAI; Savin Juniper. Isolated compounds: 1372, 16797, 17337, 17341, 17342, 17347, 17592, 19101, 19427.
- T3596 *Juniperus sabina* var. *tamariscifolia* (Cupressaceae); CHENG LIU YE YUAN BAI; Tamarisk-leaf Juniper\*. Isolated compounds: 1372.
- T3597 *Juniperus scopulorum* (Cupressaceae); LUO JI SHAN YUAN BAI; Western Red Cedar. Isolated compounds: 11421, 19121.
- T3598 *Juniperus silicicola* (Cupressaceae); NAN MEI ZHOU GUI; Southern Red-cedar. Isolated compounds: 1372.
- T3599 *Juniperus* sp. (Cupressaceae). Isolated compounds: 5543, 18864.
- T3600 *Juniperus taiwaniana* (Cupressaceae); SHAN CI BAI; Taiwan Juniper. Used part: root or fruit. TCM Indications: Enduring low fever, skin lichen. Isolated compounds: 15703, 21346, 21347, 21348, 22052.
- T3601 *Juniperus thurifera* (Cupressaceae); RU XIANG BAI; Mastic Juniper\*. Isolated compounds: 3352, 3353, 17337.
- T3602 *Juniperus thurifera* var. *africana* (Cupressaceae); XIANG CI BAI FEI ZHOU BIAN ZHONG; Mastic Africa Juniper\*. Isolated compounds: 11760, 13897, 14317, 14495, 14496, 14504, 14644, 14647.
- T3603 *Juniperus virginiana* (Cupressaceae); BEI MEI YUAN BAI; Red Cedar. Isolated compounds: 3350, 3354, 17592.
- T3604 *Jurinea alata* (Asteraceae); YI CHI LING JU; Winged Jurinea\*. Isolated compounds: 837.  
*Jurinea souliei* = *Vladimiria souliei*
- T3605 *Justicia betonica* (Acanthaceae); YAO SHUI SU JUE CHUANG. Isolated compounds: 11983, 11984, 11985, 11986.
- T3606 *Justicia ghiesbreghtiana* (Acanthaceae). Isolated compounds: 11976.

- T3607 *Justicia heterocarpa* (Acanthaceae). Isolated compounds: 12799.
- T3608 *Justicia hyssopifolia* (Acanthaceae). Isolated compounds: 11982, 19427.  
*Justicia paniculata* = *Andrographis paniculata*  
*Justicia procumbens* = *Rostellularia procumbens*
- T3609 *Justicia procumbens* var. *leucantha* (Acanthaceae); BAI HUA JUE CHUANG; Whiteflower Rostellularia. Isolated compounds: 11979.  
*Justicia purpurea* = *Hypoestes purpurea*
- T3610 *Justicia simplex* (Acanthaceae); DAN JUE CHUANG; Simple Rostellularia. Isolated compounds: 11979, 19903.

## K

- T3611 *Kadsura ananosma* (Schisandraceae); BO LUO XIANG TENG. Isolated compounds: 1136, 1136, 1137, 1138, 1139, 1248.
- T3612 *Kadsura angustifolia* (Schisandraceae); XIA XIE NAN WU WEI ZI; Narrowleaf Kadsura\*. Isolated compounds: 1246, 1247, 1248.  
*Kadsura chenensis* = *Kadsura coccinea*
- T3613 *Kadsura coccinea* [Syn. *Kadsura chenensis*; *Kadsura hainanensis*] (Schisandraceae); LENG FAN TUAN[yn; Blacktiger Kadsura. Used part: root and trailing stem. TCM Effects: To move *qi* and relieve pain, free network vessels and dissipate stasis. TCM Indications: Gastric ulcer, duodenal ulcer, chronic gastritis, acute gastroenteritis, wind-damp impediment pain, knocks and falls, fracture, dysmenorrhea, postpartum blood stasis abdominal pain, mounting *qi* (hernia). Isolated compounds: 144, 145, 2245, 3861, 9928, 9929, 11229, 11469, 11992, 11996, 11997, 12003, 12011, 12014, 14356, 15422, 15423, 19493, 19494, 19495, 19496.  
*Kadsura hainanensis* = *Kadsura coccinea*
- T3614 *Kadsura heteroclita* [Syn. *Uvaria heteroclita*] (Schisandraceae); YI XING NAN WU WEI ZI; Curious Kadsura. Used part: root or lianoid stem. TCM Effects: To dispel wind and eliminate damp, move *qi* and relieve pain, soothe sinews and quicken network vessels. TCM Indications: Wind-damp impediment pain, stomachache, abdominal pain, dysmenorrhea, postpartum abdominal pain, knocks and falls, chronic pain in lumbus and legs. Isolated compounds: 144, 145, 9460, 9461, 9462, 9463, 9464, 9465, 9466, 9928, 9929, 11993, 11994, 13522, 15419, 19629.
- T3615 *Kadsura interior* (Schisandraceae); NEI NAN WU WEI ZI; Fengqing Kadsura. Used part: lianoid stem. TCM Effects: To engender blood and harmonize blood, regulate menstruation and promote pregnancy. TCM Indications: *Qi* blood vacuity depletion, paralysis in limbs, wind-damp impediment pain, vacuity detriment sterility, emission, white turbidity, menstrual disorder, red and white vaginal discharge. Isolated compounds: 1210, 8906, 8908, 8912, 9463, 9465, 11099, 11100, 11101, 11102, 11103, 11103, 11104, 11104, 11105, 11106, 12012, 15422, 19497.
- T3616 *Kadsura japonica* (Schisandraceae); RI BEN NAN WU WEI ZI; Japanese Kadsura. Isolated compounds: 333, 12003, 12012.
- T3617 *Kadsura lancilimba* (Schisandraceae); PI ZHEN YE NAN WU WEI ZI; Lanceolate Kadsura\*. Isolated compounds: 12477, 12478, 12479.  
*Kadsura longipedunculata* = *Kadsura peltigera*
- T3618 *Kadsura matsudai* (Schisandraceae). Isolated compounds: 12004, 19500, 19501, 19502, 20646.
- T3619 *Kadsura peltigera* [Syn. *Kadsura longipedunculata*] (Schisandraceae); CHANG GENG NAN WU WEI ZI; Longpeduncle Kadsura. Used part: root or root cortex. TCM Effects: To move *qi*, quicken blood, relieve pain. TCM Indications: *Qi* stagnation abdominal distention, abdominal pain, stomachache, pain in sinews and bones, dysmenorrhea, knocks and falls, innominate toxin swelling. Isolated compounds: 1206, 1207, 1208, 1466, 2381, 3476, 11991, 11992, 11993, 11995, 11998, 11999, 12000, 12001, 12002, 12003, 12013, 12966, 12967, 12968, 15419, 15420, 15421, 16290, 16352, 19479, 19480, 19483, 19484, 19485, 19486, 19492, 19497, 19499.
- T3620 *Kaempferia galanga* (Zingiberaceae); SHAN NAI; Galanga Resurrectionlily. Used part: rhizome. TCM Effects: To warm center and move *qi*, disperse food, relieve pain. TCM Indications: Distention fullness in chest and diaphragm, cold pain in stomach duct and abdomen, non-digestion of food accumulation. Isolated compounds: 2550, 3194, 7430, 7460, 7474, 9088, 12015, 12020, 14060, 14096, 15938, 17056, 17136, 21953, 21972.
- T3621 *Kaempferia marginata* (Zingiberaceae); KU SHAN NAI; Bitter . Isolated compounds: 13560.
- T3622 *Kaempferia pandurata* (Zingiberaceae); TI QIN ZHUANG SHAN NAI; Fiddle-leaf Resurrectionlily\*. Isolated compounds: 16603.
- T3623 *Kalmia latifolia* (Ericaceae); KUAN YE SHAN YUE GUI; Mountain Laurel. Isolated compounds: 17170.
- T3624 *Kalopanax pictum* (Araliaceae); ZHUO SE CI QIU; Picture Kalopanax\*. Used part: bark. TCM Effects: To dispel wind and eliminate damp, quicken blood and relieve pain, kill worms and relieve itch. TCM Indications: Wind-damp impediment pain, numbness in limbs, wind-fire toothache, knocks and falls, fracture, swelling of welling abscess, welling abscess and flat abscess with swelling sore, mouth sore, swelling hemorrhoids, sore and lichen. Isolated compounds: 9276, 17350, 17351.
- T3625 *Kalopanax septemlobus* (Araliaceae); CI QIU SHU PI; Septemlobate Kalopanax Bark. Used part: bark. TCM Effects: To dispel wind and eliminate damp, quicken blood and relieve pain, kill worms and relieve itch. TCM Indications: Wind-damp impediment pain, numbness in limbs, wind-fire toothache, knocks and falls, fracture, swelling of welling abscess, welling abscess and flat abscess with swelling sore, mouth sore, swelling hemorrhoids, sore and lichen. Isolated compounds: 3823, 9276, 12118, 12119.
- T3626 *Kandelia candel* (Rhizophoraceae); QIU QIE SHU; Kandelia. Isolated compounds: 678, 12128.
- T3627 *Kayea assamica* (Clusiaceae); *Kayea assamica*. Isolated compounds: 21313, 21314, 21315, 21316.
- T3628 *Kerria japonica* (Rosaceae); DI TANG HUA; Japanese Kerria Flower. Used part: flower or branchlet-leaf. TCM Effects: To relieve cough and transform phlegm, disinhibit damp and disperse swelling, resolve toxin. TCM Indications: Cough, wind-damp impediment pain, postpartum vacuity taxation, edema, inhibited urination, indigestion, swelling toxin of welling abscess and flat abscess, eczema, urticaria. Isolated compounds: 834, 8967, 9290, 13134, 16756.
- T3629 *Kigelia pinnata* (Bignoniaceae); DIAO DENG SHU; Sausagetreer. Isolated compounds: 5174, 9988, 10105, 10107, 10825, 12225, 12501.
- T3630 *Kleinhovia hospita* (Myristicaceae); MIAN TOU YE; Smallleaf

- Knema. Used part: leaf. TCM Effects: To kill worms, treat lichen, dry damp and resolve itch. TCM Indications: Scab sore, lichen, erythra itch-pain, head louse. Isolated compounds: 15525, 19087.
- T3631 *Knema globularia* (Myristicaceae); XIAO YE HONG GUANG SHU; Small-leaf Knema. Isolated compounds: 5699, 13648, 20481.
- T3632 *Knoxia valerianoides* (Rubiaceae); HONG YA DA JI; Red Knoxia. Used part: root. TCM Effects: To drain water and expel rheum, resolve toxin and dissipate binds. TCM Indications: Edema distention fullness, phlegm-rheum rapid asthma, swelling toxin of welling abscess and sore. Isolated compounds: 10530, 12237, 18329, 21730.
- T3633 *Kobresia nepalensis* (Cyperaceae); NI BO ER SONG CAO; Nepal Kobresia\*. Isolated compounds: 15478, 15479, 15480, 15481.
- T3634 *Koelipinia linearis* (Asteraceae); XIE WEI JU; Linear Koelipinia. Isolated compounds: 663, 8351, 12243, 12244, 12245, 15774, 20713.
- T3635 *Koelreuteria paniculata* (Sapindaceae); LUAN HUA; Paniculate Goldraintree Flower. Used part: flower. TCM Effects: To clear liver and brighten eyes. TCM Indications: Eye pain, eye swelling, red eyes and tearing. Isolated compounds: 3340, 12246, 14454.
- T3636 *Koelreuteria paniculata* (Sapindaceae); LUAN SHU; Paniculate Goldraintree Root-bark. Used part: root cortex. TCM Effects: To clear liver and brighten eyes. TCM Indications: Eye pain and tearing, red eyes with gall. Isolated compounds: 5511, 5512, 6727, 6728, 7458, 7470, 16607, 16608, 18412, 21042.
- T3637 *Koelreuteria* spp. (Sapindaceae). Isolated compounds: 12642.
- T3638 *Kokoona ochracea* ZHE HUANG KAO GU NA; Brown-yellow Kokoona\*. Isolated compounds: 15919, 15920, 15921, 15922, 15923.
- T3639 *Kopsia flavida* (Apocynaceae); HUANG HONG SE RUI MU; Yellow-red Kopsia\*. Isolated compounds: 14319, 14584, 14585, 14596.
- T3640 *Kopsia fruticosa* (Apocynaceae); HONG HUA RUI MU; Redflower Kopsia. Isolated compounds: 6473, 6878, 6941, 10293, 10517, 12261, 12262, 12263, 12264, 12265, 12266, 12267, 12268, 12269, 12988, 17555, 22372, 22373, 22374.
- T3641 *Kopsia griffithii* (Apocynaceae); MA LAI XI YA RUI MU; Malaysia Kopsia\*. Isolated compounds: 827, 6879, 14373.
- T3642 *Kopsia longiflora* (Apocynaceae); CHANG HUA RUI MU; Longflower Kopsia\*. Isolated compounds: 12268.
- T3643 *Kopsia officinalis* (Apocynaceae); YUN NAN RUI MU; Medicinal Kopsia. Used part: fruit and leaf. TCM Effects: To dispel wind and quicken network vessels, eliminate inflammation and relieve pain. TCM Indications: Swelling pain in throat, wind-damp impediment pain, numbness in limbs. Isolated compounds: 17556.
- T3644 *Kopsia pauciflora* (Apocynaceae); SHAO HUA RUI MU; Fewflower Kopsia\*. Isolated compounds: 16731, 16732.
- T3645 *Kummerowia striata* (Fabaceae); JI YAN CAO; Striate Kummerowia. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, fortify spleen and disinhibit damp, quicken blood and stanch bleeding. TCM Indications: Common cold with fever, summerheat-damp vomiting and diarrhea, jaundice, welling abscess boil and clove sores, dysentery, gan disease, blood strangury, coughing of blood, spontaneous external bleeding, knocks and falls, red and white vaginal discharge. Isolated compounds: 1476, 1492, 12020, 13137, 13145, 18409.
- T3646 *Kyllinga brevifolia* (Cyperaceae); SHUI WU GONG; Shortleaf Kyllinga. Used part: whole herb with rhizome. TCM Effects: To course wind and resolve exterior, clear heat and disinhibit damp, quicken blood and resolve toxin. TCM Indications: Common cold with headache and fever, acute bronchitis, pertussis, malaria, jaundice, dysentery, chyluria, toxin swelling of sores, itchy skin, poisonous snake bite, knocks and falls, rheumatic arthritis. Isolated compounds: 22581.

## L

- T3647 *Lablab niger* (Fabaceae); BIAN DOU; Niger Bean\*. Isolated compounds: 17047.
- T3648 *Laburnum anagyroides* (Fabaceae); DU DOU; Goldenchain Laburnum. Isolated compounds: 1134, 4594, 15555.
- T3649 *Laccifer lacca* (Lacciferidae); ZI CAO RONG; Lac. Used part: gum of lac insect. TCM Effects: To clear heat, cool blood, resolve toxin. TCM Indications: Measles papules, non-eruption of measles, postpartum blood dizziness, vaginal discharge, swelling toxin of sore and scab. Isolated compounds: 887.
- T3650 *Lactarius helvus* (Russulaceae). Isolated compounds: 18273.
- T3651 *Lactarius necator* (Russulaceae). Isolated compounds: 17433, 17446.
- T3652 *Lactarius pergamenus* (Russulaceae); SI YANG PI ZHI RU GU; Parchment-like Milky\*. Isolated compounds: 18273.
- T3653 *Lactarius piperatus* [Syn. *Agaricus piperatus*] (Russulaceae); LA RU GU; Peppery Milky. Used part: sporocarp. TCM Effects: To dispel wind and dissipate cold, soothe sinews and quicken network vessels. TCM Indications: Pain in lumbus and legs, numbness in limbs, hypertonicity of sinews and bones, convulsion of limbs. Isolated compounds: 17433, 17446, 22364.
- T3654 *Lactarius rolemus* (Russulaceae); DUO ZHI RU GU; Juicy Milky\*. Isolated compounds: 7245.
- T3655 *Lactarius subvellereus* (Russulaceae); YA RONG GAI RU GU; Subtomentose Milky\*. Isolated compounds: 3422.
- T3656 *Lactarius torminosus* (Russulaceae); MAO TOU RU GU; Pink-fringed Milky. Isolated compounds: 17433, 17446.
- T3657 *Lactarius vellereus* (Russulaceae); RONG BAI RU GU; Fleecy Milk-cap. Used part: sporocarp. TCM Effects: To track wind and dissipate cold, soothe sinews and quicken network vessels. TCM Indications: Numbness in limbs, hemiplegia. Isolated compounds: 10308, 10309, 10822, 11475, 11768, 12433, 12435, 18273, 22364, 22365, 22366, 22367.
- T3658 *Lactuca canadensis* (Asteraceae); JIA NA DA WO JU; Canada Lettuce. Isolated compounds: 12447.
- T3659 *Lactuca indica* (Asteraceae); SHAN WO JU; Indian Lettuce. Used part: whole herb or root. TCM Effects: To clear heat and resolve toxin, quicken blood and stanch bleeding. TCM Indications: Swelling pain in throat, intestinal welling abscess, swelling pain of sore and boil, postpartum blood stasis abdominal pain, wart, flooding and spotting, bleeding from hemorrhoids. Isolated compounds: 1113, 1476, 3551, 8351, 11642, 12441, 12442, 12443, 12444, 13137, 13147, 18317, 19087, 20369.
- T3660 *Lactuca laciniata* (Asteraceae); SUI BIAN WO JU; Laciniated Lettuce\*. Isolated compounds: 12446.

- T3661 *Lactuca sariola* (Asteraceae); SA LI LA WO JU; Sariola Lettuce\*. Isolated compounds: 12446.
- T3662 *Lactuca sativa* (Asteraceae); WO JU; Garden Lettuce. Used part: seed. TCM Effects: To disinhibit urine, free milk, clear heat and resolve toxin. TCM Indications: Inhibited urination, hematuria, galactostasis, snake or insect bites, toxin swelling. Isolated compounds: 5564, 12446, 13147, 18374.
- T3663 *Lactuca serriola* (Asteraceae); YE WO JU; Prickly Lettuce. Isolated compounds: 5187, 12447.
- T3664 *Lactuca virosa* (Asteraceae); DU WO JU; Blue Lettuce. Isolated compounds: 12446, 12447.
- T3665 *Laetia corymbulosa* (Flacourtiaceae). Isolated compounds: 4111, 4112, 4113.
- T3666 *Laetiporus sulphureus* var. *miniatus* (Polyporaceae); ZHU HONG LIU HUANG SE XUN KONG JUN; Vermeil-sulphureous Laetiporus\*. Isolated compounds: 13592, 13593.
- T3667 *Lagenaria breviflora* (Cucurbitaceae); DUAN HUA HU LU; Shortflower Bottle Gourd\*. Isolated compounds: 8065.
- T3668 *Lagenaria siceraria* var. *depressa* (Cucurbitaceae); HU GUA; Bottle Gourd. Used part: fruit. TCM Effects: To disinhibit water, disperse swelling, free strangury, dissipate binds. TCM Indications: Edema, ascites, jaundice, diabetes mellitus, strangury, swollen welling abscess. Isolated compounds: 4317.
- T3669 *Lagerstroemia fauriei* (Lythraceae); FU RUI ZI WEI; Faurie Crapemyrtle\*. Isolated compounds: 22433.  
*Lagerstroemia flos-reginae* = *Lagerstroemia speciosa*
- T3670 *Lagerstroemia indica* (Lythraceae); ZI WEI GEN; Common Crapemyrtle Root. Used part: root. TCM Effects: To clear heat and disinhibit damp, quicken blood and stanch bleeding, relieve pain. TCM Indications: Swelling toxin of sore and welling abscess, toothache, dysentery. Isolated compounds: 21955.
- T3671 *Lagerstroemia indica* (Lythraceae); ZI WEI HUA; Common Crapemyrtle Flower. Used part: flower. TCM Effects: To clear heat and resolve toxin, quicken blood and stanch bleeding. TCM Indications: Postpartum flooding, concretion and conglomeration, flooding, vaginal discharge, scab and lichen, *lai*. Isolated compounds: 4832, 5012, 8095, 14454, 14547, 17025.
- T3672 *Lagerstroemia indica* (Lythraceae); ZI WEI YE; Common Crapemyrtle Leaf. Used part: leaf. TCM Effects: To clear heat and resolve toxin, disinhibit damp and stanch bleeding. TCM Indications: Dysentery, eczema, bleeding due to external injury. Isolated compounds: 4832, 4848, 4856, 5736, 12450.
- T3673 *Lagerstroemia speciosa* [Syn. *Munchausia speciosa*; *Lagerstroemia flos-reginae*] (Lythraceae); DA HUA ZI WEI; Queen Crapemyrtle. Used part: root and leaf. TCM Effects: To close sores, resolve toxin. TCM Indications: Swelling toxin of welling abscess and sore. Isolated compounds: 18206.
- T3674 *Laggera alata* (Asteraceae); LIU LENG JU; Winged Laggera. Used part: whole herb. TCM Effects: To dispel wind, eliminate damp, transform stagnation, dissipate stasis, disperse swelling, resolve toxin. TCM Indications: Common cold with cough, generalized pain, diarrhea, painful joints due to rheumatism, menstrual block, knocks and falls, welling abscess and clove sore, scrofula, damp toxin with pruritus. Isolated compounds: 838, 839, 840, 841, 842, 4126, 7493, 9939, 9940, 9941, 10072, 10223, 10224, 10225, 10987, 11349, 16361, 21021, 21627.  
*Lagopsis supina* = *Marrubium supinum*
- T3675 *Lagopsis supina* (Lamiaceae); XIA ZHI CAO; Lagopsis. Used part: whole herb. TCM Effects: To nourish body and quicken blood, clear heat and disinhibit damp. TCM Indications: Menstrual disorder, postpartum abdominal pain due to stasis obstruction, dizzy head due to blood vacuity, hemiplegia, knocks and falls, edema, inhibited urination, red eyes with gall, welling abscess and sores, frostbite (kibe), toothache, itchy skin. Isolated compounds: 1484, 1487.
- T3676 *Lagotis stolonifera* (Scrophulariaceae); PU FU JING TU ER CAO; Creeping Lagotis\*. Isolated compounds: 18219.
- T3677 *Laguncularia racemosa* (Combretaceae); JIA HONG SHU; White Mangrove. Isolated compounds: 13296.
- T3678 *Laminaria japonica* (Laminariaceae); KUN BU; Kelp Thallus. Equivalent plant: *Ecklonia kurome*, *Undaria pinnatifida*. Used part: dried thallus. TCM Effects: To soften hardness and dissipate binds, dispel phlegm, disinhibit water. TCM Indications: Goiter and tuberculosis, scrofula, bleeding, painful swollen testes, phlegm-rheum and edema, prevention of cataracts. Isolated compounds: 9392, 9495, 12457, 13504, 13608, 14555, 15962, 15980.
- T3679 *Lamiophlomis rotata* [Syn. *Phlomis rotata*] (Lamiaceae); DU YI WEI; Common Lamiophlomis. Used part: whole herb. TCM Effects: To quicken blood and transform stasis, disperse swelling and relieve pain. TCM Indications: Knocks and falls, pain in sinews and bones, swelling pain in joints, dysmenorrhea, flooding and spotting. Isolated compounds: 1497, 1504, 4959, 12459, 12460, 12461, 12462, 12463.
- T3680 *Lamium amplexicaule* (Lamiaceae); BAO GAI CAO; Henbit Deadnettle. Used part: whole herb. TCM Effects: To quicken blood and free network vessels, resolve toxin and disperse swelling. TCM Indications: Knocks and falls, pain in sinews and bones, numbness in limbs, hemiplegia, facial paralysis, jaundice, deep-source nasal congestion, scrofula, toxin swelling, yellow-water sore. Isolated compounds: 11128, 12456, 12458, 12464.
- T3681 *Lamium barbatum* (Lamiaceae); YE ZHI MA; Barbate Deadnettle. Used part: flower or whole herb. TCM Effects: To cool blood and stanch bleeding, quicken blood and relieve pain, disinhibit damp and disperse swelling. TCM Indications: Lung heat hemoptysis, blood strangury, vaginal discharge, menstrual disorder, vacuity fever in children, knocks and falls, toxin swelling. Isolated compounds: 12464, 22158.  
*Lamium chinense* = *Galeobdolon chinense*
- T3682 *Lamium galeobdolon* (Lamiaceae); YOU CHOU YE ZHI MA; Stoat-osmyl Deadnettle\*. Isolated compounds: 9858.
- T3683 *Lamium* sp. (Lamiaceae). Isolated compounds: 9238.
- T3684 *Lamptromyces japonicus* (Tricholomataceae); RI BEN CE ER. Isolated compounds: 12465.  
*Lannea coromandelica* = *Lannea grandis*
- T3685 *Lannea grandis* [Syn. *Lannea coromandelica*] (Anacardiaceae); HOU PI SHU; Coromandel Lannea. Used part: bark. TCM Effects: To joint bones, resolve toxin. TCM Indications: Fracture, tetrodon poisoning, cassava poisoning, pineapple poisoning. Isolated compounds: 3852,

- 5825, 12488, 12714, 18378, 21909.
- T3686 *Lansium domesticum* (Meliaceae); ZAI ZHONG LANG SE MU; Cultivated Langsat\*. Isolated compounds: 16305.
- T3687 *Lantana camara* (Verbenaceae); WU SE MEI; Common Lantana. Used part: leaf or branchlet. TCM Effects: To resolve toxin and disperse swelling, dispel wind and relieve itch. TCM Indications: Swollen welling abscess, damp toxin, scab and *lai*, sore toxin. Isolated compounds: 3024, 3025, 3026, 3027, 3028, 3241, 3242, 4550, 6169, 6537, 8276, 9486, 9669, 12490, 12491, 12492, 12493, 12494, 12495, 12496, 14208, 17696, 19987, 20255, 20280, 21327, 22396.
- T3688 *Lappula echinata* (Boraginaceae); DONG BEI HE SHI; European Stickseed. Used part: fruit. TCM Effects: To expel worms. TCM Indications: Ascariasis, taeniasis, oxyuria disease. Isolated compounds: 618, 4184, 14083.
- T3689 *Lappula intermedia* (Boraginaceae); ZHONG JIAN HE SHI; Intermediate Stickseed. Isolated compounds: 12535.  
*Larix amabilis* = *Pseudolarix amabilis*
- T3690 *Larix gmelini* (Pinaceae); LUO YE SONG; Dahurian Larch. Isolated compounds: 17876, 17884.
- T3691 *Larix* sp. (Pinaceae). Isolated compounds: 3981.
- T3692 *Larix* spp. (Pinaceae). Isolated compounds: 17399, 22581.
- T3693 *Larrea divaricata* (Zygophyllaceae); JI CHA KAI LA RUI A; Spreading Creosote-bush. Isolated compounds: 8289, 12526.
- T3694 *Larrea* sp. (Zygophyllaceae). Isolated compounds: 15741.
- T3695 *Larrea tridentata* (Zygophyllaceae); SAN CHI LA RUI A; Creosote-bush. Isolated compounds: 1476, 4940, 5652, 5864, 5865, 6942, 7742, 7743, 7744, 7745, 7746, 8289, 9423, 10077, 12070, 20978, 21105, 21711, 21771, 21857.
- T3696 *Lasianthus acuminatissimus* (Rubiaceae); CHANG WEI CU YE MU; Acuminate Lasianthus. Isolated compounds: 4716, 12531, 12532, 12533.
- T3697 *Lasianthus fordii* (Rubiaceae); Fordi Lasianthus\*. Isolated compounds: 12528, 12529, 12530.
- T3698 *Lasianthus wallichii* (Rubiaceae); XIE JI CU YE MU; Wallich Lasianthus. Isolated compounds: 1892, 2296, 2477, 4659, 4716, 15697, 16516.
- T3699 *Lasiobema japonica* (Fabaceae). Isolated compounds: 18323.
- T3700 *Lasiodiplodia theobromae*; Fungus *Lasiodiplodia theobromae*. Isolated compounds: 3179, 4861, 9979, 9980, 10315, 11825, 21311.
- T3701 *Lasiosphaera fenlzii* (Lycoperdaceae); MA BO; Bark-less Puff-ball. Equivalent plant: *Lycoperdon pyriforme*. Used part: sporocarp. TCM Effects: To clear lung and disinhibit throat, stanch bleeding. TCM Indications: Cough, aphonia, nosebleed(epistaxis), bleeding due to external injury. Isolated compounds: 4879, 7250, 22246, 22251.
- T3702 *Lastrea thelpteris* (Thelypteridaceae). Isolated compounds: 18162.
- T3703 *Lathyrus cicera* (Fabaceae); BIAN JIA SHAN LI DOU; Dwarf Chickling Pea. Isolated compounds: 9596.
- T3704 *Lathyrus latifolius* (Fabaceae); SU GEN XIANG WAN DOU; Everlasting Pea. Isolated compounds: 1057, 5351.
- T3705 *Lathyrus montanus* (Fabaceae); SHAN DI XIANG WAN DOU; Bitter Vetch. Isolated compounds: 16209.
- T3706 *Lathyrus nissolia* (Fabaceae); HE CAO XIANG WAN DOU; Grass Vetchling. Isolated compounds: 15629.
- T3707 *Lathyrus odoratus* (Fabaceae); XIANG WAN DOU; Sweet Pea. Isolated compounds: 12542.
- T3708 *Lathyrus palustris* var. *pilosus* (Fabaceae); ROU MAO SHAN LI DOU; Pilosity Peavine\*. Isolated compounds: 16579, 16580, 16581.
- T3709 *Lathyrus pratensis* (Fabaceae); MU DI XIANG WAN DOU; Meadow Peavine. Used part: whole herb. TCM Effects: To dispel phlegm and relieve cough. TCM Indications: Bronchitis, pneumonia, pulmonary welling abscess, tuberculosis, scab and lichen, sore and boil. Isolated compounds: 13145.
- T3710 *Lathyrus sativus* (Fabaceae); CAO XIANG WAN DOU; Indian Pea. Isolated compounds: 1058, 2845, 9596.
- T3711 *Lathyrus* sp. (Fabaceae). Isolated compounds: 10165, 13638.
- T3712 *Lathyrus* spp. (Fabaceae). Isolated compounds: 16209.
- T3713 *Lathyrus sylvestris* (Fabaceae); LIN SHENG SHAN LI DOU; Wild Pea. Isolated compounds: 5351.
- T3714 *Launaea* sp. (Asteraceae). Isolated compounds: 3635.
- T3715 *Laurencia caespitosa* (Delesseriaceae); CU SHENG AO DING ZAO; Cluster Concave-top Alga\*. Isolated compounds: 15910.
- T3716 *Laurencia elata* (Delesseriaceae); GAO AO DING ZAO; High Concave-top Alga\*. Isolated compounds: 6735.
- T3717 *Laurencia glandulifera* (Delesseriaceae); XIAO XIAN AO DING ZAO; Small-grand Concave-top Alga\*. Isolated compounds: 8502.
- T3718 *Laurencia majuscula* (Delesseriaceae); LUE DA AO DING ZAO; Smaller Concave-top Alga\*. Isolated compounds: 2623, 2624, 5399, 5400, 6735, 11570, 15910, 20343.
- T3719 *Laurencia mariannensis* (Delesseriaceae). Isolated compounds: 2620, 12616.
- T3720 *Laurencia nidifica* (Delesseriaceae); CHAO AO DING CAO. Isolated compounds: 11485, 12572.
- T3721 *Laurencia nipponica* (Delesseriaceae); HUANG SE AO DING CAO; Yellow Concave-top Alga\*. Isolated compounds: 12565.
- T3722 *Laurencia obtusa* (Delesseriaceae); DUN XING AO DING ZAO; Blunt Concave-top Alga\*. Isolated compounds: 15893, 15894, 15895, 15898, 15910, 16300.
- T3723 *Laurencia palisada* (Delesseriaceae); SHAN ZHUANG AO DING ZAO. Isolated compounds: 16542.
- T3724 *Laurencia* sp. (Delesseriaceae). Isolated compounds: 2450, 2451, 4595, 12615, 12617, 15899.  
*Laurentia longiflora* = *Isotoma longiflora*
- T3725 *Laurus nobilis* (Lauraceae); YUE GUI YE; Grecian Laurel Leaf. Used part: leaf. TCM Effects: To fortify stomach and rectify *qi*. TCM Indications: Distending pain in stomach duct and abdomen, knocks and falls, scab and lichen. Isolated compounds: 4891, 9451, 9732, 12566, 15431, 22400, 22963.
- T3726 *Laurus nobilis* (Lauraceae); YUE GUI ZI; Grecian Laurel Fruit. Used part: fruit. TCM Effects: To dispel wind-damp, resolve toxin, kill worms. TCM Indications: Wind-damp impediment pain, tetrodon poisoning, scab and lichen, postauricular sore. Isolated compounds: 391, 585, 4128, 7521, 8312, 8337, 12564, 12566.
- T3727 *Lavandula luisieri* (Lamiaceae). Isolated compounds: 6350, 14392, 21193.
- T3728 *Lavandula officinalis* (Lamiaceae); YAO YONG XUN YI CAO; Medicinal Lavender\*. Isolated compounds: 17408.

- T3729 *Lavandula* sp. (Lamiaceae). Isolated compounds: 3693.
- T3730 *Lavandula* spp. (Lamiaceae). Isolated compounds: 17054.
- T3731 *Lawsonia alba* (Lythraceae); BAI SAN MO HUA; White Henna\*. Isolated compounds: 12580, 12581, 12582.
- T3732 *Lawsonia inermis* (Lythraceae); ZHI JIA HUA YE; Henna Leaf. Used part: leaf. TCM Effects: To clear heat and promote contraction. TCM Indications: Bleeding due to external injury. Isolated compounds: 12580, 15255, 21391.
- T3733 *Leandra chaetodon* (Melastomataceae). Isolated compounds: 1736, 5773.
- T3734 *Ledebouria graminifolia* (Hyacinthaceae); HE CAO YE JIA BEI FANG FENG. Isolated compounds: 5838, 5992, 10030, 10409, 10676, 21767, 21809, 21917.  
*Ledebouriella seseloides* = *Saposhnikovia divaricata*
- T3735 *Ledum palustre* (Ericaceae); LA BA CHA; Crystal Tea. Isolated compounds: 16577.  
*Leibnitzia anandria* = *Gerbera anandria*
- T3736 *Lemmaphyllum microphyllum* (Polypodiaceae); LUO YAN CAO; Littleleaf Lemmaphyllum Herb. Used part: whole herb with root. TCM Effects: To clear lung and relieve cough, cool blood and stanch bleeding, clear heat and resolve toxin. TCM Indications: Lung heat cough, pulmonary welling abscess, hemoptysis, blood ejection, spontaneous external bleeding, hematuria, hematochezia, flooding and spotting, swelling pain in throat, parotitis, dysentery, scrofula, swelling toxin of welling abscess and sore, damp itchy skin, wind-fire toothache, wind-damp bone pain. Isolated compounds: 6678, 6679, 12620, 16110, 16111, 16112, 16113, 16114, 16115, 17660, 18162.
- T3737 *Lemmaphyllum microphyllum* var. *obovatum* (Polypodiaceae); DAO LUAN YE FU SHI JUE; Obovateleaf Lemmaphyllum\*. Used part: whole herb. TCM Effects: To clear lung and relieve cough, cool blood and stanch bleeding, free network vessels and relieve pain, clear heat and resolve toxin. TCM Indications: Pulmonary welling abscess, coughing of blood, blood ejection, spontaneous external bleeding, hematuria, blood strangury, wind-damp pain, toothache, dysentery, wind papules, damp itchy skin, swollen boil and malign sore, syphilis. Isolated compounds: 2079, 12618, 13413, 13414, 16110, 16116, 19829, 20709, 21174, 21404, 21405.
- T3738 *Lemna minor* (Lemnaceae); FU PING; Common Duckweed. Used part: whole herb. TCM Effects: To effuse sweat and resolve exterior, outthrust papules and relieve itch, disinhibit water and disperse edema, clear heat and resolve toxin. TCM Indications: Wind-heat exterior syndrome, non-eruption of measles, dormant papules with pruritus, edema, dribbling urinary block, sore and lichen, erysipelas, scalds. Isolated compounds: 1521, 9492, 9494, 10161, 10253, 10354, 11699, 17262.
- T3739 *Lemna perpusilla* (Lemnaceae); XI MAI FU PING; Minute Duckweed. Isolated compounds: 931.
- T3740 *Lemnaia bournei* BO LUN LIN HUA RUAN SHAN HU; Softcoral *Lemnaia bournei*. Isolated compounds: 12622.
- T3741 *Lens culinaris* (Fabaceae); BING DOU; Common Lentil. Isolated compounds: 9798, 10165, 20127, 22741.  
*Lens phaseoloides* = *Entada phaseoloides*
- T3742 *Lentinus edodes* (Tricholomataceae); XIANG XUN; Champignon. Used part: sporocarp. TCM Effects: To fortify spleen and promote digestion, dispel wind and outthrust papules, rectify *qi* and transform phlegm, resolve toxin, anticancer. TCM Indications: Weakness of right *qi*, fatigued spirit and hypodynamia, torpid intake, indigestion, blood vacuity, rickets, hypertension, hyperlipemia, chronic hepatitis, night sweating, urinary incontinence, edema, non-eruption of measles, urticaria, carcinoma. Isolated compounds: 109, 617, 624, 7250, 8003, 9766, 11532, 12624, 13608, 15979, 19105, 21504, 21505, 21506.
- T3743 *Lentinus lepideus* (Tricholomataceae); BAO PI GU; Pardleather-like Mushroom. Used part: sporocarp. TCM Effects: To supplement *qi* and blood, boost heart and liver. TCM Indications: *Qi*-blood depletion, heart-spleen vacuity, fatigue hypodynamia, palpitation and insomnia. Isolated compounds: 10318, 11487, 12623, 14333, 14766.
- T3744 *Leonotis nepetaefolia* (Lamiaceae); JING JIE YE SHI ER CAO; Nepetaleaf Leontis. Isolated compounds: 15483.
- T3745 *Leontice leontopetalum* (Berberidaceae); HUA BAN SHI ZU CAO; Leontice\*. Isolated compounds: 12641, 17007.
- T3746 *Leontice robustum* (Berberidaceae); HONG MAO QI; Robust Leontice. Used part: root and rhizome. TCM Effects: To quicken blood and dissipate stasis, dispel wind and eliminate damp, move *qi* and relieve pain. TCM Indications: Menstrual disorder, dysmenorrhea, postpartum blood stasis abdominal pain, cold pain in stomach duct and abdomen, knocks and falls, wind-damp impediment pain. Isolated compounds: 3340, 3341, 3342, 3343, 13089, 20717.
- T3747 *Leontice smirnowii* (Berberidaceae); SI MI SHI MU DAN CAO; Smirnow Leontice\*. Isolated compounds: 20717.
- T3748 *Leontice* spp. (Berberidaceae). Isolated compounds: 12642.
- T3749 *Leontopodium alpinum* (Asteraceae); GAO SHAN HUO RONG CAO; Alpine Edelweiss. Used part: whole herb. TCM Effects: To course wind and clear heat, relieve cough and transform phlegm. TCM Indications: Fever due to external contraction, lung heat cough, bronchitis. Isolated compounds: 118, 119, 230, 2856, 6211, 6212, 10526, 11339, 12178, 14394, 14767, 14893, 15886, 19894, 21898, 21971.  
*Leonurus artemisia* = *Leonurus heterophyllus*
- T3750 *Leonurus cardiaca* (Lamiaceae); WEI YI MU CAO; Stomach Motherwort. Isolated compounds: 816, 10135, 12625.
- T3751 *Leonurus glaucescens* (Lamiaceae); HUI BAI YI MU CAO; Glaucous Motherwort. Isolated compounds: 12579, 12637, 12638.
- T3752 *Leonurus heterophyllus* [Syn. *Leonurus artemisia*] (Lamiaceae); YI MU CAO; Wormwood-like Motherwort. Equivalent plant: *Leonurus sibiricus*. Used part: aerial parts. TCM Effects: To quicken blood and regulate menstruation, disinhibit urine and disperse edema. TCM Indications: Menstrual disorder, dysmenorrhea, amenorrhea, postpartum bleeding, persistent flow of lochia, edema, scant urine with edema, acute nephritis with edema. Isolated compounds: 6943, 6944, 6945, 6946, 6947, 8092, 8289, 9068, 9069, 9468, 9559, 9560, 12626, 12627, 12628, 12629, 12630, 12631, 12632, 12633, 12634, 12635, 12636, 12646, 12648, 12649, 13647, 17807, 17810, 19087, 20254, 21392.
- T3753 *Leonurus persicus* (Lamiaceae); BO SI YI MU CAO; Persia Motherwort\*. Isolated compounds: 308, 409, 2133, 4747, 5176, 5189, 6946, 6947, 6948, 6949, 6950, 7090, 7526, 8094, 9814, 12647, 12648,



- 12649, 12650, 12651, 12652, 12653, 12654, 12655, 12656, 12657, 12658, 12659, 12660, 12661, 12662, 12664, 12725, 17779.
- T3754 *Leonurus sibiricus* (Lamiaceae); XI YE YI MU CAO; Siberian Motherwort. Used part: aerial parts. TCM Effects: See *Leonurus heterophyllus*. TCM Indications: See *Leonurus heterophyllus*. Isolated compounds: 6617, 7020, 7021, 8289, 11488, 12639, 12640, 12645, 12646, 12663, 12665, 12666, 13014, 13015, 15483, 19858, 19859, 19860, 19861, 19862, 20254.
- T3755 *Lepidium apetalum* [Syn. *Lepidium micranthum*] (Brassicaceae); TING LI ZI; Pepperweed Seed. Equivalent plant: *Descurainia sophia*, *Lepidium virginicum*. Used part: seed. TCM Effects: To drain lung and calm asthma, move water and disperse swelling. TCM Indications: Phlegm-drool and congesting lung, cough and asthma with abundant phlegm, distention fullness in chest and rib-side, edema in chest and abdomen, inhibited urination. Isolated compounds: 2294, 19909.
- T3756 *Lepidium campestre* (Brassicaceae); HUANG YE DU XING CAI; Field Pepperwort. Isolated compounds: 1599.
- T3757 *Lepidium draba* (Brassicaceae); MAO DU XING CAI; Hoary Pepperwort. Isolated compounds: 7323, 14728, 20478.  
*Lepidium micranthum* = *Lepidium apetalum*
- T3758 *Lepidium sativum* (Brassicaceae); JIA DU XING CAI; Garden Cress. Used part: whole herb and seed. TCM Effects: To relieve cough and dispel phlegm, warm center, disinhibit urine, hasten delivery. TCM Indications: Cough, asthma, abundant phlegm, hiccough, diarrhea, dysentery, abdominal distention, edema, inhibited urination, scab and lichen. Isolated compounds: 3911, 8599, 19912.
- T3759 *Lepidium virginicum* (Brassicaceae); BEI MEI TING LI ZI; Virginia Pepperweed Seed. Used part: seed. TCM Effects: See *Lepidium apetalum*. TCM Indications: See *Lepidium apetalum*. Isolated compounds: 1599.
- T3760 *Lepidolaena taylorii* (Lepidolaenaceae); New Zealand liverwort. Isolated compounds: 19603, 19604, 19611, 19617.
- T3761 *Lepidozia fauriana* (Lepidoziaceae); DONG YA ZHI YE TAI. Isolated compounds: 1072, 1073, 1260, 1266, 5559, 5560, 7510.
- T3762 *Lepidozia incurvata* (Lepidoziaceae); WAN QU ZHI YE TAI. Isolated compounds: 2180, 2181, 2182, 2183, 2184, 2185, 2186, 3167, 3168, 3177, 11604.
- T3763 *Lepidozia vitrea* (Lepidoziaceae); YING ZHI YE TAI. Isolated compounds: 177, 6739, 7509, 7510, 7511, 11254, 22439.
- T3764 *Lepisorus thunbergianus* (Polypodiaceae); WA WEI; Thunberg's Lepisorus. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, disinhibit urine and free strangury, stanch bleeding. TCM Indications: Infant ardent fever, fright wind, swelling pain in throat, swollen welling abscess and sores, poisonous snake bite, dribbling and inhibited voidings of urination, hematuria, cough and hemoptysis. Isolated compounds: 6679.
- T3765 *Lepisorus ussuriensis* (Polypodiaceae); WU SU LI WA WEI; Ussuri Lepisorus. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, disinhibit urine, relieve cough, stanch bleeding. TCM Indications: Inhibited urination, dribbling pain of urination, edema, bloody urine, damp-heat dysentery, asthma, sore swollen throat, toxin swelling of sores, wind-damp pain, menstrual disorder, knocks and falls, bleeding knife wound. Isolated compounds: 21695.
- T3766 *Lepista nuda* (Tricholomataceae); ZI DING XIANG MO; Murasakishimeji (in Japanese). Used part: sporocarp. TCM Effects: To dispel damp and fortify spleen. TCM Indications: Leg *qi*. Isolated compounds: 6900, 7251.
- T3767 *Leptospermum polygalifolium* ssp. *polygalifolium* (Myrtaceae); YUAN ZHI YE AO ZHOU CHA; Australian Tea-tree. Isolated compounds: 6036, 6037, 10424, 10425, 21198, 21199, 21200.
- T3768 *Leptosphaeria maculans* BAN DIAN XIAO QIU QIANG JUN. Isolated compounds: 17177, 17178, 17179, 17180, 17604, 17605, 17606, 17607, 17608.
- T3769 *Lespedeza bicolor* (Fabaceae); HU ZHI ZI; Shrub Lespedeza. Used part: stem-leaf. TCM Effects: To clear heat and moisten lung, disinhibit urine and free strangury, stanch bleeding. TCM Indications: Lung heat cough, common cold with fever, pertussis, strangury syndrome, spontaneous external bleeding, blood ejection, hematuria, hematochezia. Isolated compounds: 9616, 10096, 11642, 16196, 21634.
- T3770 *Lespedeza cuneata* (Fabaceae); YE GUAN MEN; Cuneate Lespedeza. Used part: herb with root. TCM Effects: To supplement kidney and rough essence, fortify spleen and disinhibit damp, relieve cough and dispel phlegm, clear heat and resolve toxin. TCM Indications: Kidney vacuity, emission, enuresis, frequent urination, white turbidity, vaginal discharge, diarrhea, dysentery, edema, child *gan* accumulation, cough and asthma, knocks and falls, red eyes with gall, swelling toxin of welling abscess and sore, poisonous insect stings. Isolated compounds: 17391, 20385, 20444, 22581.
- T3771 *Lespedeza cyrtobotrya* (Fabaceae); DUAN GENG HU ZHI ZI; Shortstalk Bushclover. Isolated compounds: 12018.
- T3772 *Lespedeza homoloba* (Fabaceae); TONG XING LIE PIAN HU ZHI ZI; Homoloba Lespedeza\*. Isolated compounds: 6086, 6105, 9189, 9190, 12682, 12683, 12684, 12685, 12686, 12687, 12688, 12689, 12690, 12691, 12692, 12693, 12694, 12695, 12696, 12697, 12698, 12699, 12700, 12701, 12702, 12703, 12704, 12705, 12706.
- T3773 *Lespedeza* spp. (Fabaceae). Isolated compounds: 22581.
- T3774 *Lespedeza tomentosa* (Fabaceae); XIAO XUE REN SHEN; Woolly Lespedeza. Used part: root. TCM Effects: To fortify spleen and supplement vacuity, clear heat and disinhibit damp, quicken blood and regulate menstruation. TCM Indications: Vacuity taxation, dizziness due to anemia, edema, ascites, dysentery, amenorrhea, dysmenorrhea. Isolated compounds: 21634.
- T3775 *Lethariella cladonioides* (Parmeliaceae); JIN SI SHUA; Gold-wire Brush\*. Used part: lichen. TCM Effects: To quiet spirit, calm liver, quicken blood, close sores. TCM Indications: Insomnia, epilepsy, dizziness, knocks and falls, burns and scalds. Isolated compounds: 873, 9188, 14297, 14637, 15798.
- T3776 *Lethariella zahlbruckneri* (Parmeliaceae); JIN YAO DAI; Goldon-belt\*. Used part: lichen. TCM Effects: To dispel wind and eliminate damp, quicken blood and regulate menstruation, stanch bleeding and settle pain. TCM Indications: Taxation damage pain in lumbus and legs, menstrual disorder, leukorrhea, incised wound and bleeding, dizziness. Isolated compounds: 14637.
- T3777 *Lettowianthus stellatus* (Annonaceae). Isolated compounds: 10154, 11988, 12707, 12917, 13988, 14318, 15958.

- T3778 *Leucaena glauca* [Syn. *Leucaena leucocephala*] (Fabaceae); YIN HE HUAN; Hedge Acacia. Used part: root cortex. TCM Effects: To resolve depression and quiet heart, resolve toxin and disperse swelling. TCM Indications: Insomnia and vexation, palpitation and fearful throbbing, knocks and falls, fracture, pulmonary welling abscess, swollen welling abscess, scab sore. Isolated compounds: 14868, 14869.  
*Leucaena leucocephala* = *Leucaena glauca*
- T3779 *Leucas aspera* (Lamiaceae); FENG CHAO CAO; Rough Leucas. Used part: whole herb. TCM Effects: To resolve exterior, relieve cough, brighten eyes, free menstruation. TCM Indications: Common cold, headache, asthma, pertussis, swelling pain in throat, toothache, indigestion, menstrual disorder [=menoxenia], menstrual block, night blindness, phlegmon. Isolated compounds: 1466, 3517, 10434, 13291, 15202.
- T3780 *Leucocarpus perfoliatus*. Isolated compounds: 17513.
- T3781 *Leucojum aestivum* (Amaryllidaceae); XIA XUE PIAN LIAN; Summer Snowflake. Isolated compounds: 8083, 13237.
- T3782 *Leucojum vernum* (Amaryllidaceae); XUE PIAN LIAN; Spring Snowflake. Isolated compounds: 461, 8083, 9186, 9612, 13241.
- T3783 *Leucopaxillus tricolor* (Tricholomataceae); SAN SE BAI ZHUANG GU; Tricolor Leucopaxillus\*. Isolated compounds: 21591, 21592.
- T3784 *Leucothoe grayana* (Ericaceae); MU LI LU; One Sided Racemes Leucothoe. Isolated compounds: 8993, 8994, 8995.
- T3785 *Levisticum officinale* (Apiaceae); OU DANG GUI; Garden Lovage. Used part: root. TCM Effects: To quicken blood and regulate menstruation, disinhibit urine. TCM Indications: Amenorrhea, dysmenorrhea, dizziness, headache, numbness in limbs, edema. Isolated compounds: 2791, 7768, 11642, 12825, 12826.
- T3786 *Levisticum* sp. (Apiaceae). Isolated compounds: 12420.
- T3787 *Liatris champmanii* (Asteraceae); CHA SHI SHE BIAN JU; Champman Gay-feather\*. Isolated compounds: 12746.
- T3788 *Liatris elegans* (Asteraceae); HUA LI SHE BIAN JU; Pinkscale Gay-feather. Isolated compounds: 6737.
- T3789 *Liatris provincialis* (Asteraceae); TU ER FENG; Provincialis Gayfeather\*. Isolated compounds: 17998.
- T3790 *Liatris pycnostachya* (Asteraceae); MI SUI HUA SHE BIAN JU; Kansas Gay-feather. Isolated compounds: 20160.
- T3791 *Liatris scabra* (Asteraceae); CU CAO SHE BIAN JU; Scabrous Gay-feather\*. Isolated compounds: 6737.
- T3792 *Liatris* sp. (Asteraceae). Isolated compounds: 21507.
- T3793 *Liatris spicata* (Asteraceae); SHE BIAN JU; Gay-feather. Isolated compounds: 20160.
- T3794 *Liatris squarrosa* (Asteraceae); CU SHE BIAN JU; Scaly Blazing Star. Isolated compounds: 20160.
- T3795 *Liatris tenuifolia* (Asteraceae); XI YE SHE BIAN JU; Fine-leaved Gay-feather\*. Isolated compounds: 20160.
- T3796 *Libanotis buchtormensis* (Apiaceae); YAN FENG; Buchtorm Libanotis. Used part: root. TCM Effects: To effuse exterior and dissipate cold, dispel wind and eliminate damp, disperse swelling and relieve pain. TCM Indications: Wind-cold common cold, headache, toothache, wind-damp impediment pain, sinew and bone numbness, wound swelling from knocks and falls. Isolated compounds: 11834, 11835.
- T3797 *Libanotis condensata* (Apiaceae); MI HUA YAN FENG; Denseflower Libanotis. Used part: root. TCM Effects: To dispel wind and free network vessels, relieve pain. TCM Indications: Pain in joints due to rheumatism, chest pain. Isolated compounds: 18165.
- T3798 *Libanotis pyrenaicum* (Apiaceae). Isolated compounds: 17036.
- T3799 *Libocedrus* sp. (Cupressaceae). Isolated compounds: 1372.
- T3800 *Ligularia calthaefolia* (Asteraceae); LV TI CAO YE TUO WU; Marshmarigold-like Goldenray\*. Isolated compounds: 2119.
- T3801 *Ligularia clivorum* (Asteraceae); SHAN GANG TUO WU; Leopard Plant. Isolated compounds: 3847.
- T3802 *Ligularia dentata* (Asteraceae); CHI YE TUO WU; Toothleaf Goldenray. Used part: root and rhizome. TCM Effects: See *Ligularia fischeri*. TCM Indications: See *Ligularia fischeri*. Isolated compounds: 3847, 12812.
- T3803 *Ligularia dictyoneura* [Syn. *Senecio dictyoneurus*] (Asteraceae); WANG MAI TOU WU; Netvein Goldenray. Used part: root. TCM Effects: To diffuse lung and rectify qi, eliminate phlegm and suppress cough. TCM Indications: Common cold, cough. Isolated compounds: 12803, 12804, 12805.
- T3804 *Ligularia elegans* (Asteraceae); YA ZHI TUO WU; Elegant Goldenray\*. Isolated compounds: 3847, 12812.
- T3805 *Ligularia fischeri* (Asteraceae); HU LU QI; Kidneyleaf Goldenray. Equivalent plant: *Ligularia dentata*, *Ligularia intermedia*, *Ligularia sibirica*. Used part: root and rhizome. TCM Effects: To dispel phlegm, relieve cough, rectify qi and quicken blood, relieve pain. TCM Indications: Cough, abundant phlegm and asthma, pertussis, pain in lumbus and legs, taxation damage, knocks and falls. Isolated compounds: 3847, 8020, 10094, 12812, 12813, 12814, 12815, 12816.
- T3806 *Ligularia fischeri* var. *spiciformis* (Asteraceae); HU LU QI BIAN ZHONG; Kidneyleaf Goldenray Variety\*. Isolated compounds: 8020.
- T3807 *Ligularia intermedia* (Asteraceae); XIA BAO TUO WU; Narrowbract Goldenray. Used part: root and rhizome. TCM Effects: See *Ligularia fischeri*. TCM Indications: See *Ligularia fischeri*. Isolated compounds: 10775.
- T3808 *Ligularia japonica* [Syn. *Arnica japonica*; *Senecio japonica*] (Asteraceae); DA TOU TUO WU; Japanese Goldenray. Used part: root and whole herb. TCM Effects: To soothe sinews and quicken blood, resolve toxin and disperse swelling. TCM Indications: Knocks and falls, innominate toxin swelling, poisonous snake bite, welling abscess and boil, eczema. Isolated compounds: 17546, 19706.
- T3809 *Ligularia lapathifolia* (Asteraceae); NIU BANG YE DU WU; Dockleaf Goldenray. Used part: root, leaf. TCM Effects: To dissipate stasis and quicken blood, relieve pain. TCM Indications: Knocks and falls, stasis swelling pain, wind-damp impediment pain. Isolated compounds: 1219, 1220, 1221, 1223, 1224, 1226, 1230.
- T3810 *Ligularia nelumbifolia* (Asteraceae); LIAN YE TUO WU; Waterlilyleaf Goldenray. Used part: root. TCM Effects: To relieve cough and transform phlegm, dispel wind. TCM Indications: Wind-cold cough, phthisis. Isolated compounds: 6381, 8327, 8328, 15326, 15327, 15328, 15329.
- T3811 *Ligularia platyglossa* (Asteraceae); KUAN SHE TUO WU; Broad-tongue Goldenray\*. Isolated compounds: 16330.
- T3812 *Ligularia sagitta* (Asteraceae); JIAN YE TOU WU GEN; Arrowleaf

- Goldenray Root. Isolated compounds: 1228, 1229, 5959, 5977, 6238, 13098, 14170, 14171, 19983, 22270.
- T3813 *Ligularia sibirica* (Asteraceae); XI BO LI YA TOU WU; Siberian Goldenray. Used part: root and rhizome. TCM Effects: See *Ligularia fischeri*. TCM Indications: See *Ligularia fischeri*. Isolated compounds: 12813.
- T3814 *Ligularia* sp. (Asteraceae). Isolated compounds: 21507.
- T3815 *Ligularia stenocephala* (Asteraceae); ZHAI TOU TUO WU; Narrowhead Goldenray. Used part: root. TCM Effects: To clear heat, resolve toxin, dissipate binds, disinhibit urine. TCM Indications: Mammary welling abscess, edema, scrofula, tetrodon poisoning. Isolated compounds: 6255, 7578, 10775, 12806, 12807, 12808, 12809, 12810, 12811.
- T3816 *Ligularia tongolensis* (Asteraceae); DONG E LUO DU WU; Tongol Goldenray. Isolated compounds: 7228, 14169, 21818, 21819.
- T3817 *Ligularia virgaurea* ssp. *oligocephala* (Asteraceae). Isolated compounds: 5883, 6063, 10401, 10563, 21429, 21430, 21431.
- T3818 *Ligulariopsis shichuana* (Asteraceae); JIA TUO WU; False Goldenray\*. Isolated compounds: 123, 1225, 16419, 19707. *Ligusticum acutilobum* = *Angelica acutiloba*
- T3819 *Ligusticum brachylobum* (Apiaceae); DUAN PIAN GAO BEN; Shortlobe Ligusticum. Used part: root. TCM Effects: See *Angelica decursiva*. TCM Indications: See *Angelica decursiva*. Isolated compounds: 2803, 7768, 12825.
- T3820 *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*] (Apiaceae); CHUAN XIONG; Chuanxiong (Wallich Ligusticum). Equivalent plant: *Cnidium officinale*. Used part: rhizome. TCM Effects: To move *qi* and quicken blood, dispel wind and relieve pain. TCM Indications: Cerebral ischemia, postpartum pain, acute icterohepatitis, menstrual disorder, amenorrhea and dysmenorrhea, concretion and conglomeration, chest and rib-side stabbing pain, painful swelling from knocks and falls, headache, wind-damp impediment pain. Isolated compounds: 2791, 2794, 2796, 2797, 2803, 2887, 3589, 3615, 3631, 3632, 3633, 3858, 5589, 5590, 5599, 5763, 5782, 6192, 7071, 7444, 7452, 7453, 7467, 7469, 7471, 7768, 7852, 9486, 10489, 12825, 12826, 12891, 14001, 14484, 14554, 14655, 14669, 15370, 16404, 18656, 19648, 19732, 19733, 19734, 19735, 19736, 19737, 19738, 19739, 19740, 19741, 19742, 19743, 19744, 19745, 19983, 20137, 21939, 22325, 22336, 22627.
- T3821 *Ligusticum elatum* (Apiaceae); GAO DANG GUI; High Ligusticum\*. Isolated compounds: 2284, 11834.
- T3822 *Ligusticum jeholense* (Apiaceae); LIAO GAO BEN; Jehol Ligusticum. Used part: rhizome and root. TCM Effects: See *Ligusticum sinense*. TCM Indications: See *Ligusticum sinense*. Isolated compounds: 2803, 7768, 12825, 12826, 15204, 15427, 15515.
- T3823 *Ligusticum scoticum* (Apiaceae); SU GE LAN DANG GUI; Scots Lovage. Isolated compounds: 6193.
- T3824 *Ligusticum sinense* (Apiaceae); GAO BEN; Chinese Ligusticum. Equivalent plant: *Ligusticum jeholense*. Used part: rhizome and root. TCM Effects: To dissipate cold and resolve exterior, dispel wind and eliminate damp, relieve pain. TCM Indications: Headache due to externally contracted wind-cold, vertex headache, pain in tooth and cheek, migraine, wind-cold-damp impediment, pain in limbs. Isolated compounds: 2803, 3855, 3990, 5590, 7768, 11552, 12578, 12825, 12827, 14012, 15204, 15370, 19737, 19738.
- T3825 *Ligusticum sinense* cv. *chaxiong* (Apiaceae); CHA XIONG; Chaxiong Ligusticum. Isolated compounds: 2791, 7768, 15370, 19737, 19738.
- T3826 *Ligusticum* sp. (Apiaceae). Isolated compounds: 2309. *Ligusticum wallichii* = *Ligusticum chuanxiong*
- T3827 *Ligustrum japonicum* (Oleaceae); RI BEN NV ZHEN; Japanese Privet. Used part: leaf. TCM Effects: To clear liver fire, resolve heat toxin. TCM Indications: Dizziness and dim vision, acute conjunctivitis, oral *gan*, tooth decay, innominate toxin swelling, burns and scalds. Isolated compounds: 15439, 16080, 16081.
- T3828 *Ligustrum lucidum* (Oleaceae); NV ZHEN ZI; Glossy Privet Fruit. Used part: fruit. TCM Effects: To supplement liver and kidney, brighten eyes and blacken hair. TCM Indications: Septicemia, chronic bronchitis, acute dysentery, dizziness and tinnitus, premature graying in beard and hair, dim vision. Isolated compounds: 266, 530, 10324, 11565, 12828, 12830, 13053, 13054, 13055, 13056, 13504, 15439, 15865, 15866, 15873, 16050, 16071, 16080, 16081, 18792, 22270.
- T3829 *Ligustrum robustum* (Oleaceae); CU ZHUANG NV ZHEN; Japanese Privet. Used part: leaf. TCM Effects: To dissipate wind-heat, clear head and eyes, allay vexation and thirst. TCM Indications: Headache, toothache, sore pharynx, lip sore, tinnitus, red eyes, hemoptysis, summerheat-heat and vexation and thirst. Isolated compounds: 580, 1492, 1497, 12817, 12818, 12819, 12820, 12821, 12822, 12823, 12824, 16252, 16253.
- T3830 *Ligustrum sinense* (Oleaceae); NV ZHEN XIAO LA SHU; Chinese Privet. Used part: bark and branch-leaf. TCM Effects: To clear heat and disinhibit damp, resolve toxin and disperse swelling. TCM Indications: Common cold with fever, lung heat cough, sore swollen throat, mough and tongue sores, damp-heat jaundice, dysentery, swelling toxin of welling abscess and sore, eczema, dermatitis, knocks and falls, scalds. Isolated compounds: 19926.
- T3831 *Ligustrum vulgare* (Oleaceae); OU ZHOU NV ZHEN; European Privet. Isolated compounds: 3686. *Lilium brownii* var. *colchesteri* = *Lilium brownii* var. *viridulum*
- T3832 *Lilium brownii* var. *viridulum* [Syn. *Lilium brownii* var. *colchesteri*] (Liliaceae); BAI HE; Greenish Lily. Equivalent plant: *Lilium tigrinum*, *Lilium pumilum*, *Lilium longiflorum*. Used part: bulb. TCM Effects: To nourish *yin* and moisten lung, clear heart and quiet spirit. TCM Indications: *Yin* vacuity enduring cough, phlegm containing blood, fright palpitation and vacuity vexation, insomnia and frequent dreaming, trance. Isolated compounds: 2658, 3911, 6776, 8610, 15408, 18571, 18573, 20067, 20369.
- T3833 *Lilium candidum* (Liliaceae); QING LIANG BAI HE; Madonna Lily. Isolated compounds: 3695, 8705, 10458, 10723, 10724, 14093, 16587, 20222.
- T3834 *Lilium hansonii* (Liliaceae); HUANG BAI HE; Hanson Lily. Isolated compounds: 4293, 11842, 22976. *Lilium lancifolium* = *Lilium tigrinum*
- T3835 *Lilium longiflorum* (Liliaceae); SHE XIANG BAI HE; Longflower Lily. Used part: bulb. TCM Effects: See *Lilium brownii* var. *viridulum*. TCM Indications: See *Lilium brownii* var. *viridulum*. Isolated compounds: 1358, 18572, 18573, 18574.

- T3836 *Lilium pumilum* [Syn. *Lilium tenuifolium*] (Liliaceae); XI YE BAI HE; Low Lily. Used part: bulb. TCM Effects: See *Lilium brownii* var. *viridulum*. TCM Indications: See *Lilium brownii* var. *viridulum*. Isolated compounds: 3142, 3146.
- T3837 *Lilium* sp. (Liliaceae). Isolated compounds: 4448.
- T3838 *Lilium speciosum* x *L. nobilissimum* (Liliaceae); ZA JIAO BAI HEX; Hybrid Lily\*. Isolated compounds: 5040.  
*Lilium tenuifolium* = *Lilium pumilum*
- T3839 *Lilium tigrinum* [Syn. *Lilium lancifolium*] (Liliaceae); JUAN DAN; Tiger Lily. Used part: bulb. TCM Effects: See *Lilium brownii* var. *viridulum*. TCM Indications: See *Lilium brownii* var. *viridulum*. Isolated compounds: 1358, 3142, 12833, 18571, 18575.
- T3840 *Limnophila rugosa* (Scrophulariaceae); SHUI HUI XIANG; Winked Marshweed. Used part: whole herb. TCM Effects: To fortify spleen and disinhibit damp, rectify *qi* and transform phlegm. TCM Indications: Edema, stomachache, distention fullness in chest and abdomen, cough and asthma, child milk accumulation, sore and boil. Isolated compounds: 1186, 1284, 7385, 13883.
- T3841 *Limonium bonduellii* (Plumbaginaceae); A ER JI LI YA BU XUE CAO; Algerian Statice. Isolated compounds: 3432.
- T3842 *Limonium gmelinii* (Plumbaginaceae); BU XUE CAO; Gmelin Sealavender Herb. Used part: herb. TCM Effects: To stanch bleeding and dissipate stasis. TCM Indications: Static blood, flooding and spotting, carcinoma of uterine cervix. Isolated compounds: 4450, 5011.
- T3843 *Linaria dalmatica* (Scrophulariaceae); DA ER MA WEI YA LIU CHUAN YU; Balkan Toadflax. Isolated compounds: 12015.
- T3844 *Linaria japonica* (Scrophulariaceae); HAI BIN LIU CHUAN YU; Japanese Toadflax. Isolated compounds: 12856, 12857, 12858, 12859.
- T3845 *Linaria vulgaris* (Scrophulariaceae); LIU CHUAN YU; Yellow Toadflax. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, dissipate stasis and disperse swelling. TCM Indications: Headache, dizziness, jaundice, hemorrhoids, constipation, skin diseases, burns and scalds. Isolated compounds: 480, 2276, 2278, 2279, 6359, 8759, 10821, 12916, 16756, 16770, 20569, 21079.
- T3846 *Lindelofia stylosa* (Boraginaceae); MING XIAN HUA ZHU CHANG ZHU LIU LI CAO; Longstyle Lindelofia. Isolated compounds: 2805, 6365, 7457, 7478, 12420, 14556, 18925.  
*Lindera aggregata* = *Lindera strychnifolia*
- T3847 *Lindera angustifolia* (Lauraceae); XIA YE SHAN HU JIAO; Narrowleaf Spicebush. Used part: root or branch-leaf. TCM Effects: To dispel wind, eliminate damp, move *qi* and dissipate cold, resolve toxin and disperse swelling. TCM Indications: Wind-cold common cold, headache, wind-damp impediment pain, numbness in limbs, dysentery, enteritis, knocks and falls, toxin swelling of sores, urticaria, scrofula. Isolated compounds: 7397.
- T3848 *Lindera benzoin* (Lauraceae); GUI PI DIAO ZHANG; Spicebush. Isolated compounds: 15902, 15903, 16832.
- T3849 *Lindera chunii* (Lauraceae); DING HU DIAO ZHANG; Chun's Spicebush. Used part: root. TCM Effects: To dispel wind and eliminate damp, move *qi* and loosen center, dissipate stasis and relieve pain. TCM Indications: Wind-damp bone pain, distending pain in stomach duct and abdomen, painful wound from knocks and falls. Isolated compounds: 9444, 9449, 9451, 12573, 12860, 12861, 12862, 12863, 12864, 12865, 12868, 12871, 12872, 14483, 15929, 16342, 16344, 18053, 20407, 20408.  
*Lindera erythrocarpa* = *Lindera umbellata*
- T3850 *Lindera glauca* (Lauraceae); SHAN HU JIAO; Greyblue Spicebush. Used part: fruit. TCM Effects: To warm center and dissipate cold, move *qi* and relieve pain, calm asthma. TCM Indications: Cold pain in stomach duct and abdomen, glomus fullness, asthma. Isolated compounds: 2557, 3241, 3242.
- T3851 *Lindera glauca* (Lauraceae); SHAN HU JIAO YE; Greyblue Spicebush Leaf. Used part: leaf. TCM Effects: To resolve toxin and cure sores, dispel wind and relieve pain, relieve itch, stanch bleeding. TCM Indications: Toxin swelling of sores, wind-damp impediment pain, knocks and falls, bleeding due to external injury, itchy skin, snake or insect bites. Isolated compounds: 15727.
- T3852 *Lindera megaphylla* (Lauraceae); HEI KE NAN; Largeleaf Spicebush. Used part: root, bark or branch. TCM Effects: To dispel wind and eliminate damp, warm center and move *qi*, disperse swelling and relieve pain. TCM Indications: Wind-damp impediment pain, impediment pain numbness, cold pain in stomach duct and abdomen, mounting *qi*, swelling pain in throat, lichen sore. Isolated compounds: 12877, 14161, 14483, 14640, 15738, 15802, 15803.
- T3853 *Lindera obtusiloba* (Lauraceae); SAN ZUAN FENG; Japanese Spicebush. Used part: bark. TCM Effects: To warm center and move *qi*, quicken blood and dissipate stasis. TCM Indications: Pain in heart and abdomen, knocks and falls, blood stasis swelling and pain, sore toxin. Isolated compounds: 2836, 2837, 3040, 4843, 4844, 11566, 11567, 11568, 15902, 15903, 15904, 20369, 21045.
- T3854 *Lindera strychnifolia* [Syn. *Lindera aggregata*] (Lauraceae); WU YAO; Combined Spicebush. Used part: tuberoid. TCM Effects: To normalize *qi* and relieve pain, warm kidney and disperse cold. TCM Indications: Distending pain in chest and abdomen, *qi* counterflow with rapid asthma, bladder vacuity cold, enuresis and frequent urination, mounting *qi*, dysmenorrhea. Isolated compounds: 3241, 3464, 4942, 9669, 9670, 11494, 11495, 12573, 12866, 12867, 12868, 12869, 12870, 12871, 12872, 12874, 12875, 15428, 20409, 20412, 20413.
- T3855 *Lindera triloba* (Lauraceae); SAN YE DIAO ZHANG; Threeleaf Spicebush\*. Isolated compounds: 19837.
- T3856 *Lindera umbellata* [Syn. *Lindera erythrocarpa*] (Lauraceae); DIAO ZHANG GEN PI; Largeleaf Spicebush Root-bark. Used part: root cortex. TCM Effects: To warm stomach and center, move *qi* and relieve pain, dispel wind and eliminate damp. TCM Indications: Running piglet, beriberi, edema, scab and lichen, bleeding due to external injury. Isolated compounds: 3702, 4936, 5969, 12564, 12573, 15500.
- T3857 *Lindera umbellata* [Syn. *Lindera erythrocarpa*] (Lauraceae); DIAO ZHANG ZHI YE; Largeleaf Spicebush Branch-leaf. Used part: branch-leaf. TCM Effects: To dispel wind and kill worms, close sores and stanch bleeding. TCM Indications: Scab and lichen with itching sores, bleeding due to external injury, cracking of hands and feet. Isolated compounds: 16697.
- T3858 *Linum album* (Linaceae); BAI YA MA; White Flax. Isolated compounds: 5093, 16793, 16794.

- T3859 *Linum usitatissimum* (Linaceae); YA MA; Common Flax. Used part: root, leaf. TCM Effects: To calm liver, quicken blood. TCM Indications: Liver wind headache, knocks and falls, swollen welling abscess and clove sores. Isolated compounds: 8316, 9616, 11773, 12854, 12891, 12893, 12895, 12896, 13003, 15429, 16196, 22464.
- T3860 *Linum usitatissimum* (Linaceae); YA MA ZI; Common Flax Seed. Used part: seed. TCM Effects: To nourish blood and dispel wind, moisten dryness and free stool. TCM Indications: Leprosy, dry cracked skin, itchy skin, hair loss, sores eczema, intestinal dry and constipation. Isolated compounds: 4511, 4512, 4513, 4514, 6729, 12854.
- T3861 *Liparis auriculata* (Orchidaceae); ER XING YANG ER LAN; Auriculate Twayblade\*. Isolated compounds: 2015.
- T3862 *Liparis loeselii* (Orchidaceae); LUO XI YANG ER SUAN; Fen Orchid. Isolated compounds: 2015.
- T3863 *Liparis nervosa* (Orchidaceae); JIAN XUE QING; Nervate Twayblade. Used part: whole herb. TCM Effects: To cool blood and stanch bleeding, clear heat and resolve toxin. TCM Indications: Stomach heat blood ejection, lung heat hemoptysis, intestinal wind bleeding, flooding and spotting, bleeding during operation, bleeding due to external injury, toxin swelling of sores, poisonous insect stings, knocks and falls. Isolated compounds: 15506, 15511.  
*Lippia citriodora* = *Verbena triphylla*
- T3864 *Lippia dulcis* (Verbenaceae); TIAN SHE CAO; Sweet-tongue Lippia\*. Isolated compounds: 580, 3745, 4830, 6148, 6930, 6951, 6953, 7591, 9450, 10751, 11195, 12456, 12902, 19211.
- T3865 *Lippia nodiflora* (Verbenaceae); PENG LAI CAO; Knotflower Phyla Herb. Used part: whole herb. TCM Effects: To dispel wind and clear heat, resolve toxin and disperse swelling. TCM Indications: Throat moth, swelling toxin of welling abscess and flat abscess, heat dysentery, strangury, *gan* of teeth and gum, zoster. Isolated compounds: 7556, 7557, 15648, 15649, 15650.
- T3866 *Liquidambar formosana* [Syn. *Liquidambar taiwaniana*] (Hamamelidaceae); FENG XIANG SHU; Beautiful Sweetgum Leaf. Used part: leaf. TCM Effects: To move *qi* and relieve pain, resolve toxin, stanch bleeding. TCM Indications: Pain in stomach duct, abdominal pain due to summerheat damage, dysentery, diarrhea, swollen welling abscess and sores, eczema, blood ejection, hemoptysis, bleeding due to external injury. Isolated compounds: 6482, 12843, 15179, 20988.
- T3867 *Liquidambar formosana* [Syn. *Liquidambar taiwaniana*] (Hamamelidaceae); LU LU TONG; Beautiful Sweetgum. Used part: inflorescence. TCM Effects: To expel wind and eliminate damp, soothe liver and quicken network vessels, disinherit water. TCM Indications: Wind-damp impediment pain, numbness in limbs, hypertonicity of limbs, pain in stomach duct and abdomen, amenorrhea, galactostasis, edema distention fullness, eczema. Isolated compounds: 231, 2338, 2558, 3303, 12904, 12906, 20417, 20418.
- T3868 *Liquidambar orientalis* (Hamamelidaceae); SU HE XIANG; Oriental Sweetgum Resin. Used part: balsam from trunk. TCM Effects: To open orifices, break foul, relieve pain. TCM Indications: Wind stroke with phlegm reversal, sudden clouding collapse, cold pain in chest and abdomen, fright epilepsy, warm disease. Isolated compounds: 3695, 6980, 16402, 20417, 22336.
- Liquidambar taiwaniana* = *Liquidambar formosana*
- T3869 Liquor JIU Liquor. TCM Effects: To quicken blood and free vessels, dissipate cold, free medicinal strength. TCM Indications: Wind-cold impediment pain, hypertonicity of sinews and vessels, chest impediment, cold pain in heart and abdomen. Isolated compounds: 1103, 1104, 7418, 7423, 8808, 13456, 16010.
- T3870 *Liriodendron* spp. (Magnoliaceae). Isolated compounds: 15751.
- T3871 *Liriodendron tulipifera* (Magnoliaceae); BEI MEI E ZHANG QIU; Yellow Poplar. Used part: bark. TCM Effects: To dispel wind and eliminate damp, dissipate cold and relieve cough. TCM Indications: Wind-damp impediment pain, wind-cold cough. Isolated compounds: 2838, 4923, 7030, 7031, 11083, 12897, 12917, 16339, 16973, 19540, 22103.
- T3872 *Liriope muscari* (Liliaceae); DUAN TING SHAN MAI DONG; Short-stipe Liriope\*. Isolated compounds: 4188, 4299, 12919, 16050, 22270.
- T3873 *Liriope platyphylla* (Liliaceae); KUO YE SHAN MAI DONG; Broadleaf Liriope\*. Used part: tuberoid. TCM Effects: See *Liriope spicata*. TCM Indications: See *Liriope spicata*. Isolated compounds: 16147, 19070.
- T3874 *Liriope spicata* (Liliaceae); SHAN MAI DONG. Equivalent plant: *Liriope platyphylla*. Used part: tuberoid. TCM Effects: To nourish *yin* and engender liquid. TCM Indications: *Yin* vacuity lung dryness, cough of profuse phlegm, stomach *yin* insufficiency, dry mouth and throat, intestinal dry and constipation. Isolated compounds: 19070.
- T3875 *Liriope spicata* var. *prolifera* (Liliaceae); HU BEI SHAN MAI DONG; Hubei Liriope. Used part: tuberoid. TCM Effects: See *Ophiopogon japonicus*. TCM Indications: See *Ophiopogon japonicus*. Isolated compounds: 618, 19071, 19072.
- T3876 *Litchi chinensis* (Sapindaceae); LI ZHI; Lychee. Used part: fruit. TCM Effects: To engender liquid and boost blood, rectify *qi* and relieve pain. TCM Indications: Vexation and thirst, hiccough, stomachache, scrofula, swelling of clove, toothache, bleeding due to external injury. Isolated compounds: 7852, 7853.
- T3877 *Litchi chinensis* (Sapindaceae); LI ZHI HE; Lychee Seed. Used part: seed. TCM Effects: To rectify *qi*, dispel cold, relieve pain, resolve binds. TCM Indications: Mounting *qi* pain, painful swollen testes, premenstrual abdominal pain, postpartum abdominal pain. Isolated compounds: 14358.
- T3878 *Lithocarpus polystachyus* (Fagaceae); DUO SUI SHI KE YE; Manyspike Tanoak Leaf. Used part: leaf. TCM Effects: To clear heat and resolve toxin, transform phlegm, dispel wind, lower blood pressure. TCM Indications: Hypertension, damp-heat diarrhea dysentery, lung heat cough, sores with welling abscess and flat abscess, dry-itchy skin. Isolated compounds: 1113, 6918, 10645, 12921, 12922, 14351, 21878.
- T3879 *Lithocarpus* sp. (Fagaceae). Isolated compounds: 20711.
- T3880 *Lithospermum arvense* (Boraginaceae); MAI JIA GONG; Corn Gromwell. Used part: fruit. TCM Effects: To warm center and move *qi*, disperse swelling and relieve pain. TCM Indications: Stomach cold distending pain, hyperchlorhydria, painful swelling from knocks and falls, fracture. Isolated compounds: 7996.
- T3881 *Lithospermum erythrorhizon* (Boraginaceae); ZI CAO; Redroot

- Gromwell. Equivalent plant: *Arnebia guttata*, *Arnebia euchroma*. Used part: root. TCM Effects: To cool blood and quicken blood, resolve toxin and outthrust papules. TCM Indications: Macula, measles papules, blood ejection, spontaneous external bleeding, hematuria, purpura, jaundice, welling abscess and flat abscess, scalds. Isolated compounds: 244, 309, 514, 908, 910, 1233, 1234, 1259, 1744, 2887, 5214, 5258, 6302, 6303, 6539, 6722, 6726, 10266, 10535, 11107, 11300, 11765, 12927, 12928, 14120, 14202, 15145, 15850, 15851, 15852, 15853, 15854, 15953, 17933, 18780, 19819, 19820, 19821, 19822, 19823, 19824, 19825, 20968, 21039.
- T3882 *Lithospermum officinale* (Boraginaceae); BAI GUO ZI CAO; Common Gromwell. Used part: whole herb. TCM Effects: To resolve toxin and disperse swelling. TCM Indications: Arthritis. Isolated compounds: 1745, 12925, 19819.
- T3883 *Lithospermum ruderalis* (Boraginaceae); LU BIAN ZI CAO; Wild Gromwell\*. Isolated compounds: 12925.
- T3884 *Lithraea caustica* SHENG MU. Isolated compounds: 16622.
- T3885 *Litsea cubeba* (Lauraceae); CHENG QIE ZI; Mountain Spicy Tree. Used part: fruit. TCM Effects: To warm center and relieve pain, move *qi* and quicken blood, calm asthma, disinhibit urine. TCM Indications: Chronic bronchitis, bronchial asthma, asthma, cold pain in stomach duct and abdomen, food accumulation and *qi* distention, stomach reflux vomiting, summerheat stroke with vomiting and diarrhea, diarrhea, cold mounting with abdominal pain, cold-damp water drum distention, inhibited urination, opacity of urine, toxin swelling of sores, toothache, cold-damp impediment pain, knocks and falls. Isolated compounds: 3767, 4843, 11344, 12573, 13373.
- T3886 *Litsea euosma* (Lauraceae); QING XIANG MU JIANG ZI; Fourflower Litse. Used part: leaf. TCM Effects: To dispel wind and move *qi*, fortify spleen and disinhibit damp, resolve toxin. TCM Indications: Abdominal distention and pain, summerheat-damp vomiting and diarrhea, pain in joints, edema, innominate toxin swelling. Isolated compounds: 10525.
- T3887 *Litsea glutinosa* (Lauraceae); CHAN GAO MU JIANG ZI; Gluey Litse. Used part: bark and leaf. TCM Effects: To draw out toxin and engender flesh, stanch bleeding, disperse swelling and relieve pain. TCM Indications: Swollen welling abscess, sore and boil, knocks and falls, bleeding due to external injury. Isolated compounds: 2538.
- T3888 *Litsea glutinosa* var. *glabrata* (Lauraceae); WU MAO CHAN GAO SHU; Glabrous Litse\*. Isolated compounds: 11256.
- T3889 *Litsea gracilipes* (Lauraceae); XI BING MU JIANG ZI; Slenderstalk Litse\*. Isolated compounds: 7512.
- T3890 *Litsea grandis* (Lauraceae); DA MU JIANG ZI; Grand Litse\*. Isolated compounds: 8979.
- T3891 *Litsea laurifolia* (Lauraceae); YUE GUI SHU YE MU JIANG ZI; Laurelleaf Litse\*. Isolated compounds: 2538.
- T3892 *Litsea leefeana* (Lauraceae); LI FEI MU JIANG ZI; Leefe Litse\*. Isolated compounds: 2538.
- T3893 *Litsea pungens* (Lauraceae); ZHEN CAI; Pungent Litse. Used part: wood. TCM Indications: Cough of phlegm-rheum, accumulation-gathering and distention-fullness, beriberi, sore and scab in children. Isolated compounds: 4843, 5968, 6543, 12564, 12574, 16562, 21044.
- T3894 *Litsea salicifolia* (Lauraceae). Isolated compounds: 15738.
- T3895 *Litsea sebifera* (Lauraceae); LA ZHI MU JIANG ZI; Waxy Litse\*. Isolated compounds: 585.
- T3896 *Litsea turfosa* (Lauraceae); NI ZHAO MU JIANG ZI; Sloughy Litse\*. Isolated compounds: 2538, 4906.
- T3897 *Litsea verticillata* (Lauraceae); DIE DA LAO; Whorlleaf Litse. Used part: stem-leaf or root. TCM Effects: To dispel wind and free network vessels, dissipate stasis and relieve pain. TCM Indications: Wind-damp impediment pain, numbness in limbs, stomachache, dysmenorrhea, painful swelling from knocks and falls. Isolated compounds: 1473, 5046, 6909, 6910, 6911, 7504, 11784, 12929, 12930, 12931, 12932, 12933, 15966, 22428.
- T3898 *Lobelia chinensis* [Syn. *Lobelia radicans*] (Campanulaceae); BAN BIAN LIAN; Chinese Lobelia. Used part: whole herb. TCM Effects: To disinhibit urine and disperse edema, clear heat and resolve toxin, lower blood pressure. TCM Indications: Edema, edema and enlarged abdomen, edema in face and foot, swollen welling abscess and clove sores, snake or insect bites. Isolated compounds: 9818, 11506, 12937, 12938, 12939, 12940, 18524, 18525, 20444.
- T3899 *Lobelia hassleri* (Campanulaceae); HA SHI SHAN GENG CAI; Hassler Lobelia\*. Isolated compounds: 12937, 12939.
- T3900 *Lobelia inflata* (Campanulaceae); BEI MEI ZHOU SHAN GENG CAI; Indian Tobacco. Isolated compounds: 11507, 12937, 12939.
- T3901 *Lobelia nicotianaefolia* (Campanulaceae); YAN CAO HUA SHAN GENG CAI; Nicotianflower Lobelia\*. Isolated compounds: 12939. *Lobelia radicans* = *Lobelia chinensis*
- T3902 *Lobophytum* sp. Isolated compounds: 888, 890, 1759, 1760, 1761, 7248, 8674, 9488, 10158, 15673.
- T3903 *Lolium multiflorum* (Poaceae); DUO HUA HEI MAI CAO; Italian Ryegrass. Isolated compounds: 1342, 22158.
- T3904 *Lonchocarpus atropurpureus* (Fabaceae); Lancepod. Isolated compounds: 5972, 21719.
- T3905 *Lonchocarpus latifolius* (Fabaceae). Isolated compounds: 6222, 6229, 6309, 13933, 14368.
- T3906 *Lonchocarpus* sp. (Fabaceae). Isolated compounds: 4872.
- T3907 *Lonchocarpus xuul* (Fabaceae). Isolated compounds: 5103, 14105, 20170, 22810.
- T3908 *Lonicera bournei* (Caprifoliaceae); XI NAN REN DONG; South-western Honeysuckle. Used part: flower bud. TCM Effects: See *Lonicera japonica*. TCM Indications: See *Lonicera japonica*. Isolated compounds: 2572, 2573, 7425.
- T3909 *Lonicera confusa* (Caprifoliaceae); HUA NAN REN DONG; Wild Honeysuckle. Used part: flower bud. TCM Effects: See *Lonicera japonica*. TCM Indications: See *Lonicera japonica*. Isolated compounds: 3551.
- T3910 *Lonicera fulvotomentosa* (Caprifoliaceae); HUANG HE MAO REN DONG; Yellowhair Honeysuckle. Used part: flower bud. TCM Effects: See *Lonicera japonica*. TCM Indications: See *Lonicera japonica*. Isolated compounds: 2887, 3551, 7995, 9276, 13137, 19317.
- T3911 *Lonicera hypoglauca* (Caprifoliaceae); XIAN YE REN DONG; Glaucousback Honeysuckle. Used part: flower bud. TCM Effects: See *Lonicera japonica*. TCM Indications: See *Lonicera japonica*. Isolated compounds: 3551.

- T3912 *Lonicera japonica* (Caprifoliaceae); JIN YIN HUA; Japanese Honeysuckle. Equivalent plant: *Lonicera confusa*, *Lonicera hypoglauca*, *Lonicera fulvotomentosa*, *Lonicera macranthoides*, *Lonicera bournei*, *Lonicera similis*. Used part: flower bud. TCM Effects: To clear heat and resolve toxin. TCM Indications: Infection of upper respiratory tract, tonsillitis, acute laryngitis, skin suppurations, swelling abscess, viral conjunctivitis, influenza, pneumonia, mastitis, acute appendicitis, warm disease fever, heat toxin blood dysentery, swollen swelling abscess and clove sores, throat impediment. Isolated compounds: 878, 879, 1511, 2275, 2280, 2284, 2353, 2887, 3231, 3551, 3602, 3768, 7469, 7521, 7734, 8312, 8701, 9260, 9520, 10735, 11083, 11084, 11085, 11121, 11327, 11328, 12849, 12853, 12949, 12950, 12985, 12986, 12987, 12989, 13137, 13298, 13299, 13302, 13303, 14162, 14554, 14557, 14664, 15520, 17094, 17376, 19983, 19987, 20369, 20995.
- T3913 *Lonicera japonica* (Caprifoliaceae); REN DONG TENG; Japanese Honeysuckle Vine. Used part: stem-branch. TCM Effects: To clear heat and resolve toxin, free network vessels. TCM Indications: Warm disease fever, swelling toxin of sore and swelling abscess, heat toxin blood dysentery, wind-damp-heat impediment. Isolated compounds: 1577, 3342, 3551, 9262, 9263, 9268, 9269, 9270, 9271, 9272, 9276, 12987, 13140, 16049, 16053, 16054, 19624, 19636, 22606.
- T3914 *Lonicera macranthoides* (Caprifoliaceae); HUI ZHAN MAO REN DONG; Largeflower-like Honeysuckle. Used part: flower bud. TCM Effects: See *Lonicera japonica*. TCM Indications: See *Lonicera japonica*. Isolated compounds: 13298, 13299, 13300, 13301.
- T3915 *Lonicera morrowii* (Caprifoliaceae); MO LUO SHI REN DONG; Morrow Honeysuckle. Isolated compounds: 12229, 14982.
- T3916 *Lonicera nigra* (Caprifoliaceae); HEI REN DONG; Black Honeysuckle. Isolated compounds: 2973, 16050.
- T3917 *Lonicera quinquelocularis* (Caprifoliaceae); WU SHI REN DONG; Five-room Honeysuckle\*. Isolated compounds: 1517, 12950, 20503.
- T3918 *Lonicera similis* (Caprifoliaceae); XI ZHAN MAO REN DONG; Shortbraet Honeysuckle. Used part: flower bud. TCM Effects: See *Lonicera japonica*. TCM Indications: See *Lonicera japonica*. Isolated compounds: 2887, 3551, 11328.
- T3919 *Lonicera* sp. (Caprifoliaceae). Isolated compounds: 3981.
- T3920 *Lophatherum gracile* (Poaceae); DAN ZHU YE; Common Lophatherum. Used part: aerial parts. TCM Effects: To clear heat and eliminate vexation, disinhibit urine. TCM Indications: Febrile diseases with vexation and thirst, inhibited voidings of reddish urine, dribbling pain of urination, mouth sore, tongue sores. Isolated compounds: 1823, 4546.
- T3921 *Lophatherum gracile* (Poaceae); DAN ZHU YE GEN; Common Lophatherum Root. Used part: rhizome and root. TCM Effects: To clear heat and disinhibit urine. TCM Indications: Fever, thirst, vexation, inhibited urination. Isolated compounds: 1823, 4546.
- T3922 *Lophopetalum wallichii* (Celastraceae); WO LI HE GUAN BAN; Wallich Crestpetal-tree. Isolated compounds: 15919.
- T3923 *Lophophora williamsii* (Cactaceae); AN LU LONG SHE LAN; Peyote. Isolated compounds: 6559, 13001, 13795, 14583, 22158.
- T3924 *Lophytum* sp. Isolated compounds: 21820.  
*Loranthus chinensis* = *Loranthus parasiticus*
- T3925 *Loranthus parasiticus* [Syn. *Loranthus chinensis*; *Taxillus chinensis*] (Loranthaceae); SANG JI SHENG; Parasite Scurrella. Used part: stem and branch-leaf. TCM Effects: To dispel wind-damp, strengthen sinews and bones, quicken blood and resolve toxin. TCM Indications: Angina pectoris, arrhythmia, hypertension, wind-damp impediment pain, aching in lumbus and knees, stomachache, scant breast milk, knocks and falls, toxin swelling of sores, frostbite. Isolated compounds: 1113, 2039, 13098, 16050, 18317, 18411.
- T3926 *Loropetalum chinense* (Hamamelidaceae); JI MU; Chinese Loropetalum. Used part: leaf or stem. TCM Effects: To clear heat and relieve cough, promote contraction and stanch bleeding. TCM Indications: Angina pectoris, senile bronchitis, indigestion, duodenal bleeding, uterine bleeding, lung heat cough, hemoptysis, spontaneous external bleeding, hematochezia, dysentery, diarrhea, flooding and spotting, infection of skin. Isolated compounds: 3551, 8095, 8971.
- T3927 *Lotus australis* (Fabaceae); AO ZHOU BAI MAI GEN; Austral Bird's Foot Trefoil. Isolated compounds: 13003.
- T3928 *Lotus corniculatus* (Fabaceae); DI YANG QUE; Birdsfoot Trefoil. Used part: aerial parts. TCM Effects: To clear heat and resolve toxin, relieve cough and calm asthma, disinhibit damp and disperse glomus. TCM Indications: Wind-heat cough, swelling pain in throat, glomus fullness, clove sore, innominate toxin swelling, eczema, dysentery, hematochezia from hemorrhoids. Isolated compounds: 3059, 8779, 8782, 8964, 18309, 21127.
- T3929 *Lotus helleri* (Fabaceae). Isolated compounds: 9596.
- T3930 *Lotus pedunculatus* (Fabaceae); HUA XU GENG BAI MAI GEN; Greater Bird's-foot-trefoil. Isolated compounds: 19394.
- T3931 *Lotus polyphyllus* (Fabaceae); DUO YE BAI MAI GEN; Leafy Trefoil\*. Isolated compounds: 11653, 12031, 18334.
- T3932 *Ludwigia octovalvis* (Onagraceae); MAO CAO LONG; Water Seedbox\*. Used part: whole herb. TCM Effects: To clear heat and disinhibit damp, resolve toxin and disperse swelling. TCM Indications: Common cold with fever, child *gan* fever, swelling pain in throat, mouth and tongue sores, hypertension, edema, damp-heat diarrhea dysentery, strangury with pain, white turbidity, vaginal discharge, mammary swelling abscess, swelling toxin of clove sore, hemorrhoids, burns and scalds, poisonous snake bites. Isolated compounds: 4164, 4165, 4166, 16050, 16845, 22270.
- T3933 *Luffa acutangula* (Cucurbitaceae); YUE SI GUA; Singkwa Towelgourd. Used part: dried vascular bundles of ripe fruit. TCM Effects: See *Luffa cylindrica*. TCM Indications: See *Luffa cylindrica*. Isolated compounds: 9717.
- T3934 *Luffa cylindrica* (Cucurbitaceae); SI GUA; Suakwa Vegetablesponge. Equivalent plant: *Luffa acutangula*. Used part: dried vascular bundles of ripe fruit. TCM Effects: To clear heat and resolve phlegm, cool blood and resolve toxin. TCM Indications: Febrile diseases with vexation and thirst, cough of phlegm asthma, intestinal wind bleeding, bleeding from hemorrhoids, blood strangury, flooding and spotting, sores with swelling abscess and flat abscess, galactostasis, innominate toxin swelling, edema. Isolated compounds: 2687, 3774, 4317, 13061, 13062, 13063, 13064, 13288, 20168, 20237.
- T3935 *Luffa cylindrica* (Cucurbitaceae); SI GUA ZI; Suakwa Vegetablesponge Seed. Used part: seed. TCM Effects: To clear heat,

- disinhibit water, free stool, expel worms. TCM Indications: Edema, stone strangury, lung heat cough, intestinal wind bleeding, hemorrhoids and fistulas, constipation, ascariasis. Isolated compounds: 3318, 6733, 13659, 20237.
- T3936 *Luffa operculata* (Cucurbitaceae); NANG GAI SI GUA; Buchinha (Brazil Herb). Used part: aerial parts. TCM Effects: To disperse swelling and transform stasis, antiallergic. TCM Indications: Anaphylactic diseases (hay fever, pollinosis, allergic rhinitis, allergic conjunctivitis). Isolated compounds: 1825, 1827, 15376, 15377, 16126, 16127.
- T3937 *Lumbriconis heteropoda* (Eunicidae); YI ZU SUO SHA CAN; Heterofoot Lumbrineris\*. Used part: whole body. TCM Indications: Leg qi. Isolated compounds: 15490.
- T3938 *Lunaria* sp. (Brassicaceae). Isolated compounds: 833.
- T3939 *Lupinus albus* (Fabaceae); BAI YU SHAN DOU; White Lupin. Isolated compounds: 13088, 13089, 13150, 15070, 22667.
- T3940 *Lupinus angustifolius* (Fabaceae); AI SAI E BI YA YU SHAN DOU; Narrowleaf Lupin\*. Isolated compounds: 21146, 21147.
- T3941 *Lupinus formosus* (Fabaceae). Isolated compounds: 16789.
- T3942 *Lupinus hartwegii* (Fabaceae). Isolated compounds: 1478, 1479.
- T3943 *Lupinus luteus* (Fabaceae); HUANG YU SHAN DOU; Yellow Lupin. Isolated compounds: 8278, 8282, 8283, 11514, 13104, 13107, 20133.
- T3944 *Lupinus* sp. (Fabaceae). Isolated compounds: 6558, 8971, 22667.
- T3945 *Lupinus varius* (Fabaceae). Isolated compounds: 6955, 14084.
- T3946 *Luvunga scandens* (Rutaceae); SAN YE TENG JU; India Luvunga. Isolated compounds: 22781.
- T3947 *Luvunga* spp. (Rutaceae). Isolated compounds: 12847.
- T3948 *Lychnis coronaria* (Caryophyllaceae); MAO JIAN QIU LUO; Hairy Campion. Isolated compounds: 4903, 6682, 10063, 17662, 20271, 21415, 21590.
- T3949 *Lychnis dioica* (Caryophyllaceae); HONG JIAN QIU LUO; Red Campion. Isolated compounds: 17181.
- T3950 *Lychnis fulgens* (Caryophyllaceae); DA HUA JIAN QIU LUO; Brilliant Campion. Used part: root and whole herb. TCM Effects: To clear heat and disinhibit urine, fortify spleen, quiet spirit. TCM Indications: Inhibited urination, child gan accumulation, night sweating, headache, insomnia. Isolated compounds: 6678, 17662.
- T3951 *Lychnis viscaria* (Caryophyllaceae); YANG JIAN QIU LUO; German Catchfly. Isolated compounds: 6852.
- T3952 *Lychnophora ericoides* (Asteraceae); Falsa Arnica (in Brazil). Isolated compounds: 2455, 5531.
- T3953 *Lycianthes biflora* (Solanaceae); HONG SI XIAN; Twoflower Red silkyarn. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, disperse phlegm and relieve cough. TCM Indications: Cough, asthma, dysentery, heat strangury, rabid dog bite, red swelling of clove sore, bleeding due to external injury. Isolated compounds: 2368, 3723.
- T3954 *Lycium barbarum* (Solanaceae); NING XIA GOU QI GEN PI; Barbary Wolfberry Root-bark\*. Used part: root cortex. TCM Effects: See *Lycium chinense*. TCM Indications: See *Lycium chinense*. Isolated compounds: 19542.
- T3955 *Lycium barbarum* (Solanaceae); NING XIA GOU QI ZI; Barbary Wolfberry Fruit. Used part: fruit. TCM Effects: See *Lycium chinense*. TCM Indications: See *Lycium chinense*. Isolated compounds: 2001, 4293, 10872, 13823, 17093, 17238, 19542, 22976.
- T3956 *Lycium chinense* (Solanaceae); GOU QI GEN PI; Chinese Wolfberry Root-bark. Equivalent plant: *Lycium barbarum*. Used part: root cortex. TCM Effects: To eliminate heat in blood, lower vacuity heat. TCM Indications: Diabetes mellitus, malaria, tidal fever with night sweat, child gan accumulation with fever, cough and hemoptysis or dyspnea, blood ejection, spontaneous external bleeding. Isolated compounds: 1345, 3695, 5534, 9366, 12327, 12891, 12893, 16856, 19542, 19983, 21594.
- T3957 *Lycium chinense* (Solanaceae); GOU QI YE; Chinese Wolfberry Leaf. Used part: leaf. TCM Effects: To supplement vacuity and boost essence, clear heat and allay thirst, dispel wind and brighten eyes. TCM Indications: Vacuity taxation with fever, vexation and thirst, sore red eyes and clouded vision, eye screen, night blindness, flooding, vaginal discharge, heat toxin sores. Isolated compounds: 4592, 4593, 10913, 11082, 18266, 19987, 22256, 22702, 22703.
- T3958 *Lycium chinense* (Solanaceae); GOU QI ZI; Chinese Wolfberry Fruit. Equivalent plant: *Lycium barbarum*. Used part: fruit. TCM Effects: To nourish liver, brighten eyes, enrich kidney, moisten lung, lower blood pressure. TCM Indications: Lassitude in lumbus and knees, emission, dizziness and dim vision, lung disease with cough, diabetes mellitus. Isolated compounds: 1048, 1113, 1845, 2001, 2318, 3040, 3209, 3585, 3695, 3773, 4293, 4468, 4491, 8817, 10233, 10872, 11123, 12488, 12891, 13098, 14230, 14236, 14350, 14352, 14387, 14433, 14558, 14625, 15528, 15729, 15771, 15772, 15901, 17238, 18834, 19120, 19542, 19983, 20369, 20732, 21945, 22060, 22554, 22976.
- T3959 *Lycium chinense* var. *potaninii* (Solanaceae); BEI FANG GOU QI GEN PI; Northern Wolfberry Root-bark\*. Isolated compounds: 19542.
- T3960 *Lycogala epidendrum* (Lycogalaceae); FEN LIU JUN; Wolfs-milk Slime. Used part: sporocarp. TCM Effects: To eliminate inflammation and relieve pain. Isolated compounds: 1624, 1625, 2473, 2474, 2475, 2476, 13195, 13196, 13197, 13198, 13199, 20278. *Lycoperdon capitatum* = *Pisolithus tinctorius*
- T3961 *Lycoperdon pyriforme* (Lycoperdaceae); LI XING MA BO; Pear-like Puff-ball. Used part: sporocarp. TCM Effects: See *Lasiosphaera fenlzii*. TCM Indications: See *Lasiosphaera fenlzii*. Isolated compounds: 14207.
- T3962 *Lycopersicon esculentum* (Solanaceae); FAN QIE; Tomato. Used part: fresh fruit. TCM Effects: To engender liquid and allay thirst, fortify stomach and disperse food. TCM Indications: Thirst, inappetence. Isolated compounds: 1162, 2309, 3208, 3210, 3215, 7375, 7376, 7979, 9363, 11418, 11754, 13212, 13213, 13214, 13215, 13216, 13217, 13218, 13219, 13222, 13243, 14163, 15135, 17090, 18003, 19087, 19760, 20060, 20146, 21434, 21435, 21662, 22058.
- T3963 *Lycopersicon esculentum* var. *cerasiforme* (Solanaceae); YING TAO FAN QIE; Cherry Tomato\*. Isolated compounds: 7377, 7378, 13242.
- T3964 *Lycopodium alpinum* [Syn. *Diphasiastrum alpinum*] (Lycopodiaceae); GAO SHAN BIAN ZHI SHI SONG; Alpine Clubmoss\*. Used part: whole herb. TCM Effects: To quicken blood, relieve pain. TCM Indications: Impediment pain in joints, knocks and falls. Isolated compounds: 13187.
- T3965 *Lycopodium annotinum* (Lycopodiaceae); DAN SUI SHI SONG;



- Interrupted Clubmoss. Used part: whole herb. TCM Effects: To dispel wind and eliminate damp, soothe sinews and quicken blood. TCM Indications: Wind-damp impediment pain, numbness in limbs, menstrual disorder, knocks and falls. Isolated compounds: 1300, 1323, 1332, 1333, 13192, 13200, 13244.
- T3966 *Lycopodium annotinum* var. *acrifolium* (Lycopodiaceae); LIANG NIAN SHI SONG; Sharpleaf Clubmoss\*. Isolated compounds: 567.
- T3967 *Lycopodium carolinianum* (Lycopodiaceae); KA LUO LAI NA SHI SONG; Carolina Clubmoss\*. Isolated compounds: 3431.
- T3968 *Lycopodium carolinianum* var. *affine* (Lycopodiaceae); SI KA LUO LAI NA SHI SONG; Carolina-like Clubmoss\*. Isolated compounds: 3207.
- T3969 *Lycopodium casuarinoides* (Lycopodiaceae); TENG SHI SONG. Used part: whole herb. TCM Effects: To dispel wind and eliminate damp, soothe sinews and quicken blood, brighten eyes, resolve toxin. TCM Indications: Wind-damp impediment pain, taxation damage in lumbar muscle, knocks and falls, menstrual disorder, night sweating, conjunctivitis, night blindness, burns and scalds, toxin swelling of sores. Isolated compounds: 16117.
- T3970 *Lycopodium cernuum* (Lycopodiaceae); PU DI WU GONG; Cernuous Clubmoss. Used part: whole plant. TCM Effects: See *Lycopodium japonicum*. TCM Indications: See *Lycopodium japonicum*. Isolated compounds: 1488, 3040, 3430, 3431, 7017, 7018, 13170, 13171, 13172, 13173, 13174, 13175, 13176, 13177, 13184, 15527, 16117, 16327, 16377, 19768, 19774, 20369.  
*Lycopodium clavatum* = *Lycopodium japonicum*
- T3971 *Lycopodium complanatum* (Lycopodiaceae); GUO JIANG LONG; Complanate Clubmoss. Used part: whole herb. TCM Effects: To dispel wind and eliminate damp, soothe sinews and quicken blood. TCM Indications: Wind-damp impediment pain, deadlimb, knocks and falls, menstrual disorder. Isolated compounds: 3948, 13183, 13223, 14571, 15889, 16377, 16421, 19768, 21425.
- T3972 *Lycopodium inundatum* (Lycopodiaceae). Isolated compounds: 16117.
- T3973 *Lycopodium japonicum* [Syn. *Lycopodium clavatum*] (Lycopodiaceae); SHEN JIN CAO; Common Japanese Clubmoss. Equivalent plant: *Lycopodium cernuum*. Used part: whole plant. TCM Effects: To dispel wind and eliminate damp, soothe sinews and quicken blood, relieve cough, resolve toxin. TCM Indications: Wind-cold-damp impediment, aching pain in joints, arthritis, dysmenorrhea, skin numbness, weakness in limbs, jaundice, cough, knocks and falls, sores, zoster, scalds. Isolated compounds: 3809, 3810, 3813, 6122, 7741, 7768, 13182, 13185, 13186, 13191, 13223, 16117, 16313, 16375, 16376, 16377, 16420.
- T3974 *Lycopodium lucidulum* (Lycopodiaceae); GUANG LIANG SHI SONG; Shining Clubmoss\*. Isolated compounds: 2617, 5398, 5663, 5664, 5687, 5688, 13042, 13043, 13046, 13051, 16371, 16372, 16738, 17151, 20203, 21064, 21065, 21066, 21067.
- T3975 *Lycopodium megastachyum* (Lycopodiaceae). Isolated compounds: 17150, 19770.
- T3976 *Lycopodium obscurum* (Lycopodiaceae); YU BAI SHI SONG; Tree Clubmoss. Used part: whole herb. TCM Effects: To dispel wind and eliminate damp, soothe sinews and free network vessels. TCM Indications: Wind-damp impediment pain, pain in lumbus and legs, numbness of limbs, sprain from knocks and falls, sequel of poliomyelitis. Isolated compounds: 379, 568, 2487, 13194, 15786, 16117, 16375, 16376, 21848.  
*Lycopodium phlegmaria* = *Phlegmariurus phlegmaria*  
*Lycopodium selago* = *Huperzia selago*  
*Lycopodium serratum* = *Huperzia serrata*
- T3977 *Lycopodium serratum* var. *thunbergii* (Lycopodiaceae); JU CHI SHI SONG; Sawtooth Clubmoss\*. Isolated compounds: 19764.
- T3978 *Lycopodium sitchense* (Lycopodiaceae). Isolated compounds: 16117.
- T3979 *Lycopus europaeus* (Lamiaceae); OU DI SUN; European Bugleweed. Isolated compounds: 12925.
- T3980 *Lycopus lucidus* (Lamiaceae); ZE LAN; Shiny Bugleweed. Used part: aerial parts. TCM Effects: To quicken blood and transform stasis, move water and disperse swelling, resolve toxin and eliminate welling abscess. TCM Indications: Amenorrhea, concretion and conglomeration, postpartum blood stasis abdominal pain, edema in body and face, knocks and falls, incised wound. Isolated compounds: 6178, 13224.
- T3981 *Lycopus lucidus* (Lamiaceae); ZE LAN GEN; Shiny Bugleweed Root. Used part: rhizome. TCM Effects: To transform stasis and stanch bleeding, boost *qi* and disinhibit water. TCM Indications: Blood ejection, spontaneous external bleeding, postpartum abdominal pain, vaginal discharge, jaundice, edema, *qi* vacuity and hypodynamia. Isolated compounds: 13224.
- T3982 *Lycopus virginicus* (Lamiaceae); FU JI NI YA DI SUN; Bugleweed. Isolated compounds: 12925.
- T3983 *Lycoris aurea* (Amaryllidaceae); DA YI ZHI JIAN; Golden Lycoris. Used part: bulb. TCM Effects: To moisten lung and relieve cough, resolve toxin and disperse swelling. TCM Indications: Lung heat cough, hemoptysis, *yin* vacuity consumption fever, inhibited urination, swelling toxin of welling abscess and sore, clove sore tubercle, burns and scalds. Isolated compounds: 8083, 9612, 13236, 13237, 13241, 18050, 20891.
- T3984 *Lycoris chinensis* (Amaryllidaceae); ZHONG GUO SHI SUAN; Chinese Lycoris. Used part: bulb. TCM Effects: See *Lycoris radiata*. TCM Indications: See *Lycoris radiata*. Isolated compounds: 17573.
- T3985 *Lycoris Guangxiensis* (Amaryllidaceae); GUANG XI SHI SUAN; Guangxi Lycoris. Isolated compounds: 15288, 15750.
- T3986 *Lycoris radiata* [Syn. *Amaryllis radiata*] (Amaryllidaceae); SHI SUAN; Shorttube Lycoris. Equivalent plant: *Lycoris chinensis*. Used part: bulb. TCM Effects: To dispel phlegm and promote vomiting, resolve toxin and dissipate binds. TCM Indications: Poliomyelitis, muscle weakness, rheumatic arthritis, pain in joints due to rheumatism, throat wind, nipple moth, swelling pain in throat, phlegm-drool and congesting lung, food poisoning, seep in chest and abdomen, malign sore and swelling toxin, hemorrhoids and fistulas, knocks and falls, intractable lichen, burns and scalds, snake bite. Isolated compounds: 4241, 5081, 5991, 6920, 8083, 9187, 9547, 9612, 13236, 13237, 13238, 13239, 13240, 13241, 14288, 15788, 17573, 17850, 18050, 20891, 22232.
- T3987 *Lycoris sanguinea* (Amaryllidaceae); TIE SE JIAN; Orange Lycoris. Isolated compounds: 13236, 13238, 13239.
- T3988 *Lycoris squamigera* (Amaryllidaceae); LU CONG; Autumn Lycoris. Used part: bulb. TCM Effects: To resolve toxin, dispel phlegm,

- disinhibit urine, promote vomiting. TCM Indications: Swelling pain in throat, swelling toxin of sore and welling abscess, scrofula, cough of phlegm asthma, edema, inhibited urination, food poisoning. Isolated compounds: 8083, 17573.
- T3989 *Lygodium flexuosum* [Syn. *Lygodium pinnatifidum*; *Ophioglossum flexuosum*] (Lygodiaceae); QU ZHOU HAI JIN SHA; Flexuose Climbing Fern. Used part: whole herb. TCM Effects: To soothe sinews and free network vessels, clear heat and disinhibit damp, stanch bleeding. TCM Indications: Wind-damp pain, numbness of limbs, knocks and falls, urinary tract infection, calculus of urinary system, edema, dysentery, swelling toxin of sore and welling abscess, infant mouth sore, fire eye, lichen, bleeding due to external injury. Isolated compounds: 13245, 14144, 19087.
- T3990 *Lygodium japonicum* (Lygodiaceae); HAI JIN SHA; Japanese Climbing Fern. Used part: aerial parts. TCM Effects: To clear heat and resolve toxin, disinhibit water and free strangury, quicken blood and free network vessels. TCM Indications: Heat strangury, stone strangury, blood strangury, inhibited urination [=dysuria], edema, white turbidity, vaginal discharge, hepatitis, diarrhea, dysentery, common cold with fever, cough and asthma, swelling pain in throat, mouth sore, red eyes with gall, mumps, mammary welling abscess, erysipelas, zoster, burns and scalds, itchy skin, wound swelling from knocks and falls, wind-damp impediment pain, bleeding due to external injury. Isolated compounds: 4135.
- Lygodium pinnatifidum* = *Lygodium flexuosum*
- T3991 *Lyonia ovalifolia* (Ericaceae); LI MU; Tibet Lyonia. Used part: branchlet-leaf and fruit. TCM Effects: To quicken blood and relieve pain, dispel wind and resolve toxin. TCM Indications: Knocks and falls, fracture, lichen sore. Isolated compounds: 1928, 2332, 7278, 9915, 11085, 13246, 13247, 13248, 19987.
- T3992 *Lyonia ovalifolia* var. *elliptica* (Ericaceae); XIAO GUO NAN ZHU; Littlefruit Lyonia. Used part: branch-leaf, root or fruit. TCM Effects: To supplement spleen and boost kidney, quicken blood and strengthen sinews. TCM Indications: Spleen vacuity diarrhea, lassitude in lumbar and knees, knocks and falls. Isolated compounds: 13246, 13247, 13248.
- T3993 *Lyophyllum connatum* (Tricholomataceae); Oshiroishimeji (in Japanese). Isolated compounds: 15943.
- T3994 *Lysichitum americanum* (Araceae); MEI ZHOU GUAN YIN LIAN; Skunk Cabbage. Isolated compounds: 10629, 13259.
- T3995 *Lysidice rhodostegia* (Fabaceae); YI HUA; Redbracted Lysidice. Used part: root. TCM Effects: To quicken blood and relieve pain, disperse swelling and stanch bleeding. TCM Indications: Knocks and falls, fracture, wind-damp impediment pain, bleeding due to external injury. Isolated compounds: 13260, 13261, 13262, 14949, 14950, 17283, 18651.
- T3996 *Lysimachia candida* (Primulaceae); DAN TIAO CAO; White Pearlweed. Used part: whole herb or root. TCM Effects: To clear heat and resolve toxin, quicken blood and relieve pain, disinhibit damp and disperse swelling. TCM Indications: Swelling pain in throat, swelling toxin of welling abscess and sore, mammary welling abscess, poisonous snake bites, fracture due to knocks and falls, wind-damp impediment pain, beriberi with edema, paddy-field dermatitis. Isolated compounds: 3073.
- T3997 *Lysimachia capillipes* (Primulaceae); XI GENG XIANG CAO; Hairytalk Loosestrife. Used part: whole herb. TCM Effects: To dispel wind and eliminate damp, move *qi* and relieve pain, regulate menstruation, resolve toxin. TCM Indications: Common cold with cough, wind-damp impediment pain, distending pain in stomach duct and abdomen, menstrual disorder, clove sore, snake bite. Isolated compounds: 3123, 3124, 3125, 3126, 3127, 3128, 3129, 12020.
- T3998 *Lysimachia christinae* (Primulaceae); DA JIN QIAN CAO; Christina Loosestrife. Used part: herb. TCM Effects: To disinhibit water and free strangury, clear heat and resolve toxin, dissipate stasis and disperse swelling. TCM Indications: Gallstones, calculus of urinary system, heat strangury, nephritis with edema, damp-heat jaundice, swollen welling abscess, sore and boil, poisonous snake bite, knocks and falls. Isolated compounds: 11642, 12018, 12020, 12066, 12067, 12089, 12090, 18317, 21093, 21634.
- T3999 *Lysimachia clethroides* (Primulaceae); ZHEN ZHU CAI; Clethra Loosestrife. Used part: root or herb. TCM Effects: To quicken blood and regulate menstruation, disinhibit water and disperse edema. TCM Indications: Menstrual disorder, vaginal discharge, child *gan* accumulation, edema, dysentery, throat pain, mammary welling abscess, knocks and falls. Isolated compounds: 3030, 3032, 3033, 3034, 17858.
- T4000 *Lysimachia congestiflora* (Primulaceae); JU HUA GUO LU HUANG; Denseflower Loosestrife. Used part: whole herb. TCM Effects: To dispel wind and dissipate cold, relieve cough and transform phlegm, resolve toxin and disinhibit damp, disperse accumulation and expel stone. TCM Indications: Wind-cold common cold, cough with profuse phlegm, swelling pain in throat, jaundice, gallstones, urethral stone, child *gan* accumulation, welling abscess and flat abscess with clove sore, poisonous snake bite. Isolated compounds: 13263.
- T4001 *Lysimachia davurica* (Primulaceae); HUANG LIAN HUA; Dahurian Loosestrife. Used part: whole herb with root. TCM Effects: To calm and lower blood pressure. TCM Indications: Hypertension, headache, insomnia. Isolated compounds: 4699, 4700, 9484.
- T4002 *Lysimachia foenum-graecum* (Primulaceae); LING XIANG CAO; Strongfragrant Loosestrife. Used part: whole herb. TCM Effects: To resolve exterior, relieve pain, move *qi*, expel roundworm. TCM Indications: Common cold with headache, swelling pain in throat, toothache, distention fullness in chest and abdomen, ascariasis. Isolated compounds: 9500.
- T4003 *Lysimachia microcarpa* (Primulaceae); XIAO GUO XIANG CAO; Smallfruit Loosestrife\*. Used part: whole herb. TCM Effects: To diffuse lung and resolve exterior, relieve cough and calm asthma. TCM Indications: Common cold, cough, asthma. Isolated compounds: 9500.
- T4004 *Lysimachia paridiformis* (Primulaceae); CHONG LOU PAI CAO; Parishshape Loosestrife. Used part: whole herb. TCM Effects: To dispel wind and eliminate damp, quicken blood and relieve pain, relieve cough, resolve toxin. TCM Indications: Wind-damp pain, pain in stomach duct and abdomen, cough, knocks and falls, clove sore and swollen boil, poisonous snake bite. Isolated compounds: 16664.
- T4005 *Lysionotus pauciflorus* (Gesneriaceae); SHI DIAO LAN; Fewflower

Lysionotus. Used part: whole herb. TCM Effects: To dispel wind and eliminate damp, relieve cough and transform phlegm, dispel stasis and regulate menstruation. TCM Indications: Tuberculosis, bone tuberculosis, scrofula, chronic bronchitis, wind-damp impediment pain, cough and asthma with abundant phlegm, menstrual disorder, dysmenorrhea, knocks and falls, boil. Isolated compounds: 13264.

T4006 *Lythrum anceps* (Lythraceae); RI BEN QIAN QU CAI; Twoedged Loosestrife. Used part: whole herb. TCM Effects: See *Lythrum salicaria*. TCM Indications: See *Lythrum salicaria*. Isolated compounds: 13267.

T4007 *Lythrum salicaria* (Lythraceae); QIAN QU CAI; Spiked Loosestrife. Equivalent plant: *Lythrum anceps*. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, promote contraction and stanch bleeding. TCM Indications: Dysentery, diarrhea, hematochezia, flooding, ulcerating sores, blood ejection, spontaneous external bleeding, bleeding due to external injury. Isolated compounds: 3551, 4439, 6757, 8095, 12952, 13268, 13269, 13270, 13271, 13272, 13273, 13274, 13275, 13276, 13277, 13278, 13279, 13280, 13460, 16196.

T4008 *Lytta caraganae* (Meloidae); QING NIANG ZI; Mung Bean Blister Beetle. Used part: dried body. TCM Effects: To attack toxin and expel stasis. TCM Indications: Scrofula, rabid dog bite. Isolated compounds: 3094.

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T4009 *Maackia amurensis* (Fabaceae); CHAO XIAN HUAI; Amur Maackia. Used part: flower. TCM Effects: To cool blood and stanch bleeding, clear heat and resolve toxin. TCM Indications: Bleeding, sore toxin of welling abscess and flat abscess. Isolated compounds: 6290, 12258, 13281, 13901.

T4010 *Maackia* sp. (Fabaceae). Isolated compounds: 18020.

T4011 *Macadamia ternifolia* (Proteaceae); AO ZHOU JIAN GUO; Queensland Nut. Isolated compounds: 5283, 16561, 17963.

T4012 *Macaranga conifera* (Euphorbiaceae); ZHEN YE XUE TONG; Conifer Macaranga. Isolated compounds: 1405, 5919, 6497, 10400, 11248, 11490, 21440.

T4013 *Macaranga tanarius* (Euphorbiaceae); XUE TONG; Common Macaranga. Isolated compounds: 7617, 7950, 15876, 20667, 20668.

T4014 *Macaranga triloba* (Euphorbiaceae); SAN LIE XUE TONG; Trilobate Macaranga\*. Isolated compounds: 1411, 1416, 1437, 5638, 16498.

T4015 *Machaerium* spp. Isolated compounds: 3004.

T4016 *Machilus japonica* (Lauraceae); RI BEN NAN; Japanese Machilus\*. Isolated compounds: 8085, 13295.

T4017 *Machilus odoratissima* (Lauraceae); JI XIANG RUN NAN; Extreme-fragrant Machilus\*. Isolated compounds: 15994, 15995, 15996, 15997.

T4018 *Machilus thunbergii* (Lauraceae); HONG NAN PI; Red Nanmu Bark. Used part: bark. TCM Effects: To warm center and normalize *qi*, soothe channels and quicken blood, disperse swelling and relieve pain. TCM Indications: Sprain and contusion, incessant vomiting and diarrhea, cramp and swelling of feet. Isolated compounds: 3308, 8089, 9020, 11447, 12749, 13290, 13293, 15713, 15864, 15926, 18655, 19542, 19777.

T4019 *Machilus zuihoensis* (Lauraceae); TAI WAN RUI FANG RUN NAN;

Zuiho Machilus. Isolated compounds: 13294, 14047, 19628, 23029.

T4020 *Macleaya cordata* (Papaveraceae); BO LUO HUI; Pink Plumepoppy. Used part: whole herb with root. TCM Effects: To dispel wind, dissipate stasis, resolve toxin, relieve pain, kill worms. TCM Indications: Ulcer of uterine cervix, carcinoma of uterine cervix, carcinoma of thyroid, swollen welling abscess and clove sores, ulcer of lower limb, hemorrhoids, eczema, snake or insect bites, painful swelling from knocks and falls, pain in joints due to rheumatalgia, decayed toothache, intractable lichen, trichomoniasis, brandy nose. Isolated compounds: 930, 2523, 3498, 7399, 7416, 16473, 19284.

T4021 *Macleaya* spp. (Papaveraceae). Isolated compounds: 3498.

T4022 *Maclura pomifera* (Moraceae); SANG CHENG; Osage Orange. Isolated compounds: 4337, 9857, 15715, 16249, 17695.

T4023 *Maclura tinctoria* (Moraceae); ZHUO SE SANG CHENG; Tinctorial Osage Orange\*. Isolated compounds: 16210, 20327.

T4024 *Macrocochylus pomiferus* (Menispermaceae). Isolated compounds: 5082, 5085, 14106.

T4025 *Macropiper excelsum* (Piperaceae); GAO DA HU JIAO; Pepper-tree. Isolated compounds: 6745.

T4026 *Macrothelypteris oligophlebia* (Thelypteridaceae); JIN JI WEI BA CAO GEN; Needle-leaf Fern\*. Used part: rhizome. TCM Effects: To disinhibit water and disperse edema, clear heat and resolve toxin, stanch bleeding and kill worms. TCM Indications: Edema, sore and boil, burns and scalds, bleeding due to external injury, ascariasis. Isolated compounds: 5371, 10263, 13452.

T4027 *Maesa chisia* (Myrsinaceae); HUI YE DU JING SHAN; Greyleaf Maesa. Isolated compounds: 20169.

T4028 *Maesa indica* (Myrsinaceae); LIANG MIAN QING; Indian Maesa. Used part: whole herb or leaf. TCM Effects: To clear heat and disinhibit damp, lower blood pressure. TCM Indications: Hepatitis, diarrhea, measles papules, hypertension. Isolated compounds: 13350.

T4029 *Maesa japonica* (Myrsinaceae); DU JING SHAN; Japanese Maesa. Used part: root and leaf. TCM Effects: To dispel wind, resolve epidemic toxin, disperse swelling. TCM Indications: Febrile infectious diseases, generalized pain, vexation and agitation, thirst, edema, painful swelling from knocks and falls, bleeding due to external injury. Isolated compounds: 13350.

T4030 *Maesa lanceolata* (Myrsinaceae); PI ZHEN DU JING SHAN; Lanceolate Maesa\*. Isolated compounds: 253, 255, 6048, 6269, 12472, 13351, 13352, 13353, 13354, 13355, 13356, 13357, 13358, 13359, 13360, 13829, 13830.

T4031 *Maesa perliarius* (Myrsinaceae); JI YU DAN; Treasure Maesa. Used part: whole herb. TCM Effects: To joint bones and disperse swelling, eliminate putridity and engender flesh. TCM Indications: Fracture due to knocks and falls, knife wound, swelling of clove. Isolated compounds: 13349, 13358.

T4032 *Maesa tenera* (Myrsinaceae); RUAN RUO DU JING SHAN; Slender Maesa. Isolated compounds: 13362, 13363.

T4033 *Magnolia acuminata* (Magnoliaceae); JIAN JIAN MU LAN; Cucumber-tree. Isolated compounds: 592, 16830, 22383.

T4034 *Magnolia biloba* (Magnoliaceae); AO YE HOU PO; Twolobed Official Mangolia. Used part: bark. TCM Effects: See *Magnolia officinalis*. TCM Indications: See *Magnolia officinalis*. Isolated

- compounds: 7513, 7514, 9631, 11519, 21074.
- T4035 *Magnolia biondii* [Syn. *Magnolia fargesii*] (Magnoliaceae); WANG CHUN YU LAN; Biond Magnolia. Used part: flower bud. TCM Effects: See *Magnolia liliflora*. TCM Indications: See *Magnolia liliflora*. Isolated compounds: 1843, 2303, 2387, 2388, 2389, 2390, 2391, 2392, 2858, 5135, 7512, 7719, 7721, 11851, 12920, 13387, 16555, 17414.
- T4036 *Magnolia coco* (Magnoliaceae); YE HE HUA; Chinese Magnolia Flower. Used part: flower. TCM Effects: To move *qi* and dissipate stasis, relieve cough, check discharge. TCM Indications: Liver depression and *qi* pain, knocks and falls, concretion and conglomeration, Vaginal discharge. Isolated compounds: 1344, 12917, 13372, 19183, 20319.
- T4037 *Magnolia compressa* (Magnoliaceae); *Magnolia compressa*. Isolated compounds: 16439.
- T4038 *Magnolia denudata* [Syn. *Magnolia heptapata*] (Magnoliaceae); YU LAN; Yulan Magnolia. Used part: flower bud. TCM Effects: See *Magnolia liliflora*. TCM Indications: See *Magnolia liliflora*. Isolated compounds: 591, 946, 2759, 7719, 7722, 8086, 8093, 9209, 12750, 13374, 15426, 19183, 22383.  
*Magnolia fargesii* = *Magnolia biondii*
- T4039 *Magnolia grandiflora* (Magnoliaceae); HE HUA YU LAN; Southern Magnolia. Used part: flower and bark. TCM Effects: To dispel wind and dissipate cold, move *qi* and relieve pain. TCM Indications: Externally contracted wind-cold, headache and nasal congestion, distending pain in stomach duct, vomiting and diarrhea, hypertension, tuberculosis. Isolated compounds: 12917, 13374, 13375, 13376, 13377, 13388, 13654, 13655, 15781, 16977, 19183, 20569.  
*Magnolia heptapata* = *Magnolia denudata*
- T4040 *Magnolia kobus* (Magnoliaceae); RI BEN XIN YI; Kobus Magnolia. Isolated compounds: 7385, 19183.
- T4041 *Magnolia liliflora* (Magnoliaceae); XIN YI; Lily Magnolia Buds. Equivalent plant: *Magnolia liliflora*, *Magnolia sprengeri*, *Magnolia biondii*, *Magnolia denudata*. Used part: flower bud. TCM Effects: To dissipate wind-cold, relieve stuffed nose. TCM Indications: Wind-cold common cold, headache, nasal congestion and runny nose, nasitis, nasosinusitis. Isolated compounds: 3760, 7521, 12497, 13387, 16900, 22383.
- T4042 *Magnolia liliflora* (Magnoliaceae); ZI YU LAN PI; Lily Magnolia Bark. Used part: bark. TCM Effects: To rectify *qi* and eliminate damp, calm asthma. TCM Indications: Liquor jaundice, damp itchy in genitals, *lai*, double tongue, welling abscess and flat abscess, edema. Isolated compounds: 19183.
- T4043 *Magnolia mutabilis* (Magnoliaceae); BIAN XING MU LAN; Mutable Magnolia\*. Isolated compounds: 19777.
- T4044 *Magnolia obovata* (Magnoliaceae); RI BEN HOU PO; Whiteleaf Japanese Magnolia. Isolated compounds: 322, 532, 7517, 7894, 9631, 12497, 12917, 12917, 13373, 13388.
- T4045 *Magnolia officinalis* (Magnoliaceae); HOU PO; Officinal Magnolia. Equivalent plant: *Magnolia biloba*. Used part: bark. TCM Effects: To dry damp and disperse phlegm, precipitate *qi* and eliminate fullness, lower blood pressure. TCM Indications: Amebic dysentery, vomiting and diarrhea, food accumulation and *qi* stagnation, abdominal distention and constipation, phlegm-rheum cough asthma. Isolated compounds: 85, 336, 928, 1348, 1763, 1857, 2412, 2561, 2795, 3194, 3242, 3688, 4029, 4550, 6746, 7513, 7514, 9044, 9631, 9669, 10449, 11519, 12843, 12849, 12850, 13364, 13365, 13366, 13367, 13373, 13374, 13378, 13379, 13380, 13381, 13382, 13383, 13384, 13385, 13386, 13388, 13393, 13395, 13396, 14491, 14827, 15888, 17376, 17458, 17459, 18532, 19183, 19306, 19910, 20556, 20992, 20995, 21074.
- T4046 *Magnolia praecocissima* (Magnoliaceae); ZHOU YE MU LAN; Wrinkleleaf Magnolia\*. Isolated compounds: 394, 7077, 7512, 7720, 12241, 13394, 16154, 16675, 19777, 23006.
- T4047 *Magnolia pyramidata* (Magnoliaceae); JIN ZI TA MU LAN; Pyramidal Magnolia\*. Isolated compounds: 18241, 18242, 18243, 18244, 18245, 18246, 18247, 18248.
- T4048 *Magnolia rostrata* (Magnoliaceae); DA YE HOU PO; Bigleaf Magnolia. Used part: bark. TCM Effects: To warm center and transform damp, move *qi* and disperse accumulation. TCM Indications: Distention fullness and sudden pain in chest and abdomen, food accumulation and *qi* stagnation, vomiting, diarrhea, cough with profuse phlegm. Isolated compounds: 5379, 13373, 13388, 13389.
- T4049 *Magnolia salicifolia* (Magnoliaceae); LIU YE MU LAN; Willowleaf Magnolia\*. Isolated compounds: 1186, 1282, 7751, 13390, 13392, 19121.
- T4050 *Magnolia sieboldii* (Magnoliaceae); TIAN NV MU LAN; Oyama Magnolia. Used part: bud. TCM Effects: To disinhibit urine and disperse edema, moisten lung and relieve cough. TCM Indications: Lung vacuity cough, phlegm containing blood, liquor jaundice accumulation, double tongue, swollen welling abscess. Isolated compounds: 19922, 20569.
- T4051 *Magnolia* spp. (Magnoliaceae). Isolated compounds: 15751.
- T4052 *Magnolia sprengeri* (Magnoliaceae); WU DANG MU LAN; Sprenger Magnolia. Used part: flower bud. TCM Effects: See *Magnolia liliflora*. TCM Indications: See *Magnolia liliflora*. Isolated compounds: 2858, 13373, 13393.
- T4053 *Mahonia acanthifolia* (Berberidaceae); CI YE SHI DA GONG LAO; Acanthus-leaved Mahonia. Isolated compounds: 16439.
- T4054 *Mahonia aquifolium* (Berberidaceae); JIAN YE SHI DA GONG LAO; Oregon-grape. Isolated compounds: 11344, 16439.
- T4055 *Mahonia bealei* (Berberidaceae); SHI DA GONG LAO MU; Leatherleaf Mahonia. Equivalent plant: *Mahonia fortunei*, *Mahonia japonica*. Used part: stem. TCM Effects: To clear heat, dry damp, resolve toxin. TCM Indications: Lung heat cough, jaundice, diarrhea, dysentery, red eyes with gall, sores, eczema, scalds. Isolated compounds: 2303, 11851, 16555.
- T4056 *Mahonia bealei* (Berberidaceae); SHI DA GONG LAO YE; Leatherleaf Mahonia Leaf. Equivalent plant: *Mahonia fortunei*, *Mahonia japonica*. Used part: leaf. TCM Effects: To clear vacuity heat, dry damp, resolve toxin. TCM Indications: Tuberculosis and hemoptysis, steaming bone tidal fever, dizziness and tinnitus, limp aching lumbus and knees, damp-heat jaundice, vaginal discharge, dysentery, wind-heat common cold, red eyes with gall, swollen welling abscess and sores. Isolated compounds: no.
- T4057 *Mahonia bealei* (Berberidaceae); SHI DA GONG LAO ZI; Leatherleaf

- Mahonia Fruit. Equivalent plant: *Mahonia japonica*. Used part: fruit. TCM Effects: To clear vacuity heat, supplement kidney, dry damp. TCM Indications: Steaming bone tidal fever, limp aching lumbus and knees, dizziness and tinnitus, damp-heat diarrhea, vaginal discharge, strangury-turbidity. Isolated compounds: no.
- T4058 *Mahonia bodinieri* (Berberidaceae); XIAO GUO SHI DA GONG LAO; Bodinier Mahonia. Isolated compounds: 2303, 11851, 16555.
- T4059 *Mahonia borealis* (Berberidaceae); PA LI BEI FANG SHI DA GONG LAO; Parry Northern Mahonia. Isolated compounds: 16439.
- T4060 *Mahonia confusa* (Berberidaceae); HU BEI SHI DA GONG LAO; Confused Mahonia. Equivalent plant: *Mahonia gracilipes*. Used part: root and stem. TCM Effects: To clear heat and dry damp, drain fire and resolve toxin. TCM Indications: Damp-heat dysentery, diarrhea, jaundice, red eyes with gall, swollen welling abscess and sores, wind-damp-heat impediment, taxation fever steaming bone, hemoptysis, dizzy head. Isolated compounds: 2303, 11851, 16555.
- T4061 *Mahonia eurybracteata* (Berberidaceae); KUAN BAO SHI DA GONG LAO; Broad-bracteate Mahonia. Isolated compounds: 2303, 11851, 16555.
- T4062 *Mahonia fortunei* (Berberidaceae); XI YE GONG LAO MU; Chinese Mahonia. Used part: stem. TCM Effects: See *Mahonia bealei*. TCM Indications: See *Mahonia bealei*. Isolated compounds: 2300, 2303, 11851, 13374, 16439, 16555.
- T4063 *Mahonia fortunei* (Berberidaceae); XI YE GONG LAO YE; Chinese Mahonia Leaf. Used part: leaf. TCM Effects: See *Mahonia bealei*. TCM Indications: See *Mahonia bealei*. Isolated compounds: 13374, 16555.
- T4064 *Mahonia gracilipes* (Berberidaceae); XI BING SHI DA GONG LAO; Subtriplinerved Mahonia. Used part: root and stem. TCM Effects: See *Mahonia confusa*. TCM Indications: See *Mahonia confusa*. Isolated compounds: 2303, 11851, 16555.
- T4065 *Mahonia griffithii* (Berberidaceae); GE LI FEI SI SHI DA GONG LAO; Griffith Mahonia. Isolated compounds: 16439.
- T4066 *Mahonia japonica* (Berberidaceae); HUA NAN GONG LAO MU; Japanese Mahonia. Used part: stem. TCM Effects: See *Mahonia bealei*. TCM Indications: See *Mahonia bealei*. Isolated compounds: 2300, 2303, 3934, 4032, 11736, 11851, 13374, 16555.
- T4067 *Mahonia japonica* (Berberidaceae); HUA NAN GONG LAO YE; Japanese Mahonia Leaf. Used part: leaf. TCM Effects: See *Mahonia bealei*. TCM Indications: See *Mahonia bealei*. Isolated compounds: 3934, 4032, 11736, 13374, 16555.
- T4068 *Mahonia japonica* (Berberidaceae); HUA NAN GONG LAO ZI; Japanese Mahonia Fruit. Used part: fruit. TCM Effects: See *Mahonia bealei*. TCM Indications: See *Mahonia bealei*. Isolated compounds: 11736.
- T4069 *Mahonia leschenaultii* (Berberidaceae); LAI SHI NA TE SHI DA GONG LAO; Leschenault Mahonia. Isolated compounds: 16439.
- T4070 *Mahonia manipurensis* (Berberidaceae); MAN NI PU ER SHI DA GONG LAO; Manipur Mahonia. Isolated compounds: 16439.
- T4071 *Mahonia repens* (Berberidaceae); PU FU SHI DA GONG LAO; Creeping Mahonia. Isolated compounds: 15881, 15885, 16439, 21270.
- T4072 *Mahonia shenii* (Berberidaceae); CHENG KOU SHI DA GONG LAO; Chengkou Mahonia. Used part: root and stem. TCM Effects: To clear heat, dry damp, resolve toxin. TCM Indications: Damp-heat dysentery, diarrhea, jaundice (icterus, ICT), red eyes with gall, burns and scalds. Isolated compounds: 2303, 11851, 16555.
- T4073 *Mahonia sikkimensis* (Berberidaceae); XI JIN SHI DA GONG LAO; Sikkim Mahonia. Isolated compounds: 16439.
- T4074 *Mahonia simonsii* (Berberidaceae); XI MENG SI SHI DA GONG LAO; Simons Mahonia. Isolated compounds: 16439.
- T4075 *Mahonia* spp. (Berberidaceae). Isolated compounds: 16439, 16555.
- T4076 *Mahonia veitchiorum* (Berberidaceae); CHUAN DIAN SHI DA GONG LAO; Veitch Mahonia. Isolated compounds: 2303, 11851, 16555.
- T4077 *Malbranchea aurantiaca* (Myxotrichaceae). Isolated compounds: 10564, 16805.
- T4078 *Malina elemi*. Isolated compounds: 16040, 16041.
- T4079 *Mallotus anomalus* (Euphorbiaceae); XIU MAO YE TONG; Anomalus Mallotu. Isolated compounds: 11227.
- T4080 *Mallotus apelta* (Euphorbiaceae); BAI BEI YE; Whitebackleaf Mallotus. Used part: leaf. TCM Effects: To clear heat, resolve toxin, dispel damp, stanch bleeding. TCM Indications: Phlegmon, suppurative tympanitis, goose-mouth sore, eczema, knocks and falls, bleeding due to external injury. Isolated compounds: 5592, 5593, 5598, 10049, 10051, 10810, 10811.  
*Mallotus chrysocarpus* = *Mallotus repandus* var. *chrysocarpus*
- T4081 *Mallotus furetianus* (Euphorbiaceae). Isolated compounds: 13424, 13425.
- T4082 *Mallotus japonicus* (Euphorbiaceae); YE WU TONG; Japanese Mallotus. Used part: bark. TCM Effects: To clear heat and resolve toxin, promote contraction and stanch bleeding. TCM Indications: Gastric ulcer, duodenal ulcer, hepatitis, hematuria, vaginal discharge, sores, bleeding due to external injury. Isolated compounds: 2312, 2810, 2811, 6923, 8311, 11295, 11521, 11522, 13426, 13427, 13430, 13431, 13432, 13438, 18203, 19087.
- T4083 *Mallotus philippinensis* (Euphorbiaceae); CU KANG CHAI; Philippine Mallotus\*. Used part: pericarpial glandular hairs. TCM Effects: To kill worms and relieve diarrhea. TCM Indications: Taeniasis, ascariasis, oxyuria disease. Isolated compounds: 13433, 13434.
- T4084 *Mallotus philippinensis* (Euphorbiaceae); LV SONG QIU MAO; Kamalatre. Used part: pericarpial glandular hairs. TCM Effects: To kill worms and relieve diarrhea. TCM Indications: Taeniasis, ascariasis, oxyuria disease. Isolated compounds: 2312, 6111, 10682, 11685, 13435, 13436, 13437, 17174, 18940.  
*Mallotus repandus* = *Mallotus repandus* var. *chrysocarpus*
- T4085 *Mallotus repandus* var. *chrysocarpus* [Syn. *Mallotus chrysocarpus*; *Mallotus repandus*] (Euphorbiaceae); SHI YAN FENG; Stone Mallotus\*. Used part: root, stem, leaf. TCM Effects: To dispel wind and eliminate damp, quicken blood and free network vessels, resolve toxin and disperse swelling, expel worms and relieve itch. TCM Indications: Wind-damp impediment, pain in lumbus and legs, deviated eyes and mouth, knocks and falls, swollen welling abscess and sores, taeniasis, eczema, intractable lichen, snake or dog bite. Isolated compounds: 18624, 18625.
- T4086 *Malus asiatica* (Rosaceae); LIN QIN; Chinese Pearleaf Crabapple.

- Used part: fruit. TCM Effects: To precipitate *qi* and loosen chest, engender liquid and allay thirst, harmonize center and relieve pain. TCM Indications: Diabetes mellitus, phlegm-rheum and food retention, glomus and congestion in chest and diaphragm, cholera, vomiting diarrhea with abdominal pain, dysentery. Isolated compounds: 7852.
- T4087 *Malus domestica* (Rosaceae); PING GUO HAI TANG; Domestic Apple\*. Isolated compounds: 7996.
- T4088 *Malus pumila* (Rosaceae); PING GUO; Apple. Used part: fruit. TCM Effects: To boost stomach, engender liquid, eliminate vexation, arouse liquor. TCM Indications: Scant fluid and thirst, spleen vacuity diarrhea, food retention and abdominal distention, resolve liquor toxin. Isolated compounds: 11031, 15814, 17169, 17174, 18281.
- T4089 *Malus* sp. (Rosaceae). Isolated compounds: 3214, 7729, 13126, 15477, 17170.
- T4090 *Malus* spp. (Rosaceae). Isolated compounds: 17869.
- T4091 *Malva sylvestris* (Malvaceae); OU JIN KUI; High Mallow. Used part: flower, leaf and stem. TCM Effects: To disinhibit urine and free stool, clear heat and resolve toxin. TCM Indications: Urinary and fecal stoppage, vaginal discharge, scrofula, swelling pain in throat. Isolated compounds: 13460.
- T4092 *Mammea africana* (Clusiaceae); FEI ZHOU HUANG GUO MU; African Mammey Apple. Isolated compounds: 6181, 13464, 13467, 13473, 13809.
- T4093 *Mammea americana* (Clusiaceae); MEI ZHOU MAN MI PING GUO; Mammee Apple. Isolated compounds: 6181, 6183, 13467, 13468, 13469, 20490.
- T4094 *Mammea harmandii* (Clusiaceae). Isolated compounds: 13464, 13467, 13468, 13469, 13470, 13472.
- T4095 *Mammea longifolia* (Clusiaceae); CHANG YE MAN MI PING GUO; Longleaf Mammey\*. Isolated compounds: 20489, 20490.
- T4096 *Mammea* sp. (Clusiaceae). Isolated compounds: 15715.
- T4097 *Mammillaria microcarpa* (Cactaceae); XIAO GUO YIN MAO QIU; Fishhook Cactus. Isolated compounds: 14796.
- T4098 *Mandevilla pentlandiana* (Apocynaceae); PENG TE MAN DE MU; Pentland Mandevilla\*. Isolated compounds: 15497.
- T4099 *Mangifera indica* (Anacardiaceae); MANG GUO; Mango. Equivalent plant: *Mangifera persiciformis*. Used part: fruit. TCM Effects: To boost stomach, engender liquid, check vomiting, relieve cough. TCM Indications: Thirst, vomiting, reduced food intake, cough. Isolated compounds: 1024, 1025, 1824, 3214, 5510, 5799, 6757, 6966, 7802, 7852, 7853, 7951, 8095, 9387, 11525, 13481, 13483, 16317, 16381, 16425, 19041, 22520.
- T4100 *Mangifera indica* (Anacardiaceae); MANG GUO HE; Mango Seed. Used part: seed. TCM Effects: To fortify stomach and disperse food, move *qi* and transform phlegm. TCM Indications: Mounting *qi*, food stagnation, cough, testitis. Isolated compounds: 6431, 6432, 9717, 14929, 14930.
- T4101 *Mangifera indica* (Anacardiaceae); MANG GUO SHU PI; Mango Bark. Used part: bark. TCM Effects: To clear summerheat heat, stanch bleeding, resolve sore toxin. TCM Indications: Summerheat damage, generalized fever and aversion to cold. Isolated compounds: 1025, 4469, 4618, 7338, 9613, 10358, 10359, 11525, 13100, 13482, 13483, 14576, 14594, 14595, 16064.
- T4102 *Mangifera indica* (Anacardiaceae); MANG GUO YE; Mango Leaf. Used part: leaf. TCM Effects: To allay thirst, transform stagnation, relieve itch. TCM Indications: *Gan* accumulation, diabetes mellitus, eczema titillation, wart. Isolated compounds: 9717, 13481.
- T4103 *Mangifera persiciformis* (Anacardiaceae); BIAN TAO; Peachform Mango. Used part: fruit. TCM Effects: See *Mangifera indica*. TCM Indications: See *Mangifera indica*. Isolated compounds: 7951, 13481, 18317, 20711.
- T4104 *Manihot esculenta* (Euphorbiaceae); MU SHU DI SHANG BU FEN; Cassave Aerial Parts. Used part: leaf or root. TCM Effects: To resolve toxin and disperse swelling. TCM Indications: Toxin swelling of sores, scab and lichen. Isolated compounds: 1107, 1113, 7025, 7366, 7367, 13097, 20369, 20711, 20712.
- T4105 *Manilkara indica* (Sapotaceae); IN DU TIE XIAN ZI; Indian Balata\*. Isolated compounds: 11198.
- T4106 *Manis pentadactyla* (Manidae); CHUAN SHAN JIA; Pangolin. Used part: scale. TCM Effects: To quicken blood and dissipate stasis, free menstruation and milk, disperse welling abscess. TCM Indications: Amenorrhea due to blood stasis, concretion and conglomeration, wind-damp impediment pain, galactostasis, swollen welling abscess, scrofula. Isolated compounds: 4535.
- T4107 *Mansonia gagei* (Sterculiaceae); MAN SUO NI YA XIN CAI; Mansonia Heartwood. Isolated compounds: 13519, 13520, 13521.
- T4108 *Marchantia paleacea* var. *diptera* (Marchantiaceae); ER YI TUO BAO DI QIAN; Twowing Palea Liverwort\*. Isolated compounds: 16540.
- T4109 *Marchantia polymorpha* (Marchantiaceae); DI SUO LUO. Used part: lichen. TCM Effects: To clear heat and disinhibit damp, resolve toxin and close sores. TCM Indications: Damp-heat jaundice, swelling pain of welling abscess and sore, poisonous snake bite, burns and scalds, fracture, knife wound. Isolated compounds: 9426, 9816, 10034, 11528, 11681, 13550, 13551, 13552, 13553, 13554, 13555, 13556, 13557, 13558, 16300, 16984, 17811, 18839, 21352, 21354, 21356, 22171.
- T4110 *Marchantia* sp. (Marchantiaceae). Isolated compounds: 13084.
- T4111 *Marrubium peregrinum* (Lamiaceae); YANG OU XIA ZHI CAO; Peregrine Hoarhound. Isolated compounds: 21202.
- T4112 *Marrubium supinum* [Syn. *Lagopsis supina*] (Lamiaceae); BAI HUA XIA ZHI CAO; Whiteflower Lagopsis. Isolated compounds: 17812.
- T4113 *Marrubium velutinum* (Lamiaceae); DUAN RONG MAO OU XIA ZHI CAO; Velutinous Hoarhound\*. Isolated compounds: 3607, 22370, 22371.
- T4114 *Marrubium vulgare* (Lamiaceae); OU XIA ZHI CAO; Common Hoarhound. Isolated compounds: 580, 1663, 2134, 2325, 2912, 7925, 13573, 13574, 17812, 17813.
- T4115 *Marsdenia condurango* (Asclepiadaceae); NAN MEI NIU NAI CAI; Condurango. Isolated compounds: 3964, 3965.
- T4116 *Marsdenia globifera* (Asclepiadaceae); QIU HUA NIU NAI CAI; Globose Condorvine. Isolated compounds: 1106, 1110, 1111, 1121.
- T4117 *Marsdenia koi* (Asclepiadaceae); DA YE NIU NAI CAI; Ko Condorvine. Isolated compounds: 13575, 13576.
- T4118 *Marsdenia oreophila* (Asclepiadaceae); HUI ZHU NIU NAI CAI; Beakstyle Condorvine. Used part: rhizome. TCM Effects: To stanch bleeding and dissipate stasis, free network vessels and relieve pain. TCM Indications: Bleeding due to external injury, fracture, lumbar and

- back pain. Isolated compounds: 13577.
- T4119 *Marsdenia roylei* (Asclepiadaceae); ROU LEI NIU NAI CAI; Roylei Condorvine\*. Isolated compounds: 5129, 5131, 5242, 7468, 13578, 16032, 16033.
- T4120 *Marsdenia tenacissima* (Asclepiadaceae); TONG GUANG TENG; Tenacious Condorvine. Used part: stem, root or leaf. TCM Effects: To clear heat and resolve toxin, relieve cough and calm asthma, disinhibit damp and free milk, anticancer. TCM Indications: swelling pain in throat, lung heat cough asthma, damp-heat jaundice, inhibited urination [=dysuria], breast milk stoppage, sore and boil, carcinoma. Isolated compounds: 20930, 20931.
- T4121 *Marsilea quadrifolia* (Marsileaceae); PING; Water-clover. Used part: whole herb. TCM Effects: To disinhibit water and disperse edema, clear heat and resolve toxin, stanch bleeding, eliminate vexation and quiet spirit. TCM Indications: Edema, heat strangury, inhibited urination [=dysuria], jaundice, blood ejection, spontaneous external bleeding, hematuria, flooding spotting and vaginal discharge, profuse menstruation, sleepless and vexation, diabetes mellitus, common cold, summer unacclimation in child, swollen welling abscess and sore toxin, scrofula, mastitis, swelling pain in throat, acute conjunctivitis, poisonous snake bites. Isolated compounds: 9638.
- T4122 *Matayba arborescens*. Isolated compounds: 3829.
- T4123 *Matricaria aurea* (Asteraceae); JIN SE MU JU; Aureate Mayweed\*. Isolated compounds: 5903, 16837, 16838, 16840.
- T4124 *Matricaria chamomilla* [Syn. *Matricaria recutita*] (Asteraceae); MU JU<sup>(3)</sup>; Mayweed. Used part: flower or whole herb. TCM Effects: To clear heat and resolve toxin, relieve cough and calm asthma, dispel wind-damp. TCM Indications: Common cold with fever, swelling pain in throat, lung heat cough asthma, heat impediment swelling and pain, swelling of sores. Isolated compounds: 1502, 2044, 2071, 2414, 2416, 2807, 3300, 3464, 3622, 7729, 9038, 9496, 13604, 13605, 16728, 21176, 22035.
- Matricaria recutita* = *Matricaria chamomilla*
- T4125 *Matricaria suffruticosa* (Asteraceae); BAN GUAN MU MU JU; Semi-frutex Mayweed\*. Isolated compounds: 5236.
- T4126 *Matteuccia orientalis* (Onocleaceae); DONG FANG JIA GUO JUE; Oriental Ostrich Fern. Used part: rhizome or stem-leaf. TCM Effects: To dispel wind, stanch bleeding. TCM Indications: Wind-damp impediment pain, bleeding due to external injury. Isolated compounds: 13609, 13611, 13993.
- T4127 *Matteuccia struthiopteris* (Onocleaceae); XIAO YE GUAN ZHONG; Matteuccia Frond. Used part: rhizome. TCM Effects: To clear heat and resolve toxin, kill worms, stanch bleeding. TCM Indications: Febrile diseases macular eruption, parotitis, damp-heat sore toxin, abdominal pain due to ascariasis, oxyuria disease, red dysentery and bloody stool, hematuria, blood ejection, spontaneous external bleeding, flooding and spotting [=metrorrhagia and metrostaxis]. Isolated compounds: 1599, 2909, 3551, 6678, 6679, 8077, 8668, 17700, 18162, 19983.
- T4128 *Maytenus buchananii* (Celastraceae); BU CHANG NAN MEI DENG MU; Buchanan Mayten. Isolated compounds: 13619, 13620, 13621, 13622.
- T4129 *Maytenus canariensis* (Celastraceae); JIA NA LI MEI DENG MU; Canari Mayten\*<sup>[1]</sup> Isolated compounds: 16359, 16429, 17862, 21397.
- T4130 *Maytenus chuchuhuasca* (Celastraceae); QIU SHI MEI DENG MU; Chuchuhuasca Mayten\*. TCM Effects: Anticarcinoma. TCM Indications: Skin cancer. Isolated compounds: 5655, 5656, 5744, 5745, 10267, 11786, 11787, 11788, 16411, 22811, 22812, 22813.
- T4131 *Maytenus confertiflorus* (Celastraceae); MI HUA MEI DENG MU; Crown-flowered Mayten. Used part: leaf. TCM Effects: To dispel stasis and relieve pain, resolve toxin and disperse swelling, anticancer. TCM Indications: Knocks and falls, lumbago, carcinoma. Isolated compounds: 12952, 13620, 13621.
- T4132 *Maytenus guangsiensis* (Celastraceae); GUANG XI MEI DENG MU; Guangxi Mayten\*. Isolated compounds: 13621.
- T4133 *Maytenus heterophylla* (Celastraceae); YI YE MEI DENG MU; Heteroleaf Mayten\*. Isolated compounds: 9470, 10565.
- T4134 *Maytenus hookeri* (Celastraceae); YUN NAN MEI DENG MU; Yunnan Mayten. Used part: leaf. TCM Effects: To transform stasis and disperse concretion, anticancer. TCM Indications: carcinoma. Isolated compounds: 13620, 13621.
- T4135 *Maytenus ilicifolia* (Celastraceae); DONG QING YE MEI DENG MU; Ilcis-leaf Mayten\*. Isolated compounds: 16429.
- T4136 *Maytenus krukovii* (Celastraceae); KE SHI MEI DENG MU; Krukov Mayten\*. Isolated compounds: 3327, 15789.
- T4137 *Maytenus mossambicensis* (Celastraceae); MO SANG BI KE MEI DENG MU; Mozambique Mayten\*. Isolated compounds: 3356.
- T4138 *Maytenus ovatus* (Celastraceae); LUAN YE MEI DENG MU; Ovateleaf Mayten\*. Isolated compounds: 13619, 13621.
- T4139 *Maytenus serrata* (Celastraceae); CHI YE MEI DENG MU; Serrate-leaved Mayten. Isolated compounds: 13618, 13619, 13621.
- T4140 *Maytenus* sp. (Celastraceae). Isolated compounds: 21397.
- T4141 *Meconopsis betonicifolia* (Papaveraceae); HUO XIANG YE LV RONG HAO; Betonyleaf Meconopsis. Isolated compounds: 7002, 16624, 16626, 16627.
- T4142 *Meconopsis cambrica* (Papaveraceae); WEI ER SHI LV RONG HAO; Welsh Poppy. Isolated compounds: 7980, 8524, 13630, 13631.
- T4143 *Meconopsis horridula* (Papaveraceae); DUO CI LV RONG HAO; Spiny Meconopsis. Used part: whole herb. TCM Effects: To quicken blood and transform stasis, clear heat and relieve pain. TCM Indications: Knocks and falls, fracture, pain in chest and back, wind-heat headache, swelling pain in joints. Isolated compounds: 1096, 16627, 16628.
- T4144 *Meconopsis nepaulensis* (Papaveraceae); NI BO ER LV RONG HAO; Nepal Meconopsis. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, disinhibit damp. TCM Indications: Lung heat cough, damp-heat jaundice, damp-heat edema, gastroenteritis, headache, dysmenorrhea, leukorrhea. Isolated compounds: 14590, 16627, 16628.
- T4145 *Meconopsis punicea* (Papaveraceae); HONG HUA LV RONG HAO; Redflower Meconopsis. Used part: whole herb with flower. TCM Effects: To clear heat and resolve toxin, disinhibit damp, relieve pain. TCM Indications: Ardent fever, tuberculosis, pneumonia, hepatitis, dysmenorrhea, leukorrhea, damp-heat edema, headache, hypertension. Isolated compounds: 866, 13630, 13994.
- T4146 *Meconopsis* spp. (Papaveraceae). Isolated compounds: 16627, 16628.
- T4147 *Medicago falcata* (Fabaceae); YE MU XU; Sickle Alfalfa. Used part: whole herb. TCM Effects: To fortify spleen and supplement vacuity,

- disinhibit urine and abate jaundice, soothe sinews and quicken network vessels. TCM Indications: Spleen vacuity and abdominal distention, indigestion, edema, jaundice, wind-damp impediment pain. Isolated compounds: 2017, 7821.
- T4148 *Medicago sativa* (Fabaceae); MU XU; Alfalfa. Used part: whole herb. TCM Effects: To clear heat and cool blood, disinhibit damp and abate jaundice. TCM Indications: Febrile diseases with vexation and fullness, jaundice, enteritis, dysentery, edema, urethral stone, hematochezia from hemorrhoids. Isolated compounds: 1673, 3059, 3209, 3774, 4190, 4604, 5010, 5440, 7775, 7883, 8050, 8762, 8763, 12843, 12849, 13018, 13456, 13635, 14469, 14619, 15146, 16118, 17024, 19395, 20168, 20254, 20444, 21589, 21662.
- T4149 *Medicago sativa* (Fabaceae); MU XU GEN; Alfalfa Root. Used part: root. TCM Effects: To clear heat and disinhibit damp, free strangury and expel stone. TCM Indications: Febrile diseases with vexation and fullness, jaundice, urethral stone. Isolated compounds: 1040.
- T4150 *Medicago* sp. (Fabaceae). Isolated compounds: 13638.
- T4151 *Medicago* spp. (Fabaceae). Isolated compounds: 12908.
- T4152 *Medinilla magnifica* (Melastomataceae); HONG WEI SUAN JIAO GAN; Magnific Medinilla\*. Isolated compounds: 15641, 15642.
- T4153 *Melaleuca alternifolia* (Myrtaceae); HU SHENG YE BAI QIAN CENG; Alternateleaf Melaleuca\*. Isolated compounds: 20992.
- T4154 *Melaleuca leucadendra* (Myrtaceae); BAI QIAN CENG; Cajeput-tree. Used part: leaf. TCM Effects: To dispel wind and resolve exterior, disinhibit damp and relieve itch. TCM Indications: Common cold with fever, wind-damp bone pain, abdominal pain and diarrhea, wind papules, eczema. Isolated compounds: 7481.
- T4155 *Melia azadirachta* (Meliaceae); Chinaberry-tree. Isolated compounds: 13661, 15601, 15602, 15604.
- T4156 *Melia azedarach* (Meliaceae); KU LIAN PI; Chinaberry-tree Bark. Equivalent plant: *Melia toosendan*. Used part: dried stem or root cortex. TCM Effects: To expel worms and treat lichen. TCM Indications: Ascariasis, oxyuria disease, abdominal pain due to worm accumulation, scab and lichen with itching. Isolated compounds: 2050, 2054, 2055, 3710, 5194, 7945, 8249, 12328, 12329, 12330, 12952, 13660, 13661, 13664, 13665, 13666, 13667, 13668, 13669, 13670, 13671, 14544, 15603, 15606, 15610, 15611, 19177, 20966, 20967, 21448, 21977.
- T4157 *Melia azedarach* (Meliaceae); KU LIAN SHI; Chinaberry-tree Fruit. Used part: fruit. TCM Effects: To move *qi* and relieve pain, kill worms. TCM Indications: Pain in stomach duct and rib-side, mounting pain, abdominal pain due to worm accumulation, tinea capitis, frostbite (kibe). Isolated compounds: 4752, 4753, 4754, 4790, 15605, 21554.
- T4158 *Melia azedarach* (Meliaceae); KU LIAN YE; Chinaberry-tree Leaf\*. Used part: leaf. TCM Effects: To clear heat and dry damp, kill worms and relieve itch, move *qi* and relieve pain. TCM Indications: Eczema titillation, sore lichen and scab *lai*, snake or insect bites, trichomonal vaginitis, mounting *qi* (hernia), painful swelling from knocks and falls. Isolated compounds: 21449, 21450.
- T4159 *Melia azedarach* (Meliaceae); LIAN HUA; Chinaberry-tree Flower. Used part: flower. TCM Effects: To clear heat and dispel damp, kill worms and relieve itch. TCM Indications: Prickly heat. Isolated compounds: 13675.
- T4160 *Melia azedarach* var. *japonica* (Meliaceae); RI BEN KU LIAN; Japanese Chinaberry-tree. Isolated compounds: 3308, 4791, 13669, 19705.
- T4161 *Melia indica* (Meliaceae); YIN JIAN; Indica Melia\*. Isolated compounds: 15601, 15602.
- T4162 *Melia toosendan* (Meliaceae); CHUAN LIAN PI; Szechwan Chinaberry Bark. Used part: dried stem or root cortex. TCM Effects: See *Melia azedarach*. TCM Indications: See *Melia azedarach*. Isolated compounds: 4755, 4756, 11743, 13664, 13665, 13672, 14813, 15612, 20206, 21447, 21448, 21554, 21555, 21556.
- T4163 *Melia toosendan* (Meliaceae); CHUAN LIAN ZI; Szechwan Chinaberry Fruit. Used part: fruit. TCM Effects: To soothe liver, move *qi*, relieve pain, expel worms. TCM Indications: Chest and rib-side pain, distending pain in stomach duct, mounting *qi*, abdominal pain due to worm accumulation. Isolated compounds: 527, 14764, 15606, 15607, 15608, 15609, 21448.
- T4164 *Melicope coodeana* (Rutaceae); RU NI WENG DAO MI ZHU YU; Reunion-Island Melicope\*. Isolated compounds: 6218, 16863, 21911.
- T4165 *Melicope ptelefolia* (Rutaceae). Isolated compounds: 13676, 13677.
- T4166 *Melicope semecarpifolia* (Rutaceae); SI ROU TUO GUO YE MI ZHU YU. Isolated compounds: 2047, 3974, 3975, 6289, 6404, 6405, 6642, 6708, 8824, 9226, 11605, 12254, 13673, 13674, 13685, 14072, 14254, 19690, 20002.
- T4167 *Melicope* sp. (Rutaceae). Isolated compounds: 12254.
- T4168 *Melicope* spp. (Rutaceae). Isolated compounds: 20978.
- T4169 *Melicope triphylla* (Rutaceae); SAN YE MI ZHU YU; Threeleaf Melicope. Isolated compounds: 16867.
- T4170 *Melilotus albus* (Fabaceae); BAI XIANG CAO MU XI; White Sweetclover. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, harmonize stomach and transform damp. TCM Indications: Summerheat-heat and oppression in chest, headache, bad breath, malaria, dysentery, strangury, skin sores. Isolated compounds: 5440.
- T4171 *Melilotus messanensis* (Fabaceae); XI XI LI CAO MU XI; Messania Sweetclover\*. Isolated compounds: 13682, 13683, 13684.
- T4172 *Melilotus suaveolens* (Fabaceae); PI HAN CAO; Daghestan Sweetclover. Used part: whole herb. TCM Effects: To clear summerheat and transform damp, fortify stomach and harmonize center. TCM Indications: Summerheat-damp and oppression in chest, distended head and headache, dysentery, malaria, strangury syndrome, vaginal discharge, mouth sore, bad breath, sores, damp sore, scab and lichen, scrofula. Isolated compounds: 663, 664, 3383, 4134, 4139, 4141, 4142, 5440, 5665, 13678, 22195.
- T4173 *Melilotus suaveolens* (Fabaceae); PI HAN CAO GEN; Daghestan Sweetclover Root. Used part: root. TCM Effects: To clear heat and resolve toxin. TCM Indications: Scrofula. Isolated compounds: 4134.
- T4174 *Melissa officinalis* (Lamiaceae); XIANG FENG HUA; Bee Balm. Isolated compounds: 3767, 12420.
- T4175 *Melittis melissophyllum* (Lamiaceae); OU ZHOU MI FENG HUA; Balmleaf Metittis. Isolated compounds: 4626.
- T4176 *Melodinus balansae* (Apocynaceae); BEI SHI SHAN CHENG; Balansa Melodinus\*. Isolated compounds: 784.
- T4177 *Melodinus celastroides* (Apocynaceae); NAN SHE TENG ZHUANG



- SHAN CHENG; *Celastrus Melodinus*\*. Isolated compounds: 22499.
- T4178 *Melodinus hemsleyanus* (Apocynaceae); CHUAN SHAN CHENG; Hemsley Melodinus. Used part: root or fruit. TCM Effects: To fortify spleen, supplement blood, clear heat (root), free menstruation and promote lactation, stanch bleeding, resolve toxin (fruit). TCM Indications: Spleen-stomach vacuity, anemia and scant milk, mouth sore, tongue sores (root), menstrual disorder, galactostasis, bleeding from hemorrhoids, swelling toxin of welling abscess and sore, snake bite (fruit). Isolated compounds: 5099, 10093, 10824.
- T4179 *Melodinus tenuicaudatus* (Apocynaceae); BO YE SHAN CHENG; Thin-leaf Melodinus. Isolated compounds: 20933.
- T4180 *Melodorum fruticosum* (Annonaceae). Isolated compounds: 463, 2257, 2261, 2262, 13712.  
*Melodorum glaucescens* = *Fissistigma glaucescens*  
*Melodorum oldhamii* = *Fissistigma oldhamii*  
*Meniscium simplex* = *Pronephrium simplex*
- T4181 *Menispermum canadense* (Menispermaceae); MEI GUO BIAN FU GE; Canada Moonseed. Isolated compounds: 4685.
- T4182 *Menispermum dauricum* (Menispermaceae); BIAN FU GE; Asiatic Moonseed. Used part: rattan. TCM Effects: To clear heat and resolve toxin, disperse swelling and relieve pain. TCM Indications: Lumbago, scrofula, swelling pain in throat, diarrhea and dysentery, swelling pain from hemorrhoids. Isolated compounds: 603, 604, 2343, 2344, 2345, 4846, 6512, 6886, 19955.
- T4183 *Menispermum dauricum* (Menispermaceae); BIAN FU GE GEN; Asiatic Moonseed Root. Used part: rhizome. TCM Effects: To clear heat and resolve toxin, disperse swelling and relieve pain, disinhibit damp. TCM Indications: Swelling pain in throat, lung heat cough, epidemic parotitis, diarrhea, jaundice, wind-damp impediment pain, swelling pain from hemorrhoids, snake or insect bites. Isolated compounds: 602, 603, 604, 3494, 4100, 4101, 4685, 4686, 4687, 4688, 4689, 4690, 4691, 4692, 4693, 4847, 5077, 5581, 6260, 6268, 6574, 9825, 10428, 13716, 13717, 14251, 15802, 15803, 17968, 19187, 19955, 20324, 21206, 21255, 22159.  
*Mentha arvensis* = *Mentha haplocalyx*  
*Mentha arvensis* var. *haplocalyx* = *Mentha haplocalyx*  
*Mentha cablin* = *Pogostemon cablin*  
*Mentha canadaensis* = *Mentha haplocalyx*
- T4184 *Mentha haplocalyx* [Syn. *Mentha canadaensis*; *Mentha arvensis* var. *haplocalyx*; *Mentha arvensis*] (Lamiaceae); BO HE; Wild Mint. Used part: dried aerial parts. TCM Effects: To dissipate wind-heat, clear head and eyes, disinhibit pharynx and larynx, outthrust papules, resolve depression. TCM Indications: Chronic urticaria, infection of upper respiratory tract, sarcoma, wind-heat exterior syndrome, headache and red eyes, swelling pain in throat, non-eruption of measles, dormant papules with pruritus, liver depression and rib-side pain, abdominal distention. Isolated compounds: 139, 2444, 2445, 2887, 3045, 9515, 11533, 12420, 12843, 13774, 13775, 13776, 13779, 17376.
- T4185 *Mentha longifolia* (Lamiaceae); OU BO HE; Horse Mint. Isolated compounds: 7278, 9458, 12978, 12979, 12984.
- T4186 *Mentha piperita* (Lamiaceae); LA BO HE; Pepper Mint. Used part: leaf. TCM Effects: To course wind and dissipate heat, resolve toxin and dissipate binds. TCM Indications: Wind-heat common cold, headache, red eyes, sore pharynx, epidemic parotitis. Isolated compounds: 12420, 13779, 22768.
- T4187 *Mentha pulegium* (Lamiaceae); CHUN E BO HE; Pennyroyal Mint. Isolated compounds: 18190.
- T4188 *Mentha rotundifolia* (Lamiaceae); YU XIANG CAO; Apple Mint. Used part: whole herb. TCM Effects: To dispel wind, resolve toxin, harmonize stomach, moisten skin. TCM Indications: Common cold, eye diseases, stomachache, sore and boil, cracking. Isolated compounds: 3237, 6455, 15413, 15415, 15926, 17457, 18190, 18954, 19309.
- T4189 *Mentha* sp. (Lamiaceae). Isolated compounds: 12843, 13776.
- T4190 *Mentha spicata* (Lamiaceae); LIU LAN XIANG; Spearmint. Used part: whole herb. TCM Effects: To resolve exterior, harmonize center, rectify *qi*. TCM Indications: Common cold, cough, headache, sore pharynx, red eyes, nosebleed(epistaxis), stomachache, abdominal distention, cholera with vomiting and diarrhea, dysmenorrhea, numbness in limbs, painful swelling from knocks and falls, sore and boil, cracking. Isolated compounds: 3237.
- T4191 *Mentha* spp. (Lamiaceae). Isolated compounds: 17454, 18954.
- T4192 *Mentha sylvestris* (Lamiaceae); SEN LIN BO HE; Forest Mint. Isolated compounds: 17457.
- T4193 *Menyanthes* sp. (Gentianaceae). Isolated compounds: 5191.
- T4194 *Menyanthes trifoliata* (Gentianaceae); SHUI CAI; Bogbean. Used part: leaf or whole herb. TCM Effects: To fortify spleen and disperse food, nourish heart and quiet spirit, clear heat and disinhibit urine. TCM Indications: Gastritis, indigestion, palpitation and insomnia, damp-heat jaundice, cholecystitis, edema, inhibited urination, inhibited voidings of reddish urine. Isolated compounds: 2850, 4415, 4416, 5615, 7851, 8291, 8296, 8297, 9088, 12950, 12952, 13773, 19623, 20168.
- T4195 *Menyanthes trifoliata* (Gentianaceae); SHUI CAI GEN; Bogbean Root. Used part: rhizome. TCM Effects: To moisten lung and suppress cough, suppress cough, lower blood pressure. TCM Indications: Cough, edema, wind-damp pain, hypertension. Isolated compounds: 5615, 7851, 8299, 13773.
- T4196 *Mercurialis annua* (Euphorbiaceae); YI NIAN SHENG SHAN DIAN; Annual Mercury. Isolated compounds: 22975.
- T4197 *Merremia dissecta* (Convolvulaceae); SHEN LIE YU HUANG CAO; Deeplobed Merremia\*. Isolated compounds: 13784, 13785, 13786, 13787, 13788.
- T4198 *Merremia quinquefolia* (Convolvulaceae); WU YE YU HUANG CAO; Five-leaf Merremia\*. Isolated compounds: 14487.
- T4199 *Mesembryanthemum anatomicum* (Aizoaceae); MING SONG YE JU; Anatomicum Fig\*. Isolated compounds: 13796, 13797, 13798.
- T4200 *Mesembryanthemum edule* (Aizoaceae); SHI YONG RI ZHONG HUA; Hottentot Fig. Isolated compounds: 2320, 11252.
- T4201 *Mesembryanthemum expansum* (Aizoaceae); KUO ZHANG SONG YE JU; Expansum Fig\*. Isolated compounds: 13796, 13797, 13798.
- T4202 *Mesembryanthemum tortuosum* (Aizoaceae); NIU QU SONG YE JU; Tortuous Fig\*. Isolated compounds: 13796, 13797, 13798.  
*Mesogloea decipiens* = *Nemacystus decipiens*
- T4203 *Mesua ferrea* (Clusiaceae); TIE LI MU; Common Mesua. Used part: bark, flower and seed. TCM Effects: To relieve cough and dispel

- phlegm, resolve toxin and disperse swelling. TCM Indications: Cough with profuse phlegm, swelling of sore welling abscess and boil, bleeding from hemorrhoids, scalds, poisonous snake bite. Isolated compounds: 5642, 5643, 6011, 6018, 6019, 6020, 6021, 6181, 10241, 10507, 13467, 13469, 13470, 13804, 13805, 13806, 13807, 13808, 13809, 13810, 13811.
- T4204 *Mesua racemosa* (Clusiaceae); ZONG ZHUANG TIE LI MU; Racemose Mesua\*. Isolated compounds: 13471, 18514.
- T4205 *Mesua thwaitesii* (Clusiaceae). Isolated compounds: 6181, 13464.
- T4206 *Metaplexis japonica* (Asclepiadaceae); LUO MO; Japanese Metaplexis. Used part: whole herb or root. TCM Effects: To supplement essence and boost *qi*, free milk, resolve toxin. TCM Indications: Vacuity detriment and taxation damage, impotence, emission, vaginal discharge, scant breast milk, erysipelas, scrofula, clove sore, snake or insect bites. Isolated compounds: 2268, 4796, 5384, 8046, 11643, 12880, 13813, 16917, 19361, 22285.
- T4207 *Metaplexis japonica* (Asclepiadaceae); LUO MO ZI; Japanese Metaplexis Seed. Used part: seed. TCM Effects: To supplement kidney and boost essence, engender flesh and stanch bleeding. TCM Indications: Vacuity taxation, impotence, emission, incised wound and bleeding. Isolated compounds: 5527, 16034, 18528, 19375.
- T4208 *Metasequoia glyptostroboides* (Taxodiaceae); SHUI SHAN; Dawn Redwood. Used part: leaf and fruit. TCM Effects: To clear heat and resolve toxin, eliminate inflammation and relieve pain. TCM Indications: Swelling toxin of welling abscess and sore, lichen sore. Isolated compounds: 7751.
- T4209 *Michelia alba* (Magnoliaceae); BAI LAN HUA; Bailan Flower. Used part: flower. TCM Effects: To transform damp, move *qi*, relieve cough. TCM Indications: Oppression in chest and abdomen distention, summerheat stroke, cough, prostatitis, Vaginal discharge. Isolated compounds: 12917, 14827, 14829, 19183.
- T4210 *Michelia champaca* (Magnoliaceae); HUANG MIAN GUI; Champac Michelia. Used part: root. TCM Effects: To dispel wind-damp, disinhibit throat. TCM Indications: Wind-damp impediment pain, swelling pain in throat. Isolated compounds: 12917, 14829, 16675, 16713.
- T4211 *Michelia compressa* var. *formosana* (Magnoliaceae); WU XIN SHI; Formosan Michelia\*. Isolated compounds: 14828, 14829, 14830, 19308.
- T4212 *Michelia doltsopa* (Magnoliaceae); NAN YA HAN XIAO; South Asia Michelia. Isolated compounds: 4939.
- T4213 *Michelia lanuginosa* (Magnoliaceae); CHANG MAO HAN XIAO; Longhairy Michelia\*. Isolated compounds: 16675.
- T4214 *Michelia spaerantha* (Magnoliaceae); MAO GUO HAN XIAO; Hairyfruit Michelia. Isolated compounds: 20149.
- T4215 *Michelia yunnanensis* (Magnoliaceae); YUN NAN HAN XIAO; Yunnan Michelia. Used part: flower. TCM Effects: To clear heat and resolve toxin. TCM Indications: Pharyngolaryngitis, nasitis, conjunctivitis, brain leak. Isolated compounds: 5967, 9797, 16675, 18673.
- T4216 *Miconia* sp. (Malastomataceae). Isolated compounds: 17857.
- T4217 *Microcos paniculata* [Syn. *Grewia microcos*] (Tiliaceae); PO BU YE; Paniculate Microcos. Used part: leaf. TCM Effects: To clear heat and disinhibit damp, fortify stomach and disperse stagnation. TCM Indications: Common cold with fever, jaundice, inappetence, indigestion, distending pain in stomach duct and abdomen, diarrhea, sores, centipede bite. Isolated compounds: 14284.
- T4218 *Microglossa pyrifolia* (Asteraceae); XIAO SHE JU GEN; Pearleaf Microglossa Root. Isolated compounds: 149, 212, 270, 416, 417, 418, 419, 10057, 10813, 14117, 14118, 14119.
- T4219 *Microlepis marginata* (Dennstaedtiaceae); BIAN YUAN LIN GAI JUE; Marginate Microlepis. Used part: tender leaf. TCM Effects: To clear heat and resolve toxin, dispel wind and quicken network vessels. TCM Indications: Swollen sore of welling abscess and boil, wind-damp impediment pain, knocks and falls. Isolated compounds: 468, 469, 7999, 8000, 8001, 13561, 13562, 14838, 18698.
- T4220 *Microlepis strigosa* [Syn. *Trichomanes strigosa*] (Dennstaedtiaceae); CU MAO LIN GAI JUE; Strigose Microlepis. Used part: whole herb. TCM Effects: To clear heat and disinhibit damp. TCM Indications: Enteritis, influenza. Isolated compounds: 18098, 18142, 18150.
- T4221 *Micromelum falcatum* (Rutaceae); XIAO GAN; Falcate Micromelum. Used part: root or leaf. TCM Effects: To quicken blood and move *qi*, dissipate stasis and relieve pain. TCM Indications: Chest impediment, painful swelling from knocks and falls, fracture, sprain, wind-damp impediment pain, throat pain, poisonous snake bites. Isolated compounds: 5709, 5710, 5711, 17824, 22937.
- T4222 *Micromelum hirsutum* (Rutaceae); YIN MAO XIAO YUN MU; Hairy Micromelum\*. Isolated compounds: 7897, 7907, 12489, 14216, 14217, 14840, 14842.
- T4223 *Micromelum integerrimum* (Rutaceae); XIAO YUN MU; Entire Micromelum. Used part: root, bark and leaf. TCM Effects: To course wind and resolve exterior, warm center and move *qi*, dissipate stasis and disperse swelling. TCM Indications: Influenza, common cold with cough, stomachache, wind-damp impediment pain, painful swelling from knocks and falls, fracture. Isolated compounds: 14839, 19542.
- T4224 *Micromelum minutum* (Rutaceae); JI XIAO XIAO YUN XIANG MU; Minima Micromelum\*. Isolated compounds: 5552, 7149, 9998, 10244.
- T4225 *Microsorium punctatum* (Polypodiaceae); XING JUE; Punctated Microsorium\*. Used part: whole herb. TCM Effects: To clear heat and disinhibit damp, resolve toxin. TCM Indications: Strangury, inhibited urination, knocks and falls, dysentery. Isolated compounds: 14152, 14281.
- T4226 *Microtoena prainiana* (Lamiaceae); NAN CHUAN GUAN CHUN HUA; Prain Microtoena. Isolated compounds: 874, 1476, 1485, 4225, 7424, 9458, 11350, 12331, 13137, 13151, 14261, 14847, 14848, 14849, 16498, 19542.
- T4227 *Microula sikkimensis* (Boraginaceae); WEI KONG CAO; Sikkim Microula. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, quicken blood. Isolated compounds: 9913, 9914.
- T4228 *Mikania cordata* (Asteraceae); JIA ZE LAN; Heartshape Mikania. Isolated compounds: 14850.
- T4229 *Mikania mendocina* (Asteraceae); TAI PING YANG JIA ZE LAN; Pacific Mikania\*. Isolated compounds: 18293.
- T4230 *Mikania scandens* (Asteraceae); WEI GAN JU; Climbing Hempweed. Isolated compounds: 5678, 14850.
- T4231 *Milingtonia hortensis* (Bignoniaceae); TONG LUO HAN. Used part:

- bark or leaf. TCM Effects: To dispel wind and relieve itch, transform phlegm and relieve cough, expel roundworm. TCM Indications: Wind papule itching, cough and asthma with abundant phlegm, ascariasis. Isolated compounds: 18614, 18615, 18616, 18617.
- T4232 *Miliusa balansae* (Annonaceae). Isolated compounds: 2471, 3623, 14852, 14853, 16498.
- T4233 *Millettia auriculata* (Fabaceae); ER XING JI XUE TENG; Auriculate Millettia\*. Isolated compounds: 2014.
- T4234 *Millettia dielsiana* (Fabaceae); KUN MING JI XUE TENG; Diels Millettia. Used part: rattan. TCM Effects: To supplement blood and stanch bleeding, quicken blood and free network vessels. TCM Indications: Blood vacuity and general weakness, taxation damage and sinew bone pain, menstrual disorder, amenorrhea, postpartum abdominal pain, persistent flow of lochia, wind-damp impediment pain, bleeding, knocks and falls. Isolated compounds: 676, 3004, 10967, 11543, 11696, 14713, 15993, 16804.
- T4235 *Millettia erythrocalyx* (Fabaceae); HONG E JI XUE TENG; Redcalyx Millettia\*. Isolated compounds: 3334, 5221, 6242, 13934, 14361, 14363, 14376, 14855, 14856, 14857, 14858, 16274, 17707, 17713.
- T4236 *Millettia griffoniana* (Fabaceae). Isolated compounds: 9007, 9008, 9009.
- T4237 *Millettia laurentii* (Fabaceae). Isolated compounds: 12567, 12568.
- T4238 *Millettia nitida* (Fabaceae); LIANG YE YAN DOU TENG; Shiningleaf Millettia. Used part: rattan. TCM Effects: To supplement blood and quicken blood, soothe channels and quicken network vessels. TCM Indications: Blood vacuity, postpartum vacuity weakness, dizziness, menstrual disorder, wind-damp impediment pain, numbness in limbs. Isolated compounds: 6918.
- T4239 *Millettia nitida* var. *hirsutissima* (Fabaceae); FENG CHENG JI XUE TENG; Hirsute Millettia. Used part: root and lianoid stem. TCM Effects: To supplement blood and quicken blood, soothe sinews and quicken network vessels. TCM Indications: Blood vacuity and general weakness, menstrual disorder [=menoxenia], wind-damp impediment pain, poliomyelitis, knocks and falls. Isolated compounds: 7884, 9554, 9555, 9556.
- T4240 *Millettia pachycarpa* (Fabaceae); KU TAN ZI; Thickfruit Millettia. Used part: seed or fruit. TCM Effects: To attack toxin and relieve pain, disperse accumulation and kill worms. TCM Indications: Scab and lichen, sore *lai*, sand *qi* abdominal pain, child *gan* accumulation. Isolated compounds: 6496, 10680, 13088, 16489, 16490, 16491, 16492, 16493, 18939.
- T4241 *Millettia pervilleana* (Fabaceae). Isolated compounds: 17004, 17005.
- T4242 *Millettia racemosa* (Fabaceae); ZONG ZHUANG JI XUE TENG; Racemose Millettia\*. Isolated compounds: 15436.
- T4243 *Millettia reticulata* (Fabaceae); JI XUE TENG GEN; Leatherleaf Millettia Root. Used part: root. TCM Effects: To quiet spirit, calm. TCM Indications: Manic agitation schizophrenia. Isolated compounds: 18939.
- T4244 *Millettia stuhlmannii* (Fabaceae); SI TU JI XUE TENG; Stuhlmann Millettia\*. Isolated compounds: 18857.
- T4245 *Millettia thomningii* (Fabaceae). Isolated compounds: 5727, 10466, 14131, 21081, 21336.
- T4246 *Millettia usaramensis* ssp. *usaramensis* (Fabaceae). Isolated compounds: 2148, 4949, 5733, 6971, 8322, 22278, 22279.
- T4247 *Millingtonia hortensis* (Bignoniaceae); ZI MEI SHU; Garden Millingtonia. Used part: bark or leaf. TCM Effects: To dispel wind and relieve itch, resolve toxin and kill worms, suppress cough and transform phlegm. TCM Indications: Eczema, urticaria, ascariasis, cough of phlegm asthma, leptochroa. Isolated compounds: 266, 9564, 19582, 19584.
- T4248 *Mimosa pudica* (Fabaceae); HAN XIU CAO; Sensitive Plant. Used part: whole herb. TCM Effects: To cool blood and resolve toxin, clear heat and disinhibit damp, quiet spirit and calm. TCM Indications: Common cold, infant ardent fever, bronchitis, hepatitis, gastritis, enteritis, conjunctivitis, calculus of urinary system, edema, taxation damage hemoptysis, nosebleed(epistaxis), hematuria, neurasthenia, neurosis, insomnia, toxin swelling of sores, zoster, knocks and falls. Isolated compounds: 14868, 14869, 15708, 22122.
- T4249 *Mimosa* sp. (Fabaceae). Isolated compounds: 6533.
- T4250 *Mimosa tenuiflora* (Fabaceae); XI HUA HAN XIU CAO; Smallflower Mimosa\*. Isolated compounds: 20934, 20935, 20936.
- T4251 *Mimulus aurantiacus* (Scrophulariaceae); JU SE GOU SUAN JIANG; Orange Monkeyflower\*. Isolated compounds: 2007.
- T4252 *Mirabilis jalapa* (Nyctaginaceae); ZI MO LI GEN; Common Four-o'clock Root. Used part: root. TCM Effects: To clear heat and disinhibit damp, quicken blood and resolve toxin. TCM Indications: Heat strangury, white turbidity, edema, red and white vaginal discharge, swelling pain in joints, swelling toxin of welling abscess and sore, mammary welling abscess, knocks and falls. Isolated compounds: 11018, 13860, 14109, 14498, 14879, 14880, 14881, 14882, 22623.
- T4253 *Mirabilis jalapa* (Nyctaginaceae); ZI MO LI YE; Common Four-o'clock Leaf. Used part: leaf. TCM Effects: To clear heat and resolve toxin, dispel wind and percolate damp, quicken blood. TCM Indications: Welling abscess, boil, scab sore, lichen, wound. Isolated compounds: 21662.
- T4254 *Miscanthus sinensis* (Poaceae); MANG JING; Chinese Silvergrass. Used part: stem. TCM Effects: To dissipate blood, disinhibit urine, resolve heat toxin. TCM Indications: Inhibited urination, animal and insect bites. Isolated compounds: 14884, 18003, 21589.
- T4255 *Mitragyna africana* (Rubiaceae); FEI ZHOU MAO ZHU MU; African Mitragyna\*. Isolated compounds: 14108.
- T4256 *Mitragyna inermis* (Rubiaceae); WU CI MAO ZHU MU; Spineless Mitragyna\*. Isolated compounds: 11035, 11036, 18826.
- T4257 *Mitragyna macrophylla* (Rubiaceae); DA YE MAO ZHU MU; Abura Mitragyna. Isolated compounds: 14889.
- T4258 *Mitragyna speciosa* (Rubiaceae); MEI LI MAO ZHU MU; Beautiful Mitragyna\*. Isolated compounds: 10528, 14886, 16735, 20138, 20139.
- T4259 *Mnium cuspidatum* (Mniaceae); SHUI MU CAO; Cuspidate Mnium Herb. Used part: plant body. TCM Effects: To cool blood and stanch bleeding. TCM Indications: Nosebleed(epistaxis), blood ejection, hematochezia, flooding and spotting. Isolated compounds: 19331. *Moghania philippinensis* = *Flemingia philippinensis*
- T4260 *Moghania philippinensis* (Fabaceae); FEI LV BIN QIAN JIN BA; Philippine Flemingia. Used part: root. TCM Effects: To dispel wind

and eliminate damp, strengthen sinews and bones, quicken blood and resolve toxin. TCM Indications: Wind-damp impediment pain, taxation damage in lumbar muscle, wilting-weakness in limbs, knocks and falls, swelling pain in throat. Isolated compounds: 6305, 21098, 21717, 21718, 21796.

*Mollugo lotoides* = *Glinus lotoides*

- T4261 *Mollugo pentaphylla* (Aizoaceae); SU MI CAO; Fiveleaf Carpetweed. Used part: whole herb. TCM Effects: To clear heat and transform damp, resolve toxin and disperse swelling. TCM Indications: Abdominal pain and diarrhea, dysentery, common cold with cough, summerheat stroke, skin heat papules, red eyes with gall, swelling toxin of sore and boil, poisonous snake bite, burns and scalds. Isolated compounds: 14902, 14903, 14904, 14905.
- T4262 *Mollugo spargula* (Aizoaceae). Isolated compounds: 20142, 20143, 20144, 20145.
- T4263 *Momordica charantia* (Cucurbitaceae); KU GUA; Balsampear. Used part: fruit. TCM Effects: To dispel summerheat, brighten eyes, resolve toxin. TCM Indications: Summerheat-heat vexation and thirst, diabetes mellitus, painful red eyes, dysentery, swelling toxin of sore and welling abscess. Isolated compounds: 1046, 3774, 8078, 13212, 14907, 14908, 19987, 20346, 22466.
- T4264 *Momordica cochinchinensis* (Cucurbitaceae); MU BIE GEN; Cochinina Momordica Root. Used part: tuberoid. TCM Effects: To resolve toxin, disperse distention, relieve pain. TCM Indications: Welling abscess and toxin of clove, innominate toxin swelling, lymphnoditis. Isolated compounds: 2973, 4127.
- T4265 *Momordica cochinchinensis* (Cucurbitaceae); MU BIE ZI; Cochinina Momordica Seed. Used part: ripe seed. TCM Effects: To dissipate binds and disperse swelling, attack toxin and cure sores. TCM Indications: Swollen welling abscess, mammary welling abscess, scrofula, hemorrhoids and fistulas, dry lichen, bald sores. Isolated compounds: 14909, 16050.
- T4266 *Momordica dioica* (Cucurbitaceae); SHAN KU GUA; Mountain Balsampear. Isolated compounds: 8765.  
*Momordica grosvenorii* = *Siraitia grosvenorii*
- T4267 *Monachosorum flagellare* (Monachosoraceae); WEI YE XI ZI JUE; Tail-leaf Monachosorum. Used part: whole herb. TCM Effects: To dispel wind and eliminate damp, relieve pain. TCM Indications: Wind-damp impediment pain, pain wind. Isolated compounds: 14911, 14912, 14913, 15026, 18098.
- T4268 *Monachosorum henryi* (Monachosoraceae); XI ZI JUE; Henry's Monachosorum. Used part: whole herb. TCM Effects: To dispel wind and eliminate damp, relieve pain. TCM Indications: Wind-damp bone pain, painful wound from knocks and falls, mounting *qi*. Isolated compounds: 14911, 14912, 14913, 15026.
- T4269 *Monarda didyma* (Lamiaceae); MEI GUO BO HE; Oswegotea. Isolated compounds: 14914.
- T4270 *Monascus kaoliang* GAO LIANG HONG QU; Red Koji; Angkak. Isolated compounds: 14915, 14916.
- T4271 *Mondia whitei* MENG DI TENG. Isolated compounds: 3570.
- T4272 *Monimia* spp. Isolated compounds: 15751.
- T4273 *Monochaetum multiflorum* (Melastomataceae). Isolated compounds: 2286, 8104, 8114, 14921, 15643.

- T4274 *Monostroma nitidum* (Monostromaceae); JIAO MO. Used part: frond. TCM Effects: To clear heat and disinhibit water, transform phlegm and relieve cough. TCM Indications: Laryngitis, cough and abundant phlegm, edema, inhibited urination [=dysuria]. Isolated compounds: 9384.
- T4275 *Monotropa hypopitys* (Pyrolaceae); HUANG SHUI JING LAN; Yellow Bird's-nest. Used part: whole herb or root. TCM Effects: To suppress cough, supplement vacuity. TCM Indications: Spasmodic cough, trachitis, vacuity weakness, inhibited urination. Isolated compounds: 14933.
- T4276 *Monotropa uniflora* (Pyrolaceae); SHUI JING LAN; Indianpipe. Used part: root. TCM Effects: To supplement lung and relieve cough. TCM Indications: Lung vacuity cough. Isolated compounds: 14933.
- T4277 *Montanoa tomentosa* (Asteraceae). Isolated compounds: 23021.
- T4278 *Montrouzieria sphaeroidea* (Clusiaceae). Isolated compounds: 14947, 14948.
- T4279 *Morina chinensis* (Dipsacaceae); YUAN E CI XU DUAN; Chinese Morina. Used part: whole herb or seed. TCM Effects: To dispel wind-damp, supplement liver and kidney, disperse swollen welling abscess. TCM Indications: Wind-damp impediment pain, aching in lumbus and knees, dizziness, frequent urination, swelling and pain of sore and welling abscess. Isolated compounds: 14976, 14977.
- T4280 *Morinda citrifolia* (Rubiaceae); HAI BA JI; Indianmulberry. Used part: root. TCM Effects: To clear heat and resolve toxin. TCM Indications: Dysentery, tuberculosis. Isolated compounds: 899, 900, 1360, 1361, 1894, 4716, 6376, 9790, 14972, 14974, 14975, 15734.
- T4281 *Morinda coreia* (Rubiaceae); TAI GUO BA JI; Thailand Indianmulberry\*. Isolated compounds: 470, 507, 21923, 22926, 22927, 22928.
- T4282 *Morinda lucida* (Rubiaceae); GUANG ZE BA JI; Lucid Indianmulberry\*. Isolated compounds: 14144, 15734.
- T4283 *Morinda officinalis* (Rubiaceae); BA JI TIAN; Medicinal Indianmulberry. Used part: root. TCM Effects: To supplement kidney and invigorate *yang*, strengthen sinews and bones, eliminate wind-damp. TCM Indications: Neurasthenia, impotence and emission, cold pain in abdomen, urinary incontinence, vacuity cold of uterus, wind-cold-damp impediment, aching in lumbus and knees. Isolated compounds: 1893, 5818, 5961, 9791, 10193, 10467, 14933, 14973, 16014, 17247, 19983.
- T4284 *Morinda parvifolia* (Rubiaceae); BAI YAN TENG; Littleleaf Indianmulberry. Used part: whole plant. TCM Effects: To clear heat and relieve cough, harmonize stomach and transform damp, dissipate stasis and relieve pain. TCM Indications: Common cold with cough, pertussis, indigestion, eczema, knocks and falls, taxation damage in lumbar muscle. Isolated compounds: 5522, 10468, 13044.
- T4285 *Morinda tinctoria* (Rubiaceae); RAN SE JI YAN TENG; Dyed Morinda. Isolated compounds: 14974, 15734.
- T4286 *Morinda umbellata* (Rubiaceae); YANG JIAO TENG; Common Indianmulberry. Used part: root or bark. TCM Effects: To dispel wind-damp. TCM Indications: Swelling pain in joints, kidney vacuity lumbago. Isolated compounds: 899, 900, 901, 9792, 10467, 13041, 14002, 14144, 15076, 18224, 18998, 18999, 20369.
- T4287 *Morus alba* (Moraceae); SANG BAI PI; White Mulberry Root-bast.

- Used part: root cortex. TCM Effects: To drain lung and calm asthma, disinherit water and disperse edema. TCM Indications: Lung heat cough asthma, water-rheum collecting lung, distention fullness and rapid asthma, edema, beriberi, inhibited urination. Isolated compounds: 4517, 4518, 6002, 6003, 6004, 6914, 12379, 12380, 12381, 12382, 12383, 12384, 12387, 12388, 12389, 12393, 12394, 14951, 14952, 14965, 14971, 14995, 15038, 15039, 15040, 15045, 15047, 15048, 15049, 15050, 15051, 15812, 16445, 19255, 19256, 19257, 19259, 19260, 19261, 19262, 19263, 19264, 19265, 19266, 19267, 19268, 19269, 19270, 19271, 19542.
- T4288 *Morus alba* (Moraceae); SANG SHI; White Mulberry Fruit. Used part: spicate fruit. TCM Effects: To enrich *yin* and nourish blood, engender liquid, moisten intestines. TCM Indications: Dizzy head and vision due to insufficiency of liver-kidney and blood vacuity essence depletion, aching lumbus and tinnitus, premature graying in beard and hair, insomnia and frequent dreaming, fluid damage and thirst, diabetes mellitus, intestinal dry and constipation. Isolated compounds: 6052, 6053, 6054, 14989, 14990, 14991, 14992, 14993, 14994, 21815, 21816.
- T4289 *Morus alba* (Moraceae); SANG YE; White Mulberry Leaf. Equivalent plant: *Morus mongolica*, *Morus australis*, *Morus cathayana*. Used part: leaf. TCM Effects: To course wind and dissipate heat, clear lung and moisten dryness, clear liver and brighten eyes. TCM Indications: Wind-heat common cold, lung heat dry cough, dizziness and headache, red eyes and clouded vision. Isolated compounds: 617, 844, 846, 1935, 2276, 3040, 3551, 4232, 4337, 5789, 6002, 6003, 6004, 6679, 7521, 7852, 7853, 9021, 9942, 9943, 9944, 9945, 11067, 11085, 11290, 11642, 11754, 12385, 12386, 13098, 13296, 14718, 14953, 14954, 14955, 14956, 14957, 14958, 14959, 14960, 14971, 14995, 15039, 16532, 16884, 18317, 18834, 18918, 19087, 19542, 19545, 19987, 20003, 21662, 22554.
- T4290 *Morus alba* (Moraceae); SANG ZHI; White Mulberry Branch. Used part: young twig. TCM Effects: To dispel wind-damp, disinherit joints, lower blood pressure, disinherit urine. TCM Indications: Hypertension, aching pain in joints, numbness in joints. Isolated compounds: 863, 1764, 3010, 4337, 4517, 4518, 5198, 5475, 5679, 7705, 8052, 13296, 14290, 14971, 14995, 15038, 17841.
- T4291 *Morus australis* (Moraceae); AO DA LI YA SANG; Japanese Mulberry. Used part: leaf. TCM Effects: See *Morus alba*. TCM Indications: See *Morus alba*. Isolated compounds: 15038.
- T4292 *Morus bombycis* (Moraceae); CAN SANG; Silk Mulberry\*. Isolated compounds: 3453, 12377, 15041.
- T4293 *Morus cathayana* (Moraceae); HUA SANG; Chinese Mulberry. Used part: leaf. TCM Effects: See *Morus alba*. TCM Indications: See *Morus alba*. Isolated compounds: 3324, 3325, 15053, 19252, 19255, 19256, 19257, 19258, 19259, 19268, 19270.
- T4294 *Morus insignis* (Moraceae). Isolated compounds: 14984, 14985, 14986, 14987, 14988.
- T4295 *Morus laevigata* (Moraceae); PING HUA SANG; Smooth Mulberry\*. Isolated compounds: 13085.
- T4296 *Morus lhou* (Moraceae). Isolated compounds: 847, 15043, 15044, 15052, 15058.
- T4297 *Morus macroura* (Moraceae); NAI SANG; Long-tail Mulberry\*. Isolated compounds: 845, 9053, 9054, 9055, 9056, 9057, 9058, 9059, 9060, 9061, 9062, 9063, 9064, 9065, 9066, 12390, 12391, 12392, 15044, 15045.
- T4298 *Morus mongolica* (Moraceae); MENG SANG; Mongolian Mulberry. Used part: leaf. TCM Effects: See *Morus alba*. TCM Indications: See *Morus alba*. Isolated compounds: 1956, 12378, 12385, 12386, 14995, 15038, 15040, 15042, 15046, 15054, 15055, 15056, 15057, 19253, 19254, 19262, 19272.
- T4299 *Morus serrata* (Moraceae); JU CHI SANG; Serrate Mulberry\*. Isolated compounds: 14971.
- T4300 *Morus* sp. (Moraceae). Isolated compounds: 2018, 3010, 3011, 4234, 4343, 5700, 8053, 8614, 11894, 13851, 14983, 18919, 19265, 20003.
- T4301 *Morus* spp. (Moraceae). Isolated compounds: 16445.
- T4302 *Morus tinctoria* (Moraceae); RAN SE SANG; Tinctorial Mulberry\*. Isolated compounds: 14971.
- T4303 *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus* (Cervidae); SHE XIANG; Abelmusk. Used part: dried secretion obtained from musk gland of musk deer. TCM Effects: To open orifices and arouse spirit, quicken blood and dissipate binds, disperse swelling and relieve pain. TCM Indications: Angina pectoris, cerebral thrombosis, vascular migraine, carcinoma, febrile diseases clouded spirit, wind stroke with phlegm reversal, *qi* depression and fulminant reversal, malignity stroke stupor, amenorrhea due to blood stasis, concretion conglomeration accumulation and gathering, sudden pain in heart and abdomen, knocks and falls, wound, impediment pain numbness, malign sore with welling abscess and flat abscess, throat impediment, mouth sore, *gan* of teeth and gum, otitis media. Isolated compounds: 917, 1163, 1164, 1165, 1166, 1167, 1168, 1169, 1170, 3578, 3585, 4524, 4537, 4538, 4831, 7383, 7384, 9780, 9781, 9782, 9783, 10532, 10533, 14276, 15127, 15128, 15129, 15130, 15682, 15778, 21022, 22247, 22248.
- T4304 *Mosla chinensis* [Syn. *Orthodon chinensis*] (Lamiaceae); SHI XIANG RU; Chinese Orthodon. Used part: whole herb. TCM Effects: To effuse sweat and resolve summerheat, transform damp and harmonize center, move water and disperse swelling. TCM Indications: Summer externally contracted wind-cold, headache without sweating, pain in stomach duct and abdomen, vomiting and diarrhea, inhibited urination, edema. Isolated compounds: 2550, 3231, 3232, 7521, 9669, 10025, 21360.
- T4305 *Mosla dianthera* (Lamiaceae); DA YE XIANG RU; Twoanther Mosla. Used part: whole herb. TCM Effects: To effuse exterior and dispel summerheat, disinherit damp and harmonize center, stanch bleeding and disperse swelling, dissipate wind and relieve itch. TCM Indications: Wind-cold common cold, *yin* summerheat and headache, nausea, pain in stomach duct, white dysentery, edema, spontaneous external bleeding, bleeding from hemorrhoids, sore and boil, pudendal itch, eczema, bleeding due to external injury, snake or insect bites. Isolated compounds: 2412, 4550, 6193, 6482, 9669, 12843, 20988.
- T4306 *Mosla grosseserrata* (Lamiaceae); JI NING; Largeserrate Mosla. Used part: stem-leaf. TCM Effects: To disinherit water and disperse edema, harmonize stomach and inhibit acid. TCM Indications: Diarrhea and dysentery due to cold *qi*, hyperchlorhydria. Isolated compounds: 2412, 9669.

*Mosla punctata* = *Mosla scabra*

- T4307 *Mosla scabra* [Syn. *Mosla punctata*] (Lamiaceae); SHI JI NING; Scabrous Mosla. Used part: whole herb. TCM Effects: To course wind and resolve exterior, clear summerheat and eliminate damp, resolve toxin and relieve itch. TCM Indications: Common cold with headache, cough, summerheat stroke, eczema, enteritis, dysentery, bleeding from hemorrhoids, flooding, prickly heat, wind papules, foot lichen, snake or insect bites. Isolated compounds: 1148, 1835, 2849, 9669, 11552, 13391, 15000, 15001, 15926, 21350.
- T4308 *Mucuna birdwoodiana* (Fabaceae); BAI HUA YOU MA TENG; Whiteflower Mucuna. Used part: rattan. TCM Effects: To supplement blood and quicken blood, free channels and quicken network vessels. TCM Indications: blood vacuity, septicemia, menstrual disorder, numbness and paralysis, aching in lumbus and legs. Isolated compounds: 6558, 7788.
- T4309 *Mucuna cochinchinensis* (Fabaceae); MAO DOU; Cochinchina Mucuna\*. Isolated compounds: 6558.
- T4310 *Mucuna pruriens* (Fabaceae); CI YANG LI DOU; Cowage Velvet-bean. Isolated compounds: 3169, 3170, 6418, 6420, 10818, 19760.
- T4311 *Mucuna sempervirens* (Fabaceae); CHANG CHUN YOU MA TENG; Evergreen Mucuna. Used part: stem. TCM Effects: To quicken blood and regulate menstruation, supplement blood and soothe sinews. TCM Indications: Menstrual disorder, dysmenorrhea, amenorrhea, postpartum anemia, blood vacuity, wind-damp impediment pain, numbness in limbs, knocks and falls. Isolated compounds: 6558.
- T4312 *Muehlenbeckia* spp. (Polygonaceae). Isolated compounds: 3615.
- T4313 *Mulinum spinosum* (Lamiaceae); DUO CI LUO CAO; Argentin *Mulinum spinosum*. Isolated compounds: 15060, 15061.  
*Munchausia speciosa* = *Lagerstroemia speciosa*
- T4314 *Muntingia calabura* YA MAI JIA YING TAO; Jamaica Cherry\*. Isolated compounds: 1401, 1406, 1407, 1414, 1419, 11504, 16864, 21918.
- T4315 *Muricella sinensis* (Gorgonidae); ZHONG HUA XIAO JIAN LIU SHAN HU; Gorgonian *Muricella sinensis*. Isolated compounds: 2975.
- T4316 *Murraya cremulata* (Rutaceae); TAI WAN JIU LI XIANG; Taiwan Common Jasminorange. Isolated compounds: 15117.
- T4317 *Murraya euchrestifolia* [Syn. *Clausena euchrestifolia*] (Rutaceae); DOU YE JIU LI XIANG; Euchretaleaf Common Jasminorange. Used part: branch-leaf. TCM Effects: To course wind and resolve exterior, quicken blood and dissipate stasis, disperse swelling and relieve pain. TCM Indications: Common cold, cough, headache, knocks and falls, wind-damp bone pain. Isolated compounds: 13397, 13398, 15117, 15118.
- T4318 *Murraya exotica* (Rutaceae); ZHONG HUA JIU LI XIANG; Chinese Common Jasminorange. Isolated compounds: 2485, 13398, 14824, 14825, 15105, 16260.
- T4319 *Murraya koenigii* (Rutaceae); YIN DU JIU LI XIANG; Indian Common Jasminorange. Isolated compounds: 2480, 8456, 9419, 10104, 11520, 11690, 12247, 12248, 12249, 12250, 13398, 13399, 15113, 15118, 15119, 16442.
- T4320 *Murraya kwangsiensis* (Rutaceae); GUANG XI JIU LI XIANG; Kwangsi Jasminorange. Used part: branch-leaf. TCM Effects: To course wind and resolve exterior, quicken blood and disperse swelling. TCM Indications: Common cold, measles papules, knocks and falls, keratitis, fracture. Isolated compounds: 12396.
- T4321 *Murraya microphylla* (Rutaceae); NEN YE JIU LI XIANG; Juvenileleaf Common Jasminorange. Isolated compounds: 8456.
- T4322 *Murraya omphalocarpa* (Rutaceae); QI GUO JIU LI XIANG; Omphalo-fruit Common Jasminorange\*. Isolated compounds: 6266, 15103, 15104, 15107, 15120, 16094, 16095.
- T4323 *Murraya paniculata* [Syn. *Chalcas paniculata*] (Rutaceae); JIU LI XIANG; Common Jasminorange. Equivalent plant: *Murraya paniculata* var. *exotica*. Used part: leaf and branchlet. TCM Effects: To move *qi* and quicken blood, dissipate stasis and relieve pain, resolve toxin and disperse swelling, anesthetize and settle pain. TCM Indications: Pain in stomach duct, wind-damp impediment pain, painful swelling from knocks and falls, sore and welling abscess, snake or insect bites, local anesthesia. Isolated compounds: 570, 859, 1763, 2137, 2354, 2355, 3194, 3241, 3242, 3768, 4193, 4515, 5057, 5089, 5556, 6265, 6266, 7521, 7696, 7697, 8312, 9193, 9403, 9404, 9405, 9406, 9509, 9511, 10928, 11001, 11534, 11536, 12843, 13397, 13781, 13930, 14142, 14718, 14718, 14825, 14841, 15100, 15101, 15102, 15104, 15108, 15109, 15110, 15118, 15121, 15122, 15707, 15935, 16259, 16261, 16605, 16606, 16615, 16617, 16930, 16935, 17051, 17376, 17377, 18190, 19542, 19545, 19694, 19929, 20002, 22615, 22937.
- T4324 *Murraya paniculata* [Syn. *Chalcas paniculata*] (Rutaceae); JIU LI XIANG GEN; Common Jasminorange Root. Used part: root. TCM Effects: To dispel wind and eliminate damp, move *qi* and relieve pain, free network vessels and dissipate stasis. TCM Indications: Wind-damp impediment pain, cold pain in lumbus and knees, pain wind, knocks and falls, painful swollen testes, eczema, scab and lichen. Isolated compounds: 10162, 16612, 16613, 16614, 16871, 22937.
- T4325 *Murraya paniculata* var. *exotica* (Rutaceae); XIAO YE JIU LI XIANG; Littleleaf Common Jasminorange. Used part: leaf and branchlet. TCM Effects: See *Murraya paniculata*. TCM Indications: See *Murraya paniculata*. Isolated compounds: 11520, 11549, 11550, 13397, 13398, 13399, 13780, 13781, 13923, 13958, 13996, 14824, 14874, 15100, 15106, 15111, 15112, 16969, 16975.
- T4326 *Murraya paniculata* var. *omphalocarpa* (Rutaceae); QI GUO QIAN LI XIANG; Omphalo-fruit Jasminorange\*. Isolated compounds: 14825, 16096.
- T4327 *Murraya siamensis* (Rutaceae); YUAN DONG JIU LI XIANG; Siamense Common Jasminorange. Isolated compounds: 3937, 5796, 8324, 8456, 10126, 13846, 15114, 15115, 15116, 15118.
- T4328 *Murraya* spp. (Rutaceae). Isolated compounds: 17051.
- T4329 *Musa acuminata* (Musaceae); XIAO GUO YE JIAO; Acuminate Banana. Isolated compounds: 6823, 6866, 6924, 8099, 17897, 21837.
- T4330 *Musa paradisiaca* (Musaceae); FEN BA JIAO; Plantain Banana. Isolated compounds: 19198.
- T4331 *Musa paradisiaca* var. *sapientum* [Syn. *Musa sapientum*] (Musaceae); XIANG JIAO; Common Banana. Used part: fruit. TCM Effects: To clear heat, moisten lung, lubricate intestines, resolve toxin. TCM Indications: Febrile diseases with vexation and thirst, lung heat dry cough, constipation, hemorrhoids. Isolated compounds: 653, 6559, 9568, 15708, 19760.

*Musa sapientum* = *Musa paradisiaca* var. *sapientum*

- T4332 *Musa x paradisiaca* cultivar (Musaceae); FEN BA JIAO ZA JIAO ZHONG ZHI BIAN ZHONG; Plantain Banana Cultivariety\*. Isolated compounds: 1393, 1434, 1435, 2468.
- T4333 *Muscari paradoxum* (Liliaceae); QI YI PU TAO FENG XIN ZI; Paradoxy Grape-hyacinth\*. Isolated compounds: 1507, 1508, 7130, 7131, 7132, 7138, 7139, 7140, 12481, 13058, 13059, 13060, 19521, 19522, 19523.
- T4334 *Mussaenda hirsutissim* (Rubiaceae); YU YE JIN HUA; Mussaenda\*. Isolated compounds: 3432.
- T4335 *Mussaenda pubescens* (Rubiaceae); SHAN GAN CAO; Buddha's Lamp. Used part: stem-leaf. TCM Effects: To resolve exterior, clear summerheat, disinhibit damp, resolve toxin, quicken blood. TCM Indications: Common cold, summerheat stroke, fever, cough, swelling pain in throat, summerheat-damp diarrhea, dysentery, swelling and pus of sores, knocks and falls, snake bite. Isolated compounds: 1736, 20369.
- T4336 *Mycena dendrobii* (Tricholomataceae); SHI HU XIAO GU; Dendrob Mycena. Isolated compounds: 7093.
- T4337 *Mycobacterium phlei*. Isolated compounds: 17263.
- T4338 *Mylabris phalerata*; *Mylabris cichorii* (Meloidea); BAN MAO; Blister Beetle. Used part: dried body. TCM Effects: To break blood and disperse concretion, attack toxin and cure sores. TCM Indications: Concretion and conglomeration, intractable lichen, scrofula, wart, non-opened welling abscess and flat abscess, malign sore. Isolated compounds: 1050, 1051, 3094, 6341.
- T4339 *Mylia nuda* (Jungermanniaceae); LUO XIAO E TAI. Isolated compounds: 1755, 1756, 1757, 6840, 9039, 9040, 15143, 15144, 20886, 20887, 20888, 20889, 20890.
- T4340 *Mylia taylorii* (Jungermanniaceae); XIAO E TAI. Isolated compounds: 1755, 1756, 1757, 6840, 9039, 9040, 15143, 15144, 20886, 20887, 20888, 20889, 20890.
- T4341 *Myoporium* sp. (Myoporaceae). Isolated compounds: 11143.
- T4342 *Myrica arborea* (Myricaceae); QIAO MU ZHUANG YANG MEI; Arboreous Bayberry\*. Isolated compounds: 15167, 22837.
- T4343 *Myrica esculent* (Myricaceae); MAO YANG MEI; Hairy Bayberry. Used part: bark. TCM Effects: To astringe intestines and check diarrhea, stanch bleeding, relieve pain. TCM Indications: Diarrhea, dysentery, flooding and spotting, stomachache. Isolated compounds: 6923.
- T4344 *Myrica gale* (Myricaceae); XIANG YANG MEI; Bog-myrtle. Isolated compounds: 11966, 15187.
- T4345 *Myrica multiflora* (Myricaceae); DUO HUA YANG MEI; Manyflower Bayberry\*. Isolated compounds: 15147, 15148, 15149, 15150, 15151.
- T4346 *Myrica nagi* [Syn. *Podocarpus nagi*] (Podocarpaceae); ZHU BAI; Nagai Podocarpus. Used part: leaf. TCM Effects: To stanch bleeding and joint bones. TCM Indications: Bleeding due to external injury, fracture. Isolated compounds: 6853, 15170, 15229, 15230, 15231, 15232, 22615.
- T4347 *Myrica nagi* [Syn. *Podocarpus nagi*] (Podocarpaceae); ZHU BAI GEN; Nagai Podocarpus Root. Used part: root or bark. TCM Effects: To dispel wind and eliminate damp. TCM Indications: Wind-damp impediment pain. Isolated compounds: 15235, 15236, 15237, 21474.
- T4348 *Myrica rubra* (Myricaceae); YANG MEI; Chinese Waxmyrtle. Used part: fruit. TCM Effects: To engender liquid and allay thirst, harmonize stomach and disperse food. TCM Indications: Vexation and thirst, vomiting and diarrhea, dysentery, abdominal pain. Isolated compounds: 1110, 1113, 11085, 13098, 15170, 15184.
- T4349 *Myrica rubra* (Myricaceae); YANG MEI SHU PI; Chinese Waxmyrtle Bark. Used part: bark. TCM Effects: To rectify *qi* and dissipate stasis, eliminate damp, relieve pain. TCM Indications: Dysentery, knocks and falls, eye screen, toothache, burns and scalds, malign scab and *lai* sore. Isolated compounds: 530, 984, 3084, 6059, 6251, 6921, 8095, 10129, 15154, 15155, 15156, 15157, 15158, 15159, 15160, 15161, 15162, 15163, 15164, 15165, 15166, 15168, 15170, 15184, 17900, 18411, 18413, 18818, 19983, 20711, 22270, 22272.
- T4350 *Myriopterion extensum* (Asclepiadaceae); CHI GUO TENG; Extended Wingfruitvine. Used part: whole herb. TCM Effects: To boost lung and relieve cough. TCM Indications: Phthisis, cough. Isolated compounds: 7698, 7699.
- T4351 *Myristica fragrans* (Myristicaceae); ROU DOU KOU; Common Nutmeg. Used part: kernel. TCM Effects: To warm center and move *qi*, astringe intestines and check diarrhea. TCM Indications: Spleen-stomach vacuity cold, incessant chronic diarrhea, distending pain in stomach duct, reduced food intake with vomiting. Isolated compounds: 2559, 7521, 7523, 7933, 11408, 11421, 12749, 12750, 14531, 15203, 15204, 17376, 17453, 19121, 21980.
- T4352 *Myristica malabarica* (Myristicaceae); MENG MAI ROU DOU KOU; Bombay Nutmeg\*. Isolated compounds: 2384, 5822, 6243, 10447, 18001.
- T4353 *Myristica otoba* (Myristicaceae); AO TUO ROU DOU KOU; Otoba Nutmeg\*. Isolated compounds: 16267.
- T4354 *Myristica simiarum* (Myristicaceae); FEI LV BIN ROU DOU KOU; Antao Nutmeg. Isolated compounds: 16267.  
*Myristica surinamensis* = *Virola surinamensis*
- T4355 *Myrothecium roridum*. Isolated compounds: 21559.
- T4356 *Myrothecium* sp. Isolated compounds: 4520, 15206, 15207, 16897, 21558.
- T4357 *Myrothecium verrucaria*. Isolated compounds: 22420.
- T4358 *Myroxylon pereirae* (Fabaceae); BI LU XIANG JIAO; Peru Balmtree Resin. Used part: balsam. TCM Effects: To relieve cough and dispel phlegm, resolve toxin and kill worms. TCM Indications: Scab sore, copper coin lichen. Isolated compounds: 2280, 2282, 3695, 15500, 15500.
- T4359 *Myroxylon* spp. (Fabaceae). Isolated compounds: 3004, 12908.
- T4360 *Myrrhis odorata* (Apiaceae); OU ZHOU MO YAO; Sweet Cicely. Isolated compounds: 17028.
- T4361 *Myrsine africana* (Myrsinaceae); TIE ZI; African Myrsine. Used part: root or herb. TCM Effects: To dispel wind and relieve pain, clear heat and disinhibit damp, promote contraction and stanch bleeding. TCM Indications: Wind-damp impediment pain, toothache, diarrhea, dysentery, flooding, hematochezia, tuberculosis and hemoptysis. Isolated compounds: 6767, 6776, 14140, 14809, 15782, 17858, 18410.
- T4362 *Myrsine capitellata* (Myrsinaceae); XIAO TOU TIE ZI; Capitellate Myrsine\*. Isolated compounds: 6767.
- T4363 *Myrsine seguinii* (Myrsinaceae). Isolated compounds: 15210, 15211,

15212, 15213, 15214, 19670, 19671, 19672, 19673, 19674.

- T4364 *Myrsine semiserrata* (Myrsinaceae); CHI YE TIE ZI; Serrate-leaf Myrsine. Used part: fruit. TCM Effects: To expel worms. TCM Indications: Taeniasis. Isolated compounds: 6767.
- T4365 *Myrsine* sp. (Myrsinaceae). Isolated compounds: 18546.  
*Myrtus cumini* = *Eugenia jambolana*
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- T4366 *Naematoloma fasciculare* (Strophariaceae); CU SHENG HUANG REN SAN; Sulfur Tuft. Used part: sporocarp. TCM Effects: Anticarcinoma. Isolated compounds: 7737, 7738.
- T4367 *Naematoloma sublateritium* (Strophariaceae); ZHUAN HONG REN SAN; Brick Tops. Used part: sporocarp. TCM Effects: Anticarcinoma. Isolated compounds: 20441, 20442, 20443.
- T4368 *Nandina domestica* (Berberidaceae); NAN TIAN ZHU GEN; Common Nandina Root. Used part: root. TCM Effects: To clear heat, relieve cough, eliminate damp, resolve toxin. TCM Indications: Lung heat cough, damp-heat jaundice, diarrhea, wind-damp impediment pain, sore, scrofula. Isolated compounds: 6552, 14332, 15243, 15245.
- T4369 *Nandina domestica* (Berberidaceae); NAN TIAN ZHU GENG; Common Nandina Stem. Used part: branchlet. TCM Effects: To clear damp heat, downbear counterflow *qi*. TCM Indications: Damp-heat jaundice, diarrhea, heat strangury, red eyes with gall, cough and asthma, *ge* syndrome. Isolated compounds: 6552, 14332, 15243, 15779, 21252.
- T4370 *Nandina domestica* (Berberidaceae); NAN TIAN ZHU YE; Common Nandina Leaf. Used part: leaf. TCM Effects: To clear heat and disinherit damp, drain fire, resolve toxin. TCM Indications: Lung heat cough, pertussis, heat strangury, hematuria, red eyes with gall, sore and welling abscess, scrofula. Isolated compounds: 6835, 15244, 15247, 15248.
- T4371 *Nandina domestica* (Berberidaceae); NAN TIAN ZHU ZI; Common Nandina Fruit. Used part: ripe fruit. TCM Effects: To constrain lung and relieve cough, calm asthma. TCM Indications: Enduring cough, asthma, pertussis. Isolated compounds: 2978, 6552, 8756, 11344, 13716, 14332, 15245, 15779, 17983.
- T4372 *Nannoglottis ravida* (Asteraceae); QIAN HUI MAO GUAN JU; Greyish Nannoglottis\*. Isolated compounds: 18559, 18560.
- T4373 *Narcissus angustifolius* (Amaryllidaceae); WU KE LAN XIA YE SHUI XIAN; Ukrainian Narrowleaf Narcissus\*. Isolated compounds: 15246.
- T4374 *Narcissus bujei* (Amaryllidaceae); YI BI LI YA SHUI XIAN; Iberian Narcissus\*. Isolated compounds: 406, 2733.
- T4375 *Narcissus leonensis* (Amaryllidaceae); SAI LA LI ANG SHUI XIAN. Isolated compounds: 15750.
- T4376 *Narcissus nivalis* (Amaryllidaceae); XUE SHENG SHUI XIAN. Isolated compounds: 15750.
- T4377 *Narcissus papyraceus* (Amaryllidaceae); BAI SHUI XIAN; Paper-white Narcissus. Isolated compounds: 8083, 13236.
- T4378 *Narcissus poeticus* (Amaryllidaceae); HONG KOU SHUI XIAN; Poets Narcissus. Isolated compounds: 9612, 17479.
- T4379 *Narcissus pseudonarcissus* (Amaryllidaceae); HUANG SHUI XIAN; Daffodil. Isolated compounds: 13239.
- T4380 *Narcissus pseudonarcissus* ssp. *pseudonarcissus* (Amaryllidaceae); JIA SHUI XIAN; False Narcissus\*. Isolated compounds: 15750.
- T4381 *Narcissus* sp. (Amaryllidaceae). Isolated compounds: 3693, 7821.
- T4382 *Narcissus* spp. (Amaryllidaceae). Isolated compounds: 17573.
- T4383 *Narcissus tazetta* (Amaryllidaceae); DUO HUA SHUI XIAN; Polyanthus Narcissus. Isolated compounds: 17850, 20891.
- T4384 *Narcissus tazetta* var. *chinensis* (Amaryllidaceae); SHUI XIAN GEN; Chinese Narcissus Bulb. Used part: bulb. TCM Effects: To clear heat and resolve toxin, dissipate stasis and disperse swelling. TCM Indications: Swelling toxin of sore and welling abscess, insect bites, fish bone stuck in throat. Isolated compounds: 8083, 13236, 13241, 16634, 17850, 18050, 20891.
- T4385 *Narcissus tazetta* var. *chinensis* (Amaryllidaceae); SHUI XIAN HUA; Chinese Narcissus Flower. Used part: flower. TCM Effects: To clear heart and quiet spirit, rectify *qi* and regulate menstruation, resolve toxin and repel foulness. TCM Indications: Fatigued spirit and dizziness, menstrual disorder, dysentery, swelling of sores. Isolated compounds: 2222, 2273, 3696, 3768, 7521, 11025, 13241, 15265, 17111, 17132, 18050.
- T4386 *Nardostachys chinensis* (Valerianaceae); GAN SONG; Chinese Nardostachys. Equivalent plant: *Nardostachys jatamansi*. Used part: root and rhizome. TCM Effects: To rectify *qi* and relieve pain, harmonize stomach and arouse spleen. TCM Indications: Stomachache, distention fullness in chest and abdomen, headache, hysteria, beriberi. Isolated compounds: 1191, 1701, 1704, 1706, 1707, 2943, 2944, 3194, 4815, 7514, 9483, 11553, 11754, 11834, 11835, 12132, 12133, 12134, 12135, 12136, 15264, 15269, 15270, 15271, 15272, 15273, 15274, 15275, 15276, 15277, 16213, 16707, 16711, 21048, 22313.
- T4387 *Nardostachys jatamansi* (Valerianaceae); SHI YE GAN SONG; Spoonleaf Nardostachys. Used part: root and rhizome. TCM Effects: See *Nardostachys chinensis*. TCM Indications: See *Nardostachys chinensis*. Isolated compounds: 11833, 11834, 11835, 13283, 16707, 16711, 19792, 19793.
- T4388 *Nasturtium officinale* (Brassicaceae); DOU BAN CAI; Watercress. Used part: whole herb. TCM Effects: To clear lung, cool blood, resolve toxin, disinherit urine. TCM Indications: Lung heat dry cough, scurvy, infection of urinary system, painful swelling from clove sore, itchy skin. Isolated compounds: 8599, 14760, 14761, 17131.
- T4389 *Nauclea diderrichii* (Rubiaceae); DI SHI WU TAN; Diderrichi Fatheadtree\*. Isolated compounds: 3157, 3158, 5272, 5273, 15297, 15300, 15301, 15309, 15314.
- T4390 *Nauclea latifolia* (Rubiaceae); KUAN YE WU TAN; Broadleaf Fatheadtree\*. Isolated compounds: 3184, 4840, 5540, 5541, 5542, 6973, 9788, 10733, 13874, 13876, 15292, 15293, 15294, 15295, 15296, 15297, 15305, 15313, 15315, 15316, 20390.
- T4391 *Nauclea officinalis* (Rubiaceae); DAN MU; Medicinal Fatheadtree. Used part: Branch and bark. TCM Effects: To clear heat and resolve toxin, disperse swelling and relieve pain. TCM Indications: Acute tonsillitis, pharyngolaryngitis, mastitis, enteritis, bacillary dysentery, urinary tract infection, cholecystitis, ulcer of lower limb, infection due to foot lichen, swollen boil with pus and ulcer, dermatitis, eczema. Isolated compounds: 15298, 15299, 15302, 15303, 15304, 15306, 15307, 22493.



- T4392 *Nauclea orientalis* (Rubiaceae); DONG FANG WU TAN; Oriental Fatheadtree\*. Isolated compounds: 515, 3186, 10733, 15290, 15291, 15310, 15311, 18199, 19983, 19987, 20390, 21923, 22496.  
*Nauclea pilosa* = *Uncaria scandens*
- T4393 *Nauclea pobequini* (Rubiaceae); BO SHI WU TAN; pobequini Fatheadtree\*. Isolated compounds: 15308, 15312.  
*Nauclea rhynchophylla* = *Uncaria rhynchophylla*  
*Nauclea sessilifolia* = *Neonauclea sessilifolia*  
*Nauclea sessilifructus* = *Uncaria sessilifructus*
- T4394 *Navicula delognei* f. *elliptica* (Naviculaceae); TUO YUAN ZHOU XING ZAO; Ellipse Navicula\*. Isolated compounds: 17272.
- T4395 *Necturus maculosus* (Salamandridae); BAN YUAN; Mudpuppy. Isolated compounds: 19223.
- T4396 *Nelumbo lutea* (Nymphaeaceae); JIN HUANG LIAN; American Lotus. Isolated compounds: 15781.
- T4397 *Nelumbo nucifera* (Nymphaeaceae); HE GENG; Hindu Lotus Petiole. Used part: dried petiole and pedicel. TCM Effects: To dispel summerheat, rectify *qi* and transform damp. TCM Indications: Summerheat-damp and oppression in chest, diarrhea, dysentery, strangury, Vaginal discharge. Isolated compounds: 14148, 18896.
- T4398 *Nelumbo nucifera* (Nymphaeaceae); HE YE; Hindu Lotus Leaf. Used part: leaf. TCM Effects: To clear heat and resolve summerheat, upbear *yang*, cool blood and stanch bleeding. TCM Indications: Summerheat-heat vexation and thirst, summerheat-damp diarrhea, spleen vacuity diarrhea, blood heat, blood ejection, spontaneous external bleeding, hematochezia, flooding and spotting. Isolated compounds: 1348, 1738, 8600, 10887, 11642, 12915, 12917, 14148, 14247, 15325, 15664, 15713, 15781, 15856, 17909, 18896.
- T4399 *Nelumbo nucifera* (Nymphaeaceae); HE YE DI; Hindu Lotus Leaf-base. Used part: leaf-base. TCM Effects: To clear summerheat and eliminate damp, dispel stasis and stanch bleeding, quiet fetus. TCM Indications: Summerheat-damp diarrhea, blood dysentery, flooding and spotting, stirring fetus in pregnancy. Isolated compounds: 14148, 15856, 18896.
- T4400 *Nelumbo nucifera* (Nymphaeaceae); LIAN ZI; Hindu Lotus Seed. Used part: seed. TCM Effects: To supplement spleen and check diarrhea, boost kidney and secure essence, nourish heart and quiet spirit. TCM Indications: Chronic diarrhea, inappetence, emission, restlessness, fright palpitation, insomnia, flooding and spotting, excessive leukorrhea. Isolated compounds: 1348, 1738, 3318, 5067, 12798, 12917, 15713, 15781, 15856, 17909.
- T4401 *Nelumbo nucifera* (Nymphaeaceae); LIAN ZI XIN; Hindu Lotus Plumule. Used part: dried plumule and radicle in seed. TCM Effects: To clear heart fire, clear liver fire, stanch bleeding, secure essence. TCM Indications: Heat entering pericardium, clouded spirit with delirious speech, non-interaction of heart and kidney, insomnia and emission, blood ejection due to blood heat, hypertension. Isolated compounds: 8120, 11491, 12798, 13010, 14252, 14253, 14593, 15321, 15856, 17909.
- T4402 *Nelumbo nucifera* (Nymphaeaceae); OU; Hindu Lotus Large Rhizome. Used part: rhizome. TCM Effects: To clear heat and engender liquid, cool blood, stanch bleeding and dissipate stasis. TCM Indications: Febrile diseases with vexation and thirst, blood ejection, spontaneous external bleeding, precipitate blood. Isolated compounds: 11716, 12714.
- T4403 *Nemacystus decipiens* [Syn. *Mesogloea decipiens*; *Cladosiphon decipiens*] (Spermatocnaceae); HAI YUN. Used part: frond. TCM Effects: To soften hardness and dissipate binds, disperse phlegm and disinhibit water. TCM Indications: Goiter and carcinoma of neck, thyroid enlargement, laryngitis, bronchitis. Isolated compounds: 16656, 22973.
- T4404 *Neoboutonia glabrescens* (Euphorbiaceae). Isolated compounds: 8492, 15346, 15398, 15399.
- T4405 *Neolitsea pulchella* (Lauraceae); MEI LI XIN MU JIANG ZI; Beautiful Newlitse. Isolated compounds: 15431.
- T4406 *Neolitsea sericea* (Lauraceae); ZHOU SHAN XIN MU JIANG ZI; Sericeous Newlitse. Isolated compounds: 2538.
- T4407 *Neolloydia texensis*. Isolated compounds: 15930.
- T4408 *Neonauclea sessilifolia* [Syn. *Nauclea sessilifolia*; *Adina sessilifolia*] (Rubiaceae); WU BING XIN WU TAN; Sessile Neonauclea. Isolated compounds: 8714, 18732.
- T4409 *Nepicrorhiza scrophulariiflora* (Scrophulariaceae). Isolated compounds: 19569, 19570.
- T4410 *Neorautanenia edulis*. Isolated compounds: 10059, 16499.
- T4411 *Neorautanenia pseudopachyrhiza*. Isolated compounds: 16499.
- T4412 *Nepenthes* sp. (Nepenthaceae). Isolated compounds: 9568.
- T4413 *Nepeta cataria* (Lamiaceae); JIA JING JIE; Catnip. Used part: whole herb. TCM Effects: To course wind and clear heat, quicken blood and stanch bleeding. TCM Indications: Externally contracted wind-heat, headache and sore pharynx, non-eruption of measles, blood ejection, spontaneous external bleeding, bleeding due to external injury, painful swelling from knocks and falls, poisonous snake bite. Isolated compounds: 3241, 3242, 5680, 7521, 11378, 11562, 15484, 15485, 15486, 15487, 15488.
- T4414 *Nepeta ciliaris* (Lamiaceae); YUAN MAO JING JIE; Ciliate Catnip. Isolated compounds: 17402.
- T4415 *Nepeta hindostana* (Lamiaceae); YIN DU JIA JING JIE; Indian Catnip\*. Isolated compounds: 7556, 9564.
- T4416 *Nepeta leucophylla* (Lamiaceae); BAI YE JING JIE; Whiteleaf Nepeta. Isolated compounds: 3464.  
*Nepeta tenuifolia* = *Schizonepeta tenuifolia*
- T4417 *Nephtea chabroli*; Softcoral *Nephtea chabroli*. Isolated compounds: 14114, 14226, 14227, 14228, 14234, 14300, 14643.
- T4418 *Nerium indicum* (Apocynaceae); JIA ZHU TAO; Sweetscented Oleander. Used part: leaf or bark. TCM Effects: To strengthen heart and disinhibit urine, dispel phlegm and settle asthma, settle pain, dispel stasis. TCM Indications: Congestive cardiac failure, cough and asthma, epilepsy, painful swelling from knocks and falls, amenorrhoea due to blood stasis. Isolated compounds: 400, 655, 4615, 4758, 8460, 15491, 16005, 16006, 16007, 16008, 16009, 20406.
- T4419 *Nerium odorum* (Apocynaceae). Isolated compounds: 15492, 15493.
- T4420 *Nerium oleander* (Apocynaceae); OU ZHOU JIA ZHU TAO; Common Oleander. Isolated compounds: 655, 15491, 15497, 16031.
- T4421 *Neurospora* spp. Isolated compounds: 17264.
- T4422 *Newbouldia laevis* (Bignoniaceae); FEI ZHOU ZI WEI; Africa Trumpetreepeper\*. Isolated compounds: 12501, 14429, 14430, 14431,

- 15518, 15519.
- T4423 *Nicandra physaloides* (Solanaceae); JIA SUAN JIANG; Apple of Peru. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, dispel phlegm, calm. TCM Indications: Rabid dog bite, mental disease, epilepsy, wind-damp pain, sore and boil, common cold. Isolated compounds: 10835, 15521, 15522, 20369, 22051, 22701.
- T4424 *Nicotiana acuminata* (Solanaceae); JIAN XING YAN CAO; Acuminate Tobacco\*. Isolated compounds: 1124.
- T4425 *Nicotiana glutinosa* (Solanaceae); JIAO YAN CAO; Slimy Tobacco\*. Isolated compounds: 8794.
- T4426 *Nicotiana plumbaginifolia* (Solanaceae); HUI YE YAN CAO; Leadwordleaf Tobacco. Isolated compounds: 20064, 20065.
- T4427 *Nicotiana rustica* (Solanaceae); HUANG HUA YAN CAO; Aztec Tobacco. Isolated compounds: 15527.
- T4428 *Nicotiana tabacum* (Solanaceae); YAN CAO; Common Tobacco. Used part: leaf. TCM Effects: To move *qi* and relieve pain, resolve toxin and kill worms. TCM Indications: Food stagnation, *qi* bind pain, swelling abscess and flat abscess, clove sore, scab and lichen, snake bite, dog bite. Isolated compounds: 116, 1124, 1125, 1140, 3145, 4473, 4816, 4963, 6643, 6644, 11754, 15527, 16884, 18849, 19105, 19545, 20070, 20146, 21612, 22058.
- T4429 *Nierembergia hippomanica* (Solanaceae); MA ZHUANG SAI YA MA; Hippomane Cupflower\*. Isolated compounds: 16122.
- T4430 *Nigella arvensis* (Ranunculaceae); YE HEI ZHONG CAO; Devil-in-a-bush. Isolated compounds: 4614.
- T4431 *Nigella damascena* (Ranunculaceae); HEI ZHONG CAO; Jackinprison. Isolated compounds: 4614.
- T4432 *Nigella glandulifera* (Ranunculaceae); XIAN MAO HEI ZHONG CAO; Glandular Fennelflower. Used part: seed. TCM Effects: To quicken blood and free menstruation, disinhibit urine and remove stone, supplement kidney and fortify brain. TCM Indications: Menstrual disorder, menstrual block, scant breast milk, edema, urethral stone, dizziness and tinnitus, premature graying in beard and hair, cough and asthma, scab sore, white patch wind. Isolated compounds: 8043, 15562, 15567.
- T4433 *Nigella sativa* (Ranunculaceae); ZAI PEI HEI ZHONG CAO; Cultivated Fennelflower\*. Isolated compounds: 15563, 15564, 15565, 15566, 15568, 15569.
- T4434 *Niphogeton ternata* (Apiaceae). Isolated compounds: 196, 3556, 3560, 3561, 3856, 5658, 7707, 7709, 11001, 11462, 11578, 11601, 11834, 16458, 16488, 16597, 19430, 22774.
- T4435 *Nitraria schoberi* (Zygophyllaceae); DONG QIANG; Whitethorn\*. Isolated compounds: 15317.
- T4436 *Nitraria tangutorum* (Zygophyllaceae); BAI CI; Nitraria\*. Used part: fruit. TCM Effects: To fortify spleen and assisting movement, promote lactation, quiet spirit. TCM Indications: Reduced food intake due to spleen vacuity, indigestion, scant breast milk, neurasthenia. Isolated compounds: 22492.
- T4437 *Nolina recurvata* (Agavaceae); XIA WAN NUO LIN; Recurved Nolina\*. Isolated compounds: 15455, 15456.
- T4438 *Nostoc flagelliforme* (Nostocaceae); FA CAI; Hair Vegetable\*. Used part: frond. TCM Effects: To supplement blood, disinhibit urine, lower blood pressure, relieve cough and transform phlegm. TCM Indications: Blood vacuity of women, hypertension, cough with profuse phlegm. Isolated compounds: 15227.
- T4439 *Nothapodytes pittosporoides* MA BI MU; Pittosporumlike Nothapodytes. Used part: root cortex. TCM Effects: To dispel wind and disinhibit damp, rectify *qi* and dissipate cold. TCM Indications: Wind-cold-damp impediment, edema, mounting *qi* (hernia). Isolated compounds: 3053.
- T4440 *Nothofagus* sp. (Fagaceae). Isolated compounds: 17420.
- T4441 *Notholaena* sp. (Sinopteridaceae). Isolated compounds: 5969.
- T4442 *Notholaena* spp. (Sinopteridaceae). Isolated compounds: 17617. *Notholirion bulbuliferum* = *Notholirion hyacinthinum*
- T4443 *Notholirion hyacinthinum* [Syn. *Notholirion bulbuliferum*] (Liliaceae); JIA BAI HE; Hyacinth False-lily. Used part: small bulb. TCM Effects: To rectify *qi* and harmonize stomach, dispel wind and relieve cough. TCM Indications: Distending pain in stomach duct and abdomen, vomiting, wind-cold cough. Isolated compounds: 2907, 4135, 7424, 7768, 14254, 14499, 20059.
- T4444 *Nothopanax davidii* (Araliaceae); YI YE LIANG WANG CHA; David Falsepanax. Used part: bark. TCM Effects: To dispel wind and dissipate stasis, quicken blood and relieve pain. TCM Indications: Wind-damp impediment pain, taxation damage and lumbago, knocks and falls, fracture, menstrual disorder. Isolated compounds: 533, 22915, 22916, 22917, 22918, 22919.
- T4445 *Notopterygium forbesii* [Syn. *Notopterygium franchetii*] (Apiaceae); KUAN YE QIANG HUO; Forbes Notopterygium. Used part: rhizome or root. TCM Effects: See *Notopterygium incisum*. TCM Indications: See *Notopterygium incisum*. Isolated compounds: 2308, 3045, 3195, 3237, 3936, 4550, 5080, 9407, 9512, 11462, 12843, 15146, 15645, 15647, 15843, 15973, 17055, 17376, 17377, 19099, 19687, 20990, 20992, 20995. *Notopterygium franchetii* = *Notopterygium forbesii*
- T4446 *Notopterygium incisum* (Apiaceae); QIANG HUO; Incised Notopterygium. Equivalent plant: *Notopterygium forbesii*. Used part: rhizome or root. TCM Effects: To dissipate cold and resolve exterior, dispel wind and eliminate damp, disinhibit joints, relieve pain. TCM Indications: Externally contracted wind-cold, headache without sweating, wind-cold-damp impediment, edema, toxin swelling of sores. Isolated compounds: 336, 934, 1048, 1278, 1279, 1520, 1598, 2310, 2545, 3936, 5080, 6537, 6725, 7466, 7708, 7768, 9044, 9486, 11462, 12800, 12843, 12891, 13571, 14335, 14336, 14485, 14486, 14610, 14629, 14742, 14744, 15203, 15645, 15647, 15843, 15844, 15845, 15926, 15927, 16066, 16257, 16823, 17077, 17376, 17377, 18739, 19983, 20280, 20446, 20990, 20992, 20998, 21349, 21595, 21976, 22332, 22775.
- T4447 *Notoseris rhombiformis* (Asteraceae); LING YE ZI JU; Rhombicleaf Purple-daisy. Isolated compounds: 15846.
- T4448 *Nuphar japonicum* (Nymphaeaceae); RI BEN PING PENG CAO; Japanese Cowlily\*. Isolated compounds: 5199, 15868, 15869, 15870, 16836.
- T4449 *Nuphar luteum* (Nymphaeaceae); OU ZHOU PING PENG CAO; European Cowlily. Isolated compounds: 5199, 21333.
- T4450 *Nuphar pumilum* (Nymphaeaceae); PING PENG CAO; Cowlily. Used part: rhizome. TCM Effects: To fortify spleen and boost lung, quicken

- blood and regulate menstruation. TCM Indications: Reduced food intake due to spleen vacuity, *yin* vacuity cough, night sweating, blood stasis and dysmenorrhea, menstrual disorder, knocks and falls. Isolated compounds: 15868, 15871, 15872.
- T4451 *Nuphar variegatum* (Nymphaeaceae); BAN YE PING PENG CAO; Variegated Cowlily. Isolated compounds: 15869, 15870, 21052.
- T4452 *Nuxia sphaerocephala* (Loganiaceae). Isolated compounds: 56, 266, 2914, 2916, 2917, 4181, 6464, 9925, 9926, 10024, 10304, 10305, 10340, 10561, 16050, 16373, 16374, 19987, 20899.
- T4453 *Nyctanthes arbor-tristis* (Oleaceae); YE HUA; Nightjasmine. Used part: branch-leaf. TCM Effects: To dispel wind and eliminate damp. Isolated compounds: 4249.
- T4454 *Nymphaea caerulea* (Nymphaeaceae); LAN SHUI LIAN; Blue Waterlily. Isolated compounds: 491, 5023, 5024, 15173.
- T4455 *Nymphaea lotus* (Nymphaeaceae); CHI YE SHUI LIAN; White Lotus, Egyptian Lotus. Isolated compounds: 15174, 15877, 15878.
- T4456 *Nymphoides peltatum* (Gentianaceae); XING CAI; Shield Floatingheart. Used part: whole herb. TCM Effects: To effuse sweat and outthrust papules, disinhibit urine and free strangury, clear heat and resolve toxin. TCM Indications: Non-eruption of measles, edema, inhibited urination, heat strangury, toxin swelling of sores, poisonous snake bite. Isolated compounds: 18327.
- T4457 *Nyssa sinensis* (Nyssaceae); ZI SHU; Chinese Tupelo. Used part: root. TCM Effects: Anticarcinoma. Isolated compounds: 15880.
- T4458 *Nyssa sylvatica* (Nyssaceae); DUO HUA LAN GUO SHU; Manyflower Tupelo\*. Isolated compounds: 2922.
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- T4459 Occurs in many fungi. Isolated compounds: 21467.
- T4460 Occurs in many human foods. Isolated compounds: 22779.
- T4461 Occurs in many plants. Isolated compounds: 530, 580, 663, 1048, 1110, 1113, 1476, 1935, 2309, 2550, 2887, 3004, 3040, 3045, 3241, 3242, 3308, 3498, 3551, 3615, 3695, 4135, 4550, 4680, 5763, 6757, 6776, 6853, 7250, 7521, 7523, 7768, 7788, 7883, 7951, 7996, 8095, 9234, 9486, 9646, 9669, 9818, 10870, 10887, 11031, 11085, 11642, 12018, 12020, 12843, 12891, 12893, 12917, 13098, 13126, 13137, 13374, 14889, 15203, 15279, 16050, 16439, 16555, 16901, 17376, 17869, 17876, 17893, 17905, 18317, 18411, 18643, 18860, 19087, 19540, 19542, 19777, 19912, 19983, 19987, 19993, 20030, 20168, 20280, 20369, 20444, 20446, 20566, 20995, 21415, 22169, 22172, 22195, 22253, 22270, 22336, 22581.
- T4462 Occurs in wood. Isolated compounds: 10453.
- T4463 *Ochna afzelii* (Ochnaceae). Isolated compounds: 681, 682, 683, 2984, 2985, 5662, 11512, 13000.
- T4464 *Ochna calodendron* (Ochnaceae); KA MAI LONG JIN LIAN MU; Cameroon Ochna\*. Isolated compounds: 2986, 2987.
- T4465 *Ochna integerrima* (Ochnaceae); JIN LIAN MU; Entire Ochna. Isolated compounds: 5683, 5684, 6311.
- T4466 *Ochna macrocalyx* (Ochnaceae); CHANG E JIN LIAN MU PI; Macrocalyx Ochna Bark\*. Isolated compounds: 2985, 4045, 4985, 5551, 9518, 15916.
- T4467 *Ochromonas malhamensis*; Protozoon *Ochromonas malhamensis*. Isolated compounds: 17729.
- T4468 *Ochrosia confusa* (Apocynaceae); YI SI MEI GUI SHU; Confusable Ochrosia. Isolated compounds: 15924.
- T4469 *Ochrosia elliptica* (Apocynaceae); GU CHENG MEI GUI SHU; Elliptical Ochrosia. Isolated compounds: 6759.
- T4470 *Ocimum basilicum* (Lamiaceae); LUO LE; Basil. Used part: whole herb. TCM Effects: To course wind and resolve exterior, transform damp and harmonize center, move *qi* and quicken blood, resolve toxin and disperse swelling. TCM Indications: Common cold with headache, fever and cough, summerheat stroke, non-digestion of food accumulation, no thought of food and drink, distention fullness and pain in stomach duct and abdomen, vomiting and diarrhea, wind-damp impediment pain, emission, menstrual disorder, toothache, bad breath, damp-sore of skin, dormant papules with pruritus, knocks and falls, snake or insect bites. Isolated compounds: 1186, 2357, 3194, 7481, 7521, 7523, 8011, 11642, 13883, 14245, 19121.
- T4471 *Ocimum basilicum* (Lamiaceae); LUO LE ZI; Basil Fruit. Used part: fruit. TCM Effects: To clear heat, brighten eyes, eliminate screens. TCM Indications: Red eyes and profuse eye discharge, ingrown eyelash, eye screen, galloping *gan* of teeth and gum. Isolated compounds: 8078, 13509, 17514.
- T4472 *Ocimum canum* (Lamiaceae); ZHANG NAO LUO LE; Grey Basil. Isolated compounds: 13264.
- T4473 *Ocimum gratissimum* (Lamiaceae); DING XIANG LUO LE; Sweetscented Basil. Isolated compounds: 16928.
- T4474 *Ocimum kilimandscharicum* (Lamiaceae); FEI ZHOU LUO LE; African Basil\*. Isolated compounds: 20998.
- T4475 *Ocimum selloi* (Lamiaceae); SAI LE LUO LE; Sello Basil\*. Isolated compounds: 1290.
- T4476 *Ocimum* sp. (Lamiaceae). Isolated compounds: 7521.
- T4477 *Ocotea bullata* (Lauraceae); NAN FEI ZHANG GUI. Isolated compounds: 11572, 15928, 19871.
- T4478 *Octopus vulgaris* (Octopodidae); ZHANG YU; Common Atlantic Octopus. Used part: meat. TCM Effects: To nourish blood and free milk, resolve toxin, engender flesh. TCM Indications: Anemia and amenorrhea, postpartum scant milk, enduring sores. Isolated compounds: 20155.
- T4479 *Odontites serotina* (Scrophulariaceae); CHI YE CAO; Lateripening Bartsia. Used part: whole herb. TCM Effects: To clear heat and dry damp, cool blood and relieve pain. TCM Indications: Febrile infectious diseases, depressed liver-gallbladder heat, pain of blood stasis. Isolated compounds: 2004, 15989.
- T4480 *Oenanthe crocata* (Apiaceae); ZANG HONG HUA SE SHUI QIN; Hemlock Waterdropwort. Isolated compounds: 9363.
- T4481 *Oenanthe javanica* (Apiaceae); QIN HUA; Javan Waterdropwort Flower. Used part: flower. TCM Indications: Spill pulse. Isolated compounds: 16990.
- T4482 *Oenanthe javanica* (Apiaceae); SHUI QIN; Javan Waterdropwort. Used part: herb. TCM Effects: To clear heat and disinhibit water. TCM Indications: Fulminant fever with vexation and thirst, jaundice, edema, strangury, vaginal discharge, scrofula, epidemic parotitis. Isolated compounds: 2448, 2793, 5502, 11648, 20998.
- T4483 *Oenothera tetraptera* (Onagraceae); SI CHI YUE JIAN CAO; Fourwing Eveningprimrose\*. Isolated compounds: 16012.

- T4484 *Ola* sp. (Oleaceae). Isolated compounds: 16025.  
*Oldenlandia chrysotricha* = *Hedyotis chrysotricha*  
*Oldenlandia corymbosa* = *Hedyotis corymbosa*
- T4485 *Oldenlandia diffusa* [Syn. *Hedyotis diffusa*] (Rubiaceae); BAI HUA SHE SHE CAO; Spreading Hedyotis. Equivalent plant: *Hedyotis corymbosa*. Used part: whole herb with root. TCM Effects: To clear heat and resolve toxin, disinhibit damp. TCM Indications: Lung heat cough asthma, swelling pain in throat, intestinal welling abscess, swelling of sores and boils, poisonous snake bite, heat strangury with inhibited pain, edema, dysentery, enteritis, damp-heat jaundice, carcinoma. Isolated compounds: 1894, 4185, 4186, 12046, 13894, 13895, 16050, 16587, 18354, 18355, 18362, 18396, 20369, 22270.
- T4486 *Olea africana* (Oleaceae); FEI ZHOU GAN LAN; African Olive\*. Isolated compounds: 16088.
- T4487 *Olea europaea* (Oleaceae); YOU GAN LAN; Common Olive. Used part: fruit. TCM Effects: To moisten intestines and free stool, resolve toxin and close sores, lower blood pressure, lower blood-fat. TCM Indications: Intestinal dry and constipation, burns and scalds, coronary heart disease. Isolated compounds: 3686, 6747, 12488, 13581, 14163, 16050, 16080, 16088, 21413.
- T4488 *Oleandra wallichii* (Oleandraceae); GAO SHAN TIAO JUE; Alpine Oleandra. Isolated compounds: 630, 9642, 15405.
- T4489 *Ongokea gore* (Oleaceae); EN GE MU. Isolated compounds: 6271, 10554, 10555, 16097.
- T4490 *Onobrychis* spp. (Fabaceae). Isolated compounds: 12908.
- T4491 *Onobrychis viciifolia* (Fabaceae); LV DOU; Common Sainfoin. Isolated compounds: 3603, 3608, 3846, 4138, 4182, 4183, 8686, 11504, 11669, 13479, 14257, 14258, 15185, 18391, 19168, 22438.
- T4492 *Onoclea sensibilis* (Aspidiaceae); BEI MEI QIU ZI JUE; Bead Fern, Sensitive Fern. Isolated compounds: 18162.
- T4493 *Ononis spinosa* (Fabaceae); CI MANG BING HUA; Restharrow. Isolated compounds: 7883, 16117, 20901.
- T4494 *Onopordum acanthium* (Asteraceae); DA CHI JI; Scotch Cottonthistle. Used part: whole herb. TCM Effects: To stanch bleeding. Isolated compounds: 7278, 16119.
- T4495 *Onopordum alexandrinum* (Asteraceae); AI JI DA CHI JI; Egyptian Cottonthistle\*. Isolated compounds: 16119.
- T4496 *Onopordum algeriense* (Asteraceae); A ER JI ER DA CHI JI; Algerian Cottonthistle\*. Isolated compounds: 16119.
- T4497 *Onopordum illyricum* (Asteraceae); YI LI LI YA DA CHI JI; Illyrian Cottonthistle\*. Isolated compounds: 16119.
- T4498 *Onosma hispida* (Boraginaceae); CU YING MAO DIAN ZI CAO; Hispid Onosma\*. Isolated compounds: 1476, 1492, 2330, 5828, 6159, 7577, 16120, 16121.
- T4499 *Onosma hookeri* (Boraginaceae); XI HUA DIAN ZI CAO; Hooker Onosma. Isolated compounds: 514.
- T4500 *Onosma paniculatum* (Boraginaceae); DIAN ZI CAO; Paniculate Onosma. Used part: root or root cortex. TCM Effects: To clear heat, resolve toxin, cool blood, quicken blood. TCM Indications: Measles papules, pneumonia, febrile diseases macular eruption, ulcerating sores, eczema, scalds. Isolated compounds: 309, 514, 6302, 6303, 10266, 19819.
- T4501 *Onychium auratum* (Sinopteridaceae); *Onychium auratum*. Isolated compounds: 16098, 16697.
- T4502 *Onychium japonicum* [Syn. *Tricomanes japonicum*] (Sinopteridaceae); XIAO YE JI WEI; Japanese Clave Fern. Used part: whole herb or leaf. TCM Effects: To clear heat and resolve toxin, disinhibit damp, stanch bleeding. TCM Indications: Wind-heat common cold, cough, sore pharynx, diarrhea, dysentery, dribbling pain of urination, damp-heat jaundice, blood ejection, coughing of blood, hematochezia, bleeding from hemorrhoids, hematuria, sore toxin, knocks and falls, poisonous snake bites, burns and scalds. Isolated compounds: 16122, 16123, 18123, 18148.
- T4503 *Onychium lucidum* (Sinopteridaceae); LI BING JIN FEN JUE; Lucidum Onychium. Used part: whole herb. TCM Effects: To dispel wind and eliminate damp, clear heat and resolve toxin, eliminate inflammation. TCM Indications: Common cold, stomachache, wind-damp pain, painful swelling from knocks and falls, bleeding due to external injury, cassava poisoning, arsenic poisoning. Isolated compounds: 13047.
- T4504 *Onychium siliculosum* (Sinopteridaceae); JIN FEN JUE; Siliculose Onychium. Isolated compounds: 16098, 16101, 16102.
- T4505 *Ophiocephalus argus* (Ophiocephalidae); WU LI; Serpent-head. Used part: meat or whole fish. TCM Effects: To supplement spleen and fortify stomach, disinhibit water and disperse edema. TCM Indications: Edema, edema in pregnancy, damp impediment, beriberi, postpartum scant milk, habitual abortion, tuberculosis and vacuity, distention fullness in stomach duct, intestinal wind, bleeding from hemorrhoids, scab and lichen. Isolated compounds: 10660, 14490.  
*Ophioglossum flexuosum* = *Lygodium flexuosum*
- T4506 *Ophioglossum vulgatum* (Ophioglossaceae); PING ER XIAO CAO; Adder's Tongue. Used part: whole herb. TCM Effects: To clear heat and cool blood, resolve toxin and settle pain. TCM Indications: Lung heat cough, pulmonary welling abscess, tuberculosis with blood ejection, infant ardent fever, red eyes with gall, stomachache, swollen welling abscess and clove sores, painful swelling from knocks and falls. Isolated compounds: 14710.
- T4507 *Ophiopogon japonicus* (Liliaceae); MAI DONG; Liriope. Equivalent plant: *Liriope spicata* var. *prolifera*. Used part: tuberoid. TCM Effects: To nourish *yin* and engender liquid, moisten lung and clear heart. TCM Indications: Angina pectoris, dry cough due to lung dryness, vacuity consumption with cough, fluid damage and thirst, insomnia and vexation, diabetes mellitus due to internal heat, intestinal dry and constipation, diphtheria. Isolated compounds: 618, 875, 876, 2551, 2552, 2554, 4189, 5856, 6440, 7788, 9071, 10033, 10213, 10509, 11577, 11823, 14635, 14636, 16050, 16131, 16135, 16136, 16137, 16138, 16139, 16140, 16141, 16142, 16143, 16144, 16145, 16146, 16147, 16148, 16149, 16150, 16707, 19070, 19072, 19073, 20369, 21720, 21722, 21800, 22252.
- T4508 *Ophiopogon planiscapus* (Liliaceae); BIAN JING YAN JIE CAO; Flatstem Lilyturf\*. Isolated compounds: 19070, 19074.
- T4509 *Ophiorrhiza hayata* (Rubiaceae); XIA YE SHE GEN CAO; Hayata Ophiorrhiza. Isolated compounds: 16132, 16133, 16134.
- T4510 *Ophiorrhiza japonica* (Rubiaceae); RI BEN SHE GEN CAO; Japanese Ophiorrhiza. Equivalent plant: *Ophiorrhiza mungos*. Used part: whole herb. TCM Effects: To relieve cough and dispel phlegm, quicken

- blood and regulate menstruation. TCM Indications: Cough, taxation damage and blood ejection, hematochezia, dysmenorrhea, menstrual disorder, pain in sinews and bones, sprain and contusion. Isolated compounds: 9234, 16151, 16152.
- T4511 *Ophiorrhiza kuroiwai* (Rubiaceae); HEI YAN SHE GEN CAO; Black-rock Ophiorrhiza\*. Isolated compounds: 16151, 16152.
- T4512 *Ophiorrhiza liukuensis* (Rubiaceae); LIU QIU SHE GEN CAO; Liuku Ophiorrhiza\*. Isolated compounds: 3053, 3551, 4680, 5097, 5205, 5210, 7040, 8758, 9234, 10887, 12949, 12950, 13168, 13863, 13864, 16151, 16152, 18199, 18918, 19542, 19983, 20390, 20503, 20513, 22270.
- T4513 *Ophiorrhiza mungos* (Rubiaceae); SHE GEN CAO; Common Ophiorrhiza. Used part: whole herb. TCM Effects: See *Ophiorrhiza japonica*. TCM Indications: See *Ophiorrhiza japonica*. Isolated compounds: 3053, 13863, 13864.
- T4514 *Ophiorrhiza pumila* (Rubiaceae); DUAN XIAO SHE GEN CAO; Dwarf Ophiorrhiza. Used part: whole herb. TCM Effects: To clear heat and resolve toxin. TCM Indications: Common cold with fever, cough, swelling toxin of welling abscess and flat abscess, poisonous snake bites. Isolated compounds: 18199.
- T4515 *Opilia celtidifolia* (Opiliaceae); PU YE SHAN YOU ZI; Celtis-leaf Opilia\*. Isolated compounds: 18229.
- T4516 *Oplopanax elatus* (Araliaceae); DONG BEI CI REN SHEN; Northeast Spineginseng\*. Tall Oplopanax. Used part: root. TCM Effects: To supplement *qi* and reinforce *yang*, suppress cough, free network vessels, abate fever. TCM Indications: *Qi* vacuity and general weakness, fatigued spirit and lassitude, impotence, vacuity cough, wind-cold-damp impediment, diabetes mellitus, hypertension. Isolated compounds: 2858, 3737, 3738, 3739, 3740, 4680, 6837, 6981, 8611, 9273, 18739, 20569.
- T4517 *Oplopanax horridus* (Araliaceae); MEI ZHOU CI SHEN; American Spineginseng\*<sup>[</sup>Isolated compounds: 15939.
- T4518 *Oppopanax chironium* (Apiaceae); AO PA CAO. Used part: stem and root. TCM Effects: To resolve spasm, dispel phlegm.<sup>[5509]</sup> TCM Indications: Spasm, abundant phlegm, menstrual disorder.<sup>[5509]</sup> Isolated compounds: 2309, 9419, 11001, 15644, 17028, 22774.
- T4519 *Opuntia dillenii* (Cactaceae); XIAN REN ZHANG; Cholla. Equivalent plant: *Opuntia vulgaris*. Used part: root and stem. TCM Effects: To move *qi* and quicken blood, cool blood and stanch bleeding, resolve toxin and disperse swelling. TCM Indications: Stomachache, lump glomus, dysentery, throat pain, lung heat cough, tuberculosis and hemoptysis, blood ejection, bleeding from hemorrhoids, sores clove boil, mammary welling abscess, epidemic parotitis, skin lichen, snake or insect bites, scalds, frostbite. Isolated compounds: 5763, 7405, 7432, 7768, 12052, 12062, 13479, 14711, 16157, 16158, 16159, 16160, 18317, 18376, 19087, 22332.
- T4520 *Opuntia ficus-indica* (Cactaceae); LI GUO XIAN REN ZHANG; Prickly Pear. Used part: root and stem. TCM Effects: To clear lung and relieve cough, cool blood and resolve toxin. TCM Indications: Lung heat cough, tuberculosis and hemoptysis, dysentery, bleeding from hemorrhoids, mammary welling abscess, epidemic parotitis, swelling toxin of welling abscess and sore, burns and scalds, bald sores, scab and lichen, snake or insect bites. Isolated compounds: 11018, 17479.
- T4521 *Opuntia vulgaris* (Cactaceae); LV XIAN REN ZHANG; Common Prickly Pear. Used part: root and stem. TCM Effects: See *Opuntia dillenii*. TCM Indications: See *Opuntia dillenii*. Isolated compounds: 11252.
- T4522 *Orchis* sp. (Orchidaceae). Isolated compounds: 16168.
- T4523 *Oriciopsis glaberrima* (Orchidaceae). Isolated compounds: 16179, 16180, 16181, 16182, 21763.
- T4524 *Origanum majorana* (Lamiaceae); TIAN NIU ZHI; Sweet Marjoram. Isolated compounds: 1618, 7521.
- T4525 *Origanum syriacum* (Lamiaceae); XU LI YA NIU ZHI; Syria Origanum\*. Isolated compounds: 3233, 10763, 13748, 21363, 21364.
- T4526 *Origanum vulgare* (Lamiaceae); TU XIANG RU; Common Origanum. Used part: whole herb. TCM Effects: To resolve exterior, rectify *qi*, clear summerheat, disinhibit damp. TCM Indications: Common cold with fever, summerheat stroke, distention fullness in chest and diaphragm, vomiting diarrhea with abdominal pain, jaundice, edema, vaginal discharge, child *gan* accumulation, measles papules, itchy skin, swelling pain of sores, knocks and falls. Isolated compounds: 3231, 8313, 15286, 21360.
- T4527 *Orixa japonica* (Rutaceae); CHOU SHAN YANG; Japanese Orixa. Used part: root. TCM Effects: To clear heat and resolve exterior, move *qi* and relieve pain, dispel wind and disinhibit damp. TCM Indications: Wind-heat common cold, cough, throat pain, toothache, stomachache, pain in joints due to rheumatism, dysentery, innominate toxin swelling. Isolated compounds: 442, 2309, 3236, 7703, 11001, 11234, 11606, 11633, 11821, 12253, 12254, 14153, 14446, 15785, 16199, 16200, 16201, 16202, 16203, 16204, 16447, 17844, 17849, 20002.
- T4528 *Orixa* sp. (Rutaceae). Isolated compounds: 12254.
- T4529 *Ormosia dasycarpa* (Fabaceae). Isolated compounds: 16207.
- T4530 *Ormosia hosiei* (Fabaceae); HONG DOU; Hosie Ormosia. Used part: seed. TCM Effects: To rectify *qi* and quicken blood, clear heat and resolve toxin. TCM Indications: Mounting *qi*, *qi* pain in heart and stomach, amenorrhea due to blood stasis, innominate toxin swelling, clove sore. Isolated compounds: 14749, 16206.
- T4531 *Ormosia jamaicensis* (Fabaceae). Isolated compounds: 16207.
- T4532 *Ormosia panamensis* (Fabaceae). Isolated compounds: 16207.
- T4533 *Ormosia* spp. (Fabaceae). Isolated compounds: 16585.
- T4534 *Ornithogalum caudatum* (Liliaceae); HU YAN WAN NIAN QING; Whiplash Star-of-Bethlehem. Isolated compounds: 3328, 14437, 14438, 14439.
- T4535 *Ornithogalum saundersiae* (Liliaceae). Isolated compounds: 3576, 3577, 3580, 3581, 3582, 3583, 5899, 5900, 16265, 19408, 19409, 19410, 19411, 19412, 19413.
- T4536 *Orobanche coerulescens* (Orobanchaceae); LIE DANG; Skyblue Broomrape. Used part: whole plant. TCM Effects: To supplement kidney and invigorate *yang*, strengthen sinews and bones, moisten intestines. TCM Indications: Kidney vacuity impotence, emission, infertility due to uterus cold, rachitis in children, cold pain in lumbus and knees, weakness in sinews and bones, intestinal dry and constipation. Isolated compounds: 580, 2859, 4225, 11195, 14261, 16208.
- Orontium japonicum* = *Rohdea japonica*

- T4537 *Oroxylum indicum* (Bignoniaceae); MU HU DIE; Indian Trumpetflower. Used part: seed. TCM Effects: To clear lung and disinhibit throat, course liver and harmonize stomach. TCM Indications: Lung heat cough, throat impediment, aphonia, liver stomach *qi* pain. Isolated compounds: 967, 2102, 2103, 2104, 2106, 3600, 16215, 18001, 19582, 19587, 21212.
- T4538 *Oroxylum indicum* (Bignoniaceae); MU HU DIE SHU PI; Indian Trumpetflower Bark. Used part: bark. TCM Effects: To clear heat and disinhibit damp, abate jaundice, disinhibit throat and disperse swelling. TCM Indications: Infective hepatitis, swelling pain in throat. Isolated compounds: 2106, 16216, 19582, 19585.  
*Orthodon chinensis* = *Mosla chinensis*
- T4539 *Orthodon formosanus* (Lamiaceae); TAI WAN JI NING; Taiwan Mosla. Isolated compounds: 6193.
- T4540 *Orthodon hadai* (Lamiaceae); HA DA SHI JI NING; Hada Mosla\*. Isolated compounds: 3231.  
*Orthosiphon aristatus* = *Orthosiphon stamineus*  
*Orthosiphon grandiflorus* = *Orthosiphon stamineus*  
*Orthosiphon spicatus* = *Orthosiphon stamineus*
- T4541 *Orthosiphon stamineus* [Syn. *Orthosiphon aristatus*; *Orthosiphon grandiflorus*; *Orthosiphon spicatus*] (Lamiaceae); XIONG RUI ZHUANG ZHI GUAN CAO; Big-flowered Javatea. Isolated compounds: 4759, 4760, 4761, 5137, 7591, 10556, 10619, 12448, 15443, 15444, 15795, 15796, 16221, 16222, 16223, 16224, 16225, 16226, 16227, 16228, 16229, 16230, 16231, 16232, 16233, 16234, 16235, 16236, 16237, 16238, 16239, 16240, 16241, 16242, 16243, 16244, 16872, 19630, 19966, 19967, 19968, 19969, 19970, 20258, 20259, 20260, 20261, 21202.
- T4542 *Orthosiphon wulfenoides* [Syn. *Coleus wulfenoides*] (Lamiaceae); JI JIAO SHEN; Common Javatea. Used part: root. TCM Effects: To dispel wind and disinhibit damp, quicken blood and free network vessels, kill worms and disperse accumulation. TCM Indications: Wind-damp impediment pain, strangury, edema, knocks and falls, fracture, food accumulation abdominal distention, abdominal pain due to worm accumulation. Isolated compounds: 16220.
- T4543 *Orthosiphonia mexicana*. Isolated compounds: 16245.
- T4544 *Oryza sativa* (Poaceae); DAO CAO; Rice Straw. Used part: stem-leaf. TCM Effects: To loosen center, precipitate *qi*, disperse food, resolve toxin. TCM Indications: Dysphagia-occlusion, stomach reflux, food stagnation, abdominal pain, diarrhea, diabetes mellitus, jaundice, throat impediment, hemorrhoids, scalds. Isolated compounds: 1358, 3162, 4496, 7121, 7154, 7174, 7181, 7185, 7186, 13126, 13127, 15477, 16247, 16248, 17257, 17258, 17259, 17260, 17261, 22520.
- T4545 *Oryza sativa* (Poaceae); JING MI; Rice. Used part: seed. TCM Effects: To supplement *qi* and fortify spleen, eliminate vexation and allay thirst, check dysentery and diarrhea. TCM Indications: Spleen-stomach vacuity, reduced food intake, fatigue hypodynamia, vexation and thirst, diarrhea. Isolated compounds: 1358, 3040, 3199, 3585, 7768, 12802, 13126, 15355, 15458, 15477, 19463, 20237, 20369, 22520.
- T4546 *Oryza sativa* (Poaceae); MI PI KANG; Rice Spermoderm. Used part: spermoderm. TCM Effects: To increase appetite, precipitate *qi*. TCM Indications: Dysphagia-occlusion, beriberi. Isolated compounds: 3041, 3586, 4470, 4475, 5714, 5715, 7768, 14267, 14353, 15867, 19995, 20237, 20376, 22557.
- T4547 *Oryza sativa* cv (Poaceae); HEI SE MI PI KANG; Black Rice Spermoderm\*. TCM Effects: To increase appetite, precipitate *qi*. TCM Indications: Dysphagia-occlusion, stomach reflux, leg *qi* [=beriberi]. Isolated compounds: 16246.
- T4548 *Oryza sativa* var. *glutinosa* (Poaceae); NUO DAO; Sticky Rice. Used part: kernel without shell. TCM Effects: To supplement center and boost *qi*, fortify spleen and check diarrhea, reduce urine, constrain sweat, resolve toxin. TCM Indications: Diarrhea due to spleen-stomach vacuity cold, cholera with vomiting of sour matter, diabetes mellitus with profuse urination, spontaneous sweating, variola, hemorrhoids. Isolated compounds: 11032.
- T4549 *Osbeckia chinensis* (Melastomataceae); JIN JIN XIANG; Chinese Osbeckia. Used part: whole herb or root. TCM Effects: To transform phlegm and disinhibit damp, dispel stasis and stanch bleeding, resolve toxin and disperse swelling. TCM Indications: Cough, asthma, child *gan* accumulation, diarrhea and dysentery, wind-damp impediment pain, hemoptysis, spontaneous external bleeding, blood ejection, hemochezia, flooding and spotting [=metrorrhagia and metrostaxis], dysmenorrhea, menstrual block, postpartum stasis stagnation abdominal pain, toothache, prolapse of rectum, wound swelling from knocks and falls, poisonous snake bites. Isolated compounds: 16250.
- T4550 *Osmanthus fragrans* (Oleaceae); GUI HUA; Sweet Osmanthus. Used part: flower. TCM Effects: To warm lung and transform rheum, dissipate cold and relieve pain. TCM Indications: Phlegm-rheum cough asthma, cold pain in stomach duct and abdomen, intestinal wind blood dysentery, amenorrhea and dysmenorrhea, cold mounting with abdominal pain, toothache, bad breath. Isolated compounds: 5646, 12853, 15498, 15926.
- T4551 *Osmorhiza aristata* var. *laxa* (Apiaceae); XIANG GEN QIN; Laxleaf Sweetroot. Used part: root. TCM Effects: To dissipate cold and effuse exterior, relieve pain, fortify stomach, brighten eyes. TCM Indications: Wind-cold common cold, vertex headache, generalized pain. Isolated compounds: 945, 1186, 1282, 6209.
- T4552 *Osmunda japonica* (Osmundaceae); ZI QI; Japanese Osmunda Frond. Used part: rhizome. TCM Effects: To clear heat and resolve toxin, dispel stasis and stanch bleeding, kill worms. TCM Indications: Influenza, epidemic encephalitis, parotitis, swelling toxin of welling abscess and sore, measles papules, varicella, dysentery, blood ejection, spontaneous external bleeding, hemochezia, flooding and spotting, vaginal discharge, intestinal parasitic disease. Isolated compounds: 6678, 6679, 14506, 16255, 16256, 16658, 17700, 20444.
- T4553 *Osmunda ragalis* (Osmundaceae); OU ZI QI; Flowering Fern. Isolated compounds: 16256.
- T4554 *Ostodes paniculata* (Euphorbiaceae); YUAN ZHUI HUA YE LUN MU; Paniculate Ostodes\*. Isolated compounds: 16262.
- T4555 *Ostrea rivularis*; *Ostrea taliemwhanensis*; *Ostrea gigas* (Ostreidae); MU LI ROU; Oyster Meat. Used part: meat. TCM Effects: To nourish blood and quiet spirit, soften hardness and disperse swelling. TCM Indications: Heat vexation and insomnia, disquieted heart spirit, scrofula. Isolated compounds: 8785, 14665, 14666.
- T4556 *Osyris tenuifolia* (Santalaceae); XIAO HUA SHA ZHEN; East African Sandalwood. Isolated compounds: 2409, 12467, 20937, 20938.

- T4557 *Otostegia fruticosa* (Lamiaceae); GUAN MU AO TUO SI TE CAO; Shrubby Otostegia\*. Isolated compounds: 16272.
- T4558 *Otostegia integrifolia* (Lamiaceae); QUAN YUAN YE AO TUO SI TE CAO; Integrifolious Otostegia\*. Isolated compounds: 2045, 16273, 17845.
- T4559 *Otostegia limbata* (Lamiaceae); YOU YAN AO TUO SI TE CAO; Limbate Otostegia. Isolated compounds: 7835, 12834, 12835.
- T4560 *Ouratea flava* (Ochnaceae); HUANG SAI JIN LIAN MU; Yellow Ouratea\*. Isolated compounds: 7822, 7823.
- T4561 *Ouratea hexasperma* (Ochnaceae); LIU ZI SAI JIN LIAN MU; Hexaseed Ouratea\*. Isolated compounds: 9518.
- T4562 *Oxalis acetosella* (Oxalidaceae); SHAN ZUO JIANG CAO; Wood-sorrel. Used part: whole herb. TCM Effects: To quicken blood and transform stasis, clear heat and resolve toxin, disinhibit urine and free strangury. TCM Indications: Taxation damage and pain, knocks and falls, leprosy, innominate toxin swelling, scab and lichen, infant mouth sore, burns and scalds, strangury-turbidity, vaginal discharge, urinary stoppage. Isolated compounds: 22122.
- T4563 *Oxalis cernua* (Oxalidaceae). Isolated compounds: 3432.
- T4564 *Oxalis corniculata* [Syn. *Oxalis repens*] (Oxalidaceae); ZUO JIANG CAO; Creeping Oxalis. Used part: whole herb. TCM Effects: To clear heat and disinhibit damp, cool blood and dissipate stasis, resolve toxin and disperse swelling. TCM Indications: Damp-heat diarrhea, dysentery, jaundice, strangury syndrome, vaginal discharge, blood ejection, spontaneous external bleeding, hematuria, menstrual disorder, knocks and falls, swelling pain in throat, swollen welling abscess and clove sores, erysipelas, eczema, scab and lichen, hemorrhoids, measles papules, burns and scalds, snake or insect bites. Isolated compounds: 16893, 18281, 21413.  
*Oxalis repens* = *Oxalis corniculata*
- T4565 *Oxalis* sp. (Oxalidaceae). Isolated compounds: 16285.
- T4566 *Oxystelma esculentum* var. *alpini* (Asclepiadaceae); BIAN ZHONG JIAN HUI TENG; Edible Oxystelma Variety\*. Isolated compounds: 990, 991, 992.
- T4567 *Oxytropis campestris* (Fabaceae); TIAN YE JI DOU; Yellow Oxytropis. Isolated compounds: 23000.
- T4568 *Oxytropis myriophylla* (Fabaceae); DUO YE JI DOU; Leafy Crazyweed. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, disperse swelling and stanch bleeding. TCM Indications: Influenza, swelling pain in throat, swelling toxin of welling abscess and sore, knocks and falls, static blood swelling and distention, various hemorrhage. Isolated compounds: 9275, 15193, 15194, 15195, 15196, 15197, 15198, 15199, 15200, 15201, 16479.
- T4569 *Oyadea verbesinoides*. Isolated compounds: 1216.
- P**
- T4570 *Pachydictyon coriaceum* (Dictyotaceae); HOU WANG ZAO. Isolated compounds: 16495.
- T4571 *Pachypodanthium staudii* (Annonaceae); SI TUO HOU BING HUA. Isolated compounds: 16511.
- T4572 *Pachyrhizus erosus* (Fabaceae); DI GUA ZI; Wayaka Yambean Seed. Used part: seed. TCM Effects: To kill worms and relieve itch. TCM Indications: Scab and lichen, itchy skin, swollen welling abscess. Isolated compounds: 4954, 6551, 7289, 7290, 10059, 10589, 10680, 10681, 15462, 18939.
- T4573 *Pachyrhizus erosus* (Fabaceae); DOU SHU; Wayaka Yambean. Used part: tuberoid. TCM Effects: To clear lung and engender liquid, disinhibit urine and free milk, resolve liquor toxin. TCM Indications: Lung heat cough, pulmonary welling abscess, summerheat stroke with vexation and thirst, diabetes mellitus, scant breast milk, inhibited urination [=dysuria]. Isolated compounds: 6551, 6632, 10059, 16499, 16500, 18939.
- T4574 *Pachysandra procumbens* (Buxaceae); YANG WO BAN DENG GUO; Prostrate Pachysandra\*. Isolated compounds: 6322, 21968.
- T4575 *Pachysandra terminalis* (Buxaceae); XUE SHAN LIN; Japanese Pachysandra. Used part: whole herb with root. TCM Effects: To dispel wind-damp, soothe sinews and quicken blood, free menstruation and check discharge. TCM Indications: Wind-damp-heat impediment, systemma, menstrual disorder, Vaginal discharge. Isolated compounds: 4767, 5461, 6989, 6990, 6991, 6992, 6993, 6994, 6995, 6996, 14650, 16501, 16502, 16503, 16504, 16505, 16506, 16507, 16508, 16509, 16510, 16512, 16513, 20205, 20976.
- T4576 *Paederia chinensis* (Rubiaceae); ZHONG HUA JI SHI TENG; Chinese Fevervine. Isolated compounds: 17089.
- T4577 *Paederia scandens* (Rubiaceae); JI SHI TENG; Fevervine. Used part: whole herb or root. TCM Effects: To dispel wind and eliminate damp, disperse food and transform accumulation, resolve toxin and disperse swelling, quicken blood and relieve pain. TCM Indications: Wind-damp pain, diarrhea, dysentery, pain in stomach duct and abdomen, *qi* vacuity edema, heavy head and low food intake, liver spleen enlargement, scrofula, intestinal welling abscess, innominate toxin swelling, knocks and falls. Isolated compounds: 1618, 1892, 4659, 6196, 6197, 7779, 7780, 9740, 16514, 16515, 16516, 16517, 19454.
- T4578 *Paederia scandens* (Rubiaceae); JI SHI TENG GUO; Fevervine Fruit. Used part: fruit. TCM Effects: To resolve toxin and engender flesh. TCM Indications: Poisonous insect stings, frostbite. Isolated compounds: 4814, 9740, 16050.
- T4579 *Paederota lutea*. Isolated compounds: 16518, 20252.
- T4580 *Paeonia albiflora* [Syn. *Paeonia lactiflora*] (Ranunculaceae); BAI SHAO; Common Peony. Used part: root. TCM Effects: To calm liver and relieve pain, nourish blood and regulate menstruation, constrain *yin* and check sweating. TCM Indications: Headache and dizziness, pain in rib-side, abdominal pain, spasm in limbs, anemia with yellow complexion, menstrual disorder, profuse menstruation, spontaneous sweating, night sweating. Isolated compounds: 857, 861, 2224, 2266, 3301, 3302, 5249, 7518, 7518, 8095, 8108, 8116, 8117, 9502, 14743, 16455, 16519, 16520, 16521, 16522, 16523, 16524, 16525, 16526, 16527, 16528, 16532, 16539, 16765, 16836, 16836, 16905, 17089, 18255, 18256, 19983, 20389, 20910, 21053, 21641, 21642, 21643.
- T4581 *Paeonia arborea* (Ranunculaceae); QIAO MU SHAO YAO; Arboreous Peony. Isolated compounds: 16533, 16534.
- T4582 *Paeonia delavayi* (Ranunculaceae); DIAN MU DAN; Delavay Peony. Used part: root cortex. TCM Effects: See *Paeonia moutan*. TCM Indications: See *Paeonia moutan*. Isolated compounds: 16525.
- T4583 *Paeonia emodi* (Ranunculaceae); DUO HUA SHAO YAO; Himalayan

- Peony. Isolated compounds: 8095, 9818, 14454, 16529, 16530, 16531.  
*Paeonia lactiflora* = *Paeonia albiflora*
- T4584 *Paeonia lactiflora* wild (Ranunculaceae); CHI SHAO wild; Common Peony (wild). Equivalent plant: *Paeonia obovata*, *Paeonia veitchii*. Used part: root. TCM Effects: To clear heat and cool blood, quicken blood and dispel stasis. TCM Indications: Warm toxin macular eruption, blood ejection, spontaneous external bleeding, intestinal wind bleeding, red eyes with gall, swollen welling abscess and sores, amenorrhea, dysmenorrhea, flooding and vaginal discharge with strangury-turbidity, pain in rib-side due to stagnation, mounting-conglomeration accumulation-gathering, knocks and falls. Isolated compounds: 857, 2224, 4680, 5483, 7518, 12439, 16455, 16524, 16525, 16532, 17378, 19983, 21053.
- T4585 *Paeonia moutan* [Syn. *Paeonia suffruticosa*] (Ranunculaceae); MU DAN PI; Subshrubby Peony Bark. Equivalent plant: *Paeonia delavayi*. Used part: root cortex. TCM Effects: To clear heat and cool blood, quicken blood and dissipate stasis. TCM Indications: Appendicitis, dysentery, hypertension, allergic rhinitis, warm heat disease with fever, macular eruption, blood ejection, spontaneous external bleeding, steaming bone tidal fever due to *yin* vacuity, amenorrhea due to blood stasis, dysmenorrhea, concretion and conglomeration, swelling toxin of welling abscess and sore, painful wound from knocks and falls, wind-damp-heat impediment. Isolated compounds: 1524, 2263, 2266, 8095, 16455, 16525, 16532, 16533, 16534, 16836, 20451, 20452, 20453, 20454, 20455.
- T4586 *Paeonia obovata* (Ranunculaceae); CAO SHAO YAO; Obovate Peony. Used part: root. TCM Effects: See *Paeonia lactiflora* wild. TCM Indications: See *Paeonia lactiflora* wild. Isolated compounds: 16455, 16525, 16533.
- T4587 *Paeonia officinalis* (Ranunculaceae); YAO YONG MU DAN; Kingsbloom. Isolated compounds: 16525.
- T4588 *Paeonia* sp. (Ranunculaceae). Isolated compounds: 3454.
- T4589 *Paeonia* spp. (Ranunculaceae). Isolated compounds: 16905.  
*Paeonia suffruticosa* = *Paeonia moutan*
- T4590 *Paeonia veitchii* (Ranunculaceae); CHUAN CHI SHAO; Veitch Peony. Used part: root. TCM Effects: See *Paeonia lactiflora* wild. TCM Indications: See *Paeonia lactiflora* wild. Isolated compounds: 16455, 16525, 19986.
- T4591 *Paepalanthus bromelioides* (Eriocaulaceae). Isolated compounds: 16535.
- T4592 *Paepalanthus denudatus* (Eriocaulaceae). Isolated compounds: 13981, 14082.
- T4593 *Paepalanthus hilareii* (Eriocaulaceae). Isolated compounds: 13981, 14082.
- T4594 *Paepalanthus latipes* (Eriocaulaceae). Isolated compounds: 13902, 18311, 18312, 18313, 18314, 18315.
- T4595 *Paepalanthus polyanthus* (Eriocaulaceae). Isolated compounds: 13981, 14082.
- T4596 *Paepalanthus ramosus* (Eriocaulaceae). Isolated compounds: 13981, 14082.
- T4597 *Paepalanthus robustus* (Eriocaulaceae). Isolated compounds: 13981, 14082.
- T4598 *Paepalanthus vellozioides* (Eriocaulaceae). Isolated compounds: 18311, 18312, 18313, 18314, 18315.
- T4599 *Panax ginseng* [Syn. *Panax schinseng*] (Araliaceae); REN SHEN; Ginseng. Used part: root. TCM Effects: To supplement original *qi* greatly, restore pulse and stem desertion, supplement spleen and boost lung, engender liquid, quiet spirit, lower blood sugar levels. TCM Indications: *Qi* vacuity and verging on desertion, cold limbs and faint pulse, reduced food intake due to spleen vacuity, cough and asthma due to lung vacuity, fluid damage and thirst, diabetes mellitus due to internal heat, enduring illness *qi* vacuity, fright palpitation and insomnia, impotence, uterus cold, cardiac failure. Isolated compounds: 617, 618, 626, 928, 1534, 1608, 1674, 2352, 2395, 2412, 2849, 2851, 2852, 2943, 3040, 3242, 3354, 3522, 3523, 3565, 3589, 3766, 4680, 5178, 5371, 5403, 6360, 6522, 6541, 6720, 6741, 6742, 6743, 7104, 7730, 7852, 7971, 8409, 8410, 8411, 8412, 8413, 8414, 8415, 8416, 8417, 8418, 8419, 8420, 8421, 8422, 8423, 8424, 8425, 8426, 8427, 8428, 8429, 8430, 8431, 8432, 8434, 8435, 8436, 8437, 8438, 8439, 8445, 8446, 8447, 8448, 8449, 8450, 8451, 8452, 8453, 8755, 8761, 8906, 9041, 9071, 9088, 9378, 9379, 9485, 9486, 9669, 9670, 11332, 11333, 11334, 11335, 12020, 12891, 13284, 13419, 13441, 13442, 13443, 13444, 13454, 13507, 13508, 13922, 15140, 15368, 15369, 15411, 15528, 15660, 15836, 15839, 15973, 16560, 16582, 16583, 16588, 16589, 16590, 16591, 16592, 16593, 16594, 16595, 16596, 16597, 16599, 16707, 16830, 17981, 17982, 18025, 18230, 18281, 18450, 18526, 18739, 18834, 19187, 19306, 19681, 19686, 19687, 19688, 19983, 19989, 19990, 19991, 20146, 20147, 20369, 20373, 20374, 20375, 20378, 20444, 20446, 20715, 21040, 21610, 21634, 22252, 22554, 22556, 22659, 22843.
- T4600 *Panax ginseng* [Syn. *Panax schinseng*] (Araliaceae); REN SHEN HUA LEI; Ginseng Buds. Used part: bud. TCM Effects: To supplement original *qi* greatly, supplement spleen and boost lung, engender liquid and allay thirst, quiet spirit and boost wits. TCM Indications: *Qi* vacuity and verging on desertion, spleen vacuity and fatigued body, inappetence, vomiting, diarrhea, lung vacuity and shortness of breath, cough, hasty asthma, vacuity and profuse sweating, fluid damage and thirst, diabetes mellitus, insomnia and frequent dreaming, fright palpitation and amnesia, anemia with yellow complexion, kidney vacuity impotence, frequent urination, *qi*-blood fluids vacuity depletion. Isolated compounds: 17982.
- T4601 *Panax ginseng* [Syn. *Panax schinseng*] (Araliaceae); REN SHEN LU; Ginseng Reed. Used part: rhizome. TCM Effects: To upbear *yang* and raise fall. TCM Indications: Spleen vacuity *qi* fall, enduring diarrhea, prolapse of rectum. Isolated compounds: 18277.
- T4602 *Panax ginseng* [Syn. *Panax schinseng*] (Araliaceae); REN SHEN YE; Ginseng Leaf. Used part: leaf. TCM Effects: To clear heat and resolve summerheat, engender liquid and allay thirst. TCM Indications: Summerheat-heat and thirst, febrile diseases fluid damage, stomach *yin* insufficiency, diabetes mellitus, dry cough due to lung dryness, vacuity-fire toothache. Isolated compounds: 8433, 8440, 8441, 8442, 8443, 8444, 16587.
- T4603 *Panax ginseng* x *P. quinquefolium* (Araliaceae); REN SHEN XI YANG SHEN ZA JIAO ZHONG. Isolated compounds: 9375.
- T4604 *Panax japonicus* var. *bipinnatifidus* (Araliaceae); YU YE SAN QI; Bipinnatifid Ginseng. Used part: rhizome. TCM Effects: To stanch



- bleeding and dissipate stasis, disperse swelling and settle pain. TCM Indications: Blood ejection, hemoptysis, spontaneous external bleeding, hematochezia, hematuria, blood dysentery, flooding and spotting, bleeding due to external injury, menstrual disorder, amenorrhea, postpartum blood stasis abdominal pain, painful swelling from knocks and falls, taxation damage and lumbago, chest and rib-side pain, pain in stomach duct, sores. Isolated compounds: 8423, 8425, 13404, 13405.
- T4605 *Panax japonicus* var. *major* (Araliaceae); QIN LING ZHU ZI SHEN; Largeleaf Japanese Ginseng. Used part: rhizome. TCM Effects: To clear heat and nourish *yin*, stanch bleeding and dissipate stasis, disperse swelling and relieve pain. TCM Indications: Febrile diseases with vexation and thirst, lung heat cough due to *yin* vacuity, hemoptysis, blood ejection, spontaneous external bleeding, hematochezia, hematuria, flooding and spotting, bleeding due to external injury, wound swelling from knocks and falls, wind-damp impediment pain, stomachache, menstrual disorder, wind-fire toothache, swelling pain in throat, swelling pain of welling abscess and sore. Isolated compounds: 8427, 13404, 13405, 13407, 13408, 16048.
- Panax notoginseng* = *Panax pseudo-ginseng* var. *notoginseng*
- T4606 *Panax pseudo-ginseng* (Araliaceae); ZANG SAN QI; Tibet Ginseng. Used part: tuberoid. TCM Effects: To transform stasis and stanch bleeding, disperse swelling and settle pain. TCM Indications: Blood ejection, spontaneous external bleeding, blood dysentery, flooding, postpartum persistent flow of lochia, knocks and falls. Isolated compounds: 8816.
- T4607 *Panax pseudo-ginseng* var. *japonicus* (Araliaceae); ZHU JIE SAN QI; Japanese Ginseng. Used part: rhizome. TCM Effects: To supplement vacuity, relieve cough and dispel phlegm, stanch bleeding and dissipate stasis, disperse swelling and relieve pain. TCM Indications: Weakness during convalescence, inappetence, vacuity taxation cough, hemoptysis, blood ejection, spontaneous external bleeding, hematochezia, hematuria, aberratio mensium, flooding and spotting, bleeding due to external injury, concretion and conglomeration, amenorrhea due to blood stasis, postpartum stasis stagnation abdominal pain, knocks and falls, pain in joints due to rheumatism, swollen welling abscess, hemorrhoids, poisonous snake bite. Isolated compounds: 1608, 8423, 8425, 8426, 8427, 8428, 8430, 8445, 8755, 13405, 13443, 15822, 15823, 15824, 15825, 15836, 15839, 15840, 18025, 18026, 22483, 22484, 22485, 22893, 22894, 22895, 22896, 22897, 22898, 22899, 22900, 22901, 22902.
- T4608 *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*] (Araliaceae); SAN QI; Sanchi. Used part: root. TCM Effects: To stanch bleeding and dissipate stasis, disperse swelling and settle pain. TCM Indications: Hemoptysis, blood ejection, spontaneous external bleeding, hematochezia, flooding and spotting, bleeding due to external injury, angina pectoris, stabbing pain in chest and abdomen, painful swelling from knocks and falls. Isolated compounds: 115, 1058, 2804, 2852, 3242, 4029, 4367, 4463, 4464, 4489, 4500, 4501, 4505, 4506, 4507, 4508, 4509, 4510, 4526, 4527, 4528, 4534, 4577, 4680, 5105, 5416, 6189, 6301, 6319, 6522, 6523, 6534, 6720, 6741, 6742, 6795, 6800, 7469, 7476, 8423, 8424, 8426, 8427, 8428, 8430, 8435, 8605, 8646, 8651, 9041, 9042, 9088, 9359, 9360, 9378, 9485, 9486, 11285, 14484, 14528, 14709, 15140, 15671, 15684, 15818, 15819, 15820, 15821, 15824, 15825, 15826, 15827, 15828, 15829, 15830, 15831, 15832, 15836, 15837, 15838, 15839, 15840, 16594, 16595, 16597, 16598, 16599, 16830, 18317, 18446, 18447, 18448, 18449, 18451, 19233, 19983, 20369, 21040, 21197, 21621, 21628, 22830.
- T4609 *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*] (Araliaceae); SAN QI HUA LEI; Sanchi Buds. Used part: flower. TCM Effects: To clear heat and engender liquid, calm liver and lower blood pressure. TCM Indications: Fluid damage and thirst, aphonia due to throat pain, hypertension. Isolated compounds: 8423, 8424, 8425, 8426, 8427, 9130, 9134, 15821, 15822, 15833, 15834, 15835, 15841, 15842, 16598, 19987, 20367, 20372.
- T4610 *Panax quinquefolium* (Araliaceae); XI YANG SHEN; American Ginseng. Used part: root. TCM Effects: To supplement *qi* and nourish *yin*, clear fire and engender liquid. TCM Indications: *Qi* vacuity, *yin* depletion and effulgent fire, cough and asthma with phlegm-blood, vacuity heat and vexation fatigue, diabetes mellitus due to internal heat, thirst with dry throat. Isolated compounds: 479, 2412, 2943, 3139, 3140, 3242, 4390, 4498, 4672, 6522, 6541, 6795, 7730, 8419, 8423, 8424, 8425, 8426, 8427, 8428, 8429, 8430, 8431, 8435, 8445, 8452, 9485, 9486, 11421, 12856, 12891, 13441, 13443, 13444, 14214, 15684, 15977, 16586, 16597, 16619, 16620, 16621, 16850, 17088, 17104, 17105, 17106, 17107, 17108, 17109, 17124, 17128, 17137, 17138, 17139, 17752, 18190, 18445, 18450, 20280, 20446, 21870, 22825.
- T4611 *Panax quinquefolium* (Araliaceae); XI YANG SHEN JING YE; American Ginseng Stem-leaf. Isolated compounds: 4617, 4619, 4620, 4621.
- Panax schinseng* = *Panax ginseng*  
*Pancovia delavayi* = *Sapindus delavayi*
- T4612 *Panacratium biflorum* (Amaryllidaceae); QUAN NENG HUA; Twoflower Panacratium. Isolated compounds: 2369, 17850.
- Panacratium littoralis* = *Hymenocallis littoralis*
- T4613 *Panacratium maritimum* (Amaryllidaceae). Isolated compounds: 22040.
- T4614 *Panda oleosa*. Isolated compounds: 16602.
- T4615 *Pandanus boninensis* (Pandanaceae). Isolated compounds: 14268, 14273.
- T4616 *Pandanus tectorius* (Pandanaceae); LU DOU LE HUA; Thatch Screwpine Flower. Used part: flower. TCM Effects: To clear heat, disinhibit water. TCM Indications: Common cold with cough, strangury-turbidity, inhibited urination, heat diarrhea, mounting *qi*, mouth-level nape sore. Isolated compounds: 6482, 12843, 14672, 17111.
- T4617 *Panellus serotinus* (Tricholomataceae); HOU SHU SHAN GU; Mukitake (in Japanese). Isolated compounds: 6898, 6899, 6900, 9487, 15943.
- T4618 *Panicum miliaceum* (Poaceae); SHU MI; Broomcorn Millet. Used part: seed. TCM Effects: To supplement center and boost *qi*, eliminate vexation and allay thirst, resolve toxin. TCM Indications: Diarrhea and dysentery, vexation and thirst, retching with counterflow, cough, stomachache, goose-mouth sore, sore and welling abscess, scalds. Isolated compounds: 4672, 11503, 14851.

- T4619 *Panulirus* sp. (Palinuridae). Isolated compounds: 3585.
- T4620 *Papaver album* (Papaveraceae); BAI HUA YING SU; White Poppy\*. Isolated compounds: 16623.
- T4621 *Papaver alpinum* (Papaveraceae); GAO SHAN YING SU; Alpine Poppy. Isolated compounds: 1094, 16625.
- T4622 *Papaver auranticum* (Papaveraceae); JU HUANG YING SU; Orange Poppy\*. Isolated compounds: 1097.
- T4623 *Papaver bracteatum* (Papaveraceae); DA HONG YING SU; Bracteate Poppy\*. Isolated compounds: 3885, 4121, 7837, 14251, 15449, 16625.
- T4624 *Papaver caucasicum* (Papaveraceae); GAO JIA SUO YING SU; Caucasian Poppy\*. Isolated compounds: 1738, 16625.
- T4625 *Papaver commutatum* [Syn. *Papaver rhoeas*] (Papaveraceae); LI CHUN HUA; Corn Poppy. Used part: whole herb, flower or fruit. TCM Effects: To suppress cough, settle pain, check diarrhea. TCM Indications: Cough, migraine, abdominal pain, dysentery. Isolated compounds: 3498, 5768, 9830, 11344, 11677, 13632, 14981, 15266, 16624, 16625, 16627, 16628, 18816, 18817, 19284, 19908, 21292, 21292.
- T4626 *Papaver dubium* (Papaveraceae); CHANG GUO YING SU; Long-headed Poppy. Isolated compounds: 7980, 16625.
- T4627 *Papaver dubium* var. *glabrum* (Papaveraceae). Isolated compounds: 16446.
- T4628 *Papaver fugax* (Papaveraceae); YI XIAN YING SU; Fugacious Poppy\*. Isolated compounds: 7980, 13631.
- T4629 *Papaver nudicaule* (Papaveraceae); YE YING SU; Iceland Poppy. Equivalent plant: *Papaver nudicaule* ssp. *amurense*. Used part: fruit shell or whole herb with flower. TCM Effects: To constrain lung and relieve cough, astringe intestines and check diarrhea, settle pain. TCM Indications: Enduring cough and asthma, diarrhea, hematochezia, prolapse of rectum, emission, vaginal discharge, headache, stomachache, dysmenorrhea. Isolated compounds: 1098, 1099, 3502, 5283, 16625.
- T4630 *Papaver nudicaule* ssp. *amurense* (Papaveraceae); HEI SHUI YE YING SU; Amur Poppy. Used part: fruit shell or whole herb with flower. TCM Effects: See *Papaver nudicaule*. TCM Indications: See *Papaver nudicaule*. Isolated compounds: 1094, 1097, 1100, 1101, 15079.
- T4631 *Papaver nudicaule* var. *chinense* (Papaveraceae); LIE YE YE YING SU; Splidleaf Poppy\*. Used part: fruit shell or whole herb. TCM Effects: To constrain lung and relieve cough, astringe intestines and check diarrhea, settle pain. TCM Indications: Enduring cough and asthma, enduring diarrhea, enduring dysentery, headache, stomachache, pain in heart and abdomen, wind-damp impediment pain, knocks and falls. Isolated compounds: 1096, 1100, 15861, 15862, 18570.
- T4632 *Papaver orientale* (Papaveraceae); JIN DONG YING SU; Oriental Poppy. Isolated compounds: 7837, 11741, 16625.
- T4633 *Papaver persicum* (Papaveraceae); BO SI YING SU; Persia Poppy. Isolated compounds: 1738, 16625.
- T4634 *Papaver pseudorientale* (Papaveraceae); JIA JIN DONG YING SU; Pseudoriental Poppy\*. Isolated compounds: 11741.  
*Papaver rhoeas* = *Papaver commutatum*
- T4635 *Papaver somniferum* (Papaveraceae); YA PIAN; Opium. Used part: latex from unripe capsules. TCM Effects: To relieve pain, astringe intestines, suppress cough. TCM Indications: Pain in heart and abdomen, chronic diarrhea, chronic dysentery, dry cough without phlegm. Isolated compounds: 3884, 3885, 4050, 4123, 4129, 4290, 4473, 4474, 4503, 4504, 7837, 8523, 8902, 9564, 9709, 11348, 12562, 12563, 13633, 14248, 14291, 14981, 15263, 15266, 15267, 15268, 15449, 15664, 16538, 16623, 16625, 16626, 16627, 16628, 18052, 18654, 18816, 19284, 19566, 19987, 19997, 21292, 22745.
- T4636 *Papaver somniferum* (Papaveraceae); YING SU; Opium Poppy. Used part: seed. TCM Effects: To fortify spleen and promote digestion, clear heat and disinhibit urine. TCM Indications: Stomach reflux, abdominal pain, diarrhea, prolapse of rectum. Isolated compounds: 2887, 3885, 4290, 4473, 7837, 8513, 9349, 9350, 12561, 12563, 14981, 15263, 15266, 15268, 15449, 16430, 16623, 17983, 18655, 19284, 20369, 21292.
- T4637 *Papaver somniferum* (Papaveraceae); YING SU KE; Opium Poppy Pericarp. Used part: capsule. TCM Effects: To constrain lung, astringe intestines, relieve pain. TCM Indications: Enduring cough, chronic diarrhea, prolapse of rectum, pain in stomach duct and abdomen. Isolated compounds: 3885, 4290, 5708, 7334, 11085, 13505, 14981, 15266, 15268, 15793, 16473, 16623, 19284, 19650, 21292.
- T4638 *Papaver* spp. (Papaveraceae). Isolated compounds: 3498, 7002, 16624, 16627, 16628.
- T4639 *Papaver urbanianum* (Papaveraceae). Isolated compounds: 14251.
- T4640 *Parabenzoin trilobum* JIA SHAN HU JIAO. Isolated compounds: 16649.
- T4641 *Parakmeria yunnanensis* (Magnoliaceae); YUN NAN NI DAN XING MU LAN; Yunnan Parakmeria. Isolated compounds: 16651.
- T4642 *Parameria laevigata* (Apocynaceae); CHANG JIE ZHU; Laevigata Parameria. Used part: stem cortex or root cortex. TCM Effects: To supplement kidney and strengthen lumbus, dissipate stasis and relieve pain. TCM Indications: Kidney vacuity lumbago, pain in sinews and bones, knocks and falls, snake bite. Isolated compounds: 666, 3725, 6862, 16654, 16655, 17868.
- T4643 *Pararistolochia flos-avis*. Isolated compounds: 17463.
- T4644 *Parasilurus asotus* NIAN YU. Used part: meat or whole fish. TCM Effects: To enrich *yin* and supplement vacuity, fortify spleen and promote digestion, promote lactation, disinhibit urine. TCM Indications: Vacuity detriment and emaciation weakness, spleen-stomach vacuity, indigestion, postpartum scant milk, edema, inhibited urination [=dysuria]. Isolated compounds: 16656.
- T4645 *Parepigynum funingense* (Apocynaceae); FU NING TENG. Isolated compounds: 8005, 8006, 8007, 8008.
- T4646 *Parinari sprucei* (Chrysobalanaceae). Isolated compounds: 5931, 6042, 6066, 6067, 9504, 10512, 10588, 12179, 16854, 16855, 21135, 21136, 21137, 21755, 21758, 21798, 21801, 21802, 21803, 21804, 21805, 21806, 21807.
- T4647 *Paris fargesii* (Liliaceae); QIU YAO GE CHONG LOU; Farges Paris. Isolated compounds: 6440.
- T4648 *Paris polyphylla* (Liliaceae); ZAO XIU; Manyleaf Paris. Equivalent plant: *Paris polyphylla* var. *chinensis*, *Paris polyphylla* var. *yunnanensis*, *Paris polyphylla* var. *pseudothibetica*, *Paris polyphylla* var. *stenophylla*. Used part: rhizome. TCM Effects: To clear heat and resolve toxin, disperse swelling and relieve pain, cool liver and settle

- fright. **TCM Indications:** Swelling toxin of welling abscess and sore, throat impediment, mammary welling abscess, snake or insect bites, painful wound from knocks and falls, liver heat and convulsion. **Isolated compounds:** 6437, 6440, 6443, 6446, 6447, 16668, 16669, 16671, 16810, 16811, 16812, 16815, 17654, 17655, 17656, 17657, 17658, 17659, 17781.
- T4649 *Paris polyphylla* var. *chinensis* (Liliaceae); HUA CHONG LOU; China Paris. **Used part:** rhizome. **TCM Effects:** See *Paris polyphylla*. **TCM Indications:** See *Paris polyphylla*. **Isolated compounds:** 16815.
- T4650 *Paris polyphylla* var. *pseudohibetica* (Liliaceae); CHANG YAO GE CHONG LOU; Tibet Paris. **Used part:** rhizome. **TCM Effects:** See *Paris polyphylla*. **TCM Indications:** See *Paris polyphylla*. **Isolated compounds:** 6440.
- T4651 *Paris polyphylla* var. *stenophylla* (Liliaceae); XIA YE CHONG LOU; Narrowleaf Paris. **Used part:** rhizome. **TCM Effects:** See *Paris polyphylla*. **TCM Indications:** See *Paris polyphylla*. **Isolated compounds:** 6440.
- T4652 *Paris polyphylla* var. *yunnanensis* (Liliaceae); YUN NAN CHONG LOU; Yunnan Manyleaf Paris. **Used part:** rhizome. **TCM Effects:** See *Paris polyphylla*. **TCM Indications:** See *Paris polyphylla*. **Isolated compounds:** 6440, 16813, 16814, 16815, 17783.
- T4653 *Paris* sp. (Liliaceae). **Isolated compounds:** 6440.
- T4654 *Paris* spp. (Liliaceae). **Isolated compounds:** 16809.
- T4655 *Paris tetraphylla* (Liliaceae); WANG SUN; Tetraphyllous Paris. **Used part:** rhizome. **TCM Indications:** Red and white dysentery, impediment, aching pain in limbs. **Isolated compounds:** 16815.
- T4656 *Parmelia saxatilis* (Parmeliaceae); SHI HUA; Parmelia Lichen. **Used part:** lichen. **TCM Effects:** To supplement liver and boost kidney, brighten eyes, stanch bleeding, resolve toxin and disinhibit damp. **TCM Indications:** Blurred vision, pain in lumbus and knees, blood ejection, flooding and spotting, jaundice, scab and lichen. **Isolated compounds:** 1990, 9185, 16673.
- T4657 *Parmelia saxatilis* var. *omphalodes* (Parmeliaceae); QI SHI HUA; Omphalos Parmelia\*. **Isolated compounds:** 1990.
- T4658 *Parmelia tinctorum* (Parmeliaceae); MEI YI; Tinctorial Parmelia\*. **Used part:** lichen. **TCM Effects:** To boost essence, brighten eyes, cool blood and resolve toxin. **TCM Indications:** Dim vision, flooding and spotting, bleeding due to external injury, sore toxin and intractable lichen. **Isolated compounds:** 11486, 12598, 16169.
- T4659 *Parthenium argentatum* x *P. tomentosum* (Asteraceae); ZA JIAO YIN JIAO JU; Hybrid Pathenium\*. **Isolated compounds:** 1668, 1669, 1670, 1671.
- T4660 *Parthenium hysterophorus* (Asteraceae); YIN JIAO JU; Common Pathenium. **Used part:** whole herb. **TCM Indications:** Toxin swelling of sores. **Isolated compounds:** 239, 3482, 4087, 7170, 7171, 7172, 9936, 10916, 10917, 10918, 10919, 16674, 21842.
- T4661 *Parthenium* spp. (Asteraceae). **Isolated compounds:** 16675.
- T4662 *Parthenocissus tricuspidata* (Vitaceae); DI JIN; Japanese Creeper. **Used part:** root and stem. **TCM Effects:** To quicken blood, dispel wind, relieve pain. **TCM Indications:** Postpartum blood stasis, abdominal lump glomus, red and white vaginal discharge, wind-damp pain in sinew and bone, migraine. **Isolated compounds:** 13266, 15986.
- T4663 *Passiflora caerulea* (Passifloraceae); XI FAN LIAN; Passionflower. **Used part:** whole herb. **TCM Effects:** To dispel wind and eliminate damp, quicken blood and relieve pain. **TCM Indications:** Common cold with headache, nasal congestion and runny nose, pain in joints due to rheumatism, mounting *qi*, dysmenorrhea, neuralgia, insomnia, diarrhea. **Isolated compounds:** 3318, 8095.
- T4664 *Passiflora coriacea* (Passifloraceae); GE YANG XI FAN LIAN; Coriaceous Passionflower\*. **Isolated compounds:** 4988.
- T4665 *Passiflora edulis* (Passifloraceae); JI DAN GUO; Passionfruit. **Used part:** fruit. **TCM Effects:** To clear lung and moisten dryness, quiet spirit and relieve pain, harmonize blood and check dysentery. **TCM Indications:** Cough, dry throat, hoarseness, constipation, insomnia, dysmenorrhea, pain in joints, dysentery. **Isolated compounds:** 9232, 9233, 9234, 9235, 15926, 22615.
- T4666 *Passiflora incarnata* (Passifloraceae); FEN HONG SE XI FAN LIAN; May-apple. **Isolated compounds:** 9232, 9234, 9236.
- T4667 *Passiflora quadrangularis* (Passifloraceae); DA GUO XI FAN LIAN; Giant Granadilla. **Isolated compounds:** 6354, 6355, 6380, 6386, 15708.
- T4668 *Passiflora* sp. (Passifloraceae). **Isolated compounds:** 9467, 13003.
- T4669 *Pastinaca sativa* (Apiaceae); OU FANG FENG; Garden Parsnip. **Isolated compounds:** 15204, 22774, 22775.
- T4670 *Patrinia heterophylla* (Valerianaceae); YI YE BAI JIANG; Diversifolious Patrinia. Equivalent plant: *Patrinia scabra*. **Used part:** root. **TCM Effects:** To constrain sweat and dry damp, dispel stasis and disperse swelling. **TCM Indications:** Warm malaria, flooding, red and white vaginal discharge, knocks and falls. **Isolated compounds:** 15705.
- T4671 *Patrinia saniculaefolia* (Valerianaceae); BIAN DOU CAI YE BAI JIANG; Korea Patrinia\*. **Isolated compounds:** 15276, 16716, 16717, 16718.
- T4672 *Patrinia scabiosaefolia* (Valerianaceae); HUANG HUA BAI JIANG; Dahurian Patrinia. **Used part:** whole herb. **TCM Effects:** See *Patrinia villosa*. **TCM Indications:** See *Patrinia villosa*. **Isolated compounds:** 1576, 3042, 4680, 6756, 8607, 8719, 8726, 9260, 9262, 9276, 12642, 12643, 16050, 16719, 16720, 16721, 16722, 16723, 18709, 18710, 19443, 19444, 19445, 19446, 19447, 19542, 19987, 20476, 20477.
- T4673 *Patrinia scabra* (Valerianaceae); CAO YE BAI JIANG; Scabrous Patrinia. **Used part:** root. **TCM Effects:** See *Patrinia heterophylla*. **TCM Indications:** See *Patrinia heterophylla*. **Isolated compounds:** 4414, 7409, 16724.
- T4674 *Patrinia* sp. (Valerianaceae). **Isolated compounds:** 3340.
- T4675 *Patrinia* spp. (Valerianaceae). **Isolated compounds:** 12642.
- T4676 *Patrinia villosa* (Valerianaceae); BAI JIANG; Whiteflower Patrinia. Equivalent plant: *Patrinia scabiosaefolia*. **Used part:** whole herb. **TCM Effects:** To clear heat and resolve toxin, expel pus and break stasis. **TCM Indications:** Intestinal welling abscess, dysentery, red and white vaginal discharge, postpartum blood stasis abdominal pain, red eyes with gall, swollen welling abscess, scab and lichen. **Isolated compounds:** 11083, 12950, 14982, 19935, 22479, 22480, 22481.
- Paullinia asiatica* = *Toddalia asiatica*
- T4677 *Paullinia cupana* (Sapindaceae); BA XI XIANG WU HUAN ZI; Guarana. **Isolated compounds:** 2892, 21310, 21312.
- Paullinia japonica* = *Ampelopsis japonica*
- T4678 *Paulownia fortunei* (Scrophulariaceae); PAO TONG; Fortune

- Paulownia. Equivalent plant: *Paulownia tomentosa*. Used part: bark. TCM Effects: To expel wind and eliminate damp, resolve toxin and disperse swelling. TCM Indications: Wind-damp-heat impediment, strangury, erysipelas, toxin swelling from hemorrhoids, intestinal wind bleeding, swelling pain due to external injury, fracture. Isolated compounds: 20569.
- T4679 *Paulownia tomentosa* (Scrophulariaceae); MAO PAO TONG; Royal Paulownia. Used part: bark. TCM Effects: See *Paulownia fortunei*. TCM Indications: See *Paulownia fortunei*. Isolated compounds: 580, 1833, 3052, 3306, 3981, 11581, 13580, 16734, 19777, 19922, 20569, 22270.
- T4680 *Paxillus curtisii* (Paxillaceae); KE DI SI WANG ZHE JUN; Curtisi Paxillus\*. Isolated compounds: 4401, 4402, 4403, 4404, 4405, 4406, 4407, 4408, 4409, 4410, 4411, 4412, 4413.
- T4681 *Pedicularis decora* (Scrophulariaceae); MEI GUAN MA XIAN HAO ; Smallcalyx Woodbetony. Used part: root. TCM Effects: To enrich *yin* and supplement kidney, boost *qi* and fortify spleen. TCM Indications: Spleen-kidney vacuity, steaming bone tidal fever, pain in joints, no thought of food and drink. Isolated compounds: 16763, 16764.
- T4682 *Pedicularis muscicola* (Scrophulariaceae); XIAN SHENG MA XIAN HAO; Muscicolous Woodbetony. Used part: root. TCM Effects: To supplement original *qi* greatly, engender liquid and quiet spirit, strengthen heart and lower blood pressure. TCM Indications: *Qi*-blood depletion, vacuity taxation with profuse sweating, vacuity desertion failure, hypotension. Isolated compounds: 3247, 19782.
- T4683 *Pedicularis spicata* (Scrophulariaceae); SUI HUA MA XIAN HAO; Spicate Woodbetony. Isolated compounds: 16763.
- T4684 *Pedicularis striata* (Scrophulariaceae); HONG WEN MA XIAN HAO; Redstriate Woodbetony. Isolated compounds: 16763.
- T4685 *Pedicularis striata* ssp. *arachnoidea* (Scrophulariaceae); ZHU SI HONG WEN MA XIAN HAO; Arachnoidea Redstriate Woodbetony\*. Isolated compounds: 16763.
- T4686 *Pedilanthus tithymaloides* (Euphorbiaceae); YU DAI GEN; Tithymalus-like Pedilanthus. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, dissipate stasis and disperse swelling, engender flesh and stanch bleeding. TCM Indications: Toxin swelling of sores, painful swelling from knocks and falls, fracture, bleeding due to external injury. Isolated compounds: 6918, 6919.
- T4687 *Peganum harmala* (Zygophyllaceae); LUO TUO PENG; Common Peganum. Used part: whole herb. TCM Effects: To diffuse lung *qi*, dispel wind-damp, disperse swelling toxin. TCM Indications: Cough and shortness of breath, wind-damp impediment pain, itchy skin, innominate toxin swelling. Isolated compounds: 5201, 5219, 9232, 9233, 9235, 16766, 16768, 16769, 16770, 16771, 19062, 22350.
- T4688 *Peganum harmala* (Zygophyllaceae); LUO TUO PENG ZI; Common Peganum Seed. Used part: seed. TCM Effects: To relieve cough and calm asthma, dispel wind-damp, resolve depression. TCM Indications: Cough and asthma, inhibited urination, numbness in limbs, aching pain in joints. Isolated compounds: 5219, 9232, 9235, 9236, 12488, 16770, 21070, 22350.
- T4689 *Peganum nigellastrum* (Zygophyllaceae); LUO TUO HAO; Little Peganum. Used part: whole herb. TCM Effects: To dispel damp and resolve toxin, quicken blood and relieve pain, diffuse lung and suppress cough. TCM Indications: Arthritis, menstrual disorder, bronchitis, headache. Isolated compounds: 5219, 5565, 5713, 13086, 13087, 22350.
- T4690 *Pelargonium graveolens* (Geraniaceae); XIANG YE; Roco Pelargonium. Used part: whole herb. TCM Effects: To dispel wind and eliminate damp, move *qi* and relieve pain, kill worms. TCM Indications: Rheumatism, mounting *qi*, scrotal eczema, scab and lichen. Isolated compounds: 3768, 12853, 14581, 15146, 18920, 21979.
- T4691 *Pelargonium hortorum* (Geraniaceae); SHI LA HONG; Fish Pelargonium. Used part: flower. TCM Effects: To clear heat and resolve toxin. TCM Indications: Otitis media. Isolated compounds: 3767, 3768, 15901.
- T4692 *Pelargonium reniforme* (Geraniaceae); SHEN YE TIAN ZHU KUI; Reniform Pelargonium\*. Isolated compounds: 2603, 8111, 8112, 8113, 8119, 11342, 16786, 16787, 16788, 17221, 17222, 21905.
- T4693 *Pelargonium* sp. (Geraniaceae). Isolated compounds: 20715.
- T4694 *Pelargonium zonale* (Geraniaceae); MA TI WEN TIAN ZHU KUI; Zonal Geranium. Isolated compounds: 16781.
- T4695 *Pellia epiphylla* (Dilaeaceae); XI TAI. Isolated compounds: 6999, 16790.
- T4696 *Penaeus orientalis* (Penaeidae); HAI XIAKihinouye; Prawn. Used part: meat or body. TCM Effects: To supplement kidney and invigorate *yang*, open stomach and transform phlegm. TCM Indications: Kidney vacuity impotence, convulsion of hands and feet, wind stroke with hemiplegia, mammary sore, enduring sores. Isolated compounds: 1921, 3095, 4569, 6688, 10913, 13126, 14133, 21940.
- T4697 *Penicillium oxalicum* . Isolated compounds: 6906.
- T4698 *Penicillium roqueforti* LOU DI QING MEI. Isolated compounds: 17999.
- T4699 *Penicillium simplicissimum* JI JIAN DAN QING MEI. Isolated compounds: 2441, 4206, 4207, 16806, 16807.
- T4700 *Penicillium steckii* . Isolated compounds: 6340, 6362, 20690, 20691.
- T4701 *Penicillium verruculosum* Mold; *Penicillium verruculosum*. Isolated compounds: 22421.
- T4702 *Pentopetia androsaernifolia* (Asclepiadaceae); PEN TUO PO TI CAO; *Pentopetia androsaernifolia*. Isolated compounds: 16959.
- T4703 *Pentopetia* spp. (Asclepiadaceae). Isolated compounds: 16958.
- T4704 *Peperomia duclouxii* (Piperaceae); MENG ZI CAO HU JIAO; Mengzi Peperomia\*. Used part: whole herb. TCM Effects: To dispel wind and eliminate damp, transform stasis and dissipate binds, resolve toxin and disperse swelling. TCM Indications: Wind-damp impediment pain, knocks and falls, swollen welling abscess and sore toxin, try to using for carcinoma of stomach and carcinoma of esophagus. Isolated compounds: 2482, 2483, 9818, 10015, 10016, 10388, 14009, 14010, 14011, 14107, 18265, 22170.
- T4705 *Peperomia pellucida* (Piperaceae); CAO HU JIAO; Shiny Peperomia. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, dissipate stasis and relieve pain, stanch bleeding. TCM Indications: Swelling toxin of welling abscess and sore, burns and scalds, knocks and falls, bleeding due to external injury. Isolated compounds: 16791.

- T4706 *Peperomia sui* (Piperaceae). Isolated compounds: 2415, 16906, 17871, 20491, 20493, 20494, 20495.
- T4707 *Peperomia villipetiola* (Piperaceae). Isolated compounds: 13820, 13821, 14116, 14515, 14516, 14587, 14588.
- T4708 *Peperomia vulcanica* (Piperaceae); HUO SHAN YAN CAO HU JIAO; Volcanic Peperomia\*. Isolated compounds: 16907, 16908.
- T4709 *Periandra dulcis* TIAN ZHOU WEI JIA XIONG RUI. Isolated compounds: 16918, 16919, 16920.
- T4710 *Pericampylus glaucus* (Menispermaceae); XI YUAN TENG; Greyblue Pericampylus. Used part: vine or root. TCM Effects: To clear heat and resolve toxin, extinguish wind and check tetany, dispel wind-damp. TCM Indications: Toxin swelling of sores, swelling pain in throat, fright wind and convulsion, wind-damp impediment pain, knocks and falls, poisonous snake bite. Isolated compounds: 6918.
- T4711 *Pericopsis angolensis*. Isolated compounds: 6290, 17278.
- T4712 *Peridinium bipes* (Peridiniaceae); ER JIAO DUO JIA ZAO. Isolated compounds: 5377, 6424, 6425, 16922.
- T4713 *Perilla arguta* (Lamiaceae); RUI ZI SU; Argute Perilla\*. Isolated compounds: 16930.
- T4714 *Perilla frutescens* (Lamiaceae); BAI SU YE; Common Perilla Leaf. Used part: leaf. TCM Effects: To course wind and diffuse lung, rectify *qi* and disperse food, resolve toxin of fish and crab. TCM Indications: Common cold due to wind-cold, cough and asthma, distention and oppression in stomach duct and abdomen, non-digestion of food accumulation, vomiting and diarrhea, cold dysentery, poisoning of fish or crab, genital swelling, leg *qi* with swelling toxin, snake or insect bites. Isolated compounds: 10270, 16931, 16934.
- T4715 *Perilla frutescens* (Lamiaceae); BAI SU ZI; Common Perilla Fruit. Used part: fruit. TCM Effects: To downbear *qi* and disperse phlegm, calm asthma, moisten intestines. TCM Indications: Phlegm congestion and *qi* counterflow, cough and asthma, intestinal dry and constipation. Isolated compounds: 6716, 8816, 15983, 16929, 16930.
- T4716 *Perilla frutescens* f. *viridis* (Lamiaceae); QING ZI SU ; Viridian Common Perilla\*. Isolated compounds: 16931, 16933.
- T4717 *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*] (Lamiaceae); JIAN ZI SU; Acute Common Perilla. Used part: seed. TCM Effects: See *Perilla frutescens* var. *arguta*. TCM Indications: See *Perilla frutescens* var. *arguta*. Isolated compounds: 6095, 6096, 6193, 6745, 13774, 16930.
- T4718 *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*] (Lamiaceae); JIAN ZI SU YE; Acute Common Perilla Leaf. Used part: leaf. TCM Effects: See *Perilla frutescens* var. *arguta*. TCM Indications: See *Perilla frutescens* var. *arguta*. Isolated compounds: 2222, 2455, 2887, 3040, 3045, 3242, 4550, 6745, 7521, 11406, 12420, 12843, 12849, 13774, 13776, 15204, 15238, 16929, 17376, 17377, 18000, 19587, 19983, 20369, 22465.
- T4719 *Perilla frutescens* var. *arguta* (Lamiaceae); ZI SU; Common Perilla. Equivalent plant: *Perilla frutescens* var. *acuta*, *Perilla frutescens* var. *crispa*. Used part: seed. TCM Effects: To downbear *qi*, transform phlegm, calm asthma, moisten intestines. TCM Indications: Phlegm congestion and *qi* counterflow, cough and asthma, intestinal dry and constipation. Isolated compounds: 12891, 12893, 22554.
- T4720 *Perilla frutescens* var. *arguta* (Lamiaceae); ZI SU GENG; Common Perilla Stem. Equivalent plant: *Perilla frutescens* var. *crispa*. Used part: stem. TCM Effects: To loosen center and rectify *qi*, quiet fetus, harmonize blood. TCM Indications: Spleen-stomach *qi* stagnation, glomus fullness, fetus *qi* disharmony, beriberi with edema, hemoptysis, blood ejection, spontaneous external bleeding. Isolated compounds: 6716, 12893, 16929.
- T4721 *Perilla frutescens* var. *arguta* (Lamiaceae); ZI SU YE; Common Perilla Leaf. Equivalent plant: *Perilla frutescens* var. *acuta*. Used part: leaf. TCM Effects: To dissipate cold and resolve exterior, diffuse lung and transform phlegm, move *qi* and harmonize center, quiet fetus, resolve toxin of fish and crab. TCM Indications: Wind-cold exterior syndrome, cough with profuse phlegm, distention fullness in chest and stomach duct, nausea and vomiting, abdominal pain and diarrhea, malign obstruction in pregnancy, poisoning of fish or crab. Isolated compounds: 2306, 3045, 3242, 4356, 5690, 11406, 12844, 12849, 13775, 14374, 16930, 16932, 16936, 19983.
- T4722 *Perilla frutescens* var. *crispa* (Lamiaceae); HUI HUI SU; Crisped Common Perilla. Used part: seed. TCM Effects: See *Perilla frutescens* var. *arguta*. TCM Indications: See *Perilla frutescens* var. *arguta*. Isolated compounds: 16930, 19983, 20369.
- T4723 *Perilla frutescens* var. *crispa* (Lamiaceae); HUI HUI SU GENG; Crisped Common Perilla Stem. Used part: stem. TCM Effects: See *Perilla frutescens* var. *arguta*. TCM Indications: See *Perilla frutescens* var. *arguta*. Isolated compounds: 1489, 2896, 2913, 3045, 3242, 3760, 6745, 12420, 12843, 12849, 13142, 13450, 13774, 13775, 15204, 15238, 16930, 16935, 17376, 19583.
- Perilla frutescens* var. *purpurascens* = *Perilla frutescens* var. *acuta*
- T4724 *Perilla* spp. (Lamiaceae). Isolated compounds: 19838.
- T4725 *Periploca calophylla* (Asclepiadaceae); QING SHE TENG; Greensnake vine. Used part: stem. TCM Effects: To dispel wind and eliminate damp, quicken blood and relieve pain. TCM Indications: Wind-cold-damp impediment, numbness of limbs, lumbago, knocks and falls. Isolated compounds: 12948, 16959, 17562.
- T4726 *Periploca forrestii* (Asclepiadaceae); XI NAN GANG LIU; Forrest Silkvine. Used part: root or whole herb. TCM Effects: To dispel wind and eliminate damp, quicken blood and disperse welling abscess. TCM Indications: Wind-damp impediment pain, menstrual block, mammary welling abscess, knocks and falls, fracture. Isolated compounds: 10599, 16923, 16924, 16948, 16959.
- T4727 *Periploca graeca* (Asclepiadaceae); XI LA GANG LIU; Grecian Silkvine. Isolated compounds: 663, 4549, 7768, 16900, 16943, 16959.
- T4728 *Periploca nigrescens* (Asclepiadaceae); HEI GANG LIU; Black Silkvine. Isolated compounds: 281, 282, 4012, 4547, 4972, 4973, 20395, 20397, 20399, 20401.
- T4729 *Periploca sepium* (Asclepiadaceae); XIANG JIA PI; Chinese Silkvine Root-bark. Used part: root cortex. TCM Effects: To dispel wind-damp, strengthen sinews and bones. TCM Indications: Wind-damp impediment pain, limp aching lumbus and knees, palpitation and shortness of breath, edema in lower limb. Isolated compounds: 1110, 1111, 1112, 1113, 3951, 3953, 3956, 8828, 8829, 8830, 8831, 14088, 14684, 14685, 14686, 15493, 16938, 16939, 16940, 16941, 16942, 16943, 16944, 16945, 16946, 16947, 16948, 16949, 16950, 16951, 16952, 16953, 16954, 16955, 16956, 16957, 16958, 16959, 16961,

- 16962, 16963, 17566, 17801, 17802, 17803, 19092, 19093, 19094, 19095, 19853, 19987, 22856.
- T4730 *Peristrophe roxburghiana* (Acanthaceae); GUAN YIN CAO; Roxburgh Peristrophe. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, cool blood and extinguish wind, dissipate stasis and disperse swelling. TCM Indications: Lung heat cough, tuberculosis and hacking of blood, blood ejection, infant fright wind, red swollen of throat, mouth and tongue sores, dribbling pain of urination, swelling welling abscess and sore and boil, scrofula, painful swelling from knocks and falls, bleeding due to external injury, poisonous snake bites. Isolated compounds: 16964, 16965.
- T4731 *Persea americana* [Syn. *Persea gratissima*] (Lauraceae); E LI; American Avocado. Used part: fruit. TCM Effects: To engender liquid and allay thirst. TCM Indications: Diabetes mellitus. Isolated compounds: 166, 167, 233, 234, 1596, 5691, 9748.
- T4732 *Persea borbonia* (Lauraceae). Isolated compounds: 15903.  
*Persea gratissima* = *Persea americana*
- T4733 *Persea indica* (Lauraceae); YIN DU E LI; Indian Avocado\*. Isolated compounds: 1264, 1265, 5465, 8201.
- T4734 *Persea* spp. (Lauraceae). Isolated compounds: 15903.  
*Persicaria sibirica* = *Polygonum sibiricum*
- T4735 *Pertya glabrescens* (Asteraceae); JIN WU MAO SAO JU; Longflower Bloomdaisy. Isolated compounds: 9528.
- T4736 *Petalostemon purpureus* ZI SE BAN RUI DOU; Purple Prairie-clover. Isolated compounds: 17008.
- T4737 *Petalostemon purpureum* HUANG SE BAN RUI DOU; Yellow Prairie-clover. Isolated compounds: 17009.
- T4738 *Petasites albus* (Asteraceae); BAI HUA FENG DOU CAI; White-flowerButterbur\*. Isolated compounds: 10094.
- T4739 *Petasites formosanus* (Asteraceae); TAI WAN FENG DOU CAI; Taiwan Butterbur\*. Isolated compounds: 2120, 2121, 2122, 4989, 7768, 13098, 17012, 17014, 20148.  
*Petasites hybridu* = *Petasites officinalis*
- T4740 *Petasites japonicus* (Asteraceae); FENG DOU CAI; Japanese Butterbur. Used part: rhizome. TCM Effects: To clear heat and resolve toxin, dispel stasis and disperse swelling. TCM Indications: Swelling pain in throat, swollen welling abscess and toxin of clove, poisonous snake bite, knocks and falls. Isolated compounds: 198, 264, 395, 864, 1188, 1205, 2412, 3194, 3241, 3242, 5617, 7227, 7229, 7986, 7987, 7988, 7989, 7990, 8016, 8018, 8019, 8021, 9607, 10094, 11591, 11626, 11822, 12813, 15693, 15696, 17010, 17011, 17013, 17015, 17016, 17017, 19302, 19731, 21616, 22389.
- T4741 *Petasites kablikianus* (Asteraceae); KA BU LI FENG DOU CAI; Kabliki Butterbur\*. Isolated compounds: 11591.
- T4742 *Petasites laevigatus* (Asteraceae); PING HUA FENG DOU CAI; Smooth Butterbur\*. Isolated compounds: 17546.
- T4743 *Petasites officinalis* [Syn. *Petasites hybridu*] (Asteraceae); ZI FENG DOU CAI; Purple Butterbur. Isolated compounds: 11591, 17013, 17015.
- T4744 *Petasites* sp. (Asteraceae). Isolated compounds: 2119, 7230.
- T4745 *Petasites tricholobus* (Asteraceae); MAO LIE FENG DOU CAI; Hairyllobed Butterbur. Isolated compounds: 2168, 17018, 17019, 18071.
- T4746 *Petiveria alliacea* (Phytolaccaceae); SUAN CHOU MU JI CAO. Isolated compounds: 2293, 5391, 5392, 5393, 5394, 5395, 6501, 8772, 8777, 8778.
- T4747 *Petrocosmea kerrii* (Gesneriaceae); SHI HU DIE; Kerri Petrocosmea\*. Isolated compounds: 3432.
- T4748 *Petroselinum crispum* (Apiaceae); ZHOU YE OU QIN; Curly Garden Parsley. Isolated compounds: 1502, 1520, 2284, 15204.
- T4749 *Petroselinum* sp. (Apiaceae). Isolated compounds: 2309.
- T4750 *Petrosia strongylata*; Sponge *Petrosia strongylata*. Isolated compounds: 12613, 12614.
- T4751 *Petunia hybrida* (Solanaceae); BI DONG QIE; Common Petunia. Isolated compounds: 13458, 13459, 13461, 17026.
- T4752 *Petunia nyctaginiflora* (Solanaceae); ZI MO LI HUA BI DONG QIE; Nyctaginiflower Petunia\*. Isolated compounds: 21962, 21964.
- T4753 *Petunia reitzii* (Solanaceae). Isolated compounds: 17358, 17359.
- T4754 *Peucedanum bourgaei* (Apiaceae); BO SHI QIAN HU; Bourgae Hogfennel\*. Isolated compounds: 17036.  
*Peucedanum decursivum* = *Angelica decursiva*
- T4755 *Peucedanum formosanum* (Apiaceae); TAI WAN QIAN HU; Taiwan Hogfennel. Isolated compounds: 17763.
- T4756 *Peucedanum govanianum* var. *bicolor* (Apiaceae); LI JIANG QIAN HU; Likiang Hogfennel. Isolated compounds: 1346, 7707, 12800, 14894, 17030, 17375, 18165, 18317, 20156, 20280.
- T4757 *Peucedanum grande* (Apiaceae); DA QIAN HU; Big Hogfennel\*. Isolated compounds: 2833.
- T4758 *Peucedanum guangxiense* (Apiaceae); GUANG XI QIAN HU; Guangxi Hogfennel. Isolated compounds: 17763.
- T4759 *Peucedanum hispanicum* (Apiaceae). Isolated compounds: 16263.
- T4760 *Peucedanum japonicum* (Apiaceae); BIN HAI QIAN HU; Japan Hogfennel. Used part: root. TCM Effects: To clear heat and relieve cough, disinhibit urine and resolve toxin. TCM Indications: Lung heat cough, damp-heat strangury pain, red swollen sore and welling abscess. Isolated compounds: 17032, 17763.
- T4761 *Peucedanum longshengens* (Apiaceae); NAN LING QIAN HU; Nanling Hogfennel. Used part: root. TCM Effects: See *Angelica decursiva*. TCM Indications: See *Angelica decursiva*. Isolated compounds: 476.
- T4762 *Peucedanum mashanens* (Apiaceae); MA SHAN QIAN HU; Mashan Hogfennel. Isolated compounds: 9204.
- T4763 *Peucedanum morisonii* (Apiaceae); ZHUN GE ER QIAN HU; Dzungaria Hogfennel\*. Used part: root. TCM Effects: To dispel wind and dissipate cold, rectify *qi* and relieve pain. TCM Indications: Wind-cold common cold, cough, stomach cold distending pain Isolated compounds: 17028.
- T4764 *Peucedanum officinale* (Apiaceae); YAO YONG QIAN HU; Hog's Fennel. Isolated compounds: 17028.
- T4765 *Peucedanum oreoselinum* (Apiaceae); SHAN QIAN HU; Mountain Parsley. Isolated compounds: 12747, 17036.
- T4766 *Peucedanum ostruthium* (Apiaceae); OU QIAN HU; Masterwort. Isolated compounds: 11001, 16261, 16263, 16264.
- T4767 *Peucedanum palustre* (Apiaceae); ZHAO ZE QIAN HU; Marsh Parsley. Isolated compounds: 16263, 16457.
- T4768 *Peucedanum praeruptorum* (Apiaceae); BAI HUA QIAN HU;

- Whiteflower Hogfennel. Used part: root. TCM Effects: See *Angelica decursiva*. TCM Indications: See *Angelica decursiva*. Isolated compounds: 317, 1239, 1536, 2107, 2309, 8095, 11688, 15645, 15647, 17029, 17031, 17033, 17756, 17757, 17758, 17759, 17760, 17761, 17762, 17763, 17764, 18086, 18282, 18283, 18284, 18285, 18286, 22774.
- T4769 *Peucedanum rubricaulum* (Apiaceae); YUN QIAN HU; Yun Hogfennel. Used part: root. TCM Effects: See *Angelica decursiva*. TCM Indications: See *Angelica decursiva*. Isolated compounds: 359, 438, 4193, 5039, 11001, 11346, 13571, 13687, 14825, 16261, 19040, 19984, 20280, 22775.
- T4770 *Peucedanum ruthenicum* (Apiaceae); E GUO QIAN HU; Russian Hogfennel\*. Isolated compounds: 17028.
- T4771 *Peucedanum* sp. (Apiaceae). Isolated compounds: 1960.
- T4772 *Peucedanum stenocarpum* (Apiaceae); XIA GUO QIAN HU; Narrowfruit Hogfennel\*. Isolated compounds: 2833, 17028.
- T4773 *Peucedanum terebinthaceum* (Apiaceae); SHI FANG FENG; Terebinthaceous Hogfennel. Used part: root. TCM Effects: To dissipate wind and clear heat, downbear *qi* and disperse phlegm. TCM Indications: Common cold, cough, phlegm asthma, head wind dizziness. Isolated compounds: 13571.
- T4774 *Peumus boldus* (Monimiaceae); BO LU DU SHU; Boldo. Isolated compounds: 2538, 11256.
- T4775 *Pfaffia paniculata* BA XI REN SHEN. Isolated compounds: 17037, 17038.
- T4776 *Phaeanthus ebracteolatus* (Annonaceae). Isolated compounds: 17039.
- T4777 *Phalaris arundinacea* (Poaceae); YI CAO; Reed Canary-grass. Used part: whole herb. TCM Effects: To regulate menstruation and check discharge. TCM Indications: Menstrual disorder, red and white vaginal discharge. Isolated compounds: 6370, 8971, 9646.
- T4778 *Phallus impudicus* (Phallaceae); BAI GUI BI; Stinking Polecat, Wood Witch. Used part: sporocarp. TCM Effects: To dispel wind and eliminate damp, quicken blood and relieve pain. TCM Indications: Wind-damp pain. Isolated compounds: 17090.
- T4779 *Pharbitis nil* (Convolvulaceae); QIAN NIU ZI; Lobedleaf Pharbitis Seed. Equivalent plant: *Pharbitis purpurea*. Used part: seed. TCM Effects: To drain water and free stool, disperse accumulation and kill worms. TCM Indications: Edema distention fullness, inhibited urine and stool, phlegm-rheum and accumulation-gathering, *qi* counterflow with cough and asthma, abdominal pain due to worm accumulation, ascariasis, taeniasis. Isolated compounds: 3477, 6765, 8095, 8372, 8373, 8377, 11582, 13257, 15597, 16808, 16884, 17043, 17044.
- T4780 *Pharbitis purpurea* (Convolvulaceae); YUAN YE QIAN NIU ZI; Roundleaf Pharbitis Seed. Used part: seed. TCM Effects: See *Pharbitis nil*. TCM Indications: See *Pharbitis nil*. Isolated compounds: 8372, 8373, 8374, 8377.
- Phaseolus angularis* = *Vigna angularis*
- T4781 *Phaseolus coccineus* (Fabaceae); DUO HUA CAI DOU; Scarlet Runner Bean. Isolated compounds: 13439.
- T4782 *Phaseolus multiflorus* (Fabaceae); HONG HUA CAI DOU; Runner Bean. Isolated compounds: 15708, 17045.
- T4783 *Phaseolus* sp. (Fabaceae). Isolated compounds: 1048.
- T4784 *Phaseolus* spp. (Fabaceae). Isolated compounds: 17047.
- T4785 *Phaseolus vulgaris* (Fabaceae); BAI FAN DOU; Kidney Bean. Used part: seed. TCM Effects: To enrich and nourish, resolve heat, disinhibit urine, disperse swelling. TCM Indications: Summerheat-heat vexation and thirst, edema, beriberi. Isolated compounds: 618, 3040, 3594, 4451, 5010, 5027, 7384, 8012, 8753, 11551, 12083, 12714, 12718, 16781, 17027, 17048, 17049, 17425, 17913, 19238, 19239, 20129, 20369.
- T4786 *Phasianus colchicus* (Phasianidae); ZHI; Common Pheasant. Used part: meat. TCM Effects: To supplement center and boost *qi*, engender liquid and allay thirst. TCM Indications: Spleen vacuity diarrhea, distention fullness in chest and abdomen, diabetes mellitus, frequent urination, phlegm asthma, fistula. Isolated compounds: 13504, 15949.
- T4787 *Phellinus igniarius* (Polyporaceae); SANG HUANG; *Phellinus igniarius*. Used part: sporocarp. TCM Effects: To stanch bleeding, quicken blood, transform rheum, check diarrhea. TCM Indications: Flooding, blood strangury, prolapse of rectum with bleeding, vaginal discharge, amenorrhea. Isolated compounds: 700, 2887, 5763, 6075, 6201, 7250, 9567, 9815, 11081, 11413, 15954, 17059, 17060, 17061, 17062, 17063, 17064, 17968, 20566.
- T4788 *Phellinus linteus* (Polyporaceae); LIE TI MU CENG KONG JUN. Isolated compounds: 9561.
- T4789 *Phellodendron amurense* (Rutaceae); HUANG BAI; Amur Corktree. Equivalent plant: *Phellodendron chinense*, *Phellodendron chinense* var. *Glabriusculum*, *Phellodendron amurense* var. *wilsonii*. Used part: bark. TCM Effects: To drain fire, dispel damp and resolve toxin. TCM Indications: Damp-heat dysentery, tuberculosis, epidemic meningitis, acute conjunctivitis, trachoma, fever, abdominal pain, diarrhea, suppurative hematochezia, tenesmus, jaundice, yellow thick foul leukorrhagia, swelling pain in knees and feet, urinary tract infection, boil, sore, ulcer, eczema, mouth sore, hemorrhoids, burns, scalds, exuberance of fire with tidal fever, tidal fever with night sweat, emission. Isolated compounds: 1091, 2303, 3040, 3070, 4969, 4971, 9428, 11851, 12226, 13374, 13716, 15598, 15761, 15882, 15883, 15884, 16555, 17053, 17057, 17058, 17065, 17066, 17078, 19983.
- T4790 *Phellodendron amurense* var. *wilsonii* (Rutaceae); TAI WAN HUANG BO; Taiwan Corktree\*. Used part: bark. TCM Effects: See *Phellodendron amurense*. TCM Indications: See *Phellodendron amurense*. Isolated compounds: 874, 1091, 1764, 1935, 5063, 9815, 9818, 10195, 11642, 12020, 12847, 13097, 14205, 14254, 14443, 14652, 14673, 15448, 16257, 16399, 17052, 17053, 17067, 17068, 17069, 17072, 17073, 17076, 18317, 19542, 19627, 19784, 19983, 20034, 21266, 21634, 22195, 22332.
- T4791 *Phellodendron chinense* (Rutaceae); HUANG PI SHU; Chinese Corktree. Used part: bark. TCM Effects: See *Phellodendron amurense*. TCM Indications: See *Phellodendron amurense*. Isolated compounds: 2303, 13374, 15598, 15599, 16555, 17065, 17070, 17071, 17075, 17480.
- T4792 *Phellodendron chinense* var. *glabriusculum* (Rutaceae); TU YE HUANG PI SHU; Glabrousleaf Chinese Corktree. Used part: bark. TCM Effects: See *Phellodendron amurense*. TCM Indications: See *Phellodendron amurense*. Isolated compounds: 4122, 13374, 17065, 19983, 21077.
- T4793 *Phellodendron japonicum* (Rutaceae); RI BEN HUANG BAI; Japan

- Corktree\*. Isolated compounds: 315, 481, 663, 874, 1091, 2224, 2887, 3723, 3936, 4135, 4189, 6954, 7951, 8983, 9815, 9818, 13097, 14141, 14205, 14254, 14652, 17053, 17066, 17074, 18317, 19081, 19540, 19542, 19983, 22195, 22332.
- T4794 *Phellodendron sachalinense* (Rutaceae); KU YE DAO HUANG BAI; Sachaline Corktree\*. Isolated compounds: 17078.
- T4795 *Phellodendron* spp. (Rutaceae). Isolated compounds: 15761.
- T4796 *Pheretima aspergillum*; *Allolobophora caliginosa trapezoides* (Megascolecidae;Lumbricidae); QIU YIN; Earthworm. Used part: body. TCM Effects: To clear heat, calm liver, calm asthma, free network vessels, lower blood pressure. TCM Indications: Ardent fever and manic agitation, fright wind and convulsion, wind-heat headache, red eyes, wind stroke with hemiplegia, chronic bronchitis, asthma, bronchial asthma, hypertension, throat impediment, pain in joints, gum hemorrhage, urinary stoppage, scrofula, epidemic parotitis, sore. Isolated compounds: 3585, 9067, 9070, 10913, 22756.
- T4797 *Phillyrea latifolia* (Oleaceae); KUO YE OU NV ZFEN; Tree Phyllirea. Used part: leaf. TCM Effects: To promote contraction, disinherit urine. <sup>[5509]</sup> TCM Indications: Headache. <sup>[5509]</sup> Isolated compounds: 17145, 18792, 20569.
- T4798 *Philonotis fontana* (Bartramiaceae); ZE XIAN. Used part: plant body. TCM Effects: To clear heat and resolve toxin. TCM Indications: Swelling pain in throat, common cold, cough, swelling welling abscess and sore and boil, burns and scalds. Isolated compounds: 5692, 17147.
- T4799 *Philydrum lanuginosum* (Philydraceae); TIAN CONG; Woolly Philydrum. Used part: whole herb. TCM Effects: To clear heat and transform damp, resolve toxin. TCM Indications: Edema, heat impediment, toxin swelling of sores, scab and lichen, beriberi, foot rot. Isolated compounds: 2843, 11659, 19087, 20562.
- T4800 *Phlegmariusus fordii* (Huperziaceae); HUA NAN MA WEI SHAN; Fordi Phlegmariusus. Used part: whole herb. TCM Effects: To dispel wind and free network vessels, disperse swelling and relieve pain, clear heat and resolve toxin. TCM Indications: Swelling pain in joints, numbness in limbs, knocks and falls, cough and asthma, heat strangury, poisonous snake bite. Isolated compounds: 7879, 17154, 17155, 17156, 17157, 17158.
- T4801 *Phlegmariusus phlegmaria* [Syn. *Lycopodium phlegmaria*] (Huperziaceae); MA WEI SHAN; Slender Phlegmariusus. Used part: whole herb. TCM Effects: To dispel wind and eliminate damp, clear heat and resolve toxin. TCM Indications: Wind-damp impediment pain, knocks and falls, fever and sore pharynx, edema, urticaria. Isolated compounds: 13188, 13193, 13220, 13221, 17148, 17149, 17150, 17151, 17152, 17153, 19770.
- T4802 *Phleum pratense* (Poaceae); TI MU CAO; Timothy. Used part: whole herb. TCM Indications: Indigestion, diarrhea, dysentery, dribbling pain of urination. Isolated compounds: 7768.
- T4803 *Phlogacanthus curviflorus* (Acanthaceae); HUO YAN HUA; Curvedflower Phlogacanthus. Used part: root or whole herb. TCM Effects: To clear heat and resolve toxin, interrupt malaria. TCM Indications: Heat toxin swollen welling abscess, malaria. Isolated compounds: 85, 2331, 4680, 13098, 17159, 17160, 17161, 17162, 17163, 19983, 20556.
- T4804 *Phlojodicarpus sibiricus* (Apiaceae); ZHANG GUO QIN; Siberian Phlojodicarpus. Used part: root. TCM Effects: See *Angelica sinensis*. TCM Indications: See *Angelica sinensis*. Isolated compounds: 5707, 22552.
- T4805 *Phlojodicarpus* sp. (Apiaceae). Isolated compounds: 22552.
- T4806 *Phlomis aurea* (Lamiaceae); JIN HUANG CAO SU; Goldenyellow Jerusalem sage\*. Isolated compounds: 2279, 6998, 10085, 17167.
- T4807 *Phlomis brunneogaleata* (Lamiaceae); ZONG KUI CAO SU. Isolated compounds: 580, 2683, 2920, 2924, 3166, 3551, 3609, 3674, 7925, 9750, 11128, 11195, 12916, 18221.
- T4808 *Phlomis grandiflora* var. *grandiflora* (Lamiaceae); DA HUA CAO SU; Largeflower Jerusalem sage. Isolated compounds: 17164.
- T4809 *Phlomis lunariifolia* (Lamiaceae); XIN YUE XING YE CAO SU. Isolated compounds: 13074, 13075, 13138.
- T4810 *Phlomis mongolica* (Lamiaceae); MENG GU CAO SU; Mongolian Jerusalem sage. Used part: root or whole herb. TCM Effects: To dispel wind and eliminate damp, quicken blood and relieve pain. TCM Indications: Rheumatic arthritis, common cold, knocks and falls, vacuity and fever. Isolated compounds: 511, 6997, 19782.
- T4811 *Phlomis pungens* (Lamiaceae); CI CAO SU; Pungent Jerusalem sage\*. Isolated compounds: 8289.  
*Phlomis rotata* = *Lamiophlomis rotata*
- T4812 *Phlomis spinidens* (Lamiaceae). Isolated compounds: 17165, 17166.
- T4813 *Phlomis tuberosa* (Lamiaceae); KUAI JING CAO SU; Tuberosroot Jerusalem sage. Used part: whole herb or root. TCM Effects: To resolve toxin and disperse swelling, quicken blood and regulate menstruation. TCM Indications: Menstrual disorder, syphilis, swelling of sores. Isolated compounds: 1494, 2887, 2906, 2918.
- T4814 *Phlomis umbrosa* (Lamiaceae); CAO SU; Jerusalem sage. Used part: whole herb with root. TCM Effects: To dispel wind and transform phlegm, disinherit damp and eliminate impediment, dispel phlegm, resolve toxin, disperse swelling. TCM Indications: Common cold, cough and abundant phlegm, wind-damp impediment pain, knocks and falls, swelling and toxin of sore and welling abscess. Isolated compounds: 8597, 10494, 19574.
- T4815 *Phoebe chemensii* (Lauraceae); CHE SHI NAN; Chemens Phoebe\*. Isolated compounds: 13631.
- T4816 *Phoebe cinnamomifolia* (Lauraceae); YU GUO XIAO YE NAN; Cinnamomi-leaf Phoebe\*. Isolated compounds: 16414.
- T4817 *Phoebe mollicella* (Lauraceae). Isolated compounds: 21246.
- T4818 *Phoebe nanmu* (Lauraceae); NAN MU; Nanmu. Used part: wood branchlet-leaf. TCM Effects: To harmonize center and downbear counterflow, check vomiting and diarrhea, disinherit water and disperse edema. TCM Indications: Vomiting and diarrhea with cramp, edema. Isolated compounds: 16396.
- T4819 *Phoenix canariensis* (Arecaceae); ZHEN KUI; Canary Island Date-palm. Isolated compounds: 21589.
- T4820 *Phoenix dactylifera* (Arecaceae); WU LOU ZI; Phoenix Date. Used part: fruit. TCM Effects: To boost *qi* and supplement vacuity, disperse food and transform phlegm. TCM Indications: Cough with phlegm, vacuity detriment. Isolated compounds: 2923, 3585, 7387, 7819, 13100.
- T4821 *Pholidota articulata* (Orchidaceae); JIE JING SHI XIAN TAO; Articulate Pholidota. Used part: whole herb. TCM Effects: To enrich



- yin and boost *qi*, dissipate stasis and disperse swelling. TCM Indications: Lung vacuity cough, prolapse of uterus, dizziness, headache, emission, leukorrhea, swelling toxin of welling abscess and sore, knocks and falls, fracture with wound sinew. Isolated compounds: 7811.
- T4822 *Pholidota rubra* (Orchidaceae); HONG SHI XIAN TAO; Rubi Pholidota\*. Isolated compounds: 17176.
- T4823 *Pholidota yunnanensis* (Orchidaceae); YUN NAN SHI XIAN TAO; Yunnan Pholidota. Used part: Pseudobulb or whole herb. TCM Effects: To moisten lung and relieve cough, dissipate stasis and relieve pain, clear heat and disinherit damp. TCM Indications: Tuberculosis and hemoptysis, lung heat cough, chest and rib-side pain, stomachache, swelling toxin of welling abscess and sore, wind-damp pain. Isolated compounds: 4519, 4529, 17175, 17196, 17197, 17198, 17199, 17200, 17201.
- T4824 *Phoma lingam* JING DIAN MEI. Isolated compounds: 17177, 17178, 17179, 17180, 17604, 17605, 17606, 17607, 17608.
- T4825 *Phormium tenax* (Agavaceae); XIN XI LAN MA; New Zealand Flax. Isolated compounds: 7736, 11355.
- T4826 *Photinia lactiflora* (Rosaceae); MAO HUA SHI NAN; Hairyflower Photinia\*. Isolated compounds: 1935.
- T4827 *Photinia parvifolia* (Rosaceae); XIAO YE SHI NAN; Small-leaf Photinia\*. Used part: root. TCM Effects: To clear heat and resolve toxin, quicken blood and relieve pain. TCM Indications: jaundice (icterus, ICT), mammary welling abscess, toothache. Isolated compounds: 6250, 8624, 9023, 9024, 10014, 11726.
- T4828 *Photinia serrulata* (Rosaceae); SHI NAN; Chinese Photinia. Used part: tender branch-leaf. TCM Effects: To dispel wind-damp, relieve itch, strengthen sinews and bones, boost liver and kidney. TCM Indications: Wind-damp impediment pain, head wind headache, wind papules [=rubella], weakness in legs and knees, kidney vacuity lumbar pain, impotence with emission. Isolated compounds: 16050, 22270.
- T4829 *Phragmites communis* (Poaceae); LU GEN; Common Reed Rhizome. Used part: rhizome. TCM Effects: To clear heat and engender liquid, eliminate vexation, check vomiting, disinherit urine. TCM Indications: Febrile diseases with vexation and thirst, stomach heat vomiting, lung heat cough, pulmonary welling abscess, heat strangury with inhibited pain. Isolated compounds: 3907, 3925, 18834, 21589, 22554.
- T4830 *Phryma leptostachya* (Phrymataceae); LAO PO ZI ZHEN XIAN; Lopseed. Used part: herb or root. TCM Effects: To resolve toxin and kill worms. TCM Indications: Scab sore, yellow-water sore, sore toxin. Isolated compounds: 12680, 17203.
- T4831 *Phtheirospermum japonicum* [Syn. *Gerardia japonica*] (Scrophulariaceae); SONG HAO; Japanese Phtheirospermum. Used part: whole herb. TCM Effects: To clear heat and disinherit damp, resolve toxin. TCM Indications: Jaundice, edema, wind-heat common cold, mouth sore, nasitis, swelling toxin of sore and boil. Isolated compounds: 12725, 17513.
- T4832 *Phyllanthus acuminatus* (Euphorbiaceae); JIAN YE YE XIA ZHU; Sharpleaf Leafflower\*. Isolated compounds: 11978, 17216, 17217, 17218, 17219.
- T4833 *Phyllanthus discoides* (Euphorbiaceae); PAN ZHUANG YE XIA ZHU; Discoid Leafflower\*. Isolated compounds: 19639.
- T4834 *Phyllanthus emblica* (Euphorbiaceae); AN MO LE; Emblic Leafflower. Used part: fruit. TCM Effects: To relieve cough and transform phlegm, engender liquid and allay thirst, resolve toxin. TCM Indications: Common cold with fever, cough, throat pain, diphtheria, enteritis, diarrhea, eczema, heat vexation and thirst. Isolated compounds: 3176, 3490, 3491, 3492, 3493, 4055, 5517, 5518, 5519, 6239, 6730, 6819, 6853, 6921, 7402, 8030, 8096, 8098, 8108, 8109, 8311, 9502, 13098, 13420, 13423, 15007, 15008, 15009, 15010, 15011, 15012, 15013, 15014, 15015, 15016, 15017, 15362, 17171, 17205, 17206, 17207, 17208, 17209, 17210, 17211, 17212, 17213, 17898, 17899, 18203, 18228, 20969, 21053.
- T4835 *Phyllanthus emblica* (Euphorbiaceae); YOU GAN GEN; Emblic Leafflower Root. Used part: root. TCM Effects: To clear heat and disinherit damp, resolve toxin and dissipate binds. TCM Indications: Diarrhea, dysentery, jaundice, scrofula, eczema of skin, centipede bite. Isolated compounds: 13098.
- T4836 *Phyllanthus emblica* (Euphorbiaceae); YOU GAN MU PI; Emblic Leafflower Bark. Used part: bark. TCM Effects: To clear heat and disinherit damp, cool blood and resolve toxin. TCM Indications: Mouth sore, clove sore, hemorrhoids, scrotal eczema, bleeding due to external injury. Isolated compounds: 3490, 3493, 4055, 5519, 8095, 8108, 13098.
- T4837 *Phyllanthus emblica* (Euphorbiaceae); YOU GAN YE; Emblic Leafflower Leaf. Used part: leaf. TCM Effects: To clear heat and resolve toxin, disinherit damp and disperse swelling. TCM Indications: Mouth sore, clove sore, eczema, dermatitis, edema, hypertension, poisonous snake bite, knocks and falls. Isolated compounds: 1065, 1764, 3490, 3493, 4055, 5519, 6923, 7278, 7279, 7282, 7285, 8095, 8108, 11642, 12020, 12082, 13098, 14200, 14345, 15063, 15184, 15279, 15280, 15281, 16836, 18003, 18317, 18411, 19087, 21053, 21054, 22078.
- T4838 *Phyllanthus flexuosus* (Euphorbiaceae); LUO E YE XIA ZHU; Flexuose Leafflower\*. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, dispel wind and eliminate damp. TCM Indications: Allergic dermatitis, infantile night crying, snake bite, wind-damp. Isolated compounds: 2331, 13094, 13098.
- T4839 *Phyllanthus myritifolius* (Euphorbiaceae); YIN DU SI LI LAN KA YE XIA ZHU; Indian-Sri-Lankan Leafflower\*. Isolated compounds: 18662.
- T4840 *Phyllanthus niruri* (Euphorbiaceae); ZHU ZI CAO; Nirur Leafflower\*. Used part: whole herb. TCM Effects: To clear heat, disinherit damp, transform phlegm and resolve toxin. TCM Indications: Jaundice, diarrhea, dysentery, heat strangury, stone strangury, edema, phlegm cough, red eyes with gall, poisonous snake bite. Isolated compounds: 15622, 15623, 15624, 15625, 15626, 15627, 17215, 17231, 18624.
- T4841 *Phyllanthus piscatorum* (Euphorbiaceae); YU FU YE XIA ZHU; Fisherman Leafflower\*. Isolated compounds: 11978, 17478.
- T4842 *Phyllanthus reticulatus* (Euphorbiaceae); LONG YAN JING; Reticulate Leafflower\*. Used part: root, stem-leaf. TCM Effects: To dispel wind, disinherit damp and quicken blood. TCM Indications: Pain in joints due to rheumatism, hepatitis, nephritis, enteritis, dysentery, knocks and falls. Isolated compounds: 18265.
- T4843 *Phyllanthus urinaria* (Euphorbiaceae); YE XIA ZHU; Common

- Leafflower. Used part: whole herb with root. TCM Effects: To clear heat and calm liver, disinhibit water and resolve toxin. TCM Indications: Cough, enteritis, dysentery, infective hepatitis, nephritis with edema, urinary tract infection, child *gan* accumulation, acute conjunctivitis nephelium, mouth sore, head sore, innominate toxin swelling. Isolated compounds: 4055, 5052, 5282, 8095, 12020, 14160, 17223, 17224, 18317, 19087, 21956, 22257, 22258.
- T4844 *Phyllostachys edulis* (Poaceae); MENG ZONG ZHU; Edible Bamboo. Isolated compounds: 17229, 17230.
- T4845 *Physalis alkekengi* (Solanaceae); SUAN JIANG; Japanese-lantern. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, disinhibit pharynx and larynx, disinhibit urine and free stool. TCM Indications: Acute tonsillitis, swelling pain in throat, laryngeal infection in children, lung heat cough, jaundice, dysentery, edema, dribbling urination, fecal stoppage, yellow-water sore, eczema, erysipelas. Isolated compounds: 4293, 17239, 17240, 17241, 17242, 21372.
- T4846 *Physalis alkekengi* var. *franchetii* (Solanaceae); GUA JIN DENG; Franchet Groundcherry. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, disinhibit urine. TCM Indications: Heat cough, throat pain, jaundice, dysentery, edema, clove sore, erysipelas. Isolated compounds: 12488, 17243, 17244, 17245, 17246, 21372.
- T4847 *Physalis alkekengi* var. *franchetii* (Solanaceae); GUA JIN DENG GEN; Franchet Groundcherry Root. Used part: root. TCM Effects: To clear heat and disinhibit water. TCM Indications: Malaria, jaundice, mounting *qi*. Isolated compounds: 17238.
- T4848 *Physalis angulata* (Solanaceae); KU ZHI; Cutleaf Groundcherry. Used part: whole herb. TCM Effects: To clear heat, disinhibit urine, resolve toxin, disperse swelling. TCM Indications: Common cold, lung heat cough, swelling pain in throat, gum swelling and pain, damp-heat jaundice, dysentery, edema, heat strangury, heaven-borne sore, clove sore. Isolated compounds: 17240.
- T4849 *Physalis chenopodifolia* (Solanaceae). Isolated compounds: 17232, 17233, 17234, 17235, 17236.
- T4850 *Physalis ixocarpa* (Solanaceae); NIAN XING GUO SHI SUAN JIANG. Isolated compounds: 11804.
- T4851 *Physalis minima* (Solanaceae); TIAN PAO ZI; Little Groundcherry. Used part: whole herb or fruit. TCM Effects: To percolate damp and kill worms. TCM Indications: Jaundice, inhibited urination, chronic cough and asthma, *gan* disease, scrofula, heaven-borne sore, damp sore. Isolated compounds: 7187, 22716, 22717.
- T4852 *Physalis peruviana* (Solanaceae); DENG LONG CAO; Peruvian Groundcherry. Used part: whole herb. TCM Effects: To clear heat and move *qi*, disperse swelling and relieve pain. TCM Indications: Common cold, epidemic parotitis, throat pain, cough, abdominal distention, mounting *qi*, heaven-borne sore. Isolated compounds: 1563, 1567, 6731, 7214, 8637, 16858, 16995, 18390, 18391.
- T4853 *Physalis philadelphica* (Solanaceae); FEI CHENG SUAN JIANG; Philadelphia Groundcherry\*. Isolated compounds: 1391, 1392, 1451, 1452, 1453, 1454, 1455, 1456, 3568, 5657, 5671, 5672, 10827, 11804, 21834, 22705, 22715.
- T4854 *Physalis pubescens* (Solanaceae); KU ZHI; Downy Groundcherry. Used part: herb. TCM Effects: To clear heat and resolve toxin, disinhibit urine. TCM Indications: Common cold, lung heat cough, swelling pain in throat, gum swelling, damp-heat jaundice, dysentery, edema, heat strangury, heaven-borne sore, clove sore. Isolated compounds: 17238.
- T4855 *Physeter catodon* (Physeteridae); LONG XIAN XIANG; Ammbergris. Used part: dried secretion in intestines of sperm whales. TCM Effects: To transform phlegm and calm asthma, move *qi* and dissipate binds, disinhibit water and free strangury. TCM Indications: *Qi* counterflow with cough and asthma, oppression in chest and *qi* bind, concretion conglomeration accumulation and gathering, pain in heart and abdomen, clouded spirit, strangury syndrome. Isolated compounds: 21046.
- T4856 *Physeter catodon* (Physeteridae); MO XIANG JING; Cachalot. Isolated compounds: 1026.
- T4857 *Physochlaina alaica* (Solanaceae); YI PAO NANG CAO; Winged Physochlaina\*. Isolated compounds: 2218.
- T4858 *Physochlaina infundibularis* (Solanaceae); LOU DOU PAO NANG CAO; Funneled Physochlaina. Used part: root. TCM Effects: To dispel phlegm, relieve cough and calm asthma. TCM Indications: Cough and asthma with abundant phlegm. Isolated compounds: 2001.
- T4859 *Physochlaina physaloides* (Solanaceae); PAO NANG CAO; Common Physochlaina. Used part: root or whole herb. TCM Effects: To clear heat and resolve toxin, dispel damp and kill worms (herb), warm center and supplement vacuity, quiet spirit and settle asthma (root). TCM Indications: Otitis media, nasosinusitis, swelling pain in throat, swelling toxin of sore and welling abscess, headache (herb), vacuity cold diarrhea, taxation damage, cough of phlegm asthma, disquieted heart spirit (root). Isolated compounds: 4417, 15416.
- T4860 *Phytolacca venenosum* (Fabaceae); DU BIAN DOU; Deadly Calabarbean. Isolated compounds: 7379, 7380, 7381, 17253, 20369. *Phytolacca acinosa* = *Phytolacca esculenta*
- T4861 *Phytolacca americana* [Syn. *Phytolacca decandra*] (Phytolaccaceae); MEI SHANG LU; American Pokeweed. Used part: root. TCM Effects: See *Phytolacca esculenta*. TCM Indications: See *Phytolacca esculenta*. Isolated compounds: 266, 1034, 1035, 1036, 2322, 7368, 7370, 7374, 8750, 11209, 11210, 11211, 14132, 16050, 16299, 16569, 16570, 17266, 17267, 17268, 17269, 17270, 17271, 17770, 18322, 20168, 22768, 22822. *Phytolacca decandra* = *Phytolacca americana*
- T4862 *Phytolacca dioica* (Phytolaccaceae); A GEN TING SHANG LU; Ombutree Pokeberry. Isolated compounds: 16093.
- T4863 *Phytolacca dodecandra* (Phytolaccaceae); SHI ER RUI SHANG LU; Decapitil Pokeweed\*. Isolated compounds: 2179, 12621, 16044.
- T4864 *Phytolacca esculenta* [Syn. *Phytolacca acinosa*] (Phytolaccaceae); SHANG LU; Indian Pokeweed. Equivalent plant: *Phytolacca americana*. Used part: root. TCM Effects: To expel water and disperse swelling, disinhibit urine and free stool, resolve toxin and dissipate binds. TCM Indications: Edema distention fullness, urinary and fecal stoppage, swelling toxin of welling abscess and sore. Isolated compounds: 471, 545, 546, 547, 548, 7025, 7368, 7369, 7370, 7371, 7372, 7373, 7374, 9568, 11421, 11812.
- T4865 *Phytolacca icosandra* (Phytolaccaceae); ER SHI RUI SHANG LU; Icosandrous Pokeweed\*. Isolated compounds: 19333, 19334, 19335,

- 19336, 19337, 19338, 19339, 19340, 19341.
- T4866 *Phytolacca octandra* (Phytolaccaceae); AO ZHOU SHANG LU; Octapistil Pokeweed\*. Isolated compounds: 22903.
- T4867 *Phytolacca polyandra* (Phytolaccaceae); DUO XIONG RUI SHANG LU; Polyandrous Pokeweed. Isolated compounds: 4533.
- T4868 *Phytolacca* spp. (Phytolaccaceae). Isolated compounds: 12642, 17267.
- T4869 *Picea abies* (Pinaceae); OU ZHOU YUN SHAN; Common Spruce. Isolated compounds: 4140, 11673, 17278.
- T4870 *Picea glehnii* (Pinaceae); SA HA LIN YUN SHAN; Saghalin Spruce. Isolated compounds: 10583, 17283, 17409, 18643.
- T4871 *Picea jezoensis* (Pinaceae); RI BEN YU LIN SONG; Yeddo Spruce. Isolated compounds: 7145, 7166, 7169, 10702, 14091, 17409.
- T4872 *Picea jezoensis* var. *jezoensis* (Pinaceae); YU LIN YUN SHAN; Yeddo Spruce. Isolated compounds: 7167, 14090.
- T4873 *Picea koraiensis* (Pinaceae); HONG PI YUN SHAN; Korean Spruce. Used part: Branch-leaf and bark. TCM Effects: To expel wind and eliminate damp. TCM Indications: Wind-damp impediment pain. Isolated compounds: 5763.
- T4874 *Picea morrisonicola* (Pinaceae); TAI WAN YUN SHAN; Taiwan Spruce. Isolated compounds: 271, 16307, 17275, 17276, 17277.
- T4875 *Picea obovata* (Pinaceae); XI BO LI YA YUN SHAN; Siberian Spruce. Isolated compounds: 11314, 15360.
- T4876 *Picea sitchensis* (Pinaceae); XI TE KA YUN SHAN; Sitka Spruce. Isolated compounds: 17456.
- T4877 *Picea* sp. (Pinaceae). Isolated compounds: 1951, 3194, 13594, 15555.
- T4878 *Picea* spp. (Pinaceae). Isolated compounds: 17287.
- Picrasma ailanthoides* = *Picrasma quassioides*
- T4879 *Picrasma crenata* (Simaroubaceae); YUAN CHI KU MU; Crenate Quassia-wood\*. Isolated compounds: 3096, 3158.
- T4880 *Picrasma excelsa* (Simaroubaceae); YA MAI JIA KU MU; Jamaica Quassia-wood. Isolated compounds: 15549, 15561.
- T4881 *Picrasma quassioides* [Syn. *Picrasma ailanthoides*] (Simaroubaceae); KU MU; Indian Quassia-wood. Used part: wood. TCM Effects: To clear heat and resolve toxin, dry damp and kill worms. TCM Indications: Infection of upper respiratory tract, pneumonia, acute gastroenteritis, dysentery, sore and boil, scab and lichen, eczema, burns and scalds, infection of biliary tract, poisonous insect stings. Isolated compounds: 344, 3096, 3156, 3158, 7908, 12334, 12335, 15454, 15542, 15546, 15547, 15552, 15554, 15555, 15561, 17327, 18299.
- T4882 *Picrasma quassioides* [Syn. *Picrasma ailanthoides*] (Simaroubaceae); KU SHU PI; Indian Quassia-wood Bark. Used part: bark. TCM Effects: To clear heat and disinhibit damp, resolve toxin and kill worms. TCM Indications: Bacillary dysentery, infection of biliary tract, suppurative infection, scab and lichen, eczema, snake bite. Isolated compounds: 3096, 3156, 3158, 3159, 3160, 3161, 5418, 6152, 6257, 6297, 7433, 7459, 7898, 10479, 10584, 10770, 12332, 12333, 12334, 12335, 12373, 14211, 14218, 14520, 15454, 15542, 15543, 15544, 15545, 15546, 15547, 15548, 15550, 15551, 15552, 15553, 15554, 15555, 15556, 15557, 15558, 15559, 15560, 15561, 17298, 17299, 17300, 17301, 17302, 17303, 17305, 17306, 17307, 17308, 17309, 17310, 17311, 17312, 17313, 17314, 17315, 17316, 17317, 17318, 17319, 17320, 17321, 17322, 17323, 17324, 17325, 17326, 17327, 18299, 19900, 21407, 22516.
- T4883 *Picrasma* sp. (Simaroubaceae). Isolated compounds: 15454.
- T4884 *Picria felterrae* (Scrophulariaceae); KU XUAN SHEN; Common Bitterfigwort. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, disperse swelling and relieve pain. TCM Indications: Wind-heat common cold, swelling pain in throat, mumps, swollen boil, diarrhea and dysentery, hemorrhoids, eczema, poisonous snake bites, knocks and falls. Isolated compounds: 4883, 9517, 17288, 17289, 17290, 17291, 17292, 17293, 17294, 17295, 21985.
- T4885 *Picris kamschatica* (Asteraceae); KAN CHA JIA MAO LIAN CAI; Kamchatka Oxtongue. Isolated compounds: 6143, 10012.
- T4886 *Picrodendron baccatum* JIANG GUO KU SHU. Isolated compounds: 17332, 17333, 17334, 17335, 17336.
- T4887 *Picrorhiza kurroa* (Scrophulariaceae); HU HUANG LIAN; Picrorhiza. Equivalent plant: *Picrorhiza scrophulariaeflora*. Used part: rhizome. TCM Effects: To lower vacuity heat, eliminate gan fever, clear heat and dry damp, drain fire and resolve toxin. TCM Indications: Steaming bone tidal fever due to yin vacuity, night sweating, child gan accumulation, indigestion, abdominal distention and emaciation, dysentery, fever, gastrointestinal damp-heat diarrhea, hemorrhoids. Isolated compounds: 117, 1162, 1826, 1827, 5763, 7768, 9476, 9477, 12376, 13504, 14871, 16821, 16853, 17287, 17344, 17345, 17346, 22341, 22415.
- T4888 *Picrorhiza scrophulariiflora* (Scrophulariaceae); XI ZANG HU HUANG LIAN; Figwortflower Picrorhiza. Used part: rhizome. TCM Effects: See *Picrorhiza kurroa*. TCM Indications: See *Picrorhiza kurroa*. Isolated compounds: 1162, 2004, 3306, 3695, 6081, 7768, 7773, 9347, 10442, 13504, 17344, 17345, 17510, 17511, 17287, 17483, 17484, 17485, 19572, 19573, 22332.
- T4889 *Pieris formosa* (Ericaceae); MEI LI MA ZUI MU; Taiwan Pieris\*. Isolated compounds: 17353, 17354, 17355, 17356, 17357.
- T4890 *Pieris japonica* (Ericaceae); RI BEN MA ZUI MU; Japanese Pieris. Used part: leaf. TCM Effects: To kill worms. TCM Indications: Scab sore. Isolated compounds: 1848, 1849, 1850, 8994, 17170.
- T4891 *Pilocarpus jaborandi* (Rutaceae); MAO GUO YUN XIANG. Isolated compounds: 17360.
- T4892 *Pimelea prostrata* (Thymelaeaceae); PING WO DAO HUA; Prostrate Rice-flower\*. Isolated compounds: 17958.
- T4893 *Pimelea simplex* (Thymelaeaceae); DAN ZHI DAO HUA; Simplex Rice-flower\*. Isolated compounds: 19902.
- T4894 *Pimenta dioica* (Myrtaceae); DUO XIANG GUO; Allspice. Isolated compounds: 3559, 7521.
- T4895 *Pimpinella anisum* (Apiaceae); HUI QIN; Anise. Isolated compounds: 1184, 1185, 1186, 1282, 4234, 5172, 7389, 7522, 9025, 9026, 9027, 9513, 9740, 9784, 9916, 10454, 10631, 10632, 10633, 10634, 10635, 14059, 14420, 14421, 14422, 14423, 14424, 14425, 14426, 14427, 14476, 14735.
- T4896 *Pimpinella aurea* (Apiaceae). Isolated compounds: 14603.
- T4897 *Pimpinella corymbosa* (Apiaceae). Isolated compounds: 14029, 17925.
- T4898 *Pimpinella isaurica* (Apiaceae). Isolated compounds: 14028, 14030, 14079, 17924, 17926.
- T4899 *Pimpinella magna* (Apiaceae); DA HUI QIN; Big Anise\*. Isolated

- compounds: 11249, 17375.
- T4900 *Pimpinella saxifraga* (Apiaceae); HU ER CAO YE HUI QIN; Burnet-saxifrage. Isolated compounds: 11249, 17375.
- T4901 *Pimpinella* sp. (Apiaceae). Isolated compounds: 22195.
- T4902 *Pimpinella thelungiana* (Apiaceae); YANG HONG SHAN; Thellung Pimpinella. Used part: root or whole herb. TCM Effects: To boost *qi* and fortify spleen, nourish heart and quiet spirit, relieve cough and dispel phlegm. TCM Indications: Kersan disease, palpitation and shortness of breath, cough. Isolated compounds: 7406, 7407, 14003, 16895, 16896, 21308, 21309.
- T4903 *Pinellia pedatisecta* (Araceae); ZHANG YE BAN XIA; Pedate Pinellia. Used part: tuber. TCM Effects: See *Arisaema consanguineum*. TCM Indications: See *Arisaema consanguineum*. Isolated compounds: 618, 4463, 4464, 4510, 4526, 7334, 10520, 10913, 11631, 14752, 14780, 14802, 16759, 16760, 17095, 17906, 17907, 19983, 22237, 22329.
- T4904 *Pinellia ternata* (Araceae); BAN XIA; Ternate Pinellia. Used part: tuber. TCM Effects: To eliminate damp and resolve cold phlegm, downbear counterflow and check vomiting, disperse glomus and dissipate binds. TCM Indications: Cough and asthma with abundant phlegm, vomiting nausea, glomus in chest, dizziness, headache, vexation and agitation in night, goiters with phlegm node, swelling toxin of welling abscess and flat abscess. Isolated compounds: 832, 1047, 1673, 1886, 2458, 3589, 3988, 4680, 5763, 6815, 8672, 8817, 9071, 9380, 9569, 9608, 13823, 14225, 14334, 15981, 16835, 16862, 17093, 17905, 17968, 19759, 19983, 19987, 21342, 21662, 22169, 22324.
- T4905 *Pinus aristata* (Pinaceae); CI GUO SONG; Bristlecone Pine. Isolated compounds: 3600.
- T4906 *Pinus armandii* (Pinaceae); HUA SHAN SONG; Armand Pine. Used part: leaf. TCM Effects: See *Pinus massoniana*. TCM Indications: See *Pinus massoniana*. Isolated compounds: 16316.
- T4907 *Pinus armandii* var. *masteriana* (Pinaceae); TAI WAN GUO SONG; Masters Pine. Isolated compounds: 17422.
- T4908 *Pinus bungeana* (Pinaceae); BAI PI SONG; Lacebark Pine. Used part: cone. TCM Effects: To dispel phlegm, relieve cough, calm asthma. TCM Indications: Chronic trachitis, asthma, cough and shortness of breath, abundant phlegm. Isolated compounds: 12843.
- T4909 *Pinus cembra* (Pinaceae); RUI SHI SHI SONG; Arolla Pine. Isolated compounds: 17403.
- T4910 *Pinus excelsa* (Pinaceae); QIAO GUI; Bhutan Pine. Isolated compounds: 3600.
- T4911 *Pinus kesiya* (Pinaceae); KA XI YA SONG; Khasya Pine. Isolated compounds: 17056.
- T4912 *Pinus koraiensis* (Pinaceae); HAI SONG ZI; Korean Pine Seed. Used part: seed. TCM Effects: To moisten dryness, nourish blood, dispel wind. TCM Indications: Dry cough due to lung dryness, vacuity constipation, joints wind, wind impediment. Isolated compounds: 711, 3194, 3385, 6293, 6482, 6937, 11314, 12455, 12843, 14285, 14548, 15332, 15735, 15736, 16555, 17390, 17426.
- T4913 *Pinus koraiensis* (Pinaceae); HONG SONG; Korean Pine. Isolated compounds: 17422.
- T4914 *Pinus laricio* (Pinaceae); KE XI JIA SONG; Corsican Pine. Isolated compounds: 7768.
- T4915 *Pinus maritime* (Pinaceae). Isolated compounds: 5699.
- T4916 *Pinus massoniana* (Pinaceae); MA WEI SONG YE; Masson Pine Leaf. Equivalent plant: *Pinus armandii*. Used part: leaf. TCM Effects: To dispel wind and dry damp, kill worms and relieve itch, quicken blood and quiet spirit. TCM Indications: Wind-damp impediment pain, beriberi, damp sore, lichen, wind papule itching, knocks and falls, neurasthenia, chronic nephritis, hypertension, prevention of influenza and encephalitis B. Isolated compounds: 10996, 13582, 13583, 13584, 13585, 13586, 13587, 13588, 17376.
- T4917 *Pinus massoniana* (Pinaceae); SONG XIANG; Colophony. Used part: residue left after distillation of turpentine oil from crude oleo-resin of various spp. of *Pinus*. TCM Effects: To dispel wind and dry damp, expel pus and draw out toxin, engender flesh and relieve pain. TCM Indications: Malign sores with welling abscess and flat abscess, scrofula, fistula, scab and lichen, bald white scalp sore, leprosy, impediment, incised wound, sprain, leukorrhea, thromboangitis obliterans (Buerger's disease), clove sore, hemorrhoids, itchy skin. Isolated compounds: 10, 15333, 16572.
- T4918 *Pinus monticola* (Pinaceae); JIA ZHOU SHAN SONG; Californian Mountain Pine. Isolated compounds: 3600.
- T4919 *Pinus palustris* (Pinaceae); CHANG YE SONG; Long-leaved Pine. Isolated compounds: 11600, 12955, 15805, 15806.
- T4920 *Pinus radiata* (Pinaceae); FU SHE SONG; Monterey Pine. Isolated compounds: 3767, 7751, 15663, 17055, 17888.
- T4921 *Pinus resinosa* (Pinaceae); DUO ZHI SONG; Red Pine. Isolated compounds: 9740.
- T4922 *Pinus rigida* (Pinaceae); GANG SONG; Northern Pitch Pine. Isolated compounds: 18641.
- T4923 *Pinus sibirica* (Pinaceae); XI BO LI YA HONG SONG; Siberian Stone Pine. Isolated compounds: 11314, 17422, 18643, 18650.
- T4924 *Pinus* sp. (Pinaceae). Isolated compounds: 1074, 1282, 5694, 12955, 15555, 17409, 17420, 17421, 18003.
- T4925 *Pinus* spp. (Pinaceae). Isolated compounds: 17399.
- T4926 *Pinus sylvestris* (Pinaceae); OU ZHOU CHI SONG; Scotch Pine. Isolated compounds: 1169, 7385, 21022.
- T4927 *Pinus taeda* (Pinaceae); TAI DA SONG; Loblolly Pine, Old Field Pine. Isolated compounds: 1655, 17888, 17890.
- T4928 *Piper aduncum* (Piperaceae); GOU ZHUANG HU JIAO; Hooked Pepper\*. Isolated compounds: 1343, 6193, 6383, 17430, 17431, 17432.
- T4929 *Piper aequale* (Piperaceae); TE LI NI DA HU JIAO; Trinidad Pepper\*. Isolated compounds: 5644, 6423, 14380.
- T4930 *Piper* aff. *pedicellatum* (Piperaceae). Isolated compounds: 2563.
- T4931 *Piper angustifolium* (Piperaceae); XIA YE HU JIAO; Matico Pepper. Isolated compounds: 1520, 1835.
- T4932 *Piper arboreum* (Piperaceae); QIAO MU HU JIAO; Arboreous Pepper\*. Isolated compounds: 1612, 16388.
- T4933 *Piper attenuatum* (Piperaceae); LUAN YE HU JIAO; Ovateleaf Pepper. Isolated compounds: 17463, 17466.
- T4934 *Piper aurantiacum* (Piperaceae). Isolated compounds: 17449.
- T4935 *Piper banksii* (Piperaceae); BAN KE HU JIAO; Bank Pepper\*. Isolated compounds: 6745.

- T4936 *Piper bavinum* (Piperaceae); XIAN MAI JU; Glandularnerve Pepper. Isolated compounds: 22628.
- T4937 *Piper betle* (Piperaceae); JU JIANG YE; Betel Pepper Leaf. Used part: leaf. TCM Effects: To course wind and dissipate cold, move *qi* and transform phlegm, resolve toxin and disperse swelling, dry damp and resolve itch. TCM Indications: Wind-cold cough, asthma, pertussis, distending pain in stomach duct, edema, wound swelling from knocks and falls, wind-damp bone pain, toxin swelling of sores, burns and scalds, wind toxin and beriberi, scab and *lai*, eczema titillation. Isolated compounds: 955, 2850, 3231, 3486, 3488, 7521, 7523.
- T4938 *Piper boehmeriaefolium* (Piperaceae); ZHU YE JU; Falsenettleleaf Pepper. Used part: whole herb. TCM Effects: To dispel wind and dissipate cold, dispel damp and free network vessels, move *qi* and relieve pain. TCM Indications: Common cold due to wind-cold, wind-damp impediment pain, stomachache, menstrual disorder [=menoxenia], knocks and falls, fracture. Isolated compounds: 15725, 17463, 17464, 17465, 17466.
- T4939 *Piper brachystachyum* (Piperaceae); DUAN SUI HU JIAO; Shortspike Pepper\*. Isolated compounds: 2575, 2576, 2577, 17436.
- T4940 *Piper cenocladum* (Piperaceae). Isolated compounds: 3386, 5259, 17472.
- T4941 *Piper chaba* (Piperaceae). Isolated compounds: 4961, 11273, 11281, 14678, 16384, 17440, 17441, 17442, 17443, 17451, 17461, 18658.
- T4942 *Piper clarkii* (Piperaceae). Isolated compounds: 17447.
- T4943 *Piper crassinervium* (Piperaceae); CU YE MAI HU JIAO; Grossnerve Pepper\*. Isolated compounds: 5859, 5860, 6041, 15279, 19172.
- T4944 *Piper cubeba* (Piperaceae); BI CHENG QIE; Cubeba Pepper. Used part: fruit. TCM Effects: To warm center and dissipate cold, move *qi* and relieve pain, warm kidney. TCM Indications: Stomach cold with retching counterflow, distention fullness, cold pain in stomach duct and abdomen, rumbling intestines and diarrhea, cold mounting with abdominal pain, cold-damp dribbling urination and turbid urine. Isolated compounds: 1834, 1840, 2357, 3761, 3762, 3851, 4304, 4305, 4306, 4307, 4308, 4309, 4310, 5543, 5561, 5572, 7114, 7400, 9343, 9471, 9949, 13391, 13640, 13898, 14264, 16340, 17447, 17448, 21345, 21928, 22989.
- T4945 *Piper elongatum* (Piperaceae); CHANG HU JIAO. Isolated compounds: 2835, 17427, 17428.  
*Piper futokadsura* = *Piper kadsura*
- T4946 *Piper guineense* (Piperaceae); JI NEI YA HU JIAO; Ashanti Pepper. Isolated compounds: 5572, 16387, 17451.
- T4947 *Piper hamiltonii* (Piperaceae). Isolated compounds: 17463.
- T4948 *Piper hancei* (Piperaceae); SHAN JU; Hance Pepper. Used part: stem-leaf. TCM Effects: To dispel wind and eliminate damp, quicken blood and disperse swelling, move *qi* and relieve pain, transform stagnation and relieve pain. TCM Indications: Wind-cold-damp impediment, stomachache, dysmenorrhea, knocks and falls, wind-cold cough, mounting *qi*. Isolated compounds: 2760, 8035, 8040, 9208, 9209, 9210, 9211, 22628.
- T4949 *Piper hispidum* (Piperaceae); YING MAO HU JIAO; Hispid Pepper\*. Isolated compounds: 11280, 14020, 17438.
- T4950 *Piper kadsura* [Syn. *Piper futokadsura*] (Piperaceae); HAI FENG TENG; Kadsura Pepper. Used part: stem. TCM Effects: To dispel wind-damp, free channels and network vessels, relieve pain due to impediment. TCM Indications: Wind-cold-damp impediment, aching sinews in limb joints, hypertonicity of sinews and vessels. Isolated compounds: 592, 1840, 3517, 5135, 6745, 8035, 8036, 8037, 8038, 8039, 8040, 8041, 8086, 8088, 8093, 11269, 12005, 12006, 12007, 12008, 12009, 12010, 12013, 13293, 13295, 17265, 17460, 19983, 20369, 22060, 22383, 23030.
- T4951 *Piper laetispicum* (Piperaceae); DA YE JU; Largeleaf Piper\*. Used part: whole herb. TCM Effects: To quicken blood, disperse swelling, relieve pain. TCM Indications: Knocks and falls, static blood swelling pain. Isolated compounds: 12449.
- T4952 *Piper lhotzkyanum* (Piperaceae). Isolated compounds: 12157.
- T4953 *Piper longum* (Piperaceae); BI BA; Long Pepper. Used part: fruit-spike. TCM Effects: To warm center and dissipate cold, precipitate *qi* and relieve pain. TCM Indications: Cold pain in stomach duct and abdomen, vomiting, diarrhea, headache, toothache, deep-source nasal congestion, coronary heart disease, angina pectoris. Isolated compounds: 2284, 9083, 9485, 11269, 12574, 17450, 17451, 17461, 17471, 17472, 19777, 20523, 21078, 22227.
- T4954 *Piper longum* (Piperaceae); BI BA GEN; Long Pepper Root. Used part: root. TCM Effects: To warm center and move *qi*, downbear counterflow and disperse food, dissipate cold and relieve pain. TCM Indications: Taxation damage, genital sweating, node swelling, cold *qi* retching, distention fullness in heart and abdomen, food accumulation, cold mounting, infertility due to uterus cold, lumbus kidney cold. Isolated compounds: 14791, 17429, 17451, 17461, 17463, 17464, 17465, 17466, 17472.
- T4955 *Piper methysticum* (Piperaceae); KA WA HU JIAO; Kava Pepper. Isolated compounds: 2043, 4936, 5677, 7188, 12184, 13915, 14820, 17462, 22882.
- T4956 *Piper mullesua* (Piperaceae); DUAN JU; Globular Pepper. Used part: whole plant. TCM Effects: To expel wind and dissipate cold, dissipate stasis and relieve pain, resolve toxin and disperse swelling. TCM Indications: Wind-damp impediment pain, numbness in limbs, externally contracted wind-cold, cough and asthma, cold pain in stomach duct and abdomen, knocks and falls, menstrual disorder, dysmenorrhea, postpartum abdominal pain, toothache, swelling pain of sore and boil, scalds, snake or insect bites. Isolated compounds: 15318, 15319.
- T4957 *Piper nigrum* (Piperaceae); HU JIAO; Black Pepper. Used part: fruit. TCM Effects: To warm center and dissipate cold, precipitate *qi*, disperse phlegm. TCM Indications: Vomiting with stomach cold, abdominal pain and diarrhea, inappetence, convulsion, epilepsy and profuse phlegm. Isolated compounds: 3487, 4288, 6465, 11269, 11270, 11271, 11272, 11274, 11282, 11283, 13723, 13724, 13726, 13727, 13770, 15446, 16306, 16318, 16319, 16325, 16382, 16383, 16384, 16385, 16386, 16387, 16388, 16389, 16390, 16391, 16392, 16393, 16405, 16406, 17401, 17434, 17435, 17436, 17437, 17438, 17438, 17439, 17444, 17445, 17449, 17451, 17451, 17456, 17468, 17469, 17470, 17473, 17474, 18657, 19371, 19378, 19788, 20991.
- T4958 *Piper nove-hollandae* (Piperaceae); XIN HE LAN HU JIAO; Novel-Holland Pepper\*. Isolated compounds: 6193.
- T4959 *Piper peepuloides* (Piperaceae). Isolated compounds: 17424.

- T4960 *Piper peltatum* (Piperaceae); DUN YE HU JIAO; Peltateleaf Pepper\*. Isolated compounds: 6379, 15505.
- T4961 *Piper polysyphorum* (Piperaceae); ZHANG YE HU JIAO; Camphortreeleaf Pepper. Isolated compounds: 8040, 17688, 22528, 22628.
- T4962 *Piper puberulum* (Piperaceae); MAO JU; Hairy Pepper. Used part: whole herb. TCM Effects: To dispel wind and dissipate cold and eliminate damp, move *qi* and quicken blood and relieve pain. TCM Indications: Wind-damp impediment pain, wind-cold headache, pain in stomach duct and abdomen, mounting *qi* (hernia), menstrual pain, painful swelling from knocks and falls. Isolated compounds: 22628.
- T4963 *Piper regnelli* (Piperaceae). Isolated compounds: 10056, 10088, 14367, 14503.
- T4964 *Piper retrofractum* (Piperaceae); CHANG GUO BI BA; Petrofracted Pepper. Used part: fruit. TCM Effects: To warm center and fortify stomach, dispel cold and relieve pain. TCM Indications: Stomach cold pain, distention fullness in stomach duct. Isolated compounds: 2576, 17444, 18657, 18659, 18660, 21907.
- T4965 *Piper sarmentosum* (Piperaceae); JIA JU; Sarmentose Pepper. Used part: stem-leaf or whole herb. TCM Effects: To dispel wind and dissipate cold, move *qi* and relieve pain, quicken network vessels, disperse swelling. TCM Indications: Wind-cold cough, wind-damp impediment pain, distention fullness in stomach duct, diarrhea and dysentery, postpartum foot edema, knocks and falls. Isolated compounds: 957, 1832.
- T4966 *Piper sarmentosum* (Piperaceae); JIA JU ZI; Sarmentose Pepper Spike. Used part: fruit spike. TCM Effects: To warm center and dissipate cold, move *qi* and relieve pain, transform damp and disperse swelling. TCM Indications: Distending pain in stomach duct, cold-damp diarrhea, wind-damp impediment pain, mounting *qi*, toothache, edema. Isolated compounds: 14382, 17130, 19368, 19369, 19370, 19371, 19378.
- T4967 *Piper solmsianum* (Piperaceae). Isolated compounds: 6348, 8979, 14384.
- T4968 *Piper* spp. (Piperaceae); *Piper* spp. Isolated compounds: 10792.
- T4969 *Piper sulvaticum* (Piperaceae); CHANG BING HU JIAO; Longstalk Pepper\*. Isolated compounds: 17472.
- T4970 *Piper taiwanense* (Piperaceae); TAI WAN HU JIAO; Taiwan Pepper\*. Isolated compounds: 955, 1695, 2891, 3408, 3694, 3723, 6216, 6466, 7521, 10416, 17463, 17464, 17465, 17467, 22615.
- T4971 *Piper trichostachyon* (Piperaceae); MAO SUI HU JIAO; Hairspike Pepper\*. Isolated compounds: 4536, 17435.
- T4972 *Piper tuberculatum* (Piperaceae); LIU TU HU JIAO; Tuberculate Pepper\*. Isolated compounds: 1612, 5695, 16388, 17439, 21904, 21908.
- T4973 *Piper umbellatum* (Piperaceae); SAN XING HU JIAO; Umbellate Pepper\*. Isolated compounds: 6379, 15505.
- T4974 *Piper wallichii* [Syn. *Piper wallichii* var. *hupehense*] (Piperaceae); SHI NAN TENG. Used part: stem-leaf or whole herb. TCM Effects: To dispel wind-damp, strengthen lumbus and knees, supplement kidney and invigorate *yang*, relieve cough and calm asthma, quicken blood and relieve pain. TCM Indications: Wind-cold-damp impediment, aching in lumbus and knees, impotence, cough and asthma, dysmenorrhea, painful swelling from knocks and falls. Isolated compounds: 22628.  
*Piper wallichii* var. *hupehense* = *Piper wallichii*  
*Piptanthus mongolicus* = *Ammopiptanthus mongolicus*
- T4975 *Piptanthus nanus* (Fabaceae); XIAO SHA DONG QING; Small *Piptanthus*\*. Used part: stem-leaf. TCM Effects: See *Ammopiptanthus mongolicus*. TCM Indications: See *Ammopiptanthus mongolicus*. Isolated compounds: 16206.
- T4976 *Piptanthus nepalensis* (Fabaceae); HUANG HUA MU; Greenleaf *Piptanthus*, Evergreen Laburnum. Used part: seed. TCM Effects: To clear liver and brighten eyes, moisten intestines and free stool. TCM Indications: Headache due to externally contracted wind-heat, conjunctivitis, hypertension, chronic constipation. Isolated compounds: 4604, 8278, 8282, 20099.
- T4977 *Piscidia erythrina* YA MAI JIA DU YU DOU; *Piscidia erythrina*. Isolated compounds: 17479, 17481, 17482.
- T4978 *Pisolithus tinctorius* [Syn. *Lycoperdon capitatum*; *Scleroderma tinctorium*] (Sclerodermataceae); DOU BAO JUN; Dye-maker's False Puffball. Used part: sporocarp. TCM Effects: To stanch bleeding, resolve toxin and disperse swelling. TCM Indications: Stomach and esophagus hemorrhage, bleeding due to external injury, frostbite flowing water and pus. Isolated compounds: 15717, 17492.
- T4979 *Pistacia chinensis* (Anacardiaceae); HUANG LIAN YA; Chinese Pistache. Used part: leaf and bud. TCM Effects: To clear summerheat, engender liquid, resolve toxin, disinhibit damp. TCM Indications: Summerheat-heat thirst, swelling pain in throat, oral ulcer, vomiting and dysentery, strangury syndrome, innominate toxin swelling, sore and papules. Isolated compounds: 5613, 5614, 5699, 7802, 8095.
- T4980 *Pistacia lentiscus* (Anacardiaceae); XIANG HUANG LIAN MU; Mastic-tree. Isolated compounds: 17055.
- T4981 *Pistacia terebinthus* (Anacardiaceae); RU DU XIANG; Turpentine Tree. Isolated compounds: 6502, 10363, 13591, 14979.
- T4982 *Pistacia vera* (Anacardiaceae); A YUE HUN ZI; Common Pistache. Used part: fruit. TCM Effects: To warm kidney, warm spleen. TCM Indications: Kidney vacuity lumbar cold, impotence, spleen vacuity cold dysentery. Isolated compounds: 4439.
- T4983 *Pisum sativum* (Fabaceae); WAN DOU; Garden Pea. Used part: seed. TCM Effects: To harmonize center and precipitate *qi*, free milk and disinhibit water, resolve toxin. TCM Indications: Cholera cramp, beriberi with edema, diabetes mellitus, vomiting of sour matter, abdominal distention and diarrhea, scant breast milk, swollen welling abscess. Isolated compounds: 36, 2845, 7996, 8377, 9620, 10165, 12097, 15708, 17477, 17493, 17494, 17495, 17913, 18281, 18398, 19432, 19982, 21662, 22466, 22782, 22815.
- T4984 *Pisum* sp. (Fabaceae). Isolated compounds: 1048.
- T4985 *Pithecolobium dulce* (Fabaceae); NIU TI DOU; Guamachil Apea-earring. Used part: leaf. TCM Effects: To disperse swelling and dispel damp. Isolated compounds: 20169.
- T4986 *Pithomyces chartarum*. Isolated compounds: 20234.
- T4987 *Pittosporum tobira* (Pittosporaceae); HAI TONG; Japanese Pittosporum. Used part: fruit. TCM Indications: mounting pain. Isolated compounds: 13955, 13956, 13957.
- T4988 *Pityrogramma triangularis* (Hemionitidaceae); SAN JIAO FEN YE JUE; Goldback Fern. Isolated compounds: 9423, 21711.

- T4989 *Plagiochasma intermedium* (Grimaldiaceae); WU WEN ZI BEI TAI; Intermediate Plagiochasma. Isolated compounds: 7426.
- T4990 *Plagiochasma rupestre* (Grimaldiaceae); ZI BEI TAI; Argentine Liverwort. Isolated compounds: 19069.
- T4991 *Plagiochila acanthophylla* ssp. *japonica* (Plagiochilaceae); RI BEN DUO CI YU TAI. Isolated compounds: 17500.
- T4992 *Plagiochila asplenioides* (Plagiochilaceae); TIE JIAO JUE YU TAI. Isolated compounds: 1754, 2406, 2407, 6957, 15139, 17498, 17499, 17503, 19679.
- T4993 *Plagiochila carringtonii* (Plagiochilaceae). Isolated compounds: 17496, 17497.
- T4994 *Plagiochila deltoidea* (Plagiochilaceae). Isolated compounds: 7194, 9923, 18915.
- T4995 *Plagiochila rutilans* (Plagiochilaceae). Isolated compounds: 6382, 7461, 7479, 10389, 13917, 14031, 14032, 14076, 14077.
- T4996 *Plagiochila siophila* (Plagiochilaceae). Isolated compounds: 17500.
- T4997 *Plagiogyria dunnii* (Plagiogyriaceae); DAO YE LIU ZU JUE; Dunn's Plagiogyria. Isolated compounds: 17502.
- T4998 *Plagiogyria euphlebica* (Plagiogyriaceae); HUA ZHONG LIU ZU JUE; Fine-nerved Plagiogyria. Used part: rhizome or whole herb. TCM Effects: To clear heat and resolve toxin. TCM Indications: Influenza. Isolated compounds: 17501.
- T4999 *Plagiogyria matsumureana* (Plagiogyriaceae). Isolated compounds: 17501, 17502.
- T5000 *Plagiogyria stenoptera* (Plagiogyriaceae); ER XING LIU ZU JUE; Auriform Plagiogyria. Used part: rhizome or whole herb. TCM Effects: To clear heat and resolve toxin, effuse exterior and relieve cough. TCM Indications: Common cold with headache, cough. Isolated compounds: 17501.
- T5001 *Planchonia grandis* (Sapotaceae); GAO DA SHAN LAN. Isolated compounds: 12057, 12058, 12079.
- T5002 *Plantago asiatica* (Plantaginaceae); CHE QIAN; Asiatic Plantain. Equivalent plant: *Plantago major*, *Plantago depressa*. Used part: whole herb. TCM Effects: To clear heat and disinhibit urine, cool blood, resolve toxin. TCM Indications: Heat bind in bladder, inhibited urination [=dysuria], strangury-turbidity and vaginal discharge, summerheat-damp diarrhea, bloody urine (hematuria), spontaneous external bleeding, swelling toxin of welling abscess and sore. Isolated compounds: 580, 617, 2004, 7426, 9331, 9363, 9617, 10351, 11195, 11529, 12725, 16050, 17505, 17505, 17506, 17507, 17508, 17509, 17510, 17511, 17512, 18219, 18526, 19983, 20255, 20369, 20446, 22270.
- T5003 *Plantago cornuti* (Plantaginaceae); JIAO ZHUANG CHE QIAN; Cornuted Plantain\*. Isolated compounds: 250.
- T5004 *Plantago depressa* (Plantaginaceae); PING CHE QIAN; Depressed Plantain. Used part: whole herb. TCM Effects: See *Plantago asiatica*. TCM Indications: See *Plantago asiatica*. Isolated compounds: 617, 2004, 3052, 16050, 22270.
- T5005 *Plantago hostifolia* (Plantaginaceae); YU ZAN YE CHE QIAN; Jadehairpin-leaf Plantain\*. Isolated compounds: 17510.
- T5006 *Plantago lanceolata* (Plantaginaceae); CHANG YE CHE QIAN; Buckhorn Plantain. Isolated compounds: 580, 2004, 5277, 5278, 12577, 12725, 13580, 17510, 18219.
- T5007 *Plantago major* (Plantaginaceae); DA CHE QIAN; Rippleseed Plantain. Used part: whole herb. TCM Effects: See *Plantago asiatica*. TCM Indications: See *Plantago asiatica*. Isolated compounds: 250, 580, 1892, 2004, 2102, 2106, 3040, 3551, 3674, 3695, 4135, 7768, 7996, 8081, 8307, 9486, 9818, 10351, 11805, 12891, 12952, 13137, 13406, 13656, 15203, 15363, 16050, 17506, 17513, 18219, 19187, 19587, 19983, 20369, 20566, 22170, 22270.
- T5008 *Platanus* sp. (Platanaceae). Isolated compounds: 5283, 5613.
- T5009 *Platanus* spp. (Platanaceae). Isolated compounds: 17399.
- T5010 *Platycarya strobilacea* (Juglandaceae); HUA XIANG SHU YE; Dyetree Leaf. Used part: leaf. TCM Effects: To resolve toxin and cure sores, kill worms and relieve itch. TCM Indications: Swelling toxin of sore and welling abscess, purulence due to bone welling abscess, intractable lichen, scrotal eczema, tinea capitis. Isolated compounds: 6757, 8095, 11903, 20389.  
*Platyclusus orientalis* = *Thuja orientalis*
- T5011 *Platycodon grandiflorum* (Campanulaceae); JIE GENG; Balloonflower. Used part: root. TCM Effects: To diffuse lung, dispel phlegm, disinhibit throat, expel pus. TCM Indications: Cough with profuse phlegm, swelling pain in throat, pulmonary welling abscess with hacking of pus and blood, fullness in chest and rib-side pain, dysentery, dribbling urinary block. Isolated compounds: 487, 488, 2331, 4799, 4800, 8711, 14468, 14549, 14604, 14681, 17529, 17530, 17531, 17532, 17533, 17534, 17535, 17536, 17537, 17538, 17539, 17540, 17541, 17542, 17543, 17544, 17545, 17628, 17629, 17630, 20168, 20169.
- T5012 *Platypodia granulosa*. Isolated compounds: 19431.
- T5013 *Platystemon* spp. Isolated compounds: 3498.
- T5014 *Plectranthus nummularius* (Lamiaceae); YUAN BAN XIANG CHA CAI; Nummulate Rabdosia\*. Isolated compounds: 16680, 16681, 17553, 17554.  
*Plectranthus striatus* = *Isodon lophanthoides*
- T5015 *Pleiocarpa mutica* (Apocynaceae); DUO GUO SHU. Isolated compounds: 12268.
- T5016 *Pleiocarpa pycnantha* var. *tubicina* (Apocynaceae); CU SHENG HUA DUO GUO SHU. Isolated compounds: 12268.
- T5017 *Pleiocarpa tubicina* (Apocynaceae); LA BA ZHUANG DUO GUO SHU. Isolated compounds: 12120, 12268.
- T5018 *Pleuropterus ciliinervis* (Polygonaceae); MAO MAI LIAO. Used part: tuberoid. TCM Effects: To clear heat and resolve toxin, cool blood, quicken blood. TCM Indications: infection of upper respiratory tract, tonsillitis, acute bacillary dysentery, acute enteritis, infection of urinary system, various hemorrhage, knocks and falls, menstrual disorder, wind-damp impediment pain, heat toxin sores, burns. Isolated compounds: 13250, 13253, 17283, 17285, 17352, 17559, 18643.
- T5019 *Pleurospermum govianum* var. *bicolor* (Apiaceae); SHUANG SE SUO ZI QIN; Twocoloured Pleurospermum. Isolated compounds: 17763.
- T5020 *Pleurospermum lindleyanum* (Apiaceae); TIAN SHAN LING ZI QIN; Lindley Pleurospermum. Isolated compounds: 10216.
- T5021 *Pleurospermum rivulorum* (Apiaceae); YUN NAN QIANG HUO; Yunnan Pleurospermum. Used part: root. TCM Effects: To dispel wind and eliminate damp, free network vessels and relieve pain. TCM

- Indications:** Wind-cold common cold, wind-cold-damp impediment, hypertonicity of sinews and vessels, headache, pain in stomach duct and abdomen. **Isolated compounds:** 8326, 9420, 11001, 11445, 13571, 22774, 22775.
- T5022 *Pleurotus eryngii* (Pleurotaceae). **Isolated compounds:** 192, 5884, 5885, 6898, 6900, 6905, 7251, 21729.
- T5023 *Plocamium cartilagineum* (Plocamiaceae); RUAN GU HAI TOU HONG. **Isolated compounds:** 17650, 17651, 17652, 17653.
- T5024 *Plocamium corallorrhiza* (Plocamiaceae); SHAN HU GEN HAI TOU HONG. **Isolated compounds:** 2619, 2625, 17563, 17564, 17565, 21545.
- T5025 *Pluchea sericea* (Asteraceae); JUAN MAO KUO BAO JU; Sericeous Pluchea\*. **Isolated compounds:** 260, 10529.
- T5026 *Plumbagella micrantha* (Plumbaginaceae); JI WA CAO; Littleflower Plumbagella. **Used part:** herb. **TCM Effects:** To kill worms and relieve itch, decay wart and mole. **TCM Indications:** Neurodermatitis, psoriasis, tinea capitis, goose-foot wind, foot lichen, wart. **Isolated compounds:** 17568.
- T5027 *Plumbago europaea* (Plumbaginaceae); OU ZHOU LAN MO LI; European Leadwort\*. **Isolated compounds:** 17568.
- T5028 *Plumbago indica* (Plumbaginaceae); ZI XUE HUA; Indian Leadwort. **Used part:** Stem-leaf or flower. **TCM Effects:** To break blood and free menstruation, disperse swelling and relieve pain, dispel wind and kill worms. **TCM Indications:** Amenorrhea, dysmenorrhea, wind-damp impediment pain, sprain from knocks and falls, swelling toxin of welling abscess and sore, scab and lichen. **Isolated compounds:** 17568.
- T5029 *Plumbago zeylanica* (Plumbaginaceae); BAI HUA DAN; Whiteflower Leadwort. **Used part:** whole herb and root. **TCM Effects:** To dispel wind and eliminate damp, move *qi* and quicken blood, resolve toxin and disperse swelling. **TCM Indications:** Wind-damp impediment pain, liver spleen enlargement, amenorrhea due to blood stasis, sprain from knocks and falls, swollen welling abscess and scrofula, scab and lichen with itching, poisonous snake bite. **Isolated compounds:** 2402, 3541, 3569, 8712, 8713, 11790, 17567, 17568.
- T5030 *Plumeria bicolor* (Apocynaceae); SHUANG SE JI DAN HUA; Twocoloured Frangipani\*. **Isolated compounds:** 523, 10760.
- T5031 *Plumeria obtusa* (Apocynaceae); DUN XING JI DAN HUA; Obtuse Frangipani\*. **Isolated compounds:** 3468, 3469, 3470, 3471, 15911, 22964.
- T5032 *Plumeria rubra* (Apocynaceae); HONG JI DAN HUA; Frangipani. **Isolated compounds:** 17571.
- T5033 *Poa sphondylodes* (Lamiaceae); LONG XU CAO; Hard Bluegrass. **Used part:** aerial parts. **TCM Effects:** To clear heat and resolve toxin, disinhibit urine and free strangury. **TCM Indications:** Dribbling and inhibited voidings of urination, yellow-water sore. **Isolated compounds:** 1113, 1823, 7759, 7951, 8789.
- T5034 *Podanthus mitiqui* (Compositae); MI TI BING HUA JU. **Isolated compounds:** 16278.
- T5035 *Podanthus ovatifolius* (Compositae); BING HUA JU. **Isolated compounds:** 16278.
- T5036 *Podocarpus andina* (Podocarpaceae); ZHI LI LUO HAN SONG; Chile Podocarpus\*. **Isolated compounds:** 17586.
- T5037 *Podocarpus elongatu* (Podocarpaceae); HAO WANG JIAO LUO HAN SONG; Cape of Good Hope Podocarpus. **Isolated compounds:** 2379.
- T5038 *Podocarpus ferrugineu* (Podocarpaceae); XIN XI LAN LUO HAN SONG; New Zealand Podocarpus\*. **Isolated compounds:** 18971.
- T5039 *Podocarpus gracilior* (Podocarpaceae); XI LUO HAN SONG; Musengerra Podocarpus. **Isolated compounds:** 17591.
- T5040 *Podocarpus hallii* (Podocarpaceae); HA SHI LUO HAN SONG; Hall Podocarpus\*. **Isolated compounds:** 9196, 9197, 15231.
- T5041 *Podocarpus imbricatus* (Podocarpaceae); JI MAO SONG; Imbricate Podocarpus. **Isolated compounds:** 4289, 6679, 9543, 9818, 15668, 17588, 18864, 18866.
- T5042 *Podocarpus macrophyllus* (Podocarpaceae); LUO HAN SONG SHI; Longleaf Podocarpus Seed. Equivalent plant: *Podocarpus macrophyllus* var. *maki*. **Used part:** seed and floral receptacle. **TCM Effects:** To move *qi* and relieve pain, warm center and supplement blood. **TCM Indications:** Blood vacuity, withered-yellow facial complexion, pain in heart and stomach. **Isolated compounds:** 2850, 9543, 11113, 11114, 11115, 11116, 11117, 11118, 11119, 11128, 13411, 15231, 15233, 15234, 17700.
- T5043 *Podocarpus macrophyllus* (Podocarpaceae); LUO HAN SONG YE; Longleaf Podocarpus Leaf. Equivalent plant: *Podocarpus macrophyllus* var. *maki*. **Used part:** branch-leaf. **TCM Effects:** To stanch bleeding. **TCM Indications:** Blood ejection, hemoptysis. **Isolated compounds:** 3185, 6679, 9543, 12176, 12620, 13317, 13410, 13411, 13412, 15373, 17588, 17589, 17596, 17700, 21476.
- T5044 *Podocarpus macrophyllus* var. *maki* (Podocarpaceae); DUAN YE LUO HAN SONG SHI; Chinese Podocarpus Seed. **Used part:** seed and floral receptacle. **TCM Effects:** See *Podocarpus macrophyllus*. **TCM Indications:** See *Podocarpus macrophyllus*. **Isolated compounds:** 2850, 17700.
- T5045 *Podocarpus macrophyllus* var. *maki* (Podocarpaceae); DUAN YE LUO HAN SONG YE; Chinese Podocarpus Leaf. **Used part:** branch-leaf. **TCM Effects:** See *Podocarpus macrophyllus*. **TCM Indications:** See *Podocarpus macrophyllus*. **Isolated compounds:** 17700.
- T5046 *Podocarpus montanus* (Podocarpaceae); SHAN DI LUO HAN SONG; Mountain Podocarpus\*. **Isolated compounds:** 1030.  
*Podocarpus nagi* = *Myrica nagi*
- T5047 *Podocarpus nakaii* (Podocarpaceae); TAI WAN LUO HAN SONG; Nakai Podocarpus. **Isolated compounds:** 17699, 17700, 17701, 17702.
- T5048 *Podocarpus neriifolius* (Podocarpaceae); BAI RI QING; Thitmin. **Isolated compounds:** 17590.
- T5049 *Podocarpus nivalis* (Podocarpaceae); GAO SHAN LUO HAN SONG; Alpine Totara. **Isolated compounds:** 15231.
- T5050 *Podocarpus nubigenus* (Podocarpaceae); YUN WU LUO HAN SONG; Manio. **Isolated compounds:** 15231.
- T5051 *Podocarpus philippinensis* (Podocarpaceae); FEI LV BIN LUO HAN SONG; Philippine Podocarpus. **Isolated compounds:** 15229.
- T5052 *Podocarpus polystachyus* (Podocarpaceae); DUO SUI LUO HAN SONG SHI; Manyspike Podocarpus Seed. **Isolated compounds:** 15229.
- T5053 *Podocarpus purdieana* (Podocarpaceae); PU ER DI LUO HAN SONG; Purdie Podocarpus\*. **Isolated compounds:** 15231.
- T5054 *Podocarpus* sp. (Podocarpaceae). **Isolated compounds:** 15233, 17583, 18003.



- T5055 *Podocarpus spicatus* (Podocarpaceae); SUI HUA LUO HAN SONG; Matai. Isolated compounds: 13594.
- T5056 *Podolepis longipedata*. Isolated compounds: 16409.
- T5057 *Podophyllum emodii* [Syn. *Podophyllum emodii* var. *chinense*; *Podophyllum sikkimense*; *Sinopodophyllum emodii*] (Berberidaceae); TAO ER QI; Common Sinopodophyllum. Used part: root and rhizome. TCM Effects: To dispel wind and eliminate damp, quicken blood and relieve pain, relieve cough and dispel phlegm. TCM Indications: Wind-damp impediment pain, knocks and falls, menstrual disorder, dysmenorrhea, pain in stomach duct and abdomen, cough. Isolated compounds: 1372, 4962, 5011, 5074, 5078, 5091, 5092, 5093, 5094, 11608, 14400, 17110, 17337, 17339, 17340, 17341, 17592, 17593, 17594, 17595, 19889.  
*Podophyllum emodii* var. *chinense* = *Podophyllum emodii*
- T5058 *Podophyllum peltatum* (Berberidaceae); DUN YE GUI JIU; Common Mayapple. Isolated compounds: 16793, 16794, 16795, 16796, 16797, 17337, 17347, 17592, 17593, 17594, 17595.  
*Podophyllum sikkimense* = *Podophyllum emodii*
- T5059 *Pogostemon cablin* [Syn. *Mentha cablin*] (Lamiaceae); GUANG HUO XIANG; Cablin Potchouli. Used part: aerial parts. TCM Effects: To transform damp aromatically, increase appetite and check vomiting, effuse exterior and resolve summerheat. TCM Indications: Summerheat-damp lassitude, oppression in chest, vomiting diarrhea with abdominal pain, deep-source nasal congestion and headache. Isolated compounds: 928, 1476, 1485, 1492, 2222, 2943, 3241, 3242, 3693, 4875, 6741, 6928, 7521, 7730, 9031, 9032, 9033, 9041, 9042, 9088, 9727, 9728, 9729, 14111, 14177, 16092, 16498, 16704, 16706, 16707, 16711, 16712, 16929, 17601, 17602, 18679, 19793, 22311.
- T5060 *Polanisia dodecandra* (Capparidaceae); SHI ER RUI CHOU SHI CAI; Dodecapistil Spiderflower\*. Isolated compounds: 17603.
- T5061 *Polianthes tuberosa* (Amaryllidaceae); WAN XIANG YU; Tuberose. Used part: root. TCM Effects: To clear heat and resolve toxin. TCM Indications: Swelling toxin of welling abscess and sore. Isolated compounds: 696, 1570, 1571, 3553, 3584, 8661, 9254, 9255, 9256, 17611, 17612, 17613, 17614, 17615, 17616, 21383, 21385, 21387, 22286, 22826.
- T5062 *Pollia endiviifolia* (Commelinaceae). Isolated compounds: 16984.
- T5063 *Polyalthia acuminata* (Annonaceae). Isolated compounds: 15711.
- T5064 *Polyalthia cheliensis* (Annonaceae); JING HONG AN LUO; Jinghong Greenstar. Isolated compounds: 246.
- T5065 *Polyalthia longifolia* (Annonaceae); CHANG YE AN LUO; India Greenstar. Isolated compounds: 12714, 17619.
- T5066 *Polyalthia longifolia* var. *pendula* (Annonaceae); BIAN ZHONG CHANG YE AN LUO; Indian Greenstar Variety\*. Isolated compounds: 917, 11750, 12257, 16799, 16800, 16802, 20372.
- T5067 *Polyalthia nemoralis* (Annonaceae); LING SHUI AN LUO; Nemicolous Greenstar\*. Used part: root. TCM Effects: To fortify spleen and boost stomach, supplement kidney and secure essence. TCM Indications: Center vacuity with stomachache, inappetence, kidney vacuity and emission. Isolated compounds: 23002.
- T5068 *Polyalthia suberosa* (Annonaceae); AN LUO; Suberous Greenstar. Isolated compounds: 12116.
- T5069 *Polycarpon prostratum* (Caryophyllaceae); DUO JIA CAO; Manyseed. Isolated compounds: 17959, 17960, 17961, 17962.
- T5070 *Polygala amarella* (Polygalaceae); KU WEI YUAN ZHI; Bitter Milkwort\*. Isolated compounds: 20940, 20941, 20942, 20943, 20944, 20946, 20947, 20948, 20949, 20950, 20951, 20952, 20953, 20954, 20957, 20958.
- T5071 *Polygala arillata* (Polygalaceae); HUANG HUA YUAN ZHI; Yellowflower Milkwort. Used part: root. TCM Effects: To dispel phlegm and eliminate damp, fortify spleen and supplement vacuity, quiet heart and quicken blood. TCM Indications: Cough with profuse phlegm, wind-damp impediment pain, dribbling pain of urination, edema, beriberi, hepatitis, tuberculosis, postpartum vacuity weakness, inappetence, child *gan* accumulation, insomnia and frequent dreaming, menstrual disorder, knocks and falls. Isolated compounds: 1681, 1682, 1683, 1684, 1685, 1686, 1687, 1688, 1689, 6009, 6031, 10423, 17636, 18606, 20369, 20372.  
*Polygala aureocauda* = *Polygala fallax*
- T5072 *Polygala caudata* (Polygalaceae); SHUI HUANG YANG MU; Caudate Milkwort. Used part: root. TCM Effects: To clear heat and disinhibit damp, relieve cough and transform phlegm. TCM Indications: Swelling pain in throat, damp-heat jaundice, bronchitis. Isolated compounds: 4143, 17621.
- T5073 *Polygala chinensis* [Syn. *Polygala glomerata*] (Polygalaceae); DA JIN NIU CAO; Chinese Milkwort. Used part: whole herb with root. TCM Effects: To dispel phlegm, disperse accumulation, dissipate stasis, resolve toxin. TCM Indications: Cough and sore pharynx, child *gan* accumulation, knocks and falls, scrofula, swollen welling abscess, poisonous snake bite. Isolated compounds: 1622, 1623, 3530, 3531, 3532, 3540, 8582, 8583, 8584, 8585, 8586, 8587, 9323, 12082, 15184, 20445.
- T5074 *Polygala emodi* (Polygalaceae); XI MA LA YA YUAN ZHI; Himalayan Milkwort\*. Isolated compounds: 5074.
- T5075 *Polygala fallax* [Syn. *Polygala aureocauda*] (Polygalaceae); JIA HUANG HUA YUAN ZHI; Faslé Yellowflower Milkwort\*. Used part: root or stem-leaf. TCM Effects: To supplement vacuity and fortify spleen, free network vessels and dissipate stasis. TCM Indications: Taxation fatigue and hypodynamia, prolapse of uterus, child *gan* accumulation, spleen vacuity edema, sparse vaginal discharge, wind-damp impediment pain, lumbago, menstrual disorder, dysmenorrhea, knocks and falls. Isolated compounds: 6009, 6031, 7711, 7712, 7713, 10044, 10422, 16109, 17637, 17638.
- T5076 *Polygala fruticosa* (Polygalaceae); GUAN MU YUAN ZHI; Shrubby Milkwort\*. Isolated compounds: 7973.  
*Polygala glomerata* = *Polygala chinensis*
- T5077 *Polygala macradenia* (Polygalaceae); DA XIAN YUAN ZHI; Macradenous Milkwort\*. Isolated compounds: 5074.
- T5078 *Polygala nitida* (Polygalaceae); GUANG LIANG YUAN ZHI; Shining Milkwort\*. Isolated compounds: 18609, 18610.
- T5079 *Polygala paenea* (Polygalaceae); PEI NI YUAN ZHI; Paene Milkwort\*. Isolated compounds: 5074.
- T5080 *Polygala peltatum* (Polygalaceae); ZU YE CAO; Peltate Milkwort\*. Isolated compounds: 5074.
- T5081 *Polygala polygama* (Polygalaceae); KU YUAN ZHI; Racemed Milkwort. Isolated compounds: 5093.

- T5082 *Polygala reinii* (Polygalaceae); SHI YE CAO; Reini Milkwort\*. Isolated compounds: 18603, 18604, 18605, 18606, 18607, 18608, 18611, 18612.
- T5083 *Polygala sabulosa* (Polygalaceae); SHA DI YUAN ZHI; Sandland Milkwort\*. Isolated compounds: 13919, 14014, 14015, 14018, 14019, 14021, 17840, 17976.
- T5084 *Polygala senega* (Polygalaceae); MEI YUAN ZHI; Senega Snakeroot. Isolated compounds: 16104, 19715, 19724, 19725, 19726, 19727, 19728, 19729, 20168.
- T5085 *Polygala senega* var. *latifolia* (Polygalaceae); KUAN YE MEI YUAN ZHI; Broadleaf Milkwort\*. Isolated compounds: 19716, 19717, 19718, 19719, 19720, 19721, 19722, 19723.
- T5086 *Polygala sibirica* (Polygalaceae); XI BO LI YA YUAN ZHI; Siberian Milkwort. Used part: root. TCM Effects: See *Polygala tenuifolia*. TCM Indications: See *Polygala tenuifolia*. Isolated compounds: 1682, 1683, 12468, 17631, 19855, 19856, 19857, 19863, 19864, 19865, 19866.
- T5087 *Polygala telephioides* (Polygalaceae); XIAO HUA YUAN ZHI; Smallflower Milkwort. Used part: whole herb with root. TCM Effects: To dispel phlegm, relieve cough, dissipate stasis, resolve toxin. TCM Indications: Cough, cough with inhibited phlegm, knocks and falls, menstrual disorder, swelling toxin of welling abscess and sore, poisonous snake bites. Isolated compounds: 20907, 20908, 20909.
- T5088 *Polygala tenuifolia* (Polygalaceae); YUAN ZHI; Thinleaf Milkwort. Equivalent plant: *Polygala sibirica*. Used part: root. TCM Effects: To quiet heart and spirit, dispel phlegm and open orifices, resolve toxin and disperse swelling. TCM Indications: Pharyngitis, disquieted heart spirit, fright palpitation and insomnia, amnesia, fright epilepsy, cough with profuse phlegm, effusion of back from welling abscess and flat abscess, painful swollen breast. Isolated compounds: 402, 3156, 3158, 5842, 6011, 6165, 6299, 8743, 9234, 10045, 10756, 10804, 14320, 15752, 16103, 16104, 16105, 16108, 16874, 16968, 17632, 17633, 17634, 17635, 17636, 20939, 20940, 20941, 20942, 20943, 20944, 20945, 20955, 20956, 20957, 20958, 20959, 20960, 20961, 20962, 21902.
- T5089 *Polygala vulgaris* (Polygalaceae); PU TONG YUAN ZHI; Common Milkwort\*. Isolated compounds: 3573, 6164, 6213, 19916.
- T5090 *Polygala wattersii* (Polygalaceae); CHANG MAO ZI YUAN ZHI; Longhair Milkwort. Used part: root or leaf. TCM Effects: To resolve toxin, dissipate stasis. TCM Indications: Mammary welling abscess, innominate toxin swelling, knocks and falls. Isolated compounds: 22639, 22640, 22641, 22642, 22643, 22644, 22645, 22646, 22647, 22648.
- T5091 *Polygonatum cyrtonea* [Syn. *Polygonatum multiflorum*] (Liliaceae); DUO HUA HUANG JING; Manyflower Solomonseal. Used part: rhizome. TCM Effects: See *Polygonatum sibiricum*. TCM Indications: See *Polygonatum sibiricum*. Isolated compounds: 2057, 5350, 5351, 9620.
- T5092 *Polygonatum kingianum* (Liliaceae); DIAN HUANG JING; King Solomonseal. Used part: rhizome. TCM Effects: See *Polygonatum sibiricum*. TCM Indications: See *Polygonatum sibiricum*. Isolated compounds: 7413, 11544, 12228.  
*Polygonatum multiflorum* = *Polygonatum cyrtonea*
- T5093 *Polygonatum odoratum* [Syn. *Polygonatum officinale*] (Liliaceae); YU ZHU; Fragrant Solomonseal. Equivalent plant: *Polygonatum prattii*. Used part: rhizome. TCM Effects: To nourish *yin* and moisten dryness, engender liquid and allay thirst. TCM Indications: Lung stomach *yin* damage, dry cough, dry throat, diabetes mellitus due to internal heat. Isolated compounds: 2057, 4005, 10134, 17624, 17625, 17626, 17627, 22650.  
*Polygonatum officinale* = *Polygonatum odoratum*
- T5094 *Polygonatum prattii* (Liliaceae); KANG DING YU ZHU; Pratt Solomonseal. Used part: rhizome. TCM Effects: See *Polygonatum odoratum*. TCM Indications: See *Polygonatum odoratum*. Isolated compounds: 17768.
- T5095 *Polygonatum sibiricum* (Liliaceae); HUANG JING; Siberian Solomonseal. Equivalent plant: *Polygonatum kingianum*, *Polygonatum cyrtonea*. Used part: rhizome. TCM Effects: To nourish *yin* and moisten lung, supplement spleen and boost *qi*, enrich kidney and replenish essence. TCM Indications: *Yin* vacuity taxation cough, lung heat dry cough, fatigue hypodynamia due to spleen vacuity, reduced food intake with dry mouth, diabetes mellitus, limp aching lumbus and knees due to kidney *yin* vacuity, impotence and emission, tinnitus and dim vision, premature graying in beard and hair, vacuity and marked emaciation, wind *lai* lichen. Isolated compounds: 5896, 13507, 15450, 17676, 17677, 17678, 17679, 17680, 17681.
- T5096 *Polygonatum zanlanscianense* (Liliaceae); HU BEI HUANG JING; Hubei Landpick. Isolated compounds: 6437, 8968, 10374, 11555, 11556, 16670, 17643, 17644, 17645, 17646, 17654.
- T5097 *Polygonum amphibium* (Polygonaceae); LIANG QI LIAO; Amphibious Knotweed. Used part: herb. TCM Effects: To clear heat and disinhibit damp, resolve toxin. TCM Indications: Edema in lower limb, dysentery, hematuria, tidal fever, vacuity and profuse sweating, clove sore, innominate toxin swelling. Isolated compounds: 2039.
- T5098 *Polygonum aviculare* (Polygonaceae); BIAN XU; Common Knotgrass. Used part: dried aerial parts. TCM Effects: To disinhibit urine and free strangury, kill worms, relieve itch. TCM Indications: Urethritis, lithiasis, chyluria, dysentery, parotitis, heat strangury, short voidings of reddish urine, dripping with inhibited pain, eczema, pudendal itch, vaginal discharge, ascariasis. Isolated compounds: 2039, 2040, 2887, 3551, 8095, 15181, 18317, 18411, 18680, 19542.
- T5099 *Polygonum bistorta* (Polygonaceae); QUAN SHEN; Bistort. Used part: rhizome. TCM Effects: To clear heat and resolve toxin, disperse swelling, stanch bleeding. TCM Indications: Red dysentery, heat diarrhea, lung heat cough, swollen welling abscess, scrofula, mouth sore, tongue sores, blood ejection, spontaneous external bleeding, bleeding from hemorrhoids, poisonous snake bite. Isolated compounds: 5519, 6853, 8095, 8109.
- T5100 *Polygonum chinense* (Polygonaceae); HUO TAN MU CAO; Chinese Knotweed. Used part: herb. TCM Effects: To clear heat and disinhibit damp, cool blood and resolve toxin, calm liver and brighten eyes, soothe sinews and quicken blood. TCM Indications: Diarrhea, dysentery, swelling pain in throat, diphtheria, lung heat cough, pertussis, hepatitis, vaginal discharge, swollen welling abscess, otitis media, eczema, dizziness and tinnitus, corneal nephelium, knocks and falls. Isolated compounds: 12062, 19794.

- T5101 *Polygonum cuspidatum* (Polygonaceae); HU ZHANG; Japanese Fleeceflower. Used part: rhizome. TCM Effects: To lower cholesterol, quicken blood and dissipate stasis, dispel wind and free network vessels, clear heat and disinhibit damp, resolve toxin. TCM Indications: Hyperlipemia, impediment pain in joints, damp-heat jaundice, toxic jaundice, child jaundice, amenorrhea, hepatitis, appendicitis, candida vaginitis, concretion and conglomeration, cough with profuse phlegm, burns and scalds, knocks and falls, swelling toxin of welling abscess and sore. Isolated compounds: 1362, 1363, 1367, 1476, 3308, 3315, 3615, 3674, 3765, 5762, 5763, 5964, 6087, 6360, 6776, 6778, 7710, 8095, 8622, 9043, 10419, 10432, 11483, 13254, 13832, 17247, 17251, 17283, 18317, 18407, 18411, 18416, 18417, 18643, 18759, 21157, 21453, 22060.
- T5102 *Polygonum cuspidatum* (Polygonaceae); HU ZHANG YE; Japanese Fleeceflower Leaf. Used part: leaf. TCM Effects: To dispel wind-damp, resolve heat toxin. TCM Indications: Painful joints due to rheumatism, snake bite, lacquer sore. Isolated compounds: 2039, 3766, 10887, 11642, 13419, 18411, 19087, 20715.  
*Polygonum cymosum* = *Fagopyrum cymosum*  
*Polygonum flaccidum* = *Polygonum hydropiper* var. *flaccidum*
- T5103 *Polygonum hydropiper* (Polygonaceae); LIAO SHI; Red-knees Fruit. Used part: fruit. TCM Effects: To transform damp and disinhibit water, break stasis and dissipate binds, resolve toxin. TCM Indications: Vomiting diarrhea with abdominal pain, edema, inhibited urination [=dysuria], concretion and accumulation with glomus distention, swollen welling abscess and sores, scrofula. Isolated compounds: 11403, 17642.
- T5104 *Polygonum hydropiper* (Polygonaceae); SHUI LIAO; Red-knees. Used part: herb. TCM Effects: To move stagnation and transform damp, stanch bleeding and dissipate stasis, dispel wind and relieve itch, resolve toxin. TCM Indications: Damp-stagnation obstructing internally, diarrhea, dysentery, enteritis, child *gan* accumulation, flooding and spotting, amenorrhea due to blood stasis, dysmenorrhea, knocks and falls, wind-damp impediment pain, hematochezia, bleeding due to external injury, itchy skin, eczema, wind papules, foot lichen, swollen welling abscess, poisonous snake bite. Isolated compounds: 3971, 9737, 11403, 11609, 11610, 16884, 16990, 16991, 17640, 17641, 17647, 17648, 17649, 18281, 18399, 18411, 20659, 22310, 22638.
- T5105 *Polygonum hydropiper* var. *flaccidum* [Syn. *Polygonum flaccidum*] (Polygonaceae); LA LIAO; Flaccid Knotweed. Used part: whole herb. TCM Effects: To resolve toxin, eliminate damp, dissipate stasis, stanch bleeding. TCM Indications: Dysentery, diarrhea, nipple moth, malaria, wind-damp impediment pain, painful swelling from knocks and falls, flooding and spotting [=metrorrhagia and metrostaxis], swollen welling abscess and clove sores, scrofula, poisonous snake bites, eczema, foot lichen. Isolated compounds: 16991, 17647.
- T5106 *Polygonum lapathifolium* (Polygonaceae); YU LIAO; Dockleaved Knotweed. Used part: whole herb. TCM Effects: To resolve toxin, eliminate damp, quicken blood. TCM Indications: Swelling pain of sores, scrofula, diarrhea, dysentery, eczema, *gan* accumulation, wind-damp impediment pain, knocks and falls, menstrual disorder. Isolated compounds: 1187, 9737, 12049, 12504, 12505, 12506, 12507, 12508, 13653, 14017, 18360, 22309, 22330.
- T5107 *Polygonum multiflorum* (Polygonaceae); HE SHOU WU; Tuber Fleeceflower. Used part: tuberoid. TCM Effects: To lower cholesterol, enrich *yin* and nourish blood, moisten intestines and free stool, interrupt malaria, dispel wind, resolve toxin. TCM Indications: Backache, neurasthenia, hyperlipemia, neurosis, insomnia, dizziness due to anemia, palpitation, limp aching lumbus and knees due to liver kidney *yin* vacuity, premature graying in beard and hair, tinnitus, emission, intestinal dry and constipation, enduring malaria, wind papule itching, sore and welling abscess, scrofula, hemorrhoids. Isolated compounds: 3598, 3615, 5863, 6776, 7788, 9043, 13833, 17247, 17283, 17639, 17877, 18416, 18643, 18759, 19983, 21154, 21156, 21157, 21159.
- T5108 *Polygonum multiflorum* (Polygonaceae); YE JIAO TENG; Tuber Fleeceflower Stem. Used part: stem. TCM Effects: To nourish heart and quiet spirit, dispel wind and free network vessels. TCM Indications: Insomnia, frequent dreaming, anemia and generalized pain, muscle numbness, wind-damp impediment pain, wind papule itching. Isolated compounds: 17247, 18416.
- T5109 *Polygonum nodosum* (Polygonaceae); JIE LIAO; Pale Persicaria. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, stanch bleeding, quicken blood and dissipate stasis. TCM Indications: Swelling of sores, *yin* flat abscess, scrofula, poisonous snake bite, toothache, summerheat stroke, dysentery, knocks and falls, bleeding due to external injury. Isolated compounds: 12049, 17399, 18360.
- T5110 *Polygonum orientale* (Polygonaceae); HONG CAO; Prince's-feather. Used part: herb. TCM Effects: To dispel wind and eliminate damp, clear heat and resolve toxin, quicken blood, interrupt malaria. TCM Indications: Infections, rheumatic arthritis, malaria, mounting *qi*, beriberi, swelling of sores. Isolated compounds: 9616, 16196, 17515.
- T5111 *Polygonum perfoliatum* (Polygonaceae); GANG BAN GUI GEN; Perfoliate Knotweed Root. Used part: root. TCM Effects: To resolve toxin and disperse swelling. TCM Indications: Mouth-level nape sore, hemorrhoids and fistulas. Isolated compounds: 6776, 11014.
- T5112 *Polygonum perigrinatoris* (Polygonaceae); NI A LUO. Used part: rhizome. TCM Effects: To astringe intestines and check dysentery. TCM Indications: Dysentery, diarrhea. Isolated compounds: 16925.
- T5113 *Polygonum persicaria* (Polygonaceae); TAO YE LIAO; Spring Knotweed. Used part: herb. TCM Effects: To effuse sweat and remove damp, disperse food, kill worms. TCM Indications: Wind-cold common cold, wind-cold-damp impediment, food damage diarrhea, intestinal parasitic disease. Isolated compounds: 11642, 16884, 18281.
- T5114 *Polygonum polystachyum* (Polygonaceae); DUO SUI LIAO; Many-spike Knotweed. Used part: herb. TCM Effects: To clear heat and resolve toxin, dispel wind and disinhibit damp. TCM Indications: Dysentery, diarrhea, child indigestion, wind-damp impediment pain, knocks and falls. Isolated compounds: 2039, 11642, 18317, 18342, 18411, 18674.
- T5115 *Polygonum sibiricum* [Syn. *Persicaria sibirica*] (Polygonaceae); XI BO LI YA LIAO [yn]; Siberian Knotweed\*. Used part: rhizome. TCM Effects: To course wind and clear heat, disinhibit water and disperse edema. TCM Indications: Red eyes with gall, damp itchy skin, edema, ascites (hydroperitoneum). Isolated compounds: 15450.

- T5116 *Polygonum* sp. (Polygonaceae). Isolated compounds: 19087.
- T5117 *Polygonum* spp. (Polygonaceae). Isolated compounds: 17399.
- T5118 *Polygonum suffultum* (Fabaceae); HONG SAN QI; Ovateleaf Knotweed. Used part: rhizome. TCM Effects: To stanch bleeding and relieve pain, quicken blood and regulate menstruation, clear heat and eliminate damp. TCM Indications: Painful wound from knocks and falls, bleeding due to external injury, blood ejection, hematochezia, flooding and spotting, red and white vaginal discharge, damp-heat dysentery, welling abscess. Isolated compounds: 19987.
- T5119 *Polygonum thunbergii* (Polygonaceae); SHUI MA TIAO; Thunberg Knotweed. Used part: herb. TCM Effects: To dispel wind and clear heat, quicken blood and relieve pain. TCM Indications: Headache due to externally contracted wind-heat, cough, sand, dysentery, painful wound from knocks and falls, tuberculosis and hemoptysis. Isolated compounds: 4446, 13240, 16990, 18411.
- T5120 *Polygonum tinctorium* (Polygonaceae); LIAO LAN GUO; Indigoplant Fruit. Used part: fruit. TCM Effects: To clear heat, cool blood, resolve toxin. TCM Indications: Warm disease ardent fever, blood ejection, spontaneous external bleeding, macular eruption, swelling pain in throat, swollen boil, innominate toxin swelling, bee sting, insect bites. Isolated compounds: 18287, 22059.
- T5121 *Polygonum tinctorium* (Polygonaceae); LIAO LAN YE; Indigoplant Leaf. Used part: stem-leaf. TCM Effects: To clear heat and resolve toxin, cool blood and disperse macula. TCM Indications: Warm disease fever, macular eruption and papules, blood ejection, spontaneous external bleeding, throat impediment, heat dysentery, jaundice, erysipelas, epidemic parotitis, mouth sore, swollen welling abscess. Isolated compounds: 11014, 11023, 11024, 18287, 21799.
- T5122 *Polygonum viscosum* (Polygonaceae); ZHAN MAO LIAO; Viscidhairy Knotweed. Used part: branch-leaf. TCM Effects: To rectify *qi* and remove damp, fortify stomach and disperse food. TCM Indications: Stomach *qi* pain, indigestion, child *gan* accumulation, wind-damp pain. Isolated compounds: 6147, 18353, 22535.
- T5123 *Polypodium glycyrrhiza* (Polypodiaceae); TIAN GEN DUO ZU JUE; Sweetroot Polypody\*. Isolated compounds: 17663.
- T5124 *Polypodium niponicum* (Polypodiaceae); SHUI LONG GU; Japanese Polypody. Used part: rhizome. TCM Effects: To clear heat and disinhibit damp, quicken blood and free network vessels. TCM Indications: Opacity of urine, diarrhea, strangury, wind-damp impediment pain, knocks and falls. Isolated compounds: 3773, 4468, 4503, 4885, 6678, 6679, 7758, 7978, 9638, 9639, 9641, 9642, 10066, 14355, 14434, 15064, 15065, 15066, 15067, 15729, 15730, 15731, 15732, 16029, 16030, 16037, 16038, 16251, 16426, 17584, 17585, 17618, 19767, 20698, 20709.  
*Polypodium punctatum* = *Hypolepis punctata*
- T5125 *Polypodium* spp. (Polypodiaceae). Isolated compounds: 15064.
- T5126 *Polypodium virginianum* (Polypodiaceae); DONG BEI DUO ZU JUE; North-east Polypody\*. Used part: rhizome. TCM Effects: See *Polypodium vulgare*. TCM Indications: See *Polypodium vulgare*. Isolated compounds: 15729, 15730, 19767.
- T5127 *Polypodium vulgare* (Polypodiaceae); DUO ZU JUE; Common Polypody. Equivalent plant: *Polypodium virginianum*. Used part: rhizome. TCM Effects: To clear heat, resolve toxin and disinhibit damp. TCM Indications: Damp-heat strangury pain, wind-damp-heat impediment, swollen welling abscess, sore and boil, wind papule itching, knocks and falls. Isolated compounds: 3551, 6678, 9638, 9642, 10062, 12999, 13419, 14235, 15729, 15730, 16116, 17660, 17662, 17663.  
*Polyporus cinnabarinus* = *Trametes cinnabarina*
- T5128 *Polyporus ellisii* (Polyporaceae); AI LI SI DUO KONG JUN; Ellisii Porous Agaric\*. Isolated compounds: 3421, 6904, 20154.  
*Polyporus fomentarius* = *Fomes fomentarius*  
*Polyporus pinicola* = *Fomitopsis pinicola*
- T5129 *Polyporus umbellatus* (Polyporaceae); ZHU LING; Popyporus Agaric. Used part: sclerotium. TCM Effects: To disinhibit water and percolate damp, anticancer. TCM Indications: Inhibited urination, edema, ascites, carcinoma of lung, carcinoma of esophagus, diarrhea, strangury-turbidity, vaginal discharge. Isolated compounds: 7247, 7250, 17665, 17666, 17667, 17668, 17669, 17670, 17671.
- T5130 *Polyscias amplifolia* (Araliaceae); DA YE NAN YANG SHEN; Bigleaf Polyscias\*. Isolated compounds: 8054, 8065, 17622, 17623.
- T5131 *Polyscias murrayi* (Araliaceae); MO LEI NAN YANG SHEN; Murri Polyscias\*. Isolated compounds: 6091, 10638, 17169.
- T5132 *Polystichum fauriei* (Aspidiaceae); FU RUI ER JUE; Faurie Shield Fern\*. Isolated compounds: 17660.
- T5133 *Polytrichum commune* (Polytrichaceae); JIN FA XIAN; Common Gold-hair Moss\*. Used part: frond. TCM Effects: To enrich *yin* and clear heat, cool blood and stanch bleeding. TCM Indications: Steaming bone tidal fever due to *yin* vacuity, night sweating, tuberculosis with cough, blood ejection due to blood heat, spontaneous external bleeding, hemoptysis, hematochezia, flooding and spotting. Isolated compounds: 14806.
- T5134 *Polytrichum ohioense* (Polytrichaceae); DUO XING JIN FA XIAN; Polymorphism Gold-hair Moss\*. Isolated compounds: 16019, 16020, 16021, 16022, 16023.
- T5135 *Polytrichum pollidisetum* (Polytrichaceae); CANG MAO JIN FA XUAN; Dark-hair Gold-hair Moss\*. Isolated compounds: 16548, 16549.
- T5136 *Pometia ridleyi* (Sapindaceae); LI DE LI FAN LONG YAN; Ridley Pometia\*. Isolated compounds: 17689, 17690, 17691, 17692, 17693, 17694.
- T5137 *Poncirus trifoliata* (Rutaceae); GOU JU; Trifoliolate-orange. Used part: unripe fruit. TCM Effects: To break *qi* and dissipate binds, course liver and resolve depression. TCM Indications: Binding depression of liver *qi*, mammary consumption, mounting *qi*, *qi* stagnation, distention fullness in stomach duct and abdomen, pain in stomach duct, constipation, prolapse of uterus, prolapse of rectum. Isolated compounds: 933, 1497, 3241, 3242, 9458, 11611, 15286, 15882, 17705, 19784, 20002, 22775.
- T5138 *Poncirus trifoliata* (Rutaceae); GOU JU HE; Trifoliolate-orange Seed. Used part: seed. TCM Effects: To stanch bleeding. TCM Indications: Incessant intestinal wind bleeding. Isolated compounds: 2010, 9419, 13846.
- T5139 *Poncirus trifoliata* (Rutaceae); GOU JU YE; Trifoliolate-orange Leaf. Used part: leaf. TCM Effects: To rectify *qi* and dispel wind, dissipate binds and disperse swelling. TCM Indications: Dysphagia-occlusion,

- stomach reflux, vomiting, globus hystericus, mounting *qi*. Isolated compounds: 1497, 17705.
- T5140 *Poncirus trifoliata* (Rutaceae); GOU JU ZHI KE; Trifoliolate-orange Unripe Fruit. Used part: unripe fruit. TCM Effects: See *Citrus aurantium*. TCM Indications: See *Citrus aurantium*. Isolated compounds: 15286.
- T5141 *Poncirus trifoliata* (Rutaceae); GOU JU ZHI SHI; Trifoliolate-orange Young Fruit. Used part: young fruit. TCM Effects: See *Citrus aurantium*. TCM Indications: See *Citrus aurantium*. Isolated compounds: 9420, 14796, 15286, 15404, 17704.
- T5142 *Poncirus trifoliata* (Rutaceae); ZHI GEN PI; Trifoliolate-orange Root-bark. Used part: root cortex. TCM Effects: To constrain blood, relieve pain. TCM Indications: Toothache, hemorrhoids, hematochezia. Isolated compounds: 5134, 19784.
- T5143 *Pongamia pinnata* (Fabaceae); SHUI LIU DOU; Poongaoil Pongamia. Used part: seed. TCM Effects: To dispel wind and eliminate damp, resolve toxin and kill worms. TCM Indications: Scab and *lai*, lichen, suppurative sore. Isolated compounds: 1408, 1409, 1410, 1413, 2334, 2857, 3071, 3072, 3335, 5962, 6228, 6245, 6246, 6247, 8124, 10029, 10407, 12163, 13097, 13098, 13908, 14074, 14075, 15950, 17398, 17708, 17709, 17710, 17711, 17712, 17714, 17715, 17716, 17753, 20280, 20372, 21916.
- T5144 *Populus adenopoda* (Salicaceae); XIANG YE YANG; Chinese Aspen. Used part: root cortex, bark or leaf. TCM Effects: To dispel wind and relieve pain, quicken blood and free network vessels. TCM Indications: Wind-damp impediment pain, paralysis in limbs, decayed toothache, static blood pain due to injury. Isolated compounds: 19184, 19192.
- T5145 *Populus alba* (Salicaceae); YIN BAI YANG; White Aspen. Used part: leaf. TCM Effects: To relieve cough and calm asthma, clear heat and resolve phlegm. TCM Indications: Cough and asthma. Isolated compounds: 3600, 19184, 19192.
- T5146 *Populus alba* var. *pyramidalis* (Salicaceae); XIN JIANG YANG; Sinkiang Poplar\*. Isolated compounds: 3600, 19184, 19192.
- T5147 *Populus balsamifera* (Salicaceae); ZHI YANG; Balsam Poplar. Isolated compounds: 115, 2414.
- T5148 *Populus beijingensis* (Salicaceae); BEI JING YANG; Beijing Poplar. Isolated compounds: 3600, 19184, 19192.
- T5149 *Populus canadensis* (Salicaceae); JIA YANG; Canada Poplar. Equivalent plant: *Populus cathayana*. Used part: male inflorescence. TCM Effects: To clear heat and resolve toxin, transform damp and check dysentery. TCM Indications: Bacteriogenic dysentery, enteritis. Isolated compounds: 3600, 19184.
- T5150 *Populus cathayana* (Salicaceae); QING YANG; Green Poplar. Used part: male inflorescence. TCM Effects: See *Populus canadensis*. TCM Indications: See *Populus canadensis*. Isolated compounds: 19184, 19192.
- T5151 *Populus davidiana* (Salicaceae); SHAN YANG; Wild poplar. Used part: bark. TCM Effects: To dispel wind and quicken blood, clear heat and disinhibit damp, expel worms. TCM Indications: Wind impediment, beriberi, static blood from knocks and falls, dysentery, lung heat cough, mouth sore, toothache, dribbling urination, ascariasis. Isolated compounds: 165, 3600, 19184, 19192, 20899.
- T5152 *Populus heterophylla* (Salicaceae); YI YE YANG; Swamp Cottonwood. Isolated compounds: 21508.
- T5153 *Populus hopeiensis* (Salicaceae); HE BEI YANG; Hebei Poplar. Isolated compounds: 19184, 19192.
- T5154 *Populus koreana* (Salicaceae); XIANG YANG; Korea Poplar. Isolated compounds: 19184, 19192.
- T5155 *Populus lasiocarpa* (Salicaceae); DA YE YANG; Bigleaf Poplar. Isolated compounds: 19184.
- T5156 *Populus nigra* var. *thevestina* (Salicaceae); JIAN GAN YANG; Arrowshaft Poplar. Used part: bark or leaf. TCM Effects: To dispel wind and eliminate damp, cool blood and resolve toxin. TCM Indications: Wind-damp impediment pain, leg *qi* with edema, hepatitis, dysentery, burns and scalds, scab and lichen with bald sores. Isolated compounds: 19184.
- T5157 *Populus pseudo-simonii* (Salicaceae); XIAO QING YANG; False Simon Poplar. Used part: bark. TCM Effects: To resolve toxin. TCM Indications: Stubborn lichen with sore toxin. Isolated compounds: 3600, 19184, 19192.
- T5158 *Populus simonii* (Salicaceae); XIAO YE YANG; Simon Poplar. Used part: bark. TCM Effects: To dispel wind and quicken blood, clear heat and disinhibit damp. TCM Indications: Wind-damp impediment pattern, painful swelling from knocks and falls, lung heat cough, dribbling urination, mouth sore, toothache, dysentery, leg *qi*, ascariasis. Isolated compounds: 19184.
- T5159 *Populus* sp. (Salicaceae). Isolated compounds: 3600, 3695, 17828, 19184, 20556.
- T5160 *Populus* spp. (Salicaceae). Isolated compounds: 2890, 17720.
- T5161 *Populus tomentosa* (Salicaceae); MAO BAI YANG; Chinese White Poplar. Used part: bark or twig. TCM Effects: To clear heat and disinhibit damp, relieve cough and transform phlegm. TCM Indications: Hepatitis, dysentery, strangury-turbidity, cough of phlegm asthma. Isolated compounds: 1485, 3600, 17720, 19184, 19192, 21510.
- T5162 *Populus tremula* (Salicaceae); OU ZHOU SHAN YANG; Aspen. Isolated compounds: 21508.
- T5163 *Populus tremuloides* (Salicaceae); CHAN YANG; American Aspen. Isolated compounds: 2284, 17089, 21508, 21510.
- T5164 *Populus trichocarpa* (Salicaceae); MAO GUO YANG; Black Cottonwood. Isolated compounds: 21557.
- T5165 *Populus ussuriensis* (Salicaceae); DA QING YANG; Ussuri Poplar. Isolated compounds: 19184, 19192.
- T5166 *Populus xiaohei* (Salicaceae); XIAO HEI YANG; Slamm Black Poplar. Isolated compounds: 3600, 19184, 19192.
- T5167 *Porana racemosa* (Convolvulaceae); FEI E TENG; Racemose Porana. Used part: whole herb or root. TCM Effects: To resolve exterior, move *qi*, quicken blood, resolve toxin. TCM Indications: Common cold due to wind-cold, food stagnation abdominal distention, innominate toxin swelling. Isolated compounds: 11132.
- T5168 *Porella acutifolia* ssp. *tosana* (Porellaceae); SHANG ZUO JIAN YE GUANG E TAI. Isolated compounds: 600, 601, 2352, 2429, 2430, 2431, 2432, 2433, 2434, 6741, 7089, 10650, 10651, 16407, 16979, 22311.
- T5169 *Poria cocos* (Polyporaceae); FU LING; Indian Bread. Used part: sclerotium. TCM Effects: To disinhibit water and percolate damp,

- fortify spleen and quiet heart. TCM Indications: Neurasthenia, disquieted heart spirit, fright palpitation and insomnia, insomnia, pelvic inflammation, edema, scant urine with edema, phlegm-rheum dizziness, reduced food intake due to spleen vacuity, sloppy stool and diarrhea, chronic diarrhea. Isolated compounds: 478, 617, 1112, 3140, 3589, 4874, 4909, 4978, 6544, 6674, 6889, 7250, 9486, 9758, 9823, 10070, 10311, 12569, 16496, 16497, 17387, 17664, 17722, 17723, 17724, 17725, 17726, 17727, 17728, 21502, 22108, 22109, 22218.
- T5170 *Porphyra* sp. (Bangiaceae). Isolated compounds: 16345.
- T5171 *Porphyra tenera* (Bangiaceae); ZI CAI; Laver. Used part: thalospore. TCM Effects: To transform phlegm and soften hardness, clear heat and disinhibit urine. TCM Indications: Goiter and tuberculosis, beriberi, edema, strangury, swelling pain in throat, cough, diarrhea. Isolated compounds: 3237, 6721, 8011, 12900, 12901, 13126, 15528, 16884, 20998.
- T5172 *Portulaca grandiflora* (Portulacaceae); DA HUA MA CHI XIAN; Largeflower Purslane. Used part: herb. TCM Effects: To clear heat and resolve toxin, stanch bleeding and dissipate stasis. TCM Indications: Swelling pain in throat, sore and boil, eczema, painful swelling from knocks and falls, burns and scalds, bleeding due to external injury. Isolated compounds: 2319, 2320, 2322, 9662, 11018, 11250, 11252, 17733, 17734, 17735, 17736, 17737, 17738, 17739, 17740.
- T5173 *Portulaca oleracea* (Portulacaceae); MA CHI XIAN; Purslane. Used part: aerial parts. TCM Effects: To clear heat and resolve toxin, cool blood and stanch bleeding. TCM Indications: Heat toxin blood dysentery, acute bacillary dysentery, pertussis, enteritis, appendicitis, swollen welling abscess and clove sores, eczema, erysipelas, bleeding, postpartum bleeding, hematochezia, bleeding from hemorrhoids, flooding and spotting, ascariasis, ancylostomiasis, snake or insect bites. Isolated compounds: 6558, 6559, 11250, 11252, 15708, 16074, 16075, 16076, 16077, 16078.
- T5174 *Portulaca pilosa* (Portulacaceae); MAO MA CHI XIAN; Pilose Purslane\*. Used part: whole herb. TCM Effects: To clear heat and disinhibit damp, resolve toxin. TCM Indications: Damp-heat dysentery, sore and boil. Isolated compounds: 11250, 11252, 17364, 17365, 22624.
- T5175 *Potamogeton lucens* (Potamogetonaceae); GUANG YE YAN ZI CAI; Glabrousleaf Pondweed. Isolated compounds: 8680, 8700, 10546.
- T5176 *Potamogeton natans* (Potamogetonaceae); FU YE YAN ZI CAI; Floatingleaf Pondweed. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, dispel damp and disinhibit water. TCM Indications: Red eyes with gall, swelling toxin of sore and welling abscess, jaundice, edema, bleeding from hemorrhoids, ascariasis. Isolated compounds: 187, 5875, 5876, 7183, 7184, 10087, 11699, 17742, 18815.
- T5177 *Potamogeton pectinatus* (Potamogetonaceae); BI CHI YAN ZI CAI; Fennelleaf Pondweed. Used part: whole herb. TCM Effects: To clear heat and resolve toxin. TCM Indications: Lung heat cough, sore and boil. Isolated compounds: 7049, 7161, 8641, 10298, 12409, 14405, 14408.
- T5178 *Potamogeton perfoliatus* (Potamogetonaceae); SUAN SHUI CAO; Thorowort Pondweed. Used part: whole herb. TCM Effects: To dispel wind and disinhibit damp. TCM Indications: Eczema, itchy skin. Isolated compounds: 13126, 15477, 22520.
- T5179 *Potentilla anserina* (Rosaceae); E RONG WEI LING CAI; Silverweed Cinquefoil. Used part: tuberoid. TCM Effects: To supplement *qi* and blood, fortify spleen and stomach, engender liquid and allay thirst. TCM Indications: Blood vacuity during convalescence, *gan* accumulation, edema, spleen vacuity diarrhea, wind-damp impediment pain. Isolated compounds: 6853.
- T5180 *Potentilla atrosanguinea* (Rosaceae); AN HONG WEI LING CAI; Darksanguine Cinquefoil\*. Isolated compounds: 4446.
- T5181 *Potentilla chinensis* (Rosaceae); WEI LING CAI; Chinese Cinquefoil. Used part: whole herb with root. TCM Effects: To cool blood and check dysentery, clear heat and resolve toxin. TCM Indications: Red dysentery and abdominal pain, enduring dysentery, bleeding hemorrhoids, swelling toxin of sore and welling abscess. Isolated compounds: 8095, 12020, 18317, 22270.
- T5182 *Potentilla discolor* (Rosaceae); FAN BAI CAO; Discolor Cinquefoil. Used part: whole herb with root. TCM Effects: To clear heat and resolve toxin, cool blood and stanch bleeding. TCM Indications: Cough and asthma due to lung heat, diarrhea dysentery, malaria, hacking of blood, blood ejection, bloody stool, flooding and spotting [=metrorrhagia and metrostaxis], swelling toxin of welling abscess and sore, scrofula. Isolated compounds: 13374.
- T5183 *Potentilla griffithii* var. *velutina* (Rosaceae); CHANG ROU MAO WEI LING CAI; Velutinous Cinquefoil. Used part: root. TCM Effects: To rectify *qi* and disperse food, promote contraction and stanch bleeding, clear heat and quicken blood. TCM Indications: Food accumulation stomachache, gastric ulcer, duodenal ulcer, child *gan* accumulation, dysentery, incessant postpartum bleeding, infant fright wind, facial paralysis. Isolated compounds: 21392.
- T5184 *Potentilla kleiniana* (Rosaceae); SHE HAN WEI LING CAI; Klein Cinquefoil. Used part: whole herb with root. TCM Effects: To clear heat and settle fright, interrupt malaria, relieve cough and transform phlegm, quicken blood and resolve toxin. TCM Indications: Ardent fever with fright wind, malaria, lung heat cough, pertussis, dysentery, toxin swelling of sores, swelling pain in throat, wind-fire toothache, zoster, red eyes with gall, snake or insect bites, rheumatism numbness, knocks and falls, menstrual disorder, bleeding due to external injury. Isolated compounds: 759, 17750.
- T5185 *Potentilla multifida* (Rosaceae); DUO LIE WEI LING CAI; Many-cleft Cinquefoil. Used part: whole herb with root. TCM Effects: To stanch bleeding, disinhibit damp heat, kill worms. TCM Indications: Bleeding due to external injury, flooding and spotting [=metrorrhagia and metrostaxis], hepatitis, oxyuria disease. Isolated compounds: 10943, 22617.
- T5186 *Potentilla reptans* var. *sericophylla* (Rosaceae); JIN JIN BANG; Sericeous Cinquefoil. Used part: root. TCM Effects: To engender liquid and allay thirst, enrich *yin* and remove heat. TCM Indications: Vacuity taxation with fever, vacuity asthma, febrile diseases fluid damage, thirst with dry throat, turbid vaginal discharge. Isolated compounds: 18347.
- T5187 *Potentilla* spp. (Rosaceae). Isolated compounds: 16765.
- T5188 *Potentilla viscosa* (Rosaceae); NIAN WEI LING CAI; Viscose

- Cinquefoil\*. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, promote contraction and stem desertion. TCM Indications: Enteritis, dysentery, pneumonia, prolapse of uterus. Isolated compounds: 17884.
- T5189 *Pothos chinensis* (Araceae); SHI GAN ZI; Chinese Pothos. Used part: whole herb. TCM Effects: To move *qi* and relieve pain, disperse accumulation, dispel wind-damp, dissipate stasis and resolve toxin. TCM Indications: *Qi* pain in heart and stomach, mounting *qi*, child *gan* accumulation, food accumulation distention and fullness, swollen liver and spleen due to bilharziosis, wind-damp impediment pain, beriberi, knocks and falls, fracture, otitis media, nasosinusitis. Isolated compounds: 20444.
- T5190 *Prana discifera* DA PENG TENG; Disciform Prana\*. Isolated compounds: 3279.
- T5191 *Prangos pabularia* (Apiaceae); SHUAN CHI QIN; Common Prangos. Isolated compounds: 933, 9419, 13453, 16261, 16457, 16485, 16486, 16487, 17028.
- T5192 *Prangos tschimganica* (Apiaceae). Isolated compounds: 22064, 22065, 22066.
- T5193 *Pratia nummularia* (Campanulaceae); TONG CHUI YU DAI CAO; Common Pratia. Used part: whole herb. TCM Effects: To dispel wind and eliminate damp, quicken blood, resolve toxin. TCM Indications: Wind-damp pain, knocks and falls, menstrual disorder [=menoxenia], red eyes with gall, mammary welling abscess, innominate toxin swelling. Isolated compounds: 12941, 12942, 12943, 17766, 17767.  
*Premna herbacea* = *Pygmaepremna herbacea*
- T5194 *Premna microphylla* (Verbenaceae); DOU FU CHAI; Japanese Premna. Used part: stem-leaf. TCM Effects: To clear heat and resolve toxin. TCM Indications: Malaria, diarrhea, dysentery, drunkenness, swollen welling abscess, clove sore, erysipelas, snake or insect bites, bleeding due to external injury. Isolated compounds: 21578.
- T5195 *Premna subscandens* (Verbenaceae); PAN YUAN CHOU HUANG JING; Climbing Premna. Isolated compounds: 17814, 17815, 17816, 17817, 17818, 17819, 17820, 17821.
- T5196 *Prenanthes acerifolia* (Asteraceae); QI YE PAN GUO JU; Rattlesnakeroot. Isolated compounds: 17822.
- T5197 *Primula auricula* (Primulaceae); ER ZHUANG BAO CHUN HUA; Auricula. Isolated compounds: 16532.
- T5198 *Primula elatior* (Primulaceae); GAO BAO CHUN; Oxlip. Isolated compounds: 17857, 17859, 22607.
- T5199 *Primula malacoides* (Primulaceae); BAO CHUN HUA; Fairy Primrose. Used part: whole herb. TCM Effects: To clear heat and resolve toxin. TCM Indications: Lung heat cough, red swollen in throat, oral ulcer, gum swelling and pain, liver fire and red eyes, swollen welling abscess, sore and boil. Isolated compounds: 7334.
- T5200 *Primula mistassinica* (Primulaceae); JIA NA DA BAO CHUN; Mistassini Primrose. Isolated compounds: 17853.
- T5201 *Primula modesta* (Primulaceae); CHANG BAI SHAN BAO CHUN; Changpai Mountains Primrose. Isolated compounds: 17853.
- T5202 *Primula obconica* (Primulaceae); E BAO CHUN; Top Primrose. Used part: root. TCM Effects: To resolve liquor toxin, settle pain. Isolated compounds: 17857.  
*Primula officinalis* = *Primula veris*
- T5203 *Primula pulverulenta* (Primulaceae); YIN FEN BAO CHUN; Pulverulent Primrose. Isolated compounds: 7819.
- T5204 *Primula veris* [Syn. *Primula officinalis*] (Primulaceae); HUANG HUA JIU LUN CAO; Official Primrose\*. Isolated compounds: 6225, 6226, 10023, 14016.
- T5205 *Primula viscosa* (Primulaceae); NIAN BAO CHUN; Viscid Primrose\*. Isolated compounds: 16532.
- T5206 *Prinostemma aspera* . Isolated compounds: 17862.
- T5207 *Prismatomeris tetrandra* (Rubiaceae); NAN SHAN HUA; Furstamen Prismatomeris. Used part: root. TCM Effects: To cool blood and stanch bleeding, disinherit damp and abate jaundice, dissipate stasis and strengthen sinews. TCM Indications: Gum hemorrhage, anemia, hepatitis, rheumatic arthritis, knocks and falls, urinary tract infection. Isolated compounds: 5836, 10032, 10800.
- T5208 *Pristimera indica* (Hippocrateaceae); BIAN SHUO TENG; Indian Pristimera. Isolated compounds: 17862.
- T5209 *Pronephrium simplex* [Syn. *Meniscium simplex*] (Thelypteridaceae); DAN YE XIN YUE JUE; Simple Pronephrium. Used part: whole herb. TCM Effects: To clear heat and resolve toxin. TCM Indications: Swelling pain in throat, dysentery, poisonous snake bites. Isolated compounds: 17880.
- T5210 *Prosopis juliflora* (Fabaceae); MU DOU SHU; Algarroba. Isolated compounds: 11943, 16364, 19621.
- T5211 *Prosopis* spp. (Fabaceae). Isolated compounds: 22581.
- T5212 *Protea mellifera* (Proteaceae); MI PU LUO TI YA MU; Sugar Bush. Isolated compounds: 9740.
- T5213 *Protorhus thouvenotii* (Anacardiaceae). Isolated compounds: 9388, 21337, 21338.
- T5214 *Prunella vulgaris* (Lamiaceae); XIA KU CAO; Common Selfheal. Used part: spike. TCM Effects: To clear fire, brighten eyes, dissipate binds, disperse swelling. TCM Indications: Red eyes with gall, eyeball night pain, headache and dizziness, scrofula, goiter and tuberculosis, mammary welling abscess, thyroid enlargement, scrofula, hyperplasia of mammary glands, hypertension. Isolated compounds: 1733, 3674, 4680, 7751, 9616, 10334, 10350, 10887, 13137, 14158, 14306, 14307, 14398, 14512, 14634, 14783, 14784, 14785, 14786, 14787, 14788, 14803, 15539, 15540, 16036, 16050, 16905, 18006, 18007, 19758, 20349, 20366, 21764, 22264, 22270, 22621, 22622.
- T5215 *Prunus amygdalus* (Rosaceae); BA DAN XING REN; Amygdalate Apricot Seed. Used part: seed. TCM Effects: To moisten lung and suppress cough, transform phlegm and precipitate *qi*. TCM Indications: Vacuity taxation cough, fullness and oppression in heart and abdomen. Isolated compounds: 1102, 1764, 2222, 5699, 7278, 9717.
- T5216 *Prunus armeniaca* (Rosaceae); XING REN; Apricot Seed. Equivalent plant: *Prunus armeniaca* var. *ansu*. Used part: bitter seed. TCM Effects: To downbear *qi* and transform phlegm, relieve cough and calm asthma, moisten intestines and free stool. TCM Indications: Cough, asthma and fullness due to external contraction cough, intestinal dry and constipation. Isolated compounds: 1102, 1102, 1598, 3760, 4550, 4817, 4835, 6540, 6820, 6821, 6822, 7821, 9486, 11123, 12849, 12891, 12893, 13478, 15203, 15692, 16561, 18000, 19039, 20280, 20995, 20998.
- T5217 *Prunus armeniaca* (Rosaceae); XING SHU GEN; Apricot Root. Used

- part: root. TCM Effects: To resolve toxin. TCM Indications: Poisoning from almonds. Isolated compounds: 2063.
- T5218 *Prunus armeniaca* (Rosaceae); XING ZI; Apricot. Used part: fruit. TCM Effects: To moisten lung and settle asthma, engender liquid and allay thirst. TCM Indications: Lung heat dry cough, fluid damage and thirst. Isolated compounds: 3761, 7072, 9523, 14186, 15971, 17090, 22615.
- T5219 *Prunus armeniaca* var. *ansu* (Rosaceae); SHAN XING REN; Ansu Apricot Seed. Used part: bitter seed. TCM Effects: See *Prunus armeniaca*. TCM Indications: See *Prunus armeniaca*. Isolated compounds: 1102, 1102, 9512, 9519, 12849, 20995, 20998.
- T5220 *Prunus davidiana* (Rosaceae); SHAN TAO JING BAI PI; David Peach Bast. Used part: bast. TCM Effects: See *Prunus persica*. TCM Indications: See *Prunus persica*. Isolated compounds: 1764, 14768, 15279, 16992, 16993.
- T5221 *Prunus davidiana* (Rosaceae); SHAN TAO ZHI; David Peach Juvenile Branch. Used part: branchlet. TCM Effects: See *Prunus persica*. TCM Indications: See *Prunus persica*. Isolated compounds: 15279.
- T5222 *Prunus domestica* (Rosaceae); YANG LI; Garden Plum. Isolated compounds: 7821, 15477.
- T5223 *Prunus humilis* [Syn. *Cerasus humilis*] (Rosaceae); OU LI REN; Chinese Dwarf Cherry Seed. Used part: ripe seed. TCM Effects: See *Prunus japonica*. TCM Indications: See *Prunus japonica*. Isolated compounds: 15069, 15072.
- T5224 *Prunus japonica* [Syn. *Cerasus japonica*] (Rosaceae); YU LI REN; Dwarf Flowering Cherry Seed. Equivalent plant: *Prunus humilis*, *Prunus japonica* var. *nakaii*. Used part: ripe seed. TCM Effects: To moisten dryness and lubricate intestines, precipitate *qi*, disinhibit water. TCM Indications: Desiccation of liquid and intestine dryness, food accumulation and *qi* stagnation, abdominal distention and constipation, edema, beriberi, inhibited urination. Isolated compounds: 1102, 9717, 12018, 15068, 15069, 15072.
- T5225 *Prunus japonica* var. *nakaii* (Rosaceae); CHANG GENG YU LI REN; Longpedicel Chinese Buscherry Seed. Used part: ripe seed. TCM Effects: See *Prunus japonica*. TCM Indications: See *Prunus japonica*. Isolated compounds: 15069, 15072.
- T5226 *Prunus mume* (Rosaceae); BAI MEI HUA; Japanese Apricot Flower. Used part: bud. TCM Effects: To soothe liver, harmonize stomach and transform phlegm. TCM Indications: Globus hystericus, liver stomach *qi* pain, inappetence, dizziness, scrofula. Isolated compounds: 466, 497, 2222, 2276, 2278, 3489, 3551, 7525, 11666, 17265, 18004, 18005, 18351, 18378, 18390, 19087.
- T5227 *Prunus mume* (Rosaceae); MEI HE REN; Japanese Apricot Kernel. Used part: kernel. TCM Effects: To clear summerheat, brighten eyes, eliminate vexation. TCM Indications: Summerheat-heat and cholera, heat vexation, blurred vision. Isolated compounds: 1102.
- T5228 *Prunus mume* (Rosaceae); WU MEI; Japanese Apricot. Used part: unripe fruit. TCM Effects: To constrain lung and relieve cough, astringe intestines and check diarrhea, stanch bleeding, engender liquid, quiet roundworm, close sores. TCM Indications: Enduring cough, chronic diarrhea and dysentery, hematuria, hematochezia, flooding and spotting, vacuity heat with vexation and thirst, roundworm reversal with abdominal pain, outcrop of sore and welling abscess. Isolated compounds: 1102, 3766, 9717, 13419, 15279, 17328.
- T5229 *Prunus persica* (Rosaceae); TAO; Peach. Used part: fruit. TCM Effects: To engender liquid, moisten intestines, quicken blood, disperse accumulation. TCM Indications: Scant fluid and thirst, intestinal dry and constipation, amenorrhea, accumulation-gathering. Isolated compounds: 1102, 3318, 15068, 15069, 15477, 18003, 21143, 21171, 22217.
- T5230 *Prunus persica* (Rosaceae); TAO GEN; Peach Root. Used part: root. TCM Effects: To clear heat and disinhibit damp, quicken blood and relieve pain, disperse swollen welling abscess. TCM Indications: Jaundice, sand *qi* abdominal pain, lumbago, taxation damage due to knocks and falls, wind-damp impediment pain, amenorrhea, blood ejection, spontaneous external bleeding, swollen welling abscess, hemorrhoids. Isolated compounds: 6864, 9457.
- T5231 *Prunus persica* (Rosaceae); TAO HUA; Peach Flower. Equivalent plant: SHAN TAO HUA. Used part: flower. TCM Effects: To disinhibit water and free stool, quicken blood and transform stasis. TCM Indications: Inhibited urination, edema, phlegm-rheum, sand strangury, stone strangury, beriberi, constipation, concretion and conglomeration, amenorrhea, mania and withdrawal, sore and papules. Isolated compounds: 15069, 15279, 21634.
- T5232 *Prunus persica* (Rosaceae); TAO JING BAI PI; Peach Bast. Equivalent plant: *Prunus davidiana*. Used part: bast. TCM Effects: To clear heat and disinhibit damp, resolve toxin, kill worms. TCM Indications: Edema, sand *qi* abdominal pain, lung heat asthma and oppression, welling abscess and flat abscess, scrofula, damp sore. Isolated compounds: 1764, 14768, 15279, 16992, 16993.
- T5233 *Prunus persica* (Rosaceae); TAO REN; Peach Kernel. Used part: seed. TCM Effects: To quicken blood and dispel stasis, moisten intestines and free stool. TCM Indications: Amenorrhea, dysmenorrhea, concretion and conglomeration, lump glomus, knocks and falls, intestinal dry and constipation. Isolated compounds: 1102, 3308, 14448.
- T5234 *Prunus persica* (Rosaceae); TAO YE; Peach Leaf. Used part: leaf. TCM Effects: To dispel wind and clear heat, dry damp and resolve toxin, kill worms. TCM Indications: Externally contracted wind evil, head wind, headache, wind impediment, eczema, swollen welling abscess and sores, lichen sore, malaria, trichomoniasis. Isolated compounds: 15279, 18421.
- T5235 *Prunus persica* (Rosaceae); TAO ZHI; Peach Juvenile Branch. Equivalent plant: *Prunus davidiana*. Used part: branchlet. TCM Effects: To quicken blood and free network vessels, resolve toxin, kill worms. TCM Indications: Pain in heart and abdomen, invisible worm sores. Isolated compounds: 1764, 15279, 16992, 16993, 19191.
- T5236 *Prunus pseudocerasus* (Rosaceae); YING TAO; Falsesour Cherry. Used part: fruit. TCM Effects: To supplement spleen and boost kidney. TCM Indications: Paralysis, spleen vacuity diarrhea, kidney vacuity and emission, pain in lumbus and legs, numbness in limbs. Isolated compounds: 8289, 9717, 19174.
- T5237 *Prunus puddun* (Rosaceae); PU DUN LI; Puddun Plum\*. Isolated compounds: 18001.
- T5238 *Prunus salicina* (Rosaceae); LI HE REN; Japanese Plum Kernel. Used part: seed. TCM Effects: To dispel stasis, disinhibit water, moisten



- intestines. **TCM Indications:** Knocks and falls, blood stasis swelling and pain, ascites, beriberi, intestinal dry and constipation. **Isolated compounds:** 1102.
- T5239 *Prunus salicina* (Rosaceae); LI ZI; Japanese Plum. **Used part:** fruit. **TCM Effects:** To clear heat, engender liquid, disperse accumulation. **TCM Indications:** Vacuity taxation with steaming bone, diabetes mellitus, food accumulation. **Isolated compounds:** 1048, 1102, 22492.
- T5240 *Prunus serotina* (Rosaceae); YE HEI YING; Wild Rum-cherry. **Isolated compounds:** 4135, 19542.
- T5241 *Prunus serrulata* var. *spontanea* (Rosaceae); YE SHENG SHAN YING TAO. **Isolated compounds:** 18007, 21865.
- T5242 *Prunus* sp. (Rosaceae). **Isolated compounds:** 8278, 13126, 17403.
- T5243 *Prunus* spp. (Rosaceae). **Isolated compounds:** 17399.
- T5244 *Prunus tomentosa* (Rosaceae); SHAN YING TAO; Downy Cherry. **Used part:** fruit. **TCM Effects:** To fortify spleen, boost *qi*, secure essence. **TCM Indications:** Food stagnation and diarrhea, constipation, beriberi, emission. **Isolated compounds:** 3308, 18411, 21436.
- T5245 *Prunus verecunda* (Rosaceae); WEI RUI LI; Verecun Plum\*. **Isolated compounds:** 18001.
- T5246 *Prunus yedoensis* (Rosaceae); RI BEN YING HUA; Tokyo Cherry. **Isolated compounds:** 15279, 19173.
- T5247 *Przewalskia tangutica* (Solanaceae); MA NIAO PAO; Tangut Przewalskia. **Used part:** root and seed. **TCM Effects:** To resolve spasm and relieve pain, disperse swelling. **TCM Indications:** Stomachache, cholecystitis, acute gastroenteritis, chronic gastroenteritis, innominate toxin swelling. **Isolated compounds:** 10872.
- T5248 *Psacalium peltatum* (Asteraceae); DUN ZHUANG LI JU; Matarique (in Mexico). **Used part:** root. **TCM Indications:** wind-damp (rheumatis)<sup>[5509]</sup>. **Isolated compounds:** 16792.
- T5249 *Psammaphysilla purpurea* ZI SHA ROU HAI MIAN; Sponge *Psammaphysilla purpurea*. **Isolated compounds:** 18212, 18213.
- T5250 *Psammosilene tunicoides* (Caryophyllaceae); JIN TIE SUO; Tuniclike *Psammosilene*. **Used part:** root. **TCM Effects:** To dissipate stasis and settle pain, stanch bleeding, disperse welling abscess and expel pus. **TCM Indications:** Knocks and falls, wind-damp pain, stomachache, welling abscess and boil, bleeding due to external injury. **Isolated compounds:** 4462, 4463, 4464, 4534, 8057, 8058, 8073, 8074, 8075, 14401, 18014, 18015, 18418.
- T5251 *Pseudoceratina purpurea*. **Isolated compounds:** 110.
- T5252 *Pseudodrynaria coronans* (Polypodiaceae); CHUAN SHI JIAN; Rock-ginger Fern. **Used part:** rhizome. **TCM Effects:** See *Drynaria fortunei*. **TCM Indications:** See *Drynaria fortunei*. **Isolated compounds:** 9642.
- T5253 *Pseudoelephantopus spicatus* (Asteraceae); JIA DI DAN CAO; Spicate Pseudoelephantopus. **Isolated compounds:** 4203.
- T5254 *Pseudognaphalium cheiranthifolium*. **Isolated compounds:** 7015.
- T5255 *Pseudognaphalium heterotrichium*. **Isolated compounds:** 7015.
- T5256 *Pseudolarix amabilis* [Syn. *Larix amabilis*; *Pseudolarix kaempferi*] (Pinaceae); TU JING PI; Chinese Golden Larch. **Used part:** root cortex and bark near root. **TCM Effects:** To dispel wind and eliminate damp, kill worms and relieve itch. **TCM Indications:** Scab and lichen, eczema, neurodermatitis. **Isolated compounds:** 489, 4769, 4770, 6104, 14702, 14703, 18031, 18032, 18033, 18034, 18035, 18036, 18037, 18038, 18039, 18040, 18041, 18042, 18043, 18044, 18045, 18046, 18047, 18048, 18049.
- Pseudolarix kaempferi* = *Pseudolarix amabilis*
- T5257 *Pseudophegopteris bukoensis* (Thelypteridaceae). **Isolated compounds:** 17974.
- T5258 *Pseudophegopteris hirtirachis* (Thelypteridaceae). **Isolated compounds:** 17974.
- T5259 *Pseudophegopteris subaurita* (Thelypteridaceae); GUANG NANG ZI BING JUE; Long-eared *Pseudophegopteris*. **Isolated compounds:** 17974.
- T5260 *Pseudostellaria heterophylla* (Caryophyllaceae); YI YE JIA FAN LV; Heterophylla Falsestarwort. **Used part:** root. **TCM Effects:** To boost *qi* and fortify spleen, moisten lung and engender liquid. **TCM Indications:** Spleen vacuity and fatigued body, inappetence, weakness during convalescence, *qi* and *yin* vacuity, thirst due to spontaneous sweating, dry cough due to lung dryness. **Isolated compounds:** 1526, 1673, 9569, 14870, 18064, 18065, 18066, 18067, 18068, 18069.
- T5261 *Pseudotsuga sinensis* (Pinaceae); HUANG SHAN; China Douglas Fir. **Isolated compounds:** 10481, 21134.
- T5262 *Pseuduvaria* spp. (Annonaceae). **Isolated compounds:** 15751.
- T5263 *Psiadia anchusifolia*. **Isolated compounds:** 6372, 21204.
- T5264 *Psiadia dentata*. **Isolated compounds:** 11569.
- T5265 *Psidium guajava* (Myrtaceae); FAN SHI LIU GAN; Guava Unripe Fruit. **Used part:** unripe fruit. **TCM Effects:** To promote contraction and check drain, stanch bleeding. **TCM Indications:** Chronic dysentery, flooding and spotting. **Isolated compounds:** 2039, 3301, 3303, 8095, 9043, 12714, 18837, 20910.
- T5266 *Psidium guajava* (Myrtaceae); FAN SHI LIU PI; Guava Bark. **Used part:** bark. **TCM Effects:** To promote astriction, check diarrhea, close sores. **TCM Indications:** Damp toxin of scab sore, toothache, sore and boil in children. **Isolated compounds:** 1083, 1736, 3296, 12714, 13125.
- T5267 *Psidium guajava* (Myrtaceae); FAN SHI LIU YE; Guava Leaf. **Used part:** leaf. **TCM Effects:** To dry damp and fortify spleen, clear heat and resolve toxin. **TCM Indications:** Dysentery, food accumulation abdominal distention, gingiva painful swelling, wind-damp impediment pain, eczema shank sore, swelling toxin of clove sore, painful swelling from knocks and falls, bleeding due to external injury, snake or insect bites. **Isolated compounds:** 1083, 2039, 7521, 9043, 9073, 9074, 12714, 18378, 20389.
- T5268 *Psidium guajava* (Myrtaceae); FAN SHI LIU ZI; Guava Seed. **Used part:** seed. **TCM Effects:** To relieve pain, arrest diarrhea. **TCM Indications:** Abdominal pain, diarrhea. **Isolated compounds:** 6284, 6285.
- T5269 *Psilotum nudum* (Psilotaceae); SHI SHUA BA; Nude Fern. **Used part:** whole herb. **TCM Effects:** To dispel wind and eliminate damp, quicken blood and stanch bleeding. **TCM Indications:** Wind-damp impediment pain, wind papules, amenorrhea, blood ejection, knocks and falls. **Isolated compounds:** 1031, 1032, 1033, 18084, 18085.
- T5270 *Psoralea corylifolia* (Fabaceae); BU GU ZHI; Malaytea Scurfpea. **Used part:** fruit. **TCM Effects:** To supplement kidney and invigorate *yang*, accept *qi* and calm asthma, warm spleen and check diarrhea. **TCM Indications:** Fracture, osteomalacia, osteoporosis, kidney *yang* vacuity, cold pain in lumbus and knees, impotence and emission,

- frequent urination, enuresis, kidney *qi* insecurity, vacuity asthma, spleen-kidney vacuity, chronic diarrhea, white patch wind, alopecia areata, psoriasis. Isolated compounds: 1191, 2081, 2123, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 4107, 4108, 4109, 4110, 4680, 6537, 11248, 11345, 11557, 11632, 15203, 15341, 15342, 18086, 18087, 18088, 18089, 20081, 20280, 20369, 21537, 22774.
- T5271 *Psoralea drupacea* (Fabaceae); HE GUO ZHUANG BU GU ZHI; Drupaceous Scurfpea\*. Isolated compounds: 2081.
- T5272 *Psorospermum febrifugum* (Clusiaceae); PU SUO MU. TCM Effects: To resolve heat, resolve toxin, free stool<sup>[5509]</sup>. TCM Indications: Constipation, numbing wind (leprosy)<sup>[5509]</sup>. Isolated compounds: 18091, 22551.
- T5273 *Psorothamnus junceus* (Fabaceae); DENG XIN DAI ER DOU. Isolated compounds: 18092.
- T5274 *Psychotria beccaroides* (Rubiaceae); BI CHUAN JIU JIE MU. Isolated compounds: 18094.
- T5275 *Psychotria forsteriana* (Rubiaceae); FU SI TE JIU JIE; Forster Ninenode\*. Isolated compounds: 18295, 18296.
- T5276 *Psychotria leiocarpa* (Rubiaceae); PING HUA GUO JIU JE; Leio-fruit Ninenode\*. Isolated compounds: 8746.
- T5277 *Psychotria oleoides* (Rubiaceae); YOU GAN LAN JIU JIE; Olive Ninenode\*. Isolated compounds: 18093.
- T5278 *Psychotria rostrata* (Rubiaceae); HUI ZHUANG JIU JIE; Rostral Ninenode\*. Isolated compounds: 18296.
- T5279 *Psychotria serpens* (Rubiaceae); MAN JIU JIE; Creeping Ninenode. Used part: whole herb. TCM Effects: To dispel wind and eliminate damp, soothe sinews and quicken network vessels, disperse swelling and relieve pain. TCM Indications: Pain in joints due to rheumatism, deadlimb, taxation damage in lumbar muscle, sciatica, multiple swollen welling abscess, bone tuberculosis, knocks and falls, fracture, poisonous snake bite. Isolated compounds: 14144, 20369.
- T5280 *Ptaeroxylon obliquum* (Ptaeroxylaceae). Isolated compounds: 14125, 18097.
- T5281 *Ptelea* sp. (Rutaceae). Isolated compounds: 15645.
- T5282 *Ptelea trifoliata* (Rutaceae); YU JU; Common Hoptree. Isolated compounds: 13904, 14446, 14705, 15348, 18102.
- T5283 *Pteridium aquilinum* (Pteridaceae); OU ZHOU JUE; Bracken. Isolated compounds: 6678, 18000, 18099, 18100, 18101, 18124, 18150, 18151.
- T5284 *Pteridium aquilinum* var. *latiusculum* (Pteridaceae); JUE; Eastern Bracken Fern. Used part: tender leaf. TCM Effects: To clear heat and disperse damp, downbear *qi* and transform phlegm, stanch bleeding. TCM Indications: Common cold with fever, jaundice, dysentery, vaginal discharge, dysphagia-occlusion, tuberculosis and hemoptysis, intestinal wind bleeding, wind-damp impediment pain. Isolated compounds: 490, 2267, 11013, 11351, 16565, 16566, 16567, 17700, 17703, 18098, 18112, 18116, 18117, 18118, 18119, 18120, 18121, 18122, 18131, 18132, 18133, 18134, 18135, 18136, 18137, 18138, 18145, 18146, 18147, 18149, 18161, 18162.
- T5285 *Pteridophyllum* spp. Isolated compounds: 3498.
- T5286 *Pteris bella* (Pteridaceae); CHANG BING FENG WEI JUE; Pretty Brake. Isolated compounds: 18155.
- T5287 *Pteris cretica* (Pteridaceae); DA YE JING KOU BIAN CAO; Cretan Brake. Isolated compounds: 18154.
- T5288 *Pteris cretica* var. *nervosa* [Syn. *Pteris nervosa*] (Pteridaceae); FENG WEI JUE; Nervous Brake. Used part: whole herb. TCM Effects: To clear heat and disperse damp, stanch bleeding and engender flesh, resolve toxin and disperse swelling. TCM Indications: Diarrhea, dysentery, jaundice, strangury syndrome, edema, coughing of blood, hematuria, hematochezia, bleeding knife wound, painful swelling from knocks and falls, sore and welling abscess, burns and scalds. Isolated compounds: 18098, 18154.
- T5289 *Pteris dactylina* (Pteridaceae); JIN JI WEI; Figuerleaved Brake. Used part: whole herb or rhizome. TCM Effects: To clear heat and resolve toxin, disperse damp and transform damp, settle fright. TCM Indications: Dysentery, diarrhea, mumps, lymphadenitis, leukorrhea, edema, infant fright wind, rabid dog bite. Isolated compounds: 18150, 18152.
- T5290 *Pteris fauriei* [Syn. *Pteris fauriei* var. *minor*] (Pteridaceae); JIN CHAI FENG WEI JUE; Faurie's Brake. Used part: leaf. TCM Effects: To clear heat and disperse damp, dispel wind and settle fright, close sores and stanch bleeding. TCM Indications: Dysentery, diarrhea, jaundice, infant fright wind, bleeding due to external injury, burns and scalds. Isolated compounds: 18126, 18127, 18128, 18129, 18130, 18158, 18159.
- Pteris fauriei* var. *minor* = *Pteris fauriei*
- T5291 *Pteris inaequalis* (Pteridaceae); BIAN YI FENG WEI JUE; Unequal Brake. Isolated compounds: 18126, 18127.
- T5292 *Pteris kiuschiensis* (Pteridaceae); PING YU FENG WEI JUE; Kiushu Brake. Isolated compounds: 18155, 18156.
- T5293 *Pteris linearis* (Pteridaceae); XIAN YU FENG WEI JUE; Linear Brake. Isolated compounds: 18155.
- T5294 *Pteris livida* (Pteridaceae). Isolated compounds: 18154.
- T5295 *Pteris multifida* (Pteridaceae); FENG WEI CAO; Chinese Brake. Used part: whole herb or rhizome. TCM Effects: To clear heat and disperse damp, resolve toxin and disperse swelling, cool blood and stanch bleeding. TCM Indications: Dysentery, diarrhea, strangury-turbidity, vaginal discharge, jaundice, swelling toxin of clove sore, throat impediment with nipple moth, scrofula, parotitis, mastitis, ardent fever and convulsion, snake or insect bites, blood ejection, spontaneous external bleeding, hematuria, hematochezia, bleeding due to external injury. Isolated compounds: 18139, 18150, 18154, 18289, 18290.
- Pteris nervosa* = *Pteris cretica* var. *nervosa*
- T5296 *Pteris oshimensis* (Pteridaceae); XIE YU FENG WEI JUE; Oblique Pinna Brake. Isolated compounds: 18125, 18152.
- T5297 *Pteris plumbea* (Pteridaceae); LI BING FENG WEI JUE; Lead-coloured Brake. Used part: whole herb. TCM Effects: To clear heat and disperse damp, quicken blood and stanch bleeding. TCM Indications: Dysentery, knocks and falls, bleeding knife wound. Isolated compounds: 16849, 18107, 18108, 18109, 18110, 18111.
- T5298 *Pteris vittata* (Pteridaceae); WU GONG CAO; Chinese Brake. Used part: whole herb or rhizome. TCM Effects: To dispel wind and eliminate damp, soothe sinews and quicken network vessels, resolve toxin and kill worms. TCM Indications: Wind-damp pain in sinew and bone, lumbago, numbness in limbs, hemiplegia, knocks and falls, common cold, dysentery, mammary welling abscess, sore toxin, scab sore, ascariasis, snake or insect bites. Isolated compounds: 12525.

- T5299 *Pteris wallichiana* (Pteridaceae); SAN CHA FENG WEI JUE; Wallich's Brake. Used part: whole herb. TCM Effects: To clear heat and check dysentery, settle fright, stanch bleeding. TCM Indications: Dysentery, infant fright wind, bleeding due to external injury. Isolated compounds: 18125.
- T5300 *Pterocarpus angolensis* (Fabaceae); AN GE LA ZI TAN; Angola Padauk\*. Isolated compounds: 15998, 18001.
- T5301 *Pterocarpus indicus* (Fabaceae); ZI TAN; Burmacoast Padauk. Used part: wood. TCM Effects: To dispel stasis and harmonize construction, stanch bleeding and settle pain. TCM Indications: Headache, pain in heart and abdomen, persistent flow of lochia, dribbling pain of urination, wind toxin and swollen welling abscess, incised wound and bleeding. Isolated compounds: 1240, 6290, 7883, 18103, 18104, 18163.
- T5302 *Pterocarpus marsupium* (Fabaceae); NANG ZHUANG ZI TAN; Vengai Padauk. Isolated compounds: 8620, 13579, 18105, 18106, 18115, 18164, 22476, 22477.
- T5303 *Pterocarpus officinalis* (Fabaceae); YAO YONG ZI TAN; Medicinal Padauk\*. Isolated compounds: 10877.
- T5304 *Pterocarpus osun* (Fabaceae); E SUN ZI TAN; Osun Padauk\*. Isolated compounds: 18103.
- T5305 *Pterocarpus santalinus* (Fabaceae); SI ZI TAN; Sandalwood Padauk. Isolated compounds: 2983, 5761, 8307, 9818, 10522, 10753, 13678, 18103, 18163, 19427, 19912.
- T5306 *Pterocarpus* sp. (Fabaceae). Isolated compounds: 6853, 18020.
- T5307 *Pterocarpus* spp. (Fabaceae). Isolated compounds: 3004.
- T5308 *Pterocarya stenoptera* (Juglandaceae); MA LIU YE; Chinese Wingnut. Used part: leaf. TCM Effects: To dispel wind and relieve pain, kill worms and relieve itch, resolve toxin and close sores. TCM Indications: Wind-damp impediment pain, toothache, knee joint pain, scab and lichen, eczema, trichomoniasis, scalds, wound, enduring sores, bilharziosis, cough and asthma. Isolated compounds: 19187.
- T5309 *Pterocladia tenuis* (Gelidiaceae); JI MAO CAI; Chicken-feather Vegetable\*. Used part: frond. TCM Effects: To clear heat and drain fire, soften hardness and transform phlegm. TCM Indications: Lung heat abundant phlegm dry cough, laryngitis, chronic constipation. Isolated compounds: 18281.
- T5310 *Pterospermum lanceaefolium* (Sterculiaceae); ZHAI YE BAN FENG HE; Lanceleaf Wingseedtree. Used part: leaf. TCM Effects: To quicken blood and stanch bleeding. TCM Indications: Bleeding due to external injury. Isolated compounds: 2170, 6854, 12020, 18317, 18411, 19542, 19983.
- T5311 *Pueraria calycina* (Fabaceae); HUANG MAO GE; Yellow-hairy Calyx Kudzuvine. Isolated compounds: 4604, 18180.
- T5312 *Pueraria edulis* (Fabaceae); SHI YONG GE; Edible Kudzuvine. Used part: tuberoid. TCM Effects: See *Pueraria lobata*. TCM Indications: See *Pueraria lobata*. Isolated compounds: 4604, 4606, 18180.
- T5313 *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*] (Fabaceae); GE GEN; Lobed Kudzuvine Root. Equivalent plant: *Pueraria thomsonii*, *Pueraria edulis*, *Pueraria omeiensis*, *Pueraria phaseoloides*. Used part: tuberoid. TCM Effects: To engender liquid, outthrust papules, upbear yang and check diarrhea. TCM Indications: Angina pectoris, hypertension, headache due to externally contracted wind-heat, rigidity of neck, thirst, diabetes mellitus, non-eruption of measles, heat dysentery, diarrhea, deafness in early stage, optic nerve atrophy, retinitis. Isolated compounds: 917, 1598, 4190, 4604, 4605, 4606, 4680, 5345, 7883, 7885, 8278, 8282, 12113, 12308, 12309, 13445, 14080, 14494, 14706, 18180, 18181, 18182, 18183, 18184, 18185, 18186, 18859, 19540, 19983, 20083, 21751, 21781, 22080.
- T5314 *Pueraria lobata* var. *thomsonii* (Fabaceae); FEN GE; Thomson Kudzuvine. Isolated compounds: 4604, 4606, 18180.
- T5315 *Pueraria mirifica* (Fabaceae); GUO YE GE; Mirifica Kudzuvine. Isolated compounds: 14883.
- T5316 *Pueraria omeiensis* (Fabaceae); E MEI GE; Omei Kudzuvine. Used part: tuberoid. TCM Effects: See *Pueraria lobata*. TCM Indications: See *Pueraria lobata*. Isolated compounds: 4604, 4606, 18180.
- T5317 *Pueraria peduncularis* (Fabaceae); YUN NAN GE TENG; Yunnan Kudzuvine. Used part: lianoid stem or root. TCM Effects: To kill worms (stem), upbear yang and resolve exterior (root). TCM Indications: Impotence, common cold (root). Isolated compounds: 4604, 6061, 6062, 7273, 8663, 8683, 18180.
- T5318 *Pueraria phaseoloides* (Fabaceae); SAN LIE YE GE; Trilobedleaf Kudzuvine. Used part: tuberoid. TCM Effects: See *Pueraria lobata*. TCM Indications: See *Pueraria lobata*. Isolated compounds: 4604, 4606, 18180.
- Pueraria pseudohirsuta* = *Pueraria lobata*
- T5319 *Pueraria* spp. (Fabaceae). Isolated compounds: 18180.
- T5320 *Pueraria thomsonii* (Fabaceae); GAN GE TENG GEN; Thomson Kudzuvine Root. Used part: tuberoid. TCM Effects: See *Pueraria lobata*. TCM Indications: See *Pueraria lobata*. Isolated compounds: 4605, 4606, 14706, 18180.
- Pueraria thunbergiana* = *Pueraria lobata*
- T5321 *Pueraria tuberosa* (Fabaceae); KUAI JING GE; Tuberos Kudzuvine\*. Isolated compounds: 20369, 22080.
- T5322 *Pulicaria wightiana* (Fabaceae); ZAO CAO; Pulicaria\*. Isolated compounds: 16741, 16742, 16743, 16744, 16745.
- T5323 *Pulsatilla campanella* (Ranunculaceae); ZHONG E BAI TOU WENG; Bellcalyx Pulsatilla. Used part: root. TCM Effects: See *Pulsatilla chinensis*. TCM Indications: See *Pulsatilla chinensis*. Isolated compounds: 12642, 12643, 18195, 18196.
- T5324 *Pulsatilla cernua* (Ranunculaceae); CHAO XIAN BAI TOU WENG; Korean Pulsatilla. Used part: root. TCM Effects: See *Pulsatilla chinensis*. TCM Indications: See *Pulsatilla chinensis*. Isolated compounds: 3433, 19316, 20369.
- T5325 *Pulsatilla chinensis* (Ranunculaceae); BAI TOU WENG; Chinese Pulsatilla. Equivalent plant: *Pulsatilla cernua*, *Pulsatilla campanella*, *Pulsatilla dahurica*. Used part: root. TCM Effects: To clear heat and resolve toxin, cool blood and check diarrhea, dry damp and kill worms. TCM Indications: Amebic dysentery, nosebleed, flooding and spotting, bleeding from hemorrhoids, cold-heat warm malaria, vaginal discharge, pudendal itch, eczema, scrofula, welling abscess, painful red eyes, neurodermatitis. Isolated compounds: 266, 1178, 1179, 1180, 1181, 1182, 3340, 4431, 4680, 5951, 5952, 6106, 9260, 10674, 10675, 16295, 18191, 18192, 18193, 18194, 18545, 18686.
- T5326 *Pulsatilla dahurica* (Ranunculaceae); XING AN BAI TOU WENG; Dahurian Pulsatilla\*. Used part: root. TCM Effects: See *Pulsatilla*

- chinensis*. TCM Indications: See *Pulsatilla chinensis*. Isolated compounds: 12642, 12644.
- T5327 *Punica granatum* (Punicaceae); SHI LIU GEN; Pomegranate Root. Used part: root. TCM Effects: To kill worms, astrinige intestines, check discharge. TCM Indications: Ascariasis, taeniasis, chronic diarrhea, chronic dysentery, red and white vaginal discharge. Isolated compounds: 6632, 8808, 14534, 16781, 16789, 18055.
- T5328 *Punica granatum* (Punicaceae); SHI LIU PI; Pomegranate Peel. Used part: pericarp. TCM Effects: To astrinige intestines and check diarrhea, stanch bleeding, expel worms. TCM Indications: Chronic diarrhea, chronic dysentery, hematochezia, prolapse of rectum, flooding and spotting, leukorrhea, abdominal pain due to worm accumulation. Isolated compounds: 7951, 8095, 14534, 16789, 18200, 18201, 18202, 18204, 18205, 18206, 21177.
- T5329 *Punica granatum* (Punicaceae); SHI LIU XIN CAI; Pomegranate Heartwood. Used part: root. TCM Effects: To expel worms, astrinige intestines, check discharge. TCM Indications: Ascariasis, taeniasis, enduring diarrhea, enduring dysentery, red and white vaginal discharge. Isolated compounds: 5485, 6347, 8115, 14344.
- T5330 *Punica granatum* (Punicaceae); SHI LIU YE; Pomegranate Leaf. Used part: leaf. TCM Effects: To promote contraction and check drain, resolve toxin and kill worms. TCM Indications: Diarrhea, furunculosis, *lai* sore, knocks and falls. Isolated compounds: 17805.
- T5331 *Punica granatum* (Punicaceae); SHI LIU ZHONG ZI; Pomegranate Seed. Isolated compounds: 3984, 4680, 6344, 10949, 17087, 19923, 21955.
- T5332 *Punica granatum* (Punicaceae); SUAN SHI LIU; Pomegranate. Used part: fruit. TCM Effects: To allay thirst, astrinige intestines, stanch bleeding. TCM Indications: Diarrhea, chronic dysentery, flooding and spotting, vaginal discharge. Isolated compounds: 7387, 18203, 21576.
- T5333 *Punica granatum* cv. *nana* (Punicaceae); YUE JI SHI LIU; Dwarf Pomegranate. Isolated compounds: 7387.
- T5334 *Putoria calabrica* (Rubiaceae). Isolated compounds: 18226, 18227.
- T5335 *Putranjiva roxburghii* (Euphorbiaceae). Isolated compounds: 18229.
- T5336 *Putterlickia verrucosa* DUO ZHI PU TE MU. Isolated compounds: 15776.
- T5337 *Pycnarrhena longifolia* (Menispermaceae). Isolated compounds: 9597.
- T5338 *Pycnarrhena ozantha* (Menispermaceae). Isolated compounds: 15804.
- T5339 *Pycnoporus sanguineus* (Polyporaceae); XUE HONG SHUAN JUN. Used part: sporocarp. TCM Effects: See *Trametes cinnabarina*. TCM Indications: See *Trametes cinnabarina*. Isolated compounds: 18231.
- T5340 *Pygeum topengii* (Rosaceae); TUN XING GUO; Topeng Pygeum. Used part: bark. TCM Indications: Maybe cure prostatauxe. Isolated compounds: 4680, 6178, 7657, 7951.
- T5341 *Pygmaeopremna herbacea* [Syn. *Premna herbacea*] (Verbenaceae); QIAN JIE CAO; Herbaceous Pygmaeopremna. Used part: whole herb. TCM Effects: To quicken blood and relieve pain, dispel wind and eliminate damp, fortify spleen and disperse food. TCM Indications: Knocks and falls, wind-damp impediment pain, pain in stomach duct, indigestion, diarrhea, toxin swelling of sores. Isolated compounds: 5468, 18232, 18233, 18234, 18235, 18236.
- T5342 *Pyrenula japonica* (Pyrenulaceae); RI BEN XIAO HE YI; Asian lichen. Isolated compounds: 5993, 21810.
- T5343 *Pyrethrum* sp. (Asteraceae). Isolated compounds: 22103.
- T5344 *Pyrola atropurpurea* (Pyrolaceae); ZI BEI LU TI CAO; Purpleback Pyrola. Used part: whole herb. TCM Effects: See *Pyrola calliantha*. TCM Indications: See *Pyrola calliantha*. Isolated compounds: 9594, 10887.
- T5345 *Pyrola calliantha* [Syn. *Pyrola rotundifolia* ssp. *chinensis*] (Pyrolaceae); LU XIAN CAO; Chinese Pyrola. Equivalent plant: *Pyrola decorata*, *Pyrola japonica*, *Pyrola incarnata*, *Pyrola rotundifolia*, *Pyrola atropurpurea*, *Pyrola calliantha* var. *tibetana*. Used part: whole herb. TCM Effects: To dispel wind-damp, strengthen sinews and bones, stanch bleeding. TCM Indications: Pulmonary infection, intestinal infection, urinary tract infection, infant diarrhea, acute dysentery, wind-damp impediment pain, lassitude in lumbus and knees, profuse menstruation, enduring cough. Isolated compounds: 1618, 3526, 5763, 8095, 9594, 10887, 18270, 18317, 18620.
- T5346 *Pyrola calliantha* var. *tibetana* (Pyrolaceae); XI ZANG LU TI CAO; Tibet Pyrola\*. Used part: whole herb. TCM Effects: See *Pyrola calliantha*. TCM Indications: See *Pyrola calliantha*. Isolated compounds: 9594.
- T5347 *Pyrola decorata* (Pyrolaceae); PU TONG LU TI CAO; Common Pyrola. Used part: whole herb. TCM Effects: See *Pyrola calliantha*. TCM Indications: See *Pyrola calliantha*. Isolated compounds: 1935, 9594, 10887, 11642, 18270.
- T5348 *Pyrola forrestiana* (Pyrolaceae); DA LI LU TI CAO; Forrest Pyrola. Isolated compounds: 9594.
- T5349 *Pyrola incarnata* (Pyrolaceae); HONG HUA LU TI CAO; Redflower Pyrola. Used part: whole herb. TCM Effects: See *Pyrola calliantha*. TCM Indications: See *Pyrola calliantha*. Isolated compounds: 3526, 9594, 10888, 11456, 17876, 17881, 17884, 17892, 17896, 22270.
- T5350 *Pyrola japonica* (Pyrolaceae); RI BEN LU TI CAO; Japanese Pyrola. Used part: whole herb. TCM Effects: See *Pyrola calliantha*. TCM Indications: See *Pyrola calliantha*. Isolated compounds: 1618, 3526, 6336, 8697, 9363, 9594, 10150, 10198, 10200, 14933, 16050, 17476, 18317, 19983, 22270.
- T5351 *Pyrola rotundifolia* (Pyrolaceae); YUAN YE LU TI CAO; European Pyrola. Used part: whole herb. TCM Effects: See *Pyrola calliantha*. TCM Indications: See *Pyrola calliantha*. Isolated compounds: 1618, 9594, 11456, 18268, 18269, 18270, 18620.  
*Pyrola rotundifolia* ssp. *chinensis* = *Pyrola calliantha*
- T5352 *Pyrola rugosa* (Pyrolaceae); ZHOU YE LU TI CAO; Wrinkledleaf Pyrola. Isolated compounds: 9594, 22270.  
*Pyropolyporus fomentarius* = *Fomes fomentarius*
- T5353 *Pyrrrosia calvata* (Polypodiaceae); GUANG SHI WEI; Bald Pyrrosia. Isolated compounds: 11524, 13481.
- T5354 *Pyrrrosia davidii* (Polypodiaceae); BEI JING SHI WEI; Peking Pyrrosia Frond. Used part: leaf. TCM Effects: See *Pyrrrosia lingua*. TCM Indications: See *Pyrrrosia lingua*. Isolated compounds: 3551, 13481.
- T5355 *Pyrrrosia drakeana* (Polypodiaceae); ZHAN MAO SHI WEI; Panniform Pyrrosia. Used part: leaf. TCM Effects: See *Pyrrrosia lingua*. TCM Indications: See *Pyrrrosia lingua*. Isolated compounds: 3551, 7283.
- T5356 *Pyrrrosia gralla* (Polypodiaceae); XI NAN SHI WEI; Stilted Pyrrosia.

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Used part: leaf. TCM Effects: See *Pyrrosia lingua*. TCM Indications: See *Pyrrosia lingua*. Isolated compounds: 3551, 7283.

- T5357 *Pyrrosia lingua* (Polypodiaceae); SHI WEI; Japanese Felt Fern Frond. Equivalent plant: *Pyrrosia sheareri*, *Pyrrosia davidii*, *Pyrrosia petiolosa*. Used part: leaf. TCM Effects: To disinhibit urine and free strangury, clear heat and stanch bleeding. TCM Indications: Heat strangury, blood strangury, stone strangury, urinary stoppage, dripping with inhibited pain, blood ejection, nosebleed(epistaxis), hematuria, flooding and spotting, lung heat cough asthma, urethral stone, urinary tract infection, bleeding. Isolated compounds: 3551, 7283, 9641, 11524, 11642, 12020, 13481, 18317, 19983, 20446, 21634.
- T5358 *Pyrrosia petiolosa* (Polypodiaceae); YOU BING SHI WEI; Petioled *Pyrrosia* Frond. Used part: leaf. TCM Effects: See *Pyrrosia lingua*. TCM Indications: See *Pyrrosia lingua*. Isolated compounds: 3551, 7283, 11524, 13481.
- T5359 *Pyrrosia pseudocalvata* (Polypodiaceae); NI GUANG SHI WEI; Pseudobald *Pyrrosia*\*. Isolated compounds: 3551, 11524, 13481.
- T5360 *Pyrrosia sheareri* (Polypodiaceae); LU SHAN SHI WEI; Shearer's *Pyrrosia* Frond. Used part: leaf. TCM Effects: See *Pyrrosia lingua*. TCM Indications: See *Pyrrosia lingua*. Isolated compounds: 2887, 3551, 5763, 7283, 7996, 9641, 11524, 13481, 19983, 20446.
- T5361 *Pyrus betulaeifolia* (Rosaceae); TANG LI; Birchleaf Pear. Used part: fruit. TCM Effects: To constrain lung, astringe intestines, disperse food. TCM Indications: Cough, diarrhea, dysentery, food accumulation. Isolated compounds: 15363.
- T5362 *Pyrus bretschneideri* (Rosaceae); LI YE; Bretschneider Pear Leaf. Equivalent plant: *Pyrus pyrifolia*. Used part: leaf. TCM Effects: To soothe liver and harmonize stomach, disinhibit water and resolve toxin. TCM Indications: Cholera with vomiting and diarrhea, edema, inhibited urination, child mounting *qi*, poisoning of mushrooms. Isolated compounds: 1618, 11325, 11326.
- T5363 *Pyrus calleryana* (Rosaceae); YE LI ZHI YE; Callery Pear Branch-leaf. Used part: branchlet-leaf. TCM Effects: To clear heat and resolve toxin, moisten lung and relieve cough, move *qi* and fortify stomach. TCM Indications: Incessant vomiting and diarrhea, abdominal pain and cramp, stomach reflux vomiting. Isolated compounds: 1618, 2894, 5769, 9820, 17966, 17969, 22340.
- T5364 *Pyrus communis* (Rosaceae); XI YANG LI; Common Pear. Isolated compounds: 324, 1618, 9740, 18280.
- T5365 *Pyrus pashia* (Rosaceae); CHUAN LI GUO; Pashi Pear Fruit. Used part: fruit. TCM Effects: To disperse food and transform accumulation, dispel stasis and relieve pain. TCM Indications: Meat-type food accumulation, indigestion, diarrhea, dysmenorrhea, postpartum blood stasis abdominal pain, hypertension. Isolated compounds: 7951.
- T5366 *Pyrus pyrifolia* (Rosaceae); SHA LI YE; Sand Pear Leaf. Used part: leaf. TCM Effects: See *Pyrus bretschneideri*. TCM Indications: See *Pyrus bretschneideri*. Isolated compounds: 1618.
- T5367 *Pyrus* sp. (Rosaceae). Isolated compounds: 7729.
- T5368 *Python molurus bivittatus* (Boidae); MANG SHE; Indian Python. Used part: meat. TCM Effects: To dispel wind and quicken network vessels, kill worms and relieve itch. TCM Indications: Wind impediment, paralysis, leprosy, scab and lichen, malign sore. Isolated compounds: 20038.
- T5369 *Quassia africana* (Simaroubaceae); FEI ZHOU KU MU; African Quassia\*. Isolated compounds: 15554, 19900.
- T5370 *Quassia amara* (Simaroubaceae); MEI ZHOU KU MU; Surinam Quassia. Isolated compounds: 15454, 15549, 15561, 18298, 18299, 19900.
- T5371 *Quercus aliena* (Fagaceae); HU LI; Peking Oak. Isolated compounds: 17754.
- T5372 *Quercus dentata* (Fagaceae); HU YE; Daimyo Oak Leaf. Used part: leaf. TCM Effects: To stanch bleeding, free strangury. TCM Indications: Spontaneous external bleeding, blood ejection, hematochezia, bleeding from hemorrhoids, blood dysentery, dribbling pain of urination. Isolated compounds: 12038.
- T5373 *Quercus iberica* (Fagaceae); YI BI LI YA LI; Iberian Oak\*. Isolated compounds: 18317.
- T5374 *Quercus infectoria* (Fagaceae); MO SHI ZI; Aleppo Gall (*Galla Halepensis*). Used part: cecidium. TCM Effects: To secure *qi* and rough essence, constrain lung, stanch bleeding. TCM Indications: Diarrhea, hematochezia, emission, genital sweating, cough, hemoptysis, toothache, bleeding due to external injury, enduring sores. Isolated compounds: 8095, 16836, 20566.
- T5375 *Quercus mongolica* (Fagaceae); MENG GU LI; Mongolian Oak. Used part: leaf. TCM Effects: To clear heat and check dysentery, relieve cough, resolve toxin and disperse swelling. TCM Indications: Bacillary dysentery, child indigestion, swollen welling abscess, hemorrhoids. Isolated compounds: 7951, 8788, 9479.
- T5376 *Quercus phillyraeoides* (Fagaceae); FEI LI GUI LI; Mocketprivet-like Oak. Isolated compounds: 17144.
- T5377 *Quercus robur* (Fagaceae); OU ZHOU BAI LI; Common Oak. Isolated compounds: 18410.
- T5378 *Quercus rubra* (Fagaceae); HONG LI; Spanish Oak. Isolated compounds: 9202.
- T5379 *Quercus* sp. (Fagaceae). Isolated compounds: 3301, 3983, 7518, 19910, 20910.
- T5380 *Quercus* spp. (Fagaceae). Isolated compounds: 16765.
- T5381 *Quercus tinctoria* (Fagaceae); ZHUO SE LI; Black Oak. Isolated compounds: 18411.
- T5382 *Quillaja saponaria* (Rosaceae); ZAO PI SHU; Soapbark Tree. Isolated compounds: 18418.
- T5383 *Quisqualis fructus* (Combretaceae). Isolated compounds: 18452.
- T5384 *Quisqualis indica* (Combretaceae); SHI JUN ZI; Rangooncreeper. Used part: ripe fruit. TCM Effects: To resolve toxin and kill worms, eliminate food stagnation. TCM Indications: Ascariasis, oxyuria disease, child *gan* accumulation. Isolated compounds: 17746, 18452, 21662.
- T5385 *Quisqualis indica* (Combretaceae); SHI JUN ZI YE; Rangooncreeper Leaf. Used part: leaf. TCM Effects: To rectify *qi* and fortify spleen, resolve toxin and kill worms. TCM Indications: Child *gan* accumulation, distention fullness in stomach duct and abdomen, worm accumulation, ulcerating sore and boil. Isolated compounds: 17746, 21662.
- T5386 *Quisqualis indica* var. *villosa* (Combretaceae); MAO SHI JUN ZI;

Villous Rangooncreeper\*. Isolated compounds: 18452.

T5387 *Quivisia papinae*. Isolated compounds: 4714, 9808, 18453.

## R

T5388 *Rabdosia adenantha* (Lamiaceae); XIAN HUA XIANG CHA CAI; Glandularflower Rabdosia. Used part: stem-leaf. TCM Effects: To clear heat and resolve toxin. TCM Indications: Heat toxin sores, diarrhea, dysentery. Isolated compounds: 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 619, 621, 622, 623, 2949, 7917, 11391, 15507, 22657.

T5389 *Rabdosia coetsa* (Lamiaceae); XI ZHUI XIANG CHA CAI; Littleconical Rabdosia. Used part: aerial parts. TCM Effects: To effuse exterior and dissipate wind, transform damp and harmonize center, stanch bleeding. TCM Indications: Wind-cold common cold, vomiting, diarrhea, wind-damp numbness pain, eczema titillation, leg *qi* damp-erosion, bleeding knife wound. Isolated compounds: 3895, 3896, 3897, 18456, 18457, 18458, 18459.

T5390 *Rabdosia coetsoides* (Lamiaceae); JIA XI ZHUI XIANG CHA CAI; Falselittleconical Rabdosia. Isolated compounds: 3898, 3899, 3900, 3901, 3902, 3903, 3904, 3905.

T5391 *Rabdosia ericalyx* (Lamiaceae); MAO E XIANG CHA CAI; Hairysidal Rabdosia. Used part: leaf or root. TCM Effects: To dispel wind and eliminate damp, resolve toxin and kill worms. TCM Indications: Common cold with headache, wind-damp impediment pain, diarrhea and abdomen pain, mounting *qi* [=hernia], leg *qi*, swelling toxin of welling abscess and sore, knife wound. Isolated compounds: 6908, 6958, 7267, 7268, 7269, 7270, 7271, 7275, 13523, 13524, 13525, 13526, 13527, 13528, 13529, 13530, 13531, 13532, 13533, 13534, 13535, 13536, 13537, 13538, 13539, 13540, 13541, 13542, 18494, 18495.

T5392 *Rabdosia excisa* (Lamiaceae); WEI YE XIANG CHA CAI; Taillikeleaf Rabdosia. Isolated compounds: 7674, 7675, 7676, 7677, 7678, 7679, 7680, 7681, 7682, 7683, 7684, 9362, 12123, 12125, 18472, 18485.

*Rabdosia inflexa* = *Isodon inflexa*

*Rabdosia japonica* = *Isodon japonica*

T5393 *Rabdosia longituba* (Lamiaceae); CHANG GUAN XIANG CHA CAI; Longtube Rabdosia. Used part: root, leaf or whole herb. TCM Effects: To clear heat and resolve toxin, disperse swelling and relieve pain. TCM Indications: Summerheat stroke with abdominal pain, urinary tract infection, mastitis, painful wound from knocks and falls, agkistrodon bite. Isolated compounds: 11511, 12123, 12957, 12958, 12959, 12960, 12961, 12962, 12963, 12970, 12971, 12972, 12973, 12974, 12975, 12976, 12977, 15988, 18466, 18467, 18468, 18469, 18477, 18925.

*Rabdosia lophanthoides* = *Isodon lophanthoides*

T5394 *Rabdosia macrophylla* (Lamiaceae); DA YE XIANG CHA CAI; Largeleaf Rabdosia. Isolated compounds: 11392, 18483.

T5395 *Rabdosia nervosa* (Lamiaceae); XIAN MAI XIANG CHA CAI; Veined Rabdosia. Used part: whole herb. TCM Effects: To disinhibit damp and harmonize stomach, resolve toxin and close sores. TCM Indications: Acute hepatitis, indigestion, pemphigus, eczema, itchy skin, burns and scalds, poisonous snake bites. Isolated compounds: 4873, 8146, 8147, 12537, 15507, 15508, 15509, 15510, 15848, 15988,

16183, 17717, 18480, 18481, 18482.

T5396 *Rabdosia rubescens* (Lamiaceae); DONG LING CAO; Blushred Rabdosia. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, quicken blood and relieve pain, anticancer. TCM Indications: Swelling pain in throat, common cold with headache, trachitis, chronic hepatitis, pain in joints due to rheumatism, snake or insect bites, carcinoma of mammary glands, carcinoma of esophagus. Isolated compounds: 3689, 4550, 4701, 4833, 6741, 8483, 9080, 9486, 12843, 13694, 15681, 16050, 16183, 17376, 17717, 18503, 18975, 18976, 18977, 19872, 20466, 20622, 20623, 22270, 22797, 22798, 22799, 22800, 22801, 22802, 22803, 22804, 22805, 22806, 22807, 22808.

*Rabdosia rugosa* = *Isodon rugosus*

*Rabdosia sculponeata* = *Isodon sculponeata*

T5397 *Rabdosia serra* (Lamiaceae); XI HUANG CAO; Serrate Rabdosia. Equivalent plant: *Isodon lophanthoides*. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, disinhibit damp and abate jaundice, dissipate stasis and disperse swelling. TCM Indications: Damp-heat jaundice, cholecystitis, diarrhea, dysentery, swelling of sores, painful wound from knocks and falls. Isolated compounds: 193, 18484, 18485, 18486.

T5398 *Rabdosia shikokiana* (Lamiaceae); SI GUO XIANG CHA CAI; Shiko Rabdosia\*. Isolated compounds: 7202, 18460, 18487, 18488, 18489, 19811, 19813, 19814, 19815, 19816, 19817, 19818.

T5399 *Rabdosia* spp. (Lamiaceae). Isolated compounds: 9650.

T5400 *Rabdosia stracheyi* (Lamiaceae); CHANG YE XIANG CHA CAI; Longleaf Rabdosia. Used part: whole herb. TCM Effects: To clear heat and disinhibit damp, quicken blood and dissipate stasis. TCM Indications: Acute icterohepatitis, acute cholecystitis, edema, summerheat stroke, stasis pain from knocks and falls, mammary sore. Isolated compounds: 256.

T5401 *Rabdosia yuennanensis* (Lamiaceae); BU YU HONG; Yunnan Rabdosia. Used part: rhizome or whole herb. TCM Effects: To dispel wind and disinhibit damp, quicken blood and free menstruation, resolve toxin and disperse swelling. TCM Indications: Common cold, wind-damp bone pain, hemiplegia, food accumulation, pain in stomach duct, dysentery, jaundice, dysmenorrhea, menstrual block, flooding and spotting [=metrorrhagia and metrostaxis], scrofula, syphilis, sores, measles papules, wind papules, scab and *lai*, knocks and falls, rabid dog bite, poisonous snake bites. Isolated compounds: 18510, 18511, 18512.

T5402 *Radermachera sinica* (Bignoniaceae); CAI DOU SHU; Asia Belltree. Used part: root, leaf or fruit. TCM Effects: To clear summerheat and resolve toxin, dissipate stasis and disperse swelling. TCM Indications: Fever due to summerheat damage, swollen welling abscess, fracture, poisonous insect stings. Isolated compounds: 9973, 11455, 11616, 14871, 18522.

T5403 *Radula marginata* (Radulaceae); BIAN YUAN BIAN E TAI. Isolated compounds: 2348, 2349, 16985.

T5404 *Radula perrottetii* (Radulaceae); NING BIAN E TAI. Isolated compounds: 2404, 2405, 2408, 7057, 14033, 16980, 16981, 16982, 16983, 16984, 16986, 16987, 22531, 22532.

T5405 *Ramalina paludosa* (Usneaceae); ZHAO ZE SHU HUA; Marsh

- Ramalina\*. Isolated compounds: 16571.
- T5406 *Rana limnocharis* (Ranidae); XIA MA DAN; Rice Frog Gall. Used part: gall juice. TCM Effects: To disinhibit throat and restore voice. TCM Indications: Child aphonia. Isolated compounds: 2720.
- T5407 *Rana nigromaculata*; *Rana plancyi* (Ranidae); QING WA; Pond Frog. Used part: body. TCM Effects: To disinhibit water and disperse edema, clear heat and resolve toxin, supplement vacuity. TCM Indications: Edema, ascites, jaundice, toad head scourge, child heat sore, dysentery, *gan* disease, taxation fever, postpartum vacuity weakness. Isolated compounds: 626, 2393, 3205, 4221, 4222, 7814, 9853, 11784, 18529, 18530.
- T5408 *Rana nigromaculata*; *Rana plancyi* (Ranidae); QING WA DAN; Pond Frog Gall. Used part: gall. TCM Effects: To clear heat and resolve toxin. TCM Indications: Measles papules with complicated pneumonia, throat erosion. Isolated compounds: 4031, 4583.
- T5409 *Rana temporaria chensinensis*; *Rana amurensis* (Ranidae); HA SHI MA; Dried Chinese Woodfrog. Used part: dried body. TCM Effects: To supplement lung and boost kidney, disinhibit water and disperse edema. TCM Indications: Vacuity taxation cough, child *gan* accumulation, abdominal distention with edema, swelling toxin of sore and welling abscess. Isolated compounds: 626, 18544.
- T5410 *Randia formosa* (Rubiaceae); BA NA MA SHAN SHI LIU; Taiwan Malabar Randia. Isolated compounds: 10983, 10984, 18535, 18536, 18537, 18538, 18539, 18540, 18541.
- T5411 *Randia spinosa* (Rubiaceae); SHAN SHI LIU; Malabar Randia; Sping Randia. Used part: fruit and root, leaf. TCM Effects: To dispel stasis and disperse swelling, resolve toxin, stanch bleeding. TCM Indications: Stasis swelling from knocks and falls, bleeding due to external injury, skin scabies, toxin swelling. Isolated compounds: 18542.
- T5412 *Ranunculus acris* (Ranunculaceae); CAO DI MAO GEN; Meadow Buttercup. Isolated compounds: 7821.
- T5413 *Ranunculus cantoniensis* (Ranunculaceae); ZI KOU CAO; Canton Buttercup. Used part: whole herb. TCM Effects: To clear liver and brighten eyes, resolve toxin and eliminate damp, interrupt malaria. TCM Indications: Eye screen, red eyes, jaundice, swollen welling abscess, rheumatic arthritis, malaria. Isolated compounds: 1179.
- T5414 *Ranunculus japonicus* (Ranunculaceae); MAO GEN; Japanese Buttercup. Used part: whole herb and root. TCM Effects: To abate jaundice, settle asthma, interrupt malaria, settle pain, eliminate screen. TCM Indications: Malaria, jaundice, migraine, stomachache, pain in joints due to rheumatism, crane's knee wind, swollen welling abscess, malign sore, scab and lichen, toothache, fire eye. Isolated compounds: 1178, 1179.
- T5415 *Ranunculus sceleratus* (Ranunculaceae); SHI LONG RUI; Poisonous Buttercup. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, dissipate binds and disperse swelling, relieve pain, interrupt malaria. TCM Indications: Swelling toxin of welling abscess and boil, scrofula, malaria, ulcerating sore of leg. Isolated compounds: 1178, 1179, 18545.
- T5416 *Rapanea neurophylla* (Myrsinaceae); CU YE MAI MI HUA SHU; Rough-veined Rapanea\*. Isolated compounds: 6767.
- T5417 *Rapanea* sp. (Myrsinaceae). Isolated compounds: 6767.
- T5418 *Rapanea umbellata* (Myrsinaceae); SAN HUA MI HUA SHU; Umbellate Rapanea\*. Isolated compounds: 6767.
- T5419 *Raphanus sativus* (Brassicaceae); LAI FU; Garden Radish. Used part: fresh root. TCM Effects: To disperse food, precipitate *qi*, transform phlegm, stanch bleeding, allay thirst, disinhibit urine. TCM Indications: Indigestion, food accumulation distention and fullness, hyperchlorhydria, vomiting, diarrhea, dysentery, constipation, phlegm-heat cough, hemoptysis, blood ejection, spontaneous external bleeding, hematochezia, diabetes mellitus, strangury-turbidity, sores, stasis swelling due to injury, scalds, frostbite. Isolated compounds: 7768, 8307, 14581, 16778, 16779, 16780, 16782, 16783, 16784, 17134, 18278, 18548.
- T5420 *Raphanus sativus* (Brassicaceae); LAI FU ZI; Garden Radish Seed. Used part: seed. TCM Effects: To disperse food distention, downbear *qi* and transform phlegm. TCM Indications: Food stagnation, distending pain in stomach duct, constipation, accumulation and diarrhea, phlegm congestion cough asthma. Isolated compounds: 7291, 7768, 8589, 8752, 8811, 14581, 18547, 19909, 19917, 19918.
- T5421 *Raucheria* spp. Isolated compounds: 13098.
- T5422 *Rauvolfia bahiensis* (Apocynaceae); BA XI LUO FU MU; Brazilian Devilpepper\*. Isolated compounds: 5054, 13838, 14039, 14102.
- T5423 *Rauvolfia verticillata* (Apocynaceae); LUO FU MU; Common Devilpepper. Equivalent plant: *Rauvolfia verticillata* var. *hainanensis*, *Rauvolfia latifrons*, *Rauvolfia perakensis*, *Rauvolfia vomitoria*, *Rauvolfia verticillata* f. *rubrocarpa*. Used part: root. TCM Effects: To clear heat, lower blood pressure, quiet spirit. TCM Indications: Common cold with fever, headache and generalized pain, swelling pain in throat, hypertension, dizziness, insomnia, *gan* accumulation. Isolated compounds: 783, 784, 18552, 18633, 18634, 18859, 22368.
- T5424 *Rauvolfia verticillata* (Apocynaceae); LUO FU MU JING YE; Common Devilpepper Stem and Leaf. Used part: stem-leaf. TCM Effects: To clear heat and resolve toxin, quicken blood and disperse swelling, lower blood pressure. TCM Indications: Swelling pain in throat, stasis swelling from knocks and falls, poisonous snake bite, hypertension. Isolated compounds: 1680, 18859.
- T5425 *Rauvolfia verticillata* f. *rubrocarpa* (Apocynaceae); HONG GUO LUO FU MU; Redfruit Devilpepper. Used part: root. TCM Effects: See *Rauvolfia verticillata*. TCM Indications: See *Rauvolfia verticillata*. Isolated compounds: 22427.
- T5426 *Rauvolfia verticillata* var. *hainanensis* (Apocynaceae); HAI NAN LUO FU MU; Hainan Devilpepper. Used part: root. TCM Effects: See *Rauvolfia verticillata*. TCM Indications: See *Rauvolfia verticillata*. Isolated compounds: 784, 6517, 13325, 22368, 22427.
- T5427 *Rauvolfia vomitoria* (Apocynaceae); CUI TU LUO FU MU; Emetic Devilpepper. Used part: root. TCM Effects: See *Rauvolfia verticillata*. TCM Indications: See *Rauvolfia verticillata*. Isolated compounds: 784, 1002, 1680, 5248, 6204, 16909, 18210, 18303, 18551, 18556, 18557, 18558, 18623, 18630, 18633, 18635, 19386, 19763, 21055, 22921.
- T5428 *Rauvolfia yunnanensis* (Apocynaceae); YUN NAN LUO FU MU; Yunnan Devilpepper. Used part: root. TCM Effects: To clear heat and calm liver, resolve toxin and kill worms. TCM Indications: Hypertension due to ascendant liver *yang*, headache, dizziness, vexation and agitation with insomnia, scab and lichen, snake bite. Isolated compounds: 783, 18059, 18633, 19763, 22921.

- T5429 *Rauwolfia beddomei* (Apocynaceae); BI SHI LUO FU MU; Beddome Devilpepper. Isolated compounds: 19762.
- T5430 *Rauwolfia caffra* (Apocynaceae); KA FU LA LUO FU MU; Caffra Devilpepper\*. Isolated compounds: 18635, 19386.
- T5431 *Rauwolfia canescens* (Apocynaceae); HUI BAI MAO LUO FU MU; Canescent Devilpepper\*. Isolated compounds: 5248.
- T5432 *Rauwolfia cubana* (Apocynaceae); GU BA LUO FU MU; Cuba Devilpepper. Isolated compounds: 5248.
- T5433 *Rauwolfia cumminsii* (Apocynaceae); KE MING XI LUO FU MU; Cummins Devilpepper\*. Isolated compounds: 18210, 18635, 19386.
- T5434 *Rauwolfia fruticosa* (Apocynaceae); GUAN MU LUO FU MU; Shrubby Devilpepper\*. Isolated compounds: 19762.
- T5435 *Rauwolfia latifrons* (Apocynaceae); KUO YE LUO FU MU; Broadleaf Devilpepper. Used part: root. TCM Effects: See *Rauwolfia verticillata*. TCM Indications: See *Rauwolfia verticillata*. Isolated compounds: 18633.
- T5436 *Rauwolfia littoralis* (Apocynaceae); HAI BIN LUO FU MU; Littoral Devilpepper\*. Isolated compounds: 5248.
- T5437 *Rauwolfia macrophylla* (Apocynaceae); DA YE LUO FU MU; Largeleaf Devilpepper\*. Isolated compounds: 18623, 18630, 18635.
- T5438 *Rauwolfia nitida* (Apocynaceae); GUANG LIANG LUO FU MU; Shining Devilpepper\*. Isolated compounds: 783, 18553, 18630, 18632, 22921.
- T5439 *Rauwolfia obscura* (Apocynaceae); GANG GUO LUO FU MU; Obscure Devilpepper\*. Isolated compounds: 1002, 18557.
- T5440 *Rauwolfia oreogiton* (Apocynaceae). Isolated compounds: 18303, 18635.
- T5441 *Rauwolfia perakensis* (Apocynaceae); PI LI LUO FU MU; Perak Devilpepper. Used part: root. TCM Effects: See *Rauwolfia verticillata*. TCM Indications: See *Rauwolfia verticillata*. Isolated compounds: 784, 16909, 18633, 19386.
- T5442 *Rauwolfia serpentina* (Apocynaceae); YIN DU LUO FU MU; Java Devilpepper. Used part: root, stem-leaf. TCM Effects: To lower blood pressure. TCM Indications: Hypertension. Isolated compounds: 783, 784, 4115, 5248, 11202, 16623, 18623, 18629, 18630, 18631, 18632, 18633, 18634, 19386, 19762, 22921.
- T5443 *Rauwolfia volkensii* (Apocynaceae). Isolated compounds: 18303, 18635.
- T5444 *Reboulia hemisphaerica* (Grimaldiaceae); SHI DI QIAN. Used part: thallus. TCM Effects: To clear heat and resolve toxin, disperse swelling and stanch bleeding. TCM Indications: Swelling toxin of sore and boil, burns and scalds, painful swelling from knocks and falls, bleeding due to external injury. Isolated compounds: 9634, 10156.
- T5445 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*] (Scrophulariaceae); GAN DI HUANG; Adhesive Rehmannia Dried Root. Used part: dried root. TCM Effects: To enrich *yin* and clear heat, cool blood and supplement blood, lower blood sugar levels. TCM Indications: Diabetes mellitus, dermatitis, rheumatism, diphtheria, acute tonsillitis, febrile diseases with vexation and thirst, steaming bone taxation fever, warm disease macular eruption, blood ejection due to blood heat, spontaneous external bleeding due to blood heat, flooding and spotting due to blood heat, hematuria due to blood heat, hematochezia due to blood heat, anemia with yellow complexion, palpitation and dizziness, blood depletion and amenorrhea. Isolated compounds: 305, 347, 580, 618, 815, 816, 1048, 1598, 2004, 3040, 3138, 3140, 3306, 3371, 3695, 3751, 3756, 4144, 4626, 4672, 4680, 5555, 5557, 6537, 6952, 7440, 7769, 7770, 7924, 8276, 8753, 8790, 9360, 9486, 9819, 11195, 11872, 11873, 11874, 11875, 11876, 11877, 11878, 11879, 11880, 11881, 11882, 11883, 11884, 11885, 11886, 12569, 12891, 13504, 13580, 13710, 14878, 15203, 15672, 15684, 16561, 16831, 17091, 18219, 18220, 18221, 18526, 18589, 18590, 18591, 18592, 18593, 18594, 18595, 18596, 18597, 18598, 18599, 18601, 18735, 19983, 20255, 20280, 20369, 20444, 22339, 22396, 22664.
- T5446 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*] (Scrophulariaceae); SHU DI HUANG; Adhesive Rehmannia Cocked Root. Used part: steamed and sundried root. TCM Effects: To supplement blood and enrich *yin*, boost essence and replenish marrow. TCM Indications: Blood vacuity with yellow complexion, dizziness and palpitation, menstrual disorder [=menoxenia], incessant flooding and spotting, liver-kidney *yin* depletion, tidal fever with night sweat, impotence and emission, sterility and infertility, limp aching lumbus and knees, tinnitus and deafness, dizzy head and vision, premature graying in beard and hair, diabetes mellitus, constipation, kidney vacuity hasty asthma. Isolated compounds: 3306, 9767, 10493, 18266, 18589, 18592, 18596, 18597, 18598, 18599, 18600, 22252.
- T5447 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*] (Scrophulariaceae); XIAN DI HUANG; Adhesive Rehmannia Fresh Root. Used part: fresh root. TCM Effects: To clear heat and cool blood, engender liquid and moisten dryness, lower blood sugar levels. TCM Indications: Diabetes mellitus, dermatitis, rheumatism, diphtheria, acute tonsillitis, acute febrile diseases, ardent fever with clouded spirit, macula, fluid damage with vexation and thirst, blood ejection due to blood heat, spontaneous external bleeding due to blood heat, flooding and spotting due to blood heat, hematochezia due to blood heat, mouth and tongue sores, swelling pain in throat, taxation fever cough, painful wound from knocks and falls, swollen welling abscess. Isolated compounds: 618, 816, 3306, 13503, 18221, 18596, 18597, 18598, 18599.
- Rehmannia glutinosa* f. *huechingensis* = *Rehmannia glutinosa*
- T5448 *Rehmannia glutinosa* var. *purpurea* (Scrophulariaceae); ZI DI HUANG; Purple Adhesive Rehmannia\*. Isolated compounds: 18221.
- T5449 *Reineckea carnea* (Liliaceae); JI XIANG CAO; Pink Reineckea. Used part: whole herb with root. TCM Effects: To clear lung and relieve cough, cool blood and stanch bleeding, resolve toxin and disinhibit throat. TCM Indications: Lung heat cough, hemoptysis, blood ejection, spontaneous external bleeding, hematochezia, swelling pain in throat, red eyes and eye screen, swollen welling abscess, sore and boil. Isolated compounds: 11307, 11646, 11674, 12231, 16890, 18602.
- T5450 *Renealmia nicolaitoides* (Zingiberaceae). Isolated compounds: 1418, 1420.
- T5451 *Renealmia cincinnata* (Zingiberaceae). Isolated compounds: 7503, 8335, 8336, 16154, 21750.
- T5452 *Reseda luteola* (Resedaceae); DAN HUANG MU XI CAO. TCM Effects: To effuse sweat, disinhibit urine. Isolated compounds: 13137, 13151.



- T5453 *Rhamnella inaequilatera* (Rhamnaceae); BU DUI CHENG MAO RU; Asymmetry *Rhamnella*\*. Isolated compounds: 18676, 18677, 18678.
- T5454 *Rhamnus cathartica* (Rhamnaceae); YAO SHU LI; Common Buckthorn. Used part: ripe fruit. TCM Effects: To moisten intestines and free stool. TCM Indications: Intestinal dry and constipation, habitual constipation. Isolated compounds: 7939, 7940.
- T5455 *Rhamnus crenata* (Rhamnaceae); LI LA GEN; Oriental Buckthorn. Used part: root or root cortex. TCM Effects: To clear heat and resolve toxin, kill worms and disinhibit damp. TCM Indications: Scab sore, intractable lichen, eczema, urticaria, tinea capitis, knocks and falls. Isolated compounds: 3598.
- T5456 *Rhamnus crenatus* (Rhamnaceae); HUANG YAO; Oriental Buckthorn. Isolated compounds: 4226.
- T5457 *Rhamnus davurica* (Rhamnaceae); SHU LI; Davurian Buckthorn. Used part: fruit. TCM Effects: To clear heat and resolve toxin, drain precipitation and kill worms, relieve cough and dispel phlegm. TCM Indications: Sore and welling abscess, scrofula, scab and lichen, decayed toothache, mouth sore, abdominal distention and constipation, cough of phlegm asthma, edema distention fullness. Isolated compounds: 967, 3615, 6776, 12020.
- T5458 *Rhamnus disperma* (Rhamnaceae); SHUANG ZHONG ZI SHU LI; Diseed Buckthorn\*. Isolated compounds: 18350.
- T5459 *Rhamnus formosana* (Rhamnaceae); TAI WAN SHU LI; Taiwan Buckthorn\*. Isolated compounds: 17252.
- T5460 *Rhamnus frangula* [Syn. *Frangula alnus*] (Rhamnaceae); OU SHU LI; Glossy Buckthorn. Used part: bark. TCM Effects: To moisten intestines and free stool. TCM Indications: Habitual constipation, abdominal pain. Isolated compounds: 968, 1738, 6776, 6778, 7938, 7939, 7940, 15489, 16558.
- T5461 *Rhamnus leptophylla* (Rhamnaceae); JIANG LI MU GEN; Thinleaf Buckthorn Root. Used part: root. TCM Effects: To disperse food and transform stagnation, move water and free stool. TCM Indications: Food accumulation abdominal distention, edema, ascites, constipation. Isolated compounds: 2556.
- T5462 *Rhamnus nakaharai* (Rhamnaceae); TAI ZHONG SHU LI; Taizhong Buckthorn\*. Isolated compounds: 18376, 18376.
- T5463 *Rhamnus purshiana* (Rhamnaceae); BO XI SHU LI; Cascara Buckthorn. Isolated compounds: 3254, 3598, 3615, 17251.
- T5464 *Rhamnus virgata* (Rhamnaceae); ZHOU ZHI SHU LI; Twiggy Buckthorn. Isolated compounds: 17250.
- T5465 *Rhaponticum carthamoides* (Asteraceae); LU CAO; Redflowered Swisscentaury\*. Used part: root. TCM Effects: To boost *qi* and fortify spleen, quiet spirit. TCM Indications: Fatigue hypodynamia, inappetence, neurasthenia. Isolated compounds: 811, 1476, 2779, 6402, 9260, 9678, 11660, 17662, 18369, 20357.
- T5466 *Rhaponticum uniflorum* (Asteraceae); LOU LU; Uniflower Swisscentaury. Equivalent plant: *Echinops grijssii*, *Echinops ritro*. Used part: root. TCM Effects: To clear heat and resolve toxin, quicken blood and promote milk. TCM Indications: Mammary welling abscess, effusion of back from welling abscess and flat abscess, scrofula, galactostasis, damp impediment and hypertonicity. Isolated compounds: 6679, 6681, 18750, 18751.
- T5467 *Rheedia gardneriana* (Clusiaceae). Isolated compounds: 18754.
- Rheum australe* = *Rheum emodi*
- T5468 *Rheum emodi* [Syn. *Rheum australe*] (Polygonaceae); ZANG BIAN DA HUANG; Austral Rhubarb. Used part: root and rhizome. TCM Effects: To clear heat and resolve toxin, stanch bleeding and engender flesh. TCM Indications: Lung heat cough, swelling pain in throat, swelling toxin of welling abscess and sore, bleeding due to external injury, hematochezia. Isolated compounds: 401, 967, 1363, 3222, 3255, 3256, 3280, 3308, 3590, 3615, 3618, 3619, 6776, 6854, 8095, 9898, 9899, 13361, 17247, 17250, 17251, 18669, 18670, 18671, 18672, 18759, 20468, 21453.
- T5469 *Rheum hotaoense* (Polygonaceae); HE TAO DA HUANG; River-bend Rhubarb\*. Used part: root and rhizome. TCM Effects: To disperse accumulation and transform stagnation, free bowels and drain heat. TCM Indications: Food accumulation, distention fullness in stomach duct and abdomen, abdominal pain and diarrhea, heat bind constipation. Isolated compounds: 3616, 8095, 18767.
- T5470 *Rheum maximowiczii* (Polygonaceae); MA SHI DA HUANG; Maximowicz Rhubarb\*. Isolated compounds: 10610, 10611, 10612, 10613, 13616, 13617, 18265.
- T5471 *Rheum nanum* (Polygonaceae); AI DA HUANG; Low Rhubarb\*. Isolated compounds: 8879, 13361.
- T5472 *Rheum officinale* (Polygonaceae); DA HUANG; Medicinal Rhubarb. Equivalent plant: *Rheum palmatum*, *Rheum tanguticum*. Used part: root and rhizome. TCM Effects: To drain heat and free intestines, cool blood and resolve toxin, expel stasis and free menstruation. TCM Indications: Repletion heat constipation, accumulation with abdominal pain, damp-heat jaundice, acute icterohepatitis, red eyes, swollen throat, intestinal welling abscess and abdominal pain, bleeding of digestive tract, chronic diarrhea, indigestion, acute appendicitis, acute peritonitis, ileus, cholecystitis, gallstones, swollen welling abscess and clove sores, amenorrhea due to blood stasis, knocks and falls, burns and scalds. Isolated compounds: 423, 967, 970, 1363, 3172, 3173, 3279, 3315, 3615, 3619, 3620, 3703, 3706, 5514, 5518, 6776, 6778, 6854, 6864, 8095, 8096, 8097, 8108, 8109, 8110, 10217, 10534, 14219, 14220, 15132, 16556, 16557, 16558, 17099, 17247, 17250, 17251, 17877, 17896, 18650, 18744, 18748, 18756, 18757, 18758, 18759, 18761, 18766, 19746, 19748, 19749, 19750, 19751, 21453, 21454, 21642.
- T5473 *Rheum palaestinum* (Polygonaceae). Isolated compounds: 17283, 18744.
- T5474 *Rheum palmatum* (Polygonaceae); ZHANG YE DA HUANG; Sorrel Rhubarb. Used part: root and rhizome. TCM Effects: See *Rheum officinale*. TCM Indications: See *Rheum officinale*. Isolated compounds: 899, 967, 969, 970, 971, 3308, 3315, 3599, 3615, 3619, 3620, 3703, 3706, 5206, 5514, 5518, 6776, 6778, 6854, 6864, 8095, 8096, 8097, 8108, 8109, 16556, 16557, 16558, 17099, 17247, 17249, 17250, 17251, 17283, 17877, 17896, 18648, 18650, 18744, 18756, 18757, 18758, 18759, 18760, 18761, 18762, 18763, 18764, 18765, 18766, 19746, 19747, 19748, 19749, 19750, 19751, 19752, 21158, 21642, 21786, 21787, 21788.
- T5475 *Rheum qinlingense* (Polygonaceae); QIN LING DA HUANG; Qinling Rhubarb\*. Isolated compounds: 3621.
- T5476 *Rheum raponticum* (Polygonaceae); SHI YONG DA HUANG;

- Rhubarb. Isolated compounds: 16285.
- T5477 *Rheum* sp. (Polygonaceae); CHANG JI HUANG. Isolated compounds: 17869, 17876, 17877, 17879, 17881, 17882, 17883, 17885, 17887, 17890, 17891, 17894, 17895, 17896.
- T5478 *Rheum* sp. (Polygonaceae); YU DA HUANG. Isolated compounds: 1951, 17278, 17279, 17282, 18745, 18746, 18747, 18749, 21158.
- T5479 *Rheum* sp. (Polygonaceae); SI CHUAN CHAN DA HUANG. Isolated compounds: 17278, 17280, 17281, 18648, 18650.
- T5480 *Rheum* spp. (Polygonaceae). Isolated compounds: 3615, 17878.
- T5481 *Rheum tanguticum* (Polygonaceae); TANG GU TE DA HUANG; Tangut Rhubarb. Used part: root and rhizome. TCM Effects: See *Rheum officinale*. TCM Indications: See *Rheum officinale*. Isolated compounds: 967, 970, 971, 3308, 3315, 3615, 3619, 3620, 3703, 3706, 5514, 5518, 6776, 6778, 6854, 6864, 8095, 8096, 8097, 8108, 8109, 11496, 12876, 16556, 16557, 16558, 17247, 17250, 17251, 17283, 17877, 17896, 18648, 18650, 18756, 18757, 18758, 18759, 18761, 18762, 18763, 18764, 18765, 18766, 19746, 19748, 19749, 19751, 21158, 21642.
- T5482 *Rheum wittrockii* (Polygonaceae); TIAN SHAN DA HUANG; Tianshan Mountain Rhubarb. Isolated compounds: 3615, 3619, 5206, 6360, 6776, 17251, 17278, 18643.
- T5483 *Rhinacanthus nasutus* (Acanthaceae); BAI HE LING ZHI; Bignose Rhiancanthus. Used part: branch-leaf. TCM Effects: To clear heat and moisten lung, kill worms and relieve itch. TCM Indications: Taxation cough, scab and lichen, eczema. Isolated compounds: 18768, 18769, 18770, 18771, 18772, 18773, 18774, 18775, 18776, 18777, 18778.
- T5484 *Rhinoceros unicornis*; *Rhinoceros sondaicus*; *Rhinoceros sumatrensis* (Rhinocerotidae); XI JIAO; Rhinoceros Horn. Used part: horn. TCM Effects: To cool blood, clear heat, resolve toxin, settle fright. TCM Indications: Blood ejection, spontaneous external bleeding, acute febrile diseases, epidemic febrile diseases. Isolated compounds: 7390.
- T5485 *Rhizocarpon geographicum* (Lecideaceae); DI TU YI. Isolated compounds: 18779.
- T5486 *Rhizoma rhei*. Isolated compounds: 18650.
- T5487 *Rhizophora apiculata* (Rhizophoraceae); HONG SHU; Sharpleaf Mangrove. Isolated compounds: 3192.
- T5488 *Rhizophora mucronata* (Rhizophoraceae); HONG QIE DONG GUO; Mangrove Fruit. Isolated compounds: 2926, 2927, 15019.
- T5489 *Rhizophora stylosa* (Rhizophoraceae); HONG HAI LAN; Stylose Mangrove. Isolated compounds: 3192, 3193.
- T5490 *Rhizopus oryzae* DAO GEN MEI. Isolated compounds: 6133, 6134, 6135, 6136, 10728, 10729, 10730, 14158, 20295, 20297, 20298, 20299, 20300, 20301, 20302, 20303, 21153, 21846, 21847.
- T5491 *Rhodiola algida* (Crassulaceae); JI SHI HONG JING TIAN; Algid Rhodiola\*. Isolated compounds: 18792.
- T5492 *Rhodiola atuntsuensis* (Crassulaceae); DE QIN HONG JING TIAN; Atuntsuen Rhodiola. Isolated compounds: 18791.
- T5493 *Rhodiola coccinea* (Crassulaceae); SHEN HONG HONG JING TIAN; Darkred Rhodiola. Isolated compounds: 18792.
- T5494 *Rhodiola crenulata* [Syn. *Rhodiola euryphylla*] (Crassulaceae); DA HUA HONG JING TIAN; Bigflower Rhodiola. Used part: root. TCM Effects: To clear lung and boost *qi*. TCM Indications: Tuberculosis with cough, hemoptysis, pneumonia, bronchitis. Isolated compounds: 4227, 7441, 12083, 18792, 22170.
- Rhodiola euryphylla* = *Rhodiola crenulata*
- T5495 *Rhodiola himalansis* (Crassulaceae); XI MA HONG JING TIAN; Himalaya Rhodiola. Isolated compounds: 18792.
- T5496 *Rhodiola juparensis* (Crassulaceae); YUAN CONG HONG JING TIAN; Jupar Rhodiola. Isolated compounds: 18792.
- T5497 *Rhodiola kirilowii* (Crassulaceae); XIA YE HONG JING TIAN; Kirilow Rhodiola. Used part: rhizome and root. TCM Effects: To nourish heart and quiet spirit, quicken blood and transform stasis, stanch bleeding, clear heat and resolve toxin. TCM Indications: *Qi* vacuity and general weakness, shortness of breath and hypodynamia, palpitation and insomnia, dizziness, chest oppression and pain, knocks and falls, menstrual disorder, flooding and spotting, blood ejection, dysentery, diarrhea. Isolated compounds: 13003, 18792, 22170.
- T5498 *Rhodiola quadrifida* (Crassulaceae); SI LIE HONG JING TIAN; Foursplit Rhodiola. Used part: whole herb with root. TCM Effects: To boost kidney and nourish liver, regulate menstruation and quicken blood. TCM Indications: Steaming bone taxation fever, dry blood tisis (consumptive disease due to blood disorders), dizzy head and vision, menstrual disorder [=menoxenia]. Isolated compounds: 18792.
- T5499 *Rhodiola sacra* (Crassulaceae); SHENG DI HONG JING TIAN; Integripetal Rhodiola. Used part: whole herb. TCM Effects: To supplement *qi* and clear lung, boost wits and nourish heart, promote contraction and stanch bleeding, dissipate stasis and disperse swelling. TCM Indications: *Qi* vacuity and general weakness, aversion of cold during convalescence, shortness of breath and hypodynamia, lung heat cough, hemoptysis, leukorrhea, diarrhea, knocks and falls, burns and scalds, neurosis, altitude stress. Isolated compounds: 2887, 4680, 7441, 8095, 9467, 12020, 18790, 18792, 18793, 19109, 19377, 19983, 22170, 22195.
- T5500 *Rhodiola subopposita* (Crassulaceae); HU SHENG HONG JING TIAN; Oppositeleaf Rhodiola. Isolated compounds: 18792.
- T5501 *Rhodiola yunnanensis* (Crassulaceae); YUN NAN HONG JING TIAN; Yunnan Rhodiola. Used part: whole herb with root. TCM Effects: To supplement lung and boost kidney, clear heat and relieve cough, dissipate stasis and stanch bleeding. TCM Indications: Vacuity taxation with cough, kidney vacuity lumbar pain, pain in throat, painful swelling from knocks and falls, bleeding due to external injury. Isolated compounds: 18792.
- T5502 *Rhododendron anthopogonoides* (Ericaceae); XIAO YE PI PA; Savoury Rhododendron. Used part: leaf. TCM Effects: To dispel phlegm, relieve cough, calm asthma. TCM Indications: Cough, asthma, abundant phlegm. Isolated compounds: 2274, 8959, 10887, 11966, 12843.
- T5503 *Rhododendron arboreum* (Ericaceae); SHU XING DU JUAN; Treelike Rhododendron. Isolated compounds: 2334.
- T5504 *Rhododendron capitatum* (Ericaceae); TOU HUA DU JUAN; Capitata Rhododendron. Used part: leaf or flower. TCM Effects: To relieve cough and dispel phlegm, warm stomach and relieve pain. TCM Indications: Cough and asthma with abundant phlegm, stomach cold abdominal pain. Isolated compounds: 11966, 17376, 17809.
- T5505 *Rhododendron chrysanthum* (Ericaceae); NIU PI CHA; Goldmat Rhododendron. Isolated compounds: 18794.

- T5506 *Rhododendron cinnabarinum* (Ericaceae); ZHU SHA DU JUAN; Vermilion Rhododendron. Isolated compounds: 1074.
- T5507 *Rhododendron collettianum* (Ericaceae); A FU HAN DU JUAN HUA; H.Collett's Rhododendron. Isolated compounds: 3829, 3831, 6870, 8673, 21905.
- T5508 *Rhododendron dauricum* (Ericaceae); MAN SHAN HONG; Dahurian Rhododendron. Used part: leaf. TCM Effects: To relieve cough, dispel phlegm. TCM Indications: Acute bronchitis, chronic bronchitis. Isolated compounds: 1161, 2039, 2052, 2274, 3241, 3242, 3973, 4681, 4682, 4683, 4684, 5079, 5699, 7736, 8345, 8346, 8347, 8959, 9010, 9667, 9740, 10887, 10887, 11461, 12020, 16169, 18317, 18411, 18796, 19542, 19685, 20566, 21969.
- T5509 *Rhododendron fauriei* (Ericaceae); FU LEI SHI DU JUAN HUA; Pere L. F. Faurie's Rhododendron. Isolated compounds: 18794.
- T5510 *Rhododendron huianum* (Ericaceae); LIANG SHAN DU JUAN. Isolated compounds: 12020, 18317.
- T5511 *Rhododendron japonicum* (Ericaceae); RI BEN DU JUAN HUA; Japanese Azalea. Isolated compounds: 18799, 18800, 18801, 18802. *Rhododendron lamprophyllum* = *Rhododendron ovatum*
- T5512 *Rhododendron lingii* (Ericaceae); RU YUAN DU JUAN; Ruyuan Rhododendron. Isolated compounds: 18317.
- T5513 *Rhododendron mariae* (Ericaceae); LING NAN DU JUAN; Lingnan Rhododendron\*. Used part: Flower, leaf, twig or root. TCM Effects: To dispel phlegm and relieve cough, disperse swelling and relieve pain. TCM Indications: Cough of profuse phlegm, asthma, knocks and falls, mouth-lever nape sore (nuchal phlegmon). Isolated compounds: 18317, 18411.
- T5514 *Rhododendron metternichii* var. *hondoese* (Ericaceae); MEI TE NI DU JUAN HUA; Metternich Rhododendron\*. Isolated compounds: 1161.
- T5515 *Rhododendron micranthum* (Ericaceae); ZHAO SHAN BAI; Manchurian Rhododendron. Used part: branchlet-leaf or flower. TCM Effects: To relieve cough and transform phlegm, dispel wind and free network vessels, regulate menstruation and relieve pain. TCM Indications: Cough and asthma with abundant phlegm, wind-damp impediment pain, lumbago, menstrual disorder, dysmenorrhea, fracture. Isolated compounds: 1161, 1935, 8959, 10887, 12020, 18317, 19542, 20566.
- T5516 *Rhododendron molle* (Ericaceae); NAO YANG HUA; Chinese Azalea. Used part: flower. TCM Effects: To dispel wind and eliminate damp, dissipate stasis and settle pain, kill worms. TCM Indications: Tachycardia, palpitation, hypertension, wind-damp impediment pain, knocks and falls, intractable lichen. Isolated compounds: 1161, 7662, 8759, 8995, 12117, 14068, 18800, 18801, 18803, 18806, 18807, 18808, 18809, 18810, 18811, 18812, 18813, 20132.
- T5517 *Rhododendron molle* (Ericaceae); NAO YANG HUA ZI; Chinese Azalea Fruit. Used part: fruit. TCM Effects: To dispel wind and dry damp, dissipate stasis and relieve pain, settle asthma, arrest diarrhea. TCM Indications: Wind-cold-damp impediment, joint running swelling pain, knocks and falls, asthma and cough, diarrhea and dysentery, swelling toxin of welling abscess and flat abscess. Isolated compounds: 18801, 18804, 18805.
- T5518 *Rhododendron mucronatum* (Ericaceae); BAI HUA YING SHAN HONG; Snow Azalea. Used part: flower, root and leaf. TCM Effects: To harmonize blood, dissipate stasis, relieve cough. TCM Indications: Blood ejection, hematochezia, dysentery, flooding and spotting, cough, knocks and falls. Isolated compounds: 2052, 2053, 5699, 8959, 15170, 18263, 18796, 20566.
- T5519 *Rhododendron mucronulatum* (Ericaceae); YING SHAN HONG; Korean Rhododendron. Used part: leaf. TCM Effects: To resolve exterior, relieve cough and transform phlegm. TCM Indications: Common cold, cough and asthma, abundant phlegm. Isolated compounds: 2052, 5699, 8959, 14542, 14609, 16884, 20566.
- T5520 *Rhododendron ovatum* [Syn. *Rhododendron lamprophyllum*; *Azalea ovata*] (Ericaceae); MA YIN HUA; Ovateleaf Rhododendron\*. Used part: root. TCM Effects: To clear damp heat, resolve sore toxin. TCM Indications: Damp-heat vaginal discharge, swollen welling abscess and clove sores. Isolated compounds: 22071.
- T5521 *Rhododendron przewalskii* (Ericaceae); LONG SHU DU JUAN; Przewalsk Rhododendron\*. Used part: leaf. TCM Effects: To clear lung, relieve cough and transform phlegm. TCM Indications: Cough and asthma, abundant and sticky phlegm. Isolated compounds: 1161.
- T5522 *Rhododendron seniavinii* (Ericaceae); MAO GUO DU JUAN; Hairfruit Rhododendron\*. Used part: root, stem-leaf and flower. TCM Effects: To relieve cough, dispel phlegm, calm asthma. TCM Indications: Chronic trachitis. Isolated compounds: 18317.
- T5523 *Rhododendron simsii* (Ericaceae); DU JUAN HUA; Indian Azalea. Used part: flower. TCM Effects: To harmonize blood, regulate menstruation, relieve cough, dispel wind-damp, resolve sore toxin. TCM Indications: Blood ejection, spontaneous external bleeding, flooding and spotting, menstrual disorder, cough, wind-damp impediment pain, sore toxin of welling abscess and boil. Isolated compounds: 1161, 3594, 4451, 13460, 13610, 13611, 14609, 16905.
- T5524 *Rhododendron simsii* (Ericaceae); DU JUAN HUA YE; Indian Azalea Leaf. Used part: leaf. TCM Effects: To clear heat and resolve toxin, stanch bleeding. TCM Indications: Swollen welling abscess and clove sores, bleeding due to external injury, urticaria. Isolated compounds: 1161, 1512, 6177, 13610.
- T5525 *Rhododendron* sp. (Ericaceae). Isolated compounds: 17170.
- T5526 *Rhododendron* spp. (Ericaceae). Isolated compounds: 16900.
- T5527 *Rhodomyrtus macrocarpa* (Myrtaceae); DA GUO TAO JIN NIANG; Bigfruit Rosemyrtle\*. Isolated compounds: 18814.
- T5528 *Rhodomyrtus tomentosa* (Myrtaceae); SHAN REN YE; Downy Rosemyrtle Leaf. Used part: leaf. TCM Effects: To disinhibit damp and check diarrhea, engender flesh and stanch bleeding. TCM Indications: Headache, diarrhea, *gan* accumulation, bleeding due to external injury, scab sore. Isolated compounds: 1109, 1113, 2332, 2338, 13098.
- T5529 *Rhodomyrtus tomentosa* (Myrtaceae); TAO JIN NIANG; Rosemyrtle. Used part: fruit. TCM Effects: To nourish blood and stanch bleeding, astringe intestines and secure essence. TCM Indications: Blood vacuity and general weakness, blood ejection, nosebleed(epistaxis), taxation damage hemoptysis, hematochezia, flooding and spotting, emission, vaginal discharge, dysentery, prolapse of rectum, scalds, bleeding due to external injury. Isolated compounds: 3296, 3302, 16765, 21443.
- T5530 *Rhus chinensis* [Syn. *Rhus semialata*] (Anacardiaceae); YAN FU YE;

- Chinese Sumac Leaf. Used part: fresh leaf. TCM Effects: To relieve cough and transform phlegm, promote contraction and resolve toxin. TCM Indications: Phlegm cough, hematochezia, blood dysentery, night sweating, sore. Isolated compounds: 14454.
- T5531 *Rhus chinensis* [Syn. *Rhus semialata*] (Anacardiaceae); YAN FU ZI; Chinese Sumac Fruit. Used part: fruit. TCM Effects: To moisten lung and engender liquid, downbear fire and transform phlegm, constrain sweat, check dysentery. TCM Indications: Phlegm cough, throat impediment, jaundice, night sweating, dysentery, intractable lichen, welling abscess, head wind white scaling. Isolated compounds: 5515, 8095, 14454.
- T5532 *Rhus coriaria* (Anacardiaceae); XI XI LI QI SHU; Sumach. Isolated compounds: 7441, 8095.
- T5533 *Rhus lanceolata* (Anacardiaceae); PI ZHEN QI SHU; Lanceolate Sumac\*. Isolated compounds: 19545.
- T5534 *Rhus pyroides* (Anacardiaceae). Isolated compounds: 18820.
- T5535 *Rhus retinorrhoea* (Anacardiaceae); SHU ZHI YAN FU MU; Resinoid Sumac\*. Isolated compounds: 6409, 19174.  
*Rhus semialata* = *Rhus chinensis*
- T5536 *Rhus* sp. (Anacardiaceae). Isolated compounds: 5613, 16836, 18864.  
*Rhus succedanea* = *Toxicodendron succedaneum*
- T5537 *Rhus sylvestris* (Anacardiaceae); YE QI SHU YE; Woods Leaquertree Leaf. Used part: leaf. TCM Effects: To dispel stasis and disperse swelling, kill worms, resolve toxin. TCM Indications: Knocks and falls, bleeding due to external injury, ancylostomiasis, scab and lichen, sore toxin, poisonous snake bite. Isolated compounds: 1497, 5613, 5614, 7802.
- T5538 *Rhus sylvestris* (Anacardiaceae); YE QI SHU ZI; Woods Leaquertree. Isolated compounds: 18821, 18822.
- T5539 *Rhus taishanensis* (Anacardiaceae); TAI SHAN YAN FU ZI; Taishan Sumac Fruit. Isolated compounds: 18823.
- T5540 *Rhus typhina* (Anacardiaceae); LU JIAO QI SHU; Stag's-horn Sumach. Isolated compounds: 917, 8095.
- T5541 *Rhus verniciflua* [Syn. *Toxicodendron verniciflum*] (Anacardiaceae); QI ZI; True Lacquer Seed. Used part: seed. TCM Effects: To quicken blood and stanch bleeding, warm channels and relieve pain. TCM Indications: Hematochezia, hematuria, flooding and spotting, abdominal pain due to stagnation, amenorrhea. Isolated compounds: 2779, 5613, 6535, 6719, 20481.
- T5542 *Rhus verniciflua* [Syn. *Toxicodendron verniciflum*] (Anacardiaceae); SHENG QI; True Lacquer. Used part: balsam. TCM Effects: To kill worms. TCM Indications: Worm accumulation, water *gu*. Isolated compounds: 12424, 12425, 12426, 12427.
- T5543 *Rhynchochotum vestitum* (Gesneriaceae); MAO XIAN ZHU JU TAI; Hairy Rhynchochotum. Used part: whole herb. TCM Indications: Hepatitis A, Hepatitis B. Isolated compounds: 15077, 18828.
- T5544 *Ribes alpinum* (Saxifragaceae); GAO SHAN CHA BIAO; Alpine Currant. Isolated compounds: 13627, 15183, 18375.
- T5545 *Ribes fasciculatum* var. *chinense* (Saxifragaceae); HUA CHA BIAO; China Winterberry Currant. Used part: root. TCM Effects: To cool blood and clear heat, regulate menstruation. TCM Indications: Vacuity heat and hypodynamia, menstrual disorder [=menoxenia], dysmenorrhea. Isolated compounds: 2778, 3308, 4184, 5981, 8098, 10637, 13100, 14530, 15954, 19377.
- T5546 *Ribes nigrum* (Saxifragaceae); HEI CHA BIAO; Black Currant. Isolated compounds: 15593, 15594.
- T5547 *Ricinus communis* (Euphorbiaceae); BI MA GEN; Castorbean Root. Used part: root. TCM Effects: To dispel wind and resolve tetany, quicken blood and disperse swelling. TCM Indications: Tetanus, epilepsy, wind-damp impediment pain, knocks and falls, swollen welling abscess and scrofula, prolapse of rectum, prolapse of uterus. Isolated compounds: 4947, 21622.
- T5548 *Ricinus communis* (Euphorbiaceae); BI MA YE; Castorbean Leaf. Used part: leaf. TCM Effects: To draw out pus and relieve itch, relieve cough and calm asthma. TCM Indications: Beriberi, swelling pain of scrotum, cough of phlegm asthma, goose-foot wind, sore and boil. Isolated compounds: 15525, 18407, 18840.
- T5549 *Ricinus communis* (Euphorbiaceae); BI MA YOU; Castorbean Oil. Used part: oil expressed from seeds. TCM Effects: To lubricate intestines, moisten skin. TCM Indications: Dry stool, sore and scab, burns. Isolated compounds: 14932, 18841, 22028.
- T5550 *Ricinus communis* (Euphorbiaceae); BI MA ZI; Castorbean Seed. Used part: ripe seed. TCM Effects: To disperse swelling and draw out toxin, drain precipitation and free stagnation. TCM Indications: Swelling toxin of welling abscess and flat abscess, throat impediment, scrofula, dry stool. Isolated compounds: 4055, 4124, 6132, 6194, 18840, 18841, 19596, 20439.
- T5551 *River corymbosa* (Convolvulaceae); MO XI GE XUAN HUA; Mexico Glorybind\*. Isolated compounds: 7240.
- T5552 *Robinia pseudoacacia* (Fabaceae); CI HUAI HUA; Black Locust Flower. Used part: flower. TCM Effects: To stanch bleeding. TCM Indications: Precipitate blood of large intestine, hemoptysis, flooding. Isolated compounds: 56, 61, 1482, 2779, 2785, 3059, 5702, 9522, 11504, 12908, 14712, 16843, 17470, 18642, 18857, 22122.
- T5553 *Robinia pseudomonas* (Fabaceae); JIA DAN BAO JUN YANG HUAI; Pseudomonas Locust\*. Isolated compounds: 18859.
- T5554 *Rodgersia aesculifolia* (Saxifragaceae); MU HE; Fingerleaf Rodgersflower. Used part: rhizome. TCM Effects: To clear heat and transform damp, engender flesh and stanch bleeding. TCM Indications: Damp-heat dysentery, chronic diarrhea, white turbidity, vaginal discharge, flooding and spotting, blood ejection, spontaneous external bleeding, hematochezia, sore toxin, incised wound. Isolated compounds: 2312, 16884.
- T5555 *Rodgersia pinnata* (Saxifragaceae); YU YE GUI DENG QING; Featherleaf Rodgersflower. Used part: rhizome. TCM Effects: To quicken blood and regulate menstruation, dispel wind and eliminate damp, promote contraction and stanch bleeding. TCM Indications: Knocks and falls, fracture, menstrual disorder [=menoxenia], dysmenorrhea, wind-damp pain, bleeding due to external injury, enteritis, dysentery. Isolated compounds: 6403.
- T5556 *Rodgersia podophylla* (Saxifragaceae); RI BEN GUI DENG QING; Bronzeleaf Rodgersflower. Isolated compounds: 2039, 11897, 12021, 12022, 12082, 14034, 14035, 14688, 14689, 14695, 14696, 15184, 18319, 18320, 18337, 18411.
- T5557 *Rohdea japonica* [Syn. *Orontium japonicum*] (Liliaceae); WAN NIAN QING GEN; Omoto Nipponlily Root. Used part: root, rhizome and

- leaf. TCM Effects: To clear heat and resolve toxin, strengthen heart and disinhibit urine, cool blood and stanch bleeding. TCM Indications: Cardiac failure, swelling pain in throat, diphtheria, edema, ascites, hemoptysis, blood ejection, clove sore, erysipelas, snake bite, scalds, arrhythmia, dysentery. Isolated compounds: 2401, 4006, 4007, 7005, 7006, 11675, 11676, 18782, 18783, 18785, 18786, 18787, 18788, 18789, 20220.
- T5558 *Rollinia mucosa* (Annonaceae); NIAN ZHI LUO LIN; Mucosa Rollinia\*. Isolated compounds: 13987, 16414, 18897, 18900, 18901, 18902, 18903, 18904, 18905, 18906.
- T5559 *Romalea microptera* HUANG CHONG; Grasshopper. Isolated compounds: 18426.  
*Rorippa dubia* = *Rorippa montana*
- T5560 *Rorippa montana* [Syn. *Rorippa dubia*; *Sisymbrium dubium*] (Brassicaceae); HAN CAI; Indian Rorippa. Used part: whole herb. TCM Effects: To dispel phlegm and suppress cough, dissipate cold and resolve exterior, quicken blood and resolve toxin, disinhibit damp and abate jaundice. TCM Indications: Cough, cough of phlegm asthma, common cold with fever, non-eruption of measles, wind-damp impediment pain, swelling pain in throat, swollen welling abscess and clove sores, lacquer sore, amenorrhea, knocks and falls, jaundice, edema. Isolated compounds: 18908, 18909.
- T5561 *Rosa canina* (Rosaceae); QUAN CHI QIANG WEI; Dog Rose. Isolated compounds: 5763, 6428, 13212, 19039.
- T5562 *Rosa chinensis* (Rosaceae); YUE JI HUA; Chinese Rose. Used part: flower. TCM Effects: To quicken blood and regulate menstruation, resolve toxin and disperse swelling. TCM Indications: Menstrual disorder, dysmenorrhea, knocks and falls, blood stasis swelling and pain, scrofula, swollen welling abscess, scalds. Isolated compounds: 8095.
- T5563 *Rosa cymosa* (Rosaceae); XIAO GUO QIANG WEI GEN; Smallfruit Rose. Used part: root. TCM Effects: To dissipate stasis, stanch bleeding, disperse swelling, resolve toxin. TCM Indications: Bleeding due to external injury, knocks and falls, menstrual disorder [=menoxenia], prolapse of uterus, hemorrhoids, wind-damp pain, diarrhea, dysentery. Isolated compounds: 9385, 18894, 18895, 19057.
- T5564 *Rosa damascena* (Rosaceae); DA MA SHI GE QIANG WEI; Damask Rose. Isolated compounds: 8312.
- T5565 *Rosa gallica* (Rosaceae); FA GUO QIANG WEI; French Rose. Isolated compounds: 8312.
- T5566 *Rosa henryi* (Rosaceae); RUAN TIAO QI QIANG WEI; Henry's Rose. Used part: root. TCM Effects: To quicken blood and regulate menstruation, transform stasis and stanch bleeding. TCM Indications: Menstrual disorder [=menoxenia], infertility, bleeding due to external injury. Isolated compounds: 17884.
- T5567 *Rosa laevigata* (Rosaceae); JIN YING YE; Cherokee Rose Leaf. Used part: leaf. TCM Effects: To clear heat and resolve toxin, quicken blood and stanch bleeding, check discharge. TCM Indications: swollen welling abscess and clove sores, scalds, dysentery, amenorrhea, flooding and spotting, vaginal discharge, bleeding from wounds. Isolated compounds: 17750.
- T5568 *Rosa laevigata* (Rosaceae); JIN YING ZI; Cherokee Rose Seed. Used part: fruit. TCM Effects: To secure essence and reduce urine, astringe intestines and check diarrhea. TCM Indications: Emission, enuresis and frequent urination, flooding and spotting with vaginal discharge, chronic diarrhea and dysentery. Isolated compounds: 757, 758, 7657, 14440, 14512, 14523, 14591, 14765, 16422, 17750, 17884, 18916, 19276, 21458.
- T5569 *Rosa multiflora* (Rosaceae); QIANG WEI GEN; Japanese Rose Root. Used part: root. TCM Effects: To clear heat and resolve toxin, dispel wind and eliminate damp, quicken blood and regulate menstruation, secure essence and reduce urine. TCM Indications: Swelling toxin of sore and welling abscess, scalds, mouth sore, bleeding from hemorrhoids, nosebleed(epistaxis), pain in joints, menstrual disorder, dysmenorrhea, chronic dysentery, enuresis, frequent urination, excessive leukorrhea, prolapse of uterus, bone stuck in throat. Isolated compounds: 6178, 14454, 15068, 15069.
- T5570 *Rosa roxburghii* (Rosaceae); CI LI; Roxburgh Rose. Used part: fruit. TCM Effects: To fortify stomach, disperse food, check diarrhea. TCM Indications: Food accumulation distention and fullness, enteritis and diarrhea. Isolated compounds: 18970, 20257.
- T5571 *Rosa rubiginosa* (Rosaceae); XIU HONG QIANG WEI; Sweet-briar. Isolated compounds: 19039.
- T5572 *Rosa rugosa* (Rosaceae); MEI GUI HUA; Rugose Rose Flower. Used part: bud. TCM Effects: To move *qi* and relieve depression, harmonize blood, relieve pain. TCM Indications: Liver stomach *qi* pain, reduced food intake with nausea and vomiting, menstrual disorder, painful wound from knocks and falls. Isolated compounds: 1735, 2284, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 3768, 4451, 7521, 8095, 8312, 8313, 9203, 9485, 9909, 9910, 9911, 10173, 10245, 11218, 11367, 11368, 11369, 11370, 11642, 12852, 13744, 15498, 15926, 17111, 18421, 18912, 18913, 19039, 19047, 19048, 19050, 19051, 19052, 19053, 19054, 19055, 19056, 19057, 19058, 19059, 19060, 19277, 19607, 20389, 21612.
- T5573 *Rosa sericea* (Rosaceae); JUAN MAO QIANG WEI; Silky Rose. Used part: root and fruit. TCM Effects: To fortify and move spleen, check dysentery and promote astriction. TCM Indications: Accumulation with abdominal distention, diarrhea, enduring dysentery, profuse menstruation, flooding and spotting [=metrorrhagia and metrostaxis]. Isolated compounds: 7657, 7658, 8682.
- T5574 *Rosa* sp. (Rosaceae). Isolated compounds: 1358, 3209, 7518, 7821, 16836, 18265, 20910.
- T5575 *Rosmarinus officinalis* (Lamiaceae); MI DIE XIANG; Rosemary. Used part: whole herb. TCM Effects: To effuse sweat, fortify spleen, quiet spirit, relieve pain. TCM Indications: Headache, prevention of hair loss in early stage. Isolated compounds: 1110, 1113, 2331, 2550, 2557, 3206, 6454, 6825, 7556, 8289, 10024, 10172, 10550, 11684, 12420, 13146, 17696, 18921, 18922, 18923, 18924, 20993, 20994, 20995, 22398.
- T5576 *Rostellularia procumbens* [Syn. *Justicia procumbens*] (Acanthaceae); JUE CHUANG; Creeping Rostellularia. Used part: dried whole herb. TCM Effects: To clear heat and resolve toxin, disinhibit damp and disperse stagnation, quicken blood and relieve pain. TCM Indications: Common cold with fever, cough, swelling pain in throat, red eyes with gall, *gan* accumulation, damp-heat diarrhea dysentery, malaria, jaundice, edema, pain in sinews and bones, knocks and falls, welling

- abscess and flat abscess with clove sore, eczema. Isolated compounds: 3638, 6490, 11977, 11978, 11979, 11980, 17872, 17955, 20645, 22077.
- T5577 *Rouya polygama* (Apiaceae). Isolated compounds: 18962, 18963, 18964, 18965, 18966, 18967.
- T5578 *Rubia cordifolia* (Rubiaceae); QIAN CAO GEN; Indian Madder Root. Equivalent plant: *Rubia schumannina*, *Rubia tinctorum*, *Rubia oncotricha*, *Rubia wallichiana*. Used part: root. TCM Effects: To cool blood and stanch bleeding, quicken blood and transform stasis. TCM Indications: Bleeding due to blood heat, amenorrhea due to blood stasis, knocks and falls, impediment pain in joints. Isolated compounds: 266, 899, 901, 3181, 5522, 9891, 9892, 10502, 13939, 13940, 13954, 13998, 14040, 14144, 14775, 14777, 14778, 14779, 14901, 15076, 15734, 16065, 18058, 18222, 18224, 18979, 18980, 18981, 18982, 18983, 18984, 18985, 18986, 18987, 18988, 18989, 18990, 18991, 18992, 18993, 18994, 19013, 19023, 19031, 19036, 19037, 19038, 21794, 21795, 22773.
- T5579 *Rubia cordifolia* (Rubiaceae); QIAN CAO TENG; Indian Madder Stem. Used part: aerial parts. TCM Effects: To stanch bleeding, move stasis. TCM Indications: Blood ejection, flooding, knocks and falls, wind impediment, lumbago, welling abscess toxin, swelling of clove. Isolated compounds: 19028, 19029.
- T5580 *Rubia cordifolia* var. *pratensis* (Rubiaceae); HEI GUO QIAN CAO; Blackfruit Madder. Isolated compounds: 19037, 19038.
- T5581 *Rubia iberica* (Rubiaceae). Isolated compounds: 15734.
- T5582 *Rubia oncotricha* (Rubiaceae); GOU MAO QIAN CAO; Hookedhair Madder. Used part: root. TCM Effects: See *Rubia cordifolia*. TCM Indications: See *Rubia cordifolia*. Isolated compounds: 11234, 19036.
- T5583 *Rubia schumannina* (Rubiaceae); DA YE QIAN CAO; Smoothstalk Madder. Used part: root. TCM Effects: See *Rubia cordifolia*. TCM Indications: See *Rubia cordifolia*. Isolated compounds: 14901.
- T5584 *Rubia tinctorum* (Rubiaceae); YANG QIAN CAO; Madder. Used part: root. TCM Effects: See *Rubia cordifolia*. TCM Indications: See *Rubia cordifolia*. Isolated compounds: 899, 901, 13041, 18222.
- T5585 *Rubia wallichiana* (Rubiaceae); GUANG JING QIAN CAO; Wallich Madder. Used part: root. TCM Effects: See *Rubia cordifolia*. TCM Indications: See *Rubia cordifolia*. Isolated compounds: 900, 901, 1360, 5522, 5990, 6017, 6537, 10206, 10380, 10414, 10415, 10417, 10467, 13041, 13045, 13640, 14775, 14776, 14778, 15077, 15734, 18222, 18224, 18998, 19000, 19024, 19025, 19026, 19540, 19542, 19983, 20369, 22270.
- T5586 *Rubia yunnanensis* (Rubiaceae); XIAO HONG SHEN; Yunnan Madder. Used part: root. TCM Effects: To quicken blood and soothe sinews, dispel stasis and engender flesh, nourish *qi* blood. TCM Indications: Wind-damp pain, knocks and falls, menstrual disorder [=menoxenia], menstrual block, vaginal discharge, postpartum arthralgia, tuberculosis and coughing of blood, dizzy head and insomnia, anemia. Isolated compounds: 303, 371, 496, 11477, 12520, 13986, 14775, 14777, 18983, 18990, 18995, 18996, 18997, 19001, 19002, 19003, 19004, 19005, 19006, 19007, 19008, 19009, 19010, 19011, 19012, 19014, 19015, 19016, 19017, 19018, 19019, 19020, 19021, 19022, 19032, 19033, 19034, 19035, 19618, 19983, 20369, 20566, 22332.
- T5587 *Rubus alceaefolius* (Rosaceae); CU YE XUAN GOU ZI; Roughleaf Raspberry. Used part: root and leaf. TCM Effects: To clear heat and disinhibit damp, stanch bleeding, dispel stasis. TCM Indications: Hepatitis, dysentery, enteritis, mastitis, stomatitis, march hematology, bleeding due to external injury, liver spleen enlargement, knocks and falls, wind-damp bone pain. Isolated compounds: 4088, 6178, 15539.
- T5588 *Rubus allegheniensis* (Rosaceae); PU TONG XUAN GOU ZI; Common Raspberry\*. Isolated compounds: 19045.
- T5589 *Rubus chamaemorus* (Rosaceae); XUAN GOU ZI; Avrons. Isolated compounds: 19039.
- T5590 *Rubus chroosepalus* (Rosaceae); MAO E MEI; Hairysidal Raspberry. Isolated compounds: 6170.
- T5591 *Rubus cochinchinensis* (Rosaceae); SHE PAO JIN; Snakebubble Raspberry. Used part: root. TCM Effects: To dispel wind and eliminate damp, move *qi* and relieve pain. TCM Indications: Wind-damp impediment pain, painful wound from knocks and falls, pain in lumbus and leg. Isolated compounds: 516.
- T5592 *Rubus hirsutus* (Rosaceae); CI BO; Hirsute Raspberry. Used part: root or leaf. TCM Effects: To clear heat and resolve toxin, disperse swelling and relieve pain, stanch bleeding. TCM Indications: Influenza, common cold, infant ardent fever convulsion, swelling pain in throat, toothache, headache, wind-damp pain in sinew and bone, scrofula, swollen boil. Isolated compounds: 21634.
- T5593 *Rubus idaeus* (Rosaceae); FU PEN ZI; Red-and-Yellow Garden Raspberry. Used part: fruit. TCM Effects: To supplement liver and boost kidney, secure essence and reduce urine, brighten eyes. TCM Indications: Impotence with premature ejaculation, emission, infertility due to uterus cold, frequent urination and enuresis, dizziness and dim vision, premature graying in beard and hair. Isolated compounds: 3594, 17886.
- T5594 *Rubus parkeri* (Rosaceae); WU PAO ZI; Parker Raspberry. Used part: root. TCM Effects: To regulate menstruation, stanch bleeding, dispel phlegm, relieve cough. TCM Indications: Menstrual disorder, menstrual block, concretion and conglomeration, flooding, spontaneous external bleeding, hematochezia, cough and abundant phlegm, sores. Isolated compounds: 21824.
- T5595 *Rubus parvifolius* (Rosaceae); MAO MEI; Japanese Raspberry. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, dissipate stasis and relieve pain, kill worms. TCM Indications: Common cold with fever, cough with phlegm and blood, dysentery, knocks and falls, postpartum abdominal pain, scab sore, swollen boil, bleeding due to external injury. Isolated compounds: 15539.
- T5596 *Rubus rigidus* (Rosaceae); JIAN YING XUAN GOU ZI; Rigid Blackberry\*. Isolated compounds: 18265.
- T5597 *Rubus sanctus* (Rosaceae); SHEN SHENG XUAN GOU ZI; Sanctity Blackberry\*. Isolated compounds: 2930, 5409, 9503.
- T5598 *Rubus* sp. (Rosaceae). Isolated compounds: 3301.
- T5599 *Rubus* spp. (Rosaceae). Isolated compounds: 16765, 17750.
- T5600 *Rubus suavissimus* (Rosaceae); TIAN CHA; Sweet Blackberry\*. Isolated compounds: 20341, 20433.
- T5601 *Rubus taiwanicus* (Rosaceae); XIAO YE XUAN GOU ZI; Small-leaf Raspberry. Isolated compounds: 15539, 15540, 15541.

- T5602 *Rubus ulmifolius* (Rosaceae); YU YE MAO MEI; Elm-leaf Raspberry\*. Isolated compounds: 18972, 18973, 18974.
- T5603 *Rudbeckia bicolor* (Asteraceae); SHUANG SE JIN GUANG JU; Pinewoods Coneflower. Isolated compounds: 20665.
- T5604 *Rudbeckia laciniata* (Asteraceae); JIN GUANG JU; Cutleaf Coneflower. Used part: leaf. TCM Effects: To clear damp heat, resolve toxin and eliminate welling abscess. TCM Indications: Damp-heat vomiting diarrhea, abdominal pain, swollen welling abscess and sore toxin. Isolated compounds: 19046.
- T5605 *Rumex acetosa* (Polygonaceae); SUAN MO; Garden Sorrel. Used part: root. TCM Effects: To cool blood and stanch bleeding, drain heat and free stool, disinhibit urine, kill worms. TCM Indications: Blood ejection, hematochezia, profuse menstruation, heat dysentery, red eyes, constipation, urinary stoppage, strangury-turbidity, malign sore, scab and lichen, eczema. Isolated compounds: 3615, 3620, 6776, 15489, 17247, 17248, 22520.
- T5606 *Rumex acetosa* (Polygonaceae); SUAN MO YE; Garden Sorrel Leaf. Used part: leaf. TCM Effects: To drain heat, relieve constipation, disinhibit urine, cool liver and stanch bleeding, resolve toxin. TCM Indications: Swelling pain in throat, gum hemorrhage, spleen vacuity diarrhea, painful wound from knocks and falls, hemorrhoids. Isolated compounds: 22520.
- T5607 *Rumex crispus* (Polygonaceae); NIU ER DA HUANG; Crisped Dock. Used part: root. TCM Effects: To clear heat and resolve toxin, cool blood and stanch bleeding, free stool and kill worms. TCM Indications: Acute hepatitis, chronic hepatitis, enteritis, dysentery, chronic trachitis, blood ejection, spontaneous external bleeding, hematochezia, flooding and spotting, heat bind constipation, swelling toxin of welling abscess and flat abscess, scab and lichen, bald sores. Isolated compounds: 3598, 3620, 6776.
- T5608 *Rumex dentatus* (Polygonaceae); NIU SHE CAO; Toothedfruit Dock. Used part: leaf. TCM Effects: To clear heat and resolve toxin, kill worms and relieve itch. TCM Indications: Red swollen breast. Isolated compounds: 967, 3615, 6776, 15489, 17247.
- T5609 *Rumex hastatus* (Polygonaceae); JI YE SUAN MO; Hastate Dock\*. Used part: root or whole herb. TCM Effects: To effuse sweat and resolve exterior, dispel wind and eliminate damp, relieve cough, stanch bleeding. TCM Indications: Common cold, headache, pain in joints due to rheumatism, cough and asthma, knocks and falls, flooding and spotting. Isolated compounds: 12714.
- T5610 *Rumex hymenosepalus* (Polygonaceae); MO E SUAN MO; Canaigre. Isolated compounds: 12714.
- T5611 *Rumex japonicus* (Polygonaceae); YANG TI; Japanese Dock. Equivalent plant: *Rumex nepalensis*. Used part: root. TCM Effects: To clear heat and free stool, cool blood and stanch bleeding, kill worms and relieve itch. TCM Indications: Constipation, blood ejection, spontaneous external bleeding, intestinal wind bleeding, bleeding from hemorrhoids, flooding and spotting, scab and lichen, bald white scalp sore, swelling toxin of welling abscess and sore, knocks and falls. Isolated compounds: 3615, 6776, 7209, 15153, 15489, 17247, 21817.
- T5612 *Rumex nepalensis* (Polygonaceae); NI BO ER YANG TI; Nepal Dock. Used part: root. TCM Effects: See *Rumex japonicus*. TCM Indications: See *Rumex japonicus*. Isolated compounds: 3615, 6776, 15489, 17247.
- T5613 *Rumex obtusifolius* (Polygonaceae); DUN YE SUAN MO; Bluntleaf Dock. Used part: root. TCM Effects: To clear heat and resolve toxin, cool blood and stanch bleeding, dispel stasis and disperse swelling, free stool, kill worms. TCM Indications: Tuberculosis and hemoptysis, pulmonary welling abscess, blood ejection, abdominal pain due to stagnation, knocks and falls, constipation, epidemic parotitis, swelling toxin of welling abscess and sore, scalds, scab and lichen, eczema. Isolated compounds: 13447, 15489.
- T5614 *Rumex patientia* (Polygonaceae); NIU XI XI; Patience Dock. Used part: root. TCM Effects: To clear heat and resolve toxin, stanch bleeding and disperse swelling, free stool and kill worms. TCM Indications: Blood ejection, spontaneous external bleeding, hematochezia, flooding and spotting, red and white vaginal discharge, purpura, dysentery, hepatitis, constipation, inhibited urination, swelling toxin of welling abscess and sore, scab and lichen, knocks and falls, burns and scalds. Isolated compounds: 967, 3308, 3544, 3615, 3619, 6776, 6778, 6779, 12401, 13841, 15489, 16169, 16195, 16714, 16715, 17247, 18416, 19066.
- T5615 *Rumex* spp. (Polygonaceae). Isolated compounds: 3615.
- T5616 *Ruppia maritime* (Potamogetonaceae); HAI SHENG CHUN MAN ZAO; Marine Widgeonweed. Isolated compounds: 14408.
- T5617 *Ruprechtia triflora* (Polygonaceae). Isolated compounds: 6901.
- T5618 *Ruscus aculeatus* (Liliaceae); JIA YE SHU; Butchersbroom. Isolated compounds: 19070, 19074, 20219.
- T5619 *Russula cyanoxantha* (Russulaceae); LAN HUANG HONG GU; Blue-yellow Redmushroom\*. Isolated compounds: 20153.
- T5620 *Russula delica* (Russulaceae); MEI WEI HONG GU; Milk-white Russula. Isolated compounds: 2497, 8013, 12434, 19075, 19076.
- T5621 *Russula lepida* (Russulaceae); DA HONG GU; Big Russula\*. Isolated compounds: 4301, 4302.
- T5622 *Russula ochroleuca* (Russulaceae); HUANG BAI HONG GU; Pale Russula\*. Isolated compounds: 21332.
- T5623 *Russula queletii* (Russulaceae). Isolated compounds: 17433, 17446.
- T5624 *Russula rosacea* (Russulaceae); KU HONG GU; Bitter Russula. Isolated compounds: 18910, 18911.
- T5625 *Ruta chalepensis* (Rutaceae); SUI ZHUANG YUN XIANG; Syrian Rue\*. Isolated compounds: 9304, 11727, 19086.
- T5626 *Ruta graveolens* (Rutaceae); CHOU CAO; Common Rue. Used part: whole herb. TCM Effects: To dispel wind, abate fever, disinhibit urine, quicken blood, resolve toxin, disperse swelling. TCM Indications: Common cold with fever, wind-damp bone pain, infant fright wind, inhibited urination, diarrhea, mounting *qi*, amenorrhea, knocks and falls, heat toxin sores, eczema. Isolated compounds: 1613, 1614, 2309, 2833, 3457, 3857, 6306, 6511, 6708, 7703, 8984, 8985, 8986, 8987, 8988, 8989, 8991, 8992, 9304, 11601, 12254, 13572, 13904, 14246, 14379, 14675, 14682, 15698, 16488, 17297, 18086, 18759, 18829, 18831, 19077, 19078, 19079, 19083, 19084, 19085, 19086, 19087, 19427, 19919, 20002, 20438, 22195, 22219, 22225, 22781.
- T5627 *Ruta microcarpa* (Rutaceae); XIAO GUO YUN XIANG; Smallfruit Rue\*. Isolated compounds: 19427.
- T5628 *Ruta montana* (Rutaceae); MENG DA NA YUN XIANG; Montana Rue\*. Isolated compounds: 4836, 15689, 15690, 15691, 19777.
- T5629 *Ruta oreojasme* (Rutaceae); SHAN MO LI YUN XIANG;

Mountjasmine Rue\*. Isolated compounds: 8989.

T5630 *Ruta pinnata* (Rutaceae); YU ZHUANG YUN XIANG; Pinnate Rue\*. Isolated compounds: 2833, 9452, 11249.

T5631 *Ruta* sp. (Rutaceae). Isolated compounds: 22336, 22774.

T5632 *Ruta* spp. (Rutaceae). Isolated compounds: 22195.

T5633 *Ruta tuberculata* [Syn. *Haplophyllum tuberculatum*] (Rutaceae); LIU ZHUANG DAN YE YUN XIANG; Tuberculate Rue\*. Isolated compounds: 9228, 9229, 17112, 22077.

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T5634 *Sabal blackburniana* (Arecaceae). Isolated compounds: 19103.

T5635 *Sabal causiarum* (Arecaceae). Isolated compounds: 19102.

T5636 *Sabal peregrina* (Arecaceae); WAI LAI CAI ZONG. Isolated compounds: 16380.

T5637 *Sabia schumanniana* (Sabiaceae); SI CHUAN QING FENG TENG; Szechwan Sabia. Used part: root. TCM Effects: To dispel wind and quicken blood, relieve cough and transform phlegm. TCM Indications: Wind-damp impediment pain, knocks and falls, lumbago, chronic cough and asthma. Isolated compounds: 1109, 6057, 6475, 10549, 16401, 20254.

T5638 *Sabia swinhoi* (Sabiaceae); JIAN YE QING FENG TENG; Sharpleaf Sabia. Used part: whole herb. TCM Effects: To quicken blood and transform stasis, soothe sinews and quicken network vessels, eliminate wind-damp, relieve pain due to impediment. TCM Indications: Pain in joints due to rheumatism, weakness in sinews and bones. Isolated compounds: 19097, 19098.

T5639 *Sabina chinensis* (Cupressaceae); YUAN BAI; Chinese Juniper. Used part: leaf. TCM Effects: To dispel wind and dissipate cold, quicken blood and resolve toxin. TCM Indications: Wind-cold common cold, pain in joints due to rheumatism, urticaria, swelling toxin of flat abscess, urinary tract infection. Isolated compounds: 9, 1476.

T5640 *Sabina vulgaris* (Cupressaceae); CHOU BAI; Savin. Used part: branchlet or cone. TCM Effects: To dispel wind and eliminate damp, quicken blood and relieve pain. TCM Indications: Wind-damp impediment pain, itchy skin, headache, cough. Isolated compounds: 4289, 17592, 19101.

T5641 *Saccharum officinarum* (Poaceae); YAO YONG GAN ZHE; Sugarcane. Isolated compounds: 552, 10967, 20446.

T5642 *Saccharum sinensis* (Poaceae); GAN ZHE; Sweetcane Culm. Used part: stem. TCM Effects: To clear heat and engender liquid, moisten dryness and harmonize center, resolve toxin. TCM Indications: Heat vexation, diabetes mellitus, vomiting nausea, vacuity heat cough, dry stool, swelling of welling abscess, welling abscess and flat abscess with swelling sore. Isolated compounds: 552, 553, 1048, 3040, 7450, 7996, 8827, 13793, 14388, 18261, 20369.

T5643 *Saccogyna viticulosa* (Geocalycaceae). Isolated compounds: 927, 1758, 8951, 8952, 8953, 8954, 11407, 11437, 11458, 11791, 19106, 22583, 22999.

T5644 *Sageretia gracilis* (Rhamnaceae); XI QUE MEI TENG; Thin Sageretia. Isolated compounds: 21706.

*Sageretia thea* = *Sageretia theezans*

T5645 *Sageretia theezans* [Syn. *Sageretia thea*] (Rhamnaceae); QUE MEI TENG; Hedge Sageretia. Used part: root. TCM Effects: To downbear

*qi* and transform phlegm, dispel wind and disinherit damp. TCM Indications: Cough, asthma, stomachache, crane's knee wind, edema. Isolated compounds: 7951, 8759, 20444, 20711.

T5646 *Sagina japonica* [Syn. *Spergula japonica*] (Caryophyllaceae); QI GU CAO; Pearlwort. Used part: whole herb. TCM Effects: To cool blood and resolve toxin, kill worms and relieve itch. TCM Indications: Lacquer sore, bald sores, eczema, erysipelas, scrofula, innominate toxin swelling, poisonous snake bites, deep-source nasal congestion, decayed teeth, internal damage due to knocks and falls. Isolated compounds: 1595.

T5647 *Sagittaria sagittifolia* (Alismataceae); CI GU; Oldworld Arrowhead Corm. Used part: corm. TCM Effects: To cool blood and quicken blood, relieve cough and free strangury, resolve toxin and dissipate binds. TCM Indications: Postpartum blood stasis, retention of placenta, strangury, cough with phlegm and blood. Isolated compounds: 4289, 19124.

*Salacia chinensis* = *Salacia prinoides*

T5648 *Salacia prinoides* [Syn. *Salacia chinensis*] (Hippocrateaceae); SUO LA MU; Prinos-like Salacia. Used part: root. TCM Effects: To expel wind and eliminate damp, free channels and quicken blood. TCM Indications: Wind-damp impediment, blood stasis lumbago. Isolated compounds: 27, 1107, 1113, 3308, 3359, 5096, 6060, 6632, 6853, 6921, 7946, 7947, 7949, 7953, 10127, 10578, 11477, 13249, 13481, 13624, 13975, 16245, 18584, 19178, 19179, 19180, 19181, 19182, 21396, 21397, 21996, 22025, 22673.

T5649 *Salacia* sp. (Hippocrateaceae). Isolated compounds: 21397.

T5650 *Salix babylonica* (Salicaceae); LIU BAI PI; Babylon Weeping Willow Root-bast. Used part: bark or root cortex. TCM Effects: To dispel wind and disinherit damp, disperse swelling and relieve pain. TCM Indications: Wind-damp bone pain, wind swelling and pruritus, jaundice, strangury-turbidity, mammary welling abscess, toothache, burns and scalds. Isolated compounds: 19184.

T5651 *Salix babylonica* (Salicaceae); LIU ZHI; Babylon Weeping Willow Branch. Used part: branchlet. TCM Effects: To dispel wind, disinherit urine, relieve pain, disperse swelling. TCM Indications: Wind-damp impediment pain, strangury, white turbidity, urinary stoppage, infective hepatitis, wind swelling, clove sore, erysipelas, tooth decay, gum swelling. Isolated compounds: 17287, 19184.

T5652 *Salix caprea* (Salicaceae); HUANG HUA ER LIU; Goat Willow. Isolated compounds: 3308, 17884, 17890.

T5653 *Salix purpurea* (Salicaceae); SHUI YANG MU BAI PI; Bitter Willow Bast. Used part: bast. TCM Indications: Incised wound. Isolated compounds: 11693, 19184, 19191.

T5654 *Salix purpurea* (Salicaceae); SHUI YANG ZHI YE; Bitter Willow Branch-leaf. Used part: branchlet-leaf. TCM Effects: To clear heat and resolve toxin. TCM Indications: Chronic dysentery, swelling toxin of sore and welling abscess. Isolated compounds: 3454, 7285, 19184.

T5655 *Salix* sp. (Salicaceae). Isolated compounds: 3674, 19184, 20434.

T5656 *Salix* spp. (Salicaceae). Isolated compounds: 17720.

T5657 *Salsola collina* (Chenopodiaceae); ZHU MAO CAI; Common Russianthistle. Used part: whole herb. TCM Effects: To lower blood pressure, calm liver and subdue yang, moisten intestines and free stool. TCM Indications: Hypertension, headache, dizziness, insomnia,



- intestinal dry and constipation. Isolated compounds: 7777, 19195, 19196, 19197.
- T5658 *Salsola micranthera* (Chenopodiaceae). Isolated compounds: 20529.
- T5659 *Salvia aegyptiaca* (Lamiaceae); AI JI SHU WEI CAO; Egyptian Sage\*. Isolated compounds: 6968, 14262, 14263.
- T5660 *Salvia blepharophylla* (Lamiaceae); JIE MAO YE SHU WEI CAO; Eyelid-leaf Sage\*. Isolated compounds: 2501, 2502.
- T5661 *Salvia bowleyana* (Lamiaceae); NAN DAN SHEN; *Bowley Sage*. Used part: root. TCM Effects: To quicken blood and transform stasis, regulate menstruation and relieve pain. TCM Indications: Chest impediment and angina, vexation, heart palpitation, pain in stomach duct and abdomen, menstrual disorder [=menoxenia], menstrual pain, menstrual block, postpartum stasis stagnation abdominal pain, flooding and spotting, liver spleen enlargement, arthralgia, mounting *qi* (hernia), swelling of sores. Isolated compounds: 4292, 5722, 5763, 14391, 14736, 17968, 18012, 20685, 20686, 20687.
- T5662 *Salvia bracteata* (Lamiaceae); BAO PIAN SHU WEI CAO. Isolated compounds: 2584, 19208.
- T5663 *Salvia bucharica* (Lamiaceae). Isolated compounds: 2695, 2696.
- T5664 *Salvia bulleyana* (Lamiaceae); JI YE SHU WEI CAO; Hastateleaf Sage. Isolated compounds: 4292, 5722, 5763, 14391, 14736, 17968, 18012, 20685, 20686, 20687.
- T5665 *Salvia canariensis* (Lamiaceae); JIA NA LI SHU WEI CAO; Canari Sage\*. Isolated compounds: 19209.
- T5666 *Salvia candelabrum* (Lamiaceae); ZHU TAI SHU WEI CAO. Isolated compounds: 3064, 3065, 3066, 3067, 3068, 3069, 14210, 20465.
- T5667 *Salvia castanea* (Lamiaceae); LI SE SHU WEI CAO; Chestnut Sage. Isolated compounds: 4292, 5722, 5763, 14391, 14736, 17968, 18012, 20685, 20686, 20687.
- T5668 *Salvia cilicica* (Lamiaceae); TU ER QI SHU WEI CAO; Turkish Sage\*. Isolated compounds: 3, 10429.
- T5669 *Salvia cinnabarina* (Lamiaceae); ZHU HONG SHU WEI CAO. Isolated compounds: 19620.
- T5670 *Salvia dichroantha* (Lamiaceae); ER SE HUA SHU WEI CAO; Twocolor-flower Sage\*. Isolated compounds: 5432, 5433, 5434.
- T5671 *Salvia digitaloides* (Lamiaceae); MAO DI HUANG SHU WEI CAO; Foxglove-like Sage. Used part: root. TCM Effects: To quicken blood and dispel stasis, disinhibit damp and resolve toxin. TCM Indications: Chest impediment and angina, menstrual disorder, menstrual pain, vaginal protrusion (prolapse of uterus), flooding and spotting, red and white vaginal discharge, malign sore and swelling toxin. Isolated compounds: 4292, 5722, 5763, 14391, 14736, 17968, 18012, 20685, 20686, 20687.
- T5672 *Salvia flava* (Lamiaceae); HUANG HUA SHU WEI CAO; Yellowflower Sage. Used part: root. TCM Effects: To quicken blood and regulate menstruation, transform stasis and relieve pain. TCM Indications: Menstrual disorder, menstrual pain, menstrual block, flooding and spotting, blood ejection, wind-damp bone pain, mammary welling abscess, swelling of sores. Isolated compounds: 4292, 5722, 5763, 14391, 14736, 17968, 18012, 20685, 20686, 20687.
- T5673 *Salvia glutinosa* (Lamiaceae); JIAO ZHI SHU WEI CAO; Sticky Clary. Used part: root. TCM Effects: To promote contraction and stanch bleeding. TCM Indications: Blood ejection, hemoptysis, hematochezia. Isolated compounds: 5165, 5654, 8289, 11730, 16356.
- T5674 *Salvia greggii* (Lamiaceae); GE SHI SHU WEI CAO; Gregg Sage\*. Isolated compounds: 19212, 19213, 19214, 19215, 19216.
- T5675 *Salvia hydrangea* (Lamiaceae); XIU QIU SHU WEI CAO. Isolated compounds: 277, 4965, 5603, 6374, 16050.
- T5676 *Salvia karabachensis* (Lamiaceae); KA LA BA DAN SHEN; Karaba Sage\*. Isolated compounds: 20685.
- T5677 *Salvia lineata* (Lamiaceae); TIAO WEN SHU WEI CAO. Isolated compounds: 12879.
- T5678 *Salvia mellifera* (Lamiaceae); JU MI SHU WEI CAO; Melliferous Sage\*. Isolated compounds: 17486.
- T5679 *Salvia microstegia* (Lamiaceae); XIAO GAI SHU WEI CAO; Microcap Sage\*. Isolated compounds: 17486.
- T5680 *Salvia miltiorrhiza* (Lamiaceae); DAN SHEN; Danshen. Equivalent plant: *Salvia przewalskii*, *Salvia miltiorrhiza* f. *alba*. Used part: root. TCM Effects: To quicken blood and dispel stasis, regulate menstruation and relieve pain, nourish blood and quiet spirit, cool blood and disperse welling abscess. TCM Indications: Angina pectoris, cerebral atherosclerosis, diffusive intravascular clotting, thrombophlebitis, hepatitis, acute surgical infection, mastitis, erysipelas, otitis media, tonsillitis, bone marrow infection, menstrual disorder, dysmenorrhea, amenorrhea, postpartum stasis stagnation abdominal pain, pain in heart and abdomen, concretion conglomeration accumulation and gathering, heat impediment swelling and pain, knocks and falls, heat entering construction-blood, vexation and agitation, insomnia and vexation, swelling toxin of welling abscess and sore, zoster, neurodermatitis, psoriasis. Isolated compounds: 2106, 2887, 4292, 4627, 4628, 4629, 4630, 4631, 4632, 4633, 4634, 4635, 4680, 4950, 4974, 5653, 5722, 5723, 5763, 6877, 7764, 9455, 10492, 10736, 10737, 11354, 11629, 11729, 11731, 12204, 12420, 12924, 12926, 13370, 14391, 14736, 14862, 14863, 14864, 14865, 14927, 15374, 15375, 15801, 16072, 16073, 17968, 18012, 18925, 19201, 19202, 19203, 19204, 19205, 19207, 19217, 19218, 19219, 19983, 20679, 20680, 20681, 20682, 20683, 20684, 20685, 20686, 20687, 20688, 21383, 22270.
- T5681 *Salvia miltiorrhiza* f. *alba* (Lamiaceae); BAI HUA DAN SHEN; Whiteflower Danshen. Used part: root. TCM Effects: See *Salvia miltiorrhiza*. TCM Indications: See *Salvia miltiorrhiza*. Isolated compounds: 20678, 21080.
- T5682 *Salvia officinalis* (Lamiaceae); YAO YONG DAN SHEN; Medicinal Sage. Isolated compounds: 3743, 12420, 13709, 14580, 19123.
- T5683 *Salvia officinalis* (Lamiaceae); YAO YONG DAN SHEN YE; Medicinal Sage Leaf. Isolated compounds: 1476, 3745, 8090, 9564, 9793, 9794, 9795, 14085, 21202.
- T5684 *Salvia pisidica* (Lamiaceae); DU YU SHU WEI CAO; *Salvia pisidica*. Isolated compounds: 17486.
- T5685 *Salvia plebeia* (Lamiaceae); LI ZHI CAO; Common Sage. Used part: aerial parts. TCM Effects: To clear heat and resolve toxin, cool blood and dissipate stasis, disinhibit water and disperse edema. TCM Indications: Common cold with fever, swelling pain in throat, lung heat cough, hemoptysis, blood ejection, hematuria, flooding and spotting, bleeding from hemorrhoids, nephritis with edema, white turbidity, dysentery, swelling toxin of welling abscess and sore,

- eczema titillation, knocks and falls, snake or insect bites. Isolated compounds: 5763, 7557, 7556, 9564, 9617.
- T5686 *Salvia polystachya* (Lamiaceae); DUO SUI SHU WEI CAO. Isolated compounds: 4937, 12879, 17682, 17683, 17684, 17685, 17686, 17687, 19210.
- T5687 *Salvia prionitis* (Lamiaceae); HONG GEN CAO; Hispid Sage. Used part: whole herb with root. TCM Effects: To course wind and clear heat, disinhibit damp, stanch bleeding, quiet fetus. TCM Indications: Common cold with fever, pneumonia with cough and asthma, swelling pain in throat, hepatitis with rib-side pain, diarrhea, dysentery, nephritis, blood ejection, fetal spotting (precipitation of blood in pregnancy). Isolated compounds: 4292, 4950, 5722, 5763, 9629, 10691, 12202, 14391, 14736, 17968, 18012, 19349, 19350, 19614, 20685, 20686, 20687.
- T5688 *Salvia przewalskii* (Lamiaceae); GAN XI SHU WEI CAO; Przewalsk Sage. Used part: root. TCM Effects: See *Salvia miltiorrhiza*. TCM Indications: See *Salvia miltiorrhiza*. Isolated compounds: 2147, 2223, 3206, 4292, 4629, 5722, 5723, 5763, 6016, 6877, 7764, 10957, 14391, 14736, 15453, 17487, 17490, 17968, 18008, 18009, 18010, 18012, 18921, 19209, 20465, 20685, 20686, 20687.
- T5689 *Salvia przewalskii* var. *mandarinorum* (Lamiaceae); ZI DAN SHEN; Manchurian Sage\*. Isolated compounds: 4292, 5722, 14391, 14736, 17968, 18011, 18012, 18013, 20685, 20686, 20687.
- T5690 *Salvia roborowskii* (Lamiaceae); NIAN MAO SHU WEI CAO; Roborowsk Sage. Used part: whole herb. TCM Effects: To clear liver, brighten eyes, relieve pain. TCM Indications: Red eyes with gall, eye screen, hepatitis, toothache. Isolated compounds: 199, 21514, 21518, 21519.
- T5691 *Salvia sclarea* (Lamiaceae); NAN OU DAN SHEN; Clary. Isolated compounds: 20686.
- T5692 *Salvia sinica* (Lamiaceae); NI DAN SHEN; Chinese Sage. Isolated compounds: 4292, 5722, 5763, 14391, 14736, 17968, 18012, 20685, 20686, 20687.
- T5693 *Salvia splendens* (Lamiaceae); XI YANG HONG; Scarlet Sage. Isolated compounds: 14914.
- T5694 *Salvia* spp. (Lamiaceae); *Salvia* spp. Isolated compounds: 10792.
- T5695 *Salvia staminea* (Lamiaceae); XIONG RUI ZHUANG SHU WEI CAO; Staminate Sage\*. Isolated compounds: 266, 1476, 1492, 3243, 4281, 7764, 10024, 13137, 13511, 14846, 16415, 19220, 19981, 19983, 19987, 20137, 20809.
- T5696 *Salvia tomentosa* (Lamiaceae); RONG MAO DAN SHEN; Tomentose Sage\*. Isolated compounds: 3741, 6452.
- T5697 *Salvia trijuga* (Lamiaceae); SAN YE SHU WEI CAO; Threelaf Sage. Used part: root. TCM Effects: To quicken blood and regulate menstruation, dispel stasis and engender flesh, boost kidney and quiet spirit. TCM Indications: Menstrual disorder, dysmenorrhea, menstrual block, flooding, kidney vacuity lumbago, impotence, insomnia, frequent dreaming, knocks and falls. Isolated compounds: 3916, 4088, 4292, 5722, 5763, 7657, 7764, 9620, 14391, 14736, 17968, 18012, 20465, 20685, 20686, 20687.
- T5698 *Salvia uliginosa* (Lamiaceae). Isolated compounds: 5017.
- T5699 *Salvia wagneriana* (Lamiaceae); Wiedemann Sage\*. Isolated compounds: 5469, 9231, 17575, 17576, 17577.
- T5700 *Salvia wiedemannii* (Lamiaceae); WEI SHI SHU WEI CAO. Isolated compounds: 17486.
- T5701 *Salvia yunnanensis* (Lamiaceae); YUN NAN SHU WEI CAO; Yunnan Sage. Used part: root. TCM Effects: To quicken blood and dispel stasis, cool blood and stanch bleeding, nourish heart and quiet spirit, resolve toxin and disperse swelling. TCM Indications: Menstrual disorder, dysmenorrhea, menstrual block, persistent flow with abdominal pain, concretion and conglomeration, chest impediment and angina, arthralgia, mounting *qi* (hernia), flooding and spotting, blood ejection, spontaneous external bleeding, hacking of blood, blood vacuity and numbness in limbs, sleepless, amnesia, fright palpitation, fearful throbbing, mammary welling abscess, swelling of sores, stasis swelling from knocks and falls. Isolated compounds: 4292, 5722, 5763, 14391, 14736, 17968, 18012, 20685, 20686, 20687.
- T5702 *Samadera madagascariensis* (Simaroubaceae); MA DAO HUANG LIAN SHU; Fatraina (in Madagascar). Isolated compounds: 3355, 3571, 5705, 5706, 19221, 19222.
- T5703 *Samanea saman* (Fabaceae); YU SHU; Raintree. Isolated compounds: 15708.
- T5704 *Sambucus nigra* (Caprifoliaceae); XI YANG JIE GU MU; Black Elder. Used part: stem-branch. TCM Effects: See *Sambucus williamsii*. TCM Indications: See *Sambucus williamsii*. Isolated compounds: 412, 2288, 5639, 5640, 5641, 7821, 8675, 8676, 9590, 9840, 10953, 13640, 17409, 18000, 19226, 23000.
- T5705 *Sambucus sieboldiana* (Caprifoliaceae); LAN SHAI PIAO; Siebold Elder. Isolated compounds: 85, 5583, 5634, 5635, 13589, 13590, 16090, 16587.
- T5706 *Sambucus* sp. (Caprifoliaceae). Isolated compounds: 4451.
- T5707 *Sambucus williamsii* (Caprifoliaceae); JIE GU MU; Elder\*. Equivalent plant: *Sambucus nigra*. Used part: stem-branch. TCM Effects: To dispel wind and disinhibit damp, quicken blood, stanch bleeding. TCM Indications: Wind-damp impediment pain, pain wind, osteoarthritis, acute nephritis, chronic nephritis, wind papules, knocks and falls, swelling pain from fracture, bleeding due to external injury. Isolated compounds: 2331.
- Sandoricum indicum* = *Sandoricum koetjape*
- T5708 *Sandoricum koetjape* [Syn. *Sandoricum indicum*] (Meliaceae); YIN DU SHAN DAO LIAN YE; Indian Katon. Isolated compounds: 19240, 19241, 19242, 19243, 19244.
- T5709 *Sanguinaria canadensis* (Rosaceae); MEI ZHOU XUE GEN CAO; Bloodroot. Isolated compounds: 19284.
- T5710 *Sanguinaria* spp. (Rosaceae). Isolated compounds: 3498.
- T5711 *Sanguisorba minor* (Rosaceae); XIAO DI YU; Small Burnet\*. Isolated compounds: 3178, 6249.
- T5712 *Sanguisorba officinalis* (Rosaceae); DI YU; Garden Burnet. Used part: root. TCM Effects: To cool blood and stanch bleeding, clear heat and resolve toxin, disperse swelling and close sores. TCM Indications: Blood ejection, hemoptysis, duodenal ulcer, spontaneous external bleeding, hematuria, hematochezia, bleeding from hemorrhoids, blood dysentery, flooding and spotting, red and white vaginal discharge, swelling pain of welling abscess and sore, eczema, pudendal itch, burns and scalds, snake or insect bites. Isolated compounds: 1579, 1580, 1581, 1582, 1583, 1584, 1585, 1586, 1587, 1588, 1589, 1590,

- 1591, 3594, 4451, 6055, 6176, 7657, 8095, 10887, 14293, 14294, 14295, 14746, 14772, 14773, 16358, 17696, 17698, 18916, 19273, 19274, 19275, 19276, 19277, 19278, 19279, 19280, 19281, 19282, 19283, 19285, 19286, 19287, 19288, 20433, 21170, 21861, 21864, 21955, 23008, 23009.
- T5713 *Sanicula* sp. (Apiaceae). Isolated compounds: 12420.
- T5714 *Sansevieria trifasciata* (Liliaceae); HU WEI LAN; Snake Sansevieria. Used part: leaf. TCM Effects: To clear heat and resolve toxin, quicken blood and disperse swelling. TCM Indications: Common cold, lung heat cough, toxin swelling of sores, knocks and falls, poisonous snake bite, scalds. Isolated compounds: 1.
- T5715 *Santalum album* (Santalaceae); TAN XIANG; Sandalwood. Used part: heartwood. TCM Effects: To rectify *qi* and harmonize stomach. TCM Indications: Pain in chest and abdomen, cold stomachache, vomiting of water due to congealing cold *qi* stagnation, coronary heart disease with pattern of *qi* stagnation and blood stasis. Isolated compounds: 2307, 4208, 5115, 5501, 5636, 7008, 7730, 8780, 9621, 10659, 10661, 12207, 15630, 15810, 19300, 19301, 19302, 19303, 19304, 19305, 19306, 19307, 19309, 19310, 19311, 20971, 20972, 20973.
- T5716 *Santolina oblongifolia*. Isolated compounds: 149.
- T5717 *Sapindus delavayi* [Syn. *Pancovia delavayi*] (Sapindaceae); PI SHAO ZI; Chuandian Soapberry Seed. Used part: fruit or seed. TCM Effects: To move *qi* and disperse accumulation, resolve toxin and kill worms. TCM Indications: Mounting *qi* (hernia), child *gan* accumulation, nipple moth, mumps, scab and *lai*, yellow-water sore, ascariasis. Isolated compounds: 18237, 18238, 18239.
- T5718 *Sapindus emarginatus* (Sapindaceae); AO TOU WU HUAN ZI; Emarginate Soapberry Seed. Isolated compounds: 411, 9261, 16051.
- T5719 *Sapindus mukorossi* (Sapindaceae); WU HUAN ZI; Chinese Soapberry Seed. Used part: seed. TCM Effects: To clear heat, dispel phlegm, disperse accumulation, kill worms. TCM Indications: Throat impediment sore with gall, lung heat cough, aphonia, food stagnation, *gan* accumulation, roundworm reversal with abdominal pain, trichomoniasis, skin lichen, toxin swelling. Isolated compounds: 15029, 15030, 15031, 15032, 15033, 15034, 15035, 15036, 15037.
- T5720 *Sapindus mukorossi* (Sapindaceae); WU HUAN ZI PI; Chinese Soapberry Peel. Used part: pericarp. TCM Effects: To clear heat and resolve phlegm, relieve pain, disperse accumulation. TCM Indications: Throat impediment sore with gall, stomachache, mounting *qi*, wind-damp pain, worm accumulation, food stagnation, innominate toxin swelling. Isolated compounds: 15029, 15030, 15031, 15032, 15033, 15034, 15035, 15036, 15037, 19316, 19317, 19318, 19319, 19320.
- T5721 *Sapindus mukorossi* (Sapindaceae); WU HUAN ZI YE; Chinese Soapberry Leaf. Used part: branchlet-leaf. TCM Effects: To resolve toxin, suppress cough. TCM Indications: Snake bite, pertussis. Isolated compounds: 1476, 19316, 19317.
- T5722 *Sapium japonicum* (Euphorbiaceae); BAI MU WU JIU; Japanese Sapium. Used part: root cortex and leaf. TCM Effects: To dissipate stasis blood, strengthen lumbus and knees. TCM Indications: Taxation damage, aching in lumbus and knees. Isolated compounds: 4055.
- T5723 *Sapium sebiferum* (Euphorbiaceae); WU JIU MU GEN PI; Chinese Tallowtree Bark. Used part: root cortex. TCM Effects: To drain precipitation and expel water, dissipate binds and disperse swelling, resolve snake toxin, lower blood pressure. TCM Indications: Edema, ascites, urinary and fecal stoppage, hypertension, concretion conglomeration accumulation and gathering, painful swelling from clove sore, eczema, scab and lichen, poisonous snake bite. Isolated compounds: 4055, 6224, 8095, 19597, 22778.
- T5724 *Sapium sebiferum* (Euphorbiaceae); WU JIU YE; Chinese Tallowtree Leaf. Used part: leaf. TCM Effects: To drain precipitation and expel water, dissipate stasis and disperse swelling, resolve toxin and kill worms. TCM Indications: Swollen welling abscess and clove sores, sore and scab, foot lichen, eczema, snake bite, vaginitis. Isolated compounds: 8095.
- T5725 *Sapium* spp. (Euphorbiaceae). Isolated compounds: 17181.  
*Sapium sylvatica* = *Stillingia sylvatica*
- T5726 *Saponaria officinalis* (Caryophyllaceae); FEI ZAO CAO; Soapwort. Used part: root. TCM Effects: To dispel wind and eliminate damp, dispel phlegm, disinhibit urine, kill worms. TCM Indications: Cough, skin diseases. Isolated compounds: 19331.
- T5727 *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*] (Apiaceae); FANG FENG; Divaricate Saposhnikovia. Used part: root. TCM Effects: To dispel wind and resolve exterior, overcome damp and relieve pain, resolve spasm, relieve itch. TCM Indications: Migraine, headache and generalized pain, common cold, rheumatoid arthritis, externally contracted wind-cold, wind-damp impediment pain, aching pain in joints, abdominal pain and diarrhea, intestinal wind bleeding, tetanus, wind papule itching, sores. Isolated compounds: 407, 2309, 2412, 3652, 4367, 4680, 5039, 6529, 7514, 7707, 8684, 9205, 9375, 9377, 9512, 9514, 9976, 11001, 12601, 12800, 14176, 14812, 15252, 15973, 15977, 15984, 16876, 16885, 17077, 17376, 17856, 18086, 19983, 20446.
- T5728 *Saprolegnia ferax*. Isolated compounds: 19976.
- T5729 *Saprosma scortechinii* (Rubiaceae); MA LAI BAN DAO RAN MU SHU; Malaya Dieingtree\*. Isolated compounds: 5785, 5915, 6869, 13914, 13952, 13953, 19351, 19352, 21746, 21782.
- T5730 *Sarcandra glabra* [Syn. *Chloranthus glaber*] (Chloranthaceae); JIU JIE CHA; Glabrous Sarcandra. Used part: leaf and branchlet. TCM Effects: To dispel wind and eliminate damp, quicken blood and dissipate stasis, clear heat and resolve toxin. TCM Indications: Wind-damp impediment pain, numbness in limbs, knocks and falls, fracture, dysmenorrhea, postpartum blood stasis abdominal pain, pneumonia, acute appendicitis, bacillary dysentery, cholecystitis, abscess, stomatitis. Isolated compounds: 4143, 7996, 11428, 11792, 20444.
- T5731 *Sarcococca coriacea* [Syn. *Sarcococca wallichii*] (Buxaceae); YUN NAN YE SHAN HUA; Yunnan Sarcococca. Used part: whole herb. TCM Effects: To quicken blood and move *qi*, disperse swelling and relieve pain. TCM Indications: Pain in stomach duct, knocks and falls, innominate toxin swelling. Isolated compounds: 7177, 7198, 8009, 14449.
- T5732 *Sarcococca saligna* (Buxaceae); YE SHAN HUA; Willowleaf Sarcococca. Isolated compounds: 904, 19354, 19355, 19356.
- T5733 *Sarcococca vagans* (Buxaceae); HAI NAN YE SHAN HUA; Hainan Sarcococca. Used part: root. TCM Effects: To joint bones. TCM

- Indications: Fracture. Isolated compounds: 16501, 19362, 19363, 19364, 19365.  
*Sarcococca wallichii* = *Sarcococca coriacea*
- T5734 *Sarcodon aspratus* (Thelephoraceae); Kotake (in Japanese). Isolated compounds: 10592.
- T5735 *Sarcodon glaucopus* (Thelephoraceae); CANG BAI BING ROU CHI JUN. Isolated compounds: 8521, 8522.
- T5736 *Sarcomelicope glauca*. Isolated compounds: 7830, 9226, 12254, 20002.
- T5737 *Sarcomelicope megistophylla*. Isolated compounds: 569, 776, 8027, 8028, 13651, 13652, 19359, 19618.
- T5738 *Sargassum micracanthum* (Sargassaceae); Brown alga; Gulfweed *Sargassum micracanthum*. Isolated compounds: 17516, 17517, 17518, 17519, 17520.
- T5739 *Sargassum parvivesiculosum* (Sargassaceae); XI NANG MA WEI ZAO; Parvivesiculose Gulfweed\*. Isolated compounds: 5481, 6480, 6481, 9411, 14931.
- T5740 *Sargassum vachellianum* (Sargassaceae); WA SHI MA WEI ZAO; Vachelli Gulfweed\*. Used part: frond. TCM Effects: To disperse phlegm, soften hardness, disinhibit water, abate swelling. TCM Indications: Goiter and carcinomas of neck, scrofula, bulging mounting, leg *qi* puffy swelling. Isolated compounds: 22307.
- T5741 *Sargentodoxa cuneata* (Sargentodoxaceae); DA XUE TENG; Sargentgloryvine. Used part: stem. TCM Effects: To clear heat and resolve toxin, quicken blood, dispel wind. TCM Indications: Intestinal welling abscess and abdominal pain, amenorrhea, dysmenorrhea, wind-damp impediment pain, painful swelling from knocks and falls. Isolated compounds: 3551, 4362, 4363, 4364, 4365, 4366, 13834, 16254, 19366, 22333.
- T5742 *Sarracenia flava* (Sarraceniaceae); HUANG PING ZI CAO; Yellow Pitcherplant. Isolated compounds: 3988, 19387.
- T5743 *Sarracenia* sp. (Sarraceniaceae). Isolated compounds: 9568.
- T5744 *Sassafras albidum* (Lauraceae); MEI ZHOU CHA MU; Sassafras. Isolated compounds: 2538, 19121.
- T5745 *Sassafras randainense* (Lauraceae); TAI WAN CHA MU; Taiwan Sassafras. Isolated compounds: 7521, 13388, 18533.
- T5746 *Sassafras tzumu* (Lauraceae); CHA SHU; Common Sassafras. Used part: root, stem-leaf. TCM Effects: To dispel wind and eliminate damp, quicken blood and dissipate stasis, stanch bleeding. TCM Indications: Wind-damp impediment pain, knocks and falls, taxation damage in lumbar muscle, hemiplegia, bleeding due to external injury. Isolated compounds: 7521.
- T5747 *Sauromatum guttatum* (Araceae); KU BAO; Monarch-of-the-East. Isolated compounds: 11025, 19187.
- T5748 *Sauropus androgynus* (Euphorbiaceae); TONG XU SHOU GONG MU; Geckowood. Isolated compounds: 11478, 19418.
- T5749 *Saururus cernuus* (Saururaceae); MEI ZHOU SAN BAI CAO; Lizard's-tail. Isolated compounds: 4920, 5624, 19404, 19415, 19416, 19417, 22383.
- T5750 *Saururus chinensis* (Saururaceae); SAN BAI CAO; Chinese Lizardtail. Used part: rhizome or whole plant. TCM Effects: To clear heat and disinhibit urine, resolve toxin and disperse swelling. TCM Indications: Edema, beriberi, jaundice, strangury-turbidity, vaginal discharge, swollen welling abscess, clove sore. Isolated compounds: 1692, 1695, 2039, 6410, 10887, 11642, 13292, 13474, 13475, 13992, 18411, 19398, 19399, 19400, 19401, 19402, 19403, 19404, 19405, 19406, 19407, 19417, 19419.
- T5751 *Saururus* sp. (Saururaceae). Isolated compounds: 13474, 13475, 19397, 19405, 19406.
- T5752 *Saussurea amarafisch* (Asteraceae). Isolated compounds: 19087, 20569.  
*Saussurea carthamoides* = *Hemistepta lyrata*
- T5753 *Saussurea gnaphaloides* (Asteraceae); SHU QU FENG MAO JU; Cudweed-like Saussurea. Used part: whole herb with root. TCM Effects: See *Saussurea laniceps*. TCM Indications: See *Saussurea laniceps*. Isolated compounds: 19087, 20569.
- T5754 *Saussurea graminea* (Asteraceae); HE YE FENG MAO JU; Grassleaf Saussurea. Used part: whole herb. TCM Effects: To clear heat and disinhibit damp, cool blood and stanch bleeding. TCM Indications: Common cold with fever, damp-heat jaundice, vomiting, diarrhea, blood ejection, bloody stool. Isolated compounds: 19087, 20569.  
*Saussurea hieracioides* = *Saussurea superba*
- T5755 *Saussurea involucrata* (Asteraceae); XUE LIAN; Snow Lotus. Used part: whole herb with flower. TCM Effects: To warm kidney and invigorate *yang*, dispel wind and overcome damp, quicken blood and free menstruation. TCM Indications: Impotence, weakness in lumbus and knees, wind-damp impediment pain, menstrual disorder, amenorrhea, uterus cold and abdominal pain, cold rheum cough. Isolated compounds: 1621, 9385, 9500, 19087, 20569, 22809.
- T5756 *Saussurea japonica* (Asteraceae); FENG MAO JU; Wildhairdaisy. Used part: whole herb. TCM Effects: To dispel wind and eliminate damp, dissipate stasis and relieve pain. TCM Indications: Wind-damp impediment pain, knocks and falls. Isolated compounds: 12522, 12523.
- T5757 *Saussurea laniceps* (Asteraceae); MIAN TOU XUE LIAN; Lanatchead Saussurea. Equivalent plant: *Saussurea medusa*, *Saussurea gnaphaloides*. Used part: whole herb with root. TCM Effects: To warm kidney and invigorate *yang*, regulate menstruation and stanch bleeding. TCM Indications: Impotence, limp aching lumbus and knees, vaginal discharge, menstrual disorder, wind-damp impediment, bleeding due to external injury. Isolated compounds: no.
- T5758 *Saussurea lappa* [Syn. *Aucklandia lappa*] (Asteraceae); MU XIANG; Common Aucklandia (Costustoot). Used part: root. TCM Effects: To move *qi* and relieve pain, fortify spleen and disperse food. TCM Indications: Distending pain in chest and stomach duct, diarrhea and tenesmus, non-digestion of food accumulation, no thought of food and drink. Isolated compounds: 834, 1048, 1122, 1123, 1525, 1617, 1795, 2331, 3045, 3354, 3774, 3908, 4126, 4127, 4128, 4485, 4486, 4550, 4565, 4891, 5570, 5607, 5701, 5795, 6741, 6746, 7044, 8338, 8339, 8341, 8342, 8817, 9486, 9669, 10483, 11122, 11123, 11203, 11371, 11627, 12511, 12512, 12849, 12873, 12891, 13899, 15146, 17055, 18673, 19308, 19420, 19421, 19422, 19423, 19424, 19427, 19687, 19983, 20369, 20469, 20470, 20569, 20704, 22962.
- T5759 *Saussurea medusa* (Asteraceae); SHUI MU XUE LIAN; Medusa Saussurea. Used part: whole herb with root. TCM Effects: See *Saussurea laniceps*. TCM Indications: See *Saussurea laniceps*.

- Isolated compounds: 85, 1476, 1491, 1492, 1499, 1621, 1623, 2920, 2921, 3609, 3610, 3674, 11642, 12987, 13137, 13145, 13149, 14224, 17409, 17415, 18317, 19425, 19426, 19618, 20556.
- T5760 *Saussurea mongolica* (Asteraceae); MENG GU FENG MAO JU; Mongolian Saussurea\*. Isolated compounds: 1847, 13983.
- T5761 *Saussurea neopulchella* (Asteraceae); XIN MEI FENG MAO JU; New Beauty Saussurea\*. Isolated compounds: 19414.
- T5762 *Saussurea nigrescens* (Asteraceae); DUN BAO XUE LIAN; Blacken Saussurea. Used part: whole herb. TCM Effects: To quicken blood and regulate menstruation, clear heat and brighten eyes. TCM Indications: Menstrual disorder, steaming bone taxation fever, liver heat and red eyes. Isolated compounds: 19087, 20569.
- T5763 *Saussurea parviflora* (Asteraceae); XIAO HUA FENG MAO JU; Smallflower Saussurea\*. Isolated compounds: 19087, 20569.
- T5764 *Saussurea petrovii* (Asteraceae). Isolated compounds: 7205, 20697, 20699, 20700, 20701, 20702.
- T5765 *Saussurea phaeantha* (Asteraceae); HE HUA XUE LIAN; Brownflower Saussurea. Isolated compounds: 20569.
- T5766 *Saussurea prostrata* (Asteraceae). Isolated compounds: 19087, 20569.
- T5767 *Saussurea pulchella* (Asteraceae); MEI HUA FENG MAO JU; Beautiful-flowered Saussurea. Used part: whole herb. TCM Effects: To dispel wind, clear heat, eliminate damp, relieve pain. TCM Indications: Common cold with fever, rheumatic arthritis, damp-heat diarrhea. Isolated compounds: 19087, 19414, 20569.
- T5768 *Saussurea salsa* (Asteraceae); YAN DI FENG MAO JU; Saline Saussurea. Isolated compounds: 4795.
- T5769 *Saussurea soroseris* (Asteraceae). Isolated compounds: 19087, 20569.
- T5770 *Saussurea superba* [Syn. *Saussurea hieracioides*] (Asteraceae); CHANG MAO FENG MAO JU; Hawkweed-like Saussurea. Used part: whole herb. TCM Effects: To drain water retention. TCM Indications: Edema, ascites (hydroperitoneum), effusion in thorax. Isolated compounds: 20569.
- T5771 *Saussurea tridactyla* var. *maidugonla* (Asteraceae); CONG ZHU XUE LIAN. Isolated compounds: 20003.
- T5772 *Saxidomus giganteus* (Veneridae); BAI TA GE. Isolated compounds: 19431.
- T5773 *Saxifraga stolonifera* (Saxifragaceae); HU ER CAO; Creeping Rockfoil. Used part: whole herb. TCM Effects: To dispel wind and clear heat, cool blood and resolve toxin. TCM Indications: Wind papules, eczema, otitis media, erysipelas, cough with blood ejection, pulmonary welling abscess, flooding and spotting, hemorrhoids. Isolated compounds: 1618, 2312, 15719, 17895, 18369.
- T5774 *Scabiosa caucasica* (Dipsacaceae); GAO JIA SUO LAN PEN HUA; Caucasian Scabious\*. Isolated compounds: 6454.
- T5775 *Scabiosa comosa* (Dipsacaceae); MENG GU SHAN LUO BO; Narrowleaf Scabious. Used part: flower. TCM Effects: To clear heat and drain fire. TCM Indications: Lung heat cough asthma, liver fire headache, red eyes, damp-heat jaundice. Isolated compounds: 1121, 6452, 8827, 15363.
- T5776 *Scabiosa soongorica* (Dipsacaceae); ZHUN GE ER LAN PEN HUA. Isolated compounds: 22839.
- T5777 *Scabiosa* spp. (Dipsacaceae). Isolated compounds: 3551.
- T5778 *Scabiosa tschiliensis* (Dipsacaceae); HUA BEI LAN PEN HUA; Huapei Scabious. Isolated compounds: 9632, 9633, 16701, 19433, 19434, 19435, 19436, 19437, 19438, 19439, 19440, 19441, 19442.
- T5779 *Scapania undulata* (Scapaniaceae); BO BAN HE YE TAI. Isolated compounds: 6740, 6744, 9332, 11509, 16911, 16976.
- T5780 *Scaphopetalum thonneri* (Sterculiaceae). Isolated compounds: 19456, 19457.
- T5781 *Schefflera arboricola* (Araliaceae); E ZHANG TENG; Scandent Schefflera. Used part: root or stem-leaf. TCM Effects: To dispel wind and relieve pain, quicken blood and disperse swelling. TCM Indications: Wind-damp impediment pain, headache, toothache, pain in stomach duct and abdomen, dysmenorrhea, postpartum abdominal pain, painful swelling from knocks and falls, fracture, swelling of sores. Isolated compounds: 1503, 1515, 17729, 18419, 18687, 18688, 18704, 18705, 18721, 18726.
- T5782 *Schefflera faguetti* (Araliaceae). Isolated compounds: 8662, 8717, 8718, 8749, 18690, 18692.
- T5783 *Schefflera rotundifolia* (Araliaceae); YUAN YE E ZHANG CHAI; Roundleaf Schefflera\*. Isolated compounds: 1575, 2276, 2287, 2290, 8715, 8716, 10953, 18689, 18691, 18693, 18733, 22838.
- T5784 *Schefflera* spp. (Araliaceae). Isolated compounds: 12642.
- T5785 *Schefflera venulosa* (Araliaceae); MI MAI E ZHANG CHAI; Densevein Schefflera. Used part: stem cortex. TCM Effects: To dispel wind and relieve pain, quicken blood and disperse swelling. TCM Indications: Wind-damp impediment pain, pain in stomach duct, wound swelling from knocks and falls, fracture, bleeding due to external injury. Isolated compounds: 3615, 6204, 19458.
- T5786 *Schinopsis* sp. (Anacardiaceae). Isolated compounds: 5613.
- T5787 *Schinopsis* spp. (Anacardiaceae). Isolated compounds: 3492.
- T5788 *Schinus molle* (Schisandraceae); ROU MAO XIAO RU XIANG; Hairy Peppertree\*. Isolated compounds: 3462, 6938, 11530.
- T5789 *Schinus terebinthifolius* (Schisandraceae); XIAO RU XIANG; Brazilian Peppertree. Isolated compounds: 2380, 3188, 19101.
- T5790 *Schisandra arisanensis* (Schisandraceae); A LI SHAN WU WEI ZI; Taiwan Magnoliavine. Isolated compounds: 8907, 8912, 8917, 19465.
- T5791 *Schisandra chinensis* (Schisandraceae); WU WEI ZI; Chinese Magnoliavine. Equivalent plant: *Schisandra sphenanthera*. Used part: fruit. TCM Effects: To promote contraction and secure astriction, boost *qi* and engender liquid, quiet heart and spirit. TCM Indications: Enduring cough and vacuity asthma, dream emission, frequent urination and enuresis, incessant chronic diarrhea, spontaneous sweating and night sweating, fluid damage and thirst, palpitation and insomnia. Isolated compounds: 336, 1206, 1207, 1208, 1209, 1212, 2240, 2241, 2242, 2245, 2411, 2412, 2852, 3045, 3242, 3465, 3466, 3760, 3768, 3769, 3848, 4367, 4499, 4550, 5178, 5213, 6373, 6741, 6926, 7392, 8312, 8906, 8907, 8908, 8909, 8910, 8911, 8912, 8913, 8914, 8915, 8916, 8917, 8918, 8919, 8920, 8921, 8922, 8923, 8924, 8925, 8926, 9501, 11510, 11626, 11698, 12843, 12849, 12955, 12969, 14156, 14599, 15146, 15701, 15705, 15741, 15968, 15969, 17096, 17103, 17129, 17376, 17806, 18061, 19044, 19303, 19306, 19473, 19474, 19477, 19478, 19489, 19490, 19491, 19497, 19687, 19786, 20988, 20990, 20992, 20995, 21353, 21377, 21415, 22559, 22560, 22561.
- T5792 *Schisandra grandiflora* (Schisandraceae); DA HUA WU WEI ZI;

- Bigflower Magnoliavine\*. Isolated compounds: 19472.
- T5793 *Schisandra henryi* (Schisandraceae); YI GENG WU WEI ZI; Henry Magnoliavine. Used part: rattan and root. TCM Effects: To dispel wind and eliminate damp, move *qi* and relieve pain, quicken blood and relieve pain. TCM Indications: Wind-damp impediment pain, *qi* pain in heart and stomach, taxation damage and blood ejection, amenorrhea, menstrual disorder, knocks and falls, swelling toxin of incised wound. Isolated compounds: 1466, 8907, 12011, 19475, 19498, 22737, 22738.
- T5794 *Schisandra lancifolia* (Schisandraceae); XIA YE WU WEI ZI; Narrowleaf Magnoliavine\*. Used part: lianoid stem and root. TCM Effects: To quicken blood and dispel stasis, disperse swelling and relieve pain. TCM Indications: Knocks and falls, fracture, wind-damp lumbago. Isolated compounds: 12473, 12474, 12475, 12476.
- T5795 *Schisandra micrantha* (Schisandraceae); XIAO HUA WU WEI ZI; Smallflower Magnoliavine\*. Used part: root. TCM Effects: To dispel wind and disinhibit damp, rectify *qi* and quicken blood. TCM Indications: Wind-damp bone pain, knocks and falls, stomachache, menstrual disorder, nephritis. Isolated compounds: 10312, 12011, 14832, 14833, 14834, 19499.
- T5796 *Schisandra nigra* (Schisandraceae); NEI FENG XIAO; Black Magnoliavine\*. Isolated compounds: 15570, 19476, 19499.
- T5797 *Schisandra propinqua* (Schisandraceae); HAN RUI WU WEI ZI; Angletwig Magnoliavine. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, soothe sinews and quicken blood, disperse swelling and relieve pain. TCM Indications: Influenza, poisonous snake bite, rabid dog bite, rheumatism numbness, knocks and falls, menstrual disorder, swelling toxin of welling abscess and sore. Isolated compounds: 1467, 17928, 17929, 19488.
- T5798 *Schisandra propinqua* var. *intermedia* (Schisandraceae); ZHONG JIAN WU WEI ZI; Intermediate Magnoliavine. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, soothe sinews and quicken blood, disperse swelling and relieve pain. TCM Indications: Influenza, poisonous snake bite, rabid dog bite, rheumatism numbness, knocks and falls, menstrual disorder, swelling toxin of welling abscess and sore. Isolated compounds: 1468, 1518, 1558, 13522, 17848.
- T5799 *Schisandra rubriflora* (Schisandraceae); HONG HUA WU WEI ZI; Redflower Magnoliavine. Used part: rattan. TCM Effects: To dispel wind and eliminate damp, quicken blood and relieve pain. TCM Indications: Rheumatic arthritis. Isolated compounds: 5178, 5213, 8917, 8923, 12003, 19044, 19477, 19478, 19497.
- T5800 *Schisandra* sp. (Schisandraceae). Isolated compounds: 19479, 19480, 19481, 19482.
- T5801 *Schisandra sphaerandra* (Schisandraceae); QIU RUI WU WEI ZI; Ballander Magnoliavine. Isolated compounds: 15570.
- T5802 *Schisandra sphenanthera* (Schisandraceae); HUA ZHONG WU WEI ZI; Orange Magnoliavine. Used part: fruit. TCM Effects: See *Schisandra chinensis*. TCM Indications: See *Schisandra chinensis*. Isolated compounds: 1466, 1467, 5213, 8907, 8908, 8917, 15570, 19473, 19474, 19475, 19487, 19489, 19490, 19497, 19498.
- T5803 *Schistochila glaucescens* (Schistochilaceae); CANG BAI QI SHE TAI. Isolated compounds: 8247, 8248.  
*Schizocapsa plantaginea* = *Tacca plantaginea*
- T5804 *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*] (Lamiaceae); JING JIE; Fineleaf Schizonepeta. Used part: aerial parts. TCM Effects: To dispel wind, resolve exterior, outthrust papules, stanch bleeding. TCM Indications: Common cold with fever, headache, itchy eye, cough, swelling pain in throat, measles papules, wind papules, swollen welling abscess, sore and scab, throat pain, conjunctivitis, child measles, spontaneous external bleeding, blood ejection, hemochezia, flooding and spotting, postpartum blood dizziness. Isolated compounds: 3045, 3242, 3674, 4550, 5868, 6741, 9456, 9458, 9670, 10069, 11639, 12843, 13137, 13776, 14271, 15978, 15979, 15983, 17376, 17377, 17452, 17456, 18190, 18925, 19503, 19504, 19505, 19506, 19507, 19508, 19509, 19510.
- T5805 *Schkuhria pinnata* (Asteraceae); SHI KU JU; Dwarf Marigold. Isolated compounds: 9570, 19511.
- T5806 *Schlumbergera truncata* (Cactaceae); XIE ZHUA LAN; Crab-craw Orchid\*. Used part: aerial parts. TCM Effects: To resolve toxin and disperse swelling. TCM Indications: Toxin swelling of sores, parotitis. Isolated compounds: 15343.
- T5807 *Schnabelia tetradonta* (Lamiaceae); SI CHI SI LENG CAO; Fourteech Schnabelia. Isolated compounds: 313, 1476, 1480, 1560, 2056, 4680, 8745, 8767, 13580, 15133, 19983, 21144.
- T5808 *Schoenocaulon officinale* (Liliaceae); WEI JING BAI HE; *Schoenocaulon officinale*. Isolated compounds: 4337, 14963, 15058, 16471, 16472, 17283, 18647, 19512, 22382.
- T5809 *Scilla dracomontana* (Liliaceae). Isolated compounds: 5986.
- T5810 *Scilla maderensis* [Syn. *Autonoë madeirensis*] (Liliaceae); MA DE LI MIAN ZAO ER; Madrid Squill\*. Isolated compounds: 1041.
- T5811 *Scilla nervosa* (Liliaceae). Isolated compounds: 5839, 6210, 6234, 6256, 9836, 9842, 9843, 9844, 9851, 10385, 10386, 10387, 10410, 13854, 13855, 13856.
- T5812 *Scilla peruviana* (Liliaceae); BI LU MIAN ZAO ER; Peru Squill\*. Isolated compounds: 16997, 16998.
- T5813 *Scilla scilloides* (Liliaceae); MIAN ZAO ER; Common Squill. Used part: bulb or whole herb. TCM Effects: To quicken blood and relieve pain, resolve toxin and disperse swelling. TCM Indications: Mammary welling abscess, knocks and falls, pain in sinews and bones, swelling pain of welling abscess and sore, edema due to heart disease. Isolated compounds: 17951, 19516, 19517, 19524, 19525, 19526.
- T5814 *Scleroderma citrinum* (Sclerodermataceae); HUANG YING PI MA BO; Yellow Hardpeel Puff-ball\*. Isolated compounds: 422, 6298, 6394, 14321, 14670.  
*Scleroderma tinctorium* = *Pisolithus tinctorius*
- T5815 *Scleropyrum wallichianum* (Santalaceae); YING HE; Wallich Scleropyrum. Isolated compounds: 19533, 19983, 19999, 20369, 20377.
- T5816 *Sclerotinia fruticola* (Sclerotiniaceae). Isolated compounds: 19534.
- T5817 *Scolopendra subspinipes mutilans* (Scolopendridae); WU GONG; Centipede. Used part: dried body. TCM Effects: To calm, lower blood pressure, extinguish wind and check tetany, resolve toxin and dissipate binds, free network vessels and relieve pain. TCM Indications: Acute fright wind, chronic fright wind, tetanus, spasm, convulsion, toxin swelling of sores and open sores, scrofula with ulceration, intractable headache with pulling sensation, wind-damp impediment pain, hypertension. Isolated compounds: 3585, 9568, 10190.

- T5818 *Scoparia dulcis* (Scrophulariaceae); YE GAN CAO; Sweet Broomwort. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, disinhibit urine and disperse edema. TCM Indications: Lung heat cough, summerheat-heat diarrhea, beriberi with general edema, child measles, papules, eczema, prickly heat, laryngitis, erysipelas. Isolated compounds: 1477, 1486, 3907, 6621, 7016, 7522, 11405, 19535, 19536, 19537, 19538, 19539, 21734.
- T5819 *Scopolia acutangula* [Syn. *Anisodus acutangulus*] (Solanaceae); SAN FEN SAN; Acutangular Scopolia. Used part: root, leaf or seed. TCM Effects: To anesthetize and settle pain. TCM Indications: Stomachache, fracture, wind-damp pain, knocks and falls. Isolated compounds: 4417.
- T5820 *Scopolia carnolica* (Solanaceae); OU LANG DANG; European Scopolia. Isolated compounds: 10870.
- T5821 *Scopolia japonica* (Solanaceae); DONG LANG DANG; Japanese Scopolia. Used part: rhizome. TCM Effects: To resolve tetany and settle pain, constrain sweat and astringe intestines. TCM Indications: Various pains, mental manic agitation, swelling toxin of sore and welling abscess, anthrax, bleeding due to external injury, body lichen. Isolated compounds: 10870, 15760, 19542, 19545.
- T5822 *Scopolia sinensis* (Solanaceae); TIAN PENG ZI; Chinese Atropanthe. Used part: root. TCM Effects: To dissipate wind-cold, quicken network vessels and relieve pain. TCM Indications: Wind-cold-damp impediment, paralysis, painful wound from knocks and falls, tetanus. Isolated compounds: 2001.
- T5823 *Scopolia* spp. (Solanaceae). Isolated compounds: 10870.  
*Scopolia tangutica* = *Anisodus tanguticus*
- T5824 *Scorzonera hispanica* (Asteraceae); XI JUAN YA CONG; Scorzonera. Isolated compounds: 3981.
- T5825 *Scorzonera humilis* (Asteraceae); AI SHENG YA CONG; Viper's-glass. Isolated compounds: 22160, 22161.
- T5826 *Scrophularia buergeriana* (Scrophulariaceae); BEI XUAN SHEN; Buerger Figwort. Used part: root. TCM Effects: See *Scrophularia ningpoensis*. TCM Indications: See *Scrophularia ningpoensis*. Isolated compounds: 2702, 2709, 2710, 2711, 2712, 2887, 3695, 4135, 7768, 9237, 9238, 13885, 13886, 13888, 13889, 13890, 13891, 14259.
- T5827 *Scrophularia lepidota* (Scrophulariaceae); LIN PIAN XUAN SHEN; Scale Figwort\*. Isolated compounds: 815, 816, 1241, 2004, 3306, 5675, 11148, 14222, 19568, 19960.
- T5828 *Scrophularia ningpoensis* (Scrophulariaceae); XUAN SHEN; Ningpo Figwort. Equivalent plant: *Scrophularia buergeriana*. Used part: root. TCM Effects: To clear heat and cool blood, enrich *yin* and downbear fire, resolve toxin and dissipate binds. TCM Indications: Heat entering construction-blood, generalized fever, vexation and thirst, crimson tongue, macular eruption, steaming bone taxation cough, vacuity vexation and insomnia, fluid damage and constipation, dry eyes with clouded flowery vision, swelling pain in throat, scrofula with phlegm node, sore toxin of welling abscess and flat abscess. Isolated compounds: 410, 415, 1866, 2702, 2703, 2704, 2705, 2706, 2707, 2708, 2713, 3695, 6841, 7776, 8064, 9237, 9238, 9912, 10209, 10381, 14222, 15615, 15616, 15617, 15618, 15619, 15620, 15621, 16402, 19571, 19983.
- T5829 *Scrophularia nodosa* (Scrophulariaceae); LIN SHENG XUAN SHEN; Common Figwort. Isolated compounds: 3695, 6454, 9238.
- T5830 *Scurrula atropurpurea* (Loranthaceae); HEI ZI LI GUO JI SHENG; Black-purple Scurrula\*. TCM Effects: Anticarcinoma. Isolated compounds: 2040, 2892, 3308, 6853, 6864, 6923, 10944, 12891, 12893, 15947, 15955, 15956, 16066, 18411, 19087, 21310.
- T5831 *Scutellaria altissima* (Lamiaceae); GAO HUANG QIN; Tall Skullcap. Isolated compounds: 19587.
- T5832 *Scutellaria amabilis* (Lamiaceae); KE AI HUANG QIN; Delightful Skullcap\*. Isolated compounds: 5831, 5980, 9394, 15970, 21109, 21110, 21111, 21115, 21736, 21778, 21779.
- T5833 *Scutellaria amoena* (Lamiaceae); DIAN HUANG QIN; Yunnan Skullcap. Used part: root. TCM Effects: See *Scutellaria baicalensis*. TCM Indications: See *Scutellaria baicalensis*. Isolated compounds: 2102, 2106, 3600, 15815, 16216, 16846, 16848, 19580, 19581, 19983, 20009, 21108, 21114, 21775, 22718, 22720.
- T5834 *Scutellaria baicalensis* (Lamiaceae); HUANG QIN; Baikal Skullcap. Equivalent plant: *Scutellaria amoena*, *Scutellaria viscidula*, *Scutellaria likiangensis*, *Scutellaria rehderiana*, *Scutellaria hypericifolia*. Used part: root. TCM Effects: To clear heat and dry damp, drain fire and resolve toxin, stanch bleeding, quiet fetus. TCM Indications: Chest oppression with retching, diarrhea, jaundice, lung heat cough, infection of upper respiratory tract, acute tonsillitis, acute pharyngolaryngitis, ardent fever with vexation and thirst, blood heat, blood ejection, spontaneous external bleeding, swelling toxin of welling abscess and sore, stirring fetus in pregnancy. Isolated compounds: 1568, 1569, 2102, 2103, 2106, 3040, 3600, 5546, 5685, 5830, 6150, 6161, 7278, 9486, 10026, 10444, 10829, 11697, 11703, 13847, 13942, 15815, 16216, 16217, 16846, 16848, 17098, 17101, 19587, 19587, 19588, 19983, 20004, 20009, 20369, 20369, 20446, 21094, 21113, 21114, 21126, 21708, 21710, 21712, 21732, 21738, 21769, 21772, 21773, 21775, 21777, 21855, 22534, 22718, 22719, 22720.
- T5835 *Scutellaria barbata* [Syn. *Scutellaria rivularis*] (Lamiaceae); BAN ZHI LIAN; Barbed Skullcap. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, stanch bleeding and dissipate stasis, disinhibit urine and disperse edema. TCM Indications: Heat toxin swollen welling abscess, throat pain, pulmonary welling abscess, intestinal welling abscess, scrofula, poisonous snake bite, knocks and falls, blood ejection, spontaneous external bleeding, blood strangury, edema, ascites, carcinoma. Isolated compounds: 3223, 9831, 10028, 10829, 18853, 19582, 19587, 22718.
- T5836 *Scutellaria discolor* (Lamiaceae); ZI BEI HUANG QIN; Discolored Skullcap\*. Used part: whole herb. TCM Effects: To resolve exterior and abate fever, relieve cough, clear heat and resolve toxin. TCM Indications: Common cold with fever, swelling pain in throat, vomiting diarrhea with abdominal pain, vacuity taxation cough, heat toxin sore and welling abscess, otitis media. Isolated compounds: 10028, 15815.
- T5837 *Scutellaria epilobifolia* (Lamiaceae); LIU YE CAI HUANG QIN; Willowweedleaf Skullcap. Isolated compounds: 15815.
- T5838 *Scutellaria galericulata* (Lamiaceae); BING TOU CAO; Galericulate Skullcap. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, disinhibit water and free strangury, quicken blood and dissipate stasis. TCM Indications: Heat strangury, blood strangury,

- intestinal welling abscess, hepatitis, carcinoma, toxin swelling of sores, knocks and falls, poisonous insect stings. Isolated compounds: 8081.
- T5839 *Scutellaria hypericifolia* (Lamiaceae); CHUAN HUANG QIN; St. Johnswortleaf Skullcap. Used part: root. TCM Effects: See *Scutellaria baicalensis*. TCM Indications: See *Scutellaria baicalensis*. Isolated compounds: 2102, 2106, 16216, 21094, 22718, 22720.
- T5840 *Scutellaria indica* (Lamiaceae); HAN XIN CAO; Indian Skullcap. Used part: whole herb with root. TCM Effects: To clear heat and resolve toxin, quicken blood and relieve pain, stanch bleeding and disperse swelling. TCM Indications: Swollen welling abscess and toxin of clove, pulmonary welling abscess, intestinal welling abscess, scrofula, poisonous snake bite, lung heat cough asthma, toothache, throat impediment, sore pharynx, pain in sinews and bones, blood ejection, hemoptysis, hematochezia, knocks and falls, bleeding due to external injury, itchy skin. Isolated compounds: 11703, 19582.
- T5841 *Scutellaria likiangensis* (Lamiaceae); LI JIANG HUANG QIN; Likiang Skullcap. Used part: root. TCM Effects: See *Scutellaria baicalensis*. TCM Indications: See *Scutellaria baicalensis*. Isolated compounds: 2102, 16216, 22718.
- T5842 *Scutellaria przewalskii* (Lamiaceae); AI YE HUANG QIN; Przewalsk Skullcap. Isolated compounds: 9564.
- T5843 *Scutellaria rehderiana* (Lamiaceae); GAN SU HUANG QIN; Rehder Skullcap. Used part: root. TCM Effects: See *Scutellaria baicalensis*. TCM Indications: See *Scutellaria baicalensis*. Isolated compounds: 2102, 2106, 16216, 21094, 22718.  
*Scutellaria rivularis* = *Scutellaria barbata*
- T5844 *Scutellaria scordifolia* (Lamiaceae); BING TOU HUANG QIN; Twinflower Skullcap. Used part: whole herb. TCM Effects: To clear heat and disinhibit damp, resolve toxin and disperse swelling. TCM Indications: Hepatitis, cirrhosis with ascites, appendicitis, mastitis, snake or insect bites, knocks and falls. Isolated compounds: 2102, 2106.
- T5845 *Scutellaria viscidula* (Lamiaceae); ZHAN MAO HUANG QIN; Viscidhair Skullcap. Used part: root. TCM Effects: See *Scutellaria baicalensis*. TCM Indications: See *Scutellaria baicalensis*. Isolated compounds: 2102, 2106, 16216, 20009, 21094, 22718, 22720.
- T5846 *Scutia buxifolia* (Rhamnaceae); HUANG YANG YE DUI CI TENG; Boxleaf Scutia\*. Isolated compounds: 3962, 19589, 19590, 19591, 19592, 19593, 19594, 19595.
- T5847 *Securidaca inappendiculata* (Polygalaceae); CHAN YI TENG; Cicadawingvine. Used part: root. TCM Effects: To dispel wind and eliminate damp, dissipate stasis and relieve pain. TCM Indications: Knocks and falls, wind-damp bone pain, acute gastroenteritis, allergic dermatitis. Isolated compounds: 5845, 6012, 6013, 6182, 6183, 6357, 8306, 10046, 16109, 19643, 19645, 19646, 21791, 21792.
- T5848 *Securinega suffruticosa* (Euphorbiaceae); YI YE QIU; Suffrutescent Securinega. Used part: root and twig. TCM Effects: To dispel wind and quicken blood, boost kidney and strengthen sinews. TCM Indications: Neuralgia, recurrent neuritis, chronic ischiatitis, neurasthenia, depression, schizophrenia, senile dementia, wind-damp lumbago, numbness in limbs, impotence, child gan accumulation, facial paralysis, sequel of poliomyelitis. Isolated compounds: 940, 5712, 5738, 6044, 6045, 10052, 17214, 19639, 19640, 19641, 19642, 19644, 22529.
- T5849 *Sedum acre* (Crassulaceae); TAI JING TIAN; Biting Stonecrop. Isolated compounds: 2845, 12937, 16789, 19647, 19649.
- T5850 *Sedum aizoon* (Crassulaceae); FEI CAI; Aizoon Stonecrop. Used part: whole herb or root. TCM Effects: See *Sedum kamschaticum*. TCM Indications: See *Sedum kamschaticum*. Isolated compounds: 1618, 15177, 15179, 19649, 19650.
- T5851 *Sedum alfredii* [Syn. *Sedum formosanum*] (Crassulaceae); DONG NAN JING TIAN; Alfred Stonecrop. Used part: whole herb. TCM Effects: To clear heat and cool blood, resolve toxin and disperse swelling. TCM Indications: Blood ejection due to blood heat, spontaneous external bleeding, heat toxin swollen welling abscess. Isolated compounds: 12838.
- T5852 *Sedum bulbiferum* (Crassulaceae); XIAO JIAN CAO; Bulbiferous Stonecrop. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, cool blood and stanch bleeding, interrupt malaria. TCM Indications: Heat toxin swollen welling abscess, gum swelling and pain, poisonous snake bite, bleeding due to blood heat, bleeding due to external injury, malaria. Isolated compounds: 1105, 1108.
- T5853 *Sedum cepaea* (Crassulaceae); XI PA JING TIAN; Cepaea Stonecrop\*. Isolated compounds: 19379.
- T5854 *Sedum ewersii* (Crassulaceae); YI WO SI JING TIAN; Ewers Stonecrop\*. Isolated compounds: 663.  
*Sedum formosanum* = *Sedum alfredii*
- T5855 *Sedum kamschaticum* (Crassulaceae); HENG GEN FEI CAI; Orange Stonecrop. Equivalent plant: *Sedum aizoon*. Used part: whole herb or root. TCM Effects: To dissipate stasis, stanch bleeding, quiet heart and spirit, resolve toxin. TCM Indications: Blood ejection, spontaneous external bleeding, hemoptysis, hematochezia, hematuria, flooding and spotting, bleeding due to external injury, knocks and falls, palpitation, insomnia, swollen welling abscess, sore and boil, burns and scalds, poisonous insect stings. Isolated compounds: 663, 8959, 8965, 11551, 14534, 15184.
- T5856 *Sedum lineare* [Syn. *Sedum obtuso-lineare*] (Crassulaceae); FO JIA CAO; Linear Stonecrop. Used part: stem-leaf. TCM Effects: To clear heat and resolve toxin, disinhibit damp, stanch bleeding. TCM Indications: Swelling pain in throat, red eyes with gall, heat toxin swollen welling abscess, clove sore, erysipelas, herpes zoster, burns and scalds, poisonous snake bites, jaundice, damp-heat dysentery, hematochezia, flooding and spotting, bleeding due to external injury, flat wart. Isolated compounds: 16211, 16212.  
*Sedum obtuso-lineare* = *Sedum lineare*
- T5857 *Sedum sarmentosum* (Crassulaceae); SHI ZHI JIA; Stringy Stonecrop. Used part: whole herb. TCM Effects: To clear heat, disperse swelling, resolve toxin. TCM Indications: Swelling pain in throat, acute icterohepatitis, mastitis, heat strangury, swollen welling abscess, burns and scalds, snake bite, insect bites. Isolated compounds: 11648, 11655, 12015, 14534, 18317, 19377, 19650.
- T5858 *Sedum* spp. (Crassulaceae). Isolated compounds: 19647.
- T5859 *Selaginella braunii* (Selaginellaceae); MAO ZHI JUAN BAI; Braun's Spikemoss. Used part: whole herb. TCM Effects: To clear heat and disinhibit damp, relieve cough. TCM Indications: Jaundice, dysentery, lung heat cough, burns and scalds. Isolated compounds: 1030, 4376,



8401.

- T5860 *Selaginella davidii* (Selaginellaceae); MAN SHENG JUAN BAI; David's Spikemoss. Used part: whole herb. TCM Effects: To clear heat and disinhibit damp, soothe sinews and quicken network vessels. TCM Indications: Hepatitis, diarrhea, rheumatic arthritis, scalds, bleeding due to external injury. Isolated compounds: 1030, 4376.
- T5861 *Selaginella doederleinii* (Selaginellaceae); DA YE CAI; Doederlein's Spikemoss. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, dispel wind and eliminate damp. TCM Indications: Swelling pain in throat, red eyes with gall, lung heat cough, mastitis, damp-heat jaundice, wind-damp impediment pain, bleeding due to external injury. Isolated compounds: 1030, 6547, 9473, 9647, 9648, 9649, 14797, 18865, 21192.
- T5862 *Selaginella involvens* (Selaginellaceae); YAN ZHOU JUAN BAI; Involute Spikemoss. Used part: whole herb. TCM Effects: To clear heat and disinhibit damp, relieve cough, stanch bleeding, resolve toxin. TCM Indications: Damp-heat jaundice, dysentery, edema, ascites, strangury syndrome, phlegm-damp cough, hemoptysis, blood ejection, hematochezia, flooding and spotting, bleeding due to external injury, mammary welling abscess, scrofula, hemorrhoids, scalds. Isolated compounds: 1030, 4376, 21504, 21505, 21506.
- T5863 *Selaginella moellendorffii* (Selaginellaceae); JIANG NAN JUAN BAI; Moellendorff Spikemoss. Used part: whole herb. TCM Effects: To stanch bleeding, clear heat, disinhibit damp. TCM Indications: Lung heat hemoptysis, blood ejection, spontaneous external bleeding, bloody stool, bleeding hemorrhoids, bleeding due to external injury, fever, infant fright wind, damp-heat jaundice, strangury, edema, burns and scalds. Isolated compounds: 1030, 4376.
- T5864 *Selaginella omeiensis* (Selaginellaceae); E MEI JUAN BAI; Emei Spikemoss\*. Isolated compounds: 1030, 4376.
- T5865 *Selaginella pulvinata* (Selaginellaceae); DIAN ZHUANG JUAN BAI; Cushion-shaped Spikemoss. Used part: dried whole herb. TCM Effects: See *Selaginella tamariscina*. TCM Indications: See *Selaginella tamariscina*. Isolated compounds: 1030, 4376.
- T5866 *Selaginella sanguinolenta* (Selaginellaceae); YUAN ZHI JUAN BAI; Sanguineous Spikemoss. Used part: whole herb. TCM Effects: To clear heat and disinhibit damp, quicken blood and soothe sinews, stanch bleeding. TCM Indications: Damp-heat dysentery, knocks and falls, bleeding due to internal damage, bleeding due to external injury, burns and scalds. Isolated compounds: 1030, 8401.
- T5867 *Selaginella sinensis* (Selaginellaceae); ZHONG HUA JUAN BAI; Chinese Spikemoss. Used part: whole herb. TCM Effects: To clear heat and disinhibit damp, stanch bleeding. TCM Indications: Jaundice hepatitis, cholecystitis, nephritis, dysentery, eczema of lower limb, burns and scalds, bleeding due to external injury. Isolated compounds: 1030, 4376.
- T5868 *Selaginella stantoniana* (Selaginellaceae); HAN SHENG JUAN BAI; Staunton's Spikemoss. Used part: whole herb. TCM Effects: To dissipate stasis and relieve pain, cool blood and stanch bleeding. TCM Indications: Knocks and falls, static blood pain, bloody stool, bloody urine, endometriorrhagia. Isolated compounds: 1030, 4376, 8401.
- T5869 *Selaginella tamariscina* (Selaginellaceae); JUAN BAI; Tamariskoid Spikemoss. Equivalent plant: *Selaginella pulvinata*. Used part: dried whole herb. TCM Effects: To quicken blood and free menstruation (raw), transform stasis and stanch bleeding (scorch-fry). TCM Indications: Amenorrhea, concretion and conglomeration, knocks and falls, abdominal pain, asthma (raw), blood ejection, hematuria, hematochezia, prolapse of rectum (scorch-fry). Isolated compounds: 618, 1030, 1476, 4376, 5601, 9543, 11353, 20107, 20653, 20654, 20655, 21504, 21505, 21506.
- T5870 *Selaginella uncinata* (Selaginellaceae); CUI YUN CAO; Hooked Spikemoss. Used part: whole herb. TCM Effects: To clear heat and disinhibit damp, resolve toxin, stanch bleeding. TCM Indications: Jaundice, dysentery, diarrhea, edema, strangury, impediment pain in sinew and bone, blood ejection, coughing of blood, hematochezia, bleeding due to external injury, hemorrhoids and fistulas, burns and scalds, snake bite. Isolated compounds: 1030, 4376, 6167, 9543, 22215, 22216.
- T5871 *Selenarctos thibetanus*; *Ursus arctos* (Ursidae); XIONG DAN; Bear Gall. Used part: gall bladder. TCM Effects: To clear heat and resolve toxin, calm liver and brighten eyes, stanch bleeding and kill worms. TCM Indications: Fright wind, epilepsy, convulsion due to liver heat and liver wind, swollen pain in red eyes due to liver heat, aversion to light, eye screen, swelling pain of welling abscess and sore, swelling pain from hemorrhoids. Isolated compounds: 351, 3511, 3588, 5161, 20733, 20734, 20735, 22269.
- T5872 *Selenarctos thibetanus*; *Ursus arctos* (Ursidae); XIONG ZHANG; Bear's Paw. Used part: paw. TCM Effects: To supplement *qi* and blood, dispel wind and eliminate impediment, fortify spleen and stomach. TCM Indications: Spleen-stomach vacuity, vacuity detriment. Isolated compounds: 16480, 16481.
- T5873 *Semecarpus heterophylla* (Anacardiaceae); YI YE ROU TUO GUO; Heteroleaf Markingnut\*. Isolated compounds: 16622.
- T5874 *Senecio abrotanifolius* (Asteraceae); SONG YE QIAN LI GUANG; Pineleaf Groundsel. Isolated compounds: 11807.
- T5875 *Senecio adnatus* (Asteraceae); TIE SHENG QIAN LI GUANG; Adnate Groundsel\*. Isolated compounds: 17546.
- T5876 *Senecio aegypticus* (Asteraceae); AI JI QIAN LI GUANG; Egyptian Groundsel. Isolated compounds: 18842.
- T5877 *Senecio aetnensis* (Asteraceae). Isolated compounds: 19698.
- T5878 *Senecio alpinus* (Asteraceae); YA KE BEI QIAN LI GUANG; Alpine Groundsel\*. Isolated compounds: 11091, 11809.
- T5879 *Senecio ambrosioides* (Asteraceae); TUN CAO QIAN LI GUANG; Ragweed Groundsel\*. Isolated compounds: 18842.
- T5880 *Senecio angulatus* (Asteraceae); LENG JIAO QIAN LI GUANG; Angulate Groundsel\*. Isolated compounds: 1242.
- T5881 *Senecio brasiliensis* (Asteraceae); BA XI QIAN LI GUANG; Brazilian Groundsel\*. Isolated compounds: 11091.
- T5882 *Senecio bupleuroides* (Asteraceae); CHAI HU ZHUANG QIAN LI GUANG; Thorowax-like Groundsel\*. Isolated compounds: 11189.
- T5883 *Senecio cannabifolius* (Asteraceae); MA YE QIAN LI GUANG; Hempleaf Groundsel. Used part: whole herb with root. TCM Effects: To dissipate stasis, stanch bleeding, relieve pain. TCM Indications: Knocks and falls, static blood swelling pain, bleeding due to external injury. Isolated compounds: 3085, 3086, 5800, 9997.
- Senecio chinensis* = *Senecio scandens*

- T5884 *Senecio chrysanthemoides* (Asteraceae); TU SAN QI; Chrusanthemum-like Groundsel. Used part: whole herb or root. TCM Effects: To clear heat and resolve toxin, dissipate stasis and disperse swelling. TCM Indications: Toxin swelling of sores, painful swelling from knocks and falls. Isolated compounds: 19712.
- T5885 *Senecio cineraria* (Asteraceae); YIN BAI QIAN LI GUANG; Silver Ragwort. Isolated compounds: 11809.  
*Senecio dictyoneurus* = *Ligularia dictyoneura*
- T5886 *Senecio eremophilus* (Asteraceae); SHA SHENG QIAN LI GUANG; Desertliving Groundsel\*. Isolated compounds: 18842.
- T5887 *Senecio faberi* (Asteraceae); MI SAN QIAN LI GUANG; Faber Groundsel. Isolated compounds: 11091.
- T5888 *Senecio flavus* (Asteraceae); HUANG SE QIAN LI GUANG; Yellow Groundsel\*. Isolated compounds: 7164, 7656, 14197, 16324, 16378, 19708.
- T5889 *Senecio integerrimus* (Asteraceae); QUAN YUAN QIAN LI GUANG; Entire Groundsel. Isolated compounds: 11091.  
*Senecio integrifolius* var. *fauriei* = *Tephrosia kirilowii*
- T5890 *Senecio jacobaea* (Asteraceae); CAO DIAN QIAN LI GUANG; Ragwort. Isolated compounds: 11809, 19706, 19712, 19731.  
*Senecio japonica* = *Ligularia japonica*
- T5891 *Senecio longifolius* (Asteraceae); CHANG YE QIAN LI GUANG; Longleaf Groundsel\*. Isolated compounds: 11189, 17776.
- T5892 *Senecio nemorensis* (Asteraceae); HUANG WAN; Shady Groundsel. Used part: whole herb. TCM Effects: To clear heat and resolve toxin. TCM Indications: Dysentery, enteritis, hepatitis, conjunctivitis, otitis media, welling abscess and boil, toxin of clove sore. Isolated compounds: 4547, 4564, 13320, 19388.
- T5893 *Senecio nudicaulis* (Asteraceae); ZI BEI TIAN KUI CAO; Nudicaulous Groundsel Herb. Used part: whole herb. TCM Effects: To quicken blood and regulate menstruation. TCM Indications: Menstrual disorder, postpartum abdominal pain, knocks and falls. Isolated compounds: 13457.
- T5894 *Senecio oryzetorum* (Asteraceae); DA BAI DING CAO; Field Groundsel. Used part: whole herb. TCM Effects: To clear heat and resolve toxin. TCM Indications: White mouth sore in children, clove sore. Isolated compounds: 7821, 12535, 17546, 18305, 18316, 18667, 19388, 19706, 19712.
- T5895 *Senecio paucicaucylatus* (Asteraceae); SHAO FU E QIAN LI GUANG; Fewcalycle Groundsel\*. Isolated compounds: 11189.
- T5896 *Senecio philippicus* (Asteraceae); FEI LV BIN QIAN LI GUANG; Philippine Groundsel\*. Isolated compounds: 18667, 19712.
- T5897 *Senecio platyphyllus* (Asteraceae); KUAN YE QIAN LI GUANG; Broadleaf Groundsel\*. Isolated compounds: 17546, 19712.
- T5898 *Senecio polyodon* (Asteraceae); DUO CHI QIAN LI GUANG; Manytoothed Groundsel\*. Isolated compounds: 11591.
- T5899 *Senecio pseudoorientalis* (Asteraceae); JIA DONG FANG QIAN LI GUANG; Pseud-oriental Groundsel\*. Isolated compounds: 9318.
- T5900 *Senecio pyramidatus* (Asteraceae); JIN ZI TA XING QIAN LI GUANG; Pyramidal Groundsel\*. Isolated compounds: 2119.
- T5901 *Senecio renardii* (Asteraceae); LEI SHI QIAN LI GUANG; Renard Groundsel\*. Isolated compounds: 19731.
- T5902 *Senecio retrorsus* (Asteraceae); WAN QU QIAN LI GUANG; Retrorse Groundsel\*. Isolated compounds: 18667.
- T5903 *Senecio riddellii* (Asteraceae); RUI DE QIAN LI GUANG; Riddell Groundsel. Isolated compounds: 18842.
- T5904 *Senecio rivularis* (Asteraceae); XI QIAN LI GUANG; Rivulet Groundsel\*. Isolated compounds: 18854.
- T5905 *Senecio rosmarinifolius* (Asteraceae); MI DIE XIANG YE QIAN LI GUANG; Rosmarin-leaf Groundsel\*. Isolated compounds: 18926.
- T5906 *Senecio sarracenicus* (Asteraceae); PING QIAN LI GUANG; Bottle Groundsel\*. Isolated compounds: 19388.
- T5907 *Senecio scandens* [Syn. *Senecio chinensis*] (Asteraceae); QIAN LI GUANG; Climbing Groundsel. Used part: aerial parts. TCM Effects: To clear heat and resolve toxin, eliminate screen and brighten eyes, kill worms and relieve itch. TCM Indications: Wind-fire eye, conjunctivitis, eye screen, typhoid fever, acute bacillary dysentery, pneumonia, lobar pneumonia, tonsillitis, appendicitis, bronchitis, enteritis, jaundice, influenza, toxemia, hematosepsis, swelling toxin of welling abscess and boil, dry lichen, damp lichen, erysipelas, eczema, scalds, trichomoniasis. Isolated compounds: 3592, 7821, 8012, 9740, 10608.
- T5908 *Senecio sceleratus* (Asteraceae); LA QIAN LI GUANG; Smirch Groundsel\*. Isolated compounds: 19461.
- T5909 *Senecio selloi* (Asteraceae). Isolated compounds: 7087, 7088.
- T5910 *Senecio* sp. (Asteraceae). Isolated compounds: 10775.
- T5911 *Senecio* spp. (Asteraceae). Isolated compounds: 3551, 17546.
- T5912 *Senecio squalidus* (Asteraceae); NIU JIN QIAN LI GUANG; Oxford Ragwort. Isolated compounds: 11091.
- T5913 *Senecio sylvaticus* (Asteraceae); YE SHENG QIAN LI GUANG; Heath Groundsel. Isolated compounds: 19388.
- T5914 *Senecio vernalis* (Asteraceae); CHUN QIAN LI GUANG; Eastern Groundsel. Isolated compounds: 19714, 19731.
- T5915 *Senecio vulgaris* (Asteraceae); OU ZHOU QIAN LI GUANG; Common Groundsel. Isolated compounds: 7821, 18667, 18842, 19706, 19712.
- T5916 *Senna spectabilis* (Fabaceae); ZHUANG GUAN FAN XIE; Spectacular Senna\*. Isolated compounds: 2260, 3292, 5327, 10510, 10511.
- T5917 *Sequoia gigantea* (Taxodiaceae); JU SHAN; Giant Sequoia. Isolated compounds: 17181.
- T5918 *Sequoia sempervirens* (Taxodiaceae); BEI MEI HONG SHAN; Redwood. Isolated compounds: 17181.
- T5919 *Sequoia* sp. (Taxodiaceae). Isolated compounds: 3983.
- T5920 *Seriphidium cinum* [Syn. *Artemisia cina*] (Asteraceae); HUI HAO; Chinese Seriphidium. Used part: inflorescence and leaf. TCM Effects: To kill worms. TCM Indications: Ascariasis, oxyuria disease. Isolated compounds: 1798, 3760, 19313.
- T5921 *Seriphidium finitum* [Syn. *Artemisia finita*] (Asteraceae); DONG BEI HUI HAO; Northeast Seriphidium. Used part: flower. TCM Effects: To expel worms. TCM Indications: Ascariasis, oxyuria disease. Isolated compounds: 7801, 19314.
- T5922 *Serratula strangulata* (Asteraceae); YI BAO MA HUA TOU; Contracted Sawwort. Isolated compounds: 3390, 6427, 6429, 6430, 10065.
- T5923 *Sesamum indicum* (Pedaliaceae); HU MA GEN; Oriental Sesame Root.

- Isolated compounds: 1368, 1369, 1370, 3572, 7200, 10709, 14661, 14663.
- T5924 *Sesamum indicum* (Pedaliaceae); HU MA YE; Oriental Sesame Leaf. Used part: leaf. TCM Effects: To boost *qi*, supplement brain and marrow, strengthen sinews and bones. TCM Indications: Wind-cold-damp impediment, flooding, blood ejection, damp itchy in genitals. Isolated compounds: 3052, 16757, 16758.
- T5925 *Sesamum indicum* [Syn. *Sesamum orientale*] (Pedaliaceae); BAI ZHI MA; Oriental Sesame (white seed). Used part: white seed. TCM Effects: To supplement liver and boost kidney, nourish blood and boost essence, moisten intestines and free stool. TCM Indications: Lassitude in lumbar and knees, premature graying in beard and hair, dry cracked skin, intestinal dry and constipation, scant breast milk, welling abscess and eczema, scrofula, burns and scalds, hemorrhoids. Isolated compounds: 3052, 19779.
- T5927 *Sesamum indicum* [Syn. *Sesamum orientale*] (Pedaliaceae); HEI ZHI MA; Oriental Sesame (black seed). Used part: black seed. TCM Effects: To supplement liver and kidney, boost essence and blood, moisten intestines. TCM Indications: Dizziness, tinnitus and deafness, premature graying in beard and hair, hair loss during convalescence, intestinal dry and constipation. Isolated compounds: 3052, 3774, 7853, 16066, 19777, 19779, 19780, 19781.  
*Sesamum orientale* = *Sesamum indicum*
- T5926 *Sesbania sesban* (Fabaceae); AI JI TIAN JING; Indian Sesbania. Isolated compounds: 18229.
- T5928 *Seseli campestre* (Apiaceae); PING DI XI FENG QIN; Campestral Seseli\*. Isolated compounds: 17757.
- T5929 *Seseli ericephalum* (Apiaceae); MIAN MAO XIE HAO; Woolly Seseli\*. Isolated compounds: 18165.
- T5930 *Seseli grandivittatum* (Apiaceae); DA TIAO WEN XIE HAO; Bigstreak Seseli\*. Isolated compounds: 4863.
- T5931 *Seseli incanum* (Apiaceae); HUI BAI XIE HAO; Greywhite Seseli\*. Isolated compounds: 6507.
- T5932 *Seseli indicum* (Apiaceae); YIN DU XIE HAO; Indian Seseli\*. Isolated compounds: 19784.
- T5933 *Seseli libanotis* (Apiaceae); LI BA NEN XIE HAO; Moon-carrot. Isolated compounds: 1960, 6507.
- T5934 *Seseli meirei* (Apiaceae); SAN YE FANG FENG; Bambooleaf Seseli. Equivalent plant: *Seseli yunnanense*. Used part: root. TCM Effects: To dispel wind and overcome damp, relieve pain and check tetany. TCM Indications: Common cold, headache, toothache, distending pain in stomach duct, diarrhea, wind-damp impediment pain, paralysis, tetanus, fright wind, wind papules, eczema, swelling of sores. Isolated compounds: 2309.
- T5935 *Seseli* sp. (Apiaceae). Isolated compounds: 2309.
- T5936 *Seseli tortuosum* (Apiaceae); XUAN NIU XIE HAO; Tortuous Seseli\*. Isolated compounds: 17764, 19227.
- T5937 *Seseli yunnanense* (Apiaceae); SONG YE FANG FENG; Yunnan Seseli. Used part: root. TCM Effects: See *Seseli meirei*. TCM Indications: See *Seseli meirei*. Isolated compounds: 7707, 11001.
- T5938 *Setaria italica* (Poaceae); SU MI; Foxtail Millet. Used part: kernel. TCM Effects: To harmonize center, boost kidney, eliminate heat, resolve toxin. TCM Indications: Spleen-stomach vacuity heat, stomach reflux vomiting, reduced food intake with abdominal distention, diabetes mellitus, diarrhea, scalds. Isolated compounds: 1048, 4650, 5509, 8809, 13126.
- T5939 *Shiraia bambusicola* (Clavicipitaceae); ZHU XUANG; Bamboo Yellow\*. Used part: stroma and spore. TCM Effects: To transform phlegm and relieve cough, quicken blood and dispel wind, disinherit damp. TCM Indications: Cough and abundant phlegm, pertussis, vaginal discharge, stomachache, wind-damp impediment pain, infant fright wind, knocks and falls. Isolated compounds: 19834, 19835, 19836.
- T5940 *Sickingia tinctoria* (Rubiaceae); RAN LIAO SI SHI MU. Isolated compounds: 16152.
- T5941 *Sickingia williamsii* (Rubiaceae); WEI LIAN SI SHI MU. Isolated compounds: 16152.
- T5942 *Sida acuta* (Malvaceae); HUANG HUA REN; Acute Sida. Used part: leaf or root. TCM Effects: To clear damp heat, resolve toxin and disperse swelling, quicken blood and relieve pain. TCM Indications: Damp-heat diarrhea dysentery, mammary welling abscess, hemorrhoids, toxin swelling of sores, knocks and falls, fracture, bleeding due to external injury. Isolated compounds: 85, 1380, 1381, 1386, 1425, 4282, 6815, 7788, 12953, 19542, 22615.
- T5943 *Sida cordifolia* (Malvaceae); HUANG HUA ZI; Cordateleaf Sida. Used part: leaf or root. TCM Effects: To clear heat and disinherit damp, relieve cough, resolve toxin and eliminate welling abscess. TCM Indications: Damp-heat jaundice, dysentery, diarrhea, strangury, fever and cough, asthma, swelling toxin of welling abscess and sore. Isolated compounds: 14795, 16770, 17083, 18024, 22349, 22350.
- T5944 *Sida spinosa* (Malvaceae); DUO CI HUANG HUA REN; Spiny Sida\*. Isolated compounds: 8812, 10204.
- T5945 *Sideritis moorei* (Lamiaceae); MU ER DU MA CAO; Moor Sideritis\*. Isolated compounds: 168, 169, 296, 297, 298, 299, 5940.
- T5946 *Sideritis ozturkii* (Lamiaceae). Isolated compounds: 580, 6851, 7151, 12725, 12878, 13580, 16482, 16483, 16484, 19873, 19874.
- T5947 *Sideritis* sp. (Lamiaceae). Isolated compounds: 3741.
- T5948 *Sideritis* spp. (Lamiaceae). Isolated compounds: 22768.  
*Siegesbeckia glabrescens* = *Siegesbeckia orientalis* var. *glabrescens*
- T5949 *Siegesbeckia gummifer* (Asteraceae); JIAO XI XIAN; Gummy St. Paulswort\*. Isolated compounds: 5930.
- T5950 *Siegesbeckia orientalis* (Asteraceae); XI XIAN; Common St. Paulswort. Equivalent plant: *Siegesbeckia orientalis* var. *pubescens*, *Siegesbeckia orientalis* var. *glabrescens*. Used part: aerial parts. TCM Effects: To dispel wind-damp, free channels and network vessels, clear heat and resolve toxin. TCM Indications: Wind-damp impediment pain, lassitude in lumbus and knees, hemiplegia, hypertension, malaria, jaundice, swelling toxin of welling abscess and sore, wind papules, damp sore, animal and insect bites. Isolated compounds: 445, 2852, 4661, 4662, 5955, 7215, 7216, 9755, 10920, 10921, 11623, 12230, 16186, 16187, 16188, 16196, 16320, 16434, 16435, 16436, 18175, 18176, 18177, 18178, 19875, 19876, 19878, 19879, 20369, 21149, 21150.
- T5951 *Siegesbeckia orientalis* var. *glabrescens* [Syn. *Siegesbeckia glabrescens*] (Asteraceae); MAO GENG XI XIAN; Hairstalk St. Paulswort. Used part: aerial parts. TCM Effects: See *Siegesbeckia*

- orientalis*. TCM Indications: See *Siegesbeckia orientalis*. Isolated compounds: 445, 7768, 9370, 15390, 20444.
- T5952 *Siegesbeckia orientalis* var. *pubescens* [Syn. *Siegesbeckia pubescens*] (Asteraceae); XIAN GENG XI XIAN; Glandularstalk St. Paulswort. Used part: aerial parts. TCM Effects: See *Siegesbeckia orientalis*. TCM Indications: See *Siegesbeckia orientalis*. Isolated compounds: 2481, 4680, 5930, 10277, 10289, 12175, 12196, 12230, 18175, 18176, 18177, 18178, 18179, 19875, 19876, 19877, 19880, 19983, 21756. *Siegesbeckia pubescens* = *Siegesbeckia orientalis* var. *pubescens*
- T5953 *Silene firma* (Caryophyllaceae); YING YE NV LOU CAI; Robust Silene\*. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, regulate menstruation, disinhibit urine. TCM Indications: Swelling pain in throat, otitis media, inhibited urination. Isolated compounds: 13657.
- T5954 *Silene fortunei* (Caryophyllaceae); YING ZI CAO; Catch-fly. Used part: whole herb with root. TCM Effects: To clear heat and disinhibit damp, quicken blood and resolve toxin. TCM Indications: Dysentery, enteritis, heat strangury, vaginal discharge, swelling pain in throat, taxation damage fever, knocks and falls, poisonous snake bites. Isolated compounds: 8059, 8060, 8061, 10061.
- T5955 *Silene jennisensis* (Caryophyllaceae); HAN MAI PING CAO; Dry Silene. Used part: root. TCM Effects: See *Gypsophila pacifica*. TCM Indications: See *Gypsophila pacifica*. Isolated compounds: 8056, 18418.
- T5956 *Siler trilobum*. Isolated compounds: 21889.
- T5957 *Silybum marianum* (Asteraceae); SHUI FEI JI; St. Marys. Used part: achene. TCM Effects: To clear heat and disinhibit damp, course liver and disinhibit gallbladder. TCM Indications: Acute hepatitis, chronic hepatitis, cirrhosis, fatty liver, gallstones, cholangitis. Isolated compounds: 1494, 5789, 11714, 11715, 13563, 13564, 13565, 19893, 19895, 19896, 19897, 19898, 19899, 22158.
- T5958 *Sinapis alba* [Syn. *Brassica alba*; *Brassica hirta*] (Brassicaceae); BAI JIE ZI; White Mustard Seed. Used part: seed. TCM Effects: To transform phlegm and expel rheum, dissipate binds and disperse swelling. TCM Indications: Cough and asthma with abundant phlegm, fullness in chest and rib-side pain, numbness in limbs, swelling pain in joints, damp phlegm streaming sore, swelling toxin of flat abscess. Isolated compounds: 8599, 9822, 16842, 16852, 16859, 19909, 19917, 19983.
- T5959 *Sinapis arvensis* (Brassicaceae); YE OU BAI JIE; Charlock. Isolated compounds: 19909.
- T5960 *Sinoadina racemosa* [Syn. *Adina racemosa*] (Rubiaceae); JI ZI MU; Racemose Adina. Isolated compounds: 636, 637, 638, 639, 640, 2789, 3184, 3551, 6953, 7040, 7425, 7774, 8977, 8978, 10887, 12020, 12072, 12073, 12074, 12949, 12950, 14224, 15525, 18317, 18380, 18381, 18382, 18383, 18384, 18390, 18441, 18918, 19087, 19623, 19624, 19625, 19626, 19636, 20263, 20390, 20503, 21634, 22496, 22606.
- T5961 *Sinocalamus oldhami* (Poaceae); LV SUN PIAN; Oldham Bamboo Shoot. Used part: shoot. TCM Effects: To transform phlegm and calm asthma. TCM Indications: Cough and asthma with abundant phlegm. Isolated compounds: 2027, 2028, 11031.
- T5962 *Sinocrassula asclepiadea* (Crassulaceae); SI MA LI JIN SHI LIAN. Isolated compounds: 19936, 19937, 19938, 19939, 19940, 19941, 19942, 19943, 19944, 19945, 19946.
- T5963 *Sinodielsia yunnanensis* (Apiaceae); DIAN QIN; Common Sinodielsia. Used part: root. TCM Effects: To effuse exterior, dispel wind, relieve pain, disinhibit urine. TCM Indications: Common cold, headache, cough, wind-damp impediment pain, wind water edema. Isolated compounds: 2309, 7707, 9785, 19542, 19947, 19948, 19949, 19950, 19951, 19952, 19953, 19954.
- T5964 *Sinomenium acutum* (Menispermaceae); QING FENG TENG; Orientvine. Used part: stem. TCM Effects: To dispel wind and free network vessels, dispel damp and relieve pain. TCM Indications: Wind-damp impediment pain, pain from arthritis, swelling in joints, paralytic and pruritus. Isolated compounds: 602, 603, 6512, 11717, 13374, 14484, 14827, 19200, 19908, 19955, 19983, 20322, 20369, 20556, 22100. *Sinopodophyllum emodii* = *Podophyllum emodii*
- T5965 *Siparuna pauciflora* (Monimiaceae); SHAO HUA XI PA MU; Limoncillo (in Costa Rica). Isolated compounds: 12573, 19961, 19962, 19963.
- T5966 *Siphonostegia chinensis* (Scrophulariaceae); YIN XING CAO; Chinese Siphonostegia. Used part: whole herb. TCM Effects: To clear heat and disinhibit damp, quicken blood and dispel stasis. TCM Indications: Jaundice, inhibited urination, abdominal distention with edema, stasis pain from knocks and falls, blood dysentery, blood strangury, vaginal discharge, menstrual disorder, concretion conglomeration accumulation and gathering, postpartum abdominal pain. Isolated compounds: 7521, 11305, 12952.
- T5967 *Siraitia grosvenorii* [Syn. *Momordica grosvenorii*] (Cucurbitaceae); LUO HAN GUO; Grosvenor Siraitia. Used part: fruit. TCM Effects: To clear heat and moisten lung, lubricate intestines and free stool. TCM Indications: Lung heat dry cough, common cold, throat pain, laryngitis, aphonia due to throat pain, intestinal dry and constipation. Isolated compounds: 9012, 19971, 19972, 19973, 19974, 19975. *Sisymbrium dubium* = *Rorippa montana*
- T5968 *Sisymbrium officinale* (Brassicaceae); ZUAN GUO SUAN JIE; Hedge Mustard. Isolated compounds: 15400.
- T5969 *Sium latifolium* (Apiaceae); OU ZE QIN; Greater Water-parsnip. Used part: whole herb with root. TCM Effects: To dispel wind and relieve pain, lower blood pressure. TCM Indications: Common cold, headache, hypertension. Isolated compounds: 16930.
- T5970 *Skimmia japonica* (Rutaceae); XIANG YIN YU; Japanese Skimmia. Isolated compounds: 20002, 20003.
- T5971 *Skimmia laureola* (Rutaceae); GUANG RONG YIN YU; Laureate Skimmia\*. Isolated compounds: 3464, 9419, 20003.
- T5972 *Skimmia reevesiana* (Rutaceae); YIN YU; Reeves Skimmia. Used part: stem-leaf. TCM Effects: To dispel wind and overcome damp. TCM Indications: Wind-damp impediment pain, hypertonicity of limbs, weakness of legs. Isolated compounds: 18568, 18569, 20002, 20003.
- T5973 *Smilax aristolochiaefolia* (Liliaceae); HUI BA QIA; Grey Greenbrier\*. Isolated compounds: 16666, 19389.
- T5974 *Smilax aspera* (Liliaceae); SUI BA QIA; Eurasia Greenbrier. Isolated compounds: 15729.
- T5975 *Smilax bockii* (Liliaceae); XI NAN BA QIA; *Smilax bockii*. Used part:

- rhizome. TCM Effects: To dispel wind and eliminate damp, quicken blood and dispel stasis, resolve toxin and dissipate binds. TCM Indications: Wind-damp impediment, painful swelling from knocks and falls, clove sore scrofula. Isolated compounds: 2524, 2525.
- T5976 *Smilax china* [Syn. *Smilax japonica*] (Liliaceae); BA QIA; Chinaroot Greenbrier. Used part: rhizome. TCM Effects: To dispel wind and disinhibit damp, resolve toxin and eliminate welling abscess. TCM Indications: Wind-damp impediment pain, strangury-turbidity, vaginal discharge, dysentery, diarrhea, swelling toxin of welling abscess and sore, intractable lichen, burns and scalds. Isolated compounds: 5659, 8968, 15465, 15466, 18056, 19983.
- T5977 *Smilax glabra* (Liliaceae); TU FU LING; Glabrous Greenbrier. Equivalent plant: *Smilax menispermoides*. Used part: rhizome. TCM Effects: To eliminate damp, resolve toxin, free joints. TCM Indications: Damp-heat with strangury turbidity, vaginal discharge, swollen welling abscess, scrofula, scab and lichen, syphilis, mercurial poisoning. Isolated compounds: 1928, 2924, 5659, 5699, 5984, 11241, 11411, 20020, 20021, 20022, 20023, 20024, 20029, 20566, 21682, 22101.
- T5978 *Smilax glauco-china* (Liliaceae); HEI GUO BA QIA; Blackfruit Greenbrier. Used part: rhizome or tender leaf. TCM Effects: To dispel wind, clear heat, disinhibit damp, resolve toxin. TCM Indications: Wind-damp impediment, pain in lumbus and legs, knocks and falls, dribbling and inhibited voidings of urination, scrofula, swelling toxin of welling abscess and sore, ulcer of lower limb. Isolated compounds: 7748.
- Smilax japonica* = *Smilax china*
- T5979 *Smilax lebrunii* (Liliaceae); CU CAO BA QIA; Lebrun Greenbrier. Isolated compounds: 20236.
- T5980 *Smilax menispermoides* (Liliaceae); FANG JI YE BA QIA; Gansu Greenbrier. Used part: rhizome. TCM Effects: See *Smilax glabra*. TCM Indications: See *Smilax glabra*. Isolated compounds: 6440, 6441, 17278, 18643.
- T5981 *Smilax riparia* (Liliaceae); NIU WEI CAI; Oxtail Greenbrier. Used part: rhizome and root. TCM Effects: To dispel wind-damp, free channels and network vessels, dispel phlegm and relieve cough. TCM Indications: Wind-damp impediment, taxation damage and lumbago, knocks and falls, cough and asthma. Isolated compounds: 15465, 15466.
- T5982 *Smilax sieboldii* (Liliaceae); NIAN YU XU; Siebold Greenbrier. Equivalent plant: *Smilax stans*. Used part: rhizome and root. TCM Effects: To dispel wind and disinhibit damp, quicken blood and free network vessels, resolve toxin and dissipate binds. TCM Indications: Wind-damp impediment pain, sore and boil, toxin swelling, scrofula. Isolated compounds: 12591, 15463, 21383.
- T5983 *Smilax* sp. (Liliaceae). Isolated compounds: 8834.
- T5984 *Smilax stans* [Syn. *Smilax vaginata* var. *stans*] (Liliaceae); QIAO BING BA QIA; Sheathstipe Greenbrier. Used part: rhizome and root. TCM Effects: See *Smilax sieboldii*. TCM Indications: See *Smilax sieboldii*. Isolated compounds: 18056.
- Smilax vaginata* var. *stans* = *Smilax stans*
- T5985 *Smyrniopsis aucheri*. Isolated compounds: 15241.
- T5986 *Smyrniolum olusatrum* (Apiaceae); XIAO MEI WEI QIN. Isolated compounds: 194, 215, 5492, 5495, 5496, 5886, 5887.
- T5987 *Sobina chinensis* (Cupressaceae); HUI<sup>(4)</sup> YE; Chinese Juniper Leaf. Used part: leaf. TCM Effects: To expel wind and dissipate cold, quicken blood and resolve toxin. TCM Indications: Wind-cold common cold, pain in joints due to rheumatism, urticaria, toxin swelling. Isolated compounds: 1030, 9543.
- T5988 *Solanum abutiloides* (Solanaceae); MA ZHUANG QIE; Abutilon Nightshade\*. Isolated compounds: 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48.
- T5989 *Solanum aculeatissimum*‡ (Solanaceae); DING QIE; Aculeate Nightshade\*. Used part: whole herb. TCM Effects: To suppress cough and calm asthma, dissipate stasis and relieve pain. TCM Indications: Asthma, chronic bronchitis, stomachache, wind-damp pain, scrofula, cold suppurative sore, knocks and falls. Isolated compounds: 3639, 3640, 3641, 3642, 3643, 3644, 3645, 3646, 3647, 3648, 15855. ‡Note: same plant as T6014.
- T5990 *Solanum arundo* (Solanaceae); A LUN DUO QIE; Arundo Nightshade\*. Isolated compounds: 1822.
- T5991 *Solanum aviculare* [Syn. *Solanum laciniatum*] (Solanaceae); AO ZHOU QIE; Australian Nightshade. Isolated compounds: 16789, 20066, 20069.
- T5992 *Solanum berthaultii* (Solanaceae); BO SHI QIE; Berthault Nightshade\*. Isolated compounds: 7730.
- T5993 *Solanum capsicastrum* (Solanaceae); YE HAI JIAO; Twoflower Jerusalemcherry. Used part: whole herb. TCM Effects: To disperse accumulation, disinhibit diaphragm, precipitate heat toxin. TCM Indications: Rheumatism numbness, damp-heat itchy sore, clove sore, menstruant's morbidity. Isolated compounds: 3143, 20061.
- T5994 *Solanum chacoense* (Solanaceae); CHA QIE; Cha Nightshade\*. Isolated compounds: 3942, 5104.
- T5995 *Solanum commersonii* (Solanaceae); KE MO SEN QIE; Commerson Nightshade\*. Isolated compounds: 3942, 5104.
- T5996 *Solanum decemlineata* (Solanaceae); SHI XIAN QIE; Decaline Nightshade\*. Isolated compounds: 5104.
- T5997 *Solanum demissum* (Solanaceae); AI QIE; Dwarf Nightshade\*. Isolated compounds: 5104, 14235, 19982, 21434.
- T5998 *Solanum dulcamara* (Solanaceae); QIAN NIAN BU LAN XIN; Bitter Nightshade Fruit. Used part: whole herb. TCM Effects: To expel wind and eliminate damp, clear heat and resolve toxin. TCM Indications: Wind-damp pain, tetanus, swollen welling abscess, malign sore, scab sore, bleeding due to external injury. Isolated compounds: 3939, 4944, 10711, 10712, 10713, 10771, 10772, 13222, 13243, 20042, 20044, 20046, 20047, 20048, 20049, 20050, 20066, 20069, 21383, 21433, 22878.
- T5999 *Solanum incanum* (Solanaceae); HUI BAI QIE; Greywhite Nightshade\*. Isolated compounds: 20069.
- T6000 *Solanum indicum* (Solanaceae); TIAN QIE ZI; Indian Nightshade. Used part: fruit, seed and leaf. TCM Effects: To dispel wind and eliminate evil. TCM Indications: Toothache, headache, deep-source nasal congestion. Isolated compounds: 4189, 7788, 12488, 14698, 17973, 19542, 20043, 20066, 20070.
- T6001 *Solanum jasminoides* (Solanaceae); SU XIN YE BAI YING; Jasmine Nightshade. Isolated compounds: 20066, 20069.

- T6002 *Solanum juzepczukii* (Solanaceae); JU SHI QIE; Juzepczuk Nightshade\*. Isolated compounds: 5104.
- T6003 *Solanum khasianum* (Solanaceae); CI TIAN QIE; Khasi Nightshade Fruit. Used part: fruit. TCM Effects: To expel wind and relieve pain, clear heat and resolve toxin. TCM Indications: Wind-damp pain, bleeding due to external injury, nervous headache, stomachache, toothache, mastitis, epidemic parotitis. Isolated compounds: 7788, 20044, 20066, 20069.  
*Solanum laciniatum* = *Solanum aviculare*
- T6004 *Solanum laxum* (Solanaceae); XI SHU QIE; Lax Nightshade\*. Isolated compounds: 13022.
- T6005 *Solanum lyratum* (Solanaceae); BAI MAO TENG; Bittersweet. Used part: whole herb. TCM Effects: To clear heat and disinhibit damp, dispel wind and resolve toxin. TCM Indications: Malaria, jaundice, edema, strangury, pain in joints due to rheumatism, erysipelas, clove sore. Isolated compounds: 1898, 3939, 15464, 18724, 18725, 20042, 20044, 20052, 20053, 20054, 20055, 20069, 21384.
- T6006 *Solanum melongena* (Solanaceae); QIE YE; Garden Eggplant Leaf. Used part: leaf. TCM Effects: To dissipate blood and disperse swelling. TCM Indications: Blood strangury, blood dysentery, intestinal wind bleeding, swollen welling abscess, frostbite. Isolated compounds: 9568, 20066, 21662.
- T6007 *Solanum melongena* (Solanaceae); QIE ZI; Garden Eggplant. Used part: fruit. TCM Effects: To clear heat and quicken blood, disperse swelling and relieve pain. TCM Indications: Intestinal wind bleeding, heat toxin swollen welling abscess. Isolated compounds: 617, 5010, 5027, 12488, 13016, 15289, 17973, 19838, 20069, 21383, 21662.
- T6008 *Solanum nigrum* (Solanaceae); LONG KUI; Black Nightshade. Used part: aerial parts. TCM Effects: To clear heat and resolve toxin, quicken blood and disperse swelling. TCM Indications: Clove sore, swollen welling abscess, erysipelas, sprain from knocks and falls, mastitis, cervicitis, chronic bronchitis, chronic trachitis, acute nephritis, dysentery, infection of skin, leukorrhea, scant urine in children. Isolated compounds: 8817, 20044, 20056, 20060, 20066, 20069, 21383.
- T6009 *Solanum pseudo-capsicum* (Solanaceae); YU SHAN HU GEN; Jerusalemcherry Root. Used part: root. TCM Effects: To relieve pain. TCM Indications: Taxation damage and lumbago. Isolated compounds: 20061.
- T6010 *Solanum pubescens* (Solanaceae); ROU MAO QIE; Pubescent Nightshade. Isolated compounds: 16498.
- T6011 *Solanum sarrachoides* (Solanaceae); YE GUO QIE; Leafy-fruited Nightshade. Isolated compounds: 12070.  
*Solanum sodomaicum* = *Solanum sodomeum*
- T6012 *Solanum sodomeum* [Syn. *Solanum sodomaeum*] (Solanaceae); SUO DUO MI QIE; Sodome Nightshade\*. Isolated compounds: 20068, 20069.
- T6013 *Solanum* sp. (Solanaceae). Isolated compounds: 20069.
- T6014 *Solanum surattense*† (Solanaceae); YE DIAN QIE; Soda-apple Nightshade. Used part: whole herb. TCM Effects: To suppress cough and calm asthma, dissipate stasis and relieve pain. TCM Indications: Asthma, chronic bronchitis, stomachache, wind-damp pain, scrofula, cold suppurative sore, knocks and falls. Isolated compounds: 20045, 20069. ‡Note: same plant as T5989.
- T6015 *Solanum torvum* (Solanaceae); SHUI QIE; Water Nightshade. Used part: root. TCM Effects: To quicken blood, dissipate stasis and relieve pain. TCM Indications: painful wound from knocks and falls, taxation damage in lumbar muscle, sand, stomachache, clove sore, swollen welling abscess. Isolated compounds: 11971, 16616, 19978, 19987, 20069, 21468, 21469, 21470, 21471, 21472, 21473, 22700, 22704.
- T6016 *Solanum tripartitum* (Solanaceae); SAN LIE QIE; Tripartite Nightshade\*. Isolated compounds: 20062, 20063.
- T6017 *Solanum tuberosum* (Solanaceae); MA LING SHU; Potato. Used part: tuber. TCM Effects: To harmonize stomach and fortify center, resolve toxin and disperse swelling. TCM Indications: Stomachache, epidemic parotitis, swollen welling abscess, eczema, scalds. Isolated compounds: 4135, 7781, 7782, 7788, 7789, 13016, 14235, 17913, 17914, 18849, 19982, 20056, 20060, 20070, 22058, 22080.
- T6018 *Solanum verbascifolium* (Solanaceae); YE YAN YE; Mullein Nightbrier Leaf. Used part: leaf. TCM Effects: To move qi-blood, disperse swelling toxin, relieve pain. TCM Indications: Yellow swelling, pain wind, flooding, painful swelling from knocks and falls, toothache, scrofula, welling abscess, eczema, dermatitis. Isolated compounds: 20069.
- T6019 *Solanum viarum* (Solanaceae); XIAO LU QIE; Viatic Nightshade\*. Isolated compounds: 20069.
- T6020 *Solanum xanthocarpum* (Solanaceae); HUANG GUO QIE; Yellowfruit Nightshade. Used part: root, fruit and seed. TCM Effects: To clear heat and disinhibit damp, disperse stasis and relieve pain. TCM Indications: Wind-damp impediment pain, toothache, painful swollen testes, welling abscess and boil. Isolated compounds: 663, 3221, 3241, 3242, 20069.
- T6021 *Solenanthes circinatus* (Boraginaceae); CHANG RUI LIU LI CAO; Circinate Solenanthes. Isolated compounds: 18847.
- T6022 *Solidago altissima* (Asteraceae); GAO YI ZHI HUANG HUA; Canadian Goldenrod. Isolated compounds: 232, 268, 269, 3835, 5792, 9751, 9752, 9753, 9920, 9921, 20071, 20169.  
*Solidago chinensis* = *Wedelia chinensis*  
*Solidago decurrens* = *Solidago virgaurea* var. *leiocarpa*
- T6023 *Solidago virgaurea* (Asteraceae); MAO GUO YI ZHI HUANG HUA; European Goldenrod. Used part: whole herb or root. TCM Effects: To course wind and clear heat, resolve toxin and disperse swelling. TCM Indications: Wind-heat common cold, swelling pain in throat, nephritis, cystitis, swollen welling abscess and toxin of clove, knocks and falls. Isolated compounds: 12608, 19087, 22526.
- T6024 *Solidago virgaurea* var. *leiocarpa* [Syn. *Solidago decurrens*] (Asteraceae); YI ZHI HUANG HUA; Common Goldenrod. Used part: whole herb. TCM Effects: To soothe wind and drain heat, resolve toxin and disperse swelling. TCM Indications: Wind-heat common cold, headache, swelling pain in throat, lung heat cough, jaundice, diarrhea, heat strangury, swollen welling abscess, sore and boil, poisonous snake bite. Isolated compounds: 2283, 2292, 2887, 4441, 13603, 13828, 13853, 13857, 14283, 18411.
- T6025 *Sonchus arvensis* (Asteraceae); NIU SHE TOU; Field Sowthistle. Used part: herb. TCM Effects: To clear heat and resolve toxin. TCM Indications: Dysentery, appendicitis, mastitis, white turbidity,

- hemorrhoids, emission, swelling toxin of sore and boil, burns and scalds. Isolated compounds: 1476, 11083, 11084, 11085, 13143, 13504.
- T6026 *Sonchus asper* [Syn. *Sonchus oleraceus* var. *asper*] (Asteraceae); XU DUAN JU; Prickly Sowthistle. Used part: whole herb or root. TCM Effects: To clear heat and resolve toxin, stanch bleeding. TCM Indications: Toxin swelling of sores, infantile cough asthma, tuberculosis and coughing of blood. Isolated compounds: 8615, 14110, 20706.  
*Sonchus oleraceus* var. *asper* = *Sonchus asper*
- T6027 *Sonchus* sp. (Asteraceae). Isolated compounds: 3635.
- T6028 *Sophora alopecuroides* (Fabaceae); KU DOU GEN; Foxtail-like Sophora Root\*. Used part: root. TCM Effects: To clear intestines and dry damp, settle pain. TCM Indications: Damp-heat dysentery, enteritis and diarrhea, jaundice, eczema, sore pharynx, toothache, intractable lichen, scalds. Isolated compounds: 16474, 20100.
- T6029 *Sophora alopecuroides* (Fabaceae); KU DOU ZI; Foxtail-like Sophora. Used part: whole herb and seed. TCM Effects: To clear heat and dry damp, kill worms and relieve pain. TCM Indications: Dysentery, stomachache, excessive leukorrhea, eczema, sore and boil, intractable lichen. Isolated compounds: 983, 4594, 13606, 15527, 16451, 16474, 20077, 20094, 20100.  
*Sophora angustifolia* = *Sophora flavescens*
- T6030 *Sophora chrysophylla* (Fabaceae); HUANG YE HUAI; Yellowleaf Sophora. Isolated compounds: 13606.
- T6031 *Sophora flavescens* [Syn. *Sophora angustifolia*] (Fabaceae); KU SHEN; Lightyellow Sophora. Used part: dried root. TCM Effects: To clear heat and dry damp, dispel wind and kill worms. TCM Indications: Arrhythmia, otitis media, acute conjunctivitis, chronic conjunctivitis, trichomoniasis, septicemia, edema, damp-heat diarrhea, intestinal wind bleeding, acute jaundice, inhibited urination, vaginal discharge, pudendal itch, scab and lichen, leprosy, itchy skin, eczema, damp toxin sore, suppurative nest sore. Isolated compounds: 938, 1134, 2145, 4594, 4948, 7883, 9361, 9391, 10714, 11222, 11473, 11474, 11531, 11588, 11783, 12280, 12281, 12282, 12283, 12284, 12285, 12286, 12287, 12340, 12341, 12342, 12343, 12344, 12353, 12354, 12355, 12356, 12357, 12358, 12359, 12360, 12361, 12362, 12363, 12364, 12365, 12366, 12367, 12368, 12369, 12370, 12371, 12595, 12597, 12605, 13089, 13281, 13282, 13462, 13606, 13985, 14279, 14545, 15425, 15674, 15769, 15770, 16451, 16474, 16826, 16834, 20077, 20078, 20086, 20089, 20090, 20091, 20092, 20094, 20096, 20097, 20100, 20127, 21623, 21638, 22761.
- T6032 *Sophora flavescens* [Syn. *Sophora angustifolia*] (Fabaceae); KU SHEN SHI; Lightyellow Sophora Seed. Used part: seed. TCM Effects: To clear heat and resolve toxin, free stool, kill worms. TCM Indications: Acute bacillary dysentery, constipation, ascariasis. Isolated compounds: 4594, 16474.
- T6033 *Sophora franchetiana* (Fabaceae); MIN HUAI; Franchet Sophora. Isolated compounds: 1068.
- T6034 *Sophora japonica* (Fabaceae); HUAI; Japanese Pagodatree. Used part: flower and bud. TCM Effects: To cool blood and stanch bleeding, clear liver and brighten eyes. TCM Indications: Intestinal wind bleeding, bleeding from hemorrhoids, blood dysentery, hematuria, hematochezia, blood strangury, flooding and spotting, blood ejection, spontaneous external bleeding, liver fire headache, red eyes with gall, swollen welling abscess and sores. Isolated compounds: 1935, 2065, 2066, 2069, 2370, 8062, 8063, 8278, 8279, 8280, 8281, 8282, 8282, 8284, 8285, 11642, 12076, 12111, 12112, 12113, 13451, 15525, 18002, 18317, 19087, 19087, 20079, 20080, 20083, 20099, 20128.
- T6035 *Sophora japonica* (Fabaceae); HUAI GEN; Japanese Pagodatree Root. Used part: root. TCM Effects: To dissipate stasis and disperse swelling, kill worms. TCM Indications: Hemorrhoids, throat impediment, ascariasis. Isolated compounds: 13281, 13282.
- T6036 *Sophora japonica* (Fabaceae); HUAI JIAO; Japanese Pagodatree Fruit. Used part: fruit. TCM Effects: To cool blood and stanch bleeding, clear liver and brighten eyes. TCM Indications: Intestinal wind bleeding, bleeding from hemorrhoids, blood strangury, flooding and spotting, blood dysentery, blood heat, blood ejection, spontaneous external bleeding, liver fire and red eyes, dizziness and dim vision. Isolated compounds: 8278, 11648, 18317, 19087, 20080, 20088, 20099, 20101, 20385.
- T6037 *Sophora koreensis* (Fabaceae); CHAO XIAN LANG YA CI; Korean Sophora. Isolated compounds: 517, 6693, 6694.
- T6038 *Sophora leachiana* (Fabaceae); LI QI HUAI; Leachiana Sophora. Isolated compounds: 12595, 12596, 16550.
- T6039 *Sophora moorcroftiana* (Fabaceae); SHA SHENG HUAI; Sandliving Sophora. Used part: seed. TCM Effects: To clear heat and dry damp, resolve toxin. TCM Indications: Damp-heat jaundice, diphtheria, nipple moth. Isolated compounds: 11248, 16451.
- T6040 *Sophora pachycarpa* (Fabaceae); GAN SU HUAI SHU; Thickfruit Sophora. Isolated compounds: 20077.
- T6041 *Sophora* sp. (Fabaceae). Isolated compounds: 2455.
- T6042 *Sophora* spp. (Fabaceae). Isolated compounds: 3004.
- T6043 *Sophora subprostrata* [Syn. *Sophora tonkinensis*] (Fabaceae); SHAN DOU GEN; Tonkin Sophora Root. Used part: root and rhizome. TCM Effects: To clear heat and resolve toxin, disinhibit throat and disperse swelling. TCM Indications: Septicemia, ulcer of uterine cervix, chronic cervicitis, bacillary dysentery, enteritis, hydatid moles, chorioblastoma, asthma, chronic bronchitis, acute tonsillitis, laryngitis, accumulated fire toxin, swelling pain in throat, gingiva painful swelling. Isolated compounds: 16, 17, 18, 22, 1134, 4604, 6539, 8278, 13098, 13281, 13282, 13606, 16451, 18103, 20077, 20082, 20083, 20085, 20095, 20096, 20098, 20123, 22697.
- T6044 *Sophora tetraptera* (Fabaceae); SI CHI HUAI; New Zealand Kowhai. Isolated compounds: 13606.
- T6045 *Sophora tomentosa* (Fabaceae); LING NAN HUAI SHU; Tomentose Sophora. Isolated compounds: 11248, 11504, 13281, 20093.  
*Sophora tonkinensis* = *Sophora subprostrata*
- T6046 *Sophora viciifolia* (Fabaceae); BAI CI HUA; Vetchleaf Sophora. Used part: root. TCM Effects: To clear heat and disinhibit throat, cool blood and disperse swelling. TCM Indications: Swelling pain in throat, cough, hepatitis, dysentery, strangury syndrome, edema, hematuria, nosebleed(epistaxis), hematochezia. Isolated compounds: 6452, 6454, 10336, 10337, 10338, 13606, 14892, 16451, 16474, 20077, 20094.
- T6047 *Sophora viciifolia* (Fabaceae); BAI CI HUA GEN; Vetchleaf Sophora Root. Used part: root. TCM Effects: To clear heat and disinhibit throat,

- cool blood and disperse swelling. TCM Indications: Swelling pain in throat, lung heat cough, hepatitis, dysentery, strangury syndrome, edema, spontaneous external bleeding, hematochezia, hematuria. Isolated compounds: 4695, 4696, 4697.
- T6048 *Sophora vicifolia* (Fabaceae); BAI CI HUA YE; Vetchleaf Sophora Leaf. Used part: leaf. TCM Effects: To cool blood, resolve toxin, kill worms. TCM Indications: Spontaneous external bleeding, hematochezia, swollen welling abscess and clove sores, scab and lichen, scalds, trichomoniasis. Isolated compounds: 6454, 16474.
- T6049 *Sophora vicifolia* (Fabaceae); BAI CI HUA ZI; Vetchleaf Sophora Seed. Used part: fruit. TCM Effects: To clear heat and transform damp, disperse accumulation and relieve pain. TCM Indications: Food accumulation, stomachache, abdominal pain. Isolated compounds: 5895, 21733.
- T6050 *Sopubia delphinifolia* (Scrophulariaceae); CUI QUE YE DUAN GUAN CAO; Delphinileaf Sopubia\*. Isolated compounds: 17834, 17838.
- T6051 *Sorbaria arborea* (Rosaceae); GAO CONG ZHEN ZHU MEI; Tree Falsespiraea. Used part: bark. TCM Effects: See *Sorbaria sorbifolia*. TCM Indications: See *Sorbaria sorbifolia*. Isolated compounds: 18407, 19587, 21634.
- T6052 *Sorbaria sorbifolia* (Rosaceae); ZHEN ZHU MEI; Ural Falsespiraea. Equivalent plant: *Sorbaria arborea*. Used part: bark. TCM Effects: To quicken blood and dispel stasis, disperse swelling and relieve pain. TCM Indications: Fracture, knocks and falls, wind-damp impediment pain. Isolated compounds: 1618, 11659, 11897, 18317, 18407, 19587, 20102, 20103, 21634.
- T6053 *Sorbus aucuparia* (Rosaceae); OU ZHOU HUA QIU; European Mountainash. Isolated compounds: 2005, 6632, 16657, 16658, 20104.
- T6054 *Sorbus decora* (Rosaceae); MEI LI HUA QIU; Showy Mountainash. Isolated compounds: 2005.
- T6055 *Sorbus tianschanica* (Rosaceae); TIAN SHAN HUA QIU; Tianshan Mountain Mountainash. Used part: branchlet and fruit. TCM Effects: To clear lung and suppress cough, supplement spleen and engender liquid. TCM Indications: Tuberculosis, cough and asthma, stomachache, hypovitaminosis. Isolated compounds: 1102, 16657, 21612.
- T6056 *Sorghum vulgare* (Poaceae); GAO LIANG; Sorghum. Used part: seed. TCM Effects: To fortify spleen and check diarrhea, transform phlegm and quiet spirit. TCM Indications: Cholera, spleen vacuity diarrhea, indigestion, phlegm-damp cough, insomnia and frequent dreaming. Isolated compounds: 5283, 13136.
- T6057 *Sorocea bonplandii*. Isolated compounds: 20105.
- T6058 *Sorocea ilicifolia*. Isolated compounds: 20106.
- T6059 *Soulamea soulameoides*. Isolated compounds: 3829.
- T6060 *Souliea vaginata* (Ranunculaceae); HUANG SAN QI; Common Souliea. Used part: rhizome or whole herb. TCM Effects: To clear heat and eliminate vexation, resolve toxin and disperse swelling. TCM Indications: Febrile diseases with vexation and agitation, palpitation and fearful throbbing, steaming bone tidal fever, pharyngitis, stomatitis, conjunctivitis, swelling toxin of sore and welling abscess, damp-heat diarrhea, dysentery. Isolated compounds: 2202, 3649, 3666, 9455, 20110, 20111, 20112.
- T6061 *Sparaxis* sp. (Iridaceae). Isolated compounds: 17568.
- T6062 *Sparganium stoloniferum* (Sparganiaceae); SAN LENG; Common Burreed. Used part: tuber. TCM Effects: To break blood, move *qi* and relieve pain, disperse accumulation. TCM Indications: Concretion conglomeration accumulation and gathering, *qi*-blood stagnation, pain in heart and abdomen, distending pain in rib-side, amenorrhea, postpartum blood stasis abdominal pain, knocks and falls, swelling of sores. Isolated compounds: 6798, 6799, 11503, 12020, 19295, 19983, 21112.
- T6063 *Spartina cynosuroides* (Poaceae); YAN DI HE; Big Cord-grass. Isolated compounds: 21589.
- T6064 *Spartium junceum* (Fabaceae); YING ZHAO DOU; Weaversbroom. Isolated compounds: 4594, 14279, 19332, 20134.
- T6065 *Spathelia excelsa* (Rutaceae). Isolated compounds: 10201, 10202, 10486, 10487, 10783, 16431.
- T6066 *Spatholobus suberectus* (Fabaceae); MI HUA DOU; Suberect Spatholobus. Used part: stem. TCM Effects: To supplement blood, quicken blood, free network vessels. TCM Indications: Septicemia, menstrual disorder, blood vacuity, anemia due to malnutrition, anemia due to bleeding, anemia with yellow complexion, numbness and paralysis, wind-damp impediment pain. Isolated compounds: 676, 2779, 2931, 10967, 20437.
- T6067 *Spatoglossum variabile* YI BIAN HE SHE ZAO. Isolated compounds: 3542, 3557.
- T6068 *Speranskia leptostachya* (Euphorbiaceae). Isolated compounds: 17202.
- T6069 *Speranskia tuberculata* (Euphorbiaceae); TOU GU CAO; Tuberculate Speranskia. Used part: whole herb. TCM Effects: To dispel wind and eliminate damp, soothe sinews and quicken blood, relieve pain. TCM Indications: Wind-damp impediment pain, contracture of muscles and joints, beriberi, swelling toxin of sore and lichen. Isolated compounds: 3594, 11897, 12679, 17202.
- Spergula japonica* = *Sagina japonica*
- T6070 *Sphaeciospongia vesparia*; Sponge *Sphaeciospongia vesparia*. Isolated compounds: 17729.
- T6071 *Sphaeranthus indicus* (Asteraceae); RONG MAO DAI XING CAO; Indian Sphaeranthus. Used part: whole herb. TCM Effects: To clear heat and disinhibit urine, fortify stomach and disperse food. TCM Indications: Infection of urinary system, indigestion. Isolated compounds: 13883.
- Sphaerophysa salsula* = *Swainsonia salsula*  
*Sphagnum cymbifolium* = *Sphagnum palustre*  
*Sphagnum obtusifolium* = *Sphagnum palustre*
- T6072 *Sphagnum palustre* [Syn. *Sphagnum obtusifolium*; *Sphagnum cymbifolium*] (Sphagnaceae); NI TAN XIAN. Used part: plant body. TCM Effects: To clear heat and brighten eyes, relieve itch. TCM Indications: Eye screen, skin diseases, insect bites with itching. Isolated compounds: 13127.
- T6073 *Sphallerocarpus gracilis* (Apiaceae); MO GUO QIN; Thin Sphallerocarpus. Used part: fruit. TCM Effects: To boost kidney, invigorate *yang*, dispel wind and dry damp. Isolated compounds: 1211, 2041, 22744.
- T6074 *Spigelia anthelmia* (Spigeliaceae); QU CHONG CAO. Isolated compounds: 1281, 4907, 4908, 4911, 4931, 4932, 4933, 5169, 5215,



- 5869, 5870, 7091, 7092, 7111, 7112, 7113, 10071, 10081, 10683, 10715, 15794, 19091, 20162, 20163.
- T6075 *Spiranthes acmella* (Asteraceae); TIAN WEN CAO; Paniculate Spotted. Used part: whole herb. TCM Effects: To suppress cough and settle asthma, resolve toxin and disinhibit damp, disperse swelling and relieve pain. TCM Indications: Common cold, cough, asthma, pertussis, tuberculosis, diarrhea, enteritis, malaria, swelling toxin of sore and boil, rheumatic arthritis, toothache, knocks and falls, poisonous snake bite. Isolated compounds: 1115, 1116, 1117, 1118, 1119, 1120, 1121, 1122.
- T6076 *Spinacia oleracea* (Chenopodiaceae); BO CAI; Spinich. Used part: whole herb with root. TCM Effects: To nourish blood, stanch bleeding, calm liver, moisten dryness. TCM Indications: Spontaneous external bleeding, hematochezia, headache, dizziness and dim vision, red eyes, night blindness, diabetes mellitus, fecal stoppage, hemorrhoids. Isolated compounds: 360, 3585, 4190, 7777, 7852, 7853, 9568, 9601, 10500, 15356, 15357, 16285, 17140, 17141, 20164, 20166, 20167, 20168, 21415.
- T6077 *Spiraea formosana* (Rosaceae); TAI WAN XIU XIAN JU; Taiwan Spiraea\*. Isolated compounds: 1113, 2081, 8788, 19983, 20189, 20190, 20191, 20192.
- T6078 *Spiraea fritschiana* var. *parvifolia* (Rosaceae); XIAO YE HUA BEI XIU XIAN JU; Smallleaf Fritsch Spiraea\*. Isolated compounds: 20178, 20181, 20182, 20183, 20184, 20185, 20186, 20187, 20188.
- T6079 *Spiraea japonica* (Rosaceae); XIU XIAN JU; Japanese Spiraea. Used part: root. TCM Effects: See *Spiraea japonica* var. *Fortunei*. TCM Indications: See *Spiraea japonica* var. *Fortunei*. Isolated compounds: 20194.
- T6080 *Spiraea japonica* (Rosaceae); XIU XIAN JU YE; Japanese Spiraea Leaf. Used part: leaf. TCM Effects: To resolve toxin and disperse swelling, eliminate putridity and engender flesh. TCM Indications: Fistula. Isolated compounds: 20175, 20176, 20177, 20179, 20180.
- T6081 *Spiraea japonica* var. *acuta* (Rosaceae); JI JIAN XIU XIAN JU; Acute Spiraea. Isolated compounds: 20193, 20195, 20200, 20201.
- T6082 *Spiraea japonica* var. *fortunei* (Rosaceae); GUANG YE FEN HUA XIU XIAN JU; Fortune Japanese Spiraea. Equivalent plant: *Spiraea japonica*. Used part: root. TCM Effects: To dispel wind and clear heat, eliminate screen and brighten eyes. TCM Indications: Cough, toothache, headache, red eyes and eye screen. Isolated compounds: 20197, 20198, 20199.
- T6083 *Spiraea mongolica* (Rosaceae); MENG GU XIU XIAN JU; Mongolian Spiraea. Isolated compounds: 20196.
- T6084 *Spiraea prunifolia* (Rosaceae); XIAO YE HUA; Bridalwreath Spiraea. Equivalent plant: *Spiraea thunbergii*. Used part: root. TCM Effects: To disinhibit throat and disperse swelling, dispel wind and relieve pain. TCM Indications: Swelling pain in throat, wind-damp impediment pain. Isolated compounds: 10488, 14313.
- T6085 *Spiraea* sp. (Rosaceae). Isolated compounds: 22336.
- T6086 *Spiraea thunbergii* (Rosaceae); ZHEN ZHU XIU XIAN JU; Thunberg Spiraea. Used part: root. TCM Effects: See *Spiraea prunifolia*. TCM Indications: See *Spiraea prunifolia*. Isolated compounds: 3704, 3705, 3707, 10490, 10491.
- T6087 *Spiranthes sinensis* (Orchidaceae); ZHONG GUO SHOU CAO; Chinese Spiranthes\*. Used part: whole herb with root. TCM Effects: To boost *qi* and nourish *yin*, clear heat and resolve toxin. TCM Indications: Weakness during convalescence, *yin* vacuity internal heat, cough with blood ejection, dizzy head, lumbago and limp aching, diabetes mellitus, emission, strangury-turbidity and vaginal discharge, swelling pain in throat, poisonous snake bites, burns and scalds, swollen welling abscess and sores. Isolated compounds: 19930, 19931, 19932.
- Splachnum mnioides* = *Tetraplodon mnioides*
- T6088 *Spongia* sp. Isolated compounds: 20226, 20227.
- T6089 *Stachybotrys atra*; Fungus *Stachybotrys atra*. Isolated compounds: 1983.
- T6090 *Stachybotrys chartarum*; Fungus *Stachybotrys chartarum*. Isolated compounds: 1983, 1984, 1985, 1986, 1987, 1988, 1989, 7110, 10058.
- T6091 *Stachybotrys nephrospora*; Fungus *Stachybotrys nephrospora*. Isolated compounds: 17574, 20253.
- T6092 *Stachys palustris* (Lamiaceae); GUANG YE SHUI SU; Marshy Betony. Used part: root or whole herb. TCM Effects: To clear heat and resolve toxin, cool blood and quicken blood. TCM Indications: Swelling pain in throat, pulmonary welling abscess, pertussis, dysentery, mammary welling abscess, zoster, eye screen, hemoptysis, painful swelling from knocks and falls. Isolated compounds: 2918, 13847, 16575.
- T6093 *Stachys sylvatica* (Lamiaceae); LIN DI SHUI SU; Whitespot Betony. Isolated compounds: 2325.
- T6094 *Stachys tubrifera* (Lamiaceae); KUAI JING SHUI SU; Chinese Artichoke. Isolated compounds: 20254.
- T6095 *Stachytarpheta jamaicensis* (Verbenaceae); JIA MA BIAN; Jamaica Falsevalerian. Used part: whole herb and root. TCM Effects: To clear heat and disinhibit damp, resolve toxin and disperse swelling. TCM Indications: Heat strangury, stone strangury, white turbidity, leukorrhea, wind-damp bone pain, acute conjunctivitis, pharyngolaryngitis, gingivitis, cholecystitis, welling abscess and boil, hemorrhoids, painful swelling from knocks and falls. Isolated compounds: 3551, 22044.
- T6096 *Stachyurus praecox* (Stachyuraceae); JING JIE HUA; praecox Stachyurus\*. Isolated compounds: 16765, 17754.
- T6097 *Staphylea bumalda* (Staphyleaceae); SHENG GU YOU; Bumalda Bladdernut. Used part: fruit or root. TCM Effects: To moisten lung and relieve cough. TCM Indications: Dry cough, postpartum blood stasis. Isolated compounds: 10944, 13645, 20263, 20264, 20265, 20266, 20267, 20268, 20269, 20270, 20271, 20272, 20273, 20274.
- T6098 *Staphylea pinnata* (Staphyleaceae); OU ZHOU SHENG GU YOU; European Bladdernut, Pinnate Bladdernut. Isolated compounds: 16469, 17392.
- T6099 *Stauntonia chinensis* (Lardizabalaceae); YE MU GUA; Chinese Stauntonvine. Used part: root or root cortex. TCM Effects: To dispel wind and quicken network vessels, quicken blood and relieve pain, disinhibit urine and disperse edema. TCM Indications: Armpit welling abscess, enlargement of testes, dysmenorrhea. Isolated compounds: 18197, 22883, 22884, 22885, 22886, 22887, 22888, 22889, 22890, 22891, 22892.
- T6100 *Stauntonia hexaphylla* (Lardizabalaceae); NA TENG; Japanese Stauntonvine. Used part: stem-leaf. TCM Effects: To dispel wind and

- dissipate stasis, relieve pain, disinhibit urine and disperse edema. TCM Indications: Wind-damp impediment pain, painful wound from knocks and falls, neuralgia, inhibited urination, edema. Isolated compounds: 13799, 18419.
- T6101 *Stauntonia hexaphylla* (Lardizabalaceae); NA TENG GUO; Japanese Stauntonvine Fruit. Used part: fruit. TCM Effects: To resolve toxin and disperse swelling, kill worms and relieve pain. TCM Indications: Sore and welling abscess, mounting *qi*, ascariasis, trichuriasis. Isolated compounds: 6755, 15004, 15005, 15006.
- T6102 *Stauranthus perforatus* (Rutaceae); Tankasché (in Mexico). Isolated compounds: 1067, 1833, 3457, 6312, 7061, 7719, 9304, 11269, 11630, 22781.
- T6103 *Steganotaenia araliacea* (Apiaceae); WU JIA QIAN HU. Isolated compounds: 15417, 20284, 20285, 22173.
- T6104 *Stellaria dichotoma* var. *lanceolata* (Caryophyllaceae); YIN CHAI HU; Lanceolate Starwort. Used part: root. TCM Effects: To clear vacuity heat, eliminate *gan* fever. TCM Indications: *Yin* vacuity fever, steaming bone taxation fever, child *gan* fever. Isolated compounds: 5420, 5421, 5422, 5423, 5424, 5425, 5427, 5428, 5429, 5430, 5431, 8594, 9183, 20169, 20286, 22718.
- T6105 *Stellera chamaejasme* (Thymelaeaceae); LANG DU; Chinese Stellera. Used part: root. TCM Effects: To expel water and dispel phlegm, break accumulation and kill worms. TCM Indications: Edema distention fullness, accumulation from phlegm, food accumulation, worm accumulation, pain in heart and abdomen, chronic trachitis, cough, asthma, scab and lichen, hemorrhoids and fistulas, scrofula, bone tuberculosis, epididymis tubercle. Isolated compounds: 3458, 3459, 3460, 3461, 3462, 3696, 4645, 4658, 6541, 11249, 11319, 11320, 11558, 11601, 13989, 14895, 15361, 16828, 17375, 19063, 19064, 19890, 19902, 20156, 20556, 21610, 22195, 22829.
- T6106 *Stelmatocrypton khasianum* (Asclepiadaceae); SHENG TENG; Common Stelmatocrypton. Used part: lianoid stem or whole herb. TCM Effects: To dispel wind and dissipate cold, move *qi* and free network vessels. TCM Indications: Common cold, cough, distending pain in stomach duct, wind-cold-damp impediment. Isolated compounds: 14088, 19988, 20287, 20288, 20289, 20290.
- T6107 *Stemona* cf. *pierrei* (Stemonaceae); c. Isolated compounds: 5694, 14677, 17420, 17992, 20291, 20292, 20293, 20294, 20307, 20379, 20380, 20381, 20382.
- T6108 *Stemona cochinchinensis* (Stemonaceae); YIN DU ZHI NA BAI BU; Indochina *Stemona*\*. Isolated compounds: 10731, 17992, 20296, 20304.
- T6109 *Stemona collinsae* (Stemonaceae); XIAO QIU BAI BU; Hill *Stemona*\*. Used part: root. TCM Effects: Anticarcinoma. Isolated compounds: 5470.
- T6110 *Stemona curtisii* (Stemonaceae). Isolated compounds: 4964, 10731, 16470, 16475, 16476, 17992, 20296, 20304.
- T6111 *Stemona japonica* (Stemonaceae); WAN SHENG BAI BU; Japanese *Stemona*. Used part: root. TCM Effects: See *Stemona tuberosa*. TCM Indications: See *Stemona tuberosa*. Isolated compounds: 17992, 20304, 20306, 20307.
- T6112 *Stemona kerrii* (Stemonaceae); DI TANG BAI BU; Kerri *Stemona*\*. Isolated compounds: 4964, 14094, 16470, 16475, 16476, 17992, 20296, 20305.
- T6113 *Stemona sessilifolia* (Stemonaceae); ZHI LI BAI BU; Sessile *Stemona*. Used part: root. TCM Effects: See *Stemona tuberosa*. TCM Indications: See *Stemona tuberosa*. Isolated compounds: 11719, 16437, 17992, 20307, 22085.
- T6114 *Stemona* sp. (Stemonaceae). Isolated compounds: 16475, 16476, 16692, 18260.
- T6115 *Stemona tuberosa* (Stemonaceae); BAI BU; Tuber *Stemona*. Equivalent plant: *Stemona japonica*, *Stemona sessilifolia*. Used part: root. TCM Effects: To moisten lung, relieve cough and kill worms. TCM Indications: Wind-cold cough, pertussis, tuberculosis, senile cough and asthma, ascariasis, oxyuria disease, scab and lichen, eczema, cootie. Isolated compounds: 3766, 5471, 6839, 7882, 11720, 11749, 13419, 15460, 15469, 16285, 16437, 16438, 20307, 20308, 20309, 20444, 22084, 22085, 22086, 22087, 22088, 22089, 22090.
- T6116 *Stenoloma chusanum* (Lindsaeaceae); DA YE JIN HUA CAO; Common Wedgelet Fern. Used part: whole herb or rhizome. TCM Effects: To clear heat and resolve toxin, disinhibit damp, stanch bleeding. TCM Indications: Common cold with fever, cough, swelling pain in throat, enteritis, dysentery, hepatitis, damp-heat vaginal discharge, swelling toxin of welling abscess and sore, epidemic parotitis, mouth sore, burns and scalds, poisonous snake and rabid dog bite, eczema of skin, blood ejection, hematuria, hematochezia, bleeding due to external injury. Isolated compounds: 20566.
- T6117 *Stephania abyssinica* (Menispermaceae). Isolated compounds: 17956.
- T6118 *Stephania brachyandra* (Menispermaceae); BAI XIAN SHU; Shortstamen *Stephania*\*. Used part: tuberoid. TCM Effects: To move *qi* and quicken blood, dispel wind and relieve pain, clear heat and resolve toxin. TCM Indications: Stomachache, wind-damp impediment pain, knocks and falls, dysmenorrhea, swelling toxin of welling abscess and boil, eczema. Isolated compounds: 11344.
- T6119 *Stephania cepharantha* (Menispermaceae); BAI YAO ZI; Oriental *Stephania*. Used part: tuberoid. TCM Effects: To clear heat and resolve toxin, dispel wind and relieve pain, cool blood and stanch bleeding. TCM Indications: Septicemia, acute hepatitis, bacillary dysentery, parotitis, neurodermatitis, swelling pain in throat, heat toxin swollen welling abscess, wind-damp impediment pain, abdominal pain and diarrhea, blood ejection, bleeding, spontaneous external bleeding, bleeding due to external injury. Isolated compounds: 2300, 2303, 3410, 3411, 3412, 3885, 4461, 6437, 8808, 9597, 11736, 14981, 15725, 16623, 21206, 21887.
- T6120 *Stephania delavayi* [Syn. *Stephania epigaea*] (Menispermaceae); DI BU RONG; Delavay *Stephania*. Used part: tuber. TCM Effects: To rectify *qi* and relieve pain, dispel wind-damp, disperse swelling toxin. TCM Indications: *Qi* stagnation and food accumulation, pain in stomach duct and abdomen, wind-damp impediment pain, swelling toxin of welling abscess and sore, poisonous snake bite. Isolated compounds: 3412, 4461, 4994, 16310, 20319.
- T6121 *Stephania dicentrifera* (Menispermaceae); HE BAO DI BU RONG; Dicine *Stephania*\*. Equivalent plant: *Stephania viridiflavens*. Used part: tuberoid. TCM Effects: To dissipate stasis and relieve pain, clear heat and resolve toxin. TCM Indications: Stomachache, dysentery, sore pharynx, knocks and falls, swollen welling abscess, sore and boil,

- poisonous snake bite. Isolated compounds: 5417.
- T6122 *Stephania dielsiana* (Menispermaceae); XUE SAN SHU; Diels Stephania. Used part: tuberoid. TCM Effects: To clear heat and resolve toxin, dissipate stasis and relieve pain. TCM Indications: Infection of upper respiratory tract, pharyngitis, sore and welling abscess, stomachache, gastroenteritis, toothache, neuralgia, knocks and falls. Isolated compounds: 19200.
- T6123 *Stephania dinklagei* (Menispermaceae); DING KE LA QIAN JIN TENG; Dinklage Stephania\*. Isolated compounds: 1961, 4106, 4970, 11344, 12917, 20316.
- T6124 *Stephania discolor* (Menispermaceae); CAI WEN QIAN JIN TENG; Discolor Stephania\*. Isolated compounds: 21206.
- T6125 *Stephania elegans* (Menispermaceae); YA LI QIAN JIN TENG; Elegant Stephania. Used part: root. TCM Effects: To clear heat and resolve toxin, dispel wind and relieve pain. TCM Indications: Sore swollen throat, sore toxin, swelling hemorrhoids, wind-damp impediment pain. Isolated compounds: 9245, 9447.  
*Stephania epigaea* = *Stephania delavayi*
- T6126 *Stephania erecta* (Menispermaceae); ZHI LI QIAN JIN TENG; Erect Stephania\*. Isolated compounds: 9597, 15739, 15764, 15804.
- T6127 *Stephania glabra* (Menispermaceae); GUANG YE DI BU RONG; Glabrousleaf Stephania\*. Used part: tuberoid. TCM Effects: To dispel wind and move water, resolve toxin and disperse swelling. TCM Indications: Wind-damp impediment pain, edema, toxin swelling of sores. Isolated compounds: 4461, 17909.
- T6128 *Stephania hernandifolia* (Menispermaceae); RU LAN; Hernandialeaf Stephania. Used part: root. TCM Effects: To clear heat and resolve toxin, dispel wind-damp, relieve pain. TCM Indications: Sore toxin of welling abscess and boil, swelling pain in throat, epidemic parotitis, wind-damp impediment pain, dysentery, headache, stomachache, taxation damage and pain. Isolated compounds: 822, 1698, 7024, 7714, 9441, 9442, 9445, 9446, 9447, 9448, 11329, 11747, 18410.
- T6129 *Stephania japonica* (Menispermaceae); QIAN JIN TENG; Japanese Staphania. Used part: root or stem-leaf. TCM Effects: To clear heat and resolve toxin, dispel wind and relieve pain, disinherit water and disperse edema. TCM Indications: Swelling pain in throat, swollen welling abscess, sore and boil, poisonous snake bite, wind-damp impediment pain, stomachache, beriberi with edema, nephritis with edema, urinary tract infection, rheumatic arthritis, sciatica. Isolated compounds: 4459, 7022, 7024, 9245, 9622, 10893, 11088, 13812, 15885, 16328, 16341, 16412, 16424, 17908, 17957, 17993, 20283, 20312, 20318, 20319, 20323, 20325.
- T6130 *Stephania japonica* var. *australis* (Menispermaceae); AO DA LI YA QIAN JIN TENG; Australia Stephania\*. Isolated compounds: 9245, 16424.
- T6131 *Stephania longa* (Menispermaceae); FEN JI DU; Long Stephania. Used part: root, rhizome or whole herb. TCM Effects: To clear heat and resolve toxin, disinherit damp and disperse swelling, dispel wind and quicken network vessels. TCM Indications: Diarrhea and dysentery, dribbling and inhibited voidings of urination, edema, jaundice, wind-damp impediment pain, throat impediment, tympanitis, swelling toxin of sore and welling abscess, poisonous snake bites. Isolated compounds: 17956, 20311.
- T6132 *Stephania sasakii* (Menispermaceae); TAI WAN QIAN JIN TENG; Sasak Stephania\*. Used part: rhizome. TCM Effects: To settle pain, promote vomiting. TCM Indications: Tuberculosis, bronchitis, pertussis, chronic sores, poisonous snake bite, malaria. Isolated compounds: 2300, 3412, 9447, 14289, 14707, 17041, 19608.
- T6133 *Stephania sinica* (Menispermaceae); JIN BU HUAN; Chinese Stephania. Used part: root. TCM Effects: To clear heat and resolve toxin, dissipate stasis and relieve pain. TCM Indications: stomachache, neuralgia, toothache, common cold, throat pain, diarrhea, dysentery, swelling toxin of welling abscess and flat abscess, wind-damp impediment pain, knocks and falls. Isolated compounds: 19067, 21077.
- T6134 *Stephania* sp. (Menispermaceae). Isolated compounds: 2049, 4224, 19598.
- T6135 *Stephania succifera* (Menispermaceae); XIAO YE DI BU RONG; Littleleaf Stephania. Used part: tuberoid. TCM Effects: To clear heat and resolve toxin, calm and relieve pain. TCM Indications: Various pain, neuralgia, toothache, stomachache, malaria, bacillary dysentery, acute gastroenteritis, infection of upper respiratory tract, swollen welling abscess and sore toxin, poisonous snake bites. Isolated compounds: 17041.
- T6136 *Stephania tetrandra* (Menispermaceae); FANG JI; Fourstamen Stephania. Used part: root. TCM Effects: To disinherit water and disperse edema, dispel wind and relieve pain. TCM Indications: Beriberi with edema, inhibited urination, eczema, sore toxin, wind-damp impediment pain, hypertension, adjuvant in anesthesia. Isolated compounds: 2303, 3747, 4459, 5419, 7714, 7753, 7754, 11851, 13714, 13715, 14441, 14753, 16332, 20313, 20314, 20315, 20320, 21206.
- T6137 *Stephania viridiflavens* (Menispermaceae); HUANG YE DI BU RONG; Greenyellow Stephania. Used part: tuberoid. TCM Effects: See *Stephania dicentrifera*. TCM Indications: See *Stephania dicentrifera*. Isolated compounds: 11851, 16555, 18054, 22820.
- T6138 *Sterculia foetida* (Sterculiaceae); JIA MA SHU; Hazel Sterculia. Used part: bark. TCM Effects: To joint sinews and bones, quicken blood and relieve pain. TCM Indications: Sinew and bone wound, painful swelling from knocks and falls. Isolated compounds: 20328, 20710.
- T6139 *Sterculia lychnophora* (Sterculiaceae); PANG DA HAI. Used part: seed, fruit. TCM Effects: To eliminate inflammation, clear heat and resolve toxin, clear lung and disinherit throat, moisten intestines and free stool.<sup>[5509]</sup> TCM Indications: Dry cough lesser phlegm, aphonia due to throat pain, headache, steaming bone tidal fever, nosebleed, red eyes, toothache, heat bind constipation, hemorrhoids and fistulas.<sup>[5509]</sup> Isolated compounds: 20329, 20330.
- T6140 *Stereocaulon alpinum* (Stereocaulaceae). Isolated compounds: 12936.
- T6141 *Stereospermum kunthianum* (Bignoniaceae); WU GAN DA YU YE QIU; Uganda Padritree\*. Isolated compounds: 1364, 18252, 18253, 20333, 20334.
- T6142 *Stereospermum personatum* (Bignoniaceae); JIA MIAN YU YE QIU; Personator Padritree\*. Isolated compounds: 20335, 20336, 20337, 20338, 20339.
- T6143 *Stereum hirsutum* (Thelephoraceae); MAO REN GE JUN. Isolated compounds: 5927, 10418, 10469, 20332.

- T6144 *Sternbergia lutea* (Liliaceae); HUANG SI TAN BAO; Winter Daffodil. Isolated compounds: 9547.
- T6145 *Stichopus japonicus* (Stichopodidae); HAI SHEN CHANG; Sea-cucumber Intestines. Used part: intestine. TCM Effects: To settle fright, harmonize stomach, resolve toxin and outthrust papules, engender flesh and stanch bleeding. TCM Indications: Gastric ulcer, duodenal ulcer, epilepsy, child indigestion, measles papules, sore and boil, bleeding due to external injury. Isolated compounds: 8753.
- T6146 *Stillingia sylvatica* [Syn. *Sapium sylvatica*] (Euphorbiaceae); CAO WU JIU; Sylvatic Sapium\*. Isolated compounds: 15990, 17958.
- T6147 *Stizolobium capitatum* (Fabaceae); LI DOU; Capitatedflower Velvetbean. Used part: seed. TCM Effects: To warm center and boost qi. TCM Indications: Diabetes mellitus. Isolated compounds: 6558.
- T6148 *Streptomyces griseus* . Isolated compounds: 8308.
- T6149 *Streptomyces hygroscopicus* . Isolated compounds: 17609, 17610.
- T6150 *Streptopelia orientalis* (Columbidae); BAN JIU; Rufous Turtle Dove. Used part: meat. TCM Effects: To supplement kidney, boost qi, brighten eyes. TCM Indications: Enduring illness qi vacuity, fatigue hypodynamia, hiccup, dim vision. Isolated compounds: 2101.
- T6151 *Streptothris chromogena* . Isolated compounds: 18426.
- T6152 *Streptomyces niveus* ; Ray-fungus 1. Isolated compounds: 15849.
- T6153 *Streptomyces spheroids* ; Ray-fungus 2. Isolated compounds: 15849.
- T6154 *Strobilanthes japonicus* [Syn. *Championella japonica*] (Acanthaceae); HONG ZE LAN; Japanese Conehead. Used part: whole herb. TCM Effects: To quicken blood and free menstruation, transform stasis and move water. TCM Indications: Menstrual disorder, dysmenorrhea, amenorrhea, postpartum abdominal pain, concretion and conglomeration, swollen welling abscess, knocks and falls. Isolated compounds: 20393.
- T6155 *Strophanthus divaricatus* (Apocynaceae); YANG JIAO AO ZI; Divaricate Strophanthus Seed. Used part: seed. TCM Effects: To quicken blood and disperse swelling, strengthen heart, kill worms and relieve itch. TCM Indications: Wind-damp, scab and lichen, knocks and falls, swelling of sores, cardiac failure, rheumatic arthritis. Isolated compounds: 3331, 3332, 4317, 4857, 6530, 6532, 12951, 15123, 19372, 19374, 19380, 19381, 19958, 19959, 20403, 20405.
- T6156 *Strophanthus gratus* (Apocynaceae); XUAN HUA YANG JIAO AO; Spinyflower Strophanthus. Isolated compounds: 20403.
- T6157 *Strophanthus kombe* (Apocynaceae); KANG PI DU MAO XUAN HUA; Kombe Strophanthus\*. Isolated compounds: 4547, 4549, 7320, 9335, 9336, 16943, 20397, 20405.
- T6158 *Strophanthus preussii* (Apocynaceae). Isolated compounds: 16959.
- T6159 *Strophanthus sarmentosus* var. *senegambiae* (Apocynaceae); XI FEI YANG JIAO AO; Senegalese Strophanthus\*. Isolated compounds: 2399, 19374.
- T6160 *Strophanthus* sp. (Apocynaceae). Isolated compounds: 12951, 21662.
- T6161 *Strophanthus* spp. (Apocynaceae). Isolated compounds: 16958.
- T6162 *Strophanthus thollonii* (Apocynaceae); SE LUN YANG JIAO AO; Thollon Strophanthus\*. Isolated compounds: 2399.
- T6163 *Strychnos aculeata* (Loganiaceae); CI MA QIAN ZI; Aculeate Poisonnut\*. Isolated compounds: 2678.
- T6164 *Strychnos afzelii* (Loganiaceae); A FU ZE ER MA QIAN ZI; Afzel Poisonnut\*. Isolated compounds: 3148, 5682.
- T6165 *Strychnos amazonica* (Loganiaceae); YA MA XUN MA QIAN ZI; Amazonian Poisonnut\*. Isolated compounds: 5682, 13615.
- T6166 *Strychnos angustiflora* (Loganiaceae); NIU YAN MA QIAN; Narrowflower Poisonnut. Used part: seed. TCM Effects: To free channels and quicken network vessels, disperse swelling and relieve pain. TCM Indications: Wind-damp impediment pain, deadlimb, hemiplegia, swelling toxin of welling abscess and flat abscess, knocks and falls. Isolated compounds: 1250.
- T6167 *Strychnos camptoneura* (Loganiaceae). Isolated compounds: 817.
- T6168 *Strychnos dale* (Loganiaceae). Isolated compounds: 14123.
- T6169 *Strychnos decussata* (Loganiaceae); DUI SHENG MA QIAN; Opposite Poisonnut\*. Isolated compounds: 817, 4864.
- T6170 *Strychnos divaricans* (Loganiaceae); FEN CHA MA QIAN ZI; Divaricate Poisonnut\*. Isolated compounds: 2959, 4377, 13615.
- T6171 *Strychnos dolichothyrsa* (Loganiaceae); CHANG HUA XU MA QIAN ZI; Longthyrsus Poisonnut\*. Isolated compounds: 3148, 5682.
- T6172 *Strychnos elaeocarpa* (Loganiaceae). Isolated compounds: 14123.
- T6173 *Strychnos froesii* (Loganiaceae); FU SHI MA QIAN ZI; Froes Poisonnut\*. Isolated compounds: 4377, 21485.
- T6174 *Strychnos gardneri* (Loganiaceae). Isolated compounds: 817.
- T6175 *Strychnos guianensis* (Loganiaceae). Isolated compounds: 905, 4209, 4926, 4927, 7841, 9077, 9078, 13335, 13615, 14024.
- T6176 *Strychnos icaja* (Loganiaceae); ZHONG FEI MA QIAN; Central-African Poisonnut\*. Isolated compounds: 10734, 10939, 20414.
- T6177 *Strychnos ignatii* (Loganiaceae); LV SONG GUO; Ignat Poisonnut Seed. Used part: ripe seed. TCM Effects: To resolve toxin, disperse swelling, kill worms, relieve pain. TCM Indications: Stomachache, diarrhea, dysentery, malaria, worm accumulation, bleeding due to external injury, centipede bite. Isolated compounds: 2678, 7417, 12950, 14095, 17934, 20410.
- T6178 *Strychnos jobertiana* (Loganiaceae). Isolated compounds: 817.
- T6179 *Strychnos mellodora* (Loganiaceae). Isolated compounds: 16541, 21049, 21050.
- T6180 *Strychnos mitschlichii* (Loganiaceae); MI SHI MA QIAN ZI; Mitschlich Poisonnut\*. Isolated compounds: 2959, 4377, 13615.
- T6181 *Strychnos myrtoides* (Loganiaceae). Isolated compounds: 5050, 10079, 13417, 15226.
- T6182 *Strychnos nigriflora* (Loganiaceae). Isolated compounds: 817.
- T6183 *Strychnos nitida* (Loganiaceae); MAO ZHU MA QIAN; Hairstyle Poisonnut. Used part: fruit and seed. TCM Effects: To dispel wind and quicken network vessels, resolve toxin and disperse swelling. TCM Indications: Wind stroke, numbness in limbs, hypertonicity, paralysis, swelling toxin of welling abscess and sore, swelling pain in throat. Isolated compounds: 3103, 12800, 20410.
- T6184 *Strychnos nux-vomica* (Loganiaceae); MA QIAN ZI; Nut-vomitive Poisonnut. Equivalent plant: *Strychnos wallichiana*. Used part: seed. TCM Effects: To free network vessels and relieve pain, dissipate binds and disperse swelling. TCM Indications: Hemiplegia, numbness and paralysis, muscle weakness, impotence, hypertrophic spinitis, chronic anemia, wind-damp intractable impediment, sequel of poliomyelitis, rheumatoid arthritis, knocks and falls, swelling pain of welling abscess and flat abscess. Isolated compounds: 454, 455, 456, 457, 1110, 2678,

- 2679, 3551, 3930, 3931, 4311, 4943, 9930, 9931, 10457, 10459, 10734, 10939, 11265, 11266, 11721, 11722, 12950, 13615, 13972, 15775, 15847, 17994, 18021, 18070, 18792, 20410, 20411, 22614.
- T6185 *Strychnos parvifolia* (Loganiaceae). Isolated compounds: 817.
- T6186 *Strychnos* sp. (Loganiaceae). Isolated compounds: 5191.
- T6187 *Strychnos spinosa* (Loganiaceae). Isolated compounds: 817.
- T6188 *Strychnos toxifera* (Loganiaceae); DU MA QIAN; Toxic Poisonnut\*. Isolated compounds: 13615, 21485.
- T6189 *Strychnos trinervis* (Loganiaceae); SAN YE MAI MA QIAN; Trinervure Poisonnut\*. Isolated compounds: 2959.
- T6190 *Strychnos triplinervia* (Loganiaceae); LI JI SAN CHU MAI MA QIAN; Triplinervia Poisonnut\*. Isolated compounds: 20410.
- T6191 *Strychnos usambarensis* (Loganiaceae); DONG FEI MA QIAN; East-African Poisonnut\*. Isolated compounds: 817, 3614, 11723, 20415, 22275, 22276.
- T6192 *Strychnos vanprukii* (Loganiaceae). Isolated compounds: 817, 4958, 10649, 14123, 16541, 21050.
- T6193 *Strychnos wallichiana* (Loganiaceae); CHANG ZI MA QIAN; Wallich Poisonnut. Used part: seed. TCM Effects: See *Strychnos nux-vomica*. TCM Indications: See *Strychnos nux-vomica*. Isolated compounds: 10459, 10734, 10939.
- T6194 *Stylomecon* spp. Isolated compounds: 3498.
- T6195 *Stylophorum diphyllum* (Papaveraceae); ER YE BAO YING SU; Celandine Poppy. Isolated compounds: 3502.
- T6196 *Stylophorum* spp. Isolated compounds: 3498.
- T6197 *Styrax benzoin* (Styracaceae); AN XI XIANG; Sumatra Snowbell. Equivalent plant: *Styrax tonkinensis*. Used part: balsam. TCM Effects: To open orifices and arouse spirit, break phlegm and repel foulness, move *qi* and quicken blood, relieve pain. TCM Indications: Sudden stroke and fulminant reversal, pain in heart and abdomen, postpartum blood dizziness, child fright epilepsy, wind impediment and lumbago. Isolated compounds: 2222, 3695, 3728, 3986, 17133, 20417, 20430, 20484, 22336.
- T6198 *Styrax ferrugineus* (Styracaceae); XIU SE AN XI XIANG; Ferruginous Snowbell\*. Isolated compounds: 8708, 8709, 10664, 10665.
- T6199 *Styrax formosanus* (Styracaceae); TAI WAN AN XI XIANG; Taiwan Snowbell. Isolated compounds: 10665.
- T6200 *Styrax japonica* (Styracaceae); RI BEN AN XI XIANG JING PI; Japanese Snowbell Stem-bark. Isolated compounds: 5584, 6717, 10665, 13592, 13595, 17416, 20420, 20421, 20422, 20423, 20424, 20425, 20426, 20427, 20428, 20429, 20569, 20711.
- T6201 *Styrax obassia* (Styracaceae); YU LING HUA; Fragrant Snowbell. Used part: fruit. TCM Effects: To expel worms. TCM Indications: Oxyuria disease. Isolated compounds: 10665.
- T6202 *Styrax officinalis* (Styracaceae); YAO YONG AN XI XIANG; Drug Snowbell. Isolated compounds: 2264, 14172, 20419.
- T6203 *Styrax* sp. (Styracaceae). Isolated compounds: 3695.
- T6204 *Styrax tonkinensis* (Styracaceae); YUE NAN AN XI XIANG; Tonkin Snowbell. Used part: balsam. TCM Effects: See *Styrax benzoin*. TCM Indications: See *Styrax benzoin*. Isolated compounds: 3727, 3985, 19854.
- T6205 *Sus scrofa* (Suidae); YE ZHU DAN; Wild Boar Gall. Used part: gall. TCM Effects: To clear heat and resolve toxin. TCM Indications: Clove sore, toxin swelling, scalds. Isolated compounds: 10560.
- T6206 *Sus scrofa domestica* (Suidae); ZHU DAN; Pig Gall. Used part: gall. TCM Effects: To clear heat and resolve toxin, moisten dryness. TCM Indications: Febrile diseases with vexation and thirst, constipation, jaundice, pertussis, asthma, diarrhea, dysentery, red eyes, throat impediment, otitis media, swollen welling abscess and clove sores. Isolated compounds: 10560, 10867, 10868, 10869.
- T6207 *Swainsonia canescens* (Fabaceae); HUI BAI KU MA DOU; Canescent Swainsonia\*. Isolated compounds: 20500.
- T6208 *Swainsonia galegifolia* (Fabaceae); SHAN YANG DOU YE KU MA DOU; Darling Pea. Isolated compounds: 20500.
- T6209 *Swainsonia luteola* (Fabaceae); DAN HUANG KU MA DOU; Yellowish Swainsonia\*. Isolated compounds: 20500.
- T6210 *Swainsonia salsula* [Syn. *Sphaerophysa salsula*] (Fabaceae); KU MA DOU; Saline Swainsonia. Used part: fruit. TCM Effects: To disinhibit urine, disperse swelling. TCM Indications: Edema, inhibited urination, ascites. Isolated compounds: 20151, 20152, 21760.
- T6211 *Swartzia madagascariensis* (Fabaceae); MA DAO SI WO CI DOU; Madagascar Swartzia\*. Isolated compounds: 6290, 13638, 18229.
- T6212 *Swertia angustifolia* (Gentianaceae); XIA YE ZHANG YA CAI; Narrowleaf Swertia. Isolated compounds: 1243, 1251, 8304, 20503, 20509, 20510.
- T6213 *Swertia calycina* (Gentianaceae); BAO E ZHANG YA CAI; Calycin Swertia. Isolated compounds: 15718, 20502, 20503, 20509, 20510, 20511, 21172, 21173, 21762.
- T6214 *Swertia chinensis* (Gentianaceae); DANG YAO; Chinese Swertia\*. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, disinhibit damp and fortify stomach. TCM Indications: Medullitis, pharyngolaryngitis, tonsillitis, conjunctivitis, hepatitis, indigestion, dysentery, sore and welling abscess with scab and lichen, poisonous snake bites. Isolated compounds: 1017, 1020, 20503, 20509.
- T6215 *Swertia chirata* (Gentianaceae); ZHAI RUI TA ZHANG YA CAI; Chirata Swertia\*. Isolated compounds: 2220, 11436, 20502, 20509.
- T6216 *Swertia cincta* (Gentianaceae); XI NAN ZHANG YA CAI; Surrounded Swertia. Isolated compounds: 8304, 20503, 20509.
- T6217 *Swertia davidii* (Gentianaceae); CHUAN DONG ZHANG YA CAI; E.Chuan Swertia. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, disinhibit damp. TCM Indications: Damp-heat jaundice, lung heat cough, swelling pain in throat, toothache, dysentery, urinary tract infection, suppurative osteomyelitis, conjunctivitis, annexitis, pelvic inflammation, zoster, scab and lichen with sore toxin. Isolated compounds: 5950, 6166, 8304, 8740, 20509, 21793.
- T6218 *Swertia decora* (Gentianaceae); GUAN SHANG ZHANG YA CAI. Isolated compounds: 20504.
- T6219 *Swertia erythrosticta* (Gentianaceae); HONG ZHI ZHANG YA CAI; Redspot Swertia. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, disinhibit damp and abate jaundice, kill worms. TCM Indications: Wind-heat cough, sore swollen throat, jaundice (icterus, ICT), syphilis, swelling and toxin of sore and welling abscess, scab and lichen. Isolated compounds: 8304, 20503, 20509, 20510.
- T6220 *Swertia fasciculata* (Gentianaceae); CU HUA ZHANG YA CAI; Fascicled Swertia\*. Isolated compounds: 8304, 20503, 20509, 20510.
- T6221 *Swertia franchetiana* (Gentianaceae); BAO JING ZHANG YA CAI;

- Amplexicaul Swertia. Isolated compounds: 8304, 8758, 19699, 19700, 20509.
- T6222 *Swertia hickinii* (Gentianaceae); ZHE JIANG ZHANG YA CAI; Zhejiang Swertia\*. Isolated compounds: 8304, 20509.
- T6223 *Swertia japonica* (Gentianaceae); RI BEN ZHANG YA CAI; Japanese Swertia\*. Isolated compounds: 1593, 2546, 2781, 3539, 7970, 8069, 8070, 8601, 8602, 8603, 8636, 8734, 8735, 8736, 9840, 10498, 13506, 14732, 15441, 15799, 15800, 17854, 18736, 20505, 20506, 20507, 20509, 20511, 20512.
- T6224 *Swertia kouitchensis* (Gentianaceae); GUI ZHOU ZHANG YA CAI; Guizhou Swertia\*. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, disinherit damp. TCM Indications: Fever in children, bitter taste and tidal fever, damp-heat jaundice, sore swollen throat, indigestion, gastritis, mouth sore, toothache, fire eye, poisonous snake bites. Isolated compounds: 8304, 20509.
- T6225 *Swertia macrosperma* (Gentianaceae); DA ZI ZHANG YA CAI; Bigseed Swertia. Isolated compounds: 8304, 20503, 20508, 20509, 20510.
- T6226 *Swertia mileensis* (Gentianaceae); QING YE DAN; Mileen Swertia. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, disinherit damp and abate jaundice. TCM Indications: Damp-heat jaundice, heat strangury with inhibited pain, damp-heat diarrhea dysentery, red and white vaginal discharge, influenza, malaria with fever, acute gastritis, acute pharyngolaryngitis, acute tonsillitis, acute conjunctivitis, allergic dermatitis. Isolated compounds: 14566, 16050, 20503, 20505.
- T6227 *Swertia mussoitii* (Gentianaceae); CHUAN XI ZHANG YA CAI; Mussot Swertia. Used part: whole herb. TCM Effects: To clear liver and disinherit gallbladder, abate jaundice, disinherit water and disperse edema. TCM Indications: Acute icterohepatitis, hepatitis, cholecystitis, edema. Isolated compounds: 13481, 16050.
- T6228 *Swertia nervosa* (Gentianaceae); XIAN MAI ZHANG YA CAI; Veined Swertia\*. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, quicken blood and regulate menstruation. TCM Indications: Jaundice (icterus, ICT), bitter taste, tidal fever. Isolated compounds: 8304, 20503, 20509, 20510.
- T6229 *Swertia patens* (Gentianaceae); XIE JING ZHANG YA CAI; Spreading Swertia\*. Used part: whole herb. TCM Effects: To warm center and relieve pain, fortify spleen and disperse accumulation. TCM Indications: Infant common cold, spasmodic abdominal pain, child gan accumulation, indigestion. Isolated compounds: 20509.
- T6230 *Swertia perennis* (Gentianaceae); SU GEN ZHANG YA CAI; Alpine Bog-swertia. Isolated compounds: 15799, 20511.
- T6231 *Swertia pseudochinensis* (Gentianaceae); ZHANG YA CAI; False Chinese Swertia. Used part: whole herb. TCM Effects: To drain fire and resolve toxin, disinherit damp, fortify spleen. TCM Indications: Acute icterohepatitis, chronic liver diseases, damp-heat jaundice, dysentery, gastritis, indigestion, acute conjunctivitis, toothache, mouth sore, swelling pain of sores. Isolated compounds: 5840, 5847, 5848, 6011, 8304, 9616, 11773, 20503, 20509, 20510.
- T6232 *Swertia pubescens* (Gentianaceae); MAO ZHANG YA CAI; Pubescent Swertia. Isolated compounds: 8304, 20503, 20509.
- T6233 *Swertia punctata* (Gentianaceae); XI DIAN ZHANG YA CAI; Punctate Swertia\*. Isolated compounds: 8301, 17855.
- T6234 *Swertia punicea* (Gentianaceae); ZI HONG ZHANG YA CAI; Scarlet Swertia. Used part: whole herb. TCM Effects: To clear liver and disinherit gallbladder, clear heat and resolve toxin, disinherit damp. TCM Indications: Acute icterohepatitis, cholecystitis, wind-heat common cold, wind-fire toothache, swelling pain in throat, indigestion, acute bacillary dysentery, infection of urinary system, tinnitus and deafness, burns and scalds. Isolated compounds: 8304, 20503, 20509, 20510, 20512, 20514.
- T6235 *Swertia punicea* var. *lutescens* (Gentianaceae); DAN HUANG ZHANG YA CAI; Yellowish Swertia\*. Isolated compounds: 8304, 20509, 20510.
- T6236 *Swertia purpurascens* (Gentianaceae); ZI SE ZHANG YA CAI; Purple Swertia\*. Isolated compounds: 15800, 20511.
- T6237 *Swertia randainensis* (Gentianaceae); LUAN DA SHAN ZHANG YA CAI; Randain Swertia\*. Isolated compounds: 15800.
- T6238 *Swertia* sp. (Gentianaceae). Isolated compounds: 19545.
- T6239 *Swertia swertiopsis* (Gentianaceae); PU TONG ZHANG YA CAI; Common Swertia\*. Isolated compounds: 15799.
- T6240 *Swertia tosaensis* (Gentianaceae); SHANG ZUO ZHOU ZHANG YA CAI; Tosa Swertia\*. Isolated compounds: 20511.
- T6241 *Swietenia mahogany* (Meliaceae); TAO HUA XIN MU; West Indian Mahogany. Isolated compounds: 4772, 10768, 20516, 20517, 20518, 20519, 20520, 20521, 20522.
- T6242 *Symphonia globulifera* (Clusiaceae); KA MAI LONG XIN FO NI A; Cameroon Symphonia\*. Isolated compounds: 1135, 8555, 8556, 8557, 8558, 20526.
- T6243 *Symphoricarpos* sp. (Caprifoliaceae). Isolated compounds: 7944.
- T6244 *Symphytum asperum* (Boraginaceae); CU XI MEN FEI CAO; Rough Comfrey. Isolated compounds: 9316, 12535.
- T6245 *Symphytum caucasicum* (Boraginaceae); XIN FEI CAO; Caucasian Comfrey. Isolated compounds: 6684, 6686.
- T6246 *Symphytum officinale* (Boraginaceae); XI MEN FEI CAO; Comfrey. Isolated compounds: 6684, 9316, 12420, 12535, 20525, 20527.
- T6247 *Symphytum orientale* (Boraginaceae); DONG FANG XI MEN FEI CAO; Soft Comfrey. Isolated compounds: 6684, 20527.
- T6248 *Symphytum tuberosum* (Boraginaceae); KUAI JING XI MEN FEI CAO; Tuberous Comfrey. Isolated compounds: 6684.
- T6249 *Symphytum x uplandicum* (Boraginaceae); E GUO XI MEN FEI CAO; Russian Comfrey. Isolated compounds: 13235, 20527.
- T6250 *Symplocos caudata* (Symplocaceae); SHAN FAN GEN; Caudate Sweetleaf Root. Used part: root. TCM Effects: To clear heat and disinherit damp, cool blood and stanch bleeding, dispel wind and relieve pain. TCM Indications: Jaundice, diarrhea, dysentery, flooding, wind-fire toothache, headache, wind-damp impediment pain. Isolated compounds: 4680, 5583, 6273, 8681, 10666, 11083, 20446, 20546, 21714, 21923.
- T6251 *Symplocos caudata* (Symplocaceae); SHAN FAN YE; Caudate Sweetleaf Leaf. Used part: leaf. TCM Effects: To clear heat and promote contraction. TCM Indications: Tuberculosis and hemoptysis, hematochezia, chronic dysentery, acute tonsillitis, acute otitis media, wind eye with ulceration of eyelid rim. Isolated compounds: 14552, 14553.

- T6252 *Symplocos chinensis* (Symplocaceae); HUA SHAN FAN; Chinese Sweetleaf. Used part: root. TCM Effects: To clear heat and resolve toxin, transform phlegm and interrupt malaria, free network vessels and relieve pain. TCM Indications: Common cold with fever, diarrhea and dysentery, swelling of sores and boils, poisonous snake bites, malaria, pain in sinews and bones, knocks and falls. Isolated compounds: 20540, 20541, 20542, 20543, 20544, 20545.
- T6253 *Symplocos glomerata* (Symplocaceae); TUAN HUA SHAN FAN; Glomerule Sweetleaf. Isolated compounds: 20529, 20530, 20531, 20532, 20533, 20534, 20535, 20536, 20537, 20538, 20539.
- T6254 *Symplocos racemosa* (Symplocaceae); ZHU ZI SHU; Racemose Sweetleaf. Isolated compounds: 2270, 9234, 19192, 20528, 20547, 20548, 20549.
- T6255 *Synechocytis* sp. (Chroococcaceae). Isolated compounds: 15242.
- T6256 *Syneilesis palmata* (Asteraceae); TU ER SAN; *Syneilesis*\*. Isolated compounds: 20551.
- T6257 *Syngnathus acus* JIAN HAI LONG; Acute Syngnathus\*. Used part: meat or whole fish. TCM Effects: To supplement kidney and invigorate yang, dissipate binds and disperse swelling. TCM Indications: Impotence, emission, sterility, kidney vacuity asthma, concretion conglomeration accumulation and gathering, scrofula, goiter and carcinoma of neck, knocks and falls, swollen welling abscess and clove sores. Isolated compounds: 17127.
- T6258 *Syringa afghanica* (Oleaceae); A FU HAN DING XIANG; Afghanistan Lilac\*. Isolated compounds: 6917, 19112, 19113, 19114, 19115, 19116, 19117, 19118, 19119, 20553.
- T6259 *Syringa amurensis* [Syn. *Syringa reticulata* var. *amurensis*] (Oleaceae); BAO MA ZI; Amur Lilac. Used part: Bark, branch and trunk. TCM Effects: To diffuse lung and transform phlegm, relieve cough and calm asthma, disinhibit water. TCM Indications: Chronic bronchitis, asthma, edema due to heart disease. Isolated compounds: 8071, 8737, 8738, 8739, 10819, 12524, 12829, 14733, 15873, 15874, 19626.
- T6260 *Syringa oblata* (Oleaceae); ZI DING XIANG; Early Lilac. Used part: leaf and bark. TCM Effects: To clear heat and resolve toxin, disinhibit damp and abate jaundice. TCM Indications: Acute diarrhea, icterohepatitis, acute conjunctivitis, sores. Isolated compounds: 4135, 20569.
- T6261 *Syringa pinnatifolia* (Myrtaceae); YU YE DING XIANG; Pinnateleaf Lilac. Used part: root or branch and trunk. TCM Effects: To warm center, downbear qi, warm kidney. TCM Indications: Cold pain in stomach duct and abdomen, cold asthma, prolapse of uterus, prolapse of rectum. Isolated compounds: 22984.  
*Syringa reticulata* var. *amurensis* = *Syringa amurensis*
- T6262 *Syringa vulgaris* (Myrtaceae); OU DING XIANG; Common Lilac. Isolated compounds: 20560.
- T6263 *Syzygium aromaticum* [Syn. *Eugenia caryophyllata*] (Myrtaceae); DING XIANG; Clove Tree. Used part: flower bud. TCM Effects: To warm center and downbear counterflow, warm kidney and invigorate yang. TCM Indications: Stomach cold with retching counterflow, hiccough, cold pain in stomach duct and abdomen, reduced food intake and diarrhea, kidney vacuity impotence, vacuity cold in lumbus and knees, yin flat abscess. Isolated compounds: 391, 2222, 2273, 3241, 3301, 3488, 7518, 7520, 7521, 7524, 9669, 11411, 11419, 11420, 13848, 14668, 14718, 16050, 18679, 20389, 20910, 22336.
- T6264 *Syzygium buxifolium* (Myrtaceae); CHI NAN; Boxleaf Syzygium. Used part: root or root cortex. TCM Effects: To boost kidney and settle asthma, fortify spleen and disinhibit damp, expel wind and quicken blood, resolve toxin and disperse swelling. TCM Indications: Edema, asthma, strangury-turbidity, urethral stone, dysentery, hepatitis, prolapse of uterus, wind-damp pain, testitis, hemorrhoids, swollen welling abscess, burns and scalds, painful swelling from knocks and falls. Isolated compounds: 17696, 22270.
- T6265 *Syzygium cordatum* (Myrtaceae); XIN XING PU TAO; Cordate Syzygium\*. Isolated compounds: 8095.  
*Syzygium cumin* = *Eugenia jambolana*
- T6266 *Syzygium cumini* (Myrtaceae); YANG SHI GUO; Duhai. Used part: fruit. TCM Effects: To constrain lung and settle asthma, engender liquid, astringe intestines. TCM Indications: Taxation damage cough, vacuity asthma, fluid damage and thirst, chronic diarrhea and dysentery. Isolated compounds: 4446, 7852.
- T6267 *Syzygium jambos* (Myrtaceae); PU<sup>(3)</sup> TAO; Roseapple. Used part: pericarp. TCM Effects: To fortify spleen and warm stomach, supplement lung and relieve cough, break blood and disperse swelling. TCM Indications: Stomach cold and hiccough, spleen vacuity diarrhea, chronic dysentery, lung vacuity cold cough, flat abscess. Isolated compounds: 3303, 5011, 13456.
- T6268 *Syzygium samarangense* (Myrtaceae); YANG PU TAO YE; Samalanga Syzygium. Used part: leaf or bark. TCM Effects: To drain fire and resolve toxin, dry damp and resolve toxin. TCM Indications: Mough and tongue sores, goose-mouth sore, damp-erosion of sores, pudendal itch. Isolated compounds: 5048, 5857, 6923, 10399, 13628, 14676, 15170, 15180, 15181, 15184, 15192, 17403, 18317, 20331, 20394, 22287.

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- T6269 *Tabebuia avellanedae* (Apocynaceae); HE SE ZHONG HUA SHU. Isolated compounds: 1284, 6201, 6205, 6281, 6286, 6287, 9818, 9819, 10606, 10618, 10621, 11146, 11147, 13850, 21927.
- T6270 *Tabebuia impetiginosa* (Apocynaceae); BAN ZHEN ZHONG HUA SHU. Isolated compounds: 6206, 6274, 6281, 6286, 6287, 10606, 10618, 10622, 13949, 14055, 16739, 16740, 21894, 21895, 21925, 21927.
- T6271 *Tabernaemontana chartacea* (Apocynaceae); ZHI ZHI SHAN MA CHA. Isolated compounds: 16966.
- T6272 *Tabernaemontana corymbosa* (Apocynaceae); SAN FANG HUA XU HONG YUE GUI; Corymb Rose-bay\*. Isolated compounds: 3992, 3993, 3994, 3995, 3996, 3997, 3998, 3999, 4000, 4001, 4002, 4003, 7294, 9933, 9934, 10095.
- T6273 *Tabernaemontana holstii* (Apocynaceae); HE ER TI SHAN MA CHA. Isolated compounds: 16966.
- T6274 *Tabernaemontana johnstonii* (Apocynaceae); YUE HAN SI TONG SHAN MA CHA. Isolated compounds: 16966, 20576.
- T6275 *Tacca chantrieri* [Syn. *Tacca minor*; *Tacca esquirolii*] (Taccaceae); JIAN GEN SHU; Arrowroot Tacca. Used part: rhizome. TCM Effects: To clear heat and resolve toxin, rectify qi and relieve pain. TCM Indications: Gastroenteritis, gastric ulcer, duodenal ulcer, indigestion,

dysentery, hepatitis, sore and boil, swelling pain in throat, toxin swelling of sores. Isolated compounds: 3478, 3479, 5774, 5775, 5776, 5781, 5815, 5816, 5817, 5912, 5913, 8650, 8688, 8702, 8703, 8704, 8707, 10725, 10726, 18719, 20221, 20223, 20596, 20597, 20598.

*Tacca esquirolii* = *Tacca chantrieri*

*Tacca minor* = *Tacca chantrieri*

- T6276 *Tacca plantaginea* [Syn. *Schizocapsa plantaginea*] (Taccaceae); LIE GUO SHU; Lobedfruit Tacca. Used part: tuber. TCM Effects: To cool blood and disperse stasis, eliminate inflammation and relieve pain. TCM Indications: Peptic ulcer, enteritis, tuberculosis, pertussis, knocks and falls, bleeding due to external injury, sore pharynx, toothache, swollen welling abscess. Isolated compounds: 20587, 20588, 20589, 20590, 20591, 20592, 20593, 20594, 20595.
- T6277 *Tadehagi triquetrum* (Fabaceae); HU LU CHA; Triquetrous Tadehagi. Used part: branch-leaf. TCM Effects: To clear heat and resolve toxin, disperse accumulation and disinhibit damp, kill worms. TCM Indications: Common cold with fever, swelling pain in throat, nephritis, icterohepatitis, enteritis, bacillary dysentery, vomiting in pregnancy, ancylostomiasis. Isolated compounds: 20599.
- T6278 *Tagetes erecta* (Asteraceae); WAN SHOU JU; Aztec Marigold. Used part: inflorescence. TCM Effects: To clear heat and resolve toxin, relieve cough and transform phlegm. TCM Indications: Infection of upper respiratory tract, pertussis, conjunctivitis, stomatitis, toothache, dizziness, infant fright wind, amenorrhea, blood stasis and abdominal pain, swelling toxin of welling abscess and sore. Isolated compounds: 2017, 2783, 7441, 7821, 9290, 10273, 13126, 14602, 17263, 17264, 20608, 21018.
- T6279 *Tagetes erecta* (Asteraceae); WAN SHOU JU YE; Aztec Marigold Leaf. Used part: leaf. TCM Effects: To clear heat and resolve toxin. TCM Indications: Innominate toxin swelling, gan disease, welling abscess, sore, clove sore. Isolated compounds: 12018.
- T6280 *Tagetes maxima* (Asteraceae); ZUI DA WAN SHOU JU; Maxima Marigold\*. Isolated compounds: 3389, 10272, 16728, 18306, 18307, 18310, 18316.
- T6281 *Tagetes minuta* (Asteraceae); WEI XIAO WAN SHOU JU; Southern Marigold. Isolated compounds: 2284, 2783, 17090.
- T6282 *Tagetes patula* (Asteraceae); KONG QUE CAO; French Marigold. Used part: whole herb. TCM Effects: To clear heat and disinhibit damp, suppress cough. TCM Indications: Cough, dysentery. Isolated compounds: 834, 9290, 16728, 18305, 18316, 19027, 19039, 22520.
- T6283 *Tagetes* sp. (Asteraceae). Isolated compounds: 10775.
- T6284 *Taiwania cryptomerioides* (Taxodiaceae); TAI WAN SHAN; Cryptomeria-like Taiwania. Isolated compounds: 263, 1621, 2848, 2854, 2856, 2857, 2857, 2858, 4310, 4929, 5317, 5998, 5999, 6000, 6099, 6367, 9323, 9746, 10259, 10360, 10455, 10456, 11471, 12223, 14073, 15138, 15141, 16363, 16394, 16416, 16417, 19427, 20629, 20630, 20631, 20632, 20633, 20634, 20635, 20636, 20637, 20638, 20639, 20640, 20641, 20642, 20643, 20644, 21679, 21839.
- T6285 *Tamarindus indica* (Fabaceae); SUAN JIAO; Tamarind Fruit. Used part: fruit. TCM Effects: To clear heat and resolve toxin, harmonize stomach and disperse accumulation. TCM Indications: Summerheat stroke, inappetence, child gan accumulation, vomiting in pregnancy, constipation. Isolated compounds: 9616, 11773, 16196, 17090, 17425, 20715, 22581.
- T6286 *Tamarix chinensis* (Tamaricaceae); CHENG LIU; Chinese Tamarisk. Equivalent plant: *Tamarix ramosissima*. Used part: tender branch-leaf. TCM Effects: To course wind and resolve exterior, disinhibit urine and resolve toxin. TCM Indications: Non-eruption of measles, wind papule itching, common cold, cough and asthma, wind-damp bone pain. Isolated compounds: 8095, 11648, 12015, 12045, 18317, 18348, 20661, 20662, 20663.
- T6287 *Tamarix gallica* (Tamaricaceae); FA GUO CHENG LIU; French Tamarisk. Isolated compounds: 13504.
- T6288 *Tamarix hispida* (Tamaricaceae); GANG MAO CHENG LIU; Kashgar Tamarisk. Isolated compounds: 5791, 11648, 18682.
- T6289 *Tamarix nilotica* (Tamaricaceae); NI LUO HE CHENG LIU; Nilotic Tamarisk\*. Isolated compounds: 8095, 15600.
- T6290 *Tamarix ramosissima* (Tamaricaceae); DUO ZHI CHENG LIU; Branchy Tamarisk. Used part: tender branch-leaf. TCM Effects: See *Tamarix chinensis*. TCM Indications: See *Tamarix chinensis*. Isolated compounds: 18348.
- T6291 *Tamus communis* (Dioscoreaceae); JIANG GUO SHU YU; Black Bryony. Isolated compounds: 11246, 13243.
- T6292 *Tanacetum longifolium* (Asteraceae); CHANG YE AI JU; Longleaf Tansy. Isolated compounds: 9412, 20666.
- T6293 *Tanacetum microphyllum* (Asteraceae); XIAO YE JU HAO; Small-leaf Tansy\*. Isolated compounds: 3388, 5987, 9765, 12044, 19312.
- T6294 *Tanacetum parthenium* (Asteraceae); CHU AI JU; Feverfew. Isolated compounds: 3076, 19312.
- T6295 *Tanacetum sibiricum* [Syn. *Filifolium sibiricum*] (Asteraceae); SI BO LI YA AI JU; Siberian Tansy. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, quiet spirit, regulate menstruation. TCM Indications: Ardent fever (hyperpyrexia), palpitation, sleepless, menstrual disorder, swollen welling abscess and sores. Isolated compounds: 9604.
- T6296 *Tanacetum* sp. (Asteraceae). Isolated compounds: 19308.
- T6297 *Tanacetum* spp. (compositae). Isolated compounds: 16675, 17719.
- T6298 *Tanacetum vulgare* (Asteraceae); JU HAO; Common Tansy. Isolated compounds: 19312, 21350.
- T6299 *Tanghinia venenifera* (Apocynaceae); TAN MANG GUO. Isolated compounds: 20671.
- T6300 *Taraxacum formosanum* (Asteraceae); TAI WAN PU GONG YING; Taiwan Dandelion\*. Isolated compounds: 874, 1284, 2887, 3551, 3983, 9815, 9818, 14443, 14526, 14652, 14734, 14804, 15526, 19983, 20369, 20554, 20566, 20692, 20693, 20694, 20695, 20696, 20714, 22332, 22336.
- T6301 *Taraxacum mongolicum* (Asteraceae); PU GONG YING; Mongolian Dandelion. Used part: aerial parts. TCM Effects: To clear heat and resolve toxin, dissipate binds and disperse swelling, disinhibit urine and free strangury. TCM Indications: Epidemic parotitis, infection of upper respiratory tract, tonsillitis, laryngitis, sore pharynx, mastitis, hepatitis, swelling toxin of clove sore, mammary welling abscess, scrofula, red eyes, pulmonary welling abscess, damp-heat jaundice, heat strangury with inhibited pain. Isolated compounds: 2887, 3551, 3589, 20704.
- T6302 *Taraxacum obovatum* (Asteraceae); DAO LUAN YE PU GONG



- YING GEN; Obovateleaf Dandelion Root. Isolated compounds: 4749, 4750, 5724, 10319, 20073, 20714.
- T6303 *Taraxacum officinale* (Asteraceae); YAO YONG PU GONG YING; Official Dandelion. Isolated compounds: 1113, 1476, 1492, 1749, 2887, 3434, 3551, 3589, 3674, 4190, 4680, 6452, 7768, 7821, 7853, 7971, 12891, 13126, 13137, 13687, 16066, 17515, 18317, 19983, 20366, 20369, 20446, 20704, 20705, 20711, 22520.  
*Taxillus chinensis* = *Loranthus parasiticus*
- T6304 *Taxillus levinei* (Loranthaceae); XIU MAO JI SHENG; Rustyhair *Taxillus*. Used part: branch-leaf. TCM Effects: To clear lung and relieve cough, dispel wind-damp. TCM Indications: Lung heat cough, wind-damp pain in lumbus and legs, sore and boil. Isolated compounds: 5763, 11642.
- T6305 *Taxodium distichum* (Taxodiaceae); LUO YU SHAN; Deciduous Cypress. Isolated compounds: 20809, 20810.
- T6306 *Taxodium mucronatum* (Taxodiaceae); MO XI GE LUO YU SHAN; Mexican Cypress\*. Isolated compounds: 1030, 6314, 17588.
- T6307 *Taxus baccata* (Taxaceae); JIANG GUO ZI SHAN; Common Yew. Isolated compounds: 152, 157, 158, 284, 285, 355, 369, 519, 2072, 2073, 2076, 2077, 3402, 3697, 3698, 3699, 3701, 3719, 3720, 3721, 4704, 4711, 4713, 4721, 4722, 4723, 4730, 4737, 4780, 4783, 4784, 4798, 4804, 4810, 4812, 4852, 5138, 5139, 5140, 5293, 5294, 5318, 5331, 5538, 6880, 9811, 9812, 9865, 9866, 9867, 9965, 10475, 10739, 14198, 14199, 14739, 18815, 20741, 20742, 20743, 20770, 20793, 20795, 20797, 20806, 20811, 20812, 20814, 20840, 20905, 21160, 21529, 21602, 22845, 22847, 22848, 22849, 22851, 22852.
- T6308 *Taxus brevifolia* (Taxaceae); DUAN YE HONG DOU SHAN; Pacific Yew. Isolated compounds: 2256, 2258, 2604, 4722, 4723, 4729, 4731, 4732, 4733, 4765, 4779, 4849, 5348, 5383, 5459, 5460, 5881, 5882, 7027, 20761, 20762, 20779, 20803, 20811, 20849.
- T6309 *Taxus canadensis* (Taxaceae); JIA NA DA HONG DOU SHAN; Canadian Yew. Isolated compounds: 362, 367, 2236, 2237, 3056, 4725, 4726, 4744, 4781, 4786, 5138, 5304, 5310, 5315, 5328, 5329, 5330, 6157, 6850, 6881, 9763, 9963, 10742, 10777, 10778, 10781, 20743, 20748, 20749, 20750, 20751, 20752, 20822, 20863, 21523, 21603.
- T6310 *Taxus chinensis* (Taxaceae); HONG DOU SHAN; Chinese Yew. Isolated compounds: 156, 363, 368, 2249, 2250, 2252, 2253, 2255, 2265, 3714, 3716, 3717, 4705, 4736, 4737, 4764, 4776, 4777, 4778, 4849, 4853, 4854, 4980, 5294, 5318, 5323, 5331, 6395, 6934, 9505, 9813, 9960, 10739, 20736, 20737, 20743, 20744, 20761, 20764, 20768, 20769, 20770, 20771, 20772, 20773, 20774, 20775, 20776, 20777, 20778, 20779, 20790, 20795, 20797, 20798, 20802, 20811, 20817, 20818, 20866, 20867, 20875, 21160, 21516, 21527, 21529, 21531, 21704, 21705.
- T6311 *Taxus cuspidata* (Taxaceae); ZI SHAN; Japanese Yew. Used part: branchlet-leaf. TCM Effects: To disinhibit urine and free channels, anticancer. TCM Indications: Kidney disease, diabetes mellitus, carcinoma of ovary, carcinoma of mammary glands. Isolated compounds: 2073, 2074, 3721, 4708, 4782, 6679, 6884, 8609, 10738, 10743, 11477, 11728, 11732, 14651, 15664, 17700, 19514, 20738, 20739, 20740, 20743, 20762, 20780, 20781, 20782, 20783, 20784, 20785, 20786, 20787, 20788, 20789, 20790, 20794, 20797, 20798, 20799, 20800, 20801, 20802, 20807, 20811, 20813, 20840, 20841, 20842, 20843, 20844, 20845, 20846, 20847, 20848, 20849, 20851, 20852, 20853, 20854, 20855, 20856, 20857, 20858, 20859, 20860, 20861, 20862, 20863, 20864, 20865, 20868, 20869, 20870, 20871, 20872, 20873, 21529.
- T6312 *Taxus mairei* (Taxaceae); MEI LI HONG DOU SHAN; Maire Yew. Used part: seed. TCM Effects: To disperse accumulation, expel roundworm. TCM Indications: Food accumulation, ascariasis. Isolated compounds: 120, 151, 2074, 3715, 3717, 4708, 4734, 4735, 4785, 4981, 4984, 5294, 5320, 5321, 9811, 10476, 10740, 10780, 14199, 20647, 20745, 20746, 20797, 20800, 20802, 20811, 20819, 20820, 20821, 20822, 20823, 20824, 20825, 20826, 20827, 20828, 20829, 20830, 20831, 20832, 20834, 20835, 20836, 20837, 20838, 20839, 20840, 21029, 22951.
- T6313 *Taxus media* (Taxaceae); JIE ZHI HONG DOU SHAN; Media Yew. Isolated compounds: 2074, 2077, 4793, 4980, 4981, 20811.
- T6314 *Taxus* sp. (Taxaceae). Isolated compounds: 2075, 2078, 20850.
- T6315 *Taxus* spp. (Taxaceae). Isolated compounds: 20805.
- T6316 *Taxus sumatrana* (Taxaceae); SU MEN DA LA HONG DOU SHAN; Sumatran Yew. Isolated compounds: 531, 2073, 3402, 4722, 4736, 4762, 4763, 4765, 4787, 6140, 9812, 9961, 10558, 20718, 20719, 20720, 20721, 20722, 20723, 20724, 20725, 20739, 20765, 20796, 20800, 20803, 20811, 20822, 20823, 20833, 20834, 20835, 20836, 20854, 22630.
- T6317 *Taxus wallichiana* (Taxaceae); XI MA LA YA HONG DOU SHAN; Himalayan Yew. Isolated compounds: 150, 337, 519, 4702, 4704, 4707, 4783, 4784, 4801, 4802, 4803, 4808, 4851, 5478, 6315, 7046, 9811, 9812, 9962, 20739, 20753, 20754, 20755, 20756, 20757, 20758, 20811, 20812, 21028, 21161, 21533, 22630.
- T6318 *Taxus x media* (Taxaceae); ZA JIAO JIE ZHI HONG DOU SHAN; Media Yew (hybrid). Isolated compounds: 2235, 4706, 4710, 4724, 4805, 4807, 4813, 6868, 14739, 20747, 20776, 20813, 20814, 20870.
- T6319 *Taxus yunnanensis* (Taxaceae); YUN NAN HONG DOU SHAN; Yunnan Yew. Isolated compounds: 129, 133, 176, 182, 257, 288, 293, 328, 2073, 2073, 2075, 3980, 3983, 4636, 4637, 4638, 4639, 4704, 4705, 4708, 4722, 4726, 4727, 4728, 4766, 4781, 4787, 4788, 4850, 4855, 4979, 4980, 5145, 5289, 5348, 6884, 7028, 9626, 9627, 9628, 9811, 9812, 10314, 10779, 10782, 11732, 19618, 20758, 20759, 20760, 20761, 20762, 20763, 20764, 20765, 20766, 20767, 20786, 20787, 20796, 20797, 20800, 20802, 20804, 20806, 20811, 20812, 20813, 20815, 20816, 20824, 20840, 20850, 20851, 20869, 20871, 20874, 20875, 20876, 20877, 20878, 20879, 20880, 20881, 20882, 20883, 20884, 20885, 21515, 21529, 21686, 22336, 22846, 22853, 22939, 22950, 22951, 22952.
- T6320 *Teclea grandifolia* (Rutaceae); DA YE YOU MU YUN XIANG. Isolated compounds: 20895.
- T6321 *Teclea natalensis* (Rutaceae). Isolated compounds: 20893, 20894.
- T6322 *Teclea nobilis* (Rutaceae); GAO GUI YOU MU YUN XIANG. Isolated compounds: 1267, 3547, 7808, 9227, 11733, 14620, 15638, 20892, 20893.
- T6323 *Teclea oubanguiensi* (Rutaceae). Isolated compounds: 20895.
- T6324 *Tecoma stans* (Bignoniaceae); HUANG ZHONG HUA; Florida Yellowtrumpet. Isolated compounds: 582, 17513, 20896, 20898.
- T6325 *Tectona grandis* (Verbenaceae); YOU MU; Common Teak. Used part:

- stem-leaf. TCM Effects: To harmonize center and check vomiting, dispel wind and relieve itch. TCM Indications: Nausea and vomiting, wind papule itching. Isolated compounds: 967, 3615, 5188, 6015, 10313, 12503, 14144.
- T6326 *Telekia speciosa* (Compositae); MEI LI TE LE JU. Used part: whole herb. TCM Indications: Wind-damp. Isolated compounds: 1888, 11203, 20906.
- T6327 *Telotoxicum peruvianum*. Isolated compounds: 15792.
- T6328 *Tellima grandifolia* (Saxifragaceae); XIN SHAO NA CAO; Fringecups. Isolated compounds: 7518, 20910.
- T6329 *Telosma procumbens* (Asclepiadaceae); WO JING YE LAI XIANG; Creeping Telosma. Isolated compounds: 20912, 20913, 20914, 20915, 20916, 20917, 20918, 20919, 20920, 20921, 20922, 20923, 20924, 20925, 20926, 20927, 20928, 20929.
- T6330 *Tephrosia kirilowii* [Syn. *Senecio integrifolius* var. *fauriei*] (Asteraceae); GOU SHE CAO; Kirilow Groundsel Herb. Used part: herb. TCM Effects: To clear heat, disinherit water, kill worms. TCM Indications: Nephritis with edema, open pus sore of lung, swollen boil, scab sore. Isolated compounds: 17546.
- T6331 *Tephrosia aequilata* (Fabaceae); KEN NI YA HUI YE; Kenya Tephrosia\*. Isolated compounds: 6349.
- T6332 *Tephrosia calophylla* (Fabaceae); MEI LI YE HUI MAO DOU; Beautiful-leaf Tephrosia\*. Isolated compounds: 1935, 14465, 20964.
- T6333 *Tephrosia crassifolia* (Fabaceae); HOU YE HUI MAO DOU; Crassleaf Tephrosia\*. Isolated compounds: 4212, 4213.
- T6334 *Tephrosia elata* (Fabaceae); GAO HUI MAO DOU; High Tephrosia\*. Isolated compounds: 20965, 22637.
- T6335 *Tephrosia hamiltonii* (Fabaceae); HAN MI ER DUN HUI YE; Hamilton Tephrosia\*. Isolated compounds: 18223.
- T6336 *Tephrosia hildebrandtii* (Fabaceae); XI SHI HUI MAO DOU; Hildebrandt Tephrosia\*. Isolated compounds: 9540.
- T6337 *Tephrosia noctiflora* (Fabaceae); YE HUA HUI MAO DOU; Long Inflorescence Tephrosia. Isolated compounds: 22158.
- T6338 *Tephrosia purpurea* (Fabaceae); HUI YE; Purple Tephrosia. Used part: whole herb. TCM Effects: To resolve exterior and clear heat, dry damp and resolve toxin. TCM Indications: Wind-heat common cold, eczema, dermatitis. Isolated compounds: 1403, 1404, 18218, 18223.
- T6339 *Tephrosia purpurea* (Fabaceae); HUI YE GEN; Purple Tephrosia Root. Used part: root. TCM Effects: To clear heat and disperse stagnation, move *qi* and relieve pain, contract damp and relieve itch. TCM Indications: Indigestion, gastritis, abdominal distention, stomachache, eczema, dermatitis. Isolated compounds: 4872, 4898, 10421, 10680, 14683, 17708, 18063, 18223, 18939, 20965, 21483.
- T6340 *Tephrosia* sp. (Fabaceae). Isolated compounds: 4872, 10680.
- T6341 *Tephrosia toxicaria* (Fabaceae); DU HUI MAO DOU; Toxic Tephrosia\*. Isolated compounds: 1436, 2280, 2282, 3602, 5595, 8278, 10430, 10741, 10741, 11504, 13097, 13571, 15887, 20485, 21483.
- T6342 *Tephrosia tunicata* (Fabaceae); BAO MO HUI MAO DOU; Tunicate Tephrosia\*. Isolated compounds: 22110.
- T6343 *Terminalia arborea* (Combretaceae); QIAO MU ZHUANG LAN REN; Arboreous Terminalia\*. Isolated compounds: 18202.
- T6344 *Terminalia arjuna* (Combretaceae); A JIANG LAN REN. Isolated compounds: 1733, 1734, 3303.
- T6345 *Terminalia calamansanai* (Combretaceae). Isolated compounds: 17754.
- T6346 *Terminalia chebula* (Combretaceae); HE ZI; Medicine Terminalia. Equivalent plant: *Terminalia chebula* var. *tomentella*. Used part: fruit. TCM Effects: To constrain lung and astringe intestines, downbear fire and disinhibit throat. TCM Indications: Chronic diarrhea and dysentery, hematochezia, prolapse of rectum, cough and asthma due to lung vacuity, incessant cough, aphonia due to throat pain. Isolated compounds: 1732, 3318, 3490, 3493, 4055, 4968, 6757, 7441, 8095, 8108, 16836, 18204, 18421, 19749, 20970, 20974, 20977, 21643.
- T6347 *Terminalia chebula* (Combretaceae); HE ZI YE; Medicine Terminalia Leaf. Used part: leaf. TCM Effects: To precipitate *qi* and disperse phlegm, allay thirst, check dysentery. TCM Indications: Enduring cough and aphonia, chronic diarrhea, chronic dysentery. Isolated compounds: 4968, 18421.
- T6348 *Terminalia chebula* var. *tomentella* (Combretaceae); WEI MAO HE ZI; *Terminalia chebula* var. *tomentella*. Used part: fruit. TCM Effects: See *Terminalia chebula*. TCM Indications: See *Terminalia chebula*. Isolated compounds: 20975, 21273.
- T6349 *Terminalia stuhlmannii* (Combretaceae); A KA XI A LAN REN; Acacia Terminalia\*. Isolated compounds: 10226.
- T6350 *Ternstroemia japonica* (Theaceae); RI BEN HOU PI XIANG; Japanese Clevera. Isolated compounds: 5241, 18699, 20980, 20981, 20982, 20983, 20984, 20985.
- T6351 *Tessaria integrifolia* (Asteraceae); QUAN YUAN YE TE SA JU. Isolated compounds: 5415, 11094, 11095, 11096, 11097, 11098.
- T6352 *Tetracentron sinense* (Tetracentraceae); SHUI QING SHU; Tetracentron. Isolated compounds: 21035, 21036.
- T6353 *Tetracera asiatica* (Dilleniaceae); XI YE TENG; Asian Tetracera. Used part: root or leaf. TCM Effects: To promote contraction and stem desertion, disperse swelling and relieve pain. TCM Indications: Enteritis, dysentery, prolapse of rectum, emission, knocks and falls. Isolated compounds: 2052, 18679, 18682.
- T6354 *Tetradium daniellii*. Isolated compounds: 10053.
- T6355 *Tetradymia glabrata* (Asteraceae); GUANG SI SHI JU; Littleleaf Horsebrush. Isolated compounds: 10238, 21051.
- T6356 *Tetrapanax papyriferus* (Araliaceae); TONG HUA GEN; Ricepaperplant Root. Used part: root. TCM Effects: To clear heat and disinhibit urine, rectify *qi* and disperse food, quicken blood and promote milk. TCM Indications: Edema, strangury syndrome, food accumulation distention and fullness, lump glomus, wind-damp impediment pain, menstrual disorder, galactostasis. Isolated compounds: 14633, 16046, 16047, 18712.
- T6357 *Tetrapanax papyriferus* (Araliaceae); TONG TUO MU; Ricepaperplant. Used part: stem marrow. TCM Effects: To clear heat and disinhibit water, free milk. TCM Indications: Strangury with pain, inhibited urination, edema, jaundice, damp-heat disease, short voidings of reddish urine, postpartum scant milk, amenorrhea, Vaginal discharge. Isolated compounds: 1608, 16635, 16636, 16637, 16638, 16639, 16640, 16641, 16642, 16643, 16644, 16645, 16646, 16647, 17917, 17918.
- Tetraplodon bryoides* = *Tetraplodon mnioides*
- T6358 *Tetraplodon mnioides* [Syn. *Tetraplodon bryoides*; *Splachnum*

- mnioides*] (Spalchnaceae); BING CHI XIANG. Used part: plant body. TCM Effects: To calm and quiet spirit. TCM Indications: Disquieted spirit-mind, palpitation, sleepless, epilepsy, wind stroke with loss of speech. Isolated compounds: 11532, 15980.
- T6359 *Teucrium bidentatum* (Lamiaceae); ER CHI XIANG KE KE; Twodenntate Germander. Used part: root or whole herb. TCM Effects: To dispel wind, disinhibit damp, resolve toxin. TCM Indications: Common cold, headache, nasal congestion, dysentery, eczema, eczema leukoplakia. Isolated compounds: 21223, 21228.
- T6360 *Teucrium chamaedrys* (Lamiaceae); SHI CAN XIANG KE KE; Chamaedrys Germander. Isolated compounds: 7124, 21214, 21215.
- T6361 *Teucrium fruticans* (Lamiaceae); GUAN CONG XIANG KE KE; Fluticose Germander\*. Isolated compounds: 425, 4742, 7972, 10130, 10131, 10132, 11430.
- Teucrium japonicum* var. *pilosum* = *Teucrium pilosum*
- T6362 *Teucrium marum* (Lamiaceae); MA SHI XIANG KE KE; Cat Thyme. Isolated compounds: 6550.
- T6363 *Teucrium montanum* (Lamiaceae); SHAN XIANG KE KE; Montane Germander\*. Isolated compounds: 524, 14946.
- T6364 *Teucrium orientale* (Lamiaceae); DONG FANG XIANG KE KE; Oriental Germander. Isolated compounds: 4789, 10761, 21217, 21218, 21219, 21220.
- T6365 *Teucrium pilosum* [Syn. *Teucrium japonicum* var. *pilosum*] (Lamiaceae); CHANG MAO XIANG KE KE; Pilose Germander. Used part: whole herb. TCM Effects: To dispel wind and effuse exterior, clear heat and resolve toxin, relieve itch. TCM Indications: Wind-heat common cold, sore swollen throat, mumps, pulmonary welling abscess, dysentery, lacquer sore, eczema, scab and lichen, wind papules [=rubella]. Isolated compounds: 21216, 21221.
- T6366 *Teucrium polium* (Lamiaceae); HUI BAI SHI CAN; Narrowleaf Germander. Isolated compounds: 486, 21226, 21227.
- T6367 *Teucrium quadrifarium* (Lamiaceae); TIE ZHOU CAO; Fourfile Germander. Used part: whole herb, root or leaf. TCM Effects: To dispel wind and resolve summerheat, disinhibit damp and disperse swelling, cool blood and resolve toxin. TCM Indications: Wind-heat common cold, summerheat stroke and anidrosis, lung heat cough asthma, pulmonary welling abscess, heat toxin dysentery, edema, wind-damp pain, taxation damage, blood ejection, hematochezia, mammary welling abscess, innominate toxin swelling, wind papules, eczema, knocks and falls, bleeding due to external injury, poisonous snake bite, bee sting. Isolated compounds: 21229.
- T6368 *Teucrium scordium* (Lamiaceae); SUAN WEI XIANG KE KE; Garlicsmell Germander\*. Isolated compounds: 524, 525, 10762, 21213.
- T6369 *Teucrium scorodonia* (Lamiaceae); LIN SHI CAN; Wood Sage. Isolated compounds: 12420.
- T6370 *Teucrium tomentosum* (Lamiaceae); RONG MAO XIANG KE KE; Tomentose Germander. Isolated compounds: 525, 5342, 10762, 14946, 21213, 21222, 21224.
- T6371 *Teucrium viscidum* var. *miquelianum* (Lamiaceae); MAN HUO XIANG. Isolated compounds: 21224.
- T6372 *Thalictrum acutifolium* (Ranunculaceae); JIAN YE TANG SONG CAO; Sharpleaf Meadowrue. Used part: root and rhizome. TCM Effects: See *Thalictrum faberi*. TCM Indications: See *Thalictrum faberi*. Isolated compounds: 596, 14484, 21888.
- T6373 *Thalictrum alpinum* (Ranunculaceae); GAO SHAN TANG SONG CAO; Alpine Meadowrue. Used part: root and rhizome. TCM Effects: To clear heat and drain fire, resolve toxin. TCM Indications: Headache and red eyes, diarrhea, dysentery, sores. Isolated compounds: 15787, 21251, 21259, 21268, 21269.
- T6374 *Thalictrum atriplex* (Ranunculaceae); XIA XU TANG SONG CAO; Narrowraceme Meadowrue. Used part: rhizome and root. TCM Effects: To clear heat and resolve toxin, cool liver, check dysentery. TCM Indications: Swelling and toxin of sore and welling abscess, damp-heat jaundice, dysentery, conjunctivitis. Isolated compounds: 930, 2300, 2303, 4032, 4290, 9441, 11736, 11851, 16439, 16555, 17983, 21253.
- T6375 *Thalictrum baicalense* (Ranunculaceae); BEI JIA ER TANG SONG CAO; Baikal Meadowrue. Used part: rhizome and root. TCM Effects: See *Thalictrum foliolosum*. TCM Indications: See *Thalictrum foliolosum*. Isolated compounds: 8513, 13374, 19983.
- T6376 *Thalictrum cultratum* (Ranunculaceae); GAO YUAN TANG SONG CAO; Highland Meadowrue. Used part: rhizome and root. TCM Effects: See *Thalictrum foliolosum*. TCM Indications: See *Thalictrum foliolosum*. Isolated compounds: 21246, 21248, 21265.
- T6377 *Thalictrum dasycarpum* (Ranunculaceae); CU GUO TANG SONG CAO; Purple Meadowrue. Isolated compounds: 4121, 12561, 13374, 21239, 21251.
- T6378 *Thalictrum delavayi* (Ranunculaceae); PIAN CHI TANG SONG CAO; Delavay Meadowrue. Used part: root and rhizome. TCM Effects: To clear heat and dry damp, drain fire and resolve toxin. TCM Indications: Damp-heat diarrhea dysentery, jaundice, leukorrhea, wind-fire toothache, red eyes with gall, toxin swelling of sores. Isolated compounds: 18057.
- T6379 *Thalictrum dioicum* (Ranunculaceae); YI XING TANG SONG CAO; Early Meadowrue. Isolated compounds: 16816, 21239.
- T6380 *Thalictrum elegans* (Ranunculaceae); XIAO YE TANG SONG CAO; Small-leaf Meadowrue. Isolated compounds: 21187.
- T6381 *Thalictrum faberi* (Ranunculaceae); DA YE TANG SONG CAO; Faber Meadowrue. Equivalent plant: *Thalictrum acutifolium*, *Thalictrum fortunei*. Used part: root and rhizome. TCM Effects: To clear heat, drain fire, resolve toxin. TCM Indications: Dysentery, diarrhea, red eyes with gall, damp-heat jaundice. Isolated compounds: 930, 2300, 2303, 4032, 4290, 9441, 11736, 11851, 16439, 16555, 17983, 21235, 21251, 21253, 21261.
- T6382 *Thalictrum fargesii* (Ranunculaceae); CHENG KOU TANG SONG CAO; Farges Meadowrue. Isolated compounds: 21251.
- T6383 *Thalictrum fendleri* (Ranunculaceae); FEN SHI TANG SONG CAO; Fendler's Meadowrue. Isolated compounds: 9441, 14251, 21253.
- T6384 *Thalictrum filamentosum* (Ranunculaceae); HUA TANG SONG CAO; Filamentary Meadowrue. Isolated compounds: 21246.
- T6385 *Thalictrum flavum* (Ranunculaceae); HUANG TANG SONG CAO; Maidenhair Meadowrue. Used part: rhizome and root. TCM Effects: See *Thalictrum foliolosum*. TCM Indications: See *Thalictrum foliolosum*. Isolated compounds: 21239.
- T6386 *Thalictrum foetidum* (Ranunculaceae); XIANG TANG SONG CAO; Tibetan Meadowrue. Used part: root and rhizome. TCM Effects: To

- clear heat and dry damp, resolve toxin. TCM Indications: Damp-heat dysentery, jaundice, red eyes with gall, swollen welling abscess, sore and boil, wind-damp-heat impediment. Isolated compounds: 4492, 4680, 7793, 8513, 9235, 11256, 11736, 13374, 13836, 19087, 21235, 21236, 21252, 21267.
- T6387 *Thalictrum foliolosum* (Ranunculaceae); MA WEI LIAN; Manyleaf Meadowrue. Equivalent plant: *Thalictrum baicalense*, *Thalictrum flavum*, *Thalictrum cultratum*, *Thalictrum glandulosissimum*. Used part: rhizome and root. TCM Effects: To clear heat and dry damp, drain fire and resolve toxin. TCM Indications: Influenza, fever in children, common cold with fever, measles papules, malaria, damp-heat diarrhea dysentery, jaundice, red eyes with gall. Isolated compounds: 930, 2300, 2303, 3934, 4032, 4290, 9441, 11736, 11851, 13374, 15787, 16439, 16441, 16555, 17983, 18655, 21234, 21253, 21254, 21263, 21268, 21269, 22771.
- T6388 *Thalictrum fortunei* (Ranunculaceae); HUA DONG TANG SONG CAO; Fortune Meadowrue. Used part: root and rhizome. TCM Effects: See *Thalictrum fabri*. TCM Indications: See *Thalictrum fabri*. Isolated compounds: 8626, 8627, 8628, 8629, 21256.
- T6389 *Thalictrum glandulosissimum* (Ranunculaceae); JIN SI MA WEI LIAN; Gold-enthread Meadowrue. Used part: rhizome and root. TCM Effects: See *Thalictrum foliolosum*. TCM Indications: See *Thalictrum foliolosum*. Isolated compounds: 930, 2300, 2303, 4032, 4290, 9441, 11736, 11851, 16439, 16555, 17983, 21253.
- T6390 *Thalictrum glaucum* (Ranunculaceae); LV TANG SONG CAO; Glaucous Meadowrue\*. Isolated compounds: 21257.
- T6391 *Thalictrum hernandezii* (Ranunculaceae); HE SHI TANG SONG CAO; Hernandez Meadowrue\*. Isolated compounds: 9441.
- T6392 *Thalictrum honanense* (Ranunculaceae); HE NAN TANG SONG CAO; Honan Meadowrue. Isolated compounds: 631, 11851, 21254.
- T6393 *Thalictrum ichangense* [Syn. *Thalictrum tripeltatum*; *Thalictrum multipeltatum*] (Ranunculaceae); DUN YE TANG SONG CAO; Peltateleaf Meadowrue. Used part: whole herb or root. TCM Effects: To clear heat and resolve toxin, dry damp. TCM Indications: Damp-heat jaundice, damp-heat dysentery, infant fright wind, red eyes with gall, erysipelas wandering wind, goose-mouth sore, knocks and falls. Isolated compounds: 21246, 21259.
- T6394 *Thalictrum incidum* (Ranunculaceae); XIA YE TANG SONG CAO; Narrowleaf Meadowrue. Isolated compounds: 15881.
- T6395 *Thalictrum isopyroides* (Ranunculaceae); ZI JIN YE TANG SONG CAO; Corydalisleaf Meadowrue. Isolated compounds: 21263.
- T6396 *Thalictrum longistylum* (Ranunculaceae); CHANG ZHU TANG SONG CAO; Longstyle Meadowrue\*. Isolated compounds: 5100.
- T6397 *Thalictrum lucidum* (Ranunculaceae); TOU MING TANG SONG CAO; Lucid Meadowrue\*. Isolated compounds: 1769, 9597, 11851, 15881, 15885, 16439, 21240, 21251, 21257, 21270.
- T6398 *Thalictrum microgynum* (Ranunculaceae); XIAO GUO TANG SONG CAO; Smallfruit Meadowrue. Used part: root. TCM Effects: To clear heat and resolve toxin, disinhibit damp. TCM Indications: Yellow swelling in whole body, yellow eyes, knocks and falls. Isolated compounds: 930, 2300, 2303, 4032, 4290, 8513, 9441, 11736, 11851, 16414, 16439, 16555, 17983, 21246, 21253.
- T6399 *Thalictrum minus* (Ranunculaceae); XIAO TANG SONG CAO; Low Meadowrue. Isolated compounds: 1667, 13374, 14756, 15881, 20649, 21235, 21237, 21238, 21240, 21243, 21251, 21257, 21260, 21261, 21266, 21268, 21270.
- T6400 *Thalictrum minus* var. *adiantifolium* (Ranunculaceae); TIE XIAN JUE YE TANG SONG CAO; Maidenhair-like Meadowrue\*. Isolated compounds: 631, 15787, 21255.
- T6401 *Thalictrum minus* var. *hypoleucum* (Ranunculaceae); DONG YA TANG SONG CAO. Isolated compounds: 13374.  
*Thalictrum multipeltatum* = *Thalictrum ichangense*
- T6402 *Thalictrum omeiense* (Ranunculaceae); E MEI TANG SONG CAO; Omei Meadowrue. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, dry damp, interrupt malaria. TCM Indications: Damp-heat jaundice, abdominal pain and diarrhea, red eyes with gall, malaria with chills and fever. Isolated compounds: 13836, 21265.
- T6403 *Thalictrum petaloideum* (Ranunculaceae); BAN RUI TANG SONG CAO; Petalformed Meadowrue. Used part: root and rhizome. TCM Effects: To clear heat, dry damp, resolve toxin. TCM Indications: Damp-heat diarrhea dysentery, jaundice, lung heat cough, red eyes with gall, swelling welling abscess and sore and boil, exudative dermatitis. Isolated compounds: 930, 2300, 2303, 4032, 4290, 9441, 11736, 11851, 16439, 16555, 17983, 21253.
- T6404 *Thalictrum podocarpum* (Ranunculaceae); BING GUO TANG SONG CAO; Stalkedfruit Meadowrue\*. Isolated compounds: 5100, 5260, 9441, 21253, 21257.
- T6405 *Thalictrum polygamum* (Ranunculaceae); ZA XING TANG SONG CAO; Tall Meadowrue. Isolated compounds: 2304, 16816, 21239, 21257, 21266.
- T6406 *Thalictrum revolutum* (Ranunculaceae); WAI JUAN TANG SONG CAO; Waxy Meadowrue. Isolated compounds: 16816, 21239, 21251, 21257, 21266, 21268.
- T6407 *Thalictrum rugosum* (Ranunculaceae); ZOU WEN TANG SONG CAO; Rugose Meadowrue\*. Isolated compounds: 1667, 4121, 9597, 15787, 15885, 21234, 21251, 21257, 21263, 21266, 21268, 21269, 21270.
- T6408 *Thalictrum sessile* (Ranunculaceae); WU BING TANG SONG CAO; Javan Meadowrue. Isolated compounds: 21245.
- T6409 *Thalictrum simplex* [Syn. *Thalictrum simplex* var. *brevipes*] (Ranunculaceae); YING SHUI HUANG LIAN; Slim-top Meadowrue. Used part: root. TCM Effects: To clear heat and resolve toxin, disinhibit damp and abate jaundice. TCM Indications: Jaundice, dysentery, lung heat cough, red eyes with gall, gan of nose. Isolated compounds: 930, 2300, 2303, 4032, 4290, 9441, 11736, 11851, 16439, 16555, 17983, 21234, 21241, 21242, 21246, 21249, 21253, 21262.  
*Thalictrum simplex* var. *brevipes* = *Thalictrum simplex*
- T6410 *Thalictrum smithii* (Ranunculaceae); BIAN ZHU TANG SONG CAO; Smith Meadowrue. Used part: aerial parts. TCM Effects: To clear heat and dry damp, resolve toxin. TCM Indications: Abdominal pain and diarrhea, dizziness. Isolated compounds: 4467.
- T6411 *Thalictrum* sp. (Ranunculaceae). Isolated compounds: 21264.
- T6412 *Thalictrum squarrosum* (Ranunculaceae); ZHAN ZHI TANG SONG CAO; Spreading Meadowrue\*. Used part: root and rhizome (or whole herb). TCM Effects: To clear heat and resolve toxin, inhibit acid. TCM Indications: Acute conjunctivitis, infective hepatitis, dysentery, stomach disease and acid vomiting. Isolated compounds: 21251.

- T6413 *Thalictrum strictum* (Ranunculaceae); BI ZHI TANG SONG CAO; Strict Meadowrue\*. Isolated compounds: 21246.
- T6414 *Thalictrum thunbergii* (Ranunculaceae); YAN GUO CAO; East-Asia Low Meadowrue. Used part: root. TCM Effects: To clear heat and resolve toxin, dry damp. TCM Indications: Pertussis, toothache, swelling toxin of welling abscess and sore, acute dermatitis, eczema. Isolated compounds: 930, 1492, 1667, 2300, 2303, 4032, 4290, 9441, 9597, 11736, 11851, 13374, 14756, 16439, 16555, 17983, 20649, 21240, 21244, 21247, 21248, 21253.  
*Thalictrum tripeltatum* = *Thalictrum ichangense*
- T6415 *Thalictrum urbainii* (Ranunculaceae); TAI WAN TANG SONG CAO; Taiwan Meadowrue. Isolated compounds: 11344.
- T6416 *Thamnia vermicularis* (Thamniaceae); XUE CHA; Vermiculate Thamnia Thallus. Used part: lichen body. TCM Effects: To clear heat and allay thirst, arouse spirit. TCM Indications: Summerheat stroke, vexation and thirst, lung heat cough, *yin* vacuity tidal fever, epilepsy, insomnia, eye diseases. Isolated compounds: 1596, 20238, 21271, 21272, 22402.
- T6417 *Thamnia vermicularis* var. *subuliformis* (Thamniaceae); Lichen. Isolated compounds: 2101.
- T6418 *Thamnosma rhodesica* (Rutaceae). Isolated compounds: 2833, 3856, 8985, 10465, 11001, 11601, 13571, 18784, 19077.
- T6419 *Thapsia garganica* (Asteraceae); DU HU LUO BO; Deadly Carrot. Isolated compounds: 15811, 21279.
- T6420 *Thelephora aurantiotincta* (Thelephoraceae); JIN HUANG GE JUN; Goldenyellow Thelephore\*. Isolated compounds: 2000, 8132, 8133, 9818, 14150, 21293, 21294, 21295, 21296, 21297, 21298, 21299, 21300, 21307.
- T6421 *Thelephora terrestris* (Thelephoraceae); LU SHENG GE JUN; Terrestrial Thelephore\*. Isolated compounds: 20386, 21002, 21003, 21006, 21007, 21008, 21009, 21010, 21011, 21012.
- T6422 *Thelephora vialis* (Thelephoraceae); LIAN ZUO GE JUN; Vase Thelephore. Used part: sporocarp. TCM Effects: To dispel wind and dissipate cold, soothe sinews and quicken network vessels. TCM Indications: Wind-damp impediment pain, hypertonicity of sinews and vessels. Isolated compounds: 12598, 13790, 13791, 13792.
- T6423 *Theobroma cacao* (Sterculiaceae); KE KE; Cocoa. Used part: seed. TCM Effects: To warm *yang*, disinhibit urine, raise spirit. Isolated compounds: 1562, 1564, 3551, 6863, 8051, 17876, 17888, 19198, 21310.
- T6424 *Thermopsis alpina* (Fabaceae); GAO SHAN HUANG HUA; Alpine Thermopsis. Used part: flower and fruit. TCM Effects: To extinguish wind and settle fright. TCM Indications: Rabid dog bite. Isolated compounds: 4594, 21318.
- T6425 *Thermopsis alternifolia* (Fabaceae); HU SHENG YE YE JUE MING; Alternateleaf Thermopsis\*. Isolated compounds: 4594.
- T6426 *Thermopsis chinensis* (Fabaceae); XIAO YE YE JUE MING; Chinese Thermopsis. Used part: root or seed. TCM Effects: To clear heat and brighten eyes. TCM Indications: Red eyes with gall. Isolated compounds: 4594.
- T6427 *Thermopsis cinerea* (Fabaceae); HUI HUANG HUA; Cinereous Thermopsis\*. Isolated compounds: 15972.
- T6428 *Thermopsis lanceolata* (Fabaceae); MU MA DOU; Lanceleaf Thermopsis. Used part: whole herb. TCM Effects: To relieve cough and dispel phlegm, moisten intestines and free stool. TCM Indications: Cough of phlegm asthma, dry stool. Isolated compounds: 329, 1134, 1672, 4594, 7900, 13089, 18819, 20133, 21317, 21318.
- T6429 *Thermopsis lupinoides* (Fabaceae); YE JUE MING; Wild Thermopsis. Used part: whole herb and seed. TCM Effects: To resolve toxin and disperse swelling, dispel phlegm and promote vomiting. TCM Indications: Malign sore, scab and lichen. Isolated compounds: 4594, 16494, 21318.
- T6430 *Thermopsis* spp. (Fabaceae). Isolated compounds: 3004, 16209.
- T6431 *Thesium chinense* (Santalaceae); BAI RUI CAO; Chinese Bastardtoadflax. Used part: whole herb. TCM Effects: To clear heat, disinhibit damp, resolve toxin. TCM Indications: Wind-heat common cold, summerheat stroke, pulmonary welling abscess, nipple moth, scrofula, mammary welling abscess, swollen boil, strangury syndrome, jaundice, lumbago, emission. Isolated compounds: 12020, 20444.
- T6432 *Thespesia populnea* [Syn. *Hibiscus populneus*] (Malvaceae); YANG YE XIAO JIN; Portiatree. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, disperse swelling and relieve pain, eliminate inflammation and disperse swelling (leaf), enrich and supplement (root). TCM Indications: Meningitis, dysentery, hemorrhoids, painful swollen testes, scab and lichen; bark: dysentery, hemorrhoids, skin diseases. Isolated compounds: 13513, 13514, 13515, 13516, 21320, 21321.
- T6433 *Thevetia nerifolia* [Syn. *Thevetia peruviana*] (Apocynaceae); HUANG HUA JIA ZHU TAO; Yellow Oleander. Used part: seed. TCM Effects: To strengthen heart, disinhibit urine and disperse edema. TCM Indications: Cardiac failure, paroxysmal supraventricular tachycardia, paroxysmal fibrillation. Isolated compounds: 2556, 3416, 3417, 12019, 12046, 12093, 13100, 13418, 15494, 16587, 16996, 16999, 17000, 17001, 17002, 17003, 18354, 18362, 18363, 18395, 19090, 20088, 20148, 21322, 21323, 21324, 21325, 21326, 21327, 22426.  
*Thevetia peruviana* = *Thevetia nerifolia*
- T6434 *Thichothecium roseum*. Isolated compounds: 21577.
- T6435 *Thladiantha cordifolia* (Cucurbitaceae); XIN YE CHI BO; Heartleaf Tubergourd. Used part: root and fruit. TCM Effects: To clear heat and resolve toxin, fortify stomach and relieve pain (root), disperse swelling (fruit). Isolated compounds: 5649, 21335, 22842.
- T6436 *Thlaspi arvense* (Brassicaceae); XI MING; Boor's Mustard. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, disinhibit water and disperse edema. TCM Indications: Red eyes with gall, pulmonary welling abscess, diarrhea, dysentery, leukorrhea, postpartum blood stasis abdominal pain, indigestion, nephritis with edema, cirrhosis with ascites, swelling toxin of welling abscess and sore. Isolated compounds: 19935.
- T6437 *Thlaspi arvense* (Brassicaceae); XI MING ZI; Boor's Mustard Seed. Used part: seed. TCM Effects: To brighten eyes, dispel wind-damp. TCM Indications: Sore red swollen eyes and tearing, wind-damp impediment pain. Isolated compounds: 14336, 19935.
- T6438 *Thuja occidentalis* (Cupressaceae); BEI MEI YA BAI; Eastern Arborvitae. Isolated compounds: 1372, 1373, 1394, 1395, 5543, 7751, 15412, 21350.
- T6439 *Thuja orientalis* [Syn. *Platyclusus orientalis*; *Biota orientalis*]

- (Cupressaceae); CE BAI ZHI JIE; Chinese Arborvitae Branch. Used part: branchlet. TCM Effects: To dispel wind and eliminate damp, resolve toxin and cure sores. TCM Indications: Wind impediment, joint running wind, cholera cramp, gum swelling and pain. Isolated compounds: 2396, 2397, 3466, 4368, 4369, 4370, 4371, 4372, 4374, 4375, 4392, 4894, 5924, 11255, 11256, 11357, 13625, 21351, 22656, 22659, 22660, 22661.
- T6440 *Thuja orientalis* [Syn. *Platyclusus orientalis*; *Biota orientalis*] (Cupressaceae); CE BAI YE; Chinese Arborvitae Leaf. Used part: leaf. TCM Effects: To cool blood and stanch bleeding, relieve cough and dispel phlegm, dispel wind-damp, dissipate toxin swelling. TCM Indications: Hemoptysis, duodenal bleeding, chronic bronchitis, tuberculosis, blood ejection, spontaneous external bleeding, hematuria, hematochezia, blood dysentery, incessant flooding and spotting, cough with profuse phlegm, wind-damp impediment pain, erysipelas, epidemic parotitis, scalds, burns. Isolated compounds: 1030, 1764, 3241, 3242, 4376, 6333, 7751, 9543, 10656, 11358, 11594, 11596, 11598, 11600, 12062, 12455, 15170, 15184, 15664, 16366, 17422, 17423, 18317, 18411, 21350, 22492.
- T6441 *Thuja plicata* (Cupressaceae); BEI MEI XIANG BAI; Western Arborvitae. Isolated compounds: 17561, 21347, 21348.
- T6442 *Thuja standishii* (Cupressaceae); RI BEN XIANG BAI JING PI; Japanese Arborviate Stem-bark. Isolated compounds: 7764, 11358, 16367, 16368, 19236, 20465.
- T6443 *Thujopsis dolabrata* (Cupressaceae); LUO HAN BAI; Broadleaf Arborvitae Hiba. Isolated compounds: 1372, 17876.
- T6444 *Thunbergia grandiflora* (Acanthaceae); DA HUA SHAN QIAN NIU; Bengal Clockvine. Used part: stem-leaf. TCM Effects: To resolve toxin and disperse swelling, quicken blood and relieve pain. TCM Indications: Knocks and falls, fracture, sore and boil, snake bite. Isolated compounds: 1493.
- T6445 *Thunbergia laurifolia* (Acanthaceae); TAI GUO SHAN QIAN NIU; Thailand Clockvine (Raang-Chuet). Isolated compounds: 6927, 8733.
- T6446 *Thymra* spp. (Lamiaceae). Isolated compounds: 6162, 21709.
- T6447 *Thymus longiflorus* (Lamiaceae). Isolated compounds: 15440.
- T6448 *Thymus magnus* (Lamiaceae); CHAO XIAN DA BAI LI XIANG; Korean Big Thyme\*. Isolated compounds: 3048, 3231, 4550, 20990, 21360.
- T6449 *Thymus piperella* (Lamiaceae). Isolated compounds: 6162.
- T6450 *Thymus quinquecostatus* (Lamiaceae); WU MAI BAI LI XIANG; Fiveribbed Thyme. Isolated compounds: 3048, 3231, 4550, 20990, 21360.
- T6451 *Thymus saturoide* (Lamiaceae); TA HUA BAI LI XIANG. Isolated compounds: 21709.
- T6452 *Thymus serpyllum* (Lamiaceae); BAI LI XIANG; Breckland Thyme. Isolated compounds: 1476, 20995, 21360.
- T6453 *Thymus* spp. (Lamiaceae). Isolated compounds: 22768.
- T6454 *Thymus vulgaris* (Lamiaceae); SHE XIANG CAO; Thyme. Used part: herb. TCM Effects: To suppress cough and dispel wind. TCM Indications: Pertussis, acute bronchitis, pharyngolaryngitis. Isolated compounds: 2550, 2555, 2887, 3231, 3241, 3242, 3683, 3741, 7522, 9528, 10268, 10269, 10270, 12420, 12850, 13745, 13746, 13749, 13755, 14509, 14510, 14597, 14598, 20992, 20995, 21344, 21360, 21362, 21365, 21366, 22467.
- T6455 *Tibouchina semidecandra* (Melastomataceae); Glory Bush. Isolated compounds: 15641, 15642, 17754.
- T6456 *Tilia alburnum* (Tiliaceae); BAI DUAN; White Linden\*. Isolated compounds: 12018.
- T6457 *Tilia japonica* (Tiliaceae); HUA DONG DUAN; Japanese Linden. Used part: flower. TCM Effects: See *Tilia miqueliana*. TCM Indications: See *Tilia miqueliana*. Isolated compounds: 21391.
- T6458 *Tilia miqueliana* (Tiliaceae); PU TI SHU HUA; Miquel Linden. Equivalent plant: *Tilia japonica*. Used part: flower. TCM Effects: To settle tetany, calm, effuse sweat and abate fever. TCM Indications: Wind-cold common cold, headache and generalized pain, fright epilepsy. Isolated compounds: 7734.
- T6459 *Tilia* sp. (Tiliaceae). Isolated compounds: 5613.
- T6460 *Tilia* spp. (Tiliaceae). Isolated compounds: 17399, 21392.
- T6461 *Tilia vulgaris* (Tiliaceae); DUAN SHU; Common Lime. Isolated compounds: 20237.
- T6462 *Tinospora baenzigeri* (Menispermaceae). Isolated compounds: 2098, 2099, 2100.
- T6463 *Tinospora capillipes* (Menispermaceae); JIN GUO LAN; Hairystalk Tinospora. Used part: root. TCM Effects: See *Tinospora sagittata*. TCM Indications: See *Tinospora sagittata*. Isolated compounds: 3934, 3939, 16555.
- T6464 *Tinospora cordifolia* (Menispermaceae); XIN XING YE QING NIU DAN; Cardialeaf Tinospora\*. Isolated compounds: 1084, 1085, 1086, 1087.
- T6465 *Tinospora craveniana* (Menispermaceae); JIANG XI QING NIU DAN; Jiangxi Tinospora\*. Isolated compounds: 6680.
- T6466 *Tinospora hainanensis* (Menispermaceae); HAI NAN QING NIU DAN; Hainan Tinospora. Isolated compounds: 3747, 6219, 11851, 14748.
- T6467 *Tinospora sagittata* (Menispermaceae); QING NIU DAN; Arrowshaped Tinospora. Equivalent plant: *Tinospora capillipes*. Used part: root. TCM Effects: To clear heat and resolve toxin, disinhibit throat, relieve pain. TCM Indications: Swelling pain in throat, welling abscess and flat abscess with clove sore, diarrhea, dysentery, heat pain in stomach duct and abdomen. Isolated compounds: 3939, 11338, 20321, 21398.
- T6468 *Tinospora sinensis* (Menispermaceae); ZHONG HUA QING NIU DAN; Chinese Tinospora\*. Used part: stem. TCM Effects: To dispel wind and relieve pain, soothe sinews and quicken network vessels. TCM Indications: Wind-damp impediment pain, taxation damage in lumbar muscle, knocks and falls. Isolated compounds: 10949, 11480, 17419, 17922, 20669, 21399, 21400, 21401.
- T6469 *Tithonia diversifolia* (Asteraceae); ZHONG BIN JU; Yucatan Tithonia. Used part: leaf. TCM Effects: To clear heat and resolve toxin. TCM Indications: Acute gastroenteritis, toxin swelling of sores Isolated compounds: 175, 216, 240, 1438, 1439, 1440, 5898, 6064, 7204, 10769, 15926, 20609, 20610, 20611, 21410.
- T6470 *Tithonia tagiliflora* (Asteraceae); MO XI GE XIANG RI KUI; Mexican Sunflower. Isolated compounds: 16205, 20612.
- Toddalia aculeata* = *Toddalia asiatica*
- T6471 *Toddalia asiatica* [Syn. *Toddalia aculeata*; *Paullinia asiatica*]

- (Rutaceae); FEI LONG ZHANG XUE; Asiatic Toddalia. Used part: root or root cortex. TCM Effects: To dispel wind and relieve pain, stanch bleeding and dissipate stasis. TCM Indications: Wind-damp Pain, stomachache, knocks and falls, blood ejection, spontaneous external bleeding, knife wound, amenorrhea, dysmenorrhea. Isolated compounds: 588, 3498, 3499, 3768, 5558, 6068, 6454, 7521, 11601, 14824, 16443, 17375, 18881, 20002, 21169, 21418, 21423, 21822, 21832.
- T6472 *Toddalia* spp. (Rutaceae). Isolated compounds: 3498.
- T6473 *Toddaliopsis bremekampii* (Rutaceae). Isolated compounds: 21419, 21420, 21421, 21422.
- T6474 *Toona ciliata* (Meliaceae); HONG CHUN; Burma Toon. Used part: root cortex. TCM Effects: To clear heat and dry damp, promote astriction, kill worms. TCM Indications: Chronic diarrhea, chronic dysentery, intestinal wind bleeding, flooding and spotting, vaginal discharge, emission, white turbidity, *gan* accumulation, ascariasis, sore and lichen. Isolated compounds: 290, 8316, 21446.
- T6475 *Toona sinensis* (Meliaceae); CHUN BAI PI; Chinese Toon Root-bast. Used part: bark or root cortex. TCM Effects: To eliminate heat and dry damp, astringe intestines and stanch bleeding, kill worms. TCM Indications: Chronic dysentery, chronic diarrhea, intestinal wind bleeding, flooding and spotting, vaginal discharge, emission, white turbidity, *gan* accumulation, ascariasis, sore and lichen. Isolated compounds: 21448.
- T6476 *Torilis japonica* (Apiaceae); HUA NAN HE SHI; Japanese Hedgeparsley. Used part: fruit or whole herb. TCM Effects: To kill worms, check diarrhea, contract damp and relieve itch. TCM Indications: Abdominal pain due to worm accumulation, diarrhea and dysentery, ulcerating sores, pudendal itch and vaginal discharge, wind-damp papules. Isolated compounds: 21456, 21457.
- T6477 *Torreya grandis* (Taxaceae); FEI SHU; Torreya\*. Used part: branch-leaf. TCM Effects: To dispel wind and eliminate damp. TCM Indications: Wind-damp sore toxin. Isolated compounds: 5948, 21462, 21463, 21464.
- T6478 *Torreya jackii* (Taxaceae); CHANG YE FEI SHU; Jack Torreya. Used part: branch-leaf. TCM Effects: To lower blood pressure, anticancer. TCM Indications: Hypertension. Isolated compounds: 16649.
- T6479 *Torreya yunnanensis* (Taxaceae); YUN NAN FEI SHU; Yunnan Torreya. Isolated compounds: 1030, 2125, 7996, 9970, 13783, 17418, 17419, 19514, 20107, 21465.
- T6480 *Tournefortia sarmentosa* (Boraginaceae); ZI DAN TENG; Taiwan Tournefortia\*. Isolated compounds: 11694, 12420, 12925, 19201, 19206, 21477, 21478, 21479, 21480.  
*Toxicadendron verniciflum* = *Rhus verniciflua*
- T6481 *Toxicodendron radicans* (Anacardiaceae); DU QI TENG; Poison Ivy. Isolated compounds: 22274.
- T6482 *Toxicodendron succedaneum* [Syn. *Rhus succedanea*] (Anacardiaceae); LIN BEI ZI; Field Lacquertree. Used part: leaf. TCM Effects: To stanch bleeding and dissipate stasis, resolve toxin. TCM Indications: Hemoptysis, blood ejection, bleeding due to external injury, poisonous snake bite. Isolated compounds: 1030, 1497, 5613, 5614, 6535, 6719, 7802, 9376, 9383, 9386, 9543, 12428.
- T6483 *Trachelospermum asiaticum* (Apocynaceae); RI BEN LUO SHI; Japanese Star Jasmine\*. Isolated compounds: 15806, 20433, 21493.
- T6484 *Trachelospermum jasminoides* (Apocynaceae); LUO SHI TENG; Chinese Star Jasmine. Used part: leafy stem. TCM Effects: To dispel wind and free network vessels, cool blood and disperse swelling. TCM Indications: Wind-damp impediment pain, hypertonicity of sinews and vessels, aching in lumbus and knees, throat impediment, swollen welling abscess, knocks and falls. Isolated compounds: 1490, 1497, 1623, 4615, 10937, 13144, 13145, 15807, 15808, 15809, 21491, 21492, 21493, 22597, 22602.
- T6485 *Trachycarpus fortunei* (Arecaceae); ZONG LV PI; Fortune Windmillpalm. Used part: petiole and fibre of sheath. TCM Effects: To promote contraction and stanch bleeding. TCM Indications: Blood ejection, spontaneous external bleeding, hematuria, hematochezia, flooding, bleeding due to external injury. Isolated compounds: 3308, 5763, 8095, 9818, 14699, 17968.
- T6486 *Trachycarpus wagnerianus* (Arecaceae); WA SHI ZONG LV; Wagner Windmill Palm. Isolated compounds: 18056.
- T6487 *Trachyrhamphus serratus* CU WEN HAI LONG. Isolated compounds: 5674.
- T6488 *Trachyspermum ammi* (Apiaceae); A YU WEI; Ajowan. Used part: fruit. TCM Effects: To dissipate cold and relieve pain, resolve toxin and disinhibit damp. TCM Indications: Cold pain in stomach duct and abdomen, indigestion, vomiting nausea, diarrhea, cold mounting, dysmenorrhea, urethral stone, swelling pain of sore and boil. Isolated compounds: 21360.
- T6489 *Tragopogon porrifolius* (Asteraceae); SUAN YE PO LUO MEN SHEN; Salsify. Used part: root and leaf. TCM Effects: To fortify spleen and boost *qi*. TCM Indications: Weakness during convalescence, child *gan* accumulation, tinea capitis. Isolated compounds: 3175, 6108, 14723, 19562, 21357, 21500.
- T6490 *Tragopogon* sp. (Asteraceae). Isolated compounds: 2455, 20505.
- T6491 *Trametes cinnabarina* [Syn. *Polyporus cinnabarinus*; *Boletus cinnabarinus*] (Polyporaceae); HONG SHUAN JUN; Cinnabar-red. Equivalent plant: *Pycnoporus sanguineus*. Used part: sporocarp. TCM Effects: To resolve toxin and eliminate damp, stanch bleeding. TCM Indications: Dysentery, swelling pain in throat, knocks and falls, welling abscess and boil, itchy papules, bleeding due to external injury. Isolated compounds: 21501.
- T6492 *Trapa bispinosa* (Trapaceae); LING; Singharanut. Used part: pulp. TCM Effects: To clear summerheat heat, eliminate vexation and allay thirst, boost *qi* and fortify spleen, resolve toxin. TCM Indications: Spleen vacuity diarrhea, summerheat-heat vexation and thirst, diabetes mellitus, dysentery, drunkenness. Isolated compounds: 61, 5720, 7247, 19057.
- T6493 *Trattinickia rhoifolia*. Isolated compounds: 7494.
- T6494 *Trema dielsiana* (Ulmaceae); SHAN YOU MA; Diels Trema. Used part: leaf. TCM Effects: To relieve pain, stanch bleeding. TCM Indications: Boil. Isolated compounds: 9235.
- T6495 *Trewin nudiflora* (Euphorbiaceae); HUA TAO SHU. Isolated compounds: 5728.
- T6496 *Tribulus pentandrus* (Zygophyllaceae); WU XIONG RUI JI LI; Penta-androus Caltrap\*. Isolated compounds: 16877, 16878, 16879, 16880, 16881, 16882, 16883.

- T6497 *Tribulus terrestris* (Zygophyllaceae); CI JI LI; Puncturevine Caltrap. Used part: fruit. TCM Effects: To dissipate wind and brighten eyes, precipitate *qi* and move blood. TCM Indications: Headache, itchy body, red eyes and eye screen, convulsion, fullness in chest, cough and counterflow, concretion and conglomeration, difficult lactation, welling abscess and flat abscess, scrofula. Isolated compounds: 5250, 6437, 7788, 8458, 8459, 8633, 8634, 8968, 9234, 9235, 15525, 17975, 19070, 20218, 21000, 21001, 21004, 21005, 21013, 21014, 21015, 21016, 21017, 21546, 21547, 21548.
- T6498 *Tribulus terrestris* (Zygophyllaceae); JI LI GEN; Puncturevine Caltrap Root. Used part: root. TCM Effects: To secure teeth. TCM Indications: Toothache. Isolated compounds: 3552, 8457, 9236, 19070.
- T6499 *Tribulus terrestris* (Zygophyllaceae); JI LI MIAO; Puncturevine Caltrap Shoot\*. Used part: stem-leaf. TCM Effects: To dispel wind, eliminate damp, relieve itch, disperse welling abscess. TCM Indications: Summerheat-damp damage center, vomiting and diarrhea, nasal congestion and runny nose, wind papule itching of skin, scab and lichen, swollen welling abscess. Isolated compounds: 19087.
- T6500 *Trichilia prieuriana* (Meliaceae). Isolated compounds: 14924, 17852.
- T6501 *Trichocline reptans*. Isolated compounds: 418.
- T6502 *Trichocolea mollissima* (Trichocoleaceae); JI RUAN RONG TAI. Isolated compounds: 5922, 10255.
- T6503 *Trichoderma virida* LV SE MU MEI. Isolated compounds: 21559.
- T6504 *Tricholoma matsutake* [Syn. *Armillaria matsutake*] (Tricholomataceae); SONG XUN; Pine Mushroom. Used part: sporocarp. TCM Effects: To soothe channels and quicken network vessels, rectify *qi* and transform phlegm, disinhibit damp and transform turbidity. TCM Indications: Pain in lumbus and legs, incessant urinary turbidity, numbness in limbs, hypertonicity of sinews and vessels, abundant phlegm and shortness of breath. Isolated compounds: 6900, 7250, 11532, 13608, 14245, 15983, 21106, 22558.
- T6505 *Tricholoma muscarium* (Tricholomataceae). Isolated compounds: 21562.
- T6506 *Tricholoma saponaceum* (Tricholomataceae); ZAO WEI KOU MO. Isolated compounds: 19321, 19322, 19323, 19324, 19325, 19326, 19327, 19328, 19329, 19330.  
*Trichomanes strigosa* = *Microlepis strigosa*
- T6507 *Trichosanthes cucumeroides* (Cucurbitaceae); WANG GUA; Japanese Snakegourd. Used part: fruit. TCM Effects: To eliminate heat, engender liquid, dispel stasis, promote lactation. TCM Indications: Diabetes mellitus, jaundice, dysphagia-occlusion and stomach reflux, amenorrhea, scant breast milk, swollen welling abscess, chronic pharyngolaryngitis. Isolated compounds: 12018, 20168.
- T6508 *Trichosanthes cucumeroides* (Cucurbitaceae); WANG GUA ZI; Japanese Snakegourd Seed. Used part: seed. TCM Effects: To clear heat and disinhibit damp, cool blood and stanch bleeding. TCM Indications: Lung wilting, jaundice, dysentery, intestinal wind bleeding. Isolated compounds: 5352, 9069, 17425, 21576.
- T6509 *Trichosanthes hupehensis* (Cucurbitaceae); HU BEI GUA LOU; Hupeh Snakegourd. Isolated compounds: 2687.
- T6510 *Trichosanthes kirilowii* (Cucurbitaceae); GUA LOU; Mongolian Snakegourd. Equivalent plant: *Trichosanthes rosthornii*. Used part: fruit. TCM Effects: To clear heat and resolve phlegm, loosen chest and dissipate binds, moisten dryness and lubricate intestines. TCM Indications: Angina pectoris, lung heat cough, chest impediment, diabetes mellitus, acute mastitis, constipation, swelling toxin of welling abscess and sore. Isolated compounds: 1048, 2687, 3039, 3040, 3138, 4317, 9486, 12165, 12166, 12569, 12800, 12891, 12893, 15203, 15684, 16315, 16362, 16561, 16831, 19231, 19232, 19980, 20168, 20280, 20344, 20345, 20357, 20360, 20369, 21576, 22332.
- T6511 *Trichosanthes kirilowii* (Cucurbitaceae); GUA LOU ZI; Mongolian Snakegourd Seed. Used part: seed. TCM Effects: To clear lung and transform phlegm, lubricate intestines and free stool. TCM Indications: Phlegm-heat cough, lung vacuity dry cough, intestinal dry and constipation, swelling toxin of welling abscess and sore. Isolated compounds: 21576.
- T6512 *Trichosanthes kirilowii* (Cucurbitaceae); TIAN HUA FEN; Mongolian Snakegourd Root. Used part: root. TCM Effects: To clear heat and engender liquid, disperse swelling and expel pus. TCM Indications: Febrile diseases thirst, lung heat dry cough, diabetes mellitus due to internal heat, toxin swelling of sores, induce abortion. Isolated compounds: 1048, 2687, 3774, 9486, 10521, 12891, 12893, 20169, 20367.
- T6513 *Trichosanthes rosthornii* [Syn. *Trichosanthes uniflora*] (Cucurbitaceae); SHUANG BIAN GUA LOU; Rosthorn Snakegourd. Used part: fruit. TCM Effects: See *Trichosanthes kirilowii*. TCM Indications: See *Trichosanthes kirilowii*. Isolated compounds: 3138, 3434, 9363, 9366, 9368, 12569, 12891, 12893, 13687, 14043, 14931, 14944, 15203, 15660, 15684, 16561, 16831, 20280, 20367, 20368, 21575, 21589.
- T6514 *Trichosanthes tricuspidata* (Cucurbitaceae); SAN YING JIAN GUA LOU; Tri-hard-tip Snakegourd\*. Isolated compounds: 4325, 4326, 4539, 4540, 4541, 12208, 12209, 12210, 12211, 12212, 12213, 12214, 12215, 12216, 12217, 12218, 12219.  
*Trichosanthes uniflora* = *Trichosanthes rosthornii*
- T6515 *Trichurus terrophilus* (imperfect fungi); MAO SHU MEI. Isolated compounds: 18549, 18550, 21579, 21580, 21581, 21582, 21583, 21584, 21585, 21586, 21587, 21588.  
*Tricomanes japonicum* = *Onychium japonicum*
- T6516 *Trifolium alexandrinum* (Fabaceae); AI JI CHE ZHOU CAO; Egyptian Clover\*. Isolated compounds: 21631, 21632, 21633.
- T6517 *Trifolium dubium* (Fabaceae); DUN YE CHE ZHOU CAO; Suckling Clover. Isolated compounds: 18643.
- T6518 *Trifolium fragiferum* (Fabaceae); CAO MEI CHE ZHOU CAO; Strawberry Clover. Isolated compounds: 4190.
- T6519 *Trifolium fruticosum* (Fabaceae); GUAN MU ZHUANG CHE ZHOU CAO; Shrubby Clover\*. Isolated compounds: 9598.
- T6520 *Trifolium hybridum* (Fabaceae); ZA JIAO CHE ZHOU CAO; Hybrid Clover\*. Isolated compounds: 6290.
- T6521 *Trifolium pratense* (Fabaceae); HONG CHE ZHOU CAO; Red Clover. Used part: flower and inflorescence. TCM Effects: To clear heat and relieve cough, dissipate binds and disperse swelling. TCM Indications: Common cold, cough and asthma, hard swelling, burns. Isolated compounds: 2384, 4135, 4604, 5440, 6201, 7852, 7853, 7853, 7883, 8011, 8278, 11158, 11648, 13282, 13638, 15484, 16756, 17765, 21634.
- T6522 *Trifolium repens* (Fabaceae); SAN XIAO CAO; White Clover. Used



- part: whole herb. TCM Effects: To clear heat, cool blood, quiet heart. TCM Indications: Epilepsy, bleeding from hemorrhoids, hard swelling. Isolated compounds: 4137, 4138, 4190, 4604, 8101, 9568, 12023, 12047, 13003, 15171, 15176, 18321, 18356, 20017, 21541, 21634.
- T6523 *Trifolium resupinatum* (Fabaceae). Isolated compounds: 18703.
- T6524 *Trifolium* spp. (Fabaceae). Isolated compounds: 3004.
- T6525 *Trifolium subterraneum* (Fabaceae); DI XIA CHE ZHOU CAO; Subterranean Clover. Isolated compounds: 2384, 2845, 7883, 8309, 9598.
- T6526 *Triglochin maritimum* (Juncaginaceae); HAI JIU CAI; Shore Podgrass. Used part: whole herb. TCM Effects: To clear heat and engender liquid, resolve toxin and disinhibit damp. TCM Indications: Exuberant heat fluid damage, stomach heat vexation thirst, dribbling pain of urination. Isolated compounds: 7419, 9717, 17425, 20805, 21644.
- T6527 *Trigonella caerulea* (Fabaceae); LAN HU LU BA; Blue Trigonella. Used part: seed. TCM Effects: To supplement kidney and disinhibit water, rectify *qi* and relieve pain. TCM Indications: Kidney vacuity lumbago, edema, spasmodic abdominal pain of gastrointestinal tract, mounting *qi* (hernia), painful swollen testes. Isolated compounds: 18281.
- T6528 *Trigonella foenum-graecum* (Fabaceae); HU LU BA; Common Fenugreek. Used part: seed. TCM Effects: To lower cholesterol, warm kidney, dispel cold, relieve pain. TCM Indications: Hyperlipemia, kidney vacuity cold, cold pain in lesser-abdomen, mounting *qi*, beriberi. Isolated compounds: 1673, 3218, 6440, 6444, 6449, 8095, 8297, 8457, 8969, 8970, 9569, 9616, 12063, 12064, 12832, 15279, 16196, 18370, 19473, 19542, 20207, 20208, 21383, 21589, 21590, 21645, 21646, 21647, 21648, 21649, 21650, 21651, 21652, 21653, 21654, 21655, 21656, 21657, 21658, 21659, 21660, 21661, 21662, 21663, 21664, 21665, 21666, 21667, 21668, 21669, 21670, 21671, 21672, 21673, 21674, 21675, 21676, 21677, 21678, 22464, 22554, 22581, 22582, 22878, 22936.
- T6529 *Trigonella* sp. (Fabaceae). Isolated compounds: 6437, 6440, 13638.
- T6530 *Trigonostemon reidioides* (Euphorbiaceae). Isolated compounds: 18563, 18564, 18565, 18566, 18567.
- T6531 *Trillium camtschaticum* (Liliaceae); YU ER QI; Whiteflower Trillium. Equivalent plant: YAN LING CAO. Used part: rhizome. TCM Effects: To dispel wind and soothe liver, quicken blood and stanch bleeding. TCM Indications: Hypertension, dizziness and headache, pain in lumbus and legs, bleeding due to external injury, knocks and falls, fracture. Isolated compounds: 2324, 4280, 4455, 5040, 16809, 21876.
- T6532 *Trillium erectum* (Liliaceae); HE HUA YAN LING CAO; Brownflower Trillium. Isolated compounds: 16809, 21871.
- T6533 *Trillium kamschaticum* (Liliaceae); JI LIN YAN LING CAO; Whiteflower Trillium\*. Used part: rhizome. TCM Effects: See *Trillium tschonoskii*. TCM Indications: See *Trillium tschonoskii*. Isolated compounds: 5217, 5218, 21872, 21873, 21874, 21875.
- T6534 *Trillium* sp. (Liliaceae). Isolated compounds: 6440.
- T6535 *Trillium tschonoskii* (Liliaceae); YAN LING CAO; Tschonosk Trillium. Equivalent plant: *Trillium kamschaticum*. Used part: rhizome. TCM Effects: To calm, relieve pain, quicken blood, stanch bleeding. TCM Indications: Hypertension, neurasthenia, dizziness and headache, pain in lumbus and legs, menstrual disorder [=menoxenia], flooding and spotting [=metrorrhagia and metrostaxis], bleeding due to external injury, knocks and falls. Isolated compounds: 3546, 4455, 6443, 6679, 21871.
- T6536 *Triphyophyllum peltatum* (Dioncophyllaceae); SAN YE MU; Trileaf Wood\*. Isolated compounds: 6433, 6896, 14325, 14396.
- T6537 *Tripterospermum japonicum* (Gentianaceae); RI BEN SHUANG HU DIE; Japanese Dualbutterfly\*. Used part: whole herb. TCM Effects: See *Tripterospermum taiwanense*. TCM Indications: See *Tripterospermum taiwanense*. Isolated compounds: 493, 494, 8685, 9616, 11773, 12949, 14982, 18729, 20503, 21989, 22836.
- T6538 *Tripterospermum taiwanense* (Gentianaceae); TAI WAN SHUANG HU DIE; Taiwan Dualbutterfly. Equivalent plant: *Tripterospermum japonicum*. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, suppress cough. TCM Indications: Jaundice, wind-heat cough. Isolated compounds: 21991.
- T6539 *Tripterygium doianum* (Celastraceae); NAN RI BEN LEI GONG TENG; South-Japan Threewingnut\*. Isolated compounds: 130, 301, 334, 3562, 21408.
- T6540 *Tripterygium hypoglaucum* (Celastraceae); KUN MING SHAN HAI TANG; Glaucousback Threewingnut. Used part: root. TCM Effects: To dispel wind and eliminate damp, quicken blood and stanch bleeding, soothe sinews and joint bones, resolve toxin and kill worms. TCM Indications: Rheumatic arthritis, wind-damp impediment pain, hemiplegia, mounting *qi*, dysmenorrhea, profuse menstruation, postpartum abdominal pain, incessant bleeding, acute infectious hepatitis, chronic nephritis, erythematous lupus, fracture, medullitis, bone tuberculosis, epididymis tubercle, sore toxin, psoriasis, neurodermatitis. Isolated compounds: 27, 266, 3308, 6921, 8100, 10892, 10897, 10899, 10906, 10907, 10908, 16403, 17886, 17892, 18578, 21987, 21993, 22011, 22013, 22014, 22017, 22023, 22680, 22695.
- T6541 *Tripterygium regelii* (Celastraceae); HEI MAN; Regel Threewingnut. Used part: whole herb or root. TCM Effects: To dispel wind and eliminate damp, disinhibit water and disperse edema, resolve toxin and kill worms. TCM Indications: Rheumatoid arthritis, jaundice, glomus accumulation, knocks and falls, scrofula, toxin swelling of sores, tinea capitis, itchy skin, poisonous snake bite. Isolated compounds: 27, 3368, 10899, 16245, 18576, 18577, 18578, 18579, 18580, 18581, 18582, 18583.
- T6542 *Tripterygium wilfordii* (Celastraceae); LEI GONG TENG; Common Threewingnut. Used part: root, leaf and flower. TCM Effects: To dispel wind and eliminate damp, quicken blood and free network vessels, disperse swelling and relieve pain, resolve toxin and kill worms (high toxicity). TCM Indications: Rheumatoid arthritis, rheumatic arthritis, glomerulonephritis, nephropathy syndrome, erythematous lupus, dryness in eyes and mouth, Behcet's syndrome, psoriasis, eczema, leprosy, scab sore, intractable lichen. Isolated compounds: 27, 30, 1465, 3075, 3356, 3357, 3358, 3360, 3368, 4873, 5144, 5914, 6468, 6632, 6940, 7029, 7045, 7534, 8023, 8024, 9367, 10086, 10566, 10776, 10814, 10815, 10816, 10817, 10899, 10900, 11561, 11781, 13640, 15468, 15476, 15538, 15635, 16245, 16675, 18580, 19182, 20556, 21023, 21395, 21512, 21521, 21986, 21987, 21988, 21990, 21992, 21993, 21994, 21995, 21996, 21997, 21998,

- 21999, 22000, 22001, 22002, 22003, 22004, 22005, 22006, 22007, 22008, 22009, 22010, 22011, 22012, 22013, 22015, 22016, 22017, 22018, 22019, 22020, 22021, 22022, 22023, 22024, 22025, 22026, 22027, 22263, 22674, 22675, 22676, 22677, 22678, 22679, 22680, 22681, 22682, 22683, 22684, 22685, 22686, 22687, 22688, 22689, 22690, 22695.
- T6543 *Tristaniopsis calobuxus* (Myrtaceae). Isolated compounds: 6757, 21926.
- T6544 *Triticum aestivum* [Syn. *Triticum vulgare*] (Poaceae); XIAO MAI; Wheat. Used part: seed. TCM Effects: To nourish heart, boost kidney, eliminate heat, allay thirst. TCM Indications: Visceral agitation, heat vexation, diabetes mellitus, diarrhea, swollen welling abscess, bleeding due to external injury, scalds. Isolated compounds: 917, 2455, 6204, 19983, 21415.
- T6545 *Triticum monococcum* (Poaceae); DAN LI XIAO MAI; Einkorn. Isolated compounds: 13003.
- T6546 *Triticum* sp. (Poaceae). Isolated compounds: 13003.  
*Triticum vulgare* = *Triticum aestivum*
- T6547 *Tritomaria polita*; Liverwort *Tritomaria polita*. Isolated compounds: 7095, 7150, 7491, 7496, 7497, 9499, 10110, 10112, 10113, 19613.
- T6548 *Tritonia crocosmaeflora* (Iridaceae); XIONG HUANG LAN; Common Tritonia. Used part: corm. TCM Effects: To resolve toxin, disperse swelling, relieve pain. TCM Indications: Tympanites, pain in stomach duct, pain in sinews and bones, epidemic parotitis, sores, painful wound from knocks and falls, bleeding due to external injury. Isolated compounds: 21597.
- T6549 *Trochodendron aralioides* (Trochodendraceae); KUN LAN SHU; Wheelstamentree. Isolated compounds: 5283.
- T6550 *Trocholejeunea sandvicensis* (Lejeuneaceae); YE TAI. Isolated compounds: 1990, 4960, 5487, 8022, 10024, 12609, 12610, 14375, 17721, 19250, 21629.
- T6551 *Trogopterus xanthipes*; *Pteromys volans* (Petauristidae); WU LING ZHI; Trogopterus Dung. Used part: dried feces. TCM Effects: To quicken blood and relieve pain, transform stasis and stanch bleeding, disperse accumulation and resolve toxin. TCM Indications: Amenorrhea, postpartum blood stasis abdominal pain, flooding, profuse menstruation, incessant red and white vaginal discharge, snake bite, scorpion sting, centipede bite. Isolated compounds: 2413, 6178, 11810, 17696, 21752, 22246, 22739.  
*Trollius asiaticus* var. *chinensis* = *Trollius chinensis*
- T6552 *Trollius chinensis* [Syn. *Trollius asiaticus* var. *chinensis*] (Ranunculaceae); JIN LIAN HUA; Chinese Globeflower. Equivalent plant: *Trollius ledebourii*. Used part: flower. TCM Effects: To clear heat and resolve toxin, disperse swelling, brighten eyes. TCM Indications: Common cold with fever, swelling pain in throat, mouth sore, gum swelling and pain, gum hemorrhage, red eyes with gall, swelling toxin of clove sore, acute periostitis, acute lymphangitis. Isolated compounds: 6201, 16196, 22581.
- T6553 *Trollius ledebourii* (Ranunculaceae); DUAN BAN JIN LIAN HUA; Ledebour Globeflower. Used part: flower. TCM Effects: See *Trollius chinensis*. TCM Indications: See *Trollius chinensis*. Isolated compounds: 6207, 6208, 7783, 8066, 8072, 11724, 14193, 14194, 14196, 14203, 22345.
- T6554 *Trollius macropetalus* (Ranunculaceae); CHANG BAN JIN LIAN HUA; Langpetal Globeflower. Used part: flower. TCM Effects: To clear heat and resolve toxin. TCM Indications: Infection of upper respiratory tract, acute or chronic tonsillitis, acute conjunctivitis, acute otitis media, acute lymphangitis, acute dysentery, acute appendicitis. Isolated compounds: 6201, 16196, 17902, 22581.
- T6555 *Tropaeolum majus* (Tropaeolaceae); HAN LIAN HUA; Common Nasturtium. Used part: whole herb. TCM Effects: To clear heat and resolve toxin. TCM Indications: Sore toxin, red eyes with gall, malign sore. Isolated compounds: 1358, 2294, 2298, 3211, 7291, 8760, 17102.
- T6556 *Tsoongiodendron odorum* (Magnoliaceae); GUAN GUANG MU; Guanguangtree. Isolated compounds: 6027, 12917.
- T6557 *Tsuga dumosa* (Pinaceae); YUN NAN TIE SHAN; Yunnan Hemlock. Isolated compounds: 5871, 6635.
- T6558 *Tsuga heterophylla* (Pinaceae); YI YE TIE SHAN; Western Hemlock. Isolated compounds: 7768, 10574, 12520, 13594, 17409, 19618.
- T6559 *Tuber indicum* YIN DU KUAI JUN; Indian Truffle. Isolated compounds: 22053, 22054, 22055, 22056.
- T6560 *Tulipa edulis* (Liliaceae); GUANG CI GU; Edible Tulip. Used part: bulb. TCM Effects: To clear heat and resolve toxin, dissipate binds and disperse swelling. TCM Indications: Swelling pain in throat, scrofula, welling abscess and flat abscess, swelling of sores, postpartum stasis stagnation. Isolated compounds: 3911.
- T6561 *Tulipa gesneriana* (Liliaceae); YU JIN XIANG; Common Tulip. Used part: flower. TCM Effects: To transform damp and repel foulness. TCM Indications: Spleen-stomach damp turbidity, fullness and oppression in chest and stomach duct, retching counterflow and abdominal pain, bad breath and slimy tongue fur. Isolated compounds: 4451, 8371, 15664, 19187, 22102, 22104, 22105.
- T6562 *Tulipa gesneriana* (Liliaceae); YU JIN XIANG GEN; Common Tulip Root. Used part: root. TCM Effects: To calm. TCM Indications: Visceral agitation. Isolated compounds: 8371, 8373, 8374, 8375, 8376.
- T6563 *Tulipa hybrida* (Liliaceae); YU JIN XIANG ZA JIAO ZHONG; Tulip Hybrid\*. Isolated compounds: 22104, 22105.
- T6564 *Tulipa* sp. (Liliaceae). Isolated compounds: 7821.
- T6565 *Tulipa turkestanii* (Liliaceae); TU ER QI YU JIN XIANG; Turkey Tulip\*. Isolated compounds: 22106, 22107.
- T6566 *Tupistra chinensis* (Liliaceae); KAI KOU JIAN; Chinese Tupistra. Used part: rhizome. TCM Effects: To clear heat and resolve toxin, dispel wind and eliminate damp, dissipate stasis and relieve pain. TCM Indications: Diphtheria, swelling pain in throat, wind-damp impediment pain, knocks and falls, stomachache, swollen welling abscess and sore toxin, poisonous snake bites, rabid dog bite. Isolated compounds: 955, 6974, 7009, 9815, 10381, 14254, 14652, 16891, 19983, 19987, 20369, 20556, 20566, 22111, 22112, 22113, 22114, 22115, 22116, 22117, 22332, 22336.
- T6567 *Tupistra wattii* [Syn. *Campylandra wattii*] (Liliaceae); WAN RUI KAI KOU JIAN; Watt Tupistra. Used part: rhizome. TCM Effects: To clear heat and resolve toxin, dissipate stasis and stanch bleeding, disperse swelling and relieve pain. TCM Indications: Wind-heat common cold, cough and sore pharynx, tonsillitis, lymphoditis, fracture due to knocks and falls, stomachache blood ejection, bleeding due to external injury. Isolated compounds: 21845, 22649, 22650, 22651, 22652,

- 22653, 22654, 22655.
- T6568 *Turpinia ternata* (Staphyleaceae); SAN CHU SHAN XIANG YUAN; Threelobed Turpinia. Isolated compounds: 22125, 22126, 22127, 22128, 22129.
- T6569 *Turraea floribunda* (Meliaceae); DUO HUA U LIAN; Manyflower Starbush\*. Isolated compounds: 22130, 22131, 22132, 22133, 22134, 22135, 22136, 22137.
- T6570 *Turraea nilotica* (Meliaceae); NI LUO HE JIN YIN LIAN; Nile Starbush\*. Isolated compounds: 15598, 17480.
- T6571 *Turraea parvifolia* (Meliaceae); XIAO YE DU LIAN; Littleleaf Starbush\*. Isolated compounds: 128, 6935, 6936, 22138, 22139, 22140, 22141.
- T6572 *Turraea wakefieldii* (Meliaceae). Isolated compounds: 5291, 5298, 5299, 5311, 5316, 20895.
- T6573 *Turreanthus africanus* (Meliaceae). Isolated compounds: 185, 6890, 7160.
- T6574 *Tussilago farfara* (Asteraceae); KUAN DONG HUA; Common Coltsfoot. Used part: flower bud. TCM Effects: To moisten lung and precipitate *qi*, relieve cough and transform phlegm. TCM Indications: Cough, cough and asthma with abundant phlegm, consumption cough and hemoptysis, chronic bronchitis, infection of upper respiratory tract, tuberculosis. Isolated compounds: 122, 2169, 3214, 4287, 4841, 7058, 7715, 7716, 8095, 10265, 10887, 13127, 14187, 14188, 15470, 19087, 19731, 20136, 22143, 22144, 22222.
- T6575 *Tylimanthus renifolius* (Acrobolbaceae); Liverwort *Tylimanthus renifolius*. Isolated compounds: 209, 9425, 9427, 17255, 18914.
- T6576 *Tylimanthus tenellus* (Acrobolbaceae); New Zealand liverwort *Tylimanthus tenellus*. Isolated compounds: 9663, 9666, 10579.
- T6577 *Tylophora asthmatica* [Syn. *Tylophora indica*] (Asclepiadaceae); YIN DU WA ER TENG; Indian Tylophora\*. Isolated compounds: 22151, 22152, 22153.
- T6578 *Tylophora atrofolliculata* (Asclepiadaceae); SAN FEN DAN; Brackfollicle. Used part: root. TCM Effects: To dispel wind, quicken blood, relieve pain. TCM Indications: Wind-damp pain, painful swelling from knocks and falls. Isolated compounds: 22147, 22148, 22149, 22150, 22152, 22153.
- T6579 *Tylophora crebriflora* (Asclepiadaceae); MI HUA WA ER TENG; Denseflower Tylophora\*. Isolated compounds: 22146, 22151, 22153.
- T6580 *Tylophora floribunda* (Asclepiadaceae); WA ER TENG; Manyflower Tylophora. Used part: root. TCM Effects: To dispel wind and transform phlegm, quicken blood and relieve pain, resolve toxin and disperse swelling. TCM Indications: Infant fright wind, wind-damp impediment pain, cough and asthma with abundant phlegm, diphtheria, knocks and falls, fracture, poisonous snake bite, swollen welling abscess, sore and boil, red eyes, stomatitis, liver spleen enlargement. Isolated compounds: 22146, 22151, 22153.
- Tylophora indica* = *Tylophora asthmatica*
- T6581 *Tylophora mollissima* (Asclepiadaceae); MIAN MAO WA ER TENG; Woolly Tylophora. Used part: whole plant. TCM Effects: To clear lung heat, relieve cough and asthma. TCM Indications: Common cold with fever, lung heat cough, asthma. Isolated compounds: 22152, 22153.
- T6582 *Tylophora ovata* (Asclepiadaceae); LUAN YE WA ER TENG; Ovateleaf Tylophora. Equivalent plant: *Gerbera piloselloides*, *Cynanchum versicolor*, *Cynanchum atratum*, *Cynanchum ascyrifolium*. Used part: root. TCM Effects: To clear heat and boost *yin*, disinhibit urine and free strangury, resolve toxin and cure sores. TCM Indications: Warm heat disease with fever, generalized fever with macule, steaming bone tidal fever, lung heat cough, postpartum vacuity vexation, heat strangury, blood strangury, swelling pain in throat, swelling toxin of sore and welling abscess, poisonous snake bite. Isolated compounds: 22152, 22153.
- T6583 *Tylorella* sp. Isolated compounds: 21359.
- T6584 *Typha angustata* (Typhaceae); PU HUANG; Longbract Cattail Pollen. Equivalent plant: *Typha angustifolia*, *Typha latifolia*. Used part: pollen. TCM Effects: To lower cholesterol, cool blood and stanch bleeding, quicken blood and dispel stasis. TCM Indications: Hyperlipemia, angina pectoris, exudative eczema, bleeding, hemoptysis, spontaneous external bleeding, blood ejection, hematochezia, hematuria, flooding and spotting, bleeding due to external injury, pain in heart and abdomen, dysmenorrhea, postpartum bleeding, postpartum abdominal pain, blood strangury with inhibited pain. Isolated compounds: 1599, 5763, 9364, 9486, 9815, 10636, 11648, 11662, 12071, 13479, 13504, 15661, 15662, 15663, 16822, 18317, 18378, 19087, 19983, 19998, 20280, 20355, 20444, 22154, 22157.
- T6585 *Typha angustifolia* (Typhaceae); XIA YE XIANG PU; Narrowleaf Cattail Pollen. Used part: pollen. TCM Effects: See *Typha angustata*. TCM Indications: See *Typha angustata*. Isolated compounds: 11648, 12020, 14611, 14628, 14769, 15279, 16822, 16893, 18317, 18378, 18739, 19983, 19998, 22043, 22154, 22843.
- T6586 *Typha capensis* (Typhaceae); HAO WANG JIAO XIANG PU; Cape-of-Good-Hope Cattail. Isolated compounds: 22155, 22156.
- T6587 *Typha latifolia* (Typhaceae); KUAN YE XIANG PU; Broadleaf Cattail Pollen. Used part: pollen. TCM Effects: See *Typha angustata*. TCM Indications: See *Typha angustata*. Isolated compounds: 3766, 7882, 10967, 11648, 11662, 11669, 12071, 12436, 13419, 13479, 18281, 18317, 20444, 22118, 22154.
- T6588 *Typhonium giganteum* (Araceae); YU BAI FU; Giant Typhonium. Used part: tuberoid. TCM Effects: To dispel wind and transform phlegm, free channels and network vessels, resolve toxin and settle pain. TCM Indications: Wind stroke with congesting phlegm, deviated eyes and mouth, migraine, tetanus, poisonous snake bite, scrofula, swollen welling abscess. Isolated compounds: 11083, 11084, 11085, 19987.
- T6589 *Tyromyces fissilis* (Polyporaceae); YI LYE GAN LAO JUN; Easy-lobed Tyromyces\*. Isolated compounds: 21502, 22162, 22163, 22164, 22165, 22166, 22167, 22168.

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- T6590 *Ulex europaeus* (Fabaceae); JING DOU; Common Gorse. Isolated compounds: 4594.
- T6591 *Ulex minor* (Fabaceae); XIAO JING DOU; Small Gorse\*. Isolated compounds: 11514.
- T6592 *Ulex nanus* (Fabaceae); AI JING DOU; Dwarf Gorse. Isolated compounds: 8282.
- T6593 *Ulex* sp. (Fabaceae). Isolated compounds: 3209.
- T6594 *Ulmus americana* (Ulmaceae); MEI ZHOU YU; American Elm. Isolated compounds: 3317.

- T6595 *Ulmus glabra* (Ulmaceae); SHAN YU; Wych Elm. Isolated compounds: 13513.
- T6596 *Ulmus parvifolia* (Ulmaceae); LANG YU PI; Chinese Elm Bark. Used part: bark. TCM Effects: To disinhibit water and free strangury, eliminate welling abscess. Isolated compounds: 9868, 12431, 13513, 13515, 13517, 13951, 20369.
- T6597 *Ulmus pumila* (Ulmaceae); YU SHU; Siberian Elm. Used part: branch. TCM Effects: To disinhibit urine and free strangury. TCM Indications: *Qi* strangury. Isolated compounds: 20369.
- T6598 *Ulva conglobata* (Ulvaceae); LI CAI; Conglobate Ulva Frond\*. Used part: frond. TCM Effects: To clear heat and resolve toxin, disinhibit urine. TCM Indications: Thyroid enlargement, summerheat stroke, edema, inhibited urination. Isolated compounds: 14326.
- T6599 *Ulva lactuca* (Ulvaceae); SHI CHUN; Lettuce Ulva Frond. Equivalent plant: *Ulva lactuca*. Used part: frond. TCM Effects: To disinhibit water and disperse edema, transform phlegm and soften hardness, clear heat and resolve toxin. TCM Indications: Edema, goiter and carcinoma of neck, hypertension, laryngitis, sore and boil, acute enteritis, chronic enteritis, *gan* accumulation. Isolated compounds: 3849, 4473, 6400, 11431, 12445, 14352.
- T6600 *Ulva pertusa* (Ulvaceae); KONG SHI CHUN; Pertusate Ulva Frond. Used part: frond. TCM Effects: See *Ulva lactuca*. TCM Indications: See *Ulva lactuca*. Isolated compounds: 578, 1282, 2222, 3693, 3767, 4473, 4550, 7521, 8011, 9374, 9384, 9491, 11431, 11767, 16345, 16563, 16568, 16884, 20998, 22336, 22556.
- T6601 *Umbilicaria esculenta* [Syn. *Gyrophora esculenta*] (Umbilicariaceae); SHI ER; Rock-Ears\*. Used part: lichen. TCM Effects: To nourish *yin* and moisten lung, cool blood and stanch bleeding, clear heat and resolve toxin. TCM Indications: Lung vacuity taxation cough, blood ejection, spontaneous external bleeding, flooding and spotting [=metrorrhagia and metrostaxis], intestinal wind bleeding, hemorrhoids and fistulas, prolapse of rectum, strangury-turbidity, vaginal discharge, poisonous snake bites, scalds, knife wound. Isolated compounds: 12598.
- T6602 *Umbilicaria hypococcinea* (Umbilicariaceae); HONG SHI ER; Red-Rock-Ears. Used part: lichen. TCM Effects: To rectify *qi* and promote digestion, disinhibit water and disperse distention. TCM Indications: Indigestion, distending pain in stomach duct, dysentery, *gan* accumulation. Isolated compounds: 2443, 14637, 14639, 16218.
- T6603 *Umbilicaria proboscidea* (Umbilicariaceae); WU LA ER DI YI; Ural's Lichen. Isolated compounds: 22197, 22198.
- T6604 *Uncaria acida* (Rubiaceae); SUAN GOU TENG; Acid Gambirplant\*. Isolated compounds: 4118, 9234, 11679, 18826.
- T6605 *Uncaria africana* (Rubiaceae); FEI ZHOU GOU TENG; African Gambirplant\*. Isolated compounds: 783, 5569, 11539, 11679, 14889, 18826.
- T6606 *Uncaria attenuata* (Rubiaceae); XIA GOU TENG; Narrow Gambirplant\*. Isolated compounds: 906, 907, 4118, 4119, 4120, 5569, 9234, 9552, 9553, 11347, 11679, 14889, 16353, 18553, 18826, 18943, 19176, 22204, 22206.
- T6607 *Uncaria barbata* (Rubiaceae). Isolated compounds: 9234.
- T6608 *Uncaria bernaysii* (Rubiaceae). Isolated compounds: 11539, 11636, 11679, 14889, 18114, 18826, 22206, 22207.
- T6609 *Uncaria borneensis* (Rubiaceae); PO LUO ZHOU GOU TENG; Borneo Gambirplant\*. Isolated compounds: 4118, 9234, 11347, 11679, 18826.
- T6610 *Uncaria callophylla* (Rubiaceae); HOU YE GOU TENG; Thickleaf Gambirplant\*. Isolated compounds: 2981, 2982, 5569, 8125, 8127, 9234, 11432, 11539, 11679, 14889, 18826, 18943.
- T6611 *Uncaria canescens* (Rubiaceae); QIAN HUI GOU TENG; Greyish Gambirplant\*. Isolated compounds: 9234.
- T6612 *Uncaria cordata* (Rubiaceae); XIN XING GOU TENG; Cordate Gambirplant\*. Isolated compounds: 4119, 4120, 5569, 11679, 18826.
- T6613 *Uncaria donisii* (Rubiaceae). Isolated compounds: 11636, 18114, 22206, 22207.
- T6614 *Uncaria elliptica* (Rubiaceae); TUO YUAN GOU TENG; Elliptic Gambirplant\*. Isolated compounds: 783, 826, 5569, 6191, 6853, 9234, 10264, 11539, 11644, 11679, 14889, 18441, 18553, 18554, 18555, 18826, 18943, 18969, 19087, 21862, 21863, 22204.
- T6615 *Uncaria gambir* (Rubiaceae); ER CHA GOU TENG; Gambier Gambirplant. Used part: dry decocted paste of branch-leaf. TCM Effects: To contract damp and close sores, stanch bleeding and settle pain, clear heat and resolve phlegm. TCM Indications: Enduring sores, damp-sore with flowing water, *gan* of teeth and gum, mouth sore, hemoptysis, blood ejection, hematuria, hematochezia, flooding, bleeding due to external injury, hemorrhoids and swollen welling abscess, phlegm-heat cough. Isolated compounds: 3308, 3318, 6853, 8095, 8126, 8127, 14889, 18943, 18968, 22204.
- T6616 *Uncaria guianensis* (Rubiaceae); GUI YA NA GOU TENG; Garabato; Unganangi; Cat's Claw. Isolated compounds: 5569, 9552, 9553, 11539, 11679, 11636, 14889, 18114, 18428, 18432, 18439, 18826, 22206.
- T6617 *Uncaria hirsuta* (Rubiaceae); MAO GOU TENG; Hirsute Gambirplant\*. Isolated compounds: 10887, 11539, 14889, 18826, 19087, 22204.
- T6618 *Uncaria homomalla* [Syn. *Uruparia homomalla*; *Uruparia tonkinensis*; *Uruparia lanosa* var. *parviflora*] (Rubiaceae); BEI YUE GOU TENG; North Viet-Nam Gambirplant. Used part: root. TCM Effects: To dispel wind and free network vessels, calm liver and extinguish wind. TCM Indications: Rheumatic arthritis, sciatica, knocks and falls, fracture, bleeding due to external injury, hypertension, hemiparesis [= hemilateral headache], infant fright wind, prolapse of rectum. Isolated compounds: 11539, 11636, 14889, 18114, 22206, 22207.
- T6619 *Uncaria kawakamii* (Rubiaceae); CHUAN SHANG LONG MI GOU TENG; Kawakami Gambirplant\*. Isolated compounds: 14889.
- T6620 *Uncaria kunstleri* (Rubiaceae). Isolated compounds: 4119, 4120, 9553, 11679, 18826.
- T6621 *Uncaria laevigata* (Rubiaceae); PING HUA FA LIANG GOU TENG; Smooth Gambirplant. Isolated compounds: 11539, 11636, 14889, 22204, 22206.
- T6622 *Uncaria lancifolia* (Rubiaceae); PI ZHEN YE GOU TENG; Lance-leaved Gambirplant. Isolated compounds: 11539, 14889, 18826.
- T6623 *Uncaria lanosa* (Rubiaceae); MIAN MAO GOU TENG; Woolly Gambirplant\*. Isolated compounds: 3308, 7833, 8488, 9234, 11347, 11539, 11636, 14889, 18114, 18553, 21863, 22206, 22207.
- T6624 *Uncaria longiflora* (Rubiaceae); CHANG HUA GOU TENG; Longflower Gambirplant\*. Isolated compounds: 4118, 5569, 6191,

- 8125, 8488, 11347, 11539, 11636, 11679, 14889, 18114, 18826, 22206, 22207.
- T6625 *Uncaria macrophylla* (Rubiaceae); DA YE GOU TENG; Largeleaf Gambirplant. Used part: hooked stem-branch. TCM Effects: See *Uncaria rhynchophylla*. TCM Indications: See *Uncaria rhynchophylla*. Isolated compounds: 4119, 4120, 11679, 11680, 18826.
- T6626 *Uncaria nervosa* (Rubiaceae); DUO MAI GOU TENG; Many-veined Gambirplant\*. Isolated compounds: 5569, 9234, 9552, 9553.
- T6627 *Uncaria orientalis* (Rubiaceae); DONG FANG GOU TENG; Oriental Gambirplant\*. Isolated compounds: 783, 9234, 11539, 11636, 14889, 18114, 22204, 22206, 22207.
- T6628 *Uncaria perrottetii* (Rubiaceae). Isolated compounds: 11539, 14889, 18114, 22206, 22207.  
*Uncaria pilosa* = *Uncaria scandens*
- T6629 *Uncaria rhynchophylla* [Syn. *Nauclea rhynchophylla*] (Rubiaceae); GOU TENG; Sharpleaf Gambirplant. Equivalent plant: *Uncaria sinensis*, *Uncaria macrophylla*. Used part: hooked stem-branch. TCM Effects: To extinguish wind and check tetany, clear heat and calm liver. TCM Indications: Infant fright wind and night crying, exuberant heat stirring wind, epilepsy of pregnancy, liver yang dizziness, liver fire headache. Isolated compounds: 823, 1244, 1252, 2844, 3680, 3681, 4114, 4118, 5550, 5569, 6853, 8251, 9234, 9552, 9553, 10887, 11347, 11377, 11636, 11679, 11680, 14455, 18114, 18824, 18826, 20390, 21634, 22208, 22209, 22210, 22211, 22212, 22328, 22496.
- T6630 *Uncaria roxburghiana* (Rubiaceae). Isolated compounds: 11636, 18114, 22206, 22207.
- T6631 *Uncaria scandens* [Syn. *Nauclea pilosa*; *Uruparia pilosa*; *Uncaria pilosa*] (Rubiaceae); PAN ZHI GOU TENG; Climbing Gambirplant. Isolated compounds: 11539, 11636, 14889, 18114, 22206, 22207.
- T6632 *Uncaria sessilifructus* [Syn. *Nauclea sessilifructus*] (Rubiaceae); BAI GOU TENG; White Gambirplant. Isolated compounds: 4119, 4120, 9553, 11539, 11679, 14889, 18826, 22204, 22207.
- T6633 *Uncaria sinensis* (Rubiaceae); HUA GOU TENG; Chinese Gambirplant. Used part: hooked stem-branch. TCM Effects: See *Uncaria rhynchophylla*. TCM Indications: See *Uncaria rhynchophylla*. Isolated compounds: 2887, 4118, 5550, 9552, 9553, 11347, 11377, 11426, 11537, 11538, 11635, 11636, 11678, 11679, 11680, 14887, 14888, 17876, 18113, 18114, 18825, 18826, 18827, 19542, 22206, 22207.
- T6634 *Uncaria sterrophylla* (Rubiaceae). Isolated compounds: 4119, 4120, 11539, 11636, 11679, 14889, 18114, 18826, 22206, 22207.
- T6635 *Uncaria talbotii* (Rubiaceae). Isolated compounds: 11679, 18826.
- T6636 *Uncaria thwaitesii* (Rubiaceae). Isolated compounds: 6191, 21862.
- T6637 *Uncaria tomentosa* (Rubiaceae); BI LU GOU TENG; Uña de Gato (Cat's Claw). Isolated compounds: 3677, 3678, 3679, 3680, 3681, 5190, 6069, 6071, 6853, 9552, 9553, 11539, 11636, 11679, 13971, 14889, 15747, 16323, 16357, 18114, 18428, 18429, 18430, 18431, 18432, 18433, 18434, 18435, 18436, 18440, 18442, 18824, 18826, 18943, 21441, 21442, 21828, 21833, 21863, 22205, 22206, 22270.
- T6638 *Uncaria velutina* (Rubiaceae); DUAN RONG MAO GOU TENG; Velutinous Gambirplant\*. Isolated compounds: 11539, 11636, 14889, 18114, 22206, 22207.
- T6639 *Uncaria yunnanensis* (Rubiaceae); DIAN GOU TENG; Yunnan Gambirplant. Isolated compounds: 5357.
- T6640 *Undaria pinnatifida* (Alariaceae); QUN DAI CAI; Undaria. Used part: dried thallus. TCM Effects: See *Laminaria japonica*. TCM Indications: See *Laminaria japonica*. Isolated compounds: 935, 7951, 7978, 11123, 11508, 12952, 14618, 15784, 16153, 17265, 19367, 21330, 22556.
- T6641 *Ungernia minor* (Amaryllidaceae); XIAO BO SI SHI SUAN; Small Ungernia\*. Isolated compounds: 22232.
- T6642 *Ungernia trisphaera* (Amaryllidaceae); SAN QIU BO SI SHI SUAN; Trisphaera Ungernia\*. Isolated compounds: 22040.
- T6643 Unsteadiness mould's metabolite. Isolated compounds: 15571.
- T6644 *Upuna borneensis* (Dipterocarpaceae). Isolated compounds: 17284, 17286, 21680, 21681, 21683, 22233, 22234, 22235, 22236.
- T6645 *Urena lobata* (Malvaceae); DI TAO HUA; Rose Mallow. Used part: root or whole herb. TCM Effects: To dispel wind and disinherit damp, quicken blood and disperse swelling, clear heat and resolve toxin. TCM Indications: Common cold, wind-damp impediment pain, dysentery, diarrhea, strangury syndrome, vaginal discharge, menstrual disorder, painful swelling from knocks and falls, throat impediment, mammary welling abscess, sore and boil, poisonous snake bite. Isolated compounds: 13481.
- T6646 *Urginea altissima* (Liliaceae); GAO HAI CONG. Isolated compounds: 10693, 22250.
- T6647 *Urginea epigea* (Liliaceae); CHU TU HAI CONG. Isolated compounds: 300, 9860.
- T6648 *Urginea fugax* (Liliaceae); YI XIAN HAI CONG. Isolated compounds: 7981.
- T6649 *Urginea maritima* (Liliaceae); HAI CONG; Red Squill. Isolated compounds: 278, 279, 3509, 6970, 16349, 19518, 19519, 19520, 19527, 19528, 19529, 19530.
- T6650 *Ursinia anthemoides* (Asteraceae). Isolated compounds: 22268.
- T6651 *Urtica cannabina* (Urticaceae); QIAN MA; Hempleaf Nettle. Equivalent plant: *Urtica dioica*. Used part: whole herb. TCM Effects: To dispel wind and free network vessels, calm liver and settle fright, disperse accumulation and free stool, resolve toxin. TCM Indications: Wind-damp impediment pain, postpartum wind tetany, infant fright wind, sequel of poliomyelitis, hypertension, indigestion, fecal stoppage, urticaria, knocks and falls, snake or insect bites. Isolated compounds: 6454, 7882, 9624, 9625, 9832, 19922, 20254, 21340, 21341, 21343.
- T6652 *Urtica dioica* (Urticaceae); YI ZHU QIAN MA; Dioecious Nettle. Used part: whole herb. TCM Effects: See *Urtica cannabina*. TCM Indications: See *Urtica cannabina*. Isolated compounds: 115, 874, 1935, 2426, 2887, 2912, 3209, 3551, 3766, 3982, 4680, 5564, 7768, 7996, 8078, 8806, 9568, 9815, 9833, 10203, 10967, 11477, 12020, 13127, 13419, 14089, 14308, 14309, 14310, 14311, 15440, 15442, 15525, 15934, 16285, 18317, 18421, 19087, 19542, 19760, 19912, 19983, 19997, 20444, 22336, 22520.  
*Uruparia homomalla* = *Uncaria homomalla*  
*Uruparia lanosa* var. *parviflora* = *Uncaria homomalla*  
*Uruparia pilosa* = *Uncaria scandens*  
*Uruparia tonkinensis* = *Uncaria homomalla*
- T6653 *Usnea diffracta* (Usneaceae); HUAN JIE SONG LUO; Diffract Usnea Filament. Used part: filament. TCM Effects: See *Usnea longissima*.

- TCM Indications: See *Usnea longissima*. Isolated compounds: 2146, 5507, 22282.
- T6654 *Usnea longissima* (Usneaceae); SONG LUO; Long Usnea Filament. Equivalent plant: *Usnea diffracta*. Used part: filament. TCM Effects: To relieve cough and dispel phlegm, clear heat and resolve toxin, dispel damp and free network vessels, regulate menstruation and stanch bleeding, expel worms. TCM Indications: Headache, red eyes, cough with profuse phlegm, malaria, scrofula, vaginal discharge, flooding and spotting, bleeding due to external injury, swollen welling abscess, poisonous snake bite. Isolated compounds: 2146, 5507, 8788, 12982, 12983, 18527, 22282.
- T6655 *Ustilaginoidea virens* (Clavicipitaceae); JING GU NU; Fungus-infected Rice Spike. Used part: sclerotium and conidium, parasitized on spite of rice (*Oryza sativa* L.). TCM Effects: To clear heat and resolve toxin, disinhibit throat. TCM Indications: Throat impediment, swelling pain in throat. Isolated compounds: 22283, 22284.
- T6656 *Ustilago maydis* (Ustilaginaceae); YU MI HEI MEI; Black-powder Fungus in Corn. Used part: sporocarp. TCM Effects: To fortify spleen and stomach, disinhibit liver and gallbladder, quiet spirit. TCM Indications: Hepatitis, ulcer in gastrointestinal tract, indigestion, gan accumulation, insomnia. Isolated compounds: 12488, 14414.
- T6657 *Uvaria acuminata* (Annonaceae); JIAN ZI YU PAN; Acuminate Uvaria\*. Isolated compounds: 594, 2280, 6528, 11323, 11751, 22287, 22290.
- T6658 *Uvaria angolensis* (Annonaceae); GUAN ZI YU PAN; Angola Uvaria\*. Isolated compounds: 2224, 11751, 22287, 22290.
- T6659 *Uvaria boniana* (Annonaceae); GUANG YE ZI YU PAN; Glabrousleaf Uvaria. Isolated compounds: 20051, 22291, 22292, 22293, 22294, 22295, 22296, 22297.
- T6660 *Uvaria chamae* (Annonaceae); AN ZI YU PAN; Low Uvaria. Isolated compounds: 3463, 11321, 11751.
- T6661 *Uvaria dulcis* (Annonaceae); TIAN ZI YU PAN; Sweet Uvaria\*. Isolated compounds: 5820, 5823, 10013.
- T6662 *Uvaria grandiflora* (Annonaceae); DA HUA ZI YU PAN; Largeflower Uvaria. Isolated compounds: 11375, 22298, 22299, 22300.  
*Uvaria heteroclita* = *Kadsura heteroclita*
- T6663 *Uvaria klaineana* (Annonaceae); JIA PENG ZI YU PAN; Gabon Uvaria\*. Isolated compounds: 12232.
- T6664 *Uvaria kweichowensis* (Annonaceae); LIU GUO ZI YU PAN; Kweichou Uvaria. Isolated compounds: 12397, 12398, 22299, 22988.
- T6665 *Uvaria macrophylla* (Annonaceae); DA YE ZI YU PAN; Largeleaf Uvaria\*. Isolated compounds: 13318.
- T6666 *Uvaria narum* (Annonaceae); NA ER ZI YU PAN; Nar Uvaria\*. Isolated compounds: 11375, 16584.
- T6667 *Uvaria scheffleri* (Annonaceae); XIE FEI ZI YU PAN; Scheffleri Uvaria\*. Isolated compounds: 19464.
- V**
- Vaccaria pyramidata* = *Vaccaria segetalis*
- T6668 *Vaccaria segetalis* [Syn. *Vaccaria pyramidata*] (Caryophyllaceae); WANG BU LIU XING; Cowherb. Used part: seed. TCM Effects: To quicken blood and free menstruation, promote lactation and disperse edema. TCM Indications: Galactostasis, amenorrhea, dysmenorrhea, mammary welling abscess. Isolated compounds: 9717, 11695, 13659, 19353, 19658, 19659, 19660, 19661, 19662, 19663, 19664, 19665, 19666, 19667, 19668, 22302, 22303, 22304, 22308, 22465.
- T6669 *Vaccinium ashei* (Ericaceae). Isolated compounds: 14575, 22306.
- T6670 *Vaccinium bracteatum* (Ericaceae); NAN ZHU ZHI; Oriental Blueberry Fruit. Used part: fruit. TCM Effects: To supplement liver and kidney, strengthen sinews and bones, secure essence *qi*, check dysentery and diarrhea. TCM Indications: Liver kidney vacuity, premature graying in beard and hair, weakness in sinews and bones, chronic diarrhea, dream emission, incessant vaginal discharge, chronic diarrhea and dysentery. Isolated compounds: 6918, 7951, 9616, 11085.
- T6671 *Vaccinium macrocarpon* (Ericaceae); MEI ZHOU SUAN GUO LUO; American Cranberry. Isolated compounds: 3215, 13126.
- T6672 *Vaccinium* sp. (Ericaceae). Isolated compounds: 4439.
- T6673 *Vaccinium vitis-idaea* (Ericaceae); YUE JU YE; Cowberry Leaf. Used part: leaf. TCM Effects: To disinhibit urine, resolve toxin. TCM Indications: Strangury syndrome, pain wind. Isolated compounds: 324, 1618, 2039, 2893, 6853, 9740, 10623, 17867, 17876, 17884, 17890, 18792.
- T6674 *Valeriana alternifolia* var. *stolonifera* (Valerianaceae); MAO JIE XIE CAO; Hairnode Valeriana\*. Isolated compounds: 22312.
- T6675 *Valeriana amurensis* (Valerianaceae); HEI SHUI XIE CAO; Amur Valeriana. Used part: root and rhizome. TCM Effects: See *Valeriana officinalis*. TCM Indications: See *Valeriana officinalis*. Isolated compounds: 13137, 22312.
- T6676 *Valeriana hardwickii* (Valerianaceae); CHANG XU XIE CAO; Hardwick Valeriana. Used part: root or whole herb. TCM Effects: To quicken blood and regulate menstruation, dispel wind and disinhibit damp, fortify spleen and disperse accumulation. TCM Indications: Menstrual disorder, dysmenorrhea, amenorrhea, wind-damp impediment pain, inhibited urination, painful wound from knocks and falls, angitis. Isolated compounds: 22312, 22314.
- T6677 *Valeriana jatamansii* [Syn. *Valeriana wallichii*] (Valerianaceae); ZHI ZHU XIANG; Jatamans Valeriana. Used part: rhizome. TCM Effects: To rectify *qi* and disperse cold, quicken blood and regulate menstruation. TCM Indications: Sand and painful distention in stomach duct and abdomen, vomiting and diarrhea, beriberi with edema, wind-cold common cold, menstrual disorder, consumption damage and cough. Isolated compounds: 61, 121, 200, 534, 535, 2550, 2555, 2887, 3551, 4550, 5482, 5734, 9593, 9610, 9611, 11766, 12843, 12855, 13283, 13285, 14335, 15500, 16707, 17376, 22312, 22323.
- T6678 *Valeriana laxiflora* (Valerianaceae); SHU HUA JIE CAO; Laxflower Valeriana\*. Isolated compounds: 2331, 2334, 7768, 9854, 10208, 10652, 10820, 16050, 17861, 19312, 21589, 21776, 22270.
- T6679 *Valeriana officinalis* (Valerianaceae); XIE CAO; Common Valeriana. Equivalent plant: *Valeriana officinalis* var. *latifolia*, *Valeriana amurensis*. Used part: root and rhizome. TCM Effects: To quiet heart and spirit, dispel wind-damp, move *qi*-blood, relieve pain. TCM Indications: Disquieted heart spirit, palpitation and insomnia, mania and withdrawal, visceral agitation, wind-damp impediment pain, distending pain in stomach duct, dysmenorrhea, amenorrhea, knocks and falls. Isolated compounds: 582, 928, 2305, 2412, 2550, 2850,

- 2887, 3045, 7229, 7749, 8754, 9455, 10601, 10652, 10654, 10655, 11754, 11755, 11762, 12604, 13283, 13590, 15222, 15223, 16884, 17412, 17415, 18279, 20998, 22312, 22313, 22314, 22315, 22316, 22317, 22318, 22319, 22320, 22321, 22323.
- T6680 *Valeriana officinalis* var. *latifolia* (Valerianaceae); KUO YE XIE CAO; Broadleaf Common Valeriana. Used part: root and rhizome. TCM Effects: See *Valeriana officinalis*. TCM Indications: See *Valeriana officinalis*. Isolated compounds: 2555, 3045, 4550, 6482, 12191, 12192, 12193, 12194, 12843, 17376, 17377, 20995, 22312, 22313, 22314.
- T6681 *Valeriana* sp. (Valerianaceae). Isolated compounds: 5482, 11754.
- T6682 *Valeriana* spp. (Valerianaceae). Isolated compounds: 3551, 22312.  
*Valeriana wallichii* = *Valeriana jatamansii*
- T6683 *Vallisneria spiralis* (Hydrocharitaceae); KU CAO; Eelgrass. Used part: whole herb. TCM Effects: To dry damp and check discharge, move *qi* and quicken blood. TCM Indications: Vaginal discharge, postpartum persistent flow of lochia. Isolated compounds: 6722, 20168.
- T6684 *Vanilla planifolia* (Orchidaceae); XIANG ZI LAN; Vanilla. Used part: whole herb. TCM Effects: To clear heat and resolve toxin. TCM Indications: Poisonous snake bites. Isolated compounds: 22336.
- T6685 *Vanilla* sp. (Orchidaceae). Isolated compounds: 1282, 17470, 22336.
- T6686 *Vatica rassak* (Dipterocarpaceae); QING MEI; Rassak *Vatica*\*. Isolated compounds: 17283, 18643, 22354, 22355, 22356, 22357, 22505.
- T6687 *Venidium decurrens* (Asteraceae); NI JIN ZHAN JU; Cape Dandelion. Isolated compounds: 9015.
- T6688 *Ventilago calyculata* (Rhamnaceae); MAO GUO YI HE GUO; Hairyfruit Ventilago. Isolated compounds: 6776.
- T6689 *Ventilago leiocarpa* (Rhamnaceae); YI HE GUO; Smoothfruit Ventilago. Used part: rhizome. TCM Effects: To supplement *qi* and blood, strengthen sinews and bones, soothe channels and network vessels. TCM Indications: *Qi*-blood depletion, menstrual disorder, anemia and amenorrhea, wind-damp pain, knocks and falls, taxation damage in lumbar muscle. Isolated compounds: 1764, 3319, 3615, 6776, 10068, 11191, 11192, 12606, 13098, 16665, 20010, 20369, 20711, 21713, 22377, 22378, 22379.
- T6690 *Vepris louisii* LU YI CI JU; Louis Vepris\*. Used part: stem cortex and root cortex. TCM Indications: Dermatitis<sup>[5509]</sup>. Isolated compounds: 22380.
- T6691 *Veratrilba baillonii* (Gentianaceae); HUANG QIN JIAO; Baillon Veratrilba. Used part: root. TCM Effects: To clear heat and resolve toxin, kill worms, quicken network vessels and relieve pain. TCM Indications: Lung heat cough, tonsillitis, gastritis, dysentery, chronic cholecystitis, nephritis, mastitis, ascariasis, burns, knocks and falls, swelling toxin of welling abscess and sore. Isolated compounds: 21191, 22387, 22388.
- T6692 *Veratrum album* (Liliaceae); BAI LI LU; White Falsehellebore. Isolated compounds: 4522, 11866, 15395, 15452, 17995, 17996, 18643, 22395, 23033.
- T6693 *Veratrum album* var. *lobelianum* [Syn. *Veratrum lobelianum*] (Liliaceae); BAN BIAN LIAN ZHUANG LI LU; Lobelia Falsehellebore\*. Used part: root and rhizome. TCM Effects: To relieve pain, kill worms and ejection. TCM Indications: Wind-damp impediment pain, knocks and falls, scab and lichen, malign sore, mania and withdrawal with congesting phlegm. Isolated compounds: 783, 22395.
- T6694 *Veratrum californicum* (Liliaceae); JIA ZHOU LI LU; Californian Falsehellebore\*. Isolated compounds: 4522.
- T6695 *Veratrum eschscholtzii* (Liliaceae); AI XI SHOU SHI LI LU; Eschscholtz Falsehellebore\*. Isolated compounds: 15396.
- T6696 *Veratrum fimbriatum* (Liliaceae); LIU SU LI LU; Fimbriate Falsehellebore\*. Isolated compounds: 15396.
- T6697 *Veratrum grandiflorum* (Liliaceae); MAO YE LI LU; Largeflower Falsehellebore. Used part: root and rhizome. TCM Effects: See *Veratrum nigrum*. TCM Indications: See *Veratrum nigrum*. Isolated compounds: 4337, 11866, 18643, 20056, 22386.  
*Veratrum lobelianum* = *Veratrum album* var. *lobelianum*
- T6698 *Veratrum nigrum* (Liliaceae); LI LU; Black Falsehellebore. Equivalent plant: *Veratrum grandiflorum*. Used part: root and rhizome. TCM Effects: To promote vomiting, dispel wind and transform phlegm, lower blood pressure, kill worms. TCM Indications: Wind stroke with congesting phlegm, epilepsy, malaria, scab and lichen, malign sore. Isolated compounds: 3911, 4522, 8352, 11866, 18030, 19030, 20056, 22395, 23031, 23032.
- T6699 *Veratrum nigrum* var. *ussuriense* (Liliaceae); WU SU LI LI LU; Ussuri Falsehellebore. Isolated compounds: 18643, 22434.
- T6700 *Veratrum viride* (Liliaceae); LV LI LU; Green Falsehellebore. Isolated compounds: 8353, 11866, 15395, 15396, 15452, 22386.
- T6701 *Verbascum lychnites* (Scrophulariaceae); JIAN QIU LUO MAO RUI HUA; White Mullein. Isolated compounds: 56, 3306, 3307.
- T6702 *Verbascum phlomoides* (Scrophulariaceae); JU SE MAO RUI HUA; Orange Mullein. Isolated compounds: 4249.
- T6703 *Verbascum saccatum* (Scrophulariaceae); NANG ZHUANG MAO RUI HUA; Saccate Mullein\*. Isolated compounds: 19104.
- T6704 *Verbascum sinuatum* (Scrophulariaceae); DI ZHONG HAI MAO RUI HUA; Mediterranean Mullein. Isolated compounds: 580.
- T6705 *Verbascum thapsus* (Scrophulariaceae); MAO RUI HUA; Flannel Mullein. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, stanch bleeding and dissipate stasis. TCM Indications: Pneumonia, chronic appendicitis, sore toxin, sprain from knocks and falls, bleeding due to external injury. Isolated compounds: 2004, 3306, 4140, 18939.
- T6706 *Verbascum wiedemannianum* (Scrophulariaceae); ZI HUA GUAN MAO RUI HUA; Purplered-corolla Mullein\*. Isolated compounds: 580, 7925, 12726, 13580, 22662, 22663, 22664, 22665, 22666.
- T6707 *Verbena hastata* (Verbenaceae); JI YE MA BIAN CAO; Hastate Verbena. Isolated compounds: 9244, 22397.
- T6708 *Verbena littoralis* (Verbenaceae); HAI BIAN MA BIAN CAO; Littoral Verbena\*. Isolated compounds: 8259, 12934.
- T6709 *Verbena officinalis* (Verbenaceae); MA BIAN CAO; European Verbena. Used part: aerial parts. TCM Effects: To quicken blood and dissipate stasis, interrupt malaria, resolve toxin, disinhibit water and disperse edema. TCM Indications: Malaria, amenorrhea and dysmenorrhea, throat impediment, edema, heat strangury, diphtheria, bilharziosis, dysentery, concretion conglomeration accumulation and gathering. Isolated compounds: 618, 1792, 4060, 5735, 6123, 9244, 10698,

- 22270, 22271, 22397.
- T6710 *Verbena stricta* (Verbenaceae); JIAN TING MA BIAN CAO; Strict Verbena\*. Isolated compounds: 22397.
- T6711 *Verbena triphylla* [Syn. *Lippia citriodora*] (Verbenaceae); SAN YE MA BIAN CAO; Trifoliolate Verbena\*. Isolated compounds: 3760, 22399.
- T6712 *Vernonia amygdalina* (Asteraceae); BIAN TAO ZHUANG BAN JIU JU; Bitterleaf. Isolated compounds: 22405, 22412, 22414.
- T6713 *Vernonia anthelmintica* (Asteraceae); QU CHONG BAN JIU JU; Worm-killed Bitterleaf. Used part: fruit or whole herb. TCM Effects: To dispel wind and quicken blood, kill worms and relieve itch, resolve toxin. TCM Indications: White patch wind, skin diseases, oxyuria disease, ascariasis. Isolated compounds: 2559, 22406.
- T6714 *Vernonia chinense* (Asteraceae); ZHONG GUO BAN JIU JU; Chinese Bitterleaf\*. Isolated compounds: 22407.
- T6715 *Vernonia colorata* (Asteraceae); YOU SE BAN JIU JU; Colorful Bitterleaf. Isolated compounds: 22412.
- T6716 *Vernonia esculenta* (Asteraceae); BAN JIU JU; Edible Bitterleaf. Used part: root or leaf. TCM Effects: To clear heat and resolve toxin, engender flesh and close sores. TCM Indications: Appendicitis, sore and boil, burns and scalds. Isolated compounds: 22405, 22411, 22413, 22414.
- T6717 *Vernonia flexuosa* (Asteraceae); WAN YAN BAN JIU JU; Flexuous Bitterleaf\*. Isolated compounds: 22407, 22408.
- T6718 *Vernonia guineensis* (Asteraceae); JI NEI YA BAN JIU JU; Guinea Bitterleaf\*. Isolated compounds: 5490, 5493, 16861, 22409, 22410.
- T6719 *Vernonia lasiopus* (Asteraceae). Isolated compounds: 7032, 12541, 22406.
- T6720 *Vernonia pogosperma* (Asteraceae); BO GE BAN JIU JU; Manysperma Bitterleaf\*. Isolated compounds: 17600.
- T6721 *Vernonia* sp. (Asteraceae). Isolated compounds: 7226.
- T6722 *Veronica anagallis-aquatica* (Scrophulariaceae); BEI SHUI KU MAI; Watery Speedwell. Used part: whole herb with insect gall fruit. TCM Effects: To clear heat and resolve toxin, quicken blood and stanch bleeding. TCM Indications: Common cold, sore pharynx, taxation damage hemoptysis, dysentery, blood strangury, menstrual disorder [=menoxenia], swelling of sores, knocks and falls. Isolated compounds: 1538, 1539, 1540, 10353, 10355.
- T6723 *Veronica arvensis* (Scrophulariaceae); ZHI LI PO PO NA; Common Speedwell. Used part: whole herb. TCM Effects: To clear heat, interrupt malaria. TCM Indications: Malaria. Isolated compounds: 2004.
- T6724 *Veronica liwanensis* (Scrophulariaceae). Isolated compounds: 10352, 10356.
- T6725 *Veronica longifolia* (Scrophulariaceae); CHANG WEI PO PO NA; Longleaf Speedwell. Isolated compounds: 10352, 10356.
- T6726 *Veronica pectinata* var. *glandulosa* (Scrophulariaceae); SHU CHI PO PO NA; Pectinate Speedwell\*. Isolated compounds: 6718, 22416, 22417, 22418.
- T6727 *Veronica persica* (Scrophulariaceae); A LA BO PO PO NA; Iran Speedwell. Used part: whole herb. TCM Effects: To dispel wind and eliminate damp, strengthen lumbus, interrupt malaria. TCM Indications: Wind-damp impediment pain, kidney vacuity lumbago, enduring malaria. Isolated compounds: 580, 1082, 2004, 3307, 6632, 10353, 11195, 12577, 16994, 22392, 22403, 22415, 22419.
- T6728 *Veronica serpyllifolia* (Scrophulariaceae); XIAO PO PO NA; Thymeleaf Speedwell. Used part: whole herb. TCM Effects: To quicken blood and dissipate stasis, stanch bleeding, resolve toxin. TCM Indications: Knocks and falls, menstrual disorder, bleeding due to external injury, mouth sore, burns and scalds. Isolated compounds: 2004.
- T6729 *Veronica spuria* (Scrophulariaceae); YI ZHI XIANG; Bastard Speedwell. Used part: herb. TCM Effects: To suppress cough, transform phlegm, calm asthma. TCM Indications: Chronic trachitis. Isolated compounds: 10351, 13504.
- T6730 *Veronica thymoides* ssp. *pseudocinerea* (Scrophulariaceae); JIA HUI SE JIU LI XIANG PO PO NA; Thyme Speedwell\*. Isolated compounds: 85, 2279, 3674, 6074, 6081, 7557, 10694, 10695, 11704.
- T6731 *Veronicastrum sibiricum* (Scrophulariaceae); ZHAN LONG JIAN; Siberian Veronicastrum. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, dispel wind and eliminate damp, relieve pain. TCM Indications: Wind-damp pain in lumbus and legs, courbature, common cold, cystitis, tuberculosis, bleeding due to external injury, poisonous snake bite, poisonous insect stings. Isolated compounds: 3674, 4292, 5721, 12987, 13504, 14871, 19867, 19868, 19869, 19870, 20685, 20686.
- T6732 *Vespertilio superans* (Vespertilionidae); YE MING SHA; Bat Dung. Used part: dried feces. TCM Effects: To clear heat and brighten eyes, dissipate blood and eliminate accumulation. TCM Indications: Clear-eye blindness, night blindness, internal or external obstruction and screen, scrofula, gan accumulation, malaria. Isolated compounds: 3585, 22246, 22251.
- T6733 *Vetiveria zizanioides* (Poaceae); YAN LAN CAO; Vetiver. Isolated compounds: 22440, 22441.
- T6734 *Viburnum awabuki* (Caprifoliaceae); RI BEN JIA MI; Japanese Viburnum. Isolated compounds: 7033, 7034, 7036, 7037, 14399, 14404, 14615, 14616, 14617, 14648, 14808, 15472, 15473, 15474, 15475, 22443, 22444, 22446, 22448, 22451, 22452, 22453, 22454, 22455, 22456, 22457, 22458.
- T6735 *Viburnum dilatatum* (Caprifoliaceae); JIA MI; Linden Viburnum. Used part: stem-leaf. TCM Effects: To course wind and resolve exterior, clear heat and resolve toxin, quicken blood. TCM Indications: Wind-heat common cold, clove sore with fever, postpartum wind tetany, fracture due to knocks and falls. Isolated compounds: 15864.
- T6736 *Viburnum erubescens* (Caprifoliaceae); HONG JIA MI; Red Viburnum\*. Isolated compounds: 9259.
- T6737 *Viburnum luzonicum* (Caprifoliaceae); LV SONG JIA MI; Luzon Viburnum\*. Used part: stem-leaf. TCM Effects: To dispel wind and eliminate damp, quicken blood. TCM Indications: Wind-damp impediment pain, knocks and falls. Isolated compounds: 13153, 13154, 13155, 13156, 13157, 13158, 13159, 13160, 13161, 13162, 13163, 13164, 13165, 13166, 13167.
- T6738 *Viburnum odoratissimum* (Caprifoliaceae); XIANG QI JIA MI; Sweet Viburnum\*. Used part: Leaf, bark, root. TCM Effects: To dispel wind and eliminate damp, free channels and quicken network vessels. TCM Indications: Common cold, wind-damp impediment pain, painful



- swelling from knocks and falls, fracture. Isolated compounds: 881, 882, 7035, 7036, 7219, 7220, 10343, 10344, 10345, 10823, 14807, 22442, 22443, 22444, 22445, 22446, 22447, 22449, 22450, 22459, 22460.
- T6739 *Viburnum prunifolium* (Caprifoliaceae); YING YE JIA MI; Blackhaw. Isolated compounds: 19184.
- T6740 *Viburnum suspensum* (Caprifoliaceae); XUAN CHUI JIA MI; Weeping Viburnum\*. Isolated compounds: 10576, 10577, 16400.
- T6741 *Viburnum tinus* (Caprifoliaceae). Isolated compounds: 6378, 19543, 22462, 22463.
- T6742 *Vicia amoena* (Fabaceae); SHAN YE WAN DOU; Broadleaf Vetch. Used part: whole herb. TCM Effects: To dispel wind and eliminate damp, quicken blood and relieve pain. TCM Indications: Wind-damp pain, hypertonicity of sinews and vessels, scrotal eczema, knocks and falls, innominate toxin swelling, nosebleed(epistaxis), flooding and spotting. Isolated compounds: 1069, 12020.
- T6743 *Vicia angustifolia* (Fabaceae); ZHAI YE YE WAN DOU; Narrowleaf Vetch. Isolated compounds: 18324, 18325, 22465.
- T6744 *Vicia faba* (Fabaceae); CAN DOU; Broadbean. Used part: seed. TCM Effects: To fortify spleen and disinhibit water, resolve toxin and disperse swelling. TCM Indications: Diaphragm food, edema, sore toxin. Isolated compounds: 2331, 6558, 8806, 11825, 17425, 22466, 22741, 22742.
- T6745 *Vicia faba* (Fabaceae); CAN DOU JIA KE; Broadbean Pericarp. Used part: pericarp. TCM Effects: To stanch bleeding, close sores. TCM Indications: Hemoptysis, nosebleed(epistaxis), hematuria, bleeding of digestive tract, heaven-borne sore, scalds. Isolated compounds: 6558, 8806.
- T6746 *Vicia faba* (Fabaceae); CAN DOU JING; Broadbean Stem. Used part: stem. TCM Effects: To stanch bleeding, check diarrhea, resolve toxin and close sores. TCM Indications: Internal bleeding, water diarrhea, scalds. Isolated compounds: 8806.
- T6747 *Vicia faba* (Fabaceae); CAN DOU YE; Broadbean Leaf. Used part: leaf. TCM Effects: To stanch bleeding, close sores. TCM Indications: Tuberculosis and hemoptysis, bleeding of digestive tract, bleeding due to external injury, shank sore. Isolated compounds: 6558, 7853, 8806, 12060, 17515.
- T6748 *Vicia faba* var. *equina* (Fabaceae); MA CAN DOU; Horse Bean. Isolated compounds: 22466.
- T6749 *Vicia hirsuta* (Fabaceae); XIAO CHAO CAI; Pigeon Vetch. Used part: whole herb. TCM Effects: To resolve exterior and disinhibit damp, regulate menstruation and stanch bleeding. TCM Indications: Jaundice, malaria, menstrual disorder, nosebleed(epistaxis), Vaginal discharge. Isolated compounds: 1502.
- T6750 *Vicia sativa* (Fabaceae); DA CHAO CAI; Common Vetch. Used part: whole herb or seed. TCM Effects: To boost kidney, disinhibit water, relieve cough, stanch bleeding. TCM Indications: Kidney vacuity lumbago, jaundice, edema, malaria, nosebleed(epistaxis), palpitation, emission, menstrual disorder, toxin swelling of sores. Isolated compounds: 4452, 9717, 9798, 11642, 22465, 22466.
- T6751 *Vicia* sp. (Fabaceae). Isolated compounds: 1048, 1866, 9798, 10165.
- T6752 *Vigna angularis* [Syn. *Dolichus angularis*; *Phaseolus angularis*] (Fabaceae); CHI DOU; Assuki Bean. Used part: seed. TCM Effects: To disinhibit water, disperse edema and abate jaundice, clear heat, resolve toxin and disperse welling abscess. TCM Indications: Edema, leg qi, jaundice, strangury, hematochezia, swelling toxin sores, lichen papules. Isolated compounds: 2058, 2059, 2060, 2065, 2066, 2067, 2068, 2069, 2070, 13107, 17876.
- T6753 *Vigna* sp. (Fabaceae). Isolated compounds: 18859.
- T6754 *Vigna unguiculata* (Fabaceae); JIANG DOU; Cow-pea. Used part: seed. TCM Effects: To fortify spleen and disinhibit damp, supplement kidney and rough essence. TCM Indications: Spleen-stomach vacuity, diarrhea and dysentery, vomiting of sour matter, kidney vacuity lumbago, emission, diabetes mellitus, leukorrhea, white turbidity, frequent urination. Isolated compounds: 17047, 17048, 22474.
- T6755 *Viguiera eriophora* ssp. *eriophora* (Asteraceae). Isolated compounds: 390, 2698, 2946, 7286, 9292, 12198, 12199, 12671, 21726.
- T6756 *Viguiera puruana* (Asteraceae). Isolated compounds: 447, 7286, 7408, 12671.
- T6757 *Viguiera stenoloba* (Compositae). Isolated compounds: 22475.
- T6758 *Viguiera tucumanensis* (Compositae). Isolated compounds: 3840.
- T6759 *Vinca erecta* (Apocynaceae); ZHI LI CHANG CHUN HUA; Erect Periwinkle. Isolated compounds: 12120, 12268, 22502, 22503.
- T6760 *Vinca herbacea* [Syn. *Vinca major*] (Apocynaceae); DA CHANG CHUN HUA; Greater Periwinkle. Isolated compounds: 12268, 18634, 19762, 22489, 22490.  
*Vinca major* = *Vinca herbacea*
- T6761 *Vinca minor* (Apocynaceae); MAN CHANG CHUN HUA; Common Periwinkle. Isolated compounds: 6677, 18623, 22489, 22495.
- T6762 *Vinca* sp. (Apocynaceae). Isolated compounds: 5191.
- T6763 *Vincetoxicum officinale* [Syn. *Cynanchum vincetoxicum*] (Asclepiadaceae); YAO YONG BAI QIAN; White Swallow-wort. Isolated compounds: 22151, 22492.
- T6764 Vinegar CU Vinegar; Vinegar. TCM Effects: To stanch bleeding and dissipate stasis, resolve toxin and kill worms. TCM Indications: Postpartum blood dizziness, concretion and conglomeration, jaundice, yellow sweating, blood ejection, spontaneous external bleeding, hematochezia, itching in genital region, swelling of welling abscess, welling abscess and flat abscess with swelling sore. Isolated compounds: 108, 111, 5748, 7881.
- T6765 *Viola* sp. (Violaceae). Isolated compounds: 11183, 11184, 17470.
- T6766 *Viola tricolor* (Violaceae); SAN SE JIN; Garden Pansy. Used part: whole herb. TCM Effects: To suppress cough. TCM Indications: Cough, scrofula, infection of upper respiratory tract. Isolated compounds: 2017, 2039, 17264, 22519, 22521.
- T6767 *Viola yedoensis* (Violaceae); ZI HUA DI DING; Tokyo Violet. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, cool blood and disperse swelling. TCM Indications: Welling abscess and flat abscess with clove sore, erysipelas, mumps, mammary welling abscess, intestinal welling abscess, scrofula, damp-heat diarrhea dysentery, jaundice, red eyes with gall, poisonous snake bites. Isolated compounds: 1480, 1481, 1501, 11306, 22522.
- T6768 *Virola caducifolia* (Myristicaceae); LUO HUA NAN MEI ROU DOU KOU. Isolated compounds: 7883.
- T6769 *Virola multinervia* (Myristicaceae); DUO MAI NAN MEI ROU DOU KOU. Isolated compounds: 7883.

- T6770 *Viola surinamensis* [Syn. *Myristica surinamensis*] (Myristicaceae); SU LI NAN ROU DOU KOU; Ucahub; Baboen. Isolated compounds: 10515, 10516, 14381, 14383, 20492.
- T6771 *Viscum album* (Loranthaceae); LUAN YE HU JI SHENG; White Mistletoe. Used part: stem and branch-leaf. TCM Effects: To dispel wind-damp, strengthen sinews and bones, promote lactation. TCM Indications: Wind-damp impediment pain, limp wilting sinew and bone, lumbago and limp leg, postpartum scant milk. Isolated compounds: 22158.
- T6772 *Viscum angulatum* (Loranthaceae); LENG ZHI HU JI SHENG; Angulate Mistletoe\*. Used part: stem-leaf. TCM Effects: To dispel wind-damp, strengthen sinews and bones, relieve cough, disperse swelling, lower blood pressure. TCM Indications: Wind-damp impediment pain, aching in lumbus and legs, cough, hemoptysis, stomachache, stirring fetus disquieted, sore and boil, hypertension. Isolated compounds: 9604, 15279, 17404, 18683, 21179, 22540.
- T6773 *Viscum articulatum* (Loranthaceae); BIAN ZHI HU JI SHENG; Flatshort Mistletoe. Used part: branchlet-leaf. TCM Effects: See *Viscum articulatum*. TCM Indications: See *Viscum articulatum*. Isolated compounds: 16050, 17405, 17407.
- T6774 *Viscum articulatum* (Loranthaceae); FENG XIANG JI SHENG; Flatshoot Mistletoe. Equivalent plant: *Viscum articulatum*. Used part: branchlet-leaf. TCM Effects: To dispel wind and eliminate damp, soothe sinews and quicken blood, relieve cough and transform phlegm, stanch bleeding. TCM Indications: Wind-damp impediment pain, limp aching lumbus and knees, painful wound from knocks and falls, taxation damage cough, flooding and spotting with vaginal discharge, postpartum blood *qi* vacuity. Isolated compounds: 7338, 11083, 11084, 11085, 12905, 16050, 22536.
- T6775 *Viscum coloratum* (Loranthaceae); HU JI SHENG; Colored Mistletoe. Used part: stem and branch-leaf. TCM Effects: To dispel wind-damp, supplement liver and kidney, strengthen sinews and bones, quiet fetus. TCM Indications: Hypertension, cerebral and cardiovascular diseases, wind-damp impediment pain, limp aching lumbus and knees, stirring fetus in pregnancy. Isolated compounds: 7280, 9604, 9605, 9705, 14418, 16050, 18675, 22536, 22537, 22538, 22539, 22540, 22541, 22542.
- T6776 *Viscum cruciatum* (Loranthaceae); SHI ZI XING FENG JI SHENG; Cruciate Mistletoe\*. Isolated compounds: 4930.
- T6777 *Viscum multinerve* (Loranthaceae); BING GUO HU JI SHENG; Stipefruit Mistletoe. Used part: stem-leaf. TCM Effects: To dispel wind-damp, supplement liver and kidney, quicken blood and relieve pain, quiet fetus, promote lactation. TCM Indications: Wind-damp impediment pain, pain in lumbus and legs, knocks and falls, hypertension, stirring fetus disquieted, breast milk stoppage. Isolated compounds: 16823, 18675.
- T6778 *Viscum* sp. (Loranthaceae). Isolated compounds: 19922.
- T6779 *Vismia guianensis* (Clusiaceae). Isolated compounds: 22543, 22544, 22545, 22546, 22547, 22548, 22549.
- T6780 *Vismia orientalis* (Clusiaceae); DONG FANG WEI SI MU; Oriental Vismia\*. Isolated compounds: 2346, 6776, 8325, 22551.
- T6781 *Vismia* sp. (Clusiaceae). Isolated compounds: 13808.
- T6782 *Vitex agnuscastus* (Verbenaceae); SUI HUA MU JING; Lilac Chastetree. Isolated compounds: 750, 751, 752, 5308.
- T6783 *Vitex altissima* (Verbenaceae); ZUI GAO MU JING YE; Highest Chastetree Leaf\*. Isolated compounds: 1009, 9827.
- T6784 *Vitex littoralis* (Verbenaceae); BIN MU JING; Littoral Chastetree\*. Isolated compounds: 11773, 22581.
- T6785 *Vitex lucens* (Verbenaceae); XIN XI LAN MU JING; Puriri. Isolated compounds: 2455, 11773, 22581.
- T6786 *Vitex megapotamica* (Verbenaceae). Isolated compounds: 18162.
- T6787 *Vitex negundo* (Verbenaceae); HUANG JING GEN; Negundo Chastetree Root. Used part: root. TCM Effects: To resolve exterior, relieve cough, dispel wind and eliminate damp, rectify *qi* and relieve pain. TCM Indications: Common cold, chronic trachitis, wind-damp impediment pain, stomachache, sand *qi*, abdominal pain. Isolated compounds: 15322, 15323.
- T6788 *Vitex negundo* (Verbenaceae); HUANG JING YE; Negundo Chastetree Leaf. Used part: leaf. TCM Effects: To clear heat and resolve exterior, resolve toxin and disinhibit damp. TCM Indications: Common cold, summerheat stroke, vomiting and diarrhea, dysentery, malaria, jaundice, rheumatism, painful swelling from knocks and falls, sore and welling abscess, scab and lichen. Isolated compounds: 107, 2259, 3300, 5319, 5387, 5401, 5536, 6483, 6500, 9507, 10252, 15324, 15628.
- T6789 *Vitex negundo* (Verbenaceae); HUANG JING ZHONG ZI; Negundo Chastetree Seed\*. Used part: fruit. TCM Effects: To dispel wind and resolve exterior, relieve cough and calm asthma, rectify *qi* and disperse food with relieving pain. TCM Indications: Wind damage and common cold, cough, asthma, stomachache with acid regurgitation, indigestion, food accumulation diarrhea, cholecystitis, gallstones, mounting *qi* [=hernia]. Isolated compounds: 5279, 5582, 10185, 22565, 22566, 22567, 22594, 22595.
- T6790 *Vitex rotundifolia* [Syn. *Vitex trifolia* var. *simplicifolia*] (Verbenaceae); DAN YE MAN JING; Simpleleaf Shrub Chastetree. Isolated compounds: 5279, 5280, 5281, 22590, 22591, 22592, 22593, 22594, 22595.
- T6791 *Vitex rotundifolia* [Syn. *Vitex trifolia* var. *simplicifolia*] (Verbenaceae); DAN YE MAN JING ZI; Simpleleaf Shrub Chastetree Fruit. Used part: seed. TCM Effects: See *Vitex trifolia*. TCM Indications: See *Vitex trifolia*. Isolated compounds: 159, 1792, 3045, 3300, 6160, 11208, 17376, 17377, 18656, 22571, 22575, 22576, 22577, 22578, 22580.
- T6792 *Vitex trifolia* (Verbenaceae); MAN JING YE; Threeleaf Chastetree Leaf. Equivalent plant: DAN YE MAN JING YE. Used part: leaf. TCM Effects: To disperse swelling and relieve pain. TCM Indications: Head wind, knocks and falls. Isolated compounds: 20999.
- T6793 *Vitex trifolia* (Verbenaceae); MAN JING ZI; Threeleaf Chastetree Fruit. Equivalent plant: *Vitex rotundifolia*. Used part: seed. TCM Effects: To dispel wind-heat, clear head and eyes. TCM Indications: Externally contracted wind-heat, dizziness and headache, migraine, gum swelling and pain, red eyes with gall, delacrimation, wind-damp impediment pain, hypertonicity of limbs. Isolated compounds: 6, 227, 3300, 3624, 3689, 4204, 4205, 5718, 9818, 12891, 15203, 16066, 16561, 17089, 17851, 18955, 19983, 19987, 20280, 20995, 21414, 22336, 22568, 22569, 22570, 22571, 22572, 22573, 22574, 22579, 22580, 22581. *Vitex trifolia* var. *simplicifolia* = *Vitex rotundifolia*

- T6794 *Vitis amurensis* (Vitaceae); SHAN PU TAO; Amur Grape. Used part: fruit. TCM Effects: To clear heat and disinhibit urine. TCM Indications: Heat vexation and thirst, urinary tract infection, inhibited urination. Isolated compounds: 1090, 1092, 1093, 1095, 17889, 22505, 22506, 22508, 22584, 22585, 22588, 22589.
- T6795 *Vitis coignetiae* (Vitaceae); XIE PU TAO; Coigne Grape\*. Isolated compounds: 22586.
- T6796 *Vitis* sp. (Vitaceae). Isolated compounds: 13460.
- T6797 *Vitis* spp. (Vitaceae). Isolated compounds: 18643.
- T6798 *Vitis vinifera* (Vitaceae); PU<sup>(2)</sup> TAO; European Grape. Used part: fruit. TCM Effects: To supplement *qi* and blood, strengthen sinews and bones, disinhibit urine. TCM Indications: Vacuity of *qi* and blood, lung vacuity cough, palpitation and night sweating, wind-damp impediment pain, strangury, edema. Isolated compounds: 943, 1445, 1446, 1447, 2808, 3308, 3318, 7026, 8095, 8307, 8806, 9696, 9818, 14229, 16010, 16550, 16901, 17024, 17869, 17876, 17884, 18163, 18643, 18644, 18645, 18646, 19912, 20715, 21849, 22504, 22505, 22507, 22587.
- T6799 *Vitis vinifera* (Vitaceae); PU TAO TENG YE; European Grape Stem and Leaf. Used part: stem-leaf. TCM Effects: To dispel wind and eliminate damp, disinhibit water and disperse edema, resolve toxin. TCM Indications: Edema, inhibited urination, red eyes, swollen welling abscess, wind-damp impediment pain. Isolated compounds: 8806, 18421.
- T6800 *Viverra zibetha* (Viverridae); LING MAO XIANG; Civet. Used part: secretion with a musky odor secreted from anal scent glands. TCM Effects: To move *qi*, quicken blood, quiet spirit, relieve pain. TCM Indications: Sudden pain in heart and abdomen, mounting *qi*. Isolated compounds: 3780, 7420, 11025, 17935, 19459.
- T6801 *Vladimiria denticulata* (Asteraceae); YUE XI MU XIANG; Denticulate Vladimiria. Used part: root. TCM Effects: To rectify *qi*, relieve pain. TCM Indications: Pain in stomach duct and rib-side, diarrhea, dysentery, indigestion. Isolated compounds: 4128, 4891.
- T6802 *Vladimiria souliei* [Syn. *Jurinea souliei*] (Asteraceae); CHUAN MU XIANG; Common Vladimiria. Used part: root. TCM Effects: To move *qi* and relieve pain. TCM Indications: Distending pain in stomach duct, rumbling intestines and diarrhea, tenesmus, liver gallbladder pain. Isolated compounds: 4128, 4891, 13588, 15705.
- T6803 *Volvariella volvacea* (Pluteaceae); CAO GU; Straw Mushroom. Used part: sporocarp. TCM Effects: To clear heat and resolve summerheat, supplement *qi* and blood, lower blood pressure. TCM Indications: Summerheat-heat vexation and thirst, vacuity and hypodynamia, hypertension. Isolated compounds: 14229, 14237.
- T6804 *Vouacapoua americana* (Fabaceae); MEI GUO KE YA SHU; American Vouacapoua\*. Isolated compounds: 3276, 14814, 22619.
- T6805 *Vouacapoua macropetala* (Fabaceae); CHANG HUA BAN KE YA SHU; Longpetal Vouacapoua\*. Isolated compounds: 17278.
- W**
- T6806 *Walsura piscidia* (Meliaceae); PI XI DI GE SHE SHU; Piscidi Cuttongue tree\*. Isolated compounds: 17480.
- T6807 *Walsura yunnanensis* (Meliaceae); YUN NAN GE SHE SHU; Yunnan Cuttongue tree. Isolated compounds: 22631.
- T6808 *Waltheria americana* (Sterculiaceae); HE TA CAO; Florida Waltheria. Used part: root and stem. TCM Effects: To expel wind and eliminate damp, resolve toxin and eliminate inflammation. TCM Indications: Vaginal discharge, welling abscess and boil, mastitis. Isolated compounds: 648, 649, 650, 651.
- T6809 *Waltheria douradinha* (Sterculiaceae). Isolated compounds: 14815, 22632, 22633, 22634.
- T6810 *Warburgia salutaris*. Isolated compounds: 22638.
- T6811 *Warburgia stuhlmannii*. Isolated compounds: 6377, 11670, 15023, 15024, 15025.
- T6812 *Warburgia ugandensis*. Isolated compounds: 12017, 12084, 12100, 18388.
- T6813 *Warionia saharae*. Isolated compounds: 4941, 5274, 5275, 5494, 5794, 7115, 7182, 9564, 10155, 14195, 14978, 18673, 19128, 19129.  
*Wedelia calendulacea* = *Wedelia chinensis*
- T6814 *Wedelia chinensis* [Syn. *Solidago chinensis*; *Wedelia calendulacea*] (Asteraceae); PENG QI JU; Chinese Wedelia. Used part: whole herb. TCM Effects: To clear heat and resolve toxin, cool blood and dissipate stasis. TCM Indications: Common cold with fever, pharyngolaryngitis, parotitis, tonsillitis, diphtheria, pertussis, trachitis, pneumonia, tuberculosis and hemoptysis, nosebleed(epistaxis), hematuria, infective hepatitis, dysentery, hemorrhoids, swelling toxin of clove sore. Isolated compounds: 5101.
- T6815 *Wedelia* sp. (Asteraceae). Isolated compounds: 11794.
- T6816 *Welwitschia mirabilis* (Welwitschiaceae); BAI SUI YE; Longlived Leaf. Isolated compounds: 8881.
- T6817 widely distributed in nature ; Widely distributed in nature. Isolated compounds: 618, 19759, 21342, 22324.
- T6818 *Wigandia urens* (Hydrophyllaceae). Isolated compounds: 6008, 14004, 14027.
- T6819 *Wikstroemia chamaedaphne* (Thymelaeaceae); HE SHUO YAO HUA; Lowdaphne Stringbush. Used part: bud. TCM Effects: To drain precipitation and expel water, reduce phlegm. TCM Indications: Edema, distention fullness in stomach duct, phlegm-rheum, cough and counterflow with asthma and fullness, infective hepatitis, schizophrenia, epilepsy. Isolated compounds: 15935, 22929.
- T6820 *Wikstroemia indica* (Thymelaeaceae); LIAO GE WANG GEN; Indian Stringbush Root. Used part: root. TCM Effects: To clear heat, disinhibit urine, resolve toxin, break accumulation and kill worms. TCM Indications: Pertussis, rheumatic arthritis, leprosy, bronchial asthma, amebic dysentery, pneumonia, epidemic parotitis, edema, scrofula, toxin swelling of sores, swelling and pus of sores, knocks and falls. Isolated compounds: 1621, 2490, 2491, 4651, 4657, 11017, 15805, 15809, 19891, 19892, 20556, 21589, 22668.
- T6821 *Wikstroemia lanceolata* (Thymelaeaceae); PI ZHEN XING YAO HUA; Lanceolate Stringbush\*. Isolated compounds: 1537, 5376, 6204, 9035, 9544.
- T6822 *Wikstroemia monticola* (Thymelaeaceae); SHAN DI YAO HUA; Country Stringbush\*. Isolated compounds: 19902.
- T6823 *Wikstroemia sikokiana* (Thymelaeaceae); SI GUO YAO HUA; Siko Stringbush\*. Isolated compounds: 19890.
- T6824 *Wikstroemia* sp. (Thymelaeaceae). Isolated compounds: 17409, 20556.
- T6825 *Winchia calophylla* (Apocynaceae); PEN JIA SHU; Prettyleaf Winchia.

- Used part: leaf or bark. TCM Effects: To relieve cough and calm asthma. TCM Indications: Cough and asthma, enduring cough and asthma. Isolated compounds: 372, 6698.
- T6826 *Wisteria sinensis* (Fabaceae); ZI TENG; Chinese Wisteria. Used part: stem-leaf. TCM Effects: To disinhibit water, eliminate impediment, kill worms. TCM Indications: Edema, pain in joints, intestinal parasitic disease. Isolated compounds: 916, 917, 4594.
- T6827 *Wisteria sinensis* (Fabaceae); ZI TENG ZI; Chinese Wisteria Seed. Used part: seed. TCM Effects: To quicken blood and free network vessels, resolve toxin, kill worms. TCM Indications: Pain in sinews and bones, vomiting diarrhea with abdominal pain, child oxyuria disease. Isolated compounds: 4594.
- T6828 *Withania coagulans* (Solanaceae); NING GU SHUI QIE; Coagulate Withania. Isolated compounds: 3859, 9743, 10092, 22699, 22702.
- T6829 *Withania somnifera* (Solanaceae); CUI MIAN SHUI QIE; Somniferous Withania. Isolated compounds: 3859, 5739, 5740, 5879, 5880, 7082, 7128, 7129, 7210, 7210, 7211, 7212, 7213, 10587, 10828, 13181, 14230, 16789, 17237, 21148, 22698, 22700, 22700, 22700, 22702, 22704, 22705, 22706, 22707, 22708, 22709, 22710, 22711, 22712, 22713, 22714.
- T6830 *Woodfordia fruticosa* (Lythraceae); XIA ZI HUA; Shrubby Woodwardia. Used part: root or flower. TCM Effects: To quicken blood and stanch bleeding, soothe sinews and quicken network vessels. TCM Indications: Dysmenorrhea, menstrual block, flooding, nosebleed(epistaxis), coughing of blood, intestinal wind bleeding, dysentery, wind-damp impediment pain, taxation damage in lumbar muscle, knocks and falls. Isolated compounds: 15719.
- T6831 *Woodwardia orientalis* (Blechnaceae); DONG FANG GOU JI; Oriental Chain Fern. Used part: rhizome. TCM Effects: To dispel wind-damp, supplement liver and kidney, strengthen lumbus and knees, resolve toxin, kill worms. TCM Indications: Aching pain in lumbus and back, knee pain and legs weakness, dysentery, flooding and spotting, leukorrhea, child gan accumulation, concretion and conglomeration, snake bite. Isolated compounds: 3040, 3042, 3043, 3044, 11067, 17700, 19987, 19997, 22721, 22722.
- T6832 *Woodwardia virginica* (Blechnaceae); FU JI NI YA GOU JI JUE; Virginia Chain Fern. Isolated compounds: 22723, 22724, 22725.
- T6833 *Wrightia javanica* (Apocynaceae); ZHAO WA DAO DIAO BI; Java Wrightia\*. Isolated compounds: 22735, 22736.
- T6834 *Wrightia tomentosa* (Apocynaceae); YAN MU; Tomentose Wrightia. Used part: root or stem. TCM Effects: To resolve toxin and disperse swelling. TCM Indications: Snake bite. Isolated compounds: 11340, 22733.
- X**
- T6835 *Xanthium canadense* (Asteraceae); JIA NA DA CANG ER; Canadian Cocklebur\*. Isolated compounds: 9740, 11203.
- T6836 *Xanthium chasei* (Asteraceae); CAI SI CANG ER; Chase Cocklebur\*. Isolated compounds: 22780.
- T6837 *Xanthium chinense* (Asteraceae); ZHONG GUO CANG ER; Burweed. Isolated compounds: 22780.
- T6838 *Xanthium commune* (Asteraceae); PU TONG CANG ER; Common Cocklebur\*. Isolated compounds: 22757.
- T6839 *Xanthium occidentale* (Asteraceae); XI FANG CANG ER; Occidental Cocklebur\*. Isolated compounds: 22780.
- T6840 *Xanthium orientale* (Asteraceae); DONG FANG CANG ER; Oriental Cocklebur\*. Isolated compounds: 22757.
- T6841 *Xanthium pennsylvanicum* (Asteraceae); BIN XI FA NI YA CANG ER; Pennsylvanian Cocklebur\*. Isolated compounds: 22755.
- T6842 *Xanthium riparium* (Asteraceae); XIAO XI CANG ER; Ripply Cocklebur\*. Isolated compounds: 22755.
- T6843 *Xanthium sibiricum* [Syn. *Xanthium strumarium*] (Asteraceae); CANG ER; Siberian Cocklebur. Used part: stem-leaf. TCM Effects: To dispel wind, dissipate heat, eliminate damp, resolve toxin. TCM Indications: Allergic rhinitis, nervous headache, rheumatic arthritis, pain in limbs, sciatica, eczema, itchy skin, chronic sinus infections, otitis media, parotitis, common cold, head wind, dizziness, deep-source nasal congestion, red eyes, eye screen, wind-damp impediment pain, hypertonicity and numbness, wind *lai*, clove sore, scab and lichen, itchy skin, hemorrhoids, dysentery. Isolated compounds: 5413, 11590, 20369, 21552, 22755, 22757, 22780.
- T6844 *Xanthium* sp. (Asteraceae). Isolated compounds: 22755.  
*Xanthium strumarium* = *Xanthium sibiricum*
- T6845 *Xanthoceras sorbifolia* (Sapindaceae); WEN GUAN MU; Shinyleaf yellowhorn. Used part: stem or branch-leaf. TCM Effects: To dispel wind and eliminate damp, disperse swelling and relieve pain. TCM Indications: Wind-damp-heat impediment, pain in sinews and bones. Isolated compounds: 15170, 18317, 22758.
- T6846 *Xanthorhiza simplicissima* (Asteraceae); HUANG GEN SHU; Yellowroot. Isolated compounds: 15885, 16439.  
*Xanthoxylum americanum* = *Zanthoxylum americanum*
- T6847 *Xeranthemum cylindraceum* (Asteraceae); CHANG TONG HAN HUA; Cylinder Immortelle. Isolated compounds: 22784.
- T6848 *Xerocomus badius* (Boletaceae); HE RONG GAI NIU GAN JUN; Bay Bolete. Isolated compounds: 15717.
- T6849 *Xylaria* sp. Isolated compounds: 6267, 10207, 10505.
- T6850 *Xylopiya aromatica* (Annonaceae); FANG XIANG MU BAN SHU; Aromatic Xylopiya\*. Isolated compounds: 22816, 22817.
- T6851 *Xylopiya buxifolia* (Annonaceae); HUANG YANG YE MU BAN SHU; Boxleaf Xylopiya\*. Isolated compounds: 15797.
- T6852 *Xylopiya columbiana* (Annonaceae); GE LUN BI YA MU BAN SHU; Columbia Xylopiya\*. Isolated compounds: 1459, 1770, 13634, 13715, 15885, 21258.
- T6853 *Xylopiya discreta* (Annonaceae); XI SHU MU BAN SHU; Discrete Xylopiya\*. Isolated compounds: 22818.
- T6854 *Xylopiya parviflora* (Annonaceae); XIAO HUA MU BAN SHU; Smallflower Xylopiya\*. Isolated compounds: 4886, 5602, 6316, 14674, 14708, 22819.
- T6855 *Xylopiya vielana* (Annonaceae); MU BAN SHU; Common Xylopiya. Isolated compounds: 22469, 22470, 22471, 22472, 22473.
- Y**
- T6856 *Yatheca podophylla* (Cyatheaceae); BING YE SUO LUO. Isolated compounds: 6612, 10121, 19979.
- T6857 Yeast and other biological sources. Isolated compounds: 22255.

## Z

- T6858 *Zanthoxylum acanthopodium* (Rutaceae); CI HUA JIAO; Acanthoid Pricklyash\*. Used part: root or fruit. TCM Effects: To warm center and dissipate cold, kill worms and relieve pain. TCM Indications: Cold pain in stomach duct and abdomen, wind-cold-damp impediment, knocks and falls, abdominal pain due to worm accumulation. Isolated compounds: 7719, 17572, 19540, 19777, 20665.
- T6859 *Zanthoxylum acutifolium* (Rutaceae); JIAN YE HUA JIAO; Acute-leaf Pricklyash\*. Isolated compounds: 595, 597, 598.
- T6860 *Zanthoxylum ailanthoides* (Rutaceae); CHU YE HUA JIAO; Ailanthus-like Pricklyash. Used part: fruit. TCM Effects: To warm center, dry damp, kill worms, relieve pain. TCM Indications: Cold pain in heart and abdomen, cold rheum, diarrhea, cold dysentery, damp impediment, red and white vaginal discharge, toothache. Isolated compounds: 775, 776, 5445, 12571, 15631, 19618, 22781.
- T6861 *Zanthoxylum ailanthoides* (Rutaceae); CHU YE HUA JIAO GEN; Ailanthus-like Pricklyash Root. Used part: root. TCM Effects: To dispel wind and eliminate damp, quicken blood and dissipate stasis, disinhibit water and disperse edema. TCM Indications: Wind-damp impediment pain, abdominal pain and diarrhea, inhibited urination [=dysuria], bleeding due to external injury, knocks and falls, poisonous snake bites. Isolated compounds: 15631.
- T6862 *Zanthoxylum ailanthoides* (Rutaceae); CHU YE HUA JIAO PI; Ailanthus-like Pricklyash Bark. Used part: bark. TCM Effects: To dispel wind and eliminate damp, free network vessels and relieve pain, disinhibit urine. TCM Indications: Wind-cold-damp impediment, pain in lumbus and knees, knocks and falls, abdominal pain and diarrhea, inhibited urination, toothache, eczema, scab and lichen. Isolated compounds: 5445, 12571, 15631, 17572, 20002, 22781.
- T6863 *Zanthoxylum americanum* [Syn. *Xanthoxylum americanum*] (Rutaceae); MEI ZHOU HUA JIAO; Pricklyash. Isolated compounds: 941, 6484, 15631, 22777, 22781.
- T6864 *Zanthoxylum armatum* (Rutaceae); MAO ZHU YE HUA JIAO; Armate-leaf Pricklyash\*. Used part: fruit. TCM Effects: To dissipate cold, relieve pain, expel roundworm. TCM Indications: Stomach cold, stomachache due to roundworm, toothache, damp sore. Isolated compounds: 1737.
- T6865 *Zanthoxylum arnotianum* (Rutaceae); A NUO TI HUA JIAO; Arnotti Pricklyash\*. Isolated compounds: 1833, 5445, 13571.
- T6866 *Zanthoxylum avicennae* (Rutaceae); YING BU BO; Avicenna's Pricklyash. Used part: root. TCM Effects: To dispel wind and transform damp, disperse swelling and free network vessels. TCM Indications: Swelling pain in throat, yellow swelling, malaria, wind-damp bone pain, contusion from knocks and falls. Isolated compounds: 2035, 2037, 6454, 15631.
- T6867 *Zanthoxylum belizense* (Rutaceae); BO LI ZI HUA JIAO; Beliz Pricklyash\*. Isolated compounds: 3096, 3770.
- T6868 *Zanthoxylum brachyacanthum* (Rutaceae); DUAN CI HUA JIAO; Shortspine Pricklyash\*. Isolated compounds: 3057, 14209.
- T6869 *Zanthoxylum bungeanum* (Rutaceae); HUA JIAO; Bunge Pricklyash. Equivalent plant: *Zanthoxylum schinifolium*. Used part: pericarp. TCM Effects: To warm center and relieve pain, dispel damp and kill worms. TCM Indications: Spleen-stomach vacuity cold, cold pain in stomach duct and abdomen, vomiting, diarrhea, abdominal pain and vomiting due to roundworm. Isolated compounds: 2745, 3689, 4357, 7385, 14538, 15631, 19468, 20002, 20992, 20995, 22966, 22969.
- T6870 *Zanthoxylum bungeanum* (Rutaceae); HUA JIAO GEN; Bunge Pricklyash Root. Used part: root. TCM Effects: To kill worms. TCM Indications: Vacuity cold of kidney and bladder, blood strangury, beriberi, damp sore. Isolated compounds: 20002.
- T6871 *Zanthoxylum clava-hercules* (Rutaceae); MEI GUO CI JIAO; Hercules' Club. Isolated compounds: 9428, 15631, 17572.
- T6872 *Zanthoxylum cuspidatum* (Rutaceae); HUA JIAO LE; Cuspidate Pricklyash. Used part: stem-leaf or root. TCM Effects: To quicken blood, dissipate stasis, relieve pain. TCM Indications: Stasis stagnation pain in stomach duct and abdomen, knocks and falls. Isolated compounds: 9226, 11237, 12917, 15631, 15632.
- T6873 *Zanthoxylum decaryi* (Rutaceae); DE KA RUI HUA JIAO; Decary Pricklyash\*. Isolated compounds: 1833, 5445.
- T6874 *Zanthoxylum dimorphophyllum* var. *spinifolium* (Rutaceae); CI YI YE HUA JIAO; Spinyleaf Pricklyash. Used part: root. TCM Effects: To dispel wind and dissipate cold, dissipate stasis and settle pain, stanch bleeding and engender flesh. TCM Indications: Wind-cold-damp impediment, wind-cold cough, knocks and falls, static blood swelling pain, bleeding due to external injury. Isolated compounds: 6026.
- T6875 *Zanthoxylum dipetalum* (Rutaceae); ER DUN ZHUANG HUA JIAO; Twopetaline Pricklyash\*. Isolated compounds: 3096.
- T6876 *Zanthoxylum dissitum* (Rutaceae); DA YE HUA JIAO; Shellfish Pricklyash. Used part: fruit. TCM Effects: To dissipate cold and relieve pain, regulate menstruation. TCM Indications: Mounting *qi* (hernia), profuse menstruation. Isolated compounds: 15631.
- T6877 *Zanthoxylum dissitum* (Rutaceae); DA YE HUA JIAO GEN; Shellfish Pricklyash Root. Used part: root. TCM Effects: To dispel wind and dissipate cold, rectify *qi* and quicken blood. TCM Indications: Wind-cold-damp impediment, *qi* stagnation and pain in stomach duct, cold mounting with abdominal pain, toothache, knocks and falls. Isolated compounds: 15631.
- T6878 *Zanthoxylum echinocarpum* (Rutaceae); CI KE HUA JIAO; Spinyfruit Pricklyash. Used part: root, root cortex or stem-leaf. TCM Effects: To disperse food and assisting movement, move *qi* and relieve pain. TCM Indications: Spleen weakness and functional weakness, reduced food intake with abdominal distention, *qi* stagnation and pain in stomach duct. Isolated compounds: 15631.
- T6879 *Zanthoxylum elephantiasis* (Rutaceae); HOU PI HUA JIAO; Thickbark Pricklyash\*. Isolated compounds: 3070, 3096, 12571.
- T6880 *Zanthoxylum flavum* (Rutaceae); HUANG XIN HUA JIAO; Yellow-heart Pricklyash. Isolated compounds: 15631.
- T6881 *Zanthoxylum hamiltonianum* (Rutaceae); GAO SHAN HUA JIAO; Alpine Pricklyash. Isolated compounds: 2284.
- T6882 *Zanthoxylum integrifolium* (Rutaceae); QUAN YUAN YE HUA JIAO; Integrifolious Pricklyash\*. Isolated compounds: 147, 4648, 5347, 9742, 10236, 10237, 12498, 12499, 12500, 19298, 21057.
- T6883 *Zanthoxylum myriacanthum* (Rutaceae); DA YE CHOU HUA JIAO; Manyspiny Pricklyash\*. Used part: stem and branch-leaf. TCM Effects: To dispel wind-damp, resolve toxin and disperse swelling,

- stanch bleeding and relieve pain. TCM Indications: Wind-cold common cold, wind-damp impediment pain, fracture due to knocks and falls, bleeding due to external injury, burns and scalds, poisonous snake bite. Isolated compounds: 15631.
- T6884 *Zanthoxylum nitidum* (Rutaceae); RU DI JIN NIU; Shinyleaf Pricklyash. Used part: root or branchlet-leaf. TCM Effects: To dispel wind and free network vessels, disperse swelling and relieve pain. TCM Indications: Wind-damp bone pain, stomachache, toothache, throat impediment, scrofula, burns and scalds. Isolated compounds: 1833, 2523, 3499, 6454, 11093, 11237, 11423, 12917, 14819, 15631, 15632, 16443, 16454, 16477, 19540, 19777.
- T6885 *Zanthoxylum ovalifolium* (Rutaceae); TUO YUAN YE HUA JIAO; Ellipticleaf Pricklyash\*. Isolated compounds: 3096.
- T6886 *Zanthoxylum piperitum* (Rutaceae); HU JIAO HUA JIAO; Japanese Pricklyash. Isolated compounds: 1833, 7703, 13716, 19777, 22779, 23023, 23024, 23025, 23026, 23027, 23028.
- T6887 *Zanthoxylum planispinum* (Rutaceae); ZHU YE JIAO; Bambooleaf Pricklyash. Used part: fruit. TCM Effects: To dissipate cold, relieve pain, expel roundworm. TCM Indications: Stomach cold, stomachache due to roundworm, toothache, damp sore. Isolated compounds: 5445, 7703, 20002, 22771.
- T6888 *Zanthoxylum planispinum* (Rutaceae); ZHU YE JIAO GEN; Bambooleaf Pricklyash Root. Used part: root. TCM Effects: To dispel wind and quicken blood, dissipate cold and relieve pain. TCM Indications: Common cold with headache, cough, vomiting and diarrhea, pain in joints due to rheumatism, knocks and falls, toothache. Isolated compounds: 5445, 7703, 17504, 22771.
- T6889 *Zanthoxylum podocarpum* (Rutaceae); BING GUO HUA JIAO; Stalkedfruit Pricklyash. Used part: bark. TCM Effects: To dispel cold, settle pain, course wind, fortify stomach. TCM Indications: Wind-damp pain in sinew and bone, throat pain, summerheat stroke, knocks and falls, snake bite. Isolated compounds: 17572, 17587.
- T6890 *Zanthoxylum rhesta* (Rutaceae). Isolated compounds: 10117.
- T6891 *Zanthoxylum rubescens* (Rutaceae); HONG HUA JIAO; Red Pricklyash\*. Isolated compounds: 9818, 14444.
- T6892 *Zanthoxylum schinifolium* (Rutaceae); QING JIAO; Peppertree Pricklyash. Used part: pericarp. TCM Effects: See *Zanthoxylum bungeanum*. TCM Indications: See *Zanthoxylum bungeanum*. Isolated compounds: 147, 1186, 2010, 2309, 3926, 14112, 19467, 19468, 19470, 19540, 20002, 22195.
- T6893 *Zanthoxylum simulans* (Rutaceae); YE HUA JIAO GEN; Flatspine Pricklyash Root. Used part: root cortex. or stem cortex. TCM Effects: To dispel wind and eliminate damp, dissipate cold and relieve pain, resolve toxin. TCM Indications: wind-cold-damp impediment, sinew and bone numbness, cold pain in stomach duct and abdomen, vomiting and diarrhea, toothache, skin sores, poisonous snake bites. Isolated compounds: 19904, 19905, 19906, 19907.
- T6894 *Zanthoxylum simulans* (Rutaceae); YE HUA JIAO PI; Flatspine Pricklyash Bark. Used part: root cortex or stem cortex. TCM Effects: To dispel wind and eliminate damp, dissipate cold and relieve pain, resolve toxin. TCM Indications: Wind-cold-damp impediment, sinew and bone numbness, cold pain in stomach duct and abdomen, vomiting and diarrhea, toothache, skin sores, poisonous snake bites. Isolated compounds: 9656, 16443, 18830.
- T6895 *Zanthoxylum simulans* (Rutaceae); YE HUA JIAO YE; Flatspine Pricklyash Leaf. Used part: leaf. TCM Effects: To dispel wind and dissipate cold, fortify stomach and expel worms, dispel damp and check diarrhea, quicken blood and free menstruation. TCM Indications: Knocks and falls, wind-damp pain, pain of blood stasis, amenorrhea, hemoptysis, blood ejection, pain wind in joints. Isolated compounds: 370, 2227, 12850, 14037, 19297, 19540, 22967, 22969.
- T6896 *Zanthoxylum* sp. (Rutaceae). Isolated compounds: 126, 136, 775, 776, 1737, 2034, 4348, 4349, 4967, 5549, 5858, 6040, 6261, 6262, 7063, 11286, 11423, 12611, 12612, 13801, 14086, 14121, 15335, 16423, 16978, 17411, 17413, 17417, 19469, 19471, 20658, 22965, 22968, 22970, 22972.
- T6897 *Zanthoxylum* spp. (Rutaceae). Isolated compounds: 3498.
- T6898 *Zanthoxylum tsihanimposa* (Rutaceae); QI HAN NING HUA JIAO; Tsihanim Pricklyash\*. Isolated compounds: 7703.
- T6899 *Zanthoxylum veneficium* (Rutaceae); DU HUA JIAO; Venenous Pricklyash\*. Isolated compounds: 3057, 14209.
- T6900 *Zea mays* (Poaceae); YU MI FU; Maize Bran. Isolated compounds: 4977.
- T6901 *Zea mays* (Poaceae); YU MI XU; Maize Style. Used part: style and stigma. TCM Effects: To disinhibit urine and disperse edema, clear liver and disinhibit gallbladder. TCM Indications: Edema, dribbling urination, jaundice, cholecystitis, gallstones, hypertension, diabetes mellitus, galactostasis. Isolated compounds: 11083, 11084, 11085.
- T6902 *Zea mays* (Poaceae); YU SHU SHU; Maize. Used part: seed. TCM Effects: To regulate center and increase appetite, boost lung and quiet heart, disinhibit urine. TCM Indications: Inappetence, inhibited urination, edema, urethral stone. Isolated compounds: 933, 3208, 3210, 3215, 3605, 3606, 4293, 8078, 10609, 18261, 19983, 20369, 20434, 22058, 22975, 22976.
- T6903 *Zephyranthes candida* (Amaryllidaceae); GAN FENG CAO; Autumn Zephyrlily. Used part: herb. TCM Effects: To calm liver and extinguish wind. TCM Indications: Infant fright wind, epilepsy, tetanus. Isolated compounds: 9187, 13241, 15496, 17850, 20891.
- Zephyranthes carinata* = *Zephyranthes grandiflora*
- T6904 *Zephyranthes grandiflora* [Syn. *Zephyranthes carinata*] (Amaryllidaceae); FENG YU HUA; Rosepink Zephyrlily. Used part: whole herb. TCM Effects: To cool blood and stanch bleeding, resolve toxin and disperse swelling. TCM Indications: Blood ejection, hematochezia, flooding and spotting, red swollen due to knocks and falls, red swollen sore and welling abscess, poisonous snake bite. Isolated compounds: 3198, 16601.
- T6905 *Zexmenia brevifolia* DUAN YE PENG QI JU. Isolated compounds: 22987.
- T6906 *Zexmenia buphthalmiflora* NIU YAN PENG QI JU. Isolated compounds: 18229.
- T6907 *Zingiber aromaticum* (Zingiberaceae); FANG XIANG JIANG; Aromatic Ginger. Isolated compounds: 4680, 7105, 7106, 8395, 8396, 8397, 9664, 9668, 12024, 12025, 12026, 12035, 12036, 12037, 12044, 12070, 12082, 12099, 19846, 19847, 19983, 19987, 21600, 22984, 22985.
- T6908 *Zingiber cassumunar* (Zingiberaceae); YE JIANG; Cassumuna

- Ginger\*. Isolated compounds: 6277, 6278, 6279, 6280, 6282, 10438, 21924.
- T6909 *Zingiber officinale* (Zingiberaceae); GAN JIANG; Common Ginger Dried Rhizome. Used part: dried rhizome. TCM Effects: To warm center and dissipate cold, return yang and free vessels, warm lung and transform rheum. TCM Indications: Cold pain in stomach duct and abdomen, vomiting, diarrhea, yang-collapse reversal flow, cold rheum asthma cough, cold-damp impediment pain. Isolated compounds: 2412, 3045, 3689, 3760, 3761, 3762, 4390, 4550, 4833, 5302, 7162, 7728, 8312, 8386, 8387, 8388, 8389, 8390, 8391, 8394, 8395, 8396, 8397, 8398, 9409, 9498, 10178, 10179, 10189, 11438, 12843, 13802, 15681, 15685, 17055, 19787, 19846, 23003, 23004.
- T6910 *Zingiber officinale* (Zingiberaceae); SHENG JIANG; Fresh Common Ginger. Used part: fresh rhizome. TCM Effects: To dissipate cold and resolve exterior, downbear counterflow and check vomiting, relieve cough and transform phlegm. TCM Indications: Wind-cold common cold, fever and aversion to wind, headache and nasal congestion, vomiting, phlegm-rheum cough asthma, distention fullness, diarrhea. Isolated compounds: 135, 210, 336, 399, 675, 928, 2306, 2412, 2550, 2787, 3045, 3048, 3150, 3151, 3194, 3242, 3351, 3689, 3760, 3761, 3762, 3768, 3769, 4029, 4305, 4390, 4550, 4921, 4922, 5288, 5302, 5503, 5906, 6358, 6741, 6742, 6746, 7119, 7162, 7393, 7418, 7454, 7475, 7514, 7523, 7729, 7730, 7734, 7750, 7752, 8082, 8312, 8313, 8382, 8383, 8384, 8385, 8386, 8389, 8390, 8391, 8394, 8395, 8399, 8400, 8849, 9408, 9409, 10011, 10183, 10184, 10436, 10448, 10452, 11259, 11260, 11438, 11752, 12843, 12849, 13742, 13743, 13802, 14111, 14127, 14463, 14464, 14475, 14529, 14601, 15498, 15499, 15500, 15683, 15686, 15687, 15926, 15973, 15974, 16650, 16926, 17056, 17376, 17425, 17916, 17930, 19121, 19307, 19846, 19848, 19849, 19850, 19851, 20990, 20992, 20995, 20998, 21349, 21598, 21975, 23003, 23004, 23022.
- T6911 *Zingiber zerumbet* (Zingiberaceae); HONG QIU JIANG; Zerumbet Ginger. Isolated compounds: 9671, 9672, 10834, 22984, 22985, 22986.
- T6912 *Zinnia elegans* (Asteraceae); BAI RI CAO; Youth-and-old-age. Used part: whole herb. TCM Effects: To clear heat, disinhibit damp, resolve toxin. TCM Indications: Damp-heat dysentery, strangury syndrome, mammary welling abscess, swollen boil. Isolated compounds: 1124, 1492.
- T6913 *Zizia aptera* (Apiaceae); JI JI QIN; Heart-leaved Alexanders. Isolated compounds: 1536, 18165.
- T6914 *Ziziphus amphibia* (Rhamnaceae); SHUI LU ZAO; Amphibian Jujube\*. Isolated compounds: 1080.
- T6915 *Ziziphus cambodiana* (Rhamnaceae); JIAN PU ZHAI ZAO; Cambodia Jujube\*. Isolated compounds: 2334, 10383.
- T6916 *Ziziphus jujuba* (Rhamnaceae); DA ZAO; Chinese Date. Equivalent plant: *Ziziphus jujuba* var. *inermis*. Used part: ripe fruit. TCM Effects: To supplement center and boost qi, nourish blood and quiet spirit. TCM Indications: Reduced food intake due to spleen vacuity, lack of strength and sloppy stool, visceral agitation. Isolated compounds: 984, 1857, 2303, 2331, 2334, 2338, 3308, 3318, 3932, 4147, 4148, 4169, 4170, 4187, 6059, 7787, 9486, 11904, 11905, 11906, 11909, 11911, 11912, 12891, 13419, 15203, 15528, 16050, 16402, 17983, 18834, 19087, 19921, 20172, 20280, 20322, 20369, 20515, 20715, 22270, 22554, 22615, 23010, 23013, 23015, 23016, 23017, 23018.
- T6917 *Ziziphus jujuba* var. *inermis* (Rhamnaceae); WU CI ZAO; Spineless Common Jujube. Used part: ripe fruit. TCM Effects: See *Ziziphus jujuba*. TCM Indications: See *Ziziphus jujuba*. Isolated compounds: 4596, 18834, 18918, 23011, 23012, 23019, 23020.
- T6918 *Ziziphus jujuba* var. *spinosa* (Rhamnaceae); SUAN ZAO; Spine Date. Used part: seed. TCM Effects: To quiet heart and spirit, nourish liver, constrain sweat. TCM Indications: Vacuity vexation and egeris, fright palpitation and fearful throbbing, spontaneous sweating and night sweating due to vacuity. Isolated compounds: 16050, 22270.
- T6919 *Ziziphus jujuba* var. *spinosa* (Rhamnaceae); SUAN ZAO REN; Spine Date Seed. Used part: seed. TCM Effects: To supplement liver, quiet heart, constrain sweat, engender liquid. TCM Indications: Neurasthenia, vacuity vexation and insomnia, fright palpitation, arrhythmia, frequent dreaming, vacuity and profuse sweating, fluid damage and thirst. Isolated compounds: 443, 984, 2334, 2838, 3345, 4187, 4680, 6662, 7768, 7787, 11907, 11909, 11910, 11911, 11913, 11914, 11915, 11989, 13258, 14148, 19289, 19290, 19291, 19292, 19293, 19294, 19921, 20172, 20515, 23007, 23015.
- T6920 *Ziziphus mauritiana* (Rhamnaceae); MIAN ZAO; Indian Jujube. Used part: bark. TCM Effects: To eliminate inflammation and engender flesh. TCM Indications: Burns and scalds, throat pain, diarrhea, dysentery. Isolated compounds: 1081, 7937, 13613, 13614.
- T6921 *Ziziphus abyssinica* (Rhamnaceae); AI SAI E BI YA ZAO; Ethiopian Jujube\*. Isolated compounds: 15020.
- T6922 *Ziziphus mucronata* (Rhamnaceae); JIAN YE ZAO; Mucronated Jujube\*. Isolated compounds: 15020.
- T6923 *Ziziphus oenoplia* (Rhamnaceae); XIAO GUO ZAO; Littlefruit Jujube. Isolated compounds: 23014.
- T6924 *Ziziphus xylopyrus* (Rhamnaceae). Isolated compounds: 11313.
- T6925 *Zostera marina* (Potamogetonaceae); HAI DAI; Ellgrass. Used part: whole herb. TCM Effects: To clear heat and resolve phlegm, soften hardness and dissipate binds, disinhibit water. TCM Indications: Goiter and tuberculosis, mounting-conglomeration, edema, beriberi. Isolated compounds: 1521, 8078, 14818.
- T6926 *Zygophyllum atriplicoides*. Isolated compounds: 1997, 1998, 8732.

(Note: For plant T1471, T4056, T4057 and T5757, there is no isolated compound data.)

Jiaju Zhou · Guirong Xie · Xinjian Yan

# Encyclopedia of Traditional Chinese Medicines

Molecular Structures, Pharmacological Activities,  
Natural Sources and Applications

## Vol.6

Indexes

 Springer



Encyclopedia of Traditional Chinese Medicines  
Molecular Structures, Pharmacological Activities,  
Natural Sources and Applications



Jiaju Zhou • Guirong Xie • Xinjian Yan

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# Encyclopedia of Traditional Chinese Medicines

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# Preface

A significant preoccupation of modern traditional Chinese medicine (TCM) research has been the characterization of TCM components, such as pertain to their isolation, purification, structural determination, and pharmacological activity. As a reference tool, this *Encyclopedia of Traditional Chinese Medicines* presents a comprehensive and integrative work on surveying TCM plant sources, chemistry, pharmacology and medicinal effects and indications in a systematic manner.

This encyclopedia is an integrated achievement of a long-term TCM research project by the authors at the Chinese Academy of Sciences<sup>[1-4]</sup>, involving three parts and now organized in six volumes:

Part I (Volumes 1 to 4 and part of Volume 5) provides structural, physical, pharmacological and natural source information on 23,033 isolated chemicals captured from 5,535 references, basically up to year 2005. A great deal of effort has been paid on overlapping or contradictory data in order to provide readers with an accurate and reliable resource.

Part II (last part of Volume 5) describes 6,926 TCM plants and congeners, together with their medicinal effects and indications. The contents of Part I and Part II are all organized in alphabetical order.

Part III (Volume 6) includes seven indexes produced by a computer program. Based on the indexes, users can readily find concerned contents in multiple ways.

With this encyclopedia, the authors attempt to provide a bridge for the communication between the TCM system and Western medicinal systems, and a platform with multiple-subjects in support of research and development of the health sciences.

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# Introduction

This encyclopedia mainly consists two parts - compound and plant. Its core content is the structural and pharmacological information of 23,033 phytochemicals, as well as medical effects and indications of 6,926 plant species from which the phytochemicals were isolated. The compounds, i.e. phytochemicals, are ordered alphabetically, and their ordinal numbers are used as compound unique codes. The plant species are coded from T0001 to T6926. With this code system, the complicated “many to many” relationship between compounds and plants can be clearly expressed, and any individual compound or plant could be located easily in this 6 volumes book.

## 1. Compound Entry

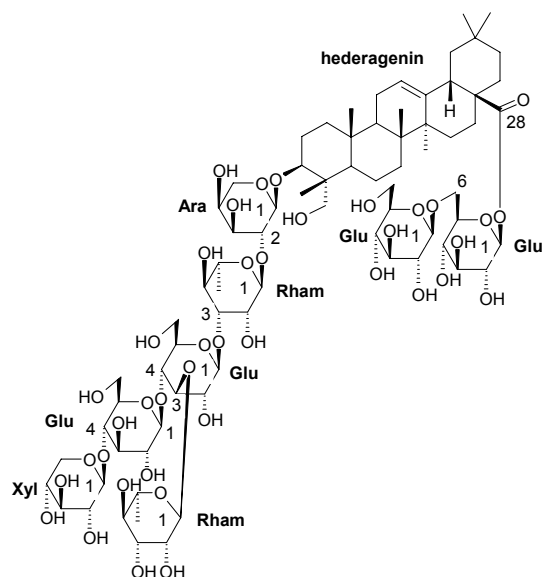
**Format of Compound Entry.** A compound entry starts with a title line, in which there are two items: the compound’s unique code and main name. Following the title line is the compound physical, pharmacological and source information, which may include 8 items:

**Title line (code number, main name)**

- A. Synonyms of the compound (if any);
- B. CASRN number (if any);
- C. Formula (relative molecular mass);
- D. Physicochemical properties;
- E. Pharmacological data (if any);
- F. Source(s);
- G. Reference(s);
- H. Graphic structure.

**Chemical Names and Synonyms.** Generally, a compound may have one scientific name and several trivial names. In the encyclopedia, based on original articles, we select one name as the “main name” (appeared at the title line of each compound entry), and use it to alphabetically order the 23,033 compounds in the first 5 volumes. The main name is either a scientific name or a trivial name. All of other names of each compound, if any, are presented after the title line.

**Stereochemistry of Chemical Structure.** We protracted all compound structures down to atom-bond level including complicated glycosides, with stereo-chemical information based on the data in the original papers. For example, the structure with full stereochemistry of compound 22,834 (isolated from CHUAN XU DUAN *Dipsacus asperoides*) is:



3-*O*-[ $\beta$ -*D*-Xylopyranosyl(1 $\rightarrow$ 4)]- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 4)]  
 [ $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 3)-  
 $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl hederagenin-  
 28-*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside

**Normalization of Pharmacological Data.** More than 8,000 TCM components in this encyclopedia have a variety of pharmacological data, which are valuable not only for the study of TCM, but also for the development of Western medicine. Because different expressions are used for the same kind of data in different articles, we have to define and normalize thousands pharmacological terms, so that the data could be expressed by a unified way, and be easily understood by readers.

The pharmacological terms in the encyclopedia are presented by a multi-layered structure. In the top layer, there are around 20 types of pharmacological activity terms, they are cytotoxic (*in vitro* anticancer), antineoplastic (*in vivo* anticancer), antibacterial, antifungal, antiviral, anti-HIV, anti-inflammatory, antioxidant, antimalarial, enzyme inhibitors, NO production inhibitors, cardiovascular activity, smooth muscle relaxant and stimulant, toxin and medium lethal dose LD<sub>50</sub>, and so forth. For each term there is a regulation about how to describe related pharmacological data. The following is an example:

**Term name** (*in vitro/in vivo*,  
 target cell **1**, quantitative data,  
 control Compound, control's data;  
 target cell **2**, quantitative data,  
 control Compound, control's data;  
 target cell **3**, quantitative data,  
 control Compound, control's data;  
 terse description of related mechanism if any).

Under the subtitle “Pharm:” of compound entry 248 (17-Acetoxyabda-7,12(*E*),14-triene), a set of bio-data is presented as follows:

Pharm: **Cytotoxic** (*in vitro*,  
 BT474 human galactophore cancer cell,  $IC_{50} = 4.7\mu\text{g/mL}$ ,  
 control Doxorubicin hydrochloride,  $IC_{50} = 0.08\mu\text{g/mL}$ ;  
 CHAGO human undifferentiated lung cancer cell,  $IC_{50} = 5.7\mu\text{g/mL}$ ,  
 control Doxorubicin hydrochloride,  $IC_{50} = 2.3\mu\text{g/mL}$ ;  
 HepG2 human liver cancer cell,  $IC_{50} = 6.5\mu\text{g/mL}$ ,  
 control Doxorubicin hydrochloride,  $IC_{50} = 0.9\mu\text{g/mL}$ ;  
 Kato3 human gastric cancer cell,  $IC_{50} = 5.3\mu\text{g/mL}$ ,  
 control Doxorubicin hydrochloride,  $IC_{50} = 1.7\mu\text{g/mL}$ ;  
 SW620 human colorectal adenocarcinoma cell,  $IC_{50} = 5.6\mu\text{g/mL}$ ,  
 control Doxorubicin hydrochloride,  $IC_{50} = 1.1\mu\text{g/mL}$ ).

In order to standardize abbreviations of cancer cells, such as BT474, CHAGO, etc., we defined and used 270 cancer cell codes (CCC) in the encyclopedia. For explanations of these codes, please see “Cancer Cell Codes in the Pharmacological Models” in Volume 1 of the encyclopedia.

By means of the formatted and structuralized methods, we normalized expressions of most pharmacological data appeared in the encyclopedia. For complete information of all 3367 normalized pharmacological activity terms, please see “Compound Pharmacological Activities Index” in Volume 6.

## 2. Plant Entry

**One Species One Entry.** Conventionally, a TCM name may include more than one plant species that have the same medical functions; therefore, a plant may not have an independent TCM entry and may be described under a TCM name. In this book, modern botany classification regulation is adopted and each plant species has an independent entry.

For example, traditional Chinese medicine DAN SHEN includes three species. They are equivalent in both effects and indications in TCM practice. In this encyclopedia, we defined three plant entries for each one of them.

T5680 *Salvia miltiorrhiza* (Lamiaceae); DAN SHEN; Danshen;  
 T5681 *Salvia miltiorrhiza* f. *alba* (Lamiaceae); BAI HUA DAN SHEN; Whiteflower Danshen;  
 T5688 *Salvia przewalskii* (Lamiaceae); GAN XI SHU WEI CAO; Przewalsk Sage.

With this method, we are able to smoothly link TCM information with that of modern botany.

**Simplified Latin Name.** For each TCM plant or TCM congener, four names are used in the encyclopedia. They are Latin name, English name, PIN-YIN name and Chinese

name, while the Chinese name only appears in TCM Plants PIN-YIN/Chinese Names Index” not in the main part of the book. For plant Latin name (e.g. scientific name), we use a simplified nomenclature, in which the nomenclator(s) information is not included. For example the Latin name of Chinese Angelica (DANG GUI) in the encyclopedia is “*Angelica sinensis*”, not “*Angelica sinensis* (Oliv.) Diels”.

**Family Name.** According to the “International Code of Botanical Nomenclature” (2007), the following eight authoritative family names are used in the encyclopedia. The family names of long usage, which are not used in are the encyclopedia, indicated in parentheses:

Apiaceae (Umbelliferae);  
 Arecaceae (Palmae);  
 Asteraceae (Compositae);  
 Brassicaceae (Cruciferae);  
 Clusiaceae (Guttiferae);  
 Fabaceae (Leguminosae);  
 Lamiaceae (Labiatae) and  
 Poaceae (Gramineae).

**PIN-YIN Name and Chinese Name.** A simplified PIN-YIN name system is used in the encyclopedia. That is not to include the four-tone mark. However, there are exceptions. Among the thousand PIN-YIN names in the book, there are seven confusing cases. For each mistakable name, a superscript is attached to the name for indicating its four-tone in order to distinguish it from other plant species. For example: BAI MAO GEN<sup>(1)</sup> and BAI MAO GEN<sup>(4)</sup> are two different TCM plants:

T3416 *Imperata cylindrica* var. *major* (Poaceae); BAI MAO GEN<sup>(1)</sup>; Lalang Grass Rhizome.  
 T3309 *Hydrastis canadensis* (Ranunculaceae); BAI MAO GEN<sup>(4)</sup>; Golden-seal.

Other six cases are:

T1449 *Cirsium japonicum* (Asteraceae); DA JI<sup>(4)</sup>; Japanese Thistle.  
 T2608 *Euphorbia pekinensis* (Euphorbiaceae); DA JI<sup>(3)</sup>; Peking Euphorbia.  
 T4124 *Matricaria chamomilla* [Syn. *Matricaria recutita*] (Asteraceae); MU<sup>(3)</sup> JU; Mayweed.  
 T0197 *Aegle marmelos* (Rutaceae); MU<sup>(4)</sup> JU; Sepiaria.  
 T1039 *Bruguiera gymnorrhiza* (Rhizophoraceae); MU LAN<sup>(3)</sup>; Common Bruguiera.  
 T3423 *Indigofera tinctoria* (Fabaceae); MU LAN<sup>(2)</sup>; True Indigo.  
 T6798 *Vitis vinifera* (Vitaceae); PU<sup>(2)</sup> TAO; European Grape.  
 T6267 *Syzygium jambos* (Myrtaceae); PU<sup>(3)</sup> TAO; Roseapple.  
 T2107 *Dendrobium nobile* (Orchidaceae); SHI HU<sup>(4)</sup>; Noble Dendrobium.  
 T2646 *Evodia rutaecarpa* var. *officinalis* (Rutaceae); SHI HU<sup>(3)</sup>; Official Evodia.  
 T1221 *Caryopteris divaricata* (Verbenaceae); YOU<sup>(2)</sup>; Divaricate Bluebeard.  
 T1478 *Citrus grandis* (Rutaceae); YOU<sup>(4)</sup>; Pummelo.

**Translation of TCM Effects Terms.** In the Volume 5 of the encyclopedia, 6,926 TCM Plant entries list in alphabetical order of *Latin names*, including 2,923 original TCM plants (including few of animals)<sup>[R01-R04]</sup> and 4,003 congeners (including a few of non-TCM medicinal plants). For each TCM plant, two most important features are traditional TCM effects and indications.

For preparing this encyclopedia, one of the greatest challenges is how to correctly translate each TCM term into correspondent English, so that Western readers are able to understand the true meaning of the content in the book. After comparing several translation systems, we decided to use Wiseman's terminological system<sup>[R05-R07]</sup> for this book.

Wiseman's system obeys two most important principles: (1). The English-language terms should be faithful to the original concepts in traditional Chinese medicine. (2). The English-language TCM terminology should be flexible enough to allow modifications and extensions so that derivative effects can be described by a structuralized manner. For instance, the term "quicken blood" describes a general effect meaning "activating blood flow" or "promoting blood circulation". Elaboration of this term produces "quicken blood and transform stasis", "quicken blood and relieve pain", "quicken blood and regulate menstruation", and so on. The following illustrations are an example of the structuralized expressions related to the term "quicken blood":

quicken blood and disinhibit water  
 quicken blood and dispel stasis  
 quicken blood and dispel wind  
 quicken blood and disperse swelling  
 quicken blood and disperse welling abscess  
 quicken blood and dissipate binds  
 quicken blood and dissipate stasis  
 quicken blood and free menstruation  
 quicken blood and free network vessels  
 quicken blood and free vessels  
 quicken blood and joint bones  
 quicken blood and move *qi*  
 quicken blood and move stasis  
 quicken blood and nourish heart  
 quicken blood and promote milk  
 quicken blood and quiet spirit  
 quicken blood and regulate menstruation  
 quicken blood and relieve pain  
 quicken blood and resolve toxin  
 quicken blood and settle pain  
 quicken blood and soothe sinews  
 quicken blood and stanch bleeding  
 quicken blood and strengthen sinews  
 quicken blood and transform stasis  
 quicken blood and vessels

**Translation of TCM Indications Terms.** Based on Wiseman's terminological system, "Chinese-English Dictionary of Traditional Chinese Medicine" compiled by Guangzhen Gao *et al.*<sup>[R08]</sup>, "An English-Chinese Medical Dictionary, Second Edition" compiled by Weiyi Chen *et al.*<sup>[R09]</sup>, and other reference dictionaries, we defined over 3,800 standard indication terms for translating TCM indications terms from Chinese to English. Among the 3,800 terms, 2,526 terms are actually used in the encyclopedia, in which 85% terms are traditional TCM terms and the rest 15% are common modern medicinal terms. Some typical examples of traditional TCM indication terms are as follows:

*yin* vacuity internal heat  
*yin* vacuity lung dryness  
*yin* vacuity tidal fever  
 chest impediment  
 chest impediment and heart pain  
 chest impediment and heart pain over back  
 chest oppression and pain  
 chest oppression with breathe hard  
 distention pain in rib-side  
 distention pain in stomach duct  
 distention pain in stomach duct and abdomen  
 externally contracted summer heat-damp  
 externally contracted wind evil  
 externally contracted wind-cold  
 externally contracted wind-heat  
 knocks and falls  
 sores  
 sores clove boil  
 swelling of sores and boils  
 sore scab and lichen  
 toxin swelling of sores

In summary, this encyclopedia provides a collection of more than 23,000 TCM chemical components isolated from natural resources and a large number of pharmacological activity data of these components. It may be used not only as a handbook to look for structures and pharmacological activities of TCM chemical components and source plant information, but also a fundamental platform for studying TCM with a systematic and integrative approach.

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- R30** J. G. Harris and M. W. Harris, (Yufei Wang, et al., translated) *Plant Identification Terminology: An Illustrated Glossary*, Spring Lake Publishing, Payson UT, 2001, Science Press, Beijing, 2001
- R31** Rensheng Xu, et al., *Chemistry of Natural Products*, Second Edition, Science Press, Beijing, 2004
- R32** Jingying Tan, *English-Chinese Biological Dictionary of Biochemistry and Molecular Biology*, Second Edition, Science Press, Beijing, 2007
- R33** Wenbao Chang, et al., *Dictionary of Chemistry*, Science Press, Beijing, 2008



# How to Use the Books

## 1. Three Kinds of “Many to Many” Relationships

To help readers effectively search and use of the books, authors strongly suggest readers being familiar with the structure of the encyclopedia and certain important linkers or pointers between different data sets.

Firstly, in order to avoid confusing cases, please keep in mind the following three features of the book:

(a) In the encyclopedia, all of pharmacological data belong to compounds, not to plants. In other words, the encyclopedia doesn't include plants' pharmacological data.

(b) All effect and indication terms belong to TCM plants, not to compounds. And almost all of effect terms as well as 85% indication terms are pure Chinese traditional concepts.

(c) In the encyclopedia, there are three kinds of “many to many” relationships: (i), compounds to plants, which is the most important relationship. (ii), pharmacological data to compounds in the molecular level only. (iii), plants to effects/indications in the species level.

Pharm. data ↔ Compound 1		Plant T0001 ↔ effects, indications
Pharm. data ↔ Compound 2		Plant T0002 ↔ effects, indications
Pharm. data ↔ Compound 3	↔	Plant T0003 ↔ effects, indications
.....		.....
Pharm. data ↔ Compound 23032		Plant T6925 ↔ effects, indications
Pharm. data ↔ Compound 23033		Plant T6926 ↔ effects, indications
(Molecular level)		(Species level)

### Sketch Map of Three Important “Many to Many” Relationships

## 2. Seven Useful Indexes

In Volume 6, there are seven indexes for data searching.

The indexes 1-3 are tools to search compounds from different starting-points:

**Index 1** (Compound Pharmacological Activity Index) links pharmacological terms

with related compound codes. For example, if there is a question as:

“Which compounds have *in vitro* cytotoxic activity against human breast cancer cells?”

From the index 1, the answer can easily be obtained as follows:

Cytotoxic, BC hmn breast cancer cells 24, 349, 526, 2244, 3416, 3429, 3708, 4775, 5095, 6759, 6759, 6759, 12453, 12454, 15494, 15495, 18515, 20671.

Cytotoxic, BC-1 hmn breast cancer cells 1277, 2260, 5064, 5327, 6759, 6759, 8220, 8221, 8222, 8235, 10250, 10297, 10511, 11353, 13489, 13490, 13491, 13492, 13493, 13494, 13495, 15919, 17008, 18866, 20809.

Cytotoxic, BCA-1 hmn breast cancer cells 6759, 13468, 13469, 13470, 15739.

Cytotoxic, Bcap37 hmn breast cancer cells 843, 11392, 13123, 16183, 17717, 18499.

Then, from compounds code numbers, one can get detailed data for each compound.

**Index 2** (Compound Molecular Formula Index) connects a molecular formula to its all isomers. For example, there are five isomers with formula  $C_{45}H_{76}O_{18}$ :

$C_{45}H_{76}O_{18}$

Abutiloside F, 40

Asp-IV, 1905

Asp-V, 1906

Trigoneoside IIIa, 21669

Trigoneoside IIIb, 21670

**Index 3** (Compound Synonym Index) is useful for searching a compound from a known name. A strong suggestion to readers is that when searching a compound from a known name, to search twice probably is necessary: firstly from entry title in the encyclopedia text and then from the index 3.

The indexes 4–7 are tools to search TCM plants:

**Index 4** (TCM Plant English Name Index) links a Plant English Name to other names of the plant, for example:

Chinese Angelica = T0495 *Angelica sinensis* = DANG GUI

Siberian Phlojodicarpus = T4804 *Phlojodicarpus sibiricus* = ZHANG GUO QIN

Dahurian Angelica = T0478 *Angelica dahurica* [Syn. *Angelica porphyrocaulis*] = BAI ZHI

Gigantic Angelica = T0483 *Angelica gigas* = CHAO XIAN DANG GUI

Narrowleaf Angelica = T0476 *Angelica anomala* = XIA YE DANG GUI

**Index 5** (TCM Plant PIN-YIN and Chinese Name Index) links PIN-YIN name to Latin name and/or English name, for example:

BAI HUA QIAN HU = T4768 *Peucedanum praeruptorum* = Whiteflower Hogfennel

BAI HUA SHE GAN = T3457 *Iris dichotoma* = Vesper Iris

BAI HUA SHE SHE CAO = T4485 *Oldenlandia diffusa* [Syn. *Hedyotis diffusa*] = Spreading Hedyitis

**Index 6** (TCM Plant Traditional Effects Index) and **Index 7** (TCM Plant Traditional Indications Index) connect specific effect and/or indication to related plants.

For example, to search all plants with effect “nourish heart and quiet spirit”, the result is:

**nourish heart and quiet spirit:**

T0944 *Biota orientalis* [Syn. *Thuja orientalis*; *Platyclusus orientalis*],  
 T1292 *Celastrus orbiculatus* [Syn. *Celastrus articulatus*],  
 T1381 *Choerospondias axillaris*,  
 T4194 *Menyanthes trifoliata*,  
 T4400 *Nelumbo nucifera*,  
 T4902 *Pimpinella thelungiana*,  
 T5108 *Polygonum multiflorum*,  
 T5497 *Rhodiola kirilowii*,  
 T5701 *Salvia yunnanensis*.

If searching all plants with indication “angina pectoris” (a modern medicinal term), “externally contracted wind-cold” (a TCM term), and “externally contracted wind-heat” (a TCM term), you will obtain the following results:

**angina pectoris:** T1215 *Carthamus tinctorius*, T1395 *Chrysanthemum morifolium* [Syn. *Dendranthema morifolium*], T1775 *Crataegus pinnatifida*, T1778 *Crataegus pinnatifida* var. *major*, T2274 *Dryobalanops aromatica*, T2389 *Epimedium acuminatum*, T2390 *Epimedium brevicornum*, T2392 *Epimedium davidii*, T2394 *Epimedium elongatum*, T2398 *Epimedium koreanum*, T2401 *Epimedium pubescens*, T2402 *Epimedium sagittatum*, T2404 *Epimedium sutchuenense*, T2406 *Epimedium wushanense*, T2846 *Ganoderma japonicum* [Syn. *Ganoderma sinense*], T2848 *Ganoderma lucidum*, T2964 *Ginkgo biloba*, T3388 *Ilex chinensis* [Syn. *Ilex purpurea*], T3396 *Ilex pubescens*, T3397 *Ilex pubescens* var. *glaber*, T3875 *Liriope spicata* var. *prolifera*, T3925 *Loranthus parasiticus* [Syn. *Loranthus chinensis*; *Taxillus chinensis*], T3926 *Loropetalum chinense*, T4303 *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*, T4507 *Ophiopogon japonicus*, T4608 *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*], T4953 *Piper longum*, T5312 *Pueraria edulis*, T5313 *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*], T5316 *Pueraria omeiensis*, T5318 *Pueraria phaseoloides*, T5320 *Pueraria thomsonii*, T5680 *Salvia miltiorrhiza*, T5681 *Salvia miltiorrhiza* f. *alba*, T5688 *Salvia przewalskii*, T6510 *Trichosanthes kirilowii*, T6513 *Trichosanthes rosthornii* [Syn. *Trichosanthes uniflora*], T6584 *Typha angustata*, T6585 *Typha angustifolia*, T6587 *Typha latifolia*.

**externally contracted wind-cold:** T4039 *Magnolia grandiflora*, T4445 *Notopterygium forbesii* [Syn. *Notopterygium franchetii*], T4446 *Notopterygium incisum*, T4956 *Piper mullesua*, T5727 *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*].

**externally contracted wind-heat:** T0480 *Angelica decursiva* [Syn. *Peucedanum decursivum*], T1395 *Chrysanthemum morifolium* [Syn. *Dendranthema morifolium*], T1933 *Cyclea sutchuenensis*, T2798 *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*], T3819 *Ligusticum brachylobum*, T4413 *Nepeta cataria*, T4761 *Peucedanum longshengens*, T4768 *Peucedanum praeruptorum*, T4769 *Peucedanum rubricaulis*, T6791 *Vitex rotundifolia* [Syn. *Vitex trifolia* var. *simplicifolia*], T6793 *Vitex trifolia*.

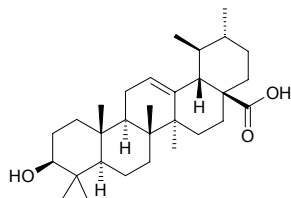
### 3. Data Survey Example of Compound Entry

At last, we would like to take Ursolic acid (compound code 22270 in the books) as a data survey example. Under this compound there are a quite number of data as follows:

**22270 Ursolic acid**

$\beta$ -Ursolic acid [77-52-1] C<sub>30</sub>H<sub>48</sub>O<sub>3</sub> (456.72).

White solid powder (chloroform–methanol), mp 298~294°C, 265~267°C.

**Pharm: (27 items)**

- Cytotoxic** (KB, ED<sub>50</sub> > 25μg/mL, control Doxorubicin, ED<sub>50</sub> = 0.12μg/mL; Hep3B, ED<sub>50</sub> > 25μg/mL, control Doxorubicin, ED<sub>50</sub> = 0.14μg/mL; Colon205, ED<sub>50</sub> > 25μg/mL, control Doxorubicin, ED<sub>50</sub> = 0.10μg/mL; HeLa, ED<sub>50</sub> > 25μg/mL, control Doxorubicin, ED<sub>50</sub> = 0.11μg/mL)<sup>[4369]</sup>;
- cytotoxic** (*in vitro*, HONE-1 cell, IC<sub>50</sub> = (8.8±1.5)μmol/L, control Etoposide, IC<sub>50</sub> = (0.5±0.2)μmol/L, *cis*-Platin, IC<sub>50</sub> = (3.2±0.5)μmol/L; KB cell, IC<sub>50</sub> = (8.2±2.7)μmol/L, Etoposide, IC<sub>50</sub> = (0.9±0.3)μmol/L, *cis*-Platin, IC<sub>50</sub> = (4.4±0.9)μmol/L; HT29 cell, IC<sub>50</sub> = (4.7±1.5)μmol/L, Etoposide, IC<sub>50</sub> = (2.4±0.5)μmol/L, *cis*-Platin, IC<sub>50</sub> = (5.7±1.1)μmol/L)<sup>[5254]</sup>;
- antineoplastic** (liver cancer cells *in vitro*, mus ascites carcinoma *in vivo*, life was prolonged);
- antibacterial** (*Escherichia coli*, IZD = 13~15mm, control Chloramphenicol, IZD = 16~20mm, control DMSO (4%), IZD < 10mm; *Staphylococcus aureus*, IZD = 10~12mm, control Chloramphenicol, IZD = 16~20mm, control DMSO (4%), IZD < 10mm; *Bacillus subtilis*, IZD = 13~15mm; control Chloramphenicol, IZD = 16~20mm, control DMSO (4%), IZD < 10mm)<sup>[5315]</sup>;
- antibacterial** (*Staphylococcus* spp. *in vitro*, MIC = 300μg/mL, gram-positive bacteria *in vitro*, MIC = 50~400μg/mL, gram-negative bacteria *in vitro*, MIC = 200~800μg/mL, microzyme *in vitro*, MIC = 100~700μg/mL);
- antitubercular** (*Mycobacterium tuberculosis*, MIC = 41.9μg/mL, cytotoxic, Vero cells, IC<sub>50</sub> = 46.5μg/mL, SI (IC<sub>50</sub>/MIC) = 1.11, positive control Rifampin, MIC = 0.03μg/mL, IC<sub>50</sub> = 98.3μg/mL, SI = 3277)<sup>[4986]</sup>;
- anticonvulsant** (induced by corazol);
- anti-inflammatory** (rat, induced by embedding woolball, 12.5mg/(kg·d) ip, 7 days, effective);
- anti-inflammatory** (*in vitro*, murine macrophage RAW264.7 Cells, inhibits LPS-induced NO and PGE<sub>2</sub> release)<sup>[5016]</sup>;
- COX-2 enzyme selective inhibitor** (mean IC<sub>50</sub> of isomers = 130μmol/L)<sup>[4415]</sup>;
- COX-2 enzyme inhibitor** (PMA-treated hmn mammary and oral epithelial cells, molecular mechanisms is mediated by a cAMP response element in the COX-2 promoter, associated with inhibition of protein kinases)<sup>[4415]</sup>;
- antipyretic** (clearly reduces normal body temperature of rat);
- reduces serum transaminase** (animal, 100mg/kg);
- antitrypanosomal** (epimastigotes of *Trypanosoma cruzi*, MLC = 6.2μmol/L, control Gentian violet, MLC = 6.2μmol/L)<sup>[2579]</sup>;
- mucin release stimulator** (acts directly on airway mucin-secreting cells, increased mucin release (40~50)% above control at the highest concentrations 0.00001~0.001mol/L, possible use to treatment of chronic airway diseases)<sup>[4084]</sup>;
- platelet aggregation inhibitor** (2~5mg/mL collagen-induced, IC<sub>50</sub> = (511±4)μmol/L, control ASA, IC<sub>50</sub> = (420±3)μmol/L; 1~4μmol/L epinephrine-induced with 0.8~1.0mg/mL collagen, IC<sub>50</sub> = (82.6±2.8)μmol/L, ASA, IC<sub>50</sub> = (53.0±4.5)μmol/L; 10~40μmol/L Sodium arachidonate-induced with 0.8~1.0mg/mL collagen, IC<sub>50</sub> =

(669±12)μmol/L, ASA, IC<sub>50</sub> = (66.0±2.1)μmol/L; 1~5μmol/L PGH<sub>2</sub>/TXA<sub>2</sub> receptor agonist U46619-induced with 0.8~1.0mg/mL collagen, IC<sub>50</sub> > 1000μmol/L, ASA, IC<sub>50</sub> = (340±12)μmol/L)<sup>[4994]</sup>;

**tissue factor inhibitor inactive**<sup>[5387]</sup>;

**antirheumatic**<sup>[5341]</sup>;

**anti-diabetic**<sup>[5341]</sup>;

**antiulcer**<sup>[5341]</sup>;

**hypolipidemic**<sup>[5341]</sup>;

**anti-atherosclerotic**<sup>[5341]</sup>;

**anti-HIV**<sup>[5341]</sup>;

**TGF-β1 antagonist** (inhibits the binding of <sup>125</sup>I-TGF-β1 to its receptor in Balb/c 3T3 cell, IC<sub>50</sub> = (6.9±0.8)μmol/L, suggests TGF-β1 antagonistic activity is responsible, at least in part, for therapeutic efficacy of *Clerodendranthus spicatus* to treat humans with renal disease)<sup>[5496]</sup>;

**glucocorticoid** (enhances glycogen in liver, reduces glycogen in heart and striated muscles);

**LD<sub>50</sub>** (mus, ip) = 680mg/kg.

### Sources: (52 species)

BAI HUA SHE SHE CAO *Oldenlandia diffusa* [Syn. *Hedyotis diffusa*] (whole herb: mean content of 16 origins = 0.211%)<sup>[5508]</sup>;

BI LU GOU TENG *Uncaria tomentosa*,

CHE QIAN *Plantago asiatica* (whole herb: content scope = 0.28%~2.32%, mean content = 0.97%)<sup>[5508]</sup>;

CHI NAN *Syzygium buxifolium*,

CHONG YA YAO *Isodon ternifolius*,

CI WU JIA YE *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*],

DA CHE QIAN *Plantago major*,

DA ZAO *Ziziphus jujuba* (ripe fruit: mean content = 0.016%)<sup>[5508]</sup>,

DAN SHEN *Salvia miltiorrhiza*,

DIAN NAN HONG HOU KE *Calophyllum polyanthum* (seed: yield = 0.0064%dw),

DONG LING CAO *Rabdosia rubescens* (whole herb: mean content = 0.414%)<sup>[5508]</sup>; leaf: mean content = 0.573%)<sup>[5508]</sup>;

DU ZHONG *Eucommia ulmoides*,

DUAN TING SHAN MAI DONG *Liriope muscari* (tuber),

GOU GU YE *Ilex cornuta* (leaf: mean content = 0.96%)<sup>[5508]</sup>,

GUANG JING QIAN CAO *Rubia wallichiana* (stem),

HONG HUA LU TI CAO *Pyrola incarnata* (whole herb: content = 2.06%)<sup>[5508]</sup>,

HU BEI SHAN ZHA *Crataegus hupehensis* (dried ripe fruit: mean content = 0.455%),

JIAN YE TOU WU GEN *Ligularia sagitta*,

LIAN QIAN CAO *Glechoma lungituba*,

LIAN QIAO *Forsythia suspensa*,

LIU QIU SHE GEN CAO *Ophiorrhiza liukiensis* (whole herb),

MA BIAN CAO *Verbena officinalis* (whole herb: mean content of 5 batch samples = 0.227%)<sup>[5508]</sup>,

MAO CAO LONG *Ludwigia octovalvis* (whole herb: yield = 0.00012%dw),

MAO PAO TONG *Paulownia tomentosa*,

MAO XU CAO *Clerodendranthus spicatus*,

MU GUA *Chaenomeles sinensis*,

NV ZHEN ZI *Ligustrum lucidum*,

PI PA YE *Eriobotrya japonica* (dried leaf: mean content = 0.677%)<sup>[5508]</sup>,

PI PA YE *Eriobotrya japonica* (stem and leaf),

PING CHE QIAN *Plantago depressa* (whole herb: mean content = 0.276%)<sup>[5508]</sup>,

RI BEN LU TI CAO *Pyrola japonica*,

RONG SHU *Ficus microcarpa* (aerial root),  
 SHAN DI XIANG CHA CAI *Isodon oresbia*,  
 SHAN LI HONG *Crataegus pinnatifida* var. *major*,  
 SHAN ZHA *Crataegus pinnatifida* (fruit: content scope = 0.31%~0.56%)<sup>[5501]</sup>,  
 SHAN ZHU YU *Cornus officinalis* [Syn. *Macrocarpium officinale*] (dried ripe fruit: content  
 scope = 0.24%~0.32%)<sup>[5501]</sup>, mean content = 0.263%)<sup>[5508]</sup>,  
 SHI NAN *Photinia serrulata* (leaf: mean content = 1.50%)<sup>[5508]</sup>,  
 SHI SHENG BIAN LEI *Gentianopsis paludosa*,  
 SHI YE *Diospyros kaki* (dried leaf: mean content = 0.784%)<sup>[5508]</sup>,  
 SHU HUA JIE CAO *Valeriana laxiflora* (aerial parts and root),  
 SUAN ZAO *Ziziphus jujuba* var. *spinosa* (ripe fruit: content = 0.030%)<sup>[5508]</sup>,  
 SUO YANG *Cynomorium songaricum* (fleshy stem: content = 0.78%)<sup>[5508]</sup>,  
 WEI LING CAI *Potentilla chinensis*,  
 WU GENG WU JIA PI *Acanthopanax sessiliflorus* (fruit),  
 XIA KU CAO *Prunella vulgaris* (dried spike: content = 0.780%)<sup>[5508]</sup>,  
 YANG MEI SHU PI *Myrica rubra* (bark: content = 0.027%),  
 YE SHAN ZHA *Crataegus cuneata* (dried ripe fruit: mean content of 3 origins =  
 0.399%)<sup>[5508]</sup>,  
 YI LANG QING LAN *Dracocephalum kotschyi*,  
 ZHI ZI *Gardenia jasminoides* [Syn. *Gardenia florida*] (dried ripe fruit: mean content =  
 0.041%)<sup>[5508]</sup>,  
 ZHOU YE LU TI CAO *Pyrola rugosa* (whole herb: content = 3.00%)<sup>[5508]</sup>,  
*Cussonia bancoensis*,  
 Occurs in many plants.

**Ref:** 4, 367, 428, 454, 501, 592, 595, 600, 658, 660, 2579, 3005, 3061, 4084, 4163, 4369,  
 4415, 4527, 4767, 4772, 4986, 4994, 5016, 5254, 5315, 5382, 5387, 5341, 5496, 5501,  
 5508.



# Abbreviations and Symbols

12(S)-HETE	12(S)-Hydroxy-5,8,10,14-EicosaTetraEnoic acid	cAMP-PDE	cAMP-phosphodiesterase
<sup>125</sup> I-TGF- $\beta$ 1	<sup>125</sup> I-Transforming Growth Factor- $\beta$ 1	CAPE	Caffeic Acid Phenethyl Ester
5-FU	5-FluoroUracil	CB	cytochalasin B
5-HT	5-HydroxyTryptamine (serotonin)	CC	macrophage inflammatory protein (MIP-1 $\beta$ ), monocyte chemotactic protein (MCP-2), and C lymphotactin (ltn) (a chemokine family)
95%FL (=CI <sub>95</sub> )	95% Fiducial Limits (=95% Confidence Interval)	CC <sub>0</sub>	Minimum cytotoxic concentration
AA	Arachidonic Acid	CC <sub>50</sub>	IC <sub>50</sub> of cytotoxicity (concentration of the 50% cytotoxic effect)
AAPH	2,2'-Azo-bis-(2-AmidinoPropane)-diHydrochloride	CCR1	chemokine receptor 1
ABTS <sup>+</sup>	2,2'-Azino-Bis-(3-ethylbenzThiazoline 6-Sulphonic acid), radical	CD	concentration required to double enzyme (induction) activity
ACAT	Acyl-CoA Cholesterol acyltransferase	CD	Concentration required to double quinone reductase (induction) activity
ACE	Angiotensin Converting Enzyme	CD <sub>50</sub>	medium Convulsive Dose
Ach	Acetylcholine	cGMP	cyclic guanosine monophosphate
AChE	Acetylcholinesterase	cGMP-PDE	cGMP-phosphodiesterase
ACTH	AdrenoCorticoTropic Hormone	CGN	<i>cis</i> -Golgi network
AD	Alzheimer's disease	CGRP	Calcitonin gene-related peptide
ADM	adriamycin	CHO	Chinese hamster ovarian
ADP	adenosine diphosphate	CI	Chemopreventive index (=IC <sub>50</sub> /CD)
AG	aminoguanidine	CI <sub>95</sub> (=95%FL)	95% Confidence Interval (=95% Fiducial Limits)
AggRt	aggregation rate	CIC	complete inhibiting concentration
AIDS	acquired immunodeficiency syndrome	CIMC	complete inhibiting minimum concentration
ALS	amyotrophic lateral sclerosis	CINC-1	cytokine-induced neutrophil chemoattractant 1
ALT	alanine aminotransferase	CMV	Cytomegalovirus
AMP	adenosine monophosphate	CNQX	6-Cyano-7-nitroquinoxaline-2,3-dione (non-NMDA receptor antagonist)
AMV	avian myeloblastosis virus	CNS	central nervous system
AP	angina pectoris	ConA	concanavalin A
AP-1	activator protein-1	COX	cyclooxygenase
APN	Aminopeptidase N	COX-1	cyclooxygenase-1
APV	<i>dl</i> -2-Amino-5-phosphonovaleric acid (a competitive antagonist of the NMDA receptor)	COX-2	cyclooxygenase-2
aq.	aqueous solution	CPT	camptothecin
ASA	AcetylSalicylic Acid	CRF	corticotrophin releasing factor
AST	aspartate transaminase; aspartate aminotransferase	CRH-1	corticotrophin releasing hormone-1
AT-III	Antithrombase-III	CRP	C-reactive protein
ATPase	Adenosine triphosphatase	CV-3988	<i>rac</i> -3-( <i>N</i> -octadecylcarbomoyloxy)-2-methoxypropyl 2-thiazoliethyl phosphate
AZT	3'-azido-3'-deoxythymidine	CVS	cardiac vascular system
BACE1	$\beta$ -Secretase	CXC	Stromal cell-derived factor (SDF)-1 $\alpha$ and IL-8 (a chemokine)
BChE	Butyrylcholinesterase	CYP1A	Cytochrome P450 1A
bFGF	basic Fibroblast Growth Factor	CYP2D6	Cytochrome P450 2D6
BHA	Butylated HydroxyAnisole; 3- <i>tert</i> -Butyl-4-HydroxyAnisole	CYP3A4	Cytochrome P450 3A4
BHT	Butylated HydroxyToluene	d	day
bid	bis in die (Latin)	DCFH	2',7'-dichlorodihydrofluorescein dye
BLM	bleomycin	DDDP	DNA-dependent DNA polymerase
bp	boiling point	dec	decomposition
BST	Brine Shrimp lethality bioassay = Brine Shrimp Test	<i>D</i> -GalN	<i>D</i> -galactosamine
<i>c</i>	concentration		
C5a	complement 5a		
cAMP	cyclic adenosine monophosphate		

DGAT	Diacylglycerol acyltransferase	GSH	Glutathione; <i>N</i> -( <i>N</i> - <i>L</i> - $\gamma$ -Glutamyl- <i>L</i> -cysteinyl)glycine
dil.	dilute	GTP	Guanosine TriPhosphate
DIZ	Diameter of Inhibitory Zone	GVHR	Graft-Versus-HostReaction
DMBA	9,10-dimethyl-1,2-benzanthracene (carcinogen); 7,12-dimethylbenz[a]anthracene (carcinogen)	h	hour
DMDP	(2 <i>R</i> ,3 <i>R</i> ,4 <i>R</i> ,5 <i>R</i> )-2,5-DihydroxyMethyl-3,4-Dihydroxy-Pyrrolidine	HAD	hmn immunodeficiency virus associated dementia
DMSO	DiMethyl SulphOxide	HBeAg	hmn type B Hepatitis, e Antigen
DNA	deoxyribonucleic acid	HBsAg	hmn type B Hepatitis, Surface Antigen
DNJ	1-Deoxynojirimucin (one kind of polyhydroxy alkaloid, glucosidase inhibitor)	HBV	Hepatitis B Virus
DOX	doxorubicin	HC <sub>50</sub>	medium Hemolytic Concentration
DPI	Diphenyleneiodonium	HCoV-229E	hmn coronavirus strain 229E
DPPH	1,1-DiPhenyl-2-PicrylHydrazyl free radical	HD	Huntington's disease
DS8000	Dextran sulphate, prepared from average Mr 8000	HER rat	Hypertensive Essential Rat
DSCG	DiSodium ChromoGlycate (anti-allergic agent)	HIV	hmn immunodeficiency virus
dw	dried weight	HIV-1	hmn immunodeficiency virus type 1
E.A.	Enzyme Activity	HIV-1 IN	hmn immunodeficiency virus type 1 integrase
EBV-EA	Epstein-Barr Virus Early Antigen	HIV-1 RT	hmn immunodeficiency virus type 1 reverse transcriptase
EC	Effective Concentration	HIV-RT	hmn immunodeficiency virus reverse transcriptase
EC <sub>50</sub>	medium Effective Concentration	hmn	human
ED	Effective Dose	HSV-1	herpes simplex virus 1
ED <sub>25</sub>	Effective Dose for 25%	HSV-2	herpes simplex virus 2
ED <sub>50</sub>	medium Effective Dose (in some cases for the medium Effective Concentration)	HVA	homovanillic acid
EGCG (EGCg)	(-)-Epigallocatechin gallate	hydroxyl radical	OH <sup>•</sup>
EGF	Epidermal Growth Factor (it protects MPP <sup>+</sup> -induced cell death)	ia	intra-arterial injection
EGFR	Epidermal Growth Factor Receptor	IAA	indole-3-acetic acid
ELAM-1	Endothelial-Leukocyte Adhesion Molecule-1	IC	Inhibiting Concentration
ELISA	Enzyme-Linked ImmunoSorbent Assay	IC <sub>50</sub>	median Inhibiting Concentration
eotaxin	eosinophilous cytotoxin	IC <sub>100</sub>	Absolute Inhibiting Concentration
ERK	Extracellular signal-Regulated Kinase	ICAM-1	Intercellular Cell Adhesion Molecule-1
ET	experimental times	ICR	Imprinting Control Region mouse
FAG	Fagomine (one kind of polyhydroxy alkaloid, glucosidase inhibitor)	id	intradermal injection
FCA	Freund's complete adjuvant	ID	Inhibiting Dose
FI	Feeding Index (= ((C-T)/(C+T)×100)	ID <sub>50</sub>	Median Inhibiting Dose
Flu-A	influenza virus type A	IFN	interferon
fMLP	<i>N</i> -formyl- <i>L</i> -Methionyl- <i>L</i> -Leucyl- <i>L</i> -Phenylalanine	IFN- $\gamma$	Interferon- $\gamma$
fp	freezing point	IgE	Immunoglobulin E
FR <sub>50</sub>	Feeding ratio when the consumed area of control disc (CCD) is 50% [FR = CTD(consumed area of treated disc)/CCD]	IgG	Immunoglobulin G
fw	fresh weight	IL	interleukin
G6PD	Glucose-6-Phosphate Dehydrogenase	IL-1	Interleukin-1
GABA	$\gamma$ -aminobutyric acid	IL-1 $\alpha$	interleukin-1 $\alpha$
GaIN	galactosamine	IL-1 $\beta$	interleukin-1 $\beta$
GI	growth inhibition	IL-2	Interleukin-2
GI <sub>50</sub>	the concentration of sample necessary to inhibit the growth to 50% of the control	IL-4	Interleukin-4
Glu	glutamate	IL-6	Interleukin-6
GOT	Glutamate-Oxaloacetate Transaminase	IL-8	Interleukin-8
Gp	Gastro protective effect	IL-10	Interleukin-10
gpg	guinea pig	IL-12	Interleukin-12
GPT	GlutamicPyruvic Transaminase	im	intramuscular injection
GRO	Growth-Related Oncogene	<i>in vitro</i>	<i>in vitro</i>
		<i>in vivo</i>	<i>in vivo</i>
		Indo	indomethacin
		iNOS	inducible Nitric Oxide Synthase
		InRt	inhibitive rate
		ip	intraperitoneal injection

i.t.	intrathecal injection	MMP	Matrix MetalloProteinases
iv	intravenous injection	MMP-2	Matrix MetalloProteinase-2
IZA	Inhibition Zone Area (mm <sup>2</sup> )	mp	melting point
IZD	Inhibition Zone Diameter (mm)	mPGES	microsomal ProstaGlandin E Synthase
J774.A1	murine monocyte/macrophage cell J774.A1	MPP+	1-methyl-4-phenylpyridinium ion (neurotoxin)
JNK	c-Jun NH <sub>2</sub> -terminal kinase	MRSA	Methicillin-Resistant <i>Staphylococcus aureus</i>
KD <sub>50</sub>	Dose required to Knock down 50% of the population of insects	MSSA	Methicillin-Sensitive <i>Staphylococcus aureus</i>
LC <sub>50</sub>	concentration at which only 50% of the cell are viable	MTC	Minimal Toxic Concentration
LC <sub>50</sub>	concentration of inhibiting luminous intensity 50%	MTT	A Cytotoxicity measurement method (tetrazolium-based colorimetric assay used for cytotoxicity bioassay, see Rubinstein L. V., et al., <i>Nat. Cancer Inst.</i> , 82, 1113-1118, 1990)
LCIC	Lowest Complete Inhibition Concentration	mus	mouse
LD	Lethal Dose	<i>n</i>	number of parallel experiments
LD <sub>100</sub>	100% Lethal Dose	nAChR	neuronal nicotinic AcetylCholine Receptor
LD <sub>50</sub>	medium Lethal Dose	NADH	reduced nicotinamide adenine dinucleotide
LDH	lactate dehydrogenase	NADPH	cytochrome C reductase
LDL	Low Density Lipoprotein	NCCLS	A standard antibacterial activity test method (see Wayne P. A., "National Committee for Clinical Laboratory Standards Performance Standards for Antimicrobial Disk Susceptibility Tests," 6th ed., Approved standards M2-A6. NCCLS, 1997)
L-NA	N <sup>ω</sup> -L-nitroarginine	NDGA	Nordihydroguaiaretic acid
L-NMMA	N <sup>G</sup> -monomethyl-L-arginine	NEP	Neutral EndoPeptidase
LOX	Lipoxygenase	NF	Nuclear Factor
LPO	lipid peroxidation	NF-κB	Nuclear Factor κB
LPS	lipopolysaccharide	NFAT	Nuclear Factor of Activated T cell
LTB <sub>4</sub>	Leukotriene B <sub>4</sub>	NGF	Nerve Growth Factor
LTC <sub>4</sub>	Leukotriene C <sub>4</sub>	NMDA	N-methyl-D-aspartate
LTD <sub>4</sub>	Leukotriene D <sub>4</sub>	NO	nitric oxide
MA	maytenfolic acid	non-oral	paraoral
MA	maslinic acid	NOR1	(+/-)-(E)-4-methyl-2-[(E)-hydroxyimino]-5-nitro-6-methoxy-3-hexenamid
MA	minimal amount	NOS-2	Nitric oxide synthase type-2
MABA	Microplate Alamar Blue Assay	OCIF	OsteoClastogenesis-Inhibitory Factor
MAC-1	integrin MAC-1	oral	oral
MAO-A	Monoamine oxidase A	OVA	ovalbumin
MAO-B	Monoamine oxidase B	oxazolone	oxazolone
MAPK	Mitogen-Activated Protein Kinase	OZ	opsonized zymosan
MCC	Minimum Cytocidal Concentration	P450	Cytochrome P450
MCP	Monocyte Chemotactic Protein	PAF	Platelet Activating Factor
MCTHBE	Minimum Concentration for Total Haemolysis of Bovine Erythrocytes (µg/mL)	PAF	Platelet Aggregation Factor
MDA	Methylene Dihydroxy Amphetamine	PAI-1	Plasminogen Activator Inhibitor type 1
MDA	Malondialdehyde	Para-3 (=PIV3)	Parainfluenza type 3 virus
MDR	MultiDrug Resistance	PBMC	hmN Peripheral Blood Mononuclear Cell
MED	Minimal Effective Dose	PCA reaction	Passive Cutaneous Anaphylaxis reaction
MFC	Minimal Fungicidal Concentration	PD	Parkinson's Disease
MIA	Minimal Inhibitory Amounts (µg/disc)	PD	a cytotoxic model
MIC	Minimum Inhibitory Concentration	pD2 (=pEC <sub>50</sub> )	negative logarithm (-logM) of the concentration required to produce 50% of the maximum response (EC <sub>50</sub> )
MIC <sub>80</sub>	Minimal Inhibitive Concentration for 80%	PDE	phosphodiesterase
MIC <sub>90</sub>	Minimal Inhibitive Concentration for 90%	PDTC	pyrrolidine dithiocarbamate
min	minute	PEBP2αA	polyoma enhancer binding protein 2αA
MIP-1α/β	macrophage inflammatory protein	pEC <sub>50</sub>	negative logarithm (-logM) of the concentration required to produce 50% of the maximum response (EC <sub>50</sub> )
MIQ	Minimum inhibitory quantity (µg)		
MK-801	dizocipline maleate (a non-competitive antagonist of the NMDA receptor)		
MLC	Minimum Lethal Concentration		
MLD	Minimum Lethal Dose		
MMDC	Minimal Morphological Deformation Concentration		
MMOC	Mouse Mammary Organ Culture model		

PEG	PolyEthylene Glycol	Singlet oxygen	$^1\text{O}_2$
PEP	Prolyl endopeptidase (a serine protease)	SIZ	sulfisoxazole
pet. ether	petroleum ether	SNP	sodium nitroprusside
PFTase	farnesylprenyltransferase	SOD	Superoxide dismutase
PGD <sub>2</sub>	prostaglandin D <sub>2</sub>	sp.	species
PGE <sub>2</sub>	prostaglandin E <sub>2</sub>	SP-A	pulmonary surfactant Protein A
PGF <sub>2<math>\alpha</math></sub>	prostaglandin F <sub>2<math>\alpha</math></sub>	spp.	species (plural)
PGH <sub>2</sub>	prostaglandin H <sub>2</sub>	SRSA	Slow-Reacting Substance of Anaphylaxis
PGI <sub>2</sub>	prostacyclin (prostaglandin I <sub>2</sub> )	StRt	Stimulatory Rate
PHA	phytohemagglutinin	STZ	streptozotocin
Phe	Phenylephrine	superoxide anion	$\text{O}_2^{\bullet-}$
pIC <sub>50</sub>	negative logarithm (-logM) of IC <sub>50</sub>	SuRt	survival rate
PK	protein kinase	Syn.(= ‡)	Synonym
PKC	protein kinase C	T/C	survival ratio
PLA <sub>2</sub>	phospholipase A <sub>2</sub>	TACE	$\alpha$ -Secretase (a serine protease)
PMA (=TPA)	Phorbol-12-Myristate-13-Acetate	TBARS	ThioBarbituric Acid Reactive Substance assay
PMNs	polymorphonuclear cell	TC <sub>50</sub>	50% cytoToxic Concentration
pNPPase	<i>p</i> -nitrophenylphosphate enzyme	TCM	Traditional Chinese Medicines
POA	pentacyclic oxindole alkaloids	TFP	Trifluoperazine (calmodulin antagonist)
PPase1	Protein serine/threonine Phosphatase	TGF- $\beta_1$	Transforming Growth Factor- $\beta_1$
PRA	Plaque Reduction Assay	TGI	Total Growth Inhibition, concentration at which no growth was observed
PTH	parathyroid hormone	TI	Therapeutic Index (=IC <sub>50</sub> /EC <sub>50</sub> )
PTN	parthenolide	TNF- $\alpha$	Tumor Necrosis Factor- $\alpha$
PTP1B	Protein Tyrosine Phosphatase 1B	TOA	tetracyclic oxindole alkaloids
QR	quinone reductase	topo II	DNA topoisomerase II
RA	rheumatoid arthritis	TP	Thymidine phosphorylase
Raji	EBV-transformed B cell line	tPA	tissue Plasminogen Activator
rat	white rat	TPA (=PMA)	12- <i>O</i> -tetradecanoyl phorbol 13-acetate
rbt	rabbit	TrkA	proto-oncogene TrkA
RDDP	RNA-dependent DNA polymerase	TXA <sub>2</sub>	thromboxane A <sub>2</sub>
RDS	Respiratory Distress Syndrome	TXB <sub>2</sub>	thromboxane B <sub>2</sub>
rel-InRt	relative inhibitive rate (taking the control compound as 100%)	UDP-MurNac	UDP- <i>N</i> -acetylmuramic acid
RM	Relative Mobility	VCAM-1	Vascular Cell Adhesion Molecule-1
RNA	ribonucleic acid	VCR	vincristine
RNase H	inherent ribonuclease H	VEGF	Vascular Endothelial Growth Factor
ROS	reactive oxygen species (they are involved in the genesis of various cancers, arteriosclerosis, rheumatism and ageing)	Veraguensin	veraguensin
RSV	Respiratory Syncytial Virus	VHR DS-PTPase	VHR Dual-Specificity Protein Tyrosine Phosphatase
RT	Reverse Transcriptase	VHR protein	Vaccinia open reading-frame H1-Related protein phosphatase
RT-PCR	reverse-transcribed polymerase chain reaction	VP-16	A positive control for cytotoxic assay (Sigma product)
sALT	serum alanine transaminase	VRE	Vancomycin-Resistant <i>Enterococci</i> sp
sAST	serum aspartate transaminase	VSE	Vancomycin-Sensitive <i>Enterococci</i> sp
sc	subcutaneous injection	VSV	Vesicular Stomatitis Virus
SC <sub>50</sub>	Half-maximal radical Scavenging Concentration	ww	wet weight
SC <sub>50</sub>	50% Scavenging Concentration	XTT	sodium 3'-[1-(phenylaminocarbonyl)-3,4-tetrazolium] bis(4-methoxy-6-nitrobenzene)sulfonic acid
ScRt	scavenging rate	†	homonym mark
SDF	Stromal cell-Derived Factor	‡ (=Syn.)	synonym mark
SGOT	serum Glutamic Oxalacetic Transaminase	*	the name is given by the authors of the books
SGPT	serum Glutamic Pyruvic Transaminase		
SHR rat	Spontaneously Hypertensive Rats		
SI	Selective index = cytotoxic CC <sub>50</sub> /target EC <sub>50</sub>		
SI	Selective index = cytotoxic IC <sub>50</sub> /target IC <sub>50</sub>		
SI	Selective index = cytotoxic IC <sub>50</sub> /target MIC		

# Cancer Cell Codes

This set of codes for 270 cancer cells, named as **CCC code**, are defined and tried out in the books for the first time by the authors.

<b>1A9</b>	hmn ovarian cancer (cell).	<b>CaEs-17</b>	hmn esophageal cancer (cell).
<b>212</b>	inducible <i>Ha-ras</i> oncogene transformed from the NIH/3T3 cell line.	<b>CAKI</b>	hmn renal cancer (cell).
<b>308</b>	cultured mouse epidermal cells.	<b>CAKI-1</b>	hmn renal cancer (cell).
<b>3LL</b>	mus Lewis lung cancer (cell).	<b>Calu1</b>	hmn lung cancer (cell).
<b>3PS</b>	mouse leukemia (cell).	<b>Capan1</b>	pancreas cancer (cell).
<b>780-6</b>	renal cancer (cell).	<b>Capan2</b>	pancreas cancer (cell).
<b>9KB</b>	hmn epidermatoid nasopharyngeal carcinoma (cell).	<b>CaSki</b>	hmn cervical carcinoma (cell).
<b>9L</b>	rat glioma (cell).	<b>CEM</b>	leukemia (cell).
<b>9PS</b>	mouse lymphocytic leukemia (cell).	<b>CHAGO</b>	hmn undifferentiated lung cancer (cell).
<b>A2780</b>	hmn ovarian cancer (cell).	<b>CNE</b>	hmn nasopharyngeal carcinoma (cell).
<b>A375</b>	hmn melanoma (cell).	<b>Col1</b>	hmn colorectal cancer (cell).
<b>A431</b>	hmn epidermic cancer (cell).	<b>Col2</b>	hmn colorectal cancer (cell).
<b>A498</b>	hmn renal cancer (cell).	<b>COLO320DM</b>	hmn colorectal cancer (cell).
<b>A549</b>	hmn non-small cell lung cancer (cell).	<b>Colon205</b>	colorectal cancer (cell).
<b>ACHN</b>	hmn renal cancer (cell).	<b>Colon26-L5</b>	mus colorectal cancer (cell).
<b>AGS</b>	gastric adenocarcinoma (cell).	<b>COS-7</b>	monkey kidney cells.
<b>APM1840</b>	hmn leukemia (cell).	<b>CPAE</b>	calf pulmonary arterial endothelial cells.
<b>B16</b>	mouse melanoma (cell).	<b>CT-26</b>	mus colorectal cancer (cell).
<b>B16(F-10)</b>	mouse melanoma (cell).	<b>CTV1</b>	hmn leukemia (cell).
<b>BAEC</b>	bovine aortic endothelial cells.	<b>CXF94L</b>	hmn tumor (cell).
<b>BC</b>	hmn breast cancer (cell).	<b>DLD</b>	hmn colorectal adenocarcinoma (cell).
<b>BC-1</b>	hmn breast cancer (cell).	<b>DLD-1</b>	hmn colorectal adenocarcinoma (cell).
<b>BCA-1</b>	hmn breast cancer (cell).	<b>DMS114</b>	hmn lung cancer (cell).
<b>Bcap37</b>	hmn breast cancer (cell).	<b>DMS273</b>	hmn lung cancer (cell).
<b>Bel7402</b>	hmn liver cancer (cell).	<b>DU145</b>	prostatic cancer (cell).
<b>Bel7405</b>	hmn liver cancer (cell).	<b>EAC</b>	Ehrlich ascites cancer (cell).
<b>BGC823</b>	hmn gastric cancer (cell).	<b>EJ-1</b>	hmn bladder cancer (cell).
<b>BIU87</b>	bladder cancer (cell).	<b>FM3A</b>	mus breast cancer (cell).
<b>BL6</b>	mouse melanoma (cell).	<b>H.Ep.-2</b>	hmn cutis cancer cells in throat.
<b>Bowes</b>	skin cancer cells.	<b>H116</b>	hmn colorectal cancer (cell).
<b>Bre04</b>	hmn breast cancer (cell).	<b>H9</b>	lymphocytes.
<b>BSY1</b>	breast cancer (cell).	<b>HBC4</b>	breast cancer (cell).
<b>BT474</b>	hmn galactophore cancer (cell).	<b>HBC5</b>	breast cancer (cell).
<b>BT549</b>	hmn galactophore cancer (cell).	<b>HCC2998</b>	hmn colorectal cancer (cell).
<b>BXPC3</b>	pancreas cancer (cell).	<b>HCT</b>	hmn colorectal cancer (cell).
<b>C6</b>	rat glioma (cell).	<b>HCT116</b>	hmn colorectal cancer (cell).
<b>CA</b>	hmn liver cancer (cell).	<b>HCT15</b>	hmn colorectal cancer (cell).

**HCT8** hmn colorectal cancer (cell).  
**HEK-293** hmn epithelial kidney cell.  
**HEL** hmn embryonic lung fibrocytes.  
**HeLa** culture cervical epithelial cancer (cell) from Henrietta Lack.  
**HeLa ATCC-17** hmn cervical epithelial cancer (cell).  
**HeLa-S3** hmn cervical epithelial cancer (cell).  
**HELF** normal hmn embryo lung fibroblasts.  
**Hep2** hmn liver cancer (cell).  
**Hep2,2,15** hmn liver cancer (cell) transfected with hepatitis B virus.  
**Hep3B** hmn liver cancer (cell).  
**Hepa** hmn liver cancer (cell).  
**Hepa1c1c7** mus liver cancer (cell).  
**Hepa59T/VGH** hmn liver cancer (cell).  
**HepG2** hmn liver cancer (cell).  
**HEPZ** hmn epithelial cancer (cell).  
**HFF** hmn foreskin fibroblasts.  
**HGF** normal hmn gingival fibroblast cells.  
**HL-60** hmn acute promyelocytic leukemia (cell).  
**HM02** hmn melanoma (cell).  
**HMC-1** hmn leukemic mast cells.  
**HMEC** hmn microvascular endothelial cells.  
**HO-8910** hmn ovarian cancer (cell).  
**HOG.R5** green fluorescent protein (GFP)-based reporter cell.  
**HONE-1** hmn nasopharyngeal carcinoma (cell).  
**HOP-62** non-small cell lung cancer (cell).  
**Hs578T** hmn breast cancer (cell).  
**Hs740T** hmn gastric cancer (cell).  
**Hs742T** hmn breast cancer (cell).  
**Hs756T** hmn gastric cancer (cell).  
**HSC-2** hmn oral squamous cell carcinoma cells.  
**HSG** hmn salivary gland tumor (cell).  
**HT** sarcoma (cell).  
**HT1080** hmn fibrosarcoma (cell).  
**HT29** hmn colorectal cancer (cell).  
**HT3** hmn cervical carcinoma (cell).  
**hTERT-RPE1** hmn telomerase reverse transcriptase-retinal pigment epithelial cells.  
**Huh7** hmn hepatoma (cell).  
**HUVEC** hmn umbilical vein endothelial cell.  
**Jurkat-T** hmn T-cell leukemia (cell).  
**K562** hmn leukemia (cell).  
**K562/ADM** hmn leukemia (cell) of adriamycin-resistant.  
**Kato3** hmn gastric cancer (cell).  
**KB** hmn nasopharyngeal carcinoma (cell).  
**KB15** hmn nasopharyngeal carcinoma (cell).  
**KB16** hmn nasopharyngeal carcinoma (cell).  
**KB3** hmn nasopharyngeal carcinoma (cell).  
**KBV200** MDR nasopharyngeal carcinoma (cell).  
**KB-VIN** vincristine-resistant nasopharyngeal carcinoma (cell).  
**Ketr3** hmn renal cancer (cell).  
**KG-1** hmn leukemia (cell).  
**KM12** hmn colorectal cancer (cell).  
**KM20L2** hmn colorectal cancer (cell).  
**KU-1** hmn bladder cancer (cell).  
**L<sub>1210</sub>** Lymphocytic leukemia (cell).  
**L5178Y** lymphosarcoma (cell).  
**L-6** rat skeletal myoblasts.  
**L<sub>615</sub>** mouse spleen leukemia (cell).  
**L<sub>7212</sub>** mouse leukemia (cell).  
**L-929** fibrosarcoma (cell).  
**LLC** mouse Lewis lung cancer (cell).  
**LMTK** mouse fiber cells.  
**LNCaP** hmn prostatic cancer (cell).  
**LNCaP-FGC** hmn prostatic cancer (cell).  
**LO2** hmn liver cell.  
**LoVo** hmn colorectal cancer (cell).  
**LoVo/Doxo** hmn colorectal cancer cell, drug-resistant subclone.  
**LOX** melanoma (cell).  
**LOX-IMVI** melanoma (cell).  
**LS174T** colorectal cancer (cell).  
**Lu04** hmn lung cancer (cell).  
**Lu1** hmn lung cancer (cell).  
**LXFL529L** hmn large cell lung cancer (cell).  
**M1** mus myelocytic leukemia (cell).  
**M14** melanoma (cell).  
**M4BEU** hmn melanoma (cell).  
**M5076** ovarian sarcoma (cell).  
**Ma7373** mus breast cancer (cell).  
**MALME-3M** melanoma (cell).  
**MBT-2** mus bladder cancer (cell).  
**MCF7** hmn breast cancer (cell).  
**MCF7/6** hmn breast cancer (cell).  
**MCF7/ADR-RES** hmn breast cancer (cell).  
**MCF7-ras** hmn breast cancer (cell).  
**MDA231** hmn breast cancer (cell).  
**MDA-MB-231** hmn breast cancer (cell).  
**MDA-MB-435** hmn breast cancer (cell).  
**MDCK** Madin-Darby Canine.  
**MEL-28** hmn melanoma cell.  
**Meth-A** Meth-A sarcoma (cell).  
**MGc803** hmn gastric adenocarcinoma (cell).  
**MH-60** mus leukemia (cell).  
**MI4** melanoma (cell).  
**MIA-PaCa-2** hmn pancreas cancer (cell).  
**MK1** hmn gastric cancer (cell).  
**MKN1** hmn gastric cancer (cell).  
**MKN28** hmn gastric cancer (cell).  
**MKN45** hmn gastric cancer (cell).  
**MKN7** hmn gastric cancer (cell).  
**MKN74** hmn gastric cancer (cell).  
**MM1** highly invasive clone isolated from parental rat ascites hepatoma AH130 cells.  
**Molt4** hmn lymphoma (cell).  
**Mono-Mac-6** mononuclear cells.  
**MQc80-3** gastric adenocarcinoma (cell).  
**MRC-5** hmn diploid embryonic cells.

**MS301** mus breast cancer (cell).  
**MS310** mus breast cancer (cell).  
**N04** hmn neuroma (cell).  
**NCI-H1417** hmn small cell lung cancer (cell).  
**NCI-H187** hmn small cell lung cancer (cell).  
**NCI-H226** hmn non-small cell lung cancer (cell).  
**NCI-H23** hmn lung cancer (cell).  
**NCI-H460** hmn lung cancer (cell).  
**NCI-H522** hmn lung cancer (cell).  
**NK/LY** ascites cancer (cell).  
**NSCLC-N6** hmn non-small cell lung cancer (cell).  
**NUGC** hmn gastric cancer (cell).  
**NUGC-3** hmn gastric cancer (cell).  
**NUGC-4** hmn gastric cancer (cell).  
**OVCAR-2780** ovarian adenocarcinoma (cell).  
**OVCAR-3** ovarian adenocarcinoma (cell).  
**OVCAR-4** ovarian adenocarcinoma (cell).  
**OVCAR-5** ovarian adenocarcinoma (cell).  
**OVCAR-8** ovarian adenocarcinoma (cell).  
**P1534** mus, transplanted leukemia (cell).  
**P<sub>388</sub>** mouse lymphocytic leukemia (cell).  
**P<sub>388</sub>/ADM** mouse lymphocytic leukemia (cell) of adriamycin-resistant.  
**PACA-2** hmn pancreas cancer (cell) .  
**PANC1** pancreas cancer (cell).  
**PBMC** peripheral blood mononuclear cells.  
**PC12** hmn lung cancer (cell).  
**PC3** hmn prostatic cancer (cell).  
**PC-6** hmn lung cancer (cell).  
**PLC/PRF/5** hmn liver cancer (cell).  
**PSN1** hmn pancreas cancer (cell).  
**PTX10** ovarian cancer cells with  $\beta$ -tubulin mutation.  
**QGY-7703** hmn liver cancer (cell).  
**RAW264.7** mouse macrophages.  
**RBL-2H3** rat basophilic cells.  
**RL33** rbt lung cancer (cell).  
**RPMI-7951** melanoma (cell).  
**RPMI-8226** leukemia (cell).  
**RXF-393** renal cancer (cell).  
**RXF-631L** renal cancer (cell).  
**S<sub>180</sub>** mouse sarcoma (cell).  
**S37** mouse sarcoma (cell).  
**Sca7901** hmn gastric adenocarcinoma (cell).  
**SCL** hmn gastric cancer (cell).  
**SCL-37\*6** hmn gastric cancer (cell).  
**SCL-6** hmn gastric cancer (cell).  
**SCL-9** hmn gastric cancer (cell).  
**SF268** hmn brain tumor (cell).  
**SF295** hmn brain tumor (cell).  
**SF539** hmn brain tumor (cell).  
**SGC** hmn gastric cancer (cell).  
**SGC7901** hmn gastric cancer (cell).  
**SiHa** hmn cervical carcinoma (cell).  
**SKBR3** hmn breast cancer (cell).  
**SKCO1** colorectal cancer (cell).  
**SK-MEL** hmn caucasian melanoma (cell).  
**SK-MEL-2** hmn melanoma (cell).  
**SK-MEL-28** hmn melanoma (cell).  
**SK-MEL-5** hmn melanoma (cell).  
**SK-MES-1** bronchogenic carcinoma cell.  
**SK-OV-3** ovarian adenocarcinoma (cell).  
**SMMC-7721** hmn liver cancer (cell).  
**SNB75** hmn brain tumor (cell).  
**SNB78** hmn brain tumor (cell).  
**SNU638** hmn gastric adenocarcinoma (cell).  
**SR** leukemia (cell).  
**St4** gastric cancer (cell).  
**SVR** mouse endothelial cells.  
**SW620** hmn colorectal adenocarcinoma (cell).  
**T24** hmn liver cancer (cell).  
**T24S** hmn bladder cancer (cell).  
**T47D** hmn breast cancer (cell).  
**T98G** hmn caucasian glioblastoma (cell).  
**TK10** renal cancer (cell).  
**Tmolt3** hmn leukemia (cell).  
**U14** mouse cervical carcinoma (cell).  
**U251** brain tumor (cell).  
**U373** caucasian glioblastoma (cell).  
**U4** mouse cervical carcinoma (cell).  
**U-87-MG** caucasian glioblastoma (cell).  
**U937** hmn monocytic leukemia (cell).  
**UACC62** melanoma (cell).  
**UO-31** renal cancer (cell).  
**Vero** green monkey kidney tumour (cell).  
**W<sub>256</sub>** rat Walker sarcoma (cell).  
**WEHI-164** mus fibrosarcoma (cell).  
**WHCO1** hmn esophageal cancer (cell).  
**WI-38** hmn lung fibrocyte (normal hmn diploid fibrocyte).  
**WiDr** colorectal adenocarcinoma (cell).  
**Wish** transformed epithelial tumour (cell).  
**XF-498** hmn tumor (cell).  
**ZR-75-1** hmn breast cancer (cell).





# Volume 6 Indexes



# Compound Pharmacological Activity Index

This index lists all 3367 normalized pharmacological activity terms appeared in the encyclopedia in alphabetical order and a number code sequence of the related compounds follows the bold term immediately.

Authors would like to give some reminder to readers: (1), for normalization of pharmacological terms, please see “Abbreviations and Symbols” and “Cancer Cell Codes in Pharmacological Models” in Volume 1. (2), in the encyclopedia the *in vivo* anticancer activity data are defined as “antineoplastic” while the *in vitro* anticancer activity data are defined as “cytotoxic”. (3), the inactive experimental data in literatures are also collected. The formatted method of inactive data is putting word “inactive” after the activity term, for example “AChE inhibitor inactive”, “Cytotoxic inactive” and so on.

- Acaricide** 3502, 10680, 21360.  
**Acaricide (*Dermatophagoides pteronyssinus*)** 18563, 18564, 18565, 18566.  
**ACAT inhibitor** 9083.  
**ACE inhibitor** 4225, 6757, 6921, 7978, 8095, 8155, 10887, 11350, 11642, 12916, 14261, 16011, 16773, 16774, 16776, 17895, 18358, 18371, 18411, 21392.  
**Acetylcholine antagonist** 12083.  
**Acetylcholine transferase activator** 893, 894, 896.  
**AChE inhibitor** 408, 460, 904, 2220, 2233, 2813, 2814, 2815, 3516, 3881, 3882, 4236, 4237, 4241, 4292, 4516, 4532, 4542, 4568, 4862, 4863, 4877, 4996, 5098, 5255, 5256, 5722, 5739, 5828, 6159, 6842, 7038, 7128, 7177, 7381, 7381, 7414, 7835, 7928, 8009, 8083, 9200, 9201, 9206, 9946, 10197, 10258, 10260, 11002, 11004, 11291, 11462, 12351, 12352, 12834, 12835, 13241, 13571, 14078, 14449, 15322, 15323, 15647, 15718, 15800, 16117, 16988, 17035, 19354, 19355, 19356, 20440, 20511, 20685, 20686, 20891, 21374, 22195, 22700, 22774, 22781.  
**AChE inhibitor inactive** 7082, 7210, 7213, 19696.  
**Acidic component of common plants** 18421.  
**Activates basophilic cells** 21279.  
**Activates lymph node** 3412.  
**Activates mastocytes** 21279.  
**Activates nerve** 4873.  
**Activates neutrophil granulocytes** 21279.  
**Activates plasminogen** 17194.  
**Acts against hepatic adipose infiltration** 2318, 13823.  
**Acts against hepatic adipose infiltration, removes fat from liver of fatty infiltration** 19087.  
**Acute toxicity** 2247, 3712, 13794.  
**Adenosine A<sub>1</sub> receptor partial agonist, the first nonnucleoside adenosine receptor agonist not structurally related to adenosine** 8754.  
**Adenyl cyclase inhibitor** 12420.  
**Adrenal cortex hormoneoid** 8841, 8846.  
**Adrenergic  $\beta$ -receptor blocker** 18180.  
**Adrenergic antagonist** 1048, 7024, 11344, 16439.  
**Adrenaline  $\alpha_1$ - and  $\alpha_2$ -receptor agonist** 2303.  
**Adrenergic  $\alpha_1$ -receptor antagonist** 1041.  
**Adrenergic  $\alpha$ -receptor blocker** 6517, 7243, 22818, 22820.  
**Adrenergic  $\alpha$ - and  $\beta$ -receptor agonist** 6815, 18024.  
**Adrenergic receptor blocker** 7252, 19386.  
**Affinity to dopamine-D<sub>2</sub>-receptor** 5308.  
**Affinity to nAChR** 2484, 2621, 2622, 4868, 4869, 7842, 7843.  
**Against African sleeping sickness** 1141, 1145, 1147.  
**Against neurovaccine** 20490.  
**Aids in generation of neuroglia** 1853.  
**Alarm pheromone of insect** 15688.  
**Aldoketomutase I inhibitor** 2102.  
**Aldose reductase inhibitor** 61, 85, 466, 491, 497, 580, 664, 1476, 1491, 1492, 1492, 1499, 1502, 1623, 1928, 2044, 2380, 2920, 2921, 3600, 3602, 3609, 3610, 3674, 3742, 3744, 3745, 4627, 4628, 6031, 6453, 6643, 6769, 7278, 7283, 7284, 7802, 8925, 9331, 9456, 9458, 10351, 10887, 11198, 11505, 11642, 11666, 11703, 11897, 12020, 12083, 12714, 12987, 13137, 13145, 13149, 13315, 13502, 14224, 14971, 15038, 15147, 15148, 15149, 15150, 15151, 15170, 15184, 15286, 15319, 16726, 16729, 16851, 16931, 16933, 17097, 17409, 17415,

- 18004, 18005, 18317, 18317, 18345, 18351, 18368, 18378, 18411, 19087, 19087, 19201, 19618, 20102, 21053, 21097, 21362.
- Aldose reductase inhibitor inactive** 1621, 19425, 19426, 20556.
- Algicidal (*Oscillatoria perornata*)** 8985, 19077, 19078.
- Algicidal (*Raphidocelis subcapitata*)** 7049, 7161, 12409, 14405, 14408.
- Algicidal (*Selenastrum capricornutum*)** 8985, 19077, 19078.
- Alkaline phosphatase inhibitor** 2208, 3063.
- Alkaline phosphatase promoter** 2331.
- Allelopathil agent, produced from walnut tree *Juglans regia*** 11903.
- Allergen** 62, 2890, 3611, 9700, 14971, 16440, 16598, 17828, 17853, 18679, 22104, 22105.
- Alluring action (male gamete of *Allomyces*)** 19976.
- $\gamma$ -Aminobutyric acid antagonist** 642.
- AMV-reverse transcriptase inhibitor** 11703, 21913.
- Amyloglucosidase inhibitor** 2792, 7437.
- An essential amino acid for children** 9569.
- Analgesic** 304, 554, 669, 1012, 1021, 1094, 1097, 1178, 1283, 1287, 1667, 2214, 2247, 2303, 2550, 2737, 2738, 2739, 2887, 3141, 3152, 3204, 3218, 3498, 3689, 3693, 3712, 3885, 3907, 3935, 3937, 4080, 4103, 4550, 4645, 4685, 4741, 4745, 4771, 4993, 5108, 5358, 5359, 5417, 6529, 6708, 6767, 7441, 7481, 7665, 7707, 7714, 7800, 7996, 8083, 8150, 8151, 8156, 8170, 8257, 8273, 8276, 8307, 8428, 8965, 9187, 9238, 9661, 10875, 10887, 11259, 11260, 11580, 11734, 11741, 12510, 12608, 12916, 12916, 13606, 13630, 13774, 13776, 13794, 14184, 14896, 14897, 14981, 15449, 15843, 16451, 16525, 16532, 16555, 16803, 16966, 17042, 17958, 19081, 19184, 19196, 19198, 19200, 19473, 19540, 19922, 19955, 20002, 20141, 20307, 20324, 20444, 20509, 20569, 20578, 21077, 21206, 21234, 21245, 21292, 21366, 21887, 21955, 22384, 22562, 22602, 22818, 22938, 23004.
- Androgen** 1169, 21022.
- Anesthetic** 2113, 2716, 3278, 4353, 5199, 6745, 9553, 13774, 13796, 13797, 13798, 14981, 21292, 23003.
- Anesthetic antagonist** 3079.
- Angiogenesis enhancer** 19202.
- Angiogenesis inhibitor** 2208, 5047, 5910, 11505, 13391, 16183, 17717, 20900, 20901, 21709.
- Angiogenesis inhibitor inactive** 6162, 9564, 10751, 12448, 21856.
- Anorexic** 3327, 15789.
- Antagonist to body temperature reduction caused by 5-HT** 19846.
- Antagonist to muscle rigidity** 20732.
- Antagonizes antibacterial action of paraxin** 3118.
- Antemetic** 8395, 19846, 21059, 23003.
- Anthelmintic** 139, 759, 762, 834, 936, 1319, 1475, 1654, 1658, 1779, 1798, 1842, 1895, 1897, 2050, 2550, 3231, 3598, 3760, 3767, 3841, 4234, 4317, 4329, 5251, 5502, 5648, 6460, 6550, 6767, 7481, 7798, 7809, 8312, 9288, 9704, 11203, 12221, 13559, 14728, 15131, 15485, 15486, 15882, 16085, 16584, 16770, 16789, 18094, 18299, 18452, 18546, 18940, 19101, 19313, 19314, 20240, 21350, 21360, 21448, 22332, 22382.
- Anthelmintic (amoeba)** 14728.
- Anthelmintic (ants)** 18293.
- Anthelmintic (ascarid)** 762, 8312, 11203, 16770, 18452, 21448.
- Anthelmintic (*Ascaris vermicularis*)** 18299.
- Anthelmintic (*Caenorhabditis elegans*)** 1319, 20240.
- Anthelmintic (dwarf tapeworm)** 6460.
- Anthelmintic (hookworm)** 1895, 6460.
- Anthelmintic (liver flukes)** 16789.
- Anthelmintic (tapeworm)** 762, 1654, 1895, 6767, 9704, 16789.
- Anthelmintic (termites)** 5188, 6015, 9857, 14144.
- Anthelmintic (*Trypanosoma cruzi*)** 16085.
- Antiacetylcholine activity** 17007.
- Anti-acne agent** 2056.
- Anti-addictive** 4080.
- Anti-adrenaline** 5707, 11851, 18623, 22921.
- Antiallergic** 892, 893, 983, 1836, 1837, 1838, 2102, 2106, 2687, 3412, 4097, 4417, 5415, 5430, 5722, 6105, 6853, 7054, 7924, 8095, 8297, 8841, 8846, 11095, 12683, 12766, 12767, 12891, 13137, 14995, 16268, 16269, 16525, 18643, 18790, 21206, 21356, 21993, 21994, 22350.
- Antiallergic and anti-inflammatory** 23, 3602.
- Antiallergic  $\beta$ -Hexosaminidase inhibitor** 2165, 2456, 2508, 5905, 9099, 9100, 9102, 9846, 9848, 13909, 13910, 14154.
- Antiamebic** 576, 774, 777, 2615, 2660, 2665, 2666, 2667, 2668, 2670, 2671, 2674, 2684, 3218, 3400, 5436, 6772, 8047, 8509, 11203, 12347, 17862, 18095, 18627, 19414, 19900, 22098, 22146.
- Anti-amnesic** 4568.
- Anti-androgenic** 4039, 4040, 4041, 4042, 7521, 10960, 12490, 12491, 12493, 12496, 16358.
- Anti-androgenic inactive** 16498.
- Antianemic** 11882.
- Anti-apoptosis** 251, 580, 1181, 2547, 5314, 18192.
- Antiasthmatic** 663, 957, 1162, 1628, 1840, 1903, 2797, 3235, 3237, 3689, 5067, 5763, 6815, 7481, 7924, 8095, 8404, 9646, 11507, 12438, 14395, 15370, 17456, 17472, 17983, 18219, 18317, 19540, 20077, 20137, 20254, 20992, 20995, 21312.
- Anti-atropine** 9224.
- Antibacterial inactive summary index** 569, 1215, 1217, 1222, 1617, 1635, 1636, 1637, 1646, 1647, 1764, 2590, 2624, 2945, 2990, 2991, 2998, 3004, 3908, 4035, 4128, 4891, 4985, 5925, 5926, 6065, 6809, 6810, 7044, 7313, 7315, 7316, 8576, 8579, 8580, 9223, 9225, 9518, 9857, 10629, 11071, 11078, 11079, 11086, 11258, 11485, 11570, 12310, 12511, 12572, 12615, 12616, 13259, 13637, 14729, 14731, 14789, 14915, 15118, 15583, 15584, 15585, 15586, 15588, 15589, 15590, 15591, 15592, 15916, 18673, 19308, 19349, 19350, 19428, 19429, 19589, 19591, 19594, 19595, 19999, 20377, 22634, 22777, 22962.
- Antibacterial inactive, 13 strains of methicillin-resistant *Staphylococcus aureus* (MRSA)** 7313, 7315, 7316.
- Antibacterial inactive, *Alteromonas* sp.** 2624, 12616.
- Antibacterial inactive, *Azobacter beijerinckii*** 11485, 12616.
- Antibacterial inactive, *Bacillus brevis*** 8576, 8579, 8580.
- Antibacterial inactive, *Bacillus megaterium*** 15518.
- Antibacterial inactive, *Bacillus subtilis*** 1646, 1647, 1764, 3004, 8576, 8579, 8580, 10629, 13259, 19428, 19429.
- Antibacterial inactive, *Chromobacterium violaceum*** 11258.
- Antibacterial inactive, *Clostridium fallax*** 11570, 12615.
- Antibacterial inactive, *Clostridium novyi*** 11570, 12615.
- Antibacterial inactive, *Clostridium sordellii*** 11570, 12615.

**Antibacterial inactive, *Enterobacter aerogenes*** 11570, 12615.  
**Antibacterial inactive, *Enterobacter cloacae*** 569, 14789.  
**Antibacterial inactive, *Enterobacter dissolvens*** 8576, 8579, 8580.  
**Antibacterial inactive, *Escherichia coli*** 569, 1635, 1636, 1637, 2590, 2945, 2990, 2991, 2998, 3004, 6065, 9857, 10629, 11071, 11078, 11079, 11086, 12615, 13259, 13637, 14789, 19589, 19591, 19594, 19595, 22634.  
**Antibacterial inactive, gram-negative bacteria** 1215, 1217, 1222.  
**Antibacterial inactive, gram-positive bacteria** 1215, 1217, 1222.  
**Antibacterial inactive, *Halobacterium* sp.** 2624, 11485, 12572, 12616.  
**Antibacterial inactive, *Halococcus* sp.** 2624, 11485, 12572, 12616.  
**Antibacterial inactive, *Helicobacter pylori* NCTC11637 strain** 4035.  
**Antibacterial inactive, *Helicobacter pylori* NCTC11916 strain** 4035.  
**Antibacterial inactive, *Helicobacter pylori* OCO1 strain** 4035.  
**Antibacterial inactive, *Klebsiella aerogenes*** 11258.  
**Antibacterial inactive, *Klebsiella pneumoniae*** 569, 14789, 19589, 19591, 19594, 19595, 22634.  
**Antibacterial inactive, MDR *Staphylococcus aureus* RN4220 strain** 4985, 9518, 15916.  
**Antibacterial inactive, MDR *Staphylococcus aureus* SA-1199-B strain** 4985, 9518, 15916.  
**Antibacterial inactive, MDR *Staphylococcus aureus* XU212 strain** 4985, 9518, 15916.  
**Antibacterial inactive, methicillin-resistant *Staphylococcus aureus* MRSA** 5925, 5926, 12310, 15583, 15584, 15585, 15586, 15588, 15589, 15590, 15591, 15592.  
**Antibacterial inactive, methicillin-sensitive *Staphylococcus aureus* MSSA** 12310.  
**Antibacterial inactive, *Micrococcus luteus*** 8576, 19349, 19350, 19589, 19591, 19594, 19595, 22634.  
**Antibacterial inactive, *Mycobacterium smegmatis*** 1646, 1647.  
**Antibacterial inactive, *Mycobacterium tuberculosis*** 6809, 6810, 14729, 14731, 14915, 15118, 19999, 20377, 22777.  
**Antibacterial inactive, *Pseudomonas aeruginosa*** 569, 1635, 1636, 1637, 14789.  
**Antibacterial inactive, *Pseudomonas aeruginosa*** 569, 1635, 1636, 1637, 14789.  
**Antibacterial inactive, *Salmonella setubal*** 19589, 19591, 19594, 19595, 22634.  
**Antibacterial inactive, *Serratia marcescens*** 14789.  
**Antibacterial inactive, *Shigella flexneri*** 11570, 12615.  
**Antibacterial inactive, *Staphylococcus aureus*** 569, 1635, 1636, 1637, 1646, 1647, 1764, 3004, 9857, 10629, 11086, 13259, 19349, 19350, 19428, 19429, 19589, 19591, 19594, 19595, 22634.  
**Antibacterial inactive, *Staphylococcus epidermidis*** 569, 19589, 19591, 19594, 19595, 22634.  
**Antibacterial inactive, *Staphylococcus sanguis*** 1635, 1636, 1637.  
**Antibacterial inactive, various tested bacteria** 9223, 9225.  
**Antibacterial inactive, *Vibrio anguillarum*** 2590, 2945, 2990, 2991, 2998, 9857, 11071, 11078, 11079, 11086.  
**Antibacterial inactive, *Vibrio cholerae*** 11570, 12615.  
**Antibacterial inactive, *Vibrio vulnificus*** 11570, 12615.  
**Antibacterial summary index** 10, 24, 50, 51, 53, 99, 123, 126, 143, 207, 218, 370, 515, 585, 589, 595, 597, 598, 663, 664, 675, 754, 755, 756, 762, 783, 822, 834, 847, 847, 899, 901, 909, 920, 930, 957, 967, 1016, 1080, 1135, 1159, 1178, 1179, 1244, 1250, 1252, 1277, 1293, 1348, 1476, 1643, 1644, 1645, 1648, 1745, 1769, 1842, 1845, 1897, 1904, 1990, 2013, 2034, 2081, 2106, 2168, 2244, 2283, 2284, 2294, 2300, 2303, 2304, 2309, 2331, 2334, 2376, 2380, 2509, 2539, 2550, 2584, 2590, 2591, 2592, 2593, 2594, 2619, 2624, 2678, 2680, 2681, 2682, 2685, 2844, 2887, 2945, 2985, 2990, 2991, 2998, 3004, 3004, 3026, 3029, 3052, 3055, 3057, 3058, 3094, 3096, 3122, 3148, 3153, 3157, 3158, 3186, 3231, 3243, 3294, 3308, 3368, 3412, 3452, 3453, 3453, 3463, 3472, 3473, 3474, 3475, 3485, 3490, 3498, 3502, 3511, 3551, 3588, 3598, 3615, 3633, 3689, 3695, 3708, 3745, 3767, 3768, 3791, 3799, 3940, 3941, 3962, 4005, 4029, 4048, 4055, 4135, 4140, 4200, 4202, 4203, 4241, 4243, 4292, 4348, 4349, 4362, 4363, 4398, 4422, 4460, 4471, 4536, 4604, 4632, 4633, 4634, 4645, 4832, 4837, 4840, 4923, 4976, 5064, 5100, 5134, 5152, 5161, 5214, 5229, 5235, 5272, 5273, 5276, 5279, 5332, 5333, 5445, 5522, 5524, 5540, 5541, 5542, 5550, 5551, 5572, 5613, 5682, 5694, 5700, 5708, 5722, 5747, 5763, 5789, 5858, 5894, 5926, 5959, 6018, 6018, 6020, 6020, 6032, 6040, 6049, 6065, 6178, 6238, 6261, 6263, 6298, 6302, 6303, 6361, 6366, 6427, 6429, 6430, 6518, 6605, 6626, 6629, 6735, 6752, 6757, 6758, 6776, 6801, 6853, 6901, 6921, 6973, 7015, 7063, 7121, 7154, 7174, 7178, 7181, 7185, 7205, 7221, 7278, 7305, 7306, 7307, 7312, 7314, 7323, 7354, 7355, 7356, 7357, 7358, 7385, 7399, 7413, 7416, 7441, 7481, 7512, 7521, 7703, 7707, 7736, 7756, 7764, 7767, 7768, 7792, 7802, 7809, 7825, 7829, 7830, 7883, 7897, 7897, 7907, 7924, 7926, 7927, 7942, 7944, 7996, 8081, 8081, 8081, 8081, 8085, 8095, 8095, 8136, 8140, 8218, 8218, 8219, 8221, 8272, 8275, 8278, 8306, 8307, 8314, 8333, 8334, 8403, 8405, 8456, 8490, 8493, 8499, 8548, 8591, 8596, 8672, 8708, 8709, 8760, 8833, 8841, 8955, 8959, 8967, 8968, 8982, 9226, 9288, 9321, 9322, 9393, 9441, 9456, 9547, 9557, 9558, 9570, 9596, 9597, 9631, 9631, 9678, 9697, 9702, 9720, 9740, 9788, 9854, 9869, 9877, 9924, 10104, 10126, 10149, 10159, 10208, 10351, 10383, 10484, 10565, 10567, 10652, 10664, 10665, 10732, 10733, 10736, 10747, 10748, 10751, 10819, 10820, 10826, 10883, 10887, 11056, 11071, 11078, 11079, 11092, 11149, 11258, 11259, 11260, 11262, 11263, 11264, 11269, 11321, 11324, 11327, 11348, 11386, 11392, 11423, 11434, 11455, 11485, 11526, 11570, 11607, 11642, 11683, 11736, 11736, 11747, 11751, 11777, 11778, 11779, 11811, 11849, 11851, 11866, 11903, 11943, 12018, 12020, 12060, 12163, 12228, 12254, 12321, 12322, 12334, 12335, 12380, 12389, 12420, 12438, 12453, 12454, 12489, 12501, 12537, 12572, 12573, 12597, 12615, 12616, 12764, 12766, 12767, 12771, 12843, 12849, 12957, 12958, 13041, 13088, 13088, 13107, 13109, 13137, 13195, 13196, 13239, 13264, 13281, 13315, 13388, 13398, 13428, 13429, 13469, 13469, 13481, 13485, 13486, 13487, 13488, 13492, 13493, 13494, 13495, 13606, 13607, 13637, 13638, 13643, 13651, 13652, 13811, 13811, 13874, 13876, 13941, 13979, 14028, 14029, 14083, 14086, 14121, 14154, 14170, 14216, 14217, 14255, 14256, 14340, 14341, 14342, 14346, 14454, 14531, 14567, 14592, 14603, 14680, 14705, 14728, 14758, 14789, 14815, 14829, 14840, 14842, 14850, 14967, 14969, 14970, 14971, 15027, 15039, 15042, 15043, 15044, 15056, 15170, 15184, 15221, 15279, 15286, 15297, 15298, 15300, 15301,

- 15302, 15303, 15304, 15305, 15306, 15307, 15308, 15309, 15312, 15313, 15314, 15315, 15316, 15335, 15337, 15342, 15370, 15412, 15436, 15489, 15506, 15519, 15561, 15587, 15633, 15652, 15715, 15728, 15737, 15800, 15849, 15858, 15859, 15860, 15869, 15870, 15872, 15881, 15885, 15888, 15910, 15939, 16050, 16079, 16080, 16119, 16183, 16261, 16264, 16268, 16269, 16275, 16359, 16429, 16439, 16442, 16488, 16532, 16545, 16555, 16597, 16598, 16600, 16666, 16675, 16711, 16741, 16742, 16743, 16744, 16745, 16747, 16747, 16748, 16748, 16749, 16754, 16770, 16799, 16800, 16802, 16816, 16912, 16913, 16914, 16915, 16966, 16978, 17009, 17018, 17019, 17028, 17047, 17048, 17049, 17168, 17247, 17272, 17283, 17361, 17362, 17363, 17371, 17375, 17403, 17430, 17431, 17432, 17456, 17486, 17487, 17488, 17489, 17491, 17528, 17567, 17568, 17570, 17571, 17602, 17696, 17777, 17859, 17861, 17862, 17870, 17924, 17926, 17983, 18011, 18071, 18086, 18097, 18102, 18212, 18213, 18214, 18219, 18220, 18221, 18269, 18270, 18305, 18317, 18376, 18411, 18547, 18643, 18674, 18679, 18759, 18831, 18849, 18857, 18859, 18868, 18972, 19078, 19148, 19174, 19257, 19259, 19299, 19306, 19307, 19312, 19452, 19468, 19469, 19471, 19511, 19533, 19542, 19546, 19547, 19548, 19549, 19550, 19551, 19552, 19553, 19554, 19555, 19556, 19557, 19558, 19559, 19560, 19561, 19574, 19575, 19590, 19592, 19593, 19614, 19707, 19777, 19819, 19827, 19904, 19905, 19906, 19907, 19912, 19933, 19934, 19935, 19985, 20002, 20018, 20019, 20044, 20061, 20093, 20135, 20137, 20150, 20166, 20167, 20307, 20390, 20444, 20489, 20511, 20566, 20575, 20578, 20670, 20679, 20680, 20681, 20685, 20686, 20687, 20697, 20699, 20700, 20701, 20702, 20717, 20732, 20968, 20992, 21018, 21022, 21034, 21052, 21055, 21132, 21206, 21235, 21236, 21237, 21239, 21251, 21253, 21257, 21260, 21261, 21266, 21268, 21269, 21270, 21328, 21333, 21356, 21360, 21362, 21486, 21503, 21577, 21589, 21727, 21765, 21776, 21830, 21866, 22045, 22059, 22080, 22190, 22191, 22195, 22239, 22270, 22270, 22270, 22282, 22321, 22332, 22380, 22420, 22496, 22498, 22499, 22592, 22593, 22594, 22596, 22667, 22667, 22700, 22704, 22755, 22759, 22774, 22781, 22815, 22818, 22965, 22970, 22972, 23002, 23014.
- Antibacterial,  $\alpha$ -hemolytic streptococcus** 17602.
- Antibacterial, 10 strains of methicillin-resistant *Staphylococcus aureus* (MRSA)** 847, 3453, 8140, 15042, 15043, 15044, 15056, 22667.
- Antibacterial, 11 kinds of pathogenic bacteria** 7924.
- Antibacterial, 12 strains of molds** 16555.
- Antibacterial, 13 strains of methicillin-resistant *Staphylococcus aureus* (MRSA)** 7312, 7314.
- Antibacterial, 15 strains of dysentery** 13606.
- Antibacterial, 18 strains of methicillin-resistant *Staphylococcus aureus* (MRSA)** 22593, 5279, 22594, 22592.
- Antibacterial, 30 hmn pathogenic bacteria, in which 8/30 effective** 16966.
- Antibacterial, 30 kinds of pathogenic bacteria** 20575.
- Antibacterial, 40 types of bacteria** 22499.
- Antibacterial, 40 types of bacteria and fungi** 21055.
- Antibacterial, 8 strains of methicillin-resistant *Staphylococcus aureus* (MRSA)** 847, 3453, 8140, 15042, 15043, 15044, 15056, 22667.
- Antibacterial, acid-fast bacteria** 7323, 9631, 14454.
- Antibacterial, aflatoxin B<sub>1</sub>** 17028.
- Antibacterial, *Alcaligenes aquamarinus*** 2624, 12616.
- Antibacterial, *Alteromonas* sp.** 11485, 12572.
- Antibacterial, antipyretic** 15337.
- Antibacterial, *Aspergillus niger*** 1244, 1250, 1252, 2844, 5550, 15298, 15370, 20390.
- Antibacterial, *Azomonas agilis*** 2624, 11485, 12572, 12616.
- Antibacterial, *Azotobacter beijerinckii*** 2624, 12572.
- Antibacterial, *Babesia gibsoni*** 14342, 14340, 14341, 14346.
- Antibacterial, *Bacillus anthracis*** 967, 9678, 18759.
- Antibacterial, *Bacillus brevis*** 10732.
- Antibacterial, *Bacillus cereus*** 143, 207, 218, 589, 755, 756, 2591, 2592, 2593, 3368, 6049, 6065, 7707, 7756, 7767, 9678, 9924, 10159, 10567, 11262, 11263, 11264, 14789, 17862, 21830, 22818.
- Antibacterial, *Bacillus cereus* ATCC11778 strain** 10484, 14592.
- Antibacterial, *Bacillus coagulans*** 143, 9924.
- Antibacterial, *Bacillus coli*** 51, 123, 515, 589, 663, 957, 1016, 1179, 1244, 1250, 1252, 2168, 2244, 2283, 2539, 2624, 2844, 3148, 3157, 3158, 3186, 3452, 3962, 4140, 4203, 4241, 4243, 4645, 4840, 5161, 5235, 5272, 5273, 5540, 5541, 5542, 5550, 5682, 5763, 6427, 6429, 6430, 6735, 6776, 6973, 7205, 7305, 7307, 7767, 7883, 8136, 8278, 8456, 8968, 9596, 9788, 10104, 10159, 10567, 10733, 10819, 11259, 11260, 11392, 11434, 11485, 11570, 11777, 11778, 11779, 12537, 12572, 12616, 12957, 12958, 13107, 13239, 13398, 13874, 13876, 14255, 14815, 15170, 15279, 15286, 15297, 15298, 15300, 15301, 15302, 15303, 15304, 15305, 15306, 15307, 15308, 15309, 15312, 15313, 15314, 15315, 15316, 15342, 15885, 16442, 16532, 16545, 16555, 17018, 17019, 17048, 17247, 17528, 18071, 18220, 18221, 18547, 19590, 19592, 19593, 19707, 19819, 20018, 20019, 20390, 20686, 20687, 20697, 20699, 20700, 20701, 20702, 21251, 21257, 21269, 21270, 22045, 22195, 22270, 22282, 22496, 22667.
- Antibacterial, *Bacillus coli* ATCC11775 strain** 10484, 14592.
- Antibacterial, *Bacillus coli* ATCC25922 strain** 3689, 4135.
- Antibacterial, *Bacillus coli* NIHJ JC-2 strain** 7792, 11811, 12321, 12322.
- Antibacterial, *Bacillus coli* O157:H7 ATCC43894 strain** 3689, 4135.
- Antibacterial, *Bacillus diphtheriae*** 515, 967, 1178, 1244, 1250, 1252, 2844, 3157, 3158, 3186, 4832, 4840, 5272, 5273, 5540, 5541, 5542, 5550, 6973, 9678, 9788, 10733, 13874, 13876, 15297, 15298, 15300, 15301, 15302, 15303, 15304, 15305, 15306, 15307, 15308, 15309, 15312, 15313, 15314, 15315, 15316, 18759, 20390, 22282, 22496.
- Antibacterial, *Bacillus dysenteriae*** 967, 6776, 7441, 7942, 8095, 8968, 13137, 14971, 15170, 15279, 15286, 16555, 17247, 18759, 19574, 19575, 19819, 20444, 21251, 21269, 21270.
- Antibacterial, *Bacillus fusiformis*** 8405.
- Antibacterial, *Bacillus globisporus*** 15910, 18097.
- Antibacterial, *Bacillus influenzae*** 3615, 6776.
- Antibacterial, *Lactobacillus* spp.** 16080.
- Antibacterial, *Bacillus lactis*** 515, 1244, 1250, 1252, 2844, 3157, 3158, 3186, 4840, 5272, 5273, 5540, 5541, 5542, 5550, 6973, 9788, 10733, 13874, 13876, 15297, 15298, 15300, 15301, 15302, 15303, 15304, 15305, 15306, 15307, 15308, 15309, 15312, 15313, 15314, 15315, 15316, 20390, 22496.

- Antibacterial, *Bacillus megaterium* 12501, 15519.
- Antibacterial, *Bacillus mycoides* 14829, 15039, 21251.
- Antibacterial, *Bacillus paratyphosus* 967, 6776, 6921, 18759.
- Antibacterial, *Bacillus paratyphosus* A 8095.
- Antibacterial, *Bacillus pertussis* 22282.
- Antibacterial, *Bacillus pumilus* 14789.
- Antibacterial, *Bacillus pyocyaneus* 3148, 4645, 5682, 5763, 6776, 8095, 8334, 10351, 10819, 11736, 13137, 15910, 17247, 17528, 17696, 19148, 19819, 20444, 21251, 21269, 21270, 22045.
- Antibacterial, *Bacillus pyocyaneus* ATCC27853 strain 3689, 4135, 20686, 20687.
- Antibacterial, *Bacillus septicus* 21251, 21269, 21270.
- Antibacterial, *Bacillus sonne* 16770.
- Antibacterial, *Bacillus* sp. 18868, 22059.
- Antibacterial, *Bacillus sphaericus* 99, 6263, 10748, 11258, 16275, 16741, 16742, 16743, 16744, 16745, 18212, 18213.
- Antibacterial, *Bacillus subtilis* 50, 51, 53, 99, 123, 143, 207, 218, 515, 901, 957, 967, 1244, 1250, 1252, 1645, 1648, 2168, 2244, 2283, 2539, 2584, 2844, 3004, 3157, 3186, 3463, 3472, 3474, 4048, 4243, 4243, 4422, 4604, 4840, 4923, 5214, 5235, 5272, 5273, 5522, 5540, 5541, 5542, 5550, 5747, 5959, 6238, 6263, 6303, 6361, 6427, 6429, 6430, 6776, 6973, 7178, 7205, 7305, 7306, 7307, 7707, 7756, 7764, 7767, 7883, 8136, 8278, 8456, 8672, 8833, 9288, 9321, 9322, 9788, 9924, 10104, 10732, 10733, 10748, 11056, 11258, 11269, 11321, 11392, 11434, 11751, 11777, 11778, 11779, 12334, 12380, 12389, 12766, 12767, 12771, 13107, 13109, 13137, 13195, 13196, 13398, 13637, 13874, 13876, 14170, 14680, 14789, 14829, 15039, 15297, 15298, 15300, 15301, 15302, 15303, 15304, 15305, 15306, 15307, 15308, 15309, 15312, 15313, 15314, 15315, 15316, 15342, 15489, 15506, 15561, 15939, 16275, 16359, 16429, 16532, 16545, 16741, 16742, 16743, 16744, 16745, 16747, 16748, 16749, 16799, 16802, 17018, 17019, 17048, 17371, 17403, 17430, 17431, 17432, 17486, 17487, 17488, 17489, 17491, 18071, 18212, 18213, 18214, 18759, 19257, 19259, 19574, 19575, 19707, 20093, 20390, 20697, 20699, 20700, 20701, 20702, 20968, 21022, 21034, 22059, 22195, 22239, 22270, 22282, 22496, 22667.
- Antibacterial, *Bacillus subtilis* 6633 strain 3158.
- Antibacterial, *Bacillus subtilis* ATCC1633 strain 13607.
- Antibacterial, *Bacillus subtilis* H17 strain 15858, 15859, 15860.
- Antibacterial, *Bacillus subtilis* IFO3134 strain 7792, 11811, 12321, 12322.
- Antibacterial, *Bacillus subtilis* M45 strain 15858, 15859, 15860.
- Antibacterial, *Bacillus termo* 515, 1244, 1250, 1252, 2844, 3157, 3158, 3186, 4840, 5272, 5273, 5540, 5541, 5542, 5550, 5763, 6973, 7521, 9788, 10733, 13137, 13874, 13876, 15297, 15298, 15300, 15301, 15302, 15303, 15304, 15305, 15306, 15307, 15308, 15309, 15312, 15313, 15314, 15315, 15316, 16770, 20390, 20444, 21251, 21269, 21270, 22282, 22496.
- Antibacterial, *Bacillus termo* I 12537, 20578.
- Antibacterial, *Bacillus thuringiensis* 20992.
- Antibacterial, *Bacillus typhosus* 3452, 3767, 3768, 6921, 8095, 13137, 14971, 15170, 15279, 15286, 16770, 18270, 18759, 19819, 20444, 22815.
- Antibacterial, bacteria on skin surface 8081.
- Antibacterial, broad spectrum 4460, 11851, 11903, 16261, 22774.
- Antibacterial, broad spectrum and low toxicity 18270.
- Antibacterial, *Chromobacterium violaceum* 99, 6263, 6735, 10748, 11570, 12615, 16275, 16741, 16742, 16743, 16744, 16745, 18212, 18213.
- Antibacterial, *Citrobacter freundii* ATCC8090 strain 3689, 4135.
- Antibacterial, *Clostridium cellobioparum* 6735, 11570, 12615.
- Antibacterial, *Clostridium fallax* 6735.
- Antibacterial, *Clostridium novyi* 6735.
- Antibacterial, *Clostridium sordellii* 6735.
- Antibacterial, *Coccus catarrhal* 3615, 6776, 20444, 13137.
- Antibacterial, *Coccus* spp. 11747.
- Antibacterial, *Cochliobolus miyabeanus* 15370.
- Antibacterial, cooperates with berberine to inhibit *Staphylococcus aureus* 8841.
- Antibacterial, *Corynebacterium accolens* 3490, 4055, 6757, 6758, 8095, 13428, 13429.
- Antibacterial, *Corynebacterium acnes* 10, 10351.
- Antibacterial, *Corynebacterium betae* 5894, 6032.
- Antibacterial, *Corynebacterium fascians* 5894, 6032, 18219.
- Antibacterial, *Corynebacterium hoffmanii* 16799, 16800, 16802.
- Antibacterial, *Cryptococcus neoformans* 10565.
- Antibacterial, *Cryptococcus neoformans* ATCC90112 strain 10484, 14592.
- Antibacterial, cytochrome C reductase inhibitor 7015.
- Antibacterial, *Diplococcus catarrhal* 12843.
- Antibacterial, *Diplococcus pneumoniae* 3158, 3615, 5763, 9678, 12334, 12843, 13137, 14454, 14531, 15337, 15561, 17283, 17456, 17862, 20061, 22282.
- Antibacterial, *Enterobacter cloacae* 5613, 7278, 8081, 8959, 13651, 13652.
- Antibacterial, *Enterobacter cloacae* ATCC23350 strain 3689, 4135.
- Antibacterial, *Enterococci* sp. (VRE) 9393.
- Antibacterial, *Enterococcus faecalis* 5747, 7764.
- Antibacterial, *Enterococcus faecalis* 11268 strain 13811.
- Antibacterial, *Enterococcus faecalis* 1528(vanA) strain 2680, 2681, 2682.
- Antibacterial, *Enterococcus faecalis* 18292 strain 6018, 6020, 13469, 13811.
- Antibacterial, *Enterococcus faecalis* 19250 strain 6018, 6020, 13469, 13811.
- Antibacterial, *Enterococcus faecalis* ATCC21212 strain 7792, 11811, 12321, 12322.
- Antibacterial, *Enterococcus faecalis* ATCC29212 strain 10484, 14592.
- Antibacterial, *Enterococcus faecalis* ATCC33186 strain 3689, 4135.
- Antibacterial, *Enterococcus faecalis* JCM7783 strain (VSE) 847, 3453, 8140, 15042, 15043, 15044, 15056, 22667.
- Antibacterial, *Enterococcus faecalis* JU1782 (VRE, VanB) 847, 3453, 8140, 15042, 15043, 15044, 15056, 22667.
- Antibacterial, *Enterococcus faecalis* JU1856 (VRE, VanA) 847, 3453, 8140, 15042, 15043, 15044, 15056, 22667.

- Antibacterial, *Enterococcus faecium* 5** 13811.
- Antibacterial, *Enterococcus faecium* JCM5804 (VSE)** 847, 3453, 8140, 15042, 15043, 15044, 15056, 22667.
- Antibacterial, *Enterococcus faecium* JU1777 (VRE, VanB)** 847, 3453, 8140, 15042, 15043, 15044, 15056, 22667.
- Antibacterial, *Enterococcus faecium* JU1858 (VRE, VanA)** 847, 3453, 8140, 15042, 15043, 15044, 15056, 22667.
- Antibacterial, *Enterococcus gallinarum* CDC-42 strain** 3689, 4135.
- Antibacterial, *Enterococcus gallinarum* JU2786 (VRE, VanC)** 3453.
- Antibacterial, *Enterococcus gallinarum* JU2786 strain (VRE, VanC)** 847, 8140, 15042, 15043, 15044, 15056, 22667.
- Antibacterial, *Enterococcus* sp.** 18270, 22815.
- Antibacterial, *Enteromorpha cloacae*** 15170, 15184, 18305, 18411, 18679, 18857, 18859.
- Antibacterial, *Erwinia amylovora*** 2624, 11485, 12572, 12616.
- Antibacterial, *Erwinia carotovora*** 3490, 4055, 6757, 6758, 8095, 13428, 13429.
- Antibacterial, *Erwinia carotovora* var. *carotovora*** 18219.
- Antibacterial, *Escherichia coli*** 901, 1178, 4471, 5522, 5700, 5747, 5959, 6238, 7521, 7764, 13195, 13196, 13651, 13652, 14170, 18219, 20093, 21022, 21034.
- Antibacterial, *Escherichia coli* SG458 strain** 2680, 2681, 2682.
- Antibacterial, *Escherichia* sp.** 20578.
- Antibacterial, *Flavobacterium helmiphilum*** 6735, 11570, 12615.
- Antibacterial, *Fusobacterium nucleatum*** 2303, 3055, 3057, 3058, 6366, 9702, 11348, 14567, 19985, 21356.
- Antibacterial, gram-negative bacteria** 675, 2294, 3745, 4837, 7323, 9631, 10751, 10883, 14083, 14454, 14728, 16183, 17009, 17489, 17570, 17571, 17870, 22270.
- Antibacterial, gram-positive bacteria** 675, 2294, 3588, 3633, 3745, 4837, 5789, 7221, 7323, 9570, 9869, 10751, 10883, 11092, 11455, 13109, 14083, 14454, 14728, 15039, 15652, 16183, 17009, 17489, 17570, 17571, 17870, 19468, 22239, 22270, 22321, 22596, 22704, 23014.
- Antibacterial, gram-positive bacteria (inactive for gram-negative bacteria)** 7015.
- Antibacterial, *Helicobacter pylori* NCTC11637 strain** 13643, 16079, 21765.
- Antibacterial, *Helicobacter pylori* NCTC11916 strain** 13643, 16079, 21765.
- Antibacterial, *Helicobacter pylori* OCO1 strain** 13643, 16079, 21765.
- Antibacterial, hemolytic streptococcus** 3452, 8967, 10736, 20686, 20687, 22282.
- Antibacterial, hemolytic  $\beta$ -Streptococcus** 3158, 11259, 11260, 15337, 15561.
- Antibacterial, *Hemophilus influenzae*** 5763.
- Antibacterial, hmn *Mycobacterium tuberculosis*** 22282.
- Antibacterial, hmn *Mycobacterium tuberculosis* H37Rv strain** 4292, 5722, 6605, 10736.
- Antibacterial, enhances antibacterial action of phage by over 100 times** 22774.
- Antibacterial, inhibits colony formation of *X. campestris* pv. *oryzae*** 7121, 7154, 7174, 7181, 7185.
- Antibacterial, *Klebsiella aerogenes*** 99, 6263, 10748, 16275, 16741, 16742, 16743, 16744, 16745, 18212, 18213.
- Antibacterial, *Klebsiella pneumoniae*** 3962, 7521, 8548, 13651, 13652, 14454, 14815, 15885, 16799, 16800, 17528, 19593, 20018, 20019, 21251, 21253, 21257, 21269, 21270.
- Antibacterial, *Klebsiella pneumoniae*** 515, 1244, 1250, 1252, 2844, 3157, 3158, 3186, 4840, 5272, 5273, 5540, 5541, 5542, 5550, 6973, 9788, 10733, 13874, 13876, 15297, 15298, 15300, 15301, 15302, 15303, 15304, 15305, 15306, 15307, 15308, 15309, 15312, 15313, 15314, 15315, 15316, 20390, 22496.
- Antibacterial, *Klebsiella pneumoniae* ATCC13883 strain** 3689, 4135.
- Antibacterial, *Klebsiella pneumoniae* NCTC9633 strain** 10484, 14592.
- Antibacterial, lactic acid bacteria** 19819.
- Antibacterial, *Listeria monocytogenes*** 5747, 7764.
- Antibacterial, main effective component of *Euphorbia humifusa* (DI JIN CAO)** 22195.
- Antibacterial, *Micrococcus epidermidis*** 2081, 4362, 4363.
- Antibacterial, *Micrococcus kristinae*** 14789.
- Antibacterial, *Micrococcus luteus*** 143, 2081, 3368, 3472, 3473, 3962, 9924, 14815, 15506, 17430, 17431, 17432, 17862, 18269, 19592, 19593, 19614, 21830.
- Antibacterial, *Micrococcus luteus* ATCC10240 strain** 2680, 2681, 2682.
- Antibacterial, *Micrococcus lysodeikticus*** 53, 4243.
- Antibacterial, *Micrococcus lysodicklycus*** 16799, 16800.
- Antibacterial, *Micrococcus* sp.** 22818.
- Antibacterial, *Microsporium* sp.** 2081.
- Antibacterial, microzyme** 12771, 22270.
- Antibacterial, *Mucor mucedo*** 50.
- Antibacterial, mutational *Streptococcus*** 8833.
- Antibacterial, *Mycobacterium intracellulare*** 19174.
- Antibacterial, *Mycobacterium leprae*** 1293, 3485, 8955, 9697.
- Antibacterial, *Mycobacterium smegmatis*** 1645, 1648, 3463, 4923, 5100, 5572, 6752, 8493, 8548, 9441, 9597, 11321, 11751, 12380, 12389, 15881, 15885, 16439, 16816, 17049, 18102, 18831, 19174, 21235, 21237, 21251, 21257, 21260, 21261, 21266, 21268, 21269, 21270.
- Antibacterial, *Mycobacterium smegmatis* ATCC607 strain** 8490, 8499, 9557, 9558, 10149.
- Antibacterial, *Mycobacterium* sp.** 1769, 14028, 14029, 14603, 16488, 17924, 17926, 21239, 21253.
- Antibacterial, *Mycobacterium tuberculosis*** 24, 1178, 1179, 1277, 1643, 1644, 2244, 2300, 2331, 2334, 2334, 2619, 2619, 3412, 3708, 3791, 3799, 3940, 3941, 4048, 4837, 5064, 5134, 5926, 6298, 6518, 6629, 6801, 6901, 7413, 7512, 7768, 7897, 7897, 7907, 8219, 8221, 8306, 8403, 9678, 9854, 10126, 10208, 10383, 10652, 10747, 10820, 11607, 11736, 12163, 12228, 12453, 12454, 12489, 13109, 13264, 13481, 13485, 13486, 13487, 13488, 13492, 13493, 13494, 13495, 13979, 14216, 14217, 14217, 14758, 14840, 14842, 15027, 15715, 15737, 15800, 15881, 15939, 16050, 16439, 16912, 16913, 16914, 16915, 17375, 17568, 17861, 18011, 18086, 19312, 19533, 19777, 19827, 20061, 20511, 20679, 20680, 20681, 20717, 21206, 21236, 21503, 21589, 21776, 21866, 22080, 22270, 22282, 22774.
- Antibacterial, *Mycobacterium tuberculosis* 607 strain** 17570.
- Antibacterial, *Mycobacterium tuberculosis* avium isoniazid-resistant strain** 15939.



- Antibacterial, *Mycobacterium tuberculosis* H37Rv strain** 4632, 4633, 4634, 6302, 8085, 13638.
- Antibacterial, *Mycobacterium vaccae* IMET10670 strain** 2680, 2681, 2682.
- Antibacterial, *Mycobacterium xenopi*** 19174.
- Antibacterial, *Neisseria* sp.** 8095.
- Antibacterial, no explanation of bacterial species** 126, 370, 585, 595, 597, 598, 664, 754, 762, 783, 822, 834, 920, 1080, 1159, 1348, 1476, 1745, 1842, 1845, 1897, 1904, 1990, 2013, 2034, 2106, 2284, 2304, 2309, 2376, 2594, 2678, 2887, 3094, 3231, 3294, 3308, 3498, 3498, 3502, 3598, 3695, 4005, 4029, 4348, 4349, 4398, 4536, 4976, 5152, 5445, 5524, 5694, 5858, 6040, 6261, 6853, 7063, 7385, 7399, 7416, 7481, 7703, 7768, 7802, 7809, 7926, 7944, 7996, 8272, 8275, 8307, 8591, 8760, 8982, 9456, 9720, 9740, 9877, 11149, 11327, 11386, 11423, 11526, 11866, 11943, 12020, 12438, 12849, 14086, 14121, 14705, 14850, 15221, 15335, 15412, 15436, 15633, 15849, 15888, 16268, 16269, 16675, 16711, 16978, 17047, 17168, 17567, 17859, 17983, 18317, 18376, 18643, 18849, 19078, 19306, 19307, 19469, 19471, 19511, 19542, 19904, 19905, 19906, 19907, 19912, 19933, 19934, 19935, 20044, 20135, 20166, 20167, 20307, 20566, 20670, 20685, 21018, 21328, 21333, 21360, 21486, 21577, 22332, 22420, 22700, 22755, 22781, 22965, 22970, 22972, 23002.
- Antibacterial, original hyphomycete of blood red trichophyta** 3122.
- Antibacterial, pathogenic bacteria** 12420, 22498.
- Antibacterial, pathogenic bacteria in mouth** 13315.
- Antibacterial, *Penicillium aureus*** 675.
- Antibacterial, photo-activated antibacterial** 7830, 9226, 12254, 20002.
- Antibacterial, plant pathogenic bacteria** 5894, 6032, 7924, 16666, 18219.
- Antibacterial, *Proteus mirabilis*** 6735, 11570, 12615.
- Antibacterial, *Proteus mirabilis* IFO3849 strain** 7792, 11811, 12321, 12322.
- Antibacterial, *Proteus vulgare*** 21052.
- Antibacterial, *Proteus vulgaris*** 8456, 10104, 13398, 16442, 17489, 20018, 20019.
- Antibacterial, *Pseudomonas aeruginosa*** 207, 218, 2244, 2283, 3472, 4203, 6065, 7756, 7767, 10565, 10567, 11777, 11778, 11779, 16600.
- Antibacterial, *Pseudomonas aeruginosa* (*Bacillus pyocyaneus*)** 99, 6263, 7707, 10748, 11258, 13651, 13652, 16275, 16799, 18212, 18213.
- Antibacterial, *Pseudomonas cepacia*** 18219.
- Antibacterial, *Pseudomonas fluorescens*** 99.
- Antibacterial, *Pseudomonas maltophilia*** 5613, 7278, 8081, 8959, 10887, 11642, 15170, 15184, 18219, 18305, 18411, 18679, 18857, 18859, 20578.
- Antibacterial, *Pseudomonas* sp.** 17489.
- Antibacterial, *Pseudomonas syringae*** 6361.
- Antibacterial, *Pyricularia oryzae*** 15370, 17489, 19257, 19259.
- Antibacterial, *Ristella melaninigenica*** 21356.
- Antibacterial, *S. thermophilus*** 10351.
- Antibacterial, *Saccharomyces cerevisiae*** 15869, 15870.
- Antibacterial, *Salmonella aertrycke*** 3026, 7178, 13041, 17272, 20018, 20019, 21251, 21269, 21270.
- Antibacterial, *Salmonella aertrycke* ATCC14028 strain** 3689, 4135.
- Antibacterial, *Salmonella aertrycke* IFO13245 strain** 7792, 11811, 12321, 12322.
- Antibacterial, *Salmonella enteritidis*** 5747, 7764.
- Antibacterial, *Salmonella gallinarum*** 15885, 21251.
- Antibacterial, *Salmonella paratyphi* A** 16799, 16800.
- Antibacterial, *Salmonella setubal*** 3962, 14815.
- Antibacterial, *Salmonella* sp.** 515, 1244, 1250, 1252, 2844, 3157, 3158, 3186, 4840, 5272, 5273, 5540, 5541, 5542, 5550, 6973, 9788, 10733, 13874, 13876, 14829, 15297, 15298, 15300, 15301, 15302, 15303, 15304, 15305, 15306, 15307, 15308, 15309, 15312, 15313, 15314, 15315, 15316, 20390, 20578, 22496.
- Antibacterial, *Salmonella typhi*** 16799, 16800.
- Antibacterial, *Sarcina citrea*** 21022, 21034.
- Antibacterial, *Sarcina lutea*** 6303, 12537, 20968.
- Antibacterial, *Sarcina lutea* NIHJ strain** 5214.
- Antibacterial, *Sarcina* sp.** 8095, 15489.
- Antibacterial, *Sclerotinia libertiana*** 50.
- Antibacterial, *Serratia marcescens*** 8968.
- Antibacterial, *Shigella flexneri*** 6735.
- Antibacterial, *Shigella flexneri*** 4645, 6735.
- Antibacterial, *Shigella shigae*** 1179, 7521.
- Antibacterial, *Shigella sonnei*** 5747, 7764.
- Antibacterial, *Shigella* sp.** 16770, 20578.
- Antibacterial, six *Bacillus*** 11747.
- Antibacterial, *Sporothrix* sp.** 16555.
- Antibacterial, *Staphylococcus albus*** 5763.
- Antibacterial, *Staphylococcus aureus*** 10, 50, 51, 53, 99, 143, 207, 218, 515, 663, 755, 756, 899, 909, 1016, 1179, 1244, 1250, 1252, 1645, 1648, 2081, 2081, 2081, 2168, 2244, 2283, 2380, 2509, 2539, 2590, 2844, 2945, 2990, 2991, 2998, 3004, 3026, 3096, 3153, 3157, 3186, 3243, 3452, 3463, 3472, 3490, 3511, 3767, 3768, 3962, 4055, 4203, 4241, 4243, 4243, 4292, 4362, 4363, 4471, 4604, 4645, 4840, 4923, 5161, 5235, 5272, 5273, 5540, 5541, 5542, 5550, 5682, 5700, 5722, 5747, 5763, 5959, 6065, 6238, 6263, 6302, 6427, 6429, 6430, 6752, 6757, 6758, 6776, 6921, 6973, 7205, 7305, 7306, 7307, 7413, 7521, 7707, 7736, 7756, 7764, 7767, 7829, 7883, 7927, 8095, 8095, 8136, 8278, 8314, 8333, 8456, 8548, 8672, 8708, 8709, 8833, 8967, 9288, 9441, 9547, 9678, 9788, 9924, 10104, 10351, 10565, 10567, 10664, 10665, 10733, 10736, 10748, 10819, 10826, 11056, 11071, 11078, 11079, 11258, 11259, 11260, 11321, 11392, 11434, 11736, 11751, 11777, 11778, 11779, 11849, 12228, 12335, 12380, 12389, 12537, 12573, 12764, 12766, 12767, 12771, 12843, 12957, 12958, 13107, 13109, 13137, 13195, 13196, 13398, 13428, 13429, 13637, 13651, 13652, 13874, 13876, 14170, 14255, 14256, 14531, 14680, 14789, 14815, 14971, 15039, 15170, 15279, 15286, 15297, 15298, 15300, 15301, 15302, 15303, 15304, 15305, 15306, 15307, 15308, 15309, 15312, 15313, 15314, 15315, 15316, 15342, 15728, 15869, 15870, 15872, 15881, 15885, 15910, 16119, 16183, 16264, 16275, 16429, 16439, 16442, 16532, 16545, 16555, 16597, 16598, 16600, 16741, 16742, 16743, 16744, 16745, 16747, 16748, 16749, 16770, 16799, 16800, 16802, 17018, 17019, 17048, 17049, 17247, 17272, 17283, 17361, 17362, 17363, 17371, 17456, 17486, 17487, 17488, 17489, 17491, 17602, 17696, 17777, 17862, 18071, 18097, 18102, 18212,

- 18213, 18219, 18269, 18270, 18547, 18759, 18868, 18972, 19174, 19257, 19259, 19574, 19575, 19593, 19614, 19819, 20018, 20019, 20093, 20137, 20390, 20444, 20687, 20697, 20699, 20700, 20701, 20702, 20968, 21052, 21239, 21257, 21266, 21269, 21270, 21362, 22190, 22191, 22239, 22270, 22380, 22496, 22667, 22759, 22815, 22818.
- Antibacterial, *Staphylococcus aureus* 17380 strain** 6018, 6020, 13469, 13811.
- Antibacterial, *Staphylococcus aureus* 17547 strain** 6018, 6020, 13469.
- Antibacterial, *Staphylococcus aureus* 17592 strain** 6018, 6020, 13469, 13811.
- Antibacterial, *Staphylococcus aureus* 17728 strain** 6018, 6020, 13469, 13811.
- Antibacterial, *Staphylococcus aureus* 18110 strain** 6018, 6020, 13469, 13811.
- Antibacterial, *Staphylococcus aureus* 18268 strain** 6018, 6020, 13469.
- Antibacterial, *Staphylococcus aureus* 209P strain** 3158, 5214, 6303, 13607, 18011.
- Antibacterial, *Staphylococcus aureus* 3012 strain** 6018, 6020, 13469.
- Antibacterial, *Staphylococcus aureus* 414 strain** 6018, 6020, 13469.
- Antibacterial, *Staphylococcus aureus* ATCC13709 strain** 8490, 8493, 8499, 9557, 9558, 10149, 13941.
- Antibacterial, *Staphylococcus aureus* ATCC25923 penicillin-sensitive strain** 18674, 22759.
- Antibacterial, *Staphylococcus aureus* ATCC25923 strain** 2685, 3029, 3475, 3689, 4135, 4200, 4202, 5229, 6626, 7825, 8218, 8219, 8221, 11324, 11683, 12018, 12060, 13088, 13088, 13281, 13492, 14969, 16747, 16748, 16749, 16754, 19299, 19452, 19546, 19547, 19548, 19549, 19550, 19551, 19552, 19553, 19554, 19555, 19556, 19557, 19558, 19559, 19560, 19561, 20150, 20686, 20687.
- Antibacterial, *Staphylococcus aureus* ATCC6538 strain** 10484, 14592.
- Antibacterial, *Staphylococcus aureus* drug-resistant strain** 4292, 8968, 10736, 12335, 20687.
- Antibacterial, *Staphylococcus aureus* EMRSA-15 strain** 16747, 16748, 16749, 16754.
- Antibacterial, *Staphylococcus aureus* H114 strain** 2081.
- Antibacterial, *Staphylococcus aureus* methicillin-resistant ATCC33591 strain** 5332, 5333.
- Antibacterial, *Staphylococcus aureus* methicillin-resistant JCM2874 strain** 847, 3453, 8140, 15042, 15043, 15044, 15056, 22667.
- Antibacterial, *Staphylococcus aureus* methicillin-resistant SK1 strain** 2685, 3029, 3475, 4200, 4202, 5229, 6626, 7825, 8218, 8219, 8221, 11324, 11683, 12018, 12060, 13088, 13088, 13281, 13492, 14969, 18674, 19299, 19452, 19546, 19547, 19548, 19549, 19550, 19551, 19552, 19553, 19554, 19555, 19556, 19557, 19558, 19559, 19560, 19561, 20150, 22759.
- Antibacterial, *Staphylococcus aureus* methicillin-resistant strain** 1135, 5276, 7354, 7355, 7356, 7357, 7358, 7792, 8218, 9393, 11811, 12321, 12322, 12597, 12766, 14967, 14970, 15587, 21132.
- Antibacterial, *Staphylococcus aureus* methicillin-sensitive strain** 7792, 11811, 12321, 12322.
- Antibacterial, *Staphylococcus aureus* multidrug-resistant ATCC25923 strain** 21727.
- Antibacterial, *Staphylococcus aureus* multidrug-resistant RN4220 strain** 2985, 5551.
- Antibacterial, *Staphylococcus aureus* multidrug-resistant SA-1199-B strain** 2985, 5551.
- Antibacterial, *Staphylococcus aureus* multidrug-resistant XU212 strain** 2985, 5551.
- Antibacterial, *Staphylococcus aureus* RN4220 strain** 15939, 21727.
- Antibacterial, *Staphylococcus aureus* SA-1199B strain** 16747, 16748, 16749, 16754, 21727.
- Antibacterial, *Staphylococcus aureus* sensitive strain** 8968.
- Antibacterial, *Staphylococcus aureus* SG511 strain** 2680, 2681, 2682.
- Antibacterial, *Staphylococcus aureus* TPR27 strain** 5214, 6303.
- Antibacterial, *Staphylococcus aureus* XU-212 strain** 16747, 16748, 16749, 16754.
- Antibacterial, *Staphylococcus aureus* XU212(TetKmecA) strain** 21727.
- Antibacterial, *Staphylococcus epidermidis*** 589, 909, 2584, 2591, 2592, 2593, 3368, 3962, 6302, 8081, 10159, 10351, 11262, 11263, 11264, 13651, 13652, 14815, 17272, 17862, 19592, 19593, 21830.
- Antibacterial, *Staphylococcus epidermidis* 2515 strain** 6018, 6020, 13469.
- Antibacterial, *Staphylococcus epidermidis* 3112 strain** 6018, 6020, 13469, 13811.
- Antibacterial, *Staphylococcus epidermidis* ATCC12228 strain** 3689, 4135.
- Antibacterial, *Staphylococcus epidermidis* ATCC2223 strain** 14592, 10484.
- Antibacterial, *Staphylococcus epidermidis* IFO3762 strain** 11811, 12322, 12321, 7792.
- Antibacterial, *Staphylococcus epidermidis* TPR25 strain** 5214, 6303.
- Antibacterial, *Staphylococcus hemolyticus flavus*** 6921.
- Antibacterial, *Staphylococcus saprophyticus* 3010 strain** 6018, 6020, 13469.
- Antibacterial, *Staphylococcus simulans* 214 strain** 6018, 6020, 13469, 13811.
- Antibacterial, *Staphylococcus* sp.** 930, 967, 1178, 3052, 14829, 20489, 20578, 21251, 22080.
- Antibacterial, *Staphylococcus* spp.** 20732, 22270.
- Antibacterial, *Staphylococcus tetragenus*** 3511, 5161.
- Antibacterial, *Streptobacillus* sp.** 515, 3157, 3158, 3186, 4840, 5272, 5273, 5540, 5541, 5542, 6973, 9788, 10733, 13874, 13876, 15297, 15300, 15301, 15302, 15303, 15304, 15305, 15306, 15307, 15308, 15309, 15312, 15313, 15314, 15315, 15316, 22496.
- Antibacterial, *Streptococcus durans* 23** 13811.
- Antibacterial, *Streptococcus faecalis*** 3472, 3474, 7829, 12380, 12389, 15039, 15910, 16532, 16800, 16802, 20018, 20019, 21251, 21269, 21270.
- Antibacterial, *Streptococcus mutans*** 2303, 2509, 11348, 3057, 14567, 3055, 3058, 6366, 9702, 19985.
- Antibacterial, *Streptococcus mutans* ATCC25175 strain** 3689, 4135.
- Antibacterial, *Streptococcus pneumoniae*** 7413, 12228.
- Antibacterial, *Streptococcus pneumoniae*** 11259, 11260.
- Antibacterial, *Streptococcus pyogenes*** 16799, 16800, 17862.
- Antibacterial, *Streptococcus pyogenes* ATCC19615 strain** 3689, 4135.

- Antibacterial, *Streptococcus* sp.** 515, 967, 1178, 1244, 1250, 1252, 2844, 3052, 3157, 3158, 3186, 3511, 4840, 5161, 5272, 5273, 5540, 5541, 5542, 5550, 6973, 9596, 9788, 10733, 12771, 13388, 13874, 13876, 14154, 15297, 15298, 15300, 15301, 15302, 15303, 15304, 15305, 15306, 15307, 15308, 15309, 15312, 15313, 15314, 15315, 15316, 18759, 20390, 22496.
- Antibacterial, *Streptococcus* var.** 10, 6178, 17696.
- Antibacterial, *Streptococcus varians*** 17862.
- Antibacterial, *Streptococcus viridans*** 11259, 11260, 16799, 16800.
- Antibacterial, *Streptomyces scabies*** 207, 218, 7707, 7756, 7767.
- Antibacterial, *Trichophyton* sp.** 2081.
- Antibacterial, used in treatment of skin diseases** 3122.
- Antibacterial, *Vibrio cholerae*** 5161, 6735.
- Antibacterial, *Vibrio parahaemolyticus*** 6735, 11570, 12615.
- Antibacterial, *Vibrio vulnificus*** 6735.
- Antibacterial, *Vibrio vulnificus* ATCC29307 strain** 3689, 4135.
- Antibacterial, vinegar organism** 19819.
- Antibacterial,  $\alpha$ -*Streptococcus*** 3615, 5763, 6776, 8095, 12843, 17456.
- Antibacterial,  $\beta$ -*Streptococcus*** 16555, 17456, 17528.
- Antibiotic** 1179, 2063, 14968.
- Anti-caducity of plants** 22975.
- Anti-cancer-promoted activity** 7460.
- Anti-carcinogen, inhibits carcinogenic action of multiring aromatic hydrocarbons** 2298.
- Anti-carcinogenic** 2890, 18643.
- Anti-carcinogenic, inhibits TPA-stimulated  $^{32}$ P-incorporation into the phospholipids of HeLa cells** 5377, 6424, 6425, 16922.
- Anticaries** 9631.
- Anti-Chagas' disease** 184, 1141, 1145, 1147, 3258.
- Anticholinergic** 1287, 1288, 2001, 2725, 2734, 2797, 6439, 7636, 8273, 10872, 11809, 12825, 17546, 18842, 19388, 20488, 21372.
- Anticoagulant** 126, 5858, 6040, 7063, 11414, 12766, 19469, 19471.
- Anticomplement activity** 3602, 10665, 13592, 17869, 18400, 18401, 18402, 18403, 20422, 20428, 20429.
- Anti-complication of diabetes** 11505.
- Anticonvulsant** 2791, 3079, 3318, 3588, 4536, 4936, 9184, 9223, 9330, 11077, 15370, 16532, 17451, 18623, 19111, 19737, 19738, 20002, 20509, 22270, 22336, 22346.
- Antidepressant** 10883, 10886, 11524, 17093, 17955, 22060.
- Antidiabetic** 12443, 12444, 22270.
- Antidiabetic** 920, 1618.
- Antidiarrheal** 759, 2303, 3308, 4421, 4921, 14933.
- Anti-diuretic** 6618, 13057, 22921.
- Antidote** 1039, 1275, 1845, 3412, 7381, 8761, 8785, 9818, 17347, 20444, 22269, 22562.
- Antidote (alcohol and venom)** 3412.
- Antidote (cobra-poisoning)** 9818, 20444.
- Antidote (diphacin poisoning)** 22562.
- Antidote (from poisoning by sulfhydryl enzyme)** 8785.
- Antidote (poisoning from anticholinergic)** 7381.
- Antidote (poisoning from barbital)** 17347.
- Antidyskinetic** 9092.
- anti-early-pregnancy** 1191.
- Anti-electroshock** 7996, 9330.
- Antiemetic** 8081, 10186, 10215, 10450, 10630, 12015, 19997.
- Anti-endotoxin** 9217.
- Anti-epilepsy** 6708.
- Antiestrogenic** 7768, 22937.
- Anti-exudation** 21282.
- Antifeedant** 3087, 9013, 9456, 11843, 11844, 11845, 16652, 16653, 19652, 19653, 19654, 19656, 19657.
- Anti-fertility agent** 3909, 4190, 6767, 7243, 7945, 8967, 10814, 13575, 15527, 16793, 17337, 17568, 17592, 18033, 19187, 22011, 22815.
- Antifibrinolysis** 2366, 2367, 5484, 6700, 2183.
- Antifibrogenic** 2779.
- Antifibrotic** 7441.
- Antifungal inactive summary index** 504, 589, 618, 1343, 1470, 2296, 2590, 2833, 2945, 2990, 2991, 2998, 3048, 3791, 3799, 3856, 3962, 4422, 4550, 4712, 4816, 5134, 5547, 5747, 6263, 6758, 7756, 7764, 8107, 8576, 8578, 8580, 8623, 8708, 8709, 8985, 9223, 9225, 9486, 9597, 9857, 10159, 10565, 10629, 10748, 11001, 11071, 11078, 11079, 11086, 11230, 11258, 11269, 11601, 12048, 13259, 13571, 13860, 14109, 14498, 14516, 14698, 14699, 14915, 14957, 14958, 14959, 15118, 15152, 15518, 15737, 15881, 16247, 16248, 16439, 16555, 18359, 18784, 19077, 19193, 19589, 19590, 19591, 19592, 19593, 19594, 19595, 19983, 20018, 20019, 20990, 21239, 21266, 21835, 22616, 22777.
- Antifungal inactive, *Aspergillus flavus* KCCM11453** 3048, 4550, 20990.
- Antifungal inactive, *Aspergillus fumigatus*** 1470, 11230.
- Antifungal inactive, *Aspergillus niger*** 7756.
- Antifungal inactive, *Blastoschyzomyces capitatus* KCCM50270** 4550, 20990.
- Antifungal inactive, *Candida albicans*** 589, 618, 2296, 3791, 3799, 3962, 4422, 5134, 5547, 5747, 6758, 7764, 8623, 9486, 9597, 10159, 10565, 10629, 11269, 13259, 13860, 14698, 14699, 14915, 15118, 15737, 15881, 16439, 16555, 19589, 19590, 19591, 19592, 19593, 19594, 19595, 19983, 20018, 20019, 21239, 21266, 21835, 22616, 22777.
- Antifungal inactive, *Candida albicans* 19** 12048, 15152, 18359.
- Antifungal inactive, *Candida albicans* 32** 12048, 15152, 18359.
- Antifungal inactive, *Candida albicans* ATCC2091** 8107, 12048, 15152, 18359.
- Antifungal inactive, *Candida albicans* DSY1024** 14109, 14498.
- Antifungal inactive, *Candida albicans* KCCM11282** 3048, 4550, 20990.
- Antifungal inactive, *Candida glabrata*** 618, 8623, 9486, 14698, 14699, 19983, 21835.
- Antifungal inactive, *Candida krusei*** 5747, 7764, 20018, 20019.
- Antifungal inactive, *Candida tropicalis*** 618, 2590, 2945, 2990, 2991, 2998, 8623, 9486, 9857, 11071, 11078, 11079, 11086, 14698, 14699, 19983, 21835.
- Antifungal inactive, *Candida utilis* KCCM11356** 3048, 4550, 20990.
- Antifungal inactive, *Cladosporium cladosporioides*** 14516.
- Antifungal inactive, *Cladosporium cucumerinum*** 1343, 2833, 3856, 4816, 8985, 11001, 11601, 13571, 18784, 19077.

- Antifungal inactive, *Cladosporium herbarum*** 10629.
- Antifungal inactive, *Cladosporium sphaerospermum*** 8708, 8709, 14516.
- Antifungal inactive, *Cryptococcus neoformans* KCCM0564** 4550, 3048, 20990.
- Antifungal inactive, *Diaporthe nomurai*** 14958.
- Antifungal inactive, *Fusarium oxysporum*** 10629.
- Antifungal inactive, *Mucor miehei*** 8576, 8578, 8580.
- Antifungal inactive, *Nematospora coryli*** 8576, 8580.
- Antifungal inactive, no description on fungi species** 9223, 9225.
- Antifungal inactive, *Paecilomyces notatum*** 8576, 8580.
- Antifungal inactive, *Paecilomyces variotii*** 8576, 8580.
- Antifungal inactive, *Penicillium notatum*** 8578.
- Antifungal inactive, *Penicillium ochrocloron*** 504.
- Antifungal inactive, *Pyricularia oryzae*** 16247, 16248.
- Antifungal inactive, *Rhizopus oryzae*** 6263, 10748, 11258.
- Antifungal inactive, *Saccharomyces cerevisiae*** 3962, 19589, 19590, 19591, 19592, 19593, 19594, 19595.
- Antifungal inactive, *Sclerotinia* sp.** 14959.
- Antifungal inactive, *Stigmina mori*** 14957.
- Antifungal inactive, TLC** 2833, 3856, 8985, 10629, 11001, 11601, 13571, 18784, 19077.
- Antifungal inactive, *Trichoderma viride*** 504, 4712, 19193.
- Antifungal inactive, *Trichosporon mucoides* KCCM50570** 3048, 4550, 20990.
- Antifungal inactive, *Ustilago violacea*** 15518.
- Antifungal summary index** 51, 140, 206, 207, 218, 233, 234, 242, 318, 319, 357, 426, 432, 433, 434, 436, 504, 515, 660, 663, 675, 676, 834, 844, 909, 924, 1016, 1030, 1178, 1282, 1342, 1379, 1572, 1612, 1736, 1764, 1832, 1913, 1914, 2002, 2005, 2029, 2030, 2031, 2032, 2033, 2041, 2166, 2224, 2244, 2283, 2286, 2293, 2317, 2539, 2647, 2648, 2649, 2680, 2681, 2682, 2783, 2887, 2961, 2962, 2988, 3004, 3036, 3037, 3048, 3140, 3145, 3157, 3158, 3186, 3231, 3318, 3464, 3490, 3498, 3572, 3598, 3693, 3695, 3760, 3761, 3762, 3767, 3853, 3925, 3936, 3939, 3983, 4005, 4029, 4055, 4124, 4135, 4140, 4190, 4203, 4241, 4243, 4291, 4301, 4335, 4337, 4347, 4422, 4457, 4536, 4550, 4604, 4712, 4832, 4840, 4873, 4923, 5101, 5104, 5229, 5230, 5231, 5232, 5233, 5234, 5235, 5272, 5273, 5336, 5337, 5366, 5372, 5391, 5392, 5393, 5394, 5395, 5445, 5518, 5524, 5540, 5541, 5542, 5578, 5682, 5694, 5695, 5700, 5763, 5844, 5859, 5860, 5894, 5923, 5923, 6030, 6032, 6041, 6181, 6263, 6290, 6361, 6390, 6391, 6392, 6393, 6402, 6437, 6447, 6496, 6501, 6549, 6757, 6776, 6797, 6973, 7107, 7200, 7206, 7207, 7305, 7306, 7307, 7317, 7382, 7413, 7505, 7506, 7507, 7521, 7703, 7707, 7767, 7768, 7809, 7834, 7883, 7897, 7950, 7973, 8034, 8079, 8080, 8095, 8136, 8218, 8278, 8312, 8330, 8389, 8456, 8493, 8548, 8577, 8579, 8606, 8672, 8683, 8708, 8709, 8752, 8760, 8794, 8805, 8833, 8968, 9200, 9201, 9234, 9321, 9322, 9344, 9387, 9441, 9540, 9546, 9547, 9549, 9596, 9606, 9631, 9644, 9645, 9700, 9759, 9760, 9788, 10041, 10082, 10104, 10126, 10257, 10258, 10260, 10351, 10463, 10464, 10465, 10484, 10600, 10639, 10664, 10665, 10709, 10732, 10733, 10748, 10826, 10831, 10832, 10839, 10840, 10841, 11056, 11092, 11130, 11203, 11246, 11258, 11269, 11280, 11303, 11322, 11379, 11408, 11434, 11526, 11607, 11673, 11777, 11778, 11779, 11851, 11903, 11943, 11978, 12184, 12228, 12344, 12501, 12542, 12580, 12778, 12849, 12917, 13011, 13016, 13085, 13088, 13105, 13106, 13107, 13137, 13150, 13195, 13196, 13241, 13259, 13281, 13398, 13416, 13428, 13429, 13513, 13637, 13638, 13808, 13820, 13821, 13861, 13874, 13876, 13965, 13990, 13991, 14020, 14029, 14101, 14116, 14182, 14217, 14347, 14446, 14454, 14515, 14541, 14581, 14587, 14588, 14592, 14705, 14728, 14789, 14850, 14954, 14955, 14956, 14957, 14958, 14959, 14960, 15020, 15021, 15027, 15124, 15142, 15204, 15279, 15297, 15300, 15301, 15302, 15303, 15304, 15305, 15306, 15307, 15308, 15309, 15312, 15313, 15314, 15315, 15316, 15342, 15489, 15629, 15633, 15635, 15741, 15855, 15872, 15885, 15998, 16130, 16168, 16169, 16257, 16264, 16267, 16339, 16388, 16442, 16545, 16600, 16666, 16674, 16675, 16934, 17047, 17048, 17049, 17225, 17257, 17258, 17259, 17260, 17261, 17278, 17341, 17376, 17377, 17403, 17420, 17421, 17438, 17439, 17477, 17478, 17481, 17482, 17570, 17602, 17777, 17833, 17841, 17842, 17864, 17865, 17924, 17926, 17931, 18003, 18029, 18031, 18033, 18035, 18036, 18088, 18102, 18103, 18163, 18214, 18215, 18265, 18270, 18280, 18547, 18643, 18759, 18780, 18849, 19078, 19086, 19121, 19168, 19172, 19174, 19193, 19316, 19394, 19452, 19542, 19777, 19784, 19909, 19912, 19929, 20041, 20042, 20060, 20070, 20093, 20134, 20210, 20211, 20382, 20566, 20670, 20901, 20975, 20990, 21119, 21143, 21146, 21147, 21171, 21253, 21257, 21270, 21328, 21329, 21347, 21348, 21360, 21434, 21435, 21488, 21557, 21559, 21737, 21745, 21749, 21790, 21904, 21908, 22059, 22080, 22104, 22105, 22158, 22190, 22191, 22195, 22213, 22332, 22336, 22347, 22436, 22437, 22438, 22474, 22496, 22505, 22526, 22638, 22667, 22700, 22741, 22742, 22755, 22768, 22903, 22966, 23002, 23014.
- Antifungal, 17 kinds of fungi** 8095.
- Antifungal, *Acrothesium floccosum*** 17341.
- Antifungal, *Alternaria alternata*** 206, 357, 2002, 3853, 4291, 6030, 9387, 9759, 9760, 10082, 13416.
- Antifungal, *Alternaria citri*** 5694, 17420, 20382.
- Antifungal, ash fungi** 5763.
- Antifungal, *Aspergillus flavus*** 206, 357, 2002, 3853, 6030, 9759, 9760, 10082, 11903, 11978, 13416, 14789, 17478.
- Antifungal, *Aspergillus flavus*** 9200, 9201.
- Antifungal, *Aspergillus flavus* IHEM37.19** 2962, 5844, 6181, 10463, 10464, 10831, 10832, 13808, 21790.
- Antifungal, *Aspergillus flavus* KCCM11453** 3231, 21360.
- Antifungal, *Aspergillus fumigatus*** 1030, 2961, 2988, 4335, 4347, 11303, 11978, 14029, 17478, 21488, 22667.
- Antifungal, *Aspergillus fumigatus* CBS113.26** 2962, 5844, 6181, 10463, 10464, 10831, 10832, 13808, 21790.
- Antifungal, *Aspergillus nidulan*** 22667.
- Antifungal, *Aspergillus niger*** 206, 207, 218, 357, 504, 515, 2002, 3157, 3158, 3186, 3853, 4203, 4712, 4840, 5101, 5272, 5273, 5540, 5541, 5542, 6030, 6263, 6361, 6973, 7707, 7767, 8456, 8672, 8683, 9549, 9759, 9760, 9788, 10082, 10104, 10733, 10748, 11246, 11258, 11778, 13398, 13416, 13874, 13876, 14789, 15297, 15300, 15301, 15302, 15303, 15304, 15305, 15306, 15307, 15308, 15309, 15312, 15313, 15314, 15315, 15316, 16257, 16442, 17602, 19193, 19784, 20060, 21435, 22496.

- Antifungal, *Aspergillus niger* IHEM2951** 2962, 5844, 6181, 10463, 10464, 10831, 10832, 13808, 21790.
- Antifungal, *Aspergillus niger* KCCM11239** 3048, 3231, 4550, 20990, 21360.
- Antifungal, *Aspergillus ochraceus*** 206, 357, 504, 2002, 3853, 4712, 6030, 9759, 9760, 10082, 13416, 19193.
- Antifungal, *Aspergillus parasiticus*** 22768.
- Antifungal, *Aspergillus terreus* 5029.2000** 2962, 5844, 6181, 10463, 10464, 10831, 10832, 13808, 21790.
- Antifungal, *Aspergillus versicolor*** 206, 357, 2002, 3853, 6030, 9759, 9760, 10082, 13416.
- Antifungal, *Bipolaris leersiae*** 14954.
- Antifungal, *Blastomyces* sp.** 15872.
- Antifungal, *Blastomyces dermatitidis*** 17049.
- Antifungal, *Blastoschizomyces capitatus*** 11978, 17478.
- Antifungal, *Blastoschizomyces capitatus* KCCM50270** 3048, 3231, 21360.
- Antifungal, *Botrytis cinerea*** 1030, 5694, 5894, 6032, 10600, 11246, 17420, 20382, 22505.
- Antifungal, broad spectrum** 11851, 19121.
- Antifungal, *Candida albicans*** 242, 675, 909, 924, 1016, 2244, 2283, 2680, 2681, 2682, 3318, 3490, 3925, 4055, 4203, 4241, 4832, 4923, 5678, 5682, 5923, 6263, 6437, 6447, 6757, 7107, 7206, 7207, 7897, 8095, 8456, 8548, 8606, 8672, 8708, 8709, 9200, 9201, 9321, 9322, 9441, 9547, 9596, 10041, 10104, 10126, 10257, 10258, 10260, 10639, 10664, 10665, 10748, 10826, 11056, 11258, 11777, 11778, 11779, 11978, 12344, 13137, 13195, 13196, 13241, 13398, 13428, 13429, 14217, 14446, 15027, 15124, 15489, 15885, 16339, 16442, 16600, 17403, 17478, 17602, 17864, 17865, 18029, 18102, 18214, 18215, 19174, 20093, 20060, 21146, 21147, 21253, 21257, 21270, 21328, 21435, 21559, 22195.
- Antifungal, *Candida albicans* 19** 2286, 5518, 13965, 14101.
- Antifungal, *Candida albicans* 32** 2286, 5518, 13965, 14101.
- Antifungal, *Candida albicans* ATCC1023** 8493.
- Antifungal, *Candida albicans* ATCC10231** 6797, 10484, 14592.
- Antifungal, *Candida albicans* ATCC2091** 2286, 5518, 13965, 14101.
- Antifungal, *Candida albicans* ATCC663.90** 2962, 5844, 6181, 10463, 10464, 10831, 10832, 13808, 21790.
- Antifungal, *Candida albicans* KCCM11282** 3231, 21360.
- Antifungal, *Candida glabrata*** 1572, 4335, 4347, 6437, 6447, 8606, 9200, 9201, 21488.
- Antifungal, *Candida guilliermondii*** 8079, 8080.
- Antifungal, *Candida krusei*** 19174.
- Antifungal, *Candida mycoderma*** 51, 2539, 3004, 3004, 4243, 4604, 5235, 7305, 7306, 7307, 7883, 8136, 8278, 11434, 13107, 13637, 15342, 16545, 17048, 22667.
- Antifungal, *Candida niger* ATCC10335** 6797.
- Antifungal, *Candida* sp.** 3140, 8833.
- Antifungal, *Candida tropicalis*** 6437, 6447.
- Antifungal, *Cladosporium cladosporioides*** 2166, 5700, 6361, 19168.
- Antifungal, *Cladosporium cladosporioides*** 206, 357, 504, 2002, 2293, 3853, 4712, 5391, 5392, 5393, 5394, 5395, 5859, 5860, 6030, 6041, 6501, 8330, 9759, 9760, 10082, 13416, 13820, 13821, 14116, 14515, 14587, 14588, 14789, 15279, 19172, 19193, 21119, 21737, 21745, 21749.
- Antifungal, *Cladosporium cucumerinum*** 426, 432, 433, 434, 436, 2041, 4422, 5336, 5337, 5578, 7973, 9321, 9322, 10465, 10839, 10840, 10841, 11269, 11408, 12344, 14182, 14541, 14789, 15204, 17833, 17842, 18280, 19777, 22213, 22505.
- Antifungal, *Cladosporium cucumerinum*** 242, 5923, 10257, 10260, 10258.
- Antifungal, *Cladosporium fulvum*** 3572, 7200, 10709, 18780.
- Antifungal, *Cladosporium herbarum*** 5694, 17420, 20382.
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- Anti-HIV-1 inactive, H9 lymphocytes** 930, 1665, 1666, 1699, 1713, 1718, 1725, 1728, 2303, 3498, 4189, 5062, 7777, 7788, 17983, 19284, 21056.
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- Anti-HIV-1 inactive, HOG.R5 cells** 1473, 6910, 6911, 7504, 12929, 12932, 12933, 15966.
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- Anti-HIV-1, binds to chemokine receptor CCR5** 6008, 14004, 14027.
- Anti-HIV-1, CEM-SS cells infected by HIV-1** 17958.
- Anti-HIV-1, DDDP inhibitor** 12020, 18354, 4214, 4216, 18395, 12019, 20499, 18363, 18317, 12046, 20088, 16587, 16999, 17000, 17001, 18362, 12093, 21324, 21327, 4215.
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- Anti-HIV-1, HIV-1 reverse transcriptase highly selective inhibitor** 18662.
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- Anti-inflammatory inactive, inhibiting NF- $\kappa$ B assay** 16162, 16164, 16165.
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- Anti-inflammatory inactive, inhibition assay of histamine release, rat mast cells stimulated with compound 48/80** 8216, 8217.
- Anti-inflammatory inactive, inhibition assay of release of  $\beta$ -glucuronidase, rat mast cells stimulated with compound 48/80** 8216, 8217.
- Anti-inflammatory inactive, LPS-activated mouse peritoneal macrophages** 303, 371, 496, 14777, 19032.
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- Anti-inflammatory inactive, NO production inhibitor assay** 16162, 16164, 16165.
- Anti-inflammatory inactive, TNF- $\alpha$  production inhibitor assay, N9 microglial cells stimulated with LPS/IFN- $\gamma$**  117, 5750, 8507.
- Anti-inflammatory inactive, TNF- $\alpha$  production inhibitor assay, RAW264.7 cells stimulated with LPS** 117, 5750, 8507.
- Anti-inflammatory summary index (not including NO production inhibitor)** 27, 37, 56, 118, 119, 171, 173, 205, 222, 304, 309, 508, 538, 546, 547, 548, 580, 660, 663, 664, 668, 899, 966, 977, 978, 983, 1476, 1492, 1573, 1614, 1768, 1790, 1791, 1802, 1828, 1854, 1928, 1965, 1971, 2004, 2036, 2038, 2102, 2106, 2303, 2312, 2325, 2414, 2455, 2594, 2687, 2886, 2887, 2890, 2983, 2989, 2990, 3077, 3141, 3221, 3269, 3270, 3272, 3273, 3307, 3362, 3368, 3462, 3464, 3588, 3595, 3600, 3674, 3689, 3743, 3911, 3923, 3924, 3935, 3937, 3981, 4056, 4097, 4266, 4328, 4398, 4439, 4477, 4565, 4589, 4614, 4645, 4685, 4746, 4876, 4921, 4922, 4963, 5008, 5152, 5161, 5573, 5699, 5763, 5930, 5939, 6183, 6211, 6288, 6428, 6454, 6487, 6491, 6643, 6656, 6767, 6816, 6853, 6923, 6938, 7180, 7195, 7196, 7197, 7239, 7243, 7278, 7361, 7370, 7399, 7416, 7481, 7495, 7521, 7528, 7529, 7530, 7531, 7532, 7586, 7659, 7714, 7793, 7802, 7833, 7860, 7868, 7869, 7870, 7871, 7872, 7873, 7926, 7950, 7951, 8020, 8095, 8214, 8215, 8278, 8292, 8293, 8295, 8297, 8304, 8360, 8361, 8363, 8365, 8388, 8401, 8405, 8423, 8424, 8520, 8521, 8522, 8664, 8679, 8788, 8814, 8841, 8846, 8865, 8965, 9038, 9053, 9054, 9056, 9060, 9061, 9062, 9238, 9276, 9288, 9337, 9419, 9441, 9455, 9456, 9486, 9496, 9705, 10041, 10182, 10363, 10472, 10526, 10639, 10814, 10820, 10875, 10886, 10887, 10967, 11017, 11077, 11121, 11259, 11260, 11339, 11416, 11417, 11505, 11521, 11522, 11530, 11572, 11642, 11736, 11741, 11747, 11753, 11808, 12018, 12020, 12122, 12178, 12184, 12255, 12420, 12510, 12523, 12608, 12766, 12891, 12907, 12916, 12982, 12983, 12987, 13088, 13098, 13137, 13145, 13391, 13392, 13435, 13436, 13437, 13474, 13475, 13481, 13492, 13559, 13591, 13774, 13808, 13809, 13962, 14097, 14106, 14756, 14767, 14893, 14896, 14897, 14971, 14976, 14977, 14979, 15002, 15038, 15170, 15203, 15279, 15279, 15286, 15635, 15843, 15886, 15928, 16025, 16031, 16050, 16080, 16163, 16166, 16167, 16216, 16221, 16222, 16362, 16451, 16525, 16532, 16535, 16539, 16540, 16550, 16571, 16603, 16675, 16713, 16867, 16900, 16983, 17024, 17042, 17145, 17168, 17240, 17267, 17344, 17345, 17350, 17371, 17377,



- 17403, 17409, 17422, 17460, 17532, 17597, 17598, 17599, 17648, 17829, 17862, 17918, 17958, 18169, 18190, 18219, 18221, 18317, 18376, 18408, 18409, 18411, 18440, 18513, 18643, 18644, 18645, 18673, 18685, 18792, 18824, 18859, 19074, 19081, 19087, 19111, 19142, 19143, 19259, 19308, 19312, 19401, 19402, 19403, 19404, 19405, 19406, 19407, 19427, 19450, 19540, 19542, 19545, 19819, 19846, 19871, 19883, 19885, 19894, 19895, 19897, 19898, 19922, 19955, 19983, 20066, 20099, 20168, 20501, 20509, 20569, 20650, 20686, 20710, 20717, 20732, 20900, 20901, 20978, 20992, 21055, 21059, 21206, 21234, 21245, 21264, 21392, 21397, 21419, 21420, 21421, 21422, 21435, 21438, 21439, 21862, 21887, 21930, 21971, 22023, 22059, 22080, 22123, 22124, 22151, 22270, 22274, 22282, 22332, 22433, 22504, 22581, 22686, 22687, 22688, 22700, 22718, 22720, 22727, 22728, 22729, 22730, 22731, 22938, 22990.
- Anti-inflammatory, 12-LOX inhibitor in hmn platelets, without affecting the levels of cyclooxygenase** 2106, 16216, 22718.
- Anti-inflammatory, 15-LOX inhibitor** 1110, 1131, 2102, 2380, 4289, 13097, 13098, 13137, 19929.
- Anti-inflammatory, 5-LOX inhibitor** 444, 580, 2101, 2102, 2216, 3188, 3743, 6491, 7819, 7924, 7926, 8926, 8997, 9202, 9331, 11572, 12936, 15319, 15928, 16540, 16983, 17979, 18513, 19201, 19312, 19846, 19871, 22511, 22778.
- Anti-inflammatory, activity matches with aspirin** 12987.
- Anti-inflammatory, acute** 983, 16451.
- Anti-inflammatory, animal model** 3595, 9276, 17344, 17350, 18859, 21264.
- Anti-inflammatory, antiarthritic** 668, 3368, 7566, 8753.
- Anti-inflammatory, anti-edema** 118, 119, 2102, 2106, 6211, 10526, 11339, 14767, 14893, 15886, 18408, 19894, 21971.
- Anti-inflammatory, anti-inflammatory action in models of atherosclerosis, Alzheimer's disease, arthritis and pancreatitis; proposed mechanisms include macrophage activation inhibitor, lipoxygenase inhibitor, cyclooxygenase 2 inhibitor, and metabolite production via arachidonic acid pathways** 4398.
- Anti-inflammatory, antiproliferative, hmn mononuclear cells involving T lymphocytes, B lymphocytes, and macrophages isolated from peripheral blood** 8664.
- Anti-inflammatory, apoptosis, K562 cells, via inhibition of both LOX and COX** 18643.
- Anti-inflammatory, appears to be a highly specific antagonist for the CCR1 receptor** 19819.
- Anti-inflammatory, arthritis model, induced by carrageenan, suppresses recruitment of neutrophils** 12122.
- Anti-inflammatory, arthritis model, induced by formaldehyde or egg white** 8297.
- Anti-inflammatory, assay of dimethyl benzene-induced inflammation** 660, 7361, 11416, 11417.
- Anti-inflammatory, blocks macrophage inflammatory protein (MIP-1a) banding to hmn monocytes** 19819.
- Anti-inflammatory, blocks macrophage inflammatory protein (MIP-1a) binding to hmn embryonic kidney (HEK)/293 cells transfected with stable CC chemokine receptor-1 (CCR1)** 19819.
- Anti-inflammatory, blocks NO production and NOS activity and expression, rat macrophages and pancreatitis tissue** 4398.
- Anti-inflammatory, blocks regulated upon activation on normal T-cell expressed and secreted (RANTES) banding to hmn monocytes** 19819.
- Anti-inflammatory, blocks regulated upon activation on normal T-cell expressed and secreted (RANTES) binding to hmn embryonic kidney (HEK)/293 cells transfected with stable CC chemokine receptor-1 (CCR1)** 19819.
- Anti-inflammatory, blocks TNF- $\alpha$ -induced cell-cell adhesion between HUVECs and THP-1 cells** 18643.
- Anti-inflammatory, blocks VCAM-1 expression induced by IL-4 in endothelial cells** 16675.
- Anti-inflammatory, calcium-stimulated, mouse peritoneal macrophages and hmn platelets** 3981.
- Anti-inflammatory, caused by formalin** 5930.
- Anti-inflammatory, causes a pronounced reduction in the *c-fos* and TGF- $\beta$ 1 expression in mouse skin stimulated by phorbol myristate acetate (PMA)** 18643.
- Anti-inflammatory, chemiluminescence assay** 21419, 21420, 21421, 21422.
- Anti-inflammatory, CINC-1 formation inhibitor, stimulated with LPS, LPSNRK-52E rat kidney epithelial cells** 18673.
- Anti-inflammatory, COX inhibitor** 16540, 16983, 18376, 19312, 19846, 19895, 19897, 19898.
- Anti-inflammatory, COX-1 inhibitor** 2890, 4056, 7180, 7860, 7868, 7869, 7870, 7871, 7872, 7873, 8814, 9486, 10041, 11753, 12178, 12891, 14106, 15203, 16550, 17371, 18317, 18513, 18643, 18644, 18645, 22504.
- Anti-inflammatory, COX-2 inhibitor** 1476, 2036, 2038, 2887, 2890, 3600, 4056, 6277, 6282, 7180, 7860, 7868, 7869, 7870, 7871, 7872, 7873, 8020, 8814, 9486, 10041, 10438, 10639, 12122, 12891, 13137, 13137, 13137, 14106, 14971, 14971, 14971, 15203, 15279, 16550, 17168, 17532, 18317, 18643, 18643, 18643, 18644, 18645, 19087, 21924, 22270, 22504, 22718.
- Anti-inflammatory, COX-2 inhibitor inactive** 330, 509, 510, 511, 6278, 6279, 6280, 11129, 13108, 15134, 19795, 19796.
- Anti-inflammatory, COX-2 inhibitor, inhibits expression of COX-2** 1476, 2036, 2038, 3600, 8020, 15279, 17168, 18317, 19087, 22718.
- Anti-inflammatory, COX-2 inhibitor, inhibits expression of COX-2, through inhibition of NF- $\kappa$ B** 2036, 2038.
- Anti-inflammatory, COX-2 inhibitor, rat peritoneal macrophages, inhibits PGE2 production** 17532.
- Anti-inflammatory, COX-2 inhibitor, rat renal medulla** 13137, 14971.
- Anti-inflammatory, COX-2 inhibitor, selective** 16050, 22270.
- Anti-inflammatory, cytokine formation inhibitor, hmn peripheral blood monocytes, TNF- $\alpha$ , IL-1 $\beta$ , IL-8 and IL-10** 20992.
- Anti-inflammatory, cytokine formation inhibitor, hmn peripheral blood mononuclear cells, TNF- $\alpha$ , IL-4, IL-2 and IFN- $\gamma$**  14976, 14977.
- Anti-inflammatory, cytokine formation inhibitor, macrophages, TNF- $\alpha$ , IL-6 and IL-12** 17240.
- Anti-inflammatory, cytokine formation inhibitor, RAW264.7 cells, TNF- $\alpha$  and IL-6** 13137, 18317, 8278, 3674.

- Anti-inflammatory, decreases expression of IL-1 $\alpha$ , IL-1 $\beta$ , TNF- $\alpha$  and IL-6 mRNAs in J774A.1 macrophages 15635.
- Anti-inflammatory, diminishes increase in VCAM-1 and MCP-1 levels induced by TNF- $\alpha$  and oxidized LDL in HUVECs 9337.
- Anti-inflammatory, ear edema, both PMA and oxazolone-induced 13137.
- Anti-inflammatory, ear edema, prevents ear edema formation caused by PMA and synthesis of LOX products, especially LTC<sub>4</sub> and COX metabolites derived from arachidonic acid 14979, 13591, 10363.
- Anti-inflammatory, eczema in mouse ears, repeated administration of TPA 3462, 6938, 11530.
- Anti-inflammatory, edema and inflammation, induced by PMA 17958.
- Anti-inflammatory, experimental colitis 2102.
- Anti-inflammatory, free radical scavenger 19087.
- Anti-inflammatory, gpg ear edema, induced by benzoic acid 7521.
- Anti-inflammatory, gpg, erythema reaction from ultraviolet irradiation 664.
- Anti-inflammatory, ICAM-1 expression inhibitor 4217, 4218.
- Anti-inflammatory, ICAM-1 expression inhibitor, PMA-induced 13474, 13475.
- Anti-inflammatory, IL-12 production inhibitor 2102, 10886, 17240.
- Anti-inflammatory, IL-12 production inhibitor, macrophages, LPS-activated 10886, 17240.
- Anti-inflammatory, IL-12 production inhibitor, macrophages, LPS-activated, 2102.
- Anti-inflammatory, IL-1 $\beta$  production inhibitor, hmn monocyte, LPS-stimulated 3368, 17862, 21397.
- Anti-inflammatory, IL-1 $\beta$ /inhibitor, hmn monocyte 16539.
- Anti-inflammatory, IL-2 inhibitor, decreases expression of IL-2 in T-lymphocytes 16675.
- Anti-inflammatory, IL-5inhibitor 1476, 1492, 12020, 13137, 13145, 18409.
- Anti-inflammatory, IL-6 and IL-8 blocker, blocking production and expression of IL-6 and IL-8 2102, 22718.
- Anti-inflammatory, increases TNF- $\alpha$  level in RAW264.7 cells 2102, 2106, 22718.
- Anti-inflammatory, inhibits 5-LOX metabolites especially LTC<sub>4</sub> 3981.
- Anti-inflammatory, inhibits accumulation of NO<sub>2</sub><sup>-1</sup> 8214, 8215.
- Anti-inflammatory, inhibits activation of IL-12 gene promoter 10886.
- Anti-inflammatory, inhibits activation of NF- $\kappa$ B, PMA- and TNF- $\alpha$ -induced, mechanism not involving antioxidant pathways 10886.
- Anti-inflammatory, inhibits binding of several chemokines, such as CXC, CC to hmn leukocytes or cells transfected with chemokine receptors 2102, 2106.
- Anti-inflammatory, inhibits C5a-stimulated release of TNF- $\alpha$  and IL-1 $\beta$  17460.
- Anti-inflammatory, inhibits C5a-stimulated release of TNF- $\alpha$  and IL-1 $\beta$ , RAW264.7 cells 17460.
- Anti-inflammatory, inhibits chemotaxis of hmn peripheral blood neutrophils 6428.
- Anti-inflammatory, inhibits COX metabolite PGE<sub>2</sub>, TXB<sub>2</sub> 3981.
- Anti-inflammatory, inhibits expression and production of of pro-inflammatory cytokines (IL-1 $\beta$ , IL-6, TNF- $\alpha$ , IFN $\gamma$ , MIP-1 $\alpha/\beta$ ), hmn peripheral blood mononuclear cells under stimulation with superantigenic staphylococcal exotoxins 2106.
- Anti-inflammatory, inhibits expression of iNOS 1790, 5669, 7982, 7985, 10628, 10820, 11017, 12122, 13433, 13434, 13435, 13436, 13437, 16603, 16713, 17409, 18643, 19405, 19406, 19895, 20686.
- Anti-inflammatory, inhibits expression of iNOS, TPA-treated hmn monocyte cell line THP-1 16713.
- Anti-inflammatory, inhibits induction of VCAM-1, HUVECs, TNF- $\alpha$ - and IL-1 $\beta$ -stimulated 3911.
- Anti-inflammatory, inhibits inflammation induced by cancer promotor TPA 16221, 16222.
- Anti-inflammatory, inhibits lipid peroxidation see "Antioxidant, inhibits lipid peroxidation".
- Anti-inflammatory, inhibits lipid peroxidation, cephalopin 8278, 13088, 18685, 19450.
- Anti-inflammatory, inhibits LPS-induced DNA binding activity of NF- $\kappa$ B, associated with decrease of p65 protein levels in nucleus 10820.
- Anti-inflammatory, inhibits LTB<sub>4</sub> biosynthesis 2106.
- Anti-inflammatory, inhibits metabolism of arachidonic acid 7926, 15038, 19259, 22274.
- Anti-inflammatory, inhibits metabolism of arachidonic acid, calcium ionophore-stimulated leukocytes, inhibits LTB<sub>4</sub> production 10182, 10472.
- Anti-inflammatory, inhibits mRNA expression and production of TNF- $\alpha$  or IL-6 in RAW 264.7 cells 11521, 11522.
- Anti-inflammatory, inhibits not only expression of inflammatory NF- $\kappa$ B target genes such as iNOS, COX-2 and TNF- $\alpha$  but also production of PGE<sub>2</sub> and TNF- $\alpha$  12122.
- Anti-inflammatory, inhibits over-production of NO and PGE<sub>2</sub> 16532.
- Anti-inflammatory, inhibits PGE<sub>2</sub> production and inhibits COX-2 production, but not COX-1 17532.
- Anti-inflammatory, inhibits production of COX metabolite PGE<sub>2</sub>, reduces TXB<sub>2</sub> level 17145, 18792, 20569.
- Anti-inflammatory, inhibits production of of pro-inflammatory cytokines (TNF- $\alpha$ , IL-1 $\beta$ , IL-4, IL-2 and IFN- $\gamma$ ), hmn peripheral mononuclear cells 22686, 22687, 22688.
- Anti-inflammatory, inhibits production of of pro-inflammatory cytokines (TNF- $\alpha$ , IL-1 $\beta$  and IL-6) 16532.
- Anti-inflammatory, inhibits production of of pro-inflammatory cytokines (TNF- $\alpha$  and IL-1 $\beta$ ), hmn monocytes and macrophages 3368.
- Anti-inflammatory, inhibits production of PGE<sub>2</sub> and proMMP-9 in rabbit synovial fibroblasts 15635.
- Anti-inflammatory, inhibits production of PGE<sub>2</sub> in C6 rat glioma cells 2106.
- Anti-inflammatory, inhibits protein and mRNA expression levels of iNOS and COX-2 enzymes 10820.
- Anti-inflammatory, inhibits RANTES-induced CCR1 cell migration, without interfering with CCR1 cell migration induced by

- epidermal growth factor (EGF)** 19819.
- Anti-inflammatory, inhibits release and metabolism of arachidonic acid** 7802, 15170.
- Anti-inflammatory, inhibits release of histamine** 8214, 8215.
- Anti-inflammatory, inhibits release of  $\beta$ -glucuronidase, rat mast cells stimulated with compound 48/80** 8214, 8215.
- Anti-inflammatory, inhibits synthesis of COX-2 transcript** 22504.
- Anti-inflammatory, inhibits synthesis of iNOS transcript** 22504.
- Anti-inflammatory, inhibits synthesis of prostaglandin and leukotriene** 22059.
- Anti-inflammatory, inhibits thioglycolate-elicited rat peritoneal neutrophil accumulation and LPS-activated nitric oxide production in murine macrophages** 20978.
- Anti-inflammatory, lead compound to develop new anti-inflammatory drugs** 4398, 12122, 15635, 16532.
- Anti-inflammatory, lead compound to treat asthma** 13137.
- Anti-inflammatory, leukocyte elastase MMP-2/9 inhibitor** 6923, 14971.
- Anti-inflammatory, LTC<sub>4</sub> selective inhibitor, rat resident peritoneal macrophage** 2102.
- Anti-inflammatory, lysosome enzyme inhibitor, polymorphonuclear (PMN) leukocytes** 8405, 9053, 9054, 9056, 9060, 9061, 9062.
- Anti-inflammatory, may be useful for the treatment of various inflammatory diseases** 11017.
- Anti-inflammatory, modified Tan and Berridge method** 508, 5008, 8788, 12510, 12982, 12983, 18169, 20501.
- Anti-inflammatory, modulation of complement 5a-induced chemotaxis and inflammatory cytokines production in macrophages** 17460.
- Anti-inflammatory, modulator of cytokine network** 2004, 2102, 2106, 2983, 3269, 3270, 3272, 3273, 3307, 3368, 3368, 3674, 3911, 4398, 4565, 5699, 6923, 7278, 7714, 8278, 8423, 8424, 9276, 9337, 9456, 11521, 11522, 12523, 13137, 14971, 14976, 14977, 15635, 16532, 16675, 17240, 17409, 17460, 17862, 18317, 18643, 18673, 19308, 19427, 19819, 20992, 21206, 21397, 22686, 22687, 22688, 22718, 22727, 22728, 22729, 22730, 22731.
- Anti-inflammatory, most effective component of 10 compounds in *Schizonepeta tenuifolia* (JING JIE)** 17377.
- Anti-inflammatory, mus arthritis** 4589, 19955, 22023.
- Anti-inflammatory, mus ear edema, induced by arachidonic acid** 12766, 18219.
- Anti-inflammatory, mus ear edema, induced by croton oil** 977, 978, 5152, 7521, 8521, 8522, 10814, 11121, 11259, 11260, 17422, 22023.
- Anti-inflammatory, mus ear edema, induced by croton oil, by down-regulation of COX-2** 8401.
- Anti-inflammatory, mus ear edema, induced by phospholipase A<sub>2</sub>** 19883, 19885.
- Anti-inflammatory, mus ear edema, induced by TPA** 205, 1971, 2102, 12766, 13098, 16080, 17345, 20710, 21392.
- Anti-inflammatory, mus paw edema model** 4614, 8965, 22700, 22938.
- Anti-inflammatory, mus paw edema model, induced by 5-HT** 664, 7243.
- Anti-inflammatory, mus paw edema model, induced by carrageenan** 663, 664, 966, 1768, 1928, 2455, 2594, 2990, 3462, 3743, 4328, 5573, 6454, 6487, 7243, 7521, 7659, 8304, 8841, 9288, 9419, 9705, 11747, 12122, 12916, 13481, 14896, 14897, 16050, 16080, 16525, 16532, 16867, 17042, 18221, 19540, 19922, 20509, 20569, 20717, 21055, 21435, 21438, 21439, 22080, 22151, 22433, 22504, 22504.
- Anti-inflammatory, mus paw edema model, induced by carrageenan, inhibits leucocyte aggregation in inflammatory exudate** 22720.
- Anti-inflammatory, mus paw edema model, induced by DMSO** 546, 547, 548.
- Anti-inflammatory, mus paw edema model, induced by formaldehyde** 19111.
- Anti-inflammatory, mus paw edema model, induced by glucosan** 664, 16525.
- Anti-inflammatory, mus paw edema model, induced by glucosan or acetate acid** 16532.
- Anti-inflammatory, mus paw edema model, induced by histamine** 663, 664.
- Anti-inflammatory, mus paw edema model, induced by phospholipase A<sub>2</sub>** 11530, 21392.
- Anti-inflammatory, mus, experimental chronic arthritis** 16050, 14896.
- Anti-inflammatory, mus, formaldehyde edema model** 56, 309, 8841, 12510, 15286.
- Anti-inflammatory, mus, inflammation caused by TPA** 10967, 16362, 4963.
- Anti-inflammatory, mus, inhibits phoroplast permeability** 899.
- Anti-inflammatory, mus, inhibits vaso-permeability** 3588, 5161, 7495, 15843, 19922, 20569.
- Anti-inflammatory, mus, tampon granuloma model** 309, 3368, 4266, 8841, 8841, 9238, 11505, 11747, 13391, 13481, 13559, 22151, 22938.
- Anti-inflammatory, mus, tuberculin reaction model** 8841.
- Anti-inflammatory, mus, woolball model** 10887, 12018, 12020, 13137, 15279, 19087, 20099, 22270.
- Anti-inflammatory, myeloperoxidase inhibitor** 2102, 13098.
- Anti-inflammatory, NF- $\kappa$ B inhibitor** 19401, 19402, 19403, 19404, 13474, 13475.
- Anti-inflammatory, NF- $\kappa$ B pathway** 2890, 3141, 4398, 6923, 7239, 9288, 16031, 16713, 17862, 18317, 18643.
- Anti-inflammatory, NF- $\kappa$ B activation inhibitor, LPS-induced, murine RAW264.7 cells** 171, 173, 222, 5939, 16675.
- Anti-inflammatory, NF- $\kappa$ B inhibitor** 1790, 1791, 1802, 2004, 2036, 2038, 3307, 3362, 3368, 4746, 7195, 7196, 7197, 10820, 10886, 14097, 15002, 16163, 16166, 16167, 16675, 18643, 19407, 19895, 21930, 2102, 6288.
- Anti-inflammatory, NF- $\kappa$ B inhibitor, hmn monocytes, prevents cytokines (IL-1, IL-6, TNF, IL-8) release and PGE<sub>2</sub> synthesis** 6288, 21930.
- Anti-inflammatory, NF- $\kappa$ B inhibitor, LPS-induced, RAW264.7 cells** 16675, 14097, 4746, 7196, 7197, 15002, 7195, 1802, 1791, 1790.
- Anti-inflammatory, no detail information** 1828, 1965, 2325, 2414, 2687, 2886, 3221, 3464, 6183, 6816, 7370, 7528, 7529, 7530, 7531, 7532, 7950, 9455, 8293, 8295, 12907, 13809, 8360, 8361, 8365, 8363, 12608, 16025, 17267, 17648, 17918, 18440, 19074, 21245, 3935, 3937, 304, 538, 580, 1614, 2303, 2312, 2989, 3077, 3600, 3689, 3923, 3924, 4439, 4477, 4645, 4685, 4876, 5763, 6643, 6656, 6767, 6853, 7481, 7586,

- 7793, 7951, 9441, 8292, 8095, 11077, 12420, 9038, 9496, 11808, 12255, 13392, 13492, 13808, 13962, 14756, 12184, 8846, 11642, 11736, 10875, 11741, 13774, 16900, 17024, 17597, 17598, 17599, 17829, 18190, 18411, 19142, 19143, 19542, 19545, 19983, 20168, 20650, 20732, 21059, 21234, 21887, 22282, 22581, 27, 13437, 13435, 13436, 8865, 17403, 16535, 22990, 7833, 18824, 21862, 22332.
- Anti-inflammatory, NO production inhibitor** see "NO production inhibitor".
- Anti-inflammatory, NO, IL-1 $\beta$ , IL-6 and TNF- $\alpha$  production inhibitor** 20686.
- Anti-inflammatory, ornithine decarboxylase inhibitor** 2102.
- Anti-inflammatory, PGE<sub>2</sub> production inhibitor** 12122, 16603.
- Anti-inflammatory, PGE<sub>2</sub> production inhibitor, LPS-induced, RAW264.7 cells** 1573, 8020, 8679, 10820, 19081, 19405, 19406, 22123, 22124, 22270.
- Anti-inflammatory, PGE<sub>2</sub> production inhibitor, rat peritoneal macrophages** 17532.
- Anti-inflammatory, PGE<sub>2</sub> production inhibitor, TPA-stimulated rat peritoneal macrophages** 20900, 20901.
- Anti-inflammatory, PMA-treated mammary epithelial cells, inhibits COX-2 transcription and COX-2 activity, by inhibiting signal transduction through PKC** 18643.
- Anti-inflammatory, prevents eotaxin production and mRNA eotaxin expression in hmn fibroblasts stimulated with IL-4/TNF- $\alpha$**  2102.
- Anti-inflammatory, prevents integrin-mediated neutrophil adhesion and fMLP- or leukotriene B<sub>4</sub>-induced transmigration** 7714, 21206.
- Anti-inflammatory, prevents production of TNF- $\alpha$ , IL-1 $\beta$  and IL-6 in LPS-activated macrophages, possibly via NF- $\kappa$ B inhibition** 3307.
- Anti-inflammatory, prevents TNF- $\alpha$  and IL-6 production in RBL-2H3 stimulated mast cells, through a mechanism involving the blockade of NF- $\kappa$ B activation** 2004.
- Anti-inflammatory, prostaglandin biosynthesis inhibitor** 4921, 4922, 8388.
- Anti-inflammatory, prostaglandin biosynthesis inhibitor, rbt kidney microsomes** 16571.
- Anti-inflammatory, prostanoid inhibitor, LOX pathway** 18643.
- Anti-inflammatory, rat, experimental gastric ulcer** 37.
- Anti-inflammatory, reduces arthritic inflammation in rat adjuvant-induced arthritis as well as abdominal constriction caused by acetic acid** 8401.
- Anti-inflammatory, reduces cell surface expression of adhesion molecules, resulting in inhibition of THP-1 monocyte adhesion to TNF- $\alpha$  stimulated HUVECs** 9337.
- Anti-inflammatory, reduces expression of ICAM-1 and VCAM-1 in THP-1 hmn monocytes** 3269, 3270, 3272, 3273.
- Anti-inflammatory, reduces expression of VCAM-1, aorta cells of hypercholesterolemic New Zealand rabbits** 9337.
- Anti-inflammatory, reduces ICAM-1 expression, mouse liver cells, LPS-stimulated** 13137.
- Anti-inflammatory, reduces IFN- $\gamma$ -induced ICAM-1 protein, as well as mRNA expression in hmn keratinocytes** 5699.
- Anti-inflammatory, reduces leukocyte infiltration, measured as tissue peroxidase activity** 6938, 11530.
- Anti-inflammatory, reduces permeability of blood capillary and activity of hyaluronidase** 20066.
- Anti-inflammatory, reduces permeability of capillary and blood cell walls** 4097.
- Anti-inflammatory, reduces VCAM-1 expression, HUVECs, TNF- $\alpha$ -induced** 9337.
- Anti-inflammatory, retardation of macrophage recruitment and suppression of cytokines production might underlie potential usefulness of piperlactam S as an anti-inflammatory agent** 17460.
- Anti-inflammatory, specific NF- $\kappa$ B inhibitor of DNA-binding activity of p50 subunit** 12122.
- Anti-inflammatory, sulfate of rutin being strong anti-inflammatory** 19087.
- Anti-inflammatory, suppresses expression of iNOS and COX-2 protein** 19405, 19406.
- Anti-inflammatory, suppresses expression of iNOS and COX-2, without cytotoxic effect** 16603.
- Anti-inflammatory, suppresses expression of NF- $\kappa$ B target genes such as iNOS and COX-2** 1790.
- Anti-inflammatory, suppresses IL-1 $\beta$ -induced production of PGE<sub>2</sub> in hmn synovial fibroblasts** 15635.
- Anti-inflammatory, suppresses iNOS expression and NO production, cultured cells, by down-regulation of NF- $\kappa$ B binding activity via blockade of I $\kappa$ B $\alpha$  degradation** 18643.
- Anti-inflammatory, TNF- $\alpha$  production inhibitor** 13137, 14097, 4746, 7196, 7197, 15002, 7195, 1802, 1791, 1790, 12122, 16675.
- Anti-inflammatory, TNF- $\alpha$  production inhibitor, LPS/IFN- $\gamma$ -induced, N9 microglial cell lines** 8520.
- Anti-inflammatory, TNF- $\alpha$  production inhibitor, LPS/IFN- $\gamma$ -induced, peritoneal macrophages** 9337.
- Anti-inflammatory, TNF- $\alpha$  production inhibitor, LPS-induced, RAW264.7 cells** 2983, 4565, 7278, 8423, 8424, 8520, 9276, 9456, 12523, 17409, 18673, 19308, 19427, 22727, 22728, 22729, 22730, 22731.
- Anti-inflammatory, TNF- $\alpha$  production inhibitor, LPS-induced, U937 cells** 8423, 8424.
- Anti-inflammatory, TNF- $\alpha$  production inhibitor, sulphhydryl (thiol, -SH) compounds abrogated the inhibitory effect** 4565.
- Anti-inflammatory, treatment of cervicitis** 7399, 7416.
- Anti-inflammatory, Ungar method** 15635.
- Anti-inflammatory, inhibits iNOS** 1854, 4292, 5722, 16717, 20685, 20686, 22059.
- Antileishmanial** 515, 580, 815, 816, 1141, 1145, 1146, 1241, 1244, 1250, 1252, 1937, 1939, 2004, 2229, 2346, 2683, 2833, 2844, 2920, 2924, 3157, 3158, 3166, 3186, 3306, 3551, 3609, 3674, 3856, 4080, 4279, 4478, 4840, 5272, 5273, 5540, 5541, 5542, 5550, 5675, 6024, 6025, 6776, 6973, 7646, 7650, 7651, 7925, 8325, 8985, 9750, 9788, 10310, 10465, 10733, 11001, 11148, 11195, 11601, 12232, 12487, 12916, 13571, 13874, 13876, 14222, 15297, 15298, 15300, 15301, 15302, 15303, 15304, 15305, 15306, 15307, 15308, 15309, 15312, 15313,

- 15314, 15315, 15316, 15779, 15780, 16067, 16068, 16693, 16898, 17135, 17940, 18221, 18784, 19077, 19234, 19235, 19542, 19568, 19960, 20369, 20390, 22496, 22551, 22818.
- Antileishmanial inactive, *Leishmania donovani*** 4866, 15716.
- Antileprotic** 3485, 8955, 9697.
- Antimalarial inactive summary index** 8, 472, 506, 1276, 1532, 1784, 2334, 2911, 3097, 3159, 3413, 3852, 3940, 3941, 4068, 4069, 4237, 4866, 4982, 5733, 6034, 6757, 6809, 6810, 7503, 8321, 8335, 8336, 9887, 10159, 10426, 10427, 13241, 13297, 13867, 13869, 13871, 14462, 14729, 14731, 14758, 14915, 15716, 16050, 16154, 16892, 16898, 17940, 19533, 19999, 20377, 21475, 21926, 22230.
- Antimalarial inactive, *Plasmodium*** 3940, 3941.
- Antimalarial inactive, *Plasmodium falciparum*** 506, 580, 815, 816, 1241, 2004, 2334, 2924, 3166, 3306, 3551, 4866, 5675, 6809, 6810, 7925, 9750, 12916, 14222, 14729, 14731, 14758, 15716, 16154, 18221, 19568, 19960.
- Antimalarial inactive, *Plasmodium falciparum* D10** 1532.
- Antimalarial inactive, *Plasmodium falciparum* D6** 3852.
- Antimalarial inactive, *Plasmodium falciparum* D6 chloroquine-sensitive strain** 5733.
- Antimalarial inactive, *Plasmodium falciparum* D6 clone** 3097, 3159, 9887, 13867, 13869, 13871, 16892.
- Antimalarial inactive, *Plasmodium falciparum* Dd2** 4068, 4069.
- Antimalarial inactive, *Plasmodium falciparum* FAC8** 1532.
- Antimalarial inactive, *Plasmodium falciparum* K1** 3413, 6034, 10159, 10426, 10427, 14915, 20369.
- Antimalarial inactive, *Plasmodium falciparum* K1 multidrug-resistant strain** 2911, 19999, 20377.
- Antimalarial inactive, *Plasmodium falciparum* NF54** 4982, 10159, 13297, 22230.
- Antimalarial inactive, *Plasmodium falciparum* poW** 1928, 4068, 4069, 5659, 7883.
- Antimalarial inactive, *Plasmodium falciparum* TM91C235 clone** 3097, 3159, 9887, 13867, 13869, 13871, 16892.
- Antimalarial inactive, *Plasmodium falciparum* W2 chloroquine-resistant** 3852, 5733.
- Antimalarial inactive, *Plasmodium falciparum* W2 clone** 3097, 3159, 9887, 13867, 13869, 13871, 16892.
- Antimalarial inactive, *Plasmodium* hmn** 11133.
- Antimalarial summary index** 24, 52, 52, 53, 55, 261, 262, 266, 580, 589, 602, 675, 676, 777, 815, 816, 919, 1141, 1145, 1147, 1241, 1364, 1460, 1475, 1784, 1784, 1784, 1784, 1784, 1842, 1857, 1928, 1937, 1939, 2004, 2148, 2191, 2672, 2683, 2870, 2871, 2872, 2873, 2875, 2883, 2884, 2885, 2910, 2914, 2916, 2917, 2920, 2924, 3004, 3005, 3007, 3096, 3166, 3243, 3306, 3551, 3609, 3614, 3674, 3686, 3700, 4048, 4066, 4067, 4104, 4181, 4421, 4478, 4949, 5095, 5146, 5435, 5436, 5659, 5675, 5833, 6018, 6020, 6409, 6413, 6433, 6464, 6776, 6896, 6971, 7304, 7329, 7883, 7925, 8004, 8322, 8509, 9072, 9598, 9738, 9739, 9750, 9857, 9885, 9926, 10310, 10340, 10383, 10398, 10531, 10561, 10656, 11133, 11148, 11195, 11358, 11594, 11596, 11598, 11723, 11723, 11977, 11978, 11988, 12455, 12487, 12501, 12573, 12573, 12751, 12751, 12766, 12916, 13241, 13811, 13918, 14029, 14183, 14222, 14325, 14396, 15062, 15722, 15739, 15764, 15804, 16050, 16067, 16068, 16261, 16366, 16373, 16374, 16604, 16912, 16913, 16914, 16915, 16970, 17041, 17309, 17422, 17423, 17478, 17574, 17827, 17841, 17846, 17847, 17924, 17983, 18188, 18221, 18252, 18253, 18425, 18425, 18515, 18862, 18867, 19234, 19235, 19568, 19753, 19883, 19885, 19886, 19887, 19888, 19891, 19892, 19900, 19960, 20108, 20253, 20333, 20334, 20369, 20414, 20415, 20975, 21313, 21314, 21315, 21316, 21389, 21390, 21905, 22278, 22279, 22551, 22818, 23002.
- Antimalarial, causes transformation of erythrocytes into stomatocytes** 16050.
- Antimalarial, cultivated *in vitro* by Trager and Jensen method** 17574, 20253.
- Antimalarial, formerly used to treat malaria** 18425.
- Antimalarial, inhibits *Plasmodium falciparum*. absorbing H<sup>3</sup>-sarkin *in vitro*** 2672.
- Antimalarial, mus *Plasmodium* sp.** 777, 1475, 23002.
- Antimalarial, mus, infected by *Plasmodium vinckei*** 16898, 17940.
- Antimalarial, no detail information** 3686, 8509, 9738, 20108, 21905, 1842, 2191, 4421, 5435, 9739, 9857, 12501, 16261, 17983, 20975.
- Antimalarial, *Plasmodium*** 24, 1364, 1784, 6757, 16050, 18252, 18253, 20333, 20334, 20414, 21926.
- Antimalarial, *Plasmodium berghei*** 18862, 18867.
- Antimalarial, *Plasmodium berghei* NK65 on infected mouse** 261, 262, 10531, 15062.
- Antimalarial, *Plasmodium* chloroquine-resistant strain** 3614, 11723, 20415.
- Antimalarial, *Plasmodium* chloroquine-sensitive strain** 3614, 11723, 20415.
- Antimalarial, *Plasmodium* F32 chloroquine-sensitive strain** 919.
- Antimalarial, *Plasmodium falciparum*** 777, 1784, 1784, 1784, 1937, 1939, 2683, 2920, 3243, 3609, 3674, 5095, 6413, 6776, 7503, 8335, 8336, 10383, 11148, 11195, 11977, 13918, 14183, 16067, 16068, 16912, 16913, 16914, 16915, 16970, 17041, 17841, 17846, 17847, 18515, 19900, 21389, 22551.
- Antimalarial, *Plasmodium falciparum* 3D7** 675, 10656, 11358, 11594, 11596, 11598, 12455, 12766, 16366, 17422, 17423.
- Antimalarial, *Plasmodium falciparum* D10** 8, 472, 1276, 4237, 13241, 21475.
- Antimalarial, *Plasmodium falciparum* D10 chloroquine-sensitive** 6018, 6020, 13811.
- Antimalarial, *Plasmodium falciparum* D2** 12573.
- Antimalarial, *Plasmodium falciparum* D6** 52, 52, 53, 55, 1460, 1784, 5146, 5833, 6409, 7304, 7329, 8004, 8321, 9072, 9598, 10398, 12751, 12751, 14029, 14462, 16604, 17827, 17924, 18188, 18425, 19753, 19883, 19885, 19886, 19887, 19888, 21390.
- Antimalarial, *Plasmodium falciparum* D6 chloroquine-sensitive** 2148, 4949, 6971, 8322, 17309, 22278, 22279, 22818, 4104, 15739, 15764, 15804, 1857.
- Antimalarial, *Plasmodium falciparum* D6 clone** 21313, 21314, 21315, 21316.
- Antimalarial, *Plasmodium falciparum* Dd2** 676, 1928, 3004, 3005, 3007, 3700, 4066, 4067, 5659, 7883, 12573, 12766.
- Antimalarial, *Plasmodium falciparum* F32 chloroquine-sensitive**

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- Antimalarial, *Plasmodium falciparum* FAC8** 472, 1276, 4237, 13241.
- Antimalarial, *Plasmodium falciparum* FCA20 GHANA chloroquine-sensitive** 11723.
- Antimalarial, *Plasmodium falciparum* FcB1** 266, 2914, 2916, 2917, 4181, 6464, 9926, 10340, 10561, 16050, 16374.
- Antimalarial, *Plasmodium falciparum* FCB1 COLOMBIA(CQR-) strain** 11723.
- Antimalarial, *Plasmodium falciparum* FcM29** 10340, 16373, 16374.
- Antimalarial, *Plasmodium falciparum* FCR3 drug-sensitive strain** 19891, 19892.
- Antimalarial, *Plasmodium falciparum* FCR-3/A2 clone** 2870, 2871, 2872, 2873, 2875, 2883, 2884, 2885, 15722.
- Antimalarial, *Plasmodium falciparum* K1** 8, 589, 1141, 1145, 1147, 4048, 6433, 6896, 10310, 11978, 12487, 14325, 14396, 17478, 19234, 19235, 21475.
- Antimalarial, *Plasmodium falciparum* K1 chloroquine-resistant strain** 19891, 19892.
- Antimalarial, *Plasmodium falciparum* K1 multidrug-resistant strain** 1784, 2910, 11988, 17574, 19533, 20253.
- Antimalarial, *Plasmodium falciparum* NF54** 589, 6433, 6896, 13241, 14325, 14396.
- Antimalarial, *Plasmodium falciparum* NF54 chloroquine-sensitive strain** 11988.
- Antimalarial, *Plasmodium falciparum* PFB(CQR+) strain** 11723.
- Antimalarial, *Plasmodium falciparum* PoW** 4066, 4067, 12573, 3700, 3005, 676, 3004, 3007.
- Antimalarial, *Plasmodium falciparum* W2** 52, 53, 55, 1460, 1784, 5146, 6409, 8004, 8321, 9072, 9598, 12751, 14029, 14462, 16604, 17827, 17924, 18188, 18425, 19753, 19883, 19885, 19886, 19887, 19888, 21390.
- Antimalarial, *Plasmodium falciparum* W2 chloroquine-resistant strain** 52, 12751, 7304, 10398, 5833, 6018, 6020, 7329, 9885, 2148, 4949, 6971, 8322, 13811, 17309, 22278, 22279, 22818, 4104, 15739, 15764, 15804, 1857.
- Antimalarial, *Plasmodium falciparum* W2 clone** 3096, 21313, 21314, 21315, 21316.
- Antimalarial, *Plasmodium falciparum* W2 INDOCHINA(CQR) strain** 11723.
- Antimalarial, *Plasmodium* FcM29-Cameroon chloroquine resistant strain** 919.
- Antimalarial, *Plasmodium* moderate chloroquine-resistant strain** 3614, 11723.
- Antimalarial, similar action with quinine** 602.
- Antimelancholic** 10886.
- Anti-metabolism** 3059.
- Antimicrobial** 933, 2057, 2303, 2628, 3079, 3499, 3600, 4032, 6606, 8081, 8403, 8487, 8549, 8550, 8555, 8556, 8557, 8752, 11808, 11819, 12256, 12503, 12749, 13492, 15741, 15849, 16128, 16457, 16584, 17695, 17831, 19047, 19257, 19259, 20093, 21597, 22290.
- Antimitotic** 1372, 2890, 3909, 4547, 5074, 5093, 7768, 9740, 12732, 20284, 22408, 22488, 22491.
- Antimitotic and antifungal** 3458, 3459, 3461, 11319, 15361, 19890.
- Antimitotic and antifungal inactive** 3460.
- Antimutagenic** 870, 6193, 7956, 19983, 20355, 20365, 20369.
- Antimutagenic** 2564, 3026, 3551, 6757, 6853, 8095, 9818, 18545.
- Antineoplastic (*in vivo*) summary index** 10, 27, 90, 136, 140, 144, 145, 195, 404, 409, 537, 552, 570, 576, 660, 727, 759, 777, 778, 779, 780, 837, 899, 909, 910, 952, 962, 967, 1002, 1029, 1128, 1210, 1275, 1313, 1372, 1463, 1464, 1467, 1497, 1621, 1626, 1627, 1745, 1789, 1841, 1866, 1928, 1965, 1971, 1993, 2026, 2073, 2102, 2109, 2119, 2293, 2300, 2318, 2331, 2334, 2380, 2660, 2661, 2662, 2666, 2667, 2675, 2676, 2684, 2687, 2735, 2768, 2892, 2938, 2946, 3053, 3076, 3082, 3094, 3095, 3181, 3188, 3197, 3198, 3209, 3218, 3300, 3308, 3402, 3404, 3412, 3467, 3481, 3498, 3499, 3506, 3529, 3551, 3602, 3637, 3693, 3702, 3745, 3754, 3779, 3788, 3861, 3883, 3909, 3911, 3937, 3964, 3965, 4048, 4053, 4106, 4128, 4140, 4238, 4239, 4289, 4295, 4299, 4300, 4317, 4319, 4320, 4321, 4322, 4323, 4324, 4327, 4352, 4398, 4399, 4400, 4455, 4456, 4457, 4547, 4657, 4739, 4860, 4870, 4872, 4874, 4978, 5063, 5074, 5093, 5098, 5134, 5136, 5168, 5181, 5187, 5236, 5391, 5392, 5393, 5394, 5395, 5414, 5440, 5507, 5537, 5543, 5686, 5796, 6162, 6290, 6303, 6490, 6498, 6501, 6643, 6737, 6741, 6750, 6751, 6759, 6762, 6767, 6772, 6776, 6804, 6889, 7030, 7031, 7167, 7203, 7232, 7236, 7327, 7399, 7416, 7528, 7529, 7530, 7531, 7532, 7550, 7551, 7552, 7553, 7554, 7555, 7559, 7566, 7579, 7580, 7581, 7584, 7585, 7586, 7593, 7594, 7595, 7611, 7618, 7739, 7740, 7768, 7837, 7904, 7909, 7913, 7979, 7994, 7996, 8047, 8095, 8128, 8155, 8169, 8173, 8263, 8312, 8324, 8403, 8424, 8429, 8430, 8436, 8458, 8509, 8524, 8563, 8569, 8570, 8841, 8846, 8848, 8906, 8908, 8912, 8914, 8967, 8980, 8981, 9015, 9194, 9239, 9288, 9320, 9329, 9456, 9463, 9465, 9571, 9572, 9609, 9643, 9671, 9740, 9882, 9928, 9929, 9992, 10067, 10070, 10093, 10148, 10583, 10588, 10710, 10881, 10915, 11019, 11020, 11024, 11058, 11091, 11100, 11103, 11104, 11105, 11106, 11179, 11295, 11428, 11449, 11450, 11451, 11525, 11601, 11747, 11748, 11773, 11807, 11848, 11850, 11864, 11903, 11970, 11992, 11993, 12011, 12012, 12145, 12146, 12220, 12465, 12501, 12503, 12535, 12537, 12619, 12732, 12733, 12734, 12746, 12766, 12843, 12850, 12952, 13002, 13023, 13025, 13027, 13029, 13040, 13072, 13092, 13094, 13098, 13100, 13212, 13239, 13241, 13430, 13514, 13606, 13618, 13619, 13620, 13621, 13622, 13801, 13846, 13863, 13864, 14090, 14092, 14126, 14205, 14356, 14457, 14559, 14560, 14561, 14562, 14563, 14564, 14565, 14728, 14739, 14821, 14822, 14826, 14828, 14830, 14835, 14836, 14837, 14839, 14896, 14897, 14907, 14923, 14971, 15071, 15073, 15114, 15115, 15116, 15170, 15204, 15231, 15233, 15279, 15403, 15417, 15419, 15422, 15570, 15631, 15634, 15635, 15637, 15641, 15642, 15737, 15741, 15776, 15806, 15990, 16019, 16050, 16082, 16083, 16085, 16183, 16205, 16257, 16260, 16278, 16279, 16290, 16352, 16439, 16451, 16593, 16601, 16623, 16666, 16675, 16731, 16731, 16732, 16733, 16763, 16793, 16795, 16796, 16797, 16916, 16935, 17009, 17028, 17039, 17042, 17194, 17216, 17217, 17240, 17243, 17278, 17337, 17341, 17342, 17409, 17411, 17413, 17417, 17557, 17558, 17591, 17593, 17662, 17664, 17706, 17717, 17722, 17723, 17727, 17728, 17754, 17829, 17850, 17859, 17862, 17876, 17886, 17952, 17998, 18011, 18012, 18050, 18067, 18069, 18086, 18091, 18103, 18262, 18272, 18287, 18297, 18298, 18411, 18483, 18523,

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- Antineoplastic inactive, KB, LNCaP, Lu1 and P<sub>388</sub>** 3300.
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- Antineoplastic, induces myelocytic leukemia M1 cell differentiation** 3745, 8436.
- Antineoplastic, , tubulin assay, ox brain** 14739, 20814.
- Antineoplastic, 115 Shingi cancer** 570.
- Antineoplastic, 3PS leukemia** 11848, 17240.
- Antineoplastic, 715 adenocarcinoma** 19983.
- Antineoplastic, 755 adenocarcinoma** 9320, 14971, 20140, 22146.
- Antineoplastic, 9KB** 2768.
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- Antineoplastic, activates glutathione S-transferase in cardiaie sinus** 952.
- Antineoplastic, adenocarcinoma in colon ascendens** 22551.
- Antineoplastic, antineoplastic and antimetastatic** 9992.
- Antineoplastic, antitumor promotor** 3209, 3779, 3788, 4872, 5063, 5098, 5134, 5686, 6498, 6762, 7167, 7203, 7904, 7909, 7913, 8980, 8981, 9456, 9643, 10067, 10710, 11970, 12220, 13002, 14090, 14092, 15737, 16257, 16260, 17706, 18939, 19540, 19542, 19784, 21483, 21499, 22194, 22195, 22777, 22781.
- Antineoplastic, ARS ascites tumour** 6741, 22733.
- Antineoplastic, ascites carcinoma** 16439, 17028, 20060, 22270.
- Antineoplastic, ascites carcinoma AH130 and AH1974** 22282.
- Antineoplastic, ascites hepatoma** 11179, 13241, 16916, 22232.
- Antineoplastic, ascites lymphoma** 13241, 21239, 21264.
- Antineoplastic, autochthoneous fibrosarcomas induced by methylcholanthrene** 6767.
- Antineoplastic, B16** 1626, 1627, 1928, 2660, 5414, 6776, 8509, 13621, 15170, 15631, 17216, 17217, 17557, 18011, 18287, 22368.
- Antineoplastic, bladder carcinoma** 13212.
- Antineoplastic, breast cancer** 3095, 6776, 16935, 17028, 18759, 20030.
- Antineoplastic, breast cancer caused by DMBA** 7232.
- Antineoplastic, C1498 marrow-leukemia** 570.
- Antineoplastic, candidate as antitumor agent** 6162, 21709.
- Antineoplastic, cardiaie sinus cancer** 14126.
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- Antineoplastic, cervical carcinoma** 7399, 7416.
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- Antineoplastic, Co115 cancer** 10881.
- Antineoplastic, colorectal cancer** 3095, 10915, 10915.
- Antineoplastic, decuduoma caused by luteosterone** 8967.
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- Antineoplastic, EAC, inhibits cellular proliferation** 5440.
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- Antineoplastic, Ehrlich ascites carcinoma (EAC)** 3964, 3965, 4327, 4400, 11179, 15631, 22232.
- Antineoplastic, ESC cancer** 1626, 1627.
- Antineoplastic, Friend virus leukemia** 22768.
- Antineoplastic, gastric cancer** 20098.
- Antineoplastic, glutathione S-transferase activator** 9671.
- Antineoplastic, granulation carcinoma** 17028.
- Antineoplastic, HAC cancer** 12537.
- Antineoplastic, HCS cancer** 22733.
- Antineoplastic, HeLa** 837, 837, 4870, 8458, 9609, 11747, 13239, 13241, 17850, 20236.
- Antineoplastic, HeLa, inhibits proliferation of cells** 11601, 20236.
- Antineoplastic, HeLa-S<sub>3</sub>** 16439.
- Antineoplastic, HepA liver cancer** 1993.
- Antineoplastic, HL-60** 8436, 22615, 20670.
- Antineoplastic, HL-60, induces leucocyte inhibiting growth of HL-60 leukemia cells** 20670.
- Antineoplastic, hollow fiber assay** 3300, 10588.

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- Antineoplastic, in clinical trials** 22232.
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- Antineoplastic, induces cell differentiation** 17243.
- Antineoplastic, induces normal conformation of cells** 18262.
- Antineoplastic, inhibits <sup>32</sup>P combines with phospholipid in HeLa cells** 8458, 4870.
- Antineoplastic, inhibits biosynthesis of protein** 837, 2684, 17850, 18262.
- Antineoplastic, inhibits cancer cell mitosis** 16793.
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- Antineoplastic, inhibits cellular hyperplasia** 837.
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- Antineoplastic, inhibits formation of melanin** 1928, 3702, 5414, 16731, 16732, 18067, 18069.
- Antineoplastic, inhibits K-ras-NRK** 18262.
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- Antineoplastic, inoculated tumor** 837.
- Antineoplastic, KB** 727, 3181, 3883, 8047, 10588, 13621, 15073, 21987, 22146.
- Antineoplastic, Kichita sarcoma** 13241.
- Antineoplastic, L<sub>1210</sub> Lymphocytic leukemia** 2660, 2687, 2735, 3218, 6759, 9194, 9609, 11449, 13621, 13863, 14826, 14971, 15073, 15170, 15279, 15631, 15631, 16085, 16183, 21987, 22011, 22146, 22232.
- Antineoplastic, L<sub>1712</sub> leukemia** 11024.
- Antineoplastic, L<sub>342</sub> pulmonary adenocarcinoma** 3754, 16763.
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- Antineoplastic, L<sub>615</sub> leukemia** 5181, 9194, 9239.
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- Antineoplastic, leukemia** 727, 899, 2662, 2675, 3637, 5136, 8312, 11019, 13430, 15403, 15806, 15990, 18882, 20108, 22231.
- Antineoplastic, leukemia caused by Rauscher leukemia virus** 17850.
- Antineoplastic, leukemia, acute** 11179.
- Antineoplastic, Lewis lung cancer** 2660, 3082, 7740, 8509, 9194, 13606, 13621, 15631, 15635, 18011, 18287, 19983, 20901, 21236, 21239, 21251, 22368.
- Antineoplastic, Lewis lung carcinoma** 22232.
- Antineoplastic, liver cancer** 6759, 13241, 12535, 20745, 20746, 20802, 11179.
- Antineoplastic, LLC** 13241.
- Antineoplastic, llung cancer** 12843, 15204.
- Antineoplastic, LNCaP** 10588.
- Antineoplastic, lung cancer, essential or caused by urethan** 2892.
- Antineoplastic, lymphatic dyscrasia** 12734.
- Antineoplastic, lymphatic sarcoma** 11179, 11179, 13241, 21234, 21435, 22146.
- Antineoplastic, lymphocyte leukemia** 9609, 19542.
- Antineoplastic, lymphoma** 1621.
- Antineoplastic, malignant lymphoma** 3404.
- Antineoplastic, many types of transplanted tumor** 17717.
- Antineoplastic, maybe useful for the remission of brain tumors** 2102, 22718.
- Antineoplastic, MCF7** 1313, 11864, 13514, 21320, 21321.
- Antineoplastic, melanoma** 8424, 16731, 16732, 17028, 18759, 22700.
- Antineoplastic, MGc803 adenocarcinoma of stomach** 3754.
- Antineoplastic, MQc803 gastric adenocarcinoma** 16763, 20236.
- Antineoplastic, MS301 breast cancer** 1002.
- Antineoplastic, MS310 breast cancer** 19762.
- Antineoplastic, mus pulmonary adenoma caused by nitroso compound** 2892.
- Antineoplastic, mus tumor due to SV40 virus** 3693.
- Antineoplastic, nasopharyngeal carcinoma** 8524.
- Antineoplastic, NK/CY lymphatic carcinoma** 21234.
- Antineoplastic, no cytotoxic action for normal cells** 16731, 16732.
- Antineoplastic, no description on tumor types** 136, 144, 145, 404, 576, 660, 909, 1128, 1275, 1467, 1789, 1866, 1971, 2026, 2073, 2119, 2300, 2318, 2938, 2946, 3053, 3076, 3094, 3197, 3198, 3308, 3467, 3506, 3529, 3551, 3861, 3909, 3911, 4053, 4106, 4128, 4140, 4238, 4239, 4295, 4300, 4317, 4319, 4321, 4322, 4324, 4352, 4457, 4547, 4657, 5093, 5187, 5236, 5543, 6262, 6290, 6490, 6737, 6741, 6772, 7030, 7031, 7236, 7327, 7550, 7552, 7554, 7555, 7559, 7579, 7580, 7584, 7585, 7586, 7593, 7594, 7595, 7739, 7768, 7996, 8403, 8429, 8430, 8846, 9015, 9329, 9571, 9572, 9740, 9882, 9928, 9929, 10881, 11295, 11525, 11903, 11992, 11993, 12011, 12145, 12146, 12465, 12503, 12732, 13072, 13100, 13801, 14356, 14821, 14822, 14828, 14830, 14835, 14836, 14839, 14923, 15417, 15419, 15570, 15634, 15637, 15741, 16019, 16085, 16205, 16278, 16279, 16290, 16352, 16451, 16623, 16675, 16795, 16796, 16797, 17009, 17039, 17243, 17278, 17411, 17413, 17417, 17558, 17859, 17862, 17952, 17998, 18012, 18050, 18086, 18297, 18411, 18623, 18679, 18843, 19057, 19194, 19201, 19308, 19313, 19316, 19455, 19472, 19479, 19480, 19484, 19487, 19498, 19499, 19629, 19697, 19715, 19811, 20160, 20234, 20387, 20419, 20500, 20664, 20730, 21243, 21397, 21486, 21589, 21889, 22072, 22098, 22151, 22152, 22153, 22268, 22405, 22407, 22413, 22414, 22475, 22497, 22551, 22581, 22718, 22951, 22987, 23033.
- Antineoplastic, nude mouse bearing hmn gastric cancer xenografts** 22232.
- Antineoplastic, Oberling-Guerin transplanting myeloma** 8841.
- Antineoplastic, 10 of 60 tested flavones show antineoplastic activity, isovitexin was one of the strongest three compounds** 11773.
- Antineoplastic, P1534 leukemia** 12733.
- Antineoplastic, P<sub>388</sub>** 27, 90, 777, 1029, 1372, 1745, 2109, 2660, 2661, 2666, 2667, 2676, 2684, 3181, 3402, 3481, 4289, 4739, 5074, 5181, 5537, 6750, 6751, 6759, 7553, 7581, 7740, 8509, 8967, 9194, 9288, 10093, 10148, 10915, 11020, 11058, 11449, 11450, 11748, 11807,



- 11848, 11850, 12501, 12734, 12746, 13618, 13619, 13620, 13621, 13622, 13864, 13864, 14826, 14897, 14971, 15071, 15231, 15233, 15631, 15631, 15776, 16601, 16733, 17194, 17216, 17217, 17337, 17341, 17342, 17557, 17591, 18011, 18091, 18298, 18523, 18899, 19387, 19900, 20576, 20612, 20815, 20963, 21487, 21662, 22011, 22146, 22232, 22596, 22733, 22865, 22868, 22869, 22870, 22871, 22929, 22962, 22984.
- Antineoplastic, P<sub>388</sub> D1, inhibits growth of cells** 22984.
- Antineoplastic, p53-deficient hmn head and neck squamous cell carcinoma SQ-20B** 3498.
- Antineoplastic, papillary epithelioma** 12766.
- Antineoplastic, PC-1 hepatocellular carcinoma** 21234.
- Antineoplastic, prevents new vessel formation** 8424.
- Antineoplastic, produces cytotoxic activity under exposure of light with special wavelength** 18272.
- Antineoplastic, pulmonary adenoma** 8095, 14126.
- Antineoplastic, QGY7703 liver cancer** 22422.
- Antineoplastic, radioresistant and chemoresistant** 3498.
- Antineoplastic, Raji cells** 537, 1210, 1463, 1464, 3779, 3788, 4874, 4978, 5063, 5098, 5134, 5686, 6498, 6889, 7203, 7611, 7618, 7904, 7909, 7913, 8906, 8908, 8912, 8980, 8981, 9463, 9465, 9643, 10070, 10710, 11100, 11103, 11104, 11105, 11106, 11451, 11970, 12012, 12220, 12619, 13002, 14092, 15422, 15737, 16257, 16260, 17664, 17706, 17722, 17723, 17727, 17728, 19497, 19540, 19542, 19784, 21499, 22108, 22194, 22195, 22777, 22781.
- Antineoplastic, RNA tumor virus** 20717.
- Antineoplastic, RS188N(rad+) mutant yeast *Saccharomyces cerevisiae*** 2293, 5391, 5392, 5393, 5394, 5395, 6501.
- Antineoplastic, RS321 mutant yeast *Saccharomyces cerevisiae*** 2293, 5391, 5392, 5393, 5394, 5395, 6501.
- Antineoplastic, RS52YK(rad52Y) mutant yeast *Saccharomyces cerevisiae*** 2293, 2293, 3053, 5391, 5391, 5392, 5392, 5393, 5393, 5394, 5394, 5395, 5395, 6501, 6501.
- Antineoplastic, S<sub>180</sub> sarcoma** 10, 140, 195, 759, 962, 1626, 1627, 2380, 3181, 3188, 3404, 3412, 3964, 3965, 4299, 4320, 4323, 6741, 6759, 8128, 8263, 9194, 9239, 9320, 11747, 12850, 13241, 13606, 13621, 14205, 14907, 14971, 15641, 15642, 16050, 17754, 18011, 18103, 19036, 19524, 19819, 20009, 20044, 20069, 20079, 20900, 20901, 21206, 21251, 22700, 22704, 22733.
- Antineoplastic, S<sub>180</sub> vaccinal** 11428.
- Antineoplastic, S37 mouse liver cancer** 22011.
- Antineoplastic, S37 sarcoma** 4399, 4400, 13241.
- Antineoplastic, S45 sarcoma** 12535, 18834.
- Antineoplastic, sarcoma** 1841, 15279.
- Antineoplastic, screened as potential antitumor promoters** 1210, 8906, 8908, 8912, 9463, 9465, 11100, 11103, 11104, 11105, 11106, 12012, 15422, 19497.
- Antineoplastic, shows antitumor activity without any cytotoxicity to Raji cells** 778, 779, 780.
- Antineoplastic, skin cancer** 409, 3209, 4455, 4872, 6762, 7167, 10067, 12843, 14090, 16935, 18939, 19889, 21483.
- Antineoplastic, skin cancer caused by DMBA** 6643.
- Antineoplastic, skin cancer, induced by chemical carcinogen** 3095.
- Antineoplastic, SMMC-7721** 3754, 16763, 20236.
- Antineoplastic, SN36 leukemia** 2380.
- Antineoplastic, squamosal carcinoma in skin** 14923.
- Antineoplastic, stomach tumor** 15204.
- Antineoplastic, SW620 hmn colorectal cancer** 6162, 21709.
- Antineoplastic, SWA16** 2331.
- Antineoplastic, thyroid carcinoma** 7399, 7416.
- Antineoplastic, transplant tumor** 20077.
- Antineoplastic, transplant tumors of six animals** 11091.
- Antineoplastic, treatment of breast cancer** 20811.
- Antineoplastic, treatment of cancer** 18940.
- Antineoplastic, treatment of cancer of esophagus** 16183.
- Antineoplastic, treatment of cancer of pancreas** 16183, 16935.
- Antineoplastic, treatment of cervical cancer** 4400.
- Antineoplastic, treatment of chronic myelocytic leukemia** 15631.
- Antineoplastic, treatment of colorectal cancer** 9609.
- Antineoplastic, treatment of gastric cancer** 8430, 21251.
- Antineoplastic, treatment of granulocytic leukemia** 11024.
- Antineoplastic, treatment of leukemia** 967.
- Antineoplastic, treatment of liver cancer** 16183.
- Antineoplastic, treatment of lung cancer** 20811.
- Antineoplastic, treatment of nasopharyngeal carcinoma** 20811.
- Antineoplastic, treatment of nonlymphatic leukemia** 9609.
- Antineoplastic, treatment of ovarian cancer** 20811.
- Antineoplastic, treatment of skin cancer** 5093.
- Antineoplastic, tumor caused by TPA** 6643, 8914, 17876, 17886.
- Antineoplastic, tumor xenograft** 6162, 11179, 21709.
- Antineoplastic, U14 cervical carcinoma** 1993, 4400, 11179, 11179, 11179, 11179.
- Antineoplastic, U4 mouse cervical carcinoma** 4399.
- Antineoplastic, unacceptable toxicity profile for clinical use** 15631.
- Antineoplastic, V-79 cancer** 3181.
- Antineoplastic, W<sub>256</sub> rat Walker sarcoma** 910, 2331, 2334, 5168, 6303, 6750, 6751, 7551, 7553, 7566, 7837, 7994, 9194, 9239, 9320, 9320, 11024, 12501, 12535, 13098, 14837, 14896, 14897, 15635, 16666, 19983, 20062, 20063, 20064, 20065, 20140, 20809, 20810, 20963, 21236, 21239, 21251, 22011, 22368, 22411.
- Antineoplastic, WM cancer** 1745.
- Antineoplastic, X5563 phlogocyte myeloma** 570.
- Antineoplastic, YAS ascites tumor** 6741.
- Antineoplastic, yeast bioassay for DNA-modifying agents** 2293, 3053, 5391, 5392, 5393, 5394, 5395, 6501.
- Antineoplastic, Yoshida sarcoma** 16593.
- Antinociception** 8423, 8424, 8427, 8429.
- Antiosteoporosis** 2480.
- Antioxidant inactive summary index** 27, 113, 258, 571, 572, 573, 574, 575, 577, 580, 617, 618, 959, 960, 961, 1107, 1113, 1162, 1363, 1476, 1513, 1935, 2073, 2107, 2136, 2311, 2491, 2539, 2805, 3004, 3175, 3359, 3389, 3475, 3615, 3619, 3775, 3872, 3873, 3983, 4195, 4199, 4200, 4201, 4202, 4243, 4406, 4604, 4611, 4612, 4613, 4940, 5044, 5096, 5276, 5652, 5864, 5865, 6060, 6365, 6622, 6626, 6628, 6629, 6630, 6631, 6776, 6778, 6779, 6780, 6781, 6782, 6865, 7305, 7306, 7307, 7405, 7457, 7478, 7701, 7702, 7768, 7773, 7825, 7826, 7883,

- 7925, 7949, 7974, 8029, 8136, 8210, 8211, 8219, 8221, 8278, 8278, 8423, 8426, 8427, 8504, 8546, 8547, 8869, 8871, 9243, 9347, 9423, 9502, 9551, 9626, 9811, 10127, 10220, 10221, 10222, 10231, 10362, 10376, 10442, 10578, 10751, 10786, 10803, 10883, 10884, 10885, 10889, 10929, 10930, 10931, 10932, 10933, 11324, 11434, 11462, 11527, 11658, 11669, 11683, 12053, 12070, 12082, 12178, 12420, 12819, 12820, 12821, 12822, 12824, 13088, 13107, 13250, 13253, 13492, 13493, 13572, 13624, 13637, 14723, 15342, 15525, 16159, 16160, 16169, 16180, 16182, 16245, 16252, 16629, 16630, 16631, 16632, 16633, 16994, 17012, 17048, 17247, 17251, 17287, 17416, 17511, 17517, 17518, 17548, 17559, 17588, 18086, 18317, 18368, 18411, 18674, 18755, 18925, 19182, 19211, 19542, 19562, 19572, 19619, 19777, 20389, 20423, 20424, 20425, 20426, 20427, 20569, 20711, 20840, 21357, 21415, 21711, 21763, 21768, 21857, 21996, 22025, 22182, 22252, 22332, 22336, 22609, 22667, 22673, 22775.
- Antioxidant inactive, assay on AAPH-induced hemolysis of RBC** 12819, 12820, 12824.
- Antioxidant inactive, Cytochrome-C reduction** 1935, 11658, 11669, 12053, 15525.
- Antioxidant inactive, DCFH method, HL-60 cells** 1476, 4940, 5652, 5864, 5865, 9423, 12070, 21711, 21857.
- Antioxidant inactive, DPPH scavenger inactive** 27, 258, 577, 580, 617, 618, 618, 959, 1107, 1113, 1363, 1513, 1935, 2073, 2107, 2136, 2311, 2491, 2805, 3175, 3359, 3389, 3475, 3615, 3615, 3619, 3619, 3775, 3872, 3873, 3983, 4195, 4199, 4200, 4201, 4202, 4406, 4611, 4612, 4613, 5044, 5096, 5276, 6060, 6365, 6622, 6626, 6628, 6629, 6630, 6631, 6776, 6776, 6778, 6779, 6865, 7457, 7825, 7826, 7925, 7949, 7974, 8210, 8211, 8219, 8221, 8221, 8546, 8547, 9243, 9551, 9626, 9811, 10127, 10231, 10362, 10376, 10578, 10803, 10883, 10885, 10933, 11324, 11462, 11527, 11658, 11669, 11683, 12053, 12082, 13088, 13107, 13492, 13493, 13493, 13572, 13624, 14723, 15525, 16169, 16180, 16182, 16245, 16994, 17012, 17247, 17247, 17251, 17416, 17517, 17548, 17559, 17588, 18086, 18411, 18674, 18755, 18925, 19182, 19542, 19562, 19619, 20389, 20423, 20424, 20425, 20426, 20427, 20569, 20711, 20840, 21357, 21763, 21768, 21996, 22025, 22182, 22252, 22332, 22336, 22609, 22673, 22775.
- Antioxidant inactive, DPPH scavenger inactive, TLC** 51, 113, 2539, 3004, 4243, 4604, 7305, 7306, 7307, 7701, 7702, 7883, 8136, 8278, 8278, 11434, 13107, 13637, 15342, 17048, 18317, 19777, 22667.
- Antioxidant inactive, ferric thiocyanate method** 10751, 19211.
- Antioxidant inactive, FMLP-induced and OZ-induced oxidative burst** 6780, 6781, 6782, 8029, 10220, 10221, 10222, 10889, 10931, 16629, 16630, 16631, 16632.
- Antioxidant inactive, H<sub>2</sub>O<sub>2</sub>/horseradish peroxidase assay** 10885.
- Antioxidant inactive, hydroxyl radical scavenging assay** 1162, 7773, 9347, 10442, 17287.
- Antioxidant inactive, inhibits peroxidation of linolenic acid** 258.
- Antioxidant inactive, inhibits superoxide anion generation, fMLP/CB method** 12178.
- Antioxidant inactive, iron chelating assay** 2805, 6365, 7457, 7478, 18925.
- Antioxidant inactive, lipid peroxide inhibitory experiment** 8869, 8871, 17518, 17559, 21415.
- Antioxidant inactive, lipid peroxide inhibitory experiment, rat hepatic homogenate, caused by FeSO<sub>4</sub>** 8426, 8427.
- Antioxidant inactive, lipid peroxide inhibitory experiment, rat hepatic homogenate, caused by H<sub>2</sub>O<sub>2</sub>+FeSO<sub>4</sub>** 8426.
- Antioxidant inactive, lipid peroxide inhibitory experiment, rat hepatic homogenate, caused by H<sub>2</sub>O<sub>2</sub>** 8426, 8423.
- Antioxidant inactive, lipid peroxide inhibitory experiment, rat liver microsomes** 10786, 19542.
- Antioxidant inactive, no description on experimental method** 571, 572, 573, 574, 575.
- Antioxidant inactive, PMN cellular chemiluminescence assay** 6780, 6781, 6782, 8029, 10220, 10221, 10222, 10889, 10931, 16629, 16630, 16631, 16632.
- Antioxidant inactive, PMN cellular chemiluminescence assay, reduces oxidative burst FMLP-induced** 10929, 10932, 10930, 10933, 10885, 10884, 16633.
- Antioxidant inactive, rbt, peroxidization of erythrocytic membrane** 18368.
- Antioxidant inactive, SOD-like activity** 617, 618, 8504, 9502.
- Antioxidant inactive, superoxide anion radical scavenging assay** 1162, 7773, 9347, 10442, 10885, 17287, 17511, 19572.
- Antioxidant inactive, superoxide anion radical scavenging assay, superoxide dismutase method** 7405, 16159, 16160, 22332, 7768.
- Antioxidant inactive, superoxide radical scavenging assay** 959, 960, 961, 2805, 6365, 7457, 7478, 9551, 12082, 12420, 13250, 13253, 17548, 17559, 18411, 18925.
- Antioxidant inactive, TBARS assay** 258.
- Antioxidant summary index** 51, 113, 309, 361, 398, 508, 577, 580, 679, 680, 759, 778, 779, 780, 845, 856, 911, 912, 959, 960, 961, 962, 1074, 1091, 1174, 1175, 1466, 1476, 1492, 1497, 1513, 1562, 1564, 1650, 1651, 1652, 1663, 1845, 1928, 1935, 1937, 1938, 1939, 1940, 1941, 1942, 1943, 1971, 2073, 2107, 2134, 2135, 2136, 2311, 2312, 2380, 2490, 2539, 2564, 2685, 2805, 2859, 2887, 2909, 2912, 3004, 3029, 3064, 3065, 3066, 3067, 3068, 3069, 3141, 3162, 3222, 3289, 3291, 3301, 3303, 3308, 3370, 3389, 3475, 3490, 3493, 3517, 3544, 3551, 3674, 3680, 3681, 3745, 3754, 3756, 3775, 3829, 3831, 3832, 3850, 3870, 3871, 3980, 3983, 3984, 4195, 4196, 4199, 4200, 4201, 4202, 4225, 4243, 4298, 4385, 4386, 4387, 4398, 4405, 4406, 4407, 4408, 4409, 4410, 4411, 4412, 4413, 4604, 4611, 4612, 4613, 4630, 4631, 4830, 4920, 4930, 4940, 5008, 5227, 5229, 5276, 5279, 5353, 5414, 5484, 5521, 5588, 5725, 5726, 5729, 5730, 5731, 5763, 5791, 5926, 5928, 5929, 5930, 5932, 6002, 6003, 6004, 6074, 6081, 6086, 6105, 6108, 6148, 6200, 6302, 6344, 6365, 6623, 6624, 6625, 6626, 6627, 6700, 6701, 6718, 6767, 6819, 6853, 6854, 6860, 6861, 6863, 6865, 6921, 6923, 6942, 7280, 7305, 7306, 7307, 7405, 7405, 7432, 7457, 7518, 7557, 7591, 7701, 7702, 7746, 7768, 7788, 7825, 7826, 7883, 7924, 7925, 7926, 7974, 7991, 8051, 8095, 8136, 8210, 8211, 8218, 8219, 8221, 8235, 8246, 8278, 8330, 8423, 8426, 8427, 8501, 8504, 8505, 8506, 8545, 8546, 8547, 8833, 8844, 8845, 8869, 8870, 8871, 8872, 8873, 8914, 9003, 9053, 9054, 9055, 9056, 9057, 9060, 9061, 9062, 9063, 9064, 9065, 9066, 9189, 9190, 9240, 9241, 9242, 9243, 9257, 9258, 9275, 9276, 9347, 9376, 9383, 9386, 9423, 9502, 9550, 9551, 9605, 9626, 9631, 9706, 9723, 9757, 9811, 9818, 9857, 9869,

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- Antioxidant, ABTS<sup>•+</sup> radical quenching activity** 16531.
- Antioxidant, against oxidative toxicity induced by glutamate, PC12 cells** 19587.
- Antioxidant, amelioration of freeradical-Induced oxidative stress of endothelial cells** 17460.
- Antioxidant, antihemolytic** 1928, 8818, 13055, 15439, 16071, 16080, 16763.
- Antioxidant, antihemolytic, AAPH-induced hemolysis of RBC** 580, 1492, 1497, 12817, 12818, 12821, 12822, 12823, 16252, 16253.
- Antioxidant, antihemolytic, free-radical induced lysis of rat RBC** 2887, 3308, 6853, 17876.
- Antioxidant, antihemolytic, free-radical induced lysis of RBC** 13054.
- Antioxidant, antihemolytic, H<sub>2</sub>O<sub>2</sub>-induced hemolysis of RBC** 8501, 12766.
- Antioxidant, antihemolytic, rat plasma** 2887.
- Antioxidant, attenuates Fe<sup>2+</sup>-induced oxidation of cell membrane** 17460.
- Antioxidant, chemiluminescence method** 3551, 2909, 18317, 2887, 19087.
- Antioxidant, Cytochrome-C reduction** 11642, 18335, 18336, 18365, 19087, 11654, 12032.
- Antioxidant, DCFH method, HL-60cells** 1845, 4920, 6942, 7746, 10077, 21105, 21771.
- Antioxidant, DPPH scavenger** 508, 580, 679, 680, 856, 911, 912, 960, 961, 1091, 1091, 1466, 1476, 1562, 1564, 1650, 1651, 1652, 1845, 1845, 1845, 1845, 1845, 1845, 1845, 1845, 1935, 2135, 2312, 2380, 2490, 2685, 2887, 2887, 2909, 3029, 3162, 3222, 3301, 3303, 3308, 3308, 3370, 3475, 3517, 3544, 3551, 3551, 3551, 3674, 3850, 3870, 3871, 3980, 4196, 4200, 4202, 4405, 4407, 4408, 4409, 4410, 4411, 4412, 4413, 4930, 5008, 5227, 5229, 5279, 5484, 5521, 5763, 5763, 5791, 5926, 6002, 6003, 6004, 6074, 6081, 6108, 6623, 6624, 6625, 6627, 6700, 6701, 6718, 6767, 6819, 6853, 6853, 6853, 6853, 6854, 6860, 6861, 6863, 6921, 6923, 7405, 7432, 7445, 7478, 7518, 7557, 7768, 7768, 7991, 8051, 8095, 8218, 8218, 8219, 8235, 8246, 8278, 8504, 8505, 8506, 8545, 8845, 9003, 9240, 9241, 9242, 9257, 9258, 9275, 9276, 9502, 9550, 9818, 9857, 10185, 10272, 10314, 10377, 10434, 10694, 10695, 10887, 11152, 11154, 11158, 11165, 11171, 11172, 11477, 11514, 11564, 11642, 11642, 11642, 11642, 11654, 11704, 11732, 12018, 12018, 12020, 12020, 12032, 12033, 12052, 12060, 12062, 12420, 12510, 13088, 13249, 13250, 13253, 13291, 13296, 13361, 13479, 13479, 13481, 13492, 13872, 13975, 14489, 14556, 14711, 14969, 14988, 15170, 15202, 15448, 15719, 15805, 15809, 16159, 16160, 16174, 16179, 16246, 16258, 16399, 16680, 16681, 16725, 16728, 16765, 17053, 17173, 17283, 17285, 17352, 17518, 17519, 17553, 17554, 17869, 17876, 17884, 17884, 17886, 18169, 18306, 18307, 18310, 18316, 18317, 18317, 18317, 18317, 18317, 18317, 18330, 18335, 18336, 18365, 18376, 18378, 18400, 18401, 18402, 18403, 18414, 18584, 18643, 19056, 19087, 19087, 19087, 19087, 19087, 19277, 19299, 19452, 19618, 19618, 19883, 19885, 20150, 20310, 20501, 20556, 20696, 20806, 20910, 21082, 21083, 21125, 21396, 21397, 21415, 21415, 21417, 21453, 21500, 21634, 21691, 21808, 22180, 22181, 22183, 22184, 22185, 22186, 22187, 22188, 22306, 22332, 22332, 22416, 22417, 22418, 22524, 22565, 22566, 22581, 22594, 22595, 22759, 22760.
- Antioxidant, DPPH scavenger, TLC** 1845, 8095, 8330, 16545, 18317, 21119, 21415, 21737, 21745, 21749.
- Antioxidant, ferric thiocyanate method** 5279, 10185, 22565, 22566, 22594, 22595, 6148, 4830, 22306, 7591, 3745, 580, 11195.
- Antioxidant, free radical scavenger, no description on type of free radical** 1174, 1175, 4631, 7924, 7926, 8833, 8844, 11266, 12766, 13212, 17344, 19203, 19846, 21360.
- Antioxidant, H<sub>2</sub>O<sub>2</sub> scavenger** 9257, 9258, 9275, 9276, 20901.
- Antioxidant, H<sub>2</sub>O<sub>2</sub>/horseradish peroxidase assay** 10933.
- Antioxidant, hydroxyl radical scavenger** 1845, 4298, 4385, 4386, 4387, 6081, 6200, 6923, 7280, 9605, 9631, 13331, 16170, 16171, 16172, 17510, 17511, 19572, 19573, 20566, 20900, 20901, 21130.
- Antioxidant, inhibits formation of active oxygen** 1928.
- Antioxidant, inhibits formation of superoxide in macrophage** 22239.

- Antioxidant, inhibits formation of MDA, mitochondria of mus heart** 17876.
- Antioxidant, inhibits H<sub>2</sub>O<sub>2</sub>-induced oxidative stress and DNA oxidative damage, cultured MDCK cells** 3303.
- Antioxidant, inhibits lipid peroxidation, ADP/Fe<sup>2+</sup>-induced** 3141, 5588, 17229, 21415.
- Antioxidant, inhibits lipid peroxidation, adriamycin- induced** 1937, 1938, 1939, 1940, 1941, 1942, 1943, 20121, 20122.
- Antioxidant, inhibits lipid peroxidation, brain tissue, caused by insufficient oxygen and sugar** 7788.
- Antioxidant, inhibits lipid peroxidation, caused by CCl<sub>4</sub>** 1971.
- Antioxidant, inhibits lipid peroxidation, cephalopin** 8278, 13088, 18685, 19450.
- Antioxidant, inhibits lipid peroxidation, cytoblast and microsome in hepatic cells** 5414.
- Antioxidant, inhibits lipid peroxidation, effects on plasma oxidation after incubation with Fe<sup>2+</sup>/H<sub>2</sub>O<sub>2</sub>** 13581.
- Antioxidant, inhibits lipid peroxidation, enzymatic lipid peroxidation** 21392.
- Antioxidant, inhibits lipid peroxidation, hepatic cell mitochondria in cats** 16765.
- Antioxidant, inhibits lipid peroxidation, induced by vitamin C- nicotinamide ADP and Fe<sup>2+</sup>-cysteine in microsome of murine cerebral, hepatic and renal cells** 4631, 12420, 19201.
- Antioxidant, inhibits lipid peroxidation, linoleic acid emulsion** 9257, 9258, 9275, 9276.
- Antioxidant, inhibits lipid peroxidation, macrosome of liver cells in rat** 962, 3303.
- Antioxidant, inhibits lipid peroxidation, microsome** 3754, 16763.
- Antioxidant, inhibits lipid peroxidation, microsome of hepatocyte in rat** 3493, 3831, 3832, 3829, 10038, 13438, 16836.
- Antioxidant, inhibits lipid peroxidation, microsome of hepatocyte in rat, ADP+NADPH-induced** 17507, 17508, 17510, 21157.
- Antioxidant, inhibits lipid peroxidation, microsome of hepatocyte in rat, FeSO<sub>4</sub>+cysteine-induced** 1497.
- Antioxidant, inhibits lipid peroxidation, microsome of hepatocyte in rat, CCl<sub>4</sub>-induced** 1497.
- Antioxidant, inhibits lipid peroxidation, microsome, induced by Fe<sup>2+</sup>/VC, CCl<sub>4</sub>/NADPH, or Fe<sup>3+</sup>/NADPH** 20324.
- Antioxidant, inhibits lipid peroxidation, microsome, induced by ferrous-cysteine** 9063, 9064, 9065, 9066, 21415.
- Antioxidant, inhibits lipid peroxidation, microsome, NADPH-dependent lipid peroxidation and autoxidation of linoleic acid** 1562, 1564, 6863, 8051.
- Antioxidant, inhibits lipid peroxidation, mitochondria** 3756.
- Antioxidant, inhibits lipid peroxidation, mitochondria of hepatocyte in rat** 759, 962, 3490, 16836.
- Antioxidant, inhibits lipid peroxidation, mitochondria of hepatocyte in rat, ADP/NADPH-induced** 8914, 18643.
- Antioxidant, inhibits lipid peroxidation, mitochondria of hepatocyte in rat, Fe<sup>2+</sup>/VC-induced** 8914.
- Antioxidant, inhibits lipid peroxidation, mitochondria of hepatocyte in rat, FeSO<sub>4</sub>-induced** 11703.
- Antioxidant, inhibits lipid peroxidation, mus liver** 15204.
- Antioxidant, inhibits lipid peroxidation, no description on target tissue and method** 8870, 11648, 13250, 13253, 13514, 16983, 17278, 17283, 17285, 17352, 17517, 17519, 18643, 21320, 21321, 21415, 22505.
- Antioxidant, inhibits lipid peroxidation, rat brain homogenate** 6086, 6105, 9189, 9190, 12682, 12683, 12684, 12685, 12686, 12687, 12688, 12689, 12690, 12691, 12695, 12696, 12697, 12698, 12701, 12702.
- Antioxidant, inhibits lipid peroxidation, rat cytoblast in liver cells** 11735.
- Antioxidant, inhibits lipid peroxidation, rat heart and liver mitochondria** 9631.
- Antioxidant, inhibits lipid peroxidation, rat hepatic homogenate, caused by H<sub>2</sub>O<sub>2</sub>** 8427.
- Antioxidant, inhibits lipid peroxidation, rat hepatocyte membrane, effects on Fe<sup>+3</sup>/ascorbate-induced lipid peroxidation** 13581.
- Antioxidant, inhibits malondialdehyde (MDA)** 845, 9053, 9054, 9055, 9056, 9057, 9060, 9061, 9062, 9063, 9064, 9065, 9066, 9869, 12391, 12392, 21415, 21415, 21415.
- Antioxidant, inhibits NOR1 (nitric oxide donor) action** 778, 779, 780.
- Antioxidant, inhibits *t*-BuOOH induced luminescence, mus hepatic homogenate** 11327.
- Antioxidant, iron chelating assay** 9257, 9258, 9275, 9276, 12420, 14556.
- Antioxidant, iron/ascorbate system for antioxidative potency (AOP) determination** 9376, 9383, 9386.
- Antioxidant, LDL peroxidation inhibitor** 13212, 13292, 17884, 19419.
- Antioxidant, LDL peroxidation inhibitor, Cu<sup>+2</sup>-induced** 6002, 6003, 6004, 11694, 12420, 12925, 17460, 19201, 19206, 21477, 21478, 21479, 21480.
- Antioxidant, LDL peroxidation inhibitor, Cu<sup>+2</sup>-induced and AAPH-induced** 580, 7925, 1663, 2134, 2912.
- Antioxidant, linoleic acid solution** 5725, 5726, 5729, 5730, 5731.
- Antioxidant, lipid peroxidation assay, enzyme-dependent** 3068, 3064, 14210, 3065, 3069, 12420, 3066, 3067.
- Antioxidant, lipid peroxidation assay, enzyme-independent** 3064, 3065, 3066, 3067, 3068, 3069, 12420, 14210, 21392.
- Antioxidant, minimizes loss of cell viability in endothelial cells** 17460.
- Antioxidant, no description on experimental method** 309, 361, 398, 580, 1074, 2564, 2859, 3368, 3680, 3681, 4225, 4398, 6302, 7521, 10351, 11195, 11266, 12771, 13370, 14261, 14997, 15278, 15279, 16532, 16540, 17486, 17489, 17491, 17886, 18643, 19781, 19819, 19903, 20451, 20452, 20453, 20454, 21415, 22718.
- Antioxidant, oxygen free radical scavenger** 1938, 19201, 20901.
- Antioxidant, PEP inhibitor** 5791, 9561, 11648, 18682.
- Antioxidant, peroxide formed from polymorph** 10893.
- Antioxidant, peroxidization of rbt erythrocytic membrane** 3303, 18323.
- Antioxidant, peroxidized anion scavenger** 17895.
- Antioxidant, PMN cellular chemiluminescence assay** 10883, 10929, 10932, 10930, 10933, 10885, 10884, 16633, 18317.
- Antioxidant, prevents oxidation of unsaturated fatty acid components to stabilize cell membranes** 21415.
- Antioxidant, rat brain, effect on conjugated diene formation of LDL or MDA level** 3984, 6344, 19923, 21955.

- Antioxidant, reduces oxidative burst FMLP-induced** 18317, 10883.
- Antioxidant, reduces risk of atherosclerosis** 17460.
- Antioxidant, reversed H<sub>2</sub>O<sub>2</sub>/FeSO<sub>4</sub>-induced impairment of endothelium in rat aorta** 17460.
- Antioxidant, SOD-like activity** 1845, 3301, 3303, 5521, 7518, 8505, 8506, 16765, 19056, 19277, 20310, 20389, 20910.
- Antioxidant, superoxide anion radical scavenger** 1845, 1939, 1941, 3289, 3291, 3308, 3754, 4385, 4386, 4387, 6081, 6200, 6923, 7280, 8872, 8873, 9605, 11672, 12258, 12420, 16170, 16171, 16172, 17278, 17278, 17283, 17285, 17352, 17510, 18643, 18643, 19531, 19532, 19573, 20556, 20566, 21369, 21415.
- Antioxidant, superoxide anion radical scavenger, cytochrome C assay** 10933.
- Antioxidant, superoxide anion radical scavenger, hmn neutrophils, stimulated by FMLP/Cbor PMA** 5353, 16050.
- Antioxidant, superoxide anion radical scavenger, inhibits superoxide anion generation, FMLP/CB method** 5930, 5932, 10542, 9757, 5928, 15766, 9723, 10276, 5929, 9706.
- Antioxidant, superoxide anion radical scavenger, protects myocardial ischemia-reperfusion injury in rat myocardium mitochondrial membrane** 4630.
- Antioxidant, superoxide anion radical scavenger, superoxide dismutase method** 5763, 7432, 12020, 12052, 12062, 13479, 14711, 18317, 18323, 18361, 18376, 19087.
- Antioxidant, superoxide radical scavenger** 4930, 7445, 9257, 9258, 9275, 9276, 9550, 14489, 14556, 16174, 16175.
- Antioxidant, superoxide scavenger** 5791, 8869, 8870, 8871, 22505.
- Antioxidant, thiobarbituric acid reactive substance (TBARS) assay, inhibits peroxidation of linolenic acid** 10377, 10376, 21808.
- Antioxidant, up-regulates 50 genes and down-regulates many others** 10887.
- Antiparasite** 16266.
- Anti-phage** 12221.
- Antipneumocystis agent** 2376.
- Anti-pregnancy** 23021.
- Antiprotozoal** 2303, 3094, 3968, 8304, 8128, 11541, 11851, 14906, 18939, 19819, 22282.
- Antipyretic** 304, 554, 651, 1283, 1520, 1901, 1964, 2106, 2303, 2676, 3220, 3588, 3689, 3693, 3809, 3907, 4421, 4614, 4876, 5108, 5436, 6618, 6767, 7481, 7521, 7523, 8010, 8292, 9455, 11882, 12510, 15337, 16451, 16525, 16532, 16966, 19184, 19473, 20002, 20066, 20076, 20444, 20732, 21234, 21508, 21887, 22270, 22384, 22385, 22602, 22938, 23003.
- Antipyretic mechanism involves inhibition of PG synthesis in brain** 7521.
- Antirachitic vitamin** 22558.
- Anti-rejection symptom in skin grafting** 1191.
- Antiretroviral and cytotoxic** 9186, 9612, 13241, 22040.
- Antirheumatic** 8307, 10886, 13391, 16085, 19184, 19427, 22270.
- Anti-rheumatoid arthritis** 5613, 20481.
- Anti-sepsis** 14063, 14064.
- Anti-sepsis inactive** 1184, 1185, 14062, 14065.
- Antiseptic** 2284, 3237, 3318, 3760, 3761, 3762, 8312, 9703, 12436, 12849, 17089, 17602, 17931, 19187, 21360, 21366.
- Anti-seronine** 8395.
- Anti-sickling of cells** 9818, 22332.
- Antispasmodic** 56, 871, 904, 957, 1191, 1287, 1288, 1476, 1502, 1520, 1526, 1614, 1619, 1742, 1935, 1960, 2001, 2298, 2300, 2550, 2657, 2803, 3231, 3243, 3394, 3502, 3633, 3695, 3741, 3745, 3794, 3889, 3915, 4421, 4604, 5036, 5161, 5677, 6507, 6776, 6921, 7230, 7385, 7523, 7703, 7802, 7811, 9184, 9419, 9541, 10872, 11002, 11091, 11504, 11591, 11834, 12184, 12221, 12438, 12535, 12747, 12908, 13137, 13571, 14531, 14820, 14923, 14971, 15266, 15268, 15279, 15449, 16080, 16525, 16770, 16966, 17013, 17036, 17174, 18165, 19085, 19195, 19354, 19355, 19356, 19388, 19473, 19542, 19706, 19712, 19933, 19934, 20140, 20148, 20324, 21060, 21077, 21263, 21362, 21511, 22195, 22269, 22282, 22314, 22350, 22530, 22552, 22553, 22581, 22718, 22768, 22774, 22781, 22882.
- Antispirochetic** 4116, 5152, 6776.
- Anti-stimulation** 21350.
- Anti-stress** 86, 3751.
- Anti-sweetener** 2271, 11904, 11905, 11906, 11911, 20037, 23016, 23017, 23018.
- Antithrombotic** 10, 920, 921, 2102, 2266, 5440, 6700, 7978, 10684, 12420, 15635, 17568, 17978, 18378, 20009, 20121, 20686, 21157, 22497.
- Antitoxin** 2106, 3760, 3774.
- Anti-*Trichomonas vaginalis*** 576, 2061, 2615, 7323, 8047, 9809, 9810, 11203, 14728, 18627, 19414, 22282.
- Antitrypanosomal** 9235, 12501, 15881, 16555, 21397, 14728, 18094.
- Antitrypanosomal inactive (*Trypanosoma brucei*)** 4866.
- Antitrypanosomal inactive (*Trypanosoma brucei rhodesiense*)** 10159.
- Antitrypanosomal inactive (*Trypanosoma cruzi*)** 4866, 10159, 12845, 12846, 13729, 15716, 19983.
- Antitrypanosomal (*Castellanella gambiense*)** 7323.
- Antitrypanosomal (*Trypanosoma brucei rhodesiense*)** 580, 589, 815, 816, 1141, 1145, 1146, 1147, 1241, 1937, 1939, 2004, 2346, 2683, 2920, 2924, 3166, 3306, 3551, 3609, 3674, 4478, 4982, 5675, 6776, 7925, 8325, 9750, 11148, 11195, 11978, 12916, 13297, 14222, 16067, 16068, 17478, 18221, 19568, 19960, 22409, 22410, 22551.
- Antitrypanosomal (*Trypanosoma brucei*)** 506, 15716.
- Antitrypanosomal (*Trypanosoma brucei brucei*)** 585, 3293, 5417, 10310, 12232, 12487, 19234, 19235, 19542, 20369.
- Antitrypanosomal (*Trypanosoma cruzi*)** 184, 227, 376, 506, 580, 815, 816, 1141, 1145, 1146, 1147, 1241, 1460, 1842, 1937, 1939, 2004, 2346, 2683, 2920, 2924, 3166, 3258, 3306, 3551, 3609, 3674, 3761, 3762, 4088, 4204, 4205, 4478, 4891, 5477, 5675, 6348, 6759, 6776, 7925, 8004, 8325, 8979, 9031, 9032, 9033, 9072, 9727, 9728, 9729, 9732, 9750, 10296, 10297, 11148, 11195, 11978, 12497, 12842, 12916, 13719, 13720, 13721, 13722, 13905, 14222, 14384, 16050, 16067, 16068, 16604, 16711, 17006, 17478, 17851, 18187, 18188, 18221, 19568, 19636, 19753, 19960, 21390, 22270, 22551, 22579, 22580, 22963.
- Antitrypanosomal (*Trypanosoma equiperdum*)** 7323.
- Antitussive** 1618, 1866, 2274, 2312, 2557, 3237, 3588, 3615, 3885, 5178, 6776, 7996, 8347, 9315, 9564, 10887, 11507, 12446, 13137, 15146,

- 15263, 15460, 15469, 16623, 17283, 17456, 19955, 19983, 20307, 22086, 22087.
- Antitussive inactive** 6839, 10188.
- Antitussive, dispels phlegm** 10819, 9021, 9617, 10137, 11966, 15614, 17377, 17384, 17567, 17813, 19715, 663, 834, 1094, 1097, 1935, 2678, 3400, 4550, 6482, 6772, 7944, 9564, 12843, 13264, 14531, 15170, 11524, 13574, 13610, 13611, 17376, 18095, 18317, 18816, 20254, 17505, 19542, 7736, 5763, 20987, 17568.
- Ant ulcerative** 10, 140, 195, 777, 1287, 1476, 2071, 2887, 3308, 4873, 4889, 4893, 4941, 5665, 6990, 8297, 8524, 8841, 8965, 11504, 11808, 12908, 13388, 13492, 13678, 15705, 15882, 16085, 16505, 16525, 16693, 16694, 17220, 17546, 17549, 17550, 17551, 17552, 17886, 19332, 19388, 19422, 19423, 19424, 20082, 20205, 20444, 20711, 20714, 22270.
- Anti-venom** 2887, 5763.
- Antiviral inactive summary index** 2994, 2995, 4225, 10681, 11350, 14261, 14847, 14848, 14849, 21509, 21509, 21510, 21510.
- Antiviral inactive, HSV-1 virus** 6230, 6298, 10681, 13250, 13251, 14321, 16500, 21509, 21510.
- Antiviral inactive, HSV-2 virus** 10681, 21509, 21510.
- Antiviral inactive, MDCK cells, Flu-A virus** 12828, 13053, 13055, 15439, 16071, 16080.
- Antiviral inactive, Vero cells, HSV-1 virus** 12828, 13053, 13055, 15439, 16071, 16080.
- Antiviral inactive, Vero cells, HSV-2 333 virus** 4225, 11350, 14261, 14847, 14848, 14849.
- Antiviral inactive, Vero cells, HSV-2 virus** 2994, 2995.
- Antiviral summary index** 26, 736, 740, 784, 1372, 2044, 2811, 2865, 2866, 2867, 2868, 2869, 2887, 2892, 3094, 3197, 3198, 3300, 3308, 3498, 3502, 3551, 3588, 3622, 3623, 3875, 3909, 4048, 4354, 5093, 5161, 5613, 6272, 6402, 6551, 6772, 7323, 7518, 7833, 8095, 8246, 8307, 8423, 8424, 8427, 8458, 8846, 8967, 9194, 9456, 9458, 10059, 10589, 10681, 10886, 11086, 11129, 11524, 11569, 11703, 11903, 11978, 11980, 12070, 12420, 12733, 12828, 12849, 13053, 13055, 13137, 13239, 13241, 13481, 13863, 14728, 14965, 14971, 15286, 15439, 15462, 15849, 15881, 16003, 16071, 16080, 16268, 16498, 16499, 16500, 16511, 16555, 16599, 16601, 16777, 16793, 17216, 17217, 17337, 17341, 17342, 17574, 17578, 17579, 17580, 17581, 17582, 17592, 17593, 17896, 17952, 18028, 18050, 18251, 18272, 18317, 18376, 18411, 18770, 18771, 18824, 18868, 18916, 19087, 19142, 19148, 19211, 19777, 19819, 19900, 20253, 20307, 20369, 20434, 20578, 20670, 21059, 21089, 21328, 21508, 21698, 21862, 22215, 22216, 22721, 22863.
- Antiviral, Asia  $\alpha$ -Influenza virus** 16555.
- Antiviral, Bunya virus** 16601.
- Antiviral, chicken ES4 virus** 12849.
- Antiviral, chickenpox virus** 8846.
- Antiviral, Cocksackie virus** 13241.
- Antiviral, Cxsackie-B virus** 14728.
- Antiviral, cytomegalovirus CMV(hmn)** 18770, 18771.
- Antiviral, cytomegalovirus CMV(mus)** 11978, 18770, 18771.
- Antiviral, EBV virus** 8246, 16599.
- Antiviral, EMC virus = Casrdiovirus** 18050.
- Antiviral, encephalitis B virus** 9194.
- Antiviral, encephalitis B virus in mouse** 5161.
- Antiviral, encephalitis B virus in mouse, RNA virus** 16601.
- Antiviral, endomyocarditis virus** 13239.
- Antiviral, epidemic type-1 poliomyelitis virus-1** 6402, 18376.
- Antiviral, Gesak virus** 17216, 17217.
- Antiviral, Gesak-B<sub>4</sub> virus** 6402, 18376.
- Antiviral, *H. suis* virus** 13137.
- Antiviral, Hep2 cells infected by Para-3 virus** 12828, 13053, 13055, 15439, 16071, 16080.
- Antiviral, Hep2cells infected by respiratory syncytial virus RSV** 16080.
- Antiviral, hepatitis B virus HBV in blood products** 3588.
- Antiviral, herpes zoster virus** 8846.
- Antiviral, herpesvirus** 13863, 14971.
- Antiviral, herpesvirus A** 13241.
- Antiviral, herpetic stomatitis RNA virus** 16268.
- Antiviral, hmn coronavirus strain 229E (HCoV-229E)** 11086, 18251.
- Antiviral, hmn T-lymphocytes-phil virus III HTLV-III** 3588.
- Antiviral, hmn T-lymphocytes-phil virus III HTLV-III** 3588.
- Antiviral, HSV virus** 7518, 11524, 12420, 13481, 17216, 17217, 17593, 19148.
- Antiviral, HSV/CV-1 virus** 17337, 17341, 17342.
- Antiviral, HSV-1 virus** 163, 422, 736, 740, 1372, 3875, 5303, 5613, 6551, 10059, 10589, 11129, 11569, 13098, 15462, 16499, 16511, 16793, 17337, 17592, 17896, 18868, 20253, 21059, 21508, 21724, 22721.
- Antiviral, HSV-1, DNA virus** 16268.
- Antiviral, HSV-2 virus** 736, 740, 6551, 10059, 16500, 10589, 15462, 16499, 17574, 17900, 18272, 21059.
- Antiviral, influenza virus** 3909, 8095, 9194, 11703, 15881, 19777.
- Antiviral, influenza virus A** 661, 8967, 11903, 18411.
- Antiviral, influenza virus A<sub>2</sub>** 19142.
- Antiviral, influenza virus B** 11903.
- Antiviral, influenza virus sialoma inhibitor** 19211.
- Antiviral, inhibits biosynthesis of RNA** 4048, 13239.
- Antiviral, inhibits infection from RDV virus in young chicken embryo** 16003.
- Antiviral, inhibits infection of herpes simplex virus 2 in mus genital** 17216, 17217.
- Antiviral, inhibits replication of HSV-1** 2811, 8423, 8427, 8424, 19537.
- Antiviral, Japanese encephalitis virus** 8967, 18050.
- Antiviral, jockos, inactivator to hepatitis B virus HBV** 3588.
- Antiviral, Mayaro virus** 17952.
- Antiviral, measles virus** 1372, 16793, 17337, 17592, 19148.
- Antiviral, Mengo virus** 14728.
- Antiviral, meningitis virus** 18050.
- Antiviral, Newcastle disease virus** 9194.
- Antiviral, no explanation of virus species** 26, 784, 2044, 2887, 2892, 3094, 3197, 3198, 3300, 3308, 3498, 3502, 3551, 3622, 4354, 5093, 6772, 7323, 7833, 8307, 8423, 8424, 8427, 9456, 9458, 12070, 14965, 15849, 16498, 16777, 18317, 18824, 18916, 19819, 19900, 20307, 20434, 20670, 21328, 21862, 22863.
- Antiviral, non-A non-B hepatitis virus NANB** 3588.

- Antiviral, Para-3 virus** 661, 2865, 2866, 2867, 2868, 2869, 20369, 22215, 22216.
- Antiviral, poliomyelitis I virus** 18868.
- Antiviral, poliomyelitis virus** 11569, 12733, 13241, 17952, 20578.
- Antiviral, potato virus** 14971.
- Antiviral, poxvirus** 14728.
- Antiviral, PR<sub>8</sub> virus** 8967.
- Antiviral, pseudolyssa virus** 14728.
- Antiviral, respiratory syncytial virus RSV** 661, 22215, 22216.
- Antiviral, reverse transcriptive virus** 10886, 18028.
- Antiviral, rhinovirus II** 3623.
- Antiviral, Sendai virus** 19777.
- Antiviral, Sindbis virus** 11978.
- Antiviral, tobacco masaic virus** 8458.
- Antiviral, tobacco mosaic virus TMV** 6272.
- Antiviral, vaccinia virus** 9194, 12733.
- Antiviral, Vero cells infected by HSV-1 virus** 17578, 17579, 17580, 17581, 17582, 21089, 21698.
- Antiviral, vesicular stomatitis virus** 15286, 18411, 19087.
- Antiviral, vesicular stomatitis virus VSV** 17216, 17217.
- Antiviral, vesicular stomatitis virus VSV** 11569, 11978, 11980.
- Antiviral, vesicular stomatitis virus VSV/BHK** 17337, 17341, 17342.
- Antiviral, yellow fever virus** 16601.
- Anxiolytic** 2016.
- Anxiolytic and antidepressant** 8524.
- Aphrodisiac** 14057.
- APN inhibitor inactive** 6757, 8095, 11642, 10887, 18411, 16011, 18358, 18371, 21392.
- Apoptosis enhancer** 10287.
- apoptosis inducer** 1307, 8526, 8527, 8528, 8530, 8531, 8532, 8533, 8535, 8536, 8541, 8542, 8543, 8544, 16050, 20811.
- apoptosis inducer inactive** 6689.
- Arachidonic acid 5-lipoxidase selective inhibitor** 3743.
- Arachidonic acid oxidase inhibitor** 14995.
- Aromatase inhibitor** 51, 846, 2635, 2647, 5086, 5746, 7485, 8262, 10506, 11490, 14964, 15279, 15934, 20326, 21116, 21151.
- Aromatase inhibitor inactive** 1764, 2172, 2629, 2630, 2648, 2650, 2651, 4108, 5894, 6001, 6088, 6102, 6103, 8141, 10445, 12681, 13571, 14956, 14961, 14962, 18643, 21086, 21117, 21128.
- Aromatic bitter** 3248.
- Aromatic L-amino-acid decarboxylase inhibitor** 17278.
- Astringent** 660, 909, 917, 1654, 7882, 8095, 17813, 21955.
- Attractant for many plant-eating insects** 9522.
- Attracts adult male dayfly (*Chrysopa septempunctata*)** 15434.
- BACE1 inhibitor** 9561.
- BChE inhibitor** 2233, 2815, 4516, 4532, 4542, 4996, 5828, 6159, 7082, 7128, 7177, 7210, 7381, 7381, 7835, 7928, 8009, 9200, 9201, 11002, 11004, 11291, 12834, 12835, 14449, 15322, 15323, 16988, 21374, 22700.
- BChE inhibitor inactive** 5739, 7213.
- Benzedrine antagonist** 16451.
- Benzodiazepine receptor agonist** 14865.
- Bidirectional action to blood pressure (first increases and then lowers blood pressure, while heart rate slows)** 8423, 8424, 8426, 8428, 8429, 8430.
- Bidirectional action to blood pressure (first increases and then lowers blood pressure, while heart rate slows)** 20100.
- Bidirectional action to blood vessel (dilates at low concentration and contracts at high concentration)** 4036.
- Bidirectional action to blood vessel (when dose less than 40nmol relaxes blood vessel, when dose over 40nmol contracts blood vessel)** 15317.
- Bidirectional action to CNS system (central sedation at low dose, central stimulation at moderate dose and paralytic death at high dose)** 8297.
- Bidirectional action to CNS system (central stimulation at high dose and sedation at low dose)** 651.
- Bidirectional action to CNS system (first stimulation and then inhibition)** 3220, 11202, 19388.
- Bidirectional action to CNS system (stimulation in low dose, inhibition in high dose)** 20069.
- Bidirectional action to drowsiness (excitation in low dose and inhibition in high dose)** 15129.
- Bidirectional action to heart (first stimulates and then inhibits)** 13237.
- Bidirectional action to heart (inhibits first and then stimulates)** 11851.
- Bidirectional action to nerve system (motor depressant in low dose and causes convulsion in high dose)** 9234.
- Bidirectional action to neuromuscular transmission (in high dose, first enhances and then inhibits)** 21593.
- Bidirectional action to potassium channel in myocardium membrane** 19201.
- Bidirectional action to sympathetic nerve (excites sympathetic fibers in low dose and inhibits them in high dose)** 22397.
- Bile secretion promoter** 2887, 1742, 20734, 2538, 4135, 15279, 17983, 22346, 22397, 5161, 4249.
- Binding activity to benzodiazepine receptor** 1476, 3745, 8090, 9564, 14085, 20577.
- Bioactive in connection with plant photosynthesis and path of respiration** 17515.
- Biosynthesis of DNA, promoter** 9456.
- Biosynthesis of DNA, protein and lipid, promoter** 8423, 8424, 8426, 8430.
- Biosynthesis of rRNA and mRNA in diabetic rat, promoter** 8424.
- Biosynthesis precursor of carthamin** 17771.
- Biosynthetic precursor of some drugs** 18304.
- Bitter principle** 486, 1017, 1779, 3206, 4318, 15286, 15404, 15555, 15652, 15655, 16080, 16551, 16650, 17215, 17705, 18299, 18425, 19184, 20913, 21599.
- Bitter-sweet taste** 8834.
- Blocks nerve** 19431.
- Blocks permeation of sodium through membranes of nerval fibrocyte** 21211.
- Blocks self-discipline nerve** 20496.
- Blocks sympathetic ganglia** 20650.
- Bone marrow cell proliferation promoter** 3308, 6853, 6864, 6921, 6923.
- Bone marrow inhibitor** 3404, 3911.

- Bone resorption inhibitor** 10896, 14698, 15985, 16408, 16409, 20228.
- Bone resorption inhibitor** 6456, 6457, 6458, 19778, 20556.
- Bradykinin antagonist** 20009.
- Ca<sup>2+</sup>-ATPase inhibitor** 18668.
- Caffeine antagonist** 16451.
- Calcitonin gene-related peptide (CGRP) stimulator** 7665.
- Calcium antagonist** 2041, 3935, 5135, 7512, 7721, 8423, 8424, 8426, 9553, 11680, 12916, 13836, 14184, 15321, 15645, 15704, 16711, 20121, 20122, 21077, 21490, 21493, 22144.
- Calcium channel blocker** 2606, 16263.
- Calcium channel receptor inhibitor** 2209.
- Calmodulin-dependent cAMP phosphodiesterase inhibitor** 10564.
- CaM interactor** 4918, 7838, 14639.
- CaM interactor inactive** 9480, 15936, 21038.
- cAMP phosphodiesterase inhibitor** 2102, 2613, 2614, 3160, 3602, 3745, 4898, 4918, 4996, 5250, 6254, 7838, 7924, 7926, 8423, 8424, 8426, 8427, 8833, 8914, 8968, 9331, 9546, 13594, 9681, 9682, 12333, 12344, 12355, 12358, 13145, 14639, 15038, 15455, 15456, 16867, 16989, 16997, 17020, 17305, 17306, 17409, 18219, 18368, 19072, 19259, 19588, 21493, 22720.
- 3',5'-cAMP-phosphodiesterase inhibitor** 18317.
- Cancer cell P-Glycoprotein inhibitor** 7596, 7597, 7598, 7599, 7600, 7601, 7602, 7603, 7604, 7605, 7606, 7607.
- Cancer cell stimulator, MCF7 and T47D cell proliferation** 4418.
- Capillary, enhances capillary permeability** 4319, 13137.
- Capillary, improves barrier of microcirculation** 4630, 10870, 18180.
- Capillary, inhibits increase of blood capillary permeability** 664, 3588, 4097, 5161, 7495, 8297, 15843, 16050, 19087, 19111, 19922, 20066, 20569.
- Capillary, improves osmosis of capillary** 11141.
- Capillary, prevents brittle rupture of blood capillary** 4439, 16900, 17024.
- Capillary, reduces blood capillary brittleness** 12255, 18317, 19087.
- Capillary, reduces effusion of Evan's blue from blood capillary** 5152.
- Carboxylation activity during metabolism of protein and carbohydrate** 2395.
- Carcinogen** 1713, 1835, 3847, 4456, 11189, 12535, 12543, 16657, 17127, 18098, 19121, 19731, 20527.
- Carcinogen assistant** 17187, 18640, 22658.
- Carcinogen promotor** 13476.
- Carcinogen, causes hepatic cancer** 14923.
- Cardiac glycoside** 9335, 9330, 16943, 17002, 19090, 20405.
- Cardiotonic** 377, 1844, 2187, 2190, 2191, 2716, 2728, 3048, 3277, 3278, 3729, 3732, 3942, 4005, 4029, 4036, 4192, 4544, 4547, 5104, 5523, 5526, 5533, 6530, 7296, 7303, 7320, 7342, 7343, 8461, 8968, 10915, 10981, 11524, 16031, 16050, 16084, 18216, 18637, 18785, 19958, 20056, 20140, 20403, 20671, 20730, 20732, 21325, 21326, 21435, 22301, 22629.
- Cardiovascular activity (against damage in cardiac cells)** 19201.
- Cardiovascular activity (against heart failure)** 4108.
- Cardiovascular activity (antiarrhythmic)** 618, 783, 930, 983, 1287, 1667, 2300, 2372, 4543, 4544, 4685, 5136, 7703, 7854, 8423, 8424, 8426, 8427, 9553, 9631, 9738, 11344, 11851, 12510, 12798, 13089, 13836, 15321, 15526, 15658, 15875, 15972, 16080, 16451, 16555, 18180, 18180, 18376, 19955, 20094, 20100, 20732, 21077, 21206, 21263, 21325, 21326, 22404, 22466, 22490.
- Cardiovascular activity (anti-arteriosclerosis)** 2791, 3909, 11834, 13212, 19738, 18165, 19070, 22270.
- Cardiovascular activity (anti-ischemia myocardial)** 2300, 2564, 3761, 3762, 4544, 4630, 4645, 9631, 18180, 22172, 22581.
- Cardiovascular activity (anti-myocardial infarction)** 4630, 9631, 22172.
- Cardiovascular activity (arterial pressure in both types of rats fell substantially, while heart rate of only anaesthetized rats also decreased)** 5569.
- Cardiovascular activity (assists in treatment of heart failure, coronary heart disease, hypertension and arrhythmia)** 22172.
- Cardiovascular activity (Cardioprotective)** 2606, 3633, 8914.
- Cardiovascular activity (causes heart beat to slow and amplitude to increasing in low dose; causes heart paralysis and hypotension in high dose)** 17505.
- Cardiovascular activity (contracts blood vessels, increases blood pressure and stimulates heart)** 15184.
- Cardiovascular activity (electrocardiogram changed)** 11020.
- Cardiovascular activity (enhances amplitude of contraction and reduces frequency of heart beat)** 15288.
- Cardiovascular activity (enhances arterial tension and myocardial contractility)** 9419.
- Cardiovascular activity (enhances cardiac motility)** 5067.
- Cardiovascular activity (enhances collateral circulation and oxygen consumption upon lack of blood in myocardium)** 4604.
- Cardiovascular activity (enhances contractility of main artery)** 20968.
- Cardiovascular activity (enhances myocardial contractility and increases blood flow)** 6559.
- Cardiovascular activity (enhances myocardial contractility and raises heart rate)** 19846.
- Cardiovascular activity (enhances myocardial contractility and reduces scope of contraction)** 6691.
- Cardiovascular activity (enhances myocardial contractility with peripheral anapetia)** 1866.
- Cardiovascular activity (enhances myocardial contractility)** 4108, 4353, 7343, 16555, 16756, 16997, 19639, 20094, 21511, 22237.
- Cardiovascular activity (improves acute myocardial ischemia)** 3633.
- Cardiovascular activity (improves myocardium metabolism and promotes restoration of myocardial function)** 4645.
- Cardiovascular activity (improves peripheral circulation and markedly increases amount of urine)** 6559.
- Cardiovascular activity (increases atrial and ventricular thresholds, also reduces atrial conduction)** 19762.
- Cardiovascular activity (increases cerebral blood flow)** 19540, 19587.
- Cardiovascular activity (increases contractility of atrium);** 16451.
- Cardiovascular activity (increases coronary flow and cerebral blood flow)** 11344.
- Cardiovascular activity (increases coronary flow and slows heart rate)** 4609, 20730.
- Cardiovascular activity (increases coronary flow)** 3633, 4480, 4543,



- 4544, 4604, 4631, 4645, 4889, 5414, 6752, 6753, 7303, 8914, 13137, 14796, 22552.
- Cardiovascular activity (increases coronary flow, reduces consumption of oxygen in myocardium, increases cerebral blood flow, lowers blood pressure, and slows heart rate)** 5750.
- Cardiovascular activity (induces myocardial rhythm)** 14796.
- Cardiovascular activity (inhibits cardiac contraction, causes a prolongation of the latency time and decrease of contraction force)** 4911, 4931, 4932, 4933, 5215, 5869, 7091, 7092, 10071, 10683, 19091, 20162.
- Cardiovascular activity (inhibits cardiac fibrillation)** 21263.
- Cardiovascular activity (inhibits cardiac muscles)** 15321, 21239.
- Cardiovascular activity (inhibits content of free radicals in myocardial cells)** 8424.
- Cardiovascular activity (inhibits contraction of auricular smooth muscle)** 2284.
- Cardiovascular activity (inhibits contraction of blood vessel and cardiac muscle)** 17762.
- Cardiovascular activity (inhibits damage of myocardial cells caused by free radicals)** 11266.
- Cardiovascular activity (inhibits frog heart *in vitro*)** 8289, 8297.
- Cardiovascular activity (inhibits heart and relaxes artery)** 17568.
- Cardiovascular activity (inhibits heart rate)** 18299.
- Cardiovascular activity (inhibits heart)** 643, 3002, 3907, 5435, 6552, 16674, 22153.
- Cardiovascular activity (inhibits malondialdehyde (MDA) formed by abnormality of calcium concentration in cardiac muscle cells)** 8914.
- Cardiovascular activity (inhibits myocardial automatic rhythmicity and contractile power)** 13836.
- Cardiovascular activity (inhibits myocardial contractility)** 117, 304, 2300.
- Cardiovascular activity (inhibits myocardial contraction and calcium antagonist)** 16280.
- Cardiovascular activity (inhibits sino-atrial rate and contraction of atrium papillary muscle in dog)** 16759.
- Cardiovascular activity (makes heart stop in period of relaxation)** 3218.
- Cardiovascular activity (Protects cardiac muscle from lack of blood)** 20688.
- Cardiovascular activity (protects *in vitro* heart from damage during ischemic re-perfusion)** 17762.
- Cardiovascular activity (raises heart rate)** 5067.
- Cardiovascular activity (reduces area of myocardial infarction)** 16555, 20094.
- Cardiovascular activity (reduces consumption of oxygen in myocardium)** 4645, 5763, 14796, 18826.
- Cardiovascular activity (reduces myocardial contractility)** 15396, 18826.
- Cardiovascular activity (reduces resistance of cerebral blood vessels)** 19587.
- Cardiovascular activity (reduces scleratheroma incidence)** 4245.
- Cardiovascular activity (slows heart rate and enhances amount of urine)** 1866.
- Cardiovascular activity (slows heart rate and enhances myocardial contractility)** 9233.
- Cardiovascular activity (slows heart rate)** 554, 983, 1658, 2300, 4912, 7343, 7980, 9232, 11680, 15708, 18165, 18826, 19473, 20061, 20254, 21511.
- Cardiovascular activity (slows heart rate, increases output blood pressure, blood flow in aorta and myocardial contractility)** 9235.
- Cardiovascular activity (stimulates atrium)** 19198.
- Cardiovascular activity (stimulates heart)** 4108, 5445, 20069, 20077, 20100.
- Cardiovascular activity (stimulates heart)** 3588.
- Carminative** 1186, 3237.
- Catechol-*O*-methyltransferase inhibitor** 8278.
- Cathartic** 136, 6262, 13801, 17411, 17413, 17417.
- Causes abortion** 3498.
- Causes acute glomerulus necrosis** 1713.
- Causes allergic reaction (hmn skin)** 19779.
- Causes arrhythmia** 304, 1738, 10875.
- Causes arrhythmia and bradycardia** 8353.
- Causes asthma and nasitis** 17561.
- Causes asthma, convulsion and breath faintness** 22360.
- causes bleeding** 4140, 5440, 15633.
- Causes blistering in cuticle** 18545.
- Causes chronic ammonia toxicosis** 5351.
- Causes conjunctivitis** 18426.
- Causes contact dermatitis** 1789, 2890, 3695, 4087, 4128, 4584, 8997, 16598, 16674, 18257, 18426, 21207, 21974, 22142, 22274.
- Causes convulsion and paralysis** 12562.
- Causes dermatitis** 21402.
- Causes epilepsy** 4051.
- Causes glucopenia and "vomiting sickness"** 10898.
- Causes goitre** 17903.
- Causes hmn mammary diseases** 21507.
- Causes hypoglycemia** 14358, 21662.
- Causes involuntary repetitive movement** 3692.
- Causes liver injury** 4140.
- Causes mental illness** 6418, 13795, 14583.
- Causes methaemoglobin disease in cattles** 14885.
- Causes miosis** 1654, 1658, 7298, 17253, 17360.
- Causes paralysis, paroxysmal spasm, convulsion and death** 7706.
- Causes paralysis** 4377, 19223.
- Causes paroxysm convulsion and breath inhibition** 5035.
- causes Phalaris blind stagger (sheep)** 8971.
- Causes plant to be infected by *Agrobacterium tumefaciens*** 116.
- Causes progressive paralysis of CNS** 9233.
- Causes pulmonary heart disease** 19902.
- Causes selenium poisoning** 19691.
- Causes slight shrinkage of liver** 4329.
- Causes St. George disease (ox)** 19902.
- Causes strong convulsion** 3002.
- Causes tachycardia** 1134.
- Causes tetanic coma** 2734.
- Cell cycle inhibitor** 2021.

- Cell division arrester** 6939, 12130, 12131, 16365.
- Cell growth inhibitor** 8095, 8276.
- Cell growth regulator** 3275, 22408.
- Cell viability** 8788, 12982, 12983.
- Central muscle relaxant** 2791.
- Choleretic** 117, 834, 1742, 1935, 2102, 2106, 2224, 2303, 2538, 2887, 3118, 3551, 3695, 4135, 4245, 4249, 4398, 4564, 5161, 8095, 8273, 9498, 9749, 11428, 13481, 15184, 15279, 16439, 16439, 16623, 16623, 16770, 17983, 19473, 19473, 19540, 20732, 20732, 20734, 22269, 22269, 22346, 22397.
- Cholineoid action** 15126.
- Cholinergic** 1658, 5201, 5219.
- Cholinesterase activator** 1036.
- Cholinesterase inhibitor** 6853, 7379, 7380, 8083, 9686, 9687, 10601, 13236, 13255, 14971, 16555, 17253, 19639, 21434, 22349.
- Cholinomimetic** 1658.
- Chymotrypsin inhibitor** 13563, 13564, 13565.
- Chymotrypsin inhibitor inactive** 9561.
- CNS active** 3147, 3860, 4118, 4120, 7521, 8251, 9232, 11636, 11679, 12908, 16761, 16762, 18114, 20577, 22145.
- CNS depressant** 569, 669, 706, 983, 1039, 1191, 1654, 1824, 2016, 2114, 3502, 3637, 3907, 3915, 5248, 6656, 6708, 7517, 7523, 8524, 9553, 9631, 10886, 11477, 11869, 13481, 13630, 13795, 14865, 15070, 15126, 16009, 17007, 17065, 17572, 19041, 19057, 19473, 19903, 20002, 20076, 20307, 20444, 21263, 21292, 21372, 21877, 21887, 21991, 22151, 22314, 22490, 22502, 22818.
- Coagulant** 3615.
- Cockroach killer** 2298, 15490, 17332, 17334, 17335, 17336, 18270.
- Coenzyme** 22554, 22556.
- Coenzyme of amino transferase, decarboxylase, racemase and some other amino acids** 18261.
- Coenzyme of energy transfer in phosphate bonds** 626.
- Collagenase inhibitor** 7441.
- Component of artificial calculus bovis** 2374.
- Component of coconut flavorant** 15680.
- component of coenzyme I and II** 15526.
- Components of plant epicyte** 2596, 3040.
- Contraceptive** 1710, 3457, 6495, 12925, 18841.
- Controls dormancy of common yam** 2163, 2166.
- Controls growth of *Hepatica lunularia*** 13084.
- Convulsant** 6552, 12562, 16746.
- corrosion** 7882.
- Curare component in cucurbit** 2959.
- Curare main component in cucurbit** 4377.
- Curariform action** 2042, 6699, 7325, 7328, 7330, 12571, 13373, 13374, 13716.
- Curtials the time of blood clotting and bleeding** 3551.
- Cuticle cornification promoter** 1853.
- Cycloadenyl mononucleotide phosphodiesterase inhibitor** 1621, 9331.
- Cyclonucleotide phosphodiesterase inhibitor** 710, 4376, 9543, 15278, 18864.
- Cyclooxygenase inhibitor** 3188, 7819, 8081, 8395.
- CYP2D6 inhibitor inactive** 7105, 7106, 8395, 8397, 9664, 9668, 12024, 12025, 12026, 12035, 12036, 12082, 19846, 19983, 19987, 21600, 22984, 22985.
- CYP3A4 inhibitor** 1834, 3851, 4307, 4308, 4309, 4310, 5543, 5561, 5572, 7105, 7106, 7114, 7400, 8395, 8396, 8397, 9664, 9668, 9949, 12024, 12025, 12026, 12035, 12036, 12037, 12044, 12070, 12099, 13261, 13391, 13640, 13898, 14264, 16340, 19846, 19847, 21345, 21392, 21392, 21928, 22984, 22985.
- CYP3A4 inhibitor and CYP2D6 inhibitor** 1834, 3851, 4307, 4308, 4309, 4310, 5543, 5561, 5572, 7114, 7400, 8396, 9949, 12037, 12044, 12070, 12099, 13391, 13640, 13898, 14264, 16340, 18423, 18423, 19847, 21345, 21928.
- CYP3A4 inhibitor inactive** 12082, 19983, 19987, 21600.
- Cytochrome CyP1A inhibitor** 8278, 11152, 11154, 11158, 11165, 11171, 11172.
- Cytochrome P450 (CYP3A4) inducer** 10883.
- Cytochrome P-450inhibitor** 17247.
- Cytostatic/cytotoxic** 5185, 5186.
- Cytotoxic (*in vitro*) summary index** 8, 24, 51, 76, 78, 84, 90, 150, 159, 175, 225, 226, 228, 240, 248, 251, 265, 266, 332, 349, 370, 378, 463, 472, 492, 512, 526, 530, 531, 576, 577, 579, 585, 589, 594, 595, 597, 598, 607, 610, 696, 777, 837, 843, 846, 911, 912, 913, 914, 915, 919, 924, 941, 955, 993, 1008, 1010, 1012, 1030, 1136, 1137, 1138, 1177, 1245, 1275, 1276, 1277, 1294, 1295, 1296, 1297, 1302, 1303, 1304, 1305, 1306, 1308, 1310, 1311, 1312, 1313, 1319, 1320, 1321, 1322, 1324, 1325, 1359, 1367, 1372, 1373, 1380, 1381, 1382, 1383, 1384, 1385, 1386, 1387, 1388, 1389, 1390, 1391, 1392, 1393, 1394, 1395, 1396, 1397, 1398, 1399, 1400, 1401, 1402, 1403, 1404, 1405, 1406, 1407, 1408, 1409, 1410, 1411, 1412, 1413, 1414, 1415, 1416, 1417, 1418, 1419, 1420, 1421, 1422, 1423, 1424, 1425, 1426, 1427, 1428, 1429, 1430, 1431, 1432, 1433, 1434, 1435, 1436, 1437, 1438, 1439, 1440, 1441, 1442, 1443, 1444, 1445, 1446, 1447, 1448, 1449, 1450, 1451, 1452, 1453, 1454, 1455, 1456, 1457, 1460, 1470, 1471, 1472, 1492, 1508, 1552, 1570, 1571, 1575, 1576, 1578, 1581, 1583, 1617, 1621, 1625, 1650, 1651, 1652, 1679, 1691, 1748, 1764, 1765, 1768, 1789, 1792, 1845, 1856, 1860, 1863, 1864, 1885, 1913, 1914, 1924, 1925, 1926, 1961, 1971, 1992, 2005, 2006, 2034, 2047, 2073, 2082, 2102, 2106, 2109, 2119, 2130, 2172, 2219, 2227, 2244, 2257, 2259, 2260, 2261, 2262, 2303, 2304, 2312, 2334, 2338, 2339, 2340, 2468, 2492, 2493, 2495, 2498, 2499, 2500, 2527, 2528, 2529, 2590, 2601, 2604, 2619, 2625, 2630, 2635, 2647, 2648, 2652, 2653, 2654, 2655, 2656, 2660, 2661, 2664, 2676, 2677, 2684, 2694, 2716, 2722, 2735, 2736, 2769, 2810, 2811, 2824, 2826, 2830, 2856, 2857, 2946, 2948, 2950, 2952, 2956, 2957, 2958, 2964, 2985, 2990, 2991, 2998, 3012, 3014, 3015, 3016, 3018, 3019, 3020, 3021, 3022, 3053, 3060, 3063, 3071, 3072, 3076, 3087, 3088, 3096, 3097, 3126, 3143, 3181, 3227, 3228, 3229, 3230, 3241, 3257, 3258, 3259, 3260, 3261, 3262, 3263, 3264, 3265, 3266, 3267, 3268, 3271, 3274, 3292, 3293, 3294, 3296, 3300, 3303, 3308, 3324, 3325, 3368, 3388, 3402, 3405, 3406, 3412, 3416, 3429, 3457, 3467, 3476, 3481, 3498, 3499, 3502, 3513, 3514, 3515, 3548, 3551, 3553, 3555, 3565, 3568, 3573, 3576, 3580, 3581, 3582, 3583, 3600, 3602, 3626, 3667, 3668, 3708, 3710, 3724, 3729, 3732, 3745, 3748, 3777, 3778, 3784, 3816, 3821, 3829, 3868, 3869, 3906, 3911, 3920, 3921, 3936, 3940, 3974, 3975, 4046, 4048, 4081,

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- Cytotoxic inactive, 1A9** 14934, 14935.
- Cytotoxic inactive, 3LL** 7998, 11569, 14697.
- Cytotoxic inactive, 59 NCI hmn cancer cell lines except HL-60 cell** 17727.
- Cytotoxic inactive, 9KB cells** 22195.
- Cytotoxic inactive, A2780 cells** 1107, 1113, 3125, 3127, 4281, 7025, 7366, 7367, 7764, 8939, 8942, 8944, 10052, 12107, 13097, 16050, 16415, 19220, 20369, 20711, 20712.
- Cytotoxic inactive, A375 cells** 11799.
- Cytotoxic inactive, A498 cells** 1067, 3571, 4722, 4762, 9812, 9961, 20722, 20739, 20765, 20803, 22630, 22781.
- Cytotoxic inactive, A549 cells** 519, 984, 1067, 1367, 1699, 1713, 1718, 1725, 1728, 2856, 3266, 3267, 3268, 3271, 3695, 3829, 3831, 3932, 4169, 4170, 4189, 4310, 4690, 4722, 4762, 4763, 4957, 5062, 5344, 5367, 5368, 5369, 6708, 6761, 7572, 7575, 7777, 7788, 7788, 7788, 7789, 7951, 8027, 8028, 8327, 8328, 9035, 9812, 9961, 10052, 10381, 10558, 12397, 12398, 12587, 12589, 13537, 13674, 13871, 13903, 14072, 14437, 14438, 14439, 14484, 15082, 15249, 15621, 16343, 16402, 19571, 19622, 19690, 19981, 19983, 19983, 19985, 20237, 20356, 20362, 20554, 20739, 20765, 20803, 22299, 22332, 22630, 22781, 22988.
- Cytotoxic inactive, ACHN cells** 3355.
- Cytotoxic inactive, AGS cells** 2101, 12936.
- Cytotoxic inactive, assay to screen for inhibitors of cell division, *Xenopus* cells from early *Xenopus laevis* embryo at blastular stage** 12139, 12137.
- Cytotoxic inactive, ATCC: CCRF-CEM murine leukemia cells** 1136, 1137, 1138.
- Cytotoxic inactive, B16 cells** 492, 6427, 6430, 7205, 9474, 9475, 16818, 16819, 16820, 18697, 20697, 20699, 20701, 20702, 21027, 22497.
- Cytotoxic inactive, B16(F-10) cells** 984, 3932, 4169, 4170, 16402, 18945, 18946, 18947, 18948, 18949.
- Cytotoxic inactive, BC cells** 14915, 17846, 17847.
- Cytotoxic inactive, BC-1 cells** 7764, 2048, 3292, 3940, 3941, 8219, 10296, 10510, 13484, 13487, 18682, 21358, 5276.
- Cytotoxic inactive, BCA-1 cells** 13464, 13472, 13467.
- Cytotoxic inactive, Bcap37 cells** 11394, 12536.
- Cytotoxic inactive, Bel7402 cells** 465, 2254, 4987, 5344, 5867, 5975, 5976, 6327, 6689, 7540, 8528, 9629, 10485, 10815, 10816, 10817, 14042, 14168, 16050, 21031, 21640, 22011, 22013.
- Cytotoxic inactive, Bel7405 cells** 8632, 11201.
- Cytotoxic inactive, BGC823 cells** 6689, 8528, 13693, 13699, 13702, 13703, 13704, 13706, 13707, 20811.
- Cytotoxic inactive, BL6 cells** 1532.
- Cytotoxic inactive, Bowes cells** 3695, 10381, 15621.
- Cytotoxic inactive, Bre04 cells** 14847, 14848, 14849.
- Cytotoxic inactive, BST assay** 247, 2091, 2092, 6267, 10207, 10505, 221, 223, 1819, 1820, 1821, 2260, 3153, 5936, 8211, 10510, 14995, 15038, 20803, 21082, 21125, 22551.
- Cytotoxic inactive, BST cells** 2346, 8325, 10126.
- Cytotoxic inactive, BT474 cells** 2251, 2618, 5944, 7122, 10306, 12413, 12415, 12416, 17118.
- Cytotoxic inactive, BT549 cells** 11636, 22205, 22206, 22206.
- Cytotoxic inactive, BXPC3 cells** 2102, 2106.
- Cytotoxic inactive, CA cells** 18499.
- Cytotoxic inactive, CAKI cells** 14934.
- Cytotoxic inactive, Calu1 cells** 1764, 3319, 3615, 11191, 11192, 13098, 16665, 20369, 20711, 21713, 22378, 22379.
- Cytotoxic inactive, Capan1 cells** 2101.
- Cytotoxic inactive, Capan2 cells** 2101, 12936.
- Cytotoxic inactive, CaSki cells** 6490.
- Cytotoxic inactive, CCM2 cells** 13023, 13038.
- Cytotoxic inactive, CEM cells** 16550.
- Cytotoxic inactive, CHAGO cells** 248, 2251, 2618, 5944, 7122, 10306, 12413, 12415, 12416, 17118.
- Cytotoxic inactive, Chinese hamster ovarian CHO cells** 21475.
- Cytotoxic inactive, Col2 cells** 175, 1864, 1865, 1885, 2048, 2259, 2765, 2766, 2767, 3982, 4281, 5075, 5387, 5536, 5931, 6066, 6067, 6090, 6500, 9504, 9507, 9546, 10296, 10446, 10512, 10769, 11477, 12179, 13464, 13467, 13468, 13845, 16415, 16854, 16855, 18682, 19220, 21135, 21137, 21410, 21755, 21758, 21798, 21801, 21804, 21805, 21806, 21807.
- Cytotoxic inactive, Colon205 cells** 901, 2309, 2830, 3778, 5522, 6017, 7699, 10380, 10414, 10467, 11001, 11600, 11601, 13041, 14776, 16261, 16725, 18222, 18998, 19542, 19790, 20465, 22270, 22774.
- Cytotoxic inactive, Colon26-L5 cells** 3014, 3980, 4135, 4788, 4900, 4936, 5788, 9626, 9627, 9628, 9815, 10099, 10411, 14500, 14613,

- 15351, 15443, 16221, 16222, 16230, 16231, 16232, 20840, 20877, 21529.
- Cytotoxic inactive, COS-7 cells** 10732, 8576, 8577, 8578, 8579, 8580.
- Cytotoxic inactive, DLD-1 cells** 3241.
- Cytotoxic inactive, DU145 cells** 5706, 7998, 14697.
- Cytotoxic inactive, EAC cells** 12622.
- Cytotoxic inactive, fibroblasts in normal hmn** 3241.
- Cytotoxic inactive, FM3A cells** 5042, 15719.
- Cytotoxic inactive, GLC4 cells** 16725.
- Cytotoxic inactive, HCC2998 cells** 5706.
- Cytotoxic inactive, HCT cells** 6785.
- Cytotoxic inactive, HCT116 cells** 5706, 12310, 15242, 17872.
- Cytotoxic inactive, HCT15 cells** 3571, 12541, 19622.
- Cytotoxic inactive, HCT8 cells** 8939, 8942, 8944, 14935.
- Cytotoxic inactive, HeLa cells** 465, 901, 1022, 1624, 1764, 2021, 2309, 2473, 2833, 3319, 3615, 3908, 4046, 4283, 4987, 5522, 5570, 5607, 5701, 5795, 5867, 5975, 5976, 6017, 6338, 6427, 6430, 6689, 7205, 9406, 9509, 10374, 10380, 10414, 10467, 10483, 10485, 10595, 11001, 11191, 11192, 11265, 11266, 11392, 11595, 11600, 11601, 11799, 12512, 13041, 13098, 13123, 13197, 13198, 13199, 14042, 14737, 14776, 15635, 15910, 16050, 16261, 16665, 16873, 17244, 17611, 17612, 17615, 18222, 18224, 18499, 18697, 18945, 18946, 18947, 18948, 18949, 18950, 18998, 19174, 19540, 19542, 20369, 20465, 20697, 20699, 20700, 20701, 20702, 20711, 21713, 22378, 22379, 22497, 22774, 22962.
- Cytotoxic inactive, HeLa-S3 cells** 10732, 13166, 13167, 8579, 8580, 8576, 8577, 8578, 8360, 8361, 8363, 8364, 8365.
- Cytotoxic inactive, HEp2 cells** 11265, 11722.
- Cytotoxic inactive, Hep3B cells** 901, 2824, 2826, 3778, 5179, 5180, 5367, 5368, 5369, 6017, 7043, 8938, 10380, 10414, 10467, 11600, 13041, 14776, 14940, 14942, 18222, 18998, 19542, 19790, 20465, 22270.
- Cytotoxic inactive, Hepa cells** 12622.
- Cytotoxic inactive, Hepa1c1c7 cells** 17715.
- Cytotoxic inactive, HEPA59T/VGH cells** 11945, 11950, 11952.
- Cytotoxic inactive, HepG cells** 8669, 8670, 8671, 13328.
- Cytotoxic inactive, HepG2 cells** 8, 248, 2251, 2618, 3308, 3544, 3615, 3619, 3908, 5179, 5180, 5368, 5570, 5607, 5701, 5795, 5944, 6776, 6778, 6779, 7043, 7122, 8935, 8936, 8938, 10306, 10483, 12413, 12415, 12416, 12512, 16169, 17118, 17247, 21475, 22962.
- Cytotoxic inactive, HGF cells** 414, 477, 512, 579, 993, 1177, 1580, 1581, 1583, 1584, 1585, 1586, 1587, 1591, 2309, 3659, 3667, 3668, 3669, 5150, 5774, 5775, 5776, 5781, 5790, 5815, 5816, 5817, 5912, 5913, 5982, 5983, 6176, 7657, 9857, 9905, 10717, 10718, 10721, 14638, 15040, 15042, 15046, 15054, 15055, 15056, 15279, 17696, 18916, 19255, 19256, 19257, 19259, 19268, 20105, 20106, 21170, 21864, 22667.
- Cytotoxic inactive, HL-60 cells** 465, 1476, 2101, 2309, 4689, 4690, 4940, 4987, 5344, 5652, 5703, 5864, 5865, 5867, 5934, 5975, 5976, 6578, 6689, 6760, 6761, 6942, 8528, 8576, 8577, 8578, 8579, 8580, 9423, 9629, 10279, 10280, 10485, 10732, 11595, 11601, 12070, 14042, 16050, 18931, 19349, 19350, 20068, 21105, 21711, 21857, 22287, 22774.
- Cytotoxic inactive, HM02 cells** 6778, 3308, 3544, 3619, 6779, 17247, 3615, 6776, 16169.
- Cytotoxic inactive, HMEC cells** 9199.
- Cytotoxic inactive, HO-8910 cells** 236, 5648, 5689, 6114, 8632, 10020, 11201.
- Cytotoxic inactive, HOCR5 cells** 6090.
- Cytotoxic inactive, HONE-1 cells** 174, 252, 2415, 4648, 6477, 8948, 9452, 9698, 9700, 9701, 9815, 9944, 11234, 13943, 14254, 15249, 16906, 17871, 18420, 19983, 19987, 20493, 20554, 22195, 23029.
- Cytotoxic inactive, Hs578T cells** 5580.
- Cytotoxic inactive, Hs742T cells** 5343, 5580, 5621, 20122.
- Cytotoxic inactive, HSC-2 cells** 414, 477, 993, 1505, 1506, 1507, 1509, 1580, 1584, 1585, 1586, 1587, 1591, 2309, 3659, 3669, 5150, 5774, 5775, 5776, 5781, 5790, 5815, 5816, 5817, 5912, 5913, 5982, 5983, 6176, 7130, 7134, 7135, 7137, 7138, 7657, 8657, 8658, 8659, 8660, 8693, 8698, 8748, 9857, 10718, 10721, 12481, 13058, 13059, 13060, 14638, 15040, 15042, 15046, 15054, 15055, 15056, 15057, 15279, 17696, 18916, 19255, 19256, 19259, 19268, 19522, 19523, 20105, 20106, 21170, 21864, 22667.
- Cytotoxic inactive, HSG cells** 15040, 15042, 15046, 15054, 15055, 15056, 19255, 19256, 19257, 19259, 19268, 20105, 20106.
- Cytotoxic inactive, HT1080 cells** 3980, 4135, 4788, 4936, 5548, 5779, 5788, 6954, 9626, 9627, 9815, 10099, 10100, 10411, 10412, 11504, 14500, 14613, 15443, 15796, 16221, 16222, 16229, 16230, 16231, 19618, 20840, 20877, 21529.
- Cytotoxic inactive, HT29 cells** 174, 252, 1067, 1621, 2856, 3266, 3267, 3268, 3271, 5373, 5374, 5375, 6289, 6477, 6708, 6760, 6761, 7043, 7788, 8027, 8028, 8824, 9035, 10187, 10747, 13674, 14072, 14484, 18588, 19690, 19981, 19983, 19985, 20237, 20356, 20362, 20554, 20643, 22332, 22781.
- Cytotoxic inactive, hTERT-RPE1 cells** 5931, 6066, 6067, 9504, 9507, 10512, 12179, 16854, 16855, 21135, 21137, 21755, 21758, 21798, 21801, 21804, 21805, 21806, 21807.
- Cytotoxic inactive, HUVEC cells** 1864, 1865, 1885, 2259, 2259, 3982, 5387, 5387, 5401, 5931, 6042, 6066, 6067, 6090, 9504, 9507, 9507, 9546, 10512, 12179, 13845, 16854, 16855, 21135, 21137, 21755, 21758, 21798, 21801, 21804, 21805, 21806, 21807.
- Cytotoxic inactive, inhibition assay of hmn tumor cell replication** 3104, 3105, 3106, 3107, 3108, 3109, 3110, 3111, 3112, 3113.
- Cytotoxic inactive, Jurkat-T cells** 2101, 2591, 2592, 2593, 11262, 11263, 11264, 12936.
- Cytotoxic inactive, K562 cells** 492, 984, 1764, 2101, 3319, 3615, 3615, 3695, 3932, 4169, 4170, 6204, 6776, 6791, 6792, 7998, 9081, 9082, 10068, 10381, 11191, 11192, 11265, 12590, 13067, 13068, 13069, 13070, 13098, 14697, 15621, 16177, 16402, 16665, 18697, 18978, 19983, 20369, 20711, 21713, 21845, 22378, 22379, 22748, 22792, 22800, 22801, 22803.
- Cytotoxic inactive, K562/ADM cells** 492, 18697.
- Cytotoxic inactive, Kato3 cells** 248, 2251, 2618, 5944, 7016, 7122, 10306, 12413, 12415, 12416, 17118.
- Cytotoxic inactive, KB ATCC CCL17 cells** 5794.
- Cytotoxic inactive, KB cells** 89, 174, 252, 266, 675, 901, 1372, 1745, 1865, 2048, 2259, 2384, 2591, 2592, 2593, 2765, 2766, 2767, 2824, 2826, 2945, 3292, 3429, 3940, 3941, 3982, 4281, 4624, 5075, 5276,

- 5387, 5522, 5931, 6017, 6066, 6067, 6090, 6477, 6515, 6689, 6761, 7190, 7191, 7582, 7764, 8219, 8528, 8939, 8942, 8944, 9199, 9504, 9507, 9546, 9564, 10159, 10206, 10296, 10380, 10414, 10446, 10467, 10510, 10512, 10910, 10911, 10912, 11079, 11262, 11263, 11264, 11477, 11600, 11636, 12179, 12453, 13038, 13041, 13467, 13468, 13484, 13487, 13491, 14775, 14776, 14846, 14915, 15118, 16050, 16415, 16748, 16754, 16854, 16855, 16867, 16966, 17846, 17847, 17852, 18425, 18682, 18697, 18998, 19220, 19536, 19540, 19542, 20369, 20465, 20797, 20798, 20811, 20836, 20849, 20850, 20851, 21135, 21137, 21358, 21755, 21758, 21798, 21801, 21804, 21805, 21806, 21807, 22205, 22206, 22206, 22270, 22413, 22544, 22545, 22546, 22547.
- Cytotoxic inactive, KB16 cells** 11945, 11950, 11952.
- Cytotoxic inactive, KB-VI cells** 7764.
- Cytotoxic inactive, KB-VIN cells** 14934.
- Cytotoxic inactive, L<sub>1210</sub> cells** 6478, 6617, 7998, 8439, 10089, 10364, 11569, 12639, 12640, 13014, 13015, 13591, 14697, 15483, 15931, 16050, 20797.
- Cytotoxic inactive, L-5178Y cells** 22408.
- Cytotoxic inactive, L6(=L-6) cells** 580, 815, 816, 1241, 1784, 1937, 1939, 2004, 2346, 2683, 2920, 2924, 3166, 3306, 3551, 3609, 3674, 4478, 5675, 6776, 7925, 8325, 9750, 10159, 11148, 11195, 12916, 14222, 16067, 16068, 18221, 19568, 19960.
- Cytotoxic inactive, L-929 cells** 11799.
- Cytotoxic inactive, leukemia cells** 6741.
- Cytotoxic inactive, LLC cells** 8150, 8166, 8168, 8186, 8188, 8189, 11277, 13019.
- Cytotoxic inactive, LNCaP cells** 266, 1864, 1865, 1885, 2048, 2765, 2766, 2767, 3982, 4281, 4680, 5075, 5931, 6066, 6067, 6090, 7788, 8814, 9504, 9546, 10296, 10446, 10512, 10871, 11477, 12179, 13845, 14114, 14226, 14228, 14300, 14643, 14846, 15944, 15945, 15946, 15951, 16415, 16854, 16855, 18682, 19087, 19220, 19983, 21037, 21135, 21137, 21755, 21758, 21798, 21801, 21804, 21805, 21806, 21807, 22332.
- Cytotoxic inactive, LNCaP-FGC cells** 5343, 5580, 5621, 8278, 18700, 18701, 20117, 20122, 20129.
- Cytotoxic inactive, LO2 hmn liver cells** 5648.
- Cytotoxic inactive, LOX-IMVI cells** 984, 3355, 3932, 4169, 4170, 16402.
- Cytotoxic inactive, Lu04 cells** 14847, 14848, 14849.
- Cytotoxic inactive, Lu1 cells** 266, 1864, 1865, 1885, 2048, 3982, 4281, 5931, 6066, 6067, 6090, 9504, 9507, 9546, 10296, 10512, 12179, 13464, 13467, 13468, 13472, 13845, 14846, 16415, 16854, 16855, 18682, 19220, 21135, 21137, 21755, 21758, 21798, 21801, 21804, 21805, 21806, 21807.
- Cytotoxic inactive, mammalian cell lines** 11636, 18114.
- Cytotoxic inactive, McCoy cells** 13902.
- Cytotoxic inactive, MCF cells** 3308, 3544, 3615, 3619, 6776, 6778, 6779, 16169, 17247.
- Cytotoxic inactive, MCF7 cells** 1067, 1621, 1699, 1713, 1718, 1725, 1728, 3159, 3695, 3829, 3831, 4189, 4416, 4957, 5062, 5179, 5180, 5367, 5368, 5369, 5373, 5374, 5375, 6162, 6490, 6689, 7043, 7777, 7788, 7788, 7998, 8569, 8932, 8933, 8935, 8936, 8938, 9535, 9564, 10187, 10381, 10747, 10751, 11890, 12448, 13871, 13903, 13935, 13936, 13943, 14115, 14697, 15249, 15621, 16050, 18588, 19571, 19983, 21709, 21856, 22830.
- Cytotoxic inactive, MCF7/ADM cells** 22830.
- Cytotoxic inactive, MCF7-ras cells** 6490.
- Cytotoxic inactive, MDA231 cells** 4913.
- Cytotoxic inactive, MDA-MB-231 cells** 5179, 5180, 5367, 5368, 5369, 6162, 7699, 8935, 8938, 9564, 10751, 12448, 13903, 13943, 21709, 21856.
- Cytotoxic inactive, Meth-A cells** 8150, 8166, 8168, 8189.
- Cytotoxic inactive, MH-60 cells** 2716, 2722, 3729, 3732, 5237, 5238, 5239, 7190, 7191, 8121, 9859, 9861, 9917, 9918, 9993, 10672, 10673, 16296, 20911.
- Cytotoxic inactive, MI4 cells** 3355.
- Cytotoxic inactive, MK1 cells** 18945, 18946, 18947, 18948, 18949.
- Cytotoxic inactive, MKN-28 cells** 19349, 19350.
- Cytotoxic inactive, MRC-5 cells** 19891.
- Cytotoxic inactive, MT-4 cells** 11843, 11844, 11845, 11846, 11847, 16652, 16653, 19652, 19653, 19654, 19655, 19656.
- Cytotoxic inactive, MTT antiproliferative assay, B16F10, HeLa, MK1 cells** 18945, 18946, 18947, 18948, 18949.
- Cytotoxic inactive, myosarcoma cells** 2591, 2592, 2593, 11262, 11263, 11264.
- Cytotoxic inactive, N04 cells** 14847, 14848, 14849.
- Cytotoxic inactive, NCF-7 cells** 5532.
- Cytotoxic inactive, NCI-H1417 cells** 2101, 12936.
- Cytotoxic inactive, NCI-H187 cells** 422, 422, 3941, 6183, 6298, 8032, 8219, 8325, 10250, 13491, 14321, 21358.
- Cytotoxic inactive, NCI-H226 cells** 4722, 4762, 9812, 9961, 20739, 20765, 20803, 22630.
- Cytotoxic inactive, NCI-H23 cells** 3355.
- Cytotoxic inactive, NCI-H266 cells** 5706.
- Cytotoxic inactive, NCI-H446 cells** 12397, 12398, 22299, 22988.
- Cytotoxic inactive, NCI-H460 cells** 7699, 8569.
- Cytotoxic inactive, no explanation on cell species** 163, 1161, 1992, 2286, 3159, 3429, 5303, 5518, 6409, 6490, 6490, 6490, 6490, 8107, 9474, 9475, 12048, 13965, 14101, 15152, 16818, 16819, 16820, 17872, 18359, 21027, 21724, 16199, 17196, 17198, 17197, 17199.
- Cytotoxic inactive, NSCLC-N6 cells** 2331, 10342, 11978, 13097, 13098, 16373.
- Cytotoxic inactive, NUGC cells** 3555, 4648, 8948, 9452, 9698, 9700, 9701, 9815, 9944, 10343, 11234, 13943, 14254, 18420, 19983, 19987, 20554, 22195, 22460.
- Cytotoxic inactive, NUGC-3 cells** 23029, 2415, 15249, 16906, 17871, 20493.
- Cytotoxic inactive, NUGC-4 cells** 6621, 7016, 11405.
- Cytotoxic inactive, OVCAR-3 cells** 2101, 3908, 5570, 5607, 5701, 5795, 10483, 12512, 12936, 20070.
- Cytotoxic inactive, P<sub>388</sub> cells** 194, 215, 492, 2309, 3292, 4281, 4689, 5194, 5344, 5492, 5496, 5886, 5887, 6708, 7571, 7572, 7575, 8439, 10510, 11001, 11601, 11853, 11857, 11859, 13464, 13467, 13472, 13674, 14072, 14437, 14484, 16415, 18697, 19690, 19981, 20237, 20356, 20362, 20554, 22332, 22736, 22774.

- Cytotoxic inactive, P<sub>388</sub>/ADM cells** 18697.
- Cytotoxic inactive, PACA-2 cells** 1067.
- Cytotoxic inactive, PANC1 cells** 2101, 12936.
- Cytotoxic inactive, PBMC cells** 9488.
- Cytotoxic inactive, PC3 cells** 984, 1067, 2101, 3932, 4169, 4170, 4722, 9812, 9961, 12936, 14934, 16402, 20739, 20765, 20803, 22630, 22781.
- Cytotoxic inactive, primary culture hmn PBMCs** 11001, 16261.
- Cytotoxic inactive, PTX10 cells** 14935.
- Cytotoxic inactive, Raji cells** 1764, 3319, 3615, 11191, 11192, 13098, 16665, 20369, 20711, 21713, 22378, 22379.
- Cytotoxic inactive, RAW264.7 cells** 5633, 5669, 7982, 7983, 7984, 7985, 11017.
- Cytotoxic inactive, RL33 cells** 11978.
- Cytotoxic inactive, RXF-393 cells** 3355.
- Cytotoxic inactive, S<sub>180</sub> cells** 8150, 8166, 8168, 8186, 8189, 13019, 13020.
- Cytotoxic inactive, S<sub>180</sub>A cells** 12622.
- Cytotoxic inactive, SCL-6 cells** 7016.
- Cytotoxic inactive, SF268 cells** 7125, 7613, 7614, 8569, 11890.
- Cytotoxic inactive, SF539 cells** 5706.
- Cytotoxic inactive, SGC7901 cells** 19349, 19350.
- Cytotoxic inactive, SiHa cells** 6490, 12541.
- Cytotoxic inactive, SK-MEL cells** 11636, 22205, 22206, 22206.
- Cytotoxic inactive, SK-MEL-2 cells** 19622, 984, 3932, 4169, 4170, 16402.
- Cytotoxic inactive, SK-MES-1 cells** 12397, 22299, 22988.
- Cytotoxic inactive, SK-OV-3 cells** 11636, 16370, 19622, 22205, 22206, 22206.
- Cytotoxic inactive, SMMC-7721 cells** 236, 5648, 5689, 6114, 6427, 6430, 7205, 10020, 20697, 20699, 20700, 20701, 20702, 22497, 22497.
- Cytotoxic inactive, SNU-1 cells** 18088.
- Cytotoxic inactive, SNU-16 cells** 18088.
- Cytotoxic inactive, SR cells** 3355.
- Cytotoxic inactive, SW620 cells** 248, 2251, 2618, 5944, 7122, 10306, 12413, 12415, 12416, 17118.
- Cytotoxic inactive, T24 cells** 12588.
- Cytotoxic inactive, T24S cells** 3695, 10381, 15621, 19571, 19983.
- Cytotoxic inactive, T47D cells** 2101, 6162, 8150, 8166, 8168, 8186, 8189, 9564, 10751, 12448, 12936, 13019, 21709, 21856.
- Cytotoxic inactive, U251 cells** 7998, 14697.
- Cytotoxic inactive, U-87-MG cells** 14934.
- Cytotoxic inactive, U937 cells** 465, 4987, 5867, 5975, 5976, 10485, 14042.
- Cytotoxic inactive, Vero cells** 24, 26, 330, 509, 510, 511, 1764, 3319, 3615, 3940, 3941, 7897, 7907, 11129, 11191, 11192, 11636, 12489, 13098, 13108, 14217, 14840, 14842, 15134, 16665, 17574, 19795, 19796, 20369, 20711, 21713, 22205, 22206, 22206, 22378, 22379.
- Cytotoxic inactive, WI-38 cells** 11595, 21498.
- Cytotoxic inactive, WiDr cells** 2101, 12936.
- Cytotoxic inactive, Wish cells** 1764, 3319, 3615, 11191, 11192, 13098, 16665, 20369, 20711, 21713, 22378, 22379.
- Cytotoxic inactive, yeast assay, no selective DNA-damaging, RS321NpRAD52(gal)** 4970, 11344, 20316, 12917.
- Cytotoxic inactive, yeast assay, no selective DNA-damaging, RS321NYCp50(gal)** 4970, 11344, 20316, 12917.
- Cytotoxic, 1,3,8-trihydroxy for anthraquinone plays a significant role in the cytotoxic activity** 6776, 20010.
- Cytotoxic, 212 cells** 1992, 6490, 8520, 11977, 17872.
- Cytotoxic, 39 kinds of hmn cancer cell lines** 1625.
- Cytotoxic, 3LL mus Lewis lung cancer cells** 19516, 19517, 19524, 19525, 19526, 22281.
- Cytotoxic, 780-6 renal cancer cells** 3583.
- Cytotoxic, 9KB hmn epidermatoid nasopharyngeal carcinoma cells** 2735, 10126, 11978, 16414, 17240.
- Cytotoxic, 9L rat glioma cells** 2303.
- Cytotoxic, 9PS mouse lymphleukemia cells** 2735, 16021, 16022, 16023, 17240.
- Cytotoxic, a promising lead as potential cancer chemopreventive agents** 51, 5746, 8262, 11490, 11504, 11804, 18547.
- Cytotoxic, A2780 hmn ovarian cancer cells** 1576, 3126, 6044, 6045, 8054, 8065, 8940, 9089, 9090, 9388, 11783, 11783, 12108, 12109, 12110, 17622, 17623, 20809, 21337, 21338, 22761, 22761, 22839.
- Cytotoxic, A375 hmn melanoma cells** 919, 2492, 2493, 4046, 6437, 11800, 11801, 17654, 18056.
- Cytotoxic, A431 hmn epidermic cancer cells** 9187, 15739, 15922, 17008, 19284.
- Cytotoxic, A498 hmn renal cancer cells** 1297, 1303, 1304, 1305, 1320, 1321, 1322, 3457, 3583, 4763, 5706, 6827, 6828, 10558, 11269, 14906, 18211, 20720, 20721, 20811.
- Cytotoxic, A549 non-small cell lung cancer cells** 150, 251, 577, 843, 1297, 1303, 1304, 1305, 1310, 1311, 1312, 1320, 1321, 1322, 1621, 1679, 1764, 1924, 1925, 1926, 2006, 2047, 2334, 2338, 2527, 2528, 2652, 2653, 2654, 2655, 2656, 2677, 2735, 2736, 2857, 3053, 3096, 3097, 3241, 3257, 3457, 3583, 3868, 3869, 3974, 3975, 4147, 4148, 4317, 4320, 4323, 4689, 4880, 4986, 5055, 5284, 5295, 5314, 5826, 5832, 6044, 6045, 6075, 6162, 6204, 6277, 6282, 6289, 6314, 6315, 6328, 6367, 6404, 6405, 6642, 6759, 6760, 6827, 6828, 6897, 7535, 7568, 7569, 7571, 7646, 7698, 7788, 8824, 8946, 9226, 9323, 9535, 9544, 9567, 9669, 9747, 9885, 10126, 10438, 11029, 11081, 11269, 11375, 11494, 11605, 12188, 12189, 12254, 12964, 13518, 13673, 13685, 13867, 13869, 14254, 14492, 14495, 14496, 14504, 14644, 14645, 14646, 14647, 14906, 14934, 14934, 14935, 14935, 15084, 15085, 15087, 15088, 15089, 15141, 15169, 15879, 15902, 16021, 16023, 16050, 16282, 16283, 16370, 16402, 16427, 16676, 16677, 16693, 17059, 17060, 17061, 17062, 17063, 17064, 17309, 17619, 18011, 18033, 18044, 18211, 18768, 18769, 18770, 18771, 18772, 18773, 18774, 18775, 18776, 18777, 18778, 18892, 19427, 19516, 19517, 19524, 19525, 19526, 20002, 20244, 20363, 20540, 20641, 20643, 20644, 20679, 20680, 20681, 20720, 20721, 20722, 20811, 20811, 20811, 21709, 21924, 22208, 22208, 22209, 22451, 22458, 22923, 23013.
- Cytotoxic, ACHN hmn renal cancer cells** 251, 2528, 4880, 5314, 5706, 7698, 20811, 20811.
- Cytotoxic, acts on calf thymus DNA** 7704, 15631, 19284, 22232.
- Cytotoxic, acts on DNA topo II** 843.
- Cytotoxic, against a series of tumor cell lines but did not show**



- significant effects in clinical studies against solid tumors 2660.
- Cytotoxic, AGS gastric adenocarcinoma cells** 3498, 17979.
- Cytotoxic, animal cap assay to screen for inhibitors of cell division**  
4820, 4821, 4822, 4825, 4826, 4827, 4828, 4829, 4838, 12138.
- Cytotoxic, animal model** 8596, 8598, 8599.
- Cytotoxic, animal tumor and plant tumor** 14705.
- Cytotoxic, antioxidant assay** 1400, 2635, 6103, 8095, 14454, 20481, 20482.
- Cytotoxic, antiproliferation inactive** 5528, 8665, 8677, 8678.
- Cytotoxic, antiproliferation inactive, Colon26-L5** 15443, 16221, 16222, 16230, 16231, 16232.
- Cytotoxic, antiproliferation inactive, HT1080** 15443, 15796, 16221, 16222, 16229, 16230, 16231.
- Cytotoxic, antiproliferative** 2102, 2106, 3548, 3551, 4590, 5929, 6907, 7080, 9655, 10277, 10281, 10559, 12171, 12177, 12180, 12206, 14304, 14305, 15635, 18759, 19458, 19634, 20465, 20670, 20811, 21231, 22213, 22718.
- Cytotoxic, antiproliferative** 1389, 1390, 1439, 1440, 14901, 15494.?
- Cytotoxic, antiproliferative inactive, HL-60** 20068.
- Cytotoxic, antiproliferative, A-2780** 11783, 22761.
- Cytotoxic, antiproliferative, AGS cells** 3498.
- Cytotoxic, antiproliferative, B16(F-10), HeLa, MK1** 18944, 18950, 18951, 18952, 18953.
- Cytotoxic, antiproliferative, calf pulmonary arterial endothelial cells CPAE** 20900, 20901.
- Cytotoxic, antiproliferative, Col2 cells** 240, 6064, 7204, 20610.
- Cytotoxic, antiproliferative, Colon26-L5** 15796, 16229.
- Cytotoxic, antiproliferative, colorectal cancer cells** 11783, 22761.
- Cytotoxic, antiproliferative, cytotoxicity of compounds was measured using the WST-8 proliferation reagent** 7376, 21435.
- Cytotoxic, antiproliferative, HEK-293** 1575, 3821, 8715, 18691, 18693, 18733, 22838.
- Cytotoxic, antiproliferative, hmn breast cancer cells** 1399, 2635, 11783, 14961, 22761.
- Cytotoxic, antiproliferative, HT1080 cells** 16232.
- Cytotoxic, antiproliferative, HTC cells** 8148, 8149, 8159, 8160, 8161, 8174.
- Cytotoxic, antiproliferative, J774 macrophages** 8662, 8717, 8718, 8749, 18690, 18692.
- Cytotoxic, antiproliferative, J774.A1** 1575, 3821, 8715, 8716, 18691, 18693, 18733, 22838.
- Cytotoxic, antiproliferative, LoVo** 3573, 6164, 6213, 19916.
- Cytotoxic, antiproliferative, LoVo/Doxo** 3573, 6164.
- Cytotoxic, antiproliferative, lymphocytes** 22015.
- Cytotoxic, antiproliferative, MCF7** 3303, 3498.
- Cytotoxic, antiproliferative, MT2** 3816.
- Cytotoxic, antiproliferative, MTT colorimetric assay** 3816.
- Cytotoxic, antiproliferative, PC3** 3498.
- Cytotoxic, antiproliferative, PMA-induced** 17958.
- Cytotoxic, antiproliferative, six esophageal cancer cells** 2303.
- Cytotoxic, antiproliferative, T-lymphoid leukemia cells** 2102.
- Cytotoxic, antiproliferative, WEHI-164** 1575, 3821, 8715, 8716, 18691, 18693, 22838.
- Cytotoxic, APM1840 hmn leukemia cells** 17240.
- Cytotoxic, aromatase inhibitor** 51, 846, 1402, 2635, 2647, 5746, 8262, 11490, 17403.
- Cytotoxic, arrests in the G2/M phase of cell cycle** 5055.
- Cytotoxic, ascites carcinoma cells** 17028, 18816.
- Cytotoxic, assay of larva of yellow fever mosquito** 18240.
- Cytotoxic, B16 mouse melanoma cells** 2304, 2811, 6221, 16599, 19143, 19143, 20700.
- Cytotoxic, B16(F-10) mouse melanoma cells** 2334, 2338, 4147, 4148, 16050, 18944, 18950, 18951, 18952, 18953, 19516, 19517, 19524, 19525, 19526, 23013.
- Cytotoxic, *Bacillus coli*, *Bacillus subtilis* and nema** 21328.
- Cytotoxic, BC hmn breast cancer cells** 24, 349, 526, 2244, 3416, 3429, 3708, 4775, 5095, 6759, 6759, 6759, 12453, 12454, 15494, 15495, 18515, 20671.
- Cytotoxic, BC-1 hmn breast cancer cells** 1277, 2260, 5064, 5327, 6759, 6759, 8220, 8221, 8222, 8235, 10250, 10297, 10511, 11353, 13489, 13490, 13491, 13492, 13493, 13494, 13495, 15919, 17008, 18866, 20809.
- Cytotoxic, BCA-1 hmn breast cancer cells** 6759, 13468, 13469, 13470, 15739.
- Cytotoxic, Bcap37 hmn breast cancer cells** 843, 11392, 13123, 16183, 17717, 18499.
- Cytotoxic, Bel7402 hmn liver cancer cells** 1764, 3053, 3868, 3869, 3911, 5826, 5832, 5888, 6044, 6045, 6075, 6314, 6328, 7436, 7504, 7544, 7545, 7548, 8526, 8527, 8530, 8531, 8532, 8533, 8534, 8535, 8536, 8541, 8543, 8544, 8692, 9567, 10052, 11081, 11659, 14347, 17059, 17060, 17061, 17062, 17063, 17064, 17928, 19488, 20397, 20811, 20811, 20811.
- Cytotoxic, Bel7405 hmn liver cancer cells** 1860, 8656, 9546, 14044, 22828.
- Cytotoxic, Bel7420 cells** 18545.
- Cytotoxic, BGC823 hmn stomach cancer cells** 843, 1030, 1764, 3053, 3868, 3869, 4701, 5826, 5832, 6044, 6045, 6075, 6756, 8526, 8527, 8530, 8531, 8532, 8533, 8534, 8535, 8536, 8541, 8543, 8544, 9567, 10052, 10815, 10816, 10817, 11081, 11392, 11659, 13123, 13694, 13700, 13701, 13705, 16050, 17059, 17060, 17061, 17062, 17063, 17064, 17717, 18499, 20397, 20542, 22011, 22013, 22497, 22798.
- Cytotoxic, BIU87 bladder cancer cells** 16183, 17717.
- Cytotoxic, BL6 mouse melanotic carcinoma** 472, 1276, 4237, 13241.
- Cytotoxic, blocks cell from G<sub>1</sub> to S phase** 9655.
- Cytotoxic, blocks DNA synthesis** 19085.
- Cytotoxic, blocks expression of vascular endothelial growth factor (VEGF)mRNA in GI-101A cells** 3498.
- Cytotoxic, B-lymphocytes** 1359.
- Cytotoxic, bone cancer cells** 15409.
- Cytotoxic, Bowes skin cancer cells** 16402, 19571, 19983.
- Cytotoxic, breast cancer cells** 2601, 11783, 22761.
- Cytotoxic, Brine Shrimp Lethality bioassay (Brine Shrimp Test)** 1297, 1303, 2082, 3292, 5327, 6309, 8210, 10511, 13296, 17592.
- Cytotoxic, BST** 1310, 1311, 1312, 1313, 1320, 1321, 1322, 1679, 2736, 7788, 8946, 11375, 11566, 11864, 11978, 14906, 15084, 15085, 15087, 15088, 15089, 15902, 15903, 16676, 16677, 18211, 18214, 18215,

- 18240, 18899, 20248.
- Cytotoxic, BSY1 breast cancer cells** 1625, 4880, 18714.
- Cytotoxic, BT-20** 9869.
- Cytotoxic, BT474 hmn galactophore cancer cells** 225, 226, 248, 463, 2257, 2261, 2262, 4268, 4269, 5942, 5945, 10307, 12414, 12417, 12423.
- Cytotoxic, BT549 hmn galactophore cancer cells** 11636, 18114.
- Cytotoxic, BXPC3 pancreas cancer cells** 7912, 9859, 9861, 9917, 10672, 10673, 16296, 16312.
- Cytotoxic, C6 rat glioma cells** 9376, 9383, 9386.
- Cytotoxic, CA hmn liver cancer cells** 11392, 13071, 13123, 16183, 17717.
- Cytotoxic, CaEs-17 hmn esophageal cancer cells** 16183.
- Cytotoxic, CAKI hmn renal cancer cells** 14934.
- Cytotoxic, CAKI-1 hmn renal cancer cells** 3583.
- Cytotoxic, Calu1 hmn lung cancer cells** 6776, 10068, 20010.
- Cytotoxic, Capan1 pancreas cancer cells** 12936, 17979.
- Cytotoxic, Capan2 pancreas cancer cells** 17979.
- Cytotoxic, CaSki hmn cervical carcinoma cells** 1992, 11977.
- Cytotoxic, CCM2** 8167.
- Cytotoxic, cell adhesion inhibitor, adhesion of HL-60 cell to BAEC** 3324, 3325.
- Cytotoxic, cellular differentiation inducer, HL-60** 175, 240, 1438, 1441, 2676, 2684, 6064, 7204, 10769, 15635, 20610, 20670, 21410.
- Cytotoxic, cellular differentiation inducer, mus myelocytic leukemia cells** 10594, 10751, 10752, 10796.
- Cytotoxic, CEM leukemia cells** 6221.
- Cytotoxic, CHAGO hmn undifferentiated lung cancer cells** 225, 226, 463, 2257, 2261, 2262, 4268, 4269, 5942, 5945, 10307, 12414, 12417, 12423.
- Cytotoxic, changes the shape of *Pyricularia oryzae* mycelium** 17975, 17980.
- Cytotoxic, Chinese hamster ovarian** 8.
- Cytotoxic, CNE hmn nasopharyngeal carcinoma** 16183, 17717.
- Cytotoxic, Col1 hmn colorectal cancer cells** 15739.
- Cytotoxic, Col2 hmn colorectal cancer cells** 175, 240, 266, 1863, 3300, 5055, 5074, 5319, 5401, 6042, 6064, 6277, 6282, 6483, 6759, 6759, 6759, 6759, 7078, 7204, 7764, 10297, 10396, 10438, 10769, 11353, 13469, 13470, 13472, 14045, 14846, 18866, 20610, 20809, 20811, 21313, 21314, 21315, 21316, 21410, 21803, 21924.
- Cytotoxic, COLO320DM hmn colorectal cancer cells** 4913.
- Cytotoxic, Colon205 colorectal cancer cells** 2528, 2824, 2826, 3583, 3777, 6766, 6906, 7698, 10206, 14775, 18224, 19540, 20811.
- Cytotoxic, Colon26-L5 mus colorectal cancer cells** 2468, 2498, 2499, 2500, 3012, 3012, 3014, 3015, 3015, 3016, 3016, 3018, 3018, 3019, 3019, 3020, 3020, 3021, 3021, 4398, 4882, 5156, 5156, 5548, 5777, 5778, 5779, 5780, 6217, 6844, 6844, 6846, 6846, 6847, 6848, 6848, 9300, 3022, 6849, 9974, 10100, 10412, 13859, 14254, 15351, 15352, 15796, 16229, 17174, 17517, 17518, 17519, 19618, 20840, 20877, 21529.
- Cytotoxic, colorectal cancer cells** 11783, 15409, 16864, 22761.
- Cytotoxic, colorimetric method** 6759, 17574, 20253.
- Cytotoxic, COS-7 monkey kidney cells** 8360, 8361, 8363, 8364, 8365.
- Cytotoxic, COX-1 inhibitor** 1397, 1405, 1417, 1421, 1422, 1423, 1443, 1446, 1447, 1448, 1765, 7026, 5679, 15714, 20326, 21849, 12681, 11672, 1387, 1396, 1412, 1445, 1449, 1450, 2172, 2635, 3308, 4337, 7768, 18643, 18644, 11248, 14931, 14962, 14961.
- Cytotoxic, COX-2 inhibitor** 1387, 1396, 1412, 1424, 1437, 1442, 1444, 1445, 1449, 1450, 2334, 6497, 11490, 14931, 18644, 21440.
- Cytotoxic, Crown gall cancer cells** 17619.
- Cytotoxic, CT-26 mus colorectal cancer cells** 3241, 9669.
- Cytotoxic, CTV1 hmn leukemia cells** 17240.
- Cytotoxic, cultural hmn throat epicytoma cells** 14896.
- Cytotoxic, cultured mouse epidermal 308 cells** 1372, 1373, 1394, 1395, 5543, 15412.
- Cytotoxic, CXF94L hmn tumor cells** 13241.
- Cytotoxic, cytochrome C antioxidant assay** 1398.
- Cytotoxic, D.mel-II (embryonic tissue of ferment fly, *D. melanogaster*)** 2948, 2950, 2952.
- Cytotoxic, DAUDI** 17528.
- Cytotoxic, decrease in cellular GSH content and increases ROS production** 9669.
- Cytotoxic, decrease in thymidine uptake and glutathione levels of the tumor cells** 6767.
- Cytotoxic, direct cytotoxic effect to arrest carcinoma cells in the G2/M phase, stomach cancer cells** 22232.
- Cytotoxic, DLD hmn colorectal adenocarcinoma cells** 11949.
- Cytotoxic, DLD-1 hmn colorectal adenocarcinoma cells** 9669.
- Cytotoxic, DMS114 hmn lung cancer cells** 4880.
- Cytotoxic, DMS273 hmn lung cancer cells** 1625, 4880.
- Cytotoxic, DNA-damaging activity** 3498, 6710, 6711, 6714, 11636, 12537, 18114, 19061.
- Cytotoxic, DU145 prostatic cancer cells** 2528, 4880, 5343, 5580, 5621, 6314, 7912, 8278, 9859, 9861, 9917, 10672, 10673, 16296, 16312, 18700, 18701, 20117, 20122, 20129, 20811, 22281.
- Cytotoxic, EAC Ehrlich ascites cancer cells** 3502, 3745, 3906, 6284, 6285, 6459, 7323, 7566, 11056, 13238, 17717, 18461, 19929, 22778.
- Cytotoxic, EBV-EA** 7764, 11358, 19236, 20465.
- Cytotoxic, EBV-EA inhibitor TPA-induced** 7764, 11358, 19236, 20465.
- Cytotoxic, Ehrlich ascites cancer cells** 4471, 4472, 7399, 16183.
- Cytotoxic, EJ-1 hmn bladder cancer cells** 2102, 2106, 22718.
- Cytotoxic, EL<sub>4</sub> cells** 19143.
- Cytotoxic, enhances cytotoxicity for drug-resistant strain P<sub>388</sub>** 8436.
- Cytotoxic, estrogen  $\alpha$ -receptor-binding assay** 1397, 2630, 2648, 4108, 14961.
- Cytotoxic, estrogen  $\beta$ -receptor-binding assay** 1397, 2630, 2648, 4108, 14961.
- Cytotoxic, estrone sulfatase assay** 6322, 21968.
- Cytotoxic, fibrosarcoma cells** 6767.
- Cytotoxic, FM3A mus breast cancer cells** 911, 912, 1650, 1651, 1652, 2312, 2380.
- Cytotoxic, gpg horn cells** 3096.
- Cytotoxic, GXF251L** 13241.
- Cytotoxic, H.Ep.-2 hmn cutis cancer cells in throat** 7836, 17042.
- Cytotoxic, H116 hmn colorectal cancer cells** 5284, 5295, 6897, 9747, 14495, 14496, 14504, 14644, 14647.

- Cytotoxic, HBC4 breast cancer cells** 4880.
- Cytotoxic, HBC5 breast cancer cells** 4880.
- Cytotoxic, HCC2998 hmn colorectal cancer cells** 4880.
- Cytotoxic, HCT hmn colorectal cancer cells** 2677, 12958, 18931, 22795, 22923.
- Cytotoxic, HCT116 hmn colorectal cancer cells** 159, 1792, 3300, 3583, 4880, 6160, 6490, 9376, 9383, 9386, 11723, 22077, 22580.
- Cytotoxic, HCT15 hmn colorectal cancer cells** 1913, 1914, 4880, 5706, 6162, 7032, 11723, 11723, 16370, 18011, 20679, 20680, 20681, 21709, 22208, 22209.
- Cytotoxic, HCT8 hmn colorectal cancer cells** 1764, 2652, 2653, 2654, 2655, 2656, 3053, 3868, 3869, 5826, 5832, 6044, 6045, 6075, 6221, 8940, 9567, 10052, 11081, 12188, 12189, 14934, 14934, 14935, 17059, 17060, 17061, 17062, 17063, 17064, 18044, 20540, 20542, 20545, 22147, 22148, 22149, 22150.
- Cytotoxic, HEK-293 hmn epithelial kidney cells** 1575, 3821, 8715, 18691, 18693, 18733, 22838.
- Cytotoxic, HEL normal hmn embryonic lung fibrocytes** 5196, 14967.
- Cytotoxic, HeLa ATCC-17 hmn cervical epithelial cancer cells** 1136, 1137, 1138.
- Cytotoxic, HeLa culture cervical epithelial cancer cells from Henrietta Lack** 492, 585, 696, 1319, 1470, 1471, 1472, 1617, 1625, 2492, 2493, 2811, 3053, 3293, 3412, 3502, 3548, 3553, 3745, 3911, 4128, 4320, 4323, 4324, 4327, 4461, 4565, 4795, 4891, 5196, 5417, 5929, 6437, 6776, 6921, 7044, 7436, 7474, 7586, 7593, 7665, 7714, 8128, 8526, 8527, 8528, 8530, 8531, 8532, 8533, 8534, 8535, 8536, 8541, 8543, 8544, 8968, 9015, 9194, 9254, 9255, 9256, 9288, 9376, 9383, 9386, 9869, 10068, 10206, 10277, 10281, 10559, 10773, 10815, 10816, 10817, 10893, 11179, 11230, 11231, 11232, 11555, 11556, 11645, 11659, 11722, 11800, 11801, 11977, 12171, 12177, 12180, 12446, 12511, 13071, 14304, 14305, 14347, 14417, 14775, 14967, 16183, 16599, 16670, 17265, 17613, 17614, 17616, 17643, 17644, 17645, 17646, 17654, 17654, 17717, 17862, 18056, 18097, 18484, 18485, 18562, 18673, 18944, 18951, 18952, 18953, 19085, 19278, 19308, 20010, 20135, 20278, 20283, 20284, 20397, 20811, 20811, 20811, 20811, 21206, 21239, 21240, 21385, 21387, 21498, 22011, 22013, 22270, 22286, 22775, 22781, 22784.
- Cytotoxic, HeLa-S3 hmn cervical epithelial cancer cells** 3412, 4752, 4753, 4754, 4790, 13153, 13154, 13155, 13157, 13158, 13159, 13160, 13161, 13164, 13165, 15409, 17489, 21887.
- Cytotoxic, HELF normal hmn embryo lung fibroblasts** 20540.
- Cytotoxic, Hep2 hmn liver cancer cells** 2811, 7586, 11266, 20963.
- Cytotoxic, Hep2,2,15 transfected with hepatitis B virus hmn liver cancer cells** 473, 1294, 1295, 1296, 1302, 1308, 1856, 1961, 2735, 3060, 4089, 4090, 4091, 4284, 5240, 7515, 7516, 7815, 8167, 12956, 13023, 13038, 15084, 15085, 15090, 15091, 15092, 15093, 15095, 15097, 15098, 15339, 18897, 18898, 19200, 20240, 20243, 22214.
- Cytotoxic, Hep3B hmn liver cancer cells** 1324, 1324, 1325, 1492, 2830, 3258, 3259, 3260, 3261, 3262, 3263, 3555, 3777, 5297, 5522, 5532, 6490, 8379, 8379, 8932, 8933, 8934, 8935, 8936, 8946, 8947, 8948, 9194, 10206, 11977, 13903, 13943, 14775, 14936, 14936, 14937, 14937, 14938, 14938, 14941, 14942, 14943, 14943, 17872, 18224, 19540, 20626, 20811, 22077.
- Cytotoxic, Hepa hmn liver cancer cells** 20834, 20835, 20836.
- Cytotoxic, Hepa1c1c7 mus liver cancer cells** 1380, 1381, 1382, 1383, 1384, 1386, 1388, 1392, 1393, 1401, 1403, 1404, 1406, 1407, 1408, 1409, 1410, 1411, 1413, 1414, 1415, 1416, 1418, 1419, 1420, 1425, 1427, 1428, 1429, 1430, 1431, 1432, 1433, 1434, 1435, 1436, 1451, 1452, 1453, 1454, 1455, 1456, 1457, 2468, 2857, 2857, 3071, 3072, 3602, 4282, 6228, 6228, 6246, 6246, 7670, 7788, 8278, 9740, 10430, 10827, 11504, 11804, 12953, 14074, 14074, 14075, 14075, 16498, 16935, 17753, 19542, 19910, 21918, 22615, 22715.
- Cytotoxic, Hepa59T/VGH hmn liver cancer cells** 531, 11951, 20811, 20833, 22630.
- Cytotoxic, HepG2 hmn liver cancer cells** 225, 226, 463, 473, 1294, 1295, 1296, 1302, 1308, 1324, 1324, 1325, 1617, 1856, 1961, 2102, 2106, 2257, 2261, 2262, 2735, 2948, 2950, 2952, 3060, 3555, 4089, 4090, 4091, 4128, 4268, 4269, 4284, 4891, 5240, 5367, 5369, 5532, 5942, 5945, 6490, 7044, 7515, 7516, 7815, 8167, 8379, 8379, 8932, 8933, 8934, 8946, 8947, 8948, 10307, 11977, 12414, 12417, 12423, 12511, 12597, 12954, 12956, 13023, 13038, 13903, 13943, 14936, 14936, 14937, 14937, 14938, 14938, 14939, 14940, 14940, 14941, 14941, 14942, 14942, 14943, 14943, 15084, 15085, 15090, 15091, 15092, 15093, 15095, 15097, 15098, 15339, 16634, 17872, 17928, 17929, 18673, 18897, 18898, 19148, 19200, 19308, 19488, 20240, 20243, 22077, 22214.
- Cytotoxic, HEPZ hmn epithelial cancer cells** 837.
- Cytotoxic, HGF normal hmn gingival fibroblast cells** 1010, 4338, 4339, 4340, 4341, 4342, 5184, 6128, 6129, 6130, 6447, 7133, 7136, 8354, 8355, 8357, 8358, 8359, 8653, 8654, 8655, 8687, 8721, 8722, 10716, 10719, 10720, 10722, 10727, 11206, 11248, 13881, 19254, 19517, 21797.
- Cytotoxic, HL-60 leukaemia cells** 175, 240, 594, 941, 1570, 1571, 1578, 1691, 1845, 2102, 2106, 2528, 2716, 2722, 3053, 3324, 3325, 3576, 3576, 3580, 3580, 3581, 3581, 3582, 3582, 3583, 3583, 3724, 3729, 3732, 3784, 3911, 4893, 5237, 5238, 5239, 5774, 5775, 5776, 5781, 5815, 5816, 5817, 5899, 5900, 5912, 5913, 5926, 6064, 6107, 6125, 6221, 6328, 6437, 6484, 6528, 6576, 6577, 6785, 7081, 7204, 7436, 7540, 7544, 7545, 7548, 7746, 7911, 7912, 8121, 8222, 8327, 8328, 8360, 8361, 8363, 8364, 8365, 8526, 8527, 8530, 8531, 8532, 8533, 8534, 8535, 8536, 8541, 8542, 8543, 8544, 8661, 8691, 8699, 9381, 9859, 9861, 9917, 9918, 9993, 10077, 10274, 10287, 10287, 10672, 10673, 10725, 10726, 10769, 10773, 10815, 10816, 10817, 11001, 11001, 11323, 11659, 11751, 11962, 12167, 12202, 12595, 12597, 12936, 12958, 13241, 13492, 13493, 13494, 13495, 14347, 14698, 15635, 15813, 16261, 16261, 16296, 16312, 17240, 17265, 17528, 17727, 17928, 17929, 17979, 18637, 18714, 18716, 18768, 18769, 18770, 18771, 18772, 18773, 18774, 18775, 18776, 18777, 18778, 18835, 18892, 19122, 19324, 19410, 19410, 19411, 19411, 19412, 19412, 19413, 19413, 19488, 20009, 20068, 20221, 20223, 20397, 20610, 20811, 20811, 20811, 20811, 20911, 21410, 21498, 21771, 22011, 22013, 22290, 22718, 22720, 22777, 22792, 22793, 22794, 22795, 22826.
- Cytotoxic, hmn breast cancer cells** 1399, 2635, 14961.
- Cytotoxic, hmn cervical carcinoma cells** 21497.
- Cytotoxic, hmn cervical carcinoma cells** 11541.

- Cytotoxic, hmn colorectal cancer cells** 1389, 1390, 1439, 1440, 14901, 15494.
- Cytotoxic, hmn embryo lung cells** 11541.
- Cytotoxic, hmn intestinal mucoadenocarcinoma in nude mouse** 11179.
- Cytotoxic, hmn keratinocytes** 19284.
- Cytotoxic, hmn liver cancer cells** 8128.
- Cytotoxic, hmn lymphocytes** 14995.
- Cytotoxic, hmn medulloblastoma** 1470, 1471, 1472, 11230, 11231, 11232, 11645, 18562.
- Cytotoxic, hmn microvascular endothelial cells** 9198.
- Cytotoxic, hmn peripheral blood T cells** 7519, 11318, 12106, 15331, 16216, 19515, 22718.
- Cytotoxic, hmn throat epicytoma cells** 7558.
- Cytotoxic, hmn throat epidermic carcinoma cells H-Ep-2** 9288.
- Cytotoxic, hmn T-lymphoid leukemia cells** 2102.
- Cytotoxic, HO-8910 hmn ovarian cancer cells** 1860, 8656, 9546, 11203, 14044, 14828, 16675, 22497, 22828.
- Cytotoxic, HOG.R5 green fluorescent protein (GFP)-based reporter cells** 1863, 1885, 6759, 9546, 10396, 13845, 14045.
- Cytotoxic, HONE-1 hmn nasopharyngeal carcinoma cells** 228, 332, 530, 2006, 2338, 3555, 4317, 4320, 4323, 5573, 5574, 8935, 8936, 13294, 16337, 16402, 16891, 20495, 22270, 22272.
- Cytotoxic, HOP-62 non-small cell lung cancer cells** 3583.
- Cytotoxic, Hs578T hmn breast cancer cells** 5343, 5580, 5621, 8278, 18700, 18701, 20117, 20122, 20129.
- Cytotoxic, Hs740T hmn stomach cancer cells** 5343, 5580, 5621, 8278, 18700, 18701, 20117, 20122, 20129.
- Cytotoxic, Hs742T hmn breast cancer cells** 5343, 5580, 5621, 8278, 18700, 18701, 20117, 20129.
- Cytotoxic, Hs756T hmn stomach cancer cells** 5343, 5580, 5621, 8278, 18700, 18701, 20117, 20122, 20129.
- Cytotoxic, HSC-2 hmn oral squamous cell carcinoma cells** 1010, 1177, 1508, 1570, 1571, 1581, 1583, 4338, 4339, 4340, 4341, 4342, 5184, 6128, 6129, 6130, 6447, 7083, 7131, 7132, 7139, 7140, 8354, 8355, 8357, 8358, 8359, 8661, 8695, 10722, 10727, 11206, 11248, 19254, 19257, 19521, 21797, 22826.
- Cytotoxic, HSC-2 hmn oral squamous cell carcinoma cells, also active for normal hmn gingival fibroblasts HGF** 8653, 8654, 8655, 8687, 8721, 8722, 10716, 10719, 10720, 13881.
- Cytotoxic, HSC-2 hmn oral squamous cell carcinoma cells, inactive for normal hmn gingival fibroblasts HGF** 512, 579, 3667, 3668, 9905, 10717.
- Cytotoxic, HSG hmn salivary gland tumor cells** 19254.
- Cytotoxic, HT sarcoma cells** 9187, 15919, 17008, 17009.
- Cytotoxic, HT1080 hmn fibrosarcoma cells** 2468, 2498, 2499, 2500, 2769, 3012, 3012, 3014, 3014, 3015, 3015, 3016, 3016, 3018, 3018, 3019, 3019, 3020, 3020, 3021, 3021, 3022, 4398, 4882, 4900, 5156, 5156, 5777, 5778, 5780, 6217, 6277, 6282, 6759, 6844, 6844, 6846, 6846, 6847, 6848, 6848, 6849, 9300, 9628, 9974, 10438, 11353, 12766, 12768, 12770, 13098, 13859, 14254, 15351, 15351, 15352, 15352, 15739, 15922, 15923, 16232, 17174, 17343, 18866, 19516, 19517, 19524, 19525, 19526, 21924.
- Cytotoxic, HT1197 cells** 22208, 22209.
- Cytotoxic, HT29 hmn colorectal cancer cells** 228, 332, 530, 1297, 1303, 1304, 1305, 1310, 1312, 1320, 1321, 1322, 1367, 1625, 1679, 1691, 1924, 1925, 1926, 2005, 2047, 2338, 2528, 2694, 2735, 2736, 2857, 3257, 3457, 3583, 3974, 3975, 4164, 4165, 4166, 4310, 4880, 5841, 5843, 6010, 6165, 6181, 6183, 6204, 6314, 6367, 6404, 6405, 6490, 6642, 6827, 6828, 7032, 7698, 7788, 7789, 7951, 8203, 8204, 8205, 8556, 8946, 9226, 9323, 9544, 10126, 10462, 11269, 11375, 11494, 11566, 11605, 12254, 12541, 12886, 12887, 12888, 13673, 13685, 13808, 14254, 14492, 14572, 14645, 14646, 14906, 15082, 15084, 15085, 15087, 15088, 15089, 15141, 15879, 15902, 15903, 16020, 16282, 16283, 16337, 16402, 16427, 16677, 16832, 17588, 17619, 17872, 18754, 18768, 18769, 18770, 18771, 18772, 18773, 18774, 18775, 18776, 18777, 18778, 18892, 19427, 19516, 19517, 19524, 19525, 19526, 20002, 20244, 20363, 20641, 20644, 20811, 20811, 22077, 22270, 22272, 22451, 22458.
- Cytotoxic, HT3 hmn cervicall cancer cells** 1992.
- Cytotoxic, HTC mus hepatosarcoma cells** 8148, 8149, 8159, 8160, 8161, 8174.
- Cytotoxic, HTC rat cultural liver cancer cells** 18295, 18296.
- Cytotoxic, hTERT-RPE1 hmn telomerase reverse transcriptase-retinal pigment epithelial cells** 2259, 3300, 5319, 5387, 5401, 5536, 6042, 6483, 6500, 20811, 21803.
- Cytotoxic, Huh7 hmn hepatoma cells** 9376, 9383, 9386.
- Cytotoxic, HUVEC hmn umbilical vein endothelial cells** 1863, 3300, 3300, 5319, 5319, 5401, 5536, 5536, 6483, 6483, 6500, 6500, 6759, 10396, 14045, 20811, 21803.
- Cytotoxic, induces apoptosis, B16** 19143.
- Cytotoxic, induces apoptosis, causes rapidly apoptosis of many radioresistant and chemoresistant hmn squamous cell carcinoma** 3498.
- Cytotoxic, induces apoptosis, HeLa** 7665.
- Cytotoxic, induces apoptosis, HL-60** 10287, 13492.
- Cytotoxic, inhibition assay of ornithine decarboxylase** 1373, 1394, 1395.
- Cytotoxic, inhibits absorption of thymidine** 2664.
- Cytotoxic, inhibits biosynthesis of DNA** 17489.
- Cytotoxic, inhibits biosynthesis of DNA, RNA and protein** 14698, 16183, 21397.
- Cytotoxic, inhibits biosynthesis of DNA, RNA, protein and cholesterol** 7566.
- Cytotoxic, inhibits Ca<sup>2+</sup>-induced depolymerization of tubulin to overcome resistance of cancer cells** 20800, 20850.
- Cytotoxic, inhibits cellular macromolecular biosyntheses** 8360, 8361, 8363, 8364, 8365.
- Cytotoxic, inhibits DMBA-induced preneoplastic lesion formation** 240, 4151, 4179, 4180.
- Cytotoxic, inhibits DNA biosynthesis by blocking thymidine to go into HL-60 cells** 941, 6484, 22777.
- Cytotoxic, inhibits estrogen receptor-positive MCF7 hmn breast cancer cells, the inhibition was not reversibile by an addition of estrogen** 2102.
- Cytotoxic, inhibits growth of cells** 2102, 2106, 19284, 20009, 22718,

- 22720.
- Cytotoxic, inhibits growth of cells inactive, MCF7, NCIH460, SF268** 8569.
- Cytotoxic, inhibits growth of cells, A549** 5055, 6162, 21709, 22208, 22209.
- Cytotoxic, inhibits growth of cells, B16** 19143.
- Cytotoxic, inhibits growth of cells, Bel7402** 5888, 7504, 8692.
- Cytotoxic, inhibits growth of cells, breast cancer cells** 2601.
- Cytotoxic, inhibits growth of cells, Col2** 5055.
- Cytotoxic, inhibits growth of cells, EL<sub>4</sub>** 19143.
- Cytotoxic, inhibits growth of cells, GI-101A** 3498.
- Cytotoxic, inhibits growth of cells, HCT15** 6162, 21709, 22208, 22209.
- Cytotoxic, inhibits growth of cells, HepG2** 2102, 2106.
- Cytotoxic, inhibits growth of cells, HL-60** 3576, 3580, 3581, 3582, 3583, 14698, 19410, 19411, 19412, 19413.
- Cytotoxic, inhibits growth of cells, hmn cancer cells** 22210, 22211, 22212.
- Cytotoxic, inhibits growth of cells, HT1197** 22208, 22209.
- Cytotoxic, inhibits growth of cells, KB** 13672, 14813, 21447, 21448, 21554.
- Cytotoxic, inhibits growth of cells, LOX-IMVI** 6162, 21709.
- Cytotoxic, inhibits growth of cells, MCF7** 8563, 8570, 13092, 13093, 13098, 18170, 18171, 18172, 22208, 22209.
- Cytotoxic, inhibits growth of cells, MDA-MB-435** 2102.
- Cytotoxic, inhibits growth of cells, MH<sub>1</sub>C<sub>1</sub>** 19143.
- Cytotoxic, inhibits growth of cells, NCI-H460** 8563, 8570, 13092, 13093, 13098, 18170, 18171, 18172.
- Cytotoxic, inhibits growth of cells, PC3** 21709, 6162.
- Cytotoxic, inhibits growth of cells, rat liver cancer** 16935.
- Cytotoxic, inhibits growth of cells, SF268** 8563, 8570, 13092, 13093, 13098, 18170, 18171, 18172.
- Cytotoxic, inhibits growth of cells, SW620** 6162, 21709.
- Cytotoxic, inhibits growth of cells, ZR-75-1** 9564.
- Cytotoxic, inhibits invasion of mus MO4 cells into embryonic chick heart fragments** 15635, 20670.
- Cytotoxic, inhibits phosphorylated action of phospholipid, then inhibits cancer cell's growth and metabolism** 17763.
- Cytotoxic, inhibits TPA-induced <sup>32</sup>P combines with phospholipid in HeLa cells** 12766.
- Cytotoxic, Ishikawa anti-E2 bioassay** 1389, 1390, 14714.
- Cytotoxic, J774.A1 macrophages** 1575, 3821, 8715, 8716, 18691, 18693, 18733, 22838.
- Cytotoxic, Jurkat-T hmn T-cell leukemia cells** 2495, 4190, 4604, 5851, 5973, 7295, 10047, 11978, 17478, 17528, 17830, 17979.
- Cytotoxic, K562 doxorubicin-resistant hmn leukemia cells** 5175, 8238, 11433.
- Cytotoxic, K562 hmn leukemia cells** 607, 610, 843, 1245, 1913, 1914, 2334, 2338, 2528, 3548, 3551, 3583, 3920, 3921, 4147, 4148, 4701, 5929, 6756, 6785, 6789, 6790, 6794, 6826, 7062, 8483, 9080, 9381, 10277, 10281, 10559, 11266, 11392, 11394, 11722, 12171, 12177, 12180, 12536, 12587, 12588, 12589, 12936, 12958, 13071, 13076, 13078, 13083, 13123, 13241, 13537, 13544, 13694, 14304, 14305, 15652, 16050, 16183, 16402, 17240, 17717, 17975, 17979, 17980, 18457, 18459, 18499, 18931, 19122, 19458, 19571, 19579, 20010, 20811, 20811, 22281, 22653, 22654, 22655, 22657, 22751, 22793, 22794, 22795, 22797, 22798, 22799, 22802, 23013.
- Cytotoxic, Kato3 hmn stomach cancer cells** 225, 226, 463, 2257, 2261, 2262, 4268, 4269, 5942, 5945, 6621, 10307, 11405, 12414, 12417, 12423, 19535, 19537.
- Cytotoxic, KB ATCC CCL17 hmn nasopharyngeal carcinoma cells** 4941, 5494, 7115, 7182, 10155, 18673.
- Cytotoxic, KB drug-resistant cells** 18866.
- Cytotoxic, KB hmn nasopharyngeal carcinoma cells** 24, 76, 78, 84, 90, 228, 265, 332, 349, 492, 526, 530, 531, 577, 589, 777, 837, 913, 914, 915, 993, 1012, 1277, 1306, 1460, 1470, 1471, 1472, 1492, 1768, 1863, 1864, 1885, 2026, 2109, 2244, 2260, 2338, 2495, 2590, 2604, 2619, 2652, 2653, 2654, 2655, 2656, 2660, 2661, 2677, 2716, 2722, 2810, 2811, 2830, 2990, 2991, 2998, 3181, 3300, 3368, 3402, 3405, 3406, 3416, 3481, 3499, 3513, 3514, 3515, 3600, 3626, 3708, 3729, 3732, 3748, 3777, 3778, 3829, 4048, 4164, 4165, 4166, 4190, 4320, 4323, 4324, 4327, 4547, 4604, 4708, 4739, 4740, 4775, 4939, 5064, 5074, 5074, 5095, 5237, 5238, 5239, 5274, 5275, 5319, 5327, 5401, 5522, 5536, 5537, 5851, 5941, 5973, 6042, 6049, 6483, 6500, 6514, 6516, 6606, 6646, 6647, 6652, 6654, 6750, 6751, 6759, 6759, 6759, 6759, 6759, 6759, 6759, 6759, 6760, 6766, 6913, 7027, 7030, 7031, 7033, 7036, 7041, 7078, 7192, 7193, 7295, 7317, 7550, 7551, 7552, 7553, 7554, 7555, 7556, 7579, 7580, 7581, 7583, 7584, 7585, 7586, 7590, 7593, 7594, 7595, 7650, 7655, 7740, 7912, 7914, 8004, 8079, 8080, 8121, 8220, 8221, 8222, 8235, 8278, 8327, 8328, 8489, 8508, 8509, 8526, 8527, 8530, 8531, 8532, 8533, 8534, 8535, 8536, 8541, 8543, 8544, 8940, 9072, 9187, 9194, 9198, 9320, 9330, 9570, 9859, 9861, 9902, 9917, 9918, 9993, 10047, 10148, 10250, 10297, 10297, 10297, 10310, 10396, 10511, 10588, 10672, 10673, 10680, 10692, 10815, 10816, 10817, 10909, 10915, 11015, 11071, 11230, 11231, 11232, 11295, 11316, 11353, 11355, 11380, 11494, 11636, 11645, 11723, 11736, 11807, 11850, 11977, 11978, 11980, 12188, 12189, 12454, 12487, 12746, 12897, 12917, 12944, 12964, 13023, 13430, 13432, 13464, 13469, 13470, 13472, 13489, 13490, 13492, 13493, 13494, 13495, 13618, 13619, 13620, 13622, 13672, 13845, 14045, 14195, 14602, 14813, 14906, 14934, 14934, 14935, 14935, 14978, 15170, 15242, 15409, 15417, 15494, 15495, 15598, 15635, 15739, 15746, 15776, 15857, 15991, 16020, 16119, 16266, 16280, 16312, 16329, 16337, 16339, 16356, 16402, 16411, 16429, 16444, 16495, 16604, 16693, 16695, 16733, 16747, 16749, 16864, 16984, 17008, 17252, 17430, 17431, 17478, 17557, 17591, 17592, 17603, 17830, 17832, 17862, 17928, 17929, 17998, 18044, 18091, 18114, 18188, 18222, 18224, 18298, 18515, 18523, 18562, 18637, 18637, 18668, 18768, 18769, 18770, 18771, 18772, 18773, 18774, 18775, 18776, 18777, 18866, 18892, 19128, 19129, 19148, 19234, 19235, 19373, 19376, 19511, 19542, 19542, 19637, 19638, 19753, 19790, 19900, 20051, 20062, 20063, 20160, 20284, 20285, 20540, 20575, 20626, 20629, 20630, 20631, 20632, 20633, 20634, 20635, 20636, 20637, 20638, 20639, 20640, 20671, 20743, 20800, 20803, 20809, 20809, 20810, 20811, 20811, 20813, 20814, 20833, 20834, 20835, 20852, 20853, 20856, 20873, 20911, 20963, 21313, 21314, 21315, 21316, 21390, 21447, 21448, 21554, 21803, 21830, 22011, 22011,

- 22013, 22013, 22103, 22147, 22148, 22149, 22150, 22232, 22270, 22272, 22301, 22405, 22411, 22412, 22414, 22443, 22543, 22548, 22549, 22630, 22667, 22768, 22784.
- Cytotoxic, KB15 hmn nasopharyngeal carcinoma cells** 15879.
- Cytotoxic, KB16 hmn nasopharyngeal carcinoma cells** 11949, 11951, 16282, 16343.
- Cytotoxic, KB3 hmn nasopharyngeal carcinoma cells** 15920.
- Cytotoxic, KBMRI cells** 10126.
- Cytotoxic, KB-V cells** 11353, 11353, 15919, 17008, 17008, 17009.
- Cytotoxic, KB-V1 cells** 15739, 20809.
- Cytotoxic, KB-VIN vincristine-resistant nasopharyngeal carcinoma cells** 1625, 14934, 14935, 14935, 16864.
- Cytotoxic, Ketr3 hmn renal cancer cells** 6075, 9567, 11081, 17059, 17060, 17061, 17062, 17063, 17064.
- Cytotoxic, KG-1 hmn leukemia cells** 17240.
- Cytotoxic, Kichita sarcoma cells** 15230, 15231, 15232, 15233, 15234, 17591.
- Cytotoxic, KM12 hmn colorectal cancer cells** 3583, 4880.
- Cytotoxic, KM20L2 hmn colorectal cancer cells** 7912, 9859, 9861, 9917, 10672, 10673, 16296, 16312.
- Cytotoxic, KM3 cells** 17528.
- Cytotoxic, KU-1 hmn bladder cancer cells** 2102, 2106, 22718.
- Cytotoxic, L<sub>1210</sub> lymphocytic leukemia cells** 577, 2304, 2339, 2340, 4048, 4708, 7740, 8360, 8361, 8363, 8364, 8365, 8452, 15409, 15647, 16183, 16411, 16429, 16586, 17557, 17600, 18523, 20009, 20240, 20743, 20771, 20798, 20800, 20813, 20814, 20849, 20850, 20851, 20852, 20853, 20871, 20872, 22281.
- Cytotoxic, L5178Y lymphosarcoma cells** 2811, 13432, 17822, 21493.
- Cytotoxic, L-6 rat skeletal myoblasts** 589, 11978, 17478, 17592, 17592, 22551.
- Cytotoxic, L-929 fibrosarcoma cells** 2492, 2493, 3241, 3548, 4046, 5929, 6437, 9669, 10277, 10281, 10559, 11800, 11801, 12171, 12177, 12180, 14304, 14305, 16599, 17654, 18056, 20811.
- Cytotoxic, lymphoma cells** 21490.
- Cytotoxic, leukemia** 1275, 2660, 2684, 13044, 14945, 16597, 19146, 19221, 22411.
- Cytotoxic, leukemia cells** 11227.
- Cytotoxic, liver cancer cells** 11392, 22270.
- Cytotoxic, LLC mouse Lewis lung cancer cells** 1792, 3227, 3228, 3229, 3230, 4235, 5378, 8187, 10235, 10317, 10403, 10539, 11023, 11278, 11279, 13020, 13021, 13241, 17769, 19777, 20556.
- Cytotoxic, LMTK mouse fiber cells** 5081, 16634.
- Cytotoxic, LNCaP hmn prostate cancer cells** 1863, 3087, 3088, 5074, 6042, 6759, 6759, 7078, 7764, 9013, 9187, 10297, 10396, 10588, 11353, 14045, 14227, 14234, 15739, 15919, 15922, 17008, 18866, 20809, 20811, 21313, 21314, 21315, 21316, 21803.
- Cytotoxic, LO2 hmn liver cells** 11203.
- Cytotoxic, LoVo hmn colorectal cancer cells** 1552, 6164, 6213, 6490, 9376, 9383, 9386, 13403, 16703, 19916, 22077.
- Cytotoxic, LoVo/Doxo hmn colorectal cancer cells, drug-resistant subclone** 6164.
- Cytotoxic, LOX melanoma cells** 4111, 4112, 4113.
- Cytotoxic, LOX-IMVI melanoma cells** 251, 2334, 2338, 4147, 4148, 4880, 5314, 5706, 6162, 16050, 19516, 19517, 19524, 19525, 19526, 21709, 23013.
- Cytotoxic, LS174T colorectal cancer cells** 4913.
- Cytotoxic, Lu1 hmn lung cancer cells** 1863, 2259, 3300, 5319, 5387, 5401, 5536, 6042, 6483, 6500, 6759, 6759, 6759, 7078, 7764, 9187, 10297, 10396, 10588, 11353, 13469, 13470, 14045, 15919, 17008, 18866, 20809, 20811, 21313, 21314, 21315, 21316, 21803.
- Cytotoxic, LUC-1** 15739.
- Cytotoxic, lung cancer cells** 10229, 10230.
- Cytotoxic, LXFL529L hmn large cell lung cancer cells** 2102, 2106, 13241, 20009, 22718, 22720.
- Cytotoxic, lymphleukemia cells** 16864.
- Cytotoxic, lymphocyte sarcoma** 2664.
- Cytotoxic, M1 mus myelocytic leukemia** 17239.
- Cytotoxic, M14 melanoma cells** 3583.
- Cytotoxic, M4BEU hmn melanoma cells** 3241, 9669.
- Cytotoxic, M5076 ovarian sarcoma cells** 16601.
- Cytotoxic, Ma7373 mus breast cancer cells** 11179.
- Cytotoxic, macrophages** 1359.
- Cytotoxic, MALME-3M melanoma cells** 3583.
- Cytotoxic, mammary cancer cells in rat** 12957, 12958.
- Cytotoxic, many of radioresistant and chemoresistant hmn squamous cell carcinoma** 3498.
- Cytotoxic, may serve as a new prototype molecule to develop antitumor agents, the first compound of this type to contain lactone moieties on both sides of the aliphatic chain and to lack either tetrahydrofuran or tetrahydropyran rings** 18897.
- Cytotoxic, MBT-2 mus bladder cancer cells** 2102, 2106, 22718.
- Cytotoxic, MCF7 hmn breast cancer cells** 1297, 1303, 1304, 1305, 1310, 1320, 1321, 1322, 1679, 1764, 2006, 2527, 2528, 2735, 2736, 2856, 2857, 2985, 3053, 3096, 3097, 3241, 3303, 3457, 3555, 3583, 3868, 3869, 4310, 4317, 4320, 4323, 4689, 4690, 4880, 4913, 4930, 4986, 5551, 5622, 5826, 5832, 6075, 6221, 6367, 6827, 6828, 7100, 7125, 7126, 7376, 7613, 7614, 7646, 7698, 7788, 7912, 8526, 8527, 8528, 8530, 8531, 8532, 8533, 8534, 8535, 8536, 8541, 8543, 8544, 8563, 8570, 8946, 8947, 8948, 9323, 9567, 9669, 9859, 9861, 9885, 9917, 10672, 10673, 10815, 10816, 10817, 11029, 11081, 11269, 11566, 11977, 13092, 13093, 13098, 13518, 13867, 13869, 14934, 14934, 14935, 14935, 15082, 15084, 15085, 15087, 15088, 15089, 15141, 15169, 15902, 15903, 15916, 16020, 16021, 16296, 16312, 16402, 16676, 16693, 16694, 16695, 16832, 17059, 17060, 17061, 17062, 17063, 17064, 17309, 17619, 17973, 18170, 18171, 18172, 19427, 19516, 19517, 19524, 19525, 19526, 20244, 20641, 20643, 20644, 20811, 20811, 20811, 20811, 20811, 21435, 22011, 22013, 22077, 22208, 22208, 22209, 22281, 22781.
- Cytotoxic, MCF7/6 hmn breast cancer cells** 12344.
- Cytotoxic, MCF7/ADR-RES hmn breast cancer cells** 3583.
- Cytotoxic, MCF7-ras hmn breast cancer cells** 11977, 22077.
- Cytotoxic, MDA-MB-231 hmn breast cancer cells** 2528, 3555, 4880, 5532, 7698, 7698, 8932, 8933, 8934, 8936, 8947, 8948, 20811, 20811.
- Cytotoxic, MDA-MB-231/ATCC hmn breast cancer cells** 3583.
- Cytotoxic, MDA-MB-435 hmn breast cancer cells** 2102, 3583, 11659, 20397.

- Cytotoxic, MDA-N hmn breast cancer cells** 3583.
- Cytotoxic, mechanism was considered to be an inhibition of oxygen consumption and depletion of glutathione in tumor cells** 11179.
- Cytotoxic, mechanism was postulated to be due to covalent binding of oridonin to a specific site of enzymes in tumor cells** 16183.
- Cytotoxic, Mel-2 cells** 15739, 15923, 17008, 20137.
- Cytotoxic, MEL-28 hmn melanoma cells** 1924, 1925, 1926, 14492, 14645, 14646, 16427.
- Cytotoxic, melanoma cells** 16864.
- Cytotoxic, Meth-A sarcoma cells** 1792, 3227, 3228, 3229, 3230, 4235, 5378, 8186, 8187, 8188, 10229, 10230, 10317, 10403, 10539, 13019, 13020, 13021, 13241, 17769, 19777, 20556.
- Cytotoxic, MG** 18461.
- Cytotoxic, MGC803 hmn gastric adenocarcinoma cells** 16183.
- Cytotoxic, MH<sub>1</sub>C<sub>1</sub>** 19143.
- Cytotoxic, MH-60 mus leukemia cells** 7192, 7193, 7912, 16312, 16329, 18637.
- Cytotoxic, MI4 melanoma cells** 5706.
- Cytotoxic, MIA-PaCa-2 hmn pancreas cancer cells** 1297, 1303, 1304, 1305, 6827, 6828.
- Cytotoxic, MK1 hmn stomach cancer cells** 16599, 18944, 18950, 18951, 18952, 18953.
- Cytotoxic, MKN1 hmn stomach cancer cells** 4880.
- Cytotoxic, MKN28 hmn stomach cancer cells** 1625, 4880, 6785, 12202, 12958, 18714, 18931, 22793, 22794, 22795.
- Cytotoxic, MKN45 hmn stomach cancer cells** 4880.
- Cytotoxic, MKN7 hmn stomach cancer cells** 4880.
- Cytotoxic, MKN74 hmn stomach cancer cells** 4880.
- Cytotoxic, MMOC assay, inhibition of DMBA-induced preneoplastic lesions *in vitro*** 3602, 5595, 6064, 7204, 8278, 10430, 10741, 11504, 20485, 20610, 21410, 21483.
- Cytotoxic, Molt4 hmn lymphoma cells** 3583, 5081, 13241, 15750, 16634.
- Cytotoxic, Mono-Mac-6 mononuclear cells** 2495, 4190, 4604, 5851, 5973, 7295, 10047, 17830.
- Cytotoxic, mouse alveolus non-cancer fibrocytes LMTK** 15750.
- Cytotoxic, mouse mammary organ culture model MMOC** 240, 4151, 4179, 4180.
- Cytotoxic, mouse TPA-induced skin tumor** 17763.
- Cytotoxic, MRC-5 hmn diploid embryonic cells** 19892.
- Cytotoxic, MT2 cells** 3816.
- Cytotoxic, MT-4 cells** 8436.
- Cytotoxic, MTT assay** 2985, 4893, 5375, 5551, 12397, 12398, 15652, 15916, 19536, 21845, 22299, 22653, 22654, 22655, 22988.
- Cytotoxic, mus mammary organ culture assay** 1453, 1454, 3568, 4151, 4282, 5679, 6497, 7788, 7824, 10741, 10827, 11504, 11804, 15714, 20326, 21440, 21483, 22705, 22715.
- Cytotoxic, mutant yeast strain RAD 52Y** 6710, 6711, 6714, 12537, 19061.
- Cytotoxic, NCI 60 hmn tumor cell lines screen** 3583, 14719, 17722, 19296.
- Cytotoxic, NCI-H1417 hmn small cell lung cancer cells** 17979.
- Cytotoxic, NCI-H187 hmn small cell lung cancer cells** 349, 526, 1277, 2244, 3416, 3429, 3708, 3940, 4775, 5064, 5276, 5827, 6759, 8220, 8221, 8222, 8235, 8315, 13484, 13487, 13489, 13490, 13492, 13493, 13494, 13495, 15494, 15495, 20671.
- Cytotoxic, NCI-H226 hmn non-small cell lung cancer cells** 1625, 4763, 4880, 10558, 20720, 20721, 20722, 20811.
- Cytotoxic, NCI-H23 hmn lung cancer cells** 3583, 4880.
- Cytotoxic, NCI-H460 hmn lung cancer cells** 2528, 4880, 7125, 7126, 7613, 7614, 7698, 7912, 8563, 8570, 8669, 8670, 8671, 9859, 9861, 9917, 10672, 10673, 11890, 13092, 13093, 13098, 13328, 16296, 16312, 18170, 18171, 18172, 18714, 20811.
- Cytotoxic, NCI-H522 hmn lung cancer cells** 1625, 3583, 4880.
- Cytotoxic, NK/LY ascites cancer cells** 13137.
- Cytotoxic, no explanation on cell species** 370, 576, 595, 597, 598, 1748, 1789, 1971, 2034, 2073, 2119, 2130, 2227, 2303, 2529, 2946, 3063, 3076, 3294, 3388, 3467, 3565, 4348, 4349, 4350, 4351, 4353, 4399, 4414, 5136, 5168, 5187, 5236, 6027, 6261, 6737, 7559, 7739, 8239, 9304, 9655, 11052, 11379, 11386, 11423, 11636, 12225, 12501, 12916, 13072, 13473, 13522, 14086, 14121, 14821, 14822, 14830, 14835, 14836, 15335, 15634, 15635, 15637, 15764, 15782, 15801, 16019, 16119, 16128, 16205, 16278, 16674, 16675, 16747, 16748, 16749, 16929, 16978, 17037, 17038, 17041, 17200, 17201, 17558, 17594, 17619, 17665, 17666, 17667, 17668, 17669, 17670, 17671, 18114, 18297, 18522, 18567, 18679, 18843, 19194, 19313, 19315, 19468, 19904, 19905, 19906, 19907, 20121, 20171, 20235, 20387, 20496, 20664, 20730, 21559, 21889, 22268, 22407, 22420, 22475, 22818, 22965, 22970, 22972, 22987.
- Cytotoxic, no reversal effect of VCR resistance** 1625.
- Cytotoxic, no significant differential cellular sensitivities when it was evaluated in the Japanese Foundation for Cancer Research 39 cell line assay** 18714.
- Cytotoxic, non-parvicellular lung cancer, with strong selectivity** 20813.
- Cytotoxic, normal EAC-E4cells** 7586, 7593.
- Cytotoxic, normal hmn cell, fibroblasts** 9669.
- Cytotoxic, normal Rkcells** 7586, 7593.
- Cytotoxic, NSCLC-N6 hmn non-small cell lung cancer cells** 10340, 10573.
- Cytotoxic, NSCLCN6-L16 non-small cell lung cancer cells** 16495.
- Cytotoxic, NUGC hmn stomach cancer cells** 955, 8935, 8936, 10344, 16891, 22114, 22459.
- Cytotoxic, NUGC-3 hmn stomach cancer cells** 2006, 4317, 4320, 4323, 5573, 5574, 7035, 13294, 17973, 20495.
- Cytotoxic, NUGC-4 hmn stomach cancer cells** 19535, 19537.
- Cytotoxic, ornithine decarboxylase inhibition assay** 1372, 5543, 15412.
- Cytotoxic, OVCAR-2780 ovarian adenocarcinoma cells** 12531, 12532, 12533.
- Cytotoxic, OVCAR-3 ovarian adenocarcinoma cells** 1617, 4128, 4880, 4891, 7044, 7698, 12511, 17979, 18673, 18714, 19308, 20811, 22962.
- Cytotoxic, OVCAR-4 ovarian adenocarcinoma cells** 4880.
- Cytotoxic, OVCAR-5 ovarian adenocarcinoma cells** 3583, 4880.
- Cytotoxic, OVCAR-8 ovarian adenocarcinoma cells** 4880, 18714.
- Cytotoxic, P<sub>388</sub> mouse lymphocytic leukemia cells** 378, 577, 913, 914, 915, 1008, 1306, 1367, 1691, 1924, 1925, 1926, 2005, 2047, 2109, 2219, 2260, 2303, 2304, 2677, 2694, 2811, 3181, 3257, 3266, 3267,

- 3268, 3271, 3476, 3602, 3710, 3829, 3936, 3974, 3975, 4135, 4291, 4471, 4680, 4690, 4708, 4986, 5327, 5841, 5843, 5901, 5941, 6010, 6014, 6165, 6181, 6183, 6204, 6204, 6284, 6285, 6289, 6328, 6402, 6404, 6405, 6606, 6642, 6759, 6759, 6760, 6761, 6776, 7568, 7569, 7611, 7674, 7675, 7677, 7681, 7682, 7683, 7684, 7740, 7764, 7788, 7789, 7951, 8167, 8203, 8204, 8205, 8556, 8824, 9035, 9226, 9362, 9544, 9594, 9883, 10116, 10462, 10468, 10511, 11428, 11494, 11605, 11842, 11854, 11855, 11856, 11858, 11860, 11861, 11862, 11863, 11978, 12122, 12125, 12254, 12886, 12887, 12888, 12964, 13023, 13038, 13468, 13469, 13470, 13673, 13685, 13808, 14139, 14254, 14492, 14572, 14645, 14646, 14846, 15073, 15074, 15598, 15645, 15739, 15762, 15792, 15879, 15919, 15920, 15921, 16122, 16261, 16262, 16282, 16283, 16343, 16356, 16403, 16411, 16427, 16429, 16495, 16601, 16661, 16662, 16695, 16733, 16966, 17218, 17557, 17591, 17603, 17696, 17973, 18033, 18044, 18054, 18057, 18444, 18472, 18485, 18523, 18754, 18768, 18769, 18770, 18771, 18772, 18773, 18774, 18775, 18776, 18777, 18778, 18892, 18994, 19041, 19057, 19143, 19148, 19483, 19485, 19486, 19983, 19985, 20002, 20051, 20240, 20244, 20284, 20285, 20363, 20809, 20843, 21080, 22451, 22452, 22453, 22454, 22455, 22456, 22457, 22458, 22735, 23005.
- Cytotoxic, P<sub>388</sub>/ADM doxorubicin-resistant mouse lymphocytic leukemia cells** 492.
- Cytotoxic, P<sub>388</sub>/DOX cells** 16495.
- Cytotoxic, P<sub>815</sub>** 4135.
- Cytotoxic, PACA-2 hmn pancreas cancer cells** 1320, 1321, 1322, 3457, 11269, 14906, 18240, 22781.
- Cytotoxic, PANC1 hmn pancreas cancer cells** 17979.
- Cytotoxic, panel of hmn cancer cell lines, according to established protocols of Likitwitayawuid 1993 and Seo 2001** 6346, 14342.
- Cytotoxic, partial reversal of doxorubicin resistance** 22830.
- Cytotoxic, parvicellular lung cancer, with strong selectivity** 20813.
- Cytotoxic, PBMC peripheral blood mononuclear cells** 11978, 17478.
- Cytotoxic, PC12 hmn lung cancer cells** 159, 1792, 3300, 6160, 22580.
- Cytotoxic, PC13** 2811.
- Cytotoxic, PC3 hmn prostatic cancer cells** 251, 1297, 1303, 1304, 1305, 1320, 1321, 1322, 2334, 2338, 2528, 3241, 3258, 3259, 3260, 3261, 3262, 3263, 3264, 3265, 3274, 3457, 3498, 3583, 4147, 4148, 4762, 4763, 4880, 5297, 5314, 6162, 6827, 6828, 9669, 10558, 11269, 11802, 12446, 14906, 14934, 14935, 14935, 16050, 17979, 18211, 18714, 19516, 19517, 19524, 19525, 19526, 20248, 20720, 20721, 20722, 20811, 20811, 20811, 21709, 23013.
- Cytotoxic, PC-3M-1E8** 11659, 20397.
- Cytotoxic, PC-6 hmn lung cancer cells** 17973.
- Cytotoxic, PD assay** 1310, 1679, 7788, 8946, 11864, 15084, 15085.
- Cytotoxic, platelet aggregation inhibitor** 22969.
- Cytotoxic, PLC/PRF/5 hmn liver cancer cells** 1992, 2102, 2106, 3143, 17252.
- Cytotoxic, polymorphism malignancy glioma** 16548, 16549.
- Cytotoxic, potato culture dish PD test** 15902.
- Cytotoxic, protein quantification assay** 4893.
- Cytotoxic, PSN1 hmn pancreas cancer cells** 5284, 5295, 6897, 9747, 14495, 14496, 14504, 14644, 14647.
- Cytotoxic, PTX10 ovarian cancer cells with  $\beta$ -tubulin mutation** 14934, 14935.
- Cytotoxic, QGY-7703 hmn liver cancer cells** 16686, 18483.
- Cytotoxic, quinone reductase induction assay** 1380, 1381, 1382, 1383, 1384, 1386, 1388, 1392, 1393, 1401, 1403, 1404, 1406, 1407, 1408, 1409, 1410, 1411, 1413, 1414, 1415, 1416, 1418, 1419, 1420, 1425, 1427, 1428, 1429, 1430, 1431, 1432, 1433, 1434, 1435, 1436, 1451, 1452, 1453, 1454, 1455, 1456, 1457, 2468, 2857, 3602, 4282, 6228, 6246, 7670, 7788, 8278, 10430, 10827, 11504, 11804, 12953, 14074, 14075, 16498, 19542, 19910, 21918, 22615, 22715.
- Cytotoxic, RAD+ wild type yeast strain** 6710, 6711, 6714, 12537, 19061.
- Cytotoxic, radiosensitizing agent** 11179.
- Cytotoxic, Raji cells** 6254, 6776, 10068, 20010.
- Cytotoxic, RB cells** 18545.
- Cytotoxic, RL33 rbt lung cancer cells** 11980.
- Cytotoxic, Rous sarcoma virus** 3481.
- Cytotoxic, RPMI** 2677.
- Cytotoxic, RPMI-7951 melanoma cells** 3296, 16548, 16549, 17144, 17603, 17895, 17896, 18202, 20389, 22435.
- Cytotoxic, RPMI-8226 leukemia cells** 3583.
- Cytotoxic, RXF-393 renal cancer cells** 3583.
- Cytotoxic, RXF-631L renal cancer cells** 4880.
- Cytotoxic, S<sub>180</sub> mouse sarcoma cells** 3502, 8187, 8188, 13021, 16414, 22232.
- Cytotoxic, S-180V cells** 11179.
- Cytotoxic, Sca7901 hmn gastric adenocarcinoma cells** 4460.
- Cytotoxic, SCL hmn stomach cancer cells** 6621, 7016, 11405, 19535, 19537.
- Cytotoxic, SCL-37'6 hmn stomach cancer cells** 6621, 7016, 11405, 19535, 19537.
- Cytotoxic, SCL-6 hmn stomach cancer cells** 6621, 11405, 19535, 19537.
- Cytotoxic, SCL-9 hmn stomach cancer cells** 6621, 7016, 11405, 19535, 19537.
- Cytotoxic, SDK cells** 17528.
- Cytotoxic, Selective DNA-damaging activity** 1961, 3053.
- Cytotoxic, SF268 hmn brain tumor cells** 3583, 4880, 7126, 7912, 8563, 8570, 8669, 8670, 8671, 9859, 9861, 9917, 10672, 10673, 13092, 13093, 13098, 13328, 16296, 16312, 18170, 18171, 18172.
- Cytotoxic, SF295 hmn brain tumor cells** 3583, 4880, 18714.
- Cytotoxic, SF539 hmn brain tumor cells** 1625, 3583, 4111, 4112, 4113, 4880.
- Cytotoxic, SGC hmn stomach cancer cells** 6055.
- Cytotoxic, SGC7901 hmn stomach cancer cells** 12202.
- Cytotoxic, SiHa hmn cervical carcinomacells** 1992, 7032, 11977, 22077.
- Cytotoxic, SKBR3 hmn breast cancer cells** 5284, 5295, 6897, 9747, 14495, 14496, 14504, 14644, 14647.
- Cytotoxic, SKCO1 colorectal cancer cells** 4913.
- Cytotoxic, SK-MEL hmn caucasian melanoma cells** 11636, 18114.
- Cytotoxic, SK-MEL-2 hmn melanoma cells** 2334, 2338, 3583, 4147, 4148, 14934, 14934, 16050, 16370, 18011, 20679, 20680, 20681, 23013.
- Cytotoxic, SK-MEL-28 hmn melanoma cells** 3583.



- Cytotoxic, SK-MEL-5 hmn melanoma cells** 3583, 5706.
- Cytotoxic, SK-MES-1 bronchogenic carcinoma cells** 12398.
- Cytotoxic, SK-OV-3 ovarian adenocarcinoma cells** 4880, 7535, 11636, 18011, 18114, 20679, 20680, 20681.
- Cytotoxic, SMMC-7721 hmn liver cancer cells** 11203, 14828, 16675, 18034.
- Cytotoxic, SNB75 hmn brain tumor cells** 4880.
- Cytotoxic, SNB78 hmn brain tumor cells** 1625, 4880.
- Cytotoxic, SNU638 hmn gastric adenocarcinoma cells** 6277, 6282, 6759, 10438, 21924.
- Cytotoxic, soft agar transformation assay with JB6 cells** 1373, 1385, 1391, 1394, 1395, 1426, 1428, 1429, 1433, 3568, 10827, 11804, 17342, 22715.
- Cytotoxic, specific activity for cancer cells** 16265.
- Cytotoxic, SR leukemia cells** 3583.
- Cytotoxic, St4 stomach cancer cells** 4880.
- Cytotoxic, stomach cancer cells** 924, 22232.
- Cytotoxic, sulforhodamine-B assay** 12344.
- Cytotoxic, SW620 hmn colorectal adenocarcinoma cells** 225, 226, 251, 463, 2257, 2261, 2262, 3583, 4268, 4269, 5314, 5942, 5945, 6162, 10307, 12414, 12417, 12423, 16599, 17973, 21709.
- Cytotoxic, T24 hmn liver cancer cells** 1992, 12587, 12589, 13537.
- Cytotoxic, T24S hmn bladder cancer cells** 16402.
- Cytotoxic, T47D hmn breast cancer cells** 7032, 8187, 8188, 12541, 13020, 13021, 17979.
- Cytotoxic, T98G hmn caucasian gioblastoma cells** 5284, 5295, 6897, 9747, 14495, 14496, 14504, 14644, 14647.
- Cytotoxic, TE-671** 2677.
- Cytotoxic, TK10 renal cancer cells** 4930.
- Cytotoxic, T-lymphocyte** 1359.
- Cytotoxic, Tmolt3 hmn leukemia cells** 15409.
- Cytotoxic, topoisomerase I inhibitor** 6835, 9011.
- Cytotoxic, toxic to topoisomerases I and II** 7704.
- Cytotoxic, toxin** 12138.
- Cytotoxic, U14 mouse cervical carcinoma cells** 11179.
- Cytotoxic, U251 brain tumor cells** 3583, 4880, 5706, 18714, 22281.
- Cytotoxic, U373 caucasian gioblastoma cells** 11353, 15739, 15919, 15922, 15923, 17008, 18866.
- Cytotoxic, U-87-MG caucasian gioblastoma cells** 14934, 14935, 14935.
- Cytotoxic, U937 hmn monocytic leukemia cells** 2956, 2957, 2958, 2964, 3911, 7060, 7153, 7436, 8360, 8361, 8363, 8364, 8365, 11895, 13241, 14347, 16675.
- Cytotoxic, UACC62 melanoma cells** 3583, 4930.
- Cytotoxic, uncoupling of oxidative phosphorylation** 3498.
- Cytotoxic, UO-31 renal cancer cells** 2528, 3583, 20811.
- Cytotoxic, V-79 cells** 3181, 4081, 4082, 4083, 4084.
- Cytotoxic, Vero green monkey kidney tumour cells** 6759, 6759, 6776, 10068, 11636, 14965, 16266, 18114, 20010, 20253.
- Cytotoxic, W-18Va-2 cells** 7586, 9288.
- Cytotoxic, W<sub>256</sub> rat Walker sarcoma cells** 4643, 6776, 11023.
- Cytotoxic, WEHI-164 mus fibrosarcoma cells** 1575, 3821, 8715, 8716, 18691, 18693, 22838.
- Cytotoxic, WHCO1 hmn esophageal cancer cells** 2619, 2625, 17564, 17565, 21545.
- Cytotoxic, WI-38 hmn lung fibrocyte (normal hmn diploid fibrocyte)** 3053, 9288, 10773, 11723, 17265.
- Cytotoxic, WiDr colorectal adenocarcinoma cells** 4913, 17979.
- Cytotoxic, Wish transformed epithelial tumour cells** 6776, 10068, 20010.
- Cytotoxic, XF-498 hmn tumour cells** 18011, 20679, 20680, 20681.
- Cytotoxic, yeast assay RS321NpRAD52(glu)** 1961, 3053.
- Cytotoxic, ZR-75-1 hmn breast cancer cells** 9187, 9564, 11353, 15739, 15919, 15923, 17008, 17009, 18866.
- Damages function of liver and kidney** 3692.
- Decolorant** 9739.
- Decreases accumulation of reactive oxygen intermediates** 2102, 2106.
- Decreases some hmn leukocyte functions** 18219, 18220.
- Deodorant** 917, 17486, 17491.
- Depilatory** 14868.
- Dermatitis suppressant** 828, 829, 830, 831, 1293, 1332, 1599, 21434.
- Detail study on pharmacokinetics of baicalin** 2106.
- Detail study on protective effects of evodiamine on myocardial ischemia-reperfusion injury in rats** 7665.
- Detail study on protective effects of rutaecarpine on cardiac anaphylaxis (the protective effects of rutaecarpine on cardiac anaphylactic injury are related to inhibition of TNF- $\alpha$  production by stimulation of CGRP release)** 19081.
- Detumescent** 3983, 5502, 12184, 19910, 21434.
- DGAT inhibitor** 7104, 7663, 12341, 12343, 12344, 12361, 12364, 13922.
- Diabetogenic** 17170.
- Digestive enzymes inhibitor** 3968.
- Digestive tract irritant** 11024.
- Dihydrocoenzyme I (NADH) oxidase inhibitor** 13137.
- Disinfectant** 4234, 4306.
- Dispels phlegm** 13137, 15146, 15221, 20137, 21360.
- Dissolves oncocytes** 22491.
- Diuretic** 480, 664, 892, 893, 899, 1048, 1476, 1618, 1866, 1904, 1935, 2039, 2102, 2106, 3306, 3307, 3615, 4029, 4036, 4080, 4547, 4589, 6455, 6699, 6776, 7278, 7665, 7883, 7944, 8806, 9224, 9335, 9340, 9604, 11141, 11524, 11642, 13504, 14057, 14796, 14971, 15170, 15781, 16031, 16050, 16756, 17571, 17952, 18411, 18652, 18759, 18794, 18859, 19540, 20133, 20168, 20169, 20730, 21310, 21312, 21508, 22301, 22498, 22499, 22668, 22718.
- DNA cleavage inducer, berberrubine induced** 2304.
- DNA isomerase inhibitor** 598, 2034, 2227, 4348, 4349, 11423, 14086, 14121, 15335, 16978, 19468, 19904, 19905, 19906, 19907, 22965, 22969, 22970, 22972.
- DNA strand-scission activity** 22546.
- DNA strand-scission inactive** 22543, 22544, 22545, 22547, 22548, 22549.
- DNA topoisomerase I inhibitor** 6906.
- DNA topoisomerase II inhibitor** 2102, 3935, 20389.
- DNA topoisomerase inhibitor** 370, 595, 597, 6261, 19278.
- Dopamine receptor antagonist** 20324.
- Dopamine receptor antagonist (CNS system)** 2734, 20324.
- Dopaminergic** 763.
- Dormancy factor** 13084.

- Downregulates COX-2 gene expression** 13437, 13435, 13436.
- Downregulates IL-1 $\beta$  gene expression** 13437, 13435, 13436.
- Downregulates IL-6 gene expression** 13437, 13435, 13436.
- Ecdysteroid agonist** 10063, 10064.
- Ecdysteroid agonist or antagonist inactive** 9326.
- Ecdysteroid antagonist** 12240, 14890, 14891.
- Eclamptogenic** 642, 1738, 2716, 3637, 4051, 5108, 5136, 7980, 10734, 10877, 13001.
- Ectoparasiticide;** 17269, 20262.
- Effective component in *Acacia melanoxylon* (HEI MU JIN HE HUAN) known to cause contact dermatitis** 62.
- Effective component in *Alangium chinense* (BA JIAO FENG)** 1125.
- Effective component in *Plantago asiatica* (CHE QIAN)** 17505.
- Effective component in *Pueraria lobata* (GE GEN)** 18180.
- Effective component in *Schisandra chinensis* (WU WEI ZI)** 19473.
- Effective component in *Schizonepeta tenuifolia* (JING JIE) to settle pain** 13776.
- Effective component in seeds of *Melia azedarach*** 2050.
- Effective component in total alkaloids of Common Devilpepper, *Rauwolfia verticillata* (LUO FU MU)** 18633.
- Effective component in Virgate Wormwood, *Artemisia scoparia* (HUANG HAO)** 19540.
- Effective component in Yellow Toadflax, *Linaria vulgaris* (LIU CHUAN YU)** 16756.
- Egg laying stimulator** 2455, 15287.
- Elastase inhibitor** 306, 580, 2887, 3695, 4163, 9238, 11195, 16536.
- Elastase inhibitor inactive** 9561.
- Emetic** 3400, 5436, 6772, 13241, 15452, 17995, 18095.
- Enhances action of  $\beta$ -adrenalin** 15127.
- Enhances action to boost blood pressure caused by adrenalin** 6439.
- Enhances activity of esterase** 22269.
- Enhances arterial tension and lowers intravenous tension** 13137.
- Enhances blood pressure increase caused by adrenaline** 6686.
- Enhances cytotoxic effects of daunomycin and vincalucoblastine** 8423, 8427.
- Enhances effects of cytotoxic drugs against cancer metastasis** 8404, 8405.
- Enhances effects of vitamin C** 9458.
- Enhances fibrinolytic activity** 11414.
- Enhances neuromuscular transmission** 21593.
- Enhances phagocytic function** 18114.
- Enhances phagocytosis of granular leukocytes** 17568.
- Enhances respiration** 15288.
- Enhances sedative effects of phenobarbital** 582.
- Enhances sex drive** 2564, 8633, 8634.
- Enhances tension of intestinal canal of cat, but inhibits the tension of rbt** 6691.
- Enhances trypsin activity** 3231.
- Enzymatic substrate (arginase, anginine decarboxylase, L-amino-acidoxidase)** 9798.
- Essential amino acid** 17093, 22060.
- Essential for growth** 18656.
- Estrogenic activity** 1290, 2384, 3911, 4080, 4190, 4604, 6440, 7387, 7883, 8282, 8372, 12344, 14883, 17028, 17834, 17838, 19540, 19618, 20041, 20685, 22718.
- Excitation to the peripheral nervous system** 13711.
- Extends the period of fertility in rat** 1599.
- Extremely bitter** 4315, 15454, 15542.
- Farnesyl transferase inhibitor** 4302.
- Farnesylprenyltransferase (PFase) inhibitor** 6162, 9564, 10751, 12448, 21709, 21856.
- Farnesyl-protein transferase inhibitor** 9908.
- Fatty acid synthetase inhibitor** 18317.
- Feeding irritant (*Plutella maculipennis*)** 3317, 17903.
- Feeding pregnant rat** 20670.
- Fibrinolytic function** 4631, 10967.
- Flavorant** 2808, 2850, 3237, 3241, 3242, 3766, 3767, 3768, 4305, 6501, 7463, 7734, 9110, 9601, 9669, 11183, 12569, 13779, 15498, 15500, 15705, 17913, 17914, 19927, 19928, 22217, 22440, 22441, 22920.
- Flavorant, conditioning agent** 23010.
- Food additive** 832, 3139, 3142, 3209, 3350, 3354, 15705.
- Frees menstruation** 1520.
- Fruit protective film** 9363.
- Funk** 19459.
- GABA<sub>A</sub> receptor antagonist** 17347.
- Galactin inhibitor** 7236.
- Galactin inhibitor, inhibits release of galactin** 3935, 6765, 7232, 7243, 7234, 7240.
- Ganglionic blocker** 1134, 3633, 4459, 6686, 6699, 6734, 7325, 7328, 7330, 12571, 13373, 13374, 13716, 22427.
- Ganglionic stimulant** 1658, 3070.
- Gastric secretion inhibitor** 777, 1599, 20082.
- Gastric secretion promotor** 2887, 4097, 8304, 16770.
- Gastroprotective** 6980, 10364, 19983.
- Gastroprotective, ethanol- and indomethacin-induced gastric lesions** 2969, 2970, 2971, 2972, 2973, 4961, 9083, 11273, 11281, 14678, 16384, 17439, 17451, 17461, 18658.
- Gastroprotective, Inhibits ethanol-induced gastric mucosal lesions** 1916, 1917, 21283, 21284, 21287.
- Gastroprotective, inhibits gastric contraction** 4459.
- Gastroprotective, inhibits gastric injury** 4398.
- Gastroprotective, inhibits gastric secretion** 4889, 8273, 8297, 16084, 19201, 19473, 20711.
- Gastroprotective, inhibits gastric ulcer** 8914, 13678.
- Genotoxic** 967, 18058, 18222.
- Germination inhibitor** 36, 2802, 5969, 9596, 9798, 11032, 11158, 13084, 13883, 17425, 18020, 19542, 20146, 20147, 21397.
- Germination/growth inhibitor/stimulator** 7777, 7778, 7788, 14444, 14445.
- Glandular secretion inhibitor** 2001.
- Glucagon secretion promotor** 832.
- Glucocorticoid (enhances glycogen in liver, reduces glycogen in heart and striated muscles)** 22270.
- Glucose consumption activity** 7505.
- Glucose dehydrogenase inhibitor** 1319.
- Glucose transferase inhibitor** 13315.

- Glucosidase I and  $\alpha$ -, $\beta$ -glucosidase inhibitor** 6028.
- Glutamnergic agonist** 8308.
- Glycation inhibitor** 3605, 3606.
- Gonad stimulating principle** 823.
- Gonad stimulating principle** 12916.
- Granular release inhibitor** 8278, 18685.
- Granulation stimulator** 1853.
- Growth factor for animals and microorganisms** 11083.
- Growth retardant** 14134.
- Growth-Stimulating factor** 22305.
- H<sup>+</sup>,K<sup>+</sup>-ATPase inhibitor** 19201, 19537, 20082.
- Hallucinogen** 2726, 3477, 4594, 9235, 13255, 13795, 15204, 21059.
- Hematopoietic** 1845, 7852.
- Hemolytic** 660, 1554, 2029, 2030, 3939, 4005, 4029, 4457, 6755, 6756, 6759, 7748, 8424, 8968, 9294, 13635, 16666, 18229, 18534, 18702, 18916, 19148, 19316, 19333, 19334, 19335, 19336, 19337, 19338, 19339, 19340, 19341, 20060, 20069, 21282.
- Hemostatic** 759, 1058, 2048, 2304, 2887, 3308, 3551, 5101, 5105, 6757, 9703, 9719, 12580, 14826, 16756, 17655, 18086, 18411, 19749, 19750, 20254, 21955, 22562.
- Hepatoprotective** 4398, 10314, 20806, 21157.
- Hepatoprotective, alanine aminopherase inhibitor** 16050.
- Hepatoprotective, aminotransferase inhibitor** 3498, 8907, 10351, 16851, 22270.
- Hepatoprotective, biosynthesis of hepatic glycogen, promoter** 8906.
- Hepatoprotective, H<sub>2</sub>O<sub>2</sub>-induced toxicity** 2039, 11897, 12082, 15184, 18319, 18320, 18411.
- Hepatoprotective, hepatic cell recondition and regeneration, promoter** 16050.
- Hepatoprotective, hepatotoxin inhibitor, induced by GalN** 993, 6290, 7302, 12097, 17493, 17494, 18103, 18398, 22667, 3004, 5235, 5834, 7300, 7301, 7883, 8278, 10007, 10009, 13281, 13638, 14638, 16209, 21918.
- Hepatoprotective, improves appetite and symptoms in hepatitis patients** 18261.
- Hepatoprotective, inhibits activation of macrophages, inhibits increase in sALT and sAST levels** 8423, 8425, 8426, 8427, 8428, 8430, 8435, 9168, 15836, 15840.
- Hepatoprotective, inhibits cellular leakage of LDH and AST, and cell death** 9631, 13388.
- Hepatoprotective, inhibits GSH depletion** 9631, 13388.
- Hepatoprotective, Inhibits liver damage** 16579, 16580, 16581, 20121, 20122.
- Hepatoprotective, inhibits liver damage induced by GalN, LPS or CCl<sub>4</sub>** 18398.
- Hepatoprotective, inhibits SGPT, reduces the raised SGPT due to acute liver injury induced by CCl<sub>4</sub>** 20505.
- Hepatoprotective, inhibits stored triglyceride in primary cultured mouse hepatocytes** 15563, 15564, 15565, 15566.
- Hepatoprotective, inhibits tBH-induced lipid peroxidation** 9631, 13388.
- Hepatoprotective, liver regeneration promoter** 7385.
- Hepatoprotective, reduces accumulation of trilaurin in liver** 8846.
- Hepatoprotective, reduces GPT** 20099.
- Hepatoprotective, SGPT inhibitor** 19377.
- Hepatoprotective, SGPT, SGOT and ALP inhibitor** 20503.
- Hepatotoxin** 2015, 7636, 9316, 9318, 10238, 11019, 11091, 13235, 17040, 18842, 18854, 19714, 20488, 21051.
- Herbicide** 1846, 6598, 12501, 13883, 18841.
- Herbicide inactive** 15518, 15519.
- 5-HETE production inhibitor** 7924.
- 12(S)-HETE production inhibitor** 4281, 12766, 19983.
- 12(S)-HETE production inhibitor inactive** 9, 3354, 4916, 15705, 20465.
- Hexokinase inhibitor** 2684.
- Histamine antagonist** 12083, 16098, 18454, 18455, 22023.
- Histamine secretion promotor** 15811.
- Histidine decarboxylase inhibitor** 8278, 15279.
- Hormone of defoliation** 36.
- Hormone secreted by medulla of adrenal gland** 15708.
- 5-HT inhibitor** 13255, 15279, 18317.
- 5-HT receptor antagonist, rbt *in vitro* aortal contraction induced by 5-HT** 1857.
- 5-HT receptor blocker, gpg uterus** 7243.
- 5-HT receptor inhibitor, D receptor and M receptor** 16098.
- Hyaluronidase inhibitor** 5415, 6855, 6856, 6858, 6859, 11095, 17866, 17867, 18203, 18368.
- 11 $\beta$ -Hydroxylase inhibitor** 1162.
- 11 $\beta$ -Hydroxysteroid dehydrogenase inhibitor** 8427.
- 3 $\alpha$ -Hydroxysteroid dehydrogenase inhibitor** 9456, 16539.
- Hypnotic** 115, 1048, 2113, 2303, 2734, 3220, 3368, 4119, 4120, 6193, 7341, 9184, 9223, 9224, 11259, 11260, 11408, 11679, 14531, 16532, 21077, 22336, 22346, 22375, 22820.
- Hypoglycemic** 1972, 2303, 2969, 2970, 2971, 2972, 2973, 3321, 3907, 3923, 3924, 4140, 6178, 7705, 8052, 8091, 11067, 12255, 12447, 12734, 13098, 13100, 14290, 15882, 16050, 16792, 16931, 18599, 20341, 20383, 20732, 20896, 20898, 21055, 22269, 22498, 22499.
- hypoglycemic and lowers urine sugar** 22269.
- Hypotensor and vasodilator** 9553.
- Ichthyotoxin** 126, 136, 1990, 2402, 2403, 2697, 2976, 3541, 4976, 5858, 6040, 6262, 7063, 7189, 7404, 7448, 7449, 9691, 9877, 10775, 11077, 11903, 11977, 11978, 13801, 14347, 14348, 16564, 16659, 17411, 17413, 17417, 18165, 19469, 19471, 20986, 21507.
- IFN- $\gamma$  inhibitor** 2106, 14976, 14977, 22686, 22687, 22688.
- IL-1 inhibitor, in mus enterocelia macrophages** 3368.
- IL-10 inhibitor** 20992.
- IL-10-like activity** 8095, 18317.
- IL-12 inhibitor** 2102, 10886, 17240.
- IL-1 $\alpha$  inhibitor** 15635.
- IL-1 $\beta$  inhibitor** 2106, 3307, 3368, 15635, 16532, 16539, 17460, 17862, 20686, 20992, 22686, 22687, 22688, 21397.
- IL-2 inhibitor** 14976, 14977, 16675, 22686, 22687, 22688.
- IL-2 inhibitor in mus splenocyte** 3368.
- IL-2 secretion inhibitor** 7519, 11318, 12106, 15331, 16216, 19515, 22718.
- IL-4 inhibitor** 5430, 14976, 14977, 22686, 22687, 22688.
- IL-4 release inhibitor** 5424.

- IL-4 release inhibitor inactive** 5420, 5421, 5422, 5423, 5425.
- IL-6 inhibitor** 2004, 2102, 2106, 3307, 7714, 11521, 11522, 15635, 16532, 17240, 20686, 21206.
- IL-6 release inhibitor** 3674, 6288, 8278, , 13137, 18317, 21930.
- IL-8 inhibitor** 2102, 6288, 20992, 21930, 22718.
- IL-8 secretion inhibitor** 79, 82, 83, 20486.
- Immunoenhancer** 266, 1275, 1626, 1627, 1713, 1936, 2300, 3906, 4837, 5120, 5122, 5446, 6459, 6961, 7788, 11179, 11680, 12501, 13137, 15221, 17569, 18534, 19143, 19148, 20100, 22938.
- Immunoenhancer inactive** 11679, 18826.
- Immunological adjuvant activity, increases serum IgG level** 15818, 15820, 15821, 15825, 15826, 15827, 15829, 15830, 15832, 18448, 18449, 18451.
- Immunomodulator** 85, 909, 2890, 3368, 4645, 7487, 7924, 13435, 13436, 13437.
- Immunostimulant** 11539, 11636, 14889, 18114, 22206, 22207.
- Immunosuppressant** 899, 1359, 1544, 1545, 1546, 1547, 2208, 3368, 3599, 3649, 3756, 4292, 5121, 5488, 5489, 5721, 6070, 7519, 7657, 8023, 8024, 9367, 10580, 10814, 11318, 11882, 12106, 12827, 15319, 15331, 15538, 16216, 16410, 16649, 17592, 18221, 18221, 18549, 18550, 19515, 19869, 19870, 20094, 20685, 20686, 21521, 21579, 21580, 21581, 21585, 21586, 21587, 21588, 21831, 22664, 22679, 22685, 22695, 22718.
- Immunosuppressant inactive** 1542, 1543, 10776, 18695, 18696.
- Important medium of inflammation and anaphylaxis** 9568.
- Important role in normal metabolic processes** 8785.
- Improves erythrocyte's ability to change shape** 1937, 1939.
- Improves hyperplasia of spleen lymphocyte** 4384.
- Improves permeability of BBB** 19587.
- Improves respiration** 8289.
- Increases absorption through skin** 16066.
- Increases activity of choline acetyltransferase in rat cerebrum** 11209, 11211.
- Increases amount of lactic acid in zoic blood** 1972.
- Increases blood flow through kidney** 14796.
- Increases blood pressure** 580, 2304, 2716, 2726, 3070, 3475, 3729, 3732, 4477, 4547, 5229, 6418, 6815, 7825, 7980, 8257, 8423, 9459, 11507, 13169, 13237, 13281, 13543, 14796, 17220, 17996, 18637, 19223, 19299, 19449, 19451, 19452, 19639, 20077, 22144.
- Increases blood pressure and blood flow through the coronary arteries** 15708.
- Increases blood pressure and enhances myocardial contractility** 16261.
- Increases blood pressure and raises heart rate** 19198.
- Increases fertility** 8405.
- Increases leucocyte** 2300.
- Increases level of arterenol and dopamine** 12254.
- Increases level of blood sugar** 8297, 20060, 20066, 20069.
- Increases spread and mobility of macrophage** 5414.
- Increases the rate and depth of breathing** 15708.
- Increases the weight and RNA content of both prostate and testis** 6754.
- Increases tolerance to anoxia** 9631, 1275, 2303, 3633, 4630, 4889, 11259, 11260, 15129, 17764, 19196.
- Indispensable for cell growth, promotes biosynthesis of protein** 18261.
- Induces activity of cytochrome system** 15204.
- Induces cell cleavage arrest** 2238, 4823, 4824, 6325.
- Induces cell cleavage arrest inactive** 12140.
- Induces cell differentiation** 11716, 19211, 19929, 21185, 21913, 22859.
- Induces distortion of mycelial (mold of rice blast)** 6703.
- Induces expression of defense genes in uninfected leaves** 9528.
- Induces formation of spore** 19534.
- Induces gene expression changes (hmn fibroblast)** 1853, 1854, 13337, 13338.
- Induces gene expression of pea nodule bacteria and accrete host *Pisum sativum*** 7278.
- Induces geno-defect** 22974.
- Induces growth of radial root nodule commensal "Frankia"** 6502.
- Induces hyperplasia** 20683, 20684.
- Induces lipid peroxidization** 17168.
- Induces mitochondria-mediated apoptosis** 317.
- Induces nodulin gene expression of symbion in *Rhizobium leguminosarum* and *Pisum sativum*** 15279.
- Induces production of estrin synthetase and cruarin** 3600.
- Induces quinone reductase** 10421, 18223.
- Induces sweatiness** 1654, 2550, 7665.
- Induces tissue to produce collagen** 1845.
- Inducing cell differentiation activity** 17239.
- Influences CNS in insects** 3059.
- Influenza virus sialoma inhibitor** 11703, 20515.
- Inhibits <sup>3</sup>H-dobamine absorption by synapse of rat striatum** 15797.
- Inhibits <sup>35</sup>S-TBPS specially combines with rat brain meninges** 17333, 17334, 17335, 17336.
- Inhibits absorption of GABA and  $\beta$ -alanine** 9092.
- Inhibits acetylcholine** 19388.
- Inhibits activation of transcription factor AP-1** 18317.
- Inhibits activity of cells** 17219.
- Inhibits adenosine diphosphate transfer to adenosine triphosphate** 11141.
- Inhibits adipose peroxidization** 8311.
- Inhibits akaryocyte K<sup>+</sup> effusion caused by lysolecithin** 3412.
- Inhibits alcohol in blood** 20383, 20384.
- Inhibits autonomic movement** 11741.
- Inhibits autoxidation of linoleic acid** 3559, 19929.
- Inhibits basophile to release histamine** 3602, 7819.
- Inhibits biosynthesis of chlorophyll** 11825.
- Inhibits biosynthesis of cholesterol** 675, 8190, 8191, 15419, 15420, 15421, 18841.
- Inhibits biosynthesis of DNA in mus embryo** 22929.
- Inhibits bloom** 931.
- Inhibits breeding** 16808.
- Inhibits cancer cell invasion** 2040, 3308, 6853, 6864, 6921, 6923, 8098, 10944, 12891, 12893, 15947, 15955, 15956, 16066.
- Inhibits cancer cell invasion inactive** 2892, 18411, 19087, 21310.
- Inhibits carcinogenic action of chemicals** 664.
- Inhibits cell proliferation of PMBC** 6923, 15180, 15184, 20394.
- Inhibits CNS** 15497.
- Inhibits CNS with activity similar to that of morphine** 6552.

- Inhibits combination of leucocyte and its receptor** 4061.
- Inhibits contraction of aorta strip** 17762.
- Inhibits coronal wart growth in potato flower tray** 6776.
- Inhibits cytochrome C and P450** 13514, 21320, 21321.
- Inhibits degradation of insulin** 1618, 8095, 18265.
- Inhibits degranulation and release of  $\beta$ -hexosaminidase (did not affect the enzyme activity of  $\beta$ -hexosaminidase)** 6921, 15154, 15155, 15156, 15157, 15158, 15159, 15160, 15163, 15164, 15165, 15170, 15184, 18413, 20711, 22272.
- Inhibits degranulation of mast cell RBL-2H3** 5722.
- Inhibits ejection of sperm** 6302.
- Inhibits electron-transfer and oxidative phosphorylation** 11130.
- Inhibits endotoxin, promotes dissolution of fibrin** 1939.
- Inhibits englobement of  $\gamma$ -propanaline and  $\beta$ -alanine** 1654.
- Inhibits excitation of striatum adenylyl cyclase caused by dopamine** 2734.
- Inhibits expression of tissue factor, hmh hyalin leukocyte, induced by interleukin-1** 19929.
- Inhibits expression of tissue factor, hum monocyte induced by interleukin I, anti-coagulant** 3602.
- Inhibits fatigue** 8423, 8426, 8424, 8429, 8430, 8428.
- Inhibits fatigue and promotes interferon inducing formation** 12916.
- Inhibits fermentation of indole-3-acetic acid (IAA)** 9549.
- Inhibits flap and quiver in mus, caused by stress** 4080.
- Inhibits formation of indole-3-acetic acid oxidase and ATP** 19582.
- Inhibits formation of peroxide** 23.
- Inhibits glandular secretion** 10872, 10870.
- Inhibits Glu-mediated excitatory signal pathway in hippocampus (probably acts through its anti-calmodulin action)** 11909.
- Inhibits granulation** 7527.
- Inhibits granulocyte and lymphocyte** 909.
- Inhibits growth of cell and tissue** 21662.
- Inhibits growth of green algae** 12564.
- Inhibits growth of wheat coleoptile** 8282.
- Inhibits herpes simplex** 16796.
- Inhibits hippocampal formation** 11909.
- Inhibits histamine release** 443, 1840, 2359, 2360, 2361, 2362, 3600, 3781, 3782, 3973, 4158, 4159, 4681, 4682, 4683, 4684, 5155, 6351, 7802, 8153, 8167, 9010, 11910, 11913, 17278, 19238, 19239, 19846, 19929, 20009, 20447, 21493, 22720.
- Inhibits IL-1 $\alpha$ -induced proliferation of synovia cells** 13391.
- Inhibits increase of Ca<sup>2+</sup> concentration caused by ET-1** 15321.
- Inhibits kidney damage in diabetic rat** 8424.
- Inhibits lactation hormone** 16808.
- Inhibits lactic acid bacteria** 6853.
- Inhibits lipolysis** 4055, 7518, 8311, 9456, 19143, 20389, 20910.
- Inhibits L-type calcium current** 20148.
- Inhibits lymphocyte reproduction caused by sheep red blood cell antibody and concanavalin A** 17506.
- Inhibits microzymes** 22638.
- Inhibits minimally oxidized LDL-induced cellular toxicity** 580, 1663, 2134, 2912, 7925.
- Inhibits mitosis** 3502, 17595, 16796, 17590, 17592, 17593, 16795, 17699, 22487.
- Inhibits mitosis of plant cells** 13241.
- Inhibits molds** 17931.
- Inhibits neuroaction** 7793.
- Inhibits neutrophil cells to release  $\beta$ -glucuronidase** 3602.
- Inhibits OH-free radicals damaging AT-III** 7441.
- Inhibits onset of senility** 8388, 8633, 8634, 11490, 22094.
- Inhibits oxidation of LDL** 17869, 17886.
- Inhibits oxidative phosphorylation** 16602, 23014.
- Inhibits phagocytosis of hmh granular cells and stimulates the activity in low dose** 3526.
- Inhibits plasmin and plasminogen** 2266.
- Inhibits present of bilirubin in blood** 4245, 4249.
- Inhibits production of carcinogen** 1845.
- Inhibits production of *Trichoderma viride*** 13635.
- Inhibits proliferation of neuroglia** 4097.
- Inhibits promotor of cancer** 266, 3625, 8968, 11320, 12165, 12166, 12591, 15321, 15361, 16304, 16305, 16314, 16315, 16804, 16998, 17869, 22697.
- Inhibits rat neutrophilic cells** 23.
- Inhibits rat skin passive allergy** 19846.
- Inhibits reaction of actomyosin-adenosine triphosphate system** 3907.
- Inhibits release of  $\beta$ -glucuronidase, lysozym and histamine in mastocyte** 23.
- Inhibits release of Glu-transmitter** 15370, 19737, 19738.
- Inhibits respiration of cytoblast** 4337, 11130.
- Inhibits reuptake of neurotransmitters** 10883.
- Inhibits specifically basic fibroblast growth factor (bFGF)-induced proliferation of bovine aorta endothelial cells (BAECs)** 6364.
- Inhibits sperm movement** 6778.
- Inhibits spontaneous movement** 3354, 4029, 12849, 16451, 18197, 20076, 20077, 20324, 22336, 22346.
- Inhibits spontaneous movement and reflex actions** 17065.
- Inhibits sympathetic nervous system and relaxes blood vessels** 9301, 17869.
- Inhibits synthesis of leukotriene in polymorphonuclear neutrocyte** 12766, 12767.
- Inhibits teleocidin** 19259.
- Inhibits tissue respiration in lung trachea** 7736.
- Inhibits transport of active sodium in bladder** 9233, 9234.
- Inhibits transport of gall** 18841.
- Inhibits zoospore motility** 8605, 8646, 8651.
- Inhibits [<sup>125</sup>I]sauvagine binding to CRH-1 receptor** 10883, 10886, 20012, 20013.
- Insect antifeedant** 425, 524, 525, 788, 789, 809, 1264, 1265, 2050, 2054, 2055, 2119, 3037, 3076, 3246, 3307, 3635, 3837, 4087, 4742, 5342, 5991, 6028, 6402, 7031, 7788, 7972, 8201, 8404, 8405, 8971, 9015, 9496, 9540, 9547, 9570, 9604, 9646, 10053, 10130, 10131, 10132, 10762, 11052, 11203, 11256, 11386, 11430, 11903, 12254, 12336, 12337, 12338, 12339, 12897, 13104, 13237, 13238, 13239, 13670, 14446, 14946, 15189, 15521, 15534, 15535, 15536, 15537, 15606, 15607, 15608, 15609, 15655, 16119, 16572, 16674, 16973, 17047, 17048, 17049, 17168, 17170, 17386, 17421, 17640, 17857, 18411,

- 19087, 19168, 19177, 19194, 19313, 19511, 19837, 19846, 20965, 21207, 21213, 21217, 21218, 21219, 21222, 21224, 21446, 21553, 21889, 22349, 22405, 22406, 22638, 22780, 22784, 22865.
- Insect attractant** 8313, 11025, 17402.
- Insect ecdysone** 794, 811, 4455, 6678, 6679, 11067, 13411, 17583, 17662, 17700, 18162.
- Insect growth inhibitor** 3972, 13104, 15652, 17172, 22755.
- Insect juvenile hormone** 4935, 11987, 11988.
- Insect phagostimulant** 15355, 15458, 18411, 19087, 19463.
- Insect repellent** 11143.
- Insecticidal** 1124, 1348, 2598, 3356, 3761, 3762, 3864, 4550, 5035, 6437, 11149, 14581, 15521, 17117, 17444, 18882, 20240, 22677.
- Insecticidal (*Aedes aegypti* larvae)** 14284, 17473, 17474.
- Insecticidal (*Aedes aegypti*)** 364.
- Insecticidal (*Cylas formicarius elegantulus* adult)** 2847, 2855, 5757, 5758, 5784, 9800, 9801, 9802, 9803, 9870, 9872, 9873, 9874, 9875, 9876, 20249.
- Insecticidal (*Heliothis virescens*)** 15603.
- Insecticidal (*Mythimna separata* larvae)** 16817, 21517, 21520, 21525, 21526.
- Insecticidal (*Mythimna separata*)** 5300, 5312, 21025.
- Insecticidal (*Plutella xylostella*)** 22860, 22861, 22862, 22866, 22871.
- Insecticidal (*Rhyzopertha dominica*)** 15445, 15446.
- Insecticidal (*Sitophilus oryzae*)** 15445, 15446.
- Insecticidal (*Spodoptera littoralis* larvae)** 375, 495, 741, 4964, 5463, 5470, 10677, 10731, 14094, 14714, 16470, 16475, 16476, 16618, 16692, 17992, 18260, 18883, 18884, 18885, 18886, 18887, 18888, 18889, 18890, 18891, 20296, 20304, 20305.
- Insecticidal inactive (*Aedes aegypti*)** 13663.
- Insecticidal inactive (*Spodoptera littoralis* larvae)** 10097, 10098, 21274, 21275.
- Insulin-like activity** 10888, 18339.
- Integrin MAC-1 inhibitor** 2102, 2106.
- Interferes in metabolism of alcohol** 4030.
- Intermediate in phytosterol biosynthesis** 14352.
- Involves in many plant metabolism processes** 10165.
- Involves the metabolism of carbohydrates** 22253.
- Iodinate thyronine deiodinase inhibitor** 2011, 3454, 3600, 7802, 12020, 13137, 14971, 17168, 20481.
- Irritant** 899, 953, 1738, 1789, 2215, 2845, 2890, 3048, 3188, 3194, 3231, 3361, 3593, 3695, 4087, 4128, 4584, 5188, 6482, 6521, 7616, 8827, 8997, 8997, 9568, 12543, 12843, 13439, 13476, 14125, 15964, 16066, 16598, 16674, 17083, 17181, 17187, 17374, 17376, 17857, 18257, 18426, 18639, 18640, 19846, 19909, 19935, 20550, 21207, 21974, 22070, 22142, 22274.
- Irritant inactive** 9474, 9475, 16818, 16819, 16820, 21027.
- Irritant of contact-ovipositing (*Papilio xuthus*)** 19087.
- Key role in biosynthesis of threonine, isoleucine and methionine** 9620.
- Kibe (frostbite) preventive** 9458.
- Kinase inhibitor, cyclin-dependent** 11023.
- $\alpha$ -Glucosidase inhibitor** 5198, 2102, 2792, 5206, 6054, 6089, 6203, 7437, 7705, 8617, 9922, 10351, 10435, 10437, 11703, 13803, 16179, 16182, 16851, 18524, 18525, 20570, 20571, 21685, 21763, 21815, 21816, 21838.
- $\alpha$ -Glucosidase inhibitor inactive** 6052, 6053, 6094, 8616, 14989, 14990, 14991, 14992, 14993, 14994, 15812, 20569, 21893.
- $\beta$ -Galactosidase inhibitor** 2792, 7437, 21838.
- $\beta$ -Glucosidase inhibitor** 2792, 7437, 9616, 22581.
- $\beta$ -Glucosidase inhibitor inactive** 6089, 6094, 6203, 10435, 10437, 20569, 21893.
- $\beta$ -Glucuronidase inhibitor** 18668, 19539.
- $\beta$ -Hexosaminidase inhibitor** 97, 98, 100, 101, 4084, 5430, 9278, 9282, 15499, 18990, 18996, 18997, 19004, 19005, 19006, 19032.
- $\beta$ -Hexosaminidase inhibitor inactive** 303, 371, 496, 3308, 3399, 3831, 3832, 5427, 5428, 5431, 6853, 7944, 8594, 11477, 14777, 18797, 18983, 18995, 19001, 19002, 19003, 19007, 19009, 19010, 19011, 19016, 19542, 19618, 20566, 22332, 22332.
- $\beta$ -Hexosaminidase release inhibitor** 4398, 5424, 11364, 11614, 11806, 12403, 12520, 13986, 14775, 15705, 16462, 16463, 16464, 16465, 16466, 16468, 19689, 20899.
- $\beta$ -Hexosaminidase release inhibitor inactive** 5420, 5421, 5422, 5423, 5425.
- $\beta$ -Hexosaminidase release inhibitor, IgE-induced** 9456, 9458, 11691, 15279, 15286, 17705.
- Lacrimation promoter** 6550, 17912.
- Lactace inhibitor (isomaltose enzyme inhibitor)** 6914.
- Lactace inhibitor (trehalase inhibitor)** 3010, 3011.
- Larvacide** 2057, 17434, 17435, 17436, 17437, 19378.
- Larvacide (*Acroepiopsis assectella* larvae)** 17662.
- Larvacide (*Eurema hecabe mandarina* larvae)** 5991.
- Larvacide (*Heliothis virescens*)** 3594.
- Larvacide (*Heliothis zea* larvae)** 7278, 19582.
- Larvacide (insect larvae)** 4739, 7621, 21208.
- Larvacide (larvae of housefly and apple moth)** 15231.
- Larvacide (mosquito larvae)** 4872, 4898, 10843.
- Larvacide (mosquito late third or early fourth-instar larvae of *Anopheles gambiae*)** 5299, 5311, 5316.
- Larvacide (order Lepidoptera larvae)** 16183.
- Larvacide (*Spodoptera exempta* larvae)** 11386.
- Larvacide (*Stegomyia calopus* larvae)** 11408, 15204, 18214, 18215, 18899.
- Larvacide (toxic to larvae of housefly)** 4140, 9196, 9197.
- Larvacide (toxic to mosquito larvae)** 9857.
- Laxative** 480, 967, 971, 981, 1892, 2004, 2538, 2816, 3254, 3306, 3307, 3598, 3599, 3692, 3695, 4319, 4477, 4531, 4543, 4716, 4717, 5093, 5191, 6632, 7617, 7938, 7939, 7940, 8128, 8231, 8276, 8277, 12950, 15068, 15069, 16516, 16756, 17249, 17251, 17571, 18841, 19749, 19750, 22397.
- laxative** 18759.
- LD** 663, 2001, 2678, 3094, 3911, 4685, 4993, 6772, 9441, 11141, 12446, 13621, 14971, 15170, 15527, 16031, 18299, 18859, 18939, 19223, 19431, 20896, 21234, 21263, 21350, 22057.
- LD<sub>50</sub>** 56, 304, 554, 651, 909, 924, 1161, 1191, 1283, 1376, 1520, 1526, 1713, 1844, 1904, 1938, 1972, 2214, 2284, 2294, 2298, 2312, 2380, 2550, 2660, 2716, 2728, 2734, 2737, 2738, 2757, 2791, 2887, 2937, 3002, 3220, 3277, 3278, 3502, 3511, 3551, 3588, 3633, 3637, 3693,

- 3729, 3770, 3886, 3910, 3964, 3965, 4103, 4135, 4237, 4245, 4290, 4315, 4317, 4319, 4320, 4399, 4399, 4456, 4547, 4550, 4589, 4594, 4645, 4649, 4685, 4693, 5105, 5136, 5152, 5161, 5436, 5502, 5526, 5763, 6454, 6558, 6990, 7272, 7341, 7381, 7385, 7521, 7714, 7736, 7854, 7980, 8297, 8312, 8347, 8430, 8967, 9223, 9330, 9335, 9486, 9541, 9553, 9740, 10351, 10734, 10814, 10875, 11002, 11024, 11091, 11179, 11189, 11259, 11260, 11337, 11344, 11736, 12221, 12421, 12422, 12510, 12537, 12571, 12734, 12798, 13001, 13109, 13137, 13236, 13237, 13239, 13241, 13246, 13247, 13373, 13559, 13606, 14796, 14923, 14981, 15126, 15129, 15146, 15266, 15432, 15490, 15561, 15658, 15781, 16084, 16169, 16183, 16261, 16439, 16505, 16512, 16525, 16555, 16623, 16657, 16666, 16693, 16694, 16773, 16789, 16795, 16796, 16884, 16929, 16958, 16959, 16966, 17028, 17127, 17451, 17456, 17592, 17593, 17708, 17717, 18031, 18033, 18050, 18086, 18256, 18317, 18816, 18826, 18834, 19087, 19111, 19195, 19196, 19227, 19316, 19518, 19528, 19540, 19542, 19587, 19639, 19706, 19749, 19895, 19955, 20002, 20060, 20066, 20076, 20077, 20079, 20137, 20341, 20403, 20405, 20410, 20490, 20650, 20717, 20963, 20995, 21051, 21077, 21251, 21292, 21360, 21435, 21448, 21485, 21511, 21577, 21662, 22011, 22232, 22269, 22270, 22280, 22282, 22336, 22346, 22395, 22399, 22420, 22421, 22487, 22489, 22497, 22502, 22552, 22553, 22618, 22774, 22820, 22938.
- LD<sub>100</sub>** 22384, 22385.
- Leads to struma** 14868.
- Lettuce cotyledon factor** 5564.
- Leucine aminopeptidase inhibitor** 7924.
- Leucocyte activation inhibitor** 12767.
- Leukocyte elastase MMP-2/9 inhibitor** 2102, 5011, 16777, 18317.
- Leukocytes infiltration effect** 118, 119, 14767.
- Leukopoietic** 617, 1186, 2887, 3094, 3551, 3695, 3844, 7385, 7386.
- Leukotriene biosynthesis inhibitor** 118, 119, 230, 6211, 7663, 12766, 12767, 14394, 14624, 14654, 14771, 14800, 22059.
- Leukotriene inhibitor** 1628.
- Lipase accelerator** 20734.
- Lipase inhibitor** 4604, 8278.
- Liver and nerve protectant** 8423.
- Liver sialidase inhibitor** 22720, 20515.
- Local anesthetic** 554, 824, 2218, 2303, 3277, 3508, 3968, 4936, 4993, 6439, 6683, 8010, 12184, 12510, 16803, 17909, 19184, 20566, 22938.
- Local anticorrosion** 4234.
- Local stimulant** 3094, 7751.
- Lousicide** 781, 17470.
- Low toxin** 195, 1618, 3431, 3907, 3912, 4036, 6679, 10887, 11067, 15337, 16050, 16080, 17505, 18624, 20016, 20254, 21362.
- LOX inhibitor** 2102, 2131, 2132, 6921, 8818, 13252, 13261, 15322, 15323, 16120, 16121, 16525, 16529, 16530, 16531, 16886, 17278, 19895, 19897, 19898, 20123, 20124, 20125, 20126, 20129.
- 5-LOX inhibitor** 444, 580, 2101, 2102, 2216, 3188, 3743, 6491, 7819, 7924, 7926, 8926, 8997, 9202, 9331, 11572, 12936, 15319, 15928, 16540, 16983, 17979, 18513, 19201, 19312, 19846, 19871, 22511, 22778.
- $\Delta^5$ -LOX inhibitor** 7802, 12020, 14971, 15170, 16758, 18219.
- 12-LOX inhibitor inactive** 4913.
- 12(S)-LOX inhibitor inactive** 9, 3354, 4916, 15705, 20465.
- 12-LOX inhibitor** 1131, 2102, 5801, 12936, 17979, 21703.
- 12(S)-LOX inhibitor** 4281, 19983.
- 15-LOX inhibitor** 1110, 1131, 2102, 2380, 4289, 13097, 13098, 13137, 19929.
- LTB<sub>4</sub> inhibitor** 7924, 19312.
- LTB<sub>4</sub> production inhibitor** 2106, 3462, 10182, 10472, 19883, 19885.
- LTC<sub>4</sub> inhibitor** 3981.
- LTD<sub>4</sub> antagonist** 16268, 16269, 21993, 21994.
- Lubricant** 1598.
- Main active component in Cassave Aerial Parts, *Manihot esculenta* MU SHU DI SHANG BU FEN** 12854.
- Main antispasmodic component in Cow-bezoar, *Bos taurus domesticus*; *Bubalus bubalis* NIU HUANG** 5161.
- Main bitter component in beer** 9678.
- Main component of breviscarpin in Shortscape Fleabane, *Erigeron breviscapus* DENG ZHAN XI XIN to cure post-palsy paralysis** 19587.
- Main component of phenol character acid in Danshen, *Salvia miltiorrhiza* DAN SHEN.** 4631.
- Main effective component in Dahurian Rhododendron, *Rhododendron dauricum* MAN SHAN HONG to treat trachitis** 7736.
- Main effective component in Orange Daylily, *Hemerocallis fulva* XUAN CAO GEN** 9339.
- Main effective component in Tibet Lyonina, *Lyonia ovalifolia* LI MU** 13246, 13247.
- Main effective component in Tibet Wormwood, ZANG YIN CHEN** 13481.
- Main effective component in Yanhusuo, *Corydalis yanhusuo* YAN HU SUO** 4889.
- Main odiferous component in cucumber *Cucumis sativus* HUANG GUA** 15676.
- Maintains normal vision** 18834.
- Maltase inhibitor** 2792, 7437, 21362.
- MAO inhibitor** 1007, 3440, 3441, 3442, 3443, 3444, 3445, 3446, 3447, 3449, 3450, 8844, 9232, 9233, 9235, 10786, 11436, 11504, 12771, 12782, 12908, 15204, 19198, 19542, 19783.
- MAO inhibitor inactive** 3829, 3831, 3832, 10038.
- MAO-A inhibitor** 2220, 4292, 5722, 10124, 12889, 12890, 13916, 17278, 17451, 20502, 20685.
- MAO-B inhibitor** 10124, 12889, 12890, 13916, 17451.
- Matrix metalloproteinase-1 (MMP-1) inhibitor** 20421.
- May has a potential in the treatment of asthma** 18376.
- M-choline receptor agonist** 1658, 17360.
- M-cholinergic receptor blocker** 10872.
- Medulla vasomotorium inhibitor** 19195, 19196.
- Melanogenesis inhibitor** 17461.
- Membrane stabilizer** 1769.
- Metabolic intermediate.** 8817.
- Mild anesthetic** 6552.
- MIP-1 $\alpha/\beta$  inhibitor** 2106.
- Mitochondrial complex I selective inhibitor; NADH oxidase** 1317, 11793, 12452, 14906, 18899, 18939, 22099.

- Mitochondrial respiratory chain complex I inhibitor** 1459, 1770, 13634, 13715, 15885, 18939, 21258.
- Mitochondrial respiratory chain inhibitor, mammalian** 241, 311, 1008.
- MLD** 1102, 3452, 4029, 8256, 11203, 13089, 21211, 21887.
- Molluscicide** 1029, 2179, 2309, 2973, 2973, 3340, 4624, 6193, 8403, 9288, 9589, 10881, 11379, 11903, 12621, 14279, 14541, 15253, 16044, 16052, 16080, 16674, 16898, 17269, 17586, 17857, 18229, 18257, 18534, 19316, 19391, 19846, 22880.
- Molluscicide** 19333, 19334, 19335, 19336, 19337, 19338, 19339, 19340, 19341.
- Mucin release stimulator** 2331, 22270.
- Multidrug resistance (MDR) reversing activity** 17731, 18170, 18171, 18172, 18173, 21026.
- Multidrug resistance protein (MRP) inhibitor** 19536.
- Muscarinic inhibitor** 22275.
- Muscle relaxant** 136, 1125, 2042, 3148, 4459, 4693, 6262, 6734, 8292, 9597, 11091, 11329, 13388, 13716, 13801, 17411, 17413, 17417, 20732, 21206, 21485, 21887, 22489.
- Muscle stimulant** 3404.
- Mutagen** 701, 1713, 2220, 3847, 6011, 6684, 7994, 8081, 9320, 9882, 11091, 11436, 11809, 12535, 14923, 14971, 15184, 15799, 15815, 18667, 18679, 19706, 19731, 19791, 19805, 19846, 20510, 22011.
- Mutagen** 1020, 17247.
- Mydriatic** 1288, 2001, 3860, 6418, 9703, 10870, 10872, 15461, 16773, 20496, 22921.
- Myotoxic phospholipase A<sub>2</sub> (PLA2) inhibitor** 15505.
- Na<sup>+</sup>,K<sup>+</sup>-ATP inhibitor** 10, 7156, 9233, 9234, 10285, 12178, 12180, 14093, 14543, 14995, 15038, 15705, 19802, 19803, 20222.
- NADH dehydrogenase inhibitor** 16124.
- NADH oxidase inhibitor** 241, 311, 1008, 1319, 5613, 7015, 7802, 9395, 9396, 9397, 9398, 9399, 9400, 9401, 15170, 18939.
- NADH ubiquinone reductase inhibitor** 14906, 16266, 20240.
- N-choline receptor agonist** 1658.
- Negative chronotropic action** 19955.
- Negative inotropic action** 21206.
- Nematocide** 2783, 3508, 4872, 4898, 6487, 10680, 14683, 17708, 19846, 21018, 21328, 21483.
- NEP inhibitor** 6757, 8095, 10887, 11642, 16011, 18358, 18371, 18411, 21392.
- Nerve growth factor (NGF) enhancer** 9436, 22271.
- Neurite outgrowth activity** 3859, 6538, 6723, 7212, 9994, 21099, 21148, 21783, 22702, 22708, 22710.
- Neurite outgrowth enhancer** 1035, 1477, 1486, 8212, 8259, 8423, 8425, 12934, 15822, 15839, 17500, 21168, 22318.
- Neurite outgrowth enhancer inactive** 7522, 21734.
- Neuromuscular blocker** 1125, 1366, 2959, 3148, 3878, 3963, 4864, 7324, 7326, 7327, 7331, 7340, 7341, 11337, 14569, 18655, 19198, 21448, 21485.
- Neuromuscular toxicity** 905, 4926, 4927, 9077, 9078, 14024.
- Neuroprotective** 1695, 2376, 2439, 2470, 2709, 2710, 2711, 2712, 2887, 2960, 3695, 4135, 4185, 4186, 4398, 5045, 7052, 7053, 7768, 8089, 8404, 8405, 9020, 9237, 9238, 9855, 9968, 10684, 10765, 11447, 12046, 12749, 13290, 13885, 13886, 13888, 13889, 13890, 13891, 13894, 16587, 18354, 18355, 18362, 19777.
- Neuroprotective inactive** 2466, 2467, 2469.
- Neuroprotective, induced by L-glutamate** 13895, 14070.
- Neurotoxin** 833, 1057, 1058, 4452, 15490, 19223.
- Neurotransmitter** 1048, 6559, 15708, 19760.
- Neurotrophic** 2376.
- Neurotrophic** 7517, 20651.
- Neurotrophic activity** 4811, 6538, 6723, 9975, 11868.
- Neurotrophic bioassay inactive** 4523, 4896, 9954, 13789, 20716.
- NF-κB inhibitor** 2004, 3307, 3693, 13882.
- NFAT transcription inhibitor** 2245, 2778, 3308, 4184, 5213, 5981, 8098, 8910, 8922, 9106, 9107, 9108, 9109, 9382, 10637, 13100, 14530, 15954, 18411, 19377, 19473, 19474, 19497.
- NFAT transcription inhibitor inactive** 6918, 7951, 20237.
- Nicotine antagonist** 9238, 12083, 19386, 20496.
- Nicotinic acetylcholine receptor competitive inhibitor** 14024.
- Nitrogen-containing base occurring in DNA and RNA** 9070, 14802.
- NO production inhibitor inactive** 658, 1284, 2041, 2491, 4396, 4895, 5577, 6201, 9657, 9818, 11613, 11789, 12016, 12253, 13115, 15805, 15809, 16204, 16231, 17844, 20660, 22978, 22981, 22982, 22983.
- NO production inhibitor, accompanied by a decrease in iNOS protein level, did not affect COX-2 protein expression level** 16717.
- NO production inhibitor, cultured rat aortic smooth muscle cells treated with LPS/IFN-γ** 11203, 16713.
- NO production inhibitor, inhibits iNOS gene expression activated by LPS and recombinant mus IFN-γ, furthermore, inhibits histamine release from rat peritoneal mast cells** 13433, 13434.
- NO production inhibitor, LPS-activated macrophage-like J774.1 cells** 4759, 4760, 4761, 5137, 6205, 6281, 6286, 6287, 9819, 10606, 10618, 10621, 11146, 11147, 13850, 15443, 15444, 15795, 16221, 16222, 16223, 16224, 16225, 16226, 16227, 16228, 16229, 16232, 16233, 16234, 16235, 16236, 16237, 16238, 16239, 16240, 16242, 16243, 16244, 19630, 19966, 19967, 19968, 19969, 19970, 20258, 20259, 20260, 20261, 21927.
- NO production inhibitor, LPS-activated macrophages RAW264.7** 131, 132, 155, 292, 2359, 2360, 2361, 2362, 5155, 5285 5292.
- NO production inhibitor, LPS-activated macrophages RAW264.7, treated simultaneously by α-viniferin and LPS** 22504.
- NO production inhibitor, LPS-activated mus peritoneal macrophages** 889, 1213, 2427, 2428, 2462, 4378, 4379, 4389, 4393, 4394, 4395, 4397, 4398, 4400, 4416, 5457, 6875, 7116, 7514, 8014, 8015, 8048, 8049, 8347, 8348, 8525, 10147, 11001, 11359, 11364, 11412, 11462, 11477, 11614, 11637, 11806, 12403, 12520, 13986, 14775, 15378, 15379, 15705, 16456, 16459, 16462, 16463, 16464, 16465, 16466, 17875, 18282, 18983, 18990, 18995, 18996, 19001, 19002, 19003, 19004, 19005, 19006, 19007, 19009, 19010, 19011, 19016, 19017, 19618, 19689, 20566, 20899, 22124, 22195, 22332, 22775, 22977.
- NO production inhibitor, LPS-activated mus peritoneal macrophages, reduces NO production and iNOS gene expression, by inhibiting NFκB** 19895.
- NO production inhibitor, LPS-induced macrophages RAW264.7, through suppression of NF-κB by inhibiting transactivation activity of RelA subunit** 19407.



- NO production inhibitor, LPS-induced mus macrophages RAW264.7** 1573, 8679, 10820, 10834, 19405, 19406, 22270, 22984, 22986.
- NO production inhibitor, LPS-induced, concentration-dependent manner** 3388, 5987, 9765, 12044, 19312.
- NO production inhibitor, macrophage-like cell line RAW264.7 activated by LPS/IFN- $\gamma$**  592, 3517, 8037, 8038, 8039, 8086, 8088, 8093, 13293, 13295, 22383, 23030.
- NO production inhibitor, macrophages activated by LPS and recombinant mouse IFN- $\gamma$**  11017, 13435, 13436, 13437, 18317, 19891, 19892.
- NO production inhibitor, mus macrophages RAW264.7, activated by LPS/IFN- $\gamma$**  2359, 2360, 2361, 2362, 5155, 5633, 5669, 7982, 7983, 7984, 7985, 18317.
- NO production inhibitor, mus macrophages RAW264.7, activated by LPS/IFN- $\gamma$ , without showing cytotoxicity at low (effective) concentrations** 5742, 5911, 16199, 22761, 22762, 22764.
- NO production inhibitor, mus macrophages, activated by LPS/IFN- $\gamma$**  19536.
- NO production inhibitor, neuroprotective, glutamate-injured primary cultures of rat cortical cells** 1695.
- NO production inhibitor, no explanation on cell species** 171, 173, 222, 1159, 1367, 1476, 1790, 1791, 1802, 2036, 2038, 2073, 2075, 2102, 2106, 2379, 2490, 2629, 3362, 3368, 3368, 3980, 3983, 4128, 4604, 4726, 4746, 4788, 4891, 4980, 5939, 6690, 6923, 7195, 7196, 7197, 7239, 8020, 8278, 8401, 8818, 9626, 9627, 9811, 10314, 10894, 10922, 11732, 12170, 13137, 14097, 14995, 15002, 15038, 16163, 16166, 16167, 16603, 16675, 16675, 17862, 19259, 19618, 20556, 20806, 20840, 20877, 20988, 21280, 22336, 22718, 22876, 22877.
- NO production inhibitor, RAW264.7, activated by LPS/IFN- $\gamma$ , with strong cytotoxicity** 13109, 13110, 13111, 13112, 13113, 13114.
- NO production inhibitor, summary index** 131, 132, 155, 171, 173, 222, 292, 592, 889, 1159, 1213, 1367, 1476, 1573, 1695, 1790, 1791, 1802, 2036, 2038, 2073, 2075, 2102, 2106, 2359, 2360, 2361, 2362, 2379, 2427, 2428, 2462, 2490, 2629, 3362, 3368, 3388, 3517, 3980, 3983, 4128, 4378, 4379, 4389, 4393, 4394, 4395, 4397, 4398, 4400, 4416, 4604, 4726, 4746, 4759, 4760, 4761, 4788, 4891, 4980, 5137, 5155, 5285, 5292, 5457, 5633, 5669, 5742, 5911, 5939, 5987, 6205, 6281, 6286, 6287, 6690, 6875, 6923, 7116, 7195, 7196, 7197, 7239, 7514, 7982, 7983, 7984, 7985, 8014, 8015, 8020, 8037, 8038, 8039, 8048, 8049, 8086, 8088, 8093, 8278, 8347, 8348, 8401, 8525, 8679, 8818, 9626, 9627, 9765, 9811, 9819, 10147, 10314, 10606, 10618, 10621, 10820, 10834, 10894, 10922, 11001, 11017, 11146, 11147, 11203, 11359, 11364, 11412, 11462, 11477, 11614, 11637, 11732, 11806, 12044, 12170, 12403, 12520, 13109, 13110, 13111, 13112, 13113, 13114, 13137, 13293, 13295, 13433, 13434, 13435, 13436, 13437, 13850, 13986, 14097, 14775, 14995, 15002, 15038, 15378, 15379, 15443, 15444, 15705, 15795, 16163, 16166, 16167, 16199, 16221, 16222, 16223, 16224, 16225, 16226, 16227, 16228, 16229, 16232, 16233, 16234, 16235, 16236, 16237, 16238, 16239, 16240, 16242, 16243, 16244, 16456, 16459, 16462, 16463, 16464, 16465, 16466, 16603, 16675, 16713, 16717, 17196, 17197, 17198, 17199, 17200, 17201, 17862, 17875, 18282, 18317, 18983, 18990, 18995, 18996, 19001, 19002, 19003, 19004, 19005, 19006, 19007, 19009, 19010, 19011, 19016, 19017, 19259, 19312, 19405, 19406, 19407, 19536, 19618, 19630, 19689, 19891, 19892, 19895, 19966, 19967, 19968, 19969, 19970, 20258, 20259, 20260, 20261, 20556, 20566, 20806, 20840, 20877, 20899, 20988, 21280, 21927, 22124, 22195, 22270, 22332, 22336, 22383, 22504, 22718, 22761, 22762, 22764, 22775, 22876, 22877, 22977, 22984, 22986, 23030.
- NO production inhibitor, with cytotoxicity** 17200, 17201.
- NO production inhibitor, without cytotoxicity** 17196, 17197, 17198, 17199.
- Nodulation signal for metabiosis of pea and *Rhizobium leguminosarum*** 1492, 8309.
- Nodulation signal for metabiosis of pea and *Rhizobium leguminosarum*** 1476.
- Non-addictive antitussive** 15266.
- Nonpeptide tachykinin NK<sub>1</sub> receptor antagonist** 21176.
- Nonpeptide tachykinin NK1 receptor antagonist inactive** 22035.
- Nonpolarizing muscle relaxant** 2191.
- Nootropic** 21234.
- Normalizes the ratio between phosphatide and cholesterol** 2379.
- Nourishes nerve** 1036, 11209, 11211, 17500.
- Novel  $\alpha$ -glycerophosphoric acid tetrazole reductase inhibitor** 22282.
- Nucleotide diphosphatase inhibitor** 1030.
- Nutrient** 1866, 1886, 12891, 12893.
- One of allergens in *Hydrangea macrophylla* BA XIAN HUA** 9700.
- One of effective components in danshen, *Salvia miltiorrhiza* DAN SHEN** 10736.
- One of effective components in *Erycibe obtusifolia* DING GONG TENG** 19542, 19545.
- One of effective components in *Hypericum japonicum* DI ER CAO for curing hepatitis** 11642.
- One of effective components in Red Wing Azalea** 491.
- One of main components of divasides** 6530.
- Opioid agonist** 10528, 14886, 14981, 16735, 20138, 20139.
- Ornithine decarboxylase inhibitor** 4872, 17958, 19255.
- Osteoblast inhibitor** 2208.
- Osteoblastic differentiation stimulator** 1275.
- Osteoblastic proliferation stimulator** 2331, 13990, 13991.
- Osteoclastogenesis-inhibitory factor (OCIF) gene expression inhibitor** 15376.
- Overcomer of dormancy of peppertree fruits** 16657.
- Oviposition promoter** 9458, 17903.
- Oxytocic** 930, 7243, 16770, 20133.
- PAF antagonist** 5135, 8040, 8392, 8393, 9490, 13390, 15940, 17422, 19404, 20113, 20114, 21493, 22383.
- PAF inhibitor(Anti-PAF)** 1737, 4967, 5549, 8979, 11286, 12010, 12013, 12611, 12612.
- PAF receptor antagonist** 5135, 8404, 8405, 8406, 8407, 8408, 12005, 12006, 12007, 12008, 13387, 17688, 22528, 22628.
- Pancreatic lipase inhibitor** 9632, 9633, 19433, 19434, 19435, 19436, 19437, 19438, 19439, 19440, 19441.
- Pancreatic lipase inhibitor inactive** 16701.
- Paralyses CNS** 3218.
- Paralyses CNS and respiration** 983.

- Paralyses motor nerve ending** 3988, 23003.  
**Paralyses muscle** 3615, 21485.  
**Paralyses respiration** 2372, 3692, 8256, 21292, 21877.  
**Paralyses sensory and motor nerve** 3502.  
**Paralyses striated muscle** 6552.  
**Paralysis** 3968, 13223.  
**Paralysis of nervous system** 16285.  
**Paralyzes cardiac and skeletal muscle** 21887.  
**Parasympathetic ganglionic blocker (anti-vagus)** 871.  
**Parasympathomimetic** 20017, 22158, 22397.  
**Passive cutaneous anaphylaxis inhibitor** 9456, 9458, 11691, 15279, 15286, 17705.  
**PDE isozymes selective inhibitor** 18376.  
**PDE3 selective inhibitor** 18376.  
**Pectinase inhibitor** 9616, 22581.  
**PEP inhibitor** 5791, 9561, 11648, 18682.  
**Peroxidase formation inhibitor** 20127.  
**Peroxidase inhibitor** 4190, 8278, 19898.  
**Perspiration** 17360, 18794.  
**Pesticide** 136, 290, 782, 862, 948, 1125, 1319, 1474, 1520, 2298, 2676, 3307, 3692, 6262, 6796, 8509, 9428, 9631, 10680, 10938, 11269, 13801, 14692, 15527, 15549, 16500, 16734, 17411, 17413, 17417, 17451, 17776, 18256, 18262, 18939, 19811, 20485, 21483, 22815.  
**Pesticide (aphids *Schizaphis graminum*)** 6643, 13022.  
**Pesticide (curculio, grasshopper, housefly and cockroach)** 18270.  
**Pesticide (dog roundworm larvae)** 18202.  
**Pesticide (*Eurema hecabe mandarina*)** 8083.  
**Pesticide (housefly)** 15232, 15233, 15490.  
**Pesticide (larvae of mosquito, mustard beetles and houseflies)** 20490.  
**PGE<sub>2</sub> production inhibitor** 1573, 2106, 3388, 3981, 4159, 5987, 6288, 6351, 8020, 8679, 8898, 9436, 9765, 10820, 11001, 11462, 12044, 12122, 15635, 16532, 16603, 17077, 17145, 17532, 18792, 19081, 19201, 19312, 19405, 19406, 20569, 20900, 20901, 21930, 22123, 22124, 22270.  
**PGE<sub>2</sub> production inhibitor inactive** 4158, 20447.  
**PGE<sub>2</sub> release inhibitor in rbt synovioblasts** 3368.  
**PGE<sub>2</sub> synthesis stimulator** 19143, 19148.  
**PGI<sub>2</sub> biosynthesis stimulator** 17697.  
**PGI<sub>2</sub> release stimulator** 5414, 11209.  
**P-glucoprotein inhibitor** 6604, 17732.  
**Phagostimulant (*Chrysomela vigintipunctata*)** 3674.  
**Phagostimulant (insect)** 11699.  
**Phagostimulant (order Hemiptera insect)** 3199.  
**Phagostimulant (silkworm)** 14971, 11642.  
**Pheromone of *Nasutitermis exitiosus* (for tracking)** 15360.  
**Phosphatase inhibitor** 4297, 5040.  
**Phosphodiesterase I inhibitor** 2270, 19192, 20528, 20547, 20548, 20549.  
**Phosphodiesterase inhibitor** 61, 2369, 16918, 16919, 16920.  
**Phospholipase A<sub>2</sub> inhibitor** 8401.  
**Phospholipase C<sub>7j</sub> inhibitor** 12280, 12355, 12358, 12364, 12365, 12366, 12367.  
**Phospholipase PLA<sub>2</sub> inhibitor** 22055.  
**Phospholipase PLC $\gamma$ 1 inhibitor** 22208, 22209, 22210, 22211, 22212.  
**Photo-activated antibacterial** 7830, 9226, 12254, 20002.  
**photo-activated antifungal** 7830, 9226, 12254, 20002.  
**Photo-activated DNA binding** 9226, 12254, 20002.  
**Photo-activated DNA binding inactive** 7830.  
**Photosensitive agent** 126, 1191, 2309, 5858, 6040, 7063, 10886, 18086, 19469, 19471, 21328, 22774.  
**Phototoxic** 6796, 7592, 9226, 11376, 12221, 12254, 20002, 22553.  
**Phytoalexin** 4135, 4312, 4313, 4966, 7707, 9616, 11773, 13513, 14254, 16168, 16196, 18643, 19122, 22581.  
**Phyto-estrogen** 361, 398.  
**Phytogrowth inhibitor** 421, 1067, 1822, 1833, 2847, 2855, 3457, 3840, 3911, 4938, 4986, 5941, 6312, 6888, 7719, 9304, 9872, 9873, 9875, 9876, 10290, 10564, 11113, 11114, 11115, 11269, 12964, 16601, 16805, 17278, 22781.  
**Phytohormone** 8374, 22122.  
**Phytohormone active against auxin** 22757.  
**Phytotoxin** 187, 1924, 1925, 1926, 2108, 4918, 5875, 5876, 5956, 5957, 5958, 7079, 7123, 7838, 10087, 10366, 10367, 10368, 10369, 10371, 14492, 14639, 14645, 14646, 16427, 16805, 17605, 17607, 17742, 18802, 20332, 21124.  
**Phytotoxin inactive** 9480, 15936, 21038.  
**Pigment** 1013, 1358, 2319, 2320, 2322, 2496, 3146, 3209, 3210, 3215, 3225, 3432, 4293, 4398, 4434, 4446, 4451, 5011, 7821, 8927, 8930, 9290, 9421, 11018, 13243, 13456, 13460, 14879, 14880, 14881, 14882, 14974, 15477, 17238, 17771, 22520, 22623, 22976.  
**Pituitary stimulant** 1673.  
**Piscicide** 933, 6490, 11978, 16457, 17478, 18939, 22774.  
**PKA inhibitor** 19284.  
**PKC activator** 485, 14201, 17187, 21381, 21382.  
**PKC activator inactive** 483, 484, 4839.  
**PKC inhibitor** 3498, 7802, 13137, 14892, 16550, 17168, 17869, 18092, 18203, 18317, 19255, 19259, 19284, 22504.  
**Plant growth and germination inhibitor** 834, 1892, 3063, 16898, 17940.  
**Plant growth hormone** 11031.  
**Plant growth regulator** 538, 777, 1617, 2108, 3076, 3545, 4314, 4891, 5236, 5938, 6643, 6750, 9234, 9291, 12227, 13238, 14705, 15229, 15230, 15231, 15232, 15233, 15234, 17733, 18257, 19313, 19897, 19898, 21541, 22411, 22533, 22638, 22975.  
**Plant growth stimulant** 2845.  
**Plant growth stimulatory or inhibitory activity** 412, 2288, 5639, 5640, 5641, 8675, 8676, 9590, 9840, 10953, 13640, 17409, 18000, 19226.  
**Plasma protein binder** 15849.  
**Platelet aggregation inhibitor** 23, 24, 54, 147, 309, 322, 370, 383, 424, 532, 595, 597, 598, 664, 921, 952, 955, 983, 1173, 1287, 1476, 1691, 2009, 2010, 2018, 2034, 2120, 2121, 2122, 2224, 2227, 2263, 2891, 3244, 3408, 3412, 3434, 3519, 3520, 3600, 3613, 3633, 3694, 3723, 3793, 3794, 3795, 3796, 3797, 3798, 3926, 3935, 3936, 3937, 4296, 4348, 4349, 4580, 4630, 4680, 4685, 4989, 5347, 5414, 5440, 5750, 6204, 6216, 6261, 6266, 6302, 6466, 6745, 6921, 7441, 7521, 7714, 7719, 7768, 7768, 7788, 7819, 7894, 7945, 8191, 8380, 8404, 8405, 8406, 8407, 8424, 8696, 9123, 9486, 9564, 9604, 9631, 9656, 9736, 9742, 10236, 10237, 10545, 11000, 11414, 11421, 11423, 11547, 11648,

- 11747, 12420, 12498, 12499, 12500, 12564, 12574, 12714, 12767, 12917, 13098, 13330, 13331, 13332, 13387, 13987, 14037, 14086, 14121, 14187, 14188, 14619, 14825, 14865, 14996, 14997, 15103, 15104, 15107, 15118, 15120, 15204, 15279, 15321, 15333, 15335, 15470, 15635, 15645, 15647, 16050, 16072, 16073, 16094, 16095, 16525, 16533, 16534, 16572, 16623, 16978, 17168, 17283, 17463, 17464, 17467, 17508, 17568, 17587, 17688, 17763, 18004, 18005, 18063, 18295, 18296, 18317, 18376, 18643, 18655, 18744, 18768, 18769, 18770, 18772, 18773, 18774, 18775, 18776, 18778, 18901, 18902, 18903, 18904, 19012, 19201, 19203, 19231, 19232, 19298, 19467, 19468, 19470, 19540, 19542, 19587, 19819, 19846, 19904, 19905, 19906, 19907, 19983, 19983, 19993, 20009, 20069, 20178, 20181, 20182, 20183, 20184, 20185, 20186, 20187, 20188, 20194, 20348, 20361, 20369, 20968, 21057, 21206, 21493, 21576, 21887, 22144, 22270, 22336, 22511, 22528, 22615, 22628, 22818, 22965, 22969, 22970, 22972.
- Platelet aggregation inhibitor inactive** 1328, 1510, 5535, 5929, 5930, 5932, 10275, 12497.
- Platelet aggregation promoter or inhibitor (promoter at low concentration; inhibitor at high concentration)** 18995, 19015.
- Platelet aggregation selected inhibitor** 1326, 5928, 9706, 9723, 9757, 10276, 10542, 12178.
- PNPPase inhibitor** 19201.
- Polyoma enhancer binding protein 2 $\alpha$ A (PEBP2 $\alpha$ A) inhibitor** 15376.
- Positive inotropic effect** 7788, 20100.
- Potassium channel activator** 2606.
- Potato micro-tuber inducer** 9979, 9980, 10315, 11825, 21311.
- Tumour-promoting agents** 17181.
- Potential exists for development of new agents for treating stroke** 10684.
- Potentiates hypnotic effect of barbiturates** 18881.
- Ppsa1 inhibitor** 10036, 10035.
- Precursor of biosynthesis of vitamin A** 3208, 3209, 3210, 3214, 15135.
- Precursor of indoleacetic acid** 22058.
- Precursor to biosynthesis of 5-HT** 10818.
- Precursor to biosynthesis of adrenalin** 6559.
- Precursor to biosynthesis of arterenol** 6558.
- Precursor to biosynthesis of chamazulene** 13605.
- Precursor to biosynthesis of dopamine** 6558.
- Precursor to biosynthesis of ecdysone** 19513.
- Precursor to biosynthesis of lignin** 3981, 19922.
- Precursor to biosynthesis of sterol** 4473, 12488.
- Precursor to essence synthesis;** 15203.
- Pregnancy terminator** 17983, 22937.
- Prevention and cure of diabetes syndrome (retinopathy, cataract, nervous system diseases)** 16931, 16933.
- Prevention and cure of ulcer and gastritis** 1020.
- prevents action of chemical carcinogens** 11320.
- Prevents AIDS** 20124, 20125, 20126.
- Prevents atherosclerosis** 18261.
- Prevents atrophy of prostate and spermary** 86.
- Prevents cancer** 6812, 16888, 20478, 22779.
- Prevents cell division** 13239.
- Prevents enteritis** 2013.
- Prevents exudative pulmonary edema, reduces vasa publica permeability** 21312.
- Prevents hardening of cardiac muscle and vasa coronaria** 4547.
- Prevents infection of *Schistosoma mansoni*** 4485.
- prevents toxicosis** 8906.
- Prevents ulcer** 16512.
- Proliferation inhibitor** 5116, 5118, 11504, 20168, 21156, 22338.
- Proliferation stimulator or inhibitor, Jurkat cell lines, stimulator at low concentration, inhibitor at high concentration** 8060, 8061.
- Proliferation stimulator, B cells** 5116, 5118, 22338.
- Proliferation stimulator, Jurkat cell lines** 8059.
- Prolyl endopeptidase inhibitor** 5916, 5917, 6244, 8403, 9389, 10750, 15215, 15217, 18917.
- Promoter of biosynthesis of glutathione** 13823.
- Promoter of cytotoxic effects of vincalucoblastine** 8423, 8427, 17475.
- Promoter of cytotoxic effects of vincalucoblastine, inhibits vinblastine-resistant KB cells** 16002.
- Promoter of estrogenic activity** 8487.
- Promoter of glutathione S-transferase** 3243.
- Promoter of normal growth of female sexual organs and secondary sex characters** 7383, 7384.
- Promotes aging of leaves** 11825.
- Promotes cell division and growth of plants** 2598.
- Promotes cell division of plants** 22975.
- Promotes decomposition of protein to be converted to sugar** 4097.
- Promotes germination** 19542, 20392.
- Promotes growth of bacteria producing butyric and lactic acids** 10.
- Promotes hair growth** 18655.
- Promotes lipid metabolism** 15563, 15564, 15565, 15566.
- Promotes lipolysis** 3490, 3493, 8311, 11083, 13438.
- Promotes macrophage phagocytic function** 4385.
- Promotes metabolism** 20341.
- Promotes plasma secretion of corticosterone** 8423, 8426, 8427.
- Promotes platelet production in toxin dose** 1658.
- Promotes regeneration of muscle tissue** 8967.
- Promotes resynthesis of heart glycogen** 4547.
- Promotes RNA polymerase activity** 8424.
- Promotes secretion of digestive juice** 19935.
- Promotes ulcer healing** 9569.
- Promotes wound healing** 1853.
- Prostaglandin biosynthesis inhibitor** 1746, 1747, 3983, 5258, 6643, 7788, 7802, 8386, 10545, 11547, 13962, 19822, 19823.
- Prostaglandin synthetase activator** 5763, 9818.
- Prostaglandin synthetase inhibitor** 4921, 8388, 8403, 15705, 16001, 19846, 19910, 22778.
- Prostaglandin-like physio-activities** 17952, 17953.
- Protects cerebrum** 1039.
- Protects red blood cells from decomposition due to low osmotic pressure** 3077.
- Protects shock** 6452, 8297.
- Protein glycation (Maillard reaction) inhibitor** 9779.
- Protein opopanax ester transferase (FPT) selective inhibitor** 8150.

- Protein tyrosine phosphatase 1B (PTP1B) inhibitor** 2081, 10035, 10036, 18088.
- Provides energy and restores body fluid for patients with diabetes and hepatitis** 7971.
- PTP1B inhibitor** 2975.
- Pulmonary fibrosis inhibitor** 11491.
- Pyridoxal phosphate enzyme inhibitor** 3059.
- $\alpha_2$ -Macroglobulin inhibitor** 17171, 17172.
- $\alpha$ -Mannosidase inhibitor** 13803, 20500.
- QR inhibitor** 8278, 11152, 11154, 11158, 11165, 11171, 11172.
- Quinone reductase inducer** 4194, 5657, 5671, 5672, 11804, 21834.
- Quinone reductase inducer inactive** 2149, 7023, 19586.
- Radioprotector** 9646, 16943, 22158.
- Raises body temperature** 7665, 19081.
- Raises dopamine metabolite HVA** 20094.
- Raw material for partial synthesis of steroid hormone** 5040, 5041.
- Raw material for synthesis** 3138, 11754.
- Raw material for synthesis of hormonal corticosteroid drugs** 21383.
- Raw material for synthesis of ionone and vitamin A** 3760.
- Raw material for synthesis of vitamin D and hormones** 3585.
- Raw material of synthesis of pregnane** 19390.
- Raw material of synthesis of vitamins K<sub>1</sub> and E** 17265.
- Reagent used in biochemistry research** 617, 626, 12802, 13507, 18230.
- Reduced coenzyme I (NADH) oxidase inhibitor** 2779.
- Reduces activity of LDH** 20094.
- Reduces ammonia in blood** 1673.
- Reduces arteriotony** 19706.
- Reduces consumption of oxygen in blood** 1972.
- Reduces fertility in insects** 22349.
- Reduces G6PD in hematids** 22466.
- Reduces intestinal vessel tension (gpg, *in vitro*)** 6552.
- Reduces intra-ocular pressure in rbt** 2303.
- Reduces isolation-induced aggression in mouse** 12917, 19783.
- Reduces learning disorder in mus caused by ischemia-perfusion** 19201.
- Reduces MDA content in mouse serum** 2564.
- Reduces muscular twitching** 4862, 4863.
- Reduces nephrotoxicity of cyclosporine** 8405.
- Reduces normal body temperature of mus** 22865.
- Reduces plasma's exosmosis** 23.
- Reduces serum bilirubin and enhances output of bilirubin in urine** 8841, 8846.
- Reduces symptom of acute dysemia in myocarditis** 4547.
- Reduces symptoms of myocarditis and prevents development of cardiac muscle sclerosis** 4036.
- Reduces the level of cholesterol and lecithin in serum** 5707, 18165.
- Reduces the level of cholesterol and triglyceride in serum** 8278, 13137, 18916, 22269.
- Reduces the level of cholesterol in serum** 891, 2384, 2379, 4685, 6440, 6853, 7978, 8401, 8423, 8424, 8846, 9184, 11648, 12624, 19070, 20369, 22552.
- Reduces toxicity of opium** 3361.
- Reduces tube formation of BAECs** 6364.
- 5 $\alpha$ -Reductase inhibitor inactive** 2071,6923.
- 5 $\alpha$ -Reductase inhibitor** 4398, 6185, 6488, 8330, 9038, 9044, 10191, 10214, 12893, 21456.
- Regulates allergic reaction** 7802.
- Regulates cAMP level and hydrochloric acid in gastric juice** 17220.
- Regulates drug immunological injury** 2300.
- Regulates kidney function and inhibits reproduction of glomerulus cells** 8427.
- Regulates menstrual cycle** 19427.
- Relaxes aortal contraction induced by K<sup>+</sup> and Ca<sup>2+</sup>** 7945.
- Release of CRF and CRF gene express, stimulator** 19148.
- Releases histamine** 19955.
- Releases inhibition of vagus nerve to the heart** 2001.
- Relieves headache** 7252.
- Relieves itching** 13774, 17089.
- Respiration promoter** 8010.
- Respiratory depressant** 4237, 5003, 5032, 5108, 7341, 11741, 21511.
- Respiratory stimulant** 1124, 1904, 2001, 2716, 4594, 7980, 8256, 9419, 10870, 13001, 15263, 15268, 18637, 19639, 22158, 22502.
- Restores miocardia force after anoxia** 20679, 20680, 20681, 20688.
- Reverse transcriptase inhibitor** 5515, 12503, 15631, 17869.
- Reverse transcriptase inhibitor of RNA tumor virus** 7806.
- Reverses glucopenia and ketosis caused by starvation** 832.
- Reverses standing lowblood pressure** 17220.
- Reversing action to MDR of KBV200 cells** 6709, 11001.
- Rodenticide** 5440, 19528.
- Rodentine antifeedant** 10877.
- Salivary secretion inhibitor** 1288.
- Salivary secretion promotor** 582.
- Schistosomacide** 762, 1784, 4485, 4624, 7226, 9339, 20492.
- Schistosomacide (*Bilharzia japonica*)** 6611.
- Schistosomacide (*Fasciola hepatica*)** 834.
- Schistosomacide (martensite schistosome)** 4128.
- Screening ultraviolet** 1042, 3209.
- Sedative** 86, 535, 651, 783, 784, 917, 1094, 1097, 1178, 1502, 2106, 2113, 2303, 2734, 3080, 3354, 3498, 3588, 3878, 3929, 3933, 4029, 4036, 4116, 4536, 4645, 5199, 5417, 5482, 6193, 6482, 6618, 7385, 9187, 9223, 9224, 9335, 11741, 11851, 11903, 12446, 12843, 12849, 13392, 14531, 15843, 16451, 16501, 16505, 16512, 16525, 16532, 17451, 17708, 17958, 17983, 18197, 18552, 18623, 18630, 18633, 18816, 18826, 19111, 20076, 20205, 20324, 20444, 20509, 20566, 21234, 21511, 21578, 22195, 22312, 22336, 22346, 22375, 22384, 22433.
- Selective DNA-damaging activity** 4106.
- Selective  $\alpha$ -mannosidase inhibitor** 17506.
- Selectively inhibits nucleoside transport across cellular chorion** 3652.
- Sensitizer** 3551, 6482, 16622, 17083, 17561.
- Serotonin (5-HT) antagonist** 22921.
- Shampoo** 16711.
- Similar action with aconitine** 5032, 7706, 10875, 11867, 13794.
- Similar action with arterenol** 7240.
- Similar action with atropine** 10870, 22277.
- Similar action with berberine** 2302.
- Similar action with bufotenine** 6370.

- Similar action with codeine** 15449.  
**Similar action with cocaine** 6439.  
**Similar action with colchicine** 3912.  
**Similar action with ephedrine** 9646.  
**Similar action with ergometrine** 16808.  
**Similar action with ergotamine** 7243, 16808.  
**Similar action with linamarin** 13003.  
**Similar action with mesaconitine** 10875.  
**Similar action with mescaline** 14583.  
**Similar action with methyllycaconitine** 3963.  
**Similar action with narceine** 4290, 7994.  
**Similar action with nicotine** 3070.  
**Similar action with physostigmine** 17253.  
**Similar action with quinine** 602.  
**Similar action with sanguinarin** 5708.  
**Similar action with strychnine** 6691, 10734.  
**Similar action with talatizamine** 3201.  
**Similar action with vitamin C<sub>2</sub>** 6454.  
**Similar action with vitamin P** 56, 3308, 6454, 12018, 12714.  
**Similar physiological activity with ergot** 7234.  
**Similar to that of aminoguanidine** 3605, 3606.  
**Skeletal muscle and carotid stimulant** 1658.  
**Skeletal muscle inhibitor** 3502, 3907.  
**Skeletal muscle relaxant** 824, 3218, 7523, 9631, 20732, 22091.  
**Smell of cedar** 19303.  
**Smooth muscle, bladder smooth muscle relaxant** 16189, 16190, 16191, 20472, 20473, 20474, 20475.  
**Smooth muscle, bronchial smooth muscle stimulant** 1658, 2303, 9568, 16773, 17055, 17056.  
**Smooth muscle, bronchodilator** 2284, 6815, 14395, 20254, 20995, 21312, 16773, 18024, 21578.  
**Smooth muscle, inhibits calcium activation and release (blood vessel smooth muscle)** 19540.  
**Smooth muscle, inhibits ileac tension and contractility** 17472.  
**Smooth muscle, inhibits ileal contraction** 893.  
**Smooth muscle, inhibits intestinal and uterine movement** 8289.  
**Smooth muscle, inhibits intestinal movement** 871, 2734, 3907, 11091, 13776, 15882, 19101, 19620, 19955.  
**Smooth muscle, inhibits intestine and other smooth muscle movement** 3452.  
**Smooth muscle, inhibits K<sup>+</sup>-induced contraction of colon bands** 21493.  
**Smooth muscle, inhibits mesenteric venous contraction** 19846.  
**Smooth muscle, inhibits smooth muscle** 2284.  
**Smooth muscle, inhibits tracheal smooth muscle contraction induced by TXA<sub>2</sub>** 16268, 16269.  
**Smooth muscle, paralyzes small intestinal smooth muscle** 2380.  
**Smooth muscle, paralyzes uterus (high dose)** 6552.  
**Smooth muscle, promotes intestinal and uterine motion** 17505.  
**Smooth muscle, promotes intestinal motion** 1658, 3551, 3615, 15263, 15884.  
**Smooth muscle, promotes small intestinal motion** 13223, 16929.  
**Smooth muscle, reduces duodenum tension** 1742.  
**Smooth muscle, rises intestinal vessel tension (gpg, *in vivo*)** 6552.  
**Smooth muscle, smooth muscle contractor (tracheal)** 843.  
**Smooth muscle, smooth muscle relaxant** 126, 5035, 5858, 6040, 6402, 7063, 7802, 9541, 16623, 17983, 18317, 19469, 19471, 19473, 20670, 21362, 21589.  
**Smooth muscle, smooth muscle relaxant (biliary tract)** 1287.  
**Smooth muscle, smooth muscle relaxant (blood vessel)** 7521.  
**Smooth muscle, smooth muscle relaxant (blood vessel, intestine, isolated uterus, gpg trachea, gpg ileum, but causes constriction of rat isolated bladder)** 7521.  
**Smooth muscle, smooth muscle relaxant (colonic)** 18826.  
**Smooth muscle, smooth muscle relaxant (duodenum)** 1191, 1287, 11002.  
**Smooth muscle, smooth muscle relaxant (ileal)** 7521, 8846, 11002, 12083, 13836, 16098, 16101, 16102, 16152, 18454, 18455, 19539, 22023.  
**Smooth muscle, smooth muscle relaxant (ileal)** 13137.  
**Smooth muscle, smooth muscle relaxant (intestinal)** 760, 5136, 5286, 7521, 9232, 11580, 15708, 16623, 19706, 21024, 21522.  
**Smooth muscle, smooth muscle relaxant (small intestine)** 4685, 5003, 11002.  
**Smooth muscle, smooth muscle relaxant (stomach)** 1287.  
**Smooth muscle, smooth muscle relaxant (tracheal)** 7521, 8846, 13137, 15370, 17456, 21493.  
**Smooth muscle, smooth muscle relaxant (uterus)** 7521, 11002, 15797, 18190.  
**Smooth muscle, smooth muscle stimulant** 17360, 20060.  
**Smooth muscle, smooth muscle stimulant (bladder)** 2303.  
**Smooth muscle, smooth muscle stimulant (ileal)** 338.  
**Smooth muscle, smooth muscle stimulant (intestinal)** 2303, 3002, 3318, 11111, 11867, 17592.  
**Smooth muscle, smooth muscle stimulant (peripheral blood vessel)** 7252.  
**Smooth muscle, smooth muscle stimulant (stomach)** 2303.  
**Smooth muscle, smooth muscle stimulant relaxant (small intestine)** 643, 13237.  
**Smooth muscle, stimulates striated muscles and smooth muscles** 22153.  
**Smooth muscle, uterine relaxant** 2797, 2803, 5003, 8423, 8426, 8428, 8429, 8430, 9235, 12825, 18655.  
**Smooth muscle, uterine stimulant** 117, 642, 643, 763, 1333, 1599, 2219, 2303, 2380, 2725, 2726, 2734, 3002, 3114, 3318, 3452, 3551, 3934, 4058, 4103, 4115, 4191, 4192, 4353, 4912, 5108, 5435, 5436, 5445, 6420, 6552, 6757, 7232, 7240, 7252, 7327, 8127, 8256, 8289, 9234, 9646, 11091, 11202, 12646, 13089, 13223, 13237, 13241, 16664, 16773, 16774, 18652, 19081, 19461, 20133, 20254, 22502, 22503, 22929.  
**SOD activity enhancer** 2564.  
**Somatostatin antagonist** 18093.  
**SP-A gene expression promoter** 2106.  
**Spasm action (picrotoxin-like)** 15432.  
**Spasmogenic** 13246, 21292, 21350.  
**Special spicery of tea** 6923.  
**Spermaticidal** 924.  
**Spermaticidal** 107, 762, 1860, 1861, 1862, 3368, 3619, 6940, 10093,

- 12621, 16044, 16169, 17768, 18229, 19333, 19334, 19335, 19336, 19337, 19338, 19339, 19340, 19341.
- Steroid hormone** 17901.
- Sthenic** 136, 6262, 12916, 13801, 17411, 17413, 17417.
- Stimulant** 2550, 2566, 13796, 13798, 14057, 14125, 15485, 15486.
- Stimulates center nerves and cardiac muscles** 21312.
- Stimulates cerebra** 12580.
- Stimulates fibrinolysis** 12420.
- Stimulates function of adrenal cortex** 5152.
- Stimulates horses** 18425.
- Stimulates nerve** 3615.
- Stimulates pons, causes spasm and stiffness in limbs** 9232.
- Stimulates synthesis of NGF** 7261, 7262, 7263, 7264.
- Stomachic** 12229, 14982, 18299.
- Strengthens CNS inhibition induced by chlorpromazine** 16451.
- Stress-induced plant metabolite** 22782.
- Striated muscle relaxant** 3747.
- Striated muscle stimulant** 9232.
- Strongest active component in Chinese Angelica, DANG GUI, *Angelica sinensis*** 12825.
- Succinic oxidase inhibitor** 2779, 5613, 7802, 13137, 15170.
- Sucrase inhibitor** 21362.
- Sugar hydrolase inhibitor** 16931.
- Sulfonamide antagonist** 1042.
- Supercharging for cerebral circulation** 4594.
- Supertoxic agent** 37, 554, 631, 1021, 1134, 1849, 2372, 3063, 3075, 3979, 4377, 5093, 6683, 8776, 9067, 9077, 10959, 11020, 12563, 13476, 14821, 17278, 17999, 22070, 22098.
- Suppressive effects on ovalbumin (OVA)-induced airway hyperresponsiveness** 18376.
- Survival effect on TrkA fibroblasts** 12141.
- Sweetener** 31, 1596, 4483, 6632, 16930, 17663, 20791, 20919, 20920, 20921, 20922, 20923, 20924, 20925, 20926, 20927, 20928, 20929, 22607.
- Sympatholytic** 3755, 3757, 3758.
- Synergist of antineoplastic bleomycin A5** 16183.
- Synergist of buhach** 2298.
- Synergist of pesticides** 4310, 12012, 13594, 17202.
- Synergist of pyrethrin** 1833, 6193.
- TACE inhibitor inactive** 9561.
- Tanning agent** 678, 6857, 6922, 8126, 9079, 12128, 13136, 13402, 17867, 18858.
- T-Cell Proliferation inhibitor** 9419, 11001.
- Teratogen** 1134, 3979, 3988, 4522, 4594, 9320, 11866, 14868, 15204, 20060, 20066, 20488.
- Testosterone 5 $\alpha$ -reductase inhibitor** 4039, 4040, 4041, 4042, 7521, 10960, 12490, 12491, 12493, 12496, 16358.
- Testosterone 5 $\alpha$ -reductase inhibitor** 4610, 6275, 6276, 10394, 12559.
- Tetanicum** 3293.
- TGF- $\beta$ 1 antagonist** 16050, 22270.
- Thrombin inhibitor** 18917.
- Thrombin inhibitor inactive** 5916, 5917, 6244, 6089, 6094, 6203, 10437, 10435, 10750, 20569, 21893.
- Thrombolytic** 4055.
- Thymidine phosphorylase (TP) inhibitor** 12613, 12614.
- Thymidine phosphorylase inhibitor** 2270, 19192, 20528, 20547, 20548, 20549.
- Thyroid peroxidase inhibitor** 16196, 22581.
- Tissue factor inhibitor** 8621.
- Tissue factor inhibitor inactive** 16050, 22270.
- Tissue proteinase B inhibitor** 1030, 6314, 17588.
- TNF inhibitor** 22586, 22587.
- TNF- $\alpha$  formation enhancer** 11977, 22077.
- TNF- $\alpha$  inhibitor** 5430.
- TNF- $\alpha$  production inhibitor** 1071, 1790, 1791, 1802, 2004, 2106, 2469, 2983, 3307, 3368, 3674, 4565, 4565, 4746, 7195, 7196, 7197, 7278, 8278, 8423, 8423, 8424, 8424, 8520, 8520, 9276, 9337, 9456, 11521, 11522, 12122, 12122, 12523, 13137, 13137, 14097, 14976, 14977, 15002, 15635, 16532, 16675, 16717, 17240, 17409, 17460, 17875, 18317, 18317, 18376, 18673, 19308, 19427, 20992, 22686, 22687, 22688, 22727, 22728, 22729, 22730, 22731.
- TNF- $\alpha$  release inhibitor** 4055, 4716, 5424, 6923, 8311, 8894.
- TNF- $\alpha$  release inhibitor inactive** 5420, 5421, 5422, 5423, 5425.
- TNF- $\alpha$  secretion inhibitor** 79, 82, 83, 18317, 20486.
- Tonic** 1017, 11882, 19473.
- Topical protectant** 10, 15333.
- Topoisomerase I inhibitor** 10691, 15631.
- Topoisomerase II inhibitor** 2304, 15478, 15479, 15480, 15481, 15869, 17144, 17896, 18202, 18624, 21054.
- Topoisomerase inhibitor inactive** 19349, 19350.
- Topoisomerases I and II inhibitor** 22232.
- Total cAMP- and cGMP-phosphodiesterase (PDE)inhibitor** 18376.
- Toxic** 17732.
- Toxic (highly)** 18426.
- Toxic inactive** 14024.
- Toxin** 10, 126, 140, 340, 551, 567, 646, 655, 782, 983, 1008, 1011, 1068, 1125, 1242, 1250, 1283, 1352, 1353, 1364, 1366, 1461, 1842, 1887, 1895, 2039, 2309, 2399, 2676, 2838, 2937, 2959, 3148, 3152, 3190, 3201, 3207, 3218, 3404, 3498, 3634, 3909, 3911, 3988, 4078, 4457, 4741, 4745, 4771, 4857, 4988, 5004, 5283, 5440, 5523, 5858, 6040, 6370, 6532, 6533, 6684, 6686, 6734, 7063, 7236, 7252, 8091, 8257, 8292, 8461, 8756, 8784, 8841, 8906, 8971, 9114, 9183, 9288, 9339, 9467, 9596, 9877, 10238, 10818, 10898, 11012, 11130, 11189, 11690, 11794, 11867, 12421, 12422, 12854, 12896, 12937, 12951, 13241, 13255, 13711, 14134, 14250, 14358, 14885, 15123, 15429, 15452, 15461, 15633, 15872, 15924, 16285, 16674, 17040, 17089, 17420, 17863, 17903, 17904, 17963, 18000, 18017, 18023, 18785, 18814, 18816, 18840, 18849, 18940, 19041, 19057, 19121, 19374, 19379, 19461, 19469, 19471, 19676, 19698, 19706, 19712, 19889, 20056, 20060, 20061, 20069, 20133, 20341, 20403, 20500, 20963, 21325, 21326, 21402, 21644, 22146, 22151, 22153, 22276, 22280, 22360, 22401, 22404, 22465, 22608, 23000.
- Transforms into vitamin D<sub>2</sub> under ultraviolet ray** 7250.
- Treatment of abdominalgia, cholera in early stage, colitis and dysentery** 2013.
- Treatment of acne and other pigment diseases** 2056.

- Treatment of acute arrhythmia 17761.
- Treatment of acute heart failure with edema of lungs and cardiogenic shock 20403.
- Treatment of acute myocardial ischemia 16525.
- Treatment of AIDS 17958.
- Treatment of allergic purpura 6302.
- Treatment of allergy and empyema in nose 13390.
- Treatment of amebic dysentery 8513, 12347.
- Treatment of amoebic dysentery 19819.
- Treatment of angina pectoris 8401.
- Treatment of angina pectoris, asthma, and cardiac edema 21312.
- Treatment of angiocardioopathy 8633, 8634.
- Treatment of AP 1275.
- Treatment of arrhythmia 7703, 18552.
- Treatment of arterial blockage in retina 18180.
- Treatment of arteriosclerosis and hyperlipidemia 11083.
- Treatment of arteriosclerosis, cerebral wounds and dysemia 20575.
- Treatment of arteriosclerosis, hyperlipidemia, thrombus and coronary heart disease 12767.
- Treatment of asthma and allergic disease 7926.
- Treatment of asthma and bronchitis 17472, 19540.
- Treatment of asthmatic bronchitis 14395, 22552.
- Treatment of atherosclerosis 1928.
- Treatment of bacillary dysentery 983.
- Treatment of bacillary dysentery 13606.
- Treatment of bacillary dysentery and inflammation of upper-respiratory tract 1159.
- Treatment of bacillary dysentery, duodenal ulcer, enteritis, gastritis and trachitis 3203.
- Treatment of bilious headache (vasomotor headache) 16675.
- Treatment of bilious headache and obstetric process 16808.
- Treatment of blood capillary ailments 19087.
- Treatment of bronchitis, scrofula, pulmonary tuberculosis and basal tuberculosis 13264.
- Treatment of cerebral thrombosis and atherosclerosis 21055.
- Treatment of chronic arrhythmia 5067.
- Treatment of chronic bronchitis 8312, 9315, 13610, 13611.
- Treatment of chronic bronchitis 18317.
- Treatment of cirrhosis with ascites 19819.
- Treatment of coronary heart disease 4889, 16525.
- Treatment of dermatitis 21434.
- Treatment of dermatosis and tinea 19187.
- Treatment of diabetic cataract 491.
- Treatment of diarrhea 22190.
- Treatment of diseases in lung and bronchus 7482.
- Treatment of dysentery 17862.
- Treatment of eczema 1599.
- Treatment of fever, diarrhea and diseases of the urinary system 822.
- Treatment of fig wart 17592.
- Treatment of gastric disorders 22564.
- Treatment of gastric hyperacidity 20341.
- Treatment of gastric ulcer 19388.
- Treatment of gastritis, ulcer, upper-respiratory tract infection, urethral infection, bronchitis, pneumonia, enteritis, bacillary dysentery and sepsis 3202.
- Treatment of glaucoma 17360, 21059.
- Treatment of glaucoma and myoparalysis 7381.
- Treatment of gout 10913.
- Treatment of headache and diseases of nasal cavity 13392.
- Treatment of headache, neuralgia, itching, respiratory tract inflammation, atrophic rhinitis and celostomia (alalia) 13774.
- Treatment of heart failure and auricular arrhythmia 15038.
- Treatment of heart failure and breathing inhibition 18637.
- Treatment of hepatic coma and constipation 12440.
- Treatment of hepatic edema 21310.
- Treatment of hepatic insufficiency 2538.
- Treatment of hepatitis 13481, 19819, 19895, 19897, 22975.
- Treatment of Hodgkin's disease, chorion cancer, lymphatic sarcoma 22487.
- Treatment of hypertension and angina pectoris 18180.
- Treatment of hypertension and rheumatism 21887.
- Treatment of hypertension and tachycardia caused by smoking 4873.
- Treatment of hypertension, bronchial asthma, ulcer of digestive tract, and chronic enteritis 21511.
- Treatment of hypertensive 18826.
- Treatment of hypoprothrombinemia disease 22562.
- Treatment of impotence 12291, 12292.
- Treatment of infant bacillary dysentery 7942.
- Treatment of infection from hepatitis virus 18599.
- Treatment of infection of respiratory tract, urethra, digestive tract and wounds 18270.
- Treatment of infectious diseases of respiratory tract and intestinal tract 4876.
- Treatment of leprosy 828, 829, 830, 831.
- Treatment of liver coma 1673.
- Treatment of maladjustment of blood capillary permeability 13502.
- Treatment of megaloblastic anemia due to lack of folic acid 7852.
- Treatment of menopathy and female climacteric syndrome 7386.
- Treatment of mental disorder 1039.
- Treatment of muscle rigidity and Parkinson's disease 21372.
- Treatment of myasthenia gravis 15396.
- Treatment of myocardial infarction 11851.
- Treatment of myocardial ischemia and myocardial infarction 20686.
- Treatment of neurasthenic syndrome 1609.
- Treatment of neurosis 1608.
- Treatment of neurosis and gastrointestinal diseases 7517.
- Treatment of newborn asphyxia, toxicosis from opium, barbital, carbon monoxide, and respiratory failure induced by pneumonia and diphtheria 12939.
- Treatment of pediatric gastrointestinal functional disorder 17886.
- Treatment of pellagrosis, stomatitis and glossitis 15526.
- Treatment of pile 19070.
- Treatment of post-palsy paralysis 19587.
- Treatment of post-partum uterus bleeding 7240.
- Treatment of primary hypertension 20324.
- Treatment of psoriasis, rheumatic arthritis and leukemia 22011.

- Treatment of renal insufficiency** 12018.
- Treatment of restless extrapyramidal dyskinesia** 20324.
- Treatment of rheumatism and neuralgia** 19542, 19545.
- Treatment of rheumatic arthritis** 22487.
- Treatment of rheumatic arthritis** 1928.
- Treatment of rheumatic arthritis and asthma** 5135.
- Treatment of rheumatic heart disease and coronary heart disease**  
4543.
- Treatment of rheumatism and paralysis** 3361.
- Treatment of schistosomiasis** 9339.
- Treatment of seasickness and carsickness** 10870.
- Treatment of sexual immaturity and learning disability** 3753.
- Treatment of silicosis** 21206.
- Treatment of skin disease** 1293, 1332, 13223, 17347, 17486, 17491.
- Treatment of skin disease, hepatitis, and inflammation** 7997.
- Treatment of some kidney disorders and relieve intracranial pressure in brain injuries** 13504.
- Treatment of sterilitas virilis** 13212.
- Treatment of stroke** 17978.
- Treatment of suppurated wound, burn, and skin infection** 22282.
- Treatment of terror, anxiety and melancholy** 8524.
- Treatment of tinea and sarcoptidosis** 13246, 13247.
- Treatment of trachitis** 21508.
- Treatment of trachitis and dysentery** 22151, 22153.
- Treatment of trachitis, antitussive** 12020.
- Treatment of tympanitis, onychia lateralis, viral herpes, burn infection, suppurative amygdalitis and enteritis** 20444.
- Treatment of ulcer** 11295.
- Treatment of ulcer of digestive tract** 17546.
- Treatment of urethral infection** 834.
- Treatment of vascular headache and bilious headache** 20324.
- Treatment of ventricular tachycardia** 20133.
- Trehalase inhibitor** 2792, 7437.
- Tremorigenic agent** 20016.
- Trypsase inhibitor** 20009.
- Trypsase inhibitor inactive** 9561.
- TXA<sub>2</sub> formation inhibitor** 3794.
- TXB<sub>2</sub> formation inhibitor** 3981, 12766, 19259.
- Tyrosinase inhibitor** 577, 618, 1091, 1618, 2380, 3567, 3829, 3831, 4249, 4251, 4254, 4260, 4262, 4263, 4264, 6700, 6870, 8673, 10054, 10626, 10807, 11656, 12252, 12280, 12341, 12341, 12343, 12344, 12355, 12358, 12361, 12365, 12366, 12367, 12510, 12847, 13097, 14452, 14511, 14802, 14868, 15206, 15526, 15769, 16897, 18064, 18065, 18066, 18067, 18068, 18069, 18169, 19983, 20086, 21905, 21967, 22237.
- Tyrosinase inhibitor inactive** 508, 571, 572, 573, 574, 575, 5008, 5783, 20501.
- Tyrosine kinase inhibitor** 2102, 2106, 3811, 6091, 10638, 17169, 20009, 22718, 22720.
- UDP-MurNac synthesis inhibitor** 1635, 1636, 1637.
- Uncoupling action** 16024.
- Up-regulation of vascular endothelial growth factor (VEGF) and its receptors VEGF-R1, VEGF-R2 gene** 19202.
- Urease inhibitor** 9740, 15216, 20528.
- Uricosuric** 2004.
- Used to research of  $\gamma$ -radiation** 16929.
- Used to resist aridity in agriculture** 13084.
- Vanilloid receptor activator** 19081.
- Vasoconstriction inhibitor** 893, 894, 896, 4545, 5750, 8913, 8914.
- Vasoconstriction inhibitor, in artery** 15704.
- Vasoconstrictor** 514, 2726, 4381, 5445, 6303, 6815, 7232, 7234, 7243, 9335, 15253, 15708, 15875, 17028, 17370, 17953, 18024, 19819, 20100, 22144, 22237.
- Vasodilator** 1048, 1275, 1658, 2300, 2303, 2734, 3588, 4543, 4544, 4873, 5707, 6677, 6691, 8010, 8290, 8423, 8424, 8426, 8427, 8430, 8808, 8989, 9568, 10870, 11002, 11680, 11834, 11834, 12574, 13237, 13260, 13261, 13262, 14949, 14950, 15002, 15003, 15321, 15528, 15704, 15705, 16263, 16439, 16867, 17283, 18651, 19081, 19540, 20275, 20510, 20575, 21055, 21239, 21877, 22489, 22552.
- Vasodilator inactive** 1271, 1272, 8507, 14732.
- Vasodilator, cerebral** 8989, 21055.
- Vasodilator, coronary** 784, 1275, 2298, 2796, 3633, 4108, 4630, 4889, 6507, 7334, 7945, 11648, 12221, 12747, 13836, 15129, 16080, 16525, 16759, 17036, 17278, 17968, 18165, 18180, 18317, 19227, 19540, 21310, 21312, 21511.
- Vasodilator, coronary and cerebral** 783.
- Vasodilator, coronary, cerebral and peripheral** 5067.
- Vasodilator, peripheral** 4543, 4544, 11002, 15528, 21055.
- Vasorelaxant** 1030, 2300, 2303, 3795, 5135, 8251, 13573, 13574, 15278, 19761.
- Vasorelaxant, inhibits inward flow of calcium, increase cGMP** 5135.
- Vesicant** 1179, 22146.
- VHR DS-PTPase inhibitor** 10035, 10036.
- VRI receptor antagonist** 843.
- Vulnerary** 21511.
- Xanthine oxidase inhibitor** 3490, 4055, 5212, 6757, 6758, 8095, 13428, 13429, 14099, 15451, 15457, 17985, 17986, 17991, 18317, 19347, 19348.
- Xanthinoxidase inhibitor** 1497, 2102, 3602, 6095, 6096, 6769, 8844, 11266, 12766, 12767, 12771, 12987, 13145, 15715, 17895, 18323, 18361, 18368, 20515, 21054, 21634, 22718.



# Compound Molecular Formula Index

The Molecular Formula Index lists the molecular formulae of all 23033 isolated compounds from TCM plants and their congeners given in the encyclopedia in Hill convention order. Under a bold formula, main names of all related compounds lists in alphabetical order and the compound code number follows the name immediately.

<b>CHN</b>	<b>C<sub>2</sub>H<sub>6</sub>N<sub>2</sub>O<sub>2</sub></b>	Dithiocyclopentene, 6524
Hydrocyanic acid, 9717	Methylazoxymethanol, 14151	<b>C<sub>3</sub>H<sub>5</sub>NOS</b>
<b>CH<sub>2</sub>O</b>	<b>C<sub>2</sub>H<sub>6</sub>O<sub>2</sub></b>	2-Oxazolidinethione, 16286
Formaldehyde, 7881	Glycol, 8826	<b>C<sub>3</sub>H<sub>6</sub>O</b>
<b>CH<sub>2</sub>O<sub>2</sub></b>	<b>C<sub>2</sub>H<sub>6</sub>O<sub>2</sub>S</b>	2-Hydroxy-propylene, 10663
Formic acid, 7882	Dimethyl sulfone, 6408	Propionaldehyde, 17930
<b>CH<sub>4</sub>N<sub>2</sub>O</b>	<b>C<sub>2</sub>H<sub>6</sub>S</b>	<b>C<sub>3</sub>H<sub>6</sub>OS</b>
Urea, 22246	Dimethyl sulfide, 6407	Propanethial <i>S</i> -oxide, 17912
<b>CH<sub>4</sub>S</b>	<b>C<sub>2</sub>H<sub>6</sub>S<sub>2</sub></b>	<b>C<sub>3</sub>H<sub>6</sub>O<sub>2</sub></b>
Methyl mercaptan, 14581	Dimethyl disulfide, 6342	Methylacetate, 14111
<b>CH<sub>5</sub>N</b>	<b>C<sub>2</sub>H<sub>6</sub>S<sub>3</sub></b>	Propionic acid, 17931
Methylamine, 14133	Dimethyl trisulfide, 6417	<b>C<sub>3</sub>H<sub>6</sub>O<sub>3</sub></b>
<b>CH<sub>5</sub>N<sub>3</sub></b>	<b>C<sub>2</sub>H<sub>6</sub>S<sub>4</sub></b>	Dihydroxyacetone, 5748
Guanidine, 9067	Dimethyl tetrasulfide, 6414	Lactic acid, 12436
<b>C<sub>2</sub>H<sub>2</sub>O<sub>2</sub></b>	<b>C<sub>2</sub>H<sub>7</sub>N</b>	<b>C<sub>3</sub>H<sub>6</sub>O<sub>4</sub></b>
Glyoxal, 8849	Ethylamine, 7420	<i>D</i> -Glyceric acid, 8806
<b>C<sub>2</sub>H<sub>2</sub>O<sub>4</sub></b>	<b>C<sub>2</sub>H<sub>7</sub>NO</b>	<b>C<sub>3</sub>H<sub>6</sub>S<sub>4</sub></b>
Oxalic acid, 16285	Ethanolamine, 7390	5-Methyl-1,2,3,4-tetrathiane, 14755
<b>C<sub>2</sub>H<sub>3</sub>NS</b>	<b>C<sub>2</sub>H<sub>7</sub>NO<sub>3</sub></b>	<b>C<sub>3</sub>H<sub>7</sub>NO<sub>2</sub></b>
Methyl isothiocyanate, 14539	Taurine, 20732	<i>L</i> -Alanine, 832
<b>C<sub>2</sub>H<sub>4</sub>O</b>	<b>C<sub>3</sub>H<sub>4</sub>O<sub>2</sub></b>	<i>β</i> -Alanine, 833
Ethyl aldehyde, 7419	Acrylic acid, 578	Sarcosine, 19360
<b>C<sub>2</sub>H<sub>4</sub>O<sub>3</sub></b>	Methylglyoxal, 14475	<b>C<sub>3</sub>H<sub>7</sub>NO<sub>3</sub></b>
Glycolic acid, 8827	<b>C<sub>3</sub>H<sub>4</sub>O<sub>3</sub></b>	( <i>S</i> )-Serine, 19759
<b>C<sub>2</sub>H<sub>5</sub>NO</b>	Pyruvic acid, 18281	<b>C<sub>3</sub>H<sub>8</sub>N<sub>2</sub>O<sub>2</sub></b>
Acetamide, 109	<b>C<sub>3</sub>H<sub>4</sub>O<sub>4</sub></b>	<i>α,β</i> -Diaminopropionic acid, 5352
<b>C<sub>2</sub>H<sub>5</sub>NO<sub>2</sub></b>	Malonic acid, 13439	<b>C<sub>3</sub>H<sub>8</sub>O</b>
Glycine, 8817	<b>C<sub>3</sub>H<sub>4</sub>S<sub>2</sub></b>	<i>n</i> -Propanol, 17916

- C<sub>3</sub>H<sub>8</sub>O<sub>3</sub>**  
Glycerol, 8808
- C<sub>3</sub>H<sub>8</sub>S**  
Propane-1-thiol, 17913  
Propane-2-thiol, 17914
- C<sub>3</sub>H<sub>9</sub>N**  
Propylamine, 17935  
Trimethylamine, 21939
- C<sub>3</sub>H<sub>9</sub>NO**  
Trimethylamine oxide, 21940
- C<sub>4</sub>H<sub>4</sub>N<sub>2</sub>O<sub>2</sub>**  
Uracil, 22237
- C<sub>4</sub>H<sub>4</sub>O<sub>4</sub>**  
Fumaric acid, 7996
- C<sub>4</sub>H<sub>4</sub>O<sub>5</sub>**  
Oxalacetic acid, 16284
- C<sub>4</sub>H<sub>5</sub>ClO<sub>2</sub>**  
Methyl 2-chloropropenoate, 14225
- C<sub>4</sub>H<sub>5</sub>NO<sub>2</sub>**  
Pyrrolidine-2,5-dione, 18277
- C<sub>4</sub>H<sub>5</sub>NS**  
Allyl isothiocyanate, 949  
Allylthiocyanate, 956
- C<sub>4</sub>H<sub>5</sub>O<sub>4</sub>N<sub>3</sub>**  
(2,5-Dioxo-4-imidazolidinyl)carbamic acid, 6472
- C<sub>4</sub>H<sub>6</sub>N<sub>2</sub>O<sub>2</sub>**  
*L*-β-Cyanoalanine, 4452  
5-Methyl hydantoin, 14494
- C<sub>4</sub>H<sub>6</sub>N<sub>4</sub>O<sub>3</sub>**  
Allantoin, 917
- C<sub>4</sub>H<sub>6</sub>O<sub>2</sub>**  
Crotonic acid, 4271
- C<sub>4</sub>H<sub>6</sub>O<sub>2</sub>S**  
Thioacetic anhydride, 21332
- C<sub>4</sub>H<sub>6</sub>O<sub>4</sub>**  
Succinic acid, 20444  
Threono-1,4-lactone, 21343
- C<sub>4</sub>H<sub>6</sub>O<sub>5</sub>**  
Malic acid, 13419
- C<sub>4</sub>H<sub>6</sub>O<sub>6</sub>**  
Tartaric acid, 20715
- C<sub>4</sub>H<sub>6</sub>S**  
Divinyl sulfide, 6531
- C<sub>4</sub>H<sub>6</sub>S<sub>2</sub>**  
3-Methyl-1,2-dithia-3-cyclopentene, 14327  
4-Methyl-1,2-dithio-3-cyclopentene, 14328  
5-Methyl-1,2-dithio-3-cyclopentene, 14329
- C<sub>4</sub>H<sub>7</sub>NOS**  
*trans*-3-Methylthioacrylamide, 14758
- C<sub>4</sub>H<sub>7</sub>NO<sub>2</sub>**  
Azetidine-2-carboxylic acid, 2057
- C<sub>4</sub>H<sub>7</sub>NO<sub>4</sub>**  
*N*-Acetyl-*N*-hydroxy-2-carbamic acid methyl ester, 413  
*L*-Aspartic acid, 1886
- C<sub>4</sub>H<sub>7</sub>NO<sub>5</sub>**  
*erythro*-β-Hydroxy-*L*-aspartic acid, 9804
- C<sub>4</sub>H<sub>7</sub>NS**  
Isopropyl isothiocyanate, 11625
- C<sub>4</sub>H<sub>7</sub>N<sub>3</sub>O**  
Creatinine, 4223  
1,5-Dihydro-1-methyl-2-amino-imidazol-4-one, 5674
- C<sub>4</sub>H<sub>8</sub>N<sub>2</sub>O<sub>3</sub>**  
*L*-Asparagine, 1866
- C<sub>4</sub>H<sub>8</sub>N<sub>4</sub>O<sub>4</sub>**  
Allantoic acid, 916
- C<sub>4</sub>H<sub>8</sub>O**  
Allylcarbinol, 943  
*n*-Butylaldehyde, 2787  
Isobutanal, 11267
- C<sub>4</sub>H<sub>8</sub>O<sub>2</sub>**  
Acetoin, 111  
Butyric acid, 2808  
Ethyl acetate, 7418  
Isobutyric acid, 11290
- C<sub>4</sub>H<sub>8</sub>O<sub>2</sub>S**  
*trans*-3-Methylsulfinyl-2-propenol, 14729
- C<sub>4</sub>H<sub>8</sub>O<sub>3</sub>S**  
*trans*-3-Methylsulfonyl-2-propenol, 14731
- C<sub>4</sub>H<sub>8</sub>O<sub>4</sub>**  
(3*S*),4-Dihydroxybutyric acid, 5783
- C<sub>4</sub>H<sub>8</sub>O<sub>5</sub>**  
(*D*)-Threonic acid, 21340  
(*L*)-Threonic acid, 21341
- C<sub>4</sub>H<sub>8</sub>OS<sub>2</sub>**  
Methyl allyl thiosulfinate, 14128  
Methyl-1-propenyl thiosulfinate, 14690
- C<sub>4</sub>H<sub>8</sub>S**  
Methyl allyl sulfide, 14127
- C<sub>4</sub>H<sub>8</sub>S<sub>2</sub>**  
Methyl allyl disulfide, 14126
- C<sub>4</sub>H<sub>8</sub>S<sub>3</sub>**  
Allyl methyl trisulfide, 952  
4-Methyl-1,2,3-trithiane, 14793
- C<sub>4</sub>H<sub>8</sub>S<sub>4</sub>**  
Allyl methyl tetrasulfide, 951
- C<sub>4</sub>H<sub>8</sub>S<sub>5</sub>**  
Allyl methyl pentasulfide, 950
- C<sub>4</sub>H<sub>9</sub>N**  
Pyrrolidine, 18275
- C<sub>4</sub>H<sub>9</sub>NO<sub>2</sub>**  
α-Aminobutyric acid, 1046  
β-Aminobutyric acid, 1047  
γ-Aminobutyric acid, 1048  
Aminoisobutyric acid, 1055
- C<sub>4</sub>H<sub>9</sub>NO<sub>2</sub>S**  
*L*-Homocysteine, 9601  
*S*-Methyl cysteine, 14277
- C<sub>4</sub>H<sub>9</sub>NO<sub>2</sub>S<sub>2</sub>**  
*S*-Methyl mercapto-*L*-cysteine, 14582
- C<sub>4</sub>H<sub>9</sub>NO<sub>2</sub>Se**  
Se-Methyl-*L*-selenocysteine, 19691
- C<sub>4</sub>H<sub>9</sub>NO<sub>3</sub>**  
*L*-Homoserine, 9620  
Threonine, 21342
- C<sub>4</sub>H<sub>9</sub>NO<sub>3</sub>S**  
*S*-Methyl-*L*-cysteine sulfoxide, 14278
- C<sub>4</sub>H<sub>9</sub>NO<sub>4</sub>**  
α-Hydroxymethylserine, 10521
- C<sub>4</sub>H<sub>9</sub>N<sub>3</sub>O<sub>2</sub>**  
Creatine, 4221
- C<sub>4</sub>H<sub>9</sub>N<sub>3</sub>O<sub>3</sub>**  
*L*-Albizziine, 862
- C<sub>4</sub>H<sub>9</sub>O<sub>4</sub>**  
Methyl (*S*)-glycerate, 14473
- C<sub>4</sub>H<sub>10</sub>N<sub>2</sub>O<sub>2</sub>**  
2,3-Diaminobutyric acid, 5350  
*L*-α,γ-Diaminobutyric acid, 5351  
3-Methylamino-*L*-alanine, 14134
- C<sub>4</sub>H<sub>10</sub>N<sub>2</sub>O<sub>3</sub>**  
Canaline, 3059
- C<sub>4</sub>H<sub>10</sub>N<sub>3</sub>O<sub>5</sub>P**  
Creatine phosphoric acid, 4222
- C<sub>4</sub>H<sub>10</sub>O**  
Isobutyl alcohol, 11268
- C<sub>4</sub>H<sub>10</sub>O<sub>3</sub>**  
1-Deoxy-*L*-erythritol, 5171
- C<sub>4</sub>H<sub>10</sub>O<sub>4</sub>**  
Erythritol, 7334  
(*D*)-Threitol, 21339
- C<sub>4</sub>H<sub>10</sub>S**  
Diethyl sulfide, 5503
- C<sub>4</sub>H<sub>10</sub>S<sub>2</sub>**  
Methyl propyl disulfide, 14691
- C<sub>4</sub>H<sub>10</sub>S<sub>3</sub>**  
Methyl propyl trisulfide, 14694
- C<sub>4</sub>H<sub>12</sub>N<sub>2</sub>**  
Putrescine, 18230
- C<sub>5</sub>H<sub>4</sub>Cl<sub>2</sub>N<sub>2</sub>**  
2,4-Dichloro-6-aminopyridine, 5418
- C<sub>5</sub>H<sub>4</sub>N<sub>2</sub>O<sub>4</sub>**  
Orotic acid, 16214
- C<sub>5</sub>H<sub>4</sub>N<sub>4</sub>**  
Purine, 18209
- C<sub>5</sub>H<sub>4</sub>N<sub>4</sub>O**  
Hypoxanthine, 10913
- C<sub>5</sub>H<sub>4</sub>N<sub>4</sub>O<sub>2</sub>**  
Xanthine, 22756

- C<sub>5</sub>H<sub>4</sub>O<sub>2</sub>**  
Anemonol, 1179  
2-Furaldehyde, 8011
- C<sub>5</sub>H<sub>4</sub>O<sub>3</sub>**  
2-Furancarboxylic acid, 8012  
Pyromeconic acid, 18271
- C<sub>5</sub>H<sub>5</sub>NO**  
Pyrrole-2-aldehyde, 18274
- C<sub>5</sub>H<sub>5</sub>NO<sub>2</sub>**  
2-Minaline, 14870
- C<sub>5</sub>H<sub>5</sub>NO<sub>3</sub>**  
Codopiloic acid, 3887
- C<sub>5</sub>H<sub>5</sub>N<sub>5</sub>**  
Adenine, 617
- C<sub>5</sub>H<sub>5</sub>N<sub>5</sub>O**  
Guanine (1,7-Dihydro-form), 9070  
Isoguanine, 11448
- C<sub>5</sub>H<sub>6</sub>KN<sub>3</sub>O<sub>5</sub>**  
Potassium quisqualate, 17746
- C<sub>5</sub>H<sub>6</sub>N<sub>2</sub>O<sub>2</sub>**  
1-Imidazolylacetic acid, 10997  
5-Methyluracil, 14802
- C<sub>5</sub>H<sub>6</sub>N<sub>2</sub>O<sub>4</sub>**  
Ibotenic acid, 10938
- C<sub>5</sub>H<sub>6</sub>N<sub>4</sub>O<sub>3</sub>**  
Uric acid, 22251
- C<sub>5</sub>H<sub>6</sub>O<sub>2</sub>**  
Furfuryl alcohol, 8025  
Tulipalin, 22102
- C<sub>5</sub>H<sub>6</sub>O<sub>3</sub>**  
*β*-Hydroxy-*α*-methylene-*γ*-butyllactone, 10488
- C<sub>5</sub>H<sub>6</sub>O<sub>4</sub>**  
Mesaconic acid, 13793
- C<sub>5</sub>H<sub>6</sub>S<sub>3</sub>**  
4-Vinyl-1,2,3-trithia-4-cyclohexene, 22518
- C<sub>5</sub>H<sub>7</sub>NOS**  
1-Thiocyanato-2-hydroxy-3-butene, 21334  
L-5-Vinyl-2-thiooxazolidone, 22517
- C<sub>5</sub>H<sub>7</sub>NO<sub>2</sub>**  
1-Cyano-2-hydroxymethylprop-1-ene-3-ol, 4453  
1-Cyano-2-hydroxymethylprop-2-ene-1-ol, 4454  
Jatropham, 11842
- C<sub>5</sub>H<sub>7</sub>NO<sub>3</sub>**  
Pyroglutamic acid, 18266
- C<sub>5</sub>H<sub>7</sub>NS**  
3-Butenyl isothiocyanate, 2782
- C<sub>5</sub>H<sub>7</sub>N<sub>3</sub>O<sub>5</sub>**  
Quisqualic acid, 18452
- C<sub>5</sub>H<sub>8</sub>N<sub>2</sub>O**  
2-4'-Imidazolethanol, 10998
- C<sub>5</sub>H<sub>8</sub>N<sub>2</sub>O<sub>2</sub>**  
Squamolone, 20243
- C<sub>5</sub>H<sub>8</sub>N<sub>2</sub>O<sub>4</sub>**
- Tricholomic acid, 21562
- C<sub>5</sub>H<sub>8</sub>N<sub>2</sub>O<sub>5</sub>**  
*L*-*α*-Amino-*β*-oxalylaminopropionic acid, 1058  
(*S*)-Dencichine, 5105
- C<sub>5</sub>H<sub>8</sub>O**  
3-Methyl-3-butenone, 14177  
Tiglaldehyde, 21370
- C<sub>5</sub>H<sub>8</sub>O<sub>2</sub>**  
Angelica acid, 1188  
Tiglic acid, 21371
- C<sub>5</sub>H<sub>8</sub>O<sub>3</sub>**  
Levulinic acid, 12735
- C<sub>5</sub>H<sub>8</sub>O<sub>4</sub>**  
Capilliplactone, 3123  
2-Deoxy-*D*-ribono-1,4-lactone, 5209  
2,3-Dihydroxy-2-methyl-butylolactone, 6027  
Glutaric acid, 8784
- C<sub>5</sub>H<sub>9</sub>NO**  
4-Pentenamide, 16887
- C<sub>5</sub>H<sub>9</sub>NOS<sub>2</sub>**  
3-Methylsulfinyl propyl isothiocyanate, 14730
- C<sub>5</sub>H<sub>9</sub>NO<sub>2</sub>**  
*γ*-Amino-*α*-methylene butyric acid, 1056  
Proline, 17905  
Pterolactam, 18112  
Pyrrolidine carboxylic acid, 18276
- C<sub>5</sub>H<sub>9</sub>NO<sub>3</sub>**  
*cis*-4-Hydroxyproline, 10659  
3-Hydroxyproline, 10660  
*trans*-4-Hydroxyproline, 10661
- C<sub>5</sub>H<sub>9</sub>NO<sub>3</sub>S**  
1,4-Thiazane-3-carboxylic acid *S*-oxide, 21330
- C<sub>5</sub>H<sub>9</sub>NO<sub>5</sub>**  
3-Amino-2-hydroxy pentanedioic acid, 1052  
*γ*-Hydroxy glutaminic acid, 10151
- C<sub>5</sub>H<sub>9</sub>NS**  
Butyl isothiocyanate, 2798  
*sec*-Butyl isothiocyanate, 2799
- C<sub>5</sub>H<sub>9</sub>NS<sub>2</sub>**  
3-Methylthiopropyl isothiocyanate, 14762
- C<sub>5</sub>H<sub>9</sub>N<sub>3</sub>**  
Histamine, 9568
- C<sub>5</sub>H<sub>10</sub>**  
2-Methyl-2-butene, 14173
- C<sub>5</sub>H<sub>10</sub>N<sub>2</sub>O<sub>2</sub>**  
Cucurbitine, 4329
- C<sub>5</sub>H<sub>10</sub>N<sub>4</sub>O<sub>4</sub>**  
3-Acetyl-5-carbomethoxy-2*H*-3,4,5,6-tetrahydro-1-oxa-2,3,5,6-tetrazine, 345
- C<sub>5</sub>H<sub>10</sub>O**  
Isovaleraldehyde, 11752  
3-Methyl butanone, 14163  
2-Methylbut-3-en-2-ol, 14176
- Pentanal, 16876  
1-Penten-3-ol, 16889
- C<sub>5</sub>H<sub>10</sub>O<sub>2</sub>**  
Ethylpropionate, 7475  
Isovaleric acid, 11754  
2-Methyl butyric acid, 14186  
Pentanic acid, 16884
- C<sub>5</sub>H<sub>10</sub>O<sub>3</sub>**  
(*R*)-Artabotriol, 1775  
Nilic acid, 15597
- C<sub>5</sub>H<sub>10</sub>O<sub>5</sub>**  
Apiose, 1521  
Ribose, 18837  
Xylose, 22843
- C<sub>5</sub>H<sub>11</sub>N**  
Piperidine, 17450
- C<sub>5</sub>H<sub>11</sub>NO**  
Pentaldehyde oxime, 16862
- C<sub>5</sub>H<sub>11</sub>NO<sub>2</sub>**  
Betaine, 2318  
*N,N*-Dimethyl glycine methyl ester, 6353  
Norvaline, 15814  
2-*N*-Propyl-1,3-dioxolane, 17938  
Valine, 22324
- C<sub>5</sub>H<sub>11</sub>NO<sub>2</sub>S**  
Methionine, 13823
- C<sub>5</sub>H<sub>11</sub>NO<sub>3</sub>**  
*L*-*α*-Amino-*δ*-hydroxyvaleric acid, 1054  
1,4-Dideoxy-1,4-imino-arabinitol, 5475  
Mesotrihydroxypiperidine, 13803  
*α*-Oxyvaline, 16480  
*β*-Oxyvaline, 16481  
3*β*,4*β*,5*α*-Trihydroxypiperidine, 21838
- C<sub>5</sub>H<sub>11</sub>NO<sub>3</sub>S**  
Methionine sulfoxide, 13824
- C<sub>5</sub>H<sub>11</sub>NO<sub>5</sub>S**  
*D*-Rhodoic acid, 18798
- C<sub>5</sub>H<sub>11</sub>NS<sub>2</sub>**  
Nereistoxin, 15490
- C<sub>5</sub>H<sub>11</sub>N<sub>3</sub>O<sub>2</sub>**  
*γ*-Guanidinobutyric acid, 9069
- C<sub>5</sub>H<sub>11</sub>O<sub>2</sub>S<sup>+</sup>**  
Dimethyl-*β*-propriotheatin, 6400
- C<sub>5</sub>H<sub>12</sub>N<sub>2</sub>O<sub>2</sub>**  
Ornithine, 16208
- C<sub>5</sub>H<sub>12</sub>N<sub>4</sub>O<sub>3</sub>**  
Canavanine, 3063
- C<sub>5</sub>H<sub>12</sub>O**  
Isoamyl alcohol, 11218  
2-Methyl-1-butanol, 14162  
Pentanol, 16885
- C<sub>5</sub>H<sub>12</sub>O<sub>2</sub>**  
1,5-Pentadiol, 16835

- C<sub>5</sub>H<sub>12</sub>O<sub>4</sub>**  
 1-Deoxy-*L*-arabinitol, 5154  
 1-Deoxy-*D*-lyxitol, 5192  
 1-Deoxy-*D*-ribitol, 5207  
 2-Deoxy-*D*-ribitol, 5208  
 1-Deoxy-*D*-xylitol, 5220  
 2-*C*-Methyl-*D*-erythritol, 14419
- C<sub>5</sub>H<sub>12</sub>O<sub>5</sub>**  
 Adonitol, 645  
*D*-Arabitol, 1596  
 (3*R*)-2-Hydroxymethylbutane-1,2,3,4-tetrol, 10471  
 Ribitol, 18832
- C<sub>5</sub>H<sub>12</sub>S**  
 Ethylisopropyl sulfide, 7454
- C<sub>5</sub>H<sub>13</sub>N**  
 Isoamylamine, 11219
- C<sub>5</sub>H<sub>13</sub>NO**  
 Neurine, 15516
- C<sub>5</sub>H<sub>13</sub>N<sub>3</sub>O**  
 4-Guanidino-1-butanol, 9068
- C<sub>5</sub>H<sub>14</sub>NO<sup>+</sup>**  
 Choline, 3589
- C<sub>5</sub>H<sub>14</sub>N<sub>2</sub>**  
 Cadaverine, 2845
- C<sub>5</sub>H<sub>14</sub>N<sub>4</sub>**  
 Agmatine, 749
- C<sub>5</sub>H<sub>14</sub>O<sub>22</sub>P<sub>6</sub>**  
 3,4-*trans*-(*erythro*)-3,5-Bis(tripolyphosphate)-4-pentanolide, 2494
- C<sub>6</sub>H<sub>3</sub>N<sub>3</sub>O<sub>7</sub>**  
 Picric acid, 17328
- C<sub>6</sub>H<sub>4</sub>O<sub>2</sub>**  
 Quinone, 18426
- C<sub>6</sub>H<sub>5</sub>NO<sub>2</sub>**  
 Nicotinic acid, 15528
- C<sub>6</sub>H<sub>6</sub>N<sub>2</sub>O**  
 Nicotinamide, 15526
- C<sub>6</sub>H<sub>6</sub>N<sub>2</sub>O<sub>2</sub>**  
 Urocanic acid, 22260
- C<sub>6</sub>H<sub>5</sub>N<sub>5</sub>O**  
 2-Amino-6-hydroxypteridine, 1053
- C<sub>6</sub>H<sub>5</sub>N<sub>5</sub>O<sub>2</sub>**  
 Isoxanthopterin, 11784  
 Xanthopterin, 22772
- C<sub>6</sub>H<sub>6</sub>O**  
 Phenol, 17089
- C<sub>6</sub>H<sub>6</sub>O<sub>2</sub>**  
 Catechol, 3318  
 Hydroquinone, 9740  
 $\alpha$ -Methylfurfural, 14450  
 Resorcinol, 18641
- C<sub>6</sub>H<sub>6</sub>O<sub>3</sub>**  
 5-Hydroxymethyl furaldehyde, 10493  
 4-Hydroxymethyl-2-furaldehyde, 10494  
 Maltol, 13452  
 5-Methoxyfuraldehyde, 13931  
 Phloroglucinol, 17174  
 Pyrogallol, 18265
- C<sub>6</sub>H<sub>6</sub>O<sub>4</sub>**  
 5-(Hydroxymethyl)-furan-2-carboxylic acid, 10495  
 Kojic acid, 12252
- C<sub>6</sub>H<sub>6</sub>O<sub>6</sub>**  
*cis*-Aconitic acid, 552  
*trans*-Aconitic acid, 553  
 Dehydroascorbic acid, 4879
- C<sub>6</sub>H<sub>7</sub>NO**  
*m*-Aminophenol, 1059  
*o*-Aminophenol, 1060  
*p*-Aminophenol, 1061  
 3-Hydroxy-2-methylpyridine, 10520  
 3-Methoxypyridine, 14081  
 Pyridin-3-yl-methanol, 18259  
 Pyrrolyl- $\alpha$ -methyl ketone, 18279
- C<sub>6</sub>H<sub>7</sub>NO<sub>2</sub>**  
 5-Hydroxy-2-pyridinemethanol, 10669
- C<sub>6</sub>H<sub>7</sub>NO<sub>3</sub>**  
 Gentianaine, 8293
- C<sub>6</sub>H<sub>7</sub>NO<sub>3</sub>S**  
 Sulfanilic acid, 20467
- C<sub>6</sub>H<sub>8</sub>N<sub>2</sub>O<sub>2</sub>**  
 Imidazolylpropionic acid, 10999
- C<sub>6</sub>H<sub>8</sub>O<sub>2</sub>**  
 Parasorbic acid, 16657
- C<sub>6</sub>H<sub>8</sub>O<sub>3</sub>**  
 5*R*,6*S*-Osmundalactone, 16255
- C<sub>6</sub>H<sub>8</sub>O<sub>6</sub>**  
 Ascorbic acid, 1845
- C<sub>6</sub>H<sub>8</sub>O<sub>7</sub>**  
 Citric acid, 3766  
 Isocitric acid, 11332  
 Isocitric acid b, 11333  
 Isocitric acid c, 11334  
 Isocitric acid d, 11335
- C<sub>6</sub>H<sub>8</sub>OS<sub>2</sub>**  
 3-Allyldisulfanyl-propenal, 947  
 2-Vinyl-1,3-dithia-4-cyclohexene-3-oxide, 22512  
 3-Vinyl-1,2-dithia-4-cyclohexene-2-oxide, 22514
- C<sub>6</sub>H<sub>8</sub>S**  
 6-Methyl-1-thio-2,4-cyclohexadiene, 14759
- C<sub>6</sub>H<sub>8</sub>S<sub>2</sub>**  
 2-Vinyl-1,3-dithia-4-cyclohexene, 22511  
 3-Vinyl-1,2-dithia-4-cyclohexene, 22513  
 3-Vinyl-1,2-dithia-5-cyclohexene, 22515
- C<sub>6</sub>H<sub>8</sub>S<sub>2</sub>O**  
 3-Vinyl-3,4-dihydro-1,2-dithiin-1-oxide, 22509
- C<sub>6</sub>H<sub>9</sub>NO**  
*trans*-3-Ethylidene-2-pyrrolidinone, 7451
- C<sub>6</sub>H<sub>9</sub>NOS<sub>2</sub>**  
 Raphanin, 18547
- C<sub>6</sub>H<sub>9</sub>NO<sub>2</sub>**  
*L*-Baikiain, 2108  
 Guvacine, 9092  
 $\alpha$ -(Methylenecyclopropyl) glycine, 14358  
 4-Methylene-*DL*-proline, 14390
- C<sub>6</sub>H<sub>9</sub>NO<sub>3</sub>**  
 Methyl pyroglutamate, 14709
- C<sub>6</sub>H<sub>9</sub>NO<sub>4</sub>**  
 $\gamma$ -Methylene glutamic acid, 14385
- C<sub>6</sub>H<sub>9</sub>NS**  
 4-Pentenyl isothiocyanate, 16888
- C<sub>6</sub>H<sub>9</sub>N<sub>3</sub>O<sub>2</sub>**  
 $\alpha$ -Amino- $\beta$ -(pyrazolyl-*N*)propionic acid, 1063  
*L*-Histidine, 9569
- C<sub>6</sub>H<sub>10</sub>**  
 Methylene cyclopentane, 14357
- C<sub>6</sub>H<sub>10</sub>MgO<sub>6</sub>**  
 Magnesium lactate, 13368
- C<sub>6</sub>H<sub>10</sub>N<sub>2</sub>O<sub>2</sub>**  
 Cyclo-(Ala-Ala), 4462
- C<sub>6</sub>H<sub>10</sub>N<sub>2</sub>O<sub>5</sub>**  
*L*- $\alpha$ -Amino- $\gamma$ -oxalylaminobutyric acid, 1057  
*L*-Glutamic acid- $\gamma$ -methylamide, 8769
- C<sub>6</sub>H<sub>10</sub>O**  
 (*E*)-2-Hexenal, 9519  
 Isomesityl oxide, 11535  
 Mesityl oxide, 13800  
 2-Methylcyclopentanone, 14275  
 2-Methyl-2-pentenal, 14662
- C<sub>6</sub>H<sub>10</sub>OS<sub>2</sub>**  
 Allicin, 920  
 1-Propenylallylthiosulfinate, 17919
- C<sub>6</sub>H<sub>10</sub>O<sub>2</sub>**  
*trans*-2-Hexenoic acid, 9521
- C<sub>6</sub>H<sub>10</sub>O<sub>3</sub>**  
 (+)-(3*R*)-3-Hydroxy-4,4-dimethyl-4-butylolactone, 10048
- C<sub>6</sub>H<sub>10</sub>O<sub>4</sub>**  
 Leucanthemitol, 12713  
 Methyl  $\beta$ , $\gamma$ -dihydroxy- $\alpha$ -methylene butylate, 14313  
 Methyl glutarate, 14471  
 Methyl 5-hydroxy-4-oxopentanoate, 14519
- C<sub>6</sub>H<sub>10</sub>O<sub>5</sub>**  
 3,6-Anhydrogalactose, 1268
- C<sub>6</sub>H<sub>10</sub>O<sub>7</sub>**  
*D*-Galacturonic acid, 8078  
 Glucuronic acid, 8761

- D*-Mannuronic acid, 13509
- C<sub>6</sub>H<sub>10</sub>O<sub>8</sub>**  
Mucic acid, 15007
- C<sub>6</sub>H<sub>10</sub>S**  
Allyl monosulfide, 953
- C<sub>6</sub>H<sub>10</sub>S<sub>2</sub>**  
Allyl disulfide, 948
- C<sub>6</sub>H<sub>10</sub>S<sub>3</sub>**  
Allitridin, 924
- C<sub>6</sub>H<sub>10</sub>S<sub>4</sub>**  
Diallyl tetrasulfide, 5349
- C<sub>6</sub>H<sub>11</sub>NOS**  
Cleomin, 3828
- C<sub>6</sub>H<sub>11</sub>NOS<sub>2</sub>**  
4-Methylsulfinyl butyl isothiocyanate, 14728  
Sulforathane, 20478
- C<sub>6</sub>H<sub>11</sub>NO<sub>2</sub>**  
6 $\zeta$ -Methoxypiperidin-2-one, 14071  
Pipelic acid, 17425
- C<sub>6</sub>H<sub>11</sub>NO<sub>2</sub>S**  
*S*-Allyl-*L*-cystein, 944  
Entadamide A, 6809  
*S*-(1-Propenyl)-*L*-cystein, 17921
- C<sub>6</sub>H<sub>11</sub>NO<sub>2</sub>S<sub>2</sub>**  
Erysoline, 7323
- C<sub>6</sub>H<sub>11</sub>NO<sub>3</sub>**  
*cis*-4-Hydroxymethylproline, 10518  
*trans*-4-Hydroxymethylproline, 10519  
Pegaline, 16767
- C<sub>6</sub>H<sub>11</sub>NO<sub>3</sub>S**  
Alliin, 921  
Entadamide C, 6810
- C<sub>6</sub>H<sub>11</sub>NO<sub>4</sub>**  
 $\alpha$ -Aminoadipic acid, 1040
- C<sub>6</sub>H<sub>11</sub>NO<sub>4</sub>S**  
*S*-(2-Carboxyethyl)-*L*-cysteine, 3171
- C<sub>6</sub>H<sub>11</sub>N<sub>3</sub>O<sub>3</sub>**  
 $\alpha$ -Keto- $\delta$ -guanidino-valeric acid, 12200
- C<sub>6</sub>H<sub>12</sub>**  
1-Hexene, 9520
- C<sub>6</sub>H<sub>12</sub>N<sub>2</sub>O**  
*N*-3-methyl-2-butenyl urea, 14184
- C<sub>6</sub>H<sub>12</sub>N<sub>2</sub>O<sub>3</sub>**  
Aminozone, 1064  
*n*-Butyl allophanate, 2788
- C<sub>6</sub>H<sub>12</sub>O**  
Hexanal, 9512  
 $\beta$ -Hexenol, 9522  
*trans*-2-Hexenol, 9523  
 $\gamma$ -Hexenol, 9524  
Methyl isobutyl ketone, 14529
- C<sub>6</sub>H<sub>12</sub>O<sub>2</sub>**  
Caproic acid, 3139
- Ethyl butyrate, 7423
- 2-Methanol tetrahydropyran, 13822
- 3-Methyl-1,2-cyclopentane-1,2-diol, 14274
- C<sub>6</sub>H<sub>12</sub>O<sub>4</sub>**  
Digitoxose, 5527
- C<sub>6</sub>H<sub>12</sub>O<sub>5</sub>**  
Methyl pentose I, 14665  
Methyl pentose II, 14666  
1-*O*-Methyl-*D*-xyloside, 14817  
2-*O*-Methyl-*D*-xyloside, 14818  
Polygalitol, 17636  
*D*-Quercitol, 18410  
Rhamnose, 18739  
Viburnitol, 22461
- C<sub>6</sub>H<sub>12</sub>O<sub>6</sub>**  
Cocositol, 3880  
Fructose, 7971  
Inositol, 11083  
Inositol b, 11084  
Inositol c, 11085  
Mannose, 13507  
Mannose-b, 13508  
Sorbitol, 20104
- C<sub>6</sub>H<sub>12</sub>O<sub>7</sub>**  
Gluconic acid, 8600
- C<sub>6</sub>H<sub>12</sub>S**  
3-[(1-Methylethyl)thio]-1-propene, 14436
- C<sub>6</sub>H<sub>12</sub>S<sub>2</sub>**  
Allyl propyl disulfide, 954  
Propenyl propyl disulfide, 17927
- C<sub>6</sub>H<sub>13</sub>N**  
*D*- $\alpha$ -Pipicoline, 17426
- C<sub>6</sub>H<sub>13</sub>NO<sub>2</sub>**  
Alloisoleucine, 935
- C<sub>6</sub>H<sub>13</sub>NO<sub>2</sub>S**  
Homomethionin, 9614  
*S*-Propyl-*L*-cystein, 17937
- C<sub>6</sub>H<sub>13</sub>NO<sub>3</sub>**  
**3-Epifagomine**, 6914  
Fagomine, 7705
- C<sub>6</sub>H<sub>13</sub>NO<sub>4</sub>**  
1-Deoxynojirimycin, 5198  
2,5-Dihydroxymethyl-3,4-dihydroxypyrrolidine,  
6028
- C<sub>6</sub>H<sub>13</sub>NO<sub>5</sub>**  
Galactosamine, 8076  
Glucosamine, 8753
- C<sub>6</sub>H<sub>13</sub>N<sub>3</sub>**  
Galegine, 8091
- C<sub>6</sub>H<sub>13</sub>N<sub>3</sub>O<sub>3</sub>**  
Citrulline, 3774
- C<sub>6</sub>H<sub>14</sub>NO<sub>2</sub>S<sup>+</sup>**  
Vitamin U, 22564
- C<sub>6</sub>H<sub>14</sub>N<sub>2</sub>O<sub>3</sub>**  
 $\delta$ -Hydroxylysine, 10357
- C<sub>6</sub>H<sub>14</sub>N<sub>4</sub>O<sub>2</sub>**  
*L*-Arginine, 1673
- C<sub>6</sub>H<sub>14</sub>N<sub>4</sub>O<sub>3</sub>**  
 $\gamma$ -Hydroxyarginine, 9798
- C<sub>6</sub>H<sub>14</sub>O**  
Hexanol, 9514  
2-Hexanol, 9515  
3-Hexanol, 9516
- C<sub>6</sub>H<sub>14</sub>O<sub>2</sub>**  
Acetal, 108
- C<sub>6</sub>H<sub>14</sub>O<sub>5</sub>**  
1-Deoxy-*D*-glucitol, 5177  
*L*-Fucitol, 7975  
*D*-Quinovit, 18443
- C<sub>6</sub>H<sub>14</sub>O<sub>6</sub>**  
Dulcitol, 6632  
*D*-Mannitol, 13504
- C<sub>6</sub>H<sub>14</sub>S<sub>2</sub>**  
Dipropyl disulfide, 6501  
Propyl isopropyl disulfide, 17939
- C<sub>6</sub>H<sub>15</sub>N**  
Hexyl amine-1, 9530
- C<sub>6</sub>H<sub>18</sub>O<sub>24</sub>P<sub>6</sub>**  
Phytic acid, 17256
- C<sub>7</sub>H<sub>4</sub>OS**  
3-(2-Thienyl) propargyl aldehyde, 21331
- C<sub>7</sub>H<sub>4</sub>O<sub>6</sub>**  
Chelidonic acid, 3501
- C<sub>7</sub>H<sub>5</sub>NO<sub>2</sub>**  
2-Benzoxazolinone, 2229
- C<sub>7</sub>H<sub>5</sub>NO<sub>4</sub>**  
Pyridine-2,6-dicarboxylic acid, 18258
- C<sub>7</sub>H<sub>5</sub>N<sub>5</sub>**  
Benzothiazole, 2228  
Phenyl isothiocyanate, 17125
- C<sub>7</sub>H<sub>5</sub>N<sub>5</sub>O<sub>3</sub>**  
Ranachrome 5, 18530
- C<sub>7</sub>H<sub>5</sub>N<sub>5</sub>O<sub>4</sub>**  
Isoxanthopterin-6-carboxylic acid, 11785
- C<sub>7</sub>H<sub>5</sub>NaO<sub>3</sub>**  
Sodium *p*-hydroxybenzoate, 20033
- C<sub>7</sub>H<sub>5</sub>NaO<sub>4</sub>**  
Sodium protocatechuate, 20035
- C<sub>7</sub>H<sub>6</sub>N<sub>4</sub>O<sub>3</sub>**  
6-Hydroxymethylumazin, 10500
- C<sub>7</sub>H<sub>6</sub>O**  
Benzaldehyde, 2222
- C<sub>7</sub>H<sub>6</sub>O<sub>2</sub>**  
Benzoic acid, 2224  
*p*-Hydroxybenzaldehyde, 9815  
*m*-Hydroxybenzaldehyde, 9816

- Salicylaldehyde, 19185  
Tropolone, 22052
- C<sub>7</sub>H<sub>6</sub>O<sub>3</sub>**  
*m*-Hydroxybenzoic acid, 9817  
*p*-Hydroxybenzoic acid, 9818  
Protocatechuic aldehyde, 17968  
Salicylic acid, 19187  
Sesamol, 19779
- C<sub>7</sub>H<sub>6</sub>O<sub>4</sub>**  
2,6-Dihydroxybenzoic acid, 5762  
3,4-Dihydroxybenzoic acid, 5763  
3,5-Dihydroxybenzoic acid, 5764  
Gentisic acid, 8307  
*o*-Pyrocatechuic acid, 18263  
*β*-Resorcylic acid, 18642
- C<sub>7</sub>H<sub>6</sub>O<sub>5</sub>**  
Gallic acid, 8095
- C<sub>7</sub>H<sub>6</sub>O<sub>6</sub>**  
Osbeckic acid, 16250
- C<sub>7</sub>H<sub>7</sub>NO<sub>2</sub>**  
*p*-Aminobenzoic acid, 1042  
Trigonelline, 21662
- C<sub>7</sub>H<sub>7</sub>N<sub>5</sub>O<sub>2</sub>**  
Ranachrome 3, 18529
- C<sub>7</sub>H<sub>7</sub>O<sub>2</sub>**  
Pyrolin, 18270
- C<sub>7</sub>H<sub>8</sub>**  
Methylbenzene, 14155
- C<sub>7</sub>H<sub>8</sub>N<sub>2</sub>O**  
*N*'-Methyl nicotineamide, 14618
- C<sub>7</sub>H<sub>8</sub>N<sub>4</sub>O<sub>2</sub>**  
Theobromine, 21310  
Theophylline, 21312
- C<sub>7</sub>H<sub>8</sub>O**  
Anisole, 1290  
Benzyl alcohol, 2275  
*m*-Cresol, 4232  
*o*-Cresol, 4233  
*p*-Cresol, 4234
- C<sub>7</sub>H<sub>8</sub>O<sub>2</sub>**  
Guaiacol, 9021  
2-Hydroxybenzyl alcohol, 9832  
*p*-Hydroxybenzyl alcohol, 9833  
Orcinol, 16169  
Trichodenone A, 21558
- C<sub>7</sub>H<sub>8</sub>O<sub>3</sub>**  
5-Methoxymethyl furfural, 14023
- C<sub>7</sub>H<sub>8</sub>O<sub>4</sub>**  
Doederleinic acid, 6547  
Opuntiol, 16159
- C<sub>7</sub>H<sub>8</sub>O<sub>5</sub>**  
Dehydroshikimic acid, 4968
- C<sub>7</sub>H<sub>8</sub>O<sub>7</sub>**
- Daucic acid, 4676
- C<sub>7</sub>H<sub>9</sub>NO**  
4-Hydroxybenzylamine, 9834  
Salicylamine, 19186
- C<sub>7</sub>H<sub>9</sub>NO<sub>2</sub>**  
Myrothenone B, 15207
- C<sub>7</sub>H<sub>10</sub>N<sub>5</sub>O<sup>+</sup>**  
1,3-Dimethylisoguaninium, 6364
- C<sub>7</sub>H<sub>10</sub>O**  
(*E,E*)-2,4-Heptadienal, 9392
- C<sub>7</sub>H<sub>10</sub>O<sub>3</sub>**  
Theobroxide, 21311
- C<sub>7</sub>H<sub>10</sub>O<sub>5</sub>**  
Shikimic acid, 19805
- C<sub>7</sub>H<sub>11</sub>NO<sub>2</sub>**  
Arecidine, 1654  
Guvacoline, 9093  
*L*-Hypoglycin, 10898
- C<sub>7</sub>H<sub>11</sub>NO<sub>3</sub>**  
Ethyl pyroglutamate, 7476
- C<sub>7</sub>H<sub>11</sub>N<sub>3</sub>O<sub>2</sub>**  
3-Methylhistidine, 14490
- C<sub>7</sub>H<sub>11</sub>N<sub>5</sub>O<sub>2</sub>**  
Stizolamine, 20385
- C<sub>7</sub>H<sub>12</sub>N<sub>2</sub>O<sub>5</sub>**  
*γ*-*L*-Glutamyl-glycine, 8775
- C<sub>7</sub>H<sub>12</sub>O**  
*α*-Heptenal, 9413  
3-Heptenal, 9414  
3-Methylcyclohexanone, 14271  
4-Methylcyclohexanone, 14272
- C<sub>7</sub>H<sub>12</sub>OS<sub>3</sub>**  
*Z*-4,9-Diene-2,3,7-trithiadeca-7-oxide, 5486
- C<sub>7</sub>H<sub>12</sub>O<sub>2</sub>**  
Ethyl-2-methylbut-2-enoate, 7463  
*γ*-Heptalactone, 9402  
2-Heptenic acid, 9415
- C<sub>7</sub>H<sub>12</sub>O<sub>3</sub>**  
*trans*-4-Hydroxycyclohexane-1-carboxylic acid, 9953
- C<sub>7</sub>H<sub>12</sub>O<sub>4</sub>**  
Dimelic acid, 6194
- C<sub>7</sub>H<sub>12</sub>O<sub>6</sub>**  
Quinic acid, 18421
- C<sub>7</sub>H<sub>13</sub>NO**  
Nor-*ψ*-tropine, 15812
- C<sub>7</sub>H<sub>13</sub>NO<sub>2</sub>**  
2 $\alpha$ ,3 $\beta$ -Dihydroxynortropine, 6052  
2 $\beta$ ,3 $\beta$ -Dihydroxynortropine, 6053  
3 $\beta$ ,6-*exo*-Dihydroxynortropine, 6054  
Erycibelline, 7299  
Stachydrine, 20254
- C<sub>7</sub>H<sub>13</sub>NO<sub>3</sub>**
- Betonidine, 2325  
2 $\alpha$ ,3 $\beta$ ,4 $\alpha$ -Trihydroxynortropine, 21815  
2 $\alpha$ ,3 $\beta$ ,6-*exo*-Trihydroxynortropine, 21816
- C<sub>7</sub>H<sub>13</sub>NO<sub>4</sub>**  
Calystegine B<sub>2</sub>, 3010
- C<sub>7</sub>H<sub>13</sub>NO<sub>5</sub>**  
Calystegine C<sub>1</sub>, 3011  
1,2,3,4,7-Pentahydroxy-6-nitrobicyclo[3.3.0]-octane, 16856
- C<sub>7</sub>H<sub>14</sub>**  
Methylcyclohexane, 14270
- C<sub>7</sub>H<sub>14</sub>N<sub>2</sub>O<sub>3</sub>**  
Theanine, 21281
- C<sub>7</sub>H<sub>14</sub>N<sub>2</sub>O<sub>4</sub>S<sub>2</sub>**  
Cystathionine, 4591  
*L*-Djenkolic acid, 6533
- C<sub>7</sub>H<sub>14</sub>N<sub>2</sub>O<sub>4</sub>Se**  
*L*-Selenocystathionine, 19676
- C<sub>7</sub>H<sub>14</sub>O**  
Heptanal, 9407  
*β*-Heptenol, 9416  
*γ*-Heptenol, 9417  
Methyl-*n*-pentyl ketone, 14668
- C<sub>7</sub>H<sub>14</sub>O<sub>2</sub>**  
Amyl acetate, 1103  
Enanthic acid, 6795
- C<sub>7</sub>H<sub>14</sub>O<sub>4</sub>**  
Cymarose, 4549  
Oleandrose, 16034  
Sarmentose, 19375
- C<sub>7</sub>H<sub>14</sub>O<sub>6</sub>**  
*L*(+)-Bornesitol, 2556  
Lucidol, 13047  
Methyl- $\alpha$ -*D*-fructofuranoside, 14448  
Methyl *D*-galactoside, 14453  
*β*-Methyl-*D*-glucoside, 14469  
*D*-1-*O*-Methyl-*muco*-inositol, 14527  
Ononitol, 16118  
Pinitol, 17391  
*L*-Quebrachitol, 18304  
Sequoyitol, 19757
- C<sub>7</sub>H<sub>14</sub>O<sub>7</sub>**  
Coriose, 4057  
*L*-Galactoheptulose, 8050  
*D*-Mannoheptulose, 13505  
Sedoheptulose, 19650
- C<sub>7</sub>H<sub>14</sub>S<sub>3</sub>**  
1-(1-Methyl thiopropyl)-1-propenyl disulfide, 14763
- C<sub>7</sub>H<sub>15</sub>NO<sub>4</sub>**  
*N*-Methyl-1-deoxynojirimycin, 14290
- C<sub>7</sub>H<sub>16</sub>**  
Heptane, 9408

- 3-Methylhexane, 14488
- C<sub>7</sub>H<sub>16</sub>NO<sub>2</sub><sup>+</sup>**  
Acetylcholine, 351
- C<sub>7</sub>H<sub>16</sub>N<sub>4</sub>O<sub>2</sub>**  
*L*-Homoarginine, 9596
- C<sub>7</sub>H<sub>16</sub>N<sub>4</sub>O<sub>3</sub>**  
(+)- $\gamma$ -Hydroxy-*L*-homoarginine, 10165
- C<sub>7</sub>H<sub>16</sub>O**  
2-Heptanol, 9409
- C<sub>7</sub>H<sub>16</sub>O<sub>5</sub>**  
Xylitol, 22814
- C<sub>7</sub>H<sub>16</sub>O<sub>7</sub>**  
Volemitol, 22607
- C<sub>7</sub>H<sub>19</sub>N<sub>3</sub>**  
Spermidine, 20146
- C<sub>8</sub>H<sub>4</sub>O<sub>3</sub>**  
Phthalic anhydride, 17204
- C<sub>8</sub>H<sub>5</sub>NO<sub>2</sub>**  
Isatin, 11190
- C<sub>8</sub>H<sub>6</sub>N<sub>2</sub>O**  
4-Quinazolone, 18420
- C<sub>8</sub>H<sub>6</sub>O**  
Coumarone, 4143
- C<sub>8</sub>H<sub>6</sub>O<sub>3</sub>**  
*Z*<sup>2,4</sup>-Dihydropthalic anhydride, 5693  
*p*-Formyl benzoic acid, 7895  
Piperonal, 17470
- C<sub>8</sub>H<sub>6</sub>O<sub>5</sub>**  
5-Hydroxyisophthalic acid, 10252
- C<sub>8</sub>H<sub>7</sub>N**  
Indole, 11025
- C<sub>8</sub>H<sub>7</sub>NO**  
4-Hydroxybenzyl cyanide, 9835  
Mandelonitrile, 13478
- C<sub>8</sub>H<sub>7</sub>NO<sub>2</sub>**  
Gentianadine, 8292
- C<sub>8</sub>H<sub>7</sub>NO<sub>3</sub>**  
Ascosonchine, 1846  
Coixol, 3907
- C<sub>8</sub>H<sub>7</sub>NO<sub>4</sub>**  
2,4-Dihydroxy-1,4-benzoxazin-3-one, 5765
- C<sub>8</sub>H<sub>7</sub>NS**  
Benzyl isothiocyanate, 2294  
Benzyl thiocyanate, 2298
- C<sub>8</sub>H<sub>7</sub>NaO<sub>4</sub>**  
Sodium vanillate, 20039
- C<sub>8</sub>H<sub>8</sub>**  
Styrene, 20430
- C<sub>8</sub>H<sub>8</sub>N<sub>2</sub>O<sub>2</sub>**  
Ricinine, 18840
- C<sub>8</sub>H<sub>8</sub>O**  
Acetophenone, 115  
Phenylacetaldehyde, 17090
- C<sub>8</sub>H<sub>8</sub>O<sub>2</sub>**  
*p*-Anisaldehyde, 1282  
Benzyl formate, 2285  
*p*-Hydroxyacetophenone, 9749  
*m*-Methoxybenzaldehyde, 13848  
4-Methyl salicylaldehyde, 14717  
Phenylacetic acid, 17091
- C<sub>8</sub>H<sub>8</sub>O<sub>3</sub>**  
Anisic acid, 1284  
2',4'-Dihydroxyacetophenone, 5749  
3',4'-Dihydroxyacetophenone, 5750  
6-Hydroxy-7,7 $\alpha$ -dihydro-2(6*H*)-benzofuranone, 9997  
2-Hydroxy-5-methoxy-benzyldehyde, 10384  
2-Hydroxyphenyl acetic acid, 10607  
*p*-Hydroxyphenyl acetic acid, 10608  
Isovanillin, 11767  
4-Methoxy-1,2-benzodioxole, 13849  
4-Methoxysalicylaldehyde, 14088  
4-Methyl-2,6-dihydroxy-benzaldehyde, 14297  
Methylparaben, 14652  
Methyl salicylate, 14718  
Vanillin, 22336
- C<sub>8</sub>H<sub>8</sub>O<sub>4</sub>**  
2,6-Dimethoxybenzoquinone, 6204  
Homogentisic acid, 9608  
3-Hydroxy-4-methoxy benzoic acid, 10381  
2-Hydroxy-4-methoxybenzoic acid, 10382  
Methyl- $\beta$ -resorcyate, 14712  
Orsellinic acid, 16218  
Protocatechuic acid methyl ester, 17967  
Vanillic acid, 22332
- C<sub>8</sub>H<sub>8</sub>O<sub>5</sub>**  
5-(Acetoxymethyl)-furan-2-carboxylic acid, 258  
3,5-Dihydroxy-4-methoxybenzoic acid, 5963  
Leiocarpic acid, 12607  
3-Methoxygallate, 13937  
Methyl gallate, 14454
- C<sub>8</sub>H<sub>9</sub>NO<sub>2</sub>**  
Methylantranilate, 14142
- C<sub>8</sub>H<sub>9</sub>NO<sub>3</sub>**  
*m*-Hydroxyphenylglycine, 10624  
2-(4-Hydroxyphenyl)-1-nitroethane, 10629  
Myrothenone A, 15206
- C<sub>8</sub>H<sub>10</sub>**  
1,2-Dimethylbenzene, 6318
- C<sub>8</sub>H<sub>10</sub>N<sub>2</sub>O**  
*N*-Methylanthranylamide, 14143  
3-Methyl-6,7,8-trihydropyrrolo[1,2-*a*]pyrimidin-2-one, 14774
- C<sub>8</sub>H<sub>10</sub>N<sub>2</sub>O<sub>4</sub>**  
Mimosine, 14868
- C<sub>8</sub>H<sub>10</sub>N<sub>4</sub>O<sub>2</sub>**  
Caffeine, 2892
- C<sub>8</sub>H<sub>10</sub>N<sub>4</sub>O<sub>3</sub>**  
Vachellin, 22307
- C<sub>8</sub>H<sub>10</sub>O**  
Benzyl ethyl alcohol, 2284  
2,3-Dicresol, 5442  
*m*-Ethylphenol, 7472  
*p*-Ethylphenol, 7473  
Methyl benzyl ether, 14156  
Methyl phenyl carbinol, 14671
- C<sub>8</sub>H<sub>10</sub>OS**  
Benzyl hydroxymethyl sulphide, 2293
- C<sub>8</sub>H<sub>10</sub>O<sub>2</sub>**  
4-Ethylresorcinol, 7477  
4-Hydroxybenzyl methyl ether, 9849  
Tyrosol, 22170  
Veratrole, 22389  
*m*-Xylohydroquinone, 22815
- C<sub>8</sub>H<sub>10</sub>O<sub>2</sub>S**  
Foetithiophene A, 7849
- C<sub>8</sub>H<sub>10</sub>O<sub>3</sub>**  
Filicinic acid, 7797  
1'-(4-Hydroxyphenyl)ethane-1',2'-diol, 10604  
Hydroxytyrosol, 10819  
Rengyolone, 18615  
Vanillyl alcohol, 22346
- C<sub>8</sub>H<sub>10</sub>O<sub>4</sub>**  
Dictafofin B, 5444  
4-Ethoxy-6-hydroxymethyl- $\alpha$ -pyrone, 7405  
Herierin III, 9438  
Herierin IV, 9439  
Penicillic acid, 16805
- C<sub>8</sub>H<sub>10</sub>O<sub>5</sub>**  
Argutone, 1678
- C<sub>8</sub>H<sub>11</sub>N**  
Phenethylamine, 17083
- C<sub>8</sub>H<sub>11</sub>NO**  
Tyramine, 22158
- C<sub>8</sub>H<sub>11</sub>NO<sub>2</sub>**  
Dopamine, 6559
- C<sub>8</sub>H<sub>11</sub>NO<sub>3</sub>**  
Noradrenaline, 15708  
Pyridoxine, 18261
- C<sub>8</sub>H<sub>12</sub>N<sub>2</sub>**  
Chuanxiongine, 3633
- C<sub>8</sub>H<sub>12</sub>N<sub>2</sub>O<sub>2</sub>**  
Cyclo-(Ala-Pro), 4463
- C<sub>8</sub>H<sub>12</sub>O**  
Bicyclo[2,2,2]oct-5-en-2-ol, 2356  
(*E,E*)-2,4-Octadienal, 15962  
3,5-Octadiene-2-one, 15963
- C<sub>8</sub>H<sub>12</sub>O<sub>3</sub>**  
Euscapholide, 7659

- C<sub>8</sub>H<sub>12</sub>O<sub>7</sub>**  
2-Hydroxy-1,2,3-propanetricarboxylic acid-1,3-dimethylester, 10662
- C<sub>8</sub>H<sub>13</sub>NO**  
Tropinone, 22051
- C<sub>8</sub>H<sub>13</sub>NO<sub>2</sub>**  
Arecolidine, 1657  
Arecoline, 1658  
Heliotridine, 9318  
Scopine, 19541
- C<sub>8</sub>H<sub>13</sub>NO<sub>3</sub>**  
Desmodilactone, 5266
- C<sub>8</sub>H<sub>14</sub>N<sub>2</sub>O<sub>2</sub>**  
Cyclo-(Ala-Val), 4464
- C<sub>8</sub>H<sub>14</sub>N<sub>2</sub>O<sub>4</sub>**  
Coprine, 4030
- C<sub>8</sub>H<sub>14</sub>N<sub>2</sub>O<sub>5</sub>**  
 $\gamma$ -Glutamyl-alanine, 8770
- C<sub>8</sub>H<sub>14</sub>N<sub>2</sub>O<sub>6</sub>**  
 $\gamma$ -Glutamyl-serine, 8781
- C<sub>8</sub>H<sub>14</sub>O**  
(*E*)-2-Octenal, 15980
- C<sub>8</sub>H<sub>14</sub>O<sub>2</sub>**  
 $\gamma$ -Octalactone, 15971  
2-Octenic acid, 15982
- C<sub>8</sub>H<sub>14</sub>O<sub>2</sub>S<sub>2</sub>**  
 $\alpha$ -Lipoic acid, 12900
- C<sub>8</sub>H<sub>14</sub>O<sub>3</sub>**  
Rengyoxide, 18619
- C<sub>8</sub>H<sub>14</sub>O<sub>3</sub>S<sub>2</sub>**  
 $\beta$ -Lipoic acid, 12901
- C<sub>8</sub>H<sub>14</sub>O<sub>4</sub>**  
2-(1,4-Dihydroxycyclohexanyl)-acetic acid, 5800  
3,7-Dihydroxy-5-octanolide, 6056  
Suberic acid, 20439
- C<sub>8</sub>H<sub>14</sub>S<sub>4</sub>**  
Foetisulfide D, 7848
- C<sub>8</sub>H<sub>15</sub>N**  
 $\gamma$ -Coniceine, 3979
- C<sub>8</sub>H<sub>15</sub>NO**  
Hygrine, 10835  
Pelletierine, 16789  
Pseudotropine, 18072  
Tropine, 22050
- C<sub>8</sub>H<sub>15</sub>NO<sub>2</sub>**  
Valerine, 22321
- C<sub>8</sub>H<sub>15</sub>NO<sub>3</sub>**  
Swainsonine, 20500
- C<sub>8</sub>H<sub>15</sub>NO<sub>6</sub>**  
*N*-Acetyl-*D*-glucosamine, 402
- C<sub>8</sub>H<sub>15</sub>NS**  
7-Methylthioheptanenitrile, 14760
- C<sub>8</sub>H<sub>16</sub>**  
1,4-Dimethyl-*cis*-cyclohexane, 6334  
1,6-Dimethyl-*cis*-cyclohexane, 6335  
Ethylcyclohexane, 7431  
**1-Octene**, 15981  
1,1,3-Trimethylcyclopentane, 21952
- C<sub>8</sub>H<sub>16</sub>ClNO**  
*N*-4'-Chlorobutylbutyramide, 3543
- C<sub>8</sub>H<sub>16</sub>N<sub>2</sub>O<sub>2</sub>**  
*N,N,N',N'*-Tetramethylsuccinamide, 21203
- C<sub>8</sub>H<sub>16</sub>N<sub>2</sub>O<sub>4</sub>**  
Octopinic acid, 15986
- C<sub>8</sub>H<sub>16</sub>N<sub>2</sub>O<sub>4</sub>S<sub>2</sub>**  
Homocystine, 9602
- C<sub>8</sub>H<sub>16</sub>N<sub>2</sub>O<sub>7</sub>**  
Cycasin, 4456
- C<sub>8</sub>H<sub>16</sub>O**  
Isomatsutakeol, 11532  
Matsutake alcohol, 13608  
Octanal, 15973  
3-Octanone, 15979  
1-Octen-3-ol, 15983  
7-Octen-4-ol, 15984
- C<sub>8</sub>H<sub>16</sub>OS<sub>3</sub>**  
Foetisulfide A, 7845
- C<sub>8</sub>H<sub>16</sub>O<sub>2</sub>**  
Caprylic acid, 3140
- C<sub>8</sub>H<sub>16</sub>O<sub>2</sub>S<sub>3</sub>**  
Foetisulfide B, 7846  
Foetisulfide C, 7847
- C<sub>8</sub>H<sub>16</sub>O<sub>3</sub>**  
Rengyol, 18614
- C<sub>8</sub>H<sub>16</sub>O<sub>4</sub>**  
*erythro*-2-Hydroxy-2-(1-hydroxyethyl)-4-methylpentanoic acid, 10181
- C<sub>8</sub>H<sub>16</sub>O<sub>6</sub>**  
3,6-Anhydro-*L*-galactose dimethyl acetal, 1269  
Dambonitol, 4615  
Ethyl- $\alpha$ -*D*-fructoside, 7438  
1-Ethyl- $\alpha$ -*D*-galactoside, 7439  
1-Ethyl- $\beta$ -*D*-galactoside, 7440  
Ethyl  $\beta$ -*D*-glucopyranoside, 7443
- C<sub>8</sub>H<sub>16</sub>O<sub>7</sub>**  
Ethane-1,2-diol 1-*O*- $\beta$ -*D*-glucopyranoside, 7389
- C<sub>8</sub>H<sub>17</sub>N**  
Coniine, 3988
- C<sub>8</sub>H<sub>17</sub>NO<sub>3</sub>**  
 $\alpha$ -1-*C*-Ethyl-fagomine, 7437
- C<sub>8</sub>H<sub>17</sub>O**  
Pseudoconhydrine, 18023
- C<sub>8</sub>H<sub>18</sub>**  
2-Methylheptane, 14482  
*n*-Octane, 15974
- C<sub>8</sub>H<sub>18</sub>O**  
Octanol, 15977  
3-Octanol, 15978
- C<sub>8</sub>H<sub>18</sub>O<sub>4</sub>**  
(2*S*\*,7*S*\*)-(2)-Octane-1,2,7,8-tetrol, 15976  
2,2,2-Triethoxyl-ethanol, 21628
- C<sub>8</sub>H<sub>18</sub>O<sub>5</sub>S**  
Musclide A<sub>1</sub>, 15127
- C<sub>8</sub>H<sub>20</sub>N<sub>2</sub>**  
Tetramethyl diaminobutane, 21195
- C<sub>8</sub>H<sub>21</sub>N<sub>3</sub>**  
*sym*-Homospermidine, 9621
- C<sub>9</sub>H<sub>6</sub>N<sub>2</sub>S**  
Brassilexin, 2597
- C<sub>9</sub>H<sub>6</sub>O<sub>2</sub>**  
Coumarin, 4140
- C<sub>9</sub>H<sub>6</sub>O<sub>3</sub>**  
3-Hydroxycoumarin, 9942  
4-Hydroxycoumarin, 9943  
5-Hydroxycoumarin, 9944  
6-Hydroxycoumarin, 9945  
Umbelliferone, 22195
- C<sub>9</sub>H<sub>6</sub>O<sub>4</sub>**  
Aesculetin, 663  
Daphnetin, 4645  
5,7-Dihydroxychromone, 5789  
5,7-Dihydroxycoumarin, 5796
- C<sub>9</sub>H<sub>7</sub>NO**  
3-Aldehydoindole, 874
- C<sub>9</sub>H<sub>7</sub>NO<sub>2</sub>**  
Indole-3-carboxylic acid, 11029
- C<sub>9</sub>H<sub>7</sub>NS**  
5-Phenyl thiazole, 17136
- C<sub>9</sub>H<sub>7</sub>N<sub>3</sub>O<sub>3</sub>**  
Methyl calvatate, 14207
- C<sub>9</sub>H<sub>8</sub>O**  
Cinnamaldehyde, 3693  
1-Indanone, 11013
- C<sub>9</sub>H<sub>8</sub>O<sub>2</sub>**  
Cinnamic acid, 3695  
2'-Hydroxycinnamaldehyde, 9908
- C<sub>9</sub>H<sub>8</sub>O<sub>3</sub>**  
*trans*-Caffeic aldehyde, 2891  
*m*-Coumaric acid, 4133  
*o*-Coumaric acid, 4134  
*p*-Coumaric acid, 4135  
Coumarinic acid, 4141  
Methyl-*p*-formylbenzoate, 14447  
Phenyl pyruvic acid, 17134
- C<sub>9</sub>H<sub>8</sub>O<sub>4</sub>**  
Caffeic acid, 2887  
*m*-Hydroxyphenylpyruvic acid, 10640  
*o*-Hydroxyphenylpyruvic acid, 10641  
*p*-Hydroxyphenylpyruvic acid, 10642



- C<sub>9</sub>H<sub>8</sub>O<sub>5</sub>**  
 2,3-Dihydro-3,6,7-trihydroxy-1-*H*-benzo[b]-pyran-4-one, 5728  
 Haematommic acid, 9188  
 Meconic acid, 13632  
 4,5,6-Trihydroxy-7-methylphthalide, 21808
- C<sub>9</sub>H<sub>9</sub>I<sub>2</sub>NO<sub>3</sub>**  
 Diiodotyrosine, 6187
- C<sub>9</sub>H<sub>9</sub>N**  
 6-Methyl indole, 14525  
 Phenyl propionitrile, 17131  
 Scatole, 19459  
 Xylylic acid nitrile, 22855
- C<sub>9</sub>H<sub>9</sub>NO**  
*trans*-Cinnamamide, 3694
- C<sub>9</sub>H<sub>9</sub>NO<sub>2</sub>**  
 Gentianidine, 8296
- C<sub>9</sub>H<sub>9</sub>NO<sub>3</sub>**  
 Hippuric acid, 9548
- C<sub>9</sub>H<sub>9</sub>NO<sub>4</sub>**  
 Peristrophamide, 16964
- C<sub>9</sub>H<sub>9</sub>NO<sub>5</sub>**  
 Betalamic acid, 2319
- C<sub>9</sub>H<sub>9</sub>NS**  
 $\beta$ -Phenylethyl isothiocyanate, 17117
- C<sub>9</sub>H<sub>9</sub>NaO<sub>3</sub>**  
 (2*R*)-Sodium 3-phenyllactate, 20034
- C<sub>9</sub>H<sub>9</sub>NaO<sub>5</sub>**  
 Sodium syringate, 20031
- C<sub>9</sub>H<sub>9</sub>O<sub>4</sub><sup>-</sup>**  
 (2*S*)-(*O*-Hydroxyphenyl)lactate, 10626
- C<sub>9</sub>H<sub>9</sub>O<sub>8</sub>S**  
 3,4-Dihydroxy-5-methoxybenzoic acid methyl ester-4-sulfate, 5964
- C<sub>9</sub>H<sub>10</sub>N<sub>2</sub>O<sub>3</sub>**  
 Armillarisin B, 1743
- C<sub>9</sub>H<sub>10</sub>O**  
 Chavicol, 3488  
 Cinnamic alcohol, 3696  
*p*-Methoxystyrene, 14096  
*o*-Methylacetophenone, 14112  
 Phenyl-2-propanone, 17129  
 2-(2-Propenyl) phenol, 17923
- C<sub>9</sub>H<sub>10</sub>O<sub>2</sub>**  
 Allylpyrocatechol, 955  
 Benzyl acetate, 2273  
 3,4-Dimethylbenzoic acid, 6320  
 3,5-Dimethyl-4-hydroxy-benzaldehyde, 6359  
 Ethyl benzoate, 7421  
 Hydrocinnamic acid, 9708  
*p*-Hydroxybenzyl acetone, 9831  
 4-Methoxy-acetophenone, 13827  
 Methyl phenylacetate, 14669
- Phenyl ethyl formate, 17115
- C<sub>9</sub>H<sub>10</sub>O<sub>3</sub>**  
 Acetovanillone, 117  
 2,4-Dimethoxybenzaldehyde, 6209  
 Isopaeonol, 11580  
 Melilotic acid, 13678  
 4-Methoxyphenylacetic acid, 14054  
 Methyl *p*-anisate, 14141  
 Methylvanillin, 14805  
 Paeonol, 16532  
 Phloretinic acid, 17169  
 Tropic acid, 22049
- C<sub>9</sub>H<sub>10</sub>O<sub>4</sub>**  
 2,4'-Dihydroxy-3'-methoxyacetophenone, 5960  
 3-(3,4-Dihydroxyphenyl)propanoic acid, 6091  
 2,6-Dimethoxy benzoic acid, 6200  
 3,4-Dimethoxybenzoic acid, 6201  
 3,5-Dimethoxybenzoic acid, 6202  
 Ethyl 3,4-dihydroxybenzoate, 7432  
 Jacaranone, 11807  
 Methyl orsellinate, 14639  
 Methyl vanillate, 14804  
 Syringaldehyde, 20554
- C<sub>9</sub>H<sub>10</sub>O<sub>5</sub>**  
 Danshensu, 4630  
 1,5-Dimethoxy-3-hydroxybenzoic acid, 6233  
 3-Ethoxy-4,5-dihydroxy-benzoic acid, 7402  
 Ethyl gallate, 7441  
 $\alpha$ -Hydroxyhydrocaffeic acid, 10172  
 Methyl-4-*O*-methylgallate, 14602  
 Piscrococin B, 17484  
 Syringic acid, 20566  
 2,3,4-Trihydroxy-benzenepropanoic acid, 21689
- C<sub>9</sub>H<sub>11</sub>NO**  
*D*-Cathinone, 3327  
 Gentialutine, 8291  
 Isogentialutine, 11435
- C<sub>9</sub>H<sub>11</sub>NO<sub>2</sub>**  
 Benzoic acid 2-methyl amino methyl ester, 2225  
 Gentiaticetine, 8299  
 Phenylalanine, 17093
- C<sub>9</sub>H<sub>11</sub>NO<sub>3</sub>**  
 Lysichitalexin, 13259  
 (*S*)-Tyrosine, 22169
- C<sub>9</sub>H<sub>11</sub>NO<sub>4</sub>**  
 Dopa, 6558
- C<sub>9</sub>H<sub>11</sub>N<sub>5</sub>O<sub>3</sub>**  
 Bioppterin, 2393  
 (2*R*)-Hydroxy-4-(9-adenyl)butyric acid, 9766
- C<sub>9</sub>H<sub>11</sub>N<sub>5</sub>O<sub>4</sub>**  
 7-Hydroxybiopterin, 9853  
 Lentysine, 12624  
 Trihydroxypropylpterisin, 21841
- C<sub>9</sub>H<sub>11</sub>O<sub>5</sub>**  
 7-Hydroxy viteoid II, 10825
- C<sub>9</sub>H<sub>12</sub>**  
 1-Ethyl-2-methylbenzene, 7462  
 1,2,3-Trimethylbenzene, 21942
- C<sub>9</sub>H<sub>12</sub>N<sub>2</sub>O<sub>6</sub>**  
 Uridine, 22252
- C<sub>9</sub>H<sub>12</sub>O**  
 $\alpha,\alpha$ -Dimethylbenzene methanol, 6319  
 Methyl (phenyl ethyl) ether, 14672  
 Phenylpropyl alcohol, 17132
- C<sub>9</sub>H<sub>12</sub>O<sub>2</sub>**  
 3,5-Dimethoxytoluene, 6294  
*p*-Hydroxybenzyl ethyl ether, 9839
- C<sub>9</sub>H<sub>12</sub>O<sub>3</sub>**  
 3-(3,4-Dihydroxyphenyl)-1-propanol, 6092  
 Homovanillyl alcohol, 9624  
 2-Hydroxy-3,5,5-trimethylcyclohex-2-ene-1,4-dione, 10807  
 2-Methoxy-2-(4'-hydroxyphenyl)ethanol, 13966
- C<sub>9</sub>H<sub>12</sub>O<sub>4</sub>**  
 Aucubigenin, 2003  
 Buergerinin G, 2708  
 (3*S*,4*R*)-3-Carboxy-2-methylene-heptan-4-olide, 3179  
 Chaetoquadrin F, 3445  
 Decumbic acid, 4861  
 Genipic acid, 8272  
 Jiofuran, 11872  
 Piscrococin A, 17483
- C<sub>9</sub>H<sub>12</sub>O<sub>5</sub>**  
 Rehmaglutin C, 18591
- C<sub>9</sub>H<sub>13</sub>ClO<sub>3</sub>**  
 Cistachlorin, 3749
- C<sub>9</sub>H<sub>13</sub>ClO<sub>4</sub>**  
 Rehmaglutin D, 18592
- C<sub>9</sub>H<sub>13</sub>ClO<sub>5</sub>**  
 Rehmaglutin B, 18590
- C<sub>9</sub>H<sub>13</sub>NO**  
*N*-Methyltyramine, 14796  
 Norephedrine, 15745  
*D*-Norpseudoephedrine, 15789
- C<sub>9</sub>H<sub>13</sub>NO<sub>2</sub>**  
 Synephrine, 20552
- C<sub>9</sub>H<sub>13</sub>NO<sub>3</sub>**  
 Adrenaline, 653
- C<sub>9</sub>H<sub>13</sub>N<sub>2</sub>O<sub>9</sub>P**  
 Uridinemonophosphate, 22254  
 Uridylic acid, 22256
- C<sub>9</sub>H<sub>14</sub>**  
 Santene, 19309
- C<sub>9</sub>H<sub>14</sub>N<sub>2</sub>O<sub>3</sub>**  
 2-Methyl-3-(2',3',4'-trihydroxybutyl)pyrazine,

- 14780  
**C<sub>9</sub>H<sub>14</sub>N<sub>2</sub>O<sub>4</sub>**  
 2-Methyl-5-(1',2',3',4'-tetrahydroxybutyl)pyrazine,  
 14752
- C<sub>9</sub>H<sub>14</sub>N<sub>3</sub>O<sub>8</sub>P**  
 Cytidylic acid A, 4592  
 Cytidylic acid B, 4593
- C<sub>9</sub>H<sub>14</sub>N<sub>4</sub>O<sub>3</sub>**  
 Carnosine, 3205
- C<sub>9</sub>H<sub>14</sub>O**  
 Crocusatin E, 4257  
 Cryptone, 4288  
 1(7),8(10)-*p*-Menthadien-9-ol, 13725  
 2,4-Nonadienal, 15675  
 2,6-Nonadienal, 15676  
 2*E*,6*Z*-Nonadienal, 15677  
 Nopinone, 15706  
 2-Pentylfuran, 16893  
 (-)-*β*-Pinone, 17408  
 Santenone, 19310  
 Spiro[4,4]nonane-2-one, 20204
- C<sub>9</sub>H<sub>14</sub>OS<sub>3</sub>**  
 Ajoene, 785
- C<sub>9</sub>H<sub>14</sub>O<sub>2</sub>**  
 Boschnialactone, 2566  
 Crocusatin A, 4253  
 (2*E*)-2,6-Dimethyl-2,5-heptadienoic acid, 6354  
 (4*R*)-Hydroxy-3,5,5-trimethylcyclohex-2-enone,  
 10808  
 (4*S*)-Hydroxy-3,5,5-trimethylcyclohex-2-enone,  
 10809  
 2,4-Nonadienic acid, 15678  
 3,5,5-Trimethyl-4-hydroxy-1-cyclohexanon-2-  
 ene, 21967
- C<sub>9</sub>H<sub>14</sub>O<sub>2</sub>S<sub>2</sub>**  
 Foetithiophene B, 7850
- C<sub>9</sub>H<sub>14</sub>O<sub>2</sub>S<sub>3</sub>**  
*E*-1,7,11-Triene-4,5,9-trithiadodeca-9,9-dioxide,  
 21626
- C<sub>9</sub>H<sub>14</sub>O<sub>3</sub>**  
 Boonein, 2546  
 Buergerinin F, 2707  
 7-Hydroxy-9-hydroxymethyl-3-oxo-bicyclo  
 [4.3.0]-8-nonene, 10209  
 Iridoid-related aglycone, 11148  
 Ningpogenin, 15615
- C<sub>9</sub>H<sub>14</sub>O<sub>4</sub>**  
 Cistanin, 3750  
 Jioglutolide, 11878
- C<sub>9</sub>H<sub>14</sub>O<sub>5</sub>**  
 Buergerinin B, 2703  
 Rehmaglutin A, 18589
- C<sub>9</sub>H<sub>14</sub>O<sub>6</sub>**
- 7-Hydroxy eucommic acid, 10107
- C<sub>9</sub>H<sub>15</sub>NO**  
 Pseudopelletierine, 18055
- C<sub>9</sub>H<sub>15</sub>NO<sub>2</sub>**  
 Homoarecoline, 9595
- C<sub>9</sub>H<sub>15</sub>NO<sub>3</sub>**  
*n*-Butyl pyroglutamate, 2804  
 Ecgonine, 6683  
 Isobutyl pyroglutamate, 11285
- C<sub>9</sub>H<sub>15</sub>N<sub>2</sub>O<sub>15</sub>P<sub>3</sub>**  
 Uridine-5'-triphosphatemonophosphate, 22255
- C<sub>9</sub>H<sub>15</sub>N<sub>3</sub>O<sub>2</sub>S**  
 Ergothioneine, 7254
- C<sub>9</sub>H<sub>16</sub>**  
 1-Propenyl-cyclohexane, 17920
- C<sub>9</sub>H<sub>16</sub>N<sub>2</sub>O<sub>2</sub>**  
 Cyclo-(Ile-Ala), 4500  
 Cyclo-(Leu-Ala), 4505
- C<sub>9</sub>H<sub>16</sub>N<sub>2</sub>O<sub>3</sub>**  
 Cyclo-(Leu-Ser), 4507
- C<sub>9</sub>H<sub>16</sub>N<sub>2</sub>O<sub>5</sub>**  
*γ*-*L*-Glutamyl-*L*-*β*-aminoisobutyric acid, 8771
- C<sub>9</sub>H<sub>16</sub>O**  
 3-Ene-nonanone-2, 6800  
 2,6-Nonadienol, 15679  
 (*E*)-2-Nonenal, 15692  
 Santenone alcohol, 19311  
 2,2,6-Trimethyl cyclohexanone, 21949
- C<sub>9</sub>H<sub>16</sub>O<sub>2</sub>**  
*γ*-Nonalactone, 15680  
 2-Nonenoic acid, 15694  
 8-Nonenoic acid, 15695  
 2,6,6-Trimethyl-2-hydroxycyclohexanone, 21966
- C<sub>9</sub>H<sub>16</sub>O<sub>2</sub>S<sub>2</sub>**  
 Rutadisulfide A, 19080
- C<sub>9</sub>H<sub>16</sub>O<sub>3</sub>**  
 1-Deoxyeucommiol, 5173  
 10-Deoxyeucommiol, 5174  
*erythro*-5-*n*-Pentyl-4-hydroxytetrahydrofuran-  
 2-one, 16895  
*threo*-5-*n*-Pentyl-4-hydroxy  
 tetrahydrofuran-2-one, 16896
- C<sub>9</sub>H<sub>16</sub>O<sub>4</sub>**  
 Azelaic acid, 2056  
 4,4-Dimethyl-1,7-heptanedioic acid, 6357  
 Eucommiol, 7488  
 7-Hydroxy-10-deoxyeucommiol, 9988  
 3-(2-Hydroxyethyl)-5-(2''-hydroxypropyl)-  
 dihydrofuran-2(3*H*)-one, 10105  
 Methyl-5,7-dihydroxy-2(*Z*)-octenoate, 14314
- C<sub>9</sub>H<sub>17</sub>N**  
 Pinidine, 17390
- C<sub>9</sub>H<sub>17</sub>NO**
- Methyl isopelletierine, 14534
- C<sub>9</sub>H<sub>17</sub>NO<sub>5</sub>**  
 Vitamin B<sub>5</sub>, 22555
- C<sub>9</sub>H<sub>17</sub>NO<sub>8</sub>**  
 Miserotoxin, 14885
- C<sub>9</sub>H<sub>17</sub>NO<sub>10</sub>S<sub>2</sub>**  
 2-Hydroxyethyl glucosinolate, 10103
- C<sub>9</sub>H<sub>18</sub>**  
 1-Nonene, 15693  
 Propylcyclohexane, 17936  
 1,2,3-Trimethyl-cyclohexane, 21947  
 1,3,5-Trimethylcyclohexane, 21948  
 3,4,4-Trimethyl-2-hexene, 21965
- C<sub>9</sub>H<sub>18</sub>N<sub>2</sub>O<sub>4</sub>**  
 Lysopine, 13266
- C<sub>9</sub>H<sub>18</sub>O**  
 Nonaldehyde, 15681  
 2-Nonanone, 15687  
 3-Nonanone, 15688  
 1-Nonen-3-ol, 15696
- C<sub>9</sub>H<sub>18</sub>O<sub>2</sub>**  
 Amyl butyrate, 1104  
 Isobutylisovalerate, 11276  
 Methyl caprylate, 14215  
 Nonanoic acid, 15684
- C<sub>9</sub>H<sub>18</sub>O<sub>6</sub>**  
 Isopropyl *β*-*D*-glucopyranoside, 11621
- C<sub>9</sub>H<sub>18</sub>O<sub>7</sub>**  
 Glycerol 2-*O*-*α*-*L*-fucopyranoside, 8810  
 (2*S*)-Propane-1,2-diol 1-*O*-*β*-*D*-glucopyranoside,  
 17911
- C<sub>9</sub>H<sub>18</sub>O<sub>8</sub>**  
 (2*R*)-1-*O*-Glyceryl-*β*-*D*-galactoside, 8813
- C<sub>9</sub>H<sub>19</sub>N**  
 (+)-*N*-Methylconiine, 14250
- C<sub>9</sub>H<sub>20</sub>**  
 2,3-Dimethylheptane, 6356  
 3-Ethyl-2,3-dimethyl-pentane, 7434  
 3-Methyl-3-ethylhexane, 14435  
 2-Methyl octane, 14631  
*n*-Nonane, 15683  
 2,3,4-Trimethylhexane, 21963
- C<sub>9</sub>H<sub>20</sub>NO<sub>2</sub><sup>+</sup>**  
 Muscarine I, 15125  
 Muscarine II, 15126
- C<sub>9</sub>H<sub>20</sub>N<sub>2</sub>O<sub>2</sub>**  
 Laminine, 12457
- C<sub>9</sub>H<sub>20</sub>O**  
 Heptyl ethyl ether, 9418  
 6-Methyl-1-octanol, 14632  
 2-Nonanol, 15685  
*n*-Nonanol, 15686
- C<sub>10</sub>H<sub>6</sub>O<sub>2</sub>**

- 1,4-Naphthoquinone, 15255
- C<sub>10</sub>H<sub>6</sub>O<sub>3</sub>**  
Juglone, 11903  
Lawsone, 12580
- C<sub>10</sub>H<sub>6</sub>O<sub>4</sub>**  
Ayapin, 2048  
8-Formyl-7-hydroxycoumarin, 7904  
6-Formylumbelliferone, 7913  
Naphthazarin, 15253
- C<sub>10</sub>H<sub>6</sub>O<sub>6</sub>**  
Saikochromic acid, 19130
- C<sub>10</sub>H<sub>7</sub>NO<sub>2</sub>**  
Cinchonic acid, 3683
- C<sub>10</sub>H<sub>7</sub>NO<sub>3</sub>**  
6,7-Methylenedioxy-1(2*H*)-isoquinolinone, 14372
- C<sub>10</sub>H<sub>7</sub>NO<sub>4</sub>**  
Nukagenin, 15867
- C<sub>10</sub>H<sub>8</sub>**  
Azulene, 2071  
Naphthalene, 15252
- C<sub>10</sub>H<sub>8</sub>N<sub>2</sub>**  
Indole-3-acetonitrile, 11027
- C<sub>10</sub>H<sub>8</sub>N<sub>2</sub>O<sub>2</sub>**  
2,3-Dihydro-4-hydroxy-2-indole-3-acetonitrile, 5637
- C<sub>10</sub>H<sub>8</sub>N<sub>2</sub>O<sub>2</sub>S<sub>2</sub>Zn**  
Zincpolyanemine, 23002
- C<sub>10</sub>H<sub>8</sub>O<sub>2</sub>**  
1,2-Hydronaphthoquinone, 9724  
1,4-Hydronaphthoquinone, 9725
- C<sub>10</sub>H<sub>8</sub>O<sub>2</sub>S**  
Methyl *trans*-5-(2-thienyl)-2-penten-4-yn-1-olate, 14757
- C<sub>10</sub>H<sub>8</sub>O<sub>3</sub>**  
Erythrocentaurin, 7336  
Herniarin, 9452  
*α*-Hydrojuglone, 9719  
*β*-Hydrojuglone, 9720  
6-Hydroxy-7-methylcoumarin, 10482
- C<sub>10</sub>H<sub>8</sub>O<sub>4</sub>**  
Acamelin, 62  
Anemonin, 1178  
Daphnetin-7-methyl ether, 4647  
Daphnetin-8-methyl ether, 4648  
Erythrocentauric acid, 7335  
Isoscopoletin, 11702  
*β*-Methylaesculetin, 14122  
Scopoletin, 19542
- C<sub>10</sub>H<sub>8</sub>O<sub>5</sub>**  
Fraxetin, 7942
- C<sub>10</sub>H<sub>9</sub>ClO<sub>5</sub>**  
Longissiminone B, 12983
- C<sub>10</sub>H<sub>9</sub>NO**  
Echinopsine, 6691  
Indole-3-acetaldehyde, 11026
- C<sub>10</sub>H<sub>9</sub>NO<sub>2</sub>**  
Gentianine, 8297  
3-Indolylacetic acid, 11031  
Methyl indole-3-carboxylate, 14526
- C<sub>10</sub>H<sub>9</sub>NO<sub>3</sub>**  
*N*-Demethyloryphornine, 5077  
Noroxyhydrastinine, 15787
- C<sub>10</sub>H<sub>9</sub>NO<sub>4</sub>**  
6-Hydroxy-5-methoxy-*N*-methylphthalimide, 10428
- C<sub>10</sub>H<sub>9</sub>N<sub>5</sub>O**  
Kinetin, 12227
- C<sub>10</sub>H<sub>9</sub>NaO<sub>4</sub>**  
Sodium ferulate, 20032
- C<sub>10</sub>H<sub>10</sub>N<sub>4</sub>**  
2-(4'-Aminobenzenamine)-pyrimidine, 1041
- C<sub>10</sub>H<sub>10</sub>O**  
2-Phenyl-2-butenal, 17100  
(*E*)-4-Phenyl-3-buten-2-one, 17101
- C<sub>10</sub>H<sub>10</sub>O<sub>2</sub>**  
Cumulene, 4360  
(4*R*)-4-Hydroxy-*α*-tetralone, 10746  
(4*S*)-4-Hydroxy-*α*-tetralone, 10747  
Isosafrole, 11690  
2-Methoxycinnamaldehyde, 13882  
*p*-Methoxycinnamaldehyde, 13883  
5-Methoxy-2-methylbenzofuran, 14003  
Methylcinnamate, 14245  
Methyl *p*-hydroxycinnamoyl ketone, 14500  
1-Phenyl-1,3-butanediol, 17098  
Safrole, 19121
- C<sub>10</sub>H<sub>10</sub>O<sub>3</sub>**  
Coniferyl aldehyde, 3983  
(*E*)-4-(3,4-Dihydroxyphenyl)but-3-en-2-one, 6075  
(4*R*)-4,8-Dihydroxy-*α*-tetralone, 6145  
3-(4-Hydroxy-3-methoxyphenyl)-2-propenal, 10453  
5-Hydroxymethylisochroman-1-one, 10498  
*p*-Hydroxyphenyl crotonic acid, 10615  
*m*-Methoxycinnamic acid, 13884  
*p*-Methoxycinnamic acid, 13885  
*trans*-Methyl *p*-coumarate, 14254  
*m*-Methyl-*p*-hydroxy-cinnamic acid, 14499  
(-)-Regiolone, 18588
- C<sub>10</sub>H<sub>10</sub>O<sub>4</sub>**  
Dimethyl phthalate, 6398  
Ferulic acid, 7768  
(-)-Gynuraone, 9123  
Hesperetic acid, 9455
- 3 $\xi$ -(1 $\xi$ -Hydroxyethyl)-7-hydroxy-1-isobenzofuranone, 10104  
(-)-(3*R*,4*S*)-4-Hydroxymellein, 10376  
(-)-(3*R*)-5-Hydroxymellein, 10377  
Kakuol, 12115  
Meconine, 13633  
Methyl caffeate, 14205  
Vanillin acetate, 22337
- C<sub>10</sub>H<sub>10</sub>O<sub>5</sub>**  
Longissiminone A, 12982  
Methyl(2,4-dihydroxy-3-formyl-6-methoxy)-phenylketone, 14301
- C<sub>10</sub>H<sub>10</sub>O<sub>6</sub>**  
Hemipic acid, 9349  
*m*-Hemipic acid, 9350
- C<sub>10</sub>H<sub>11</sub>NO**  
Boschniakine, 2565
- C<sub>10</sub>H<sub>11</sub>NO<sub>3</sub>**  
Gentianal, 8294  
Gentioflavine, 8303  
Northalifoline (tautomeric structure 1), 15802  
Northalifoline (tautomeric structure 2), 15803  
Tuberosine B, 22082
- C<sub>10</sub>H<sub>12</sub>**  
*m*-Isopropenyl toluene, 11617  
*o*-Isopropenyl toluene, 11618  
*p*-Isopropenyl toluene, 11619
- C<sub>10</sub>H<sub>12</sub>N<sub>2</sub>**  
Anatabine, 1140  
Tryptamine, 22058
- C<sub>10</sub>H<sub>12</sub>N<sub>2</sub>O**  
Acanthifoline, 77  
Argutine B, 1677  
Serotonin, 19760
- C<sub>10</sub>H<sub>12</sub>N<sub>2</sub>O<sub>3</sub>**  
Kynurenine, 12399
- C<sub>10</sub>H<sub>12</sub>N<sub>2</sub>O<sub>4</sub>**  
3-Hydroxykynurenine, 10294
- C<sub>10</sub>H<sub>12</sub>N<sub>4</sub>O<sub>5</sub>**  
Hypoxanthine nucleoside, 10914  
Inosine, 11082  
6-Isoinosine, 11465
- C<sub>10</sub>H<sub>12</sub>O**  
*cis*-Anethole, 1183  
Anethole, 1186  
Benzyl acetone, 2274  
Cumaldehyde, 4354  
Estragole, 7385  
Lachnophyllol, 12429  
2,4,6-Trimethylbenzaldehyde, 21941
- C<sub>10</sub>H<sub>12</sub>O<sub>2</sub>**  
Anisolacetone, 1289  
( $\pm$ )-Car-3-ene-2,5-dione, 3196

- Chavibetol, 3486  
 Cumic acid, 4356  
 Egomaketone, 6716  
 Eugenol, 7521  
 4-(4-Hydroxyphenyl)-2-butanone, 10614  
 Isoegomaketone, 11406  
 Isoeugenol, 11421  
*trans*-4-Methoxycinnamoyl alcohol, 13896  
 Naginataketone, 15238  
 Phenylethyl acetate, 17111  
 $\alpha$ -Thujaplicin, 21346  
 $\beta$ -Thujaplicin, 21347  
 $\gamma$ -Thujaplicin, 21348  
 1,1,5-Trimethyl-2-formyl-cyclohexa-2,5-diene-4-one, 21957
- C<sub>10</sub>H<sub>12</sub>O<sub>3</sub>**  
*trans*-Coniferyl alcohol, 3982  
 3,5-Dimethyl-4-methoxybenzoic acid, 6368  
 5,6-Dimethyl-3a,4,7,7a-tetrahydro-1,3-Isobenzofurandione, 6412  
 5-Ethyl-1-methoxy-2,3-methylenedioxybenzene, 7461  
 2-(1'-Hydroxy-2'-oxopropyl)-5-methylphenol, 10581  
*p*-Methoxydihydrocinnamic acid, 13906  
 Methyl 4-methoxyphenylacetate, 14589  
 1,3*R*,8*R*-Trihydroxydec-9-en-4,6-yne, 21703  
 2,4,4-Trimethyl-3-formyl-6-hydroxy-2,5-cyclohexadien-1-one, 21958
- C<sub>10</sub>H<sub>12</sub>O<sub>4</sub>**  
 Acetosyringone, 116  
 Anticancer Benzenoid PMV70P691-58, 1386  
 Asarylaldehyde, 1840  
 Cantharidin, 3094  
 2,4-Dihydroxy-6-methoxy-3-methylacetophenone, 5988  
 4-Ethoxy-3-methoxybenzoic acid, 7411  
 3-Hydroxy-1-(4'-hydroxy-3'-methoxyphenyl)propan-1-one, 10192  
 Methyl- $\beta$ -orcinoil carboxylate, 14637  
 Methyl veratrate, 14806  
 Paeonilactone B, 16527  
 Rhizonic acid, 18779  
 Sparassol, 20132  
 Xanthoxilin, 22778
- C<sub>10</sub>H<sub>12</sub>O<sub>5</sub>**  
 Antiarolaldehyde, 1379  
 Methyl 2-hydroxy-3,4-dimethoxy benzoate, 14502  
 Methyl syringate, 14734  
 Piscrococin C, 17485  
 2,4,5-Trimethoxybenzoic acid, 21892
- C<sub>10</sub>H<sub>12</sub>O<sub>6</sub>**  
 (5*R*,8*R*)-1,6,9,13-Tetraoxadispiro[4.2.4.2]-tetradecane-2,10-dione, 21209
- C<sub>10</sub>H<sub>12</sub>O<sub>7</sub>**  
 1-*O*-Galloyl-glycerol, 8110
- C<sub>10</sub>H<sub>13</sub>BrCl<sub>4</sub>**  
 8-Bromo-1,3,4,7-tetrachloro-3,7-dimethyl-1*E*,5*E*-octadiene, 2625
- C<sub>10</sub>H<sub>13</sub>Br<sub>2</sub>Cl<sub>3</sub>**  
 (1*R*\*,2*S*\*,4*S*\*,5*S*\*)-4-Bromo-5-bromomethyl-1*E*-chlorovinyl-2,5-dichloromethylcyclohexane, 2619  
 Plocoralide C, 17565
- C<sub>10</sub>H<sub>13</sub>Br<sub>2</sub>NO<sub>4</sub>**  
 1-Acetamide-3,5-dibromo-1-hydroxy-4,4-dimethoxy-2,5-cyclohexadiene, 110
- C<sub>10</sub>H<sub>13</sub>Br<sub>3</sub>Cl<sub>2</sub>**  
 1,4,8-Tribromo-3,7-dichloro-3,7-dimethyl-1*E*,5*E*-octadiene, 21545
- C<sub>10</sub>H<sub>13</sub>ClO<sub>4</sub>**  
*threo*-3-Chloro-1-(4-hydroxy-3-methoxyphenyl)propane-1,2-diol, 3559
- C<sub>10</sub>H<sub>13</sub>N**  
 Actinidine, 582  
 5,6,7,8-Tetrahydro-4-methylquinoline, 21075
- C<sub>10</sub>H<sub>13</sub>NO<sub>2</sub>**  
 Daechu alkaloid A, 4596  
 (3 *$\alpha$* ,4 *$\beta$* ,5 *$\alpha$* )-4,5-Dihydro-3-(1-pyrrolyl)-4,5-dimethyl-2(3*H*)-furanone, 5698  
*N*-Methylphenylalanine, 14670  
 (-)-Salsolinol, 19198
- C<sub>10</sub>H<sub>13</sub>NO<sub>3</sub>**  
 Damascenine, 4614
- C<sub>10</sub>H<sub>13</sub>N<sub>5</sub>**  
 Triacanthine, 21511
- C<sub>10</sub>H<sub>13</sub>N<sub>5</sub>O**  
 Zeatin, 22975
- C<sub>10</sub>H<sub>13</sub>N<sub>5</sub>O<sub>3</sub>**  
 Cordycepin, 4048
- C<sub>10</sub>H<sub>13</sub>N<sub>5</sub>O<sub>4</sub>**  
 Adenine nucleoside, 618
- C<sub>10</sub>H<sub>13</sub>N<sub>5</sub>O<sub>5</sub>**  
 Crotonoside, 4272  
 Guanosine, 9071
- C<sub>10</sub>H<sub>14</sub>**  
*p*-Cymene, 4550  
 3,5-Dimethylene-1,4,4-trimethylcyclopentene, 6350
- C<sub>10</sub>H<sub>14</sub>Br<sub>2</sub>Cl<sub>2</sub>**  
 Plocoralide A, 17563  
 Plocoralide B, 17564
- C<sub>10</sub>H<sub>14</sub>N<sub>2</sub>**  
 Anabasine, 1124  
 ( $\pm$ )-Anabasine, 1125
- (-)-Nicotine, 15527
- C<sub>10</sub>H<sub>14</sub>N<sub>2</sub>O<sub>2</sub>**  
*L*-Prolyl-*L*-proline anhydride, 17906
- C<sub>10</sub>H<sub>14</sub>N<sub>2</sub>O<sub>3</sub>**  
 Chinese bittersweet alkaloid I, 3536
- C<sub>10</sub>H<sub>14</sub>N<sub>2</sub>O<sub>5</sub>**  
 Thymidine, 21359
- C<sub>10</sub>H<sub>14</sub>N<sub>5</sub>O<sub>7</sub>P**  
 5'-Adenosine monophosphate, 625
- C<sub>10</sub>H<sub>14</sub>O**  
 1-Acetyl-4-isopropenyl cyclopentene, 440  
 1-Acetyl-4-isopropylidene-cyclopentene, 441  
 Carvacrol, 3231  
 Carvone, 3237  
 Chrysanthenone, 3596  
 Cumic alcohol, 4357  
 Eucarvone, 7483  
 Isopiperitenone, 11603  
 Limonene-10-al, 12842  
 5-Methylene-2,3,4,4-tetramethylcyclopent-2-enone, 14392  
 Myrtenal, 15219  
 $\alpha$ -Naginatene, 15239  
 $\beta$ -Naginatene, 15240  
 Perillaldehyde, 16930  
 (-)-Pinocarvone, 17402  
 Piperitenone, 17452  
 Safranal, 19120  
 Teresantalaldehyde, 20971  
 Thymol, 21360  
 3,6,6-Trimethyl-2,4-cycloheptadien-1-one, 21946  
 Verbenone, 22399
- C<sub>10</sub>H<sub>14</sub>O<sub>2</sub>**  
 Actinidialactone, 581  
 3,7-Dimethyl-2,6-octadien-1,6-olide, 6382  
 Dolichodial, 6550  
 Elsholtzia ketone, 6763  
 Isoactinidialactone, 11196  
 (-)-Isochaminic acid, 11322  
 Isononepetalactone, 11560  
 Isonepetalactone, 11562  
 Myrtenic acid, 15220  
 Neonepetalactone, 15437  
 Nepetalactone, 15484  
*cis*-Nepetalactone, 15485  
*trans*-Nepetalactone, 15486  
 6-*n*-Pentyl- $\alpha$ -pyrone, 16897  
 Perilla ketone, 16929  
 Rhododendrol, 18796  
 (+)-Rhododendrol, 18797  
 Rotundifolone, 18954  
 $\alpha$ -Teresantallic acid, 20972  
 3,4,5,5-Tetramethylcyclopenta-1,3-diene-

- carboxylic acid, 21193  
Thymolhydroquinone, 21361
- C<sub>10</sub>H<sub>14</sub>O<sub>3</sub>**  
Crocusatin I, 4261  
Dihydroconiferyl alcohol, 5564  
3-Hydroxy-4(8)-ene-*p*-menthane-3(9)-lactone, 10069  
1-(4'-Methoxyphenyl)-(1*R*,2*R*)-propanediol, 14062  
1-(4'-Methoxyphenyl)-(1*R*,2*S*)-propanediol, 14063  
1-(4'-Methoxyphenyl)-(1*S*,2*R*)-propanediol, 14064  
1-(4'-Methoxyphenyl)-(1*S*,2*S*)-propanediol, 14065  
1,2,3-Trimethoxy-5-methyl benzene, 21919  
2,3,5-Trimethoxytoluene, 21935
- C<sub>10</sub>H<sub>14</sub>O<sub>4</sub>**  
Buergerinin C, 2704  
2-Carboxymethyl-4-(3'-hydroxybutyl)furan, 3180  
Cepharosporolide E, 3414  
Cepharosporolide F, 3415  
Crocusatin F, 4258  
Gardendiol, 8227  
1-(4-Hydroxy-3-methoxyphenyl)propan-1,2-diol, 10452  
Paeonilactone A, 16526  
Suspenolic acid, 20497  
3,4,5-Trimethoxy-benzyl alcohol, 21897
- C<sub>10</sub>H<sub>14</sub>O<sub>5</sub>**  
Buergerinin D, 2705  
(1*R*,4*R*,4*aS*,7*aS*)-4,7-Dihydroxymethyl-1-hydroxyl-1,4,4*a*,7*a*-tetrahydrocyclopenta-6-ene[*e*]pyran-3-one, 6035  
4,4-Dimethyl-7*α*,8*β*-dihydroxy-3,5-dioxobicyclo[4.3.1]dec-1(10)-en-2-one, 6339  
*erythro*-Guaiacylglycerol, 9022  
*threo*-Guaiacylglycerol, 9028  
Morindacin, 14972  
Non-glycosidic iridoid, 15697
- C<sub>10</sub>H<sub>14</sub>O<sub>5</sub>S**  
(*S*)-4-(4-Hydroxyphenyl)-2-butanol 2-*O*-sulfate, 10613
- C<sub>10</sub>H<sub>15</sub>ClO<sub>5</sub>**  
Jioglutin A, 11873  
Jioglutin B, 11874
- C<sub>10</sub>H<sub>15</sub>N<sub>5</sub>O<sub>10</sub>P<sub>2</sub>**  
Adenosine diphosphate, 624
- C<sub>10</sub>H<sub>15</sub>NO**  
Ephedrine, 6815  
Hordenine, 9646  
*D*-Pseudoephedrine, 18024
- C<sub>10</sub>H<sub>15</sub>NO<sub>4</sub>**
- α*-Allokainic acid, 936
- C<sub>10</sub>H<sub>15</sub>O<sub>3</sub>**  
GSIR-1, 9019
- C<sub>10</sub>H<sub>15</sub>O<sub>4</sub>**  
(5-Butyl-3-oxo-2,3-dihydrofuran-2-yl)-acetic acid, 2802
- C<sub>10</sub>H<sub>16</sub>**  
Alloocimene, 939  
Artemisia triene, 1796  
Bornylene, 2559  
Camphene, 3045  
Carene-3, 3194  
Carene-4, 3195  
1,1-Dimethyl-2-(3-methyl-1,3-butadiene)-cyclo-propane, 6371  
Dipentene, 6482  
*α*-Fenchene, 7749  
*β*-Fenchene, 7750  
*D*-Limonene, 12843  
*L*-Limonene, 12844  
2,4(8)-*p*-Menthadiene, 13718  
1-Methyl-4-methylethylcyclohexene, 14599  
Myrcene, 15146  
Ocimene, 15925  
*β*-*cis*-Ocimene, 15926  
*β*-*trans*-Ocimene, 15927  
*α*-Phellandrene, 17055  
*β*-Phellandrene, 17056  
*α*-Pinene, 17376  
*β*-Pinene, 17377  
Sabinene, 19099  
Sylvestrene, 20524  
*α*-Terpinene, 20988  
*β*-Terpinene, 20989  
*γ*-Terpinene, 20990  
Terpinolene, 20998  
Thujene, 21349  
Tricyclene, 21598  
3,6,6-Trimethyl-bicyclo[3.1.1]-2-heptene, 21944  
1,3,3-Trimethyltricyclo[2.2.1.0<sup>2,6</sup>]heptane, 21975
- C<sub>10</sub>H<sub>16</sub>N<sub>2</sub>O<sub>2</sub>**  
Cyclo-(Pro-Val), 4534
- C<sub>10</sub>H<sub>16</sub>N<sub>2</sub>O<sub>3</sub>S**  
Biotin, 2395
- C<sub>10</sub>H<sub>16</sub>N<sub>2</sub>O<sub>5</sub>**  
Pinnatanine, 17392
- C<sub>10</sub>H<sub>16</sub>N<sub>2</sub>O<sub>6</sub>**  
Oxypinnatanine, 16469
- C<sub>10</sub>H<sub>16</sub>N<sub>2</sub>O<sub>7</sub>**  
*γ*-*L*-Glutamyl-*L*-glutamic acid, 8773
- C<sub>10</sub>H<sub>16</sub>N<sub>4</sub>O<sub>3</sub>**  
Anserine, 1350
- C<sub>10</sub>H<sub>16</sub>N<sub>4</sub>O<sub>7</sub>**
- Vicine, 22466
- C<sub>10</sub>H<sub>16</sub>N<sub>5</sub>O<sub>13</sub>P<sub>3</sub>**  
Adenosine triphosphate, 626
- C<sub>10</sub>H<sub>16</sub>O**  
Artemisia ketone, 1795  
Camphor, 3048  
*cis*-Carveol, 3234  
*trans*-Carveol, 3235  
Chrysanthemal, 3591  
Citral, 3760  
(*E*)-Citral, 3761  
(*Z*)-Citral, 3762  
(*E,E*)-2,4-Decadienal, 4817  
3,7-Dimethyl-1,5,7-octatrien-3-ol, 6384  
Fenchone, 7751  
Isopinocampone, 11602  
2-Isopropenyl-5-methylhexa-*trans*-3,5-dien-1-ol, 11615  
Isopulegone, 11639  
Isothujone, 11742  
Matatabiether, 13596  
1(7),2-*p*-Menthadien-4-ol, 13723  
1(7),2-*p*-Menthadien-6-ol, 13724  
*cis-p*-2,8-Menthadien-1-ol, 13726  
3,8(9)-*p*-Menthadien-1-ol, 13727  
*p*-Menth-4-en-3-one, 13772  
2-Methyl-6-methylene-2,7-octadienol, 14597  
Myrtenol, 15221  
Perilal, 16926  
(*R*)-Perilla alcohol, 16927  
(*S*)-Perilla alcohol, 16928  
Perillyl alcohol, 16935  
Phellandral, 17054  
*L*-Pinocampone, 17400  
*trans*-Pinocarveol, 17401  
Piperitone, 17456  
Pulegone, 18190  
Sabinol, 19101  
Teresantalol, 20973  
1-Thujone, 21350  
Thujylalcohol, 21355  
1,3,4-Trimethyl-3-cyclohexene-1-carboxaldehyde, 21950  
Verbenol, 22398  
3,6,6-Trimethyl norpinan-2-one, 21970
- C<sub>10</sub>H<sub>16</sub>O<sub>2</sub>**  
Aleprestic acid, 883  
Allomatatabiol, 937  
Ascaridole, 1842  
Chrysanthemic acid, 3593  
Crocusatin C, 4255  
Decadienoic acid, 4819  
Dihydronepetalactone, 5680

- Diosphenol, 6455  
 5-Hydroxymatatabiether, 10365  
 (+)-Iridodial, 11143  
 Iridomyrmecin, 11149  
 Isodihydroepinepetalactone, 11378  
 Isoiridomyrmecin, 11467  
 Matatabilactone, 13597  
 Matatabiol, 13598  
 (-)-(1*R*,4*S*)-*p*-Mentha-2,8-dien-1-hydroperoxide, 13719  
 (-)-(1*S*,4*S*)-*p*-Mentha-2,8-dien-1-hydroperoxide, 13720  
 (-)-(2*R*,4*S*)-*p*-Mentha-1(7),8-dien-2-hydroperoxide, 13721  
 (-)-(2*S*,4*S*)-*p*-Mentha-1(7),8-dien-2-hydroperoxide, 13722  
 6 $\alpha$ -Methyl-2,6 $\beta$ -dihydroxymethylbicyclo[3.1.1]-hept-2-ene, 14310  
 1,10-Oxy- $\alpha$ -myrcene hydroxide, 16452  
 1,10-Oxy- $\beta$ -myrcene hydroxide, 16453  
 Piperitone oxide, 17457  
 Schizonol, 19509
- C<sub>10</sub>H<sub>16</sub>O<sub>3</sub>**  
 Crocusatin B, 4254  
 Crocusatin D, 4256  
 Crocusatin J, 4262  
 Crocusatin K, 4263  
 Crocusatin L, 4264  
 (4*S*,8*R*)-8,9-Dihydroxy-8,9-dihydrocarvone, 5809  
 (4*S*,8*S*)-8,9-Dihydroxy-8,9-dihydrocarvone, 5810  
 Elsholtzidiol, 6764  
 (*R*)-6-Hydroxy-3-(2-hydroxypropan-2-yl)-6-methylcyclohex-2-enone, 10216  
 (4*R*)-4-Hydroxymethylboschnialactone, 10470  
 Nepetalic acid, 15487  
 Rehmapicrogenin, 18600  
 Schizonodiol, 19508
- C<sub>10</sub>H<sub>16</sub>O<sub>4</sub>**  
 Camphoric acid, 3051  
 4,7-Dihydroxy-10-methyl-3,4,7,8,9,10-hexahydro-oxecin-2-one, 6034  
 (4*R*,5*R*,7*S*,8*S*,9*S*)-7-Hydroxy-8-hydroxymethyl-4-methyl-perhydrocyclopenta[*c*]pyran-1-one, 10208  
 Masutakic acid A, 13593  
 Villosol, 22480
- C<sub>10</sub>H<sub>16</sub>O<sub>5</sub>**  
 Buergerinin E, 2706  
 Cepharosporolide C, 3413
- C<sub>10</sub>H<sub>16</sub>O<sub>6</sub>**  
 Jioglutin C, 11875  
 Melimissanol A, 13682
- C<sub>10</sub>H<sub>16</sub>O<sub>9</sub>**  
 6-*O*-malonyl- $\beta$ -methyl-*D*-glucopyranoside, 13447
- C<sub>10</sub>H<sub>17</sub>N<sub>3</sub>O<sub>3</sub>**  
 Erycibe alkaloid II, 7298  
 Tussilagine, 22143
- C<sub>10</sub>H<sub>17</sub>N<sub>3</sub>O<sub>6</sub>**  
 Linamarin, 12854
- C<sub>10</sub>H<sub>17</sub>N<sub>3</sub>O<sub>7</sub>S<sub>2</sub>**  
 Sinigrin, 19935
- C<sub>10</sub>H<sub>17</sub>N<sub>3</sub>O<sub>8</sub>**  
 Cordycydeptide A, 4046
- C<sub>10</sub>H<sub>17</sub>N<sub>3</sub>O<sub>6</sub>S**  
 $\gamma$ -*L*-Glutamyl-glutamine, 8774  
 Norophthalmic acid, 15784
- C<sub>10</sub>H<sub>17</sub>N<sub>3</sub>O<sub>6</sub>S**  
 Glutathione, 8785
- C<sub>10</sub>H<sub>17</sub>N<sub>7</sub>O<sub>4</sub>**  
 Saxitoxin, 19431
- C<sub>10</sub>H<sub>18</sub>**  
 Butylidene-cyclohexane, 2795  
 $\Delta^1$ (7)-Menthene, 13742  
 $\Delta^3$ -Menthene, 13743  
*p*-1-Menthene, 13744  
 1-Methyl-4-isoallyl-cyclohexane, 14528
- C<sub>10</sub>H<sub>18</sub>N<sub>2</sub>O<sub>2</sub>**  
 Slaframine, 20017  
*L*-Valyl-*L*-valine anhydride, 22329
- C<sub>10</sub>H<sub>18</sub>N<sub>2</sub>O<sub>3</sub>**  
 Cyclo-(Leu-Thr), 4508
- C<sub>10</sub>H<sub>18</sub>N<sub>2</sub>O<sub>5</sub>**  
 $\gamma$ -Glutamyl-valine, 8783
- C<sub>10</sub>H<sub>18</sub>O**  
 Artemisia alcohol, 1793  
 Borneol, 2550  
*D*-Borneol, 2553  
*L*-Borneol, 2555  
 2-Caraneol, 3150  
 3-Caraneol, 3151  
 1,4-Cineole, 3688  
 1,8-Cineole, 3689  
 Citronellal, 3767  
 Dihydrocarveol, 5555  
 Dihydroperilla alcohol, 5690  
 3,7-Dimethyl-7-octenal, 6385  
 Eucalyptol, 7481  
 Fenchyl alcohol, 7752  
 Geraniol, 8312  
*D*-Isoborneol, 11259  
*L*-Isoborneol, 11260  
 Isomenthone, 11533  
 Isopulegol, 11638  
 Lavandulol, 12578  
 Linalool, 12849
- cis*-*p*-2-Menthen-1-ol, 13770  
*trans*-*p*-2-Menthen-1-ol, 13771  
 Menthone, 13776  
 4-Methyl-1-(1-methylethyl)-3-cyclohexene-1-ol, 14600  
 Myrtanol, 15218  
 Neoisopulegol, 15413  
 Neoisopulegol, 15415  
 Nerol, 15498  
 Piperitol, 17453  
 (3*R*,4*S*)-(-)-*trans*-Piperitol, 17454  
 (3*S*,4*R*)-(+)-*cis*-Piperitol, 17455  
 Rose oxide, 18920  
 Sabinene hydrate, 19100  
 1-Terpinen-5-ol, 20991  
 Terpinen-4-ol, 20992  
*cis*- $\beta$ -Terpineol, 20993  
*trans*- $\beta$ -Terpineol, 20994  
 $\alpha$ -Terpineol, 20995  
 $\delta$ -Terpineol, 20997  
 Thujanol-4, 21344  
 3,6,6-Trimethyl bicyclo[3.1.1]-heptanol, 21943  
 $\alpha,\alpha,4$ -Trimethyl-3-cyclohexene methanol, 21951  
 2,2,6-Trimethyl-6-vinyl-tetrahydropyran, 21979  
 Yomogi alcohol A, 22922
- C<sub>10</sub>H<sub>18</sub>O<sub>2</sub>**  
 $\gamma$ -Decanolactone, 4835  
*cis*-4-Decenoic acid, 4843  
*trans*-4-Decenoic acid, 4844  
 1,2-Dihydroxy-8(9)-ene-*p*-menthane, 5868  
 (3*R*,4*R*,6*S*)-3,6-Dihydroxy-1-menthene, 5959  
 (5*E*)-2,6-Dimethyl-5,7-octadiene-2,3-diol, 6380  
 Epoxydihydrolinalool, 7072  
 7-Hydroxydihydromatatabiether, 10008  
 4-Hydroxy-2-isopropenyl-5-methylene-hexan-1-ol, 10261  
*trans*-5-Hydroxy-2-isopropenyl-5-methylhex-3-en-1-ol, 10262  
 4-Hydroxymethyl-3,5,5-trimethylcyclohex-3-enol, 10524  
 Isonematatabiol, 11559  
 Linalyl oxide, 12853  
*p*-Mentha-8-en-1,2-diol, 13729  
 6 $\alpha$ -Methyl-2 $\alpha,6\beta$ -dihydroxymethylbicyclo[3.1.1]heptane, 14308  
 Neomatatabiol, 15434  
 Sobrerol, 20030
- C<sub>10</sub>H<sub>18</sub>O<sub>3</sub>**  
 (1*S*,4*S*,8*S*)-8,9-Dihydroxytetrahydrocarvone, 6141  
 $\omega$ -*cis*-Hydroxy- $\Delta^2$ -decenoic acid, 9966  
 $\omega$ -*trans*-Hydroxy- $\Delta^2$ -decenoic acid, 9967  
*cis*-*p*-Menth-2-ene-1 $\alpha,7,8$ -triol, 13765

- trans-p*-Menth-2-ene-1 $\alpha$ ,7,8-triol, 13766  
*p*-Menth-3-ene-1 $\beta$ ,2 $\beta$ ,5 $\beta$ -triol, 13767  
Methyl 4-oxononanoate, 14649
- C<sub>10</sub>H<sub>18</sub>O<sub>4</sub>**  
Dibutyl oxalate, 5403  
Sebacic acid, 19596
- C<sub>10</sub>H<sub>18</sub>O<sub>10</sub>**  
Peltalosa, 16792
- C<sub>10</sub>H<sub>19</sub>NO**  
Epilupinine, 6955  
Lupinine, 13104
- C<sub>10</sub>H<sub>19</sub>NS**  
9-Methylthiononanenitrile, 14761
- C<sub>10</sub>H<sub>20</sub>**  
Butyl-cyclohexane, 2790  
1-Decene, 4841
- C<sub>10</sub>H<sub>20</sub>N<sub>2</sub>O<sub>3</sub>**  
Azoxyalkene, 2063  
*L*-Valine-*L*-valine anhydride, 22325
- C<sub>10</sub>H<sub>20</sub>O**  
Carvomenthol, 3236  
Citronellol, 3768  
Decanal, 4833  
Menthol, 13774  
Menthol-b, 13775  
1-Methyl-3-isopropoxy cyclohexane, 14536
- C<sub>10</sub>H<sub>20</sub>O<sub>2</sub>**  
Capric acid, 3138  
Iridodiol, 11145  
*n*-Octyl acetate, 15987  
Terpin, 20987
- C<sub>10</sub>H<sub>20</sub>O<sub>3</sub>**  
(3*S*,6*R*)-6,7-Dihydroxy-6,7-dihydrolinalool, 5811  
(3*S*,6*S*)-6,7-Dihydroxy-6,7-dihydrolinalool, 5812  
*trans-p*-Menthane-1 $\alpha$ ,2 $\beta$ ,8-triol, 13739  
4-*p*-Menthane-1,7,8-triol, 13740
- C<sub>10</sub>H<sub>20</sub>O<sub>4</sub>**  
3,7-Dimethyloct-3(10)-ene-1,2,6,7-tetrol, 6387  
4 $\beta$ H-*cis-p*-Menthane-2 $\alpha$ ,6 $\alpha$ ,8,9-tetrol, 13730  
*rel*-(1*R*,2*R*,4*R*,8*S*)-*p*-Menthane-1,2,8,9-tetrol, 13731  
(1*R*,2*S*,4*R*,8*R*)-*p*-Menthane-1,2,8,9-tetrol, 13732  
*rel*-(1*S*,2*R*,4*R*,8*R*)-*p*-Menthane-1,2,8,9-tetrol, 13733  
*rel*-(1*S*,2*R*,4*R*,8*S*)-*p*-Menthane-1,2,8,9-tetrol, 13734  
(1*S*,2*S*,4*R*,8*S*)-*p*-Menthane-1,2,8,9-tetrol, 13735  
Thellungianol, 21309
- C<sub>10</sub>H<sub>20</sub>O<sub>6</sub>**  
Butan-2-*O*- $\beta$ -D-glucopyranoside, 2778  
Isobutyl  $\beta$ -D-glucopyranoside, 11275  
 $\beta$ -*n*-Butyl-D-tagatopyranoside, 2806
- C<sub>10</sub>H<sub>20</sub>O<sub>7</sub>**  
Butane-2,3-diol 2-*O*- $\beta$ -D-glucopyranoside, 2777
- C<sub>10</sub>H<sub>20</sub>O<sub>8</sub>**  
1-Deoxy-*L*-erythritol 3-*O*- $\beta$ -D-glucopyranoside, 5172
- C<sub>10</sub>H<sub>21</sub>NO<sub>4</sub>**  
6-*C*-Butyl-DMDP, 2792
- C<sub>10</sub>H<sub>21</sub>O<sub>4</sub>**  
(3*E*)-3,7-Dimethyl-3-octene-1,2,6,7-tetrol, 6386
- C<sub>10</sub>H<sub>22</sub>**  
Decane, 4834  
5-Ethyl-2-methylheptane, 7464  
3-Methylnonane, 14621  
4-Methylnonane, 14622
- C<sub>10</sub>H<sub>23</sub>N**  
*N,N*-Dimethylconiine, 6332
- C<sub>10</sub>H<sub>26</sub>N<sub>4</sub>**  
Spermine, 20147
- C<sub>11</sub>H<sub>6</sub>O<sub>3</sub>**  
Angelicin, 1191  
Psoralen, 18086
- C<sub>11</sub>H<sub>6</sub>O<sub>4</sub>**  
Bergaptol, 2310  
Xanthotoxol, 22775
- C<sub>11</sub>H<sub>7</sub>ClO<sub>3</sub>**  
3-Chloroplumbagin, 3569
- C<sub>11</sub>H<sub>8</sub>**  
Norcapillene, 15724
- C<sub>11</sub>H<sub>8</sub>N<sub>2</sub>**  
Norharman, 15752
- C<sub>11</sub>H<sub>8</sub>O**  
 $\beta$ -Naphthaldehyde, 15251
- C<sub>11</sub>H<sub>8</sub>O<sub>2</sub>**  
Dehydromatricaria ester, 4946  
*trans*-Dehydromatricaria ester, 4947  
2-Methyl-1,4-naphthoquinone, 14612
- C<sub>11</sub>H<sub>8</sub>O<sub>3</sub>**  
7-Methyl juglone, 14541  
Plumbagin, 17568
- C<sub>11</sub>H<sub>8</sub>O<sub>4</sub>**  
**Angelical**, 1189  
Droserone, 6605  
2,3-Epoxyplumbagin, 7189  
8-Formyl-7-methoxycoumarin, 7909  
2-Methoxyjuglone, 13978  
3-Methoxyjuglone, 13979
- C<sub>11</sub>H<sub>8</sub>O<sub>5</sub>**  
5-Carboxy-7-hydroxy-2-methyl-benzopyran- $\gamma$ -one, 3173  
Hydroxydroserone, 10060  
6-Methoxy-7,8-methylenedioxcoumarin, 14013  
Yunnngin B, 22954
- C<sub>11</sub>H<sub>8</sub>O<sub>7</sub>**  
3,8-Dihydroxy-4-methoxy-2-oxo-2*H*-1-benzopyran-5-carboxylic acid, 5994
- C<sub>11</sub>H<sub>9</sub>NO<sub>3</sub>**  
Doryanine, 6573
- C<sub>11</sub>H<sub>9</sub>NO<sub>4</sub>**  
4-Carbomethoxy-6-hydroxy-2-quinolone, 3162  
8-Methoxy-4-quinolone-2-carboxylic acid, 14083
- C<sub>11</sub>H<sub>10</sub>**  
1-Methyl naphthalene, 14611
- C<sub>11</sub>H<sub>10</sub>N<sub>2</sub><sup>+</sup>**  
6,7-Methylenedioxy-*N*-methylisoquinoline, 14378
- C<sub>11</sub>H<sub>10</sub>N<sub>2</sub>O**  
Deoxyvasicinone, 5219  
1,2,3,4-Tetrahydro-1-oxo- $\beta$ -carboline, 21076
- C<sub>11</sub>H<sub>10</sub>N<sub>2</sub>O<sub>2</sub>**  
Vasicinone, 22350
- C<sub>11</sub>H<sub>10</sub>N<sub>6</sub>O**  
Pedatisectine A, 16759
- C<sub>11</sub>H<sub>10</sub>O<sub>2</sub>**  
Matricaria ester, 13603  
Methyl(2*E*,8*Z*)-decadien-4,6-dienoate, 14283
- C<sub>11</sub>H<sub>10</sub>O<sub>3</sub>**  
2,5-Dimethyl-7-hydroxy chromone, 6360  
Psilotic acid, 18084
- C<sub>11</sub>H<sub>10</sub>O<sub>4</sub>**  
Citropten, 3770  
Dulcinone, 6622  
Eugenin, 7519  
7-Hydroxy-4-methoxy-5-methylcoumarin, 10419  
Isoeugenitol, 11420  
Lathodoratin, 12542  
(*E*)-3-Methoxy-4,5-methylenedioxcinnamaldehyde, 14012  
Phellodenol A, 17067  
Phellodenol B, 17068  
*trans*-Phenylitaconic acid, 17126  
Scoparone, 19540
- C<sub>11</sub>H<sub>10</sub>O<sub>5</sub>**  
5,6-Dimethoxy-7-hydroxycoumarin, 6236  
Fraxidin, 7943  
7-Hydroxy-6,8-dimethoxy coumarin, 10017  
Isofraxidin, 11428  
Scicochromone A, 19515
- C<sub>11</sub>H<sub>10</sub>O<sub>7</sub>**  
(+)-Taraxafolin B, 20696
- C<sub>11</sub>H<sub>10</sub>O<sub>9</sub>**  
*L*-Malic acid 2-*O*-gallate, 13420
- C<sub>11</sub>H<sub>11</sub>NO**  
6-Methoxy-4-methylquinoline, 14036  
Phlegmariurine N, 17158
- C<sub>11</sub>H<sub>11</sub>NO<sub>2</sub>**  
4-Methoxy-1-methyl-2-quinolone, 14037

- C<sub>11</sub>H<sub>11</sub>NO<sub>3</sub>**  
 Doryphornine, 6574  
 Gentianamine, 8295  
 Oxyhydrastinine, 16446
- C<sub>11</sub>H<sub>11</sub>NO<sub>4</sub>**  
 5,6-Dimethoxy-*N*-methylphthalimide, 6268
- C<sub>11</sub>H<sub>12</sub>NO<sup>+</sup>**  
 Echinorine, 6692
- C<sub>11</sub>H<sub>12</sub>N<sub>2</sub>**  
 Deoxypeganine, 5201
- C<sub>11</sub>H<sub>12</sub>N<sub>2</sub>O**  
 Peganine, 16770  
 Peganol, 16771
- C<sub>11</sub>H<sub>12</sub>N<sub>2</sub>O<sub>2</sub>**  
 7-hydroxy vasicine, 10821  
 Pegamine, 16768  
**Tryptophan**, 22060  
 Vasicinol, 22349
- C<sub>11</sub>H<sub>12</sub>N<sub>2</sub>O<sub>3</sub>**  
 5-Hydroxy-*L*-tryptophan, 10818
- C<sub>11</sub>H<sub>12</sub>O<sub>2</sub>**  
 2-(Butyn-2-ylidene)-*d*<sup>3</sup>-dihydrofuran[5-spiro-2']-tetrahydrofuran, 2807  
 Cinnamyl acetate, 3726  
 Ethylcinnamate, 7430  
 2-(1'-Methylethenyl)-6-hydroxy-2,3-dihydrobenzo[*b*]furan, 14429
- C<sub>11</sub>H<sub>12</sub>O<sub>3</sub>**  
 Anticancer Benzenoid PMV70P691-57, 1385  
 Asaricin, 1832  
 Croweacin, 4276  
 Dictafofin A, 5443  
 (-)-5-Hydroxy-4-methoxy-1-tetralone, 10460  
 (4*R*)-5-Hydroxy-4-methoxy- $\alpha$ -tetralone, 10461  
 Isomyristicin, 11552  
 (*E*)-*p*-Methoxycinnamic acid methyl ester, 13886  
 3-(4-Methoxyphenyl)-2-methyl-2-acrylic acid, 14060  
 Myristicin, 15204  
 Pedicellarin, 16761
- C<sub>11</sub>H<sub>12</sub>O<sub>4</sub>**  
 Caffeic acid dimethyl ether, 2888  
 (4*S*)-4,8-Dihydroxy-5-methoxy- $\alpha$ -tetralone, 6005  
 (4*R*)-5,8-Dihydroxy-4-methoxy- $\alpha$ -tetralone, 6006  
 (4*S*)-5,8-Dihydroxy-4-methoxy- $\alpha$ -tetralone, 6007  
 6,7-Dimethoxy-2*H*-1-benzopyran-2-one, 6203  
 3,4-Dioxymethylene-5-methoxy-1-(1-oxopropyl)benzene, 6479  
 Ethyl caffeate, 7424  
 Methyl *cis*-ferulate, 14442  
 Methyl *trans*-ferulate, 14443  
 3-Methyl-6-methoxy-8-hydroxy-3,4-dihydroisocoumarin, 14586
- Sinapaldehyde, 19910
- C<sub>11</sub>H<sub>12</sub>O<sub>5</sub>**  
 3-Aldehyde-6-methyl-2,4-dihydroxy-ethylbenzoate, 873  
 Elenolide, 6747  
 Plumbagic acid, 17567  
 Sinapic acid, 19912
- C<sub>11</sub>H<sub>12</sub>O<sub>7</sub>**  
 Piscidic acid, 17479
- C<sub>11</sub>H<sub>13</sub>NO<sub>2</sub>**  
 (4*S*,5*R*) Ephedroxane, 6816
- C<sub>11</sub>H<sub>13</sub>NO<sub>3</sub>**  
 Cantleyine, 3103  
 Corydaldine (tautomeric structure 1), 4100  
 Corydaldine (tautomeric structure 2), 4101  
 Isocantleyine, 11305  
 Thalifoline, 21255
- C<sub>11</sub>H<sub>13</sub>NO<sub>4</sub>**  
 Wilfordic acid, 22676
- C<sub>11</sub>H<sub>14</sub>N<sub>2</sub>**  
 Gramine, 8971
- C<sub>11</sub>H<sub>14</sub>N<sub>2</sub>O**  
 Cytisine, 4594  
 Gramine *Nb*-oxide, 8973
- C<sub>11</sub>H<sub>14</sub>N<sub>4</sub>O<sub>6</sub>**  
 1-Methylxanthosine, 14816
- C<sub>11</sub>H<sub>14</sub>O**  
 1-Methoxy-4-(2-methylpropenyl)benzene, 14033
- C<sub>11</sub>H<sub>14</sub>O<sub>2</sub>**  
 Actinidiolide, 583  
 1-Allyl-2,4-dimethoxybenzene, 945  
 Eugenol methyl ether, 7523  
*p*-Methoxybenzylacetone, 13852  
 4-(3-Methyl-2-butenyl)-4-cyclohexene-1,3-dione, 14180  
*cis*-Methyl isoeugenol, 14530  
*trans*-Methyl isoeugenol, 14531
- C<sub>11</sub>H<sub>14</sub>O<sub>3</sub>**  
 Feroxidin, 7761  
 Gynunol, 9121  
 2-Methoxy-4-(3-methoxy-1-propenyl)-phenol, 14001  
 Nakienone A, 15242  
 Zingerone, 23003
- C<sub>11</sub>H<sub>14</sub>O<sub>4</sub>**  
 Desaspidinol, 5244  
 Diethylene glycol monobenzoate, 5501  
 3-(3,4-Dihydroxyphenyl)-2-propen-1-ethanoate, 6094  
 Robustaol B, 18868  
 Sinapyl alcohol, 19922
- C<sub>11</sub>H<sub>14</sub>O<sub>5</sub>**  
 Dehydromorroniaglycone, 4951
- Dunnisinin, 6639  
 Genipin, 8273  
 3-Hydroxy-1-(4-hydroxy-3,5-dimethoxyphenyl)-1-propanone, 10180  
 Sarracenin, 19387  
 Taraxafofin, 20695
- C<sub>11</sub>H<sub>14</sub>O<sub>6</sub>**  
 2,3-Dihydroxy-1-(4-hydroxy-3,5-dimethoxyphenyl)-1-propanone, 5907  
 Genipinic acid, 8275  
 Lamiophlomiol A, 12459  
 Lamiophlomiol B, 12460  
 Methyl syramuraldehydate, 14733
- C<sub>11</sub>H<sub>14</sub>O<sub>7</sub>**  
 Lamiophlomiol C, 12461
- C<sub>11</sub>H<sub>15</sub>N**  
 5,6,7,8-Tetrahydro-2,4-dimethylquinoline, 21069
- C<sub>11</sub>H<sub>15</sub>NO**  
 3,4-Dimethyl-5-phenyloxazolidine, 6396
- C<sub>11</sub>H<sub>15</sub>NO**  
 Valerianine, 22319
- C<sub>11</sub>H<sub>15</sub>NO<sub>2</sub>**  
 Corypalline, 4121
- C<sub>11</sub>H<sub>15</sub>NO<sub>2</sub>**  
 6,7-Dihydroxy-1,1-dimethyl-1,2,3,4-tetrahydroisoquinoline, 5862
- C<sub>11</sub>H<sub>15</sub>NO<sub>2</sub>**  
*N,N*-Dimethylphenylalanine, 6394
- C<sub>11</sub>H<sub>15</sub>NO<sub>2</sub>**  
 3-Ethoxymethyl-5,6,7,8-tetrahydro-8-indolizinone, 7413
- C<sub>11</sub>H<sub>15</sub>NO<sub>2</sub>**  
 Salsoline, 19196
- C<sub>11</sub>H<sub>15</sub>NO<sub>4</sub>**  
 Radicamine B, 18525
- C<sub>11</sub>H<sub>15</sub>NO<sub>7</sub>**  
 Brachystemoside A, 2583
- C<sub>11</sub>H<sub>15</sub>N<sub>5</sub>O**  
 Ganoderpurine, 8192
- C<sub>11</sub>H<sub>16</sub>N<sub>2</sub>O<sub>2</sub>**  
 Pilocarpine, 17360
- C<sub>11</sub>H<sub>16</sub>O**  
 2-Isopropyl-5-methylanisole, 11626  
 Jasmone, 11824  
 2-Methyl-4-(1,1-dimethylethyl) phenol, 14323  
 3-Methyl-2-(2-pentenyl)-2-cyclopenten-1-one, 14664
- C<sub>11</sub>H<sub>16</sub>O<sub>2</sub>**  
 Jasmololone, 11823  
 Nortricycloekasantalic acid, 15810
- C<sub>11</sub>H<sub>16</sub>O<sub>3</sub>**  
 5-Ethyl-1,2,3-trimethoxybenzene, 7479  
 Isololilide, 11508



- 3-Isopropyl-5-acetoxycyclohexene-2-one-1, 4496  
(6*S*,7*αR*)-Loliolide, 12952  
Loliolide isomer, 12953  
8-Methoxy-9-hydroxythymol, 13969
- C<sub>11</sub>H<sub>16</sub>O<sub>4</sub>**  
Melazolide A, 13660
- C<sub>11</sub>H<sub>16</sub>O<sub>5</sub>**  
(1*R*,4*R*,4*aS*,7*aS*)-4,7-Dihydroxymethyl-1-methoxyl-1,4,4*a*,7*a*-tetrahydrocyclopenta-6-en[e]pyran-3-one, 6038  
(1*R*,4*S*,4*aS*,7*aS*)-4,7-Dihydroxymethyl-1-methoxyl-1,4,4*a*,7*a*-tetrahydrocyclopenta-6-en[e]pyran-3-one, 6039
- C<sub>11</sub>H<sub>16</sub>O<sub>6</sub>**  
*erythro*-1-*C*-Syringylglycerol, 20572  
*threo*-1-*C*-Syringylglycerol, 20574
- C<sub>11</sub>H<sub>16</sub>O<sub>8</sub>**  
Protoanemonin hydrate glucoside, 17965  
Ranunculin, 18545
- C<sub>11</sub>H<sub>17</sub>NO**  
*N*-Methylephedrine, 14395  
*D*-*N*-Methyl-pseudoephedrine, 14701  
Tecomanine, 20896
- C<sub>11</sub>H<sub>17</sub>NO<sub>2</sub>**  
Ganoine, 8194  
Magnosprengerine, 13393
- C<sub>11</sub>H<sub>17</sub>NO<sub>3</sub>**  
Mescaline, 13795
- C<sub>11</sub>H<sub>17</sub>NO<sub>6</sub>**  
Rhodiocyanoside A, 18790
- C<sub>11</sub>H<sub>17</sub>NO<sub>7</sub>**  
Cardiospermin, 3190  
Sarmentosin, 19377
- C<sub>11</sub>H<sub>17</sub>NO<sub>8</sub>**  
Pyroglutamic acid *N*-fructoside, 18267  
Sarmentosin epoxide, 19379
- C<sub>11</sub>H<sub>17</sub>N<sub>3</sub>O<sub>8</sub>**  
Tetrodonic acid, 21210  
Tetrodotoxin, 21211
- C<sub>11</sub>H<sub>18</sub>NO<sup>+</sup>**  
*N*-Candicine, 3070
- C<sub>11</sub>H<sub>18</sub>N<sub>2</sub>O<sub>2</sub>**  
*L*-Prolyl-*L*-valine anhydride, 17907
- C<sub>11</sub>H<sub>18</sub>N<sub>2</sub>O<sub>6</sub>S**  
*γ*-*L*-Glutamyl-*S*-(prop-1-enyl)cystein sulfoxide, 8780
- C<sub>11</sub>H<sub>18</sub>O<sub>2</sub>**  
Linalylformate, 12852
- C<sub>11</sub>H<sub>18</sub>O<sub>3</sub>**  
Aeginetolide, 657
- C<sub>11</sub>H<sub>18</sub>O<sub>5</sub>**  
(1*R*,4*R*,4*aS*,7*S*,7*aS*)-7-Hydroxyl-4-hydroxymethyl-7-methyl-1-methoxyl-1,4,4*a*,7*a*-tetrahydrocyclopenta[*e*]-pyran-3-one, 10321  
(1*R*,4*S*,4*aS*,7*S*,7*aS*)-7-hydroxyl-4-hydroxymethyl-7-methyl-1-methoxyl-1,4,4*a*,7*a*-tetrahydrocyclopenta[*e*]-pyran-3-one, 10322  
(1*S*,4*R*,4*aS*,7*S*,7*aS*)-7-Hydroxyl-4-hydroxymethyl-7-methyl-1-methoxyl-1,4,4*a*,7*a*-tetrahydrocyclopenta[*e*]-pyran-3-one, 10323
- 4-Hydroxy-5-methoxy-10-methyl-oxecane-2,7-dione A, 10426  
4-Hydroxy-5-methoxy-10-methyl-oxecane-2,7-dione B, 10427
- C<sub>11</sub>H<sub>18</sub>O<sub>6</sub>**  
Jioglutin D, 11876
- C<sub>11</sub>H<sub>18</sub>O<sub>8</sub>**  
Securiterpenoside, 19643  
Tuliposide A, 22104
- C<sub>11</sub>H<sub>18</sub>O<sub>9</sub>**  
Tuliposide B, 22105  
6-Tuliposide B, 22106
- C<sub>11</sub>H<sub>19</sub>NO<sub>6</sub>**  
Heterodendrin, 9467  
Lotaustralin, 13003
- C<sub>11</sub>H<sub>19</sub>NO<sub>10</sub>S<sub>2</sub>**  
2-Hydroxybut-3-enyl glucosinolate, 9863  
Progoitrin, 17903
- C<sub>11</sub>H<sub>19</sub>N<sub>3</sub>O<sub>6</sub>**  
Ophthalmic acid, 16153
- C<sub>11</sub>H<sub>19</sub>N<sub>3</sub>O<sub>6</sub>S**  
*S*-Methylglutathione, 14472
- C<sub>11</sub>H<sub>20</sub>NO<sub>10</sub>S<sub>3</sub><sup>-</sup>**  
Glucosiberin, 8598
- C<sub>11</sub>H<sub>20</sub>NO<sub>11</sub>S<sub>3</sub><sup>-</sup>**  
Glucoscheirolin, 8591
- C<sub>11</sub>H<sub>20</sub>N<sub>2</sub>O<sub>2</sub>**  
Cyclo-(Ile-Val), 4501  
Cyclo-(Leu-Val), 4510
- 3-Isopropyl-6-isobutyl-2,5-dioxopiperazine, 11624  
3-Isopropyl-6-tert-butyl-2,5-piperazinedione, 11631
- C<sub>11</sub>H<sub>20</sub>N<sub>2</sub>O<sub>6</sub>**  
Saccharopine, 19105
- C<sub>11</sub>H<sub>20</sub>O<sub>2</sub>**  
3-Acetoxy-1-nonene, 264  
*γ*-Undecalactone, 22217  
10-Undecenoic acid, 22221
- C<sub>11</sub>H<sub>20</sub>O<sub>4</sub>**  
Dimethyl azelate, 6317
- C<sub>11</sub>H<sub>20</sub>O<sub>5</sub>**  
Jioglutin E, 11877
- C<sub>11</sub>H<sub>20</sub>O<sub>6</sub>**  
Crenulatin, 4227
- Officialisin, 16014
- C<sub>11</sub>H<sub>20</sub>O<sub>8</sub>**  
Hymenoside M, 10856  
Hymenoside W, 10866  
3-(Methoxycarbonyl)propyl-*β*-*D*-glucopyranoside, 13877
- C<sub>11</sub>H<sub>21</sub>N**  
*β*-Skytanthine, 20016
- C<sub>11</sub>H<sub>21</sub>NO**  
Tecostanine, 20898
- C<sub>11</sub>H<sub>21</sub>NO<sub>2</sub>S**  
Rorifone, 18909
- C<sub>11</sub>H<sub>22</sub>**  
Methyl cyclodecane, 14269  
Undecene, 22220
- C<sub>11</sub>H<sub>22</sub>O**  
Methyl-*n*-nonylketone, 14623  
1-Undecen-3-ol, 22222
- C<sub>11</sub>H<sub>22</sub>O<sub>2</sub>**  
8-Methyl capric acid, 14214  
2-Nonyl acetate, 15698  
Undecanoic acid, 22218
- C<sub>11</sub>H<sub>22</sub>O<sub>9</sub>**  
2-*C*-Methyl-*D*-erythritol  
1-*O*-*β*-*D*-fructofuranoside, 14420  
2-*C*-Methyl-*D*-erythritol  
3-*O*-*β*-*D*-fructofuranoside, 14421  
2-*C*-Methyl-*D*-erythritol  
4-*O*-*β*-*D*-fructofuranoside, 14422  
2-*C*-Methyl-*D*-erythritol  
1-*O*-*β*-*D*-glucopyranoside, 14423  
2-*C*-Methyl-*D*-erythritol  
3-*O*-*β*-*D*-glucopyranoside, 14424  
2-*C*-Methyl-*D*-erythritol  
4-*O*-*β*-*D*-glucopyranoside, 14425
- C<sub>11</sub>H<sub>23</sub>NO<sub>3</sub>S**  
Rorifamide, 18908
- C<sub>11</sub>H<sub>24</sub>**  
2,4,6-Trimethyl octane, 21972
- C<sub>11</sub>H<sub>24</sub>O**  
Nonyl ethyl ether, 15700  
Undecan-2-ol, 22219  
Undecyl alcohol, 22226
- C<sub>12</sub>H<sub>6</sub>S**  
2-(Buta-1,3-diylnyl)-5-(but-3-en-1-ynyl)thiophene, 2775
- C<sub>12</sub>H<sub>7</sub>ClOS**  
2-(Buta-1,3-diylnyl)-5-(4-chloro-3-hydroxybut-1-ynyl)thiophene, 2776
- C<sub>12</sub>H<sub>8</sub>N<sub>2</sub>O**  
1-Formyl-*β*-carboline, 7898
- C<sub>12</sub>H<sub>8</sub>N<sub>2</sub>O<sub>4</sub>**  
Picrasidine V, 17313

- C<sub>12</sub>H<sub>8</sub>O**  
Capillin, 3122  
Dibenzofuran, 5380
- C<sub>12</sub>H<sub>8</sub>OS**  
*cis*-1-(2-Furyl)-4-(2-thienyl)-1-buten-3-yne, 8031
- C<sub>12</sub>H<sub>8</sub>O<sub>2</sub>S<sub>2</sub>**  
Arctic acid, 1620
- C<sub>12</sub>H<sub>8</sub>O<sub>4</sub>**  
Bergapten, 2309  
Isobergapten, 11249  
Sphondin, 20156  
Xanthotoxin, 22774
- C<sub>12</sub>H<sub>8</sub>O<sub>5</sub>**  
5-Methoxy-8-hydroxy-psoralen, 13968
- C<sub>12</sub>H<sub>8</sub>O<sub>6</sub>**  
Brevifolin, 2602
- C<sub>12</sub>H<sub>8</sub>S<sub>2</sub>**  
5-(3-Buten-1-ynyl)-2,2'-bithienyl, 2783
- C<sub>12</sub>H<sub>8</sub>S<sub>3</sub>**  
 $\alpha$ -Terthienyl, 21018
- C<sub>12</sub>H<sub>9</sub>NO<sub>2</sub>**  
Dictamine, 5445  
Isodictamine, 11376
- C<sub>12</sub>H<sub>9</sub>NO<sub>3</sub>**  
Confusameline, 3975  
Dictangustine A, 5456  
Robustine, 18881
- C<sub>12</sub>H<sub>9</sub>NO<sub>4</sub>**  
Cheliensisamine, 3504  
5-Hydroxy-3-amino-2-acetyl-1,4-naphthoquinone, 9778
- C<sub>12</sub>H<sub>9</sub>N<sub>3</sub>O**  
Carboline-1-carboxylic acid, amide, 3157
- C<sub>12</sub>H<sub>10</sub>**  
Capillene, 3121  
Neocapillene, 15354
- C<sub>12</sub>H<sub>10</sub>N<sub>2</sub>**  
Harman, 9234
- C<sub>12</sub>H<sub>10</sub>N<sub>2</sub>O**  
Harmol, 9236  
1-Hydroxymethyl- $\beta$ -carboline, 10479  
Taraxacine A, 20692
- C<sub>12</sub>H<sub>10</sub>O**  
1-Phenyl-2,4-hexadiyne-1-ol, 17123
- C<sub>12</sub>H<sub>10</sub>O<sub>2</sub>**  
Chimaphylin, 3526
- C<sub>12</sub>H<sub>10</sub>O<sub>4</sub>**  
5-Acetyl-7-hydroxy-2-methylbenzopyran- $\gamma$ -one, 423  
Aristolindiquinone, 1710  
5-(2-Hydroxyphenoxymethyl)furfural, 10603  
Liqcoumarin, 12903  
3-Methoxy-7-methyljuglone, 14026
- Sappanin, 19346
- C<sub>12</sub>H<sub>10</sub>O<sub>5</sub>**  
Armillarisin A, 1742  
Bis(5-formylfurfuryl)ether, 2452  
2-Methyl-5-carboxymethyl-7-hydroxychromone, 14220  
Murraxonin, 15112
- C<sub>12</sub>H<sub>10</sub>O<sub>6</sub>**  
Yunnngin A, 22953
- C<sub>12</sub>H<sub>11</sub>NO<sub>3</sub>**  
4-Ethoxycarbonyl-2-quinolinone, 7398
- C<sub>12</sub>H<sub>11</sub>NO<sub>4</sub>**  
2,3-Methylenedioxy-4,7-dimethoxyquinoline, 14364
- C<sub>12</sub>H<sub>11</sub>NO<sub>5</sub>**  
6,7-Dimethoxy-*N*-methyl-3,4-dioxo-1(2*H*)-isoquinolinone, 6260
- C<sub>12</sub>H<sub>12</sub>**  
Agropyrene, 764
- C<sub>12</sub>H<sub>12</sub>N<sub>2</sub>**  
Dihydroharman, 5625
- C<sub>12</sub>H<sub>12</sub>N<sub>2</sub>O**  
Harmalol, 9233
- C<sub>12</sub>H<sub>12</sub>N<sub>2</sub>O<sub>2</sub>**  
Cycloanthranilylproline, 4466  
Lycoperodine 1, 13213  
1,2,3,9-Tetrahydropyrrolo(2,1-*b*)quinazolin-1-carboxylic acid, 21079
- C<sub>12</sub>H<sub>12</sub>O**  
Capillon, 3130
- C<sub>12</sub>H<sub>12</sub>O<sub>2</sub>**  
3-Butylidene-phalide, 2797
- C<sub>12</sub>H<sub>12</sub>O<sub>3</sub>**  
Anofinic acid, 1343  
3-Butylidene-7-hydroxyphalide, 2796  
Fomannoxin acid, 7855  
Senkyunolide B, 19732  
Senkyunolide C, 19733  
Senkyunolide E, 19735
- C<sub>12</sub>H<sub>12</sub>O<sub>4</sub>**  
5,7-Dihydroxy-2,6,8-trimethylchromone, 6167  
Eugenitin, 7520  
Hispolon, 9567  
Isoeugenitin, 11419  
Polygonolide, 17648
- C<sub>12</sub>H<sub>12</sub>O<sub>5</sub>**  
2-Methyl-5-carboxymethyl-7-hydroxy-chromanone, 14219
- C<sub>12</sub>H<sub>12</sub>O<sub>5</sub>**  
Schinicomarin, 19467  
6,7,8-Trimethoxy-2*H*-1-benzopyran-2-one, 21893  
5,6,7-Trimethoxycoumarin, 21905
- 5,7,8-Trimethoxycoumarin, 21906
- C<sub>12</sub>H<sub>12</sub>O<sub>6</sub>**  
Apodophyllone, 1531  
8-Hydroxy-5,6,7-trimethoxycoumarin, 10786
- C<sub>12</sub>H<sub>13</sub>N**  
2-*n*-Propylquinoline, 17940
- C<sub>12</sub>H<sub>13</sub>NO<sub>2</sub>**  
Shihunine, 19803
- C<sub>12</sub>H<sub>13</sub>NO<sub>3</sub>**  
Nigellimine *N*-oxide, 15569  
Nirurine, 15626  
Oleracein E, 16078  
Salsoline A, 19197
- C<sub>12</sub>H<sub>13</sub>NO<sub>4</sub>**  
Cherianoine, 3512
- C<sub>12</sub>H<sub>13</sub>NO<sub>5</sub>**  
4-[2-(Methoxycarbonyl)anilino]-4-oxobutanoic acid, 13872
- C<sub>12</sub>H<sub>14</sub>N<sub>2</sub>**  
Calligonine, 2977  
Eleagnine, 6736
- C<sub>12</sub>H<sub>14</sub>N<sub>2</sub>O**  
Dehydrobufotenine, 4884  
Shihunidine, 19802  
Tetrahydroharmol, 21071
- C<sub>12</sub>H<sub>14</sub>N<sub>2</sub>O<sup>-</sup>**  
Nigeglamine, 15562
- C<sub>12</sub>H<sub>14</sub>N<sub>2</sub>OS<sub>2</sub>**  
Methoxybrassinin, 13861
- C<sub>12</sub>H<sub>14</sub>N<sub>2</sub>O<sub>2</sub>**  
Abrine, 13  
Cyclo-(Phe-Ala), 4526  
*N*-Formylcytisine, 7900
- C<sub>12</sub>H<sub>14</sub>N<sub>2</sub>O<sub>3</sub>**  
*L*-Phenylalanyl-*L*-serine anhydride, 17095
- C<sub>12</sub>H<sub>14</sub>N<sub>2</sub>O<sub>4</sub>**  
Cyclo-(*D*-seryl-*L*-tyrosyl), 4535
- C<sub>12</sub>H<sub>14</sub>N<sub>2</sub>O<sub>4</sub>S**  
Bufothionine, 2727
- C<sub>12</sub>H<sub>14</sub>O**  
Capillanol, 3116  
4,7-Dimethyl-1-tetralone, 6413
- C<sub>12</sub>H<sub>14</sub>O<sub>2</sub>**  
Bruguierol A, 2680  
3-Butyl-phthalide, 2803  
4-(3,4-Dimethoxyphenyl)-but-1,3-diene, 6277  
6-Hydroxy-8-methyl-2,2-dimethyl-2*H*-benzopyran, 10484  
Lachnophyllol acetate, 12430  
Ligustilide, 12825  
2-Methyl-6-(3-methyl-2-butenyl)benzo-1,4-quinone, 14592  
Neoligustilide, 15427

- C<sub>12</sub>H<sub>14</sub>O<sub>3</sub>**  
 Acetylugenol, 391  
 Bruguierol B, 2681  
 Bruguierol C, 2682  
 3,5-Dimethyl-8-methoxy-3,4-dihydroisocoumarin, 6369  
 (Z)-6,7-Epoxy-6,7-dihydrologustilide, 7071  
 Ethyl *p*-methoxy-*cis*-cinnamate, 7460  
 Ethyl-*p*-methoxycinnamate, 7474  
 3-Hydroxy-2-methyl-5-(3-methyl-2-butenyl)-benzo-1,4-quinone, 10508  
 8-Methoxy-2,2-dimethyl-2*H*-chromen-6-ol, 13917  
 2-Methoxy-6-prenyl-1,4-benzoquinone, 14076  
 Narchinol A, 15264  
 Senkyunolide F, 19736  
*n*-Valerophenone-*O*-carboxylic acid, 22322
- C<sub>12</sub>H<sub>14</sub>O<sub>4</sub>**  
 Apiole, 1520  
 Diethylphthalate, 5502  
 2,3-Dihydro-5,7-dihydroxy-2,6,8-trimethyl-4*H*-1-benzopyran-4-one, 5598  
 4,7-Dihydroxy-3-butylphthalide, 5782  
 Dillapiol, 6193  
 3,5-Dimethyl-8-hydroxy-7-methoxy-3,4-dihydroisocoumarin, 6361  
 Phomapyrone D, 17177  
 Senkyunolide D, 19734  
 Tetrahydropiperic acid, 21078  
 Z-3-(2,4,5-Trimethoxyphenyl)-2-propenal, 21929
- C<sub>12</sub>H<sub>14</sub>O<sub>5</sub>**  
 Mono-*p*-coumaroyl glyceride, 14922  
*trans*-Sinapic acid methylester, 19916  
 2,4,5-Trimethoxycinnamic acid, 21901  
 3,4,5-Trimethoxy cinnamic acid, 21902  
 1-(2,4,5-Trimethoxyphenyl)-1,2-propanedione, 21928
- C<sub>12</sub>H<sub>14</sub>O<sub>6</sub>**  
 1-*O*-Caffeoylglycerol, 2907
- C<sub>12</sub>H<sub>14</sub>O<sub>8</sub>**  
 Uralenneoside, 22240
- C<sub>12</sub>H<sub>15</sub>ClO<sub>3</sub>**  
 Senkyunolide L, 19741
- C<sub>12</sub>H<sub>15</sub>NO<sub>3</sub>**  
 Hydrocotarnine, 9709  
*N*-Methylcorydaldine, 14251  
 Uncinine, 22214
- C<sub>12</sub>H<sub>15</sub>NO<sub>4</sub>**  
 (-)-3-Carboxy-1,1-dimethyl-6,7-dihydroxy-1,2,3,4-tetrahydroisoquinoline, 3169  
 (-)-3-Carboxy-1,1-dimethyl-7,8-dihydroxy-1,2,3,4-tetrahydroisoquinoline, 3170  
 Cotarnine, 4129
- Desmodimine, 5267
- C<sub>12</sub>H<sub>15</sub>NO<sub>8</sub>**  
 4-Hydroxypyridyl-3-oic acid 4-*O*-glucopyranoside, 10670
- C<sub>12</sub>H<sub>16</sub>N<sub>2</sub>**  
 3,4-Dihydro-6,7-dimethoxy-2-methylisoquinoline, 5602  
*N,N*-Dimethyltryptamine, 6418
- C<sub>12</sub>H<sub>16</sub>NO<sub>2</sub><sup>+</sup>**  
 2-Methyl-1,2,3,4-tetrahydro- $\beta$ -carboline, 14747
- C<sub>12</sub>H<sub>16</sub>N<sub>2</sub>O**  
 Bufotenine, 2726  
*N,N*-Dimethyltryptamine *N*-oxide, 6420  
 5-Methoxy-*N*-methyltryptamine, 14038  
*N*-Methylcytisine, 14279
- C<sub>12</sub>H<sub>16</sub>O<sub>2</sub>**  
 Benzyl *D*-2-methylbutyrate, 2295  
 3(*S*)-3-Butyl-4,5-dihydrophthalide, 2791  
 Carvacrol acetate, 3232  
 $\beta$ -Phenylethyl isobutanoate, 17116  
 Thymyl acetate, 21366  
 7-Trinoreudesm-4(15),8-dien-1 $\beta$ -ol-7-one, 21981
- C<sub>12</sub>H<sub>16</sub>O<sub>3</sub>**  
 1-Allyl-2,4,5-trimethoxy-benzene, 957  
 $\alpha$ -Asarone, 1834  
 $\beta$ -Asarone, 1835  
 (*E*)-4-(3,4-Dimethoxyphenyl)-but-3-en-1-ol, 6279  
 3,7-Dimethyl-8-hydroxy-6-methoxyisochroman, 6362  
 Elemicin, 6745  
*trans*-Isoelemicin, 11408  
 2-Methoxy-6-prenylhydroquinone, 14077  
 Primin, 17857  
 Senkyunolide G, 19737  
 Senkyunolide K, 19740
- C<sub>12</sub>H<sub>16</sub>O<sub>4</sub>**  
 Acoramone, 561  
 Aspidinol, 1897  
 (Z)-4,5-Dihydro-6,7-*trans*-dihydroxy-3-butylidene phthalide, 5589  
 (Z)-4,5-Dihydro-6,7-*cis*-dihydroxy-3-butylidene phthalide, 5590  
 3,7-Dimethyl-1,8-dihydroxy-6-methoxyisochroman, 6340  
*cis*-1',2'-Epoxyasarone, 7056  
 Erigerenone A, 7255  
 Erigerenone C, 7257  
 Isoacoramone, 11194  
 Pogostone, 17602  
 Senkyunolide H, 19738
- C<sub>12</sub>H<sub>16</sub>O<sub>5</sub>**  
 3,4,5-Trimethoxydihydrocinnamic acid, 21907
- C<sub>12</sub>H<sub>16</sub>O<sub>7</sub>**  
 Arbutin, 1618  
*C*- $\beta$ -*D*-Glucopyranosyl-2,6-dihydroxyl benzene, 8620
- C<sub>12</sub>H<sub>16</sub>O<sub>8</sub>**  
 Dianthoside, 5371  
 Phlorin, 17171
- C<sub>12</sub>H<sub>17</sub>N**  
 Nigrifactin, 15571
- C<sub>12</sub>H<sub>17</sub>NO**  
 2,3,4-Trimethyl-5-phenyloxazolidine, 21973
- C<sub>12</sub>H<sub>17</sub>NO<sub>2</sub>**  
 1-Methyl-corypalline, 14252  
*O*-Methyl-corypalline, 14253  
 Salsolidine, 19195
- C<sub>12</sub>H<sub>17</sub>NO<sub>3</sub>**  
 Maokonine, 13543
- C<sub>12</sub>H<sub>17</sub>NO<sub>5</sub>**  
 Radicamine A, 18524
- C<sub>12</sub>H<sub>17</sub>NO<sub>6</sub>**  
 Deidaclin, 4988
- C<sub>12</sub>H<sub>17</sub>NO<sub>7</sub>**  
 Volkenin, 22608
- C<sub>12</sub>H<sub>17</sub>NO<sub>8</sub>**  
 Gynocardin, 9114
- C<sub>12</sub>H<sub>17</sub>N<sub>3</sub>O<sub>4</sub>**  
 Agaritine, 701
- C<sub>12</sub>H<sub>17</sub>N<sub>4</sub>OS<sup>+</sup>**  
 Vitamin B<sub>1</sub>, 22554
- C<sub>12</sub>H<sub>18</sub>**  
 3,5-Dimethylbutylbenzene, 6329  
 1-Phenylhexane, 17124  
 Pregeijerene B, 17780
- C<sub>12</sub>H<sub>18</sub>NO<sub>3</sub><sup>+</sup>**  
 4-Hydroxybenzoyl choline, 9822
- C<sub>12</sub>H<sub>18</sub>N<sub>2</sub>O**  
 Gramine methohydroxide, 8972
- C<sub>12</sub>H<sub>18</sub>N<sub>2</sub>O<sub>2</sub>**  
 Isokuraramine, 11473  
 Kuraramine, 12340
- C<sub>12</sub>H<sub>18</sub>N<sub>2</sub>O<sub>5</sub>**  
*L*- $\gamma$ -Glutamyl-*L*-hypoglycin, 8776
- C<sub>12</sub>H<sub>18</sub>N<sub>2</sub>O<sub>12</sub>**  
 Cibarian, 3634  
 Coronarian, 4078
- C<sub>12</sub>H<sub>18</sub>O**  
 (+)-3,4,4*aR*,7,8,8*aR*-Hexahydro-5,8 $\alpha$ -dimethylnaphthalen-2(1*H*)-one, 9499
- C<sub>12</sub>H<sub>18</sub>O<sub>2</sub>**  
 Cnidilide, 3855  
 Cnidium lactone, 3858  
 7,7-Dimethyl-2-methylenebicyclo[3.1.1]-heptan-6-ol acetate, 6372

- Isocnidilide, 11336  
 1,8-Menthadien-10-ol acetate, 13728  
 4-Methylene-1-isopropyl-bicyclo[3.1.0]-hexan-3-ol acetate, 14386  
 2-Methyl-6-methylene-2,7-octadienol acetate, 14598  
 6-Methyl-7-(3-oxobutyl)-bicyclo[4.1.0]heptan-3-one, 14642  
 (+)-Myrtenyl acetate, 15222  
 Neocnidilide, 15370
- C<sub>12</sub>H<sub>18</sub>O<sub>3</sub>**  
*D*-8-Acetoxyarvotanacetone, 139  
 Buergerinin A, 2702  
 1-(3-Hydroxyphenyl)-hexane-2,5-diol, 10625  
 (-)-Jasmonic acid, 11825  
 Oxyphyllenone A, 16464  
 Oxyphyllenone B, 16465  
 Sedanonic acid, 19648
- C<sub>12</sub>H<sub>18</sub>O<sub>4</sub>**  
 Allixin, 926  
 Erigerenone B, 7256  
 2-(1-Ethoxy-2-hydroxy)propyl-4-methoxyphenol, 7406  
 (1*R*,2*R*)-5'-Hydroxyjasmonic acid, 10269  
 Senkyunolide J, 19739  
 Senkyunolide N, 19743
- C<sub>12</sub>H<sub>18</sub>O<sub>5</sub>**  
 3-*n*-Butyl-3-hydroxy-4,5,6,7-tetrahydro-6,7-dihydroxy phthalide, 2794  
 Drummondol, 6607
- C<sub>12</sub>H<sub>18</sub>O<sub>8</sub>**  
 Opuntiaester, 16157  
 Osmundalin, 16256
- C<sub>12</sub>H<sub>19</sub>NO<sub>3</sub>**  
*N*-Methylmescaline, 14583
- C<sub>12</sub>H<sub>19</sub>N<sub>3</sub>O**  
 Alchorneine, 871
- C<sub>12</sub>H<sub>20</sub>NO<sub>2</sub><sup>+</sup>**  
 Salicifoline, 19183
- C<sub>12</sub>H<sub>20</sub>N<sub>2</sub>O**  
 (+)-Ammodendrine, 1068  
*N*-Methyltetrahydrocytisine, 14749
- C<sub>12</sub>H<sub>20</sub>N<sub>2</sub>O<sub>2</sub>S<sub>2</sub>**  
 Aglaidithioduline, 736
- C<sub>12</sub>H<sub>20</sub>O<sub>2</sub>**  
 Acetylborneol, 336  
 Aleprylic acid, 885  
*L*-β-Artemisia alcohol acetate, 1794  
 Bornyl acetate, 2557  
 Crocusatin G, 4259  
 Dihydrocarveol acetate, 5556  
 Ethyl geranate, 7442  
 Geranyl acetate, 8313
- Isobornyl acetate, 11261  
 Linalyl acetate, 12850  
 4-Methyl-1-(1-methylethyl)-3-cyclohexen-1-ol-acetate, 14601  
 Neryl acetate, 15512  
 Terpinyl acetate, 20999
- C<sub>12</sub>H<sub>20</sub>O<sub>3</sub>**  
 Cucurbitic acid, 4314  
 Gardenone, 8230  
 Vulgarole, 22620
- C<sub>12</sub>H<sub>20</sub>O<sub>4</sub>**  
 Crocusatin H, 4260  
 Dimethyl camphorate, 6330  
 (1*R*,4*S*)-1-Hydroperoxy-*p*-menth-2-en-8-ol acetate, 9732
- C<sub>12</sub>H<sub>20</sub>O<sub>7</sub>**  
 Clandonensine, 3785
- C<sub>12</sub>H<sub>20</sub>O<sub>8</sub>**  
 (3*R*,5*R*)-3-(β-*D*-Glucopyranosyloxy)-5-hexanolide, 8689  
 Parasorboside, 16658
- C<sub>12</sub>H<sub>21</sub>NO**  
*N*-Isobutyl-(2*E*,4*E*)-octadienamamide, 11283  
*N*-Isobutyl-(2*Z*,4*E*)-octa-2,4-dienamide, 11284
- C<sub>12</sub>H<sub>21</sub>NO<sub>10</sub>S<sub>2</sub>**  
 2-Hydroxypent-4-enylglucosinate, 10598
- C<sub>12</sub>H<sub>22</sub>**  
 1,1'-Bicyclohexyl, 2353
- C<sub>12</sub>H<sub>22</sub>NO<sub>9</sub>S<sub>3</sub><sup>-</sup>**  
 Glucoerucin, 8595
- C<sub>12</sub>H<sub>22</sub>NO<sub>10</sub>S<sub>3</sub><sup>-</sup>**  
 Glucoraphanin, 8752
- C<sub>12</sub>H<sub>22</sub>NO<sub>11</sub>S<sub>3</sub><sup>-</sup>**  
 Glucoerysolin, 8596
- C<sub>12</sub>H<sub>22</sub>N<sub>2</sub>O<sub>2</sub>**  
 Cyclo-(Leu-Ile), 4506
- C<sub>12</sub>H<sub>22</sub>O**  
 Cyclododecanone, 4489  
 8-Methyl-5-isopropyl-6,8-nonadiene-2-one, 14538
- C<sub>12</sub>H<sub>22</sub>O<sub>2</sub>**  
 Citronellyl acetate, 3769  
 Decanoylacetaldehyde, 4837  
 γ-Dodecalactone, 6540  
*cis*-4-Dodecenoic acid, 6543  
 Dodecenoic acid, 6544  
 Linderic acid, 12873  
 Menthyl acetate, 13779
- C<sub>12</sub>H<sub>22</sub>O<sub>4</sub>**  
 Dimethyl sebacate, 6406
- C<sub>12</sub>H<sub>22</sub>O<sub>5</sub>**  
 Mioporosidegenin, 14878
- C<sub>12</sub>H<sub>22</sub>O<sub>6</sub>**  
 (E)-2-Hexenyl-β-*D*-glucopyranoside, 9527  
 (Z)-3-Hexenyl-β-*D*-glucopyranoside, 9528
- C<sub>12</sub>H<sub>22</sub>O<sub>10</sub>**  
 Methyl β-*D*-apiofuranosyl-(1→6)-β-*D*-glucopyranoside, 14145  
 Robinobiose, 18860
- C<sub>12</sub>H<sub>22</sub>O<sub>11</sub>**  
 Cellobiose, 3383  
 Gentiobiose, 8300  
 Isomaltose, 11523  
 Lactose, 12440  
 Maltose, 13454  
 Sophorose, 20101  
 Sucrose, 20446  
 Timobiose, 21393  
 Trehalose (α:α), 21504  
 Trehalose (α:β), 21505  
 Trehalose (β:β), 21506  
 Turanose, 22118
- C<sub>12</sub>H<sub>23</sub>NO<sub>3</sub>**  
 (±)-*threo*-*N*-Isobutyl-4,5-dihydroxy-2*E*-octenamamide, 11271
- C<sub>12</sub>H<sub>23</sub>NO<sub>9</sub>**  
 2-*O*-α-*D*-Galactopyranosyl-1-deoxynojirimycin, 8052  
 6-*O*-α-*D*-Galactopyranosyl-1-deoxynojirimycin, 8053  
 4-*O*-β-*D*-Glucopyranosyl-1-deoxynojirimycin, 8614
- C<sub>12</sub>H<sub>24</sub>**  
 Nonyl cyclopropane, 15699
- C<sub>12</sub>H<sub>24</sub>O**  
 Lauric aldehyde, 12570
- C<sub>12</sub>H<sub>24</sub>O<sub>2</sub>**  
*n*-Decyl acetate, 4865  
 Lauric acid, 12569
- C<sub>12</sub>H<sub>24</sub>O<sub>6</sub>**  
*n*-Hexyl-β-*D*-glucopyranoside, 9531
- C<sub>12</sub>H<sub>24</sub>O<sub>7</sub>**  
 Hexane-1,5-diol-1-*O*-β-*D*-glucopyranoside, 9513
- C<sub>12</sub>H<sub>26</sub>**  
 Dodecane, 6541
- C<sub>12</sub>H<sub>26</sub>O**  
 Dodecanol, 6542
- C<sub>12</sub>H<sub>31</sub>NO**  
 Nominine, 15658
- C<sub>13</sub>H<sub>6</sub>**  
 1-Tridecene-3,5,7,9,11-pentyne, 21622
- C<sub>13</sub>H<sub>8</sub>**  
 1,3*E*-Tridecadiene-5,7,9,11-tetrayne, 21604  
 1,3*Z*-Tridecadiene-5,7,9,11-tetrayne, 21605  
 1,11*E*-Tridecadiene-3,5,7,9-tetrayne, 21606  
 1,11*Z*-Tridecadiene-3,5,7,9-tetrayne, 21607

- C<sub>13</sub>H<sub>8</sub>O<sub>3</sub>**  
5-Hydroxyxanthone, 10831  
7-Hydroxyxanthone, 10832
- C<sub>13</sub>H<sub>8</sub>O<sub>4</sub>**  
2'-Acetylangelicin, 316  
1,5-Dihydroxyxanthone, 6181  
1,6-Dihydroxyxanthone, 6182  
1,7-Dihydroxyxanthone, 6183
- C<sub>13</sub>H<sub>8</sub>O<sub>5</sub>**  
Gentisein, 8306  
Mesuaxanthone B, 13809  
1,3,5-Trihydroxyxanthone, 21866
- C<sub>13</sub>H<sub>8</sub>O<sub>6</sub>**  
Norathyriol, 15715  
Norbellidifodin, 15718  
Norswertianin, 15799  
Phelligridin A, 17059
- C<sub>13</sub>H<sub>8</sub>O<sub>7</sub>**  
3,4,8,9,10-Pentahydroxydibenzo[b,d]pyran-6-one,  
16845
- C<sub>13</sub>H<sub>8</sub>O<sub>8</sub>**  
Brevifolincarboxylic acid, 2603  
Phyllanthusiin E, 17221
- C<sub>13</sub>H<sub>8</sub>S**  
2-(Ethenylbutadiynyl)-5-(propinyl)-thiophene,  
7391
- C<sub>13</sub>H<sub>8</sub>S<sub>2</sub>**  
Thiarubrin A, 21328  
Thiarubrin B, 21329
- C<sub>13</sub>H<sub>9</sub>ClO**  
5-Chloro-2-(octa-2,4,6-triynylidene)-5,6-dihydro-  
2*H*-pyran, 3564
- C<sub>13</sub>H<sub>9</sub>ClOS**  
2-(4-Chloro-3-hydroxybut-1-ynyl)-5-(penta-1,3-  
diynyl) thiophene, 3558
- C<sub>13</sub>H<sub>9</sub>NO**  
3-Formylcarbazole, 7897
- C<sub>13</sub>H<sub>9</sub>NO<sub>2</sub>**  
Mukonal, 15027
- C<sub>13</sub>H<sub>9</sub>NO<sub>3</sub>**  
**Clausine O**, 3802
- C<sub>13</sub>H<sub>9</sub>NO<sub>4</sub>**  
Kokusagine, 12253  
1,2,3-Trihydroxyacridone, 21687
- C<sub>13</sub>H<sub>9</sub>NO<sub>5</sub>**  
Megistoquinone I, 13651
- C<sub>13</sub>H<sub>10</sub>**  
(*E,E*)-1,3,5-Tridecatriene-7,9,11-triyn, 21617  
(*E,Z*)-1,3,5-Tridecatriene-7,9,11-triyn, 21618  
(*Z,E*)-1,3,11-Tridecatriene-5,7,9-triyn, 21619  
(*Z,Z*)-1,3,11-Tridecatriene-5,7,9-triyn, 21620
- C<sub>13</sub>H<sub>10</sub>N<sub>2</sub>O**  
1-Acetyl- $\beta$ -carboline, 344
- C<sub>13</sub>H<sub>10</sub>N<sub>2</sub>O<sub>2</sub>**  
Arenarine D, 1662  
 $\beta$ -Carboline-1-carboxylic acid, methyl ester, 3158  
1-Formyl-4-methoxy- $\beta$ -carboline, 7908
- C<sub>13</sub>H<sub>10</sub>N<sub>2</sub>O<sub>3</sub>**  
Begonanline, 2210  
Taraxacine B, 20693
- C<sub>13</sub>H<sub>10</sub>O**  
Atractylodin, 1969  
Ponticaepoxide, 17719
- C<sub>13</sub>H<sub>10</sub>OS<sub>3</sub>**  
 $\alpha$ -Terthienyl methanol, 21019
- C<sub>13</sub>H<sub>10</sub>O<sub>2</sub>**  
Annuaadiepoide, 1334  
Capillarin, 3117  
Dehydrosafynol, 4966
- C<sub>13</sub>H<sub>10</sub>O<sub>3</sub>**  
Mycosinol, 15142
- C<sub>13</sub>H<sub>10</sub>O<sub>4</sub>**  
Visnagin, 22553
- C<sub>13</sub>H<sub>10</sub>O<sub>5</sub>**  
2,4'-Dihydroxy-5-carboxy-dibenyl ether, 5786  
Hispidin, 9561  
Iriflophenone, 11153  
Isopimpinellin, 11601  
Khellol, 12222  
Pimpinellin, 17375  
2,4,6,3'-Tetrahydroxybenzophenone, 21082
- C<sub>13</sub>H<sub>10</sub>O<sub>6</sub>**  
Maclurin, 13296
- C<sub>13</sub>H<sub>10</sub>O<sub>8</sub>**  
Tricozarin A, 21597
- C<sub>13</sub>H<sub>10</sub>O<sub>9</sub>**  
4,8-Dimethoxy-7-hydroxy-2-oxo-2*H*-1-  
benzopyran-5,6-dicarboxylic acid, 6249
- C<sub>13</sub>H<sub>11</sub>N**  
3-Methylcarbazole, 14216
- C<sub>13</sub>H<sub>11</sub>NO**  
2-Hydroxy-3-methylcarbazole, 10478
- C<sub>13</sub>H<sub>11</sub>NO<sub>3</sub>**  
 $\gamma$ -Fagarine, 7703  
Iso- $\gamma$ -fagarine, 11424  
Melicarpinone, 13674  
6-Methoxy dictamnine, 13904
- C<sub>13</sub>H<sub>11</sub>NO<sub>4</sub>**  
Haplopin, 9226
- C<sub>13</sub>H<sub>12</sub>**  
(*E,E,E*)-1,3,5,11-Tridecatetraene-7,9-diyne,  
21613  
(*E,Z,E*)-1,3,5,11-Tridecatetraene-7,9-diyne,  
21614  
(*Z,E,E*)-1,3,5,11-Tridecatetraene-7,9-diyne,  
21615
- C<sub>13</sub>H<sub>12</sub>N<sub>2</sub>O**  
Harmine, 9235  
1-Methoxymethyl- $\beta$ -carboline, 14007
- C<sub>13</sub>H<sub>12</sub>N<sub>2</sub>O<sub>2</sub>**  
Picrasidine P, 17308
- C<sub>13</sub>H<sub>12</sub>O**  
Methoxycapillen, 13870
- C<sub>13</sub>H<sub>12</sub>O<sub>2</sub>**  
Atractylodinol, 1970  
Dehydrotremetone, 4976  
4,4'-Dihydroxydiphenyl methane, 5866  
Goniothalamine, 8947  
2-(Hexa-2,4-diyne-1-ylidene)-1,6-dioxaspiro[4,4]-  
non-3-ene, 9496  
Safynol, 19122
- C<sub>13</sub>H<sub>12</sub>O<sub>3</sub>**  
Euparin, 7578  
Garcibiphenyl A, 8204  
Goniothalamine epoxide, 8948  
*o*-(*o*-Methoxyphenoxy)phenol, 14053  
6-(2-methoxy-*Z*-vinyl)-7-methyl-pyranocoumarin,  
14104  
Mukagolactone, 15026  
Nepodin, 15489
- C<sub>13</sub>H<sub>12</sub>O<sub>4</sub>**  
Aloesone, 980  
Altholactone, 1008  
6-(*trans*-1-Buten-3-oxy)-7-methoxycoumarin,  
2780  
Cassiachromone, 3279  
Goniobutenolide A, 8932  
Goniobutenolide B, 8933  
Hibicuslide C, 9538  
Methyl piperate, 14678
- C<sub>13</sub>H<sub>12</sub>O<sub>5</sub>**  
Xanthocerin, 22758
- C<sub>13</sub>H<sub>12</sub>O<sub>6</sub>**  
Nigrolineaisoflavone A, 15572
- C<sub>13</sub>H<sub>12</sub>O<sub>8</sub>**  
Caffeoyl malic acid, 2912
- C<sub>13</sub>H<sub>12</sub>O<sub>9</sub>**  
Monocaffeoyltartaric acid, 14920
- C<sub>13</sub>H<sub>12</sub>O<sub>11</sub>**  
Mucic acid 1,4-lactone 2-*O*-gallate, 15011  
Mucic acid 1,4-lactone 3-*O*-gallate, 15012  
Mucic acid 1,4-lactone 5-*O*-gallate, 15013
- C<sub>13</sub>H<sub>13</sub>ClO<sub>3</sub>**  
8-Chlorogoniodiol, 3555
- C<sub>13</sub>H<sub>13</sub>NO**  
(*E*)-3-(3'-Methyl-2'-butenylidene)-2-indolinone,  
14181  
*N*-(3-Phenylpropanoyl)pyrrole, 17130
- C<sub>13</sub>H<sub>13</sub>NO<sub>2</sub>**

- Sarmentamide A, 19368
- C<sub>13</sub>H<sub>13</sub>NO<sub>5</sub>**  
Glycocitridine, 8824  
Melisemine, 13685
- C<sub>13</sub>H<sub>13</sub>N<sub>2</sub>O<sup>+</sup>**  
6-Methoxy-2-methyl- $\beta$ -carbolinium (cation), 14008
- C<sub>13</sub>H<sub>14</sub>N<sub>2</sub>O**  
Harmaline, 9232
- C<sub>13</sub>H<sub>14</sub>N<sub>2</sub>O<sub>3</sub>**  
Nigellicine, 15568
- C<sub>13</sub>H<sub>14</sub>N<sub>2</sub>O<sub>8</sub>**  
Miraxanthin II, 14880
- C<sub>13</sub>H<sub>14</sub>O**  
Carlinoxide, 3200
- C<sub>13</sub>H<sub>14</sub>O<sub>2</sub>**  
Tremetone, 21507
- C<sub>13</sub>H<sub>14</sub>O<sub>3</sub>**  
6-Acetyl-2,2-dimethylchroman-4-one, 383  
6-Acetyl-5-hydroxy-2-isopropenyl-2,3-dihydrobenzofuran, 418  
Chuanxiongol, 3631  
( $\pm$ )-2,3-Dihydro-2-(1-methylethenyl)-5-benzofurancarboxylic acid methyl ester, 5676  
5,6-Dimethoxy-2-isopropenylbenzofuran, 6255  
2,2-Dimethyl-2*H*-1-benzopyran-6-carboxylic acid methyl ester, 6321  
Eupatoriochromene, 7592  
7-Hydroxy-4-isopropyl-6-methyl coumarin, 10263  
2-Hydroxy-5-methoxy-6-(3-methylbut-3-en-1-ynyl)benzylalcohol, 10418  
6-Hydroxytremetone, 10775  
Toxol, 21486
- C<sub>13</sub>H<sub>14</sub>O<sub>4</sub>**  
1'-Acetoxychavicol acetate, 140  
6-Acetyl-5-hydroxy-2-(1-hydroxy-2-propenyl)-2,3-dihydrobenzofuran, 416  
6-Acetyl-2-hydroxymethyl-2-methylchroman-4-one, 424  
(+)-9-Deoxygoniopyrone, 5179  
Deoxygoniopyrone A, 5180  
(6*R*,7*R*,8*R*)-Goniodiol, 8934  
Goniofupyrone A, 8938  
(+)-Gynunone, 9122  
7-Hydroxy-2-(2-hydroxy)propyl-5-methylbenzopyran- $\gamma$ -one, 10217  
(2'*S*)-7-Hydroxy-2-(2'-hydroxypropyl)-5-methylchromone, 10218  
Isocorylifonol, 11345  
7-Methoxyanofinic acid, 13840  
Pedicellin, 16762
- C<sub>13</sub>H<sub>14</sub>O<sub>5</sub>**  
(5*S*,6*R*,7*R*,8*R*)-Goniotriol, 8949  
(5*S*,6*R*,7*S*,8*S*)-Goniotriol, 8950  
(2'*S*)-7-Hydroxy-5-hydroxymethyl-2-(2'-hydroxypropyl) chromone, 10205  
5-Methanol-7-hydroxy-2,2-dimethyl-2*H*-1-chromene-6-carboxylic acid, 13820
- C<sub>13</sub>H<sub>14</sub>O<sub>8</sub>**  
(-)-4-(*E*)-Caffeoyl-*L*-threonic acid, 2928
- C<sub>13</sub>H<sub>14</sub>O<sub>9</sub>**  
Norbergenin, 15719
- C<sub>13</sub>H<sub>14</sub>O<sub>12</sub>**  
Mucic acid 2-*O*-gallate, 15009
- C<sub>13</sub>H<sub>15</sub>NO**  
Argutine A, 1676  
(1-Oxo-3-phenyl-2*E*-propenyl)pyrrolidine, 16406  
Zanthonitrile, 22968
- C<sub>13</sub>H<sub>15</sub>NO<sub>2</sub>**  
Allosecurinine, 940  
Securinine, 19639  
Virosecurinine, 22529
- C<sub>13</sub>H<sub>15</sub>NO<sub>3</sub>**  
*ent*-Phyllanthidine, 17214
- C<sub>13</sub>H<sub>15</sub>NO<sub>6</sub>**  
*L*-*O*-Caffeoylhomoserine, 2909
- C<sub>13</sub>H<sub>15</sub>O<sub>8</sub>**  
Demethoxybergenin, 5042
- C<sub>13</sub>H<sub>15</sub>O<sub>13</sub><sup>-</sup>**  
Turgorin, 22122
- C<sub>13</sub>H<sub>16</sub>N<sub>2</sub>**  
*N<sub>6</sub>*-Methyltetrahydroharman, 14750
- C<sub>13</sub>H<sub>16</sub>N<sub>2</sub>O**  
2-Methyl-6-methoxy-1,2,3,4-tetrahydro- $\beta$ -carboline, 14590  
*N<sub>6</sub>*-Methyltetrahydroharmol, 14751  
Tetrahydroharmine, 21070
- C<sub>13</sub>H<sub>16</sub>N<sub>2</sub>O<sub>2</sub>**  
(+)-*N<sub>6</sub>*-Methyl tryptophan methyl ester (*S*), 14795
- C<sub>13</sub>H<sub>16</sub>N<sub>2</sub>O<sub>4</sub>**  
Delamide, 4992
- C<sub>13</sub>H<sub>16</sub>O<sub>2</sub>**  
2-Hexenyl benzoate, 9526  
4-Hydroxy-3-(3-methyl-2-butenyl)acetophenone, 10472  
Vinyl-2,2-dimethyl-3-phenyl-propionate, 22510
- C<sub>13</sub>H<sub>16</sub>O<sub>3</sub>**  
4-Hydroxy-3-(2-hydroxy-3-isopentenyl)acetophenone, 10182  
4-Methoxy-3-(3-methyl-2-butenyl)-benzoic acid, 14004  
2-(1-Oxopentyl)-benzoic acid methyl ester, 16404  
Precocene II, 17776
- C<sub>13</sub>H<sub>16</sub>O<sub>5</sub>**  
4-(2,4,5-Trimethoxyphenyl)-but-1,3-diene, 21924
- Wilforonide, 22689
- C<sub>13</sub>H<sub>16</sub>O<sub>4</sub>**  
Asarumin B, 1837  
Proglobeflowery acid, 17902
- C<sub>13</sub>H<sub>16</sub>O<sub>5</sub>**  
Descurainolide A, 5246  
Eugenone, 7524  
4-Hydroxy-2-(2,4,5-trimethoxyphenyl)-2*E*-butenal, 10801  
Methyl 3,4,5-trimethoxycinnamate, 14791  
Sinapic acid ethyl ester, 19913
- C<sub>13</sub>H<sub>16</sub>O<sub>6</sub>**  
Cardiobutanolide, 3189
- C<sub>13</sub>H<sub>16</sub>O<sub>7</sub>**  
Helicide, 9303
- C<sub>13</sub>H<sub>16</sub>O<sub>8</sub>**  
1-*O*-(4-Hydroxybenzoyl)- $\beta$ -*D*-glucose, 9824
- C<sub>13</sub>H<sub>16</sub>O<sub>9</sub>**  
3-Carboxy-4-hydroxy-phenoxy glucoside, 3174  
1-*O*-Galloyl- $\alpha$ -*L*-rhamnose, 8118  
Protocatechuic acid-3-glucoside, 17966
- C<sub>13</sub>H<sub>16</sub>O<sub>10</sub>**  
1-*O*-Galloyl-glucose, 8108  
6-*O*-Galloyl-glucose, 8109
- C<sub>13</sub>H<sub>17</sub>NO**  
Paniculidine C, 16614
- C<sub>13</sub>H<sub>17</sub>NO<sub>2</sub>**  
Dihydrosecurinine, 5712  
14,15-Dihydrovirosecurinine, 5738
- C<sub>13</sub>H<sub>17</sub>NO<sub>3</sub>**  
Lophophorine, 13001  
Securinol A, 19640  
Securinol B, 19641  
Securinol C, 19642
- C<sub>13</sub>H<sub>17</sub>NO<sub>4</sub>**  
2,6-Di-*C*-methyl-nicotinic acid 3,5-diethyl ester, 6378
- C<sub>13</sub>H<sub>18</sub>N<sub>2</sub>O**  
Bufotenidine, 2725  
*N,N*-Dimethyl-5-methoxy tryptamine, 6370
- C<sub>13</sub>H<sub>18</sub>N<sub>2</sub>O<sub>2</sub>**  
5-Methoxy-*N,N*-dimethyl-tryptamine *N<sub>6</sub>*-oxide, 13920
- C<sub>13</sub>H<sub>18</sub>N<sub>2</sub>O<sub>4</sub>**  
*N*<sup>5</sup>-(4-Methoxyphenyl)methyl-*L*-glutamine, 14061
- C<sub>13</sub>H<sub>18</sub>N<sub>2</sub>O<sub>7</sub>**  
Justiciamide, 11976
- C<sub>13</sub>H<sub>18</sub>O<sub>2</sub>**  
Arteamisinine I, 1782  
3-Keto- $\beta$ -ionone, 12203
- C<sub>13</sub>H<sub>18</sub>O<sub>3</sub>**  
2-Methoxy-1-*O*-methyl-6-prenylhydroquinone,

- 14031  
2-Methoxy-4-*O*-methyl-6-prenylhydroquinone,  
14032
- C<sub>13</sub>H<sub>18</sub>O<sub>4</sub>**  
Baeckeol, 2097
- C<sub>13</sub>H<sub>18</sub>O<sub>5</sub>**  
Monascusone A, 14915
- C<sub>13</sub>H<sub>18</sub>O<sub>6</sub>**  
Benzyl alcohol *O*- $\beta$ -*D*-glucopyranoside, 2276
- C<sub>13</sub>H<sub>18</sub>O<sub>7</sub>**  
Gastrodin, 8237  
Homoarbutin, 9594  
3-Hydroxybenzyl-1-*O*- $\beta$ -*D*-glucopyranoside,  
9840  
4-Hydroxybenzyl-*O*- $\beta$ -*D*-glucopyranoside, 9841  
Isohomoarbutin, 11456  
2-Methoxyphenyl  $\beta$ -*D*-glucopyranoside, 14059  
Orcinol glucoside, 16172  
Salicin, 19184
- C<sub>13</sub>H<sub>18</sub>O<sub>8</sub>**  
3,4-Dihydroxybenzyl alcohol-4-glucoside, 5769  
4-Hydroxy-3-methoxyphenol  
 $\beta$ -*D*-glucopyranoside, 10432  
Isotachioside, 11726
- C<sub>13</sub>H<sub>18</sub>O<sub>9</sub>**  
**Opuntioside**, 16160
- C<sub>13</sub>H<sub>19</sub>NO<sub>2</sub>**  
6,7-Dihydroxy-1,1-dimethyl-*N*-ethyl-1,2,3,4-  
tetrahydroisoquinoline, 5853  
Dioscorine, 6439  
Kinganone, 12228  
Lucidulinone, 13051  
Pectenine, 16746
- C<sub>13</sub>H<sub>19</sub>NO<sub>3</sub>**  
*O*<sup>7</sup>-Angeloylretronecine, 1233  
*O*<sup>9</sup>-Angeloylretronecine, 1234  
Rivularine, 18854
- C<sub>13</sub>H<sub>19</sub>NO<sub>4</sub>**  
Tuberostemospironine, 22090
- C<sub>13</sub>H<sub>20</sub>N<sub>2</sub>O**  
*N,N*-Dimethyltryptamine-methoxyhydroxide, 6419
- C<sub>13</sub>H<sub>20</sub>O**  
 $\alpha$ -Ionone, 11122  
 $\beta$ -Ionone, 11123
- C<sub>13</sub>H<sub>20</sub>O<sub>2</sub>**  
Actinidol, 584  
3-Hydroxy- $\beta$ -ionone, 10233  
(3*R*,6*R*,7*E*)-3-Hydroxy-4,7-megastigmadien-3-  
one, 10366  
(6*E*,9*S*)-9-Hydroxy-4,6-megastigmadien-3-one,  
10367  
(6*Z*,9*S*)-9-Hydroxy-4,6-megastigmadien-3-one,  
10368  
(6*R*,7*E*,9*R*)-9-Hydroxy-4,7-megastigmadien-3-  
one, 10369  
(7*E*,9*ξ*)-9-Hydroxy-5,7-megastigmadien-4-one,  
10370  
Theaspirone, 21291
- C<sub>13</sub>H<sub>20</sub>O<sub>3</sub>**  
Annuionone D, 1335  
Apocynol A, 1527  
(3*S*,5*R*,6*S*,7*E*)-5,6-Epoxy-3-hydroxy-7-  
megastigmen-9-one, 7123  
Grasshopperketone, 8983  
4'-(4"-Hydroxy-3"-methylbutyloxy)-2-  
phenylethanol, 10474  
Icarisidin B<sub>1</sub>, 10956  
*cis*-Methyl jasmonate, 14540  
Norannuic acid, 15709  
Vomifoliol, 22615
- C<sub>13</sub>H<sub>20</sub>O<sub>4</sub>**  
Apocynol B, 1528  
13-Carboxy-blumenol C, 3165  
(1*R*,2*R*)-Methyl-5'-hydroxyjasmonate, 14509
- C<sub>13</sub>H<sub>20</sub>O<sub>6</sub>**  
*threo*-3-(4-Hydroxy-3,5-dimethoxyphenyl)-3-  
ethoxypropane-1,2-diol, 10037
- C<sub>13</sub>H<sub>21</sub>NO<sub>2</sub>**  
Tigloidine, 21372
- C<sub>13</sub>H<sub>21</sub>NO<sub>3</sub>**  
Macrophylline, 13320
- C<sub>13</sub>H<sub>21</sub>NO<sub>4</sub>**  
Meteloidine, 13819
- C<sub>13</sub>H<sub>22</sub>**  
1,4,7-Tridecatriene, 21616
- C<sub>13</sub>H<sub>22</sub>O**  
Dihydro- $\beta$ -ionone, 5646
- C<sub>13</sub>H<sub>22</sub>O<sub>2</sub>**  
(3*R*,6*R*,7*E*,9*R*)-3,9-Dihydroxy-4,7-megastigma-  
diene, 5956  
(3*S*,7*E*,9*R*)-3,9-Dihydroxy-5,7-megastigmadiene,  
5957  
(6*R*,9*R*)-9-Hydroxy-4-megastigmen-3-one, 10371  
3-Hydroxymegastigmen-5-en-9-one, 10372  
(*S*)-9-Hydroxymegastigmen-5-en-4-one, 10373  
Neryl propionate, 15515
- C<sub>13</sub>H<sub>22</sub>O<sub>3</sub>**  
Annuionone E, 1336  
Annuionone G, 1338  
(2*R*,6*R*,9*R*)-2,9-Dihydroxy-4-megastigmen-3-one,  
5958  
(3*S*,5*R*,6*S*,7*E*,9*R*)-5,6-Epoxy-3,9-dihydroxy-7-  
megastigmene, 7079  
Methyl dihydrojasmonate, 14296
- C<sub>13</sub>H<sub>22</sub>O<sub>4</sub>**  
Annuionone F, 1337
- C<sub>13</sub>H<sub>24</sub>N<sub>2</sub>O**  
Cuscohygrine, 4417
- C<sub>13</sub>H<sub>24</sub>O<sub>2</sub>**  
Megastigmen-5-ene-3,9-diol, 13646
- C<sub>13</sub>H<sub>24</sub>O<sub>3</sub>**  
11-Hydroxy-9-tridecenoic acid, 10784  
7-Megastigmene-3,6,9-triol, 13648
- C<sub>13</sub>H<sub>24</sub>O<sub>4</sub>**  
Megastigmenetetrol, 13647  
(3*S*,5*R*,6*R*,7*E*,9*R*)-3,5,6,9-Tetrahydroxy-7-  
megastigmene, 21124
- C<sub>13</sub>H<sub>24</sub>O<sub>9</sub>**  
Methyl di- $\alpha$ -*L*-rhamnoside, 14326  
Methyl-(3*R*,5*R*)-5-hydroxy-3-( $\beta$ -*D*-glucopyra-  
nosyloxy)-hexanoate, 14505  
Methyl-(3*S*,5*S*)-5-hydroxy-3-( $\beta$ -*D*-glucopyra-  
nosyloxy) hexanoate, 14506
- C<sub>13</sub>H<sub>24</sub>O<sub>11</sub>**  
Ethane-1,2-diol 1-*O*- $\beta$ -*D*-apiofuranosyl-(1 $\rightarrow$ 6)-  
 $\beta$ -*D*-glucopyranoside, 7388
- C<sub>13</sub>H<sub>26</sub>**  
Tridecene, 21621
- C<sub>13</sub>H<sub>26</sub>O**  
2-Methyl-dodecane-5-one, 14330  
2-Tridecanone, 21612
- C<sub>13</sub>H<sub>26</sub>O<sub>2</sub>**  
*n*-Undecyl acetate, 22224  
Tridecanoic acid, 21611  
2-Undecyl acetate, 22225
- C<sub>13</sub>H<sub>26</sub>O<sub>4</sub>S**  
Undecyl sulfonyl acetic acid, 22228
- C<sub>13</sub>H<sub>28</sub>**  
2,4-Dimethyl-undecane, 6421  
3,6-Dimethyl-undecane, 6422  
2-Methyl-5-propyl nonane, 14693  
*n*-Tridecane, 21610  
2,5,6-Trimethyldecane, 21953
- C<sub>13</sub>H<sub>28</sub>O<sub>2</sub>**  
1,1-Diethoxy-*n*-nonane, 5499
- C<sub>13</sub>H<sub>28</sub>O<sub>4</sub>**  
Homosenkyunolide H, 9618  
Homosenkyunolide I, 9619
- C<sub>14</sub>H<sub>6</sub>O<sub>8</sub>**  
Ellagic acid, 6757
- C<sub>14</sub>H<sub>8</sub>N<sub>2</sub>O**  
Canthin-6-one, 3096
- C<sub>14</sub>H<sub>8</sub>N<sub>2</sub>O<sub>2</sub>**  
Canthin-6-one 3-*N*-oxide, 3098  
1-Hydroxycanthin-6-one, 9884  
9-Hydroxycanthin-6-one, 9885  
11-Hydroxycanthin-6-one, 9886
- C<sub>14</sub>H<sub>8</sub>N<sub>2</sub>O<sub>3</sub>**  
9-Hydroxycanthin-6-one 3-*N*-oxide, 9887

- Tramesanguin, 21501
- C<sub>14</sub>H<sub>8</sub>O<sub>2</sub>**  
Anthraquinone, 1367
- C<sub>14</sub>H<sub>8</sub>O<sub>3</sub>**  
 $\alpha$ -Hydroxyanthraquinone, 9791  
2-Hydroxyanthraquinone, 9792
- C<sub>14</sub>H<sub>8</sub>O<sub>4</sub>**  
Alizarin, 899  
Chrysazin, 3599  
Purpuroxanthin, 18224
- C<sub>14</sub>H<sub>8</sub>O<sub>5</sub>**  
Anthragallol, 1359  
Purpurin, 18222
- C<sub>14</sub>H<sub>8</sub>O<sub>6</sub>**  
1,7-Dihydroxy-2,3-methylenedioxyxanthone, 6031
- C<sub>14</sub>H<sub>8</sub>O<sub>9</sub>**  
Luteic acid, 13125
- C<sub>14</sub>H<sub>9</sub>ClO<sub>6</sub>**  
7-Chloro-1,2,3-trihydroxy-6-methoxyxanthone, 3573
- C<sub>14</sub>H<sub>9</sub>NO<sub>2</sub>**  
Trisphaeridine, 22040
- C<sub>14</sub>H<sub>9</sub>NO<sub>3</sub>**  
Crinasiadine, 4238  
Dianthalexine, 5366
- C<sub>14</sub>H<sub>9</sub>O<sub>8</sub>S<sup>-</sup>**  
1,3-Dihydroxy-5-methoxyxanthone-4-sulfonate, 6014
- C<sub>14</sub>H<sub>10</sub>N<sub>2</sub>O<sub>2</sub>**  
3-(2'-Hydroxyphenyl)-4-(3*H*)-quinazolinone, 10643
- C<sub>14</sub>H<sub>10</sub>O**  
Anthranol, 1365
- C<sub>14</sub>H<sub>10</sub>O<sub>3</sub>**  
Kvannin, 12395
- C<sub>14</sub>H<sub>10</sub>O<sub>4</sub>**  
Cyperaquinone, 4576  
Dengibsin, 5128  
2-(2,4-Dihydroxyphenyl)-6-hydroxybenzofuran, 6086  
Drypearmoracein B, 6614  
5-Hydroxy-1-methoxyxanthone, 10462  
6-Hydroxy-7-methoxyxanthone, 10463  
7-Hydroxy-8-methoxyxanthone, 10464  
4,5-Methylenedioxy-4'-hydroxy-2-aldehyde-[1,1'-biphenyl], 14369  
Moracin M, 14962
- C<sub>14</sub>H<sub>10</sub>O<sub>5</sub>**  
7-Benzoyloxy-6-oxo-2,4*E*-heptadiene-1,4-olide, 2261  
7-Benzoyloxy-6-oxo-2,4*Z*-heptadiene-1,4-olide, 2262
- Buchanaxanthone, 2694  
Crataequinone A, 4217  
Densiflorolorin, 5133  
1,3-Dihydroxy-2-methoxy xanthone, 6009  
1,6-Dihydroxy-7-methoxyxanthone, 6010  
1,7-Dihydroxy-3-methoxy xanthone, 6011  
1,7-Dihydroxy-4-methoxyxanthone, 6012  
2,7-Dihydroxy-1-methoxyxanthone, 6013  
Isogentisin, 11436  
Kigelinone, 12225  
Mesuaxanthone A, 13808  
Nor-rubrofusarin, 15791  
1,3,6-Trihydroxy-8-methylxanthone, 21809  
1,5,8-Trihydroxy-3-methylxanthone, 21810
- C<sub>14</sub>H<sub>10</sub>O<sub>6</sub>**  
Bellidifodin, 2220  
Crataequinone B, 4218  
Lespedezol H<sub>1</sub>, 12704  
Swertianin, 20510  
1,3,7-Trihydroxyl-8-methoxyxanthone, 21762  
1,3,5-Trihydroxy-2-methoxyxanthone, 21790  
1,3,7-Trihydroxy-2-methoxyxanthone, 21791  
1,3,8-Trihydroxy-2-methoxyxanthone, 21792  
1,3,8-Trihydroxy-5-methoxyxanthone, 21793
- C<sub>14</sub>H<sub>10</sub>O<sub>7</sub>**  
Caloxanthone E, 3000
- C<sub>14</sub>H<sub>10</sub>O<sub>8</sub>**  
Methyl brevifolin carboxylate, 14160  
Phyllanthusiin E methyl ester, 17222
- C<sub>14</sub>H<sub>10</sub>O<sub>9</sub>**  
*m*-Digallic acid, 5510  
*m*-Digalloyl acid, 5511  
*p*-Digalloyl acid, 5512
- C<sub>14</sub>H<sub>11</sub>NO<sub>2</sub>**  
3-Formyl-6-methoxycarbazole, 7907  
1-Hydroxy-10-methylacridone, 10465  
Methyl carbazole-3-carboxylate, 14217  
Murrayanine, 15118
- C<sub>14</sub>H<sub>11</sub>NO<sub>3</sub>**  
Clausine E, 3795  
Clausine I, 3798  
Clausine M, 3800  
Clausine N, 3801  
Clausine Q, 3804  
Griffithazanone B, 9005  
Isoursuline, 11750  
Lansine, 12489
- C<sub>14</sub>H<sub>11</sub>NO<sub>4</sub>**  
Clausine R, 3805  
Griffithazanone A, 9004  
2-Hydroxy-3-formyl-7-methoxycarbazole, 10126  
Indigotisisocoumarin A, 11022  
Penduline, 16802
- C<sub>14</sub>H<sub>11</sub>NO<sub>5</sub>**  
Melandrin, 13657
- C<sub>14</sub>H<sub>11</sub>NO<sub>6</sub>**  
Dianthramine, 5372  
Precatorine, 17772
- C<sub>14</sub>H<sub>12</sub>N<sub>2</sub>O**  
1-Vinyl-4-methoxy- $\beta$ -carboline, 22516
- C<sub>14</sub>H<sub>12</sub>N<sub>2</sub>O<sub>2</sub>**  
Arenarine A, 1659  
Arenarine C, 1661  
1-Carboethoxy- $\beta$ -carboline, 3156  
 $\beta$ -Carboline-1-propionic acid, 3159  
Picrasidine I, 17301
- C<sub>14</sub>H<sub>12</sub>N<sub>2</sub>O<sub>3</sub>**  
Dichotomine A, 5422  
7-Hydroxy- $\beta$ -carboline-1-propionic acid, 9890
- C<sub>14</sub>H<sub>12</sub>N<sub>2</sub>O<sub>4</sub>**  
Dichotomine B, 5423  
Peristrophine, 16965
- C<sub>14</sub>H<sub>12</sub>O<sub>2</sub>**  
Benzyl benzoate, 2280  
*o*-Benzyl benzoic acid, 2281  
Pinosylvin, 17420
- C<sub>14</sub>H<sub>12</sub>O<sub>3</sub>**  
Ammirin, 1067  
Angenomalin, 1238  
Benzyl salicylate, 2297  
5,6-Dehydrokawain, 4936  
Hibicutaiwanin, 9539  
2'-Isopropyl-psoralen, 11630  
Resveratrol, 18643  
Seselin, 19784  
2,4,4'-Trihydroxystilbene, 21849  
4,5',8-Trimethyl psoralen, 21974  
Xanthyletin, 22781
- C<sub>14</sub>H<sub>12</sub>O<sub>4</sub>**  
Cearoin, 3346  
Cedrecoumarin A, 3349  
Clematicinenol, 3822  
Cudranin, 4337  
Dihydrocyperaquinone, 5579  
2,6-Dihydroxy-4-methoxybenzophenone, 5965  
Eleutherol, 6753  
4'-Hydroxy-5,6-dehydrokawain, 9974  
5-Hydroxyseselin, 10710  
Nakhsmyrin, 15241  
Nodachenetin, 15644  
Norbraylin, 15721  
Obliquin, 15886  
Oroselol, 16213  
*cis*-Osthenone, 16259  
*trans*-Osthenone, 16260  
*E*-Piceatannol, 17278



- Suberenone, 20438  
Wyerone acid, 22742
- C<sub>14</sub>H<sub>12</sub>O<sub>5</sub>**  
Clausenin, 3792  
Khellin, 12221  
Melodorinol, 13712  
2-Methoxy-6-acetyl-7-methyljuglone, 13832
- C<sub>14</sub>H<sub>12</sub>O<sub>6</sub>**  
Ammiol, 1066  
4,6,3',4'-Tetrahydroxy-2-methoxybenzophenone, 21125
- C<sub>14</sub>H<sub>12</sub>O<sub>7</sub>**  
Rheumin, 18767
- C<sub>14</sub>H<sub>12</sub>O<sub>11</sub>**  
Chebulic acid, 3492
- C<sub>14</sub>H<sub>13</sub>NO**  
Murrayafoline A, 15117
- C<sub>14</sub>H<sub>13</sub>NO<sub>2</sub>**  
Carbalexin A, 3153  
Carbalexin B, 3154  
Carbalexin C, 3155  
Clausine V, 3808  
Flindersine, 7830  
N-Salicylidene-salicylamine, 19188
- C<sub>14</sub>H<sub>13</sub>NO<sub>3</sub>**  
Isotaifine, 11727
- C<sub>14</sub>H<sub>13</sub>NO<sub>4</sub>**  
Isomaculosidine, 11518  
Kokusaginine, 12254  
Skimmianine, 20002
- C<sub>14</sub>H<sub>13</sub>NO<sub>6</sub>**  
E-Dimethyl rhoifolinate, 6404  
Z-Dimethyl rhoifolinate, 6405  
Lycoricidine, 13238  
Megistoquinone II, 13652
- C<sub>14</sub>H<sub>13</sub>NO<sub>7</sub>**  
Furomegistine II, 8028  
Lycoricidinol, 13239
- C<sub>14</sub>H<sub>14</sub>BrNO**  
6-Bromo-2-(1,1-dimethyl-2-propenyl)-1H-indole-3-carbaldehyde, 2621
- C<sub>14</sub>H<sub>14</sub>N<sub>2</sub>O**  
1-Ethyl-4-methoxy-β-carboline, 7459
- C<sub>14</sub>H<sub>14</sub>N<sub>2</sub>O<sub>2</sub>**  
Arenarine B, 1660  
Picrasidine J, 17302
- C<sub>14</sub>H<sub>14</sub>O**  
Tetradec-8,10,12-triyn-6-ene-3-one, 21047
- C<sub>14</sub>H<sub>14</sub>O<sub>2</sub>**  
Dihydropinosylvin, 5694  
Ichthyothereol, 10959  
Lunularin, 13085
- C<sub>14</sub>H<sub>14</sub>O<sub>3</sub>**
- Aucuparin, 2005  
Bis(4-hydroxybenzyl)ether, 2458  
Bis(2-hydroxyphenyl)methyl ether, 2471  
7-Demethylsuberosin, 5098  
Dihydroresveratrol, 5700  
3',5'-Dimethoxy-biphenyl-4-ol, 6213  
4-[(4-hydroxyphenyl)methoxy]benzenemethanol, 10627  
Kawain, 12184  
Mansonrin C, 13521  
Osthenol, 16257
- C<sub>14</sub>H<sub>14</sub>O<sub>4</sub>**  
Columbianetin, 3936  
Decursinol, 4863  
Demethylauraptenol, 5063  
Dihydroosthenon, 5686  
(E)-7-Hydroxy-6-(3-hydroxy-methyl-1-butenyl)-2H-1-benzopyran-2-one, 10194  
(R)-(+)-7-Hydroxy-8-(2-hydroxy-3-methyl-3-butenyl)-2H-1-benzopyran-2-one, 10195  
7-Hydroxy-6-(2-(R)-hydroxy-3-methylbut-3-enyl)coumarin, 10197  
(Z)-7-Hydroxy-6-(3-hydroxy-methyl-1-butenyl)-2H-1-benzopyran-2-one, 10196  
Jatamansinol, 11835  
Marmesin, 13571  
Methyl-2-(5-acetyl-2,3-dihydrobenzofuran-2-yl)propenoate, 14117  
Nodakenetin, 15645  
Phellodenol C, 17069  
Tetrahydrocycperaguinone, 21063  
Torachryson, 21452
- C<sub>14</sub>H<sub>14</sub>O<sub>5</sub>**  
Angelidiol, 1194  
Celereoin, 3375  
3,4-Dihydro-1,2-secomicrominutinin, 5709  
1-(3',5'-Dihydroxyphenyl)-2-(4"-hydroxyphenyl)-ethane-1,2-diol, 6087  
Khellactone, 12220  
Methyl-2-(6-acetyl-5-hydroxy-2,3-dihydrobenzofuran-2-yl)propenoate, 14119  
Peucedanone, 17035
- C<sub>14</sub>H<sub>14</sub>O<sub>9</sub>**  
3,5,7-Trihydroxylchromone 3-O-β-D-xylopyranoside, 22071
- C<sub>14</sub>H<sub>14</sub>O<sub>11</sub>**  
Mucic acid 1,4-lactone methyl ester 2-O-gallate, 15014  
Mucic acid 1,4-lactone methyl ester 5-O-gallate, 15015
- C<sub>14</sub>H<sub>14</sub>S**  
Dibenzyl sulphide, 5392
- C<sub>14</sub>H<sub>14</sub>S<sub>2</sub>**
- Dibenzyl disulphide, 5391
- C<sub>14</sub>H<sub>14</sub>S<sub>3</sub>**  
Dibenzyl trisulphide, 5394
- C<sub>14</sub>H<sub>14</sub>S<sub>4</sub>**  
Dibenzyl tetrasulphide, 5393
- C<sub>14</sub>H<sub>15</sub>NO<sub>2</sub>**  
Ganodine, 8193  
Piperchabamide A, 17440
- C<sub>14</sub>H<sub>15</sub>NO<sub>3</sub>**  
Gastrodamine, 8236  
1-[1-Oxo-3(3,4-methylenedioxyphenyl)-2E-propenyl]pyrrolidine, 16392
- C<sub>14</sub>H<sub>15</sub>NO<sub>7</sub>**  
Isatan B, 11188
- C<sub>14</sub>H<sub>15</sub>NO<sub>8</sub>**  
Pancratistatin, 16601
- C<sub>14</sub>H<sub>16</sub>**  
Chamazulene, 3464
- C<sub>14</sub>H<sub>16</sub>ClNO<sub>8</sub>**  
7-Chloro-(2R)-2-O-β-D-glucopyranosyl-2H-1,4-benzoxazin-3(4H)-one, 3554
- C<sub>14</sub>H<sub>16</sub>ClNO<sub>9</sub>**  
7-Cl-DIBOA-Glc, 3815
- C<sub>14</sub>H<sub>16</sub>N<sub>2</sub>O<sub>2</sub>**  
Peganidine, 16769
- C<sub>14</sub>H<sub>16</sub>N<sub>2</sub>O<sub>3</sub>**  
Cyclo-(Pro-Tyr-), 4533
- C<sub>14</sub>H<sub>16</sub>N<sub>2</sub>O<sub>5</sub>**  
Brachystemidine D, 2581
- C<sub>14</sub>H<sub>16</sub>N<sub>2</sub>O<sub>6</sub>**  
Brachystemidine E, 2582  
Indicaxanthin, 11018
- C<sub>14</sub>H<sub>16</sub>N<sub>2</sub>O<sub>7</sub>**  
Portulaxanthine, 17734
- C<sub>14</sub>H<sub>16</sub>N<sub>2</sub>O<sub>8</sub>**  
Vulgaxanthin II, 22624
- C<sub>14</sub>H<sub>16</sub>O**  
Lacinilene A, 12431
- C<sub>14</sub>H<sub>16</sub>O<sub>2</sub>**  
Precolpuchol, 17777  
4-(2-Propenyl)-phenyl angelate, 17924  
4-(1-Propenyl)-phenyl tiglate, 17926
- C<sub>14</sub>H<sub>16</sub>O<sub>3</sub>**  
Atractylentriol, 1968  
Encecalin, 6796  
Fraxinellone, 7945  
Mansonrin B, 13520  
Mexicanin E, 14821  
Phomapyrone F, 17179  
Pterosin E, 18136
- C<sub>14</sub>H<sub>16</sub>O<sub>4</sub>**  
6-Acetyl-5-hydroxy-2-isopropenyl-3-methoxy-2,3-dihydrobenzofuran, 419

- (3*S*\*,4*S*\*,5*R*\*)-(*E*)-3,4-Dihydroxy-2-(hexa-2,4-dinylyden)-1,6-dioxaspiro-(4,5)decane, 5903  
Hydroxyachillin, 9765  
(6*R*,7*R*,8*R*)-8-Methoxygoniodiol, 13943  
Methyl 5-hydroxy-7-methyl-2,2-dimethyl-2*H*-1-chromene-6-carboxylate, 14515  
Methyl 7-hydroxy-5-methyl-2,2-dimethyl-2*H*-1-chromene-6-carboxylate, 14516  
Prenyl caffeate, 17828
- C<sub>14</sub>H<sub>16</sub>O<sub>5</sub>**  
1'-Acetoxyeugenol acetate, 195  
6-Acetyl-5-hydroxy-2-(1-hydroxy-2-propenyl)-3-methoxy-2,3-dihydrobenzofuran, 417  
Forsythenside B, 7923  
5-Methanol-7-methoxy-2,2-dimethyl-2*H*-1-chromene-6-carboxylic acid, 13821  
Methyl-2-(6-acetyl-5-hydroxy-2,3-dihydrobenzofuran-2-yl)propanoate, 14118  
(*R*)-Peucedanol, 17032  
(*S*)-Peucedanol, 17033
- C<sub>14</sub>H<sub>16</sub>O<sub>6</sub>**  
Asarumin D, 1839  
Caruignigan D, 3230  
Zhebeiresinol, 22996
- C<sub>14</sub>H<sub>16</sub>O<sub>6</sub>S**  
Petasiformin A, 17012
- C<sub>14</sub>H<sub>16</sub>O<sub>8</sub>**  
1-*O*-Caffeoyl- $\beta$ -xylose, 2930
- C<sub>14</sub>H<sub>16</sub>O<sub>9</sub>**  
Bergenin, 2312
- C<sub>14</sub>H<sub>16</sub>O<sub>10</sub>**  
3-*O*-Galloyl quinic acid, 8116  
4-*O*-Galloyl quinic acid, 8117
- C<sub>14</sub>H<sub>16</sub>O<sub>12</sub>**  
Mucic acid 1-methyl ester 2-*O*-gallate, 15016  
Mucic acid 6-methyl ester 2-*O*-gallate, 15017
- C<sub>14</sub>H<sub>17</sub>Br<sub>2</sub>ClO**  
Dactylone, 4595
- C<sub>14</sub>H<sub>17</sub>ClO**  
Pterosin F, 18137
- C<sub>14</sub>H<sub>17</sub>ClO<sub>2</sub>**  
Pterosin J, 18145
- C<sub>14</sub>H<sub>17</sub>N**  
2-*n*-Pentylquinoline, 16898
- C<sub>14</sub>H<sub>17</sub>NO**  
1-(1-Oxo-3-phenyl-2*E*-propenyl)piperidine, 16405
- C<sub>14</sub>H<sub>17</sub>NO<sub>2</sub>**  
Awaine, 2043  
Paniculidine A, 16612
- C<sub>14</sub>H<sub>17</sub>NO<sub>3</sub>**  
*cis*-Fagaramide, 7701  
*trans*-Fagaramide, 7702
- 6-Hydroxy-2-(3-hydroxy-3-methylbutyl)-4-quinolone, 10201  
7-Hydroxy-2-(3-hydroxy-3-methylbutyl)-4-quinolone, 10202  
Securitinine, 19644
- C<sub>14</sub>H<sub>17</sub>NO<sub>6</sub>**  
Indican glucoside, 11014  
Prunasin, 18000  
Sambunigrin, 19226
- C<sub>14</sub>H<sub>17</sub>NO<sub>7</sub>**  
Dhurrin, 5283  
*p*-Glucosyloxymandelonitrile, 8756  
Holocalin, 9590  
Taxiphyllin, 20805  
Zierin, 23000
- C<sub>14</sub>H<sub>17</sub>NO<sub>9</sub>**  
2,4-Dihydroxy-1,4-benzoxazin-3-one-2-*O*- $\beta$ -*D*-glucopyranoside, 5766  
(2*R*)-2-*O*- $\beta$ -*D*-Glucopyranosyl-5-hydroxy-2*H*-1,4-benzoxazin-3(4*H*)-one, 8666  
6-Hydroxy blepharin, 9858
- C<sub>14</sub>H<sub>17</sub>NO<sub>10</sub>**  
Triglochinin, 21644
- C<sub>14</sub>H<sub>17</sub>N<sub>3</sub>O<sub>7</sub>**  
Vulgaxanthin I, 22623
- C<sub>14</sub>H<sub>17</sub>O<sub>8</sub><sup>-</sup>**  
Glochidacuminoside A, 8559
- C<sub>14</sub>H<sub>18</sub>**  
4-Epi-11-nor-aristola-1,9,11-triene, 6979
- C<sub>14</sub>H<sub>18</sub>BrClO**  
Srilankenyne, 20251
- C<sub>14</sub>H<sub>18</sub>N<sub>2</sub>O<sub>2</sub>**  
Cyclo-(Phe-Val), 4528  
Hypaphorine, 10877  
Trimethyl tryptophan, 21978
- C<sub>14</sub>H<sub>18</sub>N<sub>2</sub>O<sub>3</sub>**  
Physovenine, 17253
- C<sub>14</sub>H<sub>18</sub>N<sub>2</sub>O<sub>5</sub>**  
 $\gamma$ -*L*-Glutamyl-*L*-phenylalanine, 8779
- C<sub>14</sub>H<sub>18</sub>N<sub>2</sub>O<sub>6</sub>**  
 $\gamma$ -*L*-Glutamyl-*L*-tyrosine, 8782
- C<sub>14</sub>H<sub>18</sub>N<sub>2</sub>O<sub>7</sub>**  
Humilixanthin, 9662
- C<sub>14</sub>H<sub>18</sub>N<sub>2</sub>O<sub>7</sub>S**  
Miraxanthin I, 14879
- C<sub>14</sub>H<sub>18</sub>O**  
3,3-Dimethyl allyl-*p*-propenyl phenyl ether, 6310  
4-Phenylbicyclo[2.2.2]octan-1-ol, 17096
- C<sub>14</sub>H<sub>18</sub>O<sub>2</sub>**  
4-(1-Propenyl)-phenyl 2-methylbutanoate, 17925  
Pterosin B, 18133  
Thellungianin F, 21308
- C<sub>14</sub>H<sub>18</sub>O<sub>3</sub>**  
Enecalinalol, 6797  
Espeletone, 7382  
Lobetyol, 12941  
Pterosin C, 18134  
Pterosin G, 18138  
Pterosin M, 18148  
Pterosin N, 18149  
Pterosin P, 18151
- C<sub>14</sub>H<sub>18</sub>O<sub>4</sub>**  
(*E*)-4-(3,4-Dimethoxyphenyl)-but-3-en-1-ol acetate, 6280  
Phomapyrone E, 17178  
Phomapyrone G, 17180  
Pterosin Q, 18152  
Pterosin S, 18154  
Pterosin T, 18155
- C<sub>14</sub>H<sub>18</sub>O<sub>5</sub>**  
AcronyculatinD, 574  
Pterosin U, 18156
- C<sub>14</sub>H<sub>18</sub>O<sub>6</sub>**  
2,3-Dihydroxymethyl-4-(3',4'-dimethoxyphenyl)- $\gamma$ -butyrolactone, 6029  
Drypeararmoracein A, 6613
- C<sub>14</sub>H<sub>18</sub>O<sub>7</sub>**  
Picein, 17287
- C<sub>14</sub>H<sub>18</sub>O<sub>8</sub>**  
6-*O*-Acetylbutin, 324  
Alopecuquinone, 982  
Bungeiside A, 2747  
Bungeiside B, 2748  
2-Carboxylmethylphenol  
1-*O*- $\beta$ -*D*-glucopyranoside, 3176  
Cuneataside A, 4362  
Cuneataside B, 4363  
(2*S*)-2-*O*- $\beta$ -*D*-Glucopyranosyl-2-hydroxyphenyl-acetic acid, 8675  
methyl (6-*O*-*p*-Hydroxybenzoyl)- $\beta$ -*D*-glucopyranoside, 14497
- C<sub>14</sub>H<sub>18</sub>O<sub>9</sub>**  
1-(3-*O*- $\beta$ -*D*-Glucopyranosyl-4,5-dihydroxyphenyl)-ethanone, 8622  
Maltol-(6-*O*-acetyl)- $\beta$ -*D*-glucopyranoside, 13453  
Phaseoloidin, 17050  
Vanillic acid 4-*O*- $\beta$ -*D*-glucopyranoside, 22334  
Vanillic acid  $\beta$ -*D*-glucopyranosyl ester, 22335  
Woodorien, 22721
- C<sub>14</sub>H<sub>18</sub>O<sub>10</sub>**  
4-*O*- $\beta$ -*D*-Glucopyranosyl methyl gallate, 8682  
Methyl-6-*O*-galloyl- $\beta$ -*D*-glucopyranoside, 14455  
Polygoacetophenoxide, 17639
- C<sub>14</sub>H<sub>19</sub>NO<sub>2</sub>**  
3-Methyl-but-2-enoic acid-[2-(4-methoxyphen-

- yl)-ethyl]-amide, 14175  
 Paniculidine B, 16613  
**C<sub>14</sub>H<sub>19</sub>NO<sub>6</sub>**  
 Nordomoic acid, 15742  
**C<sub>14</sub>H<sub>19</sub>NO<sub>9</sub>S<sub>2</sub>**  
 Glucotropaeolin, 8760  
**C<sub>14</sub>H<sub>19</sub>NO<sub>10</sub>S<sub>2</sub>**  
 Sinalbine, 19909  
**C<sub>14</sub>H<sub>20</sub>**  
 4-Epi-11-nor-aristola-1(10),11-diene, 6977  
 4-Epi-11-nor-aristola-9,11-diene, 6978  
**C<sub>14</sub>H<sub>20</sub>N<sub>2</sub>O<sub>3</sub>**  
 Subaphylline, 20434  
**C<sub>14</sub>H<sub>20</sub>N<sub>2</sub>O<sub>9</sub>**  
 Mimosine-*O*- $\beta$ -D-glucoside, 14869  
**C<sub>14</sub>H<sub>20</sub>O**  
 2,8-Dimethyl-5-acetyl-bicyclo[5,3,0] deca-  
 diene-1,8, 6301  
 Mayurone, 13625  
**C<sub>14</sub>H<sub>20</sub>O<sub>2</sub>**  
 2-(*p*-Cyclohexyl-phenoxy)ethanol, 4499  
 (+)-1,5-Epoxy-nor-ketoguaia-11-ene, 7179  
 Glutinosone, 8794  
 4'-(3"-Methylbut-2"-enyloxy)-3-phenylpropanol,  
 14182  
 2-(2-Phenyl cyclohexyloxy) ethanol, 17103  
 Polygonone, 17649  
**C<sub>14</sub>H<sub>20</sub>O<sub>3</sub>**  
 Ailanthoidiol, 775  
 Cuspidiol, 4422  
**C<sub>14</sub>H<sub>20</sub>O<sub>4</sub>**  
 Fascicularone A, 7737  
 Norannuic acid formyl ester, 15710  
 2,2,4,4-Tetramethyl-6-(2-methyl-1-oxopropyl)-  
 1,3,5-cyclohexanetrione, 21200  
**C<sub>14</sub>H<sub>20</sub>O<sub>5</sub>**  
 7,8-Dihydroxy-isobutyryl-thymol, 5921  
 Pectinolide B, 16748  
 Pectinolide C, 16749  
 Pectinolide H, 16754  
 Sphaelactone A, 20149  
**C<sub>14</sub>H<sub>20</sub>O<sub>6</sub>**  
 Phenethyl  $\beta$ -D-glucopyranoside, 17085  
**C<sub>14</sub>H<sub>20</sub>O<sub>7</sub>**  
 1-*O*- $\beta$ -D-Glucopyranosyl-2-(3-hydroxyphenyl)-  
 ethanol, 8676  
 Rhodiolide, 18792  
 Sargencuneside, 19366  
 Sceptroside, 19462  
**C<sub>14</sub>H<sub>20</sub>O<sub>8</sub>**  
 Cimidahurine, 3653  
 Cimidahurinine, 3654  
 3,5-Dihydroxyphenethyl alcohol 3-*O*- $\beta$ -gluco-  
 pyranoside, 6074  
 3,4-Dihydroxyphenylethyl alcohol glucoside,  
 6081  
 Vanilloloside, 22338  
**C<sub>14</sub>H<sub>20</sub>O<sub>9</sub>**  
 2,6-Dimethoxy-4-hydroxyphenol-1-*O*- $\beta$ -D-glucoside,  
 6250  
 Jioglutoside A, 11879  
 Koaburaside, 12238  
**C<sub>14</sub>H<sub>21</sub>ClO<sub>11</sub>**  
 Glutinoside, 8790  
**C<sub>14</sub>H<sub>21</sub>N**  
 2,6-Nonamethylene pyridine, 15682  
**C<sub>14</sub>H<sub>21</sub>NO**  
 (2*S*,2'*S*)-Sedamine, 19647  
**C<sub>14</sub>H<sub>21</sub>NO<sub>4</sub>**  
 Codonopsine, 3886  
 6,7-Dihydroxy-1,1-dimethyl-*N*-(2'-glyceryl)-  
 1,2,3,4-tetrahydroisoquinoline, 5855  
**C<sub>14</sub>H<sub>21</sub>N<sub>3</sub>O<sub>5</sub>**  
 Leonurine, 12646  
**C<sub>14</sub>H<sub>22</sub>**  
 (-)-Norrotundene, 15790  
**C<sub>14</sub>H<sub>22</sub>NO<sub>3</sub><sup>+</sup>**  
 3-(4-Hydroxyphenyl)propionyl choline, 10638  
**C<sub>14</sub>H<sub>22</sub>O**  
*cis*- $\alpha$ -Irone, 11183  
*trans*- $\alpha$ -Irone, 11184  
 Rudbeckianone, 19046  
**C<sub>14</sub>H<sub>22</sub>O<sub>2</sub>**  
 2,6-Dibutyl-*p*-cresol, 5402  
 4-Hydroxy-14-nor-5-dumorten-7-one, 10540  
 Isokobusone, 11472  
 Isopolygonal, 11610  
 Kobusone, 12242  
 Norketoagarofuran, 15768  
 Polygonal, 17642  
 Rishitin, 18849  
**C<sub>14</sub>H<sub>22</sub>O<sub>3</sub>**  
 Canusesnol H, 3111  
 Dihydrocuspidiol, 5578  
 Oxyphyllendiol A, 16462  
 Oxyphyllendiol B, 16463  
**C<sub>14</sub>H<sub>22</sub>O<sub>4</sub>**  
 1-Oxo-2- $\beta$ -[3-butanone]-3- $\alpha$ -methyl-6- $\beta$ -[2-  
 propanoic acid]-cyclohexane, 16297  
 Russulanorol A, 19075  
 Russulanorol B, 19076  
**C<sub>14</sub>H<sub>22</sub>O<sub>6</sub>**  
 Bursephenylpropane, 2767  
**C<sub>14</sub>H<sub>23</sub>NO**  
 Sarmentine, 19371  
**C<sub>14</sub>H<sub>23</sub>NO<sub>4</sub>**  
 Heliohoustine, 9306  
 Isoretrohoustine, 11647  
 Retrohoustine, 18661  
**C<sub>14</sub>H<sub>24</sub>**  
 Cyprotene, 4587  
**C<sub>14</sub>H<sub>24</sub>O**  
 5-*cis*-Cyclotetradecen-1-one, 4538  
 (*E*)-9-Isopropyl-6-methyl-5,9-decadiene-2-one,  
 11627  
 T-Muurolol, 15141  
**C<sub>14</sub>H<sub>24</sub>O<sub>2</sub>**  
 Alepric acid, 884  
 Goshuyic acid, 8956  
**C<sub>14</sub>H<sub>24</sub>O<sub>3</sub>**  
 (1*R*,5*S*,6*S*,7*S*,10*R*)-1 $\beta$ ,6 $\alpha$ -Dihydroxyeudesman-  
 4-one, 5892  
 15-Nor-10-hydroxy-oplopan-4-oic acid, 15758  
**C<sub>14</sub>H<sub>24</sub>O<sub>4</sub>S<sub>2</sub>**  
*t*-Butyl 3-[(1-methylpropyl)dithio]-2-propenyl  
 malonate, 2800  
*t*-Butyl 3-[(1-methylthiopropyl)thio]-2-propenyl  
 malonate, 2801  
**C<sub>14</sub>H<sub>24</sub>O<sub>8</sub>**  
 Rengyoside B, 18617  
**C<sub>14</sub>H<sub>24</sub>O<sub>9</sub>**  
 Rengynic acid 1'-*O*- $\beta$ -D-glucoside, 18613  
**C<sub>14</sub>H<sub>25</sub>NO**  
*N*-Isobutyldeca-*trans*-2-*trans*-4-dienamide,  
 11269  
**C<sub>14</sub>H<sub>25</sub>NO<sub>2</sub>**  
*N*-Isobutyl-4,5-epoxy-2*E*-decaenamide, 11274  
**C<sub>14</sub>H<sub>25</sub>NO<sub>3</sub>**  
 Pipericycliamide, 17445  
**C<sub>14</sub>H<sub>26</sub>N<sub>2</sub>O<sub>12</sub>**  
 Neocycasin A, 15380  
 Neocycasin B, 15381  
 Neocycasin E, 15384  
**C<sub>14</sub>H<sub>26</sub>O**  
 Cyclotetradecan-1-one, 4537  
 3-Methylcyclotridecan-1-one, 14276  
**C<sub>14</sub>H<sub>26</sub>O<sub>2</sub>**  
 Myristoleic acid, 15205  
*cis*-4-Tetradecenoic acid, 21044  
 Tetradecenoic acid A, 21045  
 Tetradecenoic acid B, 21046  
**C<sub>14</sub>H<sub>26</sub>O<sub>6</sub>**  
 (3*R*)-1-Octan-3-enyl- $\beta$ -D-glucopyranoside,  
 15975  
**C<sub>14</sub>H<sub>26</sub>O<sub>8</sub>**  
 Rengyoside A, 18616  
**C<sub>14</sub>H<sub>26</sub>O<sub>9</sub>S**  
 Bacopaside A, 2084  
**C<sub>14</sub>H<sub>26</sub>O<sub>10</sub>**

- Isopropyl  $\beta$ -D-apiofuranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside, 11620
- C<sub>14</sub>H<sub>26</sub>O<sub>11</sub>**  
Agarobiose dimethylacetal, 702
- C<sub>14</sub>H<sub>26</sub>O<sub>12</sub>**  
Propanetriol- $\alpha$ -L-arabinofuranosyl (1 $\rightarrow$ 4)- $\beta$ -D-glucopyranoside, 17915
- C<sub>14</sub>H<sub>27</sub>NO<sub>3</sub>**  
N-Isobutyl-4,5-dihydroxy-2E-decaenamide, 11270
- C<sub>14</sub>H<sub>28</sub>**  
1-Tetradecene, 21043
- C<sub>14</sub>H<sub>28</sub>O<sub>2</sub>**  
Ethyllaurate, 7455  
Methyl-2,4,6-trimethyl-decanoate, 14792  
Myristic acid, 15203  
n-Dodecyl acetate, 6545  
(-)-2D,4D,6D,8D-Tetramethyl decanoic acid, 21194
- C<sub>14</sub>H<sub>28</sub>O<sub>4</sub>**  
Ipurolic acid, 11132
- C<sub>14</sub>H<sub>30</sub>**  
4,6-Dimethyl dodecane, 6343  
Tetradecane, 21040
- C<sub>14</sub>H<sub>30</sub>O**  
1-Tetradecanol, 21041
- C<sub>15</sub>H<sub>8</sub>N<sub>2</sub>O<sub>2</sub>**  
Tryptanthrine, 22059
- C<sub>15</sub>H<sub>8</sub>O<sub>5</sub>**  
Coumestrol, 4190  
4-Hydroxy-2-carboxyanthraquinone, 9891  
Nordamnacanthal, 15734  
Ophiohayatone C, 16134
- C<sub>15</sub>H<sub>8</sub>O<sub>6</sub>**  
Lucernol, 13018  
Munjistin, 15076  
Norjuzunal, 15765  
Rhein, 18759
- C<sub>15</sub>H<sub>8</sub>O<sub>7</sub>**  
Demethylweddelolactone, 5101  
Isodemethylweddelolactone, 11374  
Pseudopurpurin, 18058
- C<sub>15</sub>H<sub>9</sub>ClO<sub>2</sub>**  
4'-Chloroaurone, 3542
- C<sub>15</sub>H<sub>9</sub>NO<sub>3</sub>**  
Criasiaticidine A, 4235
- C<sub>15</sub>H<sub>9</sub>O<sub>10</sub>S**  
Quercetin-3-sulphate, 18399
- C<sub>15</sub>H<sub>10</sub>N<sub>2</sub>O**  
Anticancer Alkaloid PMV70P691-051, 1381
- C<sub>15</sub>H<sub>10</sub>N<sub>2</sub>O<sub>2</sub>**  
Drymaritin, 6609  
5-Hydroxymethylcanthin-6-one, 10477
- 1-Methoxycanthin-6-one, 13865  
5-Methoxycanthin-6-one, 13866  
9-Methoxycanthin-6-one, 13867  
10-Methoxycanthin-6-one, 13868  
3-Methyl-canthin-2,6-dione, 14211  
Picrasidine L, 17304
- C<sub>15</sub>H<sub>10</sub>N<sub>2</sub>O<sub>3</sub>**  
1-Hydroxy-9-methoxycanthin-6-one, 10390  
8-Hydroxy-9-methoxycanthin-6-one, 10391  
10-Hydroxy-9-methoxycanthin-6-one, 10392  
11-Hydroxy-10-methoxycanthin-6-one, 10393  
9-Methoxycanthin-6-one 3-N-oxide, 13869  
Nigakinone, 15561  
Picrasidine Q, 17309
- C<sub>15</sub>H<sub>10</sub>O**  
2,3-Diphenyl-2-cyclopropen-1-one, 6485
- C<sub>15</sub>H<sub>10</sub>O<sub>2</sub>**  
Flavone, 7819  
2-Methylanthraquinone, 14144
- C<sub>15</sub>H<sub>10</sub>O<sub>3</sub>**  
Anticancer Flavonoid PMV70P691-94, 1419  
Flavonol, 7820  
1-Hydroxy-2-methyl-anthraquinone, 10467  
2-Hydroxymethylanthraquinone, 10468  
2-Isopropenyl naphtho[2,3-*b*]furan-4,9-quinone, 11616
- C<sub>15</sub>H<sub>10</sub>O<sub>4</sub>**  
Alizarin-1-methylether, 900  
Alizarin-2-methylether, 901  
Chrysin, 3600  
Chrysophanol, 3615  
Cypriitbetquinone A, 4585  
Daidzein, 4604  
Digiferrugineol, 5522  
4',7'-Dihydroxyflavone, 5895  
1,4-Dihydroxy-2-methylanthraquinone, 6015  
1,8-Dihydroxy-2-methylanthraquinone, 6017  
3,9-Dihydroxypterocarp-6a-ene, 6105  
2-Hydroxy-3-hydroxymethyl anthraquinone, 10193  
1-Hydroxy-3-methoxyanthraquinone, 10380  
6-Methylalazarin, 14124  
2-(1'-Methylethenyl)-5-hydroxynaphtho[2,3-*b*]furan-4,9-dione, 14430  
2-(1'-Methylethenyl)-7-hydroxynaphtho[2,3-*b*]furan-4,9-dione, 14431  
Nordalbergin, 15733  
Primetin, 17853  
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- C<sub>15</sub>H<sub>10</sub>O<sub>5</sub>**  
Aloemodin, 967  
Anthragallol-2-methylether, 1361  
Apigenin, 1476
- Baicalein, 2102  
1,8-Dihydroxy-4-hydroxymethyl anthraquinone, 5914  
3,6-Dihydroxy-2-hydroxymethyl-9,10-anthraquinone, 5915  
1,6-Dihydroxy-2-methoxyanthraquinone, 5961  
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5-Hydroxylizarin-1-methylether, 9771  
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Lucidin, 13041  
2-Methyl-1,3,6-trihydroxyanthraquinone, 14775  
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Tournefolal, 21477  
4,5,6-Trihydroxy-aurone, 21688  
5,7,2'-Trihydroxyflavone, 21732  
7,3',4'-Trihydroxyflavone, 21733
- C<sub>15</sub>H<sub>10</sub>O<sub>6</sub>**  
Aureusidin, 2011  
Catenarin, 3319  
Citroerosein, 3765  
6-Demethoxycapillarisin, 5043  
Fisetin, 7802  
6-Hydroxy-1-methoxy-2,3-methylenedioxy-xanthone, 10422  
7-Hydroxy-1-methoxy-2,3-methylenedioxy-xanthone, 10423  
3-Hydroxymorindone, 10530  
Isosabandin, 11689  
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Kaempferol, 12020  
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Norartocarpetin, 15714  
Orobol, 16209  
Scutellarein, 19582  
5,7,2',3'-Tetrahydroxyflavone, 21113  
5,7,2',6'-Tetrahydroxyflavone, 21114
- C<sub>15</sub>H<sub>10</sub>O<sub>7</sub>**  
6-Demethylcapillarisin, 5065  
Herbacetin, 9421  
6-Hydroxyluteolin, 10351  
Morin, 14971  
3,5,7,2',6'-Pentahydroxy flavone, 16848  
3,5,6,7,8-Pentahydroxy-2-phenyl-4H-1-benzopyran-4-one, 16859  
Quercetin, 18317

- Robinetin, 18857  
Robustaquinone F, 18874
- C<sub>15</sub>H<sub>10</sub>O<sub>8</sub>**  
Gossypetin, 8959  
Myricetin, 15170  
Quercetagenin, 18305
- C<sub>15</sub>H<sub>10</sub>O<sub>9</sub>S**  
Kaempferol-3-sulphate, 12098
- C<sub>15</sub>H<sub>11</sub>ClO<sub>3</sub>**  
4'-Chloro-2-hydroxyaurone, 3557
- C<sub>15</sub>H<sub>11</sub>ClO<sub>5</sub>**  
5-Chloro-1,6-dihydroxy-3-methoxy-8-methylxanthone, 3549
- C<sub>15</sub>H<sub>11</sub>I<sub>4</sub>NO<sub>4</sub>**  
3,5,3',5'-Tetraiodothyronine, 21175
- C<sub>15</sub>H<sub>11</sub>N**  
 $\alpha$ -Phenylcinnamic acid nitrile, 17102  
2-Phenylquinoline, 17135
- C<sub>15</sub>H<sub>11</sub>NO<sub>5</sub>**  
Marcanine D, 13549
- C<sub>15</sub>H<sub>11</sub>O<sub>5</sub><sup>+</sup>**  
Pelargonidin, 16777
- C<sub>15</sub>H<sub>11</sub>O<sub>6</sub><sup>+</sup>**  
Cyanidin, 4434
- C<sub>15</sub>H<sub>11</sub>O<sub>7</sub><sup>+</sup>**  
Delphinidin, 5011
- C<sub>15</sub>H<sub>12</sub>I<sub>3</sub>NO<sub>4</sub>**  
3,3',5'-Triiodothyronine, 21867  
3,5,3'-Triiodothyronine, 21868
- C<sub>15</sub>H<sub>12</sub>O<sub>2</sub>S<sub>2</sub>**  
5-(3-Buten-1-ynyl)-2,2'-bithienyl-5'-methylacetate, 2784
- C<sub>15</sub>H<sub>12</sub>O<sub>2</sub>S<sub>3</sub>**  
 $\alpha$ -Terthienyl methyl acetate, 21020
- C<sub>15</sub>H<sub>12</sub>O<sub>3</sub>**  
Acetyl-atractylodinol, 327  
Anticancer Flavonoid PMV70P691-84, 1414  
Chrysarobin, 3598  
4,4'-Dihydroxychalcone, 5788  
Flavidin, 7811  
Hagin E, 9190  
5-Hydroxyflavanone, 10124  
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Magnoquinone, 13389  
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Thespona, 21321  
Typhaphthalide, 22155
- C<sub>15</sub>H<sub>12</sub>O<sub>4</sub>**  
Bolusanthin IV, 2539  
1,7-Dimethoxyxanthone, 6299  
Emodin anthrone, 6777  
Hagin D, 9189
- Hydrangeic acid, 9699  
Hydrangenol, 9700  
3-Hydroxydehydro-iso- $\alpha$ -lapachone, 9973  
Isoliquiritigenin, 11504  
Lespedezol F<sub>1</sub>, 12702  
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4-Methoxyphenanthrene-2,3,7-triol, 14051  
Montroumarin, 14947  
Pinocembrin, 17403  
2,4,4'-Trihydroxychalcone, 21694
- C<sub>15</sub>H<sub>12</sub>O<sub>5</sub>**  
Butein, 2779  
Butin, 2785  
Chalconaringenin, 3454  
1,6-Dihydroxy-3-methoxy-8-methylxanthone, 5992  
1,8-Dihydroxy-5-methoxy-3-methylxanthone, 5993  
Garbanzol, 8202  
1-Hydroxy-2,4-dimethoxyxanthone, 10044  
1-Hydroxy-3,7-dimethoxyxanthone, 10045  
2-Hydroxy-1,7-dimethoxyxanthone, 10046  
4-Hydroxyhydrangenol, 10171  
Isotalactone, 11744  
4-Methoxy-6-(11,12-methylenedioxystryryl)-2-pyrone, 14021  
4-Methoxyphenanthrene-2,3,6,7-tetrol, 14050  
Microminutin, 14841  
( $\pm$ )-Naringenin, 15278  
Naringenin, 15279  
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Protosappanin A, 17985  
Rubrofusarin, 19041  
Securixanthone B, 19646  
2,4,2',4'-Tetrahydroxychalcone, 21086  
Thunberginol C, 21357  
Toralactone, 21455  
7,3',5'-Trihydroxyflavanone, 21731
- C<sub>15</sub>H<sub>12</sub>O<sub>6</sub>**  
(2*R*,3*R*)-Aromadendrin, 1764  
(2*R*,3*S*)-Aromadendrin, 1765  
Carthamidin, 3223  
(+)-Dihydrofisetin, 5613  
(-)-Dihydrofisetin, 5614  
1,3-Dihydroxy-4,5-dimethoxyxanthone, 5840  
1,6-Dihydroxy-3,5-dimethoxyxanthone, 5841  
1,6-Dihydroxy-3,7-dimethoxyxanthone, 5842  
1,6-Dihydroxy-5,7-dimethoxyxanthone, 5843  
1,6-Dihydroxy-7,8-dimethoxyxanthone, 5844  
1,7-Dihydroxy-3,4-dimethoxyxanthone, 5845  
3,6-Dihydroxy-1,7-dimethoxyxanthone, 5846  
Eriodictyol, 7278  
Gentiacaleine, 8290
- Maesopsin, 13361  
2-*O*-Methylswertianin, 14732  
Micromelin, 14839  
Okanin, 16024  
2',3',4',5',6'-Pentahydroxychalcone, 16842  
3,4,5,2',4'-Pentahydroxychalcone, 16843  
Steppogenin, 20326  
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(2*R*,3*R*)-2',3,5,7-tetrahydroxyflavanone, 21108  
(2*S*)-5,7,2',5'-Tetrahydroxyflavanone, 21109  
Tragopogonic acid, 21500
- C<sub>15</sub>H<sub>12</sub>O<sub>7</sub>**  
Dihydromorin, 5679  
Dihydroquercetin, 5699  
Dihydorobinetin, 5702  
Epitaxifolin, 7026  
2-*O*-(4-Hydroxybenzoyl)-2,4,6-trihydroxyphenylacetic acid, 9830  
Onjixanthone II, 16109  
3,5,7,2'6'-Pentahydroxyflavanone, 16846  
(+)-3,5,7,3',5'-Pentahydroxyflavanone, 16847  
Phelligridin B, 17060  
Securixanthone A, 19645
- C<sub>15</sub>H<sub>12</sub>O<sub>8</sub>**  
Ampelopsin, 1074  
2-*O*-(3,4-Dihydroxybenzoyl)-2,4,6-trihydroxyphenylacetic acid, 5768
- C<sub>15</sub>H<sub>13</sub>ClO<sub>4</sub>**  
Chlorosesamone, 3572
- C<sub>15</sub>H<sub>13</sub>ClO<sub>6</sub>**  
6-Chlorocatechin, 3544  
(-)-6-Chloroepicatechin, 3550
- C<sub>15</sub>H<sub>13</sub>I<sub>2</sub>NO<sub>4</sub>**  
3,3'-Diiiodothyronine, 6186
- C<sub>15</sub>H<sub>13</sub>NO<sub>3</sub>**  
Glycozolidal, 8832  
Mukonine, 15028
- C<sub>15</sub>H<sub>13</sub>NO<sub>4</sub>**  
Clausine B, 3793  
Clausine K, 3799
- C<sub>15</sub>H<sub>13</sub>NO<sub>5</sub>**  
Citrusinine II, 3778
- C<sub>15</sub>H<sub>14</sub>N<sub>2</sub>O<sub>2</sub>**  
Kumujian G, 12335  
Methyl-3-( $\beta$ -carboline-1-yl) propionate, 14218  
4,9-Dimethoxy-1-vinyl- $\beta$ -carboline, 6297
- C<sub>15</sub>H<sub>14</sub>N<sub>2</sub>O<sub>3</sub>**  
7-Methoxy- $\beta$ -carboline-1-Propionic acid, 13871
- C<sub>15</sub>H<sub>14</sub>N<sub>2</sub>O<sub>4</sub>**  
Dichotomine C, 5424
- C<sub>15</sub>H<sub>14</sub>N<sub>2</sub>O<sub>6</sub>**  
Sterculimine II, 20330
- C<sub>15</sub>H<sub>14</sub>O**

- Linderazulene, 12870
- C<sub>15</sub>H<sub>14</sub>O<sub>2</sub>**
- Deoxylapachol, 5188
- Flavanol, 7807
- 4'-Methylpinosylvin, 14677
- Pinosylvin methyl ether, 17421
- C<sub>15</sub>H<sub>14</sub>O<sub>3</sub>**
- Corsifuran B, 4094
- 7,4'-Dihydroxyflavan, 5894
- 4,7-Dihydroxy-2-methoxy-9,10-dihydrophenanthrene, 5970
- 1,3-Diphenylpropane-1,2-diol-3-one, 6489
- Hircinol, 9549
- Lapachol, 12501
- $\alpha$ -Lapachone, 12502
- $\beta$ -Lapachone, 12503
- Magnotriol A, 13395
- Magnotriol B, 13396
- Mansonone D, 13514
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- 2-Methoxy-9,10-dihydrophenanthrene-4,5-diol, 13909
- 4-Methoxy-9,10-dihydrophenanthrene-2,7-diol, 13910
- Tupichinol C, 22116
- C<sub>15</sub>H<sub>14</sub>O<sub>4</sub>**
- Alloxanthoxyletin, 941
- Benzyl 2-hydroxy-6-methoxybenzoate, 2292
- Braylin, 2599
- Catalpalactone, 3305
- Cochinolide, 3876
- Davidigenin, 4694
- Dehydrogeijerin, 4919
- Dehydrooxoperezinone, 4957
- 1,5-Dihydroxy-3-methylanthraquinone, 6016
- Drypemolundein A, 6615
- 5-Hydroxylapachol, 10313
- Isorhapontigenin, 11672
- Lunularic acid, 13084
- Luvangetin, 13152
- Mansonone H, 13518
- 4-Methoxy-9,10-dihydrophenanthrene-1,2,7-triol, 13912
- 4-Methoxy-9,10-dihydrophenanthrene-2,3,7-triol, 13913
- 5-Methoxyseselin, 14092
- Micropubescin, 14845
- Miliusolide, 14853
- Murralongin, 15104
- Murrayone, 15122
- Naphthoquinone IV, 15259
- Peucedanin, 17028
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- Randaol, 18533
- Rhapontigenin, 18748
- Rhinacanthin A, 18768
- Thespesone, 21320
- Wyerone, 22741
- Xanthoxyletin, 22777
- Yangonin, 22882
- C<sub>15</sub>H<sub>14</sub>O<sub>5</sub>**
- 5-Acetoxyisogoniotalamin oxide, 241
- 3-Acetyltholactone, 311
- Afzelechin, 677
- Atrochrysone, 1999
- Cheliensisin A, 3505
- 6,3'-Dihydroxy-2,4-dimethoxybenzophenone, 5819
- (-)-Epihafzelechin, 6819
- 2,3-Epoxy sesamone, 7200
- Fistacacidin, 7804
- Hopeyhopin, 9643
- Hydroxysesamone, 10709
- 4-Methoxy-9,10-dihydrophenanthrene-2,3,6,7-tetrol, 13911
- 4-Methoxy-6-(11,12-methylenedioxydihydrostyryl)-2-pyrone, 14014
- 11-Methoxynoryangonin, 14043
- Methysticin, 14820
- Naphthoquinone VI, 15261
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- (+)-Catechin, 3308
- (-)-Catechin, 3309
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- Epicatechin, 6854
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- Leucopelargonidin, 12718
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- Spirolactone iridoid, 20202
- C<sub>15</sub>H<sub>14</sub>O<sub>7</sub>**
- L*-Epigallocatechin, 6921
- (+)-Galocatechin, 8098
- (-)-Galocatechin, 8099
- Leucocyanidin, 12714
- Plagiogyrin A, 17501
- Robidandiol, 18856
- Sawarachromone, 19428
- C<sub>15</sub>H<sub>14</sub>O<sub>8</sub>**
- Dulcisflavan, 6624
- Leucodelphinidin, 12717
- 1-(3,4,5-Trihydroxyphenyl)-3-(2,4,6-trihydroxyphenyl)-2-hydroxy-1-propanone, 21837
- C<sub>15</sub>H<sub>14</sub>O<sub>9</sub>**
- 2-Acetyl-3-(*p*-coumaroyl)-*meso*-tartaric acid, 360
- C<sub>15</sub>H<sub>14</sub>O<sub>10</sub>**
- 7,8-Dihydroxycoumarin-7-*O*- $\beta$ -*D*-glucuronide, 5797
- C<sub>15</sub>H<sub>15</sub>NO**
- N*-(2-Phenylethyl)benzamide, 17112
- C<sub>15</sub>H<sub>15</sub>NO<sub>2</sub>**
- Clausine P, 3803
- N*-Methylflindersine, 14446
- Onosmin A, 16120
- C<sub>15</sub>H<sub>15</sub>NO<sub>3</sub>**
- Haplophytin A, 9225
- C<sub>15</sub>H<sub>15</sub>NO<sub>5</sub>**
- Acronycidine, 569
- Flindersiamine, 7829
- C<sub>15</sub>H<sub>15</sub>NO<sub>6</sub>**
- Melicarpine, 13673
- C<sub>15</sub>H<sub>15</sub>NO<sub>7</sub>**
- Furomegistine I, 8027
- C<sub>15</sub>H<sub>16</sub>Br<sub>2</sub>O<sub>2</sub>**
- Lembyne B, 12617
- C<sub>15</sub>H<sub>16</sub>BrClO<sub>2</sub>**
- Lembyne A, 12615
- (1*E*)-Lembyne-A, 12616
- C<sub>15</sub>H<sub>16</sub>N<sub>2</sub>O<sub>2</sub>**
- 1-Ethyl-4,8-dimethoxy- $\beta$ -carboline, 7433
- C<sub>15</sub>H<sub>16</sub>O**
- 4-Cumylphenol, 4361
- Pyrocurzerenone, 18264
- C<sub>15</sub>H<sub>16</sub>O<sub>2</sub>**
- Dehydrolindestrenolide, 4942
- Guaia-1(10),2,4,11(13)-tetraen-12,6 $\zeta$ -olide, 9037
- 7-Hydroxycadalenal, 9868
- 3-Hydroxy-4'-methoxybibenzyl, 10389
- Lindenone, 12867
- Mansonone C, 13513
- Naphthoquinone II, 15257
- Shizukanolide B, 19841
- Stilbostemin B, 20379
- C<sub>15</sub>H<sub>16</sub>O<sub>3</sub>**
- Batatasin III, 2165
- Batatasin IV, 2166
- Dehydroleucodin, 4941
- 1-(2,4-Dihydroxyphenyl)-3-(4-hydroxyphenyl)propane, 6088

- 3-(1,1-Dimethyl allyl) herniarin, 6306  
 (*E*)-4-(1,5-Dimethyl-3-oxo-1,4-hexadienyl) benzoic acid, 6390  
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 5 $\alpha$ H-3 $\beta$ ,4 $\beta$ -Epoxy-14-oxo-guaia-1(10),11(13)-dien-6 $\alpha$ ,12-olide, 7182  
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- C<sub>15</sub>H<sub>17</sub>NO<sub>3</sub>**  
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- C<sub>15</sub>H<sub>18</sub>N<sub>2</sub>O**  
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- C<sub>15</sub>H<sub>19</sub>Br<sub>2</sub>ClO<sub>2</sub>**  
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- C<sub>15</sub>H<sub>19</sub>NO<sub>3</sub>**  
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 1-[1-Oxo-3(3,4-methylenedioxyphenyl)propyl]piperidine, 16393
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- α*-Corocalene, 4076  
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- C<sub>15</sub>H<sub>20</sub>Br<sub>2</sub>O**  
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- C<sub>15</sub>H<sub>20</sub>N<sub>2</sub>O<sub>5</sub>S**  
 (*S*<sub>C2</sub>*R*<sub>C7</sub>)-*γ*-Glutamyl-*S*-benzylcysteine, 8772
- C<sub>15</sub>H<sub>20</sub>N<sub>2</sub>O<sub>6</sub>**  
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- C<sub>15</sub>H<sub>20</sub>N<sub>2</sub>O<sub>6</sub>S**  
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- C<sub>15</sub>H<sub>20</sub>O**  
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*α*-Cuparenone, 4371  
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- β*-Cyclocostunolide, 4486  
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- C<sub>15</sub>H<sub>23</sub>Br<sub>2</sub>ClO**  
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- C<sub>15</sub>H<sub>23</sub>N**  
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- C<sub>15</sub>H<sub>23</sub>NO**  
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- C<sub>15</sub>H<sub>23</sub>NO<sub>2</sub>**  
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 $\alpha$ -Chamigrene, 3465  
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 $\alpha$ -Guaiene, 9041  
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 $\alpha$ -Humulene, 9669  
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6-Hydroxy-1,2,5-trimethoxyxanthone, 10805  
7-Hydroxy-1,2,8-trimethoxyxanthone, 10806  
Klaivanolide, 12232  
Lespedezol D, 12692  
4-Methoxy-6-(11,12-methylenedioxy-14-methoxystyryl)-2-pyrone, 14019  
(3*R*)-4'-Methoxy-2',3,7-trihydroxyisoflavanone, 14100  
7-*O*-Methylaromadendrin, 14146  
7-*O*-Methyleriodictyol, 14417  
(+)-Mopanol, 14949  
Onjixanthone I, 16108  
Paepalantine, 16535  
Perforatic acid, 16916  
Protosappanin C, 17988
- Sappanone B, 19348  
Scuteamoenin, 19580  
Suberectin, 20437  
2,6,2',4'-Tetrahydroxy-6'-methoxychalcone, 21126  
5,7,3',5'-Tetrahydroxy-6-methylflavanone, 21134  
5,7,4'-Trihydroxy-6-methoxyflavanone, 21772  
7,2'6'-Trihydroxy-5-methoxyflavanone, 21773
- C<sub>16</sub>H<sub>14</sub>O<sub>7</sub>**  
(+)-Dihydroisorhamnetin, 5652  
1,3-Dihydroxy-2,4,7-trimethoxyxanthone, 6164  
1,6-Dihydroxy-3,5,7-trimethoxyxanthone, 6165  
1,8-Dihydroxy-3,4,7-trimethoxyxanthone, 6166  
Isolecanoric acid, 11486  
Lecanoric acid, 12598  
4'-*O*-Methyltaxifolin, 14737
- C<sub>16</sub>H<sub>14</sub>O<sub>9</sub>**  
Ethyl-*m*-digallate, 7458  
Ethyl-*p*-digallate, 7470
- C<sub>16</sub>H<sub>15</sub>ClO<sub>5</sub>**  
8-(3-Chloro-2-hydroxy-3-methylbutoxy)psoralen, 3560  
Saxalin, 19430
- C<sub>16</sub>H<sub>15</sub>NO<sub>3</sub>**  
Apoaemanthamine, 1532  
Kalasinamide, 12116  
Nantoamide, 15249
- C<sub>16</sub>H<sub>15</sub>NO<sub>4</sub>**  
Arborinine, 1614  
Clausine H, 3797  
4a,*N*-Dedihydronoraugustamine, 4866  
Toddaliopsin A, 21419
- C<sub>16</sub>H<sub>15</sub>NO<sub>5</sub>**  
Citrusinine I, 3777  
4-Methoxydianthramide B, 13903
- C<sub>16</sub>H<sub>15</sub>NO<sub>6</sub>**  
Atalafoline B, 1954  
Buxifoliadine H, 2830
- C<sub>16</sub>H<sub>16</sub>N<sub>2</sub>O<sub>2</sub>**  
Isolysergic acid, 11516  
Lysergic acid, 13256
- C<sub>16</sub>H<sub>16</sub>O<sub>2</sub>**  
(*E*)-3,4'-Dimethoxystilbene, 6292  
3,5-Dimethoxystilbene, 6293  
6-Isohexenyl- $\alpha$ -naphthoquinone, 11455  
*Obtustylene*, 15913
- C<sub>16</sub>H<sub>16</sub>O<sub>3</sub>**  
Broussin, 2628  
Corsifuran A, 4093  
7,4'-Dihydroxy-8-methylflavan, 6032  
7-Hydroxy-3-(4-hydroxybenzyl)chromane, 10175  
4'-Hydroxy-7-methoxyflavan, 10403

- Hydroxyobtustylene, 10545  
 3'-(4"-Hydroxyphenyl)-propyl benzoate, 10639  
 (2*S*)-5-Methoxy flavan-7-ol, 13928  
 3,4-Methylenedioxy-3'-methoxybibenzil, 14375  
 Orchinol, 16168  
 Pterostilbene, 18163  
 Xenognosin A, 22782
- C<sub>16</sub>H<sub>16</sub>O<sub>4</sub>**  
 Angolensin, 1240  
 Benzyl 2,6-dimethoxybenzoate, 2283  
 Densiflorol A, 5132  
 Deoxyshikonin, 5214  
 3',4'-Dihydroxy-3,5'-dimethoxystilbene, 5839  
 2',6'-Dihydroxy-4'-methoxydihydrochalcone, 5969  
 (2*S*),3',4'-Dihydroxy-7-methoxy flavan, 5978  
 (2*S*)-4',7'-Dihydroxy-3'-methoxyflavan, 5979  
 Eleutherin, 6752  
 4'-Hydroxy-7-methoxyflavan-3-ol, 10404  
 Isohemigossylic acid lactone-2-methyl ether, 11453  
 Isohemigossylic acid lactone- 7-methyl ether, 11454  
 LoureirinC, 13012  
 5-*O*-Methylalloptaeroxylin, 14125  
 Naphthoquinone V, 15260  
 Phoyubene C, 17198  
 Uvangoletin, 22287  
 (3*R*)-Vestitol, 22436  
 (3*S*)-Vestitol, 22437
- C<sub>16</sub>H<sub>16</sub>O<sub>5</sub>**  
 (-)-Alkannin, 909  
 Angelicone, 1193  
 Benzyl 2-hydroxy-3,6-dimethoxybenzoate, 2291  
 Coeloginanthridin, 3890  
 Columbianetin acetate, 3937  
 3'-Deoxysappanol, 5211  
 5,8-Dimethoxyxanthyletin, 6300  
 11*b*-Hydroxy-11*b*,1-dihydromedicarpin, 10009  
 5-Hydroxymethyl-6-endo-(3'-methoxy-4'-hydroxyphenyl)-8-oxa-bicyclo[3.2.1]-oct-3-en-2-one, 10489  
 Lespedezol G<sub>1</sub>, 12703  
 4-Methoxy-6-(11,12-dimethylstyryl)-2-pyrone, 13919  
 Nodakenetin acetate, 15646  
 Shikonin, 19819  
 Torosachryson, 21459  
 4,2',4'-Trihydroxy-6'-methoxydihydrochalcone, 21770
- C<sub>16</sub>H<sub>16</sub>O<sub>6</sub>**  
 3'(S)-Acetoxy-4'(R)-hydroxy-3',4'-dihydroxanthyletin, 213
- Arachidoside, 1600  
 Aviprin, 2041  
 (4*S*,4*aR*,9*aR*)-4*a*-Carbomethoxy-1,4,4*a*,9*a*-tetrahydro-4,8-dihydroxy-6-methylxanthone, 3164  
 3',6-Dihydroxy-2,4,4'-trimethoxybenzophenone, 6158  
 Glochidiolide, 8564  
 Heraclenol, 9420  
 Isoglochidiolide, 11442  
 4-Methoxy-6-(11,12-methylenedioxy-14-methoxydihydrostyryl)-2-pyrone, 14018  
 Oxypeucedanin hydrate, 16458  
 (*S*)-(-)-Oxypeucedanin hydrate, 16459  
 Protosappanin B, 17987  
 Qianhuocoumarin B, 18283  
 Qianhuocoumarin C, 18284  
 Sappanol, 19347  
 Ventiloquinone I, 22378
- C<sub>16</sub>H<sub>16</sub>O<sub>7</sub>**  
 8-*O*-Methyl-fusarubin, 14451  
 Omphalocarpinol, 16094
- C<sub>16</sub>H<sub>16</sub>O<sub>8</sub>**  
 3-*O*-Caffeoylshikimic acid, 2923  
 5-*O*-Caffeoylshikimic acid, 2924
- C<sub>16</sub>H<sub>17</sub>NO<sub>2</sub>**  
 Onosmin B, 16121
- C<sub>16</sub>H<sub>17</sub>NO<sub>3</sub>**  
 Caranine, 3152  
 Crinine, 4240  
 (+)-Crinine, 4241  
 Demethylcoclaurine, 5067  
 Epivittatine, 7038  
 Neoacutifolin, 15335  
 1-[1-Oxo-5(3,4-methylenedioxyphenyl)-2*E*,4*E*-pentadienyl]pyrrolidine, 16387  
 1-[1-Oxo-5(3,4-methylenedioxyphenyl)-2*E*,4*Z*-pentadienyl] pyrrolidine, 16388  
 1-[1-Oxo-5(3,4-methylenedioxyphenyl)-2*Z*,4*E*-pentadienyl] pyrrolidine, 16389  
 Zanthobungeanine, 22966
- C<sub>16</sub>H<sub>17</sub>NO<sub>4</sub>**  
 Hamayne, 9206  
 (+)-11-Hydroxyvittatine, 10826  
 Lycorine, 13241  
 Nangustine, 15246  
 Noraugustamine, 15716  
 Orixalone C, 16201  
 (-)-Pancracine, 16600  
 Pipermethystine, 17462
- C<sub>16</sub>H<sub>17</sub>NO<sub>5</sub>**  
 Cenocladamide, 3386  
 4'-Desmethylpiplartine, 5259  
 3*α*,4*α*-Epoxy-5*β*-pipermethystine, 7188
- C<sub>16</sub>H<sub>17</sub>N<sub>3</sub>O**  
 Lysergamide, 13255
- C<sub>16</sub>H<sub>17</sub>N<sub>3</sub>O<sub>2</sub>S**  
 1-(2'-Pyrrolidinethion-3'-yl)-1,2,3,4-tetrahydro-*β*-carboline-3-carboxylic acid, 18278
- C<sub>16</sub>H<sub>18</sub>N<sub>2</sub>**  
 Agroclavine, 763
- C<sub>16</sub>H<sub>18</sub>N<sub>2</sub>O**  
 Elymoclavine, 6765  
 Isosetoclavine, 11712  
 Lysergol, 13257  
 Setoclavine, 19789
- C<sub>16</sub>H<sub>18</sub>N<sub>2</sub>O<sub>2</sub>**  
 Isopenniclavine, 11582  
 Penniclavine, 16808
- C<sub>16</sub>H<sub>18</sub>N<sub>2</sub>O<sub>3</sub>**  
 4,8-Dimethoxy-1-(2-methoxyethyl)-*β*-carboline, 6257
- C<sub>16</sub>H<sub>18</sub>N<sub>2</sub>O<sub>6</sub>**  
 Cappariloside A, 3136  
 Indole-3-acetonitrile-6-*O*-*β*-*D*-glucopyranoside, 11028
- C<sub>16</sub>H<sub>18</sub>N<sub>6</sub>O<sub>5</sub>**  
 AMG-1, 1039
- C<sub>16</sub>H<sub>18</sub>O<sub>3</sub>**  
 Broussonin A, 2647  
 Broussonin B, 2648  
 4-Ethoxymethylphenyl-4'-hydroxybenzylether, 7412  
 3-Methoxy-7-hydroxycadalenal, 13951  
 3'-*O*-Methylbatatasin III, 14154  
 Stilbostemin D, 20380
- C<sub>16</sub>H<sub>18</sub>O<sub>4</sub>**  
 Alkannan, 908  
 Batatasin II, 2164  
 Bungein A, 2746  
 Coumurrayin, 4193  
 Gigantol, 8380  
 6-Methoxyhemigossypol, 13946  
 Rutacultin, 19079  
 Stilbostemin E, 20381  
 Toddaculine, 21418
- C<sub>16</sub>H<sub>18</sub>O<sub>5</sub>**  
 Aculeatin, 588  
 Albiflorin-2, 859  
 Albiflorin-3, 860  
 5,6-Dimethoxy-8-(3'-methyl-2'-oxobutyl) coumarin, 6265  
 5,7-Dimethoxy-8-(3'-methyl-2'-oxobutyl) coumarin, 6266  
 11-Methoxy-5,6-dihydroangonin, 13915  
 5-*O*-Methylvisamminol, 14812  
 Omphamurin, 16095

- Perforamone A, 16912  
 Perforamone B, 16913  
 Perforamone C, 16914
- C<sub>16</sub>H<sub>18</sub>O<sub>6</sub>**  
 Descurainin, 5245  
 6-(2',3'-Dihydroxy-3'-methylbutyl)-7-acetoxy-2*H*-1-benzopyran-2-one, 6026  
 Methyl 5-acetoxymethanol-7-hydroxy-2,2-dimethyl-2*H*-1-chrome e-6-carboxylate, 14116  
 1-Naphthol- $\beta$ -*D*-glucopyranoside, 15254  
 (2*S*)-Ongokein-4'-one, 16097
- C<sub>16</sub>H<sub>18</sub>O<sub>7</sub>**  
 4-Hydroxy-1-naphthalenyl- $\beta$ -*D*-glucopyranoside, 10536
- C<sub>16</sub>H<sub>18</sub>O<sub>8</sub>**  
 5-*p-cis*-Coumaroylquinic acid, 4182  
 5-*p-trans*-Coumaroylquinic acid, 4183  
 Gerberinside, 8334  
 $\alpha$ -Hydrojuglone glucoside, 9721  
 Jiadifenin, 11868  
 1,2,4-Trihydroxynaphthalene-4-glucoside, 21811
- C<sub>16</sub>H<sub>18</sub>O<sub>9</sub>**  
 Biflorin, 2369  
 4-*O*-Caffeoylquinic acid, 2918  
 Chlorogenic acid, 3551  
 8-*O*- $\beta$ -*D*-Glucopyranosyl-6-hydroxy-2-methyl-4*H*-1-benzopyran-4-one, 8673  
 Isochlorogenic acid, 11327  
 Neochlorogenic acid, 15363  
 Scopolin, 19545  
 Staphylin, 20263
- C<sub>16</sub>H<sub>18</sub>O<sub>10</sub>**  
 Fraxin, 7944
- C<sub>16</sub>H<sub>19</sub>BrCl<sub>2</sub>O<sub>3</sub>**  
 Polyhalogenated homosesquiterpenic fatty acid A, 17650  
 Polyhalogenated homosesquiterpenic fatty acid B, 17651
- C<sub>16</sub>H<sub>19</sub>NO<sub>3</sub>**  
 $\alpha$ -Erythroidine, 7340  
 $\beta$ -Erythroidine, 7341  
 Macowine, 13297  
 Norgalanthamine, 15750  
 Norpluviine, 15788  
 Piperamine, 17438  
 Piperlonguminine, 17461
- C<sub>16</sub>H<sub>19</sub>NO<sub>4</sub>**  
 Acutifolidin, 595  
 4 $\alpha$ -Dehydroxycrinamabine, 4982  
 ( $\pm$ )-8-Methoxyplatydesmine, 14072  
 1-[1-Oxo-3(3,4-methylenedioxy-5-methoxyphenyl)-2*Z*propenyl] piperidine, 16382  
 Pseudolycorine, 18050
- C<sub>16</sub>H<sub>19</sub>NO<sub>5</sub>**  
 (2*S*,4*R*)-2-Carboxy-4-(*E*)-*p*-coumaroyloxy-1,1-dimethylpyrrolidinium inner salt, 3166  
 Zanthodioline, 22967
- C<sub>16</sub>H<sub>19</sub>NO<sub>6</sub>**  
 Nor-orixine, 15785
- C<sub>16</sub>H<sub>19</sub>NO<sub>7</sub>S**  
 Chaetoquadrin D, 3443
- C<sub>16</sub>H<sub>19</sub>NO<sub>8</sub>**  
 6-Acetyl holocalin, 412
- C<sub>16</sub>H<sub>19</sub>N<sub>3</sub>O<sub>3</sub>**  
 $\alpha$ -Dichroine, 5435  
 $\beta$ -Dichroine, 5436  
 Febrifugine, 7747
- C<sub>16</sub>H<sub>20</sub>NO<sub>3</sub><sup>+</sup>**  
*N*-Methylplatydesmin, 14682
- C<sub>16</sub>H<sub>20</sub>NO<sub>4</sub>**  
 Ribalinium, 18831
- C<sub>16</sub>H<sub>20</sub>NO<sub>4</sub><sup>+</sup>**  
 Pteleatin, 18102
- C<sub>16</sub>H<sub>20</sub>N<sub>2</sub>**  
 Costaclavine, 4125
- C<sub>16</sub>H<sub>20</sub>N<sub>2</sub>O**  
 Chanoclavine, 3477  
 Fordimine, 7879  
 Huperzine B, 9687
- C<sub>16</sub>H<sub>20</sub>N<sub>2</sub>O<sub>9</sub>S<sub>2</sub>**  
 Glucobrassicin, 8589
- C<sub>16</sub>H<sub>20</sub>N<sub>2</sub>O<sub>10</sub>S<sub>2</sub>**  
 4-Hydroxy-3-indolyl methyl glucosinolate, 10232
- C<sub>16</sub>H<sub>20</sub>N<sub>2</sub>O<sub>12</sub>S<sub>3</sub>**  
 Glucobrassicin-1-Sulfonate, 8590
- C<sub>16</sub>H<sub>20</sub>O<sub>2</sub>**  
 Arnebinol, 1746  
 Isolinderoxide, 11495
- C<sub>16</sub>H<sub>20</sub>O<sub>3</sub>**  
 1,4-Dihydroxy-2-(3',7'-dimethyl-1'-oxo-2'-*E*,6'-octadienyl)benzene, 5859  
 1,4-Dihydroxy-2-(3',7'-dimethyl-1'-oxo-2'-*Z*,6'-octadienyl)benzene, 5860  
 Lacinilene C 7-methyl ether, 12432  
*rel*-3*R*-Methoxy-4*S*-furanogermaera-1*E*,10(15)-dien-6-one, 13935
- C<sub>16</sub>H<sub>20</sub>O<sub>4</sub>**  
 Acetylpterisin C, 490  
 2,3-Dihydro-5,7-dihydroxy-2,6-dimethyl-8-(3-methyl-2-butenyl)-4*H*-1-benzopyran-4-one, 5592  
 2,3-Dihydro-5,7-dihydroxy-2,8-dimethyl-6-(3-methyl-2-butenyl)-4*H*-1-benzopyran-4-one, 5593  
 5-Hydroxy-6-isobutyryl-7-methoxy-2,2-dimethylbenzopyran, 10239  
 7-Hydroxy-6-isobutyryl-5-methoxy-2,2-dimethylbenzopyran, 10240
- C<sub>16</sub>H<sub>20</sub>O<sub>5</sub>**  
 Curvularin, 4414  
 1,4-Dihydroxy-2-(7'-methyl-3'-methylene-1'-oxo-4',7'-peroxide-octyl)benzene, 6041  
 7-Methoxy-8-(2'-Methoxy-3'-hydroxy-3'-methylbutyl)coumarin, 13996  
 3-Methoxytanaphtholide, 14097
- C<sub>16</sub>H<sub>20</sub>O<sub>6</sub>**  
 (2*S*)-*cis*-4'-Hydroxy-ongokein, 10554  
 (2*S*)-*trans*-4'-Hydroxy-ongokein, 10555  
 Isomexoticin, 11536  
 Lasiopulide, 12541  
 Mexoticin, 14825  
 Toddalolactone, 21423
- C<sub>16</sub>H<sub>20</sub>O<sub>7</sub>**  
 Bidensyneoside B, 2361  
 Buergeriside C<sub>1</sub>, 2712  
 (2*E*,8*E*)-2,8-Decadiene-4,6-diyne-1,10-diol 1-*O*- $\beta$ -*D*-glucopyranoside, 4818  
 Juglanoside A, 11898
- C<sub>16</sub>H<sub>20</sub>O<sub>8</sub>**  
 Juglanoside B, 11899  
 Juglanoside C, 11900  
 Methyl 6-*O*-*p-cis*-coumaroyl- $\beta$ -*D*-glucopyranoside, 14257  
 Methyl 6-*O*-*p-trans*-coumaroyl- $\beta$ -*D*-glucopyranoside, 14258  
 Veranisatin A, 22384
- C<sub>16</sub>H<sub>20</sub>O<sub>9</sub>**  
 6-*O*-Feruloyl- $\beta$ -*D*-glucopyranoside, 7773  
 1-*O*-Feruloyl- $\beta$ -glucose, 7774  
 Gentiopicroside, 8304  
 5-Hydroxy-6-methylchromone-7-*O*- $\beta$ -*D*-glucoside, 10481  
 Juglanoside D, 11901  
 Juglanoside E, 11902  
 Veranisatin B, 22385
- C<sub>16</sub>H<sub>20</sub>O<sub>10</sub>**  
 7-Caffeoylsedoheptulose, 2922
- C<sub>16</sub>H<sub>20</sub>O<sub>11</sub>**  
 Erinoside, 7266
- C<sub>16</sub>H<sub>21</sub>BrCl<sub>2</sub>O<sub>3</sub>**  
 Polyhalogenated homosesquiterpenic fatty acid C, 17652
- C<sub>16</sub>H<sub>21</sub>BrN<sub>2</sub>**  
 Deformylflustrabromine, 4868  
 Deformylflustrabromine B, 4869
- C<sub>16</sub>H<sub>21</sub>NO<sub>3</sub>**  
 Annotine, 1332  
 Annotinine, 1333

- Datumetine, 4665  
 5,6-Dihydropiperlonguminine, 5695  
 Norhyoscyamine, 15760  
 3-Oxo-8 $\alpha$ -methoxy-10 $\alpha$ H-eremophila-1,7(11)-dien-12,8 $\beta$ -lactam, 16378
- C<sub>16</sub>H<sub>21</sub>NO<sub>4</sub>**  
 Concneorine, 3960  
 Edulinine, 6708  
 Sarmetamide C, 19370
- C<sub>16</sub>H<sub>21</sub>NO<sub>5</sub>**  
 Foliosidine, 7854
- C<sub>16</sub>H<sub>22</sub>Cl<sub>2</sub>O<sub>3</sub>**  
 Polyhalogenated homosesquiterpenic fatty acid D, 17653
- C<sub>16</sub>H<sub>22</sub>N<sub>2</sub>**  
 Lycodine, 13190  
 6,7-Seco-agroclavine, 19605
- C<sub>16</sub>H<sub>22</sub>N<sub>2</sub>O<sub>2</sub>S**  
 Aglathioduline, 740
- C<sub>16</sub>H<sub>22</sub>N<sub>4</sub>O<sub>2</sub>**  
 Acanthoine, 81
- C<sub>16</sub>H<sub>22</sub>N<sub>4</sub>O<sub>3</sub>**  
 Eseramine, 7379
- C<sub>16</sub>H<sub>22</sub>NO<sub>4</sub><sup>+</sup>**  
 Rutalinium, 19084
- C<sub>16</sub>H<sub>22</sub>O<sub>2</sub>**  
 Gloeophyllol B, 8577  
 8 $\alpha$ -Methoxyfuranodiene, 13932  
 Pathenolide, 16713  
 Pterosin I, 18144
- C<sub>16</sub>H<sub>22</sub>O<sub>3</sub>**  
 Acutifolone A, 600  
 4 $\beta$ -Methoxycostuslactone, 13899  
*rel*-2*R*-Methoxy-4*R*-furanogermacra-1(10)*E*-en-6-one, 13936  
 Methyl 8- $\alpha$ -humula-6*Z*,9*E*-dien-12-oate, 14492  
 Methyl 8-oxo- $\alpha$ -humula-6*E*,9*E*-dien-12-oate, 14645  
 Methyl 8-oxo- $\alpha$ -humula-6*E*,9*Z*-dien-12-oate, 14646  
 Pterosin V, 18157
- C<sub>16</sub>H<sub>22</sub>O<sub>4</sub>**  
 Des-*O*-methylsiasiodiplodin, 5258  
 Dibutyl phthalate, 5404  
 Diterbutyl phthalate, 6523  
 1 $\beta$ ,10 $\beta$ -Epoxy-8 $\alpha$ -methoxyeremophil-7(11)-en-12,8 $\beta$ -olide, 7164  
 6 $\beta$ -Hydroxy-8 $\alpha$ -methoxyeremophila-1(10),7(11)-dien-12,8 $\beta$ -olide, 10401  
 8-Methoxy-9-*O*-angeloylthymol, 13839  
 8-Methoxy-9-hydroxythymol 3-*O*-tiglate, 13970  
 3-*O*-(3-Methyl-2-butenoyl)-8-methoxy-9-hydroxythymol, 14179
- 9'-(3,4-Methylenedioxy-phenyl)-nonanoic acid, 14381  
 Methyl leptol B, 14551  
 Senkyunolide M, 19742  
 Senkyunolide Q, 19744
- C<sub>16</sub>H<sub>22</sub>O<sub>5</sub>**  
 (3*R*),(5*R*)-5-Hydroxy-de-*O*-methylsiasiodiplodin, 9979  
 (3*R*),(6*R*)-6-Hydroxy-de-*O*-methylsiasiodiplodin, 9980
- C<sub>16</sub>H<sub>22</sub>O<sub>6</sub>**  
 7-Acetoxy-8-hydroxy-9-isobutyryloxythymol, 219  
 Bidenoside C, 2358  
 Lindenanolide G, 12864  
 Pectinolide A, 16747
- C<sub>16</sub>H<sub>22</sub>O<sub>7</sub>**  
 Bidensyneoside A<sub>1</sub>, 2359  
 Bidensyneoside A<sub>2</sub>, 2360  
 3-Deoxybidensyneoside B, 5155  
 Eugenol- $\beta$ -*D*-glucopyranoside, 7522  
 Gymnasterkoreaside A, 9104  
 (*E*)-3-Hydroxyanethole  $\beta$ -*D*-glucopyranoside, 9784  
 (*E*)-1'-(2-Hydroxy-5-methoxyphenyl)propene  $\beta$ -*D*-glucopyranoside, 10454  
 Phenylbutanone-glucoside, 17099
- C<sub>16</sub>H<sub>22</sub>O<sub>8</sub>**  
 Baihuaqianhuoside, 2107  
 Bidensyneoside C, 2362  
 Coniferin, 3981  
 3( $\zeta$ ),8( $\zeta$ )-Dihydroxydec-9-en-4,6-yne-1-*O*- $\beta$ -*D*-glucopyranoside, 5801  
 Pectinolide D, 16750  
 Serratumin A, 19775
- C<sub>16</sub>H<sub>22</sub>O<sub>9</sub>**  
 10-Deoxygeniposidic acid, 5176  
 2,4-Dihydroxy-6-methoxy-3-methylacetophenone-4-*O*- $\beta$ -*D*-glucopyranoside, 5989  
 2-*O*-(2)- $\beta$ -*D*-Glucopyranosyl-4,6-dimethoxyphenylentanone, 8625  
 2-*O*- $\beta$ -*D*-Glucosyloxy-4-methoxybenzene-propanoic acid, 8757  
 Sweroside, 20503
- C<sub>16</sub>H<sub>22</sub>O<sub>10</sub>**  
 7,8-Epoxy-8-epi-loganic acid, 7090  
 Gardoside, 8234  
 Geniposidic acid, 8277  
 Methyl syringate 4-*O*- $\beta$ -*D*-glucopyranoside, 14735  
 Swertiamarin, 20509  
 Trimethylgalloylglucose, 21959
- C<sub>16</sub>H<sub>22</sub>O<sub>11</sub>**
- Deacetyl asperulosidic acid, 4716  
 Monotropein, 14933  
 Scandoside, 19454  
 Theveside, 21324
- C<sub>16</sub>H<sub>23</sub>NO<sub>2</sub>**  
 Acrifoline, 567  
 Lycophlegmine, 13221  
 Lycoposerramine H, 13227  
 Lycoposerramine I, 13228  
 Lycoposerramine K, 13230
- C<sub>16</sub>H<sub>23</sub>NO<sub>3</sub>**  
 Neohuperzidine, 15407
- C<sub>16</sub>H<sub>23</sub>NO<sub>5</sub>**  
 Assamicadine, 1912  
 Fulvine, 7994
- C<sub>16</sub>H<sub>23</sub>NO<sub>6</sub>**  
 Monocrotaline, 14923
- C<sub>16</sub>H<sub>23</sub>NO<sub>7</sub>**  
 6,7-Dihydroxy-1-methyl-*N*-(6'-fructopyranosyl)-1,2,3,4-tetrahydroisoquinoline, 6033
- C<sub>16</sub>H<sub>24</sub>NO<sub>5</sub>**  
 Sinapine, 19917
- C<sub>16</sub>H<sub>24</sub>N<sub>2</sub>**  
 Huperzidine C, 9690
- C<sub>16</sub>H<sub>24</sub>N<sub>2</sub>O<sub>2</sub>**  
 Carolinianine, 3207
- C<sub>16</sub>H<sub>24</sub>N<sub>2</sub>O<sub>5</sub>**  
 (2*S*)-6-Amino-2-[(3*aR*\*,4*S*\*,7*R*\*,7*aS*\*)-3*a*,7*a*-dimethyl-1,3-dioxo-4,7-epoxyoctahydroisindol-2-yl]-hexanoic Acid, 1050
- C<sub>16</sub>H<sub>24</sub>N<sub>4</sub>O<sub>5</sub>**  
 (2*S*)-2-[(3*aR*\*,4*S*\*,7*R*\*,7*aS*\*)-3*a*,7*a*-Dimethyl-1,3-dioxo-4,7-epoxy-octahydroisindol-2-yl]-5-guanidino pentanoic acid, 6341
- C<sub>16</sub>H<sub>24</sub>O**  
 Curcumadione, 4389
- C<sub>16</sub>H<sub>24</sub>O<sub>2</sub>**  
 2-Hydroxy-4-methoxycuparene, 10395  
 Madolin K, 13342  
 Madolin M, 13343  
 Madolin S, 13345  
 Methylarteanuante, 14147  
 Methyl guaia-1(10),11-dien-15-carboxylate, 14477  
 (-)-Methyl selina-3,11-dien-14-oate, 14725  
 (+)-Methyl selina-4,11-dien-14-oate, 14726  
 Petasalbin methyl ether, 17011
- C<sub>16</sub>H<sub>24</sub>O<sub>3</sub>**  
 Actinolide A, 586  
 Dehydrojuvabione, 4935  
 10 $\beta$ -Hydroxy-6 $\beta$ -methoxy-furanoeremophilane, 10406
- C<sub>16</sub>H<sub>24</sub>O<sub>4</sub>**

- Brefeldin A, 2600  
 Isotorquatone, 11745  
 8-Methoxy-9-(2-methylbutyryloxy)thymol, 14005  
 7-Oxopinguinolenol-12-methyl ester, 16407
- C<sub>16</sub>H<sub>24</sub>O<sub>5</sub>**  
 8β,10β-Dihydroxy-6β-methoxyeremophil-7(11)-en-12,8α-olide, 5977  
 7-*O*-Methylpseudomajucin, 14704
- C<sub>16</sub>H<sub>24</sub>O<sub>7</sub>**  
 Epirhododendrin, 7007  
 8-Hydroxycuminylyl β-*D*-glucopyranoside, 9950  
 (8*R*)-9-Hydroxycuminylyl β-*D*-glucopyranoside, 9951  
 7-Hydroxythymol 3-*O*-β-*D*-glucopyranoside, 10764  
 Perilloside B, 16932  
 (2*S*,3*S*)-1-Phenyl-2,3-butanediol 3-*O*-β-*D*-glucopyranoside, 17097  
 Rhododendrin, 18794  
 Thymoquinol 2-*O*-β-*D*-glucopyranoside, 21363  
 Thymoquinol 5-*O*-β-*D*-glucopyranoside, 21364
- C<sub>16</sub>H<sub>24</sub>O<sub>8</sub>**  
 (1'*R*,2'*R*)-Anethole Glycol 2'-*O*-β-*D*-glucopyranoside, 1184  
 (1'*S*,2'*S*)-Anethole glycol 2'-*O*-β-*D*-Glucopyranoside, 1185  
 Boschnaloside, 2564  
 (8*S*)-8,9-Dihydroxycuminylyl β-*D*-glucopyranoside, 5798  
 1-(4'-Methoxyphenyl)-(1*R*,2*S*)-propan-1-ol 2-*O*-β-*D*-glucopyranoside, 14066  
 1-(4'-Methoxyphenyl)-(1*S*,2*R*)-propan-1-ol 2-*O*-β-*D*-glucopyranoside, 14067
- C<sub>16</sub>H<sub>24</sub>O<sub>9</sub>**  
 Cachineside I, 2839  
 7-Deoxy-8-epi-loganic acid, 5189  
*C*-8-(*S*)-7-Deoxyloganic acid, 5190  
 2,6-Dimethoxy-4-(2-hydroxyethyl)phenol 1-*O*-β-*D*-glucopyranoside, 6239  
 1'-(4-Hydroxy-2-methoxyphenyl)propane-2',3-diol 4-*O*-β-*D*-glucopyranoside, 10433  
 Ixoroside, 11805  
 Junipediol A 29-*O*-β-*D*-glucopyranoside, 11963  
 Junipediol A 4-*O*-β-*D*-glucopyranoside, 11964  
 Nikoenoside, 15595  
 Plantarenaloside, 17513  
 Swertiajaposide B, 20507
- C<sub>16</sub>H<sub>24</sub>O<sub>10</sub>**  
 Adoxosidic acid, 652  
 Cachineside V, 2842  
 8-*O*-Debenzoylpaconiflorin, 4809  
 Demethylsecologanol, 5097  
 8-Diebenzoylpaconiflorin, 5483  
 6α-Dihydrocornic acid, 5567  
 6β-Dihydrocornic acid, 5568  
 8-Epiloganic acid, 6952  
*D*-*threo*-Guaiacyl glycerol 8-β-*D*-glucopyranoside, 9023  
*L*-*threo*-Guaiacyl glycerol 8-β-*D*-glucopyranoside, 9024  
 (1'*R*,2'*R*)-Guaiacyl glycerol 3'-*O*-β-*D*-glucopyranoside, 9025  
 (1'*R*,2'*R*)-Guaiacyl glycerol 4-*O*-β-*D*-glucopyranoside, 9026  
 (1'*S*,2'*R*)-Guaiacyl glycerol 3'-*O*-β-*D*-glucopyranoside, 9027  
 8-Hydroxy-10-hydrosveroside, 10174  
 9-Hydroxysemperoside, 10698  
 Loganic acid, 12949  
 6-*O*-Methyl catalpol, 14222  
 Mussaenosidic acid, 15134  
 Tecomoside, 20897
- C<sub>16</sub>H<sub>24</sub>O<sub>11</sub>**  
 Cachineside IV, 2841  
 Shanzhiside, 19795  
 Tuliposide F, 22107
- C<sub>16</sub>H<sub>25</sub>N**  
 (*E*)-3-Isocyanobisabolene-7,10-diene, 11360  
 Muscopyridine, 15130
- C<sub>16</sub>H<sub>25</sub>NO**  
 Hydroxymuscopyridine A, 10532  
 Hydroxymuscopyridine B, 10533  
 Lycopodine, 13223  
 Sanshool, 19297
- C<sub>16</sub>H<sub>25</sub>NO<sub>2</sub>**  
 Acrifolinol, 568  
 Annofoline, 1300  
 Clavatine, 3809  
 Clavolonine, 3813  
 Dendrobine, 5108  
 12-Epilycodoline, 6956  
 Flabelliformine, 7805  
 L20, 12400  
 Lucidioline, 13046  
 Lycodoline, 13191  
 Lycofoline, 13194  
 Lycoposerramine J, 13229  
 Lycoposerramine L, 13231  
 Lycoposerramine M, 13232  
 Pseudoselagine, 18062
- C<sub>16</sub>H<sub>25</sub>NO<sub>3</sub>**  
 Decoyl vanillylamide, 4858  
 Dendramine, 5106  
 6-Hydroxydendrobine, 9982  
 Lycoposerramine G, 13226  
 Serrantinine, 19764  
 Serratine, 19771  
 Serratinine, 19773
- C<sub>16</sub>H<sub>25</sub>NO<sub>4</sub>**  
 Lycoposerramine F, 13225  
 Serratanidine, 19766  
 ZP-amide A, 23023  
 ZP-amide B, 23024
- C<sub>16</sub>H<sub>25</sub>NO<sub>5</sub>**  
 Hordenine-*O*-α-*L*-rhamnopyranoside, 9649  
 Retusine, 18668
- C<sub>16</sub>H<sub>25</sub>NO<sub>9</sub>S**  
 Sinapine bisulfate, 19918
- C<sub>16</sub>H<sub>25</sub>NO<sub>10</sub>**  
 Proacaciberin, 17863
- C<sub>16</sub>H<sub>26</sub>**  
 3-Phenyldecane, 17104  
 Valencene, 22311
- C<sub>16</sub>H<sub>26</sub>N<sub>2</sub>O**  
 Cernuine, 3431
- C<sub>16</sub>H<sub>26</sub>N<sub>2</sub>O<sub>2</sub>**  
 Lycocernuine, 13184
- C<sub>16</sub>H<sub>26</sub>N<sub>4</sub>O<sub>2</sub>**  
 Acanthoidine, 80
- C<sub>16</sub>H<sub>26</sub>O**  
 7,10,13-Hexadecatrienal, 9491
- C<sub>16</sub>H<sub>26</sub>O<sub>2</sub>**  
 1,5-Di-isobutyl-3,3-dimethyl[3,1,0]cyclohexadione, 6188  
 7*Z*,10*Z*,13*Z*-Hexadecatrienoic acid, 9492
- C<sub>16</sub>H<sub>26</sub>O<sub>3</sub>**  
 Bisaborosaol A, 2417  
 (10*R*)-Hydroxyhexadeca-7*Z*,11*E*,13*Z*-trienoic acid, 10161  
 Juvabione, 11987  
 Juvenile hormone III, 11988  
 4-Methoxy-5-hydroxybisabola-2,10-diene-9-one, 13950  
 2-Methoxy-3-nonylresorcinol, 14042
- C<sub>16</sub>H<sub>26</sub>O<sub>4</sub>**  
 Bisaborosaol B<sub>1</sub>, 2418  
 Bisaborosaol B<sub>2</sub>, 2419  
 Bisaborosaol F, 2423  
 5α-Hydroxy-4-epi-ilicic acid methyl ester, 10072  
 7α-Hydroxypinguinolenol-12-methyl ester, 10650  
 7β-Hydroxypinguinolenol-12-methyl ester, 10651
- C<sub>16</sub>H<sub>26</sub>O<sub>5</sub>**  
 Bisaborosaol C<sub>1</sub>, 2420  
 Bisaborosaol C<sub>2</sub>, 2421  
 Bisaborosaol D, 2422
- C<sub>16</sub>H<sub>26</sub>O<sub>6</sub>**  
 Limonene-10-ol 10-*O*-β-*D*-glucopyranoside, 12845  
 Perilloside A, 16931

- Perillylglucopyranoside, 16936
- C<sub>16</sub>H<sub>26</sub>O<sub>7</sub>**  
Dissectol A, 6518  
(1*S*,4*R*,6*S*)-6-Hydroxycamphor- $\beta$ -*D*-glucopyranoside, 9880  
(1*R*,4*S*,6*S*)-6-Hydroxycamphor  $\beta$ -*D*-glucopyranoside, 9881  
(4*R*,6*S*)-7-Hydroxycarveol 7-*O*- $\beta$ -*D*-glucopyranoside, 9896  
3 $\beta$ -Hydroxy-*p*-menth-1-en-4 $\beta$ ,5 $\beta$ -oxide 3-*O*- $\beta$ -*D*-glucopyranoside, 10378  
6 $\alpha$ -Methyl-2,6 $\beta$ -dihydroxymethylbicyclo[3.1.1]hept-2-ene-2 $\beta$ -*O*-glucoside, 14311  
Picrocrocin, 17330  
Schizonepetoside A, 19503  
Schizonepetoside B, 19504  
Schizonepetoside C, 19505  
Schizonepetoside D, 19506  
Thymuside A, 21365
- C<sub>16</sub>H<sub>26</sub>O<sub>8</sub>**  
Bodinierin, 2526  
(4*S*,8*S*)-8,9-Dihydroxy-8,9-dihydrocarvone 9-*O*- $\beta$ -*D*-glucopyranoside, 5808  
(-)-Oleuropeic acid 8-*O*- $\beta$ -*D*-glucopyranoside, 16079  
Picrocrocinic acid *O*- $\beta$ -*D*-glucopyranoside, 17331  
Rehmapicroside, 18601  
Villoside, 22479
- C<sub>16</sub>H<sub>26</sub>O<sub>9</sub>**  
1-*O*- $\beta$ -*D*-Glucopyranosylamplexin, 8603  
Villosolside, 22481
- C<sub>16</sub>H<sub>26</sub>O<sub>10</sub>**  
3,4-Dihydro-methylcatalpol, 5675  
Lamiol, 12458
- C<sub>16</sub>H<sub>26</sub>O<sub>11</sub>**  
3-Methylbut-2-enoyl-1-*O*- $\beta$ -*D*-glucopyranosyl- $\beta$ -*D*-apiofuranoside, 14178
- C<sub>16</sub>H<sub>27</sub>KO<sub>10</sub>S**  
(3*S*,6*E*)-8-Hydroxylinalool 3-*O*- $\beta$ -*D*-(3-*O*-Potassium sulfo)glucopyranoside, 10326
- C<sub>16</sub>H<sub>27</sub>NO**  
Complanatine, 3948  
1-(1-*O*-2*E*,4*E*-dodadienyl)pyrrolidine, 16325
- C<sub>16</sub>H<sub>27</sub>NO<sub>2</sub>**  
Deacetyllycoclavine, 4748
- C<sub>16</sub>H<sub>27</sub>NO<sub>4</sub>**  
ZP-amide C, 23025  
ZP-amide D, 23026  
ZP-amide E, 23027  
ZP-amide F, 23028
- C<sub>16</sub>H<sub>27</sub>NO<sub>5</sub>**  
Heliotridine 2*S*-hydroxy-2*S*-(1*S*-hydroxyethyl)-4-methyl-pentanoyl ester, 9319  
Heliotrine, 9320  
Retronecine 2*S*-hydroxy-2*S*-(1*S*-hydroxyethyl)-4-methylpentanoyl ester, 18664  
Supinidine *N*-oxide 2*S*-hydroxy-2*S*-(1*S*-hydroxyethyl)-4-methylpentanoyl ester, 20487
- C<sub>16</sub>H<sub>27</sub>NO<sub>6</sub>**  
Europine, 7636  
Retronecine *N*-oxide 2*S*-hydroxy-2*S*-(1*R*-hydroxyethyl)-4-methylpentanoyl ester, 18665  
Retronecine *N*-oxide 2*S*-hydroxy-2*S*-(1*S*-hydroxyethyl)-4-methylpentanoyl ester, 18666
- C<sub>16</sub>H<sub>27</sub>NO<sub>11</sub>**  
Linustatin, 12896
- C<sub>16</sub>H<sub>28</sub>O**  
1-Methoxy-4-cadinene, 13862
- C<sub>16</sub>H<sub>28</sub>O<sub>2</sub>**  
Ambrettolide, 1027  
Hydnocarpic acid, 9697  
6 $\alpha$ -Methoxyeudesm-4(15)-en-1 $\beta$ -ol, 13925  
11-Methoxyopposit-4(15)-en-1 $\beta$ -ol, 14048
- C<sub>16</sub>H<sub>28</sub>O<sub>3</sub>**  
13-Hydroxy-9,11-hexadecadienoic acid, 10160  
15-Methoxyisodauc-3-ene-1 $\beta$ ,5 $\alpha$ -diol, 13974
- C<sub>16</sub>H<sub>28</sub>O<sub>4</sub>**  
Actinolide B, 587  
Methyl (2*E*,6*E*,10*R*)-10,11-dihydroxy-3,7,11-trimethyl-2,6-dodecadienoate, 14318
- C<sub>16</sub>H<sub>28</sub>O<sub>6</sub>**  
Borneol-2-*O*- $\beta$ -*D*-glucopyranoside, 2554  
Perilloside C, 16933
- C<sub>16</sub>H<sub>28</sub>O<sub>7</sub>**  
(1*R*,2*S*,4*S*,5*R*)-Angelicoidenol 2-*O*- $\beta$ -*D*-glucopyranoside, 1192  
Betulalbuside A, 2329  
(1*R*,2*R*,4*S*,6*R*)-Bornane-2,6-diol 2-*O*- $\beta$ -*D*-glucopyranoside, 2548  
(1*S*,2*S*,4*R*,6*S*)-Bornane-2,6-diol 2-*O*- $\beta$ -*D*-glucopyranoside, 2549  
Bucharioside, 2696  
(1*R*,2*R*,4*S*)-2-Hydroxy-1,8-cineole  $\beta$ -*D*-glucopyranoside, 9907  
8-Hydroxygeraniol-1- $\beta$ -*D*-glucopyranoside, 10141  
2 $\beta$ -Hydroxy-2 $\alpha$ -hydroxymethyl-6,6-dimethyl bicyclo[3.1.1]heptane-2 $\alpha$ -*O*-glucoside, 10203  
*p*-Menth-1-ene-3,4-diol 4-*O*- $\beta$ -glucopyranoside, 13748  
(1*R*,2*R*)-*p*-Menth-4(5)-ene-1,2-diol 1-*O*- $\beta$ -*D*-glucopyranoside, 13749  
(1*S*,2*R*,4*R*)-*p*-Menth-5-ene-1,2-diol 1-*O*- $\beta$ -*D*-glucopyranoside, 13750  
(1*S*,2*R*,4*R*)-*p*-Menth-5-ene-1,2-diol 2-*O*- $\beta$ -*D*-glucopyranoside, 13751  
(1*S*,2*R*,4*R*)-*p*-Menth-8-ene-2,10-diol 2-*O*- $\beta$ -*D*-glucopyranoside, 13752  
(1*S*,2*S*,4*R*)-*p*-Menth-8-ene-1,2-diol 1-*O*- $\beta$ -*D*-glucopyranoside, 13753  
(1*S*,2*S*,4*R*)-*p*-Menth-8-ene-1,2-diol 2-*O*- $\beta$ -*D*-glucopyranoside, 13754  
(1*R*,2*R*)-*p*-Menth-3-ene-1,2-diol 2-*O*- $\beta$ -*D*-glucopyranoside, 13755  
(3*R*,4*R*)-*p*-Menth-1-ene-3,4-diol 3-*O*- $\beta$ -*D*-glucopyranoside, 13756  
(3*R*,4*S*,6*R*)-*p*-Menth-1-ene-3,6-diol 3-*O*- $\beta$ -*D*-glucopyranoside, 13757  
(3*R*,4*S*,6*R*)-*p*-Menth-1-ene-3,6-diol 6-*O*- $\beta$ -*D*-glucopyranoside, 13758  
(4*R*)-*p*-Menth-1-ene-7,8-diol 7-*O*- $\beta$ -*D*-glucopyranoside, 13759  
(4*R*)-*p*-Menth-1-ene-7,8-diol 8-*O*- $\beta$ -*D*-glucopyranoside, 13760  
(4*R*,6*S*)-*p*-Menth-1-ene-4,6-diol 4-*O*- $\beta$ -*D*-glucopyranoside, 13761  
(4*S*)-*p*-Menth-1-ene-4,7-diol 4-*O*- $\beta$ -*D*-glucopyranoside, 13762  
(4*S*)-*p*-Menth-1-ene-7,8-diol 8-*O*- $\beta$ -*D*-glucopyranoside, 13763  
(4*S*,6*S*)-*p*-Menth-1-ene-4,6-diol 4-*O*- $\beta$ -*D*-glucopyranoside, 13764  
6 $\alpha$ -Methyl-2 $\alpha$ ,6 $\beta$ -dihydroxymethylbicyclo[3.1.1]heptane-2 $\alpha$ -*O*-glucoside, 14309  
(1*S*,2*R*,4*S*,7*R*)-Vicodiol 2-*O*- $\beta$ -*D*-glucopyranoside, 22467  
(1*R*,2*S*,4*R*,7*S*)-Vicodiol 9-*O*- $\beta$ -*D*-glucopyranoside, 22468
- C<sub>16</sub>H<sub>28</sub>O<sub>8</sub>**  
(1*S*,4*S*,8*S*)-8,9-Dihydroxytetrahydrocarvone 9-*O*- $\beta$ -*D*-glucopyranoside, 6142  
(3*R*,4*R*,6*R*)-*p*-Menth-1-ene-3,4,6-triol 3-*O*- $\beta$ -*D*-glucopyranoside, 13768  
(1*S*,2*R*,4*S*)-*p*-Menth-5-ene-1,2,4-triol 2-*O*- $\beta$ -*D*-glucopyranoside, 13769  
Schizonepetoside E, 19507
- C<sub>16</sub>H<sub>28</sub>O<sub>10</sub>**  
Isopentenol-1-*O*- $\beta$ -*D*-apiofuranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside, 11584
- C<sub>16</sub>H<sub>28</sub>O<sub>11</sub>**  
3-Methylbutanoyl-1-*O*- $\beta$ -*D*-glucopyranosyl- $\beta$ -*D*-apiofuranoside, 14166
- C<sub>16</sub>H<sub>29</sub>NO**  
Herculin, 9428  
*N*-Isobutyl-2*E*,4*E*-dodadienamide, 11272
- C<sub>16</sub>H<sub>29</sub>NO<sub>4</sub>**  
Trachelanthamidine 2*S*-hydroxy-2*S*-(1*S*-hydroxyethyl)-4-methylpentanoyl ester, 21489  
Viridiflorine, 22527



- C<sub>16</sub>H<sub>29</sub>O<sub>11</sub><sup>S-</sup>**  
 (3*S*,6*R*)-6,7-Dihydroxy-6,7-dihydrolinalool-3-*O*- $\beta$ -*D*-(3-*O*-Potassium sulfo)-glucopyranoside, 5897
- C<sub>16</sub>H<sub>30</sub>O**  
 Muscone, 15129
- C<sub>16</sub>H<sub>30</sub>O<sub>2</sub>**  
 11*Z*-Hexadecenoic acid, 9494  
 $\omega$ -Hexadecenoic acid, 9495  
 $\gamma$ -Hydroxypalmitic acid lactone, 10590  
 Hypogaic acid, 10895  
 Palmitoleic acid, 16561
- C<sub>16</sub>H<sub>30</sub>O<sub>3</sub>**  
 2-Oxohexadecanoic acid, 16345
- C<sub>16</sub>H<sub>30</sub>O<sub>4</sub>**  
 (3*S*,5*R*,6*R*,7*E*,9*R*)-5,6,9-Trihydroxy-3-isopropoxy-7-megastigmenone, 21753
- C<sub>16</sub>H<sub>30</sub>O<sub>7</sub>**  
 (3*S*)-8-Hydroxy-6,7-dihydrolinalool 3-*O*- $\beta$ -*D*-glucopyranoside, 10005  
 8-Hydroxy-6,7-dihydrolinalool 8-*O*-glucopyranoside, 10006
- C<sub>16</sub>H<sub>30</sub>O<sub>8</sub>**  
 (3*S*,6*R*)-6,7-Dihydroxy-6,7-dihydrolinalool-3-*O*- $\beta$ -*D*-glucopyranoside, 5813  
 (3*S*,6*S*)-6,7-Dihydroxy-6,7-dihydrolinalool-3-*O*- $\beta$ -*D*-glucopyranoside, 5814  
 Ethyl *O*- $\beta$ -*D*-oleandropyranosyl-(1 $\rightarrow$ 4)-*O*-3-*O*-methyl-6-deoxy- $\beta$ -*D*-allopyranoside, 7468  
 (1*S*,2*R*,4*R*,8*S*)-*p*-Menthane-2,8,9-triol 2-*O*- $\beta$ -*D*-glucopyranoside, 13741  
 (1*S*,2*S*,4*R*)-*p*-Menth-1,2,8-triol 2-*O*- $\beta$ -*D*-glucopyranoside, 13777  
 (1*R*,2*R*,4*R*,8*R*)-*p*-Menth-2,8,9-triol 2-*O*- $\beta$ -*D*-glucopyranoside, 13778
- C<sub>16</sub>H<sub>30</sub>O<sub>9</sub>**  
 (2*S*,6*C*)-3,7-Dimethyloct-3(10)-ene-1,2,6,7-tetrol 1-*O*- $\beta$ -*D*-glucopyranoside, 6388  
*rel*-(1*R*,2*R*,4*R*,8*S*)-*p*-Menthane-1,2,8,9-tetrol 9-*O*- $\beta$ -*D*-glucopyranoside, 13736  
 (1*S*,2*S*,4*R*,8*R*)-*p*-Menthane-1,2,8,9-tetrol 2-*O*- $\beta$ -*D*-glucopyranoside, 13737  
 (1*S*,2*S*,4*R*,8*S*)-*p*-Menthane-1,2,8,9-tetrol 2-*O*- $\beta$ -*D*-glucopyranoside, 13738
- C<sub>16</sub>H<sub>32</sub>**  
 2-Cyclohexyldecane, 4497  
 1-Hexadecene, 9493
- C<sub>16</sub>H<sub>32</sub>O**  
 Muscol, 15128
- C<sub>16</sub>H<sub>32</sub>O<sub>2</sub>**  
 Hexadecanoic acid, 9486  
 Methyl pentadecanoate, 14655  
 13-Methyl pentadecanoic acid, 14656
- 12-Methyl tetradecanoic acid methyl ester, 14744  
 4,8,12-Trimethyl tridecanoic acid, 21976
- C<sub>16</sub>H<sub>32</sub>O<sub>5</sub>**  
 Aleuritic acid, 887
- C<sub>16</sub>H<sub>33</sub>NO**  
 Palmitamide, 16559
- C<sub>16</sub>H<sub>34</sub>**  
 Hexadecane, 9485
- C<sub>17</sub>H<sub>9</sub>NO<sub>3</sub>**  
 Liriodenine, 12917
- C<sub>17</sub>H<sub>10</sub>O<sub>6</sub>**  
 Aristolophenanlactone I, 1724  
 Flemichapparin C, 7826
- C<sub>17</sub>H<sub>10</sub>O<sub>7</sub>**  
 Boeravinone F, 2537  
 Irisoid D, 11169
- C<sub>17</sub>H<sub>10</sub>O<sub>8</sub>**  
 Irisoid E, 11170
- C<sub>17</sub>H<sub>11</sub>NO<sub>4</sub>**  
 Aristolactam I, 1698  
 4,5-Dioxodehydroasimilobine, 6466  
 6-Methoxy-aristolactam, 13844
- C<sub>17</sub>H<sub>11</sub>NO<sub>5</sub>**  
 Aristoliukine B, 1712
- C<sub>17</sub>H<sub>11</sub>NO<sub>6</sub>**  
 Aristolochic acid II methyl ester, 1717
- C<sub>17</sub>H<sub>11</sub>NO<sub>7</sub>**  
 Aristolochic acid, 1713
- C<sub>17</sub>H<sub>11</sub>NO<sub>8</sub>**  
 Aristolochic acid E, 1715  
 Aristolochic acid IVa, 1719  
 7-Hydroxy-aristolochic acid A, 9799
- C<sub>17</sub>H<sub>11</sub>N<sub>3</sub>O<sub>2</sub>**  
 Bouchardatine, 2569
- C<sub>17</sub>H<sub>12</sub>N<sub>2</sub>O<sub>4</sub>**  
 Flazin, 7824
- C<sub>17</sub>H<sub>12</sub>O<sub>3</sub>**  
 Tanshinlactone, 20682
- C<sub>17</sub>H<sub>12</sub>O<sub>4</sub>**  
 Nortanshinone, 15801
- C<sub>17</sub>H<sub>12</sub>O<sub>5</sub>**  
 Flemichapparin B, 7825  
 3'-Methoxy-4',5'-methylenedioxyflavone, 14016  
 5-Methoxy-6,7-methylenedioxyflavone, 14017  
 3',4'-Methylenedioxy-7-methoxyflavone, 14376
- C<sub>17</sub>H<sub>12</sub>O<sub>6</sub>**  
 Aflatoxin B<sub>1</sub>, 671  
 Boeravinone B, 2533  
 3,4-Dimethylenedioxypterocarpan, 6349  
 Leiocarpaquinone, 12606  
 1-Methoxy-3-hydroxy-2-carbomethoxy-9,10-anthraquinone, 13952  
 5-Methoxy-4'-hydroxy-6,7-methylenedioxyiso-
- flavone, 13964  
 Tournefoliac acid A, 21478  
 Tournefoliac acid B, 21479
- C<sub>17</sub>H<sub>12</sub>O<sub>7</sub>**  
 Aflatoxin G<sub>1</sub>, 673  
 Boeravinone E, 2536  
 Iriflogenin, 11152  
 Irisoid A, 11166
- C<sub>17</sub>H<sub>12</sub>O<sub>8</sub>**  
 3,3',4-Tri-*O*-methyl ellagic acid, 21955
- C<sub>17</sub>H<sub>13</sub>NO**  
 Hypodematine, 10891
- C<sub>17</sub>H<sub>13</sub>NO<sub>3</sub>**  
 10-Amino-2,4-dimethoxyphenanthrene-1-carboxylic acid lactam, 1049  
 Aristolactam BII, 1695  
 Graveoline, 8991  
 4-Hydroxy-3-methoxy-*N*-methylaristolactam, 10416  
*Opuntin B*, 16158  
 Sauristolactam, 19417
- C<sub>17</sub>H<sub>13</sub>NO<sub>4</sub>**  
 Aristolactam FII, 1696  
 Goniolfithine, 8937  
 Goniotalactam, 8945  
 1-(4-Hydroxybenzoyl)-7-hydroxy-6-methoxyisoquinoline, 9825  
 Hyoscyamine  $\beta$ -hydroxylase, 10873  
 Piperlactam S, 17460  
 Piperolactam B, 17464  
 Piperolactam D, 17466
- C<sub>17</sub>H<sub>13</sub>NO<sub>5</sub>**  
 Aristoliukine A, 1711
- C<sub>17</sub>H<sub>13</sub>O<sub>9</sub>S**  
 Quercetin-3-methyl-7-methyl ether-4'-sulfate, 18349
- C<sub>17</sub>H<sub>13</sub>O<sub>10</sub>S**  
 Persicarin-7-methylether, 16991
- C<sub>17</sub>H<sub>13</sub>O<sub>11</sub><sup>S-</sup>**  
 Centradixin, 3398
- C<sub>17</sub>H<sub>14</sub>N<sub>2</sub>**  
 Ellipticine, 6759  
 Olivacine, 16085
- C<sub>17</sub>H<sub>14</sub>N<sub>2</sub>O<sub>2</sub>**  
 Luotonin D, 13087
- C<sub>17</sub>H<sub>14</sub>N<sub>2</sub>O<sub>3</sub>**  
 Pedatisectine C, 16760
- C<sub>17</sub>H<sub>14</sub>O<sub>2</sub>**  
 2,7-Dihydroxy-1-methyl-5-vinylphenanthrene, 6046  
 2-(2-Phenylethyl) chromone, 17113
- C<sub>17</sub>H<sub>14</sub>O<sub>3</sub>**  
 6-Hydroxy-2-(2-phenylethyl) chromone, 10616

- 7-Hydroxy-2-(2-phenylethyl)chromone, 10617  
 7-Methoxy-2-methyl isoflavone, 14025  
 Sterehirsutinal, 20332  
 Typharin, 22156
- C<sub>17</sub>H<sub>14</sub>O<sub>4</sub>**  
 5,8-Dihydroxy-2-(2-phenylethyl)chromone, 6082  
 6,8-Dihydroxy-2-(2-phenylethyl)chromone, 6083  
 2',5'-Dimethoxyflavone, 6225  
 3',4'-Dimethoxyflavone, 6226  
 7,4'-Dimethoxyisoflavone, 6254  
 6-Hydroxy-2-(2-hydroxy-2-phenylethyl)chromone, 10210  
 6-Hydroxy-2-[2-(2-hydroxyphenyl)ethyl]chromone, 10211  
 6-Hydroxy-2-[2-(4-hydroxyphenyl)ethyl]chromone, 10212  
 5-Hydroxy-7-methoxy-6-methylflavone, 10424  
 5-Hydroxy-7-methoxy-8-methylflavone, 10425  
 9-Hydroxymicroperforanone, 10527  
 Isobonducellin, 11258  
*O*-Methylalbergin, 14280
- C<sub>17</sub>H<sub>14</sub>O<sub>5</sub>**  
 Afrormosin, 676  
 Desmosflavone, 5270  
 7,4'-Dimethoxy-3'-hydroxyflavone, 6240  
 7,4'-Dimethoxy-5-hydroxyisoflavone, 6243  
 3-(4-Hydroxybenzylidene)-5-hydroxy-7-methoxychroman-4-one, 9844  
 3'-Hydroxy-4',5'-dimethoxyflavone, 10023  
 5-Hydroxy-4',7-dimethoxyflavone, 10024  
 5-Hydroxy-6,7-dimethoxyflavone, 10025  
 5-Hydroxy-7,8-dimethoxyflavone, 10026  
 7-Hydroxy-3,5-dimethoxyflavone, 10027  
 7-Hydroxy-5,8-dimethoxyflavone, 10028  
 1-Hydroxy-2,3-dimethoxy-7-methyl-9,10-anthraquinone, 10032  
 Isonobavachalcone, 11557  
 Melimessanol C, 13684  
 1-Methoxy-2-methoxymethyl-3-hydroxyanthraquinone, 13998  
 2-Methoxy-obtusifolin, 14046  
 2'-*O*-Methylabronisoflavone, 14109  
 8-*o*-Methylreyusi, 14713  
 Neobavachalcone, 15341  
 Pterocarpin, 18103  
 Robustaquinone B, 18870
- C<sub>17</sub>H<sub>14</sub>O<sub>6</sub>**  
 Abrectorin, 11  
*trans*-3-Acetoxy-5,7-dihydroxyflavanone, 165  
 Aflatoxin B<sub>2</sub>, 672  
 Cirsimaritin, 3745  
 5,3'-Dihydroxy-7,4'-dimethoxyflavone, 5829  
 5,8-Dihydroxy-6,7-dimethoxyflavone, 5830
- 2',7'-Dihydroxy-4',5'-dimethoxyisoflavone, 5834  
 3',7'-Dihydroxy-4',6-dimethoxyisoflavone, 5835  
 1,3-Dihydroxy-5,6-dimethoxy-2-methyl-9,10-anthraquinone, 5836  
 1,7-Dihydroxy-3,9-dimethoxy pterocarpene, 5837  
 3-(3,4-Dihydroxyphenyl)-2-propenoic acid (*Z,E*)-2-(3,4-dihydroxyphenyl) ethenyl ester, 6095  
 3-(3,4-Dihydroxyphenyl)-2-propenoic acid (*Z,E*)-2-(3,5-dihydroxyphenyl) ethenyl ester, 6096  
 5,15-Dimethylmorindol, 6376  
 Gnaphaliin, 8865  
 3-(4-Hydroxybenzylidene)-5,7-dihydroxy-6-methoxychroman-4-one, 9843  
 5-Hydroxy-7-methoxy-3',4'-methylenedioxyisoflavone, 10420  
 (–)-3-Hydroxy-4-methoxy-8-9-methylenedioxy pterocarpin, 10421  
 Irilin B, 11156  
 Irisolidone, 11171  
 Kaempferol-3,4-di-*O*-methyl ether, 12044  
 Kaempferol-7,4'-dimethyl ether, 12045  
 Kumatakenin, 12331  
 Ladanein, 12448  
 6-*C*-Methyluteolin 7-methyl ether, 14567  
 Pectolarigenin, 16755  
 Pisatin, 17477  
 Rhynchotechol, 18828  
 Salvianolic acid F, 19206  
 Skullcapflavone I, 20004
- C<sub>17</sub>H<sub>14</sub>O<sub>7</sub>**  
 Aflatoxin G<sub>2</sub>, 674  
 Anticancer Flavonoid PMV70P691-87, 1416  
 Aurantioobtusin, 2008  
 Betuletol, 2330  
 Calycosin C, 3007  
 Cirsiliol, 3743  
 4',7'-Dihydroxy-2',5'-dimethoxyflavonol, 5832  
 3,3'-Dimethylquercetin, 6402  
 Eupalitin, 7577  
 Hildecarpin, 9540  
 Irisflavone A, 11160  
 Irisflavone D, 11163  
 Laurentinol, 12567  
 4'-Methylcapillaridin, 14212  
 7-Methylcapillaridin, 14213  
 Olibergin A, 16082  
 Ombuin, 16092  
 Quercetin-3',4'-dimethyl ether, 18348  
 Rhamnazin, 18674  
 Robustaquinone A, 18869  
 Tricin, 21589  
 3,5,6-Trihydroxy-7,4'-dimethoxyflavone, 21707
- 5,2',6'-Trihydroxy-7,8-dimethoxyflavone, 21708  
 5,6,4'-Trihydroxy-7,3'-dimethoxyflavone, 21709  
 5,7,2'-Trihydroxy-8,6'-dimethoxyflavone, 21710  
 5,7,4'-Trihydroxy-3,8-dimethoxyflavone, 21711  
 5,8,2'-Trihydroxy-6,7-dimethoxyflavone, 21712  
 1,2,6-Trihydroxy-7,8-dimethoxy-3-methylanthraquinone, 21713
- C<sub>17</sub>H<sub>14</sub>O<sub>8</sub>**  
 Axillarin, 2044  
 Eupatolitin, 7588  
 Gossypetin-3,5-dimethyl ether, 8960  
 Quercetagenin-3,4'-dimethyl ether, 18308  
 Spinacetin, 20164  
 Syringetin, 20561  
 Taxifolin 3-*O*-acetate, 20791  
 Tenuiflorin A, 20934  
 Tenuiflorin B, 20935  
 5,7,2',5'-Tetrahydroxy-8,6'-dimethoxy flavone, 21094  
 5,7,3',4'-Tetrahydroxy-6,8-dimethoxy flavone, 21095  
 5,7,8,3'-Tetrahydroxy-3,4'-dimethoxy flavone, 21096  
 5,6,3',4'-Tetrahydroxy-3,7-dimethoxyflavone, 21097
- C<sub>17</sub>H<sub>14</sub>O<sub>9</sub>**  
 Rubanthrone B, 18973
- C<sub>17</sub>H<sub>14</sub>O<sub>10</sub>**  
 Rubanthrone A, 18972
- C<sub>17</sub>H<sub>15</sub>NO<sub>2</sub>**  
 Anonaine, 1348
- C<sub>17</sub>H<sub>15</sub>NO<sub>3</sub>**  
 Anolobine, 1344  
 (–)-Cissaglaberrimine, 3746  
 Dutadrupine, 6642  
 Galanthindole, 8084  
 Juzirine, 11989  
 Michelalbine, 14827  
 Reevesianine B, 18569
- C<sub>17</sub>H<sub>15</sub>NO<sub>4</sub>**  
 Annocherine A, 1298  
 (*E*)-3-(3',5'-Dimethoxy-4'-hydroxybenzylidene)-2-indolinone, 6235  
 Prooxocryprochine, 17910
- C<sub>17</sub>H<sub>15</sub>O<sub>7</sub>**  
 Malvidin, 13456
- C<sub>17</sub>H<sub>16</sub>N<sub>2</sub>O<sub>3</sub>**  
 Nauclealine B, 15291
- C<sub>17</sub>H<sub>16</sub>O<sub>2</sub>**  
*cis*-Hinokiresinol, 9546  
 Thanilignan, 21273
- C<sub>17</sub>H<sub>16</sub>O<sub>3</sub>**

- Asparenediol, 1885  
 Danshenspiroketallactone, 4629  
 1,3-Di-*p*-hydroxyphenyl-4-penten-1-one, 6090  
 Epidanshenspiroketallactone, 6877  
 3-(Hydroxymethyl)-2,5-bis(3-methylbut-3-en-1-ynyl)benzene-1,4-diol, 10469  
 Juncunone, 11959  
 Obtusilactone, 15902  
 2,4,7-Trimethoxyphenanthrene, 21920
- C<sub>17</sub>H<sub>16</sub>O<sub>4</sub>**  
 Anticancer Flavonoid PMV70P691-93, 1418  
 Batatasin I, 2163  
 Caffeic acid phenethyl ester, 2890  
 Coniferyl benzoate, 3985  
 Demethoxymatteucinol, 5048  
 3,9-Dimethoxypterocarpan, 6290  
 Glypallichalcone, 8850  
 Isobatatasin I, 11246  
 Isosativan, 11696  
 Methyl-(7*R*,8*R*)-4-hydroxy-8',9'-dinor-4',7'-epoxy-8,3'-neolignan-7'-ate, 14503  
 Mollugin, 14901  
 Stercurensin, 20331
- C<sub>17</sub>H<sub>16</sub>O<sub>5</sub>**  
 2-Carboxymethyl-3-phenyl-2,3-epoxy-1,4-naphthoquinone, 3181  
 Cnidilin, 3856  
 Coelogin, 3889  
 2',3'-Dihydroxy-4',6'-dimethoxychalcone, 5820  
 2',4'-Dihydroxy-4,6'-dimethoxydihydrochalcone, 5824  
 7,4'-Dihydroxy-2',5'-dimethoxyisoflav-3-ene, 5833  
 2,5-Dihydroxy-6-methyl-7-methoxyflavanone, 6036  
 2,5-Dihydroxy-8-methyl-7-methoxyflavanone, 6037  
 2,6-Dihydroxy-1,5,7-trimethoxyphenanthrene, 6163  
 2',6'-Dimethoxy-4,4'-dihydroxychalcone, 6217  
 Farrerol, 7736  
 2'-Hydroxy-3',5'-diimethoxyflavanone, 10013  
 5-Hydroxy-4',7-dimethoxydihydroflavone, 10020  
 5-Hydroxy-7,2'-dimethoxyflavone, 10022  
 5-Hydroxy-7-methoxy-3-(4'-hydroxybenzyl)-4-chromanone, 10409  
 6-Isopentenylxyloisobergaptin, 11589  
 Matteucin, 13609  
 Melilotocarpan A, 13679  
 3'-*O*-Methylbrazilin, 14159  
 Methylnissolin, 14619  
 Odoriflavene, 16001  
 Pashanone, 16697
- Phellopterin, 17077  
 Sativanone, 19393  
 (-)-Sparticarpin, 20134  
 Tsugafolin, 22067  
 (-)-Variabilin, 22347
- C<sub>17</sub>H<sub>16</sub>O<sub>6</sub>**  
 Aromadendrin-5,7-dimethyl ether, 1766  
 Byakangelicol, 2834  
 Cyrtominetin, 4588  
 Dihydroskullcapflavone I, 5717  
 (2*S*)-5,2'-Dihydroxy-7,5'-dimethoxyflavanone, 5828  
 1,8-Dihydroxy-3-(3'-hydroxy-butoxy) xanthone, 5950  
 Homoferreirin, 9606  
 3-(4-Hydroxybenzyl)-5,7-dihydroxy-6-methoxychroman-4-one, 9836  
 3-(3-Hydroxy-4-methoxybenzyl)-5,7-dihydroxychroman-4-one, 10385  
 Isobyakangelicol, 11301  
 Lapathinol, 12504  
 Melilotocarpan D, 13681  
 Methoxy-8-(3"-hydroxymethyl-but-2-enyloxy)-psoralen, 13963  
 Neobyakangelicol, 15348  
 Pendulone, 16804  
 Persicogenin, 16992  
 Tamariscina ester A, 20653  
 1,2,3,7-Tetramethoxyxanthone, 21190  
 Teucrol, 21216  
 3,5,7-Trihydroxy-3-(4'-methoxybenzyl)-4-chromanone, 21767
- C<sub>17</sub>H<sub>16</sub>O<sub>7</sub>**  
 Americanoic acid methyl ester, 1035  
 (2*R*,3*S*)-(+)-3',5'-Dihydroxy-4',7'-dimethoxydihydroflavonol, 5825  
 (2*R*,3*R*)-4',7'-Dihydroxy-2',5'-dimethoxydihydroflavonol, 5826  
 4',7'-Di-*O*-methylidihydroquercetin, 6338  
 Dulcisxanthone C, 6628  
 Evernic acid, 7661  
 1-Hydroxy-2,3,4,5-tetramethoxyxanthone, 10754  
 1-Hydroxy-2,3,4,7-tetramethoxyxanthone, 10755  
 6-Hydroxy-1,2,3,7-tetramethoxyxanthone, 10756  
 6-Hydroxy-1,3,5,7-tetramethoxyxanthone, 10757  
 Isoamericanoic acid A methyl ester, 11210  
 Lespedezol E, 12699  
 Swertiadecoraxanthone, 20504  
 3,2',4',6'-Tetrahydroxy-4,3'-dimethoxy chalcone, 21093  
 Ventilagolin, 22377
- C<sub>17</sub>H<sub>16</sub>O<sub>9</sub>**  
 Bergaptol-*O*-β-*D*-glucopyranoside, 2311
- Xanthotoxol 8-*O*-β-*D*-glucopyranoside, 22776
- C<sub>17</sub>H<sub>16</sub>O<sub>10</sub>**  
 5-*O*-β-*D*-Glucopyranosyl-6-hydroxyangelicin, 8664  
 6-*O*-β-*D*-Glucopyranosyl-5-hydroxyangelicin, 8665  
 5-*O*-β-*D*-Glucopyranosyl-8-hydroxypsoralen, 8677  
 8-*O*-β-*D*-Glucopyranosyl-5-hydroxypsoralen, 8678
- C<sub>17</sub>H<sub>16</sub>O<sub>11</sub>**  
 Trimethyl ester dehydrochebulic acid, 21956
- C<sub>17</sub>H<sub>17</sub>ClO<sub>5</sub>**  
 8-Chloro-2-(2-phenylethyl)-5,6,7-trihydroxy-5,6,7,8-tetrahydrochromone, 3566
- C<sub>17</sub>H<sub>17</sub>ClO<sub>6</sub>**  
 5-*O*-(3-Chloro-2-hydroxy-3-methylbutyl)-8-methoxypsoralen, 3561
- C<sub>17</sub>H<sub>17</sub>NO<sub>2</sub>**  
 Asimilobine, 1857  
 (-)-Caaverine, 2838  
*N*-*trans*-Cinnamoyltyramine, 3723
- C<sub>17</sub>H<sub>17</sub>NO<sub>3</sub>**  
*N*-*p*-*cis*-Coumaroyltyramine, 4188  
*N*-(*trans*-*p*-Coumaroyl) tyramine, 4189  
 Graveolinine, 8992  
 Norcinnamolarine, 15727  
 Semecarpine, 19690
- C<sub>17</sub>H<sub>17</sub>NO<sub>4</sub>**  
 Confusadine, 3974  
 Demethylcephalotaxinone, 5066  
 Hainanensine, 9191  
*N*-[β-Hydroxy-β-(4-hydroxyphenyl)]ethyl-4-hydroxy cinnamide, 10213  
 5,6,8,9-Tetrahydro-1-hydro-4*H*-cyclopenta[*a*]-[1,3]dioxolo[4,5-*h*]pyrrolo[2,1-*b*][3]benzaepin-2(3*H*)-one, 21073
- C<sub>17</sub>H<sub>17</sub>NO<sub>5</sub>**  
 Hippeastrine, 9547
- C<sub>17</sub>H<sub>17</sub>NO<sub>6</sub>**  
 Atalafoline, 1953
- C<sub>17</sub>H<sub>17</sub>O<sub>4</sub>**  
 2,3-Dihydroxy-4-methoxy-6,6,9-trimethyl-6*H*-dibenzo[*b,d*]pyran, 6008
- C<sub>17</sub>H<sub>18</sub>**  
 Heptadec-1,7,9-trien-11,13,15-triyne, 9390
- C<sub>17</sub>H<sub>18</sub>Cl<sub>2</sub>O<sub>7</sub>**  
 Patientoside B, 16715
- C<sub>17</sub>H<sub>18</sub>N<sub>2</sub>O<sub>5</sub>**  
 Miraxanthin III, 14881
- C<sub>17</sub>H<sub>18</sub>N<sub>2</sub>O<sub>6</sub>**  
 Miraxanthin V, 14882
- C<sub>17</sub>H<sub>18</sub>O<sub>3</sub>**

- Dalbergiphenol, 4610  
 Daphneolone, 4642  
 2,5-Dihydroxy-3-isoprenyl-6-(3-methylbut-3-en-1-ynyl)benzaldehyde, 5927  
 Isomucronustyrene, 11547  
 (2S)-5-Methoxy-6-methylflavan-7-ol, 14022  
 Neocryptotanshinone II, 15375  
 2,4,7-Trimethoxy-9,10-dihydrophenanthrene, 21910
- C<sub>17</sub>H<sub>18</sub>O<sub>4</sub>**  
 7,3'-Dihydroxy-4'-methoxy-8-methylflavan, 5991  
 6,7-Dihydroxy-2-(2-phenylethyl)-5,6,7,8-tetrahydrochromone, 6084  
 4-Hydroxy-2',4'-dimethoxydihydrochalcone, 10018  
 4-Hydroxy-2',6'-dimethoxydihydrochalcone, 10019  
 6-Hydroxy-7-methoxy-3-(4'-hydroxybenzyl)chroman, 10408  
 Isoagatharesinol, 11201  
 Isohemigossylic acid lactone-2, 7-dimethyl ether, 11452  
 Loureirin A, 13011  
 Myrigalone H, 15192  
 Neoboutonin, 15346  
 Phoyunbene D, 17199  
 Pygmaeoherin, 18236  
 Sativin, 19394  
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 Stemanthrene B, 20292  
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- C<sub>17</sub>H<sub>18</sub>O<sub>5</sub>**  
 Columbianetin propionate, 3938  
 3'-Deoxy-4-O-methylsappanol, 5195  
 5,6-Dihydro-1,7-dihydroxy-3,4-dimethoxy-2-methylidibenz[b,f]oxepin, 5591  
 2',4'-Dihydroxy-4,6'-dimethoxychalcone, 5821  
 α-2'-Dihydroxy-4,4'-dimethoxydihydrochalcone, 5822  
 2',3'-Dihydroxy-4',6'-dimethoxydihydrochalcone, 5823  
 Halophilol A, 9198  
 1-(2-Hydroxy-4-methoxyphenyl)-3-(3,4-methylenedioxyphenyl)propan-2-ol, 10447  
 Isomucronulatol, 11544  
 Isomurralonginol acetate, 11549  
 2-Methoxybenzyl-2,6-dimethoxybenzoate, 13853  
 (3R)-5'-Methoxyvestitol, 14103  
 Monascusone B, 14916  
 Mucronulatol, 15021  
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 Phellodenol D, 17070
- Phoyunbene A, 17196  
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 Sequirin C, 19755  
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- C<sub>17</sub>H<sub>18</sub>O<sub>6</sub>**  
 3'-O-Acetylhamaudol, 407  
 Agarotretol, 707  
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- C<sub>17</sub>H<sub>22</sub>O<sub>8</sub>**  
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- C<sub>17</sub>H<sub>22</sub>O<sub>9</sub>**  
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- C<sub>17</sub>H<sub>22</sub>O<sub>10</sub>**  
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*trans*-Sinapic acid glucoside, 19915
- C<sub>17</sub>H<sub>23</sub>BrCl<sub>2</sub>O<sub>3</sub>**  
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- C<sub>17</sub>H<sub>23</sub>BrN<sub>2</sub>O<sub>5</sub>S**  
*N*-(2-[6-Bromo-2-(1,1-dimethyl-2-propenyl)-1*H*-indol-3-yl]ethyl)-*N*-methylmethanesulfonamide, 2622
- C<sub>17</sub>H<sub>23</sub>ClO<sub>2</sub>**  
 Ginsenoyne B, 8449
- C<sub>17</sub>H<sub>23</sub>ClO<sub>6</sub>**  
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- C<sub>17</sub>H<sub>23</sub>NO**  
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- C<sub>17</sub>H<sub>23</sub>NO<sub>3</sub>**  
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 Hyoscyamine, 10872  
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- C<sub>17</sub>H<sub>23</sub>NO<sub>4</sub>**  
 Anisodamine, 1287
- C<sub>17</sub>H<sub>23</sub>NO<sub>5</sub>**  
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- C<sub>17</sub>H<sub>23</sub>NO<sub>5</sub>S**  
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- C<sub>17</sub>H<sub>24</sub>N<sub>2</sub>**  
*N*-Methyllycodine, 14571
- C<sub>17</sub>H<sub>24</sub>N<sub>2</sub>O**  
 $\beta$ -Obscurine, 15890
- C<sub>17</sub>H<sub>24</sub>O**  
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- C<sub>17</sub>H<sub>24</sub>O<sub>2</sub>**  
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- C<sub>17</sub>H<sub>24</sub>O<sub>3</sub>**  
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- C<sub>17</sub>H<sub>24</sub>O<sub>4</sub>**  
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- C<sub>17</sub>H<sub>24</sub>O<sub>5</sub>**  
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- C<sub>17</sub>H<sub>24</sub>O<sub>8</sub>**  
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- C<sub>17</sub>H<sub>24</sub>O<sub>9</sub>**  
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- C<sub>17</sub>H<sub>24</sub>O<sub>12</sub>**  
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- C<sub>17</sub>H<sub>24</sub>O<sub>14</sub>**  
 Nuezhenidic acid, 15866
- C<sub>17</sub>H<sub>25</sub>ClO<sub>3</sub>**  
 10-Chloro-1-heptadecene-4,6-diyne-3,8,9-triol, 3556  
 Chloropanaxydiol, 3565
- C<sub>17</sub>H<sub>25</sub>NO**  
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- C<sub>17</sub>H<sub>25</sub>NO<sub>2</sub>**  
 Hydroxy- $\gamma$ -Sanshool, 9742  
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- C<sub>17</sub>H<sub>25</sub>NO<sub>3</sub>**  
 Annapodine, 1323  
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- C<sub>17</sub>H<sub>25</sub>NO<sub>4</sub>**  
 4-Hydroxydendroxine, 9983  
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 Stemonine, 20307
- C<sub>17</sub>H<sub>25</sub>NO<sub>7</sub>**  
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- C<sub>17</sub>H<sub>26</sub>N<sub>2</sub>O**  
 $\alpha$ -Obscurine, 15889
- C<sub>17</sub>H<sub>26</sub>O<sub>2</sub>**  
 14-Acetoxymodhephene, 260  
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- C<sub>17</sub>H<sub>26</sub>O<sub>3</sub>**  
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- C<sub>17</sub>H<sub>26</sub>O<sub>5</sub>**  
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- C<sub>17</sub>H<sub>26</sub>O<sub>6S</sub>**  
 6-Gingesulfonic acid, 8400
- C<sub>17</sub>H<sub>26</sub>O<sub>7</sub>**  
 (*Z*)-5'-Hydroxyjasnone 5'-*O*- $\beta$ -*D*-glucopyranoside, 10268
- C<sub>17</sub>H<sub>26</sub>O<sub>9</sub>**  
 Deoxyloganin, 5191  
 (1'*R*)-1'-(4-Hydroxy-3,5-dimethoxyphenyl)propan-1'-ol 4-*O*- $\beta$ -*D*-glucopyranoside, 10040
- C<sub>17</sub>H<sub>26</sub>O<sub>10</sub>**  
 6-*O*-Acetylajugol, 308  
 Ajugoside, 816  
 3,4-Dihydroverbenalin, 5735  
 8-Epiloganin, 6953  
 1'-(3-Hydroxy-4,5-dimethoxyphenyl)-propane-2',3'-diol 3'-*O*- $\beta$ -*D*-glucopyranoside, 10039  
 loganin, 12950  
 (1'*R*,2'*R*)-4-*O*-Methylguaiaicyl glycerol 3'-*O*- $\beta$ -*D*-glucopyranoside, 14476  
 Mussaenoside, 15133  
 Reptoside, 18628
- C<sub>17</sub>H<sub>26</sub>O<sub>11</sub>**  
 8-Acetylharpagide, 409  
 Caryoptoside, 3247  
 6-Epi-8-*O*-acetylharpagide, 6818  
 Ipolamiide, 11128  
 Morroniside, 14982  
 Shanzhiside methyl ester, 19796  
 (7*S*,8*S*)-Syringoylglycerol 9-*O*- $\beta$ -*D*-glucopyranoside, 20571  
 4-(1,2,3-Trihydroxypropyl)-2,6-dimethoxyphenyl-1-*O*- $\beta$ -*D*-glucopyranoside, 21840
- C<sub>17</sub>H<sub>26</sub>O<sub>12</sub>**  
 Clandonoside II, 3787  
 Genameside A, 8266  
 Genameside B, 8267  
 Lamiide, 12456  
 Yopaaoside C, 22928
- C<sub>17</sub>H<sub>26</sub>O<sub>13</sub>**  
 7-Epiphlomiol, 6997
- C<sub>17</sub>H<sub>27</sub>NO<sub>2</sub>**  
 Neostenine, 15460  
 Stenine, 20309
- C<sub>17</sub>H<sub>27</sub>NO<sub>3</sub>**  
 Nobilonine, 15640  
 Nonyl vanillylamide, 15702  
 Nordihydrocapsacine, 15740
- C<sub>17</sub>H<sub>27</sub>NO<sub>6</sub>**  
 Acetylcidine, 437
- C<sub>17</sub>H<sub>28</sub>**  
 Aplotaxene, 1525  
 3-Phenylundecane, 17088  
 4-Phenylundecane, 17138  
 6-Phenylundecane, 17139
- C<sub>17</sub>H<sub>28</sub>NO<sub>2</sub><sup>+</sup>**  
*N*-Methylidendrobium, 14288
- C<sub>17</sub>H<sub>28</sub>O<sub>2</sub>**  
 Farnesyl acetate, 7735  
 Isoambreinolide, 11208  
 Scleropyric acid, 19533
- C<sub>17</sub>H<sub>28</sub>O<sub>3</sub>**  
 7-Acetoxy-*elem*-1,3-dien-8-ol, 177  
 9-Acetoxy-10-hydroxyaromadendrane, 209  
 1 $\alpha$ -Acetoxy-*ent*-junenol, 246  
 15-Acetoxy-*T*-muurolol, 263  
 3 $\alpha$ ,7 $\alpha$ -Dihydroxy amorph-4-ene 3-acetate, 5755  
 (-)-Eudesm-3-ene-6 $\alpha$ -acetoxy-7 $\alpha$ -ol, 7501  
 5-Hydroxy-6-methyl-3-(undec-10-enyl)-5,6-dihydropyran-2-one, 10525  
 Kessyl acetate, 12193  
 Liguloxidol acetate, 12816  
 Polygodial acetal, 17641
- C<sub>17</sub>H<sub>28</sub>O<sub>4</sub>**  
 3-Acetoxy-7,11-dihydroxy-farnesa-1,5,9-triene, 164  
 [6]-Gingediol, 8383
- C<sub>17</sub>H<sub>28</sub>O<sub>6</sub>**  
 3 $\beta$ -Acetoxy,5 $\alpha$ ,11,12,13-tetrahydroxy-eudesm-4(15)-ene, 287  
 Griffonianone C, 9009
- C<sub>17</sub>H<sub>29</sub>NO<sub>11</sub>**  
 Neolinustatin, 15429
- C<sub>17</sub>H<sub>30</sub>O**  
 Civetone, 3780  
 (*Z,Z*)-8,11-Heptadecadienal, 9374
- C<sub>17</sub>H<sub>30</sub>O<sub>6</sub>**  
 (1*R*\*,2*R*\*,3*R*\*,6*R*\*,7*R*\*)1,2,3,6,7-Pentahydroxy-1-acetoxy-bisabol-10(11)-ene, 16837  
 (1*R*\*,2*R*\*,3*R*\*,6*R*\*,7*R*\*)1,2,3,6,7-Pentahydroxy-2-acetoxy-bisabol-10(11)-ene, 16838
- C<sub>17</sub>H<sub>30</sub>O<sub>10</sub>**  
 (*E*)-2-Hexenyl- $\alpha$ -*L*-arabinopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranoside, 9525
- C<sub>17</sub>H<sub>30</sub>O<sub>12</sub>**

- 3-Methylbutanoyl-6-*O*- $\alpha$ -*D*-glucopyranosyl- $\beta$ -*D*-fructofuranosideand, 14167
- C<sub>17</sub>H<sub>30</sub>O<sub>15</sub>**  
 *$\beta$* -*D*-Xylopyranosyl-(1 $\rightarrow$ 6)- $\alpha$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside, 22825
- C<sub>17</sub>H<sub>31</sub>N<sub>3</sub>O<sub>2</sub>**  
 Palustrine, 16574
- C<sub>17</sub>H<sub>32</sub>O**  
 8-Heptadecenal, 9384
- C<sub>17</sub>H<sub>32</sub>O<sub>3</sub>**  
 Muricatacin, 15082
- C<sub>17</sub>H<sub>34</sub>**  
 1-Heptadecene, 9385  
 Hexahydroaplotaxene, 9497
- C<sub>17</sub>H<sub>34</sub>O<sub>2</sub>**  
 Daturic acid, 4672  
 Ethylpentadecanoate, 7471  
 Methyl hexadecanoate, 14484  
 14-Methyl hexadecanoic acid, 14485
- C<sub>17</sub>H<sub>36</sub>**  
 Heptadecane, 9378
- C<sub>17</sub>H<sub>36</sub>O**  
 1-Heptadecanol, 9379  
 9-Heptadecanol, 9380
- C<sub>18</sub>H<sub>8</sub>O<sub>6</sub>**  
 Erosnine, 7289
- C<sub>18</sub>H<sub>10</sub>N<sub>2</sub>O<sub>4</sub>**  
 Melanin, 13659
- C<sub>18</sub>H<sub>10</sub>O<sub>5</sub>**  
 Pongaglabrone, 17707
- C<sub>18</sub>H<sub>10</sub>O<sub>8</sub>**  
 Euphorbetin, 7615  
 Isoeuphorbetin, 11422  
 Torreyafflavone, 21462
- C<sub>18</sub>H<sub>10</sub>O<sub>9</sub>**  
 Eckstolonol, 6701
- C<sub>18</sub>H<sub>11</sub>NO<sub>4</sub>**  
 Atherospermidine, 1961  
 Bianfugedine, 2344  
 Cephadione A, 3408  
 Lanuginosine, 12497
- C<sub>18</sub>H<sub>11</sub>NO<sub>5</sub>**  
 7-Oxohernangerine, 16344
- C<sub>18</sub>H<sub>11</sub>N<sub>3</sub>O**  
 (*E*)-2-[(3'-Indole)cyanomethylene]-3-indolinone, 11030
- C<sub>18</sub>H<sub>12</sub>**  
 (*Z*)-1,1'-Biindenyliden, 2370
- C<sub>18</sub>H<sub>12</sub>O<sub>3</sub>**  
 Isotanshinone I, 11729  
*Isotanshinone II*, 11730  
 Tanshinone I, 20685
- C<sub>18</sub>H<sub>12</sub>O<sub>4</sub>**  
 Cauliflorin A, 3334  
 Karanjin, 12163  
 Pinnatin, 17398  
 Przewaquinone B, 18012  
 Tanshinol A, 20683
- C<sub>18</sub>H<sub>12</sub>O<sub>5</sub>**  
 Cauliflorin B, 3335  
 6-Hydroxy,3-methoxy furo[8,7:4",5"]flavone, 10407  
 3',4'-Methylenedioxy-(2",3":7,8)-furanoflavanone, 14368
- C<sub>18</sub>H<sub>12</sub>O<sub>6</sub>**  
 Atromentin, 2000
- C<sub>18</sub>H<sub>12</sub>O<sub>7</sub>**  
 Salvianolic acid G, 19207
- C<sub>18</sub>H<sub>12</sub>O<sub>8</sub>**  
 Usararotenoid A, 22278
- C<sub>18</sub>H<sub>12</sub>O<sub>9</sub>**  
 Eckol, 6700  
 3,4-Methylenedioxy-3',4'-*O*-dimethyl-5'-methoxyellagic acid, 14366  
 Norstictic acid, 15798
- C<sub>18</sub>H<sub>12</sub>O<sub>10</sub>**  
 Parmatic acid, 16673
- C<sub>18</sub>H<sub>13</sub>NO<sub>3</sub>**  
 Bianfugecine, 2343  
 Lysicamine, 13258
- C<sub>18</sub>H<sub>13</sub>NO<sub>4</sub>**  
 Artabonatine D, 1772  
 Daurioxoisoporphine D, 4692  
 Norcepharadione B, 15725  
 Pareirubrine B, 16662  
 Piperadione, 17429
- C<sub>18</sub>H<sub>13</sub>NO<sub>5</sub>**  
 9-Methoxyaristolactam I, 13842
- C<sub>18</sub>H<sub>13</sub>NO<sub>7</sub>**  
 Aristolochic acid I methyl ester, 1718  
 Debilic acid, 4814
- C<sub>18</sub>H<sub>13</sub>NO<sub>8</sub>**  
 Aristolochic acid D methyl ether, 1714  
 Aristolochic acid IVa methyl ester, 1720  
 7-Methoxy-aristolochiac acid, 13843
- C<sub>18</sub>H<sub>13</sub>N<sub>3</sub>O**  
 Rutaecarpine, 19081
- C<sub>18</sub>H<sub>13</sub>N<sub>3</sub>O<sub>3</sub>**  
 1,2-Dihydroxyrutaecarpine, 6112
- C<sub>18</sub>H<sub>14</sub>O<sub>3</sub>**  
 Dihydroisotanshinone I, 5653  
 Dihydroisotanshinone II, 5654  
 15,17-Dihydrotanshinone I, 5721  
 Dihydrotanshinone I, 5722  
 1,2-Dihydrotanshinquinone, 5723  
 Methylene tanshinquinone, 14391
- C<sub>18</sub>H<sub>14</sub>O<sub>4</sub>**  
 7-Acetoxy-2-methylisoflavone, 259  
 3- $\beta$ -Hydroxymethylenetanshinquinone, 10492  
 3-Methoxy-(2",3":7,8)-furanoflavanone, 13933  
 (-)-(2*S*)-6-Methoxy-[2",3":7,8]-furanoflavanone, 13934  
 Pongamol, 17708
- C<sub>18</sub>H<sub>14</sub>O<sub>5</sub>**  
 6-Deoxyisojacareubin, 5182  
 6-Deoxyjacareubin, 5184  
 Nigrolineaxanthone F, 15579  
 Nigrolineaxanthone H, 15581  
 Rheediachromenoxanthone, 18754  
 Tovoxanthone, 21482
- C<sub>18</sub>H<sub>14</sub>O<sub>6</sub>**  
 Boeravinone A, 2532  
 7,8-Dimethoxy-3',4'-methylenedioxyflavone, 6264  
 Globulixanthone C, 8555  
 Jacareubin, 11808  
 3',4'-Methylenedioxy-6,7-dimethoxyflavone, 14363  
 Millettocalyxin A, 14856  
 Morusignin C, 14984  
*Ophiopogonone A*, 16148  
 Tlatancuayin, 21411  
 1,3,5-Trihydroxy-13,13-dimethyl-2*H*-pyran[6,7-*b*]-xanthen-9-one, 21723
- C<sub>18</sub>H<sub>14</sub>O<sub>7</sub>**  
 Boeravinone D, 2535  
 4',5-Dimethoxy-3-hydroxy-6,7-methylenedioxyisoflavone, 6248  
 Iriskashmirianin, 11165  
 Irisoid B, 11167  
 Irisoid C, 11168  
 9-*O*-Methyl-4-hydroxyboeravinone, 14498  
 Sagittin, 19127  
 5,7,2'-Trihydroxy-6-methyl-3-(3',4'-methylenedioxybenzyl) chromone, 21800
- C<sub>18</sub>H<sub>14</sub>O<sub>8</sub>**  
 Calycosin B, 3006  
 Dichotomitin, 5426  
 12-Dihydrousararotenoid A, 5733  
 5,3'-Dihydroxy-4'-methoxy-7-methoxycarbonylflavonol, 5987  
 3,8-Dimethoxy-5,7-dihydroxy-3',4'-methylenedioxyflavone, 6218  
 Epiphyllic acid, 6999  
 Psoromic acid, 18090  
 Robustaquinone G, 18875  
 Virensic acid, 22523
- C<sub>18</sub>H<sub>14</sub>O<sub>9</sub>**  
 Protocetraric acid, 17970



- C<sub>18</sub>H<sub>15</sub>KO<sub>8</sub>**  
Potassium rosmarinate, 17747
- C<sub>18</sub>H<sub>15</sub>NO<sub>2</sub>**  
Murrayacine, 15113
- C<sub>18</sub>H<sub>15</sub>NO<sub>3</sub>**  
*N*-Demethylnoracronycine, 5089  
*N*-Formylanonaine, 7894
- C<sub>18</sub>H<sub>15</sub>NO<sub>4</sub>**  
Atalaphyllidine, 1958  
(*S*)-Cryptodrine, 4279  
(-)-*N*-Demethylcrychine, 5069  
Norrufescine, 15792  
Oriciacridone C, 16179  
Oriciacridone D, 16180  
Piperolactam C, 17465  
Piperolactam E, 17467
- C<sub>18</sub>H<sub>15</sub>NO<sub>5</sub>**  
Lindechunine B, 12861
- C<sub>18</sub>H<sub>15</sub>NO<sub>6</sub>**  
Ariskanin A, 1691
- C<sub>18</sub>H<sub>15</sub>N<sub>3</sub>O<sub>2</sub>**  
Naucedine, 15301
- C<sub>18</sub>H<sub>15</sub>N<sub>3</sub>O<sub>4</sub>**  
Dichotomide II, 5421
- C<sub>18</sub>H<sub>15</sub>NaO<sub>8</sub>**  
Sodium rosmarinate, 20036
- C<sub>18</sub>H<sub>15</sub>O<sub>8</sub><sup>-</sup>**  
Calcium rosmarinate, 2955
- C<sub>18</sub>H<sub>15</sub>O<sub>10</sub>S**  
Quercetin-3',4',7-trimethyl ether-3-sulfate, 18406
- C<sub>18</sub>H<sub>16</sub>N<sub>2</sub>O<sub>5</sub>**  
Picrasidine E, 17298
- C<sub>18</sub>H<sub>16</sub>N<sub>2</sub>O<sub>8</sub>**  
Betanidin, 2320  
Isobetanidin, 11250
- C<sub>18</sub>H<sub>16</sub>O<sub>2</sub>**  
Cinnamyl cinnamate, 3728  
12-Deoxydanshenxinkun B, 5165  
2,7-Dihydroxy-1,6-dimethylpyrene, 5861  
2-Isopropyl-8-methylphenanthrene-3,4-dione  
(R<sub>0</sub>-090680), 11629  
Purpuremethide, 18218  
Styracin, 20417
- C<sub>18</sub>H<sub>16</sub>O<sub>3</sub>**  
Danshenxinkun B, 4633  
2-Hydroxy-7-carboxy-1-methyl-5-ethenyl-9,10-dihydrophenanthrene, 9893  
2-Hydroxy-8-carboxy-1-methyl-5-ethenyl-9,10-dihydrophenanthrene, 9894  
Magnaldehyde B, 13364  
4-[5-(4-Methoxyphenoxy)-3-penten-1-ynyl]-phenol, 14052  
2-[2-(4'-Methoxyphenyl) ethyl] chromone, 14057  
6-Methoxy-2-(2-phenylethyl) chromone, 14058  
Randainal, 18532  
Styracin epoxide, 20418  
1,2,15,16-Tetrahydrotanshinone I, 21080
- C<sub>18</sub>H<sub>16</sub>O<sub>4</sub>**  
Calophyllin B, 2989  
Danshenxinkun A, 4632  
(*E*)-4,4'-Dihydroxy-7,7'-dioxolign-8(8')-ene, 5864  
(*Z*)-4,4'-Dihydroxy-7,7'-dioxolign-8(8')-ene, 5865  
5-Hydroxy-6-methoxy-2-(2-phenylethyl) chromone, 10439  
6-Hydroxy-2-[2-(4'-methoxyphenyl)ethyl] chromone, 10440  
6-Hydroxy-7-methoxy-2-(2-phenylethyl) chromone, 10441  
3''-Methoxyasparenediol, 13845  
4-[(2*S*,3*R*)-3-Methyl-7-(1-propynyl)-2,3-dihydro-1,4-benzodioxin-2-yl]-1,3-benzenediol, 14695  
4-[(2*S*,3*S*)-3-Methyl-7-(1-propynyl)-2,3-dihydro-1,4-benzodioxin-2-yl]-1,3-benzenediol, 14696  
Tanshinol B, 20684  
Tanshinone VI, 20688
- C<sub>18</sub>H<sub>16</sub>O<sub>5</sub>**  
Bangangxanthone B, 2136  
5,8-Dihydroxy-2-[2-(4'-methoxyphenyl) ethyl]chromone, 5996  
(2*S*)-5,7-Dimethoxy-8-formylflavanone, 6228  
3'-Formyl-4',6'-dihydroxy-2'-methoxy-5'-methyl-chalcone, 7903  
(2*S*)-8-Formyl-5-hydroxy-7-methoxy-6-methyl-flavanone, 7905  
Globuxanthone, 8558  
12b-Hydroxy-des-*D*-ring-garcigerrin A, 9994  
3,4-Methylenedioxy-2',4'-dimethoxychalcone, 14361  
Przewaquinone F, 18013  
Tanshindiol A, 20679  
Tanshindiol B, 20680  
Tanshindiol C, 20681  
1,3,7-Trihydroxy-2-(3-methylbut-2-enyl) xanthone, 21797  
5,7,2'-Trimethoxyflavone, 21912  
5,7,4'-Trimethoxyflavone, 21913  
7,2',4'-Trimethoxyflavone, 21914  
7,2',5'-Trimethoxyflavone, 21915  
7,3',4'-Trimethoxyisoflavone, 21918
- C<sub>18</sub>H<sub>16</sub>O<sub>6</sub>**  
Americanin A, 1034  
Andrographin, 1157  
Betagarin, 2317  
Cudraxanthone S, 4347  
Desmosdumotin D, 5269  
5,7-Dihydroxy-3',4'-dimethoxyspiro{2*H*-1-benzopyran-7'-bicyclo[4.2.0]octa[1,3,5]-trien}-4-one, 5838  
(2*S*)-5,7-Dimethoxy-3',4'-methylenedioxyflavanone, 6263  
2,8-Dimethoxy-6-methyl-9-oxo-9*H*-xanthene-1-carboxylic acid methyl ester, 6267  
6,8-Di-*C*-methylleucin 7-methyl ether, 6366  
Erycibenin C, 7302  
3-Hydroxy-5,7,4'-trimethoxyflavone, 10790  
5-Hydroxy-3,7,4'-trimethoxyflavone, 10791  
5-Hydroxy-7,3',4'-trimethoxyflavone, 10792  
5-Hydroxy-7,2',3'-trimethoxyflavone, 10793  
5-Hydroxy-7,2',5'-trimethoxyflavone, 10794  
5-Hydroxy-7,2',6'-trimethoxyflavone, 10795  
8-Hydroxy-5,7,4'-trimethoxyflavone, 10796  
2'-Hydroxy-5,6,7-trimethoxyisoflavonoid, 10799  
3-Hydroxy-1,5,6-trimethoxy-2-methyl-9,10-anthraquinone, 10800  
Isoamericanin A, 11209  
Isoophiopogonone A, 11577  
Melimessanol B, 13683  
3-(4-Methoxybenzylidene)-5,7-dihydroxy-6-methoxychroman-4-one, 13856  
Milletenone, 14855  
Morusignin A, 14983  
Ophiopogonanone A, 16136  
Salvigenin, 19211  
Symphoxanthone, 20526  
1,3,5,6-Tetrahydroxy-2-isoprenylxanthone, 21122  
1,3,6,7-Tetrahydroxy-8-(3-methyl-2-butenyl)-9*H*-xanthen-9-one, 21133  
1,3,5,6-Tetrahydroxy-4-prenylxanthone, 21152  
Toxyloxanthone C, 21488
- C<sub>18</sub>H<sub>16</sub>O<sub>7</sub>**  
Ayanin, 2047  
Boeravinone C, 2534  
Calycosin A, 3005  
Cirsilineol, 3741  
5,2'-Dihydroxy-6,7,8-trimethoxyflavone, 6161  
5,6-Dihydroxy-7,3',4'-trimethoxyflavone, 6162  
Eupatilin, 7582  
Eupatorin, 7591  
Feralolide, 7755  
Herbacetin 3,8,4'-trimethyl ether, 9423  
Irisflavone B, 11161  
Lysionotin, 13264  
Obtusin, 15908  
Pachypodol, 16498  
Penduletin, 16801  
Rivularin, 18853  
Robustaquinone H, 18876

- Santin, 19312  
 Tambulin, 20665  
 1,3,5-Trihydroxy-2-ethoxymethyl-6-methoxyanthraquinone, 21730  
 (–)-Usnic acid, 22281  
 Usnic acid, 22282  
 Vavain, 22358  
 Xanthomicrol, 22768
- C<sub>18</sub>H<sub>16</sub>O<sub>8</sub>**  
 Acerosin, 107  
 Areapillin, 1653  
 Centaureidin, 3388  
 Chrysograyanin, 3611  
 Chrysosplenol, 3623  
 Chrysosplenol D, 3624  
 Eupatin, 7583  
 Irigenin, 11154  
 Irisflavone C, 11162  
 Isoarcapillin, 11235  
 Labiatenic acid, 12420  
 Myricetin-3,5,3'-trimethyl ether, 15186  
 Oxyayanin B, 16440  
 Sideritiflavone, 19872  
 Thymonin, 21362  
 3,5,6-Trihydroxy-7,3',4'-trimethoxyflavone, 21854  
 5,2',5'-Trihydroxy-6,7,8-trimethoxyflavone, 21855  
 5,7,3'-Trihydroxy-6,4',5'-trimethoxyflavone, 21856  
 5,7,4'-Trihydroxy-3,8,3'-trimethoxyflavone, 21857  
 5,7,4'-Trihydroxy-6,8,3'-trimethoxy flavone, 21858  
 6,3',4'-Trimethoxy-7,8,5'-trihydroxyisoflavone, 21936
- C<sub>18</sub>H<sub>16</sub>O<sub>9</sub>**  
 Limocitrol, 12840  
 Vermicularin, 22402
- C<sub>18</sub>H<sub>16</sub>O<sub>10</sub>**  
 2-*C-β-D*-Xylopyranosyl-1,3,6,7-tetrahydroxy-xanthone, 22841
- C<sub>18</sub>H<sub>17</sub>ClO<sub>6</sub>**  
 2-Chlorosamaderine A, 3571
- C<sub>18</sub>H<sub>17</sub>NO**  
 Girinimbine, 8456
- C<sub>18</sub>H<sub>17</sub>NO<sub>2</sub>**  
 Clausine D, 3794  
 Cycloclausenamide, 4484  
 Glycoborinine, 8822  
 Heptaphylline, 9410  
 Koenine, 12250  
 Micromeline, 14840
- Roemerine, 18896
- C<sub>18</sub>H<sub>17</sub>NO<sub>3</sub>**  
 Clausine S, 3806  
 Fugapavine, 7980  
 Japonine, 11821  
*L*-Mecambrolone, 13631  
 Micheline A, 14829  
 Norstephalagine, 15797  
 PC-2000-53-503-15, 16738  
*N*-β-Phenethyl-3-(3,4-methylenedioxy phenyl)propenamide, 17086  
 Xylopine, 22818
- C<sub>18</sub>H<sub>17</sub>NO<sub>4</sub>**  
 Actinodaphnine, 585  
 Annocherine B, 1299  
 Cularicine, 4350  
 Hemangerine, 9451  
 Launobine, 12564  
 7-Methoxyoxoasoanine, 14049  
 Norannuradhapurine, 15711  
 1,3,5-Trihydroxyl-4-prenylacridone, 21763
- C<sub>18</sub>H<sub>17</sub>NO<sub>5</sub>**  
 Terrestriamide, 21004
- C<sub>18</sub>H<sub>17</sub>NO<sub>6</sub>**  
 Toddaliopsin C, 21421
- C<sub>18</sub>H<sub>17</sub>NO<sub>8</sub>S**  
 2-Hydroxy-7-[(4-hydroxy-3-methoxyphenyl)methyl]-3-methoxy-8-quinolyl sulfate, 10190
- C<sub>18</sub>H<sub>17</sub>N<sub>3</sub>O<sub>2</sub>**  
 Nauclexine, 15314
- C<sub>18</sub>H<sub>17</sub>N<sub>3</sub>O<sub>4</sub>**  
 Dichotomide I, 5420
- C<sub>18</sub>H<sub>17</sub>O<sub>7</sub><sup>+</sup>**  
 3-*O*-Methyl malvidin, 14575
- C<sub>18</sub>H<sub>18</sub>N<sub>2</sub>O<sub>3</sub>**  
 Cyclo-(Phe-Tyr), 4527
- C<sub>18</sub>H<sub>18</sub>N<sub>2</sub>O<sub>4</sub>**  
 3,6-Di(4-hydroxy) benzyl-2,5-dioxopiperazine, 5770
- Isaindigodione, 11186
- C<sub>18</sub>H<sub>18</sub>O**  
 Juncunol, 11958
- C<sub>18</sub>H<sub>18</sub>O<sub>2</sub>**  
 Honokiol, 9631  
 (7*S*,8*R*)-4-Hydroxy-4',7-epoxy-8,3'-neolignan-(7*E*)-ene, 10088  
 Isomagnolol, 11519  
 Juncusol, 11960  
 Magnolol, 13388  
 (–)-4'-*O*-Methyl-nyasol, 14627  
 Monomethyl-*cis*-hinokiresinol, 14926  
 Phenylpropyl cinnamate, 17133
- C<sub>18</sub>H<sub>18</sub>O<sub>3</sub>**  
 3'-Hydroxy-4'-methoxy-4'-dehydroxynyasol, 10396  
 3'-Methoxynyasin, 14044  
 3''-Methoxynyasol, 14045  
 Obovatol, 15888  
 Termilignan, 20975
- C<sub>18</sub>H<sub>18</sub>O<sub>4</sub>**  
 Champanone B, 3473  
 Champanone C, 3474  
 Combretastatin D<sub>4</sub>, 3941  
 3,4-Dehydrolarreatricin, 4940  
 4',6'-Dihydroxy-3',5'-dimethyl-2'-methoxychalcone, 5857  
 Enterolactone, 6812  
 7-Hydroxy-5-methoxy-6,8-dimethylflavanone, 10399  
 Magnolignan E, 13382  
 4-[(2*S*,3*R*)-3-Methyl-7-((*E*)-1-propenyl)-2,3-dihydro-1,4-benzodioxin-2-yl]-1,3-benzenediol, 14688  
 4-[(2*S*,3*S*)-3-Methyl-7-((*E*)-1-propenyl)-2,3-dihydro-1,4-benzodioxin-2-yl]-1,3-benzenediol, 14689
- C<sub>18</sub>H<sub>18</sub>O<sub>5</sub>**  
 Agrimonolide, 760  
 Chrysotoxene, 3627  
 4,7-Dihydroxy-5-methoxyl-6-methyl-8-formylflavan, 5985  
 5,7-Dimethoxy-3-(4-hydroxybenzyl)chroman-4-one, 6234  
 Flavokawain A, 7818  
 Helilandin B, 9305  
 (4-Hydroxyphenyl)ethyl *trans*-ferulate, 10619  
 2'-Hydroxy-2,4',6'-trimethoxychalcone, 10785  
 Iso-mucromatol, 11543  
 Magnaldehyde C, 13365  
 Matteucinol, 13611  
 (2*S*)-3',4'-Methylenedioxy-5,7-dimethoxyflavane, 14362  
 Naringenin trimethyl ether, 15285  
 Ophiopogonanone B, 16137
- C<sub>18</sub>H<sub>18</sub>O<sub>6</sub>**  
 Acetylalkannin, 309  
 Acetylshikonin, 514  
 Americanol, 1036  
 (±)-3',3''-Bisdemethylpinoresinol, 2440  
 5,7-Dihydroxy-6-methoxy-3-(4-methoxybenzyl)chroman-4-one, 5986  
 3-(3,4-Dimethoxybenzyl)-5,7-dihydroxychroman-4-one, 6210  
 5-Hydroxy-6,7-dimethoxy-3-(4'-hydroxybenzyl)-4-chromanone, 10030  
 3-(4-Hydroxy-3-methoxybenzyl)-5-hydroxy-7-

- methoxychroman-4-one, 10387  
 5-Hydroxy-7-methoxy-3-(3-hydroxy-4-methoxybenzyl)-chroman-4-one, 10410  
 (2*R*)-5-Hydroxy-7,2',3'-trimethoxyflavanone, 10789  
 Isoamericanol A, 11211  
 Melilotocarpan C, 13680  
 Methoxymatteucin, 13993  
 3'-*O*-Methylviolanonone, 14811  
 Nigrolineaxanthone D, 15577  
 Odoricarpan, 16000  
 Samaderine A, 19221  
 2(*S*)-5,7,3'-Trihydroxy-6,8-dimethyl-5'-methoxyflavanone, 21721  
 1,3,5-Trihydroxy-4-(3-hydroxy-3-methylbutyl)xanthone, 21747  
 1,3,7-Trihydroxy-2-(3-hydroxy-3-methylbutyl)xanthone, 21748  
 (2*R*,3*R*)-(+)-4',5,7-Trimethoxydihydroflavonol, 21909
- C<sub>18</sub>H<sub>18</sub>O<sub>7</sub>**  
 (*R*)-2,3-Dihydro-7-demethylrobustigenin, 5586  
 5,7-Dihydroxy-3-(3-hydroxy-4-methoxybenzyl)-6-methoxychroman-4-one, 5910  
 (2*S*)-5,2'-Dihydroxy-7,4',5'-trimethoxyflavanone, 6159  
 5,3'-Dihydroxy-6,7,4'-trimethoxyflavanone, 6160  
 Inumakilactone B, 11115  
 Laurentiquinone, 12568  
 3-Methyl betuletol, 14157  
 1,2,3,6,7-Pentamethoxyxanthone, 16874  
 Qianhucoumarin D, 18285  
 Ramalic acid, 18527
- C<sub>18</sub>H<sub>18</sub>O<sub>8</sub>**  
 2-Caffeoyloxy-3-hydroxy-3-(3,4-dihydroxyphenyl)propyl alcohol, 2915  
 2,3-Dihydroirigenin, 5647  
 Futoxide, 8041
- C<sub>18</sub>H<sub>18</sub>O<sub>9</sub>**  
 Vacciheine A, 22306
- C<sub>18</sub>H<sub>19</sub>ClO<sub>5</sub>**  
 Eurycolactone B, 7640
- C<sub>18</sub>H<sub>19</sub>NO<sub>2</sub>**  
 Lirinidine, 12915  
*N*-Methylasimilobine, 14148  
 (*S*)-Nornuciferine, 15780  
*N*-Nornuciferine, 15781
- C<sub>18</sub>H<sub>19</sub>NO<sub>3</sub>**  
 Clausenamide, 3789  
 Erythraline, 7330  
 Glaziovine, 8524  
 (-)-Isopiline, 11593  
 Neoclausenamide, 15366
- 1-[1-Oxo-7(3,4-methylenedioxyphenyl)-2*E*,4*E*,6*E*-heptatrienyl]pyrrolidine, 16383  
 Stepharine, 20322  
 Tuduranine, 22100
- C<sub>18</sub>H<sub>19</sub>NO<sub>4</sub>**  
 Bellamarine, 2219  
 Cephalotaxinone, 3407  
 7'-(3',4'-Dihydroxyphenyl)-*N*-[(4-methoxyphenyl)ethyl]propanamide, 6089  
 Eryphrine, 7308  
*N-trans*-Feruloyltyramine, 7788  
*N-cis*-Feruloyltyramine, 7789  
 Haplopine-3,3'-dimethylallylether, 9227  
 Hernovine, 9454  
 Isocephalotaxinone, 11317  
 Krepowine, 12296  
 Lauroilsine, 12573  
 Nobiline, 15638  
 Perfamine, 16910  
 Pessoine, 17006  
 Tecleabine, 20892  
 Tecleanatalensine B, 20894
- C<sub>18</sub>H<sub>19</sub>NO<sub>5</sub>**  
 3-*O*-Acetylhamayne, 408  
 1-*O*-Acetyllicorine, 460  
 2-*O*-Acetyllicorine, 461  
 Anhydroevoxine, 1267  
 Bueropyridinium A, 2713  
 Cephalotaxinamide, 3403  
 Clausine U, 3807  
 Epibueropyridinium A, 6841  
*N-cis*-Feruloyloctopamine, 7781  
*N-trans*-Feruloyloctopamine, 7782  
 Hernandonine, 9449  
 Isotecleoxine, 11733  
 Tecleanatalensine A, 20893  
 Toddaliopsin D, 21422
- C<sub>18</sub>H<sub>19</sub>NO<sub>6</sub>**  
 3'-*O*-Acetylisopteleflorine, 442
- C<sub>18</sub>H<sub>19</sub>NO<sub>7</sub>**  
 Glyfoline, 8848
- C<sub>18</sub>H<sub>19</sub>NO<sub>11</sub>**  
 Ebracteolatinoside A, 6671
- C<sub>18</sub>H<sub>19</sub>N<sub>3</sub>O**  
*N*-(2-Methylaminobenzoyl)tryptamine, 14135
- C<sub>18</sub>H<sub>20</sub>ClNO<sub>5</sub>**  
 Chlorodesnkolbisine, 3547
- C<sub>18</sub>H<sub>20</sub>ClN<sub>3</sub>O<sub>6</sub>S<sub>2</sub>**  
 Sporidesmin, 20234
- C<sub>18</sub>H<sub>20</sub>N<sub>2</sub>**  
 Tabernoschizine, 20578
- C<sub>18</sub>H<sub>20</sub>N<sub>2</sub>O<sub>4</sub>**  
 Dichotomine D, 5425
- C<sub>18</sub>H<sub>20</sub>N<sub>2</sub>O<sub>6</sub>**  
 Sterculinine I, 20329
- C<sub>18</sub>H<sub>20</sub>O<sub>2</sub>**  
 FB3, 7744  
 Salvinone, 19218
- C<sub>18</sub>H<sub>20</sub>O<sub>3</sub>**  
 Allogibberic acid, 931  
 1,3-Di-*O*-[2',2'-di-(*p*-phenylene) isopropylidene] glycerol, 5481  
 4-Epi-larreatricin, 6942  
 FB5, 7746  
 Garcibenzopyran, 8203  
 Garcibiphenyl B, 8205  
 5-(1-Hydroxyethyl)-2,6-dihydroxy-1,7-dimethyl-9,10-dihydrophenanthrene, 10101  
 5-(1-Hydroxyethyl)-2,8-dihydroxy-1,7-dimethyl-9,10-dihydrophenanthrene, 10102  
*threo*-(7*S*,8*R*)-1-(4-Hydroxyphenyl)-2-[4-(*E*)-propenylphenoxy]propan-1-ol, 10637
- C<sub>18</sub>H<sub>20</sub>O<sub>4</sub>**  
 Hibicuslide A, 9536  
 Hibicuslide B, 9537  
 3''-Hydroxy-4-epi-larreatricin, 10077  
 Magnolignan A, 13378  
 Magnolignan C, 13380  
 Stemanthrene C, 20293  
 Toxyl angelate, 21487
- C<sub>18</sub>H<sub>20</sub>O<sub>5</sub>**  
 Arnebifuranone, 1744  
 Cnidiadin, 3854  
 Gobicusin A, 8903  
 3'-(4''-Hydroxy-3'',5''-dimethoxyphenyl)propyl benzoate, 10041  
 2'-Hydroxy-4,4',6'-trimethoxydihydrochalcone, 10787  
 Lauruscolactone B, 12576  
 Magnolignan B, 13379  
 2'-Methoxymollugin, 14040  
 7-*O*-Methyl isomucronulatol, 14533  
 Shikonofuran A, 19821  
*meso*-(*rel*-7*S*,8*S*,7'*R*,8'*R*)-3,4,3',4'-Tetrahydroxy-7,7'-epoxylignan, 21105  
 2,3,4,4'-Tetrahydroxy-5-methoxy-6-prenylbiphenyl, 21132  
 Tupichinol B, 22115
- C<sub>18</sub>H<sub>20</sub>O<sub>6</sub>**  
*trans*-4,5-Bis(4-hydroxy-3-methoxyphenyl)-1,3-dioxacyclohexane, 2463  
 6-*O-cis-p*-Coumaroyl-7-deoxyrehmaglutin A, 4152  
 6-*O-trans-p*-Coumaroyl-7-deoxyrehmaglutin A, 4153  
 5β,6-Dihydrosamaderine A, 5705

- Eurycolactone C, 7641  
 Isoduartin, 11404  
 2-Methoxybenzyl-2,3,6-trimethoxybenzoate, 13857  
 1'-Methoxy-2'-hydroxydihydromollugin, 13954  
 Nagilactone D, 15232  
 5 $\alpha$ ,6 $\beta$ ,7 $\beta$ -Trihydroxy-8 $\alpha$ -methoxy-2-(2-phenylethyl)-5,6,7,8-tetrahydro chromone, 21785
- C<sub>18</sub>H<sub>20</sub>O<sub>7</sub>**  
*tert-O*-Methyl byakangelicin, 14204  
 Protosappanin C dimethyl acetal, 17989  
 5 $\alpha$ ,6 $\beta$ ,7 $\beta$ ,8 $\alpha$ -Tetrahydroxy-2-[2-(4'-methoxyphenyl)ethyl]-5,6,7,8-tetrahydrochromone, 21131
- C<sub>18</sub>H<sub>20</sub>O<sub>8</sub>**  
 Inumakilactone A, 11113  
 Uvaribonol F, 22295  
 Uvaribonol G, 22296
- C<sub>18</sub>H<sub>21</sub>NO<sub>3</sub>**  
 Codeine, 3885  
 (+)-8,9-Dihydrostepharine, 5719  
 Erysodine, 7322  
 Erysovine, 7328  
 Magnococline, 13372  
*D-N*-Methyl coclaurine, 14247  
 Neopine, 15449  
*N*-Norarmepavine, 15713  
 Sarmentosine, 19378  
 Yuziphine, 22958
- C<sub>18</sub>H<sub>21</sub>NO<sub>4</sub>**  
 1-*O*-Acetylnorpluviine, 472  
 3-*O*-Acetylsanguinine, 506  
 Buphanidrine, 2751  
 Cephalotaxine, 3404  
 Homolycorine, 9612  
 Isocephalotaxine, 11316
- C<sub>18</sub>H<sub>21</sub>NO<sub>5</sub>**  
 Ambelline, 1021  
 Cephalotaxine  $\alpha$ -*N*-oxide, 3405  
 Cephalotaxine  $\beta$ -*N*-oxide, 3406  
 Drupacine, 6608  
 4-Hydroxycephalotaxine, 9900  
 11-Hydroxycephalotaxine, 9901  
 Pretazettine, 17850  
 Stephabyssine, 20311  
 Tazettine, 20891  
 (+)-Undulatine, 22229  
 (-)-Undulatine, 22230
- C<sub>18</sub>H<sub>21</sub>NO<sub>6</sub>**  
 Haploperine, 9223  
 11- $\beta$ -Hydroxycephalotaxine  $\beta$ -*N*-oxide, 9902
- C<sub>18</sub>H<sub>22</sub>ClNO<sub>6</sub>**  
 Acutumidine, 602
- C<sub>18</sub>H<sub>22</sub>NO<sup>+</sup>**  
*N*-(*p*-Hydroxyphenethyl)actinidine, 10601
- C<sub>18</sub>H<sub>22</sub>NO<sub>2</sub>**  
 Valerianae alkaloid B, 22317
- C<sub>18</sub>H<sub>22</sub>NO<sub>4</sub><sup>+</sup>**  
*O*-Methylptelefolonium, 14705
- C<sub>18</sub>H<sub>22</sub>N<sub>2</sub>O**  
 (+)-Manilamine, 13501
- C<sub>18</sub>H<sub>22</sub>N<sub>2</sub>O<sub>2</sub>**  
 Dehydrodorine, 4955
- C<sub>18</sub>H<sub>22</sub>O**  
 2,2-Dimethyl-8-prenyl-6-vinylchromene, 6399
- C<sub>18</sub>H<sub>22</sub>O<sub>2</sub>**  
 Deoxodehydrocyclopiloselloidone, 5142  
 Estrone, 7387  
 1-(7-Hydroxy-2,6-dimethyl-1-naphthyl)-4-methyl-3-pentanone, 10052  
 Tetrahydromagnolol, 21074
- C<sub>18</sub>H<sub>22</sub>O<sub>3</sub>**  
 Cyclopiloselloidone, 4530  
 3 $\beta$ ,12-Dihydroxy-13-methyl-5,8,11,13-podocarpatetraen-7-one, 6045  
 FB4, 7745  
 Isocrotonoylpterosin B, 11351
- C<sub>18</sub>H<sub>22</sub>O<sub>4</sub>**  
 Arnebinone, 1747  
 (1a*S*\*,1b*S*\*,7a*S*\*,8a*S*\*)-4,5-Dimethoxy-1a,7a-dimethyl-1,1a,1b,2,7,7a,8,8a-octahydrocyclopropa[3,4]cyclopenta[1,2-*b*]naphthalene-3,6-dione, 6221  
 Heliotropinone A, 9321  
 Heliotropinone B, 9322  
 13-Methoxy-8,12-podocarpadiene-2,11,14-trione, 14073  
 Nordihydroguaiaretic acid, 15741
- C<sub>18</sub>H<sub>22</sub>O<sub>5</sub>**  
 5-Acetyl-3 $\beta$ -angeloyloxy-2 $\beta$ -(1-hydroxyisopropyl)-2,3-dihydrobenzofuran, 318  
 Celaphanol B, 3363  
 Chrysotoxin, 3628  
 1 $\beta$ ,14-Dihydroxy-13-methoxy-8,11,13-podocarpatriene-2,7-dione, 5999  
 Eurycolactone D, 7642  
 Laurycolactone A, 12575  
 Zearalenone, 22974
- C<sub>18</sub>H<sub>22</sub>O<sub>6</sub>**  
 Arteanomalactone, 1788  
 2,5-Dimethyl-3-*O*- $\beta$ -*D*-glucopyranosylnaphthol, 6352
- C<sub>18</sub>H<sub>22</sub>O<sub>7</sub>**  
 Nagilactone J, 15235
- C<sub>18</sub>H<sub>22</sub>O<sub>8</sub>**  
 Buergeriside B<sub>1</sub>, 2710
- Buergeriside B<sub>2</sub>, 2711  
 Ningposide D, 15621  
 Pectinolide G, 16753
- C<sub>18</sub>H<sub>22</sub>O<sub>9</sub>**  
 Ethyl chlorogenate, 7425  
 6 $\beta$ -*C*-Glucopyranosyl-5,7-dihydroxy-2-isopropylchromone, 8618  
 8 $\beta$ -*C*-Glucopyranosyl-5,7-dihydroxy-2-isopropylchromone, 8619  
 Inumakilactone C, 11116  
 Methylenidioside A, 14246  
 Ningposide A, 15618  
 Ningposide B, 15619  
 Uncinoside A, 22215
- C<sub>18</sub>H<sub>22</sub>O<sub>10</sub>**  
 Picraquassioside A, 17297
- C<sub>18</sub>H<sub>22</sub>O<sub>11</sub>**  
 Asperuloside, 1892
- C<sub>18</sub>H<sub>22</sub>O<sub>11</sub>S**  
 Paederoside, 16516
- C<sub>18</sub>H<sub>23</sub>NO**  
 (*E*)-3-(3-Hydroxymethyl-2-butenyl)-7-(3-methyl-2-butenyl)-1*H*-indole, 10473  
*N*-Isobutyl-2*E*,4*E*,12*E*-tetradecatrien-8,10-diyamide, 11288  
*N*-Isobutyl-2*E*,4*E*,12*Z*-tetradecatrien-8,10-diyamide, 11289
- C<sub>18</sub>H<sub>23</sub>NO<sub>2</sub>**  
 Cocculidine, 3862  
 3,3-Dimethylallyl-4-methoxy-2-quinolone, 6308  
 Isococculidine, 11337  
 2-(Nonan-8-one)-(1*H*)-4-quinolone, 15691
- C<sub>18</sub>H<sub>23</sub>NO<sub>3</sub>**  
 Coccutrine, 3865  
 Futoamide, 8035  
 1-Hydroxycryprochine, 9948  
 (3*Z*,5*Z*)-*N*-Isobutyl-8-(3',4'-methylenedioxyphenyl)-heptadienamamide, 11280  
*O*-Methylmaritidine, 14578  
 Piperamide C 7:1(6*E*), 17434
- C<sub>18</sub>H<sub>23</sub>NO<sub>4</sub>**  
 Haplophyllidine, 9224  
 Isostemonamine, 11719  
 Lycorenine, 13237  
*O*-Methylacutifolin, 14121  
 Papyramine, 16634
- C<sub>18</sub>H<sub>23</sub>NO<sub>5</sub>**  
 (*E*)-Seneciophylline, 19712
- C<sub>18</sub>H<sub>23</sub>NO<sub>6</sub>**  
 Dechloroacutumidine, 4846  
 Riddelline, 18842
- C<sub>18</sub>H<sub>23</sub>N<sub>3</sub>O<sub>2</sub>**  
 Picrasidine K, 17303

- C<sub>18</sub>H<sub>23</sub>N<sub>3</sub>O<sub>2</sub>S<sub>2</sub>**  
Polanrazine B, 17604
- C<sub>18</sub>H<sub>24</sub>NO<sub>5</sub><sup>+</sup>**  
Veprisinium, 22380
- C<sub>18</sub>H<sub>24</sub>N<sub>2</sub>O<sub>2</sub>**  
Anticancer Amide PMV70P691-052, 1382  
Grandiamide B, 8975  
Odorine, 16002
- C<sub>18</sub>H<sub>24</sub>N<sub>2</sub>O<sub>3</sub>**  
Elliptinol, 6761  
Grandiamide C, 8976  
(+)-Odorinol, 16003
- C<sub>18</sub>H<sub>24</sub>O**  
Backuchiol, 2081  
2,6-Diprenyl-4-vinylphenol, 6499
- C<sub>18</sub>H<sub>24</sub>O<sub>2</sub>**  
3 $\beta$ ,12-Dihydroxy-13-methyl-6,8,11,13-podocarpetraen, 6044  
 $\alpha$ -Estradiol, 7383  
 $\beta$ -Estradiol, 7384  
Octadeca-8,10,12-triynoic acid, 15955  
Przewalskin, 18008
- C<sub>18</sub>H<sub>24</sub>O<sub>3</sub>**  
3-(3',7'-Dimethyl-2',6'-octadienyl)-4-methoxybenzoic acid, 6383  
Estriol, 7386  
Piloselloidone, 17367
- C<sub>18</sub>H<sub>24</sub>O<sub>4</sub>**  
3 $\beta$ ,14-Dihydroxy-13-methoxy-8,11,13-podocarpatrien-7-one, 6000  
Hydroxyisopiloselloidone, 10254  
3 $\beta$ -Hydroxy-13-methoxy-8,12-podocarpadiene-11,14-dione, 10455  
18-Hydroxy-13-methoxy-8,12-podocarpadiene-11,14-dione, 10456  
Hydroxypiloselloidone, 10646  
Ialibinone E, 10933  
Miliusol, 14852  
Tanzawaic acid F, 20691
- C<sub>18</sub>H<sub>24</sub>O<sub>5</sub>**  
*rel*-2*R*-Methyl-5*S*-acetoxy-4*R*-furanogermacrol(10)*Z*-en-6-one, 14115
- C<sub>18</sub>H<sub>24</sub>O<sub>6</sub>**  
8-Acetoxy-2-methoxy-10-hydroxy-3,11(13)-guaiadien-12,6-olide, 251
- C<sub>18</sub>H<sub>24</sub>O<sub>7</sub>**  
(2*S*)-4',4'-Dimethoxy-ongokein, 6271  
Iridoid CPB-53-710-1, 11146  
Iridoid CPB-53-710-2, 11147  
Renifolin, 18620
- C<sub>18</sub>H<sub>24</sub>O<sub>8</sub>**  
Celephtalide A, 3372
- C<sub>18</sub>H<sub>24</sub>O<sub>9</sub>**  
Tenuifoliside D, 20958
- C<sub>18</sub>H<sub>24</sub>O<sub>10</sub>**  
Dracunculifoside E, 6584  
3'-*O*- $\beta$ -Glucopyranosyl plumbagic acid methyl ester, 8713  
Regaloside A, 18571  
Regaloside D, 18573
- C<sub>18</sub>H<sub>24</sub>O<sub>12</sub>**  
10-*O*-Acetylmonotropein, 470  
6-*O*-Acetylscandoside, 507  
Asperulosidic acid, 1894  
6-*O*-Epiacetylscandoside, 6869
- C<sub>18</sub>H<sub>24</sub>O<sub>12</sub>S**  
Paederosidic acid, 16517
- C<sub>18</sub>H<sub>25</sub>NO**  
Dehydro- $\gamma$ -sanshool, 4967  
*N*-Isobutyl-2*E*,4*E*,10*E*,12*Z*-tetradecatetraen-8-ynamide, 11287
- C<sub>18</sub>H<sub>25</sub>NO<sub>2</sub>**  
Isolobinine, 11507
- C<sub>18</sub>H<sub>25</sub>NO<sub>5</sub>**  
Integerrimine, 11091  
Isostemotinine, 11720  
Senecionine, 19706  
Senecivermine, 19714  
Stemotinine, 20308  
3 $\alpha$ -(3',4',5'-Trimethoxybenzoyloxy)tropane, 21896
- C<sub>18</sub>H<sub>25</sub>NO<sub>5</sub>S**  
*O*-Methylsakambullin, 14715
- C<sub>18</sub>H<sub>25</sub>NO<sub>6</sub>**  
Angularine, 1242  
Crotalaburnine, 4266  
Jacobine, 11809  
Mucronatinine, 15018  
Retrorsine, 18667  
Usaramine, 22277
- C<sub>18</sub>H<sub>25</sub>NO<sub>7</sub>**  
Isatidine, 11189  
Spectabiline, 20140
- C<sub>18</sub>H<sub>26</sub>O<sub>2</sub>**  
3 $\beta$ ,12-Dihydroxy-13-methyl-8,10,13-podocarpatriene, 6043  
(*Z*)-Octadec-12-ene-8,10-diyynoic acid, 15956
- C<sub>18</sub>H<sub>26</sub>O<sub>3</sub>**  
15,16-Bisnor-13-oxo-8(17),11*E*-labdadien-19-oic acid, 2488  
14,18-Dihydroxy-13-methoxy-8,11,13-podocarpatriene, 5998  
8 $\beta$ -Ethoxy atractylenolide III, 7396  
1-Methoxy-(9*R*,10*S*)-epoxyheptadecan-4,6-diyne-3-one, 13922  
Tanzawaic acid E, 20690
- C<sub>18</sub>H<sub>26</sub>O<sub>4</sub>**  
Aurantiacone, 2007  
*n*-Butyl-2-ethylbutylphthalate, 2793  
2-(1 $\beta$ -Geranyl-5 $\beta$ -hydroxy-2'-oxocyclohex-3'-enyl)acetic acid, 8321  
3-Teracrylmelazolide B, 20967
- C<sub>18</sub>H<sub>26</sub>O<sub>5</sub>**  
6- $\alpha$ -Acetyl-4-*O*-oxobedfordiaic methyl ester, 475  
1 $\beta$ -Hydroxy-8 $\beta$ -acetoxycostic acid methyl ester, 9754  
1 $\beta$ -Hydroxy-8 $\beta$ -acetoxysisocostic acid methyl ester, 9756  
3-Teracrylmelazolide A, 20966
- C<sub>18</sub>H<sub>26</sub>O<sub>8</sub>**  
(*E*)-4-(3,4-Dimethoxyphenyl)but-3-en-1-*O*- $\beta$ -D-glucopyranoside, 6278  
4-Hydroxy-2-[(*E*)-4-hydroxy-3-methyl-2-butenyl]-5-methylphenyl  $\beta$ -D-glucopyranoside, 10198  
(*S*)-4-(4-Hydroxyphenyl)-2-butanol  
2-*O*-(6-*O*-acetyl)- $\beta$ -D-glucopyranoside, 10610
- C<sub>18</sub>H<sub>26</sub>O<sub>9</sub>**  
Icariside H<sub>1</sub>, 10954
- C<sub>18</sub>H<sub>26</sub>O<sub>10</sub>**  
Benzyl alcohol *O*- $\beta$ -D-primveroside, 2278  
Benzyl alcohol  $\beta$ -D-(2'-*O*- $\beta$ -xylopyranosyl)glucopyranoside, 2279  
Icariside F<sub>2</sub>, 10953
- C<sub>18</sub>H<sub>26</sub>O<sub>11</sub>**  
3'-*O*-Acetylloganic acid, 454  
4'-*O*-Acetylloganic acid, 455  
6'-*O*-Acetylloganic acid, 456  
7-*O*-Acetylloganic acid, 457  
6-*O*-Methyldeacetylasperulosidic acid methyl ester, 14282  
2-*C*-Methyl-*D*-erythritol 1-*O*- $\beta$ -D-(6-*O*-4-hydroxybenzoyl)glucopyranoside, 14426  
8-*O*-Methylmonotropein methyl ester, 14605  
6-*O*-Methylscandoside methyl ester, 14722  
Oleoside dimethyl ester, 16071  
Orcinol-1-*O*- $\beta$ -D-apiofuranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside, 16170  
Secologanoside dimethyl ester, 19625
- C<sub>18</sub>H<sub>26</sub>O<sub>12</sub>**  
8-*O*-Acetylshanzhiside, 509  
Canthoside C, 3101  
Canthoside D, 3102  
Digupigan A, 5534  
4-Hydroxyphenyl- $\beta$ -gentiobioside, 10623
- C<sub>18</sub>H<sub>27</sub>NO**  
(2*E*,4*E*,8*E*,10*E*,12*E*)-*N*-Isobutyl-2,4,8,10,12-tetradecapentaenamide, 11286
- C<sub>18</sub>H<sub>27</sub>NO<sub>3</sub>**

- Capsaicin, 3141  
Lycophlegmarine, 13220
- C<sub>18</sub>H<sub>27</sub>NO<sub>4</sub>**  
*L*-3 $\alpha$ ,6 $\beta$ -Ditigloyloxytropane, 6525  
 $\omega$ -Hydroxycapsaicin, 9888  
Lycofawcine, 13192  
Lycoposerramine N, 13233
- C<sub>18</sub>H<sub>27</sub>NO<sub>5</sub>**  
7-Hydroxy-3,6-bis(tigloyloxy)tropane, 9856  
Platyphylline, 17546  
Sarracine, 19388
- C<sub>18</sub>H<sub>27</sub>NO<sub>6</sub>**  
Rosmarinine, 18926  
Trichodesmine, 21560
- C<sub>18</sub>H<sub>27</sub>NO<sub>7</sub>**  
Sceleratine, 19461  
**Syneilesine**, 20551
- C<sub>18</sub>H<sub>28</sub>N<sub>2</sub>O<sub>2</sub>**  
Serratimidine, 19772
- C<sub>18</sub>H<sub>28</sub>O<sub>2</sub>**  
Octadeca-8,10-diynoic acid, 15947  
Parinaric acid, 16667  
1-Undecylenyl-3,4-methylenedioxybenzene, 22227
- C<sub>18</sub>H<sub>28</sub>O<sub>3</sub>**  
15,16-Bisnor-13-oxo-8(17)-labden-19-oic acid, 2489  
2-Dehydroxy-5-*O*-methylembelin, 4987  
Licanic acid, 12748  
Panaquinquecol 1, 16586
- C<sub>18</sub>H<sub>28</sub>O<sub>4</sub>**  
5-*O*-Methylembelin, 14347
- C<sub>18</sub>H<sub>28</sub>O<sub>5</sub>**  
3 $\alpha$ -Acetoxydiversifolol, 175  
3 $\alpha$ -Acetoxy-4 $\alpha$ -hydroxy-11(13)-eudesmen-12-oic acid methyl ester, 216
- C<sub>18</sub>H<sub>28</sub>O<sub>8</sub>**  
Celephtalide C, 3374  
4-Hydroxy-2-[3-hydroxy-3-methylbutyl]-5-methylphenyl  $\beta$ -*D*-glucopyranoside, 10200
- C<sub>18</sub>H<sub>28</sub>O<sub>9</sub>**  
(1*R*,2*R*)-5'-Hydroxyjasmonic acid 5'-*O*- $\beta$ -*D*-glucopyranoside, 10270  
Nuezhengalaside, 15865  
Qingjueine I, 18289  
Tuberonic acid glucoside, 22078
- C<sub>18</sub>H<sub>28</sub>O<sub>11</sub>**  
3-Epiphlomurin, 6998  
Lamioside, 12464  
7-*O*-Methyl morroniside, 14607  
Phlomurin, 17167
- C<sub>18</sub>H<sub>28</sub>O<sub>12</sub>**  
Repenoside, 18626
- C<sub>18</sub>H<sub>29</sub>NO**  
Lanyuamide III, 12500
- C<sub>18</sub>H<sub>29</sub>NO<sub>2</sub>**  
*O*-Acetyl-dihydrolycopodine, 379  
Bungeanol, 2745  
(2*E*,4*E*,8*Z*,11*E*)-2'-Hydroxy-*N*-isobutyl-2,4,8,11-tetradecatetraenamide, 10236  
(2*E*,4*E*,8*Z*,11*Z*)-2'-Hydroxy-*N*-isobutyl-2,4,8,11-tetradecatetraenamide, 10237  
5-Hydroxy-2-methyl-6-(11'-oxododecyl)pyridine, 10510  
Lanyuamide II, 12499
- C<sub>18</sub>H<sub>29</sub>NO<sub>3</sub>**  
Dihydrocapsaicin, 5553  
Fawcettiine, 7741  
5-Hydroxy-2-methyl-6-(11'-oxododecyl)pyridine *N*-oxide, 10511  
Lycoclavine, 13187
- C<sub>18</sub>H<sub>29</sub>NO<sub>7</sub>**  
Croalbidine, 4244
- C<sub>18</sub>H<sub>30</sub>**  
2-Phenyldodecane, 17105  
3-Phenyldodecane, 17106  
4-Phenyldodecane, 17107  
5-Phenyldodecane, 17108  
6-Phenyldodecane, 17109
- C<sub>18</sub>H<sub>30</sub>N<sub>2</sub>O<sub>3</sub>**  
Chinese bitter-sweet alkaloid II, 3537
- C<sub>18</sub>H<sub>30</sub>O**  
2,4,6-Tri-*t*-butyl phenol, 21550
- C<sub>18</sub>H<sub>30</sub>O<sub>2</sub>**  
 $\alpha$ -Eleostearic acid, 6748  
Gorlic acid, 8955  
Linolenic acid, 12893  
(*Z*)-7-Octadecen-9-ynoic acid, 15958  
Trichosanic acid, 21576
- C<sub>18</sub>H<sub>30</sub>O<sub>3</sub>**  
13(*R*)-Hydroxy-octadeca-(9*Z*,11*E*,15*Z*)-trien-oic acid, 10546  
Hygrophorone F<sup>12</sup>, 10841  
Hygrophorone G<sup>12</sup>, 10842
- C<sub>18</sub>H<sub>30</sub>O<sub>4</sub>**  
Auxin B, 2028  
Hygrophorone C<sup>12</sup>, 10839  
Hygrophorone D<sup>12</sup>, 10840  
6-Methylgingediol, 14464
- C<sub>18</sub>H<sub>30</sub>O<sub>5</sub>**  
1-*O*-Acetyl hygrophorone E<sup>10</sup>, 435
- C<sub>18</sub>H<sub>30</sub>O<sub>8</sub>**  
Dictamnosiide N, 5455  
(1*R*,2*R*)-*p*-Menth-4(5)-ene-1,2-diol  
1-*O*- $\beta$ -*D*-(2-*O*-acetyl)glucopyranoside, 13745  
(1*R*,2*R*)-*p*-Menth-4(5)-ene-1,2-diol
- 1-*O*- $\beta$ -*D*-(6-*O*-acetyl)glucopyranoside, 13746
- C<sub>18</sub>H<sub>31</sub>NO**  
*N*-Methyl-6 $\beta$ -(deca-1',3',5'-trienyl)-3 $\beta$ -methoxy-2 $\beta$ -methylpiperidine, 14284
- C<sub>18</sub>H<sub>31</sub>NO<sub>2</sub>**  
Dihydrobungeanol, 5549  
Lanyuamide I, 12498
- C<sub>18</sub>H<sub>31</sub>NO<sub>4</sub>**  
Broussonetine W, 2645
- C<sub>18</sub>H<sub>31</sub>NO<sub>6</sub>**  
Broussonetine R, 2639
- C<sub>18</sub>H<sub>31</sub>N<sub>3</sub>O<sub>3</sub>**  
Palustridine, 16573
- C<sub>18</sub>H<sub>32</sub>O**  
9,12-Octadecadienal, 15938
- C<sub>18</sub>H<sub>32</sub>O<sub>2</sub>**  
Chaulmoogric acid, 3485  
Isolinolic acid, 11503  
*cis*-9,*cis*-12-Linoleic acid, 12891  
*trans*-9,*trans*-12-Linoleic acid, 12892  
Malvic acid, 13455  
Micromolide, 14842  
10,13-Octadecadienoic acid, 15941
- C<sub>18</sub>H<sub>32</sub>O<sub>3</sub>**  
(*S*)-Coriolic acid, 4056  
Coronaric acid, 4079  
( $\pm$ )-12,13-Epoxyoleic acid, 7180
- C<sub>18</sub>H<sub>32</sub>O<sub>4</sub>**  
Hygrophorone A<sup>12</sup>, 10836
- C<sub>18</sub>H<sub>32</sub>O<sub>5</sub>**  
Auxin A, 2027
- C<sub>18</sub>H<sub>32</sub>O<sub>11</sub>**  
(*E*)-2-Hexenyl- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranoside, 9529
- C<sub>18</sub>H<sub>32</sub>O<sub>16</sub>**  
Gentianose, 8298  
1-Kestose, 12195  
Manninotriose, 13503  
Neokestose, 15424  
Nigellamose, 15567  
Panose, 16619  
Panose B, 16620  
Panose C, 16621  
Planteose, 17514  
Raffinose, 18526
- C<sub>18</sub>H<sub>33</sub>NO<sub>2</sub>**  
Tetrahydrobungeanol, 21057
- C<sub>18</sub>H<sub>33</sub>NO<sub>5</sub>**  
Broussonetine U, 2642  
Broussonetine U<sub>1</sub>, 2643  
Broussonetine V, 2644
- C<sub>18</sub>H<sub>34</sub>N<sub>4</sub>O<sub>12</sub>**  
Argininy-fructosyl-glucose, 1674

- C<sub>18</sub>H<sub>34</sub>O<sub>2</sub>**  
 Elaidic acid, 6731  
 Isooleic acid, 11574  
 Oleic acid, 16066  
 Petroselaic acid, 17021  
 Petroselinic acid, 17022  
 Vaccenic acid, 22305
- C<sub>18</sub>H<sub>34</sub>O<sub>3</sub>**  
 9-*D*-Hydroxy-*cis*-12-octadecenoic acid, 10547  
 Ricinoleic acid, 18841
- C<sub>18</sub>H<sub>34</sub>O<sub>5</sub>**  
 Sanleng acid, 19295  
 Tianshic acid, 21368
- C<sub>18</sub>H<sub>34</sub>O<sub>11</sub>**  
 Hexyl- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranoside, 9532  
 Hexyl- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside, 9533
- C<sub>18</sub>H<sub>35</sub>NO<sub>2</sub>**  
 (-)-Cassine, 3292
- C<sub>18</sub>H<sub>35</sub>NO<sub>4</sub>**  
 Morusimic acid B, 14990  
 Morusimic acid D, 14992  
 Morusimic acid F, 14994
- C<sub>18</sub>H<sub>35</sub>NO<sub>7</sub>**  
 Broussonetine T, 2641
- C<sub>18</sub>H<sub>36</sub>**  
 3-Cyclohexyldodecane, 4498
- C<sub>18</sub>H<sub>36</sub>N<sub>2</sub>O<sub>5</sub>**  
 Broussonetine J<sub>2</sub>, 2637
- C<sub>18</sub>H<sub>36</sub>O**  
 Hexahydrofarnesyl acetone, 9500  
 9(*Z*)-Octadecen-1-ol, 15957
- C<sub>18</sub>H<sub>36</sub>O<sub>2</sub>**  
 Ethylpalmitate, 7469  
 4-Methyl heptadecanoic acid, 14481  
 14-Methyl hexadecanoic acid methyl ester, 14486  
 Stearic acid, 20280
- C<sub>18</sub>H<sub>36</sub>O<sub>4</sub>**  
 9,10-Dihydroxystearic acid, 6132
- C<sub>18</sub>H<sub>37</sub>NO**  
 Stearamide, 20279
- C<sub>18</sub>H<sub>37</sub>NO<sub>5</sub>**  
 Broussonetine M<sub>1</sub>, 2638
- C<sub>18</sub>H<sub>37</sub>NO<sub>6</sub>**  
 Broussonetine S, 2640
- C<sub>18</sub>H<sub>38</sub>**  
 n-Octadecane, 15948
- C<sub>18</sub>H<sub>38</sub>O**  
 Octadecanol, 15950
- C<sub>18</sub>H<sub>38</sub>O<sub>2</sub>**  
 1,1-Diethoxy-*n*-tetradecane, 5500  
*erythro*-2,3-Octadecane-diol, 15949
- C<sub>18</sub>H<sub>39</sub>NO<sub>3</sub>**  
 Phytosphingosine, 17273
- C<sub>19</sub>H<sub>11</sub>NO<sub>4</sub>**  
 Lettowianthine, 12707  
 Norsanguinarine, 15793
- C<sub>19</sub>H<sub>11</sub>NO<sub>6</sub>**  
 Hypecoumine, 10880  
**Stephadione**, 20313
- C<sub>19</sub>H<sub>12</sub>NO<sub>5</sub>**  
**8-Oxocoptisine**, 16302
- C<sub>19</sub>H<sub>12</sub>O<sub>3</sub>**  
 Anticancer Phenylphenalone PMV70P691-130, 1435
- C<sub>19</sub>H<sub>12</sub>O<sub>6</sub>**  
 Bhubaneswin, 2342  
 Dehydronotenone, 4954  
 Dicoumarin, 5440  
 Dolineone, 6551  
 Gamatin, 8124  
 Pachyrrhizin, 16499  
 Pongapin, 17714
- C<sub>19</sub>H<sub>12</sub>O<sub>7</sub>**  
 Daphnoretin, 4657  
 5,8-Dihydroxy-7-(4-hydroxy-5-methyl-coumarin-3)-coumarin, 5918  
 12 $\alpha$ -Hydroxydolineone, 10059  
*Isodaphnoretin*, 11366
- C<sub>19</sub>H<sub>12</sub>O<sub>8</sub>**  
 Boennin, 2531
- C<sub>19</sub>H<sub>13</sub>NO<sub>3</sub>**  
 Evodianinine, 7666
- C<sub>19</sub>H<sub>13</sub>NO<sub>4</sub>**  
 Zanthoxyline, 22970
- C<sub>19</sub>H<sub>13</sub>NO<sub>5</sub>**  
 Nandazurine, 15243
- C<sub>19</sub>H<sub>13</sub>NO<sub>6</sub>**  
 Lindechunine A, 12860
- C<sub>19</sub>H<sub>14</sub>NO<sub>4</sub><sup>+</sup>**  
 Coptisine, 4032
- C<sub>19</sub>H<sub>14</sub>N<sub>2</sub>O**  
 Nauclefine, 15305
- C<sub>19</sub>H<sub>14</sub>N<sub>4</sub>**  
 Bilatriene, 2373
- C<sub>19</sub>H<sub>14</sub>O<sub>2</sub>**  
 Sterequinone A, 20335
- C<sub>19</sub>H<sub>14</sub>O<sub>5</sub>**  
 Millettocalyxin C, 14858  
 Pachycarin D, 16492  
 Vulpinic acid, 22625
- C<sub>19</sub>H<sub>14</sub>O<sub>6</sub>**  
 9-Ethoxy-aristololactone, 7395  
 3'-Hydroxy,3,5'-dimethoxy furo[8,7:4",5"]flavone, 10029
- 2-*O*-Methylatromentin, 14150  
 Neotenone, 15462
- C<sub>19</sub>H<sub>14</sub>O<sub>7</sub>**  
 6-Aldehydo-isoophiopogone A, 875  
 Anadanthoflavone, 1131  
 Ophiopogonone C, 16149
- C<sub>19</sub>H<sub>14</sub>O<sub>9</sub>**  
 Stictic acid, 20342
- C<sub>19</sub>H<sub>14</sub>O<sub>10</sub>**  
 3,4-Methylenedioxy-3',4'-*O*-dimethyl-5,5'-dimethoxyellagic acid, 14365
- C<sub>19</sub>H<sub>14</sub>O<sub>12</sub>**  
 Ellagic acid-4-*O*- $\beta$ -*D*-xylopyranoside, 6758
- C<sub>19</sub>H<sub>15</sub>NO<sub>3</sub>**  
*N*-Acetyldehydroanonaine, 370
- C<sub>19</sub>H<sub>15</sub>NO<sub>4</sub>**  
 Artabonatine C, 1771  
 Berberrubine, 2304  
 Cepharadione B, 3409  
 Griffinin, 9002  
 Griffithdione, 9006  
 Menisporphine, 13717  
*O*-Methylmoschatoline, 14608
- C<sub>19</sub>H<sub>15</sub>NO<sub>5</sub>**  
 Artabonatine E, 1773  
 9-Ethoxy-aristololactam, 7394  
 7-Oxoernagine, 16342
- C<sub>19</sub>H<sub>15</sub>NO<sub>6</sub>**  
 Integriamide, 11093
- C<sub>19</sub>H<sub>15</sub>N<sub>3</sub>O**  
 Angustidine, 1244  
 Dehydroevodiamine, 4912
- C<sub>19</sub>H<sub>15</sub>N<sub>3</sub>O<sub>2</sub>**  
 14-Formyldihydrotutaecarpine, 7902  
 1-Methoxyrutataecarpine, 14086
- C<sub>19</sub>H<sub>16</sub>NO<sub>4</sub><sup>+</sup>**  
 Groenlandicin, 9011  
 Thalifendine, 21254
- C<sub>19</sub>H<sub>16</sub>N<sub>2</sub>**  
 Sempervirine II, 19697
- C<sub>19</sub>H<sub>16</sub>N<sub>2</sub>O<sub>3</sub>**  
 Alangimarine, 831  
 Daurioxoisoporphine C, 4691  
 Nauclefoline, 15306
- C<sub>19</sub>H<sub>16</sub>N<sub>2</sub>O<sub>4</sub>**  
 Daurioxoisoporphine B, 4690
- C<sub>19</sub>H<sub>16</sub>O<sub>3</sub>**  
 1,7-Bis(4-hydroxyphenyl)-1,4,6-heptatrien-3-one, 2469  
 $\Delta^1$ -Dehydrotanshinone, 4974  
 Sterequinone C, 20337
- C<sub>19</sub>H<sub>16</sub>O<sub>4</sub>**  
 Anthrakunthone, 1364

- Bisdemethoxycurcumin, 2439  
 Bis(4-hydroxycinnamoyl)methane, 2462  
 2-(3,4-Methylenedioxyphenyl)-3-methyl-5-(2-oxopropyl)benzofuran, 14380  
*O*-Methylpogonol, 14683  
 Moracin D, 14956  
 Moracin E, 14957  
 Moracin G, 14959  
 Sterequinone E, 20339  
 Tanshinoldehyde, 20678
- C<sub>19</sub>H<sub>16</sub>O<sub>5</sub>**  
 Combretastatin D<sub>3</sub>, 3940  
 Linixanthone B, 12887  
 Sarcomeginal, 19359  
 Vitrofolal E, 22594
- C<sub>19</sub>H<sub>16</sub>O<sub>6</sub>**  
 6-Aldehyde-isoophiopogone B, 876  
 Caledonixanthone E, 2962  
 Psorospermin, 18091  
 Tournefoliac acid B ethyl ester, 21480  
 Vitrofolal F, 22595
- C<sub>19</sub>H<sub>16</sub>O<sub>7</sub>**  
 Hemerocallone, 9340  
 2'-Hydroxymethylphopogonone A, 10509  
 Ophiopogonone C, 16138
- C<sub>19</sub>H<sub>16</sub>O<sub>9</sub>**  
 9'-(*O*-Methyl)protocetraric acid, 14697  
 3,6,8-Trimethoxy-5,7-dihydroxy-3',4'-methylenedioxyflavone, 21911
- C<sub>19</sub>H<sub>16</sub>O<sub>11</sub>**  
 Thamnic acid, 21271
- C<sub>19</sub>H<sub>17</sub>NO<sub>3</sub>**  
*N*-Acetylanonaine, 322  
 Cusparine, 4421  
 Dehydrostephalagine, 4970  
*N*-Demethyl-acronycine, 5057  
 Noracronycine, 15707  
 Rutacridone, 19077
- C<sub>19</sub>H<sub>17</sub>NO<sub>4</sub>**  
 Crychine, 4277  
*N*-Methyl ovigerine, 14640  
 Neolitsine, 15431  
 Reframidine, 18570  
 Romucosine, 18900  
 Rutacridone epoxide, 19078  
 Stylopine, 20416  
 (-)-Tetrahydrocoptisine, 21061
- C<sub>19</sub>H<sub>17</sub>NO<sub>5</sub>**  
 Cassythidine, 3295  
 (-)-12-Hydroxycrychine, 9947  
 Norimelutein, 15762  
 Pendulamine B, 16800
- C<sub>19</sub>H<sub>17</sub>NO<sub>5</sub><sup>+</sup>**  
 Thalidastine, 21252
- C<sub>19</sub>H<sub>17</sub>N<sub>3</sub>**  
 Naufoline, 15315
- C<sub>19</sub>H<sub>17</sub>N<sub>3</sub>O**  
 Evodiamine, 7665
- C<sub>19</sub>H<sub>17</sub>N<sub>3</sub>O<sub>2</sub>**  
 GoshuyamideII, 8958  
 Hydroxyevodiamine, 10117
- C<sub>19</sub>H<sub>17</sub>O<sub>13</sub>S**  
 1,3-Dihydroxy-5-*O*-β-*D*-glucopyranosyl-xanthone-4-sulfonate, 5901
- C<sub>19</sub>H<sub>18</sub>ClNO<sub>4</sub>**  
 Gravacridonechlorine, 8984  
 Romucosine B, 18902
- C<sub>19</sub>H<sub>18</sub>ClNO<sub>5</sub>**  
 Gravacridonolchlorine, 8987
- C<sub>19</sub>H<sub>18</sub>NO<sub>4</sub><sup>+</sup>**  
 Dehydrocoreximine (perchlorate), 4886  
 Stepharine, 20321
- C<sub>19</sub>H<sub>18</sub>N<sub>2</sub>O<sub>4</sub>**  
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- C<sub>19</sub>H<sub>18</sub>O**  
 Alnustone, 966
- C<sub>19</sub>H<sub>18</sub>O<sub>3</sub>**  
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- C<sub>19</sub>H<sub>18</sub>O<sub>4</sub>**  
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 6-Methoxy-2-[2-(3'-methoxyphenyl) ethyl] chromone, 13999  
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 6-Methoxy-2-[2-(3-methoxy-4-hydroxyphenyl) ethyl]chromone, 13997  
 3-Methoxy-4-[(2*S*,3*R*)-3-methyl-7-(1-propynyl)-2,3-dihydro-1,4-benzodioxin-2-yl]-1,2-benzenediol, 14035  
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 5-Hydroxy-3',4',7-trimethoxyspiro{2*H*-1-benzopyran-7'-bicyclo[4.2.0]octa[1,3,5]-trien}-4-one, 10676  
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- C<sub>19</sub>H<sub>18</sub>O<sub>9</sub>**  
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- C<sub>19</sub>H<sub>18</sub>O<sub>10</sub>**  
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- C<sub>19</sub>H<sub>20</sub>O**  
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- C<sub>19</sub>H<sub>20</sub>O<sub>2</sub>**  
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 (3*S*,7*S*)-5,6-Dehydro-4''-de-*O*-methylcentrolobine, 4900  
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- C<sub>19</sub>H<sub>20</sub>O<sub>6</sub>**  
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- C<sub>19</sub>H<sub>20</sub>O<sub>7</sub>**  
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- C<sub>19</sub>H<sub>20</sub>O<sub>8</sub>**  
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- C<sub>19</sub>H<sub>20</sub>O<sub>9</sub>**  
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- C<sub>19</sub>H<sub>20</sub>O<sub>10</sub>**  
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- C<sub>19</sub>H<sub>20</sub>O<sub>11</sub>**  
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- C<sub>19</sub>H<sub>21</sub>ClO<sub>8</sub>**  
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- C<sub>19</sub>H<sub>21</sub>NO<sub>2</sub>**  
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- C<sub>19</sub>H<sub>21</sub>NO<sub>3</sub>**  
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 namide, 17084  
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- C<sub>19</sub>H<sub>21</sub>NO<sub>4</sub>**  
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 (+)-Flavinantine, 7815  
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- C<sub>19</sub>H<sub>21</sub>NO<sub>5</sub>**  
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*N*-*trans*-Feruloylmethoxytyramine, 7777  
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- C<sub>19</sub>H<sub>21</sub>NO<sub>7</sub>S**  
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- C<sub>19</sub>H<sub>21</sub>N<sub>3</sub>**  
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- C<sub>19</sub>H<sub>21</sub>N<sub>3</sub>O**  
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- C<sub>19</sub>H<sub>22</sub>N<sub>2</sub>O**  
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 Cinchonine, 3685

- Cinchonine, 3686  
 Eburnamonine, 6677  
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- C<sub>19</sub>H<sub>22</sub>N<sub>2</sub>O<sub>2</sub>**  
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- C<sub>19</sub>H<sub>22</sub>N<sub>2</sub>O<sub>3</sub>**  
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- C<sub>19</sub>H<sub>22</sub>N<sub>2</sub>O<sub>4</sub>**  
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- C<sub>19</sub>H<sub>22</sub>N<sub>2</sub>O<sub>5</sub>**  
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- C<sub>19</sub>H<sub>22</sub>N<sub>2</sub>O<sub>7</sub>**  
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- C<sub>19</sub>H<sub>22</sub>O**  
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- C<sub>19</sub>H<sub>22</sub>O<sub>2</sub>**  
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 6,8-Diprenylumbelliferone, 6498  
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 $\alpha,\alpha'$ -Dihydro-3,5,3',4'-tetrahydroxy-5'-isopentenyl stilbene, 5726  
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- C<sub>19</sub>H<sub>22</sub>O<sub>5</sub>**  
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 (3*S*,5*R*,6*S*,7*R*)-5,6-Dihydroxy-1,7-bis(4-hydroxyphenyl)-de-*O*-methylcentrolobine, 5777  
 (3*S*,5*S*,6*R*,7*R*)-5,6-Dihydroxy-1,7-bis(4-hydroxyphenyl)-de-*O*-methylcentrolobine, 5778  
 (3*S*,5*S*,6*S*,7*R*)-5,6-Dihydroxy-1,7-bis(4-hydroxyphenyl)-4"-de-*O*-methylcentrolobine, 5779  
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- C<sub>19</sub>H<sub>22</sub>O<sub>6</sub>**  
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 (7*S*,8*R*)-Dihydro-3'-hydroxy-8-hydroxy-methyl-7-(4-hydroxy-3-methoxyphenyl)-1'-benzofuranpropanol, 5636  
 (2*R*-*trans*)-2,3-Dihydro-2-(4-hydroxy-3-me-
- thoxyphenyl)-3-(hydroxymethyl)-7-hydroxy-5-benzofuran-propanol, 5639  
 8 $\alpha$ -Epoxyethylacryloxyambrosin, 7170  
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- C<sub>19</sub>H<sub>22</sub>O<sub>7</sub>**  
 9-*O*-Acetylsalograviolide A, 504  
 Canavalia gibberellin I, 3061  
 6-*O*-*cis*-*p*-Coumaroyl-3 $\alpha$ -*O*-methyl-7-deoxy-rehmaglutin A, 4171  
 6-*O*-*cis*-*p*-Coumaroyl-3 $\beta$ -*O*-methyl-7-deoxy-rehmaglutin A, 4172  
 6-*O*-*trans*-*p*-Coumaroyl-3 $\alpha$ -*O*-methyl-7-deoxy-rehmaglutin A, 4173  
 6-*O*-*trans*-*p*-Coumaroyl-3 $\beta$ -*O*-methyl-7-deoxy-rehmaglutin A, 4174  
 Diosbulbin C, 6436  
 8 $\alpha$ -Epoxyethylacryloxyparthenin, 7172  
 6-Hydroxy-5,6-dihydroeurycomalactone, 9999  
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 Repin, 18627  
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- C<sub>19</sub>H<sub>22</sub>O<sub>8</sub>**  
 8-Hydroxy-3",4"-dihydrocapnolactone-2',3'-diol, 9998  
 Musizin-8-*O*- $\beta$ -*D*-glucoside, 15132  
 Trideca-2 $\beta$ -*D*-glucopyranosyl-1,13-dihydroxy-3(*E*),11(*E*)-dien-5,7,9-triene, 21608
- C<sub>19</sub>H<sub>22</sub>O<sub>8</sub>S**  
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- C<sub>19</sub>H<sub>22</sub>O<sub>9</sub>**  
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 Breynioside A, 2611  
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 6-Hydroxymusizin-8-*O*- $\beta$ -*D*-glucoside, 10534  
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- C<sub>19</sub>H<sub>22</sub>O<sub>10</sub>**  
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- C<sub>19</sub>H<sub>23</sub>ClO<sub>7</sub>**  
 Acroptilin, 576
- C<sub>19</sub>H<sub>23</sub>NO<sub>3</sub>**

- Amurone, 1101  
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 3-Epischelhammericine, 7014  
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 6-Methylcodeine, 14248  
 4'-Methyl-*N*-methylcoclaurine, 14593
- C<sub>19</sub>H<sub>23</sub>NO<sub>4</sub>**  
*trans*-6β-Acetoxy-3α-(cinnamoyloxy)tropane, 142  
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 3-Isobutyl-4-[4-(3-methyl-2-butenyloxy)phenyl]-1*H*-pyrrol-1-ol-2,5-dione, 11279  
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 Reticuline, 18655  
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- C<sub>19</sub>H<sub>23</sub>NO<sub>5</sub>**  
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*N*-Desmethyl-8α-ethoxy pretazettine, 5255  
*N*-Desmethyl-8β-ethoxy pretazettine, 5256  
 Metaphanine, 13812  
 6-*O*-Methylpretazettine, 14687  
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- C<sub>19</sub>H<sub>23</sub>NO<sub>6</sub>**  
 Methylnkolbisine, 14620
- C<sub>19</sub>H<sub>23</sub>N<sub>3</sub>O<sub>2</sub>**  
 Ergometrine, 7240  
 Ergometrinine, 7241
- C<sub>19</sub>H<sub>24</sub>ClNO<sub>5</sub>**  
 Acutumine, 604
- C<sub>19</sub>H<sub>24</sub>ClNO<sub>6</sub>**  
 Acutumine, 603
- C<sub>19</sub>H<sub>24</sub>Cl<sub>2</sub>O<sub>7</sub>**  
 Centaurepsin, 3390
- C<sub>19</sub>H<sub>24</sub>NO<sub>3</sub>**  
 Lotusine, 13010
- C<sub>19</sub>H<sub>24</sub>NO<sub>3</sub><sup>+</sup>**  
 Magnocurarine, 13373
- C<sub>19</sub>H<sub>24</sub>N<sub>2</sub>O**  
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 20-Epi-19,20-dihydro-decarbomethoxy vobasine, 6893
- C<sub>19</sub>H<sub>24</sub>N<sub>2</sub>O<sub>2</sub>**  
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- C<sub>19</sub>H<sub>24</sub>N<sub>2</sub>O<sub>3</sub>**  
 Gelsedine, 8253
- C<sub>19</sub>H<sub>24</sub>N<sub>2</sub>O<sub>4</sub>**  
 14-Hydroxygelsedine, 10136  
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- C<sub>19</sub>H<sub>24</sub>O<sub>2</sub>**  
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- C<sub>19</sub>H<sub>24</sub>O<sub>3</sub>**  
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 6-Methylcryptoacetalide, 14262  
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- C<sub>19</sub>H<sub>24</sub>O<sub>4</sub>**  
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- C<sub>19</sub>H<sub>24</sub>O<sub>5</sub>**  
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 4,6-Dihydroxy-3-[3'-methyl-2'-butenyl]-5-[4"-hydroxy-3"-methyl-2"-butenyl]-cinnamic acid, 6023  
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- 5-Acetyl-3β-angeloyloxy-2β-(1-hydroxyisopropyl)-6-methoxy-2,3-dihydrobenzofuran, 319  
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 (3*R*,5*R*)-3,5-Dihydroxy-1,7-bis-(3,4-dihydroxyphenyl)heptane, 5774  
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 8α-Epoxyethylacryloxy-11,13-dihydroparthenin, 7171  
 1β,2α-Epoxytagitinin C, 7204  
 Gibberellin A<sub>8</sub>, 8374  
 6α-Hydroxyeurycomalactone, 10115  
 Inumakilactone E, 11118  
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- C<sub>19</sub>H<sub>24</sub>O<sub>8</sub>**  
 1α,3α,15-Trihydroxy-3,10-epoxy-8β-*O*-methacryloyl-4,11-germacradiene,6α,12-olide, 21726
- C<sub>19</sub>H<sub>24</sub>O<sub>9</sub>**  
 (2*R*\*,3*S*\*)-1-(2-[1-(Hydroxymethyl)vinyl]-3-[β-*D*-glucosyloxy]-2,3-dihydrobenzo[*b*]furan-5-yl)-1-ethanone, 10526  
 Macrophyllside C, 13323  
 2-Methyl-5-(2'-hydroxypropyl)-7-hydroxy-

- chromone-2'-*O*- $\beta$ -*D*-glucopyranoside, 14521
- C<sub>19</sub>H<sub>24</sub>O<sub>10</sub>**  
 Dracunculifoside J, 6589  
 Methylpicraquassioside A, 14675
- C<sub>19</sub>H<sub>25</sub>ClO<sub>7</sub>**  
 Eupaglehmin F, 7565
- C<sub>19</sub>H<sub>25</sub>Cl<sub>3</sub>O<sub>11</sub>**  
 Curculigin C, 4383
- C<sub>19</sub>H<sub>25</sub>NO<sub>2</sub>**  
 2-(Nonan-8-one)-4-methoxy-quinoline, 15689  
 2-(Nonan-8-one)-*N*-methyl-4-quinolone, 15690
- C<sub>19</sub>H<sub>25</sub>NO<sub>3</sub>**  
 Amuroline, 1100  
 Cryprochine, 4278  
 Isocryprochine, 11352  
 Piperolein A, 17468  
 Taxodine, 20808
- C<sub>19</sub>H<sub>25</sub>NO<sub>4</sub>**  
 Erythratidine, 7331  
 3*R*\*,4*R*\*-1-Hydroxy-3-isobutyl-4-[4-(3-methyl-2-butenyloxy)phenyl]pyrrolidine-2,5-dione, 10234  
 3*R*\*,4*S*\*-1-Hydroxy-3-isobutyl-4-[4-(3-methyl-2-butenyloxy)phenyl]pyrrolidine-2,5-dione, 10235
- C<sub>19</sub>H<sub>25</sub>NO<sub>5</sub>**  
 Acanthamolide, 76  
 Nerinine, 15496  
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- C<sub>19</sub>H<sub>25</sub>NO<sub>6</sub>**  
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 1-Epidechloroacutumine, 6886  
 Hernandine A, 9445  
 Hernandine B, 9446
- C<sub>19</sub>H<sub>25</sub>NO<sub>10</sub>**  
 Vicianin, 22465
- C<sub>19</sub>H<sub>25</sub>NO<sub>12</sub>**  
 1-(2-Hydroxyphenylamino)-1-deoxy- $\beta$ -gentiobioside 1,2-carbamate, 10609
- C<sub>19</sub>H<sub>26</sub>**  
 19-Nordehydroabiet-4(18)-ene, 15736
- C<sub>19</sub>H<sub>26</sub>Cl<sub>2</sub>O<sub>11</sub>**  
 Curculigin B, 4382
- C<sub>19</sub>H<sub>26</sub>N<sub>2</sub>**  
 Kamassine, 12120
- C<sub>19</sub>H<sub>26</sub>N<sub>2</sub>O**  
 Pareirine, 16660
- C<sub>19</sub>H<sub>26</sub>N<sub>2</sub>O<sub>3</sub>**  
 Alstonoxine B, 1004
- C<sub>19</sub>H<sub>26</sub>N<sub>2</sub>O<sub>5</sub>**  
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- C<sub>19</sub>H<sub>26</sub>O<sub>2</sub>**  
 Androst-4-ene-3,17-dione, 1169
- C<sub>19</sub>H<sub>26</sub>O<sub>3</sub>**  
 8-Acetoxyfalconin, 196  
 Acetyl panaxydol, 479  
 3,15-Dihydroxy-18-norabieta-3,8,11,13-tetraene, 6049  
 4-Hydroxy-[2-*trans*-3',7'-dimethyl-octa-2',6'-dienyl]-6-methoxy-acetophenone, 10774
- C<sub>19</sub>H<sub>26</sub>O<sub>3</sub>S**  
 Spetasin, 20148
- C<sub>19</sub>H<sub>26</sub>O<sub>4</sub>**  
 1-[2',4'-Dihydroxy-3',5'-di-(3"-methylbut-2"-enyl)-6'-methoxy]phenylethanone, 5852
- C<sub>19</sub>H<sub>26</sub>O<sub>5</sub>**  
 AcronyculatinB, 572  
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 1*R*,5*R*-Diacetoxycyclomyltaylan-10-one, 5290  
 Rubrosterone, 19043
- C<sub>19</sub>H<sub>26</sub>O<sub>6</sub>**  
 Alatalide, 837  
 6-Dehydroxylongilactone, 4986  
 3,4-Dihydroeurycomalactone, 5609  
 Eurycolactone E, 7643  
 Eurycomalide A, 7647  
 7 $\alpha$ -Hydroxyeurycomalactone, 10116  
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- C<sub>19</sub>H<sub>26</sub>O<sub>7</sub>**  
 Anticancer Sesquiterpene PMV70P691-134, 1438  
 Britanin, 2615  
 3,4 $\beta$ -Dihydrosamaderine C, 5706  
 4 $\alpha$ ,10 $\alpha$ -Dihydroxy-3-oxo-8 $\beta$ -isobutyryloxyguaia-11(13)-en-12,6 $\alpha$ -olide, 6064  
 Eurycolactone G, 7645  
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 Sipaucin A, 19961  
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- C<sub>19</sub>H<sub>26</sub>O<sub>8</sub>**  
 Eurylactone A, 7653
- C<sub>19</sub>H<sub>26</sub>O<sub>9</sub>**  
 Hymenocide S, 10862  
 Hymenocide T, 10863
- C<sub>19</sub>H<sub>26</sub>O<sub>10</sub>**  
 Hymenocide K, 10854  
 Hymenocide Q, 10860  
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 Ptelatoside A, 18099  
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- C<sub>19</sub>H<sub>26</sub>O<sub>11</sub>**  
 10-*O*-Acetylgeniposide, 397  
 Bungeiside C, 2749
- 4-Hydroxyacetophenone 4-*O*-(6-*O*- $\beta$ -*D*-apiofuranosyl)- $\beta$ -*D*-glucopyranoside, 9750  
 Hymenocide L, 10855  
 Regalocide F, 18575
- C<sub>19</sub>H<sub>26</sub>O<sub>12</sub>**  
 10-Acetoxy majoroside, 250  
 Bungeiside D, 2750  
 Canthoside A, 3099  
 Daphylloside, 4659  
 Violutoside, 22521
- C<sub>19</sub>H<sub>26</sub>O<sub>12</sub>S**  
 Paederia glucoside 1\*, 16514  
 Paederia glucoside 3\*, 16515
- C<sub>19</sub>H<sub>26</sub>O<sub>13</sub>**  
 Sibiricose A<sub>3</sub>, 19864
- C<sub>19</sub>H<sub>26</sub>O<sub>15</sub>**  
 1-Galloyl- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-galactopyranoside, 8107
- C<sub>19</sub>H<sub>27</sub>NO**  
 1-Methyl-2-nonyl-4(1*H*)-quinolone, 14624
- C<sub>19</sub>H<sub>27</sub>NO<sub>3</sub>**  
 Nudicaulonol, 15862
- C<sub>19</sub>H<sub>27</sub>NO<sub>4</sub>**  
 Stemonamine, 20306
- C<sub>19</sub>H<sub>27</sub>NO<sub>6</sub>**  
 Senkirikine, 19731
- C<sub>19</sub>H<sub>27</sub>NO<sub>7</sub>**  
 Petasitenine, 17015
- C<sub>19</sub>H<sub>27</sub>NO<sub>12</sub>**  
 6'-*O*- $\beta$ -*D*-Apiofuranosylthalicetoside, 1518  
 6'-*O*- $\alpha$ -*L*-Arabinofuranosylthalicetoside, 1558  
 Proteacin, 17963
- C<sub>19</sub>H<sub>28</sub>NO<sub>2</sub>**  
 Delavayine A, 4995
- C<sub>19</sub>H<sub>28</sub>O**  
 18-Nordehydroabietan-4 $\alpha$ -ol, 15735
- C<sub>19</sub>H<sub>28</sub>O<sub>2</sub>**  
 5 $\alpha$ -Androstan-3,17-dione, 1165  
 5 $\beta$ -Androstan-3,17-dione, 1166  
 3 $\alpha$ -Hydroxy-androst-4-ene-17-one, 9782  
 3 $\beta$ -Hydroxy-androst-5-ene-17-one, 9783  
 16*BH*,17-Hydroxy-3-oxo-19-*nor-ent*-kaur-4-ene, 10567  
 Pipataline, 17424  
 Testosterone, 21022
- C<sub>19</sub>H<sub>28</sub>O<sub>3</sub>**  
 Agallochin I, 692  
 10 $\alpha$ ,19-Dihydroxy-15,16-epoxy-8(17),13(16),14-*nor-ent*-labdatriene, 5876  
 16 $\alpha$ ,17-Dihydroxy-3-oxo-19-*nor-ent*-kaur-4-ene, 6065  
*ent*-15,16-Epoxy-3-oxa-kauran-2-one, 7181
- C<sub>19</sub>H<sub>28</sub>O<sub>3</sub>S**

- S*-Japonine, 11822
- C<sub>19</sub>H<sub>28</sub>O<sub>4</sub>**  
 10β-Hydroxy-6β-isobutyryl furanoeremophilane, 10238  
 Methyl 2-(1β-geranyl-5β-hydroxy-2'-oxocyclohex-3'-enyl)acetate, 14462  
 13α,16α,17-Trihydroxy-9α-methyl-19,20-dinor-kauran-4-en-15-one, 21798
- C<sub>19</sub>H<sub>28</sub>O<sub>5</sub>**  
 6-Acetyl gingerol, 399  
 Deisobutyryl bakkenolide H, 4989
- C<sub>19</sub>H<sub>28</sub>O<sub>6</sub>**  
 2-*O*-*n*-Butyrylpseudomajucin, 2812  
 1-(4-Hydroxy-3-methoxyphenyl)-3,5-diacetoxyoctane, 10436  
 Tagitinin D, 20611
- C<sub>19</sub>H<sub>28</sub>O<sub>7</sub>**  
 Eurycolactone F, 7644  
 2α-Hydroxytirofundin, 10769  
 Murrayacoumarin B, 15115  
 Tagitinin A, 20609
- C<sub>19</sub>H<sub>28</sub>O<sub>8</sub>**  
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- C<sub>19</sub>H<sub>28</sub>O<sub>9</sub>**  
 Corchoionoside B, 4034  
 Icariside B<sub>2</sub>, 10944
- C<sub>19</sub>H<sub>28</sub>O<sub>10</sub>**  
 Benzyl 6-*O*-*α*-*L*-rhamnopyranosyl-(1→6)β-*D*-glucopyranoside, 2296  
 Icariside D<sub>1</sub>, 10949  
 Sayaendoside, 19432
- C<sub>19</sub>H<sub>28</sub>O<sub>11</sub>**  
 Cuchiloside, 4311  
 2-*C*-Methyl-*D*-erythritol  
 1-*O*-β-*D*-(6-*O*-4-methoxybenzoyl)glucopyranoside, 14427  
 Osmanthuside H, 16254  
 Phenyl ethanol 4-*O*-β-*D*-xylopyranosyl-(1→6)-β-*D*-glucopyranoside, 17110  
 Zizybeoside I, 23011
- C<sub>19</sub>H<sub>28</sub>O<sub>12</sub>**  
 6-*O*-Acetylshanzhiside methyl ester, 510  
 8-*O*-Acetylshanzhiside methyl ester, 511  
 Cuneataside C, 4364  
 Cuneataside D, 4365  
 3,4-Dihydroxyphenylethanol-8-*O*-[β-*D*-apiofuranosyl(1→2)]-β-*D*-glucopyranoside, 6076  
 3,4-Dihydroxyphenylethanol-8-*O*-[β-*D*-apiofuranosyl(1→3)]-β-*D*-glucopyranoside, 6077  
 3,4-Dimethoxyphenol β-*D*-apiofuranosyl(1→6)-β-*D*-glucopyranoside, 6273  
 2'-*O*-β-*D*-Glucopyranosylsalicin, 8731  
 (1'*S*)-1'-(4-Hydroxyphenyl)ethane-1',2'-diol  
 2'-*O*-β-*D*-Apiofuranosyl-(1→6)-β-*D*-glucopyranoside, 10605  
 Ipolamiidoside, 11129  
 Orcinol-1-*O*-β-*D*-glucopyranosyl-(1→6)-β-*D*-glucopyranoside, 16171
- C<sub>19</sub>H<sub>28</sub>O<sub>13</sub>**  
 Canthoside B, 3100  
 Diderroside, 5477
- C<sub>19</sub>H<sub>29</sub>NO<sub>3</sub>**  
 Homocapsaicin, 9599
- C<sub>19</sub>H<sub>29</sub>NO<sub>4</sub>**  
 Ankorine, 1293  
 Dendrine, 5107
- C<sub>19</sub>H<sub>30</sub>O**  
*ent*-17-Norkauran-16-one, 15767
- C<sub>19</sub>H<sub>30</sub>O<sub>2</sub>**  
 Androsterone, 1170  
 Ardisinol II, 1644  
 CPB5212-1492-1, 4204  
 3α-Hydroxy-5β-androstan-17-one, 9780  
 3β-Hydroxy-5α-androstan-17-one, 9781
- C<sub>19</sub>H<sub>30</sub>O<sub>3</sub>**  
 Agallochin E, 688  
 4α-Hydroxy-19-nor-*ent*-kauran-17-oic acid, 10542  
 Tagalsin H, 20607
- C<sub>19</sub>H<sub>30</sub>O<sub>4</sub>**  
 5-*O*-Ethylembelin, 7436  
 [8]-Gingerol, 8396  
 9'-Oxopodopyrone, 16408  
 10'-Oxopodopyrone, 16409  
 Rapanone, 18546  
 Vitedoin B, 22567  
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- C<sub>19</sub>H<sub>30</sub>O<sub>5</sub>**  
 Hedychiol B 8,9-diacetate, 9282  
 Kessoglycol diacetate, 12192  
 Shiromodiol diacetate, 19837
- C<sub>19</sub>H<sub>30</sub>O<sub>7</sub>**  
 14-*O*-*n*-Butyrylfloridanolide, 2809  
 (6*S*,9*R*)-Deoxyroseoside, 5210
- C<sub>19</sub>H<sub>30</sub>O<sub>8</sub>**  
 Apocynoside I, 1529  
 Austroside B, 2023  
 Cannabiside E, 3086  
 Citroside A, 3771  
 Citroside B, 3772  
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 Glochidionioside C, 8567  
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 Icariside B<sub>1</sub>, 10943  
 Junipeionolide, 11965  
 (6*S*,9*R*)-Roseoside, 18918  
 Roseoside II, 18919  
 Saussureoside B, 19426  
 Staphylionoside A, 20264  
 Staphylionoside D, 20267
- C<sub>19</sub>H<sub>30</sub>O<sub>9</sub>**  
 Apocynoside II, 1530  
 Austroside A, 2022  
 Cannabiside D, 3085  
 Glochidionioside A, 8565  
 6-Hydroxy-junipeionolide, 10271  
 (1*R*,2*R*)-Methyl-5'-hydroxyjasmonate 5'-*O*-β-*D*-glucopyranoside, 14510  
 Sauroposide, 19418  
 Saussureoside A, 19425  
 Spionoside A, 20173  
 Spionoside B, 20174  
 (1*R*,6*R*,9*S*)-6,9,11-Trihydroxy-4,7-megastigma-dien-3-one 11-*O*-β-*D*-glucopyranoside, 21765
- C<sub>19</sub>H<sub>30</sub>O<sub>10</sub>**  
 2-[4-(3-Hydroxypropyl)-2-methoxyphenoxy]-1,3-propanediol 1-*O*-glucoside, 10666  
 Qingjueine II, 18290
- C<sub>19</sub>H<sub>30</sub>O<sub>11</sub>**  
 Secologanin dimethyl acetal, 19624
- C<sub>19</sub>H<sub>31</sub>NO<sub>2</sub>**  
 Samandarine, 19223
- C<sub>19</sub>H<sub>32</sub>**  
 4-Phenyltridecane, 17128  
 5-Phenyltridecane, 17137
- C<sub>19</sub>H<sub>32</sub>O<sub>2</sub>**  
 5β-Androstan-3α,17α-diol, 1163  
 5β-Androstan-3α,17β-diol, 1164  
 5α-Androstane-3β,17α-diol, 1167  
 Annosquamosin C, 1327  
 Grevillol, 8997  
 Methyllinolenate, 14555
- C<sub>19</sub>H<sub>32</sub>O<sub>3</sub>**  
 Annosquamosin B, 1326  
 Isoobtusilactone A, 11567  
 19-Nor-*ent*-kaurane-4α,16β,17-triol, 15766  
 Obtusilactone A, 15903
- C<sub>19</sub>H<sub>32</sub>O<sub>4</sub>**  
 Annosquamosin G, 1331  
 [8]-Gingediol, 8384  
 Protolichesterinic acid, 17979
- C<sub>19</sub>H<sub>32</sub>O<sub>7</sub>**  
 Blumenol C glucoside, 2522  
 Byzantioside B, 2835  
 Icariside B<sub>6</sub>, 10946  
 Icariside B<sub>9</sub>, 10947
- C<sub>19</sub>H<sub>32</sub>O<sub>8</sub>**  
 Breyniaionoside D, 2610  
 Corchoionoside A, 4033

- Excoecarioside A, 7693  
 Glochidionioside B, 8566  
 (3*S*,5*S*,6*R*,9*R*)-3-Hydroxy-5,6-epoxy- $\beta$ -ionol-9-*O*- $\beta$ -glucopyranoside, 10085  
 Lasianthioside B, 12529  
 Lasianthioside C, 12530  
 Officinioside A, 16015  
 Officinioside B, 16016  
 Rehmaionoside C, 18595  
 Sammangaoside A, 19228  
 Staphylionoside E, 20268  
 Staphylionoside F, 20269  
 Staphylionoside H, 20271  
 Turpinionoside E, 22129
- C<sub>19</sub>H<sub>32</sub>O<sub>9</sub>**  
 Breyniaionoside A, 2607  
 Lasianthioside A, 12528  
 Pisumionoside, 17495  
 Staphylionoside C, 20266
- C<sub>19</sub>H<sub>33</sub>NO<sub>2</sub>**  
 3-*O*-Tetradecanoyl-1-cyano-2-methyl-1-propene, 21042
- C<sub>19</sub>H<sub>34</sub>O<sub>2</sub>**  
 Anticancer Fatty acid PMV70P691-75, 1396  
 Methyl linoleate, 14554  
 Methyl octadeca-8,11-dienoate, 14628  
 Sterculic acid, 20328
- C<sub>19</sub>H<sub>34</sub>O<sub>4</sub>**  
 1-Acetoxy-2,4-dihydroxy-*N*-heptadeca-16-yne, 167
- C<sub>19</sub>H<sub>34</sub>O<sub>7</sub>**  
 Alatoside E, 842  
 Linarionoside A, 12856  
 Linarionoside B, 12857  
 (3*R*,9*S*)-Megastigman-5-en-3,9-diol-3-*O*- $\beta$ -*D*-glucopyranoside, 13643  
 Myrsinioside A, 15210  
 Platanionoside J, 17527
- C<sub>19</sub>H<sub>34</sub>O<sub>8</sub>**  
 Myrsinioside B, 15211  
 Rehmaionoside A, 18593  
 Rehmaionoside B, 18594  
 Sammangaoside B, 19229  
 Turpinionoside A, 22125  
 Turpinionoside B, 22126  
 Turpinionoside D, 22128
- C<sub>19</sub>H<sub>34</sub>O<sub>9</sub>**  
 Breyniaionoside B, 2608  
 Breyniaionoside C, 2609  
 (3*S*,5*R*,6*R*,7*E*,9*S*)-Megastigman-7-ene-3,5,6,9-tetrol-3-*O*- $\beta$ -*D*-glucopyranoside, 13644  
 (3*S*,5*R*,6*R*,7*E*,9*S*)-Megastigman-7-ene-3,5,6,9-tetrol-9-*O*- $\beta$ -*D*-glucopyranoside, 13645
- Staphylionoside B, 20265  
 Staphylionoside J, 20273
- C<sub>19</sub>H<sub>34</sub>O<sub>11</sub>**  
 Ebracteatoside D, 6666
- C<sub>19</sub>H<sub>34</sub>O<sub>12</sub>**  
 3-*O*- $\alpha$ -*L*-Arabinopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside of butyl (3*S*)-hydroxybutanoate, 1563  
 3-*O*- $\alpha$ -*L*-Arabinopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside of butyl (3*R*)-hydroxybutanoate, 1567
- C<sub>19</sub>H<sub>36</sub>O<sub>2</sub>**  
 Methyl 9-octadecenoate, 14630
- C<sub>19</sub>H<sub>36</sub>O<sub>4</sub>**  
 1-Acetoxy-2,4-dihydroxy-*N*-heptadeca-16-ene, 166  
 9,12-Dihydroxy-15-nonadecenoic acid, 6047
- C<sub>19</sub>H<sub>36</sub>O<sub>5</sub>**  
 2,3-Dihydroxy-2-(1-hydroxytridecyl)-4-methoxycyclopentanone, 5920
- C<sub>19</sub>H<sub>36</sub>O<sub>7</sub>**  
 Myrsinioside C, 15212  
 Myrsinioside D, 15213
- C<sub>19</sub>H<sub>36</sub>O<sub>8</sub>**  
 Meliaionoside A, 13664  
 Meliaionoside B, 13665  
 Turpinionoside C, 22127
- C<sub>19</sub>H<sub>36</sub>O<sub>10</sub>**  
 Rhodiooctanoside, 18793
- C<sub>19</sub>H<sub>38</sub>O<sub>2</sub>**  
 Ethyl heptadecanoate, 7444  
 Ethylisoheptadecanoate, 7452  
 Methyl octadecanoate, 14629  
 Nonadecanoic acid, 15672
- C<sub>19</sub>H<sub>38</sub>O<sub>4</sub>**  
*L*-(-)- $\alpha$ -Monopalmitin, 14931
- C<sub>19</sub>H<sub>40</sub>**  
*n*-Nonadecane, 15671
- C<sub>19</sub>H<sub>40</sub>O**  
 Nonacetyl alcohol-10, 15659
- C<sub>20</sub>H<sub>11</sub>N<sub>3</sub>O<sub>2</sub>**  
 Arcyriaflavin A, 1624
- C<sub>20</sub>H<sub>11</sub>N<sub>3</sub>O<sub>3</sub>**  
 Arcyriaflavin B, 1625
- C<sub>20</sub>H<sub>12</sub>**  
 3,4-Benzopyrene, 2226
- C<sub>20</sub>H<sub>12</sub>N<sub>2</sub>O<sub>2</sub>**  
 20-Formylbenzo[6,7]indolizino[1,2-*b*]quinolin-11 (13*H*)-one, 7896
- C<sub>20</sub>H<sub>12</sub>O<sub>4</sub>**  
 Palmarumycin CP<sub>1</sub>, 16552
- C<sub>20</sub>H<sub>12</sub>O<sub>6</sub>**  
 Helioxanthin, 9323
- Justicidine E, 11981  
 Taiwanin C, 20643
- C<sub>20</sub>H<sub>12</sub>O<sub>7</sub>**  
 Juscimranthin, 11972  
 Justicidone, 11982  
 Phelligridin C, 17061  
 Taiwanin E, 20644
- C<sub>20</sub>H<sub>12</sub>O<sub>8</sub>**  
 Phelligridin D, 17062
- C<sub>20</sub>H<sub>13</sub>NO<sub>5</sub>**  
 11-Methoxylettowianthine, 13988  
 Oxyanguinarine, 16473
- C<sub>20</sub>H<sub>13</sub>N<sub>3</sub>O**  
 Naulafine, 15316  
 Staurosporinone, 20278
- C<sub>20</sub>H<sub>13</sub>N<sub>3</sub>O<sub>2</sub>**  
 Bisindolylpyrrole CPB-53-594-6, 2476
- C<sub>20</sub>H<sub>13</sub>N<sub>3</sub>O<sub>8</sub>**  
 Xanthommatin, 22769
- C<sub>20</sub>H<sub>14</sub>NO<sub>4</sub>**  
 Avicine, 2037  
 Sanguinarine, 19284
- C<sub>20</sub>H<sub>14</sub>N<sub>2</sub>O<sub>2</sub>**  
 Naucleficine, 15302
- C<sub>20</sub>H<sub>14</sub>N<sub>2</sub>O<sub>3</sub>**  
 Nauclealine A, 15290  
 Nauclequiniine, 15312
- C<sub>20</sub>H<sub>14</sub>N<sub>4</sub>**  
 Porphyrin, 17730
- C<sub>20</sub>H<sub>14</sub>O<sub>4</sub>**  
 4,5,4',5'-Tetrahydroxy-1:1'-binaphthyl, 21083
- C<sub>20</sub>H<sub>14</sub>O<sub>5</sub>**  
 Palmarumycin JC<sub>1</sub>, 16553  
 Palmarumycin JC<sub>2</sub>, 16554  
 Sophoracoumestan A, 20081
- C<sub>20</sub>H<sub>14</sub>O<sub>6</sub>**  
 Jayantinin, 11865  
 Matsukaze lactone, 13607  
 Pachycarin E, 16493  
 Taiwanin A, 20641
- C<sub>20</sub>H<sub>14</sub>O<sub>7</sub>**  
 Daphnoretin methyl ether, 4658  
 3'-Methoxypongapin, 14074  
 Pachyrrhizone, 16500
- C<sub>20</sub>H<sub>14</sub>O<sub>8</sub>**  
 (-)-Diasamin-di- $\gamma$ -lactone, 5376  
 12 $\alpha$ -Hydroxypachyrrhizone, 10589
- C<sub>20</sub>H<sub>14</sub>O<sub>9</sub>**  
 Fuscoporine, 8033
- C<sub>20</sub>H<sub>15</sub>NO<sub>4</sub>**  
 Dihydrosanguinarine, 5708  
 7,9-Dimethoxy-2,3-methylendioxybenzophenanthridine, 6261

- C<sub>20</sub>H<sub>15</sub>NO<sub>5</sub>**  
Oxyterihanine, 16477
- C<sub>20</sub>H<sub>15</sub>NO<sub>6</sub>**  
6,7-Methylenedioxy-2-(6-acetyl-2,3-methylene-dioxybenzyl)-1(2*H*)-isoquinolinone, 14360  
Thalicminine, 21242
- C<sub>20</sub>H<sub>15</sub>N<sub>3</sub>O**  
Angustine, 1250  
Evodiainine, 7667
- C<sub>20</sub>H<sub>15</sub>N<sub>3</sub>O<sub>2</sub>**  
10-Hydroxyangustine, 9788  
Nauclefine, 15313
- C<sub>20</sub>H<sub>16</sub>NO<sub>4</sub><sup>+</sup>**  
Isofagaridine, 11423  
Worenine, 22732
- C<sub>20</sub>H<sub>16</sub>N<sub>2</sub>O<sub>3</sub>**  
Deoxycamptothecin, 5157
- C<sub>20</sub>H<sub>16</sub>N<sub>2</sub>O<sub>4</sub>**  
Camptothecin, 3053
- C<sub>20</sub>H<sub>16</sub>N<sub>2</sub>O<sub>5</sub>**  
10-Hydroxycamptothecin, 9882  
18-Hydroxycamptothecin, 9883
- C<sub>20</sub>H<sub>16</sub>O<sub>2</sub>**  
(*E*)-2-(4-Methylpenta-1,3-dienyl)anthraquinone, 14661
- C<sub>20</sub>H<sub>16</sub>O<sub>3</sub>**  
Sterequinone D, 20338
- C<sub>20</sub>H<sub>16</sub>O<sub>4</sub>**  
Bidwillon C, 2365  
Corylin, 4109
- C<sub>20</sub>H<sub>16</sub>O<sub>5</sub>**  
Alpinumisoflavone, 993  
Atalantoflavone, 1956  
Carpachromene, 3217  
Derrone, 5235  
Erylatissin B, 7306  
Glabrocoumarin, 8496  
Glabrone, 8501  
Isopsoralidin, 11632  
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Phaseol, 17046  
Psoralidin, 18088  
Psorothamnone A, 18092  
Sojagol, 20041  
Vogelin J, 22605  
Yinyanghuo C, 22910
- C<sub>20</sub>H<sub>16</sub>O<sub>6</sub>**  
Bavacoumestan A, 2176  
Bavacoumestan B, 2177  
Detetrahydroconidendrin, 5279  
Elliptone, 6762  
Erosone, 7290
- (-)-(*R,E*)-Hibalactone, 9534  
I-23, 10928
- Licoisoflavone B, 12779  
Negundin A, 15322  
Pachycarin A, 16489  
Pachycarin B, 16490  
Picropolygamain, 17343  
Psoralidin-2',3'-oxide, 18089  
Savinin, 19427  
Semilicoisoflavone B, 19695  
3,3',5'-Trimethoxy furo[8,7:4",5"]flavone, 21916  
Yinyanghuo E, 22912
- C<sub>20</sub>H<sub>16</sub>O<sub>7</sub>**  
(-)-Aptosimon, 1537  
Corylidin, 4107  
Genkdaphin, 8286  
6*αα*,12*αα*-12*α*-Hydroxyelliptone, 10067  
(+)-Malaccol, 13415
- C<sub>20</sub>H<sub>16</sub>O<sub>12</sub>**  
Ducheside A, 6619  
Ducheside B, 6620  
4-(*α*-Rhamnopyranosyl)ellagic acid, 18697
- C<sub>20</sub>H<sub>16</sub>O<sub>15</sub>**  
Mucic acid 1,4-lactone 3,5-di-*O*-gallate, 15010
- C<sub>20</sub>H<sub>17</sub>ClO<sub>4</sub>**  
Anthrasedamone C, 1370
- C<sub>20</sub>H<sub>17</sub>ClO<sub>7</sub>**  
5-Chloropropacin, 3570
- C<sub>20</sub>H<sub>17</sub>NO<sub>5</sub>**  
Bianfugenine, 2345  
Oxoglaucine, 16339  
Oxyberberine, 16441  
Vitedoamine A, 22565
- C<sub>20</sub>H<sub>17</sub>NO<sub>6</sub>**  
Adlumidine, 642  
Bicuculline, 2350  
Hypecorinine, 10879  
Leptopidinine, 12675  
Pareirubrine A, 16661  
1,2,3,10-Tetramethoxy-9-hydroxy-4,5,6,6*α*-dehydro-7-aporhthione, 21187
- C<sub>20</sub>H<sub>17</sub>NO<sub>7</sub>**  
Procumbine, 17873
- C<sub>20</sub>H<sub>17</sub>N<sub>3</sub>O**  
3,14-Dihydroangustine, 5540  
18,19-Dihydroangustine, 5541
- C<sub>20</sub>H<sub>17</sub>N<sub>3</sub>O<sub>2</sub>**  
Angustoline, 1252
- C<sub>20</sub>H<sub>18</sub>NO<sub>4</sub>**  
Berberine, 2303  
Epiberberine, 6835
- C<sub>20</sub>H<sub>18</sub>NO<sub>5</sub><sup>+</sup>**  
Berberastine, 2302
- C<sub>20</sub>H<sub>18</sub>NO<sub>6</sub><sup>+</sup>**  
Leptopine, 12676
- C<sub>20</sub>H<sub>18</sub>N<sub>2</sub>O<sub>2</sub>**  
Kopsorinine, 12269
- C<sub>20</sub>H<sub>18</sub>N<sub>2</sub>O<sub>4</sub>**  
Corydamine, 4105
- C<sub>20</sub>H<sub>18</sub>N<sub>2</sub>O<sub>7</sub>**  
Canthin-6-one 9-*O*- $\beta$ -glucopyranoside, 3097
- C<sub>20</sub>H<sub>18</sub>O<sub>2</sub>**  
1,4-Bis-benzyloxy-benzene, 2436  
2-(4-Methylpent-3-enyl)anthraquinone, 14663
- C<sub>20</sub>H<sub>18</sub>O<sub>3</sub>**  
Anthrasedamone A, 1368
- C<sub>20</sub>H<sub>18</sub>O<sub>4</sub>**  
(2*R*)-Abyssinone I, 50  
Anthrasedamone B, 1369  
Anticancer Phenylphenalane PMV70P691-129, 1434  
Bavachromene, 2175  
Capitellataquinone D, 3135  
Erypoeigin E, 7311  
Erypoeigin H, 7314  
Glabrene, 8490  
4-Hydroxyonchocarpin, 10335  
Inflacoumarin A, 11037  
Kanzonol B, 12149  
Licoflavone A, 12774  
Neobavaisoflavone, 15342  
Obovatine, 15887  
Phaseollin, 17048  
8-Prenylaididzein, 17830  
Stereunthal B, 20334
- C<sub>20</sub>H<sub>18</sub>O<sub>5</sub>**  
Capitellataquinone C, 3134  
Demethoxycurcumin, 5045  
8-(1,1-Dimethylallyl)genistein, 6305  
Eurycarpin A, 7637  
Glabroisoflavanone A, 8497  
Glepidotin A, 8548  
(2*S*)-5-Hydroxy-7-methoxy-8-[(*E*)-3-oxo-1-butenyl]flavanone, 10430  
Hydroxyphaseollin, 10600  
Isodispar B, 11380  
Licoflavone C, 12776  
Lupiwighteone, 13107  
Methyl tanshinonate, 14736  
Moracin H, 14960  
6-Prenylapigenin, 17823  
Psoralenol, 18087  
Stereunthal A, 20333  
Tuberosin, 22080  
Vismiagiuanin A, 22543  
Vitrofolal A, 22590



- Wighteone, 22667  
Yinyanghuo D, 22911
- C<sub>20</sub>H<sub>18</sub>O<sub>6</sub>**  
Asarinin, 1833  
Capitellataquinone A, 3132  
Cubebinolide, 4310  
Desmosdumotin A, 5268  
Erythrinin C, 7333  
Gancaonin C, 8136  
Glyasperin F, 8801  
Glycyrrhisoflavone, 8844  
(+)-Hinokinin, 9544  
2-(*p*-Hydroxyphenoxy)-5,7-dihydroxy-6-isopentenylchromone, 10602  
Isogancaonin C, 11434  
Isolicoflavonol, 11490  
8-Isopentenyl-kaempferol, 11588  
8-(*D*<sup>2</sup>-Isopentenyl)-5,7,3',4'-tetrahydroxyflavone, 11590  
Licoflavonal, 12773  
Licoisoflavone, 12778  
Luteone, 13150  
4-Oxoobovatachromene, 16399  
Phellodensin A, 17072  
Sanggenon F, 19261  
Sanggenon H, 19263  
Sesamin, 19777  
5,7,4'-Trihydroxy-6-(3,3-dimethylallyloxiranyl-methyl)isoflavone, 21716  
Ugonin F, 22179  
Vitrofolal B, 22591
- C<sub>20</sub>H<sub>18</sub>O<sub>7</sub>**  
Calocedrin, 2983  
Capitellataquinone B, 3133  
Gancaonin P, 8141  
Glycyrrhiza-flavonol A, 8845  
7-Hydroxyhinokinin, 10164  
Isopaulownin, 11581  
Meridinol, 13783  
Neosesamin, 15459  
Neouralenol, 15471  
Ophiopogonane D, 16139  
Parabenzlactone, 16649  
Paulownin, 16734  
Sesaminone, 19778  
Sesamolol, 19780  
Styraxin, 20419  
Uralenol, 22241
- C<sub>20</sub>H<sub>18</sub>O<sub>8</sub>**  
Cleomiscosin A, 3829  
Cleomiscosin B, 3830  
Daphneticin, 4643  
8'-Epi-cleomiscosin A, 6870
- Irisfloreantin, 11164  
5,6,7,5'-Tetramethoxy-3',4'-methylenedioxyflavone, 21188
- C<sub>20</sub>H<sub>18</sub>O<sub>9</sub>**  
Frangulin B, 7940  
5,3',4',5'-Tetramethoxy-6,7-methylenedioxyisoflavone, 21189  
Xanthopurpurin-3-*O*- $\beta$ -*D*-glucoside, 22773
- C<sub>20</sub>H<sub>18</sub>O<sub>10</sub>**  
Juglanin, 11897  
Salvianolic acid D, 19204
- C<sub>20</sub>H<sub>18</sub>O<sub>11</sub>**  
Avicularin, 2039  
Fukinolic acid, 7987  
Guaijaverin, 9043  
Quercetin-3- $\beta$ -*D*-xylopyranoside, 18407
- C<sub>20</sub>H<sub>18</sub>O<sub>12</sub>**  
(-)-2-Galloyl-4-(*E*)-caffeoyl-*L*-threonic acid, 8103  
Melicitrin, 13675
- C<sub>20</sub>H<sub>18</sub>O<sub>14</sub>**  
2,3-*O*-(*S*)-Hexahydroxydiphenyl-*D*-glucopyranose, 9502
- C<sub>20</sub>H<sub>19</sub>NO<sub>2</sub>**  
Benzosimuline, 2227
- C<sub>20</sub>H<sub>19</sub>NO<sub>3</sub>**  
Acronycine, 570  
2-[4(3,4-Methylenedioxyphenyl)butyl]-4-quinolone, 14379
- C<sub>20</sub>H<sub>19</sub>NO<sub>4</sub>**  
(-)-*N*-Acetylnorstephalagine, 473  
*N*-Acetylxylidine, 532  
Annuloline, 1342  
Tetrahydrocorysamine, 21062
- C<sub>20</sub>H<sub>19</sub>NO<sub>5</sub>**  
Chelidonine, 3502  
2,3-Dihydroauriporphine, 5581  
Hypecorine, 10878  
Isocorynoline, 11346  
Parfumine, 16663  
Protopine, 17983  
Pseudoprotopine, 18057  
Xanthaline, 22745
- C<sub>20</sub>H<sub>19</sub>NO<sub>6</sub>**  
10-Hydroxychelidonine, 9903  
Ledeborine, 12600  
Papaverrubine A, 16624  
Papaverrubine E, 16628  
Rhoeagenine, 18817  
Taspine, 20717
- C<sub>20</sub>H<sub>19</sub>NO<sub>7</sub>**  
Rhodesiacridone, 18784
- C<sub>20</sub>H<sub>19</sub>N<sub>3</sub>O<sub>2</sub>**  
3,14-Dihydroangustoline, 5542
- C<sub>20</sub>H<sub>19</sub>N<sub>3</sub>O<sub>3</sub>**  
Anisotine, 1291
- C<sub>20</sub>H<sub>19</sub>O<sub>3</sub>**  
Decussine, 4864
- C<sub>20</sub>H<sub>19</sub>O<sub>10</sub>S<sup>-</sup>**  
Torvanol A, 21468
- C<sub>20</sub>H<sub>19</sub>O<sub>11</sub><sup>+</sup>**  
Delphinidin-3-araboside, 5012
- C<sub>20</sub>H<sub>20</sub>NO<sub>4</sub><sup>+</sup>**  
Columbamine, 3934  
Dehydrocorydalmine, 4890  
Jatrorrhizine, 11851
- C<sub>20</sub>H<sub>20</sub>NO<sub>6</sub><sup>+</sup>**  
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- C<sub>20</sub>H<sub>20</sub>N<sub>2</sub>O<sub>2</sub>**  
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Naucleifiline, 15304
- C<sub>20</sub>H<sub>20</sub>N<sub>2</sub>O<sub>3</sub>**  
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Naucleamide D, 15295  
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- C<sub>20</sub>H<sub>20</sub>N<sub>2</sub>O<sub>4</sub>**  
*cis*-Moschamine, 14998  
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- C<sub>20</sub>H<sub>20</sub>N<sub>2</sub>O<sub>5</sub>**  
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Cheliensisine, 3506  
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- C<sub>20</sub>H<sub>20</sub>O<sub>2</sub>**  
2,7-Dimethoxy-1,6-dimethyl-5-vinylphenanthrene, 6223  
Salvilenone, 19217
- C<sub>20</sub>H<sub>20</sub>O<sub>3</sub>**  
Derricidin, 5221  
Ovalifoliolatin B, 16276
- C<sub>20</sub>H<sub>20</sub>O<sub>4</sub>**  
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(2*S*)-Abyssinone II, 51  
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3,9-Dihydroxy-4-(3,3-dimethylallyl)-[6*aR*, 11*aR*]-pterocarpane, 5851

- Dorsmanin A, 6561  
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 Pyranokunthone A, 18252  
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- C<sub>20</sub>H<sub>20</sub>O<sub>5</sub>**  
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 Brousochalcone A, 2629  
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- C<sub>20</sub>H<sub>20</sub>O<sub>6</sub>**  
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- C<sub>20</sub>H<sub>20</sub>O<sub>9</sub>**  
 5,7-Dihydroxy-2',3',4',5',6'-pentamethoxyflavone, 6072  
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- C<sub>20</sub>H<sub>20</sub>O<sub>11</sub>**  
 6'-O-Caffeoylerigeroside, 2900  
 4-C-β-D-Glucopyranosyl-1,3,6-trihydroxy-7-methoxyxanthone, 8743  
 1-(2'-γ-Pyrone)-6-caffeoyl-α-D-pyranooglucose, 18254  
 Swertianolin, 20511
- C<sub>20</sub>H<sub>20</sub>O<sub>12</sub>**  
 Homomangiferin, 9613
- C<sub>20</sub>H<sub>20</sub>O<sub>13</sub>**  
 Aceritannin, 95  
 Neocretanin, 15372
- C<sub>20</sub>H<sub>20</sub>O<sub>14</sub>**  
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 1,4-Di-O-galloylglucose, 5517  
 1,6-Di-O-galloyl-β-glucose, 5518  
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- C<sub>20</sub>H<sub>21</sub>NO<sub>3</sub>**  
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- C<sub>20</sub>H<sub>21</sub>NO<sub>4</sub>**  
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(-)-Dicentrine, 5417  
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*O*-Methylbulbocarpine, 14161  
*O*-Methyl domesticine, 14332  
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(-)-Tetrahydroberberine, 21056
- C<sub>20</sub>H<sub>21</sub>NO<sub>5</sub>**  
(+)-Eschscholtzidine-*N*-oxide, 7360  
Gravacridonediol monomethyl ether, 8986  
(-)-12-Hydroxy-*O*-methylcaryachine, 10480  
Ocoakryptine, 15929  
Ophiocarpine, 16128  
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- C<sub>20</sub>H<sub>21</sub>NO<sub>6</sub>**  
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*N*-Methyl-14-*O*-desmethyl-epiporphyroxine, 14291  
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- C<sub>20</sub>H<sub>21</sub>N<sub>3</sub>O<sub>2</sub>**  
Adhatodine, 627
- C<sub>20</sub>H<sub>22</sub>NO<sub>6</sub><sup>+</sup>**  
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- C<sub>20</sub>H<sub>22</sub>N<sub>2</sub>O<sub>2</sub>**  
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- C<sub>20</sub>H<sub>22</sub>N<sub>2</sub>O<sub>3</sub>**  
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- C<sub>20</sub>H<sub>22</sub>N<sub>2</sub>O<sub>4</sub>**  
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- C<sub>20</sub>H<sub>22</sub>N<sub>2</sub>O<sub>6</sub>**  
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- C<sub>20</sub>H<sub>22</sub>N<sub>2</sub>O<sub>9</sub>**  
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- C<sub>20</sub>H<sub>22</sub>O<sub>3</sub>**  
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(2*S*)-7,4'-Dihydroxy-3'-prenylflavan, 6102  
6(1,1-Dimethylallyl)-7,4'-dihydroxyflavan, 6304  
7-(4"-Hydroxy-3"-methoxyphenyl)-1-phenyl-hept-4-en-3-one, 10451  
6-Methylcryptotanshinone [14,16-epoxy-6-methyl-5(10),6,8,13-abietatetraene-11,12-dione], 14263  
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- C<sub>20</sub>H<sub>22</sub>O<sub>6</sub>**  
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(+)-Epipinoresinol, 7000  
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- C<sub>20</sub>H<sub>22</sub>O<sub>7</sub>**  
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- C<sub>20</sub>H<sub>22</sub>O<sub>10</sub>**  
 Benzyl 6'-*O*-galloyl-β-*D*-glucopyranoside, 2286  
 Catechin 7-*O*-β-*D*-xyloside, 3317  
*p*-Hydroxybenzoyl calleryanin, 9820  
 6-Methoxy-2-acetyl-3-methyl-1,4-naphthoquinone-8-*O*-β-*D*-glucopyranoside, 13833  
 Plicatic acid, 17561  
 Rumexoside, 19066  
 2,4',6-Trihydroxy-4-methoxybenzophenone-2-*O*-glucoside, 21766
- C<sub>20</sub>H<sub>22</sub>O<sub>11</sub>**  
 3-Hydroxy-5-methylphenol  
 1-*O*-β-*D*-(6'-galloyl)glucopyranoside, 10513  
 Protocatechuoyl calleryanin, 17969
- C<sub>20</sub>H<sub>23</sub>ClO**  
 Fritillaziebinol, 7958
- C<sub>20</sub>H<sub>23</sub>NO<sub>2</sub>**  
 4-(3'-Methyl-but-2'-ene)oxy, *N*-benzoylphenethyl amine, 14174  
 Zanthosimuline, 22969
- C<sub>20</sub>H<sub>23</sub>NO<sub>3</sub>**  
 Huajiaosimuline, 9656  
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- C<sub>20</sub>H<sub>23</sub>NO<sub>4</sub>**  
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 (+)-*N*-Methyl lauretanine, 14550  
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 (+)-Sebiferine, 19598  
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- C<sub>20</sub>H<sub>23</sub>NO<sub>5</sub>**  
 Acetylcephalotaxine, 348  
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*C*-3-Epiwilsonione, 7043  
*N-trans*-4-*O*-Methylferuloyl 4'-*O*-methyl-dopamine, 14445
- C<sub>20</sub>H<sub>23</sub>NO<sub>6</sub>**  
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 16-Oxoprometaphanine, 16412
- C<sub>20</sub>H<sub>23</sub>NO<sub>7</sub>**  
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- C<sub>20</sub>H<sub>23</sub>NO<sub>9</sub>**  
 Nigrumin-5-*p*-coumarate, 15593
- C<sub>20</sub>H<sub>23</sub>N<sub>3</sub>O**  
 3,3'-Bis(indolylmethyl)dimethyl ammonium hydroxide, 2472
- C<sub>20</sub>H<sub>23</sub>O<sub>9</sub>S**  
 (+)-Isolariciresinol-2*a*-sulfate, 11483
- C<sub>20</sub>H<sub>24</sub>NO<sub>4</sub>**  
 Magnoflorine, 13374  
 Steponine, 20325
- C<sub>20</sub>H<sub>24</sub>NO<sub>4</sub><sup>+</sup>**  
 Cissamine, 3747  
 Cyclanoline, 4459  
 2,3-Dimethoxy-9,10-dihydroxy-*N*-methyl-tetrahydroprotoberberine quaternary salt, 6219  
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- C<sub>20</sub>H<sub>24</sub>N<sub>2</sub>O**  
 Affinisine, 669  
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 19-(*Z*)-Taberpsychine, 20579
- C<sub>20</sub>H<sub>24</sub>N<sub>2</sub>O<sub>2</sub>**  
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 Aglaiduline, 737  
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- Epiquinine, 7004  
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- C<sub>20</sub>H<sub>24</sub>N<sub>2</sub>O<sub>3</sub>**  
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- C<sub>20</sub>H<sub>24</sub>N<sub>2</sub>O<sub>4</sub>**  
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- C<sub>20</sub>H<sub>25</sub>ClO<sub>7</sub>**  
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- C<sub>20</sub>H<sub>25</sub>NO<sub>2</sub>**  
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- C<sub>20</sub>H<sub>25</sub>NO<sub>6</sub>**  
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- C<sub>20</sub>H<sub>25</sub>NO<sub>7</sub>**  
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- C<sub>20</sub>H<sub>26</sub>NO<sub>3</sub><sup>+</sup>**  
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- C<sub>20</sub>H<sub>26</sub>N<sub>2</sub>O**  
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- C<sub>20</sub>H<sub>26</sub>O<sub>12</sub>**  
(*Z*)-4-Coumaric acid 4-*O*- $\beta$ -D-apiofuranosyl-(1" $\rightarrow$ 2")-*O*- $\beta$ -D-glucopyranoside, 4136  
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- C<sub>20</sub>H<sub>26</sub>O<sub>13</sub>**  
5-Methoxyphthalide 7-*O*- $\beta$ -xylopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -glucopyranoside, 14068
- C<sub>20</sub>H<sub>27</sub>NO**  
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- C<sub>20</sub>H<sub>27</sub>NO<sub>2</sub>**  
2-(Decan-9-one)-*N*-methyl-4-quinolone, 4836  
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- C<sub>20</sub>H<sub>27</sub>NO<sub>3</sub>**  
3-Epimethylschelhammericine B, 6969  
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- C<sub>20</sub>H<sub>27</sub>NO<sub>4</sub>**  
7-Deoxycephalofortuneine, 5160  
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- C<sub>20</sub>H<sub>27</sub>NO<sub>5</sub>**  
Cephalofortuneine, 3401  
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- C<sub>20</sub>H<sub>27</sub>NO<sub>6</sub>**  
Stephasunoline, 20323
- C<sub>20</sub>H<sub>27</sub>NO<sub>7</sub>**  
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- C<sub>20</sub>H<sub>27</sub>NO<sub>11</sub>**
- Amygdalin, 1102
- C<sub>20</sub>H<sub>27</sub>N<sub>2</sub>O<sub>3</sub>**  
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4-Epidehydroabietic acid, 6887  
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7 $\beta$ -Hydroxyabieta-8,11,13-trien-19-al, 9745  
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*ent*-1 $\beta$ -Hydroxy-9(11),16-kauradien-15-one, 10274  
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 6-*O*-Acetyl hygrophorone A<sup>12</sup>, 427  
 1-*O*-Acetyl hygrophorone E<sup>12</sup>, 436  
 12-Hydroxykirenol, 10289  
*ent*-2 $\alpha$ ,14 $\alpha$ ,15 $\beta$ ,16*S*,17-Pentahydroxy kaurane, 16849  
 Prostaglandin E<sub>1</sub>, 17954
- C<sub>20</sub>H<sub>34</sub>O<sub>6</sub>**  
 Grayanotoxin III, 8994  
 Kalmanol, 12117
- C<sub>20</sub>H<sub>34</sub>O<sub>7</sub>**  
 Rhodojaponin VI, 18803  
 Rhodomollein XIV, 18811
- C<sub>20</sub>H<sub>34</sub>O<sub>12</sub>**  
 1 $\alpha$ -*O*-[2'-(2'-Methyl-5'-isopropyl,3'-en-bihydrofuryl)]- $\beta$ -*D*-lactose, 14537
- C<sub>20</sub>H<sub>35</sub>ClO<sub>3</sub>**  
 Agallochin C, 686
- C<sub>20</sub>H<sub>35</sub>N<sub>3</sub>**  
 Ormosanine, 16206
- C<sub>20</sub>H<sub>36</sub>N<sub>2</sub>O<sub>17</sub>**
- Neocycasin C, 15382  
 Neocycasin F, 15385  
 Neocycasin G, 15386
- C<sub>20</sub>H<sub>36</sub>O<sub>2</sub>**  
 12,17-Dihydroxyabda-13(*E*)-ene, 5944  
 13-Epi-sclareol, 7015  
 Leoheteronin D, 12630  
 Linoleyl acetate, 12894  
 10,13-Octadecadienoic acid ethyl ester, 15942
- C<sub>20</sub>H<sub>36</sub>O<sub>3</sub>**  
 Clerod-14-ene-3 $\alpha$ ,4 $\beta$ ,13 $\zeta$ -triol, 3840  
 Vitexifolin B, 22576
- C<sub>20</sub>H<sub>36</sub>O<sub>4</sub>**  
 Hygrophorone B<sup>14</sup>, 10837  
 1-Monolinolein, 14925
- C<sub>20</sub>H<sub>36</sub>O<sub>9</sub>**  
 Staphylionoside I, 20272
- C<sub>20</sub>H<sub>36</sub>O<sub>10</sub>**  
*O*- $\beta$ -*D*-Oleandropyranosyl-(1 $\rightarrow$ 4)-*O*- $\beta$ -*D*-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-oleandropyranose, 16033
- C<sub>20</sub>H<sub>36</sub>O<sub>11</sub>**  
 (*R*)-Oct-1-en-3-yl *O*- $\alpha$ -*L*-arabinopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside, 15985
- C<sub>20</sub>H<sub>36</sub>O<sub>12</sub>**  
 Ebracteoside C, 6665
- C<sub>20</sub>H<sub>38</sub>**  
*trans*-1,3-Phytodiene, 17262
- C<sub>20</sub>H<sub>38</sub>O<sub>2</sub>**  
 11-Eicosenoic acid, 6725  
 Gadoleic acid, 8045
- C<sub>20</sub>H<sub>38</sub>O<sub>4</sub>**  
 Eicosandioic acid, 6719
- C<sub>20</sub>H<sub>39</sub>NO<sub>2</sub>**  
 (-)-Spectraline, 20141
- C<sub>20</sub>H<sub>40</sub>N<sub>2</sub>O<sub>8</sub>**  
 Vitamin B<sub>15</sub>, 22557
- C<sub>20</sub>H<sub>40</sub>O**  
 Phytol, 17265
- C<sub>20</sub>H<sub>40</sub>O<sub>2</sub>**  
 Arachidic acid, 1598  
 Ethylisooctadecanoate, 7453  
 Ethyloctadecanoate, 7467  
 (4*R*)-4-Hydroxyisophytol, 10253  
 Phytene-1,2-diol, 17254
- C<sub>20</sub>H<sub>40</sub>O<sub>3</sub>**  
 2*Z*-Phytene-1,15,20-triol, 17255
- C<sub>20</sub>H<sub>42</sub>**  
 Eicosane, 6720
- C<sub>20</sub>H<sub>42</sub>O**  
 Eicosanol, 6722
- C<sub>20</sub>H<sub>50</sub>O<sub>5</sub>**  
*ent*-16 $\beta$ ,17,18-Trihydroxy-kauran-19-oic acid,

- 21756  
**C<sub>21</sub>H<sub>7</sub>NO<sub>3</sub>**  
 Retrofractamide D, 18660  
**C<sub>21</sub>H<sub>10</sub>O<sub>13</sub>**  
 Sanguisobiac acid dilactone, 19285  
**C<sub>21</sub>H<sub>14</sub>O<sub>4</sub>**  
 2-Benzylxanthopurpurin, 2299  
**C<sub>21</sub>H<sub>14</sub>O<sub>6</sub>**  
 Tephcalostan, 20964  
**C<sub>21</sub>H<sub>14</sub>O<sub>7</sub>**  
 Jusmicranthin methyl ether, 11973  
 Justicidin D, 11980  
 Taiwanin E methyl ether, 20645  
**C<sub>21</sub>H<sub>14</sub>O<sub>8</sub>**  
 Prostalidin A, 17955  
**C<sub>21</sub>H<sub>16</sub>NO<sub>5</sub><sup>+</sup>**  
 Chelirubine, 3508  
**C<sub>21</sub>H<sub>16</sub>O<sub>6</sub>**  
 Cassigarol B, 3286  
 Chinensin, 3530  
 Gancaonin F, 8139  
 Gerberinol I, 8333  
 Gnetal, 8877  
 Justicidin B, 11978  
 Retrojusticidin B, 18662  
 Scandenal, 19449  
 Vitrofolal D, 22593  
**C<sub>21</sub>H<sub>16</sub>O<sub>7</sub>**  
 Chinensinaphthol, 3531  
 Diphyllin, 6490  
 Parviflorol, 16678  
 Piscatorin, 17478  
**C<sub>21</sub>H<sub>16</sub>O<sub>8</sub>**  
 4'-Demethyldehydrodopodophyllotoxin, 5070  
**C<sub>21</sub>H<sub>16</sub>O<sub>9</sub>**  
 Anthraxin, 1371  
**C<sub>21</sub>H<sub>16</sub>O<sub>10</sub>**  
 3-Carboxy-6,7-dihydroxy-1-(3',4'-dihydroxy-phenyl)-naphthalene-9,2"-*O*-malic acid ester, 3167  
**C<sub>21</sub>H<sub>16</sub>O<sub>18</sub>S<sub>2</sub><sup>2-</sup>**  
 Isoscutellarein 8-*O*- $\beta$ -*D*-glucuronide 2",4"-disulfate, 11706  
**C<sub>21</sub>H<sub>17</sub>NO<sub>5</sub>**  
 Oxychelerythrine, 16443  
 Oxynitidine, 16454  
**C<sub>21</sub>H<sub>18</sub>CINO<sub>4</sub>**  
 Nitidine chloride, 15632  
**C<sub>21</sub>H<sub>18</sub>NO<sub>4</sub><sup>+</sup>**  
 Chelerythrine, 3498  
 Nitidine, 15631  
**C<sub>21</sub>H<sub>18</sub>N<sub>2</sub>O<sub>4</sub>**  
 Zanthobisquinolone, 22965  
**C<sub>21</sub>H<sub>18</sub>N<sub>2</sub>O<sub>5</sub>**  
*N*-Formylcorydamine, 7899  
 10-Methoxycamptothecin, 13863  
 9-Methoxycamptothecin, 13864  
**C<sub>21</sub>H<sub>18</sub>O<sub>4</sub>**  
 Candidin, 3071  
**C<sub>21</sub>H<sub>18</sub>O<sub>5</sub>**  
 [6",6"-Dimethylpyrano-(2",3":7,8)]-4'-methoxy-3-arylcoumarin, 6401  
 5-*O*-Methylalpinumisoflavone, 14131  
 3',4'-Methylenedioxy-7-hydroxy-6-isopentenyl flavone, 14371  
**C<sub>21</sub>H<sub>18</sub>O<sub>6</sub>**  
 Detetrahydroconidendrin B, 5280  
 Detetrahydroconidendrin C, 5281  
 Glycyrol, 8839  
 3'-Hydroxy-4'-*O*-methylalpinumisoflavone, 10466  
 Isoglycyrol, 11444  
 Piscisoflavone B, 17482  
**C<sub>21</sub>H<sub>18</sub>O<sub>7</sub>**  
 Artoindonesianin T, 1818  
 Burseranin, 2769  
 4,4'-Dimethoxyvulpinic acid, 6298  
 Pachycarin C, 16491  
**C<sub>21</sub>H<sub>18</sub>O<sub>8</sub>**  
 Lignan from *Justicia heterocarpa*, 12799  
**C<sub>21</sub>H<sub>18</sub>O<sub>9</sub>**  
 Pinnatifinoside A, 17394  
**C<sub>21</sub>H<sub>18</sub>O<sub>10</sub>**  
 Chrysin 7-*O*- $\beta$ -galactopyranuronoside, 3601  
**C<sub>21</sub>H<sub>18</sub>O<sub>11</sub>**  
 Apigenin-4'-*O*-glucuronide, 1493  
 Apigenin-7-*O*- $\beta$ -*D*-glucuronide, 1494  
 Baicalein-6-glucuronide, 2104  
 Baicalin, 2106  
 Rhein-8-*O*- $\beta$ -*D*-glucopyranoside, 18761  
**C<sub>21</sub>H<sub>18</sub>O<sub>12</sub>**  
 Breviscapine, 2606  
 Demethylwedelolactone-7-glucoside, 5102  
 Kaempferol-3- $\beta$ -*D*-glucuronide, 12065  
 Luteolin-3'-*O*-glucuronide, 13146  
 Luteolin-7-*O*- $\beta$ -*D*-glucuronide, 13147  
 3-*O*-methylellagic acid  
 3'-*O*- $\alpha$ -*L*-rhamnopyranoside, 14343  
 3-*O*-Methylellagic acid  
 4-*O*- $\alpha$ -*L*-rhamnopyranoside, 14344  
 3-*O*-Methylellagic acid  
 4'-*O*- $\alpha$ -*L*-rhamnopyranoside, 14345  
 4-*O*-Methylellagic acid 3'- $\alpha$ -rhamnoside, 14346  
 Scutellarin, 19587  
 5,7,2',5'-Tetrahydroxyflavone  
 7-*O*- $\beta$ -*D*-glucuronopyranoside, 21115  
 5,6,4'-Trihydroxyflavone-7-*O*- $\beta$ -*D*-galactonic acid, 21735  
**C<sub>21</sub>H<sub>18</sub>O<sub>13</sub>**  
 Mingjinianuronide A, 14872  
 Quercetin-3-*O*-glucuronide, 18371  
 Querciturone, 18414  
**C<sub>21</sub>H<sub>19</sub>NO<sub>4</sub>**  
 Buxifoliadine G, 2829  
 Dihydrochelerythrine, 5558  
**C<sub>21</sub>H<sub>19</sub>NO<sub>5</sub>**  
 Corynoloxine, 4117  
 Thaligluconone, 21257  
**C<sub>21</sub>H<sub>19</sub>NO<sub>6</sub>**  
 Isoarmottianamide, 11237  
 6-Oxocorynoline, 16303  
 Oxopurpureine, 16414  
**C<sub>21</sub>H<sub>19</sub>NO<sub>7</sub>**  
 Lederine, 12603  
**C<sub>21</sub>H<sub>19</sub>N<sub>3</sub>O<sub>2</sub>**  
 16-Methoxycarbonyl naufoline, 13876  
 19-*O*-Methylangustoline, 14139  
**C<sub>21</sub>H<sub>19</sub>N<sub>3</sub>O<sub>4</sub>**  
 16-Methoxycarbonyl-18,19-dihydroxynaufoline, 13874  
**C<sub>21</sub>H<sub>19</sub>O<sub>15</sub>S<sup>-</sup>**  
 Centabracein, 3387  
**C<sub>21</sub>H<sub>20</sub>NO<sub>4</sub>**  
 Fagaronine, 7704  
**C<sub>21</sub>H<sub>20</sub>NO<sub>13</sub>**  
 Isoaffnetin, 11198  
**C<sub>21</sub>H<sub>20</sub>N<sub>2</sub>O<sub>3</sub>**  
 Alstonine, 1002  
 Serpentine, 19762  
**C<sub>21</sub>H<sub>20</sub>O<sub>4</sub>**  
 Anhydronotoptol, 1278  
 Burtinol B, 2771  
 Crassichalcone, 4212  
 Danshenol A, 4627  
 Danshenxinkun D, 4635  
 3-Hydroxy-9-methoxy-10-(3,3-dimethylallyl) pterocarpene, 10398  
 Licoagrochalcone B, 12752  
**C<sub>21</sub>H<sub>20</sub>O<sub>5</sub>**  
 Anhydronotoptoloxide, 1279  
 Anticancer Flavonoid PMV70P691-026, 1404  
 1,7-Bis(4-hydroxy-3-methoxyphenyl)-1,4,6-heptatrien-3-one, 2466  
 Erylatissin A, 7305  
 Erypoeigin F, 7312  
 Gancaonin A, 8134  
 Glabroisoflavanone B, 8498  
 Glyrallin A, 8854  
 5-Hydroxy-4'-methoxy-2",2"-dimethylpyrano-

- (7,8:6",5")flavanone, 10400  
 Pervilline, 17004  
 Pervillinine, 17005  
 Sigmoidin C, 19887  
 Sterequinone B, 20336  
 Xanthohumol C, 22763
- C<sub>21</sub>H<sub>20</sub>O<sub>6</sub>**  
 Anhydroicaritin, 1273  
 Bursehemin, 2764  
 Chisolactone, 3540  
 Curcumin, 4398  
 4',5"-Dihydroxy-6"-methoxy-4",4"-dimethyl-4",5"-dihydro-6"*H*-pyrano[2",3":7,8]-isoflavone, 5973  
 Gancaonin B, 8135  
 Glicoricone, 8552  
 Glyasperin M, 8803  
 Glycycoumarin, 8833  
 Glycyrrhisoflavanone, 8843  
 Isoanhydroicaritin, 11222  
 Isoglycycoumarin, 11443  
 Isokaerophyllin, 11470  
 Kaerophyllin, 12106  
 Licoarylcoumarin, 12763  
 7-*O*-Methyluteone, 14568  
 Piscisoflavone A, 17481  
 Sophoflavescenol, 20078  
 Suchilactone, 20445  
 Topazolin, 21451  
 Ugonin C, 22176
- C<sub>21</sub>H<sub>20</sub>O<sub>7</sub>**  
 Anticancer Glycerol Ester PMV70P691-117, 1422  
 Calebin A, 2960  
 (+)-5'-Demethoxyepiexcelsin, 5046  
 4'-Demethyldeoxypodophyllotoxin, 5074  
*O*-[3-(2,2-Dimethyl-3-oxo-2*H*-furan-5-yl)-3-hydroxybutyl]bergaptol, 6389  
 Gancaonin D, 8137  
 Gancaonin P-3'-methylether, 8142  
 Glyasperin E, 8800  
 2-*O*-[2-(5-Hydroxy-2,6,6-trimethyl-3-oxo-2*H*-pyran-2-yl)ethyl]bergaptol, 10812  
 Kweichowenol B, 12398  
 Licofuranocoumarin, 12777  
 Licopyranocoumarin, 12782  
 Piperenol A, 17447  
 Piperenol B, 17448  
 Podoverin A, 17597  
 Uralene, 22238  
 Uralenol-3-methylether, 22242  
 Uvaribonol D, 22293  
 Uvarigranol G, 22299
- Zeylenol, 22988  
 (+)-Zeylenol, 22989
- C<sub>21</sub>H<sub>20</sub>O<sub>8</sub>**  
 (-)-Altissinone, 1009  
 Coniselin, 3990  
 4-Demethyl-picropodophyllotoxin, 5091  
 4-Demethyl-podophyllotoxin, 5093  
 2-(4-Hydroxy-3,5-dimethoxy-phenyl)-10-methoxy-3-methyl-2,3-dihydro-1,4,5-trioxaphenanthren-6-one, 10038  
 $\alpha$ -Peltatin, 16793
- C<sub>21</sub>H<sub>20</sub>O<sub>9</sub>**  
 Apigenin-5-rhamnoside, 1498  
 Chrysophanol-8-*O*- $\beta$ -*D*-glucopyranoside, 3619  
 Chrysophanol-1-*O*- $\beta$ -*D*-glucoside, 3620  
 Cleomiscosin C, 3831  
 Cleomiscosin D, 3832  
 Daidzin, 4606  
 Frangulin A, 7939  
 5,6,7,8,5'-Pentamethoxy-3',4'-methylenedioxyflavone, 16873  
 Puerarin, 18180  
 Sophoraflavone B, 20087
- C<sub>21</sub>H<sub>20</sub>O<sub>10</sub>**  
 Aloeemodin- $\omega$ -*O*- $\beta$ -*D*-glucopyranoside, 970  
 Aloeemodin-8-monoglucoside, 971  
 Anthraglycoside B, 1363  
 Apigenin-4'-*O*- $\beta$ -*D*-glucopyranoside, 1491  
 Apigenin-7-*O*-glucoside, 1492  
 Baicalein-7-*O*- $\beta$ -*D*-glucopyranoside, 2103  
 Emodin-1-*O*- $\beta$ -*D*-glucopyranoside, 6778  
 Emodin-3-*O*- $\beta$ -*D*-glucopyranoside, 6779  
 Genistein 7-glucoside, 8282  
 Genistein 8-*C*-glucoside, 8283  
 Isovitexin, 11773  
 Kaempferol-3-rhamnoside, 12082  
 Kaempferol-7-rhamnoside, 12083  
 Sophoricoside, 20099  
 Sorbarin, 20102  
 Sulfuretin glucoside, 20482  
 Tetuin, 21212  
 5,7,2'-Trihydroxyflavone 2'-*O*- $\beta$ -*D*-glucopyranoside, 21736  
 Vitexin, 22581
- C<sub>21</sub>H<sub>20</sub>O<sub>11</sub>**  
 Amoenin A<sub>3</sub>, 1069  
 Astragalin, 1935  
 Aureusidin-6-glucoside, 2012  
 Carthamone, 3225  
 Cernuocide, 3432  
 Cinaroside, 3674  
 Dihydrobaicalin, 5546  
 Galuteolin, 8120
- Homoorientin*, 9616  
 Isorhamnetin-3- $\alpha$ -*L*-arabofuranoside, 11652  
 Isoscutellarein 7-*O*- $\beta$ -*D*-glucopyranoside, 11705  
 Kaempferol 3-*O*- $\beta$ -*D*-glucopyranoside, 12050  
 Kaempferol-7-*O*-glucoside, 12062  
 Luteolin 7-*O*- $\beta$ -*D*-galactoside, 13143  
 Luteolin-4'-*O*-glucoside, 13145  
 Mollupentin, 14905  
 Orientin, 16196  
 Oroboiside, 16211  
 Plantaginin, 17505  
 Quercetin-3- $\alpha$ -*L*-rhamnufuranoside, 18379  
 Quercitrin, 18411  
 Rhodiolatusoside, 18791  
 Scutellarein-5-galactoside, 19584  
 Trifolin, 21634  
 Vincetoxicoside B, 22492
- C<sub>21</sub>H<sub>20</sub>O<sub>12</sub>**  
 (2*R*)-Eriodictyol-7-*O*- $\beta$ -*D*-glucopyranosiduronic acid, 7283  
 (2*S*)-Eriodictyol-7-*O*- $\beta$ -*D*-glucopyranosiduronic acid, 7284  
 Herbacin, 9424  
 6-Hydroxykaempferol-7-*O*-glucoside, 10273  
 8-Hydroxyluteolin-8- $\beta$ -*D*-glucopranoside, 10354  
 6-Hydroxyluteolin-7-*O*-glucoside, 10355  
 Hyperin, 10887  
 Isoarticalatin, 11238  
 Isohyperoside, 11461  
 Isoquercitrin, 11642  
 Myricetin-3- $\alpha$ -*L*-rhamnoside, 15184  
 Quercetin-4'-glucoside, 18368  
 Quercetin-5-*O*- $\beta$ -*D*-glucoside, 18369  
 Quercimeritrin, 18409  
 (2*S*)-5,7,2',5'-Tetrahydroxyflavanone 7-*O*- $\beta$ -*D*-glucuronopyranoside, 21111
- C<sub>21</sub>H<sub>20</sub>O<sub>13</sub>**  
 Cannabiscitrin, 3084  
 Gossypin, 8965  
 Gossypitrin, 8966  
 Iso-myricitrin, 11551  
 Quercetagerin-3-galactoside, 18309  
 Quercetageritrin, 18316  
 Tagetiin, 20608
- C<sub>21</sub>H<sub>20</sub>O<sub>13</sub>S**  
 Sulfemodin-8-*O*- $\beta$ -*D*-glucoside, 20468
- C<sub>21</sub>H<sub>21</sub>NO<sub>4</sub>**  
 Isochotensine, 11571  
 Ochotensine, 15918
- C<sub>21</sub>H<sub>21</sub>NO<sub>5</sub>**  
 Corycavine, 4099  
 Corynoline, 4116  
 (+)-14-Epicorynoline, 6874



- C<sub>21</sub>H<sub>21</sub>NO<sub>6</sub>**  
 Adlumine, 643  
 Corlumine, 4058  
 Cornigerine, 4059  
 (1*R*,9*R*)-Hydrastine, 9703  
*D*-(1*S*,9*R*)-Hydrastine, 9704  
 12-Hydroxycorynoline, 9938  
 Isorhoeadine, 11677  
 Methoxychelidonine, 13880  
 Rhoeadine, 18816  
 Zijinlongine, 23001
- C<sub>21</sub>H<sub>21</sub>NO<sub>7</sub>**  
 Narcotoline, 15268
- C<sub>21</sub>H<sub>21</sub>NO<sub>10</sub>**  
 6'-*O*-Galloylprunasin, 8114
- C<sub>21</sub>H<sub>21</sub>NO<sub>11</sub>**  
 Glochidacuminoside D, 8562
- C<sub>21</sub>H<sub>21</sub>N<sub>3</sub>O<sub>3</sub>**  
 Nauclechine, 15297  
 Naucleonidine, 15308
- C<sub>21</sub>H<sub>21</sub>O<sub>10</sub>**  
 Pelargonidin-3-galactoside, 16785
- C<sub>21</sub>H<sub>21</sub>O<sub>10</sub><sup>+</sup>**  
 Callistephin, 2978  
 Luteolinidin-5-glucoside, 13148
- C<sub>21</sub>H<sub>21</sub>O<sub>11</sub>**  
 Petunidin-3-arabinoside, 17025
- C<sub>21</sub>H<sub>21</sub>O<sub>11</sub><sup>+</sup>**  
 Chrysanthemin, 3594  
 Cyanidin-3-*O*- $\beta$ -*D*-galactoside, 4439  
 Cyanidin-4'-*O*- $\beta$ -*D*-glucopyranoside, 4442
- C<sub>21</sub>H<sub>21</sub>O<sub>12</sub><sup>+</sup>**  
 Delphinidin-3-*O*- $\beta$ -*D*-galactopyranoside, 5022  
 Delphinidin-3-glucoside, 5027
- C<sub>21</sub>H<sub>22</sub>NO<sub>4</sub><sup>+</sup>**  
 Dehydrocorybulbine, 4888  
 Palmatine, 16555  
 Thalphenine, 21266
- C<sub>21</sub>H<sub>22</sub>N<sub>2</sub>O<sub>2</sub>**  
 Isostrychnine, 11721  
 Kopsifoline D, 12265  
 Strychnine, 20410
- C<sub>21</sub>H<sub>22</sub>N<sub>2</sub>O<sub>3</sub>**  
 4-Hydroxystrychnine, 10734  
 Isostrychnine *N*-oxide, 11722  
 Pseudostrychnine, 18070  
 Strychnine *N*-oxide, 20411  
 Vallesiachotamine, 22328
- C<sub>21</sub>H<sub>22</sub>N<sub>2</sub>O<sub>4</sub>**  
 Picralinal, 17296
- C<sub>21</sub>H<sub>22</sub>O<sub>2</sub>**  
 5,7,3',5'-Tetrahydroxyflavanonol-3-*O*- $\beta$ -*D*-glucoside, 21112
- C<sub>21</sub>H<sub>22</sub>O<sub>3</sub>**  
 Benzoylpterisin B, 2267
- C<sub>21</sub>H<sub>22</sub>O<sub>4</sub>**  
 Bavachalcone, 2171  
 Bavachinin, 2173  
 Bergamotin, 2308  
 Burttinol A, 2770  
 Burttinol C, 2772  
 Gancaonin X, 8143  
 Gancaonin Y, 8144  
 8-Geranyloxy psoralen, 8326  
 4-Hydroxyderricin, 9992  
 Licochalcone A, 12766  
 Licochalcone C, 12768  
 Licochalcone E, 12770  
 3-*O*-Methylcalopocarpin, 14206  
 7-*O*-Methylglabranin, 14465  
 4'-*O*-Methylglabridin, 14466  
 Sandwicensin, 19251  
 Taxamairin A, 20745
- C<sub>21</sub>H<sub>22</sub>O<sub>5</sub>**  
 (-)-Aristotetralone, 1730  
 Cristacarpin, 4243  
 Dehydrogyasperin C, 4924  
 5-Deoxyabyssinin II, 5146  
 1",2"-Dihydroxanthohumol C, 5743  
 Erylatissin C, 7307  
 Futoquinol, 8040  
 Gancaonin I, 8140  
 Glyceollin IV, 8805  
 5-(6-Hydroxy-3,7-dimethylocta-2,7-dienyloxy) psoralen, 10053  
 Isoxanthohumol, 11783  
 Lespedezol D<sub>4</sub>, 12696  
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 Licoagrochalcone D, 12754  
 Licobenzofuran, 12764  
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 3'-Methoxyglabridin, 13941  
 (-)-4'-*O*-Methylenshicine, 14393  
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 1,2,5-Tri-*O*-methylglobuxanthone, 21960  
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- C<sub>21</sub>H<sub>22</sub>O<sub>6</sub>**  
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 $\alpha$ -*O*-Methylcubebin, 14264  
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 5'-Prenylhomoeriodictyol, 17833  
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- C<sub>21</sub>H<sub>22</sub>O<sub>7</sub>**  
 ( $\pm$ )-4'-*O*-Acetyl-3'-*O*-angeloyl-*cis*-khellactone, 317  
 (-)-3'-(*S*)-Acetyloxy-4'-(*S*)-angeloyloxy-3',4'-dihydroseselin, 476  
 Crotozambefuran C, 4275  
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 1 $\xi$ -Hydroxy-1,7-bis(4-hydroxy-3-methoxyphenyl)-6-heptene-3,5-dione, 9855  
 (2*S*,3*S*)-2-(4-Hydroxy-3,5-dimethoxybenzyl)-3-(3,4-methylenedioxybenzyl)butyrolactone, 10016  
 (2*S*,3*S*)-2-(4-Hydroxy-3-methoxybenzyl)-3-(5-methoxy-3,4-methylenedioxybenzyl)butyrolactone, 10388  
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 7,8-Seco-holostylone B, 19616  
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- C<sub>21</sub>H<sub>22</sub>O<sub>8</sub>**

- Bannamurpanisin, 2137  
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 3,5,6,7,3',4'-Hexamethoxyflavone, 9507  
 5,6,2',3',5',6'-Hexamethoxyflavone, 9508  
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 5,6,8,3',4',5'-Hexamethoxyflavone, 9511  
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- C<sub>21</sub>H<sub>22</sub>O<sub>9</sub>**  
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 Cassialoin, 3280  
 Dihydrodaidzin, 5580  
 1,3-Dihydroxy-6,7-dimethylxanthone-1-*O*- $\beta$ -*D*-glucoside, 5863  
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 5-Hydroxy-7,2',3',4',5',6'-hexamethoxyflavone, 10163  
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- C<sub>21</sub>H<sub>22</sub>O<sub>10</sub>**  
 2-*O*-Caffeoyl arbutin, 2893  
 Choerospondin, 3574  
 Dihydrogenistin, 5621  
 Dihydrokaempferol-3-*O*- $\alpha$ -*L*-rhamnopyranoside, 5659  
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 7-Hydroxyaloin A, 9773  
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 Isosalipurposide, 11693  
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 1 $\alpha$ ,3,2',4'-Tetrahydroxy-2'-*O*- $\beta$ -*D*-glucopyranosylchalcone, 21118  
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- C<sub>21</sub>H<sub>22</sub>O<sub>11</sub>**  
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 Bockioside A, 2524  
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 1,3-Dihydroxy-4,5-dimethoxyxanthone-1-*O*- $\beta$ -*D*-glucopyranoside, 5847  
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 Eriodictyol-7-glucoside, 7285  
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 Kaempferol 3-*O*- $\beta$ -*D*-galactopyranoside, 12047  
 Miscanthoside, 14884  
 Neocarthamin, 15358  
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 Steppogenin 4'-*O*- $\beta$ -*D*-glucoside, 20327  
 (2*S*)-5,7,2',5'-Tetrahydroxy-flavanone 7-*O*- $\beta$ -*D*-glucopyranoside, 21110  
 2,4,6-Trihydroxyacetophenone 3-*C*- $\beta$ -(2'-*O*-*p*-hydroxybenzoyl)-glucopyranoside, 21683
- C<sub>21</sub>H<sub>22</sub>O<sub>12</sub>**  
 Plantagoside, 17506  
 Quercetin-3-*O*- $\beta$ -*D*-galactopyranoside, 18356  
 (2*S*,3*S*)-(-)-Taxifolin-3-*O*- $\beta$ -*D*-glucopyranoside, 20792  
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- C<sub>21</sub>H<sub>22</sub>O<sub>13</sub>**  
 Myrciaphenone B, 15152  
 Myricetin-3-*O*- $\beta$ -*D*-galactopyranoside, 15176
- C<sub>21</sub>H<sub>22</sub>O<sub>14</sub>**  
 Methyl 4,6-di-*O*-galloyl- $\beta$ -*D*-glucopyranoside, 14293  
 Methyl 6-*O*-digalloyl- $\beta$ -*D*-glucopyranoside I, 14294  
 Methyl 6-*O*-digalloyl- $\beta$ -*D*-glucopyranoside II, 14295
- C<sub>21</sub>H<sub>23</sub>NO<sub>2</sub>**  
 Isolobelanine, 11506
- C<sub>21</sub>H<sub>23</sub>NO<sub>3</sub>**  
 (+)-Eschscholtzidine, 7359
- C<sub>21</sub>H<sub>23</sub>NO<sub>4</sub>**  
 Dehydroglaucine, 4923  
 Thalictrifoline, 21250
- C<sub>21</sub>H<sub>23</sub>NO<sub>5</sub>**  
 Allocryptopine, 930  
 Argemexicaine A, 1665  
 Argemexicaine B, 1666  
 Canadoline, 3055  
 Cryptopine, 4290
- Fumaricine, 7997  
 Homochelidonine, 9600  
 Romucosine D, 18904  
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 Thalimine, 21241
- C<sub>21</sub>H<sub>23</sub>NO<sub>6</sub>**  
 Canadinic acid, 3058  
 Colchicine, 3910  
*N*-Formyl-*N*-deacetylcolchicine, 7901  
 $\beta$ -Hydrastine, 9702  
 Papaverrubine B, 16625  
 Raddeanine, 18519  
 Romucosine H, 18907
- C<sub>21</sub>H<sub>24</sub>NO<sub>4</sub>**  
*N*-Methyl canadine, 14209  
 Takatonine, 20649
- C<sub>21</sub>H<sub>24</sub>N<sub>2</sub>O<sub>2</sub>**  
 Alstonerinal II\*, 1000  
 Alstonerine, 1001  
 Catharanthine, 3321  
 12-Methoxy-*N*<sub>9</sub>-methyl-vellosimine, 14039  
 Purpeline, 18210  
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 Venalstonine, 22374  
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- C<sub>21</sub>H<sub>24</sub>N<sub>2</sub>O<sub>3</sub>**  
 Ajmalicine, 783  
 19-(*Z*)-Akuammidine, 824  
 16-Epideacetylakuammiline, 6878  
 Gelseverine, 8261  
 16-Hydroxymethylpleiocarpamine, 10517  
 Lochnericine, 12944  
 Rauniticine, 18553  
 Rhazine, 18753  
 Tetrahydroalstonine, 21055  
 Vincarin, 22490  
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- C<sub>21</sub>H<sub>24</sub>N<sub>2</sub>O<sub>4</sub>**  
 Akuammidine *N*-oxide, 825  
*N*(4)-Demethylalstophyllal oxindole, 5060  
*N*(4)-Demethylalstophylline oxindole, 5061  
 16-Epideacetylakuammiline *N*(4)-oxide, 6879  
 16-Epi-voacarpine, 7039  
 11-Hydroxy-14,15 $\alpha$ -epoxytabersonine, 10093  
 16 $\beta$ -Hydroxy-19*S*-vindolinine *N*-oxide, 10824  
 Isoformosanine, 11426  
 Isomitraphylline, 11539  
 Isopteropodine, 11636  
 Mitraphylline, 14889  
 Pteropodine, 18114  
 Rauniticine oxindole A, 18554

- Uncarine B, 22204  
 Uncarine C, 22205  
 Uncarine D, 22206  
 Uncarine F, 22207  
 Vincoline, 22493
- C<sub>21</sub>H<sub>24</sub>N<sub>2</sub>O<sub>5</sub>**  
 16-Hydroxy-*N*(4)-demethylalstophyllal oxindole, 9977  
 16-Hydroxy-*N*(4)-demethylalstophylline oxindole, 9978
- C<sub>21</sub>H<sub>24</sub>O<sub>4</sub>**  
 Acuminatin, 591  
 (+)-Acuminatin, 592  
 (2*S*)-2',4'-Dihydroxy-7-methoxy-8-prenylflavan, 6001  
 2',4'-Dihydroxy-7-methoxy-8-prenylflavan, 6002  
 2',7-Dihydroxy-4'-methoxy-8-prenylflavan, 6003  
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- C<sub>21</sub>H<sub>24</sub>O<sub>5</sub>**  
 Acetoxyauraptene, 126  
 (-)-Denudatin B, 5135  
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 (-)8,8'*R*-Epi-holostylone, 6932  
 (-)8,8'*S*-Epi-holostylone, 6933  
 Fragransol C, 7933  
 Futokadsurin B, 8038  
 Futokadsurin C, 8039  
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 Hancinone B, 9210  
 (+)-Holostylone, 9592  
 Kadsurenone, 12010  
 (-)-Machilusin, 13295  
 Myricanone, 15165  
 Odoratisol A, 15994  
 Rutamarin, 19085  
 Schisandrone, 19475  
 Shikonofuran E, 19825
- C<sub>21</sub>H<sub>24</sub>O<sub>6</sub>**  
*L*-Arctigenin, 1621  
 Fargesone A, 7721  
 Fargesone B, 7722  
 Isoarctigenin, 11236  
 Isovalerylshikonin, 11765  
 Kadsurin A, 12013  
 $\alpha$ -Methyl-*n*-butyrylshikonin, 14202  
 Phillygenin, 17143  
 (+)-Pinoresinol monomethyl ether, 17418  
 7,8-Seco-holostylone A, 19615  
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- Xanthohumol H, 22766
- C<sub>21</sub>H<sub>24</sub>O<sub>7</sub>**  
 Ailantinol E, 778  
 Dihydrosamidin, 5707  
 Dihydrosinapyl ferulate, 5713  
 2,3,4,2',4',6'-Hexamethoxychalcone, 9506  
 $\beta$ -Hydroxyisovalerylshikonin, 10266  
 2-Hydroxy-3,2',6'-trimethoxy-4'-(2,3-epoxy-1-hydroxypropyl)-5-(3-hydroxy-1-propenyl) biphenyl, 10788  
 Lithospermidin A, 12927  
 Lithospermidin B, 12928  
 (+)-Medioresinol, 13640  
 (2*R*,3*R*)-5'-Methoxyguayanol, 13945  
 (2*S*,3*S*)-2-(5-Methoxy-3,4-methylenedioxy-benzyl)-3-(3,4-methylenedioxybenzyl)butane-1,4-diol, 14010  
 Peucedanocoumarin I, 17029  
 Trachelogenin, 21490  
 Visnadine, 22552  
 Xanthohumol G, 22765
- C<sub>21</sub>H<sub>24</sub>O<sub>8</sub>**  
 Albaspidin AA, 848  
 Deoxyrhaponticin, 5206  
 Mallotphenone, 13432  
 7*S*,8*S*-Nitidanin, 15630  
 Orientalide, 16186
- C<sub>21</sub>H<sub>24</sub>O<sub>9</sub>**  
 Anticancer Flavonoid PMV70P691-77, 1412  
 Cochinolide  $\beta$ -glucopyranoside, 3877  
 Glycyphyllin, 8834  
 Isorhapontin, 11673  
 Monnieraside I, 14917  
 Nodifloridin B, 15650  
 Rhaponticin, 18744  
 Rhapontigenin 3'-*O*- $\beta$ -*D*-glucopyranoside, 18749  
*cis*-3,5,3'-Trihydroxy-4'-methoxystilbene-3-*O*- $\beta$ -*D*-glucopyranoside, 21788
- C<sub>21</sub>H<sub>24</sub>O<sub>10</sub>**  
 1-Keto-3,10-epoxy-8 $\beta$ -*O*-methacryloyl-4,15-dihydroxy-5-acetoxy-2,11-germacradiene,6 $\alpha$ ,12-olide, 12198  
 Licoagroside F, 12762  
 Monnieraside III, 14919  
 Phloridzin, 17170  
 Pterosupin, 18164  
 Rocymosin B, 18895  
 Trilobatin, 21878  
 Triptephenoside, 21989
- C<sub>21</sub>H<sub>24</sub>O<sub>11</sub>**  
 (+)-Catechin-5-*O*-glucoside, 3315  
 Curculigoside B, 4386  
 Epicatechin-8-*C*- $\beta$ -*D*-galactopyranoside, 6863
- 3-Hydroxyphlorizin, 10645  
 Vanilloyl calleryanin, 22340
- C<sub>21</sub>H<sub>24</sub>O<sub>12</sub>**  
 2-Methoxy-5-hydroxymethyl-phenyl-1-*O*-(6''-galloyl)- $\beta$ -*D*-glucopyranoside, 13965  
 Rocymosin A, 18894
- C<sub>21</sub>H<sub>24</sub>O<sub>13</sub>**  
 3,5-Dimethoxy-4-hydroxyphenol 1-*O*- $\beta$ -*D*-(6''-*O*-galloyl)glucopyranoside, 6251  
 Palustroside, 16577
- C<sub>21</sub>H<sub>25</sub>NO<sub>3</sub>**  
 Carduchorone, 3191  
 Dehydrodeacetylheterophylloidine, 4897  
 Dehydropiperonaline, 4961
- C<sub>21</sub>H<sub>25</sub>NO<sub>4</sub>**  
 (-)-Argemonine, 1667  
 (+)-Corybulbine, 4098  
 Glaucine, 8513  
 Lienkonine, 12797  
 Tetrahydropalmatine, 21077  
 Thalicthuberine, 21247  
 Xylopinine, 22820  
 Yuanhunine, 22934
- C<sub>21</sub>H<sub>25</sub>NO<sub>5</sub>**  
 Acutifolidine, 596  
 Capauridine, 3114  
 Colchamine, 3909  
*N-trans*-4-*O*-Methylferuloyl 3',4'-*O*-dimethyldopamine, 14444
- C<sub>21</sub>H<sub>25</sub>NO<sub>6</sub>**  
 16-Oxohasubanonine, 16341
- C<sub>21</sub>H<sub>25</sub>NO<sub>7</sub>**  
 Oxoepesthamiersine, 16328  
 Oxostephamiersine, 16424
- C<sub>21</sub>H<sub>25</sub>NO<sub>10</sub>**  
 Nigrumin-5-ferulate, 15594
- C<sub>21</sub>H<sub>25</sub>N<sub>2</sub>O<sub>3</sub>**  
*N*4-Methyl angustilobine B, 14138
- C<sub>21</sub>H<sub>25</sub>N<sub>7</sub>O<sub>7</sub>**  
 Folinic acid, 7853
- C<sub>21</sub>H<sub>26</sub>NO<sub>4</sub>**  
 (*S*)-*trans*-*N*-Methyltetrahydrocolumbamine, 14748
- C<sub>21</sub>H<sub>26</sub>NO<sub>4</sub><sup>+</sup>**  
 Menisperine, 13716  
 Xanthoplanine, 22771
- C<sub>21</sub>H<sub>26</sub>N<sub>2</sub>O<sub>2</sub>**  
 Aspidospermatine, 1903  
 Chrysotricine, 3629  
 Coronaridine, 4080  
 Dihydrovindolinine, 5737  
 16-Epikopsinine, 6941  
 Isochrysotricine, 11330

- Kopsinine, 12268  
 10-Methoxyaffinisine, 13837  
 12-Methoxyaffinisine, 13838  
 17-*O*-Methylakagerine, 14123
- C<sub>21</sub>H<sub>26</sub>N<sub>2</sub>O<sub>3</sub>**  
 Alloyohimbine, 942  
 Corynanthine, 4115  
 Humantenine, 9659  
 15 $\alpha$ -Hydroxykopsinine, 10293  
 Isositsirikine, 11718  
 Protostrychnine, 17994  
 Pseudoyohimbine, 18074  
 Rhazimanine, 18752  
 Sitsirikine, 20000  
 Tabernaemontanine, 20575  
 Vincamine, 22489  
 Yohimbine, 22921
- C<sub>21</sub>H<sub>26</sub>N<sub>2</sub>O<sub>4</sub>**  
 Amsosinine, 1089  
 Aspidodasycarpine, 1901  
 Humantenirine, 9660  
 19-(*R*)-Hydroxydihydrogelsevirine, 10001  
 19-(*S*)-Hydroxydihydrogelsevirine, 10002  
 11-Hydroxyhumantenine, 10168  
 15-Hydroxyhumantenine, 10169  
 Isorhynchophyllic acid, 11678  
 Isorhynchophylline, 11679  
 Lonicerine, 12988  
 11-Methoxygelsemamide, 13938  
 Rhynchophyllic acid, 18825
- C<sub>21</sub>H<sub>26</sub>O<sub>2</sub>**  
 Cannabinol, 3082
- C<sub>21</sub>H<sub>26</sub>O<sub>3</sub>**  
 5-(1-Ethoxy-ethyl)-2-hydroxy-7-methoxy-1,8-dimethyl-9,10-dihydrophenanthrene, 7403  
 (3*S*,5*R*)-3-Hydroxy-5-ethoxy-1-(4-hydroxyphenyl)-7-phenyl-6*E*-heptene, 10099  
 (3*S*,5*S*)-3-Hydroxy-5-ethoxy-1-(4-hydroxyphenyl)-7-phenyl-6*E*-heptene, 10100  
 1-(4-Hydroxy-2-methoxyphenyl)-3-(4-hydroxy-3-prenylphenyl)propane, 10445  
 11 $\alpha$ -Hydroxy 18,20-oxido-3-oxo-pregna-1,4,17(20)-triene, 10557  
 Hypolide methyl ether, 10900  
 5-Methoxy-7-(4"-hydroxyphenyl)-1-phenyl-3-heptanone, 13967  
 Neridienone A, 15493  
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- C<sub>21</sub>H<sub>26</sub>O<sub>4</sub>**  
 Crocetin monomethyl ester, 4248  
 Dehydroagastol, 4875  
 Isonotriptophenolide, 11561
- 5-methoxy-7-(4"-hydroxy-3"-methoxyphenyl)-1-phenyl-3-heptanone, 13962  
 Neotriptophenolide, 15468  
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 Terresterone A, 21002
- C<sub>21</sub>H<sub>26</sub>O<sub>5</sub>**  
 Diarylheptanoid CPB-51-262-4, 5375  
 Futokadsurin A, 8037  
 Kadsurenin C, 12006  
 4-Methoxymachilin D, 13992  
 12-( $\alpha$ -Methyl butyryl)-14-acetyl-2*E*,8*E*,10*E*-attractylentriol, 14189  
 12-( $\alpha$ -Methyl butyryl)-14-acetyl-2*E*,8*Z*,10*E*-attractylentriol, 14190  
 (+)-*S*-Myricanol, 15159  
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 (-)-Nectandrin A, 15318  
 PC-66-633-3, 16744  
 Rosmaquinone A, 18922  
 Rosmaquinone B, 18923  
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- C<sub>21</sub>H<sub>26</sub>O<sub>6</sub>**  
 Biondinin A, 2387  
 Candosalvoquinone, 3069
- Cascarinin B**, 3252  
 Daphneligin, 4641  
 (2*S*,3*S*,1'*S*,2'*R*)-and(2*S*,3*S*,1'*R*,2'*R*)-2,3-Dihydro-5-(1',2'-dihydroxypropyl)-2-(3,4-dimethoxyphenyl)-7-methoxy-3-methylbenzofuran, 5596  
 (*E*)-3-(3,4-Dimethoxyphenyl)-2-propen-1-yl (Z)-2-[(Z)-2-methyl-2-butenoyloxymethyl]butenoate, 6288  
 5-*O*-Ethyl-hirsutanonol, 7445  
 Hexahydrocurcumin, 9498  
*erythro*-1-(4-Hydroxy-3-methoxyphenyl)-2-(4-allyl-2,6-dimethoxyphenoxy) propan-1-ol, 10434  
 Phantomolin, 17042  
 Scaphopetalone, 19456  
 Theraphin A, 21313
- C<sub>21</sub>H<sub>26</sub>O<sub>7</sub>**  
 Acetylerioflorin, 390  
 3 $\beta$ -Angeloyloxy-8 $\beta$ -methoxyeremophil-7(11)-ene-12,8 $\alpha$ (14 $\beta$ ,6 $\alpha$ )-diolide, 1230  
 Aspidinin, 1896  
 Eurycolactone A, 7639  
 5-Hydroxy-1-(3,4-dihydroxy-5-methoxyphenyl)-7-(4-hydroxy-3-methoxyphenyl)heptan-3-one, 10011
- 5-Hydroxy-1-(4-hydroxy-3-methoxyphenyl)-7-(3,4-dihydroxy-5-methoxyphenyl)heptan-3-one, 10183  
 5-Methoxy-*trans*-dihydrodehydrodiconiferyl alcohol, 13907  
 (-)-8-Methoxysolariciresinol, 13975  
 (-)-5'-Methoxysolariciresinol, 13976  
 5'-Methoxylariciresinol, 13986  
 Norcaesalpinin F, 15722  
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 Pseudolaric acid C, 18035
- C<sub>21</sub>H<sub>26</sub>O<sub>8</sub>**  
 Calealactone C, 2958  
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 15-Hydroxy-9 $\alpha$ -acetoxy-8 $\beta$ -isobutyryloxy-14-oxo-melampolide, 9755  
 Icarinol A<sub>1</sub>, 10940  
 Torosaflavone A, 21461
- C<sub>21</sub>H<sub>26</sub>O<sub>8</sub>S**  
 Shogasulfonic acid A, 19848
- C<sub>21</sub>H<sub>26</sub>O<sub>9</sub>**  
 Calealactone B, 2957
- C<sub>21</sub>H<sub>26</sub>O<sub>10</sub>**  
 Bruceolide, 2674
- C<sub>21</sub>H<sub>26</sub>O<sub>10</sub>S**  
 Shogasulfonic acid D, 19851
- C<sub>21</sub>H<sub>26</sub>O<sub>12</sub>**  
 Plumieride, 17571
- C<sub>21</sub>H<sub>26</sub>O<sub>13</sub>**  
 Scopoletin  $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside, 19544
- C<sub>21</sub>H<sub>27</sub>NO<sub>2</sub>**  
 Holonamine, 9591  
 Variegatine, 22348
- C<sub>21</sub>H<sub>27</sub>NO<sub>3</sub>**  
 Delcarduchol, 5002  
 3,18-Dioxo-11 $\alpha$ -hydroxycona-1,4-diene, 6469  
 1-[1-Oxo-9(3,4-methylenedioxyphenyl)-2*E*,8*E*-nonadienyl] piperidine, 16384
- C<sub>21</sub>H<sub>27</sub>NO<sub>4</sub>**  
 Laudanosine, 12563  
 Protostephanine, 17993
- C<sub>21</sub>H<sub>27</sub>NO<sub>5</sub>**  
 Hasubanone, 9245  
 Runanine, 19067
- C<sub>21</sub>H<sub>27</sub>NO<sub>6</sub>**  
 Stephamiersine, 20318
- C<sub>21</sub>H<sub>27</sub>NO<sub>7</sub>**  
 Clivorine, 3847  
 Trachelogenin amide, 21491
- C<sub>21</sub>H<sub>27</sub>N<sub>2</sub>O<sub>2</sub>**  
 Fluorocurine, 7841
- C<sub>21</sub>H<sub>27</sub>N<sub>3</sub>O<sub>3</sub>**

- Celafurine, 3358
- C<sub>21</sub>H<sub>27</sub>N<sub>3</sub>O<sub>6</sub>**  
Casimiroedine, 3275
- C<sub>21</sub>H<sub>27</sub>N<sub>7</sub>O<sub>14</sub>P<sub>2</sub>**  
Coenzyme I, 3893
- C<sub>21</sub>H<sub>27</sub>N<sub>7</sub>O<sub>17</sub>P<sub>3</sub>**  
Coenzyme II, 3894
- C<sub>21</sub>H<sub>28</sub>N<sub>2</sub>O<sub>2</sub>**  
Macrocarpine A, 13316
- C<sub>21</sub>H<sub>28</sub>N<sub>2</sub>O<sub>3</sub>**  
Alstohentine, 994  
Dihydrositsirikine, 5716
- C<sub>21</sub>H<sub>28</sub>N<sub>2</sub>O<sub>6</sub>**  
11-Methoxy-19-(*R*)-hydroxygelselegine, 13961
- C<sub>21</sub>H<sub>28</sub>O<sub>3</sub>**  
Pyrethrin I, 18255  
Salvibracteone, 19208  
Triptinin A, 21993
- C<sub>21</sub>H<sub>28</sub>O<sub>4</sub>**  
3 $\beta$ -Acetoxy-12-methoxy-13-methyl-podocarpan-8,11,13-trien-7-one., 254  
Adonilide, 644  
Anhydrohirundigenin, 1271  
Bractealine, 2584  
*r*-Cajucarin B, 2932  
11-Dehydrocorticosterone, 4887  
Erectquione A, 7223  
Geranyloxy sinapyl aldehyde, 8328  
Ialibinone A, 10929  
Ialibinone B, 10930  
Methyl 15,16-epoxy-12-oxo-8(17),13(16),14-*ent*-labdatrien-19-oate, 14408  
Neotussilagolactone, 15470  
Stizophyllin, 20386  
Taiwaniaquinol A, 20629  
Taiwaniaquinol D, 20632  
Taiwaniaquinone F, 20638  
Triptobenzene H, 21995  
Triptonoditerpenic acid, 22014
- C<sub>21</sub>H<sub>28</sub>O<sub>5</sub>**  
Aldosterone, 880  
Cascarinin C, 3253  
CinerinII, 3692  
Limbatolide A, 12834  
Ludongnin J, 13071  
7-Methoxyrosmanol, 14085  
1-Methylene-2,4a-dimethyl-6,8-dihydroxy-5-methoxy-7-(1,1-dimethyl hydroxymethyl)-1,2,3,4,9,10,10a-heptahydro-9-phenanthrone, 14359  
9 $\beta$ -(3-Methyl-pentoyl-3-ene)-parthenolide, 14667  
Taiwaniaquinone E, 20637  
Tricyclodehydroisohumulone, 21599
- C<sub>21</sub>H<sub>28</sub>O<sub>6</sub>**  
3 $\beta$ -Angeloyloxy-10 $\beta$ -hydroxy-6 $\beta$ -methoxy-eremophila-7(11),8(9)-dien-8,12-olide, 1227  
Angustifolin, 1245  
Candesalvone B methyl ester, 3068  
6-Epiangustifolin, 6826  
Epi-maoecrystal P, 6958  
Eupaglehnin D, 7563  
Macrocalyxin B, 13306  
Maoecrystal Q, 13538  
12-*O*-Methylcandesalvone B, 14210  
Nervosin, 15510  
Nigakilactone I, 15554  
Octahydrocurcumin, 15965  
Rabdosin A, 18496  
Sauriol B, 19416
- C<sub>21</sub>H<sub>28</sub>O<sub>6</sub>S**  
Bakkenolide D, 2120  
*S*-Fukinolide, 7988
- C<sub>21</sub>H<sub>28</sub>O<sub>7</sub>**  
3 $\beta$ -Acetoxy-8 $\beta$ -isobutyryloxyreynosin, 240  
3 $\beta$ -Angeloyloxy-8,12-epoxy-12 $\alpha$ -hydroxy-8 $\beta$ -methoxyeremophil-7(11)-en-14 $\beta$ ,6 $\alpha$ -olide, 1219  
Hancogenin B, 9212  
8-*O*-Isobutyryl-9 $\alpha$ -acetoxycumambrin B, 11292  
3'-Methoxysecoisolariciresinol, 14089  
Picrasin G, 17317  
Stauntonine, 20275  
Viguiestin, 22475
- C<sub>21</sub>H<sub>28</sub>O<sub>8</sub>**  
1-(4'-Hydroxy-3'-methoxyphenyl)-2-[4''-(3-hydroxypropyl)-2'',6''-dimethoxyphenoxy]propane-1,3-diol, 10446  
8 $\alpha$ -Isobutyryloxyanthemolide A, 11298  
8 $\alpha$ -Isobutyryloxyanthemolide C, 11299  
Ixiseriside, 11797  
Picrodendrin Q, 17336  
Vernoflexuocide, 22408
- C<sub>21</sub>H<sub>28</sub>O<sub>9</sub>**  
Anthemolide F, 1357  
Deacetylmatricarin 8-*O*- $\beta$ -glucopyranoside, 4750  
2 $\alpha$ -Hydroperoxy-8-*O*-isobutyryl-9 $\alpha$ -acetoxycumambrin B, 9730  
11 $\beta$ -Hydroxyleukodin 11-*O*- $\beta$ -glucopyranoside, 10319  
8-*O*-Isobutyryl-9-*O*-acetylanthemolide B, 11293  
Picrodendrin M, 17334  
Taraxinic acid-1'-*O*- $\beta$ -*D*-glucopyranoside, 20714
- C<sub>21</sub>H<sub>28</sub>O<sub>10</sub>**  
Picrodendrin A, 17332  
Taraxafolide, 20694
- C<sub>21</sub>H<sub>28</sub>O<sub>12</sub>**
- Cistanoside I, 3759  
Sibirioside A, 19867
- C<sub>21</sub>H<sub>28</sub>O<sub>13</sub>**  
Cistanoside F, 3756  
(6-*O*-(*E*)-*p*-Coumaroyl)- $\beta$ -*D*-fructofuranosyl-(2 $\rightarrow$ 1)- $\alpha$ -*D*-glucopyranoside, 4159  
Swertiamacroside, 20508
- C<sub>21</sub>H<sub>28</sub>O<sub>14</sub>**  
1-*O*-(*E*)-Caffeoyl- $\beta$ -gentiobiose, 2905  
1-*O*-(3'-*O*- $\beta$ -*D*-Glucopyranosyl)-(*E*)-caffeoyl- $\beta$ -*D*-glucopyranose, 8612
- C<sub>21</sub>H<sub>29</sub>BrN<sub>2</sub>**  
Flustramine A, 7843  
Flustramine B, 7844
- C<sub>21</sub>H<sub>29</sub>ClO<sub>7</sub>**  
(2*S*)-Pteroside K, 18122
- C<sub>21</sub>H<sub>29</sub>NO**  
1-Methyl-2-[(*Z*)-5-undecenyl]-4(1*H*)-quinolone, 14799  
1-Methyl-2-[(*Z*)-6-undecenyl]-4(1*H*)-quinolone, 14800
- C<sub>21</sub>H<sub>29</sub>NO<sub>2</sub>**  
Regholarrenine B, 18586
- C<sub>21</sub>H<sub>29</sub>NO<sub>3</sub>**  
Piperolein B, 17469  
Spiradine G, 20180
- C<sub>21</sub>H<sub>29</sub>NO<sub>4</sub>**  
Incarvine C, 11011
- C<sub>21</sub>H<sub>29</sub>N<sub>2</sub>O<sub>2</sub>**  
9-Methoxy-*N*<sub>6</sub>-methylgeissoschizol, 14024
- C<sub>21</sub>H<sub>29</sub>O<sub>6</sub>**  
Eupaglehnin A, 7560
- C<sub>21</sub>H<sub>30</sub>O**  
6-Dehydrohinokiol, 4929
- C<sub>21</sub>H<sub>30</sub>O<sub>2</sub>**  
Cannabichromene, 3077  
Cannabidiol, 3079  
Dehydroabietic acid methyl ester, 4874  
12-Methoxy-6,8,11,13-abietatraen-11-ol, 13825  
4-Nerolidylcatechol, 15505  
Progesterone, 17901  
 $\Delta^8$ -Tetrahydrocannabinol, 21058  
 $\Delta^9$ -Tetrahydrocannabinol, 21059
- C<sub>21</sub>H<sub>30</sub>O<sub>3</sub>**  
Cryptojaponol, 4281  
Deoxycorticosterone, 5163  
3 $\beta$ -Hydroxy-1-oxo-13-*O*-methyltarol, 10575  
8,11,13-Icetexantrien-10,11,12-triol, 10957  
Methyl dehydro-15-hydroxy-abietan-18-oate, 14285  
Methyl lambertianate, 14548  
(+)-Methyl vouacapenate, 14814  
Przewalskin C, 18009

- Sugikurojin F, 20462  
 Tupipregnenolone, 22117  
 Turricolol E, 22142
- C<sub>21</sub>H<sub>30</sub>O<sub>4</sub>**  
 Bornyl-2-methoxy-4-hydroxycinnamate, 2562  
 Corticosterone, 4096  
 10-Dehydrogingerdione, 4922  
 Geranyloxy sinapyl alcohol, 8327  
 Glaucopine A, 8521  
 Glaucopine B, 8522  
 3 $\beta$ -Hydroxy-*cis*-dehydrocrotonin, 9971  
 17-Hydroxy-11-deoxy-corticosterone, 9986  
 Otogirin, 16268  
 PC-66-633-5, 16741  
 Pinusolide, 17422  
 Triptonoterpenol, 22017
- C<sub>21</sub>H<sub>30</sub>O<sub>5</sub>**  
 Adhumulone, 628  
 Coetsoidin C, 3901  
 4-*O*-[(2*E*,5*E*)-3,7-Dimethyl-2,5-octadiene-7-*ol*]-  
 sinapyl alcohol, 6381  
 Enaimeone B, 6781  
 Humulone, 9678  
 17-Hydroxycorticosterone, 9937  
 1'-Hydroxyalibinone A, 10220  
 1'-Hydroxyalibinone B, 10221  
 Isohumulone A, 11459  
 Isohumulone B, 11460  
 Kamebacetal A, 12121  
 Kamebacetal B, 12122  
 Limbatolide B, 12835  
 Ludongnin F, 13067  
 Ludongnin G, 13068  
 Ludongnin H, 13069  
 Ludongnin I, 13070  
 (+)-15-Methoxyfloridolide A, 13929  
 (10*R*)-15-Methoxypinusolidic acid, 14069  
 (10*S*)-15-Methoxypinusolidic acid, 14070  
 Nelumol B, 15326  
 PC-66-633-1, 16742  
 Poststerone, 17741  
 4-Pregnene-17 $\alpha$ ,20 $\beta$ ,21-triol-3,11-dione, 17804  
 Taiwaniaquinol C, 20631  
 1,3,5-Trihydroxy-6-[2''',3'''-epoxy-3'''-methyl-  
 butyl]-2-[2''-methyl-butanoyl]-4-[3'-methyl-2'-  
 butenyl]-benzene, 21727
- C<sub>21</sub>H<sub>30</sub>O<sub>6</sub>**  
 6 $\beta$ -Angeloyloxy-10 $\beta$ -hydroxy-8 $\alpha$ -methoxyere-  
 mophil-7(11)-en-12,8 $\beta$ -olide, 1228  
 6 $\beta$ -Angeloyloxy-10 $\beta$ -hydroxy-8 $\beta$ -methoxyere-  
 mophil-7(11)-en-12,8 $\alpha$ -olide, 1229  
 Coetsoidin D, 3902  
 Humulinone, 9677
- Irroratin A, 11185  
 Nigakilactone A, 15547  
 PC-66-633-2, 16743  
 PC-66-633-4, 16745  
 Rabdonervosin B, 18481  
 Rubescensin W, 18978  
 Syringenin diisovalerate, 20559
- C<sub>21</sub>H<sub>30</sub>O<sub>7</sub>**  
 3 $\beta$ -Angeloyloxy-8 $\beta$ ,10 $\beta$ -dihydroxy-6 $\beta$ -  
 methoxyeremophilanolide, 1217  
 Isodotricin, 11402  
 Nigakihemiacetal E, 15544  
 Nigakilactone M, 15558  
 Nigakilactone N, 15559  
 Pteroside Z, 18131  
 Rabdoterin E, 18505  
 Rabdoterin F, 18506  
 Rabdoterin G, 18507  
 Rubescensin H, 18977  
 Taibaijaponicain A, 20620
- C<sub>21</sub>H<sub>30</sub>O<sub>8</sub>**  
 Cuminoside A, 4358  
 Eurycolactone, 7638  
 Methyl 8 $\alpha$ -(3,4-dihydroxy-2-methylene-  
 butanoyloxy)-6 $\alpha$ ,15-dihydroxyelema-  
 1,3,11(13)-trien-12-oate, 14312  
 Onitin-2'-*O*- $\beta$ -*D*-alloside, 16099  
 Onitin-2'-*O*- $\beta$ -*D*-glucoside, 16100  
 Onitinoside, 16101  
 Pteroside A, 18116  
 Pteroside D, 18121  
 Tithofolinolide, 21410  
 3 $\beta$ ,6 $\beta$ ,8 $\alpha$ -Triacetoxo-4 $\beta$ ,5 $\alpha$ -epoxy-1-oxo-  
 germacr-10(14)-ene, 21519
- C<sub>21</sub>H<sub>30</sub>O<sub>9</sub>**  
 11 $\beta$ ,13-Dihydro-taraxinic acid-1'-*O*- $\beta$ -*D*-  
 glucopyranoside, 5724  
 10 $\beta$ ,14-Dihydroxy-10(14),11 $\beta$ (13)-tetrahydro-  
 8,9-didehydro-3-deoxyzaluzanin C  
 10-*O*- $\beta$ -*D*-glucopyranoside, 6143  
 (3*S*)-3-Hydroxyatractylenolide III  
 3-*O*- $\beta$ -*D*-glucopyranoside, 9806  
 9 $\alpha$ -Hydroxy-11 $\beta$ ,13-dihydrozaluzanin C  
 3-*O*- $\beta$ -allopyranoside, 10012  
 Napiferoside, 15262  
 Prenantheside A, 17822  
 Pteroside W, 18129  
 Pteroside X, 18130  
 2*R*,3*R*-Pterosin L-2'-*O*- $\beta$ -*D*-glucoside, 18140  
 2*S*,3*R*-Pterosin L-2'-*O*- $\beta$ -*D*-glucoside, 18141
- C<sub>21</sub>H<sub>30</sub>O<sub>10</sub>**  
 15-*O*- $\beta$ -*D*-Glucopyranosyl-11 $\beta$ ,13-dihydro-  
 urospermal A, 8615
- (1'*S*,6'*R*)-8'-Hydroxyabscisic acid  $\beta$ -*D*-glucoside,  
 9748
- C<sub>21</sub>H<sub>30</sub>O<sub>11</sub>**  
 (2*E*)-2-Decene-4,6-diyne-1,8-diol 8-*O*- $\beta$ -*D*-apio-  
 furanosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside, 4842  
 3,4-Dihydroxyallylbenzene  
 4-*O*-[ $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 6)]- $\beta$ -*D*-gluco-  
 pyranoside, 5754  
 Gein, 8250  
 Gymnasterkoreaside B, 9105  
 Pectinolide F, 16752  
 4-Propenyl-2-methoxyphenyl  
 6-*O*- $\beta$ -*D*-apiofuranosyl  
 (1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside, 17922  
 Rhododendroketoside, 18795
- C<sub>21</sub>H<sub>30</sub>O<sub>12</sub>**  
 4-[ $\beta$ -*D*-Apiofuranosyl-(1 $\rightarrow$ 6)]- $\beta$ -*D*-glucopyra-  
 nosyloxy]-3-methoxypropiophenone, 1513  
 Coelovirin A, 3892  
 Coniferyl 9-*O*-[ $\beta$ -*D*-apiofuranosyl(1 $\rightarrow$ 6)]-*O*- $\beta$ -*D*-  
 glucopyranoside, 3984
- C<sub>21</sub>H<sub>30</sub>O<sub>13</sub>**  
 Acetylbarlerin, 330  
 6'-*O*- $\beta$ -Apiofuranosylsweroside, 1517  
 Ebractelatinoside C, 6668  
 Erythroxyloside B, 7346  
 Evernic acid methyl ester 2-*O*- $\beta$ -xylopyra-  
 nosyl-(1 $\rightarrow$ 6)- $\beta$ -glucopyranoside, 7662  
 Tectoroside, 20904
- C<sub>21</sub>H<sub>30</sub>O<sub>14</sub>**  
 6'-*O*-Acetyldideroside, 376  
 6'-*O*- $\alpha$ -*L*-Arabinopyranosylswertiamarin, 1593  
 Chironoside, 3539  
 Syringic acid methyl ester-4-*O*- $\beta$ -*D*-apiofura-  
 nosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranoside, 20567
- C<sub>21</sub>H<sub>31</sub>NO**  
 1-Methyl-2-undecyl-4(1*H*)-quinolilone, 14801
- C<sub>21</sub>H<sub>31</sub>NO<sub>4</sub>**  
*N*-Deethyl-*N*-19-didehydrosachaconitine, 4867  
 Liconosine A, 12781
- C<sub>21</sub>H<sub>32</sub>N<sub>2</sub>**  
 Conkurchine, 3991
- C<sub>21</sub>H<sub>32</sub>O<sub>2</sub>**  
 Cannabigerol, 3081  
*trans*-Communic acid methyl ester, 3945  
 1,4-Epoxy-16-hydroxyheneicos-1,3,12,14,18-  
 pentaene, 7117  
 Labda-7,12(*E*),14-triene-17-oic acid methyl ester,  
 12416  
 1-(3,4-Methylenedioxyphenyl)-1*E*-tetradecene,  
 14382  
 (-)-Methyl kaur-16-en-19-oate, 14543  
 12-*O*-Methylpisiferanol, 14679

- Pregnenolone, 17805  
 Urushiol III, 22274
- C<sub>21</sub>H<sub>32</sub>O<sub>3</sub>**  
 3 $\beta$ -Acetoxy-17 $\beta$ -hydroxy-androst-5-ene, 205  
 Agallochin O, 695  
 4(18),13-Clerodadien-3-oxo-15-oic acid methyl ester, 3835  
 Coronarin D methyl ether, 4085  
 10-Deoxy-4,18-epoxy-12-methoxy-4,5-seco-pisiferan-19-ol, 5170  
 15 $\alpha$ ,20 $\beta$ -Dihydroxy- $\Delta^4$ -pregnen-3-one, 6101  
 1 $\beta$ -Hydroxypisiferanol, 10657  
 12-Methoxy-8,11,13-abietatriene-7 $\beta$ ,11-diol, 13826  
 Preclavulone A methyl ester, 17773  
 Preclavulone A methyl ester 12-isomer, 17775  
 Salvicanol, 19209  
*trans*-10-Shogaol, 19847
- C<sub>21</sub>H<sub>32</sub>O<sub>4</sub>**  
 Ceriopsin A, 3423  
 Ceriopsin F, 3427  
 CPB5212-1492-2, 4205  
 17 $\alpha$ ,20 $R$ -Dihydroxypregnan-3,16-dione, 6100  
 Fukujusone, 7992  
 [10]-Gingerdione, 8388  
 Isoramanone, 11643  
 Methyl 16 $\alpha$ ,17-dihydroxy-*ent*-9(11)-kauren-19-oate, 14305  
 Methyl 7 $\alpha$ ,12 $\beta$ -dihydroxysandaracopimarate, 14317  
 Methyl 12-oxo-8 $\alpha$ -hydroxyabiet-13-en-19-oate, 14647  
 Ramanone, 18528
- C<sub>21</sub>H<sub>32</sub>O<sub>5</sub>**  
 Agallochin N, 694  
 1-[2',4'-Dihydroxy-3'-(3"-methylbut-2"-enyl)-5'-(1"-ethoxy-3"-methylbutyl)-6'-methoxy]-phenylethanone, 6022  
 16 $\alpha$ ,17-Dihydroxy-15-oxo-*ent*-kaur-19-oic acid methyl ester, 6067  
 Isoloneolone, 11497  
 Lineolone, 12880  
 Methyl 15-hydroxy-8 $\alpha$ ,12 $\alpha$ -epidioxiabiet-13-en-19-oate, 14504  
 Methyl 12-oxo-8 $\alpha$ ,15-dihydroxyabiet-13-en-19-oate, 14644  
 Nepetalic anhydride, 15488  
 Pergularin, 16917
- C<sub>21</sub>H<sub>32</sub>O<sub>6</sub>**  
 Ajugalide D, 798  
 Anhydrocinnzeylanol, 1264  
 Deacylmetaplexigenin, 4796  
 [6]-Gingediacetate, 8382
- 15 $\beta$ -Hydroxyisolineolone, 10248  
 15 $\beta$ -Hydroxylineolone, 10327  
 6 $\beta$ -(2'-Methylbutanoyloxy)-10 $\beta$ -hydroxy-8 $\alpha$ -methoxyeremophil-7(11)-en-12,8 $\beta$ -olide, 14170  
 6 $\beta$ -(2'-Methylbutanoyloxy)-10 $\beta$ -hydroxy-8 $\beta$ -methoxyeremophil-7(11)-en-12,8 $\alpha$ -olide, 14171  
 Methyl 15-hydroperoxy-8 $\alpha$ ,14 $\alpha$ ,12 $\alpha$ ,13 $\alpha$ -diepoxiabietan-13-en-19-oate, 14495  
 Methyl 15-hydroperoxy-8 $\alpha$ ,12 $\alpha$ -epidioxiabiet-13-en-19-oate, 14496  
 Nardostachin, 15276  
 Nervosinin A, 15508  
 Nigakihemiacetal C, 15543  
 Sibiricinone C, 19860  
 10 $\alpha$ ,16 $\alpha$ ,17-Trihydroxy-9 $\alpha$ -methyl-15-oxo-20-nor-kauran-19-oic acid methyl ester, 21807  
 Xindongnin K, 22807
- C<sub>21</sub>H<sub>32</sub>O<sub>7</sub>**  
 Furoneguinone B, 8029  
 Lushanrubescensin F, 13121  
 3 $\beta$ ,6 $\beta$ ,8 $\alpha$ -Triacetoxy-4 $\beta$ ,5 $\alpha$ -epoxygermacr-1(10)*E*-ene, 21518
- C<sub>21</sub>H<sub>32</sub>O<sub>8</sub>**  
 Alatoside C, 840  
 Alatoside D, 841  
 Mukaadial 6-*O*- $\alpha$ -L-rhamnopyranoside, 15025  
 Sonchuside A, 20073  
 3 $\beta$ ,6 $\beta$ ,8 $\alpha$ -Triacetoxy-4 $\beta$ ,5 $\alpha$ :1 $\alpha$ ,10 $\beta$ -diepoxygermacrane, 21514
- C<sub>21</sub>H<sub>32</sub>O<sub>9</sub>**  
 Cuminoside B, 4359  
 Mukaadial 6-*O*- $\beta$ -D-glucopyranoside, 15024
- C<sub>21</sub>H<sub>32</sub>O<sub>10</sub>**  
 Dendromonilide C, 5118  
 Dihydrophaseic acid 4'-*O*- $\beta$ -D-glucopyranoside, 5691
- C<sub>21</sub>H<sub>32</sub>O<sub>11</sub>**  
 Adinoside B, 637  
 Adinoside C, 638  
 Apiosylepirhododendrin, 1522  
 Dendromonilide B, 5117  
 Lonicercetalide A, 12985  
 Lonicercetalide B, 12986
- C<sub>21</sub>H<sub>32</sub>O<sub>12</sub>**  
 Cistanoside E, 3755  
 4'-Deoxykanokoside A, 5185
- C<sub>21</sub>H<sub>32</sub>O<sub>13</sub>**  
 Diospyrososide, 6463  
 2-(3-Hydroxy-4-methoxyphenyl)-ethyl-*O*- $\beta$ -D-glucopyranosyl (1 $\rightarrow$ 3)- $\beta$ -D-glucopyranoside, 10442
- 1-[ $\alpha$ -L-Rhamnosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl]-3,4,5-trimethoxybenzene, 18740  
 Sinuatol, 19960
- C<sub>21</sub>H<sub>32</sub>O<sub>14</sub>**  
 6-*O*- $\beta$ -D-Apiofuranosyl-mussaenosidic acid, 1516  
 6-*O*- $\alpha$ -L-Rhamnopyranosylcatalpol, 18694  
 Ulmoside, 22193
- C<sub>21</sub>H<sub>32</sub>O<sub>15</sub>**  
 3'-*O*- $\beta$ -D-Glucopyranosyl-catalpol, 8613  
 Melittoside, 13710  
 Rehmansioside A, 18596  
 Rehmansioside B, 18597
- C<sub>21</sub>H<sub>33</sub>NO<sub>3</sub>**  
 Dictysine, 5458
- C<sub>21</sub>H<sub>33</sub>NO<sub>4</sub>**  
 16 $\beta$ -Hydroxycardiopetaline, 9895
- C<sub>21</sub>H<sub>33</sub>NO<sub>7</sub>**  
 Lasiocarpine, 12535
- C<sub>21</sub>H<sub>33</sub>O<sub>3</sub>**  
*O*-Methylpisiferic acid, 14680
- C<sub>21</sub>H<sub>34</sub>NO<sub>2</sub><sup>+</sup>**  
*N*-Isopentenyl dendrobine, 11585
- C<sub>21</sub>H<sub>34</sub>N<sub>2</sub>**  
 Wrightiamine A, 22735
- C<sub>21</sub>H<sub>34</sub>O**  
 Cardanol, 3188
- C<sub>21</sub>H<sub>34</sub>O<sub>2</sub>**  
 Bilobol, 2380  
 1,4-Epoxy-16-hydroxyheneicos-1,3,12,14-tetraene, 7118  
 5 $\beta$ ,20-Epoxy-20-methoxy-ros-15-ene, 7165  
 3-(Pantadec-10-enyl)-catechol, 16622  
 5-Pregnene-3 $\beta$ ,20 $\alpha$ -diol, 17801
- C<sub>21</sub>H<sub>34</sub>O<sub>3</sub>**  
 Hydroginkgolic acid, 9718  
 2 $\alpha$ -Hydroxy-3,13-clerodadien-15-oic acid methyl ester, 9920  
 2 $\beta$ -Hydroxy-3,13-clerodadien-15-oic acid methyl ester, 9921  
 2 $\beta$ -Hydroxy-9-epi-*ent*-labda-8(17),13(*Z*)-dien-15-oic acid, 10076  
 (*S*)-12-Hydroxygeranylgeranic acid methyl ester, 10145  
 Isoobtusilactone B, 11568  
 Obtusilactone B, 15904  
 5-Pregnene-3 $\beta$ ,17 $\alpha$ ,20 $\alpha$ -triol, 17803  
 Siegesmethyletheric acid, 19880  
 Toosendansterol A, 21449  
 Toosendansterol B, 21450
- C<sub>21</sub>H<sub>34</sub>O<sub>4</sub>**  
 Annosquamosin D, 1328  
 Ceriopsin B, 3424

- [10]-Gingerol, 8397  
Methyl 16 $\alpha$ ,17-dihydroxy-*ent*-kauran-19-oate, 14304
- C<sub>21</sub>H<sub>34</sub>O<sub>5</sub>**  
Annosquamosin F, 1330  
15-Epi-sibiricinone D, 7020  
15-Epi-sibiricinone E, 7021  
Sibiricinone D, 19861  
Sibiricinone E, 19862  
Utendin, 22285
- C<sub>21</sub>H<sub>34</sub>O<sub>6</sub>**  
Deniagenin, 5129  
Sarcostin, 19361
- C<sub>21</sub>H<sub>34</sub>O<sub>8</sub>**  
Dendromonilide A, 5116  
Dictamnolide L, 5453
- C<sub>21</sub>H<sub>34</sub>O<sub>9</sub>**  
Alatoside B, 839  
Celerioside A, 3378  
Dendroside F, 5125
- C<sub>21</sub>H<sub>34</sub>O<sub>10</sub>**  
Dendromonilide D, 5119  
Dendroside G, 5126  
(*Z*)-(1*S*,5*R*)- $\beta$ -Pinen-10-yl- $\beta$ -vicianoside, 17378  
Sacranoside A, 19109  
(1*S*,5*R*,7*R*,10*R*)-Secoatractylolactone  
11-*O*- $\beta$ -D-glucopyranoside, 19606
- C<sub>21</sub>H<sub>34</sub>O<sub>11</sub>**  
(1*R*,4*S*,6*S*)-6-Hydroxycamphor- $\beta$ -D-apiofuranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside, 9879  
Patrinoside, 16720  
Valerosidatum, 22323
- C<sub>21</sub>H<sub>34</sub>O<sub>13</sub>**  
Phyllaemblicin D, 17207
- C<sub>21</sub>H<sub>34</sub>O<sub>14</sub>**  
Rehmannioside C, 18598
- C<sub>21</sub>H<sub>35</sub>NO**  
Funtumine, 8010  
Wrightiamine B, 22736
- C<sub>21</sub>H<sub>35</sub>O<sub>7</sub>**  
(5*R*,7*R*,10*S*)-Isopterocarpolone  $\beta$ -D-glucopyranoside, 11634
- C<sub>21</sub>H<sub>36</sub>N<sub>2</sub>O**  
Holarrhidine, 9586  
Holarrhimine, 9587
- C<sub>21</sub>H<sub>36</sub>O<sub>2</sub>**  
Alkylresorcinol A, 911  
Casealactone, 3257  
*ent*-16 $\alpha$ -Methoxy-kauran-17-ol, 13984  
Methyl labd-13*E*-en-15-oate, 14546  
5 $\alpha$ -Pregnane-3 $\beta$ ,20 $\beta$ -diol, 17784
- C<sub>21</sub>H<sub>36</sub>O<sub>4</sub>**  
[10]-Gingediol, 8385
- C<sub>21</sub>H<sub>36</sub>O<sub>5</sub>**  
Agallochin M, 693  
Desacylkondurangenin C, 5242  
 $\gamma$ -Eudesmol 11- $\alpha$ -L-rhamnoside, 7516  
Tomentogenin, 21437
- C<sub>21</sub>H<sub>36</sub>O<sub>7</sub>**  
Atractylolide C, 1976  
1 $\beta$ -D-Glucopyranosyloxy-6 $\alpha$ -hydroxy-eudesman-4(15)-ene, 8692  
Liriopeoside A, 12919
- C<sub>21</sub>H<sub>36</sub>O<sub>8</sub>**  
Alatoside A, 838  
Atractylolide G, 1979  
Celerioside B, 3379  
Celerioside C, 3380  
Celerioside D, 3381  
Dendroside A, 5122  
Dendroside E, 5124  
Dictamnolide H, 5449  
(1*S*,4*S*,5*R*,7*R*,10*R*)-11,14-Dihydroxyguai-3-one  
11-*O*- $\beta$ -D-glucopyranoside, 5902  
Integrifoside A, 11095  
Integrifoside B, 11096
- C<sub>21</sub>H<sub>36</sub>O<sub>9</sub>**  
Dictamnolide A, 5446  
Dictamnolide B, 5447  
Integrifoside C, 11097  
Integrifoside D, 11098  
(1*S*,4*S*,5*S*,7*R*,10*R*)-10,11,14-Trihydroxyguai-3-one  
11-*O*- $\beta$ -D-glucopyranoside, 21739  
(1*S*,4*S*,5*S*,7*R*,10*S*)-10,11,14-Trihydroxyguai-3-one  
11-*O*- $\beta$ -D-glucopyranoside, 21740
- C<sub>21</sub>H<sub>36</sub>O<sub>10</sub>**  
Atractylolide A, 1973  
Borneol-2-*O*- $\beta$ -D-apiofuranosyl(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside, 2551  
Borneol-2-*O*- $\alpha$ -L-arabinofuranosyl(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside, 2552  
10-Epiatractylolide A, 6833  
2-(8-Methyl-2,8-dihydroxy-9-oxo-2-hydroxymethylbicyclo[5.3.0]decan-7-yl)isopropanol glucoside, 14316  
Neohancoside A, 15401  
Shionoside A, 19831  
(4*S*)- $\alpha$ -Terpineol *O*- $\beta$ -D-Apiofuranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside, 20996
- C<sub>21</sub>H<sub>36</sub>O<sub>11</sub>**  
(1*S*,2*S*,4*R*)-*p*-Menth-8-ene-1,2-diol 2-*O*- $\beta$ -D-apiofuranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside, 13747  
Neohancoside B, 15402
- C<sub>21</sub>H<sub>37</sub>N<sub>3</sub>O<sub>2</sub>**  
Anhydrocannabisativine, 1262
- C<sub>21</sub>H<sub>38</sub>O<sub>4</sub>**  
Glycerol linolenate I, 8814
- C<sub>21</sub>H<sub>38</sub>O<sub>6</sub>**  
Cryptomeridiol 11- $\alpha$ -L-rhamnoside, 4284
- C<sub>21</sub>H<sub>38</sub>O<sub>8</sub>**  
Celerioside E, 3382  
Dendronobiloside B, 5121  
Icariside C<sub>3</sub>, 10948  
Ophiopogonoside A, 16150
- C<sub>21</sub>H<sub>38</sub>O<sub>9</sub>**  
Dictamnolide I, 5450  
Dictamnolide J, 5451
- C<sub>21</sub>H<sub>38</sub>O<sub>10</sub>**  
Atractylolide B, 1975  
Dictamnolide K, 5452  
2-(8-Methyl-2,8,9-trihydroxy-2-hydroxymethylbicyclo[5.3.0]decan-7-yl)isopropanolglucoside, 14782  
*O*- $\beta$ -D-Oleandropyranosyl-(1 $\rightarrow$ 4)-*O*- $\beta$ -D-cymaropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-oleandropyranose, 16032
- C<sub>21</sub>H<sub>39</sub>N<sub>7</sub>O<sub>13</sub>**  
Reticulin, 18654
- C<sub>21</sub>H<sub>39</sub>O<sub>5</sub>**  
Enaimeone A, 6780
- C<sub>21</sub>H<sub>40</sub>O<sub>2</sub>**  
Methyl 11-eicosenoate, 14336
- C<sub>21</sub>H<sub>40</sub>O<sub>4</sub>**  
 $\alpha$ -Monoolein, 14929  
 $\beta$ -Monoolein, 14930
- C<sub>21</sub>H<sub>40</sub>O<sub>5</sub>**  
Monoricinolein, 14932
- C<sub>21</sub>H<sub>41</sub>NO**  
1-(14-Methylhexadecanoyl)pyrrolidine, 14487
- C<sub>21</sub>H<sub>42</sub>O<sub>2</sub>**  
Heneicosanoic acid, 9360  
Methyl eicosanoate, 14335
- C<sub>21</sub>H<sub>42</sub>O<sub>4</sub>**  
1,2-*O*-[2'-Hydroxyoctadecyl]-glycerol, 10548  
1-*O*-Octadecanoyl glycerol, 15951
- C<sub>21</sub>H<sub>44</sub>**  
Heneicosane, 9359  
3-Methyl eicosane, 14334
- C<sub>22</sub>H<sub>14</sub>O<sub>6</sub>**  
3,3'-Biplumbagin, 2402  
3,8'-Biplumbagin, 2403  
Chitranone, 3541  
Diospyrin, 6459  
Isodiospyrin, 11379  
Isozeylanone, 11790  
Mamegakinone, 13463  
Neodiospyrin, 15392
- C<sub>22</sub>H<sub>15</sub>N<sub>3</sub>O<sub>4</sub>**



- Lycogaric acid A, 13197  
**C<sub>22</sub>H<sub>16</sub>O<sub>5</sub>**  
 Latinone, 12559  
**C<sub>22</sub>H<sub>16</sub>O<sub>6</sub>**  
 6 $\alpha$ ,12 $\alpha$ -Dehydromillettone, 4949  
**C<sub>22</sub>H<sub>16</sub>O<sub>7</sub>**  
 8-*C-p*-Hydroxybenzylkaempferol, 9845  
**C<sub>22</sub>H<sub>16</sub>O<sub>10</sub>**  
 Amurenisin, 1090  
**C<sub>22</sub>H<sub>16</sub>O<sub>12</sub>**  
 Fumarprotocetraric acid, 7998  
**C<sub>22</sub>H<sub>16</sub>O<sub>15</sub>S**  
 Myricatin, 15168  
**C<sub>22</sub>H<sub>17</sub>NO<sub>4</sub>**  
 Crinasiatine, 4239  
**C<sub>22</sub>H<sub>17</sub>N<sub>3</sub>O<sub>3</sub>**  
 Cinereapyrrole B, 3691  
**C<sub>22</sub>H<sub>17</sub>N<sub>3</sub>O<sub>4</sub>**  
 Cinereapyrrole A, 3690  
**C<sub>22</sub>H<sub>18</sub>N<sub>2</sub>O<sub>5</sub>**  
 20-*O*-Acetylcampthothecin, 341  
**C<sub>22</sub>H<sub>18</sub>O<sub>4</sub>**  
 Diospyrol, 6460  
 1-*p*-Hydroxybenzyl-4-methoxyphenanthrene-  
 2,7-diol, 9848  
 Ovalifolin, 16274  
**C<sub>22</sub>H<sub>18</sub>O<sub>5</sub>**  
 Chamanetin, 3463  
 Howiinin A, 9654  
 Isochamanetin, 11321  
**C<sub>22</sub>H<sub>18</sub>O<sub>6</sub>**  
 Vitrofolal C, 22592  
**C<sub>22</sub>H<sub>18</sub>O<sub>7</sub>**  
 Chaihunaphthone, 3451  
 Chinensinaphthol methyl ether, 3532  
 12a-Epimillettosin, 6971  
 Griffonianone B, 9008  
 Justicidin A, 11977  
 Justicidin C, 11979  
**C<sub>22</sub>H<sub>18</sub>O<sub>8</sub>**  
 Cleistanone, 3816  
 Dehydropodophyllotoxin, 4962  
**C<sub>22</sub>H<sub>18</sub>O<sub>9</sub>**  
 4',5',7-Triacetoxy-2'-methoxyisoflavone, 21528  
 Triacetylhispidulin, 21534  
**C<sub>22</sub>H<sub>18</sub>O<sub>10</sub>**  
 (-)-Epicatechin-3-*O*-gallate, 6864  
**C<sub>22</sub>H<sub>18</sub>O<sub>11</sub>**  
 Epigallocatechin 3-gallate (EGCG), 6923  
 (+)-Leucocyanidin gallate, 12715  
**C<sub>22</sub>H<sub>18</sub>O<sub>12</sub>**  
 Chicoric acid, 3518  
**C<sub>22</sub>H<sub>18</sub>O<sub>13</sub>**  
 4-(4'-*O*-Acetyl- $\alpha$ -rhamnopyranosyl)ellagic acid,  
 492  
 Nyssoside, 15880  
**C<sub>22</sub>H<sub>18</sub>O<sub>18</sub>S<sub>2</sub><sup>2-</sup>**  
 Isoscutellarein 4'-methyl ether 8-*O*- $\beta$ -*D*-  
 glucuronide 2'',4''-disulfate, 11709  
**C<sub>22</sub>H<sub>19</sub>NO<sub>5</sub>**  
 Ethoxysanguinarine, 7416  
**C<sub>22</sub>H<sub>19</sub>NO<sub>6</sub>**  
 Bungeanine, 2744  
**C<sub>22</sub>H<sub>19</sub>NO<sub>9</sub>**  
 3,4-Methylenedioxy-10-hydroxy  
 aristololactam-*N*- $\beta$ -*D*-glucoside, 14370  
**C<sub>22</sub>H<sub>19</sub>NO<sub>10</sub>**  
 Aristolactam AIIIa *N*- $\beta$ -*D*-glucoside, 1694  
**C<sub>22</sub>H<sub>19</sub>O<sub>15</sub>S<sup>-</sup>**  
 Isoscutellarein 4'-methyl ether  
 8-*O*- $\beta$ -*D*-glucuronide 2''-sulfate, 11710  
**C<sub>22</sub>H<sub>20</sub>NO<sub>5</sub><sup>+</sup>**  
 Chelilutine, 3507  
**C<sub>22</sub>H<sub>20</sub>NO<sub>6</sub><sup>+</sup>**  
 Leptocarpine, 12672  
**C<sub>22</sub>H<sub>20</sub>O<sub>4</sub>**  
 Gymconopin A, 9099  
 Gymconopin B, 9100  
 1-(*p*-Hydroxybenzyl)-4-methoxy-9,10-dihydro-  
 phenanthrene-2,7-diol, 9846  
 3-(*p*-Hydroxybenzyl)-4-methoxy-9,10-dihydro-  
 phenanthrene-2,7-diol, 9847  
**C<sub>22</sub>H<sub>20</sub>O<sub>5</sub>**  
 3,5-Dimethoxy-2'',2''-dimethylpyrano-(5'',6'':8,7)-  
 flavone, 6222  
 Dimethylalpinumisoflavone, 6313  
 Gnetupendin A, 8897  
 Rhinacanthin M, 18776  
**C<sub>22</sub>H<sub>20</sub>O<sub>6</sub>**  
 Gnetupendin B, 8898  
 Howiinol A, 9655  
 Indicanine E, 11016  
 Millettocalyxin B, 14857  
**C<sub>22</sub>H<sub>20</sub>O<sub>7</sub>**  
 $\beta$ -Apopicropodophyllin, 1533  
 Artoindonesianin S, 1817  
 Methyl 4,4'-dimethoxyvulpinate, 14321  
**C<sub>22</sub>H<sub>20</sub>O<sub>8</sub>**  
 Isopicropodophyllone, 11592  
 (*cis*-head-to-head)-Limettin dimer, 12836  
 (*cis*-head-to-tail)-Limettin dimer, 12837  
 Peperomin E, 16906  
 Picropodophyllone, 17341  
 Podophyllotoxone, 17594  
**C<sub>22</sub>H<sub>20</sub>O<sub>9</sub>**  
 3,5-Diacetyltambulin, 5347  
 Hyosgerin, 10874  
 Venkatasin, 22376  
**C<sub>22</sub>H<sub>20</sub>O<sub>10</sub>**  
 Licoagroside C, 12759  
**C<sub>22</sub>H<sub>20</sub>O<sub>11</sub>**  
 Baicalein 6-methylether-7-*O*- $\beta$ -galactopyranuro-  
 noside, 2105  
 Irlone 4'-*O*- $\beta$ -*D*-glucoside, 11159  
 Kaempferol-3-*O*- $\alpha$ -*L*-3''-acetyl-arabinofuranoside,  
 12021  
 Kaempferol-3-*O*- $\alpha$ -*L*-5''-acetyl-arabinofuranoside,  
 12022  
 Oroxylin A 7-*O*-glucuronide, 16217  
 Palustrinoside, 16575  
 Wogonoside, 22720  
**C<sub>22</sub>H<sub>20</sub>O<sub>12</sub>**  
 Bracteoside, 2585  
 Clerodendroside A, 3839  
 3,4'-*O*-Dimethylellagic acid 4-*O*- $\alpha$ -*L*-rhamno-  
 pyranoside, 6347  
 Hispidulin-7-*O*-glucuronide, 9566  
 Isoscutellarein 4'-methyl ether 8-*O*- $\beta$ -*D*-glucu-  
 ronide, 11707  
 Quercetin-3-*O*- $\alpha$ -*L*-(3''-*O*-acetyl)-arabinofura-  
 noside, 18319  
 Quercetin-3-*O*- $\alpha$ -*L*-(5''-*O*-acetyl)-arabinofura-  
 noside, 18320  
 3,5,4'-Trihydroxy-6,7-methylenedioxyflavone-  
 3-*O*- $\beta$ -*D*-glucopyranoside, 21799  
**C<sub>22</sub>H<sub>21</sub>NO<sub>5</sub>**  
 Bocconoline, 2523  
 Chelerythrine methanolate, 3499  
**C<sub>22</sub>H<sub>21</sub>N<sub>3</sub>O<sub>2</sub>**  
 Acetonylevodiamine, 114  
**C<sub>22</sub>H<sub>22</sub>NO<sub>6</sub>**  
 Alborine, 866  
**C<sub>22</sub>H<sub>22</sub>N<sub>2</sub>O<sub>4</sub>**  
 Venacarpine A, 22372  
**C<sub>22</sub>H<sub>22</sub>O<sub>4</sub>**  
 3,3'-Dihydroxy-2-(4-hydroxybenzyl)-5-  
 methoxybibenzyl, 5905  
 Microphyllone, 14844  
**C<sub>22</sub>H<sub>22</sub>O<sub>5</sub>**  
 Anticancer Flavonoid PMV70P691-107, 1410  
 Ponganone I, 17713  
 Praecansone B, 17753  
**C<sub>22</sub>H<sub>22</sub>O<sub>6</sub>**  
 Erypoeigin G, 7313  
 Glycyrin, 8838  
 Licoricone, 12794  
**C<sub>22</sub>H<sub>22</sub>O<sub>7</sub>**  
 Angelafolone, 1187  
 Anhydropodorhizol, 1280

- Anthricin, 1372  
 Anthricin isomer, 1373  
 Artoindonesianin Q, 1815  
 Artoindonesianin R, 1816  
 Baohuosu, 2144  
 Dulxanthone E, 6633  
 Isoanthricin, 11228  
 Isochaihulactone, 11318  
 Nemosin, 15331  
 Pyramidin H, 18248
- C<sub>22</sub>H<sub>22</sub>O<sub>8</sub>**  
 Anticancer Glycerol Ester PMV70P691-118, 1423  
 (2*S*,3*S*)-2,3-Bis(5-methoxy-3,4-methylene-dioxybenzyl)-butyrolactone, 2483  
 7-Hydroxyanhydropodorhizol, 9789  
 $\beta$ -Peltatin, 16794  
 Picropodophyllin, 17337  
 Podophyllotoxin, 17592
- C<sub>22</sub>H<sub>22</sub>O<sub>9</sub>**  
 Chrysoeriol 6-*C*- $\beta$ -*L*-boivinopyranoside, 3605  
 Formononetin-7-glucoside, 7885  
 Isoanonin, 11576  
 Kaplanin, 12157  
 8-Methoxy-5-*O*-glucoside flavone, 13942  
 4'-*O*-Methylpuerarin, 14706  
 Nantenoside A, 15247  
 Nantenoside B, 15248  
 Strobilanthin, 20393
- C<sub>22</sub>H<sub>22</sub>O<sub>10</sub>**  
 Acacetin-7-*O*- $\beta$ -*D*-galactopyranoside, 57  
 Anthraglycoside A, 1362  
 Derriscandenoside A, 5222  
 Echioidinin-2'-*O*- $\beta$ -*D*-glucopyranoside, 6695  
 Echioidinin-5-*O*- $\beta$ -*D*-glucopyranoside, 6696  
 2-( $\beta$ -*D*-Glucopyranosyloxy)-8-hydroxy-1-methoxy-3-methyl-9,10-anthraquinone, 8696  
 Glycitiin, 8819  
 3'-Hydroxy-4'-methoxyisoflavone-7-*O*- $\beta$ -*D*-glucoside, 10413  
 Isoswertisin, 11724  
 Lasianthuoside A, 12531  
 $\alpha$ -Maackiain- $\beta$ -*D*-glucoside, 13282  
 7-Methoxykaempferol 3-*O*- $\alpha$ -*L*-rhamnopyranoside, 13983  
 3'-Methoxypuerarin, 14080  
 Physcion-8-*O*- $\beta$ -*D*-glucopyranoside, 17251  
 Prunetin 4'-*O*- $\beta$ -*D*-glucopyranoside, 18002  
 Pteroisauoside, 18106  
 Sophojaponicin, 20079  
 Swertisin, 20515  
 Tilianin, 21391  
 Wogonin 5- $\beta$ -*D*-glucoside, 22719
- C<sub>22</sub>H<sub>22</sub>O<sub>11</sub>**  
 Azalein, 2053  
 Chrysoeriol 4'-*O*- $\beta$ -*D*-glucopyranoside, 3608  
 Chrysoeriol 7-*O*- $\beta$ -*D*-glucopyranoside, 3609  
 2-*O*-Cinnamoyl-glucogallin, 3703  
 (2*S*)-7,2'-Dihydroxy-5-methoxyflavone 7-*O*- $\beta$ -*D*-glucuronopyranoside, 5980  
 Diosmetin 7-*O*- $\beta$ -*D*-glucopyranoside, 6453  
 3-*O*- $\beta$ -*D*-Glucopyranosyl-5,9,4'-trihydroxy-8-methoxyflavone, 8744  
 Homoplataginin, 9617  
 Isorhamnetin-3- $\alpha$ -*L*-rhamnofuranoside, 11663  
 Isorhamnetin 3-*O*-rhamnoside, 11666  
 Isoscoparin, 11699  
 Leptosin, 12678  
 Nodososide, 15654  
 Oroboside-3'-methylether, 16212  
 Putorinoside B, 18227  
 Rhamnocitrin-3-*O*- $\beta$ -*D*-glucoside, 18684  
 7*α*-*L*-Rhamnosyl-6-methoxyluteolin, 18743  
 Stachannin A, 20252  
 Swertijaponin, 20505  
 Tectoridin, 20900  
 5,7,2'-Trihydroxy-8-methoxyflavone 2'-*O*- $\beta$ -*D*-glucopyranoside, 21778  
 5,7,2'-Trihydroxy-8-methoxyflavone 7-*O*- $\beta$ -*D*-glucopyranoside, 21779
- C<sub>22</sub>H<sub>22</sub>O<sub>12</sub>**  
 Alliumoside A, 925  
 Cacticin, 2843  
 Dracunculifoside B, 6581  
 Eriodietyl 7-*O*- $\beta$ -*D*-(6'-methylester)-glucuronopyranoside, 7277  
 Eupafolin-7-glucoside, 7557  
 4-*O*-(6'-*O*-Galloyl- $\beta$ -*D*-glucopyranosyl)-*cis*-*p*-coumaric acid, 8104  
 2-(3-Hydroxy-4-methoxyphenyl)-3,5-dihydroxy-7-*O*- $\beta$ -*D*-glucopyranoside-4*H*-1-benzopyran-4-one, 10437  
 Isorhamnetin-3-*O*-glucoside, 11659  
 Isorhamnetin-5-*O*-glucoside, 11660  
 Mearnsitrin, 13628  
 6-Methoxykaempferol 3-*O*-glycoside, 13982  
 3-*O*-Methyl quercetin 7-*O*- $\beta$ -*D*-glucopyranoside, 14711  
 Ordoritin-glucoside, 16173  
 Pedaliin, 16757  
 Putorinoside A, 18226  
 Rhamnetin-3-galactoside, 18680
- C<sub>22</sub>H<sub>22</sub>O<sub>13</sub>**  
 1-*O*-(*E*)-Caffeoyl-3-*O*-galloyl- $\beta$ -*D*-glucopyranose, 2902  
 3-*O*-(*E*)-Caffeoyl-4-*O*-galloyl- $\beta$ -*D*-glucopyranose, 2903
- C<sub>22</sub>H<sub>23</sub>NO<sub>4</sub>**  
 Ochotensimine, 15917  
 Tylophoridicine D, 22148  
 Tylophorimidine, 22152
- C<sub>22</sub>H<sub>23</sub>NO<sub>5</sub>**  
 3*α*,7*β*-Dibenzoyloxy-6*β*-hydroxy-tropine, 5385  
 Tylophoridicine E, 22149  
 Tylophoridicine F, 22150
- C<sub>22</sub>H<sub>23</sub>NO<sub>6</sub>**  
 Corydalic acid methyl ester, 4102  
 Simulansamide, 19905
- C<sub>22</sub>H<sub>23</sub>NO<sub>7</sub>**  
 $\alpha$ -Narcotine, 15266  
 $\beta$ -Narcotine, 15267
- C<sub>22</sub>H<sub>23</sub>NO<sub>8</sub>**  
 Acuminaminoside, 590
- C<sub>22</sub>H<sub>23</sub>O<sub>11</sub><sup>+</sup>**  
 Malvidin-3-arabinoside, 13457  
 Peonidin-3-glucoside, 16901
- C<sub>22</sub>H<sub>23</sub>O<sub>12</sub>**  
 Petunidin-3-glucoside, 17027
- C<sub>22</sub>H<sub>24</sub>CINO<sub>6</sub>**  
 Romucosine F, 18905
- C<sub>22</sub>H<sub>24</sub>NO<sub>4</sub><sup>+</sup>**  
 Dehydrocorydaline, 4889
- C<sub>22</sub>H<sub>24</sub>N<sub>2</sub>O<sub>3</sub>**  
 $\alpha$ -Colubrine, 3930  
 $\beta$ -Colubrine, 3931  
 Icajine, 10939  
 Kopsifoline E, 12266  
 16-Methoxystrychnine, 14095  
 Venacarpine B, 22373
- C<sub>22</sub>H<sub>24</sub>N<sub>2</sub>O<sub>4</sub>**  
 11-Demethoxymyrtoidine, 5050  
 16-Hydroxy- $\alpha$ -colubrine, 9930  
 16-Hydroxy- $\beta$ -colubrine, 9931  
 2-Hydroxy-3-methoxystrychnine, 10457  
 4-Hydroxy-3-methoxystrychnine, 10459  
 6-Oxoalstophyllal, 16292  
 6-Oxoalstophylline, 16293  
 3-Oxo-11-methoxytabersonine, 16379  
 Vomocine, 22614

- C<sub>22</sub>H<sub>24</sub>N<sub>2</sub>O<sub>5</sub>**  
Methyl  
11,12-methylenedioxy-*N*<sub>1</sub>-decarbomethoxychano-  
nofruticosinate, 14596
- C<sub>22</sub>H<sub>24</sub>N<sub>2</sub>O<sub>6</sub>**  
10,11-Dimethoxynareline, 6270
- C<sub>22</sub>H<sub>24</sub>O<sub>4</sub>**  
Anticancer Flavonoid PMV70P691-82, 1413  
Candidone, 3072  
Taxamairin B, 20746  
Xuulanin, 22810
- C<sub>22</sub>H<sub>24</sub>O<sub>5</sub>**  
(2*S*)-5,7-Dimethoxy-8-(2*R*-hydroxy-3-methyl-  
3-butenyl)-flavanone, 6245  
(2*S*)-5,7-Dimethoxy-8-(2*S*-hydroxy-3-methyl-  
3-butenyl)-flavanone, 6246  
Glyasperin K, 8802  
Sigmoidin B-4'-methyl ether, 19886  
Spherosinin, 20152
- C<sub>22</sub>H<sub>24</sub>O<sub>5</sub>**  
Tomentolide B, 21439  
Erypoegein D, 7310  
Schizandrin C, 19497  
Urinatetralin, 22258  
Xanthanthusin K, 22754
- C<sub>22</sub>H<sub>24</sub>O<sub>7</sub>**  
6β-Acetylteuscordin, 525  
Aschantin, 1843  
Crotozambefuran A, 4273  
Dihydroanhydrodorphizol, 5543  
*rel*-(7*R*,8*R*,7'*R*,8'*R*)-3,4,3',4'-Dimethylenedioxy-  
5,5'-dimethoxy-7,7'-epoxylignan, 6348  
Echinoisoflavanone, 6690  
Epiaschantin, 6832  
Gomisin R, 8924  
Hemiariensin, 9343  
Heteroclitin G, 9466  
Melafolone, 13653  
Nodifloridin A, 15649  
Pyramidatin F, 18246  
Urinaligran, 22257  
Valafolone, 22309
- C<sub>22</sub>H<sub>24</sub>O<sub>8</sub>**  
*trans*-4,5-Bis(4-acetoxy-3-methoxyphenyl)-1,3-  
dioxacyclohexane, 2424  
Butyl rosmarinate, 2805  
(8*R*,8'*R*)-4-Hydroxycubebinone, 9949  
(2*S*,3*S*)-2-(4-Hydroxy-3,5-dimethoxybenzyl)-3-  
(5-methoxy-3,4-methylenedioxybenzyl)butyrol  
actone, 10015  
**7-Hydroxyatein**, 10833  
Nymphone, 15879  
Plaunol E, 17552
- C<sub>22</sub>H<sub>24</sub>O<sub>9</sub>**  
9,9-Bisacetylneoolivil, 2426  
3,5,6,7,3',4',5'-Heptamethoxyflavone, 9403  
3,5,6,8,3',4',5'-Heptamethoxy flavone, 9404  
3,5,7,8,3',4',5'-Heptamethoxyflavone, 9405  
5,6,7,8,3',4',5'-Heptamethoxy flavone, 9406  
Homonataloin, 9615  
Medicarpin-3-*O*-glucoside, 13639
- C<sub>22</sub>H<sub>24</sub>O<sub>10</sub>**  
Biochanin-7-glucoside, 2386  
4''-Hydroxyimperatorin 4''-*O*-β-*D*-glucopyra-  
noside, 10231  
Licoagroside D, 12760  
Licoagroside E, 12761  
Scorzocreticoside I, 19562  
2,3,5,4'-Tetrahydroxystilbene-2-*O*-(6''-*O*-acetyl)-  
β-*D*-glucopyranoside, 21154
- C<sub>22</sub>H<sub>24</sub>O<sub>11</sub>**  
Caffeoyl calleryanin, 2894  
Hesperetin-5-glucoside, 9457  
Lanceolin, 12466  
3'-Methyl eriodictyol-7-*O*-β-*D*-glucoside, 14418  
7-*O*-Methyl luteolin-6-*C*-β-*D*-glucoside, 14566  
Mopanolside, 14950  
Protogenkwanin-4'-glucoside, 17974  
Scuteamoenoside, 19581
- C<sub>22</sub>H<sub>24</sub>O<sub>12</sub>**  
Torachryson-8-*O*-β-*D*-(6'-oxayl)-glucoside,  
21454  
4-*O*-β-*D*-(6-*O*-Vanilloyl glucopyranosyl) vanillic  
acid, 22343
- C<sub>22</sub>H<sub>25</sub>NO**  
Exozoline, 7697
- C<sub>22</sub>H<sub>25</sub>NO<sub>2</sub>**  
Lobelanine, 12938  
Mahanimbini, 13399
- C<sub>22</sub>H<sub>25</sub>NO<sub>6</sub>**  
Colchicine, 3911  
*N*-Ethoxycarbonyllauretanine, 7397  
Glaudine, 8523  
β-Lumicolchicine, 13073  
Mecambridine, 13630
- C<sub>22</sub>H<sub>25</sub>N<sub>2</sub>O<sub>7</sub>**  
Pseudopalmatine methyl nitrate, 18054
- C<sub>22</sub>H<sub>26</sub>Br<sub>3</sub>N<sub>3</sub>O<sub>4</sub>**  
Purpuramine L, 18213
- C<sub>22</sub>H<sub>26</sub>NO<sub>5</sub><sup>+</sup>**  
*N*-Methylphoebine, 14674
- C<sub>22</sub>H<sub>26</sub>N<sub>2</sub>O<sub>2</sub>**  
Alstonerinal, 999
- C<sub>22</sub>H<sub>26</sub>N<sub>2</sub>O<sub>3</sub>**  
Alstophyllal, 1005  
Alstophylline, 1006
- Corynantheine, 4114  
Geissoschizine methyl ether, 8251  
Hirsuteine, 9552  
Kopsifoline F, 12267
- C<sub>22</sub>H<sub>26</sub>N<sub>2</sub>O<sub>4</sub>**  
Aricine, 1680  
Corynoxene, 4118  
Gambireine, 8125  
14-β-Hydroxy-3-isoraunicine, 10264  
Isocorynoxene, 11347  
Kopsifoline A, 12262  
Lochnerinine, 12947  
Methyl 12-methoxy-*N*<sub>1</sub>-decarbomethoxychano-  
fruticosinate, 14585  
Raumitorine, 18551  
Reserpinine 1, 18634
- C<sub>22</sub>H<sub>26</sub>N<sub>2</sub>O<sub>5</sub>**  
Vineridine, 22502  
Volkensine, 22610
- C<sub>22</sub>H<sub>26</sub>N<sub>2</sub>O<sub>6</sub>**  
Alkaloid US-7, 906  
Alkaloid US-8, 907  
11,12-Methylenedioxykopsinaline *N*(4)-oxide,  
14373
- C<sub>22</sub>H<sub>26</sub>N<sub>4</sub>**  
Calycanthine, 3002  
Chimonanthine, 3527
- C<sub>22</sub>H<sub>26</sub>O<sub>4</sub>**  
(+)-Bornyl piperate, 2563  
Cannabinolic acid, 3083  
Danshenol B, 4628
- C<sub>22</sub>H<sub>26</sub>O<sub>5</sub>**  
6-Allyl-7-(3,4-dimethoxyphenyl)-2,3-dimethoxy-  
8-methyl-tricyclo[4.2.0.0<sup>2,8</sup>]oct-3-en-5-one,  
946  
(-)-Aristoligone, 1709  
3,4-Dimethoxy-3',4'-methylenedioxy-7,9'-epoxy-  
lignan-9-ol, 6262  
(+)-8,8'-Epi-aristoligone, 6830  
(-)-8,8'-Epi-aristoligone, 6831  
Glyasperin D, 8799  
Mammearin A, 13472  
Wallichimine, 22628
- C<sub>22</sub>H<sub>26</sub>O<sub>6</sub>**  
(-)-Acetoxycollinin, 147  
Burcellin, 2759  
Burseran, 2768  
Coetsoidin A(Wang), 3899  
Dimethylmatairesinol, 6367  
Eriocalysin E, 7271  
Eudesmin, 7512  
Gingerenone B, 8390  
(-)-Gomisin L<sub>1</sub>, 8918

- (-)-Gomisin L<sub>2</sub>, 8919  
 (±)-Gomisin M<sub>1</sub>, 8920  
 (+)-Gomisin M<sub>2</sub>, 8921  
 Isogingerenone B, 11438  
 Orthosilignin, 16220  
 Pinoresinol dimethyl ether, 17414  
 Pseudolaric acid H, 18041  
 Schisanhenol B, 19478
- C<sub>22</sub>H<sub>26</sub>O<sub>7</sub>**  
 Binankadsurin A, 2381  
 Caesalpinin I, 2871  
 (-)-Clusin, 3851  
 Crotochryliferan, 4267  
 2-Deoxy-8-*O*-acetyl pumilin, 5141  
 2-Deoxy-5-deoxy-8-*O*-acetyl-17,18-epoxy pumilin, 5143  
 (-)-Dihydroclusin, 5561  
 (2*R*-*trans*)  
 2,3-Dihydro-2-(4-hydroxy-3-methoxyphenyl)-3-(hydroxymethyl)-7-methoxy-5-benzofuranpropionyl acetate, 5641  
 1-[2,4-Dihydroxy-3-(3-hydroxy-2-methoxy-3-methylbutyl)-6-methoxyphenyl]-3-(4-hydroxyphenyl)propanone, 5911  
 Enanderianin F, 6786  
 Glaucolactone, 8514  
 (+)-4-Hydroxy-2,6-di(3,4-dimethoxyphenyl)-3,7-dioxabicyclo[3.3.0]octane, 9995  
 Neociwujiaphenol, 15365  
 Pseudolaric acid F, 18039  
 Teuquadrin B, 21229  
 Woorenogenin, 22726
- C<sub>22</sub>H<sub>26</sub>O<sub>8</sub>**  
 Albaspidin AP, 850  
 Euparotin acetate, 7580  
 Liatrin, 12746  
 Magnostellin B, 13394  
 Pseudolaric acid C<sub>2</sub>, 18036  
 (+)-Syringaresinol, 20556  
 2,6,2',6'-Tetramethoxy-4,4'-bis(2,3-epoxy-1-hydroxypropyl)biphenyl, 21178  
 Teucrolivin H, 21220  
 Xerophilusin E, 22790
- C<sub>22</sub>H<sub>26</sub>O<sub>9</sub>**  
 Ciwujiatone, 3783  
 Daldinin C, 4611  
 Eleganin, 6737
- C<sub>22</sub>H<sub>26</sub>O<sub>10</sub>**  
 Asebotin, 1847  
 Auriculoside, 2016  
 Benzyl 2β-*O*-*D*-glucopyranosyl-3,6-dimethoxybenzoate, 2289  
 Forsythenside A, 7922
- Melampyroside, 13656  
 Trifochalcanolide I, 21631
- C<sub>22</sub>H<sub>26</sub>O<sub>11</sub>**  
 15-Acetyl-13α(21)-epoxyeurycomanone, 389  
 Curculigoside, 4385  
 1'-*O*-β-*D*-(3,4-Dihydroxyphenyl)-ethyl-6'-*O*-vanilloyl-glucopyranoside, 6085  
 7-*O*-Methyl leucopelargonidin-3-mono-glucofuranoside, 14552  
 4'-*O*-Methyl leucopelargonidin-3-mono-glucofuranoside, 14553  
 Trifochalcanolide II, 21632  
 Veronicoside, 22415  
 Yunngnoside A, 22955
- C<sub>22</sub>H<sub>26</sub>O<sub>12</sub>**  
 Catalposide, 3307  
 Curculigoside C, 4387  
 Rubinaphthin C, 19034
- C<sub>22</sub>H<sub>26</sub>O<sub>13</sub>**  
 Seguinose H, 19671  
 3,4,5-Trimethoxyphenyl (6'-*O*-galloyl)-β-*D*-glucopyranoside, 21926  
 Verproside, 22419
- C<sub>22</sub>H<sub>27</sub>ClO<sub>8</sub>**  
 Eupachifolin D, 7539  
 Eupachlorin acetate, 7551
- C<sub>22</sub>H<sub>27</sub>ClO<sub>9</sub>**  
 Eupachinilide F, 7545
- C<sub>22</sub>H<sub>27</sub>NO<sub>2</sub>**  
 Lobeline, 12939
- C<sub>22</sub>H<sub>27</sub>NO<sub>3</sub>**  
 Cyclostachine A, 4536  
 2,3-Dimethoxy-6-(3-oxo-butyl)-7,9,10,11,11a,12-hexahydrobenzo[*f*]pyrrolo[1,2-*b*]isoquinoline, 6272  
 7'-(4'-Hydroxy,3'-methoxyphenyl)-*N*-[(4-butylphenyl)ethyl]propanamide, 10435
- C<sub>22</sub>H<sub>27</sub>NO<sub>4</sub>**  
 (+)-Corydaline, 4103  
 Thalicsessine, 21245
- C<sub>22</sub>H<sub>27</sub>NO<sub>5</sub>**  
 Didehydrostemofoline, 5470  
 Guanfu base Q, 9051  
 Muramine, 15079  
 Thalicsimidine, 21246
- C<sub>22</sub>H<sub>27</sub>O<sub>11</sub>S**  
 (-)-Lyoniresinol-2a-sulfate, 13254
- C<sub>22</sub>H<sub>28</sub>N<sub>2</sub>O<sub>2</sub>**  
*N*(4)-Methyl-*N*(4),21-seco-talpinine, 14724  
 Talcarpine, 20652
- C<sub>22</sub>H<sub>28</sub>N<sub>2</sub>O<sub>3</sub>**  
 Dihydrocorynantheine, 5569  
 Hirsutine, 9553
- 10-Methoxycathafoline, 13878  
 Vincorine, 22495  
 Voacangine, 22597
- C<sub>22</sub>H<sub>28</sub>N<sub>2</sub>O<sub>4</sub>**  
 Alstovenine, 1007  
 Catharosine, 3323  
 Corynoxine, 4119  
 Corynoxine B, 4120  
 Diangoutengjian I, 5357  
 Gambirine, 8127  
 Isogambirine, 11432  
 Isorhynchophylline, 11680  
 10-Methoxycathafoline *N*(4)-oxide, 13879  
 11-Methoxyhumantenine, 13948  
 9-Methoxy-3-*epi*-α-yohimbine, 14108  
 Rhynchophylline, 18826  
 Venenatine, 22375
- C<sub>22</sub>H<sub>28</sub>N<sub>2</sub>O<sub>5</sub>**  
 Anti-isorhynchophylline *N*-oxide, 1458  
 Kopsifoline B, 12263  
 Rhynchophylline *N*-oxide, 18827  
 Rotundifoline, 18943
- C<sub>22</sub>H<sub>28</sub>N<sub>2</sub>O<sub>6</sub>**  
 Kopsifoline C, 12264  
 3-Oxo-7-hydroxy-3,7-secorhynchophylline, 16353
- C<sub>22</sub>H<sub>28</sub>N<sub>2</sub>O<sub>11</sub>**  
 Capparilide B, 3137
- C<sub>22</sub>H<sub>28</sub>O<sub>3</sub>**  
 Dehydroguggulsterone M, 4925
- C<sub>22</sub>H<sub>28</sub>O<sub>4</sub>**  
 2-Acetoxy-1,15-beyeradiene-3,12-dione, 134  
 Crocetin dimethyl ester, 4246
- C<sub>22</sub>H<sub>28</sub>O<sub>5</sub>**  
 17-Acetoxyjolkinalide A, 245  
 15-Acetoxy-7-oxo-dehydroabiatic acid, 271  
 Di-*O*-methyltetrahydrofurguaiacin B, 6410  
 (-)-Galbelgin, 8088  
 (+)-Galbelgin, 8089  
 (±)-Galgravin, 8093  
 Hancinol, 9208  
 5α-*p*-Hydroxybenzoyloxydauc-2-ene-1-one, 9829  
 Isorecedensolide, 11645  
 Kuhistanicaol B, 12312  
 Liangshanin B, 12740  
 Liangshanin C, 12741  
 Pyrethrin II, 18256  
 Recedensolide, 18562  
 Saucermetin, 19404  
 Veraguensin, 22383
- C<sub>22</sub>H<sub>28</sub>O<sub>6</sub>**  
 Apetalic acid, 1470  
 Caesalmin B, 2864

- Calanolide E<sub>2</sub>, 2942  
 Calolongic acid, 2988  
 Cascarillin B, 3249  
 Coleon U 11-acetate, 3920  
 Cornutin G, 4070  
 Cornutin H, 4071  
 Disparpropylinol B, 6516  
 Effusin, 6715  
 Gomisin J, 8914  
 Isoapetalic acid, 11230  
 Isocalolongic acid, 11303  
 Isodoacetal, 11381  
 LS-2(furanoditerpenelactone), 13015  
 Macrophyllin B, 13319  
 Maoecrystal A, 13523  
 Maoecrystal B, 13524  
 Maoecrystal U, 13542  
 Nigakilactone D, 15549  
 Pellucidin A, 16791  
 Picrasmin, 17327  
 Pseudolaric acid A, 18031  
 Quassin, 18299  
 Surinamensin, 20492  
 Theraphin B, 21314  
 Theraphin C, 21315
- C<sub>22</sub>H<sub>28</sub>O<sub>7</sub>**  
 16-*O*-Acetylcoleon C, 358  
 Acetylleptocarpin, 447  
 3 $\beta$ -Angeloyloxy-8 $\beta$ -ethoxyeremophil-7(11)-ene-12,8 $\alpha$ (14 $\beta$ ,6 $\alpha$ )-diolide, 1223  
 Biondinin B, 2388  
 Caesalpinin H, 2870  
 Caesalpinin O, 2884  
 Enmein-3-acetate, 6805  
 1,5-Epoxy-3-hydroxy-1-(4-hydroxy-3,5-dimethoxyphenyl)-7-(4-hydroxy-3-methoxyphenyl)heptane, 7119  
 Eriocalysin C, 7269  
 4-[1-Ethoxyl-1-(4'-hydroxy-3'-methoxy)benzyl]methyl-2-(4-hydroxy-3-methoxy)benzyl-3-hydroxymethyl-tetrahydro-furan, 7409  
 Eupachinilide I, 7548  
 Eupacunin, 7553  
 Eupaglehnnin B, 7561  
 Eupaserrin, 7581  
 Eupatocunin, 7584  
 (-)-Fargesol, 7720  
 Hiyodorilactone B, 9571  
 5 $\zeta$ -Hydroxy-1-(4-hydroxy-3,5-dimethoxyphenyl)-7-(4-hydroxy-3-methoxyphenyl)-3-heptanone, 10178  
 5 $\zeta$ -Hydroxy-7-(4-hydroxy-3,5-dimethoxyphenyl)-1-(4-hydroxy-3-methoxyphenyl)-3-heptanone, 10179  
 Isodonal, 11392  
 Laxiflorin M, 12590  
 (+)-Leosibiricin, 12663  
 Leosibiricin, 12664  
 8 $\alpha$ -(*Z*-2-Methyl-4-acetoxybut-2-enoyloxy)-15-hydroxygermacra-1(10),*E*,4*Z*,11(13)-trien-12,6 $\alpha$ -olide, 14113  
 Nepetaefuran, 15483  
 Orthosiphon Z, 16241  
 Pseudolaric acid G, 18040  
 Rugosanin, 19049  
 Trichorabdal B, 21564  
 Trichorabdal C, 21565  
 Trichorabdal F acetate, 21569  
 Trichorabdal G, 21570  
 Trichorabdal H, 21572  
 1-(3,4,5-Trimethoxyphenyl)-2-propenyl 2-(2-methyl-2*Z*-butenoyloxymethyl)-2*Z*-butenoate, 21930  
 Ursiniolide A, 22268  
 Xerophilusin A, 22786  
 Xerophilusin F, 22791
- C<sub>22</sub>H<sub>28</sub>O<sub>8</sub>**  
 3 $\beta$ -Acetoxy-9 $\beta$ -angeloyloxy-1 $\beta$ ,10 $\beta$ -epoxy-8 $\alpha$ -hydroxyeremophil-7(11)-en-8 $\beta$ (12)-olide, 123  
 8 $\alpha$ -[(4-Acetoxy-5-hydroxy)-angelate]salonitenolide, 206  
 4'-Acetylnicin, 357  
 Caesalmin A, 2863  
 Carpalsionin, 3219  
 6-Deacetyl-teucrolivin A, 4789  
 Eupachinilide J, 7549  
 Eupacunolin, 7554  
 Eupacunoxin, 7555  
 Eupatocunoxin, 7585  
 Hiyodorilactone A, 9570  
 8 $\alpha$ -(3-Hydroxy-4-acetoxy-2-methylene-butanoyloxy)-dehydro-melitensin, 9759  
 Isodonoic acid, 11393  
 (+)-Lyoniresinol, 13249  
 Oreskaurin A, 16176  
 Teuctosin, 21222  
 8 $\alpha$ -Tigloyloxyanthemolide C, 21379  
 Trichorabdal D, 21566  
 Trichorabdal E, 21567
- C<sub>22</sub>H<sub>28</sub>O<sub>9</sub>**  
 8-*O*-Angeloyl-9-*O*-acetylanthemolide B, 1204  
 Bruceine I, 2673  
 8 $\alpha$ -(3'-Hydroxy-4'-acetoxy-2'-methylene-butanoyloxy)4-epi-sonchucarpolide, 9760  
 8-*O*-Tigloyl-9-*O*-acetylanthemolide B, 21373
- C<sub>22</sub>H<sub>28</sub>O<sub>10</sub>**  
 12-Acetyl-13,21-dihydroeurycomanone, 378  
 Davisioside, 4698  
 Eupalinilide J, 7576  
 Glochidacuminoside B, 8560  
 4'-*O*- $\beta$ -Glucopyranosyl-5-*O*-methylvisamminol, 8684  
 Ovatolactone 7-*O*-(6'-*O*-*p*-hydroxybenzoyl)- $\beta$ -*D*-glucopyranoside, 16281  
 Tschimganic ester A, 22064
- C<sub>22</sub>H<sub>28</sub>O<sub>11</sub>**  
 6-*O*-(4-Hydroxybenzoyl)-ajugol, 9819  
 Prim-*O*-glucosylcimifugin, 17856
- C<sub>22</sub>H<sub>28</sub>O<sub>12</sub>**  
 7-Methyl-1,4,5-trihydroxy-naphthalene-4-*O*-(6'-*O*- $\beta$ -xylopyranosyl)- $\beta$ -glucopyranoside, 14790  
 Rubinaphthin B, 19033
- C<sub>22</sub>H<sub>28</sub>O<sub>13</sub>**  
 5-Methylcoumarin-4-cellobioside, 14255  
 5-Methylcoumarin-4-gentiobioside, 14256
- C<sub>22</sub>H<sub>28</sub>O<sub>14</sub>**  
 Racemosic acid, 18513  
 Scopoletin 7-*O*- $\beta$ -*D*-sophoroside, 19543
- C<sub>22</sub>H<sub>29</sub>NO<sub>2</sub>**  
 Lobelanidine, 12937  
 Spiradine D, 20178  
 Spirafine IV, 20184
- C<sub>22</sub>H<sub>29</sub>NO<sub>3</sub>**  
 Laetispicine, 12449  
 Pipericide, 17444  
 Retrofractamide B, 18658  
 Songoramine, 20075  
 Spiradine C, 20177
- C<sub>22</sub>H<sub>29</sub>NO<sub>4</sub>**  
 Didehydrotuberostemonine, 5471  
 Epi-bisdehydrotuberostemonine J, 6839
- C<sub>22</sub>H<sub>29</sub>NO<sub>5</sub>**  
 Guan-fu base I, 9048  
 Stemofoline, 20304  
 Tuberostemoenone, 22084
- C<sub>22</sub>H<sub>29</sub>NO<sub>6</sub>**  
 2'-Hydroxystemofoline, 10731
- C<sub>22</sub>H<sub>29</sub>NO<sub>6</sub>S**  
 $\beta$ -Hydroxygerambullal, 10138
- C<sub>22</sub>H<sub>29</sub>N<sub>2</sub>O<sub>4</sub>**  
 Echitamine, 6699
- C<sub>22</sub>H<sub>30</sub>NO<sub>4</sub><sup>+</sup>**  
*N,N*-Dimethylanomurine, 6316
- C<sub>22</sub>H<sub>30</sub>N<sub>2</sub>O<sub>2</sub>**  
 Aspidospermine, 1904
- C<sub>22</sub>H<sub>30</sub>N<sub>2</sub>O<sub>3</sub>**  
 Aspidocarpine, 1900  
 Malagashanol, 13417

**C<sub>22</sub>H<sub>30</sub>O<sub>2</sub>**

Bufadienolide, 2714  
 Confluentin, 3973  
 Grifolin, 9010  
 4,4'-Methylene bis[2,3,5,6-tetramethyl phenol],  
 14349  
 Senkyunone, 19745

**C<sub>22</sub>H<sub>30</sub>O<sub>3</sub>**

Anacardic acid D, 1130  
 Daurichromene A, 4681  
 Daurichromene B, 4682  
 Daurichromene C, 4683  
 Daurichromene D, 4684  
 Guggulsterone M, 9076

**C<sub>22</sub>H<sub>30</sub>O<sub>4</sub>**

19-Acetoxy-15,16-epoxy-8(17),13(16),14-*ent*-  
 labdatrien-20-al, 187  
 Cannabichromenic acid, 3078  
 Cannabidiolic acid, 3080  
 CPB-2004-52-608-2, 3510  
 Ferutinin, 7792  
 Gesneroidin B, 8367  
 4-Hydroxy-2,6,8-trimethyl-6-(3,7-dimethyl-2,6-  
 octadienyl)-2*H*-1-benzopyran-5,7(3*H*,6*H*)-  
 dione, 10810  
 5-Hydroxy-2,6,8-trimethyl-8-(3,7-dimethyl-2,6-  
 octadienyl)-2*H*-1-benzopyran-4,7(3*H*,8*H*)-  
 dione, 10811  
 lalibinone C, 10931  
 lalibinone D, 10932  
 Jatrophene, 11849  
 Kuhistanol D, 12322  
 Kuhistanol E, 12323  
 Kuhistanol F, 12324  
 Kuhistanol G, 12325  
 Palbinone, 16539  
*ent*-8,9-Seco-7*α*-acetoxykaura-8(14),16-dien-  
 9,15-dione, 19604  
 Δ<sup>1</sup>-Tetrahydrocannabinolic acid A, 21060  
 Velamolone acetate, 22362

**C<sub>22</sub>H<sub>30</sub>O<sub>5</sub>**

7*α*-Acetoxyroyleanone, 277  
 15-*O*-Acetyl-15-*epi*-(4*E*)-jatrogrossidentadione,  
 385  
 14-Acetylbrosin B, 528  
 3*β*-Angeloyloxy-8-oxoeremophila-6,9-dien-12-  
 oic acid ethyl ester, 1231  
 Cascarillin C, 3250  
 Cascarillin D, 3251  
 Cornutin K, 4074  
 Cortisone, 4097  
 15,16-Epoxy-12(*R*)-acetoxy-8(17),13(16),14-*ent*-  
 labdatrien-19-oic acid, 7049

8,9-Epoxy-ferutinin, 7098  
 Glaucocalyxin B, 8516  
 Glaucocalyxin D, 8518  
 Inflekarabdonin C, 11043  
 Kuhistanicaol G, 12317  
 Lancerotriol 9*α*-(*p*-hydroxybenzoate), 12470  
*ent*-8,9-Seco-7*α*-acetoxy-11*β*-hydroxykaura-  
 (14),16-dien-9,15-dione, 19603  
*ent*-8,9-Seco-7*α*-hydroxy-11-acetoxykaura-  
 8(14),16-dien-9,15-dione, 19617  
 Shikoccin, 19807

**C<sub>22</sub>H<sub>30</sub>O<sub>6</sub>**

Caesalpinin N, 2883  
 Coleon S, 3917  
 Dubiin, 6617  
 Effusanin B, 6711  
 Enanderianin L, 6790  
 Enmedol, 6803  
 Epoxyshikoccin, 7201  
 3*β*-Ethoxy-leptocarpin, 7408  
 Fruticolone, 7972  
 Fukinolide, 7989  
 Ganervosin B, 8147  
 Inflekarabdonin E, 11045  
 Isodoglutosin A, 11384  
 Kuhistaferone, 12310  
 Kuhistanicaol H, 12318  
 Kuhistanicaol J, 12320  
 Kuhistanol H, 12326  
 Liangshanin E, 12743  
 Liangshanin F, 12744  
 Longikaurin C, 12959  
 Longikaurin E, 12961  
 Longirabdolide F, 12975  
 Longirabdolide G, 12976  
 Lushanrubescensin H, 13123  
 Maoecrystal L, 13533  
 Maoecrystal S, 13540  
 Neoquassin, 15454  
 Oreskaurin B, 16177  
 Picrasin D, 17314  
 Pregomisin, 17806  
 Preschisanthrin, 17848  
 Prostratin, 17958  
 Pseurata C, 18077  
 Rabdocoetsin B, 18457  
 Rabdocoetsin D, 18459  
 Rabdosianin C, 18489  
 Rabdoternin H, 18508  
 Xindongnin H, 22804

**C<sub>22</sub>H<sub>30</sub>O<sub>7</sub>**

(1*R*,3*R*,4*R*,5*S*,6*S*)-1-Acetoxy-8-angeloyloxy-  
 3,4-epoxy-5-hydroxybisabola-7(14),10-dien-2-

one, 122

Acetylamarolide, 312  
 Baiyecrystal B, 2117  
 Dihydrorugosanin, 5704  
 (3*R*,5*S*)-3,5-Dihydroxy-1-(4-hydroxy-3,5-  
 dimethoxyphenyl)-7-(4-hydroxy-3-methoxyph-  
 enyl)heptane, 5906  
 Effusanin C, 6712  
 Enanderianin C, 6785  
 Enanderianin K, 6789  
 7*β*-Hydroxyfruticolone, 10130  
 8*β*-Hydroxyfruticolone, 10131  
 11-Hydroxyfruticolone, 10132  
 Isodonoiol, 11394  
 15-*O*-Isovaleroyl-3*β*-*O*-acetyl-9*β*-hydroxy-  
 amphoricarpolide, 11757  
 Lasiokaurin, 12537  
 Lasiokaurin (Lasiodin), 12539  
 Longikaurin B, 12958  
 Longikaurin D, 12960  
 Lophanthoidin C, 12995  
 Lophanthoidin E, 12997  
 Lushanrubescensin I, 13124  
 Maoecrystal O, 13536  
 Nigakilactone K, 15556  
 Nigakilactone L, 15557  
 Phyllostachysin B, 17227  
 Phyllostachysin C, 17228  
 Picrasin E, 17315  
 Pseurata F, 18080  
 Rabdokaurin D, 18469  
 Rabdolasonal, 18475  
 Rabdosichuanin A, 18490  
 Rabdosin C, 18500  
 Sculponeatin E, 19578  
 Trichoranin, 21574  
 Wikstroemioidin C, 22671  
 Xerophilusin K, 22795

**C<sub>22</sub>H<sub>30</sub>O<sub>8</sub>**

Adenolin B, 620  
 Dihydrocarpalasionin, 5554  
 Enanderianin B, 6784  
 Isovaltrate, 11766  
 Leocardin, 12625  
 Maoecrystal I, 13530  
 Picrasin F, 17316  
 Teucrolivin C, 21219  
 Valepotriate, 22312  
 Xeroferin, 22785  
 Xerophilusin G, 22792  
 Xerophilusin J, 22794

**C<sub>22</sub>H<sub>30</sub>O<sub>9</sub>**

6*α*-Acetyl-15*β*-hydroxyklaineanone, 420

- 15 $\beta$ -*O*-Acetyl-14-hydroxyklaineanone, 421  
Burseneolignan, 2766
- C<sub>22</sub>H<sub>30</sub>O<sub>10</sub>**  
6 $\alpha$ -Acetyl-14 $\beta$ ,15 $\beta$ -dihydroxyklaineanone, 381
- C<sub>22</sub>H<sub>30</sub>O<sub>12</sub>**  
Seguinose G, 19670
- C<sub>22</sub>H<sub>30</sub>O<sub>13</sub>**  
Sibirioside B, 19868
- C<sub>22</sub>H<sub>30</sub>O<sub>14</sub>**  
Arillanin B, 1682  
Arillatose B, 1685  
4'-*O*- $\beta$ -*D*-Glucopyranosylgentiopicoside, 8635  
6'-*O*- $\beta$ -*D*-Glucopyranosylgentiopicoside, 8636  
Olivioside, 16087
- C<sub>22</sub>H<sub>31</sub>NO<sub>2</sub>**  
Geranyl *N*-Dimethylallylanthranilate, 8314  
Regholarrhenine A, 18585  
Spirafine II, 20181  
Spirafine III, 20182
- C<sub>22</sub>H<sub>31</sub>NO<sub>3</sub>**  
Bullatine G, 2742  
Piperchabamide D, 17443  
Songorine, 20076  
Spirafine V, 20185  
Spirafine VI, 20187  
Spiramine N<sub>6</sub>, 20194  
Yuzurimic acid B, 22959
- C<sub>22</sub>H<sub>31</sub>NO<sub>4</sub>**  
Equisetin, 7221
- C<sub>22</sub>H<sub>31</sub>NO<sub>5</sub>**  
Oxotuberostemonine, 16437  
Oxotuberostemonine II, 16438  
Stemocochinin, 20296  
Stemokerrin, 20305  
Tuberostemonol, 22088
- C<sub>22</sub>H<sub>31</sub>NO<sub>5</sub>S**  
Gerambullol, 8310  
 $\beta$ -Hydroxygerambullin, 10139
- C<sub>22</sub>H<sub>31</sub>NO<sub>6</sub>**  
Oxystemokerrin, 16475  
Tuberostemonone, 22089
- C<sub>22</sub>H<sub>31</sub>NO<sub>6</sub>S**  
 $\beta$ -Hydroxygerambullol, 10140  
Sakerinol A, 19170  
Sakerinol B, 19171
- C<sub>22</sub>H<sub>31</sub>NO<sub>7</sub>**  
Oxystemokerrin-*N*-oxide, 16476
- C<sub>22</sub>H<sub>32</sub>O<sub>2</sub>**  
2,4-Dimethyl-6-(3'-methyl-isobuten-5'-isopropyl)-phenyl-3,5-hexanedione, 6375  
(16*R*)-*ent*-3 $\alpha$ -Hydroxykauran-15-one, 10278  
(16*R*)-*ent*-7 $\beta$ -Hydroxykauran-15-one, 10279  
(16*R*)-*ent*-11 $\alpha$ -Hydroxykauran-15-one, 10280
- C<sub>22</sub>H<sub>32</sub>O<sub>3</sub>**  
7 $\beta$ -Acetoxyisopimara-8(14),15-dien-1-one, 242  
Acetylsanaol, 505  
Anacardic acid C, 1129  
3-Hydroxyneogrifolin, 10538  
Micranoic acid A, 14833  
Micranoic acid B, 14834
- C<sub>22</sub>H<sub>32</sub>O<sub>4</sub>**  
2-*ac*-Acetoxy-*cis*-cleroda-3,13(*Z*),8(17)-trien-15-oic acid, 143  
*ent*-20-Acetoxy-11 $\alpha$ -hydroxy-16-kauren-15-one, 201  
*ent*-7 $\beta$ -Acetoxy-11 $\alpha$ -hydroxykaur-16-en-15-one, 221  
18-Acetoxy-7 $\alpha$ -hydroxykaur-16-en-15-one, 222  
*ent*-18-Acetoxy-11 $\alpha$ -hydroxykaur-16-en-15-one, 223  
*ent*-18-Acetoxy-14 $\alpha$ -hydroxykaur-16-en-15-one, 224  
*ent*-11 $\alpha$ -Acetoxykaur-16-en-18-oic acid, 247  
17-Acetoxy-11,13-dien-20-oic acid, 261  
Caesaldekarin A, 2861  
Gesneroidin A, 8366  
Juniperexcelsic acid, 11967  
Melissoidesin L, 13698  
PC-1999-52-1447-7b, 16736  
Rabdohakusin, 18463  
Sugikurojin E, 20461  
Vitetrifolin C, 22570
- C<sub>22</sub>H<sub>32</sub>O<sub>5</sub>**  
*ent*-3 $\beta$ -Acetoxy-7 $\alpha$ ,18-dihydroxykaur-15-en-17-al, 168  
*ent*-18-Acetoxy-3 $\beta$ ,7 $\alpha$ -dihydroxykaur-15-en-17-al, 169  
*ent*-1 $\alpha$ -Acetoxy-7 $\beta$ ,14 $\alpha$ -dihydroxykaur-16-en-15-one, 170  
1 $\beta$ -Acetoxy-7 $\alpha$ ,14 $\beta$ -dihydroxykaur-16-en-15-one, 171  
*ent*-11 $\alpha$ -Acetoxy-7 $\beta$ ,14 $\alpha$ -dihydroxykaur-16-en-15-one, 172  
18-Acetoxy-7 $\alpha$ ,14 $\beta$ -dihydroxykaur-16-en-15-one, 173  
Caesalpinin K, 2873  
Coetsoidin E, 3903  
Compound 1 (*Isodon umbrosa*), 3950  
Compound 2 (*Isodon umbrosa*), 3951  
Enaimeone C, 6782  
Galeopsin, 8092  
1'-Hydroxyialbinone D, 10222  
Hypoestoxide, 10894  
Inflexanin A, 11039  
Inflexarabdonin K, 11051  
Isodopharicin A, 11395
- Kuhistanol A, 12321  
Leucamenin E, 12712  
Lungshengenin D, 13080  
Maoecrystal G, 13529  
Melissoidesin N, 13700  
Ostostegin A, 16272  
Pregaleopsin, 17779  
Prehumulone, 17808  
Reniformin C, 18622  
Rosthornin A (Isodopharicin C), 18932  
Torilin, 21456
- C<sub>22</sub>H<sub>32</sub>O<sub>6</sub>**  
17-Acetoxy-11,13-dien-20-oic acid, 262  
(12 $\alpha$ )-2 $\alpha$ -Acetoxy-5 $\alpha$ ,9 $\alpha$ ,10 $\beta$ -trihydroxy-3,11-cyclotax-4(20)-en-13-one, 293  
Adenanthin L, 616  
Albopilosin A, 865  
Bakkenolide G, 2121  
Compound 3 (*Isodon umbrosa*), 3952  
Compound 4 (*Isodon umbrosa*), 3953  
Dihydrofukinolide, 5617  
Enanderianin M, 6791  
Enanderianin N, 6792  
Excisanin B, 7675  
Excisanin D, 7677  
Flexicaulin A, 7828  
Glabensin J, 8471  
Henryin, 9362  
Inflexanin B, 11040  
Isodomedin, 11386  
Isodoternifolin B, 11401  
Isofruticolone, 11430  
Leopersin A, 12647  
Leucamenin A, 12708  
Lophanthoidin D, 12996  
Lushanrubescensin D, 13119  
Maoecrystal E, 13527  
Nigakilactone B, 15548  
Picrasinol B, 17319  
Rabdokunmin A, 18470  
Rabdoparicin C, 18482  
Reniformin B, 18621  
Rosthornin C, 18934  
Rosthornin D, 18935  
Rostronol F, 18938  
Shikoccidin, 19806  
Suimiyain A, 20466  
Taxezopidine C, 20782  
Taxezopidine D, 20783  
4 $\beta$ ,8 $\beta$ ,9 $\alpha$ -Trihydroxy-6 $\alpha$ -*p*-hydroxybenzoyloxydaucane, 21744  
Xindongnin B, 22798  
Xindongnin F, 22802

- C<sub>22</sub>H<sub>32</sub>O<sub>7</sub>**  
 10β-Acetoxy-2α,5α,7β,9α-tetrahydroxytaxa-4(20),11-dien-13-one, 288  
 3β-Angeloyloxy-6β-ethoxy-8β,10β-dihydroxy-eremophilanolide, 1222  
 Cascarillin, 3248  
 Cornutin D, 4067  
 Dihydropseurata F, 5696  
 Excisanin E, 7678  
 Lasiokaurinol, 12540  
 Neoangustifolin, 15338  
 Nigakilactone F, 15551  
 Rabdoterin D, 18504  
 Shinjulactone K, 19827  
 Sodoponin, 20040
- C<sub>22</sub>H<sub>32</sub>O<sub>8</sub>**  
 Didrovaltratum, 5482  
 Dihydrovalepotriate, 5734  
 Nigakilactone H, 15553
- C<sub>22</sub>H<sub>32</sub>O<sub>9</sub>**  
 Garajonone, 8201
- C<sub>22</sub>H<sub>32</sub>O<sub>10</sub>**  
 4-Deacetyltagifine III, 4778  
 Glochidacuminoside C, 8561  
 Rengyoside C, 18618
- C<sub>22</sub>H<sub>32</sub>O<sub>11</sub>**  
 Eugenyl-β-rutinoside, 7526
- C<sub>22</sub>H<sub>32</sub>O<sub>13</sub>**  
 Cistanoside H, 3758  
 2-(2-Methylbutyryl)phloroglucinol 1-*O*-(6"-*O*-β-*D*-apiofuranosyl)-β-*D*-glucopyranoside, 14200  
 Sinapyl 9-*O*-[β-*D*-apiofuranosyl(1→6)]-*O*-β-*D*-glucopyranoside, 19923  
 8-*O*-Tigloyldideroside, 21376  
 Tinosinen, 21399
- C<sub>22</sub>H<sub>32</sub>O<sub>14</sub>**  
 Swertiapunimarin, 20512
- C<sub>22</sub>H<sub>32</sub>O<sub>15</sub>**  
 6'-*O*-β-*D*-Fructofuranosylswertiamarin, 7970  
 3'-*O*-β-*D*-Galactopyranosylswertiamarin, 8069  
 6'-*O*-α-*D*-Galactopyranosylswertiamarin, 8070  
 3'-*O*-β-*D*-Glucopyranosylswertiamarin, 8734  
 4'-*O*-β-*D*-Glucopyranosylswertiamarin, 8735  
 6'-*O*-β-*D*-Glucopyranosylswertiamarin, 8736  
 6'-*O*-α-*D*-Mannopyranosylswertiamarin, 13506  
 Segetoside A, 19658
- C<sub>22</sub>H<sub>33</sub>NO**  
 1-Methyl-2-dodecyl-4(1*H*)-quinolone, 14331  
 2-Tridecyl-4(1*H*)-quinolone, 21625
- C<sub>22</sub>H<sub>33</sub>NO<sub>2</sub>**  
 Atisine, 1964  
 Bullatine A, 2737
- Denudatine, 5136  
 Paravallarine, 16659  
 Spirafine III A, 20183  
 Veatchine, 22360
- C<sub>22</sub>H<sub>33</sub>NO<sub>3</sub>**  
 Ajaconine, 782  
 8-Deoxy-14-dehydro-aconosine, 5166  
 Lepenine, 12668  
 Napelline, 15250  
 Spirafine VA, 20186  
 Spirafine VIA, 20188  
 Spiratine A, 20200
- C<sub>22</sub>H<sub>33</sub>NO<sub>4</sub>**  
 Isotuberostemonine, 11749  
 Karakanine, 12162  
 Neotuberostemonine, 15469  
 Spiramine W, 20195  
 Tuberostemonine, 22085  
 Tuberostemonine H, 22086  
 Tuberostemonine J, 22087
- C<sub>22</sub>H<sub>33</sub>NO<sub>5</sub>**  
 Heteratisine, 9459  
 Parvistemonine, 16692
- C<sub>22</sub>H<sub>33</sub>NO<sub>6</sub>**  
 Excelsine, 7673  
 Glabrephinine, 8491
- C<sub>22</sub>H<sub>34</sub>NO<sub>3</sub>**  
*N*-Isopentenyl dendroxine, 11586
- C<sub>22</sub>H<sub>34</sub>NO<sub>4</sub><sup>†</sup>**  
*N*-Isopentenyl-6-hydroxydendroxine, 11587
- C<sub>22</sub>H<sub>34</sub>N<sub>2</sub>**  
 Conessidine, 3966  
 Regholarrenine C, 18587
- C<sub>22</sub>H<sub>34</sub>O<sub>2</sub>**  
 17-Acetoxylabda-7,12(*E*),14-triene, 248  
 Clupanodonic acid, 3849  
 15α-Hydroxymansumbinone, 10361  
 20-Hydroxymulin-11,13-dienyl acetate, 10531  
 2-Methylcardol, 14221
- C<sub>22</sub>H<sub>34</sub>O<sub>3</sub>**  
 2-Acetoxy-3-hydroxy-labda-8(17),12(*E*),14-triene, 225  
 3-Acetoxy-2-hydroxy-labda-8(17),12(*E*),14-triene, 226  
 18-Acetoxy-7-oxo-9-epi-*ent*-pimara-15-ene, 272  
 Albaconol, 843  
 7β,12-Dimethoxy-8,11,13-abietatrien-11-ol, 6198  
 Ginkgolic acid, 8403  
 Rhusone, 18823
- C<sub>22</sub>H<sub>34</sub>O<sub>4</sub>**  
 16-Acetoxy-12(*R*),15-epoxy-15β-hydroxy-labda-8(17),13(16)-diene, 185  
*ent*-(16*S*)-18-Acetoxy-7β-hydroxykauran-15-ene, 220
- 220  
*ent*-18-Acetoxy-16-hydroxy-8(14)-pimaren-15-one, 235  
 7β-Acetoxytrachyloban-18-oic acid, 291  
 Aglatomin B, 743  
 Calliterpenone monoacetate, 2980  
 Compound 2 (*Periploca sepium*), 3957  
 Fritillebic acid, 7960  
 2-Hydroxy-5-methoxy-3-pentadecenyl benzoquinone, 10431  
 Linearol, 12878  
 Rotundifuran, 18955  
 Sidol, 19874  
 Taxuyunnanine J, 20882  
 Vitetrifolin B, 22569
- C<sub>22</sub>H<sub>34</sub>O<sub>5</sub>**  
 6-Acetoxy-9-hydroxy-13(14)-labden-16,15-olide, 227  
*ent*-3β-Acetoxy-7α,17,18-trihydroxykaur-15-ene, 298  
*ent*-18-Acetoxy-3β,7α,17-trihydroxykaur-15-ene, 299  
 Annosquamosin E, 1329  
 Compound 1a (*Periploca sepium*), 3956  
 Cornudentanone, 4061  
 Epoxyisolinearol, 7151  
 16β-Hydroxy-17-acetoxy-*ent*-kauran-19-oic acid, 9757  
 2-Keto-16-acetyl-kirenol, 12196  
 Melissoidesin M, 13699  
 21-*O*-Methyl-5,14-pregndiene-3β,14β,17β,21-tetrol, 14684  
 21-*O*-Methyl-5-pregnene-3β,17β,21-tetrol-20-one, 14686  
 Mulin-11-ene-13α,14α-dihydroxy-20-oic acid, 15060  
 Previtexilactone, 17851  
 2α,10β,14β-Trihydroxy-5α-acetoxytaxa-4(20),11-diene, 21686  
 Vitexilactone, 22580
- C<sub>22</sub>H<sub>34</sub>O<sub>6</sub>**  
*ent*-3β-Acetoxy-7α,17,18-trihydroxy-15β,16β-epoxykaurane, 296  
*ent*-18-Acetoxy-3β,7α,17-trihydroxy-15β,16β-epoxykaurane, 297  
 7-Debenzoxyloxy-10-deacetyl-brevifoliol, 4808  
 Enanderianin O, 6793  
 15-Epileoheteronone E, 6945  
 15-Epileopersin B, 6946  
 Inflexarabdonin F, 11046  
 Leoheteronone E, 12636  
 Leopersin B, 12648  
 Melissoidesin I, 13695



- Melissoidesin P, 13702  
6-Methylgingediacetate, 14463  
Nigakihemiacetal F, 15545
- C<sub>22</sub>H<sub>34</sub>O<sub>7</sub>**  
Coleonol, 3915  
Lyoniol A, 13246  
Nigakihemiacetal A, 15542  
Rhodojaponin II, 18800  
Rhodomollein XII, 18809
- C<sub>22</sub>H<sub>34</sub>O<sub>8</sub>**  
Cornutin J, 4073  
Macrocalyxin G, 13309  
Macrocalyxin H, 13310  
Patridoid I, 16716  
Patridoid II, 16717  
Patridoid IIA, 16718
- C<sub>22</sub>H<sub>34</sub>O<sub>10</sub>**  
Marioside, 13567
- C<sub>22</sub>H<sub>34</sub>O<sub>11</sub>**  
Carvacrol 2-*O*- $\beta$ -glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -glucopyranoside, 3233
- C<sub>22</sub>H<sub>34</sub>O<sub>12</sub>**  
6-Hydroxythymol 3,6-di-*O*- $\beta$ -*D*-glucopyranoside, 10763
- C<sub>22</sub>H<sub>34</sub>O<sub>15</sub>**  
Gmephiloside, 8864
- C<sub>22</sub>H<sub>35</sub>NO**  
Holadysamine, 9576  
Holadysine, 9577
- C<sub>22</sub>H<sub>35</sub>NO<sub>2</sub>**  
Kurchiphyllamine, 12349
- C<sub>22</sub>H<sub>35</sub>NO<sub>3</sub>**  
17-Hydroxyhomodaphniphylic acid, 10166
- C<sub>22</sub>H<sub>35</sub>NO<sub>4</sub>**  
Carmichaeline, 3201  
Genicunine A, 8271  
Karacoline, 12161
- C<sub>22</sub>H<sub>35</sub>NO<sub>5</sub>**  
Karacolidine, 12160
- C<sub>22</sub>H<sub>35</sub>NO<sub>6</sub>**  
Tatsinine, 20728
- C<sub>22</sub>H<sub>35</sub>NO<sub>7</sub>**  
Sinomontanine E, 19957
- C<sub>22</sub>H<sub>35</sub>NO<sub>8</sub>**  
Sinomontanine D, 19956
- C<sub>22</sub>H<sub>36</sub>N<sub>2</sub>**  
Conamine, 3959  
Conimine, 3989  
3-Epiconamine, 6873
- C<sub>22</sub>H<sub>36</sub>O<sub>2</sub>**  
Belamcandol B, 2217  
Garcinielliptone N, 8216
- C<sub>22</sub>H<sub>36</sub>O<sub>3</sub>**  
*ent*-3 $\beta$ -Acetoxyisopimar-15-en-8 $\beta$ -ol, 243  
Aglatomin A, 742  
Anacardic acid A, 1128  
Azorellanol, 2061  
5-Pregnene-3 $\beta$ ,16 $\alpha$ ,20 $\alpha$ -triol, 17802  
Siegesetheric acid II, 19879
- C<sub>22</sub>H<sub>36</sub>O<sub>4</sub>**  
10-Acetoxy-8,18-dihydroxy-2,6-dolabelladiene, 163  
*ent*-18-Acetoxy-8(14)-pimarene-15*S*,16-diol, 276  
2,5-Dimethoxy-6-methyl-3-tridecyl-1,4-benzoquinone, 6269  
Fritillebeinol, 7959  
Vitetrifolin E, 22572  
Vitetrifolin F, 22573  
Vitetrifolin F, 22579
- C<sub>22</sub>H<sub>36</sub>O<sub>5</sub>**  
(1*R*\*,3*S*\*,4*R*\*,6*S*\*)-9-(Acetoxy)-4-hydroxy-1-[(2*Z*)-2-methylbut-2-enoyloxy]bisabol-10(11)-ene, 230  
4-*O*-Acetyl hygrophorone D<sup>14</sup>, 434  
16-Acetylkirenil, 445  
Compound 1 (*Periploca sepium*), 3955  
21-*O*-Methyl-5-pregnene-3 $\beta$ ,14 $\beta$ ,17 $\beta$ ,20,21-pentol, 14685  
Orientalin A, 16187  
Orientalin B, 16188
- C<sub>22</sub>H<sub>36</sub>O<sub>6</sub>**  
4,6-Di-*O*-acetyl hygrophorone A<sup>12</sup>, 5336  
1,4-Di-*O*-acetyl hygrophorone E<sup>12</sup>, 5340  
Rollicosin, 18897
- C<sub>22</sub>H<sub>36</sub>O<sub>7</sub>**  
Andromedotoxin, 1161  
Grayanotoxin I, 8993  
Rhodomollein XIII, 18810
- C<sub>22</sub>H<sub>36</sub>O<sub>8</sub>**  
Lyoniol D, 13248  
Rhodomollein XI, 18808
- C<sub>22</sub>H<sub>36</sub>O<sub>11</sub>**  
Limonene-10-ol 10-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranoside, 12846
- C<sub>22</sub>H<sub>36</sub>O<sub>12</sub>**  
Iridodialo- $\beta$ -*D*-gentiobioside, 11144
- C<sub>22</sub>H<sub>37</sub>NO**  
*N*-Methylfuntumine, 14449
- C<sub>22</sub>H<sub>38</sub>N<sub>2</sub>**  
Kurchamine, 12346
- C<sub>22</sub>H<sub>38</sub>O<sub>5</sub>**  
4-*O*-Acetyl hygrophorone A<sup>14</sup>, 428  
6-*O*-Acetyl hygrophorone A<sup>14</sup>, 429  
4-*O*-Acetyl hygrophorone B<sup>14</sup>, 430  
6-*O*-Acetyl hygrophorone B<sup>14</sup>, 431
- C<sub>22</sub>H<sub>38</sub>O<sub>7</sub>**  
Leopersin E, 12651  
7-*epi*-Leopersin F, 12652  
Leopersin F, 12653
- C<sub>22</sub>H<sub>38</sub>O<sub>10</sub>**  
Shionoside B, 19832
- C<sub>22</sub>H<sub>39</sub>NO**  
*N*-Isobutyl-2*E*,4*E*,12*Z*-octadecatrienamido, 11282
- C<sub>22</sub>H<sub>39</sub>NO<sub>4</sub>**  
*N*,*O*-Diacylcassine, 5327
- C<sub>22</sub>H<sub>40</sub>N<sub>6</sub>O<sub>4</sub><sup>+2</sup>**  
Chaksine, 3452
- C<sub>22</sub>H<sub>40</sub>O<sub>4</sub>**  
Hygrophorone B<sup>16</sup>, 10838
- C<sub>22</sub>H<sub>40</sub>O<sub>7</sub>**  
Agaric acid, 700
- C<sub>22</sub>H<sub>40</sub>O<sub>11</sub>**  
(*E*)-3,7-Dimethyl-1-*O*-[ $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl]-oct-2-en-7-ol, 6403
- C<sub>22</sub>H<sub>40</sub>O<sub>13</sub>**  
3-*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside of ethyl 3-hydroxyoctanoate, 8637
- C<sub>22</sub>H<sub>41</sub>NO**  
*N*-Isobutyl-(2*E*,4*E*)-octadecadienamido, 11281
- C<sub>22</sub>H<sub>42</sub>O<sub>2</sub>**  
Cyclodocosalactone, 4488  
Erucic acid, 7291
- C<sub>22</sub>H<sub>42</sub>O<sub>4</sub>**  
Docosanedioic acid, 6535
- C<sub>22</sub>H<sub>44</sub>O<sub>2</sub>**  
Docosanoic acid, 6537
- C<sub>22</sub>H<sub>46</sub>**  
Docosane, 6534
- C<sub>22</sub>H<sub>46</sub>O<sub>2</sub>**  
1,22-Docosanediol, 6536
- C<sub>23</sub>H<sub>13</sub>N<sub>3</sub>O<sub>2</sub>**  
Qingdainone, 18287
- C<sub>23</sub>H<sub>16</sub>O<sub>5</sub>**  
Ohioensin A, 16019  
Ohioensin C, 16021
- C<sub>23</sub>H<sub>16</sub>O<sub>6</sub>**  
Methylene-3,3'-biplumbagin, 14348
- C<sub>23</sub>H<sub>17</sub>N<sub>3</sub>O<sub>2</sub>**  
Scarlet808, 19458
- C<sub>23</sub>H<sub>17</sub>N<sub>3</sub>O<sub>4</sub>**  
Bisindolylpyrrole CPB-53-594-3, 2473
- C<sub>23</sub>H<sub>17</sub>N<sub>3</sub>O<sub>5</sub>**  
Bisindolylpyrrole CPB-53-594-4, 2474  
Bisindolylpyrrole CPB-53-594-5, 2475
- C<sub>23</sub>H<sub>18</sub>O<sub>3</sub>**  
Pallidisetin A, 16548  
Pallidisetin B, 16549

- C<sub>23</sub>H<sub>18</sub>O<sub>14</sub>**  
Rhein-8-*O*- $\beta$ -*D*-(6'-oxalyl)-glucopyra-noside, 18766
- C<sub>23</sub>H<sub>19</sub>NO<sub>10</sub>**  
Tuberosinone-*N*- $\beta$ -glucoside, 22083
- C<sub>23</sub>H<sub>20</sub>N<sub>2</sub>O<sub>6</sub>**  
10-Methoxy-20-*O*-acetylcamptothecin, 13831
- C<sub>23</sub>H<sub>20</sub>O<sub>5</sub>**  
1-(4-Hydroxybenzyl)-4,8-di-methoxyphenanthrene-2,7-diol, 9838
- C<sub>23</sub>H<sub>20</sub>O<sub>6</sub>**  
Brasillixanthone A, 2595  
Dehydrodeguelin, 4898  
Nigrolineaxanthone I, 15582  
Pseudosmiglabin, 18063  
Pyranojacaeubin, 18251  
Rheediaxanthone A, 18755  
Thwaitesixanthone, 21358
- C<sub>23</sub>H<sub>20</sub>O<sub>7</sub>**  
Rhinacanthin D, 18771
- C<sub>23</sub>H<sub>20</sub>O<sub>9</sub>**  
Pongamoside A, 17709
- C<sub>23</sub>H<sub>20</sub>O<sub>10</sub>**  
Pinnatifin I, 17393  
Pinnatifinoside B, 17395  
Pinnatifinoside C, 17396  
Pinnatifinoside D, 17397
- C<sub>23</sub>H<sub>20</sub>O<sub>13</sub>**  
3,3'-Di-*O*-methyllellagic acid  
4-(5"-acetyl)- $\alpha$ -*L*-arabinofuranoside, 6345  
3-*O*-Methyllellagic acid  
3'-*O*- $\alpha$ -2"-*O*-acetyl-rhamnopyranoside, 14337  
3-*O*-Methyllellagic acid  
3'-*O*- $\alpha$ -3"-*O*-acetyl-rhamnopyranoside, 14338  
3-*O*-Methyllellagic acid  
3'-*O*- $\alpha$ -4"-*O*-acetyl-rhamnopyranoside, 14339  
4-*O*-Methyllellagic acid  
3'-(3"-*O*-acetyl)- $\alpha$ -rhamnoside, 14340  
4-*O*-Methyllellagic acid  
3'-(4"-*O*-acetyl)- $\alpha$ -rhamnoside, 14341
- C<sub>23</sub>H<sub>21</sub>NO<sub>10</sub>**  
Aristolactam-*N*- $\beta$ -*D*-glucoside, 1697
- C<sub>23</sub>H<sub>21</sub>NO<sub>13</sub>**  
Aristoloside, 1725
- C<sub>23</sub>H<sub>22</sub>NO<sub>3</sub><sup>+</sup>**  
Tylophoricidine C, 22147
- C<sub>23</sub>H<sub>22</sub>N<sub>2</sub>O<sub>5</sub>**  
Isaindigotidione, 11187
- C<sub>23</sub>H<sub>22</sub>O<sub>4</sub>**  
8-( $\alpha$ , $\beta$ -Dimethylallyl)-pongamol, 6309  
1-(4-Hydroxybenzyl)-4,7-dimethoxy-9,10-dihydrophenanthrene-2-ol, 9837
- C<sub>23</sub>H<sub>22</sub>O<sub>5</sub>**  
Ananixanthone, 1135  
Cudraxanthone Q, 4345  
Demethylcalabaxanthone, 5064  
Inoxanthone, 11086  
Isouvaretin, 11751  
Mergueneone, 13782  
Nigrolineaxanthone K, 15584  
Trapezifolixanthone, 21503  
Uvaretin, 22290
- C<sub>23</sub>H<sub>22</sub>O<sub>6</sub>**  
Bangangxanthone A, 2135  
Barbigerone, 2148  
Caledonixanthone M, 2963  
Caloxanthone A, 2998  
Deguelin, 4872  
Garcinone B, 8219  
Gerontoxanthone A, 8354  
Gerontoxanthone B, 8355  
3-Hydroxyblancoxanthone, 9857  
Latisxanthone D, 12560  
Morusignin I, 14987  
Morusignin J, 14988  
Nigrolineaxanthone G, 15580  
(+)-Purpurin 2, 18223  
Rotenone, 18939  
Smeathxanthone B, 20019  
Subelliptenone H, 20436
- C<sub>23</sub>H<sub>22</sub>O<sub>7</sub>**  
Anticancer Flavonoid PMV70P691-105, 1408  
3,4 $\beta$ -Dihydro-15-dehydrolactucopicrin, 5585  
12 $\alpha$ -Hydroxyrotenone, 10680  
12 $\alpha$ -Hydroxyrotenone, 10681  
Lactucopicrin, 12447  
Pongapinone A, 17715  
Sumatrol, 20485  
(-)-Tephrosin, 20965  
 $\alpha$ -Toxicarol, 21483  
 $\beta$ -Toxicarol, 21484  
Usararotenoid C, 22279
- C<sub>23</sub>H<sub>22</sub>O<sub>8</sub>**  
Chaetoquadrin J, 3449  
11-Hydroxytephrosin, 10741
- C<sub>23</sub>H<sub>22</sub>O<sub>10</sub>**  
6"-*O*-Acetylaidzin, 361  
8-*O*- $\beta$ -*D*-(6'-*O*-Acetyl)glucopyranosylchrysophanol, 401  
5,3'-Diacetoxy-3,6,7,4'-tetramethoxyflavone, 5319  
Phymarolin II, 17203
- C<sub>23</sub>H<sub>22</sub>O<sub>11</sub>**  
6"-*O*-Acetylgenistin, 398  
Germanaism B, 8350  
Kaempferol-3-*O*-(2-*O*-acetyl- $\alpha$ -*L*-rhamnopyra-noside), 12024  
Kaempferol-3-*O*-(3-*O*-acetyl- $\alpha$ -*L*-rhamnopyra-noside), 12025  
Kaempferol-3-*O*-(4-*O*-acetyl- $\alpha$ -*L*-rhamnopyra-noside), 12026  
Pongamoside D, 17712  
1,3,6-Trihydroxy-2-methyl-9,10-anthra-quinone-3-*O*-(6'-*O*-acetyl)- $\beta$ -*D*-glucoside, 21794
- C<sub>23</sub>H<sub>22</sub>O<sub>12</sub>**  
2"-*O*-Acetylquercitrin, 491
- C<sub>23</sub>H<sub>22</sub>O<sub>13</sub>**  
Myricetin-3-*O*-(2"-*O*-acetyl- $\alpha$ -rhamnopyra-noside), 15173  
3,3',4'-Trimethyl-4'-*O*- $\beta$ -*D*-glucopyranosyl-ellagic acid, 21961
- C<sub>23</sub>H<sub>22</sub>O<sub>15</sub>S**  
Tamarixetin 3-glucoside-7-sulphate, 20659
- C<sub>23</sub>H<sub>23</sub>NO<sub>3</sub>**  
Buxifoliadine D, 2826  
Severifoline, 19790
- C<sub>23</sub>H<sub>23</sub>NO<sub>4</sub>**  
Atalaphyllinine, 1959
- C<sub>23</sub>H<sub>23</sub>NO<sub>5</sub>**  
Ethoxychelerythrine, 7399  
Waltherione A, 22634
- C<sub>23</sub>H<sub>23</sub>NO<sub>6</sub>**  
Acetylcorynoline, 359  
Acetylisocorynoline, 438
- C<sub>23</sub>H<sub>23</sub>NO<sub>10</sub>**  
Nandinin, 15244
- C<sub>23</sub>H<sub>24</sub>O<sub>4</sub>**  
Cudraphenone A, 4339  
Gymconopin D, 9102  
5-Hydroxy-4-(*p*-hydroxybenzyl)-3',3-dimethoxy-bibenzyl, 10176
- C<sub>23</sub>H<sub>24</sub>O<sub>5</sub>**  
Caloxanthone L, 3001  
Cudraphenone C, 4341  
8-Desoxygartanin, 5276  
7-Geranyloxy-1,3-dihydroxyxanthone, 8323  
Gerontoxanthone H, 8358  
Mangostinone, 13495  
7-*O*-Methoxypraecansone B, 14075  
Nigrolineaxanthone J, 15583  
Nigrolineaxanthone Q, 15590  
Subelliptenone B, 20435  
1,3,7-Trihydroxy-2,4-bis(3-methyl-2-butenyl)-xanthone, 21691
- C<sub>23</sub>H<sub>24</sub>O<sub>6</sub>**  
Alvaxanthone, 1010  
Anticancer Flavonoid PMV70P691-106, 1409  
BR-Xanthone A, 2685  
Cudraxanthone J, 4343

- Cudraxanthone P, 4344  
 Demethoxy-cochinchinone D, 5044  
 Gartanin, 8235  
 Gerontoxanthone G, 8357  
 Gerontoxanthone I, 8359  
 Isoalvaxanthone, 11206  
 Isonormangostin, 11564  
 Ixerochinolide, 11802  
 Mangostenone D, 13490  
 $\gamma$ -Mangostin, 13494  
 Mangoxanthone, 13496  
 Montrouxanthone, 14948  
 Morusignin H, 14986  
 Nigrolineaxanthone M, 15586  
 Patulone, 16730  
 Pongapinone B, 17716  
 Smeathxanthone A, 20018  
 1,4,5,6-Tetrahydroxy-7,8-di(3-methylbut-2-enyl)xanthone, 21099
- C<sub>23</sub>H<sub>24</sub>O<sub>7</sub>**  
 Cudraxanthone R, 4346  
 (2*S*)-5,7-Dimethoxy-8-(2*S*-hydroxy-3-methyl-3-butenyl)-3',4'-methylenedioxyflavanone, 6247  
 Garcimangosone C, 8208  
 Morusignin E, 14985  
 (*R*)-Saclenone, 19108
- C<sub>23</sub>H<sub>24</sub>O<sub>8</sub>**  
 3,7-Dihydroxy-3'-(2-hydroxy-3-methyl-3-butenyl)-5,6,4'-trimethoxyflavone, 5916  
 5,7-Dihydroxy-3'-(2-hydroxy-3-methyl-3-butenyl)-3,6,4'-trimethoxyflavone, 5917  
 Hernandin, 9443  
 $\beta$ -Peltatin A methyl ether, 16797
- C<sub>23</sub>H<sub>24</sub>O<sub>10</sub>**  
 Andrographidine C, 1153  
 Lasianthuoside B, 12532  
 2,4,6-Trihydroxyacetophenone 3-*C*- $\beta$ -(2'-*O*-*E*-cinnamoyl)-glucopyranoside, 21680
- C<sub>23</sub>H<sub>24</sub>O<sub>11</sub>**  
 Abrusin, 28  
 Camaroside, 3027  
 5,7-Dihydroxy-8,2'-dimethoxyflavone-7-*O*- $\beta$ -*D*-glucopyranoside, 5831  
 6,4'-dimethoxy-5-hydroxyflavone 7-glucoside, 6241  
 5-Hydroxyaloin A 6'-*O*-acetate, 9774  
 Irisolidone-7-*O*- $\alpha$ -*D*-glucoside, 11172  
 4'-Methyltectorigenin 7-glucoside, 14740  
 Orobol 5,3'-di-*O*-methyl-8-*C*-glucoside, 16210  
 Skullcapflavone I 2'-*O*- $\beta$ -*D*-glucopyranoside, 20008  
 2,4,6-Trihydroxyacetophenone 3-*C*- $\beta$ -(2'-*O*-*E*-coumaroyl)-glucopyranoside, 21681
- C<sub>23</sub>H<sub>24</sub>O<sub>12</sub>**  
 Andrographidine B, 1152  
 Aurantiobutisin  $\beta$ -*D*-glucoside, 2009  
 Burkinabin A, 2761  
 Burkinabin B, 2762  
 Burkinabin C, 2763  
 Cirsiliol-4'-monoglucoside, 3744  
 3',4'-Dimethoxy-5,7,5'-trihydroxyflavone 3-*O*- $\alpha$ -*L*-rhamnopyranoside, 6296  
 Eriodictyl 7-*O*- $\beta$ -*D*-(6'-ethyl ester)-glucuronopyranoside, 7276  
 Eupatolin, 7587  
 Iristectorin A, 11181  
 Iristectorin B, 11182  
 Kaempferol 3-*O*-(6''-acetyl)- $\beta$ -*D*-galactopyranoside, 12023  
 Rhamnazin-3-*O*- $\beta$ -*D*-glucoside, 18675  
 Tricin-7-*O*- $\beta$ -*D*-glucopyranoside, 21590
- C<sub>23</sub>H<sub>24</sub>O<sub>13</sub>**  
 7,4'-Dimethoxy-8,3',5'-trihydroxy-6-*O*- $\beta$ -*D*-glucopyranosylisoflavone, 6295  
 Gossypetin-3,8-dimethyl ether-5-*O*- $\beta$ -glucoside, 8961  
 Limocitrin- $\beta$ -*D*-glucoside, 12839  
 Quercetin-3-*O*-(6''-acetyl)- $\beta$ -*D*-galactopyranoside, 18321  
 Syringetin-3-*O*- $\beta$ -*D*-galactopyranoside, 20562  
 Syringetin-3-*O*- $\beta$ -*D*-glucoside, 20563  
 Viscidulin III 6'-*O*- $\beta$ -*D*-glucopyranoside, 22534
- C<sub>23</sub>H<sub>24</sub>O<sub>14</sub>**  
 Myricetin-3-*O*-(6''-acetyl)- $\beta$ -*D*-galactopyranoside, 15171
- C<sub>23</sub>H<sub>25</sub>NO**  
 Bicyclomahanimbicine, 2354  
 Bicyclomahanimbine, 2355  
 Cyclomahanimbine, 4515  
 Isomahanimbine, 11520  
 Mahanimbidine, 13397  
 (+)-Mahanimbine, 13398
- C<sub>23</sub>H<sub>25</sub>NO<sub>2</sub>**  
 Clausenatine A, 3790
- C<sub>23</sub>H<sub>25</sub>NO<sub>3</sub>**  
 Boehmeriasin B, 2529  
 7-Demethoxytylophorine, 5055  
 1-Epi-dioncophylline B, 6896  
 3,6,7-Trimethoxyphenanthroindolizidine, 21921
- C<sub>23</sub>H<sub>25</sub>NO<sub>4</sub>**  
 Dioncophyllinol B, 6433  
 Tylophorinine, 22153
- C<sub>23</sub>H<sub>25</sub>NO<sub>5</sub>**  
 Bassianin, 2161  
 Buxifoliadine E, 2827
- C<sub>23</sub>H<sub>25</sub>NO<sub>6</sub>**  
 Gnoscopine, 8902
- C<sub>23</sub>H<sub>25</sub>O<sub>12</sub><sup>+</sup>**  
 Oenin, 16010
- C<sub>23</sub>H<sub>26</sub>N<sub>2</sub>O<sub>3</sub>**  
 16-Ethoxystrychnine, 7417
- C<sub>23</sub>H<sub>26</sub>N<sub>2</sub>O<sub>4</sub>**  
 Brucine, 2678  
 Isobrucine, 11265  
 3-Methoxycajine, 13972
- C<sub>23</sub>H<sub>26</sub>N<sub>2</sub>O<sub>5</sub>**  
 Akuammiline *N*(4)-oxide, 827  
 Brucine *N*-oxide, 2679  
 Isobrucine *N*-oxide, 11266  
 Myrtoidine, 15226  
 Pseudobrucine, 18021
- C<sub>23</sub>H<sub>26</sub>N<sub>4</sub>O<sub>3</sub>**  
 Argentine, 1672
- C<sub>23</sub>H<sub>26</sub>O<sub>4</sub>**  
 Clusiaphenone B, 3850  
 Cudraphenone B, 4340  
 4 $\beta$ -Demethylxuananin-4 $\beta$ -ethyl ether, 5103  
 ( $\pm$ )-*trans*-3-(4-Hydroxy-3-methoxyphenyl)-4-[(*E*)-3,4-dimethoxystyryl]cyclohex-1-ene, 10438
- C<sub>23</sub>H<sub>26</sub>O<sub>5</sub>**  
 Cudraphenone D, 4342  
 2,6-Dihydroxy-4-[(*E*)-5-hydroxy-3,7-dimethyl-octa-2,7-dienyloxy] benzophenone, 5908  
 Ethylnotopterol, 7466  
 3 $\beta$ -Methoxyxuananin, 14105  
 Vismiaguianone A, 22545  
 Vismiaguianone B, 22546  
 Vismiaguianone C, 22547
- C<sub>23</sub>H<sub>26</sub>O<sub>6</sub>**  
 Nigrolineaxanthone L, 15585  
 Nigrolineaxanthone N, 15587  
 Nigrolineaxanthone R, 15591  
 Spiraformin C, 20191  
 3,4-Teracrylshikonin, 20968
- C<sub>23</sub>H<sub>26</sub>O<sub>7</sub>**  
 Garcinone C, 8220  
 Neoisostegane, 15417  
 Neokadsuranin, 15422  
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- C<sub>23</sub>H<sub>28</sub>O<sub>14</sub>**  
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- C<sub>23</sub>H<sub>29</sub>NO<sub>3</sub>**  
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- C<sub>23</sub>H<sub>29</sub>NO<sub>6</sub>**  
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- C<sub>23</sub>H<sub>29</sub>N<sub>3</sub>O<sub>2</sub>**  
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- C<sub>23</sub>H<sub>30</sub>N<sub>2</sub>O<sub>4</sub>**  
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- C<sub>23</sub>H<sub>30</sub>O<sub>4</sub>**  
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- C<sub>23</sub>H<sub>30</sub>O<sub>12</sub>**  
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- C<sub>23</sub>H<sub>31</sub>NO**  
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- C<sub>23</sub>H<sub>31</sub>NO<sub>3</sub>**  
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- C<sub>23</sub>H<sub>31</sub>NO<sub>4</sub>**  
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- C<sub>23</sub>H<sub>31</sub>NO<sub>6</sub>**  
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- C<sub>23</sub>H<sub>31</sub>NO<sub>8</sub>**  
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- C<sub>23</sub>H<sub>31</sub>NO<sub>9</sub>**  
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- C<sub>23</sub>H<sub>32</sub>O<sub>3</sub>**  
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- C<sub>23</sub>H<sub>32</sub>O<sub>9</sub>**  
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- C<sub>23</sub>H<sub>32</sub>O<sub>10</sub>**  
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- C<sub>23</sub>H<sub>32</sub>O<sub>11</sub>**  
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- C<sub>23</sub>H<sub>32</sub>O<sub>12</sub>**  
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- C<sub>23</sub>H<sub>32</sub>O<sub>13</sub>**  
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- C<sub>23</sub>H<sub>32</sub>O<sub>15</sub>**  
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- C<sub>23</sub>H<sub>33</sub>NO**  
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- C<sub>23</sub>H<sub>33</sub>NO<sub>3</sub>**  
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- C<sub>23</sub>H<sub>33</sub>NO<sub>6</sub>**  
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- C<sub>23</sub>H<sub>33</sub>NO<sub>6</sub>S**  
*O*-Methylsakerinol A, 14716
- C<sub>23</sub>H<sub>34</sub>O<sub>2</sub>**  
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- C<sub>23</sub>H<sub>34</sub>O<sub>4</sub>**  
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- C<sub>23</sub>H<sub>34</sub>O<sub>5</sub>**  
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- C<sub>23</sub>H<sub>34</sub>O<sub>7</sub>**  
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- C<sub>23</sub>H<sub>34</sub>O<sub>8</sub>**  
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- C<sub>23</sub>H<sub>34</sub>O<sub>9</sub>**  
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- C<sub>23</sub>H<sub>34</sub>O<sub>12</sub>**  
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- C<sub>23</sub>H<sub>34</sub>O<sub>13</sub>**  
Jioglutoside B, 11880
- C<sub>23</sub>H<sub>34</sub>O<sub>14</sub>**  
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- C<sub>23</sub>H<sub>34</sub>O<sub>15</sub>**  
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- C<sub>23</sub>H<sub>35</sub>ClO<sub>5</sub>**  
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- C<sub>23</sub>H<sub>35</sub>NO**  
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- C<sub>23</sub>H<sub>35</sub>NO<sub>3</sub>**  
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- C<sub>23</sub>H<sub>35</sub>NO<sub>6</sub>**  
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- C<sub>23</sub>H<sub>35</sub>O<sub>16</sub>**  
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- C<sub>23</sub>H<sub>36</sub>O<sub>2</sub>**  
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- C<sub>23</sub>H<sub>36</sub>O<sub>3</sub>**  
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- C<sub>23</sub>H<sub>36</sub>O<sub>4</sub>**  
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- C<sub>23</sub>H<sub>36</sub>O<sub>5</sub>**  
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- C<sub>23</sub>H<sub>36</sub>O<sub>6</sub>**  
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- C<sub>23</sub>H<sub>36</sub>O<sub>8</sub>**  
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- C<sub>23</sub>H<sub>36</sub>O<sub>14</sub>**  
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- C<sub>23</sub>H<sub>37</sub>NO<sub>2</sub>**  
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- C<sub>23</sub>H<sub>37</sub>NO<sub>4</sub>**  
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- C<sub>23</sub>H<sub>37</sub>NO<sub>7</sub>**  
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- C<sub>23</sub>H<sub>37</sub>O<sub>5</sub>**  
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- C<sub>23</sub>H<sub>38</sub>N<sub>2</sub>**  
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- C<sub>23</sub>H<sub>38</sub>O<sub>3</sub>**  
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- C<sub>23</sub>H<sub>38</sub>O<sub>4</sub>**  
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- C<sub>23</sub>H<sub>40</sub>O<sub>2</sub>**  
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- C<sub>23</sub>H<sub>40</sub>O<sub>3</sub>**  
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Terminaline, 20976
- C<sub>23</sub>H<sub>41</sub>NO<sub>4</sub>**  
8-Ethoxysachaconitine, 7415
- C<sub>23</sub>H<sub>42</sub>N<sub>2</sub>**

- Epipachysamine F, 6995
- C<sub>23</sub>H<sub>42</sub>O<sub>20</sub>**  
Chalconaringenin 2'-*O*-β-*D*-glucoside-4'-*O*-β-gentiobioside, 3456
- C<sub>23</sub>H<sub>46</sub>NO<sub>3</sub>**  
1,3-Dihydroxy-2-hexanoylamino-(4*E*)-heptadecene, 5904
- C<sub>23</sub>H<sub>46</sub>O<sub>2</sub>**  
*n*-Tricosanoic acid, 21595
- C<sub>23</sub>H<sub>46</sub>O<sub>4</sub>**  
Glyceryl-1-eicosanoate, 8812
- C<sub>23</sub>H<sub>47</sub>NO<sub>8</sub>**  
Germine, 8353
- C<sub>23</sub>H<sub>48</sub>**  
*n*-Tricosane, 21594
- C<sub>23</sub>H<sub>48</sub>O**  
12-Tricosanol, 21596
- C<sub>24</sub>H<sub>16</sub>O<sub>12</sub>**  
Laccaic acid B, 12425  
2-*O*-Phloroecol, 17172
- C<sub>24</sub>H<sub>18</sub>N<sub>2</sub>O<sub>4</sub>**  
Caulerpin, 3333
- C<sub>24</sub>H<sub>18</sub>O<sub>5</sub>**  
Ohioensin B, 16020
- C<sub>24</sub>H<sub>18</sub>O<sub>6</sub>**  
Ethylidene-3,3'-biplumbagin, 7448  
Ethylidene-3,6'-biplumbagin, 7449  
Ohioensin D, 16022
- C<sub>24</sub>H<sub>19</sub>N<sub>3</sub>O<sub>4</sub>**  
Lycogarubin C, 13199
- C<sub>24</sub>H<sub>19</sub>N<sub>3</sub>O<sub>5</sub>**  
Lycogarubi B, 13198
- C<sub>24</sub>H<sub>20</sub>O<sub>6</sub>**  
Diosindigo A, 6450
- C<sub>24</sub>H<sub>20</sub>O<sub>9</sub>**  
Cinchonain Ia, 3680
- C<sub>24</sub>H<sub>20</sub>O<sub>10</sub>**  
3-Carboxy-6,7-dihydroxy-1-(3',4'-dihydroxyphenyl)-naphthalene-9,5"-*O*-shikimic acid ester, 3168  
Gyrophoric acid, 9185
- C<sub>24</sub>H<sub>21</sub>N<sub>3</sub>O<sub>6</sub>**  
Hyperectine, 10882
- C<sub>24</sub>H<sub>21</sub>O<sub>13</sub>**  
5-Carboxypyranocyanidin-3-*O*-β-glucopyranoside, 3182
- C<sub>24</sub>H<sub>22</sub>O<sub>5</sub>**  
Mesuagin, 13805
- C<sub>24</sub>H<sub>22</sub>O<sub>6</sub>**  
Eurycomalin A, 7649
- C<sub>24</sub>H<sub>22</sub>O<sub>7</sub>**  
JSPC0305368-18, 11894
- C<sub>24</sub>H<sub>22</sub>O<sub>8</sub>**  
Curtisian O, 4411  
Thonningine C, 21336
- C<sub>24</sub>H<sub>22</sub>O<sub>9</sub>**  
Curtisian L, 4408  
Tetraacetylbrazililn, 21033
- C<sub>24</sub>H<sub>22</sub>O<sub>10</sub>**  
Liquidamboside, 12905  
Lysidicichin, 13260  
Pongamoside B, 17710  
Pongamoside C, 17711
- C<sub>24</sub>H<sub>22</sub>O<sub>12</sub>**  
Chrysophanol 8-*O*-β-*D*-(6'-*O*-malonyl) glucopyranoside, 3621
- C<sub>24</sub>H<sub>22</sub>O<sub>13</sub>**  
Quercetin-3-*O*-α-*L*-3",5"-diacetyl-arabinofuranoside, 18337
- C<sub>24</sub>H<sub>22</sub>O<sub>14</sub>**  
Quercetin-3-*O*-(4"-*O*-malonyl)-α-*L*-rhamnopyranoside, 18375
- C<sub>24</sub>H<sub>22</sub>O<sub>15</sub>**  
Myricetin-3-*O*-(4"-*O*-malonyl)-α-*L*-rhamnopyranoside, 15183  
Quercetin-3-*O*-(6"-malonyl)-*D*-galactoside, 18373  
Quercetin-3-*O*-malonyl-β-*D*-glucoside, 18374
- C<sub>24</sub>H<sub>23</sub>NO<sub>5</sub>**  
(±)-6-Acetyl-dihydrochelerythrine, 112  
6-Acetyl-dihydrochelerythrine, 113
- C<sub>24</sub>H<sub>23</sub>O<sub>14</sub><sup>+</sup>**  
Cyanidin-3-*O*-(6"-*O*-malonyl-β-glucopyranoside), 4445
- C<sub>24</sub>H<sub>23</sub>O<sub>15</sub>**  
Delphinidin-3-neohesperidoside, 5029
- C<sub>24</sub>H<sub>24</sub>N<sub>2</sub>O<sub>13</sub>**  
Neobetatin, 15343
- C<sub>24</sub>H<sub>24</sub>O<sub>4</sub>**  
Inophynone, 11080  
Isoinophynone, 11464
- C<sub>24</sub>H<sub>24</sub>O<sub>5</sub>**  
Mammea A/BD, 13470  
Mesuol, 13811
- C<sub>24</sub>H<sub>24</sub>O<sub>6</sub>**  
Anhydromangostanol\*, 1277  
1,5-Dihydroxy-3-methoxy-6',6'-dimethyl-2*H*-pyrano(2',3':6,7)-4-(3-methylbut-2-enyl)xanthone, 5974  
Disparinol D, 6515  
Dulcisxanthone F, 6631  
Garcimangosone B, 8207  
Mammea A/AC cyclo F, 13471  
10-*O*-Methylmacluraxanthone, 14572  
Racemosol, 18514
- C<sub>24</sub>H<sub>24</sub>O<sub>7</sub>**  
Anticancer Flavonoid PMV70P691-025, 1403  
Kweichowenol A, 12397  
Linixanthone A, 12886
- C<sub>24</sub>H<sub>24</sub>O<sub>8</sub>**  
3",4"-DihydrothonningineC, 5727
- C<sub>24</sub>H<sub>24</sub>O<sub>9</sub>**  
4,5-Dihydro-5'-α-hydroxy-4'α-methoxy-6α,12α-dehydro-α-toxicarol, 5638  
Picropodophyllotoxin acetate, 17342  
Steganacin, 20284
- C<sub>24</sub>H<sub>24</sub>O<sub>10</sub>**  
3-Carboxy-6-methoxy-1-(3',4'-dihydroxyphenyl)-naphthalene-7-*O*-α-*L*-rhamnopyranoside, 3177
- C<sub>24</sub>H<sub>24</sub>O<sub>11</sub>**  
Agastachoside, 709  
2-*O*-(*E*)-Caffeoyl-1-*O*-*p*-(*E*)-coumaroyl-β-*D*-glucopyranose, 2895  
Isoagastachoside, 11200  
Phymarolin I, 17202  
Quercitrin derivative CPB-50-208-18, 18413
- C<sub>24</sub>H<sub>24</sub>O<sub>12</sub>**  
Chrysoeriol 4'-*O*-(6"-*O*-acetyl)-β-*D*-glucopyranoside, 3603  
1,2-Di-*O*-(*E*)-caffeoyl-β-*D*-glucopyranose, 5407  
1,3-Di-*O*-(*E*)-caffeoyl-β-*D*-glucopyranose, 5408  
3,6-Di-*O*-caffeoyl-(α/β)-glucose, 5409  
Germanaism A, 8349  
7-(6-*O*-Malonyl-β-*D*-glucopyransyloxy)-3-(4-hydroxyphenyl)-4*H*-1-benzopyran-4-one, 13445  
Neocomplanoside, 15371
- C<sub>24</sub>H<sub>24</sub>O<sub>13</sub>**  
Meamsetin 3-*O*-(4"-*O*-acetyl)-α-*L*-*C<sub>r</sub>*-rhamnopyranoside, 13626
- C<sub>24</sub>H<sub>25</sub>NO<sub>4</sub>**  
Ancistroheynine A, 1144  
Ancistroheynine B, 1145  
Ancistolikokine D, 1146
- C<sub>24</sub>H<sub>25</sub>NO<sub>5</sub>**  
*O*-Methyl-waltherione A, 14815
- C<sub>24</sub>H<sub>25</sub>NO<sub>11</sub>**  
Oleracein A, 16074
- C<sub>24</sub>H<sub>26</sub>N<sub>2</sub>O<sub>8</sub>**  
Pauciflorine A, 16731
- C<sub>24</sub>H<sub>26</sub>N<sub>2</sub>O<sub>13</sub>**  
Betanin, 2322  
Gomphrenin I, 8927  
Gomphrenin II, 8928  
Isobetatin, 11252
- C<sub>24</sub>H<sub>26</sub>N<sub>2</sub>O<sub>16</sub>S**  
Prebetanin, 17770
- C<sub>24</sub>H<sub>26</sub>O<sub>4</sub>**  
Albafuran A, 844  
Mulberrofuran L, 15046

- Mulberrofuran V, 15053  
Myrtilphenone B, 15225
- C<sub>24</sub>H<sub>26</sub>O<sub>5</sub>**  
2,3-Dihydro-7-hydroxy-2*R*\*,3*R*\*-dimethyl-2-[4-methyl-5-(4-methyl-2-furyl)-3(*E*),7-pentenyl]-furo[2,3-*b*]chromone, 5630  
2,3-Dihydro-7-hydroxy-2*S*\*,3*R*\*-dimethyl-2-[4-methyl-5-(4-methyl-2-furyl)-3(*E*),7-pentenyl]-furo[2,3-*b*]chromone, 5631  
2,3-Dihydro-7-hydroxy-2*R*\*,3*R*\*-dimethyl-2-[4-methyl-5-(4-methyl-2-furyl)-3(*E*)-pentenyl]-furo[3,2-*c*]coumarin, 5632  
2,3-Dihydro-7-hydroxy-2*S*\*,3*R*\*-dimethyl-2-[4-methyl-5-(4-methyl-2-furyl)-3(*E*)-pentenyl]-furo[3,2-*c*]coumarin, 5633
- C<sub>24</sub>H<sub>26</sub>O<sub>6</sub>**  
Caloxanthone B, 2999  
Cochinchinone C, 3872  
Cowaxanthone, 4202  
Cudrafrutixanthone, 4336  
Dulcisxanthone B, 6627  
Gerontoxanthone E, 8356  
1-Isomangostin, 11526  
3-Isomangostin, 11527  
Mangostin, 13492  
4-[3''-(1*c*-Methylbutanoyloxy)propyl]-2-methoxy-(3',4'-methylenedioxyphenyl)-1*a*,5*b*-dihydrobenzo-[3,4]-cyclobutaoxirene, 14172  
Nigrolineaxanthone E, 15578  
1,3,6-Trihydroxy-7-methoxy-2,5-bis(3-methyl-2-butenyl)-xanthone, 21768
- C<sub>24</sub>H<sub>26</sub>O<sub>7</sub>**  
(+)-Anomalin, 1346  
Anomalin, 1347  
Archangelicin, 1619  
Cochinchinone D, 3873  
Disenecionyl *cis*-khellactone, 6507  
11-Hydroxy-1-isomangostin, 10250  
Mangostanin A, 13485  
Mangostanol, 13486  
Mangostenol, 13487  
Nigrolineaxanthone B, 15575  
Praeruptorin D, 17763  
Xanthalin, 22744
- C<sub>24</sub>H<sub>26</sub>O<sub>8</sub>**  
Catalpafurxin, 3304  
Interiorin C, 11101  
Isomallotochromene, 11522  
Mallotochromene, 13430  
Mangostenone C, 13489  
Picropodophyllin-1-ethyl ether, 17338  
6-Prenylisocaviunin, 17834  
1'',2'',3'',4''-TetrahydrothoningineC, 21081
- C<sub>24</sub>H<sub>26</sub>O<sub>10</sub>**  
Anticancer Rotenoid PMV70P691-036, 1436  
4',5'-Dihydro-11,5'-dihydroxy-4'-methoxytyphrosin, 5595  
Scrophuloside A, 19569  
Scrophuloside B, 19570
- C<sub>24</sub>H<sub>26</sub>O<sub>11</sub>**  
Andrographidine E, 1155  
Leptostachyol, 12679  
Spirafornin D, 20192
- C<sub>24</sub>H<sub>26</sub>O<sub>12</sub>**  
Cirsilineol-4'-monoglucoside, 3742  
Cyrtophyllin, 4589  
Dracunculifoside C, 6582  
5-Hydroxy-6,7,3'-trimethoxyflavone-8-*O*- $\beta$ -*D*-glucoside, 10797  
Vavain 3'-*O*- $\beta$ -*D*-glucopyranoside, 22359  
Viscumneoside VI, 22541
- C<sub>24</sub>H<sub>26</sub>O<sub>13</sub>**  
Benzenepropanoic acid, 8-{{[7'-(3',4'-dihydroxy-phenyl)-9'-oxo-7'-propenyl]oxy}-3-(1''-*O*- $\beta$ -*D*-glucopyranosyl)-4-hydroxy-[*R*-(*E*)], 2223  
Centaurein, 3389  
Iridin, 11141
- C<sub>24</sub>H<sub>26</sub>O<sub>14</sub>**  
Isolimocitrol-3- $\beta$ -*D*-glucoside, 11492  
Limocitrol- $\beta$ -*D*-glucoside, 12841  
Sibiricaxanthone A, 19856  
Sibiricaxanthone B, 19857
- C<sub>24</sub>H<sub>27</sub>NO<sub>3</sub>**  
Boehmeriasin A, 2528  
8-*O*-Methyl-1-epi-dioncophylline B, 14396
- C<sub>24</sub>H<sub>27</sub>NO<sub>4</sub>**  
Buxifoliadine B, 2824  
*N*-Methylalaphylline, 14149  
8-*O*-Methyldioncophyllinol B, 14325  
Tylocrebrine, 22146  
Tylophorine, 22151
- C<sub>24</sub>H<sub>27</sub>NO<sub>6</sub>**  
Merredissine, 13784
- C<sub>24</sub>H<sub>28</sub>Br<sub>3</sub>N<sub>3</sub>O<sub>6</sub>**  
Purpuramine K, 18212
- C<sub>24</sub>H<sub>28</sub>N<sub>2</sub>O<sub>3</sub>**  
16-Propoxystrychnine, 17934
- C<sub>24</sub>H<sub>28</sub>N<sub>2</sub>O<sub>5</sub>**  
Novacine, 15847
- C<sub>24</sub>H<sub>28</sub>N<sub>2</sub>O<sub>6</sub>**  
Methyl 12-methoxychanofrucosinate, 14584  
Terrestribisamide, 21005
- C<sub>24</sub>H<sub>28</sub>N<sub>4</sub>O<sub>4</sub>**  
Ergosecalimine, 7242
- C<sub>24</sub>H<sub>28</sub>O<sub>3</sub>**  
Ugonstilbene A, 22186  
Ugonstilbene B, 22187  
Ugonstilbene C, 22188
- C<sub>24</sub>H<sub>28</sub>O<sub>4</sub>**  
Angelicide, 1190  
Chlorophorin, 3567  
Clausarin, 3788  
Conferone, 3970  
(*Z,Z'*)-Diligustilide, 6192  
( $\pm$ )-*trans*-3-(3,4-Dimethoxyphenyl)-4-[(*E*)-3,4-dimethoxystyryl]cyclohex-1-ene, 6282  
Ligustilide dimer, 12826  
Norbixin, 15720  
Ponfolin, 17706  
Vismiaphenone C, 22550
- C<sub>24</sub>H<sub>28</sub>O<sub>5</sub>**  
2,3-Dihydro-7-hydroxy-2*S*\*,3*R*\*-dimethyl-2-[4,8-dimethyl-3(*E*),7-nonadien-6-onyl]-furo[3,2-*c*]coumarin, 5626  
Pseudoguttiaphenone-A, 18027  
Shijiaocao lactone, 19804  
*Z*-3',8',3' $\alpha$ ,7' $\alpha$ -Tetrahydro-6,3',7,7' $\alpha$ -diligustilide-8'-one, 21068
- C<sub>24</sub>H<sub>28</sub>O<sub>6</sub>**  
Nigrolineaxanthone O, 15588
- C<sub>24</sub>H<sub>28</sub>O<sub>7</sub>**  
3'(*S*)-Angeroyloxy-4'(*R*)-isovaleryloxy-3',4'-dihydroxanthyletin, 1239  
Cratoxylone, 4220  
Garcinone D, 8221  
Hyuganin A, 10922  
(+)-Praeruptorin E, 17764  
 $\psi$ -Rhodomyrtoxin, 18814
- C<sub>24</sub>H<sub>28</sub>O<sub>8</sub>**  
Acetylbinankadsurin A, 333  
Mangostenone E, 13491  
Schisantherin O, 19496  
Xanthanthusin H, 22751  
Xanthanthusin I, 22752  
Xanthanthusin J, 22753
- C<sub>24</sub>H<sub>28</sub>O<sub>9</sub>**  
6-Acetylpicropoline, 486  
Anticancer Lignan PMV70P691-126, 1426  
(2*S*,3*S*)-2,3-Bis(5-methoxy-3,4-methylenedioxybenzyl)-butane-1,4-diol monoacetate, 2482  
Daldinin E, 4612  
Daldinin F, 4613  
Isomallotochromanol, 11521
- C<sub>24</sub>H<sub>28</sub>O<sub>10</sub>**  
Agrimonolide-6-*O*- $\beta$ -*D*-glucopyranoside, 761
- C<sub>24</sub>H<sub>28</sub>O<sub>11</sub>**  
Bacopaside B, 2085  
10-*O*-*trans*-Coumaroyl-eranthemoside, 4154



- (-)-7-*O*-Methyleucomol 5-*O*- $\beta$ -*D*-glucopyranoside, 14437  
 Monnieraside II, 14918  
 Myrciacitrin II, 15148  
 Pagoside, 16536  
 Picroside I, 17344
- C<sub>24</sub>H<sub>28</sub>O<sub>12</sub>**  
 Breynioside B, 2612  
 Cucurbitoside E, 4334  
 12,15-Diacetyl-13 $\alpha$ (21)-epoxyeucomanone, 5334  
 Javanicin, 11852  
 Odontoside, 15989
- C<sub>24</sub>H<sub>28</sub>O<sub>13</sub>**  
 Gentiopicroside tetraacetate, 8305  
 Verminoside, 22403
- C<sub>24</sub>H<sub>29</sub>ClO<sub>7</sub>**  
 Armillarinin, 1740
- C<sub>24</sub>H<sub>30</sub>N<sub>2</sub>O<sub>5</sub>**  
 Vindorosine, 22501
- C<sub>24</sub>H<sub>30</sub>O<sub>3</sub>**  
 $\alpha,\alpha'$ -Dihydro-3,5,4'-trihydroxy-4,5'-diisopentenylstilbene, 5729  
 Ferulenol, 7767  
 Glepidotin D, 8551  
 14 $\beta$ -Hydroxybufa-3,5,20,22-tetraenolide, 9860  
 Umbelliprenin, 22196
- C<sub>24</sub>H<sub>30</sub>O<sub>4</sub>**  
 Assafoetidin, 1909  
 Badrakemin, 2096  
 Conferol, 3969  
 (*Z*)-3,8-Dihydro-6,6';7,3' $\alpha$ -diligustilide, 5599  
 2,3-Dihydro-7-hydroxy-2*S*\*,3*R*\*-dimethyl-2-[4,8-dimethyl-3(*E*),7-nonadienyl]-furo[2,3-*b*]chromone, 5627  
 2,3-Dihydro-7-hydroxy-2*R*\*,3*R*\*-dimethyl-2-[4,8-dimethyl-3(*E*),7-nonadienyl]-furo[3,2-*c*]coumarin, 5628  
 2,3-Dihydro-7-hydroxy-2*S*\*,3*R*\*-dimethyl-2-[4,8-dimethyl-3(*E*),7-nonadienyl]-furo[3,2-*c*]coumarin, 5629  
 $\alpha,\alpha'$ -Dihydro-3,5,3',4'-tetrahydroxy-4,5'-diisopentenylstilbene, 5725  
 Farnesiferol A, 7731  
 Farnesiferol B, 7732  
 Farnesiferol C, 7733  
 Gummosin, 9085  
 Uralstilbene, 22245
- C<sub>24</sub>H<sub>30</sub>O<sub>5</sub>**  
 Assafoetidol A, 1910  
 Galbanic acid, 8087  
 4-[(2'*E*)-7"-Hydroxy-3",7"-dimethyloct-2"-enyl]-2',3',4',5'-tetrahydroxy-*trans*-stilbene, 10054  
 Kamolonol, 12127  
 Neveskone, 15517  
 3-Oxo-20*S*,21-epoxyresibufogenin, 16329  
 3-Oxo-11 $\alpha$ -hydroxy-12-dehydroxy-scilliphaeosidin, 16349  
 Resibufagin, 18636
- C<sub>24</sub>H<sub>30</sub>O<sub>6</sub>**  
 Armillaripin, 1741  
 Bufotalinin, 2723  
 Caesaldekarin E, 2862  
 Magnoshinin, 13392  
 Obtusanal A, 15896  
 19-Oxodesacetylcinobufagin, 16312
- C<sub>24</sub>H<sub>30</sub>O<sub>7</sub>**  
 Apetalic acid 5-*O*-acetate, 1471  
 Armillarilin, 1739  
 Athamantin, 1960  
 Ethoxyclusin, 7400  
 Isoapetalic acid 5-*O*-acetate, 11231  
 Mallotojaponin, 13431  
 Moslolignan B, 15001  
 Nirtetralin, 15624  
 Novelrabdosin, 15848  
 Odonicin, 15988  
 Pyramidatin A, 18241  
 Schisanlignone A, 19485
- C<sub>24</sub>H<sub>30</sub>O<sub>8</sub>**  
 16-Acetoxycoleon U 11-acetate, 146  
 9'-*O*-Acetyl-(7*R*,8*S*,7*R*,8*S*)-(-)-fargesol, 394  
 6-Acetyl-teucjaponin B, 524  
 Albaspidin PB, 853  
 Cornutin F, 4069  
 (-)-Cubebinolide, 4309  
 Diacetyl montanin D, 5342  
 Diayangambin, 5378  
 Flavaspidic acid BB, 7809  
 Lirioresinol B dimethyl ether, 12920  
 Margaspidin, 13559  
 Methyl pseudolarate B, 14703  
 Platyphyllonol-5-*O*- $\beta$ -*D*-xylopyranoside, 17548  
 Rugosinin, 19061  
 Salvigresin, 19216  
 Saroaspidin A, 19382  
 Trichorabdol G acetate, 21571
- C<sub>24</sub>H<sub>30</sub>O<sub>9</sub>**  
 6-Acetyl-10-hydroxyteucjaponin B, 425  
 Alnuside A, 959  
 Alnuside B, 960  
 Coetsin B, 3897  
 1,1'-Dibenzene-6',8',9'-trihydroxy-3-allyl-4-*O*- $\beta$ -*D*-glucopyranoside, 5379  
 Loxothyryn A, 13013  
 Luzonoid A, 13157  
 Luzonoid B, 13158  
 Luzonoid C, 13159  
 Luzonoid D, 13160  
 Macrocalyxin A (Macrocalin A), 13305  
 Teucrolivin A, 21217  
 Xanthanthusin F, 22749
- C<sub>24</sub>H<sub>30</sub>O<sub>10</sub>**  
 8-Cinnamoylmyoporoside, 3711  
 Icariside A<sub>1</sub>, 10941  
 Oregonin, 16174
- C<sub>24</sub>H<sub>30</sub>O<sub>11</sub>**  
 6-*O*-*p*-Coumaroylajugol, 4144  
 Harpagoside, 9238
- C<sub>24</sub>H<sub>30</sub>O<sub>12</sub>**  
 8-*p*-Coumaroylharpagide, 4163  
 Demethyligstroside, 5084  
 Glochiflavanoside B, 8572  
 Glochiflavanoside C, 8573  
 8-*O*-(2-Hydroxycinnamoyl)harpagide, 9912
- C<sub>24</sub>H<sub>30</sub>O<sub>13</sub>**  
 2-Acetyl-1,5-dihydroxy-3-methyl-8-*O*( $\beta$ -xylopyranosyl-(1 $\rightarrow$ 6)-*O*( $\beta$ -glucopyranosyl)) naphthalene, 382  
 Inumakilactone A glucoside, 11114  
 6-*O*-Veratroyl-catalpol, 22392
- C<sub>24</sub>H<sub>32</sub>O<sub>4</sub>**  
 Geronemin B, 8361  
 Resibufogenin, 18637
- C<sub>24</sub>H<sub>32</sub>O<sub>5</sub>**  
 Bufagin, 2715  
 Desacetylcinobufagin, 5238  
 20*R*,21-Epoxyresibufogenin, 7192  
 20*S*,21-Epoxyresibufogenin, 7193  
 Gamabufotalininol, 8122  
 12 $\beta$ -Hydroxyresibufogenin, 10672  
 19-Hydroxyresibufogenin, 10673  
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- C<sub>24</sub>H<sub>32</sub>O<sub>6</sub>**  
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- C<sub>24</sub>H<sub>32</sub>O<sub>9</sub>**  
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- C<sub>24</sub>H<sub>32</sub>O<sub>12</sub>**  
 6-*O*-(3,4-Dimethoxybenzoyl)-ajugol, 6205
- C<sub>24</sub>H<sub>33</sub>NO<sub>3</sub>**  
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- C<sub>24</sub>H<sub>33</sub>NO<sub>4</sub>**  
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- C<sub>24</sub>H<sub>33</sub>NO<sub>5</sub>**  
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 16-Acetoxy-7α-ethoxyroyleanone, 193  
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- C<sub>24</sub>H<sub>34</sub>O<sub>7</sub>**  
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 (3*E*,7*E*)-2α,10β-Diacetoxy-5α,13α,20-trihydroxy-3,8-secotaxa-3,7,11-trien-9-one, 5323  
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- C<sub>24</sub>H<sub>34</sub>O<sub>9</sub>**

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- C<sub>24</sub>H<sub>34</sub>O<sub>13</sub>**  
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- C<sub>24</sub>H<sub>34</sub>O<sub>15</sub>**  
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- C<sub>24</sub>H<sub>35</sub>NO**  
1-Methyl-2-(Z)-8-tetradecenyl-4(1*H*)-quinolone, 14745
- C<sub>24</sub>H<sub>35</sub>NO<sub>3</sub>**  
Ovatine, 16279
- C<sub>24</sub>H<sub>35</sub>NO<sub>4</sub>**  
Lepetine, 12669  
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- C<sub>24</sub>H<sub>35</sub>NO<sub>7</sub>**  
8-Acetylcelsine, 392
- C<sub>24</sub>H<sub>36</sub>O<sub>4</sub>**  
18-Acetoxy-15*α*-hydroxymansumbinone, 229  
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- C<sub>24</sub>H<sub>36</sub>O<sub>5</sub>**  
Hexanorcucurbitacin F, 9517  
Lucidone C, 13050
- C<sub>24</sub>H<sub>36</sub>O<sub>6</sub>**  
(1*R*\*,3*S*\*,4*R*\*,6*S*\*)-9-(Acetoxy)-4-acetoxy-1-[(2*Z*)-2-methylbut-2-enoyloxy]bisabol-2(3), 10(11)-diene, 118  
9*α*,10*β*-Diacetoxy-5*α*,13*α*-dihydroxy-4(20),11-taxadiene, 5294  
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- C<sub>24</sub>H<sub>36</sub>O<sub>7</sub>**  
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2*α*,5*α*,9*α*-Trihydroxy-10*β*,13*α*-diacetoxytaxa-4(20),11-diene, 21705  
Xindongnin E, 22801
- C<sub>24</sub>H<sub>36</sub>O<sub>8</sub>**  
Diacetoxytetrahydroxytaxadiene, 5318
- Forrestin B, 7916  
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2*α*,5*α*,9*α*-Trihydroxy-10*β*,13*α*-diacetoxy-4*β*,20-epoxytaxa-11-ene, 21704
- C<sub>24</sub>H<sub>36</sub>O<sub>9</sub>**  
Junceollolide I, 11948  
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- C<sub>24</sub>H<sub>36</sub>O<sub>10</sub>**  
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- C<sub>24</sub>H<sub>36</sub>O<sub>15</sub>**  
Benzyl alcohol *β*-*D*-glucopyranosyl-(1→2)-[*β*-*D*-xylopyranosyl-(1→6)]-*β*-*D*-glucopyranoside, 2277  
Benzyl *β*-*D*-glucopyranosyl-(1→4)-[*β*-*D*-apiofuranosyl-(1→6)]-*β*-*D*-glucopyranoside, 2287
- C<sub>24</sub>H<sub>36</sub>O<sub>16</sub>**  
2'-*O*-*β*-*D*-Glucopyranosyl-6'-*O*-*β*-*D*-xylopyranosylsalicin, 8751
- C<sub>24</sub>H<sub>37</sub>NO<sub>2</sub>**  
Buxtauine, 2832
- C<sub>24</sub>H<sub>37</sub>NO<sub>5</sub>**  
14-Debenzoylfranchetine, 4806
- C<sub>24</sub>H<sub>37</sub>NO<sub>7</sub>**  
18-Hydroxy-14-*O*-methylgadesine, 10496
- C<sub>24</sub>H<sub>37</sub>O<sub>7</sub>**  
MelissoidesinQ, 13703
- C<sub>24</sub>H<sub>38</sub>O<sub>3</sub>**  
6-(10'*Z*-Heptadecenyl)salicylic acid, 9389  
Irisquinone A, 11179  
Merulinic acid C, 13792  
Suranone, 20491
- C<sub>24</sub>H<sub>38</sub>O<sub>4</sub>**  
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3*α*-Hydroxy-6-oxo-5*α*-cholanolic acid, 10560  
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Merulinic acid B, 13791  
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- C<sub>24</sub>H<sub>38</sub>O<sub>5</sub>**  
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7*α*,18-Diacetoxyabiet-8(14)-en-13*β*-ol, 5284  
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6*β*,7*β*-Diacetoxy-13-hydroxy-labda-8,14-diene, 5308
- Vitetrioflin D, 22571
- C<sub>24</sub>H<sub>38</sub>O<sub>6</sub>**  
(1*R*\*,3*S*\*,4*R*\*,6*S*\*)-9-(Acetoxy)-4-acetoxy-1-[(2*Z*)-2-methylbut-2-enoyloxy]bisabol-10(11)-ene, 119  
7-Acetoxy-4-hydroxy-3-oxo-4(3→2)-abeo-13-clerodaen-15-oic acid methyl ester, 232
- C<sub>24</sub>H<sub>38</sub>O<sub>7</sub>**  
4,5,6-Tri-*O*-acetyl hygrophorone A<sup>12</sup>, 21535
- C<sub>24</sub>H<sub>38</sub>O<sub>8</sub>**  
Rhodojaponin IV, 18802
- C<sub>24</sub>H<sub>38</sub>O<sub>10</sub>**  
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- C<sub>24</sub>H<sub>38</sub>O<sub>11</sub>**  
Eriojaposide A, 7287  
Platanionoside F, 17523
- C<sub>24</sub>H<sub>38</sub>O<sub>12</sub>**  
(6*S*,9*R*)-Vomifoliol-9-*O*-*β*-apiofuranosyl-(1"→6')-*O*-*β*-glucopyranoside, 22616  
(6*S*,9*R*)-Vomifoliol-9-*O*-*β*-xylopyranosyl-(1"→6')-*O*-*β*-glucopyranoside, 22617
- C<sub>24</sub>H<sub>39</sub>NO<sub>4</sub>**  
Cassaine, 3278
- C<sub>24</sub>H<sub>39</sub>NO<sub>5</sub>**  
Talatisamine, 20650
- C<sub>24</sub>H<sub>39</sub>NO<sub>6</sub>**  
Bullatine B, 2738  
6-Epiforesticine, 6915  
Foresticine, 7880  
6-Methylumbrofine, 14798
- C<sub>24</sub>H<sub>39</sub>NO<sub>7</sub>**  
Bullatine F, 2741  
Circinadine B, 3736  
Delcosine, 5004  
Delectinine, 5006  
6-Demethyldeolsoline, 5073  
Gigaconitine, 8378  
10-Hydroxynudicaulidine, 10543  
Nagarine, 15228  
Potanine, 17745  
Senbusine C, 19701
- C<sub>24</sub>H<sub>40</sub>N<sub>2</sub>**  
Concuressine, 3961  
Conessine, 3968
- C<sub>24</sub>H<sub>40</sub>N<sub>2</sub>O**  
Holarrhenine, 9584  
7*α*-Hydroxyconessine, 9932
- C<sub>24</sub>H<sub>40</sub>O<sub>2</sub>**  
5*β*-Cholanolic acid, 3575
- C<sub>24</sub>H<sub>40</sub>O<sub>3</sub>**  
Bufodihydroxycholanolic acid, 2719  
Lithocholic acid, 12923  
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- C<sub>24</sub>H<sub>40</sub>O<sub>4</sub>**  
 Allochenodeoxycholic acid, 929  
 Chenodeoxycholic acid, 3511  
 Deoxycholic acid, 5161  
 $\alpha$ -Hyodeoxycholic acid, 10868  
 $\beta$ -Hyodeoxycholic acid, 10869  
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- C<sub>24</sub>H<sub>40</sub>O<sub>5</sub>**  
 Cholic acid, 3588  
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- C<sub>24</sub>H<sub>40</sub>O<sub>6</sub>**  
 (*rel*-5*S*,6*R*,8*R*,9*R*,10*S*,13*S*,15*R*,16*R*)-6-Acetoxy-9,13;15,16-diepoxy-15,16-dimethoxylabdane, 159  
 4,5-Di-*O*-acetyl hygrophorone A<sup>14</sup>, 5337  
 4,6-Di-*O*-acetyl hygrophorone B<sup>14</sup>, 5338  
 1,4-Di-*O*-acetyl hygrophorone E<sup>14</sup>, 5341
- C<sub>24</sub>H<sub>40</sub>O<sub>10</sub>**  
 Shionoside C, 19833
- C<sub>24</sub>H<sub>40</sub>O<sub>11</sub>**  
 Cuneataside E, 4366  
 Platanionoside E, 17522  
 Platanionoside G, 17524
- C<sub>24</sub>H<sub>40</sub>O<sub>12</sub>**  
 Ebracteatoside A, 6663  
 (6*R*,9*R*)-9-Hydroxy-4-megastigmen-3-one 9-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside, 10374
- C<sub>24</sub>H<sub>41</sub>NO**  
 Alkaloid C, 904  
 2-Noryl-5-decanoylpyridine, 15816
- C<sub>24</sub>H<sub>41</sub>NO<sub>4</sub>**  
 Cassaidine, 3277
- C<sub>24</sub>H<sub>41</sub>NO<sub>8</sub>**  
 Retronecine 2*S*-hydroxy-2*S*-(1*S*-hydroxyethyl)-2*S*-[(1'*S*-hydroxyethyl)-4-methylpentanoyl]-4-methylpentanoyl ester, 18663
- C<sub>24</sub>H<sub>41</sub>NO<sub>9</sub>**  
 Broussonetine X, 2646
- C<sub>24</sub>H<sub>42</sub>N<sub>2</sub>**  
 Croomionidine, 4265  
 Dihydroconcuressine, 5562  
 Dihydroconnessine, 5563
- C<sub>24</sub>H<sub>42</sub>O<sub>3</sub>**  
 3-(1-Methoxyoctadecyl)-5-methylene-5*H*-furan-2-one, 14047
- C<sub>24</sub>H<sub>42</sub>O<sub>11</sub>**  
 (3*R*,9*S*)-Megastigman-5-en-3,9-diol-3-*O*-[ $\alpha$ -*L*-arabinofuranosyl-(1 $\rightarrow$ 6)]- $\beta$ -*D*-glucopyranoside, 13642  
 Myrsinioside E, 15214
- Platanionoside H, 17525
- C<sub>24</sub>H<sub>42</sub>O<sub>12</sub>**  
 Platanionoside I, 17526
- C<sub>24</sub>H<sub>42</sub>O<sub>21</sub>**  
 Isolychnose, 11515  
 Lychnose, 13178  
 Stachyose, 20255
- C<sub>24</sub>H<sub>43</sub>NO**  
*N*-Isobutyl-(2*E*,4*E*,14*Z*)-eicosatrienamide, 11273  
 Pipnoohine, 17473
- C<sub>24</sub>H<sub>44</sub>N<sub>2</sub>**  
 Pachysamine A, 16501
- C<sub>24</sub>H<sub>44</sub>N<sub>2</sub>O**  
 Pachysandrine C, 16507
- C<sub>24</sub>H<sub>44</sub>O<sub>4</sub>**  
 Secomahubanolide, 19628
- C<sub>24</sub>H<sub>45</sub>NO<sub>9</sub>**  
 Morusimic acid A, 14989  
 Morusimic acid C, 14991
- C<sub>24</sub>H<sub>45</sub>NO<sub>10</sub>**  
 Morusimic acid E, 14993
- C<sub>24</sub>H<sub>46</sub>O<sub>2</sub>**  
 Tetracosan-4-olide, 21038
- C<sub>24</sub>H<sub>48</sub>O<sub>2</sub>**  
 Lignoceric acid, 12800  
 21-Methyl tricosanoic acid, 14770
- C<sub>25</sub>H<sub>14</sub>O<sub>5</sub>**  
 Newbouldiaquinone, 15519
- C<sub>25</sub>H<sub>14</sub>O<sub>10</sub>**  
 Phelligridin E, 17063
- C<sub>25</sub>H<sub>17</sub>NO<sub>13</sub>**  
 Laccaic acid C, 12426
- C<sub>25</sub>H<sub>18</sub>O<sub>5</sub>**  
 Blespirol, 2504
- C<sub>25</sub>H<sub>18</sub>O<sub>9</sub>**  
 Inoscavin A, 11081
- C<sub>25</sub>H<sub>20</sub>O<sub>6</sub>**  
 Ohioensin E, 16023
- C<sub>25</sub>H<sub>20</sub>O<sub>9</sub>**  
 Neohydnocarpin, 15409
- C<sub>25</sub>H<sub>22</sub>O<sub>5</sub>**  
 Inophyllolide, 11077  
 Isorobustone, 11683  
 Tomentolide A, 21438
- C<sub>25</sub>H<sub>22</sub>O<sub>6</sub>**  
 Cyclomorusin, 4517  
 Kraussianone 1, 12291
- C<sub>25</sub>H<sub>22</sub>O<sub>7</sub>**  
 Formosanatin D, 7892  
 Gnetumontanin C, 8895  
 Kraussianone 4, 12294
- C<sub>25</sub>H<sub>22</sub>O<sub>9</sub>**  
 Silandrin, 19893
- Silymonin, 19899
- C<sub>25</sub>H<sub>22</sub>O<sub>10</sub>**  
 Isosilybin A, 11714  
 Isosilybin B, 11715  
 Silybin, 19895  
 Silybin B, 19896  
 Silychristin, 19897  
 Silydianin, 19898
- C<sub>25</sub>H<sub>22</sub>O<sub>13</sub>**  
 6,7-Dihydroxy-3-methoxy-8-[2-oxo-2*H*-1-benzopyran-7-(*O*- $\beta$ -*D*-glucopyranosyl)-8-yl]-2*H*-1-benzopyran-2-one, 5995
- C<sub>25</sub>H<sub>22</sub>O<sub>14</sub>**  
 4'-*O*-Methylellagic acid 3-(2'',3''-di-*O*-acetyl)- $\alpha$ -*L*-rhamnoside, 14342
- C<sub>25</sub>H<sub>24</sub>O<sub>4</sub>**  
 Xambioona, 22743
- C<sub>25</sub>H<sub>24</sub>O<sub>5</sub>**  
 Calaustralin, 2945  
 Chandalone, 3475  
 8,9-Dihydro-5-hydroxy-6-(2-methylbutanoyl)-4-phenyl-8-(prop-1-en-2-yl)furo[2,3-*h*]chromen-2-one, 5642  
 8,9-Dihydro-5-hydroxy-6-(3-methylbutanoyl)-4-phenyl-8-(prop-1-en-2-yl)furo[2,3-*h*]chromen-2-one, 5643  
 Glycyrdione D, 8837  
 Inophyllum C, 11078  
 Inophyllum E, 11079  
 Isochandalone, 11324  
 Lespedezol A<sub>3</sub>, 12684  
 Mammea A/AB cyclo D, 13464  
 Mammea A/A cyclo D, 13467  
 Mesuarin, 13807  
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 Ponnalide, 17718  
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 Scanderone, 19451  
 Soulatrolide, 20109  
 Ulexone A, 22189  
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- C<sub>25</sub>H<sub>24</sub>O<sub>6</sub>**  
 Acetyl blancoxanthone, 335  
 Auriculatin, 2014  
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 5,4'-Dihydroxy-8-(3,3-dimethylallyl)-2''-hydroxymethyl-2''-methylpyrano[5,6:6,7]isoflavone, 5849  
 Eryvarin G, 7351  
 Kanzonol T, 12152  
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- Lespedezol A<sub>6</sub>, 12687  
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 5,7,3'-Trihydroxy-2'-(3-methylbut-2-enyl)-4',5'-(3,3-dimethylpyrano)isoflavone, 21796  
 Yinyanghuo A, 22908
- C<sub>25</sub>H<sub>24</sub>O<sub>7</sub>**  
 Broussonol A, 2652  
 Broussonol B, 2653  
 Kraussianone 5, 12295  
 Macrophyllin, 13318  
 Mammee A/AB dioxalanocyclo F, 13466  
 Petalopurpureol, 17008  
 Sanggenon A, 19255  
 Sanggenon M, 19268
- C<sub>25</sub>H<sub>24</sub>O<sub>8</sub>**  
 Anticancer Stilbenolignan PMV70P691-042, 1448  
 Kompasinol A, 12258  
 5-Methoxy-(3",4"-dihydro-3",4"-diacetoxy)-2",2"-dimethylpyrano-(7,8:5",6")-flavone, 13908
- C<sub>25</sub>H<sub>24</sub>O<sub>10</sub>**  
 Anticancer Flavonoid PMV70P691-014, 1398
- C<sub>25</sub>H<sub>24</sub>O<sub>11</sub>**  
 (+)-Catechin-pentaacetate, 3316  
 (-)-Epicatechin-pentaacetate, 6867
- C<sub>25</sub>H<sub>24</sub>O<sub>12</sub>**  
 Cynarin, 4564  
 1,4-Di-*O*-caffeoylquinic acid, 5413  
 3,4-Di-*O*-caffeoylquinic acid, 5414  
 Isochlorogenic acid A, 11328  
 Kaempferol-3-*O*-(2,3-di-*O*-acetyl- $\alpha$ -*L*-rhamnopyranoside), 12035  
 Kaempferol-3-*O*-(2,4-di-*O*-acetyl- $\alpha$ -*L*-rhamnopyranoside), 12036  
 Kaempferol-3-*O*-(3,4-di-*O*-acetyl- $\alpha$ -*L*-rhamnopyranoside), 12037
- C<sub>25</sub>H<sub>24</sub>O<sub>13</sub>**  
 Trifolirhizin-6"-*O*-malonate, 21638  
 Trilobatin D, 21879
- C<sub>25</sub>H<sub>24</sub>O<sub>15</sub>**  
 Mearnsetin 3-*O*-(4"-*O*-malonyl)- $\alpha$ -*L*-rhamnopyranoside, 13627
- C<sub>25</sub>H<sub>25</sub>O<sub>13</sub><sup>+</sup>**  
 Peonidin-3-*O*-(6"-*O*-malonyl- $\beta$ -glucopyranoside), 16902
- C<sub>25</sub>H<sub>26</sub>BrN<sub>5</sub>O<sub>13</sub>**  
 Surugatoxin, 20496
- C<sub>25</sub>H<sub>26</sub>N<sub>2</sub>O<sub>9</sub>**  
 Naucleosidine, 15299
- C<sub>25</sub>H<sub>26</sub>O<sub>3</sub>**  
 8,8-Dimethyl-2-phenyl-10-prenyl-2,3-dihydro-8*H*-pyrano[3,2-*g*]chroman-4-one, 6397
- C<sub>25</sub>H<sub>26</sub>O<sub>4</sub>**  
 Erycristagallin, 7304  
 Euchrenone, 7484  
 Hispaglabridin B, 9558  
 3-Hydroxy-4-(3,3-dimethylallyl)-4",5"-dehydropyrano[8,9:2",3"][6*aR*,11*aR*]-pterocarpane, 10047  
 Licoflavone B, 12775
- C<sub>25</sub>H<sub>26</sub>O<sub>5</sub>**  
 Calopolyanolid C, 2994  
 Calopolyanolid D, 2995  
 (*E*)-1-[2,4-Dihydroxy-3-(3-methyl-2-butenyl)phenyl]-3-(2,2-dimethyl-8-hydroxy-2*H*-benzopyran-6-yl)-2-propen-1-one, 6024  
 6,8-Diprenylgenistein, 6496  
 Dulcisiflavone, 6625  
 2-Geranylmodin, 8315  
 3-Geranyloxy-6-methyl-1,8-dihydroxyanthraquinone, 8325  
 Glycyrdione B, 8836  
 Isolupalbigenin, 11514  
 Kanzonol Z, 12156  
 Lespedezol A<sub>2</sub>, 12683  
 Lespedezol E<sub>1</sub>, 12700  
 Lupalbigenin, 13088  
 Mammee A/BA, 13468  
 Mammee A/BB, 13469  
 Mammeisin, 13473
- C<sub>25</sub>H<sub>26</sub>O<sub>6</sub>**  
 Anticancer Flavonoid PMV70P691-024, 1402  
 Anticancer Flavonoid PMV70P691-100, 1405  
 Brousoflavonol F, 2635  
 Calopolyanolid A, 2992  
 Calopolyanolid B, 2993  
 Derrisiflavone B, 5230  
 Derrisiflavone F, 5234  
 2,3-Dihydroauriculatin, 5544  
 Disparinol B, 6514  
 Dorsmanin I, 6571  
 Erysenegalensein E, 7317  
 Eryvarin F, 7350  
 Glyarallin B, 8795  
 Glyasperin A, 8796  
 Isoerysenegalensein E, 11415  
 Isosenegalensin, 11711  
 Kushenol F, 12359  
 Kuwanol C, 12378  
 Kuwanon D, 12382  
 Kuwanon F, 12384  
 Lespedezol E<sub>2</sub>, 12701  
 LupinisoflavoneG, 13105  
 Lupinisol A, 13106
- Mammee A/AB cyclo E, 13465  
 Mulberrin, 15038  
 8-Prenylerythrinin, 17832  
 8-Prenylluteone, 17837  
 Sanggenol L, 19253  
 Sanggenon I, 19264  
 Sanggenon N, 19269  
 5,7,3',4'-Tetrahydroxy-2',5'-di(3-methylbut-2-enyl)isoflavone, 21098  
 5,7,2',4'-Tetrahydroxy-3-geranylflavone, 21116  
 2',3,5-Trihydroxy-6,7-(2",2"-dimethylchromene)-8-(3",3"-dimethylallyl)-flavanone, 21719  
 Ugonin A, 22174  
 Ugonin G, 22180  
 Ugonin J, 22183  
 Vogelien H, 22603  
 Yinyanghuo B, 22909
- C<sub>25</sub>H<sub>26</sub>O<sub>7</sub>**  
 Breviflavone B, 2601  
 Broussonol C, 2654  
 Broussonol D, 2655  
 Broussonol E, 2656  
 Erysenegalensein N, 7318  
 Erysenegalensein O, 7319  
 Kraussianone 3, 12293  
 Kushenol C, 12356  
 Oxydihydromorusin, 16445  
 5,7,3',4'-Tetrahydroxy-6-geranylflavonol, 21117  
 Vogelien I, 22604
- C<sub>25</sub>H<sub>26</sub>O<sub>9</sub>**  
 Eryvarinol A, 7352
- C<sub>25</sub>H<sub>26</sub>O<sub>10</sub>**  
 (5*S*,6*S*,7*R*)-2-[2-(2-Acetoxyphenyl)ethyl]-5 $\alpha$ ,6 $\beta$ ,7 $\alpha$ -triacetoxy-5,6,7,8-tetrahydrochromone (AH9), 275  
 5,3'-Dipropanoyloxy-3,6,7,4'-tetramethoxyflavone, 6500
- C<sub>25</sub>H<sub>26</sub>O<sub>11</sub>**  
 Apigenin-7-*O*- $\beta$ -D-glucuronide butyl ester, 1495  
 4',6"-Diacetyl puerarin, 5345
- C<sub>25</sub>H<sub>26</sub>O<sub>13</sub>**  
 Apigenin-6-*C*- $\alpha$ -*L*-arabinopyranosyl-8-*C*- $\beta$ -*L*-arabinopyranoside, 1480  
 Apigenin-6-*C*- $\alpha$ -*L*-arabinopyranosyl-8-*C*- $\beta$ -*D*-xylopyranoside, 1481  
 Apigenin-6-*C*- $\beta$ -*D*-xylopyranosyl-8-*C*- $\alpha$ -*L*-arabinopyranoside, 1501  
 6-*C*- $\beta$ -*L*-Arabinopyranosyl-8-*C*- $\alpha$ -*L*-arabinopyranosylapigenin, 1560  
 6- $\beta$ -*C*-(2'-Galloylglucopyranosyl)-5,7-dihydroxy-2-isopropylchromone, 8105  
 8- $\beta$ -*C*-(2'-Galloylglucopyranosyl)-5,7-dihydroxy-2-isopropylchromone, 8106

- Viscumneoside II, 22537
- C<sub>25</sub>H<sub>27</sub>NO<sub>4</sub>**  
Ancistrocladidine, 1141
- C<sub>25</sub>H<sub>27</sub>NO<sub>5</sub>**  
Ancistrocladisine, 1143
- C<sub>25</sub>H<sub>27</sub>NO<sub>12</sub>**  
Oleracein B, 16075
- C<sub>25</sub>H<sub>28</sub>O<sub>4</sub>**  
Abyssinone IV, 52  
Abyssinone VI, 54  
(*E*)-1-[2,4-Dihydroxy-3-(3-methyl-2-butenyl)phenyl]-3-(4-hydroxy-3-[3-methyl-2-butenyl]phenyl)-2-propen-1-one, 6025  
Erybraedin C, 7295  
Erythrabssin II, 7329  
Eryzerin D, 7357  
4'-*O*-Geranylisoliquiritigenin, 8322  
Glabrol, 8499  
Hispaglabridin A, 9557  
Isograbrol, 11446  
Kazinol B, 12187  
Mulberrofuran A, 15039  
Mulberrofuran B, 15040  
Mulberrofuran N, 15048  
Perrottetinenic acid, 16985  
Spiniavanone-B, 20170  
2',4,4'-Trihydroxy-3'-geranylchalcone, 21737
- C<sub>25</sub>H<sub>28</sub>O<sub>5</sub>**  
Abyssinone V, 53  
Bartericin A, 2153  
Bartericin B, 2154  
Bartericin C, 2155  
2,3-Dihydro-7-methoxy-2*S*\*,3*R*\*-dimethyl-2-[4-methyl-5-(4-methyl-2-furyl)-3(*E*)-pentenyl]-furo[3,2-*c*]coumarin, 5669  
6,8-Diprenylnaringenin, 6497  
Dorsmanin B, 6562  
Eryzerin A, 7354  
(2*S*)-Euchrenone A<sub>16</sub>, 7486  
Fukaneufumarin E, 7982  
Fukaneufumarin F, 7983  
Fukaneufumarin G, 7984  
Fukanemarin B, 7985  
3'-Geranyl-2',3,4,4'-tetrahydroxychalcone, 8330  
Glycyrdione A, 8835  
3-Hydroxyglabrol, 10149  
Isoemicellin, 11410  
Kushenol A, 12354  
Kuwanol D, 12379  
Lespedezol B<sub>1</sub>, 12688  
Mulberrofuran Y, 15056  
Rhinacanthin B, 18769  
2',4,4'-Trihydroxy-3'-[6-hydroxy-3,7-dimethyl-2(*E*),7-octadienyl]chalcone, 21745  
2',4',4'-Trihydroxy-3'-[2-hydroxy-7-methyl-3-methylene-6-octaenyl]chalcone, 21749
- C<sub>25</sub>H<sub>28</sub>O<sub>6</sub>**  
1,3-Dihydroxy-6,7-dimethoxy-2,8-diprenylxanthone, 5827  
3'-( $\gamma,\gamma$ -Dimethylallyl)-kievitone, 6307  
Dorsmanin E, 6565  
Dorsmanin J, 6572  
Gancaonin E, 8138  
Glisoflavanone, 8553  
Kushenol E, 12358  
Kuwanon E, 12383  
(2*R*,3*R*)-Lespedezaflavanone C, 12681  
Lespedezol D<sub>5</sub>, 12697  
Lespedezol D<sub>6</sub>, 12698  
Lespedol A, 12705  
Lespedol B, 12706  
 $\beta$ -Mangostin, 13493  
Norkurarinone, 15770  
Pluviatilol- $\gamma,\gamma$ -dimethylallyl ether, 17572  
Soporaflavanone G, 20086  
2',3,4,4'-Tetrahydroxy-3'-[6-hydroxy-3,7-dimethyl-2(*E*),7-octadienyl]chalcone, 21119
- C<sub>25</sub>H<sub>28</sub>O<sub>7</sub>**  
Cedkathryn A, 3347  
Cedkathryn B, 3348  
Disparidol B, 6513  
Dorsmanin Fa, 6566  
Dorsmanin Fb, 6567  
Dorsmanin Ga, 6568  
Dorsmanin Gb, 6569  
Dorsmanin H, 6570  
Kushenol L, 12365  
Kushenol X, 12370  
Mangostanin, 13484  
Norkurarinol, 15769
- C<sub>25</sub>H<sub>28</sub>O<sub>8</sub>**  
Kushenol G, 12360  
Lobaric acid, 12936
- C<sub>25</sub>H<sub>28</sub>O<sub>10</sub>**  
5-[3''- $\beta$ -*D*-Glucopyranosyloxy)propyl]-7-methoxy-2-(3',4'-methylenedioxyphenyl)benzofuran, 8709
- C<sub>25</sub>H<sub>28</sub>O<sub>11</sub>**  
Dracunculifoside K, 6590  
6-Hydroxy-5-methyl-3',4',5'-trimethoxyaurone  
4-*O*- $\alpha$ -*L*-rhamnopyranoside, 10522  
Shakuchirin, 19794  
Umbilicaxanthoside A, 22197
- C<sub>25</sub>H<sub>28</sub>O<sub>12</sub>**  
Andrographidine D, 1154  
Chrysoobtusin glucoside, 3613
- C<sub>25</sub>H<sub>28</sub>O<sub>13</sub>**  
Andrographidine F, 1156  
Polycaudoside A, 17621
- C<sub>25</sub>H<sub>28</sub>O<sub>14</sub>**  
2-*O*-[ $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-xylopyranosyl]-1,8-dihydroxy-6-methoxyxanthone, 18736
- C<sub>25</sub>H<sub>28</sub>O<sub>15</sub>**  
Polygalaxanthone III, 17631  
8-*O*-Primeverosylbellidifolin, 17854  
1-*O*-Primeverosyl-3,8-dihydroxy-5-methoxyxanthone, 17855
- C<sub>25</sub>H<sub>29</sub>NO<sub>4</sub>**  
Ancistrocladine, 1142  
Ancistrotrozanine C, 1147  
Buxifoliadine A, 2823
- C<sub>25</sub>H<sub>29</sub>NO<sub>5</sub>**  
Decodine, 4856  
Dihydroverticillatine, 5736
- C<sub>25</sub>H<sub>30</sub>**  
Undecenyl phenanthrene, 22223
- C<sub>25</sub>H<sub>30</sub>N<sub>2</sub>O<sub>7</sub>**  
Methyl 11,12-dimethoxychanofrucosinate, 14319
- C<sub>25</sub>H<sub>30</sub>N<sub>2</sub>O<sub>8</sub>**  
Pauciflorine B, 16732
- C<sub>25</sub>H<sub>30</sub>O<sub>4</sub>**  
Bixin, 2496  
Eryzerin C, 7356  
Kanzonol X, 12154  
Kazinol A, 12186  
Myrtiaphenone A, 15224
- C<sub>25</sub>H<sub>30</sub>O<sub>5</sub>**  
2,3-Dihydro-7-methoxy-2*S*\*,3*R*\*-dimethyl-2-[4,8-dimethyl-3(*E*),7-nonadien-6-onyl]-furo[3,2-*c*]coumarin, 5666  
Kanzonol Y, 12155  
Rhinacanthin C, 18770  
Vismione D, 22551
- C<sub>25</sub>H<sub>30</sub>O<sub>6</sub>**  
(+)-3,4-(6'',6''-Dimethyldihydropyrano)-4',5'-[2'''-(1-hydroxy-1-methylethyl)-dihydrofuran]-2',3'''-dihydroxydihydrochalcone, 6337  
Kosamol T, 12284  
Notoptolide, 15845  
(+)-Pinoresinol-3,3-dimethylallyl ether, 17413  
Rhinacanthin G, 18772  
Rhinacanthin H, 18773  
Rhinacanthin I, 18774
- C<sub>25</sub>H<sub>30</sub>O<sub>7</sub>**  
Kosamol Q, 12281  
Rhinacanthin K, 18775
- C<sub>25</sub>H<sub>30</sub>O<sub>8</sub>**

- Kadsurin, 12012  
 Longipedunin B, 12967  
 Rubschisantherin, 19044
- C<sub>25</sub>H<sub>30</sub>O<sub>9</sub>**  
 Gaultherin A, 8240  
 Kadsulignan B, 11997  
 Robustaol A, 18867
- C<sub>25</sub>H<sub>30</sub>O<sub>11</sub>**  
 5-Hydroxycampenoside, 9878  
 Yemuoside YM<sub>1</sub>, 22884
- C<sub>25</sub>H<sub>30</sub>O<sub>12</sub>**  
 Cucurbitoside C, 4332  
 6-*p*-Methoxycinnamoyl catalpol, 13887
- C<sub>25</sub>H<sub>30</sub>O<sub>13</sub>**  
 Alboside IV, 870  
 Cachineside III, 2840  
 Cucurbitoside D, 4333  
 Ebractelatinoside B, 6667  
 Fraxamoside, 7941  
 Grandifloroside, 8977  
 Minecoside, 14871  
 Picroside III, 17346
- C<sub>25</sub>H<sub>30</sub>O<sub>14</sub>**  
 Ligustrosidic acid, 12830
- C<sub>25</sub>H<sub>30</sub>O<sub>15</sub>**  
 Oleuropeinic acid, 16081  
 Tenuiphenone B, 20960
- C<sub>25</sub>H<sub>31</sub>NO<sub>10</sub>**  
 Isocimicifugamide, 11331
- C<sub>25</sub>H<sub>31</sub>N<sub>3</sub>O<sub>2</sub>**  
 Celacinnine, 3357  
 Celallocinnine, 3360
- C<sub>25</sub>H<sub>32</sub>CIN<sub>5</sub>O<sub>6</sub>**  
 Astin D, 1932
- C<sub>25</sub>H<sub>32</sub>CIN<sub>5</sub>O<sub>7</sub>**  
 Astin E, 1933
- C<sub>25</sub>H<sub>32</sub>N<sub>2</sub>O<sub>6</sub>**  
 Vindoline, 22498
- C<sub>25</sub>H<sub>32</sub>O<sub>4</sub>**  
 Artemisolide, 1802  
 2,3-Dihydro-7-methoxy-2*R*\*,3*R*\*-dimethyl-2-[4,8-dimethyl-3(*E*),7-nonadienyl]-furo[3,2-*c*] coumarin, 5667  
 2,3-Dihydro-7-methoxy-2*S*\*,3*R*\*-dimethyl-2-[4,8-dimethyl-3(*E*),7-nonadienyl]-furo[3,2-*c*] coumarin, 5668  
 Kazinol F, 12188
- C<sub>25</sub>H<sub>32</sub>O<sub>5</sub>**  
 3β-Formyloxyresibufogenin, 7912  
 Wallichilide, 22627
- C<sub>25</sub>H<sub>32</sub>O<sub>6</sub>**  
 20*R*,21-Epoxyresibufogenin 3-formate, 7190  
 20*S*,21-Epoxyresibufogenin 3-formate, 7191
- C<sub>25</sub>H<sub>32</sub>O<sub>7</sub>**  
 Ardisinone A, 1645  
 Ichangensin, 10958  
 Nigrolineaxanthone P, 15589  
 Perlatolic acid, 16967  
 Quassinoid PC03-579A, 18300  
 Schisanhenol acetate, 19477
- C<sub>25</sub>H<sub>32</sub>O<sub>8</sub>**  
 Aceroside B<sub>1</sub>, 103  
 Aceroside B<sub>2</sub>, 104  
 Albaspidin BB, 851  
 Albaspidin iBiB, 852  
 Aspidin, 1895  
 (3*S*,5*S*)-3,5-Diacetoxy-1,7-bis(4-hydroxy-3-methoxyphenyl)heptane, 5288  
 Isoaspidin BB, 11240  
 Meso-3,5-diacetoxy-1,7-bis(4-hydroxy-3-methoxyphenyl) heptane, 13802  
 Paraaspidin BB, 16648  
 Pseudoaspidin, 18019  
 Saroaspidin B, 19383
- C<sub>25</sub>H<sub>32</sub>O<sub>9</sub>**  
 Caesalpinin J, 2872  
 Caruillignan A, 3227  
 Luzonoid E, 13161  
 Luzonoid F, 13162  
 Luzonoid G, 13163  
 Sudachinoid B, 20449
- C<sub>25</sub>H<sub>32</sub>O<sub>10</sub>**  
 (–)-Isolariciresinol-2*α*-*O*-β-*D*-xylopyranoside, 11479  
 Massonianoside A, 13583  
 Massonianoside B, 13584  
 Massonianoside E, 13587
- C<sub>25</sub>H<sub>32</sub>O<sub>11</sub>**  
 (2*R*,3*S*)-2,3-Dihydro-7-hydroxy-2-(4'-hydroxy-3'-methoxyphenyl)-3-hydroxymethyl-5-benzofuranpropanol 4'-*O*-β-*D*-glucopyranoside, 5634  
 (2*S*,3*R*)-2,3-Dihydro-7-hydroxy-2-(4'-hydroxy-3'-methoxyphenyl)-3-hydroxymethyl-5-benzofuranpropanol 4'-*O*-β-*D*-glucopyranoside, 5635  
 5,4'-Dihydroxy-3-*α*-*L*-rhamnosyl-(1"→3')-β-*D*-xylopyranosyloxybibenzyl, 6108  
 Hirsutanonol-5-*O*-β-*D*-glucopyranoside, 9551  
 (–)-Isolariciresinol-3*α*-*O*-β-*D*-glucopyranoside, 11480  
 Neoglabrescin A tetraacetate, 15398  
 Syringafghanoside, 20553
- C<sub>25</sub>H<sub>32</sub>O<sub>12</sub>**  
 6-*O*-*E*-Feruloylajugol, 7769  
 6-*O*-*Z*-Feruloylajugol, 7770  
 Gelsemiol 6-*trans*-caffeoyl-1-glucoside, 8259  
 (8*E*)-Ligustroside, 12828  
 (8*Z*)-Ligustroside, 12829  
 6'-*O*-*E*-*p*-Methoxycinnamoylharpagide, 13888  
 6'-*O*-*Z*-*p*-Methoxycinnamoylharpagide, 13889  
 8-*O*-*E*-*p*-Methoxycinnamoylharpagide, 13890  
 8-*O*-*Z*-*p*-Methoxycinnamoylharpagide, 13891  
 8-(*O*-Methyl-*p*-coumaroyl)harpagide, 14259
- C<sub>25</sub>H<sub>32</sub>O<sub>13</sub>**  
 8-*O*-Feruloylharpagide, 7776  
 10-Hydroxyligustroside, 10324  
 Oleuropein, 16080  
 Orientaloside, 16195
- C<sub>25</sub>H<sub>32</sub>O<sub>14</sub>**  
 (2"*R*)-2"-Hydroxyoleuropein, 10552  
 (2"*S*)-2"-Hydroxyoleuropein, 10553
- C<sub>25</sub>H<sub>33</sub>Cl<sub>2</sub>N<sub>5</sub>O<sub>6</sub>**  
 Astin C, 1931
- C<sub>25</sub>H<sub>33</sub>Cl<sub>2</sub>N<sub>5</sub>O<sub>7</sub>**  
 Astin A, 1929  
 Astin B, 1930
- C<sub>25</sub>H<sub>33</sub>NO<sub>3</sub>**  
 Piperchabamide C, 17442
- C<sub>25</sub>H<sub>33</sub>NO<sub>9</sub>**  
 8,9-Dehydro-10-epi-ryanodine, 4911
- C<sub>25</sub>H<sub>33</sub>NO<sub>10</sub>**  
 (13*S*)-8,9-Dehydro-18-hydroxy-10-epi-ryanodine, 4931  
 8,9-Dehydro-20-hydroxy-10-epi-ryanodine, 4932  
 8,9-Dehydro-21-hydroxy-10-epi-ryanodine, 4933  
 6-Deoxy-6β,9β-epoxy-8*α*-hydroxy-10-epi-ryanodine, 5169  
 8*α*,9*α*-Epoxy-10-epi-ryanodine, 7091  
 8β,9β-Epoxy-10-epi-ryanodine, 7092  
 20-Norspiganthine-5-carboxylic acid, 15794
- C<sub>25</sub>H<sub>33</sub>NO<sub>11</sub>**  
 (13*S*)-8,9-Dehydro-18,21-dihydroxy-10-epi-ryanodine, 4907  
 8,9-Dehydro-20,21-dihydroxy-10-epi-ryanodine, 4908  
 (13*S*)-8*α*,9*α*-Epoxy-18-hydroxy-10-epi-ryanodine, 7111  
 8*α*,9*α*-Epoxy-20-hydroxy-10-epi-ryanodine, 7112  
 8*α*,9*α*-Epoxy-21-hydroxy-10-epi-ryanodine, 7113
- C<sub>25</sub>H<sub>33</sub>N<sub>5</sub>O<sub>8</sub>**  
 Asterin A, 1922
- C<sub>25</sub>H<sub>34</sub>O<sub>4</sub>**  
 Lupulone B, 13111  
 Neovibsanin G, 15474  
 14-*epi*-Neovibsanin G, 15475
- C<sub>25</sub>H<sub>34</sub>O<sub>5</sub>**  
 3-Epi-*O*-Methyl-scilliphaeosidin, 6970
- C<sub>25</sub>H<sub>34</sub>O<sub>6</sub>**  
 Erectquione C, 7225  
 Homofukinolide, 9607

- Rouyolide B, 18963
- C<sub>25</sub>H<sub>34</sub>O<sub>7</sub>**  
Atranone B, 1984  
Rouyolide A, 18962  
Rouyolide F, 18967  
Vibsanin M, 22450
- C<sub>25</sub>H<sub>34</sub>O<sub>8</sub>**  
7-Acetoxybonducellpin C, 137  
16β-Acetoxytrophanthidin, 281  
Atranone G, 1989  
Caesalpinin MF, 2876  
Kuhistanicaol A, 12311  
Rouyolide D, 18965  
Rouyolide E, 18966
- C<sub>25</sub>H<sub>34</sub>O<sub>9</sub>**  
Ailanthinone, 774  
Caesalpinin M, 2875  
(3*R*,5*R*)-3,5-Dihydroxy-1,7-bis(4-hydroxyphenyl)heptane 3-*O*-β-*D*-glucopyranoside, 5781  
Kusulactone, 12373  
Schkuhrin II, 19511  
Simalikalactone D, 19900
- C<sub>25</sub>H<sub>34</sub>O<sub>10</sub>**  
Amritoside D, 1087  
(3*R*,5*R*)-3,5-Dihydroxy-1-(3,4-dihydroxyphenyl)-7-(4-hydroxyphenyl)heptane 3-*O*-β-*D*-glucopyranoside, 5816  
(3*R*,5*R*)-3,5-Dihydroxy-1-(3,4-dihydroxyphenyl)-7-(4-hydroxyphenyl)heptane 5-*O*-β-*D*-glucopyranoside, 5817  
(2*E*,6*R*)-2,6-Dimethyl-8-hydroxy-2-octenoic acid 8-*O*-[6'-*O*-(*E*)-*p*-coumaroyl]-β-*D*-glucopyranoside, 6363  
Glaucarubinone, 8509  
1-Homoacevaltrate, 9593  
1-Homoisoacevaltrate, 9611  
Soularbinone, 20108
- C<sub>25</sub>H<sub>34</sub>O<sub>11</sub>**  
(3*R*,5*R*)-3,5-Dihydroxy-1,7-bis(3,4-dihydroxyphenyl)heptane 3-*O*-β-*D*-glucopyranoside, 5775  
Nagilactoside A, 15236  
Nagilactoside B, 15237
- C<sub>25</sub>H<sub>34</sub>O<sub>12</sub>**  
Lucidumoside A, 13053
- C<sub>25</sub>H<sub>34</sub>O<sub>13</sub>**  
Lucidumoside B, 13054  
6-*O*-(3,4,5-Trimethoxybenzoyl)-ajugol, 21894
- C<sub>25</sub>H<sub>34</sub>O<sub>14</sub>**  
Macrophylloside D, 13324
- C<sub>25</sub>H<sub>35</sub>NO**  
1-Methyl-2-[(6*Z*,9*Z*)-6,9-pentadecadienyl]-4(1*H*)-quinolone, 14654
- C<sub>25</sub>H<sub>35</sub>NO<sub>3</sub>**  
Merresectine C, 13787
- C<sub>25</sub>H<sub>35</sub>NO<sub>5</sub>**  
Yuzurimine E, 22960
- C<sub>25</sub>H<sub>35</sub>NO<sub>8</sub>**  
20-Deoxyspiganthine, 5215
- C<sub>25</sub>H<sub>35</sub>NO<sub>9</sub>**  
Spiganthine, 20162
- C<sub>25</sub>H<sub>35</sub>NO<sub>10</sub>**  
9-Hydroxy-9-epi-10-epi-ryanodine, 10071  
9-Hydroxy-10-epi-ryanodine, 10081  
20-Hydroxyryanodine, 10683  
8α-Hydroxyspiganthine, 10715  
Ryanodine, 19091
- C<sub>25</sub>H<sub>35</sub>NO<sub>11</sub>**  
(13*S*)-9,18-Dihydroxy-9-epi-10-epi-ryanodine, 5869  
9,20-Dihydroxy-9-epi-10-epi-ryanodine, 5870
- C<sub>25</sub>H<sub>35</sub>N<sub>5</sub>O<sub>6</sub>**  
Pseudostellarin A, 18064
- C<sub>25</sub>H<sub>36</sub>O<sub>2</sub>**  
Abridin, 12
- C<sub>25</sub>H<sub>36</sub>O<sub>3</sub>**  
Surinone B, 20494
- C<sub>25</sub>H<sub>36</sub>O<sub>4</sub>**  
Vibsanin R, 22453
- C<sub>25</sub>H<sub>36</sub>O<sub>5</sub>**  
Caseamembrin F, 3263  
5-Epi-vibsanin C, 7033  
5-Epi-vibsanin E, 7034  
Lupulone E, 13114  
Vibsanin B, 22442  
Vibsanin C, 22443  
Vibsanin E, 22444  
Vibsanin T, 22455
- C<sub>25</sub>H<sub>36</sub>O<sub>6</sub>**  
16-Acetylgitoxigenin, 400  
Ajugacumbin B, 789  
*ent*-15β-Angeloyloxy-7α,9α-dihydroxy-kaur-16-en-19-oic acid, 1216  
5-Epivibsanin G, 7035  
5-Epi-vibsanin H, 7036  
14*R*\*,15-Epoxyvibsanin C, 7219  
14*S*\*,15-Epoxyvibsanin C, 7220  
Erinacine A, 7261  
Erinacine B, 7262  
Erinacine E, 7264  
Vibsanin G, 22445  
Vibsanin H, 22446  
Vibsanin L, 22449  
Vibsanol A, 22459  
Vibsanol B, 22460
- C<sub>25</sub>H<sub>36</sub>O<sub>7</sub>**  
5-Epi-vibsanin K, 7037  
Preclavulone A methyl ester derivative CPB51-909-3, 17774  
Trichurusin F, 21583  
Trichurusin G, 21584  
Vibsanin I, 22447  
Vibsanin K, 22448
- C<sub>25</sub>H<sub>36</sub>O<sub>8</sub>**  
Erinacine G, 7265
- C<sub>25</sub>H<sub>36</sub>O<sub>9</sub>**  
Adenolin A, 619  
2,5-Epoxy-5,10-dihydroxy-6-angeloyloxy-9-(2-methylbutyryloxy)-germacran-8,12-olide, 7074  
2,5-Epoxy-5,10-dihydroxy-6-angeloyloxy-9-(2*R*-methylbutyryloxy)-germacran-8,12-olide, 7075  
2,5-Epoxy-5,10-dihydroxy-6-angeloyloxy-9-(3-methylbutyryloxy)-germacran-8,12-olide, 7076
- C<sub>25</sub>H<sub>36</sub>O<sub>10</sub>**  
10-Acetoxy-1-homovaltrate hydrin, 200
- C<sub>25</sub>H<sub>36</sub>O<sub>13</sub>**  
Dracunculifoside Q, 6596
- C<sub>25</sub>H<sub>37</sub>NO**  
1-Methyl-2-[(*Z*)-6-pentadecenyl]-4(1*H*)-quinolone, 14657  
1-Methyl-2-[(*Z*)-9-pentadecenyl]-4(1*H*)-quinolone, 14658  
1-Methyl-2-[(*Z*)-10-pentadecenyl]-4(1*H*)-quinolone, 14659
- C<sub>25</sub>H<sub>38</sub>O<sub>4</sub>**  
Ardisiphenol C, 1652  
12,25-Dihydroxy-16-scalaren-24,25-olide, 6113
- C<sub>25</sub>H<sub>38</sub>O<sub>5</sub>**  
2-Acetoxy-5-methoxy-6-methyl-3-[(*Z*-10'-pentadecenyl)-1,4-benzoquinone], 253
- C<sub>25</sub>H<sub>38</sub>O<sub>5</sub>**  
Caesaldecane, 2860  
2-Methoxy-5-acetoxy-6-methyl-3-[(*z*)-10'-pentadecenyl]-1,4-benzoquinone, 13829  
Vibsanin P, 22451  
Vibsanin S, 22454
- C<sub>25</sub>H<sub>38</sub>O<sub>6</sub>**  
Erinacine C, 7263  
Philadelphinone, 17142  
Rasfonin, 18549  
Taxuyunnanin H, 20880
- C<sub>25</sub>H<sub>38</sub>O<sub>7</sub>**  
Ajugacumbin F, 793  
*ent*-(16*S*)-1α,14α-Diacetoxy-7β-hydroxy-17-methoxykauran-15-one, 5309  
Trichurusin C, 21580  
Trichurusin D, 21581  
Trichurusin E, 21582  
Trichurusin H, 21585



- Trichurusin I, 21586  
 Vibsanan U, 22456  
 Vibsanan W, 22458  
**C<sub>25</sub>H<sub>38</sub>O<sub>8</sub>**  
 Xindongnin G, 22803  
**C<sub>25</sub>H<sub>38</sub>O<sub>12</sub>**  
 Eurycomaoside, 7652  
**C<sub>25</sub>H<sub>38</sub>O<sub>15</sub>**  
 Phenethylalcohol 8-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)-*O*- $\beta$ -*D*-apiofuranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside, 17081  
**C<sub>25</sub>H<sub>38</sub>O<sub>16</sub>**  
 Lupulinoside, 13108  
 Zizybeoside II, 23012  
**C<sub>25</sub>H<sub>38</sub>O<sub>17</sub>**  
 3,4-Dihydroxyphenylethanol-8-*O*-[ $\beta$ -*D*-apiofuranosyl(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 6)]- $\beta$ -*D*-glucopyranoside, 6078  
**C<sub>25</sub>H<sub>39</sub>NO**  
 1-Methyl-2-pentadecyl-4(1*H*)-quinolone, 14660  
**C<sub>25</sub>H<sub>39</sub>NO<sub>2</sub>**  
 Buxpiine, 2831  
**C<sub>25</sub>H<sub>39</sub>NO<sub>3</sub>**  
 3(*R*)-Benzoyloxy-2(*R*)-methyl-6(*R*)-(11'-oxododecyl)-piperidine, 2260  
**C<sub>25</sub>H<sub>39</sub>NO<sub>6</sub>**  
 14-Acetylgenicunine B, 396  
 Condelphine, 3963  
 Erythroplamine, 7342  
 Erythropleguine, 7343  
 Erythrosumine, 7344  
**C<sub>25</sub>H<sub>39</sub>NO<sub>7</sub>**  
 Dehydrodeltatsine, 4899  
 Delbrunine, 5000  
 Deltamine, 5037  
 18-Demethoxypubescenine, 5053  
**C<sub>25</sub>H<sub>39</sub>NO<sub>8</sub>**  
 14-*O*-Acetyltakaosamine, 518  
**C<sub>25</sub>H<sub>40</sub>N<sub>2</sub>O<sub>5</sub>**  
 Arboreumine, 1612  
**C<sub>25</sub>H<sub>40</sub>O<sub>4</sub>**  
 2,5-Dihydroxy-3-(nonadec-14-enyl)-benzoquinone, 6048  
 16*aH*,17-Isovalerate-*ent*-kauran-19-oic acid, 11753  
**C<sub>25</sub>H<sub>40</sub>O<sub>5</sub>**  
 7*a*,18-Diacetoxy-13 $\beta$ -methoxyabiet-8(14)-ene, 5313  
**C<sub>25</sub>H<sub>40</sub>O<sub>6</sub>**  
 Erigerol, 7258  
 Oriediterpenoside, 16185  
 Trichurusin B, 21579  
**C<sub>25</sub>H<sub>40</sub>O<sub>11</sub>**  
 Eriojaposide B, 7288  
**C<sub>25</sub>H<sub>40</sub>O<sub>12</sub>**  
 Zizyvoside I, 23019  
**C<sub>25</sub>H<sub>41</sub>NO<sub>2</sub>**  
 3,5-Didecanoylpyridine, 5462  
**C<sub>25</sub>H<sub>41</sub>NO<sub>6</sub>**  
 Chasmanine, 3483  
**C<sub>25</sub>H<sub>41</sub>NO<sub>7</sub>**  
 Browniine, 2657  
 Delsoline, 5035  
 Deltatsine, 5038  
 Ezochasmanine, 7700  
 Lycoctonine, 13189  
**C<sub>25</sub>H<sub>41</sub>NO<sub>8</sub>**  
 Pseudoaconine, 18016  
 Swatinine, 20501  
**C<sub>25</sub>H<sub>42</sub>N<sub>2</sub>O**  
 Cyclobuxine D, 4477  
**C<sub>25</sub>H<sub>42</sub>N<sub>2</sub>O<sub>7</sub>**  
 Hemsleyatine, 9356  
**C<sub>25</sub>H<sub>42</sub>O<sub>6</sub>**  
 Stemodin- $\alpha$ -*L*-arabinofuranoside, 20300  
 Stemodinoside A, 20302  
**C<sub>25</sub>H<sub>42</sub>O<sub>12</sub>**  
 Staphylionoside G, 20270  
**C<sub>25</sub>H<sub>42</sub>O<sub>17</sub>**  
 Illicifolioside C, 10990  
**C<sub>25</sub>H<sub>43</sub>NO<sub>2</sub>**  
 3-*O*-14,15-Eicosylenoyl-1-cyano-2-methyl-1,2-propene, 6727  
**C<sub>25</sub>H<sub>44</sub>N<sub>2</sub>**  
 Epiheteroconessine, 6931  
 Kurchessine, 12347  
**C<sub>25</sub>H<sub>44</sub>N<sub>2</sub>O**  
 Saracorine, 19356  
*N,N,N',N'*-Tetramethyl-holarrhimine, 21196  
**C<sub>25</sub>H<sub>44</sub>O<sub>12</sub>**  
 Linarionoside C, 12858  
 Staphylionoside K, 20274  
**C<sub>25</sub>H<sub>44</sub>O<sub>15</sub>**  
 Asystoside, 1952  
 Ebracteatoside B, 6664  
 Lunaroside, 13075  
**C<sub>25</sub>H<sub>44</sub>O<sub>16</sub>**  
 Illicifolioside B, 10989  
**C<sub>25</sub>H<sub>46</sub>N<sub>2</sub>**  
 Epipachysamine C, 6992  
*N*-Methyl pachysamine A, 14650  
**C<sub>25</sub>H<sub>46</sub>N<sub>2</sub>O**  
*N,O*-Dideacyl-*N*-methylpachysandrine A, 5461  
**C<sub>25</sub>H<sub>46</sub>O<sub>12</sub>**  
 Platanionoside D, 17521  
**C<sub>25</sub>H<sub>47</sub>O<sub>11</sub>S**  
 1'-*O*-Palmitoyl-3'-*O*-(6-sulfo-*O*- $\alpha$ -*D*-quinoxopyranosyl)glycerol, 16568  
**C<sub>25</sub>H<sub>48</sub>O<sub>2</sub>**  
 Pentacosan-4-olide, 16824  
**C<sub>25</sub>H<sub>50</sub>O**  
 11-Pentacosanone, 16825  
**C<sub>25</sub>H<sub>50</sub>O<sub>2</sub>**  
*n*-Pentacosanoic acid, 16823  
**C<sub>25</sub>H<sub>52</sub>**  
 Pentacosane, 16822  
**C<sub>26</sub>H<sub>18</sub>O<sub>7</sub>**  
 Thelephantin I, 21301  
**C<sub>26</sub>H<sub>19</sub>NO<sub>12</sub>**  
 Laccaic acid A, 12424  
**C<sub>26</sub>H<sub>20</sub>O<sub>10</sub>**  
 Globoidnan A, 8554  
 Isosalvianolic acid C, 11694  
 Moellendorffiline, 14894  
 Salvianolic acid C, 19203  
**C<sub>26</sub>H<sub>22</sub>N<sub>2</sub>O<sub>4</sub>**  
 Daurioxoisoporphine A, 4689  
**C<sub>26</sub>H<sub>22</sub>O<sub>6</sub>**  
 5-(3''-Benzoyloxypropyl)-7-methoxy-2-(3',4'-methylenedioxyphenyl)-benzofuran, 2264  
 Hemerocallin, 9339  
**C<sub>26</sub>H<sub>22</sub>O<sub>9</sub>**  
 3'-Benzoyloxy-5-hydroxy-3,6,7,4'-tetramethoxyflavone, 2259  
 Phelligridin F, 17064  
**C<sub>26</sub>H<sub>22</sub>O<sub>10</sub>**  
 Salvianolic acid A, 19201  
**C<sub>26</sub>H<sub>22</sub>O<sub>18</sub>**  
 Pelargoniin B, 16787  
**C<sub>26</sub>H<sub>24</sub>O<sub>5</sub>**  
 Calophyllolide, 2990  
**C<sub>26</sub>H<sub>24</sub>O<sub>6</sub>**  
 6-Methyltetrapterol A, 14754  
**C<sub>26</sub>H<sub>24</sub>O<sub>7</sub>**  
 Goniolactone A, 8939  
 Rocaglamide derivative 7, 18887  
**C<sub>26</sub>H<sub>24</sub>O<sub>10</sub>**  
 Curtisian N, 4410  
**C<sub>26</sub>H<sub>24</sub>O<sub>11</sub>**  
 Tuberculatins, 22077  
**C<sub>26</sub>H<sub>24</sub>O<sub>12</sub>**  
 Boehmerin, 2530  
 Justalakomin, 11975  
**C<sub>26</sub>H<sub>24</sub>O<sub>14</sub>**  
 4,4'-*O*-Dimethylellagic acid  
 3-(2'',3''-di-*O*-acetyl)- $\alpha$ -*L*-rhamnoside, 6346  
**C<sub>26</sub>H<sub>24</sub>O<sub>18</sub>**  
 Pelargoniin C, 16788  
**C<sub>26</sub>H<sub>26</sub>N<sub>2</sub>**

- Caulindole A, 3336  
 Caulindole B, 3337  
 Yuehchukene, 22937
- C<sub>26</sub>H<sub>26</sub>N<sub>2</sub>O<sub>10</sub>**  
 20-*O*-β-Glucopyranosyl 18-hydroxycampthecin, 8667
- C<sub>26</sub>H<sub>26</sub>O<sub>5</sub>**  
 Scandione, 19452
- C<sub>26</sub>H<sub>26</sub>O<sub>6</sub>**  
 Artocommunol CE, 1814  
 5,4'-Dihydroxy-8-(3,3-dimethylallyl)-2"-methoxyisopropylfuran[4,5:6,7]isoflavone, 5850  
 Flemiphilippinin C, 7827  
 (+)-(10*S*)-Ligulacephalin C, 12810  
 (-)-(10*S*)-Ligulacephalin C, 12811  
 Rocaglamide derivative I, 18883  
 Scandenin, 19450
- C<sub>26</sub>H<sub>26</sub>O<sub>7</sub>**  
 Brousoflavonol A, 2631  
 Digoniodiol, 5532  
 Ugonin I, 22182
- C<sub>26</sub>H<sub>26</sub>O<sub>8</sub>**  
 (2*R*\*,3*S*\*)-3-Hydroxymethyl-9-methoxy-2-(4'-hydroxy-3',5'-dimethoxyphenyl)-2,3,6,7-tetrahydrophenanthro[4,3-*b*]furan-5,11-diol, 10504  
 Interiotherin D, 11106  
 Terrestrin B, 21007
- C<sub>26</sub>H<sub>26</sub>O<sub>11</sub>**  
 2",6"-*O*-Diacetyloninin, 5343
- C<sub>26</sub>H<sub>26</sub>O<sub>12</sub>**  
 3,4-*Di-O*-caffeoylquinic acid methyl ester, 5415  
 Juspurpurin, 11974  
 Macranthoin F, 13300  
 Macranthoin G, 13301
- C<sub>26</sub>H<sub>26</sub>O<sub>14</sub>**  
 Mingjinianuronide B, 14873
- C<sub>26</sub>H<sub>26</sub>O<sub>18</sub>**  
 Amritoside, 1083
- C<sub>26</sub>H<sub>27</sub>NO<sub>7</sub>**  
 Squamosamide, 20245
- C<sub>26</sub>H<sub>28</sub>N<sub>2</sub>O<sub>8</sub>**  
 (3*R*)-Deoxypumiloside, 5205
- C<sub>26</sub>H<sub>28</sub>N<sub>2</sub>O<sub>9</sub>**  
 Naucleoside, 15298  
 Naucleoside A, 15310  
 Naucleoside B, 15311  
 Ophiorine A, 16151  
 Ophiorine B, 16152  
 Pumiloside, 18199
- C<sub>26</sub>H<sub>28</sub>O<sub>4</sub>**  
 Monachosorin A, 14911  
 Monachosorin C, 14913
- Sigmoidin E, 19888
- C<sub>26</sub>H<sub>28</sub>O<sub>5</sub>**  
 Derrisoflavone A, 5229  
 Erypoeigin J, 7316  
 Lyfoline, 13244  
 Olibergin B, 16083
- C<sub>26</sub>H<sub>28</sub>O<sub>6</sub>**  
 Burttinonedehydrate, 2774  
 Derrisoflavone C, 5231  
 Derrisoflavone D, 5232  
 Derrisoflavone E, 5233  
 Desmodianone D, 5264  
 Desmodianone E, 5265  
 5,4'-Dihydroxy-2'-methoxy-8-(3,3-dimethylallyl)-2",2"-dimethylpyrano[5,6:6,7]isoflavanone, 5971  
 5,2'-Dihydroxy-3-methoxy-6,7-(2",2"-dimethylchromene)-8-(3",3"-dimethylallyl)-flavanone, 5972  
 Kanzonol K, 12150  
 (+)-(10*S*,10'*S*)-Ligulacephalin A, 12806  
 (-)-(10*R*,10'*R*)-Ligulacephalin A, 12807  
 Ugonin B, 22175  
 Ugonin K, 22184  
 Ugonin L, 22185
- C<sub>26</sub>H<sub>28</sub>O<sub>7</sub>**  
 Artocommunol CC, 1812  
 Brousoflavonol B, 2632  
 Dorsmanin D, 6564  
 (+)-(10*R*,10'*R*)-Ligulacephalin B, 12808  
 (-)-(10*S*,10'*S*)-Ligulacephalin B, 12809  
 5-*O*-Methyl kushenol C, 14545  
 5,7,3',4'-Tetrahydroxy-3-methoxy-6-geranylflavone, 21128  
 Ugonin H, 22181
- C<sub>26</sub>H<sub>28</sub>O<sub>8</sub>**  
 Jangomolide, 11816
- C<sub>26</sub>H<sub>28</sub>O<sub>9</sub>**  
 Evodol, 7669  
 Sudachinoid C, 20450
- C<sub>26</sub>H<sub>28</sub>O<sub>10</sub>**  
 Baohuoside II, 2139  
 12*α*-Hydroxyevodol, 10118
- C<sub>26</sub>H<sub>28</sub>O<sub>11</sub>**  
 Epimesoside C, 6964  
 2"-*O*-(2"-Methylbutyryl)vitexin, 14203  
 5*α*,6*β*,7*β*,8*α*-Tetraacetoxy-2-[2-(4'-methoxyphenyl)ethyl]-5,6,7,8-tetrahydro-chromone, 21030
- C<sub>26</sub>H<sub>28</sub>O<sub>12</sub>**  
 Isoscutellarein 4'-methyl ether 8-*O*-β-*D*-glucuronide 6"-*n*-butyl ester, 11708  
 Leptostachyol acetate, 12680
- 2"-*O*-(2"-Methylbutyryl)orientin, 14196  
 Styraclignolide B, 20423
- C<sub>26</sub>H<sub>28</sub>O<sub>13</sub>**  
 Apigenin-bioside, 1482  
 6-*C*-Arabinopyranosyl-8-*C*-glucopyranosyl-5,7-dihydroxyflavone, 1568  
 8-*C*-Arabinopyranosyl-6-*C*-glucopyranosyl-5,7-dihydroxyflavone, 1569  
 Daphneticin-4"-*O*-*α*-*D*-glucopyranoside, 4644  
 Puerarin-xyloside I, 18182  
 Puerarin xyloside II, 18183  
 Rubiadin primeveroside, 19000
- C<sub>26</sub>H<sub>28</sub>O<sub>14</sub>**  
 Apigenin-4'-*O*-β-*D*-xylofuranosyl(1→4)-*O*-β-*D*-glucopyranoside, 1500  
 Apiin, 1502  
 6"-β-*D*-Arabinose-genistin, 1594  
 6-*C*-Arabinosyl-8-*C*-glucosyl apigenin, 1595  
 Artabotryside B, 1778  
*Isoschaftoside*, 11697  
 Kaempferol-3-*O*-*α*-*L*-rhamnosyl(1→2)-β-*D*-xyloside, 12090  
 Kaempferol-3-rhamno-4'-xyloside, 12091  
 Lucidin primeveroside, 13045  
 Morindin, 14973  
 Neoschaftoside, 15458  
 Schaftoside, 19463  
 Sorbifolin, 20103  
 5,7,4'-Trihydroxy-6-*C*-glucoside-8-*C*-arabinoside flavone, 21738  
 Vicenin 1, 22464  
 2"-*O*-β-*D*-Xylopyranosylisovitexin, 22836  
 6"-β-*D*-Xylose-genistin, 22844  
*O*-*D*-Xylosylvitexin, 22854  
 Yopaaoside B, 22927
- C<sub>26</sub>H<sub>28</sub>O<sub>15</sub>**  
 Artabotryside A, 1777  
 Carlinoside, 3199  
 Graveobioside A, 8990  
 Isocarlinoside, 11306  
 Kaempferol 3-*O*-*α*-arabinopyranosyl(1"→6")-β-glucopyranoside, 12028  
 Neocarlinoside, 15355  
 Phlomisflavoside B, 17166  
 Quercetin-3-*O*-β-*D*-xylose-(1→4)-*α*-*L*-rhamnoside, 18408  
 1,3,6-Trihydroxy-2-hydroxymethyl-9,10-anthraquinone 3-*O*-β-Primeveroside, 21746
- C<sub>26</sub>H<sub>28</sub>O<sub>16</sub>**  
 Phlomisflavoside A, 17165  
 Quercetin-3-*L*-arabino-7-*D*-glucoside, 18322  
 Quercetin-3-*O*-*α*-*L*-arabinopyranosyl-(1→2)-β-*D*-galactopyranoside, 18326

- Quercetin-3-*O*- $\alpha$ -arabinopyranosyl(1<sup>'''</sup>→6<sup>''</sup>)- $\beta$ -glucopyranoside, 18327
- C<sub>26</sub>H<sub>29</sub>NO<sub>5</sub>**  
Vertine, 22433
- C<sub>26</sub>H<sub>29</sub>O<sub>15</sub><sup>+</sup>**  
Cyanidin-3-xylosyl-glucoside, 4450  
Lycoricyanin' 13240
- C<sub>26</sub>H<sub>30</sub>N<sub>2</sub>O<sub>8</sub>**  
Strictosamide, 20390  
Vincosamide, 22496
- C<sub>26</sub>H<sub>30</sub>N<sub>2</sub>O<sub>9</sub>**  
10-Hydroxystictosamide, 10733  
Lyalosidic acid, 13168
- C<sub>26</sub>H<sub>30</sub>O<sub>4</sub>**  
Lakoochin A, 12453  
Monachosorin B, 14912  
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Tunicatachalcone, 22110
- C<sub>26</sub>H<sub>30</sub>O<sub>5</sub>**  
Abyssinone V-4'-methyl ether, 55  
(5*Ar*,6*R*,9*R*,9*Ar*)-4-Cinnamoyl-3,6-dihydroxy-1-methoxy-6-methyl-9-(1-methylethyl)-5a,6,7,8,9a-hexahydro-dibenzofuran, 3702  
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- C<sub>26</sub>H<sub>30</sub>O<sub>6</sub>**  
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Isokurararinone, 11474  
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- C<sub>26</sub>H<sub>30</sub>O<sub>7</sub>**  
1-Hydroxy-8-(2-hydroxy-3-methylbut-3-enyl)-3,6,7-trimethoxy-2-(3-methylbut-2-enyl)-xanthone, 10199  
Kurarinol, 12343  
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6-*O*-Methylmangostanin, 14577  
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(+)-Pinoselinol-3-hydroxy-4-methyl-4-pentenyl ether, 17417
- C<sub>26</sub>H<sub>30</sub>O<sub>8</sub>**  
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Isobutyrylmallochromene, 11295  
Limonin, 12847  
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- Obaculactone, 15882  
11-Oxo-7 $\alpha$ -obacunol, 16397  
Zapoterin, 22971
- C<sub>26</sub>H<sub>30</sub>O<sub>9</sub>**  
Egonol glucoside, 6717  
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12 $\alpha$ -Hydroxylimonin, 10325  
Kihadanin B, 12226
- C<sub>26</sub>H<sub>30</sub>O<sub>10</sub>**  
Glaucin A, 8512  
Massonianoid A, 13582  
(2*R*)-Phellodensin F, 17074  
Shihulimonin A, 19801
- C<sub>26</sub>H<sub>30</sub>O<sub>11</sub>**  
Balanophonin-4-*O*- $\beta$ -*D*-glucopyranoside, 2126  
Dracunculifoside D, 6583  
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- C<sub>26</sub>H<sub>30</sub>O<sub>12</sub>**  
Amurenin, 1091  
6- $\gamma$ , $\gamma$ -Dimethylallyltaxifolin 7-*O*- $\beta$ -*D*-glucoside, 6311  
Norcariside, 15761  
Phellatin, 17057
- C<sub>26</sub>H<sub>30</sub>O<sub>13</sub>**  
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6-*O*-*Z*-*p*-Coumaroyl scandoside methyl ester, 4186  
Dunnisiniside, 6640  
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Liquiritigenin-7-*O*- $\beta$ -*D*-apiofuranosyl)-4'-*O*- $\beta$ -*D*-glucopyranoside, 12910  
Liquiritigenin  
4'-*O*- $\beta$ -*D*-apio-*D*-furanosyl(1→2)- $\beta$ -*D*-glucopyranoside, 12911  
(2*S*)-Pinocembrin  
7-*O*-[ $\beta$ -*D*-apiosyl(1→2)]- $\beta$ -*D*-glucoside, 17405  
Pinocembrin-7-*O*- $\alpha$ -arabinopyranosyl-(1→2)- $\beta$ -glucopyranoside, 17406  
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- C<sub>26</sub>H<sub>30</sub>O<sub>14</sub>**  
Angustioside, 1251  
2'-*O*-[ $\beta$ -*D*-Apiofuranosyl(1→2)- $\beta$ -*D*-glucopyranosyl]isoliquiritigenin, 1511  
6-[( $\alpha$ -Apiofuranosyl-(1→6)-*O*- $\beta$ -*D*-glucopyranosyl)oxy]rubrofusarin], 1514  
6'-*O*-*E*-Feruloylmonotropein, 7779  
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- C<sub>26</sub>H<sub>30</sub>O<sub>15</sub>**
- Asperuloside tetraacetate, 1893  
Polygalaxanthone V, 17633
- C<sub>26</sub>H<sub>30</sub>O<sub>16</sub>**  
Vijayosine, 22477
- C<sub>26</sub>H<sub>31</sub>NO<sub>5</sub>**  
Decamine, 4832  
Decimine, 4848  
Lagerstremine, 12450  
Methyl lagerine, 14547
- C<sub>26</sub>H<sub>32</sub>N<sub>2</sub>O<sub>9</sub>**  
Isomitraphyllic acid (16→1)- $\beta$ -*D*-glucopyranosyl ester, 11538  
Mitraphyllic acid (16→1)- $\beta$ -*D*-gluco-pyranosyl ester, 14888  
Strictosidinic acid, 20391
- C<sub>26</sub>H<sub>32</sub>O<sub>4</sub>**  
Nimbocinol, 15603
- C<sub>26</sub>H<sub>32</sub>O<sub>5</sub>**  
Licoricidin, 12793  
Polyanthinin, 17620  
Tecleanin, 20895
- C<sub>26</sub>H<sub>32</sub>O<sub>6</sub>**  
Kleinioxanthrone 1, 12233  
( $\pm$ )-*trans*-3-(2,4,5-Trimethoxyphenyl)-4-[(*E*)-2,4,5-trimethoxystyryl]-cyclohexene, 21931  
1,2-*bis*(2,4,5-Trimethoxy-*Z*-styryl)cyclobutane, 21932  
*cis*-1-(2,4,5-Trimethoxy-*E*-styryl)-2-(2,4,5-trimethoxy-*Z*-styryl)cyclobutane, 21933  
*trans*-1-(2,4,5-Trimethoxy-*E*-styryl)-2-(2,4,5-trimethoxy-*Z*-styryl)cyclobutane, 21934
- C<sub>26</sub>H<sub>32</sub>O<sub>7</sub>**  
Assafoetidnol B, 1911  
Kurarinidinol, 12342  
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- C<sub>26</sub>H<sub>32</sub>O<sub>8</sub>**  
2-Acetoxycaesaldehyd E, 138  
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Butyrylmallojaponin, 2811  
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Obacunoic acid, 15883
- C<sub>26</sub>H<sub>32</sub>O<sub>9</sub>**  
Isolimononic acid (16→17)lactone, 11493  
Limononic acid A ring lactone, 12848
- C<sub>26</sub>H<sub>32</sub>O<sub>10</sub>**  
Gaultherin B, 8241  
5-[3''-( $\beta$ -*D*-Glucopyranosyloxy)propyl]-7-me-

- thoxy-2-(3',4'-dimethoxyphenyl)benzofuran, 8708  
 (2*S*,3*S*)-2-(5-Methoxy-3,4-methylenedioxybenzyl)-3-(4-hydroxy-3,5-dimethoxybenzyl)butane-1,4-diol diacetate, 14009
- C<sub>26</sub>H<sub>32</sub>O<sub>11</sub>**  
 Baenzigeroside A, 2099  
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 (7*R*,8*S*)Dehydrodiconifery alcohol-9'-*O*- $\beta$ -*D*-glucoside, 4902  
 (7*S*,8*R*)Dehydrodiconifery alcohol-4-*O*- $\beta$ -*D*-glucoside, 4903  
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 3,5-Dihydroxy-stilbene-3-*O*-neohesperidoside, 6137  
 4,4-Dimethoxy-3'-hydroxy-7,9':7',9'-diepoxylignan-3-*O*- $\beta$ -*D*-glucopyranoside, 6237  
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 (+)-Pinoresinol *O*- $\beta$ -*D*-glucopyranoside, 17415  
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 Saikolignanose D, 19139  
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 Styraxlignolide C, 20424  
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- C<sub>26</sub>H<sub>32</sub>O<sub>12</sub>**  
 6'-*O*-Acetylharpagoside, 410  
 Alboside III, 869  
 Bacopaside C, 2086  
 Cucurbitoside A, 4330  
 (+)-1-Hydroxypinoresinol-4'-*O*- $\beta$ -*D*-glucopyranoside, 10654  
 (+)-1-Hydroxypinoresinol-4''-*O*- $\beta$ -*D*-glucopyranoside, 10655  
 Luzonoside C, 13166  
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 Nortrachelogenin-5'-*C*- $\beta$ -*D*-glucopyranoside, 15807  
 Nortrachelogenin-8'-*O*- $\beta$ -*D*-glucopyranoside, 15808  
 Nortracheloside, 15809  
 Phellavin, 17058  
 (7*S*,8*S*)-Syringoylglycerol  
 9-*O*-(6'-*O*-cinnamoyl)- $\beta$ -*D*-glucopyranoside, 20570
- C<sub>26</sub>H<sub>32</sub>O<sub>13</sub>**  
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- Dichotomoside A, 5427  
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 Grandifloroside 11-methyl ester, 8978  
 2-(4-Hydroxyphenyl)ethyl-1-*O*- $\beta$ -*D*-[5-*O*-(4-hydroxybenzoyl)]-apiofuranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside, 10621  
 Lactucaside, 12444  
 Resveratrol 3,4'-*O*,*O'*-di- $\beta$ -*D*-glucopyranoside, 18647  
 Tenuiphenone A, 20959
- C<sub>26</sub>H<sub>32</sub>O<sub>14</sub>**  
 3,4-Dimethoxyphenyl  
 1-*O*- $\beta$ -*D*-[5-*O*-(4-hydroxybenzoyl)]-apiofuranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside, 6286  
 Mulberroside A, 15058  
 2,3,5,4'-Tetrahydroxystilbene-2-*O*-(6''-*O*- $\alpha$ -*D*-glucopyranosyl)- $\beta$ -*D*-glucopyranoside, 21156  
 2,3,5,4'-Tetrahydroxystilbene-2,3-*O*- $\beta$ -*D*-diglucoside, 21159
- C<sub>26</sub>H<sub>32</sub>O<sub>15</sub>**  
 Seguinose F, 19669
- C<sub>26</sub>H<sub>32</sub>O<sub>16</sub>**  
 Leucocyanidin-3-*O*- $\alpha$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)-*O*- $\beta$ -*D*-arabinopyranoside, 12716
- C<sub>26</sub>H<sub>33</sub>ClO<sub>10</sub>**  
 Junceellolide C, 11945
- C<sub>26</sub>H<sub>33</sub>ClO<sub>12</sub>**  
 Juncenolide G, 11954
- C<sub>26</sub>H<sub>33</sub>NO<sub>7</sub>**  
 Guan-fu base G, 9047
- C<sub>26</sub>H<sub>34</sub>O<sub>4</sub>**  
 Gerronemin E, 8364  
 Kazinol J, 12189
- C<sub>26</sub>H<sub>34</sub>O<sub>5</sub>**  
 Driportlandin, 6604
- C<sub>26</sub>H<sub>34</sub>O<sub>6</sub>**  
 Cinobufagin, 3729  
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- C<sub>26</sub>H<sub>34</sub>O<sub>7</sub>**  
 Ardisinone B, 1646  
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 1 $\alpha$ ,8 $\beta$ -Diacetoxy-9 $\beta$ -benzoyloxydihydro- $\beta$ -agarofuran, 5286  
 Forrestin G, 7921  
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 6 $\alpha$ -Hydroxycinobufagin, 9917  
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 1-*O*-Methylchangsensin, 14524
- C<sub>26</sub>H<sub>34</sub>O<sub>8</sub>**  
 Agrimophol, 762  
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- 12 $\beta$ -Hydroxycillirosidin, 10693  
 Nigakilactone G, 15552  
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- C<sub>26</sub>H<sub>34</sub>O<sub>9</sub>**  
 Acetylexidonin, 393  
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 Bryophyllin B, 2690  
 Crocetin mono( $\beta$ -*D*-glucosyl) ester, 4247  
 3,5-Diacetoxy-1-(4-hydroxy-3,5-dimethoxyphenyl)-7-(4-hydroxy-3-methoxyphenyl)heptane, 5302  
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 Leucophyllin A, 12719  
 Lungshengenin G, 13083  
 Rabdoepigibberellolide, 18460  
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 Sudachinoid A, 20448  
 11-*O*- $\beta$ -*D*-Xylopyranosylmyricanol, 22837
- C<sub>26</sub>H<sub>34</sub>O<sub>10</sub>**  
 Aviculin, 2040  
 Baiyecrystal A, 2116  
 2,3-Dihydrobenzofuran-2-(4'-hydroxy-3'-methoxyphenyl)-3- $\alpha$ -*L*-rhamnopyranosyloxymethyl-7-methoxy-5-propanol, 5547  
 2',3'-Dihydroxy-1'-propoxypseudolarate B, 6104  
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 (+)-Isolariciresinol-9'-*O*- $\alpha$ -*L*-rhamnoside, 11482  
 Massonianoside C, 13585  
 Massonianoside D, 13586  
 1 $\alpha$ ,8 $\beta$ ,14-Triacetoxy-9 $\beta$ -furoyloxydihydro- $\beta$ -agarofuran, 21522
- C<sub>26</sub>H<sub>34</sub>O<sub>11</sub>**  
 Bruceine A, 2664  
 Dihydrodehydrodiconifery alcohol 4'-*O*- $\beta$ -*D*-glucoside, 5583  
 (-)-Isolariciresinol-4-*O*- $\beta$ -*D*-glucopyranoside, 11481  
 (+)-1-Lariciresinol-4'- $\beta$ -*D*-glucopyranoside, 12522  
 (+)-Lariciresinol-4- $\beta$ -*D*-glucopyranoside, 12523  
 Lariciresinol-9-*O*- $\beta$ -*D*-glucoside, 12525  
 (-)-5'-Methoxyisolariciresinol-2 $\alpha$ -*O*- $\beta$ -*D*-xylopyranoside, 13977  
 Neoglabrescin B triacetate, 15399  
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- C<sub>26</sub>H<sub>34</sub>O<sub>12</sub>**  
 Berchemol-4'-*O*- $\beta$ -*D*-glucoside, 2305  
 Citrusin A, 3775  
 Hyuganoside IIIa, 10924  
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 Mallophenol B, 13425  
 7*R*,7'*R*,8*S*,8'*S*-(+)-Neo-olivil-4-*O*- $\beta$ -*D*-glucopyra-

- noside, 15441  
 Neoolivil-4-*O*- $\beta$ -*D*-glucoside, 15442  
 (-)-Olivil-4"-*O*- $\beta$ -*D*-glucopyranoside, 16090  
 (-)-Olivil-4'-*O*- $\beta$ -*D*-glucopyranoside, 16091  
 Sinenoside, 19926  
 Tamariscinoside C, 20655  
 Tanegoside, 20669
- C<sub>26</sub>H<sub>34</sub>O<sub>13</sub>**  
 Juncin Q, 11957  
 (-)-Massoniresinol 4'-*O*- $\beta$ -*D*-glucopyranoside, 13589  
 (-)-Massoniresinol 4"-*O*- $\beta$ -*D*-glucopyranoside, 13590  
 Osthenol-7-*O*- $\beta$ -gentiobioside, 16258
- C<sub>26</sub>H<sub>34</sub>O<sub>14</sub>**  
 Pyrolaside A, 18268
- C<sub>26</sub>H<sub>35</sub>NO<sub>4</sub>**  
 Lythranidine, 13279
- C<sub>26</sub>H<sub>35</sub>NO<sub>6</sub>**  
 Guan-fu base F, 9046  
 Spiramide, 20193
- C<sub>26</sub>H<sub>35</sub>N<sub>5</sub>O<sub>8</sub>**  
 Asterin B, 1923
- C<sub>26</sub>H<sub>36</sub>NO<sub>11</sub>**  
*L*-Phenylalaninosecologanin, 17094
- C<sub>26</sub>H<sub>36</sub>O<sub>4</sub>**  
 Gerronemin D, 8363  
 4-Hydroxy-2,6-dimethyl-6-(3,7-dimethyl-2,6-octadienyl)-8-(3-methyl-2-butenyl)-2*H*-1-benzopyran-5,7(3*H*,6*H*)-dione, 10049  
 5-Hydroxy-2,8-dimethyl-6-(3-methyl-2-butenyl)-8-(3,7-dimethyl-2,6-octadienyl)-2*H*-1-benzopyran-4,7(3*H*,8*H*)-dione, 10051  
 Lupulone A, 13110  
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- C<sub>26</sub>H<sub>36</sub>O<sub>6</sub>**  
 Bufotalin, 2722  
 15-*O*-Methyl-18-oxoneovibsanin F, 14648
- C<sub>26</sub>H<sub>36</sub>O<sub>7</sub>**  
 5 $\beta$ -Hydroxybufotalin, 9861  
 9 $\alpha$ -Hydroxy-2 $\alpha$ ,10 $\beta$ ,13 $\alpha$ -triacetoxytaxa-4(20),5(6),11(12)-triene, 10781  
 (2*R*\*,3*S*\*,4*R*\*,5*R*\*,9*S*\*,11*S*\*,15*R*\*)-3,5,15-Triacetoxy-14-oxolathyra-6(17),12*E*-diene, 21530
- C<sub>26</sub>H<sub>36</sub>O<sub>8</sub>**  
 Adenanthin C, 607  
 Casearinone A, 3272  
 Casearinone B, 3273  
 Dawoensin A, 4701  
 3 $\beta$ ,6 $\beta$ -Diangeloyloxy-10 $\alpha$ -hydroxy-8 $\alpha$ -methoxyremophilenolide, 5356  
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- Isodoternifolin A, 11400  
 Leucamenin C, 12710  
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 Trillenogenin, 21872
- C<sub>26</sub>H<sub>36</sub>O<sub>9</sub>**  
 4-Acetoxy-2,3-bis(3,4,5-trimethoxybenzyl)-1-butanol, 136  
 Adenanthin J, 614  
 Adenanthin K, 615  
 Caesalmin D, 2866  
 Caesalmin E, 2867  
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 1-Hydroxytaxinine A, 10739  
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 Melissoidesin B, 13689  
 Phlogacanthoside B, 17162  
 Rabdosianin A, 18487  
 Taxezopidine A, 20780  
 Taxinine A 11,12-epoxide, 20799  
 Taxuspine W, 20870  
 2 $\alpha$ ,7 $\beta$ ,13 $\alpha$ -Triacetoxy-5 $\alpha$ ,9 $\alpha$ -dihydroxy-2(3 $\rightarrow$ 20)abeotaxa-4(20),11-dien-10-one, 21515  
 (3*E*,7*E*)-2 $\alpha$ ,10 $\beta$ ,13 $\alpha$ -Triacetoxy-5 $\alpha$ ,20-dihydroxy-3,8-seco-taxa-3,7,11-trien-9-one, 21516  
 Weisiensin A, 22657
- C<sub>26</sub>H<sub>36</sub>O<sub>10</sub>**  
 Ajugalide A, 795  
 Ajugalide B, 796  
 (3*R*,5*R*)-3,5-Dihydroxy-1-(4-hydroxy-3-methoxyphenyl)-7-(4-hydroxyphenyl)heptane 3-*O*- $\beta$ -*D*-glucopyranoside, 5913  
 Nortrilobolide, 15811  
 Taxumairol J, 20830  
 Taxuspine O, 20862
- C<sub>26</sub>H<sub>36</sub>O<sub>11</sub>**  
 2 $\alpha$ -Deacetyl-5 $\alpha$ -decinnamoyltaxagifine, 4736  
 (3*R*,5*R*)-3,5-Dihydroxy-1-(4-hydroxy-3-methoxyphenyl)-7-(3,4-dihydroxyphenyl)heptane 3-*O*- $\beta$ -*D*-glucopyranoside, 5912  
 Javanicolide C, 11853  
 (-)-Secoisolariciresinol  
 4-*O*- $\beta$ -*D*-glucopyranoside, 19619
- C<sub>26</sub>H<sub>36</sub>O<sub>12</sub>**  
 10-Acetoxy-1-acevaltrate hydrin, 121  
 Foliamenthin, 7851  
 Menthiafolin, 13773  
 Tamariscinoside B, 20654  
 7,9,9'-Trihydroxy-3,3'-dimethoxy-8-*O*-4'-neolignan-4-*O*- $\beta$ -*D*-glucopyranoside, 21714
- C<sub>26</sub>H<sub>36</sub>O<sub>13</sub>**  
 Amritoside A, 1084  
 Dracunculifoside P, 6595
- C<sub>26</sub>H<sub>36</sub>O<sub>14</sub>**  
 Eurycomanol-2-*O*- $\beta$ -glucopyranoside, 7651
- C<sub>26</sub>H<sub>36</sub>O<sub>15</sub>**  
 Seguinolide K, 19674
- C<sub>26</sub>H<sub>37</sub>NO<sub>3</sub>**  
 Brachystamide C, 2575
- C<sub>26</sub>H<sub>37</sub>NO<sub>8</sub>**  
 (-)-(trans-3'-Methoxy-4'- $\alpha$ -*L*-rhamnosyloxy cinnamoyl)epilupinine, 14084
- C<sub>26</sub>H<sub>37</sub>N<sub>3</sub>O<sub>4</sub>**  
 Discarine M, 6505
- C<sub>26</sub>H<sub>38</sub>O<sub>3</sub>**  
 Papuaforin B, 16630
- C<sub>26</sub>H<sub>38</sub>O<sub>4</sub>**  
 Gerronemin C, 8362  
 Hyperpapuanone, 10889  
 Lupulone, 13109
- C<sub>26</sub>H<sub>38</sub>O<sub>5</sub>**  
 Lupulone C, 13112  
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 Methyl butyric acid 3,14-dehydro-*Z*-tussilagin ester, 14187  
 15-*O*-Methyl-14-epi-neovibsanin F, 14399  
 15-*O*-Methylneovibsanin F, 14615  
 2-*O*-Methylneovibsanin H, 14616  
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- C<sub>26</sub>H<sub>38</sub>O<sub>6</sub>**  
 Methyl *ent*-7 $\alpha$ ,9 $\alpha$ -dihydroxy-15 $\beta$ -[(2*Z*)-2-methyl-but-2-enyloxy]kaur-16-en-19-oate, 14394  
 18-*O*-Methylvibsanin G, 14807
- C<sub>26</sub>H<sub>38</sub>O<sub>7</sub>**  
 10-Deacetyltaxuyunnanin C, 4788  
 2 $\alpha$ -Hydroxy-5 $\alpha$ ,10 $\beta$ ,14 $\beta$ -triacetoxytaxa-4(20),11-diene, 10779  
 Hydroxytriacetoxytaxadiene, 10780

- 18-*O*-Methyl-5-*epi*-vibsanin K, 14404  
 18-*O*-Methylvibsanin K, 14808  
 Neovibsanin D, 15472  
 7-*epi*-Neovibsanin D, 15473  
 Pierisformoside C, 17354
- C<sub>26</sub>H<sub>38</sub>O<sub>8</sub>**  
 Adenanthin B, 606  
 2-Deacetyldecinnamoyltaxinine E, 4737  
 Melissoidesin R, 13704  
 Melissoidesin U, 13707  
 3-Methyl-1-{2-[(1*R*\*,2*S*\*,5*R*\*,6*R*\*)-2,5,6-tri(acetyloxy)-4-methyl-3-cyclohexenyl]-propyl}-2-butenyl (*Z*)-2-methyl-2-butenolate, 14767  
 Xindongnin D, 22800
- C<sub>26</sub>H<sub>38</sub>O<sub>9</sub>**  
 Baiyecrystal C, 2118  
 Epi-baiyecrystal C, 6834  
 Forrestin C, 7917  
 Forrestin E, 7919  
 Glabcensin L, 8473  
 Glabcensin M, 8474  
 $\beta$ -*D*-Glucopyranosyl-8(17),13-*ent*-labdadien-16,15-olid-18-oate, 8680  
 Phlogacanthoside A, 17161  
 Taxane 2, 20749  
 Taxawallin F, 20755  
 Taxawallin G, 20756  
 Taxawallin H, 20757  
 7 $\beta$ ,9 $\alpha$ ,10 $\beta$ -Triacetoxo-2 $\alpha$ ,5 $\alpha$ ,13 $\alpha$ -trihydroxy-4(20),11-taxadiene, 21532
- C<sub>26</sub>H<sub>38</sub>O<sub>10</sub>**  
 10-Debenzoyl-2 $\alpha$ -acetoxy-brevifoliol, 4801  
 Taxezopidine B, 20781  
 5 $\alpha$ ,7 $\beta$ ,10 $\beta$ ,13 $\alpha$ -Tetrahydroxy-2 $\alpha$ ,9 $\alpha$ ,15-triacetoxy-11(15 $\rightarrow$ 1)-abeo-taxa-4(20),11-diene, 21161
- C<sub>26</sub>H<sub>38</sub>O<sub>11</sub>**  
 1-Hydroxy-2,7,9-trideacetylaccatin I, 10782  
 Tasumatrol B, 20719  
 Taxumairol Y, 20838
- C<sub>26</sub>H<sub>38</sub>O<sub>12</sub>**  
 Agnucastoside A, 750  
 Dihydrofoliamenthin, 5615  
 Jasnudifloside I, 11829  
 Jasnudifloside J, 11830  
 Pratialin A, 17766
- C<sub>26</sub>H<sub>38</sub>O<sub>13</sub>**  
 Casteloside B, 3299  
 Iandonoside A, 10935  
 Lobetyolinin, 12943
- C<sub>26</sub>H<sub>38</sub>O<sub>14</sub>**  
 Bruceine E 2- $\beta$ -*D*-glucopyranoside, 2669
- Iandonoside B, 10936
- C<sub>26</sub>H<sub>39</sub>NO<sub>6</sub>**  
 8-Acetyldolacoinine, 384
- C<sub>26</sub>H<sub>39</sub>NO<sub>8</sub>**  
 3 $\beta$ -Acetoxynorerythrosumine, 265
- C<sub>26</sub>H<sub>40</sub>O<sub>4</sub>**  
 2-*n*-Pentadecyl-5,7-dihydroxy-6,8-dimethylchromone, 16834
- C<sub>26</sub>H<sub>40</sub>O<sub>5</sub>**  
 Vibsanin Q, 22452
- C<sub>26</sub>H<sub>40</sub>O<sub>6</sub>**  
 Siegesetheric acid I, 19878
- C<sub>26</sub>H<sub>40</sub>O<sub>6</sub>**  
 Taxuyunnanin I, 20881
- C<sub>26</sub>H<sub>40</sub>O<sub>8</sub>**  
 3,4-Dihydro-excelsin, 5612
- C<sub>26</sub>H<sub>40</sub>O<sub>8</sub>**  
 18- $\beta$ -*D*-Glucopyranosyloxy-8(17),13-*ent*-labdadien-16,15-olide, 8700
- C<sub>26</sub>H<sub>40</sub>O<sub>8</sub>**  
 Neoandrographolide, 15337
- C<sub>26</sub>H<sub>40</sub>O<sub>8</sub>**  
 Pierisformoside F, 17357
- C<sub>26</sub>H<sub>40</sub>O<sub>9</sub>**  
 Cussoracoside E, 4427
- C<sub>26</sub>H<sub>40</sub>O<sub>9</sub>**  
 Melissoidesin D, 13691
- C<sub>26</sub>H<sub>40</sub>O<sub>9</sub>**  
 Pierisformoside D, 17355
- C<sub>26</sub>H<sub>40</sub>O<sub>9</sub>**  
 Pierisformoside E, 17356
- C<sub>26</sub>H<sub>40</sub>O<sub>10</sub>**  
 Andrographiside, 1158  
 (3*S*)-3-*O*-(3',4'-Diangeloyl- $\beta$ -*D*-glucopyranosyloxy)-6-hydroperoxy-3,7-dimethylocta-1,7-diene, 5354  
 (3*S*)-3-*O*-(3',4'-Diangeloyl- $\beta$ -*D*-glucopyranosyloxy)-7-hydroperoxy-3,7-dimethylocta-1,5-diene, 5355  
 Isodoforrestin, 11383  
 Shikokiaside B, 19818
- C<sub>26</sub>H<sub>40</sub>O<sub>11</sub>**  
 Parvifoliside, 16687  
 Rabdoside 1, 18494  
 Shikokiaside A, 19817  
 Taxuyunnanin Q, 20884
- C<sub>26</sub>H<sub>40</sub>O<sub>12</sub>**  
 Agnucastoside B, 751  
 Rabdoside 2, 18495
- C<sub>26</sub>H<sub>40</sub>O<sub>15</sub>**  
 LiguobustosideM, 12822
- C<sub>26</sub>H<sub>41</sub>NO**  
 Buxbodine C, 2820
- C<sub>26</sub>H<sub>41</sub>NO<sub>2</sub>**  
 Buxbodine B, 2819
- C<sub>26</sub>H<sub>41</sub>NO<sub>7</sub>**  
 Akirane, 821  
 Bullatine C, 2739  
 Delbruline, 4999  
 Delcorine, 5003
- C<sub>26</sub>H<sub>41</sub>NO<sub>8</sub>**  
 Pubescenine, 18174
- C<sub>26</sub>H<sub>42</sub>O<sub>4</sub>**  
 Aculeatin D, 589  
 Maesaquinone, 13350  
 Pallasone C, 16544
- C<sub>26</sub>H<sub>42</sub>O<sub>6</sub>**  
 Acetylcholic acid, 350
- C<sub>26</sub>H<sub>42</sub>O<sub>7</sub>**  
 4,5,6-Tri-*O*-acetyl hygrophorone B<sup>14</sup>, 21536
- C<sub>26</sub>H<sub>42</sub>O<sub>8</sub>**  
*ent*-2-*Oxo*-15,16-dihydroxypimar-8(14)-*en*-16-*O*- $\beta$ -glucopyranoside, 16320  
 Pierisformoside B, 17353  
 Pterokaurane P<sub>1</sub>-2-*O*- $\beta$ -*D*-glucoside, 18108
- C<sub>26</sub>H<sub>42</sub>O<sub>9</sub>**  
 Cussoracoside A, 4423  
 Isodopharicin F, 11399  
*ent*-2-*Oxo*-3 $\beta$ ,15,16-trihydroxypimar-8(14)-*en*-3-*O*- $\beta$ -glucopyranoside, 16436  
 Pubeside C, 18177  
 Pubeside D, 18178  
 Rhodomoside A, 18812  
 Sumogaside, 20486
- C<sub>26</sub>H<sub>42</sub>O<sub>10</sub>**  
 Rhodomoside B, 18813
- C<sub>26</sub>H<sub>43</sub>NO<sub>6</sub>**  
 6,14-Dimethoxyforesticine, 6227  
 Glycocholic acid, 8823
- C<sub>26</sub>H<sub>43</sub>NO<sub>7</sub>**  
 Delphatine, 5008  
 8-Methyllycoctonine, 14570
- C<sub>26</sub>H<sub>43</sub>NO<sub>8</sub>**  
 18-*O*-Methyldeleterine, 14286  
 8-Methyl-10-hydroxylycoctonine, 14513
- C<sub>26</sub>H<sub>44</sub>NNaO<sub>7</sub>S**  
 Sodium taurophythocholate, 20038
- C<sub>26</sub>H<sub>44</sub>N<sub>2</sub>**  
 Buxamine E, 2816  
 Buxbodine E, 2822
- C<sub>26</sub>H<sub>44</sub>N<sub>2</sub>O**  
 Buxaminol E, 2817  
 Saraccine, 19354
- C<sub>26</sub>H<sub>44</sub>O<sub>4</sub>**  
 Irisoquin C, 11175  
 Surinone C, 20495

- C<sub>26</sub>H<sub>44</sub>O<sub>6</sub>**  
Dresigenin B, 6600
- C<sub>26</sub>H<sub>44</sub>O<sub>7</sub>**  
Stemodinoside B, 20303
- C<sub>26</sub>H<sub>44</sub>O<sub>8</sub>**  
Darutoside, 4662  
Pubeside A, 18175  
Pubeside B, 18176  
Salvigreside A, 19212  
Siegesbeckioside, 19877  
1 $\beta$ ,16 $\alpha$ ,17-Trihydroxy-*ent*-kaur-17-*O*- $\beta$ -*D*-glucopyranoside, 21758
- C<sub>26</sub>H<sub>44</sub>O<sub>9</sub>**  
*ent*-2 $\beta$ ,15,16,19-Tetrahydroxypimar-8(14)-*en*-19-*O*- $\beta$ -glucopyranoside, 21150
- C<sub>26</sub>H<sub>44</sub>O<sub>10</sub>**  
2,6-Diacetyl-3,4-diisobutyryl-1-*O*-octylglucopyranoside, 5332  
Eriocaside A, 7275
- C<sub>26</sub>H<sub>45</sub>N**  
Buxbodine A, 2818
- C<sub>26</sub>H<sub>45</sub>NO<sub>6</sub>S**  
Taurochenodeoxycholic acid, 20733  
Tauroursodeoxycholic acid, 20735
- C<sub>26</sub>H<sub>45</sub>NO<sub>7</sub>S**  
Taurocholic acid, 20734
- C<sub>26</sub>H<sub>46</sub>N<sub>2</sub>O**  
Cyclovirobuxine D, 4544  
Epipachysamine A, 6989  
Epipachysamine All, 6990  
Saracodine, 19355
- C<sub>26</sub>H<sub>46</sub>N<sub>2</sub>O<sub>22</sub>**  
Neocycasin D, 15383
- C<sub>26</sub>H<sub>46</sub>O<sub>5</sub>**  
Ranol, 18544
- C<sub>26</sub>H<sub>50</sub>O<sub>2</sub>**  
Hexacosan-4-olide, 9480  
5-Hydroxy-hexacos-1-*en*-3-*one*, 10159
- C<sub>26</sub>H<sub>52</sub>O<sub>2</sub>**  
Cerotic acid, 3434
- C<sub>26</sub>H<sub>54</sub>**  
*n*-Hexacosane, 9479
- C<sub>26</sub>H<sub>54</sub>N<sub>4</sub>O**  
Budmunchiamine L<sub>4</sub>, 2700
- C<sub>26</sub>H<sub>54</sub>O**  
Ceryl alcohol, 3435
- C<sub>27</sub>H<sub>12</sub>O<sub>18</sub>**  
Isocorilagin, 11342
- C<sub>27</sub>H<sub>20</sub>MgO<sub>12</sub>**  
Magnesium lithospermate, 13369
- C<sub>27</sub>H<sub>20</sub>O<sub>6</sub>**  
Microphyllaquinone, 14843
- C<sub>27</sub>H<sub>20</sub>O<sub>7</sub>**  
Mulberrofuran R, 15052
- C<sub>27</sub>H<sub>20</sub>O<sub>12</sub>**  
Sagecoumarin, 19123
- C<sub>27</sub>H<sub>20</sub>O<sub>17</sub>**  
Phyllanemblinin A, 17208
- C<sub>27</sub>H<sub>22</sub>N<sub>4</sub>O<sub>3</sub>**  
1-( $\beta$ -Carbolin-1-yl)-3-(4,8-dimethoxy- $\beta$ -carbolin-1-yl)propan-1-*one*, 3161
- C<sub>27</sub>H<sub>22</sub>O<sub>12</sub>**  
Lithospermic acid, 12925  
Melitric acid A, 13709
- C<sub>27</sub>H<sub>22</sub>O<sub>15</sub>**  
Quercetin-3-*O*- $\alpha$ -arabinopyranoside-2"-gallate, 18323
- C<sub>27</sub>H<sub>22</sub>O<sub>16</sub>**  
(-)-2,3-Digalloyl-4-(*E*)-caffeoyl-*L*-threonic acid, 5513
- C<sub>27</sub>H<sub>22</sub>O<sub>18</sub>**  
Corilagin, 4055  
Helioscopinin B, 9310  
Phyllanemblinin B, 17209  
Punicacortein A, 18200  
Punicacortein B, 18201  
Sanguiin H<sub>4</sub>, 19276  
Sanguiin H<sub>5</sub>, 19277  
Strictinin, 20389
- C<sub>27</sub>H<sub>22</sub>O<sub>19</sub>**  
Furosin, 8030
- C<sub>27</sub>H<sub>23</sub>O<sub>16</sub>**  
5-Carboxypyranocyanidin-3-*O*-(6"-*O*-malonyl- $\beta$ -glucopyranoside), 3183
- C<sub>27</sub>H<sub>24</sub>N<sub>2</sub>O<sub>3</sub>**  
Melicobisquinolinone B, 13677
- C<sub>27</sub>H<sub>24</sub>N<sub>2</sub>O<sub>5</sub>**  
Tyraminoporphine, 22159
- C<sub>27</sub>H<sub>24</sub>O<sub>5</sub>**  
Vismiagianone D, 22548  
Vismiagianone E, 22549
- C<sub>27</sub>H<sub>24</sub>O<sub>7</sub>**  
Rhinacanthin N, 18777
- C<sub>27</sub>H<sub>24</sub>O<sub>18</sub>**  
1,2,3-Tri-*O*-galloyl- $\beta$ -*D*-glucose, 21641  
1,2,6-Tri-*O*-galloyl- $\beta$ -*D*-glucose, 21642  
1,3,6-Trigalloyl- $\beta$ -*D*-glucose, 21643
- C<sub>27</sub>H<sub>24</sub>O<sub>19</sub>**  
Amlaic acid, 1065  
Chebulanin, 3491
- C<sub>27</sub>H<sub>26</sub>O<sub>7</sub>**  
Bletilol B, 2516  
Bletilol C, 2517
- C<sub>27</sub>H<sub>26</sub>O<sub>8</sub>**  
Rocagloic acid, 18892
- C<sub>27</sub>H<sub>26</sub>O<sub>9</sub>**  
Artabotrycinol, 1776  
Isoamericanol B<sub>1</sub>, 11212  
Isoamericanol B<sub>2</sub>, 11213  
Isoamericanol C<sub>1</sub>, 11214  
Isoamericanol C<sub>2</sub>, 11215  
Isoprincepin, 11612  
Princepin, 17860
- C<sub>27</sub>H<sub>26</sub>O<sub>10</sub>**  
Benzoylsalireposide, 2270  
Piceid 2'-*O*-*p*-hydroxybenzoate, 17286  
Symplososide, 20547
- C<sub>27</sub>H<sub>26</sub>O<sub>11</sub>**  
Symponoside, 20549  
Torreyaflavonoside, 21463
- C<sub>27</sub>H<sub>26</sub>O<sub>12</sub>**  
Cleistanthin B, 3817  
Piceid-2"-*O*-gallate, 17285  
Resveratrol-4'-*O*-(6"-*O*-galloyl)- $\beta$ -*D*-glucopyranoside, 18648  
Symplocoside, 20528
- C<sub>27</sub>H<sub>26</sub>O<sub>13</sub>**  
(+)-Galocatechin-hexacetate, 8102  
Kaempferol-3-*O*-(2,3,4-tri-*O*-acetyl- $\alpha$ -*L*-rhamnopyranoside), 12099  
Piceatannol 3'-*O*- $\beta$ -*D*-(6"-*O*-galloyl)glucopyranoside, 17279  
Piceatannol  
4'-*O*-(6"-*O*-galloyl) $\beta$ -*D*-glucopyranoside, 17280  
(*E*)-3,5,3',4'-Tetrahydroxystilbene 3-*O*- $\beta$ -*D*-(6"-galloyl)glucopyranoside, 21155
- C<sub>27</sub>H<sub>26</sub>O<sub>17</sub>**  
Apigenin-7-*O*-diglucuronide, 1489
- C<sub>27</sub>H<sub>26</sub>O<sub>18</sub>**  
Isochesnatin, 11325  
Luteolin-7-*O*-diglucuronide, 13142  
Scutellarein-7-*O*-diglucuronide, 19583
- C<sub>27</sub>H<sub>26</sub>O<sub>19</sub>**  
Quercetin-3,7-diglucuronide, 18347
- C<sub>27</sub>H<sub>26</sub>O<sub>20</sub>**  
Phyllanemblinin D, 17211  
Phyllanemblinin E, 17212  
Phyllanemblinin F, 17213
- C<sub>27</sub>H<sub>28</sub>N<sub>2</sub>O<sub>4</sub>**  
Anomalamide, 1345  
Patriscabratine, 16724  
Trichosanatine, 21575
- C<sub>27</sub>H<sub>28</sub>N<sub>2</sub>O<sub>11</sub>**  
Desoxycordifolinic acid, 5273
- C<sub>27</sub>H<sub>28</sub>O<sub>7</sub>**  
Lespedezol A<sub>5</sub>, 12686
- C<sub>27</sub>H<sub>28</sub>O<sub>9</sub>**  
Angeloylpodophyllotoxin, 1232

- Steganagin, 20285
- C<sub>27</sub>H<sub>28</sub>O<sub>10</sub>**  
Acuminatin II\*, 593
- C<sub>27</sub>H<sub>28</sub>O<sub>11</sub>**  
Cochinchiside A, 3874  
Tremulacin, 21508
- C<sub>27</sub>H<sub>28</sub>O<sub>12</sub>**  
Cochinchiside B, 3875  
Hirsutissimide A, 9554  
1-*O*-Methyl-3,5-*O*-dicaffeoyl quinic acid methyl ester, 14292
- C<sub>27</sub>H<sub>28</sub>O<sub>13</sub>**  
3-*O*-Caffeoyl-4-*O*-sinapoylquinic acid, 2925  
Cassiaoccidentalinalin A, 3281
- C<sub>27</sub>H<sub>28</sub>O<sub>14</sub>**  
Cassiaoccidentalinalin B, 3282
- C<sub>27</sub>H<sub>28</sub>O<sub>15</sub>**  
1,3-Dihydroxy-2-carbomethoxy-9,10-anthraquinone 3-*O*- $\beta$ -primeveroside, 5785  
3',5'-*O*-Dimethylmyricetin  
3-*O*- $\beta$ -*D*-2'',3''-diacetylglucopyranoside, 6377  
Yopaaoside A, 22926
- C<sub>27</sub>H<sub>28</sub>O<sub>16</sub>**  
Kaempferol 3-*O*-(2''- $\alpha$ -rhamnopyranosyl)- $\beta$ -glucuronopyranoside, 12078  
Rhein diglucoside, 18760
- C<sub>27</sub>H<sub>28</sub>O<sub>17</sub>**  
Quercetin-3-*O*-(2''-*O*-rhamnopyranosyl)- $\beta$ -glucuronopyranoside, 18330
- C<sub>27</sub>H<sub>28</sub>O<sub>18</sub>**  
Nelumboside, 15325  
Quercetin-7-*O*-glucuronoglucoside, 18372
- C<sub>27</sub>H<sub>29</sub>NO<sub>6</sub>**  
(+)-Plicamine, 17560  
(-)-Secoplicamine, 19633
- C<sub>27</sub>H<sub>29</sub>NO<sub>13</sub>**  
Cartormin, 3226
- C<sub>27</sub>H<sub>30</sub>N<sub>2</sub>O<sub>10</sub>**  
3 $\alpha$ ,3 $\beta$ -Carboxyvincoside lactam, 3186
- C<sub>27</sub>H<sub>30</sub>O<sub>4</sub>**  
Isovouacapenol D, 11779
- C<sub>27</sub>H<sub>30</sub>O<sub>6</sub>**  
Parvifloron E, 16680  
Parvifloron F, 16681  
Plectranthol A, 17553
- C<sub>27</sub>H<sub>30</sub>O<sub>7</sub>**  
Nimbolide, 15604
- C<sub>27</sub>H<sub>30</sub>O<sub>8</sub>**  
Angeloylgomisin R, 1210  
Daphnetoxin, 4649  
Heteroclitin D, 9463  
Interiorin A, 11099  
Interiorin B, 11100
- Schiarisanrin E, 19465
- C<sub>27</sub>H<sub>30</sub>O<sub>9</sub>**  
Heteroclitin E, 9464  
Interiorin B, 11104  
Schisantherin L, 19493
- C<sub>27</sub>H<sub>30</sub>O<sub>10</sub>**  
Baohuoside I, 2138  
5,3'-Dibutanoyloxy-3,6,7,4'-tetramethoxyflavone, 5401  
Heteroclitin F, 9465
- C<sub>27</sub>H<sub>30</sub>O<sub>11</sub>**  
Icariside I, 10955  
2''-*O*-(2'''-Methylbutyryl)isowertisin, 14193  
3''-*O*-(2'''-Methylbutyryl)isowertisin, 14194  
Neocariin, 15410  
Tremulacinol, 21509  
Wushanicariin, 22740
- C<sub>27</sub>H<sub>30</sub>O<sub>12</sub>**  
4'-Demethyldeoxypodophyllotoxin-4-*O*- $\beta$ -*D*-glucoside, 5075
- C<sub>27</sub>H<sub>30</sub>O<sub>13</sub>**  
4-Demethylepipodophyllotoxin 7'-*O*- $\beta$ -*D*-glucopyranoside, 5078  
4-Demethyl-picropodophyllotoxin 7'-*O*- $\beta$ -*D*-glucopyranoside, 5092  
4-Demethyl-podophyllotoxin 7'-*O*- $\beta$ -*D*-glucopyranoside, 5094  
Formononetin-7-*O*- $\beta$ -*D*-apiofuranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside, 7884  
Glycyroside, 8840  
Kushenol O, 12368  
 $\alpha$ -Peltatin glucoside, 16795  
Rhamnellaflavoside A, 18676  
Rhamnellaflavoside B, 18677  
Rhamnellaflavoside C, 18678
- C<sub>27</sub>H<sub>30</sub>O<sub>14</sub>**  
Apigenin-7-*O*-neohesperidoside, 1497  
Apigenin-7-*O*-rutinoside, 1499  
Camellianin A, 3038  
Chrysophanol-1- $\beta$ -gentiobioside, 3617  
Chrysophanol-8-*O*-gentiobioside, 3618  
Daidzein 4',7-diglucoside, 4605  
6,8-Di-*C*- $\beta$ -glucosylchrysin, 5531  
6,4'-Dihydroxy aurone 4-*O*-rutinoside, 5761  
Dulcinoside, 6623  
Isoviolanthin, 11772  
Kaempferitrin, 12018  
2-Methyl-1,3,6-trihydroxyanthraquinone  
3-*O*- $\alpha$ -*L*-rhamnosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucoside, 14778  
Ophiohayatone B, 16133  
Puerarin-4'-*O*-*D*-glucoside, 18181  
7-*O*- $\alpha$ -Rhamno(1 $\rightarrow$ 6)- $\beta$ -glucosylgenistein, 18685
- 2''-*O*- $\alpha$ -*L*-Rhamnopyranosylisovitexin, 18729  
Sophorabioside, 20080  
4',6,7-Trihydroxyisoflavone-6-methylether-7-*O*- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside, 21751  
Violanthin, 22519
- C<sub>27</sub>H<sub>30</sub>O<sub>15</sub>**  
Aloeemodin diglucoside, 969  
Apigenin-7-*O*-gentiobioside, 1490  
6,8-Bis(*C*- $\beta$ -glucosyl)-apigenin, 2455  
Chrysoeriol-7-apio-glucoside, 3604  
2''-*O*- $\beta$ -*L*-Galactopyranosylvitexin, 8072  
Genistein 7-*O*- $\beta$ -*D*-glucopyranoside-4'-*O*- $\beta$ -*D*-glucopyranoside, 8279  
Isorhamnetin-3-arabino-7-rhamnoside, 11651  
Isosaponarin, 11695  
Kaempferide-3-*O*- $\beta$ -xylosyl (1 $\rightarrow$ 2)- $\beta$ -glucoside, 12017  
Kaempferol 3-*O*- $\beta$ -*D*-glucopyranosyl-(1-2)- $\alpha$ -*L*-rhamnopyranoside, 12053  
Kaempferol-3- $\beta$ -*D*-gluco-7- $\alpha$ -*L*-rhamnoside, 12060  
Kaempferol-3- $\beta$ -*D*-gluco-7- $\beta$ -*L*-rhamnoside, 12061  
Kaempferol-3-*O*-neohesperidoside, 12071  
Kaempferol 3-*O*- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-galactopyranoside, 12074  
Lonicerin, 12987  
Luteolin-7-rutinoside, 13149  
Multiflorin B, 15069  
Nicotiflorin, 15525  
Oroxin B, 16215  
Palustroside‡, 16578  
Quercetin-3,4'-di-*O*- $\alpha$ -*L*-rhamnopyranoside, 18350  
Quercetin-3,7- $\alpha$ -*L*-dirhamnoside, 18352  
Rheinoside C, 18764  
Rheinoside D, 18765  
Safflower yellow A, 19111  
Saponarin, 19331  
Scutellarein-7-rutinoside, 19585  
Tectorigenin-7-*O*-[ $\beta$ -*D*-apiofuranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside], 20902  
4',5,7-Trihydroxy-6-methoxyisoflavone 7-*O*- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside, 21781  
Vitexin-7-glucoside, 22582  
Yuankanin, 22935
- C<sub>27</sub>H<sub>30</sub>O<sub>16</sub>**  
Bioquercetin, 2394  
Equisetrin, 7222  
2''-*O*- $\beta$ -*L*-Galactopyranosylorientin, 8066



- Isorhamnetin-3-arabinoglucoside, 11650  
 Kaempferol-3,7-diglucoside, 12043  
 Kaempferol 7-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranoside, 12052  
 Luteolin-7-*O*-digalactoside, 13140  
 Luteolin-6,8-*C*-diglucoside, 13141  
 Luteolin-7-*O*-gentiobioside, 13144  
 Multinoside A, 15072  
 Neoisorutin, 15416  
 Panasenoid, 16587  
 Quercetin-3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-rhamnopyranoside, 18365  
 Quercetin-3- $\beta$ -*D*-gluco-7- $\alpha$ -*L*-rhamnoside, 18367  
 Quercetin-3-*O*-neohesperidoside, 18378  
 Quercetin-3-rhamnoside-7-glucoside, 18387  
 Quercetin-3-robinobioside, 18390  
 Rheinoid A, 18762  
 Rheinoid B, 18763  
 Rutin, 19087  
 Sophoraflavonoloid, 20088
- C<sub>27</sub>H<sub>30</sub>O<sub>17</sub>**  
 Heliosin, 9315  
 6-Hydroxyluteolin-7-diglucoside, 10353  
 Myricetin-3-rutinoside, 15185  
 Quercetin-3,5-di-*D*-galactoside, 18338  
 Quercetin-5,4'-di-*O*- $\beta$ -*D*-glucopyranoside, 18341  
 Quercetin-3-diglucoside, 18342  
 Quercetin-3,4'-diglucoside, 18343  
 Quercetin-3,5-diglucoside, 18344  
 Quercetin-3,7-diglucoside, 18345  
 Quercetin-7,4'-diglucoside, 18346  
 Quercetin-3-*O*- $\beta$ -*D*-galactoside-7-*O*- $\beta$ -glucoside, 18357  
 Quercetin-3-*O*-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-galactopyranoside], 18362  
 Quercetin-3-*O*-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranoside], 18363  
 Quercetin-7-*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside, 18364
- C<sub>27</sub>H<sub>31</sub>NO<sub>4</sub>**  
 Erinacerin A, 7259  
 Hericenone B, 9430
- C<sub>27</sub>H<sub>31</sub>NO<sub>5</sub>**  
 Ignavine, 10962
- C<sub>27</sub>H<sub>31</sub>N<sub>2</sub>O<sub>9</sub><sup>+</sup>**  
 3,4,5,6-Tetrahydropalicoside, 21050
- C<sub>27</sub>H<sub>31</sub>O<sub>15</sub><sup>+</sup>**  
 Cyanidin-3-rutinoside, 4446  
 Pelargonidin-3,5-diglucoside, 16781
- C<sub>27</sub>H<sub>31</sub>O<sub>16</sub><sup>+</sup>**  
 Cyanidin-3,4'-di-*O*- $\beta$ -glucopyranoside, 4438  
 Cyanidin-3-gentiobioside, 4441  
 Cyanin, 4451
- C<sub>27</sub>H<sub>31</sub>O<sub>17</sub><sup>+</sup>**  
 Delphin, 5010  
 Delphinidin-3-diglucoside, 5020
- C<sub>27</sub>H<sub>32</sub>N<sub>2</sub>O<sub>10</sub>**  
 Cadambine, 2844
- C<sub>27</sub>H<sub>32</sub>O<sub>4</sub>**  
 Bitucarpin A, 2495  
 Isovouacapenol A, 11777
- C<sub>27</sub>H<sub>32</sub>O<sub>5</sub>**  
 12-Benzoyloxycrotohalimanic acid, 2251
- C<sub>27</sub>H<sub>32</sub>O<sub>6</sub>**  
 Kushenol D, 12357  
 2'-Methoxykurarinone, 13985
- C<sub>27</sub>H<sub>32</sub>O<sub>7</sub>**  
 Kadsutherin, 12014
- C<sub>27</sub>H<sub>32</sub>O<sub>8</sub>**  
 Atalantolide, 1957  
 PC-1999-52-1525-6, 16737
- C<sub>27</sub>H<sub>32</sub>O<sub>9</sub>**  
 Atalantin, 1955  
 Orbiculon D, 16163
- C<sub>27</sub>H<sub>32</sub>O<sub>10</sub>**  
 Spicatin, 20160
- C<sub>27</sub>H<sub>32</sub>O<sub>11</sub>**  
 Hemislienoid, 9352  
 Hymenoside A, 10844  
 Hymenoside J, 10853
- C<sub>27</sub>H<sub>32</sub>O<sub>12</sub>**  
 Hymenoside C, 10846  
 Hymenoside D, 10847
- C<sub>27</sub>H<sub>32</sub>O<sub>13</sub>**  
 Cascarioside C, 3255  
 Cascarioside D, 3256  
 10*R*-Chrysaloin 1-*O*- $\beta$ -*D*-glucopyranoside, 3590  
 Dracunculifoside H, 6587  
 Hymenoside B, 10845  
 Hymenoside E, 10848  
 6-*O*-*Z*-*p*-Methoxycinnamoyl scandoside methyl ester, 13894  
 5-*O*-*p*-Methoxy cinnamoyl scandoside methyl ester, 13895  
 Naringenin-7-*O*- $\alpha$ -*L*-rhamnosyl(1 $\rightarrow$ 4)-rhamnoside, 15284  
 Onychin, 16122
- C<sub>27</sub>H<sub>32</sub>O<sub>14</sub>**  
 Cascarioside A, 3254  
 Glyptoside A, 8851  
 10-Hydroxycascarioside C, 9898  
 10-Hydroxycascarioside D, 9899  
 Kushenol J, 12363  
 Liquiritigenin-7,4'-diglucoside, 12912  
 Naringin, 15286  
 Narirutin, 15287
- Nobiletin-3-*O*- $\beta$ -*D*-glucoside, 15636
- C<sub>27</sub>H<sub>32</sub>O<sub>15</sub>**  
 Butrin, 2786  
 Chalcononaringenin 2',4'-di-*O*- $\beta$ -*D*-glucoside, 3455  
 9-[( $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 6)-*O*- $\beta$ -*D*-glucopyranosyl)oxy]-10-hydroxy-7-methoxy-3-methyl-1*H*-naphthol[2,3-*c*]pyran-1-one, 8649  
 Neoricocitrin, 15393  
 Polygalaxanthone IV, 17632  
 Robustaside C, 18879  
 Rubrofusarin-6- $\beta$ -gentiobioside, 19042  
 Veratriloside D, 22388  
 Viscumneoside I, 22536  
 Viscumneoside III, 22538
- C<sub>27</sub>H<sub>32</sub>O<sub>16</sub>**  
 (2*R*)-Eriodictyol-7,4'-di-*O*- $\beta$ -*D*-glucopyranoside, 7280  
 1-*O*-Gentiobiosyl-3,7-dimethoxy-8-hydroxy-xanthone, 8301  
 Polygalaxanthone VII, 17635  
 Safflomin A, 19110  
 Suffruticoside A, 20451  
 Suffruticoside B, 20452  
 Suffruticoside C, 20453  
 Suffruticoside D, 20454
- C<sub>27</sub>H<sub>32</sub>O<sub>17</sub>**  
 Eriodictyol-7,3-diglucoside, 7281
- C<sub>27</sub>H<sub>33</sub>NO<sub>3</sub>**  
 Hericerin, 9437
- C<sub>27</sub>H<sub>33</sub>NO<sub>11</sub>**  
 Colchicoside, 3912
- C<sub>27</sub>H<sub>33</sub>N<sub>2</sub>O<sub>9</sub><sup>+</sup>**  
 3,4-Dehydropalicoside, 4958
- C<sub>27</sub>H<sub>34</sub>N<sub>2</sub>O<sub>4</sub>**  
 Pleiocarpine, 17556
- C<sub>27</sub>H<sub>34</sub>N<sub>2</sub>O<sub>9</sub>**  
 Glabratine, 8488  
 Palicoside, 16541
- C<sub>27</sub>H<sub>34</sub>N<sub>2</sub>O<sub>10</sub>**  
 3 $\alpha$ -Dihydrocadambine, 5550  
 3 $\beta$ -Isodihydrocadambine, 11377
- C<sub>27</sub>H<sub>34</sub>O<sub>5</sub>**  
 6 $\beta$ -Benzoyl-7 $\beta$ -hydroxyvouacapen-5 $\alpha$ -ol, 2244  
 4-Episopadulcic acid B, 7016  
 Isovouacapenol B, 11778  
 Licorisoflavan A, 12795
- C<sub>27</sub>H<sub>34</sub>O<sub>6</sub>**  
 Anticancer Norwithanolide PMV70P691-029, 1427  
 Jolkinol A', 11891
- C<sub>27</sub>H<sub>34</sub>O<sub>7</sub>**  
 Anticancer Norwithanolide PMV70P691-030,

- 1428  
 [(2*S*,3*R*,4*R*)-4-(3,4-Dimethoxybenzyl)-2-(3,4-dimethoxyphenyl)-tetrahydrofuran-3-yl]-methyl (2*Z*)-2-methylbut-2-en-oate, 6211  
 Lucidenic acid D<sub>1</sub>, 13026  
 Neokurarinol, 15425
- C<sub>27</sub>H<sub>34</sub>O<sub>8</sub>**  
 Deacetylsecmahoganin, 4772  
 Kleinioxanthone 4, 12236  
 (+)-4-(3-Methylbutanoyl)-2,6-di(3,4-dimethoxy)phenyl-3,7-dioxabicyclo[3.3.0]octane, 14165
- C<sub>27</sub>H<sub>34</sub>O<sub>9</sub>**  
 Anticancer Norwithanolide PMV70P691-035, 1433  
 Verrucarin A, 22420
- C<sub>27</sub>H<sub>34</sub>O<sub>10</sub>**  
 Isoveprisonic acid, 11769  
 (2*S*,3*S*)-2-(5-Methoxy-3,4-methylenedioxybenzyl)-3-(3,4,5-trimethoxybenzyl)butane-1,4-diol diacetate, 14011  
 Provincialin, 17998  
 Veprisonic acid, 22381
- C<sub>27</sub>H<sub>34</sub>O<sub>11</sub>**  
 Arctiin, 1623  
 CPB-2001-49-282-32, 3509  
 3,4,1-*O*-3,4-Dimethoxy-phenylethyl-6-*O*-cinnamoyl- $\beta$ -*D*-glucopyranose, 6284  
 3-Methoxyarctii-4"-*O*- $\beta$ -*D*-xyloside, 13841  
 Phillyrin, 17145  
 (+)-Pinoresinol monomethyl ether  
*O*- $\beta$ -*D*-glucopyranoside, 17419  
 Styraxlignolide F, 20427  
 Tetra-*O*-methylpilosidine, 21201  
 Undulatone, 22231
- C<sub>27</sub>H<sub>34</sub>O<sub>12</sub>**  
 Eucommin A, 7487  
 Tracheloside, 21493  
 Woorenoside I, 22727
- C<sub>27</sub>H<sub>34</sub>O<sub>13</sub>**  
 Alboside II, 868  
 Brunneogaleatoside, 2683  
 2-(4-Hydroxyphenyl)ethyl-1-*O*- $\beta$ -*D*-[5-*O*-(4-methoxybenzoyl)]-apiofuranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside, 10606
- C<sub>27</sub>H<sub>34</sub>O<sub>14</sub>**  
 3,4-Dimethoxyphenyl  
 1-*O*- $\beta$ -*D*-[5-*O*-(4-methoxybenzoyl)]-apiofuranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside, 6287  
 4-Methoxyphenyl  
 1-*O*- $\beta$ -*D*-[5-*O*-(3,4-dimethoxybenzoyl)]-apiofuranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside, 14055  
 Phlomisethanoside, 17164
- C<sub>27</sub>H<sub>34</sub>O<sub>15</sub>**  
 13-*O*-[ $\beta$ -*D*-Apiofuranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl]-(12*R*)-heraclenol, 1510  
 3,4-Dihydroxyphenylethanol-8-*O*-[(5-*O*-vanilloyl)- $\beta$ -*D*-apiofuranosyl(1 $\rightarrow$ 2)]- $\beta$ -*D*-glucopyranoside, 6080
- C<sub>27</sub>H<sub>34</sub>O<sub>16</sub>**  
 Albibrissinoside B, 856  
 Glypentoside B, 8852  
 Hexaacetyl catalpol, 9476  
 Leiocarposide, 12608
- C<sub>27</sub>H<sub>35</sub>BrO<sub>2</sub>**  
 4-Bromobenzyl-labda-7,12(*E*),14-triene-17-oate, 2618
- C<sub>27</sub>H<sub>35</sub>NO<sub>4</sub>**  
 Lythrancepine I, 13269
- C<sub>27</sub>H<sub>35</sub>NO<sub>5</sub>**  
 Hokbusine B, 9575  
 Lythracine I, 13267  
 Lythracine I, 13272  
 Nicotinoylisoramanone, 15530
- C<sub>27</sub>H<sub>35</sub>NO<sub>6</sub>**  
 12-*O*-Nicotinoylisolineolone, 15529
- C<sub>27</sub>H<sub>35</sub>NO<sub>7</sub>**  
 Rostratamine, 18936
- C<sub>27</sub>H<sub>35</sub>N<sub>9</sub>O<sub>15</sub>P<sub>2</sub>**  
 Flavinadenine dinucleotide, 7814
- C<sub>27</sub>H<sub>36</sub>O<sub>4</sub>**  
 Isodulcinol, 11405  
 Scopadulciol, 19537  
 Scopolalol, 19538
- C<sub>27</sub>H<sub>36</sub>O<sub>5</sub>**  
 Scopadulcic acid C, 19536  
 Scoparic acid A, 19539  
 Surangin A, 20489
- C<sub>27</sub>H<sub>36</sub>O<sub>6</sub>**  
 Anticancer Norwithanolide PMV70P691-031, 1429  
 Ganolactone, 8195  
 Lucidenic acid F, 13030
- C<sub>27</sub>H<sub>36</sub>O<sub>7</sub>**  
 Anticancer Norwithanolide PMV70P691-032, 1430  
 Lanciaquinone, 12472  
 Lucidenic acid K, 13035
- C<sub>27</sub>H<sub>36</sub>O<sub>8</sub>**  
 12-*O*-Acetylphorbol-13-tigilate, 485
- C<sub>27</sub>H<sub>36</sub>O<sub>9</sub>**  
 Crocin 4, 4252  
 Xanthanthusin G, 22750
- C<sub>27</sub>H<sub>36</sub>O<sub>10</sub>**  
 Caesalpinin MG, 2877  
 Dihydrodehydrodiconiferyl alcohol  
 9'-*O*-glucoside, 5584  
*R*-Myricanol 5-*O*- $\beta$ -*D*-glucopyranoside, 15163  
 (+)-*S*-Myricanol 5-*O*- $\beta$ -*D*-glucopyranoside, 15164
- C<sub>27</sub>H<sub>36</sub>O<sub>11</sub>**  
 Quassamarin, 18298
- C<sub>27</sub>H<sub>36</sub>O<sub>12</sub>**  
 Gaultheroside A, 8242  
 Nudiposide, 15864
- C<sub>27</sub>H<sub>36</sub>O<sub>13</sub>**  
 Amritoside C, 1086  
 Citrusin B, 3776  
 Lucidumoside D, 13056
- C<sub>27</sub>H<sub>36</sub>O<sub>14</sub>**  
 Lucidumoside C, 13055
- C<sub>27</sub>H<sub>38</sub>O<sub>3</sub>**  
 Nigrolineaquinone A, 15573
- C<sub>27</sub>H<sub>38</sub>O<sub>4</sub>**  
 Dulcidiol, 6621  
 Lygodinolide, 13245  
 Papuaforin C, 16631  
 Plastoquinone C<sub>1</sub>, 17516  
 Scopadiol, 19535  
 25*R*-Spirost-4-en-3,12-dione, 20218
- C<sub>27</sub>H<sub>38</sub>O<sub>6</sub>**  
 Caledonic acid, 2961  
 Lucidenic acid A, 13023
- C<sub>27</sub>H<sub>38</sub>O<sub>7</sub>**  
 Ajugacumbin A, 788  
 Diterpenoid EF-D, 6521  
 Lucidenic acid B, 13024  
 Lucidenic acid E<sub>1</sub>, 13028  
 Lucidenic acid I, 13033  
 Lucidenic acid L, 13036
- C<sub>27</sub>H<sub>38</sub>O<sub>8</sub>**  
 Ajugacumbin D, 791  
 Lucidenic acid J, 13034  
 Maoecrystal T, 13541
- C<sub>27</sub>H<sub>38</sub>O<sub>9</sub>**  
 Caesalmin F, 2868
- C<sub>27</sub>H<sub>38</sub>O<sub>10</sub>**  
 2-Debenzoyl-2-tigloyl-10-deacetylbaecatins III, 4812  
 Taxuyunnanin R, 20885  
 Trilobolide, 21889
- C<sub>27</sub>H<sub>38</sub>O<sub>11</sub>**  
 (3*R*,5*R*)-3,5-Dihydroxy-1,7-bis(4-hydroxy-3-methoxyphenyl)heptane  
 3-*O*- $\beta$ -*D*-glucopyranoside, 5776  
 Picrasinoside A, 17320  
 Tinosposide A, 21400
- C<sub>27</sub>H<sub>38</sub>O<sub>12</sub>**  
 Baenzigeroside B, 2100

- Icariside E<sub>6</sub>, 10951  
Tinosposide B, 21401  
**C<sub>27</sub>H<sub>38</sub>O<sub>13</sub>**  
Seguinose I, 19672  
**C<sub>27</sub>H<sub>38</sub>O<sub>15</sub>**  
2"-Epiframeroside, 6917  
Frameroside, 7934  
Rubricauloside, 19040  
**C<sub>27</sub>H<sub>39</sub>NO<sub>2</sub>**  
Veratramine, 22386  
**C<sub>27</sub>H<sub>39</sub>NO<sub>3</sub>**  
Brachystamide D, 2576  
Fetisinine, 7794  
Jervine, 11866  
**C<sub>27</sub>H<sub>39</sub>NO<sub>7</sub>**  
Tatsiensine, 20727  
**C<sub>27</sub>H<sub>39</sub>NO<sub>8</sub>**  
Siwanine A, 20001  
**C<sub>27</sub>H<sub>39</sub>NO<sub>9</sub>**  
Merresectine D β-D-glucoside, 13788  
**C<sub>27</sub>H<sub>40</sub>N<sub>2</sub>O<sub>3</sub>**  
Epoxysarcovagenine D, 7198  
**C<sub>27</sub>H<sub>40</sub>O<sub>2</sub>**  
Caseamemin, 3266  
Δ<sup>3,5</sup>-Deoxyneotigogenin, 5197  
Δ<sup>3,5</sup>-Deoxytigogenin, 5216  
25α-Spirosta-3,5-diene, 20207  
25β-Spirosta-3,5-diene, 20208  
δ-Tocotrienol, 21417  
**C<sub>27</sub>H<sub>40</sub>O<sub>3</sub>**  
Walsurol, 22631  
**C<sub>27</sub>H<sub>40</sub>O<sub>4</sub>**  
9(11)-Dehydrohecogenin, 4928  
3-Epineoruscogenin, 6974  
Plastoquinone C<sub>2</sub>, 17517  
Schisanterpene B, 19488  
Sisalagenone, 19978  
**C<sub>27</sub>H<sub>40</sub>O<sub>5</sub>**  
Asparacosin A, 1864  
9(11)-Dehydromanogenin, 4945  
Kammogenin, 12126  
Proliferin, 17904  
**C<sub>27</sub>H<sub>40</sub>O<sub>6</sub>**  
Lucidenic acid LW<sub>1</sub>, 13038  
2,3-Seco-porrigenin, 19634  
**C<sub>27</sub>H<sub>40</sub>O<sub>7</sub>**  
Hongdoushan B, 9627  
Lucidenic acid C, 13025  
Lucidenic acid H, 13032  
Trichurusin J, 21587  
Trichurusin K, 21588  
**C<sub>27</sub>H<sub>40</sub>O<sub>10</sub>**  
14,15-Dihydro-15β-methoxy-3-epicaryoptin,  
5670  
Glabcensin P, 8477  
**C<sub>27</sub>H<sub>40</sub>O<sub>11</sub>**  
Isovaleroxy-hydroxy dihydrovaltrate, 11755  
**C<sub>27</sub>H<sub>40</sub>O<sub>14</sub>**  
Amritoside B, 1085  
**C<sub>27</sub>H<sub>40</sub>O<sub>16</sub>**  
*trans-p*-Coumaroyl alcohol  
1-*O*-β-D-glucopyranosyl(1→4)-α-L-rhamno-  
pyranosyl(1→3)-β-D-glucopyranoside, 4145  
**C<sub>27</sub>H<sub>41</sub>ClO<sub>3</sub>**  
26-Chloro-26-deoxycryptogenin, 3546  
**C<sub>27</sub>H<sub>41</sub>NO<sub>2</sub>**  
Cyclopamine, 4522  
Ebeinone, 6661  
**C<sub>27</sub>H<sub>41</sub>NO<sub>3</sub>**  
Brachystamide E, 2577  
Ebeiensine, 6658  
Hupehenisine, 9684  
Korsevinine, 12278  
Peimisine, 16776  
Petisidine, 17020  
Songbeisine, 20074  
**C<sub>27</sub>H<sub>41</sub>NO<sub>4</sub>**  
Yibeissine, 22907  
**C<sub>27</sub>H<sub>41</sub>NO<sub>8</sub>**  
Deltaline, 5036  
**C<sub>27</sub>H<sub>41</sub>N<sub>3</sub>O<sub>5</sub>**  
Cordyceptide A, 4047  
**C<sub>27</sub>H<sub>42</sub>N<sub>4</sub>O<sub>4</sub>**  
Hovenine A, 9653  
**C<sub>27</sub>H<sub>42</sub>O<sub>2</sub>**  
Calicoferol E, 2975  
(22*E*)-25,26,27-Trinor-3β-hydroxycycloart-22-  
en-24-al, 21982  
**C<sub>27</sub>H<sub>42</sub>O<sub>3</sub>**  
22-Cyclopentylol-22-deisopenty-3β-hydroxyl-  
furostanol, 4525  
Diosgenin, 6440  
Neotigogenone, 15467  
Sarsasapogenone, 19392  
Smilagenone, 20028  
Tigogenone, 21388  
Trigonegenin A, 21659  
Trigonegenin B, 21660  
Yamogenin, 22878  
**C<sub>27</sub>H<sub>42</sub>O<sub>4</sub>**  
Cryptogenin, 4280  
3-Epiruscogenin, 7009  
Gloriogenin, 8588  
Hecogenin, 9253  
Heloniogenin, 9334  
Isonarthenin, 11554  
Laxogenin, 12591  
Lilagenin, 12832  
Nuatigenin, 15855  
Pennogenin, 16809  
Plastoquinone from *Sargassum micracanthum*,  
17520  
Ruscogenin, 19070  
Sisalagenin, 19977  
Torvogenin, 21469  
Yuccagenin, 22936  
**C<sub>27</sub>H<sub>42</sub>O<sub>5</sub>**  
12-Ketoporrigenin, 12206  
Manogenin, 13510  
Mexogenin, 14823  
Neomanogenin, 15433  
Neomexogenin, 15435  
Tupichigenin E, 22112  
**C<sub>27</sub>H<sub>42</sub>O<sub>6</sub>**  
2α-Acetoxy-14β-[(*S*)-2-methyl-butryloxy]-  
4(20),11-taxadiene, 257  
Hongdoushan C, 9628  
Lucidenic acid M, 13039  
Podocdysone B, 17583  
Tupichigenin D, 22111  
**C<sub>27</sub>H<sub>42</sub>O<sub>7</sub>**  
22-Oxo-ajugasterone C, 16291  
22-Oxo-20-hydroxyecdysone, 16350  
Δ25(27)-Pentrogenin, 16891  
**C<sub>27</sub>H<sub>42</sub>O<sub>7</sub>S**  
Ruscogenin 1-*O*-sulfate, 19073  
**C<sub>27</sub>H<sub>42</sub>O<sub>9</sub>**  
Spirost-25(27)-ene-1,2,3,4,5,6,7-heptol, 20220  
**C<sub>27</sub>H<sub>42</sub>O<sub>13</sub>**  
Jasnudifloside F, 11826  
Jasnudifloside G, 11827  
**C<sub>27</sub>H<sub>42</sub>O<sub>13</sub>**  
Nudifloside D, 15863  
**C<sub>27</sub>H<sub>42</sub>O<sub>17</sub>**  
4'-Deoxykanokoside C, 5186  
**C<sub>27</sub>H<sub>42</sub>O<sub>20</sub>**  
Rehmannioside D, 18599  
**C<sub>27</sub>H<sub>43</sub>NO**  
Shinonomenine, 19828  
Solandine, 20056  
**C<sub>27</sub>H<sub>43</sub>NO<sub>2</sub>**  
Chuanbeinone, 3630  
Delavinone, 4997  
Ebeienine, 6657  
Fritillarizine, 7957  
Hupehenirine, 9683  
Hupehenizine, 9685  
Korseverinine, 12277  
Rubijervine, 19030

- Solasodine, 20066  
 Tomatidenol, 21433  
 Zhebeirine, 22997  
 Ziebeimine, 22998
- C<sub>27</sub>H<sub>43</sub>NO<sub>3</sub>**  
 Ebeietinone, 6659  
 15 $\alpha$ -Hydroxysolasodine, 10713  
 15 $\alpha$ -Hydroxytomatidenol, 10771  
 Imperialine, 11002  
 Impericine, 11004  
 Korsine, 12279  
 Peiminine, 16774  
 Taipainenine, 20624  
 Zhebeinone, 22995
- C<sub>27</sub>H<sub>43</sub>NO<sub>4</sub>**  
 Imperialine *N*-oxide, 11003  
 Verticinone-*N*-oxide, 22432
- C<sub>27</sub>H<sub>43</sub>NO<sub>6</sub>**  
 Pingbeimine C, 17380
- C<sub>27</sub>H<sub>43</sub>NO<sub>7</sub>**  
 Bullatine E, 2740  
 Delbrusine, 5001  
 Zygadenine, 23033
- C<sub>27</sub>H<sub>43</sub>NO<sub>8</sub>**  
 Acetylbrowniine, 338  
 Delbonine, 4998  
 Tricornine, 21593  
 Veracevine, 22382
- C<sub>27</sub>H<sub>43</sub>NO<sub>9</sub>**  
 Protoverine, 17996
- C<sub>27</sub>H<sub>44</sub>O**  
 Cholest-4-ene-3-one, 3578  
 7-Dehydrocholesterol, 4885
- C<sub>27</sub>H<sub>44</sub>O<sub>2</sub>**  
 (2*R*,3*R*,4*S*,6*S*)-3-Methyl-4,6-di(3-methyl-2-butenyl)-2-(2-methyl-1-oxopropyl)-3-(4-methyl-3-pentenyl)-cyclohexanone, 14322  
 Wrightial, 22734
- C<sub>27</sub>H<sub>44</sub>O<sub>3</sub>**  
 Epi-sarsapogenin, 7013  
 Epismilagenin, 7022  
 Neotigogenin, 15463  
 Octadecyl (*E*)-*p*-coumarate, 15959  
 Octadecyl (*Z*)-*p*-coumarate, 15960  
 Sarsapogenin, 19390  
 Smilagenin, 20025  
 Tigogenin, 21383
- C<sub>27</sub>H<sub>44</sub>O<sub>4</sub>**  
 Barbourgenin, 2150  
 Chlorogenin, 3552  
 Cordylagenin, 4049  
 12-Epirockogenin, 7008  
 Gitogenin, 8457
- Isorhodeasapogenin, 11674  
 Markogenin, 13569  
 Neochlorogenin, 15364  
 Neogitogenin, 15397  
 Octadecanyl caffeate, 15953  
 Rhodeasapogenin, 18781  
 Rockogenin, 18893  
 Ruizgenin, 19065  
 Samogenin, 19230  
 Yonogenin, 22924
- C<sub>27</sub>H<sub>44</sub>O<sub>5</sub>**  
 Agavogenin, 726  
 Hainangenin, 9192  
 Hongguanggenin, 9630  
 Igagenin, 10961  
 Isocarneagenin, 11307  
 Isoreineckiagenin, 11646  
 Paniculogenin, 16616  
 Reineckiagenin, 18602  
 5 $\alpha$ -Spirostan-3 $\beta$ ,12 $\beta$ ,15 $\alpha$ -triol, 20215  
 Tokorogenin, 21426  
 $\Delta^{23}$ -3 $\alpha$ ,7 $\alpha$ ,12 $\alpha$ -Trihydroxy coprostenic acid, 21696  
 Trihydroxy-isosterocholenic acid, 21754
- C<sub>27</sub>H<sub>44</sub>O<sub>6</sub>**  
 Ecdysone, 6678  
 Glycoside E, 8828  
 Kitigenin, 12231  
 Kogagenin, 12251  
 Periplocoside N, 16956  
 Ponasterone A, 17700  
 Taxisterone, 20807  
 Tupichigenin F, 22113
- C<sub>27</sub>H<sub>44</sub>O<sub>7</sub>**  
 Ajugasterone C, 811  
 Commisterone, 3944  
 Ecdysterone, 6679  
 20-Hydroxyecdysone, 10061  
 24-Hydroxyecdysone, 10062  
 Inokosterone, 11067  
 (25*R*)-*Inokosterone*, 11068  
 (25*S*)-*Inokosterone*, 11069  
 Locin, 12948  
 Pentologenin, 16890  
 Ponasterone C, 17702  
 Pterosterone, 18162
- C<sub>27</sub>H<sub>44</sub>O<sub>8</sub>**  
 1 $\alpha$ ,20*R*-Hydroxyecdysone, 10063  
 5 $\beta$ -Hydroxyecdysterone, 10066  
 Polypodine B, 17662  
 Rhapontisterone, 18750
- C<sub>27</sub>H<sub>44</sub>O<sub>10</sub>S**  
 Aspidistrogenin A, 1899
- C<sub>27</sub>H<sub>44</sub>O<sub>13</sub>**  
 Atractyloside I, 1981  
*cis*-Atractyloside I, 1982
- C<sub>27</sub>H<sub>44</sub>O<sub>14</sub>**  
 Dendroside D, 5123
- C<sub>27</sub>H<sub>45</sub>NO<sub>2</sub>**  
 Delavine, 4996  
 Ebeimine, 6660  
 Forticine, 7928  
 Hupehenine, 9681  
 17 $\alpha$ *H*-Persicanidine A, 16988  
 Soladulcidine, 20042  
 Tomatidine, 21434  
 Tortifoline, 21466
- C<sub>27</sub>H<sub>45</sub>NO<sub>3</sub>**  
 Baimonidine, 2110  
 Delafrine, 4990  
 Hupehenidine, 9680  
 15 $\alpha$ -Hydroxysoladulcidine, 10711  
 15 $\beta$ -Hydroxysoladulcidine, 10712  
 15 $\alpha$ -Hydroxytomatidine, 10772  
 Isobaimonidine, 11244  
 Isoverticine, 11770  
 Korserveramine, 12275  
 Korserveriline, 12276  
 Peimine, 16773  
 Wanpeimine A, 22636  
 Zhebeimine, 22993
- C<sub>27</sub>H<sub>45</sub>NO<sub>4</sub>**  
 Esculeogenin B, 7375  
 Isoesculeogenin A, 11418  
 Isoverticine- $\beta$ -*N*-oxide, 11771  
 Verticine-*N*-oxide, 22431
- C<sub>27</sub>H<sub>45</sub>NO<sub>5</sub>**  
 Pingpeimine A, 17384
- C<sub>27</sub>H<sub>45</sub>NO<sub>6</sub>**  
 Pingpeimine B, 17385
- C<sub>27</sub>H<sub>46</sub>N<sub>2</sub>O<sub>2</sub>**  
 Solanocapsine, 20061
- C<sub>27</sub>H<sub>46</sub>O**  
 Cholesterol, 3585
- C<sub>27</sub>H<sub>46</sub>O<sub>2</sub>**  
 7 $\alpha$ -Hydroxycholesterol, 9904  
 $\delta$ -Tocopherol, 21412  
 Vitamin E $\delta$ , 22560
- C<sub>27</sub>H<sub>46</sub>O<sub>4</sub>**  
 Guggulsterol Y, 9075  
 Irisoquin D, 11176
- C<sub>27</sub>H<sub>46</sub>O<sub>5</sub>**  
 Coprocholic acid, 4031  
 Ponasterone B, 17701
- C<sub>27</sub>H<sub>46</sub>O<sub>8</sub>**  
 Microlepin, 14838

- C<sub>27</sub>H<sub>46</sub>O<sub>10</sub>**  
Crenulatoside A, 4228  
Nerolidol-3-*O*- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranoside, 15501
- C<sub>27</sub>H<sub>46</sub>O<sub>11</sub>**  
Officinose C, 16017  
Officinose D, 16018
- C<sub>27</sub>H<sub>46</sub>O<sub>12</sub>**  
Atractylside D, 1977
- C<sub>27</sub>H<sub>46</sub>O<sub>13</sub>**  
(2*R*,3*R*,5*R*,7*R*,10*S*)-Atractylside G 2-*O*- $\beta$ -*D*-glucopyranoside, 1980
- C<sub>27</sub>H<sub>46</sub>O<sub>14</sub>**  
Dictamnose G, 5448
- C<sub>27</sub>H<sub>46</sub>O<sub>15</sub>**  
Atractylside A 14-*O*- $\beta$ -*D*-fructofuranoside, 1974
- C<sub>27</sub>H<sub>47</sub>NO<sub>2</sub>**  
Hapepunine, 9220
- C<sub>27</sub>H<sub>47</sub>O<sub>7</sub>**  
Marsin, 13578
- C<sub>27</sub>H<sub>48</sub>N<sub>2</sub>**  
Cycloprotobuxine C, 4531
- C<sub>27</sub>H<sub>48</sub>N<sub>2</sub>O**  
Cyclovirobuxine, 4543
- C<sub>27</sub>H<sub>48</sub>O<sub>4</sub>**  
Agavegenin D, 725  
Tetrahydroynorbufostane, 21138
- C<sub>27</sub>H<sub>48</sub>O<sub>5</sub>**  
5 $\beta$ -Bufol sulfate, 2720  
5 $\alpha$ -Cyprinol, 4582  
5 $\beta$ -Cyprinol, 4583
- C<sub>27</sub>H<sub>48</sub>O<sub>7</sub>**  
5 $\alpha$ -Cholest-3 $\beta$ ,6 $\alpha$ ,7 $\alpha$ ,8 $\beta$ ,15 $\alpha$ ,16 $\beta$ ,26-sevol, 3587
- C<sub>27</sub>H<sub>48</sub>O<sub>9</sub>**  
(2*S*)-1-*O*-(9*Z*,12*Z*-Octadeca-dien-*n*oyl)-3-*O*- $\beta$ -*D*-galactopyranosyl-glycerol, 15940
- C<sub>27</sub>H<sub>48</sub>O<sub>12</sub>**  
Dendronobiloside A, 5120
- C<sub>27</sub>H<sub>48</sub>O<sub>14</sub>**  
Dictamnose M, 5454
- C<sub>27</sub>H<sub>49</sub>NO<sub>2</sub>**  
Haloxylone A, 9200
- C<sub>27</sub>H<sub>49</sub>NO<sub>3</sub>**  
Haloxylone B, 9201
- C<sub>27</sub>H<sub>51</sub>O<sub>11</sub>S<sup>-</sup>**  
(2*S*)-1-Stearoyl-3-*O*-(6-sulpho- $\alpha$ -*D*-quinovopyranosyl)-glycerol, 20282
- C<sub>27</sub>H<sub>52</sub>O<sub>2</sub>**  
*Heptacosan-4-olide*, 9371  
Pentacosyl vinyl ester, 16827
- C<sub>27</sub>H<sub>52</sub>O<sub>4</sub>**  
Bifloride A, 2368
- C<sub>27</sub>H<sub>56</sub>**  
*n*-Heptacosane, 9368
- C<sub>27</sub>H<sub>56</sub>O**  
14-Heptacosanol, 9369  
Heptacosanol, 9370
- C<sub>28</sub>H<sub>10</sub>O<sub>16</sub>**  
Tetrameric gallic acid, 21177
- C<sub>28</sub>H<sub>14</sub>Cl<sub>8</sub>O<sub>4</sub>**  
Bazzanin R, 2186
- C<sub>28</sub>H<sub>16</sub>Cl<sub>6</sub>O<sub>4</sub>**  
Bazzanin Q, 2185
- C<sub>28</sub>H<sub>17</sub>Cl<sub>5</sub>O<sub>4</sub>**  
Bazzanin P, 2184
- C<sub>28</sub>H<sub>17</sub>O<sub>7</sub>**  
Hopeafuran, 9636
- C<sub>28</sub>H<sub>18</sub>Cl<sub>4</sub>O<sub>4</sub>**  
Bazzanin N, 2182
- C<sub>28</sub>H<sub>18</sub>O<sub>10</sub>**  
Ustilaginoidin A, 22283
- C<sub>28</sub>H<sub>19</sub>Cl<sub>3</sub>O<sub>4</sub>**  
Bazzanin M, 2181
- C<sub>28</sub>H<sub>20</sub>Cl<sub>6</sub>O<sub>4</sub>**  
6,6',10,10',12,12'-Hexachloroisoperrottetin A, 9478
- C<sub>28</sub>H<sub>20</sub>O<sub>8</sub>**  
Cassigarol D, 3288  
Cassigarol G, 3291
- C<sub>28</sub>H<sub>22</sub>O<sub>4</sub>**  
Isoplagiochin C, 11604
- C<sub>28</sub>H<sub>22</sub>O<sub>6</sub>**  
Ampelopsin B, 1077  
Ampelopsin D, 1078  
Gnetin C, 8879  
Marchantin G, 13555  
Maximol A, 13616  
Maximol B, 13617  
Pallidol, 16550  
Resveratrol *E*-dehydrodimer, 18644  
*e*-Viniferin, 22505  
(+)-*e*-Viniferin, 22506  
(-)-*e*-Viniferin, 22507  
*e*-*iso*-Viniferin, 22508
- C<sub>28</sub>H<sub>22</sub>O<sub>7</sub>**  
(+)-Ampelopsin A, 1075  
(-)-Ampelopsin A, 1076  
(+)-Balanocarpol, 2124  
Cassigarol C, 3287  
Gnetuhainin A, 8882  
Gnetuhainin C, 8883  
2b-Hydroxyampelopsin F, 9779  
Parvifolol A, 16688  
Parvifolol B, 16689  
Scirpusin A, 19531
- C<sub>28</sub>H<sub>22</sub>O<sub>8</sub>**  
Cassigarol E, 3289  
Cassigarol F, 3290  
Gnetumontanin A, 8893  
Parvifolol C, 16690  
Scirpusin B, 19532  
Terrestrin D, 21009  
Tibeticanol, 21369
- C<sub>28</sub>H<sub>23</sub>NO<sub>8</sub>**  
Oxohermandaline, 16343
- C<sub>28</sub>H<sub>24</sub>N<sub>2</sub>O<sub>3</sub>**  
3,3'-[Oxybis(methylene)]bis(9-methoxy-9*H*-carbazole), 16442
- C<sub>28</sub>H<sub>24</sub>N<sub>4</sub>O<sub>4</sub>**  
Picrasidine H, 17300
- C<sub>28</sub>H<sub>24</sub>O<sub>4</sub>**  
Isomarchantin C, 11528  
Isoriccardin C, 11681  
Marchantin B, 13551  
Riccardin C, 18839
- C<sub>28</sub>H<sub>24</sub>O<sub>5</sub>**  
Marchantin A, 13550
- C<sub>28</sub>H<sub>24</sub>O<sub>6</sub>**  
Gnetin F, 8881  
Marchantin C, 13552  
Marchantin D, 13553  
Marchantin L, 13558
- C<sub>28</sub>H<sub>24</sub>O<sub>7</sub>**  
Goniolactone B, 8940  
Goniolactone C, 8941  
Goniolactone E, 8943
- C<sub>28</sub>H<sub>24</sub>O<sub>8</sub>**  
Albotalol, 863  
Cassigarol A, 3285  
Goniolactone D, 8942
- C<sub>28</sub>H<sub>24</sub>O<sub>12</sub>**  
Methyl melitrate A, 14580  
Monomethyl lithospermate, 14927
- C<sub>28</sub>H<sub>24</sub>O<sub>13</sub>**  
Chrysofanol-8-*O*- $\beta$ -*D*-(6'-*O*-galloyl)-glucopyranoside, 3616  
2''-*O*-*p*-Hydroxybenzoylorientin, 9827
- C<sub>28</sub>H<sub>24</sub>O<sub>14</sub>**  
2''-*O*-Galloylisovitexin, 8112  
2''-*O*-Galloylvitexin, 8119
- C<sub>28</sub>H<sub>24</sub>O<sub>15</sub>**  
2''-*O*-Galloylisorientin, 8111  
2''-*O*-Galloylorientin, 8113  
3'-Hydroxyscutellarein 7-*O*-(6''-*O*-protocatechuoyl)- $\beta$ -glucopyranoside, 10695  
Kaempferol 3-*O*-(6''-galloyl)- $\beta$ -*D*-glucopyranoside, 12048  
Kaempferol-3-*O*-(2''-*O*-galloyl)- $\beta$ -*D*-glucoside,

- 12049  
Quercitrin-2"-gallate, 18412
- C<sub>28</sub>H<sub>24</sub>O<sub>16</sub>**  
Desmanthin 2, 5252  
Hyperin-2"-*O*-gallate, 10888  
Myricetin-3-*O*-(2"-*O*-galloyl)- $\alpha$ -rhamnopyranoside, 15180  
Myricetin-3-*O*-(3"-*O*-galloyl)- $\alpha$ -rhamnopyranoside, 15181  
Quercetin-3-*O*-(6"-galloyl)-galactoside, 18358  
Quercetin-3-*O*-(6"-galloyl)- $\beta$ -*D*-glucopyranoside, 18359  
Quercetin-3-*O*-(2"-*O*-galloyl)- $\beta$ -*D*-glucoside, 18360  
Quercetin-4'-*O*- $\beta$ -*D*-glucopyranoside-6"-gallate, 18361
- C<sub>28</sub>H<sub>24</sub>O<sub>17</sub>**  
Myricetin-3-*O*- $\beta$ -*D*-(6"-*O*-galloyl)-galactopyranoside, 15177  
Myricetin-3-*O*-(2"-*O*-galloyl)- $\beta$ -*D*-glucopyranoside, 15178  
Myricetin-3-*O*- $\beta$ -*D*-(6"-*O*-galloyl)-glucopyranoside, 15179  
Quercetagetin-7-*O*-(6-*O*-galloyl)- $\beta$ -*D*-glucopyranoside), 18310
- C<sub>28</sub>H<sub>25</sub>N<sub>4</sub>O<sub>2</sub><sup>+</sup>**  
Kumujansine A, 12332
- C<sub>28</sub>H<sub>25</sub>N<sub>4</sub>O<sub>4</sub>**  
Picrasidine T, 17311
- C<sub>28</sub>H<sub>25</sub>O<sub>16</sub><sup>+</sup>**  
Delphinidin-3'-*O*-(2"-*O*-galloyl)- $\beta$ -galactopyranoside), 5024
- C<sub>28</sub>H<sub>26</sub>N<sub>2</sub>O<sub>10</sub>**  
Ophiocordin, 16130
- C<sub>28</sub>H<sub>26</sub>O<sub>4</sub>**  
Perrottetin E, 16984
- C<sub>28</sub>H<sub>26</sub>O<sub>5</sub>**  
Perrottetin F, 16986
- C<sub>28</sub>H<sub>26</sub>O<sub>7</sub>**  
Neocalyxin A, 15351  
Neocalyxin B, 15352  
Rhinacanthin Q, 18778
- C<sub>28</sub>H<sub>26</sub>O<sub>9</sub>**  
Guangsangon L, 9064  
Pannellin, 16618  
Rocaglamide derivative 8, 18888
- C<sub>28</sub>H<sub>26</sub>O<sub>12</sub>**  
Diphyllin acetylapioside, 6491
- C<sub>28</sub>H<sub>26</sub>O<sub>14</sub>**  
Naringenin 7-*O*-(6"-*O*-galloyl)-glucoside, 15281
- C<sub>28</sub>H<sub>26</sub>O<sub>15</sub>**  
(*S*)-Eriodictyol-7-*O*-(6"-*O*-galloyl)- $\beta$ -*D*-glucopyranoside, 7282
- C<sub>28</sub>H<sub>26</sub>O<sub>18</sub>**  
Methyl 2,3,6-tri-*O*-galloyl- $\beta$ -*D*-glucopyranoside, 14772  
Methyl 3,4,6-tri-*O*-galloyl- $\beta$ -*D*-glucopyranoside, 14773
- C<sub>28</sub>H<sub>28</sub>O<sub>6</sub>**  
Caloxanthone, 2997  
Dulcisxanthone D, 6629  
Garcimangosone A, 8206  
Mangostenone A, 13488
- C<sub>28</sub>H<sub>28</sub>O<sub>8</sub>**  
Bletilol A, 2515  
Methyl rocaglate, 14714
- C<sub>28</sub>H<sub>28</sub>O<sub>9</sub>**  
3'-Hydroxyrocaglate, 10677
- C<sub>28</sub>H<sub>28</sub>O<sub>11</sub>**  
Aloeresin A, 973  
6'-*O*-*p*-Coumaroylaloerin, 4146  
Curtisian I, 4405  
Isoaloeresin A, 11204
- C<sub>28</sub>H<sub>28</sub>O<sub>12</sub>**  
(-)-Epicatechin-5-*O*- $\beta$ -*D*-glucopyranosyl-3-benzoate, 6865
- C<sub>28</sub>H<sub>28</sub>O<sub>13</sub>**  
Rhaponticin 2"-*O*-gallate, 18746  
Rhaponticin 6"-*O*-gallate, 18747  
*cis*-3,5,3'-Trihydroxy-4'-methoxystilbene-3-*O*- $\beta$ -*D*-(2"-*O*-galloyl) glucopyranoside, 21786  
*cis*-3,5,3'-Trihydroxy-4'-methoxystilbene-3-*O*- $\beta$ -*D*-(6"-*O*-galloyl) glucopyranoside, 21787
- C<sub>28</sub>H<sub>28</sub>O<sub>15</sub>**  
Isorhamnetin 3-*O*- $\beta$ -*D*-2',3',4"-triacylglucopyranoside, 11670
- C<sub>28</sub>H<sub>28</sub>O<sub>17</sub>**  
Acacetin-7-glucurono-(1 $\rightarrow$ 2)-glucuronide, 58
- C<sub>28</sub>H<sub>29</sub>NO<sub>7</sub>**  
Grossamide K, 9014
- C<sub>28</sub>H<sub>29</sub>NO<sub>8</sub>**  
3'-Hydroxy-*N*-demethylrocaglamide, 9981
- C<sub>28</sub>H<sub>30</sub>N<sub>2</sub>O<sub>11</sub>**  
Desoxycordifoline, 5272
- C<sub>28</sub>H<sub>30</sub>O<sub>5</sub>**  
Dulcisxanthone A, 6626  
Nigrolineaxanthone S, 15592
- C<sub>28</sub>H<sub>30</sub>O<sub>6</sub>**  
Allanxanthone B, 918  
Cowagarcinone D, 4198  
Tovophyllin A, 21481  
Virgataxanthone B, 22525
- C<sub>28</sub>H<sub>30</sub>O<sub>9</sub>**  
Physalin B, 17240  
Physalin C, 17241
- C<sub>28</sub>H<sub>30</sub>O<sub>10</sub>**
- Buergeriside A<sub>1</sub>, 2709  
5 $\beta$ ,6 $\beta$ -Epoxyphysalin B, 7187  
Physalin A, 17239  
Pilosanol C, 17363
- C<sub>28</sub>H<sub>30</sub>O<sub>12</sub>**  
6"-*O*-Acetylamurensin, 315
- C<sub>28</sub>H<sub>30</sub>O<sub>13</sub>**  
Dracunculifoside L, 6591  
Pabularin A, 16485  
Pabularin B, 16486  
Pabularin C, 16487  
Praeroside I, 17756
- C<sub>28</sub>H<sub>30</sub>O<sub>14</sub>**  
Cassiaoccidentalinalin C, 3283
- C<sub>28</sub>H<sub>30</sub>O<sub>15</sub>**  
1-Methoxy-3-hydroxy-2-carbomethoxy-9,10-anthraquinone 3-*O*- $\beta$ -primeveroside, 13953  
2-Methyl-1,3,6-trihydroxy-9,10-anthraquinone-3-*O*- $\beta$ -*D*-xylosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-(6'-*O*-acetyl) glucoside, 14779
- C<sub>28</sub>H<sub>30</sub>O<sub>17</sub>**  
Quercetin-7-*O*- $\alpha$ -*L*-Arabinosyl-3-*O*- $\beta$ -*D*-6"-acetyl glucopyranoside, 18329
- C<sub>28</sub>H<sub>31</sub>NO<sub>8</sub>**  
*erythro*-Cannabinine H, 3054
- C<sub>28</sub>H<sub>32</sub>N<sub>2</sub>O<sub>9</sub>**  
6-*O*-Acetylstritosamide, 515
- C<sub>28</sub>H<sub>32</sub>O<sub>5</sub>**  
Cochinchinone A, 3870
- C<sub>28</sub>H<sub>32</sub>O<sub>6</sub>**  
Allanxanthone C, 919  
Cochinchinone B, 3871  
Dulcisxanthone E, 6630  
GarcinianoneA, 8210  
GarcinianoneB, 8211  
Garciniaxanthone E, 8212  
Garcinone E, 8222  
Norcowanin, 15728  
1,3,5,6-Tetrahydroxy-4,7,8-tri(3-methyl-2-butenyl)xanthone, 21168  
Virgataxanthone A, 22524
- C<sub>28</sub>H<sub>32</sub>O<sub>8</sub>**  
Griffonianone A, 9007
- C<sub>28</sub>H<sub>32</sub>O<sub>9</sub>**  
11-Oxo-7 $\alpha$ -obacunyl acetate, 16398  
Physalin M, 17244
- C<sub>28</sub>H<sub>32</sub>O<sub>10</sub>**  
Physalin L, 17243  
Pilosanol B, 17362  
Rutaevin acetate, 19082
- C<sub>28</sub>H<sub>32</sub>O<sub>11</sub>**  
Physalin D, 17242
- C<sub>28</sub>H<sub>32</sub>O<sub>12</sub>**

- 6"-*O*-Acetylphellamurin, 481  
 Hymenoside I, 10852  
**C<sub>28</sub>H<sub>32</sub>O<sub>13</sub>**  
 Derriscanoside A, 5227  
*β*-Peltatin glucoside, 16796  
*L*-Picropodophyllin 7'-*O*-*β*-*D*-glucopyranoside, 17339  
 Podophyllotoxin 7'-*O*-*β*-*D*-glucopyranoside, 17593  
**C<sub>28</sub>H<sub>32</sub>O<sub>14</sub>**  
 Acaciin, 61  
 Chrysoeriol 6-*C*-*β*-boivinopyranosyl-7-*O*-*β*-glucopyranoside, 3606  
 Derriscandenoside B, 5223  
 1,2-Di-*O*-*E*-sinapoyl-*β*-glucopyranose, 6509  
 1,6-Di-*O*-sinapoylglucose, 6510  
 Fortunellin, 7930  
 Hirsutissimide B, 9555  
 Lasianthuoside C, 12533  
 Liquiritigenin-7-*O*-*β*-*D*-(3-*O*-acetyl)-apiofuranosyl-4'-*O*-*β*-*D*-glucopyranoside, 12909  
 Physcion-8-*O*-rhamnosyl-(1→2)-glucoside, 17252  
 Saikoisoflavonoside A, 19137  
**C<sub>28</sub>H<sub>32</sub>O<sub>15</sub>**  
 Abrusin-2"-*O*-apioside, 29  
 Chrysoeriol 7-*O*-rutinoside, 3610  
 5,4'-Dihydroxyl-6,7-dimethoxyl-8-*C*-[*β*-*D*-xylocopyranosyl-(1→2)]-*β*-*D*-glucopyranosyl flavone, 5949  
 Diosmin, 6454  
 Flavocommelin, 7817  
 Hirsutissimide C, 9556  
 Kaempferide-3-*O*-neohesperidoside, 12016  
 Physciondiglucoside, 17249  
 Physcion-8-*O*-*β*-*D*-gentiobioside, 17250  
 Rhamnetin-3-*O*-rhamnosyl (1→4)-rhamnopyranoside, 18681  
 Spinosin, 20172  
 Wikstroemin, 22668  
 Zivulgarin, 23007  
**C<sub>28</sub>H<sub>32</sub>O<sub>16</sub>**  
 Complanatuside, 3949  
 Isorhamnetin 3-*O*-*β*-*D*-glucopyranosyl-(1-2)-*α*-*L*-rhamnopyranoside, 11658  
 Isorhamnetin-3-*O*-glucosyl-7-*O*-rhamnoside, 11661  
 Isorhamnetin-3-*O*-neohesperidoside, 11662  
 Isorhamnetin-3-*O*-robinobioside, 11668  
 Isorhamnetin-3-*O*-rutinoside, 11669  
 Keioside, 12190  
 Narcissin, 15265  
 Tamarixetin 3-*O*-neohesperidoside, 20660  
 Tectorigenin-4'-glucosyl(1→6)glucoside, 20903  
 5,3',4'-Trihydroxyl-6,7-dimethoxyl-8-*C*-[*β*-*D*-xylocopyranosyl-(1→2)]-*β*-*D*-glucopyranosyl flavone, 21761  
**C<sub>28</sub>H<sub>32</sub>O<sub>17</sub>**  
 Isorhamnetin 3,7-*O*-di-*β*-*D*-glucopyranoside, 11655  
 Isorhamnetin-3,4'-diglucoside, 11656  
*Isorhamnetin-7-β-D-gentiobioside*, 11657  
 Patuletin-3-*O*-*β*-*D*-robinobioside, 16729  
 Quercetagetin 7-methylether 3-*O*-neohesperidoside, 18315  
 Tamarixetin 3-*O*-*β*-*D*-glucopyranoside 7-*O*-*β*-*D*-glucopyranoside, 20658  
**C<sub>28</sub>H<sub>32</sub>O<sub>18</sub>**  
 Quercetagetin 7-methylether 3-*O*-cellobioside, 18312  
**C<sub>28</sub>H<sub>33</sub>N<sub>2</sub>O<sub>9</sub><sup>+</sup>**  
 3,4,5,6-Tetrahydrodolicchantoside, 21049  
**C<sub>28</sub>H<sub>33</sub>O<sub>15</sub><sup>+</sup>**  
 Peonidin-3-*O*-(6"-*O*-*α*-rhamnopyranosyl-*β*-glucopyranoside), 16904  
**C<sub>28</sub>H<sub>33</sub>O<sub>16</sub><sup>+</sup>**  
 Peonin, 16905  
**C<sub>28</sub>H<sub>33</sub>O<sub>17</sub><sup>+</sup>**  
 Petudin-3,7-di-*O*-(*β*-*D*-glucopyranoside), 17023  
**C<sub>28</sub>H<sub>34</sub>N<sub>2</sub>O<sub>11</sub>**  
 (5*S*)-5-Carboxystrictosidine, 3184  
**C<sub>28</sub>H<sub>34</sub>O<sub>2</sub>**  
 Bornylmagnolol, 2561  
 Piperitylmagnolol, 17458  
 Piperitylhonokiol, 17459  
**C<sub>28</sub>H<sub>34</sub>O<sub>5</sub>**  
 Peperovulcanone B, 16908  
**C<sub>28</sub>H<sub>34</sub>O<sub>6</sub>**  
 6*α*-Hydroxyzadiradione, 9808  
 Nicandrenone II, 15521  
 Nimbinin, 15602  
 Withaphysalin A, 22716  
**C<sub>28</sub>H<sub>34</sub>O<sub>7</sub>**  
 Gedunin, 8249  
**C<sub>28</sub>H<sub>34</sub>O<sub>8</sub>**  
 Angeloyl gomisin O, 1207  
 Angeloylisogomisin O, 1212  
 Heteroclitin B, 9461  
 Heteroclitin C, 9462  
 Mallotophilippen A, 13433  
 Uliginosin B, 22191  
**C<sub>28</sub>H<sub>34</sub>O<sub>9</sub>**  
 Ananosin A, 1139  
 Angeloyl gomisin P, 1208  
 Gomisin B, 8907  
 Gomisin E, 8910  
 Gomisin F, 8911  
 11*β*-Hydroxy-7*α*-obacanyl acetate, 10544  
 Nomilin, 15655  
 Schisantherin C, 19489  
 Tigloylgomisin P, 21377  
 3,7,4'-Trihydroxy-3'-(8"-acetoxyl-7"-methyl-octyl)-5,6-dimethoxyflavone, 21685  
**C<sub>28</sub>H<sub>34</sub>O<sub>10</sub>**  
 Gomisin D, 8909  
 Taiwanschirin D, 20646  
**C<sub>28</sub>H<sub>34</sub>O<sub>13</sub>**  
 Dracunculifoside O, 6594  
 Podorhizol *β*-*D*-glucoside, 17595  
**C<sub>28</sub>H<sub>34</sub>O<sub>14</sub>**  
 Isosakuranetin-7-rutinoside, 11692  
 Poncirin, 17705  
**C<sub>28</sub>H<sub>34</sub>O<sub>15</sub>**  
 Cusianoside A, 4419  
 Cusianoside B, 4420  
 Hesperidin, 9458  
 Hydroxysafflor yellow A, 10684  
 Mesuein, 13810  
 Neohesperidin, 15404  
 Paederotoside, 16518  
**C<sub>28</sub>H<sub>34</sub>O<sub>16</sub>**  
 (2*S*)-Homoperiodictyol 7,4'-di-*O*-*β*-*D*-glucopyranoside, 9605  
 2,3,4,7-Tetramethoxyxanthone-1-*O*-*β*-*D*-xylopyranosyl-(1→6)-*β*-*D*-glucopyranoside, 21191  
 Veratriloside C, 22387  
**C<sub>28</sub>H<sub>35</sub>ClO<sub>11</sub>**  
 Junceellin, 11944  
**C<sub>28</sub>H<sub>35</sub>ClO<sub>12</sub>**  
 Praelolide, 17755  
**C<sub>28</sub>H<sub>35</sub>ClO<sub>13</sub>**  
 Juncin P, 11956  
**C<sub>28</sub>H<sub>35</sub>NO<sub>8</sub>**  
 Anhydroharringtonine, 1270  
**C<sub>28</sub>H<sub>36</sub>N<sub>2</sub>O<sub>4</sub>**  
 Psychotrine, 18095  
**C<sub>28</sub>H<sub>36</sub>N<sub>2</sub>O<sub>5</sub>**  
 Alangicine, 829  
**C<sub>28</sub>H<sub>36</sub>O<sub>3</sub>**  
 6-Oxo-iguesterol, 16359  
 Tingenone, 21397  
**C<sub>28</sub>H<sub>36</sub>O<sub>4</sub>**  
 Daturilin, 4673  
 Greviobstol C, 9000  
 6-Oxotingenol, 16429  
 Tingenin B, 21396  
**C<sub>28</sub>H<sub>36</sub>O<sub>5</sub>**  
 6*α*-*O*-Acetyl-7-deacetylnimocinol, 364  
 Benzoylramanone, 2268

- 5 $\beta$ ,6 $\beta$ -Epoxy-4 $\beta$ -hydroxy-1-oxowitha-2,14,24-trienolide, 7128
- 5 $\beta$ ,6 $\beta$ -Epoxy-4 $\beta$ -hydroxy-1-oxo-witha-2,16,24-trienolide, 7129
- 17 $\beta$ -Hydroxy-14 $\alpha$ ,20 $\alpha$ -epoxy-1-oxo-(22*R*)-witha-3,5,24-trienolide, 10092
- Salaquinone B, 19178
- Withacoagulin, 22699
- C<sub>28</sub>H<sub>36</sub>O<sub>6</sub>**
- Azadironolide, 2051
- 12-*O*-Benzoylisolineolone, 2246
- Withanicandrin, 22701
- Withanone, 22705
- Withaphysalin B, 22717
- C<sub>28</sub>H<sub>36</sub>O<sub>7</sub>**
- Turraparvin A, 22138
- Turraparvin B, 22139
- C<sub>28</sub>H<sub>36</sub>O<sub>8</sub>**
- Angeloyl gomisin H, 1206
- [(2*S*,3*R*,4*R*)-4-(3,4-Dimethoxybenzyl)-2-(3,4,5-trimethoxyphenyl)-tetrahydrofuran-3-yl]-methyl (2*Z*)-2-methylbut-2-en-oate, 6212
- Heteroclitin A, 9460
- Propinquanin F, 17929
- Qingyangshengenin, 18291
- Uliginosin A, 22190
- C<sub>28</sub>H<sub>36</sub>O<sub>9</sub>**
- Forrestin F, 7920
- Kupitengester 4, 12339
- C<sub>28</sub>H<sub>36</sub>O<sub>10</sub>**
- Celahnin C, 3359
- Nomilinic acid, 15656
- C<sub>28</sub>H<sub>36</sub>O<sub>11</sub>**
- Bruceantin, 2660
- Glabcensin R, 8479
- C<sub>28</sub>H<sub>36</sub>O<sub>12</sub>**
- Bruceine C, 2666
- C<sub>28</sub>H<sub>36</sub>O<sub>13</sub>**
- Acanthoside B, 85
- Juncenolide B, 11950
- C<sub>28</sub>H<sub>36</sub>O<sub>14</sub>**
- 2-(4-Hydroxyphenyl)ethyl 1-*O*- $\beta$ -*D*-[5-*O*-(3,4-dimethoxybenzoyl)]-apiofuranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside, 10618
- Magnolenin C, 13376
- Tyrolobibenzyl E, 22160
- C<sub>28</sub>H<sub>36</sub>O<sub>15</sub>**
- 2,4-Dimethoxyphenol 1-*O*- $\beta$ -*D*-[5-*O*-(3,4-dimethoxybenzoyl)]-apiofuranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside, 6274
- 3,4-Dimethoxyphenyl 1-*O*- $\beta$ -*D*-[5-*O*-(3,4-dimethoxybenzoyl)]-apiofuranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside, 6281
- 3,4,5-Trimethoxyphenyl 1-*O*- $\beta$ -*D*-[5-*O*-(4-methoxybenzoyl)]-apiofuranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside, 21927
- C<sub>28</sub>H<sub>36</sub>O<sub>16</sub>**
- Piloside A, 17368
- C<sub>28</sub>H<sub>36</sub>O<sub>17</sub>**
- Piloside B, 17369
- Rubinaphthin D, 19035
- C<sub>28</sub>H<sub>37</sub>NO<sub>5</sub>**
- Lythranine, 13280
- Turraparvin D, 22141
- C<sub>28</sub>H<sub>37</sub>NO<sub>7</sub>**
- Guan-fu base P**, 9050
- C<sub>28</sub>H<sub>37</sub>NO<sub>8</sub>**
- Deoxyharringtonine, 5181
- C<sub>28</sub>H<sub>37</sub>NO<sub>9</sub>**
- Harringtonine, 9239
- Isoharringtonine, 11449
- C<sub>28</sub>H<sub>38</sub>N<sub>2</sub>O<sub>4</sub>**
- Cephaeline, 3400
- C<sub>28</sub>H<sub>38</sub>N<sub>8</sub>O<sub>5</sub>**
- Hordatine A, 9644
- C<sub>28</sub>H<sub>38</sub>O<sub>4</sub>**
- Gerronemin F, 8365
- Grevirobstol A, 8998
- 20 $\beta$ -Hydroxy-1-oxo-(22*R*)-witha-2,5,24-trienolide, 9743
- 27-Hydroxy-3-oxo-witha-1,4,24-trienolide, 10587
- C<sub>28</sub>H<sub>38</sub>O<sub>5</sub>**
- Daturilinol, 4674
- Euglobal III, 7531
- Euglobal V, 7532
- Lycium substance B, 13181
- Meldenin, 13661
- Withacoagin, 22698
- Withanolide B, 22703
- C<sub>28</sub>H<sub>38</sub>O<sub>6</sub>**
- Ajugin, 812
- (20*S*,22*R*)-5 $\alpha$ ,27-Dihydroxy-6 $\alpha$ ,7 $\alpha$ -epoxy-1-oxo-witha-2,24-dienolide, 5880
- 6 $\alpha$ ,7 $\alpha$ -Epoxy-5 $\alpha$ ,20 $\beta$ -dihydroxy-1-oxowitha-2,24-dienolide, 7082
- Methyl lucidenate F, 14562
- Nicandrin B, 15522
- Withaferin A, 22700
- Withanolide A, 22702
- Withanolide D, 22704
- C<sub>28</sub>H<sub>38</sub>O<sub>7</sub>**
- Ajugin E, 813
- 5 $\beta$ ,6 $\beta$ -Epoxy-4 $\beta$ ,17 $\alpha$ ,27-trihydroxy-1-oxowitha-2,24-dienolide, 7210
- (20*S*,22*R*)-5 $\beta$ ,6 $\beta$ -epoxy-4 $\beta$ ,14 $\beta$ ,15 $\alpha$ -trihydroxy-1-oxowitha-2,24-dienolide, 7214
- 18-Hydroxywithanolide D, 10827
- 27-Hydroxy withanone, 10828
- C<sub>28</sub>H<sub>38</sub>O<sub>8</sub>**
- Anticancer Withanolide PMV70P691-046, 1452
- PenisimPLICIN B, 16807
- C<sub>28</sub>H<sub>38</sub>O<sub>8</sub>S**
- Daturametelin F, 4670
- C<sub>28</sub>H<sub>38</sub>O<sub>9</sub>**
- Gesneroidin D, 8369
- Glabcensin W, 8484
- Lungshengenin E, 13081
- Lushanrubescensin C, 13118
- Rabyuennane A, 18510
- Taxinine H, 20801
- C<sub>28</sub>H<sub>38</sub>O<sub>10</sub>**
- Bulleyanin, 2743
- Calcicolin A, 2947
- Gesneroidin C, 8368
- Glabcensin A, 8462
- Glabcensin B, 8463
- Inflexusin, 11055
- Lungshengenin B, 13077
- Lushanrubescensin A, 13116
- Nervosanin, 15507
- Rabdoforrestin A, 18461
- Rabdoforrestin A', 18462
- Rabdosianin B, 18488
- Rabdosinate, 18497
- Taxine B', 20796
- Taxuspine F, 20854
- 2 $\alpha$ ,5 $\alpha$ ,7 $\beta$ ,13 $\alpha$ -Tetraacetoxy-10 $\beta$ -hydroxy-2-(3 $\rightarrow$ 20)abeotaxan-9-one, 21029
- C<sub>28</sub>H<sub>38</sub>O<sub>11</sub>**
- Ajugapantian A, 808
- Decinamoyltaxinine B 11,12-oxide, 4855
- Juncecellolide D, 11946
- Pseudolaric acid A-*O*- $\beta$ -*D*-glucopyranoside, 18032
- Tasumatrol N, 20724
- Taxumairol C, 20823
- Taxumairol I, 20829
- C<sub>28</sub>H<sub>38</sub>O<sub>12</sub>**
- 5 $\alpha$ -Decinamoyltaxagifine, 4853
- Javanicolide D, 11854
- C<sub>28</sub>H<sub>38</sub>O<sub>13</sub>**
- (+)-5,5'-Dimethoxy-9-*O*- $\beta$ -*D*-glucopyranosyl lariciresinol, 6230
- (+)-Lyoniresinol-2 $\alpha$ -*O*- $\beta$ -*D*-glucopyranoside, 13250
- (-)-Lyoniresinol-3 $\alpha$ -*O*- $\beta$ -*D*-glucopyranoside, 13253
- C<sub>28</sub>H<sub>39</sub>ClO<sub>10</sub>**



- Juncenolide A, 11949
- C<sub>28</sub>H<sub>39</sub>NO**  
N-[(S)-1-Phenylethyl]-labda-7,12(E),14-triene-17-amide, 17118
- C<sub>28</sub>H<sub>39</sub>NO<sub>6</sub>**  
Lycoposerramine O, 13234
- C<sub>28</sub>H<sub>40</sub>O**  
Ergosta-4,6,8(14),22-tetraen-3-one, 7247
- C<sub>28</sub>H<sub>40</sub>O<sub>3</sub>**  
9(11)-Dehydroaxinysterol, 4880  
2,8-Dimethyl-2-[(3E,7E)-4,8,12-trimethyltrideca-3,7,11-trienyl]-5-formyl-chroman-6-ol, 6415  
2,8-Dimethyl-2-[(3E,7E)-4,8,12-trimethyltrideca-3,7,11-trienyl]-7-formyl-chroman-6-ol, 6416
- C<sub>28</sub>H<sub>40</sub>O<sub>4</sub>**  
Grevirobstol B, 8999  
Regeol A, 18584  
Siraitic acid C, 19973
- C<sub>28</sub>H<sub>40</sub>O<sub>5</sub>**  
Siraitic acid D, 19974  
Siraitic acid E, 19975
- C<sub>28</sub>H<sub>40</sub>O<sub>6</sub>**  
Ajugin F, 814  
Anticancer Withanolide PMV70P691-049, 1455  
Anticancer Withanolide PMV70P691-149, 1457  
4,20-Dideoxyphorbol 12,13-bis(isobutyrate), 5476  
2,3-Dihydrowithaferin A, 5739  
24,25-Dihydrowithanolide A, 5740  
Macrocarpal A, 13315  
Methyl lucidenate A, 14559  
Surinone A, 20493  
4 $\beta$ ,7 $\beta$ ,20R-Trihydroxy-1-oxowitha-2,5-dien-22,26-olide, 21834
- C<sub>28</sub>H<sub>40</sub>O<sub>7</sub>**  
Anticancer Withanolide PMV70P691-047, 1453  
4-Deoxyphorbol 12,13-bis(isobutyrate), 5202  
4-Epi-4-deoxyphorbol 12,13-bis(isobutyrate), 6892  
6 $\alpha$ ,7 $\alpha$ -Epoxy-3 $\beta$ ,5 $\alpha$ ,17 $\alpha$ -trihydroxy-1-oxo-witha-24-enolide, 7211  
(20S,22R)-3 $\alpha$ ,6 $\alpha$ -Epoxy-4 $\beta$ ,5 $\beta$ ,27-trihydroxy-1-oxowitha-24-enolide, 7212  
6 $\alpha$ ,7 $\alpha$ -Epoxy-3 $\beta$ ,5 $\alpha$ ,20 $\beta$ -trihydroxy-1-oxo-witha-24-enolide, 7213  
Methyl lucidenate L, 14563  
(20S,22R)-4 $\beta$ ,5 $\beta$ ,6 $\alpha$ ,27-Tetrahydroxy-1-oxowitha-2,24-dienolide, 21148  
Withaphysacarpin, 22715
- C<sub>28</sub>H<sub>40</sub>O<sub>8</sub>**  
Anhydrohirundigenin monothevetoside, 1272  
Anticancer Withanolide PMV70P691-045, 1451  
Anticancer Withanolide PMV70P691-048, 1454
- 2,3-Dihydroixocarpalactone B, 5657  
Ixocarpalactone A, 11804  
3 $\beta$ -Oxo-formyl-7 $\beta$ ,12 $\beta$ -dihydroxy-4,4,14 $\alpha$ -trimethyl-5 $\alpha$ -chol-11,15-dioxo-8-en(E)-24-oic acid, 16336  
Taxusin, 20840  
Taxuyunnanine C, 20875
- C<sub>28</sub>H<sub>40</sub>O<sub>9</sub>**  
Adenanthin D, 608  
2-Deacetoxy-5-decinnamoyl taxinine J, 4704  
Decinnamoyltaxinine E, 4854  
Glaucogenin C mono-D-thevetoside, 8507  
14 $\beta$ -Hydroxytaxusin, 10740  
7 $\beta$ -Hydroxy-2 $\alpha$ ,5 $\alpha$ ,10 $\beta$ ,14 $\beta$ -tetraacetoxytaxa-4(20),11-diene, 10743  
Rabyuennane C, 18512  
Taxa-4(20),11-diene-5 $\alpha$ -hydroxy-1 $\beta$ ,7 $\beta$ ,9 $\alpha$ ,10 $\beta$ -tetraacetate, 20741  
5 $\alpha$ ,9 $\alpha$ ,10 $\beta$ ,13 $\alpha$ -Tetraacetoxo-15-hydroxy-11(15 $\rightarrow$ 1)-abeo-taxa-4(20),11-diene, 21028
- C<sub>28</sub>H<sub>40</sub>O<sub>10</sub>**  
Calcicolin D, 2953  
Calcicolin E, 2954  
2 $\alpha$ ,5 $\alpha$ -Dihydroxy-7 $\beta$ ,9 $\alpha$ ,10 $\beta$ ,13 $\alpha$ -tetraacetoxo-4(20),11-taxadiene, 6140  
Forrestin D, 7918  
Neocynapanogenin C  
3-O- $\beta$ -D-oleandropyranoside, 15388  
Taxezopidine F, 20785  
Teixidol, 20905
- C<sub>28</sub>H<sub>40</sub>O<sub>10</sub>S**  
5 $\alpha$ ,17 $\alpha$ -Dihydroxy-6 $\alpha$ ,7 $\alpha$ -epoxy-1-oxo-3 $\beta$ -O-sulfate-witha-24-enolide, 5879
- C<sub>28</sub>H<sub>40</sub>O<sub>11</sub>**  
7-Deacetylcanadensene, 4734  
13-Deacetylcanadensene, 4735  
5-Deacetylaxachitriene B, 4777  
Picrasinoside B, 17321  
Tasumatrol M, 20723  
Taxchinin G, 20774  
Taxuspine U, 20868
- C<sub>28</sub>H<sub>40</sub>O<sub>12</sub>**  
7,9-Deacetylbaecatin IV, 4723  
1 $\beta$ -Hydroxy-2 $\alpha$ ,7 $\beta$ -deacetylbaecatin I, 9960  
Taxacustin, 20739  
Taxumairol B, 20822  
Taxumairol W, 20836
- C<sub>28</sub>H<sub>40</sub>O<sub>13</sub>**  
(+)-5,5'-Dimethoxy-9-O- $\beta$ -D-glucopyranosyl secoisolaricresinol, 6231
- C<sub>28</sub>H<sub>40</sub>O<sub>18</sub>**  
Arillatose C, 1686  
Arillatose E, 1688
- C<sub>28</sub>H<sub>41</sub>O<sub>11</sub>**  
Dracunculifoside A, 6580
- C<sub>28</sub>H<sub>42</sub>Cl<sub>2</sub>O<sub>4</sub>**  
**Abamagenin**, 1
- C<sub>28</sub>H<sub>42</sub>N<sub>4</sub>O<sub>6</sub>**  
Kukoamine A, 12327
- C<sub>28</sub>H<sub>42</sub>O**  
Isoergosterone, 11413
- C<sub>28</sub>H<sub>42</sub>O<sub>3</sub>**  
Axinysterol, 2046  
5 $\alpha$ ,8 $\alpha$ -Epidioxergosta-6,9(11),22-trien-3 $\alpha$ -ol, 6903  
5 $\alpha$ ,8 $\alpha$ -Epidioxergosta-6,9(11),22-trien-3 $\beta$ -ol, 6904  
Peperovulcanone A, 16907
- C<sub>28</sub>H<sub>42</sub>O<sub>4</sub>**  
5 $\alpha$ ,9 $\alpha$ -Epidioxo-8 $\alpha$ ,14 $\alpha$ -epoxy-(22E)-ergosta-6,22-dien-3 $\beta$ -ol, 6898  
5 $\alpha$ ,9 $\alpha$ -Epidioxo-3 $\beta$ -hydroxy-(22E)-ergosta-7,22-dien-6-one, 6905  
Tryptocalline A, 21996
- C<sub>28</sub>H<sub>42</sub>O<sub>6</sub>**  
Lucidenic acid LM<sub>1</sub>, 13037  
Methyl lucidenate Q, 14565  
Periplocagenin, 16942  
3 $\beta$ ,6 $\beta$ ,19 $\alpha$ -Trihydroxy-23-oxo-urs-12-en-28-oic acid, 21833
- C<sub>28</sub>H<sub>42</sub>O<sub>7</sub>**  
Caseamembrin B, 3259  
Caudatin, 3329  
Lucidenic acid G, 13031  
Methyl butyric acid tussilaglin ester, 14188
- C<sub>28</sub>H<sub>42</sub>O<sub>8</sub>**  
(20R,22R)-5 $\alpha$ ,6 $\beta$ ,14 $\alpha$ ,20,27-Pentahydroxy-1-oxowitha-24-enolide, 16858  
Salvigreside D, 19215
- C<sub>28</sub>H<sub>42</sub>O<sub>11</sub>**  
Picrasinoside C, 17322  
Taxane 5, 20752
- C<sub>28</sub>H<sub>42</sub>O<sub>12</sub>**  
Taxayuntin G, 20765  
Taxumairol V, 20835
- C<sub>28</sub>H<sub>43</sub>N<sub>5</sub>O<sub>12</sub>S**  
Ustiloxin, 22284
- C<sub>28</sub>H<sub>44</sub>N<sub>2</sub>O<sub>2</sub>**  
Sarcovagine D, 19365
- C<sub>28</sub>H<sub>44</sub>N<sub>4</sub>O<sub>4</sub>**  
Adouetine X, 648  
Frangulanine, 7938
- C<sub>28</sub>H<sub>44</sub>O**  
Ergosterol, 7250  
Vitamin D<sub>2</sub>, 22558
- C<sub>28</sub>H<sub>44</sub>O<sub>2</sub>**

- 6,9-Epoxy-ergosta-7,22-dien-3-ol, 7093  
 5,6-Epoxy-24(*R*)-methylcholesta-7,22-dien-3 $\beta$ -ol, 7173  
**C<sub>28</sub>H<sub>44</sub>O<sub>3</sub>**  
 3 $\beta$ ,5 $\alpha$ -Dihydroxy-(22*E*)-ergosta-7,22-dien-6-one, 5884  
 5 $\alpha$ ,8 $\alpha$ -Epidioxy-24(*R*)-methylcholesta-6,22-diene-3 $\beta$ -ol, 6906  
 Ergosterol peroxide, 7251  
 24-Methyl-7-oxocholesta-5,24(28)-diene-3 $\beta$ ,19-diol, 14643  
**C<sub>28</sub>H<sub>44</sub>O<sub>4</sub>**  
 Bethogenin, 2324  
 5 $\alpha$ ,9 $\alpha$ -Epidioxy-(22*E*)-ergosta-7,22-diene-3 $\beta$ ,6 $\alpha$ -diol, 6899  
 5 $\alpha$ ,9 $\alpha$ -Epidioxy-(22*E*)-ergosta-7,22-diene-3 $\beta$ ,6 $\beta$ -diol, 6900  
 2-*n*-Heptadecy-5,7-dihydroxy-6,8-dimethyl chromone, 9391  
 3 $\beta$ ,5 $\alpha$ ,9 $\alpha$ -Trihydroxy-(22*E*)-ergosta-7,22-dien-6-one, 21729  
**C<sub>28</sub>H<sub>44</sub>O<sub>5</sub>**  
 Polyporusterone D, 17668  
 Polyporusterone E, 17669  
 Polyporusterone G, 17671  
 3 $\beta$ ,5 $\alpha$ ,9 $\alpha$ ,14 $\beta$ -Tetrahydroxy-(22*E*)-ergosta-7,22-dien-6-one, 21106  
**C<sub>28</sub>H<sub>44</sub>O<sub>6</sub>**  
 Polyporusterone B, 17666  
 Polyporusterone C, 17667  
**C<sub>28</sub>H<sub>44</sub>O<sub>8</sub>**  
 Lemnabourside D, 12622  
**C<sub>28</sub>H<sub>44</sub>O<sub>8</sub>S<sub>2</sub><sup>2-</sup>**  
 Lembehsterol B, 12614  
**C<sub>28</sub>H<sub>44</sub>O<sub>9</sub>S**  
 Cilistol Y, 3648  
**C<sub>28</sub>H<sub>44</sub>O<sub>12</sub>**  
 Picrasinoside G, 17325  
**C<sub>28</sub>H<sub>45</sub>NO<sub>2</sub>**  
 Impranine, 11005  
**C<sub>28</sub>H<sub>45</sub>NO<sub>5</sub>**  
 Holantosine B, 9580  
 Holantosine D, 9582  
**C<sub>28</sub>H<sub>45</sub>NO<sub>6</sub>**  
 Coumingidine, 4191  
**C<sub>28</sub>H<sub>45</sub>O<sub>12</sub>S<sub>3</sub><sup>3-</sup>**  
 Lembehsterol A, 12613  
**C<sub>28</sub>H<sub>46</sub>N<sub>2</sub>O**  
 Buxbodine D, 2821  
**C<sub>28</sub>H<sub>46</sub>O**  
 Brassicasterol, 2596  
 $\Delta^7$ -Campesterol, 3039  
 5,6-Dihydroergosterol, 5608  
 Ergost-7-en-3-one, 7249  
 24-Methylcholesta-5,7-dien-3 $\beta$ -ol, 14229  
 24-Methylcholesta-5,24-dien-3 $\beta$ -ol, 14230  
 24-Methylcholesta-7,22-dien-3 $\beta$ -ol, 14231  
 24-Methylene cholesterol, 14350  
**C<sub>28</sub>H<sub>46</sub>O<sub>2</sub>**  
 24-Methylcholesta-5,24(28)-diene-3 $\beta$ ,19-diol, 14226  
**C<sub>28</sub>H<sub>46</sub>O<sub>3</sub>**  
 (22*Z*,24*S*)-Cerevisterol, 3422  
 3 $\beta$ ,5 $\alpha$ -Dihydroxyergost-7-en-6-one, 5885  
 24-Methylcholesta-5,24(28)-diene-3 $\beta$ ,7 $\beta$ ,19-triol, 14227  
 24-Methylcholesta-9(11),24(28)-diene-3 $\beta$ ,12 $\alpha$ ,19-triol, 14228  
**C<sub>28</sub>H<sub>46</sub>O<sub>4</sub>**  
 26,27-Bisnor-8,14-dioxo- $\alpha$ -onocerin, 2487  
 22*E*,24*R*-Ergosta-7,22-diene-3 $\beta$ ,5 $\alpha$ ,6 $\beta$ ,9 $\alpha$ -tetraol, 7245  
 Octadecanyl-3-methoxy-4-hydroxy benzeneacrylate, 15954  
 Octadecyl (*Z*)-ferulate, 15961  
**C<sub>28</sub>H<sub>46</sub>O<sub>5</sub>**  
 Polyporusterone F, 17670  
 Trihydroxybufosterocholenic acid, 21693  
**C<sub>28</sub>H<sub>46</sub>O<sub>6</sub>**  
 Polyporusterone A, 17665  
**C<sub>28</sub>H<sub>46</sub>O<sub>7</sub>**  
 Makisterone A, 13410  
 Makisterone B, 13411  
 Paristerone, 16671  
 Periplocoside L, 16954  
**C<sub>28</sub>H<sub>46</sub>O<sub>8</sub>**  
 20-Hydroxy 24-hydroxymethyl ecdysone, 10204  
**C<sub>28</sub>H<sub>46</sub>O<sub>9</sub>**  
 Hythiemoside A, 10920  
 Hythiemoside B, 10921  
 Salvigreside B, 19213  
**C<sub>28</sub>H<sub>46</sub>O<sub>10</sub>**  
 Salvigreside C, 19214  
**C<sub>28</sub>H<sub>47</sub>NO<sub>2</sub>**  
 Dihydroimpranine, 5645  
 Ningpeisine, 15613  
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**C<sub>28</sub>H<sub>47</sub>NO<sub>3</sub>**  
 Pingbeinine, 17381  
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**C<sub>28</sub>H<sub>47</sub>NO<sub>6</sub>**  
 Holantosine A, 9579  
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**C<sub>28</sub>H<sub>47</sub>N<sub>7</sub>O<sub>7</sub>**  
 Glaucacyclopeptide A, 8508  
**C<sub>28</sub>H<sub>48</sub>N<sub>2</sub>**  
 Cycloprotobuxine C<sub>1</sub>, 4532  
**C<sub>28</sub>H<sub>48</sub>N<sub>2</sub>O**  
 Cyclovirobuxine A, 4542  
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**C<sub>28</sub>H<sub>48</sub>N<sub>2</sub>O<sub>2</sub>**  
 Cyclomicrophylline A, 4516  
**C<sub>28</sub>H<sub>48</sub>N<sub>2</sub>O<sub>3</sub>**  
 Sarcovagine A, 19362  
**C<sub>28</sub>H<sub>48</sub>O**  
 Campesterol, 3040  
 Fungisterol, 8003  
 4 $\alpha$ -Methyl-cholest-7-en-3 $\beta$ -ol, 14235  
 4 $\alpha$ -Methyl-cholest-8-en-3 $\beta$ -ol, 14236  
 (24*S*)-Methylcholest-7-en-3 $\beta$ -ol, 14237  
 (24*R*)-Methyl cholest-8(14)-enol, 14238  
 (24*S*)-Methyl cholest-8(14)-enol, 14239  
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**C<sub>28</sub>H<sub>48</sub>O<sub>2</sub>**  
 (24*S*)-Ergost-5-en-3 $\beta$ ,7 $\beta$ -diol, 7248  
 $\beta$ -Tocopherol, 21413  
 $\gamma$ -Tocopherol, 21414  
 Vitamin E $\beta$ , 22559  
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**C<sub>28</sub>H<sub>48</sub>O<sub>4</sub>**  
 Irisoquin E, 11177  
 24-Methylcholest-24(28)-ene-3 $\beta$ ,5 $\alpha$ ,6 $\beta$ ,19-tetraol, 14234  
**C<sub>28</sub>H<sub>48</sub>O<sub>5</sub>**  
 24-Epicasterone, 6852  
 Trihydroxybufosterocholenic acid, 21692  
**C<sub>28</sub>H<sub>48</sub>O<sub>6</sub>**  
 Brassinolide, 2598  
**C<sub>28</sub>H<sub>48</sub>O<sub>10</sub>**  
 2,6-Diacetyl-3,4-dimethylbutyryl-1-*O*-octylglucopyranoside, 5333  
**C<sub>28</sub>H<sub>48</sub>O<sub>14</sub>**  
 Periplocae oligosaccharide F<sub>1</sub>, 16940  
**C<sub>28</sub>H<sub>50</sub>N<sub>2</sub>O**  
 Cyclokoreanine B, 4502  
**C<sub>28</sub>H<sub>50</sub>N<sub>2</sub>O<sub>4</sub>**  
 Carpaine, 3218  
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**C<sub>28</sub>H<sub>50</sub>O**  
 (24*R*)-Methyl cholestanol, 14232  
 (24*S*)-Methyl cholestanol, 14233  
**C<sub>28</sub>H<sub>50</sub>O<sub>4</sub>**  
 Clavatol, 3810  
**C<sub>28</sub>H<sub>50</sub>O<sub>5</sub>**  
 Pentahydroxybufostane, 16841  
**C<sub>28</sub>H<sub>52</sub>O<sub>11</sub>**  
 Muricatin B, 15086  
**C<sub>28</sub>H<sub>54</sub>O<sub>2</sub>**

- Octacosan-4-olide, 15936
- C<sub>28</sub>H<sub>54</sub>O<sub>4</sub>**  
Octacosanedioic acid, 15933
- C<sub>28</sub>H<sub>56</sub>O<sub>2</sub>**  
Montanic acid, 14944
- C<sub>28</sub>H<sub>57</sub>N<sub>3</sub>O**  
Solapalmitenine, 20062
- C<sub>28</sub>H<sub>58</sub>N<sub>4</sub>O**  
Budmunchiamine L<sub>5</sub>, 2701
- C<sub>28</sub>H<sub>58</sub>O**  
14-Octacosanol, 15934  
1-Octacosanol, 15935
- C<sub>28</sub>H<sub>59</sub>N<sub>3</sub>O**  
Solapalmitine, 20063
- C<sub>29</sub>H<sub>19</sub>Cl<sub>5</sub>O<sub>4</sub>**  
Bazzanin O, 2183
- C<sub>29</sub>H<sub>21</sub>Cl<sub>3</sub>O<sub>4</sub>**  
Bazzanin L, 2180
- C<sub>29</sub>H<sub>22</sub>N<sub>4</sub>O<sub>4</sub>**  
Picrasidine M, 17305  
Picrasidine N, 17306
- C<sub>29</sub>H<sub>22</sub>O<sub>6</sub>**  
Acumitin, 594
- C<sub>29</sub>H<sub>22</sub>O<sub>16</sub>**  
Balanophotannin B, 2128
- C<sub>29</sub>H<sub>24</sub>O<sub>5</sub>**  
1,8-Bis(4-hydroxybenzyl)-4-methoxyphenanthrene-2,7-diol, 2461  
Isochamuaritin, 11323
- C<sub>29</sub>H<sub>24</sub>O<sub>7</sub>**  
Gnetuhainin Q, 8891
- C<sub>29</sub>H<sub>24</sub>O<sub>8</sub>**  
Curtisian P, 4412  
Gnetuhainin J, 8888  
Gnetuhainin K, 8889
- C<sub>29</sub>H<sub>24</sub>O<sub>9</sub>**  
Thelephantin A, 21293
- C<sub>29</sub>H<sub>24</sub>O<sub>12</sub>**  
Isotheaflavin, 11740
- C<sub>29</sub>H<sub>24</sub>O<sub>16</sub>**  
1-*O-p-(E)-Coumaroyl-4,6-(S)-HHDP-β-D-glucopyranose*, 4167
- C<sub>29</sub>H<sub>24</sub>O<sub>17</sub>**  
1-*O-(E)-Caffeoyl-4,6-(S)-HHDP-β-D-glucopyranose*, 2908
- C<sub>29</sub>H<sub>26</sub>N<sub>4</sub>O<sub>4</sub>**  
1-(β-Carbolin-1-yl)-4-(4,8-dimethoxy-β-carbolin-1-yl)-2-methoxy-butan-1-one, 3160
- C<sub>29</sub>H<sub>26</sub>O<sub>4</sub>**  
5-Methoxy-3-(2-phenyl-*E*-ethenyl)-2,4-bis(4-hydroxybenzyl) phenol, 14056
- C<sub>29</sub>H<sub>26</sub>O<sub>5</sub>**  
1,6-Bis(4-hydroxybenzyl)-4-methoxy-9,10-dihydrophenanthrene-2,7-diol, 2460  
1,3-Di(4-hydroxybenzyl)-4-methoxy-9,10-dihydrophenanthrene-2,7-diol, 5771
- C<sub>29</sub>H<sub>26</sub>O<sub>6</sub>**  
Marchantin E, 13554  
Plagiocchin A, 17500
- C<sub>29</sub>H<sub>26</sub>O<sub>7</sub>**  
Anticancer Flavonoid PMV70P691-91, 1417  
Anticancer Flavonoid PMV70P691-97, 1421  
Marchantin K, 13557
- C<sub>29</sub>H<sub>26</sub>O<sub>8</sub>**  
3'-[γ-Hydroxymethyl-(*E*)-γ-methylallyl]-2,4,2',4'-tetrahydrochalcone 11'-*O*-coumarate, 10506
- C<sub>29</sub>H<sub>26</sub>O<sub>10</sub>**  
Rocaglamide derivative 9, 18889
- C<sub>29</sub>H<sub>26</sub>O<sub>12</sub>**  
Dimethyl lithospermate, 6365
- C<sub>29</sub>H<sub>26</sub>O<sub>13</sub>**  
2''-*O*-Vanilloylvitexin, 22345
- C<sub>29</sub>H<sub>26</sub>O<sub>15</sub>**  
1,6-Digalloyl-2-cinnamoyl-glucose, 5514
- C<sub>29</sub>H<sub>26</sub>O<sub>17</sub>**  
1-*O-(E)-Caffeoyl-3,4-di-O-galloyl-β-D-glucopyranose*, 2897  
1-*O-(E)-Caffeoyl-4,6-di-O-galloyl-β-D-glucopyranose*, 2898  
3-*O-(E)-Caffeoyl-1,4-di-O-galloyl-β-D-glucopyranose*, 2899
- C<sub>29</sub>H<sub>27</sub>N<sub>4</sub>O<sub>3</sub><sup>+</sup>**  
Picrasidine F, 17299
- C<sub>29</sub>H<sub>28</sub>N<sub>2</sub>O<sub>7</sub>**  
Ipobscurine C, 11126  
Ipobscurine D, 11127
- C<sub>29</sub>H<sub>28</sub>N<sub>4</sub>**  
Usambarensine, 22275
- C<sub>29</sub>H<sub>28</sub>O<sub>5</sub>**  
2',6'-Bis(*p*-hydroxybenzyl)-3,3'-dihydroxy-5-methoxybibenzyl, 2456  
Perrottetin G, 16987
- C<sub>29</sub>H<sub>28</sub>O<sub>8</sub>**  
Interiorin D, 11102  
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- C<sub>29</sub>H<sub>28</sub>O<sub>9</sub>**  
Angustifolin C, 1248  
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Schisantherin D, 19490
- C<sub>29</sub>H<sub>28</sub>O<sub>10</sub>**  
Pieceid-2''-*O*-coumarate, 17352  
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- C<sub>29</sub>H<sub>28</sub>O<sub>11</sub>**  
Cucumerin A, 4312  
Cucumerin B, 4313
- C<sub>29</sub>H<sub>28</sub>O<sub>13</sub>**  
Amaronitidin, 1019
- C<sub>29</sub>H<sub>29</sub>NO<sub>8</sub>**  
1-*O*-Acetyl-*N,N*-didemethylrocaglamide, 375  
Aglaroxin A, 741
- C<sub>29</sub>H<sub>30</sub>N<sub>2</sub>O<sub>7</sub>**  
Ipobscurine B, 11125
- C<sub>29</sub>H<sub>30</sub>O<sub>5</sub>**  
5-Hydroxy-6-isobutryl-8-methyl-8-(4-methylpent-3-enyl)-4-phenyl-2*H*-pyrano[2,3-*h*]chromen-2-one, 10241
- C<sub>29</sub>H<sub>30</sub>O<sub>7</sub>**  
Piperaduncin A, 17430
- C<sub>29</sub>H<sub>30</sub>O<sub>8</sub>**  
Longipedunin C, 12968  
Piperaduncin B, 17431
- C<sub>29</sub>H<sub>30</sub>O<sub>9</sub>**  
5-Hydroxy-7-methoxy-3',4'-diacetoxy-6-(6,6-dimethyl-2-oxo-cyclohexylmethyl)flavone, 10397  
Rocaglamide derivative 4, 18884
- C<sub>29</sub>H<sub>30</sub>O<sub>10</sub>**  
Aloeresin G, 976  
5,3'-Dipent-4-enoyloxy-3,6,7,4'-tetramethoxyflavone, 6483
- C<sub>29</sub>H<sub>30</sub>O<sub>11</sub>**  
7-*O*-Methylaloeresin A, 14130
- C<sub>29</sub>H<sub>30</sub>O<sub>12</sub>**  
(*E*)-3,5,4'-Trihydroxystilbene 3-*O-β-D*-(6-*O*-galloyl)glucopyranoside, 21850
- C<sub>29</sub>H<sub>30</sub>O<sub>13</sub>**  
Amarogentin, 1017  
Phyllanthostatin A, 17219
- C<sub>29</sub>H<sub>30</sub>O<sub>14</sub>**  
Amaroswerin, 1020  
6'-*O-p*-Hydroxybenzoylcatalposide, 9821
- C<sub>29</sub>H<sub>30</sub>O<sub>15</sub>**  
Oraposide, 16161
- C<sub>29</sub>H<sub>30</sub>O<sub>17</sub>**  
Luteolin 7-*O*-[2''-*O*-(4'''-*O*-acetyl-α-*L*-rhamnopyranosyl)]-β-*D*-glucuronopyranoside, 13138
- C<sub>29</sub>H<sub>31</sub>NO<sub>7</sub>**  
Hernandaline, 9440  
Rocaglamide, 18882
- C<sub>29</sub>H<sub>31</sub>O<sub>15</sub>**  
Sutchuenoside A, 20499
- C<sub>29</sub>H<sub>32</sub>O<sub>4</sub>**  
Artoindonesianin Y, 1820
- C<sub>29</sub>H<sub>32</sub>O<sub>6</sub>**  
Fucaxanthone A, 7974
- C<sub>29</sub>H<sub>32</sub>O<sub>10</sub>**  
Bruceantarin, 2659  
Pilosanol A, 17361  
Symploveroside, 20548

- Yuanhuafin, 22931
- C<sub>29</sub>H<sub>32</sub>O<sub>11</sub>**  
Aloeresin D, 975  
Kadsulignan F, 12001
- C<sub>29</sub>H<sub>32</sub>O<sub>12</sub>**  
2''-*O*-Feruloylaloetin, 7771
- C<sub>29</sub>H<sub>32</sub>O<sub>15</sub>**  
2'''-*O*-Acetyl-2''-*O*- $\alpha$ -*L*-rhamnopyranosylisovite-  
xin, 493  
4'''-*O*-Acetyl-2''-*O*- $\alpha$ -*L*-rhamnopyranosylisovite-  
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Apigenin-7-*O*- $\alpha$ -*L*-3-*O*-acetyl-rhamnopyranosyl-  
(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside, 1477  
Camellianin A, 3035  
2-Methyl-1,3,6-trihydroxy-9,10-anthraquinone  
3-*O*-( $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)(6'-acetyl)-  
 $\beta$ -*D*-glucopyranoside), 14777  
1,3,6-Trihydroxy-2-methylanthraquinone-3-*O*-  
 $\alpha$ -rhamnosyl(1 $\rightarrow$ 2)-3'-*O*-acetylglucoside,  
21795
- C<sub>29</sub>H<sub>32</sub>O<sub>16</sub>**  
2-Methyl-1,3,6-trihydroxyanthraquinone  
3-*O*-(6'-*O*-acetyl)-  $\alpha$ -*L*-rhamnosyl-(1 $\rightarrow$ 2)-  
 $\beta$ -*D*-glucoside, 14776  
Multiflorin A, 15068  
Periginatorine, 16925  
Viscumneoside IV, 22539
- C<sub>29</sub>H<sub>32</sub>O<sub>17</sub>**  
2''-*O*-Acetylrutin, 497  
Isoscutellarein 7-*O*-(6'''-*O*-acetyl)- $\beta$ -allopyranos-  
yl(1''' $\rightarrow$ 2''')- $\beta$ -glucopyranoside, 11704  
Kaempferol-3-*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 2)- $\beta$ -  
*D*-6-acetylglucopyranoside, 12051
- C<sub>29</sub>H<sub>33</sub>NO<sub>9</sub>**  
Hernandifoline, 9442
- C<sub>29</sub>H<sub>34</sub>N<sub>4</sub>**  
Ochrolifuanine A, 15924
- C<sub>29</sub>H<sub>34</sub>O<sub>4</sub>**  
Artoindonesianin X, 1819  
Lakoochin B, 12454  
Mulberrofuran D, 15042  
Mulberrofuran W, 15054
- C<sub>29</sub>H<sub>34</sub>O<sub>5</sub>**  
Mulberrofuran X, 15055
- C<sub>29</sub>H<sub>34</sub>O<sub>6</sub>**  
Cowenin, 4200  
Kansuiphorin C, 12147  
Kansuiphorin D, 12148  
Triptofordin B<sub>1</sub>, 21999
- C<sub>29</sub>H<sub>34</sub>O<sub>7</sub>**  
Cowanol, 4201  
Microlenin, 14837  
Scortechinone D, 19549
- Scortechinone E, 19550
- C<sub>29</sub>H<sub>34</sub>O<sub>9</sub>**  
10,15-Epoxy-11(15 $\rightarrow$ 1)-abeo-10-deacetyl-  
baccatin III, 7046  
2-Hydroxyangustidenolide, 9787  
Lancifodilactone D, 12475
- C<sub>29</sub>H<sub>34</sub>O<sub>10</sub>**  
15-Benzoyl-10-deacetyl-2-debenzoyl-10-de-  
hydro-abeo-baccatin III, 2236  
10-Deacetyl-13-oxobaccatin III, 4762  
10-Deacetyl-10-oxobaccatin III, 4763  
10-Deacetyl-10-oxobaccatin V, 4764  
Wallifoliol, 22630  
Yuanhuapin, 22932
- C<sub>29</sub>H<sub>34</sub>O<sub>11</sub>**  
Diandraflavone, 5353  
Ixisoside A, 11798  
Lancifodilactone B, 12473  
Orbiculin H, 16166  
Schizanrin G, 19501  
Tasumatrol A, 20718
- C<sub>29</sub>H<sub>34</sub>O<sub>12</sub>**  
7-*O*-*p*-Hydroxybenzoylovatol 1-*O*-(6'-*O*-*p*-  
hydroxybenzoyl)- $\beta$ -*D*-glucopyranoside, 9828
- C<sub>29</sub>H<sub>34</sub>O<sub>14</sub>**  
Derriscandenoside C, 5224  
Derriscandenoside D, 5225  
Derriscanoside B, 5228  
Embinin, 6769  
Pueroside A, 18185
- C<sub>29</sub>H<sub>34</sub>O<sub>15</sub>**  
Crenatoside, 4225  
Derriscandenoside E, 5226  
Di-cliripariside C, 5439  
Isocrenatoside, 11350  
Pectolarin, 16756  
Reinioside B, 18604  
Reinioside C, 18605  
Tyrollobenzyl F, 22161
- C<sub>29</sub>H<sub>34</sub>O<sub>16</sub>**  
5-Hydroxy-7,4',5'-trimethoxyisoflavone 3'-*O*- $\alpha$ -  
*L*-arabinofuranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyrano-  
side, 10798  
Ombuoside, 16093
- C<sub>29</sub>H<sub>34</sub>O<sub>17</sub>**  
Iristectorigenin B 7-glucosyl(1 $\rightarrow$ 6)glucoside,  
11180  
Syringetin-3-*O*-robinobioside, 20564
- C<sub>29</sub>H<sub>35</sub>N<sub>3</sub>O<sub>4</sub>**  
Sanjoinenine, 19289
- C<sub>29</sub>H<sub>35</sub>O<sub>16</sub>**  
Isolugrandoside, 11513
- C<sub>29</sub>H<sub>35</sub>O<sub>17</sub><sup>+</sup>**
- Malvidin-3,5-diglucoside, 13460
- C<sub>29</sub>H<sub>36</sub>N<sub>2</sub>O<sub>6</sub>**  
Elegansamine, 6738  
Gelsamidine, 8252
- C<sub>29</sub>H<sub>36</sub>O<sub>2</sub>**  
Machillene, 13294
- C<sub>29</sub>H<sub>36</sub>O<sub>5</sub>**  
 $\beta$ -Cinnamoyl-7 $\beta$ -hydroxyvouacapen-5 $\alpha$ -ol,  
3708  
Jolkinol B, 11892
- C<sub>29</sub>H<sub>36</sub>O<sub>6</sub>**  
5-Cinnamoylphototoxicin II, 3719  
Jolkinol A, 11890
- C<sub>29</sub>H<sub>36</sub>O<sub>7</sub>**  
Turraflorin B, 22131  
Turraflorin G, 22135
- C<sub>29</sub>H<sub>36</sub>O<sub>8</sub>**  
Turraflorin F, 22134
- C<sub>29</sub>H<sub>36</sub>O<sub>9</sub>**  
2 $\alpha$ -Acetoxy-9 $\alpha$ -benzoyloxy-5 $\alpha$ ,7 $\beta$ ,10 $\beta$ ,15-tetra-  
hydroxy-11(15 $\rightarrow$ 1)-abeotaxa-4(20),11-dien-  
13-one, 133  
3-*O*-Deacetylorthosiphonol I, 4760  
Orthosiphonone C, 16243
- C<sub>29</sub>H<sub>36</sub>O<sub>10</sub>**  
10-Deacetyl baccatin III, 4722  
13-Epi-10-deacetyl-baccatin III, 6880  
Lancifodilactone C, 12474  
Taxuspinanane C, 20843
- C<sub>29</sub>H<sub>36</sub>O<sub>11</sub>**  
2-Debenzoyl-14 $\beta$ -benzoyloxy-10-deacetyl-  
baccatin III, 4803  
19-Hydroxy-10-deacetyl-baccatin III, 9961  
14 $\beta$ -Hydroxy-10-deacetyl-baccatin III, 9962  
Labriformidin, 12421  
Lancifodilactone E, 12476
- C<sub>29</sub>H<sub>36</sub>O<sub>12</sub>**  
Micrandilactone A, 14832
- C<sub>29</sub>H<sub>36</sub>O<sub>13</sub>**  
Jionoside C, 11884  
Osmanthuside B, 16252  
Osmanthuside B<sub>6</sub>, 16253  
Tabularin, 20586  
Woorenoside II, 22728
- C<sub>29</sub>H<sub>36</sub>O<sub>14</sub>**  
7-*O*- $\beta$ -*D*-Apiofuranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyra-  
nosylmatteucinol, 1512  
Clerodendronoside, 3838  
Isosyringalide 3'- $\alpha$ -*L*-rhamnopyranoside, 11725  
Syringalide 3'- $\alpha$ -*L*-rhamnopyranoside, 20555
- C<sub>29</sub>H<sub>36</sub>O<sub>15</sub>**  
Acteroside, 580  
Forsythoside A, 7924

- Isoacteoside, 11195
- C<sub>29</sub>H<sub>36</sub>O<sub>16</sub>**  
 Forsythoside C, 7926  
 Plantainoside D, 17510  
 Purpureaside A, 18219
- C<sub>29</sub>H<sub>36</sub>O<sub>17</sub>**  
 Hellicoside, 9331  
 Prunose II, 18005
- C<sub>29</sub>H<sub>37</sub>NO<sub>5</sub>**  
 Lythramine, 13268  
 Lythrancepine II, 13270
- C<sub>29</sub>H<sub>37</sub>NO<sub>6</sub>**  
 Benzoylheteratisine, 2243  
 Lythrancine II, 13273
- C<sub>29</sub>H<sub>37</sub>N<sub>3</sub>O<sub>3</sub>**  
 Alangimarckine, 830  
 Tubulosine, 22098
- C<sub>29</sub>H<sub>38</sub>N<sub>4</sub>O<sub>4</sub>**  
 Mucronine A, 15020
- C<sub>29</sub>H<sub>38</sub>N<sub>4</sub>O<sub>5</sub>**  
 Ephedradine B, 6813
- C<sub>29</sub>H<sub>38</sub>O<sub>4</sub>**  
 Celastrol, 3368
- C<sub>29</sub>H<sub>38</sub>O<sub>5</sub>**  
 Kleinioxanthrone 2, 12234
- C<sub>29</sub>H<sub>38</sub>O<sub>7</sub>**  
 2 $\alpha$ -Acetoxy-4 $\beta$ -hydroxy-6 $\alpha$ -angeloyloxy-10 $\beta$ -benzoyloxy-dauc-8-ene, 207  
 Anticancer Norwithanolide PMV70P691-034, 1432  
 Surangin B, 20490
- C<sub>29</sub>H<sub>38</sub>O<sub>8</sub>**  
 9-Deacetyl-9-benzoyl-10-debenzoylbrevifoliol, 4729  
 Lucidenic acid D<sub>2</sub>, 13027
- C<sub>29</sub>H<sub>38</sub>O<sub>9</sub>**  
 Angeloylgomisin Q, 1209  
 [(2S,3R,4R)-4-(3,4,5-Trimethoxybenzyl)-2-(3,4,5-trimethoxyphenyl)-tetrahydrofuran-3-yl]methyl (2Z)-2-methylbut-2-en-oate, 21898  
 Uscharidin, 22280
- C<sub>29</sub>H<sub>38</sub>O<sub>10</sub>**  
 7,13-Dideaceyl-9,10-debenzoyltaxchinin C, 5460
- C<sub>29</sub>H<sub>38</sub>O<sub>11</sub>**  
 Alnuside C, 961  
 Eriocarpin, 7272
- C<sub>29</sub>H<sub>38</sub>O<sub>13</sub>**  
 6'-O-Acetylpsedolaric acid B-O- $\beta$ -D-glucopyranoside, 489  
 Icariside E<sub>7</sub>, 10952  
 Pseudolaric acid B-O- $\beta$ -D-glucopyranoside, 18034
- C<sub>29</sub>H<sub>38</sub>O<sub>15</sub>**
- 2-(4-Hydroxyphenyl)ethyl 1-O- $\beta$ -D-[5-O-(3,4,5-trimethoxybenzoyl)]-apiofuranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside, 10622  
 Isomucronulatol-7,2'-di-O-glucoside, 11545
- C<sub>29</sub>H<sub>38</sub>O<sub>16</sub>**  
 5'-Hydroxy-isomucronulatol-2',5'-di-O-glucoside, 10251  
 3,4,5-Trimethoxyphenyl  
 1-O- $\beta$ -D-[5-O-(3,4-dimethoxybenzoyl)]-apiofuranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside, 21925  
 Yadanzioside F, 22865  
 Yadanzioside I, 22868
- C<sub>29</sub>H<sub>38</sub>O<sub>17</sub>**  
 Albibrissinoside A, 855
- C<sub>29</sub>H<sub>39</sub>NO<sub>6</sub>**  
 Delavaconitine, 4993
- C<sub>29</sub>H<sub>39</sub>NO<sub>9</sub>**  
 Homoharringtonine, 9609
- C<sub>29</sub>H<sub>40</sub>NO<sub>6</sub><sup>+</sup>**  
 Nudicaulin, 15861
- C<sub>29</sub>H<sub>40</sub>N<sub>2</sub>O<sub>4</sub>**  
 Emetine, 6772
- C<sub>29</sub>H<sub>40</sub>N<sub>8</sub>O<sub>5</sub>**  
 Hordatine B, 9645
- C<sub>29</sub>H<sub>40</sub>O<sub>2</sub>**  
 Papyriogenin H, 16641
- C<sub>29</sub>H<sub>40</sub>O<sub>4</sub>**  
 2 $\alpha$ ,3 $\beta$ -Dihydroxy-28-norurs-12,17,19(20),21-tetraen-23-oic acid, 6055  
 8 $\alpha$ -Hydroxyabda-13(16),14-dien-19-yl-(Z)-4-hydroxycinnamate, 10300
- C<sub>29</sub>H<sub>40</sub>O<sub>5</sub>**  
 (13S)-*ent*-18-(E)-Coumaroyloxy-8(17)-labden-15-oic acid, 4181  
 Datumetelin, 4664  
 Daturametelin C, 4668  
 Zhankuic acid A, 22990
- C<sub>29</sub>H<sub>40</sub>O<sub>6</sub>**  
*ent*-15-(E)-Caffeoyloxy-8(17)-labden-18-oic acid, 2916  
*ent*-18-(E)-Caffeoyloxy-8(17)-labden-15-oic acid, 2917  
 16 $\beta$ ,22R;21,23S-Diepoxy-21S,24-dihydroxy-5 $\alpha$ -stigmasta-8,14-diene-3,28-dione, 5490  
 Erectquione B, 7224  
 Zafaral, 22961
- C<sub>29</sub>H<sub>40</sub>O<sub>7</sub>**  
 Ardisiaquinone E, 1633  
*ent*-18-(E)-Caffeoyloxy-7 $\beta$ -hydroxy-3-cleroden-15-oic acid, 2914  
 Neocucurbitacin B, 15377
- C<sub>29</sub>H<sub>40</sub>O<sub>8</sub>**  
 Ajugalactone, 794
- Lucidenic acid E<sub>2</sub>, 13029  
 Phorbol-12-tiglate-13-butyrate, 17192
- C<sub>29</sub>H<sub>40</sub>O<sub>9</sub>**  
 Calactin, 2937  
 Calcicolin A<sub>2</sub><sup>+</sup>, 2948
- C<sub>29</sub>H<sub>40</sub>O<sub>10</sub>**  
 Ajugamarin, 801
- C<sub>29</sub>H<sub>40</sub>O<sub>11</sub>**  
 Hellebortin A, 9326  
 Hellebortin C, 9328  
 1 $\alpha$ -( $\alpha$ -Methyl)-butanoyl-2 $\alpha$ ,15-diacetoxy-4 $\beta$ -hydroxy-9 $\beta$ -( $\beta$ -)furoyloxy- $\beta$ -dihydroagarofuran, 14164  
 Neocynanversicoside, 15387
- C<sub>29</sub>H<sub>40</sub>O<sub>15</sub>**  
 1 $\beta$ ,2 $\beta$ ,3 $\alpha$ ,5 $\alpha$ ,7 $\beta$ ,8 $\beta$ ,11-Heptaacetoxy-dihydroagarofuran, 9367
- C<sub>29</sub>H<sub>40</sub>O<sub>16</sub>**  
 6-O-(4"-O- $\alpha$ -L-Rhamnopyranosyl) vanilloyl-ajugol, 18735  
 Yadanzioside D, 22863
- C<sub>29</sub>H<sub>42</sub>O<sub>2</sub>**  
 Papyriogenin I, 16642
- C<sub>29</sub>H<sub>42</sub>O<sub>3</sub>**  
 Bryophyllone, 2692
- C<sub>29</sub>H<sub>42</sub>O<sub>4</sub>**  
 17 $\beta$ -Hydroxy-3,11,16-trioxo-28-norolean-12-ene, 10813  
 Tripterygone, 21992
- C<sub>29</sub>H<sub>42</sub>O<sub>5</sub>**  
 Siraitic acid B, 19972  
 Zhankuic acid B, 22991
- C<sub>29</sub>H<sub>42</sub>O<sub>6</sub>**  
 Zhankuic acid C, 22992
- C<sub>29</sub>H<sub>42</sub>O<sub>8</sub>**  
 Caseamembrin E, 3262  
 Caseamembrol A, 3264  
 Casearinol A, 3269  
 Casearlucin A, 3274  
*rel*-(2S,5R,6R,8S,9S,10R,18S,19R)-diacetoxy-18,19-epoxy-6-hydroxy-2-(2-methylbutanoyloxy)cleroda-3,13(16),14-triene, 5297  
 Lucidenic acid P, 13040  
 Rasfonin diacetate, 18550  
 2 $\alpha$ ,5 $\alpha$ ,10 $\beta$ -Triacetoxy-14 $\beta$ -propionyloxytaxa-4(20),11-diene, 21531
- C<sub>29</sub>H<sub>42</sub>O<sub>9</sub>**  
 Ajugamarin F<sub>4</sub>, 805  
 Caseamembrol B, 3265  
 Corchoroside A, 4036  
 2,3-Dihydro-3 $\beta$ -methoxyxycarpalactone B, 5672  
 Helveticoside, 9335  
 Malayoside, 13418

- Peruvoside, 17002  
Rhapontisterone R<sub>1</sub>, 18751
- C<sub>29</sub>H<sub>42</sub>O<sub>9</sub>S**  
Daturametelin E, 4669
- C<sub>29</sub>H<sub>42</sub>O<sub>10</sub>**  
Adonitoxin, 646  
Aspecioside, 1887  
Convallatoxin, 4012  
Deglucocheirototoxin, 4871  
Securigenin-3β-O-β-6-deoxyguloside, 19638  
Strophalloside, 20396
- C<sub>29</sub>H<sub>42</sub>O<sub>11</sub>**  
α-Antiarin, 1376  
β-Antiarin, 1377  
Glabcensin O, 8476  
Sarmentosigenin-3β-O-β-6-deoxyguloside, 19376  
Strophanthidin-glucoside, 20399
- C<sub>29</sub>H<sub>42</sub>O<sub>12</sub>**  
Antialloside, 1374
- C<sub>29</sub>H<sub>42</sub>O<sub>18</sub>**  
Tangshenoside I, 20672
- C<sub>29</sub>H<sub>42</sub>O<sub>19</sub>**  
Arillatose D, 1687  
Arillatose F, 1689
- C<sub>29</sub>H<sub>44</sub>NO**  
(22*E*,24*R*)-3α-Ureido-ergosta-4,6,8(14),22-tetra-ene, 22249
- C<sub>29</sub>H<sub>44</sub>O**  
(22*E*,24*S*)-Stigmasta-1,4,22-trien-3-one, 20361
- C<sub>29</sub>H<sub>44</sub>O<sub>2</sub>**  
Koelpinin C, 12245  
Maragenin II, 13546
- C<sub>29</sub>H<sub>44</sub>O<sub>3</sub>**  
17β-Hydroxy-3,16-dioxo-28-norolean-12-ene, 10057  
Larreagenin A, 12526  
3-Oxobetulinic acid, 16295  
Pfaffic acid, 17037
- C<sub>29</sub>H<sub>44</sub>O<sub>4</sub>**  
2α,3α-Dihydroxy-30-noroleana-12,20(29)-dien-28-oic acid, 6050  
2α,3β-Dihydroxy-30-noroleana-12,20(29)-dien-28-oic acid, 6051  
Diosgenin acetate, 6441  
Ilekudinol B, 10969  
Quinatic acid, 18419  
Yamogenin acetate, 22879
- C<sub>29</sub>H<sub>44</sub>O<sub>5</sub>**  
Siraitic acid A, 19971  
2α,3β,23-Trihydroxy-30-noroleana-12,20(21)-dien-28-oic acid, 21812  
2α,3β,23-Trihydroxy-30-noroleana-12,20(29)-dien-28-oic acid, 21813
- 2α,3α,19α-Trihydroxy-24-norurs-4(23),12-dien-28-oic acid, 21817
- C<sub>29</sub>H<sub>44</sub>O<sub>6</sub>**  
Antcin K, 1351  
4(*R*),23-Epoxy-2α,3α,19α-trihydroxy-24-norurs-12-en-28-oic acid, 7209
- C<sub>29</sub>H<sub>44</sub>O<sub>7</sub>**  
Capitasterone, 3131  
Hongdoushan A, 9626
- C<sub>29</sub>H<sub>44</sub>O<sub>8</sub>**  
Casearinol B, 3270  
Cyasterone, 4455  
10-Deacetylyunnanaxane, 4793  
Isocyasterone, 11361  
Precyasterone, 17778
- C<sub>29</sub>H<sub>44</sub>O<sub>9</sub>**  
Corchorosol A, 4037  
Diginatin, 5523  
2,3-Dihydro-3β-methoxyxocarpalactone A, 5671  
Helveticosol, 9336  
Peripalloside, 16937  
Periplogenin-3-O-α-L-rhamnopyranoside, 16960  
Rhodexin A, 18785  
Rhodexin B, 18786  
Sengosterone, 19730
- C<sub>29</sub>H<sub>44</sub>O<sub>10</sub>**  
Alliside, 922  
Antioside, 1461  
α-Antioside, 1462  
Convallatolol, 4013  
19-Hydroxy-sarmentogenin-3β-O-β-6-deoxyguloside, 10692  
Lokundjioside, 12951  
3β,5β,11α,14β-Tetrahydroxy-5β-card-20(22)enolide-3α-L-rhamnoside, 21084
- C<sub>29</sub>H<sub>44</sub>O<sub>11</sub>**  
Bipindogenin-3-O-β-D-allopyranoside, 2400  
Hativene A, 9246  
Hativene B, 9247  
Hativene C, 9248  
Sarmentolloside, 19374
- C<sub>29</sub>H<sub>44</sub>O<sub>12</sub>**  
Strophanthin G, 20403
- C<sub>29</sub>H<sub>44</sub>O<sub>13</sub>**  
4-Hydroxy-2-[(2*E*,6*Z*)-8-β-*D*-glucopyranosyloxy-3,7-dimethylocta-2,6-dien-1-yl]-5-methylphenyl β-*D*-glucopyranoside, 10150
- C<sub>29</sub>H<sub>45</sub>NO<sub>8</sub>**  
Zygacine, 23031
- C<sub>29</sub>H<sub>45</sub>N<sub>3</sub>O**  
Epipachysamine B, 6991
- C<sub>29</sub>H<sub>46</sub>**  
24-Nor-4(23),9(11)-fernadiene, 15748
- C<sub>29</sub>H<sub>46</sub>N<sub>2</sub>O<sub>2</sub>**  
Holafirine, 9578
- C<sub>29</sub>H<sub>46</sub>O**  
7-Dehydroporiferasterol, 4963  
(24*S*)-Ethylcholesta-5,22,25-trien-3β-ol, 7428  
24β-Ethylcholesta-5,9(11),22-trien-3β-ol, 7429  
24-Methylenepollinastanone, 14389  
(22*E*,24*R*)-Stigmasta-1,4-dien-3-one, 20348  
(22*E*,20*S*,24*S*)-Stigmasta-7,22-dien-3-one, 20349  
Stigmasta-4,22-dien-3-one, 20350  
Stigmasta-5,22-dien-3-one, 20351  
5α-Stigmasta-7,22-dien-3-one, 20352  
7,22,25-Stigmastatrienol, 20360
- C<sub>29</sub>H<sub>46</sub>O<sub>2</sub>**  
22-Dihydrostigmast-4-en-3,6-dione, 5720  
Koelpinin A, 12243  
Lactucasterol, 12445  
Myricaolal\*, 15166  
(23*E*)-27-Nor-3β-hydroxycycloart-23-en-25-one, 15757  
Stigmasta-5,22-dien-3β-ol-7-one, 20347  
Stigmast-4-ene-1,3-dione, 20364  
Stigmast-4-ene-3,6-dione, 20365
- C<sub>29</sub>H<sub>46</sub>O<sub>4</sub>**  
24-Hydroxy-11-deoxoglycyrrhetic acid, 9985  
(2*R*,3*R*,4*S*,6*R*)-6-Methoxycarbonyl-3-methyl-4,6-di(3-methyl-2-butenyl)-2-(2-methyl-1-oxopropyl)-3-(4-methyl-3-pentenyl)cyclohexanone, 13875  
Trisnorcycloartenolonic acid acetate, 22038
- C<sub>29</sub>H<sub>46</sub>O<sub>6</sub>**  
Asparacosin B, 1865  
Isothankunic acid, 11738  
Pogosterol, 17600
- C<sub>29</sub>H<sub>46</sub>O<sub>7</sub>**  
Ajugasterone B, 810  
Decumbesterone A, 4860
- C<sub>29</sub>H<sub>46</sub>O<sub>9</sub>**  
Pubeside E, 18179
- C<sub>29</sub>H<sub>47</sub>NO<sub>6</sub>**  
Coumingine, 4192
- C<sub>29</sub>H<sub>48</sub>**  
4-Methyl-7-ergosta-8,24(28)-diene, 14414
- C<sub>29</sub>H<sub>48</sub>N<sub>2</sub>O<sub>2</sub>**  
Pachysantermine A, 16509  
Pachystermine A, 16512
- C<sub>29</sub>H<sub>48</sub>N<sub>8</sub>O<sub>9</sub>**  
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- C<sub>29</sub>H<sub>48</sub>O**  
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- Fucosterol, 7978  
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 5 $\alpha$ -Stigmasta-22-en-3-one, 20354  
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- C<sub>29</sub>H<sub>48</sub>O<sub>2</sub>**  
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 22,29 $\zeta$ -Epoxy-30-norhopane-13 $\beta$ -ol, 7178  
 3 $\beta$ -Hydroxy-29-norcycloart-24-one, 10539  
 21-Hydroxy-30-norhopan-22-one, 10541  
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 30-Nor-lupan-3 $\beta$ -ol-20-one, 15774  
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 5 $\alpha$ -Stigmastan-3,6-dione, 20355
- C<sub>29</sub>H<sub>48</sub>O<sub>3</sub>**  
 (24*R*)-7 $\alpha$ -Hydroperoxystigmasta-5,22-dien-3 $\beta$ -ol, 9735  
 (22*E*,24*S*)-7 $\alpha$ -Hydroperoxystigmasta-5,22-dien-3 $\beta$ -ol, 9736  
 4 $\alpha$ -Methyl-3 $\beta$ ,14 $\beta$ -dihydroxy-5 $\alpha$ -ergost-24(28)-en-23-one, 14300  
 26-Nor-8-oxo- $\alpha$ -onocerin, 15786  
 1-Oxo-7 $\alpha$ -hydroxysitosterol, 16356  
 2 $\alpha$ ,3 $\alpha$ ,19 $\alpha$ -Trihydroxy-28-norurs-12-ene, 21818  
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- C<sub>29</sub>H<sub>48</sub>O<sub>4</sub>**  
 Eicosyl caffeate, 6726
- C<sub>29</sub>H<sub>48</sub>O<sub>5</sub>**  
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- C<sub>29</sub>H<sub>48</sub>O<sub>7</sub>**  
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- C<sub>29</sub>H<sub>48</sub>O<sub>10</sub>S**
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- C<sub>29</sub>H<sub>49</sub>NO<sub>2</sub>**  
 24-Hydroxyimino-29-norcycloart-3-ol, 10230
- C<sub>29</sub>H<sub>50</sub>N<sub>2</sub>O**  
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- C<sub>29</sub>H<sub>50</sub>N<sub>2</sub>O<sub>2</sub>**  
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- C<sub>29</sub>H<sub>50</sub>O**  
 7-Dehydrostigmasterol, 4971  
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 24,24-Dimethyl-5 $\alpha$ -cholesta-8-en-3 $\beta$ -ol, 6331  
 14 $\alpha$ -Methyl-5 $\alpha$ -ergosta-9(11)-en-3 $\beta$ -ol, 14416  
 24-Methyllophenol, 14558  
 29-Norcycloartan-3 $\beta$ -ol, 15729  
 29-Nor-22-hopanol, 15756  
 29-Norlanost-8-enol, 15771  
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 $\beta$ -Sitosterol, 19983  
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 5 $\alpha$ -Stigmast-7-en-3 $\beta$ -ol, 20366  
 22-Stigmasterol, 20370
- C<sub>29</sub>H<sub>50</sub>O<sub>2</sub>**  
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 Stigmast-5-ene-3 $\beta$ ,7 $\alpha$ -diol, 20362  
 Stigmast-5-ene-3 $\beta$ ,7 $\beta$ -diol, 20363  
 $\alpha$ -Tocopherol, 21415
- C<sub>29</sub>H<sub>50</sub>O<sub>4</sub>**  
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- C<sub>29</sub>H<sub>52</sub>O**  
 24 $\alpha$ -Ethyl-5 $\alpha$ -cholestan-3 $\beta$ -ol, 7427  
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- C<sub>29</sub>H<sub>52</sub>O<sub>3</sub>**  
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- C<sub>29</sub>H<sub>53</sub>O<sub>3</sub>**  
 7 $\alpha$ ,22*S*-Dihydroxysitosterol, 6123
- C<sub>29</sub>H<sub>54</sub>O<sub>9</sub>**  
 1-*O*-Gluco-2-*O*-gadoleic-glyceride, 8597
- C<sub>29</sub>H<sub>56</sub>O<sub>2</sub>**  
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- C<sub>29</sub>H<sub>58</sub>O**  
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- C<sub>29</sub>H<sub>60</sub>O**  
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- C<sub>30</sub>H<sub>16</sub>O<sub>12</sub>**  
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- C<sub>30</sub>H<sub>18</sub>CaO<sub>14</sub>**  
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- C<sub>30</sub>H<sub>18</sub>O<sub>8</sub>**  
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- C<sub>30</sub>H<sub>18</sub>O<sub>11</sub>**  
 Ridiculoflavone A, 18844
- C<sub>30</sub>H<sub>18</sub>O<sub>12</sub>**  
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- C<sub>30</sub>H<sub>18</sub>O<sub>14</sub>**  
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- C<sub>30</sub>H<sub>20</sub>N<sub>4</sub>O<sub>6</sub>**  
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- C<sub>30</sub>H<sub>20</sub>O<sub>8</sub>**  
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- C<sub>30</sub>H<sub>20</sub>O<sub>10</sub>**  
2",3"-Dihydroochnaflavone, 5683  
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- C<sub>30</sub>H<sub>20</sub>O<sub>11</sub>**  
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- C<sub>30</sub>H<sub>20</sub>O<sub>12</sub>**  
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- C<sub>30</sub>H<sub>22</sub>O<sub>6</sub>**  
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- C<sub>30</sub>H<sub>22</sub>O<sub>7</sub>**  
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- C<sub>30</sub>H<sub>22</sub>O<sub>8</sub>**  
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- C<sub>30</sub>H<sub>22</sub>O<sub>9</sub>**  
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- C<sub>30</sub>H<sub>22</sub>O<sub>10</sub>**  
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- C<sub>30</sub>H<sub>22</sub>O<sub>11</sub>**  
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- C<sub>30</sub>H<sub>22</sub>O<sub>12</sub>**  
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- C<sub>30</sub>H<sub>22</sub>O<sub>13</sub>**
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- C<sub>30</sub>H<sub>24</sub>N<sub>4</sub>O<sub>5</sub>**  
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- C<sub>30</sub>H<sub>24</sub>O<sub>6</sub>**  
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(2"'-hydroxy-4"'-hydroxy dihydrochalcone),  
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- C<sub>30</sub>H<sub>24</sub>O<sub>8</sub>**  
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- C<sub>30</sub>H<sub>24</sub>O<sub>9</sub>**  
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- C<sub>30</sub>H<sub>24</sub>O<sub>10</sub>**  
*ent*-Epiafzelechin-(2 $\alpha$ →*O*→7, 4 $\alpha$ →8)-(+)-afzelechin, 6820  
*ent*-Epiafzelechin-(2 $\alpha$ →*O*→7,4 $\alpha$ →8)-(-)-afzelechin, 6821  
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- C<sub>30</sub>H<sub>24</sub>O<sub>12</sub>**  
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Epicatechin-(2 $\beta$ →*O*→7,4 $\beta$ →6)-*ent*-catechin, 6856  
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- C<sub>30</sub>H<sub>24</sub>O<sub>14</sub>**  
Apigenin-7-*O*- $\beta$ -*D*-(4"-caffeoyl)glucuronide, 1483
- C<sub>30</sub>H<sub>26</sub>O<sub>6</sub>**  
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- C<sub>30</sub>H<sub>26</sub>O<sub>8</sub>**  
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- C<sub>30</sub>H<sub>26</sub>O<sub>10</sub>**  
Afzelechin-(4 $\alpha$ →8)-afzelechin, 678  
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- C<sub>30</sub>H<sub>26</sub>O<sub>11</sub>**  
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- C<sub>30</sub>H<sub>26</sub>O<sub>12</sub>**  
Apigenin-7-*O*-(6"-*E*)-*p*-coumaroyl)- $\beta$ -*D*-galactopyranoside, 1484  
Apigenin-7-*O*- $\beta$ -*D*-(6"-*p*-coumaroyl)-glucoside, 1485  
Apigenin-7-*O*- $\beta$ -*D*-(6'-*p*-hydroxy-cinnamoyloxy)-mannoside, 1496  
4-*O*-8',5'-5"-Dehydrotriferulic acid, 4977  
Epioritin-4 $\alpha$ -ol-(6→6)-epioritin-4 $\beta$ -ol, 6984  
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Procyanidin B<sub>7</sub>, 17890  
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- C<sub>30</sub>H<sub>26</sub>O<sub>13</sub>**  
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- C<sub>30</sub>H<sub>26</sub>O<sub>14</sub>**  
Ergoflavine, 7237  
Galocatechin-(4 $\alpha$ →8)-epigallocatechin, 8101  
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Prodelfinidin B<sub>2</sub>, 17899
- C<sub>30</sub>H<sub>26</sub>O<sub>15</sub>**  
6-Hydroxykaempferol-7-*O*-(6-*O*-caffeoyl)- $\beta$ -*D*-glucopyranoside, 10272  
6-Hydroxyluteolin  
7-*O*-(6"-*O*-*E*)-caffeoyl)- $\beta$ -glucopyranoside, 10352  
Myricetin-3'-*O*-(6"-*p*-coumaroyl) glucoside, 15174  
Nympholide A, 15877  
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Quercetagenin-7-*O*-(6-*O*-*p*-coumaroyl)- $\beta$ -*D*-glucopyranoside, 18307  
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- 18332  
**C<sub>30</sub>H<sub>26</sub>O<sub>16</sub>**  
 Quercetagenin-7-*O*-(6-*O*-caffeoyl- $\beta$ -*D*-glucopyranoside), 18306
- C<sub>30</sub>H<sub>26</sub>O<sub>17</sub>**  
 Myricetin-3-*O*-(4''-*O*-acetyl-2''-*O*-galloyl)- $\alpha$ -L-<sup>1</sup>C<sub>4</sub>-rhamnopyranoside, 15172
- C<sub>30</sub>H<sub>27</sub>O<sub>13</sub><sup>+</sup>**  
 Hyacinthin, 9696
- C<sub>30</sub>H<sub>27</sub>O<sub>14</sub><sup>+</sup>**  
 Delphinidin-3-*O*- $\beta$ -*D*-(6-*E*)-*p*-coumaryl galactopyranoside, 5018
- C<sub>30</sub>H<sub>27</sub>O<sub>17</sub><sup>+</sup>**  
 Delphinidin-3'-*O*-(2''-*O*-galloyl-6''-*O*-acetyl- $\beta$ -galactopyranoside), 5023
- C<sub>30</sub>H<sub>28</sub>O<sub>6</sub>**  
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 Dibothrioclinin II, 5397  
 Diuvaretin, 6528  
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- C<sub>30</sub>H<sub>28</sub>O<sub>8</sub>**  
 Isorottlerin, 11685  
 Rottlerin, 18940
- C<sub>30</sub>H<sub>28</sub>O<sub>9</sub>**  
 Gemichalcone C, 8262  
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 4-Hydroxyrottlerin, 10682
- C<sub>30</sub>H<sub>28</sub>O<sub>10</sub>**  
 Hypomycin C, 10904  
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- C<sub>30</sub>H<sub>28</sub>O<sub>11</sub>**  
 Crenatoside, 4226
- C<sub>30</sub>H<sub>28</sub>O<sub>12</sub>**  
 3'-*O*-*trans*-Cinnamoyl-astilbin, 3700  
 Ethyl lithospermate, 7457  
 Naringenin 7-*O*-(6''-*O*-*trans*-*p*-coumaroyl)-glucoside, 15280
- C<sub>30</sub>H<sub>28</sub>O<sub>13</sub>**  
 2''-*O*-(3''',4'''-Dimethoxybenzoyl)vitexin, 6208  
 (*S*)-Eriodictyol-7-*O*-(6''-*O*-*trans*-*p*-coumaroyl)- $\beta$ -*D*-glucopyranoside, 7279
- C<sub>30</sub>H<sub>28</sub>O<sub>14</sub>**  
 2''-*O*-(3''',4'''-Dimethoxybenzoyl)orientin, 6207
- C<sub>30</sub>H<sub>29</sub>N<sub>4</sub>O<sub>4</sub><sup>+</sup>**  
 Kumujansine B, 12333
- C<sub>30</sub>H<sub>30</sub>N<sub>2</sub>O<sub>4</sub>**  
 Melicobisquinolinone A, 13676
- C<sub>30</sub>H<sub>30</sub>O<sub>5</sub>**  
 2,6-Bis(*p*-hydroxybenzyl)-3',5-dimethoxy-3-hydroxybibenzyl, 2457
- C<sub>30</sub>H<sub>30</sub>O<sub>7</sub>**  
 Artonin A, 1821  
 Cycloheterophyllin, 4495  
 Formosanatin C, 7891  
 Paleatin B, 16540  
*p*-Tolyl-methyl carbinol diferuloyl methane, 21432
- C<sub>30</sub>H<sub>30</sub>O<sub>8</sub>**  
 Gossypol, 8967
- C<sub>30</sub>H<sub>30</sub>O<sub>9</sub>**  
 1-*O*-Acetyl-rocaglic acid methyl ester, 495  
 Bismurrangatin, 2485
- C<sub>30</sub>H<sub>30</sub>O<sub>10</sub>**  
*rel*-5-Hydroxy-7,4'-dimethoxy-2''*S*-(2,4,5-trimethoxy-*E*-styryl)-tetrahydrofuro[4''*R*,5''*R*:2,3]flavanonol, 10042  
*rel*-5-Hydroxy-7,4'-dimethoxy-3''*S*-(2,4,5-trimethoxy-*E*-styryl)tetrahydrofuro[4''*R*,5''*R*:2,3]flavanonol, 10043
- C<sub>30</sub>H<sub>30</sub>O<sub>11</sub>**  
 Piceid 2'-*O*-*E*-ferulate, 17284  
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- C<sub>30</sub>H<sub>30</sub>O<sub>12</sub>**  
 (+)-Catechin-3-*O*- $\beta$ -*D*-gluco(2-cinnamoyl)-pyranoside, 3311  
 (+)-Catechin-3-*O*- $\beta$ -*D*-gluco(6-cinnamoyl)-pyranoside, 3312  
 Curtisian M, 4409
- C<sub>30</sub>H<sub>30</sub>O<sub>13</sub>**  
 Myrciacitrin V, 15151
- C<sub>30</sub>H<sub>31</sub>NO<sub>7</sub>**  
 Murrayanine II\*, 15119
- C<sub>30</sub>H<sub>32</sub>O<sub>5</sub>**  
 5-Hydroxy-8-methyl-6-(2-methylbutanoyl)-8-(4-methylpent-3-enyl)-4-phenyl-2*H*-pyrano[2,3-*h*]chromen-2-one, 10507
- C<sub>30</sub>H<sub>32</sub>O<sub>6</sub>**  
 BF-4, 2339  
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- C<sub>30</sub>H<sub>32</sub>O<sub>7</sub>**  
 Brousoflavonol D, 2634  
 Dorsmanin C, 6563  
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- C<sub>30</sub>H<sub>32</sub>O<sub>8</sub>**  
 Benzoylisogomisin O, 2245  
 Formosanatin A, 7889
- C<sub>30</sub>H<sub>32</sub>O<sub>9</sub>**  
 Benzoylgomisin P, 2241  
 Formosanatin B, 7890
- Gomisin C, 8908  
 Gomisin G, 8912  
 Lactucain B, 12442  
 Lappaol A, 12513
- C<sub>30</sub>H<sub>32</sub>O<sub>10</sub>**  
 Dumosaol, 6635
- C<sub>30</sub>H<sub>32</sub>O<sub>12</sub>**  
 Benzoylpaeoniflorin, 2266  
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- C<sub>30</sub>H<sub>32</sub>O<sub>13</sub>**  
 Benzoyl-oxypaeoniflorin, 2263
- C<sub>30</sub>H<sub>32</sub>O<sub>18</sub>**  
 Kaempferol-3-*O*-(2''-*O*- $\alpha$ -rhamnosyl-6''-*O*-malonyl)- $\beta$ -glucoside, 12088
- C<sub>30</sub>H<sub>32</sub>O<sub>19</sub>**  
 Quercetin-3-*O*-(2''-*O*- $\alpha$ -rhamnosyl-6''-*O*-malonyl)- $\beta$ -glucoside, 18389
- C<sub>30</sub>H<sub>33</sub>NO<sub>8</sub>**  
 3'-Hydroxy-8 $\beta$ -ethyl ether-rocaglic acid methylamide, 10098  
 Neoharringtonine, 15403  
 Thaliadine, 21238
- C<sub>30</sub>H<sub>33</sub>O<sub>19</sub>**  
 Delphinidin-3-*O*-(2''-*O*- $\alpha$ -rhamnosyl-6''-*O*-malonyl)- $\beta$ -glucoside, 5030
- C<sub>30</sub>H<sub>33</sub>O<sub>20</sub><sup>+</sup>**  
 Delphinidin-3-*O*-( $\beta$ -*D*-glucopyranoside)-5-*O*-(6-*O*-malonyl-( $\beta$ -*D*-glucopyranoside), 5025  
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- C<sub>30</sub>H<sub>34</sub>BrN<sub>5</sub>O<sub>15</sub>**  
 Neosurugatoxin, 15461
- C<sub>30</sub>H<sub>34</sub>N<sub>2</sub>O<sub>5</sub>**  
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- C<sub>30</sub>H<sub>34</sub>N<sub>2</sub>O<sub>19</sub>**  
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- C<sub>30</sub>H<sub>34</sub>N<sub>4</sub>**  
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- C<sub>30</sub>H<sub>34</sub>O<sub>4</sub>**  
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- C<sub>30</sub>H<sub>34</sub>O<sub>5</sub>**  
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- 5,7-Dihydroxy-8-(3-methylbutanoyl)-6-[(*E*)-3,7-dimethylocta-2,6-dienyl]-4-phenyl-2*H*-chrome *n*-2-one, 6021  
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- C<sub>30</sub>H<sub>34</sub>O<sub>6</sub>**  
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- C<sub>30</sub>H<sub>34</sub>O<sub>7</sub>**  
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- C<sub>30</sub>H<sub>34</sub>O<sub>8</sub>**  
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- C<sub>30</sub>H<sub>34</sub>O<sub>10</sub>**  
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- C<sub>30</sub>H<sub>34</sub>O<sub>15</sub>**  
(6-*O*-(*E*)-*p*-Coumaroyl)- $\beta$ -*D*-fructofuranosyl-(2 $\rightarrow$ 1)-(6-*O*-(*E*)-*p*-coumaroyl)- $\alpha$ -*D*-glucopyranoside, 4158  
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6,6'-Sucrose ester of (1 $\alpha$ ,2 $\alpha$ ,3 $\beta$ ,4 $\beta$ )-3,4-bis(4-hydroxyphenyl)-1,2-cyclobutanedicarboxylic acid, 20447
- C<sub>30</sub>H<sub>34</sub>O<sub>17</sub>**  
2''-*O*-Acetyl-3'-*O*-methylrutin, 466  
6-Hydroxyluteolin 4'-methyl ether 7-*O*- $\alpha$ -rhamnopyranosyl(1'' $\rightarrow$ 2'')[6''-*O*-acetyl- $\beta$ -glucopyranoside], 10356
- C<sub>30</sub>H<sub>35</sub>NO<sub>10</sub>**  
Celapanine, 3361
- C<sub>30</sub>H<sub>35</sub>NO<sub>16</sub>**  
Oleracein C, 16076
- C<sub>30</sub>H<sub>36</sub>N<sub>2</sub>O<sub>18</sub>**  
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11 $\beta$ ,12 $\alpha$ -Diacetoxy-14 $\beta$ ,15 $\beta$ -epoxynoteceleanin, 5299  
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- C<sub>30</sub>H<sub>36</sub>O<sub>11</sub>**  
2 $\beta$ -( $\beta$ -*D*-glucopyranosyloxy)-8 $\beta$ -(4''-methoxyphenylacetoxyl)-guaia-4(15),10(14),11(13)-trien-1 $\alpha$ ,5 $\alpha$ ,6 $\beta$ ,7 $\alpha$ H-12,6-olide, 8706  
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11-Oxocneorin G, 16301
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14-*O*-Methylacetal-15-*O*-[6'-(*p*-hydroxyphenylacetyl)]- $\beta$ -*D*-glucopyranosylurospermal A, 14110
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3'''-*O*-Methylcrenatoside, 14261  
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Lathyril-3,15-diacetate-5-nicotinate, 12545
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- C<sub>30</sub>H<sub>40</sub>O<sub>18</sub>**  
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- C<sub>31</sub>H<sub>28</sub>N<sub>2</sub>O<sub>6</sub>**  
 Pyrimidinone, 18262
- C<sub>31</sub>H<sub>28</sub>N<sub>2</sub>O<sub>7</sub>**  
 Didehydro-3'-hydroxyaglaiastatin, 5463
- C<sub>31</sub>H<sub>28</sub>N<sub>4</sub>O<sub>5</sub>**  
 Picrasidine R, 17310
- C<sub>31</sub>H<sub>28</sub>O<sub>9</sub>**  
 Curtisian K, 4407  
 Thelephantin B, 21294
- C<sub>31</sub>H<sub>28</sub>O<sub>13</sub>**  
 Hispidulin 7-(6-*E-p*-coumaroyl- $\beta$ -*D*-glucopyranoside), 9565
- C<sub>31</sub>H<sub>28</sub>O<sub>14</sub>**  
 Ergochrysin, 7231  
 2"-*O*-Feruloylorientin, 7783  
 6-Methoxykaempferol-3-*O*- $\beta$ -*D*-6"(*p*-coumaroyl)  
 glucopyranoside, 13981
- C<sub>31</sub>H<sub>28</sub>O<sub>15</sub>**  
 3'-Hydroxyscutellarein  
 7-*O*-(6"-*O-trans*-feruloyl)- $\beta$ -glucopyranoside,  
 10694  
 6-Methoxyquercetin-3-*O*- $\beta$ -*D*-6"(*p*-coumaroyl)  
 glucopyranoside, 14082
- C<sub>31</sub>H<sub>28</sub>O<sub>16</sub>**
- 1,3-Di-*O*-(*E*)-caffeoyl-4-*O*-galloyl- $\beta$ -*D*-gluco-  
 pyranose, 5406  
 Quercetin-3-*O*-(6"-feruloyl)- $\beta$ -*D*-galactopyra-  
 noside, 18353
- C<sub>31</sub>H<sub>30</sub>O<sub>7</sub>**  
 Cochinchinenin, 3867
- C<sub>31</sub>H<sub>30</sub>O<sub>9</sub>**  
 3,4-Dihydroxyrottlerin, 6111
- C<sub>31</sub>H<sub>30</sub>O<sub>10</sub>**  
 Angustifolin B, 1247
- C<sub>31</sub>H<sub>30</sub>O<sub>11</sub>**  
 Kadsulignan C, 11998  
 Kadsulignan E, 12000
- C<sub>31</sub>H<sub>30</sub>O<sub>15</sub>**  
 6"-*O-p*-Hydroxybenzoyliridin, 9826
- C<sub>31</sub>H<sub>32</sub>N<sub>4</sub>O<sub>2</sub>**  
 Roxburghine, 18968  
 Roxburghine X, 18969
- C<sub>31</sub>H<sub>32</sub>O<sub>6</sub>**  
 Artocmunol CA, 1810
- C<sub>31</sub>H<sub>32</sub>O<sub>8</sub>**  
 Longipedunin A, 12966  
 6-Methoxygossypol, 13944
- C<sub>31</sub>H<sub>32</sub>O<sub>12</sub>**  
 Gnetumontanin D, 8896
- C<sub>31</sub>H<sub>32</sub>O<sub>14</sub>**  
 Cypellogin C, 4572
- C<sub>31</sub>H<sub>32</sub>O<sub>15</sub>**  
 Majidine, 13403  
 Procumbenoid A, 17872
- C<sub>31</sub>H<sub>32</sub>O<sub>16</sub>**  
 3,4-Di-*O*-caffeoyl-5-*O*-(3-hydroxy-3-methyl)  
 glutaroyl quinic acid, 5411  
 3,5-Di-*O*-caffeoyl-4-*O*-(3-hydroxy-3-methyl)  
 glutaroylquinic acid, 5412
- C<sub>31</sub>H<sub>33</sub>O<sub>18</sub><sup>+</sup>**  
 3,5-Di-*O*-( $\beta$ -glucopyranosyl)pelargonidin  
 6"-*O*-4,6"-*O*-1-cyclic malate, 5530
- C<sub>31</sub>H<sub>33</sub>O<sub>19</sub><sup>+</sup>**  
 3,5-Di-*O*-( $\beta$ -glucopyranosyl)cyanidin  
 6"-*O*-4,6"-*O*-1-cyclic malate, 5529
- C<sub>31</sub>H<sub>34</sub>N<sub>2</sub>O<sub>8</sub>**  
 Deacetylpicraline-3,4,5-trimethoxybenzoate, 4768
- C<sub>31</sub>H<sub>34</sub>O<sub>6</sub>**  
 Shizukaol A, 19845
- C<sub>31</sub>H<sub>34</sub>O<sub>8</sub>**  
 Japonicin C, 11819
- C<sub>31</sub>H<sub>34</sub>O<sub>9</sub>**  
 Lappaol B, 12514
- C<sub>31</sub>H<sub>34</sub>O<sub>14</sub>**  
 Cypellogin A, 4570  
 Cypellogin B, 4571
- C<sub>31</sub>H<sub>34</sub>O<sub>16</sub>**
- Apigenin-7-*O*- $\alpha$ -*L*-2,3-di-*O*-acetylramno-  
 pyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside, 1486  
 Crassirhizomside A, 4214  
 Crassirhizomside B, 4215  
 Crassirhizomside C, 4216
- C<sub>31</sub>H<sub>34</sub>O<sub>17</sub>**  
 5,6,4'-Trihydroxyflavone 7-*O*- $\alpha$ -*L*-2,3-di-*O*-  
 acetylramnopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyra-  
 noside, 21734
- C<sub>31</sub>H<sub>35</sub>NO<sub>8</sub>**  
 3'-Hydroxy-8 $\beta$ -ethyl ether-rocaglic acid  
 dimethylamide, 10097
- C<sub>31</sub>H<sub>35</sub>O<sub>18</sub><sup>+</sup>**  
 Peonidin-3-*O*-(6"-*O*-malonyl- $\beta$ -glucopyrano-  
 side)-5-*O*- $\beta$ -glucopyranoside, 16903
- C<sub>31</sub>H<sub>36</sub>N<sub>2</sub>O<sub>8</sub>**  
 Raunescine, 18552
- C<sub>31</sub>H<sub>36</sub>N<sub>2</sub>O<sub>11</sub>**  
 Novobiocin, 15849
- C<sub>31</sub>H<sub>36</sub>O<sub>6</sub>**  
 Triptofordin A, 21998
- C<sub>31</sub>H<sub>36</sub>O<sub>8</sub>**  
 6 $\alpha$ -Acetoxy-1 $\beta$ ,8 $\beta$ -dibenzoyloxy-9 $\beta$ -hydroxy- $\beta$ -  
 dihydroagarofuran, 155  
 2 $\alpha$ -Acetoxy-4 $\beta$ -hydroxy-6 $\alpha$ -*p*-hydroxybenzoyl-  
 oxy-10 $\beta$ -benzoyloxy-dauc-8-ene, 218  
 Cowagarcinone E, 4199  
 Saucerneol B, 19399  
 Saucerneol D, 19401
- C<sub>31</sub>H<sub>36</sub>O<sub>9</sub>**  
 Benzoylgomisins Q, 2242  
 7-Isovaleroylcyclopiatalantin, 11758  
 Orthosiphon D, 16223
- C<sub>31</sub>H<sub>36</sub>O<sub>10</sub>**  
 Lappaol D, 12516  
 Orbiculin E, 16164  
 Staminol D, 20261
- C<sub>31</sub>H<sub>36</sub>O<sub>11</sub>**  
 13-*O*-Acetylwallifoliol, 531  
 Propinquanin E, 17928
- C<sub>31</sub>H<sub>36</sub>O<sub>12</sub>**  
 19-Hydroxy-13-oxobaccatin III, 10558
- C<sub>31</sub>H<sub>36</sub>O<sub>14</sub>**  
 11,12-Diacetoxyharrisonin, 5301  
 Ikariside F, 10964
- C<sub>31</sub>H<sub>36</sub>O<sub>16</sub>**  
 Acetylpectolarin, 480  
 Dicliripariside B, 5438
- C<sub>31</sub>H<sub>37</sub>NO<sub>17</sub>**  
 Oleracein D, 16077
- C<sub>31</sub>H<sub>38</sub>O<sub>6</sub>**  
 7-Deacetyl-7-angeloyl-6 $\alpha$ -hydroxyzadiradione,  
 4714

- C<sub>31</sub>H<sub>38</sub>O<sub>7</sub>**  
5-Cinnamoyl-10-aceyltaxicin II, 3699  
(2*R*\*,3*S*\*,4*R*\*,5*R*\*,9*S*\*,11*S*\*,15*R*\*)-5,15-Diacetoxy-3-benzoyloxy-14-oxolathra-6(17),12*E*-diene, 5287  
Lathryol-3,15-diacetate-5-benzoate, 12544
- C<sub>31</sub>H<sub>38</sub>O<sub>8</sub>**  
2-*O*-Acetyl-5-*O*-cinnamoyltaxicin I, 355  
5-Cinnamoyl-9-*O*-acetylphototaxicin I, 3697  
5-Cinnamoyl-10-aceyltaxicin I, 3698  
*O*-Cinnamoyltaxicin I, 3720  
Saucerneol, 19397  
Taxezopidine E, 20784  
Turraflorin A, 22130
- C<sub>31</sub>H<sub>38</sub>O<sub>9</sub>**  
3,12-Diacetyl-8-benzoylingol, 5325  
7-Isovaleroylcycloseverinolide, 11759  
Taxuspine Y, 20872  
Toonacilin, 21446
- C<sub>31</sub>H<sub>38</sub>O<sub>10</sub>**  
2-*O*-Deacetylorthosiphol J, 4761  
1-Dehydroxybaccatin III, 4979  
5,3'-Dihexanoyloxy-3,6,7,4'-tetramethoxyflavone, 5536  
Meliacinanhydride, 13662  
Orthosiphol I, 16227  
Orthosiphol M, 16231  
Turraflorin D, 22132  
Turraflorin E, 22133
- C<sub>31</sub>H<sub>38</sub>O<sub>11</sub>**  
Acernikol, 96  
1-Acetyl-10-deacetyl baccatin III, 362  
Baccatin III, 2073  
Baccatin V, 2076  
6-Deoxy-6*α*-acetoxyatalantin acetate, 5147  
11-Epi-21-hydroxytoonacilide, 6935  
11-Epi-23-hydroxytoonacilide, 6936  
Taxuspinanane D, 20844
- C<sub>31</sub>H<sub>38</sub>O<sub>12</sub>**  
7-Epi-19-hydroxybaccatin III, 6934  
19-Hydroxybaccatin III, 9812  
Tasumatrol O, 20725
- C<sub>31</sub>H<sub>38</sub>O<sub>13</sub>**  
Woorenside V, 22731
- C<sub>31</sub>H<sub>38</sub>O<sub>15</sub>**  
Tubuloside E, 22097
- C<sub>31</sub>H<sub>38</sub>O<sub>16</sub>**  
2'-Acetyllacteoside, 305  
6'-*O*-Acetyllacteoside, 306  
3,4-Dihydroxyphenethoxy-*O*-*α*-*L*-rhamnopyranosyl-(1→3)-*β*-*D*-(2-*O*-acetyl-4-*O*-caffeoyl)-galactopyranoside, 6073  
Tubuloside B, 22094
- C<sub>31</sub>H<sub>38</sub>O<sub>17</sub>**  
Pinocebrin 7-*O*-apiosyl(1→5)apiosyl(1→2)-*β*-*D*-glucopyranoside, 17404  
Tenuifoliside A, 20955  
*β*-*D*-[5-*O*-(3,4,5-Trimethoxybenzoyl)]-apiofuranosyl-(1→6)-*β*-*D*-glucopyranosyl, 21895
- C<sub>31</sub>H<sub>38</sub>O<sub>18</sub>**  
Prunose I, 18004
- C<sub>31</sub>H<sub>39</sub>NO<sub>6</sub>**  
Lythrancepine III, 13271
- C<sub>31</sub>H<sub>39</sub>NO<sub>7</sub>**  
Lythrancine III, 13274  
Lythrancine VI, 13277  
Lythrancine VII, 13278
- C<sub>31</sub>H<sub>39</sub>NO<sub>10</sub>S**  
Labriformine, 12422
- C<sub>31</sub>H<sub>39</sub>N<sub>5</sub>O<sub>5</sub>**  
Ergocomine, 7232
- C<sub>31</sub>H<sub>40</sub>O<sub>7</sub>**  
2*α*-Acetoxy-4*β*-hydroxy-6*α*-angeloyloxy-10*β*-cinnamoyloxy-dauc-8-ene, 208
- C<sub>31</sub>H<sub>40</sub>O<sub>8</sub>**  
Pubescence C, 18172  
Pubescence D, 18173
- C<sub>31</sub>H<sub>40</sub>O<sub>9</sub>**  
2*α*-Benzoyloxy-9*α*,10*β*-diacetoxy-1*β*,5*α*,13*α*-trihydroxy-4(20),11-taxadiene, 2255  
Brevifoliol, 2604  
Turraflorin H, 22136
- C<sub>31</sub>H<sub>40</sub>O<sub>10</sub>**  
Ardisiaquinone G, 1635  
9-Deacetyl-9-benzoyl-10-debenzoyltaxchinin A, 4730  
Orthosiphol G, 16225  
Orthosiphol V, 16237  
Orthosiphol W, 16238
- C<sub>31</sub>H<sub>40</sub>O<sub>11</sub>**  
7,9,10-Deacetyl baccatin VI, 4725  
7,9-Diacetyl taxayuntin, 5348  
7-Epi-9,10-deacetyl baccatin VI, 6881  
Taxane 3, 20750  
Taxayuntin B, 20760  
Taxumairol K, 20831  
Taxuspinanane F, 20845  
Taxuspine E, 20853  
7,9,10-Trideacetyl-abeo-baccatin VI, 21602  
7,9,13-Trideacetyl baccatin VI, 21603
- C<sub>31</sub>H<sub>40</sub>O<sub>12</sub>**  
13-*O*-Deacetyl taxumairol Z, 4785  
9(*βH*)-9-Dihydro-19-acetoxy-10-deacetyl baccatin III, 5538
- C<sub>31</sub>H<sub>40</sub>O<sub>13</sub>**  
Hydrangenoside A, 9701
- C<sub>31</sub>H<sub>40</sub>O<sub>14</sub>**  
Styraxlignolide A, 20422
- C<sub>31</sub>H<sub>40</sub>O<sub>15</sub>**  
Cistanoside D, 3754  
Epimeredinoside A, 6965  
2-(3-Hydroxy-4-methoxyphenyl) ethyl *O*-*α*-*L*-rhamnopyranosyl-(1→3)-(4-*O*-*cis*-feruloyl)-*β*-*D*-glucopyranoside, 10443  
2-(3-Hydroxy-4-methoxyphenyl)-ethyl-1-*O*-*α*-*L*-rhamnosyl-(1→3)-*β*-*D*-(4-feruloyl)-glucoside, 10444  
Juncenolide D, 11952  
Martynoside, 13580  
Isomartynoside, 11529
- C<sub>31</sub>H<sub>40</sub>O<sub>16</sub>**  
Hemiphroside A, 9347  
*Hemiphroside C*, 9348  
Illicifolioside A, 10988  
6-*O*-*α*-*L*-(2"-*O*-*trans*-*p*-Methoxycinnamoyl) rhamnopyranosylcatalpol, 13892  
6-*O*-*α*-*L*-(3"-*O*-*trans*-*p*-Methoxycinnamoyl) rhamnopyranosylcatalpol, 13893  
Plantainoside E, 17511  
Plantainoside F, 17512
- C<sub>31</sub>H<sub>41</sub>ClO<sub>11</sub>**  
Taxuchin B, 20818
- C<sub>31</sub>H<sub>41</sub>NO<sub>6</sub>**  
Franchetine, 7935  
Franchitine, 7936
- C<sub>31</sub>H<sub>41</sub>NO<sub>10</sub>**  
Polyschistine C, 17674
- C<sub>31</sub>H<sub>41</sub>NO<sub>11</sub>**  
(*E*)-Hordenine-(6-*O*-cinnamoyl)-*β*-*D*-glucopyranosyl-(1→3)-*α*-*L*-rhamnopyranoside, 9647
- C<sub>31</sub>H<sub>41</sub>NO<sub>12</sub>**  
(*E*)-Hordenine-[6-*O*-(4-hydroxycinnamoyl)-*β*-*D*-glucopyranosyl]-(1→3)-*α*-*L*-rhamnopyranoside, 9648
- C<sub>31</sub>H<sub>41</sub>NO<sub>15</sub>**  
Aristomanoside, 1728
- C<sub>31</sub>H<sub>41</sub>N<sub>5</sub>O<sub>5</sub>**  
Ergocorminine, 7233
- C<sub>31</sub>H<sub>42</sub>N<sub>4</sub>O<sub>4</sub>**  
Adouetine Y', 650  
Frangufoline, 7937  
Scutianine C, 19591  
Waltherine A, 22632
- C<sub>31</sub>H<sub>42</sub>O<sub>5</sub>**  
Kleinioxanthrone 3, 12235
- C<sub>31</sub>H<sub>42</sub>O<sub>7</sub>**  
7*β*-Hydroxy-3,11,15,23-tetraoxolanosta-8,20*E*(22)-dien-26-oic acid methyl ester, 10759  
Methyl ganoderate H, 14458

- C<sub>31</sub>H<sub>42</sub>O<sub>8</sub>**  
Neocucurbitacin A, 15376
- C<sub>31</sub>H<sub>42</sub>O<sub>9</sub>**  
Ardisiaquinone D, 1632
- C<sub>31</sub>H<sub>42</sub>O<sub>10</sub>**  
Asclepin, 1844  
Physachenolide C, 17234
- C<sub>31</sub>H<sub>42</sub>O<sub>11</sub>**  
Ajugacumbin C, 790  
Ajugamarin A<sub>2</sub>, 802
- C<sub>31</sub>H<sub>42</sub>O<sub>12</sub>**  
Ajugacumbin E, 792  
Clerodendrin A, 3837
- C<sub>31</sub>H<sub>42</sub>O<sub>13</sub>**  
Ligurobustoside O, 12824
- C<sub>31</sub>H<sub>42</sub>O<sub>15</sub>**  
(*S*)-4-(4-Hydroxyphenyl)-2-butanol 2-*O*-[6-*O*-(3,5-dimethoxy-4-*O*-*α*-*L*-rhamnopyranosyl-galloyl)-*β*-*D*-glucopyranoside], 10611  
(-)-Isolariciresinol-3*α*-*O*-*β*-apiofuranosyl-(1→2)-*O*-*β*-glucopyranoside, 11478  
Symplolignanose A, 20546
- C<sub>31</sub>H<sub>42</sub>O<sub>16</sub>**  
Yemuoside YM<sub>2</sub>, 22885  
Yemuoside YM<sub>6</sub>, 22886
- C<sub>31</sub>H<sub>42</sub>O<sub>17</sub>**  
Isonuezhenide, 11565  
(*8E*)-Nüzhenide, 15873  
(*8Z*)-Nüzhenide, 15874
- C<sub>31</sub>H<sub>42</sub>O<sub>18</sub>**  
Neonuezhenide, 15439
- C<sub>31</sub>H<sub>43</sub>NO<sub>7</sub>**  
*N*-Ethyl-1*α*-hydroxy-17-veratrolydictizine, 7447
- C<sub>31</sub>H<sub>43</sub>NO<sub>10</sub>**  
Benzoylmesaconine, 2247
- C<sub>31</sub>H<sub>44</sub>N<sub>2</sub>O<sub>8</sub>**  
Delectine, 5005  
Isodelectine, 11372
- C<sub>31</sub>H<sub>44</sub>N<sub>4</sub>O<sub>5</sub>**  
Pandamine, 16602  
Sanjoinine F, 19292  
Sanjoinine G<sub>1</sub>, 19293
- C<sub>31</sub>H<sub>44</sub>O<sub>4</sub>**  
Papuaforin D, 16632
- C<sub>31</sub>H<sub>44</sub>O<sub>6</sub>**  
Brasiliensic acid, 2590  
Glyuranolide, 8855
- C<sub>31</sub>H<sub>44</sub>O<sub>7</sub>**  
Methyl ganoderate I, 14459
- C<sub>31</sub>H<sub>44</sub>O<sub>9</sub>**  
Methyl ganoderate AP, 14456  
3*β*-Oxo-formyl-7*β*,12*β*-dihydroxy-5*α*-lanost-11,15,23-trioxo-8-en(*E*)-26-*O*-ic acid, 16335
- C<sub>31</sub>H<sub>44</sub>O<sub>11</sub>**  
Ajugamacrin B, 800  
Ajugamarin B<sub>2</sub>, 803  
1*α*-(*α*-Methyl)-butanoyl-2*α*-(*α*-methyl)-propynoxy-4*β*-hydroxy-9*β*-(*β*-)furoxyloxy-15-acetoxy-*β*-dihydroagarofuran, 14168
- C<sub>31</sub>H<sub>44</sub>O<sub>12</sub>**  
16*β*-Acetoxy-strophanthidin-3-*β*-*D*-*O*-rhamnoside, 282  
Ligurobustoside C, 12819  
Ligurobustoside E, 12820
- C<sub>31</sub>H<sub>44</sub>O<sub>13</sub>**  
Ligurobustoside I, 12821
- C<sub>31</sub>H<sub>44</sub>O<sub>16</sub>**  
2',3',4',3"-Tetramethoxy-1,3-diphenylpropane  
5',4"-di-*O*-*β*-*D*-glucopyranoside, 21179
- C<sub>31</sub>H<sub>45</sub>NO<sub>8</sub>**  
Auriculine, 2015  
Merresectine B, 13786
- C<sub>31</sub>H<sub>46</sub>N<sub>2</sub>O**  
Spiropachysine, 20205
- C<sub>31</sub>H<sub>46</sub>O<sub>2</sub>**  
Lucialdehyde A, 13019  
Vitamin K<sub>1</sub>, 22562
- C<sub>31</sub>H<sub>46</sub>O<sub>3</sub>**  
Dehydroeburiconic acid, 4910
- C<sub>31</sub>H<sub>46</sub>O<sub>4</sub>**  
26,27-Dihydroxy-lanosta-7,9(11),24-trien-3,16-dione, 5946  
Fomlactone C, 7878  
Methyl  
(24*E*)-3*α*,16*α*,23*α*(=16*R*,23*R*)-trihydroxy-epoxy-17,14-friedolan-8,14,24-trien-26-oate, 14407
- C<sub>31</sub>H<sub>46</sub>O<sub>5</sub>**  
Polyporenic acid C, 17664  
Poricoic acid C, 17724
- C<sub>31</sub>H<sub>46</sub>O<sub>5</sub>**  
Poricoic acid A, 17722  
Propapyriogenin A<sub>1</sub>, 17917
- C<sub>31</sub>H<sub>46</sub>O<sub>6</sub>**  
3*β*-Methoxy-16*α*-hydroxyursa-12,19(29)-dien-27,28-dioic acid, 13971  
Methyl (24*E*)-9*α*,23*α*-dihydroxy-3,15-dioxo-17,15-friedo-lanostan-8(14),24-dien-26-oate, 14298  
Poricoic acid D, 17725
- C<sub>31</sub>H<sub>46</sub>O<sub>7</sub>**  
Acinospesigenin B, 547  
8*β*,9*α*-Dihydroganoderic acid J methyl ester, 5620  
Methyl-7-epiganoderate, 14397
- C<sub>31</sub>H<sub>46</sub>O<sub>8</sub>**  
*rel*-(2*S*,5*R*,6*R*,8*S*,9*S*,10*R*,18*S*,19*R*)-19-Acetoxy-18,19-epoxy-6-hydroxy-18-butanoyloxy-2-(2-methylbutanoyloxy)cleroda-3,13(16),14-triene, 184  
Acinospesigenin C, 548  
Caseamembrin A, 3258  
2*α*-(*α*-Methylbutyryl)-oxy-5*α*,7*β*,10*β*-triacetoxy-4(20),11-taxadiene, 14199  
Methyl ganoderate I, 14460  
2*α*,5*α*,10*β*-Triacetoxy-14*β*-((*S*)2-methyl)butyryloxytaxa-4(20),11-diene, 21529
- C<sub>31</sub>H<sub>46</sub>O<sub>9</sub>**  
22-Acetylcasterone, 346  
Ajugalide E, 799  
Caseamembrin C, 3260  
5*α*-Hydroxy-2*α*-(*α*-methylbutyryl)-oxy-7*β*,9*α*,10*β*-triacetoxy-4(20),11-taxadiene, 10475  
9*α*-Hydroxy-14*β*-(2-methylbutyryl)-oxy-2*α*,5*α*,10*β*-tri acetoxytaxa-4(20),11-diene, 10476  
Taiwanxan, 20647  
Yunnanxane, 22951
- C<sub>31</sub>H<sub>48</sub>N<sub>2</sub>O<sub>6</sub>**  
Epoxynepakistamine A, 7177
- C<sub>31</sub>H<sub>48</sub>O**  
24-Methylenecycloartenone, 14356
- C<sub>31</sub>H<sub>48</sub>O<sub>3</sub>**  
Ambonic acid, 1025  
Dehydroeburicoic acid, 4909  
Fomefficinic acid A, 7856  
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- C<sub>31</sub>H<sub>48</sub>O<sub>4</sub>**  
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- Quadrangularic acid E, 18294  
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24(*E*)-3,4-Secodammara-4(28),20,24-trien-3,26-dioic acid-3-methylester, 19610
- C<sub>31</sub>H<sub>48</sub>O<sub>5</sub>**  
25-Hydroxy-3-epidehydrotumulolic acid, 10070  
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- C<sub>31</sub>H<sub>48</sub>O<sub>7</sub>**  
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- C<sub>31</sub>H<sub>48</sub>O<sub>12</sub>**  
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- C<sub>31</sub>H<sub>49</sub>N<sub>3</sub>O<sub>5</sub>**  
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3-Oxo-24-methylenecycloartane, 16380
- C<sub>31</sub>H<sub>50</sub>O<sub>2</sub>**  
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21 $\alpha$ -Methoxyserrat-13-en-3-one, 14091  
12-Oxoarundoin, 16294  
25(*R*)-3-Oxo-24-methylenecycloartan-26-ol, 16381
- C<sub>31</sub>H<sub>50</sub>O<sub>3</sub>**  
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- C<sub>31</sub>H<sub>50</sub>O<sub>4</sub>**  
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- C<sub>31</sub>H<sub>50</sub>O<sub>6</sub>**  
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- C<sub>31</sub>H<sub>50</sub>O<sub>8</sub>**  
5-Ene-methyl-7,12-didehydroxy-cholate-3-*O*- $\beta$ -*D*-glucopyranoside, 6798
- C<sub>31</sub>H<sub>50</sub>O<sub>11</sub>**  
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- C<sub>31</sub>H<sub>50</sub>O<sub>12</sub>**  
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- C<sub>31</sub>H<sub>50</sub>O<sub>18</sub>**  
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21-Methyldammara-18(28),22(29)-diene, 14281
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- C<sub>31</sub>H<sub>52</sub>N<sub>2</sub>O<sub>3</sub>**  
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- C<sub>31</sub>H<sub>52</sub>O<sub>2</sub>**  
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24-Methylene cycloartan-3 $\beta$ ,21-diol, 14351  
14-Methyl-24-methylene-dihydromangiferodiol, 14594  
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- C<sub>31</sub>H<sub>52</sub>O<sub>3</sub>**  
13 $\alpha$ ,14 $\alpha$ -Epoxy-3 $\beta$ -methoxyserratan-21 $\beta$ -ol, 7166  
13 $\beta$ ,14 $\beta$ -Epoxy-3 $\beta$ -methoxyserratan-21 $\beta$ -ol, 7167  
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3 $\beta$ -Methoxy-9 $\beta$ ,19-cyclolanost-23(*E*)-en-25,26-diol, 13900  
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- C<sub>31</sub>H<sub>52</sub>O<sub>4</sub>**  
(20*S*)-3 $\beta$ -Acetoxy-20-hydroperoxy-30-norlupane, 202  
Docosyl caffeate, 6539
- C<sub>31</sub>H<sub>52</sub>O<sub>6</sub>**  
21-*O*-Methyl toosendanpentol, 14764
- C<sub>31</sub>H<sub>52</sub>O<sub>8</sub>**  
Drevogenin I, 6602
- C<sub>31</sub>H<sub>52</sub>O<sub>17</sub>**  
Pipeloside A, 17428
- C<sub>31</sub>H<sub>53</sub>NO<sub>3</sub>**  
Ethyl *N*-docosanoylanthranilate, 7435
- C<sub>31</sub>H<sub>54</sub>O**

- Cycloeucalenol, 4491
- C<sub>31</sub>H<sub>54</sub>O<sub>2</sub>**  
3 $\alpha$ -Hydroxy-4-methoxyfilicane, 10402
- C<sub>31</sub>H<sub>54</sub>O<sub>5</sub>**  
Foveolin B, 7932
- C<sub>31</sub>H<sub>54</sub>O<sub>12</sub>**  
Cuscutic resinoid A, 4418
- C<sub>31</sub>H<sub>56</sub>O**  
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- C<sub>31</sub>H<sub>56</sub>O<sub>3</sub>**  
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- C<sub>31</sub>H<sub>58</sub>O<sub>14</sub>**  
1'-*O*-Palmitoyl-3'-*O*-(6-*O*- $\alpha$ -*D*-galactopyranosyl- $\beta$ -*D*-galactopyranosyl)glycerol, 16563
- C<sub>31</sub>H<sub>60</sub>O**  
(2*E*)-2-Ethyl-2-nonacosenal, 7465
- C<sub>31</sub>H<sub>62</sub>O**  
7-Methyl-4-triacontanone, 14769  
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- C<sub>31</sub>H<sub>62</sub>O<sub>2</sub>**  
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Hentriacontane, 9363
- C<sub>31</sub>H<sub>64</sub>O**  
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Thelephantin M, 21305
- C<sub>32</sub>H<sub>22</sub>MgO<sub>14</sub>**  
Cochinchinol A, 3868
- C<sub>32</sub>H<sub>22</sub>O<sub>8</sub>**  
Thelephantin J, 21302
- C<sub>32</sub>H<sub>22</sub>O<sub>10</sub>**  
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- C<sub>32</sub>H<sub>22</sub>O<sub>11</sub>**  
5'-Methoxybilobetin, 13858
- C<sub>32</sub>H<sub>24</sub>O<sub>5</sub>**  
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- C<sub>32</sub>H<sub>24</sub>O<sub>10</sub>**  
2,3-Dihydro-7,7''-dimethoxyamentoflavone, 5600  
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- C<sub>32</sub>H<sub>26</sub>O<sub>7</sub>**  
Neocandenatone, 15353
- C<sub>32</sub>H<sub>26</sub>O<sub>8</sub>**  
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- C<sub>32</sub>H<sub>26</sub>O<sub>10</sub>**  
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- C<sub>32</sub>H<sub>26</sub>O<sub>11</sub>**  
Protosappanin E<sub>1</sub>, 17990  
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- C<sub>32</sub>H<sub>28</sub>O<sub>10</sub>**  
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- C<sub>32</sub>H<sub>28</sub>O<sub>11</sub>**  
Neosappanone A, 15457
- C<sub>32</sub>H<sub>28</sub>O<sub>15</sub>S**  
Prodelphinidin A<sub>2</sub> 4'-(2-hydroxyethyl)thio ether, 17897
- C<sub>32</sub>H<sub>30</sub>N<sub>2</sub>O<sub>4</sub>**  
Anabellamide, 1126  
(-)-Auranamide, 2006
- C<sub>32</sub>H<sub>30</sub>O<sub>9</sub>**  
Thelephantin C, 21295
- C<sub>32</sub>H<sub>30</sub>O<sub>10</sub>**  
Occidentalol II, 15915
- C<sub>32</sub>H<sub>30</sub>O<sub>11</sub>**  
Dahuribirin E, 4601  
(12*R*,12''*R*)-Diheraclenol, 5535
- C<sub>32</sub>H<sub>30</sub>O<sub>12</sub>**  
Skullcapflavone I 2'-*O*- $\beta$ -*D*-(2''-*E*-cinnamoyl)glucopyranoside, 20005  
Skullcapflavone I 2'-*O*- $\beta$ -*D*-(3''-*E*-cinnamoyl)glucopyranoside, 20006  
Skullcapflavone I 2'-*O*- $\beta$ -*D*-(4''-*E*-cinnamyl)glucopyranoside, 20007
- C<sub>32</sub>H<sub>30</sub>O<sub>14</sub>**  
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Secalonic acid B, 19600  
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- C<sub>32</sub>H<sub>30</sub>O<sub>15</sub>**  
Limocitrin-3-*O*-(6''-*O*-*p*-coumaryl)- $\beta$ -*D*-glucopyranoside, 12838
- C<sub>32</sub>H<sub>31</sub>NO<sub>8</sub>**  
Aristoloterpenate, 1726  
Aristoloterpenate III, 1727  
Aristophyllide A, 1729
- C<sub>32</sub>H<sub>32</sub>O<sub>8</sub>**  
Mexolide, 14824
- C<sub>32</sub>H<sub>32</sub>O<sub>13</sub>**
- Myrciacitrin IV, 15150
- C<sub>32</sub>H<sub>32</sub>O<sub>16</sub>**  
Shegansu A, 19798  
6''-*O*-Vanilloyliridin, 22344
- C<sub>32</sub>H<sub>33</sub>N<sub>3</sub>O<sub>4</sub>**  
Scutianene D, 19589
- C<sub>32</sub>H<sub>34</sub>N<sub>2</sub>O<sub>7</sub>**  
Discarine N, 6506  
*O*-Methyl punjabine, 14707
- C<sub>32</sub>H<sub>34</sub>O<sub>8</sub>**  
6,6'-Dimethoxygossypol, 6232
- C<sub>32</sub>H<sub>34</sub>O<sub>10</sub>**  
Murramarin A, 15105
- C<sub>32</sub>H<sub>34</sub>O<sub>11</sub>**  
Schizanrin F, 19500
- C<sub>32</sub>H<sub>34</sub>O<sub>12</sub>**  
Orbiculin I, 16167
- C<sub>32</sub>H<sub>34</sub>O<sub>13</sub>**  
1 $\alpha$ ,2 $\alpha$ ,9 $\beta$ -Tri-( $\beta$ -)furoyloxy-4 $\beta$ -hydroxy-15-acetoxy- $\beta$ -dihydroagarofuran, 21640
- C<sub>32</sub>H<sub>34</sub>O<sub>16</sub>**  
Arabelline, 1552  
Neesiinoid A, 15320
- C<sub>32</sub>H<sub>36</sub>O<sub>8</sub>**  
Artanomaloide, 1781
- C<sub>32</sub>H<sub>36</sub>O<sub>10</sub>**  
Schisantherin M, 19494  
Schisantherin N, 19495
- C<sub>32</sub>H<sub>36</sub>O<sub>11</sub>**  
Kadsulignan D, 11999  
Kadsulignan G, 12002
- C<sub>32</sub>H<sub>36</sub>O<sub>16</sub>**  
3,6-Di-*O*-*p*-coumaroyl- $\beta$ -*D*-fructofuranosyl 6-*O*-acetyl- $\alpha$ -*D*-glucopyranoside, 5441
- C<sub>32</sub>H<sub>37</sub>NO<sub>9</sub>**  
Kupitengester 2, 12337
- C<sub>32</sub>H<sub>37</sub>NO<sub>13</sub>**  
1 $\alpha$ -Nicotinoyloxy-2 $\alpha$ -acetoxy-6 $\beta$ -acetoxy-9 $\beta$ -furoyloxy-11-acetoxy-4 $\beta$ -hydroxydihydro- $\beta$ -agarofuran, 15535
- C<sub>32</sub>H<sub>38</sub>N<sub>2</sub>O<sub>5</sub>**  
Nigellamine C, 15566
- C<sub>32</sub>H<sub>38</sub>N<sub>2</sub>O<sub>8</sub>**  
Deserpidine, 5248
- C<sub>32</sub>H<sub>38</sub>N<sub>2</sub>O<sub>9</sub>**  
Pseudoreserpine 16,17-stereoisomer, 18059
- C<sub>32</sub>H<sub>38</sub>O<sub>14</sub>**  
Baohuoside III, 2140
- C<sub>32</sub>H<sub>38</sub>O<sub>14</sub>**  
Baohuoside IV, 2141  
2''-*O*-Rhamnosylkarisoid A, 18742  
Safghanoside D, 19115
- C<sub>32</sub>H<sub>38</sub>O<sub>15</sub>**

- Des-*O*-methylcariin, 5257  
Ikarisioside B, 10963  
**C<sub>32</sub>H<sub>38</sub>O<sub>17</sub>**  
Glomeratose B, 8583  
**C<sub>32</sub>H<sub>38</sub>O<sub>18</sub>**  
Biochanin A-7-*O*-[ $\beta$ -*D*-apiofuranosyl-(1 $\rightarrow$ 5)- $\beta$ -*D*-apiofuranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside], 2385  
Kaempferol-3-rhamnoside-7-xylosyl(1 $\rightarrow$ 2)-rhamnoside, 12086  
Sagittatin A, 19125  
Vaccarin, 22302  
**C<sub>32</sub>H<sub>38</sub>O<sub>19</sub>**  
Apigenin-7-*O*- $\beta$ -apiofuranosyl-6,8-di-*C*- $\beta$ -glucopyranoside, 1478  
Kaempferol 3-*O*- $\beta$ -*D*-apiosyl-(1 $\rightarrow$ 2)-[ $\alpha$ -*L*-rhamnosyl(1 $\rightarrow$ 6)]- $\beta$ -*D*-glucoside, 12027  
**C<sub>32</sub>H<sub>38</sub>O<sub>20</sub>**  
Kaempferol 3-*O*- $\alpha$ -arabinopyranosyl(1" $\rightarrow$ 6")- $\beta$ -glucopyranoside 7-*O*- $\beta$ -glucopyranoside, 12029  
Saluenin, 19199  
**C<sub>32</sub>H<sub>38</sub>O<sub>21</sub>**  
Quercetin-3-*O*- $\alpha$ -arabinopyranosyl(1" $\rightarrow$ 6")- $\beta$ -glucopyranoside 7-*O*- $\beta$ -glucopyranoside, 18328  
**C<sub>32</sub>H<sub>39</sub>NO<sub>11</sub>**  
Myrsinol-type diterpene ester CPB51-719-2, 15216  
**C<sub>32</sub>H<sub>39</sub>NO<sub>15</sub>**  
1,6-Bis-deacetyl evonine, 2438  
**C<sub>32</sub>H<sub>40</sub>N<sub>2</sub>O<sub>13</sub>**  
*N*, $\beta$ -*D*-Glucopyranosyl vincosamide, 8746  
**C<sub>32</sub>H<sub>40</sub>O<sub>7</sub>**  
Plectranthol B, 17554  
**C<sub>32</sub>H<sub>40</sub>O<sub>8</sub>**  
Euphorbiasteroid, 7617  
Saucerneol A, 19398  
(-)-Saucerneol methyl ether, 19403  
**C<sub>32</sub>H<sub>40</sub>O<sub>9</sub>**  
17-Epi-12-dehydroxyheudebolin, 6890  
**C<sub>32</sub>H<sub>40</sub>O<sub>10</sub>**  
2-Hydroxy-3-*O*-tigloylswietenolide, 10768  
**C<sub>32</sub>H<sub>40</sub>O<sub>11</sub>**  
Hypolosite B, 10902  
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Myrsinol-type diterpene ester CPB51-719-3, 15217  
**C<sub>32</sub>H<sub>40</sub>O<sub>13</sub>**  
15-Acetoxy-2 $\alpha$ ,9 $\beta$ -di-( $\beta$ -furanocarbonyloxy)-4 $\beta$ ,6 $\beta$ -dihydroxy-1 $\alpha$ -(2-methylbutanoyloxy)-dihydro- $\beta$ -agarofuran, 160  
**C<sub>32</sub>H<sub>40</sub>O<sub>14</sub>**  
1 $\alpha$ ,2 $\alpha$ ,6 $\beta$ ,8 $\beta$ ,13-Pentaacetoxy-9 $\beta$ -benzoyloxy-4 $\beta$ -hydroxy- $\beta$ -dihydroagarofuran, 16817  
**C<sub>32</sub>H<sub>40</sub>O<sub>15</sub>**  
Nirurin, 15625  
**C<sub>32</sub>H<sub>40</sub>O<sub>16</sub>**  
Javanicoside C, 11856  
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6"-*O*-*p*-Coumaroylgenipingentiobioside, 4160  
Phelloside, 17078  
Safghanoside A, 19112  
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**C<sub>32</sub>H<sub>40</sub>O<sub>18</sub>**  
Telephiose C, 20909  
**C<sub>32</sub>H<sub>40</sub>O<sub>19</sub>**  
Viscumneoside V, 22540  
**C<sub>32</sub>H<sub>41</sub>NO<sub>2</sub>**  
*N*-(1',4'-Dihydroxy-1',2',3',4'-tetrahydronaphthyl)-propyl-*N*-diphenylmethyl-*N*-3,3-dimethylbutylamine, 6144  
**C<sub>32</sub>H<sub>41</sub>NO<sub>8</sub>**  
15-Veratroyl-17-acetyl-19-oxodictizine, 22391  
**C<sub>32</sub>H<sub>41</sub>N<sub>5</sub>O<sub>5</sub>**  
Ergocryptine, 7236  
 $\alpha$ -Ergokryptinine, 7238  
Mauritine A, 13613  
*O*-12'-Methyl ergocormine, 14410  
*O*-12'-Methyl ergocorminine, 14411  
**C<sub>32</sub>H<sub>42</sub>N<sub>2</sub>O<sub>6</sub>**  
Rescinnaminol, 18631  
**C<sub>32</sub>H<sub>42</sub>O<sub>5</sub>**  
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**C<sub>32</sub>H<sub>42</sub>O<sub>7</sub>**  
Euphorbia factor Ti<sub>2</sub>, 7616  
Vielanin D, 22472  
Vielanin E, 22473  
**C<sub>32</sub>H<sub>42</sub>O<sub>8</sub>**  
Acrovestone, 577  
Cipadesin, 3734  
Meliacinal, 13663  
**C<sub>32</sub>H<sub>42</sub>O<sub>9</sub>**  
Ardisiaquinone C, 1631  
Ganode-8-en-ric acid F, 8155  
**C<sub>32</sub>H<sub>42</sub>O<sub>10</sub>**  
Ardisiaquinone H, 1636  
Azedarachin C, 2055  
Yuanhuadin, 22930  
**C<sub>32</sub>H<sub>42</sub>O<sub>11</sub>**  
Taccalonolide G, 20589  
**C<sub>32</sub>H<sub>42</sub>O<sub>12</sub>**  
1-Deoxy-3-methacrylyl-11-methoxymeliacarpinin, 5194  
Taccalonolide M, 20595  
**C<sub>32</sub>H<sub>42</sub>O<sub>13</sub>**  
Myricanene A 5-*O*- $\alpha$ -*L*-arabinofuranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside, 15156  
Myricanene B 5-*O*- $\alpha$ -*L*-arabinofuranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside, 15158  
1 $\beta$ ,2 $\beta$ ,9 $\alpha$ -Triacetoxy-8 $\alpha$ -(2-hydroxy-isobutyryloxy)-15-benzoyloxy-4 $\alpha$ -hydroxy- $\beta$ -dihydroagarofuran, 21524  
**C<sub>32</sub>H<sub>42</sub>O<sub>15</sub>**  
1 $\beta$ ,7 $\beta$ ,8 $\alpha$ -Triacetoxy-2 $\beta$ -furanoyl-4 $\alpha$ -hydroxy-11-isobutyryloxy-dihydroagarofuran, 21521  
**C<sub>32</sub>H<sub>42</sub>O<sub>16</sub>**  
Bruceoside A, 2675  
Bruceoside B, 2676  
Bruceoside C, 2677  
Dehydrodiconiferyl alcohol 4, $\gamma$ -di-*O*- $\beta$ -*D*-glucopyranoside, 4904  
Javanicoside I, 11860  
(+)-Pinoresinol-di-*O*- $\beta$ -*D*-glucoside, 17412  
Scrolepidoside, 19568  
**C<sub>32</sub>H<sub>42</sub>O<sub>17</sub>**  
(+)-1-Hydroxypinoresinol-4',4"-di-*O*- $\beta$ -*D*-glucopyranoside, 10653  
**C<sub>32</sub>H<sub>42</sub>O<sub>21</sub>**  
Saprosmoside G, 19351  
**C<sub>32</sub>H<sub>43</sub>NO<sub>7</sub>**  
15-Veratroyl-17-acetyldictizine, 22390  
**C<sub>32</sub>H<sub>44</sub>N<sub>2</sub>O<sub>4</sub>**  
Phlegmariurine C, 17156  
**C<sub>32</sub>H<sub>44</sub>N<sub>2</sub>O<sub>8</sub>**  
Isolappaconitine, 11476  
Lappaconitine, 12510  
**C<sub>32</sub>H<sub>44</sub>N<sub>2</sub>O<sub>9</sub>**  
*N*-Acetylsepaconitine, 508  
Puberanine, 18169  
Ranaconitine, 18531  
**C<sub>32</sub>H<sub>44</sub>N<sub>2</sub>O<sub>10</sub>**  
Finaconitine, 7800  
**C<sub>32</sub>H<sub>44</sub>O<sub>6</sub>**  
Bisacutifolone C, 2434  
**C<sub>32</sub>H<sub>44</sub>O<sub>7</sub>**  
Bisacutifolone A, 2429  
Bisacutifolone B, 2432  
3-*O*-(2'*E*,4'*E*-Decadienoyl)-20-*O*-acetylingenol, 4820  
3-*O*-(2'*E*,4'*Z*-Decadienoyl)-5-*O*-acetylingenol, 4821  
3-*O*-(2'*E*,4'*Z*-Decadienoyl)-20-*O*-acetylingenol, 4822  
Resibufogenin 3-hydrogen suberate, 18638  
**C<sub>32</sub>H<sub>44</sub>O<sub>8</sub>**  
Cucurbitacin E, 4320  
Elaterin, 6733



- C<sub>32</sub>H<sub>44</sub>O<sub>9</sub>**  
Ganode-8-en-ric acid H, 8156
- C<sub>32</sub>H<sub>44</sub>O<sub>11</sub>**  
*β*-Acetoxy scillarenin 3-*O*-*β*-*D*-glucopyranoside, 278
- C<sub>32</sub>H<sub>44</sub>O<sub>12</sub>**  
Jatrophane 9, 11845  
Scilliroside, 19528
- C<sub>32</sub>H<sub>44</sub>O<sub>13</sub>**  
Baccatin I, 2072  
1*β*-Dehydroxybaccatin IV, 4980  
Taxachitriene A, 20736  
Taxachitriene B, 20737
- C<sub>32</sub>H<sub>44</sub>O<sub>14</sub>**  
1*β*-Acetoxy-5*α*-deacetyl-baccatin I, 151  
Baccatin IV, 2075  
Crocic 3, 4251  
1*β*-Hydroxybaccatin I, 9811  
Taxuchin A, 20817
- C<sub>32</sub>H<sub>44</sub>O<sub>15</sub>**  
10-Deacetyl-10-glycolylbaccatin IV, 4744  
1*β*-Hydroxy-10-deacetyl-10-glycolylbaccatin I, 9963
- C<sub>32</sub>H<sub>44</sub>O<sub>16</sub>**  
Javanicoside B, 11855  
(+)-Lariciresinol-4'-*O*-*β*-*D*-glucopyranosyl-(1→3)-*β*-*D*-glucopyranoside, 12524  
Yadanzioside A, 22860  
Yadanzioside B, 22861  
Yadanzioside E, 22864
- C<sub>32</sub>H<sub>44</sub>O<sub>17</sub>**  
(-)-Olivil-4',4"-di-*O*-*β*-*D*-glucopyranoside, 16089  
Yadanzioside J, 22869
- C<sub>32</sub>H<sub>45</sub>NO<sub>8</sub>**  
14-*O*-Anisoylneoline, 1292
- C<sub>32</sub>H<sub>45</sub>NO<sub>9</sub>**  
Circinadine A, 3735  
Ludaconitine, 13065
- C<sub>32</sub>H<sub>45</sub>NO<sub>10</sub>**  
Benzoylaconine, 2231  
Hokbusine A, 9574
- C<sub>32</sub>H<sub>46</sub>N<sub>2</sub>O<sub>3</sub>**  
(-)-Culantramine *N*-oxide, 4348
- C<sub>32</sub>H<sub>46</sub>N<sub>2</sub>O<sub>8</sub>**  
Anthranoyllycoctonine, 1366  
Inuline, 11112
- C<sub>32</sub>H<sub>46</sub>N<sub>4</sub>O<sub>5</sub>**  
Sanjoinine D, 19291
- C<sub>32</sub>H<sub>46</sub>O<sub>5</sub>**  
Ganoderic acid T-Q, 8173  
Inophylloidic acid A<sub>2</sub>, 11073  
Tyromycic acid G, 22168
- C<sub>32</sub>H<sub>46</sub>O<sub>6</sub>**  
Inocalophyllin B, 11065  
Inophylloidic acid, 11070  
Inophylloidic acid A<sub>1</sub>, 11072  
Inophylloidic acid A<sub>3</sub>, 11074  
Inophylloidic acid B<sub>1</sub>, 11075  
Inophylloidic acid B<sub>2</sub>, 11076  
Lanosta-7,9(11),24-trien-3*α*-acetoxy-15*α*-hydroxy-23-oxo-26-oic acid, 12483  
Lanosta-7,9(11),24-trien-15*α*-acetoxy-3*α*-hydroxy-23-oxo-26-oic acid, 12484  
Picfeltarraegenin IV, 17291
- C<sub>32</sub>H<sub>46</sub>O<sub>7</sub>**  
Bufalin-3-hydrogen suberate, 2717
- C<sub>32</sub>H<sub>46</sub>O<sub>8</sub>**  
Cucurbitacin B, 4317  
Dihydrocucurbitacin E, 5574  
Gamabufotalin-3-suberate, 8123
- C<sub>32</sub>H<sub>46</sub>O<sub>9</sub>**  
2'-*O*-Acetyl cerleaside A, 349  
3*β*-*O*-(2'-*O*-Acetyl-*α*-*L*-thvetosyl)-14*β*-hydroxy-7-en-5*β*-card-20(22)-enolide, 526  
Cucurbitacin A, 4315  
Ganoderic acid *α*, 8175
- C<sub>32</sub>H<sub>46</sub>O<sub>10</sub>**  
Peruvoside-2'-monoacetate, 17003  
Tanghinin, 20671
- C<sub>32</sub>H<sub>46</sub>O<sub>11</sub>**  
1*α*,2*α*-Di-(*a*-methyl)-butanoyl-4*β*-hydroxy-9*β*-(*β*-furoyloxy-15-acetoxy-*β*-dihydroagarofuran, 6327
- C<sub>32</sub>H<sub>46</sub>O<sub>12</sub>**  
Euphobubescene, 7613
- C<sub>32</sub>H<sub>46</sub>O<sub>13</sub>**  
Taxchin A, 20768  
Taxuspine L, 20859
- C<sub>32</sub>H<sub>46</sub>O<sub>14</sub>**  
*β*-*D*-Glucopyranosyl-(1→2)-*β*-*D*-glucopyranosyl-15,16-epoxy-12-oxo-8(17),13(16)-14-*ent*-labdatrien-19-oate, 8641  
Taxumain B, 20820  
Taxumairol L, 20832  
Taxuspine R, 20865
- C<sub>32</sub>H<sub>46</sub>O<sub>16</sub>**  
19-Hydroxydeacetylnomilinic acid-17-*β*-*D*-glucopyranoside, 9964  
Javanicoside L, 11863  
Yadanzioside H, 22867
- C<sub>32</sub>H<sub>47</sub>NO<sub>8</sub>**  
Zygadenilic acid *δ*-lactone-16-angelate, 23032
- C<sub>32</sub>H<sub>48</sub>N<sub>2</sub>O<sub>3</sub>**  
Avicennamine, 2034
- C<sub>32</sub>H<sub>48</sub>N<sub>2</sub>O<sub>4</sub>**  
(-)-Culantraminol *N*-oxide, 4349
- C<sub>32</sub>H<sub>48</sub>O<sub>4</sub>**  
3*β*-Acetoxy-12,19-dioxo-13(18)-oleanene, 174  
3*β*-Acetoxy-11*α*,12*α*-epoxy-16-oxo-14-taraxerene, 188  
3*β*-Acetoxy-11-ursen-13*α*,30-olide, 301  
Ananosic acid B, 1137  
Lanosta-7,9(11),24-trien-3*α*-acetoxy-26-oic acid, 12485
- C<sub>32</sub>H<sub>48</sub>O<sub>5</sub>**  
12*α*-Acetoxycoccinic acid, 144  
12*β*-Acetoxycoccinic acid, 145  
(25*R*)-3*β*-Acetoxy-23-oxo-9,16-lanostandien-26-oic acid, 274  
3-*O*-Acetyl-glycyrrhetic acid, 403  
Acetyl-11-keto-*β*-boswellic acid, 444  
Cordianal A, 4041  
Ganode-7,9-dien-ric acid X, 8148  
3*β*-Hydroxy-16*α*-acetoxy-lanosta-7,9(11),24-trien-21-oic acid, 9758  
Lanosta-7,9(11),24-trien-3*α*-acetoxy-15*α*,22*β*-dihydroxy-26-oic acid, 12482  
(24*Z*)-3-Oxo-12*α*-acetoxy-lanosta-8,24-dien-26-oic acid, 16290  
Sendanone acetate, 19705  
Tyromycic acid C, 22164
- C<sub>32</sub>H<sub>48</sub>O<sub>6</sub>**  
Alisol C monoacetate, 896  
Belamcandal, 2215  
Camarinic acid, 3026  
Cordiaketol A, 4039  
Ganode-8-en-ric acid V, 8160  
Poricoic acid DM, 17726
- C<sub>32</sub>H<sub>48</sub>O<sub>7</sub>**  
Acantrifoic acid A, 91  
12-*O*-Acetylphorbla-13-decanoate, 482  
Dendrocyin, 5114
- C<sub>32</sub>H<sub>48</sub>O<sub>8</sub>**  
12-*O*-Acetylphorbol-13-decanoate, 483  
Acinospesigenin, 545  
Cucurbitacin F 25-acetate, 4316  
Cucurbitacin C, 4318  
Dihydrocucurbitacin B, 5573  
Dihydroisocucurbitacin B, 5649  
Montanin, 14945  
Phorbol-12-caprate-13-acetate, 17185
- C<sub>32</sub>H<sub>48</sub>O<sub>9</sub>**  
Beauwalloside, 2190  
Cerberin, 3416  
Oleandrin, 16031
- C<sub>32</sub>H<sub>48</sub>O<sub>10</sub>**  
Neritaloside, 15497
- C<sub>32</sub>H<sub>48</sub>O<sub>12</sub>**

- 2*α*,5*α*,14*β*-Triacetoxo-10*β*-*O*-(*β*-*D*-glucopyranosyl)taxa-4(20),11-diene, 21523
- C<sub>32</sub>H<sub>48</sub>O<sub>14</sub>**  
Dicliripariside A, 5437
- C<sub>32</sub>H<sub>48</sub>O<sub>18</sub>**  
Pratialin B, 17767
- C<sub>32</sub>H<sub>50</sub>N<sub>4</sub>O<sub>6</sub>**  
Sansalvamide, 19296
- C<sub>32</sub>H<sub>50</sub>O<sub>2</sub>**  
Olean-11,13(18)-diene-3*β*-yl acetate, 16030
- C<sub>32</sub>H<sub>50</sub>O<sub>3</sub>**  
3*β*-Acetoxo-11*α*,12*α*-epoxy-14-taraxerene, 190  
3*β*-Acetoxo-15*α*-hydroxy-13,27-cyclours-11-ene, 211  
3*β*-Acetoxo-12-oleanen-11-one, 267  
3*β*-Acetoxo-24-oxo-dammara-20,25-diene, 270  
3*β*-Acetyl-5*α*-lanosta-8,24-diene-11-one, 446  
3*β*-Acetylursa-14-en-16-one, 529  
Oleanolic aldehyde acetate, 16065
- C<sub>32</sub>H<sub>50</sub>O<sub>4</sub>**  
3*β*-Acetoxo-1*β*,11*α*-epidioxy-12-ursene, 178  
3*β*-Acetoxoolean-12-en-28-oic acid, 266  
Acetylbetulinic acid, 332  
(20*S*,22*S*,23*E*)-22-*O*-Acetyl-25-hydroxylanosta-8,23(*E*)-dien-3-one, 422  
3*β*-*O*-Acetyl-mangiferolic acid, 462  
3-*O*-Acetylsursolic acid, 530  
3,7-Dihydroxy-2,5-diundecylnaphthoquinone, 5867  
3-Epi-betulinic acid acetate, 6836  
17*β*-Formyloxy-3*β*-acetyloxy-28-nor-urs-12-ene, 7911  
Garciosaterepene A, 8224  
Lup-20(29)-ene-3*α*-acetoxo-24-oic acid, 13091  
Niloticin acetate, 15599  
16-Oxo-21*β*-hydroxyserrat-14-en-3*α*-yl acetate, 16355  
Tsugaric acid A, 22068
- C<sub>32</sub>H<sub>50</sub>O<sub>5</sub>**  
3*β*-Acetoxo-18*α*-hydroperoxy-12-oleanen-11-one, 203  
3*α*-Acetoxo-25-hydroxyolean-12-en-28-oic acid, 231  
Alisol B monoacetate, 894  
25-Anhydroalisol A 11-acetate, 1257  
25-Anhydroalisol A 24-acetate, 1258  
Radermasinin, 18522  
Rubiaronone C', 18997  
Rubiaronone A, 19015
- C<sub>32</sub>H<sub>50</sub>O<sub>6</sub>**  
25-*O*-Acetylcimigenol, 353  
21-*O*-Acetyl toosendantriol, 527
- Acinospesigenin A, 546  
Alizexol A, 902  
Cordiaketol B, 4040  
Cordianone, 4044  
Guavanoic acid, 9074  
Rubianol B, 19002
- C<sub>32</sub>H<sub>50</sub>O<sub>7</sub>**  
Alizexol B, 903
- C<sub>32</sub>H<sub>50</sub>O<sub>8</sub>**  
Baliospermin, 2130  
Dihydrocucurbitacin F-25-acetate, 5576
- C<sub>32</sub>H<sub>50</sub>O<sub>9</sub>**  
Hemslecin G, 9355
- C<sub>32</sub>H<sub>50</sub>O<sub>11</sub>**  
Marginatol B, 13562
- C<sub>32</sub>H<sub>50</sub>O<sub>13</sub>**  
Cussoracoside C, 4425
- C<sub>32</sub>H<sub>52</sub>N<sub>2</sub>O<sub>4</sub>**  
Incarvine A, 11010
- C<sub>32</sub>H<sub>52</sub>O<sub>2</sub>**  
3*β*-Acetoxo-dammara-20,24-diene, 149  
*α*-Amyrin acetate, 1111  
*β*-Amyrin acetate, 1112  
Bauerenyl acetate, 2170  
*D*:*C*-Friedomadeir-7-en-3*β*-yl acetate, 7954  
*D*-Friedomadeir-14-en-3*β*-yl acetate, 7955  
Isobauerenyl acetate, 11247  
Isomultiflorenyl acetate, 11548  
Lupeol acetate, 13100  
(24*R*)-4*α*-Methyl-24-ethylcholesta-7,25-dien-3*β*-yl acetate, 14434  
Multiflor-7-ene-3*β*-yl acetate, 15067  
Nematocypol acetate, 15330  
31-Norcyclolaudenyl acetate, 15732  
Olean-13(18)-en-3-acetate, 16035  
Sablacaurin B, 19103  
*ψ*-Taraxasteryl acetate, 20706  
Taraxasteryl acetate, 20707  
Taraxeryl acetate, 20713
- C<sub>32</sub>H<sub>52</sub>O<sub>3</sub>**  
3*β*-Acetoxo-25-hydroxydammara-20,23-diene, 212  
3*β*-Acetoxo-25-hydroxylanosta-8,23-diene, 228  
3*β*-Acetoxo-19(29)-taraxasten-20*α*-ol, 283  
Acetylmyricadiol, 471  
Betulin-3-acetate, 2332  
3*β*-Hydroxyserrat-14-en-21*α*-yl acetate, 10704  
21*α*-Hydroxyserrat-14-en-3*β*-yl acetate, 10705  
21*β*-Hydroxyserrat-14-en-3*β*-yl acetate, 10706  
Methyl eburicoate, 14333  
Serratenediol-21-acetate, 19769  
Serratenediol-3-acetate, 19770  
Sophradialol-22-*O*-acetate, 20084
- Taraxaster-20-en-3*β*,16*α*-diol-3-acetate, 20703
- C<sub>32</sub>H<sub>52</sub>O<sub>4</sub>**  
3*β*-Acetoxo-21*α*,22*α*-epoxytaraxastan-20*α*-ol, 189  
(20*S*)-3*β*-Acetoxylupan-29-oic acid, 249  
14*β*,15*β*-Epoxy-3*β*-hydroxyserrat-21*α*-ol-3*β*-*O*-acetate, 7142  
2-*n*-Heneicosyl-5,7-dihydroxy-6,8-dimethyl chromone, 9361  
Methyl 2*α*-methoxyursolate, 14591  
Phlegmanol D, 17150  
Rubioprasin B, 19038  
Tumulolic acid methyl ester, 22109
- C<sub>32</sub>H<sub>52</sub>O<sub>5</sub>**  
3*β*-Acetoxo-12*β*,13*β*-epoxy-11*α*-hydroperoxy-ursane, 183  
3*β*-Acetoxo-11*α*-hydroperoxy-13*αH*-ursan-12-one, 204  
16-*O*-Acetyl isoiridogermanal, 439  
21*R*,23*R*-Epoxy,21*α*-ethoxy,24*S*,25-dihydroxy-apotirucalla-7-en-3-one, 7094  
Rubianol C, 19003  
Rubiaronol D, 19013  
Rubiaronol G, 19014  
Rubioprasin A, 19037
- C<sub>32</sub>H<sub>52</sub>O<sub>6</sub>**  
Alisol A monoacetate, 892  
Alisol E 23-acetate, 897  
Alisol E 24-acetate, 898  
Fomitopinic acid B, 7861  
Rubianol D, 19004  
7*α*,21*S*,25-Trihydroxy-3*β*-acetoxo-21*S*,23*R*-epoxy-9(11)-en-dammaraene, 21684
- C<sub>32</sub>H<sub>52</sub>O<sub>7</sub>**  
13*β*,17*β*-Epoxyalisol A 24-acetate, 7051
- C<sub>32</sub>H<sub>52</sub>O<sub>8</sub>**  
Yononin, 22925
- C<sub>32</sub>H<sub>52</sub>O<sub>9</sub>**  
Convallasaponin A, 4008
- C<sub>32</sub>H<sub>52</sub>O<sub>10</sub>**  
Convallasaponin B, 4009
- C<sub>32</sub>H<sub>52</sub>O<sub>11</sub>**  
Wattoside G, 22653
- C<sub>32</sub>H<sub>52</sub>O<sub>14</sub>**  
Acantrifoside D, 93
- C<sub>32</sub>H<sub>54</sub>N<sub>2</sub>O<sub>3</sub>**  
(-)-Buxahejramine, 2813  
(-)-Buxakarachiamine, 2814
- C<sub>32</sub>H<sub>54</sub>O**  
Cyclolaudone, 4504  
Cycloneolitol, 4519  
(24*S*)-24-Methyl-25,32-cyclo-cycloartane-3*β*-ol, 14268

- (24*S*)-24-Methyl-25,32-cyclo-5*α*-lanosta-9(11)-en-3*β*-ol, 14273
- C<sub>32</sub>H<sub>54</sub>O<sub>2</sub>**  
Epifriedelinol acetate, 6919  
Friedelan-3*α*-yl acetate, 7952
- C<sub>32</sub>H<sub>54</sub>O<sub>4</sub>**  
24*R*-Acetoxy-3*β*,25-dihydroxycycloartane, 162  
3*β*-Acetyl-20,25-epoxydammarane-24*α*-ol, 386  
3*β*-Acetyl-20,25-epoxydammarane-24*β*-ol, 387
- C<sub>32</sub>H<sub>54</sub>O<sub>5</sub>**  
3*β*-Acetoxy-12*β*,16*β*,20*S*-trihydroxydammar-24-ene, 294  
3*β*-Acetoxy-16*β*,20*S*,25-trihydroxydammar-23-ene, 295
- C<sub>32</sub>H<sub>54</sub>O<sub>6</sub>**  
(20*S*)-3*β*-Acetoxy-12*β*,16*β*,25-tetrahydroxydammar-23-ene, 286
- C<sub>32</sub>H<sub>54</sub>O<sub>13</sub>**  
Neodarutoside, 15390
- C<sub>32</sub>H<sub>54</sub>O<sub>14</sub>**  
Pyishiauoside II<sub>b</sub>, 18238
- C<sub>32</sub>H<sub>54</sub>O<sub>16</sub>**  
Atractyloside E, 1978
- C<sub>32</sub>H<sub>55</sub>O<sub>5</sub>**  
Rubiaronone C, 19017
- C<sub>32</sub>H<sub>56</sub>O<sub>4</sub>**  
Mollugogenol D, 14904
- C<sub>32</sub>H<sub>56</sub>O<sub>7</sub>**  
14-Deacetylyrylene, 4740
- C<sub>32</sub>H<sub>57</sub>NO<sub>2</sub>**  
Violydoenamamide, 22522
- C<sub>32</sub>H<sub>60</sub>O<sub>4</sub>**  
Nodolidate, 15651  
Triacontanedioic acid dimethyl ester, 21539
- C<sub>32</sub>H<sub>63</sub>NO<sub>3</sub>**  
(4*E*,2*S*,3*R*)-2-*N*-Octadecanoyl-4-tetradecasphingene, 15952
- C<sub>32</sub>H<sub>64</sub>O<sub>2</sub>**  
Dotriacontanic acid, 6575  
Triacontanyl acetate, 21543
- C<sub>33</sub>H<sub>22</sub>O<sub>10</sub>**  
Thelephantin H, 21300
- C<sub>33</sub>H<sub>24</sub>O<sub>8</sub>**  
Thelephantin E, 21297
- C<sub>33</sub>H<sub>24</sub>O<sub>9</sub>**  
Thelephorin A, 21307
- C<sub>33</sub>H<sub>24</sub>O<sub>10</sub>**  
Heveaflavone, 9473  
Kayaflavone, 12185  
Sciadopitysin, 19514  
Stephaflavone B, 20315  
Taiwanhomoflavone A, 20625  
7,4',7''-Tri-*O*-methyl amentoflavone, 21938
- C<sub>33</sub>H<sub>24</sub>O<sub>11</sub>**  
4'',5,5'',7''-Tetrahydroxy-3''',4',7-trimethoxy-3,6''-biflavone, 21162  
4'',5'',7,7''-Tetrahydroxy-3''',4',7-trimethoxy-3,6''-biflavone, 21163  
3''',5,5'',7''-Tetrahydroxy-3''',4',4''-trimethoxy-6-*O*-*α*,7-*β*-flavone-chalcone, 21164  
4''',5,5'',7''-Tetrahydroxy-3''',3''',4'-trimethoxy-6-*O*-*α*,7-*β*-flavone-chalcone, 21165  
4',5,5'',7''-Tetrahydroxy-3',3'',4''-trimethoxy-6-*O*-*α*,7-*β*-flavone-chalcone, 21166  
4',5,5'',7''-Tetrahydroxy-3',3'',4''-trimethoxy-6-*O*-*β*,7-*α*-flavone-chalcone, 21167
- C<sub>33</sub>H<sub>26</sub>O<sub>10</sub>**  
5,3'-Dibenzoyloxy-3,6,7,4'-tetramethoxyflavone, 5387
- C<sub>33</sub>H<sub>26</sub>O<sub>17</sub>**  
Swertipunicoside, 20514
- C<sub>33</sub>H<sub>28</sub>N<sub>2</sub>O<sub>6</sub>**  
Kurramine-2'-*α*-*N*-oxide, 12351  
Kurramine-2'-*β*-*N*-oxide, 12352
- C<sub>33</sub>H<sub>28</sub>O<sub>9</sub>**  
Dehydroxyhexaspermone C, 4985
- C<sub>33</sub>H<sub>28</sub>O<sub>10</sub>**  
Chamaejasmenin C, 3460  
Hexaspermone C, 9518  
Ruixianglangdusu A, 19063  
Ruixianglangdusu B, 19064
- C<sub>33</sub>H<sub>28</sub>O<sub>24</sub>**  
Mallonin, 13423
- C<sub>33</sub>H<sub>30</sub>O<sub>6</sub>**  
BF-6, 2341  
2-[4,5-Dimethoxy-5-(3-phenyl-*trans*-allyl)cyclohexa-3,6-dien-2-on-1-ylmethyl]-5-hydroxy-6-methoxy-3-phenylbenzofuran, 6275  
2-[4,5-Dimethoxy-2-(3-phenyl-*trans*-allyloxy)benzyl]-5-hydroxy-6-methoxy-3-phenylbenzofuran, 6276  
Magnolignan I, 13386
- C<sub>33</sub>H<sub>30</sub>O<sub>8</sub>**  
*rel*-1*β*-(4,6-Dihydroxy-2-methoxy)-benzoyl-*rel*-2*α*-(2,6-dimethoxy-4-hydroxy)-benzoyl-*rel*-(3*β*,4*α*)-diphenylcyclobutane, 5966
- C<sub>33</sub>H<sub>30</sub>O<sub>9</sub>**  
Sanggenon B, 19256
- C<sub>33</sub>H<sub>30</sub>O<sub>10</sub>**  
Curtisian J, 4406  
Dahuribirin A, 4597
- C<sub>33</sub>H<sub>30</sub>O<sub>11</sub>**  
Dahuribirin C, 4599
- C<sub>33</sub>H<sub>30</sub>O<sub>15</sub>**  
1,2,6-Tri-*O*-(*E*)-caffeoyl-*β*-*D*-glucopyranose, 21551
- C<sub>33</sub>H<sub>32</sub>N<sub>2</sub>O<sub>15</sub>**  
Gomphrenin III, 8929
- C<sub>33</sub>H<sub>32</sub>O<sub>8</sub>**  
Piperaduncin C, 17432  
Thelephantin F, 21298
- C<sub>33</sub>H<sub>32</sub>O<sub>9</sub>**  
Occidentalol I, 15914
- C<sub>33</sub>H<sub>32</sub>O<sub>10</sub>**  
Tricolorin A, 21591
- C<sub>33</sub>H<sub>34</sub>N<sub>4</sub>O<sub>3</sub>**  
Pyropheophorbide a, 18272
- C<sub>33</sub>H<sub>34</sub>N<sub>4</sub>O<sub>6</sub>**  
Biliverdin, 2375
- C<sub>33</sub>H<sub>35</sub>N<sub>5</sub>O<sub>5</sub>**  
Ergotamine, 7252  
Ergotaminine, 7253
- C<sub>33</sub>H<sub>35</sub>O<sub>23</sub><sup>+</sup>**  
Delphinidin-3,5-di-*O*-(6-*O*-malonyl-*β*-*D*-glucoside), 5021
- C<sub>33</sub>H<sub>36</sub>N<sub>4</sub>O<sub>6</sub>**  
Bilirubin, 2374
- C<sub>33</sub>H<sub>36</sub>O<sub>5</sub>**  
Humuladien-10-yl-(3-Hydroxy-5-oxo-4-phenyl-5*H*-furan-2-ylidene)-phenylacetic acid-ester, 9666
- C<sub>33</sub>H<sub>36</sub>O<sub>6</sub>**  
(3-Hydroxy-5-oxo-4-phenyl-5*H*-furan-2-ylidene)-phenylacetic Acid 6-hydroxy-1,7(11)-humuladienyl-10-yl ester, 10579
- C<sub>33</sub>H<sub>36</sub>O<sub>7</sub>**  
Isomorellin, 11541  
Morellin, 14968
- C<sub>33</sub>H<sub>36</sub>O<sub>8</sub>**  
Isomorellic acid, 11540  
Morellic acid, 14967
- C<sub>33</sub>H<sub>36</sub>O<sub>11</sub>**  
Triptofordin B<sub>2</sub>, 22000
- C<sub>33</sub>H<sub>36</sub>O<sub>19</sub>**  
Quercetin-3-*O*-[(2,3,4-triacetyl-*α*-rhamnopyranosyl)-(1→6)]-*β*-galactopyranoside, 18403
- C<sub>33</sub>H<sub>38</sub>N<sub>4</sub>O<sub>4</sub>**  
Condaline A, 3962  
Scutianine M, 19595
- C<sub>33</sub>H<sub>38</sub>O<sub>6</sub>**  
Deoxymorellin, 5196
- C<sub>33</sub>H<sub>38</sub>O<sub>7</sub>**  
Dihydroisomorellin, 5651  
Gaudichaudione A, 8239
- C<sub>33</sub>H<sub>38</sub>O<sub>8</sub>**  
5*α*-Acetoxy-1*β*-benzoyl-8*α*-cinnamoyl-4*α*-hydroxy-dihydroagarofuran, 130  
Gaudichaudic acid, 8238

- C<sub>33</sub>H<sub>38</sub>O<sub>9</sub>**  
1β,6α-Diacetoxy-8β,9β-dibenzyloxy-β-dihydroagarofuran, 5292  
Orbiculina A, 16162
- C<sub>33</sub>H<sub>38</sub>O<sub>10</sub>**  
Salasol B, 19179
- C<sub>33</sub>H<sub>38</sub>O<sub>11</sub>**  
1*S*,13-Diacetyloxy-4*S*-hydroxy-6*R*-(3-*R*)furan-carbonyloxy-9*S*-cinnamoyloxy-β-dihydroagarofuran, 5344  
Schizanrin H, 19502  
Triptofordin C<sub>2</sub>, 22001  
Triptofordin E, 22004
- C<sub>33</sub>H<sub>38</sub>O<sub>17</sub>**  
3-*O-p*-Coumaroyl-6-*O*-feruloyl-β-*D*-fructofuranosyl 6-*O*-acetyl-α-*D*-glucopyranoside, 4157
- C<sub>33</sub>H<sub>38</sub>O<sub>21</sub>**  
Kaempferol 3-*O*-β-(2"-*O*-α-rhamnopyranosyl-3"-*O*-β-glucopyranosyl)-β-glucuronopyranoside, 12077
- C<sub>33</sub>H<sub>40</sub>N<sub>2</sub>O<sub>9</sub>**  
Renoxidine, 18623  
Reserpine, 18633
- C<sub>33</sub>H<sub>40</sub>O<sub>6</sub>**  
Deoxygaudichaudione A, 5175
- C<sub>33</sub>H<sub>40</sub>O<sub>8</sub>**  
2,9-Diacetyl-5-cinnamoylphototaxicin II, 5329  
2,10-Diacetyl-5-cinnamoylphototaxicin II, 5330  
Morinol A, 14976  
Morinol B, 14977
- C<sub>33</sub>H<sub>40</sub>O<sub>9</sub>**  
5-Cinnamoyl-9,10-diacetyltaxicin I, 3701  
2,10-Diacetyl-5-cinnamoyl-7β-hydroxyphototaxicin II, 5328  
Taxuspinanane H, 20847
- C<sub>33</sub>H<sub>40</sub>O<sub>10</sub>**  
(2*R*\*,3*S*\*,4*R*\*,5*R*\*,8*R*\*,13*S*\*,15*R*\*)-5,8,15-Triacetoxy-3-benzoyloxy-9,14-dioxojatropha-6(17),11*E*-diene, 21513
- C<sub>33</sub>H<sub>40</sub>O<sub>11</sub>**  
Acetoxytoonacin, 290  
Euphobubescenol, 7614  
Orthosiphon J, 16228  
Taxuspinanane B, 20842
- C<sub>33</sub>H<sub>40</sub>O<sub>14</sub>**  
Anhydroicaritin-3-*O*-α-*L*-rhamnopyranosyl-(1→2)-α-*L*-rhamnopyranoside, 1274  
Linarin isovalerate, 12855  
2"-*O*-Rhamnosyl icaritiside II, 18741  
Sandrapin A, 19240
- C<sub>33</sub>H<sub>40</sub>O<sub>15</sub>**  
Anhydroicaritin-3-*O*-α-*L*-rhamnopyranosyl-7-*O*-β-*D*-glucopyranoside, 1275  
Baohuoside VII, 2143
- C<sub>33</sub>H<sub>40</sub>O<sub>16</sub>**  
Tabulalide C, 20583
- C<sub>33</sub>H<sub>40</sub>O<sub>17</sub>**  
Glomeratose C, 8584
- C<sub>33</sub>H<sub>40</sub>O<sub>18</sub>**  
Arillanin A, 1681  
Genistein 7-*O*-α-*L*-rhamnopyranoside-4'-*O*-[(α-*L*-rhamnopyranosyl)-(1→2)-β-*D*-glucopyranoside], 8285  
Kaempferol-3-*O*-rhamnosyl-7-rhamnosyl-(1→3)-rhamnoside, 12089  
3'-Sinapoyl-6-feruloylsucrose, 19919
- C<sub>33</sub>H<sub>40</sub>O<sub>19</sub>**  
Clitorin, 3846  
5,4'-Dihydroxyflavone-6-*C*-β-*D*-glycosyl-rhamnoside-7-*O*-glycoside, 5896  
4',5'-Dihydroxy-7-methoxyflavonol 3-*O*-β-*D*-xylopyranosyl-(1→2)-*O*-[α-*L*-rhamnopyranosyl-(1→6)]-β-*D*-glucopyranoside, 5983  
Genistein 7-*O*-β-*D*-glucopyranoside-4'-*O*-[(α-*L*-rhamnopyranosyl)-(1→2)-β-*D*-glucopyranoside], 8281  
Genistein 7-*O*-α-*L*-rhamnopyranoside-4'-*O*-[(β-*D*-glucopyranosyl)-(1→2)-β-*D*-glucopyranoside], 8284  
1-[(β-*D*-Glucopyranosyl-(1→3)-*O*-β-*D*-glucopyranosyl-(1→6)-*O*-β-*D*-glucopyranosyl)oxy]-8-hydroxy-3-methyl-9,10-anthraquinone, 8645  
Kaempferol 3-*O*-α-*L*-rhamnopyranosyl-(1→2)-β-*D*-galactopyranosyl-7-*O*-α-*L*-rhamnopyranoside, 12075  
Kaempferol-3-*O*-[α-rhamnopyranosyl-(1→4)-rhamnopyranosyl-(1→6)-β-galactopyranoside], 12080  
Oxytroside, 16479  
Robinin, 18859
- C<sub>33</sub>H<sub>40</sub>O<sub>20</sub>**  
Genistein 7-*O*-β-*D*-glucopyranoside-4'-*O*-[(β-*D*-glucopyranosyl)-(1→2)-β-*D*-glucopyranoside], 8280  
Isorhamnetin 3-*O*-β-*D*-apiofuranosyl-(1""→2")[(α-*L*-rhamnopyranosyl-(1""→6"))]-β-*D*-galactopyranoside, 11649  
Isorhamnetin 3-*O*-β-*D*-xylopyranosyl-(1""→3"")-α-*L*-rhamnopyranosyl-(1""→6"")-β-*D*-galactopyranoside, 11671  
Kaempferol 3-*O*-[β-*D*-glucopyranosyl-(1→2)-[α-*L*-rhamnopyranosyl-(1→6)]-β-*D*-galactopyranoside], 12019  
Kaempferol 3-*O*-α-(2,3-di-*O*-β-*D*-glucopyranosyl)-rhamnopyranoside, 12041  
Kaempferol 3-*O*-α-*L*-(2-*O*-β-*D*-glucopyranosyl)-rhamnopyranoside-7-*O*-β-*D*-glucopyranoside, 12055  
Kaempferol 3-*O*-α-rhamnoside-7,4'-di-*O*-β-galactoside, 12084  
Kaempferol-3-rhamnosyl glucoside-7-glucoside, 12087  
Manghaslin, 13479  
Quercetin-3-*O*-(2",6"-α-*L*-dirhamnopyranosyl)-β-*D*-galactopyranoside, 18351  
Quercetin-3-*O*-[α-rhamnopyranosyl-(1→4)-rhamnopyranosyl-(1→6)]-β-galactopyranoside, 18385  
Quercetin-3-*O*-[α-rhamnopyranosyl-(1→4)-α-rhamnopyranosyl-(1→6)-β-glucopyranoside], 18386  
Quercetin-3-rutinoside-7-rhamnoside, 18392
- C<sub>33</sub>H<sub>40</sub>O<sub>21</sub>**  
Aescuflavoside A, 662  
Kaempferol-3-diglucose-7-glucoside, 12042  
Kaempferol 3-*O*-β-*D*-glucosyl(1→2)-β-*D*-galactoside 7-*O*-β-*D*-glucoside, 12064  
Kaempferol-3-*O*-sophoroside-7-*O*-β-*D*-glucopyranoside, 12095  
Kaempferol-3-sophorotrioside, 12097  
Kaempferol-3,7,4'-tri-*O*-β-*D*-glucoside, 12100  
Myricetin-3-*O*-(2",6"-di-*O*-α-rhamnosyl)-β-glucoside, 15175  
Peruvianoside III, 17001  
Quercetin-3-*O*-α-*L*-(2-*O*-β-*D*-glucopyranosyl)-rhamnopyranoside-7-*O*-β-*D*-glucopyranoside, 18366  
Quercetin-3-rutinoside-7-glucoside, 18391  
Quercetin-3-rutinosyl-7-galactoside, 18393
- C<sub>33</sub>H<sub>40</sub>O<sub>22</sub>**  
Herbacetin-3-β-*D*-(2-*O*-β-*D*-glucopyranosyl-glucopyranoside)-8-β-*D*-glucopyranoside, 9422  
Moracatin, 14953  
Myricetin-3-*O*-α-*L*-(2-*O*-β-*D*-glucopyranosyl)-rhamnopyranoside-7-*O*-β-*D*-glucopyranoside, 15182  
Quercetin-3-*O*-β-*D*-glucosyl(1→2)-β-*D*-galactoside 7-*O*-β-*D*-glucoside, 18370  
Quercetin-3-sophorotrioside, 18398  
Quercetin-3,3',4'-tri-*O*-β-*D*-glucopyranoside, 18404  
Quercetin-5,7,4'-tri-*O*-β-*D*-glucopyranoside, 18405
- C<sub>33</sub>H<sub>40</sub>O<sub>23</sub>**  
Gossypetin-3-β-*D*-(2-*O*-β-*D*-glucopyranosyl-glucopyranoside)-8-β-*D*-glucopyranoside, 8962

- C<sub>33</sub>H<sub>41</sub>NO<sub>8</sub>**  
 Lythrancine IV, 13275  
 Lythrancine V, 13276
- C<sub>33</sub>H<sub>41</sub>O<sub>20</sub><sup>+</sup>**  
 Cyanidin-3-rutinoside-5-glucoside, 4447  
 Cyanidin-3-*O*-β-rutinoside-7-*O*-β-glucoside, 4448  
 Raphanusin, 18548
- C<sub>33</sub>H<sub>42</sub>N<sub>4</sub>**  
 Auricularine, 2013
- C<sub>33</sub>H<sub>42</sub>N<sub>4</sub>O<sub>6</sub>**  
 Urobilin, 22259
- C<sub>33</sub>H<sub>42</sub>N<sub>6</sub>O<sub>7</sub>**  
 Cherimolacyclopeptide E, 3514
- C<sub>33</sub>H<sub>42</sub>O<sub>4</sub>**  
 Kolanone, 12256
- C<sub>33</sub>H<sub>42</sub>O<sub>5</sub>**  
 Garcinielliptone K, 8213  
 Hypercalin B, 10881
- C<sub>33</sub>H<sub>42</sub>O<sub>6</sub>**  
 Garciosaphenone A, 8223
- C<sub>33</sub>H<sub>42</sub>O<sub>7</sub>**  
 Dantaxusin B, 4637  
 9α,10β-Diacetoxy-5α-cinnamoyloxytaxa-4(20),11-dien-13α-ol, 5289
- C<sub>33</sub>H<sub>42</sub>O<sub>8</sub>**  
 5α-Cinnamoyloxy-2α,13α-dihydroxy-9α,10β-diacetoxy-4(20),11-taxadiene, 3714  
 2-Deacetoxy-7,9-dideacetyltaxinine J, 4705  
 Japonicin B, 11818
- C<sub>33</sub>H<sub>42</sub>O<sub>9</sub>**  
 10β-Deacetylspicatine, 4773  
 Euphoscopin B, 7619  
 Pubescene A, 18170  
 Quivisianthone, 18453
- C<sub>33</sub>H<sub>42</sub>O<sub>10</sub>**  
 13-Acetylbrevifoliol, 337  
 2α-Benzoyloxy-9α,10β,13α-triacetoxy-1β,5α-dihydroxy-4(20),11-taxadiene, 2265  
 7β,16α-Diacetoxy withanolide D, 5324  
 Euphoheliosnoid C, 7610  
 Paraliane 13, 16653  
 Taxawallin D, 20754
- C<sub>33</sub>H<sub>42</sub>O<sub>11</sub>**  
 13-Acetyl-9-deacetyl-9-benzoyl-10-debenzoyl-taxchinin A, 363  
 Orthosiphol U, 16236  
 Taxchinin A, 20770
- C<sub>33</sub>H<sub>42</sub>O<sub>12</sub>**  
 15-Benzoyl-2-debenzoyl-7,9-dideacetyl-abeobaccatin VI, 2237  
 7,9-Deacetyl-baccatin VI, 4726  
 13-Decinamoyl-9-deacetyltaxchinin B, 4851
- 10-(β-Hydroxybutyryl)-10-deacetyl-baccatin I, 9865  
 Tasumatrol G, 20722  
 Taxayuntin E, 20763  
 Taxayuntin F, 20764  
 Taxumairol H, 20828  
 Taxuyunnanine E, 20877
- C<sub>33</sub>H<sub>42</sub>O<sub>13</sub>**  
 Taxumairol Z, 20839
- C<sub>33</sub>H<sub>42</sub>O<sub>14</sub>**  
 Woorenoside III, 22729
- C<sub>33</sub>H<sub>42</sub>O<sub>16</sub>**  
 Wiedemannioside A, 22662
- C<sub>33</sub>H<sub>42</sub>O<sub>19</sub>**  
 Naringenin-4'-glucoside-7-neohesperidoside, 15282  
 Naringenin-4'-glucoside-7-rutinoside, 15283
- C<sub>33</sub>H<sub>43</sub>ClO<sub>14</sub>**  
 Juncin O, 11955
- C<sub>33</sub>H<sub>43</sub>NO<sub>11</sub>**  
 Aldohypaconitine, 877
- C<sub>33</sub>H<sub>43</sub>N<sub>5</sub>O<sub>4</sub>**  
 Amphibine A, 1080  
 Waltherine B, 22633
- C<sub>33</sub>H<sub>43</sub>N<sub>5</sub>O<sub>5</sub>**  
*O*-12'-Methyl-α-ergokryptine, 14412  
*O*-12'-Methyl-α-ergokryptinine, 14413
- C<sub>33</sub>H<sub>44</sub>O<sub>4</sub>**  
 Eudesobovitol A, 7517
- C<sub>33</sub>H<sub>44</sub>O<sub>6</sub>**  
*rel*-Labd-12-en-15(16)-olid-7-one-8*R*-spiro-1'-[2*S*-(2,4,5-trimethoxyphenyl)-3-cyclohexene], 12419
- C<sub>33</sub>H<sub>44</sub>O<sub>8</sub>**  
 Sarothralen A, 19385
- C<sub>33</sub>H<sub>44</sub>O<sub>9</sub>**  
 1-Deacetyl-nimbolinin B, 4756  
 Methyl ganoderate F, 14457
- C<sub>33</sub>H<sub>44</sub>O<sub>10</sub>**  
 Ardisiaquinone I, 1637
- C<sub>33</sub>H<sub>44</sub>O<sub>12</sub>**  
 Tasumatrol F, 20721
- C<sub>33</sub>H<sub>44</sub>O<sub>13</sub>**  
 Tasumatrol E, 20720
- C<sub>33</sub>H<sub>44</sub>O<sub>14</sub>**  
 2',7-Dihydroxy-4'-methoxy-8-prenylflavan  
 2',7-di-*O*-β-*D*-glucopyranoside, 6004
- C<sub>33</sub>H<sub>44</sub>O<sub>15</sub>**  
 1α,2α,6β,15-Tetraacetoxy-3α-(α-methyl)-butanoyl-4β-hydroxy-9β-(β-furoyloxy-β-dihydroagarofuran), 21031
- C<sub>33</sub>H<sub>44</sub>O<sub>16</sub>**  
 Arctigenin 4'-gentiobioside, 1622
- Javanicoside F, 11859
- C<sub>33</sub>H<sub>44</sub>O<sub>17</sub>**  
 (+)-Medioresinol di-*O*-β-*D*-glucopyranoside, 13641  
 Syringaresinol-4-*O*-β-*D*-apiofuranosyl-(1→2)-β-*D*-glucopyranoside, 20557  
 Trachelogenin 4'-*O*-β-gentiobioside, 21492
- C<sub>33</sub>H<sub>44</sub>O<sub>20</sub>**  
 Adinoside D, 639  
 Adinoside E, 640  
 Epigeoside, 6925
- C<sub>33</sub>H<sub>45</sub>ClO<sub>14</sub>**  
 Gemmacolide B, 8265
- C<sub>33</sub>H<sub>45</sub>NO<sub>6</sub>**  
 Leueantine C, 12730
- C<sub>33</sub>H<sub>45</sub>NO<sub>7</sub>**  
 8-*O*-Cinnamoylneoline, 3712  
 14-*O*-Cinnamoylneoline, 3713  
 2-Deacetyl-9-acetoxytaxine B, 4711  
 2-Deacetyl-10-acetyltaxine B, 4713  
 Kongboendine, 12259  
 Leueantine D, 12731
- C<sub>33</sub>H<sub>45</sub>NO<sub>8</sub>**  
 Taxine B, 20795
- C<sub>33</sub>H<sub>45</sub>NO<sub>9</sub>**  
 2-Deacetyltaxine A, 4780  
 Delphinine, 5032  
 Isodelphinine, 11373
- C<sub>33</sub>H<sub>45</sub>NO<sub>10</sub>**  
 Hypaconitine, 10875
- C<sub>33</sub>H<sub>45</sub>NO<sub>11</sub>**  
 Mesaconitine, 13794
- C<sub>33</sub>H<sub>45</sub>NO<sub>12</sub>**  
 Beiwutine, 2214
- C<sub>33</sub>H<sub>46</sub>N<sub>8</sub>O<sub>8</sub>**  
 Pseudostellarin B, 18065
- C<sub>33</sub>H<sub>46</sub>O<sub>8</sub>**  
 Phorbol-12-tiglate-13-caprylenate, 17193
- C<sub>33</sub>H<sub>46</sub>O<sub>10</sub>**  
 Ostodin, 16262
- C<sub>33</sub>H<sub>46</sub>O<sub>13</sub>**  
 Taxuspine Q, 20864
- C<sub>33</sub>H<sub>46</sub>O<sub>15</sub>**  
 Myricanol gentiobioside, 15162
- C<sub>33</sub>H<sub>46</sub>O<sub>17</sub>**  
 (+)-Lyoniresinol-3α-*O*-β-*D*-apiofuranosyl-(1→2)-β-*D*-glucopyranoside, 13251
- C<sub>33</sub>H<sub>46</sub>O<sub>19</sub>**  
 6'-*O*-(7α-Hydroxyswerosyloxy)loganin, 10735
- C<sub>33</sub>H<sub>46</sub>O<sub>20</sub>**  
 Randinoside, 18542
- C<sub>33</sub>H<sub>47</sub>ClO<sub>12</sub>**  
 Juncenolide F, 11953

- C<sub>33</sub>H<sub>47</sub>NO<sub>2</sub>**  
Emindole PA, 6773  
Emindole PB, 6774  
Emindole PC, 6775
- C<sub>33</sub>H<sub>47</sub>NO<sub>9</sub>**  
8-Deacetylsungpanconitine, 4774  
Neojiangyouaconitine, 15418  
14-*O*-Veratrolyneoline, 22394
- C<sub>33</sub>H<sub>47</sub>NO<sub>10</sub>**  
14-Benzoyl-8-*O*-methyl-aconine I, 2248  
8-Deacetylyunaconitine, 4792
- C<sub>33</sub>H<sub>48</sub>O<sub>5</sub>**  
3-*O*-Acetyl-methyl-(24*E*)-3*a*,16*a*,23*a*(=16*R*,23*R*)-trihydroxy-epoxy-17,14-friedolan-8,14,24-trien-26-oate, 467  
Fomefficinic acid E, 7859  
Fomitopsis acid B, 7862
- C<sub>33</sub>H<sub>48</sub>O<sub>6</sub>**  
Inocalophyllin B methyl ester, 11066
- C<sub>33</sub>H<sub>48</sub>O<sub>7</sub>**  
Revandchinone 4, 18672
- C<sub>33</sub>H<sub>48</sub>O<sub>8</sub>**  
Phorbol-12- $\alpha$ -methylbutyrate-13-caprylate, 17189
- C<sub>33</sub>H<sub>48</sub>O<sub>9</sub>**  
12 $\beta$ -Acetoxy-3 $\beta$ -hydroxy-24,25,26,27-tetranor-cycloart-7-en-23,16 $\beta$ -olide 3-*O*- $\beta$ -*D*-xylopyranoside, 238
- C<sub>33</sub>H<sub>48</sub>O<sub>10</sub>**  
Caseamembrin D, 3261  
2*a*-( $\alpha$ -Methylbutyryl)-oxy-5*a*,7 $\beta$ ,9*a*,10 $\beta$ -tetra-acetoxy-4(20),11-taxadiene, 14198  
Taxuyunnanin B, 20874
- C<sub>33</sub>H<sub>49</sub>NO<sub>8</sub>**  
Pseudojervine, 18030
- C<sub>33</sub>H<sub>49</sub>N<sub>5</sub>O<sub>6</sub>**  
Zizyphine A, 23014
- C<sub>33</sub>H<sub>50</sub>N<sub>2</sub>O<sub>2</sub>**  
*N*-Benzoylbuxahyrcanine, 2233
- C<sub>33</sub>H<sub>50</sub>N<sub>2</sub>O<sub>3</sub>**  
Pachysandrine A, 16505
- C<sub>33</sub>H<sub>50</sub>O<sub>5</sub>**  
Fomlactone A, 7876
- C<sub>33</sub>H<sub>50</sub>O<sub>6</sub>**  
Methylcamaralate, 14208  
Regelin C, 18579
- C<sub>33</sub>H<sub>50</sub>O<sub>9</sub>**  
12 $\beta$ -Acetoxy-3 $\beta$ -hydroxy-24,25,26,27-tetranor-cycloartan-23,16 $\beta$ -olide 3-*O*- $\beta$ -*D*-xylopyranoside, 237
- C<sub>33</sub>H<sub>50</sub>O<sub>11</sub>**  
Spongipregnoside A, 20230  
Spongipregnoside B, 20231
- C<sub>33</sub>H<sub>52</sub>N<sub>4</sub>O<sub>6</sub>**  
*N*-Methylsalsalvamide, 14719
- C<sub>33</sub>H<sub>52</sub>O<sub>5</sub>**  
3 $\beta$ -Acetoxy-12*a*-formyloxy-13,27-cycloursan-11*a*-ol, 197  
Euscaphic acid 2,3-monoacetone, 7658  
21*a*-Hydroxyserrat-14-en-3 $\beta$ -yl propanedioic acid monoester, 10708  
Pachymic acid, 16496  
Tsugaric acid B, 22069
- C<sub>33</sub>H<sub>52</sub>O<sub>8</sub>**  
Collettinside I, 3922  
Diosgenin-3-*O*- $\beta$ -*D*-glucopyranoside, 6443
- C<sub>33</sub>H<sub>52</sub>O<sub>9</sub>**  
Agavoside A, 727  
Convallamarogen-3-*O*- $\beta$ -*D*-glucopyranoside, 4006
- C<sub>33</sub>H<sub>52</sub>O<sub>10</sub>**  
22-Hydroxy-25(*R,S*)-furost-5-en-12-on-3 $\beta$ ,22,26-triol 26-*O*- $\beta$ -*D*-glucopyranoside, 10134
- C<sub>33</sub>H<sub>52</sub>O<sub>12</sub>**  
Aspidoside A, 1902
- C<sub>33</sub>H<sub>52</sub>O<sub>15</sub>**  
Wattoside H, 22654
- C<sub>33</sub>H<sub>52</sub>O<sub>17</sub>**  
10-Isovaleryl kanokoside C, 11762
- C<sub>33</sub>H<sub>52</sub>O<sub>18</sub>**  
Jasnudifloside K, 11831
- C<sub>33</sub>H<sub>53</sub>NO<sub>6</sub>**  
Solaplumbinine, 20065
- C<sub>33</sub>H<sub>53</sub>NO<sub>7</sub>**  
Yibeinoside A, 22904  
Yibeinoside B, 22905
- C<sub>33</sub>H<sub>53</sub>NO<sub>8</sub>**  
Hupehemonoside, 9679
- C<sub>33</sub>H<sub>54</sub>O<sub>2</sub>**  
Eburicyl acetate, 6676  
24-Methylenecycloartanyl acetate, 14355  
Sablacaurin A, 19102
- C<sub>33</sub>H<sub>54</sub>O<sub>3</sub>**  
3 $\beta$ -Acetoxy-25-methoxy-lanosta-8,23-diene, 252
- C<sub>33</sub>H<sub>54</sub>O<sub>8</sub>**  
Asparagoside A, 1867  
(22*S*)-Cholesta-5,24-diene-3 $\beta$ ,11*a*,16 $\beta$ ,22-tetrol 16-*O*- $\alpha$ -*L*-rhamnopyranoside, 3577  
Timosaponin A<sup>1</sup>, 21394
- C<sub>33</sub>H<sub>54</sub>O<sub>9</sub>**  
22-Epirhodeasapogenin-3-*O*- $\beta$ -*D*-glucopyranoside, 7005  
16 $\beta$ -[( $\beta$ -*D*-Glucopyranosyl)-oxy]-3 $\beta$ ,7 $\beta$ -dihydroxycholest-5-en-23-one, 8687  
(25*R*)-3 $\beta$ -Hydroxy-5*a*-spirostan-6*a*-yl *O*- $\beta$ -*D*-glucopyranoside, 10717
- Isorhodeasapogenin-3-*O*- $\beta$ -*D*-glucopyranoside, 11675  
Rhodeasapogenin-3-*O*- $\beta$ -*D*-glucopyranoside, 18782  
Tokoronin, 21428
- C<sub>33</sub>H<sub>54</sub>O<sub>10</sub>**  
Agamenoside I, 698  
Agamenoside J, 699  
(25*R*)-5*a*-Spirostan-3 $\beta$ ,6*a*,23*a*-triol-6-*O*- $\beta$ -*D*-glucopyranoside, 20216  
Tokorogenin-*L*-*O*- $\beta$ -*D*-glucopyranoside, 21427
- C<sub>33</sub>H<sub>54</sub>O<sub>11</sub>**  
Ponasteroside A, 17703  
(25*S*)-1 $\beta$ ,3 $\beta$ ,4 $\beta$ -Trihydroxyspirostan-5 $\beta$ -yl-*O*- $\beta$ -*D*-glucopyranoside, 21845
- C<sub>33</sub>H<sub>54</sub>O<sub>12</sub>**  
20 $\beta$ -Ecdysterone 2-*O*- $\beta$ -*D*-glucopyranoside, 6680  
Ecdysterone-3-*O*- $\beta$ -*D*-glucopyranoside, 6681  
Ecdysterone-22-*O*- $\beta$ -*D*-glucopyranoside, 6682
- C<sub>33</sub>H<sub>54</sub>O<sub>13</sub>**  
20-Hydroxyecdysone 3-*O*- $\beta$ -*D*-glucoside, 10064
- C<sub>33</sub>H<sub>55</sub>NO<sub>5</sub>**  
Acutifolin palmitate, 598
- C<sub>33</sub>H<sub>55</sub>NO<sub>7</sub>**  
Capsicastrine, 3143  
Hupeheninoside, 9682  
Persicanidine B-3-*O*- $\beta$ -*D*-glucoside, 16989
- C<sub>33</sub>H<sub>55</sub>NO<sub>8</sub>**  
Peiminoside, 16775  
Zhebeininoside, 22994
- C<sub>33</sub>H<sub>56</sub>O<sub>4</sub>**  
Tetracosyl caffeate, 21039
- C<sub>33</sub>H<sub>56</sub>O<sub>8</sub>**  
(22*S*)-Cholest-5-ene-3*a*,11*a*,16 $\beta$ ,22-tetrol 16-*O*- $\alpha$ -*L*-rhamnopyranoside, 3583
- C<sub>33</sub>H<sub>56</sub>O<sub>12</sub>**  
6'-*O*- $\alpha$ -*L*-Rhamnopyranosyl-4-epimicrolepin, 18698
- C<sub>33</sub>H<sub>56</sub>O<sub>13</sub>**  
Wattoside D, 22651
- C<sub>33</sub>H<sub>56</sub>O<sub>14</sub>**  
Denin, 5131  
 $\alpha$ , $\beta$ -Digalactosyl- $\alpha$ -linolenic-glyceride, 5509  
Nerolidol-3-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranoside, 15502  
Nerolidol-3-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside, 15503  
Pyishiauoside Ib, 18237
- C<sub>33</sub>H<sub>56</sub>O<sub>17</sub>**  
Periplocae oligosaccharide F<sub>2</sub>, 16941
- C<sub>33</sub>H<sub>57</sub>NO<sub>3</sub>**

- Qinjiaoamide, 18292
- C<sub>33</sub>H<sub>57</sub>NO<sub>8</sub>**  
Jurubine, 11971
- C<sub>33</sub>H<sub>58</sub>O<sub>2</sub>**  
Cycloartanol acetate, 4469
- C<sub>33</sub>H<sub>58</sub>O<sub>14</sub>**  
Gingerglycolipid B, 8392  
2,3,4-Tri(5-methylhexanoyl)- $\alpha$ -D-glucopyranosyl- $\beta$ -D-fructofuranoside, 21964
- C<sub>33</sub>H<sub>60</sub>O<sub>6</sub>**  
Montalycin A, 14936
- C<sub>33</sub>H<sub>60</sub>O<sub>7</sub>**  
Muricin D, 15093  
Muricin E, 15094
- C<sub>33</sub>H<sub>60</sub>O<sub>14</sub>**  
Gingerglycolipid C, 8393
- C<sub>33</sub>H<sub>63</sub>NO<sub>4</sub>**  
(2*S*,2'*R*,3*R*,4*E*,8*E*)-*N*-2'-Hydroxytetradecanoyl-2-amino-9-methyl-4,8-octadecadiene-1,3-diol, 10744
- C<sub>33</sub>H<sub>64</sub>O<sub>2</sub>**  
Eucalyptus wax, 7482
- C<sub>33</sub>H<sub>66</sub>O<sub>2</sub>**  
Psyllic acid, 18096
- C<sub>33</sub>H<sub>67</sub>NO<sub>5</sub>**  
Trufflesphingolipid C, 22055
- C<sub>33</sub>H<sub>68</sub>**  
*n*-Tritriacontane, 22042
- C<sub>33</sub>H<sub>68</sub>O**  
6-Tritriacontanol, 22043  
Tritriacontanol, 22044
- C<sub>34</sub>H<sub>22</sub>O<sub>8</sub>**  
( $\pm$ )-Albanol B, 847
- C<sub>34</sub>H<sub>22</sub>O<sub>9</sub>**  
Mulberrofuran P, 15050
- C<sub>34</sub>H<sub>22</sub>O<sub>10</sub>**  
Mulberrofuran M, 15047
- C<sub>34</sub>H<sub>22</sub>O<sub>22</sub>**  
Punicalin, 18205
- C<sub>34</sub>H<sub>24</sub>O<sub>10</sub>**  
Mulberrofuran Q, 15051
- C<sub>34</sub>H<sub>24</sub>O<sub>21</sub>**  
Balanophotannin A, 2127
- C<sub>34</sub>H<sub>24</sub>O<sub>22</sub>**  
Casuariin, 3302  
5-Desgalloylstachyurin, 5249  
Pedunculagin, 16765  
Tomentosin, 21443
- C<sub>34</sub>H<sub>26</sub>O<sub>6</sub>**  
2,2'-Di-(2-phenylethyl)-8,6'-dihydroxy-5,5'-bichromone (AH11), 6486
- C<sub>34</sub>H<sub>26</sub>O<sub>8</sub>**  
Albanol A, 846
- Curtisian Q, 4413  
Ganbajunin C, 8132  
Ganbajunin E, 8133  
Mulberrofuran G, 15044  
Terrestrin A, 21006
- C<sub>34</sub>H<sub>26</sub>O<sub>10</sub>**  
Kuwanon Z, 12394  
Stephaflavone A, 20314  
7,4',7'',4'''-Tetra-*O*-methylamentoflavone, 21192
- C<sub>34</sub>H<sub>26</sub>O<sub>22</sub>**  
1,2-Di-*O*-galloyl-4,6-*O*-(*S*)-hexahydroxydiphenyl- $\beta$ -D-glucopyranose, 5521  
Mallorepanin, 13428  
Mallotinic acid, 13429  
Sanguiin H<sub>1</sub>, 19273  
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- C<sub>34</sub>H<sub>26</sub>O<sub>23</sub>**  
Punigluconin, 18206  
Sanguiin H<sub>7</sub>, 19279
- C<sub>34</sub>H<sub>28</sub>O<sub>7</sub>**  
Kuwanol A, 12377
- C<sub>34</sub>H<sub>28</sub>O<sub>8</sub>**  
AH21, 772
- C<sub>34</sub>H<sub>28</sub>O<sub>9</sub>**  
Albafuran C, 845  
Mulberrofuran C, 15041
- C<sub>34</sub>H<sub>28</sub>O<sub>22</sub>**  
1,2,3,4-Tetragalloyl- $\alpha$ -D-glucose, 21052  
1,2,3,6-Tetra-*O*-galloyl- $\beta$ -D-glucose, 21053  
1,2,4,6-Tetra-*O*-galloyl- $\beta$ -D-glucose, 21054
- C<sub>34</sub>H<sub>30</sub>N<sub>2</sub>O<sub>5</sub>**  
1,2-Dehydroapateline, 4877
- C<sub>34</sub>H<sub>30</sub>N<sub>2</sub>O<sub>6</sub>**  
Puertogaline A, 18187
- C<sub>34</sub>H<sub>30</sub>O<sub>8</sub>**  
Guangsangon B, 9054  
(5*S*,6*R*,7*R*,8*S*)-2-(2-Phenylethyl)-5,6,7-trihydroxy-5,6,7,8-tetrahydro-8-[2-(2-phenylethyl)chromonyl-6-oxy]chromone (AH13), 17119  
(5*S*,6*S*,7*S*,8*R*)-2-(2-Phenylethyl)-6,7,8-trihydroxy-5,6,7,8-tetrahydro-5-[2-(2-phenylethyl)chromonyl-6-oxy]chromone (AH14), 17120
- C<sub>34</sub>H<sub>30</sub>O<sub>9</sub>**  
Kuwanon P, 12390  
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(5*S*,6*S*,7*R*,8*S*)-2-(2-Phenylethyl)-6,7,8-trihydroxy-5,6,7,8-tetrahydro-5-[2-(2-phenylethyl)-7-hydroxy-chromonyl-6-oxy]-chromone (AH15), 17122
- C<sub>34</sub>H<sub>30</sub>O<sub>15</sub>**  
1,3,5-Tri-*O*-caffeoyl quinic acid, 21552
- C<sub>34</sub>H<sub>30</sub>O<sub>18</sub>**  
Trifuhalol A octaacetate, 21639  
Triisofuhalol octaacetate, 21869
- C<sub>34</sub>H<sub>32</sub>FeN<sub>4</sub>O<sub>4</sub><sup>+</sup>**  
Hemin, 9345
- C<sub>34</sub>H<sub>32</sub>N<sub>2</sub>O<sub>5</sub>**  
Coccoline, 3881
- C<sub>34</sub>H<sub>32</sub>N<sub>2</sub>O<sub>6</sub>**  
Pangkorimine, 16604
- C<sub>34</sub>H<sub>32</sub>O<sub>8</sub>**  
*rel*-(1 $\alpha$ ,2 $\beta$ )-Di-(2,6-dimethoxy-4-hydroxy)-benzoyl-*rel*-(3 $\alpha$ ,4 $\beta$ )-diphenylcyclobutane, 5480
- C<sub>34</sub>H<sub>32</sub>O<sub>9</sub>**  
6''-Demethoxyneocalycopteron, 5051
- C<sub>34</sub>H<sub>32</sub>O<sub>10</sub>**  
(*rel*)-1 $\beta$ ,2 $\alpha$ -Di-(2,4-dihydroxy-6-methoxybenzoyl)-3 $\beta$ ,4 $\alpha$ -di-(4-methoxyphenyl)-cyclobutane, 5479
- C<sub>34</sub>H<sub>32</sub>O<sub>11</sub>**  
Anticancer Stilbenoid PMV70P691-041, 1445  
Resveratrol (*E*)-dehydrodimer 11-*O*- $\beta$ -D-glucopyranoside, 18645  
Resveratrol (*E*)-dehydrodimer 11'-*O*- $\beta$ -D-glucopyranoside, 18646
- C<sub>34</sub>H<sub>32</sub>O<sub>12</sub>**  
Dahuribirin F, 4602
- C<sub>34</sub>H<sub>33</sub>FeN<sub>4</sub>O<sub>5</sub>**  
Hematin, 9338
- C<sub>34</sub>H<sub>34</sub>N<sub>2</sub>O<sub>16</sub>**  
Gomphrenin V, 8930  
Gomphrenin VI, 8931
- C<sub>34</sub>H<sub>34</sub>N<sub>4</sub>O<sub>4</sub>**  
Protoporphyrin, 17984
- C<sub>34</sub>H<sub>34</sub>N<sub>4</sub>O<sub>5</sub>**  
Phellophyll a, 17076
- C<sub>34</sub>H<sub>34</sub>O<sub>10</sub>**  
Austrocolorin A<sub>1</sub>, 2019  
Austrocolorin B<sub>1</sub>, 2020  
Calyflorene D, 3009  
Genkwadaphnin, 8287  
Singueanol I, 19933  
Singueanol II, 19934
- C<sub>34</sub>H<sub>34</sub>O<sub>13</sub>**  
Dahuribirin B, 4598  
Dahuribirin G, 4603
- C<sub>34</sub>H<sub>35</sub>O<sub>19</sub>**  
Cyanidin-3-*O*-(2''-*O*-galloyl-6''-*O*- $\alpha$ -rhamnopyranosyl- $\beta$ -galactopyranoside), 4440
- C<sub>34</sub>H<sub>36</sub>N<sub>2</sub>O<sub>6</sub>**  
Lindoldhamine, 12877  
Pseudomorphine, 18052

- C<sub>34</sub>H<sub>36</sub>O<sub>6</sub>**  
Isovouacapenol E, 11780
- C<sub>34</sub>H<sub>36</sub>O<sub>7</sub>**  
Ingenol-3,20-dibenzoate, 11058
- C<sub>34</sub>H<sub>36</sub>O<sub>8</sub>**  
Phorbol-12-benzoate-13-benzoate, 17183
- C<sub>34</sub>H<sub>36</sub>O<sub>10</sub>**  
Yuanhuatin, 22933
- C<sub>34</sub>H<sub>36</sub>O<sub>11</sub>**  
Orbiculin F, 16165
- C<sub>34</sub>H<sub>36</sub>O<sub>15</sub>**  
Agnucastoid C, 752
- C<sub>34</sub>H<sub>37</sub>N<sub>5</sub>O<sub>6</sub>**  
Longicalycinin A, 12954
- C<sub>34</sub>H<sub>38</sub>O<sub>7</sub>**  
Sarbronine B, 19357
- C<sub>34</sub>H<sub>38</sub>O<sub>10</sub>**  
Triptofordin D<sub>1</sub>, 22002
- C<sub>34</sub>H<sub>38</sub>O<sub>16</sub>**  
Aloeresin C, 974  
Pentaacetyl-6'-cinnamoyl catalpol, 16821  
Senburiside I, 19699
- C<sub>34</sub>H<sub>38</sub>O<sub>19</sub>**  
Kaempferol-3-*O*-lysimachiatriside, 12066
- C<sub>34</sub>H<sub>39</sub>NO<sub>11</sub>**  
Kupitengester 1, 12336
- C<sub>34</sub>H<sub>39</sub>NO<sub>12</sub>**  
1 $\alpha$ -Nicotinoyloxy-2 $\alpha$ -acetoxy-6 $\beta$ -acetoxy-9 $\beta$ -benzoyloxy-11-acetoxy-4 $\beta$ -hydroxydihydro- $\beta$ -agarofuran, 15534  
1 $\beta$ ,5 $\alpha$ ,11-Triacetoxy-7 $\beta$ -benzoyl-4 $\alpha$ -hydroxy-8 $\beta$ -nicotinoyl-dihydroagarofuran, 21512
- C<sub>34</sub>H<sub>40</sub>N<sub>2</sub>O<sub>10</sub>**  
10,11-Dimethoxy-1-methyldeacetylpicaline-3',4',5'-trimethoxy-benzoate, 6259
- C<sub>34</sub>H<sub>40</sub>N<sub>4</sub>O<sub>4</sub>**  
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- C<sub>34</sub>H<sub>40</sub>N<sub>4</sub>O<sub>5</sub>**  
Scutianine D, 19592  
Scutianine E, 19593
- C<sub>34</sub>H<sub>40</sub>O<sub>8</sub>**  
Isomoreollin B, 11542  
Scortechinone H, 19553
- C<sub>34</sub>H<sub>40</sub>O<sub>9</sub>**  
Moreollic acid, 14970  
Scortechinone B, 19547  
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- C<sub>34</sub>H<sub>40</sub>O<sub>10</sub>**  
Scortechinone C, 19548  
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- C<sub>34</sub>H<sub>40</sub>O<sub>12</sub>**  
Agrimol F, 755  
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- C<sub>34</sub>H<sub>40</sub>O<sub>14</sub>**  
Myricanol galloyl glucoside, 15161
- C<sub>34</sub>H<sub>40</sub>O<sub>16</sub>**  
Javanicoside J, 11861  
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- C<sub>34</sub>H<sub>40</sub>O<sub>17</sub>**  
Tabulalide A, 20581
- C<sub>34</sub>H<sub>40</sub>O<sub>18</sub>**  
Sagittatin B, 19126
- C<sub>34</sub>H<sub>40</sub>O<sub>19</sub>**  
Arillatose A, 1684  
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- C<sub>34</sub>H<sub>40</sub>O<sub>20</sub>**  
Viscumneoside VII, 22542
- C<sub>34</sub>H<sub>41</sub>NO<sub>13</sub>**  
1 $\alpha$ -Nicotinoyloxy-2 $\alpha$ -acetoxy-6 $\beta$ -acetoxy-9 $\beta$ -furoyloxy-11-isobutyryloxy-4 $\beta$ -hydroxydihydro- $\beta$ -agarofuran, 15536
- C<sub>34</sub>H<sub>41</sub>NO<sub>17</sub>**  
Anthemis glycoside B, 1353
- C<sub>34</sub>H<sub>42</sub>N<sub>2</sub>O<sub>4</sub>**  
Belladonnine, 2218
- C<sub>34</sub>H<sub>42</sub>O<sub>6</sub>**  
Cowagarcinone A, 4195
- C<sub>34</sub>H<sub>42</sub>O<sub>7</sub>**  
Scortechinone A, 19546  
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- C<sub>34</sub>H<sub>42</sub>O<sub>10</sub>**  
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- C<sub>34</sub>H<sub>42</sub>O<sub>11</sub>**  
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- C<sub>34</sub>H<sub>42</sub>O<sub>13</sub>**  
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- C<sub>34</sub>H<sub>42</sub>O<sub>18</sub>**  
Isopodophyllotoxin 7'-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside, 11608  
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*L*-Picropodophyllin 7'-*O*-( $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside), 17340  
Reiniose A, 18603
- C<sub>34</sub>H<sub>42</sub>O<sub>19</sub>**  
5,4'-Dihydroxy-7-methoxyflavone-3-*O*-[ $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 3)-*O*- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 6)-*O*- $\beta$ -*D*-glucopyranoside], 5981  
1,2-Di-*O*-*E*-sinapoyl- $\beta$ -gentiobiose, 6508  
3',6'-Disinapoylsucrose, 6511  
Sibiricose A<sub>4</sub>, 19865
- C<sub>34</sub>H<sub>42</sub>O<sub>20</sub>**  
Isorhamnetin 3-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1'' $\rightarrow$ 2'')-[ $\alpha$ -*L*-rhamnopyranosyl-(1'''' $\rightarrow$ 6'')]- $\beta$ -*D*-galactopyranoside, 11664  
Isorhamnetin 3-*O*-[ $\alpha$ -rhamnopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -rhamnopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -glucopyranoside], 11665  
Isorhamnetin 3-*O*-2<sup>G</sup>-rhamnosylrutinoside, 11667  
Typhaneoside, 22154
- C<sub>34</sub>H<sub>42</sub>O<sub>21</sub>**  
Saprosmoside H, 19352
- C<sub>34</sub>H<sub>42</sub>O<sub>22</sub>**  
3-*O*-Methylquercetin-7-*O*-diglucoside-4'-*O*-glucoside, 14710
- C<sub>34</sub>H<sub>43</sub>NO<sub>11</sub>**  
Euphocharacin J, 7605  
3,5,7,15-Tetraacetoxy-9-nicotinoyloxy-14-oxojatropha-6(17),11-diene, 21032
- C<sub>34</sub>H<sub>43</sub>NO<sub>12</sub>**  
Kansuinin G, 12143
- C<sub>34</sub>H<sub>43</sub>O<sub>14</sub>**  
Glehlinsoside A, 8545
- C<sub>34</sub>H<sub>43</sub>O<sub>20</sub><sup>+</sup>**  
Cyanidin-3-sophoroside-5-glucoside, 4449
- C<sub>34</sub>H<sub>44</sub>O<sub>9</sub>**  
Neobonaspectin B, 15345  
Salannin, 19177
- C<sub>34</sub>H<sub>44</sub>O<sub>12</sub>**  
Taccalonolide E, 20587
- C<sub>34</sub>H<sub>44</sub>O<sub>13</sub>**  
12-*O*-Deacetyltrichilin H, 4790  
Taccalonolide F, 20588  
Taccalonolide I, 20591
- C<sub>34</sub>H<sub>44</sub>O<sub>14</sub>**  
Taccalonolide K, 20593  
7-( $\beta$ -Xylosyl)-10-deacetylbaecatin III, 22846
- C<sub>34</sub>H<sub>44</sub>O<sub>16</sub>**  
Viburtinoside B, 22462  
Viburtioside A, 22463
- C<sub>34</sub>H<sub>44</sub>O<sub>19</sub>**  
Arenarioside, 1663  
Ehrenoside, 6718  
Forsythoside B, 7925  
Lavansulifolioside, 12579  
Myricoside, 15189  
Pedicularioside A, 16763
- C<sub>34</sub>H<sub>44</sub>O<sub>20</sub>**  
Aragoside, 1602  
3,4-Dihydroxyphenylethanol-8-*O*-[4-*O*-*trans*-caffeoyl- $\beta$ -*D*-apiofuranosyl(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)]- $\beta$ -*D*-glucopyranoside, 6079  
Lavandulifolioside, 12577
- C<sub>34</sub>H<sub>45</sub>ClN<sub>2</sub>O<sub>11</sub>**



- Maytanbutacine, 13618
- C<sub>34</sub>H<sub>45</sub>NO<sub>10</sub>**  
Euphocharacin G, 7602  
Euphocharacin K, 7606
- C<sub>34</sub>H<sub>46</sub>ClN<sub>3</sub>O<sub>10</sub>**  
Maytansine, 13621
- C<sub>34</sub>H<sub>46</sub>O<sub>6</sub>**  
Revandchinone 1, 18669
- C<sub>34</sub>H<sub>46</sub>O<sub>8</sub>**  
Bisacutifolone A mono acetate, 2431
- C<sub>34</sub>H<sub>46</sub>O<sub>9</sub>**  
Cinobufagin-3-hydrogen suberate, 3730  
12-*O*-Methylvolkensin, 14813
- C<sub>34</sub>H<sub>46</sub>O<sub>13</sub>**  
*cis*-Cleroda-3,13(14)-dien-15,16-olide-18-*O*-  
[ $\beta$ -*D*-galactopyranosyl]-peracetyler, 3833
- C<sub>34</sub>H<sub>46</sub>O<sub>14</sub>**  
Jatrophane 7, 11843
- C<sub>34</sub>H<sub>46</sub>O<sub>15</sub>**  
1-Acetoxy-baccatin I, 129  
1 $\beta$ -Acetylbaaccatin IV, 328  
4 $\alpha$ -Hydroxy-1 $\beta$ ,2 $\beta$ ,5 $\alpha$ -triacetoxy-7 $\beta$ ,11-diiso-  
butyryloxy-8 $\alpha$ -furanoyl-dihydroagarofuran,  
10776
- C<sub>34</sub>H<sub>46</sub>O<sub>16</sub>**  
Bruceantinoside A, 2662  
Yadanzioside N, 22873  
Yadanzioside P, 22875
- C<sub>34</sub>H<sub>46</sub>O<sub>17</sub>**  
Bis[4-( $\beta$ -*D*-glucopyranosyloxy) benzyl] (*S*)-2-  
butylmalate, 2453  
Tangshenoside III, 20674  
Yadanzioside C, 22862  
Yadanzioside L, 22871
- C<sub>34</sub>H<sub>46</sub>O<sub>18</sub>**  
Acanthoside D, 86  
Liriodendrin, 12916
- C<sub>34</sub>H<sub>46</sub>O<sub>19</sub>**  
(*E*)-Aldosecologanin, 878  
(*Z*)-Aldosecologanin, 879
- C<sub>34</sub>H<sub>47</sub>NO<sub>8</sub>**  
8-Acetyl-14-benzoylchasmanine, 331  
Crassicaudine, 4210  
13-Deoxo-13 $\alpha$ -acetyloxy-1-deoxynortaxine B,  
5138  
Gymnaconitine, 9103
- C<sub>34</sub>H<sub>47</sub>NO<sub>9</sub>**  
13,15-Dideoxyaconitine, 5473  
Penduline, 16803
- C<sub>34</sub>H<sub>47</sub>NO<sub>10</sub>**  
Deoxyaconitine, 5149  
Falaconitine, 7706  
Indaconitine, 11012
- C<sub>34</sub>H<sub>47</sub>NO<sub>11</sub>**  
Aconitine, 554  
Geniculine, 8270  
Polyschistine B, 17673  
Polyschistine D, 17675
- C<sub>34</sub>H<sub>47</sub>NO<sub>12</sub>**  
Aconifine, 551
- C<sub>34</sub>H<sub>48</sub>N<sub>2</sub>O<sub>9</sub>**  
Ajacine, 781
- C<sub>34</sub>H<sub>48</sub>O<sub>7</sub>**  
Fomitopsin B, 7864  
Lanosta-7,9(11),24-trien-3 $\alpha$ ,15 $\alpha$ -diacetoxy-23-  
oxo-26-oic acid, 12486
- C<sub>34</sub>H<sub>48</sub>O<sub>8</sub>**  
Corymbulosin A, 4111  
Huratoxin, 9691
- C<sub>34</sub>H<sub>48</sub>O<sub>9</sub>**  
Daturametelin A, 4666
- C<sub>34</sub>H<sub>48</sub>O<sub>10</sub>**  
Daturametelin B, 4667
- C<sub>34</sub>H<sub>48</sub>O<sub>11</sub>**  
Ajugamarin G<sub>1</sub>, 806  
Ajugamarin H<sub>1</sub>, 807
- C<sub>34</sub>H<sub>48</sub>O<sub>13</sub>**  
Dichotomoside D, 5430
- C<sub>34</sub>H<sub>48</sub>O<sub>14</sub>**  
Hyrcanoside, 10915
- C<sub>34</sub>H<sub>48</sub>O<sub>16</sub>**  
Nomilinic acid glucoside, 15657
- C<sub>34</sub>H<sub>48</sub>O<sub>17</sub>**  
Javanicoside K, 11862
- C<sub>34</sub>H<sub>48</sub>O<sub>18</sub>**  
(+)-Lyoniresinol-4,4'-bis-*O*- $\beta$ -*D*-glucopyranoside,  
13252
- C<sub>34</sub>H<sub>49</sub>N<sub>5</sub>O<sub>6</sub>**  
Apicidin, 1475
- C<sub>34</sub>H<sub>50</sub>O<sub>4</sub>**  
Inophylloidal acid, 11071
- C<sub>34</sub>H<sub>50</sub>O<sub>5</sub>**  
Argentatin G, 1670
- C<sub>34</sub>H<sub>50</sub>O<sub>6</sub>**  
Ganodermic acid R, 8190  
Ganodermic acid S, 8191  
Muscanone, 15124
- C<sub>34</sub>H<sub>50</sub>O<sub>7</sub>**  
Fomitopsin C, 7865  
Tyromycic acid B, 22163
- C<sub>34</sub>H<sub>50</sub>O<sub>8</sub>**  
Fomitopsin A, 7863
- C<sub>34</sub>H<sub>50</sub>O<sub>12</sub>**  
Thapsigargin, 21279
- C<sub>34</sub>H<sub>50</sub>O<sub>13</sub>**  
Erychroside, 7296
- C<sub>34</sub>H<sub>50</sub>O<sub>20</sub>**  
Cornuside, 4062
- C<sub>34</sub>H<sub>52</sub>O<sub>5</sub>**  
Argentatin H, 1671
- C<sub>34</sub>H<sub>52</sub>O<sub>6</sub>**  
C<sub>17</sub>-Obtusilactone dimer, 2836
- C<sub>34</sub>H<sub>52</sub>O<sub>7</sub>**  
Ganode-8-en-ric acid Ma, 8158  
Ganode-8-en-ric acid W, 8161
- C<sub>34</sub>H<sub>52</sub>O<sub>8</sub>**  
Corymbulosin B, 4112  
Corymbulosin C, 4113  
(22*E*,24*R*)-5 $\alpha$ ,8 $\alpha$ -Epidioxyergosta-6,9,22-triene-  
3 $\beta$ -ol 3-*O*- $\beta$ -*D*-glucopyranoside, 6902  
30-Norhederagenin-3-*O*- $\alpha$ -*L*-arabinopyranoside,  
15753  
Periploside B, 16962  
Phorbol-12-acetate-13-laurate, 17182  
Phorbol-12-laurate-13-acetate, 17186
- C<sub>34</sub>H<sub>52</sub>O<sub>9</sub>**  
Periplocoside M, 16955
- C<sub>34</sub>H<sub>52</sub>O<sub>10</sub>**  
Coagulin Q, 3859  
16 $\alpha$ ,24 $\alpha$ -Dihydroxy-12 $\beta$ -acetoxy-25,26,27-trinor-  
16,24-cycloartan-23-one 3 $\beta$ -*O*- $\alpha$ -*L*-arabinopy-  
ranoside, 5752  
24-Hydroxy-12 $\beta$ -acetoxy-25,26,27-trinorcyclo-  
artan-16,23-dione 3 $\beta$ -*O*- $\alpha$ -*L*-arabinopyranoside,  
9762  
Physagulin D, 17237
- C<sub>34</sub>H<sub>52</sub>O<sub>11</sub>**  
Cilistol U, 3645  
Withanoside XI, 22714
- C<sub>34</sub>H<sub>52</sub>O<sub>12</sub>**  
Withanoside III, 22707
- C<sub>34</sub>H<sub>52</sub>O<sub>13</sub>**  
Erychrosol, 7297
- C<sub>34</sub>H<sub>52</sub>O<sub>15</sub>**  
Bipindogenin-3-*O*- $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 4)- $\beta$ -  
*D*-allopyranoside, 2401
- C<sub>34</sub>H<sub>54</sub>O<sub>6</sub>**  
*Ingenol-3-myristinate*, 11061  
*Ingenol-20-myristinate*, 11062
- C<sub>34</sub>H<sub>54</sub>O<sub>7</sub>**  
Rubianol E, 19005
- C<sub>34</sub>H<sub>54</sub>O<sub>8</sub>**  
5 $\alpha$ ,8 $\alpha$ -Epidioxy-24(*R*)-methylcholesta-6,22-  
dien-3 $\beta$ -*D*-glucopyranoside, 6907
- C<sub>34</sub>H<sub>54</sub>O<sub>10</sub>**  
Cilistol T, 3644
- C<sub>34</sub>H<sub>54</sub>O<sub>12</sub>**  
Cilistol p, 3641
- C<sub>34</sub>H<sub>54</sub>O<sub>13</sub>**

- Styraxoside A, 20428
- C<sub>34</sub>H<sub>56</sub>O<sub>4</sub>**  
*ent*-15,16-Epoxy-3 $\beta$ -myristoyloxy-kauran-2-one,  
 7174  
 Pisosterol, 17492
- C<sub>34</sub>H<sub>56</sub>O<sub>9</sub>**  
 Cilistol V, 3646  
 Heminine, 9346
- C<sub>34</sub>H<sub>56</sub>O<sub>11</sub>**  
 Cilistol J, 3640
- C<sub>34</sub>H<sub>57</sub>NO<sub>7</sub>**  
 Ningpeisinoid, 15614
- C<sub>34</sub>H<sub>57</sub>NO<sub>8</sub>**  
 Pingbeininoid, 17382
- C<sub>34</sub>H<sub>57</sub>NO<sub>9</sub>**  
 Pingbeidinoid, 17379
- C<sub>34</sub>H<sub>58</sub>O<sub>4</sub>**  
 Lignoceryl ferulate, 12801
- C<sub>34</sub>H<sub>58</sub>O<sub>5</sub>**  
 *$\beta$* -Sitosterol-3-*O*- $\beta$ -D-xylopyranoside, 19992
- C<sub>34</sub>H<sub>58</sub>O<sub>6</sub>**  
 Campesteryl-D-glucoside, 3042  
 24-Methylcholest-5-enyl-3 $\beta$ -*O*-glucopyranoside,  
 14240
- C<sub>34</sub>H<sub>58</sub>O<sub>8</sub>**  
 Eurylene, 7655
- C<sub>34</sub>H<sub>58</sub>O<sub>12</sub>**  
 Wattoside B, 22649
- C<sub>34</sub>H<sub>65</sub>NO<sub>3</sub>**  
 (4*E*,6*E*,2*S*,3*R*)-2-*N*-Eicosanoyl-4,6-tetra-  
 decasphingadienine, 6723  
 (2*S*,3*R*,4*E*,8*E*)-2-Hexadecanoylamino-4,8-  
 octadecadien-1,3-diol, 9488
- C<sub>34</sub>H<sub>65</sub>NO<sub>4</sub>**  
 (2*S*,2'*R*,3*R*,4*E*,8*E*)-*N*-2'-Hydroxypentadecano-  
 yl-2-amino-9-methyl-4,8-octadecadiene-1,3-  
 diol, 10592
- C<sub>34</sub>H<sub>66</sub>O<sub>3</sub>**  
 Methyl-2 $\beta$ (2*S*)-hydroxyl-7(*E*)-tritriacontenoate,  
 14511
- C<sub>34</sub>H<sub>67</sub>NO<sub>3</sub>**  
 (4*E*,2*S*,3*R*)-2-*N*-Eicosanoyl-4-tetradecasphin-  
 genine, 6724
- C<sub>34</sub>H<sub>68</sub>O<sub>2</sub>**  
 4-Acetyl-2-methoxy-5-methyltriacontane, 464
- C<sub>34</sub>H<sub>69</sub>NO<sub>5</sub>**  
 Trufflesphingolipid D, 22056
- C<sub>34</sub>H<sub>70</sub>**  
 6-Methyl tritriacontane, 14794
- C<sub>35</sub>H<sub>18</sub>O<sub>15</sub>**  
 Norbadione A, 15717
- C<sub>35</sub>H<sub>26</sub>O<sub>8</sub>**  
 Upunaphenol E, 22236
- C<sub>35</sub>H<sub>26</sub>O<sub>14</sub>**  
*S*-(+)-Skyrin-6-*O*- $\alpha$ -arabinofuranoside, 20011  
*R*-(-)-Skyrin-6-*O*- $\beta$ -D-xylopyranoside, 20014  
*S*-(+)-Skyrin-6-*O*- $\beta$ -D-xylopyranoside, 20015
- C<sub>35</sub>H<sub>28</sub>O<sub>10</sub>**  
 Guangsangon G, 9059  
 Oliveriflavone, 16086
- C<sub>35</sub>H<sub>28</sub>O<sub>11</sub>**  
 Guangsangon I, 9061
- C<sub>35</sub>H<sub>28</sub>O<sub>17</sub>**  
 Pelliatin, 16790  
 Trilobatin K, 21886
- C<sub>35</sub>H<sub>28</sub>O<sub>20</sub>**  
 Quercetin-3-*O*-(2'',3''-digalloyl)- $\beta$ -D-galactopy-  
 ranoside, 18339  
 Quercetin-3-*O*-(2'',6''-digalloyl)- $\beta$ -D-galactopy-  
 ranoside, 18340
- C<sub>35</sub>H<sub>28</sub>O<sub>22</sub>**  
 3,5-Di-*O*-galloyl-4-*O*-digalloylquinic acid, 5515
- C<sub>35</sub>H<sub>30</sub>O<sub>6</sub>**  
 Sinensol H, 19931
- C<sub>35</sub>H<sub>30</sub>O<sub>10</sub>**  
 Guangsangon C, 9055  
 Guangsangon D, 9056  
 Guangsangon M, 9065  
 Guangsangon N, 9066
- C<sub>35</sub>H<sub>30</sub>O<sub>11</sub>**  
 Guangsangon K, 9063  
 Kuwanon L, 12389
- C<sub>35</sub>H<sub>30</sub>O<sub>22</sub>**  
 Methyl 2,3,4,6-tetra-*O*-galloyl- $\beta$ -D-glucopyra-  
 noside, 14746
- C<sub>35</sub>H<sub>32</sub>N<sub>2</sub>O<sub>6</sub>**  
 Normeniarine, 15777  
 Philogaline, 17146  
 Puertogaline B, 18188
- C<sub>35</sub>H<sub>32</sub>N<sub>2</sub>O<sub>7</sub>**  
 Punjabine, 18207
- C<sub>35</sub>H<sub>32</sub>O<sub>9</sub>**  
 (5*S*,6*S*,7*R*,8*S*)-2-(2-Phenylethyl)-5,6,7-trihy-  
 droxy-5,6,7,8-tetrahydro-8-[2-(2-phenyl-  
 ethyl)-7-methoxychromonyl-6-oxy]chromone  
 (AH12), 17121
- C<sub>35</sub>H<sub>32</sub>O<sub>16</sub>**  
 3*T*-*O*-Arabinopyranosyl-*ent*-epicatechin-(2 $\alpha$  $\rightarrow$ 7,  
 4 $\alpha$  $\rightarrow$ 8)-catechin, 1564
- C<sub>35</sub>H<sub>34</sub>MgN<sub>4</sub>O<sub>5</sub>**  
 Chlorophyllide a, 3568
- C<sub>35</sub>H<sub>34</sub>N<sub>2</sub>O<sub>5</sub>**  
 Cocsuline, 3882  
 Trilobine, 21887
- C<sub>35</sub>H<sub>34</sub>N<sub>2</sub>O<sub>6</sub>**  
 Cocsuline, 3883
- (+)-Guatteboline, 9072
- C<sub>35</sub>H<sub>34</sub>O<sub>6</sub>**  
 Alpinnanin A, 986  
 Alpinnanin B, 987  
 Alpinnanin C, 988  
 Magnolignan H, 13385
- C<sub>35</sub>H<sub>34</sub>O<sub>7</sub>**  
 Calyxin H, 3017  
 Epicalyxin H, 6845
- C<sub>35</sub>H<sub>34</sub>O<sub>8</sub>**  
 Calyxin B, 3013  
 Calyxin E, 3014  
 Calyxin F, 3015  
 Calyxin G, 3016  
 Calyxin K, 3020  
 Calyxin L, 3021  
 Calyxin M, 3022  
 Deoxycalyxin A, 5156  
 Epicalyxin B, 6843  
 Epicalyxin F, 6844  
 Epicalyxin K, 6848  
 Epicalyxin M, 6849
- C<sub>35</sub>H<sub>34</sub>O<sub>9</sub>**  
 Calyxin A, 3012
- C<sub>35</sub>H<sub>34</sub>O<sub>10</sub>**  
 Calycopteron, 3003
- C<sub>35</sub>H<sub>34</sub>O<sub>11</sub>**  
 Tricolorin A acetate, 21592
- C<sub>35</sub>H<sub>34</sub>O<sub>18</sub>**  
 Quercetin-3-*O*- $\alpha$ -L-arabinopyranosyl-(1 $\rightarrow$ 6)-[2''-  
*O*-(*E*)-*p*-coumaroyl]- $\beta$ -D-galactopyranoside,  
 18324  
 Quercetin-3-*O*- $\alpha$ -L-arabinopyranosyl-(1 $\rightarrow$ 6)-[2''-  
*O*-(*E*)-*p*-coumaroyl]- $\beta$ -D-glucopyranoside,  
 18325
- C<sub>35</sub>H<sub>34</sub>O<sub>19</sub>**  
 Quercetin-3-*O*-(2-*E*-caffeyl)- $\alpha$ -L-arabinopyra-  
 nosyl-(1 $\rightarrow$ 2)- $\beta$ -D-galactopyranoside, 18318
- C<sub>35</sub>H<sub>36</sub>N<sub>2</sub>O<sub>6</sub>**  
 Trilobamine, 21877
- C<sub>35</sub>H<sub>36</sub>N<sub>2</sub>O<sub>9</sub>**  
 Rocaglamide derivative 11, 18891  
 Thapsakone A, 21277  
 Thapsakone B, 21278
- C<sub>35</sub>H<sub>36</sub>O<sub>11</sub>**  
 Calyflorenone C, 3008  
 6''-Epi-calyflorenone C, 6872  
*cis*-*p*-Hydroxycinnamoylrutaevin, 9913  
*trans*-*p*-Hydroxycinnamoylrutaevin, 9914
- C<sub>35</sub>H<sub>36</sub>O<sub>12</sub>**  
 Feroxin B, 7763
- C<sub>35</sub>H<sub>36</sub>O<sub>14</sub>**  
 (2*S*)-Pinoembrin 7-*O*-[cinnamoyl(1 $\rightarrow$ 5)- $\beta$ -D-

- apiosyl(1→2)]-β-D-glucoside, 17407
- C<sub>35</sub>H<sub>37</sub>NO<sub>8</sub>**  
Regelidine, 18577
- C<sub>35</sub>H<sub>38</sub>N<sub>2</sub>O<sub>6</sub>**  
Berbamunine, 2301
- C<sub>35</sub>H<sub>38</sub>N<sub>2</sub>O<sub>9</sub>**  
Isothapsakin B, 11739  
Thapsakin B, 21276
- C<sub>35</sub>H<sub>38</sub>N<sub>5</sub>O<sub>2</sub>**  
Chrysopentamine, 3614
- C<sub>35</sub>H<sub>38</sub>O<sub>14</sub>**  
Pinoresinol *O*-(6-*O*-(*E*)-caffeoyl]-β-D-glucopyranoside, 17410
- C<sub>35</sub>H<sub>38</sub>O<sub>15</sub>**  
Hymenoside F, 10849
- C<sub>35</sub>H<sub>38</sub>O<sub>17</sub>**  
Hymenoside G, 10850  
Hymenoside H, 10851
- C<sub>35</sub>H<sub>38</sub>O<sub>20</sub>**  
Quercetin-3-*O*-[(2,3,4-triacetyl-α-rhamnopyranosyl)-(1→6)]-3-acetyl-β-galactopyranoside, 18400  
Quercetin-3-*O*-[(2,3,4-triacetyl-α-rhamnopyranosyl)-(1→6)]-4-acetyl-β-galactopyranoside, 18401
- C<sub>35</sub>H<sub>39</sub>N<sub>5</sub>O<sub>4</sub>**  
Integerrine, 11092
- C<sub>35</sub>H<sub>39</sub>N<sub>5</sub>O<sub>5</sub>**  
Ergocristine, 7234  
Ergocristinine, 7235
- C<sub>35</sub>H<sub>40</sub>O<sub>6</sub>**  
Artocommunol CB, 1811
- C<sub>35</sub>H<sub>40</sub>O<sub>7</sub>**  
Celastriane B, 3367
- C<sub>35</sub>H<sub>40</sub>O<sub>8</sub>**  
5α-Acetyl-1β,8α-bis-cinnamoyl-4α-hydroxydihydroagarofuran, 334  
Arteminolide B, 1790  
Arteminolide D, 1791
- C<sub>35</sub>H<sub>40</sub>O<sub>9</sub>**  
1β,2β-Diacetoxy-6α-benzoyloxy-9α-cinnamoyloxy-β-dihydroagarofuran, 5285
- C<sub>35</sub>H<sub>40</sub>O<sub>10</sub>**  
(1*R*,2*S*,4*S*,5*R*,7*R*,9*S*,10*R*)-1α-Benzoyloxy-2α,15-diacetoxy-4β-hydroxy-9β-cinnamoyloxy-β-dihydroagarofuran, 2254  
Dantaxusin A, 4636
- C<sub>35</sub>H<sub>40</sub>O<sub>11</sub>**  
Schisantherin J, 19492
- C<sub>35</sub>H<sub>40</sub>O<sub>12</sub>**  
Triptofordin F<sub>4</sub>, 22008
- C<sub>35</sub>H<sub>40</sub>O<sub>13</sub>**  
Triptofordin F<sub>2</sub>, 22006
- C<sub>35</sub>H<sub>40</sub>O<sub>16</sub>**  
6-*O*-α-*L*-(2"-*O*-,3"-*O*-Dibenzoyl)rhamnopyranosylcatalpol, 5388  
6-*O*-α-*L*-(2"-*O*-,4"-*O*-Dibenzoyl)rhamnopyranosylcatalpol, 5389  
6-*O*-α-*L*-(3"-*O*-,4"-*O*-Dibenzoyl)rhamnopyranosylcatalpol, 5390
- C<sub>35</sub>H<sub>40</sub>O<sub>17</sub>**  
2-Methoxy-4-[(4-hydroxybenzoyl)phenol] 1-*O*-β-*D*-[5-*O*-(3,4-dimethoxybenzoyl)]-apiofuranosyl-(1→6)-β-*D*-glucopyranoside, 13949
- C<sub>35</sub>H<sub>40</sub>O<sub>18</sub>**  
5"-*O*-β-*D*-Glucopyranosylamarogentin, 8601
- C<sub>35</sub>H<sub>40</sub>O<sub>19</sub>**  
5"-*O*-β-*D*-Glucopyranosylamaroswerin, 8602  
Hexaacetyl-6-vaniloil catalpol, 9477  
Kaempferol-3-*O*-lysimachiatriside, 12067
- C<sub>35</sub>H<sub>40</sub>O<sub>23</sub>**  
Luteolin 7-*O*-[2-(β-*D*-apiofuranosyl)-4-(β-*D*-glucopyranosyl)-6-malonyl]-β-*D*-glucopyranoside, 13139
- C<sub>35</sub>H<sub>42</sub>N<sub>2</sub>O<sub>9</sub>**  
Rescinnamine, 18630  
Reserpine 2, 18635
- C<sub>35</sub>H<sub>42</sub>O<sub>4</sub>**  
Harunmadagascarin B, 9243
- C<sub>35</sub>H<sub>42</sub>O<sub>7</sub>**  
Plocigenin, 17562
- C<sub>35</sub>H<sub>42</sub>O<sub>8</sub>**  
Ethoxydihydroisomoreollin, 7401  
Trichilin E, 21556
- C<sub>35</sub>H<sub>42</sub>O<sub>9</sub>**  
2-Deacetoxytaxinine B, 4707  
1-Deacetyl nimbolinin A, 4755  
Dibenzoylgagaimol, 5384  
Scortechinone G, 19552  
Taxinine, 20797  
Taxuspine C, 20851
- C<sub>35</sub>H<sub>42</sub>O<sub>10</sub>**  
*O*-Cinnamoyltaxicin I triacetate, 3721  
10-Deacetyl taxinine B, 4782  
Taxezopidine J, 20788  
Taxinine N,N-4, 20804  
Taxuspine B, 20850
- C<sub>35</sub>H<sub>42</sub>O<sub>12</sub>**  
13-Deacetoxy-13,15-epoxy-11(15→1)-abeo-13-epi-baccatin VI, 4706  
Swietephragmin F, 20521  
3β,5α,8α,15β-Tetraacetoxy-7β-benzoyloxy-jatropha-6(17),11*E*-dien-9,14-dione, 21027  
Trisdesaspidin BBB, 22032  
Trisflavaspidic acid, 22033
- C<sub>35</sub>H<sub>42</sub>O<sub>14</sub>**  
1α,2α-Diacetoxy-8β-(β-furancarboxyloxy)-9α-benzoyloxy-13-isobutanoyloxy-4β,6β-dihydroxy-β-dihydroagarofuran, 5300  
Sandrapin E, 19244  
Taxinine M, 20803
- C<sub>35</sub>H<sub>42</sub>O<sub>17</sub>**  
Tabulalide B, 20582  
Tabulalide D, 20584
- C<sub>35</sub>H<sub>42</sub>O<sub>20</sub>**  
Trifloroside, 21630
- C<sub>35</sub>H<sub>42</sub>O<sub>21</sub>**  
Kaempferol  
3-*O*-α-*L*-(2-*O*-β-*D*-glucopyranosyl)rhamnopyranoside-7-*O*-β-*D*-(6-*O*-acetyl)glucopyranoside, 12054  
Rindoside, 18848
- C<sub>35</sub>H<sub>42</sub>O<sub>22</sub>**  
Kaempferol 3-*O*-β-*D*-glucosyl(1→2)-(6"-*O*-acetyl)-β-*D*-galactoside 7-*O*-β-*D*-glucoside, 12063
- C<sub>35</sub>H<sub>43</sub>NO<sub>13</sub>**  
1α-Nicotinoyloxy-2α-acetoxy-6β-acetoxy-9β-furoyloxy-11-(2-methyl)butyryloxy-4β-hydroxydihydro-β-agarofuran, 15537
- C<sub>35</sub>H<sub>43</sub>N<sub>5</sub>O**  
Isostrychnopentamine, 11723  
Strychnopentamine, 20415
- C<sub>35</sub>H<sub>44</sub>N<sub>2</sub>O<sub>9</sub>**  
Rescinnamidine, 18629
- C<sub>35</sub>H<sub>44</sub>O<sub>6</sub>**  
Brasiliensophyllic acid A, 2591  
Brasiliensophyllic acid B, 2592  
Calophynic acid, 2991  
Isobrasiliensophyllic acid A, 11262  
Isobrasiliensophyllic acid B, 11263
- C<sub>35</sub>H<sub>44</sub>O<sub>8</sub>**  
5α-Cinnamoyloxy-9α,10β,13α-triacetoxytaxa-4(20),11-diene, 3717
- C<sub>35</sub>H<sub>44</sub>O<sub>9</sub>**  
Candletoxin A, 3074  
5α-Cinnamoyloxy-7β-hydroxy-9α,10β,13α-triacetoxytaxa-4(20),11-diene, 3715  
5α-Cinnamoyloxy-10β-hydroxy-2α,9α,13α-triacetoxytaxa-4(20),11-diene, 3716  
Taxezopidine G, 20786  
Taxezopidine H, 20787
- C<sub>35</sub>H<sub>44</sub>O<sub>10</sub>**  
9α-Acetyl-10β-deacetyl-spicate, 366  
Scortechinone I, 19554  
Spicate, 20161  
Taxuspine M, 20860
- C<sub>35</sub>H<sub>44</sub>O<sub>11</sub>**  
Myrsinolute diterpene ester CPB51-719-1, 15215

- C<sub>35</sub>H<sub>44</sub>O<sub>12</sub>**  
Paraliane 12, 16652  
Portlandicine, 17731  
Taxchinin D, 20772  
1 $\beta$ ,5 $\alpha$ ,14 $\alpha$ ,17 $\alpha$ -Tetraacetoxy-3 $\beta$ -benzoyloxy-15 $\beta$ -hydroxy-9-oxoparaliane, 21026
- C<sub>35</sub>H<sub>44</sub>O<sub>13</sub>**  
4-Deacetyl-11(15 $\rightarrow$ 1)-abeo-baccatin VI, 4710  
10-Deacetyl baccatin VI, 4727  
9-Deacetyl baccatin VI, 4728  
Segetene 6, 19655  
Taxayunnansin A, 20758  
Taxchinin M, 20779
- C<sub>35</sub>H<sub>44</sub>O<sub>14</sub>**  
PC-2004-65-2003-19, 16740  
Sandrapin C, 19242
- C<sub>35</sub>H<sub>44</sub>O<sub>15</sub>**  
Glehlinside B, 8546  
Woorenoside IV, 22730
- C<sub>35</sub>H<sub>44</sub>O<sub>16</sub>**  
Azadirachtin, 2050
- C<sub>35</sub>H<sub>44</sub>O<sub>18</sub>**  
 $\alpha$ -D-(6-O-4-Methyl-3,5-dimethoxycinnamoyl)-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-(3-O-sinapoyl)-fructofuranose, 14320  
Tabulalide E, 20585
- C<sub>35</sub>H<sub>44</sub>O<sub>19</sub>**  
Tenuifoliside C, 20957
- C<sub>35</sub>H<sub>45</sub>NO<sub>11</sub>**  
Euphocharacin I, 7604
- C<sub>35</sub>H<sub>46</sub>O<sub>6</sub>**  
Mesuaferrol, 13804
- C<sub>35</sub>H<sub>46</sub>O<sub>8</sub>**  
12-O-Cinnamoyl-20-O-tigloyl sarcostin, 3722
- C<sub>35</sub>H<sub>46</sub>O<sub>10</sub>**  
Bonaspectin A, 2541  
Bonaspectin B, 2542  
Nimbolinin B, 15612
- C<sub>35</sub>H<sub>46</sub>O<sub>11</sub>**  
Scortechinone O, 19560  
Spirosendan, 20206  
Turraflorin I, 22137
- C<sub>35</sub>H<sub>46</sub>O<sub>12</sub>**  
Meliatoxin B<sub>1</sub>, 13672
- C<sub>35</sub>H<sub>46</sub>O<sub>13</sub>**  
Phlogacanthoside C, 17163  
Trichilin A, 21553
- C<sub>35</sub>H<sub>46</sub>O<sub>14</sub>**  
Jatrophane 8, 11844  
Yunantaxusin A, 22939
- C<sub>35</sub>H<sub>46</sub>O<sub>17</sub>**  
Ligupurpuroside B, 12818
- C<sub>35</sub>H<sub>46</sub>O<sub>18</sub>**  
Ligurobustoside N, 12823  
Yadanzioside K, 22870
- C<sub>35</sub>H<sub>46</sub>O<sub>19</sub>**  
6'- $\beta$ -D-Apiofuranosylcistanoside C, 1504  
Jionoside E, 11886  
Leonoside A, 12637  
Ligupurpuroside A, 12817  
Methyl epipodophyllate 7'-O- $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside, 14400  
Teucroside-3'''-O-methylether, 21215  
Teucroside, 21221  
Verpectoside A, 22416
- C<sub>35</sub>H<sub>46</sub>O<sub>20</sub>**  
Caerulescenside, 2859  
Purpureaside B, 18220  
Purpureaside C, 18221  
Verpectoside B, 22417
- C<sub>35</sub>H<sub>46</sub>O<sub>21</sub>**  
Persicoside, 16994
- C<sub>35</sub>H<sub>47</sub>NO<sub>9</sub>**  
9-Acetoxytaxine B, 284  
10-Acetoxytaxine B, 285
- C<sub>35</sub>H<sub>47</sub>NO<sub>10</sub>**  
Liaconitine A, 12736  
Taxine A, 20793  
2 $\beta$ ,13 $\alpha$ ,14 $\beta$ -Trisdeacetylaustrotaxine, 22031
- C<sub>35</sub>H<sub>47</sub>N<sub>5</sub>O<sub>5</sub>**  
Mauritine B, 13614
- C<sub>35</sub>H<sub>48</sub>ClN<sub>3</sub>O<sub>10</sub>**  
Maytanprine, 13620
- C<sub>35</sub>H<sub>48</sub>N<sub>8</sub>O<sub>11</sub>S**  
Phalloidin, 17040
- C<sub>35</sub>H<sub>48</sub>O<sub>6</sub>**  
Mesuanic acid, 13806
- C<sub>35</sub>H<sub>48</sub>O<sub>13</sub>**  
1 $\alpha$ ,2 $\alpha$ -Diacetoxy-8 $\beta$ -isobutanoyloxy-9 $\alpha$ -benzoyloxy-13-( $\alpha$ -methyl)butanoyloxy-4 $\beta$ ,6 $\beta$ -dihydroxy- $\beta$ -dihydroagarofuran, 5312
- C<sub>35</sub>H<sub>48</sub>O<sub>14</sub>**  
Jatrophane 10, 11846
- C<sub>35</sub>H<sub>48</sub>O<sub>15</sub>**  
1 $\alpha$ ,2 $\alpha$ ,6 $\beta$ -Triacetoxy-8 $\beta$ -isobutanoyloxy-9 $\beta$ -( $\beta$ -furanonyloxy)-13-( $\alpha$ -methyl)butanoyloxy-4 $\beta$ -hydroxy- $\beta$ -dihydroagarofuran, 21526
- C<sub>35</sub>H<sub>48</sub>O<sub>17</sub>**  
Javanicoside D, 11857
- C<sub>35</sub>H<sub>49</sub>NO<sub>8</sub>**  
13-Deoxo-13 $\alpha$ -acetyloxy-1-deoxytaxine B, 5139  
Methyl gymnaconitine, 14478
- C<sub>35</sub>H<sub>49</sub>NO<sub>9</sub>**  
13-Deoxo-3 $\alpha$ -acetyloxytaxine B, 5140  
Liaconitine C, 12738  
2 $\beta$ ,7 $\beta$ ,9 $\alpha$ -Trisdeacetylaustrospicatin, 22030
- Vilmorrianine C, 22482
- C<sub>35</sub>H<sub>49</sub>NO<sub>10</sub>**  
Crassicauline A, 4211
- C<sub>35</sub>H<sub>49</sub>NO<sub>11</sub>**  
Yunaconitine, 22938
- C<sub>35</sub>H<sub>49</sub>NO<sub>12</sub>**  
Jesaconitine, 11867
- C<sub>35</sub>H<sub>50</sub>N<sub>2</sub>O<sub>9</sub>**  
Trifoliolasine A, 21635
- C<sub>35</sub>H<sub>50</sub>O<sub>4</sub>**  
Pyrano-[7,28-*b*]hyperforin, 18250
- C<sub>35</sub>H<sub>50</sub>O<sub>7</sub>**  
Camangeloyl acid, 3024
- C<sub>35</sub>H<sub>52</sub>N<sub>2</sub>O<sub>4</sub>**  
Semperviraminol, 19696
- C<sub>35</sub>H<sub>52</sub>O<sub>4</sub>**  
Hyperforin, 10883
- C<sub>35</sub>H<sub>52</sub>O<sub>5</sub>**  
Furohyperforin, 8026  
8-Hydroxyhyperforin-8,1-hemiacetal, 10219  
Lantadene A, 12490  
Lantadene B, 12491
- C<sub>35</sub>H<sub>52</sub>O<sub>6</sub>**  
Camaric acid, 3025  
2,7-Dihydroxy-8-methoxy-3,6-diundecyldibenzofuran-1,4-dione, 5975  
2,8-Dihydroxy-7-methoxy-3,9-diundecyldibenzofuran-1,4-dione, 5976  
Icterogenin, 10960
- C<sub>35</sub>H<sub>52</sub>O<sub>7</sub>**  
10-Hydroxy-4-O-methyl-2,11-diundecylgompholactone, 10485
- C<sub>35</sub>H<sub>52</sub>O<sub>8</sub>**  
Kudinoside J, 12306  
Phorbol 12-tiglate 13-decanonate, 17194  
Vilangin, 22478
- C<sub>35</sub>H<sub>52</sub>O<sub>9</sub>**  
Pentadecadienoic acid, 16828
- C<sub>35</sub>H<sub>52</sub>O<sub>11</sub>**  
16 $\beta$ ,22R;21,23S-Diepoxo-3 $\beta$ -O- $\beta$ -D-glucopyranosyloxy-21S,24-dihydroxy-5 $\alpha$ -stigmasta-8,14-dien-28-one, 5493  
Vernoguinsterol, 22410
- C<sub>35</sub>H<sub>52</sub>O<sub>12</sub>**  
Atratoglucoside A, 1991  
3-O- $\beta$ -D-Glucuronopyranosyl-2 $\beta$ ,3 $\beta$ ,16 $\beta$ -trihydroxy-28-norolean-12-en-15-on-23-oic acid, 8767
- C<sub>35</sub>H<sub>52</sub>O<sub>13</sub>**  
(2R,3R,4R,5R,7S,8S,9S,11E,13S,15R)-2,3,5,7,8,9,15-Heptahydroxyjatrophane-6(17),11-diene-14-one-2,8,9-triacetate-7-isobutyrate-5-(2-methylbutyrate), 9399

- (2*R*,3*R*,4*R*,5*R*,7*S*,8*S*,9*S*,11*E*,13*S*,15*R*)-2,3,5,7,8,9,15-Heptahydroxyjatropa-6(17),11-diene-14-one-7,8,9-triacetate-2-isobutyrate-5-(2-methylbutyrate), 9400
- C<sub>35</sub>H<sub>52</sub>O<sub>14</sub>**  
Cheiranthoside X, 3497  
Erysimoside, 7320  
Olitoriside, 16084
- C<sub>35</sub>H<sub>52</sub>O<sub>15</sub>**  
Cheiranthoside VIII, 3495  
Cheiranthoside IX, 3496  
Convalloside, 4014  
Securigenin-3*β*-*O*-[*α*-allosyl-(1→4)-*β*-6-deoxyalloside], 19637
- C<sub>35</sub>H<sub>54</sub>O<sub>2</sub>**  
Sugikurojin G, 20463
- C<sub>35</sub>H<sub>54</sub>O<sub>3</sub>**  
Sugikurojin H, 20464
- C<sub>35</sub>H<sub>54</sub>O<sub>5</sub>**  
Pachymic acid methyl ester, 16497
- C<sub>35</sub>H<sub>54</sub>O<sub>6</sub>**  
Hericenone C, 9431  
Hericenone F, 9434
- C<sub>35</sub>H<sub>54</sub>O<sub>7</sub>**  
22-*O*-Angeloyl theasapogenol E, 1237  
3*β*-[(*α*-*L*-Arabinopyranosyl)oxy]urs-12,18-dien-28-oic acid, 1587  
3*β*-[(*α*-*L*-Arabinopyranosyl)oxy]-urs-12,19-dien-28-oic acid, 1588  
3*β*-[(*α*-*L*-Arabinopyranosyl)oxy]-urs-12,19(29)-dien-28-oic acid, 1589  
Fomitocide C, 7868  
Ilexolide A, 10981
- C<sub>35</sub>H<sub>54</sub>O<sub>8</sub>**  
3*β*-[(*α*-*L*-Arabinopyranosyl)oxy]-19*β*-hydroxyurs-12,20(30)-dien-28-oic acid, 1582  
Cimicide E, 3672  
12-*O*-Decanoylphorbol-13-(2-methylbutyrate), 4839  
Fomitocide A, 7866  
Fomitocide B, 7867  
Phorbol-12-*α*-methylbutyrate-13-caprate, 17188
- C<sub>35</sub>H<sub>54</sub>O<sub>9</sub>**  
7,8-Didehydrocimigenol 3-*O*-*β*-*D*-xylopyranoside, 5464  
Gamboukokoenside B, 8131
- C<sub>35</sub>H<sub>54</sub>O<sub>10</sub>**  
Bugbanoside F, 2732  
24-Hydroxy-15,16-seco-cycloart-7-en 3-*O*-xyloside, 10697  
3-*O*-*β*-*D*-Xylopyranosyl-esculentic acid, 22822
- C<sub>35</sub>H<sub>54</sub>O<sub>11</sub>**  
Esculentoside B, 7369
- Esculentoside E, 7372
- C<sub>35</sub>H<sub>54</sub>O<sub>12</sub>**  
2*α*,5*α*-Diacetoxy-14*β*-2'*α*-methylbutanoate-10*β*-*O*-(*β*-*D*-glucopyranosyl)taxa-4(20),11-diene, 5315
- C<sub>35</sub>H<sub>54</sub>O<sub>13</sub>**  
2*α*,5*α*-Diacetoxy-14*β*-(2'*S*,3'*R*)-3'-hydroxy-2'*α*-methylbutanoate-10*β*-*O*-(*β*-*D*-glucopyranosyl)taxa-4(20),11-diene, 5310
- C<sub>35</sub>H<sub>54</sub>O<sub>14</sub>**  
Erycordine, 7303  
Erysimosol, 7321  
Euonymoside A, 7535  
Rhodexin C, 18787  
Rhodexoside, 18789  
Sarmentogenin-3*β*-*O*-[*α*-allosyl-(1→4)-*β*-6-deoxyalloside], 19373
- C<sub>35</sub>H<sub>56</sub>O<sub>5</sub>**  
Lantairursolic acid, 12492
- C<sub>35</sub>H<sub>56</sub>O<sub>6</sub>**  
22-*O*-Angeloyl theasapogenol B, 1236
- C<sub>35</sub>H<sub>56</sub>O<sub>7</sub>**  
*O*-Acetylpachymic acid-25-ol, 478  
22-*O*-Angeloyl theasapogenol A, 1235  
3-*O*-*α*-*L*-Arabinopyranosyloleanolic acid, 1576  
Inermiside II, 11036  
Sanguisorbin B, 19287  
3-*O*-*β*-*D*-Xylopyranosyloleanolic acid, 22839
- C<sub>35</sub>H<sub>56</sub>O<sub>8</sub>**  
3-*O*-*α*-*L*-Arabinopyranosyl-23-hydroxyursolic acid, 1573  
3-*β*-*O*-*α*-*L*-Arabinopyranosyl jujubogenin, 1574  
3*β*-[(*α*-*L*-Arabinopyranosyl)oxy]-19*α*-hydroxyolean-12-en-28-oic acid, 1579  
3*β*-[(*α*-*L*-Arabinopyranosyl)oxy]-19*α*-hydroxyurs-12-en-28-oic acid, 1584  
Cauloside A, 3340  
Leontoside A, 12642  
Prosapogenin CP<sub>0</sub>, 17943  
Prostratoside J, 17962  
Pulsatilloside A, 18192  
Ziyu glycoside II, 23009
- C<sub>35</sub>H<sub>56</sub>O<sub>9</sub>**  
Cauloside B, 3341  
Cimiaceroside B, 3649  
Cimigenol 3-*O*-*α*-*L*-arabinopyranoside, 3659  
Cimigenoside, 3661  
Shengmanol xyloside, 19800
- C<sub>35</sub>H<sub>56</sub>O<sub>10</sub>**  
Cimicide A, 3670  
Eupteleasaponin VIII, 7631  
Gamboukokoenside A, 8130  
Pictoside B, 17351
- C<sub>35</sub>H<sub>56</sub>O<sub>11</sub>**  
12*β*,21-Dihydroxycimigenol 3-*O*-*α*-*L*-arabinopyranoside, 5790
- C<sub>35</sub>H<sub>56</sub>O<sub>12</sub>**  
Cilistol pl, 3642  
Cilistol pm, 3643  
Deacetylmataplexigenin 3-*O*-*β*-*D*-oleandropyranosyl-(1→4)-*α*-*D*-oleandropyranoside, 4751
- C<sub>35</sub>H<sub>58</sub>O<sub>6</sub>**  
*α*-Spinasterol-*β*-*D*-glucoside, 20169  
5,25-Stigmastadien-3*β*-ol-*β*-*D*-glucoside, 20346  
Stigmasterol-*β*-*D*-glucoside, 20372
- C<sub>35</sub>H<sub>58</sub>O<sub>7</sub>**  
7-Oxositosteryl-*β*-*O*-glucopyranoside, 16422
- C<sub>35</sub>H<sub>58</sub>O<sub>9</sub>**  
Astramembrannin II, 1946  
Beesioside A, 2192  
Cycloalpioside C, 4465
- C<sub>35</sub>H<sub>58</sub>O<sub>10</sub>**  
Beesioside B, 2193  
Beesioside C, 2194  
Beesioside E, 2196  
Beesioside N, 2207  
Denicunine, 5130  
12*β*-Hydroxycimigenol 3-*O*-*α*-*L*-arabinopyranoside, 9905
- C<sub>35</sub>H<sub>58</sub>O<sub>11</sub>**  
Cilistol I, 3639
- C<sub>35</sub>H<sub>58</sub>O<sub>11</sub>S**  
Spergulin A, 20144
- C<sub>35</sub>H<sub>58</sub>O<sub>18</sub>**  
Periplocae oligosaccharide D<sub>2</sub>, 16939
- C<sub>35</sub>H<sub>60</sub>O<sub>3</sub>**  
4'-Hydroxy-*cis*-cinnamic acid hexacosyl ester, 9910
- C<sub>35</sub>H<sub>60</sub>O<sub>4</sub>**  
Hexacosanyl caffeate, 9481
- C<sub>35</sub>H<sub>60</sub>O<sub>6</sub>**  
Bacosterol-3-*O*-*β*-*D*-glucopyranoside, 2095  
Daucosterol, 4680  
3-*O*-*β*-*D*-Glucopyranosyl-*β*-sitosterol, 8732  
*β*-Sitosterol-3-*O*-*β*-*D*-glucoside, 19985  
*β*-Sitosterol-*α*-*D*-glucoside, 19986  
*β*-Sitosterol-*β*-*D*-glucoside, 19987  
7-Stigmasterol-3-*O*-*β*-*D*-glucoside, 20367
- C<sub>35</sub>H<sub>62</sub>O<sub>3</sub>**  
Sabadelin, 19096
- C<sub>35</sub>H<sub>62</sub>O<sub>6</sub>**  
Annocatacin A, 1294  
Annocatacin B, 1295  
Corossolone, 4090  
*cis*-Corossolone, 4091

- C<sub>35</sub>H<sub>62</sub>O<sub>7</sub>**  
 Annomolon A, 1304  
 Annonacin-10-one, 1315  
*cis*-Annonacin-10-one, 1316  
 34-Epiannomolon A, 6827  
 22-Epimolvizarin, 6972  
 Molvizarin, 14906  
 Muricin F, 15095  
 Muricin G, 15096  
 Parviflorin, 16677  
 Reticulacinone, 18653  
 Squamone, 20244
- C<sub>35</sub>H<sub>62</sub>O<sub>8</sub>**  
 Annomolon B, 1305  
 34-Epiannomolon B, 6828  
 Montacin, 14934  
*cis*-Montacin, 14935  
 Parvifloracin, 16676
- C<sub>35</sub>H<sub>64</sub>O<sub>5</sub>**  
 Solamin, 20051
- C<sub>35</sub>H<sub>64</sub>O<sub>6</sub>**  
 Corossoline, 4089  
 Gigantriocin, 8381  
 Longifolicin, 12956  
 Montalicin B, 14937  
 Muricin H, 15097  
 Murisolin, 15099
- C<sub>35</sub>H<sub>64</sub>O<sub>7</sub>**  
 Annocatalin, 1296  
 Annomolin, 1303  
*cis*-Annomuricin, 1310  
 Annonacin, 1313  
*cis*-Annonacin, 1314  
 Annoreticuin, 1324  
*cis*-Annoreticuin, 1325  
 Arianacin, 1679  
 Asitrilobin B, 1859  
*cis*-Goniothalamycin, 8946  
 Itrabin, 11793  
 Javoricin, 11864  
 Montalicin C, 14938  
 Montalicin D, 14939  
 Montalicin F, 14941  
 Muricatetrocin A, 15084  
 Muricatetrocin B, 15085  
 Muricin A, 15090  
 Muricin B, 15091  
 Muricin C, 15092  
 Pyragoncin, 18240  
 Pyranicin, 18249  
 Xylopianan, 22817
- C<sub>35</sub>H<sub>64</sub>O<sub>8</sub>**  
 Annomoncin, 1306
- Annomuricin A, 1311  
 Annomuricin B, 1312  
 Annopentocin A, 1320  
 Annopentocin B, 1321  
 Annopentocin C, 1322  
 Muricatalicin, 15083  
 Muricatocin A, 15087  
 Muricatocin B, 15088  
 Muricatocin C, 15089
- C<sub>35</sub>H<sub>66</sub>O<sub>6</sub>**  
 Gardnerilin B, 8233
- C<sub>35</sub>H<sub>66</sub>O<sub>8</sub>**  
 Gardnerilin A, 8232
- C<sub>35</sub>H<sub>67</sub>NO<sub>3</sub>**  
 (2*S*,3*R*,4*E*,8*E*)-*N*-Hexadecanoyl-2-amino-9-methyl-4,8-octadecadiene-1,3-diol, 9487
- C<sub>35</sub>H<sub>67</sub>NO<sub>4</sub>**  
 (2*S*,3*R*,4*E*,8*E*)-[(2'*R*)-2'-Hydroxyheptadecanoyl-amino]-4,8-octadecadiene-1,3-diol, 10158
- C<sub>36</sub>H<sub>22</sub>O<sub>18</sub>**  
 6,6'-Bieckol, 2366  
 8,8'-Bieckol, 2367  
 Dieckol, 5484
- C<sub>36</sub>H<sub>26</sub>O<sub>10</sub>**  
 Terrestrin F, 21011
- C<sub>36</sub>H<sub>26</sub>O<sub>20</sub>**  
 Balanophotannin C, 2129
- C<sub>36</sub>H<sub>28</sub>K<sub>2</sub>O<sub>16</sub>**  
 Dipotassium rabdosiin, 6495
- C<sub>36</sub>H<sub>28</sub>KNaO<sub>16</sub>**  
 NP02140176-41-KNa, 15853
- C<sub>36</sub>H<sub>28</sub>MgO<sub>16</sub>**  
 Magnesium lithospermate B, 13370
- C<sub>36</sub>H<sub>28</sub>N<sub>2</sub>O<sub>6</sub>**  
 Artabonatine F, 1774
- C<sub>36</sub>H<sub>28</sub>O<sub>6</sub>**  
 Neo-przewaquinone A, 15453
- C<sub>36</sub>H<sub>28</sub>O<sub>12</sub>**  
 Griffipavixanthone, 9003
- C<sub>36</sub>H<sub>28</sub>O<sub>13</sub>**  
 Bijaponicaxanthone, 2371
- C<sub>36</sub>H<sub>28</sub>O<sub>15</sub>**  
*R*-(-)-Skyrin-6-*O*- $\beta$ -glucopyranoside, 20012  
*S*-(+)-Skyrin-6-*O*- $\beta$ -glucopyranoside, 20013
- C<sub>36</sub>H<sub>28</sub>O<sub>16</sub>**  
 Schizotenuin A, 19510
- C<sub>36</sub>H<sub>28</sub>O<sub>21</sub>**  
 1-*O*-(*E*)-Caffeoyl-3-*O*-galloyl-4,6-(*S*)-HHDP- $\beta$ -*D*-glucopyranose, 2904
- C<sub>36</sub>H<sub>29</sub>KO<sub>16</sub>**  
 NP02140176-38-K, 15850  
 NP02140176-42-K, 15854
- C<sub>36</sub>H<sub>29</sub>NaO<sub>16</sub>**  
 NP02140176-39-Na, 15851
- C<sub>36</sub>H<sub>30</sub>MgO<sub>16</sub>**  
 Lithospermate B, 12924  
 Magnesium rosmarinate, 13371
- C<sub>36</sub>H<sub>30</sub>O<sub>4</sub>**  
 Dineolignan, 6423
- C<sub>36</sub>H<sub>30</sub>O<sub>14</sub>**  
 Podoverin C, 17599
- C<sub>36</sub>H<sub>30</sub>O<sub>15</sub>**  
 Podoverin B, 17598  
 Spicataside, 20158
- C<sub>36</sub>H<sub>30</sub>O<sub>16</sub>**  
 1,3-Bis-[2-(3,4-dihydroxyphenyl)-1-carboxy]ethoxycarbonyl-2-(3,4-dihydroxyphenyl)-7,8-di-hydroxy-1,2-dihydronaphthalene, 2444  
 Danshensuan B, 4631  
 Fukugiside, 7991  
 Lithospermic acid B, 12926  
 NP02140176-40, 15852  
 Salvianolic acid E, 19205
- C<sub>36</sub>H<sub>30</sub>O<sub>21</sub>**  
 6-*O*-(*E*)-Caffeoyl-1,3,4-tri-*O*-galloyl- $\beta$ -*D*-glucopyranose, 2929
- C<sub>36</sub>H<sub>32</sub>N<sub>2</sub>O<sub>4</sub>**  
 Kwangsine, 12396
- C<sub>36</sub>H<sub>32</sub>N<sub>2</sub>O<sub>8</sub>**  
 Oriciacridone F, 16182
- C<sub>36</sub>H<sub>32</sub>O<sub>6</sub>**  
 1,3,6-Tri(4-hydroxybenzyl)-4-methoxydihydrophenanthrene-2,7-diol, 21690
- C<sub>36</sub>H<sub>32</sub>O<sub>10</sub>**  
 Angustifolin A, 1246
- C<sub>36</sub>H<sub>32</sub>O<sub>15</sub>**  
 3,8"-Binaringenin-7"-*O*- $\beta$ -glucoside, 2383
- C<sub>36</sub>H<sub>32</sub>O<sub>16</sub>**  
 Xanthochymusside, 22760
- C<sub>36</sub>H<sub>33</sub>O<sub>16</sub>**  
 Salvianolic Acid B, 19202
- C<sub>36</sub>H<sub>34</sub>N<sub>2</sub>O<sub>6</sub>**  
 Menisarine, 13713  
 Stebisimine, 20283
- C<sub>36</sub>H<sub>34</sub>N<sub>2</sub>O<sub>9</sub>**  
 Tribulusamide B, 21547
- C<sub>36</sub>H<sub>36</sub>N<sub>2</sub>O<sub>5</sub>**  
 Isotrilobine, 11747  
 Tiliacorine, 21389
- C<sub>36</sub>H<sub>36</sub>N<sub>2</sub>O<sub>6</sub>**  
 Cepharoline, 3411  
 Hypoepistephanine, 10893  
 Isotrilobine-2-*N*-oxide, 11748  
*O*-Methyldeoxopunjabine, 14289
- C<sub>36</sub>H<sub>36</sub>N<sub>2</sub>O<sub>8</sub>**  
 Cannabisin D, 3087

- Cannabisin G, 3088  
 Grossamide, 9013  
 Hyoscyamide, 10871  
 Tribulusamide A, 21546
- C<sub>36</sub>H<sub>36</sub>O<sub>6</sub>**  
 Magnolignan F, 13383
- C<sub>36</sub>H<sub>36</sub>O<sub>8</sub>**  
 Magnolignan G, 13384
- C<sub>36</sub>H<sub>36</sub>O<sub>11</sub>**  
 3'-Prenyl-4'-methoxy-isoflavone-7-*O*'-β-*D*-(2''-*O*-*p*-coumaroyl)glycopyranoside, 17838
- C<sub>36</sub>H<sub>36</sub>O<sub>16</sub>**  
 Luteoliflavan-(4β→8)-eriodictyol-5-glucoside, 13136
- C<sub>36</sub>H<sub>36</sub>O<sub>17</sub>**  
 Isovitexin 2''-*O*-(6'''-*E*)-*p*-coumaroyl)glucoside, 11774  
 Kaempferol 3-*O*-α-*L*-[6'''-*p*-coumaroyl-(β-*D*)-glucopyranosyl-(1,2)-rhamnopyranoside], 12032  
 Kaempferol 3-*O*-α-*L*-rhamnopyranosyl(1→6)-(4-*O*-*trans*-*p*-coumaroyl)-β-*D*-galactopyranoside, 12072  
 Procyanidin B<sub>1</sub>-6-*C*-β-*D*-glucopyranoside, 17878  
 Procyanidin B<sub>1</sub>-8-*C*-β-*D*-glucopyranoside, 17879  
 Procyanidin B<sub>2</sub>-3''-*O*-β-*D*-allopyranoside, 17880  
 Procyanidin B<sub>2</sub>-6-*C*-glucopyranoside, 17882  
 Procyanidin B<sub>2</sub>-8-*C*-β-*D*-glucopyranoside, 17883  
 Procyanidin B<sub>3</sub>-7-*O*-β-*D*-glucopyranoside, 17885
- C<sub>36</sub>H<sub>36</sub>O<sub>18</sub>**  
 Kaempferol 3-*O*-β-(6''-*E*-*p*-coumaroyl)glucopyranoside)-7-*O*-β-glucopyranoside, 12031  
 Quercetin-3-*O*-α-*L*-[6'''-*p*-coumaroyl-(β-*D*)-glucopyranosyl-(1,2)-rhamnopyranoside], 18335  
 Quercetin-3-*O*-α-*L*-rhamnopyranosyl(1→6)-(3-*O*-*trans*-*p*-coumaroyl)-β-*D*-galactopyranoside, 18381  
 Quercetin-3-*O*-α-*L*-rhamnopyranosyl(1→6)-(4-*O*-*trans*-*p*-coumaroyl)-β-*D*-galactopyranoside, 18382
- C<sub>36</sub>H<sub>36</sub>O<sub>19</sub>**  
 Quercetin-3-*O*-β-(6''-*E*-*p*-coumaroyl)glucopyranoside)-7-*O*-β-glucopyranoside, 18334
- C<sub>36</sub>H<sub>37</sub>O<sub>18</sub><sup>+</sup>**  
 Shisonin, 19838
- C<sub>36</sub>H<sub>37</sub>O<sub>19</sub><sup>+</sup>**  
 Caffeoylcyanin, 2896
- C<sub>36</sub>H<sub>38</sub>N<sub>2</sub>O<sub>6</sub>**  
 Aromoline, 1769  
 (+)-Aromoline, 1770  
*L*-Bebeerine, 2191  
 Hayatine, 9251  
 Isochondrodendrin, 11329  
 (+)-2-Northalrugosine, 15804
- (+)-Obamegine, 15885  
 Sepeerine, 19753  
 Thalicrine, 21244
- C<sub>36</sub>H<sub>38</sub>N<sub>2</sub>O<sub>8</sub>**  
 Wilforcidine, 22674
- C<sub>36</sub>H<sub>38</sub>N<sub>2</sub>O<sub>9</sub>**  
 Heterophylline, 9470
- C<sub>36</sub>H<sub>38</sub>N<sub>2</sub>O<sub>10</sub>**  
 Thapoxepine A, 21274
- C<sub>36</sub>H<sub>38</sub>N<sub>2</sub>O<sub>11</sub>**  
 Rhynchophine, 18824
- C<sub>36</sub>H<sub>38</sub>N<sub>4</sub>O<sub>5</sub>**  
 Methyl pheophorbide a, 14673
- C<sub>36</sub>H<sub>38</sub>O<sub>8</sub>**  
 Tinyatoxin, 21402
- C<sub>36</sub>H<sub>38</sub>O<sub>11</sub>**  
 6''-Epi-calyflorene B, 6871  
 Voamatin D, 22601
- C<sub>36</sub>H<sub>38</sub>O<sub>15</sub>**  
 Glycerol sinapate, 8811
- C<sub>36</sub>H<sub>40</sub>N<sub>2</sub>O<sub>6</sub>**  
 Dauricoline, 4687
- C<sub>36</sub>H<sub>40</sub>N<sub>2</sub>O<sub>8</sub>**  
 Elliptifoline, 6760
- C<sub>36</sub>H<sub>40</sub>N<sub>2</sub>O<sub>9</sub>**  
 Homothapsakin A, 9623
- C<sub>36</sub>H<sub>40</sub>O<sub>10</sub>**  
 Orthosiphon N, 16232  
 Orthosiphonone D, 16244
- C<sub>36</sub>H<sub>40</sub>O<sub>11</sub>**  
 Voamatin A, 22598  
 Voamatin B, 22599
- C<sub>36</sub>H<sub>40</sub>O<sub>12</sub>**  
 1-*O*-3,4-Dimethoxy-phenylethyl-4-*O*-3,4-dimethoxy cinnamoyl-6-*O*-cinnamoyl-β-*D*-glucopyranose, 6285
- C<sub>36</sub>H<sub>40</sub>O<sub>19</sub>**  
 Ciliatocide A, 3638  
 Patavine, 16703
- C<sub>36</sub>H<sub>41</sub>NO<sub>7</sub>**  
 Aristoloin II, 1722
- C<sub>36</sub>H<sub>41</sub>NO<sub>14</sub>**  
 1β,2β,5α,11-Tetraacetoxy-8α-benzoyl-4α-hydroxy-γ-7β-nicotinoyl-dihydroagarofuran, 21023
- C<sub>36</sub>H<sub>42</sub>N<sub>2</sub>**  
 Caulindole C, 3338  
 Caulindole D, 3339
- C<sub>36</sub>H<sub>42</sub>N<sub>2</sub>O<sub>9</sub>**  
 3'-Hydroxyaglaine B, 9768  
 3'-Hydroxyaglaine C, 9769
- C<sub>36</sub>H<sub>42</sub>N<sub>2</sub>O<sub>10</sub>**  
 3',19-Dihydroxyaglaine C, 5753
- C<sub>36</sub>H<sub>42</sub>O<sub>10</sub>**  
 7-*O*-Deacetylorthosiphon B, 4759  
 Orthosiphon K, 16229  
 Orthosiphon T, 16235  
 Orthosiphon X, 16239
- C<sub>36</sub>H<sub>42</sub>O<sub>11</sub>**  
 Taxayuntin A, 20759  
 Triptofordin D<sub>2</sub>, 22003
- C<sub>36</sub>H<sub>42</sub>O<sub>19</sub>**  
 3'''-*O*-Glucosylsenburiside II, 8758
- C<sub>36</sub>H<sub>42</sub>O<sub>23</sub>**  
 Kaempferol 3-*O*-α-*L*-(2-*O*-β-*D*-glucopyranosyl)-rhamnopyranoside-7-*O*-β-*D*-(6-*O*-malonyl)-glucopyranoside, 12056
- C<sub>36</sub>H<sub>43</sub>NO<sub>8</sub>**  
 Gagaminine, 8046
- C<sub>36</sub>H<sub>43</sub>NO<sub>15</sub>**  
 1β-Nicotinoyl-2β,5α,7β-triacetoxy-4α-hydroxy-11-isobutyryloxy-8α-furanoyl-dihydroagarofuran, 15538
- C<sub>36</sub>H<sub>43</sub>NO<sub>17</sub>**  
 Evonine, 7671
- C<sub>36</sub>H<sub>43</sub>O<sub>24</sub><sup>+</sup>**  
 Cyanidin-3-*O*-(3''-*O*-β-glucopyranosyl-6''-*O*-malonyl-β-glucopyranoside)-4'-*O*-β-glucopyranoside, 4443  
 Cyanidin-7-*O*-(3''-*O*-β-glucopyranosyl-6''-*O*-malonyl-β-glucopyranoside)-4'-*O*-β-glucopyranoside, 4444
- C<sub>36</sub>H<sub>44</sub>N<sub>2</sub>O<sub>7</sub>**  
 Nigellamine A<sub>4</sub>, 15564
- C<sub>36</sub>H<sub>44</sub>N<sub>2</sub>O<sub>11</sub>**  
 14-Demethyl-14-acetylanhweidelphinine, 5056
- C<sub>36</sub>H<sub>44</sub>O<sub>12</sub>**  
 Agrimol C, 754  
 Agrimol G, 756  
 Filixic acid BBB, 7798  
 Japonicin D, 11820  
 Swietephragmin D, 20519  
 Trisaspidin, 22029
- C<sub>36</sub>H<sub>44</sub>O<sub>14</sub>**  
 Sandrapin D, 19243  
 Taccalonolide H, 20590
- C<sub>36</sub>H<sub>44</sub>O<sub>15</sub>**  
 Dracunculifoside R, 6597
- C<sub>36</sub>H<sub>44</sub>O<sub>16</sub>**  
 Epimedokoreanoside II, 6963
- C<sub>36</sub>H<sub>44</sub>O<sub>20</sub>**  
 5-Hydroxy-4-methoxy-flavone-7-*O*-α-*L*-rhamnopyranosyl-(1→6)[2-*O*-acetyl-β-*D*-glucopyranosyl-(1→2)]-β-*D*-glucopyranoside, 10405  
 Telephiose A, 20907  
 Telephiose B, 20908
- C<sub>36</sub>H<sub>44</sub>O<sub>22</sub>**

- Bis-iridoid glucoside, 2477
- C<sub>36</sub>H<sub>44</sub>O<sub>22</sub>S<sub>2</sub>**  
Dimer iridoid glucoside 12, 6197
- C<sub>36</sub>H<sub>45</sub>NO<sub>18</sub>**  
Wilfordlongine, 22678  
Wilfordine, 22681
- C<sub>36</sub>H<sub>46</sub>O<sub>6</sub>**  
Brasiliensophyllin acid C, 2593  
Inocalophyllin A methyl ester, 11064  
Isobrasiliensophyllin acid C, 11264
- C<sub>36</sub>H<sub>46</sub>O<sub>11</sub>**  
Neobonaspectin A, 15344
- C<sub>36</sub>H<sub>46</sub>O<sub>14</sub>**  
Sandrapin B, 19241  
Taccalonolide J, 20592  
Trichilin H, 21554
- C<sub>36</sub>H<sub>46</sub>O<sub>15</sub>**  
Taccalonolide L, 20594
- C<sub>36</sub>H<sub>46</sub>O<sub>16</sub>**  
Umbilicaxanthoside B, 22198
- C<sub>36</sub>H<sub>46</sub>O<sub>19</sub>**  
Glomeratose D, 8585
- C<sub>36</sub>H<sub>47</sub>NO<sub>11</sub>**  
Euphocharacin H, 7603
- C<sub>36</sub>H<sub>48</sub>CIN<sub>3</sub>O<sub>10</sub>**  
Normaytancyprine, 15776
- C<sub>36</sub>H<sub>48</sub>N<sub>2</sub>O<sub>10</sub>**  
Lycaconitine, 13169
- C<sub>36</sub>H<sub>48</sub>N<sub>6</sub>O<sub>7</sub>**  
Dianthin C, 5367
- C<sub>36</sub>H<sub>48</sub>O<sub>5</sub>**  
Oleoyl danshenxinkun A, 16072
- C<sub>36</sub>H<sub>48</sub>O<sub>9</sub>**  
(±)-Schefflone, 19464
- C<sub>36</sub>H<sub>48</sub>O<sub>11</sub>**  
15-*O*-Deacetylnimbolidin B, 4754
- C<sub>36</sub>H<sub>48</sub>O<sub>14</sub>**  
1 $\alpha$ ,2 $\alpha$ ,6 $\beta$ -Triacetoxo-8 $\alpha$ ,13-diisobutanoyloxy-9 $\beta$ -benzoyloxy-4 $\beta$ -hydroxy- $\beta$ -dihydroagarofuran, 21517
- C<sub>36</sub>H<sub>48</sub>O<sub>16</sub>**  
Phyllanthostatin 6, 17218
- C<sub>36</sub>H<sub>48</sub>O<sub>18</sub>**  
Yadanzioside G, 22866
- C<sub>36</sub>H<sub>48</sub>O<sub>19</sub>**  
Angoroside C, 1241  
Lamiophlomiside A, 12462  
*cis*-Lamiophlomiside A, 12463  
Leonoside B, 12638  
Leucosceptoside B, 12726  
Teucrioside-3''',4'''-*O*-dimethylether, 21214
- C<sub>36</sub>H<sub>48</sub>O<sub>20</sub>**  
Cistanoside A, 3751
- Jionoside A<sub>2</sub>, 11881  
Verpectoside C, 22418  
Wiedemannioside C, 22664
- C<sub>36</sub>H<sub>48</sub>O<sub>21</sub>**  
Scroside A, 19572
- C<sub>36</sub>H<sub>49</sub>NO<sub>8</sub>**  
Leueantine B, 12729
- C<sub>36</sub>H<sub>49</sub>NO<sub>9</sub>**  
Leueantine A, 12728
- C<sub>36</sub>H<sub>49</sub>NO<sub>12</sub>**  
3-Acetylaconitine, 304
- C<sub>36</sub>H<sub>49</sub>N<sub>5</sub>O<sub>5</sub>**  
Amphibine D, 1081
- C<sub>36</sub>H<sub>49</sub>N<sub>7</sub>O<sub>10</sub>**  
Glabrin D, 8495
- C<sub>36</sub>H<sub>50</sub>CIN<sub>3</sub>O<sub>10</sub>**  
Maytanbutine, 13619
- C<sub>36</sub>H<sub>50</sub>N<sub>2</sub>O<sub>11</sub>**  
Puberaconitine, 18167
- C<sub>36</sub>H<sub>50</sub>O<sub>4</sub>**  
Physanol A, 17245
- C<sub>36</sub>H<sub>50</sub>O<sub>18</sub>**  
Javanicoside E, 11858
- C<sub>36</sub>H<sub>51</sub>NO<sub>10</sub>**  
Veratrolyl zygadenine, 22395
- C<sub>36</sub>H<sub>51</sub>NO<sub>11</sub>**  
Bikhaconitine, 2372  
Polyschistine A, 17672
- C<sub>36</sub>H<sub>51</sub>NO<sub>12</sub>**  
Pseudoaconitine, 18017
- C<sub>36</sub>H<sub>51</sub>N<sub>3</sub>O<sub>10</sub>**  
Awadcharidine, 2042  
Trifoliolasine B, 21636
- C<sub>36</sub>H<sub>52</sub>N<sub>2</sub>O<sub>9</sub>**  
Jiufengdine, 11887
- C<sub>36</sub>H<sub>52</sub>N<sub>4</sub>O<sub>10</sub>**  
Bufotalin 3-succinoylarginine ester, 2724
- C<sub>36</sub>H<sub>52</sub>O<sub>4</sub>**  
Physanol B, 17246
- C<sub>36</sub>H<sub>52</sub>O<sub>6</sub>**  
Hericenone H, 9436
- C<sub>36</sub>H<sub>52</sub>O<sub>7</sub>**  
Methylanhydrovilangin, 14140
- C<sub>36</sub>H<sub>52</sub>O<sub>8</sub>**  
Mancinellin, 13476
- C<sub>36</sub>H<sub>52</sub>O<sub>10</sub>**  
Khekadaengoside G, 12214  
Khekadaengoside H, 12215
- C<sub>36</sub>H<sub>52</sub>O<sub>11</sub>**  
Khekadaengoside C, 12210  
Khekadaengoside I, 12216  
3,11,22-Trioxo-16 $\alpha$ -hydroxy-(20*S*,24)-epoxy-cucurbit-5,23-diene-2 $\beta$ -*O*- $\beta$ -D-glucopyranoside, 21985
- C<sub>36</sub>H<sub>52</sub>O<sub>13</sub>**  
Scillaren A, 19518  
Scillirubrosidin 3-*O*- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -L-rhamnopyranoside, 19530
- C<sub>36</sub>H<sub>52</sub>O<sub>14</sub>**  
Baccatin VII, 2078
- C<sub>36</sub>H<sub>52</sub>O<sub>15</sub>**  
Hellebrin, 9330
- C<sub>36</sub>H<sub>53</sub>NO<sub>12</sub>**  
Nervosine, 15511
- C<sub>36</sub>H<sub>53</sub>N<sub>7</sub>O<sub>8</sub>**  
Dianthin D, 5368
- C<sub>36</sub>H<sub>54</sub>N<sub>2</sub>O<sub>6</sub>**  
6'',7''-Dihydro-5',5'''-dicapsaicin, 5588
- C<sub>36</sub>H<sub>54</sub>O<sub>6</sub>**  
Camaryolic acid, 3028
- C<sub>36</sub>H<sub>54</sub>O<sub>8</sub>**  
Methylvilangin, 14809  
Synaptolepis factor K<sub>1</sub>, 20550
- C<sub>36</sub>H<sub>54</sub>O<sub>10</sub>**  
Abrusoside A, 31  
3-*O*- $\beta$ -D-Glucuronopyranosyl gypsogenin, 8765  
Vaccaroside, 22303
- C<sub>36</sub>H<sub>54</sub>O<sub>12</sub>**  
Arvenin III, 1827  
Bryoamaride, 2686  
Khekadaengoside D, 12211  
Khekadaengoside E, 12212
- C<sub>36</sub>H<sub>54</sub>O<sub>13</sub>**  
Cucurbitacin J 2-*O*- $\beta$ -glucopyranoside, 4325  
Cucurbitacin K 2-*O*- $\beta$ -glucopyranoside, 4326  
(2*R*,3*R*,4*R*,5*R*,7*S*,8*S*,9*S*,11*E*,13*S*,15*R*)-2,3,5,7,8,9,15-Heptahydroxyjatropa-6(17),11-diene-14-one-7,8,9-triacetate-2,5-bis(2-methylbutyrate), 9398  
Khekadaengoside F, 12213  
Periforoside I, 16924
- C<sub>36</sub>H<sub>54</sub>O<sub>15</sub>**  
Strophanthidin- $\beta$ -D-glucosyl-(1 $\rightarrow$ 4)- $\beta$ -D-digitaloside, 20400  
Strophanthin, 20402
- C<sub>36</sub>H<sub>55</sub>NO<sub>11</sub>**  
Neogermitrine, 15396
- C<sub>36</sub>H<sub>55</sub>N<sub>7</sub>O<sub>8</sub>**  
Pseudostellarin D, 18067
- C<sub>36</sub>H<sub>56</sub>N<sub>2</sub>O<sub>5</sub>**  
(-)-Buxakashmiramine, 2815
- C<sub>36</sub>H<sub>56</sub>O<sub>7</sub>**  
Fomitoid D, 7869
- C<sub>36</sub>H<sub>56</sub>O<sub>8</sub>**  
Phorbol-12-butyrate-13-laurate, 17184  
Phorbol-4-methoxy-12-myristate-13-acetate,



- 17187
- C<sub>36</sub>H<sub>56</sub>O<sub>9</sub>**  
*Calendula officinalis* Glycoside F, 2973  
 Cimifoetiside III, 3657  
 Eriocarpin C, 7274  
 Quinovic acid 3 $\beta$ -*O*- $\beta$ -*D*-quinovopyranoside, 18439  
 Quinovic acid 3 $\beta$ -*O*- $\alpha$ -*L*-rhamnopyranoside, 18442
- C<sub>36</sub>H<sub>56</sub>O<sub>10</sub>**  
 Dianoside H, 5365  
 Hederagenin-3-*O*- $\beta$ -glucuronopyranoside, 9265  
 12 $\beta$ -Hydroxylcimigenol  
 3-*O*- $\alpha$ -*L*-arabinopyranoside, 10316  
 Myrioside B, 15199  
 Periplocoside O, 16957  
 Phytolaccoside A, 17268  
 Quinovic acid 27-*O*- $\beta$ -*D*-glucopyranosyl ester, 18430  
 2 $\alpha$ ,3 $\beta$ ,24-Trihydroxyurs-12,18-dien-28-oic acid  
 28-*O*- $\beta$ -*D*-glucopyranosyl ester, 21860
- C<sub>36</sub>H<sub>56</sub>O<sub>11</sub>**  
 Dianoside F, 5363  
 28-*O*- $\beta$ -*D*-Glucopyranosyl-2 $\alpha$ -3 $\beta$ -dihydroxy-  
 olean-12-ene-24,28-dioic acid, 8621  
 Phytolaccoside B, 17269
- C<sub>36</sub>H<sub>56</sub>O<sub>12</sub>**  
 Odoroside D, 16007  
 Suavissimoside R<sub>1</sub>, 20433  
 Tenuifolin, 20939
- C<sub>36</sub>H<sub>56</sub>O<sub>13</sub>**  
 Odorobioside G, 16004  
 Odoroside F, 16008  
 Periplocin, 16943  
 Thevebioside, 21322  
 Tirlocularoside A, 21403  
 2 $\alpha$ ,3 $\alpha$ ,23-Trihydroxyurs-12-en-24,28-dioic acid  
 28- $\beta$ -*D*-glucopyranosylester, 21861
- C<sub>36</sub>H<sub>58</sub>O<sub>6</sub>**  
 20-Hexadecanoylingenol, 9489  
 Ingenol-20-hexadecanoate, 11059  
 Ingenol-3-hexadecanoate, 11060
- C<sub>36</sub>H<sub>58</sub>O<sub>7</sub>**  
 $\alpha$ -*L*-Rhamnopyranosyl-3 $\beta$ -hydroxy-lup-20(29)-  
 en-28-oic acid, 18728
- C<sub>36</sub>H<sub>58</sub>O<sub>8</sub>**  
 Fomitosiside I, 7874  
 3-*O*- $\beta$ -*D*-Galactopyranosyloleanolic acid, 8065  
 Ilexoside B methyl ester, 10982  
 Oleanolic acid-28-*O*- $\beta$ -*D*-glucopyranoside, 16052  
 Prosaikogenin F, 17941  
 Prosaikogenin G, 17942
- C<sub>36</sub>H<sub>58</sub>O<sub>9</sub>**  
 3 $\beta$ ,19 $\alpha$ -Dihydroxyurs-12-en-28-oic acid 28- $\beta$ -*D*-  
 glucopyranosyl ester, 6176  
 Ecliptasaponin A, 6705  
 Ecliptasaponin D, 6707  
 3-*O*- $\beta$ -*D*-Glucopyranosyl-23-hydroxyursolic  
 acid, 8679  
 16 $\beta$ -Hydroxy-18 $\beta$ *H*-oleanolic acid-28-*O*- $\beta$ -*D*-  
 glucopyranoside, 10551  
 Longispinogenin 3-*O*- $\beta$ -*D*-glucuronopyranoside,  
 12981  
 Lucyoside Q, 13064  
 25-*O*-Methoxycimigenol 3-*O*- $\alpha$ -*L*-arabinopyra-  
 noside, 13881  
 25-*O*-Methylcimigenoside, 14244  
 Pomolic acid-28-*O*- $\beta$ -*D*-glucopyranoside, 17698  
 Prosaipogenin CP<sub>2a</sub>, 17944  
 Soyasapogenol B monoglucuronide, 20117
- C<sub>36</sub>H<sub>58</sub>O<sub>10</sub>**  
 Arjunic acid-28-*O*-glucoside, 1735  
 Cimisiside F, 3673  
 21-*O*- $\beta$ -*D*-Glucopyranosyl-3 $\beta$ ,21 $\alpha$ ,30-trihydroxy-  
 olean-13(18)-en-24-oic acid, 8745  
 Lucyoside N, 13063  
 Pedunculoside, 16766  
 Rosamultin, 18916  
 2 $\alpha$ ,3 $\alpha$ ,19 $\alpha$ -Trihydroxyurs-12-en-28-oic acid  
 28- $\beta$ -*D*-glucopyranosyl ester, 21864  
 2 $\alpha$ ,3 $\alpha$ ,24-Trihydroxyurs-12-en-28-oic acid-28-  
*O*- $\beta$ -*D*-glucopyranosyl ester, 21865  
 Vulgarsaponin, 22621
- C<sub>36</sub>H<sub>58</sub>O<sub>11</sub>**  
 Arjunglucoside I, 1733  
 Lucyoside R, 13062  
 Niga-ichigoside F<sub>1</sub>, 15539  
 Niga-ichigoside F<sub>2</sub>, 15540  
 Pruvuloside B, 18007  
 Sericoside, 19758  
 2 $\alpha$ ,3 $\beta$ ,23,29-Tetrahydroxyolean-12-en-28-oic  
 acid 29-*O*- $\beta$ -*D*-glucopyranoside, 21145
- C<sub>36</sub>H<sub>58</sub>O<sub>12</sub>**  
 3-*O*- $\beta$ -*D*-Glucopyranosyl platycodigenin, 8711
- C<sub>36</sub>H<sub>60</sub>O<sub>2</sub>**  
 Cynanester A, 4554
- C<sub>36</sub>H<sub>60</sub>O<sub>4</sub>**  
*ent*-15,16-Epoxy-2 $\beta$ -palmitoyloxy-kauran-2-one,  
 7185  
*ent*-15,16-Epoxy-3 $\alpha$ -palmitoyloxy-kauran-2-one,  
 7186  
 2-*n*-Pentacosyl-5,7-dihydroxy-6,8-dimethyl  
 chromone, 16826
- C<sub>36</sub>H<sub>60</sub>O<sub>8</sub>**  
 Ginsenoside Rh<sub>4</sub>, 8439
- Rubianoside II, 19008
- C<sub>36</sub>H<sub>60</sub>O<sub>9</sub>**  
 Ginsenoside Rh<sub>5</sub>, 8440  
 Ginsenoside Rh<sub>7</sub>, 8442  
 Ginsenoside Rh<sub>8</sub>, 8443  
 Ginsenoside Rh<sub>9</sub>, 8444  
 Kahiricoside II, 12107  
 Rubianoside III, 19009
- C<sub>36</sub>H<sub>60</sub>O<sub>10</sub>**  
 Beesioside G, 2198  
 Rubianoside IV, 19010
- C<sub>36</sub>H<sub>62</sub>O<sub>4</sub>**  
 Hexacosanyl ferulate, 9482  
 Tenuiphenone C, 20961
- C<sub>36</sub>H<sub>62</sub>O<sub>8</sub>**  
 20(*R*)-Ginsenoside-Rh<sub>2</sub>, 8436  
 20(*S*)-Ginsenoside Rh<sub>2</sub>, 8437
- C<sub>36</sub>H<sub>62</sub>O<sub>9</sub>**  
 Ginsenoside F<sub>1</sub>, 8410  
 20(*R*)-Ginsenoside Rh<sub>1</sub>, 8434  
 20(*S*)-Ginsenoside Rh<sub>1</sub>, 8435  
 Gynosaponin TN<sub>1</sub>, 9115  
 Gypenoside LXXXVI, 9178  
 Sanchinoside B<sub>1</sub>, 19233  
 (20*S*)-12 $\beta$ ,16 $\beta$ -Trihydroxydammar-24-ene-3 $\beta$ -*O*-  
 $\beta$ -glucopyranoside, 21699
- C<sub>36</sub>H<sub>62</sub>O<sub>10</sub>**  
 Gycomoside III, 9096  
 Momorcharaside B, 14908  
 (24*S*)-Pseudoginsenoside RT<sub>4</sub>, 18026  
 Trilocularol A 3-glucoside, 21891
- C<sub>36</sub>H<sub>62</sub>O<sub>11</sub>**  
 Ginsenoside Rh<sub>6</sub>, 8441
- C<sub>36</sub>H<sub>62</sub>O<sub>31</sub>**  
 Lantanose B, 12495  
 Lycopose, 13224
- C<sub>36</sub>H<sub>64</sub>O<sub>14</sub>**  
 2,3,4-Tri(6-methylheptanoyl)- $\alpha$ -*D*-glucopyranos-  
 yl- $\beta$ -*D*-fructofuranoside, 21962
- C<sub>36</sub>H<sub>68</sub>N<sub>2</sub>O<sub>3</sub>**  
 Secojuliprosopinal, 19621
- C<sub>36</sub>H<sub>69</sub>NO<sub>3</sub>**  
 (4*E*,6*E*,2*S*,3*R*)-2-*N*-Docosanoyl-4,6-tetra-  
 decasphingadienine, 6538
- C<sub>36</sub>H<sub>70</sub>O<sub>2</sub>**  
 3-Methoxy-5-acetyl-31-tritriacontene, 13835
- C<sub>36</sub>H<sub>72</sub>O<sub>2</sub>**  
 Pentyl hentriacontanoate, 16894
- C<sub>36</sub>H<sub>73</sub>NO<sub>4</sub>**  
 (2*S*,3*S*,4*R*)-*N*-[2-(1,3,4-Trihydroxy-octadecan-  
 yl)]-octadecamide, 21820
- C<sub>37</sub>H<sub>30</sub>N<sub>2</sub>O<sub>9</sub>**  
 (+)-Ovihermangerine, 16282

- C<sub>37</sub>H<sub>30</sub>O<sub>7</sub>**  
Blestrianol C, 2507
- C<sub>37</sub>H<sub>30</sub>O<sub>9</sub>**  
Globulixanthone E, 8557
- C<sub>37</sub>H<sub>30</sub>O<sub>16</sub>**  
Procyanidin B<sub>1</sub> 3'-*O*-gallate, 17877  
Procyanidin B<sub>2</sub>-3'-*O*-gallate, 17881  
Procyanidin B<sub>4</sub>-3'-*O*-gallate, 17887  
Procyanidin B<sub>5</sub> 3'-*O*-gallate, 17889  
Procyanidin B<sub>7</sub>-3'-*O*-gallate, 17891
- C<sub>37</sub>H<sub>30</sub>O<sub>17</sub>**  
Epigallocatechin-(4β→8)-epicatechin-3-*O*-gallate ester, 6922
- C<sub>37</sub>H<sub>32</sub>O<sub>7</sub>**  
Blestrianol B, 2506
- C<sub>37</sub>H<sub>34</sub>N<sub>2</sub>O<sub>7</sub>**  
Oxofangchirine, 16332  
Simulanoquinoline, 19904
- C<sub>37</sub>H<sub>34</sub>O<sub>20</sub>**  
4'-*O*-[2'-*O*-*E*-Feruloyl-*O*-β-*D*-glucuronopyranosyl(1→2)-*O*-β-*D*-glucuronopyranoside]apigenin, 7775
- C<sub>37</sub>H<sub>36</sub>N<sub>2</sub>O<sub>7</sub>**  
Isothalamidine, 11737
- C<sub>37</sub>H<sub>36</sub>N<sub>2</sub>O<sub>8</sub>**  
Secocepharanthine, 19608
- C<sub>37</sub>H<sub>36</sub>O<sub>12</sub>**  
Curtisian E, 4401
- C<sub>37</sub>H<sub>36</sub>O<sub>22</sub>**  
Quercetagetin 7-methylether-3-*O*-[2-*O*-caffeoyl-β-*D*-glucopyranosyl(1→2)-*O*-β-*D*-glucuronopyranoside], 18311
- C<sub>37</sub>H<sub>37</sub>N<sub>2</sub>O<sub>6</sub><sup>+</sup>**  
Fenfangjine D, 7754
- C<sub>37</sub>H<sub>38</sub>N<sub>2</sub>O<sub>6</sub>**  
Cepharanthine, 3412  
Cissampareine, 3748  
Coelobine, 3879  
Epistephanine, 7024  
(-)-Medelline, 13634
- C<sub>37</sub>H<sub>38</sub>N<sub>4</sub>O<sub>7</sub>**  
Petasiphyll A, 17014
- C<sub>37</sub>H<sub>38</sub>O<sub>17</sub>**  
6''-*p*-Coumaroylspinosin, 4187
- C<sub>37</sub>H<sub>38</sub>O<sub>18</sub>**  
Isorhamnetin 3-*O*-α-*L*-[6''-*p*-coumaroyl-β-*D*-glucopyranosyl-(1,2)-rhamnopyranoside], 11654  
Isoscoparin 2''-*O*-(6''-(*E*)-*p*-coumaroyl)glucoside, 11700
- C<sub>37</sub>H<sub>38</sub>O<sub>19</sub>**  
Isorhamnetin 3-*O*-β-(6''-*E*-*p*-coumaroylglucopyranoside)-7-*O*-β-glucopyranoside, 11653  
Kaempferol 3-*O*-[(6-*O*-feruloyl)-β-*D*-glucopyranosyl-(1→2)-β-*D*-galactopyranoside], 12046
- Kaempferol 3-*O*-[2-*O*-[(*trans*-3-methoxy-4-hydroxycinnamoyl)]-β-*D*-galactopyranosyl-(1→4)-*O*-β-*D*-glucopyranoside, 12068
- Kaempferol 3-*O*-[2-*O*-[(*trans*-3-methoxy-4-hydroxycinnamoyl)]-β-*D*-glucopyranosyl-(1→6)-*O*-β-*D*-glucopyranoside, 12069
- Ozturkoside B, 16483
- C<sub>37</sub>H<sub>38</sub>O<sub>20</sub>**  
Quercetin-3-*O*-[(6-*O*-feruloyl)-β-*D*-glucopyranosyl-(1→2)-β-*D*-galactopyranoside], 18354  
Quercetin-3-*O*-[2-*O*-(6-*O*-*E*-feruloyl)-β-*D*-glucopyranosyl]-β-*D*-glucopyranoside, 18355
- C<sub>37</sub>H<sub>40</sub>N<sub>2</sub>O<sub>6</sub>**  
(+)-Antioquine, 1459  
(-)-Antioquine, 1460  
Berbamine, 2300  
Fangchinoline, 7714  
Hayatidine, 9250  
Hayatinine, 9252  
Homoaromoline, 9597  
Menisidine, 13714  
(+)-4''-*O*-Methylcurine, 14266  
(+)-2-Norisotetrandrine, 15764  
Oxyacanthine, 16439  
Thalicerberine, 21240  
Thalictine, 21248  
Thalifortine, 21256  
Thalmine, 21264  
Thalrugosine, 21270  
Tiliageine, 21390
- C<sub>37</sub>H<sub>40</sub>N<sub>2</sub>O<sub>7</sub>**  
*N*-Desmethylthalidezine, 5260
- C<sub>37</sub>H<sub>40</sub>N<sub>2</sub>O<sub>10</sub>**  
Thapsakin A 10-*O*-acetate, 21275
- C<sub>37</sub>H<sub>40</sub>O<sub>9</sub>**  
Resiniferatoxin, 18639
- C<sub>37</sub>H<sub>40</sub>O<sub>13</sub>**  
Ixerochinoside, 11803
- C<sub>37</sub>H<sub>40</sub>O<sub>21</sub>**  
Quercetin-3-*O*-[(2,3,4-triacetyl-α-rhamnopyranosyl)-(1→6)]-3,4-diacetyl-β-galactopyranoside, 18402
- C<sub>37</sub>H<sub>41</sub>NO<sub>10</sub>**  
3,12-Diacetyl-7-benzoyl-8-nicotinoylingol, 5326
- C<sub>37</sub>H<sub>42</sub>N<sub>2</sub>O<sub>6</sub>**  
Dauricoline, 4686  
Daurinoline, 4688  
Daurisoline, 4693  
Isoliensinine, 11491  
Liensinine, 12798  
(+)-Thaligrisine, 21258
- C<sub>37</sub>H<sub>42</sub>N<sub>2</sub>O<sub>6</sub><sup>2+</sup>**  
(+)-Tubocurarine, 22091
- C<sub>37</sub>H<sub>42</sub>O<sub>10</sub>**  
Odratrin, 15999
- C<sub>37</sub>H<sub>42</sub>O<sub>12</sub>**  
Norstaminol A, 15795
- C<sub>37</sub>H<sub>42</sub>O<sub>13</sub>**  
Triptofordin F<sub>1</sub>, 22005
- C<sub>37</sub>H<sub>42</sub>O<sub>14</sub>**  
Triptofordin F<sub>3</sub>, 22007
- C<sub>37</sub>H<sub>42</sub>O<sub>17</sub>**  
6-*O*-α-*L*-(2''-*O*-Benzoyl,3''-*O*-*trans*-*p*-coumaroyl)rhamnopyranosylcatalpol, 2234
- C<sub>37</sub>H<sub>43</sub>NO<sub>8</sub>**  
Aristoloin I, 1721
- C<sub>37</sub>H<sub>43</sub>NO<sub>9</sub>**  
Euphoheliosnoid A, 7608  
Euphoheliosnoid B, 7609
- C<sub>37</sub>H<sub>43</sub>NO<sub>10</sub>**  
Euphocharacin E, 7600
- C<sub>37</sub>H<sub>43</sub>NO<sub>11</sub>**  
Euphocharacin B, 7597  
Euphocharacin L, 7607
- C<sub>37</sub>H<sub>44</sub>N<sub>2</sub>O<sub>10</sub>**  
19-Hydroxy-3'-methoxyaglaine C, 10379
- C<sub>37</sub>H<sub>44</sub>N<sub>4</sub>O<sub>6</sub>**  
N<sub>1</sub>,N<sub>5</sub>,N<sub>10</sub>-Tris[3-(4-hydroxyphenyl)-2-propenoyl]-1,5,10,14-tetraazatetradecane, 22035
- C<sub>37</sub>H<sub>44</sub>O<sub>8</sub>**  
Trichilin D, 21555
- C<sub>37</sub>H<sub>44</sub>O<sub>9</sub>**  
6α-Acetoxy-9β-benzoyloxy-1β-cinnamoyloxy-8β-butanoyloxy-β-dihydroagarofuran, 131
- C<sub>37</sub>H<sub>44</sub>O<sub>10</sub>**  
Gnidilatidin, 8900  
Odoracin, 15990  
Yuanhuacin, 22929
- C<sub>37</sub>H<sub>44</sub>O<sub>11</sub>**  
Taxinine B, 20800
- C<sub>37</sub>H<sub>44</sub>O<sub>12</sub>**  
Dantaxusin C, 4638
- C<sub>37</sub>H<sub>44</sub>O<sub>13</sub>**  
1-Cinnamoyl-11-methoxymeliacarpinin, 3710  
Taxagifin, 20743
- C<sub>37</sub>H<sub>44</sub>O<sub>14</sub>**  
Jatrophane 11, 11847  
3β,5α,7β,8α,15β-Pentaacetoxy-2α-benzoyloxy-jatropha-6(17),11*E*-dien-9,14-dione, 16818  
Segetene A, 19656  
Segetene B, 19657  
Taxuspine S, 20866  
Taxuspine T, 20867
- C<sub>37</sub>H<sub>44</sub>O<sub>15</sub>**  
1α,2α,6β-Triacetoxy-8α-(β-furancarboxyloxy)-

- 9 $\beta$ -benzoyloxy-13-isobutanoyloxy-4 $\beta$ -hydroxy- $\beta$ -dihydroagarofuran, 21520
- C<sub>37</sub>H<sub>44</sub>O<sub>17</sub>**  
Korepimedeside A, 12272
- C<sub>37</sub>H<sub>46</sub>O<sub>10</sub>**  
2-Deacetoxytaxinine J, 4708
- C<sub>37</sub>H<sub>46</sub>O<sub>11</sub>**  
Dantaxusin D, 4639  
Taxamedin A, 20747  
Taxawallin A, 20753  
Taxuspinanane G, 20846  
Taxuspine J, 20857
- C<sub>37</sub>H<sub>46</sub>O<sub>12</sub>**  
(R)-(-)-Agrimol B, 753  
Swietephragmin C, 20518  
Taxezopidine K, 20789
- C<sub>37</sub>H<sub>46</sub>O<sub>13</sub>**  
1 $\beta$ -Dehydroxybaccatin VI, 4981  
3 $\beta$ ,5 $\alpha$ ,8 $\alpha$ ,9 $\alpha$ ,15 $\beta$ -Pentaacetoxy-7 $\beta$ -benzoyloxy-jatropha-6(17),11E-dien-14-one, 16819  
Swietephragmin E, 20520
- C<sub>37</sub>H<sub>46</sub>O<sub>14</sub>**  
13-Acetyl-13-decinnamoyltaxchinin B, 369  
Baccatin VI, 2077  
Segetene 3, 19652  
Segetene 4, 19653  
Taxumairol G, 20827
- C<sub>37</sub>H<sub>46</sub>O<sub>15</sub>**  
14 $\beta$ -Benzoyloxy-13-deacetyl baccatin IV, 2252  
14 $\beta$ -Benzoyloxy-2-deacetyl baccatin VI, 2253  
10-Hydroxyacetyl baccatin VI, 9763  
14 $\beta$ -Hydroxy-baccatin VI, 9813  
Kansuinin A, 12137
- C<sub>37</sub>H<sub>46</sub>O<sub>16</sub>**  
Kansuinin H, 12144
- C<sub>37</sub>H<sub>46</sub>O<sub>17</sub>**  
Acanfolioside, 63
- C<sub>37</sub>H<sub>46</sub>O<sub>18</sub>**  
Wiedemannioside B, 22663
- C<sub>37</sub>H<sub>48</sub>N<sub>2</sub>O<sub>11</sub>**  
Potanidine B, 17744
- C<sub>37</sub>H<sub>48</sub>O<sub>6</sub>**  
3,6-Epoxy-5,3',4'-trihydroxy-12',13',20'-trinor- $\beta$ , $\beta$ -caroten-19,11-olide, 7217
- C<sub>37</sub>H<sub>48</sub>O<sub>10</sub>**  
Cynaphylloside A, 4556
- C<sub>37</sub>H<sub>48</sub>O<sub>14</sub>**  
5 $\alpha$ -O-( $\beta$ -D-Glucopyranosyl)-10 $\beta$ -benzoyltaxacustone, 8609  
Taxumairol A, 20821
- C<sub>37</sub>H<sub>48</sub>O<sub>21</sub>**  
Tubuloside A, 22093
- C<sub>37</sub>H<sub>48</sub>O<sub>23</sub>S<sub>2</sub>**  
Dimer iridoid glucoside 10, 6196
- C<sub>37</sub>H<sub>49</sub>NO<sub>9</sub>**  
Taxuspine H, 20856
- C<sub>37</sub>H<sub>49</sub>NO<sub>10</sub>**  
Comptonine, 3958  
2'-Hydroxytaxine II, 10738  
Spicaledonine, 20157  
Taxine A', 20794
- C<sub>37</sub>H<sub>49</sub>NO<sub>11</sub>**  
7-O-Acetyltaxine A, 519
- C<sub>37</sub>H<sub>49</sub>NO<sub>12</sub>**  
Euphocharacin D, 7599
- C<sub>37</sub>H<sub>49</sub>NO<sub>13</sub>**  
(2R,3R,4R,5R,7S,8S,9S,11E,13S,15R)-2,3,5,7,8,9,15-Heptahydroxyjatropha-6(17),11-diene-14-one-7,8,9-triacetate-2-nicotinate-5-(2-methylbutyrate), 9401
- C<sub>37</sub>H<sub>50</sub>N<sub>2</sub>O<sub>10</sub>**  
Methyllycaconitine, 14569
- C<sub>37</sub>H<sub>50</sub>N<sub>2</sub>O<sub>11</sub>**  
10-Hydroxy-methyllycaconitine, 10501
- C<sub>37</sub>H<sub>50</sub>O<sub>8</sub>**  
12-O-Cinnamoyl-20-O-ikemaoyl sarcostin, 3709
- C<sub>37</sub>H<sub>50</sub>O<sub>9</sub>**  
Pimelea factor P<sub>2</sub>, 17374
- C<sub>37</sub>H<sub>50</sub>O<sub>11</sub>**  
15-O-Deacetyl-15-O-methylnimbolidin B, 4753
- C<sub>37</sub>H<sub>50</sub>O<sub>12</sub>**  
Nimbolidin C, 15607
- C<sub>37</sub>H<sub>50</sub>O<sub>14</sub>**  
1 $\alpha$ ,2 $\alpha$ ,6 $\beta$ -Triacetoxy-8 $\alpha$ -isobutanoyloxy-9 $\beta$ -benzoyloxy-13-( $\alpha$ -methyl)butanoyloxy-4 $\beta$ -hydroxy- $\beta$ -dihydroagarofuran, 21525
- C<sub>37</sub>H<sub>50</sub>O<sub>18</sub>**  
Yadanzioside O, 22874
- C<sub>37</sub>H<sub>50</sub>O<sub>20</sub>**  
Cistanoside B, 3752  
Jionoside B<sub>1</sub>, 11882  
Jionoside B<sub>2</sub>, 11883
- C<sub>37</sub>H<sub>50</sub>O<sub>21</sub>**  
Rossicaside F, 18927
- C<sub>37</sub>H<sub>51</sub>NO<sub>8</sub>**  
7,2'-Didesacetoxy austrospicatine, 5478
- C<sub>37</sub>H<sub>51</sub>NO<sub>9</sub>**  
10 $\beta$ -Hydroxy-2 $\alpha$ ,9 $\alpha$ ,13 $\alpha$ -triacetoxy-5 $\alpha$ -(3'-(dimethylamino)-3'-phenyl)butanoatetaxa-4(20),11-diene, 10777  
9 $\alpha$ -Hydroxy-2 $\alpha$ ,10 $\beta$ ,13 $\alpha$ -triacetoxy-5 $\alpha$ -(3'-N,N-dimethylamino-3'-phenyl)propionyloxytaxa-4(20),11-diene, 10778  
Taxuspine Z, 20873
- C<sub>37</sub>H<sub>51</sub>NO<sub>10</sub>**  
9 $\alpha$ -Acetyl-10 $\beta$ -deacetyl-spicataxine, 365
- 7 $\beta$ ,9 $\alpha$ -Bisdeacetylaustrospicatine, 2437  
2 $\alpha$ 17-Dihydroxy-9 $\alpha$ ,10 $\beta$ ,13 $\alpha$ -triacetoxy-5 $\alpha$ -(3'-N,N-dimethylamino-3'-phenyl)propionyloxytaxa-4(20),11-diene, 6157  
Spicataxine, 20159
- C<sub>37</sub>H<sub>52</sub>ClN<sub>3</sub>O<sub>10</sub>**  
Maytanvaline, 13622
- C<sub>37</sub>H<sub>52</sub>N<sub>2</sub>O<sub>11</sub>**  
Demethyldelevaine A, 5071  
Demethyldelevaine B, 5072  
Puberaconitidine, 18166
- C<sub>37</sub>H<sub>52</sub>O<sub>3</sub>**  
Karoundiol 3-benzoate, 12166
- C<sub>37</sub>H<sub>53</sub>N<sub>3</sub>O<sub>10</sub>**  
Delsemine A, 5033  
Delsemine B, 5034
- C<sub>37</sub>H<sub>54</sub>N<sub>2</sub>O<sub>9</sub>**  
Delajacine, 4991
- C<sub>37</sub>H<sub>54</sub>O<sub>4</sub>**  
Carpesterol, 3221  
Cholesteryl ferulate, 3586
- C<sub>37</sub>H<sub>54</sub>O<sub>5</sub>**  
Oleoyl neocryptotanshinone, 16073  
Revandchinone 3, 18671
- C<sub>37</sub>H<sub>54</sub>O<sub>6</sub>**  
Hericenone E, 9433
- C<sub>37</sub>H<sub>54</sub>O<sub>10</sub>**  
Bugbanoside E, 2731  
7,8-Didehydro-27-deoxyactein, 5466
- C<sub>37</sub>H<sub>54</sub>O<sub>11</sub>**  
Bugbanoside D, 2730  
Cimicifugoside, 3652
- C<sub>37</sub>H<sub>54</sub>O<sub>16</sub>**  
(3S)-O- $\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 3)-[4-O-(E)-coumaroyl]- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl-linalool, 18695  
(3S)-O- $\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 3)-[4-O-(Z)-coumaroyl]- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl-linalool, 18696  
Trillenoside C, 21875
- C<sub>37</sub>H<sub>56</sub>O<sub>8</sub>**  
Phorbol-12-tiglate-13-laurate, 17195
- C<sub>37</sub>H<sub>56</sub>O<sub>10</sub>**  
Acetyl cimicifugoside, 352  
3-O- $\alpha$ -(2"-O-Acetyl)-D-xylopyranosyl-3 $\beta$ -hydroxyolean-12-ene-28,29-dioic acid, 533
- C<sub>37</sub>H<sub>56</sub>O<sub>11</sub>**  
Cimiracemoside F, 3667  
Cimiracemoside G, 3668  
27-Deoxyactein, 5150
- C<sub>37</sub>H<sub>56</sub>O<sub>12</sub>**  
24-Acetoxy-15,16-seco-cycloart-7-en 3-O-xyloside, 280

- Actein, 579  
 Bugbanoside C, 2729  
 Cimidahuside D, 3656  
**C<sub>37</sub>H<sub>56</sub>O<sub>15</sub>**  
 Wattoside E, 22652  
**C<sub>37</sub>H<sub>56</sub>O<sub>16</sub>**  
 Rhodexin D, 18788  
**C<sub>37</sub>H<sub>58</sub>O<sub>6</sub>**  
 Hericenone D, 9432  
 Hericenone G, 9435  
**C<sub>37</sub>H<sub>58</sub>O<sub>8</sub>**  
 Fomitocide F, 7871  
 12-*O*-(2-Methylbutyryl)phorbol-13-dodecanoate, 14201  
 Phorbol-12- $\alpha$ -methylbutyrate-13-laurate, 17190  
**C<sub>37</sub>H<sub>58</sub>O<sub>9</sub>**  
 Fomitocide E, 7870  
 Oleanolic acid-3-*O*- $\beta$ -*D*-(6'-*O*-methyl)-glucuronoside, 16048  
**C<sub>37</sub>H<sub>58</sub>O<sub>10</sub>**  
 25-*O*-Acetylcimigenoside, 354  
 23-*O*-Acetylshengmanol 3-*O*- $\alpha$ -*L*-arabinopyranoside, 512  
 Acetyl shengmanol xyloside, 513  
 Beesioside L, 2205  
 Beesioside O, 2208  
 (22*S*)-Cholesta-5,24-diene-3 $\beta$ ,11 $\alpha$ ,16 $\beta$ ,22-tetrol 16-*O*-(2,3-di-*O*-acetyl- $\alpha$ -*L*-rhamnopyranoside), 3576  
 Cimircemoside E, 3666  
 Eclalbasaponin XIII, 6704  
 Saponin 1, 19333  
 Soulieoside C, 20112  
**C<sub>37</sub>H<sub>58</sub>O<sub>11</sub>**  
 12 $\beta$ -Acetoxycimigenol-3-*O*- $\beta$ -*D*-xylopyranoside, 141  
 25-*O*-Acetyl-12 $\beta$ -hydroxycimigenol 3-*O*- $\alpha$ -*L*-arabinopyranoside, 414  
 (22*R*,23*R*,24*R*)-12 $\beta$ -Acetyloxy-16 $\beta$ ,23:22,25-di-epoxy-23,24-dihydroxy-9,19-cyclolanostan-3 $\beta$ -yl  $\alpha$ -*L*-arabinopyranoside, 477  
 Beesioside K, 2204  
 Cimircemoside H, 3669  
**C<sub>37</sub>H<sub>58</sub>O<sub>12</sub>**  
 Cimidahuside C, 3655  
 Esculentoside D, 7371  
**C<sub>37</sub>H<sub>58</sub>O<sub>13</sub>**  
 5-Ene-methyl-7,12-didehydroxy-cholate-3-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucuronopyranoside, 6799  
**C<sub>37</sub>H<sub>58</sub>O<sub>19</sub>**  
 Prostratoside I, 17961  
**C<sub>37</sub>H<sub>59</sub>NO<sub>11</sub>**  
 Germerine, 8352  
**C<sub>37</sub>H<sub>59</sub>NO<sub>12</sub>**  
 Neogermbudine, 15395  
**C<sub>37</sub>H<sub>60</sub>O<sub>8</sub>**  
 Fomitocide J, 7875  
**C<sub>37</sub>H<sub>60</sub>O<sub>10</sub>**  
 Beesioside F, 2197  
 Beesioside M, 2206  
 (22*S*)-Cholest-5-ene-3 $\beta$ ,11 $\alpha$ ,16 $\beta$ ,22-tetrol 16-*O*-(2,3-di-*O*-acetyl- $\alpha$ -*L*-rhamnopyranoside), 3582  
 Tormentic acid-6-methoxy  $\beta$ -*D*-glucopyranosyl ester, 21458  
**C<sub>37</sub>H<sub>60</sub>O<sub>11</sub>**  
 Beesioside D, 2195  
 Beesioside III, 2202  
 Methyl-3-*O*- $\beta$ -*D*-glucopyranosyl polygalactate, 14468  
**C<sub>37</sub>H<sub>60</sub>O<sub>12</sub>**  
 (22*R*)-22-Hydroxy-24-*O*-acetylhydroshengmanol 3-*O*- $\beta$ -*D*-xylopyranoside, 9764  
**C<sub>37</sub>H<sub>62</sub>O<sub>6</sub>**  
 Marianoside B, 13565  
**C<sub>37</sub>H<sub>62</sub>O<sub>7</sub>**  
 Ginsenoside Rh<sub>3</sub>, 8438  
 Marianoside A, 13564  
**C<sub>37</sub>H<sub>62</sub>O<sub>11</sub>**  
 Beesioside P, 2209  
**C<sub>37</sub>H<sub>62</sub>O<sub>16</sub>**  
 1',3,3',4',6'-Pentakis-*O*-(3-methylbutanoyl)- $\beta$ -*D*-fructofuranosyl  $\alpha$ -*D*-glucopyranoside, 16861  
**C<sub>37</sub>H<sub>64</sub>O<sub>3</sub>**  
 4'-Hydroxy-*cis*-cinnamic acid octacosyl ester, 9911  
**C<sub>37</sub>H<sub>64</sub>O<sub>4</sub>**  
 Erythrinassinate B, 7332  
**C<sub>37</sub>H<sub>64</sub>O<sub>7</sub>**  
 Panacon, 16582  
**C<sub>37</sub>H<sub>66</sub>O<sub>5</sub>**  
 Squamocenin, 20239  
**C<sub>37</sub>H<sub>66</sub>O<sub>6</sub>**  
 Desacetylvaricin, 5240  
 Isodesacetylvaricin, 11375  
 Muricin I, 15098  
 Neoannonin, 15339  
**C<sub>37</sub>H<sub>66</sub>O<sub>7</sub>**  
 Annocherimolin, 1297  
 Annonareticin, 1317  
 Annonin VI, 1319  
 Asimicin, 1856  
 Bullatacin, 2735  
 Gigantetronenin, 8379  
 Isoannonareticin, 11223  
 2,4-*cis*-Isoannonareticin, 11224  
 2,4-*trans*-Isoannonareticin, 11225  
 Montalicin E, 14940  
 Rolliniastatin 1, 18899  
 Squamocin, 20240  
 Squamostatins D, 20247  
 Squamotacin, 20248  
 Uvaribonianin, 22291  
 Uvarigrandin A, 22298  
**C<sub>37</sub>H<sub>66</sub>O<sub>8</sub>**  
 Annoglucin, 1302  
 Bullatanocin, 2736  
 Panalicin, 16584  
 Purpuracenin, 18211  
 Purpureacin 1, 18214  
 Purpureacin 2, 18215  
 Rollimusin, 18898  
 Squamocin O<sub>1</sub>, 20241  
 Squamocin O<sub>2</sub>, 20242  
 Squamostatins B, 20246  
**C<sub>37</sub>H<sub>67</sub>NO<sub>3</sub>**  
 (2*S*,3*R*,4*E*,8*E*,9'*Z*,12'*Z*)-*N*-9',12'-Octadecadienyl-2-amino-9-methyl-4,8-octadecadiene-1,3-diol, 15943  
**C<sub>37</sub>H<sub>68</sub>O<sub>6</sub>**  
 Uvarigrin, 22300  
**C<sub>37</sub>H<sub>68</sub>O<sub>7</sub>**  
 Annomontacin, 1307  
*cis*-Annomontacin, 1308  
 Asitribolin A, 1858  
 Laherradurin, 12452  
 Montalicin I, 14942  
 Montalicin J, 14943  
 Tucumanin, 22099  
 Xylomaticin, 22816  
**C<sub>37</sub>H<sub>68</sub>O<sub>8</sub>**  
 Otivarin, 16266  
**C<sub>37</sub>H<sub>75</sub>NO<sub>4</sub>**  
 (2*S*,3*S*,4*R*)-2-Nonadecanoylamino-octadecane-1,3,4-triol, 15673  
 Trufflesphingolipid B, 22054  
**C<sub>38</sub>H<sub>30</sub>O<sub>20</sub>**  
 1,3-Di-*O*-(*E*)-caffeoyl-4,6-(*S*)-HHDP- $\beta$ -*D*-glucopyranose, 5410  
**C<sub>38</sub>H<sub>32</sub>N<sub>2</sub>O<sub>9</sub>**  
 Glycobismine F, 8820  
 Glycobismine G, 8821  
**C<sub>38</sub>H<sub>32</sub>O<sub>15</sub>**  
 Ginkgetin 7"-*O*- $\beta$ -*D*-glucopyranoside, 8402  
 Isoginkgetin-7-*O*- $\beta$ -*D*-glucopyranoside, 11440  
**C<sub>38</sub>H<sub>34</sub>N<sub>2</sub>O<sub>9</sub>**  
 (+)-Oviisocorydine, 16283  
**C<sub>38</sub>H<sub>34</sub>O<sub>10</sub>**  
 (3*S*)-6-(3-Phenyl-5-acetoxy-6-methoxybenzo[*b*]

- furan-2-ylmethyl)-vestitol-triacetate, 17092
- C<sub>38</sub>H<sub>34</sub>O<sub>16</sub>**  
1,3-Bis-[2-(3,4-dihydroxyphenyl)-1-methoxy-carbonyl]ethoxycarbonyl-2-(3,4-dihydroxyphenyl)-7,8-dihydroxy-1,2-dihydronaphthalene, 2445  
Methyl lithospermate B, 14556
- C<sub>38</sub>H<sub>36</sub>N<sub>2</sub>O<sub>6</sub>**  
8,8"-Biskoeningine, 2480
- C<sub>38</sub>H<sub>36</sub>N<sub>2</sub>O<sub>8</sub>**  
Thalphine, 21267
- C<sub>38</sub>H<sub>38</sub>O<sub>10</sub>**  
Mezerein, 14826
- C<sub>38</sub>H<sub>40</sub>N<sub>2</sub>O<sub>11</sub>**  
Catheduline E<sub>2</sub>, 3326
- C<sub>38</sub>H<sub>40</sub>N<sub>2</sub>O<sub>6</sub>**  
Insularine, 11088
- C<sub>38</sub>H<sub>40</sub>N<sub>2</sub>O<sub>7</sub>**  
Calafatimine, 2938  
Thalcimine, 21234
- C<sub>38</sub>H<sub>40</sub>N<sub>4</sub>**  
Dihydronortoxiferine I, 5682
- C<sub>38</sub>H<sub>40</sub>N<sub>4</sub>O<sub>2</sub>**  
Caracurine V, 3148
- C<sub>38</sub>H<sub>40</sub>O<sub>6</sub>**  
Blepharocalyxin D, 2499
- C<sub>38</sub>H<sub>40</sub>O<sub>9</sub>**  
6 $\alpha$ -Acetoxy-1 $\beta$ ,8 $\beta$ ,9 $\beta$ -tribenzoyloxy- $\beta$ -dihydroagarofuran, 292
- C<sub>38</sub>H<sub>40</sub>O<sub>18</sub>**  
6"-Feruloylspinosin, 7787
- C<sub>38</sub>H<sub>40</sub>O<sub>20</sub>**  
Kaempferol-3-*O*-[(6-*O*-sinapoyl)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-galactopyranoside], 12093
- C<sub>38</sub>H<sub>40</sub>O<sub>21</sub>**  
Quercetin-3-*O*-[(6-*O*-sinapoyl)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-galactopyranoside], 18395  
Quercetin-3-*O*-[2-*O*-(6-*O*-*E*-sinapoyl)- $\beta$ -*D*-glucopyranosyl]- $\beta$ -*D*-glucopyranoside, 18396
- C<sub>38</sub>H<sub>41</sub>O<sub>20</sub><sup>+</sup>**  
Alatanin 1, 835
- C<sub>38</sub>H<sub>42</sub>Br<sub>2</sub>O<sub>9</sub>**  
CPB-53-1114-4 6,7-di-*p*-bromobenzoate, 4207
- C<sub>38</sub>H<sub>42</sub>N<sub>2</sub>O<sub>6</sub>**  
Cycleaneonine, 4460  
Cycleanine, 4461  
Funiferine, 8004  
Isocycleanine, 11362  
Isotetrandrine, 11736  
Menisine, 13715  
(+)-*O*-Methylthalicberine, 14756  
Obaberine, 15881  
Pakistanamine, 16537
- Sutchuenensine, 20498  
Tetrandrine, 21206
- C<sub>38</sub>H<sub>42</sub>N<sub>2</sub>O<sub>7</sub>**  
Fenfangjine A, 7753  
Thalfoetidine, 21236  
Thalidezine, 21253  
Thalisamine, 21262  
Thalisopine, 21263  
Thalrugosidine, 21269
- C<sub>38</sub>H<sub>42</sub>O<sub>7</sub>**  
Blepharocalyxin C, 2498
- C<sub>38</sub>H<sub>42</sub>O<sub>11</sub>**  
Orthosiphonone A, 16242
- C<sub>38</sub>H<sub>42</sub>O<sub>14</sub>**  
Kansuinin B, 12138  
Kansuinin C, 12139
- C<sub>38</sub>H<sub>42</sub>O<sub>16</sub>**  
Curtisian F, 4402  
Labadoside, 12401
- C<sub>38</sub>H<sub>42</sub>O<sub>17</sub>**  
Aloeresin H, 977  
Nirurisode, 15627
- C<sub>38</sub>H<sub>43</sub>N<sub>2</sub>O<sub>6</sub>**  
(+)-2-*N*-Methylfangchinoline, 14441
- C<sub>38</sub>H<sub>44</sub>N<sub>2</sub>O<sub>6</sub>**  
Dauricine, 4685  
Neferine, 15321
- C<sub>38</sub>H<sub>44</sub>N<sub>2</sub>O<sub>8</sub>**  
Disinomenine, 6512
- C<sub>38</sub>H<sub>44</sub>N<sub>2</sub>O<sub>9</sub>**  
10-*O*-Acetylglaine B, 307  
Aglaine A, 738  
4-Epiaglaine A, 6824  
Grandiamide A, 8974
- C<sub>38</sub>H<sub>44</sub>O<sub>8</sub>**  
Gambogic acid, 8128
- C<sub>38</sub>H<sub>44</sub>O<sub>9</sub>**  
Euphoscopin C, 7620
- C<sub>38</sub>H<sub>44</sub>O<sub>11</sub>**  
Euphocharacin C, 7598  
Orthosiphol A, 16221  
Orthosiphol B, 16222  
Orthosiphol F, 16224  
Orthosiphol O, 16233
- C<sub>38</sub>H<sub>44</sub>O<sub>12</sub>**  
4 $\alpha$ ,7 $\beta$ -Diacetoxy-2 $\alpha$ ,9 $\alpha$ -dibenzoyloxy-5 $\beta$ ,20-epoxy-10 $\beta$ ,13 $\alpha$ ,15-trihydroxy-11(15 $\rightarrow$ 1)-abeo-taxene, 5293
- C<sub>38</sub>H<sub>44</sub>O<sub>12</sub>**  
6-Hydroxyorthosiphol B, 10556  
Neoorthosiphol A, 15443  
Neoorthosiphol B, 15444  
Orthosiphol L, 16230
- Orthosiphol R, 16234  
Siphonol B, 19967  
Siphonol C, 19968  
Staminol B, 20259  
Staminol C, 20260
- C<sub>38</sub>H<sub>44</sub>O<sub>18</sub>**  
Glypentoside C, 8853
- C<sub>38</sub>H<sub>44</sub>O<sub>20</sub>**  
Smiglaside C, 20022
- C<sub>38</sub>H<sub>45</sub>N<sub>5</sub>O<sub>5</sub>**  
Scutianine F, 19594
- C<sub>38</sub>H<sub>46</sub>N<sub>2</sub>O<sub>17</sub>**  
Emarginatine, 6766
- C<sub>38</sub>H<sub>46</sub>O<sub>8</sub>**  
Isogambogenic acid, 11433
- C<sub>38</sub>H<sub>46</sub>O<sub>9</sub>**  
6 $\alpha$ -Acetoxy-9 $\beta$ -benzoyloxy-1 $\beta$ -cinnamoyloxy-8 $\beta$ -(2-methylbutanoyloxy)- $\beta$ -dihydroagarofuran, 132  
Neogambogic acid, 15394
- C<sub>38</sub>H<sub>46</sub>O<sub>13</sub>**  
Swietephragmin A, 20516
- C<sub>38</sub>H<sub>46</sub>O<sub>18</sub>**  
Insularoside-3'-*O*- $\beta$ -*D*-glucoside, 11089
- C<sub>38</sub>H<sub>47</sub>NO<sub>18</sub>**  
Euonymine, 7534  
Wilformine, 22684
- C<sub>38</sub>H<sub>48</sub>N<sub>2</sub>O<sub>7</sub>**  
Nigellamine A<sub>3</sub>, 15563
- C<sub>38</sub>H<sub>48</sub>N<sub>2</sub>O<sub>11</sub>**  
14-Demethyl-14-isobutyrylanhweidelphinine, 5083
- C<sub>38</sub>H<sub>48</sub>O<sub>18</sub>**  
8-Prenylkaempferol-4'-methoxy-3-[xylosyl (1 $\rightarrow$ 4)-rhamnoside]-7-glucoside, 17835  
Safghanoside F, 19117
- C<sub>38</sub>H<sub>48</sub>O<sub>19</sub>**  
Baohuoside V, 2142  
Diphylloside B, 6493  
Epimedin B, 6960  
Safghanoside E, 19116
- C<sub>38</sub>H<sub>48</sub>O<sub>20</sub>**  
Diphylloside A, 6492  
Rouhuoside, 18961
- C<sub>38</sub>H<sub>48</sub>O<sub>23</sub>**  
Kaempferol-3-*O*-{[ $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 6)][ $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)]}- $\beta$ -*D*-galactopyranoside, 12105  
Rhamnocitrin 3-*O*-apiosyl(1 $\rightarrow$ 5)-apiosyl(1 $\rightarrow$ 2)-[ $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 6)]- $\beta$ -*D*-glucopyranoside, 18683
- C<sub>38</sub>H<sub>48</sub>O<sub>25</sub>**  
Aescuflavoside, 661

- C<sub>38</sub>H<sub>49</sub>NO<sub>12</sub>**  
Daphcalycinosidine C, 4640
- C<sub>38</sub>H<sub>50</sub>N<sub>2</sub>O<sub>10</sub>**  
Elatine, 6734
- C<sub>38</sub>H<sub>50</sub>O<sub>2</sub>**  
Dipiperitylmagnolol, 6494
- C<sub>38</sub>H<sub>50</sub>O<sub>6</sub>**  
Cambogin, 3029  
Garcinol, 8218  
Guttiferone A, 9089  
Guttiferone I, 9091  
Isoxanthochymol, 11782  
Xanthochymol, 22759
- C<sub>38</sub>H<sub>50</sub>O<sub>12</sub>**  
Nimbolidin B, 15606
- C<sub>38</sub>H<sub>50</sub>O<sub>20</sub>**  
Wiedemannioside D, 22665
- C<sub>38</sub>H<sub>51</sub>NO<sub>18</sub>**  
4-Acetylaminoethylphenyl-1-*O*-[6-*O*-(*Z*)-*p*-methoxycinnamoyl- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 2)]- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 3)]- $\alpha$ -*L*-rhamnopyranoside, 313
- C<sub>38</sub>H<sub>52</sub>O<sub>6</sub>**  
3 $\beta$ -*p*-Hydroxybenzoyldehydrotumulosic acid, 9823
- C<sub>38</sub>H<sub>52</sub>O<sub>8</sub>**  
3-*O*-(4-Hydroxy-3-methoxybenzoyl)ceanothic acid, 10383
- C<sub>38</sub>H<sub>52</sub>O<sub>16</sub>**  
Chantriolide A, 3478
- C<sub>38</sub>H<sub>54</sub>O<sub>13</sub>**  
Marinobufagin 3-suberoyl-*L*-glutamine ester, 13566
- C<sub>38</sub>H<sub>54</sub>O<sub>14</sub>**  
Scillarenin 3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)-2'-*O*-acetyl- $\alpha$ -*L*-rhamnopyranoside, 19519  
Scillarenin 3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)-3'-*O*-acetyl- $\alpha$ -*L*-rhamnopyranoside, 19520
- C<sub>38</sub>H<sub>54</sub>O<sub>15</sub>**  
6 $\beta$ -Acetoxy scillarenin 3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -*L*-rhamnopyranoside, 279  
*cis*-Cleroda-15,16-dihydroxy-3,13(*Z*)-dien-18-*O*-[ $\beta$ -*D*-galactopyranosyl]-peracetyler, 3836
- C<sub>38</sub>H<sub>54</sub>O<sub>16</sub>**  
Chantriolide B, 3479  
Scillirosidin 3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -*L*-rhamnopyranoside, 19529
- C<sub>38</sub>H<sub>54</sub>O<sub>19</sub>**  
Crocin 2, 4250
- C<sub>38</sub>H<sub>54</sub>O<sub>22</sub>**  
4'-*O*- $\beta$ -*D*-Glucosyl-9-*O*-(6"-deoxysaccharosyl)olivil, 8754
- C<sub>38</sub>H<sub>56</sub>N<sub>8</sub>O<sub>10</sub>**  
Pseudostellarin F, 18068
- C<sub>38</sub>H<sub>56</sub>O<sub>4</sub>**  
Campesteryl ferulate, 3041
- C<sub>38</sub>H<sub>56</sub>O<sub>8</sub>**  
Colchiside A, 3913
- C<sub>38</sub>H<sub>56</sub>O<sub>11</sub>**  
Methylcimicifugoside, 14241
- C<sub>38</sub>H<sub>56</sub>O<sub>13</sub>**  
25-*O*-Acetylbryoamaride, 339  
Arvenin I, 1825  
Opercurin A, 16126  
Opercurin B, 16127
- C<sub>38</sub>H<sub>58</sub>O<sub>13</sub>**  
2-*O*-Acetylsuavissimoside F<sub>1</sub>, 516  
Arvenin II, 1826  
(2*R*,3*R*,4*R*,5*R*,7*S*,8*S*,9*S*,11*E*,13*S*,15*R*)-2,3,5,7,8,9,15-Heptahydroxyjatropa-6(17),11-diene-14-one-8,9-diacetate-7-isobutyrate-2,5-bis(2-methylbutyrate), 9396  
(2*R*,3*R*,4*R*,5*R*,7*S*,8*S*,9*S*,11*E*,13*S*,15*R*)-2,3,5,7,8,9,15-Heptahydroxyjatropa-6(17),11-diene-14-one-8,9-diacetate-7-isobutyrate-2,3-bis(2-methylbutyrate), 9397
- C<sub>38</sub>H<sub>58</sub>O<sub>14</sub>**  
Funingenoside C, 8007
- C<sub>38</sub>H<sub>60</sub>O<sub>7</sub>**  
3-*O*-(2,3-Dimethylbutanoyl)-13-*O*-dodecanoyl-20-deoxyingenol, 6324
- C<sub>38</sub>H<sub>60</sub>O<sub>8</sub>**  
3-*O*-(2,3-Dimethylbutanoyl)-13-*O*-dodecanoyl-ingenol, 6325  
20-*O*-(2,3-Dimethylbutanoyl)-13-*O*-dodecanoyl-ingenol, 6326  
Fomitoid G, 7872  
13-Oxyingenol-13-dodecanoate-20-hexanoate, 16449  
Phorbol-12-palmitate-13-acetate, 17191  
Welensalifactor F<sub>1</sub>, 22658
- C<sub>38</sub>H<sub>60</sub>O<sub>9</sub>**  
12-*O*-Palmitoyl-16-hydroxyphorbol-13-acetate, 16564
- C<sub>38</sub>H<sub>60</sub>O<sub>10</sub>**  
1 $\alpha$ ,3 $\beta$ -Hydroxyimberbic acid-23-*O*- $\alpha$ -*L*-4-acetyl-rhamnopyranoside, 10226  
Rubianoside I, 19007
- C<sub>38</sub>H<sub>60</sub>O<sub>11</sub>**  
Lycogalinoside A, 13195  
Lycogalinoside B, 13196
- C<sub>38</sub>H<sub>60</sub>O<sub>12</sub>**  
Convallamarogen-1-*O*- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-xylopyranoside, 4007  
Niga-ichigoside F<sub>3</sub>, 15541  
Polyspirostanol PO<sub>5</sub>, 17679
- 25(*S*)-Ruscogenin 1-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-xylopyranoside, 19071
- C<sub>38</sub>H<sub>60</sub>O<sub>13</sub>**  
Laxogenin 3-*O*-[*O*- $\alpha$ -*L*-arabinopyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside], 12593  
Pennogenin-3-*O*- $\alpha$ -*L*-arabinofuranosyl(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranoside, 16810  
SQD<sub>4</sub>, 20236
- C<sub>38</sub>H<sub>60</sub>O<sub>14</sub>**  
26-*O*- $\beta$ -*D*-Glucopyranosyl-furostan-5,25(27)-diene-1 $\beta$ ,3 $\beta$ ,22 $\beta$ ,26-tetrahydroxy-1-*O*- $\alpha$ -*L*-arabinopyranoside, 8630
- C<sub>38</sub>H<sub>60</sub>O<sub>18</sub>**  
Stevioside, 20341
- C<sub>38</sub>H<sub>61</sub>NO<sub>11</sub>**  
Obtusolactam-20(*R*)-*O*-[ $\beta$ -thevetopyranosyl(1 $\rightarrow$ 4)- $\beta$ -cymaropyranoside], 15912
- C<sub>38</sub>H<sub>62</sub>**  
Annoglabayin, 1301
- C<sub>38</sub>H<sub>62</sub>O<sub>9</sub>**  
26-*O*-(3'-Isopentanoyl)- $\beta$ -*D*-glucopyranosyl-5 $\alpha$ -furost-20(22)-ene-3 $\beta$ ,26-diol, 11583
- C<sub>38</sub>H<sub>62</sub>O<sub>10</sub>**  
2-*O*-Acetyl-28-dehydroxy-rubianoside IV, 371  
Kahircoside III, 12108  
Kahircoside IV, 12109  
Rubiarioside A, 19021
- C<sub>38</sub>H<sub>62</sub>O<sub>11</sub>**  
2-*O*-Acetyl-rubianoside IV, 496
- C<sub>38</sub>H<sub>62</sub>O<sub>12</sub>**  
Aspafilioside A, 1860  
Asparanin B<sub>3</sub>, 1871  
Asparanin B<sub>4</sub>, 1872  
22-Epirhodeasapogenin-1-*O*- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-xylopyranoside, 7006  
Isorhodeasapogenin-1-*O*- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-xylopyranoside, 11676  
Rhodeasapogenin-1-*O*- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-xylopyranoside, 18783
- C<sub>38</sub>H<sub>62</sub>O<sub>13</sub>**  
16 $\beta$ -[( $\alpha$ -*L*-Arabinopyranosyl)oxy]-3 $\beta$ -[( $\beta$ -*D*-glucopyranosyl)oxy]-17 $\alpha$ -hydroxycholest-5-en-22-one, 1578  
(25*R*)-3 $\beta$ -Hydroxy-5 $\alpha$ -spirostan-6 $\alpha$ -yl *O*- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranoside, 10721  
Pentandroside A, 16877
- C<sub>38</sub>H<sub>62</sub>O<sub>14</sub>**  
Glucoconvallasaponin A, 8592  
Pentandroside C, 16879
- C<sub>38</sub>H<sub>62</sub>O<sub>15</sub>**  
Glucoconvallasaponin B, 8593  
Hemeroside A, 9341

- C<sub>38</sub>H<sub>63</sub>NO<sub>12</sub>**  
Obtusine-20(*R*)-*O*-[ $\beta$ -thevetopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -cymaropyranoside], 15909
- C<sub>38</sub>H<sub>64</sub>O<sub>6</sub>**  
C<sub>19</sub>-Obtusilactone dimer, 2837
- C<sub>38</sub>H<sub>64</sub>O<sub>7</sub>**  
Niloticol, 15600
- C<sub>38</sub>H<sub>64</sub>O<sub>13</sub>**  
2 $\alpha$ ,3 $\beta$ -(22*R*)-Trihydroxycholestan-6-one-22-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranoside, 21695
- C<sub>38</sub>H<sub>64</sub>O<sub>14</sub>**  
(22*S*)-Cholest-5-en-1 $\beta$ ,3 $\beta$ ,16 $\beta$ ,22,25-pentaol 1-*O*- $\beta$ -*D*-glucopyranosyl-16-*O*- $\beta$ -*D*-apiofuranoside, 3584
- C<sub>38</sub>H<sub>66</sub>O<sub>4</sub>**  
Cluytyl ferulate, 3852  
Nonacosanyl caffeate, 15670  
Tenuiphenone D, 20962
- C<sub>38</sub>H<sub>70</sub>O<sub>4</sub>**  
Coixenolide, 3906
- C<sub>39</sub>H<sub>26</sub>O<sub>9</sub>**  
Thelephantin K, 21303
- C<sub>39</sub>H<sub>32</sub>O<sub>8</sub>**  
Mulberrofuran K, 15045
- C<sub>39</sub>H<sub>32</sub>O<sub>14</sub>**  
Apigenin-7-*O*-(3'',6''-di-(*E*)-*p*-coumaroyl)- $\beta$ -*D*-galactopyranoside, 1487  
Apigenin-4'-*O*-(2'',6''-di-*O*-*p*-coumaroyl)- $\beta$ -*D*-glucoside, 1488  
Cernoside, 3430  
Kaempferol 3-*O*- $\alpha$ -*L*-(2',4'-di-*Z*-*p*-coumaroyl)-rhamnoside, 12039  
Platanoside, 17528
- C<sub>39</sub>H<sub>32</sub>O<sub>15</sub>**  
Castanoside B, 3298  
Cinchonain Ib, 3681  
Kaempferol-3-*O*-(2'',6''-di-(*E*)-*p*-coumaroyl)- $\beta$ -*D*-glucopyranoside), 12038  
Kandelin A<sub>1</sub>, 12128
- C<sub>39</sub>H<sub>34</sub>O<sub>8</sub>**  
Mulberrofuran F, 15043
- C<sub>39</sub>H<sub>34</sub>O<sub>9</sub>**  
Mulberrofuran O, 15049
- C<sub>39</sub>H<sub>36</sub>O<sub>9</sub>**  
Chalcomoracin, 3453  
Guangsongon E, 9057  
Guangsongon J, 9062
- C<sub>39</sub>H<sub>36</sub>O<sub>13</sub>**  
(+)-Catechin-3-*O*- $\beta$ -*D*-gluco(2,6-bis-cinnamoyl)-pyranoside, 3310
- C<sub>39</sub>H<sub>38</sub>O<sub>9</sub>**  
Leachianone C, 12596
- C<sub>39</sub>H<sub>38</sub>O<sub>10</sub>**  
Guangsongon A, 9053
- C<sub>39</sub>H<sub>39</sub>O<sub>21</sub><sup>+</sup>**  
Malonyl shisonin, 13450
- C<sub>39</sub>H<sub>39</sub>O<sub>22</sub><sup>+</sup>**  
Caffeoyl malonyl cyanin, 2913  
Malonylawobanin, 13440
- C<sub>39</sub>H<sub>40</sub>N<sub>2</sub>O<sub>6</sub><sup>2+</sup>**  
Phaeantharine, 17039
- C<sub>39</sub>H<sub>40</sub>O<sub>13</sub>**  
Curtisian G, 4403
- C<sub>39</sub>H<sub>40</sub>O<sub>17</sub>**  
Hydropiperoside, 9737
- C<sub>39</sub>H<sub>40</sub>O<sub>19</sub>**  
Ozturkoside C, 16484
- C<sub>39</sub>H<sub>40</sub>O<sub>20</sub>**  
Ozturkoside A, 16482
- C<sub>39</sub>H<sub>42</sub>N<sub>2</sub>O<sub>8</sub>**  
Thalfinine, 21235
- C<sub>39</sub>H<sub>43</sub>O<sub>20</sub><sup>+</sup>**  
Alatanin 2, 836
- C<sub>39</sub>H<sub>44</sub>N<sub>2</sub>O<sub>7</sub>**  
Hernandezine, 9441  
Thalidasine, 21251  
Thaliracebine, 21261  
Thalrugosaminine, 21268
- C<sub>39</sub>H<sub>44</sub>O<sub>14</sub>**  
Siphonol E, 19970
- C<sub>39</sub>H<sub>44</sub>O<sub>19</sub>**  
6''-Sinapoylspinosin, 19921
- C<sub>39</sub>H<sub>45</sub>NO<sub>11</sub>**  
Euphocharacin F, 7601
- C<sub>39</sub>H<sub>45</sub>NO<sub>12</sub>**  
Euphocharacin A, 7596
- C<sub>39</sub>H<sub>45</sub>NO<sub>19</sub>**  
Wilfordconine, 22675
- C<sub>39</sub>H<sub>45</sub>N<sub>2</sub>O<sub>6</sub><sup>+</sup>**  
(+)-2-*N*-Methyltetrandrine, 14753
- C<sub>39</sub>H<sub>46</sub>N<sub>2</sub>O<sub>10</sub>**  
5 $\alpha$ -*O*-(3'-Amino-3'-phenylpropionyl)nicotaxine, 1062
- C<sub>39</sub>H<sub>46</sub>O<sub>8</sub>**  
Nimbolin A, 15610
- C<sub>39</sub>H<sub>46</sub>O<sub>10</sub>**  
Nimbolin B, 15611
- C<sub>39</sub>H<sub>46</sub>O<sub>15</sub>**  
Taxezopidine L, 20790
- C<sub>39</sub>H<sub>46</sub>O<sub>18</sub>**  
Korepimedeside B, 12273
- C<sub>39</sub>H<sub>47</sub>BrO<sub>8</sub>**  
Bisacutifolone A *p*-bromobenzoate, 2430  
Bisacutifolone B *p*-bromobenzoate, 2433
- C<sub>39</sub>H<sub>48</sub>O<sub>11</sub>**  
15-*O*-Deacetyl-15-*O*-methylnimbolin A, 4752
- C<sub>39</sub>H<sub>48</sub>O<sub>12</sub>**  
Taxinine J, 20802
- C<sub>39</sub>H<sub>48</sub>O<sub>13</sub>**  
Swietephragmin B, 20517  
Taxuspine D, 20852
- C<sub>39</sub>H<sub>48</sub>O<sub>15</sub>**  
2 $\alpha$ ,3 $\beta$ ,5 $\alpha$ ,8 $\alpha$ ,9 $\alpha$ ,15 $\beta$ -Hexaacetoxy-7 $\beta$ -benzoyloxyjatropa-6(17),11*E*-dien-14-one, 9474  
3 $\beta$ ,5 $\alpha$ ,7 $\beta$ ,8 $\alpha$ ,9 $\alpha$ ,15 $\beta$ -Hexaacetoxy-2 $\alpha$ -benzoyloxyjatropa-6(17),11*E*-dien-14-one, 9475
- C<sub>39</sub>H<sub>48</sub>O<sub>16</sub>**  
14 $\beta$ -Benzoyloxybaccatin IV, 2249  
Segetene 5, 19654
- C<sub>39</sub>H<sub>49</sub>NO<sub>21</sub>**  
Anthemis glycoside A, 1352
- C<sub>39</sub>H<sub>50</sub>O<sub>7</sub>**  
Peridinin, 16922
- C<sub>39</sub>H<sub>50</sub>O<sub>13</sub>**  
1*S*,6*R*-Di(2-)methylbutanoyloxy-4*S*-hydroxy-8*S*-benzoyloxy-9*R*-(3-)furancarboxyloxy-13-acetyloxy- $\beta$ -dihydroagarofuran, 6328
- C<sub>39</sub>H<sub>50</sub>O<sub>19</sub>**  
Epimedin C, 6961
- C<sub>39</sub>H<sub>50</sub>O<sub>20</sub>**  
Epimedin A, 6959
- C<sub>39</sub>H<sub>50</sub>O<sub>21</sub>**  
Pyrolaside B, 18269
- C<sub>39</sub>H<sub>50</sub>O<sub>23</sub>**  
Astrasikokioside I, 1950  
Reiniiose E, 18607
- C<sub>39</sub>H<sub>50</sub>O<sub>24</sub>**  
1-[( $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 6)-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)-*O*- $\beta$ -*D*-glucopyranosyl]oxy]-8-hydroxy-3-methyl-9,10-anthraquinone, 8644  
Kaempferol 3-*O*-[2''-*O*- $\alpha$ -rhamnopyranosyl-3''-*O*-(6''-*O*- $\alpha$ -rhamnopyranosyl- $\beta$ -glucopyranosyl)]- $\beta$ -glucopyranoside, 12081
- C<sub>39</sub>H<sub>50</sub>O<sub>25</sub>**  
Quercetin-3-*O*-[ $\alpha$ -rhamnosyl (1 $\rightarrow$ 6)] [ $\beta$ -glucosyl (1 $\rightarrow$ 2)]- $\beta$ -glucoside-7-*O*- $\alpha$ -rhamnoside, 18388
- C<sub>39</sub>H<sub>51</sub>NO<sub>11</sub>**  
2'-Deacetoxyaustrotaxine, 4703
- C<sub>39</sub>H<sub>51</sub>NO<sub>12</sub>**  
2'-Deacetylaustrotaxine, 4720
- C<sub>39</sub>H<sub>52</sub>O<sub>23</sub>**  
Ballotetroside, 2134  
Lunariifolioside, 13074
- C<sub>39</sub>H<sub>52</sub>O<sub>24</sub>**  
Kaempferol 3-*O*- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranoside-7-*O*- $\alpha$ -*L*-rhamnopyranoside, 12076

- C<sub>39</sub>H<sub>53</sub>NO<sub>10</sub>**  
 2*α*-Acetoxy-2',7-dideacetoxy austrospicatine, 156  
 2'*β*-Deacetoxyaustrospicatine, 4702
- C<sub>39</sub>H<sub>53</sub>NO<sub>11</sub>**  
 (-)-2*α*-Acetoxy-2',7-dideacetoxy-1-hydroxy-11  
 (15→1)-abeo-austrospicatine, 157  
 (+)-2*α*-Acetoxy-2',7-dideacetoxy-1-hydroxy-  
 austrospicatine, 158  
 2'-Deacetylaustrospicatine, 4718  
 7-Deacetylaustrospicatine, 4719  
 2*α*-Hydroxy-2'*β*-Deacetylaustrospicatine, 9959
- C<sub>39</sub>H<sub>53</sub>NO<sub>12</sub>**  
 2*α*-Hydroxy-7*β*,9*α*,10*β*,13*α*-tetraacetoxy-5*α*-(2'-  
 hydroxy-3'-*N,N*-dimethylamino-3'-phenyl)-  
 propionyloxytaxa-4(20),11-diene, 10742
- C<sub>39</sub>H<sub>53</sub>N<sub>7</sub>O<sub>11</sub>**  
 Cyclo-(Gly-Asp-Leu-Thr-Val-Tyr-Phe), 4493
- C<sub>39</sub>H<sub>54</sub>O<sub>5</sub>**  
 Chuanxiongterpene, 3632  
 3-*O*-(*E*)-Coumaroyloleanolic acid, 4177  
 3-*O*-(*Z*)-Coumaroyloleanolic acid, 4178  
 Lup-20(29)en-28-al-3*β*-yl-caffeate, 13090  
 3*β*-[(*m*-Methoxybenzoyl)oxy]urs-12-en-28-oic  
 acid, 13851  
 Olean-28-al-3*β*-yl-caffeate, 16027
- C<sub>39</sub>H<sub>54</sub>O<sub>6</sub>**  
 3-*O*-(*cis-p*-Coumaroyl)-aliphitic acid, 4147  
 3-*O*-(*trans-p*-Coumaroyl)-aliphitic acid, 4148  
 (3*Z*)-Coumaroylhederagenin, 4164  
 (23*E*)-Coumaroylhederagenin, 4165  
 (23*Z*)-Coumaroylhederagenin, 4166  
 3-*O*-(*cis-p*-Coumaroyl)-maslinic acid, 4169  
 3-*O*-(*trans-p*-Coumaroyl)-maslinic acid, 4170  
 3*α*-(3'',4'')-Dihydroxy-*trans*-cinnamoyloxy)-*D*-  
 friedo-olean-14-en-28-oic acid, 5791  
 Diospyrosooleanolide, 6462  
 3-*O-p*-Hydroxy-*trans*-cinnamoylmaslinic acid,  
 9915  
 Jacoumaric acid, 11810  
 Lup-20(29)en-28-oic-3*β*-yl caffeate, 13095  
 Olean-28-oic-3*β*-yl caffeate, 16045  
 Rubicoumaric acid, 19028  
 Uncarinic acid C, 22210  
 Zamanic acid, 22964
- C<sub>39</sub>H<sub>54</sub>O<sub>7</sub>**  
 (3*E*)-Coumaroylarjunolic acid, 4151  
 3*β*-*cis-p*-Coumaroyloxy-2*α*,23-dihydroxyolean-  
 12-en-28-oic acid, 4179  
 23-*trans-p*-Coumaroyloxy-2*α*,3*β*-dihydroxy-  
 olean-12-en-28-oic acid, 4180  
 Guavacoumaric acid, 9073
- C<sub>39</sub>H<sub>54</sub>O<sub>8</sub>**  
 3-*O*-Benzoyl-13-*O*-dodecanoateingenol, 2238  
 20-*O*-Benzoyl-13-*O*-dodecanoateingenol, 2239  
 16-Oxolyclanitin 30-(4-hydroxycinnamoyl),  
 16376
- C<sub>39</sub>H<sub>54</sub>O<sub>22</sub>**  
 Syringaresinol-4-*O-β-D*-apiofuranosyl-(1→2)-  
*β-D*-glucopyranosyl-4'-*O-β-D*-glucopyranoside,  
 20558
- C<sub>39</sub>H<sub>56</sub>O<sub>2</sub>**  
*α*-Amyrin cinnamate, 1114  
 Lupeol cinnamate, 13101
- C<sub>39</sub>H<sub>56</sub>O<sub>3</sub>**  
*cis*-Careaborin, 3192  
*trans*-Careaborin, 3193  
 3-*O*-(*E*)-Coumaroyl-*β*-amyrin, 4149  
 3-*O*-(*Z*)-Coumaroyl-*β*-amyrin, 4150  
 3-(*Z*)-Coumaroyllupeol, 4168  
 Dioslupecin A, 6451
- C<sub>39</sub>H<sub>56</sub>O<sub>4</sub>**  
 3-(*E*)-Caffeoyllupeol, 2910  
 3-(*Z*)-Caffeoyllupeol, 2911  
 3*β*-(*E*)-Caffeoyltaraxerol, 2926  
 3*β*-(*Z*)-Caffeoyltaraxerol, 2927  
 3-*O*-(*E*)-Coumaroylerythrodiol, 4155  
 3-*O*-(*Z*)-Coumaroylerythrodiol, 4156  
 Stigmasteryl ferulate, 20376
- C<sub>39</sub>H<sub>56</sub>O<sub>5</sub>**  
 Lup-20(29)en-28-ol-3*β*-yl caffeate, 13096
- C<sub>39</sub>H<sub>56</sub>O<sub>12</sub>**  
 Spinolide A, 20171
- C<sub>39</sub>H<sub>58</sub>O<sub>2</sub>**  
 Lupeol *β*-phenyl propionate, 13102
- C<sub>39</sub>H<sub>58</sub>O<sub>3</sub>**  
 3-*O*-Dihydrocoumaroyl-*β*-amyrin, 5571
- C<sub>39</sub>H<sub>58</sub>O<sub>4</sub>**  
 21*α*-Hydroxyserrat-14-en-3*β*-yl  
*p*-dihydrocoumarate, 10707  
*β*-Sitosteryl ferulate, 19995
- C<sub>39</sub>H<sub>58</sub>O<sub>5</sub>**  
 Phlegmanol A, 17148
- C<sub>39</sub>H<sub>60</sub>O<sub>3</sub>**  
 5-(1-Phytoxy-ethyl)-2-hydroxy-7-methoxy-1,8-  
 dimethyl-9,10-dihydrophenanthrene, 17274
- C<sub>39</sub>H<sub>60</sub>O<sub>4</sub>**  
 Dihydro-*β*-sitosteryl ferulate, 5714  
 Dihydro-*γ*-sitosteryl ferulate, 5715
- C<sub>39</sub>H<sub>60</sub>O<sub>9</sub>**  
 Quinovic acid-3*β*-*O*-(3',4'-isopropylidene)-  
*β-D*-fucopyranoside, 18437  
 Quinovic acid-3*β*-(2',3'-*O*-isopropylidene)-*α-L*-  
 rhamnopyranoside, 18438
- C<sub>39</sub>H<sub>60</sub>O<sub>11</sub>**  
 30-Noroleanolic acid-3-*O-β-D*-xylosyl(1→2)-*α*-  
*L*-arabinopyranoside, 15783  
 Soulieoside A, 20110  
 Soulieoside B, 20111
- C<sub>39</sub>H<sub>60</sub>O<sub>12</sub>**  
 Beesioside I, 2200  
 30-Norhederagenin-3-*O-β-D*-xylosyl(1→2)-*α*-  
*L*-arabinopyranoside, 15755
- C<sub>39</sub>H<sub>60</sub>O<sub>13</sub>**  
 3-*O-α-L*-Rhamnopyranosyl (1→2)-*β-D*-glucu-  
 ronopyranosyl-3*β*-hydroxy-25*R*-spirost-5-ene,  
 18724  
 3-*O-α-L*-Rhamnopyranosyl (1→2)-*β-D*-glucu-  
 ronopyranosyl-3*β*-hydroxy-25*S*-spirost-5-ene,  
 18725  
 Saundersioside D, 19409
- C<sub>39</sub>H<sub>60</sub>O<sub>14</sub>**  
 1*β*,2*α*-Dihydroxyspirosta-5,25(27)-dien-3*β*-yl  
*O-α-D*-rhamnopyranosyl-(1→2)-*β-L*-galacto-  
 pyranoside, 6124
- C<sub>39</sub>H<sub>60</sub>O<sub>15</sub>**  
 Polygonoside C, 17645  
 Pregna-5,16-dien-3*β*-ol-20-one 3-*O-β*-chacotri-  
 oside, 17781
- C<sub>39</sub>H<sub>60</sub>O<sub>16</sub>**  
 Pregnadienolone-3-*O-β*-gracillimatriose, 17782
- C<sub>39</sub>H<sub>62</sub>O<sub>12</sub>**  
 Beesioside II, 2201  
 Beesioside J, 2203  
 Collettinside II, 3923  
 Ophiopogonin B, 16144  
 Ophiopogonin C', 16145  
 Polyphyllin C, 17654
- C<sub>39</sub>H<sub>62</sub>O<sub>13</sub>**  
 Deacylbrownioside, 4794  
 Diosgenin-3-di-*β-O*-glucopyranoside, 6442  
 (22*S*,23*R*)-16*β*,23-Epoxy-18,23-dihydroxy-22-  
 (2-methyl-1-propenyl)-24-norchol-5-en-3*β*-yl  
*O-α-L*-rhamnopyranosyl-(1→2)-*β-D*-glucopy-  
 ranoside, 7081  
 Pennogenin-3-*O-α-L*-rhamnopyranosyl(1→2)-*β*-  
*D*-glucopyranoside, 16813  
 Pingbeisaponin, 17383  
 Trillarin, 21871
- C<sub>39</sub>H<sub>62</sub>O<sub>14</sub>**  
 Cantalanin A, 3089  
 (25*R*)-1*β*,2*α*-Dihydroxyspirost-5-en-3*β*-yl *O-α-L*-  
 rhamnopyranosyl-(1→2)-*β-D*-galactopyrano-  
 side, 6127  
 1*β*,2*α*-Dihydroxy-5*α*-spirost-25(27)-en-3*β*-yl  
*O-α-L*-rhamnopyranosyl-(1→2)-*β-D*-galacto-  
 pyranoside, 6131  
 (24*S*,25*R*)-1*β*-[(*β-D*-Fucopyranosyl)oxy]-6*β*-  
 hydroxy-3*α*,5*α*-cyclospirostan-24-yl *β-D*-  
 glucopyranoside, 7976



- Ophiogenin-3-*O*- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranoside, 16131
- Polyspirostanol PO<sub>1</sub>, 17676
- (23*S*,25*R*)-Spirost-5-ene-3 $\beta$ ,23-diol 23-*O*-[*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside], 20219
- Terreside B, 21001
- C<sub>39</sub>H<sub>62</sub>O<sub>15</sub>**  
*Agave americana* Compound 3, 714  
 (24*S*,25*R*)-1 $\beta$ -[( $\beta$ -*D*-Glucopyranosyl) oxy]-6 $\beta$ -hydroxy-3 $\alpha$ ,5 $\alpha$ -cyclospirostan-24-yl  $\beta$ -*D*-glucopyranoside, 8690
- C<sub>39</sub>H<sub>63</sub>NO<sub>10</sub>**  
 Solanidine-3-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranoside, 20058
- C<sub>39</sub>H<sub>63</sub>NO<sub>11</sub>**  
 $\beta$ -Solamargine, 20045  
 $\gamma$ <sub>1</sub>-Solamarine, 20048  
 $\gamma$ <sub>2</sub>-Solamarine, 20049  
 Solaplumbine, 20064
- C<sub>39</sub>H<sub>63</sub>NO<sub>12</sub>**  
 $\delta$ -Solamarine, 20050
- C<sub>39</sub>H<sub>64</sub>O<sub>11</sub>**  
 Spergulin B, 20145
- C<sub>39</sub>H<sub>64</sub>O<sub>12</sub>**  
 Asparanin B<sub>6</sub>, 1874  
 Neotigogenin-3-*O*- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside, 15466
- C<sub>39</sub>H<sub>64</sub>O<sub>13</sub>**  
 Asparanin A, 1868  
 (22*S*)-3 $\beta$ ,22-Dihydroxy-1 $\beta$ -[( $\alpha$ -*L*-rhamnopyranosyl)oxy]cholest-5,24-dien-16 $\beta$ -yl  $\beta$ -*D*-glucopyranoside, 6107  
 3-*O*-[ $\beta$ -*D*-Glucopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl]-(25*S*)-5 $\beta$ -spirostan-3 $\beta$ -ol, 8656  
 Gurillin G, 9086  
 Pentandroside D, 16880  
 Smilagenin-3-*O*-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -*D*-mannopyranoside, 20027  
 Timosaponin A<sub>3</sub>, 21395  
 Torvoside J, 21471  
 Torvoside K, 21472  
 Torvoside L, 21473
- C<sub>39</sub>H<sub>64</sub>O<sub>14</sub>**  
*Agave cantala* Compound 1, 721  
*Agave cantala* Saponin 1, 723  
 (25*R*)-1 $\beta$ ,2 $\alpha$ -Dihydroxy-5 $\alpha$ -spirostan-3 $\beta$ -yl *O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-galactopyranoside, 6126  
 (25*R*)-3 $\beta$ -Hydroxy-5 $\alpha$ -spirostan-6 $\alpha$ -yl *O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranoside, 10718  
 Markogenin3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-galactopyranoside, 13570  
 (25*R*)-Samogenin 3-*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-galactopyranoside, 19231  
 (25*S*)-Samogenin 3-*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-galactopyranoside, 19232  
 (5 $\beta$ ,25*S*)-Spirostan-3 $\beta$ ,15 $\alpha$ ,23 $\alpha$ -diol-3-*O*-*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-galactopyranoside, 20209
- C<sub>39</sub>H<sub>64</sub>O<sub>15</sub>**  
 Cantalasonin 1, 3090  
 Proampeloside Bf<sub>2</sub>, 17865  
 (5 $\beta$ ,25*S*)-Spirostan-3 $\beta$ ,15 $\alpha$ ,23 $\alpha$ -triol-3-*O*-*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-galactopyranoside, 20217  
 Wattoside I, 22655
- C<sub>39</sub>H<sub>64</sub>O<sub>16</sub>**  
 Agamenoside H, 697
- C<sub>39</sub>H<sub>64</sub>O<sub>17</sub>**  
 S-10, 19094
- C<sub>39</sub>H<sub>65</sub>NO<sub>12</sub>**  
 Yibeinoside C, 22906
- C<sub>39</sub>H<sub>66</sub>O<sub>13</sub>**  
 (22*S*)-Cholest-5-ene-1 $\beta$ ,3 $\beta$ ,16 $\beta$ ,22-tetraol-1-*O*- $\alpha$ -*L*-rhamnopyranosyl-16-*O*- $\beta$ -*D*-glucopyranoside, 3579
- C<sub>39</sub>H<sub>66</sub>O<sub>14</sub>**  
 Anemarrhenasaponin I, 1171  
 26-*O*- $\beta$ -*D*-Glucopyranosylfurostane-3 $\beta$ ,26-diol-3-*O*- $\beta$ -*D*-glucopyranoside, 8631
- C<sub>39</sub>H<sub>66</sub>O<sub>18</sub>**  
 Nerolidol-3-*O*-{ $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)-[ $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 6)]- $\beta$ -*D*-glucopyranoside}, 15504
- C<sub>39</sub>H<sub>68</sub>O<sub>5</sub>**  
 Glyceryl linolenate II, 8815  
 1-*O*-(9*Z*,12*Z*-Octadecadienyl)-2-*O*-(9*Z*,12*Z*-octadecadienyl) glycerol, 15945
- C<sub>39</sub>H<sub>68</sub>O<sub>8</sub>**  
 Uvaribonone, 22297
- C<sub>39</sub>H<sub>70</sub>O<sub>5</sub>**  
 1-*O*-(9*Z*,12*Z*-Octadecadienyl)-3-*O*-(9*Z*-octadecenyl) glycerol, 15946
- C<sub>39</sub>H<sub>70</sub>O<sub>8</sub>**  
 Uvaribonin, 22292
- C<sub>39</sub>H<sub>72</sub>O<sub>5</sub>**  
 Anticancer Glycerol Ester PMV70P691-119, 1424  
 $\alpha$ : $\alpha$ -Diolenin, 6431  
 $\alpha$ : $\beta$ -Diolenin, 6432
- C<sub>39</sub>H<sub>79</sub>NO<sub>5</sub>**  
 Spongiamine A, 20226
- C<sub>40</sub>H<sub>26</sub>O<sub>25</sub>**  
 Glansrin B, 8505
- C<sub>40</sub>H<sub>28</sub>O<sub>26</sub>**  
 Phyllanthusiin U, 17224
- C<sub>40</sub>H<sub>30</sub>O<sub>24</sub>**  
 Diellagic acid rhamnoside (1 $\rightarrow$ 4) glucopyranoside, 5485
- C<sub>40</sub>H<sub>30</sub>O<sub>26</sub>**  
 Pelargoniin A, 16786
- C<sub>40</sub>H<sub>34</sub>O<sub>15</sub>**  
 Chrysoeriol 7-*O*-(3'',6''-Di-*O*-*E*-*p*-coumaroyl)- $\beta$ -*D*-glucopyranoside, 3607
- C<sub>40</sub>H<sub>36</sub>O<sub>9</sub>**  
 Lespedezol B<sub>3</sub>, 12690
- C<sub>40</sub>H<sub>36</sub>O<sub>10</sub>**  
 Guangsangan F, 9058
- C<sub>40</sub>H<sub>36</sub>O<sub>11</sub>**  
 Kuwanon G, 12385  
 Kuwanon K, 12388
- C<sub>40</sub>H<sub>36</sub>O<sub>12</sub>**  
 Cathayanon A, 3324  
 Cathayanon B, 3325  
 Sanggenon C, 19257  
 Sanggenon C<sub>1</sub>, 19258  
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 Sanggenon O, 19270  
 Sanggenon Q, 19272
- C<sub>40</sub>H<sub>38</sub>O<sub>10</sub>**  
 Guangsangan H, 9060  
 Kuwanon I, 12387
- C<sub>40</sub>H<sub>38</sub>O<sub>11</sub>**  
 Sanggenon G, 19262
- C<sub>40</sub>H<sub>38</sub>O<sub>12</sub>**  
 Moracenin D, 14952
- C<sub>40</sub>H<sub>40</sub>N<sub>4</sub>O<sub>2</sub><sup>+2</sup>**  
 5',6'-Dehydroguiaflavine, 4927
- C<sub>40</sub>H<sub>40</sub>O<sub>6</sub>**  
 3-3''Linked-(2'-hydroxy-4-*O*-isoprenylchalcone)-(2''-hydroxy-4''-*O*-isoprenyl dihydrochalcone), 12890
- C<sub>40</sub>H<sub>40</sub>O<sub>12</sub>**  
 Boehmenan, 2527
- C<sub>40</sub>H<sub>42</sub>N<sub>4</sub>O<sub>2</sub>**  
 Guiaflavine, 9078
- C<sub>40</sub>H<sub>42</sub>N<sub>4</sub>O<sub>3</sub><sup>+2</sup>**  
 5',6'-Dehydroguiachrysrine, 4926
- C<sub>40</sub>H<sub>42</sub>O<sub>9</sub>**  
 PM-2004-70-452-5, 17577
- C<sub>40</sub>H<sub>42</sub>O<sub>12</sub>**  
 Lappaol F, 12518
- C<sub>40</sub>H<sub>42</sub>O<sub>14</sub>**  
 Bis-5,5-nortrachelogenin, 2490  
 Bis-5,5'-nortrachelogenin, 2491
- C<sub>40</sub>H<sub>42</sub>O<sub>16</sub>**  
 Gnemonoside E, 8875

- C<sub>40</sub>H<sub>42</sub>O<sub>18</sub>**  
Lapathoside C, 12507
- C<sub>40</sub>H<sub>42</sub>O<sub>26</sub>**  
Isochestanin, 11326
- C<sub>40</sub>H<sub>44</sub>N<sub>2</sub>O<sub>7</sub>**  
Nigellamine A<sub>5</sub>, 15565
- C<sub>40</sub>H<sub>44</sub>N<sub>4</sub>O<sup>2+</sup>**  
C-Curarine, 4377
- C<sub>40</sub>H<sub>44</sub>N<sub>4</sub>O<sub>3</sub>**  
De-O-methyltenuicausine, 5099  
Guiachrysine, 9077
- C<sub>40</sub>H<sub>44</sub>O<sub>12</sub>**  
Baccatin III 13-cinnamate, 2074
- C<sub>40</sub>H<sub>44</sub>O<sub>20</sub>**  
Scabroside, 19448
- C<sub>40</sub>H<sub>44</sub>O<sub>22</sub>**  
Isomacrophylloside, 11517  
Macrophylloside A, 13321
- C<sub>40</sub>H<sub>44</sub>O<sub>23</sub>**  
Macrophylloside B, 13322
- C<sub>40</sub>H<sub>45</sub>N<sub>4</sub>O<sub>3</sub>**  
Macrospegatrine, 13325
- C<sub>40</sub>H<sub>46</sub>Cl<sub>2</sub>N<sub>2</sub>O<sub>6</sub><sup>2+</sup>**  
2',2'-N,N-Dichloromethyltetrandrine, 5419
- C<sub>40</sub>H<sub>46</sub>N<sub>2</sub>O<sub>8</sub>**  
Fetidine, 7793  
Pennsylvanine, 16816
- C<sub>40</sub>H<sub>46</sub>N<sub>4</sub>O<sub>2</sub><sup>2+</sup>**  
Toxiferine I, 21485
- C<sub>40</sub>H<sub>46</sub>O<sub>10</sub>**  
2 $\alpha$ -Benzoyloxy-5 $\alpha$ -cinnamoyloxy-9 $\alpha$ ,10 $\beta$ -diacetoxy-1 $\beta$ ,13 $\alpha$ -dihydroxy-4(20),11-taxadiene, 2250  
Taxchinin H, 20775
- C<sub>40</sub>H<sub>46</sub>O<sub>12</sub>**  
Orthosiphon H, 16226
- C<sub>40</sub>H<sub>46</sub>O<sub>13</sub>**  
2,7-Dideacetyl-2,7-dibenzoyl-taxayunnanin F, 5459  
Siphonol A, 19966  
Siphonol D, 19969  
Staminol A, 20258  
Taxchinin I, 20776
- C<sub>40</sub>H<sub>46</sub>O<sub>14</sub>**  
Lappaol H, 12519  
Yunnanxol, 22952
- C<sub>40</sub>H<sub>46</sub>O<sub>20</sub>**  
Longitin, 12984
- C<sub>40</sub>H<sub>47</sub>N<sub>2</sub>O<sub>8</sub><sup>+</sup>**  
Thalirabine, 21260
- C<sub>40</sub>H<sub>48</sub>N<sub>2</sub>O<sub>8</sub>**  
N-Demethylthalistylidine, 5100
- C<sub>40</sub>H<sub>48</sub>N<sub>2</sub>O<sub>10</sub>**  
5 $\alpha$ -O-(3'-Methylamino-3'-phenylpropionyl)nicotaxine, 14136
- C<sub>40</sub>H<sub>48</sub>N<sub>4</sub>O<sub>2</sub>**  
Tabernamine, 20576
- C<sub>40</sub>H<sub>48</sub>N<sub>4</sub>O<sub>2</sub><sup>2+</sup>**  
Calebassine, 2959  
Dispegatrine, 6517
- C<sub>40</sub>H<sub>48</sub>N<sub>6</sub>O<sub>9</sub>**  
Rubia akane RA-II, 18980  
Rubia akane RA-V, 18983
- C<sub>40</sub>H<sub>48</sub>N<sub>6</sub>O<sub>10</sub>**  
Rubia akane RA-I, 18979
- C<sub>40</sub>H<sub>48</sub>O<sub>12</sub>**  
Nimboldin A, 15605
- C<sub>40</sub>H<sub>50</sub>O<sub>2</sub>**  
Rhodoxanthin, 18815
- C<sub>40</sub>H<sub>50</sub>O<sub>5</sub>**  
Hongencaotone, 9629
- C<sub>40</sub>H<sub>50</sub>O<sub>7</sub>**  
PM-2004-70-452-4, 17576
- C<sub>40</sub>H<sub>52</sub>O**  
3,4-Dehydrolycopen-16-al, 4944
- C<sub>40</sub>H<sub>52</sub>O<sub>2</sub>**  
Canthaxanthin, 3095  
Cynthiixanthin, 4569
- C<sub>40</sub>H<sub>52</sub>O<sub>3</sub>**  
4,4'-Diketo-3-hydroxy- $\beta$ -carotene, 6190
- C<sub>40</sub>H<sub>52</sub>O<sub>4</sub>**  
Astaxanthin, 1921
- C<sub>40</sub>H<sub>52</sub>O<sub>17</sub>**  
Phyllanthoside, 17216  
Phyllanthostatin 1, 17217
- C<sub>40</sub>H<sub>52</sub>O<sub>21</sub>**  
Wiedemannioside E, 22666
- C<sub>40</sub>H<sub>52</sub>O<sub>24</sub>**  
Reiniose F, 18608
- C<sub>40</sub>H<sub>54</sub>**  
Torulene, 21467
- C<sub>40</sub>H<sub>54</sub>N<sub>2</sub>O<sub>6</sub>**  
Incarvillateine C, 11007
- C<sub>40</sub>H<sub>54</sub>O**  
Celaxanthin, 3369  
3,4-Didehydroxy-3'-deoxycapsanthin, 5472  
Echinenone, 6688
- C<sub>40</sub>H<sub>54</sub>O<sub>2</sub>**  
Diatoxanthin, 5377  
4-Keto-4'-hydroxy- $\beta$ -carotene, 12201
- C<sub>40</sub>H<sub>54</sub>O<sub>3</sub>**  
Adonixanthin, 647  
Doradexanthin, 6560
- C<sub>40</sub>H<sub>54</sub>O<sub>6</sub>**  
Macrophyllic acid, 13317
- C<sub>40</sub>H<sub>54</sub>O<sub>11</sub>**  
10 $\alpha$ ,13 $\alpha$ ,16 $\alpha$ -Trihydroxy-9 $\alpha$ -methyl-15-oxo-20-nor-kauran-19-oic acid  $\gamma$ -lactone-17-yl-14' $\alpha$ ,16' $\alpha$ ,17'-trihydroxy-15'-oxo-*ent*-kaur-11'-en-19'-oate, 21805
- C<sub>40</sub>H<sub>54</sub>O<sub>12</sub>**  
Nimboldin E, 15609
- C<sub>40</sub>H<sub>54</sub>O<sub>15</sub>**  
Bonaspectin C 4''- $\beta$ -glucoside, 2543
- C<sub>40</sub>H<sub>54</sub>O<sub>16</sub>**  
Bonaspectin D 4''- $\beta$ -glucoside, 2544
- C<sub>40</sub>H<sub>54</sub>O<sub>24</sub>**  
Velutinoside I, 22370
- C<sub>40</sub>H<sub>56</sub>**  
 $\alpha$ -Carotene, 3208  
 $\beta$ -Carotene, 3209  
 $\gamma$ -Carotene, 3210  
 $\delta$ -Carotene, 3211  
 $\epsilon$ -Carotene, 3212  
Lycopene, 13212  
Neo- $\beta$ -carotene B, 15356  
Neo- $\beta$ -carotene U, 15357
- C<sub>40</sub>H<sub>56</sub>O**  
 $\alpha$ -Carotene-5,6-epoxide, 3213  
 $\beta$ -Carotene-5,6-epoxide, 3214  
 $\beta$ -Cryptoxanthin, 4293  
Lycoxanthin, 13243  
Mutatochrome, 15135  
Rubixanthin, 19039
- C<sub>40</sub>H<sub>56</sub>O<sub>2</sub>**  
Cryptoxanthin epoxide, 4294  
3'-Deoxycapsanthin, 5158  
Lutein, 13126  
Lycophyll, 13222  
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Rubichrome, 19027  
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- C<sub>40</sub>H<sub>56</sub>O<sub>3</sub>**  
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(9Z,13Z)-Lutein-5,6-epoxide, 13129  
(9Z,13'Z)-Lutein-5,6-epoxide, 13130  
(9'Z,13'Z)-Lutein-5,6-epoxide, 13131  
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- C<sub>40</sub>H<sub>56</sub>O<sub>4</sub>**  
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- Siphonaxanthin, 19964  
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- C<sub>40</sub>H<sub>56</sub>O<sub>5</sub>**  
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 3,4,3',8'-Tetrahydroxy- $\beta$ - $\kappa$ -caroten-6'-one, 21085
- C<sub>40</sub>H<sub>56</sub>O<sub>6</sub>**  
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 3 $\alpha$ -*trans*-Feruloyloxy-2 $\alpha$ -hydroxyurs-12-en-28-oic acid, 7785  
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- C<sub>40</sub>H<sub>56</sub>O<sub>8</sub>**  
 3-*O-trans*-Feruloyleuscaphic acid, 7772
- C<sub>40</sub>H<sub>56</sub>O<sub>10</sub>**  
 10 $\alpha$ ,13 $\alpha$ ,16 $\alpha$ -Trihydroxy-9 $\alpha$ -methyl-15-oxo-20-nor-kauran-19-oic acid  $\gamma$ -lactone-17-yl-16' $\alpha$ ,17'-dihydroxy-15'-oxo-*ent*-kaur-19'-oate, 21806
- C<sub>40</sub>H<sub>57</sub>N<sub>3</sub>O<sub>11</sub>**  
 Giraldine G, 8454
- C<sub>40</sub>H<sub>58</sub>**  
 $\beta$ -Zeacarotene, 22973
- C<sub>40</sub>H<sub>58</sub>N<sub>3</sub>O<sub>11</sub>**  
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- C<sub>40</sub>H<sub>58</sub>N<sub>4</sub>O<sub>10</sub>**  
 Cinobufotoxin, 3733
- C<sub>40</sub>H<sub>58</sub>O<sub>2</sub>**  
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- C<sub>40</sub>H<sub>58</sub>O<sub>3</sub>**  
 Pholidotanin, 17175  
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- C<sub>40</sub>H<sub>58</sub>O<sub>4</sub>**  
 (3*S*,5*S*,6*R*,3'*R*,6'*R*)-5,6-Dihydro-5,6-dihydroxylutein, 5594
- C<sub>40</sub>H<sub>58</sub>O<sub>5</sub>**  
 3 $\beta$ -*trans*-Feruloyloxy-16 $\beta$ -hydroxylup-20(29)-ene, 7784  
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- C<sub>40</sub>H<sub>58</sub>O<sub>15</sub>**  
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- C<sub>40</sub>H<sub>60</sub>**  
 $\zeta$ -Carotene, 3215
- C<sub>40</sub>H<sub>60</sub>N<sub>4</sub>O<sub>10</sub>**  
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- C<sub>40</sub>H<sub>60</sub>N<sub>8</sub>O<sub>10</sub>**  
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- C<sub>40</sub>H<sub>60</sub>O<sub>5</sub>**  
 Annomosin A, 1309
- C<sub>40</sub>H<sub>60</sub>O<sub>7</sub>**  
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- C<sub>40</sub>H<sub>60</sub>O<sub>8</sub>**  
 13-*O*-Acetylphorbol-20-linoleate, 484
- C<sub>40</sub>H<sub>60</sub>O<sub>13</sub>**  
 Atratoside D, 1996  
 Cynascyroside D, 4566  
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- C<sub>40</sub>H<sub>60</sub>O<sub>15</sub>**  
 DraconinC, 6578
- C<sub>40</sub>H<sub>62</sub>**  
 Phytofluene, 17264
- C<sub>40</sub>H<sub>62</sub>O<sub>4</sub>**  
 Annonebinide B, 1318
- C<sub>40</sub>H<sub>62</sub>O<sub>9</sub>**  
 3-*O*-(2,3-Dimethylbutanoyl)-13-*O*-dodecanoyl-20-acetylingenol, 6323
- C<sub>40</sub>H<sub>62</sub>O<sub>11</sub>**  
 1 $\alpha$ ,3 $\beta$ -Hydroxyimberbic acid-23-*O*- $\alpha$ -L-3,4-diacetyl-rhamnopyranoside, 9741
- C<sub>40</sub>H<sub>62</sub>O<sub>12</sub>**  
 Prieurianoside, 17852
- C<sub>40</sub>H<sub>62</sub>O<sub>13</sub>**  
 Bidentatoside II, 2364  
 30-Norhederagenin-3-*O*- $\beta$ -D-glucosyl(1 $\rightarrow$ 3)- $\alpha$ -L-arabinopyranoside, 15754
- C<sub>40</sub>H<sub>62</sub>O<sub>14</sub>**  
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 3-*O*-[*O*-(2-*O*-acetyl- $\alpha$ -L-arabinopyranosyl(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside)], 12592  
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- C<sub>40</sub>H<sub>62</sub>O<sub>15</sub>**  
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- C<sub>40</sub>H<sub>62</sub>O<sub>16</sub>**  
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 21-Methoxyl-3 $\beta$ -[*O*- $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 2)-*O*-[ $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 4)]- $\beta$ -D-glucopyranosyl]oxy]pregn-5,16-en-20-one, 13991  
 Withanoside II, 22706
- C<sub>40</sub>H<sub>64</sub>**  
 Phytoene, 17263
- C<sub>40</sub>H<sub>64</sub>O<sub>2</sub>**  
 Fritillebinide A, 7965
- C<sub>40</sub>H<sub>64</sub>O<sub>3</sub>**  
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- C<sub>40</sub>H<sub>64</sub>O<sub>11</sub>**  
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- C<sub>40</sub>H<sub>64</sub>O<sub>12</sub>**  
 2-*O*-Acetyl-28-*O*-acetyl-rubianoside IV, 303  
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 Hederagenin-3-*O*- $\beta$ -D-xylo(1 $\rightarrow$ 3)- $\alpha$ -L-arabinopyranoside, 9274  
 3-*O*- $\alpha$ -L-Rhamnopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranosyl-3 $\beta$ ,23-dihydroxylup- $A^{20(29)}$ -en-28-oic-acid, 18686  
 Yamogenin 3-*O*-neohesperidoside, 22880
- C<sub>40</sub>H<sub>64</sub>O<sub>13</sub>**  
 Brisbagenin-1-*O*-[*O*- $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 3)-4-*O*-acetyl- $\alpha$ -L-arabinopyranoside], 2613  
 Cimiside B, 3671  
 Fargoside A, 7723
- C<sub>40</sub>H<sub>64</sub>O<sub>14</sub>**  
 Pentandroside B, 16878
- C<sub>40</sub>H<sub>64</sub>O<sub>16</sub>**  
 16 $\alpha$ -Methoxyl-3 $\beta$ -[*O*- $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 2)-*O*-[ $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 4)]- $\beta$ -D-glucopyranosyl]oxy]pregn-5-en-20-one, 13990  
 Spongipregnoside D, 20233
- C<sub>40</sub>H<sub>66</sub>N<sub>6</sub>**  
 Ormosinine, 16207
- C<sub>40</sub>H<sub>66</sub>O<sub>12</sub>**  
 Gypenoside XXIX, 9141  
 Smilagenin-3-*O*- $\beta$ -D-glucopyranosyl(1 $\rightarrow$ 2)- $\beta$ -D-galactopyranoside, 20026
- C<sub>40</sub>H<sub>66</sub>O<sub>14</sub>**  
 (2*S*)-1 $\beta$ -[ $\beta$ -D-Fucopyranosyl]oxy]-6 $\beta$ -hydroxy-22 $\alpha$ -methoxy-3 $\alpha$ ,5 $\alpha$ -cyclofurostan-26-yl- $\beta$ -D-glucopyranoside, 7977
- C<sub>40</sub>H<sub>66</sub>O<sub>15</sub>**  
 (2*S*)-1 $\beta$ -[ $\beta$ -D-Glucopyranosyl]oxy]-6 $\beta$ -hydroxy-22 $\alpha$ -methoxy-3 $\alpha$ ,5 $\alpha$ -cyclofurostan-26-yl- $\beta$ -D-glucopyranoside, 8694
- C<sub>40</sub>H<sub>66</sub>O<sub>16</sub>**  
 Glycoside K (Periplocae), 8831
- C<sub>40</sub>H<sub>67</sub>NO<sub>11</sub>**  
 Hapepunine 3-*O*- $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranoside, 9221
- C<sub>40</sub>H<sub>68</sub>O<sub>2</sub>**  
 (*E*)-Phytol(5*Z*,8*Z*,11*Z*,14*Z*,17*Z*)-eicosapentaenoate, 17272

- C<sub>40</sub>H<sub>68</sub>O<sub>12</sub>**  
Gypenoside LXXVII, 9179  
Lotoideside D, 13007  
Lotoideside E, 13008
- C<sub>40</sub>H<sub>68</sub>O<sub>13</sub>**  
24S-Cycloartane-3 $\beta$ ,16 $\beta$ ,24,25,30-pentaol-3-*O*-(2-*O*- $\beta$ -*D*-xylosyl)- $\beta$ -*D*-xyloside, 4467
- C<sub>40</sub>H<sub>68</sub>O<sub>14</sub>**  
Anemarrhenasaponin Ia, 1172
- C<sub>40</sub>H<sub>70</sub>O<sub>4</sub>**  
Hentriacontanyl caffeate, 9365
- C<sub>40</sub>H<sub>73</sub>N<sub>3</sub>O<sub>3</sub>**  
3'''-Oxo-juliprosopine, 16364
- C<sub>40</sub>H<sub>74</sub>O<sub>5</sub>**  
1-*O*-(9Z,12Z-Octadecadienyl)-3-*O*-nonadecanoyl glycerol, 15944
- C<sub>40</sub>H<sub>74</sub>O<sub>12</sub>**  
Azralidoside, 2064
- C<sub>40</sub>H<sub>74</sub>O<sub>19</sub>**  
1-*O*-[ $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl]hexadecanol, 18718
- C<sub>40</sub>H<sub>75</sub>NO<sub>9</sub>**  
Celebroside, 3371  
1-*O*- $\beta$ -*D*-Glucopyranosyl-(2*S*,3*R*,4*E*,11*E*)-2-(2'*R*-hydroxyhexadecenylamino)-4,11-octadecadiene-1,3-diol, 8672  
Soyacerebroside I, 20113  
Soyacerebroside II, 20114
- C<sub>40</sub>H<sub>75</sub>N<sub>3</sub>O<sub>2</sub>**  
Juliflorine, 11943
- C<sub>40</sub>H<sub>77</sub>NO<sub>10</sub>**  
Bonaroside, 2540
- C<sub>40</sub>H<sub>78</sub>**  
Lycopadiene, 13201
- C<sub>40</sub>H<sub>79</sub>NO<sub>5</sub>**  
Urtica ceramide, 22273
- C<sub>40</sub>H<sub>81</sub>NO<sub>4</sub>**  
Trufflesphingolipid A, 22053
- C<sub>40</sub>H<sub>82</sub>**  
Andrographan, 1150
- C<sub>41</sub>H<sub>26</sub>O<sub>25</sub>**  
Mautusinin, 13612
- C<sub>41</sub>H<sub>26</sub>O<sub>26</sub>**  
Alnusiiin, 962  
Castalagin, 3296  
Glansrin C, 8506  
Vescalagin, 22435
- C<sub>41</sub>H<sub>28</sub>O<sub>10</sub>**  
Thelephantin L, 21304
- C<sub>41</sub>H<sub>28</sub>O<sub>11</sub>**  
Terrestrin G, 21012
- C<sub>41</sub>H<sub>28</sub>O<sub>26</sub>**  
Casuarictin, 3301  
Casuarinin, 3303  
Potentillin, 17750  
Stachyurin, 20257
- C<sub>41</sub>H<sub>28</sub>O<sub>27</sub>**  
Geraniin, 8311  
Helioscopinin A, 9309  
2,3-*O*-Hexahydroxydiphenyl-4,6-*O*-sanguisorboyl-( $\alpha$ / $\beta$ )-glucose, 9503  
Praecoxin A, 17754
- C<sub>41</sub>H<sub>30</sub>O<sub>26</sub>**  
Cercidin A, 3418  
Eugeniin, 7518  
Nupharin A(*S*), 15869  
Nupharin B(*R*), 15870  
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- C<sub>41</sub>H<sub>30</sub>O<sub>27</sub>**  
Chebulagic acid, 3490  
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Rugosin B, 19055
- C<sub>41</sub>H<sub>30</sub>O<sub>28</sub>**  
Phyllanemblinin C, 17210  
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Repandusinic acid A, 18624
- C<sub>41</sub>H<sub>32</sub>O<sub>26</sub>**  
1,2,3,4,6-Pentagalloylglucose, 16836
- C<sub>41</sub>H<sub>32</sub>O<sub>27</sub>**  
Chebulinic acid, 3493
- C<sub>41</sub>H<sub>32</sub>O<sub>28</sub>**  
Neochebulagic acid, 15362
- C<sub>41</sub>H<sub>37</sub>O<sub>16</sub>**  
Kaempferol 3-*O*- $\alpha$ -*L*-(2'',4''-di-*E*-feruloyl)-rhamnoside, 12040
- C<sub>41</sub>H<sub>41</sub>O<sub>23</sub><sup>+</sup>**  
Delphinidin-3-*O*-[6-*O*-(*p*-coumaroyl)- $\beta$ -*D*-glucopyranoside]-5-*O*-[4-*O*-acetyl-6-*O*-malonyl- $\beta$ -*D*-glucopyranoside], 5017
- C<sub>41</sub>H<sub>42</sub>O<sub>14</sub>**  
Curtisian H, 4404
- C<sub>41</sub>H<sub>43</sub>NO<sub>12</sub>**  
Delgrandine, 5007  
Triptofordinine A<sub>1</sub>, 22009  
Triptofordinine A<sub>2</sub>, 22010
- C<sub>41</sub>H<sub>44</sub>O<sub>21</sub>**  
Myriophylloside D, 15195  
Sphaerobioside acetate, 20150
- C<sub>41</sub>H<sub>44</sub>O<sub>22</sub>**  
Myriophylloside B, 15193
- C<sub>41</sub>H<sub>44</sub>O<sub>23</sub>**  
Myriophylloside C, 15194
- C<sub>41</sub>H<sub>44</sub>O<sub>24</sub>**  
Quercetin-3-*O*-(2-*E*-caffeoyl)- $\alpha$ -*L*-arabinopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-galactopyranoside-7-*O*- $\beta$ -*D*-glucopyranoside, 18331
- C<sub>41</sub>H<sub>46</sub>N<sub>4</sub>O<sub>3</sub>**  
Tenuicausine, 20933
- C<sub>41</sub>H<sub>46</sub>O<sub>13</sub>**  
3-Acetyl-5 $\beta$ ,8 $\alpha$ -dibenzylformyl-14-propanoyl myrsinotype diterpene with C9-C10 cyclized to form an additional lactone ring, 373
- C<sub>41</sub>H<sub>47</sub>NO<sub>14</sub>**  
Kansuinin E, 12141
- C<sub>41</sub>H<sub>47</sub>NO<sub>15</sub>**  
Kansuinin D, 12140
- C<sub>41</sub>H<sub>47</sub>NO<sub>17</sub>**  
Wilforzine, 22690
- C<sub>41</sub>H<sub>47</sub>NO<sub>19</sub>**  
Hyponine F, 10908  
Wilforgine, 22680
- C<sub>41</sub>H<sub>47</sub>NO<sub>20</sub>**  
Hypoglaunine, 10897  
Isowilfortrine, 11781  
Wilfortrine, 22695
- C<sub>41</sub>H<sub>48</sub>N<sub>2</sub>O<sub>8</sub>**  
Thalicarpine, 21239
- C<sub>41</sub>H<sub>48</sub>N<sub>2</sub>O<sub>9</sub>**  
Thaliadanine, 21237
- C<sub>41</sub>H<sub>48</sub>O<sub>11</sub>**  
Manassantin B, 13475  
Saucernetin 7, 19405
- C<sub>41</sub>H<sub>49</sub>NO<sub>13</sub>**  
*N*-Debenzoyl-*N*-propanoyl-10-deacetyl paclitaxel, 4810
- C<sub>41</sub>H<sub>50</sub>N<sub>6</sub>O<sub>9</sub>**  
Rubia akane RA-VII, 18985
- C<sub>41</sub>H<sub>50</sub>N<sub>6</sub>O<sub>10</sub>**  
Rubia akane RA-III, 18981  
Rubia akane RA-IV, 18982  
Rubia akane RA-VI, 18984
- C<sub>41</sub>H<sub>50</sub>O<sub>14</sub>**  
Taxuspine X, 20871
- C<sub>41</sub>H<sub>51</sub>NO<sub>11</sub>**  
Liaconitine B, 12737
- C<sub>41</sub>H<sub>52</sub>O<sub>14</sub>**  
Taxchin B, 20769
- C<sub>41</sub>H<sub>52</sub>O<sub>21</sub>**  
Korepimesoside C, 12274
- C<sub>41</sub>H<sub>53</sub>NO<sub>11</sub>**  
Liwaconitine, 12935
- C<sub>41</sub>H<sub>53</sub>NO<sub>13</sub>**  
Austrotaxine, 2025
- C<sub>41</sub>H<sub>54</sub>N<sub>4</sub>O<sub>3</sub>**  
20-Epi-16'-decarbomethoxy-conoduramine, 6885
- C<sub>41</sub>H<sub>54</sub>O<sub>12</sub>**  
Nimboldin D, 15608

- C<sub>41</sub>H<sub>55</sub>NO<sub>12</sub>**  
Austrospicatine, 2024
- C<sub>41</sub>H<sub>55</sub>NO<sub>13</sub>**  
7β-Acetoxy-9-acetylspicataxine, 120  
2α-Acetoxy-2β-deacetylaustrospicatine, 150  
Taxuspine P, 20863
- C<sub>41</sub>H<sub>55</sub>NO<sub>14</sub>**  
2α-Acetoxy-2β-deacetyl-1-hydroxyaustrospicatine, 152
- C<sub>41</sub>H<sub>56</sub>N<sub>2</sub>O<sub>7</sub>**  
Incarvillateine D, 11008
- C<sub>41</sub>H<sub>56</sub>N<sub>2</sub>O<sub>11</sub>**  
Elanine, 6732
- C<sub>41</sub>H<sub>56</sub>O<sub>2</sub>**  
Vitamin K<sub>2</sub>, 22563
- C<sub>41</sub>H<sub>56</sub>O<sub>4</sub>**  
3-Methoxy-3'-hydroxy-5',8'-epoxy-5',8'-dihydro-5,6-seco-4,6-cyclo-β,β-caroten-5-one, 13955  
(all-*E*)-3-Methoxy-3'-hydroxy-5',6'-epoxy-5',6'-dihydro-5,6-seco-4,6-cyclo-β,β-caroten-5-one, 13956  
(9*Z*)-3-Methoxy-3'-hydroxy-5',6'-epoxy-5',6'-dihydro-5,6-seco-4,6-cyclo-β,β-caroten-5-one, 13957
- C<sub>41</sub>H<sub>56</sub>O<sub>6</sub>**  
Fucoxanthin, 7979
- C<sub>41</sub>H<sub>56</sub>O<sub>13</sub>**  
(2*R*,3*R*,4*R*,5*R*,7*S*,8*S*,9*S*,11*E*,13*S*,15*R*)-2,3,5,7,8,9,15-Heptahydroxyjatropa-6(17),11-diene-14-one-7,9-diacetate-8-benzoate-2,3-bis(2-methylbutyrate), 9395
- C<sub>41</sub>H<sub>56</sub>O<sub>24</sub>**  
Velutinoside II, 22371
- C<sub>41</sub>H<sub>58</sub>O<sub>3</sub>**  
Formosadimer A, 7886  
Sugikurojin B, 20458
- C<sub>41</sub>H<sub>58</sub>O<sub>10</sub>**  
10α-Hydroxy-9α-methyl-15-oxo-20-nor-kauran-19-oic acid methyl ester-16α-yl-14α,16'α,17'-trihydroxy-15'-oxo-*ent*-kaur-11'-en-19'-oate, 10512
- C<sub>41</sub>H<sub>59</sub>N<sub>3</sub>O<sub>11</sub>**  
Giraldine H, 8455
- C<sub>41</sub>H<sub>60</sub>N<sub>2</sub>O<sub>11</sub>**  
Potanidine A, 17743
- C<sub>41</sub>H<sub>60</sub>O<sub>4</sub>**  
24-Methylene cycloartanol ferulate, 14353
- C<sub>41</sub>H<sub>60</sub>O<sub>6</sub>**  
3β-*trans*-Sinapoyloxylup-20(29)-en-28-ol, 19920
- C<sub>41</sub>H<sub>60</sub>O<sub>7</sub>**  
Myxoxanthophyll, 15227
- C<sub>41</sub>H<sub>60</sub>O<sub>16</sub>**  
Neocynapanoside A, 15389
- C<sub>41</sub>H<sub>62</sub>O<sub>4</sub>**  
Cycloartenyl ferulate, 4475  
24-Methylcycloartanol ferulate, 14267
- C<sub>41</sub>H<sub>62</sub>O<sub>13</sub>**  
Picfeltaarraenin IA, 17294
- C<sub>41</sub>H<sub>62</sub>O<sub>14</sub>**  
Apioglycyrrhizin, 1519  
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Fargoside D, 7726  
Hollow alternanthera saponin D, 9589
- C<sub>41</sub>H<sub>62</sub>O<sub>15</sub>**  
Achyranthoside II, 544
- C<sub>41</sub>H<sub>62</sub>O<sub>16</sub>**  
Ageratoside C<sub>1</sub>, 735
- C<sub>41</sub>H<sub>63</sub>NO<sub>14</sub>**  
Protoveratrine A, 17995
- C<sub>41</sub>H<sub>63</sub>NO<sub>15</sub>**  
Neoprotoveratrine, 15452
- C<sub>41</sub>H<sub>64</sub>N<sub>8</sub>O<sub>9</sub>**  
Glabrin C, 8494
- C<sub>41</sub>H<sub>64</sub>O<sub>4</sub>**  
Cycloartanol ferulate, 4470
- C<sub>41</sub>H<sub>64</sub>O<sub>8</sub>**  
Julibrogenin A, 11916
- C<sub>41</sub>H<sub>64</sub>O<sub>12</sub>**  
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- C<sub>41</sub>H<sub>64</sub>O<sub>13</sub>**  
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- C<sub>41</sub>H<sub>66</sub>O<sub>11</sub>**  
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- C<sub>41</sub>H<sub>68</sub>O<sub>13</sub>**  
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- C<sub>42</sub>H<sub>49</sub>NO<sub>14</sub>**  
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- C<sub>42</sub>H<sub>50</sub>N<sub>2</sub>O<sub>9</sub>**  
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- C<sub>42</sub>H<sub>52</sub>N<sub>2</sub>O<sub>11</sub>**  
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- C<sub>42</sub>H<sub>52</sub>N<sub>6</sub>O<sub>10</sub>**  
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 Esculentoside A, 7368  
 Metaplexigenin-3-*O*- $\beta$ -*D*-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranoside, 13818
- C<sub>42</sub>H<sub>66</sub>O<sub>17</sub>**  
 Stelmatotriterpenoside H, 20290
- C<sub>42</sub>H<sub>66</sub>O<sub>18</sub>**  
 Cerberoside, 3417  
 Thevetin B, 21326
- C<sub>42</sub>H<sub>66</sub>O<sub>20</sub>**
- Premnaodoroside A, 17814  
 Premnaodoroside B, 17815  
 Premnaodoroside D, 17817
- C<sub>42</sub>H<sub>67</sub>KO<sub>14</sub>**  
 Potassium salt of longispinogenin 3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-glucuronopyranoside, 17749
- C<sub>42</sub>H<sub>67</sub>KO<sub>15</sub>**  
 Potassium salt of 29-hydroxy longispinogenin 3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-glucuronopyranoside, 17748
- C<sub>42</sub>H<sub>67</sub>NaO<sub>18</sub>S**  
 2 $\alpha$ ,23-Dihydroxy-3 $\beta$ -sulfoxyolean-12-en-28-oic acid *O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl ester sodium salt, 6138
- C<sub>42</sub>H<sub>68</sub>O<sub>12</sub>**  
 Oleanolic acid-3- $\beta$ -*D*-galactopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-fucopyranoside, 16047
- Saikosaponin E, 19149  
 Saikosaponin M, 19152
- C<sub>42</sub>H<sub>68</sub>O<sub>13</sub>**  
 Arvensoside A, 1829  
 Azukisaponin I, 2065  
 Carnosifloside I, 3202  
 3-*O*- $\beta$ -*D*-Galactopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-galactopyranosyloleanolic acid, 8054
- Hemslonin A, 9357  
 Illexside I methyl ester, 10986  
 Kaikasaponin I, 12111  
 Randianin, 18534  
 Saikosaponin A, 19142  
 Saikosaponin B<sub>2</sub>, 19143  
 Saikosaponin D, 19148  
 Saponin E<sub>6</sub>, 19343
- C<sub>42</sub>H<sub>68</sub>O<sub>14</sub>**  
 Azukisaponin II, 2066  
 Bacopaside N<sub>1</sub>, 2091  
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 Bourneioside A, 2572  
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 Hederagenin-28-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside, 9264  
 Jujubasaponin VI, 11906  
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 Saikosaponin L, 19151  
 Soyasaponin III, 20128
- C<sub>42</sub>H<sub>68</sub>O<sub>15</sub>**  
 Aquilegioside G, 1548  
 Bayogenin 3-*O*-cellobioside, 2179  
 Illexoside XXXVII, 10984  
 Palustroside II, 16580  
 Pruvuloside A, 18006  
 Randiasaponin VII, 18541
- Rivaloside D, 18851
- C<sub>42</sub>H<sub>68</sub>O<sub>16</sub>**  
 Centellasaponin B, 3395
- C<sub>42</sub>H<sub>68</sub>O<sub>17</sub>**  
 Platycoside K, 17544  
 Platycoside L, 17545
- C<sub>42</sub>H<sub>68</sub>O<sub>17</sub>S**  
 Sulfopatrinoside I, 20476  
 Sulfopatrinoside II, 20477
- C<sub>42</sub>H<sub>70</sub>O<sub>12</sub>**  
 Acanthoside K<sub>3</sub>, 88  
 Ginsenoside F<sub>4</sub>, 8411  
 Ginsenoside Ic, 8415
- C<sub>42</sub>H<sub>70</sub>O<sub>13</sub>**  
 Curculigosaponin G, 4384  
 Ginsenoside La, 8418
- C<sub>42</sub>H<sub>70</sub>O<sub>14</sub>**  
 23-*O*-Acetyl-3 $\beta$ ,12 $\beta$ ,23 $\beta$ ,24 $\beta$ -tetrahydroxy-20 $\beta$ ,25-epoxydammarane 3-*O*-[ $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -*D*-xylopyranoside, 521  
 Gypenoside XL, 9149  
 Hydroxysaikosaponin A, 10685  
 Hydroxysaikosaponin D, 10687  
 Justicioside A, 11983  
 Rubiarboside G, 19022  
 Thalicoside A, 21243
- C<sub>42</sub>H<sub>70</sub>O<sub>14</sub>S**  
 Atriplicosaponin B, 1998
- C<sub>42</sub>H<sub>70</sub>O<sub>15</sub>**  
 Beesioside H, 2199
- C<sub>42</sub>H<sub>70</sub>O<sub>16</sub>**  
 Iridalglycoside 5b, 11135  
 Iridalglycoside 6c, 11138
- C<sub>42</sub>H<sub>72</sub>O<sub>2</sub>**  
 $\alpha$ -Amyrin laurate, 1115  
 $\beta$ -Amyrin laurate, 1116
- C<sub>42</sub>H<sub>72</sub>O<sub>13</sub>**  
 Ginsenoside Rg<sub>2</sub>, 8431  
 20(*S*)-Ginsenoside Rg<sub>3</sub>, 8432  
 Gypenoside XII, 9132  
 Gypenoside XXXVIII, 9147  
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 Gypenoside LXXV, 9177  
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- C<sub>42</sub>H<sub>72</sub>O<sub>14</sub>**  
 Ginsenoside Ia, 8413  
 Ginsenoside Ib, 8414  
 Ginsenoside Rf, 8429  
 Ginsenoside Rg<sub>1</sub>, 8430  
 Ginsenoside Rg<sub>7</sub>, 8433  
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- Gypenoside LXXIV, 9176  
 2 $\alpha$ ,3 $\beta$ ,12 $\beta$ ,20(S)-3-Hydroxydammar-24-en-20-  
*O*- $\beta$ -D-glucopyranoside, 9958  
 Pseudoginsenoside F<sub>11</sub>, 18025  
 24S,3 $\beta$ ,11 $\alpha$ ,16 $\beta$ ,24-Tetrahydroxycycloartanol-  
 3-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranoside, 21088  
 Yixinoside B, 22914
- C<sub>42</sub>H<sub>72</sub>O<sub>15</sub>**  
 6-*O*- $\beta$ -D-Glucopyranosyl-20-*O*- $\beta$ -D-glucopyranosyl-3 $\beta$ ,6 $\alpha$ ,12 $\beta$ ,20(S),25-pentahydroxydammar-23-ene, 8651  
 Gycomoside I, 9094  
 Majonoside R<sub>1</sub>, 13404  
 Momorcharaside A, 14907
- C<sub>42</sub>H<sub>72</sub>O<sub>16</sub>**  
 Dresioside I, 6601  
 Iridalglycoside 7, 11139  
 Iridalglycoside 8, 11140
- C<sub>42</sub>H<sub>74</sub>O<sub>15</sub>**  
 Quinquenoside F<sub>1</sub>, 18445
- C<sub>42</sub>H<sub>74</sub>O<sub>16</sub>**  
 Notoginsenoside J, 15828
- C<sub>42</sub>H<sub>76</sub>O<sub>3</sub>**  
 Parvifolinoic acid, 16686
- C<sub>42</sub>H<sub>79</sub>NO<sub>9</sub>**  
 Cerebroside 5, 3420  
 Sphingolipid Lipids01-521, 20154
- C<sub>42</sub>H<sub>81</sub>NO<sub>4</sub>**  
 1,3,5-Trihydroxy-2-hexadecanoylamino-(6*E*,9*E*)-heptacosdiene, 21741
- C<sub>42</sub>H<sub>83</sub>NO<sub>5</sub>**  
 Anticancer Ceramide PMV70P691-009, 1391
- C<sub>42</sub>H<sub>85</sub>NO<sub>5</sub>**  
 Anticancer Ceramide PMV70P691-69, 1392  
 Hemisceramide, 9351  
 Newbouldiamide, 15518  
 Soyasphingosine B, 20131
- C<sub>43</sub>H<sub>32</sub>N<sub>2</sub>O<sub>9</sub>**  
*meso*-Chelidimerine, 3500
- C<sub>43</sub>H<sub>32</sub>O<sub>20</sub>**  
 Theaflavin 3,3'-digallate, 21280
- C<sub>43</sub>H<sub>33</sub>O<sub>12</sub>**  
 Mohsenone, 14895
- C<sub>43</sub>H<sub>34</sub>O<sub>22</sub>**  
 Trilobatin G, 21882
- C<sub>43</sub>H<sub>34</sub>O<sub>23</sub>**  
 Trilobatin F, 21881
- C<sub>43</sub>H<sub>36</sub>O<sub>18</sub>**  
 1,3,4,5-Tetracaffeoylquinic acid, 21034
- C<sub>43</sub>H<sub>36</sub>O<sub>21</sub>**  
 Trilobatin E, 21880
- C<sub>43</sub>H<sub>42</sub>O<sub>23</sub>**  
 Trilobatin I, 21884
- C<sub>43</sub>H<sub>42</sub>O<sub>26</sub>**  
 7-*O*- $\beta$ -D-Glucuronopyranosyl-4'-*O*-[2'-*O*-*E*-feruloyl-*O*- $\beta$ -D-glucuronopyranosyl(1 $\rightarrow$ 2)-*O*- $\beta$ -D-glucuronopyranoside]apigenin, 8763
- C<sub>43</sub>H<sub>44</sub>O<sub>6</sub>**  
 GBB A, 8247  
 GBB B, 8248
- C<sub>43</sub>H<sub>46</sub>O<sub>15</sub>**  
 Epioritin-4 $\alpha$ -ol-(6 $\rightarrow$ 6)-epioritin-4 $\beta$ -ol hepta-*O*-methylether triacetate, 6985
- C<sub>43</sub>H<sub>47</sub>N<sub>3</sub>O<sub>9</sub>**  
 Milliamine B, 14860  
 Milliamine C, 14861
- C<sub>43</sub>H<sub>48</sub>N<sub>2</sub>O<sub>10</sub>**  
 Isopythaldine, 11641
- C<sub>43</sub>H<sub>48</sub>O<sub>16</sub>**  
 Dryocerassin, 6611  
 Norflavaspidic acid, 15749
- C<sub>43</sub>H<sub>48</sub>O<sub>22</sub>**  
 Kaempferol-3-rhamnoside-7-*O*-[6-feruloylglucosyl(1 $\rightarrow$ 3)-rhamnoside], 12085
- C<sub>43</sub>H<sub>48</sub>O<sub>23</sub>**  
 Isoscoparin 2''-*O*-(6'''-*E*)-coumaroyl]glucoside-4'-*O*-glucoside, 11701  
 Isovitexin 2''-*O*-(6'''-*E*)-feruloyl]glucoside-4'-*O*-glucoside, 11776
- C<sub>43</sub>H<sub>49</sub>NO<sub>17</sub>**  
 Neowilforine, 15476
- C<sub>43</sub>H<sub>49</sub>NO<sub>18</sub>**  
 Euoverrine B, 7538  
 Wilforine, 22682
- C<sub>43</sub>H<sub>49</sub>NO<sub>19</sub>**  
 Wilfordine, 22677  
 Wilfordside, 22679  
 Wilforine B, 22687
- C<sub>43</sub>H<sub>49</sub>O<sub>23</sub><sup>+</sup>**  
 Pelargonidin-3-*O*-[6-*O*-(*E*)-feruloyl-2-*O*- $\beta$ -D-glucopyranosyl]-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranoside (-5-*O*- $\beta$ -D-glucopyranoside), 16784
- C<sub>43</sub>H<sub>50</sub>N<sub>6</sub>O<sub>10</sub>**  
 Rubia akane RA-IX, 18987
- C<sub>43</sub>H<sub>51</sub>NO<sub>13</sub>**  
 10-Deacetyltaxol B, 4784
- C<sub>43</sub>H<sub>52</sub>N<sub>2</sub>O<sub>10</sub>**  
 Methoxyadiantifoline, 13836
- C<sub>43</sub>H<sub>52</sub>N<sub>4</sub>O<sub>5</sub>**  
 Conodurine, 3998  
 Voacamine, 22596
- C<sub>43</sub>H<sub>52</sub>N<sub>4</sub>O<sub>6</sub>**  
 Cononitarine B, 4003  
 19'(S)-Hydroxyconoduramine, 9933  
 19'(S)-Hydroxyconodurine, 9934
- C<sub>43</sub>H<sub>52</sub>N<sub>4</sub>O<sub>7</sub>**  
 Callophylline A, 2981  
 Conodiparine E, 3996  
 Conodiparine F, 3997  
 Cononitarine A, 4002
- C<sub>43</sub>H<sub>52</sub>N<sub>4</sub>O<sub>8</sub>**  
 Callophylline B, 2982
- C<sub>43</sub>H<sub>52</sub>N<sub>6</sub>O<sub>11</sub>**  
 Rubia akane RA-X, 18988
- C<sub>43</sub>H<sub>53</sub>NO<sub>11</sub>**  
 10 $\beta$ -Benzoyloxy-1 $\beta$ -hydroxy-5 $\alpha$ -(3'-methylamino-3'-phenyl)propanoxy-7 $\beta$ ,9 $\alpha$ ,13 $\alpha$ -triace-toxy-11(15 $\rightarrow$ 1)-abeo-taxa-4(20),11-diene, 2258
- C<sub>43</sub>H<sub>53</sub>N<sub>9</sub>O<sub>12</sub>**  
 Lyciumin A methylate, 13179
- C<sub>43</sub>H<sub>54</sub>N<sub>2</sub>O<sub>11</sub>**  
 Nicaustrine, 15523
- C<sub>43</sub>H<sub>54</sub>O<sub>4</sub>**  
 3,29-*O*-Dibenzoyloxykarounidiol, 5386
- C<sub>43</sub>H<sub>54</sub>O<sub>23</sub>**  
 Tubuloside D, 22096
- C<sub>43</sub>H<sub>54</sub>O<sub>24</sub>**  
 Tubuloside C, 22095
- C<sub>43</sub>H<sub>56</sub>N<sub>4</sub>O<sub>5</sub>**  
 Ervadivaricatine A, 7292  
 Ervadivaricatine B, 7293
- C<sub>43</sub>H<sub>56</sub>O<sub>13</sub>**  
 Rediocide E, 18565
- C<sub>43</sub>H<sub>56</sub>O<sub>21</sub>**  
 Hedyotol C 4,4''-di-*O*- $\beta$ -D-glucopyranoside, 9284
- C<sub>43</sub>H<sub>57</sub>NO<sub>14</sub>**  
 2 $\alpha$ -Acetoxyaustrospicatine, 127
- C<sub>43</sub>H<sub>57</sub>NO<sub>15</sub>**  
 (2'*S*,3'*R*)-5-(*N,N*-Dimethyl-3'-phenylisoserilyl)-taxachitriene A, 6395
- C<sub>43</sub>H<sub>58</sub>O<sub>6</sub>**  
 Guttiferone G, 9090
- C<sub>43</sub>H<sub>58</sub>O<sub>15</sub>**  
 Cynaphylloside B, 4557
- C<sub>43</sub>H<sub>60</sub>O<sub>4</sub>**  
 6-Geranylgeranyl 8'-methyl-6,8'-diapocaroten-6,8'-dioate, 8317
- C<sub>43</sub>H<sub>60</sub>O<sub>20</sub>**  
 Azecin 1, 2054
- C<sub>43</sub>H<sub>62</sub>N<sub>8</sub>O<sub>8</sub>**  
 Grifficycloin A, 9001
- C<sub>43</sub>H<sub>62</sub>O<sub>11</sub>**  
 21 $\beta$ -Benzoylsitakigenin-3-*O*- $\beta$ -D-glucuronopyranoside, 2272  
 Voamatine C, 22600
- C<sub>43</sub>H<sub>62</sub>O<sub>17</sub>**

- 3-*O*-[ $\beta$ -*D*-Glucuronopyranosyl-(1 $\rightarrow$ 2)-*O*- $\beta$ -*D*-glucuronopyranosyl]-24-hydroxyglabrolide, 8764
- C<sub>43</sub>H<sub>62</sub>O<sub>23</sub>**  
Jasnodifloside H, 11828
- C<sub>43</sub>H<sub>64</sub>O<sub>8</sub>**  
13-*O*-Tigloylphorbol-20-linoleate, 21381
- C<sub>43</sub>H<sub>64</sub>O<sub>11</sub>**  
(22*S*)-Cholest-5-ene-3 $\beta$ ,11 $\alpha$ ,16 $\beta$ ,22-tetrol 16-*O*-{2-*O*-acetyl-3-*O*-(*p*-methoxybenzoyl)- $\alpha$ -*L*-rhamnopyranoside}, 3580
- C<sub>43</sub>H<sub>64</sub>O<sub>16</sub>**  
Abrusoside B, 32
- C<sub>43</sub>H<sub>66</sub>N<sub>12</sub>O<sub>12</sub>S<sub>2</sub>**  
Oxytocin, 16478
- C<sub>43</sub>H<sub>66</sub>O<sub>5</sub>**  
Revandchinone 2, 18670
- C<sub>43</sub>H<sub>66</sub>O<sub>14</sub>**  
 $\alpha$ -Acetyldigitoxin, 377  
Gymnemic acid I, 9110
- C<sub>43</sub>H<sub>66</sub>O<sub>16</sub>**  
Neoruscogenin 1-*O*-{*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)-*O*-[ $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 3)]- $\alpha$ -*L*-arabinopyranoside}, 15455
- C<sub>43</sub>H<sub>68</sub>O<sub>13</sub>**  
Sanguisorbin E, 19288
- C<sub>43</sub>H<sub>68</sub>O<sub>14</sub>**  
Pomolic acid-3 $\beta$ -*O*- $\alpha$ -*L*-2-acetoxyarabinopyranosyl-28-*O*- $\beta$ -*D*-glucopyranoside, 17697
- C<sub>43</sub>H<sub>68</sub>O<sub>15</sub>**  
Eupteleasaponin IX, 7632  
3-*O*-[ $\beta$ -*D*-Glucopyranosyl (1 $\rightarrow$ 3)- $\beta$ -*D*-6-*O*-methyl-glucuronopyranosyl]-3 $\beta$ ,15 $\alpha$ ,23-trihydroxyolean-12-en-16-one, 8683  
Saponin 2, 19334  
Saponin 3, 19335  
Yiamoloside B, 22903
- C<sub>43</sub>H<sub>68</sub>O<sub>16</sub>**  
Aferoside A, 668
- C<sub>43</sub>H<sub>68</sub>O<sub>17</sub>**  
Laxogenin 3-*O*-{*O*- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 4)-*O*-[ $\alpha$ -*L*-arabinopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside]}, 12594
- C<sub>43</sub>H<sub>68</sub>O<sub>22</sub>**  
Rebaudioside F, 18561
- C<sub>43</sub>H<sub>70</sub>O<sub>13</sub>**  
3-*O*-[ $\beta$ -*D*-Galactopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucuronopyranosyl]-sophoradiol methyl ester, 8063  
16 $\alpha$ ,23,28,30-Tetrahydroxyolean-11,13(18)-dien-3 $\beta$ -yl- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-fucopyranoside, 21139
- C<sub>43</sub>H<sub>70</sub>O<sub>15</sub>**  
Astragaloside II, 1937
- Davuricoside D, 4699  
Isoastragaloside II, 11243  
PM-2004-70-458-3b, 17578
- C<sub>43</sub>H<sub>70</sub>O<sub>16</sub>**  
Aquilegioside F, 1547  
Aspafilioside B, 1861  
Asparamin C, 1878  
Methyl 3-*O*- $\beta$ -laminaribiosyl polygalactate, 14549  
3-*O*-{[ $\beta$ -*D*-Xylopyranosyl(1 $\rightarrow$ 4)][ $\alpha$ -*L*-arabinopyranosyl(1 $\rightarrow$ 6)]- $\beta$ -*D*-glucopyranosyl}-(25*S*)-5 $\beta$ -spirostan-3 $\beta$ -ol, 22821
- C<sub>43</sub>H<sub>72</sub>O<sub>4</sub>**  
Diosgenin palmitate, 6445  
Yamogenin palmitate, 22881
- C<sub>43</sub>H<sub>72</sub>O<sub>11</sub>**  
Acanthoside K<sub>2</sub>, 87
- C<sub>43</sub>H<sub>72</sub>O<sub>13</sub>**  
Bupleurosides IX, 2756  
Cyclocarioside A, 4482  
Saikosaponin T, 19162
- C<sub>43</sub>H<sub>72</sub>O<sub>14</sub>**  
Bupleurosides III, 2753  
Justicioside C, 11985  
Saikosaponin B<sub>3</sub>, 19144  
Saikosaponin B<sub>4</sub>, 19145
- C<sub>43</sub>H<sub>72</sub>O<sub>15</sub>**  
23-*O*-Acetyl-3 $\beta$ ,12 $\beta$ ,23*S*,24*R*-tetrahydroxy-20*S*,25-epoxydammarane 3-*O*-[ $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 2)]- $\beta$ -*D*-glucopyranoside, 520  
Vina-ginsenoside R<sub>2</sub>, 22484
- C<sub>43</sub>H<sub>72</sub>O<sub>16</sub>**  
Cyclotricuspodoside A, 4539
- C<sub>43</sub>H<sub>72</sub>O<sub>17</sub>**  
Cyclotricuspodoside B, 4540  
Cyclotricuspodoside C, 4541
- C<sub>43</sub>H<sub>73</sub>NO<sub>13</sub>**  
Abutiloside K, 44
- C<sub>43</sub>H<sub>74</sub>O<sub>2</sub>**  
Ergosta-7,22-dien-3 $\beta$ -yl pentadecanoate, 7246
- C<sub>43</sub>H<sub>74</sub>O<sub>4</sub>**  
2-Tritriacontyl-5-hydroxy-7-methoxychromone, 22045
- C<sub>43</sub>H<sub>77</sub>NO<sub>4</sub>**  
3-*O*-14,15-Eicosylenoyl-4-*O*-stearoyl-1-cyano-2-oxymethyl-1,2-propene, 6728
- C<sub>43</sub>H<sub>80</sub>O<sub>10</sub>**  
Arisaema glyceride 3, 1690
- C<sub>43</sub>H<sub>87</sub>NO<sub>5</sub>**  
Soyasphingosine A, 20130  
Sponge sphingolipid, 20224
- C<sub>44</sub>H<sub>26</sub>O<sub>12</sub>**  
Bisodiospyrin, 2478
- C<sub>44</sub>H<sub>26</sub>O<sub>14</sub>**  
6',8'-Bisdiosquinone, 2447
- C<sub>44</sub>H<sub>32</sub>O<sub>27</sub>**  
Phyllanthusiin D, 17220
- C<sub>44</sub>H<sub>34</sub>O<sub>20</sub>**  
Procyanidin B<sub>2</sub> 3,3'-di-*O*-gallate, 17896
- C<sub>44</sub>H<sub>34</sub>O<sub>22</sub>**  
Prodelphinidin B 23,3'-di-*O*-gallate, 17900  
Theasinensin A, 21290
- C<sub>44</sub>H<sub>44</sub>O<sub>24</sub>**  
Precarthamin, 17771
- C<sub>44</sub>H<sub>46</sub>O<sub>18</sub>**  
6-*O*- $\alpha$ -*L*-(2"-*O*-,3"-*O*-Dibenzoyl,4"-*O*-*cis*-*p*-coumaroyl)rhamnopyranosylcatalpol, 5381  
6-*O*- $\alpha$ -*L*-(2"-*O*-,3"-*O*-Dibenzoyl,4"-*O*-*trans*-*p*-coumaroyl)rhamnopyranosylcatalpol, 5382
- C<sub>44</sub>H<sub>48</sub>O<sub>15</sub>**  
Taxacin, 20738
- C<sub>44</sub>H<sub>48</sub>O<sub>21</sub>**  
Shigansu C, 19799
- C<sub>44</sub>H<sub>50</sub>N<sub>8</sub>**  
Psycholeine, 18093  
Quadrigemine A, 18295  
Quadrigemine B, 18296
- C<sub>44</sub>H<sub>50</sub>O<sub>14</sub>**  
Taxchinin B, 20771
- C<sub>44</sub>H<sub>50</sub>O<sub>25</sub>**  
Kaempferol-3- $\beta$ -*D*-glucopyranosyl-7-*O*-[(2-*O*-*trans*-sinnapoyl)- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 6)]- $\beta$ -*D*-glucopyranoside, 12059  
Kaempferol-4'-(6-*O*-*E*-sinapoyl)- $\beta$ -glucopyranoside)-3,7-di-*O*- $\beta$ -glucopyranoside, 12092  
Kaempferol-3-(2"-*O*-*E*-sinapoylsophoroside)-7-*O*- $\beta$ -glucopyranoside, 12094  
Kaempferol-3-*O*-sophoroside-7-*O*-(2-*O*-*E*-sinapoyl)- $\beta$ -glucopyranoside), 12096
- C<sub>44</sub>H<sub>50</sub>O<sub>26</sub>**  
Quercetin-3'-(6-sinapoyl)-*O*- $\beta$ -*D*-glucopyranosyl)-3,4'-di-*O*- $\beta$ -*D*-glucopyranoside, 18394
- C<sub>44</sub>H<sub>52</sub>N<sub>4</sub>O<sub>7</sub>**  
Conodiparine C, 3994
- C<sub>44</sub>H<sub>52</sub>N<sub>2</sub>O<sub>10</sub>**  
Isopyruthaldine, 11640
- C<sub>44</sub>H<sub>52</sub>N<sub>4</sub>O<sub>7</sub>**  
Conodiparine D, 3995
- C<sub>44</sub>H<sub>53</sub>NO<sub>13</sub>**  
10-Deacetyl-10-oxo-7-epitaxuyunnanin A, 4766
- C<sub>44</sub>H<sub>53</sub>NO<sub>14</sub>**  
Taxol D, 20814
- C<sub>44</sub>H<sub>54</sub>N<sub>4</sub>O<sub>7</sub>**  
Conodiparine A, 3992  
Conodiparine B, 3993
- C<sub>44</sub>H<sub>54</sub>O<sub>8</sub>**  
Jatropha factor C<sub>1</sub>, 11836

- Jatropha factor C<sub>2</sub>, 11837  
 Jatropha factor C<sub>3</sub>, 11838  
 Jatropha factor C<sub>4</sub>, 11839  
 Jatropha factor C<sub>5</sub>, 11840  
 Jatropha factor C<sub>6</sub>, 11841
- C<sub>44</sub>H<sub>55</sub>NO<sub>11</sub>**  
 10β-Benzoyloxy-5α-(3'-dimethylamino-3'-phenyl)propanoxy-1β-hydroxy-7β,9α,13α-triacetoxy-11(15→1)-abeo-taxa-4(20),11-dien, 2256
- C<sub>44</sub>H<sub>55</sub>NO<sub>13</sub>**  
 10-Deacetylaxuyunnanine A, 4787  
 7-Epi-10-deacetylaxuyunnanine A, 6884
- C<sub>44</sub>H<sub>56</sub>N<sub>4</sub>O<sub>7</sub>**  
 Deacetoxyvinblastine, 4709
- C<sub>44</sub>H<sub>56</sub>N<sub>4</sub>O<sub>8</sub>**  
 Pseudovincal leukoblastine diol, 18073
- C<sub>44</sub>H<sub>56</sub>O<sub>22</sub>**  
 Epimedokoreanoside I, 6962
- C<sub>44</sub>H<sub>56</sub>O<sub>23</sub>**  
 Insularoside 6'''-O-β-glucosi-(3'→1)-β-D-glucoside, 11090
- C<sub>44</sub>H<sub>57</sub>NO<sub>4</sub>**  
 3-O-*p*-Aminobenzoyl-29-O-benzoylmultiflora-7,9(11)-diene-3α,29-diol, 1043
- C<sub>44</sub>H<sub>58</sub>O<sub>13</sub>**  
 Rediocide A, 18563
- C<sub>44</sub>H<sub>58</sub>O<sub>21</sub>**  
 Hedysalignan A, 9285
- C<sub>44</sub>H<sub>59</sub>Br<sub>2</sub>N<sub>3</sub>O<sub>4</sub>**  
 Di-*p*-bromobenzoate of tetrahydrodeoxyoxolucidine B, 5398
- C<sub>44</sub>H<sub>59</sub>NO<sub>5</sub>**  
 3-O-*p*-Aminobenzoyl-29-O-benzoylmultiflora-8-ene-3α,7β,29-triol, 1044
- C<sub>44</sub>H<sub>60</sub>O<sub>24</sub>**  
 Gymnoside VIII, 9111
- C<sub>44</sub>H<sub>62</sub>O<sub>18</sub>**  
 Hancoside A, 9217
- C<sub>44</sub>H<sub>64</sub>N<sub>2</sub>O<sub>3</sub>**  
 Pukeensine, 18189
- C<sub>44</sub>H<sub>64</sub>O<sub>10</sub>**  
 Isodopharicin E, 11398
- C<sub>44</sub>H<sub>64</sub>O<sub>17</sub>**  
 Draconin A, 6576
- C<sub>44</sub>H<sub>64</sub>O<sub>24</sub>**  
 Crocin, 4249
- C<sub>44</sub>H<sub>66</sub>O<sub>8</sub>**  
 (1*E*,24*Z*)-1,-24-Diferuloyloxytetracosane, 5506  
 1,24-Tetracosanediol diferulate, 21037
- C<sub>44</sub>H<sub>66</sub>O<sub>19</sub>**  
 Funingenoside A, 8005
- C<sub>44</sub>H<sub>68</sub>O<sub>6</sub>**  
 Fritillebinide D, 7968  
 Fritillebinide E, 7969
- C<sub>44</sub>H<sub>68</sub>O<sub>7</sub>**  
 Fritillebin B, 7962
- C<sub>44</sub>H<sub>68</sub>O<sub>16</sub>**  
 Neoruscogenin 1-*O*-{*O*-α-*L*-rhamnopyranosyl-(1→2)-*O*-[β-*D*-xylopyranosyl-(1→3)]-β-*D*-fucopyranoside}, 15456
- C<sub>44</sub>H<sub>68</sub>O<sub>19</sub>**  
 Funingenoside B, 8006
- C<sub>44</sub>H<sub>70</sub>O<sub>14</sub>**  
 3''-*O*-Acetylsaikosaponin A, 498  
 2''-*O*-Acetylsaikosaponin D, 500  
 3''-*O*-Acetylsaikosaponin D, 501  
 4''-*O*-Acetylsaikosaponin D, 502  
 6''-*O*-Acetylsaikosaponin D, 503  
 1α,3β-Hydroxyimberbic acid-23-*O*-α-[*L*-4-acetyl-rhamnopyranosyl]-29-*O*-α-rhamnopyranoside, 10227
- C<sub>44</sub>H<sub>70</sub>O<sub>16</sub>**  
 Diosgenin-3-*O*-α-*L*-rhamnopyranosyl-(1→2)[α-*L*-arabinofuranosyl-(1→4)]-β-*D*-glucopyranoside, 6446  
 Lililancifoloside A, 12833  
 Ophiopogonin D, 16146  
 Ophiopogonin D', 16147  
 Pariphyllin, 16668  
 Polyphyllin D, 17655  
 Rivaloside C, 18850  
 25(*S*)-Ruscogenin 1-*O*-[α-*L*-rhamnopyranosyl-(1→2)][β-*D*-xylopyranosyl-(1→3)]-β-*D*-fucopyranoside, 19072
- C<sub>44</sub>H<sub>70</sub>O<sub>17</sub>**  
 Caudaside A, 3328  
 Pennogenin-3-*O*-α-*L*-arabinofuranosyl(1→4)-[α-*L*-rhamnopyranosyl(1→2)]-β-*D*-glucopyranoside, 16811
- C<sub>44</sub>H<sub>70</sub>O<sub>18</sub>**  
 CTHD0233276-4, 4299  
 Ophiopogon A, 16135
- C<sub>44</sub>H<sub>70</sub>O<sub>19</sub>**  
 Chinenoside VI, 3528
- C<sub>44</sub>H<sub>70</sub>O<sub>21</sub>**  
 3-*O*-β-Lycotetraosyl 3β-hydroxy-5α-pregn-16-en-20-one, 13242
- C<sub>44</sub>H<sub>72</sub>O<sub>13</sub>**  
 3-*O*-[β-*D*-Galactopyranosyl-(1→2)-β-*D*-glucuronopyranosyl]-sophoradiol ethyl ester, 8062
- C<sub>44</sub>H<sub>72</sub>O<sub>15</sub>**  
 6''-*O*-Acetylsaikosaponin B<sub>3</sub>, 499  
 Kahiricoside V, 12110
- C<sub>44</sub>H<sub>72</sub>O<sub>16</sub>**  
 Asparanin B<sub>2</sub>, 1870  
 Convallasaponin C, 4010
- C<sub>44</sub>H<sub>72</sub>O<sub>17</sub>**  
 AS-1 A, 1830  
 3-*O*-[β-*D*-Xylopyranosyl(1→4)-β-*D*-glucopyranosyl(1→2)-β-*D*-glucopyranosyl]-(2*S*)-5β-spirostan-3β-ol, 22828
- C<sub>44</sub>H<sub>72</sub>O<sub>18</sub>**  
 Trigoneoside VIII, 21673
- C<sub>44</sub>H<sub>74</sub>O<sub>15</sub>**  
 Vina-ginsenoside R<sub>1</sub>, 22483  
 Yesanchinoside D, 22896
- C<sub>44</sub>H<sub>74</sub>O<sub>16</sub>**  
 Yesanchinoside A, 22893
- C<sub>44</sub>H<sub>74</sub>O<sub>18</sub>**  
 26-*O*-β-*D*-Glucopyranosylfurostane-3β,26-diol-3-*O*-β-*D*-xylopyranosyl(1→4)-β-*D*-glucopyranoside, 8632  
 Trigoneoside IIa, 21667  
 Trigoneoside IIb, 21668
- C<sub>44</sub>H<sub>74</sub>O<sub>19</sub>**  
 Trigoneoside Ia, 21665  
 Trigoneoside Ib, 21666  
 Trigoneoside XIb, 21676
- C<sub>44</sub>H<sub>74</sub>O<sub>24</sub>**  
 Mukurozioside I<sub>b</sub>, 15030
- C<sub>44</sub>H<sub>75</sub>NO<sub>13</sub>**  
 Abutiloside I, 42
- C<sub>44</sub>H<sub>76</sub>O<sub>2</sub>**  
 α-Amyrin myristate, 1119  
 β-Amyrin myristate, 1120
- C<sub>44</sub>H<sub>76</sub>O<sub>3</sub>**  
 Arnidiol 3-*O*-myristate, 1751  
 16β-Hydroxylupeol 3-*O*-myristate, 10347  
 Maniladiol 3-*O*-myristate, 13498
- C<sub>44</sub>H<sub>76</sub>O<sub>18</sub>**  
 Pentandroside E, 16881
- C<sub>44</sub>H<sub>76</sub>O<sub>24</sub>**  
 Mukurozioside I<sub>a</sub>, 15029
- C<sub>44</sub>H<sub>78</sub>O<sub>2</sub>**  
 Campesteryl palmitate, 3044
- C<sub>44</sub>H<sub>78</sub>O<sub>5</sub>**  
 34-Hydroxytetracontanylferulate, 10760
- C<sub>44</sub>H<sub>78</sub>O<sub>26</sub>**  
 Pharbitic acid C, 17043
- C<sub>44</sub>H<sub>83</sub>NO<sub>9</sub>**  
 Cerebroside 1, 3419  
 1-*O*-(β-*D*-Glucopyranosyl)-(2*S*,3*R*,4*E*,8*E*)-2-[(2*R*)-2'-hydroxynonadecanoylamino]-9-methyl-4,8-octadecadiene-1,3-diol, 8674
- C<sub>44</sub>H<sub>87</sub>NO<sub>4</sub>**  
 Spongiamine B, 20227
- C<sub>44</sub>H<sub>88</sub>O<sub>2</sub>**

- Hexacosyl stearate, 9484
- C<sub>45</sub>H<sub>22</sub>O<sub>19</sub>**  
Pratioside A, 17768
- C<sub>45</sub>H<sub>34</sub>O<sub>18</sub>**  
Epicatechin-(2 $\beta$ →O→7,4 $\beta$ →6)-epicatechin-(2 $\beta$ →O→7,4 $\beta$ →8)-epicatechin, 6862
- C<sub>45</sub>H<sub>36</sub>O<sub>18</sub>**  
Aesculitannin B, 666  
Cinnamtannin B<sub>1</sub>, 3725  
Epicatechin-(2 $\beta$ →O→7,4 $\beta$ →6)-[epicatechin-(4 $\beta$ →8)]-catechin, 6860
- C<sub>45</sub>H<sub>36</sub>O<sub>22</sub>**  
Oolonghomobisflavan A, 16124  
Oolonghomobisflavan B, 16125
- C<sub>45</sub>H<sub>38</sub>O<sub>13</sub>**  
Caloflavan A, 2986  
Caloflavan B, 2987
- C<sub>45</sub>H<sub>38</sub>O<sub>18</sub>**  
Arecatannin A<sub>1</sub>, 1655  
Procyanidin C<sub>1</sub>, 17893  
Robinetinidol-(4 $\alpha$ →8)-catechin-(6→4 $\alpha$ )-robinetinidol, 18858
- C<sub>45</sub>H<sub>42</sub>O<sub>10</sub>**  
Licoagrone, 12757
- C<sub>45</sub>H<sub>44</sub>O<sub>9</sub>**  
Licoagrodin, 12755
- C<sub>45</sub>H<sub>44</sub>O<sub>11</sub>**  
Kuwanon H, 12386  
Moracenin C, 14951
- C<sub>45</sub>H<sub>44</sub>O<sub>12</sub>**  
Sanggenon E, 19260  
Sanggenon P, 19271
- C<sub>45</sub>H<sub>44</sub>O<sub>16</sub>**  
Epioritin-(4 $\beta$ →6)-epioritin-(4 $\beta$ →6)-epioritin-4 $\alpha$ -ol, 6982  
Epioritin-(4 $\beta$ →6)-oritin-(4 $\alpha$ →6)-epioritin-4 $\alpha$ -ol, 6986  
Oritin-(4 $\beta$ →6)-oritin-(4 $\alpha$ →6)-epioritin-4 $\alpha$ -ol, 16197
- C<sub>45</sub>H<sub>46</sub>O<sub>11</sub>**  
Sanggenol M, 19254
- C<sub>45</sub>H<sub>47</sub>NO<sub>13</sub>**  
10-Deacetyl-10-oxo-7-epitaxol, 4765
- C<sub>45</sub>H<sub>48</sub>N<sub>2</sub>O<sub>19</sub>**  
Hyponine E, 10907
- C<sub>45</sub>H<sub>48</sub>O<sub>13</sub>**  
7-Deacetyl-7-benzoyltaxchinin I, 4733  
7-Deacetyltaxayuntin D, 4779
- C<sub>45</sub>H<sub>48</sub>O<sub>21</sub>**  
Smiglaside E, 20024
- C<sub>45</sub>H<sub>49</sub>NO<sub>13</sub>**  
10-Deacetyltaxol, 4783
- C<sub>45</sub>H<sub>49</sub>N<sub>3</sub>O<sub>10</sub>**  
Milliamine A, 14859
- C<sub>45</sub>H<sub>50</sub>O<sub>19</sub>**  
Mangicrocin, 13480
- C<sub>45</sub>H<sub>51</sub>NO<sub>20</sub>**  
Wilformine A, 22686
- C<sub>45</sub>H<sub>52</sub>N<sub>2</sub>O<sub>10</sub>**  
Thalmineline, 21265
- C<sub>45</sub>H<sub>52</sub>O<sub>13</sub>**  
Rediocide F, 18566
- C<sub>45</sub>H<sub>52</sub>O<sub>23</sub>**  
1,2,2'-Tri-*O-E*-sinapoyl- $\beta$ -gentiobiose, 22036  
1,2,6'-Tri-*O-E*-sinapoyl- $\beta$ -gentiobiose, 22037
- C<sub>45</sub>H<sub>52</sub>O<sub>24</sub>**  
4',5-Dihydroxy-7-methoxyflavonol 3-*O*-[6-*O*-(*E*)-3,5-dimethoxy-4-hydroxycinnamoyl- $\beta$ -*D*-glucopyranosyl]-(1→2)-*O*-[ $\alpha$ -*L*-rhamnopyranosyl-(1→6)]- $\beta$ -*D*-glucopyranoside, 5982
- C<sub>45</sub>H<sub>53</sub>NO<sub>14</sub>**  
Cephalomannine, 3402  
2-Debenzoyl-2-tigloyltaxol, 4813  
7-Epicephalomannine, 6868  
Taxol B, 20812
- C<sub>45</sub>H<sub>55</sub>NO<sub>14</sub>**  
*N*-Debenzoyl-*N*-(2-methylbutyryl)taxol, 4807  
Taxoline, 20815
- C<sub>45</sub>H<sub>56</sub>N<sub>8</sub>O<sub>8</sub>**  
Microtoenin B, 14848
- C<sub>45</sub>H<sub>56</sub>O<sub>23</sub>**  
Chaohuoside A, 3480
- C<sub>45</sub>H<sub>56</sub>O<sub>25</sub>**  
Tris-[4-( $\beta$ -*D*-glucopyranosyloxy)benzyl]citrate, 22034
- C<sub>45</sub>H<sub>57</sub>N<sub>3</sub>O<sub>9</sub>**  
Beauvericin, 2188
- C<sub>45</sub>H<sub>60</sub>O<sub>23</sub>**  
Syringylglycerol- $\beta$ -syringaresinol ether-4",4'''-di-*O*- $\beta$ -*D*-glucopyranoside, 20573
- C<sub>45</sub>H<sub>62</sub>N<sub>8</sub>O<sub>9</sub>**  
Psammosilenin B, 18015
- C<sub>45</sub>H<sub>62</sub>O<sub>4</sub>**  
6-Geranylgeranyl 6'-methyl-(9*E*)-6,6'-diapocarten-6,6'-dioate, 8318  
6-Geranylgeranyl 6'-methyl-(9*Z*)-6,6'-diapocarten-6,6'-dioate, 8319
- C<sub>45</sub>H<sub>62</sub>O<sub>16</sub>**  
Vernoguinoside, 22409
- C<sub>45</sub>H<sub>68</sub>O<sub>18</sub>**  
Fargoside C, 7725
- C<sub>45</sub>H<sub>69</sub>N<sub>9</sub>O<sub>10</sub>S<sub>2</sub>**  
Cherimolacyclopeptide F, 3515
- C<sub>45</sub>H<sub>69</sub>O<sub>13</sub>**  
(22*S*)-Cholest-5-ene-3 $\beta$ ,11 $\alpha$ ,16 $\beta$ ,22-tetrol 16-*O*-{2-*O*-acetyl-3-*O*-(3,4,5-trimethoxybenzoyl)- $\alpha$ -*L*-rhamnopyranoside}, 3581
- C<sub>45</sub>H<sub>70</sub>O<sub>14</sub>**  
Cynatoside B, 4568
- C<sub>45</sub>H<sub>70</sub>O<sub>16</sub>**  
Malonylsaikosaponin A, 13448  
Malonylsaikosaponin D, 13449
- C<sub>45</sub>H<sub>70</sub>O<sub>17</sub>**  
Brownioside, 2658
- C<sub>45</sub>H<sub>70</sub>O<sub>18</sub>**  
Saundersioside C, 19408
- C<sub>45</sub>H<sub>70</sub>O<sub>19</sub>**  
1 $\beta$ ,2 $\alpha$ -Dihydroxyspirosta-5,25(27)-dien-3 $\beta$ -yl *O*- $\alpha$ -*L*-rhamnopyranosyl-(1→2)-*O*-[ $\beta$ -*D*-glucopyranosyl-(1→4)]- $\beta$ -*D*-galactopyranoside, 6125  
Polygonatoside A, 17643  
Pregna-5,16-dien-3 $\beta$ -ol-20-one-3 $\beta$ -*O*- $\alpha$ -*L*-rhamnopyranosyl (1→2)-[ $\alpha$ -*L*-rhamnopyranosyl (1→4)- $\alpha$ -*L*-rhamnopyranosyl (1→4)]- $\beta$ -*D*-glucopyranoside-, 17783
- C<sub>45</sub>H<sub>70</sub>O<sub>20</sub>**  
Polygonatoside B, 17644  
3 $\beta$ -[(*O*- $\alpha$ -*L*-Rhamnopyranosyl-(1→2)-*O*-[*O*- $\beta$ -*D*-glucopyranosyl-(1→4)- $\alpha$ -*L*-rhamnopyranosyl-(1→3)]- $\beta$ -*D*-glucopyranosyl)oxy]pregna-5,16-dien-20-one, 18719  
Spongipregnoside C, 20232
- C<sub>45</sub>H<sub>72</sub>O<sub>16</sub>**  
Astragaloside I, 1936  
Collettiside III, 3925  
Desglucumosenin, 5251  
Dioscin, 6437  
Isoastragaloside I, 11242  
Protohypoglucine A, 17977
- C<sub>45</sub>H<sub>72</sub>O<sub>17</sub>**  
3-*O*-[Bis- $\alpha$ -*L*-rhamnopyranosyl-(1→2 and 1→4)- $\beta$ -*D*-glucopyranosyl]-22*R*,25*R*-spirost-5-ene-3 $\beta$ ,20 $\alpha$ -diol, 2493
- C<sub>45</sub>H<sub>72</sub>O<sub>17</sub>**  
Collettiside IV, 3924  
Deltonin, 5040  
Gracillin, 8968  
Graecunin G, 8970  
(24*S*,25*R*)-24-Hydroxyspirost-5-en-3 $\beta$ -yl *O*- $\alpha$ -*L*-rhamnopyranosyl-(1→2)-*O*-[ $\alpha$ -*L*-rhamnopyranosyl-(1→3)]- $\beta$ -*D*-glucopyranoside, 10726  
Isonarthogenin-3-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1→2)-*O*-[ $\alpha$ -*L*-rhamnopyranosyl-(1→4)]- $\beta$ -*D*-glucopyranoside, 11556  
Mubenoside A, 15006  
Pennogenin-3-*O*- $\alpha$ -*L*-rhamnopyranosyl(1→2)-[ $\alpha$ -*L*-rhamnopyranosyl(1→4)]- $\beta$ -*D*-glucopyranoside , 16814

- Polypodoside A, 17663  
 3-*O*-[ $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl]-26-*O*-( $\beta$ -*D*-glucopyranosyl)-(25*R*)-furosta-5,20-dien-3 $\beta$ , 26-diol, 18711  
 (25*S*)-Spirost-5-en-3 $\beta$ -yl *O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranoside, 20221  
 (25*R*)-Spirost-5-en-3 $\beta$ -yl-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)-*O*-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)]- $\beta$ -*D*-glucopyranoside, 20222  
 Trigonella-glucoside A, 21661  
 Zingiberoside A<sub>3</sub>, 23005
- C<sub>45</sub>H<sub>72</sub>O<sub>18</sub>**  
 CTHD0233276-9, 4300  
 26-*O*- $\beta$ -*D*-Glucopyranosyl-3 $\beta$ ,26-dihydroxy- $\Delta^5$ -choleslen-16,22-dioxo-3-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranoside, 8610  
 3 $\beta$ -[( $\beta$ -*D*-Glucopyranosyl)oxy]-17 $\alpha$ -hydroxy-16 $\beta$ -[(*O*- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 2)-2-*O*-acetyl- $\alpha$ -*L*-arabinopyranosyl)oxy]cholest-5-en-22-one, 8699  
 (23*S*,25*R*)-23-Hydroxyspirost-5-en-3 $\beta$ -yl-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)-*O*-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)]- $\beta$ -*D*-glucopyranoside, 10723  
 (25*S*)-27-Hydroxyspirost-5-en-3 $\beta$ -yl-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)-*O*-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)]- $\beta$ -*D*-glucopyranoside, 10724  
 Polygonatoside D, 17646  
 Trilloside B, 21876
- C<sub>45</sub>H<sub>72</sub>O<sub>19</sub>**  
*Agave cantala* Substance 1, 724  
 CTHD0233276-15, 4296  
 26-*O*- $\beta$ -*D*-Glucopyranosyl(25*R,S*)-5 $\alpha$ -furostane-12-one-20(22)-en-3 $\beta$ ,26-diol-3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-galactopyranoside, 8634  
 Hecogenin 3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-galactopyranoside, 9254  
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 Terreside A, 21000  
 Terrestrosin C, 21015  
 Terrestrosin E, 21017
- C<sub>45</sub>H<sub>73</sub>NO<sub>15</sub>**  
 Solamargine, 20044  
 $\beta$ -Solamarine, 20047  
 Solanidine-3-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranoside, 20057  
 Solanidine 3-*O*- $\alpha$ -*L*-rhamnopyranosyl (1 $\rightarrow$ 2)-[ $\beta$ -*D*-glucopyranosyl (1 $\rightarrow$ 4)]- $\beta$ -*D*-glucopyranoside, 20059  
 Solanine, 20060
- C<sub>45</sub>H<sub>73</sub>NO<sub>16</sub>**  
 $\alpha$ -Solamarine, 20046  
 Solasodine 3-*O*- $\alpha$ -*L*-rhamnopyranosyl (1 $\rightarrow$ 2)-*O*-[ $\beta$ -*D*-glucopyranosyl (1 $\rightarrow$ 4)]- $\beta$ -*D*-glucopyranoside, 20067  
 Solasonine, 20069
- C<sub>45</sub>H<sub>73</sub>NO<sub>17</sub>**  
 (25 $\zeta$ )-Solanid-5-en-3 $\beta$ ,23 $\beta$ -dihydroxy 3-*O*- $\beta$ -*D*-glucopyranosyl (1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl (1 $\rightarrow$ 4)- $\beta$ -*D*-galactopyranoside, 20054
- C<sub>45</sub>H<sub>74</sub>O**  
 Mallopreol, 13426
- C<sub>45</sub>H<sub>74</sub>O<sub>5</sub>**  
 Plastoquinone C<sub>4</sub>, 17519
- C<sub>45</sub>H<sub>74</sub>O<sub>10</sub>**  
 (2*S*)-1,2-Di-*O*-[(9*Z*,12*Z*,15*Z*)-octadeca-9,12,15-trienyl]-3-*O*- $\beta$ -*D*-galactopyranosyl glycerol, 6428  
 Monogalactosyldiglyceride, 14924
- C<sub>45</sub>H<sub>74</sub>O<sub>17</sub>**  
 AS-1 B, 1831  
 Asparanin B<sub>1</sub>, 1869  
 Asparanin B<sub>7</sub>, 1875  
 3-*O*-[Bis- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2 and 1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl]-25*R*-furost-5-ene-3 $\beta$ ,22 $\alpha$ ,26-triol, 2492  
 Fenbaqia saponin, 7748  
 Gurillin H, 9087  
 Neotigogenin-3-*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 4)-*O*-[ $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 6)]- $\beta$ -*D*-galactopyranoside, 15465  
 Osladin, 16251  
 Sarsasapogenin 3-*O*-4<sup>G</sup>-rhamnosyl-sophoroside, 19391  
 Terrestrosin B, 21014  
 Tubeimoside D, 22075
- C<sub>45</sub>H<sub>74</sub>O<sub>18</sub>**  
 Anemarsaponin B, 1173  
 Anemarsaponin C, 1174  
 CTHD0233276-21, 4298  
 Macrostemonoside F, 13331  
 Neotigogenin-3-*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 4)- $\beta$ -*D*-galactopyranoside, 15464  
 Terrestrosin A, 21013  
 Tigogenin-3-*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 4)- $\beta$ -*D*-galactopyranoside, 21384  
 Torvoside H, 21470  
 Trigofenoside A, 21645  
 Trigoneoside XIIa, 21677
- Trigoneoside XIIb, 21678  
 Tubeimoside E, 22076  
 Tuberoside A, 22079  
 Xilingsaponin B, 22796
- C<sub>45</sub>H<sub>74</sub>O<sub>19</sub>**  
 Macrostemonoside L, 13334  
 (25*R,S*)-5 $\alpha$ -Spirostane-2 $\alpha$ ,3 $\beta$ -diol 3-*O*-[*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-galactopyranoside], 20212
- C<sub>45</sub>H<sub>74</sub>O<sub>20</sub>**  
 26-*O*- $\beta$ -*D*-Glucopyranosyl(25*R*)-5 $\alpha$ -furostane-12-one-3 $\beta$ ,22 $\alpha$ ,26-triol-3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-galactopyranoside, 8633  
 Macrostemonoside G, 13332  
 Proampeloside Bf<sub>1</sub>, 17864
- C<sub>45</sub>H<sub>75</sub>NO<sub>9</sub>**  
 1,2-Di-*O*-(9*Z*,12*Z*,15*Z*-octadecatrienyl)-3-*O*-(6-amino-6-deoxy- $\alpha$ -*D*-glucosyl)-glycerol, 6427
- C<sub>45</sub>H<sub>75</sub>NO<sub>17</sub>**  
 (25 $\zeta$ )-Solanidan-3 $\beta$ ,23 $\beta$ -dihydroxy 3-*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl (1 $\rightarrow$ 4)- $\beta$ -*D*-galactopyranoside, 20052
- C<sub>45</sub>H<sub>76</sub>O<sub>5</sub>**  
 Plastoquinone C<sub>3</sub>, 17518
- C<sub>45</sub>H<sub>76</sub>O<sub>13</sub>**  
 Dregeoside B, 6599
- C<sub>45</sub>H<sub>76</sub>O<sub>16</sub>**  
 Lotoideside C, 13006
- C<sub>45</sub>H<sub>76</sub>O<sub>17</sub>**  
 Oleifolioside A, 16067
- C<sub>45</sub>H<sub>76</sub>O<sub>18</sub>**  
 Abutiloside F, 40  
 Asp-IV, 1905  
 Asp-V, 1906  
 Trigoneoside IIIa, 21669  
 Trigoneoside IIIb, 21670
- C<sub>45</sub>H<sub>76</sub>O<sub>19</sub>**  
 (25*R*)-26-*O*- $\beta$ -*D*-Glucopyranosyl-22-hydroxy-5 $\beta$ -furostane-3 $\beta$ ,26-diol 3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)-*O*- $\beta$ -*D*-galactopyranoside, 8669  
 (25*S*)-26-*O*- $\beta$ -*D*-Glucopyranosyl-22-hydroxy-5 $\beta$ -furostane-3 $\beta$ ,26-diol 3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)-*O*- $\beta$ -*D*-galactopyranoside, 8670  
 Trigofenoside B, 21647  
 Trigoneoside Xa, 21674  
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- C<sub>45</sub>H<sub>76</sub>O<sub>20</sub>**  
 26-*O*- $\beta$ -*D*-Glucopyranosyl-(25*S*)-3 $\beta$ ,5 $\beta$ ,6 $\alpha$ ,22 $\zeta$ ,26-pentahydroxyl-5 $\beta$ -furostane 3-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranoside, 8710  
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- 3-*O*- $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl 3 $\beta$ ,5 $\beta$ ,6 $\alpha$ ,16 $\beta$ -tetrahydroxypregnane 16-(5-*O*- $\beta$ -*D*-glucopyranosyl-4(*S*)-methyl-5-hydroxypentanoic acid) ester, 18720
- C<sub>45</sub>H<sub>78</sub>O<sub>2</sub>**  
24-Ethylcholesta-5,22-dien-3 $\beta$ -ol palmitic acid ester, 7426
- C<sub>45</sub>H<sub>80</sub>O<sub>2</sub>**  
 $\beta$ -Sitosteryl palmitate, 19998
- C<sub>45</sub>H<sub>82</sub>O<sub>23</sub>**  
1-*O*-[[ $\alpha$ -*L*-Arabinopyranosyl-(1 $\rightarrow$ 3)]- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl] hexadecanol, 1592
- C<sub>45</sub>H<sub>85</sub>O<sub>12</sub>S<sup>-</sup>**  
(2*S*)-1,2-Distearoyl-3-*O*-(6-sulpho- $\alpha$ -*D*-quinoxypyransyl)-glycerol, 6519
- C<sub>45</sub>H<sub>86</sub>O<sub>6</sub>**  
Trimyrustin, 21980
- C<sub>45</sub>H<sub>91</sub>NO<sub>5</sub>**  
Sphingolipid Lipids01-175, 20153
- C<sub>46</sub>H<sub>36</sub>O<sub>31</sub>**  
Putranjivain A, 18228
- C<sub>46</sub>H<sub>44</sub>O<sub>13</sub>**  
Lactucain C, 12443
- C<sub>46</sub>H<sub>48</sub>N<sub>2</sub>O<sub>4</sub>**  
Bisisomahanine, 2479
- C<sub>46</sub>H<sub>48</sub>N<sub>2</sub>O<sub>8</sub>**  
Michellamine B, 14831
- C<sub>46</sub>H<sub>50</sub>N<sub>4</sub>O<sub>8</sub>**  
N1,N5,N10,N14-Tetrakis[3-(4-hydroxyphenyl)-2-propenoyl]-1,5,10,14-tetraazatetradecane, 21176
- C<sub>46</sub>H<sub>50</sub>O<sub>22</sub>**  
Smiglaside B, 20021
- C<sub>46</sub>H<sub>54</sub>N<sub>4</sub>O<sub>10</sub>**  
Catharine, 3322
- C<sub>46</sub>H<sub>54</sub>O<sub>13</sub>**  
Rediocide C, 18564  
Rediocide G, 18567
- C<sub>46</sub>H<sub>55</sub>NO<sub>15</sub>**  
5 $\alpha$ -*O*-(3'-Dimethylamino-3'-phenylpropionyl) taxinine M, 6315
- C<sub>46</sub>H<sub>56</sub>N<sub>4</sub>O<sub>9</sub>**  
Catharanthamine, 3320  
Leurosine, 12734  
Vincathicine, 22491
- C<sub>46</sub>H<sub>56</sub>N<sub>4</sub>O<sub>10</sub>**  
Vinamidine, 22486  
Vincristine, 22497
- C<sub>46</sub>H<sub>57</sub>NO<sub>14</sub>**  
7-Epitaxuyunnanine A, 7028  
Taxol C, 20813
- Taxuspine N, 20861
- C<sub>46</sub>H<sub>58</sub>N<sub>4</sub>O<sub>8</sub>**  
Isoleurosine, 11489
- C<sub>46</sub>H<sub>58</sub>N<sub>4</sub>O<sub>9</sub>**  
Leurosidine, 12733  
Vinblastine, 22487
- C<sub>46</sub>H<sub>58</sub>N<sub>4</sub>O<sub>10</sub>**  
Leurocolumbine, 12732  
Vincadioline, 22488
- C<sub>46</sub>H<sub>58</sub>N<sub>6</sub>O<sub>14</sub>**  
Rubia akane RA-XII, 18990
- C<sub>46</sub>H<sub>58</sub>O<sub>25</sub>**  
Isooleoacteoside, 11575
- C<sub>46</sub>H<sub>64</sub>O<sub>15</sub>**  
Saundersioside E, 19410
- C<sub>46</sub>H<sub>64</sub>O<sub>26</sub>**  
Tangshenoside IV, 20675
- C<sub>46</sub>H<sub>65</sub>N<sub>15</sub>O<sub>12</sub>S<sub>2</sub>**  
Vasopressin, 22353
- C<sub>46</sub>H<sub>66</sub>O<sub>15</sub>**  
Saundersioside G, 19412
- C<sub>46</sub>H<sub>68</sub>O<sub>4</sub>**  
Formosadimer B, 7887
- C<sub>46</sub>H<sub>69</sub>NO<sub>11</sub>**  
Saponaceol A, 19324
- C<sub>46</sub>H<sub>69</sub>NO<sub>12</sub>**  
Saponaceol B, 19325
- C<sub>46</sub>H<sub>70</sub>O<sub>17</sub>**  
Eupteleasaponin V, 7626
- C<sub>46</sub>H<sub>70</sub>O<sub>18</sub>**  
Cynascyroside E, 4567
- C<sub>46</sub>H<sub>70</sub>O<sub>19</sub>**  
Spinacoside C, 20165
- C<sub>46</sub>H<sub>72</sub>O<sub>15</sub>**  
3",6"-*O*,*O*-diacetylsaikosaponin b<sub>2</sub>, 5346  
1 $\alpha$ ,3 $\beta$ -Hydroxyimberbic acid-23- $\alpha$ -*L*-[3,4-diacetyl-rhamnopyranosyl]-29-*O*- $\alpha$ -rhamnopyranoside, 10228
- C<sub>46</sub>H<sub>72</sub>O<sub>17</sub>**  
3-*O*- $\beta$ -*D*-Apiofuranosyl-(1 $\rightarrow$ 4)-[ $\alpha$ -*L*-arabinopyranosyl-(1 $\rightarrow$ 2)]  $\beta$ -*D*-glucuronopyranosyl oleanolic acid, 1503  
2 $\alpha$ ,3 $\beta$ -Dihydroxyurs-12,20(30)-dien-28-oic acid 3-*O*-{*O*- $\alpha$ -*L*-arabinopyranosyl-(1 $\rightarrow$ 2)-*O*-[ $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 3)] $\beta$ -*D*-glucopyranoside}, 6172  
Nudicaucin A, 15858  
Yemuoside YM<sub>11</sub>, 22890
- C<sub>46</sub>H<sub>72</sub>O<sub>19</sub>**  
Abutiloside O, 48
- C<sub>46</sub>H<sub>72</sub>O<sub>20</sub>**  
Withanoside VIII, 22711
- C<sub>46</sub>H<sub>73</sub>O<sub>20</sub>S<sup>-</sup>**  
3-*O*-[6-*O*-Sulfonyl- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)] [ $\alpha$ -*L*-arabinopyranosyl-(1 $\rightarrow$ 2)]- $\alpha$ -*L*-arabinopyranosyl-pseudojubilogenin, 20471
- C<sub>46</sub>H<sub>74</sub>O<sub>2</sub>**  
Stigmasteryl-3-*O*-scleropyrate, 20377
- C<sub>46</sub>H<sub>74</sub>O<sub>10</sub>**  
Longiside A, 12978
- C<sub>46</sub>H<sub>74</sub>O<sub>14</sub>**  
Taibaienoside IV, 20616
- C<sub>46</sub>H<sub>74</sub>O<sub>15</sub>**  
Huzhangoside A, 9692  
Oleanolic acid 3-*O*- $\beta$ -*D*-ribopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranoside, 16060  
Oleanolic acid 3-*O*- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranoside, 16063  
3 $\beta$ -[(*O*- $\beta$ -*D*-Ribopyranosyl-(1 $\rightarrow$ 3)-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl)oxy]olean-12-en-28-oic acid, 18835
- C<sub>46</sub>H<sub>74</sub>O<sub>16</sub>**  
Araloside D, 1611  
*Pometia ridleyi* saponin 6, 17692  
Prosapogenin CP<sub>5</sub>, 17945  
Prosapogenin CP<sub>6</sub>, 17946  
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- C<sub>46</sub>H<sub>74</sub>O<sub>17</sub>**  
Bacopasaponin C, 2082  
Brisbagenin 1-*O*-[*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)-*O*-[ $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 3)]-4-*O*-acetyl- $\alpha$ -*L*-arabinopyranoside], 2614  
3-*O*-[ $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 3)] [ $\alpha$ -*L*-arabinopyranosyl-(1 $\rightarrow$ 2)]- $\alpha$ -*L*-arabinopyranosyl-pseudojubilogenin, 8604  
Isolineolon 3-*O*- $\beta$ -*D*-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranoside, 11502  
Jujubogenin 3-*O*- $\alpha$ -*L*-arabinofuranosyl-(1 $\rightarrow$ 2)-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)]- $\alpha$ -*L*-arabinopyranoside, 11908  
Lineolon-3-*O*- $\beta$ -*D*-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranoside, 12885
- C<sub>46</sub>H<sub>74</sub>O<sub>18</sub>**  
Deacylmetaplexigenin 3-*O*- $\beta$ -*D*-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranoside, 4797  
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15- $\beta$ -Hydroxylineolon 3-*O*- $\beta$ -*D*-oleandropyra-

- nosyl-(1→4)- $\beta$ -*D*-digitoxopyranosyl-(1→4)- $\beta$ -*D*-digitoxopyranosyl-(1→4)- $\beta$ -*D*-digitoxopyranoside, 10332
- (25*R*,26*R*)-26-Methoxy Spirost-5-en-3 $\beta$ -yl-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1→2)-*O*-[ $\beta$ -*D*-glucopyranosyl-(1→6)]-*D*-glucopyranoside, 14093
- C<sub>46</sub>H<sub>74</sub>O<sub>19</sub>**  
(25*R*,26*R*)-17 $\alpha$ -Hydroxy-26-methoxy Spirost-5-en-3 $\beta$ -yl-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1→2)-*O*-[ $\beta$ -*D*-glucopyranosyl-(1→6)]- $\beta$ -*D*-glucopyranoside, 10458
- C<sub>46</sub>H<sub>74</sub>O<sub>20</sub>S**  
Bacopaside I, 2087
- C<sub>46</sub>H<sub>75</sub>NO<sub>17</sub>**  
Abutiloside H, 41
- C<sub>46</sub>H<sub>76</sub>O<sub>2</sub>**  
 $\beta$ -Sitosteryl-3-*O*-scleropyrate, 19999
- C<sub>46</sub>H<sub>76</sub>O<sub>16</sub>**  
Gylongiposide I, 9098
- C<sub>46</sub>H<sub>76</sub>O<sub>17</sub>**  
Astrasieversianin XV, 1949  
CTHD0233276-2, 4297  
Gypenoside XXVI, 9140
- C<sub>46</sub>H<sub>76</sub>O<sub>18</sub>**  
Marsdekoiside C, 13575  
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- C<sub>46</sub>H<sub>76</sub>O<sub>19</sub>**  
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- C<sub>46</sub>H<sub>77</sub>NO<sub>17</sub>**  
Abutiloside B, 39
- C<sub>46</sub>H<sub>78</sub>O<sub>2</sub>**  
9(11),12-Ursadien-3 $\beta$ -ol 3-*O*-palmitate, 22261
- C<sub>46</sub>H<sub>78</sub>O<sub>4</sub>**  
5 $\alpha$ ,8 $\alpha$ -Epidioxyergosta-6,22-dien-3 $\beta$ -yl stearate, 6901
- C<sub>46</sub>H<sub>78</sub>O<sub>18</sub>**  
Myrioside A, 15198  
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3 $\beta$ ,12 $\beta$ ,23*S*,24*R*-Tetrahydroxy-20*S*,25-epoxydammarane 3-*O*-[ $\beta$ -*D*-xylopyranosyl(1→2)][ $\beta$ -*D*-xylopyranosyl-(1→6)]- $\beta$ -*D*-glucopyranoside, 21104
- C<sub>46</sub>H<sub>78</sub>O<sub>19</sub>**  
Anemarsaponin E, 1175  
Trigofoenoside B<sub>1</sub>, 21648
- C<sub>46</sub>H<sub>80</sub>O<sub>2</sub>**  
 $\alpha$ -Amyrin palmitate, 1121  
 $\beta$ -Amyrin palmitate, 1122  
Lupeol palmitate, 13099  
Taraxasteryl palmitate, 20708
- C<sub>46</sub>H<sub>80</sub>O<sub>3</sub>**  
Arnidiol 3-*O*-palmitate, 1752  
Betulin 3-*O*-palmitate, 2335  
Erythrodiol 3-*O*-palmitate, 7339  
16 $\beta$ -Hydroxylupeol 3-*O*-palmitate, 10348  
Maniladiol 3-*O*-palmitate, 13499  
12-Ursene-3 $\beta$ , 11 $\alpha$ -diol 3-*O*-palmitate, 22267  
Uvaol 3-*O*-palmitate, 22289
- C<sub>46</sub>H<sub>80</sub>O<sub>6</sub>**  
34-*O*-Acetyltetratriacontanylferulate, 523
- C<sub>46</sub>H<sub>90</sub>O<sub>2</sub>**  
Myricyl hypogaeate, 15190
- C<sub>46</sub>H<sub>92</sub>O<sub>2</sub>**  
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- C<sub>47</sub>H<sub>34</sub>O<sub>32</sub>**  
Elaeocarpusin, 6730  
Helioscopin A, 9307
- C<sub>47</sub>H<sub>36</sub>O<sub>32</sub>**  
Helioscopin B, 9308
- C<sub>47</sub>H<sub>44</sub>O<sub>22</sub>**  
Agastachin, 708
- C<sub>47</sub>H<sub>48</sub>O<sub>19</sub>**  
Aloeresin I, 978
- C<sub>47</sub>H<sub>50</sub>N<sub>2</sub>O<sub>18</sub>**  
Hyponine D, 10906
- C<sub>47</sub>H<sub>50</sub>O<sub>14</sub>**  
7-Deacetyl-7-benzoyltaxayuntin C, 4732  
Taxayuntin D, 20762
- C<sub>47</sub>H<sub>50</sub>O<sub>22</sub>**  
Smiglaside D, 20023
- C<sub>47</sub>H<sub>51</sub>NO<sub>14</sub>**  
7-Epitaxol, 7027  
Taxol, 20811
- C<sub>47</sub>H<sub>51</sub>NO<sub>17</sub>**  
Euophelline, 7536
- C<sub>47</sub>H<sub>52</sub>O<sub>23</sub>**  
Senburiside III, 19700
- C<sub>47</sub>H<sub>53</sub>NO<sub>14</sub>**  
9-Deoxy-9 $\alpha$ -hydroxytaxol, 5145  
Yunnanxamine, 22950
- C<sub>47</sub>H<sub>54</sub>O<sub>25</sub>**  
Kaempferol-3-*O*-{[ $\beta$ -*D*-xylopyranosyl(1→3)- $\alpha$ -*L*-rhamnopyranosyl(1→6)][ $\alpha$ -*L*-rhamnopyranosyl(1→2)]- $\beta$ -*D*-3-*trans-p*-coumaroylgalactopyranoside, 12101  
Kaempferol-3-*O*-{[ $\beta$ -*D*-xylopyranosyl(1→3)- $\alpha$ -*L*-rhamnopyranosyl(1→6)][ $\alpha$ -*L*-rhamnopyranosyl(1→2)]- $\beta$ -*D*-4-*trans-p*-coumaroylgalactopyranoside, 12102
- C<sub>47</sub>H<sub>57</sub>NO<sub>15</sub>**  
10-( $\beta$ -Hydroxybutyryl)-10-deacetylcephalomanine, 9866
- C<sub>47</sub>H<sub>59</sub>NO<sub>14</sub>**  
*N*-Methyltaxol C, 14739  
Taxuspinnanane A, 20841
- C<sub>47</sub>H<sub>59</sub>NO<sub>17</sub>**  
7-( $\beta$ -xylosyl)-10-deacetyltaxol D, 22849
- C<sub>47</sub>H<sub>66</sub>N<sub>8</sub>O<sub>9</sub>**  
Microtoenin A, 14847
- C<sub>47</sub>H<sub>66</sub>O<sub>15</sub>**  
Saundersioside F, 19411
- C<sub>47</sub>H<sub>68</sub>O<sub>15</sub>**  
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- C<sub>47</sub>H<sub>68</sub>O<sub>21</sub>**  
Basellasaponin B, 2158
- C<sub>47</sub>H<sub>68</sub>O<sub>22</sub>**  
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- C<sub>47</sub>H<sub>70</sub>O<sub>20</sub>**  
Betavulgaroside I, 2323  
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- C<sub>47</sub>H<sub>70</sub>O<sub>21</sub>**  
Basellasaponin A, 2157
- C<sub>47</sub>H<sub>70</sub>O<sub>23</sub>**  
Deoxytrillenoside A, 5217
- C<sub>47</sub>H<sub>70</sub>O<sub>24</sub>**  
Trillenoside A, 21873
- C<sub>47</sub>H<sub>72</sub>O<sub>16</sub>**  
Inflasaponin I, 11038  
Methyl-*n*-butyl-uralsaponin A esters, 14185
- C<sub>47</sub>H<sub>72</sub>O<sub>17</sub>**  
Kudinoside D, 12302
- C<sub>47</sub>H<sub>72</sub>O<sub>18</sub>**  
Acanjaposide B, 65  
Eupteleasaponin VI, 7628  
Methyl oleanate-(3)-[ $\alpha$ -*L*-arabinofuranosyl-(1→4)]-[ $\beta$ -*D*-galactopyranosyl-(1→2)]-methyl-( $\beta$ -*D*-glucopyranoside)uronate], 14633
- C<sub>47</sub>H<sub>72</sub>O<sub>19</sub>**  
Acanjaposide A, 64  
3-*O*- $\beta$ -*D*-Galactopyranosyl-(1→2)-[ $\beta$ -*D*-xylopyranosyl(1→3)]- $\beta$ -*D*-glucuronopyranosyl-gypsogenin, 8074  
Oldhamianoside, 16026
- C<sub>47</sub>H<sub>73</sub>NO<sub>10</sub>**  
Lipohypaconitine, 12899
- C<sub>47</sub>H<sub>74</sub>O<sub>17</sub>**  
Acetyl astragaloside I, 326  
Ardisimamilloside H, 1642  
3 $\beta$ -[(*O*- $\beta$ -*D*-Glucuronopyranosyl-(1→3)-*O*-[ $\alpha$ -*L*-rhamnopyranosyl-(1→2)]- $\alpha$ -*L*-arabinopyranosyl)oxy]olean-12-en-28-oic acid, 8766  
Periandrulcin B, 16919  
3-*O*- $\alpha$ -*L*-Rhamnopyranosyl-(1→4)-[ $\alpha$ -*L*-arabinopyranosyl-(1→2)]- $\beta$ -*D*-glucuronopyranosyl

- oleanolic acid, 18687  
Trojanoside I, 22046
- C<sub>47</sub>H<sub>74</sub>O<sub>18</sub>**  
3-*O*-[ $\beta$ -*D*-Apiofuranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl]oleanolic acid 28-*O*- $\beta$ -*D*-glucopyranosyl ester, 1515  
Aquilegioside I, 1550  
Araloside A, 1608  
Chikusetsu saponin Ib, 3521  
Chikusetsusaponin IV, 3523  
Kudinoside A, 12299  
Kudinoside F, 12304  
Momordin IIc, 14910  
Purpurea glycoside A, 18216  
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Saikosaponin S<sub>1</sub>, 19161  
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*Symplocos glomerata* saponin 1, 20529  
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- C<sub>47</sub>H<sub>74</sub>O<sub>19</sub>**  
Acanjaposide C, 66  
Aquilegioside A, 1542  
Aquilegioside J, 1551  
Hydrocotyloside I, 9710  
Kudinoside B, 12300  
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Norarjunolic acid-28-*O*- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 4)- $\beta$ -*D*-glucosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside, 15712  
2 $\alpha$ ,3 $\beta$ ,23-Trihydroxy-30-norolean-12-en-28-oic acid *O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl ester, 21814  
Yunganoside B<sub>1</sub>, 22941
- C<sub>47</sub>H<sub>74</sub>O<sub>20</sub>**  
3 $\beta$ -*O*-( $\beta$ -Glucopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -xylopyranosyl)-16 $\alpha$ -hydroxyolean-12-ene-28,30-dioic acid 28-*O*-( $\beta$ -galactopyranosyl) ester, 8749
- C<sub>47</sub>H<sub>76</sub>O<sub>16</sub>**  
3-*O*- $\alpha$ -*L*-Glucopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl-oleanic acid, 8719  
3-*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-xylopyranosyl oleanolic acid, 8726  
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Oleanolic acid-3-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)]- $\alpha$ -*L*-arabinopyranoside, 16059  
Patrinoside C<sub>1</sub>, 16722  
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Raddeanin E, 18520  
3 $\beta$ -*D*-*O*-( $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl)-lup-20(29)-ene-28-*O*- $\beta$ -*D*-glucopyranosyl ester, 18691  
3-*O*-[ $\alpha$ -*L*-Rhamnopyranosyl (1 $\rightarrow$ 2)]-[ $\beta$ -*D*-glucopyranosyl (1 $\rightarrow$ 3)]- $\alpha$ -*L*-arabinopyranosyl oleanolic acid, 18709  
3-*O*-[ $\alpha$ -*L*-Rhamnopyranosyl (1 $\rightarrow$ 2)]-[ $\beta$ -*D*-glucopyranosyl (1 $\rightarrow$ 3)]- $\alpha$ -*L*-arabinopyranosyl ursolic acid, 18710  
Rotundifolioside I, 18952  
Rotundioside G, 18957
- C<sub>47</sub>H<sub>76</sub>O<sub>17</sub>**  
3-*O*- $\alpha$ -*L*-Arabinopyranosyl oleanolic acid 28-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside, 1577  
Astragaloside VIII, 1943  
Cussosaponin A, 4429  
Cussosaponin D, 4432  
3 $\beta$ -*O*- $\beta$ -*D*-Galactopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl-23-hydroxyolean-12-en-28-oic acid, 8067  
3 $\beta$ -*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -*L*-arabinopyranosyl hederagenin 28-*O*- $\alpha$ -*L*-rhamnopyranosyl ester, 8606  
3 $\beta$ -[(*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 2)-*O*-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)]- $\alpha$ -*L*-arabinopyranosyl)oxy]olean-12-en-28-oic acid, 8640  
Hederagenin-3-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl-28-*O*- $\beta$ -*D*-glucopyranoside, 9270  
Inermiside I, 11035  
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Kalopanax saponin H, 12119  
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Latifolioside B, 12548  
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Lineolon-3-*O*- $\beta$ -*D*-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-cymaropyranoside, 12884  
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Oleanolic acid 3-*O*- $\beta$ -*D*-xylopyranosyl (1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl (1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside, 16062  
*Pometia ridleyi* saponin 2, 17689  
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Randiasaponin IV, 18538  
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Rotundifolioside A, 18944  
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2"-*O*- $\beta$ -*D*-Xylopyranosylsaikosaponin b<sub>2</sub>, 22840  
Zizyphussaponin I, 23016  
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- C<sub>47</sub>H<sub>76</sub>O<sub>18</sub>**  
Akebia saponin D, 818  
Bacoside A<sub>3</sub>, 2094  
Cyclaminorin, 4458  
Durupcoside C, 6641  
3 $\beta$ -*O*-[ $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 3)]-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)]- $\alpha$ -*L*-arabinopyranosyl echinocystic acid, 8638  
Hederagenin-3-*O*- $\alpha$ -*L*-arabinopyranosyl-28-*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside, 9262  
15- $\beta$ -Hydroxyisolineolon 3-*O*- $\beta$ -*D*-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-cymaropyranoside, 10249  
15- $\beta$ -Hydroxylineolon 3-*O*- $\beta$ -*D*-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-cymaropyranoside, 10331  
Ilekudinoside E, 10975  
Illexside II, 10985  
Ixerissaponin A, 11799  
Pulsatilloside A, 18195  
Randiasaponin III, 18537  
Rotundifolioside G, 18950
- C<sub>47</sub>H<sub>76</sub>O<sub>19</sub>**  
20*S*,22*R*,23*S*,24*R*-16 $\beta$ ,23,22,25-Diepoxycholeartane-3 $\beta$ ,23,24-triol 3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-xylopyranoside, 5489  
Saikosaponin V<sub>1</sub>, 19165  
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- C<sub>47</sub>H<sub>76</sub>O<sub>20</sub>**  
Platycoside F, 17540
- C<sub>47</sub>H<sub>78</sub>O<sub>17</sub>**  
3 $\beta$ ,23-Dihydroxy-lup-20(29)-ene-28-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside, 5952  
Rotundifolioside B, 18945
- C<sub>47</sub>H<sub>78</sub>O<sub>18</sub>**  
Asernestioside A, 1851  
Astrasieversianin XIV, 1948  
Gypenoside LII, 9157
- C<sub>47</sub>H<sub>78</sub>O<sub>19</sub>**  
Astragaloside V, 1940



- Astragaloside VI, 1941  
Astragaloside VII, 1942  
Trojanoside K, 22048  
**C<sub>47</sub>H<sub>78</sub>O<sub>20</sub>**  
Volubiloside B, 22612  
**C<sub>47</sub>H<sub>80</sub>O<sub>17</sub>**  
Chikusetsusaponin III, 3522  
3 $\beta$ -*O*- $\beta$ -*D*-Glucopyranosyl-20-*O*-[ $\alpha$ -*L*-arabino-  
pyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl]3 $\beta$ ,12 $\beta$ ,  
20(*S*)-trihydroxydammar-24-ene, 8605  
Gypenoside IX, 9130  
Gypenoside XLV, 9154  
Gypenoside LV, 9160  
Lotoideside B, 13005  
Notoginsenoside Fe, 15824  
**C<sub>47</sub>H<sub>80</sub>O<sub>18</sub>**  
Cyclofoetoside B, 4492  
Gypenoside XLIV, 9153  
Gypenoside XLVI, 9155  
Gypenoside LVII, 9162  
Gypenoside LXIV, 9168  
Notoginsenoside R<sub>1</sub>, 15836  
**C<sub>47</sub>H<sub>80</sub>O<sub>19</sub>**  
Notoginsenoside H, 15826  
3 $\beta$ ,12 $\beta$ ,23*S*,24*R*-Tetrahydroxy-20*S*,25-epoxy-  
dammarane 3-*O*-[ $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 2)]  
[ $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 6)]- $\beta$ -*D*-glucopyrano-  
side, 21102  
Vina-ginsenoside R<sub>6</sub>, 22485  
Yesaninoside C, 22895  
**C<sub>47</sub>H<sub>88</sub>O<sub>15</sub>**  
1-*O*- $\beta$ -*D*-Galactosyl (6 $\rightarrow$ 1)- $\alpha$ -*D*-galactosyl-2,3-  
*O*-dihexadecanoyl-glycerol, 8077  
**C<sub>48</sub>H<sub>28</sub>O<sub>30</sub>**  
Punicacortein C, 18202  
Punicalagin, 18204  
Terchebulin, 20970  
**C<sub>48</sub>H<sub>30</sub>O<sub>30</sub>**  
Cornusiin B, 4064  
Terflavin A, 20974  
**C<sub>48</sub>H<sub>32</sub>O<sub>31</sub>**  
Agrimonin acid A, 757  
Agrimonin acid B, 758  
Glansrin A, 8504  
Rugosin C, 19056  
Sanguiin H<sub>2</sub>, 19274  
**C<sub>48</sub>H<sub>32</sub>O<sub>32</sub>**  
Mallotusinic acid, 13438  
**C<sub>48</sub>H<sub>34</sub>O<sub>31</sub>**  
Rugosin A, 19054  
**C<sub>48</sub>H<sub>34</sub>O<sub>33</sub>**  
Repandusinic acid B, 18625  
**C<sub>48</sub>H<sub>42</sub>O<sub>14</sub>**  
Cotyleloside A, 4131  
Cotyleloside B, 4132  
**C<sub>48</sub>H<sub>48</sub>O<sub>9</sub>**  
3,12,21-Trihydroxy-1,10,19-tri(4-hydroxy-  
phenyl)-5,14,23-trimethoxy[3.3.3]metacyclo-  
phane, 21852  
**C<sub>48</sub>H<sub>48</sub>O<sub>25</sub>**  
Amentoflavone-7,4',4'''-tri-*O*- $\beta$ -*D*-glucopyrano-  
side, 1033  
**C<sub>48</sub>H<sub>51</sub>NO<sub>18</sub>**  
Euoverrine A, 7537  
**C<sub>48</sub>H<sub>52</sub>O<sub>23</sub>**  
Smiglaside A, 20020  
**C<sub>48</sub>H<sub>53</sub>NO<sub>14</sub>**  
*N*-Methylpaclitaxel, 14651  
**C<sub>48</sub>H<sub>56</sub>O<sub>26</sub>**  
Kaempferol-3-*O*-{[ $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 3)- $\alpha$ -  
*L*-rhamnopyranosyl(1 $\rightarrow$ 6)]}[ $\alpha$ -*L*-rhamnopyra-  
nosyl(1 $\rightarrow$ 2)]}- $\beta$ -*D*-3-*trans*-feruloylgalacto-  
pyranoside, 12103  
Kaempferol-3-*O*-{[ $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 3)- $\alpha$ -  
*L*-rhamnopyranosyl(1 $\rightarrow$ 6)]}[ $\alpha$ -*L*-rhamnopyra-  
nosyl(1 $\rightarrow$ 2)]}- $\beta$ -*D*-4-*trans*-feruloylgalacto-  
pyranoside, 12104  
**C<sub>48</sub>H<sub>56</sub>O<sub>29</sub>**  
Pisumflavonoid II, 17494  
**C<sub>48</sub>H<sub>57</sub>O<sub>28</sub><sup>+</sup>**  
Pigment 26, 17359  
**C<sub>48</sub>H<sub>58</sub>N<sub>6</sub>O<sub>15</sub>**  
Rubia akane RA-XIV, 18992  
**C<sub>48</sub>H<sub>60</sub>N<sub>6</sub>O<sub>15</sub>**  
Rubia akane RA-XV, 18993  
**C<sub>48</sub>H<sub>60</sub>N<sub>6</sub>O<sub>16</sub>**  
Rubia akane RA-XIII, 18991  
Rubia akane RA-XVI, 18994  
**C<sub>48</sub>H<sub>60</sub>O<sub>9</sub>**  
Hibicusin, 9535  
**C<sub>48</sub>H<sub>60</sub>O<sub>10</sub>**  
**Myriceric acid C**, 15169  
**C<sub>48</sub>H<sub>64</sub>O<sub>16</sub>**  
Maoecrystal M, 13534  
**C<sub>48</sub>H<sub>69</sub>NO<sub>12</sub>**  
Saponaceol C, 19326  
**C<sub>48</sub>H<sub>70</sub>O<sub>5</sub>**  
Formosadimer C, 7888  
**C<sub>48</sub>H<sub>70</sub>O<sub>17</sub>**  
3 $\beta$ -[( $\alpha$ -*L*-Arabinopyranosyl)oxy]-19 $\alpha$ -hydroxy-  
urs-12-en-28-oic acid 28-(6-*O*-galloyl- $\beta$ -*D*-  
glucopyranosyl)ester, 1585  
**C<sub>48</sub>H<sub>72</sub>O<sub>18</sub>**  
Atratoside C, 1995  
Eupteleasaponin V acetate, 7627  
**C<sub>48</sub>H<sub>72</sub>O<sub>19</sub>**  
Licoricesaponin F<sub>3</sub>, 12788  
Stauntoside A, 20276  
**C<sub>48</sub>H<sub>72</sub>O<sub>21</sub>**  
Licoricesaponin A<sub>3</sub>, 12783  
**C<sub>48</sub>H<sub>74</sub>O<sub>16</sub>**  
Ethyl-*n*-butyl-uralsaponin A esters, 7422  
**C<sub>48</sub>H<sub>74</sub>O<sub>18</sub>**  
Atratoside B, 1994  
**C<sub>48</sub>H<sub>74</sub>O<sub>19</sub>**  
Chiisanoside, 3520  
(1*R*)-1,11- $\alpha$ -Dihydroxy-3,4-seco-lupa-4(23),  
20(29)-diene-3,28-dioic acid 3,11-lactone  
28-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-gluco-  
pyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside, 6115  
Papyrioside L-IIc, 16646  
Yunganoside D<sub>1</sub>, 22943  
**C<sub>48</sub>H<sub>74</sub>O<sub>20</sub>**  
Abrisaponin I, 22  
Acanjaposide I, 72  
3-*O*- $\beta$ -*D*-Galactopyranosyl(1 $\rightarrow$ 2)-[ $\beta$ -*D*-xylo-  
pyranosyl(1 $\rightarrow$ 3)]- $\beta$ -*D*-6-*O*-methylglucurono-  
pyranosyl-quillaic acid, 8075  
Sinocrassuloside IV, 19939  
**C<sub>48</sub>H<sub>75</sub>O<sub>23</sub>S<sup>-</sup>**  
Sandrosaponin III, 19246  
**C<sub>48</sub>H<sub>75</sub>O<sub>24</sub>S<sup>-</sup>**  
Sandrosaponin IV, 19247  
**C<sub>48</sub>H<sub>76</sub>O<sub>16</sub>**  
Oleanolic acid 3-*O*-(4-*O*-acetyl- $\beta$ -*D*-xylopyra-  
nosyl)-(1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)-  
 $\alpha$ -*L*-arabinopyranoside, 16051  
**C<sub>48</sub>H<sub>76</sub>O<sub>17</sub>**  
Hederagenin 3-*O*-(2-*O*-acetyl- $\beta$ -*D*-xylopyra-  
nosyl)-(1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)-  
 $\alpha$ -*L*-arabinopyranoside, 9261  
Mukurozisaponin E<sub>1</sub>, 15033  
**C<sub>48</sub>H<sub>76</sub>O<sub>18</sub>**  
12-*O*-Acetylneolon-3-*O*- $\beta$ -*D*-oleandropyranos-  
yl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-  
digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyra-  
noside, 453  
Achyranthes saponin A, 539  
Achyranthes saponin C, 541  
Colubrin, 3929  
Oloxoside, 16025  
Periandrulcin C, 16920  
3-*O*- $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 4)-[ $\beta$ -*D*-galac-  
topyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -*D*-glucuronopyranosyl  
oleanolic acid, 18704  
3-*O*-[ $\alpha$ -*L*-Rhamnopyranosyl (1 $\rightarrow$ 2)- $\beta$ -*D*-galacto-  
pyranosyl (1 $\rightarrow$ 2)- $\beta$ -*D*-glucuronopyranosyl]  
soyasapogenol E, 18706  
3-*O*-[ $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-glucu-

- ronopyranosyl]-28-*O*-( $\beta$ -*D*-glucopyranosyl)-3 $\beta$ -hydroxyolean-12-en-28-oate, 18722
- 3-*O*- $\alpha$ -*L*-Rhamnopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 2)-6-*O*-methyl- $\beta$ -*D*-glucuronopyranosyl-3 $\beta$ ,22 $\beta$ ,24-trihydroxy-11-oxo-olean-12-ene, 18738
- C<sub>48</sub>H<sub>76</sub>O<sub>19</sub>**
- Acanjaposide G, 70
- Acanjaposide H, 71
- Acankoreoside D, 74
- Calendula officinalis* Glycoside B, 2970
- Calendula officinalis* Glycoside C, 2971
- Cincholic acid 3 $\beta$ -*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-fucopyranosyl-28-*O*- $\beta$ -*D*-glucopyranosyl ester, 3679
- Cirenshenoside V, 3740
- Ginsenoside Ro, 8445
- Hemsgiganoside B, 9354
- Hydrocotyloside II, 9711
- Metaplexigenin-3-*O*- $\beta$ -*D*-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranoside, 13817
- Papyrioside L-IId, 16647
- Phytolaccoside F, 17271
- Quinovic acid 3 $\beta$ -*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-fucopyranosyl-(27-1)- $\beta$ -*D*-glucopyranosyl ester, 18432
- Quinovic acid 3 $\beta$ -*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-fucopyranosyl-(28-1)- $\beta$ -*D*-glucopyranosyl ester, 18433
- Quinovic acid 3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranoside 27-*O*- $\beta$ -*D*-glucopyranosyl ester, 18436
- Sandosaponin A, 19238
- Sandosaponin B, 19239
- Saponin 6, 19338
- Yunganoside A<sub>1</sub>, 22940
- Yunganoside C<sub>1</sub>, 22942
- C<sub>48</sub>H<sub>76</sub>O<sub>20</sub>**
- Acanjaposide D, 67
- Acanjaposide E, 68
- Acanjaposide F, 69
- Acankoreoside E, 75
- Azukisaponin IV, 2068
- Calendasaponin B, 2966
- Dianoside G, 5364
- Palustroside III, 16581
- Sophoraflavoside II, 20090
- 3 $\beta$ ,16 $\alpha$ ,23,28-Tetrahydroxyolean-11,13(18)-dien-30-oic acid 3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-fucopyranoside, 21141
- C<sub>48</sub>H<sub>76</sub>O<sub>21</sub>**
- Ageratoside B<sub>1</sub>, 733
- Dianoside D, 5361
- Esculentoside H, 7374
- Medicagenic acid 3-*O*-triglucoside, 13635
- Sinocrassuloside I, 19936
- C<sub>48</sub>H<sub>76</sub>O<sub>23</sub>**
- Lucilianoside C, 13058
- C<sub>48</sub>H<sub>77</sub>NaO<sub>22</sub>S**
- 2 $\alpha$ ,23-Dihydroxy-3 $\beta$ -sulfoxyolean-12-en-28-oic acid *O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl ester sodium salt, 6139
- C<sub>48</sub>H<sub>77</sub>O<sub>22</sub>S<sup>-</sup>**
- Sandrosaponin II, 19245
- Sandrosaponin V, 19248
- Sandrosaponin VI, 19249
- C<sub>48</sub>H<sub>78</sub>O<sub>9</sub>**
- Glabrescin, 8492
- C<sub>48</sub>H<sub>78</sub>O<sub>16</sub>**
- Rotundifolioside J, 18953
- Rotundioside F, 18956
- C<sub>48</sub>H<sub>78</sub>O<sub>17</sub>**
- Astragaloside VIII methylester, 1944
- 3-Epibetulinic acid 28-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside, 6837
- 3-Epi-oleanolic acid-28-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside, 6981
- Isolineolon 3-*O*- $\beta$ -*D*-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-cymaropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-cymaropyranoside, 11500
- Kaikasaponin II, 12112
- Kaikasaponin III, 12113
- Lineolon-3-*O*- $\beta$ -*D*-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-cymaropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-cymaropyranoside, 12883
- Rotundifolioside F, 18949
- Saikosaponin BK<sub>1</sub>, 19146
- Saikosaponin C, 19147
- 3 $\beta$ ,16 $\alpha$ ,28-Trihydroxyolean-11,13(18)-dien-3 $\beta$ -yl- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-[ $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)]- $\beta$ -*D*-glucopyranoside, 21821
- C<sub>48</sub>H<sub>78</sub>O<sub>18</sub>**
- Arvenoside A, 1828
- Astrasierversianin IX, 1947
- Azukisaponin V, 2069
- Carnosifloside III, 3203
- 3-*O*- $\beta$ -*D*-Glucopyranosyl betulinic acid-28-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside, 8611
- 3-*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl oleanolic acid 28-*O*- $\beta$ -*D*-glucopyranosyl ester, 8647
- 2"-*O*- $\beta$ -*D*-glucopyranosyl saikosaponin b<sub>2</sub>, 8730
- Hederagenin 28-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside, 9273
- HN Saponin H, 9573
- Jujubasaponin IV, 11904
- Jujubasaponin V, 11905
- Latifolioside J, 12556
- Lemmatoxin, 12621
- Oleanoglycotoxin A, 16044
- Pulsatilloside C, 18194
- Pulsatilloside C, 18197
- Saikosaponin N, 19153
- Saikosaponin S, 19160
- Saponin E<sub>8</sub>, 19345
- Soyasaponin I, 20127
- 3 $\beta$ ,16 $\alpha$ ,28,30-Tetrahydroxyolean-11,13(18)-dien-3 $\beta$ -yl- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-[ $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)]- $\beta$ -*D*-glucopyranoside, 21140
- 3 $\beta$ ,16 $\beta$ ,23-Trihydroxy-13,28-epoxyolean-11-en-3 $\beta$ -yl-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)]-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -*D*-fucopyranoside, 21728
- Udosaponin B, 22173
- C<sub>48</sub>H<sub>78</sub>O<sub>19</sub>**
- Asiaticoside, 1854
- Bourmeioside B, 2573
- Centellasaponin C, 3396
- Centellasaponin D, 3397
- Clinodoside A, 3845
- Congmuyanoside B, 3977
- Davuricoside J, 4700
- Ecliptasaponin B, 6706
- 3 $\beta$ ,16 $\alpha$ ,23,28,30-Pentahydroxyolean-11,13(18)-diene 3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-fucopyranoside, 16857
- Saikosaponin P, 19155
- Saikosaponin Q, 19156
- Saikosaponin Q<sub>1</sub>, 19157
- Saikosaponin Q<sub>2</sub>, 19158
- Saikosaponin R, 19159
- Spartium junceum* saponin, 19332
- Sceffoleoside A, 19460
- Soyasaponin A<sub>3</sub>, 20123
- Soyasaponin V, 20129
- 2 $\alpha$ ,3 $\beta$ ,23-Trihydroxyolean-12-en-28-oic acid *O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl ester,

- 21825
- C<sub>48</sub>H<sub>78</sub>O<sub>20</sub>**  
 Aquilegioside H, 1549  
 Asiaticoside B, 1855  
 Madecassoside, 13338  
 Stelmatotriterpenoside E, 20287  
 Stelmatotriterpenoside F, 20288  
 Stelmatotriterpenoside G, 20289  
 Volubiloside C, 22613
- C<sub>48</sub>H<sub>78</sub>O<sub>22</sub>**  
 Aesculuside B, 667
- C<sub>48</sub>H<sub>78</sub>O<sub>22</sub>S**  
 Eclalbasaponin XII, 6703
- C<sub>48</sub>H<sub>80</sub>O<sub>2</sub>**  
 $\alpha$ -Amyrin linoleate, 1117  
 $\beta$ -Amyrin linoleate, 1118
- C<sub>48</sub>H<sub>80</sub>O<sub>16</sub>**  
 Telosmoside A<sub>6</sub>, 20917
- C<sub>48</sub>H<sub>80</sub>O<sub>17</sub>**  
 3 $\beta$ -*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-fucopyranosyl (2*S*,24*Z*)-cycloart-24-en-3 $\beta$ ,22,26-triol 26-*O*- $\beta$ -*D*-glucopyranoside, 8627  
 Latifolioside I, 12555  
 Rotundifolioside C, 18946
- C<sub>48</sub>H<sub>80</sub>O<sub>18</sub>**  
 Carnosifloside VI, 3204  
 Hydroxysaikosaponin C, 10686  
 Khekadaengoside N, 12219  
 Saikosaponin 15, 19140
- C<sub>48</sub>H<sub>80</sub>O<sub>19</sub>**  
 23-*O*-Acetyl-3 $\beta$ ,12 $\beta$ ,23*S*,24*R*-tetrahydroxy-20*S*,25-epoxydammarane 3-*O*-[ $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 2)][ $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 6)]- $\beta$ -*D*-glucopyranoside, 522  
 Ginsenoside III, 8417  
 Justicioside B, 11984  
 Notoginsenoside G, 15825  
 11 $\alpha$ ,16 $\beta$ ,23,28-Tetrahydroxyolean-12-en-3 $\beta$ -yl-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)]-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -*D*-fucopyranoside, 21142
- C<sub>48</sub>H<sub>80</sub>O<sub>20</sub>**  
 Volubiloside A, 22611
- C<sub>48</sub>H<sub>80</sub>O<sub>21</sub>**  
 Iridalglycoside 5a, 11134  
 Iridalglycoside 6a, 11136  
 Iridalglycoside 6b, 11137
- C<sub>48</sub>H<sub>81</sub>NO<sub>17</sub>**  
 Abutiloside J, 43
- C<sub>48</sub>H<sub>82</sub>O<sub>2</sub>**  
 Stigmasta-7,22,25-triene-3-nonadecanoic acid ester, 20358
- C<sub>48</sub>H<sub>82</sub>O<sub>17</sub>**  
 Gypenoside XI, 9131
- Gypenoside LXXIII, 9175
- C<sub>48</sub>H<sub>82</sub>O<sub>18</sub>**  
 Ginsenoside Rd, 8427  
 Ginsenoside Re, 8428  
 3-*O*-[ $\beta$ -*D*-Glucopyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl]-20-*O*- $\beta$ -*D*-glucopyranosyl-3 $\beta$ ,12 $\beta$ ,20(*S*)-trihydroxydammar-24-ene, 8646  
 Gypenoside VIII, 9129  
 Gypenoside XVII, 9134  
 Gypenoside LXXII, 9174  
 Khekadaengoside M, 12218
- C<sub>48</sub>H<sub>82</sub>O<sub>19</sub>**  
 20-Glucosylginsenoside Rf, 8755  
 Gycomoside II, 9095  
 Majoroside F<sub>5</sub>, 13407  
 Majoroside F<sub>6</sub>, 13408  
 Notoginsenoside M, 15831  
 Notoginsenoside N, 15832  
 Notoginsenoside R<sub>3</sub>, 15838  
 Notoginsenoside R<sub>6</sub>, 15840
- C<sub>48</sub>H<sub>82</sub>O<sub>20</sub>**  
 Ginsenoside I, 8412  
 Ginsenoside II, 8416  
 Gycomoside IV, 9097  
 Yesanchinoside B, 22894
- C<sub>48</sub>H<sub>84</sub>N<sub>4</sub>O<sub>12</sub>**  
 Bassianolide, 2162
- C<sub>48</sub>H<sub>84</sub>O<sub>2</sub>**  
 $\alpha$ -Amyrin stearate, 1123
- C<sub>48</sub>H<sub>84</sub>O<sub>3</sub>**  
 Arnidiol 3-*O*-stearate, 1753  
 16 $\beta$ -Hydroxylupeol 3-*O*-stearate, 10349  
 Maniladiol 3-*O*-stearate, 13500
- C<sub>48</sub>H<sub>91</sub>NO<sub>9</sub>**  
 1-*O*- $\beta$ -*D*-Glucopyranosyl-(2*S*,3*R*,4*E*,8*Z*)-2-*N*-(2'-hydroxydocosanoyl) eicosasphinga-4,8-dienine, 8668  
 1,3,5-Trihydroxy-2-hexadecanoylamino-(6*E*,9*E*)-heptacosdiene-1-*O*-glucopyranoside, 21742
- C<sub>48</sub>H<sub>93</sub>NO<sub>8</sub>**  
 N-Lignoceryl sphingosyl glucose, 12802
- C<sub>48</sub>H<sub>93</sub>NO<sub>10</sub>**  
 Helicia cerebroside A, 9302  
 Iotroridoside B, 11124  
 Linum cerebroside, 12895
- C<sub>49</sub>H<sub>38</sub>O<sub>28</sub>**  
 Stachyuranin B, 20256
- C<sub>49</sub>H<sub>48</sub>O<sub>20</sub>**  
 Vanicoside B, 22330
- C<sub>49</sub>H<sub>50</sub>O<sub>11</sub>**  
 Australone B, 2018
- C<sub>49</sub>H<sub>53</sub>NO<sub>14</sub>**  
*N*-Debenzoyl-*N*-cinnamoyltaxol, 4805
- C<sub>49</sub>H<sub>55</sub>NO<sub>15</sub>**  
 10-( $\beta$ -Hydroxybutyryl)-10-deacetyltaxol, 9867
- C<sub>49</sub>H<sub>58</sub>O<sub>27</sub>**  
 Watterose D, 22642  
 Watterose I, 22647
- C<sub>49</sub>H<sub>60</sub>O<sub>23</sub>**  
 Safghanoside G, 19118  
 Safghanoside H, 19119
- C<sub>49</sub>H<sub>61</sub>NO<sub>18</sub>**  
 7-( $\beta$ -Xylosyl)taxol D, 22853
- C<sub>49</sub>H<sub>63</sub>NO<sub>17</sub>**  
 7-( $\beta$ -Xylosyl)-10-deacetyltaxol C, 22848
- C<sub>49</sub>H<sub>67</sub>N<sub>9</sub>O<sub>10</sub>**  
 Microtoenin C, 14849
- C<sub>49</sub>H<sub>72</sub>O<sub>16</sub>**  
 21 $\beta$ -*O*-Benzoylsitakisenin 3-*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 3)- $\beta$ -*D*-glucuronopyranoside, 2271
- C<sub>49</sub>H<sub>72</sub>O<sub>17</sub>**  
 Otophyllioside A, 16270
- C<sub>49</sub>H<sub>74</sub>O<sub>4</sub>**  
 Ubiquinone 8, 22171
- C<sub>49</sub>H<sub>74</sub>O<sub>19</sub>**  
 Eupteleasaponin VI acetate, 7629
- C<sub>49</sub>H<sub>76</sub>O<sub>16</sub>**  
 Periplocoside C, 16946
- C<sub>49</sub>H<sub>76</sub>O<sub>19</sub>**  
 Papyrioside L-IIa, 16644  
*Symplocos glomerata* saponin 2, 20530  
*Symplocos glomerata* saponin 3, 20531  
*Symplocos glomerata* saponin 6, 20534  
*Symplocos glomerata* saponin 11, 20539
- C<sub>49</sub>H<sub>76</sub>O<sub>20</sub>**  
 3-*O*- $\beta$ -*D*-Galactopyranosyl(1 $\rightarrow$ 2)-[ $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 3)]- $\beta$ -*D*-6-*O*-ethylglucuronopyranosyl-quillaic acid, 8073
- C<sub>49</sub>H<sub>77</sub>NO<sub>10</sub>**  
 Lipo-14-*O*-anisoylbikhaconine, 12898
- C<sub>49</sub>H<sub>78</sub>O<sub>16</sub>**  
 Otophyllioside B, 16271  
 Wilfoside C<sub>3</sub>N, 22693
- C<sub>49</sub>H<sub>78</sub>O<sub>18</sub>**  
 12-*O*-Acetylneolon-3-*O*- $\beta$ -*D*-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-cymaropyranoside, 452  
 3-*O*- $\alpha$ -*L*-Rhamnopyranosyl (1 $\rightarrow$ 2)- $\beta$ -*D*-galactopyranosyl (1 $\rightarrow$ 2)-6-*O*-methyl- $\beta$ -*D*-glucuronopyranosyl-3 $\beta$ ,22 $\beta$ ,24-trihydroxy-11-oxo-olean-12-ene, 18708  
 Taibaenoside II, 20614
- C<sub>49</sub>H<sub>78</sub>O<sub>19</sub>**  
 3-*O*-(4-*O*-Acetyl)- $\alpha$ -*L*-arabinopyranosyl-hederagenin 28-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-

- glucopyranoside, 323
- Chikusetsu saponin V methyl ester, 3525
- Metaplexigenin-3-*O*- $\beta$ -*D*-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-cymaropyranoside, 13816
- Papyriocide L-IIb, 16645
- Saponin 5, 19337
- C<sub>49</sub>H<sub>78</sub>O<sub>20</sub>**
- Acetyl-subproside II, 517
- Peruvianoside A, 16997
- Saponin 4, 19336
- Saponin 7, 19339
- Saponin 8, 19340
- C<sub>49</sub>H<sub>78</sub>O<sub>21</sub>**
- Extensumside A, 7698
- 3-*O*-[ $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosyl] phytolaccagenic acid 28-*O*- $\beta$ -*D*-glucopyranosyl ester, 8652
- Peruvianoside B, 16998
- C<sub>49</sub>H<sub>78</sub>O<sub>22</sub>**
- Chinenoside II, 3529
- C<sub>49</sub>H<sub>79</sub>O<sub>21</sub>**
- Capilliposide J, 3129
- C<sub>49</sub>H<sub>80</sub>O<sub>17</sub>**
- Kaikasaponin III methyl ester, 12114
- C<sub>49</sub>H<sub>80</sub>O<sub>18</sub>**
- 15- $\beta$ -Hydroxylineolon 3-*O*- $\beta$ -*D*-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-cymaropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-cymaropyranoside, 10333
- C<sub>49</sub>H<sub>80</sub>O<sub>19</sub>**
- Aselestioside B, 1852
- C<sub>49</sub>H<sub>80</sub>O<sub>20</sub>**
- Aquilegioside C, 1544
- Aquilegioside D, 1545
- C<sub>49</sub>H<sub>80</sub>O<sub>21</sub>**
- Aquilegioside E, 1546
- Asparacoside, 1863
- C<sub>49</sub>H<sub>80</sub>O<sub>22</sub>**
- Asparanin D, 1879
- C<sub>49</sub>H<sub>82</sub>O<sub>16</sub>**
- Telosmoside A<sub>4</sub>, 20915
- C<sub>49</sub>H<sub>82</sub>O<sub>17</sub>**
- Telosmoside A<sub>1</sub>, 20912
- C<sub>49</sub>H<sub>82</sub>O<sub>18</sub>**
- 11 $\alpha$ -Methoxysaikosaponin f, 14087
- C<sub>49</sub>H<sub>82</sub>O<sub>19</sub>**
- Justicioside D, 11986
- Saikosaponin 16, 19141
- 16 $\alpha$ ,23,28-Trihydroxy-11 $\alpha$ -methoxyolean-12-en-3 $\beta$ -yl-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)]-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -*D*-fucopyranoside, 21784
- C<sub>49</sub>H<sub>82</sub>O<sub>22</sub>**
- Aspafilioside C, 1862
- C<sub>49</sub>H<sub>82</sub>O<sub>28</sub>**
- Pyishiauoside IV<sub>b</sub>, 18239
- C<sub>49</sub>H<sub>83</sub>NO<sub>17</sub>**
- Abutiloside A, 38
- C<sub>49</sub>H<sub>86</sub>O<sub>2</sub>**
- Stigmasterol arachidate, 20371
- C<sub>49</sub>H<sub>88</sub>O<sub>15</sub>**
- 1-*O*-Hexadecanoyl-2-*O*-(9*Z*,12*Z*-octadecadienyl)-3-*O*-[ $\alpha$ -*D*-galactopyranosyl-(1"-6')-*O*- $\beta$ -*D*-galactopyranosyl]-glycerol, 9490
- C<sub>50</sub>H<sub>44</sub>O<sub>22</sub>**
- 3*T*-*O*- $\alpha$ -*L*-Arabinopyranosylcinnamtannin B<sub>1</sub>, 1562
- C<sub>50</sub>H<sub>50</sub>O<sub>21</sub>**
- Lapathoside A, 12505
- C<sub>50</sub>H<sub>53</sub>NO<sub>20</sub>**
- Wilforfine C, 22688
- C<sub>50</sub>H<sub>54</sub>O<sub>8</sub>**
- Bianthrone A<sub>1</sub>, 2346
- C<sub>50</sub>H<sub>57</sub>NO<sub>17</sub>**
- 7-( $\beta$ -Xylosyl)-10-deacetylaxol, 22847
- C<sub>50</sub>H<sub>59</sub>N<sub>9</sub>O<sub>12</sub>**
- Lyciumin C methylate, 13180
- C<sub>50</sub>H<sub>61</sub>NO<sub>18</sub>**
- 7-( $\beta$ -Xylosyl)cephalomannine, 22845
- C<sub>50</sub>H<sub>64</sub>O<sub>11</sub>**
- Genkwadaphnin-20-palmitate, 8288
- C<sub>50</sub>H<sub>70</sub>O<sub>17</sub>**
- Cynaphylloside E, 4560
- C<sub>50</sub>H<sub>70</sub>O<sub>18</sub>**
- Cynaphylloside C, 4558
- C<sub>50</sub>H<sub>74</sub>O<sub>28</sub>**
- Jasnudifoside L, 11832
- C<sub>50</sub>H<sub>76</sub>O<sub>21</sub>**
- Licoricesaponin D<sub>3</sub>, 12786
- Acantrifoside C, 92
- C<sub>50</sub>H<sub>78</sub>O<sub>16</sub>**
- Dibutyl uralsaponin A ester, 5405
- C<sub>50</sub>H<sub>78</sub>O<sub>18</sub>**
- 23-*O*-Acetylhederagenin 3-*O*-(4-*O*-acetyl- $\beta$ -*D*-xylopyranosyl)-(1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranoside, 411
- Mukurozisaponin G, 15034
- C<sub>50</sub>H<sub>78</sub>O<sub>19</sub>**
- Colubrinoside, 3933
- C<sub>50</sub>H<sub>78</sub>O<sub>24</sub>**
- Funingenoside D, 8008
- C<sub>50</sub>H<sub>78</sub>O<sub>27</sub>**
- 3 $\beta$ -[(*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 3)-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)-*O*-[ $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 3)]-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-galactopyranoside, 6130
- C<sub>50</sub>H<sub>80</sub>O<sub>17</sub>**
- Woodwardinoside, 22723
- C<sub>50</sub>H<sub>81</sub>NO<sub>19</sub>**
- Arudonine, 1822
- C<sub>50</sub>H<sub>81</sub>NO<sub>21</sub>**
- (25 $\zeta$ )-Solaniid-5-en-3 $\beta$ ,22 $\beta$ -dihydroxy 3-*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 2)-[ $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 4)- $\beta$ -*D*-galactopyranoside, 20055
- C<sub>50</sub>H<sub>82</sub>O<sub>19</sub>**
- yl-(1 $\rightarrow$ 3)]-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-galactopyranosyl)oxy]-2 $\alpha$ -hydroxypregna-5,16-dien-20-one, 8660
- C<sub>50</sub>H<sub>79</sub>NaO<sub>20</sub>**
- Sodium salt of alternoside II, 20037
- C<sub>50</sub>H<sub>80</sub>O<sub>18</sub>**
- 12-*O*-Acetylneolon-3-*O*- $\beta$ -*D*-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-cymaropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-cymaropyranoside, 451
- C<sub>50</sub>H<sub>80</sub>O<sub>19</sub>**
- 23-Acetoxy-16 $\alpha$ -hydroxy-13,28-epoxyolean-11-en-3 $\beta$ -yl-[ $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 2)]-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -*D*-fucopyranoside, 214
- Trojanoside J, 22047
- C<sub>50</sub>H<sub>80</sub>O<sub>21</sub>**
- Pariphyllin B, 16669
- Parissaponin Pb, 16670
- C<sub>50</sub>H<sub>80</sub>O<sub>22</sub>**
- Aspidistrin, 1898
- CTHD0233276-10, 4295
- Polyspirostanol PO<sub>3</sub>, 17678
- Polyspirostanol PO<sub>6</sub>, 17681
- C<sub>50</sub>H<sub>80</sub>O<sub>23</sub>**
- Agave americana* Compound 4, 715
- Anemarsaponin G, 1177
- Cantalasaponin 2, 3091
- Hecogenin 3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)-[ $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-galactopyranoside, 9255
- Neoprazerigenin A 3-*O*- $\beta$ -*D*-lycotetraoside, 15450
- Ophiopogon B, 16142
- Polyspirostanol PO<sub>2</sub>, 17677
- Polyspirostanol PO<sub>6</sub>, 17680
- Ruscocide, 19074
- Terrestrosin D, 21016
- C<sub>50</sub>H<sub>80</sub>O<sub>24</sub>**
- (25*R*)-2 $\alpha$ ,17 $\alpha$ -Dihydroxy Spirost-5-en-3 $\beta$ -yl *O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)-*O*-[ $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 3)]-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-galactopyranoside, 6130
- C<sub>50</sub>H<sub>80</sub>O<sub>27</sub>**
- Woodwardinoside, 22723
- C<sub>50</sub>H<sub>81</sub>NO<sub>19</sub>**
- Arudonine, 1822
- C<sub>50</sub>H<sub>81</sub>NO<sub>21</sub>**
- (25 $\zeta$ )-Solaniid-5-en-3 $\beta$ ,22 $\beta$ -dihydroxy 3-*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 2)-[ $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 4)- $\beta$ -*D*-galactopyranoside, 20055
- C<sub>50</sub>H<sub>82</sub>O<sub>19</sub>**

- Eclalbasaponin XI, 6702
- C<sub>50</sub>H<sub>82</sub>O<sub>21</sub>**  
Asparanin B<sub>5</sub>, 1873  
Convallasaponin D, 4011
- C<sub>50</sub>H<sub>82</sub>O<sub>22</sub>**  
Cantalasaponin 3, 3092  
Degalactotigonin, 4870  
Desglucolanatigonin II, 5250  
Dongnoside E, 6557  
Polyphyllin H, 17659  
(22S,25S)-5 $\alpha$ -Spirostan-3 $\beta$ -ol 3-*O*-[*O*- $\beta$ -*D*-galactopyranosyl-(1 $\rightarrow$ 2)-*O*-[ $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 3)]-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-galactopyranoside], 20214  
Tigogenin 3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)-[ $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-galactopyranoside, 21385  
Trigofenoside E, 21653
- C<sub>50</sub>H<sub>82</sub>O<sub>23</sub>**  
Anemarsaponin F, 1176  
F-Gitonin, 8458  
Gitonin, 8459  
Hemeroside B, 9342  
(25*R*)-5 $\alpha$ -Spirostan-3 $\beta$ ,6 $\beta$ -diol 3-*O*-{*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)-*O*-[ $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 3)]-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-galactopyranoside}, 20211
- C<sub>50</sub>H<sub>83</sub>NO<sub>20</sub>**  
Demissine, 5104
- C<sub>50</sub>H<sub>83</sub>NO<sub>21</sub>**  
(25 $\zeta$ )-Solanidan-3 $\beta$ ,23 $\beta$ -dihydroxy 3-*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 2)-[ $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 4)- $\beta$ -*D*-galactopyranoside, 20053  
Tomatine, 21435
- C<sub>50</sub>H<sub>83</sub>NO<sub>22</sub>**  
Lycoperoside H, 13219
- C<sub>50</sub>H<sub>84</sub>O<sub>19</sub>**  
Quinquenoside III, 18448
- C<sub>50</sub>H<sub>84</sub>O<sub>23</sub>**  
Asparanin B<sub>9</sub>, 1877  
Asparaside B<sub>1</sub>, 1881  
Asparaside B<sub>2</sub>, 1882
- C<sub>50</sub>H<sub>84</sub>O<sub>28</sub>**  
Mukurozioside II<sub>b</sub>, 15032
- C<sub>50</sub>H<sub>86</sub>O<sub>28</sub>**  
Mukurozioside II<sub>a</sub>, 15031
- C<sub>50</sub>H<sub>88</sub>O<sub>3</sub>**  
Arnidiol 3-*O*-eicosanoate, 1750  
16 $\beta$ -Hydroxylupeol 3-*O*-eicosanoate, 10346  
Maniladiol 3-*O*-eicosanoate, 13497
- C<sub>50</sub>H<sub>88</sub>O<sub>7</sub>**  
Campesteryl-*D*-glucoside-6'-palmitate, 3043
- C<sub>50</sub>H<sub>88</sub>O<sub>30</sub>**  
Pharbitic acid D, 17044
- C<sub>50</sub>H<sub>100</sub>O<sub>2</sub>**  
Ceryl lignocerate, 3437
- C<sub>51</sub>H<sub>46</sub>O<sub>14</sub>**  
AH18, 768  
AH19a, 769  
AH19b, 770  
AH20, 771
- C<sub>51</sub>H<sub>46</sub>O<sub>23</sub>**  
3*T*-*O*- $\beta$ -*D*-Galactopyranosylcinnamtannin B<sub>1</sub>, 8051
- C<sub>51</sub>H<sub>52</sub>O<sub>22</sub>**  
Lapathoside B, 12506
- C<sub>51</sub>H<sub>52</sub>O<sub>23</sub>**  
Catechin-3-*O*- $\beta$ -*D*-glucopyranosyl-(4 $\alpha$  $\rightarrow$ 8)-catechin-3-*O*- $\beta$ -*D*-gluco(2-cinnamoyl)pyranoside, 3313  
Catechin-3-*O*- $\beta$ -*D*-glucopyranosyl-(4 $\alpha$  $\rightarrow$ 8)-epicatechin-3-*O*- $\beta$ -*D*-gluco(6-cinnamoyl)pyranoside, 3314  
Kaempferol 3-*O*- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 6)-[(4-*O*-*trans*-*p*-coumaroyl)- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)]-(4-*O*-*trans*-*p*-coumaroyl)- $\beta$ -*D*-galactopyranoside, 12073
- C<sub>51</sub>H<sub>52</sub>O<sub>24</sub>**  
Quercetin-3-*O*- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 6)-[(4-*O*-*trans*-*p*-coumaroyl)- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)]-(3-*O*-*trans*-*p*-coumaroyl)- $\beta$ -*D*-galactopyranoside, 18383  
Quercetin-3-*O*- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 6)-[(4-*O*-*trans*-*p*-coumaroyl)- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)]-(4-*O*-*trans*-*p*-coumaroyl)- $\beta$ -*D*-galactopyranoside, 18384
- C<sub>51</sub>H<sub>52</sub>O<sub>25</sub>**  
Quercetin-3-*O*- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 6)-[(4-*O*-*trans*-*caff*-oyl)- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)]-(3-*O*-*trans*-*p*-coumaroyl)- $\beta$ -*D*-galactopyranoside, 18380
- C<sub>51</sub>H<sub>53</sub>O<sub>25</sub><sup>+</sup>**  
Pelargonidin-3-*O*-[6-*O*-(*E*)-*p*-coumaroyl-2-*O*-(6-*E*)-*caff*-oyl- $\beta$ -*D*-glucopyranosyl)-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranoside]-5-*O*-( $\beta$ -*D*-glucopyranoside), 16779
- C<sub>51</sub>H<sub>53</sub>O<sub>28</sub>**  
Gentiodelphin, 8302
- C<sub>51</sub>H<sub>60</sub>Br<sub>3</sub>N<sub>3</sub>O<sub>5</sub>**  
*p*-Bromobenzoyl derivative of tetrahydrodeoxyoxolucidine A, 2617
- C<sub>51</sub>H<sub>60</sub>O<sub>27</sub>**  
Fallaxose C, 7711
- C<sub>51</sub>H<sub>60</sub>O<sub>28</sub>**  
Watterose H, 22646
- C<sub>51</sub>H<sub>60</sub>O<sub>29</sub>**  
Watterose C, 22641  
Watterose J, 22648
- C<sub>51</sub>H<sub>64</sub>N<sub>8</sub>O<sub>8</sub>**  
Psammosilenin A, 18014
- C<sub>51</sub>H<sub>64</sub>O<sub>24</sub>**  
Gymnoside IX, 9112  
Gymnoside X, 9113
- C<sub>51</sub>H<sub>65</sub>NO<sub>18</sub>**  
7-( $\beta$ -Xylopyranosyl)taxol C, 22852
- C<sub>51</sub>H<sub>72</sub>O<sub>17</sub>**  
Cynaphylloside D, 4559
- C<sub>51</sub>H<sub>74</sub>O<sub>19</sub>**  
Pennogenin-hexaacetyl-3-*O*- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranoside, 16812
- C<sub>51</sub>H<sub>78</sub>O<sub>7</sub>**  
Indicanine D, 11015
- C<sub>51</sub>H<sub>78</sub>O<sub>17</sub>**  
Marsdekoiside E, 13576
- C<sub>51</sub>H<sub>78</sub>O<sub>18</sub>**  
3-*O*- $\alpha$ -*L*-Arabinofuranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucuronopyranosyl-21 $\beta$ ,22 $\alpha$ -di-*O*-angeloylprotoaescigenin, 1556  
3-*O*- $\beta$ -*D*-Xylopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucuronopyranosyl-21 $\beta$ ,22 $\alpha$ -di-*O*-angeloylprotoaescigenin, 22835
- C<sub>51</sub>H<sub>78</sub>O<sub>20</sub>**  
*Symplocos glomerata* saponin 4, 20532
- C<sub>51</sub>H<sub>80</sub>O<sub>15</sub>**  
(2*S*)-1,2-*O*-6,9,12,15-Dioctadecatetraenoyl-3-*O*-[ $\alpha$ -*D*-galactopyranosyl-(1 $\rightarrow$ 6)]-*O*- $\beta$ -*D*-galactopyranosyl]-glycerol, 6426
- C<sub>51</sub>H<sub>80</sub>O<sub>18</sub>**  
Ziziphin, 23010
- C<sub>51</sub>H<sub>80</sub>O<sub>20</sub>**  
 $\beta$ -*D*-Xylopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-xylopyranosyl gypsogenin, 22842
- C<sub>51</sub>H<sub>80</sub>O<sub>21</sub>**  
Yemuoside YM<sub>13</sub>, 22891
- C<sub>51</sub>H<sub>80</sub>O<sub>23</sub>**  
(23*R*)-3 $\beta$ -[(*O*- $\beta$ -*D*-Apiofuranosyl-(1 $\rightarrow$ 2)-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)-*O*- $\alpha$ -*L*-arabinopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl)oxy]-17 $\alpha$ ,23-epoxy-29-hydroxy-27-norlanost-8-ene-15,24-dione, 1507  
(23*S*)-3 $\beta$ -[(*O*- $\beta$ -*D*-Apiofuranosyl-(1 $\rightarrow$ 2)-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)-*O*- $\alpha$ -*L*-arabinopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl)oxy]-17 $\alpha$ ,23-epoxy-29-hydroxy-27-norlanost-8-ene-15,24-dione, 1508
- C<sub>51</sub>H<sub>80</sub>O<sub>28</sub>**  
3 $\beta$ -[(*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 3)-*O*- $\beta$ -*D*-glu-

- copyranosyl-(1→2)-*O*-[ $\beta$ -*D*-xylopyranosyl-(1→3)]-*O*- $\beta$ -*D*-glucopyranosyl-(1→4)- $\beta$ -*D*-galactopyranosyl)-oxy]-2 $\alpha$ ,16 $\beta$ -dihydroxypregn-5-ene-20-carboxylic acid  $\gamma$ -lactone, 8657
- C<sub>51</sub>H<sub>82</sub>O<sub>18</sub>**  
Hemslonin B, 9358  
Taibaenaside I, 20613
- C<sub>51</sub>H<sub>82</sub>O<sub>20</sub>**  
Asperin, 1889  
Diosgenin 3-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1→4)- $\alpha$ -*L*-rhamnopyranosyl-(1→4)-[ $\alpha$ -*L*-rhamnopyranosyl-(1→2)]- $\beta$ -*D*-glucopyranoside, 6447  
Diosgenin 3-*O*-[ $\alpha$ -*L*-rhamnopyranosyl (1→3)- $\alpha$ -*L*-rhamnopyranosyl (1→4)- $\alpha$ -*L*-rhamnopyranosyl (1→4)]- $\beta$ -*D*-glucopyranoside, 6448  
Polyphyllin E, 17656  
Polyphyllin F, 17657
- C<sub>51</sub>H<sub>82</sub>O<sub>21</sub>**  
Diosgenin -3-*O*- $\alpha$ -*L*-rhamnopyranosyl (1→3)- $\alpha$ -*L*-rhamnopyranosyl (1→4)- $\beta$ -*D*-glucopyranosyl (1→4)- $\beta$ -*D*-glucopyranoside, 6449  
(25*R*)-2 $\alpha$ -Hydroxyspirost-5-en-3 $\beta$ -yl *O*- $\alpha$ -*L*-rhamnopyranosyl-(1→2)-*O*-[*O*- $\alpha$ -*L*-rhamnopyranosyl-(1→4)- $\alpha$ -*L*-rhamnopyranosyl-(1→4)]- $\beta$ -*D*-glucopyranoside, 10727  
Musennin, 15131  
Pennogenin rhamnosyl chacotrioxide, 16815  
Pseudoprotodioscin, 18056  
Solasodoside A, 20068  
(25*S*)-Spirost-5-en-3 $\beta$ -yl *O*- $\alpha$ -*L*-rhamnopyranosyl-(1→2)-*O*-[*O*- $\beta$ -*D*-glucopyranosyl-(1→4)- $\alpha$ -*L*-rhamnopyranosyl-(1→3)]- $\beta$ -*D*-glucopyranoside, 20223
- C<sub>51</sub>H<sub>82</sub>O<sub>22</sub>**  
Diosgenin -3-*O*- $\beta$ -*D*-glucopyranosyl (1→4)- $\alpha$ -*L*-rhamnopyranosyl (1→4)- $\beta$ -*D*-glucopyranosyl (1→4)- $\beta$ -*D*-glucopyranoside, 6444  
Graecunin E, 8969  
(24*S*,25*R*)-24-Hydroxyspirost-5-en-3 $\beta$ -yl *O*- $\alpha$ -*L*-rhamnopyranosyl-(1→2)-*O*-[*O*- $\beta$ -*D*-glucopyranosyl-(1→4)- $\alpha$ -*L*-rhamnopyranosyl-(1→3)]- $\beta$ -*D*-glucopyranoside, 10725  
Soyasaponin A<sub>6</sub>, 20126  
woodwardinoside B, 22724
- C<sub>51</sub>H<sub>82</sub>O<sub>23</sub>**  
Abutiloside L, 45  
(23*S*)-3 $\beta$ -[(*O*- $\beta$ -*D*-Apiofuranosyl-(1→2)-*O*- $\beta$ -*D*-glucopyranosyl-(1→2)- $\alpha$ -*L*-arabinopyranosyl-(1→6)- $\beta$ -*D*-glucopyranosyl)oxy]-17 $\alpha$ ,23-epoxy-28,29-dihydroxy-27-norlanost-8-en-24-one, 1506  
Avenacoside A, 2031  
Deltoside, 5041
- Hypoglaucin G, 10896  
Luciamin, 13022
- C<sub>51</sub>H<sub>84</sub>O<sub>24</sub>**  
Abutiloside N, 47  
Protozingiberensisaponin, 17997
- C<sub>51</sub>H<sub>84</sub>O<sub>13</sub>**  
Glycerol- $\alpha$ , $\beta$ -dilinolenate- $\alpha$ '-rhamno-rhamnoside, 8809
- C<sub>51</sub>H<sub>84</sub>O<sub>15</sub>**  
1,2-Di-*O*-(9*Z*,12*Z*,15*Z*-octadecatrienoyl)-3-*O*-[ $\alpha$ -*D*-glucose(1→6)- $\beta$ -*D*-allose]-glycerol, 6429
- C<sub>51</sub>H<sub>84</sub>O<sub>21</sub>**  
Malonylginsenoside Rd, 13443
- C<sub>51</sub>H<sub>84</sub>O<sub>22</sub>**  
Parillin, 16666  
Polyphyllin G, 17658  
Protodioscin, 17973  
Protoneodioscin, 17980  
Trigofoenoside E<sub>1</sub>, 21654  
Trigonelloside C, 21663
- C<sub>51</sub>H<sub>84</sub>O<sub>23</sub>**  
Macrostemonoside A, 13326  
Protograccillin, 17975  
Trigofoenoside D, 21651  
Trigofoenoside F, 21655
- C<sub>51</sub>H<sub>84</sub>O<sub>24</sub>**  
Isoerubioside B, 11414  
(25*R,S*)-5 $\alpha$ -Spirostane-2 $\alpha$ ,3 $\beta$ -diol 3-*O*-[*O*- $\beta$ -*D*-glucopyranosyl-(1→2)]-*O*-[ $\beta$ -*D*-glucopyranosyl-(1→3)]-*O*- $\beta$ -*D*-glucopyranosyl-(1→4)- $\beta$ -*D*-galactopyranoside], 20213
- C<sub>51</sub>H<sub>85</sub>NO<sub>21</sub>**  
Commersonine, 3942
- C<sub>51</sub>H<sub>86</sub>O<sub>7</sub>**  
Stigmasta-7,22,25-triene-3-*O*- $\beta$ -*D*-(6'-palmitoyl)glucopyranoside, 20359
- C<sub>51</sub>H<sub>86</sub>O<sub>21</sub>**  
Spongioside A, 20228
- C<sub>51</sub>H<sub>86</sub>O<sub>22</sub>**  
Asp-VI, 1907  
26-*O*- $\beta$ -*D*-Glucopyranosyl-(25*R*)-3 $\beta$ ,22 $\zeta$ ,26-trihydroxyl-5 $\alpha$ -furostane 3-*O*- $\beta$ -chacotrioxide, 8742
- C<sub>51</sub>H<sub>86</sub>O<sub>23</sub>**  
Asparamin B<sub>8</sub>, 1876  
Asparaside A, 1880  
Trigofoenoside C, 21649  
Trigoneoside 1, 21664
- C<sub>51</sub>H<sub>88</sub>O<sub>7</sub>**  
6'-Palmityl- $\alpha$ -spinasteryl- $\beta$ -*D*-glucoside, 16569  
 $\beta$ -Sitosterol-3-(6-palmitoleoyl)glucopyranoside, 19990  
Stigmast-3-*O*- $\beta$ -*D*-glucopyranosyl-6-hexa-
- decanoate, 20378
- C<sub>51</sub>H<sub>90</sub>O<sub>7</sub>**  
6'-Palmityl- $\Delta^7$ -spinasteryl- $\beta$ -*D*-glucoside, 16570  
 $\beta$ -Sitosteryl-*D*-glucoside-6'-palmitate, 19997
- C<sub>51</sub>H<sub>98</sub>O<sub>6</sub>**  
Palmitin, 16560
- C<sub>52</sub>H<sub>46</sub>O<sub>26</sub>**  
Trilobatin J, 21885
- C<sub>52</sub>H<sub>55</sub>O<sub>25</sub><sup>+</sup>**  
Pelargonidin-3-*O*-[6-*O*-(*E*)-*p*-coumaroyl-2-*O*-(6-*E*)-feruloyl- $\beta$ -*D*-glucopyranosyl)-(1→2)- $\beta$ -*D*-glucopyranoside]-5-*O*-( $\beta$ -*D*-glucopyranoside), 16780
- C<sub>52</sub>H<sub>55</sub>O<sub>26</sub><sup>+</sup>**  
Pelargonidin-3-*O*-[6-*O*-(*E*)-caffeoyl-2-*O*-(6-*E*)-feruloyl- $\beta$ -*D*-glucopyranosyl)-(1→2)- $\beta$ -*D*-glucopyranoside]-5-*O*-( $\beta$ -*D*-glucopyranoside), 16778  
Pelargonidin-3-*O*-[6-*O*-(*E*)-feruloyl-2-*O*-(6-*E*)-caffeoyl- $\beta$ -*D*-glucopyranosyl)-(1→2)- $\beta$ -*D*-glucopyranoside]-5-*O*-( $\beta$ -*D*-glucopyranoside), 16782
- C<sub>52</sub>H<sub>59</sub>NO<sub>18</sub>**  
Taxol C-7-xylose, 20816  
7-( $\beta$ -Xylosyl)taxol, 22851
- C<sub>52</sub>H<sub>62</sub>O<sub>28</sub>**  
Fallaxose D, 7712  
Watterose A, 22639
- C<sub>52</sub>H<sub>62</sub>O<sub>29</sub>**  
Watterose F, 22644
- C<sub>52</sub>H<sub>64</sub>O<sub>26</sub>**  
Coelobillardin, 3888
- C<sub>52</sub>H<sub>66</sub>O<sub>11</sub>**  
Gnidicin-20-palmitate, 8899
- C<sub>52</sub>H<sub>74</sub>O<sub>19</sub>**  
Inerme A, 11033
- C<sub>52</sub>H<sub>76</sub>O<sub>5</sub>**  
Siphonein, 19965
- C<sub>52</sub>H<sub>77</sub>NO<sub>18</sub>**  
12-*O*-Nicotinoyllineolon 3-*O*- $\beta$ -*D*-oleandropyranosyl-(1→4)- $\beta$ -*D*-digitoxopyranosyl-(1→4)- $\beta$ -*D*-digitoxopyranosyl-(1→4)- $\beta$ -*D*-digitoxopyranoside, 15533
- C<sub>52</sub>H<sub>77</sub>NO<sub>19</sub>**  
Rostratamine 3-*O*- $\beta$ -*D*-oleandropyranosyl-(1→4)- $\beta$ -*D*-digitoxopyranosyl-(1→4)- $\beta$ -*D*-digitoxopyranosyl-(1→4)- $\beta$ -*D*-digitoxopyranoside, 18937
- C<sub>52</sub>H<sub>80</sub>O<sub>18</sub>**  
3-*O*- $\beta$ -*D*-Galactopyranosyl-(1→2)- $\beta$ -*D*-glucuronopyranosyl-21 $\beta$ ,22 $\alpha$ -di-*O*-angeloylbarringtonol C, 8055
- C<sub>52</sub>H<sub>82</sub>O<sub>21</sub>**

- Begoniifolide B, 2212  
 Begoniifolide C, 2213  
 Ciwujianoside C<sub>1</sub>, 3781  
 2 $\alpha$ ,3 $\beta$ -Dihydroxyurs-12,20(30)-dien-28-oic acid  
 3-*O*-{*O*- $\beta$ -*D*-quinovopyranosyl-(1 $\rightarrow$ 2)-*O*- $\alpha$ -*L*-  
 arabinopyranosyl-(1 $\rightarrow$ 2)-*O*-[ $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 3)] $\beta$ -*D*-glucopyranoside}, 6174  
 Eupteleasaponin I, 7622  
 Eupteleasaponin XII, 7635  
 3-*O*-methyl malonylhederagenin 28-*O*- $\alpha$ -*L*-  
 rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl-  
 (1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside, 14573  
 23-*O*-Methyl malonylhederagenin 28-*O*- $\alpha$ -*L*-  
 rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl-  
 (1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside, 14574  
 Yemuoside YM<sub>14</sub>, 22892
- C<sub>52</sub>H<sub>82</sub>O<sub>22</sub>**  
 Araloside B, 1609  
 2 $\alpha$ ,3 $\beta$ -Dihydroxyurs-12,20(30)-dien-28-oic acid  
 3-*O*-{*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)-*O*- $\alpha$ -*L*-  
 arabinopyranosyl-(1 $\rightarrow$ 2)-*O*-[ $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 3)] $\beta$ -*D*-glucopyranoside}, 6173  
*Symplocos glomerata* saponin 7, 20535  
 3-*O*-[(2'-*O*-Xylosyl)-(3'-*O*-rabinosyl)]-glucuro-  
 nyleanolic acid-28-*O*- $\beta$ -*D*-glucopyranoside,  
 22850
- C<sub>52</sub>H<sub>82</sub>O<sub>23</sub>**  
 (23*R*)-17 $\alpha$ ,23-Epoxy-29-hydroxy-3 $\beta$ -[(*O*- $\alpha$ -*L*-  
 rhamnopyranosyl-(1 $\rightarrow$ 2)-*O*- $\beta$ -*D*-glucopyra-  
 nosyl-(1 $\rightarrow$ 2)-*O*- $\alpha$ -*L*-arabinopyranosyl-(1 $\rightarrow$ 6)-  
 $\beta$ -*D*-glucopyranosyl)oxy]-27-norlanost-8-ene-  
 15,24-dione, 7130  
 (23*S*)-17 $\alpha$ ,23-Epoxy-29-hydroxy-3 $\beta$ -[(*O*- $\alpha$ -*L*-  
 rhamnopyranosyl-(1 $\rightarrow$ 2)-*O*- $\beta$ -*D*-glucopyra-  
 nosyl-(1 $\rightarrow$ 2)-*O*- $\alpha$ -*L*-arabinopyranosyl-(1 $\rightarrow$ 6)-  
 $\beta$ -*D*-glucopyranosyl)oxy]-27-norlanost-8-ene-  
 15,24-dione, 7131
- C<sub>52</sub>H<sub>82</sub>O<sub>24</sub>**  
 Aesculiside A, 665  
 (23*S*,25*R*)-3 $\beta$ -[(*O*- $\beta$ -*D*-Apiofuranosyl-(1 $\rightarrow$ 2)-*O*-  
 $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyra-  
 nosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl)oxy]-17 $\alpha$ ,  
 23-epoxy-28,29-dihydroxylanost-8-en-23,26-  
 olide, 1505
- C<sub>52</sub>H<sub>82</sub>O<sub>25</sub>**  
 Desacyl-theasaponin E, 5243  
 Withanoside IX, 22712
- C<sub>52</sub>H<sub>84</sub>O<sub>20</sub>**  
 Clematis prosapogenin, Cp7a, 3823  
 Obtusilobicinin, 15905  
 Oleanolic acid 3-*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 4)-  
 $\beta$ -*D*-ribofuranosyl(1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranoside, 16057
- Oleanolic acid-3-*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 4)-  
 $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranoside, 16058
- Scabioside E, 19445
- C<sub>52</sub>H<sub>84</sub>O<sub>21</sub>**  
 Hederagenin-3-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)-  
 $\alpha$ -*L*-arabinopyranosyl-28-*O*- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside, 9272
- Jujuboside B, 11911  
 Jujuboside B<sub>1</sub>, 11912  
*Pometia ridleyi* saponin 3, 17690  
*Pometia ridleyi* saponin 8, 17694  
 Prosapogenin CP<sub>8</sub>, 17947  
 Prosapogenin CP<sub>8a</sub>, 17948  
 Sapindoside C, 19318  
 Yuzhizioside, 22957  
 Zizyphussaponin III, 23018
- C<sub>52</sub>H<sub>84</sub>O<sub>22</sub>**  
 Dioscoreside C, 6438  
 Echinosophoside B, 6694  
 (23*S*)-17 $\alpha$ ,23-Epoxy-29-hydroxy-3 $\beta$ -[(*O*- $\alpha$ -*L*-  
 rhamnopyranosyl-(1 $\rightarrow$ 2)-*O*- $\beta$ -*D*-glucopyra-  
 nosyl-(1 $\rightarrow$ 2)-*O*- $\alpha$ -*L*-arabinopyranosyl-(1 $\rightarrow$ 6)-  
 $\beta$ -*D*-glucopyranosyl)oxy]-27-norlanost-8-en-  
 24-one, 7132  
 Isolineolon 3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-  
 oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyra-  
 nosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranosyl-(1 $\rightarrow$ 4)-  
 $\beta$ -*D*-digitoxopyranoside, 11499  
 Lineolon-3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-  
 oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyra-  
 nosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -  
 $\beta$ -*D*-digitoxopyranoside, 12882  
 Prostratoside D, 17959  
 Prostratoside E, 17960
- C<sub>52</sub>H<sub>84</sub>O<sub>23</sub>**  
 Abutuloside M, 46  
 Echinosophoside A<sub>1</sub>, 6693  
 (23*S*)-17 $\alpha$ ,23-Epoxy-28,29-dihydroxy-3 $\beta$ -[(*O*- $\alpha$ -  
 $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)-*O*- $\beta$ -*D*-glucopyra-  
 nosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -  
 $\beta$ -*D*-glucopyranosyl)oxy]-27-norlanost-8-en-24-  
 one, 7083  
 15- $\beta$ -Hydroxylneolon 3-*O*- $\beta$ -*D*-allopyranosyl-  
 (1 $\rightarrow$ 4)- $\beta$ -*D*-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-  
 digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyrano-  
 syl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranoside, 10328  
 15- $\beta$ -Hydroxylneolon 3-*O*- $\beta$ -*D*-glucopyranosyl-  
 (1 $\rightarrow$ 4)- $\beta$ -*D*-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-  
 digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyrano-  
 syl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranoside, 10330  
 Platycoside J, 17543  
 Soyasaponin A<sub>5</sub>, 20125
- C<sub>52</sub>H<sub>84</sub>O<sub>24</sub>**  
 Deapio platycodin D, 4799
- C<sub>52</sub>H<sub>85</sub>NO<sub>23</sub>**  
 Lycoperoside A, 13214  
 Lycoperoside B, 13215  
 Lycoperoside C, 13216
- C<sub>52</sub>H<sub>86</sub>O<sub>14</sub>**  
 Taibaienoside V, 20617
- C<sub>52</sub>H<sub>86</sub>O<sub>19</sub>**  
 Quinquenoside I, 18446
- C<sub>52</sub>H<sub>86</sub>O<sub>22</sub>**  
 Gypenoside XXXV, 9144  
 22-*O*-Methylprotodioscin, 14698  
 19-Oxo-3 $\beta$ ,20*S*,21,24*S*-tetrahydroxydammar-25-  
 ene 3-*O*-{[ $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)] $\beta$ -*D*-  
 xylopyranosyl(1 $\rightarrow$ 3)]- $\alpha$ -*L*-arabinopyranosyl}-  
 21-*O*- $\beta$ -*D*-glucopyranoside, 16428  
 S-5, 19093
- C<sub>52</sub>H<sub>86</sub>O<sub>23</sub>**  
 Capilliposide A, 3125  
 (25*R*)-26-( $\beta$ -*D*-Glucopyranosyloxy)-22-methoxy-  
 furost-5-en-3 $\beta$ -yl-*O*- $\alpha$ -*L*-rhamnopyranosyl-  
 (1 $\rightarrow$ 2)-*O*-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)]- $\beta$ -*D*-  
 glucopyranoside, 8705  
 Methyl deltoside, 14287  
 19-Oxo-3 $\beta$ ,20*S*,21-trihydroxy-25-hydroperoxy-  
 dammar-23-ene 3-*O*-{[ $\alpha$ -*L*-rhamnopyranosyl  
 (1 $\rightarrow$ 2)] $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 3)]- $\alpha$ -*L*-arabi-  
 nopyranosyl}-21-*O*- $\beta$ -*D*-glucopyranoside,  
 16433  
 (25*R*)-26-[( $\alpha$ -*L*-Rhamnopyranosyl)oxy]-22 $\alpha$ -  
 methoxyfurost-5-en-3 $\beta$ -yl-*O*- $\beta$ -*D*-glucopyra-  
 nosyl-(1 $\rightarrow$ 3)-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)-  
 $\beta$ -*D*-glucopyranoside, 18731  
 Trigofenoside D<sub>1</sub>, 21652  
 Trigofenoside F<sub>1</sub>, 21656
- C<sub>52</sub>H<sub>88</sub>O<sub>21</sub>**  
 Gypenoside LVIII, 9163  
 Lotoideside A, 13004  
 Notoginsenoside O, 15833  
 Notoginsenoside P, 15834  
 3 $\beta$ ,19,20*S*,21-Tetrahydroxydammar-24-ene 3-*O*-  
 {[ $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)] $\beta$ -*D*-xylopyra-  
 nosyl(1 $\rightarrow$ 3)]- $\alpha$ -*L*-arabinopyranosyl}-21-*O*- $\beta$ -  
 $\beta$ -*D*-glucopyranoside, 21091
- C<sub>52</sub>H<sub>88</sub>O<sub>22</sub>**  
 Gypenoside XXII, 9139
- C<sub>52</sub>H<sub>88</sub>O<sub>23</sub>**  
 Trigofenoside C<sub>1</sub>, 21650
- C<sub>52</sub>H<sub>92</sub>O<sub>7</sub>**  
 $\beta$ -Sitosteryl glucoside 3'-*O*-heptadecicoate,  
 19996
- C<sub>52</sub>H<sub>104</sub>O<sub>2</sub>**

- Ceryl cerotate, 3436  
 Octacosyl lignocerate, 15937  
**C<sub>53</sub>H<sub>57</sub>O<sub>26</sub><sup>+</sup>**  
 Pelargonidin-3-*O*-[6-*O*-(*E*)-feruloyl-2-*O*-(2-(*E*)-feruloyl- $\beta$ -*D*-glucopyranosyl)-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranoside]-5-*O*-( $\beta$ -*D*-glucopyranoside), 16783  
**C<sub>53</sub>H<sub>62</sub>O<sub>28</sub>**  
 Reiniöse G, 18609  
**C<sub>53</sub>H<sub>62</sub>O<sub>29</sub>**  
 Watterose B, 22640  
**C<sub>53</sub>H<sub>62</sub>O<sub>30</sub>**  
 Watterose G, 22645  
**C<sub>53</sub>H<sub>64</sub>O<sub>29</sub>**  
 Senegose G, 19722  
 Senegose H, 19723  
**C<sub>53</sub>H<sub>74</sub>O<sub>11</sub>**  
 Gnidilatidin 20-palmitate, 8901  
**C<sub>53</sub>H<sub>76</sub>O<sub>20</sub>**  
 Inerme B, 11034  
**C<sub>53</sub>H<sub>79</sub>NO<sub>18</sub>**  
 12-*O*-Nicotinoyllineolon 3-*O*- $\beta$ -*D*-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-cymaropyranoside, 15532  
**C<sub>53</sub>H<sub>80</sub>O<sub>2</sub>**  
 Plastoquinone, 17515  
**C<sub>53</sub>H<sub>80</sub>O<sub>20</sub>**  
 TR-saponin A, 22061  
**C<sub>53</sub>H<sub>81</sub>N<sub>3</sub>O<sub>8</sub>**  
 Incarvillateine E, 11009  
**C<sub>53</sub>H<sub>82</sub>O<sub>20</sub>**  
 TR-saponin B, 22062  
**C<sub>53</sub>H<sub>82</sub>O<sub>22</sub>**  
 Eupteleasaponin VII, 7630  
 Kudinoside E, 12303  
**C<sub>53</sub>H<sub>82</sub>O<sub>23</sub>**  
 Koelreuteriasaponin B, 12246  
**C<sub>53</sub>H<sub>82</sub>O<sub>25</sub>**  
 Achyranthoside I, 543  
**C<sub>53</sub>H<sub>84</sub>O<sub>21</sub>**  
 3-*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 2)-[ $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)]- $\beta$ -*D*-glucuronopyranosyl-22-*O*- $\beta$ , $\beta$ -dimethylacryloyl-barrigenol A<sub>1</sub>, 8725  
 Latifolioside K, 12557  
**C<sub>53</sub>H<sub>84</sub>O<sub>22</sub>**  
 Ardisimamilloside B, 1640  
 3-*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 2)-[ $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)]- $\beta$ -*D*-glucuronopyranosyl-22-*O*-angeloyl-barrigenol R<sub>1</sub>, 8724  
 llekudinoside G, 10977  
 3-*O*- $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 4)-[ $\alpha$ -*L*-arabinopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -*D*-glucuronopyranosyl  
 oleanolic acid 28-*O*- $\beta$ -*D*-glucopyranosyl ester, 18688  
 3-*O*-[ $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-glucuronopyranosyl]-28-*O*-[ $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl]-3 $\beta$ -hydroxyolean-12-en-28-oate, 18727  
 Rivularinin, 18855  
**C<sub>53</sub>H<sub>84</sub>O<sub>22</sub>S**  
 Extensumside B, 7699  
**C<sub>53</sub>H<sub>84</sub>O<sub>23</sub>**  
 Araloside C, 1610  
 Escin IVg, 7363  
 Escin IVh, 7364  
 llekudinoside H, 10978  
 Kudinoside C, 12301  
 Lanostane glycoside, 12481  
 Stipuleanoside R<sub>2</sub>, 20384  
 Yiyeliangwenoside XI, 22919  
**C<sub>53</sub>H<sub>84</sub>O<sub>24</sub>**  
 Camellidin II, 3037  
 Sophoraflavoside III, 20091  
**C<sub>53</sub>H<sub>84</sub>O<sub>25</sub>**  
 3 $\beta$ -*O*-( $\beta$ -Glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -glucopyranosyl(1 $\rightarrow$ 3)- $\beta$ -xylopyranosyl)-16 $\alpha$ -hydroxy-olean-12-en-28-*O*-( $\beta$ -galactopyranosyl) ester-30-oic acid, 8662  
**C<sub>53</sub>H<sub>86</sub>O<sub>20</sub>**  
 Eupteleasaponin XI, 7634  
 Raddeanin C, 18517  
**C<sub>53</sub>H<sub>86</sub>O<sub>21</sub>**  
 Anhuienoside C, 1253  
 Anhuienoside D, 1254  
 Helianthoside A, 9294  
 llekudinoside A, 10971  
 Matesaponin 2, 13599  
 Mubenin A, 15004  
 Nudicaucin C, 15860  
 Oleanolic acid 3-*O*- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl-28-*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside, 16049  
 Pastuchoside E, 16702  
 3 $\beta$ -*D*-*O*-( $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl)-olean-12-ene-28-*O*-( $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl) ester, 18693  
 3-*O*- $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-quinovopyranosyl pyrocincholic acid 28-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl ester, 18732  
 3 $\beta$ -*D*-*O*-( $\beta$ -*D*-Xylopyranosyl)-olean-12-ene-28-*O*-( $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl) ester, 22838  
**C<sub>53</sub>H<sub>86</sub>O<sub>22</sub>**  
 Ardipusilloside I, 1626  
 Ardisicrispin B, 1638  
 Ardisimamilloside G, 1641  
 Cauloside D, 3343  
 Cernuoside C, 3433  
 Clematibetoside C, 3821  
 3 $\beta$ -*O*-( $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl)-hederagenin-28-*O*- $\beta$ -*D*-glucopyranosyl ester, 8715  
 Hederagenin-3-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl-28-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside, 9271  
 Ioniceroside C, 11121  
 Isolineolon 3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-cymaropyranoside, 11498  
 Kudinoside G, 12305  
 Latifolioside C, 12549  
 Latifolioside E, 12551  
 Latifolioside L, 12558  
 Lineolon-3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-cymaropyranoside, 12881  
 Macranthoside B, 13303  
 Matesaponin 3, 13600  
 Mubenin C, 15005  
 Mukurozisaponin X, 15035  
 Oleanolic acid-3-*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl-28-*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside, 16054  
*Pometia ridleyi* saponin 5, 17691  
 3 $\beta$ -*O*-( $\alpha$ -*L*-Rhamnopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl)-hederagenin-28-*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl)ester, 18689  
 3-*O*- $\beta$ -*D*-Xylopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl oleanolic acid 28-*O*- $\beta$ -*D*-glucopyranosyl ester, 22827  
**C<sub>53</sub>H<sub>86</sub>O<sub>23</sub>**  
 Aralia-saponin IX, 1607  
 Ardisimamilloside A, 1639  
 Hederagenin-3-*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl-28-*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside, 9263  
 Ixerissaponin B, 11800  
 Spongioside B, 20229  
 2 $\alpha$ ,3 $\beta$ ,23-Trihydroxyolean-12-en-28-oic acid *O*- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 3)-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl ester, 21826



- C<sub>53</sub>H<sub>86</sub>O<sub>24</sub>**  
 Ixerissaponin C, 11801  
 Macrostemonoside D, 13329  
 Saikosaponin V, 19164  
 Scorzoneroside A, 19563  
 Soyasaponin A<sub>2</sub>, 20122
- C<sub>53</sub>H<sub>88</sub>O<sub>21</sub>**  
 3-*O*-β-*D*-Glucopyranosyl-(1→4)-β-*D*-fucopyranosyl (2*S*,24*Z*)-cycloart-24-en-3β,22,26-triol 26-*O*-α-*L*-arabinopyranosyl-(1→6)-β-*D*-glucopyranoside, 8626  
 3-*O*-β-*D*-Glucopyranosyl-(1→4)-β-*D*-fucopyranosyl (2*S*,24*Z*)-cycloart-24-en-3β,22,26-triol 26-*O*-β-*D*-xylopyranosyl-(1→6)-β-*D*-glucopyranoside, 8629
- C<sub>53</sub>H<sub>88</sub>O<sub>22</sub>**  
 Gypenoside XXXIV, 9143  
 Gypenoside XXXVII, 9146
- C<sub>53</sub>H<sub>88</sub>O<sub>23</sub>**  
 3β,11α,16β-Trihydroxycycloartane-24-one-3-*O*-[β-*D*-glucopyranosyl(1→3)-β-*D*-glucopyranosyl(1→2)-β-*D*-glucopyranosyl]-16-*O*-α-*L*-arabinopyranoside, 21697  
 Yesanichinoside G, 22899
- C<sub>53</sub>H<sub>88</sub>O<sub>7</sub>**  
 Stigmasterol-3-(6-linoleoyl)glucopyranoside, 20373
- C<sub>53</sub>H<sub>90</sub>O<sub>7</sub>**  
 β-Sitosterol-3-(6-linoleoyl)glucopyranoside, 19989  
 Stigmasterol-3-(6-oleoyl)glucopyranoside, 20374
- C<sub>53</sub>H<sub>90</sub>O<sub>21</sub>**  
 3β,20*S*,21-Trihydroxydammar-24-ene 3-*O*-{[α-*L*-rhamnopyranosyl(1→2)][β-*D*-xylopyranosyl(1→3)]-β-*D*-glucopyranosyl}-21-*O*-β-*D*-glucopyranoside, 21702
- C<sub>53</sub>H<sub>90</sub>O<sub>22</sub>**  
 Ginsenoside Rb<sub>2</sub>, 8424  
 Ginsenoside Rc, 8426  
 Gypenoside XLIII, 9152  
 Gypenoside LVI, 9161  
 Gypenoside LXIII, 9167  
 Notoginsenoside L, 15830  
 3β,19,20*S*,21-Tetrahydroxydammar-24-ene 3-*O*-{[α-*L*-rhamnopyranosyl(1→2)][β-*D*-xylopyranosyl(1→3)]-β-*D*-glucopyranosyl}-21-*O*-β-*D*-glucopyranoside, 21092
- C<sub>53</sub>H<sub>90</sub>O<sub>23</sub>**  
 Ginsenoside Rb<sub>3</sub>, 8425  
 Gypenoside XLII, 9151  
 Gypenoside LXII, 9166  
 Gypenoside LXVII, 9170  
 Gypenoside LXVIII, 9171
- Gypenoside LXX, 9172  
 Yesanichinoside H, 22900
- C<sub>53</sub>H<sub>90</sub>O<sub>24</sub>**  
 3β,6α,12β,20*S*,25-Pentahydroxyl-dammar-23-ene-6-*O*-β-*D*-glucopyranoside-20-*O*-β-*D*-glucopyranosyl-3-*O*-β-*D*-xylopyranosyl(1→6)-*D*-glucopyranoside, 16850  
 3β,12,20*S*-Trihydroxy-25-hydroperoxydammar-23-ene 3-*O*-{[β-*D*-glucopyranosyl(1→2)-β-*D*-glucopyranosyl]-20-*O*-{[β-*D*-xylopyranosyl(1→6)]-β-*D*-glucopyranoside}, 21743
- C<sub>53</sub>H<sub>92</sub>O<sub>7</sub>**  
 Stigmasterol-3-(6-stearoyl)glucopyranoside, 20375
- C<sub>53</sub>H<sub>94</sub>O<sub>7</sub>**  
 β-Sitosterol-3-(6-stearoyl)glucopyranoside, 19991
- C<sub>53</sub>H<sub>102</sub>O<sub>6</sub>**  
 (2*S*)-1,3-Di-(*O*-palmitoyl)-2-*O*-octadecanoyl glycerol, 6480
- C<sub>54</sub>H<sub>42</sub>O<sub>36</sub>**  
 Sanguinin H<sub>8</sub>, 19280  
 Sanguinin H<sub>9</sub>, 19281
- C<sub>54</sub>H<sub>46</sub>O<sub>28</sub>**  
 Pentaisofuhalol dodecaacetate, 16860
- C<sub>54</sub>H<sub>54</sub>O<sub>11</sub>**  
 Blepharocalyxin E, 2500
- C<sub>54</sub>H<sub>64</sub>O<sub>29</sub>**  
 Glomeratose F, 8587  
 Reiniose H, 18610
- C<sub>54</sub>H<sub>64</sub>O<sub>30</sub>**  
 Watterose E, 22643
- C<sub>54</sub>H<sub>66</sub>O<sub>31</sub>**  
 Paniculatonoid A, 16607
- C<sub>54</sub>H<sub>78</sub>O<sub>19</sub>**  
 16β-[(*O*-(2-*O*-(*E*)-Cinnamoyl)-β-*D*-xylopyranosyl)-(1→2)-2-*O*-acetyl-α-*L*-arabinopyranosyl)oxy]-3β-[(β-*D*-glucopyranosyl)oxy]-17α-hydroxycholest-5-en-22-one, 3724
- C<sub>54</sub>H<sub>80</sub>O<sub>20</sub>**  
 Avenacin B<sub>2</sub>, 2030
- C<sub>54</sub>H<sub>80</sub>O<sub>21</sub>**  
 3β,17α-Dihydroxy-16β-[(*O*-β-*D*-glucopyranosyl-(1→4)-*O*-(2-*O*-3,4-dimethoxybenzoyl)-β-*D*-xylopyranosyl)-(1→3)-2-*O*-acetyl-α-*L*-arabinopyranosyl)oxy]cholest-5-en-22-one, 5899  
 3β-[(β-*D*-Glucopyranosyl)oxy]-17α-hydroxy-16β-[(*O*-(2-*O*-3,4-dimethoxybenzoyl)-β-*D*-xylopyranosyl)-(1→2)-2-*O*-acetyl-α-*L*-arabinopyranosyl)oxy]cholest-5-en-22-one, 8691
- C<sub>54</sub>H<sub>82</sub>O<sub>22</sub>**  
 Az III, 2059
- C<sub>54</sub>H<sub>82</sub>O<sub>23</sub>**  
 Az II, 2058
- C<sub>54</sub>H<sub>83</sub>NO<sub>11</sub>**  
 1,2-Di-*O*-(9*Z*,12*Z*,15*Z*-octadecatrienoyl)-3-*O*-(6-*p*-hydroxy-phenyl-propionamido-6-deoxy-α-*D*-glucosyl)-glycerol, 6430
- C<sub>54</sub>H<sub>84</sub>O<sub>21</sub>**  
 Capilliposide I, 3128
- C<sub>54</sub>H<sub>84</sub>O<sub>22</sub>**  
 Az IV, 2060
- C<sub>54</sub>H<sub>84</sub>O<sub>23</sub>**  
*Symplocos glomerata* saponin 8, 20536
- C<sub>54</sub>H<sub>84</sub>O<sub>25</sub>**  
 Ageratoside A<sub>4</sub>, 731  
 Ageratoside A<sub>5</sub>, 732  
 Sinocrassulose II, 19937  
 Sinocrassulose V, 19940
- C<sub>54</sub>H<sub>84</sub>O<sub>27</sub>**  
 Lucilianoside D, 13059
- C<sub>54</sub>H<sub>86</sub>O<sub>19</sub>**  
 12-*O*-Tigloyllineolon, 21378
- C<sub>54</sub>H<sub>86</sub>O<sub>20</sub>**  
 12-*O*-Tigloyldeacylmetaplexigenin, 21375
- C<sub>54</sub>H<sub>86</sub>O<sub>21</sub>**  
 Cynanauriculoside B, 4553
- C<sub>54</sub>H<sub>86</sub>O<sub>22</sub>**  
 Acetyljujuboside B, 443  
 Cirenshenoside U, 3739  
 Hederagenin-3-*O*-α-*L*-rhamnopyranosyl-(1→2)-α-*L*-arabinopyranosyl-28-*O*-3-acetyl-β-*D*-xylopyranosyl-(1→6)-β-*D*-glucopyranoside, 9269
- C<sub>54</sub>H<sub>86</sub>O<sub>23</sub>**  
 12-*O*-Acetyllineolon 3-*O*-β-*D*-glucopyranosyl-(1→4)-β-*D*-oleandropyranosyl-(1→4)-β-*D*-digitoxopyranosyl-(1→4)-β-*D*-digitoxopyranosyl-(1→4)-β-*D*-digitoxopyranoside, 450  
 Achyrantes saponin D, 542  
 3-*O*-α-*L*-Rhamnopyranosyl-(1→4)-[β-*D*-galactopyranosyl-(1→2)]-β-*D*-glucuronopyranosyl oleanolic acid 28-*O*-β-*D*-Glucopyranosylester, 18705
- C<sub>54</sub>H<sub>86</sub>O<sub>24</sub>**  
 Berneuxia saponin C, 2315  
 Calendasaponin A, 2965  
*Calendula officinalis* Glycoside A, 2969  
 Hydrocotyloside III, 9712  
 Hydrocotyloside IV, 9713  
 Metaplexigenin-3-*O*-β-*D*-glucopyranosyl-(1→4)-β-*D*-oleandropyranosyl-(1→4)-β-*D*-digitoxopyranosyl-(1→4)-β-*D*-digitoxopyranosyl-(1→4)-β-*D*-digitoxopyranoside, 13815
- C<sub>54</sub>H<sub>86</sub>O<sub>25</sub>**  
 Azukisaponin VI, 2070  
 Calendasaponin D, 2968

- Dianoside B, 5359
- C<sub>54</sub>H<sub>86</sub>O<sub>26</sub>**  
Segetoside K, 19668
- C<sub>54</sub>H<sub>88</sub>O<sub>21</sub>**  
Gypentonoside A, 9182  
Mimengoside A, 14866
- C<sub>54</sub>H<sub>88</sub>O<sub>22</sub>**  
Achyranthes saponin B, 540  
3-*O*- $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 2)-6-*O*-methyl- $\beta$ -*D*-glucuronopyranosyl-soyasapogenol B 22-*O*- $\beta$ -*D*-glucopyranoside, 18737  
3 $\beta$ ,16 $\alpha$ ,28-Trihydroxyolean-11,13(18)-dien-3 $\beta$ -yl- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)-[ $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)]- $\beta$ -*D*-glucopyranoside-28-*O*- $\beta$ -*D*-glucopyranoside, 21823
- C<sub>54</sub>H<sub>88</sub>O<sub>23</sub>**  
Acankoreoside C, 73  
Aralia-saponin V, 1603  
Calenduloside D, 2974  
Cirensheoside S, 3737  
Cirensheoside T, 3738  
3-*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl oleanolic acid 28- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl ester, 8648  
15- $\beta$ -Hydroxylineolon 3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-cymaropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-cymaropyranoside, 10329  
Paridiformoside, 16664  
3-*O*-[ $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-galactopyranosyl-(1 $\rightarrow$ 3)-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -*D*-glucuronopyranosyl]-primulagenin A, 18699  
3-*O*-[ $\alpha$ -*L*-Rhamnopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-galactopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-glucuronopyranosyl]-22-*O*- $\beta$ -*D*-glucopyranosylsoyasapogenol B, 18703  
3 $\beta$ ,21 $\beta$ ,22 $\beta$ ,24-Tetrahydroxyolean-12-en-3-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 3)-[ $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -*D*-galactopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucuronopyranoside, 21146
- C<sub>54</sub>H<sub>88</sub>O<sub>24</sub>**  
Aralia-saponin VI, 1604  
Aralia-saponin VII, 1605  
(25*R*)-26-[( $\alpha$ -*L*-Rhamnopyranosyl)oxy]-22 $\alpha$ -methoxyfurost-5-en-3 $\beta$ -yl-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)-*O*-[6-acetyl- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)]-*O*- $\beta$ -*D*-glucopyranoside, 18730  
Saikosaponin O, 19154  
Ternstroemiaside A, 20980  
Ternstroemiaside C, 20982
- C<sub>54</sub>H<sub>88</sub>O<sub>25</sub>**
- Desacyl-boninsaponin A, 5241  
Glycoside H<sub>2</sub>, 8830  
S-4a, 19092
- C<sub>54</sub>H<sub>90</sub>O<sub>9</sub>**  
Kansuiphorin A, 12145
- C<sub>54</sub>H<sub>90</sub>O<sub>10</sub>**  
Kansuiphorin B, 12146
- C<sub>54</sub>H<sub>90</sub>O<sub>21</sub>**  
3-*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-fucopyranosyl (22*S*,24*Z*)-cycloart-24-en-3 $\beta$ ,22,26-triol  
26-*O*- $\beta$ -*D*-quinovopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside, 8628  
Telosmoside A<sub>8</sub>, 20919
- C<sub>54</sub>H<sub>90</sub>O<sub>22</sub>**  
Gypenoside XXXVI, 9145  
Primulasaponin, 17859  
Telosmoside A<sub>9</sub>, 20920  
3 $\beta$ ,20*S*,21-Trihydroxydammar-24-ene 3-*O*-{[ $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)][ $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucopyranosyl}-21-*O*- $\beta$ -*D*-glucopyranoside, 21700
- C<sub>54</sub>H<sub>90</sub>O<sub>24</sub>**  
Notoginsenoside B, 15819  
Quinquenoside IV, 18449
- C<sub>54</sub>H<sub>92</sub>O<sub>21</sub>**  
Gypenoside VII, 9128
- C<sub>54</sub>H<sub>92</sub>O<sub>22</sub>**  
Gypenoside V, 9126  
Gypenoside VI, 9127  
Gypenoside XVIII, 9135  
Notoginsenoside I, 15827
- C<sub>54</sub>H<sub>92</sub>O<sub>23</sub>**  
Ginsenoside Rb<sub>1</sub>, 8423  
Gypenoside XIX, 9136  
Yesanchinoside E, 22897  
Yixinoside A, 22913
- C<sub>54</sub>H<sub>92</sub>O<sub>24</sub>**  
Grosomoside I, 9012  
Notoginsenoside A, 15818  
(24*S*)-3 $\beta$ ,11 $\alpha$ ,16 $\beta$ ,24-Tetrahydroxycycloartane-3-*O*-[ $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl]-24-*O*- $\beta$ -*D*-glucopyranoside, 21087
- C<sub>54</sub>H<sub>92</sub>O<sub>25</sub>**  
Notoginsenoside C, 15820  
Notoginsenoside K, 15829
- C<sub>54</sub>H<sub>108</sub>O<sub>2</sub>**  
Ceryl montanate, 3438  
Heptacosyl heptacosanate, 9372  
Melissyl lignocerate, 13708
- C<sub>55</sub>H<sub>60</sub>O<sub>30</sub>**  
Quercetin-3-(2-sinapoyl-*O*- $\beta$ -*D*-glucopyranosyl)-3'-(6-sinapoyl-*O*- $\beta$ -*D*-glucopyranosyl)-4'-*O*- $\beta$ -*D*-glucopyranoside, 18397
- C<sub>55</sub>H<sub>62</sub>N<sub>10</sub>**  
Psychotridine, 18094
- C<sub>55</sub>H<sub>66</sub>O<sub>30</sub>**  
Senegose F, 19721
- C<sub>55</sub>H<sub>69</sub>N<sub>11</sub>O<sub>13</sub>**  
Celogenamide A, 3384
- C<sub>55</sub>H<sub>72</sub>N<sub>4</sub>O<sub>6</sub>**  
Pheophytin b, 17141
- C<sub>55</sub>H<sub>73</sub>N<sub>9</sub>O<sub>9</sub>S<sub>2</sub>**  
Cyclolinopeptide I, 4514
- C<sub>55</sub>H<sub>73</sub>N<sub>9</sub>O<sub>10</sub>S<sub>2</sub>**  
Cyclolinopeptide F, 4511
- C<sub>55</sub>H<sub>74</sub>N<sub>4</sub>O<sub>5</sub>**  
Pheophytin a, 17140
- C<sub>55</sub>H<sub>80</sub>O<sub>18</sub>**  
Ikemagenin 3-*O*- $\beta$ -*D*-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranoside, 10966
- C<sub>55</sub>H<sub>82</sub>O<sub>22</sub>**  
3 $\beta$ ,17 $\alpha$ -Dihydroxy-16 $\beta$ -[(*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)-*O*-(2-*O*-3,4,5-trimethoxybenzoyl)-*D*-xylopyranosyl)-(1 $\rightarrow$ 3)-2-*O*-acetyl- $\alpha$ -*L*-arabinopyranosyl)oxy]cholest-5-en-22-one, 5900
- C<sub>55</sub>H<sub>83</sub>NO<sub>20</sub>**  
Pregnane glycoside HI, 17793
- C<sub>55</sub>H<sub>83</sub>NO<sub>21</sub>**  
Avenacin A<sub>1</sub>, 2029
- C<sub>55</sub>H<sub>84</sub>O<sub>21</sub>**  
TR-saponin C, 22063
- C<sub>55</sub>H<sub>86</sub>O<sub>22</sub>**  
Tenacissoside K, 20931
- C<sub>55</sub>H<sub>86</sub>O<sub>23</sub>**  
Escin IIIa, 7362
- C<sub>55</sub>H<sub>86</sub>O<sub>24</sub>**  
Aescin, 660  
Escin Ia, 7361  
Escin VIb, 7365  
Isoescin Ia, 11416  
Isoescin Ib, 11417  
*Symplocos glomerata* saponin 9, 20537  
*Symplocos glomerata* saponin 10, 20538  
Yiyeliangwenoside IX, 22917  
Yiyeliangwenoside X, 22918
- C<sub>55</sub>H<sub>86</sub>O<sub>25</sub>**  
Camellidin I, 3036  
Sinocrassuloside III, 19938
- C<sub>55</sub>H<sub>88</sub>O<sub>21</sub>**  
Cynanauriculoside A, 4552
- C<sub>55</sub>H<sub>88</sub>O<sub>22</sub>**  
Ciwujianoside D<sub>1</sub>, 3782
- C<sub>55</sub>H<sub>88</sub>O<sub>23</sub>**

- 12-*O*-Acetylneolon 3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-cymaropyranoside, 449
- Hederagenin-3-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl-28-*O*-6-acetyl- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside, 9268
- Taibaienoside III, 20615
- Taibaienoside VII, 20618
- C<sub>55</sub>H<sub>88</sub>O<sub>24</sub>**  
Metaplexigenin-3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-cymaropyranoside, 13814
- Saponin 9, 19341
- C<sub>55</sub>H<sub>88</sub>O<sub>25</sub>**  
Calendasaponin C, 2967
- 3-*O*-[ $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl] phytolaccagenic acid 28-*O*- $\beta$ -*D*-glucopyranosyl ester, 18713
- C<sub>55</sub>H<sub>88</sub>O<sub>27</sub>**  
(25*R*)-3 $\beta$ -[(*O*- $\alpha$ -*L*-Arabinopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)-*O*-[ $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 3)]-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-galactopyranosyl)oxy]-5 $\alpha$ -spirostan-12-one, 1571
- Cantalasaponin 4, 3093
- Hecogenin 3-*O*- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)-[ $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-galactopyranoside, 9256
- C<sub>55</sub>H<sub>90</sub>O<sub>23</sub>**  
3-*O*- $\alpha$ -*L*-Rhamnopyranosyl (1 $\rightarrow$ 2)- $\beta$ -*D*-galactopyranosyl (1 $\rightarrow$ 2)-6-*O*-methyl- $\beta$ -*D*-glucuronopyranosyl-soyasapogenol B-22-*O*- $\beta$ -*D*-glucopyranoside, 18707
- C<sub>55</sub>H<sub>90</sub>O<sub>26</sub>**  
*Agave americana* Glycoside 1, 716
- Agave cantala* Agaveside B, 718
- Agave cantala* Compound 1', 722
- Dongnoside D, 6556
- Tigogenin 3-*O*- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)-[ $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-galactopyranoside, 21387
- C<sub>55</sub>H<sub>90</sub>O<sub>27</sub>**  
Chlorogenin-3-*O*- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)-[ $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-galactopyranoside, 3553
- C<sub>55</sub>H<sub>92</sub>O<sub>19</sub>**  
Telosmoside A<sub>7</sub>, 20918
- C<sub>55</sub>H<sub>92</sub>O<sub>22</sub>**  
Mimengoside B, 14867
- Telosmoside A<sub>2</sub>, 20913
- 3 $\beta$ ,20*S*,21-Trihydroxydammar-24-ene 3-*O*-{[ $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)][ $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 3)]- $\beta$ -*D*-[6-*O*-acetylglucopyranosyl]}-21-*O*- $\beta$ -*D*-glucopyranoside, 21701
- C<sub>55</sub>H<sub>92</sub>O<sub>23</sub>**  
Ginsenoside Rs<sub>1</sub>, 8446
- Ginsenoside Rs<sub>2</sub>, 8447
- C<sub>55</sub>H<sub>92</sub>O<sub>26</sub>**  
Asparaside C, 1883
- C<sub>55</sub>H<sub>92</sub>O<sub>27</sub>**  
Asparaside D, 1884
- C<sub>55</sub>H<sub>98</sub>O<sub>7</sub>**  
 $\beta$ -Sitosterol-3-*O*- $\beta$ -*D*-glucoside-6'-*O*-eicosanate, 19988
- C<sub>55</sub>H<sub>99</sub>N<sub>3</sub>O<sub>18</sub>**  
Polaramycin A, 17609
- C<sub>56</sub>H<sub>38</sub>O<sub>12</sub>**  
Upunaphenol B, 22233
- C<sub>56</sub>H<sub>40</sub>O<sub>12</sub>**  
Davidiol C, 4697
- Kobophenol B, 12240
- C<sub>56</sub>H<sub>40</sub>O<sub>13</sub>**  
Nepalensinol G, 15481
- C<sub>56</sub>H<sub>40</sub>O<sub>31</sub>**  
Stenophyllanin A, 20310
- C<sub>56</sub>H<sub>42</sub>O<sub>12</sub>**  
Cotylelophenol C, 4130
- Gnemonol B, 8867
- Gnemonol C, 8868
- Halophilol B, 9199
- cis*-Miyabenol A, 14890
- Nepalensinol F, 15480
- Upunaphenol D, 22235
- Vaticanol B, 22355
- Vaticanol C, 22356
- (+)-Vitisin A, 22584
- (+)-*cis*-Vitisin A, 22585
- Vitisin B, 22586
- Vitisin C, 22587
- (+)-Vitisin D, 22588
- C<sub>56</sub>H<sub>42</sub>O<sub>13</sub>**  
Upunaphenol C, 22234
- C<sub>56</sub>H<sub>44</sub>O<sub>13</sub>**  
Kobophenol A, 12239
- Nepalensinol E, 15479
- C<sub>56</sub>H<sub>46</sub>O<sub>8</sub>**  
Pusilatol C, 18225
- C<sub>56</sub>H<sub>72</sub>O<sub>6</sub>**  
Xuxuasins A, 22812
- C<sub>56</sub>H<sub>72</sub>O<sub>7</sub>**  
7',8'-Dihydroxuxuarine A $\alpha$ , 5744
- Xuxuasins B, 22813
- C<sub>56</sub>H<sub>72</sub>O<sub>8</sub>**  
7',8'-Dihydroxuxuarine D $\beta$ , 5745
- C<sub>56</sub>H<sub>75</sub>N<sub>9</sub>O<sub>9</sub>S<sub>2</sub>**  
Cyclolinopeptide H, 4513
- C<sub>56</sub>H<sub>75</sub>N<sub>9</sub>O<sub>10</sub>S<sub>2</sub>**  
Cyclolinopeptide G, 4512
- C<sub>56</sub>H<sub>80</sub>O<sub>22</sub>**  
Cynaphylloside G, 4562
- C<sub>56</sub>H<sub>82</sub>O<sub>18</sub>**  
Ikemagenin 3-*O*- $\beta$ -*D*-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-cymaropyranoside, 10965
- C<sub>56</sub>H<sub>82</sub>O<sub>22</sub>**  
Periandrulcin A, 16918
- C<sub>56</sub>H<sub>84</sub>O<sub>19</sub>**  
Pregnane glycoside AI, 17785
- Pregnane glycoside BI, 17786
- C<sub>56</sub>H<sub>84</sub>O<sub>20</sub>**  
Pregnane glycoside CI, 17787
- Pregnane glycoside CII, 17788
- Pregnane glycoside WI, 17800
- 12-*O*-Salicyloylneolon, 19190
- C<sub>56</sub>H<sub>84</sub>O<sub>21</sub>**  
Pregnane glycoside UI, 17798
- Pregnane glycoside VI, 17799
- 12-*O*-Salicyloyldeacetylmetaplexigenin, 19189
- C<sub>56</sub>H<sub>86</sub>O<sub>3</sub>**  
Lutein-3-palmitate, 13135
- C<sub>56</sub>H<sub>86</sub>O<sub>19</sub>**  
Pregnane glycoside OI, 17795
- C<sub>56</sub>H<sub>86</sub>O<sub>22</sub>**  
3-*O*- $\alpha$ -*L*-Arabinofuranosyl-(1 $\rightarrow$ 3)-[ $\alpha$ -*L*-arabinofuranosyl-(1 $\rightarrow$ 2)]- $\beta$ -*D*-glucuronopyranosyl-21 $\beta$ ,22 $\alpha$ -di-*O*-angeloylprotoaescigenin, 1553
- 3-*O*- $\alpha$ -*L*-Arabinofuranosyl-(1 $\rightarrow$ 3)-[ $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -*D*-glucuronopyranosyl-21 $\beta$ ,22 $\alpha$ -di-*O*-angeloylprotoaescigenin, 1559
- C<sub>56</sub>H<sub>88</sub>O<sub>19</sub>**  
Periplocoside B, 16945
- C<sub>56</sub>H<sub>88</sub>O<sub>26</sub>**  
Segetoside C, 19660
- C<sub>56</sub>H<sub>88</sub>O<sub>29</sub>**  
(25*R*)-3 $\beta$ -[(*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 2)-*O*-[ $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 3)]-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-galactopyranosyl)oxy]-26-[[ $\beta$ -*D*-glucopyranosyl)oxy]-2 $\alpha$ -hydroxy-cholesta-5,17-diene-16,22-dione, 8748
- C<sub>56</sub>H<sub>90</sub>O<sub>19</sub>**  
Pregnane glycoside FI, 17791
- Wilfoside C<sub>1</sub>N, 22692

- C<sub>56</sub>H<sub>90</sub>O<sub>20</sub>**  
Pregnane glycoside GI, 17792
- C<sub>56</sub>H<sub>90</sub>O<sub>25</sub>**  
Ternstroemiaside B, 20981
- C<sub>56</sub>H<sub>90</sub>O<sub>28</sub>**  
Agamenoside F, 696  
(25*R*)-3β-[(*O*-*α*-*L*-Arabinopyranosyl-(1→3))-β-*D*-glucopyranosyl-(1→2)-*O*-[β-*D*-glucopyranosyl-(1→3)]-*O*-β-*D*-glucopyranosyl-(1→4)-β-*D*-galactopyranosyl)oxy]-5*α*-spirostan-12-one, 1570  
(25*R*)-3β-[(*O*-β-*D*-Glucopyranosyl-(1→3))-β-*D*-glucopyranosyl-(1→2)-*O*-[β-*D*-xylopyranosyl-(1→3)]-*O*-β-*D*-glucopyranosyl-(1→4)-β-*D*-galactopyranosyl)oxy]-5*α*-spirostan-12-one, 8661  
(25*R*)-2*α*-Hydroxyspirost-5-en-3β-yl *O*-β-*D*-glucopyranosyl-(1→3)-*O*-β-*D*-glucopyranosyl-(1→2)-*O*-[β-*D*-xylopyranosyl-(1→3)]-*O*-β-*D*-glucopyranosyl-(1→4)-β-*D*-galactopyranoside, 10722  
(25*R*)-3β-[(*O*-β-*D*-Xylopyranosyl-(1→3))-β-*D*-glucopyranosyl-(1→2)-*O*-[β-*D*-glucopyranosyl-(1→3)]-*O*-β-*D*-glucopyranosyl-(1→4)-β-*D*-galactopyranosyl)oxy]-5*α*-spirostan-12-one, 22826
- C<sub>56</sub>H<sub>90</sub>O<sub>29</sub>**  
(25*R*)-2*α*,17*α*-Dihydroxyspirost-5-en-3β-yl *O*-β-*D*-glucopyranosyl-(1→3)-*O*-β-*D*-glucopyranosyl-(1→2)-*O*-[β-*D*-xylopyranosyl-(1→3)]-*O*-β-*D*-glucopyranosyl-(1→4)-β-*D*-galactopyranoside, 6128  
(25*R*)-2*α*,15β-Dihydroxyspirost-5-en-3β-yl *O*-β-*D*-glucopyranosyl-(1→3)-*O*-β-*D*-glucopyranosyl-(1→2)-*O*-[β-*D*-xylopyranosyl-(1→3)]-*O*-β-*D*-glucopyranosyl-(1→4)-β-*D*-galactopyranoside, 6129
- C<sub>56</sub>H<sub>92</sub>O<sub>22</sub>**  
Lysimachoside, 13263
- C<sub>56</sub>H<sub>92</sub>O<sub>24</sub>**  
Glycoside H<sub>1</sub>, 8829  
Periplocoside H<sub>1</sub>, 16950
- C<sub>56</sub>H<sub>92</sub>O<sub>25</sub>**  
Malonylginsenoside Rb<sub>2</sub>, 13441  
Malonylginsenoside Rc, 13442  
Periplocoside H<sub>2</sub>, 16951  
Plocoside B, 17566
- C<sub>56</sub>H<sub>92</sub>O<sub>26</sub>**  
Dongnoside C, 6555
- C<sub>56</sub>H<sub>92</sub>O<sub>27</sub>**  
Polianthoside B, 17611  
Trigofoenoside G, 21657
- C<sub>56</sub>H<sub>92</sub>O<sub>28</sub>**  
(25*R*)-5*α*-Spirostan-3β,6β-diol 3-*O*-{*O*-β-*D*-glucopyranosyl-(1→3)-*O*-β-*D*-glucopyranosyl-(1→2)-*O*-[β-*D*-xylopyranosyl-(1→3)]-*O*-β-*D*-glucopyranosyl-(1→4)-β-*D*-galactopyranoside}, 20210
- C<sub>56</sub>H<sub>92</sub>O<sub>29</sub>**  
Digitonin, 5524  
Polianthoside D, 17613
- C<sub>56</sub>H<sub>94</sub>O<sub>24</sub>**  
Quinquenoside R<sub>1</sub>, 18450  
Yesanchinoside F, 22898
- C<sub>56</sub>H<sub>94</sub>O<sub>28</sub>**  
Protodesgalactotigonin, 17972  
Uttroside B, 22286
- C<sub>56</sub>H<sub>101</sub>N<sub>3</sub>O<sub>18</sub>**  
Polaramycin B, 17610
- C<sub>57</sub>H<sub>61</sub>O<sub>34</sub><sup>+</sup>**  
Delphinidin-3-*O*-[2-*O*-(2-*O*-(*trans*-caffeoyl)-β-*D*-glucopyranosyl)-β-*D*-galactopyranoside]-7-*O*-[6-*O*-(*trans*-caffeoyl)-β-*D*-glucopyranoside]-3'-*O*-[β-*D*-glucuronopyranoside], 5013
- C<sub>57</sub>H<sub>63</sub>O<sub>31</sub><sup>+</sup>**  
Delphinidin-3,7-di-*O*-β-*D*-glucopyranoside-3',5'-di-*O*-(6-*O*-*p*-coumaroyl-β-*D*-glucopyranoside), 5019  
Pigment 25, 17358
- C<sub>57</sub>H<sub>70</sub>O<sub>32</sub>**  
Tenuifoliolose K, 20949
- C<sub>57</sub>H<sub>72</sub>O<sub>33</sub>**  
Senegose D, 19719
- C<sub>57</sub>H<sub>82</sub>O<sub>22</sub>**  
Cynaphylloside F, 4561
- C<sub>57</sub>H<sub>84</sub>O<sub>22</sub>**  
Alpinoside B, 991  
20*S*,22*R*,23*S*,24*R*-16β,23;22,25-Diepoxy-cycloartane-3β,23,24-triol 3-*O*-(6-*O*-*trans*-isoferyl-β-*D*-glucopyranosyl)-(1→2)-β-*D*-glucopyranosyl-(1→2)-β-*D*-xylopyranoside, 5488
- C<sub>57</sub>H<sub>88</sub>O<sub>22</sub>**  
3-*O*-*α*-*L*-Arabinofuranosyl-(1→3)-[β-*D*-galactopyranosyl-(1→2)]-β-*D*-glucuronopyranosyl-21β,22*α*-di-*O*-angeloylbarringtonenol C, 1554  
Marsdeoreophiside B, 13577
- C<sub>57</sub>H<sub>88</sub>O<sub>23</sub>**  
3-*O*-*α*-*L*-Arabinofuranosyl-(1→3)-[β-*D*-glucopyranosyl-(1→2)]-β-*D*-glucuronopyranosyl-21β,22*α*-di-*O*-angeloylprotoaescigenin, 1555
- C<sub>57</sub>H<sub>88</sub>O<sub>25</sub>**  
Assamsaponin A, 1915  
Yiyeliangwanoside I, 22915  
Yiyeliangwanoside III, 22916
- C<sub>57</sub>H<sub>88</sub>O<sub>26</sub>**  
Theasaponin E<sub>3</sub>, 21285  
Theasaponin E<sub>6</sub>, 21288
- C<sub>57</sub>H<sub>88</sub>O<sub>28</sub>**  
Platyconic acid A lactone-28-[β-*D*-apiofuranosyl(1→3)-β-*D*-xylopyranosyl(1→4)-*α*-*L*-rhamnopyranosyl(1→2)-*L*-arabinopyranosyl] 3-*O*-β-*D*-glucopyranoside, 17538
- C<sub>57</sub>H<sub>90</sub>O<sub>24</sub>**  
Eupteleasaponin IV, 7625
- C<sub>57</sub>H<sub>90</sub>O<sub>25</sub>**  
Yemuoside I, 22883  
Yemuoside YM<sub>7</sub>, 22887
- C<sub>57</sub>H<sub>90</sub>O<sub>27</sub>**  
Ageratoside B<sub>2</sub>, 734
- C<sub>57</sub>H<sub>92</sub>O<sub>6</sub>**  
*α*-Eleostearin, 6749
- C<sub>57</sub>H<sub>92</sub>O<sub>23</sub>**  
Taibaenoside VIII, 20619
- C<sub>57</sub>H<sub>92</sub>O<sub>24</sub>**  
Clematoside A', 3825  
Scabioside F, 19446
- C<sub>57</sub>H<sub>92</sub>O<sub>26</sub>**  
Astersaponin G, 1927  
(25*S*)-26-[(β-*D*-Glucopyranosyl)oxy]furosta-5,20(22)-dien-3β-yl *O*-*α*-*L*-rhamnopyranosyl-(1→2)-*O*-[*O*-β-*D*-glucopyranosyl-(1→4)-*α*-*L*-rhamnopyranosyl-(1→3)]-β-*D*-glucopyranoside, 8688  
Hydrocotyloside VII, 9716
- C<sub>57</sub>H<sub>92</sub>O<sub>27</sub>**  
26-*O*-β-*D*-Glucopyranosyl-3β,26-dihydroxy-20,22-seco-25(*R*)-furost-5-en-20,22-dione-3-*O*-*α*-*L*-rhamnopyranosyl-(1→4)-*α*-*L*-rhamnopyranosyl-(1→4)-[*α*-*L*-rhamnopyranosyl-(1→2)]-β-*D*-glucopyranoside, 8623  
Polygalacin D, 17629  
Scillascilloside E<sub>2</sub>, 19525
- C<sub>57</sub>H<sub>92</sub>O<sub>28</sub>**  
(23*S*)-3β-[(*O*-β-*D*-Apiofuranosyl-(1→2)-*O*-[β-*D*-glucopyranosyl-(1→3)]-*O*-β-*D*-glucopyranosyl-(1→2)-*α*-*L*-arabinopyranosyl-(1→6)-β-*D*-glucopyranosyl)oxy]-17*α*,23-epoxy-28,29-dihydroxy-27-norlanost-8-en-24-one, 1509  
Avenacoside B, 2032  
16β-[[4(*S*)-5-(β-*D*-Glucopyranosyloxy)-4-methyl-1-oxopentyl]oxy]-3β-[(*O*-*α*-*L*-rhamnopyranosyl-(1→2)-*O*-[*O*-β-*D*-glucopyranosyl-(1→4)-*α*-*L*-rhamnopyranosyl-(1→3)]-β-*D*-glucopyranosyl)oxy]pregn-5-en-20-one, 8707  
(25*R*)-3β-[(*O*-β-*D*-Glucopyranosyl-(1→2)-*O*-[*O*-*α*-*L*-rhamnopyranosyl-(1→4)-β-*D*-glucopyranosyl-(1→3)]-*O*-β-*D*-glucopyranosyl-(1→4)-β-*D*-galactopyranosyl)oxy]-5*α*-spirostan-12-one, 8721  
Platycodin D, 17532

- Woodwardinoside C, 22725
- C<sub>57</sub>H<sub>93</sub>NO<sub>25</sub>**  
Neohyacinthoside, 15408
- C<sub>57</sub>H<sub>93</sub>NO<sub>29</sub>**  
Esculeoside C, 7377
- C<sub>57</sub>H<sub>93</sub>NO<sub>30</sub>**  
Esculeoside D, 7378
- C<sub>57</sub>H<sub>94</sub>O<sub>25</sub>**  
6"-Malonylgypenoside V, 13446
- C<sub>57</sub>H<sub>94</sub>O<sub>26</sub>**  
6"-Malonylginsenoside Rd<sub>1</sub>, 13444
- C<sub>57</sub>H<sub>94</sub>O<sub>27</sub>**  
Convallamarin, 4005  
Dongnoside B, 6554  
(25*R*)-3β-[(*O*-β-*D*-Glucopyranosyl-(1→2)-*O*-[*O*-*α*-*L*-rhamnopyranosyl-(1→4)-β-*D*-glucopyranosyl-(1→3)]-*O*-β-*D*-glucopyranosyl-(1→4)-β-*D*-galactopyranosyl)oxy]-5α-spirostan, 8722  
Tigogenin-3-*O*-*α*-*L*-rhamnopyranosyl-(1→3)-β-*D*-glucopyranosyl(1→2)-[β-*D*-glucopyranosyl(1→3)]-β-*D*-glucopyranosyl(1→4)-β-*D*-galactopyranoside, 21386  
Trigofoenoside G<sub>1</sub>, 21658
- C<sub>57</sub>H<sub>94</sub>O<sub>28</sub>**  
(25*R*)-15α-Hydroxy-5α-spirostan-3β-yl *O*-β-*D*-glucopyranosyl-(1→2)-*O*-[*O*-*α*-*L*-rhamnopyranosyl-(1→4)-β-*D*-glucopyranosyl-(1→3)]-*O*-β-*D*-glucopyranosyl-(1→4)-β-*D*-galactopyranoside, 10716  
Macrostemonoside E, 13330  
Parvifloside, 16682  
Polianthoside C, 17612
- C<sub>57</sub>H<sub>94</sub>O<sub>29</sub>**  
(25*R*)-26-*O*-β-*D*-Glucopyranosyl-22-hydroxy-furost-5(6)-ene-3β,26-diol-3-*O*-β-*D*-glucopyranosyl(1→2)[β-*D*-glucopyranosyl(1→3)]-β-*D*-glucopyranosyl(1→4)-β-*D*-galactopyranoside, 8671  
Polyfuroside, 17624
- C<sub>57</sub>H<sub>96</sub>O<sub>10</sub>**  
Longiside B, 12979
- C<sub>57</sub>H<sub>96</sub>O<sub>27</sub>**  
Asp-VII, 1908
- C<sub>57</sub>H<sub>96</sub>O<sub>28</sub>**  
Sarsaparilloside, 19389
- C<sub>57</sub>H<sub>96</sub>O<sub>29</sub>**  
Macrostemonoside B, 13327
- C<sub>57</sub>H<sub>96</sub>O<sub>30</sub>**  
Pentandroside F, 16882  
Proto-iso-erubioside B, 17978
- C<sub>57</sub>H<sub>98</sub>O<sub>6</sub>**  
Glyceryl linolenate III, 8816
- C<sub>57</sub>H<sub>104</sub>O<sub>6</sub>**  
Triolein, 21984
- C<sub>57</sub>H<sub>104</sub>O<sub>9</sub>**  
Triricinolein, 22028
- C<sub>57</sub>H<sub>110</sub>O<sub>6</sub>**  
Stearin, 20281
- C<sub>57</sub>H<sub>114</sub>O<sub>2</sub>**  
Heptacosyl melissate, 9373  
Heptatriacontanyl eicosanoate, 9412
- C<sub>57</sub>H<sub>117</sub>N<sub>2</sub>O<sub>7</sub>P**  
Sphingomyelin, 20155
- C<sub>58</sub>H<sub>59</sub>O<sub>36</sub><sup>+</sup>**  
Delphinidin-3-*O*-[2-*O*-(2-*O*-(*trans*-caffeyl)-β-*D*-glucopyranosyl)-6-*O*-(2-*O*-(tartaryl)malonyl)-β-*D*-galactopyranoside] -7-*O*-[6-*O*-(*trans*-caffeyl)-β-*D*-glucopyranoside], 5015
- C<sub>58</sub>H<sub>65</sub>O<sub>31</sub><sup>+</sup>**  
Petunidin 3-*O*-(6-*O*-(4-*O*-(4-*O*-(6-*O*-feruloyl)-β-*D*-glucopyranosyl)-*E*-*p*-coumaroyl)-*α*-rhamnopyranosyl)-β-*D*-glucopyranoside)-5-β-*D*-glucopyranoside, 17026
- C<sub>58</sub>H<sub>72</sub>O<sub>33</sub>**  
Senegose K, 19725  
Senegose M, 19727  
Tenuifoliose C, 20942  
Tenuifoliose E, 20944
- C<sub>58</sub>H<sub>74</sub>O<sub>8</sub>**  
Isoxuxuarine Fa, 11787  
Isoxuxuarine Gβ, 11788  
Xuxuarine Fa, 22811
- C<sub>58</sub>H<sub>76</sub>O<sub>8</sub>**  
7,8-Dihydroisoxuxuarine Fa, 5655  
7,8-Dihydroisoxuxuarine G<sub>α</sub>, 5656
- C<sub>58</sub>H<sub>84</sub>O<sub>3</sub>**  
Lutein-3-linolenate, 13133
- C<sub>58</sub>H<sub>86</sub>O<sub>19</sub>**  
Pregnane glycoside DI, 17789  
WilfosideK<sub>1</sub>N, 22694
- C<sub>58</sub>H<sub>86</sub>O<sub>20</sub>**  
Pregnane glycoside EI, 17790
- C<sub>58</sub>H<sub>88</sub>O<sub>3</sub>**  
Lutein oleic acid ester, 13134
- C<sub>58</sub>H<sub>88</sub>O<sub>20</sub>**  
Pregnane glycoside NI, 17794
- C<sub>58</sub>H<sub>88</sub>O<sub>21</sub>**  
12-*O*-Benzoyl-20-*O*-acetylsarcostin-3-*O*-β-*D*-thevetopyranosyl-(1→4)-β-*D*-cymaropyranosyl-(1→4)-β-*D*-cymaropyranosyl-(1→4)-β-*D*-cymaropyranoside, 2230
- C<sub>58</sub>H<sub>90</sub>O<sub>22</sub>**  
3-*O*-*α*-*L*-Rhamnopyranosyl-(1→3)-[β-*D*-galactopyranosyl-(1→2)]-β-*D*-glucuronopyranosyl-21β,22α-di-*O*-angeloylbarringtonenol C, 18702
- C<sub>58</sub>H<sub>92</sub>O<sub>25</sub>**  
Eupteleasaponin II, 7623
- C<sub>58</sub>H<sub>92</sub>O<sub>26</sub>**  
Yemuoside YM<sub>8</sub>, 22888
- C<sub>58</sub>H<sub>92</sub>O<sub>27</sub>**  
Scillasaponin E, 19521
- C<sub>58</sub>H<sub>92</sub>O<sub>29</sub>**  
Methyl platyconate A, 14681
- C<sub>58</sub>H<sub>94</sub>O<sub>25</sub>**  
3β-[(*O*-β-*D*-Glucopyranosyl-(1→4)-*O*-β-*D*-ribo-  
pyranosyl-(1→3)-*O*-*α*-*L*-rhamnopyranosyl-  
(1→2)-*α*-*L*-arabinopyranosyl)oxy]olean-12-en-  
28-oic acid *O*-β-*D*-glucopyranosyl ester, 8728  
Helianthoside B, 9295  
Oleanolic acid-3-*O*-β-*D*-glucopyranosyl(1→4)-  
β-*D*-glucopyranosyl(1→4)-β-*D*-ribo-  
pyranosyl(1→3)-*α*-*L*-rhamnopyranosyl(1→2)-*α*-*L*-arabi-  
nopyranoside, 16055  
Oleanolic acid-3-*O*-β-*D*-glucopyranosyl(1→4)-β-  
*D*-glucopyranosyl(1→4)-β-*D*-xylopyranosyl  
(1→3)-*α*-*L*-rhamnopyranosyl(1→2)-*α*-*L*-arabi-  
nopyranoside, 16056  
Scabiosaponin E, 19436
- C<sub>58</sub>H<sub>94</sub>O<sub>26</sub>**  
Fulvotomentoside A, 7995  
Jububoside A, 11909  
Jububoside A<sub>1</sub>, 11910  
Mukurozisaponin Y<sub>1</sub>, 15036  
Mukurozisaponin Y<sub>2</sub>, 15037  
Prosapogenin CP<sub>10</sub>, 17949  
Prosapogenin CP<sub>10α</sub>, 17950  
Scillascilloside E<sub>1</sub>, 19524
- C<sub>58</sub>H<sub>94</sub>O<sub>27</sub>**  
Ardipusilloside II, 1627  
Cyclamin, 4457  
(23*S*)-17α,23-Epoxy-29-hydroxy-3β-[(*O*-*α*-*L*-  
rhamnopyranosyl-(1→2)-*O*-[β-*D*-glucopyra-  
nosyl-(1→3)]-*O*-β-*D*-glucopyranosyl-(1→2)-  
*α*-*L*-arabinopyranosyl-(1→6)-β-*D*-glucopyra-  
nosyl)oxy]-27-norlanost-8-en-24-one, 7134
- C<sub>58</sub>H<sub>94</sub>O<sub>28</sub>**  
Platycoside H, 17541  
Scillanoside L<sub>1</sub>, 19516  
Soyasaponin A<sub>4</sub>, 20124
- C<sub>58</sub>H<sub>94</sub>O<sub>29</sub>**  
Deapio platycodin D<sub>3</sub>, 4800  
Platycoside A, 17539
- C<sub>58</sub>H<sub>95</sub>NO<sub>29</sub>**  
Esculeoside A, 7376  
Lycoperoside F, 13217  
Lycoperoside G, 13218
- C<sub>58</sub>H<sub>96</sub>O<sub>24</sub>**

- Capilliposide B, 3126
- C<sub>58</sub>H<sub>96</sub>O<sub>26</sub>**  
Methyl protodiosgenin tetraglycoside, 14699
- C<sub>58</sub>H<sub>96</sub>O<sub>27</sub>**  
(25S)-26-[( $\beta$ -D-Glucopyranosyl)oxy]-22 $\alpha$ -methoxyfurost-5-en-3 $\beta$ -yl *O*- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)-*O*-[*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -D-glucopyranoside, 8704
- C<sub>58</sub>H<sub>96</sub>O<sub>28</sub>**  
Capilliposide C, 3127  
Methyl parvifloside, 14653  
Taccasteroside C, 20598
- C<sub>58</sub>H<sub>96</sub>O<sub>29</sub>**  
Polyfuroside PO<sub>7</sub>, 17626
- C<sub>58</sub>H<sub>98</sub>O<sub>26</sub>**  
Ginsenoside Ra<sub>1</sub>, 8420  
Ginsenoside Ra<sub>2</sub>, 8421  
Notoginsenoside Fc, 15823
- C<sub>58</sub>H<sub>98</sub>O<sub>29</sub>**  
Macrostemonoside C, 13328
- C<sub>58</sub>H<sub>102</sub>O<sub>3</sub>**  
Ursa-12-ene-11-one-3-ol octocosate, 22262
- C<sub>58</sub>H<sub>104</sub>O<sub>2</sub>**  
Hancolupenol octacosanate, 9215
- C<sub>59</sub>H<sub>42</sub>O<sub>34</sub>**  
5-*O*-Galloylpunicacortein D, 8115
- C<sub>59</sub>H<sub>46</sub>O<sub>26</sub>**  
Procyanidin C<sub>1</sub>-3',3''-di-*O*-gallate, 17894
- C<sub>59</sub>H<sub>67</sub>O<sub>30</sub><sup>+</sup>**  
Malvidin 3-*O*-(6-*O*-(4-*O*-(4-*O*-(6-*O*-*E*-*p*-coumaroyl- $\beta$ -D-glucopyranosyl)-*E*-*p*-coumaroyl)- $\alpha$ -rhamnosyl)- $\beta$ -D-glucopyranoside)-5- $\beta$ -D-glucopyranoside, 13459
- C<sub>59</sub>H<sub>67</sub>O<sub>31</sub><sup>+</sup>**  
Malvidin 3-*O*-(6-*O*-(4-*O*-(4-*O*-(6-*O*-caffeoyl- $\beta$ -D-glucopyranosyl)-*E*-*p*-coumaroyl)- $\alpha$ -rhamnosyl)- $\beta$ -D-glucopyranoside)-5-*O*- $\beta$ -D-glucopyranoside, 13458
- C<sub>59</sub>H<sub>72</sub>O<sub>33</sub>**  
Tenuifolioside I, 20947  
Tenuifolioside J, 20948
- C<sub>59</sub>H<sub>74</sub>O<sub>34</sub>**  
Fallaxose E, 7713  
Senegose B, 19717  
Senegose C, 19718  
Tenuifolioside P, 20954
- C<sub>59</sub>H<sub>88</sub>O<sub>22</sub>**  
Condurangoglycoside A<sub>0</sub>, 3964
- C<sub>59</sub>H<sub>89</sub>NO<sub>23</sub>**  
12-*O*-Nicotinoyllineolon 3-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-cymaropyranoside, 15531
- C<sub>59</sub>H<sub>90</sub>O<sub>4</sub>**  
Ubiquinone 10, 22172
- C<sub>59</sub>H<sub>90</sub>O<sub>22</sub>**  
Condurangoglycoside C<sub>0</sub>, 3965
- C<sub>59</sub>H<sub>90</sub>O<sub>27</sub>**  
Assamsaponin C, 1917  
Theasaponin E<sub>1</sub>, 21283  
Theasaponin E<sub>2</sub>, 21284  
Theasaponin E<sub>4</sub>, 21286  
Theasaponin E<sub>7</sub>, 21289
- C<sub>59</sub>H<sub>92</sub>O<sub>26</sub>**  
Floratheasaponin A, 7832
- C<sub>59</sub>H<sub>92</sub>O<sub>27</sub>**  
Assamsaponin D, 1918  
Theasaponin, 21282
- C<sub>59</sub>H<sub>92</sub>O<sub>29</sub>**  
Ageratoside A<sub>1</sub>, 728  
Ageratoside A<sub>3</sub>, 730
- C<sub>59</sub>H<sub>92</sub>O<sub>31</sub>**  
Lucilianoside E, 13060
- C<sub>59</sub>H<sub>92</sub>O<sub>32</sub>S<sub>2</sub>**  
Colochiroside A, 3928
- C<sub>59</sub>H<sub>94</sub>O<sub>25</sub>**  
Maetenoside B, 13363
- C<sub>59</sub>H<sub>94</sub>O<sub>26</sub>**  
Berneuxia saponin A, 2313  
Berneuxia saponin B, 2314  
Clematibetoside B, 3820
- C<sub>59</sub>H<sub>94</sub>O<sub>27</sub>**  
Assamicin IV, 1914  
(25S)-26-[( $\beta$ -D-Glucopyranosyl)oxy]-22 $\alpha$ -methoxyfurosta-5,20(22)-dien-3 $\beta$ -yl *O*- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)-*O*-[*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 3)]-6-*O*-acetyl- $\beta$ -D-glucopyranoside, 8702
- C<sub>59</sub>H<sub>94</sub>O<sub>28</sub>**  
Maesasaponin I, 13351
- C<sub>59</sub>H<sub>94</sub>O<sub>28</sub>**  
Scillanoside L<sub>2</sub>, 19517  
Scillascilloside E<sub>3</sub>, 19526
- C<sub>59</sub>H<sub>94</sub>O<sub>29</sub>**  
Methyl 2-*O*-methyl platycogenate A, 14604  
Platycodin A, 17530  
Platycodin C, 17531  
Sophoraflavoside IV, 20092
- C<sub>59</sub>H<sub>96</sub>O<sub>25</sub>**  
Akeboside st<sub>in</sub>, 819  
Cussosaponin C, 4431  
Raddeanin D, 18518  
3 $\beta$ -*O*-( $\alpha$ -Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -arabinopyranosyl)-lup-12-en-28-*O*-( $\alpha$ -rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -galactopyranosyl) ester, 18692
- 3 $\beta$ -*O*-( $\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranosyl)-olean-12-ene-28-*O*-( $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl) ester, 18733
- C<sub>59</sub>H<sub>96</sub>O<sub>26</sub>**  
Anemoside B<sub>4</sub>, 1182  
Begoniifolide A, 2211  
Cussosaponin B, 4430  
Cussosaponin E, 4433  
3-*O*-[ $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 4)][ $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -arabinopyranosyl-hederagenin, 8723  
Hederasaponin C, 9275  
Japondipsaponin E<sub>1</sub>, 11817  
Jujuboside D, 11914  
Kalopanax saponin C, 12118  
Latifolioside F, 12552  
Latifolioside G, 12553  
Latifolioside H, 12554  
Matesaponin 4, 13601  
Pastuchoside D, 16701  
3 $\beta$ -*O*-( $\alpha$ -Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -arabinopyranosyl)-23-hydroxylup-12-en-28-*O*-( $\alpha$ -rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -galactopyranosyl)ester, 18690  
3-*O*-{[ $\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-galactopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -D-glucuronopyranosyl}-22-*O*-[ $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranosyl]-3 $\beta$ ,22 $\beta$ ,24-trihydroxyolean-12-ene, 18700  
Scabiosaponin F, 19437
- C<sub>59</sub>H<sub>96</sub>O<sub>27</sub>**  
Aradecoside D, 1601  
3 $\beta$ -[(*O*- $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -L-arabinopyranosyl)oxy]-23-hydroxyolean-12-en-28-oic acid *O*- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl ester, 8608  
3 $\beta$ -*O*-( $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranosyl)-hederagenin-28-*O*-( $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl)ester, 8716  
Hydrocotyloside V, 9714  
Jujuboside C, 11913  
Leontoside D, 12644  
Macranthoidin A, 13298  
Pastuchoside C, 16700  
Pulsatilioside B, 18196  
Scabiosaponin I, 19440  
Scabiosaponin J, 19441  
Virgaureasaponin 1, 22526

- C<sub>59</sub>H<sub>96</sub>O<sub>29</sub>**  
Saikosaponin U, 19163  
Saikosaponin V<sub>2</sub>, 19166  
Soyasaponin A<sub>1</sub>, 20121
- C<sub>59</sub>H<sub>98</sub>O<sub>26</sub>**  
Sophoraflavosidel, 20089
- C<sub>59</sub>H<sub>98</sub>O<sub>27</sub>**  
20,23-Dihydroxy-3 $\beta$ -[(*O*- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranosyl)oxy]lupan-28-oic acid 28-*O*- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl ester, 6106
- C<sub>59</sub>H<sub>100</sub>O<sub>26</sub>**  
Yesaninoside I, 22901
- C<sub>59</sub>H<sub>100</sub>O<sub>27</sub>**  
Ginsenoside Ra<sub>3</sub>, 8422  
Notoginsenoside Fa, 15822  
Notoginsenoside R<sub>4</sub>, 15839
- C<sub>60</sub>H<sub>46</sub>O<sub>24</sub>**  
Parameritannin A<sub>2</sub>, 16655
- C<sub>60</sub>H<sub>48</sub>O<sub>24</sub>**  
Epicatechin-(2 $\beta$  $\rightarrow$ *O* $\rightarrow$ 7,4 $\beta$  $\rightarrow$ 8)epicatechin-(4 $\alpha$  $\rightarrow$ 8)-catechin-(4 $\alpha$  $\rightarrow$ 8)-epicatechin, 6861  
Parameritannin A<sub>1</sub>, 16654
- C<sub>60</sub>H<sub>50</sub>O<sub>24</sub>**  
Arecatannin A<sub>2</sub>, 1656
- C<sub>60</sub>H<sub>52</sub>O<sub>30</sub>**  
Monochaetin, 14921
- C<sub>60</sub>H<sub>62</sub>O<sub>24</sub>**  
Gnemonoside K, 8876
- C<sub>60</sub>H<sub>63</sub>O<sub>37</sub><sup>+</sup>**  
Delphinidin-3-*O*-[2-*O*-(2-*O*-(*trans*-caffeoyl)- $\beta$ -D-glucopyranosyl)-6-*O*-(malonyl)- $\beta$ -D-galactopyranoside]-7-*O*-[6-*O*-(*trans*-caffeoyl)- $\beta$ -D-glucopyranoside]-3'-*O*-[ $\beta$ -D-glucuronopyranoside], 5014
- C<sub>60</sub>H<sub>69</sub>O<sub>31</sub><sup>+</sup>**  
Malvidin 3-*O*-(6-*O*-(4-*O*-(4-*O*-(6-*O*-feruloyl)- $\beta$ -D-glucopyranosyl)-*E*-*p*-coumaroyl)- $\alpha$ -rhamnopyranosyl)- $\beta$ -D-glucopyranoside)-5- $\beta$ -D-glucopyranoside, 13461
- C<sub>60</sub>H<sub>74</sub>O<sub>34</sub>**  
Reinioside J, 18612  
Senegose J, 19724  
Senegose L, 19726  
Senegose N, 19728  
Senegose O, 19729  
Tenuifolioside B, 20941  
Tenuifolioside D, 20943
- C<sub>60</sub>H<sub>78</sub>O<sub>9</sub>**  
Isoxuxuarine E $\beta$ , 11786
- C<sub>60</sub>H<sub>80</sub>O<sub>10</sub>**  
7 $\alpha$ -Hydroxyisoxuxuarine E $\alpha$ , 10267
- C<sub>60</sub>H<sub>92</sub>O<sub>28</sub>**  
Assamsaponin I, 1920
- C<sub>60</sub>H<sub>94</sub>O<sub>30</sub>**  
Ageratoside A<sub>2</sub>, 729
- C<sub>60</sub>H<sub>96</sub>O<sub>27</sub>**  
 $\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl-oleate-3- $\alpha$ -L-arabinofuranosyl (1 $\rightarrow$ 4)-methyl-( $\beta$ -D-glucuronopyranoside)uronate, 18712
- C<sub>60</sub>H<sub>98</sub>O<sub>26</sub>**  
Anhuienoside E, 1255  
Colchiside B, 3914  
3 $\beta$ -[*O*- $\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 4)-*O*- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)-[*O*- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)-*O*- $\beta$ -D-glucopyranosyl(1 $\rightarrow$ 4)-*O*- $\beta$ -D-glucuronopyranosyl]}-16 $\alpha$ -hydroxy-13 $\beta$ , 28-epoxyoleanane, 18734
- C<sub>60</sub>H<sub>98</sub>O<sub>27</sub>**  
Hydrocotyloside VI, 9715  
3-*O*-[ $\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-galactopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -D-glucuronopyranosyl]-22-*O*-[ $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranosyl]-3 $\beta$ ,22 $\beta$ ,24-trihydroxyolean-12-ene, 18701  
3 $\beta$ ,21 $\beta$ ,22 $\beta$ ,24-Tetrahydroxyolean-12-en-3-*O*- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 3)-[ $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -D-galactopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucuronopyranosyl-21-*O*- $\alpha$ -L-rhamnopyranoside, 21147
- C<sub>60</sub>H<sub>98</sub>O<sub>28</sub>**  
(25S)-26-[( $\beta$ -D-Glucopyranosyl)oxy]-22 $\alpha$ -methoxyfurost-5-en-3 $\beta$ -yl *O*- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)-*O*-[*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 3)]-6-*O*-acetyl- $\beta$ -D-glucopyranoside, 8703
- C<sub>60</sub>H<sub>98</sub>O<sub>29</sub>**  
Ternstroemiaside D, 20983
- C<sub>60</sub>H<sub>98</sub>O<sub>30</sub>**  
*Agave cantala* Agaveside A, 717  
Aralia-saponin VIII, 1606
- C<sub>60</sub>H<sub>102</sub>O<sub>26</sub>**  
Gypenoside II, 9125
- C<sub>60</sub>H<sub>102</sub>O<sub>27</sub>**  
Gypenoside I, 9124
- C<sub>60</sub>H<sub>102</sub>O<sub>28</sub>**  
Ginsenoside Ra<sub>0</sub>, 8419  
Gypenoside XX, 9137  
Quinquenoside V, 18451
- C<sub>61</sub>H<sub>74</sub>O<sub>34</sub>**  
Tenuifolioside H, 20946
- C<sub>61</sub>H<sub>76</sub>O<sub>35</sub>**  
Reinioside I, 18611
- Senegose A, 19716  
Senegose E, 19720  
Tenuifolioside O, 20953
- C<sub>61</sub>H<sub>92</sub>O<sub>28</sub>**  
Assamsaponin B, 1916  
Theasaponin E<sub>5</sub>, 21287
- C<sub>61</sub>H<sub>96</sub>O<sub>27</sub>**  
Tenacissoside J, 20930
- C<sub>61</sub>H<sub>96</sub>O<sub>28</sub>**  
Assamicin III, 1913  
Maesasaponin II, 13352  
Maesasaponin III, 13353
- C<sub>61</sub>H<sub>98</sub>O<sub>21</sub>**  
Symplocososide F, 20545
- C<sub>61</sub>H<sub>100</sub>O<sub>23</sub>**  
Periplocoside J, 16952
- C<sub>61</sub>H<sub>100</sub>O<sub>32</sub>**  
Chloromaloside E, 3563  
Pentandroside G, 16883
- C<sub>61</sub>H<sub>100</sub>O<sub>33</sub>**  
Polianthoside E, 17614
- C<sub>61</sub>H<sub>102</sub>O<sub>23</sub>**  
Telosmoside A<sub>13</sub>, 20924
- C<sub>61</sub>H<sub>102</sub>O<sub>24</sub>**  
Telosmoside A<sub>12</sub>, 20923
- C<sub>61</sub>H<sub>102</sub>O<sub>26</sub>**  
Telosmoside A<sub>5</sub>, 20916
- C<sub>61</sub>H<sub>102</sub>O<sub>27</sub>**  
Telosmoside A<sub>3</sub>, 20914
- C<sub>61</sub>H<sub>102</sub>O<sub>28</sub>**  
Yesaninoside J, 22902
- C<sub>61</sub>H<sub>102</sub>O<sub>32</sub>**  
Polianthoside F, 17615
- C<sub>62</sub>H<sub>64</sub>O<sub>20</sub>**  
Epioritin-(4 $\beta$  $\rightarrow$ 6)-epioritin-(4 $\beta$  $\rightarrow$ 6)-epioritin-4 $\alpha$ -ol nona-*O*-methylether tetra-acetate, 6983  
Epioritin-(4 $\beta$  $\rightarrow$ 6)-oritin-(4 $\alpha$  $\rightarrow$ 6)-epioritin-4 $\alpha$ -ol nona-*O*-methylether tetra-acetate, 6987  
Oritin-(4 $\beta$  $\rightarrow$ 6)-oritin-(4 $\alpha$  $\rightarrow$ 6)-epioritin-4 $\alpha$ -ol nona-*O*-methylether tetra-acetate, 16198
- C<sub>62</sub>H<sub>76</sub>O<sub>35</sub>**  
Tenuifolioside A, 20940
- C<sub>62</sub>H<sub>90</sub>O<sub>27</sub>**  
Cynaphylloside H, 4563
- C<sub>62</sub>H<sub>94</sub>O<sub>29</sub>**  
Assamsaponin F, 1919
- C<sub>62</sub>H<sub>98</sub>O<sub>4</sub>**  
(14-Methyl-24-methylene-dihydroman-giferodiol)-14-methyl-24-methylene dihydromangiferonate, 14595
- C<sub>62</sub>H<sub>98</sub>O<sub>28</sub>**  
Maesasaponin IV<sub>3</sub>, 13355
- C<sub>62</sub>H<sub>98</sub>O<sub>31</sub>**

- (23R)-17 $\alpha$ ,23-Epoxy-29-hydroxy-3 $\beta$ -[(*O*- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)-*O*-[*O*- $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranosyl-(1 $\rightarrow$ 3)]-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)-*O*- $\alpha$ -L-arabinopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl)oxy]-27-norlanost-8-ene-15,24-dione, 7138
- (23S)-17 $\alpha$ ,23-Epoxy-29-hydroxy-3 $\beta$ -[(*O*- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)-*O*-[*O*- $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranosyl-(1 $\rightarrow$ 3)]-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)-*O*- $\alpha$ -L-arabinopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl)oxy]-27-norlanost-8-ene-15,24-dione, 7139
- C<sub>62</sub>H<sub>98</sub>O<sub>34</sub>**  
(25R)-3 $\beta$ -[(*O*- $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 3)-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)-*O*-[ $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 3)]-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-galactopyranosyl)oxy]-26-[( $\beta$ -D-glucopyranosyl)oxy]-2 $\alpha$ -hydroxycholesta-5,17-diene-16,22-dione, 8658
- C<sub>62</sub>H<sub>100</sub>O<sub>24</sub>**  
WilfosideC<sub>1</sub>G, 22691
- C<sub>62</sub>H<sub>100</sub>O<sub>29</sub>**  
Ternstroemiaside E, 20984
- C<sub>62</sub>H<sub>100</sub>O<sub>30</sub>**  
Conyzasaponin A, 4015  
Conyzasaponin N, 4024  
Conyzasaponin P, 4026
- (23S)-17 $\alpha$ ,23-Epoxy-29-hydroxy-3 $\beta$ -[(*O*- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)-*O*-[*O*- $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranosyl-(1 $\rightarrow$ 3)]-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)-*O*- $\alpha$ -L-arabinopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl)oxy]-27-norlanost-8-en-24-one, 7140
- C<sub>62</sub>H<sub>100</sub>O<sub>31</sub>**  
Agavasaponin E, 712
- C<sub>62</sub>H<sub>100</sub>O<sub>33</sub>**  
Diuranthoside F, 6526  
Diuranthoside G, 6527  
(25R)-26-[( $\beta$ -D-Glucopyranosyl)oxy]-2 $\alpha$ -hydroxyfurosta-5,20(22)-dien-3 $\beta$ -yl *O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)-*O*-[ $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 3)]-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-galactopyranoside, 8693
- C<sub>62</sub>H<sub>100</sub>O<sub>34</sub>**  
(24S,25S)-24-[( $\beta$ -D-Glucopyranosyl)oxy]-2 $\alpha$ -hydroxyspirost-5-en-3 $\beta$ -yl *O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)-*O*-[ $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 3)]-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-galactopyranoside, 8698
- C<sub>62</sub>H<sub>100</sub>O<sub>35</sub>**  
3 $\beta$ -[(*O*- $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 3)-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)-*O*-[ $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 3)]-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-galactopyranosyl)oxy]-16 $\beta$ -[[4R]-5-( $\beta$ -D-glucopyranosyloxy)-4-methyl-1-oxopentyl]oxy]-2 $\alpha$ -hydroxypregn-5-en-20-one, 8659
- C<sub>62</sub>H<sub>102</sub>O<sub>30</sub>**  
*Agave cantala* Agaveside C, 719  
*Agave cantala* Agaveside D, 720
- C<sub>62</sub>H<sub>102</sub>O<sub>31</sub>**  
Dongnoside A, 6553
- C<sub>62</sub>H<sub>104</sub>O<sub>22</sub>**  
Telosmoside A<sub>10</sub>, 20921
- C<sub>62</sub>H<sub>104</sub>O<sub>23</sub>**  
Telosmoside A<sub>11</sub>, 20922
- C<sub>62</sub>H<sub>104</sub>O<sub>24</sub>**  
Quinquenoside II, 18447
- C<sub>62</sub>H<sub>104</sub>O<sub>33</sub>**  
Polianthoside G, 17616
- C<sub>63</sub>H<sub>72</sub>O<sub>33</sub>**  
Paniculatonoid B, 16608
- C<sub>63</sub>H<sub>78</sub>O<sub>36</sub>**  
Tenuifoliöse N, 20952
- C<sub>63</sub>H<sub>88</sub>CoN<sub>14</sub>O<sub>14</sub>P**  
Vitamin B<sub>12</sub>, 22556
- C<sub>63</sub>H<sub>88</sub>O<sub>22</sub>**  
12-*O*-Benzoyl-19-benzoyloxydeacetylmetaplexigenin-3-*O*- $\beta$ -D-thetopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-cymaropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-cymaropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-cymaropyranoside, 2232
- C<sub>63</sub>H<sub>94</sub>O<sub>26</sub>**  
Alpinoside C, 992
- C<sub>63</sub>H<sub>94</sub>O<sub>27</sub>**  
Alpinoside A, 990
- C<sub>63</sub>H<sub>98</sub>O<sub>29</sub>**  
Maesasaponin IV<sub>2</sub>, 13354  
PM-2004-70-458-4, 17579  
Tubeimoside A, 22072
- C<sub>63</sub>H<sub>98</sub>O<sub>30</sub>**  
PM-2004-70-458-5, 17581  
Tubeimoside B, 22073
- C<sub>63</sub>H<sub>98</sub>O<sub>31</sub>**  
Thladioside H<sub>1</sub>, 21335
- C<sub>63</sub>H<sub>100</sub>O<sub>23</sub>**  
Symplocoside A, 20540  
Symplocoside B, 20541
- C<sub>63</sub>H<sub>100</sub>O<sub>28</sub>**  
Maesasaponin V<sub>3</sub>, 13357
- C<sub>63</sub>H<sub>100</sub>O<sub>29</sub>**  
Eupteleasaponin III, 7624
- C<sub>63</sub>H<sub>100</sub>O<sub>31</sub>**  
Scillasaponin F, 19522
- C<sub>63</sub>H<sub>100</sub>O<sub>32</sub>**  
Scillasaponin G, 19523
- C<sub>63</sub>H<sub>102</sub>O<sub>2</sub>**  
Malloprenyl linolenate, 13427
- C<sub>63</sub>H<sub>102</sub>O<sub>11</sub>**  
(2S)-1,2,6'-Tri-*O*-[(9Z,12Z,15Z)-octadeca-9,12,15-trienyl]-3-*O*- $\beta$ -D-galactopyranosyl glycerol, 21983
- C<sub>63</sub>H<sub>102</sub>O<sub>29</sub>**  
Scabioside G, 19447
- C<sub>63</sub>H<sub>102</sub>O<sub>30</sub>**  
Conyzasaponin I, 4019
- C<sub>63</sub>H<sub>102</sub>O<sub>31</sub>**  
Conyzasaponin J, 4020
- C<sub>63</sub>H<sub>102</sub>O<sub>32</sub>**  
Polygalacin D<sub>2</sub>, 17630
- C<sub>63</sub>H<sub>102</sub>O<sub>33</sub>**  
(25R)-3 $\beta$ -[(*O*- $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 3)-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)-*O*-[*O*- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)]-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-galactopyranosyl)oxy]-5 $\alpha$ -spirostan-12-one, 8653
- Platycodin D<sub>2</sub>, 17533  
Platycodin D<sub>3</sub>, 17534
- C<sub>63</sub>H<sub>102</sub>O<sub>34</sub>**  
(25R)-3 $\beta$ -[(*O*- $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 3)-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)-*O*-[*O*- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)]-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-galactopyranosyl)oxy]-15 $\alpha$ -hydroxy-5 $\alpha$ -spirostan-12-one, 8654
- C<sub>63</sub>H<sub>104</sub>O<sub>23</sub>**  
Periplocoside F, 16949
- C<sub>63</sub>H<sub>104</sub>O<sub>33</sub>**  
(25R)-12 $\beta$ -Hydroxy-5 $\alpha$ -spirostan-3 $\beta$ -yl *O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)-*O*-[*O*- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)]-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-galactopyranoside, 10719
- (25R)-15 $\alpha$ -Hydroxy-5 $\alpha$ -spirostan-3 $\beta$ -yl *O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)-*O*-[*O*- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)]-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-galactopyranoside, 10720
- C<sub>63</sub>H<sub>104</sub>O<sub>34</sub>**  
(25R)-26-[( $\beta$ -D-Glucopyranosyl)oxy]-2 $\alpha$ -hydroxy-22 $\alpha$ -methoxyfurost-5-en-3 $\beta$ -yl-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)-*O*-[ $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 3)]-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-galactopyranoside, 8695
- C<sub>63</sub>H<sub>106</sub>O<sub>30</sub>**  
Notoginsenoside Q, 15835  
Notoginsenoside S, 15841



- C<sub>63</sub>H<sub>106</sub>O<sub>35</sub>**  
Capsicosin, 3144  
Sativoside B<sub>1</sub>, 19396
- C<sub>64</sub>H<sub>67</sub>O<sub>41</sub><sup>+</sup>**  
Cyanidin-3-*O*-[2-*O*-(2-*O*-(*trans*-caffeoyl)- $\beta$ -*D*-glucopyranosyl)-6-*O*-(2-*O*-(tartaryl)malonyl)- $\beta$ -*D*-galactopyranosyl]-7-*O*-[6-*O*-(*trans*-caffeoyl)- $\beta$ -*D*-glucopyranoside]-3'-*O*-[ $\beta$ -*D*-glucuronopyranoside], 4436
- C<sub>64</sub>H<sub>67</sub>O<sub>42</sub><sup>+</sup>**  
Delphinidin-3-*O*-[2-*O*-(2-*O*-(*trans*-caffeoyl)- $\beta$ -*D*-glucopyranosyl)-6-*O*-(2-*O*-(tartaryl)malonyl)- $\beta$ -*D*-galactopyranoside]-7-*O*-[6-*O*-(*trans*-caffeoyl)- $\beta$ -*D*-gluco-pyranoside]-3'-*O*-[ $\beta$ -*D*-glucuronopyranoside], 5016
- C<sub>64</sub>H<sub>100</sub>O<sub>28</sub>**  
Maesasaponin VI<sub>2</sub>, 13358
- C<sub>64</sub>H<sub>100</sub>O<sub>29</sub>**  
Maesasaponin V<sub>2</sub>, 13356
- C<sub>64</sub>H<sub>100</sub>O<sub>31</sub>**  
PM-2004-70-458-6, 17582  
Tubeimoside C, 22074  
3-*O*- $\beta$ -*D*-Xylopyranosyl-(1 $\rightarrow$ 3)-[ $\beta$ -*D*-galactopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -*D*-glucuronopyranosyl-gypsogenin-28-*O*- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-fucopyranoside, 22823
- C<sub>64</sub>H<sub>102</sub>O<sub>30</sub>**  
Yemuoside YM<sub>9</sub>, 22889
- C<sub>64</sub>H<sub>102</sub>O<sub>33</sub>**  
(23*S*)-17 $\alpha$ ,23-Epoxy-29-hydroxy-3 $\beta$ -[(*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)-*O*-[*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)]-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl]oxy]-27-norlanost-8-ene-15,24-dione, 7137
- C<sub>64</sub>H<sub>104</sub>O<sub>29</sub>**  
Huzhangoside B, 9693  
Huzhangoside C, 9694  
3 $\beta$ -[(*O*- $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 6)-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)-*O*- $\beta$ -*D*-ribopyranosyl-(1 $\rightarrow$ 3)-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl]oxy]olean-12-en-28-oic acid, 18714  
3 $\beta$ -[(*O*- $\beta$ -*D*-Ribopyranosyl-(1 $\rightarrow$ 3)-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl]oxy]olean-12-en-28-oic acid *O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl ester, 18836
- C<sub>64</sub>H<sub>104</sub>O<sub>30</sub>**  
Asperosaponin F, 1890  
3 $\beta$ -[(*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 3)-*O*-[ $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 2)]- $\alpha$ -*L*-arabinopyranosyl]oxy]olean-12-en-28-oic acid *O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl ester, 8747
- Helianthussaponin 2, 9297  
Hookeroside A, 9632  
Huzhangoside D, 9695  
Sapindoside D, 19319  
Scabiosaponin A, 19433  
3-*O*-[ $\beta$ -*D*-Xylopyranosyl (1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl (1 $\rightarrow$ 4)][ $\alpha$ -*L*-rhamnopyranosyl (1 $\rightarrow$ 3)]- $\beta$ -*D*-glucopyranosyl (1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranosyl (1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl hederagenin, 22831
- C<sub>64</sub>H<sub>104</sub>O<sub>31</sub>**  
Scabiosaponin K, 19442
- C<sub>64</sub>H<sub>104</sub>O<sub>32</sub>**  
(23*R*)-17 $\alpha$ ,23-Epoxy-29-hydroxy-3 $\beta$ -[(*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)-*O*-[*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)]-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl]oxy]-27-norlanost-8-en-24-one, 7135  
(23*S*)-17 $\alpha$ -Epoxy-29-hydroxy-3 $\beta$ -[(*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)-*O*-[*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)]-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl]oxy]-27-norlanost-8-en-24-one, 7136
- C<sub>64</sub>H<sub>104</sub>O<sub>33</sub>**  
Platycoside I, 17542
- C<sub>64</sub>H<sub>106</sub>O<sub>31</sub>**  
Jujuboside E, 11915
- C<sub>64</sub>H<sub>106</sub>O<sub>32</sub>**  
(25*S*)-26-[(*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl]oxy]-22 $\alpha$ -methoxyfurost-5-en-3 $\beta$ -yl *O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)-*O*-[*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucopyranoside, 8650
- C<sub>64</sub>H<sub>106</sub>O<sub>33</sub>**  
Taccasteroside B, 20597
- C<sub>64</sub>H<sub>108</sub>O<sub>31</sub>**  
Notoginsenoside D, 15821  
Notoginsenoside T, 15842
- C<sub>65</sub>H<sub>82</sub>O<sub>37</sub>**  
Tenuifolioside M, 20951
- C<sub>65</sub>H<sub>92</sub>O<sub>22</sub>**  
Pregnane glycoside TI, 17797
- C<sub>65</sub>H<sub>92</sub>O<sub>23</sub>**  
Pregnane glycoside QI, 17796
- C<sub>65</sub>H<sub>92</sub>O<sub>24</sub>**  
12-*O*-Benzoyl-19-salicyloyloxy-20-*O*-acetylsarcostin 3-*O*- $\beta$ -*D*-thevetopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-cymaropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-cymaropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-cymaropyranoside, 2269
- C<sub>65</sub>H<sub>98</sub>O<sub>23</sub>**  
Symplocososide E, 20544
- C<sub>65</sub>H<sub>102</sub>O<sub>29</sub>**  
Maesasaponin VI<sub>3</sub>, 13359
- C<sub>65</sub>H<sub>104</sub>O<sub>30</sub>**  
Maetenoside A, 13362
- C<sub>65</sub>H<sub>104</sub>O<sub>31</sub>**  
Ilekidinoside F, 10976
- C<sub>65</sub>H<sub>104</sub>O<sub>33</sub>**  
(23*S*,25*R*)-17 $\alpha$ ,23-Epoxy-29-hydroxy-3 $\beta$ -[(*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)-*O*-[*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)]-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl]oxy]lanost-8-en-23,26-olide, 7133
- C<sub>65</sub>H<sub>104</sub>O<sub>34</sub>**  
2''-*O*-Acetylplatycodin D<sub>2</sub>, 487  
3''-*O*-Acetylplatycodin D<sub>2</sub>, 488
- C<sub>65</sub>H<sub>106</sub>O<sub>24</sub>**  
Periplocoside E, 16948
- C<sub>65</sub>H<sub>106</sub>O<sub>30</sub>**  
Akeboside st<sub>g</sub>, 820  
Anhuenoside F, 1256  
3 $\beta$ -*O*-[ $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -arabinopyranosyl]-lup-12-en-28-*O*-( $\alpha$ -rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -galactopyranosyl) ester, 8718  
3 $\beta$ -[(*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 3)-*O*-[ $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)]- $\alpha$ -*L*-arabinopyranosyl]oxy]olean-12-en-28-oic acid *O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl ester, 8720  
Hederacolchiside E, 9257
- C<sub>65</sub>H<sub>106</sub>O<sub>31</sub>**  
3 $\beta$ -*O*- $\beta$ -*D*-Galactopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl-23-hydroxyolean-12-en-28-oic acid 28-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosylester, 8068  
3 $\beta$ -*O*-[ $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -arabinopyranosyl]-23-hydroxylup-12-en-28-*O*-( $\alpha$ -rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -galactopyranosyl) ester, 8717  
Hederacolchiside F, 9258  
23-Hydroxy-3 $\beta$ -[(*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)-*O*-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)]- $\alpha$ -*L*-arabinopyranosyl]oxy]lup-20(29)-en-28-oic acid 28-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)-*O*-

- β*-D-glucopyranosyl-(1→6)-*β*-D-glucopyranosyl ester, 10674  
 Matesaponin 5, 13602  
 Patrinoside C, 16721  
 3-*O*-2-*L*-Rhamnopyranosyl-(1→3)-*β*-D-glucopyranosyl-(1→3)-*α*-*L*-rhamnopyranosyl-(1→2)-*α*-*L*-arabinopyranosyl hederagenin 28-*O*-*β*-D-glucopyranosyl-(1→6)-*β*-D-glucopyranosyl ester, 18717  
 Scabiosaponin G, 19438  
**C<sub>65</sub>H<sub>106</sub>O<sub>32</sub>**  
 3-*O*-[*β*-D-Glucopyranosyl-(1→3)]-[*β*-D-glucopyranosyl-(1→2)]-*α*-*L*-arabinopyranosyl echinocystic acid 28-*O*-[*α*-*L*-rhamnopyranosyl-(1→4)-*β*-D-glucopyranosyl-(1→6)-*β*-D-glucopyranosyl] ester, 8639  
 Macranthoidin B, 13299  
 New triterpenoid glycoside, 15520  
 Scabiosaponin H, 19439  
 Ternstroemiaside F, 20985  
**C<sub>66</sub>H<sub>46</sub>O<sub>21</sub>**  
 RidiculoflavonylchalconeA, 18846  
 (4''',5'',7'-Trihydroxy-4',5,7''-trimethoxy-3,6''-biflavone)-3'''-*O*-4'''-(5,5'',7''-trihydroxy-3',3'',4'-trimethoxy-6-*O*-*β*,7-*α*-flavone-chalcone), 21853  
**C<sub>66</sub>H<sub>50</sub>O<sub>20</sub>**  
 Taiwanhomoflavone C, 20627  
**C<sub>66</sub>H<sub>50</sub>O<sub>30</sub>**  
 Procyanidin C<sub>1</sub>-3',3'',3'''-tri-*O*-gallate, 17895  
**C<sub>66</sub>H<sub>69</sub>O<sub>33</sub><sup>+</sup>**  
 Cyanidin-3-*O*-[2-*O*-(6-*O*-*E*-*p*-coumaroyl-*β*-D-glucopyranosyl)]-{6-*O*-[4-*O*-(6-*O*-*E*-*p*-coumaroyl-*β*-D-glucopyranosyl)-*E*-caffeoyl]-*β*-D-glucopyranosyl}-5-*O*-*β*-D-glucopyranoside, 4437  
 Delphinidin-3-*O*-*β*-D-glucopyranoside-7,3',5'-tri-*O*-(6-*O*-*p*-coumaroyl-*β*-glucopyranoside), 5026  
**C<sub>66</sub>H<sub>69</sub>O<sub>35</sub><sup>+</sup>**  
 Cyanidin-3-*O*-[2-*O*-(6-*O*-*E*-caffeoyl-*β*-D-glucopyranosyl)]-{6-*O*-[4-*O*-(6-*O*-*E*-3,5-dihydroxycinnamoyl-*β*-D-glucopyranosyl)-*E*-caffeoyl]-*β*-D-glucopyranosyl}-5-*O*-*β*-D-glucopyranoside, 4435  
**C<sub>66</sub>H<sub>94</sub>O<sub>27</sub>**  
 3-*O*-[*β*-D-Galactopyranosyl-(1→2)-*β*-D-glucopyranosyl]quillaic acid-28-*O*-*α*-*L*-rhamnopyranosyl-(1→2)-3-*O*-acetyl-4-*O*-*cis*-*p*-methoxycinnamoyl *β*-D-fucopyranoside, 8060  
 3-*O*-[*β*-D-Galactopyranosyl-(1→2)-*β*-D-glucopyranosyl]quillaic acid-28-*O*-*α*-*L*-rhamnopyranosyl-(1→2)-3-*O*-acetyl-4-*O*-*trans*-*p*-methoxycinnamoyl *β*-D-fucopyranoside, 8061  
**C<sub>66</sub>H<sub>102</sub>O<sub>29</sub>**  
 Maesasaponin VII<sub>1</sub>, 13360  
**C<sub>66</sub>H<sub>106</sub>O<sub>23</sub>**  
 Symplocoside C, 20542  
 Symplocoside D, 20543  
**C<sub>66</sub>H<sub>108</sub>O<sub>24</sub>**  
 Periploside A, 16961  
**C<sub>67</sub>H<sub>84</sub>O<sub>39</sub>**  
 Tenuifoliolose L, 20950  
**C<sub>67</sub>H<sub>104</sub>O<sub>32</sub>**  
 Segetoside F, 19663  
**C<sub>67</sub>H<sub>104</sub>O<sub>33</sub>**  
 3-*O*-*β*-D-Galactopyranosyl-(1→2)-*β*-D-glucopyranosyl-gypsogenin-28-*O*-*β*-D-xylopyranosyl(1→4)-[*β*-D-6-*O*-acetylglucopyranosyl(1→3)]-*α*-*L*-rhamnopyranosyl(1→2)-*β*-D-fucopyranoside, 8058  
**C<sub>67</sub>H<sub>108</sub>O<sub>34</sub>**  
 Conyzasaponin B, 4016  
 Conyzasaponin M, 4023  
 Conyzasaponin Q, 4027  
**C<sub>67</sub>H<sub>112</sub>O<sub>29</sub>**  
 Telosmoside A<sub>16</sub>, 20927  
**C<sub>67</sub>H<sub>112</sub>O<sub>30</sub>**  
 Telosmoside A<sub>18</sub>, 20929  
**C<sub>68</sub>H<sub>48</sub>O<sub>44</sub>**  
 Oenothin B, 16011  
 Sanguiin H<sub>3</sub>, 19275  
 Sanguiin H<sub>10</sub>, 19282  
**C<sub>68</sub>H<sub>50</sub>O<sub>44</sub>**  
 Nobotanin R, 15643  
**C<sub>68</sub>H<sub>56</sub>O<sub>44</sub>**  
 Cornusiin A, 4063  
**C<sub>68</sub>H<sub>86</sub>O<sub>39</sub>**  
 Tenuifoliolose F, 20945  
**C<sub>68</sub>H<sub>104</sub>O<sub>33</sub>**  
 Segetoside H, 19665  
**C<sub>68</sub>H<sub>104</sub>O<sub>34</sub>**  
 Segetoside I, 19666  
**C<sub>68</sub>H<sub>108</sub>O<sub>26</sub>**  
 Periplocoside K, 16953  
**C<sub>68</sub>H<sub>110</sub>O<sub>33</sub>**  
 Gleditsioside I, 8538  
**C<sub>68</sub>H<sub>110</sub>O<sub>34</sub>**  
 Conyzasaponin C, 4017  
**C<sub>68</sub>H<sub>110</sub>O<sub>35</sub>**  
 Conyzasaponin K, 4021  
 Conyzasaponin O, 4025  
**C<sub>68</sub>H<sub>112</sub>O<sub>37</sub>**  
 Agavasaponin H, 713  
**C<sub>68</sub>H<sub>114</sub>O<sub>27</sub>**  
 Telosmoside A<sub>14</sub>, 20925  
**C<sub>68</sub>H<sub>114</sub>O<sub>28</sub>**  
 Telosmoside A<sub>15</sub>, 20926  
 Telosmoside A<sub>17</sub>, 20928  
**C<sub>68</sub>H<sub>114</sub>O<sub>38</sub>**  
 Trigoneoside Va, 21671  
 Trigoneoside Vb, 21672  
**C<sub>68</sub>H<sub>134</sub>O<sub>2</sub>**  
 Lycopanerol C<sub>1</sub>, 13205  
**C<sub>69</sub>H<sub>82</sub>O<sub>35</sub>**  
 Kaempferol-3-*O*-[*α*-*L*-rhamnopyranosyl(1→6)-{*α*-*L*-rhamnopyranosyl(1→3)}-(2-*O*-*trans*-*p*-coumaroyl)]-*β*-D-glucopyranoside-7-*O*-[*α*-*L*-rhamnopyranosyl(1→3)-*α*-*L*-rhamnopyranosyl(1→3)-(4-*O*-*trans*-*p*-coumaroyl)]-*α*-*L*-rhamnopyranoside, 12079  
**C<sub>69</sub>H<sub>82</sub>O<sub>36</sub>**  
 Kaempferol-3-*O*-[*β*-D-glucopyranosyl(1→6)-{*α*-*L*-rhamnopyranosyl(1→3)}-(2-*O*-*trans*-*p*-coumaroyl)]-*β*-D-glucopyranoside-7-*O*-[*α*-*L*-rhamnopyranosyl(1→3)-*α*-*L*-rhamnopyranosyl(1→3)-(4-*O*-*cis*-*p*-coumaroyl)]-*α*-*L*-rhamnopyranoside, 12057  
 Kaempferol-3-*O*-[*β*-D-glucopyranosyl(1→6)-{*α*-*L*-rhamnopyranosyl(1→3)}-(2-*O*-*trans*-*p*-coumaroyl)]-*β*-D-glucopyranoside-7-*O*-[*α*-*L*-rhamnopyranosyl(1→3)-*α*-*L*-rhamnopyranosyl(1→3)-(4-*O*-*trans*-*p*-coumaroyl)]-*α*-*L*-rhamnopyranoside, 12058  
**C<sub>69</sub>H<sub>100</sub>O<sub>30</sub>**  
 Sinocrassuloside X, 19945  
**C<sub>69</sub>H<sub>106</sub>O<sub>33</sub>**  
 Segetoside B, 19659  
**C<sub>69</sub>H<sub>106</sub>O<sub>34</sub>**  
 Segetoside D, 19661  
**C<sub>69</sub>H<sub>108</sub>O<sub>35</sub>**  
 3-*O*-*α*-*L*-Arabinopyranosyl-(1→2)-[*β*-D-galactopyranosyl-(1→3)]-*β*-D-glucuronopyranosyl-gypsogenin-28-*O*-*β*-D-xylopyranosyl-(1→3)-*β*-D-xylopyranosyl-(1→4)-*α*-*L*-rhamnopyranosyl-(1→2)-*β*-D-fucopyranoside, 1566  
**C<sub>69</sub>H<sub>112</sub>O<sub>34</sub>**  
 Gleditsiasaponin E', 8529  
 Hookeroside B, 9633  
 Scabiosaponin B, 19434  
**C<sub>69</sub>H<sub>112</sub>O<sub>36</sub>**  
 Conyzasaponin L, 4022  
**C<sub>70</sub>H<sub>104</sub>O<sub>32</sub>**  
 Onjisaponin G, 16107  
 Senegin II, 19715  
**C<sub>70</sub>H<sub>110</sub>O<sub>32</sub>**  
 Segetoside G, 19664  
**C<sub>70</sub>H<sub>110</sub>O<sub>36</sub>**  
 3-*O*-*α*-*L*-Arabinopyranosyl-(1→2)-[*β*-D-galacto-

- pyranosyl-(1→3)]-β-D-glucuronopyranosyl-gypsogenin-28-O-β-D-glucopyranosyl(1→3)-[β-D-xylopyranosyl-(1→4)]-α-L-rhamnopyranosyl-(1→2)-β-D-fucopyranoside, 1565
- Vacsegoside B, 22308
- C<sub>70</sub>H<sub>112</sub>O<sub>26</sub>**  
Periplocoside D, 16947
- C<sub>70</sub>H<sub>114</sub>O<sub>34</sub>**  
3β-[(O-β-D-Glucopyranosyl-(1→4)-O-β-D-ribo-  
pyranosyl-(1→3)-O-α-L-rhamnopyranosyl-  
(1→2)-α-L-arabinopyranosyl)oxy]olean-12-  
en-28-oic acid O-α-L-rhamnopyranosyl-(1→4)-  
-O-β-D-glucopyranosyl-(1→6)-β-D-glucopyra-  
nosyl ester, 8729
- Helianthoside C, 9296
- 3β-[(O-α-L-Rhamnopyranosyl-(1→6)-O-β-D-  
glucopyranosyl-(1→4)-O-β-D-glucopyranosyl-  
(1→4)-O-β-D-ribo-β-D-glucopyranosyl-(1→3)-O-α-L-  
rhamnopyranosyl-(1→2)-α-L-arabinopyranosyl-  
oxy]olean-12-en-28-oic acid β-D-glucopyra-  
nosyl ester, 18715
- C<sub>70</sub>H<sub>114</sub>O<sub>35</sub>**  
3β-[(O-β-D-Glucopyranosyl-(1→4)-O-β-D-ribo-  
pyranosyl-(1→3)-O-α-L-rhamnopyranosyl-  
(1→2)-α-L-arabinopyranosyl)oxy]-21α-hy-  
droxyolean-12-en-28-oic acid O-α-L-rhamno-  
pyranosyl-(1→4)-O-β-D-glucopyranosyl-  
(1→6)-β-D-glucopyranosyl ester, 8727
- Patrinoside D, 16723
- Scabiosaponin C, 19435
- 3-O-[β-D-Xylopyranosyl(1→4)-β-D-glucopyra-  
nosyl(1→4)]-α-L-rhamnopyranosyl(1→3)]-β-  
D-glucopyranosyl(1→3)-α-L-rhamnopyranosyl-  
(1→2)-α-L-arabinopyranosyl hederagenin-  
28-O-β-D-glucopyranoside, 22832
- C<sub>70</sub>H<sub>116</sub>O<sub>38</sub>**  
Taccasteroside A, 20596
- C<sub>70</sub>H<sub>118</sub>O<sub>38</sub>**  
(25R)-3β-[(O-β-D-Glucopyranosyl-(1→3)-O-β-  
D-glucopyranosyl-(1→2)-O-[O-α-L-rhamno-  
pyranosyl-(1→4)-β-D-glucopyranosyl-  
(1→3)]-O-β-D-glucopyranosyl-(1→4)-β-D-  
galactopyranosyl)oxy]-22ξ-methoxy-5α-  
furostan-26-yl β-D-glucopyranoside, 8655
- C<sub>70</sub>H<sub>138</sub>O<sub>2</sub>**  
Lycoperol C<sub>2</sub>, 13206
- C<sub>71</sub>H<sub>102</sub>O<sub>31</sub>**  
Sinocrassuloside VI, 19941  
Sinocrassuloside VII, 19942
- C<sub>71</sub>H<sub>106</sub>O<sub>33</sub>**  
Onjisaponin E, 16105
- C<sub>71</sub>H<sub>116</sub>O<sub>34</sub>**  
Pastuchoside B, 16699
- C<sub>71</sub>H<sub>116</sub>O<sub>35</sub>**  
Pastuchoside A, 16698
- C<sub>71</sub>H<sub>116</sub>O<sub>36</sub>**  
28-O-β-D-Glucopyranosyl-(1→6)-β-D-gluco-  
pyranosyl ester of 3-O-[β-D-glucopyranosyl-  
(1→4)]-α-L-rhamnopyranosyl-(1→3)]-β-D-  
glucopyranosyl-(1→3)-α-L-rhamnopyranosyl-  
(1→2)-α-arabinopyranosyl-hederagenin, 8642
- 23-Hydroxy-3β-[(O-α-L-rhamnopyranosyl-  
(1→2)-O-[O-β-D-glucopyranosyl-(1→4)-β-D-  
glucopyranosyl-(1→4)]-α-L-arabinopyranosyl-  
oxy]lup-20(29)-en-28-oic acid 28-O-α-L-  
rhamnopyranosyl-(1→4)-O-β-D-glucopyra-  
nosyl-(1→6)-β-D-glucopyranosyl ester, 10675
- C<sub>72</sub>H<sub>104</sub>O<sub>31</sub>**  
Sinocrassuloside VIII, 19943  
Sinocrassuloside IX, 19944
- C<sub>72</sub>H<sub>106</sub>O<sub>31</sub>**  
3-O-[β-D-Galactopyranosyl-(1→2)-β-D-gluco-  
nopyranosyl]-28-O-[β-D-glucopyranosyl-  
(1→2)-α-L-rhamnopyranosyl-(1→2)-β-D-4-O-  
trans-p-methoxycinnamoyl-fucopyranosyl]  
quillaic acid, 8056
- C<sub>72</sub>H<sub>112</sub>O<sub>34</sub>**  
Segetoside E, 19662
- C<sub>72</sub>H<sub>112</sub>O<sub>37</sub>**  
Agrostemmasaponin 1, 765
- C<sub>72</sub>H<sub>112</sub>O<sub>38</sub>**  
Sinocrassuloside XI, 19946
- C<sub>72</sub>H<sub>114</sub>O<sub>27</sub>**  
Periplocoside A, 16944
- C<sub>72</sub>H<sub>116</sub>O<sub>4</sub>**  
Helenien, 9290  
Physalien, 17238
- C<sub>72</sub>H<sub>142</sub>O<sub>2</sub>**  
Lycoperol C<sub>3</sub>, 13207
- C<sub>73</sub>H<sub>116</sub>O<sub>27</sub>**  
Periplocoside C, 16963
- C<sub>73</sub>H<sub>118</sub>O<sub>38</sub>**  
Gleditsioside K, 8540
- C<sub>74</sub>H<sub>112</sub>O<sub>34</sub>**  
3-O-[β-D-3-O-cis-p-Coumaroyl-glucopyranosyl-  
(1→3)]-β-D-glucopyranosyl-(1→2)]-α-L-ara-  
binopyranosyl echinocystic acid 28-O-[α-L-  
rhamnopyranosyl-(1→4)-β-D-glucopyranosyl-  
(1→6)-β-D-glucopyranosyl] ester, 4161
- 3-O-[β-D-3-O-trans-p-Coumaroyl-glucopyra-  
nosyl-(1→3)]-β-D-glucopyranosyl-(1→2)]-α-  
L-arabinopyranosyl echinocystic acid 28-O-  
[α-L-rhamnopyranosyl-(1→4)-β-D-glucopyra-  
nosyl-(1→6)-β-D-glucopyranosyl] ester, 4162
- C<sub>74</sub>H<sub>120</sub>O<sub>37</sub>**  
Gleditsioside H, 8537
- C<sub>74</sub>H<sub>120</sub>O<sub>38</sub>**  
Gleditsiasaponin C', 8528
- C<sub>74</sub>H<sub>120</sub>O<sub>39</sub>**  
Gleditsioside J, 8539
- C<sub>75</sub>H<sub>52</sub>O<sub>48</sub>**  
Nobotanin A, 15641
- C<sub>75</sub>H<sub>54</sub>O<sub>47</sub>**  
Paconianin A, 16520  
Paconianin B, 16521  
Paconianin C, 16522  
Paconianin D, 16523
- C<sub>75</sub>H<sub>54</sub>O<sub>48</sub>**  
Rugosin E, 19058
- C<sub>75</sub>H<sub>56</sub>O<sub>48</sub>**  
Cornusiin G, 4065
- C<sub>75</sub>H<sub>75</sub>O<sub>35</sub>**  
Delphinidin-3,7,3',5'-tetra-O-(6-O-p-coumaroyl-  
β-glucopyranoside), 5031
- C<sub>75</sub>H<sub>81</sub>O<sub>42</sub><sup>+</sup>**  
Lobelinin A, 12940
- C<sub>75</sub>H<sub>112</sub>O<sub>35</sub>**  
Onjisaponin B, 16104
- C<sub>75</sub>H<sub>112</sub>O<sub>36</sub>**  
Onjisaponin F, 16106
- C<sub>76</sub>H<sub>116</sub>O<sub>34</sub>**  
Protocrocin, 17971
- C<sub>76</sub>H<sub>124</sub>O<sub>39</sub>**  
3-O-[β-D-Xylopyranosyl(1→4)-β-D-glucopyra-  
nosyl(1→4)]-α-L-rhamnopyranosyl(1→3)]-β-  
D-glucopyranosyl(1→3)]-α-L-rhamnopyra-  
nosyl(1→2)-α-L-arabinopyranosyl oleanolic  
acid-28-O-β-D-glucopyranosyl(1→6)-β-D-  
glucopyranoside, 22833
- C<sub>76</sub>H<sub>124</sub>O<sub>40</sub>**  
Asperosaponin H<sub>1</sub>, 1891  
28-O-β-D-Glucopyranosyl-(1→6)-β-D-gluco-  
pyranosyl ester of 3-O-[β-D-xylopyranosyl-  
(1→4)-β-D-glucopyranosyl-(1→4)]-α-L-rham-  
nopyranosyl-(1→3)]-β-D-glucopyranosyl-  
(1→3)-α-L-rhamnopyranosyl-(1→2)-α-ara-  
binopyranosyl-hederagenin, 8643
- 3-O-[β-D-Xylopyranosyl(1→4)-β-D-gluco-  
pyranosyl(1→4)]-α-L-rhamnopyranosyl(1→3)]-β-  
D-glucopyranosyl(1→3)-α-L-rhamnopyranosyl-  
(1→2)-α-L-arabinopyranosyl hederagenin-  
28-O-β-D-glucopyranosyl(1→6)-β-D-gluco-  
pyranoside, 22834
- C<sub>78</sub>H<sub>124</sub>O<sub>35</sub>**  
Gleditsioside A, 8530
- C<sub>78</sub>H<sub>124</sub>O<sub>36</sub>**  
Gleditsioside B, 8531
- C<sub>78</sub>H<sub>124</sub>O<sub>37</sub>**  
Gleditsioside Q, 8544

- C<sub>79</sub>H<sub>122</sub>O<sub>43</sub>**  
3-*O*-[ $\beta$ -*D*-Galactopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl]quillaic acid-28-*O*-[ $\alpha$ -*L*-arabinopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)]-[6-*O*-acetyl- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)]-4-*O*-acetyl- $\beta$ -*D*-fucopyranoside, 8059
- C<sub>79</sub>H<sub>128</sub>O<sub>30</sub>**  
PM-2004-70-458-4a, 17580
- C<sub>80</sub>H<sub>120</sub>O<sub>39</sub>**  
Onjisaponin A, 16103
- C<sub>80</sub>H<sub>126</sub>O<sub>44</sub>**  
Gypsoside, 9184
- C<sub>80</sub>H<sub>130</sub>O<sub>42</sub>**  
Sapindoside E, 19320
- C<sub>80</sub>H<sub>158</sub>O<sub>5</sub>**  
Lycoperol D, 13208
- C<sub>81</sub>H<sub>132</sub>O<sub>43</sub>**  
Clematoside A, 3824
- C<sub>82</sub>H<sub>54</sub>O<sub>52</sub>**  
Agrimoniin, 759  
Sanguin H<sub>6</sub>, 19278
- C<sub>82</sub>H<sub>56</sub>O<sub>52</sub>**  
Gemin A, 8263  
Heterophyllin B, 9469  
Nobotanin F, 15642  
Rugosin F, 19059
- C<sub>82</sub>H<sub>58</sub>O<sub>52</sub>**  
Coriariin A, 4053  
Rugosin D, 19057
- C<sub>82</sub>H<sub>60</sub>O<sub>52</sub>**  
Phillyraeoidin A, 17144
- C<sub>82</sub>H<sub>134</sub>O<sub>43</sub>**  
3 $\beta$ -[(*O*- $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 6)-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)-*O*- $\beta$ -*D*-ribopyranosyl-(1 $\rightarrow$ 3)-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl)oxy]olean-12-en-28-oic acid *O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl ester, 18716
- C<sub>84</sub>H<sub>64</sub>O<sub>18</sub>**  
Vaticanol D, 22357
- C<sub>84</sub>H<sub>134</sub>O<sub>41</sub>**  
Gleditsioside D, 8533
- C<sub>84</sub>H<sub>134</sub>O<sub>42</sub>**  
Gleditsioside C, 8532
- C<sub>84</sub>H<sub>134</sub>O<sub>43</sub>**  
Julibroside J<sub>20</sub>, 11934
- C<sub>85</sub>H<sub>130</sub>O<sub>43</sub>**  
Clematibetoside A, 3819
- C<sub>85</sub>H<sub>136</sub>O<sub>42</sub>**  
Julibroside J<sub>26</sub>, 11940
- C<sub>85</sub>H<sub>136</sub>O<sub>43</sub>**  
Julibroside J<sub>25</sub>, 11939
- C<sub>87</sub>H<sub>139</sub>NO<sub>43</sub>**  
Julibroside J<sub>22</sub>, 11936
- C<sub>87</sub>H<sub>142</sub>O<sub>48</sub>**  
Clematoside B, 3826
- C<sub>88</sub>H<sub>138</sub>O<sub>37</sub>**  
Gleditsioside O, 8542
- C<sub>88</sub>H<sub>138</sub>O<sub>38</sub>**  
Gleditsioside N, 8541
- C<sub>88</sub>H<sub>140</sub>O<sub>51</sub>**  
Acutifolioside, 599
- C<sub>88</sub>H<sub>144</sub>O<sub>48</sub>**  
Clematoside C, 3827
- C<sub>90</sub>H<sub>74</sub>O<sub>36</sub>**  
[Epicatechin-(4 $\beta$  $\rightarrow$ 8)] 5-epicatechin, 6857
- C<sub>94</sub>H<sub>148</sub>O<sub>42</sub>**  
Gleditsioside F, 8535  
Gleditsioside G, 8536
- C<sub>94</sub>H<sub>148</sub>O<sub>43</sub>**  
Gleditsiasaponin C, 8527  
Gleditsioside E, 8534
- C<sub>94</sub>H<sub>148</sub>O<sub>44</sub>**  
Gleditsiasaponin B, 8526
- C<sub>94</sub>H<sub>148</sub>O<sub>46</sub>**  
Julibroside J<sub>24</sub>, 11938
- C<sub>95</sub>H<sub>150</sub>O<sub>46</sub>**  
Julibroside J<sub>2</sub>, 11918  
Julibroside J<sub>7</sub>, 11922
- C<sub>96</sub>H<sub>152</sub>O<sub>46</sub>**  
Julibroside J<sub>27</sub>, 11941
- C<sub>97</sub>H<sub>153</sub>NO<sub>46</sub>**  
Julibroside J<sub>6</sub>, 11921
- C<sub>98</sub>H<sub>155</sub>NO<sub>46</sub>**  
Avicin G, 2038  
Julibroside J<sub>18</sub>, 11933
- C<sub>98</sub>H<sub>155</sub>NO<sub>47</sub>**  
Avicin D, 2036
- C<sub>100</sub>H<sub>158</sub>O<sub>49</sub>**  
Julibroside J<sub>21</sub>, 11935
- C<sub>101</sub>H<sub>160</sub>O<sub>48</sub>**  
Julibroside J<sub>14</sub>, 11929  
Julibroside J<sub>15</sub>, 11930
- C<sub>101</sub>H<sub>160</sub>O<sub>49</sub>**  
Julibroside, 11917  
Julibroside J<sub>5</sub>, 11920  
Julibroside J<sub>9</sub>, 11924  
Julibroside J<sub>10</sub>, 11925  
Julibroside J<sub>11</sub>, 11926  
Julibroside J<sub>17</sub>, 11932  
Julibroside J<sub>23</sub>, 11937
- C<sub>102</sub>H<sub>72</sub>O<sub>67</sub>**  
Oenotherin T<sub>1</sub>, 16012
- C<sub>102</sub>H<sub>162</sub>O<sub>48</sub>**  
Julibroside J<sub>16</sub>, 11931
- C<sub>102</sub>H<sub>162</sub>O<sub>49</sub>**  
Julibroside J<sub>8</sub>, 11923
- C<sub>103</sub>H<sub>160</sub>O<sub>43</sub>**  
Gleditsioside P, 8543
- C<sub>103</sub>H<sub>163</sub>NO<sub>49</sub>**  
Julibroside J<sub>3</sub>, 11919
- C<sub>104</sub>H<sub>165</sub>NO<sub>49</sub>**  
Julibroside J<sub>12</sub>, 11927  
Julibroside J<sub>13</sub>, 11928
- C<sub>108</sub>H<sub>212</sub>O<sub>6</sub>**  
Lycoperol B<sub>1</sub>, 13202
- C<sub>110</sub>H<sub>216</sub>O<sub>6</sub>**  
Lycoperol B<sub>2</sub>, 13203
- C<sub>112</sub>H<sub>220</sub>O<sub>6</sub>**  
Lycoperol B<sub>3</sub>, 13204
- C<sub>120</sub>H<sub>236</sub>O<sub>7</sub>**  
Lycoperol F, 13210  
Lycoperol G, 13211
- C<sub>122</sub>H<sub>232</sub>O<sub>7</sub>**  
Lycoperol E, 13209
- C<sub>123</sub>H<sub>86</sub>O<sub>78</sub>**  
Rugosin G, 19060
- C<sub>164</sub>H<sub>106</sub>O<sub>104</sub>**  
Sanguin H<sub>11</sub>, 19283
- O<sub>2</sub>S**  
Sulfur dioxide, 20479

# Compound Name Synonym Index

This index lists in alphabetical order all compound's synonym names contained in the bodies of compound entries. A equal sign (=) and compound code number (from 1 to 23033) follow the synonym name immediately for locating the compound in the encyclopedia. Following symbols in prefix are ineffective in ordering: *D*-, *L*-, *dl*, *R*-, *S*-, *E*-, *Z*-, *O*-, *N*-, *C*-, *H*-, *cis*-, *trans*-, *ent*-, *meso*-, *rel*-, *erythro*-, *threo*-, *sec*-, *chiro*-, *para*-, *exo*-, *m*-, *o*-, *p*-, *n*-,  $\alpha$ -,  $\beta$ -,  $\gamma$ -,  $\delta$ -,  $\epsilon$ -,  $\kappa$ -,  $\xi$ -,  $\psi$ -,  $\omega$ -, (+), (-), ( $\pm$ ) etc., and: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, {, }, [, ], (, ), ,, ;, \*, ', ", " ,  $\rightarrow$ , etc.

## A

- (*rel*-3*R*,5*R*,10*S*)-19(4 $\rightarrow$ 3)-Abeo-4(18),8,11,13-abietatetraen-3-ol = 22577  
(9*S*,13*S*,15*S*)-20-(10 $\rightarrow$ 9)-Abeo-12 $\alpha$ -acetoxo-7-hydroxy-13,16-cycloabieta-1,5(10),7-trien-6,11,14-trione = 22754  
(9*S*,13*S*,15*S*)-20-(10 $\rightarrow$ 9)-Abeo-2 $\alpha$ ,12 $\alpha$ -diacetoxo-7-hydroxy-13,16-cycloabieta-5(10),7-dien-6,11,14-trione = 22753  
17-(15 $\rightarrow$ 6)-Abeo-2 $\alpha$ ,11-diacetoxo-16-*O*-isopropyl-6,12,14-trihydroxyabieta-5,8,11,13-tetraen-7-one = 22750  
17-(15 $\rightarrow$ 16)-Abeo-2 $\alpha$ ,11-diacetoxo-6,12,14,16-tetrahydroxyabieta-5,8,11,13-tetraen-7-one = 22749  
19(4 $\rightarrow$ 3)-Abeo-11,14-dihydroxy-12-methoxyabieta-8,11,13,15-tetraen-7-one = 4875  
19(10 $\rightarrow$ 9)Abeo-8 $\alpha$ ,9 $\beta$ ,10 $\alpha$ -eupha-5,24-dien-3 $\beta$ -ol = 1463  
26(14 $\rightarrow$ 8)Abeo-*D*:*B*-friedo-ursane-3 $\beta$ ,16 $\alpha$ -dihydroxy-7 $\alpha$ ,14 $\alpha$ -epoxy-5(10)-ene = 17019  
18-(13 $\rightarrow$ 12 $\beta$ )-Abeo-lanostene triterpenoid acid = 1136  
20(10 $\rightarrow$ 5)-Abeo-4,5-seco-5(10),6,8,11,13-podocarpapentaen-3-one = 10052  
Abieforrestin = 11383  
8,13-Abietadien-18-oic acid = 16572  
8(14),13(15)-Abietadien-18-oic acid = 15333  
7,13-Abietadien-18-oil acid = 10  
8,11,13-Abietatrien-18-oic acid = 4873  
8,11,13-Abietatrien-12-ol = 7764  
Acacetin-7-*O*-glucoside = 21391  
Acacetin 7-*O*-(6''- $\alpha$ -*L*-rhamnopyranosyl)- $\beta$ -*D*-glucopyranoside = 61  
Acetaldehyde = 7419  
3-Acetamino-6-isobutyl-2,5-dioxopiperazine = 4046  
7 $\beta$ -Acetate-*O*-taxinine A = 20800  
Acetic acid amide = 109  
Acetic acid methyl ester = 14111  
Acetonylgeranin A = 17220  
2-Acetonil-6-*C*- $\beta$ -*D*-glucopyranosyl-7-hydroxy-5-methyl-chromone = 11205  
12- $\alpha$ -Acetoxymoorastatin = 21448  
8 $\beta$ -(4'-Acetoxiangelyloxy)-2 $\alpha$ ,3 $\beta$ -dihydroxy-6 $\beta$ *H*,7 $\alpha$ *H*-germacra-1(10)*E*,4*E*,11(13)-triene-6,12-olide = 7549  
8 $\beta$ -(4'-Acetoxiangelyloxy)-2 $\alpha$ -hydroxy-6 $\beta$ *H*,7 $\alpha$ *H*-germacra-1(10)-*E*,4*E*,11(13)-triene-6,12-olide = 7548  
1 $\beta$ -Acetoxo-9 $\alpha$ -benzoyloxy-2 $\beta$ ,6 $\alpha$ -dinicotinoyloxy- $\beta$ -dihydroagarofuran = 9470  
4-Acetoxo-2,3-bis(3,4-methylene-dioxybenzyl)-butan-1-ol = 9343  
2-Acetoxo-3-bornanol = 22620  
2 $\alpha$ -Acetoxobrevifoliol = 20770  
*rel*-(2*S*,5*R*,6*S*,7*R*,8*S*,9*S*,10*R*,18*S*,19*R*)-19-Acetoxo-18-butanoyloxy-18,19-epoxy-6,7-dihydroxy-2-(2-methylbutanoyloxy)cleroda-3,13(16),14-triene = 3260  
*rel*-(2*S*,5*R*,6*R*,8*S*,9*S*,10*R*,18*S*,19*R*)-19-Acetoxo-18-butanoyloxy-18,19-epoxy-6-hydroxy-2-(2-methylbutanoyloxy)cleroda-3,13(16),14-triene = 3258  
12-Acetoxo-7 $\alpha$ -butoxyethoxyabieta-6 $\alpha$ -yl 6,7-dehydroabieta-8,11,13-trien-12-yl ether = 7888  
*cis*-6 $\beta$ -Acetoxo-3 $\alpha$ -(cinnamoyloxy)tropane = 7349  
7 $\alpha$ -Acetoxo-3,4,15,16-diepoxy-cleroda-13(16),14-dien-20-al = 3251  
(20*S*,24*S*)-16 $\beta$ -Acetoxo-18,24,20,24-diepoxy-9,19-cyclanostane-3 $\beta$ ,25-diol-3-*O*- $\beta$ -*D*-xylopyranoside = 2205  
(20*S*,24*S*)-16 $\beta$ -Acetoxo-18,24,20,24-diepoxy-9,19-cyclanostane-3 $\beta$ ,15 $\beta$ ,25-triol-3-*O*- $\beta$ -*D*-xylopyranoside = 2204  
7 $\alpha$ -Acetoxo-15,16,12,20-diepoxy-20-hydroxy-cleroda-3,4,13(16),14-triene = 3250  
7 $\alpha$ -Acetoxo-3,4,15,16-diepoxy-12-oxo-cleroda-13(16),14-dien-20-al = 3249  
3 $\beta$ -Acetoxo-11 $\beta$ ,17-dihydroxy-*ent*-abieta-6(7),8(14),15(16)-triene = 13698  
6 $\alpha$ -Acetoxo-7 $\beta$ ,12-dihydroxy-8,11,13-abietatriene = 20461  
15 $\beta$ -Acetoxo-6 $\beta$ ,13 $\alpha$ -dihydroxy-3 $\alpha$ ,20-epoxy-*ent*-kaur-16-en-1,7-dione = 12590  
7 $\beta$ -Acetoxo-4 $\beta$ ,20*R*-dihydroxy-5 $\beta$ ,6 $\beta$ -epoxy-1-oxo-witha-2,24-dienolide = 302  
(1*R*,3*S*,4*S*)-3-Acetoxo-1,4-dihydroxy-8-isobutyloxyeudesm-11(13)-en-6,12-olide = 21410  
6 $\alpha$ -Acetoxo-7 $\beta$ ,11-dihydroxy-12-methoxy-8,11,13-abietatriene = 20460  
3 $\beta$ -Acetoxo-6 $\beta$ ,11 $\alpha$ -dihydroxy-16 $\alpha$ -methoxymethyl-6,20-epoxy-6,7-seco-*ent*-kaur-15-one-1,7-olide = 20621  
2 $\alpha$ -Acetoxo-3 $\alpha$ ,19 $\alpha$ -dihydroxy-olean-12-en-28-oic acid 28-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside = 18850

- 3 $\beta$ -Acetoxy-11 $\alpha$ ,23-dihydroxytaraxer-14-en-28-oic acid = 546  
 20 $\beta$ -Acetoxy-2 $\alpha$ ,3 $\beta$ -dihydroxyurs-12-en-28-oic acid = 9074  
 11 $\alpha$ -Acetoxyeffusanin D = 2116  
 (20S\*,24R\*)-16 $\beta$ -Acetoxy-20,24-epoxy-9,19-cyclolanostane-3 $\beta$ ,12 $\alpha$ ,18,25-tetraol-3-*O*- $\beta$ -D-xylopyranoside = 2195  
 (20S\*,24R\*)-16 $\beta$ -Acetoxy-20,24-epoxy-9,19-cyclolanostane-3 $\beta$ ,12 $\beta$ ,25-triol-3-*O*- $\beta$ -D-xylopyranoside = 2197  
 12 $\beta$ -Acetoxy-24R,25-epoxy-3 $\beta$ ,15 $\alpha$ -dihydroxy-16,23-dione-cycloart-7-ene 3-*O*- $\alpha$ -L-arabinopyranoside = 2730  
 12 $\beta$ -Acetoxy-24R,25-epoxy-3 $\beta$ -hydroxy-16,23-dione-cycloart-7-ene 3-*O*- $\alpha$ -L-arabinopyranoside = 2731  
 rel-(2S,5R,6R,8S,9S,10R,18S,19R)-19-Acetoxy-18,19-epoxy-6-hydroxy-18-methoxy-2-(2-methylbutanoyloxy)cleroda-3,13(16),14-triene = 3259  
 (8R)-4 $\beta$ -Acetoxy-3 $\beta$ -[(*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -L-cymaropyranosyl)oxy]-14-oxo-5 $\alpha$ -15-(14 $\rightarrow$ 8)-abeo-card-20(22)-dihydroenolide = 8007  
 (8R)-4 $\beta$ -Acetoxy-3 $\beta$ -[(*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -L-cymaropyranosyl)oxy]-14-oxo-5 $\alpha$ -15-(14 $\rightarrow$ 8)-abeo-card-20(22)-dihydroenolide = 8006  
 (8R)-4 $\beta$ -Acetoxy-3 $\beta$ -[(*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -L-cymaopyranosyl)oxy]-14-oxo-5 $\alpha$ -15-(14 $\rightarrow$ 8)-abeo-card-20(22)-dihydroenolide = 8008  
 5 $\alpha$ -Acetoxy-goniothalamine oxide = 3505  
 (rel 6S,7R,8S,9R)-6-Acetoxy-5(10),14-halimadien-7,13-diol = 22572  
 (rel 6S,7R,8S,9R)-7-Acetoxy-5(10),14-halimadien-6,13-diol = 22573  
 4,5-*cis*-4-Acetoxy-5-hydroxy-5-(1-acetoxypentadecyl)-2-cyclopenten-1-one = 5338  
 4,5-*trans*-4-Acetoxy-5-hydroxy-5-(1-acetoxypentadecyl)-2-cyclopenten-1-one = 5337  
 3'(S)-Acetoxy-4'(S)-hydroxy-3',4'-dihydroseselin = 18283  
 3 $\alpha$ -Acetoxy-4 $\alpha$ -hydroxy-4 $\beta$ ,10 $\beta$ -dimethyl-7 $\beta$ -(methyl-1*E*-propenoate)-*trans*-decalin = 175  
 4,5-*cis*-4-Acetoxy-5-hydroxy-5-(1-hydroxypentadecyl)-2-cyclopenten-1-one = 430  
 4,5-*trans*-4-Acetoxy-5-hydroxy-5-(1-hydroxytridecyl)-2-cyclopenten-1-one = 5336  
 3 $\alpha$ -Acetoxy-30-hydroxylup-20(29)-ene-23,28-dioic Acid = 91  
 3 $\alpha$ -Acetoxy-30-hydroxylup-20(29)-ene-23,28-dioic Acid 28-*O*- $\alpha$ -L-rhamno-pyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl ester = 92  
 16 $\beta$ -Acetoxy-17-hydroxy-19-nor-*ent*-kauran-4 $\alpha$ -ol = 1328  
 21 $\beta$ -Acetoxy-22 $\beta$ -hydroxy-3-oxours-12-en-28-al = 4041  
 11-(2-Acetoxy-6-hydroxyphenyl)-1-(2,6-dihydroxy-4-methoxyphenyl)undecan-1-one = 1646  
 11-(2-Acetoxy-6-hydroxyphenyl)-1-(2,4,6-trihydroxyphenyl)undecan-1-one = 1645  
*ent*-17-Acetoxy-18-isobutyryloxy-16( $\alpha$ )-kauran-19-oic acid = 19878  
*ent*-3 $\beta$ -Acetoxy-kauran-16 $\beta$ ,17-diol = 7959  
 3 $\alpha$ -Acetoxy- $\lambda$ 8(17),13(16),14-trien-19-oic acid = 11967  
 3 $\alpha$ -Acetoxy- $\lambda$ 8(24,31)-dien-21-oic acid 21-*O*- $\beta$ -D-xylopyranoside = 7872  
 (24Z)-12 $\beta$ -Acetoxy- $\lambda$ 8(7,9(11),24)-trien-26-oic acid = 22168  
 22 $\beta$ -Acetoxyatlantic acid = 3026  
 3 $\beta$ -Acetoxy-9,19-cyclolanost-24(*E*)-en-26-oic acid = 462  
 1-(2-Acetoxy-1,5-dihydroxy-cyclopent-3-enyl)-tridecan-1-one = 436  
 1-(2-Acetoxy-1,5-dihydroxy-cyclopent-3-enyl)-undecan-1-one = 435  
 4,5-*trans*-4-Acetoxy-5-hydroxy-5-(1-hydroxypentadecyl)-2-cyclopenten-1-one = 428  
 4,5-*trans*-4-Acetoxy-5-hydroxy-5-(1-hydroxytridecyl)-2-cyclopenten-1-one = 426  
*trans*-4-Acetoxy-5-hydroxy-5-pentadecanoyl-2-cyclopenten-1-one = 434  
*cis*-4-Acetoxy-5-hydroxy-5-tridecanoyl-2-cyclopenten-1-one = 432  
*trans*-4-Acetoxy-5-hydroxy-5-tridecanoyl-2-cyclopenten-1-one = 433  
 6 $\beta$ -Acetoxy-2 $\alpha$ ,3 $\beta$ ,5 $\beta$ ,14 $\beta$ ,16 $\alpha$ -pentahydroxygrayanane = 18808  
 6 $\beta$ -Acetoxy-2 $\alpha$ ,3 $\beta$ ,5 $\beta$ ,14 $\beta$ ,16 $\alpha$ -pentahydroxygrayan-10(20)-ene = 18809  
 1 $\beta$ -Acetoxy-2 $\beta$ ,6 $\alpha$ ,9 $\alpha$ -trifuroxydihydro- $\beta$ -agarofuran = 16167  
 5-Acetoxy-2,6,8-trimethylchromone 7-*O*- $\beta$ -D-glucopyranoside = 22216  
 3 $\beta$ -Acetoxy-28-nor-lup-12,17-dien-16 $\alpha$ -ol = 12244  
 15 $\alpha$ -Acetoxy-3-oxo-24-methylenelanosta-7,9(11)-dien-21-oic acid = 7859  
 19-Acetoxytaxagifine = 20790  
 6 $\beta$ -Acetoxy-3 $\beta$ ,8 $\beta$ ,12 $\beta$ ,14 $\beta$ -tetrahydroxybufa-4,20,22-trienolide = 10693  
 12 $\beta$ -Acetoxy-3 $\beta$ ,15 $\alpha$ ,24R,25-tetrahydroxy-16,23-dione-cycloart-7-ene 3-*O*- $\alpha$ -L-arabinopyranoside = 2729  
 23R-Acetoxytomatine = 13214  
 11-Acetoxy-6,12,14-trihydroxyabieta-5,8,11,13-tetraen-7-one = 3920  
 11 $\alpha$ -Acetoxy-6 $\beta$ ,7 $\beta$ ,15 $\beta$ -trihydroxy-7 $\alpha$ ,20-epoxy-entkaur-16-ene = 11401  
 3 $\beta$ -Acetoxy-6 $\alpha$ ,15 $\beta$ ,17-trihydroxy-11 $\beta$ ,16 $\beta$ -epoxy-*ent*-kaurane = 13695  
 28-Acetoxy-6 $\beta$ ,21 $\beta$ ,22 $\beta$ -trihydroxy-3-oxours-12-ene = 4044  
 1R,3R,5S,6R-6-Acetoxy-3-(3',4',5'-trimethoxybenzoyloxy)tropane = 7347  
 (rel 3S,5S,8R,9R,10S)-3-Acetoxy-14,15,16-trinor-13,9-labdanolide = 22567  
 2-Acetyl-4-chloro-1,8-dihydroxy-3-methylnaphthalene-8-*O*- $\beta$ -D-glucopyranoside = 16714  
 2-Acetyl-4-chloro-1,8-dihydroxy-3-methylnaphthalene-8-*O*- $\beta$ -D-glucopyranoside = 16714  
*O*-Acetylcholine = 351  
 25-*O*-Acetylcimigenol-3-*O*- $\beta$ -D-(2-acetyl)xylopyranoside = 20110  
 6-*O*-(2"-*O*-Acetyl-3"-*O*-cinnamoyl-4"-*O*-*p*-methoxycinnamoyl- $\alpha$ -L-rhamnopyranosyl)catalpol = 19571  
*O*-Acetyl columbianetin = 3937  
 10-Acetyl-2-deacetoxy-10-debenzoyltaxchinin A = 20757  
 13-Acetyl-2-deacetoxy-10-debenzoyltaxchinin A = 20755  
 5,10,13-Acetyl-10-debenzoyl brevifoliol = 21533  
 1-*O*-Acetyl-9-*O*-demethylpluviine = 472  
 25-*O*-Acetyl-7,8-didehydrocimigenol 3-*O*- $\beta$ -D-xylopyranoside = 352  
 2-Acetyl-1,8-dihydroxy-3-methyl naphthalene = 15489  
 2-*O*-Acetyl-3,4-di-*O*-(*E*)-*p*-methoxycinnamoyl- $\alpha$ -L-rhamnopyranoside = 2709  
 3-*O*-Acetyl-2-*O*-feruloyl- $\alpha$ -L-rhamnopyranose = 15618  
 4-*O*-Acetyl-2-*O*-feruloyl- $\alpha$ -L-rhamnopyranose = 15619  
 6'-Acetyl- $\beta$ -D-glucopyranosyldideroside = 376  
 6 $\alpha$ -*O*-(6-*O*-Acetyl- $\beta$ -D-glucopyranosyl)-15,16-dihydroxycleroda-3,13(14)-dien = 19213  
 6 $\alpha$ -*O*-(6-*O*-Acetyl- $\beta$ -D-glucopyranosyl)-15,16-epoxycleroda-3,13(16),14-trien = 19215  
 6-*O*-[6-*O*-Acetyl- $\beta$ -D-glucopyranosyl]-20-*O*-( $\beta$ -D-glucopyranosyl)-20(*S*)-protopanaxatriol = 22896  
 (22S)-16 $\beta$ -[(6-*O*-Acetyl- $\beta$ -D-glucopyranosyl)oxy]-22-hydroxy-3 $\beta$ -[(*O*- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)-*O*[( $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4))- $\beta$ -D-glucopyranosyl)oxy]cholest-5-en-12-one = 20229  
 6 $\alpha$ -*O*-(6-*O*-Acetyl- $\beta$ -D-glucopyranosyl)-15,16,18-trihydroxy-cleroda-3,13(14)-dien = 19214

- Acetylgomisin O = 19044  
8-*O*-Acetylharpagide = 409  
8-*O*-Acetylharpagide-aglucone-1-*O*- $\beta$ -*D*-ribohexo-3-ulopyranoside = 356  
6-Acetyl-7-hydroxy-2,2-dimethyl-2*H*-1-benzopyran = 7592  
6-Acetyl-5-hydroxy-4-methyl coumarin = 12903  
24-*O*-Acetyl-isodahurinol-3-*O*- $\beta$ -*D*-(2-acetyl)xylopyranoside = 20111  
24-*O*-Acetylisodahurinol-3-*O*- $\beta$ -*D*-xylopyranoside = 3666  
7-Acetyl kamebakaurin = 3953  
14-Acetyl kamebakaurin = 3952  
7-Acetyl kamebanin = 3951  
14-Acetyl kamebanin = 3950  
6'-*O*-Acetylmartynoside = 22662  
3-*O*-Acetyl-2-*O*-*p*-methoxycinnamoyl- $\alpha$ ( $\beta$ )-*L*-rhamnopyranose = 15621  
2-*O*-Acetyl-3-*O*-(*E*)-*p*-methoxycinnamoyl- $\alpha$ -*L*-rhamnopyranoside = 2710  
2-*O*-Acetyl-3-*O*-(*Z*)-*p*-methoxycinnamoyl- $\alpha$ -*L*-rhamnopyranoside = 2711  
2-Acetyl-3-methyl-6-carboxy-1,8-dihydroxynaphthalene-8-*O*- $\beta$ -*D*-glucopyranoside = 19066  
2-Acetyl-3-methyl-1,8-dihydroxynaphthalene-8-*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 3) $\beta$ -*D*-glucopyranoside = 16195  
3-*O*-[2-Acetyl-3-*O*-methyl- $\beta$ -*D*-fucopyranosyl-(1 $\rightarrow$ 4)-2,6-dideoxy-3-*O*-methyl- $\beta$ -*D*-ribo-hexopyranoside] 20-*O*-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)-3-*O*-methyl- $\beta$ -*D*-fucopyranoside] = 17566  
3-*O*-[4-*O*-Acetyl-3-*O*-methyl- $\beta$ -*D*-fucopyranosyl-(1 $\rightarrow$ 4)-2,6-dideoxy-3-*O*-methyl- $\beta$ -*D*-ribo-hexopyranoside] 20-*O*-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)-3-*O*-methyl- $\beta$ -*D*-fucopyranoside] = 8829  
14-*O*-Acetylneoline = 2739  
3 $\beta$ -Acetyloleanolic acid = 266  
7-(Acetyloxy)-*O*<sup>2</sup>-furanoyl-*O*<sup>2</sup>-deacetyl-7-deoxo-evonine = 10908  
7-(Acetyloxy)-*O*<sup>2</sup>-nicotinoyl-*O*<sup>2</sup>-deacetyl-*O*<sup>5</sup>-benzoyl-*O*<sup>5</sup>-deacetyl-7-deoxo-evonine = 10906  
6 $\beta$ -Acetyloxy-3 $\beta$ ,5 $\beta$ ,10 $\alpha$ ,14 $\beta$ ,16 $\alpha$ -pentahydroxygrayanane = 18810  
13-*O*-Acetylphorbol-20-(9*Z*,12*Z*-octadecadienoate) = 484  
2''-*O*-Acetyl platycodin D = 17530  
3''-*O*-Acetyl platycodin D = 17531  
Acetylradbosin B = 393  
1-*O*-[2-*O*-Acetyl- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl]-(2*E*,6*E*)-farnesol = 4230  
1-*O*-[3-*O*-Acetyl- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl]-(2*E*,6*E*)-farnesol = 4229  
*O*-Acetylrutaevin = 19082  
2'-*O*-Acetylsalsolide C = 20531  
3'-*O*-Acetylsalsolide C = 20530  
1-[6-(3-Acetyl-2,4,6-trihydroxy-5-methyl-benzyl)-5,7-dihydroxy-2,2-dimethyl-2*H*-chromen-8-yl]-2-methyl-butan-1-one = 13434  
Aconitane-13,14,15-trihydroxyl,20-ethyl-1,6,8,16-tetramethoxy-4-(methoxymethyl)-14-benzoate(1 $\alpha$ ,6 $\alpha$ ,14 $\alpha$ ,15 $\alpha$ ,16 $\beta$ ) = 15418  
Acorodin = 2435  
3 $\beta$ -Acetyloxypyrane = 3960  
Adaptinol = 9290  
Adenosine = 618  
Adenosine, *N*-[(5-hydroxy-2-pyridinyl)methyl] = 1039  
Aesculetin dimethylether = 19540  
Aethalic acid = 9486  
Afaxin = 18656  
Afromosin 7-*O*-[ $\alpha$ -rhamnopyranosyl-(1 $\rightarrow$ 6)]- $\beta$ -glucopyranoside = 5225  
Aglafolin = 14714  
AH1 = 707  
AH1a = 21030  
AH2 = 11199  
AH2a = 21131  
AH2b = 21121  
AH16 = 17114  
AH23 = 21120  
AHb<sub>1</sub> = 13999  
Akebiasaponin P<sub>D</sub> = 19316  
Akebiasaponin P<sub>G</sub> = 19317  
Aknadinine = 9447  
 $\beta$ -Alanyl-*L*-histidine = 3205  
Albanin F = 12385  
Albanin G = 12386  
Albanol = 15044  
Alcapton = 9608  
6-Aldehyde-isoophiopogonone A = 875  
(+)-Alismol = 888  
Alisol F 24-acetate = 902  
Alkylresorcinol B = 2380  
Alleoside A = 9335  
*L*-Alloisoleucine = 935  
26-*O*- $\beta$ -*D*-Allopyranosyl-(16*S*,20*S*,22*S*)-16 $\beta$ ,22-epoxy-16 $\alpha$ -methoxy-3 $\beta$ ,26-dihydroxy-cycloartan-24-one-3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranoside = 1544  
4-Allylcatechol = 955  
*rel*-(7*S*,8*S*,1'*R*,3'*S*,4'*R*)-1'-Allyl-7-(3,4-dimethoxyphenyl)-4'-hydroxy-5'-methoxy-8-methyl-2'-oxobicyclo[3.2.1]oct-5'-ene = 9208  
4-Allyl-2,6-dimethoxyphenol cinnamate = 5504  
4-Allyl-2-methoxyphenol = 7521  
4-Allylphenol = 3488  
4-Allylpyrocatechol = 955  
Allyl sulphide = 953  
5-Allyl-2,2',5'-trihydroxybiphenyl = 18533  
Alspopicalamine = 18303  
Amarin = 4317  
Amarylline = 13241  
Amethystoidin A = 6929  
*N*-Amidinosarcosine = 4221  
4-Aminobenzenesulfonic acid = 20467  
10-Amino-2,4-dimethoxyphenanthrene-1-carboxylic acid lactam = 8937  
 $\alpha$ -Amino-3,5-dioxo-1,2,4-oxadiazolidine-2-propanoic acid = 18452  
Aminoethane = 7420  
Aminoethanoic acid = 8817  
2-Aminoethanol = 7390  
3-Amino-5-ethenyl-5-hydroxy-2-cyclopenten-1-one = 15207  
3-(2-Aminoethyl)indole = 22058  
4-(2-Aminoethyl)pyrocatechol = 6559  
(*R*)-4-(2-Amino-1-hydroxyethyl)-1,2-benzenediol = 15708  
2-Amino-4-hydroxy-pteridine-6-carboxylic acid = 18530

- 2-Amino-3-(3-indolyl)propanoic acid = 22060  
 2-Amino-2-methylpropionic acid = 1055  
 2-Amino-4-(methylthio)butanoic acid = 13823  
 2-Amino-3-phenylpropanoic acid = 17093  
 3-Aminopregna-5,17(20)-diene-2,16-diol = 12345  
 2-Amino-4,7-pteridinediol = 11784  
 6-Amino-4,5,9-trimethoxyoxoisoaporphine = 4690  
 L-(−)-2-Amino-3-ureidopropionic acid = 862  
 2-Amino-5-ureidovaleric acid = 3774  
 Amyl ethyl ketone = 15979  
 δ-Amyrone = 1108  
 Anacarol = 3188  
 Anacrotine = 4266  
 Anaprel = 18635  
 Anchoic acid = 2056  
 Andrographoside = 1158  
 Anethol 2-methyl-butyrate = 17925  
 16-Angeloyl-21-acetylprotoaescigenin 3-O-[β-D-glucopyranosyl (1→2)]  
 [β-D-glucopyranosyl (1→4)]-β-D-glucopyranosiduronic acid = 7365  
 21-O-Angeloyl-22-O-acetylprotoaescigenin-3-O-[β-D-glucopyranosyl(1→2)]  
 [β-D-glucopyranosyl(1→4)]-β-D-glucopyranosiduronic acid = 660  
 21-O-Angeloyl-28-O-acetylprotoaescigenin-3-O-[β-D-glucopyranosyl(1→2)]  
 [β-D-glucopyranosyl(1→4)]-β-D-glucopyranosiduronic acid = 11417  
 21-O-(4-O-Angeloyl)-6-deoxy-β-glucopyranosyl-3-O-[β-glucopyranosyl(1→2)-  
 O-[β-glucopyranosyl(1→4)]-β-glucuronopyranosyl]protoaescigenin = 1914  
 8-Angeloyloxy-1α-hydroxy-3α,4α-epoxy-5α,7αH-10(14),11(13)-guaiadien-  
 12,6α-olide = 7195  
 22-Angeloylprotoaescigenin 3-O-[β-D-glucopyranosyl (1→2)] [β-D-glucopyra-  
 nosyl (1→4)]-β-D-glucopyranosiduronic acid = 7364  
 21-O-Angeloyltheasa-21-O-angeloyltheasapogenol E 3-O-β-D-galactopyra-  
 nosyl(1→2)[β-D-xylopyranosyl(1→2)-α-L-arabinopyranosyl (1→3)]-  
 β-D-glucopyranosiduronic acid = 21285  
 8β-Angelyloxy-4α-hydroxy-14-oxo-5αH,6βH,7αH-guai-2,10(14),11(13)-  
 triene-6,12-olide = 7543  
 8β-Angelyloxy-3β,4β,14-trihydroxy-5αH,6βH,7αH-guai-1(10),11(13)-diene-  
 6,12-olide = 7540  
 Anhydrobyakangelicin = 11301  
 25-Anhydrocimicigenol-3-O-β-D-xylopyranoside-(23R,24S) = 3672  
 Anhydroicaritin 3-O-β-D-(6-acetyl) glucopyranosyl-(1→3)-α-L-(4-acetyl)  
 rhamnopyranoside = 12272  
 Anhydroicaritin 3-O-β-D-(2,6-diacetyl)glucopyranosyl-(1→3)-α-L-(4-acet-  
 yl)rhamnopyranoside-7-O-β-D-glucopyranosyl = 12273  
 Anhydroicaritin-3-O-α-rhamnoside = 2138  
 Anhydromarmesin = 11630  
 2-Anilino-1,4-naphthoquinone = 13151  
 Anisic ketone = 1289  
 Annonacinone = 1315  
 cis-Annonacinone = 1316  
 Annonin I = 20240  
 Anol tiglolate = 17926  
 (−)-Anonaine = 1348  
 9,10-Anthracenedione = 1367  
 9-Anthracenol = 1365  
 Anticancer Alkaloid PMV70P691-001 = 6322  
 Anticancer Alkaloid PMV70P691-002 = 21968  
 Anticancer Benzenoid PMV70P691-003 = 6103  
 Anticancer Benzofuran PMV70P691-006 = 5086  
 Anticancer Benzofuran PMV70P691-65 = 14961  
 Anticancer Benzofuran PMV70P691-66 = 14962  
 Anticancer Benzofuran PMV70P691-67 = 14964  
 Anticancer Cyclopenta[b] Benzofuran PMV70P691-71 = 14714  
 Anticancer Diarylheptanoid PMV70P691-72 = 2468  
 Anticancer Flavonoid PMV70P691-016 = 6228  
 Anticancer Flavonoid PMV70P691-017 = 6246  
 Anticancer Flavonoid PMV70P691-019 = 10430  
 Anticancer Flavonoid PMV70P691-020 = 8262  
 Anticancer Flavonoid PMV70P691-021 = 10506  
 Anticancer Flavonoid PMV70P691-023 = 14075  
 Anticancer Flavonoid PMV70P691-102 = 14074  
 Anticancer Flavonoid PMV70P691-112 = 1402  
 Anticancer Flavonoid PMV70P691-113 = 21151  
 Anticancer Flavonoid PMV70P691-115 = 21918  
 Anticancer Flavonoid PMV70P691-79 = 2630  
 Anticancer Flavonoid PMV70P691-80 = 2635  
 Anticancer Flavonoid PMV70P691-81 = 3071  
 Anticancer Flavonoid PMV70P691-90 = 7485  
 Anticancer Flavonoid PMV70P691-99 = 12681  
 Anticancer Lignan PMV70P691-027 = 17342  
 Anticancer Lignan PMV70P691-125 = 14106  
 Anticancer Monoterpene PMV70P691-127 = 12953  
 Anticancer Sesquiterpene Lactone PMV70P691-037 = 21410  
 Anticancer Sesquiterpene PMV70P691-133 = 240  
 Anticancer Stilbenoid PMV70P691-140 = 11672  
 Anticancer Stilbenoid PMV70P691-144 = 18644  
 Antofine = 5055  
 Aoibaclin = 12214  
 Aphanamixis grandifolia = 1473  
 ent-Apigeniflavan-(2α→7,4α→8)-epiafzelechin = 13402  
 Apigenin-4',7-dimethyl ether = 10024  
 Apigenin-6-C-β-D-glucopyranoside = 11773  
 Apigenin-8-C-β-D-glucopyranoside = 22581  
 Apigenin-6-C-[(6-O-p-hydroxybenzoyl)-β-D-glucopyranosyl(1→2)-β-D-glu-  
 copyranside = 4187  
 Apigenin-5-O-α-L-rhamnosyl-(1→4)-6"-acetyl-β-D-glucoside = 3035  
 Apigenin trimethyl ether = 21913  
 Apigenside = 1492  
 3-O-β-D-Apiofuranosyl-(1→3)-α-L-arabinopyranosyl-(1→3)-[β-D-glucopyra-  
 nosyl-(1→2)]-β-D-glucopyranosyl-oleanolic acid = 17690  
 3-O-β-D-Apiofuranosyl-(1→3)-β-D-galactopyranosyl-(1→3)-[β-D-  
 glucopyranosyl-(1→2)]-α-L-arabinopyranosyl-oleanolic acid =  
 17694  
 3-O-β-D-Apiofuranosyl-(1→3)-β-D-galactopyranosyl-(1→3)-[β-D-glucopyra-  
 nosyl-(1→2)]-β-D-glucopyranosyl-oleanolic acid = 17691  
 3β-[(O-β-D-Apiofuranosyl-(1→2)-O-β-D-glucopyranosyl-(1→2)-O-α-L-  
 arabinopyranosyl-(1→6)-β-D-glucopyranosyl)oxy]-28,29-dihydroxy-  
 24,25,26,27-tetranorlanost-8-en-17α,23-olide = 13058



- 3-*O*- $\beta$ -*D*-Apiofuranosyl-(1 $\rightarrow$ 3)-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -*D*-glucopyranosyl-oleanolic acid = 17689
- 4-[4 $\beta$ -*O*- $\beta$ -*D*-Apiofuranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl-2,6,6-trimethyl-1-cyclohexen-1-yl]-butan-2-one = 4366
- 25-*O*- $\beta$ -*D*-Apiofuranosyl(1 $\rightarrow$ 4)- $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl 1 $\alpha$ ,3 $\beta$ ,7 $\beta$ ,24(5),25-pentahydroxycycloartane = 15198
- Apocynamarin = 20397
- Aptinol = 9290
- Aquilide A = 18098
- Aquillochin = 3831
- D*-Arabinitol = 1596
- 3-*O*-[ $\alpha$ -*L*-Arabinofuranosyl-(1 $\rightarrow$ 2)]- $\alpha$ -*L*-arabinopyranosyl-jujubogenin = 2083
- (23*S*,24*S*,25*R*)-3 $\beta$ -[(*O*- $\alpha$ -*L*-Arabinofuranosyl-(1 $\rightarrow$ 2)-*O*- $\alpha$ -*L*-arabinopyranosyl-(1 $\rightarrow$ 3)-*O*-[ $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)]-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)-*O*- $\alpha$ -*L*-arabinopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl)oxy]-17 $\alpha$ ,23-epoxy-24,29-dihydroxylanost-8-en-23,26-olide = 19523
- (23*S*,25*R*)-3 $\beta$ -[(*O*- $\alpha$ -*L*-Arabinofuranosyl-(1 $\rightarrow$ 2)-*O*- $\alpha$ -*L*-arabinopyranosyl-(1 $\rightarrow$ 3)-*O*-[ $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)]-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)-*O*- $\alpha$ -*L*-arabinopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl)oxy]-17 $\alpha$ ,23-epoxy-29-hydroxylanost-8-en-23,26-olide = 19522
- 3-*O*-[ $\alpha$ -*L*-Arabinofuranosyl (1 $\rightarrow$ 4)-6'-*O*-*n*-butyl- $\beta$ -*D*-glucuronopyranosyl]-oleanolic acid-28-*O*- $\beta$ -*D*-glucopyranoside = 20613
- 3-*O*-[ $\alpha$ -*L*-Arabinofuranosyl-(1 $\rightarrow$ 4)-6'-*O*-ethyl- $\beta$ -*D*-glucuronopyranosyl]-oleanolic acid-28-*O*- $\beta$ -*D*-glucopyranoside = 20614
- 3 $\beta$ -[(*O*- $\alpha$ -*L*-Arabinofuranosyl-(1 $\rightarrow$ 2)-*O*- $\alpha$ -*L*-arabinopyranosyl-(1 $\rightarrow$ 3)-*O*-[ $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)]-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)-*O*- $\alpha$ -*L*-arabinopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl)oxy]-29-hydroxy-15-oxo-24,25,26,27-tetranorlanost-8-en-17 $\alpha$ ,23-olide = 13060
- 3-*O*-[ $\alpha$ -*L*-Arabinopyranosyl-(1 $\rightarrow$ 4)-[2-*O*-acetyl]- $\beta$ -*D*-glucuronopyranosyl]-28-*O*-[ $\beta$ -*D*-glucopyranosyl]-oleanolic acid = 20534
- 4-*O*- $\alpha$ -*L*-Arabinopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-apiofuranosyldiphyllin = 17872
- 3-*O*- $\alpha$ -*L*-Arabinopyranosyl-3 $\beta$ ,23-dihydroxy-lup-20(29)-en-28-oic acid = 18192
- 3-*O*- $\alpha$ -*L*-Arabinopyranosyl-(1 $\rightarrow$ 3)-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)]- $\alpha$ -*L*-arabinopyranosyl-oleanolic acid = 17692
- 3-*O*-[ $\alpha$ -*L*-Arabinopyranosyl-(1 $\rightarrow$ 6)]-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)]- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl-21-*O*-acetyl-22-*O*-acetyl-3 $\beta$ ,16 $\alpha$ ,21 $\beta$ ,22 $\alpha$ ,28-pentahydroxyolean-12-ene = 9716
- 3-*O*- $\alpha$ -[*L*-Arabinopyranosyl-(1 $\rightarrow$ 6)]-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)]- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl-22-*O*-acetyl-21-*O*-(2-methylbuta-noyl)-3 $\beta$ ,15 $\alpha$ ,16 $\alpha$ ,21 $\beta$ ,22 $\alpha$ ,28-hexahydroxyolean-12-ene = 9715
- 3-*O*-[ $\alpha$ -*L*-Arabinopyranosyl-(1 $\rightarrow$ 6)]-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)]- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl-22-*O*-acetyl-21-*O*-(2-methylpropa-noyl)-3 $\beta$ ,15 $\alpha$ ,16 $\alpha$ ,21 $\beta$ ,22 $\alpha$ ,28-hexahydroxyolean-12-ene = 9714
- 3-*O*-[ $\alpha$ -*L*-Arabinopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucuronopyranosyl]-28-*O*-[ $\beta$ -*D*-glucopyranosyl]-oleanolic acid = 20533
- 3-*O*- $\alpha$ -*L*-Arabinopyranosyl hederagenin 28-*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside = 818
- 3-*O*- $\alpha$ -*L*-Arabinopyranosyl-16 $\alpha$ -hydroxy-22 $\alpha$ -acetoxysaikogenin E = 17961
- 3-*O*- $\alpha$ -*L*-Arabinopyranosyl ilexosapogenin A 28- $\beta$ -*D*-glucopyranosyl ester = 18540
- (23*S*,25*R*)-3 $\beta$ -[(*O*- $\alpha$ -*L*-Arabinopyranosyl-(1 $\rightarrow$ 3)-*O*-[ $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)]-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)-*O*- $\alpha$ -*L*-arabinopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl)oxy]-17 $\alpha$ ,23-epoxy-29-hydroxylanost-8-en-23,26-olide = 19521
- 3 $\beta$ -[(*O*- $\alpha$ -*L*-Arabinopyranosyl-(1 $\rightarrow$ 3)-*O*-[ $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)]-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)-*O*- $\alpha$ -*L*-arabinopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl)oxy]-29-hydroxy-15-oxo-24,25,26,27-tetranorlanost-8-en-17 $\alpha$ ,23-olide = 13059
- 3-*O*- $\alpha$ -*L*-Arabinopyranosyl saikogenin F = 17962
- 3-*O*- $\alpha$ -*L*-Arabinopyranosyl-3 $\beta$ ,19 $\alpha$ ,23-trihydroxyursa-12,20(30)-dien-28-oic acid 28- $\beta$ -*D*-glucopyranosyl ester = 18535
- 3-*O*- $\alpha$ -*L*-Arabinopyranosyl(1 $\rightarrow$ 3)-(6'-butyl ester)- $\beta$ -*D*-glucopyranosyl-oleanolic acid-28-*O*- $\beta$ -*D*-glucopyranoside = 9358
- Araregai toxin = 21211
- Ardisin = 1643
- Aristolactam C *N*-glucoside = 1694
- Aristolene = 1704
- 1(10)-Aristolene = 2943
- Aristolochic acid BII methyl ester = 1691
- Aristolodione = 17429
- Aristololactam = 1698
- Armidenediol = 1749
- Arolisic acid B = 2312
- Aromadendr-1(10)-en-9-one = 20249
- Aromadendrin-4',7-dimethyl ether = 8202
- Aromadendrol = 1764
- Artemisinine IV = 18288
- Artemisinin G = 1786
- Artilesin A = 13604
- $\gamma$ -Asarone = 957
- Asebotoside = 1847
- Asimicin = 1317
- (-)-Asimilobine = 1857
- Asparagine A = 5470
- Astragalin = 12050
- Astrantiagenin E = 9260
- Astrasierversianin VIII = 1937
- Attractilin = 1969
- Attractylaxide = 1971
- $\beta$ -Daucosterol = 4680
- Aurantinin = 15286
- Ausraptin = 11462
- Azacyclohexane = 17450
- 1-Aza-9,10-dimethoxy-4-methyl-2-oxo-1,2-dihydroanthracene = 12116
- Azedarachin = 21448

## B

- Baicalein-7-glucuronide = 2106
- Bakuchicin = 1191
- Bakuchiol = 2081
- Balanitin 6 = 23005
- Balanophorin A = 1122
- Balanophorin B = 13099
- Banisterine = 9235
- Baogongteng B = 19542
- Baphinitone = 6290
- Barlerin = 511

- Batatacin III = 2165  
 Bayogenin 3-*O*- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranoside = 4018  
 Beauverician = 2188  
 Beetroot red = 2322  
 Belamarine = 2219  
 Belamcandaphenol = 2216  
 Bellidifolin 8-*O*- $\beta$ -glucopyranoside = 20511  
 Bellidin 8-*O*- $\beta$ -glucopyranoside = 15800  
 1,2-Benzenediol = 3318  
 1,4-Benzenediol = 9740  
 1,3-Benzodioxol-5-ol = 19779  
 4-(1,3-Benzodioxol-5-yl)-6-methoxynaphtho[2,3-*c*]furan-1,5,8(3*H*)-trione = 11982  
 (2*E*,4*E*,11*E*)-12-(Benzo[1,3]dioxol-5-yl)-*N*-(3-methylbutyl)dodeca-2,4,11-trienamide = 17474  
 1,3-Benzodioxol-5-yl-1-oxo-2,4-pentadienylpiperine = 17451  
 (-)-2-(15-Benzo[1,3]dioxol-5-yl-pentadecanoyl)-3,6-dihydroxy-cyclohex-2-enone = 20493  
 2,3-Benzofuran = 4143  
 4*H*-1-Benzopyran-4-one,3,5,7-trihydroxy-2-phenyl = 8081  
 6,7-Benzopyrene = 2226  
 1,2-Benzopyrone = 4140  
 2,3-Benzopyrrole = 11025  
 1,4-Benzoquinone = 18426  
 10-*O*-Benzoyl-6-*O*- $\alpha$ -arabino(1 $\rightarrow$ 6)- $\beta$ -glucopyranosyl arborescosidic acid = 16518  
 9-Benzoyl-2-deacetoxy-9-deacetyl-10-debenzoyl-10,13-diacetyltaxchinin A = 20754  
 3-*O*-Benzoyl-7-*O*-deacetylorthosiphonol M = 16232  
 9-*O*-Benzoyl-9,10-dide-*O*-acetyl-11(15 $\rightarrow$ 1)-abeo-baccatin VI = 20776  
 2*a*-Benzoyl-9,9-dimethyl-6*a*,8*b*-di-( $\gamma$ , $\gamma$ -dimethylallyl)-3,4-[2*a*-(2'-hydroxyisopropyl)-2,3-dihydrofuran]-8*a*-*H*-*cis*-bicyclo[3.3.1]nona-3-ene-1,5-dione = 8213  
 6'-*O*-Benzoyl-8-epiloganic acid = 1538  
 6'-*O*-Benzoyl-gardoside = 1540  
 12-*O*-Benzoyllineolon 3-*O*- $\beta$ -*D*-thevetopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-cymaropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-cymaropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-cymaropyranoside = 17785  
 1-Benzoylmethyl-5-hydroxyphenyl- $\beta$ -*D*-(3'-benzoyl) glucopyranoside = 2270  
 1-Benzoylmethyl-5-hydroxyphenyl- $\alpha$ -*D*-glucopyranoside = 19192  
 10*b*-Benzoyloxy-2*a*,4*a*-diacetoxy-5*b*,20-epoxy-1*b*,7*b*,9*a*,13*a*-tetrahydrox-11(15 $\rightarrow$ 1)-abeo-taxene = 5348  
 9*a*-(Benzoyloxy)-2*a*,4*a*-diacetoxy-5*b*,20-epoxy-1*b*,7*b*,10*b*,13*a*-tetrahydroxy-11(15 $\rightarrow$ 1)-abeo-taxene = 20831  
 6'-Benzoylsequinoside A = 2612  
 Benzyl alcohol xylopyranosyl(1 $\rightarrow$ 6)glucopyranoside = 2278  
 Benzyl  $\beta$ -*D*-apiofuranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside = 10953  
 2-Benzyl-1,3-dihydroxy-anthraquinone = 2299  
 Berbericinine = 16555  
 9-Berberoline = 2304  
 Bergamottin = 2308  
 Betuletol 3-methyl ether = 19312  
 Betulic acid = 2334  
 Betulinaldehyde-3*b*-yl-caffeate = 13090  
 Betulinol = 2331  
 Bicoloirin = 664  
 Bicuculline = 642  
 Bidenoside D = 2362  
 Biflorine = 17983  
 4,4''-Binaphthalene-8,8''-*O*,*O*-di- $\beta$ -*D*-glucopyranoside = 12401  
*D*(+)-Biotin = 2395  
 Bipindogenin 3-*O*- $\beta$ -*D*-digitaloside = 2399  
 3,6'-Biplumbagin = 3541  
*L*-Bisabolene = 2412  
 $\alpha$ -Bisabolol = 2414  
 Bischroman = 2481  
 3,3'-Bis(3,4-dihydro-6-methoxy-2*H*-1-benzopyran) = 2481  
 1,2-Bis(2,4-dihydroxy,3-*C*-glucopyranosyl)-ethanedione = 22477  
 1,7-Bis-(3,4-dihydroxyphenyl)-5-hydroxy-3-heptanone-5-*O*-[2-(2-methylbutenyl)]- $\beta$ -*D*-xylopyranoside = 961  
 1,7-Bis-(3,4-dihydroxyphenyl)-5-methoxy-3-heptanone = 14489  
 3,10-Bis-(1,1-dimethyl-2-propenyl)-5-hydroxy-8,8-dimethyl-2*H*,8*H*-benzo[1,2-*b*:5,4-*b'*]dipyran-2-one = 3788  
 3-*O*-{Bis[ $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 2 and 1 $\rightarrow$ 3)- $\alpha$ -*L*-arabinopyranosyl]} echinocystic acid 28-*O*- $\beta$ -*D*-glucopyranosyl ester = 11800  
 (16 $\rightarrow$ 16)-Bis-16*b*-hydro-*ent*-kaurane = 1301  
 1,7-Bis(4-hydroxy-3-methoxyphenyl)-1,6-heptadiene-3,5-dione = 4398  
 1,7-Bis(4-hydroxyphenyl)-3*R*,5*S*-heptanediol = 9219  
 1,7-Bis(4-hydroxyphenyl)-5*S*-hydroxy-3-heptanone = 17547  
 3-[Bis(3,4-methylenedioxyphenyl)methyl]-4-( $\beta$ -*D*-glucopyranosyloxy-methyl)-2(5*H*)-furanone = 11974  
 Bis(3-methylthio-2*E*-propenyl) disulfide = 7848  
 $\beta$ -Bitter acid = 13109  
 $\alpha$ -Bixin = 2496  
 Blancoxanthone = 11086  
 Blumenol A = 22615  
 Bogoroside = 4014  
 6-*C*- $\beta$ -*D*-Boivinopyranosyl-4'-*O*- $\beta$ -*D*-glucopyranosylapigenin = 18677  
 Bolusanthin III = 16545  
 2-Bornanone = 3048  
 (+)-(1*R*,2*S*)-Borneol = 2553  
 (-)-(1*S*,2*R*)-Borneol = 2555  
 Brachyamide B = 17436  
 Brazilin = 2594  
 Britannin = 2615  
 Bruceantinoside B = 22875  
 Brucein A = 2664  
 Brucein B = 2665  
 Brucein C = 2666  
 Brucein D = 2667  
 Brucein E = 2668  
 Brucein F = 2670  
 Brucein G = 2671  
 Brucein H = 2672  
 Brucein I = 2673  
 Brucineoxide = 2679  
 bryodulcosigenin 3-*O*- $\beta$ -glucopyranosyl-26-*O*- $\alpha$ -rhamnopyranosyl-(1 $\rightarrow$ 2)-*O*- $\beta$ -glucopyranoside = 12219  
 Buddledin E = 3245  
 Bufarenogenin = 2718

Bufogenin = 18637  
 Bulbispermine = 9206  
 Bullatine F = 15228  
 Butanoic acid = 2808  
 (*E*)-2-Butenedioic acid = 7996  
 Butenoic acid = 4271  
 3-Buten-1-ol = 943  
 7 $\alpha$ -Butoxyethoxy-12-hydroxyabieta-6 $\alpha$ -yl 6,7-dehydroabieta-8,11,13-trien-12-yl ether = 7887  
 6-C-Butyl derivative of 2*R*,5*R*-bis(hydroxymethyl)-3*R*,4*R*-dihydroxypyrrolidine = 2792  
 3*S*,6*S*,7*S*-3-Butyl-4,5-dihydro-6,7-dihydroxy phthalide = 19743  
 4-*n*-Butyl-4-hydroxybutyric acid lactone = 15971  
*n*-Butylidene-phthalide = 2797  
*n*-Butyl-phthalide = 2803  
 1-Butyl-3,4,5-trihydroxy-cyclohexanol = 21309  
 Buxpiine K = 2831  
 Buxtauine M = 2832

## C

Cadabine = 20254  
 4-Cadinene-2 $\alpha$ ,10 $\alpha$ -diol = 12223  
 Caesalpinine C = 3360  
*trans*-Caffeic acid-1-*O*-rutinose ester = 20508  
 1-*O*-(*E*)-Caffeoyl-3-*O*-galloyl-4,6-[1',1''-(3',3'',4',4''-tetrahydroxydibenzofurandicarboxyl)]- $\beta$ -*D*-glucopyranose = 2129  
 3-*O*-(2-*O*-Caffeoyl)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-ribofuranosyl-(1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl hederagenin 28-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside = 3819  
 5-*O*-Caffeoylquinic acid = 15363  
 5-*O*-Caffeoylquinic acid methyl ester = 14224  
 3-Caffeoylquinid acid = 3551  
 1-*O*-(*E*)-Caffeoyl-4,6-[1',1''-(3',3'',4',4''-tetrahydroxydibenzofurandicarboxyl)]- $\beta$ -*D*-glucopyranose = 2128  
*Calendula officinalis* Glycoside D<sub>2</sub> = 9588  
 Calogenin 3-*O*- $\beta$ -*D*-cymaropyranosyl-(1 $\rightarrow$ 4)-*O*- $\beta$ -*D*-digitoxopyranoside = 9346  
 Calogenin 3-*O*-3-*O*-methyl- $\beta$ -*D*-fucopyranosyl-(1 $\rightarrow$ 4)-*O*- $\beta$ -*D*-oleandropyranoside = 5130  
 Calophyn = 1466  
 Calotropin = 2937  
 Camboginol = 8218  
 Camelliol C = 537  
 Campestrinoside = 17757  
 11-Campherennene-4,10-diol = 10243  
 Camptothecin = 3053  
 Cangorosin B = 5655  
 Cannabiscetin = 15170  
 Capaurine = 3114  
 Capric aldehyde = 4833  
 Caprylic aldehyde = 15973  
 Capsicosin D<sub>1</sub> = 8459  
 Carbamoylamine = 22246  
 3-Carboxyacetyloxy-24-exomethylene-12 $\beta$ -hydroxy-23-oxo-lanost-8-en-26-oic acid = 7863  
 3-(3'-Carboxybutyl)-4-methoxyxanthone = 21232  
 28-Carboxy-7 $\beta$ ,19 $\alpha$ -dihydroxyarbo-9(11)-en-3-one = 19019  
 6-Carboxyethyl-7-methoxy-5-hydroxybenzofuran-5-*O*- $\beta$ -*D*-glucopyranoside = 17297  
 19-Carboxy 8(17)-13(16)-14-labdatriene = 12412  
 2-Carboxyl-3-(3'-carboxyl-2'-hydroxy)-butyl-1,4-naphthohydroquinone-4-*O*- $\beta$ -*D*-glucopyranoside = 19034  
 2-Carboxyl-3-(3'-carboxyl-2'-hydroxy)-butyl-1,4-naphthohydroquinone-4-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside = 19035  
 5-Carboxyl-3,4-dihydrogen-1*H*-2-benzopyran-1-one = 7335  
 2-Carboxyl-1,4-naphthohydroquinone-4-*O*- $\beta$ -*D*-glucopyranoside = 19032  
 5-(4-Carboxy-3-methoxyphenyl)-3-methoxy-3-carboxy-4-pentenoic acid = 3178  
 $\alpha$ -Carboxy-*N,N,N*-trimethyl-1*H*-indole-3-ethanaminium hydroxide inner salt = 10877  
 (17 $\beta$ )-Card-20(22)-enolide = 5525  
 Cardol monoene = 2380  
*trans*- $\beta$ -Carotene = 3209  
 $\beta$ , $\beta$ -Carotene-4,4'-dione = 3095  
 $\psi$ -Carpaine = 18022  
 Carpodidine = 16129  
 Caryolane-5 $\beta$ ,9 $\beta$ -diol = 20137  
 (-)-*trans*-Caryophyllene = 3242  
 $\alpha$ -Caryophyllene = 9669  
 $\beta$ -Caryophyllene epoxide = 3243  
 Casealutine = 11348  
 Caseanine = 21077  
 Cassiaside C = 8649  
 Cassic acid = 18759  
 Cassythine = 3293  
 Castanin = 676  
 Catalpin = 3307  
 Catalpinoside = 3306  
 Catechinic acid = 3308  
 Catechin-3-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside = 6925  
 Catechol dimethyl ether = 22389  
 Catechuic acid = 3308  
 (+)-Catharanthine = 3321  
 Cathedulin E<sub>2</sub> = 3326  
*D*-Cathine = 15789  
 Cauda-3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-cymaropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-cymaropyranoside = 4552  
 Cauda-3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-cymaropyranoside = 4553  
 Caulophyllin = 14279  
 Caulophyllogenin 3-*O*- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranoside = 17350  
 Caulosapogenin = 9260  
 Celidoniol = 15659  
 (1*S*,2*E*,4*R*,6*R*,7*E*,11*E*)-2,7,11-Cembratriene-4,6-diol = 6643  
 Cembrene A = 15360

- Centauridin = 19312  
 Centellasaponin A = 1854  
 Cephalomannine = 20812  
 Cepharanone B = 1695  
 Cetane = 9485  
 Cetin 3-*O*- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside = 19199  
 Cetylic acid = 9486  
 5 $\alpha$ ,14 $\alpha$ -Cevanine-13,17-dehydro-3 $\alpha$ ,6 $\beta$ -diol = 22998  
 Cevaninedihydroxyone = 22995  
 (2*S*,22*S*,25*S*)-5 $\alpha$ -Cevanine-3 $\beta$ ,6 $\beta$ -diol = 7928  
 5 $\alpha$ ,17 $\beta$ ,22 $\alpha$ -Cevanine-3 $\beta$ ,6 $\alpha$ ,12 $\alpha$ ,14 $\alpha$ ,16 $\beta$ ,20 $\beta$ -hexol = 17385  
 5 $\alpha$ ,14 $\alpha$ -Cevanine-6 $\alpha$ -hydroxyl-3 $\alpha$ - $\beta$ -*D*-glucoside = 9682  
 (20*R*,22*S*,25*S*)-5 $\alpha$ -Cevanin-23-ene-3 $\beta$ ,6 $\beta$ ,16 $\beta$ -triol = 11004  
 5 $\alpha$ ,14 $\alpha$ ,22 $\alpha$ -Cevanine-3 $\beta$ ,6 $\alpha$ ,20 $\beta$ -triol = 22993  
 5 $\alpha$ ,14 $\alpha$ ,22 $\beta$ -Cevanine-3 $\beta$ ,6 $\alpha$ ,20 $\beta$ -triol = 22636  
 3-*O*- $\beta$ -*D*-Chacotriosyl-3 $\beta$ ,16 $\beta$ -dihydroxy-pregn-5-en-20-one 16-*O*-(2,5-epoxy-2-methoxy-4-methyl-pentanoic acid)-ester = 48  
 Chaerophyllin = 12106  
 Chalepin = 9304  
 Chalepin acetate = 19085  
 $\psi$ -Cheierythrine = 19284  
 Cheiranthidin 3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-boivipyranoside = 3496  
 Cheiranthidin 3-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranoside = 3497  
 Chikusetsusaponin IVc = 8428  
 Chimonin = 13481  
 ent-15-Chloro-13,14-dihydroxyabd-8(9)-en-3-one = 685  
 2-Chloro-1,4-dihydroxy-3-(4-methylpent-3-enyl)anthraquinone = 1370  
 7-Chloro-(2*R*)-2-*O*- $\beta$ -*D*-glucopyranosyl-4-hydroxy-2*H*-1,4-benzoxazin-3(4*H*)-one = 3815  
 (6*R*,7*R*,8*R*)-8-Chlorogoniodiol = 3555  
 3-Chloro-2-hydroxy-4,5,6 $\alpha$ ,7-tetrahydro-dibenzo[de,g]quinoline-6-carboxylic acidmethyl ester = 18902  
 ent-15-Chloro-labd-8(9)ene-3 $\alpha$ ,13,14-triol = 686  
 14-Chloro-2 $\beta$ ,8 $\beta$ ,10 $\alpha$ -trihydroxy-1 $\alpha$ *H*,5 $\alpha$ *H*,6 $\beta$ *H*,7 $\alpha$ *H*-guai-3,11(13)-dien-6,12-olide = 7570  
 Cholaic acid = 20734  
 Cholestane-3,7,12,26-tetrol = 21138  
 (22*S*,25*S*)-5 $\alpha$ -Cholestane-3 $\beta$ ,16 $\beta$ ,22,26-tetrol = 725  
 5-Cholesten-3 $\beta$ -ol = 3585  
 5 $\beta$ -Cholic acid = 3588  
*N*-Choloyl-aurine = 20734  
 Cholyltaurine = 20734  
 Chrysanthelide = 9218  
 Chrysanthemyl alcohol = 3595  
 Chrysartemin A = 3076  
 Chrysatroic acid = 19542  
 Chrysoeriol 7-*O*-[2'''-*O*-caffeoyl-6'''-*O*-acetyl- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranoside] = 16482  
 Chrysoeriol 7-*O*-[2'''-*O*-caffeoyl- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranoside] = 16483  
 Chrysoeriol 7-*O*-[2'''-*O*-*p*-coumaroyl-6'''- $\beta$ -*O*-acetyl-*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranoside] = 16484  
 Chrysophanein = 3620  
 Chrysophanol-1-*O*- $\beta$ -*D*-glucopyranoside = 3620  
 Chrysosplenol C = 3623  
 Chuanliansu = 21448  
 Chuan-Wu-base B = 3201  
 Cichoric acid = 3518  
 Cichorigenin = 663  
 (8 $\alpha$ ,9*R*)-Cinchonan-9-ol = 3685  
 Cinnamic aldehyde = 3693  
 6'-Cinnamoylcatalpol = 17344  
 Cinnamoyl cinnamate = 20417  
*N*-Cinnamoyl-*trans*-3,4-diacetoxypyrrolidine = 19369  
 1-Cinnamoyl-3-hydroxy-11-methoxymeliacarpinin = 3710  
 12(*R*)-*O*-Cinnamoyloxy-3 $\beta$ ,5 $\beta$ -dihydroxy-8,14-*seco*-17 $\alpha$ -pregn-6-ene-8,14,20-trione = 4562  
 12(*R*)-*O*-Cinnamoyloxy-3 $\beta$ ,5 $\beta$ -dihydroxy-8,14-*seco*-17 $\beta$ -pregn-6-ene-8,14,20-trione = 4555  
 5 $\alpha$ -Cinnamoyloxy-9 $\alpha$ -hydroxy-10 $\beta$ ,13 $\alpha$ -diacetoxytaxa-4(20),11-diene = 4637  
 5 $\alpha$ -Cinnamoyloxy-2 $\alpha$ ,7 $\beta$ ,13 $\alpha$ -triacetoxy-2(3 $\rightarrow$ 20)abeo-taxa-4(20),11-diene-9,10-dione = 4636  
*cis*-3 $\beta$ -(Cinnamoyloxy)tropane = 7348  
*O*-Cinnamoyltaxicin II triacetate = 20797  
 12-*O*-Cinnamoyldihydrosarcostin-3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)-*O*-3-*O*-methyl-6-deoxy- $\beta$ -*D*-allopyranosyl-(1 $\rightarrow$ 4)-*O*- $\beta$ -*D*-oleandropyranosyl-(1 $\rightarrow$ 4)-*O*- $\beta$ -*D*-cymaropyranoside = 13577  
 Cinobufotenine = 2726  
 Cirantin = 9458  
 Cirenenside P = 8611  
 Cirontin = 9458  
 Cirsiumaldehyde = 2452  
 Citroside A = 4716  
 Citrus-hesperidin = 9458  
*cis*-Civetone = 3780  
 Clauszoline C = 3797  
 Clauszoline I = 3795  
 Clauszoline J = 3799  
 Clemaphenol A = 3818  
 Cleosandrin = 3829  
 (*rel*-3*S*,4*S*,5*R*,8*R*,9*R*,10*S*)-14-Clerodene-3,4,13-triol = 22576  
 Cnidimine = 6709  
 Coccellinic acid = 18779  
 (+)-Coclaurine = 3878  
 Coculine = 19955  
 Codonolactone = 1967  
 Con-5-enin-3 $\beta$ -amine = 3959  
 Coniferaldehyde = 10453  
 Conioselin = 3990  
 Convallagenin B 5-*O*- $\beta$ -*D*-glucopyranoside = 21845  
 Convallaton = 4012  
 Corbisterol = 4963  
 Cornustannin 2 = 7518  
 Corydalactam = 7451  
 Corydalis = 21077

- Corylifolin = 2172  
 Corysamine = 22732  
 Cosmosiin = 1492  
 Cotoin = 5965  
 10-*O*-(*E*)-*p*-Coumaroyladoxoside = 13166  
 10-*O*-(*Z*)-*p*-Coumaroyladoxoside = 13167  
 2'-*O*-*p*-Coumaroylaloenin = 973  
 7-*O*-*trans*-*p*-Coumaroyl-6'-*O*-*trans*-caffeoyl-8-epiloganic acid = 752  
 7-*O*-*p*-Coumaroylhydroxymaltol 3-*O*- $\beta$ -*D*-glucopyranoside = 2525  
 (2-*trans*-*p*-coumaroyloxymethyl-4- $\beta$ -*D*-glucopyranosyloxy-2(*E*)-butenenitrile) = 15593  
 6-*O*- $\alpha$ -*L*-(2"-*O*-*trans*-*p*-Coumaroyl)rhamnopyranosylcatalpol = 19104  
 7-*O*-(*E*)-*p*-Coumaroylsuspensolide F = 13164  
 7-*O*-(*Z*)-*p*-Coumaroylsuspensolide F = 13165  
*trans*-*p*-Coumaryl-(6'-*O*- $\alpha$ -*L*-arabinopyranosyl)-*O*- $\beta$ -*D*-glucopyranoside = 18929  
 3-*O*-(6-*O*-*p*-coumaryl- $\beta$ -*D*-glucopyranosyl)-5-*O*-(6-*O*-malonyl- $\beta$ -*D*-glucopyranosyl)cyanidin = 13450  
*trans*-*p*-Coumaryl-(6'-*O*- $\beta$ -*D*-xylopyranosyl)-*O*- $\beta$ -*D*-glucopyranoside = 18928  
 Courouputine B = 11024  
 CQ-1 = 3440  
 CQ-2 = 3441  
 CQ-3 = 3442  
 CQ-4 = 3443  
 CQ-5 = 3444  
 Crassicaulisine = 15228  
 Cratogenic acid = 6059  
 Crocin-1 = 4249  
 Crotaline = 14923  
 Crotepoxide = 8041  
 Cryptocavine = 4290  
 Cryptopalmatine = 15079  
 Cryptopimaric acid = 19236  
 Crysoeriol = 3602  
 Cubebol = 4304  
 Cucurbitacin = 6733  
 Cucurbitacin L 2-*O*- $\alpha$ -glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -glucopyranoside = 12209  
 Cucurbitacin L 2-*O*- $\alpha$ -rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -glucopyranoside = 12208  
 Cunabic acid = 12178  
 Cupressuflavone = 4376  
 Curculigine = 4381  
*L*-Curine = 2191  
 Cyanidin-3-*O*- $\beta$ -*D*-(6-*O*-*p*-coumaroyl)-glucoside = 9696  
 Cyanidin diglucoside = 4451  
 Cyanidin 3-*O*-glucoside = 3594  
 Cyanidin rhamnoglucoside = 4446  
 Cyanidin 3-*O*-(4"-*O*-sinapoyl gentiobioside) = 835  
 Cyanidol = 3308  
 (*S*)-*trans*-Cyclanoline = 3747  
 Cyclene = 21598  
 Cycloart-23-ene-3 $\beta$ ,25-diol = 4471  
 9 $\beta$ ,19-Cyclolanost-24*E*-ene-3 $\beta$ ,6 $\alpha$ ,16 $\beta$ ,27-tetraol-3-*O*-(2'-*O*-acetyl)- $\beta$ -*D*-glucopyranoside = 12108  
 9 $\beta$ ,19-Cyclolanost-24*E*-ene-3 $\beta$ ,6 $\alpha$ ,16 $\beta$ ,27-tetraol-3-*O*-(6'-*O*-acetyl)- $\beta$ -*D*-glucopyranoside = 12109  
 9 $\beta$ ,19-Cyclolanost-24*E*-ene-3 $\beta$ ,6 $\alpha$ ,16 $\beta$ ,27-tetraol-3-*O*- $\beta$ -*D*-glucopyranoside = 12107  
 9 $\beta$ ,19-Cyclolanost-24*E*-ene-3 $\beta$ ,6 $\alpha$ ,16 $\beta$ ,27-tetraol-3-*O*- $\beta$ -*D*-glucopyranosyl-27-*O*- $\beta$ -*D*-glucopyranoside = 12110  
 9 $\beta$ ,19-Cyclo-24-lanosten-3 $\beta$ -ol = 4473  
 Cyclomulberrochromene = 4517  
 13-(2-Cyclopenten-1-yl)tridecanoic acid = 3485  
 Cyclo-(Pro-Ala) = 4463  
 Cyclo-(prolyl-glycyl-tyrosyl-valyl-leucyl-alanyl-leucyl-valyl) = 8494  
 Cyclo-(prolyl-prolyl-valyl-tyrosyl-glycyl-prolyl-glutamyl) = 8495  
 Cyclo-(Val-Pro) = 4534  
 Cymaroside = 3674  
 2-*p*-Cymenol = 3231  
 Cynajapogenin A 3-*O*- $\alpha$ -*L*-cymaropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*L*-cymaropyranoside = 4566  
 Cynajapogenin A 3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -*L*-diginopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*L*-cymaropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-digitoxopyranoside = 4567
- ## D
- Daidzein 7-*O*- $\beta$ -*D*-(6"-*O*-acetylglucopyranoside) = 361  
 Daidzoxide = 4606  
 Damma-12,20(22)*Z*-dien-3 $\beta$ -ol = 3469  
 Damma-12,20(22)*Z*-dien-3-one = 3468  
 Dammardienyl acetate = 149  
 Dammar-25-ene-20,24-diol-3-one = 7931  
 Dammar-22(32)-ene-3 $\beta$ ,6 $\alpha$ ,12 $\beta$ ,20*S*,24 $\xi$ -pentaol-(20-*O*- $\beta$ -*D*-glucopyranosyl-6-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranoside) = 13407  
 Dammar-23(24)-ene-3 $\beta$ ,6 $\alpha$ ,12 $\beta$ ,20(*S*),25-pentaol-(20-*O*- $\beta$ -*D*-glucopyranosyl-6-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranoside) = 13408  
 Dammar-24-ene-3,12,17,20-tetrol = 2326  
 Dammar-24-ene-3,12,20-triol = 2328  
 Daniellie acid = 7161  
 Daphnetin-7-glucoside = 4650  
 Darutin = 4662  
 4,8-Daucadiene = 4675  
 Dauriporphine = 2345  
 10,13-Deacetyl-abeo-baccatin IV = 20739  
 7-Deacetyl-7-angeloyl-16-ketokihadalactone A = 18453  
 2 $\alpha$ -Deacetyl-2 $\alpha$ -benzoyl-13 $\alpha$ -acetyltaxayuntin = 20761  
 10-Deacetylcephalomannine = 4784  
 9 $\alpha$ -Deacetyl-9 $\alpha$ -debenzoyl taxayuntin = 20762  
 Deacetyldecinnamoyltaxinine E = 4737  
 2-Deacetyl-7,10-diacetyl-5-deaminoacyl taxine A = 4781  
 2-*O*-Deacetylorthosiphol A = 16229  
 3-*O*-Deacetylorthosiphol B = 16229  
 3-*O*-Deacetylorthosiphol J = 16231  
 9-Deacetyltaxayuntin E = 20845  
 2-Deacetyltaxinine A = 20855  
 2 $\alpha$ -Deacetyltaxinine J = 20846  
 10-Deacetyltaxol C = 4787  
 Deacylcynanchogenin = 12880  
 Deaminoacylcinnamoyltaxine A = 20847  
 Deaminoacylcinnamoyltaxol = 2074

- 2*α*-Debenzoyl-2*α*-acetyl taxayuntin = 20760  
*N*-Debenzoyl-*N*-butanoyltaxol = 20814  
*N*-Debenzoyl-*N*-hexanoyltaxol = 20813  
 Deca-2*E*,4*Z*-dienoic acid piperidide = 15446  
 Deca-8(*E*)-en-4,6-diyne-1,3,10-triol 1-*O*-*β*-*D*-glucopyranoside = 2362  
 8*Z*-Decaene-4,6-diyne-1-*O*-*β*-*D*-glucopyranoside = 2358  
 Decaffeoyl forsythoside C = 7927  
 Decaffeoylverbascoside = 4830  
 [1*S*-(1*α*,3*β*,4*α*,8*β*)]-Decahydro-9-methylene-4,8,8-trimethyl-1,4-methanoazulene = 12955  
 (-)-(2*R*,4*α*,8*α**R*)-Decahydro-4*α*-methyl-8-methylene-2-(1-methylethyl)-2-naphthalenol = 7511  
*n*-Decane = 4834  
 Decanedioic acid = 19596  
 Decanoic acid = 3138  
 9'-Decarboxyrosmarinic acid 4'-*O*-*α*-rhamnosyl-(1'''→6''')-*O*-*β*-galactosyl-(1'''→4'')-*O*-*α*-rhamnoside = 21221  
 3(*R*)-Deca-4,6,8-triyne-1,3-diol 1-*O*-*β*-*D*-glucopyranoside = 2361  
 (3*R*)-8-Decene-4,6-diyne-1,3-diol 1-*O*-*β*-*D*-apiofuranosyl-(1→6)-*β*-*D*-glucopyranoside = 9105  
 3(*R*),8(*E*)-8-Decene-4,6-diyne-1,3-diol 1-*O*-*β*-*D*-glucopyranoside = 2359  
 (*E*)-8-Decene-4,6-diyne-1,10-diol 1-*O*-*β*-*D*-glucopyranoside = 5155  
 (3*R*)-8-Decene-4,6-diyne-1,3-diol 1-*O*-*β*-*D*-glucopyranoside = 9104  
 Degueline = 4872  
 6,7-Dehydroabieta-8,11,13-trien-12-yl 7*α*-hydroxy-12-methoxyabieta-8,11,13-trien-6*α*-yl ether = 7886  
 13-Dehydro-1*β*-acetyl-2*α*,6*β*-dihydroxyhetisine = 9051  
 7,8-Dehydrocerberin = 526  
 6*α*,12*α*-Dehydrodeguelin = 4898  
 9(11)-Dehydroergosterol peroxide = 6904  
 11-Dehydro-17-hydroxycorticosterone = 4097  
 Dehydrolarreatricin = 4940  
 6-Dehydrolongilactone = 4986  
 Δ<sup>1</sup>-Dehydromiltirone = 4950  
 Dehydroypodorhizol = 5543  
 Dehydroxytetrahydrocurcumin = 8389  
 1-*O*-Deisovaeroyl-1-*O*-3-methylvaleroylluzonoid A = 13161  
 Delphamine = 5004  
 Delphanin = 15289  
 Delphinidin 3-*O*-[6-*O*-(4-*O*-(4-*O*-(6-*O*-(*trans*-caffeoyl)-*β*-*D*-glucopyranosyl)-*trans*-*p*-coumaroyl)-*α*-*L*-rhamnopyranosyl)-*β*-*D*-glucopyranoside]-5-*O*-[*β*-*D*-glucopyranoside] = 17358  
 Delphinidin-3,5-diglucoside = 5010  
 Delphinidin 3-*O*-[6-*O*-(4-*O*-(4-*O*-(*β*-*D*-glucopyranosyl)-*trans*-*p*-coumaroyl)-*α*-*L*-rhamnopyranosyl)-*β*-*D*-glucopyranoside]-5-*O*-[*β*-*D*-glucopyranoside] = 17359  
 Delphinidol = 5011  
 Demecolcine = 3909  
 Demethoxycurcumin = 2439  
 3'-Demethoxy-6-*O*-demethylisoguaicin = 7746  
 4-Demethoxytyraminoporphine = 4689  
 4-Demethylantirol 4-*O*-[(3-methoxy-4-hydroxy-benzoyl)-*β*-*D*-apiofuranosyl-(1→2)-*β*-*D*-glucopyranoside] = 8852  
 Demethylcrinamine = 9206  
 4-Demethyl-deoxypodophyllotoxin = 5074  
*N*-Demethylfrangulane = 9653  
 (8*R*,8'*R*)-3'-*O*-Demethyl-5-hydroxymatairesinol = 5082  
 (8*R*,8'*R*)-3'-*O*-Demethyl-5-methoxymatairesinol = 5085  
 Demethylpedalitin = 10351  
 4'-Demethylpodophyllotoxin = 5093  
 Demethyltetrandrine = 7714  
 Dendramine = 9982  
 Densiflorol B = 4585  
 15-Deoxo-30-hydroxyeucosterol 3-*O*-*α*-*L*-rhamnopyranosyl-(1→2)-[(*β*-*D*-glucopyranosyl-(1→3))-*β*-*D*-glucopyranosyl-(1→2)-*α*-*L*-arabinopyranosyl-(1→6)-*β*-*D*-glucopyranoside] = 19516  
 9-Deoxo-9*α*-hydroxytaxol = 22950  
 11-Deoxojervine = 4522  
 4-Deoxyasimicin = 11375  
 Deoxycapillartemisin = 1808  
 7-Deoxycholic acid = 5161  
 3-Deoxycrassicaulidine = 15228  
 2-Deoxy-*D*-ribose-3,5-bis(tripolyphosphate)-1,4-lactone = 2494  
 22-Deoxyecdysterone = 20807  
 6-Deoxy-*β*-*D*-glucopyranosyl-[3-*O*-*β*-*D*-glucopyranosyl-(1→6)-*β*-*D*-glucopyranosyl]-pyrocincholate = 11035  
 6-Deoxy-*β*-*D*-glucopyranosyl-pyrocincholate = 11036  
 11-Deoxyglycyrrhetic acid = 5144  
 Deoxyisoartemisinin B = 6891  
 3-[[2-*O*-(6-Deoxy-*α*-*L*-mannopyranosyl)-*β*-*D*-glucopyranosyl]oxy]-5,7-dihydroxy-2-(3-hydroxy-4-methoxyphenyl)-4*H*-1-benzopyran-4-one = 20660  
 3-[[2-*O*-(6-Deoxy-*α*-*L*-mannopyranosyl)-*β*-*D*-glucopyranosyl]oxy]-5,7-dihydroxy-2-(4-methoxyphenyl)-4*H*-1-benzopyran-4-one = 12016  
 6-Deoxy-*L*-mannose = 18739  
 1-Deoxymorusignin J = 1135  
 Deoxypodophyllotoxin = 1372  
 7-Deoxypseudoanisatin = 5204  
 12-Deoxyroyleanone = 3  
 9-Deoxysanaconitine = 11476  
 Desacetylcinobufaginol = 9993  
 Desacetyleupaserrin = 4739  
 Desacetyl pseudolaric acid B = 18035  
 Desacylescine I = 667  
 Desacylkondurangenin C-3-*O*-*α*-*D*-glucopyranosyl-(1→4)-*O*-*α*-*L*-fucopyranoside = 5131  
 1-Desgalloyleugeniin = 20910  
 5-Desgalloyl stachyurin = 3302  
 Desglucosyrioidide = 7272  
 Desmanthin 1 = 15181  
 Desoxodehydrocyclopiloselloidone = 5142  
 21-Desoxy-iridogermainal = 11133  
 Desoxymorellin = 5196  
 7-Desoxyneocynapanogenin A 3-*O*-*β*-*D*-cymaropyranosyl-(1→4)-*α*-*L*-digingopyranosyl-(1→4)-*β*-*D*-thevetopyranoside = 1992  
 4,5-*cis*-4,5-Diacetoxy-(1-acetoxypentadecyl)-2-cyclopenten-1-one = 21536  
 3*β*,9*α*-Diacetoxy-7*β*-benzoyloxy-15*β*-hydroxy-14-oxojatropha-5*E*,12-*E*-

- diene = 18172
- rel*-(2*S*,5*R*,6*S*,7*R*,8*S*,9*S*,10*R*,18*S*,19*R*)-7,19-Diacetoxy-18-butanoyloxy-18,19-epoxy-6-hydroxy-2-(2-methylbutanoyloxy)cleroda-3,13(16),14-triene = 3261
- (2*R*)-1*α*,12*α*-Diacetoxy-2*α*,3*α*;6*α*,7*α*-diepoxy-27-[(*β*-*D*-glucopyranosyl)oxy]-5*α*,-16*β*-dihydroxywith-24-enolide = 3479
- (2*R*)-1*α*,12*α*-Diacetoxy-2*α*,3*α*;6*α*,7*α*-diepoxy-27-[(*β*-*D*-glucopyranosyl)oxy]-5*α*-hydroxy-16-oxowith-24-enolide = 3478
- 3'(*S*),4'(*S*)-Diacetoxy-3',4'-dihydroseselin = 18285
- 3*β*,6*α*-Diacetoxy-15*β*,17-dihydroxy-11*β*,16*β*-epoxy-*ent*-kaurane = 13696
- 7*β*,16*α*-Diacetoxy-4*β*,20*R*-dihydroxy-5*β*,6*β*-epoxy-1-oxowitha-2,24-dienolide = 5324
- 2*β*,3*β*-Diacetoxy-11*β*,13*α*-dihydroxy-*ent*-kaur-16-en-15-one = 20622
- 3*β*,11*β*-Diacetoxy-2*β*,6*α*-dihydroxy-*ent*-kaur-16-en-15-one = 20623
- Diacetoxydihydroxytaxadiene = 5294
- (20*S*,24*R*)-15*α*,16*β*-Diacetoxy-20,24-epoxy-9,19-cyclolanostane-3*β*,18,25-triol-3-*O*-*β*-*D*-xylopyranoside = 2203
- rel*-(2*R*,5*R*,6*R*,8*S*,9*S*,10*R*,18*S*,19*R*)-18,19-Diacetoxy-18,19-epoxy-6-hydroxy-2-(2-methylbutanoyloxy)cleroda-3,13(16),14-triene = 3262
- 2*α*,15-Diacetoxy-2,3-epoxy-2,3-seco-(1*α*,5*α*,6*β*,7*β*)-aromadendra-3,10(14)-dien-13-al = 17496
- 12*β*,21-Diacetoxy-29-*β*-*D*-glucopyranosyloxy-23*ξ*-hydroxytirucalla-7,24-dien-3-one = 17852
- (*rel* 6*S*,7*R*,8*S*,9*R*)-6,7-Diacetoxy-5(10),14-halimadien-13-ol = 22571
- 12,16-Diacetoxy-6-hydroxyabieta-5,8,12-trien-7,11,14-trione = 22751
- (13*S*,15*S*)-2*α*,12*α*-Diacetoxy-6-hydroxy-13,16-cycloabieta-5,8-dien-7,11,14-trione = 22752
- 1-(2,5-Diacetoxy-1-hydroxy-cyclopent-3-enyl)-pentadecan-1-one = 5341
- 1-(2,5-Diacetoxy-1-hydroxy-cyclopent-3-enyl)-tridecan-1-one = 5340
- 1-(2,5-Diacetoxy-1-hydroxy-cyclopent-3-enyl)-undecan-1-one = 5339
- (12*S*)-6*α*,19-Diacetoxy-12-hydroxy-4,18-epoxyneoclerod-13(14)-en-15,16-olide = 797
- 6*S*-[3*S*,6*S*-(Diacetoxy)-5*R*-hydroxy-1*Z*-heptenyl]-5*S*-hydroxy-5,6-dihydro-2*H*-pyran-2-one = 16750
- 4,5-*trans*-4,5-Diacetoxy-5-(1-hydroxytridecyl)-2-cyclopenten-1-one = 21535
- 1*β*,8*β*-Diacetoxyl-6*α*,9*α*-difuroyloxydihydro-*β*-agarofuran = 16166
- 2*α*,9*α*-Diacetoxy-1*β*,5*α*,10*β*,13*α*-tetrahydroxytaxa-4(20),11-diene = 5318
- 11,16-Diacetoxy-6,12,14-trihydroxyabieta-5,8,11,13-tetraen-7-one = 146
- 3*β*,6*α*-Diacetoxy-7*β*,15*β*,17-trihydroxy-11*β*,16*β*-epoxy-*ent*-kaurane = 13697
- 3-*O*-*α*'(2',4'-*O*-Diacetyl)-*L*-arabinopyranosyl-3*β*-hydroxyolean-12-ene-28,29-dioic acid-28-*O*-[*α*-*L*-rhamnopyranosyl-(1→4)-*β*-*D*-glucopyranosyl-(1→6)-*β*-*D*-glucopyranosyl] ester = 22916
- 2,10-Di-*O*-acetyl-5-decinnamoyl-taxicin I = 5331
- 3,3'-Diacetyl-4,4'-dimethoxy-2,2',6,6'-tetrahydroxy diphenyl methane = 2442
- 3,3'-Diacetyl-4,4'-dimethoxy-2,2',6,6'-tetrahydroxy diphenyl methane-6'-*O*-*β*-*D*-glucopyranoside = 6667
- 5,10-Diacetyl-6,20-epoxy-3-phenyl-acetyllythirol = 7617
- 11,13-Diacetyl-14-hydroxy-2-isobutyryl hetisine = 9050
- 21,28-Di-*O*-acetylprotoescigenin-3-*O*-[*β*-*D*-glucopyranosyl(1→2)][*β*-*D*-glucopyranosyl(1→4)]-*β*-*D*-glucopyranosiduronic acid = 665
- 1-*O*-[2,3-Di-*O*-acetyl-*α*-*L*-rhamnopyranosyl-(1→6)-*β*-*D*-glucopyranosyl]-(2*E*,6*E*)-farnesol = 4231
- 2',3'-*O*-Diacetylsalsolide C = 20532
- Diacetyltaxine B = 20794
- 3-*O*-*β*-(2',3'-Di-*O*-acetyl)-*D*-xylopyranosyl-6-*O*-*β*-*D*-glucopyranosyl-16-*O*-acetoxy-20(*R*),24(*S*)-epoxycycloartane-3*β*,6*α*,16*β*,25-tetrol = 22046
- Diallyldisulfide = 948
- Diallyl trisulfide = 924
- 1,9-Diamino-5-azanonane = 9621
- 1,4-Diaminobutane = 18230
- 4,4'-Diaminobutylamine = 9621
- 2,4-Diaminobutyric acid = 5351
- 2,6-Diamino-4,5-dihydroxy pyrimidine-5-*β*-glucoside = 22466
- 1,5-Diaminopentane = 2845
- 2,5-Diaminopentanoic acid = 16208
- 3'(*S*),4'(*S*)-Diangeloyloxy-3',4'-dihydroseselin = 17763
- Dibenzocyclooctadiene lignan = 1139
- Di[benzoic acid]2,7,8-trihydroxy-3(-4-hydroxyphenyl)dibenzofuran-1,4-diyl = 21305
- 4,6-Dibromo-1,1-dichloro-3,7-dimethyl-2*E*,7-octadiene = 17564
- 4,8-Dibromo-1,1-dichloro-3,7-dimethyl-2*E*,6*E*-octadiene = 17563
- 4,8-Dibromo-1,1,7-trichloro-3,7-dimethyl-2*E*,5*Z*-octadiene = 17565
- 1,5-Di-*O*-caffeoylquinic acid = 4564
- 2,4-Dichloro-1,8-dihydroxy-3-methylnaphthalene-8-*O*-*β*-*D*-glucopyranoside = 16715
- Dicoumarol = 5440
- Dictamnolactone = 15882
- 2,10-Dideacetyltaxin B' = 5321
- (5'*R*)-3,4-Didehydro-*β*,*κ*-caroten-6'-one = 5472
- 1,2-Didehydro-6,7-epoxy-3*α*,16,17-trimethoxyerythrinan-8-one = 7043
- Dideroside methyl ester = 13905
- rel*-(1*β*,2*α*)-Di-(2,4-dihydroxybenzoyl)-*rel*-(3*β*,4*α*)-di-(4-hydroxyphenyl)-cyclobutane = 6195
- 1,7-Di-(3',4'-dihydroxyphenyl)-4-hepten-3-one = 4930
- 3',3'-Di-(*γ*,*γ*-dimethylallyl)-2',4'-di-oxo-enolchalcone = 22110
- 3,3'-Di-(*γ*,*γ*-dimethylallyl)-2',4,4'-trihydroxychalcone = 6025
- 4,9-Dien-eudesmine-13,15-dicarboxylic acid-15-*β*-*D*-glucopyranoside = 15262
- 3*β*,20:15*R*,16*S*-Diepoxy-3*α*-beyeranol = 691
- 16*β*,22*R*;21,23*S*-Diepoxy-3*β*-*O*-*β*-*D*-glucopyranosyloxy-21*S*,24-dihydroxy-stigmasta-8,14-dien-28-one = 22409
- (12*R*,20*S*,24*S*)-20,24;20,12-Diepoxy-25-hydroxydammaran-3*β*-yl-*O*-*β*-*D*-glucopyranosyl-(1→2)-*β*-*D*-xylopyranoside = 9120
- 9(13),15(16)-Diepoxy-3*α*-hydroxy-16-dihydrolabda-14-ene = 17845
- 9,13:15,16-Diepoxy-7-hydroxy-14-labden-6-one = 17810
- rel*-(7*α*,7'*α*,8*α*,8'*α*)-7,9':7',9'-Diepoxylignan-3,3',4,4'-tetraol = 2440
- 16,23*R*: 16,24*S*-Diepoxy-3*β*,12*β*,15*α*,25-tetrahydroxy-cycloart-7-ene 3-*O*-*α*-*L*-arabinopyranoside = 2732
- 20(*S*),22(*R*),23(*S*),24(*R*)-16*β*:23;22:25-Diepoxy-3*β*,23,24-trihydroxy-9,19-cyclolanostane-3-*O*-*β*-*D*-(4-acetyl)xylopyranoside = 20112
- (22*R*,24*S*,25*R*,26*S*)-24,25;22,26-diepoxy-1*α*,3*δ*,26-trihydroxyergost-5-ene 26-*O*-*β*-*D*-glucopyranoside = 3644
- 16*β*,22*R*;21,23*S*-Diepoxy-3*β*,21*S*,24-trihydroxystigmasta-8,14-dien-28-one = 22410
- 2,17-Diethenyl-1,10,19,22,23,24-hexahydro-3,7,13,17-tetramethyl-1,19-dioxo-21*H*-bilane-8,12-dipropanoic acid = 2374
- 1,1-Diethoxyethane = 108
- Di-(2-ethylbutyl)phthalate = 2448
- 1,3-*O*-Di-galloyl-4,6-[1',1''-(3',3'',4',4''-tetrahydroxydibenzofurancarboxyl)]-

- $\beta$ -D-glucopyranose = 2127
- 3-O-Digilaniobioside = 7321
- Digiprolactone = 12952
- Digitoxigenin 3-O-oleandroside = 2187
- 28,31-Di-O- $\beta$ -D-glucopyranosides of 1 $\alpha$ ,3 $\beta$ ,24 $\zeta$ ,31-tetrahydroxy-24 $\zeta$ -methylcycloartan-28-oic acid = 4539
- 6,8-Di- $\beta$ -glucopyranosyl-5,7-dihydroxy-2-phenyl-4H-1-benzopyran-4-one = 5531
- 3,5-Di-C- $\beta$ -glucopyranosyl-2,4,6,3'-tetrahydroxybenzophenone = 20960
- 3 $\beta$ ,22 $\alpha$ -Dihydroxy-11-oxo- $\Delta$ <sup>12</sup>-olean-ene-27 $\alpha$ -methoxy carbonyl-29-oic acid (29,22 $\alpha$ ) lactone = 8855
- 3,4-Dihydroxy-trans-cinnamic acid hentriacontanylester = 9365
- 3,4-Dihydroxy-trans-cinnamic acid nonacosanylester = 15670
- 9-Dihydro-13-acetylbaecatin III = 4726
- 2,3-Dihydroambrosin = 4624
- 10,11-Dihydro-5,10[1',2']benzeno-5H-dibenzo[a,d]cycloheptene-2,4,7,8,15,17-hexol = 3286
- 2,3-Dihydro-6,6"-biluteolin = 9287
- 3 $\alpha$ -19-(S)-Dihydrocadambine = 5550
- Dihydrocherimolin = 16266
- (-)-Dihydrocubebin = 5572
- 23,24-Dihydrocucurbitacin B = 5573
- (-)-Dihydrodaidzin = 5580
- 9,10-Dihydro-5,9-dihydroxy-8,8-dimethyl-6-(2-methyl-1-oxobutyl)-4-phenyl-2H,8H-benzo[1,2-b:5,6-b']dipyran-2-one = 13465
- (2E)-1-[2,3-Dihydro-4,6-dihydroxy-2-(1-hydroxy-1-methylethyl)-7-benzofuranyl]-3-(4-hydroxyphenyl)-2-propen-1-one = 5263
- 2,3-Dihydro-5,7-dihydroxy-6-methyl-3-(1 $\alpha$ ,2,3,3 $\alpha$ ,8 $\beta$ ,8 $\gamma$ -hexahydro-6-hydroxy-1,1,3 $\alpha$ -trimethyl-1H-4-oxabenzof[f]cyclobut[c,d]inden-7-yl)-4H-1-benzopyran-4-one = 5264
- 2,3-Dihydro-5,7-dihydroxy-6-methyl-3-(3-hydroxy-6,6,9-trimethyl-6H-dibenzo[b,d]pyran-2-yl) 4H-1-benzopyran-4-one = 14754
- 2,3-Dihydro-5,7-dihydroxy-6-methyl-3-(6 $\alpha$ ,7,8,10 $\alpha$ -tetrahydro-3-hydroxy-6,6,9-trimethyl-6H-dibenzo[b,d]pyran-2-yl)-4H-1-benzopyran-4-one = 5265
- 22,23-Dihydroergosterol = 3039=14229
- 13 $\beta$ ,21-Dihydroeucycomanone = 16695
- $\alpha$ -D-(6-O-Dihydroferuloyl)-glucuronosyl(1 $\rightarrow$ 2)- $\beta$ -D-fructofuranoside = 19658
- 6'-O-(6,7-Dihydrofoliamenthoyl)mussaenosidic acid = 751
- (-)-Dihydrogenistin = 5621
- 2,3-Dihydrogeraniol = 3768
- Dihydroharmine = 9232
- Dihydrohetisine = 9472
- 2,3-Dihydro-3"-hydroxy-6,6"-biapigenin = 9286
- (7S,8R)-7,8-Dihydro-7-(4-hydroxy-3,5-dimethoxyphenyl)-8-hydroxymethyl-[1'-(7'-hydroxyethyl)-5'-methoxyl] benzofuran-4-O- $\beta$ -D-glucopyranoside = 20655
- 7 $\alpha$ ,10 $\alpha$ -Dihydro-5-hydroxy-8,8-dimethyl-6-(2-methyl-1-oxobutyl)-4-phenyl-2H-8H-[1,2]-dioxolano[4",5":4',5']furo[2',3':5,6]benzo[1,2-b]pyran-2-one = 13466
- (2E)-1-[2,3-Cihydro-4-hydroxy-2-(1-hydroxy-1-methylethyl)-6-methoxy-5-benzofuranyl]-3-(4-hydroxyphenyl)-2-propen-1-one = 22767
- Dihydro-4-hydroxy-5-hydroxymethyl-2(3H)-furanone = 5209
- (2E)-1-(3,4-Dihydro-5-hydroxy-7-methoxy-2,2-dimethyl-2H-1-benzopyran-6-yl)-3-(4-hydroxyphenyl)-2-propen-1-one = 5743
- 1-[(9,10-Dihydro-4-hydroxy-2-methoxy-7-phenanthrenyl)oxy]-4,7-dihydroxy-2-methoxy-9,10-dihydrophenanthrene = 17201
- (2R,3S)-2,3-Dihydro-2-(4'-hydroxy-3'-methoxyphenyl)-3-hydroxymethyl-7-methoxy-5-benzofuranpropanol 4'-O- $\beta$ -D-glucopyranoside = 5583
- 2,3-Dihydro-2 $\alpha$ -(4-hydroxy-3-methoxyphenyl)-3 $\beta$ -methyl-5E-propenylbenzofuran = 16651
- (R)-2,3-Dihydro-3-hydroxy-pyrrolo[2,1-b]quinazolin-9(1H)-one = 22350
- 2,3-Dihydro-5-hydroxy-6,8,8-trimethyl-2-phenyl-4H-1-benzopyran-4,7(8H)-dione = 3474
- Dihydroirisquinone = 16543
- 11 $\alpha$ ,13-Dihydroisoolantolactone = 5648
- Dihydrokaempferol = 1764
- 2,3-Dihydro-7-methoxy-2S\*,3R\*-dimethyl-3-[4-methyl-5-(4-methyl-2-furyl)-3(E)-pentenyl]-furo[3,2-c]coumarin = 7982
- 2,3-Dihydro-7-methoxy-2R\*,3R\*-dimethyl-3-[4-methyl-5-(4-methyl-2-furyl)-3(E)-pentenyl]-furo[3,2-c]coumarin = 7983
- 2,3-Dihydro-7-methoxy-2R\*,3R\*-dimethyl-2-[4-methyl-5-(4-methyl-2-furyl)-3(E)-pentenyl]-furo[3,2-c]coumarin = 7984
- 4,9-Dihydro-7-methoxy-1-methyl-3H-pyrido[3,4-b]indole = 9232
- Dihydromorelloflavone = 8246
- Dihydromyricetin = 1074
- Dihydronepetalactol = 15434
- Dihydrooroselol = 3936
- Dihydrooroxilin = 5685
- 3,7-Dihydropurine-2,6-dione = 22756
- Dihydrosarcostin 3-O- $\beta$ -D-thevetopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-cymaropyranoside = 6601
- 1,2-Dihydrotanshinone = 5723
- 15,16-Dihydrotanshinone I = 5722
- 15,17-Dihydrotanshinone IIa = 4292
- 10,11-Dihydro-2,4,7,8-tetrahydroxy-10-(3,4-dihydroxyphenyl)-5-[(3,5-dihydroxyphenyl)methyl]-5H-dibenzo[a,d]cycloheptene = 3285
- ( $\pm$ )-(2E)-1-(3,4-Dihydro-3,5,7-trihydroxy-2,2-dimethyl-2H-1-benzopyran-6-yl)-3-(4-hydroxyphenyl)-2-propen-1-one = 5262
- 4",5"-Dihydro-3,5,4'-trihydroxy-4",4",5"-trimethylfuranof[2",3":7,8]flavone = 22179
- 2,3-Dihydro-3,6,9-trimethyl naphtho[1,8-bc]pyran-7-oxa-8-one = 13521
- Dihydrovaltrate = 5482
- 14 $\alpha$ ,19-Dihydroxyabieta-8,13(15)-dien-16,12-olide = 17160
- 14 $\beta$ ,19-Dihydroxyabieta-8,13(15)-dien-16,12-olide = 17159
- 14 $\beta$ ,19-Dihydroxyabieta-8,13(15)-dien-16,12-olide 19-O- $\beta$ -D-glucopyranoside = 17161
- 14 $\beta$ ,19-Dihydroxyabieta-8,13(15)-dien-16,12-olide 19-O-[2-(4-hydroxy-3,5-dimethoxybenzoyl)]- $\beta$ -D-glucopyranoside = 17163
- 6,12-Dihydroxyabieta-5,8,11,13-tetraen-7-one = 5747
- 7 $\beta$ ,15 $\beta$ -Dihydroxy-6 $\beta$ -acetoxy-7 $\alpha$ ,20-epoxy-11 $\beta$ ,12 $\beta$ -epoxy-ent-kaur-16-ene = 16177
- 7 $\beta$ ,13 $\alpha$ -Dihydroxy-1 $\alpha$ -acetoxy-7 $\alpha$ ,20-epoxy-ent-kaur-16-en-15-ene = 6790
- 3 $\beta$ ,11 $\beta$ -Dihydroxy-6 $\alpha$ -acetoxy-ent-kaur-16-en-15-ene = 13700
- 24,25-Dihydroxy-3 $\alpha$ -acetoxylanost-8-en-21-oic acid = 7861
- 4,5-cis-4,5-Dihydroxy-5-(1-acetoxypentadecyl)-2-cyclopenten-1-one = 431
- 4,5-trans-4,5-Dihydroxy-5-(1-acetoxypentadecyl)-2-cyclopenten-1-one = 429
- 1 $\beta$ ,11 $\alpha$ -Dihydroxy-6 $\beta$ -acetoxy-6,7-seco-6,19-epoxy-7,20-olide-ent-kaur-16-en-15-ene = 16176



- 4,5-*trans*-4,5-Dihydroxy-5-(1-acetoxytridecyl)-2-cyclopenten-1-one = 427  
 5,7-Dihydroxy-2-(1-acetyl-2-methoxycarbonylethyl)-chromone = 19428  
 3,4-Dihydroxy-allylbenzene-4-*O*- $\beta$ -*D*-glucopyranoside = 7525  
 3 $\alpha$ ,17 $\alpha$ -Dihydroxy-5 $\beta$ -androstane = 1163  
 3 $\alpha$ ,17 $\beta$ -Dihydroxy-5 $\beta$ -androstane = 1164  
 3 $\beta$ ,17 $\alpha$ -Dihydroxy-5 $\alpha$ -androstane = 1167  
 3 $\beta$ ,22 $\alpha$ -Dihydroxy-16 $\alpha$ -angeloyloxy-28 $\rightarrow$ 13-lactone-oleanane-3-*O*-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-Arabinopyraosyl]-22-*O*-(6-acetyl)- $\beta$ -*D*-glucopyranoside = 3128  
 1,3-Dihydroxy-9,10-antraquinone = 18224  
 1,8-Dihydroxy-antraquinone = 3599  
 1,3-Dihydroxy-9,10-antraquinone 3-*O*- $\beta$ -*D*-glucoside = 22773  
 7 $\beta$ ,19 $\alpha$ -Dihydroxyarbor-9(11)-en-3-one = 19018  
 19-*O*-(3,4-Dihydroxybenzoyl)-11,12-dihydroxy-20(10 $\rightarrow$ 5)-abeo-abieta-1(10),6,8,11,13-tetraene = 17553  
*rel*-4 $\alpha$ -(2,4-Dihydroxybenzoyl)-3 $\beta$ -(4-hydroxybenzoyl)-2 $\alpha$ -(2,4-dihydroxyphenyl)-5 $\alpha$ -(4-hydroxyphenyl)tetrahydrofuran = 15916  
 3-(2,4-Dihydroxy-benzoyl)-4-hydroxy-2,7-bis-(4-hydroxy-phenyl)-7,8-dihydro-furo[2,3-*f*]chromen-9-on = 7823  
 4,4'-Dihydroxy-2'-benzoyloxy-5'-methoxy [1,1':4,1"-terphenyl]-3',6'-dione = 21301  
 1-[3-(2,4-Dihydroxy-benzoyl)-4,5,6-trihydroxy-2-(4-hydroxy-phenyl)-benzofuran-7-yl]-3-(4-hydroxy-phenyl)-propenone = 7822  
 3,4-Dihydroxybenzyl aldehyde = 17968  
 4,4'-Dihydroxybenzyl ether = 2458  
 10-(3,4-Dihydroxybenzyl)-isorhapontigenin = 8898  
 8,9-Dihydroxy-4,4-bis-(3,3-dimethylallyl)-6-methyl-2,3-(2,2-dimethylpyrano)anthrone = 9242  
 3,3'-Dihydroxy-2,6-bis(4-hydroxybenzyl)-5-methoxybibenzyl = 2456  
 1,3-Dihydroxy-2,6-bis(3-methyl-2-butenyl)-2,2-dimethylchromeno(5<sup>'''</sup>,6<sup>'''</sup>:8,7)xanthone = 6626  
 2,5-Dihydroxy-3,6-bis(3-methylbut-3-en-1-ynyl)benzaldehyde = 20332  
 7,7'-Dihydroxyburschermiin 4- $\beta$ -*D*-glucoside = 20420  
 2,3-Dihydroxybutanedioic acid = 20715  
 3,3'-Dihydroxy- $\beta$ -carotene-4,4'-dione = 1921  
 3,9-Dihydroxy-10-*c,c*-dimethylallylpterocarpan = 17048  
 3 $\alpha$ ,7 $\alpha$ -Dihydroxy-5 $\beta$ -cholic acid = 3511  
 (25*S*)-12 $\alpha$ ,16 $\beta$ -Dihydroxycholest-4-en-3-one 16-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranoside = 16880  
 5,7-Dihydroxy-chromone-3- $\alpha$ -*L*-rhamnopyranoside = 22101  
*trans*-3,4-Dihydroxycinnamic acid = 2887  
 6'-(3'',4''-Dihydroxycinnamoyl)arbutin = 18878  
 2 $\alpha$ ,12-Dihydroxycopacamphan-15-one 2-*O*- $\beta$ -*D*-glucopyranoside = 5116  
 16,24-Dihydroxycycloart-20,25-dien-3-one diacetate = 1670  
 22*S*-3 $\beta$ ,16 $\alpha$ -Dihydroxy-cycloart-24-en-26,22-olide 3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranoside = 1550  
 22*S*-3 $\beta$ ,16 $\alpha$ -Dihydroxy-cycloart-24-en-26,22-olide-3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranoside = 1551  
 16,24-Dihydroxycycloart-25-en-3-one = 1671  
 3 $\beta$ ,12 $\beta$ -Dihydroxy-dammar-20(22),24-diene-3-*O*- $\beta$ -*D*-glucopyranoside = 8438  
 [20*S*]-3 $\beta$ ,20-Dihydroxy-24-dammaren-12,23-dione-3-*O*-[ $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)-[ $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 3)]- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 6)]- $\beta$ -*D*-glucopyranoside = 9182  
 20,21-Dihydroxydammar-24-en-3-one = 6610  
 1 $\alpha$ ,3 $\beta$ -Dihydroxy-7 $\beta$ ,11 $\beta$ -diacetoxy-*ent*-kaur-16-en-15-one = 611  
 1 $\alpha$ ,11 $\beta$ -Dihydroxy-3 $\beta$ ,6 $\alpha$ -diacetoxy-*ent*-kaur-16-en-15-one = 13705  
 1 $\alpha$ ,11 $\beta$ -Dihydroxy-3 $\beta$ ,7 $\beta$ -diacetoxy-*ent*-kaur-16-en-15-one = 610  
 2 $\alpha$ ,9 $\alpha$ -Dihydroxy-10 $\beta$ ,13 $\alpha$ -diacetoxy-5 $\alpha$ -(3'-*N*-methylamino-3'-phenyl)-propionylxytaxa-4(20),11-diene = 5138  
 (4*S*,5*R*,6*S*)-5,6-Dihydroxy-5,6-dihydro-4*H*-cyclopenta-[*c*]furan-4-acetic acid = 17484  
 (4*S*,5*R*,6*S*)-5,6-Dihydroxy-5,6-dihydro-4*H*-cyclopenta-[*c*]furan-4-acetic acid methyl ester = 17485  
 (4*S*,5*R*,6*S*)-5,6-Dihydroxy-5,6-dihydro-4*H*-cyclopenta[*c*]furan-4-ethanol = 17483  
 (3*R*,5*R*,7*R*)-3,5-Dihydroxy-5,6-dihydro-6,7-dehydro- $\beta$ -ionol = 1338  
 7,4'-Dihydroxy-8-[(2'' $\zeta$ ,3''-dihydroxy-3''-methyl)butyl]-2'',2''-dimethyl-3'',4''-dehydroprano[1'',4'';5,6]isoflavone = 22604  
 $\pm$ {(2*E*)-1-[2,4-Dihydroxy-3-(2,3-dihydroxy-3-methylbutyl)-6-methoxyphenyl]-3-(4-hydroxyphenyl)-2-propen-1-one} = 22765  
 5,7-Dihydroxy-8-(2,3-dihydroxy-3-methylbutyl)-6-(2-methyl-1-oxobutyl)-4-phenyl-2*H*-[1]benzopyran-2-one = 6513  
 1,2-Dihydroxy-3-[12-(2,3-dihydroxyphenyl)-(Z)-dodeca-4-enyl]benzene = 8361  
 1,2-Dihydroxy-3-[12-(2,3-dihydroxyphenyl)dodecyl]benzene = 8360  
 1,2-Dihydroxy-3-[16-(2,3-dihydroxyphenyl)-(Z,Z)-hexadeca-5,8-dienyl]benzene = 8365  
 1,2-Dihydroxy-3-[14-(2,3-dihydroxyphenyl)-(Z,Z)-tetradeca-3,6-dienyl]benzene = 8364  
 1,2-Dihydroxy-3-[14-(2,3-dihydroxyphenyl)-(Z)-tetradec-6-enyl]benzene = 8363  
 1,2-Dihydroxy-3-[14-(2,3-dihydroxyphenyl)tetradecyl]benzene = 8362  
 2,8-Dihydroxy-1,3-dimethoxyanthraquinone = 18871  
 1,8-Dihydroxy-9,10-dimethoxy-[1]benzopyrano-[3,2-*c*][2]-benzopyran-7(5*H*)-one = 11167  
 1,10-Dihydroxy-8,9-dimethoxy-[1]benzopyrano-[3,2-*c*][2]-benzopyran-7(5*H*)-one = 11168  
 2,7-Dihydroxy-4,8-dimethoxy-1,3-dimethyl-9,10-dihydrophenanthrene = 20293  
 3',7-Dihydroxy-4',6-dimethoxyflavone = 11  
 4',5-Dihydroxy-3,7-dimethoxyflavone = 12331  
 5,6-Dihydroxy-7,4'-dimethoxyflavone = 12448  
 4',5-Dihydroxy-3,7-dimethoxyflavone-4'-*O*- $\beta$ -*D*-glucopyranoside = 3027  
 5,7-Dihydroxy-6,4'-dimethoxyisoflavone = 11171  
 5,7-Dihydroxy-6,4'-dimethoxyisoflavone-7-*O*- $\alpha$ -*D*-glucopyranoside = 11172  
 1,6-Dihydroxy-7,8-dimethoxy-2-methyl-9,10-antraquinone = 18828  
 1,6-Dihydroxy-3,5-dimethoxy-2-(3-methylbut-2-enyl)xanthone = 4197  
 1,6-Dihydroxy-3,7-dimethoxy-2-(3-methylbut-2-enyl)-xanthone = 4196  
 2,5-Dihydroxy-1,7-dimethoxy-6-methyl-9,10-dihydrophenanthrene = 20292  
 2,7-Dihydroxy-1,5-dimethoxy-6-methyl-9,10-dihydrophenanthrene = 20291  
 (2*R*,3*R*)-3,4'-Dihydroxy-5,7-dimethoxy-8-methylflavan = 22115  
 1,4-Dihydroxy-7,8-dimethoxy-2-methyl-5,6-methylenedioxyanthraquinone = 18875  
*trans*-3,3'-Dihydroxy-2',5-dimethoxystilbene = 17198  
 {5,5'-Dihydroxy-8-( $\gamma,\gamma$ -dimethylallyl)-[6'',6''-dimethyl-4''',5''-dihydroprano-(2''',3''':7,6)]-[6''',6''-dimethylpyrano-(2''',3''':4',3')]}-coumaronochromone = 7891  
 5,7-Dihydroxy-8-( $\gamma,\gamma$ -dimethylallyl)-[6'',6''-dimethyl-4''',5''-dihydroprano-(2''',3''':4',3')]-flavanone = 7486  
 2',4'-Dihydroxy-8- $\gamma,\gamma$ -dimethylallyl-2'',2''-dimethylpyrano-[5,6:6,7]isoflavan = 7357

- 4',7-Dihydroxy-8-(3,3-dimethylallyl)flavan = 2627
- 7,4'-Dihydroxy-8-( $\gamma,\gamma$ -dimethylallyl)-2'' $\zeta$ -(4''-hydroxyisopropyl)dihydrofuran [1'',3'';5,6]isoflavone = 22603
- 5,7-Dihydroxy-6( $\gamma,\gamma$ -dimethylallyl)-8-(2'''-hydroxy-3'''-methylbut-3'''-enyl)-4'-(1''-hydroxymethylpenta cosanyl)isoflavone = 11015
- 7,4'-Dihydroxy-3'- $\gamma,\gamma$ -dimethylallyl isoflavone = 15342
- 5,7-Dihydroxy-6,8-di(3-methylbut-2-enyl)flavanone = 20170
- 6,8-Dihydroxy-2,7-dimethyl-4*H*-chromen-4-one = 6622
- 7,4'-Dihydroxy-2'',2''-dimethyl-3'',4''-dehydropyrano[1'',4'':5,6]flavone = 22605
- 7,3'-Dihydroxy-6'',6''-dimethyl-4'',5''-dehydropyrano [2'',3'':4',5']isoflavone = 7306
- {5,5'-Dihydroxy-8-[6'',6''-dimethyl-4'',5''-dihydropyrano-(2'',3'':7,8)]-[6''',6'''-dimethylpyrano-(2''',3''':4',3')]}-coumaronochromone = 7892
- 1,5-Dihydroxy-6'',6''-dimethyldihydropyrano(2',3':3,2)-6'',6''-dimethylpyrano-(2'',3'':6,7)xanthone = 15580
- N*-(2,4-Dihydroxy-3,3-dimethyl-1-oxobutyl)- $\beta$ -alanine = 22555
- 5,2'-Dihydroxy-[(6'',6''-dimethylpyrano(2'',3'':4',5'))][(6''',6'''-dimethylpyrano(2''',3''':7,6))]-isoflavone = 12291
- 1,7-Dihydroxy-6'',6''-dimethylpyrano(2',3':3,2)-6'',6''-dimethylpyrano(2'',3'':6,5)xanthone = 15582
- 7,2'-Dihydroxy-6'',6''-dimethylpyrano-(2'',3'':4',3')isoflavone = 8501
- 1,5-Dihydroxy-6'',6''-dimethylpyrano(2',3':3,2)xanthone = 5184
- 1,7-Dihydroxy-6'',6''-dimethylpyrano(2',3':3,4)xanthone = 15579
- 1,7-Dihydroxy-6'',6''-dimethylpyrano(2',3':6,5)xanthone = 15581
- 1-[5,7-Dihydroxy-2,2-dimethyl-6-(2,4,6-trihydroxy-3-isobutyryl-5-methylbenzyl)-2*H*-chromen-8-yl]-2-methylbutan-1-one = 13433
- (7*S*,8*R*)-4,9'-Dihydroxy-3,3'-dimethoxy-1,7,8-dihydrobenzofuran-1'-propanol neolignan-9-*O*- $\alpha$ -*L*-rhamnopyranoside = 13586
- 1 $\alpha$ ,20*R*-Dihydroxyecdysone = 10063
- 5 $\beta$ ,20*R*-Dihydroxyecdysone = 10066
- 1 $\alpha$ ,20*R*-Dihydroxyecdysone 3-*O*- $\beta$ -*D*-glucoside = 10064
- 2,20(*S*)-dihydroxy-16 $\alpha$ ,23(*R*)-epoxycucurbita-5,24-diene-3,11-dione 2-*O*- $\beta$ -glucopyranoside = 12214
- 2,20(*S*)-dihydroxy-16 $\alpha$ ,23(*S*)-epoxycucurbita-5,24-diene-3,11-dione 2-*O*- $\beta$ -glucopyranoside = 12215
- (1*R*\*,4*S*\*,5*R*\*,6*S*\*,7*R*\*,10*R*\*)-4,6-Dihydroxy-7,10-epoxy-1,5-*trans*-guaiane = 16192
- (2*R*)-Dihydroxy-3,10-epoxy-8-isobutyloxygermacra-11-(13)-en-6,12-olide = 10769
- 16(*S*)-6 $\beta$ ,17-Dihydroxy-3 $\alpha$ ,20-epoxy-*ent*-kaur-1,7,15-trione = 12588
- 3 $\beta$ ,17 $\beta$ -Dihydroxy-14,20-epoxy-1-oxo-22*R*-witha-5,24-dienolide = 812
- 1 $\beta$ ,6 $\alpha$ -Dihydroxy-eudesman-4(15)-ene = 7504
- 1 $\beta$ ,5 $\alpha$ -Dihydroxyeudesman-4(15)-ene = 7505
- 1 $\beta$ ,7 $\alpha$ -Dihydroxyeudesman-4(15)-ene = 7506
- (1*R*,4*S*,5*R*,7*R*,10*S*)-1,11-Dihydroxy-eudesman-14,4-olide 11-*O*- $\beta$ -*D*-glucopyranoside = 3378
- 1 $\beta$ ,11-Dihydroxy-eudesman-4,14-oxide 11-*O*- $\beta$ -*D*-glucopyranoside = 3379
- 1 $\beta$ ,6 $\beta$ -Dihydroxy-*cis*-eudesm-3-ene-6-*O*- $\beta$ -*D*-glucopyranoside = 12919
- (1*R*,5*R*,6*S*,7*S*,9*S*,10*S*,11*R*)-1,9-Dihydroxyeudesm-3-en-12,6-olide 9-*O*- $\beta$ -*D*-glucopyranoside] = 4359
- (2*S*)-7,4'-Dihydroxyflavan = 5894
- 4,7-Dihydroxyflavanone = 12908
- 5,7-Dihydroxyflavone = 3600
- 4 $\alpha$ ,12 $\alpha$ -Dihydroxy-8(17)-fusicoccene = 8034
- 9,14-dihydroxy-1(10),4-germacratrien-12,8-olide[1(10)*E*,4*E*,8 $\alpha$ ,9 $\beta$ ] = 20149
- 2,4-Dihydroxy-10(14),11(13)-guaidiene-12,8-olide = 7836
- 4 $\beta$ ,5 $\beta$ -Dihydroxy-7(11),9-guaidiene-8-one = 17874
- 2 $\alpha$ ,21 $\beta$ -Dihydroxyhederagenin-3-*O*- $\beta$ -*D*-glucopyranoside = 13062
- 11,13-Dihydroxyhetisan-2-one = 9472
- 4,5-*cis*-4,5-Dihydroxy-5-(1-hydroxyheptadecyl)-2-cyclopenten-1-one = 10838
- 5,7-Dihydroxy-2-(3-hydroxy-4-methoxyphenoxy)chromone = 20936
- 5,7-Dihydroxy-2-(3-hydroxy-4-methoxyphenoxy)-6-methoxychromone = 20934
- 5,7-Dihydroxy-2-(4-hydroxy-3-methoxyphenoxy)-6-methoxychromone = 20935
- 1-[2',4'-Dihydroxy-5'-(2''-hydroxy-3''-methyl-3''-butenyl)-6'-methoxy]acetophenone = 574
- 1-[2,4-Dihydroxy-3-(4-hydroxy-3-methyl-2-butenyl)-6-methoxyphenyl]-3-(4-hydroxyphenyl)-2-propen-1-one = 10830
- 5,7-Dihydroxy-8-(2-hydroxy-3-methylbut-3-enyl)-6-(2-methyl-1-oxobutyl)-4-propyl-2*H*-[1]benzopyran-2-one = 6516
- 5,7-Dihydroxy-8-(2-hydroxy-3-methylbut-3-enyl)-6-(2-methyl-1-oxopropyl)-4-phenyl-2*H*-[1]benzopyran-2-one = 6515
- (2*E*)-1-[2,4-Dihydroxy-3-(3-hydroxy-3-methylbutyl)-6-methoxyphenyl]-3-(4-hydroxyphenyl)-2-propen-1-one = 22766
- (2*R*)-2-[(1*S*,2*S*)-1,2-Dihydroxy-8-[(2*R*,3*R*,4*R*,5*R*)-5-(2-hydroxymethyl-3,4-dihydroxy-1-acetylpyrrolidinyl)]octyl]piperidine = 2636
- (2*R*)-2-[(1*S*,2*S*)-1,2-Dihydroxy-8-[(2*R*,3*R*,4*R*,5*R*)-5-(2-hydroxymethyl-3,4-dihydroxypyrrrolidinyl)]octyl]piperidine = 2637
- 1,8-Dihydroxy-3-hydroxymethyl-6-methoxyanthraquinone = 7710
- (10*R**S*,11*R**S*)-(2*E*,6*Z*,8*E*)-10,11-Dihydroxy-*N*-(2-hydroxy-2-methylpropyl)-2,6,8-dodecatrienamide = 23026
- (6*R**S*,11*R**S*)-(2*E*,7*E*,9*E*)-6,11-Dihydroxy-*N*-(2-hydroxy-2-methylpropyl)-2,7,9-dodecatrienamides = 23027=23028
- 4,5-*cis*-4,5-Dihydroxy-5-(1-hydroxypentadecyl)-2-cyclopenten-1-one = 10837
- 6,7-Dihydroxy-3-(2-hydroxy-propyl)-7-methyl-1,5,6,7-tetrahydro-isochromen-8-one = 14915
- 4,5-*trans*-4,5-Dihydroxy-5-(1-hydroxytridecyl)-2-cyclopenten-1-one = 10836
- (*Z*)-(-)-3,6-Dihydroxy-2-icos-14-enoyl-cyclohex-2-enone = 20495
- 22,23-Dihydroxy-iridal-3,16-di- $\beta$ -*D*-glucopyranoside = 11140
- 4',7-Dihydroxyisoflavone = 4604
- 22,23-Dihydroxy-isoiridal-3,16-di- $\beta$ -*D*-glucopyranoside = 11139
- 16 $\alpha$ ,17-Dihydroxy-*ent*-kauran-19-oic acid 16-*O*- $\beta$ -*D*-glucopyranoside 19-*O*- $\beta$ -*D*-glucopyranosyl ester = 93
- 3 $\beta$ ,25-Dihydroxylanosta-8,23*E*dien-21-oic acid = 19321
- 3,24-Dihydroxylanosta-8,25-dien-21-oic acid = 19322
- 3 $\beta$ ,24*R*-Dihydroxylanosta-8,25-dien-21-oic acid = 19323
- (7*S*,8*R*)9,9'-Dihydroxyl-3,3'-dimethoxy-1,7,8-dihydrobenzofuran-1'-propanol neolignan-4-*O*- $\alpha$ -*L*-rhamnopyranoside = 13585
- (2*R*)-7,4'-Dihydroxyflavan = 22116
- 2,6-Dihydroxyl-3-geranyl-5-isoprenyl-2,5-dihexadiene-1,4-dione = 7223
- 15,19-Dihydroxyl 8(17)-13(*E*)-labdatriene = 12402
- (8*R*)-3 $\beta$ ,4 $\beta$ -Dihydroxyl-14-oxo-5 $\alpha$ -15(14 $\rightarrow$ 8)-abeo-card-20(22)-enolide = 8005
- 1-(2',3'-Dihydroxyphenyl)-2-*n*-heptyl-1-nonene-3-one = 18823
- 3 $\alpha$ ,11 $\alpha$ -Dihydroxylup-23-al-20(29)-en-28-oic acid 28-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-gluco-pyranosyl ester = 74
- 2 $\alpha$ ,3 $\beta$ -Dihydroxylup-20(29)-en-28-oic acid = 984
- 3,19-Dihydroxy-20(29)-lupen-12-one = 3842
- (3*S*,5*R*,6*S*,9*R*)-3,9-Dihydroxymegastigmane di-*O*- $\beta$ -*D*-glucopyranoside = 17521

- (2*R*,9*R*)-2,9-Dihydroxymegastigman-5-ene 9-*O*- $\beta$ -*D*-glucopyranoside = 17527  
 (3*S*,9*R*)-3,9-Dihydroxymegastigman-5-ene 3-*O*-primeveroside = 17525  
 (3*S*,4*S*,6*S*,7*E*)-3,4-Dihydroxymegastigman-7-en-9-one-4-*O*- $\beta$ -*D*-glucopyranoside = 12530  
 (2*S*,9*R*)-2,9-Dihydroxymegastigman-5-en-4-one 2-*O*- $\beta$ -*D*-glucopyranoside = 22129  
 6,6'-Dihydroxy-4'-methoxy-2-arylbenzofuran = 2539  
 2,5-Dihydroxy-4-methoxybenzophenone = 3346  
 2,6-Dihydroxy-4-methoxy-3,5-bis(3-methyl-2-butenyl)benzophenone = 22550  
 (3*R*)-7,4'-Dihydroxy-2'-methoxy-6,8-di( $\gamma$ , $\gamma$ -dimethylallyl)isoflavanone = 7355  
 (6*aS*,11*aS*)-3,6*a*-Dihydroxy-9-methoxy-4,10-di( $\gamma$ , $\gamma$ -dimethylallyl)pterocarpan = 7358  
 1,5-Dihydroxy-3-methoxy-4-(2,3-dihydroxy-3-methylbutyl)xanthone = 15576  
 (-)-7,3'-Dihydroxy-4'-methoxy-5'-( $\gamma$ , $\gamma$ -dimethylallyl)flavanone = 7307  
 7,3'-Dihydroxy-4'-methoxy-5'-( $\gamma$ , $\gamma$ -dimethylallyl)isoflavone = 7305  
 3,6*a*-Dihydroxy-9-methoxy-10- $\gamma$ , $\gamma$ -dimethylallylpterocarpan = 4243  
 5,7-Dihydroxy-4'-methoxyflavone = 56  
 4',5-Dihydroxy-7-methoxy flavone = 8289  
 5,4'-Dihydroxy-7-methoxyflavone 8-*C*-glucopyranoside = 11724  
 5,7-Dihydroxy-4'-methoxyflavone-7-*O*- $\alpha$ -*L*-rhamno-pyranosyl-(1 $\rightarrow$ 2)-[ $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 6)]- $\beta$ -*D*-glucopyranoside = 15347  
 1,5-Dihydroxy-3-methoxy-4-(3-hydroxy-3-methylbutyl)-6',6'-dimethylpyrano-(2',3':6,7)xanthone = 15575  
 1,5-Dihydroxy-3-methoxy-4-(3-hydroxy-3-methylbutyl)xanthone = 15574  
 7,2'-Dihydroxy-4'-methoxyisoflav-3-ene = 16545  
 5,7-Dihydroxy-4'-methoxyisoflavone = 2384  
 7,3'-Dihydroxy-4'-methoxyisoflavone = 3004  
 2',7-Dihydroxy-4'-methoxyisoflavone = 22783  
 7,8-Dihydroxy-4'-methoxyisoflavone 8-*O*- $\beta$ -glucopyranoside = 5222  
 7,8-Dihydroxy-4'-methoxyisoflavone 7-*O*-[ $\alpha$ -rhamnopyranosyl-(1 $\rightarrow$ 6)]- $\beta$ -glucopyranoside = 5223  
 2,4-Dihydroxy-6-methoxy-3-methyl acetophenone 4-*O*- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside = 6668  
 2,8-Dihydroxy-1-methoxy-3-methylanthraquinone = 15900  
 1,7-Dihydroxy-6-methoxy-2-methylanthraquinone = 18872  
 5,7-Dihydroxy-4'-methoxy-3'-(3-methylbutadienyl)-5'-(3-methylbut-2-enyl)-avanone = 2774  
 1-[2',4'-Dihydroxy-6'-methoxy-3'-(3"-methylbutanoyl)-5'-(3"-methylbut-2"-enyl)]acetophenone = 573  
 1,6-Dihydroxy-7-methoxy-8-(3-methylbut-2-enyl)6',6'-dimethylpyrano(2',3':3,2)xanthone = 1277  
 1,5-Dihydroxy-3-methoxy-2-(3-methylbut-2-enyl)-xanthone = 5925  
 1,7-Dihydroxy-3-methoxy-2-(3-methylbut-2-enyl)xanthone = 5926  
 1,6-Dihydroxy-5-methoxy-7-(3-methylbut-2-enyl)xanthone = 8556  
 2',2"-Dihydroxy-4'-methoxy-4",5"-methylenedioxybenzil = 19453  
 5,4'-Dihydroxy-3'-methoxy-6,7-methylenedioxyisoflavone = 11152  
 9,10-Dihydroxy-8-methoxy-3,4-methylenedioxy-phenanthrene-1-carboxylic acid lactone = 1724  
 6 $\beta$ ,11*a*-Dihydroxy-16*a*-methoxymethyl-6,20-epoxy-6,7-seco-*ent*-kaur-15-one-1,7-olide = 20620  
 (2*R*,3*R*)-3,4'-Dihydroxy-7-methoxy-8-methylflavan = 22114  
 5,7-Dihydroxy-8-methoxy-6-methyl-3-(2'-hydroxy-4'-methoxybenzyl)chroman-4-one = 16140  
 3,5-Dihydroxy-7-methoxy-2-phenyl-4*H*-1-benzopyran-4-one = 11806  
 1-(2,6-Dihydroxy-4-methoxyphenyl)-11-(2,6-dihydroxyphenyl)undecan-1-one = 1647  
 2-[3',4'-Dihydroxy-2'-methoxyphenyl]-4-hydroxy-6-methoxy-benzofuran-3-carbaldehyde = 3007  
 4',7-Dihydroxy-3'-methoxy-5'-prenylflavanone = 5146  
 1,6-Dihydroxy-5-methoxyxanthone = 2694  
 8 $\beta$ -(2',3'-Dihydroxy-2'-methoxybutanoxyl)-2*a*-hydroxy-6 $\beta$ *H*,7*aH*-germacra-1(10)-*E*,4*E*,11(13)-triene-6,12-olide = 7547  
 5,7-Dihydroxy-8-methyl-6-aldehydo-3-(4'-methoxybenzyl) chromone = 876  
 1,8-Dihydroxy-3-methyl-9(10*H*)-anthracenone-10-oxylhexadecanoate = 12235  
 1,8-Dihydroxy-3-methyl-9(10*H*)-anthracenone-10-oxyltetradecanoate = 12234  
 1,8-Dihydroxy-3-methyl-9-anthrone = 3598  
 1,6-Dihydroxy-5-(3-methyl-2-butenyl)-2',2"-dimethylchromeno(5',6':2,3)-2"',2"'-dimethylchromeno(5"',6"',8,7)xanthone = 6629  
 1,7-Dihydroxy-8-(3-methylbut-2-enyl)-6',6'-dimethylpyrano(2',3':3,2)-xanthone = 5064  
 5,4'-Dihydroxy-6-(3"-methylbut-2"-enyl)-2"-hydroxyisopropyl dihydrofuran[4",5":8,7]isoflavone = 11711  
 1,6-Dihydroxy-2-(3-methyl-2-butenyl)-3-methoxy-2",2"-dimethylchromeno(5",6":8,7)-xanthone = 6631  
 6-((*S*)-3,4-Dihydroxy-2-methylenebutanoate)-*D*-glucopyranose = 22106  
 1,8-Dihydroxy-9,10-methylenedioxy-[1]benzopyrano-[3,2-*c*][2]-benzopyran-7(5*H*)-one = 11169  
 5,4'-Dihydroxy-6,7-methylenedioxyisoflavone = 11158  
 3*a*,15*a*-Dihydroxy-24-methylene-lanosta-7,9(11)-dien-21-oic acid = 7857  
 3*a*,15*a*-Dihydroxy-24-methylene-lanost-8-en-21-oic acid = 20480  
 1,8-Dihydroxy-3-methyl-6-methoxy-9(10*H*)-anthracenone-10-oxydecanoate = 12233  
 1-[5,7-Dihydroxy-2-methyl-6-(3-methyl-but-2-enyl)-2-(4-methyl-pent-3-enyl)-2*H*-chromen-8-yl]-3-(3,4-dihydroxy-phenyl)-propenone = 13437  
 3,5-Dihydroxy-2-methyl-1,4-naphthoquinone = 6605  
 5,7-Dihydroxy-8-(2-methyl-1-oxobutyl)-4-phenyl-2*H*-[1]benzopyran-2-one = 11380  
 1,4-Dihydroxy-2-(4-methylpent-3-enyl)-anthraquinone = 1369  
 (*rel*)-4,6-Dihydroxy-5-[3-methyl-(*E*)-propenoic acid-3-yl]-7 $\beta$ -glucopyranosyl-{2*a*,3 $\beta$ -dihydrobenzofuran}-(3,2:*b*)-[4*a*,5 $\beta$ -dihydroxy-6*a*-hydroxymethyl tetrahydropyran] = 18513  
 5,8-Dihydroxy-1,4-naphthoquinone = 15253  
 16 $\beta$ ,17-Dihydroxy-18-nor-*ent*-kauran-4 $\beta$ -hydroperoxide = 1331  
 3,24-Dihydroxy-30-nor-12,20(29)-oleanadien-28-oic acid = 18419  
 3 $\beta$ ,23-Dihydroxy-30-norolean-2,20(29)-dien-28-oic acid 3-*O*- $\alpha$ -*L*-arabino-pyranosyl-(1 $\rightarrow$ 2)-[ $\beta$ -*D*-glucopyranosyluronic acid-(1 $\rightarrow$ 3)]- $\alpha$ -*L*-arabino-pyranoside = 7725  
 3 $\beta$ ,23-Dihydroxy-30-norolean-12,20(29)-dien-28-oic acid 3-*O*-methyl  $\beta$ -*D*-glucopyranosyluronate-(1 $\rightarrow$ 3)- $\alpha$ -*L*-arabino-pyranoside = 7726  
 3 $\beta$ ,20*a*-Dihydroxy-29-norolean-12-en-28-oic acid 3-*O*- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranoside = 7723  
 3 $\beta$ ,17 $\beta$ -Dihydroxy-28-norolean-12-en-16-one 3-*O*-[ $\alpha$ -*L*-rhamnopyranoside-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucuronopyranoside] = 20429  
 2 $\beta$ ,7 $\beta$ -Dihydroxynortropane = 7299  
 3 $\beta$ ,16*a*-Dihydroxy-olean-12-en-28-*al*-3-*O*- $\beta$ -*D*-glucopyranosyl-23-*O*- $\alpha$ -*D*-ribofuranoside = 3073  
 3 $\beta$ ,16*a*-Dihydroxyolean-12-en-23,28-dioic acid 28-*O*-[ $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 3)][ $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 6)]- $\beta$ -*D*-glucopyranosyl ester = 19936  
 3 $\beta$ ,16*a*-Dihydroxyolean-12-en-23,28-dioic acid 28-*O*-[ $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 3)][ $\beta$ -*D*-6-*O*-(3-hydroxy-5-methoxy-3-methyl-5-oxopentanoyl)gluco-

- pyranosyl(1→6)]- $\beta$ -D-glucopyranosyl ester = 19938
- 3 $\beta$ ,16 $\alpha$ -Dihydroxyolean-12-en-23,28-dioic acid 28-O-[ $\beta$ -D-glucopyranosyl(1→3)]-[ $\beta$ -D-6-O-(3R)-3-hydroxy-3-methylglutaryl]glucopyranosyl(1→6)]- $\beta$ -D-glucopyranosyl ester = 19937
- 3 $\beta$ ,30-Dihydroxy-olean-12-en-23,28-dioic acid 28-O- $\alpha$ -L-rhamnopyranosyl-(1→4)- $\beta$ -D-glucopyranosyl-(1→6)]- $\beta$ -D-glucopyranoside = 68
- 3 $\beta$ ,23-Dihydroxy-olean-12-ene-28,29-dioic acid 28-O- $\alpha$ -L-rhamnopyranosyl-(1→4)- $\beta$ -D-glucopyranosyl-(1→6)]- $\beta$ -D-glucopyranoside = 67
- 3 $\beta$ ,16 $\alpha$ -Dihydroxyolean-12-ene-28-oic acid 3-O- $\beta$ -D-glucopyranoside = 6705
- 3 $\beta$ ,22 $\alpha$ -Dihydroxyolean-12-en-29-oic acid = 27
- 2,3-Dihydroxy-12-oleanen-28-oic acid = 4219
- 3 $\beta$ ,29-Dihydroxyolean-12-en-28-oic acid = 13799
- 3 $\beta$ ,23-Dihydroxy-olean-12-en-28-oic acid 3-O-methyl  $\beta$ -D-glucopyranosyluronate-(1→3)- $\alpha$ -L-arabinopyranoside = 7727
- 3 $\beta$ ,15 $\alpha$ -Dihydroxy-olean-12(13)-en-16-one = 6061
- 16 $\alpha$ -28-dihydroxyolean-12-en-21-one-3-O- $\alpha$ -L-rhamnopyranosyl-(1→2)- $\beta$ -D-galactopyranosyl-(1→3)]- $\beta$ -D-glucopyranosyl-(1→2)- $\beta$ -D-glucuronopyranoside] = 2315
- 8 $\beta$ ,15-Dihydroxy-2-oxo-guaia-1(10),3,11(13)-trien-5 $\alpha$ ,6 $\beta$ ,7 $\alpha$ H-12,6-olide = 12446
- 24S,25-Dihydroxy-3-oxolanost-8-en-21-oic acid = 7860
- 3 $\beta$ ,24 $\alpha$ -Dihydroxy-16-oxo-oleana-11,13(18)-dien-30-oic acid = 8861
- 3 $\beta$ ,28-dihydroxy-16-oxo-12-oleanene = 19466
- 3 $\beta$ ,24-Dihydroxy-16-oxo-olean-12-en-29-oic acid = 8857
- 3,16-Dihydroxy-23-oxo-12-oleanen-28-oic acid = 18418
- 6 $\beta$ ,28-Dihydroxy-3-oxoolean-12-en-23-oic acid 23-O- $\alpha$ -L-arabinopyranosyl ester = 8131
- 21 $\beta$ ,22 $\beta$ -Dihydroxy-3-oxours-12-en-28-al = 4042
- 3 $\alpha$ ,19 $\alpha$ -Dihydroxy-2-oxo-12-ursen-28-oic acid = 16410
- 20 $\beta$ ,27-Dihydroxy-1-oxo-(22R)-witha-2,5,24-tetraenolide = 22699
- 3 $\beta$ ,7 $\beta$ -Dihydroxy-4 $\alpha$ -4 $\beta$ ,8 $\beta$ ,10 $\beta$ ,14 $\alpha$ -pentamethyl-5 $\alpha$ -gon-16-en-2-one 3-O-[ $\beta$ -D-glucopyranoside-(1→2)- $\beta$ -D-glucopyranoside] = 20428
- 3,4-Dihydroxy- $\beta$ -phenethanol-3-O- $\beta$ -D-galactopyranoside = 3653
- 3,4-Dihydroxy- $\beta$ -phenethanol-3-O- $\beta$ -D-glucopyranoside = 3654
- 3,4-Dihydroxy- $\beta$ -phenethyl-O- $\beta$ -D-glucopyranosyl-(1→3)-4-O-caffeoyl- $\beta$ -D-glucopyranoside = 18219
- 3,4-Dihydroxy- $\beta$ -phenethyl-O- $\beta$ -D-glucopyranosyl-(1→3)-O- $\alpha$ -L-rhamnopyranosyl-(1→6)-4-O-caffeoyl- $\beta$ -D-glucopyranoside = 18220
- 2-(3,4-Dihydroxyphenethyl)-O- $\alpha$ -L-lyxopyranosyl-(1→2)- $\alpha$ -L-rhamnopyranosyl-(1→3)-4-O-3,4-dimethoxy-*trans*-cinnamoyl- $\beta$ -D-glucopyranoside = 21214
- 2-(3,4-Dihydroxyphenethyl)-O- $\alpha$ -L-lyxopyranosyl-(1→2)- $\alpha$ -L-rhamnopyranosyl-(1→3)-4-O-*trans*-feruloyl- $\beta$ -D-glucopyranoside = 21215
- 3-(2,4-dihydroxyphenoxy)-8-(3,3-dimethylallyl)-2,2-dimethylpyran[5,6:6,7]chromen-4-one = 7351
- 3-(2,4-Dihydroxyphenoxy)-7-hydroxy-6,8-di(3,3-dimethylallyl)chromen-4-one = 7350
- (2,5-Dihydroxyphenyl)acetic acid = 9608
- 2-(3,4-Dihydroxyphenylacetyl)- $\beta$ -D-glucopyranosyl (*E*)-2-methyl-but-2-en-4-ol = 10854
- L-3,4-Dihydroxyphenylalanine = 6558
- 2-(3,4-Dihydroxyphenyl)-4,6-dihydroxybenzofuran-3-carboxylic acid methyl ester = 16246
- 3-(3,4-Dihydroxy-phenyl)-1-[6-(3,7-dimethyl-octa-2,6-dienyl)-5,7-dihydroxy-2,2-dimethyl-2H-chromen-8-yl]-propenone = 13436
- 1,2-O-[2S-(3,4-Dihydroxyphenyl)-1,2-ethanediyl]-3-O- $\alpha$ -L-rhamnopyranosyl-4-O-feruloyl- $\beta$ -D-glucopyranoside = 14261
- 7 $\beta$ -(3,4-Dihydroxyphenyl)-ethane 7,8-(2',1'-O- $\beta$ -D-glucopyranosyl)-7,8-diol = 4362
- 7 $\alpha$ -(3,4-Dihydroxyphenyl)-ethane 7,8-(2',1'-O- $\beta$ -D-glucopyranosyl)-7,8-diol = 4363
- 2-(3,4-Dihydroxy) phenyl ethanol (1→1) (2→2)-[(1→3)-rhamnopyranosyl-4-O-caffeoyl] glucoside = 16161
- 2-(3,4-Dihydroxyphenyl)-*R,S*-2-ethoxy-ethyl-O- $\beta$ -D-glucopyranosyl(1→4)- $\alpha$ -L-rhamnopyranosyl(1→3)(4-O-*trans*-caffeoyl)- $\beta$ -D-glucopyranoside = 18927
- 3,4-Dihydroxyphenylethyl alcohol (2-O-feruloyl)- $\beta$ -D-glucopyranoside = 2085
- 2-(3,4-Dihydroxyphenyl)ethyl O- $\beta$ -apiofuranosyl-(1→6)-O-[O- $\beta$ -apiofuranosyl-(1→4)- $\alpha$ -rhamnopyranosyl-(1→3)]-4-O-(*E*)-caffeoyl- $\beta$ -glucopyranoside = 13074
- 2-(3,4-Dihydroxyphenyl) ethyl-O- $\beta$ -D-apiofuranosyl-(1"→6')- $\beta$ -D-glucopyranoside = 4364
- 2-(3,4-Dihydroxyphenyl)ethyl-O- $\alpha$ -L-arabinopyranosyl-(1→2)-[ $\alpha$ -L-rhamnopyranosyl-(1→3)]-(4-O-*trans*-feruloyl)- $\beta$ -D-glucopyranoside = 22416
- 3,4-Dihydroxy- $\beta$ -phenylethyl caffeate, 9'-Decarboxyrosmarinic acid = 21216
- [2-(3,4-Dihydroxyphenylethyl)]-3-O- $\alpha$ -D-apiofuranosyl-(1→4)-(4-O-caffeoyl)- $\beta$ -D-glucopyranoside = 4419
- 2-(3,4-Dihydroxy-phenyl)-ethyl-O- $\beta$ -D-glucopyranoside = 6081
- 2-(3,4-dihydroxyphenyl)-ethyl-O- $\beta$ -D-glucopyranosyl-(1→6)-3-O-*trans*-caffeoyl- $\beta$ -D-glucopyranoside = 11513
- 2-(3,4-Dihydroxyphenyl)ethyl-O- $\beta$ -D-glucopyranosyl-(1→2)-[ $\alpha$ -L-rhamnopyranosyl-(1→3)]-(4-O-*trans*-caffeoyl)- $\beta$ -D-glucopyranoside = 22417
- 2-(3,4-Dihydroxyphenyl)ethyl-O- $\beta$ -D-glucopyranosyl-(1→2)-[ $\alpha$ -L-rhamnopyranosyl-(1→3)]-(4-O-*trans*-feruloyl)- $\beta$ -D-glucopyranoside = 22418
- [2-(3,4-Dihydroxyphenylethyl)]-3-O- $\beta$ -D-xylopyranosyl-(1→3)-(4-O-caffeoyl)- $\beta$ -D-glucopyranoside = 4420
- 7-(3,4-Dihydroxyphenyl)-5-hydroxy-1-(4-hydroxyphenyl)-3-heptanone-5-O- $\beta$ -D-xylopyranoside = 959
- 1-(3,4-Dihydroxyphenyl)-5-hydroxy-7-(4-hydroxyphenyl)-3-heptanone-5-O- $\beta$ -D-xylopyranoside = 960
- 3-[1-[[3-Di(4-hydroxyphenyl)methyl]2,4,6-trihydroxyphenyl]3-di(4-hydroxyphenyl)1-propanone-2-yl]5,7-dihydroxy-4H-1-benzopyran-4-one = 14895
- 1-(2,6-Dihydroxyphenyl)-octadec-8-en-1-one = 20491
- 13(2',3'-Dihydroxy-3'-phenyl)propionyl baccatin III = 22952
- 10,12-Dihydroxypicrotoxane 10,12-di-O- $\beta$ -D-glucopyranoside = 5120
- 3,4-Dihydroxy-2-piperidinemethanol = 7705
- 1 $\beta$ ,3 $\alpha$ -Dihydroxypregna-5,16-dien-20-one = 22117
- 2 $\beta$ ,3 $\alpha$ -Dihydroxypregna-4,7,16-trien-12,20-dione = 21002
- (20S)-3 $\beta$ ,16 $\beta$ -dihydroxy pregn-5-ene-22-carboxylic acid (22,16)-lactone-3-O- $\beta$ -chacotrioxide = 6636
- 11 $\beta$ ,21-Dihydroxypregna-4-ene-3,20-dione = 4096
- 2-[(17,20-Dihydroxypregna-5-en-3-yl)oxy]-4-methoxy-6-methyl-2H-pyran-3(6H)-one = 16942
- 4',5-Dihydroxy-3'-prenyl-2'',2''-dimethylchromeno-[7,8:6'',5'']isoflavone = 19451
- 4',7-Dihydroxy-3'-prenylflavanone = 51
- 3,16 $\alpha$ -Dihydroxy-3,4-seco-olean-4(24),12-dien-23,28-dioic acid 28-O-[ $\beta$ -D-glucopyranosyl(1→3)]{ $\beta$ -D-6-O-(3R)-3-hydroxy-3-methylglutaryl]- glucopyranosyl(1→6)}- $\beta$ -D-glucopyranosyl ester =

- 19940
- 3,16 $\alpha$ -Dihydroxy-3,4-seco-olean-4(24),12-dien-23,28-dioic acid 28-*O*-[ $\beta$ -*D*-6-*O*-(3-hydroxy-3-methylglutaryl)-glucopyranosyl(1 $\rightarrow$ 6)]- $\beta$ -*D*-glucopyranosyl ester = 19939
- 3 $\beta$ -21 $\alpha$ -Dihydroxy-14-sekogammasera-8(26),14(27)-diene = 16117
- (24*S*,25*S*)-1 $\beta$ ,3 $\beta$ -Dihydroxy-5 $\beta$ -spirostan-24-yl-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside = 22655
- (25*R*)-12 $\beta$ ,17 $\alpha$ -Dihydroxyspirost-4-en-3-one = 1864
- (25*S*)-3 $\beta$ ,27-Dihydroxyspirost-5-en-12-one 27-*O*- $\beta$ -*D*-glucopyranosyl-3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-fucopyranoside = 17643
- (25*S*)-3 $\beta$ ,27-Dihydroxyspirost-5-en-12-one 27-*O*- $\beta$ -*D*-glucopyranosyl-3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-galactopyranoside = 17644
- 5,2'-Dihydroxy-6,7,8,6'-tetramethoxyflavone = 20009
- 2,3-Dihydroxy-9,10-tetrahydroanthra-1,4-quinone = 6614
- 12 $\alpha$ ,14 $\beta$ -Dihydroxy-2 $\alpha$ ,3 $\beta$ -(tetrahydro-3',5'-dihydroxy-4'-methoxy-6'-methyl-2*H*-pyran-2',4'-diylbisoxo)-card-4,20-dienolide = 7981
- 8,9-Dihydroxy-1,5,6,10*b*-tetrahydro-2*H*-pyrrolo[2,1-*a*]-isoquinolin-3-one = 16078
- (4*S*)-4,8-Dihydroxy- $\alpha$ -tetralone = 18588
- (4*S*)-4,5-Dihydroxy- $\alpha$ -tetralone 4-*O*- $\beta$ -*D*-glucopyranoside = 11899
- (4*S*)-4,6-Dihydroxy- $\alpha$ -tetralone 4-*O*- $\beta$ -*D*-glucopyranoside = 11900
- 5,5"-Dihydroxy-7,4',7",4""-tetramethoxy-[3 $\rightarrow$ 6"]-biflavone = 20314
- 3,3'-Dihydroxy-4',5,6,7-tetramethoxyflavone = 7590
- 4',5-Dihydroxy-3,3',7,8-tetramethoxyflavone = 20978
- 9,9"-Dihydroxy-3,3",8,8""-tetramethyl-3,3"-bis-(4-methyl-3-pentenyl)-3,3",11,11""-tetrahydro-10,10""-(bipyrano[3,2-*a*]carbazole) = 2479
- 5*b*,7-Dihydroxy-2,2,10,10-tetramethyl-5*b*,13*a*-dihydro-2*H*,6*H*,10*H*-chromeno[6',7':4,5]furo[2,3-*b*]pyrano[3,2-*g*]chromene-6-one = 12294
- 7*b*,20-Dihydroxy-3,11,15,23-tetraoxolanost-8-en-26-oic acid = 8172
- 2,5-Dihydroxytoluene = 18270
- 11 $\beta$ ,15 $\beta$ -Dihydroxy-3 $\beta$ ,6 $\alpha$ ,7 $\beta$ -triacetoxy-*ent*-kaur-16-ene = 13704
- 11 $\beta$ ,15 $\beta$ -Dihydroxy-1 $\alpha$ ,3 $\beta$ ,6 $\alpha$ -triacetoxy-*ent*-kaur-16-ene = 13707
- 3 $\beta$ ,15 $\beta$ -Dihydroxy-1 $\alpha$ ,7 $\beta$ ,11 $\beta$ -triacetoxy-*ent*-kaur-16-en-6-one = 614
- 3 $\beta$ ,7 $\beta$ -Dihydroxy-1 $\alpha$ ,11 $\beta$ ,15 $\beta$ -triacetoxy-*ent*-kaur-16-en-6-one = 615
- 4,4"-Dihydroxy-2,3',5'-tribenzoyloxy-6'-acetyloxy[1,1':4',1""-terphenyl] = 21304
- cis*-4,5-Dihydroxy-5-tridecanoyl-2-cyclopenten-1-one = 10839
- trans*-4,5-Dihydroxy-5-tridecanoyl-2-cyclopenten-1-one = 10840
- 5,4'-Dihydroxy-6,7,3'-trimethoxyflavone = 3741
- 5,7-Dihydroxy-3',4',6'-trimethoxyflavone = 7582
- 3',5-Dihydroxy-4',6,7-trimethoxyflavone = 7591
- 2',5-Dihydroxy-3,6,7-trimethoxyflavone = 11161
- 5,7-Dihydroxy-3,6,4'-trimethoxyflavone = 19312
- (*R*)-5,7-Dihydroxy-2',4',5',5'-trimethoxyisoflavanone = 5586
- 1,7-Dihydroxy-2,3,8-trimethoxy-6-methylanthraquinone = 15908
- trans*-3,3'-Dihydroxy-2',4',5-trimethoxystilbene = 17196
- trans*-3,4'-Dihydroxy-2',3',5-trimethoxystilbene = 17197
- 3,8-Dihydroxy-2,4,6-trimethoxyxanthone = 6165
- 3 $\beta$ ,7 $\beta$ -Dihydroxy-4,4,14 $\alpha$ -trimethyl-11,15-dioxo-5 $\alpha$ -chol-8-en-24-oic acid = 13038
- 3,2,3-Dihydroxy-7,11,15-trioxolanosta-8,24-dien-26-oic acid = 8180
- 8,9-Dihydroxy-4,4,5-tris-(3,3-dimethylallyl)-6-methyl-2,3-(2,2-dimethylpyrano)anthrone = 9243
- 2,5-Dihydroxy-3-undecyl-2,5-cyclohexadiene-1,4-dione = 6767
- 3 $\beta$ ,19 $\alpha$ -Dihydroxyurs-12-en-28-oic acid = 17696
- 1,7-Dihydroxyxanthone-7-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranoside = 17621
- 2 $\alpha$ ,3 $\beta$ -Dihydroxy-24-*p-z*-coumaroyloxyurs-12-en-28-oic acid = 9073
- 2,(3,4-Dihydroxyphenyl)-3,5,7-trihydroxy-4*H*-1-benzopyran-4-one = 18317
- 2,6-Diisobutyryloxy-3-geranyl-5-isoprenyl-2,5-dihexadiene-1,4-dione = 7224
- 12,20-Di-*O*-isovaleryl-tomentogenin-3-*O*- $\alpha$ -*L*-oleandropyranosyl-(1 $\rightarrow$ 4)-*O*- $\alpha$ -*L*-oleandropyranoside = 6599
- 3',6'-Diketo-7-hydroxy-8,2',4'-trimethoxyisoflavan = 12568
- 3,20-Diketo-11 $\beta$ ,18-oxido-4-pregnene-14,21-diol = 880
- Dilinolenin = 8815
- Dillapiole = 6193
- 2,6-Dimethoxy-*p*-benzoquinone = 6204
- 3 $\alpha$ ,6 $\beta$ -Di-(4-methoxybenzoyloxy)tropane = 13784
- (2*S*,3*S*)-2 $\alpha$ -(3'',4''-Dimethoxybenzyl)-3 $\beta$ -(4'-hydroxy-3'-methoxybenzyl)- $\gamma$ -butyrolactone 4'-*O*-( $\beta$ -*D*-glucopyranoside) = 20427
- 7,7'-Dimethoxy-8,8'-bicumarin = 11865
- 4,5-Dimethoxycanthin-6-one = 12334
- 2,6-Dimethoxy-9*H*-Carbazole-3-carboxaldehyde = 8832
- 3,4-Dimethoxy-cinnamic acid = 2888
- 6-*O*-[4"-*O-trans*-(3,4-Dimethoxycinnamoyl)- $\alpha$ -*L*-rhamnopyranosyl]aucubin = 19568
- 5,7-Dimethoxycoumarin = 3770
- 6,7-Dimethoxycoumarin = 19540
- Dimethoxydaidzein = 6254
- 5,9-Dimethoxy-7*H*-dibenzo(de,h)quinolin-7-one = 2343
- 5,7-Dimethoxy-8-(2,3-dihydroxyisopentyl) coumarin = 14825
- 3',4'-Dimethoxy-5',5'-dihydroxy-6,7-methylenedioxyisoflavone = 5426
- 4*b*,5-Dimethoxy-6",6"-dimethyl-2*H*-pyrano-(2",3":7,6)-flavan = 22810
- 2,6-Dimethoxy-3-formylcarbazole = 8832
- 5,8-Dimethoxy-6,7-furanocoumarin = 11601
- 3,3'-Dimethoxyfuran[4",5":8,7]foavone = 16492
- 2,3-Dimethoxyfuran[4',5':11,10]-7-oxo-[2]benzopyrano[4',3-*b*][1]benzopyran = 16493
- 11,12-Di-methoxy-3,4-furo-1,2-naphthoquinone = 4217
- 4,8-Dimethoxyfuro[2,3-*b*]quinoline = 7703
- 1,3-Dimethoxy-2-hydroxyanthraquinone = 1360
- 6,8-Dimethoxy-7-hydroxycoumarin = 11428
- 5,7-Dimethoxy-4'-hydroxyflavone-4'-*O*-apioside = 20393
- 11,12-Dimethoxy-5-hydroxy-3,4-furo-1,2-naphthoquinone = 4218
- 5,7-Dimethoxy-8-[2'-hydroxy-3'-methyl, 3'-*O*- $\beta$ -*D*-apiofuranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosylbutyl]coumarin = 19040
- 2-(3',5'-Dimethoxy-4'-hydroxyphenyl)-3,7-dioxabicyclo[3.3.0]octan-6-one = 22996
- 2-[2',4'-Dimethoxy-3'-hydroxyphenyl]-4-hydroxy-6-methoxy-benzofuran-3-carbaldehyde = 3005
- 2-[2',4'-Dimethoxy-3'-hydroxyphenyl]-4-hydroxy-5,6-methylenedioxybenzofuran-3-carbaldehyde = 3006
- (25*R*)-3,3-Dimethoxy-17 $\alpha$ -hydroxyspirostan-3-*al*-12-one = 1865
- 3,7-Dimethoxy-4-hydroxyxanthone = 19646
- 5,6-Dimethoxy-9-hydroxyoxoisoaporphine = 4692
- 4,7-Dimethoxy-6-[(3-methyl-2-butenyl)oxy]furo-[2,3-*b*]quinoline = 20894
- (7*R*,8*R*,7'*R*,8'*S*)-3,4-Dimethoxy-3',4'-methylenedioxy-7,7'-epoxylignan = 8038
- 6,7-Dimethoxy-3',4'-methylenedioxyflavone = 14363
- (7'*R*,8'*S*)-3,4-Dimethoxy-3',4'-methylenedioxy-7,8-seco-7,7'-epoxylignan-7,8-dione = 19616
- 2,3-Dimethoxy-8 $\alpha$ -methyl-5-methylene-5,6,7,8,8 $\alpha$ ,9,10,10 $\alpha$ -octahydroanthrac

- ene-1,4-dione = 9322
- rel*-4',7-Dimethoxy-4-oxo-2,3-*trans*-isoflavanyl-(2→2'')-4'',5''-dihydroxy-7''-methoxy-2'',3''-*trans*-isoflavanone = 4985
- 5,7-Dimethoxy-8-(1-oxo-2-seneciyl-3-methyl-3-butenyl)-2*H*-1-benzopyran-2-one = 16096
- (1*R*,2*R*,5*R*,6*S*)-2-(3',4'-Dimethoxy-phenyl)-6-(3'',4''-methylene dioxyphenyl)-3,7-dioxabicyclo(3,3,0) octane = 17504
- 4,6-Dimethoxy-8-prenyloxyfuroquinoline = 20892
- 1,2-Dimethoxy-4-(1-*cis*-propenyl)-benzene = 14530
- 3,3'-Dimethoxyquercetin = 6402
- 2,3-Dimethoxy-4,6,α,β-tetrahydroxy-α'-chalconol-4-*O*-β-*D*-glucopyranoside = 21633
- 6,4'-Dimethoxy-3,5,7-trihydroxyflavone = 2330
- 6,7-Dimethoxy-3,5,4'-trihydroxyflavone = 7577
- 3',4'-Dimethoxy-5,7,5'-trihydroxyflavone 3-*O*-α-*L*-rhamnopyranoside = 6296
- 3,6-Dimethoxy kaempferide = 14157
- Dimethulene = 3464
- cis*-2,3-Dimethylacrylic acid = 1188
- (-)-3-(3,3-Dimethylallyl)-5'-(2-hydroxy-3-methylbut-3-enyl)-4,2',4'-trihydroxychalcone = 2153
- (+)-3-(3,3-Dimethylallyl)-4',5'-[2''-(1-hydroxy-1-methylethyl)-dihydrofuran]-4,2'-dihydroxychalcone = 2154
- 3'-(3,3-Dimethylallyl)-kievitone = 6307
- 3β-Dimethylamino-20α-acetoxylamino-9β,19-cyclo-4,4,14α-trimethy-5α-pregn-6(7)-ene = 2821
- 3-(Dimethylamino-20α-amino-9β,19-cyclo-4,4,14α-trimethy-5α-pregn-6(7)-ene = 2822
- 20α-Dimethylamino-9β,19-cyclo-4,4,14α-trimethy-5α-pregnane = 2818
- 3β-Dimethylamino-9β,19-cyclo-4,4,14α-trimethy-5α-pregn-6(7),17(20)-dien-16-one = 2820
- (20*S*)-20-Dimethylamino-4',6'-dimethoxy-5'-hydroxybenzoylamino-3β-methylbuxan-31-ol = 2815
- (20*S*)-20-Dimethylamino-2'-hydroxy-3β-methyl-3'-methyl-butanoylamino-9,10-seco-buxa-9(11),10(19)-dien-31-ol = 2814
- (20*S*)-20-Dimethylamino-20-hydroxy-3β-methyl-3'-methyl-pentanoylamino-9,10-seco-buxa-9(11),10(19)-dien-31-ol = 2813
- 3β-Dimethylamino-2α-hydroxypregn-5-en-20-one = 12348
- (20*S*)-20-(*N,N*-dimethylamino)-5α-pregna-3-one = 8009
- 5,6-Dimethylbenzimidazolyl cyanocobamide = 22556
- 2,2-Dimethyl-8-benzoyl-3,7-dihydroxy-5-methoxy-6-(3-methyl-2-butenyl)-3,4-dihydrobenzopyran = 18027
- 2,2-Dimethyl-8-benzoyl-7-hydroxy-5-methoxy-6-(3-methyl-2-butenyl)benzopyran = 15225
- rel*-10β*H*-*trans*-1β,12ξ-Di(2-methylbut-2(*E*)-enoyl)-6α,13ξ-dihydroxycyclo-dan-4(20),8(18)-dien-7,15-dione-15,16-oxide = 2950
- 4,24-Dimethyl cholest-7-en-3-ol = 14558
- 2,2-Dimethyl-2*H*-1-chromene-6-carboxylic acid = 1343
- Di-*O*-Methylcrenatin = 10014
- (*E,E,E*)-1,7-Dimethylcyclodeca-1,4,7-triene = 17780
- 4-(1,3-Dimethylcyclohexenyl)-1-methylbenzene = 20938
- 4-(1,3-Dimethylcyclohexenyl)-1-methyl-1,4-cyclohexadiene = 20937
- 9,9-Dimethyl-6α,8β-di(γ,γ-dimethylallyl)-3,4-[2β-(2'-hydroxyisopropyl)-2,3-dihydrofuran]-2α-(1-oxo-2-methylpropyl)-8α-*H*-*cis*-bicyclo[3.3.1]nona-
- 1,5-dione = 8214
- 9,9-Dimethyl-6α,8β-di(γ,γ-dimethylallyl)-3,4-[2β-(2'-hydroxyisopropyl)-2,3-dihydrofuran]-2α-(1-oxo-2-methylpropyl)-8α-*H*-*cis*-bicyclo[3.3.1]nona-1,5-dione = 8215
- 3,3-Dimethyl-4α,6α-di(γ,γ-dimethylallyl)-2α-(2-methyl-1-oxopropyl)cyclohexanone = 8216
- 3,4-(6'',6''-Dimethyl-dihydropyrano)-4',5'-[2''-(1-hydroxy-1-methylethyl)-dihydrofuran]-2'-hydroxychalcone = 2155
- 6,7-(2,2-Dimethyl-dihydropyrano)-8-prenyl-5,3',4'-trihydroxyflavanone = 6572
- 2,5-Dimethyl-8,10-dihydroxynaphthopyrone 10-*O*-β-*D*-glucopyranoside = 17559
- 1β\*,2β\*,3α\*,4α\*-1,2-dimethyl-3-(2,5-dimethoxy-3,4-methylenedioxyphenyl)-4-(2,4,5-trimethoxyphenyl)cyclobutane = 15001
- (7*R*,8*S*,8'*R*)-8,8'-Dimethyl-4,5-dimethoxy-3',4'-methylenedioxy-2,7'-cyclo-lignan-7-one = 1730
- (7*R*,8*S*,8'*S*)-8,8'-Dimethyl-3',4'-dimethoxy-4,5-methylenedioxy-2,7'-cyclo-lignan-7-one = 14393
- (+)-1,1-Dimethyl-4,7-dimethylene-decahydro-cyclopropa[*e*]azulen-4a-ol = 1758
- (+)-(1*S*,4*aR*,7*aS*,8*S*)-1,1-Dimethyl-4,7-dimethylenedeca-hydro-cyclopropa[*e*]azulene = 927
- 7,8-Dimethyl-10-*d*-ribityl-isoalloxazine = 18834
- 6,7-Dimethyl-9-*D*-ribitylisoalloxazine = 18834
- 3,4-Di-*O*-methyllellagic acid = 6224
- 5-[(2*E*)-3,7-Dimethyl-5,6-epoxy-2,7-octadienyloxy] psoralen = 1279
- 5-[(2*E*,5*E*)-3,7-Dimethyl-7-[(1-ethoxy)ethoxy-2,5-octadienyloxy]] psoralen = 7466
- 4-*O*-[(2*E*,5*E*)-3,7-Dimethyl-5-ethoxy-2,5-octadiene-7-ol]-sinapyl alcohol = 15328
- 4-*O*-[(2*E*)-3,7-Dimethyl-6-ethoxy-2,7-octadiene]-sinapyl alcohol = 15327
- 4-*O*-[(2*E*,4*E*)-3,7-Dimethyl-5-ethoxy-2,4-octadien-7-ol]-sinapyl alcohol = 15329
- 5-(2*E*)-3,7-dimethyl-5-ethoxy-2,6-octadienyloxy psoralen = 15845
- Dimethyl (2*R*)-2-[(4-ethoxy-4-oxobutanoyl)oxy]succinate = 16157
- 4-(1,5-Dimethyl-1,4-hexadienyl)-1-methyl-cyclohexene = 2411
- (1-(1,5-Dimethylhex-4-enyl)-4,8-dimethylspiro[4.5]deca-1,7-diene) = 22531
- (4-(1,5-Dimethylhex-5-enylidene)-1-methylcyclohexene) = 2408
- [*S*-(*R*\*,*S*\*)]-5-(1,5-Dimethyl-4-hexenyl)-2-methyl-1,3-cyclohexadiene = 23004
- (-)-(3*aS*,5*R*,7*aR*)-4,4-Dimethyl-7*a*-hydroxymethyl-5-hydroxy-2,3,3*a*,4,5,7*a*-hexahydrobenzo[*b*]furan-2-one = 13660
- (-)-(3*aS*,5*R*,7*aR*)-4,4-Dimethyl-7*a*-hydroxymethyl-2-oxo-2,3,3*a*,4,5,7*a*-hexahydrobenzo[*b*]furan-5-yl 3,4-dimethyl-3-pentenoate = 20966
- (7*R*,8*S*,8'*R*)-8,8'-Dimethyl-4-hydroxy-3',4',5-trimethoxy-2,7'-cyclo-lignan-7-one = 6932
- (7*R*,8*S*,8'*S*)-8,8'-Dimethyl-4-hydroxy-3',4',5-trimethoxy-2,7'-cyclo-lignan-7-one = 6933
- (7*R*,8*R*,8'*S*)-8,8'-Dimethyl-4-hydroxy-3',4',5-trimethoxy-2,7'-cyclo-lignan-7-one = 9592
- 1,6-Dimethyl-4-isopropyl-7,8-dihydro-naphthalene = 4076
- 3,8-Dimethyl-5-isopropyl-6-hydroxycoumarin = 13520
- 3,8-Dimethyl-5-isopropyl-6-methoxycoumarin = 13519
- 1,6-Dimethyl-4-keto-tetrahydronaphthalene = 6413
- N,N*-Dimethylmethanamine *N*-oxide = 21940
- 2,2-Dimethyl-6-methoxycarbonyl-2*H*-benzopyran = 6321
- 1β\*,2β\*,3α\*,4α\*-1,2-dimethyl-3-(3-methoxy-4,5-methylene-dioxyphenyl)-4-(2,4,5-trimethoxyphenyl)-cyclobutane = 15000
- 4-[2,2-Dimethyl-3-(5-methylcyclopenta-1,4-dien-1-yl)-cyclopropyl]-butan-2-

- one = 20889
- 2,8-Dimethyl-5-methylene-2a,3,4,5,5a,6,7,8,8a,8b-decahydro-cyclobuta[e]azulen-4-ol = 20890
- 2,2-Dimethyl-3-methylenebicyclo[2,2,1]heptane = 3045
- 1,4-Dimethyl-8-methylene-2-oxabicyclo[3.2.1]octane = 13596
- (+)-(S)-1,5-Dimethyl-7-(1-methylethenyl)-cyclodeca-1E,5E-diene = 11437
- (-)-(1R,4aS,8S,9R)-1,4a-Dimethyl-8-(1-methylethenyl)-decahydro-naphthalen-1-ol = 8954
- 4,8-Dimethyl-2-(1-methylethyl)-azulene = 22439
- 1,5-Dimethyl-1-(4-methylhexenyl)-4-cycloheptenylether = 12467
- 6,6-Dimethyl-12 $\alpha$ -(2 $\alpha$ ,3 $\alpha$ -H)-12 $\alpha$ -(2-methyl-3-hydroxybutanoyl)-8b-hydroxy-4-phenyl-pyranodihydrocoumarin = 2992
- 6,6-Dimethyl-12 $\alpha$ -(2 $\alpha$ ,3 $\beta$ -H)-12 $\alpha$ -(2-methyl-3-hydroxybutanoyl)-8b-hydroxy-4-phenyl-pyranodihydrocoumarin = 2993
- (+)-(1S\*,3aR\*,4S\*,7S\*,8aS\*)-1,4-Dimethyl-7-(5-methyl-1-methylene-hex-4-enyl)-decahydroazulen-4-ol = 22583
- (1,8-Dimethyl-4-(5-methyl-1-methylenehex-4-enyl)spiro[4.5]dec-7-ene) = 22532
- 2,6-Dimethyl-6-(4-methyl-3-pentenyl)biscyclo[3,1,1]hept-2-ene = 2306
- (2,6-Dimethyl-2-(4-methylpent-4-enyl)-1-oxaspiro[2.5]oct-5-ene) = 7057
- (+)-(1S,4aS,8aR)-4a,8-Dimethyl-1-(1-methylvinyl)-1,2,3,4,4a,5,6,8a-octahydro-naphthalene = 8952
- 3,7-Dimethylocta-1,6-dien-3,8-diol 8-*O*- $\beta$ -D-glucopyranoside = 2329
- (Z)-3,7-Dimethyl-2,6-octadien-1-ol = 15498
- 4-*O*-[(2E)-3,7-Dimethyl-2,7-octadien-5-ol]sinapyl alcohol = 15326
- 1-[6-(3,7-Dimethyl-octa-2,6-dienyl)-5,7-dihydroxy-2,2-dimethyl-2H-chromen-8-yl]-3-(4-hydroxy-phenyl)-propenone = 13435
- 2-(3,7-Dimethyl-2,6-octadienyl)-1,3,5,8-tetrahydroxyxanthone = 20018
- 2,6-Dimethyl-2,4,6-octatriene = 939
- 3,7-Dimethyl-6-octen-1-al = 3767
- 3,7-Dimethyl-6-octen-1-yl acetate = 3769
- (+)-(1R,5S,6S,7S)-5,6-Dimethyl-9-oxo-8-isopropylidene-tricyclo[5.2.2.0<sup>1,6</sup>]undecane = 1266
- (3,4-*trans*)-3-[3'-(1''',1'''-Dimethyl-2''-propenyl)-5'-indolyl]-1,4-dimethyl-4-{2-[3''-(1''',1'''-dimethyl-2''-propenyl)-5''-indolyl]-ethyl-2-enyl}-cyclohex-1-ene = 3338
- (3,4-*cis*)-3-[3'-(1''',1'''-Dimethyl-2''-propenyl)-5'-indolyl]-1,4-dimethyl-4-{2-[3''-(1''',1'''-dimethyl-2''-propenyl)-5''-indolyl]-ethyl-2-enyl}-cyclohex-1-ene = 3339
- 6'',6''-Dimethylpyrano(2'',3'':4,5)-3'- $\gamma$ , $\gamma$ -dimethylallyl-2',3,4'-trihydroxychalcone = 6024
- 6,7-(2,2-Dimethylpyrano)-8-prenyl-5,3',4'-trihydroxyflavanone = 6571
- (7R,8S,8'R)-8,8'-Dimethyl-3',4',4,5-tetramethoxy-2,7'-cycloignan-7-one = 1709
- (7R,8R,8'S)-8,8'-Dimethyl-3',4',4,5-tetramethoxy-2,7'-cycloignan-7-one = 6830
- (7R,8S,8'S)-8,8'-Dimethyl-3',4',4,5-tetramethoxy-2,7'-cycloignan-7-one = 6831
- N,N-Dimethyltyramine = 9646
- Dimidin = 5707
- Dinatin = 9564
- 18,20-Dinor-1,3,5(10),6,8,12-abietaheptaene-11,14-dione = 5165
- 25,26-Dinor-9,13-dimethylup-5-en-3-ol = 9213
- 26,27-Dinor-3,8,14,21-onoceranetretol = 3810
- 16,28-Di-*O*acetyl-21-*O*-angeloyltheasapogenol E 3-*O*- $\beta$ -D-galactopyranosyl(1 $\rightarrow$ 2)[ $\beta$ -D-xylopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranosyl(1 $\rightarrow$ 3)]- $\beta$ -D-glucopyranosiduronic acid = 21287
- Dioctyl 1,2-benzenedicarboxylate = 2449
- 3-*O*- $\alpha$ -(3',4'-*O*-Dioic-acetyl)-L-arabino-pyranosyl-3 $\beta$ -hydroxylean-12-ene-28,29-dioic acid-28-*O*-[ $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glycopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glycopyranosyl] ester = 22915
- Dioscorea sapogenin = 6440
- Diosgenin-dioglucoside = 6442
- Diosgenin-3-*O*-[ $\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 2)-[ $\alpha$ -L-arabinopyranosyl-(1 $\rightarrow$ 4)]- $\beta$ -D-glucopyranoside = 17655
- Diosgenin-3- $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 3)- $\beta$ -D-glucopyranoside = 17654
- Diosgenin-3-*O*- $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranoside = 21661
- Diosgenin 3-*O*-[ $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)-[ $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)]- $\alpha$ -L-rhamnopyranoside] = 17657
- Diosgenin-3-*O*- $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 4)[ $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 3)]- $\beta$ -D-glucopyranoside = 17656
- Diosgenin tetraglycoside = 6447
- 11,24-Dioxo-5,21-dien-cucuebit-3 $\alpha$ -*O*- $\beta$ -D-xylopyranosyl-16 $\alpha$ -*O*- $\alpha$ -L-rhamno-pyranoside = 4883
- (24E)-3,7-Dioxo-5 $\alpha$ -lanosta-8,24-dien-26-al = 13020
- 3,16-dioxo-13 $\beta$  17-methyleneoxyoleanane = 6768
- 2,6-Dioxo-1,2,3,6-tetrahydro-4-pyrimidinecarboxylic acid = 16214
- trans,trans*-1,7-Diphenyl-1,3-heptadien-5-one = 966
- 1,7-Diphenyl-5-hydroxy-3-heptanone = 6185
- trans*-1,7-Diphenyl-5-hydroxy-1-heptene = 6487
- Diphyline = 3502
- Diploptene = 9641
- Diplopterol = 10167
- 1,6-Di-*O*-*E*-sinapoyl- $\beta$ -glucopyranose = 6510
- Distylin = 5699
- Diterpenoid SP II = 5930
- 2,3-Dithiabutane = 6342
- 4,5-Dithiaoctane = 6501
- Di(5,7,4''-trihydroxy-2,3-dihydro-4',7''-dimethoxy-6''-methyl-3',3''-biflavan-yl)-6,6-tetraflavone = 20627
- 3,4-*O*-Divanilloylquinic acid = 2761
- 3,5-*O*-Divanilloylquinic acid = 2762
- 4,5-*O*-Divanilloylquinic acid = 2763
- D*-(+)-Maltose = 13454
- D*-Maltose = 13454
- DMX-B = 5262
- DMX-J = 5263
- Docosapentenoic acid = 3849
- cis*-13-Docosenoic acid = 7291
- (4 $\alpha$ ,5 $\beta$ ,6 $\alpha$ ,7 $\beta$ ,11 $\alpha$ ,11 $\beta$ )1,2,3,4,4a,5,6,6a,7,11,11a,11b-Dodecahydro-4,4,7,11b-tetramethylphenanthro[3,2-*b*]furan-4a,5,7-triol-5-benzoate = 11778
- (4 $\alpha$ ,5 $\beta$ ,6 $\alpha$ ,11 $\alpha$ ,11 $\beta$ )1,2,3,4,4a,5,6,6a,7,11,11a,11b-Dodecahydro-4,4,11b-trimethyl-7-methylenephenanthro[3,2-*b*]furan-4a,5-diol-5-benzoate = 11777
- Dodecanal = 12570
- (3E,7Z)-Dollabella-3,7,12-trien-17-oic acid = 6549
- Donaxine = 8971
- Dotorioside I = 1733
- (9S)-Drummondol-9-*O*- $\beta$ -D-glucopyranoside = 20174

Dulcinol = 19537

## E

Eburicoic acid 21-*O*- $\beta$ -*D*-glucopyranoside = 7875 $\alpha$ -Ecdysone = 6678 $\beta$ -Ecdysone = 6679

Echinaystic acid = 6689

Echinocystic acid 3-*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosyl  
(1 $\rightarrow$ 3)- $\alpha$ -*L*-arabinopyranoside = 11799Echinocystic acid 3-*O*-(6'-*O*-methyl)- $\beta$ -*D*-glucuronopyranoside = 6704

Eemanin = 12044

Egonol = 10665

*n*-Eicosane = 6720

1-Eicosanol = 6722

Elatericin = 4319

Elatoside J = 3976

Eleutheroside C = 7439

Eleutheroside E = 86

Eleutheroside M = 819

Emodin-8-*O*- $\beta$ -*D*-glucopyranoside = 1363Emodin 8-*O*- $\beta$ -*D*-glucopyranosyl-6-*O*-sulfate = 20468

Emodin-3-monomethyl ether = 17247

Emodin-1-monomethyl ether = 18416

Empetrin = 5022

Encecalol = 6797

Encordin = 17002

Engeletin = 5659

Engelitin = 5659

Enmenin = 21561

EP-1 = 7113

Ephedine = 6815

Epialisol A = 891

Epicatechin-(2 $\beta$  $\rightarrow$ *O* $\rightarrow$ 7,4 $\beta$  $\rightarrow$ 8)-[epicatechin-(4 $\beta$  $\rightarrow$ 6)]-epicatechin-(4 $\beta$  $\rightarrow$ 8)-  
epicatechin = 16654Epicatechin-(2 $\beta$  $\rightarrow$ *O* $\rightarrow$ 5,4 $\beta$  $\rightarrow$ 6)-[epicatechin-(2 $\beta$  $\rightarrow$ *O* $\rightarrow$ 7,4 $\beta$  $\rightarrow$ 8)]-epicatechin-  
(4 $\beta$  $\rightarrow$ 8)-epicatechin = 16655

Epicatechol = 6854

2-Epicephalofortuneine = 3401

7-Epi-10-deacetylaxol = 6884

(1'*R*,3'*R*,5'*R*,8'*S*)-Epi-dihydrophaseic acid  $\beta$ -*D*-glucoside = 56915 $\alpha$ ,8 $\alpha$ -Epidioxergosta-6,22-dien-3 $\beta$ -ol = 72515 $\alpha$ ,8 $\alpha$ -Epi-dioxergost-6-en-3 $\beta$ -ol = 7249

2''-Epidorsmanin Fa = 6566

2''-Epidorsmanin Fb = 6567

2''-Epidorsmanin Ga = 6568

2''-Epidorsmanin Gb = 6569

20-Epieuphol = 21409

15-Epifuziline = 15228

(-)-Epigallocatechin = 6921

(-)-Epigallocatechin-3-*O*-gallate = 6923

3-Epihydroxyetioallocholan-17-one = 1170

8'-Epi-larreatricin = 6942

1-*O*-(8-Epi-loganoyl)- $\beta$ -*D*-glucopyranose = 8864

Epilupinyl rhamnosylferulate = 14084

Epimedeside A = 5257

22,26-Epiminocholest-6-one-3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-galactopy-  
ranoside = 22906(5 $\alpha$ ,22*S*,23*R*,25*S*)-22,26-Epimino-16 $\beta$ ,23-epoxy-3 $\beta$ ,23,27-trihydroxycholestane =  
7375*L*-Epinephrine = 6536-*C*- $\beta$ -*D*-4-Epiiosyl-4'-*O*- $\beta$ -*D*-glucopyranosylapigenin = 18678

Epiquinamine = 4004

13-Epi-roseosta-chenol = 10291

15-Episenbusine C = 15228

20 $\zeta_1$ ,24 $\zeta_2$ -Epoxy-15*R*-acetoxy-9,19-cyclolanostane-3 $\beta$ ,16 $\beta$ ,25-triol-3-*O*- $\beta$ -*D*-  
xylopyranoside = 22063 $\beta$ ,25-Epoxy-21 $\beta$ -acetoxy-3 $\alpha$ ,22 $\beta$ -dihydroxyurs-12-en-28-al = 40393 $\beta$ ,25-Epoxy-28-acetoxy-3 $\alpha$ ,21 $\beta$ ,22 $\beta$ -trihydroxyurs-12-ene = 4040

Epoxyactinidionoside = 20271

4,5-Epoxy-8(14)-caryophyllene = 3243

15,16-Epoxy-1,3,13(16),14-clerodatetraen-20,12-olide-18,19-dioic acid dime-  
thylester = 427315,16-Epoxy-1,3,13(16),14-clerodatetraen-18,19,20-trioic acid trimethylester  
= 427415,16-Epoxy-3,13(16),14-clerodatrien-19,1 $\alpha$ :20,12-diolide-18-oic acid meth-  
ylester = 427520 $\zeta_1$ ,24 $\zeta_2$ -Epoxy-9,19-cyclolanostane-3 $\beta$ ,12 $\alpha$ ,15 $\alpha$ ,16 $\beta$ ,25-pentaol-3-*O*- $\beta$ -*D*-  
xylopyranoside = 2207(20*S*\*,24*R*\*)-Epoxy-9,19-cyclolanostane-3 $\beta$ ,12 $\beta$ ,16 $\beta$ ,18,25-pentaol-3-*O*- $\beta$ -*D*-  
xylopyranoside = 2193(20*S*\*,24*R*\*)-Epoxy-9,19-cyclolanostane-3 $\beta$ ,12 $\alpha$ ,16 $\beta$ ,18,25-pentaol-3-*O*- $\beta$ -*D*-  
xylopyranoside = 2194(20*S*\*,24*R*\*)-Epoxy-9,19-cyclolanostane-3 $\beta$ ,15 $\alpha$ ,16 $\beta$ ,18,25-pentaol-3-*O*- $\beta$ -*D*-  
xylopyranoside = 219620 $\zeta_1$ ,24 $\zeta_2$ -Epoxy-9,19-cyclolanostane-3 $\beta$ ,16 $\beta$ ,18,25-tetraol-3-*O*- $\beta$ -*D*-glucopy-  
ranoside = 219820 $\zeta_1$ ,24 $\zeta_2$ -Epoxy-9,19-cyclolanostane-3 $\beta$ ,16 $\beta$ ,18,25-tetraol-3-*O*-[ $\beta$ -*D*-gluco-  
pyranosyl-(1 $\rightarrow$ 6)]- $\beta$ -*D*-glucopyranoside = 2199(20*S*\*,24*R*\*)-Epoxy-9,19-cyclolanostane-3 $\beta$ ,16 $\beta$ ,18,-25-tetraol-3-*O*- $\beta$ -*D*-  
xylopyranoside = 2192(20*S*\*,24*R*\*)-Epoxy-9,19-cyclolanostane-3 $\beta$ ,12 $\beta$ ,16 $\beta$ ,25-tetraol-3-*O*- $\beta$ -*D*-  
xylopyranoside = 446520,24-Epoxy-dammarane-(3 $\beta$ ,12 $\beta$ ,20*S*,24*R*)-12-*O*- $\beta$ -*D*-quinovopyranosyl-25-  
hydroxy-3-*O*- $\alpha$ -*L*-arabinofuranoside = 4483(3*S*,5*R*,6*R*,3'*S*,5'*R*,8'*R*)-Epoxy-6,7-didehydro-5,6,5',8'-tetrahydro- $\beta$ , $\beta$ -carotene-  
3,5,3'-triol 3-*O*-acetate = 6424(3*S*,5*R*,6*R*,3'*S*,5'*R*,8'*S*)-5',8'-Epoxy-6,7-didehydro-5,6,5',8'-tetrahydro- $\beta$ , $\beta$ -carot-  
ene-3,5,3'-triol 3-*O*-acetate = 64255,8-Epoxy-5,8-dihydro- $\beta$ ,*epsilon*-carotene-3,3'-diol = 7821

12,16-Epoxy-11,14-dihydroxy-3,5,8,11,13,15-abietahexaene-7-one = 786

12,16-Epoxy-11,14-dihydroxy-3,5,8,11,13-abieta-pentaene-7-one = 787

16 $\beta$ ,23 $\beta$ -Epoxy-11 $\beta$ ,25-dihydroxy-24(*R*)-acetoxy-protost-13(17)-en-3-one =  
902(20*S*,24*S*)-20,24-Epoxy-12,25-dihydroxydammaran-3-yl *O*- $\beta$ -*D*-glucopyra-  
nosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranoside = 9117(20*S*,24*S*)-20,-24-Epoxy-12,25-dihydroxydammaran-3-yl *O*- $\beta$ -*D*-glucopyra-



- nosyl-(1→2)- $\beta$ -*D*-xylopyranoside = 9116
- (20*S*,24*R*)-20,24-Epoxy-12,25-dihydroxydammaran-3-yl *O*- $\beta$ -*D*-glucopyranosyl-(1→2)- $\beta$ -*D*-xylopyranoside = 9118
- 1,4-*trans*-7 $\beta$ ,10 $\beta$ -Epoxy-4 $\alpha$ ,6 $\alpha$ -dihydroxyguaiane = 16193
- ent*-3 $\beta$ ,20-Epoxy-3 $\alpha$ ,6 $\alpha$ -dihydroxykaur-16-ene = 689
- 15,16-Epoxy-3 $\alpha$ ,9 $\alpha$ -dihydroxy-labda-13(16),14-diene = 16273
- 3 $\beta$ ,20-Epoxy-3 $\alpha$ ,6 $\alpha$ -dihydroxy-18-nor-beyer-15-ene = 692
- 13 $\beta$ ,28-Epoxy-16 $\alpha$ ,21 $\beta$ -dihydroxyurs-11-en-3 $\beta$ -yl *α*-*L*-rhamnopyranosyl-(1→2)- $\beta$ -*D*-glucopyranosyl-(1→2)- $\beta$ -*D*-fucopyranoside = 18949
- 13 $\beta$ ,28-Epoxy-16 $\alpha$ ,23-dihydroxyurs-11-en-3 $\beta$ -yl  $\beta$ -*D*-xylopyranosyl-(1→2)- $\beta$ -*D*-glucopyranosyl-(1→2)- $\beta$ -*D*-fucopyranoside = 18944
- 15 $\alpha$ ,16 $\alpha$ -Epoxy-11 $\alpha$ ,28-dihydroxyurs-12-en-3 $\beta$ -yl  $\beta$ -*D*-xylopyranosyl-(1→2)- $\beta$ -*D*-glucopyranosyl-(1→2)- $\beta$ -*D*-fucopyranoside = 18947
- 13 $\beta$ ,28-Epoxy-16 $\alpha$ ,21 $\beta$ -dihydroxyurs-11-en-3 $\beta$ -yl  $\beta$ -*D*-xylopyranosyl-(1→2)- $\beta$ -*D*-glucopyranosyl-(1→2)- $\beta$ -*D*-fucopyranoside = 18948
- 13 $\beta$ ,28-Epoxy-16 $\alpha$ ,23-dihydroxyurs-11-en-3 $\beta$ -yl  $\beta$ -*D*-xylopyranosyl-(1→2)- $\beta$ -*D*-glucopyranosyl-(1→2)- $\beta$ -*D*-glucopyranoside = 18950
- 13 $\alpha$ (21)-Epoxyeurycomanone = 16694
- (22*S*,23*S*,25*R*,26*S*)-23,26-Epoxy-5 $\alpha$ -furostane-3 $\beta$ ,22,26-triol 26-*O*- $\beta$ -*D*-glucopyranoside = 699
- 6,7-Epoxy-10(14)-guaian-4-ol = 16191
- 2,3-Epoxy-6,9-humuladiene = 9671
- 6,7-Epoxy-2,9-humuladiene = 9672
- 9,10-Epoxy-2,6-humuladiene = 9673
- 2,3-Epoxy-6,9-humuladien-8-one = 22985
- 3 $\beta$ ,20-Epoxy-3 $\alpha$ -hydroxybeyer-15-ene = 690
- 16,24-Epoxy-25-hydroxycycloart-1,11,22-trien-3-one = 1669
- 5*aH*-2 $\beta$ ,4-Epoxy-3 $\beta$ -hydroxyguaia-1(10),11(13)-dien-6 $\beta$ ,12-olide = 14978
- 5*aH*-2,4 $\beta$ -Epoxy-1-hydroxyguaia-9(10),11(13)-dien-6 $\beta$ ,12-olide = 19128
- 5*aH*-2,4 $\beta$ -Epoxy-1-hydroxyguaia-10(14),11(13)-dien-6 $\beta$ ,12-olide = 19129
- 4,10-Epoxy-6 $\alpha$ -hydroxyguaiane = 2695
- 16,24-Epoxy-3 $\alpha$ -hydroxylanost-8-ene = 1668
- 3,25-epoxy-3 $\alpha$ -hydroxy-22 $\beta$ -[(*Z*)-29-methyl-29-butenyloxy]-11-oxoolean-12-en-28-oic acid = 3024
- 1,2-Epoxy-13-hydroxy-6,10,14-phytatrien-20,1-olide = 7086
- (23*S*,25*R*)-17 $\alpha$ ,23-Epoxy-29-hydroxy-3 $\beta$ -[(*O*)- $\alpha$ -*L*-rhamnopyranosyl-(1→2)-*O*- $\beta$ -*D*-glucopyranosyl-(1→3)]-*O*- $\beta$ -*D*-glucopyranosyl-(1→2)- $\alpha$ -*L*-arabinopyranosyl-(1→6)- $\beta$ -*D*-glucopyranosyl]oxy]lanost-8-en-23,26-olide = 19517
- 13 $\beta$ ,28-epoxy-16 $\alpha$ -hydroxyurs-11-en-3 $\beta$ -yl *α*-*L*-rhamnopyranosyl-(1→2)- $\beta$ -*D*-glucopyranosyl-(1→2)- $\beta$ -*D*-fucopyranoside = 18953
- 13 $\beta$ ,28-epoxy-16 $\alpha$ -hydroxyurs-11-en-3 $\beta$ -yl  $\beta$ -*D*-xylopyranosyl-(1→2)- $\beta$ -*D*-glucopyranosyl-(1→2)- $\beta$ -*D*-fucopyranoside = 18952
- 13 $\beta$ ,28-epoxy-16 $\alpha$ -hydroxyurs-11-en-3 $\beta$ -yl  $\beta$ -*D*-xylopyranosyl-(1→2)- $\beta$ -*D*-glucopyranosyl-(1→2)- $\beta$ -*D*-glucopyranoside = 18951
- Epoxyimperatorin = 9419=16447
- 15,16-Epoxy-8(17),13(16),14-*ent*-labdatrien-20,19-olide = 17742
- 8,13-Epoxy-14-labdene = 5954
- (*E*)-8 $\beta$ (17)-Epoxylabd-12-ene-15,16-dial = 675
- Epoxyinalool = 12853
- (3*S*,5*R*,8*S*,9*R*)-5,8-Epoxy-6-megastigmene-3,9-diol 3-*O*- $\beta$ -*D*-glucopyranoside = 16015
- (3*S*,5*R*,8*R*,9*R*)-5,8-Epoxy-6-megastigmene-3,9-diol 3-*O*- $\beta$ -*D*-glucopyranoside = 16016
- 3,25-Epoxy-3 $\alpha$ -methoxy-22 $\beta$ -[ $\beta$ , $\beta$ -dimethylacryloyloxy]-urs-12-en-28-oic acid = 3028
- (16*S*,20*S*,22*S*)-16 $\beta$ ,22-Epoxy-16 $\alpha$ -methoxy-3 $\beta$ ,25,26-trihydroxy-cycloartan-24-one 3-*O*- $\beta$ -*D*-glucopyranosyl-(1→2)- $\beta$ -*D*-glucopyranoside = 1547
- 14,16-Epoxy-6-methyl-5(10),6,8,13-abietatetraene-11,12-dione = 14263
- 8 $\beta$ -(2',3'-Epoxy-2'-methylbutanoxy)-4 $\alpha$ -hydroxy-14-oxo-5*aH*,6 $\beta$ *H*,7*aH*-guaia-1(10),2,11(13)-triene-6,12-olide = 7546
- 6-[(2,3-Epoxy-3-methylbutyl)oxy]-4,7-dimethoxyfuro[2,3-*b*]quinoline = 20893
- 5*aH*-2 $\beta$ ,4-Epoxy-3 $\beta$ -(2-methylbutyryloxy)guaia-1(10),11(13)-dien-6 $\beta$ ,12-olide = 14195
- (22*R*,24*R*,25*R*,26*S*)-22,26-Epoxy-24-*O*-methyl-1 $\alpha$ ,3 $\beta$ ,24,25,26-pentahydroxyergost-5-ene 26-*O*- $\beta$ -*D*-glucopyranoside = 3639
- 8,13-Epoxy-3-nor-2,3-seco-14-epilabden-2,4-olide = 688
- 3,23- $\beta$ -Epoxy-olean-12-en-28-oic acid = 4480
- 6*S*-(1*S*,2*R*-Epoxyphenethyl-5*S*-cinnamyloxy)-5,6-dihydro-2-pyrone = 9654
- Epoxypseudoisoeugenyl 2-methylbutyrate = 14029
- cis*-Epoxy-pseudoisoeugenyl tiglate = 14028
- trans*-Epoxy-pseudoisoeugenyl tiglate = 14030
- 15,16-Epoxy-6 $\beta$ ,7 $\beta$ ,18,19-tetrahydroxy-neo-cleroda-3(4),13(16),14-trien-20,12(*S*)-olide = 21226
- 15,16-Epoxy-3 $\alpha$ ,6 $\beta$ ,7 $\beta$ ,18,19-tetrahydroxy-neo-cleroda-4(18),13(16),14-trien-20,12(*S*)-olide = 21227
- 13,28-Epoxy-3 $\beta$ ,16 $\beta$ ,23,29-tetrahydroxyolean-11-en-3 $\beta$ -yl 30-oic acid  $\beta$ -*D*-glucopyranosyl-(1→2)-[4-*O*-sulfo- $\beta$ -*D*-glucopyranosyl-(1→3)]- $\beta$ -*D*-fucopyranoside = 19247
- 13,28-Epoxy-3 $\beta$ ,16 $\beta$ ,23,29-tetrahydroxyolean-11-en-3 $\beta$ -yl  $\beta$ -*D*-glucopyranosyl-(1→2)-[4-*O*-sulfo- $\beta$ -*D*-glucopyranosyl-(1→3)]- $\beta$ -*D*-fucopyranoside = 19245
- 13,28-Epoxy-3 $\beta$ ,16 $\beta$ ,23,30-tetrahydroxyolean-11-en-3 $\beta$ -yl  $\beta$ -*D*-glucopyranosyl-(1→2)-[4-*O*-sulfo- $\beta$ -*D*-glucopyranosyl-(1→3)]- $\beta$ -*D*-fucopyranoside = 19248
- 5,6-Epoxy-4,16,20,22-tetrahydroxy-1-oxoergost-2-eno-26,23-lactone = 11804
- (20*S*,22*R*,24*S*,25*S*)-22,25-Epoxy-3 $\beta$ ,24,27-trihydroxy-cycloartan-16-one 3-*O*- $\beta$ -*D*-glucopyranosyl-(1→2)- $\beta$ -*D*-glucopyranoside = 1548
- (20*S*,24*S*)-20,24-Epoxy-12,23 $\beta$ ,25-trihydroxydammaran-3 $\beta$ -yl *O*- $\beta$ -*D*-glucopyranosyl-(1→2)- $\beta$ -*D*-xylopyranoside = 9119
- 14 $\alpha$ ,20-Epoxy-1 $\alpha$ ,7 $\alpha$ ,14 $\beta$ -trihydroxy-*ent*-kaur-16-en-15-one = 7681
- 13,28-Epoxy-3 $\beta$ ,16 $\beta$ ,23-trihydroxyolean-11-en-3 $\beta$ -yl-30-oic acid  $\beta$ -*D*-glucopyranosyl-(1→2)-[4-*O*-sulfo- $\beta$ -*D*-glucopyranosyl-(1→3)]- $\beta$ -*D*-fucopyranoside = 19246
- EQ-7 = 3164
- EQ-8 = 10527
- 1(10),11-Eremophiladien-2-one = 15705
- Ergobasine = 7240
- Ergocalciferol = 22558
- Ergokryptine = 7236
- Ergosta-7,22-dien-3 $\beta$ -ol = 5608
- Ergosta-5,7-dien-3-ol = 14229
- (22*E*)-Ergosta-5,7,22-trien-3 $\beta$ -ol = 7250
- Ergost-7-en-3-ol = 8003
- Ergosterol peroxide = 6906
- Erinacin A = 7261

- Erinacin B = 7262  
 Erinacin C = 7263  
 Erinacin E = 7264  
 Erinacin G = 7265  
 Eriocarpin A = 6061  
 Eriodictyonone = 9604  
 Ervine = 783  
 Erypogin A = 2772  
 Erypogin B = 2771  
 Erysimin = 9335  
 Erysimotoxin = 9335  
 Escholine = 13374  
 Esculetin = 663  
 Esculin = 664  
 Estratriol = 7386  
 1,2-Ethanedicarboxylic acid = 20444  
 Ethanediol = 8826  
 4,5-Etheno-9,10-dihydroxy-6-phenanthridone = 4235  
 5(*R*)-5-Ethenyl-3-formamido-5-hydroxy-2-cyclopenten-1-one = 15206  
 (+)-(1*R*,2*R*,4*R*,5*R*)-4-Ethenyl-2-hydroxy-4-methyl-5-(1-methylethenyl)-1-(1-methylethyl)-cyclohexylacetate = 177  
 (-)-(1*S*,2*S*,3*S*)-1-Ethenyl-1-methyl-2,3-di(1-methylethenyl)-cyclohexane = 11407  
 (1*R*\*,2*S*\*,5*S*\*)-2-Ethenyl-1-(1-methylethenyl)-2,6,6-trimethylbicyclo[3.2.0]heptane = 16596  
 (+)-(1*R*,3*R*,4*R*)-4-Ethenyl-4-methyl-3-(1-methylethenyl)-1-(1-methylethyl)-cyclohexanol = 6739  
 9-Ethoxy-aristololide = 7395  
 24β-Ethoxy-20-25-epoxy-3α,16α-dihydroxy-9-methyl-19-norlanost-5(6)ene-2,11,22-trione = 5114  
*ent*-17-Ethoxy-16(α)-kauran-19-oic acid = 19879  
 4β-Ethoxy-5-methoxy-6",6"-dimethyl-2*H*-pyrano-(2",3":7,6)-flavan = 5103  
 2-Ethoxymethylene-3,5-dihydroxy-γ-pyrone = 1678  
 20-Ethyl-8-acetoxy-14-(*p*-hydroxybenzoyloxy)-1α,6α,16β,18-tetramethoxy-aconitane-3α,13β-diol = 8270  
 Ethylamylcarbinol = 15978  
 Ethyl benzenecarboxylate = 7421  
 Ethyl butanoate = 7423  
 24α-ethyl-5α-cholesta-7-*trans*,22-dien-3β-ol = 20168  
*trans*-Ethyl cinnamate = 7430  
 Ethyl dodecanoate = 7455  
 Ethyl ethanoate = 7418  
 Ethyl hexadecanoate = 7469  
 Ethyl margarate = 7444  
 25-Ethyl,23-methyl-19-*nor*-24-methylene-3,4-*seco*-4(28)-lanosten-10,3-olide = 19102  
 24-Ethyl,24-methyl-19-*nor*-3,4-*seco*-4(28),25(26)-lanostadiene-10,3-olide = 19103  
 Ethyl nonyl ether = 15700  
 Ethyl *trans*-3-phenylpropenoate = 7430  
 Ethyl stearate = 7467  
 Ethyl sulfide = 5503  
*N*-Ethyl-1α,6α,16β,18-tetramethoxy-8-ethoxy-13β-ol-2,3-dehydroaconitane-14-anisoylate = 12736  
*N*-Ethyl-1α,6α,16β,18-tetramethoxy-13β-ol-2,3-dehydroaconitane-8-acetate-14-anisoylate = 12736  
*N*-Ethyl-1α,6α,16β,18-tetramethoxy-13β-ol-2,3-dehydroaconitane-8,14-di-anisoylate = 12737  
 Eucannabinolide = 9570  
 5α*H*-Eudesma-4(15),11(13)-dien-12,8β-olide = 11203  
 Eudesmane-4(15)-ene-1β,11,14-triol 11-*O*-β-*D*-glucopyranoside = 3380  
 Eudesmane-4(15)-ene-1β,2α,11-triol 11-*O*-β-*D*-glucopyranoside = 3381  
 Eudesmane-1β,4α,11-triol 11-*O*-β-*D*-glucopyranoside = 3382  
 1α,5β,6β,7α,10α-4(15)-Eudesmen-6-ol-1-yl-acetate = 246  
 4-Eudesmen-6-one = 15334  
 Eugenyl acetate = 391  
 Eupassopin = 7566  
 (24*Z*)-7,24-Euphadien-3β,26-diol = 21407  
 Eupha-7,24-diene = 21404  
 Eupha-8,24-diene = 21405  
 (23*E*)-Eupha-8,23-diene-3β,25-diol-7,11-dione = 16365  
 (23*E*)-Eupha-8,23-diene-3β,25-diol-7-one = 12131  
 Eupha-8,24-diene-3β-ol-7-one = 12130  
 Euphadienol = 7611  
 Eupha-8,24-dien-3β-ol = 7611  
 Eupha-7-en-3,24-dione = 21408  
 Eupha-7,9(11),24-trien-3β-ol = 1464  
 Euphorbia factor L<sub>3</sub> = 5287  
 α-Euphorbol = 7618  
 Eupteleogenin 3-*O*-[α-*L*-rhamnopyranosyl(1→2)][β-*D*-galactopyranosyl(1→3)][α-*L*-rhamnopyranosyl(1→4)]-β-*D*-glucopyranoside = 7630  
 Eupteleogenin 3-*O*-[α-*L*-rhamnopyranosyl(1→2)][β-*D*-glucopyranosyl(1→3)]-6'-*O*-acetyl-β-*D*-glucopyranoside = 7629  
 Eupteleogenin 3-*O*-α-*L*-rhamnopyranosyl(1→2)-[β-*D*-glucopyranosyl(1→3)]-β-*D*-glucopyranoside = 7628  
 Eurycarpin B = 8501  
 Eurycomanone = 16693  
 Euxanthogen = 13481  
 Euxanthone = 6183  
 Evoxine = 9223  
 Excoecaria factor A<sub>3</sub> = 20986  
 Excoecaria factor B<sub>3</sub> = 20986  
 Excoecariatoin = 20986  
 Exidonin = 18499
- ## F
- Fabacei II = 4317  
 Fanchinin = 21206  
 Farcarindiol = 7708  
 Farnoquinone = 22563  
 Febrivugine = 5436  
 Feloside = 17079  
 (-)-Feroxidin = 7761  
 Ferrugin = 18892  
*N*-*trans*-Feruloyl-3-methyldopamine = 7777  
*N*-*cis*-Feruloyl-3-methyldopamine = 22081  
 3β-*O*-*E*-Feruloyl oleanolic acid = 19457  
 (2-*trans*-Feruloyloxymethyl-4-β-*D*-glucopyranosyloxy-2(*E*)-butenenitrile) = 15594

3 $\alpha$ -*E*-Ferulyloxy-lup-20(29)-en-28-oic acid = 12581  
 3 $\alpha$ -*E*-Ferulyloxy-urs-11-en-13 $\beta$ -ol = 12582  
 Ficusin = 18086  
 Finetose = 13454  
 Flaconitine = 304  
 Flavan-4-ol = 7807  
 Flavesone = 21200  
 Flemiphilippin *D* = 12358  
 Foeniculin = 9043  
 6'-*O*-Foliamenthoilmussaenosidic acid = 750  
 Foresaconitine = 22482  
 Formonetin = 7883  
 Formononetin-7-*O*-(2'',6''-*O*-diacetyl)glucopyranoside = 5343  
 Formononetin 7-*O*- $\beta$ -*D*-(6''-ethylmalonyl)-glucopyranoside = 9554  
 Formosanine = 22204  
 3'-Formyl-4',5-dihydroxy-2'',2''-dimethylchromeno-[6,7:5'',6'']isoflavone = 19449  
 1-[3'-Formyl-2',4'-dihydroxy-6'-methoxy-5'-(3''-methylbut-2''-enyl)]acetophenone = 571  
*rel*-(4 $\alpha$ S,9*R*,9 $\alpha$ S)-8-Formyl-1,2,3,4,4 $\alpha$ ,9 $\alpha$ -hexahydro-5,6,9-trihydroxy-7-isopropyl-1,1,4 $\alpha$ -trimethylfluorene = 5432  
 8-Formyl-7-hydroxy-5,6-dimethoxy coumarin = 22953  
 3-Formyl indole = 874  
 2-Formyl-5-methoxyfuran = 13931  
 17 $\beta$ -Formyloxy-28-nor-urs-12-en-3 $\beta$ -ol = 3784  
 4 $\alpha$ S\*-8-Formyl-2,3,4,4 $\alpha$ -tetrahydro-5,6-dihydroxy-7-isopropyl-1,1,4 $\alpha$ -trimethyl-1*H*-fluorene = 5433  
 Forskolin = 3915  
 Forsythiaside = 7924  
 Forsythin = 17145  
 Friedelan-3 $\beta$ -ol = 6918  
 Friedelin = 7951  
 Friedelinol = 6918  
*D*:*C*-Friedolean-7-ene = 15064  
*D*:*B*-Friedoursane-3 $\alpha$ ,16 $\alpha$ -dihydroxy-7 $\alpha$ ,8 $\alpha$ -epoxy-5(10)-ene = 17018  
 12-*O*- $\beta$ -*D*-Fucopyranosyl flourensadiol 10-*O*- $\beta$ -*D*-glucopyranoside = 16018  
 3-*O*- $\beta$ -*D*-Fucopyranosyl saikogenin F = 17941  
 12-*O*- $\beta$ -*D*-Fucopyranosyl selin-4(15)-en-3 $\beta$ ,11-diol 3-*O*- $\beta$ -*D*-glucopyranoside = 16017  
 Fugu poison = 21211  
 Fujic acid = 8376  
 Fukinanolide = 2119  
 Fumarilicine = 16663  
 Furan-2-carboxaldehyde = 8011  
 13 $\beta$ -Furanolabda-8(17),11-dien-6 $\beta$ ,7 $\alpha$ -diol = 22949  
 Furanoligularenone = 8020  
 6-Furfurylaminopurine = 12227  
 7*H*-Furo[3,2, *g*][1]benzopyran-7-one = 18086  
 (+)-Fustin = 5613  
 (-)-Fustin = 5614  
 Fuziline = 19701  
 Fysaproliferin = 17904

## G

Galactaric acid = 15007

Galactitol = 6632  
 3-*O*- $\alpha$ -*D*-Galactopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl betulinic acid 28-*O*- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl ester = 4430  
 3-*O*- $\beta$ -*D*-Galactopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -*L*-arabinopyranosyloleanolic acid = 17623  
 3-*O*- $\beta$ -*D*-Galactopyranosyl(1 $\rightarrow$ 2)  $\alpha$ -*L*-arabinopyranosyl ursolic acid 28-*O*- $\beta$ -*D*-glucopyranosyl ester = 4432  
 3-*O*- $\alpha$ -*D*-Galactopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl ursolic acid 28-*O*- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl ester = 4433  
 3-*O*- $\beta$ -*D*-Galactopyranosyl-(1 $\rightarrow$ 3)-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)]- $\alpha$ -*L*-arabinopyranosyl-oleanolic acid = 17693  
 (3 $\beta$ ,5 $\alpha$ )-3-[(*O*- $\beta$ -*D*-Galactopyranosyl-(1 $\rightarrow$ 2)-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-galactopyranosyl)oxy]-spirostan-12-one = 21015  
 3-*O*-( $\beta$ -*D*-Galactopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosyl)serjanic acid = 19334  
 3-*O*-( $\beta$ -*D*-Galactopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosyl)serjanic acid 28-*O*- $\beta$ -*D*-glucopyranoside = 19339  
 3-*O*-{[ $\beta$ -*D*-Galactopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucuronopyranosyl]}-22-*O*-[ $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 3)- $\alpha$ -*L*-arabinopyranosyl] soyasapogenol A = 20122  
 3-*O*-[ $\beta$ -*D*-Galactopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-glucuronopyranosyl]-28-*O*- $\beta$ -*D*-glucopyranosylolean-12-en-28-oic acid = 1828  
 3-*O*-[ $\beta$ -*D*-Galactopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucuronopyranosyl]-28-*O*- $\beta$ -*D*-glucopyranosylolean-12-en-28-oic acid = 22173  
 (3 $\beta$ ,5 $\alpha$ ,25*R*)-3-[(*O*- $\beta$ -*D*-Galactopyranosyl-(1 $\rightarrow$ 2)-*O*-[ $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 3)]-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-galactopyranosyl)oxy]-spirostan-12-one = 21016  
 3-*O*-[ $\beta$ -*D*-Galactopyranosyl(1 $\rightarrow$ 2)][ $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucuronopyranosylquillaic acid 28-*O*-[ $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)]-3-*O*-acetyl-4-*O*-(*E*)-*para*-methoxycinnamoyl- $\beta$ -*D*-fucopyranosyl ester = 19941  
 3-*O*-[ $\beta$ -*D*-Galactopyranosyl(1 $\rightarrow$ 2)][ $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucuronopyranosyl quillaic acid 28-*O*-[ $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)]-3-*O*-acetyl-4-*O*-(*Z*)-*para*-methoxycinnamoyl- $\beta$ -*D*-fucopyranosyl ester = 19942  
 3-*O*-[ $\beta$ -*D*-Galactopyranosyl(1 $\rightarrow$ 2)][ $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucuronopyranosyl quillaic acid 28-*O*-[ $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)]-4-*O*-(*E*)-*para*-methoxycinnamoyl- $\beta$ -*D*-fucopyranosyl ester = 19945  
 3-*O*-[ $\beta$ -*D*-Galactopyranosyl(1 $\rightarrow$ 2)][ $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucuronopyranosyl quillaic acid 28-*O*-{[ $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 4)]- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)}; [ $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 3)]-4-*O*-acetyl- $\beta$ -*D*-fucopyranosyl ester = 19946  
 3-*O*-[ $\beta$ -*D*-Galactopyranosyl(1 $\rightarrow$ 2)][ $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 3)]-[6-*O*-methyl- $\beta$ -*D*-glucuronopyranosyl] quillaic acid 28-*O*-[ $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)]-[3-*O*-acetyl-4-*O*-(*E*)-*para*-methoxycinnamoyl- $\beta$ -*D*-fucopyranosyl] ester = 19943  
 3-*O*-[ $\beta$ -*D*-Galactopyranosyl(1 $\rightarrow$ 2)][ $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 3)]-[6-*O*-methyl- $\beta$ -*D*-glucuronopyranosyl] quillaic acid 28-*O*-[ $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)]-3-*O*-acetyl-4-*O*-(*Z*)-*para*-methoxycinnamoyl- $\beta$ -*D*-fucopyranosyl ester = 19944  
 3-*O*- $\beta$ -*D*-Galactopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-xylopyranosyloleanolic acid = 17622  
 $\alpha$ -*D*-Galactosyl- $\alpha$ -*D*-galactosyl- $\alpha$ -*D*-glucosyl- $\beta$ -*D*-fructose = 20255  
 4,6-(*S,S*)-Gallagyl-*D*-glucose = 18205  
 Gallic acid ethyl ester = 7441

- 1-Galloyl-2-cinnamoyl-glucose = 3703  
 Galloylepicatechin = 6864  
 6-Galloyl-2,3-(*S*)-hexahydroxydiphenyl-*D*-glucose = 18201  
 1-*O*-Galloyl-3,6-*O*-HHDP-2,4-*O*-dehydroxymethyl-chebuloyl- $\beta$ -*D*-glucopyranos = 17224  
 1-*O*-Galloyl-2,4-(*R*)-HHDP- $\beta$ -*D*-glucose = 17209  
 1-*O*-Galloylpedunculagin = 3301  
 1-*O*-Galloyl-2,4-tetrahydroxydibenzofurancarboxyl- $\beta$ -*D*-glucose = 17208  
 Gamabufotalin = 8121  
 Ganoderic acid A = 8150  
 Ganoderic acid B = 8151  
 Ganoderic acid C<sub>1</sub> = 8152  
 Ganoderic acid *D* = 8153  
 Ganoderic acid DM = 8154  
 Ganoderic acid F = 8155  
 Ganoderic acid G = 8170  
 Ganoderic acid H = 8156  
 Ganoderic acid LM<sub>2</sub> = 8157  
 Ganoderic acid Ma = 8158  
 Ganoderic acid U = 8159  
 Ganoderic acid V = 8160  
 Ganoderic acid W = 8161  
 Ganoderic acid X = 8148  
 Ganoderic acid Y = 8149  
 Ganwuweizic acid = 19499  
 Gelidoside = 18848  
 Gelsenicine = 9661  
 Geneserine = 7380  
 Genipin  $\beta$ -cellobioside = 8268  
 Genistein 7-*O*- $\beta$ -*D*-(6"-*O*-acetylglucopyranoside) = 398  
 Genistin = 8282  
 Genkwanin 8-*C*-glucoside = 11724  
 Genkwanin-5-*O*-xylosylglucoside = 22935  
 Gentiocrucine = 8293  
 Gentiopicroin = 8304  
 Gentisin = 6011  
 Geoside = 8250  
 Geranial = 3761  
 Geranyl alcohol = 8312  
 3-Geranyl-4-hydroxy-6-(2-hydroxypropyl)-2-pyrone = 2007  
 7-Geranyloxy-8-methoxycoumarin = 3926  
 7-Geranyloxy-6-methoxycoumarin = 13846  
 4-Geranyl-2',3,4',5-tetrahydroxy-*trans*-stilbene = 3567  
 2-Geranyl-1,3,6-trihydroxy-2',2'-dimethyl[5',6':7,8]xanthone = 918  
 1(10),4(15)-Germacradien-6-one = 17809  
 1(10)*E*,4*E*-Germacrone = 8347  
 Gertiopicroin = 8304  
 Gesneroidin F = 8483  
 6-*O*- $\alpha$ -*L*-Ghamnopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-quinovopyranosyl-(22*R*,23*S*,25*S*)-3 $\beta$ ,6 $\alpha$ ,23-trihydroxy-5 $\alpha$ -spirostane = 21471  
 6-*O*- $\alpha$ -*L*-Ghamnopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-quinovopyranosyl (22*R*,23*S*,25*R*)-3 $\beta$ ,6 $\alpha$ ,23-trihydroxy-5 $\alpha$ -spirostane = 21472  
 Gibberellic acid = 8372  
 Ginkgoic acid = 8403  
 Ginsenoside A = 18025  
 Ginsenoside A<sub>2</sub> = 8430  
 Ginsenoside B<sub>2</sub> = 8428  
 Ginsenoside C = 8431  
 Ginsenoside Rh<sub>1</sub> = 8435  
 Gitogenin  $\beta$ -lycotetraoside = 8458  
 Glabralactone = 1193  
 Glaucogenin C 3-*O*- $\alpha$ -*L*-diginopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-thevetopyranoside = 1991  
 Glaucogenin C 3-*O*- $\beta$ -*D*-thevetopyranoside = 8507  
 Glucogallin = 8108  
 1- $\beta$ -Glucogeniposide = 8276  
*D*-Gluconic acid = 8600  
 10-*O*-Glucopyranoside aristolochic acid *D* = 1725  
 6-*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 2)-6-*O*-acetyl- $\beta$ -*D*-glucopyranosyl 20(*S*),24(*S*)-epoxydammane-3 $\beta$ ,6 $\alpha$ ,12 $\beta$ ,25-tetrol = 22893  
 3-*O*-[ $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 2)-6-*O*-acetyl- $\beta$ -*D*-glucopyranosyl]-20-*O*-[ $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl-3 $\beta$ ,12 $\beta$ ,20(*S*)-trihydroxydamman-24-ene = 22902  
 8-*O*- $\beta$ -*D*-Glucopyranosylakebonoic acid 3-*O*- $\alpha$ -*L*-arabinopyranosyl(1 $\rightarrow$ 3)-[ $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 4)]- $\beta$ -*D*-glucopyranoside = 7635  
 7-*O*- $\beta$ -*D*-Glucopyranosyl-anhydroicaritin-3-*O*- $\beta$ -*D*-(3,6-*O*-diacetyl)-glucopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -*L*-(4-*O*-acetyl)-rhamnopyranoside = 3480  
 4'-*O*-Glucopyranosyl apigenin-6-*C*- $\alpha$ -*L*-arabinopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-(6-*O*-dihydroferuloyl)-glucopyranoside = 19667  
 3-*O*-{[ $\beta$ -*D*-Glucopyranosyl(1 $\rightarrow$ 2)][ $\alpha$ -*L*-arabinofuranosyl(1 $\rightarrow$ 4)]-[3-*O*-acetyl]- $\beta$ -*D*-glucuronopyranosyl}-28-*O*-[ $\beta$ -*D*-glucopyranosyl]-oleanolic acid = 20538  
 3-*O*-[ $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 3)[ $\alpha$ -*L*-arabinofuranosyl-(1 $\rightarrow$ 4)]-6'-*O*-ethyl- $\beta$ -*D*-glucuronopyranosyl]-oleanolic acid-28-*O*- $\beta$ -*D*-glucopyranoside = 20615  
 3-*O*-[ $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 3)-*O*-{ $\alpha$ -*L*-arabinofuranosyl-(1 $\rightarrow$ 2)}-*O*-( $\beta$ -*D*-glucopyranosyl)]jujubogenin = 2094  
 (4'*R*)-4'-*O*-[ $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-arabinofuranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)]-[ $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -*D*-glucopyranosyl-1-4-woodwardine = 22723  
 3-*O*-[ $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 3)]- $\alpha$ -*L*-arabinopyranosyl]caulophyllogenin = 3976  
 3-*O*- $\beta$ -*D*-Glucopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl  $\beta$ -kudinlactone = 10979  
 3-*O*- $\beta$ -*D*-Glucopyranosyl(1 $\rightarrow$ 3)- $\alpha$ -*L*-arabinopyranosyl oleanolic acid 28-*O*- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside = 2211  
 3-*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -*L*-arabinopyranosyl pomolic acid 28- $\beta$ -*D*-glucopyranosyl ester = 18537  
 3-*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -*L*-arabinopyranosyl rotundic acid = 18536  
 3-*O*- $\beta$ -*D*-Glucopyranosylbayogenin 28-*O*- $\beta$ -*D*-apiofuranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 4)-[ $\beta$ -*D*-apiofuranosyl-(1 $\rightarrow$ 3)]- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl ester = 4024  
 3-*O*- $\beta$ -*D*-Glucopyranosyl betulinic acid 28-*O*- $\alpha$ -*L*-arabinopyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl ester = 4429  
 2-*O*-( $\beta$ -*D*-Glucopyranosyl) bruceantinol = 22866  
 3-*O*-( $\beta$ -*D*-Glucopyranosyl) brucein A = 22861  
 2-*O*-( $\beta$ -*D*-Glucopyranosyl) brucein C = 22862  
 2-*exo*- $\beta$ -*D*-Glucopyranosyl-1,8-cineol = 2696  
 28-*O*- $\beta$ -*D*-Glucopyranosyl cochalic acid 3-*O*- $\beta$ -*D*-galactopyranosyl(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosiduronic acid = 2966  
 28-*O*- $\beta$ -*D*-Glucopyranosyl cochalic acid 3-*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 2)-[ $\beta$ -

- D*-galactopyranosyl(1→3)]-*β*-*D*-glucopyranosiduronic acid = 2967
- (8*R*,8'*R*) 9-*β*-*D*-Glucopyranosyl dihydrocubebin = 21036
- 6*α*-*O*-*β*-*D*-Glucopyranosyl)-15,16-dihydroxycyclohexa-3,13(14)-dien = 19212
- (2*R*)-5-*O*-*β*-*D*-Glucopyranosyl-7,4'-dihydroxy-3',5'-dimethoxyflavanone = 16999
- (2*S*)-5-*O*-*β*-*D*-Glucopyranosyl-7,4'-dihydroxy-3',5'-dimethoxyflavanone = 17000
- 3-*O*-*β*-*D*-Glucopyranosyl 3*α*,11*α*-dihydroxylup-20(29)-en-28-oic acid 28-*O*-*α*-*L*-rhamnopyranosyl-(1→4)-*β*-*D*-glucopyranosyl-(1→6)-*β*-*D*-glucopyranosyl ester = 73
- 3-*O*-*β*-*D*-Glucopyranosyl 3*β*,23-dihydroxylup-20(29)-en-28-oic acid 28-*O*-*α*-*L*-rhamnopyranosyl (1→4)-*β*-*D*-glucopyranosyl(1→6)-*β*-*D*-glucopyranoside = 3737
- 6*β*-*C*-Glucopyranosyl-5,7-dihydroxy-2-methylchromone = 2369
- 3-*O*-*β*-*D*-Glucopyranosyl-2*β*,3*β*-dihydroxyolean-12-ene-23,28-dioic acid (medicagenic acid) 28-*O*-*β*-*D*-glucopyranosyl-(1→6)-*O*-*β*-*D*-glucopyranosyl ester = 733
- (2*S*)-24-*O*-*β*-*D*-Glucopyranosyl-3*β*,24*β*-dihydroxy-5*α*-spirost-3-*O*-*α*-arabinopyranosyl-(1→6)-*β*-*D*-glucopyranoside = 3528
- (2*S*)-26-*O*-*β*-*D*-Glucopyranosyl-6*α*-26-dihydroxy-5*α*-spirosten-3-one 6-*O*-[*α*-*L*-rhamnopyranosyl-(1→3)-*β*-*D*-quinovopyranoside] = 21470
- (2*S*,2*S*) 26-*O*-*β*-*D*-Glucopyranosyl-22,25-epoxy-furost-5-ene-3*β*,7*β*,26-triol 3-*O*-*β*-chacotrioxide = 45
- (2*S*,2*S*) 26-*O*-*β*-*D*-Glucopyranosyl-22,25-epoxy-furost-5-ene-3*β*,7*β*,26-triol 3-*O*-*β*-solatrioxide = 47
- 26-*O*-*β*-*D*-Glucopyranosyl-(16*S*,20*S*,22*S*)-16*β*,22-epoxy-16*α*-methoxy-3*β*,26-dihydroxy-cycloartan-24-one-3-*O*-*β*-*D*-glucopyranosyl-(1→2)-*β*-*D*-glucopyranoside = 1545
- (2*S*,2*S*) 26-*O*-*β*-*D*-Glucopyranosyl-22,25-epoxy-7*β*-methoxy-furost-5-ene-3*β*,26-diol 3-*O*-*β*-chacotrioxide = 46
- 26-*O*-*β*-*D*-Glucopyranosyl-(16*S*,20*S*,22*S*)-16*β*,22-epoxy-16*α*-methoxy-3*β*,25,26-trihydroxy-cycloartan-24-one-3-*O*-*β*-*D*-glucopyranosyl-(1→2)-*β*-*D*-glucopyranoside = 1546
- 27-*O*-*β*-*D*-Glucopyranosyl-(20*S*,22*R*,24*S*,25*S*)-22,25-epoxy-3*β*,24,27-trihydroxy-cycloartan-16-one-3-*O*-*β*-*D*-glucopyranosyl-(1→2)-*β*-*D*-glucopyranoside = 1549
- 3-*O*-*α*-*D*-Glucopyranosyl-*β*-*D*-fructopyranose = 22118
- 3-*O*-[*β*-*D*-glucopyranosyl(1→3)-*β*-*D*-fucopyranosyl]-3*β*,16*α*,23,28-tetrahydroxy-olean-11,13(18)-dien-30-oic acid 30-*O*-[pentito(1→1)]-*β*-*D*-glucopyranosyl-6-ester = 19164
- 3'-*O*-*β*-*D*-Glucopyranosyl[2'',3'',7,8]furanoflavone = 17709
- 26-*O*-*β*-*D*-Glucopyranosyl-25(*R*)-5*α*-furostan-20(22)-en-2*α*,3*β*,26-triol 3-*O*-*β*-*D*-xylopyranosyl(1→6)-*β*-*D*-glucopyranoside = 21673
- (2*S*)-26-*O*-*β*-*D*-Glucopyranosyl-5*α*-furostan-2*α*,3*β*,22*α*,26-tetraol 3-*O*-[*β*-*D*-glucopyranosyl-(1→2)-*O*-[*β*-*D*-glucopyranosyl-(1→3)]-*O*-*β*-*D*-glucopyranosyl-(1→4)-*β*-*D*-galactopyranoside = 16882
- (2*S*)-*O*-*β*-*D*-Glucopyranosyl-5*β*-furost-20(22)-ene-3*β*,26-diol-3-*O*-*β*-*D*-glucopyranosyl-(1→2)-*β*-*D*-glucopyranoside = 1174
- 26-*O*-*β*-*D*-Glucopyranosyl-(25*R*)-5*α*-furost-3*β*,22*α*,26-triol 3-*O*-*β*-*D*-glucopyranosyl-(1→2)-[*β*-*D*-xylopyranosyl-(1→3)]-*β*-*D*-glucopyranosyl-(1→4)-*β*-*D*-galactopyranoside = 22286
- 26-*O*-*β*-*D*-Glucopyranosyl-(25*R*)-5*α*-furost-3*β*,22*α*,26-triol-12-one-3-*O*-*β*-*D*-xylopyranosyl-(1→3)-*β*-*D*-glucopyranosyl-(1→2)-[*β*-*D*-xylopyranosyl-(1→3)]-*β*-*D*-glucopyranosyl-(1→4)-*β*-*D*-galactopyranoside = 17614
- 26-*O*-*β*-*D*-Glucopyranosyl-(25*R*)-5*α*-furost-3*β*,22*α*,26-triol-12-one 3-*O*-*β*-*D*-glucopyranosyl-(1→2)-[*β*-*D*-xylopyranosyl-(1→3)]-*β*-*D*-glucopyranosyl-(1→4)-*β*-*D*-galactopyranoside = 17613
- 26-*O*-*β*-*D*-Glucopyranosyl-(25*R*)-5*α*-furost-3*β*,22*α*,26-triol 3-*O*-*β*-*D*-xylopyranosyl-(1→3)-*β*-*D*-glucopyranosyl-(1→2)-[*β*-*D*-glucopyranosyl-(1→3)]-*β*-*D*-glucopyranosyl-(1→4)-*β*-*D*-galactopyranoside = 17616
- 26-*O*-*β*-*D*-Glucopyranosyl-(25*R*)-5*α*-furost-3*β*,22*α*,26-triol 3-*O*-*β*-*D*-xylopyranosyl-(1→3)-*β*-*D*-glucopyranosyl-(1→2)-[*β*-*D*-xylopyranosyl-(1→3)]-*β*-*D*-glucopyranosyl-(1→4)-*β*-*D*-galactopyranoside = 17615
- 3-*O*-[*β*-*D*-Glucopyranosyl-(1→2)-*β*-*D*-galactopyranosyl(1→2)-*β*-*D*-glucopyranosyl]soyasapogenol B = 20129
- 10-*O*-*β*-*D*-Glucopyranosyl geniposide = 8269
- 3-*O*-[*β*-*D*-Glucopyranosyl(1→3)-*β*-*D*-glucopyranosyl(1→3)-*α*-*L*-arabinopyranosyl]-16*α*,23-dihydroxyolean-12-ene 28-*O*-*β*-*D*-glucopyranosyl ester = 11801
- 3-*O*-[*β*-*D*-Glucopyranosyl-(1→2)-[*β*-*D*-glucopyranosyl-(1→3)]-*α*-*L*-arabinopyranosyl]hederagenin 28-*O*-*β*-*D*-glucopyranosyl ester = 1607
- 3-*O*-*β*-*D*-Glucopyranosyl-(1→2)-*β*-*D*-glucopyranosyl-(1→3)-*α*-*L*-arabinopyranosyl-*β*-kudinlactone = 12300
- 3-*O*-*β*-*D*-Glucopyranosyl-(1→3)-*β*-*D*-glucopyranosylbayogenin 28-*O*-*β*-*D*-apiofuranosyl-(1→3)-*β*-*D*-xylopyranosyl-(1→4)-[*β*-*D*-apiofuranosyl-(1→3)]-*α*-*L*-rhamnopyranosyl-(1→2)-*α*-*L*-arabinopyranosyl ester = 4025
- 3-*O*-*β*-*D*-Glucopyranosyl (1→4)-*β*-*D*-glucopyranosyl echinocystic acid = 3978
- 3-*O*-[*β*-*D*-Glucopyranosyl(1→2)-*β*-*D*-glucopyranosyl]-16*α*-ethoxy-olean-12-ene-28-oic acid 28-*O*-*β*-*D*-glucopyranoside = 6702
- 3-*O*-[*β*-*D*-Glucopyranosyl-(1→2)-*β*-*D*-glucopyranosyl-(1→3)-*β*-*D*-fucopyranosyl]-3*β*,16*α*,23,28-tetrahydroxy-olean-11,13(18)-dien-30-oic acid-30-*O*-[pentito(1→1)]-*β*-*D*-glucopyranosyl-6-ester = 19163
- 9-*O*-*β*-*D*-Glucopyranosyl-(1→3)-[*β*-*D*-glucopyranosyl-(1→6)]-*β*-*D*-Glucopyranoside = 22724
- 3-*O*-[*β*-*D*-Glucopyranosyl-(1→2)-[*β*-*D*-glucopyranosyl-(1→3)]-*β*-*D*-glucopyranosyl]echinocystic acid 28-*O*-*β*-*D*-glucopyranosyl ester = 1604
- 3-*O*-[*β*-*D*-Glucopyranosyl-(1→2)-[*β*-*D*-glucopyranosyl-(1→3)]-*β*-*D*-glucopyranosyl echinostic acid = 3977
- 6-*O*-[*α*-*D*-Glucopyranosyl-(1→6)]-*β*-*D*-glucopyranosyl-(1→2)-*β*-*D*-glucopyranosyl 20(*S*),24(*S*)-epoxydammane-3*β*,6*α*,12*β*,25-tetrol = 22894
- 10'-*O*-[*β*-*D*-Glucopyranosyl-(1→6)]-*β*-*D*-glucopyranosyl-(1→3)-*β*-*D*-glucopyranosyl-(1→3)-*β*-*D*-glucopyranoside = 22725
- 3-*O*-[*β*-*D*-Glucopyranosyl-(1→3)-*β*-*D*-glucopyranosyl-(1→3)-[*β*-*D*-glucopyranosyl-(1→2)]-*β*-*D*-glucopyranosyl]caulophyllogenin 28-*O*-*β*-*D*-glucopyranosyl ester = 1606
- 3-*O*-*β*-*D*-Glucopyranosyl-(1→2)-[*β*-*D*-glucopyranosyl-(1→3)]-*β*-*D*-glucopyranosyl]hederagenin 28-*O*-*β*-*D*-glucopyranosyl ester = 1605
- 3-*O*-*β*-*D*-Glucopyranosyl-(1→6)-[*β*-*D*-glucopyranosyl (1→4)]-*β*-*D*-glucopyranosyl-olean-11,13(18)-diene-3*β*,16*β*,23,28-tetrol = 3845
- 3-*O*-[*β*-*D*-Glucopyranosyl-(1→2)-[*β*-*D*-glucopyranosyl-(1→3)]-*β*-*D*-glucopyranosyl]oleanolic acid 28-*O*-*β*-*D*-glucopyranosyl ester = 1603
- 3-*O*-[*β*-*D*-Glucopyranosyl-(1→3)-*β*-*D*-glucopyranosyl-(1→3)-*β*-*D*-glucopyranosyl]serjanic acid = 19336
- 3-*O*-*β*-*D*-Glucopyranosyl-(1→6)-*β*-*D*-glucopyranosyl-(1→6)-*β*-*D*-glucopyranosyl-2*β*,3*β*,16*α*,23-tetrahydroxyolean-12-en-28-oic acid 28-*O*-*β*-*D*-xylopyranosyl-(1→4)-*α*-*L*-rhamnopyranosyl-(1→2)-*α*-*L*-arabinopyranoside = 17542
- 3*β*-*O*-*β*-*D*-Glucopyranosyl-(1→2)-*O*-*β*-*D*-glucopyranosyl-20-*O*-*β*-*D*-glucopyranosyl-3*β*,12*β*,20(*S*)-trihydroxy-24-hydrogenperoxide-dammar-25-ene = 8416
- 3-*O*-[*β*-*D*-Glucopyranosyl-(1→3)]-*β*-*D*-glucopyranosyl-(1→2)-*β*-*D*-glucopyranosyl-22-*O*-acetyl-21-*O*-(2-methylpropanoyl)-3*β*,15*α*,16*α*,21*β*,

- 22 $\alpha$ ,28-hexahydroxyolean-12-ene = 9712
- 3-*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucuronopyranosyl-22-*O*-acetyl-21-*O*-(2-methylpropanoyl)-3 $\beta$ ,15 $\alpha$ ,16 $\alpha$ ,21 $\beta$ ,22 $\alpha$ ,28-hexahydroxyolean-12-ene = 9713
- 3 $\beta$ -*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl-16 $\alpha$ -hydroxyolean-12-ene-28-oic acid-28-*O*- $\beta$ -*D*-glucopyranoside = 6706
- 3-*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosyl]jujubogenin = 2091
- 3-*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl  $\beta$ -kudinlactone = 10980
- 3-*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl 2 $\beta$ ,3 $\beta$ ,16 $\alpha$ ,23,24-pentahydroxyolean-12-ene-28-oic acid 28-*O*- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-ara- binopyranoside = 4800
- 3-*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosyl 2 $\beta$ ,3 $\beta$ ,16 $\alpha$ ,23,24-pentahydroxyolean-12-ene-28-oic acid 28-*O*- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranoside = 17539
- 3-*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosyl-2 $\beta$ ,3 $\beta$ ,16 $\alpha$ ,23,24-pentahydroxyolean-12-en-28-oic acid = 17544
- 3-*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl-2 $\beta$ ,3 $\beta$ ,16 $\alpha$ ,23,24-pentahydroxyolean-12-en-28-oic acid = 17545
- 3-*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosyl]pseudojujubogenin = 2092
- 27-*O*- $\beta$ -*D*-Glucopyranosyl (1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosylpubesanolide 3-*O*- $\beta$ -*D*-glucopyranosyl (1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside = 22712
- 3-*O*- $\beta$ -*D*-Glucopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl-[ $\alpha$ -*L*-rhamnopyranosyl (1 $\rightarrow$ 2)]- $\alpha$ -*L*-arabinopyranosyl 3 $\beta$ ,19 $\alpha$ -dihydroxy-urs-12-en-28,20 $\beta$ -olide = 10977
- 3-*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)-[ $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)]- $\alpha$ -*L*-arabinopyranosyl 3 $\beta$ ,19 $\alpha$ -dihydroxyursolic acid = 12558
- 3-*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl-hederagenin-28-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl ester = 13299
- 3-*O*- $\beta$ -*D*-Glucopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl-[ $\alpha$ -*L*-rhamnopyranosyl (1 $\rightarrow$ 2)]- $\alpha$ -*L*-arabinopyranosyl  $\gamma$ -kudinlactone = 10978
- 3-*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)-[ $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)]- $\alpha$ -*L*-arabinopyranosyl- $\beta$ -kudinlactone = 12301
- 3-*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosylpomolic acid 28-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside = 19439
- 3-*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-xylopyranosyloleanolic acid 28-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside = 19438
- 3-*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl]serjanic acid = 19335
- 3-*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl]serjanic acid 28-*O*- $\beta$ -*D*-glucopyranoside = 19340
- 3-*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl-2 $\beta$ ,3 $\beta$ ,16 $\alpha$ ,23-tetrahydroxyolean-12-en-28-oic acid 28-*O*- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranoside = 17541
- 3-*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl]-20-*O*- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl-3 $\beta$ ,12 $\beta$ ,20(*S*),25-tetrahydroxydammar-23-ene = 22900
- 3-*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl]-20-*O*- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl-3 $\beta$ ,20(*S*)-dihydroxy dammar-24-ene = 22901
- 3-*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl]-20-*O*- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl-3 $\beta$ ,7 $\beta$ ,12 $\beta$ ,20(*S*)-tetrahydroxydammar-
- 5,24-diene = 22899
- 3-*O*-[*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl] zanhic acid 28-*O*- $\beta$ -*D*-apiofuranosyl-(1 $\rightarrow$ 3)-*O*-(4-*O*-acetyl)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)-*O*- $\alpha$ -*L*-arabinopyranosyl ester = 729
- 4-*O*- $\alpha$ -*D*-Glucopyranosyl-*D*-glucose = 13454
- 4-*O*- $\beta$ -*D*-Glucopyranosyl-*D*-glucose = 3383
- 3-*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucuronopyranosyl-22-*O*-acetyl-21-*O*-(2-methylpropanoyl)-3 $\beta$ ,15 $\alpha$ ,16 $\alpha$ ,21 $\beta$ ,22 $\alpha$ ,28-hexahydroxyolean-12-ene = 9711
- 3-*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucuronopyranosyl-22-*O*-acetyl-21-*O*-propanoyl-3 $\beta$ ,15 $\beta$ ,16 $\alpha$ ,21 $\beta$ ,22 $\alpha$ ,28-hexahydroxyolean-12-ene = 9710
- 3-*O*- $\beta$ -*D*-Glucopyranosyl hederagenin 28-*O*- $\alpha$ -*L*-rhamnopyranosyl (1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside = 3738
- 3-*O*- $\beta$ -*D*-Glucopyranosyl hederagenin 28-*O*- $\alpha$ -*L*-rhamnopyranosyl (1 $\rightarrow$ 2)-[ $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 6)]- $\beta$ -*D*-glucopyranosyl ester = 11121
- 2-*O*- $\beta$ -*D*-Glucopyranosyl-6-hydroxy-2*H*-1,4-benzoxazin-3(4*H*)-one = 9858
- 3-*O*-[2'- $\beta$ -*D*-Glucopyranosyl-3'-*O*-(2"-hydroxy-1"-carboxyethoxycarboxypropyl)]- $\beta$ -*D*-glucopyranosyl oleanolic acid 28-*O*- $\beta$ -*D*-glucopyranoside = 543
- 6'-(4"-*O*- $\beta$ -*D*-Glucopyranosyl-3"-hydroxycinnamoyl)arbutin = 18879
- 26-*O*- $\beta$ -*D*-Glucopyranosyl-22-hydroxy-25(*S*)-5 $\alpha$ -furostan-12-oxo-3 $\beta$ ,26-diol-3-*O*- $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 3)[ $\alpha$ -*L*-arabinopyranosyl (1 $\rightarrow$ 2)]- $\beta$ -*D*-glucopyranosyl (1 $\rightarrow$ 4)-[ $\alpha$ -*L*-rhamnopyranosyl (1 $\rightarrow$ 2)]- $\beta$ -*D*-galactopyranoside = 3563
- (25*R*)-26-*O*- $\beta$ -*D*-glucopyranosyl-22-hydroxy-5 $\beta$ -furost-2 $\beta$ ,3 $\beta$ ,26-triol-3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-galactopyranoside = 13333
- 3-*O*- $\beta$ -*D*-Glucopyranosyl-21- $\beta$ -hydroxyhederagenin = 13063
- 7-*O*- $\beta$ -*D*-Glucopyranosyl-4'-hydroxyisoflavanone = 5580
- 3-*O*- $\beta$ -*D*-Glucopyranosyl 3 $\beta$ -hydroxyolean-9(11),12-dien-28-oic acid 28-*O*- $\alpha$ -*L*-rhamnopyranosyl (1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside = 3739
- 1- $\beta$ -*D*-Glucopyranosyl-(2*S*,3*S*,4*R*,8*Z*)-2-[(2'*R*)-2'-hydroxylygnocenoyl-amino]-8-octadecene-1,3,4-triol = 9302
- 3-*O*- $\beta$ -*D*-Glucopyranosyl-23-hydroxy-lup-20(29)-en-28-oic acid-28-*O*- $\beta$ -*D*-glucopyranosyl ester = 2572
- 3-*O*- $\beta$ -*D*-Glucopyranosyl-23-hydroxy-lup-20(29)-en-28-oic acid-28-*O*-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl]ester = 2573
- 3-*O*- $\beta$ -*D*-Glucopyranosyl ilexosapogenin A 28-*O*- $\beta$ -*D*-glucopyranosyl ester = 18541
- (+)-9-*O*- $\beta$ -*D*-Glucopyranosyl lyoniresinol = 13250
- 28-*O*- $\beta$ -*D*-Glucopyranosyl machaerinic acid 3-*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 2)-[ $\beta$ -*D*-galactopyranosyl(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucopyranosiduronic acid = 2968
- 26-*O*- $\beta$ -*D*-Glucopyranosyl-22-methoxy-3 $\beta$ ,26-dihydroxy-25(*R*)-furost-5-en-3-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)-[ $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -*D*-glucopyranoside = 14699
- (25*R*)-26-*O*- $\beta$ -*D*-Glucopyranosyl-22-methoxy-5 $\beta$ -furost-2 $\beta$ ,3 $\beta$ ,26-triol-3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-galactopyranoside = 13334
- 28-*O*- $\beta$ -*D*-Glucopyranosyl moronic acid 3-*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 2)-[ $\beta$ -*D*-galactopyranosyl(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucopyranosiduronic acid = 2965
- 2- $\beta$ -*D*-Glucopyranosyloxy-4,6-dihydroxyisovalerophenone = 13261
- (-)(6*S*,9*S*)-9-*O*- $\beta$ -*D*-Glucopyranosyloxy-6,13-dihydroxy-3-oxo- $\alpha$ -ionol = 20173
- 5-[ $\beta$ -*D*-Glucopyranosyloxy]-3,4-epoxy-10,14-dihydroxy-19-nor-bufa-20,22-dienolide = 9328
- 5-[ $\beta$ -*D*-Glucopyranosyloxy]-3,4-epoxy-14-hydroxy-19-oxo-bufa-20,22-

- dienolide = 9327
- (24R,25S)-3 $\beta$ -[( $\beta$ -D-Glucopyranosyl)-oxy]ergost-5-en-26-oic acid *O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)-*O*-[*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)]- $\beta$ -D-glucopyranosyl ester = 20598
- (24R,25S)-3 $\beta$ -[( $\beta$ -D-Glucopyranosyl)oxy]ergost-5-en-26-oic acid *O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)-*O*-[*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)]- $\beta$ -D-glucopyranosyl ester = 20597
- (24R,25S)-3 $\beta$ -[( $\beta$ -D-Glucopyranosyl)oxy]ergost-5-en-26-oic acid *O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)-*O*-[*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)]- $\beta$ -D-glucopyranosyl ester = 20596
- (24S,25S)-24-[( $\beta$ -D-Glucopyranosyl)oxy]-1 $\beta$ ,2 $\beta$ ,3 $\beta$ ,4 $\beta$ ,5 $\beta$ ,7 $\beta$ -hexahydroxy-spirostan-6-one = 22654
- (22S)-16 $\beta$ -[( $\beta$ -D-Glucopyranosyl)oxy]-22-hydroxycholest-5-en-3 $\beta$ -yl *O*- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)-*O*-[ $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)]- $\beta$ -D-glucopyranoside = 20228
- (E)-4-( $\beta$ -D-Glucopyranosyloxy)-2-(hydroxymethyl)-2-butenenitrile = 19377
- 1 $\alpha$ -*O*-( $\beta$ -D-Glucopyranosyloxy)-7-epi-eudesma-11-en-2 $\beta$ ,4 $\alpha$ -diol = 838
- 5 $\beta$ -*O*-( $\beta$ -D-Glucopyranosyloxy)-eudesma-4(15),11(13)-dien-12-oic-acid = 840
- 5 $\alpha$ -*O*-( $\beta$ -D-Glucopyranosyloxy)-eudesma-3,11(13)-dien-12-oic acid = 841
- 2 $\beta$ -*O*-( $\beta$ -D-Glucopyranosyloxy)-eudesma-4 $\alpha$ -hydroxyl-11(13)-en-12-oic-acid = 839
- 3 $\beta$ -*O*-( $\beta$ -D-Glucopyranosyloxy)-megastigma-9-one = 842
- 3 $\alpha$ -[4-( $\beta$ -D-Glucopyranosyloxy)-3-methoxy-5-(3-methyl-2-butenyl)benzoyloxy]tropane = 13788
- (S)-2-( $\beta$ -D-Glucopyranosyloxy)-3-methylbutanenitrile = 9467
- (Z)-4-( $\beta$ -D-Glucopyranosyloxy)-2-methyl-2-butenenitrile = 18790
- (4S)-4-(1- $\beta$ -D-Glucopyranosyloxy-1-methyl)ethyl-1-cyclohexene-1-carboxylic acid = 16079
- 16 $\beta$ -[(4'S)-5'-( $\beta$ -D-Glucopyranosyloxy)-4'-methylpentanoyloxy]-3 $\beta$ -hydroxy-5 $\alpha$ -pregnan-20-one 3-*O*-[ $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)-*O*]- $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 2)-*O*-[ $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 3)]-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)]- $\beta$ -D-galactopyranoside = 16883
- (22S,23S,24R,25S)-24-[( $\beta$ -D-Glucopyranosyl)oxy]-5 $\alpha$ -spirostane-3 $\beta$ ,6 $\alpha$ ,23-triol 6-*O*- $\beta$ -D-glucopyranoside = 697
- 3 $\beta$ -D-Glucopyranosyloxy-6 $\alpha$ ,16 $\alpha$ ,20(S),27-tetrahydroxydammar-24(Z)-ene = 21891
- 5-[( $\beta$ -D-Glucopyranosyloxy)-10,14,16-trihydroxy-19-nor-{5 $\beta$ ,10 $\beta$ ,14 $\beta$ ,16 $\beta$ }-bufa-3,20,22-trienolide = 9326
- 3-*O*- $\beta$ -D-Glucopyranosyl-2 $\beta$ ,3 $\beta$ ,16 $\alpha$ ,23,24-pentahydroxyolean-12-ene-28-oic acid = 8711
- 3-*O*- $\beta$ -D-Glucopyranosyl-2 $\beta$ ,3 $\beta$ ,16 $\alpha$ ,23,24-pentahydroxyolean-12-ene-28-oic acid 28-*O*- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranoside = 17540
- 3-*O*- $\beta$ -D-Glucopyranosyl-2 $\beta$ ,3 $\beta$ ,16 $\alpha$ ,23,24-pentahydroxyolean-12-ene-28-oic acid 28-*O*- $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranoside = 4799
- 3-*O*- $\beta$ -D-Glucopyranosyl-20(S)-protopanaxadiol 20-*O*- $\beta$ -D-xylopyranosyl (1 $\rightarrow$ 3)- $\beta$ -D-xylopyranosyl(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside = 15833
- 3-*O*- $\beta$ -D-Glucopyranosyl-20(S)-protopanaxadiol 20-*O*- $\beta$ -D-xylopyranosyl (1 $\rightarrow$ 4)- $\beta$ -D-xylopyranosyl(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside = 15834
- 27-*O*- $\beta$ -D-Glucopyranosylpubesolide 3-*O*- $\beta$ -D-glucopyranoside = 22713
- 27-*O*- $\beta$ -D-Glucopyranosylpubesolide 3-*O*- $\beta$ -D-glucopyranosyl (1 $\rightarrow$ 6)  $\beta$ -D-glucopyranoside = 22711
- 1'- $\beta$ -D-Glucopyranosyl-2-pyrrole-carboxylate = 2583
- 7-*O*- $\beta$ -D-Glucopyranosyl-quercetin 3-*O*-(6-*O*-*trans-p*-coumaroyl)- $\beta$ -D-glucopyranosyl(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranosyl (1 $\rightarrow$ 2)- $\beta$ -D-glucopyranoside = 17494
- 3-*O*- $\beta$ -D-Glucopyranosyl(1 $\rightarrow$ 3)- $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranosyl hederagenin 28-*O*- $\beta$ -D-glucopyranosyl(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl ester = 13298
- 3-*O*- $\beta$ -D-Glucopyranosyl(1 $\rightarrow$ 3)- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranosyl-hederagenin-28-*O*- $\beta$ -D-glucopyranosyl (1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl ester = 15520
- 3-*O*- $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 3)-[ $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)]- $\alpha$ -L-arabinopyranosyl 3 $\beta$ -hydroxy-urs-12,18-dien-28-oic acid 28-*O*- $\beta$ -D-glucopyranosyl ester = 12557
- 3-*O*- $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 3)-[ $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)]- $\alpha$ -L-arabinopyranosyl- $\beta$ -kudinlactone = 12299
- 3-*O*- $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranosylpomolic acid 28-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside = 19440
- 3-*O*- $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranosylsaresinolic acid 28-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside = 19441
- 3-*O*-[ $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -D-galactopyranosyl-(1 $\rightarrow$ 3)][ $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -D-glucuronopyranosyl camelliagenin A 22-*O*-angelate = 13362
- 3 $\beta$ -[(*O*- $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 3)-*O*-[ $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)]-*O*-[ $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)]- $\beta$ -D-glucopyranosyl)oxy]pregna-5,16-dien-20-one = 20232
- 3-*O*- $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-xylopyranosyloleanolic acid 28-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside = 19437
- 3-*O*- $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-xylopyranosyl oleanolic acid 28-*O*- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranosyl ester = 1256
- 3-*O*-( $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 3)-*O*-[ $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -D-glucopyranosyl(1 $\rightarrow$ 2)]- $\beta$ -D-glucopyranosyl)cyclamiretin A = 16664
- 3-*O*- $\beta$ -D-Glucopyranosylserjanic acid = 19333
- 6'-*O*- $\beta$ -D-Glucopyranosylsweroside = 20512
- 2''-*O*- $\beta$ -D-Glucopyranosylswertisin = 20172
- 4''- $\beta$ -*O*-Glucopyranosyl swertisin = 23007
- 3-*O*- $\beta$ -D-Glucopyranosyl 3 $\beta$ ,12 $\beta$ ,20(S),24(R)-tetrahydroxy-dammar-25-ene 20-*O*- $\beta$ -D-glucopyranoside = 8433
- 3-*O*- $\beta$ -D-Glucopyranosyl-2 $\beta$ ,3 $\beta$ ,16 $\alpha$ ,23-tetrahydroxyolean-12-en-28-oic acid 28-*O*- $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyranoside = 17543
- 8-(*C*- $\beta$ -D-Glucopyranosyl)-7,3',4'-trihydroxyflavone = 22476
- 7-*O*- $\beta$ -D-Glucopyranosyl-5,7,4'-trihydroxyisoflavanone = 5621
- 3-*O*-{[ $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 2)]-[ $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 4)]-[3-*O*-acetyl]- $\beta$ -D-glucuronopyranosyl}-28-*O*-[ $\beta$ -D-glucopyranosyl]-oleanolic acid = 20537
- 3-*O*-[ $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 6)-[ $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)-[ $\alpha$ -D-fucopyranosyl-(1 $\rightarrow$ 2)]- $\alpha$ -L-arabinopyranoside] = 11910
- 3-*O*-[ $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 3)-[ $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-galactopyranoside] = 6557
- 3-*O*-[ $\alpha$ -D-Glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-xylopyranosyl]-hederagenin = 1997
- 3-*O*-[ $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)][ $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)]- $\alpha$ -L-arabinopyranosyloleanolic acid = 17494

- nolic acid 28-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside = 19435
- 3-*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyloleanolic acid 28-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside = 19433
- 3-*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosylsialaresinolic acid 28-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside = 19442
- 3-*O*-[ $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 3)-[ $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-galactopyranoside] = 6556
- 3-*O*- $\beta$ -*D*-Glucopyranosyl zanhic acid 28-*O*- $\beta$ -*D*-apiofuranosyl-(1 $\rightarrow$ 3)-*O*-(4-*O*-acetyl)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)-*O*- $\alpha$ -*L*-arabinopyranosyl ester = 732
- 3-*O*- $\beta$ -*D*-Glucopyranosyl zanhic acid 28-*O*- $\alpha$ -*L*-arabinopyranosyl-(1 $\rightarrow$ 3)-*O*-(4-*O*-acetyl)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)-*O*- $\alpha$ -*L*-arabinopyranosyl ester = 731
- 2-*O*-( $\beta$ -*D*-Glucosyl) brucein A = 22860
- 2-*O*-( $\beta$ -*D*-Glucosyl) brucein B = 22865
- 3-*O*-( $\beta$ -*D*-Glucosyl) brucein B = 22868
- 3-*O*-( $\beta$ -*D*-Glucosyl) brucein C = 22871
- 8-*C*-Glucosylgenkwanin = 11724
- 1-(3'- $\beta$ -*D*-Glucosyloxy-4'-hydroxyphenyl)-3-hydroxymethyl-4-methoxy-6,7-methylenedioxy-2-naphthoic acid lactone = 11975
- 3-(2-*O*- $\beta$ -*D*-Glucosylphenyl)propanoic acid = 5665
- 2- $\beta$ -*D*-Glucosyl-1,3,6,7-tetrahydroxyxanthone = 13481
- 3-*O*- $\beta$ -*D*-Glucuronopyranosyl azukisapogenol = 15199
- 3-*O*- $\beta$ -*D*-Glucuronopyranosyl azukisapogenol 29-*O*- $\beta$ -*D*-glucopyranosyl ester = 15200
- 3-*O*- $\beta$ -*D*-Glucuronopyranosyl-24-hydroxy-olean-12-en-28-oic acid 28-*O*- $\beta$ -*D*-glucopyranoside = 18852
- 3-*O*-[ $\beta$ -*D*-Glucuronopyranosyl]soyasapogenol B = 20117
- $\gamma$ -*L*-Glutamyl-*L*- $\alpha$ -aminobutyryl glycine = 16153
- (*S*<sub>2</sub>*R*<sub>1</sub>*C*<sub>7</sub>*R*<sub>3</sub>)- $\gamma$ -Glutamyl-*S*-benzylcysteine sulfoxide = 8777
- (*S*<sub>2</sub>*R*<sub>1</sub>*C*<sub>7</sub>*S*<sub>3</sub>)- $\gamma$ -Glutamyl-*S*-benzylcysteine sulfoxide = 8778
- $\gamma$ -*L*-Glutamyl-*L*-cysteinylglycine = 8785
- Glut-5-en-3 $\alpha$ -ol = 8786
- Glutin-5-en-3 $\beta$ -ol = 8788
- Glycerol-2-*O*- $\beta$ -*D*-galactofuranosyl (1 $\rightarrow$ 3)-galactofuranoside = 8042
- Glycitein-7-*O*- $\beta$ -*D*-glucoside = 8819
- 3-*O*- $\beta$ -[29-(20-*O*-Glycolyl)-glyoxylyl]-oleanolic acid 28-*O*- $\beta$ -*D*-glucopyranoside = 2364
- 3-*O*- $\beta$ -*D*-Glycopyranosylsitosterol = 19987
- Glycuronic acid = 8761
- Glycyrrhetic acid-3-*O*- $\beta$ -*D*-6"-*n*-butyl-glucuronopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-6'-*n*-butyl-glucuronopyranoside = 5405
- Glycyrrhetic acid-3-*O*- $\beta$ -*D*-6"-*n*-methyl-glucuronopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-6'-*n*-butyl-glucuronopyranoside = 11038
- Glycyrrhetic acid acetate = 403
- Glycyrrhetic acid glycoside = 8846
- Glycyrrhizin = 8846
- Glycyrrhizinic acid = 8846
- Gniditrin = 15999
- Gomisin T-ol = 8926
- Goniothalenol = 1008
- (+)-(5*S*,6*S*,10*S*)- $\beta$ -Gorgonene = 8953
- Goshuynic acid = 8956
- Gracilline = 8968
- Graveobioside B = 3604
- Greenhartin = 12501
- Grosheimin = 9015
- 5 $\alpha$ ,6 $\beta$ ,7 $\beta$ -*H*-1(10),3-Guaiadien-12,6 $\alpha$ -olide = 19947
- 1(10),4,11-guaiatrien-3,9-dione = 16070
- 4,10,11-guaiatriene-3-one-15-al = 16069
- 5 $\alpha$ ,6 $\beta$ -*H*-1(10),3,7(11)-Guaiatrien-12,6 $\alpha$ -olide = 19948
- 1(5)-Guaien-11-ol = 9044
- (-)-Guaiol = 9044
- Guaipyridine = 6928
- Guanandin = 2989
- 4-Guanidino-butyric acid = 9069
- Guatambuine = 16085
- Guidongnin A = 9080
- Gulsamanin = 5995
- $\beta$ -Guriunene = 2943
- $\beta$ -Guttiiferin = 8128
- $\alpha$ <sub>2</sub>-Guttiiferin = 14967
- Guttiiferone E = 8218
- Gynosaponin E = 9126
- Gynosaponin G = 9128
- Gynosaponin K = 9131
- Gynosaponin M = 9133
- Gynosaponin S = 9134
- Gypenoside III = 8423
- Gypenoside VIII = 8427
- Gypsogenic acid-28-*O*- $\beta$ -*D*-(6-*O*-acetyl)-glucopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)-[ $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucopyranoside = 19660
- Gypsogenic acid 28-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)]- $\beta$ -*D*-glucopyranoside = 70
- Gypsogenin-3- $\beta$ -*D*-glucecronoside = 22303

## H

- Haematin = 9338
- Haemin = 9345
- Haitinosporine = 6219
- (*rel* 7*S*,8*S*,9*R*)-1(10),5,14-Halimatrien-7,13-diol = 22574
- Halleridone = 18615
- Hancinone D = 8040
- Hancoside = 9217
- Hanfangchin A = 21206
- Hannokinin = 17547
- Haplophytin B = 9223
- Harmidine = 9232
- Harpagide-aglucone-1-*O*-3',4'-seco-glycopyranoside = 3787
- Harpagide-aglucone-1-*O*- $\beta$ -*D*-ribohexo-3-ulopyranoside = 3786
- Harringtonolide = 9194
- Hederacolchiside C = 819
- Hederacoside B = 819
- Hederagenin-23-*O*- $\alpha$ -*L*-arabinopyranoside = 17943



- Hederagenin 3-*O*-arabinoside = 3340  
 Hederagenin-23-*O*- $\beta$ -*D*-glucopyranoside = 17944  
 Hederagenin-3-*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranoside = 3342  
 Hederagenin 3-*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 3)- $\alpha$ -*L*-arabinopyranoside = 6641  
 Hederagenin-3-*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 4)- $\beta$ -*D*-ribofuranosyl(1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranoside = 17949  
 Hederagenin-3-*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 4)- $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranoside = 17950  
 Hederagenin-3-*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 4)- $\beta$ -*D*-ribofuranosyl(1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranoside = 17947  
 Hederagenin-3-*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 4)- $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranoside = 17948  
 Hederagenin-3-*O*- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranoside = 9276  
 Hederagenin-3-*O*- $\beta$ -*D*-ribofuranosyl(1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranoside = 17946  
 Hederagenin-3-*O*- $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranoside = 17945  
 Hederasaponin B = 819  
 Hederidin = 9260  
 $\beta$ -Hederin = 6756  
 Heliotridine viridiflorate *N*-oxide = 6687  
 Hellebrigenin = 2721  
 Hellebrigenin glucorhamnoside = 9330  
 Hemanthamine = 9186  
 Hemipinic acid = 9349  
*m*-Hemipinic acid = 9350  
 Hendecanoic acid = 22218  
 Henryine A = 6929  
 Heptacosane = 9368  
 1-Heptacosanol = 9370  
 1,9*E*-Heptadecadiene-4,6-diene-3*R*,8*S*-diol = 7708  
 1,9*Z*-Heptadecadiene-4,6-diene-3*R*,8*S*-diol = 7707  
 6-(8'*Z*,11'*Z*-Heptadecadienyl)-1,2,4-tetrahydroxybenzene-1-*O*-acetate = 1652  
*Z*-14-Heptadecene = 9497  
 3''',4''',5''',7'''-Heptahydroxy-3,6''-biflavone = 18844  
 (20*R*,22*R*,24*S*)-2 $\beta$ ,3 $\beta$ ,11 $\alpha$ ,14 $\alpha$ ,20,22,24-Hepta-hydroxy-5 $\beta$ -cholest-7-en-6-one = 18750  
 3,5,6,7,8,3',4'-Heptahydroxyflavan = 6624  
 2 $\alpha$ ,3 $\beta$ ,5 $\beta$ ,6 $\beta$ ,8 $\alpha$ ,10 $\alpha$ ,16 $\alpha$ -Heptahydroxykalmene = 18811  
 Heptanedioic acid = 6194  
 Heptanoic acid = 6795  
 5-Heptyldihydrofuranone = 22217  
 Heraclenin = 16447  
 Heramandiol = 1194  
 Herbacintrin = 11238  
 Hernandine = 9445  
 Hesperetinic acid = 9455  
 Hesperitin = 9456  
 Heteroauxin = 11031  
 Hetisan-2,3,9,15-tetrol 2-benzoate = 10962  
 3 $\beta$ ,7 $\beta$ ,8 $\beta$ ,9 $\alpha$ ,14 $\alpha$ ,15 $\beta$ -Hexaacetoxy-2 $\beta$ *H*-jatropa-5*E*,11*E*-diene = 7613  
 2,10,12,6',10',14'-Hexachloroisoplagiochin C = 2185  
 Hexacosanoic acid = 3434  
 Hexacosanol-1 = 3435  
 Hexadecanamide = 16559  
*cis*-9-Hexadecenoic acid = 16561  
 3,14,15,16,17,20-Hexadehydro-16-ethenylxayohimban-19,21-dione = 15290  
 (2*E*,4*E*)-Hexa-2,4-dienoic acid,2-methyl-7*S*-(acetyloxy)-3',4,4',5',6,6',7,8-octahydro-3'-hydroxy-6',7-dimethyl-6,8-dioxospiro[3*H*-2-benzopyran-3,2'-[2*H*]pyran]-4-yl ester = 4612  
 (2*E*,4*E*)-Hexa-2,4-dienoic acid,4-methyl-7*S*-(acetyloxy)-3',4,4',5',6,6',7,8-octahydro-3'-hydroxy-6',7-dimethyl-6,8-dioxospiro[3*H*-2-benzopyran-3,2'-[2*H*]pyran]-4-yl ester = 4613  
 4''a,5'',6'',7'',8'',8''a-Hexahydro-3',4'-dihydroxy-7-methoxy-5'',5'',8''a-trimethyl-4*H*-chromen[2'',3'':5,6]flavone = 22185  
 4,4 $\alpha$ ,5,6,7,8-Hexahydro-4,4 $\alpha$ -dimethyl-6-(1-methylethenyl)-2(3*H*)-naphthalene = 15705  
 (+)-(1*S*,4*aS*,5*R*,8*aS*)-1,2,4 $\alpha$ ,5,6,8 $\alpha$ -Hexahydro-3,8-dimethyl-5-(1-methylethyl)-naphthalenol = 1073  
 (+)-(1*S*,7*S*,7*aS*)-2,3,5,6,7,7*a*-Hexahydro-7,7*a*-dimethyl-1-(2-methylpropanonyl)-1*H*-indene = 5560  
 Hexahydrodoluene = 14270  
 7,7',8,8',11,12-Hexahydrolycopene = 17264  
 (1*R*)-1,2,3,4,5,6-Hexahydro-3-methyl-1,5-methano-8*H*-pyrido[1,2-*a*][1,5]diazocin-8-one = 14279  
 (+)-(4*R*,4*aR*,8*aS*)-3,4,4 $\alpha$ ,7,8,8 $\alpha$ -Hexahydro-6-methyl-4-(1-methylethyl)-naphthalene-1-carbaldehyde = 1072  
 (2*S*,4*R*)-(-)-1,3,4,5,6,7-Hexahydro-1,1,5,5-tetramethyl-2*H*-2,4 $\alpha$ -methanonaphthalene = 11510  
 5,7,4',5'',7'',4''''-Hexahydroxy-(3,8'')-biflavone = 2347  
 2,3,14,20,22,24-Hexahydroxycholest-7-en-6-one = 18162  
 5 $\alpha$ ,6 $\beta$ ,7 $\alpha$ ,10 $\alpha$ ,11 $\beta$ ,12 $\alpha$ -Hexahydroxycyclodeca-1,4-benzoquinone = 982  
 3,3',4,4',5',7'-Hexahydroxyflavan = 18856  
 3,3',4',5',7'-Hexahydroxyflavone = 15170  
 2 $\alpha$ ,3 $\beta$ ,5 $\beta$ ,6 $\beta$ ,10 $\alpha$ ,14 $\beta$ -Hexahydroxygrayan-16-ene = 18806  
 2 $\alpha$ ,3 $\beta$ ,5 $\beta$ ,6 $\beta$ ,10 $\alpha$ ,14 $\beta$ -Hexahydroxygrayan-15-ene = 18807  
 3''',4',4''',5'',7''''-Hexahydroxy-5-methoxy-3,6''-biflavone = 18845  
 3 $\beta$ ,11 $\alpha$ ,12 $\beta$ ,14 $\beta$ ,17 $\beta$ ,20-Hexahydroxy pregn-5-ene = 5129  
 1 $\beta$ ,2 $\alpha$ ,5 $\alpha$ ,9 $\alpha$ ,10 $\beta$ ,13 $\alpha$ -Hexahydroxy-4(20),11-taxadiene = 9505  
 3',4,4',5,9,9'-Hexamethoxy-2,7'-cycloignan = 17231  
 5,7,8,3',4',5'-Hexamethoxyflavone = 2137  
 2,6,10,15,19,23-Hexamethyl-2,6,10,14,18,22-tetracosahexaene = 20237  
 1,6-Hexanedicarboxylic acid = 20439  
*n*-Hexanoic acid = 3139  
*trans*-3-Hexen-1-ol = 9524  
 Hexylvinylcarbinol = 15696  
 Hibiscetin-heptamethylether = 9405  
 Higenamine = 5067  
 (10*RS*,11*RS*)-(2*E*,6*Z*,8*E*)-10,11-Hydroxy-*N*-(2-hydroxy-2-methylpropyl)-2,6,8-dodecatrienamide = 23025  
 Hinokiflavone 4''',7'''-dimethylether = 4286  
 Hinokiflavone 4'''-methylether = 4285  
 (-)-Hinokinin = 4310

- Hippacine = 4235  
 (+)-Hippeastrine = 9547  
 Hirsutrin = 11642  
 Hispiduloside = 9617  
 Holarrhesine = 9578  
 Hollow alternanthera saponin B = 2973  
 Homoaromoline = 9597  
 $\alpha$ -Homochelidonine = 9600  
 24,31-Homocyclotriuracall-9(11)-ene-3 $\beta$ -ol = 19932  
 Homoeriodictyol-7-*O*- $\beta$ -*D*-(6''-*O*-acetyl)-glucopyranoside = 22541  
 Homoeriodictyol-7-*O*- $\beta$ -*D*-apiosyl-(1 $\rightarrow$ 5)- $\beta$ -*D*-apiosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranoside = 22540  
 Homoeriodictyol-7-*O*- $\beta$ -*D*-apiosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranoside = 22538  
 Homopterocarpin = 6290  
 4-Homopterocarpinol = 13679  
 Homothalricrine = 9597  
 Homotrilobine = 11747  
 Homovitexin = 11773  
 Hopene-B = 9641  
 Houttuynin = 4837  
 HSYA = 10684  
 2,9-Humuladien-6-one = 9665  
 2,7(14),9-Humulatriene = 9670  
 2,6,9-Humulatrien-8-one = 22984  
 Hydrangetin = 4648  
 Hydrocinchonidine = 3675  
 Hydrocoumaric acid = 13678  
 Hydroginkgolic acid = 1128  
 16 $\alpha$ -Hydro-17-hydroxy-19-nor-*ent*-kauran-4 $\alpha$ -ol = 1327  
 Hydromagnolol = 11519  
 (24*Z*)-3 $\beta$ -Hydroxy-14(13 $\rightarrow$ 12)abeo-lanosta-7,9(11),13(18),24-tetraen-26-oic acid = 22166  
 16-Hydroxy-abieta-8,12-diene-11,14-dione = 17732  
 (5*R*,10*S*)-12-Hydroxy-8,11,13-abietatriene-3,7-dione = 13477  
 14-Hydroxy-abieta-8,11,13-trien-3-one = 22016  
 Hydroxyacetic acid = 8827  
 (4*S*,5*R*,6*S*,7*S*,8*R*)-6-Hydroxy-7-( $\alpha$ -acetoxybenzyl)-tetrahydrofuro[3,2-*b*]furan-2-one = 404  
 3'(S)-Hydroxy-4'(S)-acetoxy-3',4'-dihydroseselin = 18284  
 3 $\beta$ -Hydroxy-12 $\beta$ -acetoxy lanosta-7,9(11),24(*Z*)-trien-26-oic acid = 22164  
 25-Hydroxy-3 $\alpha$ -acetoxy lanost-8-en-21-oic acid 21-*O*- $\beta$ -*D*-xylopyranoside = 7870  
 16 $\beta$ -Hydroxy-17-acetoxy-19-nor-*ent*-kauran-4 $\alpha$ -formate = 1329  
 16 $\beta$ -Hydroxy-17-acetoxy-18-nor-*ent*-kauran-4 $\beta$ -hydroperoxide = 1330  
 2-Hydroxy-6-aminopurine-9- $\beta$ -*D*-ribofuranoside = 4272  
 17 $\beta$ -Hydroxyandros-4-en-3-one = 21022  
 3-Hydroxy-*p*-anisaldehyde = 11767  
 8-Hydroxyapigenin = 11703  
 9-Hydroxy-*A*<sup>(10)</sup>-aristolen-2-one = 4815  
 Hydroxybenzene = 17089  
 5-Hydroxy-1,3-benzenedicarboxylic acid = 10252  
 4-Hydroxybenzoic acid methyl ester = 14652  
 6'-*O*-*p*-Hydroxybenzoyl-8-epiloganic acid = 1539  
 $\alpha$ -*O*-[2-*O*-(4-Hydroxybenzoyl)- $\beta$ -*D*-glucopyranosyl]-3,4-dihydroxyphenyl-ethanol = 14919  
 $\alpha$ -*O*-[2-*O*-(4-Hydroxybenzoyl)- $\beta$ -*D*-glucopyranosyl]-4-hydroxyphenylethanol = 14917  
*N*-*p*-Hydroxybenzoyl-5-hydroxy anthranilic acid = 13657  
 4-Hydroxybenzyl alcohol 4-*O*- $\beta$ -*D*-glucopyranoside = 8237  
 10-(4-Hydroxybenzyl)-isorhapontigenin = 8897  
 7-Hydroxy-3-benzylphthalide = 22155  
*p*-Hydroxybenzyltartaric acid = 17479  
 Hydroxybrazilein = 9337  
 14 $\beta$ -Hydroxybufa-4,20,22-trienolide 3 $\beta$ -*O*-{ $\alpha$ -*L*-rhamnopyranosyl-[(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl]-(1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranoside} = 22250  
 14-Hydroxy-bupleurynol = 2757  
 Hydroxybutanedioic acid = 13419  
 3-Hydroxy-2-butanone = 111  
 7-Hydroxy-3-butyldiene-phthalide = 2796  
 (*Z*)-5-Hydroxy-3-butyldiene-phthalide = 19733  
 (3'*S*)-3'-Hydroxy-3-butyl phthalide  $\beta$ -*D*-apiofuranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside = 3373  
 (3'*S*)-3'-Hydroxy-3-butyl phthalide  $\beta$ -*D*-glucopyranoside = 3372  
 7-Hydroxycadalin = 9869  
 (+)-(1*R*\*,6*S*\*,7*S*\*,10*S*\*)-12-hydroxy-4,11(13)-cadinadiene = 19069  
 (3*R*,5'*R*)-3-Hydroxy- $\beta$ , $\kappa$ -caroten-6'-one = 5158  
 3 $\beta$ -Hydroxy  $\gamma$ -cerane = 21174  
 6*R*-(7*R*-Hydroxy-8*R*-chloro-8-phenyl)-5,6-dihydro-2-pyrone = 3555  
 3 $\alpha$ -Hydroxy-5 $\beta$ -cholan-24-oic acid = 12923  
 Hydroxycromolaenide = 9570  
 Hydroxycinchonine = 4373  
*m*-Hydroxycinnamic acid = 4133  
*trans*-*o*-Hydroxycinnamic acid = 4134  
 4-Hydroxycinnamic acid = 4135  
 6'-(4''-Hydroxycinnamoyl)arbutin = 18877  
 (*E*) *N*-(4-Hydroxycinnamoyl)-5-methoxytryptamine = 3392  
 (*Z*) *N*-(4-Hydroxycinnamoyl)-5-methoxytryptamine = 3393  
 6*S*-(1*R*-Hydroxy-2*R*-cinnamyloxyphenethyl)-5,6-dihydro-5*S*-hydroxy-2-pyrone = 9655  
 12 $\beta$ -Hydroxyconessine = 9584  
 5-Hydroxy-1-*p*-coumaric acyl-2,3-dihydro-1*H*-indole-2-carboxylic acid-6-*O*- $\beta$ -*D*-glucopyranoside = 16074  
 5-Hydroxy-1-(*p*-coumaric acyl-7'-*O*- $\beta$ -*D*-glucopyranose)-2,3-dihydro-1*H*-indole-2-carboxylic acid-6-*O*- $\beta$ -*D*-glucopyranoside = 16076  
 7-Hydroxycoumarin = 22195  
 7-Hydroxycoumarin farnesyl ether = 22196  
 2 $\alpha$ -Hydroxy-3 $\beta$ -*trans*-*p*-coumaroyl-28,19 $\beta$ -oleanolide = 6462  
 2-Hydroxy-2,4,6-cycloheptatrien-1-one = 22052  
 1-Hydroxy-2-deacetoxytaxinine J = 20753  
 1 $\beta$ -Hydroxy-10-deacetylbaecatin I = 20824  
 1 $\beta$ -Hydroxy-5 $\alpha$ -deacetylbaecatin I = 20869  
 1 $\alpha$ -Hydroxy-3-dehydroxypseudoanisatin = 9989  
 11 $\beta$ -Hydroxy-3 $\beta$ ,6 $\alpha$ -diacetoxy-*ent*-kaur-16-en-15-one = 13701  
 1 $\zeta$ -Hydroxydihydrocurcumin = 9855  
 $\alpha$ -Hydroxy-6,7-dihydrogardenoside = 8266  
 (2*S*)-5-Hydroxy-2-(*cis*-1',4'-dihydroxycyclohexyl)-7-methoxychroman-4-one = 10554  
 (2*S*)-5-Hydroxy-2-(*trans*-1',4'-dihydroxycyclohexyl)-7-methoxychroman-4-

- one = 10555
- 7-Hydroxy-2-(3,4-dihydroxyphenyl)benzofuran-4-al = 21477
- 7-Hydroxy-2-(3,4-dihydroxyphenyl)-4-(1*E*-propenoyl-3-*oic acid*)benzofuran = 21478
- 10-Hydroxy-1,2-dimethoxy-4,5,6a,7-tetrahydro-dibenzo[de,g]quinoline-6-carboxylic acidmethyl ester = 18903
- 1-Hydroxy-2,3-dimethoxy-10-acetoxymethylacridone = 21421
- 4-Hydroxy-3,5-dimethoxybenzoic acid = 20566
- trans*-3-(4-Hydroxy-3,5-dimethoxy-benzylidene)-5-(4-hydroxy-3,5-dimethoxy-phenyl)-dihydrofuran-2-one = 5247
- 6-Hydroxy-2,4-dimethoxy-3,5-bis(3-methyl-2-butenyl)benzophenone = 15224
- 4-Hydroxy-2,4'-dimethoxychalcone = 8850
- N*-(4'-Hydroxy-3',5'-dimethoxycinnamoyl)- $\Delta^2$ -pyridin-4-one = 3386
- N*-(4'-Hydroxy-3',5'-dimethoxycinnamoyl)- $\Delta^3$ -pyridin-2-one = 5259
- 7-Hydroxy-6,8-dimethoxycoumarin glucoside = 6754
- 5-Hydroxy-6,7-dimethoxy-coumarin-5-*O*-glucoside = 21436
- 5-Hydroxy-4,9-dimethoxy-6-(3,4-dimethoxyphenyl)-2-(1-methylethenyl)-7*H*-furan[3,2-*g*]chromen-7-one = 21336
- 2'-Hydroxy-5,4'-dimethoxy-2''-2'-dimethylpyran-[5''-6''-6,7]isoflavone = 11016
- 7-Hydroxy-5,4'-dimethoxyflavanone = 22067
- 7-Hydroxy-3',4'-dimethoxyisoflavanquinone = 16804
- 8-Hydroxy-4',7-dimethoxyisoflavone 8-*O*-[ $\alpha$ -rhamnopyranosyl-(1 $\rightarrow$ 6)]- $\beta$ -glucopyranoside = 5224
- 1-Hydroxy-6,7-dimethoxy-2-methylanthraquinone = 18870
- 5-Hydroxy-6,7-dimethoxy-3',4'-methylene-dioxy-flavone = 19127
- 4'-Hydroxy-5,3'-dimethoxy-6,7-methylenedioxyisoflavone = 11165
- 7-Hydroxy-5,8-dimethoxy-6-methyl-3-(2'-hydroxy-4'-methoxybenzyl)chroman-4-one = 16141
- 7-Hydroxy-2,10-dimethoxy-1,4-phenanthraquinone = 4586
- 3-(4-Hydroxy-3,5-dimethoxy-phenyl)-acrylic acid methyl ester = 19916
- 1*R*\*-(4-Hydroxy-3,5-dimethoxy-phenyl)-2*R*\*-[4-(3-hydroxy-propyl)-2,6-dimethoxy-phenoxy]-propane-1,3-diol = 2766
- 4-(4-Hydroxy-3,5-dimethoxy-phenyl)-5-methyl-dihydro-furan-2-one = 5246
- 3-(4-Hydroxy-3,5-dimethoxyphenyl)-prop-2-enol = 19922
- 5-Hydroxy-8-(1',1'-dimethylallyl) psoralen = 934
- 16 $\beta$ -Hydroxy-20 $\alpha$ -dimethylamino-9 $\beta$ ,19-cyclo-4,4,14 $\alpha$ -trimethy-5 $\alpha$ -pregn = 2819
- 2 $\alpha$ -Hydroxy-3 $\beta$ -dimethylaminopregn-5-en-16-one = 12350
- O*<sup>7</sup>-(2*S*-2-Hydroxy-2,3-dimethyl-butanoyl) = 11647
- O*<sup>9</sup>-(2*S*-2 $\alpha$ -Hydroxy-2,3-dimethyl-butanoyl) = 9306
- O*<sup>9</sup>-(2*S*-2 $\beta$ -Hydroxy-2,3-dimethyl-butanoyl) = 18661
- 7-Hydroxy-2''-2''-dimethylchromano[5,6:6',5'']-2''',2''-dimethylchromano[3',4':5''',6''']isoflavone = 6625
- (1'*E*)-(1*R*\*,5*R*\*,9*S*\*)-9-Hydroxy-1-(2,6-dimethylhepta-1,5-dienyl)-3,6-dioxo-2-oxa-spiro[4.5]dec-7-ene = 14852
- (1*S*,6*R*,2*Z*,4*Z*)-5-[(1'-Hydroxy-2',6'-dimethyl-6'-hydroxymethyl-4'-oxo-8'- $\beta$ -*D*-glucosyl)-cyclohex-2'-en-1'-yl]-3-methyl-penta-2,4-dienoic acid = 9748
- 3-*rel*-(2*R*,3*R*)-4-Hydroxy-2,3-dimethyl-6-(3-methylbut-2-enyl)-6-[5-methyl-2-(2-methylpropenyl)hex-5-enyl]-5,7-dioxo-3,5,6,7-tetrahydro-2*H*-chromen-8-yl]-3-phenylpropionic acid = 2593
- 3-*rel*-(2*S*,3*R*)-4-Hydroxy-2,3-dimethyl-6-(3-methylbut-2-enyl)-6-[5-methyl-2-(2-methylpropenyl)hex-5-enyl]-5,7-dioxo-3,5,6,7-tetrahydro-2*H*-chromen-8-yl]-3-phenylpropionic acid = 11264
- 2*R*-(7'-Hydroxy-4',8'-dimethyl-3'*E*,8'-nonadienyl)-5-hydroxy-2,7-dimethyl-2*H*-chromene = 4681
- 2*R*-(8'-Hydroxy-4',8'-dimethyl-3'*E*,6'*Z*-nonadienyl)-5-hydroxy-2,7-dimethyl-2*H*-chromene = 4683
- 2*R*-(9'-Hydroxy-4',8'-dimethyl-3'*E*,7'*E*-nonadienyl)-5-hydroxy-2,7-dimethyl-2*H*-chromene = 4684
- 7-[(*E*)-3'-Hydroxy-3',7'-dimethyl-4',6'-octadienyloxy]coumarin = 7765
- 7-[(3'*Z*,5'*E*)-7'-Hydroxy-3',7'-dimethyl-3',5'-octadienyloxy]coumarin = 7766
- 3-Hydroxy-2,24-dioxo-3-friedelen-29-*oic acid* = 3075
- 2-Hydroxy-3-docosanyl-5-methoxy-1,4-benzoquinone = 11178
- 2-Hydroxy-3-eicosanyl-5-methoxy-1,4-benzoquinone = 11176
- $\omega$ -Hydroxyemodin = 3765
- 3-Hydroxy-8-*epi*-larreatricin = 10077
- (3*S*,5*R*,6*S*,9*R*)-3-Hydroxy-5,6-epoxy- $\beta$ -dihydroionyl-9-*O*- $\beta$ -glucopyranoside = 19229
- 6 $\beta$ -Hydroxy-7 $\alpha$ ,10 $\alpha$ -epoxyguaiane-4,5-ene = 16194
- (3*S*,5*R*,6*S*,7*E*,9*S*)-3-Hydroxy-5,6-epoxy- $\beta$ -ionyl-9-*O*- $\beta$ -glucopyranoside = 19228
- 6 $\beta$ -Hydroxy-3 $\alpha$ ,20-epoxy-*ent*-kaur-16-en-1,7,15-trione = 12587
- 2-Hydroxyesculentic acid = 11812
- 3-Hydroxyestragole- $\beta$ -*D*-glucopyranoside = 7522
- 3-Hydroxy-1,3,5(10)-estratrien-17-one = 7387
- 6 $\beta$ -Hydroxy-7- $\alpha$ -ethoxy-16-acetoxy royleanone = 12998
- (24*Z*)-26-Hydroxy-7,24-euphadien-3-one = 10770
- 4'-Hydroxyeximine = 2611
- 5-Hydroxy-1-ferulic acyl-2,3-dihydro-1*H*-indole-2-carboxylic acid-6-*O*- $\beta$ -*D*-glucopyranoside = 16075
- 5-Hydroxy-1-(ferulic acyl-7'-*O*- $\beta$ -*D*-glucopyranose)-2,3-dihydro-1*H*-indole-2-carboxylic acid-6-*O*- $\beta$ -*D*-glucopyranoside = 16077
- 2-Hydroxy-3-formylcarbazole = 15027
- 6-Hydroxy-3-(3-*O*- $\beta$ -*D*-glucopyranosyl-but-1-enyl)-2,4,4-trimethyl-cyclohex-2-enone = 3086
- 9' $\alpha$ -Hydroxy-9 $\alpha$ -*O*- $\beta$ -*D*-glucopyranosylpinoselin = 12444
- (1*S*,5*S*,6*S*,10*S*)-10-Hydroxyguaia-3,7(11)-dien-12,6-olide  $\beta$ -*D*-glucopyranoside = 4358
- (4*R*,10*R*)-10-Hydroxyguaia-1(5),6-dien-2-one = 15270
- (4*R*,10*S*)-10-Hydroxyguaia-1(5),6-dien-2-one = 15271
- 21 $\beta$ -Hydroxy-gypsogenin = 13061
- 7-Hydroxyharman = 9236
- 2-Hydroxy-3-heptadecyl-5-methoxy, 1,4-benzoquinone = 11174
- 2-Hydroxy-3-hexadecyl-5-methoxy-1,4-benzoquinone = 11173
- 5-Hydroxy-6,7,8,3',4',5'-hexamethoxy flavone = 8228
- 4-Hydroxyhomopterocarpin = 13679
- 5-Hydroxy-2*E*,6*E*,9*E*-humulatrien-8-one = 10834
- 3 $\beta$ -Hydroxy-18-hydroperoxy-15,20 $\alpha$ :18,20 $\beta$ -diepoxy-13,14:14,15-disecopregna-5,12-dien-14-*oic acid* 16-oxy-lactone = 20275
- 6-Hydroxy-2-(4-hydroxybenzyl)-benzofuran-7-*C*- $\beta$ -*D*-glucopyranoside = 18115
- 2-Hydroxy-2-*p*-hydroxybenzyl-3(2*H*)-6-hydroxybenzofuranone-7-*C*- $\beta$ -*D*-glucopyranoside = 13579
- (2*S*)-5-Hydroxy-2-(1'-hydroxy-4',4'-dimethoxycyclohexyl)-7-methoxychroman-4-one = 6271
- (3*R*)-3-Hydroxy-12-[(1*S*,4*S*)-4-[(1*S*)-1-hydroxyethyl]-pyrrolidin-1-yl]-dodecanoic acid = 14990
- (3*R*)-3-Hydroxy-12-[(1*S*,4*S*)-4-[(1*S*)-1-hydroxyethyl]-pyrrolidin-1-yl]-

- dodecanoic acid-3-*O*- $\beta$ -*D*-glucopyranoside = 14989  
 (3*R*)-3-Hydroxy-12-[(1*R*,4*R*,5*S*)-4-hydroxy-5-hydroxymethyl-piperidin-1-yl]-  
 dodecanoic acid-3-*O*- $\beta$ -*D*-glucopyranoside = 14993  
 4'-Hydroxy-7,8-[2-(2-hydroxyisopropyl)dihydrofuran]flavan = 2626  
 1-Hydroxy-2-[2-hydroxy-3-methoxy-5-(1-hydroxyethyl)-phenyl]-3-(4-hy-  
 droxy-3,5-dimethoxy)-propane-1-*O*- $\beta$ -*D*-glucuronopyranoside = 20654  
 6-Hydroxy-4 $\beta$ -(4-hydroxy-3-methoxyphenyl)-3 $\alpha$ -hydroxymethyl-5-meth-  
 oxy-3,4-dihydro-2-naphthaldehyde = 22566  
 6-Hydroxy-4-(4-hydroxy-3-methoxyphenyl)-7-methoxy-3-nicotinmethyl-2-  
 naphthoic acid- $\gamma$ -lactam = 22565  
 1-Hydroxy-2-hydroxymethyl anthraquinone = 5522  
 (S)-(-)-7-Hydroxy-8-(2-hydroxy-3-methyl-3-butenyl)-2*H*-1-benzopyran-2-  
 one = 5063  
 7-Hydroxy-6-(3-hydroxy-3-methyl-2-oxobutyl)-coumarin = 17035  
 (3*R*)-3-Hydroxy-12-[(1*R*,4*R*,5*S*)-4-hydroxy-5-methyl-piperidin-1-yl]-  
 dodecanoic acid = 14992  
 (3*R*)-3-Hydroxy-12-[(1*R*,4*S*,5*S*)-4-hydroxy-5-methyl-piperidin-1-yl]-  
 dodecanoic acid = 14994  
 (3*R*)-3-Hydroxy-12-[(1*R*,4*R*,5*S*)-4-hydroxy-5-methyl-piperidin-1-yl]-  
 dodecanoic acid-3-*O*- $\beta$ -*D*-glucopyranoside = 14991  
 (6*R*,5*S*)-(2*E*,7*E*,9*E*)-6-Hydroxy-*N*-(2-hydroxy-2-methylpropyl)-11-oxo-2,7,9-  
 dodecatrienamide = 23023  
 (11*R*,5*S*)-(2*E*,7*E*,9*E*)-11-Hydroxy-*N*-(2-hydroxy-2-methyl-propyl)-6-oxo-2,7,9-  
 dodecatrienamide = 23024  
 (2*S*)-5-Hydroxy-2-(1'-hydroxy-4'-oxocyclohexyl)-7-methoxychroman-4-one =  
 16097  
 5-Hydroxy-3-(4-hydroxyphenyl)-8,8-dimethyl-4*H*,8*H*-benzo[1,2-*b*:3,4-*b'*]  
 dipyran-4-one = 5235  
 (6*S*,9*S*)-6-Hydroxyinoside = 20173  
 15 $\beta$ -Hydroxyisolineolone = 10248  
*ent*-11 $\beta$ -Hydroxy-8(14),15-isopimaradien-3-one = 687  
 1-[2'-Hydroxy-3',4'-(2''-isopropanoyldihydrofuran)-6'-methoxy-5'-(3''-meth-  
 ylbut-2''-enyl)]acetophenone = 572  
 3-[*rel*-(2*R*,3*R*)-4-hydroxy-6-(3 $\alpha$ -isopropenyl-2,2-dimethylcyclobutyl)- $\beta$ -meth-  
 yl)-2,3-dimethyl-6-(3-methylbut-2-enyl)-5,7-dioxo-3,5,6,7-tetrahydro-  
 2*H*-chromen-8-yl]-3-phenylpropionic acid = 2591  
 3-[*rel*-(2*R*,3*R*)-4-hydroxy-6-(3 $\alpha$ -isopropenyl-2,2-dimethylcyclobutyl)- $\beta$ -meth-  
 yl)-2,3-dimethyl-6-(3-methylbut-2-enyl)-5,7-dioxo-3,5,6,7-tetrahydro-  
 2*H*-chromen-8-yl]-3-phenylpropionic acid = 2592  
 3-[*rel*-(2*S*,3*R*)-4-hydroxy-6-(3 $\alpha$ -isopropenyl-2,2-dimethylcyclobutyl)- $\beta$ -meth-  
 yl)-2,3-dimethyl-6-(3-methylbut-2-enyl)-5,7-dioxo-3,5,6,7-tetrahydro-  
 2*H*-chromen-8-yl]-3-phenylpropionic acid = 11262  
 3-[*rel*-(2*S*,3*R*)-5-hydroxy-6-(3 $\alpha$ -isopropenyl-2,2-dimethylcyclobutyl)- $\beta$ -meth-  
 yl)-2,3-dimethyl-6-(3-methylbut-2-enyl)-4,7-dioxo-3,4,6,7-tetrahydro-  
 2*H*-chromen-8-yl]-3-phenylpropionic acid = 11263  
 6-Hydroxykaempferol 3,6,4'-trimethylether = 19312  
 16*aH*-17-Hydroxy-*ent*-kauran-19-oic acid = 10277  
 16*a*-Hydroxy-*ent*-17-kauranyl aristolochate I = 1721  
 16*a*-Hydroxy-*ent*-17-kauranyl aristolochate II = 1722  
 6 $\beta$ -Hydroxy-labdane-15,16-epoxy-14,13(16),8(9)-trien-3,7-dione = 9468  
 (24*E*)-3 $\beta$ -Hydroxy-5 $\alpha$ -lanosta-7,9(11),24-trien-26-al = 13019  
 (3*R*,20*S*)-3-Hydroxyl-20-(5'-hydroxy-3'-methylpyridin-6'-yl)-5 $\alpha$ -pregnan-6-  
 one) = 7794  
 6-Hydroxy-limocitrin = 12840  
 8-Hydroxy-linalool-3-*O*- $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside = 15402  
 15 $\beta$ -Hydroxylineolone = 10327  
 (6*R*)-6-Hydroxyl-7-octenoic acid 6-*O*- $\beta$ -*D*-xylopyranosyl-(1'' $\rightarrow$ 6'')-*O*- $\beta$ -*D*-  
 glucopyranosyl-(1'' $\rightarrow$ 2'')-*O*- $\beta$ -*D*-glucopyranoside = 10990  
 3 $\beta$ -Hydroxyl-olean-12-en-28,29-dioic acid 28-*O*- $\alpha$ -*L*-rhamnopyranosyl-  
 (1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)]- $\beta$ -*D*-glucopyranoside = 72  
 21 $\beta$ -Hydroxyloleanoic acid-28-*O*- $\beta$ -*D*-glucopyranoside = 13064  
 3 $\beta$ -Hydroxyl-23-oxo-olean-12-en-28-oic acid 28-*O*- $\alpha$ -*L*-rhamnopyranosyl-  
 (1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)]- $\beta$ -*D*-glucopyranoside = 71  
 13-Hydroxylupanine = 15972  
 3 $\beta$ -Hydroxy-18 $\beta$ ,19*aH*-lup-20(29)-ene = 15482  
 30-Hydroxylup-20(29)-en-3-one = 16374  
 6-Hydroxyluteolol = 10351  
 Hydroxymaltol 3-*O*-(6-*O*-*p*-coumaryl)- $\beta$ -*D*-glucopyranoside = 2524  
*p*-Hydroxymandelonitril-glucoside = 5283  
 5-Hydroxymatine = 20096  
 (5*R*,6*R*,7*E*)-9-Hydroxymegastigmen-7-en-3-one *O*-primeveroside = 17522  
 (9*R*,7*E*)-9-Hydroxymengastigmane-5,7-dien-4-one *O*-primeveroside = 17523  
 (9*R*)-9-Hydroxymengastigman-5-en-4-one *O*-primeveroside = 17524  
 2-Hydroxy-1-methoxy-4,5,6*a*,7-tetrahydro-dibenzo[*de*.*g*]quinoline-6-carbo-  
 xylic acidmethyl ester = 18901  
 2'-Hydroxy-4'-methoxyacetophenone = 16532  
 2-Hydroxy-1-methoxyanthraquinone = 900  
 1-Hydroxy-2-methoxyanthraquinone = 901  
 2(*S*)-(3'-Hydroxy-5'-methoxy)-benz-3(*S*)-ethoxycarbonyl-6-*trans*-ethyl  
 acrylate-8-methoxy-benzofuran = 3304  
*p*-Hydroxy-*m*-methoxy-benzonic acid = 22332  
 4-Hydroxy-3-methoxybenzyl alcohol = 22346  
 (2*S*,3*S*)-2 $\alpha$ -(3''-Hydroxy-4''-methoxybenzyl)-3 $\beta$ -(4'-hydroxy-3'-methoxybenz-  
 yl)- $\gamma$ -butyrolactone 4'-*O*-( $\beta$ -*D*-glucopyranoside) = 20424  
 (2*S*,3*S*)-2 $\alpha$ -(4''-Hydroxy-3''-methoxybenzyl)-3 $\beta$ -(4'-hydroxy-3'-methoxybenz-  
 yl)- $\gamma$ -butyrolactone 4'-*O*-( $\beta$ -*D*-glucopyranoside) = 20425  
 (2*S*,3*S*)-2 $\alpha$ -(4''-Hydroxy-3''-methoxybenzyl)-3 $\beta$ -(4'-hydroxy-3'-methoxybenz-  
 yl)- $\gamma$ -butyrolactone 4''-*O*-( $\beta$ -*D*-glucopyranoside) = 20426  
 3-(4-Hydroxy-3-methoxy-benzyl)-5-[2-(4-hydroxy-3-methoxy-phenyl)-3-hy-  
 droxymethyl-7-methoxy-2,3-dihydro-benzofuran-5-yl]-4-hydroxymethyl-  
 dihydro-furan-2-one = 6635  
 4-Hydroxy-3-methoxy-*trans*-cinnamaldehyde = 3983  
 4-Hydroxy-3-methoxycinnamic acid = 7768  
 2-Hydroxy-1-methoxy-4*H*-dibenzo[*de*.*g*]quinoline-4,5-(6*H*)-dione = 6466  
 5-Hydroxy-7-methoxy-6,8-dimethylflavone = 5270  
 7-Hydroxy-8-methoxyflavanone = 11484  
 5-Hydroxy-7-methoxyflavone = 20899  
 5-Hydroxy-7-methoxy-8-formyl-3-benzoyl-2,6-dimethyl-2*S*,3*R*-dihydrochro-  
 mone = 5268  
 3'-Hydroxy,3-methoxy furo[8,7:4',5'']flavone = 3335  
 5-Hydroxy-7-methoxy-8-*C*- $\beta$ -glucosylflavone = 12157  
 3-Hydroxy-1-methoxy-2-hydroxymethyl-9,10-anthraquinone-3-*O*- $\beta$ -*D*-glucop-  
 yranoside = 12531  
 1-[2'-Hydroxy-6'-methoxy-5'-(2''-hydroxy-3''-methyl-3''-butenyl)-3',4'-(3''',3'''-  
 dimethyl-1''-pyrenyl)]acetophenone = 575  
 7-Hydroxy-4'-methoxyisoflavone = 7883

- 5-Hydroxy-4'-methoxyisoflavone = 16546  
 7-Hydroxy-6-methoxy-1(2*H*)-isoquinolinone = 5077  
 3-Hydroxy-1-methoxy-2-methoxymethylanthraquinone-3-*O*- $\beta$ -*D*-glucopyranoside = 12532  
 3-Hydroxy-1-methoxy-2-methoxymethylanthraquinone-3-*O*- $\beta$ -*D*-primeveroside = 12533  
 5-Hydroxy-6-methoxy-7-(3-methyl-but-2-enyloxy)-2*H*-1-benzopyran-2-one = 11569  
 2-Hydroxy-5-methoxy-3-methylcarbazole = 3153  
 2-Hydroxy-8-methoxy-3-methylcarbazole = 3154  
 2-Hydroxy-6-methoxy-3-methylcarbazole = 3155  
 (7*S*,7*S*,8*S*,8*S*)-4-Hydroxy-3-methoxy-3',4'-methylenedioxy-7,7'-epoxilignan = 20651  
 5-Hydroxy-7-methoxy-2-methyl-8-(2,3-epoxy-3-methylbutyl)chromone = 16912  
 5-Hydroxy-7-methoxy-2-methyl-8-(1-hydroxy-3-methyl-3-butenyl)chromone = 16913  
 5-Hydroxy-7-methoxy-2-methyl-8-(2-hydroxy-3-methyl-3-butenyl)chromone = 16914  
 9-Hydroxy-3-methoxy-2-methyl-9-(2-methoxyphenyl)-14-oxa-bicyclo[3.2.1]octa-[*f*]quinolinone = 22634  
 1-(3-Hydroxy-5-methoxy-4-methylphenyl)-2-(3-hydroxy-2-methoxyphenyl)ethane = 20382  
 1-Hydroxy-2-methoxy norporphine = 2838  
 14-Hydroxy-13-methoxy-8-oxocyclohexa-3,11-diene-12-carbaldehyde = 8521  
 14-Hydroxy-11-methoxy-8-oxocyclohexa-3,12-diene-12-carbaldehyde = 8522  
 7-Hydroxy-2-methoxy-1,4-phenanthraquinone = 4585  
 8 $\alpha$ -(4-Hydroxy-3-methoxy-phenyl)-6 $\beta$ ,7 $\alpha$ -bis-hydroxymethyl-3-methoxy-5,6,7,8-tetrahydro-naphthalen-2-ol = 2765  
 6-Hydroxy-7-Methoxy-4-phenylcoumarin = 4609  
 5-Hydroxy-2-(4-methoxyphenyl)-2,3-dihydrobenzofuran = 4094  
 6*R*-(7*R*-Hydroxy-8*R*-methoxy-8-phenyl)-5,6-dihydro-2-pyrone = 13943  
 1-(4-Hydroxy-3-methoxyphenyl)-ethanone = 117  
*N*-[2-[2-[(4-Hydroxy-3-methoxyphenyl)-2-hydroxy-1-hydroxymethyl]ethoxy]indol-3-yl]ethyl]-4-hydroxycinnamoyl amide = 11125  
 2-(4-Hydroxy-3-methoxyphenyl)-3-hydroxymethyl-5-[*N*-2-(4-hydroxyphenyl)ethyl]carbamoylethenyl-7-methoxybenzodihydrofuran = 9014  
*erythro*-1-(4-Hydroxy-3-methoxyphenyl)-2-[4-{2-[*N*-2-(4-hydroxyphenyl)ethyl]carbamoylethenyl-2-methoxyphenoxy}]<sub>2</sub>-1,3-propanediol = 3054  
 2-(4-Hydroxy-3-methoxyphenyl)-3-[*N*-2-(4-hydroxyphenyl)ethyl]carbamoylethyl-5-[*N*-2-(4-hydroxyphenyl)ethyl]carbamoylethenyl-7-methoxybenzodihydrofuran = 9013  
 1-(4-Hydroxy-3-methoxyphenyl)-7-(4-hydroxyphenyl)-1,6-heptadiene-3,5-dione = 5045  
 2 $\alpha$ -(4'-Hydroxy-3'-methoxyphenyl)-6 $\alpha$ -(3'',4''-methylenedioxyphenyl)-8-oxo-3,7-dioxabicyclo[3.3.0]octane 4'-*O*-( $\beta$ -*D*-glucopyranoside) = 20423  
 1-(4'-Hydroxy-3'-methoxyphenyl)-7-phenyl-3-heptanol = 16461  
 1-(4-Hydroxy-3-methoxyphenyl)-7-phenyl-1-hepten-3-one = 22877  
 4-Hydroxy-3-methoxyphenylpropanol = 5564  
 3-(4-Hydroxy-3-methoxyphenyl)-prop-2-enol = 3982  
 4-Hydroxy-3-methoxyphenyl-1-*O*- $\beta$ -*D*-(5-*O*-syringoyl)-apiofuranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranoside = 856  
 4-Hydroxy-3-methoxyphenyl- $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside = 5534  
 4'-Hydroxy-7-methoxy-6-prenylflavanone = 2173  
 3-Hydroxy-9-methoxypterocarpan = 13637  
*L*-3-Hydroxy-9-methoxypterocarpan = 13638  
 (4*S*)-5-Hydroxy-4-methoxy- $\alpha$ -tetralone = 10460  
 4-Hydroxy-7-methoxy-3-[1,2,6-trimethyl-7-(4-methyl-2-furyl)-hepta-2(*E*),5(*E*)-dienyl]-coumarin = 7985  
 2-Hydroxymethylalloptaeroxylin = 16915  
 2 $\alpha$ -Hydroxy-3 $\beta$ -methylaminopregn-5-en-16-one = 12349  
*rel*-(2*S*,5*R*,6*R*,8*S*,9*S*,10*R*,18*S*,19*R*)-6-Hydroxy-2-(2-methylbutanoyloxy)cleroda-3,13(16),14-triene-18,19-dicarboxaldehyde = 3263  
 1-Hydroxy-4-(3-methyl-2-butenyl)-9*H*-carbazole-3-carboxaldehyde = 3794  
 2-Hydroxy-1-(3-methyl-2-butenyl)-carbazole-3-carboxaldehyde = 9410  
 5-[2'(*R*)-Hydroxy-3"-methyl-3"-butenyloxy]furocoumarin = 16488  
 2-(3'-Hydroxy-3'-methylbutyl)-4-hydroxy-3,6-dimethoxyphenol-1-*O*- $\beta$ -*D*-glucopyranoside = 18290  
 2-(3'-Hydroxy-3'-methylbutyl)-4-hydroxy-5-methoxyphenol-1-*O*- $\beta$ -*D*-glucopyranoside = 18289  
 (2*R*,3*R*,4*R*,5*R*)-2-Hydroxymethyl-3,4-dihydroxy-5-[7-(cyclohexy-2-on-1(6-enyl)heptyl]pyrrolidine = 2645  
 (2*R*,3*S*,4*R*,5*R*)-2-Hydroxymethyl-3,4-dihydroxy-5-[7-(cyclohexy-2-on-1(6-enyl)heptyl]pyrrolidine-4-*O*- $\beta$ -*D*-glucopyranoside = 2646  
 (2*R*,3*R*,4*R*,5*R*)-2-Hydroxymethyl-3,4-dihydroxy-5-[(9*R*)-9,13-dihydroxytridecyl]pyrrolidine = 2638  
 (2*R*,3*R*,4*R*,5*R*)-2-Hydroxymethyl-3,4-dihydroxy-5-[(1*R*)-1-hydroxy-3-[6-(4-hydroxybutyl)-cyclohexy-2-on-1(6-enyl)propyl]pyrrolidine = 2639  
 (2*S*,3*S*,4*S*,5*S*)-2-Hydroxymethyl-3,4-dihydroxy-5-(3-hydroxy-4-methoxyphenyl)-pyrrolidine = 18524  
 (2*S*,3*S*,4*S*,5*S*)-2-Hydroxymethyl-3,4-dihydroxy-5-(4-hydroxyphenyl)-pyrrolidine = 18525  
 (2*R*,3*S*,4*R*,5*R*)-2-Hydroxymethyl-3,4-dihydroxy-5-[(*E*)-9-oxo-13-hydroxy-3-tridecenyl]pyrrolidine = 2644  
 (2*S*,3*S*,4*S*)-2-Hydroxymethyl-3,4-dihydroxy-5-(9-oxo-13-hydroxytridecyl)-5-pyrroline = 2642  
 (2*S*,3*S*,4*S*)-2-Hydroxymethyl-3,4-dihydroxy-5-(10-oxo-13-hydroxytridecyl)-5-pyrroline = 2643  
 (2*R*,3*R*,4*R*,5*R*)-2-Hydroxymethyl-3,4-dihydroxy-5-[(1*R*,5*S*)-1,5,13-trihydroxy-10-oxo-tridecyl]pyrrolidine = 2641  
 (2*R*,3*R*,4*R*,5*R*)-2-Hydroxymethyl-3,4-dihydroxy-5-[(1*R*,10*S*)-1,10,13-trihydroxytridecyl]pyrrolidine = 2640  
 1-(4-Hydroxy-2-methylenebutanoate)-6-((*S*)-3,4-dihydroxy-2-methylenebutanoate)- $\beta$ -*D*-glucopyranose = 22107  
 3 $\beta$ -Hydroxy-24-methylene-lanosta-7,9(11)-dien-21-oic acid = 4909  
 (4*S*,3*Z*)-4-Hydroxy-5-methylene-3-octadecylidene-di-hydro-furan-2-one = 23029  
 2-Hydroxymethylfuran = 8025  
 (-)-1*R*-3-Hydroxymethyl-1-(4'-hydroxy-3',5'-dimethoxyphenyl)-7-hydroxy-6,8-dimethoxy-1,2,3,4-tetrahydro-2-naphthalenylmethanol sulfate = 13254  
 5-Hydroxymethyl-6-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxa-bicyclo[3,2,1]oct-3-en-2-one = 5245  
 2-Hydroxymethyl-3,4-[1'-hydroxy-2'-(1-hydroxy-1-methylethyl)-dihydrofuran]-8-hydroxyanthraquinone = 3133  
 2-Hydroxymethyl-3,4-[2'-1-hydroxy-1-methylethyl]-dihydrofuran]anthraquinone = 3134  
 2-Hydroxymethyl-3,4-[2'-(1-hydroxy-1-methylethyl)-dihydrofuran]-8-hydroxyanthraquinone = 3132  
 2-Hydroxymethyl-1-methoxy-3,6-dihydroxyanthraquinone 3-*O*- $\beta$ -glucopyranoside = 18227  
 2-Hydroxymethyl-1-methoxy-3,5,6-trihydroxyanthraquinone 3-*O*- $\beta$ -glucopy-

- ranoside = 18226
- 3'-[ $\gamma$ -Hydroxymethyl (*E*)- $\gamma$ -methylallyl]-2,4,2',4'-tetrahydroxychalcone 11'-*O*-coumarate = 8262
- 2*R*-(3'-Hydroxy-8'-methyl-4'-methyliden-7'-nonaenyl)-5-hydroxy-2,7-dimethyl-2*H*-chromene = 4682
- 21-*O*-(2-Hydroxymethyl-6-methyl-6-methoxy-2,7-octadienyl)acacic acid = 11916
- 5-Hydroxy-2-methyl-1,4-naphthoquinone = 17568
- 1-Hydroxy-2-(4-methylpent-3-enyl)anthraquinone = 1368
- 2-(Hydroxymethyl)phenyl- $\beta$ -*D*-glucopyranoside = 19184
- (-)-4-Hydroxymethyl-2-(1',2',2'-trimethylcyclopentyl) phenol = 9425
- 10-Hydroxymontanin C = 425
- 9 $\beta$ -Hydroxy-monticamine = 7673
- 13-Hydroxymulin-11-en-20-oic acid = 15062
- 2-Hydroxy-1,4-naphthalenedione = 12580
- 5-Hydroxy-1,4-naphthoquinone = 11903
- 24*S*-Hydroxy-neotokorogenin 1-*O*- $\alpha$ -*L*-arabinopyranosyl 24-*O*- $\beta$ -*D*-glucopyranoside = 9341
- 2-Hydroxy-1,2,3-nonadecanetricarboxylic acid = 700
- 2-Hydroxy-3-nonadecyl-5-methoxy-1,4-benzoquinone = 11175
- 3-Hydroxy-25-norfriedel-3,1(10)-dien-2-one-30-oic acid = 21992
- 11- $\beta$ -Hydroxyobacunone = 22971
- (12*R*)-Hydroxy-*cis*-9-octadecenoic acid = 18841
- 3-Hydroxy-1-octene = 15984
- 7-Hydroxy-2-octen-5-olide = 7659
- 3 $\beta$ ,29-Hydroxy-olean-12-en-23,28-dioic acid 28-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)]- $\beta$ -*D*-glucopyranoside = 69
- 3 $\alpha$ -Hydroxyolean-12-en-23,28-dioic acid 28-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside = 3740
- 3 $\alpha$ -Hydroxy-12-oleanen-24-oic acid = 2567
- 3-Hydroxy-12-oleanen-28-oic acid = 16050
- 27-Hydroxyolean-12-en-28-oic-acid-3-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranoside = 18521
- 3 $\beta$ -Hydroxyolean-12-en-28-oic acid *O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl ester = 6981
- 27-Hydroxyolean-12-en-3-one = 3471
- 29-Hydroxy oleanic acid = 13799
- 12-Hydroxyorthosiphonol A = 16230
- 19-Hydroxy-14-oxoabieta-8,13(15)-dien-16,12-olide 19-*O*- $\beta$ -*D*-glucopyranoside = 17162
- 21-Hydroxy-23-oxo-20-en-limonin = 19801
- (24*Z*)-26-Hydroxy-3-oxo-7,24-euphadien-21-al = 10584
- (24*E*)-3 $\beta$ -Hydroxy-7-oxo-5 $\alpha$ -lanosta-8,24-dien-26-al = 13021
- 16 $\alpha$ -Hydroxy-3-oxolanosta-8,24-dien-21-oic acid = 17388
- (20*S*)-3 $\alpha$ -Hydroxy-30-oxolupan-23,28-dioic acid 28-*O*-[ $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl]-ester = 75
- 23-Hydroxy-3-oxo-20(29)-lupen-28-oic acid = 18191
- 15 $\alpha$ -Hydroxy-3-oxo-24-methylenelanost-8-en-21-oic acid = 7858
- 15 $\alpha$ -Hydroxy-16-oxo-olean-12(13)-en-3-*O*- $\beta$ -*D*-glucuronopyranoside = 7274
- 3 $\beta$ -Hydroxy-11-oxo-olean-12-en-30-oic acid-3-*O*- $\beta$ -*D*-(*n*-butyl-glucuronopyranosyl ester)-(1 $\rightarrow$ 2)- $\beta$ -*D*-(ethyl-glucuronopyranosyl ester) = 7422
- 3 $\beta$ -Hydroxy-11-oxo-olean-12-en-30-oic acid-3-*O*- $\beta$ -*D*-(*n*-butyl-glucuronopyranosyl ester)-(1 $\rightarrow$ 2)- $\beta$ -*D*-(methyl-glucuronopyranosyl ester) = 14185
- 3 $\beta$ -Hydroxy-11-oxo-olean-12-en-30-oic acid-3-*O*- $\beta$ -*D*-glucuronopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucuronopyranoside = 8847
- 3 $\beta$ -Hydroxy-11-oxo-olean-12-en-30-oic acid-3-*O*- $\beta$ -*D*-glucuronopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucuronopyranoside = 22243
- 3 $\beta$ -Hydroxy-11-oxo-olean-12-en-30-oic acid-3-*O*- $\beta$ -*D*-glucuronopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-glucuronopyranoside = 22244
- (2*Z*)-2-[(1*R*)-1-Hydroxy-2-oxo-propyl]-icos-2-enoic acid methyl ester = 19628
- 3-Hydroxy-4-oxo-4*H*-pyran-2,6-dicarboxylic acid = 13632
- 3-[9 $\beta$ -Hydroxy-2-oxo-4 $\alpha$ -quinolizidyl]-4-quinazolinone = 9698
- 12 $\alpha$ -Hydroxypachyrhizone = 10589
- 5 $\alpha$ -Hydroxy-2 $\alpha$ ,7 $\beta$ ,9 $\alpha$ ,10 $\beta$ ,13 $\alpha$ -Pentaacetoxy-4(20),11-taxadiene = 4849
- 5-Hydroxy-3,6,7,3',4'-pentamethoxy-flavone = 1792
- 5-Hydroxy-6,7,8,3',4'-pentamethoxyflavone = 5088
- threo*- $\Delta^7$ -7-Hydroxy-3,4,5,3',5'-pentamethoxy-8-*O*-4'-neoligna = 17688
- Hydroxypeucedanin hydrate = 2041
- 6 $\alpha$ -Hydroxyphaseollin = 10600
- 4-Hydroxyphenethyl alcohol = 22170
- (2,3)*trans*-*N*-(*p*-Hydroxyphenethyl)ferulamide = 7788
- p*-Hydroxyphenethyl- $\beta$ -*D*-glucoside = 18792
- 7-[2-(3-Hydroxyphenethyl)-4-hydroxy-6-methoxyphenoxy]-4-hydroxy-2-methoxy-9,10-dihydrophenanthrene = 17200
- 1-[4-Hydroxyphenoxy]-3-[3-hydroxy-4-methoxyphenyl]penta-1,4-diene = 10396
- 1-[4-Hydroxyphenoxy]-5-[3-methoxy-4-hydroxyphenyl]pent-2-en-3-yne = 13845
- 2-Hydroxy-2-phenylacetonitrile = 13478
- 2-Hydroxy-3-(phenylaminocarbonyl)naphthalene-1-azobenzene = 19458
- $\beta$ -(4-Hydroxyphenyl)ethyl-*O*- $\beta$ -*D*-apiofuranosyl-(1 $\rightarrow$ 2)-4-*O*-*trans*-feruloyl- $\beta$ -*D*-glucopyranoside = 3838
- 2-(4-Hydroxyphenyl)ethyl-*O*- $\beta$ -*D*-apiofuranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside = 16254
- 4-(4'-Hydroxy-phenyl)-6-prenyl-7-hydroxy-coumarin = 11037
- 3-(2-Hydroxyphenyl)propanoic acid = 13678
- 3-(4-Hydroxyphenyl)propanoic acid = 17169
- 3-Hydroxy-2-(13-phenyltridecanoyl)-cyclohex-2-enone = 20494
- (2*E*,6*E*,10*Z*)-1-Hydroxy-2,6,10,14-phytatetraen-18-oic Acid = 11563
- 8'-Hydroxypinoresinol = 10652
- 8'-Hydroxypinoresinol-4'-*O*- $\beta$ -*D*-glucoside = 10654
- 8-Hydroxypinoresinol-4'-*O*- $\beta$ -*D*-glucoside = 10655
- 21-Hydroxypregn-4-ene-3,20-dione = 5163
- 2-Hydroxy-1,2,3-propanetricarboxylic acid = 3766
- 2-Hydroxypropanoic acid = 12436
- 2-[4-(3-Hydroxy-propyl)-2,6-dimethoxyphenoxy]-propane-1,3-diol = 2767
- 5-(3''-Hydroxypropyl)-7-methoxy-2-(3',4'-dimethoxyphenyl)-benzofuran 3''-*O*-[ $\beta$ -*D*-xylopyranoside-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside] = 20422
- (*S*)-4-Hydroxypterisin A = 16102
- 3-Hydroxy-4*H*-pyran-4-one = 18271
- 5-Hydroxy-2-pyridylmethyl-adenine = 16759
- (*Z*)-2-Hydroxy-3-(4-pyridyl)-2-propenoic acid = 1846
- 4-Hydroxy-2-pyrrolidinecarboxylic acid = 10660
- Hydroxysanguarine = 16473
- 16 $\alpha$ -Hydroxy-3,4-seco-lanosta-4(28),8,24-triene-3,21-dioic acid = 17727
- 16 $\alpha$ -Hydroxy-3,4-seco-24-methyl-lanosta-4(28),8,24(24')-triene-3,21-dioic acid = 17728
- (3*S*)-3'-Hydroxysedanolid  $\beta$ -*D*-glucopyranoside = 3374
- 12-Hydroxysenecionan-11,16-dione = 19706

- 3 $\beta$ -Hydroxy-5 $\alpha$ ,25D-spirostan-12-one = 9253  
 (25R)-3 $\beta$ -Hydroxy-5 $\alpha$ -spirostan-6-one 3-O-[O- $\alpha$ -L-arabinopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -D-glucopyranoside] = 12593  
 (2 $\alpha$ ,3 $\beta$ ,5 $\alpha$ )-Hydroxyspirostan-3-yl O- $\beta$ -D-galactopyranosyl-(1 $\rightarrow$ 2)-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-galactopyranoside = 21017  
 Hydroxysuccinic acid = 13419  
 3 $\beta$ -Hydroxy-1 $\alpha$ ,7 $\beta$ ,11 $\beta$ ,15 $\beta$ -tetraacetoxy-ent-kaur-16-ene = 608  
 N-(2'-Hydroxy-n-tetracosanoyl)-n-eicosasphinga-(4E)-ene = 20227  
 N-(2'-Hydroxy-n-tetracosanoyl)-1,3,4-trihydroxy-n-pentadeca-sphingosine = 20226  
 (5E)-5-(2-Hydroxytetradexylidene)-furan-2(5H)-one = 10841  
 (5Z)-5-(2-Hydroxytetradexylidene)-furan-2(5H)-one = 10842  
 (-)-4-Hydroxy-1-tetralone = 10747  
 (4S)-4-Hydroxy- $\alpha$ -tetralone 4-O- $\beta$ -D-glucopyranoside = 11898  
 5-Hydroxy-1,2,3,4-tetramethoxyanthraquinone = 18876  
 4-Hydroxy-3,5,3',4'-tetramethoxybibenzyl = 3628  
 6'-Hydroxy-2',3',4,4'-tetramethoxychalcon = 15993  
 2-Hydroxy-1,6,7,8-tetramethoxy-3-methyl-9,10-anthracenedione = 3612  
 2-Hydroxy-1,5,6,7-tetramethoxyphenanthrene = 3627  
 1-Hydroxy-4,5,6,7-tetramethoxy-9H-xanthen-9-one = 20504  
 1-Hydroxy-2,3,4,6-tetramethoxyxanthone = 6628  
 (E)-7 $\beta$ -Hydroxy-3,11,15,23-tetraoxolanosta-8,20(22)-dien-26-oic acid = 8162  
 8 $\beta$ -(4'-Hydroxytigloyloxy)-14-chloro-4 $\beta$ ,10 $\beta$ -dihydroxy-1 $\alpha$ H,5 $\alpha$ H,6 $\beta$ H,7 $\alpha$ H-guai-2,11(13)-dien-6,12-olide = 7567  
 8 $\beta$ -(4'-Hydroxytigloyloxy)-3 $\alpha$ ,4 $\alpha$ :10 $\alpha$ ,14-diepoxy-2 $\beta$ -hydroxy-1 $\alpha$ H,5 $\alpha$ H,6 $\beta$ H,7 $\alpha$ H-guai-11(13)-en-6,12-olide = 7573  
 3'(R)-Hydroxy-4'(R)-tigloyloxy-3',4'-dihydroseslin = 18282  
 8 $\beta$ -(4'-Hydroxytigloyloxy)-3 $\alpha$ ,4 $\alpha$ -epoxy-2 $\beta$ -acetoxy-10 $\alpha$ ,14-dihydroxy-1 $\alpha$ H,5 $\alpha$ H,6 $\beta$ H,7 $\alpha$ H-guai-11(13)-en-6,12-olide = 7576  
 8 $\beta$ -(4'-Hydroxytigloyloxy)-2 $\beta$ ,14-epoxy-10 $\alpha$ -hydroxy-1 $\alpha$ H,5 $\alpha$ H,6 $\beta$ H,7 $\alpha$ H-guai-3,11(13)-dien-6,12-olide = 7569  
 8 $\beta$ -(4'-Hydroxytigloyloxy)-3 $\alpha$ ,4 $\alpha$ -epoxy-2 $\beta$ ,10 $\alpha$ ,14-trihydroxy-1 $\alpha$ H,5 $\alpha$ H,6 $\beta$ H,7 $\alpha$ H-guai-11(13)-en-6,12-olide = 7575  
 8 $\beta$ -(4'-Hydroxytigloyloxy)-4 $\alpha$ -hydroxy-1 $\alpha$ H,5 $\alpha$ H,6 $\beta$ H,7 $\alpha$ H-guai-2,10-(14),11(13)-trien-6,12-olide = 7568  
 8 $\beta$ -(4'-Hydroxytigloyloxy)-2 $\beta$ ,10 $\alpha$ ,14-trihydroxy-1 $\alpha$ H,5 $\alpha$ H,6 $\beta$ H,7 $\alpha$ H-guai-3,11(13)-dien-6,12-olide = 7572  
 8 $\beta$ -(4'-Hydroxytigloyloxy)-2 $\beta$ -acetoxy-14-chlorine-3 $\alpha$ ,4 $\alpha$ -epoxy-10 $\alpha$ -hydroxy-1 $\alpha$ H,5 $\alpha$ H,6 $\beta$ H,7 $\alpha$ H-guai-11(13)-ene-6,12-olide = 7545  
 8 $\beta$ -(4'-Hydroxytigloyloxy)-14-chlorine-3 $\alpha$ ,4 $\alpha$ -epoxy-2 $\beta$ ,10 $\alpha$ -dihydroxy-1 $\alpha$ H,5 $\alpha$ H,6 $\beta$ H,7 $\alpha$ H-guai-11(13)-ene-6,12-olide = 7544  
 8 $\beta$ -(4'-Hydroxytigloyloxy)-3 $\alpha$ ,4 $\alpha$ -epoxy-2 $\beta$ -hydroxy-1 $\alpha$ H,5 $\alpha$ H,6 $\beta$ H,7 $\alpha$ H-guai-1(10),11(13)-diene-6,12-olide = 7541  
 5 $\alpha$ -Hydroxy-2 $\alpha$ ,9 $\alpha$ ,10 $\beta$ -triacetoxy-11,12-epoxy-taxa-4(20)-en-13-one = 20799  
 3 $\beta$ -Hydroxy-1 $\alpha$ ,7 $\beta$ ,1 $\beta$ -triacetoxy-ent-kaur-16-en-15-one = 607  
 5 $\alpha$ -Hydroxy-9 $\alpha$ ,10 $\beta$ ,13 $\alpha$ -triacetoxytaxa-4(20),11-diene = 10780  
 rel-(2R,4S,6S)-4-Hydroxy-2-tridecyl-1,7-dioxo-dispiro[5.1.5.2]pentadeca-9,12-dien-11-one = 589  
 2'-Hydroxy-4,4',6'-trimethoxychalcone = 7818  
 (R)-5-Hydroxy-2',4',5'-trimethoxy-2'',2''-dimethylpyrano[5'',6'':6,7]isoflavone = 19108  
 (7S,8R)-4-Hydroxy-3',4',5'-trimethoxy-7,8-seco-2,7-cyclolignan-7,8-dione = 19615  
 trans-3-Hydroxy-2',3',5'-trimethoxystilbene(6) = 17199  
 7-Hydroxy-1,2,3-trimethoxyxanthone = 16108  
 5-Hydroxy-2,6,8-trimethylchromone 7-O- $\beta$ -D-glucopyranoside = 22215  
 4-Hydroxy-3,5,5-trimethyl-2-cyclohexen-1-one = 21967  
 1-(2-Hydroxy-2,6,6-trimethyl-4- $\beta$ -D-glucosyloxycyclohexylidene)-butane-2,3-dione = 3085  
 3-Hydroxy-3,7,11-trimethyl-9-oxododeca-1,10-diene = 15019  
 3-Hydroxy-12-ursene-27,28-dioic acid = 18427  
 27 $\alpha$ -Hydroxyurs-12-ene-3-O-[ $\beta$ -D-glucopyranosyl(1 $\rightarrow$ 4)(2-O-sulpho)- $\beta$ -D-quinovopyranoside] = 1998  
 2 $\alpha$ -Hydroxyursolic acid = 4088  
 19 $\alpha$ -Hydroxyursolic acid = 17696  
 $\alpha$ -Hydroxyvaline = 16480  
 $\beta$ -Hydroxyvaline = 16481  
 14'-Hydroxyvincal leukoblastine = 12732  
 15' $\alpha$ -Hydroxyvincal leukoblastine = 22488  
 17-Hydroxy withaferin = 7210  
 Hymenoratin = 15991  
 Hyndarine = 21077  
 Hyperoside = 10887  
 Hypolepin A = 18143  
 Hypolepin C = 18144
- ## I
- Icariin = 1275  
 Icaritin = 1273  
 Ichthyopterin = 9853  
 Idaein = 4439  
 $\alpha$ , $\beta$ -Dihydroxanthohumol = 5742  
 Ikariside A = 2139  
 Ikariside C = 6492  
 Ilexgenin A = 6175  
 Ilexol = 2169  
 Ilexolide = 10981  
 7H-Imadazo[4,5-d]pyrimidine = 18209  
 4-Imidazoleacrylic acid = 22260  
 22,26-Imino-17,23-oxidojerv-12-en-6-oxo-3 $\beta$ ,11 $\alpha$ -diol = 22907  
 Imperatorin oxide = 16447  
 (17R,20S,22R)-5 $\alpha$ -Impra-15,16-ene-3 $\beta$ ,6 $\beta$ -diol = 5645  
 3S,17R,20S,22R)-5 $\alpha$ -Impra-15,16-ene-6-one = 11005  
 Inapine glucosinalbate = 19909  
 Indan-1-one = 11013  
 $\alpha$ -Indanone = 11013  
 Indicine = 6686  
 Indigo = 11023  
 1H-Indole-3-acetonitrile 4-O- $\beta$ -glucopyranoside = 3136  
 1H-Indole-3-acetonitrile 4-O- $\beta$ -(6'-O- $\beta$ -glucopyranosyl)-glucopyranoside = 3137  
 2,3-Indolinedione = 11190  
 Indolo[2,1b]-quinazoline-6,12-dione = 18287  
 Indolo[2,3-a]quinolizine-2-(1-hydroxyethyl)-3-hydroxy-4,6,7,12-tetrahydro-4-one = 15291  
 (3,4-trans)-3-(5'-Indolyl)-1,4-dimethyl-4-[ethyl-2-(5''-indolyl)enyl]-cyclohex-1-ene = 3336  
 (3,4-cis)-3-(5'-Indolyl)-1,4-dimethyl-4-[ethyl-2-(5''-indolyl)enyl]-cyclohex-1-ene = 3337

- 2-{4-[1-(1*H*-Indol-2-yl)-vinyl]-1-methyl-piperidin-3-ylidene} ethanol = 13501  
 Ineupatolide = 7075  
 Inflasaponin IV = 5405  
 Inflatine = 12939  
 Infractine = 14218  
 Ingenol-3-(2,4-decadienoate)-20-acetate = 4820  
 Inocalophyllin A = 2991  
*Chiro*-Inositol = 11083  
 Inrosidine = 12733  
 Insularoside-3'-*O*- $\beta$ -*D*-glucoside = 11089  
 Irigenin-5-*O*-(6'''-*O*-vanillin acid)- $\beta$ -*D*-glucoside = 19798  
 Iriskashmirianin 4'-*O*- $\beta$ -*D*-glucoside = 8349  
 Irisquinone = 11179  
 Iryelliptin B = 10515  
 Isoacoradinene = 6373  
 Isoamyl-3-furyl ketone = 16929  
 Isoartemisia ketone = 1795  
 Isoasarone = 957  
 Isobarbaloin = 981  
 Isobutanol = 11268  
*N*-Isobutyl-4-hexanoyl-4-hydroxypyrrolidin-1-one = 17445  
*N*-Isobutyl-3,4-methylenedioxybenzethenylamide = 7702  
 4-Isobutyl-6-methyl-5-oxo-3a,4,5,7a-tetrahydro-1*H*-inden-13-oic acid = 22535  
 Isocaboxine A = 22502  
 Iso-4-cadinene-2 $\alpha$ ,10 $\beta$ -diol = 11471  
 Isocarthamin = 15358  
 Isocaryophyllene = 3241  
 Isocephalomannine = 4813  
 Isochamic acid = 11322  
 Isochlorogenic acid B = 5414  
 (+)-Isocorydine = 11344  
 Isocucurbitacin = 5114  
 Isodextropimaric acid = 11600  
 Isodihydronepetalactol = 11559  
 Isodonol = 16183  
*trans*-Isoeemicine = 11408  
 Isofebrifugine = 5435  
 Isoferulic acid = 9455  
 Isoformononetin-4'-glucoside = 11576  
 28-Isofucosterol = 11431  
 Isofuranodiene = 8014  
 Isofuranodienone = 8015  
 Isofuranogermacrene = 4415  
 Isogemichalcone C = 8262  
 Isohenin = 11203  
 Isokaempferide 7-*O*- $\beta$ -*D*-glucopyranouronide = 2585  
 Isokempferide = 12070  
 (+)-Isolariciresinol = 11477  
 Isoliquiritigenin = 21694  
 Isoliquiritigenin-4- $\beta$ -glucoside = 15414  
 (-)-Isolongifolene = 11510  
 Isolupinine = 6955  
 Isomammeisin = 13469  
 Isomesuol = 13470  
*L*-Isomexoticin = 14825  
 Isoorientin = 9616  
 Isopelletierine = 16789  
 Isopentanal = 11752  
 Isopentanol = 11218  
 8-Isopentenylimettin = 4193  
*trans*-4-Isopentenyl-3,5,2',4'-tetrahydroxystilbene = 17841  
 8(14),15-Isopimaradi-ene-6 $\alpha$ -ol = 13560  
 2-Isopropenyl-2,3-dihydrobenzofuran-5-carboxylic acid = 7855  
 7-Isopropenyl-2,3-dimethoxy-6-methyl-6-vinyl-5,6,7,8-tetrahydronaphthal-ene-1,4-dione = 9321  
*p*-Isopropyl-benzaldehyde = 4354  
 4-Isopropylbenzyl alcohol = 4357  
 4-Isopropyltoluene = 4550  
 Isopsoralen = 1191  
 Isoquassin = 17327  
 Isoquercetin = 11642  
 Isoquercetrin = 11642  
 Isorhamnetin-3-*O*- $\beta$ -*D*-galactopyranoside = 2843  
 Isorhamnetin 3-*O*-(6''-*O*- $\alpha$ -*L*-rhamnopyranosyl)- $\beta$ -*D*-glucopyranoside = 11669  
 Isorhamnetin-3-*O*-(2<sup>G</sup>- $\alpha$ -*L*-rhamnopyranosyl)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside = 22154  
 Isorhodeasapogenin 3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)-[ $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-galactopyranoside = 9342  
 7-Isorhynchophylline = 11680  
 Isosarsapogenin = 20025  
 Isosarsapogenin-3-*O*-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -*D*-mannopyranoside = 20027  
 Isoschizandrolic acid = 11525  
 Isoscutellarein-8-methyl ether = 10829  
 Isostrictinin = 19277  
 Isotadeonal = 11609  
 Isotazettine = 17850  
 Isoterpinene = 20998  
 (+)-Isotetrandrine = 13715  
 Isothiocyanato-benzene = 17125  
 2-Isothiocyanato-butane = 2799  
 3-Isothiocyanato-1-propene = 949  
 Isovaleral = 11752  
 Isovanillic acid = 10381  
 Isoverbascoside = 11195  
 Isovitexin 2''-*O*-(6'''-(*E*)-feruloyl)- $\beta$ -glucopyranoside-4'-*O*- $\beta$ -glucopyranoside = 11776  
 Isovitexin 7-*O*- $\beta$ -*D*-glucopyranoside = 19331  
 Isovouacapenol C = 2244  
 Isozaluzanin C = 7044
- ## J
- Jaeschkeanadiol *p*-hydroxybenzoate = 7792  
 Jaeschkeanadiol *p*-methoxybenzoate = 7791  
 Japonicine A = 852  
 Jatamansone = 22313  
 Jatrophalactam = 11842  
 Jayacanol = 21719



Jayacanol 3-methyl ether = 5972  
 Jikon = 8083  
 Jionoside A<sub>1</sub> = 22664  
 Judaicin = 20730  
 Juruenolide E = 10516  
 Justicidin E = 11981  
 Juziphine = 22958

## K

Kadsulignan K = 9466  
 Kaempferol 3,7-di-*O*- $\alpha$ -rhamnopyranoside = 12018  
 Kaempferol 3- $\alpha$ -*L*-(4-*O*-acetyl)rhamnopyranoside-7- $\alpha$ -*L*-rhamnopyranoside = 20499  
 Kaempferol 3-*O*- $\alpha$ -*L*-arabinofuranoside = 11897  
 Kaempferol-3-*O*-(6"-coumaroyl)-glucoside = 21392  
 Kaempferol-3-*O*-[6"-(*E*)-*p*-coumaroyl]- $\alpha$ -*D*-mannopyranoside = 3297  
 Kaempferol 3- $\alpha$ -*L*-(2,4-di-*O*-acetyl)rhamnopyranoside-7- $\alpha$ -*L*-rhamnopyranoside = 4214  
 Kaempferol 3- $\alpha$ -*L*-(3,4-di-*O*-acetyl)rhamnopyranoside-7- $\alpha$ -*L*-rhamnopyranoside = 4215  
 Kaempferol 3- $\alpha$ -*L*-(2,3-di-*O*-acetyl)rhamnopyranoside-7- $\alpha$ -*L*-rhamnopyranoside = 4216  
 Kaempferol-3-*O*-[6",4"-di-(*E*)-*p*-coumaroyl]- $\alpha$ -*D*-mannopyranoside = 3298  
 Kaempferol 3-(2,3-di-*E*-*p*-coumaroyl)- $\alpha$ -*L*-rhamnopyranoside = 17528  
 Kaempferol 3-*O*-(2",6"-di-*O*- $\alpha$ -*L*-rhamnopyranosyl)- $\beta$ -*D*-glucopyranoside = 3846  
 Kaempferol 3-*O*- $\beta$ -*D*-galactopyranoside = 21634  
 Kaempferol-3-*O*- $\beta$ -*D*-glucopyranoside = 1935  
 Kaempferol-3-*O*-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-galactopyranoside] = 16587  
 Kaempferol-3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranoside = 20088  
 Kaempferol-3-glucose-7-diglucoside = 12042  
 Kaempferol-7-*O*- $\beta$ -*D*-(6"-*O*-*p*-hydrocinnamoyl)-*D*-glucoside = 2392  
 Kaempferol 3- $\beta$ -*D*-mannoside = 1069  
 Kaempferol-4'-methylether = 12015  
 Kaempferol-7-methylether = 18682  
 Kaempferol 3-*O*- $\alpha$ -*L*-rhamnopyranoside = 12082  
 Kaempferol-3-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-galactopyranosyl-7-*O*- $\alpha$ -*L*-rhamnopyranoside = 18859  
 Kaempferol 3-*O*-(2"-*O*- $\alpha$ -rhamnopyranosyl)- $\beta$ -glucopyranoside = 12071  
 Kaempferol-7-*O*- $\alpha$ -*L*-rhamnopyranosyl-3-*O*-(6"-*P*-coumaroyl)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-xylopyranoside = 15195  
 Kaempferol-3-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-rabinofuranoside = 1778  
 Kaempferol-3-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 6)-[ $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -*D*-galactopyranosyl-7-*O*- $\alpha$ -*L*-rhamnopyranoside = 1950  
 Kaempferol-7-*O*- $\alpha$ -*L*-rhamnoside = 12083  
 Kaempferol 3-*O*-(6"-*O*- $\alpha$ -rhamonpyranosyl)- $\beta$ -glucopyranoside = 15525  
 Kaempferol-3-*O*- $\beta$ -rutinoside = 15525  
 Kaempferol-3-rutinoside-7-glucoside = 12087  
 Kainic acid = 936  
 Kajiichigoside F1 = 21864  
 Kakkonein = 22080  
 Kalopanasaponin A = 9276  
 Kalopanaxsaponin G = 18197  
 Kalopanax septemlobus asponin A = 9276

Kalosapogenin = 9260  
 Kanzuol = 21409  
 Karoundiol 3-*O*-benzoate = 12166  
 Kashmirine = 11002  
*ent*-Kauran-16 $\beta$ ,17-acetal *ent*-16 $\beta$ -kauran-17(*S*)-aldehyde = 7965  
*ent*-Kauran-16 $\beta$ -hydroxy-17-chloride = 7958  
 Kaurenoic acid = 12178  
 16-*ent*-Kauren-19-ol = 12180  
 Kelampayoside A = 21923  
 Keracyanin = 4446  
 Ketocalogenin-3-*O*- $\alpha$ -*L*-fucopyranoside = 13578  
 Ketologanin = 4943  
 4-Ketolutein = 6560  
 Kidjolanin 3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-cymaropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-cymaropyranoside = 992  
 Kidjolanin 3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-thevetopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-cymaropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-cymaropyranoside = 990  
 Kidjolanin 3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-thevetopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-cymaropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-cymaropyranoside = 991  
 Kikemanine = 4104  
 Kiuminine = 8257  
 Kizutasaponin K<sub>10</sub> = 3343  
 Klinit = 22814  
 Koelreuteriasaponin A = 3340  
 Koenidine = 12247  
 Komalin = 9420  
 (-)-Koumine = 12289  
 Kumujancine = 7908  
 Kumujian A = 3156  
 Kumujian B = 3158  
 3 $\alpha$ -Kurameroyloxytropene = 13786  
 Kuwanon C = 15038

## L

8(17),13-Labdadiene-6 $\alpha$ ,15-diol = 4270  
 Lagerstroemine = 12450  
 Lanceolatin C = 17708  
 (24*R*)-Lanosta-7,9(11)-diene-2 $\alpha$ ,3 $\beta$ ,12 $\alpha$ ,21,24,25-hexaol = 20443  
 Lanosta-8,24-dien-3 $\beta$ -ol = 12488  
 Lanost-20(22)-ene-30-ol = 633  
 (7'*S*,8*R*,8'*R*)-(+)-Lariciresinol = 12520  
 Larixinic acid = 13452  
 Laserpitin = 18282  
 Laudanosoline 4',6-dimethyl ethe = 18655  
 Laurencenone C = 16300  
 Lauric acid = 12569  
 Lecobetaine = 22232  
 Ledebouridine = 12599  
 Lederbourine = 12600  
 Leonuride = 815  
 Leptospermol = 21199

Leptospermone = 21199  
 Leucaenol = 14868  
 Leucuharmine = 9235  
 Leukamenin F = 8515  
 Leuroristine = 22497  
 Licoagrochalcone = 12751  
 Licoagroside = 12759  
 Licoflavone = 12774  
 Licoisoflavone A = 12778  
 Liconeolignan = 12764  
 Limbatolide C = 7835  
 Limettin = 3770  
 (*R*)-(+)-Limonene = 12843  
 (*S*)-(-)-Limonene = 12844  
 Limonianin = 1956  
 Limonindiosphenol = 7669  
 Limonoid = 5147  
 Linalool acetate = 12850  
 Lindeneol = 12871  
 Lindenyl acetate = 12872  
 Linderic acid = 6543  
 Linearoside = 15133  
*trans,trans*-Linoleic acid = 12892  
 Linolenic acid methyl ester = 14555  
 Liquidambronic acid = 2338  
 Lirioresinol B = 20556  
 Lirioresinol dimethyl ether = 5378  
 $\alpha$ -Lobeline = 12939  
 $\beta$ -Lofoline = 7741  
 Loganoside = 12950  
 Lomatin = 11835  
 Lonchocarpol A = 6497  
 Lonicerose = 19623  
 Lophenol = 14235  
 Lucidenic acid D = 13027  
 Lucidenolactone = 8195  
 Ludongnin B = 9081  
 lupanidine = 13606  
 12-Lupanone = 3843  
 Lupenyl acetate = 13100  
 Lupeol caffeate = 2910  
 Luteolin-7-apio-glucoside = 8990  
 Luteolin 6-*C*- $\alpha$ -*L*-arabinopyranosyl-8-*C*- $\beta$ -*D*-glucopyranoside = 11306  
 Luteolin-6-*C*- $\beta$ -*D*-glucopyranoside = 9616  
 Luteolin-8-*C*- $\beta$ -*D*-glucopyranoside = 16196  
 Luteolin 7-*O*- $\beta$ -*D*-glucopyranosiduronic acid = 13147  
 Luteolin-7-*O*-glucoside = 3674  
 Luteolin-7-*O*- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranoside = 12987  
 Luteolin 7-*O*-rutinoside = 13149  
 Lyciumamide = 1345  
 Lyclavatol = 3810  
 Lycobergine = 13193  
 Lycopersicin = 21435

Lycopersidin = 21435  
 Lycoremine = 8083  
 3-*O*- $\beta$ -Lycotetraosyl-(23*S*,24*R*)-23-acetoxy-24-*O*- $\beta$ -*D*-glucopyranosylsoladulide-24-ol = 13218  
 3-*O*- $\beta$ -Lycotetraosyl-23(*R*)-23-acetoxy-27-hydroxy-27-*O*- $\beta$ -*D*-glucopyranosyltomatidine = 13217  
 3-*O*- $\beta$ -Lycotetraosyl 3 $\beta$ ,16 $\beta$ -dihydroxy-5 $\alpha$ -pregn-20-one 16-*O*-[(4*S*)-2,5-epimino-2-methoxy-4-( $\beta$ -*D*-glucopyranosyloxy) methyl-pentanoic acid]-ester = 7378  
 3-*O*- $\beta$ -Lycotetraosyl(5*S*,25*S*)-22,26-epimino-16 $\beta$ ,23-epoxy-23 $\alpha$ -methoxy-22(*N*)-ene-3 $\beta$ ,20 $\alpha$ ,27-trihydroxycholestane 27-*O*- $\beta$ -*D*-glucopyranoside = 7377  
 3-*O*- $\beta$ -Lycotetraosyl-22-isopimpifolidine = 13219  
 (+)-Lyoniresinol-2 $\alpha$ -*O*- $\alpha$ -*L*-arabinopyranoside (D<sub>1</sub>) = 8242  
 (+)-Lyoniresinol-9,9'-diacetate = 8241  
 (+)-Lyoniresinol 3 $\alpha$ -[2-(3,5-dimethoxy-4-hydroxy)-benzoyl]-*O*- $\beta$ -glucopyranoside = 63  
 Lyonotin = 1847

## M

Maackolin = 12258  
 Maaliol = 13283  
 (8*S*,8'*R*)-Macelignan = 1466  
 Macluraxanthone = 9857  
 Macrocalyxin C = 1038  
 Macrocalyxoforin C = 11056  
 Maculotoxin = 21211  
 Madasiatic acid 28-*O*- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside = 3396  
 Madecassic acid = 2586  
 Madecassic acid 28-*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside = 3395  
 Maesaponin = 13358  
 Magnolenin = 20569  
 Mahanimbicine = 11520  
 Mahuangnin A = 6822  
 Makisterone C = 12620  
 Malonylginsenoside Rb<sub>1</sub> = 13444  
 Maltobiose = 13454  
 Maltodiose = 13454  
 Maltol-3-*O*- $\beta$ -*D*-glucopyranoside = 5371  
 Malvalic acid = 13455  
 Malvin = 13460  
 Mammeigin = 13467  
 $\alpha$ -Mangostin = 13492  
 Maniladiol = 16041  
 Margaric acid = 4672  
 Margaspidin BB = 13559  
 Margetine = 13238  
 (+)-Marmesinin = 15647  
 Marsupsin = 3222  
 (-)-Maslinic acid = 6059  
 Masticadienolic acid = 10363  
*cis*-Matrine = 13606  
 Matrine *N*-oxide = 16451

- Matsutake alcohol = 15983  
Matsutakeol = 13608  
Maytenfolic acid = 27  
Mearnsetin-3-*O*- $\alpha$ -rhamnopyranoside = 13628  
Mecambrine = 7980  
Medioresinol = 13640  
(+)-Medioresinol monoglucoside = 7487  
(3*S*,9*S*,5*Z*,7*E*)-Megastigma-5,7-diene-3,9-dihydroxy-4-one 9-*O*- $\beta$ -*D*-glucopyranoside = 20264  
(3*S*,5*R*,6*S*,9*S*)-Megastigman-3,9-diol 3-*O*- $\beta$ -*D*-glucopyranoside = 15212  
(3*S*,9*S*)-Megastigman-5-ene-3,9-diol 3,9-di-*O*- $\beta$ -*D*-glucopyranoside = 20274  
(1*S*,3*S*,5*R*,6*R*,9*R*)-Megastigman-7-ene-3,9-diol-5,12-epoxide 9-*O*- $\beta$ -*D*-glucopyranoside = 2610  
(3*S*,4*S*,5*R*,6*S*,9*S*,7*E*)-Megastigman-7-ene-5,6-epoxy-3,4,9-triol 9-*O*- $\beta$ -*D*-glucopyranoside = 20266  
(3*R*,4*R*,5*R*,6*R*,9*S*,7*E*)-Megastigman-7-ene-3,4,5,9-tetraol 9-*O*- $\beta$ -*D*-glucopyranoside = 20273  
(3*R*,5*R*,6*R*,9*S*,7*E*)-Megastigman-7-ene-3,5,6,9-tetrol 9-*O*- $\beta$ -*D*-glucopyranoside = 20265  
(3*S*\*,5*R*\*,6*S*\*,9 $\zeta$ )-Megastigman-7-ene-3,6,9,10-tetrol 9-*O*- $\beta$ -*D*-glucopyranoside = 2608  
(3*S*\*,5*R*\*,6*S*\*,9 $\zeta$ )-Megastigman-7-ene-3,6,9,10-tetrol 10-*O*- $\beta$ -*D*-glucopyranoside = 2609  
(5*R*,6*S*,9 $\zeta$ )-Megastigman-7-ene-6,9,10-triol-3-one 9-*O*- $\beta$ -*D*-glucopyranoside = 2607  
(3*S*,5*R*,6*R*,9*S*,7*E*)-Megastigman-5,6-epoxy-7-ene-3,9-diol 9-*O*- $\beta$ -*D*-glucopyranoside = 20271  
(5*R*,6*R*,9*R*)-Megastigman-3-on-6,9-diol 9-*O*- $\beta$ -*D*-glucopyranoside = 15211  
(6*R*,7*E*,9*S*)-Megastigman-3-one-4,7-diene-9,13-diol 13-*O*- $\beta$ -*D*-glucopyranoside = 8567  
(6*S*,7*E*,9*S*)-Megastigman-3-one-4,7-diene-6,9,13-triol 13-*O*- $\beta$ -*D*-glucopyranoside = 8565  
(6*R*,9*S*)-Megastigman-3-on-4-ene-9,13-diol = 8566  
(6*S*,9*R*)-Megastigman-3-on-4-ene-9-ol 9-*O*- $\beta$ -*D*-glucopyranoside = 2522  
(5*R*,6*S*,9*R*)-Megastigma-3-on-9-ol 9-*O*- $\beta$ -*D*-glucopyranoside = 15210  
Melanthigenin = 9260  
Meliotocarpin A = 13679  
Melissic acid B = 9366  
Melittoside 3"-*O*- $\beta$ -glucopyranoside = 18599  
Menisporohine = 13717  
1,8-*p*-Menthadiene = 6482  
(*R*)-(+)-*m*-Mentha-6,8-diene = 20524  
*p*-Mentha-1,4(8)-diene = 20998  
*p*-3,8(9)-Menthadien-1-ol = 13727  
*p*-(*R*)-Mentha-1,8-dien-7-ol = 16927  
*p*-(*S*)-Mentha-1,8-dien-7-ol = 16928  
Meratin = 18342  
Mesatlantin E = 4941  
Methanal = 7881  
Methanoic acid = 7882  
7 $\alpha$ -Methoxy-8,13-abieta-11,12-dione = 20462  
7 $\alpha$ -Methoxyabieta-8,13-diene-11,12-dione-(20,6 $\beta$ )-olide = 18923  
7 $\beta$ -Methoxyabieta-8,13-diene-11,12-dione-(20,6 $\beta$ )-olide = 18922  
4-Methoxyallylbenzene = 7385  
4-Methoxybenzoic acid = 1284  
3 $\alpha$ -(4-Methoxybenzoyloxy)nortropane = 13785  
3-(4-Methoxybenzyl)-5,7-dimethoxychroman-4-one = 6256  
3-Methoxycarbonylcarbazole = 14217  
(8 $\alpha$ )-6'-Methoxycinchonan-9-one = 18424  
*p*-Methoxycinnamic acid ethyl ether = 7474  
4-*O*-(*E*)-*p*-Methoxycinnamoyl- $\alpha$ -*L*-rhamnopyranoside = 2712  
6-*O*-*E*-*p*-Methoxycinnamoyl scandoside methyl ester = 13895  
5'-Methoxy-cleomiscosin A = 3831  
7-Methoxycoumarin = 9452  
7-Methoxydaphnoritin = 4658  
6-Methoxy-5,6-dihydrochelerythrine = 3499  
1- $\beta$ -Methoxy-3,4-dihydro-3 $\alpha$ -hydroxy-8-*O*-acetylharpagide aglucone = 3785  
2-Methoxy-4,6-dihydroxy- $\alpha'$ -chalcanol- $\alpha$ -epoxide-4-*O*- $\beta$ -*D*-glucopyranoside = 21631  
2-Methoxy-4,7-dihydroxy-6-isopentenyl-9,10-dihydrophenanthrene = 19930  
7-Methoxy-8-(2',3'-dihydroxy-3'-methylbutyl)coumarin = 13781  
3'-Methoxy-4',5'-dihydroxy-6,7-methylenedioxyisoflavone = 11152  
7-Methoxy-2,2-dimethyl-2*H*-1-benzopyran-6-carboxylic acid = 13840  
5-Methoxy-*N,N*-dimethyl-tryptamine = 6370  
(5' $\beta$ ,9' $\alpha$ ,10' $\alpha$ )-7-*O*-(3 $\alpha$ -Methoxy-8'(12')-drimen-11'-yl)-scopoletin = 6604  
3-Methoxy-6-*O*- $\beta$ -*D*-glucopyranosyl[2'',3'':7,8]furanoflavone = 17711  
6-Methoxy-3'-*O*- $\beta$ -*D*-glucopyranosyl[2'',3'':7,8]furanoflavone = 17710  
4-Methoxy-6-( $\beta$ -*D*-glucopyranoxymethyl)-2*H*-pyran-2-one = 16160  
3-Methoxy-4-*O*- $\beta$ -*D*-glycopyranosylpropiophenone = 2107  
(2*R*,3*R*)-5'-MethoxyguayaroI [(2*R*,3*R*)-3-(3,4-dihydroxybenzyl)-2-(3,4,5-trimethoxybenzyl)-butyrolactone] = 13945  
10-Methoxyheptadeca-1-ene-4,6-diyne-3,9-diol = 16586  
3-( $\alpha$ -Methoxy-4-hydroxybenzylidene)-6-hydroxybenzo-2(3*H*)-furanone-7-*C*- $\beta$ -*D*-glucopyranoside = 18106  
4-Methoxy-5-hydroxycanthin-6-one = 15561  
 $\alpha$ -*O*-[2-*O*-(3-Methoxy-4-hydroxycinnamoyl)- $\beta$ -*D*-glucopyranosyl]-3,4-dihydroxyphenylethanol = 14918  
(*E*)-*N*-(3-Methoxy-4-hydroxycinnamoyl)-5-hydroxytryptamine = 14999  
(*Z*)-*N*-(3-Methoxy-4-hydroxycinnamoyl)-5-hydroxytryptamine = 14998  
6-Methoxy-7-hydroxycoumarin = 19542  
4'-Methoxy-5-hydroxy-8-3,3-dimethylallyl-flavone-3-glucosyl-(1 $\rightarrow$ 2)rhamnoside-7-glucoside = 6959  
4'-Methoxy-5-hydroxy-8-3,3-dimethyl allylflavone-3-rhamnosyl-(1 $\rightarrow$ 2)rhamnoside-7-glucoside = 6961  
4'-Methoxy-5-hydroxy-8-3,3-dimethyl allylflavone-3-xyloxy-(1 $\rightarrow$ 2)rhamnoside-7-glucoside = 6960  
5-Methoxy-12-hydroxy-11,14-dioxo-abieta-8,12,15-triene = 2584  
3-Methoxy-4-hydroxy-5-(3'-methyl-2') butylenyl benzoic acid = 17902  
3-Methoxy-4-hydroxyphenyl-1-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1'' $\rightarrow$ 6'')- $\beta$ -*D*-glucopyranoside = 4365  
5-Methoxy-8-(3''-hydroxymethyl-but-2''-enyloxy)-psoralen = 13963  
*N*-(3'-Methoxy-4'-hydroxyphenethyl)-4-*O*- $\beta$ -*D*-galactopyranosyl-isoferulamide = 11331  
3-Methoxy-4-hydroxy-phenethyl-*O*-[ $\alpha$ -*L*-rhamno-pyranosyl-(1 $\rightarrow$ 3)]-*O*-[ $\beta$ -*D*-apiofuranosyl-(1 $\rightarrow$ 6)]-4-*O*-feruloyl- $\beta$ -*D*-glucopyranoside = 12462  
2-(3-Methoxy-4-hydroxy) phenyl ethanol 1-*O*- $\alpha$ -*L*-[(1 $\rightarrow$ 3)-rhamnopyranosyl-6-*O*-feruloyl] glucoside = 6965  
4''-(3'''-Methoxy-4'''-hydroxyphenyl)-2''-oxo-3'''-enebutanyl 3-(3'-methoxy-4'-

- hydroxyphenyl)propenoate = 2960
- 5-Methoxy-(+)-isolariciresinol-9,9'-diacetate = 8240
- 3'-Methoxyisovitexin 2''-*O*-(6'''-(*E*)-*p*-coumaroyl)- $\beta$ -glucopyranoside = 11700
- 3'-Methoxyisovitexin 2''-*O*-(6'''-(*E*)-*p*-coumaroyl)- $\beta$ -glucopyranoside-4'-*O*- $\beta$ -glucopyranoside = 11701
- (10*R*)-15-Methoxy-8(17),13-labdadien-16,15-olide-19-oic acid = 14069
- (10*S*)-15-Methoxy-8(17),13-labdadien-16,15-olide-19-oic acid = 14070
- 6-Methoxycarbonyl-3,3-dimethyl-4 $\alpha$ ,6 $\alpha$ -di( $\gamma$ , $\gamma$ -dimethylallyl)-2 $\alpha$ -(2-methyl-1-oxo-propyl)cyclohexanone = 8217
- 4'-Methoxyquercetin-3-*O*- $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranoside-3'-*O*- $\beta$ -*D*-glucopyranoside = 662
- 3-Methoxyl-9'- $\alpha$ -*L*-rhamnopyranosyl-4':7,5':8-diepoxyneoligan-4,9-diol = 13587
- 6-Methoxyluteolin = 7556
- 6-Methoxyluteolin-7-glucoside = 7557
- 7-Methoxy-8-(1'-methoxy-2'-hydroxy-3'-methyl-3'-butenyl)coumarin = 859
- 5-Methoxy-2-(4-methoxyphenyl)-benzofuran = 4095
- 5-Methoxy-2-(4-methoxyphenyl)-2,3-dihydrobenzofuran = 4093
- 7-Methoxy-8-(3-methyl-2-butenyl)-2*H*-1-benzopyran-2-one = 16261
- 2-Methoxy-3-methyl-4,6-dihydroxy-5(3'-hydroxyl)cinnamoylbenzaldehyde = 5269
- 7-Methoxy-3',4'-methylenedioxyflavone = 14376
- 3-Methoxy-3',4'-methylenedioxy-7-*O*- $\beta$ -*D*-glucopyranosyl flavone = 17712
- 2-(3-Methoxy-4,5-methylenedioxyphenyl)-4*H*-1-benzopyran-4-one = 14016
- 4-Methoxy-3-methyl-5-[(2*Z*,11*aS*)-3*at*,11*t*-epoxy-8*t*-(1*R*)-1-hydroxypropyl)-1*c*-methyl-(11*ar*,11*bc*)-dodecahydro-furo[3,2-*c*]pyrido[1,2-*a*]azepin-2-ylidene]-5*H*-furan-2-one = 16475
- 4-Methoxy-3-methyl-5-[(2*Z*,11*aS*)-3*at*,11*t*-epoxy-8*t*-(1*R*)-1-hydroxypropyl)-1*c*-methyl-(11*ar*,11*bc*)-dodecahydro-furo[3,2-*c*]pyrido[1,2-*a*]azepin-2-ylidene]-5*H*-furan-2-one-*N*-oxide = 16476
- 4-Methoxy-3-methyl-5-[(2*Z*,11*aS*)-3*at*,11*t*-epoxy-1*c*-methyl-(11*ar*,11*bc*)-dodecahydrofuro[3,2-*c*]pyrido[1,2-*a*]azepin-2-ylidene]-5*H*-furan-2-one = 18260
- 4-Methoxy-3-methyl-5-[(2*Z*,11*aS*)-8*t*-(1*R*)-1-hydroxypropyl)-1*c*-methyl-(11*ar*,11*bc*)-1,2,5,6,8,9,10,11,11*a*,11*b*-decahydro-furo[3,2-*c*]pyrido[1,2-*a*]azepin-2-ylidene]-5*H*-furan-2-one = 20305
- 4-Methoxy-3-methyl-5-[(2*Z*,11*aS*)-8*t*-(1*R*)-1-methoxypropyl)-1*c*-methyl-(11*ar*,11*bc*)-1,2,5,6,8,9,10,11,11*a*,11*b*-decahydrofuro[3,2-*c*]pyrido[1,2-*a*]azepin-2-ylidene]-5*H*-furan-2-one-*N*-oxide = 14094
- 5'-Methoxynobiletin = 9406
- 11 $\alpha$ -Methoxy-olean-12-ene-1 $\beta$ ,3 $\beta$ ,28-triol 28-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranoside = 11985
- 11 $\alpha$ -Methoxy-olean-12-ene-1 $\beta$ ,3 $\beta$ ,28-triol 28-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranoside = 11986
- 1 $\beta$ -Methoxy-2 $\beta$ ,3 $\alpha$ ,4 $\beta$ ,5 $\alpha$ ,6 $\beta$ -pentahydroxycyclohexane = 13047
- o*-Methoxy phenol = 9021
- 7-Methoxy-4-phenyl-2*H*-1-benzopyran-6-ol = 4608
- 2-(4-Methoxyphenyl)-1-nitroethane = 13259
- 1-(4'-Methoxyphenyl)-(1*R*,2*R*)-propan-1-ol 2-*O*- $\beta$ -*D*-glucopyranoside = 1184
- [1-(4'-Methoxyphenyl)]-(1*S*,2*S*)-propan-1-ol 2-*O*- $\beta$ -*D*-glucopyranoside = 1185
- 5'-Methoxypongapin = 14074
- 4-Methoxy-9-prenyl-2,6,10-trihydroxybenzophenone = 4338
- 1-Methoxy-4-(1-propenyl)benzene = 1186
- 2-Methoxy-4-propenyl phenol = 11421
- 5-Methoxyypsoralen = 2309
- 8-Methoxyypsoralen = 22774
- Methoxyquinol 4-*O*-[(5-*O*-*trans-p*-coumaroyl)- $\beta$ -*D*-apiofuranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranoside = 8851
- 16 $\beta$ -Methoxy-3 $\beta$ -[(*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)-*O*-[ $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)]- $\beta$ -*D*-glucopyranosyl)oxy]pregna-5,16-dien-20-one = 20233
- 6 $\alpha$ -Methoxy-6,7-seco-6,19-epoxy-7,20-olide-*ent*-kaur-16(17)-en-15-one = 13071
- (16*R*)-6 $\beta$ -Methoxy-6,7-seco-6,19-epoxy-7,20-olide-*ent*-kaur-15-one = 13070
- (16*R*)-6 $\alpha$ -Methoxy-6,7-seco-6,19-epoxy-7,20-olide-*ent*-kaur-15-one = 13067
- (16*S*)-6 $\alpha$ -Methoxy-6,7-seco-6,19-epoxy-7,20-olide-*ent*-kaur-15-one = 13068
- (16*S*)-6 $\beta$ -Methoxy-6,7-seco-6,19-epoxy-7,20-olide-*ent*-kaur-15-one = 13069
- (25*R*,26*R*)-26-Methoxyspirost-5-en-3 $\beta$ -ol 3-*O*-{*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)-*O*-[ $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 2)-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)]- $\beta$ -*D*-glucopyranoside} = 20068
- trans*-3-Methoxy-2,3',4,5'-tetrahydroxystilbene = 22434
- 2-Methoxy-3,4,6-trihydroxy- $\alpha'$ -chalconol- $\alpha$ , $\beta$ -epoxide-4-*O*- $\beta$ -*D*-glucopyranoside = 21632
- 3'-Methoxy-4',5,7-trihydroxyflavone = 3602
- 8 $\alpha$ -Methylbutyryloxy-1 $\alpha$ -hydroxy-3 $\alpha$ ,4 $\alpha$ -epoxy-5 $\alpha$ ,7 $\alpha$ H-10(14),11(13)-guaia-dien-12,6 $\alpha$ -olide = 7196
- Methylabrusgenate = 18582
- 2-Methyl-5-acetonyl-7-hydroxychromone = 3279
- Methyl 22 $\beta$ -acetoxo-3,25-epoxy-3 $\alpha$ -hydroxy-urs-12-en-28-oate = 14208
- O*-Methylaknadinine = 9245
- Methyl allyl pentasulfide = 950
- Methylallyltetrasulfide = 951
- 6-Methylamino-5,9-dimethoxyoxoisoaporphine = 4691
- 3 $\alpha$ -(Methylamino)pregn-5-en-16-one = 9577
- (20*S*)-20-(*N*-Methylamino)-3 $\beta$ -(tigloylamino)-5 $\alpha$ -pregna-2-en-16 $\alpha$ ,17 $\alpha$ -epoxy-4-one = 7198
- (20*S*)-20-(*N*-Methylamino)-3 $\beta$ -(tigloylamino)-5 $\alpha$ -pregna-16 $\alpha$ ,17 $\alpha$ -epoxy-2 $\beta$ ,4 $\beta$ -di-*O*-acetate = 7177
- O*-Methylanolobine = 22818
- O*-Methylaromoline = 9597
- O*-Methylatheroline = 16339
- Methyl azelate = 6317
- 5-Methyl-1,3-benzenediol = 16169
- Methyl betulinate = 14158
- 3-Methylbutanoic acid = 11754
- 1-[(3-Methylbutanoyl)phloroglucinyll]- $\beta$ -*D*-glucopyranoside = 13261
- (*E*)-2-Methyl-2-butenal = 21370
- trans*-2-Methyl-2-butenal = 21370
- (*E*)-2-Methylbut-2-en-1-al = 21370
- (*E*)-2-Methyl-2-butenic acid = 21371
- trans*-2-Methyl-2-butenic acid = 21371
- 2-Methyl-3-buten-2-ol  $\beta$ -*D*-glucopyranoside = 4227
- 12-*O*-(3-Methyl-2-butenoyl)-19-*O*-(3,4-dihydroxybenzoyl)-11-hydroxyabieta-8,11,13-triene = 17554
- rel*-10 $\beta$ H-*trans*-12 $\xi$ -(2-methylbut-2(*E*)-enoyl)-1 $\beta$ -(isobutanoyl)-6 $\alpha$ ,13 $\xi$ -di-hydroxycyclorodan-4(20),8(18)-dien-7,15-dione-15,16-oxide = 2948
- rel*-10 $\beta$ H-*trans*-12 $\xi$ -(2-Methylbut-2(*E*)-enoyl)-1 $\beta$ -(2-methylbutanoyl)-6 $\alpha$ ,13 $\xi$ -dihydroxycyclorodan-4(20),8(18)-dien-7,15-dione-15,16-oxide =

- 2952
- 12-(3-Methylbut-2-enyloxy)pregn-5-en-20-one 3-*O*-[ $\beta$ -cymaropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -cymaropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -thevetopyranosyl-(1 $\rightarrow$ 4)-(6-*O*-sulfo- $\beta$ -glucopyranoside)] = 7699
- 6-(3-Methyl-2-butenyl)-1,5-dihydroxyxanthone = 2989
- 2-(3-Methyl-2-butenyl)-3-*O*-(3-methyl-2-butenyl)-5-[2-(3-hydroxyphenyl)ethyl]-1,3-benzenediol = 8551
- 2-(2-Methylbutyryl)-phloroglucinol 1-*O*- $\beta$ -*D*-glucopyranoside = 15063
- 20-*O*-(2-Methylbutyryl)tomentogenin = 6600
- 3-Methyl-9*H*-carbazole = 14216
- 3-Methylcarbazol-2-ol = 10478
- 2 $\alpha$ ,3 $\beta$ -7-*O*-Methylcedrusin = 5582
- 24-Methylcholesta-5,22-dien-3 $\beta$ -ol = 2596
- (24*S*)-Methylcholesta-5-en-3 $\beta$ -ol = 3040
- 3-Methylchrysazin = 3615
- 3'-*O*-Methylconiferin = 14249
- 3'-Methyl crenatoside = 14261
- (*E*)-2-Methyl-crotonaldehyde = 21370
- $\alpha$ -Methylcrotonaldehyde = 21370
- Methyl-1-cyclohexen-1-yl-1,3,5,7,9,11,13-tetradecaheptaene = 13189
- (-)-*N*-Methylcytisine = 14279
- N*-Methyldaphnandrine = 9597
- Methyldeacetylasperuloside = 4717
- Methyl(2*Z*,8*Z*)-decadien-4,6-dienoate = 13603
- Methyl-*trans*-2-decene-4,6,8-trienoate = 4947
- Methyl-*cis*-2-decen-4,6,8-trienoate = 4946
- N*-Methyldendrobine = 14288
- Methyl-2 $\alpha$ ,15-diacetoxy-2,3-epoxy-2,3-seco-(1 $\alpha$ ,5 $\alpha$ ,6 $\beta$ ,7 $\beta$ )-aromadendran-3,10(14)-dien-13-oate = 17497
- 21 $\beta$ -Methyl-20,22-dideoxy-25-hydroxymicrandilactone A = 12476
- Methyl-2,4-dihydroxy-benzoate = 14712
- Methyl 2,3-dihydroxy-2-(5-hydroxy-11-methyl-6-oxo-1,2,6,11-tetrahydrofuro[2,3-*c*]acridin-2-yl) propanoate = 18784
- (12*S*)-Methyl 6 $\alpha$ ,12-dihydroxy-4 $\alpha$ -methoxycarbonyl-18-norneo-clerod-13(14)-en-15,16-olide = 798
- 6-Methyl-2,5-dihydroxymethyl- $\gamma$ -pyranone III = 9438
- Methyl-3 $\beta$ ,22 $\alpha$ -dihydroxy-olean-12-ene-29-oate = 18582
- Methyl-3 $\beta$ ,22 $\alpha$ -dihydroxy-urs-12-ene-30-oate = 18581
- (+)-1-Methyl-4-(5,9-dimethyl-1-methylene-deca-4,8-dienyl)cyclohexene = 2045
- Methyl eicos-11-enoate = 14336
- 3'-*O*-Methyl-ellagic acid 4-*O*- $\alpha$ -*L*-arabinofuranoside = 6620
- 4-*O*-Methylellagic acid 3'-(2'',3'-*di-O*-acetyl)-3'- $\alpha$ -rhamnoside = 14342
- 3'-*O*-Methyl-ellagic acid-4-*O*- $\beta$ -*D*-xylopyranoside = 6619
- 3,4-Methylenedioxy-5-methoxy-1-(1-oxopropyl)benzene = 6479
- 25-Methylenecycloartanyl-*p*-hydroxy-*trans*-cinnamate = 17175
- 1,2-Methylenedioxy-4-allyl-benzene = 19121
- 6,7-Methylenedioxy-coumarin = 2048
- (7*R*,8*R*,7'*S*,8'*S*)-3,4-Methylenedioxy-3',4'-dimethoxy-7,7'-epoxylignan = 8039
- 3,4-Methylenedioxy-10-hydroxy aristololactam = 1693
- 3,4-Methylenedioxy-3'-methoxybibenzyl = 14375
- 5,6-Methylenedioxy-9-methoxy-7*H*-dibenzo(de,h)quinolin-7-one = 2344
- (6*aR*,12*aS*)-2,3-Methylenedioxy-9-methoxy-8-(3,3-dimethylallyl)-12-hydroxyrotenoid = 22279
- 3,4-Methylenedioxyphenanthrene-1-carboxylic acid = 5062
- N*-[10-(13,14-Methylenedioxyphenyl)-7(*E*),9(*Z*)-pentadienyl]-pyrrolidine = 16388
- (6*E*,8*E*,12*E*)-3-Methylene-(4*R*)-hydroxy-7,11-dimethyl-(10*R*\*,11*R*\*)-dichloro-13-bromo-trideca-6,8,12-trienoic acid = 17652
- (6*E*,8*E*,12*E*)-3-Methylene-(4*R*)-hydroxy-7,11-dimethyl-(10*S*\*,11*R*\*)-dichloro-13-bromo-trideca-6,8,12-trienoic acid oil = 17653
- 24-Methylene-lanosta-9(11)-en-3 $\beta$ -ol = 766
- 24-Methylene-lanosta-9(11)-en-3-one = 767
- 4-Methylene-1-(1-methylethyl)bicyclo[3.1.0]hexane = 19099
- 3-Methylene-6-(1-methylethyl)cyclohexene = 17056
- (6*E*,8*E*,12*E*)-3-Methylene-4-oxo-7,11-dimethyl-(10*S*\*,11*R*\*)-dichloro-13-bromo-trideca-6,8,12-trienoic acid = 17650
- (6*E*,8*E*,12*E*)-3-Methylene-4-oxo-7,11-dimethyl-(10*R*\*,11*R*\*)-dichloro-13-bromo-trideca-6,8,12-trienoic acid = 17651
- 24-Methylene-3-oxo-lanost-8-en-21-oic acid = 7856
- Methyl *ent*-13,17-epoxy-16-hydroxykauran-19-oate = 3427
- Methyl (2*E*,6*E*,10*R*)-10,11-epoxy-3,7,11-trimethyl-2,6-dodecadien-oate = 11988
- 3'-*O*-Methyl eriodictyol = 9604
- 7-*O*-Methylesculetin = 11702
- 1-Methyl ether of 10,12,10"-trichloroisoplagiochin C = 2180
- 1-Methyl-3-ethylacrolein = 14662
- 4-(1-Methylethyl)benzoic acid = 4356
- 8-Methyleugenitol = 6167
- Methyl eugenol = 7523
- 22-*O*-Methyl-25(*S*)-furost-1 $\beta$ ,2 $\beta$ ,3 $\beta$ ,4 $\beta$ ,5 $\beta$ ,22 $\zeta$ ,26 $\beta$ -heptol-26-*O*- $\beta$ -*D*-glucopyranoside = 22651
- 22-*O*-Methyl-25(*R*,*S*)-furost-1 $\beta$ ,3 $\beta$ ,4 $\beta$ ,5 $\beta$ ,22 $\zeta$ ,26 $\beta$ -hexol-26-*O*- $\beta$ -*D*-glucopyranoside = 22649
- 5-*O*-Methyl genistein 7-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside = 9555
- 22-*O*-Methyl-26-*O*- $\beta$ -*D*-glycopyranosyl-25(*S*)-furost-5-en-1 $\beta$ ,3 $\beta$ ,22 $\zeta$ ,26 $\beta$ -tetrol-3-*O*-[*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 4)]- $\beta$ -*D*-galactopyranoside = 22650
- Methylheptyl-ketone = 15687
- N*-methyl-2-heptyl-4(1*H*)-quinolone = 19468
- N*-Methylhernandine = 15929
- N*-Methyl hernovine = 14640
- Methyl hexadecanoate = 14484
- Methyl 3'-Hydroxyaglafolin = 10677
- Methyl-*p*-hydroxycinnamate = 14254
- 2-Methyl-3,4-[2'-(1-hydroxy-1-methylethyl)-dihydrofuran]anthraquinone = 3135
- Methyl(24*Z*)-26-hydroxy-3-oxo-7,24-euphadienoate = 14520
- N*-Methyl-3 $\beta$ -hydroxy-5 $\alpha$ -veratranine-6-one = 15613
- 1-*O*-Methyl-*myo*-inositol = 2556
- O*-Methylsine = 8832
- 24-Methyl lathosterol = 14237
- 5-*O*-Methyl licoricidin = 12795
- 23-*O*-Methyl malonyl hederagenin 28-*O*- $\alpha$ -*L*-rhamnopyranosyl (1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside = 2212
- 3-*O*-Methyl malonyl hederagenin 28-*O*- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside = 2213
- (3*R*,4*R*,6*R*)-4-[(2*R*,3*R*)-2-Methyl-3-(3-methyl-but-2-enyl)-oxiranyl]-1-oxaspiro[2,5]octan-6-ol = 5047

- (+)-4-Methyl-9-methylene-bicyclo[8.2.1]trideca-1(13),4-diene = 11791  
 (4*S*,4*aS*,8*aS*)-8a-Methyl-5-methylene-4-(1-methylvinyl)-1,2,3,4,4*a*,5,6,8*a*-octahydro-naphthalene = 8951  
 2-Methyl-5-(1-methylethenyl)-2-cyclohexen-1-one = 3237  
 (1*α*,2*β*,5*α*)-2-Methyl-5-(1-methylethyl)cyclohexanol = 3236  
 3-Methyl-6-(1-methylethyl)-2-cyclohexen-1-one = 17456  
 (+)-(2*S*,7*R*,8*S*)-5-Methyl-8-(1-methylethyl)-9-oxa-tricyclo[6.2.2.0<sup>2,7</sup>]dodeca-1(11),5-diene = 1260  
 3'-*O*-Methyl-3,4-*O*,*O*-methylideneellagic acid-4'-*O*-*β*-*D*-glucopyranoside = 15880  
 3-Methyl-5-[(2*Z*,3*aR*)-1*r*-methyl-8*t*-(2*S*)-4*c*-methyl-5-oxo-tetrahydrofuran-2*r*-yl)-(3*ar*,10*at*,10*bt*)-decahydro-2*H*-furo[3,2-*c*]pyrrolo[1,2-*a*]jzepin-2-yl]-5*H*-furan-2-one = 20296  
 (2-Methyl-6-(4-methylphenyl)-1,5-heptadiene) = 2404  
 (2-Methyl-6-(4-methylphenyl)-1,6-heptadiene) = 2405  
*N*-Methyl nandigerine = 14483  
 7-*O*-Methylnaringenin = 19174  
 Methylnigakinone = 12334  
 (-)-Methylnissolin = 14619  
 Methyl octadecanoate = 14629  
 Methyl oleate = 14630  
 Methyl 3-oxo-22*α*-acetoxo-23-hydroxy-urs-12-ene-30-oate = 18579  
 Methyl 3-oxo-22*α*-hydroxy-olean-12-ene-29-oate = 18580  
 Methyl palmitate = 14484  
 7-*O*-Methylpectolarigenin = 19211  
 4-Methyl-4-penten-2-one = 11535  
 (2*E*,4*E*,12*Z*)-*N*-(4-Methylpentyl)octadeca-2,4,12-trienamide = 17473  
 2-Methylphenol = 4233  
 3-Methylphenol = 4232  
 4-Methylphenol = 4234  
 2-Methyl-3-phytyl-1,4-naphthoquinone = 22562  
 4'-*O*-Methyl piceid = 5206  
 6-Methylpinocembrin = 20394  
 2-Methylpropanoic acid = 11290  
 2-Methyl-1-propanol = 11268  
 2-Methyl-6-(prop-2-enyl)piperidine = 17390  
 Methyl 2-propenyl trisulfide = 952  
 3-(1-Methyl-2-pyrrolidinyl)pyridine = 15528  
 3-*O*-Methylquercetin = 18376  
 3'-*O*-Methylquercetin 3-*O*-*α*-*L*-rhamnopyranosyl(1→6)-2''-*O*-acetyl-*β*-*D*-glucopyranoside = 466  
 Methyl rosmarinat = 18925  
*E*-3-Methylsulfinyloxy-2-propenyl *sec*-butyl disulfide = 7847  
*Z*-3-Methylsulfinyloxy-2-propenyl *sec*-butyl disulfide = 7846  
*E*-3-Methylsulfinyl-2-propenyl *sec*-butyl disulfide = 7845  
 (*E*)-3-(Methylsulfonyl)-propenoic acid (*E*)-2-[4-(3,7-dimethyl-2,6-octadienyloxy)-phenyl]-2-hydroxyethyl amide = 10139  
 (*E*)-3-(Methylsulfonyl)-propenoic acid (2*E*,6*E*)-2-[4-(3,7-dimethyl-8-oxo-2,6-octadienyloxy)-phenyl]-2-hydroxyethyl amide = 10138  
 (*E*)-3-(Methylsulfonyl)-propenoic acid (2*E*,6*E*)-4-(8-hydroxy-3,7-dimethyl-2,6-octadienyloxy)-3-methoxyphenethyl amide = 14716  
 (*E*)-3-(Methylsulfonyl)-propenoic acid (2*E*,6*E*)-4-(8-hydroxy-3,7-dimethyl-2,6-octadienyloxy)-phenethyl amide = 8310  
 (*E*)-3-(Methylsulfonyl)-propenoic acid (2*E*,6*E*)-2-[4-(8-hydroxy-3,7-di-methyl-2,6-octadienyloxy)-phenyl]-2-hydroxyethyl amide = 10140  
 (*E*)-3-(Methylsulfonyl)-propenoic acid (2*E*,6*E*)-3-hydroxy-4-(8-hydroxy-3,7-dimethyl-2,6-octadienyloxy)-phenethyl amide = 19170  
 (*E*)-3-(Methylsulfonyl)-propenoic acid (2*E*,6*Z*)-3-hydroxy-4-(8-hydroxy-3,7-dimethyl-2,6-octadienyloxy)-phenethyl amide = 19171  
 (*E*)-3-(Methylsulfonyl)-propenoic acid 3-hydroxy-4-(3-methyl-2-butenyloxy)-phenethyl amide = 19169  
 (*E*)-3-(Methylsulfonyl)-propenoic acid 4-(3-methyl-2-butenyloxy)-3-methoxyphenethyl amide = 14715  
*N*-Methyltaxol = 14651  
 Methyl tetradecanoate = 14610  
 3-Methyl-4-tetradecanoyloxy-2-butenenitrile = 21042  
 2-Methyl-3-thiapentane = 7454  
*N*-[*N'*-(*E*)-(3-Methylthio-2-propenyl)-4-aminobu-tyl]-(*E*)-3-methylthiopropenamide = 736  
*N*-[*N'*-(*E*)-(3-Methylthio-2-propenyl)-4-aminobutyl] phenylacetamide = 740  
 5-Methyl thymol ether = 11626  
*N*-Methyl-1,4,5-trihydroxy-3,6-dimethoxyacridine-9-one = 1954  
 (-)-5-Methyl-3-(1',2',2'-trimethylcyclopentyl) phenol = 9427  
*N*-Methyl-*L*-tryptophan = 13  
 (1-Methylundecyl)benzene = 17104  
*N*-methyl-5*α*-veratranine-6-oxo-3*β*-*O*-*β*-*D*-glucoside = 15614  
 Methylwarifteine = 3748  
 7-*O*-Methylwogonin = 10026  
 Micromarin B = 17824  
 Micropinic acid = 11600  
 Mimoside = 14869  
 Minorine = 22489  
 Minumicroline = 14874  
 Mitrinermine = 18826  
 Miyoshianine A = 13225  
 Miyoshianine B = 13229  
 Mogro-3-*O*-*β*-*D*-glucopyranoside-24-*O* {[*β*-*D*-glucopyranosyl (2→1)]-[*β*-*D*-glucopyranosyl(6→1)]-*β*-*D*-glucopyranoside} = 9012  
 Mogrol 3-*O*-*β*-glucopyranosyl-26-*O*-*α*-rhamnopyranosyl(1→2)-*O*-*β*-glucopyranoside = 12218  
 Mollis lactone = 14898  
 Momordin IIb = 9588  
 Monardein = 14914  
 Mono(2,2-dimethylhydrazide) butanedioic acid = 1064  
 Monomelittoside = 4626  
 7''-Monomethylhinoliflavone = 11353  
 Montanin C = 524  
 Moracenin A = 12386  
 Moracenin B = 12385  
 Moranoline = 5198  
 Morinobufagin = 2715  
 Morphine monomethyl ether = 3885  
 Morusinol = 16445  
 Moupinamide = 7788  
 3-MQ = 18376  
 Mubenin B = 6755  
 Mukoenine B = 3790

Mukurosigenin = 9260  
 Mulberrochromene = 14995  
 Multifidin = 18790  
 Murraxocin = 15100  
 Murrayazoline = 13397  
 Musizin = 15489  
 Mutumol = 17492  
 Myoinositol = 11085  
 Myo-inositol hexaphosphate = 17256  
 Myricardiol = 15154  
 Myricetin-3-glucoside = 11551  
 Myricetin-3-*O*-methyl ether = 1339  
 Myricetin-5-methyl ether = 14609  
 Myricetin-4'-*O*-methyl ether-3-*O*- $\alpha$ -*L*-rhamnopyranoside = 13628  
 Myricetin 3-*O*-(6"-*O*- $\alpha$ -*L*-rhamnopyranosyl)- $\beta$ -*D*-glucopyranoside = 15185  
 Myricetol = 15170  
 Myricitrin = 15184  
 Myristic alcohol = 21041  
 Myrkolal = 15166

## N

Nagarine = 2741  
 Nandigerine = 9451  
 (+)-Nantenine = 14332  
 Napellonine = 2742  
 1,4-Naphthohydroquinone-1,4-di-*O*- $\beta$ -*D*-glucopyranoside = 19033  
 Narciclasine = 13239  
 Narcipoetine = 9612  
 (2*S*)-Naringenin = 15279  
 NDGA = 15741  
 Nehipetol = 4380  
 Neoaristolactone = 22422  
 Neocerotic acid = 16823  
 Neochamaejasmin A = 15361  
 Neofinaconitine = 5009  
 Neoglycyrol = 8839  
 Neohecogenin-3-*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 4)- $\beta$ -*D*-galactopyranoside = 21001  
 Neohecogenin-3-*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 4)- $\beta$ -*D*-galactopyranoside = 21000  
 13(18)-Neohopene = 9642  
 Neojusticin A = 11980  
 Neojusticin B = 11979  
 Neolinderalactone = 12868  
 Neoline = 2738  
 Neorautenone = 15462  
 Neosamogenin = 13569  
 Neotanshinone A = 4632  
 Neotanshinone B = 4633  
 Neotanshinone C = 4634  
 Nepitrin = 7557  
 Neral = 3762  
 Neriifolin = 15494  
 Neriifoliol = 9635

Neriine = 3968  
 (+)-Nerolidol = 15499  
 3 $\alpha$ -Nervogenoyloxytropene = 13787  
 Nevadensin = 13264  
 Niacin = 15526  
 Nicocitin = 5520  
 7-(Nicotinoyloxy)-*O*<sup>5</sup>-furanoyl-*O*<sup>5</sup>-deacetyl-7-deoxo-evonine = 10907  
 Nigakihemiacetal B = 15454  
 Nigakilactone = 15546  
 Nigricin 4'-*O*- $\beta$ -*D*-glucoside = 8350  
 Ningposide C = 415  
 Nivalenone = 15633  
 6,10-Nonacosanediol = 15663  
 Nonadecane = 15671  
 Nonadecylic acid = 15672  
 Nonane = 15683  
 Nonyl alcohol = 15686  
 Nonylaldehyde = 15681  
 4-Nonylphenol = 15701  
 18-Nor-4(19),8,11,13-abietatetraene = 15736  
 Noranhydroicaritin = 11588  
 Noraporphine = 16339  
 Norarmepavine = 15713  
 (+)-Norboldine = 12573  
 29-Norcycloartanyl acetate = 15730  
 Nordihydrocapsaicin = 15740  
 Noreugenin-7-*O*- $\beta$ -*D*-glucoside = 20263  
*C*-Nor-*D*-homosteroid alkaloid = 17380  
 (+)-Norisocorydine = 15763  
 19-Nor-*ent*-kaurane-4 $\alpha$ ,16 $\beta$ ,17-triol = 1326  
 Norlobelamine = 11506  
 28-Nor-lup-12,17-dien-3 $\beta$ ,16 $\alpha$ -diol, = 12243  
 28-Nor-lup-12,17-dien-3 $\beta$ -ol-16-one = 12245  
 30-Normethyl lupane-20-one = 634  
 30-Normethyl olean-3-on-30 $\beta$ -ol = 635  
 (*S*)-Nornantenine = 15779  
*O*-Normuciferine = 14148  
 Noroxylin = 2102  
 (-)-Norstephalagine = 15797  
 Nortropanoline = 3010  
 (-)-Norushinsunine = 14827  
 Norwedelolactone = 5101  
 Notoginsenoside B<sub>1</sub> = 19233  
 Nubiletin = 15635  
 Nudaarine = 1099  
 Nuezhenide = 15873  
 Nyasol = 9546

## O

Obacunonic acid = 15883  
 Obtusifolin-2-*O*- $\beta$ -*D*-glucoside = 8696  
 Obtusilic acid = 4843  
 $\alpha$ -Ocimene = 15925

- Ocoteine = 21241  
 2,10,12,6',7',8',10',14'-Octachloroisoplagiochin C = 2186  
 Octacosanic acid = 14944  
 Octacosyl ferulate = 3852  
 9,11-Octadecadienoic acid = 11503  
*cis*-9,*cis*-12-Octadecadienoic acid = 12891  
 1-*O*-(9*Z*,12*Z*-Octadecadienoyl) glycerol = 8814  
 Octadecane = 15948  
 Octadecanoic acid = 20280  
 Octadecanoic acid-2,3-dihydroxypropyl ester = 15951  
 Octadecanyl 3-(4-hydroxy-3-methoxy-phenyl)-acrylate ester = 15954  
 (*Z,Z,Z*)-9,12,15-Octadecatrienoic acid = 12893  
 (*Z,Z,Z*)-9,12,15-Octadecatrienoic acid methyl ester = 14555  
 (-)-*Z*-9-Octadecene-4-olide = 14842  
*trans*-9-Octadecenoic acid = 6731  
 10-Octadecenoic acid = 11574  
 (-)-1,2,3,4,4*a*,5,6,7-Octahydro-4*a*,8-dimethyl-2-(1-methylethyl)-naphthalen-2-ol = 7510  
 (+)-(2*R*,4*aS*,8*aR*)-1,2,3,4,4*a*,5,6,8*a*-Octahydro-4*a*,8-dimethyl-2-(1-methylethyl)-2-naphthalenol = 7509  
 (+)-(1*S*,3*aR*,7*S*,7*aS*)-2,3,3*a*,4,5,6,7,7*a*-Octahydro-3*a*-hydroxyl-7,7*a*-dimethyl-1-(2-methylpropanonyl)-1*H*-indene = 5559  
 7,7',8,8',11,11',12,12'-Octahydrolycopene = 17263  
 (4*a*,5*β*,11*β*)-1,2,3,4,4*a*,5,6,11*b*-Octahydro-4,4,7,11*b*-tetramethyl-phenanthro[3,2-*b*]furan-4*a*,5-diol-5-benzoate = 11779  
 3,5,6,7,8,3',4',5'-Octamethoxyflavone = 7696  
 Octanoic acid = 3140  
 Octanoic acid methyl ester = 14215  
 1-Octanol = 15977  
 (3*R*)-1-Octan-3-yl-(6-*O*-sulfonyl)- $\beta$ -*D*-glucopyranoside = 2084  
 (6*R*)-7-Octene-1,6-diol 6-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)-*O*- $\beta$ -*D*-glucopyranoside = 6665  
 (6*R*)-7-Octene-1,6-diol 6-*O*- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 6)-*O*- $\beta$ -*D*-glucopyranoside = 6666  
 1-Octen-3-ol = 13608  
 (*E*)-2-Octen-1-ol = 11532  
 (3*R*)-1-Octen-3-ol-3-*O*- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranoside = 1952  
 (3*R*)-1-Octen-3-ol-3-*O*- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 6)-*O*-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)]-*O*- $\beta$ -*D*-glucopyranoside = 6664  
 1-Octen-3-yl *O*- $\beta$ -apiofuranosyl-(1 $\rightarrow$ 6)-*O*-[ $\beta$ -glucopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -glucopyranoside = 13075  
 Octyl 6-*O*- $\alpha$ -*L*-arabinopyranosyl- $\beta$ -*D*-glucopyranoside = 18793  
 17 $\beta$ -Oestradiol = 7384  
 Oleana-11,13(18)-dien-29-oic acid 3 $\beta$ ,21*a*-di-*O*- $\beta$ -*D*-glucuronopyranoside = 8856  
 Olean-11,13(18)-diene-3 $\beta$ ,22 $\beta$ -diol = 20250  
 Olean-11,13(18)-diene-3 $\beta$ ,16 $\beta$ ,23,28,30-pentol = 19136  
 Oleandrigenin = 400  
 Oleandrigenin 3-*O*-*L*-cymaroside = 2190  
 Oleandrigenin-3-*O*-[*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 2)]- $\alpha$ -*L*-rhamnopyranoside = 22652  
 Olean-12-en-23-al-2 $\beta$ ,3 $\beta$ -dihydroxy-30-methoxycarbonyl-28-oic acid = 547  
 Olean-12-en-23-al-2 $\beta$ ,3 $\beta$ ,11*a*-trihydroxy-30-methoxycarbonyl-28-oic acid = 548  
 Olean-12-en-3 $\beta$ ,27-diol = 3470  
 Olean-12-en-3,28-diol = 7338  
 Olean-12-ene-23*a*,28 $\beta$ -dioic acid-3 $\beta$ -,16*a*-dihydroxy-28-*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)-[ $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucopyranoside = 19668  
 12-Oleanene-3,15,16,22,28-pentol = 2151  
 Olean-12-ene-1 $\beta$ ,3 $\beta$ ,11*a*,28-tetraol 28-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranoside = 11983  
 Olean-12-ene-1 $\beta$ ,3 $\beta$ ,11*a*,28-tetraol 28-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranoside = 11984  
 12-Oleanene-3,22,28-triol = 10096  
 Oleanolic acid-3-*O*- $\alpha$ -*L*-arabinopyranosyl-28-*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside = 1577  
 Oleanolic acid 28-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside = 9357  
 Oleanolic acid 3-*O*-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)]-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)]- $\alpha$ -*L*-arabinopyranosyl-28- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside = 1601  
 Oleanolic acid 3-*O*-glucuronide = 2973  
 Oleanolic acid 3-*O*-[3'-*O*-(2"-hydroxy-1"-carboxyethoxycarboxypropyl)]- $\beta$ -*D*-glucopyranoside = 544  
 Oleanolic acid 3-*O*- $\alpha$ -*L*-rhamnopyranosyl (1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranoside = 6756  
 Oleanolic acid 3-*O*-{ $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)-[ $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 4)]- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 3)}- $\beta$ -*D*-xylopyranoside = 7634  
 Oleanonic acid = 16402  
 Oleanoside A = 1610  
 Oleanoside C = 1609  
 Oleanoside E = 1608  
*cis*-Oleic acid = 16066  
 Oleoeuropeine = 16080  
 Oleovitamin A = 18656  
 Oleyl alcohol = 15957  
 6-*C*- $\beta$ -*D*-Oliopyranosyl-4'-*O*- $\beta$ -*D*-glucopyranosylapigenin = 18676  
 Olitorin = 16084  
 Olmelin = 2384  
 8(26),14(27)-Onoceradiene = 16110  
 Ononin = 7885  
 Ononoside = 7885  
 Ophiopogenin-3-*O*- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2) [ $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucopyranoside = 16135  
 Ophiopogenin-3-*O*- $\alpha$ -*L*-rhamnopyranosyl (1 $\rightarrow$ 2) [ $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 3)] [ $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 4)]- $\beta$ -*D*-glucopyranoside = 16142  
 Opuntioside I = 16160  
 Oraposide = 4225  
 Orobanchoside = 4225=16161  
 Oroselone = 12395  
 Oroxin A = 2103  
 Oroxylin = 16216  
 Oryzadione = 7154  
 Oryzanol A = 4475  
 Osage orange = 14971  
 Osthonon = 16260  
 Ouabain = 20403  
 7( $\beta$ )-Oxa-bicyclo-[4,1,0]-hept-3-ene-3-carboxylic acid-5( $\beta$ )-hydroxy = 6547



Oxacyclohexadecan-2-one = 7672  
*β*-*N*-Oxalyl-*L*-*α,β*-diaminopropionic acid = 1058  
 Oxedrine = 20552  
 (24*Z*)-3-Oxo-14(13→12)abeo-lanosta-7,9(11),13(18),24-tetraen-26-oic acid = 22167  
 Oxoagarospirol = 2111  
 ent-16-Oxobeyeran-19-al = 3428  
 13-Oxo-7,9-bis-deacetylbaecatin VI = 20844  
 2-Oxobutanedioic acid = 16284  
 1-(1-Oxo-2*E*,4*E*-decadienyl)pyrrolidine = 19371  
 (24*Z*)-3-Oxo-11*R*,12*S*-diacetoxylanosta-8,24-dien-26-oic acid = 22163  
 (22*R*,24*S*,25*R*,26*R*)-1-Oxo-22,26;24,25-diepoxy-3*β*,17*α*,26-trihydroxyergost-5-ene 3-*O*-sulfate = 3648  
 2-[(2-Oxo-1,2-dihydro-quinoline-4-carbonyl)-amino]-succinic acid 4-*n*-butyl ester = 20329  
 2-[(2-Oxo-1,2-dihydro-quinoline-4-carbonyl)-amino]-succinic acid 4-methyl ester = 20330  
 (1*R*,5*R*,6*S*,9*R*)-3-Oxo-6,13-dihydroxy-5,6-dihydro-*β*-ionol = 1337  
 3-Oxo-2*α*,23-dihydroxyolean-12-en-28-oic acid = 4481  
 3-Oxo-ent-13epi-8(13)-epoxy-15-chloro-14-hydroxyabdanone = 684  
 16-Oxo-21-episerratenediol = 6122  
 (22*R*,24*R*,25*R*,26*S*)-1-Oxo-22,26-epoxy-3*α*,5*α*-cycloergostane-6*β*,17*α*,24,25,26-pentaol 26-*O*-*β*-Dglucopyranoside = 3641  
 (22*R*,24*R*,25*R*,26*S*)-1-Oxo-22,26-epoxy-3*α*,5*α*-cycloergostane-6*β*,17*α*,24,25,26-pentaol 26-*O*-*β*-Dglucopyranoside 24-*O*-methyl ether = 3642  
 (22*R*,24*R*,25*R*,26*S*)-1-Oxo-22,26-epoxy-3*α*,5*α*-cycloergostane-6*β*,17*α*,24,25,26-pentaol 26-*O*-*β*-D-glucopyranoside 6-*O*-methyl ether = 3643  
 (22*R*,24*R*,25*R*,26*Φ*)-1-oxo-22,26-epoxy-24-*O*-methyl-3*β*,17*α*,24,25,26-pentahydroxyergost-5-ene 3-*O*-sulfate = 3647  
 3-Oxo-1(10),4,11-guaiatrien-14-al = 16069  
 19-Oxo-humantenmine = 16338  
 21-Oxo-23*ξ*-hydroxy-21,23-dihydroveprisone = 11769  
 23-Oxo-21*ξ*-hydroxy-21,23-dihydroveprisone = 22381  
 22-Oxo-23-hydroxy-iridal-3,16-di-*β*-*D*-glucopyranoside = 11135  
 22-Oxo-23-hydroxyiridal-3-[*β*-*D*-glucopyranosyl-(1→6)-*β*-*D*-glucopyranoside]-16-*β*-*D*-glucopyranoside = 11134  
 22-Oxo-23-hydroxy-isoiridal-3,16-di-*β*-*D*-glucopyranoside = 11138  
 3-Oxo-12*β*-hydroxyolanosta-7,9(11),24(*Z*)-trien-26-oic acid = 22165  
 11-Oxo-3*β*-hydroxy-olean-12-ene = 1109  
 (6*R*,9*R*)-3-Oxo-*α*-ionyl-9-*O*-*α*-rhamnopyranosyl-(1"→6")-*β*-glucopyranoside = 7288  
 (6*R*,9*R*)-3-Oxo-*α*-ionyl-9-*O*-*β*-xylopyranosyl-(1"→6")-*β*-glucopyranoside = 7287  
 22-Oxo-isoiridal-3,16,23-tri-*β*-*D*-glucopyranoside = 11136  
 3-Oxolanosta-8,24-dien-26-oic acid = 1467  
 3-Oxolanosta-9(11),24-dien-26-oic acid = 3861  
 3-Oxolanosta-8,24-dien-21-oic acid 21-*O*-*β*-*D*-xylopyranoside = 7868  
 3-Oxolanosta-8,24(31)-dien-21-oic acid 21-*O*-*β*-*D*-xylopyranoside = 7869  
 3-Oxolanosta-7,9(11),24-trien-15*α*,21-diol = 17389  
 1-Oxo-12-methoxy-7,20-epoxyabieta-8,11,13-trienestructureforsalvibractone = 19208  
 1-[1-Oxo-7(3,4-methylenedioxyphenyl)-2*E*,6*E*-heptadienyl]pyrrolidine = 19378  
 1-[1-Oxo-9(3,4-methylenedioxyphenyl)-8*E*-nonenyl]piperidine = 17469  
 1-[1-Oxo-5(3,4-methylenedioxyphenyl)-2*E*-pentenyl]piperidine = 17439  
 1-[1-Oxo-5(3,4-methylene dioxypheyl)-2*E*-pentenyl]pyrrolidine = 17438  
 2-Oxopalmitic acid = 16345

3-Oxopanaxydol = 8452  
 4-Oxopentanoic acid = 12735  
 5-Oxoproline = 18266  
 1-Oxo-1,2,3,4-tetrahydro-*β*-carboline = 21076  
 12-Oxotigogenin = 9253  
 Oxoushinsunine = 12917  
 Oxyyanin A = 3611  
 Oxy{bis[5"(4',5,7"-trihydroxy-3',3",4"-trimethoxy-7-*O*-*α*:6-*β*-flavone-chalcone)]} = 18846  
 Oxycanthine = 16439  
 Oxycoccyanin = 16901  
 17-Oxycorticosterone = 9937  
 5,5'-Oxydimethylene-bis-(2-furaldehyde) = 2452  
 11,16-Oxy-18,20-dinor-1,3,5(10),6,8,11,15-abietaheptaene-13,14-dione = 11730  
 11,16-Oxy-18,20-dinor-1,3,5(10),6,8,11-abietahexaene-13,14-dione = 5654  
 (*R*)-(+)-Oxypeucedanin hydrate = 2041  
 Oxyresveratrol = 4337

## P

6*β*,7*α*,9*α*,11*α*-Pachycarpine = 20133  
 Paclitaxel = 20811  
 Paederosidic acid methyl ester = 16515  
 Paeonidin = 16900  
 Paeonin = 16905  
 Pallason A = 11179  
 Palmatoside D = 21398  
 Palmitic acid = 9486  
 (2*S*)-1-*O*-Palmitoyl glycerol = 14931  
 6'-*O*-Palmityl-sitosteryl-3-*O*-*β*-*D*-glucoside = 19997  
 3(15)-Panasinane = 16592  
 10-Panasinane = 16591  
 Panacrine = 9187  
 Panicolin = 20004  
 Paniculol = 16614  
 Papaveraldine = 22745  
 Patrinia-glycoside B-II = 18709  
 Patulitrin = 16728  
 Pd-Ia = 17762  
 Pd-II = 17763  
 Pedatisectine D = 14780  
 Pedatisectine E = 14752  
 Pelargonic acid = 15684  
 Pellitorine = 11269  
 Pennogenin-3-*O*-*α*-*L*-rhamnopyranosyl(1→4)-*α*-*L*-rhamnopyranosyl(1→4)-[*α*-*L*-rhamnopyranosyl(1→2)]-*β*-*D*-glucopyranoside = 16815  
 5*α*,7*β*,9*α*,10*β*,13*α*-Pentaacetoxy-20(benzoyloxy)-2*α*,4*α*-dihydroxytax-11-ene = 20821  
 5*α*,6,11*α*,14*β*,17(*R*)-Pentaacetoxy-3*β*-benzoyloxy-15*β*-hydroxyseget-8(12)-en-9-one = 19656  
 5*α*,7*β*,9*α*,10*β*,13*α*-Pentaacetoxy-2*α*,20-dihydroxytax-11-ene = 20825  
 2*α*,7*β*,9*α*,10*β*,13-*Pentaacetoxy*-11*β*-hydroxy-5*α*-(3'-*N,N*-dimethylamino-3'-phenyl)-propionyloxytaxa-4(20),12-diene = 20863  
 5*α*,7*β*,9*α*,13*α*,20-*Pentaacetoxy*-2*α*,10*β*,15-trihydroxy-11(15→1)-abeo-taxene

- = 20834
- 1,4,3',4',6'-Penta-*O*-acetyl-6-*O*-*p*-coumaroylsucrose = 18004
- 2,7,9,10,13-Pentaacetyl-4(20),12-taxadiene-2,5,7,9,10,11,13-heptol = 20748
- 2,10,12,6',10'-Pentachloroisoplagiochin C = 2184
- 10,12,6',10',14'-Pentachloroisoplagiochin C = 2183
- N*-Pentacosyl-2-carboxy-benzoyl amide = 18292
- Pentadecane = 16830
- Pentadecanoic acid methyl ester = 14655
- 6-(8'*Z*-Pentadecenyl)-1,2,4-trihydroxybenzene-1-*O*-acetate = 1651
- Pentadecylic acid = 16831
- 6-Pentadecyl-1,2,4-trihydroxybenzene-1-*O*-acetate = 1650
- 1,3-Pentadiynylbenzene = 15724
- 2,3',4,4',6-Pentahydroxy benzophenone = 13296
- 5,5'',7'',7''-Pentahydroxy 4',4''-biflavonyl ether = 12989
- {5,7,5',4''',5''''-Pentahydroxy-6,8-bis-( $\gamma,\gamma$ -dimethylallyl)-[6''''',6''''-dimethyl-4''''',5''''-dihydropyrano-(2''''',3''''':4',3'')]}-coumaronochromone = 7890
- 2 $\beta$ ,3 $\beta$ ,11 $\beta$ ,14 $\beta$ ,20-Pentahydroxy-cholest-7-en-6,22-dione = 16291
- 2 $\beta$ ,3 $\beta$ ,14 $\alpha$ ,20,25-Pentahydroxy-cholest-7-en-6,22-dione = 16350
- 3 $\beta$ ,6 $\alpha$ ,16 $\alpha$ ,20(*S*),27-Pentahydroxydammar-24(*Z*)-ene = 21890
- 1 $\beta$ ,3 $\beta$ ,12 $\beta$ ,20(*S*),26-Pentahydroxy-dammer-24(25)-en-20(*S*)-*O*- $\beta$ -*D*-glucopyranoside = 9096
- 1 $\beta$ ,3 $\beta$ ,12 $\beta$ ,20(*S*),26-Pentahydroxy-dammer-24(25)-en-20(*S*)-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-gluco-pyranoside = 9094
- 1 $\beta$ ,3 $\beta$ ,12 $\beta$ ,20(*S*),26-Pentahydroxy-dammer-24(25)-en-3-*O*- $\beta$ -*D*-glucopyranosyl-20(*S*)-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside = 9097
- rel*-(7''*E*)-(7 $\alpha$ ,8 $\beta$ ,7' $\alpha$ ,8' $\beta$ )-3,4,9,9',9''-pentahydroxy-3',7:3'',7'-diepoxy-8,4':8',4''-bisoxysesqueneolign-7''-ene = 11212
- rel*-(7''*E*)-(7 $\alpha$ ,8 $\beta$ ,7' $\alpha$ ,8' $\beta$ )-3,4,9,9',9''-pentahydroxy-4',7:3'',7'-diepoxy-8,3':8',4''-bisoxysesqueneolign-7''-ene = 11214
- rel*-(7''*E*)-(7 $\alpha$ ,8 $\beta$ ,7' $\beta$ ,8' $\alpha$ )-3,4,9,9',9''-pentahydroxy-3',7:3'',7'-diepoxy-8,4':8',4''-bisoxysesqueneolign-7''-ene = 11213
- rel*-(7''*E*)-(7 $\alpha$ ,8 $\beta$ ,7' $\beta$ ,8' $\alpha$ )-3,4,9,9',9''-pentahydroxy-4',7:3'',7'-diepoxy-8,3':8',4''-bisoxysesqueneolign-7''-ene = 11215
- 3,5,6,7,8-Pentahydroxy flavone = 16859
- 3,5,7,2',4'-Pentahydroxyflavone = 14971
- 5,6,7,3',4'-Pentahydroxyflavone = 10351
- 5,7,3',4',5'-Pentahydroxyflavone-6-*C*-glucoside = 11198
- 3,5,7,8,4'-Pentahydroxyflavone-7-*O*- $\beta$ -*D*-glucuronopyranoside = 14872
- 3,5,7,8,4'-Pentahydroxyflavone-8-*O*- $\beta$ -*D*-2''-*O*-(2-methylbutanoyl) glucuronide = 14873
- 3,5,7,3',4'-Pentahydroxy-5'-isoprenylflavone = 22241
- 3,6,7,3',4'-Pentahydroxy-2'-isoprenylflavone = 15471
- (24*R*)-2,12 $\alpha$ ,21,24,25-Pentahydroxylanosta-1,8-dien-3-one = 20441
- (24*R*)-3 $\beta$ ,12 $\alpha$ ,21,24,25-Pentahydroxylanost-8-en-2-one = 20442
- 3,5,6,7,8-Pentahydroxy-4'-methoxy flavone = 16852
- 1 $\alpha$ ,3 $\beta$ ,16 $\alpha$ ,24 $\zeta$ ,31-Pentahydroxy-24 $\zeta$ -methylcycloartan-28-oic = 4541
- 1 $\alpha$ ,3 $\beta$ ,16 $\beta$ ,24 $\zeta$ ,31-Pentahydroxy-24 $\zeta$ -methylcycloartan-28-oic acid = 4540
- 3 $\beta$ ,16 $\beta$ ,23,28,30-Pentahydroxyoleana-11,13,(18)-diene-3 $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)-[ $\alpha$ -*L*-rhamno-pyranosyl-(1 $\rightarrow$ 4)]- $\beta$ -*D*-glucopyranoside = 19156
- 3 $\beta$ ,16 $\alpha$ ,23,28,30-Pentahydroxyoleana-11,13(18)-dien-3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-fucopyranoside = 19151
- 3 $\beta$ ,16 $\alpha$ ,23,28,29-Pentahydroxy-11,13(18)-oleanedien-3 $\beta$ -yl  $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)-[4-*O*-sulfo- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -*D*-fucopyrano-
- side = 19249
- 1 $\beta$ ,1 $\beta$ ,3 $\beta$ ,4 $\beta$ ,5 $\beta$ -Pentahydroxy-spirost-25(27)-ene-5-*O*- $\beta$ -*D*-glucopyranoside = 1902
- 2',4',3'',2''',4''-Pentahydroxy-4-*O*-4''-tetrahydrobichalcone = 12934
- 4 $\beta$ ,9 $\alpha$ ,12 $\beta$ ,13 $\alpha$ ,20-Pentahydroxy-1,6-tiglidien-3-one = 17181
- 1 $\alpha$ ,2 $\alpha$ ,3 $\beta$ ,19 $\alpha$ ,23-Pentahydroxyurs-12-en-28-oic acid = 8129
- 5,6,7,3',4'-Pentamethoxyflavone = 19929
- 5,6,7,8,4'-Pentamethoxyflavone = 20670
- 5,7,8,3',4'-Pentamethoxyflavone = 11716
- Pentandrin = 22358
- Pentandrin glucoside = 22359
- Pentanedioic acid = 8784
- 1,2,3,4-Pentanepentol = 645
- Pentyl butanoate = 1104
- Pentyl ethanoate = 1103
- Peonidin-3,5-diglucoside = 16905
- Peonidin 3-*O*-(4''-*O*-sinapoyl gentiobioside) = 836
- Perconval = 4013
- Perforatin A = 14125
- Pericalline = 20578
- Pericarsaponin Pk = 9275
- Periforoside 3-*O*-(2,6-dideoxy-4-*O*- $\beta$ -*D*-glucopyranosidyl-3-*O*-methyl- $\beta$ -*D*-ribo-hexopyranoside) = 16924
- Perilla alcohol = 16935
- Perillylaldehyde = 16930
- Periplocoside = 16943
- Peroxycostunolide = 22400
- Persicanidine A = 9681
- PG-3 = 14080
- PGE<sub>1</sub> = 17954
- Phellandrene = 17055
- Phellizide = 17078
- Phenethyl 1-*O*- $\beta$ -*D*-apiofuranosyl (1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranoside = 19432
- Phenethyl caffeate = 2890
- Phenethyl  $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside = 17087
- Phenol-2-carboxylic acid = 19187
- Phenylacetone = 17129
- N*-[*N*-(Phenylacetyl)-4-aminobutyl]phenylacetamide = 737
- 3 $\beta$ -(6''-Phenylacetyloxyb-*D*-glucopyranosyloxy)-8 $\beta$ -(*p*-hydroxyphenylacetyloxy)-guaia-4(15),10(14),11(13)-trien-1 $\alpha$ ,5 $\alpha$ ,6 $\beta$ ,7 $\alpha$ H-12,6-olide = 11803
- 3-Phenylacrylic acid = 3695
- Phenylallyl acetate = 3726
- 4-Phenylbutan-2-one = 2274
- 2-Phenylchromone = 7819
- Phenylethanone = 115
- $\beta$ -Phenylethyl alcohol = 2284
- Phenylethyl alcohol [5-*O*-*p*-hydroxybenzoyl- $\beta$ -*D*-apiofuranosyl-(1 $\rightarrow$ 2)]- $\beta$ -*D*-glucopyranoside = 2086
- Phenylethylene = 20430
- 2-Phenylethyl glucosinolate = 8599
- 3-[(1-Phenyl)ethylidene]amino-2-hydroxy-propyl  $\alpha$ -(benzoyl amino)benzene-propanoate = 21575
- Phenylformic acid = 2224
- 1-Phenyl-1,3-hexadiyne = 15354

- Phenylmethanal = 2222  
 Phenylmethyl glucopyranoside = 2276  
*N*-(Phenylpropanoyl)-*D*<sup>3</sup>-2-pyrrolidone = 19368  
 2-Phenyl-2-propen-1-ol = 3696  
 Phlegmanol C = 19770  
 Phloroacetophenone = 22778  
 2-*O*-Phloro-6,6'-bieckol = 21836  
 Phorbol-12-tiglate-13-caprate = 17194  
 Phosphocreatine = 4222  
 $\alpha$ -Photosantalol A = 10689  
 $\alpha$ -Photosantalol B diastereoisomer = 10690  
 1,3-Phthalandione = 17204  
 Phyllanthin = 20805  
 Phyllanthoside = 20805  
 Physcion-8-*O*- $\beta$ -*D*-glucopyranoside = 1362  
 Physeteric acid = 21046  
 Physostigmine = 7381  
 (*E*)-Phytol = 17265  
 Phytolaccasaponin B = 7374  
 Phytolaccasaponin G = 17269  
 Phytolaccinic acid = 17266  
 Phytolaccoside D = 7370  
 Phytolaccoside E = 7368  
 Piceatannol 3-*O*- $\beta$ -*D*-glucopyranoside = 1951  
 Piceatannol 3'-*O*- $\beta$ -*D*-glucopyranoside = 21158  
 Piceoside = 17287  
 Picrasidine C = 3160  
 Picrasidine S = 12333  
 Picrasin A = 15552  
 Picrasin B = 15554  
 Picrasin C = 15555  
 Picropodophyllotoxin = 17337  
 Pictogenin (3 $\beta$ ,6 $\beta$ ,16 $\alpha$ ,23-tetrahydroxyolean-12-ene-28-oic acid) 3-*O*- $\alpha$ -*L*-arabinopyranoside = 17351  
*ent*-Pimara-8(14),15-dien-19-oic acid = 17371  
 2-Pinen-4-ol = 22398  
 2-Pinen-4-one = 22399  
 (-)-2(10)-Pinen-3-one = 17402  
 Pingbeimine A = 17384  
 Pingpeisaponin = 17383  
 (*S*)-Pinoembrin = 17403  
 Pinosesinol-4,4'-di-*O*- $\beta$ -*D*-glucoside = 17412  
 Pinosolide acid = 17423  
 Pinusolic acid = 17423  
*dl*-Pipicolinic acid = 17425  
 Piperamide A 7:3(2*E*,4*E*,6*E*) = 17449  
 Piperamide A 9:1(8*E*) = 17469  
 Piperamide B 9: 3(2*E*,4*E*,8*E*) = 18657  
 Piperamide-C 5:2(*E*,*E*) = 16387  
 Piperamide C 5:1(2*E*) = 17438  
 Piperamide C 7:2(2*E*,6*E*) = 19378  
 Piperitenone oxide = 18954  
 Piperonaline = 16384  
 Piperonylaldehyde = 17470  
 Piperylene = 16387  
 Piptanthine = 16206  
 Plantagoside A = 17507  
 Plantamajoside = 18219  
 Platynecine *N*-oxide 2*S*-hydroxy-2*S*-(1*S*-hydroxyethyl)-4-methyl-pentanoyl ester = 18666  
 Podocarpene = 12176  
 Polargonin = 16781  
 Polyanthin = 17620  
 Polydatin = 17283  
 Polystachoside = 2039  
 Pomonic acid = 16358  
 Ponciretin = 11691  
 Poncitrin = 5134  
 Pongol methyl ether = 3334  
 Pontigenin = 18748  
 Populnin = 12062  
 Porphyrone = 16627  
 Portulaxanthin I = 17734  
 Potengriffoside A = 21392  
 PQ-1 = 16586  
 PQ-3 = 8452  
 Praeruptorin III = 1239  
 Prangeferol = 15645  
 Prangenin = 16447  
 Prangenin hydrate = 9420  
 Pratol = 7883  
 Pregn-4-ene-3,20-dione = 17901  
 Pregn-5-ene-3,17,20-triol 20-*O*-[2-*O*-acetyl- $\beta$ -*D*-digitalopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-cymaropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-cymaropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-cymaropyranosyl-(1 $\rightarrow$ 5)-3,7-dideoxy-4-*O*-methyl- $\alpha$ -*D*-gluco-2-heptulopyranosyl-(2 $\rightarrow$ 4)-dioxy-(1 $\rightarrow$ 3)- $\beta$ -*D*-canaropyranoside] = 16948  
 8-Prenylnaringenin = 11248  
 Proanthocyanidin B<sub>5</sub> = 17888  
 Prochamazulene = 13605  
 Procyanidin B<sub>2</sub> = 17869  
 Progoitrin = 9863  
 Propanal = 17930  
 Propanecarbaldehyde = 2787  
 Propanedioic acid = 13439  
 Propanoic acid = 17931  
*trans*-1-Propene-1,2,3-tricarboxylic acid = 553  
 Propenoic acid = 578  
*cis*-4-(1-Propenyl)anisole = 1183  
 2-[*E*]-Propenyl-7-methoxy-8-*C*- $\beta$ -*D*-[2'-(*E*)-*p*-coumaroyl]-glucopyranosyl-5-methylchromone = 976  
 1-Propenyl methyl thiosulfinate = 14690  
 2-Propenyl propyl disulfide = 954  
*n*-Propylamine = 17935  
 Prosapogenin CP<sub>26</sub> = 16061  
 Prosapogenin CP<sub>3</sub> = 16063  
 Prosapogenin CP<sub>36</sub> = 9276

Prosapogenin CP<sub>4</sub> = 16060  
 Prosapogenin CP<sub>7</sub> = 16057  
 Prosapogenin CP<sub>7a</sub> = 16058  
 Prosapogenin CP<sub>8a</sub> = 19318  
 Prosapogenin CP<sub>9</sub> = 16055  
 Prosapogenin CP<sub>9a</sub> = 16056  
 Protoescigenin-3-*O*-[ $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 2)][ $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 4)]- $\beta$ -*D*-glucopyranosiduronic acid = 667  
 Protoanemonin = 1179  
 Protocatechualdehyde = 17968  
 Protocatechuic acid = 5763  
 1-*O*-Protocatechuyil- $\beta$ -*D*-xylopyranose = 22240  
 20(*S*)-Protopanaxadiol 3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranoside, 20-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranoside = 8419  
 20(*R*)-Protopanaxatriol = 17982  
 20(*S*)-Protopanaxatriol-3,20-di-*O*- $\beta$ -*D*-glucopyranoside = 8413  
 Protoporphyrin iron(III) complex = 9345  
 Protoveratrine B = 15452  
 Provitamin D<sub>4</sub> = 14229  
 Prunuside A = 15068  
 Prunuside B = 15069  
 Przewaquinone D = 20680  
 Przewaquinone E = 20681  
 Psathyrotin = 19211  
*cis*-Pseudoisoeugenyl angelate = 14079  
 Pseudoprotimosaponin AIII = 1173  
 (-)-Pseudoemiglabrin = 18063  
 Pseudovinblastinediol = 18073  
 Psoradern = 2309  
 Puberanidine = 4745  
 Pubescine = 18634  
 Pulchinenoside A<sub>3</sub> = 1181  
 (*R*)-(+)-Pulegone = 18190  
 Purpureine = 21246  
 Purpurocatechol = 22052  
 Pyretrin = 11269  
 3-Pyridinecarboxamide = 15527  
 9*H*-Pyrido[3,4-*b*]indole = 15752  
 2,4-Pyrimidinediol = 22237  
 Pyromucic acid = 8012  
 Pyroracemic acid = 18281  
 Pyroside = 324  
 3-(3-Pyrrol)-6-hydroxy-7-hydroxymethyl-isocoumarin = 11022

## Q

Qinghaosu = 1784  
 Qinghaosu I = 1782  
 Qinghaosu III = 1783  
 Qinghaosu V = 1801  
 Quebrachamine = 12120  
 Quercetagenin 7-*O*- $\beta$ -*D*-glucopyranoside = 18316  
 Quercetagenin 3-methyl ether = 16851

Quercetagenin-6,7,3',4'-tetramethyl ether = 6146  
 Quercetin-3-*O*-(2"-*O*-acetyl- $\alpha$ -rhamnopyranoside) = 491  
 Quercetin-3-arabinoside = 7844  
 Quercetin-3-*O*-arabinoside = 9043  
 Quercetin-3-*O*-(6-*O*-*cis*-*p*-coumaroyl)- $\beta$ -*D*-glucopyranosyl (1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl (1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranoside = 17493  
 Quercetin-3,7-di-*O*- $\beta$ -*D*-glucopyranoside = 18345  
 Quercetin-3-*O*- $\beta$ -*D*-galactoside = 10887  
 Quercetin-3-*O*-(2"-galloyl)- $\beta$ -*D*-galactopyranoside = 10888  
 Quercetin-3-*O*- $\beta$ -*D*-glucopyranoside = 11642  
 Quercetin 3-*O*- $\beta$ -*D*-glucopyranoside 3'-sulphate = 3387  
 Quercetin-3-*O*-{ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)-[ $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 6)]- $\beta$ -*D*-galactopyranoside} = 17001  
 Quercetin-3- $\beta$ -*D*-glucoside-2"-gallate = 18360  
 Quercetin-3-*O*- $\beta$ -glucuronopyranoside = 18414  
 Quercetin 3'-methoxy-4'-*O*- $\beta$ -*D*-glucopyranoside = 925  
 Quercetin 3'-methyl ether = 11648  
 Quercetin-5-methyl ether = 2052  
 Quercetin-3-*O*- $\alpha$ -*L*-rhamnopyranoside = 18411  
 Quercetin 3-*O*- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 6)-2"-*O*-acetyl- $\beta$ -*D*-glucopyranoside = 497  
 Quercetin-7-*O*- $\alpha$ -*L*-rhamnopyranosyl-3-*O*-(6"-caffeyl)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-xylopyranoside = 15194  
 Quercetin-7-*O*- $\alpha$ -*L*-rhamnopyranosyl-3-*O*-(6"-feruloyl)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-xylopyranoside = 15196  
 Quercetin-3-*O*-[ $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 6)]- $\beta$ -*D*-galactofuranoside = 2394  
 Quercetin-3-*O*- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-galactopyranoside = 18390  
 Quercetin-3-*O*-(2"-*O*- $\alpha$ -rhamnopyranosyl)- $\beta$ -glucopyranoside = 18378  
 Quercetin-3-*O*-(6"-*O*- $\alpha$ -rhamnopyranosyl)- $\beta$ -glucopyranoside = 19087  
 Quercetin-3-*O*-(6"-*O*- $\alpha$ -*L*-rhamnopyranosyl)- $\beta$ -*D*-glucopyranoside-7-*O*- $\beta$ -*D*-glucopyranoside = 18391  
 Quercetin-7-*O*- $\alpha$ -*L*-rhamnopyranosyl-3-*O*-(6"-*P*-coumaroyl)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranoside = 15197  
 Quercetin-7-*O*- $\alpha$ -*L*-rhamnopyranosyl-3-*O*-(6"-*P*-coumaroyl)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-xylopyranoside = 15193  
 Quercetin-3-*O*- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -*L*-rabinofuranoside = 1777  
 Quercetin-3-*O*- $\alpha$ -*L*-rhamnopyranosyl (1 $\rightarrow$ 2)-[ $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 6)]- $\beta$ -*D*-glucopyranoside = 13479  
 Quercetin-7-*O*-rhamnoside = 22492  
 Quercetin-3-*O*-[ $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 2)]-[ $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 6)]- $\beta$ -*D*-glucopyranoside-3'-*O*- $\beta$ -*D*-glucopyranoside = 661  
 $\beta$ -Quinine = 18423  
 $p$ -Quinol = 9740

## R

Rabdolongin B = 13526  
 Rabdophyllin G = 11394  
 Rabdosianone = 7268  
 Rabdosianone II = 13524  
 Rabdosin C = 11394  
 Racemosin = 6300  
 Raddeanin B = 6755  
 Raddeanine = 11002  
*D*-Raffinose pentahydrate = 18526

- Ranachrome 1 = 2393  
 Ranachrome 4 = 11784  
 Reidin A = 18756  
 Reidin B = 18757  
 Reidin C = 18758  
 Reniformin A = 9362  
 Resibufaginol = 10673  
 Resveratrol 3-*O*- $\beta$ -*D*-glucopyranoside = 17283  
 Resveratrolside = 18650  
 Retrofractamide B = 17444  
 Retronecine† = 9318  
 Retronecine† = 14923  
 Retusin 7,8-di-*O*- $\beta$ -*D*-glucopyranoside = 9556  
 Reynoutrin = 18407  
 Rhamnazin-3-*O*- $\beta$ -*D*-apisoyl-(1 $\rightarrow$ 2)-[6"-*O*-(3-hydroxy-3-methylglutarate)] glucoside = 22542  
 Rhamnazin-*O*- $\beta$ -*D*-(6"- $\beta$ -hydroxy- $\beta$ -methylglutaryl) glucoside = 22539  
 Rhamnocitrin-3,4'-*O*- $\beta$ -*D*-diglucoside = 3949  
 6-*O*-[ $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 2)-6-*O*-acetyl- $\beta$ -*D*-glucopyranosyl]-20-*O*-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl]-20(*S*)-protopanaxatriol = 22898  
 3-*O*- $\alpha$ -*L*-Rhamnopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl abrisapogenol C 22-*O*- $\alpha$ -*L*-arabinopyranoside = 6694  
 3-*O*- $\alpha$ -*L*-Rhamnopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl kudzusapogenol A 22-*O*-acetate = 517  
 3-*O*- $\alpha$ -*L*-Rhamnopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl kudzusapogenol A 22-*O*- $\alpha$ -*L*-arabinopyranoside = 6693  
 3-*O*- $\alpha$ -*L*-Rhamnopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl gypsogenin 28-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside = 3820  
 3-*O*-[ $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl]-hederagenin-28-[ $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl] ester = 12118  
 3 $\beta$ -[(*O*- $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl)oxy]lup-20-(29)-en-28-oic acid 28-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl ester = 4431  
 6-*O*-[ $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl]-20-*O*-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl]-20(*S*)-protopanaxatriol = 22897  
 3 $\beta$ -[(*O*- $\alpha$ -*L*-Rhamnopyranosyl (1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl)oxy]olean-12-en-28-oic acid *O*- $\alpha$ -*L*-rhamnopyranosyl (1 $\rightarrow$ 4)-*O*- $\beta$ -*D*-glucopyranosyl (1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl ester = 819  
 3-*O*- $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl pomolic acid 28- $\beta$ -*D*-glucopyranosyl ester = 18538  
 3-*O*- $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl siaresinolic acid 28- $\beta$ -*D*-glucopyranosyl ester = 18539  
 6-*O*- $\alpha$ -*L*-Rhamnopyranosyl-aucubin = 19960  
 3-*O*-[ $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -(3',4'-di-*O*-acetyl)-*D*-xylopyranosyl]-6-*O*- $\beta$ -*D*-xylopyranosyl-20(*R*),24(*S*)-epoxycycloartane-3 $\beta$ ,6 $\alpha$ ,16 $\beta$ ,25-tetrol = 22047  
 3 $\beta$ -*O*-{[ $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-galactopyranosyl-(1 $\rightarrow$ 3)]-[ $\beta$ -*D*-galactopyranosyl-(1 $\rightarrow$ 2)]-[ $\beta$ -*D*-glucuronopyranosyl]-21 $\beta$ ,22 $\alpha$ -diangeloyloxy-13 $\beta$ ,28-oxidoolean-16 $\alpha$ ,28 $\alpha$ -diol = 13358  
 3 $\beta$ -*O*-{[ $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-galactopyranosyl-(1 $\rightarrow$ 3)]-[ $\beta$ -*D*-galactopyranosyl-(1 $\rightarrow$ 2)]-[ $\beta$ -*D*-glucuronopyranosyl]-16 $\alpha$ ,22 $\alpha$ -diacetoxo-21 $\beta$ -angeloyloxy-13 $\beta$ ,28-oxidoolean-16 $\alpha$ ,28 $\alpha$ -diol = 13352  
 3 $\beta$ -*O*-{[ $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-galactopyranosyl-(1 $\rightarrow$ 3)]-[ $\beta$ -*D*-galactopyranosyl-(1 $\rightarrow$ 2)]-[ $\beta$ -*D*-glucuronopyranosyl]-22 $\alpha$ -acetoxo-21 $\beta$ -angeloyloxy-13 $\beta$ ,28-oxidoolean-16 $\alpha$ ,28 $\alpha$ -diol = 13353  
 3 $\beta$ -*O*-{[ $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-galactopyranosyl-(1 $\rightarrow$ 3)]-[ $\beta$ -*D*-galactopyranosyl-(1 $\rightarrow$ 2)]-[ $\beta$ -*D*-glucuronopyranosyl]-16 $\alpha$ ,22 $\alpha$ -diacetoxo-21 $\beta$ -angeloyloxy-13 $\beta$ ,28-oxidoolean-28 $\alpha$ -ol = 13354  
 3 $\beta$ -*O*-{[ $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-galactopyranosyl-(1 $\rightarrow$ 3)]-[ $\beta$ -*D*-galactopyranosyl-(1 $\rightarrow$ 2)]-[ $\beta$ -*D*-glucuronopyranosyl]-21 $\beta$ -angeloyloxy-22 $\alpha$ -propanoyloxy-13 $\beta$ ,28-oxidoolean-16 $\alpha$ ,28 $\alpha$ -diol = 13355  
 3 $\beta$ -*O*-{[ $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-galactopyranosyl-(1 $\rightarrow$ 3)]-[ $\beta$ -*D*-galactopyranosyl-(1 $\rightarrow$ 2)]-[ $\beta$ -*D*-glucuronopyranosyl]-21 $\beta$ -angeloyloxy-22 $\alpha$ -butanoyloxy-13 $\beta$ ,28-oxidoolean-16 $\alpha$ ,28 $\alpha$ -diol = 13356  
 3 $\beta$ -*O*-{[ $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-galactopyranosyl-(1 $\rightarrow$ 3)]-[ $\beta$ -*D*-galactopyranosyl-(1 $\rightarrow$ 2)]-[ $\beta$ -*D*-glucuronopyranosyl]-16 $\alpha$ -acetoxo-21 $\beta$ -angeloyloxy-22 $\alpha$ -propanoyloxy-13 $\beta$ ,28-oxidoolean-28 $\alpha$ -ol = 13357  
 3 $\beta$ -*O*-{[ $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-galactopyranosyl-(1 $\rightarrow$ 3)]-[ $\beta$ -*D*-galactopyranosyl-(1 $\rightarrow$ 2)]-[ $\beta$ -*D*-glucuronopyranosyl]-16 $\alpha$ -acetoxo-21 $\beta$ -angeloyloxy-22 $\alpha$ -butanoyloxy-13 $\beta$ ,28-oxidoolean-28 $\alpha$ -ol = 13359  
 3 $\beta$ -*O*-{[ $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-galactopyranosyl-(1 $\rightarrow$ 3)]-[ $\beta$ -*D*-galactopyranosyl-(1 $\rightarrow$ 2)]-[ $\beta$ -*D*-glucuronopyranosyl]-16 $\alpha$ -acetoxo-21 $\beta$ ,22 $\alpha$ -diangeloyloxy-13 $\beta$ ,28-oxidoolean-28 $\alpha$ -ol = 13360  
 3-*O*-[ $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-galactopyranosyl-(1 $\rightarrow$ 3)][ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)]-[ $\beta$ -*D*-glucuronopyranosyl] camelliagenin A 22-*O*-angelate = 13363  
 3 $\beta$ -*O*-{ $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 2)-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)]- $\alpha$ -*L*-arabinopyranosyl]-28-*O*-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl]-hederagenin = 16700  
 3 $\beta$ -*O*-{ $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 2)-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)]- $\alpha$ -*L*-arabinopyranosyl]-28-*O*-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl]-oleanolate = 16701  
 3 $\beta$ -*O*-{ $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 2)-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)]- $\alpha$ -*L*-arabinopyranosyl]-28-*O*- $\beta$ -*D*-glucopyranosyl-oleanolate = 16702  
 3-*O*- $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 2)[ $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 4)]- $\alpha$ -*L*-arabinopyranosyl hederagenin 28-*O*-*D*-glucopyranosyl ester = 3433  
 3-*O*-{ $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -*L*-arabinopyranosyl]-3 $\beta$ -hydroxy-13 $\beta$ ,28-epoxy-16-oxo-oleanan-30-al = 1642  
 3-*O*- $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl-3 $\beta$ ,21 $\alpha$ -dihydroxyursolic acid 21-*O*- $\beta$ -*D*-glucopyranoside = 12556  
 1-*O*-[ $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl]-2(*E*,6*E*)-farnesol = 4228  
 3-*O*-[ $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)][ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)]- $\alpha$ -*L*-arabinopyranosyl cyclamiretin A = 1626  
 3-*O*-{ $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)]- $\alpha$ -*L*-arabinopyranosyl]-13 $\beta$ ,28-epoxy-16-oxo-oleanan-3 $\beta$ ,30-diol = 1641  
 3-*O*-{ $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)]- $\alpha$ -*L*-arabinopyranosyl]-3 $\beta$ -hydroxy-13 $\beta$ ,28-epoxy-oleanan-16-oxo-30-al = 1640  
 3-*O*-{ $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)]- $\alpha$ -*L*-arabinopyranosyl]-3 $\beta$ ,16 $\alpha$ ,28 $\alpha$ -trihydroxy-

- 13 $\beta$ ,28-epoxy-oleanan-30-al = 1639
- 3-*O*-[ $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-galactopyranoside] = 6554
- 3-*O*-[ $\alpha$ -*L*-Rhamnopyranosyl-( $\rightarrow$ )- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl]serjanic acid = 19337
- 3-*O*-[ $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl]serjanic acid 28-*O*- $\beta$ -*D*-glucopyranoside = 19341
- 3-*O*-[ $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl]spergulagenic acid = 19338
- 3-*O*-[ $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 2)-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucuronopyranosyl]-3 $\beta$ ,16 $\beta$ ,22 $\beta$ ,24-tetrahydroxy-olean-12-ene = 19332
- 4-*O*-[ $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl]-2-hydroxyl-6-methoxybenzophenone = 20959
- 3-*O*- $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl oleanolic acid 28-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl ester = 1255
- 3 $\beta$ -[(*O*- $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl)oxy]-pregna-5,16-dien-20-one = 20230
- 3 $\beta$ -[(*O*- $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl)oxy]pregna-5,16-dien-20-one = 20231
- 3-*O*- $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl-hederagenin 28-*O*- $\beta$ -*D*-glucopyranoside = 11817
- 3-*O*- $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl-3 $\beta$ ,21 $\alpha$ ,28-trihydroxy-urs-12-ene 21-*O*- $\beta$ -*D*-glucopyranoside = 12555
- 3-*O*-[ $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 2)-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)]- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)]- $\alpha$ -*L*-arabinopyranoside] = 11909
- 3-*O*-[ $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)-[ $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-galactopyranoside] = 6553
- 3-*O*-[ $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-glucuronopyranosyl]-28-*O*-[ $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl]-oleanolate = 3914
- 3-*O*-[ $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -(3'-*O*-november acetyl)-*D*-xylopyranosyl]-6-*O*- $\beta$ -*D*-xylopyranosyl-20(*R*),24(*S*)-epoxy-3 $\beta$ ,6 $\alpha$ ,16 $\beta$ ,25-tetrahydroxycycloartane = 1947
- 6-*O*- $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-quinovopyranosyl (22*R*,23*R*,25*S*)-3 $\beta$ ,6 $\alpha$ ,23-trihydroxy-5 $\alpha$ -spirostane = 21473
- 3 $\beta$ -*O*-{ $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 2)-[ $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)]- $\alpha$ -*L*-arabinopyranosyl}-28-*O*-[ $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl]-hederagenin = 16698
- 3 $\beta$ -*O*-[ $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 2)-[ $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)]- $\alpha$ -*L*-arabinopyranosyl]-28-*O*-[ $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl]-oleanolate = 16699
- 3-*O*-[ $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 2)-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-galactopyranoside] = 6555
- 3-*O*- $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-xylopyranosyl oleanolic acid 28-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl ester = 1253
- 3-*O*-[ $\alpha$ -*L*-Rhamnopyranosyl (1 $\rightarrow$ 2)- $\beta$ -*D*-xylopyranosyl]-spergulatriol = 20145
- 3-*O*-[ $\alpha$ -*L*-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-xylopyranosyl]-6-*O*- $\beta$ -*D*-xylopyranosyl-20(*R*),24(*S*)-epoxy-3 $\beta$ ,6 $\alpha$ ,16 $\beta$ ,25-tetrahydroxycycloartane = 1949
- 4[ $\alpha$ -*L*-Rhamnosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyloxy]-2-hydroxymethylene,5-hydroxy naphthalene = 6461
- 1[ $\alpha$ -*L*-Rhamnosyl(1 $\rightarrow$ 2)-( $\beta$ -*D*-glucopyranosyloxy)]-3,4,5-trimethoxy benzene = 6463
- Rhapontigenin 3-*O*- $\beta$ -*D*-glucopyranoside = 18744
- Rhein-8-monoglucoside = 18761
- Rhetsinine = 10117
- Rhizopin = 11031
- Rhoifolin = 1497
- Rhoifolose = 1497
- Ribaline = 19083
- 9- $\beta$ -Ribofuranosylguanine = 9071
- 9- $\beta$ -*D*-Ribofuranosyl-9*H*-purin-6-amine = 618
- 3-*O*- $\beta$ -*D*-Ribopyranosyl hederagenin 28-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside = 3821
- Ricinolic acid = 18841
- rosmanol = 8090
- Rosmarinic acid = 12420
- Rotenolone = 10680
- Rotundine = 21077
- Roupelliol = 1644
- Roxburghilin = 16002
- Roxburghiline = 16002
- Royleose = 16032
- Rubescensin A = 16183
- Rubescensine = 16183
- Rubescensin E = 18503
- Rubescensine B = 17717
- Rubiarboside F = 19010
- Rubrobrassicin = 18548
- Rubrofusarin gentiobioside = 19042
- Rubschisandrin = 12003
- Rugosal = 19047
- (25*S*)-Ruscogenin 1-*O*-{*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)-*O*-[ $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -*D*-fucopyranoside} = 19072
- Rutaevin = 7668
- Rutaevin (*E*)-*p*-hydroxycinnamate = 9914
- Rutaevin (*Z*)-*p*-hydroxycinnamate = 9913
- Rutamarin alcohol = 9304

## S

- (+)-(1*R*\*,3*S*\*,5*R*\*,6*S*\*)-Saccogynol = 19106
- Safflor yellow A = 19111
- Salazinic acid = 16673
- m*-Salicylic acid = 9817
- p*-Salicylic acid = 9818
- Salidroside = 18792
- Salsolose C = 20529
- Salsolose E = 20535
- (+)-Salutaridine = 7837

- Salvianolic acid B = 4631  
 Sanchinoside E<sub>1</sub> = 8423  
 Sanggenone G = 19262  
 Sanjoinine A = 7937  
 $\beta$ -Santala(3,15),10-diene = 19303  
 Santamarine = 19308  
 Santol = 16209  
 Sapogenin ST-1 = 10096  
 Saponaretin = 11773  
 Saponin C = 16025  
 Sappanchalcone = 14099  
 Sarisan = 1832  
 Sarmentogenin 3-*O*- $\alpha$ -*L*-diginoside = 6532  
 Sarmentogenin 3-*O*- $\alpha$ -oleandroside = 6530  
 Sarotanoside = 16122  
 Sarothralen B = 11818  
 Sarothralin = 11819  
 Sarsasapogenin-3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-galactopyranoside = 22796  
 Sativan = 19394  
 (+)-Saucernetin = 19404  
 Saurolectam = 19417  
 Saussurine = 19427  
 Saxifragin = 18369  
 Scabioside A = 12642  
 Scabioside C = 12643  
 Scandenone = 22637  
 Schinol = 10364  
 $\gamma$ -Schisandrin = 5178  
 Schisandrin B = 5178  
 Schisandrin C = 19497  
 Schisandronic acid = 19499  
 Schisanhenol = 8917  
 Schisanhenrin = 8907  
 Schisantherin A = 8908  
 Schisantherin B = 8907  
 Schizandrin A = 5213  
 Schizandrin B = 5178  
 Schizanhonol = 8917  
 Schizanthrin B = 8907  
 Schizanthrin D = 19490  
 Schkuhrin I = 9570  
 Scopolamine = 10870  
 Scroside B = 17511  
 Scutellarein 4'-*O*-methylether 7-*O*- $\beta$ -glucopyranoside = 20252  
 1,10-Seco-dihydroisoparthenin-1,10-dione = 3482  
*ent*-3,4-Seco-16 $\alpha$ -hydroxyatis-4(19)-en-3-oic acid = 7692  
 (8*R*,8'*R*)-(-)-Secoisolaricresinol = 19618  
*ent*-2,3-Secokaur-16-en-2,3-dioic acid = 7691  
 Selagine = 9686  
 Selina-4(14),7(11)-diene = 19681  
 Selina-4(14),7(11)-dien-8-one = 7495  
 Selina-4(15),7(11)-dien-8-one = 7495  
 Selinan = 19685  
 Selinidin = 11834  
 Sempervine = 19697  
 Sempervirine = 19697  
 Senburiside IV = 8758  
 Senkyunolide A = 2791  
 Senkyunolide I = 5590  
 (*L*)-Serine = 19759  
 Serratagenic acid 3-*O*- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranoside = 7633  
 Serratetetrol = 21424  
 Serratendiol = 7017  
 Serrat-14-en-3 $\beta$ ,21 $\alpha$ -diol = 19768  
 Serrat-14-ene = 19767  
 (+)-Sesamin = 19777  
 Shashenoside I = 20569  
 Shegansu B = 16691  
 Shogaol = 19846  
*trans*-6-Shogaol = 19846  
 Sibiricoside A<sub>1</sub> = 1683  
 Sibiricoside A<sub>5</sub> = 1682  
 Silerin = 21889  
 Silibinin = 19895  
 Silybin A = 19895  
 Simalikalactone A = 15548  
 Sinapyl alcohol diisovalerate = 20559  
 Sinapyl alcohol 4'-*O*- $\beta$ -glucopyranoside = 20569  
 Sinoacutine = 19200  
 Sinpeimine-3-*O*- $\beta$ -glucoside = 22904  
 Sipeimine† = 11002  
 Sipeimine† = 18519  
 $\Delta^5$ -Sitosterol-3-one = 19993  
 $\beta$ -Sitosteryl 3-*O*- $\beta$ -*D*-glucoside = 19985  
 Skatole = 19459  
 Sobrepin = 20030  
 Solandulcidine = 20042  
 Solanidine-3-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)] $\beta$ -*D*-glucopyranoside = 15408  
 $\alpha$ -Solanine = 20060  
 Solasodine *O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)-{[ $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 3)], [ $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)]}- $\beta$ -*D*-glucopyranoside = 1822  
 Sophoraflavanone B = 11248  
 (-)-Sophoramide = 20094  
 8 $\alpha$ -Sovaleryloxy-1 $\alpha$ -hydroxy-3 $\alpha$ ,4 $\alpha$ -epoxy-5 $\alpha$ ,7 $\alpha$ H-10(14),11(13)-guaiadien-12,6 $\alpha$ -olide = 7197  
 Soyasaponin Bb = 20127  
 Soyasaponin Bd = 19238  
 Speciophylline = 22206  
 Specneuzhenide = 15873  
 Spermathridine = 12917  
 Sphaerophysone A = 21760  
 Spheroidine = 21211  
 $\alpha$ -Spinasterol glucoside = 20169

- Spirolactam S = 17460  
 Spiroside = 18368  
 (+)-Spiropachysine = 20205  
 25*R*-Spirosta-3,5-diene = 20207  
 25*S*-Spirosta-3,5-diene = 20208  
 (23*S*,24*S*)-Spirosta-5,25(27)-diene-1*β*,3*β*,23,24-tetrol 1-*O*-{*O*-(2-*O*-acetyl-*α*-*L*-rhamnopyranosyl)-(1→2)-*α*-*L*-arabinopyranosyl)} = 6578  
 (23*S*,24*S*)-Spirosta-5,25(27)-diene-1*β*,3*β*,23,24-tetrol 1-*O*-{*O*-(2,3-di-*O*-acetyl-*α*-*L*-rhamnopyranosyl)-(1→2)-*α*-*L*-arabinopyranosyl)} = 6577  
 (23*S*,24*S*)-Spirosta-5,25(27)-diene-1*β*,3*β*,23,24-tetrol-*O*-{*O*-(2,3,4-tri-*O*-acetyl-*α*-*L*-rhamnopyranosyl)-(1→2)-*α*-*L*-arabinopyranosyl)} = 6576  
 Spirostane-3,27-diol = 2150  
 Spirostane-1,2,3,5-tetrol = 12251  
 (22*S*,23*S*,24*R*,25*S*)-5*α*-Spirostane-3*β*,23,24-triol 24-*O*-*β*-*D*-glucopyranoside = 698  
 (25*S*)-5*β*-Spirostan-3*β*-ol = 19390  
 (25*S*)-5*β*-Spirostan-3*β*-ol-3-*O*-*α*-*L*-arabinopyranosyl-(1→6)-[*α*-*L*-arabinopyranosyl-(1→4)]-*β*-*D*-glucopyranosyl-(1→2)]-*β*-*D*-glucopyranoside = 1863  
 (3*β*,5*α*)-Spirostan-3-yl *O*-6-deoxy-*α*-*L*-mannopyranosyl-(1→2)-*O*-[*β*-*D*-glucopyranosyl-(1→4)]-*β*-*D*-galactopyranoside = 21014  
 (3*β*,5*α*)-Spirostan-3-yl *O*-*β*-*D*-galactopyranosyl-(1→2)-*O*-*β*-*D*-glucopyranosyl-(1→4)-*β*-*D*-galactopyranoside = 21013  
 Spirost-5,25(27)-dien-1*β*,3*r*-diol = 6974  
 (25*R*)-Spirost-5-en-1*β*,3*α*-diol = 7009  
 (22*R*,25*S*)-Spirost-5-en-3*β*,15*α*-diol 3-*O*-{*β*-*D*-glucopyranosyl (1→2)-*β*-*D*-glucopyranosyl-(1→4)-[*α*-*L*-rhamnopyranosyl-(1→2)]-*β*-*D*-galactopyranoside} = 13022  
 Spirost-5-ene-3,17-diol = 16809  
 (25*S*)-Spirost-5-ene-3*β*,27-diol 27-*O*-*β*-*D*-glucopyranosyl-3-*O*-[*α*-*L*-rhamnopyranosyl-(1→4)]-*β*-*D*-glucopyranoside = 17646  
 Spirost-25(27)-en-1*β*,3*α*,4*β*,5*β*-tetraol = 22111  
 Spirost-25(27)-en-1*β*,3*β*,5*β*-triol = 22112  
 (25*S*)-Spirost-1*β*,2*β*,3*β*,4*β*,5*β*-pentol 2-sulfate = 1899  
 (25*S*)-Spirost-1*β*,2*β*,3*β*,5*β*-tetraol = 22113  
 1(10)-Spirovetiven-11-ol = 9542  
 Squalidine = 11091  
 Squamostatin C = 2736  
 Stauntogenin 3-*O*-[*α*-*L*-Cymaropyranosyl-(1→4)-*β*-*D*-digitoxopyranosyl-(1→4)-*β*-*D*-3-demethyl-2-deoxy-thetopyranoside] = 20277  
 Stauntogenin 3-*O*-[*α*-*L*-Cymaropyranosyl-(1→4)-*β*-*D*-digitoxopyranosyl-(1→4)-2,6-dideoxy-*β*-*D*-ribo-hexopyranoside] = 20277  
 Stauntogenin 3-*O*-[*α*-*L*-diginopyranosyl-(1→4)-*β*-*L*-cymaropyranosyl-(1→4)-*β*-*D*-digitoxopyranosyl-(1→4)-*β*-*D*-thetopyranoside] = 20276  
 Stearyl alcohol = 15950  
 Stomodol-*α*-*L*-arabinopyranoside = 20302  
 Stomodol-*β*-*D*-glucopyranoside = 20303  
 Stomodinol = 20295  
 Stephaniaflavone A = 20314  
 Stephaniaflavone B = 20315  
 Stephenanthrine = 20320  
 Stevein = 20340  
 Stevenine = 20340  
 Stigmasta-5,28-diene-3,24-diol = 19367  
 4<sup>5,25</sup>-Stigmastadienol = 3844  
 Stigmasta-5,24(28)*E*-dien-3-ol = 7978  
 (22*E*)-Stigmasta-5,22-dien-3*β*-ol = 20369  
 Stigmast-5-ene-3*β*,7*α*-diol = 10967  
 (3*β*,24*R*)-Stigmast-5-en-3-ol = 19983  
 (3*β*,24*S*)-Stigmast-5-en-3-ol = 19984  
 Stigmast-4-en-3-one = 19981  
 Stigmast-5-en-3-one = 19993  
 Stigmasterol 3-*O*-*β*-*D*-glucoside = 20372  
 Stigmasteryl palmitate = 7426  
 Stoindoside I = 19997  
 Strophanthidin 3-*O*-*β*-*D*-glucopyranosyl-(1→4)-*β*-*D*-antiaropyranoside = 3495  
 (-)-Strychnine = 20410  
 Stypanol = 9339  
 Styptysat = 3141  
 Suavissimoside F<sub>1</sub> = 20433  
 1,2,3,9,10-Substituted aporphine alkaloid = 14708  
 2,3,10,11-Substituted pseudoprotoberberine alkaloid = 4886  
*D*(+)-Sucrose = 20446  
 Sudachiflavone = 21858  
 Sulfapatrinoside I = 20476  
 Sulfapatrinoside II = 20477  
 5-Sulfonyl-1,7-bis(4,5-dihydroxy-3-methoxyphenyl)-heptan-3-one = 19851  
 5-Sulfonyl-1,7-bis(3,4-dihydroxyphenyl)-heptan-3-one = 19850  
 5-Sulfonyl-1,7-bis(4-hydroxy-3-methoxyphenyl)-heptan-3-one = 19848  
 Sulfonyl bis-methane = 6408  
 3-*O*-[6-*O*-Sulfonyl-*β*-*D*-glucopyranosyl-(1→3)]-*α*-*L*-arabinopyranosyl-pseudojubenin = 2088  
 5-Sulfonyl-1-(4-hydroxy-3-methoxyphenyl)-7-(3,4-dihydroxyphenyl)-heptan-3-one = 19849  
 Sulforaphane = 14728  
 3-*O*-[(2-*O*-Sulfonyl-*β*-*D*-glucopyranosyl)(1→2)-*β*-*D*-glucopyranosyl]-echinocystic acid 28-*O*-*β*-*D*-glucopyranoside = 6703  
 Surtogin = 20496  
 Suspensaside = 7926  
 Swertiaperennin = 14732  
 Sylvic acid = 10  
 (+)-Syringaresinol-di-*O*-*β*-*D*-glucoside = 12916  
 Syringaresinol-4'-*O*-*β*-*D*-glucopyranoside = 85  
 (+)-Syringaresinol *O*-*β*-*D*-glucopyranoside = 85  
 Syringetin-3-*O*-*α*-*L*-rhamnopyranosyl-(1→6)-*β*-*D*-galactopyranoside = 20564
- ## T
- Tachioside = 10432  
 Tadeonal = 17640  
 Tanetin = 19312  
 Tanshinaldehyde II = 20678  
 (+)-Tanshindiol A = 20679  
 Tanshiquinone A = 4632  
 Tanshiquinone B = 4633  
 Tanshiquinone C = 4634  
 Taraxanthin = 13127  
 20-Taraxastene = 20698



- 20-Taraxastene-3,16-diol = 7715  
 Tarichatoxin = 21211  
 Tatasaponin I = 20383  
 Taureminin = 20730  
 Tauroside G<sub>2</sub> = 819  
 Taxa-4(20),11-diene-2 $\alpha$ ,5 $\alpha$ ,10 $\beta$ ,14 $\beta$ -tetraol-2 $\alpha$ ,5 $\alpha$ ,10 $\beta$ -triacetate-14 $\beta$ - $\alpha$ -methyl- $\beta$ -hydroxyl butyrate = 22951  
 Taxawallin C = 20775  
 Taxayuntin = 20758  
 Taxayuntin H = 20751  
 Taxchinin C = 20762  
 Taxchinin L = 20764  
 Taxcultine = 20814  
 Taxifolin = 5699  
 Taxifolin-3-*O*- $\alpha$ -L-rhamnoside = 1928  
 Taxine C = 4780  
 Taxine I = 20795  
 Taxol B = 3402  
 Taxuspinanane E = 6884  
 Taxuspinanane F = 20750  
 Taxuspinanane I = 14651  
 Taxuspinanane J = 2074  
 Taxuyunnanane A = 20813  
 Tecleoxine = 20893  
 Tectoquinone = 14144  
 Tectorigin = 20900  
 Telepathine = 9235  
 Tellimagrandin II = 7518  
 Telosmogenin I 3-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-thevetopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-cymaropyranoside = 20913  
 Telosmogenin I 3-*O*- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-thevetopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-digitoxopyranoside = 20920  
 Telosmogenin I 3-*O*- $\beta$ -D-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-cymaropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-cymaropyranoside = 20915  
 Telosmogenin I 3-*O*- $\beta$ -D-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-cymaropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-digitoxopyranoside = 20917  
 Telosmogenin I 3-*O*- $\beta$ -D-thevetopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-oleandropyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-cymaropyranoside = 20912  
 Teracrylshikonin = 20968  
 Teresantalaldehyde = 20971  
 Teresantanane = 21598  
 Terpeneol acetate = 20999  
 Terpinen-4-ol = 20992  
 2 $\alpha$ ,5 $\alpha$ ,14 $\alpha$ ,17 $\alpha$ -Tetraacetoxy-3 $\beta$ -benzoxyloxy-15 $\beta$ -hydroxy-9-oxoparalane = 17731  
 2 $\alpha$ ,4 $\alpha$ ,7 $\beta$ ,10 $\beta$ -Tetraacetoxy-5 $\beta$ ,20-epoxy-9 $\alpha$ ,13 $\alpha$ ,15-trihydroxy-11(15 $\rightarrow$ 1)-abeo-taxene = 20836  
 2 $\alpha$ ,5 $\alpha$ ,10 $\beta$ ,14 $\beta$ -Tetraacetoxytaxa-4(20),11-diene = 20875  
 5 $\alpha$ ,9 $\alpha$ ,10 $\beta$ ,13 $\alpha$ -Tetraacetoxytaxa-4(20),11-diene = 20840  
 5 $\alpha$ ,9 $\alpha$ ,10 $\beta$ ,13 $\alpha$ -Tetraacetoxytaxa-4(20),11-dien-14 $\beta$ -ol = 10740  
 5 $\alpha$ ,7 $\beta$ ,9 $\alpha$ ,20-Tetraacetoxy-2 $\alpha$ ,10 $\beta$ ,13 $\alpha$ ,15-tetrahydroxy-11-(15 $\rightarrow$ 1)-abeo-taxene = 20835  
 1,3',4',6'-Tetra-*O*-acetyl-6-*O*-*p*-coumaroylsucrose = 18005  
 2,5,10,13-Tetraacetyl-11-taxene-2,5,7,9,10,13,20-heptol = 20752  
 2,10,12,10'-Tetrachloroisoplagiochin C = 2182  
*n*-Tetracosanoic acid = 12800  
 Tetracosanoyl-*p*-hydroxy phenethylamine = 22522  
 Tetradecanoic acid = 15203  
 12-Tetradecanoylphorbol 13-acetate = 17187  
 5-Tetradecenoic acid = 21046  
*cis*-9-Tetradecenoic acid = 15205  
 Tetradecenoic acid C = 15205  
 3,14,19,20-Tetrahydro-16-ethenyl-17-( $\beta$ -D-glucopyranosyloxy)-19-hydroxy-(15 $\beta$ ,16 $\alpha$ ,17 $\beta$ )-oxayohimban-21-one = 15310  
 14,15,19,20-Tetrahydro-16-ethenyl-17-( $\beta$ -D-glucopyranosyloxy)-19-hydroxy-(3 $\alpha$ ,16 $\alpha$ ,17 $\beta$ )-oxayohimban-21-one = 15311  
 (-)-(2*R*,3*S*,4*R*,5*R*,10*S*,2'*S*)-1-[2,3,4,5-Tetrahydro-10-acetyloxy-5-hydroxy-2-(4-methoxyphenyl)-6-methoxy-7,8-methylenedioxy-3-phenyl-2,5-methano-1-benzoxepin-4-carbonyl]-2-(2-methylpropanoylamino)-pyrrolidine = 21275  
 (3 $\alpha$ )-3,4,5,6-Tetrahydroalstonine = 21055  
 Tetrahydrobenzylisoquinoline alkaloid = 6316  
 $\Delta^2$ -Tetrahydrocannabinolic acid = 21060  
 (-)-Tetrahydrocolumbamine = 11348  
 Tetrahydrodesoxycordifoline = 3184  
 (-)-(1*R*,2*R*,3*S*,3*aR*)-16,7,8,8a-Tetrahydro-8,8a-dihydroxy-9-methoxy-5a-(4-methoxyphenyl)-6-phenyl-5a*H*-cyclopenta[4,5]furo[2,3-*f*]-1,3-benzodioxole-7-*N,N*-dimethyl amide = 741  
 (-)-(2*R*,3*S*,4*R*,5*R*,10*S*,2'*S*)-1-[2,3,4,5-Tetrahydro-5,10-dihydroxy-2-(4-methoxyphenyl)-6-methoxy-7,8-methylenedioxy-3-phenyl-2,5-methano-1-benzoxepin-4-carbonyl]-2-(2-methylbutanoylamino)-pyrrolidine = 9623  
 (-)-(2*R*,3*R*,4*S*,5*R*,10*R*,2'*S*)-1-[2,3,4,5-Tetrahydro-5,10-dihydroxy-2-(4-methoxyphenyl)-6-methoxy-7,8-methylenedioxy-3-phenyl-2,5-methano-1-benzoxepin-4-carbonyl]-2-(2-methylpropanoylamino)-pyrrolidine = 11739  
 (+)-(2*R*,3*R*,4*S*,5*R*,10*S*,2'*R*)-1-[2,3,4,5-Tetrahydro-5,10-dihydroxy-2-(4-methoxyphenyl)-6-methoxy-7,8-methylenedioxy-3-phenyl-2,5-methano-1-benzoxepin-4-carbonyl]-2-(2-methylpropanoylamino)-pyrrolidine = 21276  
 (*S*)-5,8,13,13a-Tetrahydro-3,10-dimethoxy-6*H*-dibenzof[*a,g*]quinolizine-2,9-diol = 19566  
 1,2,3,4 Tetrahydro-6,7-dimethoxy-2-methylisoquinoline = 14253  
 Tetrahydroharman = 6736  
 3,3 $\alpha$ ,7,7 $\alpha$ -Tetrahydro-3 $\alpha$ -hydroxy-6(2*H*)-benzofuranone = 18615  
 4a*S*\*-2,3,4,4a-Tetrahydro-6-hydroxy-7-isopropyl-1,1,4a-trimethyl-5,8(1*H*)-fluorene-dione = 5434  
 (+)-(2*R*,3*S*,4*R*,5*R*,2'*S*)-1-[2,3,4,5-Tetrahydro-5-hydroxy-2-(4-methoxyphenyl)-6-methoxy-7,8-methylenedioxy-10-oxo-3-phenyl-2,5-methano-1-benzoxepin-4-carbonyl]-2-(2-methylpropanoylamino)-pyrrolidine = 21277  
 (+)-(2*R*,3*R*,4*S*,5*R*,2'*S*)-1-[2,3,4,5-Tetrahydro-5-hydroxy-2-(4-methoxyphenyl)-6-methoxy-7,8-methylenedioxy-10-oxo-3-phenyl-2,5-methano-1-benzoxepin-4-carbonyl]-2-(2-methylpropanoylamino)-pyrrolidine = 21278  
 1,2,3,4-Tetrahydro-4-hydroxy-4-quinolin carboxylic acid = 22082  
 Tetrahydrojatrorrhizine = 4122  
 (+)-(2*R*,3*S*,4*R*,2'*R*)-1-[2,3,4,5-Tetrahydro-2-methoxycarbonyl-2-(4-methoxyphenyl)-6-methoxy-7,8-methylenedioxy-5-oxo-3-phenyl-1-benzoxepin-4-carbonyl]-2-(2-methylpropanoylamino)-pyrrolidine = 21274  
 1,2,3,4-Tetrahydro-6-methoxy-7-hydroxy-1,2-dimethylisoquinoline = 14252

- 1,2,3,4-Tetrahydro-6-methoxy-7-hydroxy-2-methylisoquinoline = 4121  
 8,13,13*b*,14-Tetrahydro-14-methylindolo[2',3':3,4]pyrido[2,1*b*]quinazolin-5(7*H*)-one = 7665  
 (6*R*,8*R*)-5,6,7,8-Tetrahydro-8-methyl-1,3,6-naphthalenetriol = 7761  
 Tetrahydropiperinic acid = 21078  
 Tetrahydropyrrole = 18275  
 1,2,15,16-Tetrahydro-tanshinone = 21080  
 4''*a*,5'',6'',8''*a*-Tetrahydro-5,7,4'-trihydroxy-3-methoxy-5'',5'',8''*a*-trimethyl-4*H*-chromeno[2'',3'':3',2'']flavone = 22182  
 1*β*,6*β*,7*β*,14*β*-Tetrahydroxy-19-acetoxy-7*α*,20-epoxy-*ent*-kaur-16-en-15-one = 22792  
 3*β*,7*β*,11*β*,15*β*-Tetrahydroxy-6*α*-acetoxy-*ent*-kaur-16-ene = 13702  
 2,3,7,8-Tetrahydroxy[1]benzopyrano[5,4,3-*cde*][1]benzopyran-5,7-dione = 6757  
 3',4,4'',6'-Tetrahydroxy-2'-benzoyloxy-5'-(3-pyridinecarboxyl)[1,1':4',1'-terphenyl] = 21306  
 (*E*)-4,5,6,7-Tetrahydroxy-2-benzylhept-2-enoic acid = 6613  
 2,4,3',4'-Tetrahydroxybiphenyl = 19346  
 3,4,2',4'-Tetrahydroxychalcone = 2779  
 (2*S*,2*S*)-11*α*,16*β*,22,26-Tetrahydroxycholest-4-en-3-one 16-*O-β-D*-glucopyranosyl-(1→3)-*β-D*-xylopyranoside = 16879  
 (1*α*,3*α*,4*α*,5*β*)-1,3,4,5-Tetrahydroxy-cyclohexanecarboxylic acid = 18421  
 3*β*,6*α*,12*β*,24*ξ*-Tetrahydroxy-dammar-20(22),25-diene 6-*O-β-D*-glucopyranoside = 8440  
 3*β*,7*β*,12*β*,20(*S*)-Tetrahydroxy-dammar-5,24-diene 20-*O-β-D*-glucopyranoside = 8442  
 1*β*,3*β*,12*β*,20(*S*)-Tetrahydroxy-dammer-24(25)-en-3-*O-β-D*-glucopyranosyl-20(*S*)-*O-β-D*-glucopyranosyl-(1→6)-*β-D*-glucopyranoside = 9095  
 3',4,4'',6'-Tetrahydroxy-2',5'-dibenzoyloxy [1,1':4',1''-terphenyl] = 21302  
 3,5,3',4'-Tetrahydroxy-6,7-dimethoxyflavone = 7588  
 5,7,3',4'-Tetrahydroxy-6-(6,6-dimethyl-2-methylene-cyclohexylmethyl)flavone = 22183  
 1,3,5,6-Tetrahydroxy-4-[(2*E*)-3,7-dimethylocta-2,6-dienyl]-8-(3-methylbut-2-enyl)xanthone = 22524  
 1,3,6,7-Tetrahydroxy-2-(3,7-dimethyl-2,6-octadienyl)-5-(3-methyl-2-butenyl)xanthone = 6630  
 1,3,5,6-Tetrahydroxy-2-(1,1-dimethyl-2-propenyl)xanthone = 4347  
 (2*R*,24*Z*)-1*α*,3*β*,22,26-tetrahydroxyergost-5,24-diene 26-*O-β-D*-glucopyranoside = 3646  
 3',4',5,7-Tetrahydroxyflavanol = 6853  
 (2*S*)-5,7,2',4'-Tetrahydroxyflavanone = 20326  
 3,5,7,4'-Tetrahydroxyflavone = 12020  
 3,7,3',4'-Tetrahydroxyflavone = 7802  
 5,7,3',4'-Tetrahydroxyflavone = 13137  
 5,7,8,4'-Tetrahydroxyflavone = 11703  
 3,4',5,7-Tetrahydroxyflavone-3-*L*-rhamnoside = 12082  
 3',4',5,7-Tetrahydroxyflavanol-3-*β-D*-galactoside = 10887  
 6*β*,7*β*,14*β*,15*R*-Tetrahydroxy-11*β-O*-formyl-7*α*,20-epoxy-*ent*-kaur-16-ene = 18977  
 2',3,4,4'-Tetrahydroxy-3'-geranylchalcone = 8330  
 3*β*,12*β*,20(*S*),24*ξ*-Tetrahydroxy-20-*O-β-D*-glucopyranosyl-3-*O-β-D*-glucopyranoside = 8414  
 3*β*,6*α*,12*β*,20(*S*)-Tetrahydroxy-25-hydroperoxy-dammar-23-ene 20-*O-β-D*-glucopyranoside = 8441  
 5,7,2',4'-Tetrahydroxy-6-(2''-hydroxy-3''-methylbut-3''-enyl)-8-(*γ*,*γ*-dimethylallyl) isoflavone = 7318  
 5,7,3',4'-Tetrahydroxyisoflavone = 16209  
*cis*-5*α-H*,3*β*,8*β*,14*β*,17*β*-Tetrahydroxy-12*β-O*-isovaleryl-20-*O*-isovaleryl-pregnane = 6602  
 1*α*,7*α*,12*α*,14*β*-Tetrahydroxy-*ent*-kaur-16-en-15-one = 7674  
 1*α*,7*α*,14*β*,18-Tetrahydroxy-*ent*-kaur-16-en-15-one = 7684  
 7*α*,12*α*,14*β*,18-Tetrahydroxy-*ent*-kaur-16-en-15-one = 18472  
 7*α*,12*α*,14*β*,20-Tetrahydroxy-*ent*-kaur-16-en-15-one = 7682  
 7*α*,14*β*,18,20-Tetrahydroxy-*ent*-kaur-16-en-15-one = 7683  
 3,5,7,8-Tetrahydroxy flavone 4'-*O-α-L*-rhamnopyranoside = 18791  
 1,3,5,8-Tetrahydroxy-2-methoxyanthraquinone = 18874  
 5,5'',7,7''-Tetrahydroxy 3'-methoxy 4',4''-biflavonyl ether = 14557  
 3,5,7,3'-Tetrahydroxy-4'-methoxy flavone = 20657  
 3,5,8,4'-Tetrahydroxy-7-methoxy flavone = 17617  
 5,6,3',4'-Tetrahydroxy-7-methoxyflavone = 16758  
 5,7,3',4'-Tetrahydroxy-6-methoxyflavone = 7556  
 3',4',5,7-Tetrahydroxy-6-methoxyisoflavone = 11157  
 3,5,7,4'-Tetrahydroxy-3'-methoxy-6-isoprenyl flavone = 8142  
 5,6,3',4'-Tetrahydroxy-3-methoxy-6'-isoprenyl flavone = 22238  
 5,7,3',4'-Tetrahydroxy-3-methoxy-5'-isoprenyl flavone = 22242  
 5,7,3',4'-Tetrahydroxy-3-methoxy-2'-(2,6,6-trimethyl-2-cyclohexenylmethyl) flavone = 22181  
 3*β*,16*β*,23,28-Tetrahydroxyoleana-11,13(18)-dien-3-*O-β-D*-glucopyranosyl-(1→6)-[*α-L*-rhamnopyranosyl-(1→4)]-*β-D*-glucopyranoside = 19153  
 3*β*,16*β*,23,28-Tetrahydroxyoleana-11,13(18)-dien-3-*O-β-D*-xylopyranosyl-(1→2)-*β-D*-glucopyranosyl-(1→3)-*β-D*-fucopyranoside = 19150  
 2*β*,3*β*,6*β*,28-Tetrahydroxyolean-12-en-23-oic acid 23-*O-α-L*-arabinopyranosyl ester = 8130  
 2*α*,3*α*,11,12-Tetrahydroxypicrotoxan-3(15*α*)-olide 11-*O-β-D*-glucopyranoside = 5119  
 2',3,4,4'-Tetrahydroxy-5-prenylchalcone = 17827  
 2',4',5,7-Tetrahydroxy-6-prenylflavanone = 4335  
 5,7,3',4'-Tetrahydroxy-5'-prenylflavoanone = 22239  
 3,5,7,4'-Tetrahydroxy-8-prenylflavone-3,7-*O-α-L*-dirhamnopyranoside = 2141  
 3,5,7,4'-Tetrahydroxy-8-prenylflavone-3-*O-α-L*-rhamnopyranoside = 2139  
 3,5,7,4'-Tetrahydroxy-8-prenylflavone-3-*O-α-L*-rhamnopyranosyl-(1→4)-*α-L*-rhamnopyranoside = 2140  
 3,5,7,4'-Tetrahydroxy-8-prenylflavone-3-*O-α-L*-rhamnopyranosyl-(1→4)-*α-L*-rhamnopyranosyl-7-*O-β-D*-glucopyranoside = 2142  
 (2*S**R*)-1*β*,2*β*,3*β*,5*β*-Tetrahydroxyspirostan-4*β*-yl-*O-β-D*-xylopyranoside = 22653  
 Tetrahydroxystilbene = 4337  
 3,5,3',4'-Tetrahydroxystilbene = 17278  
 5*α*,9*α*,10*β*,13*α*-Tetrahydroxy-4(20),11-taxadiene = 21160  
 3,5,7,4'-Tetrahydroxy-6-(2,6,6-trimethyl-2-cyclohexenylmethyl)flavone = 22180  
 2*α*,3*β*,19*α*,30-Tetrahydroxyurs-12-en-24,28-dioic acid 28-*O-β-D*-glucopyranosyl ester = 21403  
 2*β*,3*β*,7*β*,19*α*-Tetrahydroxyurs-12-en-28-oic acid = 18970  
 2*α*,3*α*,19*α*,24-Tetrahydroxyurs-12-en-28-oic acid 28-*O-β-D*-glucopyranoside = 18007  
 (2*R*,2*R*)-1*α*,3*β*,20,27-Tetrahydroxywitha-5,24-dienolide 3-*O-β-D*-glucopyranoside = 22714  
 1,3,6,7-Tetrahydroxyxanthone = 15715  
 1,3,5,8-Tetrahydroxyxanthone = 15718

- 4,4',6,6'-Tetramethoxy-[1,1'-biphenanthrene]-2,2',3,3',7,7'-hexol = 2398  
 5,9,10,12-Tetramethoxy-2,2-dimethyl-2*H*-pyrano[5,6-*b*]xanthen-6-one = 6633  
 3,3',4',5'-Tetramethoxyfuran[4'',5'':8,7]foavone = 16491  
 2,3,4,5-Tetramethoxy-xanthone-1-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-xylopyranoside = 22387  
 1,1,4,8-Tetramethylcycloundecane = 9667  
 1,3,3,8-Tetramethylcycloundeca-1,4,8-triene = 11458  
 (1*S*,8*S*)-4*a*,7*b*,10,10-Tetramethyl-3*b*,6*b*-dihydroxytricyclo[5,3,0,0<sup>2,5</sup>]decan-2*a*,6-olide = 7738  
 1,1,4,7-Tetramethyl-1*a*,2,4*a*,5,6,7*b*-hexahydro-1*H*-cyclopropa[*e*]azulene = 1756  
 2,2,5,7-Tetramethyl-4-hydroxy-6-(2-hydroxyethyl)-indanone = 16098  
 Tetra-*O*-methylisoscutellarein = 21186  
 2,2,4,4-Tetramethyl-6-(1-oxo-3-phenylprop-2-enyl)cyclohexane-1,3,5-trione = 3472  
 2,3,5,6-Tetramethylpyrazine = 3633  
 2,2,6,9-Tetramethyl-3,4,6*a*,7-tetrahydro-2*H*-3,9*a*-methanocyclopent[*b*]oxocine = 9039  
 (1*R*\*,6*R*\*,7*R*\*)-3,7,10,10-Tetramethyltricyclo[4.3.2.0<sup>2,6</sup>]undec-2-ene = 8453  
 (1*S*\*,8*S*\*,11*R*\*)-4,7,7,11-Tetramethyl-tricyclo[6.3.0.0<sup>1,5</sup>]undec-4-ene = 16583  
 24,25,26,27-Tetra-norapotirucalla-(apoeupha)-6*a*-acetoxy-7*a*-hydroxy-1,14,20,22-tetraen-21,23-epoxy-3-one = 364  
 [24,25,26,27-Tetranorapotirucalla-(apoeupha)-6*a*-hydroxy,11*a*-methoxy-7*a*,12*a*-diacetoxy,1,14,20(22)-trien-3-one] = 13662  
 [24,25,26,27-Tetranorapotirucalla-(apoeupha)-6*a*-methoxy-7*a*-acetoxy-1,14-dien-3,16-dione-21-al] = 22961  
 24,25,26,27-Tetranorapotirucalla-(apoeupha)-1*a*-trimethylacryloxy-21,23-6*a*,28-diepoxy-16-oxo-17-oxa-14,20,22-trien-3*a*,7*a*-diol = 13663  
 6,7,3',4'-Tetrasubstituted tetrahydrobenzylisoquinoline alkaloid = 22819  
 Tetrodontoxin = 21211  
 Teucrol-4'-*O*- $\alpha$ -rhamnopyranosyl-(1'''' $\rightarrow$ 6''')- $\beta$ -*O*-galactopyranosyl-(1'''' $\rightarrow$ 4''')- $\alpha$ -*O*-rhamnopyranoside = 21221  
 Texogenin = 13569  
 Thalicsimine = 9441  
 Thalictiin = 1492  
 Thalictrine = 13374  
 Thalictrisine = 21249  
 Thaliximine = 9441  
 Thalpinine = 21235  
 Thalrugosamine = 9597  
 Thalsimine = 21234  
 Thaspine = 20717  
 $\Delta^2$ -THC = 21060  
 $\Delta^8$ -THC = 21058  
 $\Delta^9$ -THC = 21059  
 Theasapogenol B = 2152  
 Theasapogenol C = 3032  
 Theasapogenol D = 3030  
 Theasapogenol E = 3034  
 Thiamine = 22554  
 3-Thiapentane = 5503  
 Threitol = 7334  
 Thunbergene = 3385  
 Thymine = 14802  
 Thymoquinol 2,5-*O*- $\beta$ -diglucopyranoside = 10763  
 Tyrosine = 21175  
*trans*-Tiglaldehyde = 21370  
 Tiglic aldehyde = 21370  
 21-*O*-Tigloyl-28-*O*-acetylprotoaescigenin-3-*O*-[ $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 2)][ $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 4)]- $\beta$ -*D*-glucopyranosiduronic acid = 11416  
 21-*O*-Tigloyl-22-*O*-acetylprotoaescigenin-3-*O*-[ $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 2)][ $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 4)]- $\beta$ -*D*-glucopyranosiduronic acid = 7361  
 21-*O*-Tigloyl-22-*O*-acetyltheasapogenol E 3-*O*- $\beta$ -*D*-galactopyranosyl(1 $\rightarrow$ 2)-[ $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucopyranosiduronic acid = 21289  
 21-Tigloylbarringtonol C 3*b*-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-galactopyranosyl-(1 $\rightarrow$ 3)[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucuronopyranoside] = 2313  
 28-Tigloylbarringtonol C 3*b*-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-galactopyranosyl-(1 $\rightarrow$ 3)[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucuronopyranoside] = 2314  
 8*b*-Tigloyloxy-14-chloro-2*b*,10*a*-dihydroxy-1*aH*,5*aH*,6*bH*,7*aH*-guai-3,11(13)-dien-6,12-olide = 7571  
 8*b*-Tigloyloxy-14-chloro-3*a*,4*a*-epoxy-2*b*,10-dihydroxy-1*aH*,5*aH*,6*bH*,7*aH*-guai-11(13)-en-6,12-olide = 7574  
 3'(*R*)-Tigloyloxy-4'-keto-3',4'-dihydroseselin = 18286  
 3*a*-Tigloyloxytropane = 21372  
 13-*O*-Tigloylphorbol-20-(9*Z*,12*Z*-octadecadienoate) = 21381  
 22-Tigloylprotoaescigenin 3-*O*-[ $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 2)][ $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 4)]- $\beta$ -*D*-glucopyranosiduronic acid = 7363  
 21-*O*-Tigloyltheasapogenol E 3-*O*- $\beta$ -*D*-galactopyranosyl(1 $\rightarrow$ 2)[ $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucopyranosiduronic acid = 21288  
 Tigogenin-3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)](6-*O*-acetyl- $\beta$ -*D*-glucopyranosyl)-(1 $\rightarrow$ 4)- $\beta$ -*D*-galactopyranoside = 13329  
 Tigogenin-3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-galactopyranoside = 13326  
 Tigogenin 3-*O*- $\beta$ -*D*-Glucopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-galactopyranoside = 17612  
 Tigogenin 3-*O*- $\beta$ -*D*-Xylopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-galactopyranoside = 17611  
 6*b*,15*b*-Dihydroxy-3*a*,20-epoxy-*ent*-kaur-16-en-1,7-dione = 12589  
 Timosaponin F = 20217  
 Timosaponin G = 20209  
 Timosaponin B<sub>1</sub> = 1175  
 Timosaponin F = 1176  
 Timosaponin G = 1177  
 Tinosporin = 3939  
 Tirotundin = 20611  
 Tirucalla-8,24-diene-3*b*-ol-7-one = 6939  
 $\beta$ -Tocopherol = 22559  
 $\gamma$ -Tocopherol = 22561  
 $\delta$ -Tocopherol = 22560  
 Toddaline = 3498  
 Toddasin = 14824

- Toluene = 14155  
Toluol = 14155  
Tomatin = 21435  
 $\alpha$ -Tomatine = 21435  
Toralactone 9-gentiobioside = 8649  
Tormentac acid = 6178  
Tormentac acid  $\beta$ -D-glucopyranosyl ester = 18916  
2-(2-[3-Tormylindolyl])-(3H)-quinazolin-4-one = 2569  
Torquatone in *Eucalyptus torquata* var. *grandiflora* = 11745  
Torreyol = 2858  
Toruogenin = 21469  
Tovophyllin B = 6629  
Toxyloxanthone A = 21503  
Trametenolic acid B = 21502  
Trametenolic acid 21-O- $\beta$ -D-glucopyranoside = 7874  
Triacanthin = 21511  
6,14 $\alpha$ ,17(R)-Triacetoxo-5 $\alpha$ -(2-acetoxoacetoxo)-3 $\beta$ -benzoyloxy-15 $\beta$ -hydroxy-seget-8(12)-en-9-one = 19657  
5 $\alpha$ ,8 $\alpha$ ,15 $\beta$ -Triacetoxo-3 $\alpha$ -benzoyloxy-4 $\alpha$ -hydroxy-9,14-dioxo-13 $\beta$ H-jatropha-6(17),11E-diene = 7614  
3 $\beta$ ,9 $\alpha$ ,15 $\beta$ -Triacetoxo-7 $\beta$ -benzoyloxy-14-oxojatropha-5E,12E-diene = 18170  
3 $\beta$ ,9 $\alpha$ ,15 $\beta$ -Triacetoxo-7 $\beta$ -butyroloxy-14-oxojatropha-5E,12E-diene = 18171  
2 $\alpha$ ,7 $\beta$ ,13 $\alpha$ -Triacetoxo-5 $\alpha$ ,10 $\beta$ -dihydroxy-9-keto-2(3 $\rightarrow$ 20)-abeo-taxane = 20870  
6S-[3S,5R,6S-(Triacetoxo)-1Z-heptenyl]-5S-acetoxo-5,6-dihydro-2H-pyran-2-one = 16751  
6S-[3S,5R,6S-(triacetoxo)-1Z-heptenyl]-5S-acetoxo-4R-methoxy-3,4,5,6-tetrahydro-4Hpyran-2-one = 16752  
 $\beta$ ,11 $\alpha$ ,15 $\beta$ -Triacetoxo-7 $\beta$ -hydroxy-7 $\alpha$ ,20-epoxy-entkaur-16-ene = 11400  
(12S)-6 $\alpha$ ,12,19-Triacetoxo-1 $\beta$ -hydroxy-4,18-epoxyneoclerod-13(14)-en-15,16-olide = 795  
(12S)-1 $\beta$ ,6 $\alpha$ ,19-Triacetoxo-12-hydroxy-4,18-epoxyneoclerod-13(14)-en-15,16-olide = 796  
[2'Z,5(1')Z]5-(4'S,6'R,7'S-triacetoxo-2-octenylidene)-2(5H)-furanone = 16753  
Triacetyl-5-decinnamoyltaxicin I = 10739  
2 $\alpha$ ,7 $\beta$ ,9 $\alpha$ -Triacetyl-2 $\alpha$ ,7 $\beta$ -dibenzoyl-10 $\beta$ -debenzoyltaxayuntin = 20759  
2,10,13-Triacetyl-4(20),11-taxadiene-2,5,7,9,10,13-hexol = 20749  
n-Triacetonioic acid = 13687  
10,12,10'-Trichloroisoplagiochin C = 2181  
Trichodonin = 21572  
Tricholein = 17435  
7 $\beta$ ,9 $\alpha$ ,10 $\beta$ -Trideacetyl-1 $\beta$ -hydroxybaccatin I = 20823  
Tridecane = 21610  
5-Tridecyl-1,3-benzenediol = 8997  
1,3,4-Tridehydrofangchinolium = 7754  
rel-(7 $\alpha$ ,7 $\alpha$ ,8 $\alpha$ ,8 $\alpha$ ,7 $\alpha$ ,8 $\beta$ )-3',7':7,9'-Triepoxy-4'8"-oxy-8,8'-sesquieo-lignan-3,3',4,4',9"-pentaol and rel-(7 $\alpha$ ,7 $\alpha$ ,8 $\alpha$ ,8 $\alpha$ ,7 $\beta$ ,8 $\alpha$ )-3',7':7,9':7,9'-Triepoxy-4'8"-oxy-8,8'-sesqui- neolignan-3,3',4,4',9"-pentaol) = 11612  
rel-((7 $\alpha$ ,7 $\alpha$ ,8 $\alpha$ ,8 $\alpha$ ,7 $\alpha$ ,8 $\beta$ )-4',7":7,9':7,9'-Triepoxy-3',8"-oxy-8,8'-sesquieo-lignan-3,3",4,4',9"-pentaol and rel-(7 $\alpha$ ,7 $\alpha$ ,8 $\alpha$ ,8 $\alpha$ ,7 $\beta$ ,8 $\alpha$ )-4',7":7,9':7,9'-Triepoxy-3',8"-oxy-8,8'-sesquieolignan-3,3",4,4',9"-pentaol) = 17860  
Trifolirhizin = 13282  
1,2,6-Tri-O-galloyl-3,4(R)-hexahydroxydiphenyl- $\beta$ -D-glucose = 3418  
3-(4,7,8-Trihydroxydibenzo-[b,f]oxepin-1-yl)acrylic acid = 21479  
rel-(8R,10R,20S)-8,10,20-Trihydroxy-9(10 $\rightarrow$ 20)-abeo-abieta-9,13-dien-12-one = 19429  
1 $\alpha$ ,11 $\beta$ ,16-Trihydroxy-3 $\beta$ -acetoxo-ent-abieta-7,15(17)-dien-6-one = 616  
7 $\beta$ ,14 $\beta$ ,15 $\beta$ -Trihydroxy-1 $\alpha$ -acetoxo-7 $\alpha$ ,20-epoxy-ent-kaurane = 6793  
7 $\beta$ ,13 $\alpha$ ,15 $\beta$ -Trihydroxy-1 $\alpha$ -acetoxo-7 $\alpha$ ,20-epoxy-ent-kaur-16-ene = 6791  
7 $\beta$ ,14 $\beta$ ,15 $\beta$ -Trihydroxy-1 $\alpha$ -acetoxo-7 $\alpha$ ,20-epoxy-ent-kaur-16-ene = 6792  
1 $\alpha$ ,7 $\beta$ ,13 $\alpha$ -Trihydroxy-11 $\beta$ -acetoxo-7 $\alpha$ ,20-epoxy-ent-kaur-16-en-15-one = 6789  
3 $\beta$ ,11 $\beta$ ,15 $\beta$ -Trihydroxy-6 $\alpha$ -acetoxo-ent-kaur-16-ene = 13699  
1 $\alpha$ ,7 $\alpha$ ,14 $\beta$ -Trihydroxy-12 $\alpha$ -acetoxo-ent-kaur-16-en-15-one = 7675  
1 $\alpha$ ,7 $\alpha$ ,14 $\beta$ -Trihydroxy-20-acetoxo-ent-kaur-16-en-15-one = 9362  
cis-5 $\alpha$ -H,3 $\beta$ ,14 $\beta$ ,17 $\beta$ -Trihydroxy-12 $\beta$ -O-acetyl-20-O-benzoyl-pregnane = 6603  
3 $\beta$ ,13 $\beta$ ,22 $\alpha$ -Trihydroxy-16 $\alpha$ -acetyloxy-oleanane-28-oic acid 3-O-[ $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -L-arabinopyraosyl]-22-O- $\beta$ -D-glucopyranoside = 3129  
3 $\alpha$ ,14 $\beta$ ,17-Trihydroxy-18-alent-abieta-7(8),15(16)-diene = 6794  
10 $\beta$ ,12,14-Trihydroxyalloaromadendrane 14-O- $\beta$ -D-glucopyranoside = 5122  
5,7,4'-Trihydroxy-6-C-arabinoside-8-C-glucoside flavone = 11697  
1,3,5-Trihydroxybenzene = 17174  
1,3,5-Trihydroxybenzene 1-O- $\beta$ -D-glucoside = 17171  
3,4,5-Trihydroxybenzoic acid = 8095  
4,5,7-Trihydroxy-1,8-bis(4-hydroxybenzyl)-3-methoxy-6-phenyl-9,10-dihydrophenanthrene = 19931  
1 $\alpha$ ,6 $\beta$ ,15 $\beta$ -Trihydroxy-6,7-B-seco-ent-kaur-16-en-6,20-epoxy-7,20- $\delta$ -olide = 18480  
4,2',4'-Trihydroxychalcone = 11504  
(22S,25S)-16 $\beta$ ,22,26-Trihydroxycholest-4-en-3-one 16-O-[6-O-acetyl- $\beta$ -D-glucopyranosyl]-(1 $\rightarrow$ 3)- $\beta$ -D-xylopyranoside] = 16878  
(22S,25S)-16 $\beta$ ,22,26-Trihydroxycholest-4-en-3-one 16-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -D-xylopyranoside = 16877  
3 $\alpha$ ,7 $\alpha$ ,12 $\alpha$ -Trihydroxy coprostanic acid = 4031  
3,4,5-Trihydroxy-1-cyclohexene-1-carboxylic acid = 19805  
3 $\beta$ ,6 $\alpha$ ,12 $\beta$ -Trihydroxy-20(22),24-dammardiene-6-O- $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 2)-O- $\beta$ -D-glucopyranoside = 8411  
3 $\beta$ ,6 $\alpha$ ,12 $\beta$ -Trihydroxy-20(22),24-dammar-20(H),24-diene-6-O- $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 2)-O- $\beta$ -D-glucopyranoside = 8415  
3 $\beta$ ,6 $\alpha$ ,20(S)-Trihydroxy-dammar-24-ene-12-one 20-O- $\beta$ -D-glucopyranoside = 8443  
1 $\alpha$ ,11 $\beta$ ,15 $\beta$ -Trihydroxy-3 $\beta$ ,6 $\alpha$ -diacetoxo-ent-kaur-16-ene = 13706  
1 $\alpha$ ,11 $\beta$ ,15 $\beta$ -Trihydroxy-3 $\beta$ ,7 $\beta$ -diacetoxo-ent-kaur-16-ene = 609  
3 $\beta$ ,11 $\beta$ ,15 $\beta$ -Trihydroxy-1 $\alpha$ ,7 $\beta$ -diacetoxo-ent-kaur-16-ene = 612  
3 $\beta$ ,11 $\beta$ ,15 $\beta$ -Trihydroxy-6 $\alpha$ ,7 $\beta$ -diacetoxo-ent-kaur-16-ene = 13703  
1 $\alpha$ ,6 $\alpha$ ,11 $\beta$ -Trihydroxy-3 $\beta$ ,7 $\beta$ -diacetoxo-ent-kaur-16-en-15-one = 613  
Trihydroxydiacetoxytaxadiene = 21705  
(3R)-7,2',4'-Trihydroxy-6,8-di( $\gamma$ , $\gamma$ -dimethylallyl)isoflavan = 7356  
( $\pm$ )-7,2',4'-Trihydroxy-8,3'-di( $\gamma$ , $\gamma$ -dimethylallyl)isoflavanone = 7354  
2,5,8-Trihydroxy-1,3-dimethoxyanthraquinone = 18873  
2',4",2'''-Trihydroxy-4',4'''-dimethoxy-4-O-5'''-bichalcone = 18820  
3,5,7-Trihydroxy-1,2-dimethoxy-9,10-dihydrophenanthrene = 3890  
5,3,3'-Trihydroxy-7,4'-dimethoxyflavanone = 6338  
3,5,3'-Trihydroxy-7,2'-dimethoxyflavone = 11163  
3,5,3'-Trihydroxy-7,4'-dimethoxyflavone = 16092  
3,7,4'-Trihydroxy-3',5'-dimethoxyflavone = 12567  
5,7,2'-Trihydroxy-3,6-dimethoxyflavone = 11160  
5,7,4'-Trihydroxy-3',5'-dimethoxyl-8-prenylflavone = 2144  
2,6,7-Trihydroxy-1,8-dimethoxy-3-methyl-9(10H)-anthracenone-10-oxyde-

- canoate = 12236
- 1,4,7-Trihydroxy-6,8-dimethoxy-1-methylanthraquinone = 18869
- 3,5,7-Trihydroxy-1,2-dimethoxyphenanthrene = 3891
- 1,3,6-Trihydroxy-2,7-dimethoxyxanthone = 16109
- 1,3,7-Trihydroxy-2,8-dimethoxyxanthone = 19645
- 7,2',4'-Trihydroxy-(3,3-dimethylallyl)isoflavone = 7637
- 1,3,5-Trihydroxy-4-( $\gamma,\gamma$ -dimethylallyl)acridone = 21763
- 5,7,2'-Trihydroxy-6-(3,3-dimethylallyl)-[(6'',6''-dimethylpyrano(2'',3'':4',5'))]-isoflavone = 12292
- 5,7,4'-Trihydroxy-8-(1,1-dimethylallyl)flavanone = 22178
- 5,2',4'-Trihydroxy-6-( $\gamma,\gamma$ -dimethylallyl)-3''-hydroxy-2''',2''-dimethyldihydropyrano[5''',6''':8,7]isoflavone = 7319
- 5b,7,9-Trihydroxy-2,2-dimethyl-8-(3-methyl-2-butenyl)-5b,11a-dihydro-2H,6H-chromeno[6,7':4,5]furo[2,3b]chromen-6-one = 12295
- 1,3,6-Trihydroxydimethylpyrano-4-[(2E)-3,7-dimethylocta-2,6-dienyl]-xanthone = 22525
- 1,7,8-Trihydroxy-2,2-dimethylpyrano[5',6': 3,4]xanthone = 8555
- (7 $\beta$ ,15 $\alpha$ ,23S,24E)-7,15,23-Trihydroxy-3,11-dioxolanosta-8,24-dien-26-oic acid = 8177
- 3,7,23-Trihydroxy-11,15-dioxolanosta-8,24-dien-26-oic acid = 8179
- 5,7,4'-Trihydroxy-6,8-diprenylisoflavone = 6496
- 5,7,4'-Trihydroxy-6,5'-diprenylisoflavone = 13088
- 11 $\beta$ ,13 $\alpha$ ,15 $\alpha$ -Trihydroxy-entkaur-16-en-3 $\alpha$ - $\beta$ -D-glucoside = 11399
- 3 $\alpha$ ,11 $\beta$ ,13 $\alpha$ -Trihydroxy-entkaur-16-en-15-one = 11397
- 2 $\alpha$ ,3 $\alpha$ ,18-Trihydroxy-3 $\beta$ ,20-epoxybeyer-15-ene = 7690
- 2,20(S),22-Trihydroxy-16 $\alpha$ ,23(S)-epoxycucurbita-5,24-diene-3,11-dione 2-O- $\beta$ -glucopyranoside = 12216
- 2,20S,24 $\zeta$ -Trihydroxy-16 $\alpha$ ,23R-epoxycucurbita-5-ene-3,11-dione 2-O- $\alpha$ -rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -glucopyranoside = 12217
- 3 $\beta$ ,6 $\alpha$ ,20(S)-Trihydroxy-12 $\beta$ ,23-epoxy-dammar-24-ene 20-O- $\beta$ -D-glucopyranoside = 8444
- 3 $\beta$ ,20,23-Trihydroxy-16,30-epoxy-dammar-24-ene-23-O- $\beta$ -D-glucopyranosyl-3-O- $\beta$ -D-xylopyranosyl(1 $\rightarrow$ 2)-[ $\beta$ -D-glucopyranosyl(1 $\rightarrow$ 6)]- $\beta$ -D-glucopyranosyl(1 $\rightarrow$ 3)-[ $\alpha$ -L-rhamnopyranosyl(1 $\rightarrow$ 2)]- $\alpha$ -L-arabinopyranoside = 11915
- 6 $\beta$ ,12 $\alpha$ ,15 $\beta$ -Trihydroxy-7 $\alpha$ ,20-epoxy-ent-kaur-16-ene = 16178
- 1 $\beta$ ,6 $\beta$ ,7 $\beta$ -Trihydroxy-7 $\alpha$ ,20-epoxy-ent-kaur-16-en-15-one = 22793
- 3 $\beta$ ,16 $\alpha$ ,29-Trihydroxy-13,28-epoxy-oleanane-3-O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)-(6-methyl ester)- $\beta$ -D-glucuronopyranoside = 4699
- 2 $\alpha$ ,3 $\alpha$ ,8 $\beta$ -Trihydroxy-9 $\alpha$ -(11)-epoxypicrotoxan-3(15 $\alpha$ )-olide 8-O- $\beta$ -D-glucopyranoside = 5118
- (3 $\alpha$ ,5 $\beta$ ,7 $\alpha$ ,12 $\alpha$ ,24 $\zeta$ )-3,7,12-Trihydroxy-ergost-22-en-28-oic acid = 21693
- 1 $\beta$ ,4 $\beta$ ,6 $\beta$ -Trihydroxy-cis-eudesmane-6-O- $\beta$ -D-glucopyranoside = 16150
- 5,7,4'-Trihydroxyflavanone = 15279
- 7,3',4'-Trihydroxyflavanone = 2785
- 5,7,4'-Trihydroxyflavone 6-C-[ $\alpha$ -rhamnopyranosyl-(1 $\rightarrow$ 6)]- $\beta$ -glucopyranoside = 6623
- 5,7,4'-Trihydroxy-6-[1-hydroxy-2-methylbuten-2-yl]isoflavone = 11434
- {5,7,5'-Trihydroxy-6-(3-hydroxy-3-methylbutyl)-8-( $\gamma,\gamma$ -dimethylallyl)-[6''',6''':dimethylpyrano(2''',3''':4',3'')]-coumaronochromone = 7889
- 5,7,2'-Trihydroxy-6-(3-hydroxy-3-methylbutyl)-[(6'',6''-dimethylpyrano(2'',3'':4',5'))]-isoflavone = 12293
- 1,3,7-Trihydroxy-8-(3-hydroxy-3-methylbutyl)xanthone = 15577
- 2',4',7-Trihydroxyisoflavone = 9189
- 3 $\beta$ ,15 $\zeta$ ,16-trihydroxy isopimaric acid = 22739
- 1 $\alpha$ ,7 $\alpha$ ,14 $\beta$ -Trihydroxy-ent-kaur-16-en-15-one = 12125
- (7S,8R)-3,9,9'-Trihydroxyl-3-methoxyl-7,8-dihydrobenzofunan-1'-propanol-neoligan-4-O- $\alpha$ -L-rhamnopyranoside = 13584
- (7S,8R)3,4,9'-Trihydroxyl-3-methoxyl-7,8-dihydrobenzofunan-1'-propanol-neoligan-9-O- $\alpha$ -L-rhamnopyranoside = 13583
- (1S,3S,5R,6S,9R)-3,9,12-Trihydroxymegastigmane 3-O- $\beta$ -D-glucopyranoside = 22127
- (3S,5R,6S,9S)-3,6,9-Trihydroxymegastigman-7-ene 3-O- $\beta$ -D-glucopyranoside = 22125
- (3S,4R,9R)-3,4,6-Trihydroxymegastigman-5-ene 3-O- $\beta$ -D-glucopyranoside = 22128
- (3S,5R,6S,9S)-3,6,9-Trihydroxymegastigman-7-ene 9-O- $\beta$ -D-glucopyranoside = 22126
- (3S,4R,9 $\zeta$ )-3,4,9-Trihydroxymegastigman-5-ene 3-O-primeveroside = 17526
- 1,3,6-Trihydroxy-7-methoxy-2-(4-acetoxy-3-methyl-2-butenyl)-8-(3,7-dimethyl-2,6-octadienyl)xanthone = 4199
- 1,8,10-Trihydroxy-9-methoxy-[1]benzopyrano-[3,2-c][2]-benzopyran-7(5H)-one = 11166
- 1,3,6-Trihydroxy-7-methoxy-2,5-bis(3-methyl-2-butenyl)-8-(3,7-dimethyl-2,6-octadienyl)xanthone = 4195
- 1,6,7-Trihydroxy-3-methoxy-2,8-bis(3-methyl-2-butenyl)xanthone = 6627
- 5,3',5'-Trihydroxy-7-methoxy dihydroflavone = 2521
- 5,3',4'-Trihydroxy-7-methoxy-6-(6,6-dimethyl-2-methylene-cyclohexylmethyl)flavone = 22184
- (2S)-2',5,6'-Trihydroxy-7-methoxyflavanone = 19580
- (2S)-2',5,6'-trihydroxy-7-methoxyflavanone-2'-O- $\beta$ -D-glucopyranoside = 19581
- 5,7,2'-Trihydroxy-8-methoxyflavone = 19588
- 5,7,3'-Trihydroxy-4'-methoxyflavone = 6452
- 5,7,4'-Trihydroxy-8-methoxyflavone = 10829
- 5,7,4'-Trihydroxy-3'-methoxyisoflavone = 14638
- 3,4',5-Trihydroxy-7-methoxy-8-isopentenylflavone = 11222
- 3,5,7-Trihydroxy-4'-methoxyl-8-prenylflavone-3-O- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranoside = 2143
- 1,5,6-Trihydroxy-3-methoxy-2-(3-methyl-2-butenyl)-4-(1,1-dimethylallyl)xanthone = 15578
- 5,7,2'-Trihydroxy-4'-methoxy-5'-(3"-methylbut-2"-enyl)isoflavanone = 13265
- 5,2',4'-Trihydroxy-7-methoxy-6-(3-methylbut-2-enyl)isoflavone = 14568
- 3 $\beta$ ,16 $\beta$ ,28-Trihydroxy-11- $\alpha$ - $\beta$ -methoxy-olean-12-ene-3-O- $\beta$ -D-glucosyl-(1 $\rightarrow$ 3)- $\beta$ -D-fucoside = 19162
- 4',5,7-Trihydroxy-3-methoxy-6-prenylflavone = 21451
- (7S,8R)-3',4,9-Trihydroxy-4-methoxy-9-O-shikimoyl-7,8-dihydrobenzofuran-1'-propylneoligan = 13582
- 1,2,8-Trihydroxy-6-methoxyxanthone = 20510
- 1,3,8-Trihydroxy-6-methylanthraquinone = 6776
- 5,7,4'-Trihydroxy-8-(3''-methylbut-2''-enyl)-6-(2''-hydroxy-3''-methylbut-3''enyl) isoflavone = 11415
- 6,8,12-Trihydroxy-7-(3-methyl-2-butenyl)-2-methyl-(4-methyl-3-pentenyl)pyrano-(2',3':7,8)xanthone = 4198
- 2,5,8-Trihydroxy-3-(3-methyl-2-butenyl)-1,4-naphthoquinone = 10709
- 1,8,11-Trihydroxy-9,10-methylenedioxy-[1]benzopyrano-[3,2-c][2]-benzopyran-7(5H)-one = 11170
- 3 $\alpha$ ,4 $\beta$ ,7 $\beta$ -Trihydroxy-4 $\alpha$ -methylergosta-8,24(28)-dien-11-on-26-oic acid = 1351
- 1,2,3-Trihydroxy-6-methyl-8-methoxyanthraquinone = 7660
- 1,3,5-Trihydroxy-2-methyl-6-methoxyanthraquinone = 12237
- 5,7,10-Trihydroxy-2-methyl-2-(4-methylpent-3-enyl)[2H,6H]pyrano[3,2-b]xanthen-6-one = 20019
- 1,5,8-Trihydroxy-6'-methyl-6'-(4-methylpent-3-enyl)-pyrano[2',3':3,4]xanth-

- one = 2135
- 3 $\beta$ ,20 $\alpha$ ,24-Trihydroxy-29-norolean-12-en-28-oic acid 23-*O*- $\beta$ -*D*-fucopyranosyl-(1 $\rightarrow$ 2)-[ $\alpha$ -*L*-arabinopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -*D*-glucopyranoside = 7724
- 3 $\beta$ ,20 $\alpha$ ,24-Trihydroxy-29-norolean-12-en-28-oic acid 24-*O*- $\beta$ -*D*-glucopyranoside = 7631
- 3 $\beta$ ,20 $\alpha$ ,24-Trihydroxy-29-norolean-12-en-28-oic acid 24-*O*-[ $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 4)]-6'-*O*-acetyl- $\beta$ -*D*-glucopyranoside = 7632
- 3 $\beta$ ,23,28-Trihydroxyoleana-11,13(18)-dien-3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-fucopyranoside = 19152
- 3 $\beta$ ,16 $\alpha$ ,24-Trihydroxyoleana-12-en-28-oic acid-3-*O*-(6'-butyryl)- $\beta$ -*D*-glucopyranoside = 22622
- 2,3,27-Trihydroxy-12-oleanene-23,28-dioic acid 3-*O*- $\beta$ -*D*-glucopyranoside, 28-*O*-[ $\beta$ -*D*-galactopyranosyl-(1 $\rightarrow$ 4)]- $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)-[3,4-dimethoxycinnamoyl-(1 $\rightarrow$ 4)]- $\alpha$ -*L*-fucopyranosyl ester = 19715
- 2 $\alpha$ ,3 $\alpha$ ,24-Trihydroxy-olean-12-ene-28-oic acid-28-*O*- $\beta$ -*D*-glucopyranosyl ester = 22621
- 3 $\beta$ ,16 $\alpha$ ,28-Trihydroxy-olean-12-en-3-*O*-[ $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -*D*-glucuronopyranosyl]-28-*O*- $\beta$ -*D*-glucuronopyranoside = 4700
- 1 $\alpha$ ,3 $\beta$ ,23-Trihydroxy-olean-12-en-29-oate-23-*O*- $\alpha$ -*L*-3,4-acetyl-29-dirhamnopyranoside = 10228
- 1 $\alpha$ ,3 $\beta$ ,23-Trihydroxy-olean-12-en-29-oate-23-*O*- $\alpha$ -*L*-4-acetyl-rhamnopyranoside = 10226
- 1 $\alpha$ ,3 $\beta$ ,23-Trihydroxy-olean-12-en-29-oate-23-*O*- $\alpha$ -*L*-3,4-diacetyl-rhamnopyranoside = 9741
- 1 $\alpha$ ,3 $\beta$ ,23-Trihydroxy-olean-12-en-29-oate-23-*O*- $\alpha$ -1-4-acetyl-dirhamnopyranoside = 10227
- 2 $\alpha$ ,3 $\beta$ ,19 $\alpha$ -Trihydroxy-12-oleanen-28-oic acid = 1734
- 3 $\beta$ ,21 $\alpha$ ,24-Trihydroxy-olean-12-en-30-oic acid = 8858
- 2 $\alpha$ ,3 $\alpha$ ,19 $\alpha$ -Trihydroxy-olean-12-en-28-oic acid 28-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside = 18851
- 2 $\alpha$ ,3 $\beta$ ,23-Trihydroxyolean-12-en-28-oic acid-3-*O*- $\beta$ -*D*-glucopyranosyl-28-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl ester = 20287
- 3 $\beta$ ,6 $\beta$ ,23-Trihydroxyolean-12-en-28-oic acid 28-*O*- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside = 3397
- 3 $\beta$ ,15 $\alpha$ ,23-Trihydroxy-olean-12-en-16-one = 7273
- 1-(2,4,6-Trihydroxyphenyl)-11-(2,6-dihydroxyphenyl)undecan-1-one = 1648
- 2',4',6'-Trihydroxyphenyl-(26Z)-dotriacontene-1-one = 20962
- 1-(2,4,6-Trihydroxyphenyl)-11-(2-hydroxyphenyl)undecan-1-one = 1649
- 2',4',6'-Trihydroxyphenyl-(24Z)-triacontene-1-one = 20961
- 6 $\alpha$ ,10,12-Trihydroxypicrotoxane 10-*O*- $\beta$ -*D*-glucopyranoside = 5121
- 2 $\alpha$ ,3 $\alpha$ ,12-Trihydroxypicrotoxane-3(15 $\alpha$ )-olid-11-oic acid 2-*O*- $\beta$ -*D*-glucopyranoside = 5117
- ent-(15R),16,19-Trihydroxypimar-8(14)-ene 19-*O*- $\beta$ -*D*-glucopyranoside = 18176
- 1 $\alpha$ ,2 $\beta$ ,3 $\alpha$ -Trihydroxypregna-4,7,16-trien-12,20-dione = 21003
- 2 $\beta$ ,3 $\alpha$ ,12 $\beta$ -Trihydroxypregna-4,7,16-trien-20-one = 20386
- 3 $\beta$ ,8 $\beta$ ,14 $\beta$ -Trihydroxypregna-5-en-20-one = 7992
- 2',4,4'-Trihydroxy-3-prenylchalcone = 12751
- 5,7,4'-Trihydroxy-6-prenyl-isoflavone = 22667
- 5,7,4'-Trihydroxy-8-prenylisoflavone = 13107
- 1,4,8-Trihydroxy-2-prenylxanthone = 2136
- 2,6,8-Trihydroxy-purine = 22251
- 3 $\alpha$ ,21 $\beta$ ,24-Trihydroxyserrat-14-en-16-one = 13177
- (5 $\alpha$ ,22R,23R,25S)-3 $\beta$ ,23,27-Trihydroxyspirosolane = 11418
- (2 $\alpha$ ,3 $\beta$ ,5 $\alpha$ ,25S)-2,3,27-Trihydroxyspirostane 3-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)-*O*-[ $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)]- $\beta$ -*D*-glucopyranoside = 22079
- (23S,25S)-3 $\beta$ ,23,27-Trihydroxyspirost-5-en-12-one 3-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-fucopyranoside = 17645
- 3,5,4'-Trihydroxystilbene = 18643
- 3,5,4'-Trihydroxystilbene-4'-(6"-galloyl)-glucoside = 18648
- 3,5,4'-Trihydroxystilbene-4'-glucoside = 18650
- 3,6,7-Trihydroxy-4,5,6,7-tetrahydro-3-butyl-phthalide = 2794
- (4S)-4,5,8-Trihydroxy- $\alpha$ -tetralone 4-*O*- $\beta$ -*D*-glucopyranoside = 11901
- (4S)-4,5,8-Trihydroxy- $\alpha$ -tetralone 5-*O*- $\beta$ -*D*-glucopyranoside = 11902
- 1 $\beta$ ,7 $\beta$ ,9 $\alpha$ -Trihydroxy-5 $\alpha$ ,10 $\beta$ ,13 $\alpha$ -triacetoxytaxa-4(20),11-diene = 20756
- 4,4',6'-Trihydroxy-2',3',5'-tribenzoyloxy [1,1':4',1"-terphenyl] = 21303
- 9,4',9'-Trihydroxy 4,5,3'-trimethoxy aryltetralin lignan = 19456
- 5,4',5"-Trihydroxy-7,7",4"-trimethoxy-[3 $\rightarrow$ 6"]-biflavone = 20315
- 3,5,3'-Trihydroxy-6,7,4'-trimethoxy flavone = 7583
- 5,2',4'-Trihydroxy-6,7,5'-trimethoxy flavone = 1653
- 5,2',6'-Trihydroxy-3,6,7-trimethoxyflavone = 11162
- 5,6,3'-Trihydroxy-3,7,4'-trimethoxyflavone = 16440
- 5,7,3'-Trihydroxy-6,4',5'-trimethoxyisoflavone = 11154
- 1,3,8-Trihydroxy-2,4,5-tris-(3,3-dimethylallyl)-6-methylanthrone = 9241
- 1,3,8-Trihydroxy-4,5,7-tris-(3,3-dimethylallyl)-6-methyl-anthrone = 9240
- 3 $\beta$ ,21 $\beta$ ,22 $\beta$ -Trihydroxyurs-12-en-28-al = 4043
- 2 $\beta$ ,3 $\beta$ ,19 $\alpha$ -Trihydroxy-urs-12-en-24,28-dioic acid-24-*O*- $\beta$ -*D*-glucopyranosyl-28-*O*- $\beta$ -*D*-glucopyranosyl diester = 20290
- 3 $\beta$ ,11 $\alpha$ ,21 $\alpha$ -Trihydroxyurs-12-ene = 19220
- 2 $\alpha$ ,3 $\alpha$ ,19 $\alpha$ -Trihydroxyurs-12-en-28-oic acid = 7657
- 2 $\alpha$ ,3 $\beta$ ,19 $\alpha$ -Trihydroxyurs-12-en-28-oic acid 28- $\beta$ -*D*-glucopyranosyl ester = 18916
- 2 $\alpha$ ,3 $\beta$ ,19 $\alpha$ -Trihydroxy-urs-12-en-28-oic acid-3-*O*- $\beta$ -*D*-glucopyranosyl-28-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl ester = 20289
- 2 $\alpha$ ,3 $\beta$ ,23-Trihydroxy-urs-12-en-28-oic acid-3-*O*- $\beta$ -*D*-glucopyranosyl-28-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosylester = 20288
- 2 $\alpha$ ,3 $\beta$ ,23-Trihydroxyurs-12-en-28-oic acid *O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl ester = 1854
- 11 $\alpha$ ,16 $\alpha$ ,28-trihydroxyurs-12-en-3 $\beta$ -yl  $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-fucopyranoside = 18946
- 11 $\alpha$ ,16 $\alpha$ ,28-trihydroxyurs-12-en-3 $\beta$ -yl  $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-fucopyranoside = 18945
- 1,3,7-Trihydroxyxanthone = 8306
- 1,5,6-Trihydroxyxanthone = 13809
- Trilinoleyl glyceride = 8816
- Trillin = 6443
- Trilloside A = 5040
- 1,2,3-Trimethoxy-10-acetoxymethylacridone = 21420
- 1,2,3-Trimethoxyacridone = 21419
- 5,7,4'-Trimethoxyapigenin = 21913
- N*-(3',4',5'-Trimethoxycinnamoyl)-*A*<sup>3</sup>-pyridin-2-one = 17472
- N*-(2,4,5-Trimethoxycinnamoyl)pyrrolidine = 19370
- 3,7,8-Trimethoxycoumarin = 19467
- 6,6',7-Trimethoxy-2,2'-dimethoxyacanthan-12'-ol = 16439
- 7,2',6'-Trimethoxy-6",6"-dimethylpyrano-(3',4':2",3"-)chalcone = 14075
- 3 $\beta$ ,4 $\beta$ ,5-Trimethoxy-6",6"-dimethyl-2*H*-pyrano-(2",3":7,6)-flavan = 14105
- 5,7,4'-Trimethoxyflavanone = 15285

(7*S*,8*S*,7'*S*,8'*R*)-3,4,3'-Trimethoxy-4'-hydroxy-7,7'-epoxy lignan = 8037  
 1,2,3-Trimethoxy-10-methoxymethylacridone = 21422  
 1,2,4-Trimethoxy-5-(*E*-3'-methyloxiranyl) benzene = 7056  
 1,2,4-Trimethoxyphenyl-5-aldehyde = 1840  
 3,4,5-Trimethoxyphenyl-1-*O*- $\beta$ -*D*-(5-*O*-syringoyl)-apiofuranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranoside = 855  
 3,4,5-Trimethoxyphenyl-*O*-6'-*O*-vanilloyl- $\beta$ -*D*-glucopyranoside = 21035  
 2,4,5-Trimethoxypropenyl benzene = 1835  
 3,4,5-Trimethoxytoluene = 21919  
 3,4,5-Trimethoxy-xanthone-1-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-xylopyranoside = 22388  
 1,7,7-Trimethyl-acetate-endobicyclo[2.2.1]heptan-2-ol = 336  
 7,4',4''-Tri-*O*-methyl amentoflavone = 19514  
*N*-Trimethylamine = 21939  
 1,3,3-Trimethylbicyclo[2.2.1]heptan-2-one = 7751  
*cis*-1,2,2-Trimethyl-1,3-cyclopentanedicarboxylic acid = 3051  
 1,3,7-Trimethyl-2,6-dioxapurine = 2892  
 2,6,10-Trimethyl-2,6,9,11-dodecatetraenal = 19927  
 3,7,11-Trimethyl-1,6,10-dodecatrien-3-ol = 15500  
 3,7,11-Trimethyl-2,6,10-dodecatrien-1-ol = 7734  
 2,6,11-Trimethyl-dodesa-2,6,10-triene = 20666  
 3,3',4'-Tri-*O*-methylellagic acid = 21955  
 1,7,7-Trimethyl endo-bicyclo[2.2.1]heptan-2-ol = 2550  
 3-*O*-(1'',8'',14''-Trimethylhexadecanyl)naringenin = 15124  
 3,5,5-Trimethyl-2-hydroxy-1,4-cyclohexadion-2-ene = 10807  
 6-*N*-Trimethyl-*L*-lysine betaine = 12457  
 1,3,3-Trimethyl-7-(5-methylcyclopenta-1,4-dien-1-yl)-2-oxabicyclo[2.2,1]heptane = 20886  
 2,2,6-Trimethyl-3-[(*E*)(2-methylcyclopenta-2-en-1-ylidene)methyl]-3,4-dihydro-2*H*-pyran = 20888  
 1,1,3a-Trimethyl-6-methylene-1,1a,2,3,3a,3b,4,5,6,6b-decahydrocyclopenta[2,3]cyclopropa-[1,2-*a*]cyclopropa[*c*]-benzene = 15143  
 2,2,9-Trimethyl-6-methylene-3,4,5,6,6a,7-hexahydro-2*H*-3,9a-methanocyclopent[*b*]oxocine = 9040  
 1,1,4-Trimethyl-7-methylene-1a,2,3,3,5,6,7,7a,7b-octahydro-1*H*-cyclopropa[*e*]azulene = 1755  
 1,1,7-Trimethyl-4-methylene-1a,2,3,4,4a,5,6,7b-octahydro-1*H*-cyclopropa[*e*]azulene = 1757  
 1,1,3a-Trimethyl-6-methylene-5-oxo-1,1a,2,3,3a,3b,4,-5,6,6b-decahydrocyclopenta[2,3]cyclopropa[1,2-*a*]cyclopropa[*c*]benzene = 15144  
 3,4,5-Trimethyl-2-(methylsulfinyloxymethyl) thiophene = 7850  
 1,3,3-Trimethyl-2-norbornanol = 7752  
 1,3,3-Trimethyl-2-oxabicyclo[2.2.2]octane = 3689  
 4-(2,2,6-Trimethyl-1-oxaspiro[4,4]non-6-en-3-yl)-butan-2-one = 20887  
 4,4,14 $\alpha$ -Trimethyl-24-oxo-5 $\alpha$ -chol-8-en-21-oic acid dimethylacetal = 8575  
 (3a*S*,5*R*,7a*R*)-4,4,7a-Trimethyl-2-oxo-2,3,3a,4,5,7a-hexahydrobenzo[*b*]furan-5-yl 3,4-dimethyl-3-pentenoate = 20967  
 2,2,4-Trimethyl-6-(1-oxo-3-phenylprop-2-enyl)cyclohexane-1,3,5-trione = 3473  
 6,10,14-Trimethyl-pentadecan-2-one = 9500  
 3,6,7-Trimethylquercetagenin = 3624  
 3,6,4'-Tri-*O*-methylquercetagenin-7-*O*- $\beta$ -*D*-glucopyranoside = 3389  
 3,5,12a-Trimethyl-2,5,5a,12a-tetrahydro-1*H*-naphtho[2',3':4,5]furo[2,3-*b*]

azepin-2-one = 6598  
 3,4,5-Trimethyl-2-thiophenecarboxylic acid = 7849  
 (1*S*,9*S*)-4 $\alpha$ ,11,11-Trimethyl-2 $\alpha$ ,5 $\alpha$ ,6 $\beta$ -trihydroxytricyclo[5,4,0,0<sup>2,5</sup>]undec-3-en-7-one = 7737  
 (*rel*-5*S*,6*S*,8*R*,9*R*,10*S*)-14,15,16-Trinor-13,9-labdanolide = 22578  
 Triox = 21940  
 Tripterifordine = 21990  
 Tripterine = 3368  
 Tripterygic acid A = 22025  
 Triptoditerpenic acid B = 21993  
 Triptophenolide = 10899  
 Triptophenolide methyl ether = 10900  
 Trisdesaspidin = 22032  
 Trisphaerine = 9547  
 Trispherine = 9547  
 Tropaeolin = 2298  
 3-Tropanol = 22050  
 Tsuzuic acid = 21045  
 Tubeimoside I = 22072  
 Tubeimoside II = 22073  
 Tubeimoside III = 22074  
 Tulipalin A = 22102  
 $\beta$ -Turmerone = 22123  
 Tussilaglin = 22144

## U

Ubiquitous 1,2-dilinolenoyl-3-galactopyranosylglycerol = 14924  
 Umbellatine = 2303  
 Umbelliferone 7-*O*- $\beta$ -*D*-glucopyranoside = 20003  
 Uncarine A = 11426  
 Uncarine C = 18114  
 Uncarine E = 11636  
 Undeca-2*E*,4*Z*-dien-7,9-diynoic acid isobutylamide = 15445  
 Undecanol = 22226  
 Undecylenic acid = 22221  
 Untriacontane = 9363  
 (2*S*)-6-(1,4-Ureylenebutyl)-5,7-dihydroxyflavanone = 1541  
 (2*S*)-8-(1,4-Ureylenebutyl)-5,7-dihydroxyflavanone = 11233  
 5'-Uridylic acid = 22254  
 Ursa-12-ene-11-one-3-ol octocosate = 22262  
 12-Ursene-3 $\beta$ ,27-diol = 15911  
 Urs-12-en-3 $\beta$ -ol = 1110  
 $\beta$ -Ursolic acid = 22270  
 Usaramine = 15018  
 Ushinsunine = 14829  
 Usnic acid = 22282  
 17 $\beta$ -Uzarigenin-3-*O*- $\beta$ -glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -glucopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -thevetopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -cymaropyranoside = 7698

## V

Valerianae alkaloid A = 10601  
 Valerianol = 12375

Valeric acid = 16884  
 Valeric aldehyde = 16876  
 Valtrate = 22312  
 Valtratum = 22312  
 Vanillosmin = 7226  
 6-Vanilloylcatalpol = 17345  
 3-*O*-Vanillylceanothic acid = 10383  
 Vasicine = 16770  
*L*-Vasicinone = 22350  
 VCR = 22497  
 Veneniferin = 3416  
 Venoterpine = 8291  
 (–)-Veraguensin = 22383  
 Veratric acid = 6201  
 Verbascoside = 580  
 Verbenalin = 4060  
 Verticine = 16773  
 Verticinone = 16774  
 Vestitol[6→9<sup>n</sup>;7*O*→7<sup>m</sup>]obtusquinone = 15353  
 Vicenin 2 = 2455  
 β-Vicianosyl-3-quercetin = 18327  
 Viguistenin = 22475  
 Vilmorrianine D = 19107  
 Vincal leukoblastine = 22487  
 Vincoside lactam = 22496  
 Vindolidine = 22501  
 7α,8α-*cis-e*-Viniferin = 22505  
 Vinleurosine = 12734  
 Vinrosidine = 12733  
 1-Vinyl-4,8-dimethoxy-β-carboline = 12335  
 Vinylformic acid = 578  
 Vinyl sulfide = 6531  
 Violanin = 15289  
 Virolongin = 22528  
 Viscidone = 416  
 Viscidulin I = 16848  
 Visnamine = 22552  
 Vitamin A = 18656  
 Vitamin B = 9458  
 Vitamin B<sub>2</sub> = 18834  
 Vitamin B<sub>6</sub> = 18261  
 Vitamin B<sub>7</sub> = 2395  
 Vitamin C = 1845  
 Vitamin E = 21415  
 Vitamin G = 18834  
 Vitexicarpin = 3300  
 Vitexin 7-methyl ether = 11724  
 (+)-Vittatine = 4241  
 Vladinol A = 13588  
 (6*S*,7*E*,9*R*)-Vomifoliol-9-*O*-β-*D*-xylopyranosyl-(1→6)-*O*-β-*D*-glucopyranoside = 22617  
 Vulgarin = 20730  
 Vulpic acid = 22625

## W

Wallichene = 9642  
 Wallichienene = 15405  
 Wallichinin = 22628  
 Warabisterone = 17703  
 Weedone = 4832  
 (+)-Wikstromol = 15805  
 (–)-Wikstromol = 15806  
 Wikstrotoxin = 19902  
 Withametelin = 4673  
 Wogonin-7-*O*-glucoside = 22720  
 Wuweizi alcohol B = 8906  
 Wuweizichun A = 19473  
 Wuweizi ester A = 8908  
 Wuweizi ester B = 8907  
 Wuweizisu A = 5213  
 Wuweizisu B = 5178  
 Wuweizisu C = 19497

## X

Xanthalongin = 21444  
 Xanthopurpurin = 18224  
 Xanthoxilin N = 22777  
 Xantofyl palmitate = 9290  
 Xerophilusin H = 6785  
 XH-I = 22767  
 3β-*O*-[β-*D*-Xylopyranosyl(1→4)-[2-*O*-acetyl]-β-*D*-glucuronopyranosyl]-28-*O*-[β-*D*-glucopyranosyl]-morolic acid = 20539  
 3-*O*-[β-*D*-Xylopyranosyl(1→4)-[2-*O*-acetyl]-β-*D*-glucuronopyranosyl]-28-*O*-[β-*D*-glucopyranosyl]-oleanolic acid = 20531  
 3-*O*-[β-*D*-Xylopyranosyl(1→4)-[3-*O*-acetyl]-β-*D*-glucuronopyranosyl]-28-*O*-[β-*D*-glucopyranosyl]-oleanolic acid = 20530  
 3-*O*-[β-*D*-Xylopyranosyl(1→2)-*α*-*L*-arabinopyranosyl(1→6)-2-acetamido-2-deoxy-β-*D*-glucopyranosyl]-21-*O*-{(6*S*)-2-*trans*-2-hydroxymethyl-6-methyl-6-*O*-[4-*O*-((6*S*)-2-*trans*-2,6-dimethyl-6-*O*-(6-deoxy-β-*D*-glucopyranosyl)-2,7-octadienoyl]-6-deoxy-β-*D*-glucopyranosyl]-2,-7-octadienoyl}-acacic acid 28-*O*-β-*D*-glucopyranosyl(1→3)-*α*-*L*-arabinofuranosyl(1→4)]-*α*-*L*-rhamnopyranosyl(1→2)-β-*D*-glucopyranosyl ester = 11919  
 3-*O*-[β-*D*-Xylopyranosyl(1→2)-*α*-*L*-arabinopyranosyl(1→6)-β-*D*-2-deoxy-2-acetamido-glucopyranosyl]-21-*O*-{(6*S*)-2-*trans*-2-hydroxymethyl-6-methyl-6-*O*-[4-*O*-((6*S*)-2-*trans*-2-hydroxymethyl-6-methyl-6-hydroxy-2,7-octadienoyl)]-β-*D*-quinovopyranosyl-2,7-octadienoyl}-acacic acid-28-*O*-β-*D*-glucopyranosyl(1→3)-[*α*-*L*-arabinofuranosyl(1→4)]-*α*-*L*-rhamnopyranosyl(1→2)-β-*D*-glucopyranosyl ester = 11921  
 3-*O*-β-*D*-Xylopyranosyl-16β-*O*-*α*-*L*-arabinopyranosyl-6α,22β-dihydroxyhopane = 13007  
 3-*O*-[β-*D*-Xylopyranosyl(1→2)-*α*-*L*-arabinopyranosyl(1→6)-β-*D*-glucopyranosyl]-21-*O*-{(6*S*)-2-*trans*-2-hydroxymethyl-6-methyl-6-*O*-[4-*O*-((6*S*)-2-*trans*-2,6-dimethyl-6-*O*-(6-deoxy-β-*D*-glucopyranosyl)-2,7-octadienoyl]-6-deoxy-β-*D*-glucopyranosyl]-2,7-octadienoyl}-acacic acid 28-*O*-β-*D*-glucopyranosyl(1→3)-*α*-*L*-arabinofuranosyl(1→4)]-*α*-*L*-rhamnopyranosyl(1→2)-β-*D*-glucopyranosyl ester = 11917



- 3-*O*-[ $\beta$ -*D*-Xylopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl]-21-*O*-{(6*S*)-2-*trans*-2-hydroxymethyl-6-methyl-6-*O*-[(6*S*)-2-*trans*-2,6-dimethyl-6-*O*- $\beta$ -*D*-quinovopyranosyl-2,7-octadienyl]- $\beta$ -*D*-quinovopyranosyl-2,7-octadienyl}-acacic acid-28-*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 3)-[ $\alpha$ -*L*-arabinofuranosyl(1 $\rightarrow$ 4)]- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl ester = 11926
- 3-*O*-[ $\beta$ -*D*-Xylopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl]-21-*O*-{(6*S*)-2-*trans*-2-hydroxymethyl-6-methyl-6-*O*-[4-*O*-{(6*S*)-2-*trans*-2-hydroxymethyl-6-methyl-6-hydroxyl-2,7-octadienyl)-6-deoxy- $\beta$ -*D*-glucopyranosyl]-2,7-octadienyl}-acacic acid 28-*O*- $\beta$ -glucopyranosyl(1 $\rightarrow$ 3)- $\alpha$ -*L*-arabinofuranosyl(1 $\rightarrow$ 4)]- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl ester = 11918
- 3-*O*-[ $\beta$ -Xylopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -arabinopyranosyl]-6-*O*- $\beta$ -glucopyranosyl-3 $\beta$ ,6 $\alpha$ ,16 $\beta$ ,24(*S*),25-pentahydroxycycloartane = 16068
- 3-*O*- $\beta$ -*D*-Xylopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl-28-*O*- $\beta$ -*D*-Xylopyranosyl(1 $\rightarrow$ 3)- $\beta$ -*D*-Xylopyranosyl(1 $\rightarrow$ 4)- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)-[ $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 6)]- $\beta$ -*D*-glucopyranosyl echinocystic acid = 8528
- 3-*O*- $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl oleanolic acid 28-*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside = 22957
- 3-*O*-[ $\beta$ -Xylopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -arabinopyranosyl]-6-*O*- $\beta$ -xylopyranosyl-3 $\beta$ ,6 $\alpha$ ,16 $\beta$ ,24(*S*),25-pentahydroxycycloartane = 16067
- (22*S*,25*S*)-16-*O*- $\beta$ -*D*-Xylopyranosyl-5 $\alpha$ -cholestan-3 $\beta$ ,16 $\beta$ ,22,26-tetraol 3-*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 4)- $\beta$ -*D*-galactopyranoside = 16881
- 3-*O*-[ $\beta$ -*D*-Xylopyranosyl(1 $\rightarrow$ 4)-[2,3-*O*-diacetyl]- $\beta$ -*D*-glucuronopyranosyl]-28-*O*-[ $\beta$ -*D*-glucopyranosyl]-oleanolic acid = 20532
- 3-*O*- $\beta$ -*D*-Xylopyranosyl-6,16-di-*O*- $\beta$ -*D*-glucopyranosyl-20(*R*),24(*S*)-epoxycycloartane-3 $\beta$ ,6 $\alpha$ ,16 $\beta$ ,25-tetrol = 22048
- 3-*O*-[ $\beta$ -*D*-Xylopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -*L*-fucopyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl]-21-*O*-{(6*S*)-2-*trans*-2-hydroxymethyl-6-methyl-6-*O*-[4-*O*-[(6*R*)-2-*trans*-2,6-dimethyl-6-*O*-( $\beta$ -*D*-quinovopyranosyl)-2,7-octadienyl]- $\beta$ -*D*-quinovopyranosyl-2,7-octadienyl}-acacic acid-28-*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 3)-[ $\alpha$ -*L*-arabinofuranosyl(1 $\rightarrow$ 4)]- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl ester = 11920
- 3-*O*- $\beta$ -*D*-Xylopyranosyl(1 $\rightarrow$ 3)-[ $\beta$ -*D*-galactopyranosyl(1 $\rightarrow$ 2)]- $\beta$ -*D*-glucopyranosyl gypsogenin = 16026
- 6-*C*-Xylopyranosyl-8-*C*-glucopyranosylapigenin = 22464
- 3-*O*- $\beta$ -*D*-Xylopyranosyl(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosylbayogenin 28-*O*- $\beta$ -*D*-apiofuranosyl(1 $\rightarrow$ 3)- $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 4)-[ $\beta$ -*D*-apiofuranosyl(1 $\rightarrow$ 3)]- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl ester = 4023
- 3-*O*- $\beta$ -*D*-Xylopyranosyl(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosyl bayogenin 28-*O*- $\beta$ -*D*-apiofuranosyl( $\rightarrow$ 3)- $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 4)-[ $\alpha$ -*L*-arabinopyranosyl(1 $\rightarrow$ 3)]- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosylester = 4016
- 3-*O*- $\beta$ -*D*-Xylopyranosyl(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosyl bayogenin 28-*O*- $\beta$ -*D*-apiofuranosyl(1 $\rightarrow$ 3)- $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 4)- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosylester = 4015
- 3-*O*- $\beta$ -*D*-Xylopyranosyl(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosylbayogenin 28-*O*- $\beta$ -*D*-apiofuranosyl(1 $\rightarrow$ 3)-[ $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 4)]- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl ester = 4026
- 3-*O*- $\beta$ -*D*-Xylopyranosyl(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosyl bayogenin 28-*O*- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 3)- $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 4)-[ $\beta$ -*D*-apiofuranosyl(1 $\rightarrow$ 3)]- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl ester = 4017
- 3-*O*- $\beta$ -*D*-Xylopyranosyl(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosylbayogenin 28-*O*- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 3)- $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 4)- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl ester = 4019
- 3-*O*- $\beta$ -*D*-Xylopyranosyl(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosylbayogenin 28-*O*- $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 3)- $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 4)-[ $\beta$ -*D*-apiofuranosyl(1 $\rightarrow$ 3)]- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl ester = 4027
- 3-*O*-[ $\beta$ -*D*-Xylopyranosyl(1 $\rightarrow$ 2)]- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 3)]-6'-*O*-butyl- $\beta$ -*D*-glucuronopyranosyl]oleano-lic acid-28-*O*- $\beta$ -*D*-glucopyranoside = 20619
- 3-*O*-[ $\beta$ -*D*-Xylopyranosyl(1 $\rightarrow$ 2)]- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 3)]-6'-ethyl- $\beta$ -*D*-glucuronopyranosyl] oleanolic acid-28-*O*- $\beta$ -*D*-glucopyranoside = 20618
- 3-*O*-[ $\beta$ -*D*-Xylopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 4)-[ $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 2)]- $\alpha$ -*L*-arabinopyranoside]-saikogenin = 17959
- 3-*O*-[ $\beta$ -*D*-Xylopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 4)-[ $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 2)]- $\alpha$ -*L*-arabinopyranoside]-saikogenin G = 17960
- 6-*O*- $\beta$ -*D*-Xylopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl 20(*S*),24(*S*)-epoxydammane-3 $\beta$ ,6 $\alpha$ ,12 $\beta$ ,25-tetrol = 22895
- 3-*O*-[ $\alpha$ -*L*-Xylopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 4)]- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 2)]- $\alpha$ -*L*-rhamnopyranosyl cyclamiretin A = 1627
- 3-*O*- $\beta$ -*D*-Xylopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl-20(*S*)-protopanaxadiol 20-*O*- $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 4)- $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside = 15835
- 3-*O*- $\beta$ -*D*-Xylopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl-20(*S*)-protopanaxadiol 20-*O*- $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 5)- $\alpha$ -*L*-arabinofuranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside = 15841
- 3-*O*- $\beta$ -*D*-Xylopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-glucopyranosyl-20(*S*)-protopanaxadiol 20-*O*- $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside = 15842
- 3-*O*- $\beta$ -*D*-Xylopyranosyl-22-*O*- $\beta$ -*D*-glucopyranosyl-16 $\beta$ -hydroxyhopan-6-one = 13009
- 3-*O*-[*O*- $\beta$ -*D*-Xylopyranosyl(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl] medicagenic acid 28-*O*- $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 3)-*O*- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)-*O*- $\alpha$ -*L*-arabinopyranosyl ester = 734
- 3-*O*- $\beta$ -*D*-Xylopyranosyl(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosylpolygalacic acid 28-*O*- $\beta$ -*D*-galactopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 3)- $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 4)- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl ester = 4022
- 3-*O*- $\beta$ -*D*-Xylopyranosyl(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosylpolygalacic acid 28-*O*- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 3)- $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 4)- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl ester = 4020
- 3-*O*- $\beta$ -*D*-Xylopyranosyl(1 $\rightarrow$ 3)- $\beta$ -*D*-glucopyranosylpolygalacic acid 28-*O*- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 3)- $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 4)-[ $\beta$ -*D*-apiofuranosyl(1 $\rightarrow$ 3)]- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl ester = 4021
- 3-*O*-[ $\beta$ -*D*-Xylopyranosyl(1 $\rightarrow$ 4)-[ $\beta$ -*D*-glucopyranosyl]-25*S*)-5 $\beta$ -spirostan-3 $\beta$ -ol = 1860
- 3-*O*-[*O*- $\beta$ -*D*-Xylopyranosyl(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl] 2 $\beta$ ,3 $\beta$ ,16 $\alpha$ ,21 $\beta$ -tetrahydroxyolean-12-ene-23,28-dioic acid 21,28-lactone = 735
- 3-*O*-[*O*- $\beta$ -*D*-Xylopyranosyl(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl] 2 $\beta$ ,3 $\beta$ ,16 $\alpha$ -trihydroxyolean-12-ene-23,28-dioic acid (zanhic acid)28-*O*- $\beta$ -*D*-apiofuranosyl(1 $\rightarrow$ 3)-*O*-[4-*O*-acetyl]- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)-*O*- $\alpha$ -*L*-arabinopyranosyl ester = 728
- 3-*O*- $\beta$ -*D*-Xylopyranosyl(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 4)- $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyloleanolic acid 28-*O*- $\beta$ -*D*-glucopyranosyl(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside = 19434
- 3-*O*-[*O*- $\beta$ -*D*-Xylopyranosyl(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl] zanhic acid 28-*O*- $\alpha$ -*L*-arabinopyranosyl(1 $\rightarrow$ 3)-*O*-[4-*O*-acetyl]- $\alpha$ -*L*-rhamnopyranosyl(1 $\rightarrow$ 2)-*O*- $\alpha$ -*L*-arabinopyranosyl ester = 730

3-*O*-[ $\beta$ -*D*-Xylopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 4)][ $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-galactopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-rabinopyranosyl-hederagenin-28-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside = 1891

3-*O*- $\beta$ -*D*-Xylopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-glucuronopyranosyl azukisapogenol 29-*O*- $\beta$ -*D*-glucopyranoside ester = 15201

3-*O*-[ $\beta$ -*D*-Xylopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucuronopyranosyl]-28-*O*-[ $\beta$ -*D*-glucopyranosyl]-oleanolic acid = 20529

3-*O*-( $\beta$ -*D*-Xylopyranosyl)-hederagenin = 3913

3-*O*- $\beta$ -*D*-Xylopyranosyl oleanolic acid 28-*O*- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranosyl ester = 1254

3 $\beta$ -*O*-( $\beta$ -*D*-Xylopyranosyl) pomolic acid methyl ester = 10982

28-*O*- $\beta$ -*D*-Xylopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)-[ $\alpha$ -*L*-(5-*O*-acetyl)-arabinofuranosyl(1 $\rightarrow$ 3)]- $\beta$ -*D*-(4-*O*-acetyl)-fucopyranosyl-gypsogenin-3-*O*- $\beta$ -*D*-galactopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-(6-*O*-methyl ester)-glucuronopyranoside = 19659

28-*O*- $\beta$ -*D*-Xylopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)-[ $\alpha$ -*L*-(5-*O*-acetyl)-arabinofuranosyl(1 $\rightarrow$ 3)]- $\beta$ -*D*-(4-*O*-acetyl)-fucopyranosyl-quillaic acid-3-*O*- $\beta$ -*D*-galactopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-(6-*O*-methylester)-glucuronopyranoside = 19661

28-*O*- $\beta$ -*D*-Xylopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)-[ $\alpha$ -*L*-(5-*O*-acetyl)-arabinofuranosyl(1 $\rightarrow$ 3)]- $\beta$ -*D*-(4-*O*-acetyl)-fucopyranosyl-quillaic acid-3-*O*- $\beta$ -*D*-galactopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-(6-*O*-*n*-butyl ester)-glucuronopyranoside = 19662

28-*O*- $\beta$ -*D*-Xylopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)-[ $\alpha$ -*L*-(5-*O*-acetyl)-arabinofuranosyl(1 $\rightarrow$ 3)]- $\beta$ -*D*-(4-*O*-acetyl)-fucopyranosyl-gypsogenin-3-*O*- $\beta$ -*D*-galactopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-glucuronopyranoside = 19665

28-*O*- $\beta$ -*D*-Xylopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)-[ $\alpha$ -*L*-(5-*O*-acetyl)-arabinofuranosyl(1 $\rightarrow$ 3)]- $\beta$ -*D*-(4-*O*-acetyl)-fucopyranosyl-quillaic acid-3-*O*- $\beta$ -*D*-galactopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-glucuronopyranoside = 19666

28-*O*-[ $\beta$ -*D*-Xylopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)]- $\alpha$ -*L*-arabinofuranosyl(1 $\rightarrow$ 3)- $\beta$ -*D*-(4-*O*-acetyl)-fucopyranosyl-gypsogenin-3-*O*- $\beta$ -*D*-galactopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-(6-*O*-methyl ester)-glucuronopyranoside = 19663

28-*O*- $\beta$ -*D*-Xylopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)-[ $\alpha$ -*L*-arabinofuranosyl(1 $\rightarrow$ 3)]- $\beta$ -*D*-(4-*O*-acetyl)-fucopyranosyl-gypsogenin-3-*O*- $\beta$ -*D*-galactopyranosyl(1 $\rightarrow$ 2)- $\beta$ -*D*-(6-*O*-*n*-butyl ester)-glucuronopyranoside = 19664

3-*O*-[ $\beta$ -*D*-Xylopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -*D*-(1 $\rightarrow$ 4)][ $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -*D*-galactopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -*L*-arabinopyranosyl-hederagenin = 1890

3-*O*- $\beta$ -*D*-Xylopyranosyl (1 $\rightarrow$ 2)- $\alpha$ -*L*-rhamnopyranosyl-22 $\beta$ -*O*- $\beta$ -*D*-glucopyranosyl-6 $\alpha$ ,16 $\beta$ -dihydroxyhopane = 13005

3-*O*- $\beta$ -*D*-Xylopyranosyl (1 $\rightarrow$ 2)- $\alpha$ -*L*-rhamnopyranosyl-6 $\alpha$ -*O*- $\beta$ -*D*-xylopyranosyl-22-*O*- $\beta$ -*D*-glucopyranosyl-16 $\beta$ -hydroxy hopane = 13004

3-*O*- $\beta$ -*D*-Xylopyranosyl-(1 $\rightarrow$ 3)- $\alpha$ -*L*-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -*D*-xylopyranosyl-oleanolic acid 28-*O*- $\beta$ -*D*-glucopyranosyl-(1 $\rightarrow$ 6)- $\beta$ -*D*-glucopyranoside = 19436

3-*O*-( $\beta$ -*D*-Xylopyranosyl 4-sulphate)-spergulagenin A = 20144

6'-*O*- $\beta$ -*D*-Xylopyranosylswertiamarin = 3539

3-*O*-{[ $\beta$ -*D*-Xylopyranosyl-(1 $\rightarrow$ 2)]-[ $\beta$ -*D*-xylopyranosyl-(1 $\rightarrow$ 4)]-[3-*O*-acetyl]- $\beta$ -*D*-glucuronopyranosyl}-28-*O*-[ $\beta$ -*D*-glucopyranosyl]-oleanolic acid = 20536

3-*O*- $\beta$ -*D*-Xylopyranosyl-6 $\alpha$ -*O*- $\beta$ -*D*-xylopyranosyl-16 $\beta$ ,22 $\beta$ -dihydroxyhopane = 13008

3-*O*-{[ $\beta$ -*D*-Xylopyranosyl(1 $\rightarrow$ 2)]-[ $\beta$ -*D*-xylopyranosyl(1 $\rightarrow$ 4)]- $\beta$ -*D*-glucuronopyranosyl}-28-*O*-[ $\beta$ -*D*-glucopyranosyl]-oleanolic acid = 20535

3-*O*- $\beta$ -*D*-Xylopyranosyl-6 $\alpha$ -*O*- $\beta$ -*D*-xylopyranosyl-16 $\beta$ -*O*- $\beta$ -*D*-xylopyranosyl-22 $\beta$ -hydroxyhopane = 13006

*D*-Xylose = 22843  
3,4-Xylylic acid = 6320

## Y

Yadanzolide A = 2672  
Yageine = 9235  
Yangambin = 12920  
Yatansin = 2684  
(-)-Yatein = 5543  
Yatrorizine = 11851  
Yemuoside YM14 = 3781  
(-)-Yiyeliangwanoside XI = 22919  
Yuanhuacin A = 22929  
Yuanhuadin B = 22930  
Yuglon = 11903  
Yuheinoside = 17513

## Z

Zeaxanthin dipalmitate = 17238  
Zedoarone = 4416  
Zeorin = 9634  
(+)-(1*R*\*,5*R*\*,6*S*\*)-Zierene = 22999  
Zingiberenin B = 3924

# TCM Plant English Name Index

TCM Plant English Name	TCM Plant Code and Latin Name	TCM Plant PIN YIN Name
Abbreviate Balanophora*	T0857 <i>Balanophora abbreviata</i>	DUAN SHE GU
Abelmusk	T4303 <i>Moschus moschiferus</i> ; <i>Moschus berezovskii</i> ; <i>Moschus sifanicus</i>	SHE XIANG
Abrams Cypress*	T1894 <i>Cupressus abramsiana</i>	AI SHI BAI MU
Absus Senna*	T1228 <i>Cassia absus</i>	A SU JUE MING
Abura Mitragyna	T4257 <i>Mitragyna macrophylla</i>	DA YE MAO ZHU MU
Abutilon Nightshade*	T5988 <i>Solanum abutiloides</i>	MA ZHUANG QIE
Abyssinia Coralbean*	T2457 <i>Erythrina abyssinica</i>	A BI XI NI YA CI TONG
Abyssinia Harrisonia*	T3108 <i>Harrisonia abyssinica</i>	A BI XI NI YA NIU JIN GUO
Acacia Terminalia*	T6349 <i>Terminalia stuhlmannii</i>	A KA XI A LAN REN
Acanthoid Pricklyash*	T6858 <i>Zanthoxylum acanthopodium</i>	CI HUA JIAO
Acanthus-leaved Mahonia	T4053 <i>Mahonia acanthifolia</i>	CI YE SHI DA GONG LAO
Acicular Thorowax	T1057 <i>Bupleurum bicaule</i>	ZHUI YE CHAI HU
Acid Gambirplant*	T6604 <i>Uncaria acida</i>	SUAN GOU TENG
Aconite	T0118 <i>Aconitum napellus</i>	OU WUTOU
Actino-spiny Barberry	T0896 <i>Berberis actinacantha</i>	CU CI XIAO BO
Aculeate Amomum*	T0415 <i>Amomum aculeatum</i>	CI DOU KOU
Aculeate Nightshade*	T5989 <i>Solanum aculeatissimum</i>	DING QIE
Aculeate Poisonnut*	T6163 <i>Strychnos aculeata</i>	CI MA QIAN ZI
Aculeate Ruffle Palm	T0259 <i>Aiphanes aculeata</i>	CI JI NU ZONG LV
Acuminate Aussieoplar*	T3273 <i>Homalanthus acuminatus</i>	JIAN JIAN AO YANG
Acuminate Banana	T4329 <i>Musa acuminata</i>	XIAO GUO YE JIAO
Acuminate Colanet	T1615 <i>Cola acuminata</i>	SU DAN KE LE GUO
Acuminate Glochidion*	T2987 <i>Glochidion acuminatum</i>	JIAN JIAN SUAN PAN ZI
Acuminate Lasianthus	T3696 <i>Lasianthus acuminatissimus</i>	CHANG WEI CU YE MU
Acuminate Swallowwort	T1950 <i>Cynanchum ascyrifolium</i>	CHAO FENG CAO
Acuminate Tobacco*	T4424 <i>Nicotiana acuminata</i>	JIAN XING YAN CAO
Acuminate Uvaria*	T6657 <i>Uvaria acuminata</i>	JIAN ZI YU PAN
Acuminatum Epimedium	T2389 <i>Epimedium acuminatum</i>	CU MAO YIN YANG HUO
Acutangular Scopolia	T5819 <i>Scopolia acutangula</i> [Syn. <i>Anisodus acutangulus</i> ]	SAN FEN SAN
Acute Antirhea*	T0536 <i>Antirhea acutata</i>	JIAN RUI MAO CHA
Acute Common Perilla	T4717 <i>Perilla frutescens</i> var. <i>acuta</i> [Syn. <i>Perilla frutescens</i> var. <i>purpurascens</i> ]	JIAN ZI SU
Acute Common Perilla Leaf	T4718 <i>Perilla frutescens</i> var. <i>acuta</i> [Syn. <i>Perilla frutescens</i> var. <i>purpurascens</i> ]	JIAN ZI SU YE
Acute Rush*	T3577 <i>Juncus acutus</i>	JIAN DENG XIN CAO
Acute Sida	T5942 <i>Sida acuta</i>	HUANG HUA REN
Acute Spiraea	T6081 <i>Spiraea japonica</i> var. <i>acuta</i>	JI JIAN XIU XIAN JU

Acute Syngnathus*	T6257 <i>Syngnathus acus</i>	JIAN HAI LONG
Acuteangle Hedyotis	T3122 <i>Hedyotis acutangula</i>	JIN CAO
Acuteangulus Pencilwood*	T2306 <i>Dysoxylum acutangulum</i>	RUI JIAO JIAN MU
Acuteleaf Ash Bark	T2780 <i>Fraxinus szaboana</i> [Syn. <i>Fraxinus chinensis</i> var. <i>acuminata</i> ]	JIAN YE CEN
Acute-leaf Pricklyash*	T6859 <i>Zanthoxylum acutifolium</i>	JIAN YE HUA JIAO
Acutelobed Angelica	T0474 <i>Angelica acutiloba</i> [Syn. <i>Ligusticum acutilobum</i> ]	DONG DANG GUI
Acutelobed Hornpoppy	T2970 <i>Glaucium oxylobum</i>	JIAN LIE HAI YING SU
Acutifoliate Podocarpium	T2133 <i>Desmodium racemosum</i> [Syn. <i>Podocarpium podocarpum</i> var. <i>oxyphyllum</i> ]	SHAN MA HUANG
Adder's Tongue	T4506 <i>Ophioglossum vulgatum</i>	PING ER XIAO CAO
Adhesive Rehmannia Cocked Root	T5446 <i>Rehmannia glutinosa</i> [Syn. <i>Rehmannia glutinosa</i> f. <i>huechingensis</i> ]	SHU DI HUANG
Adhesive Rehmannia Dried Root	T5445 <i>Rehmannia glutinosa</i> [Syn. <i>Rehmannia glutinosa</i> f. <i>huechingensis</i> ]	GAN DI HUANG
Adhesive Rehmannia Fresh Root	T5447 <i>Rehmannia glutinosa</i> [Syn. <i>Rehmannia glutinosa</i> f. <i>huechingensis</i> ]	XIAN DI HUANG
Adlay	T1613 <i>Coix lacryma-jobi</i>	YI MI
Adnate Groundsel*	T5875 <i>Senecio adnatus</i>	TIE SHENG QIAN LI GUANG
Afghanistan Erysimum*	T2456 <i>Erysimum perofskianum</i>	A FU HAN TANG JIE
Afghanistan Lilac*	T6258 <i>Syringa afghanica</i>	A FU HAN DING XIANG
Africa Trumpetreeper*	T4422 <i>Newbouldia laevis</i>	FEI ZHOU ZI WEI
African Antiaris*	T0532 <i>Antiaris africana</i>	FEI ZHOU JIAN XUE FENG HOU
African Basil*	T4474 <i>Ocimum kilimandscharicum</i>	FEI ZHOU LUO LE
African Costus*	T1754 <i>Costus afer</i>	FEI ZHOU BI QIAO JIANG
African Cucumber*	T1873 <i>Cucumis africanus</i>	FEI ZHOU HUANG GUA
African Custard Apple*	T3237 <i>Hexalobus crispiflorus</i>	FEI ZHOU FAN LI ZHI
African Erythrophleum	T2482 <i>Erythrophleum africanum</i>	FEI ZHOU GE MU
African frog	T0207 African frog	FEI ZHOU WA
African Gambirplant*	T6605 <i>Uncaria africana</i>	FEI ZHOU GOU TENG
African Holarrhena*	T3262 <i>Holarrhena africana</i>	FEI ZHOU ZHI XIE MU
African Lily	T0209 <i>Agapanthus africanus</i>	FEI ZHOU BAI ZI LIAN
African Mammey Apple	T4092 <i>Mammea africana</i>	FEI ZHOU HUANG GUO MU
African Mitragyna*	T4255 <i>Mitragyna africanus</i>	FEI ZHOU MAO ZHU MU
African Myrsine	T4361 <i>Myrsine africana</i>	TIE ZI
African Olive*	T4486 <i>Olea africana</i>	FEI ZHOU GAN LAN
African Quassia*	T5369 <i>Quassia africana</i>	FEI ZHOU KU MU
African Rosewood	T2004 <i>Dalbergia melanoxylon</i>	FEI ZHOU HUANG TAN
Afzel Poisonnut*	T6164 <i>Strychnos afzelii</i>	A FU ZE ER MA QIAN ZI
Afzeli Garcinia*	T2849 <i>Garcinia afzelii</i>	A FU ZE LI SHAN ZHU ZI
Aging Leek	T0320 <i>Allium senescens</i>	SHAN JIU
Ailanthus-like Pricklyash	T6860 <i>Zanthoxylum ailanthoides</i>	CHU YE HUA JIAO
Ailanthus-like Pricklyash Bark	T6862 <i>Zanthoxylum ailanthoides</i>	CHU YE HUA JIAO PI
Ailanthus-like Pricklyash Root	T6861 <i>Zanthoxylum ailanthoides</i>	CHU YE HUA JIAO GEN
Ainsliaefolious Cacalia	T1097 <i>Cacalia ainsliaeflora</i>	TU ER FENG XIE JIA CAO
Air-plant	T1043 <i>Bryophyllum pinnatum</i>	LUO DI SHENG GEN
Airpotato Yam	T2191 <i>Dioscorea bulbifera</i>	HUANG YAO ZI
Aizoon Stonecrop	T5850 <i>Sedum aizoon</i>	FEI CAI
Ajowan	T6488 <i>Trachyspermum ammi</i>	A YU WEI
Akee	T0956 <i>Blighia sapida</i>	XI FEI LI ZHI GUO
Aleppo Gall (Galla Halepensis)	T5374 <i>Quercus infectoria</i>	MO SHI ZI
Alfalfa	T4148 <i>Medicago sativa</i>	MU XU
Alfalfa Root	T4149 <i>Medicago sativa</i>	MU XU GEN
Alfred Stonecrop	T5851 <i>Sedum alfredii</i> [Syn. <i>Sedum formosanum</i> ]	DONG NAN JING TIAN

Algarroba	T5210 <i>Prosopis juliflora</i>	MU DOU SHU
Algerian Cottonthistle*	T4496 <i>Onopordum algeriense</i>	A ER JI ER DA CHI JI
Algerian Iris	T3473 <i>Iris unguicularis</i>	A ER JI LI YA YUAN WEI
Algerian Statice	T3841 <i>Limonium bonduellii</i>	A ER JI LI YA BU XUE CAO
Algid Rhodiola*	T5491 <i>Rhodiola algida</i>	JI SHI HONG JING TIAN
Alkanet	T0447 <i>Anchusa officinalis</i>	YAO YONG NIU SHE CAO
Alliaceus Pencilwood*	T2307 <i>Dysoxylum alliaceum</i>	CONG JIAN MU
Alligator Alternanthera	T0379 <i>Alternanthera philoxeroides</i>	KONG XIN XIAN
Allspice	T4894 <i>Pimenta dioica</i>	DUO XIANG GUO
Allugha Galangal*	T0352 <i>Alpinia allughas</i>	A LU HA LIANG JIANG
Alpine Bog-swertia	T6230 <i>Swertia perennis</i>	SU GEN ZHANG YA CAI
Alpine Clubmoss*	T3964 <i>Lycopodium alpinum</i> [Syn. <i>Diphasiastrum alpinum</i> ]	GAO SHAN BIAN ZHI SHI SONG
Alpine Currant	T5544 <i>Ribes alpinum</i>	GAO SHAN CHA BIAO
Alpine Edelweiss	T3749 <i>Leontopodium alpinum</i>	GAO SHAN HUO RONG CAO
Alpine Gentian	T2902 <i>Gentiana algida</i>	BAI HUA LONG DAN
Alpine Groundsel*	T5878 <i>Senecio alpinus</i>	YA KE BEI QIAN LI GUANG
Alpine Larkspur	T2074 <i>Delphinium elatum</i>	GAO FEI YAN CAO
Alpine Meadowrue	T6373 <i>Thalictrum alpinum</i>	GAO SHAN TANG SONG CAO
Alpine Oleandra	T4488 <i>Oleandra wallichii</i>	GAO SHAN TIAO JUE
Alpine Poppy	T4621 <i>Papaver alpinum</i>	GAO SHAN YING SU
Alpine Pricklyash	T6881 <i>Zanthoxylum hamiltonianum</i>	GAO SHAN HUA JIAO
Alpine Sowthistle	T1414 <i>Cicerbita alpina</i>	GAO SHAN YAN SHEN
Alpine Totara	T5049 <i>Podocarpus nivalis</i>	GAO SHAN LUO HAN SONG
Alpine Yarrow	T0060 <i>Achillea alpina</i> [Syn. <i>Achillea sibirica</i> ]	YI ZHI HAO
Alpine Thermopsis	T6424 <i>Thermopsis alpina</i>	GAO SHAN HUANG HUA
Altai Anemone*	T0463 <i>Anemone altaica</i>	A ER TAI YIN LIAN HUA
Altai Heteropappus	T3233 <i>Heteropappus altaicus</i>	A ER TAI ZI WAN
Alternateleaf Melaleuca*	T4153 <i>Melaleuca alternifolia</i>	HU SHENG YE BAI QIAN CENG
Alternateleaf Thermopsis*	T6425 <i>Thermopsis alternifolia</i>	HU SHENG YE YE JUE MING
Alternate-leaved Golden-saxifrage	T1402 <i>Chrysosplenium alternifolium</i>	JIN YAO
Amaranthinecolor Goosefoot*	T1360 <i>Chenopodium amaranticolor</i>	XIAN SE LI
Amazon lily	T2524 <i>Eucharis amazonica</i>	YA MA XUN BAI HE
Amazonian Jewelvine*	T2117 <i>Derris amazonica</i>	YA MA XUN YU TENG
Amazonian Poisonnut*	T6165 <i>Strychnos amazonica</i>	YA MA XUN MA QIAN ZI
Ambiguous Consolida*	T1646 <i>Consolida ambigua</i>	LIANG SI FEI YAN CAO
Amboina Pitch Tree	T0213 <i>Agathis dammara</i>	BEI KE SHAN
American Agave	T0215 <i>Agave americana</i>	FAN MA
American Aspen	T5163 <i>Populus tremuloides</i>	CHAN YANG
American Avocado	T4731 <i>Persea americana</i> [Syn. <i>Persea gratissima</i> ]	E LI
American Bittersweet	T1293 <i>Celastrus scandens</i>	MEI ZHOU NAN SHE TENG
American Coralbean*	T2458 <i>Erythrina americana</i>	MEI ZHOU CI TONG
American Cranberry	T6671 <i>Vaccinium macrocarpon</i>	MEI ZHOU SUAN GUO LUO
American Crotalaria*	T1814 <i>Crotalaria anagyroides</i>	MEI ZHOU YE BAI HE
American Eleutherine	T2339 <i>Eleutherine americana</i>	XIAO HONG SUAN
American Elm	T6594 <i>Ulmus americana</i>	MEI ZHOU YU
American Euphorbia	T2600 <i>Euphorbia maculata</i>	BAN DI JIN
American Ginseng	T4610 <i>Panax quinquefolium</i>	XI YANG SHEN
American Ginseng Stem-leaf	T4611 <i>Panax quinquefolium</i>	XI YANG SHEN JING YE
American Green Alder	T0325 <i>Alnus crispa</i>	MEI ZHOU LU QI MU
American Lotus	T4396 <i>Nelumbo lutea</i>	JIN HUANG LIAN
American Maidenhair Fern	T0175 <i>Adiantum pedatum</i>	TIE SI QI
American Pokeweed	T4861 <i>Phytolacca americana</i> [Syn. <i>Phytolacca decandra</i> ]	MEI SHANG LU
American Ragweed*	T0397 <i>Ambrosia artemisiaefolium</i>	MEI ZHOU TUN CAO

American Spineginseng*	T4517 <i>Oplopanax horridus</i>	MEI ZHOU CI SHEN
American Umbrellaleaf	T2230 <i>Diphylleia cymosa</i>	SHAN XI WO ER QI
American Vouacapoua*	T6804 <i>Vouacapoua americana</i>	MEI GUO KE YA SHU
Ammbergriis	T4855 <i>Physeter catodon</i>	LONG XIAN XIANG
Ampelopsis	T0423 <i>Ampelopsis brevipedunculata</i>	SHE PU TAO
Amphibian Jujube*	T6914 <i>Ziziphus amphibia</i>	SHUI LU ZAO
Amphibious Knotweed	T5097 <i>Polygonum amphibium</i>	LIANG QI LIAO
Amplexicaul Swertia	T6221 <i>Swertia franchetiana</i>	BAO JING ZHANG YA CAI
Amplexifolious Glorybower	T1569 <i>Clerodendrum serratum</i> var. <i>amplexifolium</i>	SAN TAI HUA
Amur Adonis	T0184 <i>Adonis amurensis</i>	FU SHOU CAO
Amur Barberry	T0897 <i>Berberis amurensis</i>	XIAO BO
Amur Corktree	T4789 <i>Phellodendron amurense</i>	HUANG BAI
Amur Corydalis	T1706 <i>Corydalis ambigua</i> var. <i>amurensis</i> [Syn. <i>Corydalis ambigua</i> ]	DONG BEI YAN HU SUO
Amur Grape	T6794 <i>Vitis amurensis</i>	SHAN PU TAO
Amur Jackinthepulpit	T0617 <i>Arisaema amurense</i>	DONG BEI TIAN NAN XING
Amur Lilac	T6259 <i>Syringa amurensis</i> [Syn. <i>Syringa reticulata</i> var. <i>amurensis</i> ]	BAO MA ZI
Amur Maackia	T4009 <i>Maackia amurensis</i>	CHAO XIAN HUAI
Amur Maple	T0049 <i>Acer ginnala</i>	CHA TIAO QI
Amur Poppy	T4630 <i>Papaver nudicaule</i> ssp. <i>amurense</i>	HEI SHUI YE YING SU
Amur Valeriana	T6675 <i>Valeriana amurensis</i>	HEI SHUI XIE CAO
Amygdalate Apricot Seed	T5215 <i>Prunus amygdalus</i>	BA DAN XING REN
Anantmul	T3200 <i>Hemidesmus indicus</i>	YIN DU BA QIA
Anatomicum Fig*	T4199 <i>Mesembryanthemum anatomicum</i>	MING SONG YE JU
Anattotree	T0947 <i>Bixa orellana</i>	HONG MU
Ancher St.John'swort*	T3337 <i>Hypericum ancherii</i>	AN SHI JIN SI TAO
Ancients Euphorbia	T2580 <i>Euphorbia antiquorum</i>	HUO YANG LE
Ancistrocladus*	T0450 <i>Ancistrocladus korupensis</i>	GOU ZHI TENG
Andrographis*	T0459 <i>Andrographis serpyllifolia</i>	BAI LI XIANG YE CHUN XIN LIAN
Angelica	T0477 <i>Angelica archangelica</i>	YUAN DANG GUI
Angelin-tree	T0452 <i>Andira inermis</i>	WU CI KE YA SHU
Angled Bittersweet	T1285 <i>Celastrus angulatus</i>	DIAO GAN MA
Angletwig Magnoliavine	T5797 <i>Schisandra propinqua</i>	HAN RUI WU WEI ZI
Angola Alangium*	T0283 <i>Alangium lamarckii</i>	AN GE LA BA JIAO FENG
Angola Cucumber*	T1874 <i>Cucumis angolensis</i>	AN GE LA HUANG GUA
Angola Padauk*	T5300 <i>Pterocarpus angolensis</i>	AN GE LA ZI TAN
Angola Uvaria*	T6658 <i>Uvaria angolensis</i>	GUAN ZI YU PAN
Angostura-bark Tree	T2829 <i>Galipea officinalis</i>	AN GU SI TU LA SHU
Angulate Groundsel*	T5880 <i>Senecio angulatus</i>	LENG JIAO QIAN LI GUANG
Angulate Mistletoe*	T6772 <i>Viscum angulatum</i>	LENG ZHI HU JI SHENG
Anhui Anemone*	T0464 <i>Anemone anhuiensis</i>	AN HUI YIN LIAN HUA
Anhui Fritillary	T2781 <i>Fritillaria anhuiensis</i>	AN HUI BEI MU
Anise	T4895 <i>Pimpinella anisum</i>	HUI QIN
Annual Adonis*	T0185 <i>Adonis annua</i>	QIU FU SHOU CAO
Annual Fleabane	T2421 <i>Erigeron annuus</i>	YI NIAN PENG
Annual Mercury	T4196 <i>Mercurialis annua</i>	YI NIAN SHENG SHAN DIAN
Anomalous Mallotu	T4079 <i>Mallotus anomalus</i>	XIU MAO YE TONG
Ansu Apricot Seed	T5219 <i>Prunus armeniaca</i> var. <i>ansu</i>	SHAN XING REN
Antao Nutmeg	T4354 <i>Myristica simiarum</i>	FEI LV BIN ROU DOU KOU
Antidysenteric Brucea*	T1037 <i>Brucea antidysenterica</i>	KANG LI YA DAN ZI
Antifebrile Dichroa	T2158 <i>Dichroa febrifuga</i>	CHANG SHAN
Apisin	T0539 <i>Apis cerana</i>	FENG DU
Appendiculate Cremastra	T1787 <i>Cremastra appendiculata</i>	DU JUAN LAN
Apple	T4088 <i>Malus pumila</i>	PING GUO

Apple Mint	T4188 <i>Mentha rotundifolia</i>	YU XIANG CAO
Apple of Peru	T4423 <i>Nicandra physaloides</i>	JIA SUAN JIANG
Apricot	T5218 <i>Prunus armeniaca</i>	XING ZI
Apricot Root	T5217 <i>Prunus armeniaca</i>	XING SHU GEN
Apricot Seed	T5216 <i>Prunus armeniaca</i>	XING REN
Aquatic Morning Glory	T3444 <i>Ipomoea aquatica</i> [Syn. <i>Convolvulus repens</i> ; <i>Ipomoea reptans</i> ]	WENG CAI
Aquatic-sunflower Inula	T3432 <i>Inula helianthus-aquatica</i>	SHUI CHAO YANG
Arabian Acacia	T0016 <i>Acacia arabica</i>	A LA BO JIN HE HUAN
Arabian Coffeetree	T1608 <i>Coffea arabica</i>	XIAO GUO KA FEI
Arabian Jasmine	T3557 <i>Jasminum sambac</i>	MO LI HUA
Arachnoidea Redstriate Woodbetony*	T4685 <i>Pedicularis striata</i> ssp. <i>arachnoidea</i>	ZHU SI HONG WEN MA XIAN HAO
Arboreous Bayberry*	T4342 <i>Myrica arborea</i>	QIAO MU ZHUANG YANG MEI
Arboreous Coriaria*	T1689 <i>Coriaria arborea</i>	CAI SHI MU MA SANG
Arboreous Peony	T4581 <i>Paeonia arborea</i>	QIAO MU SHAO YAO
Arboreous Pepper*	T4932 <i>Piper arboreum</i>	QIAO MU HU JIAO
Arboreous Terminalia*	T6343 <i>Terminalia arborea</i>	QIAO MU ZHUANG LAN REN
Arborescent Aloe*	T0334 <i>Aloe arborescens</i> var. <i>natalensis</i>	WU GONG ZHANG
Arenaceous Hymenocallis*	T3319 <i>Hymenocallis arenicola</i>	SHA SHENG SHUI GUI JIAO
Argenti Aglaia*	T0231 <i>Aglaia argentea</i>	YIN SE MI ZI LAN
Argentin <i>Mulinum spinosum</i>	T4313 <i>Mulinum spinosum</i>	DUO CI LUO CAO
Argentine Box*	T1085 <i>Buxus argentea</i>	YIN BAI HUANG YANG
Argentine Cudweed*	T3027 <i>Gnaphalium gaudichaudianum</i>	A GEN TING SHU QU CAO
Argentine Liverwort	T4990 <i>Plagiochasma rupestre</i>	ZI BEI TAI
Argute Perilla*	T4713 <i>Perilla arguta</i>	RUI ZI SU
Arguzioid Heliotrope*	T3168 <i>Heliotropium arguzioides</i>	A GU JI TIAN JIE CAI
Argy Wormwood Leaf	T0664 <i>Artemisia argyi</i>	AI YE
Aristolochia chilensis	T0623 <i>Aristolochia chilensis</i>	ZHI LI MA DOU LING
Arizona Cypress	T1895 <i>Cupressus arizonica</i>	LV GAN BAI
Arizona Sneezeweed*	T3132 <i>Helenium arizonicum</i>	YA LI SANG NA DUI XIN JU
Armand Pine	T4906 <i>Pinus armandii</i>	HUA SHAN SONG
Armate-leaf Pricklyash*	T6864 <i>Zanthoxylum armatum</i>	MAO ZHU YE HUA JIAO
Armet-petal Ear-leaf Muscus*	T2802 <i>Frullania muscicola</i>	KUI BAN ER YE TAI
Armillariella Tabescens	T0646 <i>Armillariella tabescens</i>	LIANG JUN
Armillary Mushroom*	T0644 <i>Armillaria mellea</i>	MI HUAN JUN
Armoracia Drypetes*	T2288 <i>Drypetes armoracia</i>	LA GEN HE GUO MU
Arnotti Pricklyash*	T6865 <i>Zanthoxylum arnottianum</i>	A NUO TI HUA JIAO
Arolla Pine	T4909 <i>Pinus cembra</i>	RUI SHI SHI SONG
Aromatic Ginger	T6907 <i>Zingiber aromaticum</i>	FANG XIANG JIANG
Aromatic Xylopi*	T6850 <i>Xylopi aromaticum</i>	FANG XIANG MU BAN SHU
Aromatic Turmeric	T1903 <i>Curcuma aromatica</i>	YU JIN
Arrowhead-like Wildginger	T0730 <i>Asarum sagittarioides</i>	SHAN CI GU
Arrowleaf Balsamroot	T0865 <i>Balsamorhiza sagittata</i>	
Arrowleaf Goldenray Root	T3812 <i>Ligularia sagitta</i>	JIAN YE TOU WU GEN
Arrowroot Tacca	T6275 <i>Tacca chantrieri</i> [Syn. <i>Tacca minor</i> ; <i>Tacca esquirolii</i> ]	JIAN GEN SHU
Arrowshaft Poplar	T5156 <i>Populus nigra</i> var. <i>thevestina</i>	JIAN GAN YANG
Arrowshaped Tinospora	T6467 <i>Tinospora sagittata</i>	QING NIU DAN
Articulate Pholidota	T4821 <i>Pholidota articulata</i>	JIE JING SHI XIAN TAO
Arundo Nightshade*	T5990 <i>Solanum arundo</i>	A LUN DUO QIE
Asafetida Giantfennel Resin	T2695 <i>Ferula assafoetida</i>	A WEI
Asarabacca	T0725 <i>Asarum europaeum</i>	OU XI XIN
Ascendent Asparagus*	T0745 <i>Asparagus adscendens</i>	SHANG JU TIAN MEN DONG
Ashanti Pepper	T4946 <i>Piper guineense</i>	JI NEI YA HU JIAO
Ashurbajev Wormwood*	T0665 <i>Artemisia ashurbajevii</i>	A SHI HAO

Asia Belltree	T5402 <i>Radermachera sinica</i>	CAI DOU SHU
Asian Colubrina	T1627 <i>Colubrina asiatica</i>	SHE TENG
Asian Cowparsnip*	T3215 <i>Heracleum lanatum</i> var. <i>asiaticum</i>	YA ZHOU DU HUO
Asian lichen	T5342 <i>Pyrenula japonica</i>	RI BEN XIAO HE YI
Asian Pigeonwings	T1577 <i>Clitoria ternatea</i>	HU DIE HUA DOU
Asian Tetracera	T6353 <i>Tetracera asiatica</i>	XI YE TENG
Asian White Birch Bark	T0935 <i>Betula platyphylla</i> var. <i>japonica</i>	HUA MU PI
Asiatic Cornelian Cherry	T1698 <i>Cornus officinalis</i> [Syn. <i>Macrocarpium officinale</i> ]	SHAN ZHU YU
Asiatic Moonseed	T4182 <i>Menispermum dauricum</i>	BIAN FU GE
Asiatic Moonseed Root	T4183 <i>Menispermum dauricum</i>	BIAN FU GE GEN
Asiatic Pennywort	T1311 <i>Centella asiatica</i>	JI XUE CAO
Asiatic Plantain	T5002 <i>Plantago asiatica</i>	CHE QIAN
Asiatic Yarrow	T0061 <i>Achillea asiatica</i>	YA ZHOU SHI
AsiaticToddalia	T6471 <i>Toddalia asiatica</i> [Syn. <i>Toddalia aculeata</i> ; <i>Paullinia asiatica</i> ]	FEI LONG ZHANG XUE
Asica Baneberry	T1418 <i>Cimicifuga asiatica</i>	LEI YE SHENG MA
Asidefield Galingale	T1975 <i>Cyperus haspan</i>	QI PAN SHA CAO
Aspen	T5162 <i>Populus tremula</i>	OU ZHOU SHAN YANG
Assam Crotalaria Seed	T1815 <i>Crotalaria assamica</i>	ZI XIAO RONG ZI
Assam Horsechestnut	T0198 <i>Aesculus assamica</i>	CHANG BING QI YE SHU
Assam Tea	T1153 <i>Camellia sinensis</i> var. <i>assamica</i>	PU ER CHA
Assuki Bean	T6752 <i>Vigna angularis</i> [Syn. <i>Dolichus angularis</i> ; <i>Phaseolus angularis</i> ]	CHI DOU
Astrantia	T0810 <i>Astrantia major</i>	DA XING QIN
Asymmetry Rhamnella*	T5453 <i>Rhamnella inaequilatera</i>	BU DUI CHENG MAO RU
Atlas Cedar	T1281 <i>Cedrus atlantica</i>	BEI FEI XUE SONG
Atuntsuen Rhodiola	T5492 <i>Rhodiola atuntsuensis</i>	DE QIN HONG JING TIAN
Aucher St.John'swort*	T3341 <i>Hypericum aucheri</i>	AO SHI JIN SI TAO
Aureate Mayweed*	T4123 <i>Matricaria aurea</i>	JIN SE MU JU
Auricled Hedyotis	T3123 <i>Hedyotis auricularia</i>	ER CAO
Auricledleaf Mosquitotrap	T1958 <i>Cynanchum otophyllum</i>	QING YANG SHEN
Auricula	T5197 <i>Primula auricula</i>	ER ZHUANG BAO CHUN HUA
Auriculate Acacia	T0017 <i>Acacia auriculaeformis</i>	ER XING JIN HE HUAN
Auriculate Millettia*	T4233 <i>Millettia auriculata</i>	ER XING JI XUE TENG
Auriculate Swallowwort	T1952 <i>Cynanchum auriculatum</i>	ER YE NIU PI XIAO
Auriculate Twayblade*	T3861 <i>Liparis auriculata</i>	ER XING YANG ER LAN
Auriform Plagiogyria	T5000 <i>Plagiogyria stenoptera</i>	ER XING LIU ZU JUE
Austral Akebia	T0279 <i>Akebia trifoliata</i> var. <i>australis</i>	BAI MU TONG
Austral Akebia Root	T0280 <i>Akebia trifoliata</i> var. <i>australis</i>	BAI MU TONG GEN
Austral Bird's Foot Trefoil	T3927 <i>Lotus australis</i>	AO ZHOU BAI MAI GEN
Austral Rhubarb	T5468 <i>Rheum emodi</i> [Syn. <i>Rheum australe</i> ]	ZANG BIAN DA HUANG
Australia Stephania*	T6130 <i>Stephania japonica</i> var. <i>australis</i>	AO DA LI YA QIAN JIN TENG
Australia Yew	T0832 <i>Austrotaxus spicata</i>	AO DA LI YA HONG DOU SHAN
Australian Blackwood	T0025 <i>Acacia melanoxylon</i>	HEI MU JIN HE HUAN
Australian Cowplant	T3080 <i>Gymnema sylvestre</i>	CHI GENG TENG
Australian Nightshade	T5991 <i>Solanum aviculare</i> [Syn. <i>Solanum laciniatum</i> ]	AO ZHOU QIE
Australian Tea-tree	T3767 <i>Leptospermum polygalifolium</i> ssp. <i>polygalifolium</i>	YUAN ZHI YE AO ZHOU CHA
Autumn Lycoris	T3988 <i>Lycoris squamigera</i>	LU CONG
Autumn Zephyrlily	T6903 <i>Zephyranthes candida</i>	GAN FENG CAO
Aweto (Chinese Caterpillar Fungus)	T1683 <i>Cordyceps sinensis</i>	DONG CHONG XIA CAO
Avicenna's Pricklyash	T6866 <i>Zanthoxylum avicennae</i>	YING BU BO
Avrons	T5589 <i>Rubus chamaemorus</i>	XUAN GOU ZI
Axillary Southem Wildjube	T1381 <i>Choerospondias axillaris</i>	NAN SUAN ZAO
Ayapana Eupatorium*	T2552 <i>Eupatorium ayapana</i>	A YA PAN ZE LAN



Aztec Dahlia	T1996 <i>Dahlia pinnata</i> [Syn. <i>Dahlia variabilis</i> ]	DA LI HUA
Aztec Marigold	T6278 <i>Tagetes erecta</i>	WAN SHOU JU
Aztec Marigold Leaf	T6279 <i>Tagetes erecta</i>	WAN SHOU JU YE
Aztec Tobacco	T4427 <i>Nicotiana rustica</i>	HUANG HUA YAN CAO
Azure Eupatorium*	T2553 <i>Eupatorium azureum</i>	TIAN LAN ZE LAN
Azure Monkshood	T0095 <i>Aconitum fischeri</i>	BO YE WU TOU
Babylon Weeping Willow Branch	T5651 <i>Salix babylonica</i>	LIU ZHI
Babylon Weeping Willow Root-bast	T5650 <i>Salix babylonica</i>	LIU BAI PI
Bacciform Ciperadessa	T1446 <i>Ciperadessa baccifera</i>	YA LUO CHUN
Badgersbane	T0114 <i>Aconitum lycoctonum</i>	LANG DU WU TOU
Baikal Meadowrue	T6375 <i>Thalictrum baicalense</i>	BEI JIA ER TANG SONG CAO
Baikal Skullcap	T5834 <i>Scutellaria baicalensis</i>	HUANG QIN
Bailai's Chrysanthemum	T0854 <i>Baileya multiradiata</i>	BAI LAI SHI JU
Bailan Flower	T4209 <i>Michelia alba</i>	BAI LAN HUA
Baillon Veratrilla	T6691 <i>Veratrilla baillonii</i>	HUANG QIN JIAO
Balansa Melodinus*	T4176 <i>Melodinus balansae</i>	BEI SHI SHAN CHENG
Bald Pyrrosia	T5353 <i>Pyrrosia calvata</i>	GUANG SHI WEI
Balearic Box	T1086 <i>Buxus balearica</i>	XI BAN YA HUANG YANG
Balkan Toadflax	T3843 <i>Linaria dalmatica</i>	DA ER MA WEI YA LIU CHUAN YU
Ballander Magnoliavine	T5801 <i>Schisandra sphaerandra</i>	QIU RUI WU WEI ZI
Balloonflower	T5011 <i>Platycodon grandiflorum</i>	JIE GENG
Balloonvine Heartseed	T1197 <i>Cardiospermum halicacabum</i>	JIA KU GUA
Bally Aloe*	T0335 <i>Aloe ballyi</i>	BEI LI LU HUI
Balmleaf Metittis	T4175 <i>Melittis melissophyllum</i>	OU ZHOU MI FENG HUA
Balsam Croton*	T1838 <i>Croton balsamifera</i>	XIANG BA DOU
Balsam Fir	T0004 <i>Abies balsamea</i>	XIANG ZHI LENG SHAN
Balsam Poplar	T5147 <i>Populus balsamifera</i>	ZHI YANG
Balsamiferous Blumea	T0957 <i>Blumea balsamifera</i>	AI NA XIANG
Balsampear	T4263 <i>Momordica charantia</i>	KU GUA
Baluchistan Barberry	T0898 <i>Berberis baluchistanica</i>	BI LU ZHI XIAO BO
Bamboo Yellow*	T5939 <i>Shiraia bambusicola</i>	ZHU XUANG
Bambooleaf Pricklyash	T6887 <i>Zanthoxylum planispinum</i>	ZHU YE JIAO
Bambooleaf Pricklyash Root	T6888 <i>Zanthoxylum planispinum</i>	ZHU YE JIAO GEN
Bambooleaf Seseli	T5934 <i>Seseli meirei</i>	SAN YE FANG FENG
Bambooleaf Thorowax	T1066 <i>Bupleurum marginatum</i>	ZHU YE CHAI HU
Bambusa Hypocrella*	T3371 <i>Hypocrella bambusae</i>	ZHU HONG JUN
Bank Pepper*	T4935 <i>Piper banksii</i>	BAN KE HU JIAO
Barbados Cotton	T3054 <i>Gossypium barbadense</i> ]	HAI DAO MIAN
Barbary Wolfberry Fruit	T3955 <i>Lycium barbarum</i>	NING XIA GOU QI ZI
Barbary Wolfberry Root-bark*	T3954 <i>Lycium barbarum</i>	NING XIA GOU QI GEN PI
Barbate Cyclea	T1931 <i>Cyclea barbata</i>	YIN BU HUAN
Barbate Deadnettle	T3681 <i>Lamium barbatum</i>	YE ZHI MA
Barbate Filmy Fern	T3324 <i>Hymenophyllum barbatum</i>	MO JUE
Barbed Skullcap	T5835 <i>Scutellaria barbata</i> [Syn. <i>Scutellaria rivularis</i> ]	BAN ZHI LIAN
Barberry-like-dileaf Canthium	T1178 <i>Canthium berberidifolium</i>	SI XIAO BO SHUANG YE YU GU MU
Barbey Larkspur*	T2061 <i>Delphinium barbeyi</i>	BA BI CUI QUE HUA
Bark-less Puff-ball	T3701 <i>Lasiosphaera fenzlii</i>	MA BO
Barley Germinating Fruit	T3282 <i>Hordeum vulgare</i>	MAI YA
Basil	T4470 <i>Ocimum basilicum</i>	LUO LE
Basil Fruit	T4471 <i>Ocimum basilicum</i>	LUO LE ZI
Bastard Speedwell	T6729 <i>Veronica spuria</i>	YI ZHI XIANG
Bastardtoadflaxlike Swallowwort	T1961 <i>Cynanchum thesioides</i>	DI SHAO GUA
Bat Dung	T6732 <i>Vespertilio superans</i>	YE MING SHA

Bauer Acronychia	T0148 <i>Acronychia baueri</i>	BAO RUI SHAN YOU GAN
Bavarian Gentian	T2903 <i>Gentiana bavarica</i>	BA FA LI YA LONG DAN
Bay Bolete	T6848 <i>Xerocomus badius</i>	HE RONG GAI NIU GAN JUN
Bayberry Glorybower*	T1560 <i>Clerodendron myricoides</i>	YANG MEI CHANG SHAN
Bead Fern, Sensitive Fern	T4492 <i>Onoclea sensibilis</i>	BEI MEI QIU ZI JUE
Beakstyle Condorvine	T4118 <i>Marsdenia oreophila</i>	HUI ZHU NIU NAI CAI
Bean Blister Beetle	T2384 <i>Epicauta gorhami</i>	GE SHANG TING CHANG
Bean Trefoil	T0441 <i>Anagyris foetida</i>	CHOU WEI HONG DOU
Bear Gall	T5871 <i>Selenarctos thibetanus</i> ; <i>Ursus arctos</i>	XIONG DAN
Bear's Paw	T5872 <i>Selenarctos thibetanus</i> ; <i>Ursus arctos</i>	XIONG ZHANG
Bearberry	T0588 <i>Arctostaphylos uva-ursi</i>	XIONG GUO
Bearded Tooth Carpophore	T3229 <i>Hericium erinaceus</i> [Syn. <i>Hydnum erinaceus</i> ]	HOU TOU JUN
Beautiful Crotalaria	T1834 <i>Crotalaria spectabilis</i>	MEI LI ZHU SHI DOU
Beautiful Galangal	T0363 <i>Alpinia speciosa</i>	DA CAO KOU
Beautiful Garcinia*	T2875 <i>Garcinia speciosa</i>	MEI LI TENG HUANG
Beautiful Hornpoppy*	T2971 <i>Glaucium pulchrum</i>	MEI LI HAI YING SU
Beautiful Inula*	T3435 <i>Inula magnifica</i>	MEI LI XUAN FU HUA
Beautiful Milkweed*	T0739 <i>Asclepias speciosa</i>	MEI LI MA LI JIN
Beautiful Mitragyna*	T4258 <i>Mitragyna speciosa</i>	MEI LI MAO ZHU MU
Beautiful Newlitse	T4405 <i>Neolitsea pulchella</i>	MEI LI XIN MU JIANG ZI
Beautiful Phyllodium	T2131 <i>Desmodium pulchellum</i> [Syn. <i>Phyllodium pulchellum</i> ]	PAI QIAN CAO
Beautiful Phyllodium Root	T2132 <i>Desmodium pulchellum</i> [Syn. <i>Phyllodium pulchellum</i> ]	PAI QIAN CAO GEN
Beautiful St.John'swort	T3342 <i>Hypericum bellum</i>	MEI LI JIN SI TAO
Beautiful Sweetgum	T3867 <i>Liquidambar formosana</i> [Syn. <i>Liquidambar taiwaniana</i> ]	LU LU TONG
Beautiful Sweetgum Leaf	T3866 <i>Liquidambar formosana</i> [Syn. <i>Liquidambar taiwaniana</i> ]	FENG XIANG SHU
Beautiful-flowered Saussurea	T5767 <i>Saussurea pulchella</i>	MEI HUA FENG MAO JU
Beautiful-leaf Tephrosia*	T6332 <i>Tephrosia calophylla</i>	MEI LI YE HUI MAO DOU
Beautiful-raceme Barberry	T0900 <i>Berberis calliobotrys</i>	MEI SUI XIAO BO
Beddome Devilpepper	T5429 <i>Rauwolfia beddomei</i>	BI SHI LUO FU MU
Bee Balm	T4174 <i>Melissa officinalis</i>	XIANG FENG HUA
Bee Wax	T0542 <i>Apis cerana</i>	MI LA
Beggarticks	T0938 <i>Bidens bipinnata</i>	GUI ZHEN CAO
Beijing Poplar	T5148 <i>Populus beijingensis</i>	BEI JING YANG
Belgaum Walnut Seed	T0300 <i>Aleurites moluccana</i>	SHI LI ZI
Beliz Pricklyash*	T6867 <i>Zanthoxylum belizense</i>	BO LI ZI HUA JIAO
Bell Heather	T2417 <i>Erica cinerea</i>	HUI SE OU SHI NAN
Bellaco-Caspi	T3251 <i>Himatanthus sukuuba</i>	SU KU BA DOU HUA
Bellcalyx Pulsatilla	T5323 <i>Pulsatilla campanella</i>	ZHONG E BAI TOU WENG
Bengal Clockvine	T6444 <i>Thunbergia grandiflora</i>	DA HUA SHAN QIAN NIU
Bengal Kino	T1083 <i>Butea monosperma</i>	DAN ZI ZI MAO
Bergamot Orange	T1470 <i>Citrus bergamia</i>	XIANG NING MENG
Berghe Eucalyptus*	T2501 <i>Eucalyptus berghei</i>	BO SHI AN
Berry-bearing Campion	T1871 <i>Cucubalus baccifer</i>	BAI NIU XI
Bertero Coralbean*	T2460 <i>Erythrina berteriana</i>	BO SHI CI TONG
Berthault Nightshade*	T5992 <i>Solanum berthaultii</i>	BO SHI QIE
Betel Pepper Leaf	T4937 <i>Piper betle</i>	JU JIANG YE
Betenutpalm	T0606 <i>Areca catechu</i>	BING LANG
Betonyleaf Meconopsis	T4141 <i>Meconopsis betonicifolia</i>	HUO XIANG YE LV RONG HAO
Bhote Khair	T2499 <i>Eskemukerjea megacarpum</i>	
Bhutan Pine	T4910 <i>Pinus excelsa</i>	QIAO GUI
Biflower Crocus*	T1807 <i>Crocus chrysanthus-biflorus</i>	SHUANG HUA FAN HONG HUA
Biflower St.John'swort*	T3353 <i>Hypericum geminiflorum</i>	SHUANG HUA JIN SI TAO
Big Ammi	T0410 <i>Ammi majus</i>	DA A MI

Big Anise*	T4899 <i>Pimpinella magna</i>	DA HUI QIN
Big Anisetree*	T3403 <i>Illicium majus</i>	DA BA JIAO
Big Cord-grass	T6063 <i>Spartina cynosuroides</i>	YAN DI HE
Big Goniiothalamus*	T3046 <i>Goniiothalamus giganteus</i>	DA GE NA XIANG
Big Hogfennel*	T4757 <i>Peucedanum grande</i>	DA QIAN HU
Big Russula*	T5621 <i>Russula lepida</i>	DA HONG GU
Big Sagebrush	T0702 <i>Artemisia tridentata</i>	SAN CHI HAO
Bigdentate Ampelopsis	T0426 <i>Ampelopsis grossedentata</i> [Syn. <i>Ampelopsis cantoniensis</i> var. <i>grossedentata</i> ]	XIAN CHI SHE PU TAO
Bigelov Sneezeweed*	T3136 <i>Helenium bigelovii</i>	BI SHI DUI XIN JU
Bigflower Cape Jasmine	T2884 <i>Gardenia jasminoides</i> var. <i>grandiflora</i>	SHUI ZHI
Bigflower Cape Jasmine Leaf	T2885 <i>Gardenia jasminoides</i> var. <i>grandiflora</i>	SHUI ZHI YE
Bigflower Carpesium*	T1212 <i>Carpesium eximium</i>	DA HUA JIN WA ER
Bigflower Goniiothalamus	T3047 <i>Goniiothalamus griffithii</i>	DA HUA GE NA XIANG
Bigflower Heartseed*	T1196 <i>Cardiospermum grandiflorum</i>	DA HUA DAO DI LING
Bigflower Ladyslipper	T1984 <i>Cypripedium macranthum</i> [Syn. <i>Cypripedium tibeticum</i> ]	DA HUA SHAO LAN
Bigflower Magnoliavine*	T5792 <i>Schisandra grandiflora</i>	DA HUA WU WEI ZI
Bigflower Pencilwood*	T2311 <i>Dysoxylum macranthum</i>	DA HUA JIAN MU
Bigflower Rhodiola	T5494 <i>Rhodiola crenulata</i> [Syn. <i>Rhodiola euryphylla</i> ]	DA HUA HONG JING TIAN
Big-flowered Javatea	T4541 <i>Orthosiphon stamineus</i> [Syn. <i>Orthosiphon aristatus</i> ; <i>Orthosiphon grandiflorus</i> ; <i>Orthosiphon spicatus</i> ]	XIONG RUI ZHUANG ZHI GUAN CAO
Bigfruit Rosemyrtle*	T5527 <i>Rhodomyrtus macrocarpa</i>	DA GUO TAO JIN NIANG
Bigleaf Beautyberry	T1120 <i>Callicarpa macrophylla</i>	DA YE ZI ZHU
Bigleaf Breaketplant	T1380 <i>Chlorophytum malayense</i>	DA YE DIAO LAN
Bigleaf Magnolia	T4048 <i>Magnolia rostrata</i>	DA YE HOU PO
Bigleaf Polyscias*	T5130 <i>Polyscias amplifolia</i>	DA YE NAN YANG SHEN
Bigleaf Poplar	T5155 <i>Populus lasiocarpa</i>	DA YE YANG
Bigleaf Thorowax	T1065 <i>Bupleurum longiradiatum</i>	DA YE CHAI HU
Bignay Chinalaurel	T0535 <i>Antidesma bunius</i>	WU YUE CHA
Bignose Rhiancanthus	T5483 <i>Rhinacanthus nasutus</i>	BAI HE LING ZHI
Bigseed Jointfir	T3032 <i>Gnetum montanum</i> f. <i>megalocarpum</i>	DA ZI MAI MA TENG
Bigseed Swertia	T6225 <i>Swertia macrosperma</i>	DA ZI ZHANG YA CAI
Bigstreak Seseli*	T5930 <i>Seseli grandivittatum</i>	DA TIAO WEN XIE HAO
Bigthyrse Rabdosia	T3514 <i>Isodon megathyrsus</i>	DA ZHUI XIANG CHA CAI
Bimble Box	T2516 <i>Eucalyptus populnea</i>	YANG YE AN
Biond Magnolia	T4035 <i>Magnolia biondii</i> [Syn. <i>Magnolia fargesii</i> ]	WANG CHUN YU LAN
Bipinnatifid Ginseng	T4604 <i>Panax japonicus</i> var. <i>bipinnatifidus</i>	YU YE SAN QI
Birchleaf Pear	T5361 <i>Pyrus betulaefolia</i>	TANG LI
Bird Rape	T1005 <i>Brassica campestris</i> [Syn. <i>Brassica campestris</i> var. <i>oleifera</i> ]	YUN TAI ZI
Bird-in-a-bush	T1708 <i>Corydalis bulbosa</i> [Syn. <i>Corydalis solida</i> ]	SHAN YAN HU SUO
Birdsfoot Trefoil	T3928 <i>Lotus corniculatus</i>	DI YANG QUE
Bispore Mushroom*	T0210 <i>Agaricus bisporus</i>	SHUANG BAO MO GU
Bistort	T5099 <i>Polygonum bistorta</i>	QUAN SHEN
Bisulcate Milkvetch*	T0787 <i>Astragalus bisulcatus</i>	ER GOU HUANG QI
Biting Stonecrop	T5849 <i>Sedum acre</i>	TAI JING TIAN
Bitter	T3621 <i>Kaempferia marginata</i>	KU SHAN NAI
Bitter Brucea*	T1036 <i>Brucea amarissima</i>	KU YA DAN ZI
Bitter Citrus	T1469 <i>Citrus aurantium</i> var. <i>amara</i>	DAI DAI HUA
Bitter Cucumber*	T1879 <i>Cucumis sativus</i> var. <i>hanzil</i>	KU HUANG GUA
Bitter Milkwort*	T5070 <i>Polygala amarella</i>	KU WEI YUAN ZHI
Bitter Nightshade Fruit	T5998 <i>Solanum dulcamara</i>	QIAN NIAN BU LAN XIN
Bitter Russula	T5624 <i>Russula rosacea</i>	KU HONG GU
Bitter Vetch	T3705 <i>Lathyrus montanus</i>	SHAN DI XIANG WAN DOU

Bitter Willow Bast	T5653 <i>Salix purpurea</i>	SHUI YANG MU BAI PI
Bitter Willow Branch-leaf	T5654 <i>Salix purpurea</i>	SHUI YANG ZHI YE
Bitterleaf	T6712 <i>Vernonia amygdalina</i>	BIAN TAO ZHUANG BAN JIU JU
Bitterness Sneezeweed*	T3131 <i>Helenium amarum</i>	KU WEI DUI XIN JU
Bittersweet	T6005 <i>Solanum lyratum</i>	BAI MAO TENG
Black Bryony	T6291 <i>Tamus communis</i>	JIANG GUO SHU YU
Black Bui*	T0863 <i>Ballota nigra</i>	HEI BA LUO CAO
Black Cottonwood	T5164 <i>Populus trichocarpa</i>	MAO GUO YANG
Black Currant	T5546 <i>Ribes nigrum</i>	HEI CHA BIAO
Black Dianella*	T2140 <i>Dianella nigra</i>	HEI JIE GENG LAN
Black Elder	T5704 <i>Sambucus nigra</i>	XI YANG JIE GU MU
Black Falsehellebore	T6698 <i>Veratrum nigrum</i>	LI LU
Black Hellebore	T3183 <i>Helleborus niger</i>	TI GEN CAO
Black Henbane Leaf	T3328 <i>Hyoscyamus niger</i>	LANG DANG YE
Black Henbane Root	T3327 <i>Hyoscyamus niger</i>	LANG DANG GEN
Black Henbane Seed	T3329 <i>Hyoscyamus niger</i>	LANG DANG ZI
Black Honeysuckle	T3916 <i>Lonicera nigra</i>	HEI REN DONG
Black Indian Hemp	T0551 <i>Apocynum cannabinum</i>	JIA ZHU TAO MA
Black Locust Flower	T5552 <i>Robinia pseudoacacia</i>	CI HUAI HUA
Black Magnoliavine*	T5796 <i>Schisandra nigra</i>	NEI FENG XIAO
Black Mustard	T1012 <i>Brassica nigra</i>	HEI JIE
Black Nightshade	T6008 <i>Solanum nigrum</i>	LONG KUI
Black Oak	T5381 <i>Quercus tinctoria</i>	ZHUO SE LI
Black Pepper	T4957 <i>Piper nigrum</i>	HU JIAO
Black Rice Spermoider*	T4547 <i>Oryza sativa</i> cv	HEI SE MI PI KANG
Black Silkvine	T4728 <i>Periploca nigrescens</i>	HEI GANG LIU
Black Soyabean	T3000 <i>Glycine max</i>	HEI DA DOU
Black Soyabean Leaf	T3002 <i>Glycine max</i>	HEI DA DOU YE
Black Soyabean Spermoider	T3001 <i>Glycine max</i>	HEI DA DOU PI
Black Thorowax	T1074 <i>Bupleurum smithii</i>	HEI CHAI HU
Black Walnut	T3566 <i>Juglans nigra</i>	HEI HU TAO
Black Wattle	T0027 <i>Acacia mollissima</i>	ROU JIN HE HUAN
Black White Quebracho*	T0769 <i>Aspidosperma nigricans</i>	HEI BAI JIAN MU
Blackberrylily	T0892 <i>Belamcanda chinensis</i>	SHE GAN
Blacken Saussurea	T5762 <i>Saussurea nigrescens</i>	DUN BAO XUE LIAN
Blackend Swallowwort	T1951 <i>Cynanchum atratum</i>	BAI WEI
Blackflower Rabdosia*	T3531 <i>Isodon trichocarpus</i>	HEI HUA YAN MING CAO
Blackflower Cassytha*	T1253 <i>Cassytha melantha</i>	HEI HUA WU GEN TENG
Blackfruit Greenbrier	T5978 <i>Smilax glauco-china</i>	HEI GUO BA QIA
Blackfruit Madder	T5580 <i>Rubia cordifolia</i> var. <i>pratensis</i>	HEI GUO QIAN CAO
Blackhair Denrdobium	T2111 <i>Dendrobium williamsonii</i>	HEI MAO SHI HU
Blackhaw	T6739 <i>Viburnum prunifolium</i>	YING YE JIA MI
Black-powder Fungus in Corn	T6656 <i>Ustilago maydis</i>	YU MI HEI MEI
Black-purple Scurrella*	T5830 <i>Scurrula atropurpurea</i>	HEI ZI LI GUO JI SHENG
Black-rock Ophiorrhiza*	T4511 <i>Ophiorrhiza kuroiwei</i>	HEI YAN SHE GEN CAO
Black-spot Hornpoppy	T2966 <i>Glaucium corniculatum</i>	XIAO JIAO HAI YING SU
Blackstick Coralbean*	T2470 <i>Erythrina melanacantha</i>	HEI CI CI TONG
Blacktiger Kadsura	T3613 <i>Kadsura coccinea</i> [Syn. <i>Kadsura chenensis</i> ; <i>Kadsura hainanensis</i> ]	LENG FAN TUAN[yn]
Blasia*	T0949 <i>Blasia pusilla</i>	HU BAO TAI
Bleedingheart	T2150 <i>Dicentra formosa</i>	MEI LI HE BAO MU DAN
Bleedingheart Glorybower	T1570 <i>Clerodendrum thomsonae</i>	LONG TU ZHU
Blepharostoma*	T0953 <i>Blepharostoma trichophyllum</i>	JIE MAO TAI

Blessing Citrus*	T1515 <i>Citrus tangemna</i>	FU JU
Blin Conyza	T1655 <i>Conyza blinii</i>	KU HAO
Bling-your-eye-tree	T2650 <i>Excoecaria agallocha</i>	HAI QI
Blister Beetle	T4338 <i>Mylabris phalerata; Mylabris cichorii</i>	BAN MAO
Bloodflower Milkweed	T0736 <i>Asclepias curassavica</i>	LIAN SHENG GUI ZI HUA
Bloodred Iris	T3468 <i>Iris sanguinea</i>	DOU CHI CAO
Bloodroot	T5709 <i>Sanguinaria canadensis</i>	MEI ZHOU XUE GEN CAO
Blue Ash	T2776 <i>Fraxinus quadrangulata</i>	SI LENG LA SHU
Blue Ceratostigma, Blue Bluesnow	T1328 <i>Ceratostigma plumbaginoides</i>	JIAO ZHU HUA
Blue Lettuce	T3664 <i>Lactuca virosa</i>	DU WO JU
Blue Thistle	T2320 <i>Echium vulgare</i>	LAN JI
Blue Trigonella	T6527 <i>Trigonella caerulea</i>	LAN HU LU BA
Blue Waterlily	T4454 <i>Nymphaea caerulea</i>	LAN SHUI LIAN
Bluesepal Rabdosia*	T3497 <i>Isodon japonica</i> var. <i>glaucoalyx</i>	LAN E XIANG CHA CAI
Blue-yellow Redmushroom*	T5619 <i>Russula cyanoxantha</i>	LAN HUANG HONG GU
Blunt Concave-top Alga*	T3722 <i>Laurencia obtusa</i>	DUN XING AO DING ZAO
Bluntleaf Cotton	T3059 <i>Gossypium indicum</i>	YIN DU MIAN
Bluntleaf Dock	T5613 <i>Rumex obtusifolius</i>	DUN YE SUAN MO
Blushred Rabdosia	T5396 <i>Rabdosia rubescens</i>	DONG LING CAO
Bodinier Box	T1087 <i>Buxus bodinieri</i>	QUE SHE HUANG YANG
Bodinier Mahonia	T4058 <i>Mahonia bodinieri</i>	XIAO GUO SHI DA GONG LAO
Bogbean	T4194 <i>Menyanthes trifoliata</i>	SHUI CAI
Bogbean Root	T4195 <i>Menyanthes trifoliata</i>	SHUI CAI GEN
Bog-myrtle	T4344 <i>Myrica gale</i>	XIANG YANG MEI
Boldo	T4774 <i>Peumus boldus</i>	BO LU DU SHU
Bombay Nutmeg*	T4352 <i>Myristica malabarica</i>	MENG MAI ROU DOU KOU
Bona Conyza	T1656 <i>Conyza bonariensis</i> [Syn. <i>Erigeron bonariensis</i> ; <i>Erigeron linifolius</i> ; <i>Erigeron crispus</i> ]	XIANG SI CAO
Bonvalot Larkspur	T2062 <i>Delphinium bonvalotii</i>	CHUAN QIAN CUI QUE HUA
Boone Alstonia	T0367 <i>Alstonia boonei</i>	GAN LAO JI GU CHANG SHAN
Boor's Mustard	T6436 <i>Thlaspi arvense</i>	XI MING
Boor's Mustard Seed	T6437 <i>Thlaspi arvense</i>	XI MING ZI
Boreal Wild Chrysanthemum	T1387 <i>Chrysanthemum boreale</i>	BEI YE JU
Borneo Gambirplant*	T6609 <i>Uncaria borneensis</i>	PO LUO ZHOU GOU TENG
Borneol	T2274 <i>Dryobalanops aromatica</i>	BING PIAN
Borneol Oil-Resin	T2275 <i>Dryobalanops aromatica</i>	LONG NAO GAO XIANG
Bottle Gourd	T3668 <i>Lagenaria siceraria</i> var. <i>depressa</i>	HU GUA
Bottle Groundsel*	T5906 <i>Senecio sarracenicus</i>	PING QIAN LI GUANG
Bottle-brush	T2407 <i>Equisetum arvense</i>	WEN JING
Bouquet Larkspur	T2077 <i>Delphinium grandiflorum</i>	CUI QUE HUA
Bourgae Hogfennel*	T4754 <i>Peucedanum bourgaei</i>	BO SHI QIAN HU
Bowedconical Rabdosia*	T3509 <i>Isodon loxothyrsa</i>	WAN ZHUI XIANG CHA CAI
Bower Actinidia	T0155 <i>Actinidia arguta</i>	MI HOU LI
Bower Actinidia Root*	T0156 <i>Actinidia arguta</i>	MI HOU LI GEN
<i>Bowley Sage</i>	T5661 <i>Salvia bowleyana</i>	NAN DAN SHEN
Bow-shaped Dutchmanspipe*	T0621 <i>Aristolochia arcuata</i>	GONG XING MA DOU LING
Boxleaf Atalantia Leaf	T0814 <i>Atalantia buxifolia</i> [Syn. <i>Severinia buxifolia</i> ]	DONG FENG JU YE
Boxleaf Atalantia Root	T0813 <i>Atalantia buxifolia</i> [Syn. <i>Severinia buxifolia</i> ]	DONG FENG JU GEN
Boxleaf Scutia*	T5846 <i>Scutia buxifolia</i>	HUANG YANG YE DUI CI TENG
Boxleaf Syzygium	T6264 <i>Syzygium buxifolium</i>	CHI NAN
Boxleaf Xylopia*	T6851 <i>Xylopia buxifolia</i>	HUANG YANG YE MU BAN SHU
Box-leaved Barberry	T0899 <i>Berberis buxifolia</i>	HUANG YANG XIAO BO
Bracken	T5283 <i>Pteridium aquilinum</i>	OU ZHOU JUE

Brackfollicle	T6578 <i>Tylophora atrofolliculata</i>	SAN FEN DAN
Bracteate Poppy*	T4623 <i>Papaver bracteatum</i>	DA HONG YING SU
Bracteole Centaurea*	T1304 <i>Centaurea bracteata</i>	BAO PIAN SHI CHE JU
Bracteole Galipea*	T2827 <i>Galipea bracteata</i>	BAO PIAN TU LA SHU
Bractleaf Rabdosia	T3515 <i>Isodon melissoides</i>	BAO YE XIANG CHA CAI
Bramble Acacia	T0034 <i>Acacia victoria</i>	WEI DUO LI YA JIN HE HUAN
Branchy Tamarisk	T6290 <i>Tamarix ramosissima</i>	DUO ZHI CHENG LIU
Braun's Spikemoss	T5859 <i>Selaginella braunii</i>	MAO ZHI JUAN BAI
Brazilian Brown Alga <i>Dictyota paffii</i>	T2171 <i>Dictyota paffii</i>	BA XI ZONG ZAO
Brazilian Calaba	T1125 <i>Calophyllum brasiliense</i>	BA XI HU TONG
Brazilian Devilpepper*	T5422 <i>Rauwolfia bahiensis</i>	BA XI LUO FU MU
Brazilian Dutchmanspipe*	T0622 <i>Aristolochia chamissonis</i>	BA XI MA DOU LING
Brazilian Ear-leaf Muscus*	T2801 <i>Frullania brasiliensis</i>	BA XI ER YE TAI
Brazilian Groundsel*	T5881 <i>Senecio brasiliensis</i>	BA XI QIAN LI GUANG
Brazilian Joan-wood*	T3562 <i>Joannesia princeps</i>	BA XI QIAO AN MU
Brazilian Peppertree	T5789 <i>Schinus terebinthifolius</i>	XIAO RU XIANG
Brazilian Wild Tobacco, Marianeira	T0075 <i>Acnistus arborescens</i>	BA XI YE YAN
Brazil-wood	T1103 <i>Caesalpinia echinata</i>	JI YUN SHI
Breckland Thyme	T6452 <i>Thymus serpyllum</i>	BAI LI XIANG
Bretschneider Pear Leaf	T5362 <i>Pyrus bretschneideri</i>	LI YE
Brick Tops	T4367 <i>Naematoloma sublateritium</i>	ZHUAN HONG REN SAN
Bridalwreath Spiraea	T6084 <i>Spiraea prunifolia</i>	XIAO YE HUA
Bright Fig*	T2722 <i>Ficus nitida</i>	LIANG YE RONG
Brilliant Campion	T3950 <i>Lychnis fulgens</i>	DA HUA JIAN QIU LUO
Bristlecone Pine	T4905 <i>Pinus aristata</i>	CI GUO SONG
British Inula	T3427 <i>Inula britannica</i>	XUAN FU HUA
British Inula Herb	T3426 <i>Inula britannica</i>	DA HUA XUAN FU HUA CAO
Broad Buckler-fern	T2277 <i>Dryopteris austriaca</i>	AO DI LI LIN MAO JUE
Broadbean	T6744 <i>Vicia faba</i>	CAN DOU
Broadbean Leaf	T6747 <i>Vicia faba</i>	CAN DOU YE
Broadbean Pericarp	T6745 <i>Vicia faba</i>	CAN DOU JIA KE
Broadbean Stem	T6746 <i>Vicia faba</i>	CAN DOU JING
Broad-bracteate Mahonia	T4061 <i>Mahonia eurybracteata</i>	KUAN BAO SHI DA GONG LAO
Broadleaf Actinidia	T0163 <i>Actinidia latifolia</i>	KUO YE MI HOU TAO
Broadleaf Arborvitae Hiba	T6443 <i>Thujaopsis dolobrata</i>	LUO HAN BAI
Broadleaf Blainvillea*	T0948 <i>Blainvillea acmella</i> [Syn. <i>Verbesina acmella</i> ; <i>Eclipta latifolia</i> ; <i>Blainvillea latifolia</i> ]	YU LIN CAI
Broadleaf Cattail Pollen	T6587 <i>Typha latifolia</i>	KUAN YE XIANG PU
Broadleaf Common Valeriana	T6680 <i>Valeriana officinalis</i> var. <i>latifolia</i>	KUO YE XIE CAO
Broadleaf Crinum	T1799 <i>Crinum latifolium</i>	XI NAN WEN SHU LAN
Broadleaf Davallia	T2054 <i>Davallia solida</i>	KUO YE GU SUI BU
Broadleaf Devilpepper	T5435 <i>Rauwolfia latifrons</i>	KUO YE LUO FU MU
Broadleaf Fatheadtree*	T4390 <i>Nauclea latifolia</i>	KUAN YE WU TAN
Broadleaf Groundsel*	T5897 <i>Senecio platyphyllus</i>	KUAN YE QIAN LI GUANG
Broadleaf Holly	T3393 <i>Ilex latifolia</i>	DA YE DONG QING
Broadleaf Jointfir	T3031 <i>Gnetum latifolium</i>	KUAN YE MAI MA TENG
Broadleaf Liriope*	T3873 <i>Liriope platyphylla</i>	KUO YE SHAN MAI DONG
Broadleaf Milkwort*	T5085 <i>Polygala senega</i> var. <i>latifolia</i>	KUAN YE MEI YUAN ZHI
Broadleaf Pluchea*	T0848 <i>Baccharis latifolia</i>	KUAN YE KUO BAO JU
Broadleaf Vetch	T6742 <i>Vicia amoena</i>	SHAN YE WAN DOU
Broad-pinna Colysis	T1629 <i>Colysis pothifolia</i> [Syn. <i>Hemionitis pothifolia</i> ]	KUAN YU XIAN JUE
Broad-tongue Goldenray*	T3811 <i>Ligularia platyglossa</i>	KUAN SHE TUO WU
Bronzeleaf Rodgersflower	T5556 <i>Rodgersia podophylla</i>	RI BEN GUI DENG QING

Brooklet Anemone	T0471 <i>Anemone rivularis</i>	HU ZHANG CAO
Broomcorn Millet	T4618 <i>Panicum miliaceum</i>	SHU MI
Brown Alga <i>Bifurcaria bifurcata</i>	T0943 <i>Bifurcaria bifurcata</i>	SHUANG CHA ZAO
Brown Alga <i>Ecklonia stolonifera</i>	T2322 <i>Ecklonia stolonifera</i>	ZONG ZAO
Brown Larkspur*	T2063 <i>Delphinium brownii</i>	BAO SHI FEI YAN CAO
Brownflower Saussurea	T5765 <i>Saussurea phaeantha</i>	HE HUA XUE LIAN
Brownflower Trillium	T6532 <i>Trillium erectum</i>	HE HUA YAN LING CAO
Brown-margin Wood Fern	T2286 <i>Dryopteris sacrosancta</i>	RI BEN LIN MAO JUE
Brown-yellow Kokoona*	T3638 <i>Kokoona ochracea</i>	ZHE HUANG KAO GU NA
Brussels Sprout	T1018 <i>Brassica oleracea</i> var. <i>gemmifera</i>	BAO ZI GAN LAN
Buchanan Mayten	T4128 <i>Maytenus buchananii</i>	BU CHANG NAN MEI DENG MU
Buchinha (Brazil Herb)	T3936 <i>Luffa operculata</i>	NANG GAI SI GUA
Buchtorm Libanotis	T3796 <i>Libanotis buchtormensis</i>	YAN FENG
Buckhorn Plantain	T5006 <i>Plantago lanceolata</i>	CHANG YE CHE QIAN
Buddha's Lamp	T4335 <i>Mussaenda pubescens</i>	SHAN GAN CAO
Buerger Figwort	T5826 <i>Scrophularia buergeriana</i>	BEI XUAN SHEN
Buffalo Horn	T1045 <i>Bubalus bubalis</i>	SHUI NIU JIAO
Bugbane	T1420 <i>Cimicifuga foetida</i>	SHENG MA
Bugleweed	T3982 <i>Lycopus virginicus</i>	FU JI NI YA DI SUN
Bui; Phut kandu (local names)	T0862 <i>Ballota limbata</i>	
Bulbiferous Stonecrop	T5852 <i>Sedum bulbiferum</i>	XIAO JIAN CAO
Bulbous Corydalis	T1712 <i>Corydalis cava</i>	AO XIAN ZI JIN
Bulb-spermo Crinum*	T1797 <i>Crinum bulbispermum</i>	LIN JING ZHONG ZI WEN SHU LAN
Bullate Custardapple*	T0504 <i>Annona bullata</i>	PAO ZHUANG FAN LI ZHI
Bullocksheart Custardapple	T0511 <i>Annona reticulata</i>	NIU XIN FAN LI ZHI
Bumalda Bladdernut	T6097 <i>Staphylea bumalda</i>	SHENG GU YOU
Bunga Ash Bark	T2766 <i>Fraxinus bungeana</i>	XIAO YE CEN
Bunge Corydalis	T1709 <i>Corydalis bungeana</i>	KU DI DING
Bunge Giantfennel	T2697 <i>Ferula borealis</i>	SHA QIAN HU
Bunge Iris*	T3454 <i>Iris bungei</i>	BENG GE YUAN WEI
Bunge Pricklyash	T6869 <i>Zanthoxylum bungeanum</i>	HUA JIAO
Bunge Pricklyash Root	T6870 <i>Zanthoxylum bungeanum</i>	HUA JIAO GEN
Bunge Swallowwort	T1953 <i>Cynanchum bungei</i>	BAI SHOU WU
Buntan Pummelo*	T1481 <i>Citrus grandis</i> f. <i>buntan</i>	WEN DAN YOU
Bunya Bunya	T0578 <i>Araucaria bidwillii</i>	DA YE NAN YANG SHAN
Bur Beggarticks	T0941 <i>Bidens tripartita</i>	LANG PA CAO
Bur Sage	T0395 <i>Ambrosia acanthicarpa</i>	CI GUO TUN CAO
Burma Toon	T6474 <i>Toona ciliata</i>	HONG CHUN
Burmacoast Padauk	T5301 <i>Pterocarpus indicus</i>	ZI TAN
Burnet-saxifrage	T4900 <i>Pimpinella saxifraga</i>	HU ER CAO YE HUI QIN
Burning Bush	T2164 <i>Dictamnus albus</i>	BAI SE BAI XIAN
Burro Bush	T3322 <i>Hymenoclea salsola</i>	MEI GUO HAI MO JU
Burrowing sponge	T1575 <i>Cliona celata</i>	YIN JU CHUAN BEI HAI MIAN
Burser Gentian*	T2905 <i>Gentiana burseri</i>	BU SHI LONG DAN
Bursera*	T1080 <i>Bursera graveolens</i>	LIE WEI LIE LAN
Burweed	T6837 <i>Xanthium chinense</i>	ZHONG GUO CANG ER
Bush Redpepper	T1187 <i>Capsicum frutescens</i>	LA JIAO
Butchersbroom	T5618 <i>Ruscus aculeatus</i>	JIA YE SHU
Butternut	T3563 <i>Juglans cinerea</i>	HUI HU TAO
Cabbage	T1017 <i>Brassica oleracea</i> var. <i>capitata</i>	GAN LAN
Cablin Potchouli	T5059 <i>Pogostemon cablin</i> [Syn. <i>Mentha cablin</i> ]	GUANG HUO XIANG
Cachalot	T4856 <i>Physeter catodon</i>	MO XIANG JING
Caesalpinia*	T1101 <i>Caesalpinia decapetala</i>	YUN SHI YE

Caffra Devilpepper*	T5430 <i>Rauwolfia caffra</i>	KA FU LA LUO FU MU
Cairo Milkvetch*	T0797 <i>Astragalus kahiricus</i>	KAI LUO HUANG QI
Cairo Morningglory	T3448 <i>Ipomoea cairica</i> [Syn. <i>Ipomoea palmata</i> ]	WU ZHAO LONG
Cajeput-tree	T4154 <i>Melaleuca leucadendra</i>	BAI QIAN CENG
Calabash-tree	T1791 <i>Crescentia cujete</i>	PAO DAN GUO
Calicole Rabdosia	T3483 <i>Isodon calcicola</i>	JIN WU MAO HUI YAN XIANG CHA CAI
Caledonian Beautyleaf*	T1126 <i>Calophyllum caledonicum</i>	SU GE LAN HU TONG
California Poppy	T2495 <i>Eschscholzia californica</i>	HUA LING CAO
Californian Allspice	T1140 <i>Calycanthus occidentalis</i>	JIA ZHOU XIA LA MEI
Californian Buckeye	T0199 <i>Aesculus californica</i>	JIA ZHOU QI YE SHU
Californian Falsehellebore*	T6694 <i>Veratrum californicum</i>	JIA ZHOU LI LU
Californian Mountain Pine	T4918 <i>Pinus monticola</i>	JIA ZHOU SHAN SONG
Callery Pear Branch-leaf	T5363 <i>Pyrus calleryana</i>	YE LI ZHI YE
Callose Agrostophyllum	T0254 <i>Agrostophyllum callosum</i>	YING PI HE YE LAN
Calumba Root	T3559 <i>Jateorhiza palmata</i>	FEI ZHOU FANG JI
Calycin Swertia	T6213 <i>Swertia calycina</i>	BAO E ZHANG YA CAI
Calyx-shaped Daphniphyllum Fruit	T2032 <i>Daphniphyllum calycinum</i>	NIU ER FENG ZI
Cambodia Coca Shrub*	T2490 <i>Erythroxylum cambodianum</i>	JIAN PU ZHAI GU KE
Cambodia Jujube*	T6915 <i>Ziziphus cambodiana</i>	JIAN PU ZHAI ZAO
Camboge Garcinia*	T2851 <i>Garcinia cambogia</i>	TENG HUANG SHAN ZHU ZI
Cameroon Ochna*	T4464 <i>Ochna calodendron</i>	KA MAI LONG JIN LIAN MU
Cameroon Symphonia*	T6242 <i>Symphonia globulifera</i>	KA MAI LONG XIN FO NI A
Campestral Mugwort	T0668 <i>Artemisia campestris</i>	TIAN YE HAO
Campestral Seseli*	T5928 <i>Seseli campestre</i>	PING DI XI FENG QIN
Camphortree	T1435 <i>Cinnamomum camphora</i>	ZHANG MU
Camphortree Bark	T1436 <i>Cinnamomum camphora</i>	ZHANG SHU PI
Camphortree Leaf	T1437 <i>Cinnamomum camphora</i>	ZHANG SHU YE
Camphortreeleaf Pepper	T4961 <i>Piper polysyphorum</i>	ZHANG YE HU JIAO
Campus-belu Aspidosperma	T0761 <i>Aspidosperma campus-belus</i>	BAI JIAN MU
Cana do brejo (in Brazil)	T1757 <i>Costus spicatus</i>	SUI ZHUANG BI QIAO JIANG
Canada Lettuce	T3658 <i>Lactuca canadensis</i>	JIA NA DA WO JU
Canada Moonseed	T4181 <i>Menispermum canadense</i>	MEI GUO BIAN FU GE
Canada Poplar	T5149 <i>Populus canadensis</i>	JIA YANG
Canadian Cocklebur*	T6835 <i>Xanthium canadense</i>	JIA NA DA CANG ER
Canadian Goldenrod	T6022 <i>Solidago altissima</i>	GAO YI ZHI HUANG HUA
Canadian Milkvetch*	T0789 <i>Astragalus canadensis</i> var. <i>mortonii</i>	JIA NA DA HUANG QI
Canadian Snakeroot	T0723 <i>Asarum canadense</i>	JIA NA DA XI XIN
Canadian Yew	T6309 <i>Taxus canadensis</i>	JIA NA DA HONG DOU SHAN
Canaigre	T5610 <i>Rumex hymenosepalus</i>	MO E SUAN MO
Canari Mayten*	T4129 <i>Maytenus canariensis</i>	JIA NA LI MEI DENG MU
Canari Sage*	T5665 <i>Salvia canariensis</i>	JIA NA LI SHU WEI CAO
Canary Island Date-palm	T4819 <i>Phoenix canariensis</i>	ZHEN KUI
Canary Island Wormwood*	T0671 <i>Artemisia canariensis</i>	JIA NA LI HAO
Candelabar Tree	T0577 <i>Araucaria angustifolia</i>	ZHAI YE NAN YANG SHAN
Canereed Spiralflag	T1756 <i>Costus speciosus</i>	ZHANG LIU TOU
Canescent Cowparsnip*	T3211 <i>Heracleum canescens</i>	HUI BAI DU HUO
Canescent Devilpepper*	T5431 <i>Rauwolfia canescens</i>	HUI BAI MAO LUO FU MU
Canescent Sunflower*	T3147 <i>Helianthus canescens</i>	HUI BAI XIANG RI KUI
Canescent Swainsonia*	T6207 <i>Swainsonia canescens</i>	HUI BAI KU MA DOU
Cangshan Rabdosia	T3482 <i>Isodon bulleyana</i>	CANG SHAN XIANG CHA CAI
Canterburybells	T1156 <i>Campanula medium</i>	FENG LING CAO
Canton Abrus	T0010 <i>Abrus fruticulosus</i> [Syn. <i>Abrus cantoniensis</i> ]	JI GU CAO



Canton Buttercup	T5413 <i>Ranunculus cantoniensis</i>	ZI KOU CAO
Cape Dandelion	T6687 <i>Venidium decurrens</i>	NI JIN ZHAN JU
Cape Ganoderma	T2845 <i>Ganoderma capense</i>	BAO GAI LING ZHI
Cape Jasmine Fruit	T2882 <i>Gardenia jasminoides</i> [Syn. <i>Gardenia florida</i> ]	ZHI ZI
Cape Jasmine Leaf	T2883 <i>Gardenia jasminoides</i> [Syn. <i>Gardenia florida</i> ]	ZHI ZI YE
Cape Leeuwin Wattle	T0294 <i>Albizzia lophantha</i>	YU ZHUANG HE HUAN
Cape of Good Hope Aloe Dried Juice	T0338 <i>Aloe ferox</i>	HAO WANG JIAO LU HUI
Cape of Good Hope Podocarpus	T5037 <i>Podocarpus elongatu</i>	HAO WANG JIAO LUO HAN SONG
Cape-of-Good-Hope Cattail	T6586 <i>Typha capensis</i>	HAO WANG JIAO XIANG PU
Caper Euphorbia Latex	T2598 <i>Euphorbia lathyris</i>	XU SUI ZI JING ZHONG BAI ZHI
Caper Euphorbia Seed	T2597 <i>Euphorbia lathyris</i>	QIAN JIN ZI
Capillary Wormwood	T0672 <i>Artemisia capillaris</i>	YIN CHEN HAO
Capitate Cyathula	T1923 <i>Cyathula capitata</i>	MA NIU XI
Capitate Rhododendron	T5504 <i>Rhododendron capitatum</i>	TOU HUA DU JUAN
Capitateflower Velvetbean	T6147 <i>Stizolobium capitatum</i>	LI DOU
Capitellate Hedyotis	T3124 <i>Hedyotis capitellata</i>	XIAO TOU LIANG HOU CHA
Capitellate Myrsine*	T4362 <i>Myrsine capitellata</i>	XIAO TOU TIE ZI
Capitulum Tickclover*	T2129 <i>Desmodium cephalotes</i>	JIA MU DOU
Carambola; Country Gooseberry	T0834 <i>Averrhoa carambola</i>	YANG TAO
Caraway	T1217 <i>Carum carvi</i>	GE LU ZI
Cardialeaf Tinospora*	T6464 <i>Tinospora cordifolia</i>	XIN XING YE QING NIU DAN
Cardia-petal Goniotalamus*	T3043 <i>Goniotalamus cardiopetalus</i>	XIN XING BAN GE NA XIANG
Cardoon	T1965 <i>Cynara cardunculus</i>	CI CAI JI
Caribbean Coralbean*	T2462 <i>Erythrina caribea</i>	JIA LE BI CI TONG
Carnation	T2142 <i>Dianthus caryophyllus</i>	SHE XIANG SHI ZHU
Carnival Candy Slime	T0590 <i>Arcyria denudata</i>	AN HONG TUAN WANG JUN
Carob	T1326 <i>Ceratonia siliqua</i>	CHANG JIAO DOU
Carolina Allspice	T1139 <i>Calycanthus floridus</i>	MEI GUO XIA LA MEI
Carolina Clubmoss*	T3967 <i>Lycopodium carolinianum</i>	KA LUO LAI NA SHI SONG
Carolina Elephantfoot*	T2331 <i>Elephantopus carolinianus</i>	KA LUO LAI NA DI DAN CAO
Carolina Jasmine	T2899 <i>Gelsemium sempervirens</i>	CHANG LV GOU WEN
Carolina Larkspur*	T2065 <i>Delphinium carolinianum</i>	KA LUO LAI NA CUI QUE
Carolina Snailseed*	T1584 <i>Cocculus carolinus</i>	MEI GUO QING TENG
Carolina-like Clubmoss*	T3968 <i>Lycopodium carolinianum</i> var. <i>affine</i>	SI KA LUO LAI NA SHI SONG
Carp	T1980 <i>Cyprinus carpio</i>	LI YU
Carp Gall	T1981 <i>Cyprinus carpio</i>	LI YU DAN
Carp Skin	T1982 <i>Cyprinus carpio</i>	LI YU PI
Carrot	T2050 <i>Daucus carota</i> var. <i>sativa</i>	HU LUO BO
Carrot Seed	T2051 <i>Daucus carota</i> var. <i>sativa</i>	HU LUO BO ZI
Caruth Wormwood*	T0673 <i>Artemisia caruthii</i>	KA SI HAO
Cascara Buckthorn	T5463 <i>Rhamnus purshiana</i>	BO XI SHU LI
Cascarilla	T1844 <i>Croton eluteria</i>	KU XIANG SHU
Cassave Aerial Parts	T4104 <i>Manihot esculenta</i>	MU SHU DI SHANG BU FEN
Cassiabarktree	T1439 <i>Cinnamomum cassia</i> [Syn. <i>Cinnamomum aromaticum</i> ]	ROU GUI
Cassiabarktree Twig	T1438 <i>Cinnamomum cassia</i> [Syn. <i>Cinnamomum aromaticum</i> ]	GUI ZHI
Cassumuna Ginger*	T6908 <i>Zingiber cassumunara</i>	YE JIANG
Castorbean Leaf	T5548 <i>Ricinus communis</i>	BI MA YE
Castorbean Oil	T5549 <i>Ricinus communis</i>	BI MA YOU
Castorbean Root	T5547 <i>Ricinus communis</i>	BI MA GEN
Castorbean Seed	T5550 <i>Ricinus communis</i>	BI MA ZI
Cat Thyme	T6362 <i>Teucrium marum</i>	MA SHI XIANG KE KE
Catch-fly	T5954 <i>Silene fortunei</i>	YING ZI CAO
Catchweed Bedstraw	T2830 <i>Galium aparine</i>	BA XIAN CAO

Catnip	T4413 <i>Nepeta cataria</i>	JIA JING JIE
Caucasian Buckler-fern*	T2278 <i>Dryopteris caucasica</i>	GAO JIA SUO LIN MAO JUE
Caucasian Comfrey	T6245 <i>Symphytum caucasicum</i>	XIN FEI CAO
Caucasian Corydalis*	T1711 <i>Corydalis caucasica</i>	GAO JIA SUO ZI JIN
Caucasian Gentian*	T2907 <i>Gentiana caucasa</i>	GAO JIA SUO LONG DAN
Caucasian Pittany*	T2166 <i>Dictamnus caucasicus</i>	GAO JIA SUO BAI XIAN
Caucasian Poppy*	T4624 <i>Papaver caucasicum</i>	GAO JIA SUO YING SU
Caucasian Scabious*	T5774 <i>Scabiosa caucasica</i>	GAO JIA SUO LAN PEN HUA
Caudate Milkwort	T5072 <i>Polygala caudata</i>	SHUI HUANG YANG MU
Caudate Sweetleaf Leaf	T6251 <i>Symplocos caudata</i>	SHAN FAN YE
Caudate Sweetleaf Root	T6250 <i>Symplocos caudata</i>	SHAN FAN GEN
Caulcescent Wildginger	T0724 <i>Asarum caulescens</i>	SHUANG YE XI XIN
Cauliflory Brassica*	T1015 <i>Brassica oleracea</i> var. <i>botrytis</i> subvar. <i>cauliflora</i>	JING HUA HUA YE CAI
Cauliflower	T1014 <i>Brassica oleracea</i> var. <i>botrytis</i>	HUA YE CAI
Cearen Rosewood*	T1998 <i>Dalbergia cearensis</i>	XI A LA HUANG TAN
Celandine Poppy	T6195 <i>Stylophorum diphyllum</i>	ER YE BAO YING SU
Celastrus Melodinus*	T4177 <i>Melodinus celastroides</i>	NAN SHE TENG ZHUANG SHAN CHENG
Celery Wormwood	T0662 <i>Artemisia apiacea</i> [Syn. <i>Artemisia caruifolia</i> ; <i>Artemisia caruifolia</i> ]	QING HAO
Celtis-leaf Opilia*	T4515 <i>Opilia celtidifolia</i>	PU YE SHAN YOU ZI
Cempedak	T0710 <i>Artocarpus champeden</i>	YIN NI MIAN BAO GUO
Centipede	T5817 <i>Scolopendra subspinipes mutilans</i>	WU GONG
Central Asia Gentian	T2913 <i>Gentiana kaufmanniana</i>	ZHONG YA QIN JIAO
Central Asia Seabuckthorn*	T3257 <i>Hippophae rhamnoides</i> subsp. <i>turkestanica</i>	ZHONG YA SHA JI
Central-African Ancistrocladus*	T0451 <i>Ancistrocladus likoko</i>	ZHONG FEI GOU ZHI TENG
Central-African Poisonnut*	T6176 <i>Strychnos icaia</i>	ZHONG FEI MA QIAN
Cepaea Stonecrop*	T5853 <i>Sedum cepaea</i>	XI PA JING TIAN
Cera Chinensis Wax	T2420 <i>Ericerus pela</i>	CHONG BAI LA
Cernuous Clubmoss	T3970 <i>Lycopodium cernuum</i>	PU DI WU GONG
Ceylan Helminthostachys	T3190 <i>Helminthostachys zeylanica</i>	RU DI WU GONG
Ceylon Cinnamon	T1445 <i>Cinnamomum zeylanicum</i>	XI LAN ROU GUI
Ceylon Coca Shrub*	T2493 <i>Erythroxylum zeylanicum</i>	XI LAN GU KE
Ceylon Houndstongue	T1971 <i>Cynoglossum zeylanicum</i> [Syn. <i>Anchusa zeylanica</i> ; <i>Cynoglossum furcatum</i> ; <i>Cynoglossum formosanum</i> ]	LIU LI CAO
Ceylon Hunteria	T3292 <i>Hunteria zeylanica</i>	ZI LAN SHU
Ceylon Persimmon Sawdust	T2216 <i>Diospyros ebenum</i>	WU MU XIE
Cha Nightshade*	T5994 <i>Solanum chacoense</i>	CHA QIE
Chachi Citrus	T1471 <i>Citrus chachiensis</i>	GAN
Chachi Citrus Pericarp	T1472 <i>Citrus chachiensis</i>	GAN PI
Chaffanjon Ampelopsis	T0425 <i>Ampelopsis chaffanjonii</i>	YU YE SHE PU TAO
Chaishou Thorowax	T1058 <i>Bupleurum chaishouii</i>	CHAI SHOU
Chamaedrys Germander	T6360 <i>Teucrium chamaedrys</i>	SHI CAN XIANG KE KE
Chamisson Ragweed	T0399 <i>Ambrosia chamissonis</i>	CHA MI SEN TUN CAO
Champa; Palillo (in local names)	T1159 <i>Campomanesia lineatifolia</i>	
Champac Michelia	T4210 <i>Michelia champaca</i>	HUANG MIAN GUI
Champignon	T3742 <i>Lentinus edodes</i>	XIANG XUN
Champion Bauhinia	T0877 <i>Bauhinia championii</i>	LONG XU TENG
Champion Wood Fern	T2279 <i>Dryopteris championii</i>	MAO GUAN ZHONG
Champman Gay-feather*	T3787 <i>Liatris champmanii</i>	CHA SHI SHE BIAN JU
Changpai Mountains Primrose	T5201 <i>Primula modesta</i>	CHANG BAI SHAN BAO CHUN
Charlock	T5959 <i>Sinapis arvensis</i>	YE OU BAI JIE
Chase Cocklebur*	T6836 <i>Xanthium chasei</i>	CAI SI CANG ER

Chaulmoogratree Seed	T3300 <i>Hydnocarpus anthelminticus</i>	DA FENG ZI
Chaxiong Ligusticum	T3825 <i>Ligusticum sinense</i> cv. <i>chaxiong</i>	CHA XIONG
Chayu St.John'swort	T3369 <i>Hypericum wightianum</i> subsp. <i>axillare</i>	CHA YU BIAN DI JIN
Cheliensis Goniothalamus	T3044 <i>Goniothalamus cheliensis</i>	GE NA XIANG
Chemens Phoebe*	T4815 <i>Phoebe chemensii</i>	CHE SHI NAN
Chengkou Mahonia	T4072 <i>Mahonia shenii</i>	CHENG KOU SHI DA GONG LAO
Chenille Plant, Red-hot Cat's-tail	T0035 <i>Acalypha hispida</i>	CU YING MAO TIE XIAN CAI
Cherimoya	T0505 <i>Annona cherimolia</i>	MAO YE FAN LI ZHI
Cherokee Rose Leaf	T5567 <i>Rosa laevigata</i>	JIN YING YE
Cherokee Rose Seed	T5568 <i>Rosa laevigata</i>	JIN YING ZI
Cherry Tomato*	T3963 <i>Lycopersicon esculentum</i> var. <i>cerasiforme</i>	YING TAO FAN QIE
Chestnut Sage	T5667 <i>Salvia castanea</i>	LI SE SHU WEI CAO
Chicken	T2837 <i>Gallus gallus domesticus</i>	JI ROU
Chicken Brain	T2836 <i>Gallus gallus domesticus</i>	JI NAO
Chicken's Gizzard Endothelium	T2838 <i>Gallus gallus domesticus</i>	JI NEI JIN
Chicken-feather Vegetable*	T5309 <i>Pterocladia tenuis</i>	JI MAO CAI
Chile Calceolaria*	T1110 <i>Calceolaria inamoena</i>	BU MEI HE BAO HUA
Chile Podocarpus*	T5036 <i>Podocarpus andina</i>	ZHI LI LUO HAN SONG
China Alyxia	T0383 <i>Alyxia sinensis</i>	LIAN ZHU TENG
China Amsonia	T0434 <i>Amsonia sinensis</i>	SHUI GAN CAO
China Douglas Fir	T5261 <i>Pseudotsuga sinensis</i>	HUANG SHAN
China Ixeris	T3547 <i>Ixeris chinensis</i>	SHAN KU MAI
China Paris	T4649 <i>Paris polyphylla</i> var. <i>chinensis</i>	HUA CHONG LOU
China Weasel-snout	T2825 <i>Galeobdolon chinense</i> [Syn. <i>Lamium chinense</i> ]	XIAO YE ZHI MA
China Winterberry Currant	T5545 <i>Ribes fasciculatum</i> var. <i>chinense</i>	HUA CHA BIAO
Chinaberry-tree	T4155 <i>Melia azadirachta</i>	
Chinaberry-tree Bark	T4156 <i>Melia azedarach</i>	KU LIAN PI
Chinaberry-tree Flower	T4159 <i>Melia azedarach</i>	LIAN HUA
Chinaberry-tree Fruit	T4157 <i>Melia azedarach</i>	KU LIAN SHI
Chinaberry-tree Leaf*	T4158 <i>Melia azedarach</i>	KU LIAN YE
Chinaroot Greenbrier	T5976 <i>Smilax china</i> [Syn. <i>Smilax japonica</i> ]	BA QIA
Chinese Alangium	T0281 <i>Alangium chinense</i>	BA JIAO FENG
Chinese Aloe Dried Juice	T0348 <i>Aloe vera</i> var. <i>chinensis</i>	BAN WEN LU HUI
Chinese Angelica	T0495 <i>Angelica sinensis</i>	DANG GUI
Chinese Arborvitae Branch	T6439 <i>Thuja orientalis</i> [Syn. <i>Platyclusus orientalis</i> ; <i>Biota orientalis</i> ]	CE BAI ZHI JIE
Chinese Arborvitae Kernel*	T0944 <i>Biota orientalis</i> [Syn. <i>Thuja orientalis</i> ; <i>Platyclusus orientalis</i> ]	BAI ZI REN
Chinese Arborvitae Leaf	T6440 <i>Thuja orientalis</i> [Syn. <i>Platyclusus orientalis</i> ; <i>Biota orientalis</i> ]	CE BAI YE
Chinese Artichoke	T6094 <i>Stachys tuberifera</i>	KUAI JING SHUI SU
Chinese Arundina	T0721 <i>Arundina chinensis</i>	ZHU YE LAN
Chinese Ash Bark	T2767 <i>Fraxinus chinensis</i>	BAI LA SHU
Chinese Aspen	T5144 <i>Populus adenopoda</i>	XIANG YE YANG
Chinese Astilbe	T0784 <i>Astilbe chinensis</i>	LUO XIN FU
Chinese Atractylodes	T0819 <i>Atractylodes chinensis</i>	BEI CANG ZHU
Chinese Atropanthe	T5822 <i>Scopolia sinensis</i>	TIAN PENG ZI
Chinese Aucuba	T0827 <i>Aucuba chinensis</i> ssp. <i>omeiensis</i>	TIAN JIAO BAN
Chinese Azalea	T5516 <i>Rhododendron molle</i>	NAO YANG HUA
Chinese Azalea Fruit	T5517 <i>Rhododendron molle</i>	NAO YANG HUA ZI
Chinese Bastardtoadflax	T6431 <i>Thesium chinense</i>	BAI RUI CAO
Chinese Bitterleaf*	T6714 <i>Vernonia chinense</i>	ZHONG GUO BAN JIU JU
Chinese Box Juvenile Leaf	T1092 <i>Buxus microphylla</i> var. <i>sinica</i>	HUANG YANG MU YE
Chinese Brake	T5295 <i>Pteris multifida</i>	FENG WEI CAO
Chinese Brake	T5298 <i>Pteris vittata</i>	WU GONG CAO
Chinese Bretschneidera	T1025 <i>Bretschneidera sinensis</i>	BO LE SHU

Chinese Buckeye	T0201 <i>Aesculus chinensis</i>	QI YE SHU
Chinese Cedar	T1867 <i>Cryptomeria fortunei</i>	LIU SHAN
Chinese Cedrela*	T1278 <i>Cedrela sinensis</i>	ZHONG GUO YANG CHUN
Chinese Chestnut	T1254 <i>Castanea mollissima</i>	BAN LI
Chinese Chestnut Bast	T1256 <i>Castanea mollissima</i>	LI SHU PI
Chinese Cinquefoil	T5181 <i>Potentilla chinensis</i>	WEI LING CAI
Chinese Clematis	T1545 <i>Clematis chinensis</i>	WEI LING XIAN
Chinese Clinopodium	T1573 <i>Clinopodium chinense</i>	FENG LUN CAI
Chinese Common Jasminorange	T4318 <i>Murraya exotica</i>	ZHONG HUA JIU LI XIANG
Chinese Coriaria	T1692 <i>Coriaria sinica</i> [Syn. <i>Coriaria nepalensis</i> ]	MA SANG
Chinese Coriaria Leaf	T1693 <i>Coriaria sinica</i> [Syn. <i>Coriaria nepalensis</i> ]	MA SANG YE
Chinese Corktree	T4791 <i>Phellodendron chinense</i>	HUANG PI SHU
Chinese Corydalis	T1713 <i>Corydalis cheilanthifolia</i>	HUA ZI JIN
Chinese Cricket	T3066 <i>Gryllulus chinensis</i>	XI SHUAI
Chinese Crinum	T1796 <i>Crinum asiaticum</i> var. <i>sinicum</i>	WEN SHU LAN
Chinese Crossostephium Root	T1812 <i>Crossostephium chinense</i>	FU RONG JU GEN
Chinese Cryptocarya	T1862 <i>Cryptocarya chinensis</i>	HOU KE GUI
Chinese Cryptolepis	T1866 <i>Cryptolepis sinensis</i>	BAI YE TENG
Chinese Date	T6916 <i>Ziziphus jujuba</i>	DA ZAO
Chinese Desmos	T2136 <i>Desmos cochinchinensis</i> [Syn. <i>Desmos chinensis</i> ]	JIA YING ZHAO
Chinese Dodder Seed	T1912 <i>Cuscuta chinensis</i>	TU SI ZI
Chinese Dregea	T2262 <i>Dregea sinensis</i>	KU SHENG
Chinese Dunnia	T2294 <i>Dunnia sinensis</i>	XIU QIU QIAN CAO
Chinese Dwarf Cherry Seed	T5223 <i>Prunus humilis</i> [Syn. <i>Cerasus humilis</i> ]	OU LI REN
Chinese Eaglewood	T0555 <i>Aquilaria sinensis</i>	BAI MU XIANG
Chinese Elm Bark	T6596 <i>Ulmus parvifolia</i>	LANG YU PI
Chinese Ephedra	T2380 <i>Ephedra sinica</i>	MA HUANG
Chinese Ephedra Root	T2381 <i>Ephedra sinica</i>	MA HUANG GEN
Chinese Eupatorium	T2555 <i>Eupatorium chinense</i>	HUA ZE LAN
Chinese Fevervine	T4576 <i>Paederia chinensis</i>	ZHONG HUA JI SHI TENG
Chinese Floweringquince	T1343 <i>Chaenomeles sinensis</i>	MU GUA
Chinese Forgetmenot	T1967 <i>Cynoglossum amabile</i>	GOU SHI HUA
Chinese Galangal	T0354 <i>Alpinia chinensis</i>	LIAN JIANG
Chinese Gambirplant	T6633 <i>Uncaria sinensis</i>	HUA GOU TENG
Chinese Globeflower	T6552 <i>Trollius chinensis</i> [Syn. <i>Trollius asiaticus</i> var. <i>chinensis</i> ]	JIN LIAN HUA
Chinese Golden Larch	T5256 <i>Pseudolarix amabilis</i> [Syn. <i>Larix amabilis</i> ; <i>Pseudolarix kaempferi</i> ]	TU JING PI
Chinese Goldthread	T1662 <i>Coptis chinensis</i>	HUANG LIAN
Chinese Hawthorn	T1775 <i>Crataegus pinnatifida</i>	SHAN ZHA
Chinese Hawthorn Flower	T1776 <i>Crataegus pinnatifida</i>	SHAN ZHA HUA
Chinese Hawthorn Leaf	T1777 <i>Crataegus pinnatifida</i>	SHAN ZHA YE
Chinese Hibiscus Flower	T3242 <i>Hibiscus rosa-sinensis</i>	FU SANG HUA
Chinese Hibiscus Leaf	T3243 <i>Hibiscus rosa-sinensis</i>	FU SANG YE
Chinese Holly Bark	T3389 <i>Ilex cornuta</i>	GOU GU SHU PI
Chinese Holly Leaf	T3390 <i>Ilex cornuta</i>	GOU GU YE
Chinese Honeylocust	T2978 <i>Gleditsia sinensis</i> [Syn. <i>Gleditsia horrida</i> ]	ZAO JIA
Chinese Honeylocust Leaf	T2981 <i>Gleditsia sinensis</i> [Syn. <i>Gleditsia horrida</i> ]	ZAO JIA YE
Chinese Honeylocust Root-bark	T2980 <i>Gleditsia sinensis</i> [Syn. <i>Gleditsia horrida</i> ]	ZAO JIA GEN PI
Chinese Honeylocust Thorn	T2979 <i>Gleditsia sinensis</i> [Syn. <i>Gleditsia horrida</i> ]	ZAO JIA CI
Chinese Hydrangea	T3303 <i>Hydrangea chinensis</i>	ZHONG GUO XIU QIU
Chinese Incarvillea	T3420 <i>Incarvillea sinensis</i>	JIAO HAO
Chinese Inula	T3428 <i>Inula britannica</i> var. <i>chinensis</i>	ZHONG GUO XUAN FU HUA
Chinese Iris	T3464 <i>Iris lactea</i> var. <i>chinensis</i> [Syn. <i>Iris pallasii</i> var. <i>chinensis</i> ]	MA LIN ZI

Chinese Iris	T3465 <i>Iris pallasii</i> var. <i>chinensis</i>	MA LIN
Chinese Ivy	T3113 <i>Hedera nepalensis</i> var. <i>sinensis</i>	CHANG CHUN TENG
Chinese Ixora	T3549 <i>Ixora chinensis</i>	LONG CHUAN HUA
Chinese Juniper	T5639 <i>Sabina chinensis</i>	YUAN BAI
Chinese Juniper Leaf	T5987 <i>Sobina chinensis</i>	HUI <sup>(4)</sup> YE
Chinese Knotweed	T5100 <i>Polygonum chinense</i>	HUO TAN MU CAO
Chinese Ligusticum	T3824 <i>Ligusticum sinense</i>	GAO BEN
Chinese Lizardtail	T5750 <i>Saururus chinensis</i>	SAN BAI CAO
Chinese Lobelia	T3898 <i>Lobelia chinensis</i> [Syn. <i>Lobelia radicans</i> ]	BAN BIAN LIAN
Chinese Loropetalum	T3926 <i>Loropetalum chinense</i>	JI MU
Chinese Lycoris	T3984 <i>Lycoris chinensis</i>	ZHONG GUO SHI SUAN
Chinese Magnolia Flower	T4036 <i>Magnolia coco</i>	YE HE HUA
Chinese Magnoliavine	T5791 <i>Schisandra chinensis</i>	WU WEI ZI
Chinese Mahonia	T4062 <i>Mahonia fortunei</i>	XI YE GONG LAO MU
Chinese Mahonia Leaf	T4063 <i>Mahonia fortunei</i>	XI YE GONG LAO YE
Chinese Milkvetch	T0805 <i>Astragalus sinicus</i>	ZI YUN YING
Chinese Milkvetch Seed	T0806 <i>Astragalus sinicus</i>	ZI YUN YING ZI
Chinese Milkwort	T5073 <i>Polygala chinensis</i> [Syn. <i>Polygala glomerata</i> ]	DA JIN NIU CAO
Chinese Morina	T4279 <i>Morina chinensis</i>	YUAN E CI XU DUAN
Chinese Mulberry	T4293 <i>Morus cathayana</i>	HUA SANG
Chinese Narcissus Bulb	T4384 <i>Narcissus tazetta</i> var. <i>chinensis</i>	SHUI XIAN GEN
Chinese Narcissus Flower	T4385 <i>Narcissus tazetta</i> var. <i>chinensis</i>	SHUI XIAN HUA
Chinese Nardostachys	T4386 <i>Nardostachys chinensis</i>	GAN SONG
Chinese Onion	T0313 <i>Allium chinense</i>	QIAO TOU
Chinese Orthodon	T4304 <i>Mosla chinensis</i> [Syn. <i>Orthodon chinensis</i> ]	SHI XIANG RU
Chinese Osbeckia	T4549 <i>Osbeckia chinensis</i>	JIN JIN XIANG
Chinese Pearleaf Crabapple	T4086 <i>Malus asiatica</i>	LIN QIN
Chinese Peashrub Root	T1191 <i>Caragana sinica</i>	JIN QUE GEN
Chinese Photinia	T4828 <i>Photinia serrulata</i>	SHI NAN
Chinese Pink	T2143 <i>Dianthus chinensis</i>	SHI ZHU
Chinese Pistache	T4979 <i>Pistacia chinensis</i>	HUANG LIAN YA
Chinese Plumyew Branch-leaf	T1323 <i>Cephalotaxus sinensis</i> [Syn. <i>Cephalotaxus harringtonia</i> var. <i>sinensis</i> ]	ZHONG GUO CU FEI ZHI YE
Chinese Plumyew Seed	T1324 <i>Cephalotaxus sinensis</i> [Syn. <i>Cephalotaxus harringtonia</i> var. <i>sinensis</i> ]	ZHONG GUO CU FEI ZI
Chinese Podocarpus Leaf	T5045 <i>Podocarpus macrophyllus</i> var. <i>maki</i>	DUAN YE LUO HAN SONG YE
Chinese Podocarpus Seed	T5044 <i>Podocarpus macrophyllus</i> var. <i>maki</i>	DUAN YE LUO HAN SONG SHI
Chinese Pothos	T5189 <i>Pothos chinensis</i>	SHI GAN ZI
Chinese Privet	T3830 <i>Ligustrum sinense</i>	NV ZHEN XIAO LA SHU
Chinese Pulsatilla	T5325 <i>Pulsatilla chinensis</i>	BAI TOU WENG
Chinese Pyrola	T5345 <i>Pyrola calliantha</i> [Syn. <i>Pyrola rotundifolia</i> ssp. <i>chinensis</i> ]	LU XIAN CAO
Chinese Rose	T5562 <i>Rosa chinensis</i>	YUE JI HUA
Chinese Sage	T5692 <i>Salvia sinica</i>	NI DAN SHEN
Chinese Seabuckthorn*	T3256 <i>Hippophae rhamnoides</i> subsp. <i>sinensis</i>	ZHONG GUO SHA JI
Chinese Seriphidium	T5920 <i>Seriphidium cinum</i> [Syn. <i>Artemisia cina</i> ]	HUI HAO
Chinese Silkvine Root-bark	T4729 <i>Periploca sepium</i>	XIANG JIA PI
Chinese Silvergrass	T4254 <i>Miscanthus sinensis</i>	MANG JING
Chinese Siphonostegia	T5966 <i>Siphonostegia chinensis</i>	YIN XING CAO
Chinese Soapberry Leaf	T5721 <i>Sapindus mukorossi</i>	WU HUAN ZI YE
Chinese Soapberry Peel	T5720 <i>Sapindus mukorossi</i>	WU HUAN ZI PI
Chinese Soapberry Seed	T5719 <i>Sapindus mukorossi</i>	WU HUAN ZI
Chinese Spikemoss	T5867 <i>Selaginella sinensis</i>	ZHONG HUA JUAN BAI
Chinese Spiranthes*	T6087 <i>Spiranthes sinensis</i>	ZHONG GUO SHOU CAO

Chinese St.John'swort Fruit	T3344 <i>Hypericum chinense</i>	JIN SI TAO GUO SHI
Chinese Star Jasmine	T6484 <i>Trachelospermum jasminoides</i>	LUO SHI TENG
Chinese Stauntonvine	T6099 <i>Stauntonia chinensis</i>	YE MU GUA
Chinese Stellera	T6105 <i>Stellera chamaejasme</i>	LANG DU
Chinese Stephania	T6133 <i>Stephania sinica</i>	JIN BU HUAN
Chinese Sumac Fruit	T5531 <i>Rhus chinensis</i> [Syn. <i>Rhus semialata</i> ]	YAN FU ZI
Chinese Sumac Leaf	T5530 <i>Rhus chinensis</i> [Syn. <i>Rhus semialata</i> ]	YAN FU YE
Chinese Swallowwort	T1954 <i>Cynanchum chinense</i>	E RONG TENG
Chinese Sweetleaf	T6252 <i>Symplocos chinensis</i>	HUA SHAN FAN
Chinese Swertia*	T6214 <i>Swertia chinensis</i>	DANG YAO
Chinese Tallowtree Bark	T5723 <i>Sapium sebiferum</i>	WU JIU MU GEN PI
Chinese Tallowtree Leaf	T5724 <i>Sapium sebiferum</i>	WU JIU YE
Chinese Tamarisk	T6286 <i>Tamarix chinensis</i>	CHENG LIU
Chinese Taro	T0333 <i>Alocasia cucullata</i> [Syn. <i>Arum cucullatum</i> ]	JIAN WEI YU
Chinese Thermopsis	T6426 <i>Thermopsis chinensis</i>	XIAO YE YE JUE MING
Chinese Thistle	T1448 <i>Cirsium chinense</i>	KU AO
Chinese Thorowax	T1059 <i>Bupleurum chinense</i>	CHAI HU
Chinese Tinospora*	T6468 <i>Tinospora sinensis</i>	ZHONG HUA QING NIU DAN
Chinese Toon Root-bast	T6475 <i>Toona sinensis</i>	CHUN BAI PI
Chinese Trumpetreeper	T1160 <i>Campsis grandiflora</i>	ZI WEI
Chinese Trumpetreeper Stem-leaf	T1161 <i>Campsis grandiflora</i>	ZI WEI JING YE
Chinese Tupelo	T4457 <i>Nyssa sinensis</i>	ZI SHU
Chinese Tupistra	T6566 <i>Tupistra chinensis</i>	KAI KOU JIAN
Chinese Umbrellaleaf	T2232 <i>Diphylleia sinensis</i>	WO ER QI
Chinese Wampee Leaf	T1538 <i>Clausena lansium</i>	HUANG PI YE
Chinese Wampee Root	T1537 <i>Clausena lansium</i>	HUANG PI GEN
Chinese Waxgourd Peel	T0894 <i>Benincasa hispida</i>	DONG GUA PI
Chinese Waxgourd Seed	T0895 <i>Benincasa hispida</i>	DONG GUA ZI
Chinese Waxmyrtle	T4348 <i>Myrica rubra</i>	YANG MEI
Chinese Waxmyrtle Bark	T4349 <i>Myrica rubra</i>	YANG MEI SHU PI
Chinese Wedelia	T6814 <i>Wedelia chinensis</i> [Syn. <i>Solidago chinensis</i> ; <i>Wedelia calendulacea</i> ]	PENG QI JU
Chinese Weeping Cypress Leaf	T1896 <i>Cupressus funebris</i>	BAI SHU YE
Chinese White Poplar	T5161 <i>Populus tomentosa</i>	MAO BAI YANG
Chinese Wingnut	T5308 <i>Pterocarya stenoptera</i>	MA LIU YE
Chinese Wisteria	T6826 <i>Wisteria sinensis</i>	ZI TENG
Chinese Wisteria Seed	T6827 <i>Wisteria sinensis</i>	ZI TENG ZI
Chinese Wolfberry Fruit	T3958 <i>Lycium chinense</i>	GOU QI ZI
Chinese Wolfberry Leaf	T3957 <i>Lycium chinense</i>	GOU QI YE
Chinese Wolfberry Root-bark	T3956 <i>Lycium chinense</i>	GOU QI GEN PI
Chinese Yew	T6310 <i>Taxus chinensis</i>	HONG DOU SHAN
Chirata Swertia*	T6215 <i>Swertia chirata</i>	ZHAI RUI TA ZHANG YA CAI
Chirita	T1370 <i>Chirita micronusa</i>	CHUN ZHU JU TAI
Chittagong Chickrassy	T1410 <i>Chukrasia tabularis</i>	MA LIAN
Chive-like	T0319 <i>Allium schoenoprasum</i>	XI XIANG CONG
Chloro-white Fibraurea*	T2714 <i>Fibraurea chloroleuca</i>	LV BAI TIAN XIAN TENG
Cholla	T4519 <i>Opuntia dillenii</i>	XIAN REN ZHANG
Chongming Many-flowered May-apple*	T2303 <i>Dysosma subrosea</i>	CHONG MING BA JIAO LIAN
Christina Loosestrife	T3998 <i>Lysimachia christinae</i>	DA JIN QIAN CAO
Chrusanthemum-like Groundsel	T5884 <i>Senecio chrysanthemoides</i>	TU SAN QI
Chuandian Soapberry Seed	T5717 <i>Sapindus delavayi</i> [Syn. <i>Pancovia delavayi</i> ]	PI SHAO ZI
Chuanxiong (Wallich Ligusticum)	T3820 <i>Ligusticum chuanxiong</i> [Syn. <i>Ligusticum wallichii</i> ]	CHUAN XIONG
Chuchuhuasc Mayten*	T4130 <i>Maytenus chuchuhuasca</i>	QIU SHI MEI DENG MU

Chulan Tree	T1374 <i>Chloranthus spicatus</i>	JIN SU LAN
Chu-lan Tree	T0240 <i>Aglaiia odorata</i>	MI ZI LAN
Chun's Spicebush	T3849 <i>Lindera chunii</i>	DING HU DIAO ZHANG
Cicadawingvine	T5847 <i>Securidaca inappendiculata</i>	CHAN YI TENG
Cigarbox Cedrela	T1277 <i>Cedrela odorata</i>	YAN YANG CHUN
Ciliate Bugle	T0262 <i>Ajuga ciliata</i>	JIN GU CAO
Ciliate Catnip	T4414 <i>Nepeta ciliaris</i>	YUAN MAO JING JIE
Ciliate Hornpoppy*	T2968 <i>Glaucium fimbriigerum</i>	HAI YING SU
Ciliate Sunflower*	T3148 <i>Helianthus ciliaris</i>	YUAN MAO XIANG RI KUI
Cinereous Thermopsis*	T6427 <i>Thermopsis cinerea</i>	HUI HUANG HUA
Cinnabar Dracaena	T2252 <i>Dracaena cinnabari</i>	ZHU HONG LONG XUE SHU
Cinnabar Persimmon*	T2215 <i>Diospyros cinnabarina</i>	ZHU HONG SHI
Cinnabar-red	T6491 <i>Trametes cinnabarina</i> [Syn. <i>Polyporus cinnabarinus</i> ; <i>Boletus cinnabarinus</i> ]	HONG SHUAN JUN
Cinnamomi-leaf Phoebe*	T4816 <i>Phoebe cinnamomifolia</i>	YU GUO XIAO YE NAN
Circinate Hemsley Monkshood	T0100 <i>Aconitum hemsleyanum</i> var. <i>circinacum</i>	QUAN JU GUA YE WU TOU
Circinate Solenanthus	T6021 <i>Solenanthus circinatus</i>	CHANG RUI LIU LI CAO
Circularity St. John'swort*	T3339 <i>Hypericum annulatum</i>	HUAN ZHUANG JIN SI TAO
Citron Daylily	T3192 <i>Hemerocallis citrina</i>	HUANG HUA CAI
Citronella-grass	T1944 <i>Cymbopogon nardus</i>	JING XIANG MAO
Citrusleaf Glycosmis	T3006 <i>Glycosmis citrifolia</i>	SHAN XIAO JU
Civet	T6800 <i>Viverra zibetha</i>	LING MAO XIANG
Clammy Hopseedbush Leaf	T2243 <i>Dodonaea viscosa</i>	CHE SANG ZI YE
Clary	T5691 <i>Salvia sclarea</i>	NAN OU DAN SHEN
Clasping Heliotrope	T3167 <i>Heliotropium amplexicaule</i>	BAO JING TIAN JIE CAI
Clematis Asiabell	T1597 <i>Codonopsis clematidea</i>	XIN JIANG DANG SHEN
Clethra Loosestrife	T3999 <i>Lysimachia clethroides</i>	ZHEN ZHU CAI
Cliff Ephedra	T2379 <i>Ephedra saxatilis</i>	ZANG MA HUANG
Cliffrose	T1766 <i>Cowania mexicana</i>	XUAN YA MEI GUI
Climbing Corydalis	T1714 <i>Corydalis claviculata</i>	BANG ZHUANG ZI JIN
Climbing Entada Seed	T2363 <i>Entada phaseoloides</i> [Syn. <i>Lens phaseoloides</i> ]	KE TENG ZI
Climbing Fig	T2723 <i>Ficus pumila</i>	BI LI
Climbing Fumitory	T0183 <i>Adlumia cirrhosa</i> [Syn. <i>Adlumia fungosa</i> ]	XUN ZHUANG SHAN YUAN CAO
Climbing Gambirplant	T6631 <i>Uncaria scandens</i> [Syn. <i>Nauclea pilosa</i> ; <i>Uruparia pilosa</i> ; <i>Uncaria pilosa</i> ]	PAN ZHI GOU TENG
Climbing Groundsel	T5907 <i>Senecio scandens</i> [Syn. <i>Senecio chinensis</i> ]	QIAN LI GUANG
Climbing Hempweed	T4230 <i>Mikania scandens</i>	WEI GAN JU
Climbing Jewelvine	T2123 <i>Derris scandens</i>	PAN YUAN YU TENG
Climbing Premna	T5195 <i>Premna subscandens</i>	PAN YUAN CHOU HUANG JING
Clove Tree	T6263 <i>Syzygium aromaticum</i> [Syn. <i>Eugenia caryophyllata</i> ]	DING XIANG
Cluster Concave-top Alga*	T3715 <i>Laurencia caespitosa</i>	CU SHENG AO DING ZAO
Coagulate Withania	T6828 <i>Withania coagulans</i>	NING GU SHUI QIE
Coastal Glehnia	T2983 <i>Glehnia littoralis</i>	BEI SHA SHEN
Coastal Waterhyssop	T0852 <i>Bacopa monniera</i>	JIA MA CHI XIAN
Coca Shrub	T2491 <i>Erythroxylum coca</i>	GU KE
Cocculus leaebe	T1587 <i>Cocculus leaebe</i>	
Cochinchina Cudrania	T1884 <i>Cudrania cochinchinensis</i>	GOU JI
Cochinchina Homalium	T3275 <i>Homalium cochinchinensis</i>	TIAN LIAO MU
Cochinchina Mucuna*	T4309 <i>Mucuna cochinchinensis</i>	MAO DOU
Cochinchinese Asparagus	T0746 <i>Asparagus cochinchinensis</i> [Syn. <i>Asparagus lucidus</i> ]	TIAN MEN DONG
Cochinhina Momordica Root	T4264 <i>Momordica cochinchinensis</i>	MU BIE GEN
Cochinhina Momordica Seed	T4265 <i>Momordica cochinchinensis</i>	MU BIE ZI
Cockroach	T0950 <i>Blatta orientalis</i>	ZHANG LANG

Cocoa	T6423 <i>Theobroma cacao</i>	KE KE
Coconut	T1591 <i>Cocos nucifera</i>	YE ZI
Coconut Albumen	T1593 <i>Cocos nucifera</i>	YE ZI RANG
Coconut Oil	T1594 <i>Cocos nucifera</i>	YE ZI YOU
Coconut Root-bark	T1592 <i>Cocos nucifera</i>	YE ZI PI
Coco-plum	T1401 <i>Chrysobalanus icaco</i>	YI KOU KE MEI
Cocoxochitl	T1995 <i>Dahlia coccinea</i>	HONG DA LI HUA
Coffee Senna	T1241 <i>Cassia occidentalis</i>	WANG JIANG NAN
Coffee Senna Seed	T1242 <i>Cassia occidentalis</i>	WANG JIANG NAN ZI
Cogon Satintail	T3415 <i>Imperata cylindrica</i>	YIN DU BAI MAO
Coigne Grape*	T6795 <i>Vitis coignetiae</i>	XIE PU TAO
Coiledleaf Pearleverlasting	T0445 <i>Anaphalis contorta</i>	XUAN YE XIANG QING
Colchicum Ivy*	T3111 <i>Hedera colchica</i>	QIU SHUI XIAN CHANG CHUN TENG
Collett Yam	T2194 <i>Dioscorea collettii</i>	CHA RUI SHU YU
Collybia Albuminosa Sporocarp	T1623 <i>Collybia albuminosa</i>	JI ZONG
Colombia Croton*; Almisclillo	T1855 <i>Croton schiedeanus</i>	GE LUN BI YA BA DOU
Colophony	T4917 <i>Pinus massoniana</i>	SONG XIANG
Colorate Ardisia*	T0592 <i>Ardisia colorata</i>	YOU SE ZI JIN NIU
Colored Mistletoe	T6775 <i>Viscum coloratum</i>	HU JI SHENG
Colorful Bitterleaf	T6715 <i>Vernonia colorata</i>	YOU SE BAN JIU JU
Columbia Xylopia*	T6852 <i>Xylopia columbiana</i>	GE LUN BI YA MU BAN SHU
Combined Spicebush	T3854 <i>Lindera strychnifolia</i> [Syn. <i>Lindera aggregata</i> ]	WU YAO
Comfrey	T6246 <i>Symphytum officinale</i>	XI MEN FEI CAO
Commerson Nightshade*	T5995 <i>Solanum commersonii</i>	KE MO SEN QIE
Common Achyranthes	T0071 <i>Achyranthes aspera</i>	TU NIU XI
Common Allemanda	T0307 <i>Allemanda cathartica</i>	RUAN ZHI HUANG CHAN
Common Alstonia	T0374 <i>Alstonia scholaris</i>	XIANG PI MU
Common Andrographis	T0457 <i>Andrographis paniculata</i> [Syn. <i>Justicia paniculata</i> ]	CHUAN XIN LIAN
Common Anemarrhena	T0462 <i>Anemarrhena asphodeloides</i>	ZHI MU
Common Anisodus	T0501 <i>Anisodus luridus</i>	SAI LANG DANG
Common Anodendron	T0514 <i>Anodendron affine</i>	SHAN TENG
Common Antiaris	T0533 <i>Antiaris toxicaria</i> [Syn. <i>Ambora toxicaria</i> ]	JIAN XUE FENG HOU
Common Arnebia	T0649 <i>Arnebia guttata</i>	JIA ZI CAO
Common Artocarpus*	T0714 <i>Artocarpus incisa</i> [Syn. <i>Artocarpus communis</i> ]	MIAN BAO GUO
Common Aspidistra	T0759 <i>Aspidistra elatior</i>	ZHI ZHU BAO DAN
Common Atlantic Octopus	T4478 <i>Octopus vulgaris</i>	ZHANG YU
Common Atropa	T0825 <i>Atropa belladonna</i>	DIAN QIE
Common Aucklandia (Costustoot)	T5758 <i>Saussurea lappa</i> [Syn. <i>Aucklandia lappa</i> ]	MU XIANG
Common Banana	T4331 <i>Musa paradisiaca</i> var. <i>sapientum</i> [Syn. <i>Musa sapientum</i> ]	XIANG JIAO
Common Baphicacanthus Leaf	T0867 <i>Baphicacanthus cusia</i> [Syn. <i>Strobilanthes cusia</i> ]	MA LAN YE
Common Baphicacanthus Root	T0866 <i>Baphicacanthus cusia</i> [Syn. <i>Strobilanthes cusia</i> ]	MA LAN GEN
Common Beet	T0928 <i>Beta vulgaris</i>	TIAN CAI
Common Bitterfigwort	T4884 <i>Picria felterrae</i>	KU XUAN SHEN
Common Bletilla	T0955 <i>Bletilla striata</i>	BAI JI
Common Bombax Flower	T0973 <i>Bombax malabaricum</i> [Syn. <i>Gossampinus malabarica</i> ]	MU MIAN HUA
Common Borage	T0981 <i>Borago officinalis</i>	LIU LI JU
Common Broadlily	T1574 <i>Clintonia alpina</i>	LEI GONG QI
Common Bruguiera	T1039 <i>Bruguiera gymnorrhiza</i>	MU LAN
Common Buckthorn	T5454 <i>Rhamnus cathartica</i>	YAO SHU LI
Common Buckwheat	T2658 <i>Fagopyrum esculentum</i>	QIAO MAI
Common Buckwheat Stem	T2659 <i>Fagopyrum esculentum</i>	QIAO MAI JIE
Common Burreed	T6062 <i>Sparganium stoloniferum</i>	SAN LENG



Common Butterbush	T1316 <i>Cephalanthus occidentalis</i>	FENG XIANG SHU YE
Common Camptotheca	T1162 <i>Camptotheca acuminata</i>	XI SHU
Common Caper	T1180 <i>Capparis spinosa</i>	LAO SHU GUA
Common Cardaria	T1195 <i>Cardaria draba</i>	QUN XIN CAI
Common Carpesium	T1210 <i>Carpesium abrotanoides</i>	TIAN MING JING
Common Carpesium Fruit	T1211 <i>Carpesium abrotanoides</i>	TIAN MING JING GUO
Common Cashew Fruit	T0438 <i>Anacardium occidentale</i>	DU XIAN ZI
Common Cerberustree	T1330 <i>Cerbera manghas</i>	NIU XIN QIE ZI
Common Ceriops	T1336 <i>Ceriops tagal</i> [Syn. <i>Rhizophora tagal</i> ]	JIAO GUO MU
Common Chamomile	T0523 <i>Anthemis nobilis</i>	GAO GUI CHUN HUANG JU
Common Chicory	T1415 <i>Cichorium intybus</i>	JU QU
Common Cissampelos	T1452 <i>Cissampelos pareira</i>	XI SHENG TENG
Common Cnidium	T1582 <i>Cnidium monnieri</i>	SHE CHUANG ZI
Common Cocklebur*	T6838 <i>Xanthium commune</i>	PU TONG CANG ER
Common Cockscomb Flower	T1299 <i>Celosia cristata</i>	JI GUAN HUA
Common Cockscomb Seed	T1297 <i>Celosia cristata</i>	JI GUAN ZI
Common Coelogyne	T1606 <i>Coelogyne ovalis</i>	BEI MU LAN
Common Coleostephus	T1618 <i>Coleostephus myconis</i>	QIAO GUAN JU
Common Coltsfoot	T6574 <i>Tussilago farfara</i>	KUAN DONG HUA
Common Crapemyrtle Flower	T3671 <i>Lagerstroemia indica</i>	ZI WEI HUA
Common Crapemyrtle Leaf	T3672 <i>Lagerstroemia indica</i>	ZI WEI YE
Common Crapemyrtle Root	T3670 <i>Lagerstroemia indica</i>	ZI WEI GEN
Common Cruculigo	T1901 <i>Curculigo orchoides</i>	XIAN MAO
Common Cyanotis	T1922 <i>Cyanotis vaga</i>	LU SHUI CAO
Common Dayflower	T1633 <i>Commelina communis</i>	YA ZHI CAO
Common Devilpepper	T5423 <i>Rauvolfia verticillata</i>	LUO FU MU
Common Devilpepper Stem and Leaf	T5424 <i>Rauvolfia verticillata</i>	LUO FU MU JING YE
Common Duckwood	T3738 <i>Lemna minor</i>	FU PING
Common Dysosma	T2305 <i>Dysosma versipellis</i> [Syn. <i>Podophyllum versipelle</i> ]	GUI JIU
Common Elsholtzia	T2341 <i>Elsholtzia ciliata</i>	BAN BIAN SU
Common Enhydra	T2361 <i>Enhydra fluctuans</i>	ZHAO JU
Common Euscaphis	T2636 <i>Euscaphis japonica</i>	YE YA CHUN
Common Evolvulus	T2649 <i>Evolvulus alsinoides</i>	TU DING GUI
Common Fenugreek	T6528 <i>Trigonella foenum-graecum</i>	HU LU BA
Common Fibraurea	T2715 <i>Fibraurea recisa</i>	TIAN XIAN TENG
Common Figwort	T5829 <i>Scrophularia nodosa</i>	LIN SHENG XUAN SHEN
Common Flax	T3859 <i>Linum usitatissimum</i>	YA MA
Common Flax Seed	T3860 <i>Linum usitatissimum</i>	YA MA ZI
Common Floweringquince	T1342 <i>Chaenomeles lagenaria</i> [Syn. <i>Chaenomeles speciosa</i> ]	QIU MU GUA
Common Fordia	T2752 <i>Fordia cauliflora</i>	GAN HUA DOU
Common Four-o'clock Leaf	T4253 <i>Mirabilis jalapa</i>	ZI MO LI YE
Common Four-o'clock Root	T4252 <i>Mirabilis jalapa</i>	ZI MO LI GEN
Common Foxglove	T2177 <i>Digitalis purpurea</i>	MAO DI HUANG
Common Ginger Dried Rhizome	T6909 <i>Zingiber officinale</i>	GAN JIANG
Common Goatsrue	T2824 <i>Galega officinalis</i>	SHAN YANG DOU
Common Goldenrod	T6024 <i>Solidago virgaurea</i> var. <i>leiocarpa</i> [Syn. <i>Solidago decurrens</i> ]	YI ZHI HUANG HUA
Common Gold-hair Moss*	T5133 <i>Polytrichum commune</i>	JIN FA XIAN
Common Gorse	T6590 <i>Ulex europaeus</i>	JING DOU
Common Gromwell	T3882 <i>Lithospermum officinale</i>	BAI GUO ZI CAO
Common Groundsel	T5915 <i>Senecio vulgaris</i>	OU ZHOU QIAN LI GUANG
Common Hawthorn	T1773 <i>Crataegus monogyna</i>	DAN ZI SHAN ZHA
Common Heron's Bill	T2438 <i>Erodium stephanianum</i>	MANG NIU ER MIAO
Common Hoarhound	T4114 <i>Marrubium vulgare</i>	OU XIA ZHI CAO

Common Hogfennel	T0480 <i>Angelica decursiva</i> [Syn. <i>Peucedanum decursivum</i> ]	QIAN HU
Common Hoptree	T5282 <i>Ptelea trifoliata</i>	YU JU
Common Houndstongue	T1969 <i>Cynoglossum officinale</i>	YAO YONG DAO TI HU
Common Hyacinth	T3297 <i>Hyacinthus orientalis</i>	FENG XIN ZI
Common Indianmulberry	T4286 <i>Morinda umbellata</i>	YANG JIAO TENG
Common Japanese Clubmoss	T3973 <i>Lycopodium japonicum</i> [Syn. <i>Lycopodium clavatum</i> ]	SHEN JIN CAO
Common Jasminorange	T4323 <i>Murraya paniculata</i> [Syn. <i>Chalcas paniculata</i> ]	JIU LI XIANG
Common Jasminorange Root	T4324 <i>Murraya paniculata</i> [Syn. <i>Chalcas paniculata</i> ]	JIU LI XIANG GEN
Common Javatea	T4542 <i>Orthosiphon wulfenioides</i> [Syn. <i>Coleus wulfenioides</i> ]	JI JIAO SHEN
Common Juniper	T3583 <i>Juniperus communis</i>	OU ZHOU CI BAI
Common Juniper Variaty*	T3584 <i>Juniperus communis</i> var. <i>depressa</i>	OU ZHOU CI BAI BIAN ZHONG
Common Knotgrass	T5098 <i>Polygonum aviculare</i>	BIAN XU
Common Lamioiphloomis	T3679 <i>Lamioiphloomis rotata</i> [Syn. <i>Phlomis rotata</i> ]	DU YI WEI
Common Lantana	T3687 <i>Lantana camara</i>	WU SE MEI
Common Leafflower	T4843 <i>Phyllanthus urinaria</i>	YE XIA ZHU
Common Lentil	T3741 <i>Lens culinaris</i>	BING DOU
Common Lilac	T6262 <i>Syringa vulgaris</i>	OU DING XIANG
Common Lime	T6461 <i>Tilia vulgaris</i>	DUAN SHU
Common Lophatherum	T3920 <i>Lophatherum gracile</i>	DAN ZHU YE
Common Lophatherum Root	T3921 <i>Lophatherum gracile</i>	DAN ZHU YE GEN
Common Macaranga	T4013 <i>Macaranga tanarius</i>	XUE TONG
Common Marsharigold	T1137 <i>Caltha palustris</i>	MA TI YE
Common Mayapple	T5058 <i>Podophyllum peltatum</i>	DUN YE GUI JIU
Common Mesua	T4203 <i>Mesua ferrea</i>	TIE LI MU
Common Milkwort*	T5089 <i>Polygala vulgaris</i>	PU TONG YUAN ZHI
Common Monkshood	T0084 <i>Aconitum carmichaeli</i>	WU TOU
Common Nandina Fruit	T4371 <i>Nandina domestica</i>	NAN TIAN ZHU ZI
Common Nandina Leaf	T4370 <i>Nandina domestica</i>	NAN TIAN ZHU YE
Common Nandina Root	T4368 <i>Nandina domestica</i>	NAN TIAN ZHU GEN
Common Nandina Stem	T4369 <i>Nandina domestica</i>	NAN TIAN ZHU GENG
Common Nasturtium	T6555 <i>Tropaeolum majus</i>	HAN LIAN HUA
Common Nutmeg	T4351 <i>Myristica fragrans</i>	ROU DOU KOU
Common Oak	T5377 <i>Quercus robur</i>	OU ZHOU BAI LI
Common Oleander	T4420 <i>Nerium oleander</i>	OU ZHOU JIA ZHU TAO
Common Olive	T4487 <i>Olea europaea</i>	YOU GAN LAN
Common Onion	T0311 <i>Allium cepa</i>	YANG CONG
Common Ophiorrhiza	T4513 <i>Ophiorrhiza mungos</i>	SHE GEN CAO
Common Origanum	T4526 <i>Origanum vulgare</i>	TU XIANG RU
Common Oxmuscle	T2157 <i>Dichotomanthes tristaniaecarpa</i>	NIU JIN TIAO
Common Oxwood	T1784 <i>Cratoxylum cochinchinense</i>	HUANG NIU MU
Common Papermulberry	T1032 <i>Broussonetia papyrifera</i>	GOU SHU
Common Papermulberry Bast*	T1033 <i>Broussonetia papyrifera</i>	GOU SHU BAI PI
Common Papermulberry Fruit	T1035 <i>Broussonetia papyrifera</i>	GOU SHU GUO
Common Papermulberry Root*	T1034 <i>Broussonetia papyrifera</i>	GOU SHU GEN
Common Pathenium	T4660 <i>Parthenium hysterophorus</i>	YIN JIAO JU
Common Pear	T5364 <i>Pyrus communis</i>	XI YANG LI
Common Pearleverlasting	T0446 <i>Anaphalis margaritacea</i>	DA YE BAI TOU WENG
Common Peganum	T4687 <i>Peganum harmala</i>	LUO TUO PENG
Common Peganum Seed	T4688 <i>Peganum harmala</i>	LUO TUO PENG ZI
Common Peony	T4580 <i>Paeonia albiflora</i> [Syn. <i>Paeonia lactiflora</i> ]	BAI SHAO
Common Peony (wild)	T4584 <i>Paeonia lactiflora</i> wild	CHI SHAO wild
Common Perilla	T4719 <i>Perilla frutescens</i> var. <i>arguta</i>	ZI SU
Common Perilla Fruit	T4715 <i>Perilla frutescens</i>	BAI SU ZI

Common Perilla Leaf	T4714 <i>Perilla frutescens</i>	BAI SU YE
Common Perilla Leaf	T4721 <i>Perilla frutescens</i> var. <i>arguta</i>	ZI SU YE
Common Perilla Stem	T4720 <i>Perilla frutescens</i> var. <i>arguta</i>	ZI SU GENG
Common Periwinkle	T6761 <i>Vinca minor</i>	MAN CHANG CHUN HUA
Common Petunia	T4751 <i>Petunia hybrida</i>	BI DONG QIE
Common Pheasant	T4786 <i>Phasianus colchicus</i>	ZHI
Common Physochlaina	T4859 <i>Physochlaina physaloides</i>	PAO NANG CAO
Common Pistache	T4982 <i>Pistacia vera</i>	A YUE HUN ZI
Common Poinsettia	T2614 <i>Euphorbia pulcherrima</i>	YI PIN HONG
Common Polypody	T5127 <i>Polypodium vulgare</i>	DUO ZU JUE
Common Prangos	T5191 <i>Prangos pabularia</i>	SHUAN CHI QIN
Common Pratia	T5193 <i>Pratia nummularia</i>	TONG CHUI YU DAI CAO
Common Prickly Pear	T4521 <i>Opuntia vulgaris</i>	LV XIAN REN ZHANG
Common Pyrola	T5347 <i>Pyrola decorata</i>	PU TONG LU TI CAO
Common Quince	T1937 <i>Cydonia oblonga</i>	WEN PO
Common Rabdosia	T3479 <i>Isodon amethystoides</i>	XIANG CHA CAI
Common Ragweed	T0398 <i>Ambrosia artemisiifolia</i>	TUN CAO
Common Raspberry*	T5588 <i>Rubus allegheniensis</i>	PU TONG XUAN GOU ZI
Common Reed Rhizome	T4829 <i>Phragmites communis</i>	LU GEN
Common Rue	T5626 <i>Ruta graveolens</i>	CHOU CAO
Common Rush	T3578 <i>Juncus effusus</i>	DENG XIN CAO
Common Russianthistle	T5657 <i>Salsola collina</i>	ZHU MAO CAI
Common Sage	T5685 <i>Salvia plebeia</i>	LI ZHI CAO
Common Sainfoin	T4491 <i>Onobrychis viciifolia</i>	LV DOU
Common Sassafras	T5746 <i>Sassafras tzumu</i>	CHA SHU
Common Scouring Rush	T2408 <i>Equisetum hiemale</i>	MU ZEI
Common Selfheal	T5214 <i>Prunella vulgaris</i>	XIA KU CAO
Common Sinodielsia	T5963 <i>Sinodielsia yunnanensis</i>	DIAN QIN
Common Sinopodophyllum	T5057 <i>Podophyllum emodii</i> [Syn. <i>Podophyllum emodii</i> var. <i>chinense</i> ; <i>Podophyllum sikkimense</i> ; <i>Sinopodophyllum emodii</i> ]	TAO ER QI
Common Smoketree	T1758 <i>Cotinus coggygria</i>	HUANG LU
Common Smoketree Branch-leaf	T1759 <i>Cotinus coggygria</i> var. <i>cinerea</i>	HUANG LU ZHI YE
Common Snapdragon	T0537 <i>Antirrhinum majus</i>	JIN YU CAO
Common Souliea	T6060 <i>Souliea vaginata</i>	HUANG SAN QI
Common Speedwell	T6723 <i>Veronica arvensis</i>	ZHI LI PO PO NA
Common Spiderflower Seed	T1550 <i>Cleome gynandra</i> [Syn. <i>Gynandropsis gynandra</i> ]	BAI HUA CAI ZI
Common Spruce	T4869 <i>Picea abies</i>	OU ZHOU YUN SHAN
Common Squill	T5813 <i>Scilla scilloides</i>	MIAN ZAO ER
Common St. Paulswort	T5950 <i>Siegesbeckia orientalis</i>	XI XIAN
Common St. John's wort	T3361 <i>Hypericum perforatum</i>	GUAN YE LIAN QIAO
Common Stelmatocrypton	T6106 <i>Stelmatocrypton khasianum</i>	SHENG TENG
Common Strawberry	T2763 <i>Fragaria ananassa</i>	CAO MEI
Common Swertia*	T6239 <i>Swertia swertiopsis</i>	PU TONG ZHANG YA CAI
Common Tansy	T6298 <i>Tanacetum vulgare</i>	JU HAO
Common Tea	T1152 <i>Camellia sinensis</i> [Syn. <i>Thea sinensis</i> ]	CHA YE
Common Teak	T6325 <i>Tectona grandis</i>	YOU MU
Common Threewingnut	T6542 <i>Tripterygium wilfordii</i>	LEI GONG TENG
Common Tobacco	T4428 <i>Nicotiana tabacum</i>	YAN CAO
Common Tritonia	T6548 <i>Tritonia crocosmaeflora</i>	XIONG HUANG LAN
Common Tulip	T6561 <i>Tulipa gesneriana</i>	YU JIN XIANG
Common Tulip Root	T6562 <i>Tulipa gesneriana</i>	YU JIN XIANG GEN
Common Turmeric	T1905 <i>Curcuma longa</i>	JIANG HUANG
Common Valeriana	T6679 <i>Valeriana officinalis</i>	XIE CAO

Common Wallflower	T1356 <i>Cheiranthus cheiri</i>	GUI ZHU XIANG
Common Waterhyacinth	T2325 <i>Eichhornia crassipes</i>	SHUI HU LU
Common Watershield	T1004 <i>Brasenia schreberi</i>	CHUN
Common Wedgelet Fern	T6116 <i>Stenoloma chusanum</i>	DA YE JIN HUA CAO
Common Vetch	T6750 <i>Vicia sativa</i>	DA CHAO CAI
Common White Jasmine	T3556 <i>Jasminum officinale</i>	SU FANG HUA
Common White Quebracho	T0772 <i>Aspidosperma quebracho-blanco</i>	PU TONG BAI JIAN MU
Common Vladimiria	T6802 <i>Vladimiria souliei</i> [Syn. <i>Jurinea souliei</i> ]	CHUAN MU XIANG
Common Woadwaxen	T2901 <i>Genista tinctoria</i>	RAN LIAO MU
Common Wormwood	T0659 <i>Artemisia absinthium</i>	ZHONG YA KU HAO
Common Xylopia	T6855 <i>Xylopia vielana</i>	MU BAN SHU
Common Yam	T2190 <i>Dioscorea batatas</i> [Syn. <i>Dioscorea opposita</i> ]	SHAN YAO
Common Yarrow	T0065 <i>Achillea millefolium</i>	YANG SHI CAO
Common Yew	T6307 <i>Taxus baccata</i>	JIANG GUO ZI SHAN
CommonGaultheria	T2893 <i>Gaultheria leucocarpa</i> var. <i>cumingiana</i>	BAI ZHU SHU
Compact Wormwood*	T0674 <i>Artemisia compacta</i>	MI HAO
Complanate Clubmoss	T3971 <i>Lycopodium complanatum</i>	GUO JIANG LONG
Compositelaf Eupatorium*	T2556 <i>Eupatorium compositifolium</i>	FU YE ZE LAN
Concentrated Beef Extract	T0983 <i>Bos taurus domesticus</i>	XIA TIAN GAO
Condurango	T4115 <i>Marsdenia condurango</i>	NAN MEI NIU NAI CAI
Conespike Flemingia	T2738 <i>Flemingia strobilifera</i>	QIU SUI QIAN JIN BA
Confusable Larkspur*	T2067 <i>Delphinium confusum</i>	YI SI CUI QUE
Confusable Ochrosia	T4468 <i>Ochrosia confusa</i>	YI SI MEI GUI SHU
Confuse Myrrhree*	T1634 <i>Commiphora confusa</i>	HUN XIAO MO YAO
Confused Mahonia	T4060 <i>Mahonia confusa</i>	HU BEI SHI DA GONG LAO
Congested-flower Rosewood*	T2000 <i>Dalbergia congestiflora</i>	JU HUA HUANG TAN
Conglobate Ulva Frond*	T6598 <i>Ulva conglobata</i>	LI CAI
Congo Antiaris*	T0534 <i>Antiaris welwitschii</i>	GANG GUO JIAN XUE FENG HOU
Congo Holarrhena*	T3264 <i>Holarrhena congolensis</i>	GANG GUO HE ZHI XIE MU
Conic Gymnadenia	T3077 <i>Gymnadenia conopsea</i>	SHOU ZHANG SHEN
Conicum Conocephalus*	T1644 <i>Conocephalum conicum</i>	SHE TAI
Conifer Macaranga	T4012 <i>Macaranga confusa</i>	ZHEN YE XUE TONG
Consolidated Larkspur*	T2068 <i>Delphinium consolida</i>	QIANG GU FEI YAN CAO
Constricted Alstonia*	T0368 <i>Alstonia constricta</i>	SHU JI GU CHANG SHAN
Contorted Tanglehead	T3234 <i>Heteropogon contortus</i>	DI JIN
Contracted Sawwort	T5922 <i>Serratula strangulata</i>	YI BAO MA HUA TOU
Convolute Asiabell	T1598 <i>Codonopsis convolvulacea</i>	JI DAN SHEN
Coprinus Sporocarp	T1660 <i>Coprinus atramentarius</i>	GUI GAI
Coral Ardisia	T0594 <i>Ardisia crenata</i>	ZHU SHA GEN
Coralhead Plant	T0012 <i>Abrus precatorius</i>	XIANG SI ZI
Coralhead Plant Vine	T0011 <i>Abrus precatorius</i>	XIANG SI TENG
Coral-tree	T2478 <i>Erythrina variegata</i> [Syn. <i>Erythrina indica</i> ]	CI TONG
Cordate Gambirplant*	T6612 <i>Uncaria cordata</i>	XIN XING GOU TENG
Cordate Syzygium*	T6265 <i>Syzygium cordatum</i>	XIN XING PU TAO
Cordateleaf Sida	T5943 <i>Sida cordifolia</i>	HUANG HUA ZI
Cordate-oblong Beautyleaf*	T1127 <i>Calophyllum cordato-oblongum</i>	CHANG YUAN XIN XING HU TONG
Coriaceous Passionflower*	T4664 <i>Passiflora coriacea</i>	GE YANG XI FAN LIAN
Coriaceousleaf Actinidia	T0165 <i>Actinidia rubricaulis</i> var. <i>coriacea</i>	GE YE MI HOU TAO
Coriander Seed	T1687 <i>Coriandrum sativum</i>	HU SUI ZI
Corinan Tree*	T1752 <i>Corynanthe johimbe</i>	KE NAN SHU
Corkywing Euonymus	T2545 <i>Euonymus phellomana</i>	SHUAN CHI WEI MAO
Corn Gromwell	T3880 <i>Lithospermum arvense</i>	MAI JIA GONG
Corn Poppy	T4625 <i>Papaver commutatum</i> [Syn. <i>Papaver rhoeas</i> ]	LI CHUN HUA

Cornflower	T1305 <i>Centaurea cyanus</i>	SHI CHE JU
Corniculate Aegiceras	T0194 <i>Aegiceras corniculatum</i>	LA ZHU GUO
Corniculate Spurgentian	T3092 <i>Halenia corniculata</i>	HUA MAO
Cornish Heath	T2419 <i>Erica vagans</i>	YING GUO OU SHI NAN
Cornuted Plantain*	T5003 <i>Plantago cornuti</i>	JIAO ZHUANG CHE QIAN
Coromandel Lannea	T3685 <i>Lannea grandis</i> [Syn. <i>Lannea coromandelica</i> ]	HOU PI SHU
Coronarius Gingerlily	T3118 <i>Hedychium coronarium</i>	TU QIANG HUO
Coronary Ervatamia*	T2440 <i>Ervatamia coronaria</i>	GUAN ZHUANG GOU YA HUA
Corsican Pine	T4914 <i>Pinus laricio</i>	KE XI JIA SONG
Corydalisleaf Meadowrue	T6395 <i>Thalictrum isopyroides</i>	ZI JIN YE TANG SONG CAO
Corymb Rose-bay*	T6272 <i>Tabernaemontana corymbosa</i>	SAN FANG HUA XU HONG YUE GUI
Corymbose Hedyotis	T3126 <i>Hedyotis corymbosa</i> [Syn. <i>Oldenlandia corymbosa</i> ]	SHUI XIAN CAO
Cotton-leaf Leprous Tree*	T3561 <i>Jatropha gossypifolia</i>	MIAN YE MA FENG SHU
Cottonrose Hibiscus Flower	T3241 <i>Hibiscus mutabilis</i>	MU FU RONG HUA
Couminga Erythrophleum*	T2484 <i>Erythrophleum couminga</i>	KAO MING GE MU
Country Monkshood	T0115 <i>Aconitum monticola</i>	SHAN DI WU TOU
Country Stringbush*	T6822 <i>Wikstroemia monticola</i>	SHAN DI YAO HUA
Cow Milk	T0989 <i>Bos taurus domesticus; Bubalus bubalis</i>	NIU RU
Cowage Velvet-bean	T4310 <i>Mucuna pruriens</i>	CI YANG LI DOU
Cowberry Leaf	T6673 <i>Vaccinium vitis-idaea</i>	YUE JU YE
Cow-bezoar (Ox-gallstone)	T0987 <i>Bos taurus domesticus; Bubalus bubalis</i>	NIU HUANG
Cowherb	T6668 <i>Vaccaria segetalis</i> [Syn. <i>Vaccaria pyramidata</i> ]	WANG BU LIU XING
Cowlily	T4450 <i>Nuphar pumilum</i>	PING PENG CAO
Cowparsnipleaf Bugbane	T1421 <i>Cimicifuga heracleifolia</i>	DA SAN YE SHENG MA
Cow-pea	T6754 <i>Vigna unguiculata</i>	JIANG DOU
Crab-craw Orchis*	T5806 <i>Schlumbergera truncata</i>	XIE ZHUA LAN
Crassleaf Tephrosia*	T6333 <i>Tephrosia crassifolia</i>	HOU YE HUI MAO DOU
Creeping Acroptilon	T0154 <i>Acroptilon repens</i>	DING YU JU
Creeping Bugle	T0271 <i>Ajuga reptans</i>	PU FU JIN GU CAO
Creeping Ceratostigma, Creeping Bluesnow	T1327 <i>Ceratostigma minus</i>	XIAO JIAO ZHU HUA
Creeping Corydalis	T1735 <i>Corydalis repens</i>	QUAN YE YAN HU SUO
Creeping Hypoestes*	T3375 <i>Hypoestes serpens</i>	PU FU QIANG DAO YAO
Creeping Juniper	T3589 <i>Juniperus horizontalis</i>	PING PU YUAN BAI
Creeping Lagotis*	T3676 <i>Lagotis stolonifera</i>	PU FU JING TU ER CAO
Creeping Mahonia	T4071 <i>Mahonia repens</i>	PU FU SHI DA GONG LAO
Creeping Ninenode	T5279 <i>Psychotria serpens</i>	MAN JIU JIE
Creeping Oxalis	T4564 <i>Oxalis corniculata</i> [Syn. <i>Oxalis repens</i> ]	ZUO JIANG CAO
Creeping Rockfoil	T5773 <i>Saxifraga stolonifera</i>	HU ER CAO
Creeping Rostellularia	T5576 <i>Rostellularia procumbens</i> [Syn. <i>Justicia procumbens</i> ]	JUE CHUANG
Creeping Skyflower	T2295 <i>Duranta repens</i>	JIA LIAN QIAO
Creeping Skyflower Leaf	T2296 <i>Duranta repens</i>	JIA LIAN QIAO YE
Creeping Telosma	T6329 <i>Telosma procumbens</i>	WO JING YE LAI XIANG
Crenate Quassia-wood*	T4879 <i>Picrasma crenata</i>	YUAN CHI KU MU
Creosote-bush	T3695 <i>Larrea tridentata</i>	SAN CHI LA RUI A
Crepinleaf Erysimum*	T2453 <i>Erysimum crepidifolium</i>	HUAN YANG SHEN YE TANG JIE
Crescent-shaped Euphorbia	T2599 <i>Euphorbia lunulata</i>	MAO YAN CAO
Crest Iris	T3456 <i>Iris cristata</i>	SHI GUAN YUAN WEI
Crestedspike Ragweed	T0406 <i>Ambrosia psilostachya</i> var. <i>coronopifolia</i>	GUAN LUO SUI TUN CAO
Cretan Brake	T5287 <i>Pteris cretica</i>	DA YE JING KOU BIAN CAO
Crispate Crotalaria*	T1818 <i>Crotalaria crispata</i>	ZOU BO ZHUANG ZHU SHI DOU
Crispateleaf Ardisia	T0595 <i>Ardisia crispa</i>	BAI LIANG JIN
Crisped Common Perilla	T4722 <i>Perilla frutescens</i> var. <i>crispa</i>	HUI HUI SU
Crisped Common Perilla Stem	T4723 <i>Perilla frutescens</i> var. <i>crispa</i>	HUI HUI SU GENG

Crisped Dock	T5607 <i>Rumex crispus</i>	NIU ER DA HUANG
Cristate Coelogyne	T1605 <i>Coelogyne cristata</i>	MAO CHUN BEI MU LAN
Crown Imperial	T2788 <i>Fritillaria imperialis</i>	XI BEI MU
Crown Vetch	T1702 <i>Coronilla varia</i>	DUO BIAN XIAO GUAN HUA
Crowndaisy Chrysanthemum	T1390 <i>Chrysanthemum coronarium</i>	TONG HAO
Crown-flowered Mayten	T4131 <i>Maytenus confertiflorus</i>	MI HUA MEI DENG MU
Crownofhorns Euphorbia	T2601 <i>Euphorbia milii</i>	TIE HAI TANG
Crozier Cycas	T1926 <i>Cycas circinalis</i>	QUAN YE SU TIE
Crucian Carp	T1194 <i>Carassius auratus</i>	JIN YU
Cruciate Mistletoe*	T6776 <i>Viscum cruciatum</i>	SHI ZI XING FENG JI SHENG
Cryptomeria-like Taiwania	T6284 <i>Taiwania cryptomerioides</i>	TAI WAN SHAN
Crystal Tea	T3735 <i>Ledum palustre</i>	LA BA CHA
Cuachalalate (local name)	T0431 <i>Amphipterygium adstringens</i>	SHOU LIAN LIANG YI MU
Cuba Devilpepper	T5432 <i>Rauwolfia cubana</i>	GU BA LUO FU MU
Cubeba Pepper	T4944 <i>Piper cubeba</i>	BI CHENG QIE
Cucumber	T1878 <i>Cucumis sativus</i>	HUANG GUA
Cucumber Tree	T2112 <i>Dendrosicyos socotrana</i>	
Cucumber-tree	T4033 <i>Magnolia acuminata</i>	JIAN JIAN MU LAN
Cudweed	T3026 <i>Gnaphalium affine</i> [Syn. <i>Gnaphalium multiceps</i> ]	SHU QU CAO
Cudweed-like Saussurea	T5753 <i>Saussurea gnaphaloides</i>	SHU QU FENG MAO JU
Cultivate Sisalan Agave East-1	T0221 <i>Agave east-one</i>	DONG YI HAO JIAN MA
Cultivated Aster*	T0779 <i>Aster cultivars</i>	ZAI PEI ZI WAN
Cultivated Citrus*	T1473 <i>Citrus cultivars</i>	ZAI PEI GAN JU
Cultivated Fennelflower*	T4433 <i>Nigella sativa</i>	ZAI PEI HEI ZHONG CAO
Cultivated Langsat*	T3686 <i>Lansium domesticum</i>	ZAI ZHONG LANG SE MU
Cultivated Scarlet Caterpillar Fungus*	T1681 <i>Cordyceps militaris</i> cv	REN GONG YONG CHONG CAO
Cultivated Sunflower Leaf*	T3146 <i>Helianthus annuus</i> cv	ZAI PEI XIANG RI KUI YE
Cultrate Rosewood*	T2001 <i>Dalbergia cultrata</i>	XIAO DAO XING HUANG TAN
Cumin	T1889 <i>Cuminum cyminum</i>	ZI RAN QIN
Cuming Croton*	T1842 <i>Croton cumingii</i>	KA MING BA DOU
Cummins Devilpepper*	T5433 <i>Rauwolfia cumminsii</i>	KE MING XI LUO FU MU
Cuneate Lespedeza	T3770 <i>Lespedeza cuneata</i>	YE GUAN MEN
Cuneate Monkshood*	T0134 <i>Aconitum subcuneatum</i>	XIE XING WU TOU
Cuneateleaf Eupatorium*	T2557 <i>Eupatorium cuneifolium</i>	XIE YE ZE LAN
Cupreous Cinchona*	T1427 <i>Cinchona cuprea</i>	TONG SE JI NA SHU
Curassow Heliotrope*	T3169 <i>Heliotropium curassavicum</i>	YAN TIAN JIE CAI
curillus Asparagus*	T0747 <i>Asparagus curillus</i>	WAN QU TIAN MEN DONG
Curinary Asparagus	T0751 <i>Asparagus officinalis</i>	SHI DIAO BAI
Curious Kadsura	T3614 <i>Kadsura heteroclita</i> [Syn. <i>Uvaria heteroclita</i> ]	YI XING NAN WU WEI ZI
Curly Bristlethistle	T1200 <i>Carduus crispus</i>	FEI LIAN
Curly Garden Parsley	T4748 <i>Petroselinum crispum</i>	ZHOU YE OU QIN
Curtilage Ardisia*	T0596 <i>Ardisia hortorum</i>	TING YUAN ZI JIN NIU
Curtisi Paxillus*	T4680 <i>Paxillus curtisii</i>	KE DI SI WANG ZHE JUN
Curvatura Jackintheulpit*	T0619 <i>Arisaema curvatum</i>	WAN QU TIAN NAN XING
Curvebeak Monkshood	T0082 <i>Aconitum campylorrhynchum</i>	WAN ZHUO WU TOU
Curvedflower Phlogacanthus	T4803 <i>Phlogacanthus curviflorus</i>	HUO YAN HUA
Curvedsepal St.John'swort	T3345 <i>Hypericum curvisepalum</i>	WAN E JIN SI TAO
Cushaw	T1880 <i>Cucurbita moschata</i>	NAN GUA
Cushaw Seed	T1881 <i>Cucurbita moschata</i>	NAN GUA ZI
Cushion-shaped Spikemoss	T5865 <i>Selaginella pulvinata</i>	DIAN ZHUANG JUAN BAI
Cuspate	T0762 <i>Aspidosperma cuspa</i>	JIAN BAI JIAN MU
Cuspidate Mniium Herb	T4259 <i>Mniium cuspidatum</i>	SHUI MU CAO
Cuspidate Pricklyash	T6872 <i>Zanthoxylum cuspidatum</i>	HUA JIAO LE

Custard Apple	T0513 <i>Annona squamosa</i>	FAN LI ZHI
Cutechu	T0019 <i>Acacia catechu</i>	HAI ER CHA
Cut-leaf Balsamroot	T0864 <i>Balsamorhiza macrophylla</i>	
Cutleaf Coneflower	T5604 <i>Rudbeckia laciniata</i>	JIN GUANG JU
Cutleaf Groundcherry	T4848 <i>Physalis angulata</i>	KU ZHI
Cyclamen	T1929 <i>Cyclamen europaeum</i>	OU ZHOU XIAN KE LAI
Cylinder Immortelle	T6847 <i>Xeranthemum cylindraceum</i>	CHANG TONG HAN HUA
Cymose Brassica*	T1016 <i>Brassica oleracea</i> var. <i>botrytis</i> subvar. <i>cymosa</i>	JU SAN HUA YE CAI
Dadah Artocarpus*	T0711 <i>Artocarpus dadah</i>	DA DA HE MIAN BAO GUO
Daffodil	T4379 <i>Narcissus pseudonarcissus</i>	HUANG SHUI XIAN
Daghestan Sweetclover	T4172 <i>Melilotus suaveolens</i>	PI HAN CAO
Daghestan Sweetclover Root	T4173 <i>Melilotus suaveolens</i>	PI HAN CAO GEN
Dahuria Gentian	T2910 <i>Gentiana dahurica</i>	DA WU LI QIN JIAO
Dahurian Angelica	T0478 <i>Angelica dahurica</i> [Syn. <i>Angelica porphyrocaulis</i> ]	BAI ZHI
Dahurian Bugbane	T1419 <i>Cimicifuga dahurica</i>	XING AN SHENG MA
Dahurian Larch	T3690 <i>Larix gmelini</i>	LUO YE SONG
Dahurian Loosestrife	T4001 <i>Lysimachia davurica</i>	HUANG LIAN HUA
Dahurian Patrinia	T4672 <i>Patrinia scabiosaefolia</i>	HUANG HUA BAI JIANG
Dahurian Pulsatilla*	T5326 <i>Pulsatilla dahurica</i>	XING AN BAI TOU WENG
Dahurian Rhododendron	T5508 <i>Rhododendron dauricum</i>	MAN SHAN HONG
Daimyo Oak Leaf	T5372 <i>Quercus dentata</i>	HU YE
Dalmatian Pyrethrum	T1388 <i>Chrysanthemum cinerariaefolium</i>	CHU CHONG JU
Damask Rose	T5564 <i>Rosa damascena</i>	DA MA SHI GE QIANG WEI
Danshen	T5680 <i>Salvia miltiorrhiza</i>	DAN SHEN
Dark-hair Gold-hair Moss*	T5135 <i>Polytrichum pollidisetum</i>	CANG MAO JIN FA XUAN
Darkhairy Milkvetch*	T0786 <i>Astragalus atropubescens</i>	ROU MAO HUANG QI
Darkred Rhodiola	T5493 <i>Rhodiola coccinea</i>	SHEN HONG HONG JING TIAN
Darksanguine Cinquefoil*	T5180 <i>Potentilla atrosanguinea</i>	AN HONG WEI LING CAI
Dark-yellow Corydalis	T1723 <i>Corydalis lutea</i>	SHEN HUANG ZI JIN
Darling Pea	T6208 <i>Swainsonia galegifolia</i>	SHAN YANG DOU YE KU MA DOU
Darwin Barberry	T0901 <i>Berberis darwinii</i>	DA ER WEN XIAO BO
Dateplum Persimmon	T2222 <i>Diospyros lotus</i>	JUN QIAN ZI
David Epimedium	T2392 <i>Epimedium davidii</i>	CHUAN DIAN YIN YANG HUO
David Falsepanax	T4444 <i>Nothopanax davidii</i>	YI YE LIANG WANG CHA
David Peach Bast	T5220 <i>Prunus davidiana</i>	SHAN TAO JING BAI PI
David Peach Juvenile Branch	T5221 <i>Prunus davidiana</i>	SHAN TAO ZHI
David's Spikemoss	T5860 <i>Selaginella davidii</i>	MAN SHENG JUAN BAI
Dawn Redwood	T4208 <i>Metasequoia glyptostroboides</i>	SHUI SHAN
Dawo Rabdosia	T3484 <i>Isodon dawoensis</i>	DAO FU XIANG CHA CAI
Davurian Buckthorn	T5457 <i>Rhamnus davurica</i>	SHU LI
Deadly Calabarbean	T4860 <i>Physostigma venenosum</i>	DU BIAN DOU
Deadly Carrot	T6419 <i>Thapsia garganica</i>	DU HU LUO BO
Death Cap	T0385 <i>Amanita phalloides</i>	DU E GAO
Decaline Nightshade*	T5996 <i>Solanum decemlineata</i>	SHI XIAN QIE
Decapistil Pokeweed*	T4863 <i>Phytolacca dodecandra</i>	SHI ER RUI SHANG LU
Decary Pricklyash*	T6873 <i>Zanthoxylum decaryi</i>	DE KA RUI HUA JIAO
Deciduous Cypress	T6305 <i>Taxodium distichum</i>	LUO YU SHAN
Decumbent Bugle	T0263 <i>Ajuga decumbens</i>	BAI MAO XIA KU CAO
Decumbent Corydalis	T1715 <i>Corydalis decumbens</i> [Syn. <i>Corydalis amabilis</i> ]	XIA TIAN WU
Decurrent Archangelica	T0583 <i>Archangelica decurrens</i>	XIA YAN GU DANG GUI
Deeplobed Larkspur*	T2073 <i>Delphinium dissectum</i>	SHEN LIE CUI QUE HUA
Deeplobed Merremia*	T4197 <i>Merremia dissecta</i>	SHEN LIE YU HUANG CAO
Deep-lobed-leaf Incarvillea*	T3419 <i>Incarvillea dissectifoliola</i>	SHEN LIE YE JIAO HAO

Deerbrush	T1276 <i>Ceanothus integerrimus</i>	QUAN YUAN YE MEI ZHOU CHA
Degen St. John's wort*	T3346 <i>Hypericum degenii</i>	DI GEN JIN SI TAO
Delacay Honeylocust	T2975 <i>Gleditsia delavayi</i>	YUN NAN ZAO JIA
Delavay Fritillary	T2784 <i>Fritillaria delavayi</i>	LENG SHA BEI MU
Delavay Meadowrue	T6378 <i>Thalictrum delavayi</i>	PIAN CHI TANG SONG CAO
Delavay Peony	T4582 <i>Paeonia delavayi</i>	DIAN MU DAN
Delavay Stephania	T6120 <i>Stephania delavayi</i> [Syn. <i>Stephania epigaea</i> ]	DI BU RONG
Delavay Monkshood	T0090 <i>Aconitum delavayi</i>	MA ER SHAN WU TOU
Delicate Jew's Ear*	T0831 <i>Auricularia delicata</i>	ZHOU MU ER
Delicious Actinidia	T0160 <i>Actinidia deliciosa</i>	MEI WEI MI HOU TAO
Delightful Dendrobium	T2095 <i>Dendrobium amoenum</i>	KE AI SHI HU
Delightful Skullcap*	T5832 <i>Scutellaria amabilis</i>	KE AI HUANG QIN
Delphinileaf Sopubia*	T6050 <i>Sopubia delphinifolia</i>	CUI QUE YE DUAN GUAN CAO
Deltoid Goldthread	T1664 <i>Coptis deltoidea</i>	SAN JIAO YE HUANG LIAN
Deltoid Yam	T2195 <i>Dioscorea deltoidea</i>	SAN JIAO YE SHU YU
Dendrob Mycena	T4336 <i>Mycena dendrobii</i>	SHI HU XIAO GU
Denne Dendrobium	T2096 <i>Dendrobium aurantiacum</i> var. <i>denneanum</i>	DIE QIAO SHI HU
Dense Euphorbia*	T2588 <i>Euphorbia fortissima</i>	NONG DA JI
Denseflower Dendrobium	T2100 <i>Dendrobium densiflorum</i>	MI HUA SHI HU
Denseflower Lemongrass*	T1940 <i>Cymbopogon densiflorus</i>	MI HUA XIANG MAO
Denseflower Libanotis	T3797 <i>Libanotis condensata</i>	MI HUA YAN FENG
Denseflower Loosestrife	T4000 <i>Lysimachia congestiflora</i>	JU HUA GUO LU HUANG
Denseflower Ragweed*	T0400 <i>Ambrosia confertiflora</i>	MI HUA TUN CAO
Denseflower Tylophora*	T6579 <i>Tylophora crebriflora</i>	MI HUA WA ER TENG
Densefruit Cucumber*	T1877 <i>Cucumis myriocarpus</i>	MI GUO HUANG GUA
Densefruit Pittany Root-bark	T2167 <i>Dictamnus dasycarpus</i>	BAI XIAN PI
Densevein Schefflera	T5785 <i>Schefflera venulosa</i>	MI MAI E ZHANG CHAI
Denticulate Vladimiria	T6801 <i>Vladimiria denticulata</i>	YUE XI MU XIANG
Denuded Larkspur*	T2071 <i>Delphinium denudatum</i>	LU CUI QUE
Deodar Cedar	T1282 <i>Cedrus deodara</i>	XUE SONG
Depressed Orange	T1475 <i>Citrus depressa</i>	BIAN PING JU
Depressed Plantain	T5004 <i>Plantago depressa</i>	PING CHE QIAN
Desert Rose	T0168 <i>Adenium obesum</i>	SHA MO QIANG WEI
Desertliving Asparagus*	T0750 <i>Asparagus gobicus</i>	GE BI TIAN MEN
Desertliving Cistanche	T1455 <i>Cistanche deserticola</i>	ROU CONG RONG
Desertliving Groundsel*	T5886 <i>Senecio eremophilus</i>	SHA SHENG QIAN LI GUANG
Desfontainia spinosa	T2126 <i>Desfontainia spinosa</i>	DUO CI DI SHI MU
Dew Rabdosia	T3495 <i>Isodon irrorata</i>	LU ZHU XIANG CHA CAI
Devil's Clow	T3106 <i>Harpagophytum procumbens</i>	NAN FEI GOU MA
Devil-in-a-bush	T4430 <i>Nigella arvensis</i>	YE HEI ZHONG CAO
Deviltree Alstonia	T0370 <i>Alstonia macrophylla</i>	DA YE TANG JIAO SHU
Diamondleaf Persimmon	T2226 <i>Diospyros rhombifolia</i>	LAO YA SHI
Dicentrine Stephania*	T6121 <i>Stephania dicentrinifera</i>	HE BAO DI BU RONG
Dichotoma Forked Fern	T2161 <i>Dicranopteris pedata</i> [Syn. <i>Polypodium pedatum</i> ; <i>Dicranopteris dichotoma</i> ]	MANG QI GU
Dichotomous Ervatamia*	T2441 <i>Ervatamia dichotoma</i>	ER QI GOU YA HUA
Dichotomous Fimbristylis	T2730 <i>Fimbristylis dichotoma</i>	PIAO FU CAO
Diderrichi Fatheadtree*	T4389 <i>Nauclea diderrichii</i>	DI SHI WU TAN
Diels Millettia	T4234 <i>Millettia dielsiana</i>	KUN MING JI XUE TENG
Diels Stephania	T6122 <i>Stephania dielsiana</i>	XUE SAN SHU
Diels Trema	T6494 <i>Trema dielsiana</i>	SHAN YOU MA
Difengpi Anisetree	T3400 <i>Illicium difengpi</i>	DI FENG PI
Different-flowered Indigo	T3422 <i>Indigofera heteranthazha</i>	YI HUA MU LAN



Diffract Usnea Filament	T6653 <i>Usnea diffracta</i>	HUAN JIE SONG LUO
Diffuse Boerhavia	T0969 <i>Boerhavia diffusa</i>	HUANG XI XIN
Diffuse Erysimum	T2454 <i>Erysimum diffusum</i>	TANG JIE
Digyna Caesalpinia*	T1102 <i>Caesalpinia digyna</i>	ER CI YUN SHI
Dill Fruit	T0472 <i>Anethum graveolens</i>	SHI LUO ZI
Diluteyellow Crotalaria	T1813 <i>Crotalaria albida</i>	HUANG HUA DI DING
Dinklage Stephania*	T6123 <i>Stephania dinklagei</i>	DING KE LA QIAN JIN TENG
Dioecious Nettle	T6652 <i>Urtica dioica</i>	YI ZHU QIAN MA
Dioecious Small Ephedra	T2374 <i>Ephedra minuta</i> var. <i>dioeca</i>	YI ZHU AI MA HUANG
Dioscorea sp.	T2209 <i>Dioscorea</i> sp.	
Disciform Prana*	T5190 <i>Prana discifera</i>	DA PENG TENG
Discoïd Leafflower*	T4833 <i>Phyllanthus discoides</i>	PAN ZHUANG YE XIA ZHU
Discolor Cinquefoil	T5182 <i>Potentilla discolor</i>	FAN BAI CAO
Discolor Stephania*	T6124 <i>Stephania discolor</i>	CAI WEN QIAN JIN TENG
Discolored Skullcap*	T5836 <i>Scutellaria discolor</i>	ZI BEI HUANG QIN
Discrete Xylopiya*	T6853 <i>Xylopiya discreta</i>	XI SHU MU BAN SHU
Diseed Buckthorn*	T5458 <i>Rhamnus disperma</i>	SHUANG ZHONG ZI SHU LI
Disparate Beautyleaf*	T1128 <i>Calophyllum dispar</i>	BU DENG HONG HOU KE
Divaricate Bluebeard	T1221 <i>Caryopteris divaricata</i>	YOU <sup>(2)</sup>
Divaricate Ervatamia	T2442 <i>Ervatamia divaricata</i>	DAN BAN GOU YA HUA
Divaricate Poisonnut*	T6170 <i>Strychnos divaricans</i>	FEN CHA MA QIAN ZI
Divaricate Saposhnikovia	T5727 <i>Saposhnikovia divaricata</i> [Syn. <i>Ledebouriella seseloides</i> ]	FANG FENG
Divaricate Strophanthus Seed	T6155 <i>Strophanthus divaricatus</i>	YANG JIAO AO ZI
Diverse Worm-wood	T0661 <i>Artemisia anomala</i>	LIU JI NU
Diversifolious Hemiphragma	T3201 <i>Hemiphragma heterophyllum</i>	BIAN DA XIU QIU
Diversifolious Patrinia	T4670 <i>Patrinia heterophylla</i>	YI YE BAI JIANG
Diversileaf Artocarpus	T0713 <i>Artocarpus heterophyllus</i>	BO LUO MI
Diversileaf Jackintheulpit	T0620 <i>Arisaema heterophyllum</i>	YI YE TIAN NAN XING
Dives Eucalyptus*	T2508 <i>Eucalyptus dives</i>	FU AN
Dockleaf Goldenray	T3809 <i>Ligularia lapathifolia</i>	NIU BANG YE DU WU
Dockleaved Knotweed	T5106 <i>Polygonum lapathifolium</i>	YU LIAO
Dodecapistil Spiderflower*	T5060 <i>Polanisia dodecandra</i>	SHI ER RUI CHOU SHI CAI
Doederlein's Spikemoss	T5861 <i>Selaginella doederleinii</i>	DA YE CAI
Dog Heart	T1171 <i>Canis familiaris</i>	GOU XIN
Dog Meat	T1170 <i>Canis familiaris</i>	GOU ROU
Dog Rose	T5561 <i>Rosa canina</i>	QUAN CHI QIANG WEI
Dogbane	T0553 <i>Apocynum venetum</i>	LUO BU MA
Dolphin	T2092 <i>Delphinus delphis</i>	HAI TUN YU
Domestic Apple*	T4087 <i>Malus domestica</i>	PING GUO HAI TANG
Doublepetalous Daylily*	T3194 <i>Hemerocallis fulva</i> var. <i>kwanso</i>	CHONG BAN XUAN CAO
Doubleteeth Pubescent Angelica	T0492 <i>Angelica pubescens</i> f. <i>biserrata</i> [Syn. <i>Angelica pubescens</i> ]	DU HUO
Douglas Wormwood*	T0675 <i>Artemisia douglasiana</i>	DAO SHI HAO
Downy Cherry	T5244 <i>Prunus tomentosa</i>	SHAN YING TAO
Downy Groundcherry	T4854 <i>Physalis pubescens</i>	KU ZHI
Downy Rosemyrtle Leaf	T5528 <i>Rhodomyrtus tomentosa</i>	SHAN REN YE
Drac Croton*	T1843 <i>Croton draco</i>	DE LA KE BA DOU
Draco Yellowvine*	T1994 <i>Daemonorops draco</i>	QI LIN JIE
Dracunculi-leaf Pluche*	T0844 <i>Baccharis dracunculifolia</i>	XIAO LONG YE KUO BAO JU
Dragon Juniper	T3582 <i>Juniperus chinensis</i> var. <i>kaizuka</i>	LONG BAI
Dragonhead	T2257 <i>Dracocephalum moldavicum</i>	XIANG QING LAN
Dragontree	T2254 <i>Dracaena draco</i>	LONG XUE SHU
Dried Chinese Woodfrog	T5409 <i>Rana temporaria chensinensis</i> ; <i>Rana amurensis</i>	HA SHI MA
Drooping Alder*	T0330 <i>Alnus pendula</i>	CHUI QI MU

Drooping Sedge*	T1203 <i>Carex pendula</i>	XIA CHUI TAI CAO
Drooping Snailseed*	T1588 <i>Cocculus pendulus</i>	CHUI MU FANG JI
Droughtdysentery Holarrhena Bark	T3263 <i>Holarrhena antidysenterica</i>	ZHI XIE MU PI
Drug Snowbell	T6202 <i>Styrax officinalis</i>	YAO YONG AN XI XIANG
Drug Sweetflag	T0142 <i>Acorus calamus</i>	BAI CHANG
Drummond St.John'swort	T3347 <i>Hypericum drummondii</i>	DE LA MENG DE JIN SI TAO
Drupaceous Plumyew*	T1317 <i>Cephalotaxus drupacea</i>	HE GUO CU FEI
Drupaceous Scurfpea*	T5271 <i>Psoralea drupacea</i>	HE GUO ZHUANG BU GU ZHI
Dry Silene	T5955 <i>Silene jensisensis</i>	HAN MAI PING CAO
Dry-living Rabdosia	T3536 <i>Isodon xerophilus</i>	HAN SHENG XIANG CHA CAI
Dubious Barberry	T0903 <i>Berberis dubia</i>	ZHI YI XIAO BO
Duhat	T6266 <i>Syzygium cumini</i>	YANG SHI GUO
Dulcin Garcinia*	T2853 <i>Garcinia dulcis</i>	TIAN SHAN ZHU ZI
Dunn Wampee	T1534 <i>Clausena dunniana</i>	HEI GUO HUANG PI
Dunn's Plagiogyria	T4997 <i>Plagiogyria dunnii</i>	DAO YE LIU ZU JUE
Dutchman's Breeches	T2148 <i>Dicentra cucullaria</i>	DOU ZHUANG HE BAO MU DAN
Dutchmanspipe	T0638 <i>Aristolochia siphon</i>	OU ZHOU MA DOU LING
Dwarf Chickling Pea	T3703 <i>Lathyrus cicera</i>	BIAN JIA SHAN LI DOU
Dwarf Cornel	T1699 <i>Cornus suecica</i>	AI LAI MU
Dwarf Flowering Cherry Seed	T5224 <i>Prunus japonica</i> [Syn. <i>Cerasus japonica</i> ]	YU LI REN
Dwarf Gorse	T6592 <i>Ulex nanus</i>	AI JING DOU
Dwarf Many-flowered May-apple	T2298 <i>Dysosma difformis</i>	XIAO BA JIAO LIAN
Dwarf Marigold	T5805 <i>Schkuhria pinnata</i>	SHI KU JU
Dwarf Nightshade*	T5997 <i>Solanum demissum</i>	AI QIE
Dwarf Ophiorrhiza	T4514 <i>Ophiorrhiza pumila</i>	DUAN XIAO SHE GEN CAO
Dwarf Pomegranate	T5333 <i>Punica granatum</i> cv. <i>nana</i>	YUE JI SHI LIU
Dwarf Sunflower*	T3152 <i>Helianthus pumilus</i>	AI XIANG RI KUI
Dyebark Evodia	T2643 <i>Evodia meliifolia</i>	LIAN YE WU ZHU YU
Dyed Morinda	T4285 <i>Morinda tinctoria</i>	RAN SE JI YAN TENG
Dye-maker's False Puffboll	T4978 <i>Pisolithus tinctorius</i> [Syn. <i>Lycoperdon capitatum</i> ; <i>Scleroderma tinctorium</i> ]	DOU BAO JUN
Dyer's Alkanet	T0304 <i>Alkanna tinctoria</i>	OU ZI CAO
Dyers Woad	T3477 <i>Isatis tinctoria</i>	OU ZHOU SONG LAN
Dytree Leaf	T5010 <i>Platycarya strobilacea</i>	HUA XIANG SHU YE
Dzungaria Hogfennel*	T4763 <i>Peucedanum morisonii</i>	ZHUN GE ER QIAN HU
Dzungaria Monkshood	T0131 <i>Aconitum soongaricum</i>	ZHUN GE ER WU TOU
E.Chuan Swertia	T6217 <i>Swertia davidii</i>	CHUAN DONG ZHANG YA CAI
Eaglewood	T0554 <i>Aquilaria agallocha</i>	CHEN XIANG
Early Lilac	T6260 <i>Syringa oblata</i>	ZI DING XIANG
Early Meadowrue	T6379 <i>Thalictrum dioicum</i>	YI XING TANG SONG CAO
Earthworm	T4796 <i>Pheretima aspergillum</i> ; <i>Allolobophora caliginosa trapezoides</i>	QIU YIN
East African Sandalwood	T4556 <i>Osyris tenuifolia</i>	XIAO HUA SHA ZHEN
East China Globethistle	T2316 <i>Echinops grijsii</i>	HUA DONG LAN CI TOU
East-African Poisonnut*	T6191 <i>Strychnos usambarensis</i>	DONG FEI MA QIAN
East-African Senna*	T1246 <i>Cassia singuana</i>	DONG FEI JUE MING
East-Anatolia Centaurea*	T1307 <i>Centaurea pseudoscabiosa</i> ssp. <i>pseudoscabiosa</i>	DONG AN NA TUO LI YA SHI CHE JU
East-Asia Low Meadowrue	T6414 <i>Thalictrum thunbergii</i>	YAN GUO CAO
Easter Heraldtrumpet	T0886 <i>Beaumontia grandiflora</i>	QING MING HUA
Eastern Arborvitae	T6438 <i>Thuja occidentalis</i>	BEI MEI YA BAI
Eastern Bracken Fern	T5284 <i>Pteridium aquilinum</i> var. <i>latiusculum</i>	JUE
Eastern Groundsel	T5914 <i>Senecio vernalis</i>	CHUN QIAN LI GUANG
Eastern Monkshood	T0121 <i>Aconitum orientale</i>	GAO JIA SUO WU TOU

Eastern Wahoo	T2537 <i>Euonymus atropurpureus</i>	ZI GUO WEI MAO
Easy-lobed Tyromyces*	T6589 <i>Tyromyces fissilis</i>	YI LYE GAN LAO JUN
Ebei Fritillary	T2785 <i>Fritillaria ebeiensis</i>	E BEI BEI MU
Ebracteolate Euphorbia	T2584 <i>Euphorbia ebracteolata</i>	YUE XIAN DA JI
Ecasto-leaf Rosewood*	T2002 <i>Dalbergia ecastophyllum</i>	YI KA TUO YE HUANG TAN
Echinate Licorice*	T3012 <i>Glycyrrhiza echinata</i>	JI GAN CAO
Echiumlike Andrographis	T0453 <i>Andrographis echioides</i>	LAN JI CHUAN XIN LIAN
Edible Abelmoschus	T3240 <i>Hibiscus esculentus</i>	KA FEI HUANG KUI
Edible Aglaia*	T0233 <i>Aglaia edulis</i>	KE SHI MI ZI LAN
Edible Bamboo	T4844 <i>Phyllostachys edulis</i>	MENG ZONG ZHU
Edible Bitterleaf	T6716 <i>Vernonia esculenta</i>	BAN JIU JU
Edible Canna	T1172 <i>Canna edulis</i>	JIAO YU
Edible Casimiroa	T1226 <i>Casimiroa edulis</i>	XIANG ROU GUO
Edible Eugenia*	T2532 <i>Eugenia edulis</i>	KE SHI FAN YING TAO
Edible Kudzuvine	T5312 <i>Pueraria edulis</i>	SHI YONG GE
Edible Milkvetch*	T0792 <i>Astragalus cibaricus</i>	SHI YONG HUANG QI
Edible Oxystelma Variety*	T4566 <i>Oxystelma esculentum</i> var. <i>alpini</i>	BIAN ZHONG JIAN HUAI TENG
Edible Tulip	T6560 <i>Tulipa edulis</i>	GUANG CI GU
Eelgrass	T6683 <i>Vallisneria spiralis</i>	KU CAO
Egypt Cultivate Coralbean*	T2469 <i>Erythrina lysistemon</i>	AI JI ZAI PEI CI TONG
Egypt Planted Iris	T3455 <i>Iris carthaliniae</i>	AI JI ZHONG ZHI YUAN WEI
Egyptian Carissa	T1207 <i>Carissa edulis</i>	AI JI JIA HU CI
Egyptian Clover*	T6516 <i>Trifolium alexandrinum</i>	AI JI CHE ZHOU CAO
Egyptian Cottonthistle*	T4495 <i>Onopordum alexandrinum</i>	AI JI DA CHI JI
Egyptian Groundsel	T5876 <i>Senecio aegypticus</i>	AI JI QIAN LI GUANG
Egyptian Sage*	T5659 <i>Salvia aegyptiaca</i>	AI JI SHU WEI CAO
Eichwald Heliotrope*	T3170 <i>Heliotropium eichwaldii</i>	AI SHI TIAN JIE CAI
Einkorn	T6545 <i>Triticum monococcum</i>	DAN LI XIAO MAI
Elder*	T5707 <i>Sambucus williamsii</i>	JIE GU MU
Elecampane Inula	T3431 <i>Inula helenium</i>	TU MU XIANG
Elegant Goldenray*	T3804 <i>Ligularia elegans</i>	YA ZHI TUO WU
Elegant Sneezeweed*	T3137 <i>Helenium elegans</i>	YA MEI DUI XIN JU
Elegant Stephania	T6125 <i>Stephania elegans</i>	YA LI QIAN JIN TENG
Elephant Bone	T2337 <i>Elephas maximus</i>	XIANG GU
Elephant Gall	T2336 <i>Elephas maximus</i>	XIANG DAN
Elephant Meat	T2338 <i>Elephas maximus</i>	XIANG ROU
Elephant Tree	T1081 <i>Bursera microphylla</i>	XIAO YE LIE LAN
Ellgrass	T6925 <i>Zostera marina</i>	HAI DAI
Ellipse Navicula*	T4394 <i>Navicula delognei</i> f. <i>elliptica</i>	TUO YUAN ZHOU XING ZAO
Elliptic Aglaia*	T0234 <i>Aglaia elliptica</i>	TUE YUAN MI ZI LAN
Elliptic Gambirplant*	T6614 <i>Uncaria elliptica</i>	TUO YUAN GOU TENG
Elliptic Gynura*	T3087 <i>Gynura elliptica</i>	TUO YUAN SAN QI CAO
Elliptical Erycibe	T2447 <i>Erycibe elliptilimba</i>	AO MAI DING GONG TENG
Elliptical Ochrosia	T4469 <i>Ochrosia elliptica</i>	GU CHENG MEI GUI SHU
Ellipticleaf Olibanum*	T0995 <i>Boswellia ovalifoliolata</i>	TUO YUAN YE RU XIANG SHU
Ellipticleaf Pricklyash*	T6885 <i>Zanthoxylum ovalifolium</i>	TUO YUAN YE HUA JIAO
Ellisi Porous Agaric*	T5128 <i>Polyporus ellisii</i>	AI LI SI DUO KONG JUN
Elm-leaf Rasperry*	T5602 <i>Rubus ulmifolius</i>	YU YE MAO MEI
Elodia St.John'swort	T3348 <i>Hypericum elodeoides</i>	TING JING BIAN DI JIN
Elongate Andrographis*	T0454 <i>Andrographis elongata</i>	SHEN CHANG CHUAN XIN LIAN
Elongate Barrenwort	T2394 <i>Epimedium elongatum</i>	CHUAN XI YIN YANG HUO
Emarginate Amaranth	T0388 <i>Amaranthus lividus</i>	AO TOU XIAN
Emarginate Soapberry Seed	T5718 <i>Sapindus emarginatus</i>	AO TOU WU HUAN ZI

Emblc Leafflower	T4834 <i>Phyllanthus emblica</i>	AN MO LE
Emblc Leafflower Bark	T4836 <i>Phyllanthus emblica</i>	YOU GAN MU PI
Emblc Leafflower Leaf	T4837 <i>Phyllanthus emblica</i>	YOU GAN YE
Emblc Leafflower Root	T4835 <i>Phyllanthus emblica</i>	YOU GAN GEN
Emei Larkspur	T2081 <i>Delphinium omeiense</i>	E MEI CUI QUE HUA
Emei Spikemoss*	T5864 <i>Selaginella omeiensis</i>	E MEI JUAN BAI
Emitic Devilpepper	T5427 <i>Rauvolfia vomitoria</i>	CUI TU LUO FU MU
English Daisy	T0893 <i>Bellis perennis</i>	CHU JU
English Ivy	T3112 <i>Hedera helix</i>	YANG CHANG CHUN TENG
English Walnut Bark	T3569 <i>Juglans regia</i>	HU TAO SHU PI
English Walnut Exocarp	T3567 <i>Juglans regia</i>	HU TAO QING PI
English Walnut Leaf	T3570 <i>Juglans regia</i>	HU TAO YE
English Walnut Seed	T3568 <i>Juglans regia</i>	HU TAO REN
Enormous Euphorbia	T2593 <i>Euphorbia ingens</i>	JU DA JI
Entire Groundsel	T5889 <i>Senecio integerrimus</i>	QUAN YUAN QIAN LI GUANG
Entire Micromelum	T4223 <i>Micromelum integerrimum</i>	XIAO YUN MU
Entire Ochna	T4465 <i>Ochna integerrima</i>	JIN LIAN MU
Entireleaf Gymnopetalum	T3081 <i>Gymnopetalum integrifolium</i>	FENG GUA
Erect Fig	T2716 <i>Ficus beecheyana</i> [Syn. <i>Ficus erecta</i> var. <i>beecheyana</i> ]	TIAN XIAN GUO
Erect Hypecoum	T3332 <i>Hypecoum erectum</i>	ZHI LI JIAO HUI XIANG
Erect Juniper*	T3586 <i>Juniperus erectopatens</i>	ZHI LI CI BAI
Erect Periwinkle	T6759 <i>Vinca erecta</i>	ZHI LI CHANG CHUN HUA
Erect St.John'swort	T3349 <i>Hypericum erectum</i>	XIAO LIAN QIAO
Erect Stephania*	T6126 <i>Stephania erecta</i>	ZHI LI QIAN JIN TENG
Ergot	T1541 <i>Claviceps purpurea</i>	MAI JIAO
Ermans Birch	T0931 <i>Betula ermanii</i>	YUE HUA
Ernest Milkvetch*	T0794 <i>Astragalus ernestii</i>	SUO GUO HUANG QI
Eschscholtz Falsehellebore*	T6695 <i>Veratrum eschscholtzii</i>	AI XI SHOU SHI LI LU
Ethiopian Jujube*	T6921 <i>Zizyphus abyssinica</i>	AI SAI E BI YA ZAO
Eucalyptus Leaf	T2510 <i>Eucalyptus globulus</i>	AN YE
Euchretaleaf Common Jasminorange	T4317 <i>Murraya euchrestifolia</i> [Syn. <i>Clausena euchrestifolia</i> ]	DOU YE JIU LI XIANG
Eucommia	T2530 <i>Eucommia ulmoides</i>	DU ZHONG
Eucommia Leaf	T2531 <i>Eucommia ulmoides</i>	DU ZHONG YE
Eupatoriumlike Inula	T3429 <i>Inula eupatorioides</i>	ZE LAN YANG ER JU
Eurasia Greenbrier	T5974 <i>Smilax aspera</i>	SUI BA QIA
European Alder	T0326 <i>Alnus glutinosa</i>	OU ZHOU QI MU
European Ash	T2768 <i>Fraxinus excelsior</i>	OU ZHOU BAI LA SHU
European Barberry	T0919 <i>Berberis vulgaris</i>	OU ZHOU XIAO BO
European Beech	T2662 <i>Fagus sylvatica</i>	OU ZHOU SHUI QING GANG
European Bladdernut, Pinnate Bladdernut	T6098 <i>Staphylea pinnata</i>	OU ZHOU SHENG GU YOU
European Boxwood	T1094 <i>Buxus sempervirens</i>	JIN SHU HUANG YANG
European Bugleweed	T3979 <i>Lycopus europaeus</i>	OU DI SUN
European Columbine	T0558 <i>Aquilegia vulgaris</i>	OU ZHOU LOU DOU CAI
European Cowlily	T4449 <i>Nuphar luteum</i>	OU ZHOU PING PENG CAO
European Cowparsnip*	T3220 <i>Heracleum pyrenaicum</i>	OU ZHOU DU HUO
European Euonymus	T2539 <i>Euonymus europaeus</i>	OU ZHOU WEI MAO
European Goldenrod	T6023 <i>Solidago virgaurea</i>	MAO GUO YI ZHI HUANG HUA
European Grape	T6798 <i>Vitis vinifera</i>	PU TAO
European Grape Stem and Leaf	T6799 <i>Vitis vinifera</i>	PU TAO TENG YE
European Gymnadenia	T3076 <i>Gymnadenia albida</i>	BAI SHOU SHEN
European Hop Female-flower	T3289 <i>Humulus lupulus</i>	PI JIU HUA
European Ladyslipper	T1983 <i>Cypripedium calceolus</i>	SHAO LAN
European Leadwort*	T5027 <i>Plumbago europaea</i>	OU ZHOU LAN MO LI

European Mountainash	T6053 <i>Sorbus aucuparia</i>	OU ZHOU HUA QIU
European Privet	T3831 <i>Ligustrum vulgare</i>	OU ZHOU NV ZHEN
European Pyrola	T5351 <i>Pyrola rotundifolia</i>	YUAN YE LU TI CAO
European Scopolia	T5820 <i>Scopolia carniolica</i>	OU LANG DANG
European Silver Fir	T0003 <i>Abies alba</i>	OU ZHOU LENG SHAN
European Stickseed	T3688 <i>Lappula echinata</i>	DONG BEI HE SHI
European Strawberry	T2764 <i>Fragaria vesca</i>	YE CAO MEI
European Waterhemlock Root	T1416 <i>Cicuta virosa</i>	DU QIN GEN
European Verbena	T6709 <i>Verbena officinalis</i>	MA BIAN CAO
Evergreen Dogwood	T1696 <i>Cornus capitata</i> [Syn. <i>Dendrobenthamia capitata</i> ]	JI SU ZI
Evergreen Euonymus	T2542 <i>Euonymus japonicus</i>	TIAO JING CAO
Evergreen Mucuna	T4311 <i>Mucuna sempervirens</i>	CHANG CHUN YOU MA TENG
Evergreen Wood Fern	T2283 <i>Dryopteris marginalis</i>	BIAN BAO LIN MAO JUE
Everlasting Pea	T3704 <i>Lathyrus latifolius</i>	SU GEN XIANG WAN DOU
Ewers Stonecrop*	T5854 <i>Sedum ewersii</i>	YI WO SI JING TIAN
Expanse Erycibe*	T2448 <i>Erycibe expansa</i>	GUANG BU DING GONG TENG
Expansum Fig*	T4201 <i>Mesembryanthemum expansum</i>	KUO ZHANG SONG YE JU
Extended Wingfruitvine	T4350 <i>Myriopteron extensum</i>	CHI GUO TENG
Extracts of Aloe spp.	T0346 <i>Aloe</i> spp.	DUO ZHONG LU HUI TI QU WU
Extreme-fragrant Machilus*	T4017 <i>Machilus odoratissima</i>	JI XIANG RUN NAN
Extreme-fragrant Tailgrape*	T0655 <i>Artabotrys odoratissimus</i>	JI XIANG YING ZHAO
Extreme-fragrant Yarrow*	T0062 <i>Achillea fragrantissima</i>	JI XIANG SHI CAO
Extreme-wide Coralbean*	T2467 <i>Erythrina latissima</i>	JI KUAN CI TONG
Eyelid-leaf Sage*	T5660 <i>Salvia blepharophylla</i>	JIE MAO YE SHU WEI CAO
Eyeshaped Dendrobium	T2102 <i>Dendrobium fimbriatum</i> var. <i>oculatum</i>	LIU SU SHI HU
Faber Galeola	T2826 <i>Galeola faberi</i>	SHAN HU LAN
Faber Groundsel	T5887 <i>Senecio faberi</i>	MI SAN QIAN LI GUANG
Faber Meadowrue	T6381 <i>Thalictrum faberi</i>	DA YE TANG SONG CAO
Faber's St. John'swort	T3350 <i>Hypericum faberi</i>	YANG ZI XIAO LIAN QIAO
Fairy Primrose	T5199 <i>Primula malacoides</i>	BAO CHUN HUA
Falcate Micromelum	T4221 <i>Micromelum falcatum</i>	XIAO GAN
Falcate Milkvetch*	T0795 <i>Astragalus falcatus</i>	LIAN XING HUANG QI
Falcon Monkshood*	T0092 <i>Aconitum falconeri</i>	FA KANG WU TOU
Fallax Cladonia Lichen	T1525 <i>Cladonia fallax</i>	JIN SHUA BA
Falsa Arnica (in Brazil)	T3952 <i>Lychnophora ericoides</i>	
False Chinese Swertia	T6231 <i>Swertia pseudochinensis</i>	ZHANG YA CAI
False Goldenray*	T3818 <i>Ligulariopsis shichuana</i>	JIA TUO WU
False Iris*	T3470 <i>Iris spuria</i>	JIA YUAN WEI
False Narcissus*	T4380 <i>Narcissus pseudonarcissus</i> ssp. <i>pseudonarcissus</i>	JIA SHUI XIAN
False Simon Poplar	T5157 <i>Populus pseudo-simonii</i>	XIAO QING YANG
Falselittleconical Rabdosia	T5390 <i>Rabdosia coetsoides</i>	JIA XI ZHUI XIANG CHA CAI
Falsenettleleaf Pepper	T4938 <i>Piper boehmeriaefolium</i>	ZHU YE JU
Falsesour Cherry	T5236 <i>Prunus pseudocerasus</i>	YING TAO
Fangchi	T0628 <i>Aristolochia fangchi</i>	GUANG FANG JI
Fan-shaped Coralloidiscus	T1672 <i>Coralloidiscus flabellatus</i> [Syn. <i>Didissandra flabellat</i> ]	SHI DAN CAO
Farges Aralia	T0574 <i>Aralia fargesii</i>	LONG YAN DU HUO
Farges Epimedium	T2395 <i>Epimedium fargesii</i>	CHUAN E YIN YANG HUO
Farges Glorybower*	T1564 <i>Clerodendron trichotomum</i> var. <i>fargesii</i>	AI TONG ZI
Farges Holboellia	T3270 <i>Holboellia fargesii</i>	WU YE GUA TENG
Farges Meadowrue	T6382 <i>Thalictrum fargesii</i>	CHENG KOU TANG SONG CAO
Farges Paris	T4647 <i>Paris fargesii</i>	QIU YAO GE CHONG LOU
Fascicled Bushmint*	T3379 <i>Hyptis fasciculata</i>	CU SHENG SHAN XIANG
Fascicled Swertia*	T6220 <i>Swertia fasciculata</i>	CU HUA ZHANG YA CAI

Fasle Yellowflower Milkwort*	T5075 <i>Polygala fallax</i> [Syn. <i>Polygala aureocauda</i> ]	JIA HUANG HUA YUAN ZHI
Fatraina (in Madagascar)	T5702 <i>Samadera madagascariensis</i>	MA DAO HUANG LIAN SHU
Faurie Crapemyrtle*	T3669 <i>Lagerstroemia fauriei</i>	FU RUI ZI WEI
Faurie Shield Fern*	T5132 <i>Polystichum fauriei</i>	FU RUI ER JUE
Faurie's Brake	T5290 <i>Pteris fauriei</i> [Syn. <i>Pteris fauriei</i> var. <i>minor</i> ]	JIN CHAI FENG WEI JUE
Feather Cockscomb	T1296 <i>Celosia argentea</i>	QIANG XIANG
Feathered Geranium	T1362 <i>Chenopodium botrys</i>	XIANG LI
Featherleaf Rodgersflower	T5555 <i>Rodgersia pinnata</i>	YU YE GUI DENG QING
Febrifuge Holarrhena*	T3265 <i>Holarrhena febrifuga</i>	TUI RE ZHI XIE MU
Female fall webworm moth	T3370 <i>Hyphantria cunea</i>	
Fen Orchid	T3862 <i>Liparis loeselii</i>	LUO XI YANG ER SUAN
Fendler's Meadowrue	T6383 <i>Thalictrum fendleri</i>	FEN SHI TANG SONG CAO
Fengqing Kadsura	T3615 <i>Kadsura interior</i>	NEI NAN WU WEI ZI
Fennel Fruit	T2744 <i>Foeniculum vulgare</i>	HUI XIANG
Fennel Root	T2745 <i>Foeniculum vulgare</i>	HUI XIANG GEN
Fennel Stem and Leaf	T2746 <i>Foeniculum vulgare</i>	HUI XIANG JING YE
Fennelleaf Pondweed	T5177 <i>Potamogeton pectinatus</i>	<i>BI CHI YAN ZI CAI</i>
Fernlike Asparagus	T0749 <i>Asparagus filicinus</i>	TU BAI BU
Ferruginous Rosewood*	T2003 <i>Dalbergia ferruginea</i>	TIE XIU SE HUANG TAN
Ferruginous Snowbell*	T6198 <i>Styrax ferrugineus</i>	<i>XIU SE AN XI XIANG</i>
Fewcalycle Groundsel*	T5895 <i>Senecio paucicazyculatus</i>	SHAO FU E QIAN LI GUANG
Feverfew	T6294 <i>Tanacetum parthenium</i>	CHU AI JU
Fevervine	T4577 <i>Paederia scandens</i>	JI SHI TENG
Fevervine Fruit	T4578 <i>Paederia scandens</i>	JI SHI TENG GUO
Fewflower Kopsia*	T3644 <i>Kopsia pauciflora</i>	SHAO HUA RUI MU
Fewflower Lysionotus	T4005 <i>Lysionotus pauciflorus</i>	SHI DIAO LAN
Few-flowered Fumitory	T2810 <i>Fumaria vaillantii</i>	WEI LAN QIU GUO ZI JIN
Fewradiate Bailai's Chrysanthemum*	T0855 <i>Baileya pauciradiata</i>	SHAO BIAN HUA BAI LAI SHI JU
Ffat-footed Clitocybe	T1576 <i>Clitocybe clavipes</i>	BANG BING BEI SAN
Fiddle-leaf Resurrectionlily*	T3622 <i>Kaempferia pandurata</i>	TI QIN ZHUANG SHAN NAI
Field Bindweed	T1650 <i>Convolvulus arvensis</i>	TIAN XUAN HUA
Field Goniiothalamus*	T3042 <i>Goniiothalamus arvensis</i>	TIAN YE GE NA XIANG
Field Groundsel	T5894 <i>Senecio oryzetorum</i>	DA BAI DING CAO
Field Lacquertree	T6482 <i>Toxicodendron succedaneum</i> [Syn. <i>Rhus succedanea</i> ]	LIN BEI ZI
Field Marigold	T1112 <i>Calendula arvensis</i>	XIAO JIN ZHAN HUA
Field Pepperwort	T3756 <i>Lepidium campestre</i>	HUANG YE DU XING CAI
Field Sowthistle	T6025 <i>Sonchus arvensis</i>	NIU SHE TOU
Fig	T2717 <i>Ficus carica</i>	WU HUA GUO
Fig Leaf	T2718 <i>Ficus carica</i>	WU HUA GUO YE
Figuerleaved Brake	T5289 <i>Pteris dactylina</i>	JIN JI WEI
Figwortflower Picrorhiza	T4888 <i>Picrorhiza scrophulariiflora</i>	XI ZANG HU HUANG LIAN
Fiji Fagara*	T2655 <i>Fagara vitiensis</i>	FEI JI AI JIAO
Fiji Garcinia*	T2871 <i>Garcinia pseudoguttifera</i>	FEI JI TENG HUANG
Filamentary Meadowrue	T6384 <i>Thalictrum filamentosum</i>	HUA TANG SONG CAO
Filiform Cassytha	T1251 <i>Cassytha filiformis</i>	WU YE TENG
Fimbriate Dendrobium*	T2101 <i>Dendrobium fimbriatum</i>	LIU SU JIN SHI HU
Fimbriate Falsehellebore*	T6696 <i>Veratrum fimbriatum</i>	LIU SU LI LU
Findley Dendrobium*	T2103 <i>Dendrobium findleyanum</i>	FEN LAI SHI HU
Fineleaf Schizonepeta	T5804 <i>Schizonepeta tenuifolia</i> [Syn. <i>Nepeta tenuifolia</i> ]	JING JIE
Fine-leaved Fumitory	T2808 <i>Fumaria parviflora</i>	XIAO HUA QIU GUO ZI JIN
Fine-leaved Gay-feather*	T3795 <i>Liatris tenuifolia</i>	XI YE SHE BIAN JU
Fine-leaved Sneezeweed	T3141 <i>Helenium tenuifolium</i>	XI YE DUI XIN JU
Fine-leaved Yarrow	T0064 <i>Achillea leptophylla</i>	XI YE SHI

Fine-nerved Plagiogyria	T4998 <i>Plagiogyria euphlebia</i>	HUA ZHONG LIU ZU JUE
Finet Monkshood	T0094 <i>Aconitum finetianum</i>	GAN WAN WU TOU
Fingerleaf Rodgersflower	T5554 <i>Rodgersia aesculifolia</i>	MU HE
First Wormwood	T0689 <i>Artemisia princeps</i>	KUI HAO
Fischer Euphorbia	T2587 <i>Euphorbia fischeriana</i>	LANG DU DA JI
Fish Pelargonium	T4691 <i>Pelargonium hortorum</i>	SHI LA HONG
Fisherman Leafflower*	T4841 <i>Phyllanthus piscatorum</i>	YU FU YE XIA ZHU
Fishhook Cactus	T4097 <i>Mammillaria microcarpa</i>	XIAO GUO YIN MAO QIU
Fistular Onion	T0314 <i>Allium fistulosum</i>	CONG BAI
Fiveangular Senna*	T1243 <i>Cassia quinquangula</i>	WU LENG JUE MING
Fiveleaf Akebia	T0273 <i>Akebia quinata</i>	MU TONG
Fiveleaf Akebia Root	T0274 <i>Akebia quinata</i>	MU TONG GEN
Fiveleaf Akebia Seed	T0275 <i>Akebia quinata</i>	YU ZHI ZI
Fiveleaf Carpetweed	T4261 <i>Mollugo pentaphylla</i>	SU MI CAO
Fiveleaf Crotalaria*	T1829 <i>Crotalaria quinquefolia</i>	WU YE ZHU SHI DOU
Fiveleaf Gynostemma	T3085 <i>Gynostemma pentaphyllum</i>	JIAO GU LAN
Five-leaf Merremia*	T4198 <i>Merremia quinquefolia</i>	WU YE YU HUANG CAO
Fiveribbed Thyme	T6450 <i>Thymus quinquecostatus</i>	WU MAI BAI LI XIANG
Five-room Honeysuckle*	T3917 <i>Lonicera quinquelocularis</i>	WU SHI REN DONG
Fivestyle Larkspur*	T2083 <i>Delphinium pentagynum</i>	WU ZHU FEI YAN CAO
Flabellate Galangal*	T0355 <i>Alpinia flabellata</i>	SHAN SHAN JIANG
Flaccid Anemone	T0467 <i>Anemone flaccida</i>	E ZHANG CAO
Flaccid Knotweed	T5105 <i>Polygonum hydropiper</i> var. <i>flaccidum</i> [Syn. <i>Polygonum flaccidum</i> ]	LA LIAO
Flagelliform Liverwort*	T0885 <i>Bazzania trilobata</i>	BIAN TAI
Flamboyanttree	T2060 <i>Delonix regia</i>	FENG HUANG MU
Flameray Gerbera	T2951 <i>Gerbera jamesonii</i>	FU LANG HUA
Flannel Mullein	T6705 <i>Verbascum thapsus</i>	MAO RUI HUA
Flatfruit Gynostemma	T3083 <i>Gynostemma compressum</i>	BIAN GUO JIAO GU LAN
Flatshoot Mistletoe	T6774 <i>Viscum articulatum</i>	FENG XIANG JI SHENG
Flatshort Mistletoe	T6773 <i>Viscum articulatum</i>	BIAN ZHI HU JI SHENG
Flatspine Pricklyash Bark	T6894 <i>Zanthoxylum simulans</i>	YE HUA JIAO PI
Flatspine Pricklyash Leaf	T6895 <i>Zanthoxylum simulans</i>	YE HUA JIAO YE
Flatspine Pricklyash Root	T6893 <i>Zanthoxylum simulans</i>	YE HUA JIAO GEN
Flatstem Lilyturf*	T4508 <i>Ophiopogon planiscapus</i>	BIAN JING YAN JIE CAO
Flatstem Milkvetch	T0793 <i>Astragalus complanatus</i>	BIAN JING HUANG QI
Flatstiped Corydalis	T1727 <i>Corydalis mucronifera</i>	BIAN BING HUANG JIN
Flavescent Crotalaria*	T1820 <i>Crotalaria fulva</i>	AN HUANG ZHU SHI DOU
Flavescent Croton*	T1845 <i>Croton flavens</i>	DAN HUANG BA DOU
Flax Lily	T2141 <i>Dianella tasmanica</i>	TA SI MA NI YA JIE GENG LAN
Fleecy Milk-cap	T3657 <i>Lactarius vellereus</i>	RONG BAI RU GU
Fleshfingered Citron	T1501 <i>Citrus medica</i> var. <i>sarcodactylis</i>	FO SHOU
Fleshy Artocarpus*	T0709 <i>Artocarpus altilis</i>	FEI HOU MIAN BAO GUO
Fleshy-flower Hemsleya	T3204 <i>Hemsleya carnosiflora</i>	ROU HUA XUE DAN
Flexedstem Rabdosia	T3489 <i>Isodon flexicaulis</i>	ROU JING XIANG CHA CAI
Flexuose Climbing Fern	T3989 <i>Lygodium flexuosum</i> [Syn. <i>Lygodium pinnatifidum</i> ; <i>Ophioglossum flexuosum</i> ]	QU ZHOU HAI JIN SHA
Flexuose Leafflower*	T4838 <i>Phyllanthus flexuosus</i>	LUO E YE XIA ZHU
Flexuose Bitterleaf*	T6717 <i>Vernonia flexuosa</i>	WAN YAN BAN JIU JU
Flexuose Lemongrass*	T1942 <i>Cymbopogon flexuosus</i>	WAN YAN XIANG MAO
Flexuose Milkvetch *	T0796 <i>Astragalus flexuosus</i>	WAN YAN HUANG QI
Flixweed Tansymustard Seed	T2125 <i>Descurainia sophia</i>	BO NIANG HAO
Floatingleaf Pondweed	T5176 <i>Potamogeton natans</i>	FU YE YAN ZI CAI

Florida Waltheria	T6808 <i>Waltheria americana</i>	HE TA CAO
Florida Yellowtrumpet	T6324 <i>Tecoma stans</i>	HUANG ZHONG HUA
Florists Chrysanthemum Flower	T1395 <i>Chrysanthemum morifolium</i> [Syn. <i>Dendranthema morifolium</i> ]	JU HUA
Florists Cyclamen	T1930 <i>Cyclamen persicum</i>	XIAN KE LAI
Flowering Ash	T2773 <i>Fraxinus ornus</i>	HUA BAI LA SHU
Flowering Fern	T4553 <i>Osmunda ragalis</i>	OU ZI QI
Flowery Stonebean-orchis	T1053 <i>Bulbophyllum odoratissimum</i> [Syn. <i>Stelis odoratissimum</i> ]	MI HUA SHI DOU LAN
Fluticose Germander*	T6361 <i>Teucrium fruticans</i>	GUAN CONG XIANG KE KE
Foetid Giantfennel*	T2700 <i>Ferula foetida</i>	CHOU A WEI
Folk Coralbean*	T2465 <i>Erythrina folkersii</i>	FU KE CI TONG
Folkers Coralbean*	T2463 <i>Erythrina crysragalli</i>	JI GUAN CI TONG
Fomes Officinalis Sporocarp	T2749 <i>Fomes officinalis</i>	A LI HONG
Foochow Yam	T2197 <i>Dioscorea futschauensis</i>	FU ZHOU SHU YU
Forbes Notopterygium	T4445 <i>Notopterygium forbesii</i> [Syn. <i>Notopterygium franchetii</i> ]	KUAN YE QIANG HUO
Forbes Wildginger	T0726 <i>Asarum forbesii</i>	DU HENG
Fordi Lasianthus*	T3697 <i>Lasianthus fordii</i>	
Fordi Phlegmariusus	T4800 <i>Phlegmariusus fordii</i>	HUA NAN MA WEI SHAN
Forest Gray Gum Leaf	T2521 <i>Eucalyptus tereticornis</i>	XI YE AN YE
Forest Horsetail	T2412 <i>Equisetum sylvaticum</i>	LIN WEN JING
Forest Mint	T4192 <i>Mentha sylvestris</i>	SEN LIN BO HE
Formosan False Cypress	T1347 <i>Chamaecyparis formosensis</i>	HONG GUI
Formosan Michelia*	T4211 <i>Michelia compressa</i> var. <i>formosana</i>	WU XIN SHI
Forrest Bugle	T0264 <i>Ajuga forrestii</i>	LI ZHI HAO
Forrest Gingerlily	T3119 <i>Hedychium forrestii</i>	YUAN BAN JIANG HUA
Forrest Pyrola	T5348 <i>Pyrola forrestiana</i>	DA LI LU TI CAO
Forrest Rabdosia*	T3490 <i>Isodon forrestii</i>	ZI E XIANG CHA CAI
Forrest Silkvine	T4726 <i>Periploca forrestii</i>	XI NAN GANG LIU
Forrest's St. John'swort	T3352 <i>Hypericum forrestii</i>	CHUAN DIAN JIN SI TAO
Forskahl Coleus	T1619 <i>Coleus barbatus</i>	RAN MAO QIAO RUI HUA
Forskahl Coleus	T1620 <i>Coleus forskahlii</i>	MAO HOU QIAO RUI HUA
Forster Ninenode*	T5275 <i>Psychotria forsteriana</i>	FU SI TE JIU JIE
Fortunate Wood Fern	T2287 <i>Dryopteris sublaeta</i>	QIAN LIE LIN MAO JUE
Fortune Eupatorium	T2559 <i>Eupatorium fortunei</i>	PEI LAN
Fortune Japanese Spiraea	T6082 <i>Spiraea japonica</i> var. <i>fortunei</i>	GUANG YE FEN HUA XIU XIAN JU
Fortune Meadowrue	T6388 <i>Thalictrum fortunei</i>	HUA DONG TANG SONG CAO
Fortune Paulownia	T4678 <i>Paulownia fortunei</i>	PAO TONG
Fortune Plumyew	T1318 <i>Cephalotaxus fortunei</i>	SAN JIAN SHAN
Fortune Windmillpalm	T6485 <i>Trachycarpus fortunei</i>	ZONG LV PI
Fortune's Drynaria Rhizome	T2273 <i>Drynaria fortunei</i>	GU SUI BU
Fortune's Holly Fern	T1986 <i>Cyrtomium fortunei</i>	HUN TOU JI
Fortune Euonymus	T2540 <i>Euonymus fortunei</i>	FU FANG TENG
<i>Fouquieria splendens</i>	T2762 <i>Fouquieria splendens</i>	HUA LAI CI SHU
Four Sepals Gaultheria	T2894 <i>Gaultheria tetramera</i>	SI LIE BAI ZHU
Four-arris Eupatorium*	T2568 <i>Eupatorium quadrangularae</i>	SI LENG ZE LAN
Fourfile Germander	T6367 <i>Teucrium quadrifarium</i>	TIE ZHOU CAO
Fourflower Litsea	T3886 <i>Litsea euosma</i>	QING XIANG MU JIANG ZI
Foursplit Rhodiola	T5498 <i>Rhodiola quadrifida</i>	SI LIE HONG JING TIAN
Fourstamen Stephania	T6136 <i>Stephania tetrandra</i>	FANG JI
Fourteech Schnabelia	T5807 <i>Schnabelia tetradonta</i>	SI CHI SI LENG CAO
Fourwing Eveningprimrose*	T4483 <i>Oenothera tetraptera</i>	SI CHI YUE JIAN CAO
Fourwing Milkvetch*	T0808 <i>Astragalus tetraplerus</i>	SI CHI HUANG QI
Foveolate Aglaia*	T0236 <i>Aglaia foveolata</i>	FENG CHAO MI ZI LAN
Foxglove-like Sage	T5671 <i>Salvia digitaloides</i>	MAO DI HUANG SHU WEI CAO



Foxtail Millet	T5938 <i>Setaria italica</i>	SU MI
Foxtail-like Galingale	T1973 <i>Cyperus alopecuroides</i>	KAN MAI NIANG ZHUANG SHA CAO
Foxtail-like Sophora	T6029 <i>Sophora alopecuroides</i>	KU DOU ZI
Foxtail-like Sophora Root*	T6028 <i>Sophora alopecuroides</i>	KU DOU GEN
Fragile Codium Frond	T1595 <i>Codium fragile</i>	SHUI SONG
Fragrant Albizia*	T0295 <i>Albizzia odoratissima</i>	XIANG HE HUAN
Fragrant Citrus	T1486 <i>Citrus junos</i>	CHENG ZI
Fragrant Citrus Seed	T1487 <i>Citrus junos</i>	CHENG ZI HE
Fragrant Datura*	T2040 <i>Datura metaloides</i>	XIANG MAN TUO LUO
Fragrant Erythrophleum	T2487 <i>Erythrophleum suaveolens</i>	YE XIANG GE MU
Fragrant Eupatorium	T2567 <i>Eupatorium odoratum</i>	FEI JI CAO
Fragrant Gananga	T1164 <i>Cananga odorata</i>	YI LAN
Fragrant Gaultheria	T2891 <i>Gaultheria fragrantissima</i>	FANG XIANG BAI ZHU
Fragrant Glorybower	T1556 <i>Clerodendron fragrans</i>	CHOU MO LI
Fragrant Gynocardia	T3082 <i>Gynocardia odorata</i>	MA DAN GUO
Fragrant Sneezeweed*	T3133 <i>Helenium aromaticum</i>	FANG XIANG DUI XIN JU
Fragrant Snowbell	T6201 <i>Styrax obassia</i>	YU LING HUA
Fragrant Solomonseal	T5093 <i>Polygonatum odoratum</i> [Syn. <i>Polygonatum officinale</i> ]	YU ZHU
Fragrant Tailgrape*	T0656 <i>Artabotrys suaveolens</i>	XIANG YING ZHAO
Franchet Groundcherry	T4846 <i>Physalis alkekengi</i> var. <i>franchetii</i>	GUA JIN DENG
Franchet Groundcherry Root	T4847 <i>Physalis alkekengi</i> var. <i>franchetii</i>	GUA JIN DENG GEN
Franchet Monkshood	T0097 <i>Aconitum franchetii</i>	DA DU WU TOU
Franchet Sophora	T6033 <i>Sophora franchetiana</i>	MIN HUAI
Frangipani	T5032 <i>Plumeria rubra</i>	HONG JI DAN HUA
Free-flowering Barberry	T0904 <i>Berberis floribunda</i>	DUO HUA XIAO BO
French Broom	T1989 <i>Cytisus monspessulanus</i>	FA GUO JIN QUE ER
French Marigold	T6282 <i>Tagetes patula</i>	KONG QUE CAO
French Rose	T5565 <i>Rosa gallica</i>	FA GUO QIANG WEI
French Tamarisk	T6287 <i>Tamarix gallica</i>	FA GUO CHENG LIU
Fresh Common Ginger	T6910 <i>Zingiber officinale</i>	SHENG JIANG
Fringecups	T6328 <i>Tellima grandifolia</i>	XIN SHAO NA CAO
Fringed Iris	T3461 <i>Iris japonica</i>	HU DIE HUA
Froes Poisonnut*	T6173 <i>Strychnos froesii</i>	FU SHI MA QIAN ZI
Frog Orchid	T1604 <i>Coeloglossum viride</i> [Syn. <i>Coeloglossum viride</i> var. <i>bracteatum</i> ]	AO SHE LAN
Frutescent Cladostachys	T2058 <i>Deeringia amaranthoides</i> [Syn. <i>Cladostachys frutescens</i> ]	JIANG GUO XIAN
Fruticose Cudrania	T1885 <i>Cudrania fruticosa</i>	ZHE TENG
Fruticose Thorowax*	T1061 <i>Bupleurum frutescens</i>	MU CHAI HU
Fugacious Poppy*	T4628 <i>Papaver fugax</i>	YI XIAN YING SU
Fukang Giantfennel Root	T2701 <i>Ferula fukanensis</i>	FU KANG A WEI GEN
Fukien Wildginger	T0727 <i>Asarum fukienense</i>	FU JIAN XI XIN
Funadoko Orange*	T1477 <i>Citrus funadoko</i>	ZHOU CHANG JU
Fungus Coprinopsis episcopalis	T1659 <i>Coprinopsis episcopalis</i>	
Fungus Curvularia lunata	T1910 <i>Curvularia lunata</i>	
Fungus <i>Gelasinospora santi-florii</i>	T2896 <i>Gelasinospora santi-florii</i>	
Fungus Lasiodiplodia theobromae	T3700 <i>Lasiodiplodia theobromae</i>	
Fungus <i>Stachybotrys atra</i>	T6089 <i>Stachybotrys atra</i>	
Fungus <i>Stachybotrys chartarum</i>	T6090 <i>Stachybotrys chartarum</i>	
Fungus <i>Stachybotrys nephrospora</i>	T6091 <i>Stachybotrys nephrospora</i>	
Fungus-infected Rice Spike	T6655 <i>Ustilaginoidea virens</i>	JING GU NU
Funneled Physochlaina	T4858 <i>Physochlaina infundibularis</i>	LOU DOU PAO NANG CAO
Furcate Angelica*	T0481 <i>Angelica furcijuga</i>	FEN CHA DANG GUI

Furcate Gloiopeltis Frond	T2994 <i>Gloiopeltis furcata</i>	LU JIAO CAI
Furfuraceous Many-flowered May-apple*	T2299 <i>Dysosma furfuracea</i>	BI LIN BA JIAO LIAN
Furstamen Prismatomeris	T5207 <i>Prismatomeris tetrandra</i>	NAN SHAN HUA
Gabon Uvaria*	T6663 <i>Uvaria klaineana</i>	JIA PENG ZI YU PAN
Galanga Galangal	T0356 <i>Alpinia galanga</i>	DA LIANG JIANG
Galanga Resurrectionlily	T3620 <i>Kaempferia galanga</i>	SHAN NAI
Galericulate Skullcap	T5838 <i>Scutellaria galericulata</i>	BING TOU CAO
Gambier Gambirplant	T6615 <i>Uncaria gambir</i>	ER CHA GOU TENG
Gamboge Tree Resin	T2866 <i>Garcinia morella</i>	TENG HUANG
Gansu Greenbrier	T5980 <i>Smilax menispermoides</i>	FANG JI YE BA QIA
Garabato; Uganangi; Cat's Claw	T6616 <i>Uncaria guianensis</i>	GUI YA NA GOU TENG
Garden Balsam	T3410 <i>Impatiens balsamina</i>	FENG XIAN
Garden Balsam Seed	T3412 <i>Impatiens balsamina</i>	JI XING ZI
Garden Balsum Flower	T3411 <i>Impatiens balsamina</i>	FENG XIAN HUA
Garden Burnet	T5712 <i>Sanguisorba officinalis</i>	DI YU
Garden Chervil	T0528 <i>Anthriscus cerefolium</i>	XUE WEI CAI
Garden Cress	T3758 <i>Lepidium sativum</i>	JIA DU XING CAI
Garden Eggplant	T6007 <i>Solanum melongena</i>	QIE ZI
Garden Eggplant Leaf	T6006 <i>Solanum melongena</i>	QIE YE
Garden Euphorbia	T2590 <i>Euphorbia hirta</i>	DA FEI YANG CAO
Garden Lettuce	T3662 <i>Lactuca sativa</i>	WO JU
Garden Lovage	T3785 <i>Levisticum officinale</i>	OU DANG GUI
Garden Millingtonia	T4247 <i>Millingtonia hortensis</i>	ZI MEI SHU
Garden Pansy	T6766 <i>Viola tricolor</i>	SAN SE JIN
Garden Parsnip	T4669 <i>Pastinaca sativa</i>	OU FANG FENG
Garden Pea	T4983 <i>Pisum sativum</i>	WAN DOU
Garden Plum	T5222 <i>Prunus domestica</i>	YANG LI
Garden Radish	T5419 <i>Raphanus sativus</i>	LAI FU
Garden Radish Seed	T5420 <i>Raphanus sativus</i>	LAI FU ZI
Garden Sorrel	T5605 <i>Rumex acetosa</i>	SUAN MO
Garden Sorrel Leaf	T5606 <i>Rumex acetosa</i>	SUAN MO YE
Garlic	T0318 <i>Allium sativum</i>	DA SUAN
Garlicsmell Germander*	T6368 <i>Teucrium scordium</i>	SUAN WEI XIANG KE KE
Garou Bush	T2025 <i>Daphne gnidium</i>	JING YA MA YE RUI XIANG
Garretti Senna*	T1233 <i>Cassia garrettiana</i>	JIA LEI JUE MING
Gaudicha Garcinia*	T2855 <i>Garcinia gaudichaudii</i>	GAO DI CHA SHAN ZHU ZI
Gaumei Fringe-petal*	T1811 <i>Crossopetalum gaumeri</i>	GAO MEI YING BAN
Gay-feather	T3793 <i>Liatris spicata</i>	SHE BIAN JU
Geckowood	T5748 <i>Sauropus androgynus</i>	TONG XU SHOU GONG MU
Geniculate Monkshood	T0098 <i>Aconitum geniculatum</i>	XI BAN WU TOU
Genipa	T2900 <i>Genipa americana</i>	JING NI PING
Genonggang	T1783 <i>Cratoxylum arborescens</i>	QIAO MU ZHUANG HUANG NIU MU
Genuflex Angelica*	T0482 <i>Angelica genuflexa</i>	QU XI DANG GUI
Gerard Ephedra	T2368 <i>Ephedra gerardiana</i>	SHAN LING MA HUANG
Gerard Linearstripe Rabdosia*	T3508 <i>Isodon lophanthoides</i> var. <i>gerardiana</i>	XIA JI XIAN WEN XIANG CHA CAI
Gerbera	T2950 <i>Gerbera anandria</i> [Syn. <i>Leibnitzia anandria</i> ]	DA DING CAO
German Catchfly	T3951 <i>Lychnis viscaria</i>	YANG JIAN QIU LUO
German Gentian	T2911 <i>Gentiana germanica</i>	DE GUO LONG DAN
German Iris	T3459 <i>Iris germanica</i>	DE GUO YUAN WEI
Gesnerialike Rabdosia	T3491 <i>Isodon gesneroides</i>	JU TAI XIANG CHA CAI
Ghostplant Wormwood	T0680 <i>Artemisia lactiflora</i>	YA JIAO AI
Giant Dogwood	T1697 <i>Cornus controversa</i> [Syn. <i>Bothrocaryum controversum</i> ]	DENG TAI SHU
Giant Granadilla	T4667 <i>Passiflora quadrangularis</i>	DA GUO XI FAN LIAN

Giant Hemsleya	T3206 <i>Hemsleya gigantea</i>	JU HUA XUE DAN
Giant Hogweed	T3216 <i>Heracleum mantegazzianum</i>	DA YE NIU FANG FENG
Giant Sequoia	T5917 <i>Sequoia gigantea</i>	JU SHAN
Giant Snowdrop	T2821 <i>Galanthus elwelii</i>	DA XUE HUA LIAN
Giant St. John's wort	T3340 <i>Hypericum ascyron</i>	HUANG HAI TANG
Giant Typhonium	T6588 <i>Typhonium giganteum</i>	YU BAI FU
Giantreed Rhizome	T0722 <i>Arundo donax</i>	LU ZHU GEN
Gibraltar Thorowax*	T1063 <i>Bupleurum gibraltarium</i>	ZHI BU LUO TUO CAI HU
Gigantic Angelica	T0483 <i>Angelica gigas</i>	CHAO XIAN DANG GUI
Gigantic Corydalis*	T1716 <i>Corydalis gigantea</i>	JU ZI JIN
Gililand Aloe*	T0339 <i>Aloe gililandii</i>	JI SHI LU HUI
Ginkgo Bark	T2963 <i>Ginkgo biloba</i>	BAI GUO SHU PI
Ginkgo Leaf	T2964 <i>Ginkgo biloba</i>	BAI GUO YE
Ginkgo Nut	T2961 <i>Ginkgo biloba</i>	BAI GUO
Ginkgo Root	T2962 <i>Ginkgo biloba</i>	BAI GUO GEN
Ginseng	T4599 <i>Panax ginseng</i> [Syn. <i>Panax schinseng</i> ]	REN SHEN
Ginseng Buds	T4600 <i>Panax ginseng</i> [Syn. <i>Panax schinseng</i> ]	REN SHEN HUA LEI
Ginseng Leaf	T4602 <i>Panax ginseng</i> [Syn. <i>Panax schinseng</i> ]	REN SHEN YE
Ginseng Reed	T4601 <i>Panax ginseng</i> [Syn. <i>Panax schinseng</i> ]	REN SHEN LU
Girald Acanthopanax Root-bark	T0036 <i>Acanthopanax giraldii</i> [Syn. <i>Acanthopanax giraldii</i> var. <i>inermis</i> ; <i>Eleutherococcus giraldii</i> ]	HONG MAO WU JIA PI
Girald Larkspur	T2076 <i>Delphinium giraldii</i>	QIN LING CUI QUE HUA
Githago Agrostemma	T0252 <i>Agrostemma githago</i>	MAI XIAN WENG
Glabrate Angelica*	T0484 <i>Angelica glabra</i>	GUANG HUA DANG GUI
Glabrate Begonia*	T0889 <i>Begonia glabra</i>	GUANG JIE QIU HAI TANG
Glabrous Acanthospermum*	T0046 <i>Acanthospermum glabratum</i>	GUANG CI BAO JU
Glabrous Cassytha*	T1252 <i>Cassytha glabella</i>	WU MAO WU GEN TENG
Glabrous Combretum*	T1631 <i>Combretum imberbe</i>	WU MAO FENG CHE ZI
Glabrous Custardapple	T0506 <i>Annona glabra</i>	YUAN HUA FAN LI ZHI
Glabrous Greenbrier	T5977 <i>Smilax glabra</i>	TU FU LING
Glabrous Holly*	T3397 <i>Ilex pubescens</i> var. <i>glaber</i>	TU MAO DONG QING
Glabrous Litsea*	T3888 <i>Litsea glutinosa</i> var. <i>glabrara</i>	WU MAO CHAN GAO SHU
Glabrous Sarcandra	T5730 <i>Sarcandra glabra</i> [Syn. <i>Chloranthus glaber</i> ]	JIU JIE CHA
Glabrous Wormwood*	T0677 <i>Artemisia glabella</i>	WU MAO HAO
Glabrousleaf Chinese Corktree	T4792 <i>Phellodendron chinense</i> var. <i>glabriusculum</i>	TU YE HUANG PI SHU
Glabrousleaf Erycibe	T2450 <i>Erycibe schmidtii</i>	GUANG YE DING GONG TENG
Glabrousleaf Pondweed	T5175 <i>Potamogeton lucens</i>	GUANG YE YAN ZI CAI
Glabrousleaf Stephania*	T6127 <i>Stephania glabra</i>	GUANG YE DI BU RONG
Glabrousleaf Uvaria	T6659 <i>Uvaria boniana</i>	GUANG YE ZI YU PAN
Glabroussepal Crotalaria	T1837 <i>Crotalaria usaramoensis</i>	GUANG E ZHU SHI DOU
Glandtooth Ardisia*	T0593 <i>Ardisia cornudentata</i>	XIAN CHI ZI JIN NIU
Glandular Fennelflower	T4432 <i>Nigella glandulifera</i>	XIAN MAO HEI ZHONG CAO
Glandularflower Rabdosia	T5388 <i>Rabdosia adenantha</i>	XIAN HUA XIANG CHA CAI
Glandularnerve Pepper	T4936 <i>Piper bavinum</i>	XIAN MAI JU
Glandularstalk St. Paulswort	T5952 <i>Siegesbeckia orientalis</i> var. <i>pubescens</i> [Syn. <i>Siegesbeckia pubescens</i> ]	XIAN GENG XI XIAN
Glandulous Eupatorium*	T2560 <i>Eupatorium glandulosum</i>	XIAN ZE LAN
Glaucous Fissistigma	T2734 <i>Fissistigma glaucescens</i> [Syn. <i>Melodorum glaucescens</i> ]	BAI YE GUA FU MU
Glaucous Motherwort	T3751 <i>Leonurus glaucescens</i>	HUI BAI YI MU CAO
Glaucous Diploclisia	T2233 <i>Diploclisia glaucescens</i>	CANG BAI CHENG GOU FENG
Glaucous Bedstraw*	T2831 <i>Galium glaucum</i>	FEN LU ZHU YANG YANG
Glaucous Custardapple*	T0507 <i>Annona glauca</i>	ROU MAO FAN LI ZHI
Glaucous Meadowrue*	T6390 <i>Thalictrum glaucum</i>	LV TANG SONG CAO

Glaucousback Honeysuckle	T3911 <i>Lonicera hypoglauca</i>	XIAN YE REN DONG
Glaucousback Threewingnut	T6540 <i>Tripterygium hypoglaucum</i>	KUN MING SHAN HAI TANG
Globe Artichoke	T1966 <i>Cynara scolymus</i>	CAI JI
Globe Candytuft	T3386 <i>Iberis umbellata</i>	SAN XING QU QU HUA
Globe Cordia*	T1677 <i>Cordia globosa</i>	QIU ZHUANG PO BU MU
Globeamaranth	T3040 <i>Gomphrena globosa</i>	QIAN RI HONG
Globefish	T2805 <i>Fugu ocellatus</i>	HE TUN
Globose Condorvine	T4116 <i>Marsdenia globifera</i>	QIU HUA NIU NAI CAI
Globular Pepper	T4956 <i>Piper mullesua</i>	DUAN JU
Glomerate Blumea*	T0958 <i>Blumea glomerata</i>	TUAN JI AI NA XIANG
Glomerule Sweetleaf	T6253 <i>Symplocos glomerata</i>	TUAN HUA SHAN FAN
Glory Bush	T6455 <i>Tibouchina semidecandra</i>	
Glory-of-the-snow	T1368 <i>Chionodoxa luciliae</i>	XUE GUANG HUA
Glossy Buckthorn	T5460 <i>Rhamnus frangula</i> [Syn. <i>Frangula alnus</i> ]	OU SHU LI
Glossy Privet Fruit	T3828 <i>Ligustrum lucidum</i>	NV ZHEN ZI
Gluey Litse	T3887 <i>Litsea glutinosa</i>	CHAN GAO MU JIANG ZI
Glutinous Bluebeard	T1222 <i>Caryopteris glutinosa</i>	NIAN YE YOU <sup>(2)</sup>
Gmelin Sealavender Herb	T3842 <i>Limonium gmelinii</i>	BU XUE CAO
Goat Hide	T1181 <i>Capra hircus; Ovis aries</i>	YANG PI
Goat Milk	T1182 <i>Capra hircus; Ovis aries</i>	YANG RU
Goat Pancreas	T1183 <i>Capra hircus; Ovis aries</i>	YANG YI
Goat Willow	T5652 <i>Salix caprea</i>	HUANG HUA ER LIU
Goering Lemongrass	T1943 <i>Cymbopogon goeringii</i>	YE XIANG MAO
Goldback Fern	T4988 <i>Pityrogramma triangularis</i>	SAN JIAO FEN YE JUE
Golden Adonis	T0186 <i>Adonis chrysocyatha</i>	JIN HUANG CE JIN ZHAN HUA
Golden Buckwheat Root	T2657 <i>Fagopyrum cymosum</i> [Syn. <i>Polygonum cymosum</i> ]	TIAN QIAO MAI GEN
Golden Corydalis	T1707 <i>Corydalis aurea</i>	JIN HUANG JIN
Golden Lycoris	T3983 <i>Lycoris aurea</i>	DA YI ZHI JIAN
Goldenchain Laburnum	T3648 <i>Laburnum anagyroides</i>	DU DOU
Goldencoma Shield Fern	T2280 <i>Dryopteris chrysocoma</i>	HUANG MAO LIN MAO JUE
Goldenflower Dendrobium	T2098 <i>Dendrobium chrysanthum</i>	SHU HUA SHI HU
Golden-seal	T3309 <i>Hydrastis canadensis</i>	BAI MAO GEN <sup>(4)</sup>
Goldenshower Senna Fruit	T1232 <i>Cassia fistula</i>	PO LUO MEN ZAO JIA
Goldenthread Cordyceps	T1682 <i>Cordyceps ophioglossoides</i>	DA TUAN NANG CHONG CAO
Gold-enthread Meadowrue	T6389 <i>Thalictrum glandulosissimum</i>	JIN SI MA WEI LIAN
Golden-wing Milkvetch*	T0791 <i>Astragalus chrysopterus</i>	JIN YI HUANG QI
Goldenyellow Jerusalem sage*	T4806 <i>Phlomis aurea</i>	JIN HUANG CAO SU
Goldenyellow Thelephora*	T6420 <i>Thelephora aurantiotincta</i>	JIN HUANG GE JUN
Goldenyellow Thorowax	T1056 <i>Bupleurum aureum</i>	JIN HUANG CHAI HU
Goldflower Actinidia	T0159 <i>Actinidia chrysantha</i>	JIN HUA MI HOU TAO
Goldhair Hedyotis	T3125 <i>Hedyotis chrysotricha</i> [Syn. <i>Oldenlandia chrysotricha</i> ]	JIN MAO ER CAO
Goldmat Rhododendron	T5505 <i>Rhododendron chrysanthum</i>	NIU PI CHA
Goldon-belt*	T3776 <i>Lethariella zahlbruckneri</i>	JIN YAO DAI
Goldregen	T1988 <i>Cytisus laburnum</i>	LIAN HUA JIN QUE ER
Goldsaxifrage Herb	T1403 <i>Chrysosplenium grayanum</i>	JIN QIAN KU YE CAO
Gold-wire Brush*	T3775 <i>Lethariella cladonioides</i>	JIN SI SHUA
Gongbo Monkshood	T0107 <i>Aconitum kongboense</i>	GONG BU WU TOU
Goose Fat	T0516 <i>Anser cygnoides domestica</i>	BAI E GAO
Goose Tail-meat	T0517 <i>Anser cygnoides domestica</i>	E CUI
Goose-bowel Vegetable*	T2359 <i>Endarachne binghamiae</i>	E CHANG CAI
Gordon Euryale Root	T2632 <i>Euryale ferox</i>	QIAN SHI GEN
Gorgonian <i>Gorgoniae suberogorgia</i>	T3053 <i>Gorgoniae suberogorgia</i>	LIU SHAN HU
Gorgonian <i>Junceella fragilis</i>	T3574 <i>Junceella fragilis</i>	CUI DENG XIN LIU SHAN HU

Gorgonian <i>Junceella gemmacea</i>	T3575 <i>Junceella gemmacea</i>	LEI DENG XIN LIU SHAN HU
Gorgonian <i>Junceella juncea</i>	T3576 <i>Junceella juncea</i>	DENG XIN LIU SHAN HU
Gorgonian <i>Muricella sinensis</i>	T4315 <i>Muricella sinensis</i>	ZHONG HUA XIAO JIAN LIU SHAN HU
Gortschakov <i>Corydalis</i> *	T1717 <i>Corydalis gortschakovii</i>	GE CAI KE SHI ZI JIN
Govan <i>Corydalis</i>	T1718 <i>Corydalis govaniana</i>	KU MANG HUANG JIN
Graceful Jessamine	T2897 <i>Gelsemium elegans</i>	GOU WEN
Gracile <i>Eupatorium</i> *	T2561 <i>Eupatorium gracile</i>	XI ZE LAN
Gram Chickpea	T1412 <i>Cicer arietinum</i>	HUI HUI DOU
Grand <i>Aglaiia</i> *	T0237 <i>Aglaiia grandis</i>	JU DA MI ZI LAN
Grand <i>Crinum</i>	T1794 <i>Crinum asiaticum</i>	YA ZHOU WEN SHU LAN
Grand <i>Globethistle</i> *	T2315 <i>Echinops giganteus</i>	JU DA LAN CI TOU
Grand <i>Litsea</i> *	T3890 <i>Litsea grandis</i>	DA MU JIANG ZI
Grapefruit	T1503 <i>Citrus paradisi</i>	PU TAO YOU
Grapeleaf <i>Hibiscus</i> *	T3249 <i>Hibiscus vitifolius</i>	PU TAO YE MU JIN
Grass Vetchling	T3706 <i>Lathyrus nissolia</i>	HE CAO XIANG WAN DOU
Grasshopper	T5559 <i>Romalea microptera</i>	HUANG CHONG
Grassland <i>Euphorbia</i> *	T2620 <i>Euphorbia stepposa</i>	CAO YUAN DA JI
Grassleaf <i>Saussurea</i>	T5754 <i>Saussurea graminea</i>	HE YE FENG MAO JU
Grassleaf Sweetflag	T0144 <i>Acorus gramineus</i>	JIN QIAN PU
Grassleaf Sweetflag Leaf	T0145 <i>Acorus gramineus</i>	JIN QIAN PU YE
Grassleaved Sweetflag	T0146 <i>Acorus tatarinowii</i>	SHI CHANG PU
Gratiola	T3061 <i>Gratiola officinalis</i>	YAO SHUI BA JIAO
Graywhite Wormwood*	T0669 <i>Artemisia cana</i>	QING AI
Great Burdock Fruit	T0586 <i>Arctium lappa</i>	NIU BANG ZI
Great Burdock Leaf*	T0585 <i>Arctium lappa</i>	NIU BANG YE
Great Burdock Root	T0584 <i>Arctium lappa</i>	NIU BANG GEN
Great Maple	T0053 <i>Acer pseudoplatanus</i>	OU YA QI
Great Willowherb (Firewood)	T1352 <i>Chamaenerion angustifolium</i> [Syn. <i>Epilobium angustifolium</i> ]	HONG KUAI ZI
Greater Bird's-foot-trefoil	T3930 <i>Lotus pedunculatus</i>	HUA XU GENG BAI MAI GEN
Greater Celandine	T1357 <i>Chelidonium majus</i>	BAI QU CAI
Greater Periwinkle	T6760 <i>Vinca herbacea</i> [Syn. <i>Vinca major</i> ]	DA CHANG CHUN HUA
Greater Water-parsnip	T5969 <i>Sium latifolium</i>	OU ZE QIN
Grecian Foxglove	T2175 <i>Digitalis lanata</i>	MAO HUA MAO DI HUANG
Grecian Laurel Fruit	T3726 <i>Laurus nobilis</i>	YUE GUI ZI
Grecian Laurel Leaf	T3725 <i>Laurus nobilis</i>	YUE GUI YE
Grecian Silkvine	T4727 <i>Periploca graeca</i>	XI LA GANG LIU
Greek Silk-hair Yarrow*	T0063 <i>Achillea holosericea</i>	XI LA SI MAO SHI
Greek Yarrow	T0058 <i>Achillea ageratifolia</i>	XI LA SHI CAO
Green <i>Alectoria</i> Filament	T0298 <i>Alectoria vivens</i>	JIN SI DAI
Green Anemone	T0526 <i>Anthopleura stell</i>	LV HAI KUI
Green Falsehellebore	T6700 <i>Veratrum viride</i>	LV LI LU
Green Hellebore*	T3189 <i>Helleborus viridis</i>	LV TI GEN CAO
Green Poplar	T5150 <i>Populus cathayana</i>	QING YANG
Greenish Lily	T3832 <i>Lilium brownii</i> var. <i>viridulum</i> [Syn. <i>Lilium brownii</i> var. <i>colchesteri</i> ]	BAI HE
Greenleaf Piptanthus, Evergreen Laburnum	T4976 <i>Piptanthus nepalensis</i>	HUANG HUA MU
Greensnake vine	T4725 <i>Periploca calophylla</i>	QING SHE TENG
Greenspike <i>Erythrophleum</i> *	T2483 <i>Erythrophleum chlorostachyum</i>	LU SUI GE MU
Greenstem Forsythia	T2757 <i>Forsythia viridissima</i>	JIN ZHONG HUA
Greenyellow <i>Stephania</i>	T6137 <i>Stephania viridiflavens</i>	HUANG YE DI BU RONG
Gregg Sage*	T5674 <i>Salvia greggii</i>	GE SHI SHU WEI CAO
Grey <i>Arcyria</i> *	T0589 <i>Arcyria cinerea</i>	HUI JIN SE TUAN WANG JUN

Grey Basil	T4472 <i>Ocimum canum</i>	ZHANG NAO LUO LE
Grey Coralbean*	T2466 <i>Erythrina glauca</i>	HUI CI TONG
Grey Greenbrier*	T5973 <i>Smilax aristolochiaefolia</i>	HUI BA QIA
Greyblue Pericampylus	T4710 <i>Pericampylus glaucus</i>	XI YUAN TENG
Greyblue Spicebush	T3850 <i>Lindera glauca</i>	SHAN HU JIAO
Greyblue Spicebush Leaf	T3851 <i>Lindera glauca</i>	SHAN HU JIAO YE
Greyhair Asiabell	T1596 <i>Codonopsis canescens</i>	HUI MAO DANG SHEN
Greyish Gambirplant*	T6611 <i>Uncaria canescens</i>	QIAN HUI GOU TENG
Greyish Nannoglottis*	T4372 <i>Nannoglottis ravida</i>	QIAN HUI MAO GUAN JU
Greyish-green Corydalis	T1705 <i>Corydalis adunca</i>	HUI LV YAN HU SUO
Greyleaf Actinidia	T0162 <i>Actinidia glaucophylla</i>	HUA NAN MI HOU TAO
Greyleaf Maesa	T4027 <i>Maesa chisia</i>	HUI YE DU JING SHAN
Greywhite Nightshade*	T5999 <i>Solanum incanum</i>	HUI BAI QIE
Greywhite Seseli*	T5931 <i>Seseli incanum</i>	HUI BAI XIE HAO
Griffith Garcinia*	T2856 <i>Garcinia griffithii</i>	GE LI FEI SI TENG HUANG
Griffith Mahonia	T4065 <i>Mahonia griffithii</i>	GE LI FEI SI SHI DA GONG LAO
Grossnerve Pepper*	T4943 <i>Piper crassinervium</i>	CU YE MAI HU JIAO
Grosvenor Siraitia	T5967 <i>Siraitia grosvenorii</i> [Syn. <i>Momordica grosvenorii</i> ]	LUO HAN GUO
Groundfig Spurge	T2581 <i>Euphorbia chamaesyce</i>	MAO GUO DI JIN
Guamachil Apea-earring	T4985 <i>Pithecolobium dulce</i>	NIU TI DOU
Guanabana	T0509 <i>Annona muricata</i>	CI GUO FAN LI ZHI
Guanguangtree	T6556 <i>Tsoongiodendron odorum</i>	GUAN GUANG MU
Guangxi Hogfennel	T4758 <i>Peucedanum guangxiense</i>	GUANG XI QIAN HU
Guangxi Lycoris	T3985 <i>Lycoris guangxiensis</i>	GUANG XI SHI SUAN
Guangxi Many-flowered May-apple*	T2300 <i>Dysosma guangxiensis</i>	GUANG XI BA JIAO LIAN
Guangxi Mayten*	T4132 <i>Maytenus guangxiensis</i>	GUANG XI MEI DENG MU
Guara, Mestizo, or Guacharaco (in Colombia)	T1892 <i>Cupania latifolia</i>	
Guarana	T4677 <i>Paullinia cupana</i>	BA XI XIANG WU HUAN ZI
Guava Bark	T5266 <i>Psidium guajava</i>	FAN SHI LIU PI
Guava Leaf	T5267 <i>Psidium guajava</i>	FAN SHI LIU YE
Guava Seed	T5268 <i>Psidium guajava</i>	FAN SHI LIU ZI
Guava Unripe Fruit	T5265 <i>Psidium guajava</i>	FAN SHI LIU GAN
Guinea Bitterleaf*	T6718 <i>Vernonia guineensis</i>	JI NEI YA BAN JIU JU
Guinea Yam	T2207 <i>Dioscorea rotundata</i> [Syn. <i>Dioscorea cayenensis</i> ]	YUAN SHU YU
Guizhou Arachniodes	T0564 <i>Arachniodes nipponica</i>	
Guizhou Evodia	T2645 <i>Evodia rutaecarpa</i> var. <i>bodinieri</i>	BO SHI WU ZHU YU
Guizhou Swertia*	T6224 <i>Swertia kouitchensis</i>	GUI ZHOU ZHANG YA CAI
Gulfweed <i>Sargassum micracanthum</i>	T5738 <i>Sargassum micracanthum</i>	
Gulin Goldthread*	T1666 <i>Coptis gulinensis</i>	GU LIN YE LIAN
Gulin Hemsleya	T3210 <i>Hemsleya penxianensis</i> var. <i>gulinensis</i>	GU LIN XUE DAN
Gum-arabic Tree	T0028 <i>Acacia nilotica</i>	A LA BO JIAO JIN HE HUAN
Gummy Atractylodes*	T0820 <i>Atractylodes gummifera</i>	OU CANG ZHU
Gummy Gardenia*	T2881 <i>Gardenia gummifera</i>	JIAO ZHI ZI
Gummy St. Paulswort*	T5949 <i>Siegesbeckia gummifer</i>	JIAO XI XIAN
Gynura	T3088 <i>Gynura segetum</i> [Syn. <i>Gynura japonica</i> ]	SAN QI CAO
Gypsophila	T3089 <i>Gypsophila acutifolia</i>	HUANG JIE GU DAN
H.Collett's Rhododendron	T5507 <i>Rhododendron collettianum</i>	A FU HAN DU JUAN HUA
Hada Mosla*	T4540 <i>Orthodon hadai</i>	HA DA SHI JI NING
Haichow Elsholtzia	T2343 <i>Elsholtzia splendens</i>	XIANG RU
Hainan Amonum	T0417 <i>Amomum longiligulare</i>	HAI NAN SHA REN
Hainan Devilpepper	T5426 <i>Rauvolfia verticillata</i> var. <i>hainanensis</i>	HAI NAN LUO FU MU
Hainan Goniotalamus	T3048 <i>Goniotalamus howii</i>	HAI NAN GE NA XIANG

Hainan Jointfir	T3030 <i>Gnetum hainanense</i>	HAI NAN MAI MA TENG
Hainan Pencilwood	T2309 <i>Dysoxylum hainanense</i>	HAI NAN JIAN MU
Hainan Plumyew	T1319 <i>Cephalotaxus hainanensis</i> [Syn. <i>Cephalotaxus mannii</i> ]	HAI NAN CU FEI
Hainan Sarcococca	T5733 <i>Sarcococca vagans</i>	HAI NAN YE SHAN HUA
Hainan Tinospora	T6466 <i>Tinospora hainanensis</i>	HAI NAN QING NIU DAN
Hair Larkspur	T2079 <i>Delphinium kamaonense</i> var. <i>glabrescens</i>	ZHAN MAO CUI QUE HUA
Hair Vegetable*	T4438 <i>Nostoc flagelliforme</i>	FA CAI
Hairfruit Rhododendron*	T5522 <i>Rhododendron seniavinii</i>	MAO GUO DU JUAN
Hairless Chinese Hawthorn	T1779 <i>Crataegus pinnatifida</i> var. <i>psilosa</i>	WU MAO SHAN ZHA
Hairnode Valeriana*	T6674 <i>Valeriana alternifolia</i> var. <i>stolonifera</i>	MAO JIE XIE CAO
Hairspike Pepper*	T4971 <i>Piper trichostachyon</i>	MAO SUI HU JIAO
Hairstalk Denrdobium	T2097 <i>Dendrobium capillipes</i>	DUAN BANG SHI HU
Hairstalk Narrowleaf Rabdosia*	T3481 <i>Isodon angustifolius</i> var. <i>glabrescens</i>	MAO GENG XIA YE XIANG CHA CAI
Hairstalk St. Paulswort	T5951 <i>Siegesbeckia orientalis</i> var. <i>glabrescens</i> [Syn. <i>Siegesbeckia glabrescens</i> ]	MAO GENG XI XIAN
Hairstyle Poisonnut	T6183 <i>Strychnos nitida</i>	MAO ZHU MA QIAN
Hairy Antler	T1337 <i>Cervus nippon</i> ; <i>Cervus elaphus</i>	LU RONG
Hairy Bayberry	T4343 <i>Myrica esculent</i>	MAO YANG MEI
Hairy Champion	T3948 <i>Lychnis coronaria</i>	MAO JIAN QIU LUO
Hairy Clovershrub	T1163 <i>Campylotropis hirtella</i>	MAO HANG ZI SHAO
Hairy Datura Flower	T2037 <i>Datura innoxia</i>	MAO MAN TUO LUO HUA
Hairy Datura Leaf	T2038 <i>Datura innoxia</i>	MAO MAN TUO LUO YE
Hairy Datura Root	T2036 <i>Datura innoxia</i>	MAO MAN TUO LUO GEN
Hairy Datura Seed	T2039 <i>Datura innoxia</i>	MAO MAN TUO LUO ZI
Hairy Heartseed*	T1198 <i>Cardiospermum hirsutum</i>	MAO DAO DI LING
Hairy Heliotrope*	T3173 <i>Heliotropium hirsutum</i>	YING MAO TIAN JIE CAI
Hairy Hellebore*	T3185 <i>Helleborus orientalis</i> var. <i>hirsutus</i>	YING MAO TI GEN CAO
Hairy Micromelum*	T4222 <i>Micromelum hirsutum</i>	YIN MAO XIAO YUN MU
Hairy Pepper	T4962 <i>Piper puberulum</i>	MAO JU
Hairy Peppertree*	T5788 <i>Schinus molle</i>	ROU MAO XIAO RU XIANG
Hairy Rhynchotechum	T5543 <i>Rhynchotechum vestitum</i>	MAO XIAN ZHU JU TAI
Hairy St. John's wort	T3355 <i>Hypericum hirsutum</i>	YING MAO JIN SI TAO
Hairy Willowweed	T2387 <i>Epilobium hirsutum</i>	SHUI JIE GU DAN
Hairy Wormwood	T0705 <i>Artemisia vestita</i>	MAO LIAN HAO
Hairydtalk Loosestrife	T3997 <i>Lysimachia capillipes</i>	XI GENG XIANG CAO
Hairyflower Actinidia	T0161 <i>Actinidia eriantha</i>	MAO HUA MI HOU TAO
Hairyflower Photinia*	T4826 <i>Photinia lactiflora</i>	MAO HUA SHI NAN
Hairyfruit Heliotrope*	T3175 <i>Heliotropium lasiocarpum</i>	MAO GUO TIAN JIE CAI
Hairyfruit Michelia	T4214 <i>Michelia spaerantha</i>	MAO GUO HAN XIAO
Hairyfruit Milkweed*	T0737 <i>Asclepias eriocarpa</i>	MAO GUO MA LI JIN
Hairyfruit Rabdosia*	T3530 <i>Isodon trichocarpa</i>	MAO GUO XIANG CHA CAI
Hairyfruit Ventilago	T6688 <i>Ventilago calyculata</i>	MAO GUO YI HE GUO
Hairyleaf Aralia	T0570 <i>Aralia dasyphylla</i>	TOU XU CONG MU
Hairyleaf Handelia	T3097 <i>Handelia trichophylla</i>	TIAN SHAN SHI
Hairyleaf South Ailanthus	T0258 <i>Ailanthus malabarica</i>	MA LA BA CHU
Hairylobed Butterbur	T4745 <i>Petasites tricholobus</i>	MAO LIE FENG DOU CAI
Hairyrod Fishvane	T2119 <i>Derris eriocarpa</i>	MAO GUO YU TENG
Hairyrod Glochidion*	T2988 <i>Glochidion eriocarpum</i>	MAO GUO SUAN PAN ZI
Hairysepal Rabdosia	T5391 <i>Rabdosia eriocalyx</i>	MAO E XIANG CHA CAI
Hairysepal Raspberry	T5590 <i>Rubus chroosepalus</i>	MAO E MEI
Hairystalk Tinospora	T6463 <i>Tinospora capillipes</i>	JIN GUO LAN
Hairyvein Agrimonia	T0248 <i>Agrimonia pilosa</i>	LONG YA CAO
Halberd-like Eupatorium*	T2577 <i>Eupatorium subhastatum</i>	JIN JI ZE LAN

Hall Podocarpus*	T5040 <i>Podocarpus hallii</i>	HA SHI LUO HAN SONG
Hamilton Tephrosia*	T6335 <i>Tephrosia hamiltonii</i>	HAN MI ER DUN HUI YE
Hanbury Garcinia*	T2857 <i>Garcinia hanburyi</i>	TENG HUANG SHU
Hance Brandisia	T1003 <i>Brandisia hancei</i>	LAI JIANG TENG
Hance Pepper	T4948 <i>Piper hancei</i>	SHAN JU
Hance Snakegrape	T0424 <i>Ampelopsis brevipedunculata</i> var. <i>hancei</i>	GUANG YE SHE PU TAO
Hancock Swallowwort	T1955 <i>Cynanchum hancockianum</i>	HUA BEI BAI QIAN
Hanson Lily	T3834 <i>Lilium hansonii</i>	HUANG BAI HE
Haoryanther Paoshan Monkshood	T0117 <i>Aconitum nagarum</i> var. <i>lasiandrum</i>	XUAN WEI WU TOU
Haplophyllum*	T3100 <i>Haplophyllum acutifolium</i>	JIAN YE YUN XIANG CAO
Hard Bluegrass	T5033 <i>Poa sphondylodes</i>	LONG XU CAO
Hardhylum Coralbean*	T2468 <i>Erythrina lithosperma</i>	YING HE CI TONG
Hardwick Valeriana	T6676 <i>Valeriana hardwickii</i>	CHANG XU XIE CAO
Harebell	T1157 <i>Campanula rotundifolia</i>	YUAN YE FENG LING CAO
Harland Box	T1088 <i>Buxus harlandii</i>	XI YE HUANG YANG
Harland Fig	T2719 <i>Ficus fistulosa</i> [Syn. <i>Ficus harlandii</i> ]	SHUI TONG MU
Harlequin Glorybower Leaf	T1562 <i>Clerodendron trichotomum</i>	CHOU WU TONG
Harlequin Glorybower Root	T1563 <i>Clerodendron trichotomum</i>	CHOU WU TONG GEN
Hassler Lobelia*	T3899 <i>Lobelia hassleri</i>	HA SHI SHAN GENG CAI
Hastate Dock*	T5609 <i>Rumex hastatus</i>	JI YE SUAN MO
Hastate Verbena	T6707 <i>Verbena hastata</i>	JI YE MA BIAN CAO
Hastateleaf Sage	T5664 <i>Salvia bulleyana</i>	JI YE SHU WEI CAO
Hawaiian Elephantfoot	T2333 <i>Elephantopus mollis</i>	ROU MAO DI DAN CAO
Hawkweed-like Saussurea	T5770 <i>Saussurea superba</i> [Syn. <i>Saussurea hieracioides</i> ]	CHANG MAO FENG MAO JU
Hawthorn	T1774 <i>Crataegus oxyacantha</i>	YING GUO SHAN ZHA
Hayata Ophiorrhiza	T4509 <i>Ophiorrhiza hayatana</i>	XIA YE SHE GEN CAO
Hazel Sterculia	T6138 <i>Sterculia foetida</i>	JIA MA SHU
Headflower Gentian	T2908 <i>Gentiana cephalantha</i>	TOU HUA LONG DAN
Heartleaf Houttuynia	T3284 <i>Houttuynia cordata</i>	YU XING CAO
Heartleaf Tubergourd	T6435 <i>Thladiantha cordifolia</i>	XIN YE CHI BO
Heart-leaved Alexanders	T6913 <i>Zizia aptera</i>	JI JI QIN
Heartshape Mikania	T4228 <i>Mikania cordata</i>	JIA ZE LAN
Heath Groundsel	T5913 <i>Senecio sylvaticus</i>	YE SHENG QIAN LI GUANG
Hebei Poplar	T5153 <i>Populus hopeiensis</i>	HE BEI YANG
Hedge Acacia	T3778 <i>Leucaena glauca</i> [Syn. <i>Leucaena leucocephala</i> ]	YIN HE HUAN
Hedge Bedstraw	T2832 <i>Galium mollugo</i>	SU ZHU YANG YANG
Hedge Mustard	T5968 <i>Sisymbrium officinale</i>	ZUAN GUO SUAN JIE
Hedge Sageretia	T5645 <i>Sageretia theezans</i> [Syn. <i>Sageretia thea</i> ]	QUE MEI TENG
Hedgehog Brain	T2427 <i>Erinaceus europaeus</i> ; <i>Hemiechinus dauuricus</i> ; <i>Hemiechinus auritus</i>	WEI NAO
Hedgehog Heart and Liver	T2428 <i>Erinaceus europaeus</i> ; <i>Hemiechinus dauuricus</i> ; <i>Hemiechinus auritus</i>	WEI XIN GAN
Heliotrope	T3171 <i>Heliotropium europaeum</i>	OU ZHOU TIAN JIE CAI
Hemhem (in Jordan)	T0448 <i>Anchusa strigosa</i>	CU MAO NIU SHE CAO
Hemihull Eucalyptus*	T2512 <i>Eucalyptus hemiphloia</i>	BAN PI AN
Hemlock Waterdropwort	T4480 <i>Oenanthe crocata</i>	ZANG HONG HUA SE SHUI QIN
Hemp Fimble Flower*	T1175 <i>Cannabis sativa</i>	MA HUA
Hemp Fimble Leaf	T1176 <i>Cannabis sativa</i>	MA YE
Hemp Fimble Root	T1174 <i>Cannabis sativa</i>	MA GEN
Hemp Fimble Seed	T1173 <i>Cannabis sativa</i>	HUO MA REN
Hemp-agrimony	T2554 <i>Eupatorium cannabinum</i>	DA MA YE ZE LAN
Hempleaf Groundsel	T5883 <i>Senecio cannabifolius</i>	MA YE QIAN LI GUANG
Hempleaf Nettle	T6651 <i>Urtica cannabina</i>	QIAN MA



Hemsley Cowparsnip	T3213 <i>Heracleum hemsleyanum</i>	NIU WEI DU HUO
Hemsley Melodinus	T4178 <i>Melodinus hemsleyanus</i>	CHUAN SHAN CHENG
Hemsley Monkshood	T0101 <i>Aconitum hemsleyanum</i>	GUA YE WU TOU
Hen's Egg Shell	T2841 <i>Gallus gallus domesticus</i>	JI ZI KE
Hen's Egg Yolk	T2840 <i>Gallus gallus domesticus</i>	JI ZI HUANG
Hen's Egg-albumen	T2839 <i>Gallus gallus domesticus</i>	JI ZI BAI
Henbit Deadnettle	T3680 <i>Lamium amplexicaule</i>	BAO GAI CAO
Henna Leaf	T3732 <i>Lawsonia inermis</i>	ZHI JIA HUA YE
Henry Actinidia	T0157 <i>Actinidia callosa</i> var. <i>henryi</i>	JING LI MI HOU TAO
Henry Anisetree	T3401 <i>Illicium henryi</i>	HONG HUI XIANG
Henry Magnoliavine	T5793 <i>Schisandra henryi</i>	YI GENG WU WEI ZI
Henry Rabbosia	T3493 <i>Isodon henryi</i>	E XI XIANG CHA CAI
Henry St.John'swort	T3354 <i>Hypericum henryi</i>	HENG LI DI ER CAO
Henry Wampee	T1533 <i>Clausena dentata</i>	YE HUANG PI
Henry's Monachosorum	T4268 <i>Monachosorum henryi</i>	XI ZI JUE
Henry's Rose	T5566 <i>Rosa henryi</i>	RUAN TIAO QI QIANG WEI
Heptaleaf Wampee*	T1536 <i>Clausena heptaphylla</i>	QI YE HUANG PI
Herb Bennet	T2958 <i>Geum urbanum</i>	XIANG CAO SHUI YANG MEI
Herbaceous Pygmaepremna	T5341 <i>Pygmaepremna herbacea</i> [Syn. <i>Premna herbacea</i> ]	QIAN JIE CAO
Hercules' Club	T6871 <i>Zanthoxylum clava-hercules</i>	MEI GUO CI JIAO
Hernandez Meadowrue*	T6391 <i>Thalictrum hernandezii</i>	HE SHI TANG SONG CAO
Hernandialeaf Stephania	T6128 <i>Stephania hernandifolia</i>	RU LAN
Heterofoot Lumbrinereis*	T3937 <i>Lumbriconeis heteropoda</i>	YI ZU SUO SHA CAN
Heteroleaf Markingnut*	T5873 <i>Semecarpus heterophylla</i>	YI YE ROU TUO GUO
Heteroleaf Mayten*	T4133 <i>Maytenus heterophylla</i>	YI YE MEI DENG MU
Heteroleaf Monkshood*	T0103 <i>Aconitum heterophyllum</i>	YI YE WU TOU
Heterophylla Falsestarwort	T5260 <i>Pseudostellaria heterophylla</i>	YI YE JIA FAN LV
Heterostemonous Biebersteinia	T0942 <i>Biebersteinia heterostemon</i>	XUN DAO NIU
Hexaseed Ouratea*	T4561 <i>Ouratea hexasperma</i>	LIU ZI SAI JIN LIAN MU
Heyne Ervatamia*	T2443 <i>Ervatamia hainanensis</i>	HAI NAN GOU YA HUA
High Ailanthus*	T0256 <i>Ailanthus excelsa</i>	GAO CHU
High Coffee*	T1609 <i>Coffea excelsa</i>	GAO KA FEI
High Concave-top Alga*	T3716 <i>Laurencia elata</i>	GAO AO DING ZAO
High Elephantfoot*	T2332 <i>Elephantopus elatus</i>	GAO DI DAN CAO
High Juniper*	T3587 <i>Juniperus excelsa</i>	GAO DA CI BAI
High Larkspur*	T2075 <i>Delphinium excelsum</i>	GAO DA CUI QUE HUA
High Ligusticum*	T3821 <i>Ligusticum elatum</i>	GAO DANG GUI
High Mallow	T4091 <i>Malva sylvestris</i>	OU JIN KUI
High Tephrosia*	T6334 <i>Tephrosia elata</i>	GAO HUI MAO DOU
Highest Chastetree Leaf*	T6783 <i>Vitex altissima</i>	ZUI GAO MU JING YE
Highland Meadowrue	T6376 <i>Thalictrum cultratum</i>	GAO YUAN TANG SONG CAO
Hildebrandt Tephrosia*	T6336 <i>Tephrosia hildebrandtii</i>	XI SHI HUI MAO DOU
Hill Flindersia*	T2739 <i>Flindersia collina</i>	SHAN QIU JU PAN MU
Hill Stemona*	T6109 <i>Stemona collinsae</i>	XIAO QIU BAI BU
Himalaya Rhodiola	T5495 <i>Rhodiola himalansis</i>	XI MA HONG JING TIAN
Himalayan Box	T1095 <i>Buxus wallichiana</i>	WA LI XI HUANG YANG
Himalayan Coralbean	T2459 <i>Erythrina arborescens</i>	QIAO MU CI TONG
Himalayan Desertcandle	T2414 <i>Eremurus himalaicus</i>	XI MA DU WEI CAO
Himalayan Inula	T3438 <i>Inula royleana</i>	XI MA XUAN FU HUA
Himalayan Iris*	T3463 <i>Iris kumaonensis</i>	XI MA LA YA YUAN WEI
Himalayan Milkwort*	T5074 <i>Polygala emodi</i>	XI MA LA YA YUAN ZHI
Himalayan Peony	T4583 <i>Paeonia emodi</i>	DUO HUA SHAO YAO
Himalayan Teasel	T2234 <i>Dipsacus asperoides</i>	CHUAN XU DUAN

Himalayan Yew	T6317 <i>Taxus wallichiana</i>	XI MA LA YA HONG DOU SHAN
Hindu Datura Flower	T2044 <i>Datura metel</i>	YANG JIN HUA
Hindu Datura Leaf	T2042 <i>Datura metel</i>	MAN TUO LUO YE
Hindu Datura Root	T2041 <i>Datura metel</i>	MAN TUO LUO GEN
Hindu Datura Seed	T2043 <i>Datura metel</i>	MAN TUO LUO ZI
Hindu Lotus Large Rhizome	T4402 <i>Nelumbo nucifera</i>	OU
Hindu Lotus Leaf	T4398 <i>Nelumbo nucifera</i>	HE YE
Hindu Lotus Leaf-base	T4399 <i>Nelumbo nucifera</i>	HE YE DI
Hindu Lotus Petiole	T4397 <i>Nelumbo nucifera</i>	HE GENG
Hindu Lotus Plumule	T4401 <i>Nelumbo nucifera</i>	LIAN ZI XIN
Hindu Lotus Seed	T4400 <i>Nelumbo nucifera</i>	LIAN ZI
Hinoki False Cypress	T1349 <i>Chamaecyparis obtusa</i>	RI BEN BIAN BAI
Hippomane Cupflower*	T4429 <i>Nierembergia hippomanica</i>	MA ZHUANG SAI YA MA
Hirsute Bittersweet*	T1295 <i>Celastrus strigillosus</i>	CU MAO NAN SHE TENG
Hirsute Cissampelos*	T1453 <i>Cissampelos pareira</i> var. <i>hirsute</i>	YA HU NU
Hirsute Euchresta*	T2529 <i>Euchresta strigillosa</i>	FU MAO SHAN DOU GEN
Hirsute Gambirplant*	T6617 <i>Uncaria hirsuta</i>	MAO GOU TENG
Hirsute Licorice	T3011 <i>Glycyrrhiza aspera</i>	CU MAO GAN CAO
Hirsute Rasperry	T5592 <i>Rubus hirsutus</i>	CI BO
Hirsute Yam*	T2199 <i>Dioscorea hirsuta</i>	CU MAO SHU YU
Hirsutefruit White Quebracho*	T0763 <i>Aspidosperma dasycarpon</i>	CU MAO GUO BAI JIAN MU
HirsuteMillettia	T4239 <i>Millettia nitida</i> var. <i>hirsutissima</i>	FENG CHENG JI XUE TENG
Hisped Vineclethra	T1549 <i>Clematoclethra scanden</i>	GANG MAO TENG SHAN LIU
Hispid Arthraxon	T0707 <i>Arthraxon hispidus</i>	JIN CAO
Hispid Fig	T2727 <i>Ficus simplicissima</i>	CU YE RONG
Hispid Onosma*	T4498 <i>Onosma hispida</i>	CU YING MAO DIAN ZI CAO
Hispid Pepper*	T4949 <i>Piper hispidum</i>	YING MAO HU JIAO
Hispid Ragweed*	T0402 <i>Ambrosia hispida</i>	CU YING MAO TUN CAO
Hispid Sage	T5687 <i>Salvia prionitis</i>	HONG GEN CAO
Hispid Yam	T2200 <i>Dioscorea hispida</i>	BAI SHU LANG
Hispid 纒孔菌	T3425 <i>Inonotus hispidus</i>	CU YING MAO XIAN KONG JUN
Hispidus Girald Acanthopanax	T0037 <i>Acanthopanax giraldii</i> var. <i>hispidus</i>	MAO GENG HONG MAO WU JIA
Hoary Pepperwort	T3757 <i>Lepidium draba</i>	MAO DU XING CAI
Hog's Fennel	T4764 <i>Peucedanum officinale</i>	YAO YONG QIAN HU
Hogweed	T3224 <i>Heracleum sphondylium</i>	NIU FANG FENG
Holland Planted Saffron*	T1806 <i>Crocus antalyensis</i> cv	HE LAN ZHONG ZHI FAN HONG HUA
Hollowed Wampee	T1535 <i>Clausena excavata</i>	SHAN HUANG PI
Hollyhock Flower	T0382 <i>Althaea rosea</i>	SHU KUI HUA
Hollyhock-like Yam	T2189 <i>Dioscorea althaeoides</i>	SHU KUI YE SHU YU
Hollyleaf Acanthus	T0048 <i>Acanthus ilicifolius</i>	LAO SHU LE
Homoloba Lespedeza*	T3772 <i>Lespedeza homoloba</i>	TONG XING LIE PIAN HU ZHI ZI
Honan Meadowrue	T6392 <i>Thalictrum honanense</i>	HE NAN TANG SONG CAO
Hondapara	T2181 <i>Dillenia indica</i>	WU YA GUO
Honey	T0540 <i>Apis cerana</i>	FENG MI
Honeyed Acacia	T0026 <i>Acacia mellifera</i>	JU MI JIN HE HUAN
Honeylocust	T2982 <i>Gleditsia triacanthos</i>	SAN CI ZAO JIA
Hongkong Pencilwood	T2310 <i>Dysoxylum hongkongense</i>	XIANG GANG JIAN MU
Hooked Dendrobium	T2094 <i>Dendrobium aduncum</i>	GOU ZHUANG SHI HU
Hooked Pepper*	T4928 <i>Piper aduncum</i>	GOU ZHUANG HU JIAO
Hooked Spikemoss	T5870 <i>Selaginella uncinata</i>	CUI YUN CAO
Hookedhair Madder	T5582 <i>Rubia oncotricha</i>	GOU MAO QIAN CAO
Hookedhairypod Tickclover	T2130 <i>Desmodium gangeticum</i>	HONG MU JI CAO

Hookedspine Bittersweet	T1286 <i>Celastrus flagellaris</i>	CI NAN SHE TENG
Hooker Cucumber*	T1874 <i>Cucumis hookeri</i>	HU KE HUANG GUA
Hooker Onosma	T4499 <i>Onosma hookeri</i>	XI HUA DIAN ZI CAO
Hop-shaped Dodder	T1914 <i>Cuscuta lupuliformis</i>	PI JIU HUA TU SI ZI
Horse Bean	T6748 <i>Vicia faba</i> var. <i>equina</i>	MA CAN DOU
Horse Mint	T4185 <i>Mentha longifolia</i>	OU BO HE
Horsechestnut	T0202 <i>Aesculus hippocastanum</i>	OU ZHOU QI YE SHU
Horseradish	T0647 <i>Armoracia lapathifolia</i>	LA GEN
Horsetail Beefwood	T1258 <i>Casuarina equisetifolia</i>	MU MA HUANG
Horseweed Fleabane	T1657 <i>Conyza canadensis</i> [Syn. <i>Erigeron canadensis</i> ]	QI ZHOU YI ZHI HAO <i>Conyza</i> <i>canadensis</i> <i>Erigeron canadensis</i>
Hosie Ormosia	T4530 <i>Ormosia hosiei</i>	HONG DOU
Hottentot Fig	T4200 <i>Mesembryanthemum edule</i>	SHI YONG RI ZHONG HUA
Howe	T1272 <i>Caulerpa sertularioides</i>	BANG YE JUE ZAO
Huapei Scabious	T5778 <i>Scabiosa tschiliensis</i>	HUA BEI LAN PEN HUA
Huaxi Fritillary	T2794 <i>Fritillaria siechuanica</i>	HUA XI BEI MU
Hubei Landpick	T5096 <i>Polygonatum zanlanscianense</i>	HU BEI HUANG JING
Hubei Liriope	T3875 <i>Liriope spicata</i> var. <i>prolifera</i>	HU BEI SHAN MAI DONG
Human Hair	T3278 <i>Homo sapiens</i>	XUE YU
Human Placenta	T3279 <i>Homo sapiens</i>	ZI HE CHE
Human Urine	T3276 <i>Homo sapiens</i>	REN NIAO
Human Urine Sediment	T3277 <i>Homo sapiens</i>	REN ZHONG BAI
Humifuse Euphorbia	T2591 <i>Euphorbia humifusa</i>	DI JIN CAO
Hupei Anemone	T0468 <i>Anemone hupehensis</i>	DA PO WAN HUA HUA
Hupei Fritillary	T2787 <i>Fritillaria hupehensis</i>	HU BEI BEI MU
Hupei Hawthorn	T1770 <i>Crataegus hupehensis</i>	HU BEI SHAN ZHA
Hupei Snakegourd	T6509 <i>Trichosanthes hupehensis</i>	HU BEI GUA LOU
Hyacinth Dolichos Seed	T2246 <i>Dolichos lablab</i>	BIAN DOU
Hyacinth Falselily	T4443 <i>Notholirion hyacinthinum</i> [Syn. <i>Notholirion bulbuliferum</i> ]	JIA BAI HE
Hyberna Euphorbia	T2592 <i>Euphorbia hyberna</i>	HAI BO NA DA JI
Hybrid Bluebeard*	T1220 <i>Caryopteris clandonensis</i>	ZA JIAO YOU <sup>(2)</sup>
Hybrid Clover*	T6520 <i>Trifolium hybridum</i>	ZA JIAO CHE ZHOU CAO
Hybrid Lily*	T3838 <i>Lilium speciosum</i> x <i>L. nobilissimum</i>	ZA JIAO BAI HEX
Hybrid Pathenium*	T4659 <i>Parthenium argentatum</i> x <i>P. tomentosa</i>	ZA JIAO YIN JIAO JU
Hypoglaucous Collett Yam	T2201 <i>Dioscorea hypoglauca</i> [Syn. <i>Dioscorea collettii</i> var. <i>hypoglauca</i> ]	BI XIE
Hyrceanian Box*	T1089 <i>Buxus hyrcana</i>	HE KA NI YA HUANG YANG
Hyssop-leaved Boneset	T2562 <i>Eupatorium hyssopifolium</i>	SHEN XIANG CAO YE ZE LAN
Iberian Narcissus*	T4374 <i>Narcissus bujei</i>	YI BI LI YA SHUI XIAN
Iberian Oak*	T5373 <i>Quercus iberica</i>	YI BI LI YA LI
Iceland Moss	T1341 <i>Cetraria islandica</i>	BING DAO YI
Iceland Poppy	T4629 <i>Papaver nudicaule</i>	YE YING SU
Icosandrous Pokeweed*	T4865 <i>Phytolacca icosandra</i>	ER SHI RUI SHANG LU
Ignat Poisonnut Seed	T6177 <i>Strychnos ignatii</i>	LV SONG GUO
Ili Larkspur	T2078 <i>Delphinium iliense</i>	YI LI CUI QUE HUA
Illicis-leaf Mayten*	T4135 <i>Maytenus ilicifolia</i>	DONG QING YE MEI DENG MU
Illyrian Cottonthistle*	T4497 <i>Onopordum illyricum</i>	YI LI LI YA DA CHI JI
Imbricate Mosquito Fern	T0838 <i>Azolla imbricata</i> [Syn. <i>Salvinia imbricata</i> ]	MAN JIANG HONG
Imbricate Podocarpus	T5041 <i>Podocarpus imbricatus</i>	JI MAO SONG
Immature Persimmon Fruit Juice	T2219 <i>Diospyros kaki</i>	SHI QI
Incarnate Gloeostereum	T2993 <i>Gloeostereum incarnatum</i>	YU ER
Incarnate Milkweed*	T0738 <i>Asclepias incarnata</i>	ROU HONG MA LI JIN
Incised Corydalis	T1719 <i>Corydalis incisa</i>	ZI HUA YU DENG CAO

Incised Histiopteris	T3260 <i>Histiopteris incisa</i>	LI JUE
Incised Notopterygium	T4446 <i>Notopterygium incisum</i>	QIANG HUO
Incurvedspur Snapweed	T3414 <i>Impatiens sicutifer</i>	HUANG JIN FENG
India Caraway*	T1216 <i>Carum ajowan</i>	YIN DU ZANG HUI XIANG
India Greenstar	T5065 <i>Polyalthia longifolia</i>	BIAN ZHONG CHANG YE AN LUO
India Jointfir	T3035 <i>Gnetum ula</i>	YIN DU MAI MA TENG
India Luvunga	T3946 <i>Luvunga scandens</i>	SAN YE TENG JU
India Mustard	T1007 <i>Brassica juncea</i>	JIE CAI
India Mustard Seed	T1008 <i>Brassica juncea</i>	JIE ZI
Indian Abutilon	T0015 <i>Abutilon indicum</i>	MO PAN CAO
Indian Aeginetia	T0195 <i>Aeginetia indica</i>	YE GU
Indian Avocado*	T4733 <i>Persea indica</i>	YIN DU E LI
Indian Azalea	T5523 <i>Rhododendron simsii</i>	DU JUAN HUA
Indian Azalea Leaf	T5524 <i>Rhododendron simsii</i>	DU JUAN HUA YE
Indian Balanophora	T0858 <i>Balanophora indica</i> [Syn. <i>Langodorfia indica</i> ]	YIN DU SHE GU
Indian Balata*	T4105 <i>Manilkara indica</i>	IN DU TIE XIAN ZI
Indian Bread	T5169 <i>Poria cocos</i>	FU LING
Indian Catnip*	T4415 <i>Nepeta hindostana</i>	YIN DU JIA JING JIE
Indian Common Jasminorange	T4319 <i>Murraya koenigii</i>	YIN DU JIU LI XIANG
Indian Damnacanthus	T2020 <i>Damnacanthus indicus</i>	HU CI
Indian Dutchmanspipe*	T0630 <i>Aristolochia indica</i>	YIN DU MA DOU LING
Indian Epimeredi	T0503 <i>Anisomeles indica</i> [Syn. <i>Epimeredi indica</i> ]	GUANG FANG FENG
Indian Garcinia*	T2859 <i>Garcinia indica</i>	YIN DU TENG HUANG
Indian Glorybower	T1557 <i>Clerodendron indicum</i>	CHANG GUAN JIA MO LI
Indian Greenstar Variety*	T5066 <i>Polyalthia longifolia</i> var. <i>pendula</i>	BIAN ZHONG CHANG YE AN LUO
Indian Heliotrope	T3174 <i>Heliotropium indicum</i>	DA WEI YAO
Indian Hemp*	T1177 <i>Cannabis sativa</i> var. <i>indica</i>	YIN DU DA MA
Indian Iphigenia	T3443 <i>Iphigenia indica</i>	CAO BEI MU
Indian Juicy Euphorbia*	T2603 <i>Euphorbia nivulia</i>	YIN DU DUO ZHI DA JI
Indian Jujube	T6920 <i>Ziziphus mauritiana</i>	MIAN ZAO
Indian Katon	T5708 <i>Sandoricum koetjape</i> [Syn. <i>Sandoricum indicum</i> ]	YIN DU SHAN DAO LIAN YE
Indian Leadword	T5028 <i>Plumbago indica</i>	ZI XUE HUA
Indian Lettuce	T3659 <i>Lactuca indica</i>	SHAN WO JU
Indian Liana	T0449 <i>Ancistrocladus heyneanus</i>	HAI NI GOU ZHI TENG
Indian Madder Root	T5578 <i>Rubia cordifolia</i>	QIAN CAO GEN
Indian Madder Stem	T5579 <i>Rubia cordifolia</i>	QIAN CAO TENG
Indian Maesa	T4028 <i>Maesa indica</i>	LIANG MIAN QING
Indian Mockstrawberry	T2290 <i>Duchesnea indica</i>	SHE MEI
Indian Nightshade	T6000 <i>Solanum indicum</i>	TIAN QIE ZI
Indian Pea	T3710 <i>Lathyrus sativus</i>	CAO XIANG WAN DOU
Indian Pluchea	T0847 <i>Baccharis indica</i> [Syn. <i>Pluchea indica</i> ]	KUO BAO JU
Indian Pokeweed	T4864 <i>Phytolacca esculenta</i> [Syn. <i>Phytolacca acinosa</i> ]	SHANG LU
Indian Pristimera	T5208 <i>Pristimera indica</i>	BIAN SHUO TENG
Indian Python	T5368 <i>Python molurus bivittatus</i>	MANG SHE
Indian Quassia wood	T4881 <i>Picrasma quassioides</i> [Syn. <i>Picrasma ailanthoides</i> ]	KU MU
Indian Quassia wood Bark	T4882 <i>Picrasma quassioides</i> [Syn. <i>Picrasma ailanthoides</i> ]	KU SHU PI
Indian Rorippa	T5560 <i>Rorippa montana</i> [Syn. <i>Rorippa dubia</i> ; <i>Sisymbrium dubium</i> ]	HAN CAI
Indian Sesbania	T5926 <i>Sesbania sesban</i>	AI JI TIAN JING
Indian Seseli*	T5932 <i>Seseli indicum</i>	YIN DU XIE HAO
Indian Skullcap	T5840 <i>Scutellaria indica</i>	HAN XIN CAO
Indian Snailseed*	T1585 <i>Cocculus indicus</i>	YIN DU MU FANG JI
Indian Sphaeranthus	T6071 <i>Sphaeranthus indicus</i>	RONG MAO DAI XING CAO
Indian Stringbush Root	T6820 <i>Wikstroemia indica</i>	LIAO GE WANG GEN

Indian Tobacco	T3900 <i>Lobelia inflata</i>	BEI MEI ZHOU SHAN GENG CAI
Indian Truffle	T6559 <i>Tuber indicum</i>	YIN DU KUAI JUN
Indian Trumpetflower	T4537 <i>Oroxylum indicum</i>	MU HU DIE
Indian Trumpetflower Bark	T4538 <i>Oroxylum indicum</i>	MU HU DIE SHU PI
Indian Tylophora*	T6577 <i>Tylophora asthmatica</i> [Syn. <i>Tylophora indica</i> ]	YIN DU WA ER TENG
Indian Wild Chrysanthemum	T1392 <i>Chrysanthemum indicum</i>	YE JU
Indian Wild Chrysanthemum Flower	T1393 <i>Chrysanthemum indicum</i>	YE JU HUA
Indianmulberry	T4280 <i>Morinda citrifolia</i>	HAI BA JI
Indianpipe	T4276 <i>Monotropa uniflora</i>	SHUI JING LAN
Indian-Sri-Lankan Leafflower*	T4839 <i>Phyllanthus myrtilifolius</i>	YIN DU SI LI LAN KA YE XIA ZHU
Indica Melia*	T4161 <i>Melia indica</i>	YIN JIAN
Indigobush Amorpha	T0421 <i>Amorpha fruticosa</i>	ZI SUI HUAI
Indigo-coloured Woad Leaf	T3476 <i>Isatis indigotica</i>	DA QING YE
Indigoplant Fruit	T5120 <i>Polygonum tinctorium</i>	LIAO LAN GUO
Indigoplant Leaf	T5121 <i>Polygonum tinctorium</i>	LIAO LAN YE
Indigowoad Root	T3475 <i>Isatis indigotica</i>	BAN LAN GEN
Indochina Stemon*	T6108 <i>Stemona cochinchinensis</i>	YIN DU ZHI NA BAI BU
Inedible Mushroom	T3299 <i>Hydnellum caeruleum</i>	LAN SE YA CHI JUN
Inflated Licorice	T3015 <i>Glycyrrhiza inflata</i>	ZHANG GUO GAN CAO
Inflatedfruit Senna	T1247 <i>Cassia sophera</i>	JIANG MANG
Inflexed Rabdosia	T3494 <i>Isodon inflexa</i> [Syn. <i>Rabdosia inflexa</i> ]	NEI ZHE XIANG CHA CAI
Inga*	T3424 <i>Inga umbellifera</i>	SAN XING HUA XU YIN JIA
Integerleaf Artocarpus	T0715 <i>Artocarpus integra</i>	QUAN YUAN GUI MU
Integrifolious Ailanthus*	T0257 <i>Ailanthus integrifolia</i> ssp. <i>calycina</i>	QUAN YUAN CHU
Integrifolious Artocarpus*	T0716 <i>Artocarpus integrifolia</i>	QUAN YUAN YE BO LUO MI
Integrifolious Barberry	T0905 <i>Berberis integerrima</i>	QUAN YUAN YE XIAO BO
Integrifolious Otostegia*	T4558 <i>Otostegia integrifolia</i>	QUAN YUAN YE AO TUO SI TE CAO
Integrifolious Pricklyash*	T6882 <i>Zanthoxylum integrifoliolum</i>	QUAN YUAN YE HUA JIAO
Integripetal Rhodiola	T5499 <i>Rhodiola sacra</i>	SHENG DI HONG JING TIAN
Intermediate Chartolepis	T1354 <i>Chartolepis intermedia</i>	BO LIN JU
Intermediate Ephedra	T2369 <i>Ephedra intermedia</i>	ZHONG MA HUANG
Intermediate Largeleaf Chastetree*	T1700 <i>Cornutia grandifolia</i> var. <i>intermedia</i>	ZHONG JIAN DA YE KE NU CAO
Intermediate Magnoliavine	T5798 <i>Schisandra propinqua</i> var. <i>intermedia</i>	ZHONG JIAN WU WEI ZI
Intermediate Peashrub	T1189 <i>Caragana intermedia</i>	ZHONG JIAN JIN JI ER
Intermediate Plagioclasma	T4989 <i>Plagioclasma intermedium</i>	WU WEN ZI BEI TAI
Intermediate Shiko Rabdosia*	T3526 <i>Isodon shikokiana</i> var. <i>intermedius</i>	JIAN XING SI GUO XIANG CHA CAI
Intermediate Stickseed	T3689 <i>Lappula intermedia</i>	ZHONG JIAN HE SHI
Intermediate Sundew*	T2265 <i>Drosera intermedia</i>	ZHONG JIAN MAO GAO CAI
Interrupted Clubmoss	T3965 <i>Lycopodium annotinum</i>	DAN SUI SHI SONG
Involucrate Balanophora	T0859 <i>Balanophora involucreta</i>	TONG QIAO SHE GU
Involute Spikemoss	T5862 <i>Selaginella involvens</i>	YAN ZHOU JUAN BAI
Ipecacuanha	T1315 <i>Cephaelis ipecacuanha</i>	TU GEN
Iran Dragonhead*	T2256 <i>Dracocephalum kotschyi</i>	YI LANG QING LAN
Iran Giantfennel*	T2703 <i>Ferula kuhistanica</i>	YI LANG A WEI
Iran Speedwell	T6727 <i>Veronica persica</i>	A LA BO PO PO NA
Iroko Fustic-tree	T1376 <i>Chlorophora excelsa</i>	GAO HUANG LU SANG
Iron-sheet Dendrobium	T2108 <i>Dendrobium officinale</i>	TIE PI SHI HU
Italian Arum	T0719 <i>Arum italicum</i>	YI DA LI JIASNG NAN XING
Italian Everlasting*	T3158 <i>Helichrysum italicum</i>	YI DA LI LA JU
Italian Ryegrass	T3903 <i>Lolium multiflorum</i>	DUO HUA HEI MAI CAO
Italian Senna*	T1234 <i>Cassia italica</i>	YI DA LI JUE MING ZI
Iva Bugle*	T0265 <i>Ajuga iva</i>	AI WA JIN GU CAO
Ivory Coast Erythrophleum	T2486 <i>Erythrophleum ivorense</i>	XIANG YA HAI AN GE MU

Ivy Glorybind	T1143 <i>Calystegia hederacea</i>	MIAN GEN TENG
Jack Torreyia	T6478 <i>Torreya jackii</i>	CHANG YE FEI SHU
Jackinprison	T4431 <i>Nigella damascena</i>	HEI ZHONG CAO
Jadehairpin-leaf Plantain*	T5005 <i>Plantago hostifolia</i>	YU ZAN YE CHE QIAN
Jamaica Cherry*	T4314 <i>Muntingia calabura</i>	YA MAI JIA YING TAO
Jamaica Falsevalerian	T6095 <i>Stachytarpheta jamaicensis</i>	JIA MA BIAN
Jamaica Quassia-wood	T4880 <i>Picrasma excelsa</i>	YA MAI JIA KU MU
Japan Corktree*	T4793 <i>Phellodendron japonicum</i>	RI BEN HUANG BAI
Japan Hogfennel	T4760 <i>Peucedanum japonicum</i>	BIN HAI QIAN HU
Japanese Acanthopanax*	T0039 <i>Acanthopanax japonicum</i>	RI BEN WU JIA
Japanese Achyranthes	T0074 <i>Achyranthes fauriei</i>	RI BEN NIU XI
Japanese Agrimonia Root	T0250 <i>Agrimonia pilosa</i> var. <i>japonica</i>	XIAN HE CAO GEN
Japanese Agrimonia*	T0247 <i>Agrimonia japonica</i>	RI BEN LONG YA CAO
Japanese Alder	T0328 <i>Alnus japonica</i>	CHI YANG
Japanese Ampelopsis	T0427 <i>Ampelopsis japonica</i> [Syn. <i>Paullinia japonica</i> ]	BAI LIAN
Japanese Angelica*	T0485 <i>Angelica japonica</i>	RI BEN DANG GUI
Japanese Anisetree	T3399 <i>Illicium anisatum</i>	RI BEN MANG CAO
Japanese Apricot	T5228 <i>Prunus mume</i>	WU MEI
Japanese Apricot Flower	T5226 <i>Prunus mume</i>	BAI MEI HUA
Japanese Apricot Kernel	T5227 <i>Prunus mume</i>	MEI HE REN
Japanese Aralia	T0568 <i>Aralia chinensis</i>	CONG MU
Japanese Arborviate Stem-bark	T6442 <i>Thuja standishii</i>	RI BEN XIANG BAI JING PI
Japanese Ardisia	T0598 <i>Ardisia japonica</i>	ZI JIN NIU
Japanese Ardisia Root	T0599 <i>Ardisia japonica</i>	ZI JIN NIU GEN
Japanese Argimonia	T0249 <i>Agrimonia pilosa</i> var. <i>japonica</i>	XIAN HE CAO
Japanese Argimonia Rhizome	T0251 <i>Agrimonia pilosa</i> var. <i>japonica</i>	XIAN HE CAO GEN YA
Japanese Ash*	T2771 <i>Fraxinus japonica</i>	RI BEN BAI LA SHU
Japanese Atractylodes	T0821 <i>Atractylodes japonica</i>	GUAN CANG ZHU
Japanese Aucuba	T0828 <i>Aucuba japonica</i>	DONG YING SHAN HU MU
Japanese Avens	T2955 <i>Geum japonicum</i>	SHUI YANG MEI
Japanese Avens Root	T2956 <i>Geum japonicum</i>	SHUI YANG MEI GEN
Japanese Azalea	T5511 <i>Rhododendron japonicum</i>	RI BEN DU JUAN HUA
Japanese Balanophora	T0860 <i>Balanophora japonica</i>	GE XUN
Japanese Barberry	T0916 <i>Berberis thunbergii</i>	RI BEN XIAO BO
Japanese Beautyberry	T1119 <i>Callicarpa japonica</i>	RI BEN ZI ZHU
Japanese Buckeye	T0204 <i>Aesculus turbinata</i>	RI BEN QI YE SHU
Japanese Bugbane*	T1422 <i>Cimicifuga japonica</i>	RI BEN SHENG MA
Japanese Bulge	T0267 <i>Ajuga nipponensis</i>	ZI BEI JIN PAN
Japanese Butterbur	T4740 <i>Petasites japonicus</i>	FENG DOU CAI
Japanese Buttercup	T5414 <i>Ranunculus japonicus</i>	MAO GEN
Japanese Caesalpinia*	T1104 <i>Caesalpinia japonica</i>	RI BEN SU MU
Japanese Camellia	T1145 <i>Camellia japonica</i>	SHAN CHA
Japanese Cayratia	T1275 <i>Cayratia japonica</i>	WU LIAN MEI
Japanese Cedar	T1868 <i>Cryptomeria japonica</i>	RI BEN LIU SHAN
Japanese Chinaberry-tree	T4160 <i>Melia azedarach</i> var. <i>japonica</i>	RI BEN KU LIAN
Japanese Chinaure*	T0966 <i>Boenninghausenia japonica</i>	RI BEN CHOU JIE CAO
Japanese Chionographis*	T1369 <i>Chionographis japonica</i>	RI BEN BAI SI CAO
Japanese Cinnamon	T1441 <i>Cinnamomum japonicum</i>	GUI PI
Japanese Clave Fern	T4502 <i>Onychium japonicum</i> [Syn. <i>Tricomanes japonicum</i> ]	XIAO YE JI WEI
Japanese Cleyera	T1571 <i>Cleyera ochracea</i> [Syn. <i>Cleyera japonica</i> ]	YANG TONG
Japanese Cleyera	T6350 <i>Ternstroemia japonica</i>	RI BEN HOU PI XIANG
Japanese Climbing Fern	T3990 <i>Lygodium japonicum</i>	HAI JIN SHA

Japanese Cnidium	T1581 <i>Cnidium japonicum</i>	BING SHE CHUANG
Japanese Conehead	T6154 <i>Strobilanthes japonicus</i> [Syn. <i>Championella japonica</i> ]	HONG ZE LAN
Japanese Coniogramme	T1640 <i>Coniogramme japonica</i> [Syn. <i>Hemionitis japonica</i> ]	FENG YA JUE
Japanese Coriaria*	T1690 <i>Coriaria japonica</i>	RI BEN MA SANG
Japanese Cowlily*	T4448 <i>Nuphar japonicum</i>	RI BEN PING PENG CAO
Japanese Creeper	T4662 <i>Parthenocissus tricuspidata</i>	DI JIN
Japanese Crinum	T1795 <i>Crinum asiaticum</i> var. <i>japonicum</i>	RI BEN WEN SHU LAN
Japanese Croomia	T1810 <i>Croomia japonica</i>	JIN GANG DA
Japanese Cryptotaenia	T1869 <i>Cryptotaenia japonica</i>	YA ER QIN
Japanese Dock	T5611 <i>Rumex japonicus</i>	YANG TI
Japanese Dodder Seed	T1913 <i>Cuscuta japonica</i>	DA TU SI ZI
Japanese Dualbutterfly*	T6537 <i>Tripterospermum japonicum</i>	RI BEN SHUANG HU DIE
Japanese Eel	T0500 <i>Anguilla japonica</i>	MAN LI YU
Japanese Elsholtzia*	T2342 <i>Elsholtzia nipponica</i>	RI BEN XIANG RU
Japanese Eupatorium	T2563 <i>Eupatorium japonicum</i>	CHENG GAN CAO
Japanese Eurya	T2631 <i>Eurya japonica</i>	LING MU
Japanese Farfugium	T2691 <i>Farfugium japonicum</i>	LIAN PENG CAO
Japanese Felt Fern Frond	T5357 <i>Pyrrosia lingua</i>	SHI WEI
Japanese Flagelliform Liverwort*	T0883 <i>Bazzania japonica</i>	RI BEN BIAN TAI
Japanese Fleeceflower	T5101 <i>Polygonum cuspidatum</i>	HU ZHANG
Japanese Fleeceflower Leaf	T5102 <i>Polygonum cuspidatum</i>	HU ZHANG YE
Japanese Galangal	T0357 <i>Alpinia japonica</i>	TU SHA REN
Japanese Ganoderma	T2846 <i>Ganoderma japonicum</i> [Syn. <i>Ganoderma sinense</i> ]	ZI ZHI
Japanese Gentian*	T2912 <i>Gentiana japonica</i>	RI BEN LONG DAN
Japanese Ginseng	T4607 <i>Panax pseudo-ginseng</i> var. <i>japonicum</i>	ZHU JIE SAN QI
Japanese Goldenray	T3808 <i>Ligularia japonica</i> [Syn. <i>Arnica japonica</i> ; <i>Senecio japonica</i> ]	DA TOU TUO WU
Japanese Goldsaxifrage	T1404 <i>Chrysosplenium japonicum</i>	RI BEN JIN YAO
Japanese Goldthread*	T1667 <i>Coptis japonica</i>	RI BEN HUANG LIAN
Japanese Hedgeparsley	T6476 <i>Torilis japonica</i>	HUA NAN HE SHI
Japanese Honeysuckle	T3912 <i>Lonicera japonica</i>	JIN YIN HUA
Japanese Honeysuckle Vine	T3913 <i>Lonicera japonica</i>	REN DONG TENG
Japanese Hop	T3288 <i>Humulus japonicus</i> [Syn. <i>Humulus scandens</i> ]	LV CAO
Japanese Hylomecon	T3316 <i>Hylomecon japonica</i>	HE QING HUA
Japanese Hypecoum*	T3333 <i>Hypecoum japonicum</i>	DI TANG CAO
Japanese Inula	T3433 <i>Inula japonica</i>	JIN FEI CAO
Japanese Iris*	T3462 <i>Iris komonoensis</i>	RI BEN YUAN WEI
Japanese Ivy	T3115 <i>Hedera rhombea</i>	LING XING CHANG CHUN TENG
Japanese Kadsura	T3616 <i>Kadsura japonica</i>	RI BEN NAN WU WEI ZI
Japanese Katsura-tree	T1332 <i>Cercidiphyllum japonicum</i>	RI BEN LIAN XIANG SHU
Japanese Kerria Flower	T3628 <i>Kerria japonica</i>	DI TANG HUA
Japanese Kumquat	T2759 <i>Fortunella japonica</i>	JIN GAN
Japanese Linden	T6457 <i>Tilia japonica</i>	HUA DONG DUAN
Japanese liverwort	T3550 <i>Jackiella javanica</i>	ZHAO WA JIA KE TAI
Japanese Machilus*	T4016 <i>Machilus japonica</i>	RI BEN NAN
Japanese Maesa	T4029 <i>Maesa japonica</i>	DU JING SHAN
Japanese Mahonia	T4066 <i>Mahonia japonica</i>	HUA NAN GONG LAO MU
Japanese Mahonia Fruit	T4068 <i>Mahonia japonica</i>	HUA NAN GONG LAO ZI
Japanese Mahonia Leaf	T4067 <i>Mahonia japonica</i>	HUA NAN GONG LAO YE
Japanese Mallotus	T4082 <i>Mallotus japonicus</i>	YE WU TONG
Japanese Metaplexis	T4206 <i>Metaplexis japonica</i>	LUO MO
Japanese Metaplexis Seed	T4207 <i>Metaplexis japonica</i>	LUO MO ZI
Japanese Monkshood*	T0104 <i>Aconitum japonicum</i>	RI BEN WU TOU
Japanese Mulberry	T4291 <i>Morus australis</i>	AO DA LI YA SANG

Japanese Mushroom*(Sheep Polypore)	T0288 <i>Albatrellus ovinus</i>	RE BEN MO GU
Japanese Ophiorrhiza	T4510 <i>Ophiorrhiza japonica</i>	RI BEN SHE GEN CAO
Japanese Orixia	T4527 <i>Orixia japonica</i>	CHOU SHAN YANG
Japanese Osmunda Frond	T4552 <i>Osmunda japonica</i>	ZI QI
Japanese Pachysandra	T4575 <i>Pachysandra terminalis</i>	XUE SHAN LIN
Japanese Pagodatree	T6034 <i>Sophora japonica</i>	HUAI
Japanese Pagodatree Fruit	T6036 <i>Sophora japonica</i>	HUAI JIAO
Japanese Pagodatree Root	T6035 <i>Sophora japonica</i>	HUAI GEN
Japanese Phtheirospermum	T4831 <i>Phtheirospermum japonicum</i> [Syn. <i>Gerardia japonica</i> ]	SONG HAO
Japanese Pieris	T4890 <i>Pieris japonica</i>	RI BEN MA ZUI MU
Japanese Pittosporum	T4987 <i>Pittosporum tobira</i>	HAI TONG
Japanese Plum	T5239 <i>Prunus salicina</i>	LI ZI
Japanese Plum Kernel	T5238 <i>Prunus salicina</i>	LI HE REN
Japanese Plumyew	T1320 <i>Cephalotaxus harringtonia</i>	RI BEN CU FEI
Japanese Polypody	T5124 <i>Polypodium niponicum</i>	SHUI LONG GU
Japanese Premna	T5194 <i>Premna microphylla</i>	DOU FU CHAI
Japanese Pricklyash	T6886 <i>Zanthoxylum piperitum</i>	HU JIAO HUA JIAO
Japanese Privet	T3827 <i>Ligustrum japonicum</i>	RI BEN NV ZHEN
Japanese Privet	T3829 <i>Ligustrum robustum</i>	CU ZHUANG NV ZHEN
Japanese Pyrola	T5350 <i>Pyrola japonica</i>	RI BEN LU TI CAO
Japanese Rabdosia	T3496 <i>Isodon japonica</i> [Syn. <i>Rabdosia japonica</i> ]	MAO YE XIANG CHA CAI
Japanese Raisin Tree Root	T3285 <i>Hovenia dulcis</i>	ZHI JU GEN
Japanese Raisin Tree Seed	T3286 <i>Hovenia dulcis</i>	ZHI JU ZI
Japanese Raspberry	T5595 <i>Rubus parviflorus</i>	MAO MEI
Japanese Rose Root	T5569 <i>Rosa multiflora</i>	QIANG WEI GEN
Japanese Sapium	T5722 <i>Sapium japonicum</i>	BAI MU WU JIU
Japanese Scopolia	T5821 <i>Scopolia japonica</i>	DONG LANG DANG
Japanese Skimmia	T5970 <i>Skimmia japonica</i>	XIANG YIN YU
Japanese Snailseed	T1589 <i>Cocculus trilobus</i> [Syn. <i>Cocculus sarmentosus</i> ]	MU FANG JI
Japanese Snailseed Stem	T1590 <i>Cocculus trilobus</i> [Syn. <i>Cocculus sarmentosus</i> ]	QING TENG XIANG
Japanese Snakegourd	T6507 <i>Trichosanthes cucumeroides</i>	WANG GUA
Japanese Snakegourd Seed	T6508 <i>Trichosanthes cucumeroides</i>	WANG GUA ZI
Japanese Snowbell Stem-bark	T6200 <i>Styrax japonica</i>	RI BEN AN XI XIANG JING PI
Japanese Spicebush	T3853 <i>Lindera obtusiloba</i>	SAN ZUAN FENG
Japanese Spiraea	T6079 <i>Spiraea japonica</i>	XIU XIAN JU
Japanese Spiraea Leaf	T6080 <i>Spiraea japonica</i>	XIU XIAN JU YE
Japanese St. John'swort	T3356 <i>Hypericum japonicum</i>	DI ER CAO
Japanese Staphania	T6129 <i>Stephania japonica</i>	QIAN JIN TENG
Japanese Star Jasmine*	T6483 <i>Trachelospermum asiaticum</i>	RI BEN LUO SHI
Japanese Stauntonvine	T6100 <i>Stauntonia hexaphylla</i>	NA TENG
Japanese Stauntonvine Fruit	T6101 <i>Stauntonia hexaphylla</i>	NA TENG GUO
Japanese Stemona	T6111 <i>Stemona japonica</i>	WAN SHENG BAI BU
Japanese Swallowwort*	T1956 <i>Cynanchum japonicum</i>	RI BEN NIU PI XIAO
Japanese Sweetflag*	T0143 <i>Acorus calamus</i> var. <i>angustatus</i>	RI BEN CHANG PU
Japanese Swertia*	T6223 <i>Swertia japonica</i>	RI BEN ZHANG YA CAI
Japanese Tachibana	T1513 <i>Citrus tachibana</i>	LI HUA JU
Japanese Teasel	T2235 <i>Dipsacus japonicus</i>	XU DUAN
Japanese Thistle	T1449 <i>Cirsium japonicum</i>	DA JI
Japanese Toadflax	T3844 <i>Linaria japonica</i>	HAI BIN LIU CHUAN YU
Japanese Trileaf Ladybell*	T0169 <i>Adenophora triphylla</i> var. <i>japonica</i>	RI BEN SAN YE SHA SEN
Japanese Umbrellaleaf	T2231 <i>Diphylleia grayi</i>	SHAN HE YE
Japanese White Birch Bark	T0933 <i>Betula platyphylla</i>	HONG HUA PI
Japanese White Chinaure*	T0965 <i>Boenninghausenia albiflora</i> var. <i>japonica</i>	RI BEN BAI SONG FENG CAO



Japanese Viburnum	T6734 <i>Viburnum awabuki</i>	RI BEN JIA MI
Japanese Wormwood	T0678 <i>Artemisia japonica</i>	MU HAO
Japanese Yam	T2202 <i>Dioscorea japonica</i>	RI BEN SHU YU
Japanese Yew	T6311 <i>Taxus cuspidata</i>	ZI SHAN
Japanese-lantern	T4845 <i>Physalis alkekengi</i>	SUAN JIANG
Japanise Chloranthus	T1371 <i>Chloranthus japonicus</i>	YIN XIAN CAO
Jasmine Nightshade	T6001 <i>Solanum jasminoides</i>	SU XIN YE BAI YING
Jatamans Valeriana	T6677 <i>Valeriana jatamansii</i> [Syn. <i>Valeriana wallichii</i> ]	ZHI ZHU XIANG
Java Almond Canary-tree	T1166 <i>Canarium commune</i>	ZHAO WA GAN LAN
Java Brucea	T1038 <i>Brucea javanica</i> [Syn. <i>Brucea sumatrana</i> ; <i>Rhus javanica</i> ]	YA DAN ZI
Java Cudrania*	T1886 <i>Cudrania javanensis</i>	ZHAO WA ZHE SHU
Java Devilpepper	T5442 <i>Rauwolfia serpentina</i>	YIN DU LUO FU MU
Java Wrightia*	T6833 <i>Wrightia javanica</i>	ZHAO WA DAO DIAO BI
Javan Bishopwood	T0945 <i>Bischofia javanica</i> [Syn. <i>Bischofia trifoliata</i> ]	QIU FENG MU
Javan Meadowrue	T6408 <i>Thalictrum sessile</i>	WU BING TANG SONG CAO
Javan Waterdropwort	T4482 <i>Oenanthe javanica</i>	SHUI QIN
Javan Waterdropwort Flower	T4481 <i>Oenanthe javanica</i>	QIN HUA
Jehol Ligusticum	T3822 <i>Ligusticum jeholense</i>	LIAO GAO BEN
Jersey Lily	T0390 <i>Amaryllis belladonna</i>	GU TING HUA
Jersey Lily Hybrid	T0391 <i>Amaryllis belladonna</i> [hybrida]	GU TING HUA ZA JIAO ZHONG
Jerusalem Artichoke	T3155 <i>Helianthus tuberosus</i>	JU YU
Jerusalemcherry Root	T6009 <i>Solanum pseudo-capsicum</i>	YU SHAN HU GEN
Jerusalem sage	T4814 <i>Phlomis umbrosa</i>	CAO SU
Jew's Ear	T0830 <i>Auricularia auricula</i>	MU ER
Jews-mallow	T1675 <i>Corchorus olitorius</i>	CHANG SHUO HUANG MA
Jiadifengpi Anisetree	T3402 <i>Illicium jiadifengpi</i>	JIA DI FENG PI
Jiangxi Tinospora*	T6465 <i>Tinospora craveniana</i>	JIANG XI QING NIU DAN
Jiangzi Seabuckthorn*	T3255 <i>Hippophae rhamnoides</i> subsp. <i>gyantsensis</i>	JIANG ZI SHA JI
Jimsonweed Root	T2046 <i>Datura stramonium</i>	OU MAN TUO LUO GEN
Jimsonweed Seed*	T2047 <i>Datura stramonium</i>	WAN TAO HUA ZI
Jinghong Greenstar	T5064 <i>Polyalthia cheliensis</i>	JING HONG AN LUO
Jiuhua Largesepal Rabdosia	T3512 <i>Isodon macrocalyx</i> var. <i>jiuhua</i>	JIU HUA DA E XIANG CHA CAI
Jobstears Seed	T1614 <i>Coix lacryma-jobi</i> var. <i>ma-yuen</i>	YI YI REN
Jointfir Ephedra	T2366 <i>Ephedra distachya</i>	SHUANG SUI MA HUANG
Jointwood Senna	T1239 <i>Cassia nodosa</i>	SHEN HUANG DOU
Jolkin Euphorbia	T2594 <i>Euphorbia jolkini</i>	NAN DA JI
Juanislama (in Salvador)	T1111 <i>Calea urticifolia</i>	YOU KA MEI JU
Juicy Milky*	T3654 <i>Lactarius rolemus</i>	DUO ZHI RU GU
Junc-like Sandwort	T0607 <i>Arenaria juncea</i>	LAO NIU JIN
Jupar Rhodiola	T5496 <i>Rhodiola juparensis</i>	YUAN CONG HONG JING TIAN
Juvenileleaf Common Jasminorange	T4321 <i>Murraya microphylla</i>	NEN YE JIU LI XIANG
Juzepczuk Nightshade*	T6002 <i>Solanum juzepczukii</i>	JU SHI QIE
Kabliki Butterbur*	T4741 <i>Petasites kablikianus</i>	KA BU LI FENG DOU CAI
Kadsura Pepper	T4950 <i>Piper kadsura</i> [Syn. <i>Piper futokadsura</i> ]	HAI FENG TENG
Kaempfer Dutchmanspipe	T0631 <i>Aristolochia kaempferi</i>	ZHU SHA LIAN
Kaith Ramin*	T3052 <i>Gonystylus keithii</i>	KAI TE LENG ZHU MU
Kalofilum	T1129 <i>Calophyllum inophyllum</i>	HAI TANG GUO
Kamatatree	T4084 <i>Mallotus philippinensis</i>	LV SONG QIU MAO
Kamchatka Bugbane	T1425 <i>Cimicifuga simplex</i>	YE SHENG MA
Kamchatka Fritillary	T2782 <i>Fritillaria camtschatcensis</i>	HEI BAI HE
Kamchatka Oxtongue	T4885 <i>Picris kamschatica</i>	KAN CHA JIA MAO LIAN CAI
Kamei Rabdosia*	T3498 <i>Isodon kameba</i>	KA MEI XIANG CHA CAI
Kandelia	T3626 <i>Kandelia candel</i>	QIU QIE SHU

Kangting Larkspur	T2087 <i>Delphinium tatsienense</i>	KANG DING CUI QUE HUA
Kansas Gay-feather	T3790 <i>Liatris pycnostachya</i>	MI SUI HUA SHE BIAN JU
Kansu Hawthorn	T1771 <i>Crataegus kansuensis</i>	GAN SU SHAN ZHA
Kansu Sandwort	T0608 <i>Arenaria kansuensis</i> [Syn. <i>Arenaria kumaonensis</i> ]	XUE LING ZHI
Kansui Euphorbia	T2596 <i>Euphorbia kansui</i>	GAN SUI
Kapok Ceiba	T1284 <i>Ceiba pentandra</i>	JI BEI
Karaba Sage*	T5676 <i>Salvia karabachensis</i>	KA LA BA DAN SHEN
Karoo Acacia	T0022 <i>Acacia karroo</i>	KA LUO JIN HE HUAN
Kashgar Tamarisk	T6288 <i>Tamarix hispida</i>	GANG MAO CHENG LIU
Kashmir Larkspur	T2066 <i>Delphinium cashmerianum</i>	KE SHEN MI ER CUI QUE
Katsumada Galangal	T0358 <i>Alpinia katsumadai</i>	CAO DOU KOU
Katsura-tree	T1333 <i>Cercidiphyllum japonicum</i> var. <i>sinense</i>	LIAN XIANG SHU
Kava Pepper	T4955 <i>Piper methysticum</i>	KA WA HU JIAO
Kawakami Gambirplant*	T6619 <i>Uncaria kawakamii</i>	CHUAN SHANG LONG MI GOU TENG
<i>Kayea assamica</i>	T3627 <i>Kayea assamica</i>	
Kazinoki Papermulberry	T1031 <i>Broussonetia kazinoki</i>	XIAO GOU SHU
Keiske Angelica*	T0487 <i>Angelica keiskei</i>	KAI SHI DANG GUI
Kelp Thallus	T3678 <i>Laminaria japonica</i>	KUN BU
Kenaf Hibiscus	T3238 <i>Hibiscus cannabinus</i>	DA MA JIN
Kenya Coralbean*	T2461 <i>Erythrina burttii</i>	KEN NI YA CI TONG
Kenya Crinum*	T1798 <i>Crinum kirkii</i>	KEN NI YA WEN SHU LAN
Kenya Embelia*	T2350 <i>Embelia schimperi</i>	KEN NI YA XIAN SUAN QIANG
Kenya Myrrhree*	T1636 <i>Commiphora kua</i> var. <i>gowllo</i>	KEN NI YA MO YAO
Kenya Tephrosia*	T6331 <i>Tephrosia aequilata</i>	KEN NI YA HUI YE
Kerri Petrocosmea*	T4747 <i>Petrocosmea kerrii</i>	SHI HU DIE
Kerri Stemona*	T6112 <i>Stemona kerrii</i>	DI TANG BAI BU
Khasi Nightshade Fruit	T6003 <i>Solanum khasianum</i>	CI TIAN QIE
Khasya Pine	T4911 <i>Pinus kesiya</i>	KA XI YA SONG
Khat	T1266 <i>Catha edulis</i>	QIAO CHA
Khingan Fir	T0006 <i>Abies nephrolepis</i>	CHOU LENG SHAN
Kidney Bean	T4785 <i>Phaseolus vulgaris</i>	BAI FAN DOU
Kidney Vetch	T0531 <i>Anthyllis vulneraria</i>	LIAO SHANG RONG MAO HUA
Kidneyleaf Goldenray	T3805 <i>Ligularia fischeri</i>	HU LU QI
Kidneyleaf Goldenray Variety*	T3806 <i>Ligularia fischeri</i> var. <i>spiciformis</i>	HU LU QI BIAN ZHONG
King Orange	T1502 <i>Citrus nobilis</i>	CHUAN JU
King Solomonseal	T5092 <i>Polygonatum kingianum</i>	DIAN HUANG JING
Kingsbloom	T4587 <i>Paeonia officinalis</i>	YAO YONG MU DAN
Kinokuni Citrus	T1489 <i>Citrus kinokuni</i>	RU JU
Kirilow Groundsel Herb	T6330 <i>Tephrosia kirilowii</i> [Syn. <i>Senecio integrifolius</i> var. <i>fauriei</i> ]	GOU SHE CAO
Kirilow Rhodiola	T5497 <i>Rhodiola kirilowii</i>	XIA YE HONG JING TIAN
Kirin Monkshood*	T0106 <i>Aconitum kirinense</i>	JI LIN WU TOU
Kiushu Brake	T5292 <i>Pteris kiushuiensis</i>	PING YU FENG WEI JUE
Klein Cinquefoil	T5184 <i>Potentilla kleiniana</i>	SHE HAN WEI LING CAI
Kleini Senna*	T1235 <i>Cassia kleinii</i>	KE LEI NI JUE MING
Klotzsch Wormwood*	T0679 <i>Artemisia klotzschiana</i>	KE SHI HAO
Knotteflower Phyla Herb	T3865 <i>Lippia nodiflora</i>	PENG LAI CAO
Ko Condorvine	T4117 <i>Marsdenia koi</i>	DA YE NIU NAI CAI
Kobus Magnolia	T4040 <i>Magnolia kobus</i>	RI BEN XIN YI
Koch Gentian*	T2914 <i>Gentiana kochiana</i>	KU HE LONG DAN
Kohl-rabi	T1019 <i>Brassica oleracea</i> var. <i>gongylodes</i>	PIE LAN
Kola Garcinia*	T2860 <i>Garcinia kola</i>	KE LE TENG HUANG
Komarov Mosquitotrap	T1957 <i>Cynanchum komarovii</i>	NIU XIN PIAO ZI

Kombe <i>Strophanthus</i> *	T6157 <i>Strophanthus kombe</i>	KANG PI DU MAO XUAN HUA
Kongu	T3280 <i>Hopea parviflora</i>	XIAO HUA PO LEI
Konish Chinafir	T1890 <i>Cunninghamia konishii</i>	TAI WAN SHAN MU
Konka Mountain Monkshood	T0112 <i>Aconitum liljestrandii</i>	GONG GA SHAN WU TOU
Koraen <i>Atractylodes</i>	T0822 <i>Atractylodes koreana</i>	CHAO XIAN CANG ZHU
Korea <i>Patrinia</i> *	T4671 <i>Patrinia saniculaefolia</i>	BIAN DOU CAI YE BAI JIANG
Korea Poplar	T5154 <i>Populus koreana</i>	XIANG YANG
Korean <i>Acanthopanax</i> *	T0040 <i>Acanthopanax koreanum</i>	CHAO XIAN WU JIA
Korean Big Thyme*	T6448 <i>Thymus magnus</i>	CHAO XIAN DA BAI LI XIANG
Korean <i>Epimedium</i>	T2398 <i>Epimedium koreanum</i>	CHAO XIAN YIN YANG HUO
Korean Fir	T0005 <i>Abies koreana</i>	CHAO XIAN LENG SHAN
Korean <i>Forsythia</i> *	T2754 <i>Forsythia koreana</i>	CHAO XIAN LIAN QIAO
Korean Monkshood	T0088 <i>Aconitum coreanum</i>	HUANG HUA WU TOU
Korean Pine	T4913 <i>Pinus koraiensis</i>	HONG SONG
Korean Pine Seed	T4912 <i>Pinus koraiensis</i>	HAI SONG ZI
Korean <i>Pulsatilla</i>	T5324 <i>Pulsatilla cernua</i>	CHAO XIAN BAI TOU WENG
Korean <i>Rhododendron</i>	T5519 <i>Rhododendron mucronulatum</i>	YING SHAN HONG
Korean <i>Sophora</i>	T6037 <i>Sophora koreensis</i>	CHAO XIAN LANG YA CI
Korean Spruce	T4873 <i>Picea koraiensis</i>	HONG PI YUN SHAN
Kotake (in Japanese)	T5734 <i>Sarcodon aspratus</i>	
Krukov <i>Mayten</i> *	T4136 <i>Maytenus krukovii</i>	KE SHI MEI DENG MU
Kua <i>Myrrh</i> tree*	T1635 <i>Commiphora kua</i>	KU A MO YAO
Kudincha Holly	T3392 <i>Ilex kudingcha</i>	KU DING CHA DONG QING
Kulaso Aloe Dried Juice	T0347 <i>Aloe vera</i> [Syn. <i>Aloe barbadensis</i> ]	LU HUI
Kunming Mosquitotrap	T1963 <i>Cynanchum wallichii</i>	DUAN JIE SHEN
Kunming <i>Rabdosia</i> *	T3499 <i>Isodon kunmingensis</i>	KUN MING XIANG CHA CAI
Kunming <i>Thorowax</i> *	T1064 <i>Bupleurum kunmingense</i>	KUN MING CHAI HU
Kuroo <i>Gentian</i> *	T2915 <i>Gentiana kuroo</i>	KU RUO LONG DAN
Kurz <i>Alangium</i>	T0282 <i>Alangium kurzii</i>	MAO BA JIAO FENG
Kusnezoff Monkshood	T0108 <i>Aconitum kusnezoffii</i>	BEI WU TOU
Kwangsi <i>Jasminorange</i>	T4320 <i>Murraya kwangsiensis</i>	GUANG XI JIU LI XIANG
Kwangsi <i>Turmeric</i>	T1904 <i>Curcuma kwangsiensis</i>	GUANG XI E SHU
Kweichou <i>Uvaria</i>	T6664 <i>Uvaria kweichowensis</i>	LIU GUO ZI YU PAN
Laburnum <i>Crotalaria</i> *	T1824 <i>Crotalaria laburnifolia</i>	JIN LIAN HUA ZHU SHI DOU
Lac	T3649 <i>Laccifer lacca</i>	ZI CAO RONG
Lacebark Pine	T4908 <i>Pinus bungeana</i>	BAI PI SONG
Laciniate Lettuce*	T3660 <i>Lactuca laciniata</i>	SUI BIAN WO JU
Laevigate <i>Parameria</i>	T4642 <i>Parameria laevigata</i>	CHANG JIE ZHU
Lagopsis	T3675 <i>Lagopsis supina</i>	XIA ZHI CAO
Lakoocha <i>Artocarpus</i> *	T0717 <i>Artocarpus lakoocha</i>	LA KOU SHA MIAN BAO GUO
Lalang Grass Leaf	T3417 <i>Imperata cylindrica</i> var. <i>major</i>	MAO CAO YE
Lalang Grass Rhizome	T3416 <i>Imperata cylindrica</i> var. <i>major</i>	BAI MAO GEN <sup>(1)</sup>
Lambert <i>Barberry</i>	T0908 <i>Berberis lambertii</i>	LAN BO TE XIAO BO
Lambsquarters Juvenile	T1359 <i>Chenopodium album</i>	LI
Lanatchead <i>Saussurea</i>	T5757 <i>Saussurea laniceps</i>	MIAN TOU XUE LIAN
Lancaster's <i>St. John'swort</i>	T3357 <i>Hypericum lancasteri</i>	ZHAN E JIN SI TAO
Lance <i>Coreopsis</i>	T1685 <i>Coreopsis lanceolata</i>	XIAN YE JIN JI JU
Lanceleaf <i>Actinodaphne</i> *	T0166 <i>Actinodaphne lancifolia</i>	PI ZHEN YE HUANG ROU NAN
Lanceleaf <i>Dogbane</i> *	T0552 <i>Apocynum lancifolium</i>	HONG MA
Lanceleaf <i>Eupatorium</i> *	T2564 <i>Eupatorium lancifolium</i>	ZHEN YE ZE LAN
Lanceleaf <i>Thermopsis</i>	T6428 <i>Thermopsis lanceolata</i>	MU MA DOU
Lanceleaf <i>Wingseedtree</i>	T5310 <i>Pterospermum lanceaeifolium</i>	ZHAI YE BAN FENG HE
Lance-leaved <i>Gambirplant</i>	T6622 <i>Uncaria lancifolia</i>	PI ZHEN YE GOU TENG

Lanceolate Kadsura*	T3617 <i>Kadsura lancilimba</i>	PI ZHEN YE NAN WU WEI ZI
Lanceolate Maesa*	T4030 <i>Maesa lanceolata</i>	PI ZHEN DU JING SHAN
Lanceolate Periwinkle*	T1267 <i>Catharanthus lanceus</i>	JIAN ZHUANG CHANG CHUN HUA
Lanceolate Starwort	T6104 <i>Stellaria dichotoma</i> var. <i>lanceolata</i>	YIN CHAI HU
Lanceolate Stringbush*	T6821 <i>Wikstroemia lanceolata</i>	PI ZHEN XING YAO HUA
Lanceolate Sumac*	T5533 <i>Rhus lanceolata</i>	PI ZHEN QI SHU
Lancepod	T3904 <i>Lonchocarpus atropurpureus</i>	
Langpetal Globeflower	T6554 <i>Trollius macropetalus</i>	CHANG BAN JIN LIAN HUA
Lantern-tree	T1792 <i>Crinodendron hookerianum</i>	HONG BAI HE MU
Lanyu Garcinia	T2861 <i>Garcinia lirii</i>	TAI WAN LV DAO TENG HUANG
Larch-leaf St.John'swort*	T3358 <i>Hypericum laricifolium</i>	LUO YE SONG YE JIN SI TAO
Large Caesalpinia*	T1105 <i>Caesalpinia major</i>	DA YUN SHI
Large Euphorbia Root	T2602 <i>Euphorbia nematocypa</i>	DA LANG DU
Largeflower Astilbe	T0785 <i>Astilbe macroflora</i>	DA HUA LUO XIN FU
Largeflower Euonymus	T2541 <i>Euonymus grandiflorus</i>	YE DU ZHONG
Largeflower Falsehellebore	T6697 <i>Veratrum grandiflorum</i>	MAO YE LI LU
Largeflower Jasmine*	T3554 <i>Jasminum grandiflorum</i>	SU XIN HUA
Largeflower Jerusalem sage	T4808 <i>Phlomis grandiflora</i> var. <i>grandiflora</i>	DA HUA CAO SU
Largeflower Purslane	T5172 <i>Portulaca grandiflora</i>	DA HUA MA CHI XIAN
Largeflower Uvaria	T6662 <i>Uvaria grandiflora</i>	DA HUA ZI YU PAN
Largeflower Wildginger	T0729 <i>Asarum maximum</i>	DA HUA XI XIN
Large-flowered Dendranthema*	T2093 <i>Dendranthema grandiflorum</i>	DA HUA JU
Large-flowered Epimedium	T2396 <i>Epimedium grandiflorum</i>	DA HUA YIN YANG HUO
Large-flowered Epimedium Variety	T2397 <i>Epimedium grandiflorum</i> var. <i>thumbergianum</i>	DA HUA YIN YANG HUO BIAN ZHONG
Largeflower-like Honeysuckle	T3914 <i>Lonicera macranthoides</i>	HUI ZHAN MAO REN DONG
Largefruit Euphorbia*	T2626 <i>Euphorbia wallichii</i>	DA GUO DA JI
Largehead Atractylodes	T0824 <i>Atractylodes macrocephala</i> [Syn. <i>Atractylis macrocephala</i> ]	BAI ZHU
Largeleaf Aglaia*	T0235 <i>Aglaia elliptifolia</i>	DA YE SHU LAN
Largeleaf Ampelopsis	T0428 <i>Ampelopsis megalophylla</i>	DA YE SHE PU TAO
Largeleaf Chinese Ash Bark	T2777 <i>Fraxinus rhynchophylla</i> [Syn. <i>Fraxinus chinensis</i> var. <i>rhynchophylla</i> ]	CEN PI
Largeleaf Curculigo	T1900 <i>Curculigo capitulata</i> [Syn. <i>Leucojum capitulata</i> ]	DA YE XIAN MAO
Largeleaf Devilpepper*	T5437 <i>Rauwolfia macrophylla</i>	DA YE LUO FU MU
Largeleaf Gambirplant	T6625 <i>Uncaria macrophylla</i>	DA YE GOU TENG
Largeleaf Gentian	T2919 <i>Gentiana macrophylla</i>	QIN JIAO
Largeleaf Hydrangea	T3304 <i>Hydrangea macrophylla</i>	BA XIAN HUA
Largeleaf Inula	T3430 <i>Inula grandis</i>	DA YE TU MU XIANG
Largeleaf Japanese Ginseng	T4605 <i>Panax japonicus</i> var. <i>major</i>	QIN LING ZHU ZI SHEN
Largeleaf Pepper*	T4951 <i>Piper laetispicum</i>	DA YE JU
Largeleaf Rabdosia	T5394 <i>Rabdosia macrophylla</i>	DA YE XIANG CHA CAI
Largeleaf Spicebush	T3852 <i>Lindera megaphylla</i>	HEI KE NAN
Largeleaf Spicebush Branch-leaf	T3857 <i>Lindera umbellata</i> [Syn. <i>Lindera erythrocarpa</i> ]	DIAO ZHANG ZHI YE
Largeleaf Spicebush Root-bark	T3856 <i>Lindera umbellata</i> [Syn. <i>Lindera erythrocarpa</i> ]	DIAO ZHANG GEN PI
Largeleaf Uvaria*	T6665 <i>Uvaria macrophylla</i>	DA YE ZI YU PAN
Largeseed Bugle	T0266 <i>Ajuga macrosperma</i>	DA ZI JIN GU CAO
Largeseed Hemsleya	T3208 <i>Hemsleya macrosperma</i>	DA ZI XUE DAN
Largesepal Rabdosia	T3511 <i>Isodon macrocalyx</i>	DA E XIANG CHA CAI
Largesepal Rabdosia	T3513 <i>Isodon macrocalyx</i>	DA E BIAN XING XIANG CHA CAI orm
Largeserrate Mosla	T4306 <i>Mosla grosseserrata</i>	JI NING
Late-flower Boneset	T2575 <i>Eupatorium serotinum</i>	WAN HUA ZE LAN
Lateripening Bartsia	T4479 <i>Odontites serotina</i>	CHI YE CAO

Laureate Skimmia*	T5971 <i>Skimmia laureola</i>	GUANG RONG YIN YU
Laurel-leaf Acronychia*	T0150 <i>Acronychia laurifolia</i>	YUE GUI YE SHAN YOU GAN
Laurelleaf Litsea*	T3891 <i>Litsea laurifolia</i>	YUE GUI SHU YE MU JIANG ZI
Laurelleaf Snailseed	T1586 <i>Cocculus laurifolius</i>	HENG ZHOU WU YAO
Laurel-like Barberry	T0909 <i>Berberis laurina</i>	YUE GUI XIAO BO
Laurent Crinum*	T1800 <i>Crinum laurentii</i>	LAO SHI WEN SHU LAN
Law Aglaia*	T0238 <i>Aglaia lawii</i>	
Lavandulaleaf Chrysanthemum	T1394 <i>Chrysanthemum lavandulifolium</i>	YAN XIANG JU
Lavender-gustatory Eupatorium*	T2576 <i>Eupatorium stoechadosmum</i>	DUO XU GONG
Lavenderleaf Wormwood	T0681 <i>Artemisia lavandulaefolia</i>	YE AI HAO
Laver	T5171 <i>Porphyra tenera</i>	ZI CAI
Lawn Pennywort	T3311 <i>Hydrocotyle sibthorpioides</i>	TIAN HU SUI
Lax Nightshade*	T6004 <i>Solanum laxum</i>	XI SHU QIE
Laxflower Hairysidal Rabdosia	T3487 <i>Isodon eriocalyx</i> var. <i>laxiflora</i>	SHU HUA MAO E XIANG CHA CAI
Laxflower Valeriana*	T6678 <i>Valeriana laxiflora</i>	SHU HUA JIE CAO
Laxleaf Sweetroot	T4551 <i>Osmorhiza aristata</i> var. <i>laxa</i>	XIANG GEN QIN
Leabo Monkshood	T0124 <i>Aconitum pseudohuiliense</i>	LEI BO WU TOU
Leachiana Sophora	T6038 <i>Sophora leachiana</i>	LI QI HUAI
Lead-coloured Brake	T5297 <i>Pteris plumbea</i>	LI BING FENG WEI JUE
Leadwordleaf Tobacco	T4426 <i>Nicotiana plumbaginifolia</i>	HUI YE YAN CAO
Leafless Anabasis	T0435 <i>Anabasis aphylla</i>	WU YE JIA MU ZEI
Leafless Swallowwort*	T1949 <i>Cynanchum aphyllum</i>	WU YE BAI QIAN
Leafspike Rabdosia	T3519 <i>Isodon phyllostachys</i>	YE SUI XIANG CHA CAI
Leafy Crazyweed	T4568 <i>Oxytropis myriophylla</i>	DUO YE JI DOU
Leafy Euphorbia	T2585 <i>Euphorbia esula</i>	JI CHANG LANG DU
Leafy St.John'swort*	T3351 <i>Hypericum foliosum</i>	DUO YE JIN SI TAO
Leafy Trefoil*	T3931 <i>Lotus polyphyllus</i>	DUO YE BAI MAI GEN
Leafy-fruited Nightshade	T6011 <i>Solanum sarrachoides</i>	YE GUO QIE
Leatherleaf Mahonia	T4055 <i>Mahonia bealei</i>	SHI DA GONG LAO MU
Leatherleaf Mahonia Fruit	T4057 <i>Mahonia bealei</i>	SHI DA GONG LAO ZI
Leatherleaf Mahonia Leaf	T4056 <i>Mahonia bealei</i>	SHI DA GONG LAO YE
Leatherleaf Millettia Root	T4243 <i>Millettia reticulata</i>	JI XUE TENG GEN
Lebrun Greenbrier	T5979 <i>Smilax lebrunii</i>	CU CAO BA QIA
Lechler Croton*	T1849 <i>Croton lechleri</i>	LAI KE BA DOU
Ledebour Globeflower	T6553 <i>Trollius ledebourii</i>	DUAN BAN JIN LIAN HUA
Ledeour Corydalis*	T1720 <i>Corydalis ledebouriana</i>	DUI YE YUAN HU
Ledger Cinchona	T1428 <i>Cinchona ledgeriana</i>	JIN JI LE
Leefe Litsea*	T3892 <i>Litsea leefeana</i>	LI FEI MU JIANG ZI
Leek	T0317 <i>Allium porrum</i>	JIU CONG
Legendre Monkshood	T0110 <i>Aconitum legendrei</i>	MIAN NING WU TOU
Leiocarpus Goniothalamus	T3049 <i>Goniothalamus leiocarpus</i>	JIN PING GE NA XIANG
Leio-fruit Ninenode*	T5276 <i>Psychotria leiocarpa</i>	PING HUA GUO JIU JE
Lemon	T1490 <i>Citrus limon</i>	NING MENG
Lemon Eucalyptus Leaf	T2505 <i>Eucalyptus citriodora</i>	NING MENG AN YE
Lemon Leaf	T1493 <i>Citrus limon</i>	NING MENG YE
Lemon Pericarp	T1492 <i>Citrus limon</i>	NING MENG PI
Lemon Root	T1491 <i>Citrus limon</i>	NING MENG GEN
Lemongrass	T1939 <i>Cymbopogon citratus</i>	XIANG MAO
Lemonlike Citrus	T1494 <i>Citrus limonia</i>	LI MENG
Lemonlike Citrus Leaf	T1497 <i>Citrus limonia</i>	LI MENG YE
Lemonlike Citrus Pericarp	T1496 <i>Citrus limonia</i>	LI MENG PI
Lemonlike Citrus Root	T1495 <i>Citrus limonia</i>	LI MENG GEN
Leontice*	T3745 <i>Leontice leontopetalum</i>	HUA BAN SHI ZU CAO

Leopard Leather Mushroom*; Tengutake (in Japanese)	T0384 <i>Amanita pantherina</i>	BAO BAN E GAO
Leopard Plant	T3801 <i>Ligularia clivorum</i>	SHAN GANG TUO WU
Leprieur Caloglossa Frond	T1122 <i>Caloglossa leprieurii</i>	ZHE GU CAI
Leprous Tree	T3560 <i>Jatropha curcas</i>	MA FENG SHU
Lepto Peel Cucumber*	T1875 <i>Cucumis leptodermus</i>	BO PI HUANG GUA
Leschenault Mahonia	T4069 <i>Mahonia leschenaultii</i>	LAI SHI NA TE SHI DA GONG LAO
Lesser Galangal	T0359 <i>Alpinia officinarum</i>	GAO LIANG JIANG
Lettuce Ulva Frond	T6599 <i>Ulva lactuca</i>	SHI CHUN
Levant Cotton	T3055 <i>Gossypium herbaceum</i>	MIAN HUA
Levant Cotton Oil	T3057 <i>Gossypium herbaceum</i>	MIAN ZI YOU
Levant Cotton Root	T3056 <i>Gossypium herbaceum</i>	MIAN HUA GEN
Liangshan Rabdosia	T3504 <i>Isodon liangshanica</i>	LIANG SHAN XIANG CHA CAI
Liaodong Aralia	T0572 <i>Aralia elata</i>	LIAO DONG CONG MU
Liaodong Aralia Leaf*	T0573 <i>Aralia elata</i>	LIAO DONG CONG MU YE
Liberian Coffee	T1610 <i>Coffea liberica</i>	DA GUO KA FEI
Licorice	T3013 <i>Glycyrrhiza glabra</i>	GUANG GUO GAN CAO
Lidded Cleistocalyx	T1544 <i>Cleistocalyx operculatus</i>	SHUI RONG
Light Larkspur*	T2069 <i>Delphinium corumbosum</i>	GUANG FEI YAN CAO
Light-hoar Tickclover*	T2128 <i>Desmodium canum</i>	DAN HUI BAI SHAN MA HUANG
Lightyellow Snapweed	T3413 <i>Impatiens nolitangere</i>	SHUI JIN FENG
Lightyellow Sophora	T6031 <i>Sophora flavescens</i> [Syn. <i>Sophora angustifolia</i> ]	KU SHEN
Lightyellow Sophora Seed	T6032 <i>Sophora flavescens</i> [Syn. <i>Sophora angustifolia</i> ]	KU SHEN SHI
Lignum-vitae	T3067 <i>Guajacum officinale</i>	YU CHUANG MU
Lihsien Rabdosia	T3505 <i>Isodon lihsienensis</i>	LI XIAN XIANG CHA CAI
Likiang Ephedra	T2372 <i>Ephedra likiangensis</i>	LI JIANG MA HUANG
Likiang Hogfennel	T4756 <i>Peucedanum govanianum</i> var. <i>bicolor</i>	LI JIANG QIAN HU
Likiang Monkshood*	T0096 <i>Aconitum forrestii</i> [Syn. <i>Aconitum likiangense</i> ]	LI JIANG WU TOU
Likiang Skullcap	T5841 <i>Scutellaria likiangensis</i>	LI JIANG HUANG QIN
Lilac Chastetree	T6782 <i>Vitex agnuscastus</i>	SUI HUA MU JING
Lilac Daphne	T2023 <i>Daphne genkwa</i>	YUAN HUA
Lilac Daphne Root	T2024 <i>Daphne genkwa</i>	YUAN HUA GEN
Lilac Pink	T2145 <i>Dianthus superbus</i>	QU MAI
Lily Magnolia Bark	T4042 <i>Magnolia liliflora</i>	ZI YU LAN PI
Lily Magnolia Buds	T4041 <i>Magnolia liliflora</i>	XIN YI
Lily of Valley	T1649 <i>Convallaria keiskei</i> [Syn. <i>Convallaria majalis</i> ]	LING LAN
Limbate Otostegia	T4559 <i>Otostegia limbata</i>	YOU YAN AO TUO SI TE CAO
Lime	T1466 <i>Citrus aurantifolia</i>	LAI MENG
Limited Alstonia*	T0373 <i>Alstonia restricta</i>	YOU XIAN YA JIAO SHU
Limoncillo (in Costa Rica)	T5965 <i>Siparuna pauciflora</i>	SHAO HUA XI PA MU
Limpricht Begonia	T0890 <i>Begonia limprichtii</i>	JI YE QIU HAI TANG
Linden Hibiscus	T3248 <i>Hibiscus tiliaceus</i>	HUANG JIN
Linden Viburnum	T6735 <i>Viburnum dilatatum</i>	JIA MI
Lindenleaf Tickclover*	T2135 <i>Desmodium tiliaefolium</i>	DUAN YE SHAN MA HUANG
Lindley Eupatorium	T2565 <i>Eupatorium lindleyanum</i>	CHENG GAN SHENG MA
Lindley Pleurospermum	T5020 <i>Pleurospermum lindleyanum</i>	TIAN SHAN LING ZI QIN
Linea Andrographis*	T0455 <i>Andrographis lineata</i>	TIAO WEN CHUAN XIN LIAN
Linear Brake	T5293 <i>Pteris linearis</i>	XIAN YU FENG WEI JUE
Linear Croton*	T1850 <i>Croton linearis</i>	XIAN YE BA DOU
Linear Koelpinia	T3634 <i>Koelpinia linearis</i>	XIE WEI JU
Linear Stonecrop	T5856 <i>Sedum lineare</i> [Syn. <i>Sedum obtuso-lineare</i> ]	FO JIA CAO
Linearisepal Goldthread*	T1668 <i>Coptis linearisepala</i>	XIAN E HUANG LIAN
Linearleaf Gentian	T2921 <i>Gentiana manshurica</i>	DONG BEI LONG DAN

Linearleaf Inula	T3434 <i>Inula linariaefolia</i>	XIAN YE XUAN FU HUA
Linearleaf Thistle	T1450 <i>Cirsium lineare</i>	TIAO YE JI
Linearleaf Thorowax	T1055 <i>Bupleurum angustissimum</i>	XIAN YE CHAI HU
Linearsegmented Corydalis	T1721 <i>Corydalis linearoides</i>	TIAO LIE HUANG JIN
Linearstripe Rabdosia	T3506 <i>Isodon lophanthoides</i>	XIAN WEN XIANG CHA CAI
Linearstripe Rabdosia	T3507 <i>Isodon lophanthoides</i> [Syn. <i>Rabdosia lophanthoides</i> ; <i>Hyssopus lophanthoides</i> ; <i>Plectranthus striatus</i> ; <i>Isodon striatus</i> ]	XI HUA XIAN WEN XIANG CHA CAI
Lingnan Rhododendron*	T5513 <i>Rhododendron mariae</i>	LING NAN DU JUAN
Lingual Forest-in Casearia*	T1225 <i>Casearia sylvestris</i> var. <i>lingua</i>	SHE XING LIN SHENG JIAO GU CUI
Lipp Amberboa*	T0392 <i>Amberboa lippii</i>	LI PU PO JU
Liquor	T3869 Liquor	JIU Liquor
Liriope	T4507 <i>Ophiopogon japonicus</i>	MAI DONG
Little Bleedingheart*	T2153 <i>Dicentra pusilla</i>	XI XIAO HE BAO MU DAN
Little Groundcherry	T4851 <i>Physalis minima</i>	TIAN PAO ZI
Little Peganum	T4689 <i>Peganum nigellastrum</i>	LUO TUO HAO
Littleconical Rabdosia	T5389 <i>Rabdosia coetsa</i>	XI ZHUI XIANG CHA CAI
Littleflower Plumbagella	T5026 <i>Plumbagella micrantha</i>	JI WA CAO
Littlefruit Jujube	T6923 <i>Zizyphus oenopia</i>	XIAO GUO ZAO
Littlefruit Lyonia	T3992 <i>Lyonia ovalifolia</i> var. <i>elliptica</i>	XIAO GUO NAN ZHU
Littlehead Sneezeweed	T3139 <i>Helenium microcephalum</i>	XIAO TOU DUI XIN JU
Littleleaf Common Jasminorange	T4325 <i>Murraya paniculata</i> var. <i>exotica</i>	XIAO YE JIU LI XIANG
Littleleaf Horsebrush	T6355 <i>Tetradymia glabrata</i>	GUANG SI SHI JU
Littleleaf Indianmulberry	T4284 <i>Morinda parvifolia</i>	BAI YAN TENG
Littleleaf Lemnaphyllum Herb	T3736 <i>Lemnaphyllum microphyllum</i>	LUO YAN CAO
Littleleaf Starbush*	T6571 <i>Turraea parvifolia</i>	XIAO YE DU LIAN
Littleleaf Stephania	T6135 <i>Stephania succifera</i>	XIAO YE DI BU RONG
Littoral Chastetree*	T6784 <i>Vitex littoralis</i>	BIN MU JING
Littoral Devilpepper*	T5436 <i>Rauwolfia littoralis</i>	HAI BIN LUO FU MU
Littoral Verbena*	T6708 <i>Verbena littoralis</i>	HAI BIAN MA BIAN CAO
Liukiu Ophiorrhiza*	T4512 <i>Ophiorrhiza liukiuensis</i>	LIU QIU SHE GEN CAO
Liverwort	T2819 <i>Gackstroemia decipiens</i>	
Liverwort <i>Tritomaria polita</i>	T6547 <i>Tritomaria polita</i>	
Liverwort <i>Tylimanthus renifolius</i>	T6575 <i>Tylimanthus renifolius</i>	
Lizard's-tail	T5749 <i>Saururus cernuus</i>	MEI ZHOU SAN BAI CAO
Lobb Poppy*	T2496 <i>Eschscholzia lobbii</i>	LUO BO HUA LING CAO
Lobed Kudzuvine Root	T5313 <i>Pueraria lobata</i> [Syn. <i>Pueraria thunbergiana</i> ; <i>Pueraria pseudohirsuta</i> ]	GE GEN
Lobedfruit Tacca	T6276 <i>Tacca plantaginea</i> [Syn. <i>Schizocapsa plantaginea</i> ]	LIE GUO SHU
Lobedleaf Morningglory*	T3449 <i>Ipomoea hederacea</i>	LIE YE QIAN NIU
Lobedleaf Pharbitis Seed	T4779 <i>Pharbitis nil</i>	QIAN NIU ZI
Lobelia Falsehellebore*	T6693 <i>Veratrum album</i> var. <i>lobelianum</i> [Syn. <i>Veratrum lobelianum</i> ]	BAN BIAN LIAN ZHUANG LI LU
Loblolly Pine, Old Field Pine	T4927 <i>Pinus taeda</i>	TAI DA SONG
Locklebur-like Amomum	T0420 <i>Amomum xanthioides</i>	SUO SHA MI
Loddiges Dendrobium	T2105 <i>Dendrobium loddigesii</i>	MEI HUA SHI HU
Long Acuminate Leaves Gaultheria	T2892 <i>Gaultheria griffithiana</i>	WEI YE BAI ZHU
Long Calotrope*	T1136 <i>Calotropis procera</i>	CHANG NIU JIAO GUA
Long Inflorescence Tephrosia	T6337 <i>Tephrosia noctiflora</i>	YE HUA HUI MAO DOU
Long Lemongrass*	T1946 <i>Cymbopogon procerus</i>	CHANG XIANG MAO
Long Pepper	T4953 <i>Piper longum</i>	BI BA
Long Pepper Root	T4954 <i>Piper longum</i>	BI BA GEN
Long Stephania	T6131 <i>Stephania longa</i>	FEN JI DU
Long Usnea Filament	T6654 <i>Usnea longissima</i>	SONG LUO
Longan Leaf	T2627 <i>Euphoria longan</i> [Syn. <i>Dimocarpus longan</i> ]	LONG YAN YE

Longbeak Eucalyptus	T2502 <i>Eucalyptus camaldulensis</i>	CHI AN
Longbract Cattail Pollen	T6584 <i>Typha angustata</i>	PU HUANG
Longcalyx Pink*	T2146 <i>Dianthus superbus</i> var. <i>longicalycinus</i>	CHANG E QU MAI
Longeared Epigynum	T2386 <i>Epigynum auritum</i>	SI MAO TENG
Long-eared Pseudophegopteris	T5259 <i>Pseudophegopteris subaurita</i>	GUANG NANG ZI BING JUE
Longflower Bloomdaisy	T4735 <i>Pertya glabrescens</i>	JIN WU MAO SAO JU
Longflower Galipea*	T2828 <i>Galipea longiflora</i>	CHANG HUA TU LA SHU
Longflower Gambirplant*	T6624 <i>Uncaria longiflora</i>	CHANG HUA GOU TENG
Longflower Kopsia*	T3642 <i>Kopsia longiflora</i>	CHANG HUA RUI MU
Longflower Laurentia	T3541 <i>Isotoma longiflora</i> [Syn. <i>Laurentia longiflora</i> ]	TONG BAN CAO
Longflower Lily	T3835 <i>Lilium longiflorum</i>	SHE XIANG BAI HE
Longflower Valerian*	T1313 <i>Centranthus longiflorus</i> ssp. <i>longiflorus</i>	CHANG HUA XIE CAO
Longfruit Hemsleya	T3205 <i>Hemsleya dolichocarpa</i>	CHANG GUO XUE DAN
Longhair Milkwort	T5090 <i>Polygala wattersii</i>	CHANG MAO ZI YUAN ZHI
Longhairy Michelia*	T4213 <i>Michelia lanuginosa</i>	CHANG MAO HAN XIAO
Long-headed Poppy	T4626 <i>Papaver dubium</i>	CHANG GUO YING SU
Longleaf Carpesium	T1213 <i>Carpesium longifolium</i>	CHANG YE TIAN MING JING
Longleaf Cryptocarya*	T1863 <i>Cryptocarya longifolia</i>	CHANG YE HOU KE GUI
Longleaf Debregeasia	T2056 <i>Debregeasia longifolia</i>	CHANG YE SHUI MA
Longleaf Goniothalamus	T3045 <i>Goniothalamus gardneri</i>	CHANG YE GE NA XIANG
Longleaf Groundsel*	T5891 <i>Senecio longifolius</i>	CHANG YE QIAN LI GUANG
Longleaf Mammea*	T4095 <i>Mammea longifolia</i>	CHANG YE MAN MI PING GUO
Longleaf Periwinkle*	T1268 <i>Catharanthus longifolius</i>	CHANG YE CHANG CHUN HUA
Longleaf Podocarpus Leaf	T5043 <i>Podocarpus macrophyllus</i>	LUO HAN SONG YE
Longleaf Podocarpus Seed	T5042 <i>Podocarpus macrophyllus</i>	LUO HAN SONG SHI
Longleaf Rabdosia	T5400 <i>Rabdosia stracheyi</i>	CHANG YE XIANG CHA CAI
Longleaf Speedwell	T6725 <i>Veronica longifolia</i>	CHANG WEI PO PO NA
Longleaf Tansy	T6292 <i>Tanacetum longifolium</i>	CHANG YE AI JU
Long-leaved Pine	T4919 <i>Pinus palustris</i>	CHANG YE SONG
Longlived Leaf	T6816 <i>Welwitschia mirabilis</i>	BAI SUI YE
Longpedicel Chinese Buscherry Seed	T5225 <i>Prunus japonica</i> var. <i>nakaii</i>	CHANG GENG YU LI REN
Longpedicel Holly	T3395 <i>Ilex pedunculosa</i>	CHANG GENG DONG QING
Longpeduncle Kadsura	T3619 <i>Kadsura peltigera</i> [Syn. <i>Kadsura longipedunculata</i> ]	CHANG GENG NAN WU WEI ZI
Longpetal Vouacapoua*	T6805 <i>Vouacapoua macropetala</i>	CHANG HUA BAN KE YA SHU
Longpetiole Juniper*	T3590 <i>Juniperus macropoda</i>	CHANG BING YUAN BAI
Longradiate Angelica*	T0488 <i>Angelica longeradiata</i>	CHANG BIAN HUA DANG GUI
Longroot Onion	T0324 <i>Allium victorialis</i>	GE CONG
Long-rostrate Eucalyptus*	T2518 <i>Eucalyptus rostrata</i>	CHANG HUI AN
Longshen Rabdosia	T3510 <i>Isodon lungshengensis</i>	LONG SHENG XIANG CHA CAI
LongspikeCroton*	T1851 <i>Croton macrostachys</i>	CHANG SUI BA DOU
Longspur Corydalis*	T1722 <i>Corydalis longicalcarata</i>	CHANG JU YAN HU SUO
longstalk Gynostemma	T3084 <i>Gynostemma longipes</i>	CHANG GENG JIAO GU LAN
Longstalk Pepper*	T4969 <i>Piper sulvaticum</i>	CHANG BING HU JIAO
Longstalk Plumyew*	T1321 <i>Cephalotaxus harringtonia</i> var. <i>drupacea</i>	CHANG GENG CU FEI
Longstamen Onion	T0316 <i>Allium macrostemon</i>	XIE BAI
Longstyle Lindelofia	T3846 <i>Lindelofia stylosa</i>	MING XIAN HUA ZHU CHANG ZHU
Longstyle Meadowrue*	T6396 <i>Thalictrum longistylum</i>	LIU LI CAO
Long-tail Mulberry*	T4297 <i>Morus macroura</i>	CHANG ZHU TANG SONG CAO
Longthyrus Poisonnut*	T6171 <i>Strychnos dolichothyrsa</i>	NAI SANG
Longtube Daylily*	T3196 <i>Hemerocallis longituba</i>	CHANG HUA XU MA QIAN ZI
Longtube Ground Ivy	T2973 <i>Glechoma longituba</i>	CHANG GUAN XUAN CAO
Longtube Rabdosia	T5393 <i>Rabdosia longituba</i>	JIN XIAN CAO
		CHANG GUAN XIANG CHA CAI



Lopseed	T4830 <i>Phryma leptostachya</i>	LAO PO ZI ZHEN XIAN
Loquat	T2431 <i>Eriobotrya japonica</i>	PI PA
Loquat Leaf	T2433 <i>Eriobotrya japonica</i>	PI PA YE
Loquat Seed	T2432 <i>Eriobotrya japonica</i>	PI PA HE
Lotusleafung	T3231 <i>Hernandia sonora</i> [Syn. <i>Hernandia ovigera</i> ]	LIAN YE TONG
Louis Vepris*	T6690 <i>Vepris louisii</i>	LU YI CI JU
Loureir Cinnamon*	T1442 <i>Cinnamomum loureirii</i>	MU GUI
Low Ardisia*	T0597 <i>Ardisia humilis</i>	AI ZI JIN NIU
Low Bearberry*	T0587 <i>Arctostaphylos pumila</i>	AI SHENG XIONG GUO
Low Lily	T3836 <i>Lilium pumilum</i> [Syn. <i>Lilium tenuifolium</i> ]	XI YE BAI HE
Low Meadowrue	T6399 <i>Thalictrum minus</i>	XIAO TANG SONG CAO
Low Rhubarb*	T5471 <i>Rheum nanum</i>	AI DA HUANG
Low Sagebrush	T0663 <i>Artemisia arbuscula</i>	BEI MEI AI HAO
Low Uvaria	T6660 <i>Uvaria chamae</i>	AN ZI YU PAN
Lowdaphne Stringbush	T6819 <i>Wikstroemia chamaedaphne</i>	HE SHUO YAO HUA
Love-lies-bleeding	T0387 <i>Amaranthus caudatus</i>	WEI SUI XIAN
Lovely Crinum*	T1793 <i>Crinum amabile</i>	SU MEN DA LA WEN SHU LAN
Lovely Gloriosa	T2995 <i>Gloriosa superba</i>	JIA LAN
Lovely Hemsleya	T3203 <i>Hemsleya amabilis</i>	LUO GUO DI
Lucid Ganoderma	T2848 <i>Ganoderma lucidum</i>	LING ZHI
Lucid Indianmulberry*	T4282 <i>Morinda lucida</i>	GUANG ZE BA JI
Lucid Meadowrue*	T6397 <i>Thalictrum lucidum</i>	TOU MING TANG SONG CAO
Lucid Monkshood*	T0113 <i>Aconitum lucidusculum</i>	GUANG ZE WU TOU
Lucidum Onychium	T4503 <i>Onychium lucidum</i>	LI BING JIN FEN JUE
Luederitz Acacia*	T0023 <i>Acacia luederitzii</i>	LE SHI JIN HE HUAN
Lunate Peltate Sundew	T2267 <i>Drosera peltata</i> var. <i>lunata</i>	MAO GAO CAI
Lushan Rabdosia*	T3521 <i>Isodon rubescens</i> var. <i>lushanensis</i>	LU SHAN XIANG CHA CAI
Lushien Rabdosia*	T3522 <i>Isodon rubescens</i> var. <i>lushiensis</i>	LU SHI DONG LING CAO
Luzon Viburnum*	T6737 <i>Viburnum luzonicum</i>	LV SONG JIA MI
Lychee	T3876 <i>Litchi chinensis</i>	LI ZHI
Lychee Seed	T3877 <i>Litchi chinensis</i>	LI ZHI HE
Lyrate Boesenbergia*	T0970 <i>Boesenbergia pandurata</i>	QIN ZHUANG AO CHUN JIANG
Lyrate Hemistepta	T3202 <i>Hemistepta lyrata</i> [Syn. <i>Hemistepta carthamoides</i> ; <i>Saussurea carthamoides</i> ]	NI HU CAI
Lyrate-like Croton*	T1857 <i>Croton sublyratus</i>	JIN QIN ZHUANG BA DOU
MacLean Leek*	T0315 <i>Allium macleanii</i>	MAI KE LIN JIU
Macradenous Milkwort*	T5077 <i>Polygala macradenia</i>	DA XIAN YUAN ZHI
Macroanther Crinum*	T1802 <i>Crinum macrantherum</i>	DA HUA YAO WEN SHU LAN
Macrocalyx Ochna Bark*	T4466 <i>Ochna macrocalyx</i>	CHANG E JIN LIAN MU PI
Macropodous Daphniphyllum	T2033 <i>Daphniphyllum macropodum</i>	JIAO RANG MU
Madagascar Evodia*	T2642 <i>Evodia madagascariensis</i>	MA DAO CHOU TAN
Madagascar Hani-wood*	T3110 <i>Harungana madagascariensis</i>	MA DAO HA NI MU
Madagascar Periwinkle	T1271 <i>Catharanthus roseus</i> [Syn. <i>Vinca rosea</i> ; <i>Lochera rosea</i> ]	CHANG CHUN HUA
Madagascar Swartzia*	T6211 <i>Swartzia madagascariensis</i>	MA DAO SI WO CI DOU
Madder	T5584 <i>Rubia tinctorum</i>	YANG QIAN CAO
Madonna Lily	T3833 <i>Lilium candidum</i>	QING LIANG BAI HE
Madrid Squill*	T5810 <i>Scilla maderensis</i> [Syn. <i>Autonoë madeirensis</i> ]	MA DE LI MIAN ZAO ER
Madura Crotalaria*	T1825 <i>Crotalaria madurensis</i>	MA DU LA ZHU SHI DOU
Magnific Medinilla*	T4152 <i>Medinilla magnifica</i>	HONG WEI SUAN JIAO GAN
<i>Magnolia compressa</i>	T4037 <i>Magnolia compressa</i>	
Maidenhair Meadowrue	T6385 <i>Thalictrum flavum</i>	HUANG TANG SONG CAO
Maidenhair-like Meadowrue*	T6400 <i>Thalictrum minus</i> var. <i>adiantifolium</i>	TIE XIAN JUE YE TANG SONG CAO
Mainge Tailgrape*	T0654 <i>Artabotrys maingayi</i>	MAN GE YING ZHAO

Maire Alstonia	T0371 <i>Alstonia mairei</i>	YANG JIAO MIAN
Maire Yew	T6312 <i>Taxus mairei</i>	MEI LI HONG DOU SHAN
Maize	T6902 <i>Zea mays</i>	YU SHU SHU
Maize Bran	T6900 <i>Zea mays</i>	YU MI FU
Maize Style	T6901 <i>Zea mays</i>	YU MI XU
Malaba Bauhinia*	T0878 <i>Bauhinia malabarica</i>	MA LA BA YANG TI JIA
Malaba Pencilwood*	T2312 <i>Dysoxylum malabaricum</i>	MA LA BA JIAN MU
Malabanut	T0170 <i>Adhatoda vasica</i>	DA BO GU
Malabar Randia; Sping Randia	T5411 <i>Randia spinosa</i>	SHAN SHI LIU
Malabartree Euphorbia	T2624 <i>Euphorbia tirucalli</i>	LU YU SHU
Malacca Jewelvine*	T2120 <i>Derris malaccensis</i>	MA LIU JIA YU TENG
Malay Blumea	T0959 <i>Blumea lacera</i>	HONG TOU CAO
Malay Bushbeech	T3024 <i>Gmelina arborea</i>	YUN NAN SHI ZI
Malay Glycosmis	T3008 <i>Glycosmis pentaphylla</i>	JIU BING YE
Malaya Dieingtree*	T5729 <i>Saprosma scortechinii</i>	MA LAI BAN DAO RAN MU SHU
Malaysia Kopsia*	T3641 <i>Kopsia griffithii</i>	MA LAI XI YA RUI MU
Malaysian Box*	T1090 <i>Buxus malaiana</i>	MA LAI XI YA HUANG YANG
Malaytea Scurfpea	T5270 <i>Psoralea corylifolia</i>	BU GU ZHI
Male Fern Rhizome	T2281 <i>Dryopteris crassirhizoma</i>	GUAN ZHONG
Male-fern	T2282 <i>Dryopteris filix-mas</i>	MIAN MA
Mamiaho (in Malagasy language, Madagascar)	T0876 <i>Baseonema acuminatum</i>	
Mamme Apple	T4093 <i>Mammea americana</i>	MEI ZHOU MAN MI PING GUO
Manaplant Alhagi Sweet Secretion	T0302 <i>Alhagi pseudalhagi</i>	LUO TUO CI
Manchineel	T3252 <i>Hippomane mancinella</i>	MA FENG MU
Manchurian Ash	T2772 <i>Fraxinus mandshurica</i>	SHUI QU LIU
Manchurian Dutchmanspipe	T0632 <i>Aristolochia manshuriensis</i>	GUAN MU TONG
Manchurian Monkshood	T0139 <i>Aconitum variegatum</i>	BAN HUA WU TOU
Manchurian Rhododendron	T5515 <i>Rhododendron micranthum</i>	ZHAO SHAN BAI
Manchurian Sage*	T5689 <i>Salvia przewalskii</i> var. <i>mandarinorum</i>	ZI DAN SHEN
Manchurian Walnut	T3564 <i>Juglans mandshurica</i>	HU TAO QIU
Manchurian Wildginger	T0728 <i>Asarum heterotropoides</i> var. <i>mandshuricum</i>	LIAO XI XIN
Mango	T4099 <i>Mangifera indica</i>	MANG GUO
Mango Bark	T4101 <i>Mangifera indica</i>	MANG GUO SHU PI
Mango Leaf	T4102 <i>Mangifera indica</i>	MANG GUO YE
Mango Seed	T4100 <i>Mangifera indica</i>	MANG GUO HE
Mangosteen	T2863 <i>Garcinia mangostana</i>	DAO NIAN ZI
Mangrove Fruit	T5488 <i>Rhizophora mucronata</i>	HONG QIE DONG GUO
Manio	T5050 <i>Podocarpus nubigenus</i>	YUN WU LUO HAN SONG
Manipur Mahonia	T4070 <i>Mahonia manipurensis</i>	MAN NI PU ER SHI DA GONG LAO
Mann Garcinia*	T2864 <i>Garcinia mannii</i>	MAN TENG HUANG
Mansonia Heartwood	T4107 <i>Mansonia gagei</i>	MAN SUO NI YA XIN CAI
Manybracteole Bugle	T0270 <i>Ajuga remota</i>	YUAN JU JIN GU CAO
Many-cleft Cinquefoil	T5185 <i>Potentilla multifida</i>	DUO LIE WEI LING CAI
Manyflower Ash	T2769 <i>Fraxinus floribunda</i>	XI MA BAI LA SHU
Manyflower Bayberry*	T4345 <i>Myrica multiflora</i>	DUO HUA YANG MEI
Manyflower Christmasbush*	T0296 <i>Alchornea floribunda</i>	DUO HUA SHAN MA GAN
Manyflower Dysosma*	T2297 <i>Dysosma aurantiocaulis</i>	DUO HUA BA JIAO LIAN
Manyflower Fissistigma	T2736 <i>Fissistigma polyanthum</i>	HEI FENG TENG
Manyflower Garcinia	T2867 <i>Garcinia multiflora</i>	SHAN ZHU ZI
Manyflower Garcinia*	T2870 <i>Garcinia polyantha</i>	DUO HUA TENG HUANG
Manyflower Giantfennel*	T2705 <i>Ferula polyantha</i>	DUO HUA A WEI
Manyflower Glorybower Leaf	T1554 <i>Clerodendron cyrtophyllum</i>	LU BIAN QING

Manyflower Solomonseal	T5091 <i>Polygonatum cyrtonema</i> [Syn. <i>Polygonatum multiflorum</i> ]	DUO HUA HUANG JING
Manyflower Starbush*	T6569 <i>Turraea floribunda</i>	DUO HUA U LIAN
Manyflower Tupelo*	T4458 <i>Nyssa sylvatica</i>	DUO HUA LAN GUO SHU
Manyflower Tylophora	T6580 <i>Tylophora floribunda</i>	WA ER TENG
Manyflower Wormwood	T0687 <i>Artemisia myriantha</i>	YI KUA
Manyfruit Idesia	T3387 <i>Idesia polycarpa</i>	SHAN TONG ZI
Manyleaf Meadowrue	T6387 <i>Thalictrum foliolosum</i>	MA WEI LIAN
Manyleaf Paris	T4648 <i>Paris polyphylla</i>	ZAO XIU
Manynerve Embelia	T2346 <i>Embelia oblongifolia</i>	MA GUI HUA
Manypetal Marshmarigold	T1138 <i>Caltha polypetala</i>	DUO BAN LV TI CAO
Manyprickle Acanthopanax	T0041 <i>Acanthopanax senticosus</i> [Syn. <i>Eleutherococcus senticosus</i> ]	CI WU JIA
Manyprickle Acanthopanax Leaf	T0043 <i>Acanthopanax senticosus</i> [Syn. <i>Eleutherococcus senticosus</i> ]	CI WU JIA YE
Manyprickle Acanthopanax Root-bark	T0042 <i>Acanthopanax senticosus</i> [Syn. <i>Eleutherococcus senticosus</i> ]	CI WU JIA PI
Manyraceme Sweetvetch	T3129 <i>Hedysarum polybotrys</i>	DUO XU YAN HUANG QI
Manyradiate Bailai's Chrysanthemum*	T0856 <i>Baileya pleniradiata</i>	DUO BIAN HUA BAI LAI SHI JU
Manyroot Monkshood	T0105 <i>Aconitum karakolicum</i>	DUO GEN WU TOU
Manyseed	T5069 <i>Polycarpon prostratum</i>	DUO JIA CAO
Manysperma Bitterleaf*	T6720 <i>Vernonia pogosperma</i>	BO GE BAN JIU JU
Manyspike Cordia*	T1678 <i>Cordia multispicata</i>	DUO SUI PO BU MU
Manyspike Knotweed	T5114 <i>Polygonum polystachyum</i>	DUO SUI LIAO
Manyspike Podocarpus Seed	T5052 <i>Podocarpus polystachyus</i>	DUO SUI LUO HAN SONG SHI
Manyspike Ragweed	T0404 <i>Ambrosia polystachya</i>	DUO SUI TUN CAO
Manyspike Tanoak Leaf	T3878 <i>Lithocarpus polystachyus</i>	DUO SUI SHI KE YE
Manyspiny Pricklyash*	T6883 <i>Zanthoxylum myriacanthum</i>	DA YE CHOU HUA JIAO
Manyspltted Monkshood	T0123 <i>Aconitum polyschistum</i>	DUO LIE WU TOU
Manytoothed Groundsel*	T5898 <i>Senecio polyodon</i>	DUO CHI QIAN LI GUANG
Manyumbell Giantfennel	T2698 <i>Ferula ferulaeoides</i>	DUO SAN A WEI
Many-veined Gambirplant*	T6626 <i>Uncaria nervosa</i>	DUO MAI GOU TENG
Marginate Microlepia	T4219 <i>Microlepia marginata</i>	BIAN YUAN LIN GAI JUE
Marginated Buckler-fern*	T2284 <i>Dryopteris marginata</i>	BIAN YUAN LIN MAO JUE
Marguerite	T1391 <i>Chrysanthemum frutescens</i>	MU TONG HAO
Marine Widgeonweed	T5616 <i>Ruppia maritime</i>	HAI SHENG CHUN MAN ZAO
Maritime Persimmon*	T2224 <i>Diospyros maritima</i>	HAI SHI
Marloth Aloe	T0341 <i>Aloe marlothii</i>	MA SHI LU HUI
Marschall Corydalis *	T1724 <i>Corydalis marschalliana</i>	MA CHANG LI ZI JIN
Marsh Horsetail	T2409 <i>Equisetum palustre</i>	GU JIE CAO
Marsh Parsley	T4767 <i>Peucedanum palustre</i>	ZHAO ZE QIAN HU
Marsh Ramalina*	T5405 <i>Ramalina paludosa</i>	ZHAO ZE SHU HUA
Marshmallow	T0381 <i>Althaea officinalis</i>	YAO SHU KUI
Marshmarigold-leaved Beesia	T0888 <i>Beesia calthaeifolia</i>	TIE PO LUO
Marshmarigold-like Goldenray*	T3800 <i>Ligularia calthaeifolia</i>	LV TI CAO YE TUO WU
Marshy Betony	T6092 <i>Stachys palustris</i>	GUANG YE SHUI SU
Marshy Euphorbia*	T2606 <i>Euphorbia palustris</i>	ZHAO SHENG DA JI
Mary Arthromeris	T0708 <i>Arthromeris mairei</i> [Syn. <i>Polypodium mairei</i> ]	FENG WEI PA SHAN HU
Masaikai Caper	T1179 <i>Capparis masaikai</i>	MA BING LANG
Mashan Hogfennel	T4762 <i>Peucedanum mashanensis</i>	MA SHAN QIAN HU
Masson Pine Leaf:	T4916 <i>Pinus massoniana</i>	MA WEI SONG YE
Masters Elaeocarpus	T2329 <i>Elaeocarpus mastersii</i>	MA SI TE SI DU YING
Masters Pine	T4907 <i>Pinus armandii</i> var. <i>mastersiana</i>	TAI WAN GUO SONG
Masterwort	T4766 <i>Peucedanum ostruthium</i>	OU QIAN HU
Mastic Africa Juniper*	T3602 <i>Juniperus thurifera</i> var. <i>africana</i>	XIANG CI BAI FEI ZHOU BIAN
Mastic Juniper*	T3601 <i>Juniperus thurifera</i>	ZHONG
		RU XIANG BAI

Mastic-tree	T4980 <i>Pistacia lentiscus</i>	XIANG HUANG LIAN MU
Matai	T5055 <i>Podocarpus spicatus</i>	SUI HUA LUO HAN SONG
Matarique (in Mexico)	T5248 <i>Psacalium peltatum</i>	DUN ZHUANG LI JU
Matico Pepper	T4931 <i>Piper angustifolium</i>	XIA YE HU JIAO
Matteuccia Frond	T4127 <i>Matteuccia struthiopteris</i>	XIAO YE GUAN ZHONG
Mature Winter-vegetable Spiced Juice	T1006 <i>Brassica chinensis</i>	CHEN DONG CAI LU ZHI
Maxima Dutchmanspipe*	T0633 <i>Aristolochia maxima</i>	DA MA DOU LING
Maxima Marigold*	T6280 <i>Tagetes maxima</i>	ZUI DA WAN SHOU JU
Maximilian's Sunflower	T3149 <i>Helianthus maximiliani</i>	MA SHI XIANG RI KUI
Maximowicz Goldsaxifrage*	T1405 <i>Chrysosplenium maximowiczii</i>	MA SHI JIN YAO
Maximowicz Hawthorn	T1772 <i>Crataegus maximowiczii</i>	MAO SHAN ZHA
Maximowicz Rhubarb*	T5470 <i>Rheum maximowiczii</i>	MA SHI DA HUANG
May-apple	T4666 <i>Passiflora incarnata</i>	FEN HONG SE XI FAN LIAN
Mayweed	T4124 <i>Matricaria chamomilla</i> [Syn. <i>Matricaria recutita</i> ]	MU JU
Meadaw Horsetail	T2410 <i>Equisetum pratense</i>	CAO WEN JING
Meadow Buttercup	T5412 <i>Ranunculus acris</i>	CAO DI MAO GEN
Meadow Cranesbill	T2944 <i>Geranium pratense</i>	CAO YUAN LAO GUAN CAO
Meadow Eyebright	T2628 <i>Euphrasia officinalis</i>	XIAO MI CAO
Meadow Gentian	T2906 <i>Gentiana campestris</i>	TIAN YE LONG DAN
Meadow Monkshood	T0138 <i>Aconitum umbrosum</i>	CAO DI WU TOU
Meadow Peavine	T3709 <i>Lathyrus pratensis</i>	MU DI XIANG WAN DOU
Meadow Saffron	T1616 <i>Colchicum autumnale</i>	QIU SHUI XIAN
Meadowrue-like Isopyrum	T3540 <i>Isopyrum thalictroides</i>	TANG SONG CAO ZHUANG BIAN GUO CAO
Media Yew	T6313 <i>Taxus media</i>	JIE ZHI HONG DOU SHAN
Media Yew (hybrid)	T6318 <i>Taxus x media</i>	ZA JIAO JIE ZHI HONG DOU SHAN
Medicinal Angelica*	T0489 <i>Angelica officinalis</i>	YAO YONG DANG GUI
Medicinal Betonica	T0929 <i>Betonica officinalis</i>	YAO SHUI SU
Medicinal Breynia Leaf*	T1026 <i>Breynia officinalis</i>	YAO YONG HEI MIAN SHEN YE
Medicinal Changium	T1353 <i>Changium myrmioides</i>	MING DANG SHEN
Medicinal Cinchona	T1429 <i>Cinchona officinalis</i>	ZHENG JI NA SHU
Medicinal Citron	T1498 <i>Citrus medica</i>	JU YUAN
Medicinal Citron Leaf	T1499 <i>Citrus medica</i>	JU YUAN YE
Medicinal Ervatamia	T2444 <i>Ervatamia heyneana</i>	HAI SHI GOU YA HUA
Medicinal Evodia	T2644 <i>Evodia rutaecarpa</i>	WU ZHU YU
Medicinal Fatheadtree	T4391 <i>Nauclea officinalis</i>	DAN MU
Medicinal Fumaria	T2807 <i>Fumaria officinalis</i>	YAO YONG QIU GUO ZI JIN
Medicinal Hyssop	T3384 <i>Hyssopus officinalis</i>	SHEN XIANG CAO
Medicinal Indianmulberry	T4283 <i>Morinda officinalis</i>	BA JI TIAN
Medicinal Kopsia	T3643 <i>Kopsia officinalis</i>	YUN NAN RUI MU
Medicinal Lavender*	T3728 <i>Lavandula officinalis</i>	YAO YONG XUN YI CAO
Medicinal Ligusticum	T1583 <i>Cnidium officinale</i> [Syn. <i>Ligusticum officinale</i> ]	YAO YONG SHE CHUANG
Medicinal Padauk*	T5303 <i>Pterocarpus officinalis</i>	YAO YONG ZI TAN
Medicinal Rhubarb	T5472 <i>Rheum officinale</i>	DA HUANG
Medicinal Sage	T5682 <i>Salvia officinalis</i>	YAO YONG DAN SHEN
Medicinal Sage Leaf	T5683 <i>Salvia officinalis</i>	YAO YONG DAN SHEN YE
Medicine Terminalia	T6346 <i>Terminalia chebula</i>	HE ZI
Medicine Terminalia Leaf	T6347 <i>Terminalia chebula</i>	HE ZI YE
Medicinal Cyathula	T1924 <i>Cyathula officinalis</i>	CHUAN NIU XI
Mediterranean Brown Alga Dilophus ligulatus	T2183 <i>Dilophus ligulatus</i>	DI ZHONG HAI ZONG HAI ZAO
Mediterranean Coriaria	T1691 <i>Coriaria myrtifolia</i>	DI ZHONG HAI MA SANG
Mediterranean Cypress	T1899 <i>Cupressus sempervirens</i>	DI ZHONG HAI BAI MU

Mediterranean Euphorbia; Mediterranean Spurge	T2582 <i>Euphorbia characias</i>	DI ZHONG HAI DA JI
Mediterranean Mullein	T6704 <i>Verbascum sinuatum</i>	DI ZHONG HAI MAO RUI HUA
Medlar Barberry*	T0921 <i>Berberis zycium</i>	GOU QI XIAO BO
Medusa Saussurea	T5759 <i>Saussurea medusa</i>	SHUI MU XUE LIAN
Meiwa Kumquat	T2758 <i>Fortunella crassifolia</i>	JIN DAN
Mellea Armillaria Sporocarp	T0645 <i>Armillariella mellea</i>	ZHEN MO
Melliferous Sage*	T5678 <i>Salvia mellifera</i>	JU MI SHU WEI CAO
Membranous Casearia*	T1224 <i>Casearia membranacea</i>	MO ZHI JIAO GU CUI
Membranous Milkvetch	T0798 <i>Astragalus membranaceus</i>	HUANG QI
Mengzi Peperomia*	T4704 <i>Peperomia duclouxii</i>	MENG ZI CAO HU JIAO
Messania Sweetclover*	T4171 <i>Melilotus messanensis</i>	XI XI LI CAO MU XI
Metternich Rhododendron*	T5514 <i>Rhododendron metternichii</i> var. <i>hondoese</i>	MEI TE NI DU JUAN HUA
Mexican Ageratum	T0230 <i>Ageratum houstonianum</i>	XIONG ER CAO
Mexican Aster	T1753 <i>Cosmos bipinnata</i>	DA BO SI JU
Mexican Cypress*	T6306 <i>Taxodium mucronatum</i>	MO XI GE LUO YU SHAN
Mexican Pricklepoppy	T0610 <i>Argemone mexicana</i>	JI YING SU
Mexican Sunflower	T6470 <i>Tithonia tagiliflora</i>	MO XI GE XIANG RI KUI
Mexican Tea	T1361 <i>Chenopodium ambrosioides</i>	TU JING JIE
Mexico Glorybind*	T5551 <i>River corymbosa</i>	MO XI GE XUAN HUA
Mexico Sneezeweed*	T3138 <i>Helenium mexicanum</i>	MO XI GE DUI XIN JU
Mexico Wormwood*	T0684 <i>Artemisia mexicana</i> var. <i>angustifolia</i>	MO XI GE HAO
Mezereon	T2026 <i>Daphne mezereum</i>	OU YA RUI XIANG
Micranthine Corydalis*	T1725 <i>Corydalis micrantha</i>	XIAO HUA ZI JIN
Microcap Sage*	T5679 <i>Salvia microstegia</i>	XIAO GAI SHU WEI CAO
Microwhite White Quebracho*	T0775 <i>Aspidosperma subincanum</i>	WEI BAI BAI JIAN MU
Mikanioid Eupatorium*	T2566 <i>Eupatorium mikanioides</i>	WEI GAN JU ZE LAN
Mileen Swertia	T6226 <i>Swertia mileensis</i>	QING YE DAN
Milkweed	T0740 <i>Asclepias syriaca</i>	XU LI YA MA LI JIN
Milk-white Russula	T5620 <i>Russula delica</i>	MEI WEI HONG GU
Milky Gentian*	T2916 <i>Gentiana lactea</i>	RU BAI LONG DAN
Minima Micromelum*	T4224 <i>Micromelum minutum</i>	JI XIAO XIAO YUN XIANG MU
Minus Hard-fern*	T0951 <i>Blechnum minus</i>	XIAO WU MAO JUE
Minute Duckweed	T3739 <i>Lemna perpusilla</i>	XI MAI FU PING
Minwan Anisetree	T3405 <i>Illicium minwanense</i>	MIN WAN BA JIAO
Miquel Linden	T6458 <i>Tilia miqueliana</i>	PU TI SHU HUA
Mirifica Kudzuvine	T5315 <i>Pueraria mirifica</i>	GUO YE GE
Miscol Rosewood*	T2005 <i>Dalbergia miscolobium</i>	MI SI KE HUANG TAN
Mist flower	T2572 <i>Eupatorium rugosum</i>	ZHOU YE ZE LAN
Mistassini Primrose	T5200 <i>Primula mistassinica</i>	JIA NA DA BAO CHUN
Mitten Crab Chelae	T2435 <i>Eriocheir sinensis</i>	XIE KE
Mittschelich Poisonnut*	T6180 <i>Strychnos mittschelichii</i>	MI SHI MA QIAN ZI
Mocketprivet-like Oak	T5376 <i>Quercus phillyraeoides</i>	FEI LI GUI LI
Moderate Asiabell	T1600 <i>Codonopsis pilosula</i> var. <i>modesta</i> [Syn. <i>Codonopsis modesta</i> ]	SU HUA DANG SHEN
Moellendorff Spikemoss	T5863 <i>Selaginella moellendorffii</i>	JIANG NAN JUAN BAI
Molniform Dendrobium*	T2106 <i>Dendrobium moniliforme</i>	XI JING SHI HU
Molly Jewelvine*	T2121 <i>Derris mollis</i>	MO LI YU TENG
Monarch-of-the-East	T5747 <i>Sauromatum guttatum</i>	KU BAO
Mongolian Adonis*	T0187 <i>Adonis mongolica</i>	MENG GU CE JIN ZHAN HUA
Mongolian Ammopiptanthus	T0414 <i>Ammopiptanthus mongolicus</i> [Syn. <i>Piptanthus mongolicus</i> ]	SHA DONG QING
Mongolian Cymbabria	T1938 <i>Cymbabria mongolica</i>	GUANG YAO DA HUANG HUA
Mongolian Dandelion	T6301 <i>Taraxacum mongolicum</i>	PU GONG YING
Mongolian Ephedra	T2367 <i>Ephedra equisetina</i>	MU ZEI MA HUANG

Mongolian Jerusalem sage	T4810 <i>Phlomis mongolica</i>	MENG GU CAO SU
Mongolian Milkvetch	T0800 <i>Astragalus mongholicus</i>	MENG GU HUANG QI
Mongolian Mulberry	T4298 <i>Morus mongolica</i>	MENG SANG
Mongolian Oak	T5375 <i>Quercus mongolica</i>	MENG GU LI
Mongolian Saussurea*	T5760 <i>Saussurea mongolica</i>	MENG GU FENG MAO JU
Mongolian Snakegourd	T6510 <i>Trichosanthes kirilowii</i>	GUA LOU
Mongolian Snakegourd Root	T6512 <i>Trichosanthes kirilowii</i>	TIAN HUA FEN
Mongolian Snakegourd Seed	T6511 <i>Trichosanthes kirilowii</i>	GUA LOU ZI
Mongolian Spiraea	T6083 <i>Spiraea mongolica</i>	MENG GU XIU XIAN JU
Mongolian Wormwood	T0685 <i>Artemisia mongolica</i>	MENG GU HAO
Monochlamys Maidenhair	T0174 <i>Adiantum monochlamys</i>	DAN GAI TIE XIAN JUE
Monoleaf Atalantia*	T0815 <i>Atalantia monophylla</i>	DAN YE DONG FENG JU
Monoseed Honeylocust*	T2977 <i>Gleditsia monosperma</i>	DAN ZHONG ZAO JIA
Monoseed Wormwood*	T0686 <i>Artemisia monosperma</i>	DAN ZI HAO
Montana Chamomile*	T0522 <i>Anthemis cretica</i> ssp. <i>cretica</i> [Syn. <i>Anthemis montana</i> ]	MENG DA NA CHUN HUANG JU
Montana Corydalis*	T1726 <i>Corydalis montana</i>	MENG DA NA ZI JIN
Montana Custardapple*	T0508 <i>Annona montana</i>	SHAN FAN LI ZHI
Montana Glycosmis*	T3007 <i>Glycosmis montana</i>	MENG DA NA SHAN XIAO JU
Montana Rue*	T5628 <i>Ruta montana</i>	MENG DA NA YUN XIANG
Montane Baliospermum	T0861 <i>Baliospermum montanum</i>	BAN ZI MU
Montane Germander*	T6363 <i>Teucrium montanum</i>	SHAN XIANG KE KE
Montane Larkspur	T2082 <i>Delphinium oreophilum</i>	XI SHAN CUI QUE
Montane Rabdosia	T3516 <i>Isodon oresbia</i>	SHAN DI XIANG CHA CAI
Monterey Cypress	T1897 <i>Cupressus macrocarpa</i>	DA GUO BAI MU
Monterey Pine	T4920 <i>Pinus radiata</i>	FU SHE SONG
Moon-carrot	T5933 <i>Seseli libanotis</i>	LI BA NEN XIE HAO
Moor Sideritis*	T5945 <i>Sideritis moorei</i>	MU ER DU MA CAO
Morrow Honeysuckle	T3915 <i>Lonicera morrowii</i>	MO LUO SHI REN DONG
Mother-of-pearl	T1804 <i>Cristaria plicata</i> ; <i>Hyriopsis cumingii</i>	ZHEN ZHU MU
Mountain Balsamppear	T4266 <i>Momordica dioica</i>	SHAN KU GUA
Mountain Immortelle	T2471 <i>Erythrina poeppigiana</i>	SHAN DI CI TONG
Mountain Laurel	T3623 <i>Kalmia latifolia</i>	KUAN YE SHAN YUE GUI
Mountain Parsley	T4765 <i>Peucedanum oreoselinum</i>	SHAN QIAN HU
Mountain Podocarpus*	T5046 <i>Podocarpus montanus</i>	SHAN DI LUO HAN SONG
Mountain Sneezeweed*	T3135 <i>Helenium autumnale</i> var. <i>montanum</i>	SHAN DI DUI XIN JU
Mountain Spicy Tree	T3885 <i>Litsea cubeba</i>	CHENG QIE ZI
Mountain Tobacco	T0651 <i>Arnica montana</i>	SHAN JIN CHE
Mountain Yam	T2212 <i>Dioscorea tokoro</i>	SHAN BI XIE
Mountainous Garcinia	T2858 <i>Garcinia hombroniana</i>	SHAN FENG GUO
Mountjasmine Rue*	T5629 <i>Ruta oreojasme</i>	SHAN MO LI YUN XIANG
Moupin Dutchmanspipe	T0635 <i>Aristolochia moupinensis</i>	HUAI TONG
Mozambique Mayten*	T4137 <i>Maytenus mossambicensis</i>	MO SANG BI KE MEI DENG MU
Muchlovable Denrodium	T2104 <i>Dendrobium gratiosissimum</i>	BEI QIAO SHI HU
Mucosa Rollinia*	T5558 <i>Rollinia mucosa</i>	NIAN ZHI LUO LIN
Mucronate Glorybind*	T1652 <i>Convolvulus erinaceus</i>	JI XUAN HUA
Mucronated Jujube*	T6922 <i>Zizyphus mucronata</i>	JIAN YE ZAO
Mudpuppy	T4395 <i>Necturus maculosus</i>	BAN YUAN
Mugwort	T0706 <i>Artemisia vulgaris</i>	BEI AI
Muhul Myrrh tree*	T1637 <i>Commiphora mukul</i>	MU KU ER MO YAO
Mukitake (in Japanese)	T4617 <i>Panellus serotinus</i>	HOU SHU SHAN GU
Mullein Nightbrier Leaf	T6018 <i>Solanum verbascifolium</i>	YE YAN YE
Mulleinleaf Inula*	T3440 <i>Inula verbascifolia</i>	MAO RUI HUA YE TU MU XIANG
Multiflower White Quebracho*	T0767 <i>Aspidosperma multiflorum</i>	DUO HUA BAI JIAN MU

Multipistillate Spiderflower*	T1551 <i>Cleome icosandra</i>	DUO RUI BAI HUA CAI
Multiradiate	T2423 <i>Erigeron multiradiatus</i>	DUO SHE FEI PENG
Mung Bean Blister Beetle	T4008 <i>Lytta caraganae</i>	QING NIANG ZI
Mural Goosefoot*	T1364 <i>Chenopodium murale</i>	BI SHENG LI
Murasakishimeji (in Japanese)	T3766 <i>Lepista nuda</i>	ZI DING XIANG MO
Muricate Amberboa*	T0393 <i>Amberboa muricata</i>	AN BEI JU
Muriculate Eucheuma Frond	T2525 <i>Eucheuma muricatum</i>	QI LIN CAI
Murri Polyscias*	T5131 <i>Polyscias murrayi</i>	MO LEI NAN YANG SHEN
Muscicolous Woodbetony	T4682 <i>Pedicularis muscicola</i>	XIAN SHENG MA XIAN HAO
Musengerra Podocarpus	T5039 <i>Podocarpus gracilior</i>	XI LUO HAN SONG
Musenna Albizia	T0291 <i>Albizia anthelmintica</i>	QU CHONG HE HUAN
Mushroom	T0211 <i>Agaricus campestris</i>	MO GU
Musk-mallow	T0002 <i>Abelmoschus moschatus</i> [Syn. <i>Hibiscus abelmoschus</i> ]	HUANG KUI
Muskmelon Fruit Pedicel	T1876 <i>Cucumis melo</i>	GUA DI
Muskroot	T0193 <i>Adoxa moschatellina</i>	WU FU HUA
Musky Yarrow	T0066 <i>Achillea moschata</i>	SHE XIANG SHI CAO
Mussaenda*	T4334 <i>Mussaenda hirsutissima</i>	YU YE JIN HUA
Mussot Swertia	T6227 <i>Swertia mussotii</i>	CHUAN XI ZHANG YA CAI
Mutable Magnolia*	T4043 <i>Magnolia mutabilis</i>	BIAN XING MU LAN
Myrrh	T1638 <i>Commiphora myrrha</i> [Syn. <i>Commiphora molmo</i> ]	MO YAO
Myrtleleaf Heimia	T3130 <i>Heimia myrtifolia</i>	HUANG WEI
Nagai Podocarpus	T4346 <i>Myrica nagi</i> [Syn. <i>Podocarpus nagi</i> ]	ZHU BAI
Nagai Podocarpus Root	T4347 <i>Myrica nagi</i> [Syn. <i>Podocarpus nagi</i> ]	ZHU BAI GEN
Nakai Podocarpus	T5047 <i>Podocarpus nakaii</i>	TAI WAN LUO HAN SONG
Naked Leafyflower	T0999 <i>Bougainvillea glabra</i>	GUANG YE ZI HUA
Naked-caule Goldsaxifrage	T1406 <i>Chrysosplenium nudicaule</i>	ZANG YAO LUO JING JIN YAO
Nakedstamen Monkshood	T0099 <i>Aconitum gymnanthum</i>	LU RUI WU TOU
Nanchuan Bugbane*	T1423 <i>Cimicifuga nanchuanensis</i>	NAN CHUAN SHENG MA
Nandewa Cotton*	T3060 <i>Gossypium sturtianum</i> var. <i>nandewarence</i>	NAN DE WA MIAN
Nanling Hogfennel	T4761 <i>Peucedanum longshengens</i>	NAN LING QIAN HU
Nanmu	T4818 <i>Phoebe nanmu</i>	NAN MU
Nantou Begonia*	T0891 <i>Begonia nantoensis</i>	NAN TOU QIU HAI TANG
Nar Uvaria*	T6666 <i>Uvaria narum</i>	NA ER ZI YU PAN
Narrow Coriaria*	T1688 <i>Coriaria angustissima</i>	XIA MA SANG
Narrow Gambirplant*	T6606 <i>Uncaria attenuata</i>	XIA GOU TENG
Narrow Rough Star Thistle*	T1302 <i>Centaurea aspera</i> subsp. <i>stenophylla</i>	XIA YE CU CAO SHI CHE JU ub
Narrowbambooleaf Thorowax	T1067 <i>Bupleurum marginatum</i> var. <i>stenophyllum</i>	ZHAI ZHU YE CHAI HU
Narrowbract Goldenray	T3807 <i>Ligularia intermedia</i>	XIA BAO TUO WU
Narrowflower Poisonnut	T6166 <i>Strychnos angustiflora</i>	NIU YAN MA QIAN
Narrowfruit Glycosmis Root*	T3010 <i>Glycosmis stenocarpa</i>	XIA GUO SHAN XIAO JU GEN
Narrowfruit Hogfennel*	T4772 <i>Peucedanum stenocarpum</i>	XIA GUO QIAN HU
Narrowhead Goldenray	T3815 <i>Ligularia stenocephala</i>	ZHAI TOU TUO WU
Narrowleaf Agave	T0217 <i>Agave angustifolia</i>	DUAN YE LONG SHE LAN
Narrowleaf Alstonia*	T0366 <i>Alstonia angustifolia</i>	XIA YE JI GU CHANG SHAN
Narrowleaf Angelica	T0476 <i>Angelica anomala</i>	XIA YE DANG GUI
Narrowleaf Cattail Pollen	T6585 <i>Typha angustifolia</i>	XIA YE XIANG PU
Narrowleaf Dittary*	T2165 <i>Dictamnus angustifolius</i>	XIA YE BAI XIAN
Narrowleaf Euphorbia	T2586 <i>Euphorbia esula</i> var. <i>cyparissoides</i>	XI YE DA JI
Narrowleaf Germander	T6366 <i>Teucrium polium</i>	HUI BAI SHI CAN
Narrowleaf Kadsura*	T3612 <i>Kadsura angustifolia</i>	XIA XIE NAN WU WEI ZI
Narrowleaf Lupin*	T3940 <i>Lupinus angustifolius</i>	AI SAI E BI YA YU SHAN DOU
Narrowleaf Magnoliavine*	T5794 <i>Schisandra lancifolia</i>	XIA YE WU WEI ZI
Narrowleaf Meadowrue	T6394 <i>Thalictrum incidum</i>	XIA YE TANG SONG CAO

Narrowleaf Paris	T4651 <i>Paris polyphylla</i> var. <i>stenophylla</i>	XIA YE CHONG LOU
Narrowleaf Rabdosia*	T3480 <i>Isodon angustifolia</i>	XIA YE XIANG CHA CAI
Narrowleaf Scabious	T5775 <i>Scabiosa comosa</i>	MENG GU SHAN LUO BO
Narrowleaf Screwtree	T3163 <i>Helicteres angustifolia</i>	SHAN ZHI MA
Narrowleaf Senna Leaf	T1230 <i>Cassia angustifolia</i>	FAN XIE YE
Narrowleaf Senna*	T1237 <i>Cassia leptophylla</i>	XIA YE JUE MING
Narrowleaf Spicebush	T3847 <i>Lindera angustifolia</i>	XIA YE SHAN HU JIAO
Narrowleaf Swertia	T6212 <i>Swertia angustifolia</i>	XIA YE ZHANG YA CAI
Narrowleaf Vetch	T6743 <i>Vicia angustifolia</i>	ZHAI YE YE WAN DOU
Narrowraceme Meadowrue	T6374 <i>Thalictrum atriplex</i>	XIA XU TANG SONG CAO
Naudin Citrullus*	T1462 <i>Citrullus naudinianus</i>	NA SHI XI GUA
Needle-leaf Fern*	T4026 <i>Macrothelypteris oligophlebia</i>	JIN JI WEI BA CAO GEN
Neem Tree	T0836 <i>Azadiractica indica</i>	YIN DU LIAN
Negundo Chastetree Leaf	T6788 <i>Vitex negundo</i>	HUANG JING YE
Negundo Chastetree Root	T6787 <i>Vitex negundo</i>	HUANG JING GEN
Negundo Chastetree Seed*	T6789 <i>Vitex negundo</i>	HUANG JING ZHONG ZI
Nemoriculous Greenstar*	T5067 <i>Polyalthia nemoralis</i>	LING SHUI AN LUO
Nepal Camphortree	T1440 <i>Cinnamomum glanduliferum</i>	YUN NAN ZHANG
Nepal Cowparsnip	T3219 <i>Heracleum nepalense</i>	NI BO ER DU HUO
Nepal Cranesbill	T2943 <i>Geranium nepalense</i>	NI BO ER LAO GUAN CAO
Nepal Dock	T5612 <i>Rumex nepalensis</i>	NI BO ER YANG TI
Nepal Kobresia*	T3633 <i>Kobresia nepalensis</i>	NI BO ER SONG CAO
Nepal Meconopsis	T4144 <i>Meconopsis nepaulensis</i>	NI BO ER LV RONG HAO
Nepal Monkshood	T0093 <i>Aconitum ferox</i>	NI BO ER WU TOU
Nepetaleaf Leontis	T3744 <i>Leonotis nepetaefolia</i>	JING JIE YE SHI ER CAO
Nepeta-like Croton*	T1852 <i>Croton nepetaefolius</i>	SI JING JIE BA DOU
Nerrowleaf Peashrub	T1192 <i>Caragana stenophylla</i>	XIA YE JIN JI ER
Nervate Twayblade	T3863 <i>Liparis nervosa</i>	JIAN XUE QING
Nervous Brake	T5288 <i>Pteris cretica</i> var. <i>nervosa</i> [Syn. <i>Pteris nervosa</i> ]	FENG WEI JUE
Netvein Goldenray	T3803 <i>Ligularia dictyoneura</i> [Syn. <i>Senecio dictyoneurus</i> ]	WANG MAI TOU WU
New Beauty Saussurea*	T5761 <i>Saussurea neopulchella</i>	XIN MEI FENG MAO JU
New Caledonian Guioa*	T3072 <i>Guioa crenulata</i>	
New Zealand Flax	T4825 <i>Phormium tenax</i>	XIN XI LAN MA
New Zealand Kowhai	T6044 <i>Sophora tetraptera</i>	SI CHI HUAI
New Zealand liverwort	T3760 <i>Lepidolaena taylorii</i>	
New Zealand liverwort <i>Tylimanthus tenellus</i>	T6576 <i>Tylimanthus tenellus</i>	
New Zealand Podocarpus*	T5038 <i>Podocarpus ferrugineus</i>	XIN XI LAN LUO HAN SONG
Newcaledonian Coelospermum*	T1607 <i>Coelospermum billardieri</i>	XIN SU GE LAN XUE GUO MU
Nguang-Chum; Duang-Sum (local names)	T2954 <i>Getonia floribunda</i>	
Nickernut Caesalpinia	T1100 <i>Caesalpinia crista</i>	CI GUO SU MU
Nicola Centaurea*	T1306 <i>Centaurea nicolai</i>	NI GU LA SHI CHE JU
Nicotianflower Lobelia*	T3901 <i>Lobelia nicotianaefolia</i>	YAN CAO HUA SHAN GENG CAI
Niger Bean*	T3647 <i>Lablab niger</i>	BIAN DOU
Nigerian Satinwood	T2239 <i>Distemonanthus benthamianus</i>	NI RI LI YA LIANG RUI SU MU
Nightblooming Cestrum	T1338 <i>Cestrum nocturnum</i>	YE XIANG SHU
Nightjasmine	T4453 <i>Nyctanthes arbor-tristis</i>	YE HUA
Nigroline Garcinia*	T2868 <i>Garcinia nigrolineata</i>	HEI XIAN TIAO TENG HUANG
Nikoo Maple	T0050 <i>Acer nikoense</i>	MAO GUO QI
Nile Starbush*	T6570 <i>Turraea nilotica</i>	NI LUO HE JIN YIN LIAN
Nilgiris Helicia	T3162 <i>Helicia nilagirica</i>	SHEN LU SHAN LONG YAN
Nilotic Tamarisk*	T6289 <i>Tamarix nilotica</i>	NI LUO HE CHENG LIU
Ningguo Fritillary	T2789 <i>Fritillaria ningguoensis</i>	NING GUO BEI MU
Ningpo Figwort	T5828 <i>Scrophularia ningpoensis</i>	XUAN SHEN



Ningxia Fritillary	T2795 <i>Fritillaria taipaiensis</i> var. <i>ningxiaensis</i>	NING XIA BEI MU
Nippon Hawthorn	T1769 <i>Crataegus cuneata</i>	YE SHAN ZHA
Nippon Yam	T2203 <i>Dioscorea nipponica</i>	CHUAN LONG SHU YU
Nirur Leafflower*	T4840 <i>Phyllanthus niruri</i>	ZHU ZI CAO
Nitidleaf Croton	T1853 <i>Croton oblongifolius</i> [Syn. <i>Croton laevigatus</i> ]	GUANG YE BA DOU
Nitidleaf Senna*	T1236 <i>Cassia laevigata</i> [Syn. <i>Cassia floribunda</i> ]	GUANG YE JUE MING
Nitraria*	T4436 <i>Nitraria tangutorum</i>	BAI CI
Niu-Chang chih; Jang Jy (in Taiwan)	T0538 <i>Antrodia camphorata</i>	
Noble Arnebia*	T0650 <i>Arnebia nobilis</i>	GAO GUI JIA ZI CAO
Noble Artocarpus*	T0718 <i>Artocarpus nobilis</i>	GAO GUI BO LUO MI
Noble Dendrobium	T2107 <i>Dendrobium nobile</i>	SHI HU
Node Elephantfoot*	T2335 <i>Elephantus nudatus</i>	LUO DI DAN CAO
Node Ferulago*	T2713 <i>Ferulago nodosa</i>	JIE JIE LEI A WEI
Non-cirrose Citrullus*	T1461 <i>Citrullus ecirrhosus</i>	WU JUAN XU XI GUA
Non-stipe Eucalyptus*	T2500 <i>Eucalyptus apodophylla</i>	WU BING YE AN
North Sea Bryozoan	T2742 <i>Flustra foliacea</i>	BEI HAI XIAN TAI CHONG
North Viet-Nam Gambirplant	T6618 <i>Uncaria homomalla</i> [Syn. <i>Uruparia homomalla</i> ; <i>Uruparia tonkinensis</i> ; <i>Uruparia lanosa</i> var. <i>parvifora</i> ]	BEI YUE GOU TENG
Northeast Clubmos*	T3293 <i>Huperzia miyoshiana</i>	DONG BEI SHI SHAN
Northeast Dim-flower Carpesium*	T1214 <i>Carpesium triste</i> var. <i>manshuricum</i>	DONG BEI AN HUA JIN WA ER
North-east Polypody*	T5126 <i>Polypodium virginianum</i>	DONG BEI DUO ZU JUE
Northeast Seriphidium	T5921 <i>Seriphidium finitum</i> [Syn. <i>Artemisia finita</i> ]	DONG BEI HUI HAO
Northeast Spineginseng*, Tall Oplopanax	T4516 <i>Oplopanax elatus</i>	DONG BEI CI REN SHEN
Northeast Walnut*	T3565 <i>Juglans mandshurica</i> var. <i>sieboldiana</i>	DONG BEI HU TAO
Northern Angelica*	T0499 <i>Angelica ursina</i>	BEI FANG DANG GUI
Northern Catalpa	T1265 <i>Catalpa speciosa</i>	HUANG JIN SHU
Northern Dutchmanspipe	T0624 <i>Aristolochia contorta</i>	BEI MA DOU LING
Northern Dutchmanspipe Root	T0625 <i>Aristolochia contorta</i>	BEI MA DOU LING GEN
Northern Monkshood*	T0129 <i>Aconitum septentrionale</i>	BEI FANG WU TOU
Northern Pitch Pine	T4922 <i>Pinus rigida</i>	GANG SONG
Northern Wolfberry Root-bark*	T3959 <i>Lycium chinense</i> var. <i>potaninii</i>	BEI FANG GOU QI GEN PI
Northsea Angelica*	T0475 <i>Angelica acutiloba</i> var. <i>sugiyamae</i>	BEI HAI DANG GUI
Norway Maple	T0052 <i>Acer platanoides</i>	NUO WEI QI
Novel-Holland Pepper*	T4958 <i>Piper nove-hollandae</i>	XIN HE LAN HU JIAO
Nude Fern	T5269 <i>Psilotum nudum</i>	SHI SHUA BA
Nude-stem Eargrass*	T3127 <i>Hedyotis nudicaulis</i>	LUO JING ER CAO
Nudicaulous Grounsel Herb	T5893 <i>Senecio nudicaulis</i>	ZI BEI TIAN KUI CAO
Nummulite Rabdosia*	T5014 <i>Plectranthus nummularius</i>	YUAN BAN XIANG CHA CAI
Nutant Aussiepoplar*	T3274 <i>Homalanthus nutans</i>	XIA CHUI AO YANG
Nutgrass Galingale	T1978 <i>Cyperus rotundus</i>	XIANG FU
Nut-vomitive Poissonnut	T6184 <i>Strychnos nux-vomica</i>	MA QIAN ZI
Nyctaginiflower Petunia*	T4752 <i>Petunia nyctaginiflora</i>	ZI MO LI HUA BI DONG QIE
Oak-of-Cappadocia	T0403 <i>Ambrosia maritima</i>	YAN HAI TUN CAO
Oat	T0833 <i>Avena sativa</i>	YAN MAI
Oblique Fuscoporia*	T2818 <i>Fuscoporia obliqua</i>	HUA HE KONG JUN
Oblique Pinna Brake	T5296 <i>Pteris oshimensis</i>	XIE YU FENG WEI JUE
Oblong-leaf Borneol Oil-Resin*	T2276 <i>Dryobalanops oblongifolia</i>	JU YUAN YE LONG NAO XIANG
Oblongleaf Milkvetch*	T0799 <i>Astragalus miser</i> var. <i>oblongifolia</i>	JU YUAN YE HUANG QI
Oblong-leaved Barberry	T0910 <i>Berberis oblonga</i>	CHANG YUAN YE XIAO BO
Obovaleaf Dandelion Root	T6302 <i>Taraxacum obovatum</i>	DAO LUAN YE PU GONG YING GEN
Obovate Peony	T4586 <i>Paeonia obovata</i>	CAO SHAO YAO
Obovateleaf Lemnaphyllum*	T3737 <i>Lemnaphyllum microphyllum</i> var. <i>obovatum</i>	DAO LUAN YE FU SHI JUE
Obscure Devilpepper*	T5439 <i>Rauwolfia obscura</i>	GANG GUO LUO FU MU

Obtuse Cryptolepis*	T1865 <i>Cryptolepis obtusa</i>	DUN XING BAI YE TENG
Obtuse Eucalyptus Leaf*	T2503 <i>Eucalyptus camaldulensis</i> var. <i>obtusa</i>	DUN XING CHI AN YE
Obtuse Frangipani*	T5031 <i>Plumeria obtusa</i>	DUN XING JI DAN HUA
Obtuseleaf Achyranthes	T0072 <i>Achyranthes aspera</i> var. <i>indica</i>	DUN YE TU NIU XI
Obtuseleaf Cassia Bark, Wild Cinnamon Bark	T1434 <i>Cinnamomum bejolghota</i> [Syn. <i>Cinnamomum obtusifolium</i> ; <i>Laurus bejolghota</i> ]	DUN YE GUI PI
Obtuseleaf Erycibe	T2449 <i>Erycibe obtusifolia</i>	DING GONG TENG
Obtuseleaf Euphorbia Latex*	T2604 <i>Euphorbia obtusifolia</i>	DUN YE DA JI XIANG JIANG
Obtuseleaf Euphorbia*	T2605 <i>Euphorbia obtusifolia</i> var. <i>obtusifolia</i>	DUN YE DA JI
Obtuseleaf Senna*	T1240 <i>Cassia obtusifolia</i>	DUN YE JUE MING
Obtuselobed Anemone	T0469 <i>Anemone obtusiloba</i>	DUN LIE YIN LIAN HUA
Occidental Cocklebur*	T6839 <i>Xanthium occidentale</i>	XI FANG CANG ER
Occidental Larkspur*	T2080 <i>Delphinium occidentale</i>	XI FANG CUI QUE
Ochotsk Corydalis	T1728 <i>Corydalis ochotensis</i>	HUANG ZI JIN
Octapistil Pokeweed*	T4866 <i>Phytolacca octandra</i>	AO ZHOU SHANG LU
Octet Wampee*	T1532 <i>Clausena anisata</i>	BA JIAO HUANG PI
Odollam Cerberustree*	T1331 <i>Cerbera odollam</i>	AO DAO LA MU HAI MANG GUO
Odorate Rosewood	T2008 <i>Dalbergia odorifera</i>	JIANG ZHEN XIANG
Odorous Hellebore*	T3184 <i>Helleborus odorus</i>	XIANG TIE KUAI ZI
Official Asparagus	T0752 <i>Asparagus officinalis</i>	XIAO BAI BU
Official Dandelion	T6303 <i>Taraxacum officinale</i>	YAO YONG PU GONG YING
Official Ervatamia*	T2445 <i>Ervatamia officinalis</i>	YAO YONG GOU YA HUA
Official Evodia	T2646 <i>Evodia rutaecarpa</i> var. <i>officinalis</i>	SHI HU <sup>(3)</sup>
Official Magnolia	T4045 <i>Magnolia officinalis</i>	HOU PO
Official Primrose*	T5204 <i>Primula veris</i> [Syn. <i>Primula officinalis</i> ]	HUANG HUA JIU LUN CAO
Oilpalm	T2328 <i>Elaeis guineensis</i>	YOU ZONG
Oiltea Camellia	T1146 <i>Camellia oleifera</i>	CHA ZI XIN
Oiltea Camellia Root-bark	T1147 <i>Camellia oleifera</i>	YOU CHA GEN PI
Oily Daphne*	T2029 <i>Daphne oleoides</i>	YOU RUI XIANG
Oily-leaf Milkveitch*	T0801 <i>Astragalus oleifolius</i>	YOU YE HUANG QI
Okamoto Maple	T0051 <i>Acer okamotoanum</i>	CHAO XIAN WU JIAO FENG
Okinawan Softcoral Clavularia viridis	T1542 <i>Clavularia viridis</i>	CHONG SHENG RUAN SHAN HU
Oldham Bamboo Shoot	T5961 <i>Sinocalamus oldhami</i>	LV SUN PIAN
Oldham Fissistigma	T2735 <i>Fissistigma oldhamii</i> [Syn. <i>Melodorum oldhamii</i> ]	GUA FU MU
Oldham Gypsophila	T3090 <i>Gypsophila oldhamiana</i>	XIA CAO
Oldworld Arrowhead Corm	T5647 <i>Sagittaria sagittifolia</i>	CI GU
Oleanderleaf Allemanda	T0308 <i>Allemanda neriifolia</i>	HUANG CHAN
Olga Gentian*	T2923 <i>Gentiana olgae</i>	AO LIE GE LONG DAN
Olga Heliotrope*	T3176 <i>Heliotropium olgae</i>	AO ER JIA TIAN JIE CAI
Olibanum	T0994 <i>Boswellia carterii</i>	RU XIANG
Olive	T1165 <i>Canarium album</i>	QING GUO
Olive Ninenode*	T5277 <i>Psychotria oleoides</i>	YOU GAN LAN JIU JIE
Olive-green White Quebracho*	T0770 <i>Aspidosperma olivaceum</i>	HE LU BAI JIAN MU
Oliver Plumyew	T1322 <i>Cephalotaxus oliveri</i>	BI ZI CU FEI
Oliver Rosewood*	T2009 <i>Dalbergia oliveri</i>	AO LI FO HUANG TAN
Olivier Gentian*	T2924 <i>Gentiana olivieri</i>	AO SHI LONG DAN
Ombutree Pokeberry	T4862 <i>Phytolacca dioica</i>	A GEN TING SHANG LU
Omei Kudzuvine	T5316 <i>Pueraria omeiensis</i>	E MEI GE
Omei Meadowrue	T6402 <i>Thalictrum omeiense</i>	E MEI TANG SONG CAO
Omei Mountain Goldthread	T1669 <i>Coptis omeiensis</i>	E MEI YE HUANG LIAN
Omoto Nipponlily Root	T5557 <i>Rohdea japonica</i> [Syn. <i>Orontium japonicum</i> ]	WAN NIAN QING GEN
Omphalo-fruit Common Jasminorange*	T4322 <i>Murraya omphalocarpa</i>	QI GUO JIU LI XIANG
Omphalo-fruit Jasminorange*	T4326 <i>Murraya paniculata</i> var. <i>omphalocarpa</i>	QI GUO QIAN LI XIANG

Omphalos Parmelia*	T4657 <i>Parmelia saxatilis</i> var. <i>omphalodes</i>	QI SHI HUA
One Sided Racemes Leucothoe	T3784 <i>Leucothoe grayana</i>	MU LI LU
Oneseed Ephedra	T2375 <i>Ephedra monosperma</i>	DAN ZI MA HUANG
<i>Onychium auratum</i>	T4501 <i>Onychium auratum</i>	
Oolong Tea	T1155 <i>Camellia sinensis</i> var. <i>viridis</i>	WU LONG CHA
Opium	T4635 <i>Papaver somniferum</i>	YA PIAN
Opium Poppy	T4636 <i>Papaver somniferum</i>	YING SU
Opium Poppy Pericarp	T4637 <i>Papaver somniferum</i>	YING SU KE
Opposite Poisonnut*	T6169 <i>Strychnos decussata</i>	DUI SHENG MA QIAN
Oppositeleaf Fig	T2720 <i>Ficus hispida</i>	DUI YE RONG
Oppositeleaf Goldsaxifrage*	T1407 <i>Chrysosplenium oppositifolium</i>	DUI YE JIN YAO
Oppositeleaf Rhodiola	T5500 <i>Rhodiola subopposita</i>	HU SHENG HONG JING TIAN
Orange Daylily	T3193 <i>Hemerocallis fulva</i>	XUAN CAO GEN
Orange Lycoris	T3987 <i>Lycoris sanguinea</i>	TIE SE JIAN
Orange Magnoliavine	T5802 <i>Schisandra sphenanthera</i>	HUA ZHONG WU WEI ZI
Orange Monkeyflower*	T4251 <i>Mimulus aurantiacus</i>	JU SE GOU SUAN JIANG
Orange Mullein	T6702 <i>Verbascum phlomoides</i>	JU SE MAO RUI HUA
Orange Poppy*	T4622 <i>Papaver auranticum</i>	JU HUANG YING SU
Orange Stonecrop	T5855 <i>Sedum kamschatcicum</i>	HENG GEN FEI CAI
Orange-ball-tree	T1047 <i>Buddleja globosa</i>	QIU HUA ZUI YU CAO
Orangeeye Butterflybush	T1046 <i>Buddleja davidii</i>	DA YE ZUI YU CAO
Oregon Alder	T0329 <i>Alnus oregana</i>	AO LEI TONG QI MU
Oregon Bleedingheart	T2151 <i>Dicentra oregana</i>	E LE GANG HE BAO MU DAN
Oregon-grape	T4054 <i>Mahonia aquifolium</i>	JIAN YE SHI DA GONG LAO
Oreintal Consolida*	T1647 <i>Consolida orientalis</i>	DONG FANG FEI YAN CAO
Oriental Bittersweet	T1288 <i>Celastrus orbiculatus</i> [Syn. <i>Celastrus articulatus</i> ]	NAN SHE TENG
Oriental Bittersweet Fruit	T1291 <i>Celastrus orbiculatus</i> [Syn. <i>Celastrus articulatus</i> ]	NAN SHE TENG GUO
Oriental Bittersweet Leaf	T1290 <i>Celastrus orbiculatus</i> [Syn. <i>Celastrus articulatus</i> ]	NAN SHE TENG YE
Oriental Bittersweet Root	T1289 <i>Celastrus orbiculatus</i> [Syn. <i>Celastrus articulatus</i> ]	NAN SHE TENG GEN
Oriental Blechnum Frond	T0952 <i>Blechnum orientale</i>	WU MAO JUE
Oriental Blueberry Fruit	T6670 <i>Vaccinium bracteatum</i>	NAN ZHU ZHI
Oriental Buckthorn	T5455 <i>Rhamnus crenata</i>	LI LA GEN
Oriental Buckthorn	T5456 <i>Rhamnus crenatus</i>	HUANG YAO
Oriental Chain Fern	T6831 <i>Woodwardia orientalis</i>	DONG FANG GOU JI
Oriental Cocklebur*	T6840 <i>Xanthium orientale</i>	DONG FANG CANG ER
Oriental Ervatamia*	T2446 <i>Ervatamia orientalis</i>	DONG FANG GOU YA HUA
Oriental Fatheadtree*	T4392 <i>Nauclea orientalis</i>	DONG FANG WU TAN
Oriental Foxglove*	T2176 <i>Digitalis orientalis</i>	DONG FANG YANG DI HUANG
Oriental Gambirplant*	T6627 <i>Uncaria orientalis</i>	DONG FANG GOU TENG
Oriental Germander	T6364 <i>Teucrium orientale</i>	DONG FANG XIANG KE KE
Oriental Henbane*	T3330 <i>Hyoscyamus orientalis</i>	DONG FANG TIAN XIAN ZI
Oriental Ostrich Fern	T4126 <i>Matteuccia orientalis</i>	DONG FANG JIA GUO JUE
Oriental Poppy	T4632 <i>Papaver orientale</i>	JIN DONG YING SU
Oriental Sesame (black seed)	T5927 <i>Sesamum indicum</i> [Syn. <i>Sesamum orientale</i> ]	HEI ZHI MA
Oriental Sesame (white seed)	T5925 <i>Sesamum indicum</i> [Syn. <i>Sesamum orientale</i> ]	BAI ZHI MA
Oriental Sesame Leaf	T5924 <i>Sesamum indicum</i>	HU MA YE
Oriental Sesame Root	T5923 <i>Sesamum indicum</i>	HU MA GEN
Oriental Stephania	T6119 <i>Stephania cepharantha</i>	BAI YAO ZI
Oriental Sweetgum Resin	T3868 <i>Liquidambar orientalis</i>	SU HE XIANG
Oriental Variegated Coralbean Bark	T2479 <i>Erythrina variegata</i> var. <i>orientalis</i>	HAI TONG PI
Oriental Waterplantain	T0303 <i>Alisma orientale</i> [Syn. <i>Alisma plantago-aquatica</i> var. <i>orientale</i> ]	ZE XIE
Oriental Vismia*	T6780 <i>Vismia orientalis</i>	DONG FANG WEI SI MU
Orientvine	T5964 <i>Sinomenium acutum</i>	QING FENG TENG

Orris	T3458 <i>Iris florentina</i>	XI OU YUAN WEI
Osage Orange	T4022 <i>Maclura pomifera</i>	SANG CHENG
Oshiroishimeji (in Japanese)	T3993 <i>Lyophyllum connatum</i>	
Osmarien Broom*	T1990 <i>Cytisus osmariensis</i>	AO MA JIN QUE HUA
Osun Padauk*	T5304 <i>Pterocarpus osun</i>	E SUN ZI TAN
Oswegotea	T4269 <i>Monarda didyma</i>	MEI GUO BO HE
Otoba Nutmeg*	T4353 <i>Myristica otoba</i>	AO TUO ROU DOU KOU
Oval Kumquat	T2760 <i>Fortunella margarita</i>	JIN JU
Oval Kumquat Leaf	T2761 <i>Fortunella margarita</i>	JIN JU YE
Oval Periwinkle*	T1269 <i>Catharanthus ovalis</i>	LUAN YUAN CHANG CHUN HUA
Ovate Catalpa	T1262 <i>Catalpa ovata</i>	ZI MU
Ovate Catalpa Bast	T1261 <i>Catalpa ovata</i>	ZI BAI PI
Ovate Catalpa Fruit	T1263 <i>Catalpa ovata</i>	ZI SHI
Ovate Catalpa Leaf	T1264 <i>Catalpa ovata</i>	ZI YE
Ovateleaf Anemone	T0465 <i>Anemone begoniifolia</i>	LUAN YE YIN LIAN HUA
Ovateleaf Garcinia*	T2869 <i>Garcinia ovalifolia</i>	LUAN YE TENG HUANG
Ovateleaf Heliotrope*	T3177 <i>Heliotropium ovalifolium</i>	LUAN YE TIAN JIE CAI
Ovateleaf Holly	T3398 <i>Ilex rotunda</i>	JIU BI YING
Ovateleaf Knotweed	T5118 <i>Polygonum suffultum</i>	HONG SAN QI
Ovateleaf Mayten*	T4138 <i>Maytenus ovatus</i>	LUAN YE MEI DENG MU
Ovateleaf Pepper	T4933 <i>Piper attenuatum</i>	LUAN YE HU JIAO
Ovateleaf Rhododendron*	T5520 <i>Rhododendron ovatum</i> [Syn. <i>Rhododendron lamprophyllum</i> ; <i>Azalea ovata</i> ]	MA YIN HUA
Ovateleaf Tylophora	T6582 <i>Tylophora ovata</i>	LUAN YE WA ER TENG
Ovate-leafThreevein Aster*	T0777 <i>Aster ageratoides</i> var. <i>ovatus</i>	LUAN YE SAN ZHE MAI ZI WAN
Ovatepetal Sandwort	T0609 <i>Arenaria kansuensis</i> var. <i>ovatipeatala</i>	LUAN BAN ZAO ZHUI
Ox Blood	T0991 <i>Bos taurus domesticus</i> ; <i>Bubalus bubalis</i>	NIU XUE
Ox Brain	T0988 <i>Bos taurus domesticus</i> ; <i>Bubalus bubalis</i>	NIU NAO
Ox Gall	T0984 <i>Bos taurus domesticus</i> ; <i>Bubalus bubalis</i>	NIU DAN
Ox Kidney	T0990 <i>Bos taurus domesticus</i> ; <i>Bubalus bubalis</i>	NIU SHEN
Ox Liver	T0986 <i>Bos taurus domesticus</i> ; <i>Bubalus bubalis</i>	NIU GAN
Ox Lung	T0985 <i>Bos taurus domesticus</i> ; <i>Bubalus bubalis</i>	NIU FEI
Ox Thyroid	T0992 <i>Bos taurus domesticus</i> ; <i>Bubalus bubalis</i>	NIU YE
Oxford Ragwort	T5912 <i>Senecio squalidus</i>	NIU JIN QIAN LI GUANG
Oxhide Gelatin	T0982 <i>Bos taurus domesticus</i>	HUANG MING JIAO
Oxlip	T5198 <i>Primula elatior</i>	GAO BAO CHUN
Oxtail Greenbrier	T5981 <i>Smilax riparia</i>	NIU WEI CAI
Oyama Magnolia	T4050 <i>Magnolia sieboldii</i>	TIAN NV MU LAN
Oyster	T1768 <i>Crassostrea gigas</i>	MU LI
Oyster Meat	T4555 <i>Ostrea rivularis</i> ; <i>Ostrea talienwhanensis</i> ; <i>Ostrea gigas</i>	MU LI ROU
Pacific Gypsophila	T3091 <i>Gypsophila pacifica</i>	SHAN YIN CHAI HU
Pacific Wood Fern	T2285 <i>Dryopteris pacifica</i>	TAI PING YANG LIN MAO JUE
Pacific Yew	T6308 <i>Taxus brevifolia</i>	DUAN YE HONG DOU SHAN
Paene Milkwort*	T5079 <i>Polygala paenea</i>	PEI NI YUAN ZHI
Painted Fern	T0818 <i>Athyrium filix-femina</i>	TI GAI JUE
Pale Bittersweet	T1287 <i>Celastrus hypoleucus</i>	MIAN TENG
Pale Butterflybush	T1048 <i>Buddleja officinalis</i>	MI MENG HUA
Pale Corydalis	T1740 <i>Corydalis sempervirens</i>	CANG BAI ZI JIN
Pale Persicaria	T5109 <i>Polygonum nodosum</i>	JIE LIAO
Pale Russula*	T5622 <i>Russula ochroleuca</i>	HUANG BAI HONG GU
Pale Treebine*	T1454 <i>Cissus pallida</i>	CANG BAI FEN TENG
Palmerston Pitch Tree*	T0214 <i>Agathis palmerstoni</i>	PA SHI BEI KE SHAN
Panamanian Albizia*	T0290 <i>Albizzia adinocephala</i>	BA NA MA HE HUAN

Pangolin	T4106 <i>Manis pentadactyla</i>	CHUAN SHAN JIA
Paniculate Bolbostemma	T0971 <i>Bolbostemma paniculatum</i>	JIA BEI MU
Paniculate Crotalaria*	T1828 <i>Crotalaria paniculata</i>	YUAN ZHUI ZHU SHI DOU
Paniculate Goldraintree Flower	T3635 <i>Koelreuteria paniculata</i>	LUAN HUA
Paniculate Goldraintree Root-bark	T3636 <i>Koelreuteria paniculata</i>	LUAN SHU
Paniculate Hydrangea	T3306 <i>Hydrangea paniculata</i>	FEN TUAN HUA
Paniculate Microcos	T4217 <i>Microcos paniculata</i> [Syn. <i>Grewia microcos</i> ]	PO BU YE
Paniculate Onosma	T4500 <i>Onosma paniculatum</i>	DIAN ZI CAO
Paniculate Ostodes*	T4554 <i>Ostodes paniculata</i>	YUAN ZHUI HUA YE LUN MU
Paniculate Spotflower	T6075 <i>Spilanthes acmella</i>	TIAN WEN CAO
Paniculate Swallowwort	T1959 <i>Cynanchum paniculatum</i>	XU CHANG QING
Paniculed Bittersweet Seed	T1292 <i>Celastrus paniculatus</i>	DENG YOU TENG ZI
Panniform Pyrrosia	T5355 <i>Pyrrosia drakeana</i>	ZHAN MAO SHI WEI
Paohsing Euonymus	T2543 <i>Euonymus mupinensis</i>	BAO XING WEI MAO
Paoshan Monkshood	T0080 <i>Aconitum bullatifolium</i> var. <i>homotrichum</i> [Syn. <i>Aconitum nagarum</i> ]	BAO SHAN WU TOU
Papaya Fruit	T1205 <i>Carica papaya</i>	FAN MU GUA
Papaya Leaf	T1206 <i>Carica papaya</i>	FAN MU GUA YE
Paper Reed	T1977 <i>Cyperus papyrus</i>	ZHI SHA CAO
Paper-white Narcissus	T4377 <i>Narcissus papyraceus</i>	BAI SHUI XIAN
Papillose Box*	T1093 <i>Buxus papillosa</i>	DUO RU TOU HUANG YANG
Papua-New-Guinea Persimmon*	T2223 <i>Diospyros mafiensis</i>	BA BU YA XIN JI NEI YA SHI
Para Rubbertree	T3236 <i>Hevea brasiliensis</i>	XIANG JIAO SHU
Paradoxy Grape-hyacinth*	T4333 <i>Muscari paradoxum</i>	QI YI PU TAO FENG XIN ZI
Paraguay Tea	T3394 <i>Ilex paraguariensis</i>	BA LA GUI CHA
Parasite Scurrula	T3925 <i>Loranthus parasiticus</i> [Syn. <i>Loranthus chinensis</i> ; <i>Taxillus chinensis</i> ]	SANG JI SHENG
Parchment-like Milky*	T3652 <i>Lactarius pergamenus</i>	SI YANG PI ZHI RU GU
Pardleather-like Mushroom	T3743 <i>Lentinus lepideus</i>	BAO PI GU
Parishshape Loosestrife	T4004 <i>Lysimachia paridiformis</i>	CHONG LOU PAI CAO
Parker Raspberry	T5594 <i>Rubus parkeri</i>	WU PAO ZI
Parmelia Lichen	T4656 <i>Parmelia saxatilis</i>	SHI HUA
Parqui Cestrum	T1339 <i>Cestrum parqui</i>	PA KE YE XIANG SHU
Parry Northern Mahonia	T4059 <i>Mahonia borealis</i>	PA LI BEI FANG SHI DA GONG LAO
Parvivesiculose Gulfweed*	T5739 <i>Sargassum parvivesiculosum</i>	XI NANG MA WEI ZAO
Pashi Pear Fruit	T5365 <i>Pyrus pashia</i>	CHUAN LI GUO
Pasific Mikania*	T4229 <i>Mikania mendocina</i>	TAI PING YANG JIA ZE LAN
Paspalum Ergot*	T1540 <i>Claviceps paspali</i>	QUE BAI MAI JIAO
Passionflower	T4663 <i>Passiflora caerulea</i>	XI FAN LIAN
Passionfruit	T4665 <i>Passiflora edulis</i>	JI DAN GUO
Pasture Gentian*	T2920 <i>Gentiana makinoi</i>	MU YE LONG DAN
Patentflower Monkshood	T0086 <i>Aconitum chasmanthum</i>	ZHAN HUA WU TOU
Patience Dock	T5614 <i>Rumex patientia</i>	NIU XI XI
Paucivitat Cowparsnip	T3218 <i>Heracleum moellendorffii</i> var. <i>paucivitatum</i>	ZOU MA QIN
Pawpaw	T0744 <i>Asimina triloba</i>	PAO PAO SHU
Pax Ash	T2774 <i>Fraxinus paxiana</i>	QIN LING BAI LA SHU
Peach	T5229 <i>Prunus persica</i>	TAO
Peach Bast	T5232 <i>Prunus persica</i>	TAO JING BAI PI
Peach Flower	T5231 <i>Prunus persica</i>	TAO HUA
Peach Fritillary*	T2791 <i>Fritillaria persica</i>	TAO BEI MU
Peach Juvenile Branch	T5235 <i>Prunus persica</i>	TAO ZHI
Peach Kernel	T5233 <i>Prunus persica</i>	TAO REN
Peach Leaf	T5234 <i>Prunus persica</i>	TAO YE

Peach Root	T5230 <i>Prunus persica</i>	TAO GEN
Peachform Mango	T4103 <i>Mangifera persiciformis</i>	BIAN TAO
Peachliking Pumpkin	T1883 <i>Cucurbita pepo</i> var. <i>akoda</i>	TAO NAN GUA
Peanut	T0559 <i>Arachis hypogaea</i>	LUO HUA SHENG
Peanut Branch-leaf	T0561 <i>Arachis hypogaea</i>	LUO HUA SHENG ZHI YE
Peanut Oil	T0560 <i>Arachis hypogaea</i>	LUO HUA SHENG YOU
Pear Aglaia*	T0242 <i>Aglaia pirifera</i>	LI MI ZI LAN
Pearleaf Microglossa Root	T4218 <i>Microglossa pyrifolia</i>	XIAO SHE JU GEN
Pear-like Puff-ball	T3961 <i>Lycoperdon pyriforme</i>	LI XING MA BO
Pearwort	T5646 <i>Sagina japonica</i> [Syn. <i>Spergula japonica</i> ]	QI GU CAO
Peashrub*	T1188 <i>Caragana chamlagu</i>	JIN JI ER
Pecan	T1218 <i>Carya illinoensis</i>	MEI GUO SHAN HE TAO
Pectinat Bushmint*	T3380 <i>Hyptis pectinata</i>	ZHI SHAN XIANG
Pectinate Speedwell*	T6726 <i>Veronica pectinata</i> var. <i>glandulosa</i>	SHU CHI PO PO NA
Pedate Pinellia	T4903 <i>Pinellia pedatisecta</i>	ZHANG YE BAN XIA
Pedicellate Gentian	T2925 <i>Gentiana pedicellata</i>	HUA GENG LONG DAN
Pedunculate Acronychia	T0151 <i>Acronychia pedunculata</i>	SHA TANG MU
Peking Euphorbia	T2608 <i>Euphorbia pekinensis</i>	DA JI <sup>(3)</sup>
Peking Oak	T5371 <i>Quercus aliena</i>	HU LI
Peking Pyrrosia Frond	T5354 <i>Pyrrosia davidii</i>	BEI JING SHI WEI
Peltate Milkwort*	T5080 <i>Polygala peltatum</i>	ZU YE CAO
Peltate Sundew*	T2266 <i>Drosera peltata</i>	DUN ZHUANG MAO GAO CAI
Peltate Yam	T2213 <i>Dioscorea zingiberensis</i>	DUN YE SHU YU
Peltateleaf Meadowrue	T6393 <i>Thalictrum ichangense</i> [Syn. <i>Thalictrum tripeltatum</i> ; <i>Thalictrum multipeltatum</i> ]	DUN YE TANG SONG CAO
Peltateleaf Pepper*	T4960 <i>Piper peltatum</i>	DUN YE HU JIAO
Pendentseed Jointfir	T3034 <i>Gnetum pendulum</i>	CHUI ZI MAI MA TENG
Pendulous Eucalyptus Leaf	T2504 <i>Eucalyptus camaldulensis</i> var. <i>pendula</i>	CHUI ZHI CHI AN YE
Pendulous Monkshood	T0122 <i>Aconitum pendulum</i>	TIE BANG CHUI
Pengxian Hemsleya	T3209 <i>Hemsleya pengxianensis</i>	PENG XIAN XUE DAN
<i>Penicillium verruculosum</i>	T4701 <i>Penicillium verruculosum</i>	Mold
Pennsylvanian Cocklebur*	T6841 <i>Xanthium pennsylvanicum</i>	BIN XI FA NI YA CANG ER
Pennyroyal Mint	T4187 <i>Mentha pulegium</i>	CHUN E BO HE
Penta-androus Caltrap*	T6496 <i>Tribulus pentandrus</i>	WU XIONG RUI JI LI
Pentagonous Ardisia	T0602 <i>Ardisia quinquegona</i>	LUO SAN SHU
Pentagynous Dillenia	T2182 <i>Dillenia pentagyna</i>	XIAO HUA WU YA GUO
Pentland Mandevilla*	T4098 <i>Mandevilla pentlandiana</i>	PENG TE MAN DE MU
<i>Pentopetia androsaernifolia</i>	T4702 <i>Pentopetia androsaernifolia</i>	PEN TUO PO TI CAO
Pepper Mint	T4186 <i>Mentha piperita</i>	LA BO HE
Pepper-tree	T4025 <i>Macropiper excelsum</i>	GAO DA HU JIAO
Peppertree Pricklyash	T6892 <i>Zanthoxylum schinifolium</i>	QING JIAO
Pepperweed Seed	T3755 <i>Lepidium apetalum</i> [Syn. <i>Lepidium micranthum</i> ]	TING LI ZI
Peppery Milky	T3653 <i>Lactarius piperatus</i> [Syn. <i>Agaricus piperatus</i> ]	LA RU GU
Perak Devilpepper	T5441 <i>Rauwolfia perakensis</i>	PI LI LUO FU MU
Pere L. F. Faurie's Rhododendron	T5509 <i>Rhododendron fauriei</i>	FU LEI SHI DU JUAN HUA
Peregrin Bleedingheart*	T2152 <i>Dicentra peregrina</i>	YI YANG HE BAO MU DAN
Peregrine Hoarhound	T4111 <i>Marrubium peregrinum</i>	YANG OU XIA ZHI CAO
Perennial Ragweed	T0405 <i>Ambrosia psilostachya</i>	LUO SUI TUN CAO
Perfoliate Knotweed Root	T5111 <i>Polygonum perfoliatum</i>	GANG BAN GUI GEN
Perforated Haplophyllum	T3104 <i>Haplophyllum perforatum</i>	DA YE YUN XIANG CAO
Perforated Harrisonia	T3109 <i>Harrisonia perforata</i>	NIU JIN GUO
Pericarp	T1488 <i>Citrus junos</i>	CHENG ZI PI
Perry Aloe*	T0342 <i>Aloe perryi</i>	PEI LI LU HUI

Persia Giantfennel Variety*	T2704 <i>Ferula persica</i> var. <i>latisecta</i>	BO SI A WEI BIAN ZHONG
Persia Motherwort*	T3753 <i>Leonurus persicus</i>	BO SI YI MU CAO
Persia Poppy	T4633 <i>Papaver persicum</i>	BO SI YING SU
Persimmon	T2221 <i>Diospyros kaki</i>	SHI ZI
Persimmon Leaf	T2220 <i>Diospyros kaki</i>	SHI YE
Persimmon Persistent Calyx	T2217 <i>Diospyros kaki</i>	SHI DI
Persimmon Root	T2218 <i>Diospyros kaki</i>	SHI GEN
Personator Padritree*	T6142 <i>Stereospermum personatum</i>	JIA MIAN YU YE QIU
Pertusate Ulva Frond	T6600 <i>Ulva pertusa</i>	KONG SHI CHUN
Peru Balmtree Resin	T4358 <i>Myroxylon pereirae</i>	BI LU XIANG JIAO
Peru Coca Shrub	T2492 <i>Erythroxylum novogranatense</i>	BI LU GU KE
Peru False Heath	T2652 <i>Fabiana imbricata</i>	PI QI QIE
Peru Squill*	T5812 <i>Scilla peruviana</i>	BI LU MIAN ZAO ER
Peruvian Groundcherry	T4852 <i>Physalis peruviana</i>	DENG LONG CAO
Petalformed Meadowrue	T6403 <i>Thalictrum petaloideum</i>	BAN RUI TANG SONG CAO
Petioled Pyrrosia Frond	T5358 <i>Pyrrosia petiolosa</i>	YOU BING SHI WEI
Petrofracted Pepper	T4964 <i>Piper retrofractum</i>	CHANG GUO BI BA
Petty Euphorbia	T2609 <i>Euphorbia peplus</i>	BO AI DA JI
Peyote	T3923 <i>Lophophora williamsii</i>	AN LU LONG SHE LAN
Phellandral Eucalyptus*	T2515 <i>Eucalyptus phellandra</i>	SHUI HUI XIANG AN
<i>Phellinus igniarius</i>	T4787 <i>Phellinus igniarius</i>	SANG HUANG
Philadelphia Fleabane	T2424 <i>Erigeron philadelphicus</i>	FEI CHENG FEI PENG
Philadelphia Groundcherry*	T4853 <i>Physalis philadelphica</i>	FEI CHENG SUAN JIANG
Philippine Bushbeech*	T3025 <i>Gmelina philippensis</i>	FEI LV BIN SHI ZI
Philippine Flemingia	T2737 <i>Flemingia philippinensis</i> [Syn. <i>Moghania philippinensis</i> ]	MAN XING QIAN JIN BA
Philippine Flemingia	T4260 <i>Moghania philippinensis</i>	FEI LV BIN QIAN JIN BA
Philippine Groundsel*	T5896 <i>Senecio philippicus</i>	FEI LV BIN QIAN LI GUANG
Philippine Maidenhair*	T0173 <i>Adiantum lunulatum</i>	BAN YUE XING TIE XIAN JUE
Philippine Mallotus*	T4083 <i>Mallotus philippinensis</i>	CU KANG CHAI
Philippine Nettle tree	T1298 <i>Celtis philippinensis</i>	FEI LV BIN PIAO SHU
Philippine Podocarpus	T5051 <i>Podocarpus philippinensis</i>	FEI LV BIN LUO HAN SONG
Phoenix Date	T4820 <i>Phoenix dactylifera</i>	WU LOU ZI
Phoenix Tree Bast	T2731 <i>Firmiana simplex</i>	WU TONG BAI PI
Phoenix Tree Leaf	T2732 <i>Firmiana simplex</i>	WU TONG YE
Phoenix Tree Seed	T2733 <i>Firmiana simplex</i>	WU TONG ZI
Picrorhiza	T4887 <i>Picrorhiza kurrooa</i>	HU HUANG LIAN
Picture Houndstongue*	T1970 <i>Cynoglossum pictum</i>	ZHUO SE LIU LI CAO
Picture Kalopanax*	T3624 <i>Kalopanax pictum</i>	ZHUO SE CI QIU
Pig Gall	T6206 <i>Sus scrofa domestica</i>	ZHU DAN
Pigeon Vetch	T6749 <i>Vicia hirsuta</i>	XIAO CHAO CAI
Pilose Asiabell	T1599 <i>Codonopsis pilosula</i>	DANG SHEN
Pilose Curculigo*	T1902 <i>Curculigo pilosa</i>	MAO XIAN MAO
Pilose Gerbera	T2952 <i>Gerbera piloselloides</i>	MAO DA DING CAO
Pilose Germander	T6365 <i>Teucrium pilosum</i> [Syn. <i>Teucrium japonicum</i> var. <i>pilosum</i> ]	CHANG MAO XIANG KE KE
Pilose Purslane*	T5174 <i>Portulaca pilosa</i>	MAO MA CHI XIAN
Piloseleaf Desmos Root	T2137 <i>Desmos dumosus</i>	MAO YE JIA YING ZHAO GEN
Pilosity Peavine*	T3708 <i>Lathyrus palustris</i> var. <i>pilosus</i>	ROU MAO SHAN LI DOU
Pilular Adina	T0180 <i>Adina pilulifera</i> [Syn. <i>Cephalanthus pilulifera</i> ]	SHUI TUAN HUA
Pine Mushroom	T6504 <i>Tricholoma matsutake</i> [Syn. <i>Armillaria matsutake</i> ]	SONG XUN
Pineapple	T0444 <i>Ananas comosus</i>	FENG LI
Pineapple Guava	T2693 <i>Feijoa sellowiana</i>	FEI YUE GUO
Pineleaf Groundsel	T5874 <i>Senecio abrotanifolius</i>	SONG YE QIAN LI GUANG
Pinewoods Coneflower	T5603 <i>Rudbeckia bicolor</i>	SHUANG SE JIN GUANG JU

Pink Plumepoppy	T4020 <i>Macleaya cordata</i>	BO LUO HUI
Pink Reineckea	T5449 <i>Reineckea carnea</i>	JI XIANG CAO
Pink-fringed Milky	T3656 <i>Lactarius torminosus</i>	MAO TOU RU GU
Pinkscale Gay-feather	T3788 <i>Liatris elegans</i>	HUA LI SHE BIAN JU
Pinnan Galangal	T0361 <i>Alpinia pinnanensis</i>	ZHU SUI SHAN JIANG
Pinnate Rue*	T5630 <i>Ruta pinnata</i>	YU ZHUANG YUN XIANG
Pinnateleaf Lilac	T6261 <i>Syringa pinnafolia</i>	YU YE DING XIANG
Pipewart	T2434 <i>Eriocaulon buergerianum</i>	GU JING CAO
Piscidi Cuttongue tree*	T6806 <i>Walsura piscidia</i>	PI XI DI GE SHE SHU
<i>Piscidia erythrina</i>	T4977 <i>Piscidia erythrina</i>	YA MAI JIA DU YU DOU
Pittosporumlike Nothapodytes	T4439 <i>Nothapodytes pittosporoides</i>	MA BI MU
Planeleaf Alangium	T0285 <i>Alangium platanifolium</i>	GUA MU
Planeleaf Alangium Variety*	T0284 <i>Alangium paltanifolium</i> var. <i>platanifolium</i>	GUA MU BIAN ZHONG
Plantain Banana	T4330 <i>Musa paradisiaca</i>	FEN BA JIAO
Plantain Banana Cultivariaty*	T4332 <i>Musa x paradisiaca</i> cultivar	FEN BA JIAO ZA JIAO ZHONG ZHI BIAN ZHONG
Platyangle Pricklepoppy*	T0611 <i>Argemone platyceras</i>	KUO GUO JI YING SU
Plumleaf Cratoxylum	T1785 <i>Cratoxylum prunifolium</i>	KU DING CHA
pobequini Fatheadtree*	T4393 <i>Nauclea pobequinii</i>	BO SHI WU TAN
Poets Narcissus	T4378 <i>Narcissus poeticus</i>	HONG KOU SHUI XIAN
Poienician Juniper	T3593 <i>Juniperus phoenicea</i>	FEI NI JI CI BAI
Poiret Barberry	T0912 <i>Berberis poiretii</i>	XI YE XIAO BO
Poison Euphorbia*	T2610 <i>Euphorbia poisonii</i>	PO SEN DA JI
Poison Ivy	T6481 <i>Toxicodendron radicans</i>	DU QI TENG
Poisonhemlock	T1642 <i>Conium maculatum</i>	DU SHEN
Poisonous Buttercup	T5415 <i>Ranunculus sceleratus</i>	SHI LONG RUI
Poisonous-shrub Anise*	T3408 <i>Illicium tsangii</i>	DU AI BA JIAO
Polyandrous Euptelea*	T2630 <i>Euptelea polyandra</i>	DUO XIONG RUI LING CHUN MU
Polyandrous Pokeweed	T4867 <i>Phytolacca polyandra</i>	DUO XIONG RUI SHANG LU
Polyanthus Narcissus	T4383 <i>Narcissus tazetta</i>	DUO HUA SHUI XIAN
Polybract Split-calyx Liverwort*	T1365 <i>Chiloscyphus polyanthus</i>	LIE E TAI
Polymorphic Angelica	T0491 <i>Angelica polymorpha</i>	GUAI QIN
Polymorphism Gold-hair Moss*	T5134 <i>Polytrichum ohioense</i>	DUO XING JIN FA XIAN
Polypore	T2751 <i>Fomitopsis spraguei</i>	CENG KONG JUN
Pomegranate	T5332 <i>Punica granatum</i>	SUAN SHI LIU
Pomegranate Heartwood	T5329 <i>Punica granatum</i>	SHI LIU XIN CAI
Pomegranate Leaf	T5330 <i>Punica granatum</i>	SHI LIU YE
Pomegranate Peel	T5328 <i>Punica granatum</i>	SHI LIU PI
Pomegranate Root	T5327 <i>Punica granatum</i>	SHI LIU GEN
Pomegranate Seed	T5331 <i>Punica granatum</i>	SHI LIU ZHONG ZI
Pomelo	T1474 <i>Citrus decumana</i>	ZHU LUAN
Pond Frog	T5407 <i>Rana nigromaculata</i> ; <i>Rana plancyi</i>	QING WA
Pond Frog Gall	T5408 <i>Rana nigromaculata</i> ; <i>Rana plancyi</i>	QING WA DAN
Poongaoil Pongamia	T5143 <i>Pongamia pinnata</i>	SHUI LIU DOU
Poplar-leaf Argyreia*	T0615 <i>Argyrea populifolia</i>	YANG YE YIN BEI TENG
Poplar-leaf-like White Quebracho*	T0771 <i>Aspidosperma populifolium</i>	SI YANG SHU YE BAI JIAN MU
Popyporus Agaric	T5129 <i>Polyporus umbellatus</i>	ZHU LING
Porrect Wormwood*	T0688 <i>Artemisia porrecta</i>	SHEN HAO
Portiatree	T6432 <i>Thespesia populnea</i> [Syn. <i>Hibiscus populneus</i> ]	YANG YE XIAO JIN
Portlan Euphorbia*	T2611 <i>Euphorbia portlandica</i>	BO TE LAN DA JI
Potanin Barberry	T0913 <i>Berberis potaninii</i>	SHAO CHI XIAO BO
Potanin Iris	T3466 <i>Iris potaninii</i>	JUAN QIAO YUAN WEI
Potanin Larkspur	T2084 <i>Delphinium potaninii</i>	HEI SHUI CUI QUE



Potanin Larkspur Variety*	T2085 <i>Delphinium potaninii</i> var. <i>jiufengshanense</i>	HEI SHUI CUI QUE HUA BIAN ZHONG
Potato	T6017 <i>Solanum tuberosum</i>	MA LING SHU
Potmarigold Calendula praecox Stachyurus*	T1113 <i>Calendula officinalis</i> T6096 <i>Stachyurus praecox</i>	JIN ZHAN JU JING JIE HUA
Prain Microtoena	T4226 <i>Microtoena prainiana</i>	NAN CHUAN GUAN CHUN HUA
Prairie Mimosa	T2127 <i>Desmanthus illinoensis</i>	YI LI NUO HE HUAN CAO
Pratt Solomonseal	T5094 <i>Polygonatum prattii</i>	KANG DING YU ZHU
Prawn	T4696 <i>Panaeus orientalis</i>	HAI XIA Kihinouye
Prepared Common Monkshood Daughter Root	T0083 <i>Aconitum carmichaeli</i>	FU ZI
Prettiest Caesalpinia	T1107 <i>Caesalpinia pulcherrima</i>	JI MEI YUN SHI
Pretty Brake	T5286 <i>Pteris bella</i>	CHANG BING FENG WEI JUE
Pretty Crocus	T1809 <i>Crocus speciosus</i>	MEI LI FAN HONG HUA
Prettyleaf Winchia	T6825 <i>Winchia calophylla</i>	PEN JIA SHU
Prickly Juniper	T3592 <i>Juniperus oxycedrus</i>	CI GUI
Prickly Lettuce	T3663 <i>Lactuca serriola</i>	YE WO JU
Prickly Pear	T4520 <i>Opuntia ficus-indica</i>	LI GUO XIAN REN ZHANG
Prickly Sowthistle	T6026 <i>Sonchus asper</i> [Syn. <i>Sonchus oleraceus</i> var. <i>asper</i> ]	XU DUAN JU
Pricklyash	T6863 <i>Zanthoxylum americanum</i> [Syn. <i>Xanthoxylum americanum</i> ]	MEI ZHOU HUA JIAO
Pricklyfruit Licorice	T3018 <i>Glycyrrhiza pallidiflora</i>	CI GUO GAN CAO
Primrose Denrdobium	T2109 <i>Dendrobium primulinum</i>	BAO CHUN SHI HU
Prince's-feather	T5110 <i>Polygonum orientale</i>	HONG CAO
Prinos-like Salacia	T5648 <i>Salacia prinoides</i> [Syn. <i>Salacia chinensis</i> ]	SUO LA MU
Procumbent Hypecoum*	T3335 <i>Hypecoum procumbens</i>	PING ZHAN JIAO HUI XIANG
Proliferous Euphorbia*	T2612 <i>Euphorbia prolifera</i>	TU GUA LANG DU
Prolongated Spleenwort	T0776 <i>Asplenium prolongatum</i>	CHANG SHENG TIE JIAO JUE
Propolis	T0543 <i>Apis mellifera ligustica</i>	FENG JIAO
Prostrate Pachysandra*	T4574 <i>Pachysandra procumbens</i>	YANG WO BAN DENG GUO
Prostrate Rice-flower*	T4892 <i>Pimelea prostrata</i>	PING WO DAO HUA
Protozoon <i>Ochromonas malhamensis</i>	T4467 <i>Ochromonas malhamensis</i>	
Provincialis Gayfeather*	T3789 <i>Liatris provincialis</i>	TU ER FENG
Przewalsk Rhododendron*	T5521 <i>Rhododendron przewalskii</i>	LONG SHU DU JUAN
Przewalsk Ephedra	T2377 <i>Ephedra przewalskii</i>	MO GUO MA HUANG
Przewalsk Fritillary	T2792 <i>Fritillaria przewalskii</i>	GAN SU BEI MU
Przewalsk Sage	T5688 <i>Salvia przewalskii</i>	GAN XI SHU WEI CAO
Przewalsk Skullcap	T5842 <i>Scutellaria przewalskii</i>	AI YE HUANG QIN
Pseudobald Pyrrosia*	T5359 <i>Pyrrosia pseudocalvata</i>	NI GUANG SHI WEI
Pseudoiva Bugle*	T0269 <i>Ajuga pseudoiva</i>	
Pseudomonas Locust*	T5553 <i>Robinia pseudomonas</i>	JIA DAN BAO JUN YANG HUAI
Pseudo-racemose Glycosmis*	T3009 <i>Glycosmis pseudoracemosa</i>	JIA ZONG ZHUANG HUA XU SHAN XIAO JU
Pseud-oriental Groundsel*	T5899 <i>Senecio pseudoorientalis</i>	JIA DONG FANG QIAN LI GUANG
Pseudoriental Poppy*	T4634 <i>Papaver pseudorientale</i>	JIA JIN DONG YING SU
Pseudostapfia Monkshood	T0125 <i>Aconitum pseudostapfianum</i>	NI YU LONG WU TOU
Puberulent Monkshood	T0078 <i>Aconitum barbatum</i> var. <i>puberulum</i> [Syn. <i>Aconitum ochranthum</i> ]	NIU BIAN
Puberulent Sneezeweed*	T3140 <i>Helenium puberulum</i>	WEI MAO DUI XIN JU
Pubescence Epimedium	T2401 <i>Epimedium pubescens</i>	ROU MAO YIN YANG HUO
Pubescent Birch*	T0934 <i>Betula pubescens</i>	MAO ZHI HUA
Pubescent Holly	T3396 <i>Ilex pubescens</i>	MAO DONG QING
Pubescent Nightshade	T6010 <i>Solanum pubescens</i>	ROU MAO QIE
Pubescent Sunflower*	T3150 <i>Helianthus mollis</i>	ROU MAO XIANG RI KUI

Pubescent Swertia	T6232 <i>Swertia pubescens</i>	MAO ZHANG YA CAI
Puddun Plum*	T5237 <i>Prunus puddun</i>	PU DUN LI
Pukee Monkshood	T0126 <i>Aconitum pukeese</i>	PU GE WU TOU
Pulicaria*	T5322 <i>Pulicaria wightiana</i>	ZAO CAO
Pulverulent Primrose	T5203 <i>Primula pulverulenta</i>	YIN FEN BAO CHUN
Pummelo	T1478 <i>Citrus grandis</i>	YOU <sup>(4)</sup>
Pummelo Seed	T1479 <i>Citrus grandis</i>	YOU HE
Pumpkin	T1882 <i>Cucurbita pepo</i>	XI HU LU
Punctate Flakelet Fern	T3376 <i>Hypolepis punctata</i> [Syn. <i>Polypodium punctatum</i> ]	JI JUE
Punctate Swertia*	T6233 <i>Swertia punctata</i>	XI DIAN ZHANG YA CAI
Punctated Microsorium*	T4225 <i>Microsorium punctatum</i>	XING JUE
Puncturevine Caltrap	T6497 <i>Tribulus terrestris</i>	CI JI LI
Puncturevine Caltrap Root	T6498 <i>Tribulus terrestris</i>	JI LI GEN
Puncturevine Caltrap Shoot*	T6499 <i>Tribulus terrestris</i>	JI LI MIAO
Pungent Jerusalem sage*	T4811 <i>Phlomis pungens</i>	CI CAO SU
Pungent Litsea	T3893 <i>Litsea pungens</i>	ZHEN CAI
Puqi Fritillary*	T2793 <i>Fritillaria puqiensis</i>	PU QI BEI MU
Purdie Podocarpus*	T5053 <i>Podocarpus purdieana</i>	PU ER DI LUO HAN SONG
Purging Croton	T1858 <i>Croton tiglium</i>	BA DOU
Puriri	T6785 <i>Vitex lucens</i>	XIN XI LAN MU JING
Purple Adhesive Rehmannia*	T5448 <i>Rehmannia glutinosa</i> var. <i>purpurea</i>	ZI DI HUANG
Purple Bauhinia	T0879 <i>Bauhinia purpurea</i>	ZI YANG TI JIA
Purple Bergenia	T0924 <i>Bergenia purpurascens</i>	YAN BAI CAI
Purple Butterbur	T4743 <i>Petasites officinalis</i> [Syn. <i>Petasites hybridu</i> ]	ZI FENG DOU CAI
Purple Conedaisy	T2314 <i>Echinacea purpurea</i>	ZI HUA SONG GUO JU
Purple Hellebore*	T3186 <i>Helleborus purpurascens</i>	ZI TI GEN CAO
Purple Hypoestes	T3373 <i>Hypoestes purpurea</i> [Syn. <i>Justicia purpurea</i> ; <i>Hypoestes sinica</i> ]	QIANG DAO YAO
Purple Meadowrue	T6377 <i>Thalictrum dasycarpum</i>	CU GUO TANG SONG CAO
Purple Prairie-clover	T4736 <i>Petalostemon purpureus</i>	ZI SE BAN RUI DOU
Purple Swertia*	T6236 <i>Swertia purpurascens</i>	ZI SE ZHANG YA CAI
Purple Tephrosia	T6338 <i>Tephrosia purpurea</i>	HUI YE
Purple Tephrosia Root	T6339 <i>Tephrosia purpurea</i>	HUI YE GEN
Purple Viper's-bugloss	T2319 <i>Echium plantagineum</i>	CHE QIAN YE LAN JI
Purpleback Pyrola	T5344 <i>Pyrola atropurpurea</i>	ZI BEI LU TI CAO
Purpleflower Crotalaria	T1831 <i>Crotalaria sessiliflora</i>	YE BAI HE
Purpleflower Fritillary	T2786 <i>Fritillaria ebeiensis</i> var. <i>purpurea</i>	ZI HUA E BEI BEI MU
Purpleflower High Monkshood	T0091 <i>Aconitum excelsum</i>	ZI HUA GAO WU TOU
Purpleflower Holly	T3388 <i>Ilex chinensis</i> [Syn. <i>Ilex purpurea</i> ]	SI JI QING
Purpleflower Stonecrop	T3318 <i>Hylotelephium mingjinianum</i>	ZI HUA JING TIAN
Purplehair Rabdosia	T3486 <i>Isodon enanderianus</i>	ZI MAO XIANG CHA CAI
Purplequeen Holarrhena*	T3266 <i>Holarrhena floribunda</i>	FAN HUA ZHI XIE MU
Purplered-corolla Mullein*	T6706 <i>Verbascum wiedemannianum</i>	ZI HUA GUAN MAO RUI HUA
Purplestem Eupatorium Flower	T2549 <i>Eupatorium adenophorum</i>	ZI JING ZE LAN HUA
Purslane	T5173 <i>Portulaca oleracea</i>	MA CHI XIAN
Pyramidal Groundsel*	T5900 <i>Senecio pyramidatus</i>	JIN ZI TA XING QIAN LI GUANG
Pyramidal Magnolia*	T4047 <i>Magnolia pyramidata</i>	JIN ZI TA MU LAN
Pyrethrum	T1389 <i>Chrysanthemum coccineum</i>	HONG HUA CHU CHONG JU
Qibaizhi Angelica*	T0479 <i>Angelica dahurica</i> cv. <i>qibaizhi</i>	QI BAI ZHI
Qinling Rhubarb*	T5475 <i>Rheum qinlingense</i>	QIN LING DA HUANG
Quaternary Alstonia*	T0372 <i>Alstonia quaternata</i>	SI SHU JI GU CHANG SHAN
Queen Crapemyrtle	T3673 <i>Lagerstroemia speciosa</i> [Syn. <i>Munchausia speciosa</i> ; <i>Lagerstroemia flos-reginae</i> ]	DA HUA ZI WEI
Queen-of-the-Meadows	T2729 <i>Filipendula ulmaria</i>	XUAN GUO WEN ZI CAO

Queensland Nut	T4011 <i>Macadamia ternifolia</i>	AO ZHOU JIAN GUO
Racemed Milkwort	T5081 <i>Polygala polygama</i>	KU YUAN ZHI
Racemose Adina	T5960 <i>Sinoadina racemosa</i> [Syn. <i>Adina racemosa</i> ]	JI ZI MU
Racemose Atalantia Leaf*	T0816 <i>Atalantia racemosa</i>	ZONG ZHUANG DONG FENG JU YE
Racemose Bauhinia*	T0880 <i>Bauhinia racemosa</i>	ZONG ZHUANG HUA YANG TI JIA
Racemose Bugbane*	T1424 <i>Cimicifuga racemosa</i>	ZONG ZHUANG SHENG MA
Racemose Corydalis	T1733 <i>Corydalis racemosa</i>	XIAO HUA HUANG JIN
Racemose Cyclea	T1932 <i>Cyclea racemosa</i>	LUN HUAN TENG
Racemose Fig*	T2724 <i>Ficus racemosa</i>	JU GUO RONG
Racemose Goosefoot*	T1363 <i>Chenopodium championii</i>	ZONG ZHUANG HUA LI
Racemose Inula	T3437 <i>Inula racemosa</i>	ZONG ZHUANG TU MU XIANG
Racemose Mesua*	T4204 <i>Mesua racemosa</i>	ZONG ZHUANG TIE LI MU
Racemose Millettia*	T4242 <i>Millettia racemosa</i>	ZONG ZHUANG JI XUE TENG
Racemose Porana	T5167 <i>Porana racemosa</i>	FEI E TENG
Racemose Sweetleaf	T6254 <i>Symplocos racemosa</i>	ZHU ZI SHU
Radde Windflower	T0470 <i>Anemone raddeana</i>	DUO BEI YIN LIAN HUA
Ragweed	T0396 <i>Ambrosia ambrosioides</i>	PU TONG TUN CAO
Ragweed Groundsel*	T5879 <i>Senecio ambrosioides</i>	TUN CAO QIAN LI GUANG
Ragwort	T5890 <i>Senecio jacobaea</i>	CAO DIAN QIAN LI GUANG
Raintree	T5703 <i>Samanea saman</i>	YU SHU
Ramose Amberboa*	T0394 <i>Amberboa ramosa</i>	FEN ZHI PO JU
Ramose Gentian*	T2926 <i>Gentiana ramosa</i>	DUO ZHI LONG DAN
Ramose Heliotrope*	T3178 <i>Heliotropium ramosissimum</i>	DUO ZHI TIAN JIE CAI
Ramose Pluchea*	T0849 <i>Baccharis ramosissima</i>	DUO ZHI KUO BAO JU
Ramose Thorowax*	T1068 <i>Bupleurum polyclonum</i>	DUO ZHI CHAI HU
Randain Swertia*	T6237 <i>Swertia randainensis</i>	LUAN DA SHAN ZHANG YA CAI
Rangooncreeper	T5384 <i>Quisqualis indica</i>	SHI JUN ZI
Rangooncreeper Leaf	T5385 <i>Quisqualis indica</i>	SHI JUN ZI YE
Rape	T1009 <i>Brassica napus</i>	OW ZHOU YOU CAI
Rapeseed*	T1011 <i>Brassica napus</i> var. <i>napus</i>	YOU CAI ZI
Rassak Vatica*	T6686 <i>Vatica rassak</i>	QING MEI
Rattlesnakeroot	T5196 <i>Prenanthes acerifolia</i>	QI YE PAN GUO JU
Ray-fungus 1	T6152 <i>Strepomyces niveus</i>	
Ray-fungus 2	T6153 <i>Strepomyces spheroids</i>	
Realleaf Garcinia*	T2854 <i>Garcinia eugenifolia</i>	ZHEN YE TENG HUANG
Rebaud Eupatorium*	T2569 <i>Eupatorium rebaudianum</i>	TIAN YE JU
Recurvate Nolina*	T4437 <i>Nolina recurvata</i>	XIA WAN NUO LIN
Red Belt Polypore	T2750 <i>Fomitopsis pinicola</i> [Syn. <i>Fomes pinicola</i> ; <i>Polyporus pinicola</i> ]	HONG YUAN CENG KONG JUN
Red Champion	T3949 <i>Lychnis dioica</i>	HONG JIAN QIU LUO
Red Cedar	T3603 <i>Juniperus virginiana</i>	BEI MEI YUAN BAI
Red Clover	T6521 <i>Trifolium pratense</i>	HONG CHE ZHOU CAO
Red Cowparsnip*	T3212 <i>Heracleum granatense</i>	HONG DU HUO
Red Fruit	T1778 <i>Crataegus pinnatifida</i> var. <i>major</i>	SHAN LI HONG
Red Horsechestnut	T0200 <i>Aesculus carnea</i>	HONG QI YE SHU
Red Knoxia	T3632 <i>Knoxia valerianoides</i>	HONG YA DA JI
Red Koji; Angkak	T4270 <i>Monascus kaoliang</i>	GAO LIANG HONG QU
Red Lady-bug	T3287 <i>Huechys sanguinea</i>	HONG NIANG ZI
Red Maple	T0054 <i>Acer rubrum</i>	HONG HUA QI
Red Nanmu Bark	T4018 <i>Machilus thunbergii</i>	HONG NAN PI
Red Orange	T1476 <i>Citrus erythrosa</i>	ZHU JU
Red Pine	T4921 <i>Pinus resinosa</i>	DUO ZHI SONG
Red Pricklyash*	T6891 <i>Zanthoxylum rubescens</i>	HONG HUA JIAO
Red Squill	T6649 <i>Urginea maritima</i>	HAI CONG

Red Tasseflower*	T2356 <i>Emilia coccinea</i>	FEI YI DIAN HONG
Red Thorowax	T1072 <i>Bupleurum scorzoniferolium</i>	HONG CHAI HU
Red Viburnum*	T6736 <i>Viburnum erubescens</i>	HONG JIA MI
Red Vinespinach flower	T0875 <i>Basella rubra</i>	LUO KUI HUA
Red-and-Yellow Garden Raspberry	T5593 <i>Rubus idaeus</i>	FU PEN ZI
Redback Christmashush	T0297 <i>Alchornea trewioides</i>	HONG BEI SHAN MA GAN
Redbark Cinchona	T1433 <i>Cinchona succirubra</i>	HONG SE JIN JI NA SHU
Redbracted Lysidice	T3995 <i>Lysidice rhodostegia</i>	YI HUA
Redcalyx Glotybower	T1555 <i>Clerodendron fortunatum</i>	GUI DENG LONG
Redcalyx Millettia*	T4235 <i>Millettia erythrocalyx</i>	HONG E JI XUE TENG
Reddish Jackinthepulpit	T0618 <i>Arisaema consanguineum</i>	TIAN NAN XING
Reddrop Barberry	T0902 <i>Berberis diaphana</i>	XIAN HUANG XIAO BO
Redflower Gentian	T2927 <i>Gentiana rhodantha</i>	HONG HUA LONG DAN
Redflower Kopsia	T3640 <i>Kopsia fruticosa</i>	HONG HUA RUI MU
Redflower Magnoliavine	T5799 <i>Schisandra rubriflora</i>	HONG HUA WU WEI ZI
Redflower Meconopsis	T4145 <i>Meconopsis punicea</i>	HONG HUA LV RONG HAO
Redflower Pyrola	T5349 <i>Pyrola incarnata</i>	HONG HUA LU TI CAO
Redflower Sweetvetch	T3128 <i>Hedysarum multijugum</i>	HONG HUA YAN HUANG QI
Redflowered Swisscentaury*	T5465 <i>Rhaponticum carthamoides</i>	LU CAO
Redfoot Wormwood	T0691 <i>Artemisia rubripes</i>	HONG ZU HAO
Redfruit Devilpepper	T5425 <i>Rauwolfia verticillata</i> f. <i>rubrocarpa</i>	HONG GUO LUO FU MU
Redfruit Pencilwood	T2308 <i>Dysoxylum binectariferum</i>	HONG GUO JIAN MU
Redhaw Hawthorn	T1780 <i>Crataegus sanguinea</i>	LIAO NING SHAN ZHA
Red-knees	T5104 <i>Polygonum hydropiper</i>	SHUI LIAO
Red-knees Fruit	T5103 <i>Polygonum hydropiper</i>	LIAO SHI
Red-milk Grass*	T2623 <i>Euphorbia makinoi</i>	HONG RU CAO
Red-Rock-Ears	T6602 <i>Umbilicaria hypococcinea</i>	HONG SHI ER
Redroot Gromwell	T3881 <i>Lithospermum erythrorhizon</i>	ZI CAO
Redspot Swertia	T6219 <i>Swertia erythrosticta</i>	HONG ZHI ZHANG YA CAI
Redstriae Woodbetony	T4684 <i>Pedicularis striata</i>	HONG WEN MA XIAN HAO
Red-water Tree	T2485 <i>Erythrophleum guineense</i>	JI NEI YA GE MU
Redwood	T5918 <i>Sequoia sempervirens</i>	BEI MEI HONG SHAN
Reed Canary-grass	T4777 <i>Phalaris arundinacea</i>	YI CAO
Reeves Skimmia	T5972 <i>Skimmia reevesiana</i>	YIN YU
Regel Ephedra	T2378 <i>Ephedra regeliana</i>	XI ZI MA HUANG
Regel Eyebright	T2629 <i>Euphrasia regelii</i>	DUAN XIAN XIAO MI CAO
Regel Threewingnut	T6541 <i>Tripterygium regelii</i>	HEI MAN
Regnell Morningglory*	T3451 <i>Ipomoea regnellii</i>	RUI SHI QIAN NIU
Rehder Skullcap;	T5843 <i>Scutellaria rehderiana</i>	GAN SU HUANG QIN
Reindeer Moss	T1526 <i>Cladonia rangiferina</i>	SHI RUI
Reini Milkwort*	T5082 <i>Polygala reinii</i>	SHI YE CAO
Religious Anisetree*	T3406 <i>Illicium religiosum</i>	DONG DU HUI
Remote Lemongrass	T1941 <i>Cymbopogon distans</i>	YUN XIANG CAO
Renard Groundsel*	T5901 <i>Senecio renardii</i>	LEI SHI QIAN LI GUANG
Reniform Pelargonium*	T4692 <i>Pelargonium reniforme</i>	SHEN YE TIAN ZHU KUI
Reniform Rabdosia*	T3502 <i>Isodon latifolia</i> var. <i>reniformis</i>	SHEN XING XIANG CHA CAI
Repent Corydalis*	T1736 <i>Corydalis repens</i> var. <i>humosides</i>	TU YAN HU
Resinoid Cistus*	T1870 <i>Cistus ladaniferus</i>	SHU ZHI BAN RI HUA
Resinoid Euphorbia*	T2616 <i>Euphorbia resinifera</i>	SHU ZHI DA JI
Resinoid Sumac*	T5535 <i>Rhus retinorrhoea</i>	SHU ZHI YAN FU MU
Restharrow	T4493 <i>Ononis spinosa</i>	CI MANG BING HUA
Reticulate Leafflower*	T4842 <i>Phyllanthus reticulatus</i>	LONG YAN JING
Reticulatefruit Larkspur	T2072 <i>Delphinium dictyocarpum</i>	WANG GUO CUI QUE HUA

Retorse Groundsel*	T5902 <i>Senecio retrorsus</i>	WAN QU QIAN LI GUANG
Retuse Ash Leaf	T2770 <i>Fraxinus insularis</i>	KU LI MU YE
Retuseleaf Daphne	T2030 <i>Daphne retusa</i>	AO YE RUI XIANG
Reunion-Island Melicope*	T4164 <i>Melicope coodeana</i>	RU NI WENG DAO MI ZHU YU
Rhinoceros Horn	T5484 <i>Rhinoceros unicornis</i> ; <i>Rhinoceros sondaicus</i> ; <i>Rhinoceros sumatrensis</i>	XI JIAO
Rhombicleaf Purpledaisy	T4447 <i>Notoseris rhombiformis</i>	LING YE ZI JU
Rhombicsign White Quebracho*	T0774 <i>Aspidosperma rhombeosignatum</i>	LENG ZHUANG BAI JIAN MU
Rhubarb	T5476 <i>Rheum rhabarbaricum</i>	SHI YONG DA HUANG
Ribbon Gum	T2522 <i>Eucalyptus viminalis</i>	DUO ZHI AN
Rice	T4545 <i>Oryza sativa</i>	JING MI
Rice Frog Gall	T5406 <i>Rana limnocharis</i>	XIA MA DAN
Rice Galingale	T1976 <i>Cyperus iria</i>	SUI MI SHA CAO
Rice Spermoderm	T4546 <i>Oryza sativa</i>	MI PI KANG
Rice Straw	T4544 <i>Oryza sativa</i>	DAO CAO
Ricepaperplant	T6357 <i>Tetrapanax papyriferus</i>	TONG TUO MU
Ricepaperplant Root	T6356 <i>Tetrapanax papyriferus</i>	TONG HUA GEN
Riddell Groundsel	T5903 <i>Senecio riddellii</i>	RUI DE QIAN LI GUANG
Ridley Pometia*	T5136 <i>Pometia ridleyi</i>	LI DE LI FAN LONG YAN
Rigescent Gentian	T2928 <i>Gentiana rigescens</i>	DIAN LONG DAN
Rigid Blackberry*	T5596 <i>Rubus rigidus</i>	JIAN YING XUAN GOU ZI
Rimth (in Tunisia)	T3096 <i>Hammada scoparia</i> [Syn. <i>Arthrophytum scoparium</i> ; <i>Haloxylon articulatum</i> ssp. <i>scoparium</i> ; <i>Haloxylon scoparium</i> ]	
Riparian Diclptera*	T2160 <i>Dicliptera riparia</i>	HE AN GOU GAN CAI
Riparian Eupatorium, Riverside Eupatorium	T2570 <i>Eupatorium riparium</i>	HE AN ZE LAN
Riparian Rosewood*	T2011 <i>Dalbergia riparia</i>	HE AN HUANG TAN
Riparian Tarbush*	T2741 <i>Flourensia riparia</i>	HE AN FU LAO JU
Rippleseed Plantain	T5007 <i>Plantago major</i>	DA CHE QIAN
Ripply Cocklebur*	T6842 <i>Xanthium riparium</i>	XIAO XI CANG ER
River Bedstraw*	T2833 <i>Galium rivale</i>	XI LIU ZHU YANG YANG
River-bend Rhubarb*	T5469 <i>Rheum hotaoense</i>	HE TAO DA HUANG
Rivulet Groundsel*	T5904 <i>Senecio rivularis</i>	XI QIAN LI GUANG
Robert Cranesbill	T2946 <i>Geranium robertianum</i>	XIAN XI LAO GUAN CAO
Roborowsk Sage	T5690 <i>Salvia roborowskii</i>	NIAN MAO SHU WEI CAO
Robust Embelia*	T2349 <i>Embelia robusta</i>	CU ZHUANG SUAN TENG ZI
Robust Cinchona*	T1430 <i>Cinchona robusta</i>	CU ZHUANG JIN JI NA
Robust Coffee*	T1611 <i>Coffea robusta</i>	CU ZHUANG KA FEI
Robust Gentian*	T2929 <i>Gentiana robusta</i>	CU ZHUANG LONG DAN
Robust Jewelvine	T2122 <i>Derris robusta</i>	CU ZHUANG YU TENG
Robust Leontice	T3746 <i>Leontice robustum</i>	HONG MAO QI
Robust Silene*	T5953 <i>Silene firma</i>	YING YE NV LOU CAI
Robust Silk Oak	T3063 <i>Grevillea robusta</i>	YIN HUA
Roce Pelargonium	T4690 <i>Pelargonium graveolens</i>	XIANG YE
Rock Thorowax	T1070 <i>Bupleurum rockii</i>	LI JIAMH CHAI HU
Rock Wormwood	T0692 <i>Artemisia rupestris</i> [Syn. <i>Artemisia dentata</i> ; <i>Artemisia viridis</i> ; <i>Artemisia viridifolia</i> ]	XIN JIANG YI ZHI HAO
Rock-Ears*	T6601 <i>Umbilicaria esculenta</i> [Syn. <i>Gyrophora esculenta</i> ]	SHI ER
Rocket Candytuft	T3385 <i>Iberis amara</i>	QU QU HUA
Rocket Consolida	T1645 <i>Consolida ajacis</i> [Syn. <i>Delphinium ajacis</i> ]	FEI YAN CAO
Rock-ginger Fern	T5252 <i>Pseudodrynaria coronans</i>	CHUAN SHI JIAN
Rockliving Corydalis	T1747 <i>Corydalis thalictrifolia</i>	YAN HUANG LIAN
Roof Iris	T3471 <i>Iris tectorum</i>	YUAN WEI
Root-tuber Cremanthodium	T1786 <i>Cremanthodium ellisii</i>	KUAI GEN CHUI TOU JU

Roquette	T2439 <i>Eruca sativa</i>	ZHI MA CAI
Rosary Ear-leaf Muscus*	T2803 <i>Frullania tamarisci</i> ssp. <i>moniliata</i> [Syn. <i>Frullania moniliata</i> ]	CHUAN ZHU ER YE TAI
Rose Corydalis*	T1737 <i>Corydalis rosea</i>	MEI GUI HONG JIN
Rose Glorybower (Clerodendrum)	T1565 <i>Clerodendrum bungei</i>	CHOU MU DAN
Rose Hypoestes*	T3374 <i>Hypoestes rosea</i>	DAN HONG QIANG DAO YAO
Rose Mallow	T6645 <i>Urena lobata</i>	DI TAO HUA
Roseapple	T6267 <i>Syzygium jambos</i>	PU <sup>(3)</sup> TAO
Rosemary	T5575 <i>Rosmarinus officinalis</i>	MI DIE XIANG
Rosemyrtle	T5529 <i>Rhodomyrtus tomentosa</i>	TAO JIN NIANG
Rose-of-Sharon	T3343 <i>Hypericum calycinum</i>	DA E JIN SI TAO
Rosepink Zephyrily	T6904 <i>Zephyranthes grandiflora</i> [Syn. <i>Zephyranthes carinata</i> ]	FENG YU HUA
Rosering Gaillardia	T2820 <i>Gaillardia pulchella</i>	TIAN REN JU
Rosmarin-leaf Groundsel*	T5905 <i>Senecio rosmarinifolius</i>	MI DIE XIANG YE QIAN LI GUANG
Rosthorn Rabdasia	T3520 <i>Isodon rosthornii</i>	YING HUA XIANG CHA CAI
Rosthorn Snakegourd	T6513 <i>Trichosanthes rosthornii</i> [Syn. <i>Trichosanthes uniflora</i> ]	SHUANG BIAN GUA LOU
Rosthorn Yam	T2204 <i>Dioscorea nipponica</i> ssp. <i>rosthornii</i>	CHAI HUANG JIANG
Rostral Ninenode*	T5278 <i>Psychotria rostrata</i>	HUI ZHUANG JIU JIE
Rostratefruit Gynostemma	T3086 <i>Gynostemma yixingense</i>	HUI GUO JIAO GU LAN
Rotate Hymenocallis*	T3321 <i>Hymenocallis rotata</i>	FU ZHUANG SHUI GUI JIAO
Rough Comfrey	T6244 <i>Symphytum asperum</i>	CU XI MEN FEI CAO
Rough Gentian	T2930 <i>Gentiana scabra</i>	LONG DAN
Rough Leucas	T3779 <i>Leucas aspera</i>	FENG CHAO CAO
Rough Star Thistle	T1301 <i>Centaurea aspera</i> ssp. <i>aspera</i>	CU CAO SHI CHE JU
Roughfruit Rabdasia*	T3500 <i>Isodon lasiocarpa</i>	CU GUO XIANG CHA CAI
Roughleaf Raspberry	T5587 <i>Rubus alceaefolius</i>	CU YE XUAN GOU ZI
Rough-veined Rapanea*	T5416 <i>Rapanea neurophylla</i>	CU YE MAI MI HUA SHU
Round Cardamom	T0416 <i>Amomum kravanh</i> [Syn. <i>Amomum cardamomum</i> ]	BAI DOU KOU
Roundfruit Glochidion*	T2989 <i>Glochidion sphaerogynum</i>	YUAN GUO SUAN PAN ZI
Roundfruit Licorice	T3021 <i>Glycyrrhiza squamulosa</i>	YUAN GUO GAN CAO
Roundleaf Coca Shrub*	T2489 <i>Erythroxylon rotundifolium</i>	YUAN XING YE GU KE
Roundleaf Corydalis*	T1738 <i>Corydalis rotundatour</i>	YUAN YE SHAN WU GUI
Roundleaf Eupatorium*	T2571 <i>Eupatorium rotundifolium</i>	YUAN YE ZE LAN
Round-leaf Flytrap*	T2187 <i>Dionaea rotundifolia</i>	YUAN YE BU YING CAO
Roundleaf Heliotrope*	T3179 <i>Heliotropium rotundifolium</i>	YUAN YE TIAN JIE CAI
Roundleaf Pharbitis Seed	T4780 <i>Pharbitis purpurea</i>	YUAN YE QIAN NIU ZI
Roundleaf Schefflera*	T5783 <i>Schefflera rotundifolia</i>	YUAN YE E ZHANG CHAI
Roundleaf Sundew	T2268 <i>Drosera rotundifolia</i>	YUAN YE MAO GAO CAI
Roundleaf Thorowax*	T1071 <i>Bupleurum rotundifolium</i>	YUAN YE CHAI HU
Roundpod Jute Leaf	T1673 <i>Corchorus capsularis</i>	HUANG MA YE
Roundpod Jute Seed	T1674 <i>Corchorus capsularis</i>	HUANG MA ZI
Roundwingfruit Cyclocarya	T1936 <i>Cyclocarya paliurus</i>	QING QIAN LIU
Roxburg Aglaia*	T0244 <i>Aglaia roxburghiana</i>	LUO KE SI BAO MI ZI LAN
Roxburgh Engelhardtia Root	T2360 <i>Engelhardtia roxburghiana</i>	HUANG QI II
Roxburgh Peristrophe	T4730 <i>Peristrophe roxburghiana</i>	GUAN YIN CAO
Roxburgh Rose	T5570 <i>Rosa roxburghii</i>	CI LI
Roxburgh Wormwood	T0690 <i>Artemisia roxburghiana</i>	HUI BAO HAO
Royal Jelly	T0541 <i>Apis cerana</i>	FENG RU
Royal Paulownia	T4679 <i>Paulownia tomentosa</i>	MAO PAO TONG
Royle Euphorbia Latex	T2617 <i>Euphorbia royleana</i>	BA WANG BIAN
Roylei Condorvine*	T4119 <i>Marsdenia roylei</i>	ROU LEI NIU NAI CAI
Rubi Pholidota*	T4822 <i>Pholidota rubra</i>	HONG SHI XIAN TAO
Rueleaf Wormwood*	T0693 <i>Artemisia sativum</i>	YUN XIANG YE HAO
Rufous Turtle Dove	T6150 <i>Streptopelia orientalis</i>	BAN JIU

Rugose Meadowrue*	T6407 <i>Thalictrum rugosum</i>	ZOU WEN TANG SONG CAO
Rugose Rabdosia*	T3523 <i>Isodon rugosus</i> [Syn. <i>Rabdosia rugosa</i> ]	ZHOU YE XIANG CHA CAI
Rugose Rose Flower	T5572 <i>Rosa rugosa</i>	MEI GUI HUA
Runner Bean	T4782 <i>Phaseolus multiflorus</i>	HONG HUA CAI DOU
Rupestrine Dragonhead	T2258 <i>Dracocephalum rupestre</i>	YANG QING LAN
Ruspol Aloe*	T0343 <i>Aloe ruspoliana</i>	LA SHI LU HUI
Russian Boschniakia	T0993 <i>Boschniakia rossica</i>	CAO CONG RONG
Russian Comfrey	T6249 <i>Symphytum x uplandicum</i>	E GUO XI MEN FEI CAO
Russian Hogfennel*	T4770 <i>Peucedanum ruthenicum</i>	E GUO QIAN HU
Russianolive	T2326 <i>Elaeagnus angustifolia</i>	SHA ZAO
Russianolive Bark	T2327 <i>Elaeagnus angustifolia</i>	SHA ZAO SHU PI
Rust-coloured Crotalaria	T1819 <i>Crotalaria ferruginea</i>	XIANG LING CAO
Rusty Foxglove	T2174 <i>Digitalis ferruginea</i>	XIU MAO DI HUANG
Rustyhair Taxillus	T6304 <i>Taxillus levinei</i>	XIU MAO JI SHENG
Rutaceae Diosma	T1617 <i>Coleonema pulchellum</i>	MEI LI BU KU
Ruyuan Rhododendron	T5512 <i>Rhododendron lingii</i>	RU YUAN DU JUAN
S. Sichuan Egretgrass	T2240 <i>Diuranthera inarticulata</i>	NAN CHUAN LU SI CAO
S. Yunnan Beautyleaf	T1130 <i>Calophyllum polyanthum</i>	DIAN NAN HONG HOU KE
Saba Aloe	T0344 <i>Aloe saba</i>	SA BA LU HUI
Saccate Mullein*	T6703 <i>Verbascum saccatum</i>	NANG ZHUANG MAO RUI HUA
Sachalin Eupatorium*	T2573 <i>Eupatorium sachalinense</i> [Syn. <i>Eupatorium glehni</i> ]	KU YE DAO ZE LAN
Sachalin Monkshood*	T0127 <i>Aconitum sachalinense</i>	KU YE WU TOU
Sachaline Corktree*	T4794 <i>Phellodendron sachalinense</i>	KU YE DAO HUANG BAI
Sacred Spindle-tree	T2546 <i>Euonymus sacrosancta</i>	MAO YE WEI MAO
Safflower	T1215 <i>Carthamus tinctorius</i>	HONG HUA
Saffron Crocus Stigma	T1808 <i>Crocus sativus</i>	ZANG HONG HUA
Saghalin Spruce	T4870 <i>Picea glehnii</i>	SA HA LIN YUN SHAN
Sagittate Epimedium	T2402 <i>Epimedium sagittatum</i>	JIAN YE YIN YANG HUO
Sago Frond	T1928 <i>Cycas revoluta</i>	SU TIE YE
Sago Seed	T1927 <i>Cycas revoluta</i>	SU TIE SHU GUO
Saline Cistanche	T1456 <i>Cistanche salsa</i>	YAN SHENG ROU CONG RONG
Saline Saussurea	T5768 <i>Saussurea salsa</i>	YAN DI FENG MAO JU
Saline Swainsonia	T6210 <i>Swainsonia salsula</i> [Syn. <i>Sphaerophysa salsula</i> ]	KU MA DOU
Salsify	T6489 <i>Tragopogon porrifolius</i>	SUAN YE PO LUO MEN SHEN
Saltliving Anabasis	T0437 <i>Anabasis salsa</i>	YAN SHENG JIA MU ZEI
Salt-loving Iris	T3460 <i>Iris halophila</i>	XI YAN YUAN WEI
Salutary Croton*	T1854 <i>Croton salutaris</i>	YI KANG BA DOU
<i>Salvia pisdica</i>	T5684 <i>Salvia pisdica</i>	DU YU SHU WEI CAO
Salviaflower Coralbean*	T2473 <i>Erythrina salviiiflora</i>	SHU WEI CAO HUA CI TONG
Salwin Camellia	T1148 <i>Camellia saluenensis</i>	NU JIANG SHAN CHA
Samalanga Syzygium	T6268 <i>Syzygium samarangense</i>	YANG PU TAO YE
Sampson St. John'swort	T3363 <i>Hypericum sampsonii</i>	YUAN BAO CAO
Sanchi	T4608 <i>Panax pseudo-ginseng</i> var. <i>notoginseng</i> [Syn. <i>Panax notoginseng</i> ]	SAN QI
Sanchi Buds	T4609 <i>Panax pseudo-ginseng</i> var. <i>notoginseng</i> [Syn. <i>Panax notoginseng</i> ]	SAN QI HUA LEI
Sanctity Blackberry*	T5597 <i>Rubus sanctus</i>	SHEN SHENG XUAN GOU ZI
Sand Pear Leaf	T5366 <i>Pyrus pyrifolia</i>	SHA LI YE
Sandal Beadtree	T0167 <i>Adenantha pavonina</i>	HAI HONG DOU
Sandalwood	T5715 <i>Santalum album</i>	TAN XIANG
Sandalwood Padauk	T5305 <i>Pterocarpus santalinus</i>	SI ZI TAN
Sandbox-tree	T3296 <i>Hura crepitans</i>	SHA HE SHU
Sandland Milkwort*	T5083 <i>Polygala sabulosa</i>	SHA DI YUAN ZHI

Sandliving Sophora	T6039 <i>Sophora moorcroftiana</i>	SHA SHENG HUAI
Sandwich Eugenia*	T2534 <i>Eugenia sandwicensis</i>	SAN WEI ZHI FAN YING TAO
Sanguineous Spikemoss	T5866 <i>Selaginella sanguinolenta</i>	YUAN ZHI JUAN BAI
Santonica	T0683 <i>Artemisia maritima</i>	BIN HAO
Sappan Caesalpinia	T1108 <i>Caesalpinia sappan</i>	SU MU
Sargent Cypress	T1898 <i>Cupressus sargentii</i>	SA JIN TE BAI MU
Sargentgloryvine	T5741 <i>Sargentodoxa cuneata</i>	DA XUE TENG
Sariola Lettuce*	T3661 <i>Lactuca sariola</i>	SA LI LA WO JU
Sarmentose Pepper	T4965 <i>Piper sarmentosum</i>	JIA JU
Sarmentose Pepper Spike	T4966 <i>Piper sarmentosum</i>	JIA JU ZI
Sasak Stephania*	T6132 <i>Stephania sasakii</i>	TAI WAN QIAN JIN TENG
Sasanqua Camellia	T1149 <i>Camellia sasanqua</i>	CHA MEI
Sassafras	T5744 <i>Sassafras albidum</i>	MEI ZHOU CHA MU
Satsuma	T1518 <i>Citrus unshiu</i>	WU HE MI JU
Sausageteer	T3629 <i>Kigelia pinnata</i>	DIAO DENG SHU
Sawara False Cypress	T1350 <i>Chamaecyparis pisifera</i>	RI BEN HUA BAI
Savin	T5640 <i>Sabina vulgaris</i>	CHOU BAI
Savin Juniper	T3595 <i>Juniperus sabina</i>	CHA ZI YUAN BAI
Savory Rhododendron	T5502 <i>Rhododendron anthopogonoides</i>	XIAO YE PI PA
Savoy Cabbage	T1020 <i>Brassica oleracea</i> var. <i>sabauda</i>	YU YI GAN LAN
Sawtooth Clubmoss*	T3977 <i>Lycopodium serratum</i> var. <i>thunbergii</i>	JU CHI SHI SONG
Scabrous Boulder Fern	T2113 <i>Dennstaedtia scabra</i> [Syn. <i>Dicksonia scabra</i> ]	WAN JUE
Scabrous Cowparsnip	T3222 <i>Heracleum scabridum</i>	DIAN BAI ZHI
Scabrous Doellingeria	T2244 <i>Doellingeria scaber</i> [Syn. <i>Aster scaber</i> ]	DONG FENG CAI
Scabrous Elephantfoot	T2334 <i>Elephantopus scaber</i>	KU DI DAN
Scabrous Gay-feather*	T3791 <i>Liatris scabra</i>	CU CAO SHE BIAN JU
Scabrous Gentian*	T2931 <i>Gentiana scabra</i> var. <i>buesgeri</i>	CU CAO LONG DAN
Scabrous Mosla	T4307 <i>Mosla scabra</i> [Syn. <i>Mosla punctata</i> ]	SHI JI NING
Scabrous Patrinia	T4673 <i>Patrinia scabra</i>	CAO YE BAI JIANG
Scale Figwort*	T5827 <i>Scrophularia lepidota</i>	LIN PIAN XUAN SHEN
Scale Licorice*	T3017 <i>Glycyrrhiza lepidota</i>	MEI ZHOU GAN CAO
Scaly Blazing Star	T3794 <i>Liatris squarrosa</i>	CU SHE BIAN JU
Scalyseed Ephedra	T2371 <i>Ephedra lepidosperma</i>	BAN ZI MA HUANG
Scammony Glorybind	T1654 <i>Convolvulus scammonia</i>	SI GE MENG XUAN HAU
Scandent Schefflera	T5781 <i>Schefflera arboricola</i>	E ZHANG TENG
Scarlet Caterpillar Fungus	T1680 <i>Cordyceps militaris</i>	YONG CHONG CAO
Scarlet Kafirlily	T1578 <i>Clivia miniata</i>	JUN ZI LAN
Scarlet Pimpernel	T0440 <i>Anagallis arvensis</i>	LIU LI FAN LV
Scarlet Runner Bean	T4781 <i>Phaseolus coccineus</i>	DUO HUA CAI DOU
Scarlet Sage	T5693 <i>Salvia splendens</i>	XI YANG HONG
Scarlet Swertia	T6234 <i>Swertia punicea</i>	ZI HONG ZHANG YA CAI
Scheffleri Uvaria*	T6667 <i>Uvaria scheffleri</i>	XIE FEI ZI YU PAN
Schischkin Foxglove*	T2178 <i>Digitalis schischkinii</i>	SI SHI MAO DI HUANG
Schleicher Fumitory	T2809 <i>Fumaria schleicheri</i>	YAN JIN
<i>Schoenocaulon officinale</i>	T5808 <i>Schoenocaulon officinale</i>	WEI JING BAI HE
Schrenk Wormwood*	T0694 <i>Artemisia schrenkiana</i>	XUE LING HAO
Scorpion	T1084 <i>Buthus martensi</i>	QUAN XIE
Scorzoneria	T5824 <i>Scorzoneria hispanica</i>	XI JUAN YA CONG
Scotch Broom	T1991 <i>Cytisus scoparius</i> [Syn. <i>Spartium scoparium</i> ]	JIN QUE ER
Scotch Cottonthistle	T4494 <i>Onopordum acanthium</i>	DA CHI JI
Scotch Pine	T4926 <i>Pinus sylvestris</i>	OU ZHOU CHI SONG
Scots Lovage	T3823 <i>Ligusticum scoticum</i>	SU GE LAN DANG GUI
Scouler Corydalis*	T1739 <i>Corydalis scouleri</i>	SI KAO LE ZI JIN



Scythian Lamb	T1411 <i>Cibotium barometz</i> [Syn. <i>Polypodium barometz</i> ]	JIN MAO GOU
Sea Euphorbia*	T2607 <i>Euphorbia paralias</i>	HAI YANG DA JI
Seabuckthorn Fruit	T3254 <i>Hippophae rhamnoides</i>	CU LIU GUO
Sea-cucumber Intestines	T6145 <i>Stichopus japonicus</i>	HAI SHEN CHANG
Seashore Angelica*	T0486 <i>Angelica keiskei</i>	BIN HAI DANG GUI
Sector Pluchea	T0845 <i>Baccharis flabellata</i>	SHAN XING KUO BAO JU
Seibo Euonymus*	T2547 <i>Euonymus sieboldianus</i>	XI BO SHI WEI MAO
Selago-like Climbing Fern	T3294 <i>Huperzia selago</i> [Syn. <i>Lycopodium selago</i> ]	XIAO JIE JIN CAO
Sello Basil*	T4475 <i>Ocimum selloi</i>	SAI LE LUO LE
Semi-frutex Mayweed*	T4125 <i>Matricaria suffruticosa</i>	BAN GUAN MU MU JU
Semiserration Eupatorium*	T2574 <i>Eupatorium semiserratum</i>	BAN JU CHI ZHUANG ZE LAN
Senega Snakeroot	T5084 <i>Polygala senega</i>	MEI YUAN ZHI
Senegal Coralbean*	T2474 <i>Erythrina senegalensis</i>	SAI NEI JIA ER CI TONG
Senegalese Strophanthus*	T6159 <i>Strophanthus sarmentosus</i> var. <i>senegambiae</i>	XI FEI YANG JIAO AO
Senna Lemongrass*	T1947 <i>Cymbopogon sennaarensis</i>	XIN NONG XIANG MAO
Sensitive Plant	T4248 <i>Mimosa pudica</i>	HAN XIU CAO
Sensitiveplant-like Senna	T1238 <i>Cassia mimosoides</i>	SHAN BIAN DOU ZI
Seoul Siebold Wildginger	T0732 <i>Asarum sieboldii</i> var. <i>seoulensis</i>	HAN CHENG XI XIN
Sepiaria	T0197 <i>Aegle marmelos</i>	MU <sup>(4)</sup> JU
Septemlobate Kalopanax Bark	T3625 <i>Kalopanax septemlobus</i>	CI QIU SHU PI
Septic Fig*	T2726 <i>Ficus septica</i>	FU YE RONG
Serbian Yarrow	T0059 <i>Achillea alexandri-regis</i>	SAI ER WEI YA SHI CAO
Sericeous Cinquefoil	T5186 <i>Potentilla reptans</i> var. <i>sericophylla</i>	JIN JIN BANG
Sericeous Newlitse	T4406 <i>Neolitsea sericea</i>	ZHOU SHAN XIN MU JIANG ZI
Sericeous Pluchea*	T5025 <i>Pluchea sericea</i>	JUAN MAO KUO BAO JU
Sericeous-leaf Rosewood	T2012 <i>Dalbergia sericea</i>	JUAN MAO HUANG TAN
Serpent-head	T4505 <i>Ophiocephalus argus</i>	WU LI
Serrate Chloranthus	T1372 <i>Chloranthus serratus</i>	JI JI
Serrate Chloranthus Stem-leaf	T1373 <i>Chloranthus serratus</i>	JI JI JING YE
Serrate Clubmoss	T3295 <i>Huperzia serrata</i> [Syn. <i>Lycopodium serratum</i> ]	QIAN CENG TA
Serrate Glorybower	T1561 <i>Clerodendron serratum</i>	SAN TAI HONG HUA
Serrate Mulberry*	T4299 <i>Morus serrata</i>	JU CHI SANG
Serrate Rabdosia	T5397 <i>Rabdosia serra</i>	XI HUANG CAO
Serrate-leaf Myrsine	T4364 <i>Myrsine semiserrata</i>	CHI YE TIE ZI
Serrate-leaved Mayten	T4139 <i>Maytenus serrata</i>	CHI YE MEI DENG MU
Sessile Neonauclea	T4408 <i>Neonauclea sessilifolia</i> [Syn. <i>Nauclea sessilifolia</i> ; <i>Adina sessilifolia</i> ]	WU BING XIN WU TAN
Sessile Stemona	T6113 <i>Stemona sessilifolia</i>	ZHI LI BAI BU
Sessileflower Acanthopanax Root-bark	T0044 <i>Acanthopanax sessiliflorus</i>	WU GENG WU JIA PI
Sessile-fruit Chinaure	T0967 <i>Boenninghausenia sessilicarpa</i>	SHI JIAO CAO
Setose Abelmoschus	T0001 <i>Abelmoschus manihot</i>	HUANG SHU KUI HUA
Setose Asparagus	T0753 <i>Asparagus setaceus</i> [Syn. <i>Asparagus plumosus</i> ]	WEN ZHU
Setose Thistle	T1451 <i>Cirsium setosum</i> [Syn. <i>Cerratula setosa</i> ; <i>Cirsium segetum</i> ; <i>Cephalanoplos segetum</i> ]	XIAO JI
Sevenlobed Yam	T2208 <i>Dioscorea septemloba</i>	MIAN BI XIE
Sewerzow Corydalis*	T1741 <i>Corydalis sewerzowi</i>	XIE SHI ZI JIN
Seville Orange Unripe Fruit	T1467 <i>Citrus aurantium</i>	ZHI KE
Seville Orange Young Fruit	T1468 <i>Citrus aurantium</i>	ZHI SHI
Shackshack Crotonalaria	T1821 <i>Crotalaria incana</i>	GUANG YE ZHU SHI DOU
Shady Broadleaf Rabdosia*	T3532 <i>Isodon umbrosa</i>	YIN DI KUAN YE XIANG CHA CAI
Shady Groundsel	T5892 <i>Senecio nemorensis</i>	HUANG WAN
Shady Rabdosia*	T3533 <i>Isodon umbrosa</i> var. <i>latifolia</i>	YIN DI XIANG CHA CAI
Shagbark Hickory	T1219 <i>Carya ovata</i>	CU PI SHAN HE TAO

Shagspine Peashrub	T1190 <i>Caragana jubata</i>	GUI JIAN JIN JI ER
Shallot	T0310 <i>Allium ascalonicum</i>	HU CONG
Shandong Hypodematium	T3372 <i>Hypodematium sinense</i>	SHAN DONG ZHONG ZU JUE
Shanyang Monkshood*	T0128 <i>Aconitum sanyoense</i>	SHAN YANG WU TOU
Sharpleaf Clubmoss*	T3966 <i>Lycopodium annotinum</i> var. <i>acrifolium</i>	LIANG NIAN SHI SONG
Sharpleaf Galangal	T0360 <i>Alpinia oxyphylla</i>	YI ZHI REN
Sharpleaf Gambirplant	T6629 <i>Uncaria rhynchophylla</i> [Syn. <i>Nauclea rhynchophylla</i> ]	GOU TENG
Sharpleaf Leafflower*	T4832 <i>Phyllanthus acuminatus</i>	JIAN YE YE XIA ZHU
Sharpleaf Mangrove	T5487 <i>Rhizophora apiculata</i>	HONG SHU
Sharpleaf Meadowrue	T6372 <i>Thalictrum acutifolium</i>	JIAN YE TANG SONG CAO
Sharpleaf Sabia	T5638 <i>Sabia swinhoei</i>	JIAN YE QING FENG TENG
Sharpleaf Senna Leaf	T1229 <i>Cassia acutifolia</i>	JIAN YE FAN XIE YE
Sharpspur Corydalis	T1745 <i>Corydalis suaveolens</i> [Syn. <i>Corydalis sheareri</i> ]	JIAN JU ZI JIN
Sharptooth Incarvillea	T3418 <i>Incarvillea arguta</i>	MA TONG HUA
Shearer's Pyrrosia Frond	T5360 <i>Pyrrosia sheareri</i>	LU SHAN SHI WEI
Sheathstipe Greenbrier	T5984 <i>Smilax stans</i> [Syn. <i>Smilax vaginata</i> var. <i>stans</i> ]	QIAO BING BA QIA
Shellfish Pricklyash	T6876 <i>Zanthoxylum dissitum</i>	DA YE HUA JIAO
Shellfish Pricklyash Root	T6877 <i>Zanthoxylum dissitum</i>	DA YE HUA JIAO GEN
Shepherdspurse	T1184 <i>Capsella bursa-pastoris</i>	JI CAI
Shepherdspurse Seed	T1185 <i>Capsella bursa-pastoris</i>	JI CAI ZI
Shield Floatingheart	T4456 <i>Nymphoides peltatum</i>	XING CAI
Shiko Rabdosia*	T5398 <i>Rabdosia shikokiana</i>	SI GUO XIANG CHA CAI
Shining Adinandra*	T0182 <i>Adinandra nitida</i>	GUANG LIANG YANG TONG
Shining Clubmoss*	T3974 <i>Lycopodium lucidulum</i>	GUANG LIANG SHI SONG
Shining Devilpepper*	T5438 <i>Rauwolfia nitida</i>	GUANG LIANG LUO FU MU
Shining Gentianella*	T2940 <i>Gentianella nitida</i>	GUANG LIANG JIA LONG DAN
Shining Milkwort*	T5078 <i>Polygala nitida</i>	GUANG LIANG YUAN ZHI
Shining Rosewood*	T2006 <i>Dalbergia nitidula</i>	GUANG LIANG HUANG TAN
Shingleleaf Birch Bark	T0932 <i>Betula luminifera</i>	LIANG YE HUA PI
Shingleleaf Millettia	T4238 <i>Millettia nitida</i>	LIANG YE YAN DOU TENG
Shiny Bugleweed	T3980 <i>Lycopus lucidus</i>	ZE LAN
Shiny Bugleweed Root	T3981 <i>Lycopus lucidus</i>	ZE LAN GEN
Shiny Peperomia	T4705 <i>Peperomia pellucida</i>	CAO HU JIAO
Shinyleaf Pricklyash	T6884 <i>Zanthoxylum nitidum</i>	RU DI JIN NIU
Shinyleaf yellowhorn	T6845 <i>Xanthoceras sorbifolia</i>	WEN GUAN MU
Shkioki Angelica*	T0494 <i>Angelica shkiokiana</i>	SHI SHI DANG GUI
Shore Juniper	T3585 <i>Juniperus conferta</i>	AN CI BAI
Shore Podgrass	T6526 <i>Triglochin maritimum</i>	HAI JIU CAI
Shortbractleaf Galingale*	T1974 <i>Cyperus brevibracteatus</i>	DUAN BAO YE SHA CAO
Shortbraet Honeysuckle	T3918 <i>Lonicera similis</i>	XI ZHAN MAO REN DONG
Shortclustered Plantainlily	T3283 <i>Hosta sieboldiana</i>	DA YU BIAO HUA
Shortflower Bottle Gourd*	T3667 <i>Lagenaria breviflora</i>	DUAN HUA HU LU
Shortflower Crotalaria*	T1816 <i>Crotalaria breviflora</i>	DUAN HUA ZHU SHI DOU
Shortfluff Consolida*	T1648 <i>Consolida pubescens</i>	DUAN ROU MAO FEI YAN CAO
Shortfluff Dutchmanspipe*	T0636 <i>Aristolochia pubescens</i>	DUAN ROU MAO MA DOU LING
Shortfluff Euphorbia*	T2613 <i>Euphorbia pubescens</i>	DUAN ROU MAO DA JI
Shortfluff Holarrhena*	T3268 <i>Holarrhena pubescens</i>	DUAN ROU MAO ZHI XIE MU
Shorthair Cowparsnip	T3217 <i>Heracleum moellendorffii</i> [Syn. <i>Heracleum microcarpum</i> ; <i>Heracleum morifolium</i> ]	DUAN MAO DU HUO
Shorthairy Antenoron	T0519 <i>Antenoron neofiliforme</i>	DUAN MAO JIN XIAN CAO GEN
Shorthorned Epimedium	T2390 <i>Epimedium brevicornum</i>	YIN YANG HUO
Shorthorned Epimedium Root	T2391 <i>Epimedium brevicornum</i>	YIN YANG HUO GEN
Shortleaf Agave	T0219 <i>Agave cantala</i>	XIA YE LONG SHE LAN

Shortleaf Anabasis	T0436 <i>Anabasis brevifolia</i>	DUAN YE JIA MU ZEI
Shortleaf Crotalaria*	T1817 <i>Crotalaria brevifolia</i>	DUAN YE ZHU SHI DOU
Shortleaf Gentian*	T2904 <i>Gentiana brachyphylla</i>	DUAN YE LONG DAN
Shortleaf Kyllinga	T3646 <i>Kyllinga brevifolia</i>	SHUI WU GONG
Shortleaf Wormwood*	T0667 <i>Artemisia brevifolia</i>	DUAN YE JUAN HAO
Shortlobe Ligusticum	T3819 <i>Ligusticum brachylobum</i>	DUAN PIAN GAO BEN
Shortpetalflower	T1001 <i>Brachystemma calycinum</i>	DUAN BAN HUA
Shortscape Fleabane	T2422 <i>Erigeron breviscapus</i>	DENG ZHAN XI XIN
Shortsepal Goldthread	T1663 <i>Coptis chinensis</i> var. <i>brevisejala</i>	DUAN E HUANG LIAN
Shortspike Pepper*	T4939 <i>Piper brachystachyum</i>	DUAN SUI HU JIAO
Shortspine Pricklyash*	T6868 <i>Zanthoxylum brachyacanthum</i>	DUAN CI HUA JIAO
Shortstalk Bushclover	T3771 <i>Lespedeza cyrtobotrya</i>	DUAN GENG HU ZHI ZI
Shortstalk Monkshood	T0079 <i>Aconitum brachypodum</i>	XUE SHANG YI ZHI HAO
Shortstamen Stephania*	T6118 <i>Stephania brachyandra</i>	BAI XIAN SHU
Shortstem Archangelica*	T0582 <i>Archangelica brevicaulis</i> [Syn. <i>Angelicarpa brevicaulis</i> ; <i>Angelica brevicaulis</i> ]	DUA JING GU DANG GUI
Short-stipe Agrostophyllum*	T0253 <i>Agrostophyllum brevipes</i>	DUAN BING HE YE LAN
Short-stipe Liriope*	T3872 <i>Liriope muscari</i>	DUAN TING SHAN MAI DONG
Shorttooth Milkvetch*	T0788 <i>Astragalus canadensis</i> var. <i>brevidens</i>	DUAN CHI HUANG QI
Shorttube Lycoris	T3986 <i>Lycoris radiata</i> [Syn. <i>Amaryllis radiata</i> ]	SHI SUAN
Shoulang Yam	T2193 <i>Dioscorea cirrhosa</i> [Syn. <i>Dioscorea pogonoides</i> ]	SHU LIANG
Showy Bleedingheart Root	T2154 <i>Dicentra spectabilis</i>	HE BAO MU DAN GEN
Showy Mountainsah	T6054 <i>Sorbus decora</i>	MEI LI HUA QIU
Shrub Lespedeza	T3769 <i>Lespedeza bicolor</i>	HU ZHI ZI
Shrub Thoroughwax (Shrubby Hare's-ear)	T1062 <i>Bupleurum fruticosum</i>	GUAN MU CHAI HU
Shrubalthea Bark	T3245 <i>Hibiscus syriacus</i>	MU JIN PI
Shrubalthea Flower	T3244 <i>Hibiscus syriacus</i>	MU JIN HUA
Shrubalthea Fruit	T3246 <i>Hibiscus syriacus</i>	MU JIN ZI
Shrubby Ajania	T0260 <i>Ajania fruticulosa</i>	GUAN MU YA JU
Shrubby Asparagus*	T0748 <i>Asparagus dumosus</i>	GUAN MU TIAN MEN DONG
Shrubby Baeckea	T0853 <i>Baeckea frutescens</i>	GANG SONG
Shrubby Clover*	T6519 <i>Trifolium fruticosum</i>	GUAN MU ZHUANG CHE ZHOU CAO
Shrubby Crinum* 'bush' or 'march lily'	T1801 <i>Crinum macowanii</i>	GUAN MU WEN SHU LAN
Shrubby Devilpepper*	T5434 <i>Rauwolfia fruticosa</i>	GUAN MU LUO FU MU
Shrubby Holly*	T3391 <i>Ilex dumosa</i>	GUAN CONG DONG QING
Shrubby Milkwort*	T5076 <i>Polygala fruticosa</i>	GUAN MU YUAN ZHI
Shrubby Otostegia*	T4557 <i>Otostegia fruticosa</i>	GUAN MU AO TUO SI TE CAO
Shrubby Woodwardia	T6830 <i>Woodfordia fruticosa</i>	XIA ZI HUA
Siam Falsenettle	T0963 <i>Boehmeria siamensis</i>	SHU XU ZHU MA
Siam Rosewood	T1999 <i>Dalbergia cochinchinensis</i>	JIAO ZHI HUANG TAN
Siamense Common Jasminorange	T4327 <i>Murraya siamensis</i>	YUAN DONG JIU LI XIANG
Siamese Senna	T1244 <i>Cassia siamea</i>	TIE DAO MU
Siberia Thorowax	T1073 <i>Bupleurum sibiricum</i>	XING AN CHAI HU
Siberian Adonis	T0188 <i>Adonis sibirica</i>	BEI CE JIN ZHAN HUA
Siberian Cocklebur	T6843 <i>Xanthium sibiricum</i> [Syn. <i>Xanthium strumarium</i> ]	CANG ER
Siberian Corydalis	T1742 <i>Corydalis sibirica</i>	BEI ZI JIN
Siberian Cranesbill	T2947 <i>Geranium sibiricum</i>	SHU ZHANG LAO GUAN CAO
Siberian Elm	T6597 <i>Ulmus pumila</i>	YU SHU
Siberian Fir	T0007 <i>Abies sibirica</i>	XI BO LI YA LENG SHAN
Siberian Fritillary	T2790 <i>Fritillaria pallidiflora</i>	YI BEI MU
Siberian Goldenray	T3813 <i>Ligularia sibirica</i>	XI BO LI YA TOU WU
Siberian Hazelnut	T1751 <i>Corylus heterophylla</i>	ZHEN

Siberian Knotweed*	T5115 <i>Polygonum sibiricum</i> [Syn. <i>Persicaria sibirica</i> ]	XI BO LI YA LIAO[yn
Siberian Milkwort	T5086 <i>Polygala sibirica</i>	XI BO LI YA YUAN ZHI
Siberian Motherwort	T3754 <i>Leonurus sibiricus</i>	XI YE YI MU CAO
Siberian Phlojodicarpus	T4804 <i>Phlojodicarpus sibiricus</i>	ZHANG GUO QIN
Siberian Solomonseal	T5095 <i>Polygonatum sibiricum</i>	HUANG JING
Siberian Spruce	T4875 <i>Picea obovata</i>	XI BO LI YA YUN SHAN
Siberian Stone Pine	T4923 <i>Pinus sibirica</i>	XI BO LI YA HONG SONG
Siberian Tansy	T6295 <i>Tanacetum sibiricum</i> [Syn. <i>Filifolium sibiricum</i> ]	SI BO LI YA AI JU
Siberian Veronicastrum	T6731 <i>Veronicastrum sibiricum</i>	ZHAN LONG JIAN
Sichuna Rabdosia	T3525 <i>Isodon setschwanensis</i>	SI CHUAN XIANG CHA CAI
Sickle Alfalfa	T4147 <i>Medicago falcata</i>	YE MU XU
Sickle Senna Seed	T1250 <i>Cassia tora</i>	JUE MING ZI
Sickle-leaved Hare's-ear	T1060 <i>Bupleurum falcatum</i>	ZI HU
Sieber Acacia*	T0029 <i>Acacia sieberiana</i>	XI BO JIN HE HUAN
Sieber Senna	T1245 <i>Cassia sieberiana</i>	XI BO JUE MING
Siebold Alder*	T0331 <i>Alnus sieboldiana</i>	XI BO DE QI MU
Siebold Elder	T5705 <i>Sambucus sieboldiana</i>	LAN SHAI PIAO
Siebold Greenbrier	T5982 <i>Smilax sieboldii</i>	NIAN YU XU
Siebold Wildginger	T0731 <i>Asarum sieboldii</i>	XI XIN
Sieve Sedge	T1202 <i>Carex kobomugi</i>	SHA ZUAN TAI CAO
Sievers Wormwood	T0696 <i>Artemisia sieversiana</i>	BAI HAO
Sieversia Milkvetch	T0804 <i>Astragalus sieversianus</i>	MIAN MAO HUANG QI
Sikkim Mahonia	T4073 <i>Mahonia sikkimensis</i>	XI JIN SHI DA GONG LAO
Sikkim Microula	T4227 <i>Microula sikkimensis</i>	WEI KONG CAO
Siko Milkvetch*	T0803 <i>Astragalus shikokianus</i>	SI GUO HUANG QI
Siko Stringbush*	T6823 <i>Wikstroemia sikokiana</i>	SI GUO YAO HUA
Siliculose Onychium	T4504 <i>Onychium siliculosum</i>	JIN FEN JUE
Silk Cocoon	T0976 <i>Bombyx mori</i>	CAN JIAN
Silk Mulberry*	T4292 <i>Morus bombycis</i>	CAN SANG
Silk-rubber Tree	T2811 <i>Funtumia elastica</i>	SI JIAO SHU
Silktree Albizia Bark	T0292 <i>Albizzia julibrissin</i>	HE HUAN PI
Silkworm Egg	T0979 <i>Bombyx mori</i>	YUAN CAN ZI
Silkworm Feculae	T0978 <i>Bombyx mori</i>	YUAN CAN SHA
Silkworm King	T0977 <i>Bombyx mori</i>	YUAN CAN E
Silkworm Larva	T0975 <i>Bombyx mori</i>	BAI JIANG CAN
Silky Ant	T2753 <i>Formica fusca</i>	HEI MA YI
Silky Rose	T5573 <i>Rosa sericea</i>	JUAN MAO QIANG WEI
Silver Maple	T0055 <i>Acer saccharinum</i>	YIN BAI QI
Silver Ragwort	T5885 <i>Senecio cineraria</i>	YIN BAI QIAN LI GUANG
Silver Wattle	T0020 <i>Acacia dealbata</i>	YIN BAI JIN HE HUAN
Silveredge Agave	T0218 <i>Agave angustifolia</i> var. <i>marginata</i>	YIN BIAN LONG SHE LAN
Silverleaf Cotoneaster	T1761 <i>Cotoneaster pannosus</i>	ZHAN MAO XUN ZI
Silverleaf Morningglory*	T3445 <i>Ipomoea argyrophylla</i>	YIN YE SHU
Silverweed Cinquefoil	T5179 <i>Potentilla anserina</i>	E RONG WEI LING CAI
Silvervine Actinidia	T0164 <i>Actinidia polygama</i>	MU TIAN LIAO
Silvery Aleuritopteris	T0301 <i>Aleuritopteris argentea</i>	TONG JING CAO
Simon Poplar	T5158 <i>Populus simonii</i>	XIAO YE YANG
Simons Mahonia	T4074 <i>Mahonia simonsii</i>	XI MENG SI SHI DA GONG LAO
Simple Arachniodes	T0565 <i>Arachniodes simplicior</i>	CHANG WEI FU YE ER JUE
Simple Digenea Frond	T2173 <i>Digenea simplex</i>	HAI REN CAO
Simple Pronephrium	T5209 <i>Pronephrium simplex</i> [Syn. <i>Meniscium simplex</i> ]	DAN YE XIN YUE JUE
Simple Rostellularia	T3610 <i>Justicia simplex</i>	DAN JUE CHUANG
Simpleleaf Shrub Chastetree	T6790 <i>Vitex rotundifolia</i> [Syn. <i>Vitex trifolia</i> var. <i>simplicifolia</i> ]	DAN YE MAN JING

Simpleleaf Shrub Chastetree Fruit	T6791 <i>Vitex rotundifolia</i> [Syn. <i>Vitex trifolia</i> var. <i>simplicifolia</i> ]	DAN YE MAN JING ZI
Simplex Rice-flower*	T4893 <i>Pimelea simplex</i>	DAN ZHI DAO HUA
Singharanut	T6492 <i>Trapa bispinosa</i>	LING
Singkwa Towelgourd	T3933 <i>Luffa acutangula</i>	YUE SI GUA
Singleleaf Acronychia*	T0149 <i>Acronychia haplophylla</i>	DAN YE YOU GAN
Sinkiang Fritillary	T2800 <i>Fritillaria walujewii</i>	XIN JIANG BEI MU
Sinkiang Globethistle	T2317 <i>Echinops ritro</i>	XIN JIANG LAN CI TOU
Sinkiang Poplar*	T5146 <i>Populus alba</i> var. <i>pyramidalis</i>	XIN JIANG YANG
Sinkiang-Tibet Arnebia	T0648 <i>Arnebia euchroma</i>	XIN ZANG JIA ZI CAO
Siris-acacia	T0293 <i>Albizia lebbeck</i>	KUO JIA HE HUAN
Sisal Hemp-plant	T0226 <i>Agave sisalana</i>	JIAN MA
Sisso Rosewood	T2013 <i>Dalbergia sissoo</i>	YIN DU HUANG TAN
Sitka Spruce	T4876 <i>Picea sitchensis</i>	XI TE KA YUN SHAN
Sixangular Dysosma	T2302 <i>Dysosma pleiantha</i> [Syn. <i>Podophyllum pleianthum</i> ]	LIU JIAO LIAN
Sixpetal Tailgrape	T0653 <i>Artabotrys hexapetalus</i> [Syn. <i>Annona hexapetalus</i> ]	YING ZHAO
Skin-carp	T3199 <i>Hemibarbus labeo</i>	CHONG CHUN YU
Skunk Cabbage	T3994 <i>Lysichitum americanum</i>	MEI ZHOU GUAN YIN LIAN
Skyblue Broomrape	T4536 <i>Orobancha coerulescens</i>	LIE DANG
Slamm Black Poplar	T5166 <i>Populus xiaohei</i>	XIAO HEI YANG
Sleeping Lotusleafing	T3230 <i>Hernandia nymphaeifolia</i>	SHUI LIAN YE TONG
Slender Dutchmanspipe	T0626 <i>Aristolochia debilis</i> [Syn. <i>Aristolochia longa</i> ]	MA DOU LING
Slender Dutchmanspipe Root	T0627 <i>Aristolochia debilis</i> [Syn. <i>Aristolochia longa</i> ]	QING MU XIANG
Slender Maesa	T4032 <i>Maesa tenera</i>	RUAN RUO DU JING SHAN
Slender Periwinkle*	T1270 <i>Catharanthus pusillus</i>	XI XIAO CHANG CHUN HUA
Slender Phlegmariurus	T4801 <i>Phlegmariurus phlegmaria</i> [Syn. <i>Lycopodium phlegmaria</i> ]	MA WEI SHAN
Slender-leaf Crotalaria	T1822 <i>Crotalaria intermedia</i>	XI YE ZHU SHI DOU
Slenderstalk Dicranostigma	T2162 <i>Dicranostigma franchetianum</i> [Syn. <i>Dicranostigma leptopodum</i> ]	TU CHUANG HUA
Slenderstalk Litse*	T3889 <i>Litsea gracilipes</i>	XI BING MU JIANG ZI
Slenderstyle Acanthopanax Root-bark	T0038 <i>Acanthopanax gracilistylus</i>	WU JIA PI
Slim-top Meadowrue	T6409 <i>Thalictrum simplex</i> [Syn. <i>Thalictrum simplex</i> var. <i>brevipes</i> ]	YING SHUI HUANG LIAN
Slimy Rabdosia	T3492 <i>Isodon glutinosa</i>	JIAO NIAN XIANG CHA CAI
Slimy Tobacco*	T4425 <i>Nicotiana glutinosa</i>	JIAO YAN CAO
Slimysheathed Waxy Cap 橄欖白蜡伞	T3313 <i>Hygrophorus olivaceoalbus</i>	
Sloughy Litse*	T3896 <i>Litsea turfosa</i>	NI ZHAO MU JIANG ZI
Small Beefwood*	T1259 <i>Casuarina stricta</i>	XIAO MU MA HUANG
Small Bugbane	T1417 <i>Cimicifuga acerina</i>	SAN MIAN DAO
Small Burnet*	T5711 <i>Sanguisorba minor</i>	XIAO DI YU
Small Centipeda	T1312 <i>Centipeda minima</i>	E BU SHI CAO
Small Ephedra	T2373 <i>Ephedra minuta</i>	AI MA HUANG
Small Gorse*	T6591 <i>Ulex minor</i>	XIAO JING DOU
Small Ochotsk Corydalis	T1729 <i>Corydalis ochotensis</i> var. <i>raddeana</i>	XIAO HUANG ZI JIN
Small Piptanthus*	T4975 <i>Piptanthus nanus</i>	XIAO SHA DONG QING
Small Rattle-box	T1827 <i>Crotalaria nana</i>	XIAO ZHU SHI DOU
Small Ungernia*	T6641 <i>Ungernia minor</i>	XIAO BO SI SHI SUAN
Small Yellow Daylily	T3197 <i>Hemerocallis minor</i>	XIAO XUAN CAO GEN
Smallcalyx Woodbetony	T4681 <i>Pedicularis decora</i>	MEI GUAN MA XIAN HAO
Smaller Concave-top Alga*	T3718 <i>Laurencia majuscula</i>	LUE DA AO DING ZAO
Smallflower Acanthus*	T0047 <i>Acanthus ebracteatus</i>	XIAO HUA LAO SHU LE.
Smallflower Beggarticks	T0939 <i>Bidens parviflora</i>	XIAO HUA GUI ZHEN
Smallflower Bruguiera Fruit*	T1040 <i>Bruguiera parviflora</i>	XIAO HUA MU LAN GUO
Smallflower Bugle*	T0268 <i>Ajuga parviflora</i>	XIAO HUA XIA KU CAO
Smallflower Embelia	T2347 <i>Embelia parviflora</i>	XIAO HUA SUAN TENG ZI

Smallflower Hemsleya	T3207 <i>Hemsleya graciliflora</i> [Syn. <i>Alsomitra graciliflora</i> ]	XI HUA XUE DAN
Smallflower Magnoliavine*	T5795 <i>Schisandra micrantha</i>	XIAO HUA WU WEI ZI
Smallflower Milkwort	T5087 <i>Polygala telephioides</i>	XIAO HUA YUAN ZHI
Smallflower Mimosa*	T4250 <i>Mimosa tenuiflora</i>	XI HUA HAN XIU CAO
Smallflower Pawpaw	T0743 <i>Asimina parviflora</i>	XIAO HUA PAO PAO
Smallflower Saussurea*	T5763 <i>Saussurea parviflora</i>	XIAO HUA FENG MAO JU
Smallflower Xylopia*	T6854 <i>Xylopia parviflora</i>	XIAO HUA MU BAN SHU
Smallflower Yam	T2206 <i>Dioscorea parviflora</i>	XIAO HUA DUN YE SHU YU
Smallfruit Fig	T2721 <i>Ficus microcarpa</i>	RONG SHU
Smallfruit Loosestrife*	T4003 <i>Lysimachia microcarpa</i>	XIAO GUO XIANG CAO
Smallfruit Meadowrue	T6398 <i>Thalictrum microgynum</i>	XIAO GUO TANG SONG CAO
Smallfruit Rose	T5563 <i>Rosa cymosa</i>	XIAO GUO QIANG WEI GEN
Smallfruit Rue*	T5627 <i>Ruta microcarpa</i>	XIAO GUO YUN XIANG
Small-grand Concave-top Alga*	T3717 <i>Laurencia glandulifera</i>	XIAO XIAN AO DING ZAO
Smallheartleaved Morningglory	T3450 <i>Ipomoea obscura</i>	XIAO XIN YE SHU
Smallleaf Black Thorowax	T1075 <i>Bupleurum smithii</i> var. <i>parvifolium</i>	XIAO YE HEI CHAI HU
Smallleaf Fritsch Spiraea*	T6078 <i>Spiraea fritschiana</i> var. <i>parvifolia</i>	XIAO YE HUA BEI XIU XIAN JU
Smallleaf Jointfir	T3033 <i>Gnetum parvifolium</i> [Syn. <i>Gnetum indicum</i> ]	XIAO YE MAI MA TENG
Smallleaf Knema	T3630 <i>Kleinhovia hospita</i>	MIAN TOU YE
Small-leaf Knema	T3631 <i>Knema globularia</i>	XIAO YE HONG GUANG SHU
Small-leaf Meadowrue	T6380 <i>Thalictrum elegans</i>	XIAO YE TANG SONG CAO
Small-leaf Photinia*	T4827 <i>Photinia parvifolia</i>	XIAO YE SHI NAN
Smallleaf Rabdosia*	T3517 <i>Isodon parvifolia</i>	XIAO YE XIANG CHA CAI
Small-leaf Raspberry	T5601 <i>Rubus taiwanicolus</i>	XIAO YE XUAN GOU ZI
Small-leaf Tansy*	T6293 <i>Tanacetum microphyllum</i>	XIAO YE JU HAO
Small-leafElaeocarpus*	T2330 <i>Elaeocarpus parvifolius</i>	XIAO YE DU YING
Smallleaf-hirsute Alder*	T0327 <i>Alnus hirsute</i> var. <i>microphylla</i>	XIAO YE YING MAO QI MU
Small-leaved Box	T1091 <i>Buxus microphylla</i>	XIAO YE HUANG YANG
Smallligulatecorolla Aster	T0778 <i>Aster albescens</i>	XIAO SHE ZI WAN
Small-tree Ardisia*	T0591 <i>Ardisia arborescens</i>	XIAO QIAO MU ZI JIN NIU
<i>Smilax bockii</i>	T5975 <i>Smilax bockii</i>	XI NAN BA QIA
Smirch Groundsel*	T5908 <i>Senecio scleratus</i>	LA QIAN LI GUANG
Smirnaw Leontice*	T3747 <i>Leontice smirnawii</i>	SI MI SHI MU DAN CAO
Smith Meadowrue	T6410 <i>Thalictrum smithii</i>	BIAN ZHU TANG SONG CAO
Smoke Longan*	T2184 <i>Dimocarpus fumatus</i>	YAN SE LONG YAN
Smooth Butterbur*	T4742 <i>Petasites laevigatus</i>	PING HUA FENG DOU CAI
Smooth Gambirplant	T6621 <i>Uncaria laevigata</i>	PING HUA FA LIANG GOU TENG
Smooth Mulberry*	T4295 <i>Morus laevigata</i>	PING HUA SANG
Smoothbranched Supplejack	T0922 <i>Berchemia polyphylla</i> var. <i>leioclada</i>	GUANG ZHI GOU ER CHA
Smoothfruit Ventilago	T6689 <i>Ventilago leiocarpa</i>	YI HE GUO
Smoothstalk Madder	T5583 <i>Rubia schumannina</i>	DA YE QIAN CAO
Snake Sansevieria	T5714 <i>Sansevieria trifasciata</i>	HU WEI LAN
Snakebubble Raspberry	T5591 <i>Rubus cochinchinensis</i>	SHE PAO JIN
Snakefruit Corydalis	T1730 <i>Corydalis ophiocarpa</i>	SHE GUO HUANG JIN
Snaw Gentian	T2922 <i>Gentiana nivalis</i>	XUE LONG DAN
Sneezeweed	T3134 <i>Helenium autumnale</i>	DUI XIN JU
Snow Azalea	T5518 <i>Rhododendron mucronatum</i>	BAI HUA YING SHAN HONG
Snow Lotus	T5755 <i>Saussurea involucrata</i>	XUE LIAN
Snowbellleaf Tickclover	T2134 <i>Desmodium styracifolium</i>	GUANG JIN QIAN CAO
Snowdrop	T2822 <i>Galanthus nivalis</i>	XUE HUA LIAN
Snowwhite Sunflower*	T3151 <i>Helianthus niveus</i>	XUE BAI XIANG RI KUI
Soapbark Tree	T5382 <i>Quillaja saponaria</i>	ZAO PI SHU
Soapwort	T5726 <i>Saponaria officinalis</i>	FEI ZAO CAO

Soda-apple Nightshade	T6014 <i>Solanum surattense</i>	YE DIAN QIE
Sodome Nightshade*	T6012 <i>Solanum sodomaeum</i> [Syn. <i>Solanum sodomaeum</i> ]	SUO DUO MI QIE
Soft Argyreia*	T0613 <i>Argyrea mollis</i>	RUAN YIN BEI TENG
Soft Comfrey	T6247 <i>Symphytum orientale</i>	DONG FANG XI MEN FEI CAO
Soft Hawksbeard	T1788 <i>Crepis mollis</i>	ROU SE HUAN YANG SHEN
Soft Persimmon*	T2225 <i>Diospyros mollis</i>	RUAN SHI
Softcoral <i>Lemnalia bournei</i>	T3740 <i>Lemnalia bournei</i>	BO LUN LIN HUA RUAN SHAN HU
Softcoral <i>Nephthea chabroli</i>	T4417 <i>Nephthea chabroli</i>	
Soft-hair Cowparsnip	T3214 <i>Heracleum lanatum</i>	RUAN MAO DU HUO
Somniferous Withania	T6829 <i>Withania somnifera</i>	CUI MIAN SHUI QIE
Soncoca	T0510 <i>Annona purpurea</i>	ZI FAN LI ZHI
Songaria Cynomorium	T1972 <i>Cynomorium songaricum</i>	SUO YANG
Sorghum	T6056 <i>Sorghum vulgare</i>	GAO LIANG
Sorrel Rhubarb	T5474 <i>Rheum palmatum</i>	ZHANG YE DA HUANG
South Asia Michelia	T4212 <i>Michelia doltsopa</i>	NAN YA HAN XIAO
South China Evodia	T2638 <i>Evodia austrosinensis</i>	HUA NAN WU ZHU YU
South China Honeyloeast	T2976 <i>Gleditsia fera</i>	HUA NAN ZAO JIA
South Chrysanthemum	T1397 <i>Chrysanthemum segetum</i>	NAN TONG HAO
South Dodder Seed	T1911 <i>Cuscuta australis</i>	NAN FANG TU SI ZI
South Houndstongue*	T1968 <i>Cynoglossum australe</i>	NAN FANG LIU LI CAO
South-Africa Tufted Everlasting*	T3157 <i>Helichrysum caespitium</i>	NAN FEI CONG SHENG LA JU
South-African Eriosema*	T2436 <i>Eriosema kraussianum</i>	NAN FEI JI TOU SHU
Southern Catalpa	T1260 <i>Catalpa bignonioides</i>	MEI GUO ZI
Southern Magnolia	T4039 <i>Magnolia grandiflora</i>	HE HUA YU LAN
Southern Maidenhair	T0171 <i>Adiantum capillus-veneris</i>	ZHU ZONG CAO
Southern Marigold	T6281 <i>Tagetes minuta</i>	WEI XIAO WAN SHOU JU
Southern Red-cedar	T3598 <i>Juniperus silicicola</i>	NAN MEI ZHOU GUI
Southern-caledonian Tulipwood*	T3107 <i>Harpullia austro-caledonica</i>	NAN SU GE LAN JIA SHAN LUO
Southern-Spain Hawksbeard*	T1790 <i>Crepis tingitana</i>	NAN XI BAN YA HUAN YANG SHEN
South-India Andrographis*	T0460 <i>Andrographis viscosula</i>	NAN YIN DU CHUAN XIN LIAN
South-India Sago Seed*	T1925 <i>Cycas beddomei</i>	NAN YIN DU SU TIE SHU GUO
South-Japan Threewingnut*	T6539 <i>Tripterygium doianum</i>	NAN RI BEN LEI GONG TENG
South-western Honeysuckle	T3908 <i>Lonicera bournei</i>	XI NAN REN DONG
Sowthistle Tasselflower	T2357 <i>Emilia sonchifolia</i>	YI DIAN HONG
Sowthistle-leaf Ixeris	T3548 <i>Ixeris sonchifolia</i>	BAO JING KU MAI CAI
Soybean Oil	T2999 <i>Glycine max</i>	DOU YOU
Soybean Paste	T3003 <i>Glycine max</i>	JIANG
Spanish Chestnut	T1255 <i>Castanea sativa</i>	OU ZHOU LI
Spanish Haplophyllum*	T3102 <i>Haplophyllum hispanicum</i>	XI BAN YA YUN XIANG CAO
Spanish Heath	T2416 <i>Erica australis</i>	NAN FANG OU SHI NAN
Spanish Oak	T5378 <i>Quercus rubra</i>	HONG LI
Sparseflower Croton*	T1856 <i>Croton sparsiflorus</i>	SAN HUA BA DOU
Sparteine Crotalaria*	T1833 <i>Crotalaria spartioides</i>	YING ZHAO DOU ZHU SHI DOU
Spatulate Alstonia*	T0375 <i>Alstonia spatulata</i>	DAO ZHUANG JI GU CHANG SHAN
Spearmint	T4190 <i>Mentha spicata</i>	LIU LAN XIANG
Spectacular Alstonia*	T0376 <i>Alstonia spectabilis</i>	ZHUANG GUAN JI GU CHANG SHAN
		SHAN
Spectacular Senna*	T5916 <i>Senna spectabilis</i>	ZHUANG GUAN FAN XIE
Spicate Centaurium*	T1310 <i>Centaurium spicatum</i>	SUI ZHUANG BAI JIN HUA
Spicate Clerodendranthus	T1553 <i>Clerodendranthus spicatus</i>	MAO XU CAO
Spicate Pseudoelephantopus	T5253 <i>Pseudoelephantopus spicatus</i>	JIA DI DAN CAO
Spicate Woodbetony	T4683 <i>Pedicularis spicata</i>	SUI HUA MA XIAN HAO
Spicebush	T3848 <i>Lindera benzoin</i>	GUI PI DIAO ZHANG

Spiderweb Blueeargrass, Pearl Cyanotis*	T1921 <i>Cyanotis arachnoidea</i> [Syn. <i>Cyanotis bodinieri</i> ]	ZHEN ZHU LU SHUI CAO
Spiked Gingerlily	T3120 <i>Hedychium spicatum</i>	TU LIANG JIANG
Spiked Loosestrife	T4007 <i>Lythrum salicaria</i>	QIAN QU CAI
Spiked Monkshood	T0133 <i>Aconitum spicatum</i>	SUI ZHUANG WU TOU
Spinach Jointfir	T3028 <i>Gnetum gnemon</i>	XIAN ZHOU MAI MA TENG
Spinach-like Jointfir	T3029 <i>Gnetum gnemonoides</i>	MA LAI XI YA MAI MA TENG
Spine Aralia	T0567 <i>Aralia armata</i>	HU CI CONG MU
Spine Date	T6918 <i>Ziziphus jujuba</i> var. <i>spinosa</i>	SUAN ZAO
Spine Date Seed	T6919 <i>Ziziphus jujuba</i> var. <i>spinosa</i>	SUAN ZAO REN
Spined Cordia*	T1679 <i>Cordia spinescens</i>	YOU CI PO BU MU
Spined Custardapple*	T0512 <i>Annona spinescens</i>	CI ZHUANG FAN LI ZHI
Spineless Agave	T0216 <i>Agave americana</i> var. <i>marginata</i> [Syn. <i>Agave americana</i> var. <i>variegata</i> ]	WU CI FAN MA
Spineless Common Jujube	T6917 <i>Ziziphus jujuba</i> var. <i>inermis</i>	WU CI ZAO
Spineless Mitragyna*	T4256 <i>Mitragyna inermis</i>	WU CI MAO ZHU MU
Spineless Powderpuff*	T1115 <i>Calliandra inermis</i>	WU CI ZHU YING HUA
Spinish	T6076 <i>Spinacia oleracea</i>	BO CAI
Spiny Alsophila	T0364 <i>Alsophila spinulosa</i>	SUO LUO
Spiny Meconopsis	T4143 <i>Meconopsis horridula</i>	DUO CI LV RONG HAO
Spiny Sida*	T5944 <i>Sida spinosa</i>	DUO CI HUANG HUA REN
Spiny Thorowax*	T1076 <i>Bupleurum spinosum</i>	DUO CI CHAI HU
Spinyflower Alternanthera	T0380 <i>Alternanthera repens</i>	CI HUA LIAN ZI CAO
Spinyflower Strophanthus	T6156 <i>Strophanthus gratus</i>	XUAN HUA YANG JIAO AO
Spinyfruit Pricklyash	T6878 <i>Zanthoxylum echinocarpum</i>	CI KE HUA JIAO
Spinyleaf Pricklyash	T6874 <i>Zanthoxylum dimorphophyllum</i> var. <i>spinifolium</i>	CI YI YE HUA JIAO
Spiral Acacia*	T0031 <i>Acacia spirorbis</i>	LUO XUAN JIN HE HUAN
Splidleaf Poppy*	T4631 <i>Papaver nudicaule</i> var. <i>chinense</i>	LIE YE YE YING SU
Sponge Amphimedon paraviridis	T0430 <i>Amphimedon paraviridis</i>	
Sponge <i>Haliclona variclona</i>	T3093 <i>Haliclona variclona</i>	
Sponge <i>Iotrochota baculifera</i>	T3442 <i>Iotrochota baculifera</i>	XIAO BANG XIOU QIOU HAI MIAN
Sponge <i>Petrosia strongylata</i>	T4750 <i>Petrosia strongylata</i>	
Sponge <i>Psammaphysilla purpurea</i>	T5249 <i>Psammaphysilla purpurea</i>	ZI SHA ROU HAI MIAN
Sponge <i>Sphaeiospongia vesparia</i>	T6070 <i>Sphaeiospongia vesparia</i>	
Spoonleaf Nardostachys	T4387 <i>Nardostachys jatamansi</i>	SHI YE GAN SONG
Spotted Gum	T2514 <i>Eucalyptus maculata</i>	BAN WEN AN
Spottedleaf Euphorbia	T2622 <i>Euphorbia supina</i>	BAN YE DI JIN
Spread Gentian	T2917 <i>Gentiana leptoclada</i>	MAN ZHI LONG DAN
Spreading Creosote-bush	T3693 <i>Larrea divaricata</i>	JI CHA KAI LA RUI A
Spreading Dogbane	T0550 <i>Apocynum androsaemifolium</i>	DIAN DI MEI YE CHA YE HUA
Spreading Hedyotis	T4485 <i>Oldenlandia diffusa</i> [Syn. <i>Hedyotis diffusa</i> ]	BAI HUA SHE SHE CAO
Spreading Meadowrue*	T6412 <i>Thalictrum squarrosus</i>	ZHAN ZHI TANG SONG CAO
Spreading Rabdosia*	T3485 <i>Isodon effusa</i>	KAI ZHAN XIANG CHA CAI
Spreading St.John'swort	T3360 <i>Hypericum patulum</i>	JIN SI MEI
Spreading Swertia*	T6229 <i>Swertia patens</i>	XIE JING ZHANG YA CAI
Sprenger Magnolia	T4052 <i>Magnolia sprengeri</i>	WU DANG MU LAN
Spring Knotweed	T5113 <i>Polygonum persicaria</i>	TAO YE LIAO
Spring Larkspur	T2088 <i>Delphinium tricorne</i>	SAN JU AI CUI QUE
Spring Snowflake	T3782 <i>Leucojum vernum</i>	XUE PIAN LIAN
Spruce Rosewood*	T2016 <i>Dalbergia spruceana</i>	QIAO HUANG TAN
Spurless Barrenwort*	T2393 <i>Epimedium ecalcaratum</i>	WU JU YIN YANG HUO
Spurless Columbine	T0557 <i>Aquilegia ecalcarata</i>	WU JU LOU DOU CAI
Squirrel's Foot Fern	T2053 <i>Davallia mariesii</i>	HAI ZHOU GU SUI BU
Squirting Cucumber	T2313 <i>Ecballium elaterium</i>	PEN GUA



Srilanka Glochidion	T2990 <i>Glochidion zeylanicum</i>	CHUI ZHU SUAN PAN ZI
Sri-Lankan Bridelia	T1028 <i>Bridelia retusa</i>	SI LI LAN KA TU MI SHU
S-shape Coralbean*	T2475 <i>Erythrina sigmoidea</i>	AI SI XING CI TONG
St. Brigid	T0466 <i>Anemone coronaria</i>	HUA GUAN YIN LIAN HUA
St. Johnswortleaf Skullcap	T5839 <i>Scutellaria hypericifolia</i>	CHUAN HUANG QIN
St. Marys	T5957 <i>Silybum marianum</i>	SHUI FEI JI
Stag's-horn Sumach	T5540 <i>Rhus typhina</i>	LU JIAO QI SHU
Stalkedfruit Meadowrue*	T6404 <i>Thalictrum podocarpum</i>	BING GUO TANG SONG CAO
Stalkedfruit Pricklyash	T6889 <i>Zanthoxylum podocarpum</i>	BING GUO HUA JIAO
Staminate Sage*	T5695 <i>Salvia staminea</i>	XIONG RUI ZHUANG SHU WEI CAO
Star Anise	T3409 <i>Illicium verum</i>	BA JIAO HUI XIANG
Staunton's Spikemoss	T5868 <i>Selaginella stauntoniana</i>	HAN SHENG JUAN BAI
Stavisacre	T2086 <i>Delphinium staphisagria</i>	SI TA WEI CUI QUE HUA
Stellate Cladonia	T1528 <i>Cladonia stellaris</i> [Syn. <i>Cladonia alpestris</i> ]	TAI BAI HUA
Stellate hair Carpetweed	T2984 <i>Glinus lotoides</i> [Syn. <i>Mollugo lotoides</i> ]	XING SU CAO
Stemless Carline Thistle	T1208 <i>Carlina acaulis</i>	CHAO XIAN JI
Stuedner Heliotrope*	T3181 <i>Heliotropium stuedneri</i>	SI SHI TIAN JIE CAI
Stevenson Rosewood*	T2017 <i>Dalbergia stevensonii</i>	SI TE WEN HUANG TAN
Sticky Clary	T5673 <i>Salvia glutinosa</i>	JIAO ZHI SHU WEI CAO
Sticky Rice	T4548 <i>Oryza sativa</i> var. <i>glutinosa</i>	NUO DAO
Stiffleaf Juniper Fruit	T3594 <i>Juniperus rigida</i>	DU SONG SHI
Stilted Pyrrosia	T5356 <i>Pyrrosia gralla</i>	XI NAN SHI WEI
Stinking Polecat, Wood Witch	T4778 <i>Phallus impudicus</i>	BAI GUI BI
Stipefruit Mistletoe	T6777 <i>Viscum multinerve</i>	BING GUO HU JI SHENG
Stipular Crotalaria*	T1835 <i>Crotalaria stipularia</i>	TUO YE ZHU SHI DOU
Stipulate Dolichandrone	T2245 <i>Dolichandrone stipulata</i>	XI NAN MAO WEI SHU
Stoat-osmyl Deadnettle*	T3682 <i>Lamium galeobdolon</i>	YOU CHOU YE ZHI MA
Stomach Motherwort	T3750 <i>Leonurus cardiaca</i>	WEI YI MU CAO
Stone Mallotus*	T4085 <i>Mallotus repandus</i> var. <i>chrysocarpus</i> [Syn. <i>Mallotus chrysocarpus</i> ; <i>Mallotus repandus</i> ]	SHI YAN FENG
Straight-raceme Barberry	T0911 <i>Berberis orthobotrys</i>	ZHI ZONG ZHUANG HUA XU XIAO BO
Straw Mushroom	T6803 <i>Volvariella volvacea</i>	CAO GU
Strawberry Clover	T6518 <i>Trifolium fragiferum</i>	CAO MEI CHE ZHOU CAO
Straw-coloured Gentian	T2934 <i>Gentiana straminea</i>	MA HUA JIAO
Stria Agave*	T0227 <i>Agave striata</i>	TIAO WEN LONG SHE LAN
Striate Kummerowia	T3645 <i>Kummerowia striata</i>	JI YAN CAO
Strict Conyza	T1658 <i>Conyza stricta</i>	JIAN TENG BAI JIU CAO
Strict Meadowrue*	T6413 <i>Thalictrum strictum</i>	BI ZHI TANG SONG CAO
Strict Verbena*	T6710 <i>Verbena stricta</i>	JIAN TING MA BIAN CAO
Strictleaf Cryptocarya*	T1864 <i>Cryptocarya strictifolia</i>	ZHI LI YE HOU KE GUI
Strictleaf Dracaena Leaf	T1684 <i>Cordyline strcta</i>	JIAN YE TIE SHU YE
Strigose Microlepia	T4220 <i>Microlepia strigosa</i> [Syn. <i>Trichomanes strigosa</i> ]	CU MAO LIN GAI JUE
Stringbushlike Rabdosis	T3535 <i>Isodon wikstroemioides</i>	YAO HUA XIANG CHA CAI
Stringy Stonecrop	T5857 <i>Sedum sarmentosum</i>	SHI ZHI JIA
Striped Crotalaria	T1826 <i>Crotalaria mucronata</i>	ZHU SHI DOU
Strongfragrant Loosestrife	T4002 <i>Lysimachia foenum-graecum</i>	LING XIANG CAO
Stuhlmann Millettia*	T4244 <i>Millettia stuhlmannii</i>	SI TU JI XUE TENG
Stygian Euphorbia*	T2621 <i>Euphorbia stygiana</i>	YOU AN DI JIN
Stylose Mangrove	T5489 <i>Rhizophora stylosa</i>	HONG HAI LAN
Suakwa Vegetablesponge	T3934 <i>Luffa cylindrica</i>	SI GUA
Suakwa Vegetablesponge Seed	T3935 <i>Luffa cylindrica</i>	SI GUA ZI
Suave Holarrhena*	T3267 <i>Holarrhena mitis</i>	WEN ROU ZHI XIE MU

Subcapitate Aralia	T0575 <i>Aralia subcapitata</i>	AN HUI CONG MU
Suberect Spatholobus	T6066 <i>Spatholobus suberectus</i>	MI HUA DOU
Suberose Coralbean*	T2477 <i>Erythrina suberosa</i>	SHUAN ZHUANG CI TONG
Suberous Greenstar	T5068 <i>Polyalthia suberosa</i>	AN LUO
Subglobose Asiabell	T1601 <i>Codonopsis subglobosa</i>	QIU HUA DANG SHEN
Sublessing Wormwood*	T0699 <i>Artemisia sublessingiana</i>	YA LIE XING HAO
Subsessile St.John'swort	T3365 <i>Hypericum subsessile</i>	JI WU BING JIN SI TAO
Subshrubby Peony Bark	T4585 <i>Paeonia moutan</i> [Syn. <i>Paeonia suffruticosa</i> ]	MU DAN PI
Subterranean Clover	T6525 <i>Trifolium subterraneum</i>	DI XIA CHE ZHOU CAO
Subtomentose Milky*	T3655 <i>Lactarius subvellereus</i>	YA RONG GAI RU GU
Subtripplinerved Mahonia	T4064 <i>Mahonia gracilipes</i>	XI BING SHI DA GONG LAO
Suckling Clover	T6517 <i>Trifolium dubium</i>	DUN YE CHE ZHOU CAO
Sudach Citrus*	T1511 <i>Citrus sudachii</i>	SU DA QI GAN JU
Suffrutescent Securinega	T5848 <i>Securinega suffruticosa</i>	YI YE QIU
Sugar Bush	T5212 <i>Protea mellifera</i>	MI PU LUO TI YA MU
Sugar Maple	T0056 <i>Acer saccharum</i>	TANG QI
Sugarcane	T5641 <i>Saccharum officinarum</i>	YAO YONG GAN ZHE
Sulfur Tuft	T4366 <i>Naematoloma fasciculare</i>	CU SHENG HUANG REN SAN
Sulphur Maidenhair Fern*	T0178 <i>Adiantum sulphureum</i>	LIU HUANG TIE XIAN JUE
Sultanate-Oman Myrrhree*	T1639 <i>Commiphora wightii</i>	A MAN SU DAN MO YAO
Sumach	T5532 <i>Rhus coriaria</i>	XI XI LI QI SHU
Sumatra Snowbell	T6197 <i>Styrax benzoin</i>	AN XI XIANG
Sumatran Yew	T6316 <i>Taxus sumatrana</i>	SU MEN DA LA HONG DOU SHAN
Summer Snowflake	T3781 <i>Leucojum aestivum</i>	XIA XUE PIAN LIAN
Summer-hyacinth	T2842 <i>Galtonia candicans</i>	XIA FENG XIN ZI
Sumpweed	T3543 <i>Iva frutescens</i>	YI WA JU
Sun Euphorbia	T2589 <i>Euphorbia helioscopia</i>	ZE QI
Sunflower Flower	T3142 <i>Helianthus annuus</i>	XIANG RI KUI HUA
Sunflower Leaf	T3144 <i>Helianthus annuus</i>	XIANG RI KUI YE
Sunflower Seed	T3145 <i>Helianthus annuus</i>	XIANG RI KUI ZI
Sunflower Stem Pith	T3143 <i>Helianthus annuus</i>	XIANG RI KUI JING SUI
Sungpan Monkshood	T0135 <i>Aconitum sungpanense</i>	SONG PAN WU TOU
Sunn Crotalaria	T1823 <i>Crotalaria juncea</i>	SHU MA
Supine Heliotrope*	T3182 <i>Heliotropium supinum</i>	YANG XIN TIAN JIE CAI
Surinam Quassia	T5370 <i>Quassia amara</i>	MEI ZHOU KU MU
Surrounded Swertia	T6216 <i>Swertia cincta</i>	XI NAN ZHANG YA CAI
Swamp Cottonwood	T5152 <i>Populus heterophylla</i>	YI YE YANG
Swamp Loosestrife	T2057 <i>Decodon verticillatus</i>	DI KE DONG
Swamp Mahogany Leaf	T2517 <i>Eucalyptus robusta</i>	DA YE AN YE
Swampy Gentianopsis	T2941 <i>Gentianopsis paludosa</i>	SHI SHENG BIAN LEI
Swede Seed	T1010 <i>Brassica napus</i> var. <i>napobrassica</i>	WU JING GAN LAN
Swedish Turnip	T1022 <i>Brassica rutabaga</i>	RUI DIAN GAN LAN
Sweet Blackberry*	T5600 <i>Rubus suavissimus</i>	TIAN CHA
Sweet Broomwort	T5818 <i>Scoparia dulcis</i>	YE GAN CAO
Sweet Cicely	T4360 <i>Myrrhis odorata</i>	OU ZHOU MO YAO
Sweet Marjoram	T4524 <i>Origanum majorana</i>	TIAN NIU ZHI
Sweet Orange	T1508 <i>Citrus sinensis</i>	TIAN CHENG
Sweet Osmanthus	T4550 <i>Osmanthus fragrans</i>	GUI HUA
Sweet Pea	T3707 <i>Lathyrus odoratus</i>	XIANG WAN DOU
Sweet Pepper	T1186 <i>Capsicum annuum</i>	HONG HAI JIAO
Sweet Potato	T3447 <i>Ipomoea batatas</i> [Syn. <i>Convolvulus batatas</i> ]	GAN SHU
Sweet Tooth	T3302 <i>Hydnum repandum</i>	MEI WEI CHI JUN
Sweet Uvaria*	T6661 <i>Uvaria dulcis</i>	TIAN ZI YU PAN

Sweet Viburnum*	T6738 <i>Viburnum odoratissimum</i>	XIANG QI JIA MI
Sweet Woodruff	T0757 <i>Asperula odorata</i>	XIANG CHE YE CAO
Sweet Wormwood	T0660 <i>Artemisia annua</i>	HUANG HUA HAO
Sweet-briar	T5571 <i>Rosa rubiginosa</i>	XIU HONG QIANG WEI
Sweetcane Culm	T5642 <i>Saccharum sinensis</i>	GAN ZHE
Sweetroot Polypody*	T5123 <i>Polypodium glycyrrhiza</i>	TIAN GEN DUO ZU JUE
Sweetscented Basil	T4473 <i>Ocimum gratissimum</i>	DING XIANG LUO LE
Sweetscented Oleander	T4418 <i>Nerium indicum</i>	JIA ZHU TAO
Sweet-tongue Lippia*	T3864 <i>Lippia dulcis</i>	TIAN SHE CAO
Sword Jackbean	T1169 <i>Canavalia gladiata</i>	DAO DOU
Sword-bean	T1168 <i>Canavalia ensiformis</i>	YANG DAO DOU
Swordleaf Dianella	T2139 <i>Dianella ensifolia</i>	SHAN MAO ER
Swordleaf Dracaena	T2253 <i>Dracaena cochinchinensis</i>	JIAN YE LONG XUE SHU
Swordlike Atractylodes	T0823 <i>Atractylodes lancea</i>	CANG ZHU
Sylvatic Sapium*	T6146 <i>Stillingia sylvatica</i> [Syn. <i>Sapium sylvatica</i> ]	CAO WU JIU
Syneilesis*	T6256 <i>Syneilesis palmata</i>	TU ER SAN
Syria Origanum*	T4525 <i>Origanum syriacum</i>	XU LI YA NIU ZHI
Syrian Rue*	T5625 <i>Ruta chalepensis</i>	SUI ZHUANG YUN XIANG
Szechuan Epimedium	T2404 <i>Epimedium sutchuenense</i>	SI CHUAN YIN YANG HUO
Szechuan Adonis	T0190 <i>Adonis sutchuenensis</i>	SHU CE JIN ZHAN HUA
Szechuan Chinaberry Bark	T4162 <i>Melia toosendan</i>	CHUAN LIAN PI
Szechuan Chinaberry Fruit	T4163 <i>Melia toosendan</i>	CHUAN LIAN ZI
Szechuan Cyclea	T1933 <i>Cyclea sutchuenensis</i>	SI CHUAN LUN HUAN TENG
Szechuan Sabia	T5637 <i>Sabia schumanniana</i>	SI CHUAN QING FENG TENG
Szechuan Tangshen	T1602 <i>Codonopsis tangshen</i>	CHUAN DANG SHEN
Szechuan-Tibet Rabdosia	T3518 <i>Isodon pharicus</i>	CHUAN ZANG XIANG CHA CAI
Taibaien Aralia	T0576 <i>Aralia taibaiensis</i>	TAI BAI CONG MU
Tail-leaf Monachosorum	T4267 <i>Monachosorum flagellare</i>	WEI YE XI ZI JUE
Taillikeleaf Rabdosia	T5392 <i>Rabdosia excisa</i>	WEI YE XIANG CHA CAI
Taishan Sumac Fruit	T5539 <i>Rhus taishanensis</i>	TAI SHAN YAN FU ZI
Taiton Wildginger	T0734 <i>Asarum taitoense</i>	TAI DONG XI XIN
Taiuia Root*	T1274 <i>Cayaponia tayuya</i>	TA YOU XIE GUA
Taiwan Agrimony	T2558 <i>Eupatorium formosanum</i>	TAI WAN ZE LAN
Taiwan Angelica	T0498 <i>Angelica taiwaniana</i>	HANG BAI ZHI
Taiwan Barberrry	T0907 <i>Berberis kawakamii</i>	TAI WAN XIAO BO
Taiwan Beautyberry	T1118 <i>Callicarpa formosana</i>	DU HONG HUA
Taiwan Bletilla*	T0954 <i>Bletilla formosana</i>	LAN YU BAI JI
Taiwan Buckthorn*	T5459 <i>Rhamnus formosana</i>	TAI WAN SHU LI
Taiwan Bugle*	T0272 <i>Ajuga taiwanensis</i>	TAI WAN JIN GU CAO
Taiwan Butterbur*	T4739 <i>Petasites formosanus</i>	TAI WAN FENG DOU CAI
Taiwan Common Jasminorange	T4316 <i>Murraya crenulata</i>	TAI WAN JIU LI XIANG
Taiwan Corktree*	T4790 <i>Phellodendron amurense</i> var. <i>wilsonii</i>	TAI WAN HUANG BO
Taiwan Dandelion*	T6300 <i>Taraxacum formosanum</i>	TAI WAN PU GONG YING
Taiwan Davallia	T2052 <i>Davallia divaricata</i> [Syn. <i>Davallia formosana</i> ; <i>Davallia orientalis</i> ]	DA YE GU SUI BU
Taiwan Dualbutterfly	T6538 <i>Tripterosperrum taiwanense</i>	TAI WAN SHUANG HU DIE
Taiwan Euchresta	T2526 <i>Euchresta formosana</i>	TAI WAN SHAN DOU GEN
Taiwan Goniothalamus	T3041 <i>Goniothalamus amuyon</i>	TAI WAN GE NA XIANG
Taiwan Hibiscus	T3247 <i>Hibiscus taiwanensis</i>	TAI WAN FU RONG
Taiwan Hogfennel	T4755 <i>Peucedanum formosanum</i>	TAI WAN QIAN HU
Taiwan Incense Cedar	T1121 <i>Calocedrus macrolepis</i> var. <i>formosana</i>	TAI WAN CUI BAI
Taiwan Juniper	T3588 <i>Juniperus formosana</i>	CI BAI
Taiwan Juniper	T3600 <i>Juniperus taiwaniana</i>	SHAN CI BAI

Taiwan Loquat	T2430 <i>Eriobotrya deflexa</i>	TAI WAN PI PA
Taiwan Magnoliavine	T5790 <i>Schisandra arisanensis</i>	A LI SHAN WU WEI ZI
Taiwan Malabar Randia	T5410 <i>Randia formosa</i>	BA NA MA SHAN SHI LIU
Taiwan Meadowrue	T6415 <i>Thalictrum urbainii</i>	TAI WAN TANG SONG CAO
Taiwan Mosla	T4539 <i>Orthodon formosanus</i>	TAI WAN JI NING
Taiwan Pepper*	T4970 <i>Piper taiwanense</i>	TAI WAN HU JIAO
Taiwan Pieris*	T4889 <i>Pieris formosa</i>	MEI LI MA ZUI MU
Taiwan Sassafras	T5745 <i>Sassafras randainense</i>	TAI WAN CHA MU
Taiwan Snowbell	T6199 <i>Styrax formosanus</i>	TAI WAN AN XI XIANG
Taiwan Spiraea*	T6077 <i>Spiraea formosana</i>	TAI WAN XIU XIAN JU
Taiwan Spruce	T4874 <i>Picea morrisonicola</i>	TAI WAN YUN SHAN
Taiwan Thistle*	T1447 <i>Cirisum japonica</i> var. <i>takaoense</i>	TAI WAN JI
Taiwan Tournefortia*	T6480 <i>Tournefortia sarmentosa</i>	ZI DAN TENG
Taizhong Buckthorn*	T5462 <i>Rhamnus nakaharai</i>	TAI ZHONG SHU LI
Tala Monkshood*	T0136 <i>Aconitum talassicum</i>	TA LA WU TOU
Tali Corydalis	T1746 <i>Corydalis taliensis</i>	WU WEI CAO
Tall Camomile	T0520 <i>Anthemis altissima</i>	GAO CHUN HUANG JU
Tall Ephedra	T2376 <i>Ephedra procera</i>	SHU ZHUANG MA HUANG
Tall Eupatorium	T2550 <i>Eupatorium altissimum</i>	GAO ZE LAN
Tall Gastrodia	T2890 <i>Gastrodia elata</i>	TIAN MA
Tall Hibiscus	T3239 <i>Hibiscus elatus</i>	GAO HONG JIN
Tall Hymenodictyon	T3323 <i>Hymenodictyon excelsum</i>	TU LIAN QIAO
Tall Meadowrue	T6405 <i>Thalictrum polygamum</i>	ZA XING TANG SONG CAO
Tall Monkshood	T0130 <i>Aconitum sinomontanum</i>	GAO WU TOU
Tall Skullcap	T5831 <i>Scutellaria altissima</i>	GAO HUANG QIN
Tamarind Fruit	T6285 <i>Tamarindus indica</i>	SUAN JIAO
Tamarisk-leaf Juniper*	T3596 <i>Juniperus sabina</i> var. <i>tamariscifolia</i>	CHENG LIU YE YUAN BAI
Tamariskoid Spikemoss	T5869 <i>Selaginella tamariscina</i>	JUAN BAI
Tangerine Pericarp	T1506 <i>Citrus reticulata</i>	JU PI
Tangerine Seed	T1504 <i>Citrus reticulata</i>	JU HE
Tangle Thallus	T2321 <i>Ecklonia kurome</i>	HEI KUN BU
Tangut Anisodus	T0502 <i>Anisodus tanguticus</i> [Syn. <i>Scopolia tangutica</i> ]	ZANG QIE
Tangut Clematis	T1546 <i>Clematis tangutica</i>	GAN QING TIE XIAN LIAN
Tangut Daphne	T2031 <i>Daphne tangutica</i>	SHAN GAN RUI XIANG
Tangut Monkshood	T0137 <i>Aconitum tanguticum</i>	GAN QING WU TOU
Tangut Przewalskia	T5247 <i>Przewalskia tangutica</i>	MA NIAO PAO
Tangut Rhubarb	T5481 <i>Rheum tanguticum</i>	TANG GU TE DA HUANG
Tankan Citrus	T1516 <i>Citrus tankan</i>	JIAO GAN
Tankan Citrus Pericarp	T1517 <i>Citrus tankan</i>	JIAO GAN PI
Tankasché (in Mexico)	T6102 <i>Stauranthus perforatus</i>	
Tansy	T1400 <i>Chrysanthemum vulgare</i>	AI JU
Taproot Angelica*	T0493 <i>Angelica radix</i>	ZHI GEN DANG GUI
Tarbush	T2740 <i>Flourensia cernua</i>	FU CHUI FE LAO JU
Taro	T1624 <i>Colocasia antiquorum</i>	YE YU
Tarragon	T0676 <i>Artemisia dracunculus</i>	XIA YE QING HAO
Tartarian Buckwheat	T2661 <i>Fagopyrum tataricum</i>	KU QIAO MAI
Tatarion Aster	T0781 <i>Aster tataricus</i>	ZI WAN
Taurine Wormwood*	T0701 <i>Artemisia taurica</i>	NIU HAO
Tea Flower	T1150 <i>Camellia sinensis</i> [Syn. <i>Thea sinensis</i> ]	CHA HUA
Tea Root	T1151 <i>Camellia sinensis</i> [Syn. <i>Thea sinensis</i> ]	CHA SHU GEN
Tea Seed	T1154 <i>Camellia sinensis</i> [Syn. <i>Thea sinensis</i> ]	CHA ZI
Teat-shaped Ardisia	T0600 <i>Ardisia mamillata</i> [Syn. <i>Tinus mamillata</i> ]	HU SHE HONG
Tenacious Condorvine	T4120 <i>Marsdenia tenacissima</i>	TONG GUANG TENG

Tendrileaf Fritillary	T2783 <i>Fritillaria cirrhosa</i>	CHUAN BEI MU
Ten-stamen Ceriops*	T1335 <i>Ceriops decandra</i>	SHI XIONG RUI JIAO GUO MU
Tenuous Corydalis*	T1732 <i>Corydalis pallida</i> var. <i>tenuis</i>	XI SHEN SHAN ZI JIN
Terebinthaceous Hogfennel	T4773 <i>Peucedanum terebinthaceum</i>	SHI FANG FENG
<i>Terminalia chebula</i> var. <i>tomentella</i>	T6348 <i>Terminalia chebula</i> var. <i>tomentella</i>	WEI MAO HE ZI
Ternate Pinellia	T4904 <i>Pinellia ternata</i>	BAN XIA
Ternateleaf Rabdosia	T3528 <i>Isodon ternifolia</i>	NIU WEI CAO XIANG CHA CAI
Ternateleaf Rabdosia	T3529 <i>Isodon ternifolius</i>	CHONG YA YAO
Terrestrial Thelephore*	T6421 <i>Thelephora terrestris</i>	LU SHENG GE JUN
Tetrabase Casimiroa*	T1227 <i>Casimiroa tetramera</i>	SI JI XIANG ROU GUO
Tetracentron	T6352 <i>Tetracentron sinense</i>	SHUI QING SHU
Tetragonal Crotalaria	T1836 <i>Crotalaria tetragona</i>	HUA JIN DAN
Tetraphyllous Paris	T4655 <i>Paris tetraphylla</i>	WANG SUN
Teysmanni Beautyleaf Variaty*	T1134 <i>Calophyllum teysmannii</i> var. <i>inophylloide</i>	TE SI MAN NI HU TONG BIAN ZHONG
Teysmanni Beautyleaf*	T1133 <i>Calophyllum teysmannii</i>	TE SI MAN NI HU TONG
Thailand Clinacanthus*; Lin-Nguu-Hao (Thai name)	T1572 <i>Clinacanthus siamensis</i>	TAI GUO NIU XU HUA
Thailand Clockvine (Raang-Chuet)	T6445 <i>Thunbergia laurifolia</i>	TAI GUO SHAN QIAN NIU
Thailand Gardenia*	T2887 <i>Gardenia thailandica</i>	TAI GUO ZHI ZI
Thailand Indianmulberry*	T4281 <i>Morinda coreia</i>	TAI GUO BA JI
Thaps Foxglove*	T2180 <i>Digitalis thapsii</i>	SA SHI MAO DI HUANG
Thatch Screwpine Flower	T4616 <i>Pandanus tectorius</i>	LU DOU LE HUA
Thellung Pimpinella	T4902 <i>Pimpinella thelungiana</i>	YANG HONG SHAN
Thickbark Pricklyash*	T6879 <i>Zanthoxylum elephantiasis</i>	HOU PI HUA JIAO
Thickfruit Angelica*	T0490 <i>Angelica pachycarpa</i>	HOU GUO DANG GUI
Thickfruit Millettia	T4240 <i>Millettia pachycarpa</i>	KU TAN ZI
Thickfruit Sophora	T6040 <i>Sophora pachycarpa</i>	GAN SU HUAI SHU
Thickleaf Bergenia	T0923 <i>Bergenia crassifolia</i>	HOU YE YAN BAI CAI
Thickleaf Gambirplant*	T6610 <i>Uncaria callophylla</i>	HOU YE GOU TENG
Thickstem Gentian	T2909 <i>Gentiana crassicaulis</i>	CU JING QIN JIAO
Thickstem Monkshood	T0089 <i>Aconitum crassicaule</i>	CU JING WU TOU
Thin Evodia	T2641 <i>Evodia leptta</i> [Syn. <i>Ilex leptta</i> ]	SAN CHA KU
Thin Sageretia	T5644 <i>Sageretia gracilis</i>	XI QUE MEI TENG
Thin Sphallerocarpus	T6073 <i>Sphallerocarpus gracilis</i>	MO GUO QIN
Thinfruit Hypecoum	T3334 <i>Hypecoum leptocarpum</i>	XI GUO JIAO HUI XIANG
Thinleaf Adina	T0181 <i>Adina rubella</i>	XI YE SHUI TUAN HUA
Thinleaf Buckthorn Root	T5461 <i>Rhamnus leptophylla</i>	JIANG LI MU GEN
Thinleaf Celery	T0546 <i>Apium leptophyllum</i>	XIAN YE QIN
Thin-leaf Melodinus	T4179 <i>Melodinus tenuicaudatus</i>	BO YE SHAN CHENG
Thinleaf Milkwort	T5088 <i>Polygala tenuifolia</i>	YUAN ZHI
Thinnest Yam	T2198 <i>Dioscorea gracillima</i>	XIAN XI SHU YU
Thin-rhizome Epimedium	T2399 <i>Epimedium leptorrhizum</i>	QIAN LING YIN YANG HUO
Thinstiped Yam	T2211 <i>Dioscorea tenuipes</i>	XI BING SHU YU
Thitmin	T5048 <i>Podocarpus nerifolius</i>	BAI RI QING
Thollon Strophanthus*	T6162 <i>Strophanthus thollonii</i>	SE LUN YANG JIAO AO
Thomson Cowparsnip*	T3226 <i>Heracleum thomsoni</i>	TANG MU XUN DU HUO
Thomson Kudzuvine	T5314 <i>Pueraria lobata</i> var. <i>thomsonii</i>	FEN GE
Thomson Kudzuvine Root	T5320 <i>Pueraria thomsonii</i>	GAN GE TENG GEN
Thorny Yam*	T2196 <i>Dioscorea dumetorum</i>	JING JI SHU YU
Thorowax	T1069 <i>Bupleurum rigidum</i>	JIAN YING CHAI HU
Thorowax-like Groundsel*	T5882 <i>Senecio bupleuroides</i>	CHAI HU ZHUANG QIAN LI GUANG
Thorowort Pondweed	T5178 <i>Potamogeton perfoliatus</i>	SUAN SHUI CAO

Three-coloured Amaranth	T0389 <i>Amaranthus tricolor</i>	YAN LAI HONG
Threeflower Clematis	T1547 <i>Clematis terniflora</i> [Syn. <i>Clematis maximowicziana</i> ]	BAI HUA TENG
Threeflower Gentian	T2938 <i>Gentiana triflora</i>	SAN HUA LONG DAN
Threefoliolate Larkspur	T2089 <i>Delphinium trifoliolatum</i>	SAN XIAO YE CUI QUE HUA
Threeleaf Akebia	T0277 <i>Akebia trifoliata</i>	SAN YE MU TONG
Threeleaf Akebia Root	T0278 <i>Akebia trifoliata</i>	SAN YE MU TONG GEN
Threeleaf Chastetree Fruit	T6793 <i>Vitex trifolia</i>	MAN JING ZI
Threeleaf Chastetree Leaf	T6792 <i>Vitex trifolia</i>	MAN JING YE
Three-leaf Goldthread	T1671 <i>Coptis trifolia</i>	SAN YE HUANG LIAN
Threeleaf Melicope	T4169 <i>Melicope triphylla</i>	SAN YE MI ZHU YU
Threeleaf Sage	T5697 <i>Salvia trijuga</i>	SAN YE SHU WEI CAO
Threeleaf Spicebush*	T3855 <i>Lindera triloba</i>	SAN YE DIAO ZHANG
Threeleaf Turpinia	T6568 <i>Turpinia ternata</i>	SAN CHU SHAN XIANG YUAN
Three-room Roundpod Jute*	T1676 <i>Corchorus trilocularis</i>	SAN SHI HUANG MA
Threestamen Dehaasia*	T2059 <i>Dehaasia triandra</i>	SAN RUI LIAN GUI
Thunberg Fritillary	T2798 <i>Fritillaria verticillata</i> var. <i>thunbergii</i> [Syn. <i>Fritillaria thunbergii</i> ]	ZHE BEI MU
Thunberg Gentian*	T2935 <i>Gentiana thunbergii</i>	ZAN SHI LONG DAN
Thunberg Hydrangea*	T3305 <i>Hydrangea macrophylla</i> var. <i>thunbergii</i>	SE BO GE XIU QIU
Thunberg Knotweed	T5119 <i>Polygonum thunbergii</i>	SHUI MA TIAO
Thunberg Spiraea	T6086 <i>Spiraea thunbergii</i>	ZHEN ZHU XIU XIAN JU
Thunberg's Daylily	T3198 <i>Hemerocallis thunbergii</i>	SHE XIANG XUAN
Thunberg's Lepisorus	T3764 <i>Lepisorus thunbergianus</i>	WA WEI
Thyme	T6454 <i>Thymus vulgaris</i>	SHE XIANG CAO
Thyme Speedwell*	T6730 <i>Veronica thymoides</i> ssp. <i>pseudocinerea</i>	JIA HUI SE JIU LI XIANG PO PO NA
Thymeleaf Coriaria*	T1695 <i>Coriaria thymifolia</i>	BAI LI XIANG YE MA SANG
Thymeleaf Speedwell	T6728 <i>Veronica serpyllifolia</i>	XIAO PO PO NA
Thyrseflower Dendrobium	T2110 <i>Dendrobium thyrseflorum</i>	JU HUA SHI HU
Tianpingshan Epimedium*	T2400 <i>Epimedium myrianthum</i>	TIAN PING SHAN YIN YANG HUO
Tianshan Mountain Gentian	T2936 <i>Gentiana tianschanica</i>	TIAN SHAN QIN JIAO
Tianshan Mountain Mountainash	T6055 <i>Sorbus tianschanica</i>	TIAN SHAN HUA QIU
Tianshan Mountain Rhubarb	T5482 <i>Rheum wittrockii</i>	TIAN SHAN DA HUANG
Tibet Berneuxine	T0926 <i>Berneuxia thibetica</i>	YAN JIN CAI
Tibet Cinnamon Bark	T1444 <i>Cinnamomum tamala</i>	SAN TIAO JIN
Tibet Clematis*	T1548 <i>Clematis tibetana</i>	XI ZANG TIE XIAN LIAN
Tibet Gentian	T2937 <i>Gentiana tibetica</i>	XI ZANG QIN JIAO
Tibet Ginseng	T4606 <i>Panax pseudo-ginseng</i>	ZANG SAN QI
Tibet Intermediate Ephedra	T2370 <i>Ephedra intermedia</i> var. <i>tibetica</i>	XI ZANG ZHONG MA HUANG
Tibet Lyonia	T3991 <i>Lyonia ovalifolia</i>	LI MU
Tibet Paris	T4650 <i>Paris polyphylla</i> var. <i>pseudothibetica</i>	CHANG YAO GE CHONG LOU
Tibet Peasshrub	T1193 <i>Caragana tibetica</i>	MAO CI JIN JI ER
Tibet Pyrola*	T5346 <i>Pyrola calliantha</i> var. <i>tibetana</i>	XI ZANG LU TI CAO
Tibet Seabuckthorn	T3259 <i>Hippophae thibetica</i>	XI ZANG SHA JI
Tibetan Hellebore	T3187 <i>Helleborus thibeticus</i>	TIE KUAI ZI
Tibetan Meadowrue	T6386 <i>Thalictrum foetidum</i>	XIANG TANG SONG CAO
Tiger Lily	T3839 <i>Lilium tigrinum</i> [Syn. <i>Lilium lancifolium</i> ]	JUAN DAN
Tillering Onion	T0312 <i>Allium cepa</i> var. <i>agrogatum</i>	FEN NIE CONG TOU
Timothy	T4802 <i>Phleum pratense</i>	TI MU CAO
Tinctorial Caesalpinia*	T1109 <i>Caesalpinia tinctoria</i>	SE ZE YUN SHI
Tinctorial Mulberry*	T4302 <i>Morus tinctoria</i>	RAN SE SANG
Tinctorial Osage Orange*	T4023 <i>Maclura tinctoria</i>	ZHUO SE SANG CHENG
Tinctorial Parmelia*	T4658 <i>Parmelia tinctorum</i>	MEI YI
Tingit Iris	T3472 <i>Iris tingitana</i>	DAN JI ER YUAN WEI

Tinyleaf Eupatorium*	T2578 <i>Eupatorium tinifolium</i>	SI MIAN MAO JIA MI YE ZE LAN
Tiny Ardisia	T0601 <i>Ardisia pusilla</i>	CHUAN CHAN JIU JIE LONG
Tithymalus-like Pedilanthus	T4686 <i>Pedilanthus tithymaloides</i>	YU DAI GEN
Toad	T1049 <i>Bufo bufo gargarizans; Bufo melanostictus</i>	CHAN CHU
Toad Gall	T1050 <i>Bufo bufo gargarizans; Bufo melanostictus</i>	CHAN CHU DAN
Toad Skin	T1051 <i>Bufo bufo gargarizans; Bufo melanostictus</i>	CHAN PI
Toad Skin Secretion Cake	T1052 <i>Bufo bufo gargarizans; Bufo melanostictus</i>	CHAN SU
Tokyo Cherry	T5246 <i>Prunus yedoensis</i>	RI BEN YING HUA
Tokyo Violet	T6767 <i>Viola yedoensis</i>	ZI HUA DI DING
Tomato	T3962 <i>Lycopersicon esculentum</i>	FAN QIE
Tomentose Pummelo	T1483 <i>Citrus grandis</i> var. <i>tomentosa</i>	HUA ZHOU YOU
Tomentose Aglaia*	T0246 <i>Aglaia tomentosa</i>	RONG MAO MI ZI LAN
Tomentose Bushmint*	T3382 <i>Hyptis tomentosa</i>	RONG MAO SHAN XIANG
Tomentose Calaba	T1135 <i>Calophyllum tomentosum</i>	RONG MAO HU TONG
Tomentose Caudate Croton	T1841 <i>Croton caudatus</i> var. <i>tomentosus</i>	MAO YE BA DOU
Tomentose Germander	T6370 <i>Teucrium tomentosum</i>	RONG MAO XIANG KE KE
Tomentose Glorybower	T1567 <i>Clerodendrum mandarinorum</i>	HAI TONG
Tomentose Sage*	T5696 <i>Salvia tomentosa</i>	RONG MAO DAN SHEN
Tomentose Sophora	T6045 <i>Sophora tomentosa</i>	LING NAN HUAI SHU
Tomentose Wrightia	T6834 <i>Wrightia tomentosa</i>	YAN MU
Tongol Goldenray	T3816 <i>Ligularia tongolensis</i>	DONG E LUO DU WU
Tongue-on-tree	T2844 <i>Ganoderma applanatum</i>	SHU SHE
Tonkin Bursera*	T1082 <i>Bursera tonkinensis</i>	YUE NAN LIE LAN
Tonkin Cyclea	T1934 <i>Cyclea tonkinensis</i>	NAN LUN HUAN TENG
Tonkin Snowbell	T6204 <i>Styrax tonkinensis</i>	YUE NAN AN XI XIANG
Tonkin Sophora Root	T6043 <i>Sophora subprostrata</i> [Syn. <i>Sophora tonkinensis</i> ]	SHAN DOU GEN
Toolur	T2511 <i>Eucalyptus grandis</i>	JU AN
Tooth Ammi	T0412 <i>Ammi visnaga</i>	CHI A MI
Toothedfruit Dock	T5608 <i>Rumex dentatus</i>	NIU SHE CAO
Toothedpetal Corydalis	T1734 <i>Corydalis remota</i> [Syn. <i>Corydalis bulbosa</i> var. <i>typica</i> ]	CHI BAN YAN HU SUO
Toothleaf Goldenray	T3802 <i>Ligularia dentata</i>	CHI YE TUO WU
Toothwing Senna*	T1231 <i>Cassia dentata</i>	CHI CHI JUE MING
Top Primrose	T5202 <i>Primula obconica</i>	E BAO CHUN
Topeng Pygeum	T5340 <i>Pygeum topengii</i>	TUN XING GUO
Torreya*	T6477 <i>Torreya grandis</i>	FEI SHU
Tortedfruit Screwtree	T3164 <i>Helicteres isora</i>	HUO SUO MA
Tortile Acacia*	T0033 <i>Acacia tortilis</i> ssp. <i>raddiana</i>	NIU XUAN JIN HE HUAN
Tortuous Fig*	T4202 <i>Mesembryanthemum tortuosum</i>	NIU QU SONG YE JU
Tortuous Hellebore*	T3188 <i>Helleborus torquatus</i> [Syn. <i>Helleborus serbicus</i> ]	NIU QU TI GEN CAO
Tortuous Seseli*	T5936 <i>Seseli tortuosum</i>	XUAN NIU XIE HAO
Tosa Goldsaxifrage*	T1408 <i>Chrysosplenium tosaense</i>	SHANG ZUO ZHOU JIN YAO
Tosa Swertia*	T6240 <i>Swertia tosaensis</i>	SHANG ZUO ZHOU ZHANG YA CAI
Toxic Poisonnut*	T6188 <i>Strychnos toxifera</i>	DU MA QIAN
Toxic Tephrosia*	T6341 <i>Tephrosia toxicaria</i>	DU HUI MAO DOU
Treacle Erysimum	T2452 <i>Erysimum cheiranthoides</i>	GUI ZHU TANG JIE
Treasure Maesa	T4031 <i>Maesa perlarius</i>	JI YU DAN
Tree Beautyberry	T1116 <i>Callicarpa arborea</i>	QIAO MU ZI ZHU
Tree Clubmoss	T3976 <i>Lycopodium obscurum</i>	YU BAI SHI SONG
Tree Falsespiraea	T6051 <i>Sorbaria arborea</i>	GAO CONG ZHEN ZHU MEI
Tree Heath	T2415 <i>Erica arborea</i>	OU SHI NAN
Tree of Heaven Ailanthus Bast	T0255 <i>Ailanthus altissima</i>	CHU BAI PI
Tree Phyllirea	T4797 <i>Phillyrea latifolia</i>	KUO YE OU NV ZFEN
Tree Wisteria	T0972 <i>Bolusanthus speciosus</i>	

Treelike Rhododendron	T5503 <i>Rhododendron arboreum</i>	SHU XING DU JUAN
Triangular Dutchmanspipe*	T0640 <i>Aristolochia triangularis</i>	SAN JIAO MA DOU LING
Triangular-leaf St.John'swort*	T3366 <i>Hypericum triquetrifolium</i>	SAN LENG YE JIN SI TAO
Trichroism Morningglory*	T3452 <i>Ipomoea tricolor</i>	SAN SE QIAN NIU
Tricolor Leucopaxillus*	T3783 <i>Leucopaxillus tricolor</i>	SAN SE BAI ZHUANG GU
Tricuspid Cudrania	T1888 <i>Cudrania tricuspidata</i>	ZHE SHU
Tricuspidate Falsenettle	T0962 <i>Boehmeria platanifolia</i> [Syn. <i>Boehmeria tricuspis</i> ]	CHI MA
Trifoliolate Acanthopanax	T0045 <i>Acanthopanax trifoliatum</i>	CI SAN JIA
Trifoliolate Euclea	T2527 <i>Euclea japonica</i>	SAN XIAO YE SHAN DOU GEN
Trifoliolate Jewelvine	T2124 <i>Derris trifoliata</i>	YU TENG
Trifoliolate-orange	T5137 <i>Poncirus trifoliata</i>	GOU JU
Trifoliolate-orange Leaf	T5139 <i>Poncirus trifoliata</i>	GOU JU YE
Trifoliolate-orange Root-bark	T5142 <i>Poncirus trifoliata</i>	ZHI GEN PI
Trifoliolate-orange Seed	T5138 <i>Poncirus trifoliata</i>	GOU JU HE
Trifoliolate-orange Unripe Fruit	T5140 <i>Poncirus trifoliata</i>	GOU JU ZHI KE
Trifoliolate-orange Young Fruit	T5141 <i>Poncirus trifoliata</i>	GOU JU ZHI SHI
Trifoliolate Verbena*	T6711 <i>Verbena triphylla</i> [Syn. <i>Lippia citriodora</i> ]	SAN YE MA BIAN CAO
Tri-hard-tip Snakegourd*	T6514 <i>Trichosanthes tricuspidata</i>	SAN YING JIAN GUA LOU
Trileaf Wood*	T6536 <i>Triphyophyllum peltatum</i>	SAN YE MU
Trilobate Macaranga*	T4014 <i>Macaranga triloba</i>	SAN LIE XUE TONG
Trilobedleaf Kudzuvine	T5318 <i>Pueraria phaseoloides</i>	SAN LIE YE GE
Trinervure Poisonnut*	T6189 <i>Strychnos trinervis</i>	SAN YE MAI MA QIAN
Trinidad Pepper*	T4929 <i>Piper aequale</i>	TE LI NI DA HU JIAO
Tripartite Nightshade*	T6016 <i>Solanum tripartitum</i>	SAN LIE QIE
Tripartite Wormwood*	T0704 <i>Artemisia tripartita</i>	SAN LIE HAO
Triplet Lily	T1029 <i>Brodiaea californica</i>	
Triplinervia Poisonnut*	T6190 <i>Strychnos triplinervia</i>	LI JI SAN CHU MAI MA QIAN
Triquetrous Tadehagi	T6277 <i>Tadehagi triquetrum</i>	HU LU CHA
Trisphare Ungernia*	T6642 <i>Ungernia trisphaera</i>	SAN QIU BO SI SHI SUAN
Trogopterus Dung	T6551 <i>Trogopterus xanthipes</i> ; <i>Pteromys volans</i>	WU LING ZHI
Trojan Milkvetch*	T0809 <i>Astragalus trojanus</i>	TE LUO YI HUANG QI
Tropic Ageratum	T0229 <i>Ageratum conyzoides</i>	SHENG HONG JI
Tropical American Hymenocallis Leaf	T3320 <i>Hymenocallis littoralis</i> [Syn. <i>Hymenocallis americana</i> ; <i>Pancratium littoralis</i> ]	SHUI GUI JIAO YE
tropical fungus <i>Botryodiplodia theobromae</i>	T0997 <i>Botryodiplodia theobromae</i>	
True Indigo	T3423 <i>Indigofera tinctoria</i>	MU LAN
True Lacquer	T5542 <i>Rhus verniciflua</i> [Syn. <i>Toxicadendron verniciflum</i> ]	SHENG QI
True Lacquer Seed	T5541 <i>Rhus verniciflua</i> [Syn. <i>Toxicadendron verniciflum</i> ]	QI ZI
Tschonosk Trillium	T6535 <i>Trillium tschonoskii</i>	YAN LING CAO
Tsihanim Pricklyash*	T6898 <i>Zanthoxylum tsihanimposa</i>	QI HAN NING HUA JIAO
Tubaroot Jewelvine	T2118 <i>Derris elliptica</i>	MAO YU TENG
Tubeflower Dutchmanspipe	T0642 <i>Aristolochia tubiflora</i>	GUAN HUA MA DOU LING
Tubeflower Gentian	T2932 <i>Gentiana siphonantha</i>	GUAN HUA QIN JIAO
Tuber Fleeceflower	T5107 <i>Polygonum multiflorum</i>	HE SHOU WU
Tuber Fleeceflower Stem	T5108 <i>Polygonum multiflorum</i>	YE JIAO TENG
Tuber Onion	T0322 <i>Allium tuberosum</i>	JIU CAI
Tuber Onion Seed	T0323 <i>Allium tuberosum</i>	JIU ZI
Tuber Stemona	T6115 <i>Stemona tuberosa</i>	BAI BU
Tuberculate Bredia	T1023 <i>Bredia tuberculata</i>	HONG MAO YE HAI TANG
Tuberculate Pepper*	T4972 <i>Piper tuberculatum</i>	LIU TU HU JIAO
Tuberculate Rue*	T5633 <i>Ruta tuberculata</i> [Syn. <i>Haplophyllum tuberculatum</i> ]	LIU ZHUANG DAN YE YUN XIANG
Tuberculate Speranskia	T6069 <i>Speranskia tuberculata</i>	TOU GU CAO
Tuberose	T5061 <i>Polianthes tuberosa</i>	WAN XIANG YU



Tuberous Comfrey	T6248 <i>Symphytum tuberosum</i>	KUAI JING XI MEN FEI CAO
Tuberous Corydalis*	T1748 <i>Corydalis tuberosa</i>	KUAI JING ZI JIN
Tuberous Dutchmanspipe	T0641 <i>Aristolochia tuberosa</i>	KUAI JING MA DOU LING
Tuberous Kudzuvine*	T5321 <i>Pueraria tuberosa</i>	KUAI JING GE
Tuberous Milkweed	T0741 <i>Asclepias tuberosa</i>	KUAI JING MA LI JIN
Tuberousroot Jerusalem sage	T4813 <i>Phlomis tuberosa</i>	KUAI JING CAO SU
Tubeshaped Flower Cistanche	T1458 <i>Cistanche tubulosa</i>	GUAN HUA ROU CONG RONG
Tubularflower Asiabell	T1603 <i>Codonopsis tubulosa</i>	GUAN HUA DANG SHEN
Tulip Hybrid*	T6563 <i>Tulipa hybrida</i>	YU JIN XIANG ZA JIAO ZHONG
Tung Oil	T0299 <i>Aleurites cordata</i> [Syn. <i>Aleurites fordii</i> ]	TONG YOU
Tunicate Tephrosia*	T6342 <i>Tephrosia tunicata</i>	BAO MO HUI MAO DOU
Tuniclike Psammosilene	T5250 <i>Psammosilene tunicoides</i>	JIN TIE SUO
Turkestan Ash	T2775 <i>Fraxinus potanophila</i>	TU ER QI SI TAN BAI LA SHU
Turkestan Gentian*	T2939 <i>Gentiana turkestanorum</i>	TU ER QI SI TAN LONG DAN
Turkey Tulip*	T6565 <i>Tulipa turkestanii</i>	TU ER QI YU JIN XIANG
Turkish Larkspur*	T2070 <i>Delphinium crispulum</i>	TU ER QI CUI QUE HUA
Turkish Sage*	T5668 <i>Salvia cilicica</i>	TU ER QI SHU WEI CAO
Turkish Snowdrop*	T2823 <i>Galanthus plicatus</i> ssp. <i>byzantinus</i>	TU ER QI XUE HUA LIAN
Turnip	T1021 <i>Brassica rapa</i>	WU QING
Turnip-shaped Hawksbeard	T1789 <i>Crepis napifera</i>	YUAN JING HUAN YANG SHEN
Turpentine Tree	T4981 <i>Pistacia terebinthus</i>	RU DU XIANG
Tutsan	T3338 <i>Hypericum androsaemum</i>	TU SAN JIN SI TAO
Twiggy Buckthorn	T5464 <i>Rhamnus virgata</i>	ZHOU ZHI SHU LI
Twinflower Skullcap	T5844 <i>Scutellaria scordifolia</i>	BING TOU HUANG QIN
Twisting Dregia	T2263 <i>Dregea volubilis</i>	NAN SHAN TENG
Twoanther Mosla	T4305 <i>Mosla dianthera</i>	DA YE XIANG RU
Twocolor-flower Sage*	T5670 <i>Salvia dichroantha</i>	ER SE HUA SHU WEI CAO
Twocoloured Frangipani*	T5030 <i>Plumeria bicolor</i>	SHUANG SE JI DAN HUA
Twocoloured Pleurospermum	T5019 <i>Pleurospermum govianum</i> var. <i>bicolor</i>	SHUANG SE SUO ZI QIN
Twodentate Germander	T6359 <i>Teucrium bidentatum</i>	ER CHI XIANG KE KE
Twoedged Loosestrife	T4006 <i>Lythrum anceps</i>	RI BEN QIAN QU CAI
Twoflower Jerusalemcherry	T5993 <i>Solanum capsicastrum</i>	YE HAI JIAO
Twoflower Pancratium	T4612 <i>Pancratium biflorum</i>	QUAN NENG HUA
Twoflower Red silkyarn	T3953 <i>Lycianthes biflora</i>	HONG SI XIAN
Twolobed Official Mangolia	T4034 <i>Magnolia biloba</i>	AO YE HOU PO
Twopetaline Pricklyash*	T6875 <i>Zanthoxylum dipetalum</i>	ER DUN ZHUANG HUA JIAO
Twoshape Arachniodes	T0562 <i>Arachniodes dimorphophylla</i>	
Twotooth Achyranthes	T0073 <i>Achyranthes bidentata</i>	NIU XI
Two-winged Palea Liverwort*	T4108 <i>Marchantia paleacea</i> var. <i>diptera</i>	ER YI TUO BAO DI QIAN
Typical Licorice*	T3014 <i>Glycyrrhiza glabra</i> var. <i>typica</i>	OU YA GAN CAO
Ucahub; Baboen	T6770 <i>Virola surinamensis</i> [Syn. <i>Myristica surinamensis</i> ]	SU LI NAN ROU DOU KOU
Udo	T0569 <i>Aralia cordata</i>	TU DANG GUI
Uganda Padritree*	T6141 <i>Stereospermum kunthianum</i>	WU GAN DA YU YE QIU
Ukrainian Narrowleaf Narcissus*	T4373 <i>Narcissus angustifolius</i>	WU KE LAN XIA YE SHUI XIAN
Umbellate Hydrangea	T3308 <i>Hydrangea umbellata</i>	SAN XING XIU QIU
Umbellate Pepper*	T4973 <i>Piper umbellatum</i>	SAN XING HU JIAO
Umbellate Rapanea*	T5418 <i>Rapanea umbellata</i>	SAN HUA MI HUA SHU
Umbels Heath	T2418 <i>Erica umbellata</i>	SAN XING OU SHI NAN
Uña de Gato (Cat's Claw)	T6637 <i>Uncaria tomentosa</i>	BI LU GOU TENG
Unarmed Glorybower	T1558 <i>Clerodendron inerme</i>	SHUI HU MAN
Unarmed Glorybower	T1566 <i>Clerodendrum inerme</i>	KU LANG SHU
Uncinate Tailgrape*	T0657 <i>Artabotrys uncinatus</i>	YOU GOU YING ZHAO
Undaria	T6640 <i>Undaria pinnatifida</i>	QUN DAI CAI

Undulate-leaf Quassiawood*	T3098 <i>Hannoa undulata</i>	BO YE KU MU
Unequal Brake	T5291 <i>Pteris inaequalis</i>	BIAN YI FENG WEI JUE
Unequalhair Paoshan Monkshood	T0116 <i>Aconitum nagarum</i> var. <i>heterotrichum</i> [Syn. <i>Aconitum bullatifolium</i> ]	XIAO BAI CHENG
Unfortunate Glorybower	T1559 <i>Clerodendron infortunatum</i>	QIAN YU DA QING
Unguiculate Hemsley Monkshood	T0102 <i>Aconitum hemsleyanum</i> var. <i>leueanthus</i>	ZHUA KUI GUA YE WU TOU
Unibract Fritillary	T2796 <i>Fritillaria unibracteata</i>	AN ZI BEI MU
Uniflower Swissscentaury	T5466 <i>Rhaponticum uniflorum</i>	LOU LU
Union Nut	T0998 <i>Bouchardatia neurococca</i>	
unsteadiness mould's metabolite	T6643 unsteadiness mould's metabolite	
Upland Cotton	T3058 <i>Gossypium hirsutum</i> [Syn. <i>Gossypium mexicanum</i> ]	LU DI MIAN
Upland Cress	T0870 <i>Barbarea vulgaris</i>	OU ZHOU SHAN JIE
Upland White Aster	T0780 <i>Aster ptarmicoides</i>	TUN CAO ZI WAN
Ural Falsespiraea	T6052 <i>Sorbaria sorbifolia</i>	ZHEN ZHU MEI
Ural Licorice	T3022 <i>Glycyrrhiza uralensis</i>	GAN CAO
Ural's Lichen	T6603 <i>Umbilicaria proboscidea</i>	WU LA ER DI YI
Ussuri Falsehellebore	T6699 <i>Veratrum nigrum</i> var. <i>ussuriense</i>	WU SU LI LI LU
Ussuri Fritillary	T2797 <i>Fritillaria ussuriensis</i>	PING BEI MU
Ussuri Lepisorus	T3765 <i>Lepisorus ussuriensis</i>	WU SU LI WA WEI
Ussuri Poplar	T5165 <i>Populus ussuriensis</i>	DA QING YANG
Utilizable Hopea*	T3281 <i>Hopea utilis</i>	YOU YONG PO LEI
Wabu Fritillary*	T2799 <i>Fritillaria wabuensis</i>	WA BU BEI MU
Vachelli Gulfweed*	T5740 <i>Sargassum vachellianum</i>	WA SHI MA WEI ZAO
Vaginate Hemlockparsley	T1641 <i>Conioselinum vaginatum</i>	XIN JIANG GAO BEN
Vaginate Stonebean-orchis*	T1054 <i>Bulbophyllum vaginatum</i>	QIAO SHI DOU LAN
Wagner Windmill Palm	T6486 <i>Trachycarpus wagnerianus</i>	WA SHI ZONG LV
Valdiv Barberrry	T0918 <i>Berberis valdiviana</i>	WA SHI XIAO BO
Walking Maidenhair	T0172 <i>Adiantum caudatum</i>	BIAN YE TIE XIAN JUE
Wallich Cowparsnip*	T3227 <i>Heracleum wallichii</i>	WA SHI DU HUO
Wallich Crestpetal-tree	T3922 <i>Lophopetalum wallichii</i>	WO LI HE GUAN BAN
Wallich Lasianthus	T3698 <i>Lasianthus wallichii</i>	XIE JI CU YE MU
Wallich Madder	T5585 <i>Rubia wallichiana</i>	GUANG JING QIAN CAO
Wallich Poisonnut	T6193 <i>Strychnos wallichiana</i>	CHANG ZI MA QIAN
Wallich Scleropyrum	T5815 <i>Scleropyrum wallichianum</i>	YING HE
Wallichi's Brake	T5299 <i>Pteris wallichinan</i>	SAN CHA FENG WEI JUE
Waltsberg Holarrhena*	T3269 <i>Holarrhena waltsbergii</i>	WO SHI ZHI XIE MU
Wandoo Eucalyptus*	T2523 <i>Eucalyptus wandoo</i>	WO SHI AN
Vanilla	T6684 <i>Vanilla planifolia</i>	XIANG ZI LAN
Vanillagrass	T3250 <i>Hierochloe odorata</i>	MAO XIANG HUA
Wanshan Epimedium	T2405 <i>Epimedium wanshanense</i>	WAN SHAN YIN YANG HUO
Variable Rosewood*	T2018 <i>Dalbergia variabilis</i>	YI BIAN HUANG TAN
Variagate Bauhinia*	T0881 <i>Bauhinia variegata</i>	CAI BAN YANG TI JIA
Variegated Cowlily	T4451 <i>Nuphar variegatum</i>	BAN YE PING PENG CAO
Wartyfruit Amomum	T0418 <i>Amomum muricarpum</i>	YOU GUO DOU KOU
Vase Thelephore	T6422 <i>Thelephora vialis</i>	LIAN ZUO GE JUN
Vaseyana Big Sagebrush*	T0703 <i>Artemisia tridentata</i> ssp. <i>vaseyana</i>	WA SI YA NA SAN CHI HAO
Water Nightshade	T6015 <i>Solanum torvum</i>	SHUI QIE
Water Seedbox*	T3932 <i>Ludwigia octovalvis</i>	MAO CAO LONG
Water-clover	T4121 <i>Marsilea quadrifolia</i>	PING
Watercress	T4388 <i>Nasturtium officinale</i>	DOU BAN CAI
Waterlilyleaf Goldenray	T3810 <i>Ligularia nelumbifolia</i>	LIAN YE TUO WU
Watermelon	T1464 <i>Citrullus vulgaris</i> [Syn. <i>Citrullus lanatus</i> ]	XI GUA
Watermelon Seed	T1465 <i>Citrullus vulgaris</i> [Syn. <i>Citrullus lanatus</i> ]	XI GUA ZI REN

Watery Speedwell	T6722 <i>Veronica anagallis-aquatica</i>	BEI SHUI KU MAI
Watt Tupistra	T6567 <i>Tupistra wattii</i> [Syn. <i>Campylandra wattii</i> ]	WAN RUI KAI KOU JIAN
Wattle	T0024 <i>Acacia mearnsii</i>	HEI JING SHU
Waxy Litse*	T3895 <i>Litsea sebifera</i>	LA ZHI MU JIANG ZI
Waxy Meadowrue	T6406 <i>Thalictrum revolutum</i>	WAI JUAN TANG SONG CAO
Wayaka Yambean	T4573 <i>Pachyrrhizus erosus</i>	DOU SHU
Wayaka Yambean Seed	T4572 <i>Pachyrrhizus erosus</i>	DI GUA ZI
Weaversbroom	T6064 <i>Spartium junceum</i>	YING ZHAO DOU
Weeping Forsythia	T2756 <i>Forsythia suspensa</i>	LIAN QIAO
Weeping Viburnum*	T6740 <i>Viburnum suspensum</i>	XUAN CHUI JIA MI
Veined Argyreia	T0614 <i>Argyreia nervosa</i>	YE MAI YIN BEI TENG
Veined Inula	T3436 <i>Inula nervosa</i>	XIAN MAI XUAN FU HUA
Veined Rabdosia	T5395 <i>Rabdosia nervosa</i>	XIAN MAI XIANG CHA CAI
Veined Swertia*	T6228 <i>Swertia nervosa</i>	XIAN MAI ZHANG YA CAI
Veinfruit Seabuckthorn	T3253 <i>Hippophae neurocarpa</i>	LEI GUO SHA JI
Weisi Rabdosia	T3534 <i>Isodon weisiensis</i>	WEI XI XIANG CHA CAI
Veitch Dysosma	T2304 <i>Dysosma veitchii</i>	CHUAN BA JIAO LIAN
Veitch Mahonia	T4076 <i>Mahonia veitchiorum</i>	CHUAN DIAN SHI DA GONG LAO
Veitch Peony	T4590 <i>Paeonia veitchii</i>	CHUAN CHI SHAO
Vellayim	T3271 <i>Holoptelea integrifolia</i>	YIN MIAN YU
Welsh Poppy	T4142 <i>Meconopsis cambrica</i>	WEI ER SHI LV RONG HAO
Weltd Thistle	T1199 <i>Carduus acanthoides</i>	JIE MAO FEI LIAN
Velutinous Cinquefoil	T5183 <i>Potentilla griffithii</i> var. <i>velutina</i>	CHANG ROU MAO WEI LING CAI
Velutinous Gambirplant*	T6638 <i>Uncaria velutina</i>	DUAN RONG MAO GOU TENG
Velutinous Hoarhound*	T4113 <i>Marrubium velutinum</i>	DUAN RONG MAO OU XIA ZHI CAO
Velvet Tamarind	T2138 <i>Dialium guineense</i>	
Wenchuan Thorowax*	T1078 <i>Bupleurum wenchuanense</i>	WEN CHUAN CHAI HU
Venenous Alstonia*	T0377 <i>Alstonia venenata</i>	YIN DU YA JIAO SHU
Venenous Pricklyash*	T6899 <i>Zanthoxylum veneficium</i>	DU HUA JIAO
Vengai Padauk	T5302 <i>Pterocarpus marsupium</i>	NANG ZHUANG ZI TAN
Wengujin Culcuma*	T1907 <i>Curcuma wengujin</i>	WEN YU JIN
Venus Maidenhair	T0179 <i>Adiantum venustum</i>	XI YE TIE XIAN JUE
Venus Tailgrape*	T0658 <i>Artabotrys venustus</i>	XIU LI YING ZHAO
Venus's Flytrap	T2186 <i>Dionaea muscipula</i>	BU YING CAO
Verecun Plum*	T5245 <i>Prunus verecunda</i>	WEI RUI LI
Vermeil-sulphureous Laetiporus*	T3666 <i>Laetiporus sulphureus</i> var. <i>miniatus</i>	ZHU HONG LIU HUANG SE XUN
		KONG JUN
Vermiculate Thamnolia Thallus	T6416 <i>Thamnolia vermicularis</i>	XUE CHA
Vermilion Rhododendron	T5506 <i>Rhododendron cinnabarinum</i>	ZHU SHA DU JUAN
Verrucatespot Euonymus	T2548 <i>Euonymus verrucosides</i>	YOU DIAN WEI MAO
Versicolorous Dutchmanspipe	T0643 <i>Aristolochia versicolor</i>	BIAN SE MA DOU LING
Versicolorous Mosquitotrap	T1962 <i>Cynanchum versicolor</i>	WAN SHENG BAI WEI
Versicolorous Pink	T2147 <i>Dianthus versicolor</i>	BIAN SE SHI ZHU
Verticillate Bushmint*	T3383 <i>Hyptis verticillata</i>	LUN SHENG SHAN XIANG
Verticillate Cladonia	T1529 <i>Cladonia verticillata</i>	XIAO LA BA
Very-hard Agave*	T0224 <i>Agave rigidissima</i>	JI JIAN LONG SHE LAN
Vesper Iris	T3457 <i>Iris dichotoma</i>	BAI HUA SHE GAN
West Africa Afrormosia	T0208 <i>Afrormosia elata</i>	XI FEI HONG DOU SHU
West Indian Mahogany	T6241 <i>Swietenia mahogany</i>	TAO HUA XIN MU
Vested Acronychia*	T0153 <i>Acronychia vestita</i>	BAO SHAN YOU GAN
Western Arborvitae	T6441 <i>Thuja plicata</i>	BEI MEI XIANG BAI
Western Hemlock	T6558 <i>Tsuga heterophylla</i>	YI YE TIE SHAN
Western Juniper	T3591 <i>Juniperus occidentalis</i>	XI FANG CI BAI

Western Red Cedar	T3597 <i>Juniperus scopulorum</i>	LUO JI SHAN YUAN BAI
Western Sage	T0682 <i>Artemisia ludoviciana</i>	LU DE WEI HAO
West-Shiko Rabdosia*	T3527 <i>Isodon shikokiana</i> var. <i>occidentalis</i>	XI SI GUO XIANG CHA CAI
Vetchleaf Sophora	T6046 <i>Sophora viciifolia</i>	BAI CI HUA
Vetchleaf Sophora Leaf	T6048 <i>Sophora viciifolia</i>	BAI CI HUA YE
Vetchleaf Sophora Root	T6047 <i>Sophora viciifolia</i>	BAI CI HUA GEN
Vetchleaf Sophora Seed	T6049 <i>Sophora viciifolia</i>	BAI CI HUA ZI
Vetiver	T6733 <i>Vetiveria zizanioides</i>	YAN LAN CAO
Wetland St.John'swort*	T3367 <i>Hypericum uliginosum</i>	SHI SHENG JIN SI TAO
Wheat	T6544 <i>Triticum aestivum</i> [Syn. <i>Triticum vulgare</i> ]	XIAO MAI
Wheelstamentree	T6549 <i>Trochodendron aralioides</i>	KUN LAN SHU
Whiplash Star-of-Bethlehem	T4534 <i>Ornithogalum caudatum</i>	HU YAN WAN NIAN QING
White Ash	T2765 <i>Fraxinus americana</i>	NEI GUO BAI CEN
White Aspen	T5145 <i>Populus alba</i>	YIN BAI YANG
White Bryony	T1042 <i>Bryonia alba</i>	BAI XIE GEN
White Bur Sage	T0401 <i>Ambrosia dumosa</i>	BAI CI GUO TUN CAO
White Chinaure	T0964 <i>Boenninghausenia albiflora</i>	YAN JIAO CAO
White Clover	T6522 <i>Trifolium repens</i>	SAN XIAO CAO
White Cowparsnip*	T3221 <i>Heracleum rapula</i>	BAI YUN HUA
White Dysosma*	T2301 <i>Dysosma majorensis</i> [Syn. <i>Podophyllum majorense</i> ; <i>Dysosma lichuanensis</i> ]	BAI BA JIAO LIAN
White Falsehellebore	T6692 <i>Veratrum album</i>	BAI LI LU
White Flax	T3858 <i>Linum album</i>	BAI YA MA
White Fuliga*	T2806 <i>Fuligo candida</i>	LIANG BAI MEI RONG JUN
White Gambirplant	T6632 <i>Uncaria sessilifructus</i> [Syn. <i>Nauclea sessilifructus</i> ]	BAI GOU TENG
White Henna*	T3731 <i>Lawsonia alba</i>	BAI SAN MO HUA
White Linden*	T6456 <i>Tilia alburnum</i>	BAI DUAN
White Lotus, Egyptian Lotus	T4455 <i>Nymphaea lotus</i>	CHI YE SHUI LIAN
White Lupin	T3939 <i>Lupinus albus</i>	BAI YU SHAN DOU
White Mangrove	T3677 <i>Laguncularia racemosa</i>	JIA HONG SHU
White Milkweed	T0735 <i>Asclepias albicans</i>	BIAN BAI MA LI JIN
White Mistletoe	T6771 <i>Viscum album</i>	LUAN YE HU JI SHENG
White Mulberry Branch	T4290 <i>Morus alba</i>	SANG ZHI
White Mulberry Fruit	T4288 <i>Morus alba</i>	SANG SHI
White Mulberry Leaf	T4289 <i>Morus alba</i>	SANG YE
White Mulberry Root-bast	T4287 <i>Morus alba</i>	SANG BAI PI
White Mullein	T6701 <i>Verbascum lychnites</i>	JIAN QIU LUO MAO RUI HUA
White Mustard Seed	T5958 <i>Sinapis alba</i> [Syn. <i>Brassica alba</i> ; <i>Brassica hirta</i> ]	BAI JIE ZI
White Pearlweed	T3996 <i>Lysimachia candida</i>	DAN TIAO CAO
White Poppy*	T4620 <i>Papaver album</i>	BAI HUA YING SU
White Pummelo*	T1482 <i>Citrus grandis</i> f. <i>hakunikuju</i>	BAI YOU
White Snakeroot	T2579 <i>Eupatorium urticaefolium</i>	QIAN MA YE ZE LAN
White Swallow-wort	T6763 <i>Vincetoxicum officinale</i> [Syn. <i>Cynanchum vincetoxicum</i> ]	YAO YONG BAI QIAN
White Sweetclover	T4170 <i>Melilotus albus</i>	BAI XIANG CAO MU XI
Whitebackleaf Mallotus	T4080 <i>Mallotus apelta</i>	BAI BEI YE
Whiteflower Caesalpinia	T1106 <i>Caesalpinia minax</i>	KU SHI LIAN
Whiteflower Danshen	T5681 <i>Salvia miltiorrhiza</i> f. <i>alba</i>	BAI HUA DAN SHEN
Whiteflower Embelia	T2348 <i>Embelia ribes</i>	XIAN SUAN QIANG
Whiteflower Hogfennel	T4768 <i>Peucedanum praeruptorum</i>	BAI HUA QIAN HU
Whiteflower Lagopsis	T4112 <i>Marrubium supinum</i> [Syn. <i>Lagopsis supina</i> ]	BAI HUA XIA ZHI CAO
Whiteflower Leadword	T5029 <i>Plumbago zeylanica</i>	BAI HUA DAN
Whiteflower Mucuna	T4308 <i>Mucuna birdwoodiana</i>	BAI HUA YOU MA TENG
Whiteflower Patrinia	T4676 <i>Patrinia villosa</i>	BAI JIANG

Whiteflower Rostellularia	T3609 <i>Justicia procumbens</i> var. <i>leucantha</i>	BAI HUA JUE CHUANG
Whiteflower Trillium	T6531 <i>Trillium camtschaticum</i>	YU ER QI
Whiteflower Trillium*	T6533 <i>Trillium kamtschaticum</i>	JI LIN YAN LING CAO
White-flowerButterbur*	T4738 <i>Petasites albus</i>	BAI HUA FENG DOU CAI
Whitehairy Beautyberry	T1117 <i>Callicarpa candicans</i>	BAI MAO ZI ZHU
Whiteleaf Aglaia*	T0239 <i>Aglaia leucophylla</i>	BAI YE MI ZI LAN
Whiteleaf Japanese Magnolia	T4044 <i>Magnolia obovata</i>	RI BEN HOU PO
Whiteleaf Nepeta	T4416 <i>Nepeta leucophylla</i>	BAI YE JING JIE
Whiteleaf Rabdosia*	T3503 <i>Isodon leucophyllus</i>	BAI YE XIANG CHA CAI
Whitopilose Rabdosia	T3478 <i>Isodon albobilosus</i>	BAI ROU MAO XIANG CHA CAI
White-punctated Combretum*	T1630 <i>Combretum albopunctatum</i>	BAI DIAN FENG CHE ZI
Whitespot Betony	T6093 <i>Stachys sylvatica</i>	LIN DI SHUI SU
Whitethorn*	T4435 <i>Nitraria schoberi</i>	DONG QIANG
Whitethroat Monkshood	T0111 <i>Aconitum leucostomum</i>	BAI HOU WU TOU
Whittaker Sundew*	T2270 <i>Drosera whittakeri</i>	HUI TE KE MAO GAO CAI
Whorlleaf Litsea	T3897 <i>Litsea verticillata</i>	DIE DA LAO
Viatic Nightshade*	T6019 <i>Solanum viarum</i>	XIAO LU QIE
Widely distributed in nature	T6817 widely distributed in nature	
Wiedemann Sage*	T5699 <i>Salvia wagneriana</i>	
Viet Nam Croton*; Kho Sam Cho La	T1859 <i>Croton tonkinensis</i>	DONG JIN BA DOU
Wight's St.John'swort	T3368 <i>Hypericum wightianum</i>	BIAN DI JIN
Wightiana Chaulmoogratree Seed*	T3301 <i>Hydnocarpus wightiana</i>	WEI SHI DA FENG ZI
Wild Angelica	T0497 <i>Angelica sylvestris</i>	LIN BAI ZHI
Wild Bleedingheart	T2149 <i>Dicentra eximia</i>	SUI MAO HE BAO MU DAN
Wild Boar Gall	T6205 <i>Sus scrofa</i>	YE ZHU DAN
Wild Cabbage	T1013 <i>Brassica oleracea</i>	YE JIE
Wild Carrot	T2048 <i>Daucus carota</i>	HE SHI FENG
Wild Carrot Fruit	T2049 <i>Daucus carota</i>	NAN HE SHI
Wild Gourd	T1460 <i>Citrullus colocynthis</i>	YAO XI GUA
Wild Gromwell*	T3883 <i>Lithospermum ruderale</i>	LU BIAN ZI CAO
Wild Honeysuckle	T3909 <i>Lonicera confusa</i>	HUA NAN REN DONG
Wild Leek	T0309 <i>Allium ampeloprasum</i>	DA TOU SUAN
Wild Mint	T4184 <i>Mentha haplocalyx</i> [Syn. <i>Mentha canadaensis</i> ; <i>Mentha arvensis</i> var. <i>haplocalyx</i> ; <i>Mentha arvensis</i> ]	BO HE
Wild Pea	T3713 <i>Lathyrus sylvestris</i>	LIN SHENG SHAN LI DOU
Wild poplar	T5151 <i>Populus davidiana</i>	SHAN YANG
Wild Rum-cherry	T5240 <i>Prunus serotina</i>	YE HEI YING
Wild Spikenard	T3381 <i>Hyptis suaveolens</i>	SHE BAI ZI
Wild Thermopsis	T6429 <i>Thermopsis lupinoides</i>	YE JUE MING
Wildcelery	T0544 <i>Apium graveolens</i>	HAN QIN
Wildcelery Variety	T0545 <i>Apium graveolens</i> var. <i>dulce</i>	HAN QIN BIAN ZHONG
Wildginger-leaf Morning Glory*	T3446 <i>Ipomoea asarifolia</i>	XI XIN YE QIAN NIU
Wildhairdaisy	T5756 <i>Saussurea japonica</i>	FENG MAO JU
Wilford Cranesbill	T2949 <i>Geranium wilfordii</i>	LAO GUAN CAO
Wilford Swallowwort	T1964 <i>Cynanchum wilfordii</i> [Syn. <i>Cynoctonum wilfordii</i> ]	GE SHAN XIAO
Willmott Ceratostigma	T1329 <i>Ceratostigma willmottianum</i>	ZI JIN LIAN
Villous Amomum	T0419 <i>Amomum villosum</i>	SHA REN
Villous Rangooncreeper*	T5386 <i>Quisqualis indica</i> var. <i>villosa</i>	MAO SHI JUN ZI
Willowleaf Ash Bark	T2779 <i>Fraxinus stylosa</i>	LIU YE CEN
Willowleaf Magnolia*	T4049 <i>Magnolia salicifolia</i>	LIU YE MU LAN
Willowleaf Sarcococca	T5732 <i>Sarcococca saligna</i>	YE SHAN HUA
Willowleaf Swallowwort	T1960 <i>Cynanchum stauntonii</i>	LIU YE BAI QIAN
Willowweedleaf Skullcap	T5837 <i>Scutellaria epilobifolia</i>	LIU YE CAI HUANG QIN

Wilson Barberry	T0920 <i>Berberis wilsonae</i>	JIN HUA XIAO BO
Wilson Buckeye Seed	T0205 <i>Aesculus wilsonii</i>	SUO LUO ZI
Wilson Citron	T1520 <i>Citrus wilsonii</i>	XIANG YUAN
Wilson Orange Young Fruit	T1521 <i>Citrus wilsonii</i>	XIANG YUAN ZHI SHI
Wilson Plumyew	T1325 <i>Cephalotaxus wilsoniana</i>	TAI WAN CU FEI
Wilson Yarrow	T0069 <i>Achillea wilsoniana</i>	YUN NAN SHI
Vinegar	T6764 Vinegar	CU Vinegar
Winged Euonymus	T2536 <i>Euonymus alatus</i>	GUI JIAN YU
Winged Jurinea*	T3604 <i>Jurinea alata</i>	YI CHI LING JU
Winged Laggera	T3674 <i>Laggera alata</i>	LIU LENG JU
Winged Physochlaina*	T4857 <i>Physochlaina alaica</i>	YI PAO NANG CAO
Winged Yam	T2188 <i>Dioscorea alata</i>	MAO SHU
Wingfruit Milkvetch*	T0802 <i>Astragalus pterocarpus</i>	CHI GUO HUANG QI
Winked Marshweed	T3840 <i>Limnophila rugosa</i>	SHUI HUI XIANG
Winter Daffodil	T6144 <i>Sternbergia lutea</i>	HUANG SI TAN BAO
Winter Daphne Flower	T2028 <i>Daphne odora</i>	RUI XIANG HUA
Winter Daphne Root	T2027 <i>Daphne odora</i>	RUI XIANG GEN
Winter Jasmine	T3555 <i>Jasminum nudiflorum</i>	YING CHUN HUA
Winter Lemongrass*	T1948 <i>Cymbopogon winterianus</i>	WEN TE XIANG MAO
Winterberry Euonymus	T2538 <i>Euonymus bungeanus</i>	SI MIAN MU
Wintergreen Barberry	T0906 <i>Berberis julianae</i>	TU HUANG LIAN
Wintersweet Bud	T1366 <i>Chimonanthus fragrans</i> [Syn. <i>Chimonanthus praecox</i> ]	LA MEI HUA
Violet Monkshood*	T0140 <i>Aconitum violaceum</i>	ZI WU TOU
Violet Morningglory*	T3453 <i>Ipomoea violacea</i>	QING ZI QIAN NIU
Viper's-glass	T5825 <i>Scorzonera humilis</i>	AI SHENG YA CONG
Virescent Larkspur	T2090 <i>Delphinium virescens</i>	DAN LV CUI QUE
Virgate Wormwood	T0695 <i>Artemisia scoparia</i> [Syn. <i>Artemisia capillaris</i> var. <i>scoparia</i> ]	HUANG HAO
Virginia Chain Fern	T6832 <i>Woodwardia virginica</i>	FU JI NI YA GOU JI JUE
Virginia Pepperweed Seed	T3759 <i>Lepidium virginicum</i>	BEI MEI TING LI ZI
Virginia Witch Hazel	T3095 <i>Hamamelis virginiana</i>	MEI ZHOU JIN LV MEI
Viridian Common Perilla*	T4716 <i>Perilla frutescens</i> f. <i>viridis</i>	QING ZI SU
Viscid Primrose*	T5205 <i>Primula viscosa</i>	NIAN BAO CHUN
Viscid Wormwood*	T0670 <i>Artemisia cana</i> ssp. <i>viscidula</i>	NIAN HAO
Viscidhair Skullcap	T5845 <i>Scutellaria viscidula</i>	ZHAN MAO HUANG QIN
Viscid hairy Knotweed	T5122 <i>Polygonum viscosum</i>	ZHAN MAO LIAO
Viscose Cinquefoil*	T5188 <i>Potentilla viscosa</i>	NIAN WEI LING CAI
Volcanic Peperomia*	T4708 <i>Peperomia vulcanica</i>	HUO SHAN YAN CAO HU JIAO
Wolfs-milk Slime	T3960 <i>Lycogala epidendrum</i>	FEN LIU JUN
Volga Adonis	T0192 <i>Adonis wolgensis</i>	FU ER JIA CE JIN ZHAN HUA
Voluble Rosewood*	T2019 <i>Dalbergia volubilis</i>	CHAN RAO HUANG TAN
Wood Sage	T6369 <i>Teucrium scorodonia</i>	LIN SHI CAN
Woodland Beakchervil	T0529 <i>Anthriscus sylvestris</i>	E SHEN
Woodland Monkshood	T0120 <i>Aconitum nemorum</i>	LIN DI WU TOU
Woodland Sunflower	T3154 <i>Helianthus strumosus</i>	LIN DI XIANG RI KUI
Woodland Wormwood	T0700 <i>Artemisia sylvatica</i>	LIN DI HAO
Woods Lcaquertree	T5538 <i>Rhus sylvestris</i>	YE QI SHU ZI
Woods Lcaquertree Leaf	T5537 <i>Rhus sylvestris</i>	YE QI SHU YE
Wood-sorrel	T4562 <i>Oxalis acetosella</i>	SHAN ZUO JIANG CAO
Woody Fleabane	T3441 <i>Inula viscosa</i>	NIAN XING TU MU XIANG
Woolly Gambirplant*	T6623 <i>Uncaria lanosa</i>	MIAN MAO GOU TENG
Woolly Lespedeza	T3774 <i>Lespedeza tomentosa</i>	XIAO XUE REN SHEN
Woolly Morning Glory	T0616 <i>Argyrea speciosa</i>	MEI LI YIN BEI TENG
Woolly Philydrum	T4799 <i>Philydrum lanuginosum</i>	TIAN CONG

Woolly Seseli*	T5929 <i>Seseli ericephalum</i>	MIAN MAO XIE HAO
Woolly Tylophora	T6581 <i>Tylophora mollissima</i>	MIAN MAO WA ER TENG
Woollyfruit Rabdosia*	T3501 <i>Isodon lasiocarpus</i>	MIAN MAO GUO XIANG CHA CAI
Wooly Dutchmanspipe	T0634 <i>Aristolochia mollissima</i>	MIAN MAO MA DOU LING
Worm-killed Bitterleaf	T6713 <i>Vernonia anthelmintica</i>	QU CHONG BAN JIU JU
Wormwood-like Motherwort	T3752 <i>Leonurus heterophyllus</i> [Syn. <i>Leonurus artemisia</i> ]	YI MU CAO
Wrinkled Gianthyssop	T0212 <i>Agastache rugosus</i>	HUO XIANG
Wrinkleleaf Pyrola	T5352 <i>Pyrola rugosa</i>	ZHOU YE LU TI CAO
Wrinkleleaf Magnolia*	T4046 <i>Magnolia praecocissima</i>	ZHOU YE MU LAN
Wru Croton*	T1860 <i>Croton urucurana</i>	WULU BA DOU
Wushan Epimedium	T2406 <i>Epimedium wushanense</i>	WU SHAN YIN YANG HUO
Wych Elm	T6595 <i>Ulmus glabra</i>	SHAN YU
Xanthorrhiza Turmeric*	T1908 <i>Curcuma xanthorrhiza</i>	HUANG GEN JIANG HUANG
Yadong Monkshood	T0077 <i>Aconitum balfourii</i>	YA DONG WU TOU
Yangtao Actinidia	T0158 <i>Actinidia chinensis</i>	MI HOU TAO
Yanhusuo	T1750 <i>Corydalis yanhusuo</i> [Syn. <i>Corydalis turtchaninovii</i> f. <i>yanhusuo</i> ]	YAN HU SUO
Ya-Yaa (Thai name)	T0812 <i>Asystasia intrusa</i>	CHA RU SHI WAN CUO
Yeast and other biological sources	T6857 Yeast and other biological sources	
Yeddo Spruce	T4871 <i>Picea jezoensis</i>	RI BEN YU LIN SONG
Yeddo Spruce	T4872 <i>Picea jezoensis</i> var. <i>jezoensis</i>	YU LIN YUN SHAN
Yellow Adonis	T0191 <i>Adonis vernalis</i>	CHUN FU SHOU CAO
Yellow Barberry	T0917 <i>Berberis tschonoskiana</i>	HUANG XIAO BO
Yellow Bedstraw	T2835 <i>Galium verum</i>	PENG ZI CAI
Yellow Bird's-nest	T4275 <i>Monotropa hypopitys</i>	HUANG SHUI JING LAN
Yellow Bugle	T0261 <i>Ajuga chamaeepitys</i>	HUANG JIN GU CAO
Yellow Cedar	T1348 <i>Chamaecyparis nootkatensis</i>	HUANG BIAN BAI
Yellow Cinnamon	T1443 <i>Cinnamomum parthenoxylum</i> [Syn. <i>Cinnamomum porrectum</i> ]	XIANG ZHANG
Yellow Concave-top Alga*	T3721 <i>Laurencia nipponica</i>	HUANG SE AO DING CAO
Yellow Daylily	T3195 <i>Hemerocallis tilio-asphodelus</i>	BEI HUANG HUA CAI
Yellow Everlasting	T3156 <i>Helichrysum arenarium</i>	SHA SHENG LA JU
Yellow Gentian	T2918 <i>Gentiana lutea</i>	HUANG LONG DAN
Yellow Groundsel*	T5888 <i>Senecio flavus</i>	HUANG SE QIAN LI GUANG
Yellow Hardpeel Puff-ball*	T5814 <i>Scleroderma citrinum</i>	HUANG YING PI MA BO
Yellow Hornpoppy*	T2969 <i>Glaucium flavum</i>	HUANG HAI YING SU
Yellow Licorice	T3016 <i>Glycyrrhiza kansuensis</i>	HUANG GAN CAO
Yellow Lupin	T3943 <i>Lupinus luteus</i>	HUANG YU SHAN DOU
Yellow Monkshood	T0076 <i>Aconitum anthora</i>	HUANG WU TOU
Yellow Oleander	T6433 <i>Thevetia nerifolia</i> [Syn. <i>Thevetia peruviana</i> ]	HUANG HUA JIA ZHU TAO
Yellow Ouratea*	T4560 <i>Ouratea flava</i>	HUANG SAI JIN LIAN MU
Yellow Oxytropis	T4567 <i>Oxytropis campestris</i>	TIAN YE JI DOU
Yellow Pitcherplant	T5742 <i>Sarracenia flava</i>	HUANG PING ZI CAO
Yellow Poplar	T3871 <i>Liriodendron tulipifera</i>	BEI MEI E ZHANG QIU
Yellow Prairie-clover	T4737 <i>Petalostemum purpureum</i>	HUANG SE BAN RUI DOU
Yellow Toadflax	T3845 <i>Linaria vulgaris</i>	LIU CHUAN YU
Yellow Yam	T2205 <i>Dioscorea panthaica</i>	HUANG SHAN YAO
Yellowbow Dendrobium	T2099 <i>Dendrobium chrysotoxum</i>	GU CHUI SHI HU
Yellowflag Iris	T3467 <i>Iris pseudacorus</i>	HUANG CHANG PU
Yellowflower Coleus	T1621 <i>Coleus xanthanthus</i>	HUANG QIAO RUI HUA
Yellowflower Corydalis	T1731 <i>Corydalis pallida</i>	JU HUA HUANG LIAN
Yellowflower Hornpoppy*	T2967 <i>Glaucium davum</i>	HUANG HUA HAI YING SU
Yellowflower Milkwort	T5071 <i>Polygala arillata</i>	HUANG HUA YUAN ZHI
Yellowflower Rabdosia	T3524 <i>Isodon sculponeata</i> [Syn. <i>Rabdosia sculponeata</i> ]	HUANG HUA XIANG CHA CAI

Yellowflower Sage	T5672 <i>Salvia flava</i>	HUANG HUA SHU WEI CAO
Yellowflower Spiderflower*	T1552 <i>Cleome viscosa</i>	HUANG HUA CAO
Yellow-flowering Pea	T1830 <i>Crotalaria retusa</i>	AO ZHU SHI DOU
Yellowfruit Nightshade	T6020 <i>Solanum xanthocarpum</i>	HUANG GUO QIE
Yellowhair Aralia	T0571 <i>Aralia decaisneae</i>	HUANG MAO CONG MU
Yellowhair Honeysuckle	T3910 <i>Lonicera fulvotomentosa</i>	HUANG HE MAO REN DONG
Yellowhair Monkshood	T0087 <i>Aconitum chrysotrichum</i>	HUANG MAO WU TOU
Yellow-hairy Calyx Kudzuvine	T5311 <i>Pueraria calycina</i>	HUANG MAO GE
Yellow-heart Pricklyash	T6880 <i>Zanthoxylum flavum</i>	HUANG XIN HUA JIAO
Yellowish Erysimum*	T2455 <i>Erysimum ochroleucum</i>	HUANG BAI TANG JIE
Yellowish Rabdosia	T3488 <i>Isodon flavidus</i>	DAN HUANG XIANG CHA CAI
Yellowish Swainsonia*	T6209 <i>Swainsonia luteola</i>	DAN HUANG KU MA DOU
Yellowish Swertia*	T6235 <i>Swertia punicea</i> var. <i>lutescens</i>	DAN HUANG ZHANG YA CAI
Yellowjuice Garcinia	T2880 <i>Garcinia xanthochymus</i>	DA YE TENG HUANG
Yellowleaf Sophora	T6030 <i>Sophora chrysophylla</i>	HUANG YE HUAI
Yellowmouth Dutchmanspipe	T0629 <i>Aristolochia heterophylla</i>	HAN FANG JI
Yellow-red Kopsia*	T3639 <i>Kopsia flavida</i>	HUANG HONG SE RUI MU
Yellowroot	T6846 <i>Xanthorhiza simplicissima</i>	HUANG GEN SHU
Yerbadetajo	T2323 <i>Eclipta prostrata</i> [Syn. <i>Eclipta alba</i> ]	MO HAN LIAN
Yinchow Thorowax	T1079 <i>Bupleurum yinchowense</i>	YIN ZHOU CHAI HU
Youth-and-old-age	T6912 <i>Zinnia elegans</i>	BAI RI CAO
Yucatan Tithonia	T6469 <i>Tithonia diversifolia</i>	ZHONG BIN JU
Yuko Citrus*	T1522 <i>Citrus yuko</i>	YU KE GAN JU
Yulan Magnolia	T4038 <i>Magnolia denudata</i> [Syn. <i>Magnolia heptapata</i> ]	YU LAN
Yun Hogfennel	T4769 <i>Peucedanum rubricaulae</i>	YUN QIAN HU
Yungning Cowparsnip	T3228 <i>Heracleum yungningense</i>	YONG NING DU HUO
Yunnan Alstonia	T0378 <i>Alstonia yunnanensis</i>	DIAN JI GU CHANG SHAN
Yunnan Amentotaxus	T0409 <i>Amentotaxus yunnanensis</i>	YUN NAN SUI HUA SHAN
Yunnan Anisetree	T3407 <i>Illicium simonsii</i>	YUN NAN BA JIAO
Yunnan Combretum*	T1632 <i>Combretum yunnanensis</i>	YUN NAN FENG CHE ZI
Yunnan Craibiodendron	T1767 <i>Craibiodendron yunnanense</i>	JIN YE ZI
Yunnan Cuttongue tree	T6807 <i>Walsura yunnanensis</i>	YUN NAN GE SHE SHU
Yunnan Devilpepper	T5428 <i>Rauvolfia yunnanensis</i>	YUN NAN LUO FU MU
Yunnan Dodder	T1915 <i>Cuscuta reflexa</i>	YUN NAN TU SI ZI
Yunnan Galangal	T0353 <i>Alpinia blepharocalyx</i>	YUN NAN CAO KOU
Yunnan Gambirplant	T6639 <i>Uncaria yunnanensis</i>	DIAN GOU TENG
Yunnan Garcinia	T2852 <i>Garcinia cowa</i>	YUN NAN SHAN ZHU ZI
Yunnan Gaultheria	T2895 <i>Gaultheria yunnanensis</i>	DIAN BAI ZHU SHU
Yunnan Gingerlily	T3121 <i>Hedychium yunnanense</i>	DIAN JIANG HUA
Yunnan Goldthread	T1670 <i>Coptis teetoides</i> [Syn. <i>Coptis teeta</i> ]	YUN NAN HUANG LIAN
Yunnan Hawthorn	T1781 <i>Crataegus scabrifolia</i>	YUN NAN SHAN ZHA
Yunnan Hemlock	T6557 <i>Tsuga dumosa</i>	YUN NAN TIE SHAN
Yunnan Kudzuvine	T5317 <i>Pueraria peduncularis</i>	YUN NAN GE TENG
Yunnan Landflower Mushroom*	T0287 <i>Albatrellus confluens</i>	YUN NAN DI HUA JUN
Yunnan Larkspur	T2091 <i>Delphinium yunnanense</i>	XIAO CAO WU
Yunnan Licorice	T3023 <i>Glycyrrhiza yunnanensis</i>	YUN NAN GAN CAO
Yunnan Madder	T5586 <i>Rubia yunnanensis</i>	XIAO HONG SHEN
Yunnan Manyleaf Paris	T4652 <i>Paris polyphylla</i> var. <i>yunnanensis</i>	YUN NAN CHONG LOU
Yunnan Mayten	T4134 <i>Maytenus hookeri</i>	YUN NAN MEI DENG MU
Yunnan Michelia	T4215 <i>Michelia yunnanensis</i>	YUN NAN HAN XIAO
Yunnan Parakmeria	T4641 <i>Parakmeria yunnanensis</i>	YUN NAN NI DAN XING MU LAN
Yunnan Pholidota	T4823 <i>Pholidota yunnanensis</i>	YUN NAN SHI XIAN TAO
Yunnan Pleurospermum	T5021 <i>Pleurospermum rivulorum</i>	YUN NAN QIANG HUO



Yunnan Rabdosia	T5401 <i>Rabdosia yunnanensis</i>	BU YU HONG
Yunnan Rhodiola	T5501 <i>Rhodiola yunnanesis</i>	YUN NAN HONG JING TIAN
Yunnan Sage	T5701 <i>Salvia yunnanensis</i>	YUN NAN SHU WEI CAO
Yunnan Sarcococca	T5731 <i>Sarcococca coriacea</i> [Syn. <i>Sarcococca wallichii</i> ]	YUN NAN YE SHAN HUA
Yunnan Seabuckthorn*	T3258 <i>Hippophae rhamnoides</i> subsp. <i>yunnanensis</i>	YUN NAN SHA JI
Yunnan Seseli	T5937 <i>Seseli yunnanense</i>	SONG YE FANG FENG
Yunnan Skullcap	T5833 <i>Scutellaria amoena</i>	DIAN HUANG QIN
Yunnan Torreya	T6479 <i>Torreya yunnanensis</i>	YUN NAN FEI SHU
Yunnan Yew	T6319 <i>Taxus yunnanensis</i>	YUN NAN HONG DOU SHAN
Yunnanwest Monkshood	T0081 <i>Aconitum bulleyanum</i>	DIAN XI WU TOU
Zambesi Croton*	T1861 <i>Croton zambesicus</i>	ZAN BI XI BA DOU
Zedoary Turmeric	T1909 <i>Curcuma zedoaria</i> [Syn. <i>Curcuma aeruginosa</i> ]	PING E SHU
Zerumbet Ginger	T6911 <i>Zingiber zerumbet</i>	HONG QIU JIANG
Zhejiang Swertia*	T6222 <i>Swertia hickinii</i>	ZHE JIANG ZHANG YA CAI
Zhongba Monkshood Daughter Root*	T0085 <i>Aconitum carmichaeli</i> cv	ZHONG BA E ZHANG YE FU ZI
Zonal Geranium	T4694 <i>Pelargonium zonale</i>	MA TI WEN TIAN ZHU KUI
Zuiho Machilus	T4019 <i>Machilus zuihoensis</i>	TAI WAN RUI FANG RUN NAN

The asterisk (\*) following a plant English name shows that the name is given by authors of the books.

# TCM Plant PIN-YIN/Chinese Name Index

PIN YIN Name	Chinese Name	English Name	Plant Code and Latin Name
A BI XI NI YA CI TONG	阿比西尼亚刺桐	Abyssinia Coralbean*	T2457 <i>Erythrina abyssinica</i>
A BI XI NI YA NIU JIN GUO	阿比西尼亚牛筋果*	Abyssinia Harrisonia*	T3108 <i>Harrisonia abyssinica</i>
A ER JI ER DA CHI JI	阿尔及尔大翅蓟	Algerian Cottonthistle*	T4496 <i>Onopordum algeriense</i>
A ER JI LI YA BU XUE CAO	阿尔及利亚补血草	Algerian Statice	T3841 <i>Limonium bonduellii</i>
A ER JI LI YA YUAN WEI	阿尔及利亚鸢尾	Algerian Iris	T3473 <i>Iris unguicularis</i>
A ER TAI YIN LIAN HUA	阿尔泰银莲花	Altai Anemone*	T0463 <i>Anemone altaica</i>
A ER TAI ZI WAN	阿尔泰紫菀	Altai Heteropappus	T3233 <i>Heteropappus altaicus</i>
A FU HAN DING XIANG	阿富汗丁香	Afghanistan Lilac*	T6258 <i>Syringa afghanica</i>
A FU HAN DU JUAN HUA	阿富汗杜鹃花	H.Collett's Rhododendron	T5507 <i>Rhododendron collettianum</i>
A FU HAN TANG JIE	阿富汗糖芥	Afghanistan Erysimum*	T2456 <i>Erysimum perofskianum</i>
A FU ZE ER MA QIAN ZI	阿弗泽尔马钱子	Afzel Poisonnut*	T6164 <i>Strychnos afzelii</i>
A FU ZE LI SHAN ZHU ZI	阿夫泽里山竹子*	Afzeli Garcinia*	T2849 <i>Garcinia afzelii</i>
A GEN TING SHANG LU	阿根廷商陆	Ombutree Pokeberry	T4862 <i>Phytolacca dioica</i>
A GEN TING SHU QU CAO	阿根廷鼠曲草	Argentine Cudweed*	T3027 <i>Gnaphalium gaudichaudianum</i>
A GU JI TIAN JIE CAI	阿古济天芥菜	Arguzioid Heliotrope*	T3168 <i>Heliotropium arguzioides</i>
A JIANG LAN REN	阿江榄仁		T6344 <i>Terminalia arjuna</i>
A KA XI A LAN REN	阿卡西阿榄仁	Acacia Terminalia*	T6349 <i>Terminalia stuhlmannii</i>
A LA BO JIAO JIN HE HUAN	阿拉伯胶金合欢	Gum-arabic Tree	T0028 <i>Acacia nilotica</i>
A LA BO JIN HE HUAN	阿拉伯金合欢	Arabian Acacia	T0016 <i>Acacia arabica</i>
A LA BO PO PO NA	阿拉伯婆婆纳	Iran Speedwell	T6727 <i>Veronica persica</i>
A LI HONG	阿里红	Fomes Officinalis Sporocarp	T2749 <i>Fomes officinalis</i>
A LI SHAN WU WEI ZI	阿里山五味子	Taiwan Magnoliavine	T5790 <i>Schisandra arisanensis</i>
A LU HA LIANG JIANG	阿陆哈良姜	Allugha Galangal*	T0352 <i>Alpinia allughas</i>
A LUN DUO QIE	阿伦多茄	Arundo Nightshade*	T5990 <i>Solanum arundo</i>
A MAN SU DAN MO YAO	阿曼苏丹没药	Sultanate-Oman Myrrhree*	T1639 <i>Commiphora wightii</i>
A NUO TI HUA JIAO	阿诺提花椒	Arnotti Pricklyash*	T6865 <i>Zanthoxylum arnottianum</i>
A SHI HAO	阿氏蒿*	Ashurbajev Wormwood*	T0665 <i>Artemisia ashurbajevii</i>
A SU JUE MING	阿苏决明	Absus Senna*	T1228 <i>Cassia absus</i>
A WEI	阿魏	Asafetida Giantfennel Resin	T2695 <i>Ferula assafoetida</i>
A YA PAN ZE LAN	阿亚潘泽兰	Ayapana Eupatorium*	T2552 <i>Eupatorium ayapana</i>
A YU WEI	阿育魏	Ajowan	T6488 <i>Trachyspermum ammi</i>
A YUE HUN ZI	阿月浑子	Common Pistache	T4982 <i>Pistacia vera</i>
AI DA HUANG	矮大黄	Low Rhubarb*	T5471 <i>Rheum nanum</i>
AI JI CHE ZHOU CAO	埃及车轴草	Egyptian Clover*	T6516 <i>Trifolium alexandrinum</i>
AI JI DA CHI JI	埃及大翅蓟	Egyptian Cottonthistle*	T4495 <i>Onopordum alexandrinum</i>
AI JI JIA HU CI	埃及假虎刺	Egyptian Carissa	T1207 <i>Carissa edulis</i>
AI JI QIAN LI GUANG	埃及千里光*	Egyptian Groundsel	T5876 <i>Senecio aegypticus</i>
AI JI SHU WEI CAO	埃及鼠尾草	Egyptian Sage*	T5659 <i>Salvia aegyptiaca</i>
AI JI TIAN JING	埃及田菁	Indian Sesbania	T5926 <i>Sesbania sesban</i>
AI JI ZAI PEI CI TONG	埃及栽培刺桐	Egypt Cultivate Coralbean*	T2469 <i>Erythrina lysistemon</i>
AI JI ZHONG ZHI YUAN WEI	埃及种植鸢尾	Egypt Planted Iris	T3455 <i>Iris carthaliniae</i>
AI JING DOU	矮荆豆	Dwarf Gorse	T6592 <i>Ulex nanus</i>

AI JU	艾菊	Tansy	T1400 <i>Chrysanthemum vulgare</i>
AI LAI MU	矮株木	Dwarf Cornel	T1699 <i>Cornus suecica</i>
AI LI SI DUO KONG JUN	爱丽思多孔菌	Ellisi Porous Agaric*	T5128 <i>Polyporus ellisii</i>
AI MA HUANG	矮麻黄	Small Ephedra	T2373 <i>Ephedra minuta</i>
AI NA XIANG	艾纳香	Balsamiferous Blumea	T0957 <i>Blumea balsamifera</i>
AI QIE	矮茄*	Dwarf Nightshade*	T5997 <i>Solanum demissum</i>
AI SAI E BI YA YU SHAN DOU	埃塞俄比亚羽扇豆	Narrowleaf Lupin*	T3940 <i>Lupinus angustifolius</i>
AI SAI E BI YA ZAO	埃塞俄比亚枣	Ethiopian Jujube*	T6921 <i>Zizyphus abyssinica</i>
AI SHENG BO LAN DI	矮生博兰地*		T0925 <i>Berlandiera pumila</i>
AI SHENG XIONG GUO	矮生熊果*	Low Bearberry*	T0587 <i>Arctostaphylos pumila</i>
AI SHENG YA CONG	矮生鸦葱	Viper's-glass	T5825 <i>Scorzonera humilis</i>
AI SHI BAI MU	艾氏柏木*	Abrams Cypress*	T1894 <i>Cupressus abramsiana</i>
AI SHI TIAN JIE CAI	艾氏天芥菜	Eichwald Heliotrope*	T3170 <i>Heliotropium eichwaldii</i>
AI SI XING CI TONG	爱思形刺桐*	S-shape Coralbean*	T2475 <i>Erythrina sigmoidea</i>
AI TONG ZI	矮桐子	Farges Glorybower*	T1564 <i>Clerodendron trichotomum</i> var. <i>fargesii</i>
AI WA JIN GU CAO	艾娃筋骨草*	Iva Bugle*	T0265 <i>Ajuga iwa</i>
AI XI SHOU SHI LI LU	埃希首氏藜芦	Eschscholtz Falsehellebore*	T6695 <i>Veratrum eschscholtzii</i>
AI XIANG RI KUI	矮向日葵	Dwarf Sunflower*	T3152 <i>Helianthus pumilus</i>
AI YE	艾叶	Argy Wormwood Leaf	T0664 <i>Artemisia argyi</i>
AI YE HUANG QIN	艾叶黄芩	Przewalsk Skullcap	T5842 <i>Scutellaria przewalskii</i>
AI ZI JIN NIU	矮紫金牛	Low Ardisia*	T0597 <i>Ardisia humilis</i>
AN BEI JU	安倍菊	Muricate Amberboa*	T0393 <i>Amberboa muricata</i>
AN CI BAI	岸刺柏	Shore Juniper	T3585 <i>Juniperus conferta</i>
AN GE LA BA JIAO FENG	安哥拉八角枫	Angola Alangium*	T0283 <i>Alangium lamarckii</i>
AN GE LA HUANG GUA	安哥拉黄瓜*	Angola Cucumber*	T1874 <i>Cucumis angolensis</i>
AN GE LA ZI TAN	安哥拉紫檀	Angola Padauk*	T5300 <i>Pterocarpus angolensis</i>
AN GU SI TU LA SHU	安古斯图腊树	Angostura-bark Tree	T2829 <i>Galipea officinalis</i>
AN HONG TUAN WANG JUN	暗红团网菌	Carnival Candy Slime	T0590 <i>Arcyria denudata</i>
AN HONG WEI LING CAI	暗红委陵菜*	Darksanguine Cinquefoil*	T5180 <i>Potentilla atrosanguinea</i>
AN HUANG ZHU SHI DOU	暗黄猪屎豆	Flavescent Crotalaria*	T1820 <i>Crotalaria fulva</i>
AN HUI BEI MU	安徽贝母	Anhui Fritillary	T2781 <i>Fritillaria anhuiensis</i>
AN HUI CONG MU	安徽槲木	Subcapitate Aralia	T0575 <i>Aralia subcapitata</i>
AN HUI YIN LIAN HUA	安徽银莲花*	Anhui Anemone*	T0464 <i>Anemone anhuiensis</i>
AN LU LONG SHE LAN	暗绿龙舌兰	Peyote	T3923 <i>Lophophora williamsii</i>
AN LUO	暗罗	Suberos Greenstar	T5068 <i>Polyalthia suberosa</i>
AN MO LE	庵摩勒	Emblic Leafflower	T4834 <i>Phyllanthus emblica</i>
AN SHI JIN SI TAO	安氏金丝桃	Ancher St.John'swort*	T3337 <i>Hypericum anchorii</i>
AN XI XIANG	安息香	Sumatra Snowbell	T6197 <i>Styrax benzoin</i>
AN YE	桉叶	Eucalyptus Leaf	T2510 <i>Eucalyptus globulus</i>
AN ZI BEI MU	暗紫贝母	Unibract Fritillary	T2796 <i>Fritillaria unibracteata</i>
AN ZI YU PAN	暗紫玉盘	Low Uvaria	T6660 <i>Uvaria chamae</i>
AN ZONG TAN TUAN JUN	暗棕碳团菌*		T3378 <i>Hypoxylon fuscum</i>
AO DA LI YA HONG DOU SHAN	澳大利亚红豆杉	Australia Yew	T0832 <i>Austrotaxus spicata</i>
AO DA LI YA QIAN JIN TENG	澳大利亚千金藤	Australia Stephania*	T6130 <i>Stephania japonica</i> var. <i>australis</i>
AO DA LI YA SANG	澳大利亚桑*	Japanese Mulberry	T4291 <i>Morus australis</i>
AO DA LI YA YAN DIAN	澳大利亚腰漩*		T0868 <i>Baptisia australis</i>
AO DAO LA MU HAI MANG GUO	奥道拉姆海杓果	Odollam Cerberustree*	T1331 <i>Cerbera odollam</i>
AO DI LI LIN MAO JUE	奥地利鳞毛蕨	Broad Buckler-fern	T2277 <i>Dryopteris austriaca</i>
AO ER JIA TIAN JIE CAI	奥尔加天芥菜	Olga Heliotrope*	T3176 <i>Heliotropium olgae</i>
AO LEI TONG QI MU	奥雷同椴木	Oregon Alder	T0329 <i>Alnus oregana</i>
AO LI FO HUANG TAN	奥利佛黄檀*	Oliver Rosewood*	T2009 <i>Dalbergia oliveri</i>
AO LIE GE LONG DAN	奥列格龙胆*	Olga Gentian*	T2923 <i>Gentiana olgae</i>
AO MA JIN QUE HUA	奥马金雀花	Osmarien Broom*	T1990 <i>Cytisus osmariensis</i>

AO MAI DING GONG TENG	凹脉丁公藤	Elliptical Erycibe	T2447 <i>Erycibe elliptilimba</i>
AO PA CAO	奥帕草		T4518 <i>Oppopanax chironium</i>
AO SHE LAN	凹舌兰	Frog Orchid	T1604 <i>Coeloglossum viride</i> [Syn. <i>Coeloglossum viride</i> var. <i>bracteatum</i> ]
			T2022 <i>Daniellia oliveri</i>
AO SHI DAN NI SU MU	奥氏丹尼苏木		T3341 <i>Hypericum aucheri</i>
AO SHI JIN SI TAO	奥氏金丝桃*	Aucher St.John'swort*	T2924 <i>Gentiana olivieri</i>
AO SHI LONG DAN	奥氏龙胆*	Olivier Gentian*	T5718 <i>Sapindus emarginatus</i>
AO TOU WU HUAN ZI	凹头无患子*	Emarginate Soapberry Seed	T0388 <i>Amaranthus lividus</i>
AO TOU XIAN	凹头苋	Emarginate Amaranth	T4353 <i>Myristica otoba</i>
AO TUO ROU DOU KOU	奥托肉豆蔻	Otoba Nutmeg*	T1712 <i>Corydalis cava</i>
AO XIAN ZI JIN	凹陷紫堇	Bulbous Corydalis	T4034 <i>Magnolia biloba</i>
AO YE HOU PO	凹叶厚朴	Twolobed Official Mangolia	T2030 <i>Daphne retusa</i>
AO YE RUI XIANG	凹叶瑞香	Retuseleaf Daphne	T3927 <i>Lotus australis</i>
AO ZHOU BAI MAI GEN	澳洲百脉根	Austral Bird's Foot Trefoil	T4011 <i>Macadamia ternifolia</i>
AO ZHOU JIAN GUO	澳洲坚果	Queensland Nut	T5991 <i>Solanum aviculare</i> [Syn. <i>Solanum laciniatum</i> ]
AO ZHOU QIE	澳洲茄	Australian Nightshade	T4866 <i>Phytolacca octandra</i>
		Octapistil Pokeweed*	T1830 <i>Crotalaria retusa</i>
AO ZHOU SHANG LU	澳洲商陆	Yellow-flowering Pea	T2344 <i>Embelia barbeyana</i>
AO ZHU SHI DOU	凹猪屎豆		T2061 <i>Delphinium barbeyi</i>
BA BEI SUAN TENG ZI	巴贝酸藤子	Barbey Larkspur*	T2223 <i>Diospyros mafiensis</i>
BA BI CUI QUE HUA	巴比翠雀花	Papua-New-Guinea Persimmon*	T5215 <i>Prunus amygdalus</i>
BA BU YA XIN JI NEI YA SHI	巴布亚新几内亚柿	Amygdalate Apricot Seed	T1858 <i>Croton tiglium</i>
BA DAN XING REN	巴旦杏仁	Purging Croton	T2903 <i>Gentiana bavarica</i>
BA DOU	巴豆	Bavarian Gentian	T4283 <i>Morinda officinalis</i>
BA FA LI YA LONG DAN	巴伐利亚龙胆	Medicinal Indianmulberry	T0281 <i>Alangium chinense</i>
BA JI TIAN	巴戟天	Chinese Alangium	T1532 <i>Clausena anisata</i>
BA JIAO FENG	八角枫	Octet Wampee*	T3409 <i>Illicium verum</i>
BA JIAO HUANG PI	八角黄皮	Star Anise	T3394 <i>Ilex paraguariensis</i>
BA JIAO HUI XIANG	八角茴香	Paraguay Tea	T0290 <i>Albizia adinocephala</i>
BA LA GUI CHA	巴拉圭茶	Panamanian Albizia*	T5410 <i>Randia formosa</i>
BA NA MA HE HUAN	巴拿马合欢	Taiwan Malabar Randia	T5976 <i>Smilax china</i> [Syn. <i>Smilax japonica</i> ]
BA NA MA SHAN SHI LIU	巴拿马山石榴*	Chinaroot Greenbrier	T2617 <i>Euphorbia royleana</i>
BA QIA	菝葜	Royle Euphorbia Latex	T2801 <i>Frullania brasiliensis</i>
BA WANG BIAN	霸王鞭	Brazilian Ear-leaf Muscus*	T1125 <i>Calophyllum brasiliense</i>
BA XI ER YE TAI	巴西耳叶苔	Brazilian Calaba	T5422 <i>Rauvolfia bahiensis</i>
BA XI HU TONG	巴西胡桐	Brazilian Devilpepper*	T0622 <i>Aristolochia chamissonis</i>
BA XI LUO FU MU	巴西萝芙木	Brazilian Dutchmanspipe*	T5881 <i>Senecio brasiliensis</i>
BA XI MA DOU LING	巴西马兜铃	Brazilian Groundsel*	T3562 <i>Joannesia princeps</i>
BA XI QIAN LI GUANG	巴西千里光	Brazilian Joan-wood*	T4775 <i>Pfaffia paniculata</i>
BA XI QIAO AN MU	巴西乔安木		T4677 <i>Paullinia cupana</i>
BA XI REN SHEN	巴西人参	Guarana	T0075 <i>Acnistus arborescens</i>
BA XI XIANG WU HUAN ZI	巴西香无患子	Brazilian Wild Tobacco; Marianeira	T2171 <i>Dictyota pfaffii</i>
BA XI YE YAN	巴西野烟	Brazilian Brown Alga <i>Dictyota pfaffii</i>	T2830 <i>Galium aparine</i>
BA XI ZONG ZAO	巴西棕藻*	Catchweed Bedstraw	T3304 <i>Hydrangea macrophylla</i>
BA XIAN CAO	八仙草	Largeleaf Hydrangea	T2301 <i>Dysosma majorensis</i> [Syn. <i>Podophyllum majorensis</i> ; <i>Dysosma lichuanensis</i> ]
BA XIAN HUA	八仙花	White Dysosma*	T4080 <i>Mallotus apelta</i>
BAI BA JIAO LIAN	白八角莲		T6115 <i>Stemona tuberosa</i>
		Whitebackleaf Mallotus	T0142 <i>Acorus calamus</i>
BAI BEI YE	白背叶	Tuber Stemona	T4436 <i>Nitraria tangutorum</i>
BAI BU	百部(对叶百部)	Drug Sweetflag	
BAI CHANG	白菖	Nitraria*	
BAI CI	白刺		

BAI CI GUO TUN CAO	白刺果豚草	White Bur Sage	T0401 <i>Ambrosia dumosa</i>
BAI CI HUA	白刺花	Vetchleaf Sophora	T6046 <i>Sophora viciifolia</i>
BAI CI HUA GEN	白刺花根	Vetchleaf Sophora Root	T6047 <i>Sophora viciifolia</i>
BAI CI HUA YE	白刺花叶	Vetchleaf Sophora Leaf	T6048 <i>Sophora viciifolia</i>
BAI CI HUA ZI	白刺花籽	Vetchleaf Sophora Seed	T6049 <i>Sophora viciifolia</i>
BAI DIAN FENG CHE ZI	白点风车子*	White-punctated Combretum*	T1630 <i>Combretum albopunctatum</i>
BAI DOU KOU	白豆蔻	Round Cardamom	T0416 <i>Amomum kravanh</i> [Syn. <i>Amomum cardamomum</i> ]
BAI DUAN	白殿	White Linden*	T6456 <i>Tilia alburnum</i>
BAI E GAO	白鹅膏	Goose Fat	T0516 <i>Anser cygnoides domestica</i>
BAI FAN DOU	白饭豆	Kidney Bean	T4785 <i>Phaseolus vulgaris</i>
BAI GOU TENG	白钩藤	White Gambirplant	T6632 <i>Uncaria sessilifructus</i> [Syn. <i>Nauclea sessilifructus</i> ]
BAI GUI BI	白鬼笔	Stinking Polecat, Wood Witch	T4778 <i>Phallus impudicus</i>
BAI GUO	白果	Ginkgo Nut	T2961 <i>Ginkgo biloba</i>
BAI GUO GEN	白果根	Ginkgo Root	T2962 <i>Ginkgo biloba</i>
BAI GUO SHU PI	白果树皮	Ginkgo Bark	T2963 <i>Ginkgo biloba</i>
BAI GUO YE	白果叶(银杏叶)	Ginkgo Leaf	T2964 <i>Ginkgo biloba</i>
BAI GUO ZI CAO	白果紫草	Common Gromwell	T3882 <i>Lithospermum officinale</i>
BAI HAO	白蒿	Sievers Wormwood	T0696 <i>Artemisia sieversiana</i>
BAI HE	百合	Greenish Lily	T3832 <i>Lilium brownii</i> var. <i>viridulum</i> [Syn. <i>Lilium brownii</i> var. <i>colchesteri</i> ]
BAI HE LING ZHI	白鹤灵芝	Bignose Rhiancanthus	T5483 <i>Rhinacanthus nasutus</i>
BAI HOU WU TOU	白喉乌头	Whitethroat Monkshood	T0111 <i>Aconitum leucostomum</i>
BAI HUA CAI ZI	白花菜籽	Common Spiderflower Seed	T1550 <i>Cleome gynandra</i> [Syn. <i>Gynandropsis gynandra</i> ]
BAI HUA DAN	白花丹	Whiteflower Leadword	T5029 <i>Plumbago zeylanica</i>
BAI HUA DAN SHEN	白花丹参	Whiteflower Danshen	T5681 <i>Salvia miltiorrhiza</i> f. <i>alba</i>
BAI HUA FENG DOU CAI	白花蜂斗菜	White-flowerButterbur*	T4738 <i>Petasites albus</i>
BAI HUA JUE CHUANG	白花爵床	Whiteflower Rostellularia	T3609 <i>Justicia procumbens</i> var. <i>leucantha</i>
BAI HUA LONG DAN	白花龙胆	Alpine Gentian	T2902 <i>Gentiana algida</i>
BAI HUA QIAN HU	白花前胡	Whiteflower Hogfennel	T4768 <i>Peucedanum praeruptorum</i>
BAI HUA SHE GAN	白花射干	Vesper Iris	T3457 <i>Iris dichotoma</i>
BAI HUA SHE SHE CAO	白花蛇舌草	Spreading Hedyotis	T4485 <i>Oldenlandia diffusa</i> [Syn. <i>Hedyotis diffusa</i> ]
BAI HUA TENG	白花藤	Threeflower Clematis	T1547 <i>Clematis terniflora</i> [Syn. <i>Clematis maximowicziana</i> ]
BAI HUA XIA ZHI CAO	白花夏至草	Whiteflower Lagopsis	T4112 <i>Marrubium supinum</i> [Syn. <i>Lagopsis supina</i> ]
BAI HUA YING SHAN HONG	白花映山红	Snow Azalea	T5518 <i>Rhododendron mucronatum</i>
BAI HUA YING SU	白花罂粟	White Poppy*	T4620 <i>Papaver album</i>
BAI HUA YOU MA TENG	白花油麻藤	Whiteflower Mucuna	T4308 <i>Mucuna birdwoodiana</i>
BAI JI	白芨	Common Bletilla	T0955 <i>Bletilla striata</i>
BAI JIAN MU	白坚木	Campus-belu Aspidosperma	T0761 <i>Aspidosperma campus-belus</i>
BAI JIANG	败酱(白花败酱)	Whiteflower Patrinia	T4676 <i>Patrinia villosa</i>
BAI JIANG CAN	白僵蚕	Silkworm Larva	T0975 <i>Bombyx mori</i>
BAI JIANG JUN	白僵菌		T0887 <i>Beauveria bassiana</i>
BAI JIE ZI	白芥子	White Mustard Seed	T5958 <i>Sinapis alba</i> [Syn. <i>Brassica alba</i> ; <i>Brassica hirta</i> ]
BAI LA SHU	白蜡树	Chinese Ash Bark	T2767 <i>Fraxinus chinensis</i>
BAI LAI SHI JU	白菜氏菊	Bailai's Chrysanthemum	T0854 <i>Baileya multiradiata</i>
BAI LAN HUA	白兰花	Bailan Flower	T4209 <i>Michelia alba</i>
BAI LI LU	白藜芦	White Falsehellebore	T6692 <i>Veratrum album</i>

BAI LI XIANG	百里香	Breckland Thyme	T6452 <i>Thymus serpyllum</i>
BAI LI XIANG YE CHUN XIN LIAN	百里香叶穿心莲*	Andrographis*	T0459 <i>Andrographis serpyllifolia</i>
BAI LI XIANG YE MA SANG	百里香叶马桑	Thymeleaf Coriaria*	T1695 <i>Coriaria thymifolia</i>
BAI LIAN	白蔹	Japanese Ampelopsis	T0427 <i>Ampelopsis japonica</i> [Syn. <i>Paullinia japonica</i> ]
BAI LIANG JIN	百两金	Crispateleaf Ardisia	T0595 <i>Ardisia crispa</i>
BAI MAO GEN <sup>(1)</sup>	白茅根	Lalang Grass Rhizome	T3416 <i>Imperata cylindrica</i> var. <i>major</i>
BAI MAO GEN <sup>(4)</sup>	白毛茛	Golden-seal	T3309 <i>Hydrastis canadensis</i>
BAI MAO TENG	白毛藤	Bittersweet	T6005 <i>Solanum lyratum</i>
BAI MAO XIA KU CAO	白毛夏枯草	Decumbent Bugle	T0263 <i>Ajuga decumbens</i>
BAI MAO ZI ZHU	白毛紫珠	Whitehairy Beautyberry	T1117 <i>Callicarpa candicans</i>
BAI MEI HUA	白梅花	Japanese Apricot Flower	T5226 <i>Prunus mume</i>
BAI MU TONG	白木通	Austral Akebia	T0279 <i>Akebia trifoliata</i> var. <i>australis</i>
BAI MU TONG GEN	白木通根	Austral Akebia Root	T0280 <i>Akebia trifoliata</i> var. <i>australis</i>
BAI MU WU JIU	白木乌柏	Japanese Sapium	T5722 <i>Sapium japonicum</i>
BAI MU XIANG	白木香	Chinese Eaglewood	T0555 <i>Aquilaria sinensis</i>
BAI NIU XI	白牛膝	Berry-bearing Campion	T1871 <i>Cucubalus baccifer</i>
BAI PI SONG	白皮松	Lacebark Pine	T4908 <i>Pinus bungeana</i>
BAI QIAN CENG	白千层	Cajeput-tree	T4154 <i>Melaleuca leucadendra</i>
BAI QU CAI	白屈菜	Greater Celandine	T1357 <i>Chelidonium majus</i>
BAI RI CAO	百日草	Youth-and-old-age	T6912 <i>Zinnia elegans</i>
BAI RI QING	百日青	Thitmin	T5048 <i>Podocarpus neriifolius</i>
BAI ROU MAO XIANG CHA CAI	白柔毛香茶菜	Whitepilose Rabdosia	T3478 <i>Isodon albopilosus</i>
BAI RUI CAO	百蕊草	Chinese Bastardtoadflax	T6431 <i>Thesium chinense</i>
BAI SAN MO HUA	白散沫花*	White Henna*	T3731 <i>Lawsonia alba</i>
BAI SE BAI XIAN	白色白鲜*	Burning Bush	T2164 <i>Dictamnus albus</i>
BAI SHAO	白芍	Common Peony	T4580 <i>Paeonia albiflora</i> [Syn. <i>Paeonia lactiflora</i> ]
BAI SHOU SHEN	白手参*	European Gymnadenia	T3076 <i>Gymnadenia albida</i>
BAI SHOU WU	白首乌	Bunge Swallowwort	T1953 <i>Cynanchum bungei</i>
BAI SHU LANG	白薯茛	Hispid Yam	T2200 <i>Dioscorea hispida</i>
BAI SHU YE	柏树叶	Chinese Weeping Cypress Leaf	T1896 <i>Cupressus funebris</i>
BAI SHUI XIAN	白水仙	Paper-white Narcissus	T4377 <i>Narcissus papyraceus</i>
BAI SU YE	白苏叶	Common Perilla Leaf	T4714 <i>Perilla frutescens</i>
BAI SU ZI	白苏子	Common Perilla Fruit	T4715 <i>Perilla frutescens</i>
BAI SUI YE	百岁叶	Longlived Leaf	T6816 <i>Welwitschia mirabilis</i>
BAI TA GE	白塔蛤		T5772 <i>Saxidomus giganteus</i>
BAI TOU WENG	白头翁	Chinese Pulsatilla	T5325 <i>Pulsatilla chinensis</i>
BAI WEI	白薇	Blackend Swallowwort	T1951 <i>Cynanchum atratum</i>
BAI XIAN PI	白鲜皮	Densefruit Pittany Root-bark	T2167 <i>Dictamnus dasycarpus</i>
BAI XIAN SHU	白线薯	Shortstamen Stephania*	T6118 <i>Stephania brachyandra</i>
BAI XIANG CAO MU XI	白香草木犀	White Sweetclover	T4170 <i>Melilotus albus</i>
BAI XIE GEN	白泻根	White Bryony	T1042 <i>Bryonia alba</i>
BAI XUE GUO MU	白雪果木		T1367 <i>Chiococca alba</i>
BAI YA MA	白亚麻	White Flax	T3858 <i>Linum album</i>
BAI YAN TENG	百眼藤	Littleleaf Indianmulberry	T4284 <i>Morinda parvifolia</i>
BAI YAO ZI	白药子	Oriental Stephania	T6119 <i>Stephania cepharantha</i>
BAI YE GUA FU MU	白叶瓜馥木	Glaucous Fissistigma	T2734 <i>Fissistigma glaucescens</i> [Syn. <i>Melodorum glaucescens</i> ]
BAI YE JING JIE	白叶荆芥	Whiteleaf Nepeta	T4416 <i>Nepeta leucophylla</i>
BAI YE MI ZI LAN	白叶米仔兰	Whiteleaf Aglaia*	T0239 <i>Aglaia leucophylla</i>
BAI YE TENG	白叶藤	Chinese Cryptolepis	T1866 <i>Cryptolepis sinensis</i>
BAI YE XIANG CHA CAI	白叶香茶菜	Whiteleaf Rabdosia*	T3503 <i>Isodon leucophyllus</i>

BAI YOU	白柚	White Pummelo*	T1482 <i>Citrus grandis</i> f. <i>hakunikuju</i>
BAI YU SHAN DOU	白羽扇豆	White Lupin	T3939 <i>Lupinus albus</i>
BAI YUN HUA	白云花	White Cowparsnip*	T3221 <i>Heracleum rapula</i>
BAI ZHI	白芷	Dahurian Angelica	T0478 <i>Angelica dahurica</i> [Syn. <i>Angelica porphyrocaulis</i> ]
BAI ZHI MA	白芝麻	Oriental Sesame (white seed)	T5925 <i>Sesamum indicum</i> [Syn. <i>Sesamum orientale</i> ]
BAI ZHU	白术	Largehead Atractylodes	T0824 <i>Atractylodes macrocephala</i> [Syn. <i>Atractylis macrocephala</i> ]
BAI ZHU SHU	白珠树	Common Gaultheria	T2893 <i>Gaultheria leucocarpa</i> var. <i>cumingiana</i>
BAI ZI REN	柏子仁	Chinese Arborvitae Kernel*	T0944 <i>Biota orientalis</i> [Syn. <i>Thuja orientalis</i> ; <i>Platycladus orientalis</i> ]
BAN BIAN LIAN	半边莲	Chinese Lobelia	T3898 <i>Lobelia chinensis</i> [Syn. <i>Lobelia radicans</i> ]
BAN BIAN LIAN ZHUANG LI LU	半边莲状藜芦	Lobelia Falsehellebore*	T6693 <i>Veratrum album</i> var. <i>lobelianum</i> [Syn. <i>Veratrum lobelianum</i> ]
BAN BIAN SU	半边苏	Common Elsholtzia	T2341 <i>Elsholtzia ciliata</i>
BAN DI JIN	斑地锦	American Euphorbia	T2600 <i>Euphorbia maculata</i>
BAN DIAN XIAO QIU QIANG JUN	斑点小球腔菌*		T3768 <i>Leptosphaeria maculans</i>
BAN GUAN MU MU JU	半灌木母菊	Semi-frutex Mayweed*	T4125 <i>Matricaria suffruticosa</i>
BAN HUA WU TOU	斑花乌头	Manchurian Monkshood	T0139 <i>Aconitum variegatum</i>
BAN JIU	斑鸠	Rufous Turtle Dove	T6150 <i>Streptopelia orientalis</i>
BAN JIU JU	斑鸠菊	Edible Bitterleaf	T6716 <i>Vernonia esculenta</i>
BAN JU CHI ZHUANG ZE LAN	半锯齿状泽兰	Semiserration Eupatorium*	T2574 <i>Eupatorium semiserratum</i>
BAN KE HU JIAO	斑克胡椒	Bank Pepper*	T4935 <i>Piper banksii</i>
BAN LAN GEN	板蓝根	Indigowoad Root	T3475 <i>Isatis indigotica</i>
BAN LI	板栗	Chinese Chestnut	T1254 <i>Castanea mollissima</i>
BAN MAO	斑蝥	Blister Beetle	T4338 <i>Mylabris phalerata</i> ; <i>Mylabris cichorii</i>
BAN PI AN	半皮桉	Hemihull Eucalyptus*	T2512 <i>Eucalyptus hemiphloia</i>
BAN RUI TANG SONG CAO	瓣蕊唐松草	Petalformed Meadowrue	T6403 <i>Thalictrum petaloideum</i>
BAN WEN AN	斑纹桉*	Spotted Gum	T2514 <i>Eucalyptus maculata</i>
BAN WEN LU HUI	斑纹芦荟	Chinese Aloe Dried Juice	T0348 <i>Aloe vera</i> var. <i>chinensis</i>
BAN XIA	半夏	Ternate Pinellia	T4904 <i>Pinellia ternata</i>
BAN YE DI JIN	斑叶地锦	Spottedleaf Euphorbia	T2622 <i>Euphorbia supina</i>
BAN YE PING PENG CAO	斑叶萍蓬草	Variiegated Cowwily	T4451 <i>Nuphar variegatum</i>
BAN YUAN	班蟪	Mudpuppy	T4395 <i>Necturus maculosus</i>
BAN YUE XING TIE XIAN JUE	半月形铁线蕨	Philippine Maidenhair*	T0173 <i>Adiantum lunulatum</i>
BAN ZHEN ZHONG HUA SHU	斑疹钟花树		T6270 <i>Tabebuia impetiginosa</i>
BAN ZHI LIAN	半枝莲	Barbed Skullcap	T5835 <i>Scutellaria barbata</i> [Syn. <i>Scutellaria rivularis</i> ]
BAN ZI MA HUANG	斑孑麻黄	Scalyseed Ephedra	T2371 <i>Ephedra lepidosperma</i>
BAN ZI MU	斑籽木	Montane Baliospermum	T0861 <i>Baliospermum montanum</i>
BANG BING BEI SAN	棒柄杯伞	Ffat-footed Clitocybe	T1576 <i>Clitocybe clavipes</i>
BANG YE JUE ZAO	棒叶蕨藻	Howe	T1272 <i>Caulerpa setularioides</i>
BANG ZHUANG ZI JIN	棒状紫堇	Climbing Corydalis	T1714 <i>Corydalis claviculata</i>
BAO BAN E GAO	豹斑鹅膏	Leopard Leather Mushroom*; Tengutake (in Japanese)	T0384 <i>Amanita pantherina</i>
BAO CHUN HUA	报春花	Fairy Primrose	T5199 <i>Primula malacoides</i>
BAO CHUN SHI HU	报春石斛	Primrose Denrdobium	T2109 <i>Dendrobium primulinum</i>
BAO E ZHANG YA CAI	苞萼獐牙菜	Calycin Swertia	T6213 <i>Swertia calycina</i>
BAO GAI CAO	宝盖草	Henbit Deadnettle	T3680 <i>Lamium amplexicaule</i>
BAO GAI LING ZHI	宝盖灵芝	Cape Ganoderma	T2845 <i>Ganoderma capense</i>

BAO JING KU MAI CAI	抱茎苦苣菜	Sowthistle-leaf Ixeris	T3548 <i>Ixeris sonchifolia</i>
BAO JING TIAN JIE CAI	抱茎天芥菜*	Clasping Heliotrope	T3167 <i>Heliotropium amplexicaule</i>
BAO JING ZHANG YA CAI	抱茎獐牙菜	Amplexicaul Swertia	T6221 <i>Swertia franchetiana</i>
BAO MA ZI	暴马子	Amur Lilac	T6259 <i>Syringa amurensis</i> [Syn. <i>Syringa reticulata</i> var. <i>amurensis</i> ]
BAO MO HUI MAO DOU	包膜灰毛豆*	Tunicate Tephrosia*	T6342 <i>Tephrosia tunicata</i>
BAO PI GU	豹皮菇	Pardleather-like Mushroom	T3743 <i>Lentinus lepideus</i>
BAO PIAN SHI CHE JU	苞片矢车菊*	Bracteole Centaurea*	T1304 <i>Centaurea bracteata</i>
BAO PIAN SHU WEI CAO	苞片鼠尾草		T5662 <i>Salvia bracteata</i>
BAO PIAN TU LA SHU	苞片图腊树	Bracteole Galipea*	T2827 <i>Galipea bracteata</i>
BAO RUI SHAN YOU GAN	包瑞山油柑	Bauer Acronychia	T0148 <i>Acronychia baueri</i>
BAO SHAN WU TOU	保山乌头	Paoshan Monkshood	T0080 <i>Aconitum bullatifolium</i> var. <i>homotrichum</i> [Syn. <i>Aconitum nagarum</i> ]
BAO SHAN YOU GAN	包山油柑	Vested Acronychia*	T0153 <i>Acronychia vestita</i>
BAO SHI FEI YAN CAO	包氏飞燕草	Brown Larkspur*	T2063 <i>Delphinium brownii</i>
BAO XING WEI MAO	宝兴卫矛	Paohsing Euonymus	T2543 <i>Euonymus mupinensis</i>
BAO YE XIANG CHA CAI	苞叶香茶菜	Bractleaf Rabdosia	T3515 <i>Isodon melissoides</i>
BAO ZI GAN LAN	抱子甘蓝	Brussels Sprout	T1018 <i>Brassica oleracea</i> var. <i>gemmifera</i>
BEI AI	北艾	Mugwort	T0706 <i>Artemisia vulgaris</i>
BEI CANG ZHU	北苍术	Chinese Atractylodes	T0819 <i>Atractylodes chinensis</i>
BEI CE JIN ZHAN HUA	北侧金盏花	Siberian Adonis	T0188 <i>Adonis sibirica</i>
BEI FANG DANG GUI	北方当归*	Northern Angelica*	T0499 <i>Angelica ursina</i>
BEI FANG GOU QI GEN PI	北方枸杞根皮	Northern Wolfberry Root-bark*	T3959 <i>Lycium chinense</i> var. <i>potaninii</i>
BEI FANG WU TOU	北方乌头	Northern Monkshood*	T0129 <i>Aconitum septentrionale</i>
BEI FEI XUE SONG	北非雪松	Atlas Cedar	T1281 <i>Cedrus atlantica</i>
BEI FEN NAI AO LE MU	被粉奈奥勒姆		T1579 <i>Cneorum pulverulentum</i>
BEI HAI DANG GUI	北海当归	Northsea Angelica*	T0475 <i>Angelica acutiloba</i> var. <i>sugiyamae</i>
BEI HAI XIAN TAI CHONG	北海鲜苔虫	North Sea Bryozoon	T2742 <i>Flustra foliacea</i>
BEI HUANG HUA CAI	北黄花菜	Yellow Daylily	T3195 <i>Hemerocallis lilio-asphodelus</i>
BEI JIA ER TANG SONG CAO	贝加尔唐松草	Baikal Meadowrue	T6375 <i>Thalictrum baicalense</i>
BEI JING SHI WEI	北京石韦	Peking Pyrrosia Frond	T5354 <i>Pyrrosia davidii</i>
BEI JING YANG	北京杨	Beijing Poplar	T5148 <i>Populus beijingensis</i>
BEI KE SHAN	贝壳杉	Amboina Pitch Tree	T0213 <i>Agathis dammara</i>
BEI LI LU HUI	贝利芦荟*	Bally Aloe*	T0335 <i>Aloe ballyi</i>
BEI MA DOU LING	北马兜铃	Northern Dutchmanspipe	T0624 <i>Aristolochia contorta</i>
BEI MA DOU LING GEN	北马兜铃根	Northern Dutchmanspipe Root	T0625 <i>Aristolochia contorta</i>
BEI MEI AI HAO	北美矮蒿	Low Sagebrush	T0663 <i>Artemisia arbuscula</i>
BEI MEI E ZHANG QIU	北美鹅掌楸	Yellow Poplar	T3871 <i>Liriodendron tulipifera</i>
BEI MEI HONG SHAN	北美红杉	Redwood	T5918 <i>Sequoia sempervirens</i>
BEI MEI QIU ZI JUE	北美球子蕨	Bead Fern, Sensitive Fern	T4492 <i>Onoclea sensibilis</i>
BEI MEI TING LI ZI	北美葶苈子	Virginia Pepperweed Seed	T3759 <i>Lepidium virginicum</i>
BEI MEI XIANG BAI	北美香柏	Western Arborvitae	T6441 <i>Thuja plicata</i>
BEI MEI YA BAI	北美崖柏	Eastern Arborvitae	T6438 <i>Thuja occidentalis</i>
BEI MEI YUAN BAI	北美圆柏	Red Cedar	T3603 <i>Juniperus virginiana</i>
BEI MEI ZHOU SHAN GENG CAI	北美洲山梗菜	Indian Tobacco	T3900 <i>Lobelia inflata</i>
BEI MU LAN	贝母兰	Common Coelogyne	T1606 <i>Coelogyne ovalis</i>
BEI QIAO SHI HU	杯鞘石斛	Muchlovable Denrdobium	T2104 <i>Dendrobium gratiosissimum</i>
BEI SHA SHEN	北沙参	Coastal Glehnia	T2983 <i>Glehnia littoralis</i>
BEI SHI SHAN CHENG	贝氏山橙*	Balansa Melodinus*	T4176 <i>Melodinus balansae</i>
BEI SHUI KU MAI	北水苦苣	Watery Speedwell	T6722 <i>Veronica anagallis-aquatica</i>
BEI WU TOU	北乌头(草乌)	Kusnezoff Monkshood	T0108 <i>Aconitum kusnezoffii</i>
BEI XUAN SHEN	北玄参	Buerger Figwort	T5826 <i>Scrophularia buergeriana</i>
BEI YE JU	北野菊	Boreal Wild Chrysanthemum	T1387 <i>Chrysanthemum boreale</i>



BEI YUE GOU TENG	北越钩藤	North Viet-Nam Gambirplant	T6618 <i>Uncaria homomalla</i> [Syn. <i>Uruparia homomalla</i> ; <i>Uruparia tonkinensis</i> ; <i>Uruparia lanosa</i> var. <i>parvifora</i> ]
BEI ZI JIN	北紫堇	Siberian Corydalis	T1742 <i>Corydalis sibirica</i>
BENG GE YUAN WEI	崩格鸢尾*	Bunge Iris*	T3454 <i>Iris bungei</i>
BI BA	荜茇	Long Pepper	T4953 <i>Piper longum</i>
BI BA GEN	荜茇根	Long Pepper Root	T4954 <i>Piper longum</i>
BI CHENG QIE	荜澄茄	Cubeba Pepper	T4944 <i>Piper cubeba</i>
BI CHI YAN ZI CAI	蓖齿眼子菜	Fennelleaf Pondweed	T5177 <i>Potamogeton pectinatus</i>
BI CHUAN JIU JIE MU	比川九节木		T5274 <i>Psychotria beccaroides</i>
BI DONG QIE	碧冬茄	Common Petunia	T4751 <i>Petunia hybrida</i>
BI LI	薜荔	Climbing Fig	T2723 <i>Ficus pumila</i>
BI LIN BA JIAO LIAN	毗鳞八角莲	Furfuraceous Many-flowered May-apple*	T2299 <i>Dyosma furfuracea</i>
BI LU GOU TENG	秘鲁钩藤*	Uña de Gato (Cat's Claw)	T6637 <i>Uncaria tomentosa</i>
BI LU GU KE	秘魯古柯	Peru Coca Shrub	T2492 <i>Erythroxylum novogranatense</i>
BI LU MIAN ZAO ER	秘魯绵枣儿	Peru Squill*	T5812 <i>Scilla peruviana</i>
BI LU XIANG JIAO	秘魯香胶	Peru Balmtree Resin	T4358 <i>Myroxylon pereirae</i>
BI LU ZHI XIAO BO	俾路支小檗	Baluchistan Barberry	T0898 <i>Berberis baluchistanica</i>
BI MA GEN	蓖麻根	Castorbean Root	T5547 <i>Ricinus communis</i>
BI MA YE	蓖麻叶	Castorbean Leaf	T5548 <i>Ricinus communis</i>
BI MA YOU	蓖麻油	Castorbean Oil	T5549 <i>Ricinus communis</i>
BI MA ZI	蓖麻子	Castorbean Seed	T5550 <i>Ricinus communis</i>
BI SHENG LI	壁生藜*	Mural Goosefoot*	T1364 <i>Chenopodium murale</i>
BI SHI DUI XIN JU	比氏堆心菊*	Bigelov Sneezeweed*	T3136 <i>Helenium bigelovii</i>
BI SHI LUO FU MU	比氏萝芙木*	Beddome Devilpepper	T5429 <i>Rauwolfia beddomei</i>
BI XIE	草薺粉草薺)	Hypoglauous Collett Yam	T2201 <i>Dioscorea hypoglauca</i> [Syn. <i>Dioscorea colletii</i> var. <i>hypoglauca</i> ]
BI ZHI TANG SONG CAO	笔直唐松草*	Strict Meadowrue*	T6413 <i>Thalictrum strictum</i>
BI ZI CU FEI	篦子粗榧	Oliver Plumyew	T1322 <i>Cephalotaxus oliveri</i>
BIAN BAI MA LI JIN	变白马利筋	White Milkweed	T0735 <i>Asclepias albicans</i>
BIAN BAO LIN MAO JUE	边孢鳞毛蕨	Evergreen Wood Fern	T2283 <i>Dryopteris marginalis</i>
BIAN BING HUANG JIN	扁柄黄堇	Flatstiped Corydalis	T1727 <i>Corydalis mucronifera</i>
BIAN DA XIU QIU	鞭打绣球	Diversifolious Hemiphragma	T3201 <i>Hemiphragma heterophyllum</i>
BIAN DI JIN	遍地金	Wight's St.John'swort	T3368 <i>Hypericum wightianum</i>
BIAN DOU	扁豆	Hyacinth Dolichos Seed	T2246 <i>Dolichos lablab</i>
BIAN DOU	扁豆	Niger Bean*	T3647 <i>Lablab niger</i>
BIAN DOU CAI YE BAI JIANG	变豆菜叶败酱*	Korea Patrinia*	T4671 <i>Patrinia saniculaefolia</i>
BIAN FU GE	蝙蝠葛	Asiatic Moonseed	T4182 <i>Menispermum dauricum</i>
BIAN FU GE GEN	蝙蝠葛根	Asiatic Moonseed Root	T4183 <i>Menispermum dauricum</i>
BIAN GUO JIAO GU LAN	扁果绞股蓝	Flatfruit Gynostemma	T3083 <i>Gynostemma compressum</i>
BIAN JIA SHAN LI DOU	扁荚山豇豆	Dwarf Chickling Pea	T3703 <i>Lathyrus cicera</i>
BIAN JING HUANG QI	扁茎黄芪	Flatstem Milkvetch	T0793 <i>Astragalus complanatus</i>
BIAN JING YAN JIE CAO	扁茎沿阶草	Flatstem Lilyturf*	T4508 <i>Ophiopogon planiscapus</i>
BIAN PING JU	扁平桔	Depressed Orange	T1475 <i>Citrus depressa</i>
BIAN SE HE KE BAO	变色裸壳孢*		T2354 <i>Emericella varicolor</i>
BIAN SE MA DOU LING	变色马兜铃	Versicolorous Dutchmanspipe	T0643 <i>Aristolochia versicolor</i>
BIAN SE SHI ZHU	变色石竹	Versicolorous Pink	T2147 <i>Dianthus versicolor</i>
BIAN SHUO TENG	扁蒴藤	Indian Pristimera	T5208 <i>Pristimera indica</i>
BIAN TAI	鞭苔	Flagelliform Liverwort*	T0885 <i>Bazzania trilobata</i>
BIAN TAO	扁桃	Peachform Mango	T4103 <i>Mangifera persiciformis</i>
BIAN TAO ZHUANG BAN JIU JU	扁桃状斑鸠菊	Bitterleaf	T6712 <i>Vernonia amygdalina</i>
BIAN XING MU LAN	变形木兰*	Mutable Magnolia*	T4043 <i>Magnolia mutabilis</i>

BIAN XU	篇蓄	Common Knotgrass	T5098 <i>Polygonum aviculare</i>
BIAN YE TIE XIAN JUE	鞭叶铁线蕨	Walking Maidenhair	T0172 <i>Adiantum caudatum</i>
BIAN YI FENG WEI JUE	变异凤尾蕨	Unequal Brake	T5291 <i>Pteris inaequalis</i>
BIAN YUAN BIAN E TAI	边缘扁萁苔*		T5403 <i>Radula marginata</i>
BIAN YUAN LIN GAI JUE	边缘鳞盖蕨	Marginate Microlepia	T4219 <i>Microlepia marginata</i>
BIAN YUAN LIN MAO JUE	边缘鳞毛蕨	Marginated Buckler-fern*	T2284 <i>Dryopteris marginata</i>
BIAN ZHI HU JI SHENG	扁枝槲寄生	Flatshort Mistletoe	T6773 <i>Viscum articulatum</i>
BIAN ZHONG CHANG YE AN LUO	变种长叶暗罗	Indian Greenstar Variety*	T5066 <i>Polyalthia longifolia</i> var. <i>pendula</i>
BIAN ZHONG JIAN HUAI TENG	变种尖槐藤*	Edible Oxystelma Variety*	T4566 <i>Oxystelma esculentum</i> var. <i>alpini</i>
BIAN ZHU TANG SONG CAO	鞭柱唐松草	Smith Meadowrue	T6410 <i>Thalictrum smithii</i>
BIN HAI DANG GUI	滨海当归	Seashore Angelica*	T0486 <i>Angelica keiskei</i>
BIN HAI QIAN HU	滨海前胡	Japan Hogfennel	T4760 <i>Peucedanum japonicum</i>
BIN HAO	滨蒿	Santonica	T0683 <i>Artemisia maritima</i>
BIN MU JING	滨牡荆	Littoral Chastetree*	T6784 <i>Vitex littoralis</i>
BIN XI FA NI YA CANG ER	宾夕法尼亚苍耳*	Pennsylvanian Cocklebur*	T6841 <i>Xanthium pennsylvanicum</i>
BING CHI XIAN	并齿蕨		T6358 <i>Tetraplodon mnioides</i> [Syn. <i>Tetraplodon bryoides</i> ; <i>Splachnum mnioides</i> ]
BING DAO YI	冰岛衣	Iceland Moss	T1341 <i>Cetraria islandica</i>
BING DOU	兵豆	Common Lentil	T3741 <i>Lens culinaris</i>
BING GUO HU JI SHENG	柄果槲寄生	Stipefruit Mistletoe	T6777 <i>Viscum multinerve</i>
BING GUO HUA JIAO	柄果花椒	Stalkedfruit Pricklyash	T6889 <i>Zanthoxylum podocarpum</i>
BING GUO TANG SONG CAO	柄果唐松草	Stalkedfruit Meadowrue*	T6404 <i>Thalictrum podocarpum</i>
BING HUA JU	柄花菊		T5035 <i>Podanthus ovatifolius</i>
BING LANG	槟榔	Betenutpalm	T0606 <i>Areca catechu</i>
BING PIAN	冰片	Borneol	T2274 <i>Dryobalanops aromatica</i>
BING SHE CHUANG	滨蛇床	Japanese Cnidium	T1581 <i>Cnidium japonicum</i>
BING TOU CAO	并头草	Galericulate Skullcap	T5838 <i>Scutellaria galericulata</i>
BING TOU HUANG QIN	并头黄芩	Twinflower Skullcap	T5844 <i>Scutellaria scordifolia</i>
BING YE SUO LUO	柄叶桫欏*		T6856 <i>Yathea podophylla</i>
BO AI DA JI	孛艾大戟	Petty Euphorbia	T2609 <i>Euphorbia peplus</i>
BO BAN HE YE TAI	波瓣合叶苔		T5779 <i>Scapania undulata</i>
BO CAI	菠菜	Spinish	T6076 <i>Spinacia oleracea</i>
BO GE BAN JIU JU	波戈斑鸠菊	Manysperma Bitterleaf*	T6720 <i>Vernonia pogosperma</i>
BO HE	薄荷	Wild Mint	T4184 <i>Mentha haplocalyx</i> [Syn. <i>Mentha canadaensis</i> ; <i>Mentha arvensis</i> var. <i>haplocalyx</i> ; <i>Mentha arvensis</i> ]
BO LE SHU	伯乐树	Chinese Bretschneidera	T1025 <i>Bretschneidera sinensis</i>
BO LI ZI HUA JIAO	伯利兹花椒	Beliz Pricklyash*	T6867 <i>Zanthoxylum belizense</i>
BO LIN JU	薄鳞菊	Intermediate Chartolepis	T1354 <i>Chartolepis intermedia</i>
BO LU DU SHU	博路都树	Boldo	T4774 <i>Peumus boldus</i>
BO LUN LIN HUA RUAN SHAN HU	波伦鳞花软珊瑚	Softcoral <i>Lemnalia bournei</i>	T3740 <i>Lemnalia bournei</i>
BO LUO HUI	博落回	Pink Plumepoppy	T4020 <i>Macleaya cordata</i>
BO LUO MI	波罗蜜	Diversileaf Artocarpus	T0713 <i>Artocarpus heterophyllus</i>
BO LUO XIANG TENG	波罗香藤		T3611 <i>Kadsura ananosma</i>
BO NIANG HAO	播娘蒿	Flixweed Tansymustard Seed	T2125 <i>Descurainia sophia</i>
BO PI HUANG GUA	薄皮黄瓜*	Leptopeel Cucumber*	T1875 <i>Cucumis leptodermis</i>
BO SHI AN	伯氏桉*	Berghe Eucalyptus*	T2501 <i>Eucalyptus berghei</i>
BO SHI CI TONG	伯氏刺桐*	Bertero Coralbean*	T2460 <i>Erythrina berteroaana</i>
BO SHI QIAN HU	博氏前胡*	Bourgae Hogfennel*	T4754 <i>Peucedanum bourgaei</i>
BO SHI QIE	博氏茄*	Berthault Nightshade*	T5992 <i>Solanum berthaultii</i>
BO SHI WU TAN	波氏乌檀	pobequini Fatheadtree*	T4393 <i>Nauclea pobequini</i>
BO SHI WU ZHU YU	波氏吴茱萸	Guizhou Evodia	T2645 <i>Evodia rutaecarpa</i> var. <i>bodinieri</i>

BO SI A WEI BIAN ZHONG	波斯阿魏变种*	Persia Giantfennel Variety*	T2704 <i>Ferula persica</i> var. <i>latisecta</i>
BO SI YI MU CAO	波斯益母草*	Persia Motherwort*	T3753 <i>Leonurus persicus</i>
BO SI YING SU	波斯罌粟	Persia Poppy	T4633 <i>Papaver persicum</i>
BO TE LAN DA JI	波特兰大戟*	Portlan Euphorbia*	T2611 <i>Euphorbia portlandica</i>
BO XI SHU LI	波希鼠李*	Cascara Buckthorn	T5463 <i>Rhamnus purshiana</i>
BO YE KU MU	波叶苦木	Undulate-leaf Quassia-wood*	T3098 <i>Hannoa undulata</i>
BO YE SHAN CHENG	薄叶山橙	Thin-leaf Melodinus	T4179 <i>Melodinus tenuicaudatus</i>
BO YE WANG YI ZAO	薄叶网膜藻		T3310 <i>Hydroclathrus tenuis</i>
BO YE WU TOU	薄叶乌头	Azure Monkshood	T0095 <i>Aconitum fischeri</i>
BU CHANG NAN MEI DENG MU	布昌南美登木	Buchanan Mayten	T4128 <i>Maytenus buchananii</i>
BU DENG HONG HOU KE	不等红厚壳*	Disparate Beautyleaf*	T1128 <i>Calophyllum dispar</i>
BU DUI CHENG MAO RU	不对称猫乳*	Asymmetry Rhamnella*	T5453 <i>Rhamnella inaequilatera</i>
BU GU ZHI	补骨脂	Malaytea Scurfpea	T5270 <i>Psoralea corylifolia</i>
BU LANG WEI JI	布郎维吉*		T1041 <i>Brunsvigia radulosa</i>
BU MEI HE BAO HUA	不美荷包花*	Chile Calceolaria*	T1110 <i>Calceolaria inamoena</i>
BU SHI LONG DAN	布氏龙胆	Burser Gentian*	T2905 <i>Gentiana burseri</i>
BU XUE CAO	补血草	Gmelin Sealavender Herb	T3842 <i>Limonium gmelinii</i>
BU YING CAO	捕蝇草	Venus's Flytrap	T2186 <i>Dionaea muscipula</i>
BU YU HONG	不育红	Yunnan Rabdosia	T5401 <i>Rabdosia yuennanensis</i>
CAI BAN YANG TI JIA	彩斑羊蹄甲*	Variegata Bauhinia*	T0881 <i>Bauhinia variegata</i>
CAI DOU SHU	菜豆树	Asia Belltree	T5402 <i>Radermachera sinica</i>
CAI JI	菜薹	Globe Artichoke	T1966 <i>Cynara scolymus</i>
CAI SHI MU MA SANG	采食木马桑	Arboreous Coriaria*	T1689 <i>Coriaria arborea</i>
CAI SI CANG ER	蔡斯苍耳*	Chase Cocklebur*	T6836 <i>Xanthium chasei</i>
CAI WEN QIAN JIN TENG	彩纹千金藤*	Discolor Stephania*	T6124 <i>Stephania discolor</i>
CAN DOU	蚕豆	Broadbean	T6744 <i>Vicia faba</i>
CAN DOU JIA KE	蚕豆荚壳	Broadbean Pericarp	T6745 <i>Vicia faba</i>
CAN DOU JING	蚕豆茎	Broadbean Stem	T6746 <i>Vicia faba</i>
CAN DOU YE	蚕豆叶	Broadbean Leaf	T6747 <i>Vicia faba</i>
CAN JIAN	蚕茧	Silk Cocoon	T0976 <i>Bombyx mori</i>
CAN SANG	蚕桑*	Silk Mulberry*	T4292 <i>Morus bombycis</i>
CANG BAI BING ROU CHI JUN	苍白柄肉齿菌*		T5735 <i>Sarcodon glaucopus</i>
CANG BAI CHENG GOU FENG	苍白秤钩风	Glaucous Diploclisia	T2233 <i>Diploclisia glaucescens</i>
CANG BAI FEN TENG	苍白粉藤	Pale Treebine*	T1454 <i>Cissus pallida</i>
CANG BAI QI SHE TAI	苍白岐舌苔*		T5803 <i>Schistochila glaucescens</i>
CANG BAI ZI JIN	苍白紫堇	Pale Corydalis	T1740 <i>Corydalis sempervirens</i>
CANG ER	苍耳	Siberian Cocklebur	T6843 <i>Xanthium sibiricum</i> [Syn. <i>Xanthium strumarium</i> ]
CANG MAO JIN FA XUAN	苍毛金发癣	Dark-hair Gold-hair Moss*	T5135 <i>Polytrichum pollidisetum</i>
CANG SHAN XIANG CHA CAI	苍山香茶菜	Cangshan Rabdosia	T3482 <i>Isodon bulleyana</i>
CANG ZHU	苍术(茅苍术)	Swordlike Atractylodes	T0823 <i>Atractylodes lancea</i>
CAO BEI MU	草贝母	Indian Iphigenia	T3443 <i>Iphigenia indica</i>
CAO CONG RONG	草苳蓉	Russian Boschniakia	T0993 <i>Boschniakia rossica</i>
CAO DI MAO GEN	草地毛茛*	Meadow Buttercup	T5412 <i>Ranunculus acris</i>
CAO DI WU TOU	草地乌头	Meadow Monkshood	T0138 <i>Aconitum umbrosum</i>
CAO DIAN QIAN LI GUANG	草甸千里光	Ragwort	T5890 <i>Senecio jacobaea</i>
CAO DOU KOU	草豆蔻	Katsumada Galangal	T0358 <i>Alpinia katsumadai</i>
CAO GU	草菇	Straw Mushroom	T6803 <i>Volvariella volvacea</i>
CAO HU JIAO	草胡椒	Shiny Peperomia	T4705 <i>Peperomia pellucida</i>
CAO MAO JIA DU JUAN	糙毛假杜鹃*		T0872 <i>Barleria strigosa</i>
CAO MEI	草莓	Common Strawberry	T2763 <i>Fragaria ananassa</i>
CAO MEI CHE ZHOU CAO	草莓车轴草	Strawberry Clover	T6518 <i>Trifolium fragiferum</i>
CAO SHAO YAO	草芍药	Obovate Peony	T4586 <i>Paeonia obovata</i>

CAO SU	糙苏	Jerusalem sage	T4814 <i>Phlomis umbrosa</i>
CAO WEN JING	草问荆	Meadow Horsetail	T2410 <i>Equisetum pratense</i>
CAO WU JIU	草乌柏	Sylvatic Sapium*	T6146 <i>Stillingia sylvatica</i> [Syn. <i>Sapium sylvatica</i> ]
CAO XIANG WAN DOU	草香豌豆	Indian Pea	T3710 <i>Lathyrus sativus</i>
CAO YE BAI JIANG	糙叶败酱	Scabrous Patrinia	T4673 <i>Patrinia scabra</i>
CAO YE YI WA JU	糙叶依瓦菊*		T3542 <i>Iva asperifolia</i>
CAO YUAN DA JI	草原大戟	Grassland Euphorbia*	T2620 <i>Euphorbia stepposa</i>
CAO YUAN LAO GUAN CAO	草原老鹳草	Meadow Cranesbill	T2944 <i>Geranium pratense</i>
CE BAI YE	侧柏叶	Chinese Arborvitae Leaf	T6440 <i>Thuja orientalis</i> [Syn. <i>Platycladus orientalis</i> ; <i>Biota orientalis</i> ]
CE BAI ZHI JIE	侧柏枝节	Chinese Arborvitae Branch	T6439 <i>Thuja orientalis</i> [Syn. <i>Platycladus orientalis</i> ; <i>Biota orientalis</i> ]
CEN PI	椴皮	Largeleaf Chinese Ash Bark	T2777 <i>Fraxinus rhynchophylla</i> [Syn. <i>Fraxinus chinensis</i> var. <i>rhynchophylla</i> ]
CENG KONG JUN	层孔菌*	Polypore	T2751 <i>Fomitopsis spraguei</i>
CHA HUA	茶花	Tea Flower	T1150 <i>Camellia sinensis</i> [Syn. <i>Thea sinensis</i> ]
CHA MEI	茶梅	Sasanqua Camellia	T1149 <i>Camellia sasanqua</i>
CHA MI SEN TUN CAO	查米森豚草	Chamisson Ragweed	T0399 <i>Ambrosia chamissonis</i>
CHA QIE	查茄	Cha Nightshade*	T5994 <i>Solanum chacoense</i>
CHA RU SHI WAN CUO	插入十万错*	Ya-Yaa (Thai name)	T0812 <i>Asystasia intrusa</i>
CHA RUI SHU YU	叉蕊薯蓣	Collett Yam	T2194 <i>Dioscorea collettii</i>
CHA SHI SHE BIAN JU	查氏蛇鞭菊*	Champan Gay-feather*	T3787 <i>Liatris champanii</i>
CHA SHU	樟树	Common Sassafras	T5746 <i>Sassafras tzumu</i>
CHA SHU GEN	茶树根	Tea Root	T1151 <i>Camellia sinensis</i> [Syn. <i>Thea sinensis</i> ]
CHA TIAO QI	茶条槭	Amur Maple	T0049 <i>Acer ginnala</i>
CHA XIONG	茶芎	Chaxiong Ligusticum	T3825 <i>Ligusticum sinense</i> cv. <i>chaxiong</i>
CHA YE	茶叶	Common Tea	T1152 <i>Camellia sinensis</i> [Syn. <i>Thea sinensis</i> ]
CHA YU BIAN DI JIN	察隅遍地金	Chayu St.John'swort	T3369 <i>Hypericum wightianum</i> subsp. <i>axillare</i>
CHA ZI	茶子	Tea Seed	T1154 <i>Camellia sinensis</i> [Syn. <i>Thea sinensis</i> ]
CHA ZI XIN	茶子心	Oiltea Camellia	T1146 <i>Camellia oleifera</i>
CHA ZI YUAN BAI	叉子圆柏	Savin Juniper	T3595 <i>Juniperus sabina</i>
CHAI HU	柴胡(北柴胡)	Chinese Thorowax	T1059 <i>Bupleurum chinense</i>
CHAI HU ZHUANG QIAN LI GUANG	柴胡状千里光	Thorowax-like Groundsel*	T5882 <i>Senecio bupleuroides</i>
CHAI HUANG JIANG	柴黄姜	Rosthorn Yam	T2204 <i>Dioscorea nipponica</i> ssp. <i>rosthornii</i>
CHAI SHOU	柴首	Chaishou Thorowax	T1058 <i>Bupleurum chaishoui</i>
CHAN CHU	蟾蜍	Toad	T1049 <i>Bufo bufo gargarizans</i> ; <i>Bufo melanostictus</i>
CHAN CHU DAN	蟾蜍胆	Toad Gall	T1050 <i>Bufo bufo gargarizans</i> ; <i>Bufo melanostictus</i>
CHAN GAO MU JIANG ZI	潺槁木姜子	Gluey Litse	T3887 <i>Litsea glutinosa</i>
CHAN PI	蟾皮	Toad Skin	T1051 <i>Bufo bufo gargarizans</i> ; <i>Bufo melanostictus</i>
CHAN RAO HUANG TAN	缠绕黄檀	Voluble Rosewood*	T2019 <i>Dalbergia volubilis</i>
CHAN SU	蟾酥	Toad Skin Secretion Cake	T1052 <i>Bufo bufo gargarizans</i> ; <i>Bufo melanostictus</i>
CHAN YANG	颤杨	American Aspen	T5163 <i>Populus tremuloides</i>
CHAN YI TENG	蝉翼藤	Cicadawingvine	T5847 <i>Securidaca inappendiculata</i>
CHANG BAI SHAN BAO CHUN	长白山报春	Changpai Mountains Primrose	T5201 <i>Primula modesta</i>
CHANG BAN JIN LIAN HUA	长瓣金莲花	Langpetal Globeflower	T6554 <i>Trollius macropetalus</i>
CHANG BIAN HUA DANG GUI	长边花当归*	Longradiate Angelica*	T0488 <i>Angelica longeradiata</i>
CHANG BING FENG WEI JUE	长柄凤尾蕨	Pretty Brake	T5286 <i>Pteris bella</i>

CHANG BING HU JIAO	长柄胡椒	Longstalk Pepper*	T4969 <i>Piper sulvaticum</i>
CHANG BING QI YE SHU	长柄七叶树	Assam Horsechestnut	T0198 <i>Aesculus assamica</i>
CHANG BING YUAN BAI	长柄圆柏*	Longpetiole Juniper*	T3590 <i>Juniperus macrospoda</i>
CHANG CHUN HUA	长春花	Madagascar Periwinkle	T1271 <i>Catharanthus roseus</i> [Syn. <i>Vinca rosea</i> ; <i>Lochera rosea</i> ]
CHANG CHUN TENG	常春藤	Chinese Ivy	T3113 <i>Hedera nepalensis</i> var. <i>sinensis</i>
CHANG CHUN YOU MA TENG	常春油麻藤	Evergreen Mucuna	T4311 <i>Mucuna sempervirens</i>
CHANG E JIN LIAN MU PI	长萼金莲木皮*	Macrocalyx Ochna Bark*	T4466 <i>Ochna macrocalyx</i>
CHANG E QU MAI	长萼瞿麦	Longcalyx Pink*	T2146 <i>Dianthus superbus</i> var. <i>longicalycinus</i>
CHANG GENG CU FEI	长梗粗榧	Longstalk Plumyew*	T1321 <i>Cephalotaxus harringtonia</i> var. <i>drupacea</i>
CHANG GENG DONG QING	长梗冬青	Longpedicel Holly	T3395 <i>Ilex pedunculosa</i>
CHANG GENG JIAO GU LAN	长梗绞股蓝	longstalk Gynostemma	T3084 <i>Gynostemma longipes</i>
CHANG GENG NAN WU WEI ZI	长梗南五味子	Longpeduncle Kadsura	T3619 <i>Kadsura peltigera</i> [Syn. <i>Kadsura longipedunculata</i> ]
CHANG GENG YU LI REN	长梗郁李仁	Longpedicel Chinese Buscherry Seed	T5225 <i>Prunus japonica</i> var. <i>nakaii</i>
CHANG GUAN JIA MO LI	长管假茉莉	Indian Glorybower	T1557 <i>Clerodendron indicum</i>
CHANG GUAN XIANG CHA CAI	长管香茶菜	Longtube Rabdosia	T5393 <i>Rabdosia longituba</i>
CHANG GUAN XUAN CAO	长管萱草*	Longtube Daylily*	T3196 <i>Hemerocallis longituba</i>
CHANG GUO BI BA	长果葎苳	Petrofracted Pepper	T4964 <i>Piper retrofractum</i>
CHANG GUO XUE DAN	长果雪胆	Longfruit Hemsleya	T3205 <i>Hemsleya dolichocarpa</i>
CHANG GUO YING SU	长果罌粟	Long-headed Poppy	T4626 <i>Papaver dubium</i>
CHANG HU JIAO	长胡椒		T4945 <i>Piper elongatum</i>
CHANG HUA BAN KE YA SHU	长花瓣柯桤树*	Longpetal Vouacapoua*	T6805 <i>Vouacapoua macropetala</i>
CHANG HUA GOU TENG	长花钩藤*	Longflower Gambirplant*	T6624 <i>Uncaria longiflora</i>
CHANG HUA RUI MU	长花蕊木*	Longflower Kopsia*	T3642 <i>Kopsia longiflora</i>
CHANG HUA TU LA SHU	长花图腊树	Longflower Galipea*	T2828 <i>Galipea longiflora</i>
CHANG HUA XIE CAO	长花纈草	Longflower Valerian*	T1313 <i>Centranthus longiflorus</i> ssp. <i>longiflorus</i>
CHANG HUA XU MA QIAN ZI	长花序马钱子	Longthyrus Poisonnut*	T6171 <i>Strychnos dolichothyrsa</i>
CHANG HUI AN	长喙桫	Long-rostrate Eucalyptus*	T2518 <i>Eucalyptus rostrata</i>
CHANG JI HUANG	长吉黄		T5477 <i>Rheum</i> sp.
CHANG JIAO DOU	长角豆	Carob	T1326 <i>Ceratonia siliqua</i>
CHANG JIE ZHU	长节珠	Laevigate Parameria	T4642 <i>Parameria laevigata</i>
CHANG JU YAN HU SUO	长矩延胡索	Longspur Corydalis*	T1722 <i>Corydalis longicalcarata</i>
CHANG LV GOU WEN	常绿钩吻	Carolina Jasmine	T2899 <i>Gelsemium sempervirens</i>
CHANG MAO FENG MAO JU	长毛凤毛菊	Hawkweed-like Saussurea	T5770 <i>Saussurea superba</i> [Syn. <i>Saussurea hieracioides</i> ]
CHANG MAO HAN XIAO	长毛含笑*	Longhairy Michelia*	T4213 <i>Michelia lanuginosa</i>
CHANG MAO XIANG KE KE	长毛香科科	Pilose Germander	T6365 <i>Teucrium pilosum</i> [Syn. <i>Teucrium japonicum</i> var. <i>pilosum</i> ]
CHANG MAO ZI YUAN ZHI	长毛籽远志	Longhair Milkwort	T5090 <i>Polygala wattersii</i>
CHANG NIU JIAO GUA	长牛角瓜*	Long Calotrope*	T1136 <i>Calotropis procera</i>
CHANG ROU MAO WEI LING CAI	长柔毛委陵菜	Velutinous Cinquefoil	T5183 <i>Potentilla griffithii</i> var. <i>velutina</i>
CHANG RUI LIU LI CAO	长蕊琉璃草	Circinate Solenanthus	T6021 <i>Solenanthus circinatus</i>
CHANG SHAN	常山	Antifebrile Dichroa	T2158 <i>Dichroa febrifuga</i>
CHANG SHENG TIE JIAO JUE	长生铁角蕨	Prolongated Spleenwort	T0776 <i>Asplenium prolongatum</i>
CHANG SHUO HUANG MA	长蒴黄麻	Jews-mallow	T1675 <i>Corchorus olitorius</i>
CHANG SUI BA DOU	长穗巴豆	LongspikeCroton*	T1851 <i>Croton macrostachys</i>
CHANG TONG HAN HUA	长筒旱花	Cylinder Immortelle	T6847 <i>Xeranthemum cylindraceum</i>
CHANG WEI CU YE MU	长尾粗叶木	Acuminate Lasianthus	T3696 <i>Lasianthus acuminatissimus</i>
CHANG WEI FU YE ER JUE	长尾复叶耳蕨	Simple Arachniodes	T0565 <i>Arachniodes simplicior</i>

CHANG WEI PO PO NA	长尾婆婆纳	Longleaf Speedwell	T6725 <i>Veronica longifolia</i>
CHANG XIANG MAO	长香茅*	Long Lemongrass*	T1946 <i>Cymbopogon procerus</i>
CHANG XU XIE CAO	长序缬草	Hardwick Valeriana	T6676 <i>Valeriana hardwickii</i>
CHANG YAO GE CHONG LOU	长药隔重楼	Tibet Paris	T4650 <i>Paris polyphylla</i> var. <i>pseudothibetica</i>
CHANG YE AI JU	长叶艾菊	Longleaf Tansy	T6292 <i>Tanacetum longifolium</i>
CHANG YE AN LUO	长叶暗罗	India Greenstar	T5065 <i>Polyalthia longifolia</i>
CHANG YE CHANG CHUN HUA	长叶长春花	Longleaf Periwinkle*	T1268 <i>Catharanthus longifolius</i>
CHANG YE CHE QIAN	长叶车前	Buckhorn Plantain	T5006 <i>Plantago lanceolata</i>
CHANG YE FEI SHU	长叶榧树	Jack Torreya	T6478 <i>Torreya jackii</i>
CHANG YE GE NA XIANG	长叶哥纳香	Longleaf Goniotalamus	T3045 <i>Goniotalamus gardneri</i>
CHANG YE HOU KE GUI	长叶厚壳桂*	Longleaf Cryptocarya*	T1863 <i>Cryptocarya longifolia</i>
CHANG YE KUAN MU	长叶宽木		T2634 <i>Eurycoma longifolia</i>
CHANG YE MAN MI PING GUO	长叶曼密苹果	Longleaf Mammey*	T4095 <i>Mammea longifolia</i>
CHANG YE QIAN LI GUANG	长叶千里光*	Longleaf Groundsel*	T5891 <i>Senecio longifolius</i>
CHANG YE SHUI MA	长叶水麻	Longleaf Debregeasia	T2056 <i>Debregeasia longifolia</i>
CHANG YE SONG	长叶松	Long-leaved Pine	T4919 <i>Pinus palustris</i>
CHANG YE TIAN MING JING	长叶天名精	Longleaf Carpesium	T1213 <i>Carpesium longifolium</i>
CHANG YE XIANG CHA CAI	长叶香茶菜	Longleaf Rabdosia	T5400 <i>Rabdosia stracheyi</i>
CHANG YUAN XIN XING HU TONG	长圆心形胡桐*	Cordate-oblong Beautyleaf*	T1127 <i>Calophyllum cordato-oblongum</i>
CHANG YUAN YE XIAO BO	长圆叶小檗	Oblong-leaved Barberry	T0910 <i>Berberis oblonga</i>
CHANG ZHU TANG SONG CAO	长柱唐松草	Longstyle Meadowrue*	T6396 <i>Thalictrum longistylum</i>
CHANG ZI MA QIAN	长籽马钱	Wallich Poisonnut	T6193 <i>Strychnos wallichiana</i>
CHAO AO DING CAO	巢凹顶藻		T3720 <i>Laurencia nidifica</i>
CHAO FENG CAO	潮风草	Acuminate Swallowwort	T1950 <i>Cynanchum ascyrifolium</i>
CHAO XIAN BAI TOU WENG	朝鲜白头翁	Korean Pulsatilla	T5324 <i>Pulsatilla cernua</i>
CHAO XIAN CANG ZHU	朝鲜苍术	Koreaen Atractylodes	T0822 <i>Atractylodes koreana</i>
CHAO XIAN DA BAI LI XIANG	朝鲜大百里香*	Korean Big Thyme*	T6448 <i>Thymus magnus</i>
CHAO XIAN DANG GUI	朝鲜当归	Gigantic Angelica	T0483 <i>Angelica gigas</i>
CHAO XIAN HUAI	朝鲜槐	Amur Maackia	T4009 <i>Maackia amurensis</i>
CHAO XIAN JI	朝鲜蓟	Stemless Carlina Thistle	T1208 <i>Carlina acaulis</i>
CHAO XIAN LANG YA CI	朝鲜狼牙刺	Korean Sophora	T6037 <i>Sophora koreensis</i>
CHAO XIAN LENG SHAN	朝鲜冷杉*	Korean Fir	T0005 <i>Abies koreana</i>
CHAO XIAN LIAN QIAO	朝鲜连翘*	Korean Forsythia*	T2754 <i>Forsythia koreana</i>
CHAO XIAN LUO WAN	朝鲜裸菀*		T3079 <i>Gymnaster koraiensis</i>
CHAO XIAN WU JIA	朝鲜五加	Korean Acanthopanax*	T0040 <i>Acanthopanax koreanum</i>
CHAO XIAN WU JIAO FENG	朝鲜五角枫	Okamoto Maple	T0051 <i>Acer okamotoanum</i>
CHAO XIAN YIN YANG HUO	朝鲜淫羊藿	Korean Epimedium	T2398 <i>Epimedium koreanum</i>
CHE QIAN	车前	Asiatic Plantain	T5002 <i>Plantago asiatica</i>
CHE QIAN YE LAN JI	车前叶蓝蓟	Purple Viper's-bugloss	T2319 <i>Echium plantagineum</i>
CHE SANG ZI YE	车桑仔叶	Clammy Hopseedbush Leaf	T2243 <i>Dodonaea viscosa</i>
CHE SHI NAN	车氏楠*	Chemens Phoebe*	T4815 <i>Phoebe chemensii</i>
CHEN DONG CAI LU ZHI	陈冬菜卤汁	Mature Winter-vegetable Spiced Juice	T1006 <i>Brassica chinensis</i>
CHEN XIANG	沉香	Eaglewood	T0554 <i>Aquilaria agallocha</i>
CHENG GAN CAO	秤杆草	Japanese Eupatorium	T2563 <i>Eupatorium japonicum</i>
CHENG GAN SHENG MA	秤杆升麻	Lindley Eupatorium	T2565 <i>Eupatorium lindleyanum</i>
CHENG KOU SHI DA GONG LAO	城口十大功劳	Chengkou Mahonia	T4072 <i>Mahonia shenii</i>
CHENG KOU TANG SONG CAO	城口唐松草	Farges Meadowrue	T6382 <i>Thalictrum fargesii</i>
CHENG LIU	怪柳	Chinese Tamarisk	T6286 <i>Tamarix chinensis</i>
CHENG LIU YE YUAN BAI	怪柳叶圆柏*	Tamarisk-leaf Juniper*	T3596 <i>Juniperus sabina</i> var. <i>tamariscifolia</i>
CHENG QIE ZI	澄茄子	Mountain Spicy Tree	T3885 <i>Litsea cubeba</i>
CHENG ZI	橙子	Fragrant Citrus	T1486 <i>Citrus junos</i>

CHENG ZI HE	橙子核	Fragrant Citrus Seed	T1487 <i>Citrus junos</i>
CHENG ZI PI	橙子皮	Pericarp	T1488 <i>Citrus junos</i>
CHI A MI	齿阿米	Tooth Ammi	T0412 <i>Ammi visnaga</i>
CHI AN	赤桉	Longbeak Eucalyptus	T2502 <i>Eucalyptus camaldulensis</i>
CHI BAN YAN HU SUO	齿瓣延胡索	Toothedpetal Corydalis	T1734 <i>Corydalis remota</i> [Syn. <i>Corydalis bulbosa</i> var. <i>typica</i> ]
CHI CHI JUE MING	齿翅决明*	Toothwing Senna*	T1231 <i>Cassia dentata</i>
CHI DOU	赤豆	Assuki Bean	T6752 <i>Vigna angularis</i> [Syn. <i>Dolichus angularis</i> ; <i>Phaseolus angularis</i> ]
CHI GENG TENG	匙羹藤	Australian Cowplant	T3080 <i>Gymnema sylvestri</i>
CHI GUO HUANG QI	翅果黄芪*	Wingfruit Milkvetch*	T0802 <i>Astragalus pterocarpus</i>
CHI GUO TENG	翅果藤	Extended Wingfruitvine	T4350 <i>Myriopteron extensum</i>
CHI MA	赤麻	Tricuspidate Falsenettle	T0962 <i>Boehmeria platanifolia</i> [Syn. <i>Boehmeria tricuspis</i> ]
CHI NAN	赤楠	Boxleaf Syzygium	T6264 <i>Syzygium buxifolium</i>
CHI SHAO wild	赤芍	Common Peony (wild)	T4584 <i>Paeonia lactiflora</i> wild
CHI YANG	赤杨	Japanese Alder	T0328 <i>Alnus japonica</i>
CHI YE CAO	齿叶草	Lateripening Bartsia	T4479 <i>Odontites serotina</i>
CHI YE MEI DENG MU	齿叶美登木	Serrate-leaved Mayten	T4139 <i>Maytenus serrata</i>
CHI YE SHUI LIAN	齿叶睡莲	White Lotus, Egyptian Lotus	T4455 <i>Nymphaea lotus</i>
CHI YE TIE ZI	齿叶铁仔	Serrate-leaf Myrsine	T4364 <i>Myrsine semiserrata</i>
CHI YE TUO WU	齿叶橐吾	Toothleaf Goldenray	T3802 <i>Ligularia dentata</i>
CHONG BAI LA	虫白蜡	Cera Chinensis Wax	T2420 <i>Ericerus pela</i>
CHONG BAN XUAN CAO	重瓣萱草	Doublepetalous Daylily*	T3194 <i>Hemerocallis fulva</i> var. <i>kwanso</i>
CHONG CHUN YU	重唇鱼	Skin-carp	T3199 <i>Hemibarbus labeo</i>
CHONG LOU PAI CAO	重楼排草	Parishshape Loosestrife	T4004 <i>Lysimachia paridiformis</i>
CHONG MING BA JIAO LIAN	崇明八角莲	Chongming Many-flowered May-apple*	T2303 <i>Dysosma subrosea</i>
CHONG SHENG RUAN SHAN HU	冲绳软珊瑚*	Okinawan Softcoral <i>Clavularia viridis</i>	T1542 <i>Clavularia viridis</i>
CHONG YA YAO	虫牙药	Ternateleaf Rabdosia	T3529 <i>Isodon ternifolius</i>
CHOU A WEI	臭阿魏	Foetid Giantfennel*	T2700 <i>Ferula foetida</i>
CHOU BAI	臭柏	Savin	T5640 <i>Sabina vulgaris</i>
CHOU CAO	臭草	Common Rue	T5626 <i>Ruta graveolens</i>
CHOU LENG SHAN	臭冷杉	Khingan Fir	T0006 <i>Abies nephrolepis</i>
CHOU MO LI	臭茉莉	Fragrant Glorybower	T1556 <i>Clerodendron fragrans</i>
CHOU MU DAN	臭牡丹	Rose Glorybower (Clerodendrum)	T1565 <i>Clerodendrum bungei</i>
CHOU SHAN YANG	臭山羊	Japanese Orixia	T4527 <i>Orixia japonica</i>
CHOU WEI HONG DOU	臭味红豆	Bean Trefoil	T0441 <i>Anagyris foetida</i>
CHOU WU TONG	臭梧桐	Harlequin Glorybower Leaf	T1562 <i>Clerodendron trichotomum</i>
CHOU WU TONG GEN	臭梧桐根	Harlequin Glorybower Root	T1563 <i>Clerodendron trichotomum</i>
CHU AI JU	雏艾菊	Feverfew	T6294 <i>Tanacetum parthenium</i>
CHU BAI PI	樗白皮	Tree of Heaven Ailanthus Bast	T0255 <i>Ailanthus altissima</i>
CHU CHONG JU	除虫菊	Dalmatian Pyrethrum	T1388 <i>Chrysanthemum cinerariaefolium</i>
CHU JU	雏菊	English Daisy	T0893 <i>Bellis perennis</i>
CHU TU HAI CONG	出土海葱*		T6647 <i>Urginea epigea</i>
CHU YE HUA JIAO	樗叶花椒	Ailanthus-like Pricklyash	T6860 <i>Zanthoxylum ailanthoides</i>
CHU YE HUA JIAO GEN	樗叶花椒根	Ailanthus-like Pricklyash Root	T6861 <i>Zanthoxylum ailanthoides</i>
CHU YE HUA JIAO PI	樗叶花椒皮	Ailanthus-like Pricklyash Bark	T6862 <i>Zanthoxylum ailanthoides</i>
CHUAN BA JIAO LIAN	川八角莲	Veitch Dysosma	T2304 <i>Dysosma veitchii</i>
CHUAN BEI MU	川贝母	Tendrilleaf Fritillary	T2783 <i>Fritillaria cirrhosa</i>
CHUAN CHAN JIU JIE LONG	川产九节龙	Tiny Ardisia	T0601 <i>Ardisia pusilla</i>
CHUAN CHI SHAO	川赤芍	Veitch Peony	T4590 <i>Paeonia veitchii</i>

CHUAN DANG SHEN	川党参	Szechwan Tangshen	T1602 <i>Codonopsis tangshen</i>
CHUAN DIAN JIN SI TAO	川滇金丝桃	Forrest's St.John'swort	T3352 <i>Hypericum forrestii</i>
CHUAN DIAN SHI DA GONG LAO	川滇十大功劳	Veitch Mahonia	T4076 <i>Mahonia veitchiorum</i>
CHUAN DIAN YIN YANG HUO	川滇淫羊藿	David Epimedium	T2392 <i>Epimedium davidii</i>
CHUAN DONG ZHANG YA CAI	川东獐牙菜	E.Chuan Swertia	T6217 <i>Swertia davidii</i>
CHUAN E YIN YANG HUO	川鄂淫羊藿	Farges Epimedium	T2395 <i>Epimedium fargesii</i>
CHUAN HUANG QIN	川黄芩	St. Johnswortleaf Skullcap	T5839 <i>Scutellaria hypericifolia</i>
CHUAN JU	川橘	King Orange	T1502 <i>Citrus nobilis</i>
CHUAN LI GUO	川梨果	Pashi Pear Fruit	T5365 <i>Pyrus pashia</i>
CHUAN LIAN PI	川楝皮	Szechwan Chinaberry Bark	T4162 <i>Melia toosendan</i>
CHUAN LIAN ZI	川楝子	Szechwan Chinaberry Fruit	T4163 <i>Melia toosendan</i>
CHUAN LONG SHU YU	穿龙薯蓣	Nippon Yam	T2203 <i>Dioscorea nipponica</i>
CHUAN MU XIANG	川木香	Common Vladimiria	T6802 <i>Vladimiria souliei</i> [Syn. <i>Jurinea souliei</i> ]
CHUAN NIU XI	川牛膝	Mediinal Cyathula	T1924 <i>Cyathula officinalis</i>
CHUAN QIAN CUI QUE HUA	川黔翠雀花	Bonvalot Larkspur	T2062 <i>Delphinium bonvalotii</i>
CHUAN SHAN CHENG	川山橙	Hemsley Melodinus	T4178 <i>Melodinus hemsleyanus</i>
CHUAN SHAN JIA	穿山甲	Pangolin	T4106 <i>Manis pentadactyla</i>
CHUAN SHANG LONG MI GOU TENG	川上泷钩藤	Kawakami Gambirplant*	T6619 <i>Uncaria kawakamii</i>
CHUAN SHI JIAN	穿石剑	Rock-ginger Fern	T5252 <i>Pseudodrynaria coronans</i>
CHUAN XI YIN YANG HUO	川西淫羊藿	Elongate Barrenwort	T2394 <i>Epimedium elongatum</i>
CHUAN XI ZHANG YA CAI	川西獐牙菜	Mussot Swertia	T6227 <i>Swertia mussozii</i>
CHUAN XIN LIAN	穿心莲	Common Andrographis	T0457 <i>Andrographis paniculata</i> [Syn. <i>Justicia paniculata</i> ]
CHUAN XIONG	川芎	Chuanxiong (Wallich Ligusticum)	T3820 <i>Ligusticum chuanxiong</i> [Syn. <i>Ligusticum wallichii</i> ]
CHUAN XU DUAN	川续断	Himalayan Teasel	T2234 <i>Dipsacus asperoides</i>
CHUAN ZANG XIANG CHA CAI	川藏香茶菜	Szechwan-Tibet Rabdosia	T3518 <i>Isodon pharicus</i>
CHUAN ZHU ER YE TAI	串珠耳叶苔	Rosary Ear-leaf Muscus*	T2803 <i>Frullania tamarisci</i> ssp. <i>moniliata</i> [Syn. <i>Frullania moniliata</i> ]
CHUI MU FANG JI	垂木防己	Drooping Snailseed*	T1588 <i>Cocculus pendulus</i>
CHUI QI MU	垂椴木	Drooping Alder*	T0330 <i>Alnus pendula</i>
CHUI ZHI CHI AN YE	垂枝赤桉叶	Pendulous Eucalyptus Leaf	T2504 <i>Eucalyptus camaldulensis</i> var. <i>pendula</i>
CHUI ZHU SUAN PAN ZI	榧柱算盘子	Srilanka Glochidion	T2990 <i>Glochidion zeylanicum</i>
CHUI ZI MAI MA TENG	垂子买麻藤	Pendentseed Jointfir	T3034 <i>Gnetum pendulum</i>
CHUN	蕓	Common Watershield	T1004 <i>Brasenia schreberi</i>
CHUN BAI PI	椿白皮	Chinese Toon Root-bast	T6475 <i>Toona sinensis</i>
CHUN E BO HE	唇萼薄荷	Pennyroyal Mint	T4187 <i>Mentha pulegium</i>
CHUN FU SHOU CAO	春福寿草	Yellow Adonis	T0191 <i>Adonis vernalis</i>
CHUN QIAN LI GUANG	春千里光	Eastern Groundsel	T5914 <i>Senecio vernalis</i>
CHUN ZHU JU TAI	唇柱苣苔	Chirita	T1370 <i>Chirita micronusa</i>
CI BAI	刺柏	Taiwan Juniper	T3588 <i>Juniperus formosana</i>
CI BO	刺菠	Hirsute Rasperry	T5592 <i>Rubus hirsutus</i>
CI CAI JI	刺菜蓟	Cardoon	T1965 <i>Cynara cardunculus</i>
CI CAO SU	刺糙苏	Pungent Jerusalem sage*	T4811 <i>Phlomis pungens</i>
CI DOU KOU	刺豆蔻	Aculeate Amomum*	T0415 <i>Amomum aculeatum</i>
CI GU	慈菇	Oldworld Arrowhead Corm	T5647 <i>Sagittaria sagittifolia</i>
CI GUI	刺桧	Prickly Juniper	T3592 <i>Juniperus oxycedrus</i>
CI GUO FAN LI ZHI	刺果番荔枝	Guanabana	T0509 <i>Annona muricata</i>
CI GUO GAN CAO	刺果甘草	Pricklyfruit Licorice	T3018 <i>Glycyrrhiza pallidiflora</i>
CI GUO SONG	刺果松	Bristlecone Pine	T4905 <i>Pinus aristata</i>
CI GUO SU MU	刺果苏木	Nickernut Caesalpinia	T1100 <i>Caesalpinia crista</i>
CI GUO TUN CAO	刺果豚草	Bur Sage	T0395 <i>Ambrosia acanthicarpa</i>



CI HUA JIAO	刺花椒	Acanthoid Pricklyash*	T6858 <i>Zanthoxylum acanthopodium</i>
CI HUA LIAN ZI CAO	刺花莲子草	Spinyflower Alternanthera	T0380 <i>Alternanthera repens</i>
CI HUAI HUA	刺槐花	Black Locust Flower	T5552 <i>Robinia pseudoacacia</i>
CI JI LI	刺蒺藜	Puncturevine Caltrap	T6497 <i>Tribulus terrestris</i>
CI JI NU ZONG LV	刺急怒棕桐	Aculeate Ruffle Palm	T0259 <i>Aiphanes aculeata</i>
CI KE HUA JIAO	刺壳花椒	Spinyfruit Pricklyash	T6878 <i>Zanthoxylum echinocarpum</i>
CI LI	刺梨	Roxburgh Rose	T5570 <i>Rosa roxburghii</i>
CI MA QIAN ZI	刺马钱子*	Aculeate Poisonnut*	T6163 <i>Strychnos aculeata</i>
CI MANG BING HUA	刺芒柄花	Restharrow	T4493 <i>Ononis spinosa</i>
CI NAN SHE TENG	刺南蛇藤	Hookedspine Bittersweet	T1286 <i>Celastrus flagellaris</i>
CI QIU SHU PI	刺楸树皮	Septemlobate Kalopanax Bark	T3625 <i>Kalopanax septemlobus</i>
CI SAN JIA	刺三甲	Trifoliolate Acanthopanax	T0045 <i>Acanthopanax trifoliatus</i>
CI TIAN QIE	刺天茄	Khasi Nightshade Fruit	T6003 <i>Solanum khasianum</i>
CI TONG	刺桐	Coral-tree	T2478 <i>Erythrina variegata</i> [Syn. <i>Erythrina indica</i> ]
CI TOU FU YE ER JUE	刺头复叶耳蕨		T0563 <i>Arachniodes exilis</i>
CI WU JIA	刺五加	Manyprickle Acanthopanax	T0041 <i>Acanthopanax senticosus</i> [Syn. <i>Eleutherococcus senticosus</i> ]
CI WU JIA PI	刺五加皮	Manyprickle Acanthopanax Root-bark	T0042 <i>Acanthopanax senticosus</i> [Syn. <i>Eleutherococcus senticosus</i> ]
CI WU JIA YE	刺五加叶	Manyprickle Acanthopanax Leaf	T0043 <i>Acanthopanax senticosus</i> [Syn. <i>Eleutherococcus senticosus</i> ]
CI YANG LI DOU	刺痒豨豆	Cowage Velvet-bean	T4310 <i>Mucuna pruriens</i>
CI YE SHI DA GONG LAO	刺叶十大功劳	Acanthus-leaved Mahonia	T4053 <i>Mahonia acanthifolia</i>
CI YI YE HUA JIAO	刺异叶花椒	Spinyleaf Prickleyash	T6874 <i>Zanthoxylum dimorphophyllum</i> var. <i>spinifolium</i>
CI ZHUANG FAN LI ZHI	刺状番荔枝	Spined Custardapple*	T0512 <i>Annona spinescens</i>
CONG BAI	葱白	Fistular Onion	T0314 <i>Allium fistulosum</i>
CONG JIAN MU	葱檉木*	Alliaceouse Pencilwood*	T2307 <i>Dysoxylum alliaceum</i>
CONG LI ZAO	丛粒藻		T0996 <i>Botryococcus braunii</i>
CONG MU	榉木	Japanese Aralia	T0568 <i>Aralia chinensis</i>
CONG ZHU XUE LIAN	丛株雪莲		T5771 <i>Saussurea tridactyla</i> var. <i>maidugonla</i>
CU	醋	Vinegar	T6764 Vinegar
CU CAO BA QIA	粗糙菝葜	Lebrun Greenbrier	T5979 <i>Smilax lebrunii</i>
CU CAO LONG DAN	粗糙龙胆	Scabrous Gentian*	T2931 <i>Gentiana scabra</i> var. <i>buesgeri</i>
CU CAO SHE BIAN JU	粗糙蛇鞭菊	Scabrous Gay-feather*	T3791 <i>Liatris scabra</i>
CU CAO SHI CHE JU	粗糙矢车菊	Rough Star Thistle	T1301 <i>Centaurea aspera</i> ssp. <i>aspera</i>
CU CI XIAO BO	簇刺小檗	Actino-spiny Barberry	T0896 <i>Berberis actinacantha</i>
CU GUO TANG SONG CAO	粗果唐松草	Purple Meadowrue	T6377 <i>Thalictrum dasycarpum</i>
CU GUO XIANG CHA CAI	粗果香茶菜	Roughfruit Rabdosia*	T3500 <i>Isodon lasiocarpa</i>
CU HUA ZHANG YA CAI	簇花獐牙菜	Fascicled Swertia*	T6220 <i>Swertia fasciculata</i>
CU JING QIN JIAO	粗茎秦艽	Thickstem Gentian	T2909 <i>Gentiana crassicaulis</i>
CU JING WU TOU	粗茎乌头	Thickstem Monkshood	T0089 <i>Aconitum crassicaule</i>
CU KANG CHAI	粗糠柴	Philippine Mallotus*	T4083 <i>Mallotus philippinensis</i>
CU LIU GUO	醋柳果	Seabuckthorn Fruit	T3254 <i>Hippophae rhamnoides</i>
CU MAO GAN CAO	粗毛甘草	Hirsute Licorice	T3011 <i>Glycyrrhiza aspera</i>
CU MAO GUO BAI JIAN MU	粗毛果白坚木	Hirsutefruit White Quebracho*	T0763 <i>Aspidosperma dasycarpum</i>
CU MAO LIN GAI JUE	粗毛鳞盖蕨	Strigose Microlepia	T4220 <i>Microlepia strigosa</i> [Syn. <i>Trichomanes strigosa</i> ]
CU MAO NAN SHE TENG	粗毛南蛇藤	Hirsute Bittersweet*	T1295 <i>Celastrus strigillosus</i>
CU MAO NIU SHE CAO	粗毛牛舌草	Hemhem (in Jordan)	T0448 <i>Anchusa strigosa</i>
CU MAO SHU YU	粗毛薯蓣*	Hirsute Yam*	T2199 <i>Dioscorea hirsuta</i>
CU MAO YIN YANG HUO	粗毛淫羊藿	Acuminatum Epimedium	T2389 <i>Epimedium acuminatum</i>
CU PI SHAN HE TAO	粗皮山核桃	Shagbark Hickory	T1219 <i>Carya ovata</i>

CU SHE BIAN JU	粗蛇鞭菊	Scaly Blazing Star	T3794 <i>Liatris squarrosa</i>
CU SHENG AO DING ZAO	簇生凹顶藻	Cluster Concave-top Alga*	T3715 <i>Laurencia caespitosa</i>
CU SHENG HUA DUO GUO SHU	簇生花多果树*		T5016 <i>Pleiocarpa pycnantha</i> var. <i>tubicina</i>
CU SHENG HUANG REN SAN	簇生黄韧伞	Sulfur Tuft	T4366 <i>Naematoloma fasciculare</i>
CU SHENG KA BU MU	簇生卡布木		T1096 <i>Cabucala fasciculata</i>
CU SHENG SHAN XIANG	簇生山香	Fascicled Bushmint*	T3379 <i>Hyptis fasciculata</i>
CU WEN HAI LONG	粗吻海龙		T6487 <i>Trachyrhamphus serratus</i>
CU XI MEN FEI CAO	粗西门肺草*	Rough Comfrey	T6244 <i>Symphytum asperum</i>
CU YE MAI HU JIAO	粗叶脉胡椒*	Grossnerve Pepper*	T4943 <i>Piper crassinervium</i>
CU YE MAI MI HUA SHU	粗叶脉密花树*	Rough-veined Rapanea*	T5416 <i>Rapanea neurophylla</i>
CU YE RONG	粗叶榕	Hispid Fig	T2727 <i>Ficus simplicissima</i>
CU YE XUAN GOU ZI	粗叶悬钩子	Roughleaf Raspberry	T5587 <i>Rubus alceaefolius</i>
CU YING MAO DIAN ZI CAO	粗硬毛滇紫草*	Hispid Onosma*	T4498 <i>Onosma hispida</i>
CU YING MAO TIE XIAN CAI	粗硬毛铁苋菜*	Chenille Plant, Red-hot Cat's-tail	T0035 <i>Acalypha hispida</i>
CU YING MAO TUN CAO	粗硬毛豚草*	Hispid Ragweed*	T0402 <i>Ambrosia hispida</i>
CU YING MAO XIAN KONG JUN	粗硬毛纤孔菌		T3425 <i>Inonotus hispidus</i>
CU ZHUANG JIN JI NA	粗壮金鸡纳*	Robust Cinchona*	T1430 <i>Cinchona robusta</i>
CU ZHUANG KA FEI	粗壮咖啡	Robust Coffee*	T1611 <i>Coffea robusta</i>
CU ZHUANG LONG DAN	粗壮龙胆	Robust Gentian*	T2929 <i>Gentiana robusta</i>
CU ZHUANG NV ZHEN	粗壮女贞	Japanese Privet	T3829 <i>Ligustrum robustum</i>
CU ZHUANG SUAN TENG ZI	粗壮酸藤子	Robust Embelia*	T2349 <i>Embelia robusta</i>
CU ZHUANG YU TENG	粗壮鱼藤*	Robust Jewelvine	T2122 <i>Derris robusta</i>
CUI DENG XIN LIU SHAN HU	脆灯心柳珊瑚	Gorgonian <i>Junceella fragilis</i>	T3574 <i>Junceella fragilis</i>
CUI MIAN SHUI QIE	催眠睡茄	Somniferous Withania	T6829 <i>Withania somnifera</i>
CUI QUE HUA	翠雀花	Bouquet Larkspur	T2077 <i>Delphinium grandiflorum</i>
CUI QUE YE DUAN GUAN CAO	翠雀叶短冠草	Delphinileaf Sopubia*	T6050 <i>Sopubia delphinifolia</i>
CUI TU LUO FU MU	催吐萝芙木	Emitic Devilpepper	T5427 <i>Rauvolfia vomitoria</i>
CUI YUN CAO	翠云草	Hooked Spikemoss	T5870 <i>Selaginella uncinata</i>
DA A MI	大阿米	Big Ammi	T0410 <i>Ammi majus</i>
DA BA JIAO	大八角	Big Anisetree*	T3403 <i>Illicium majus</i>
DA BAI DING CAO	大白顶草	Field Groundsel	T5894 <i>Senecio oryzetorum</i>
DA BO GU	大驳骨	Malabanut	T0170 <i>Adhatoda vasica</i>
DA BO SI JU	大波斯菊	Mexican Aster	T1753 <i>Cosmos bipinnata</i>
DA CAO KOU	大草蔻	Beautiful Galangal	T0363 <i>Alpinia speciosa</i>
DA CHANG CHUN HUA	大长春花*	Greater Periwinkle	T6760 <i>Vinca herbacea</i> [Syn. <i>Vinca major</i> ]
DA CHAO CAI	大巢菜	Common Vetch	T6750 <i>Vicia sativa</i>
DA CHE QIAN	大车前	Rippleseed Plantain	T5007 <i>Plantago major</i>
DA CHI JI	大翅蓟	Scotch Cottonthistle	T4494 <i>Onopordum acanthium</i>
DA DA HE MIAN BAO GUO	达达赫面包果*	Dadah Artocarpus*	T0711 <i>Artocarpus dadah</i>
DA DING CAO	大丁草	Gerbera	T2950 <i>Gerbera anandria</i> [Syn. <i>Leibnitzia anandria</i> ]
DA DOU	大豆	Soybean	T2998 <i>Glycine max</i>
DA DU WU TOU	大渡乌头	Franchet Monkshood	T0097 <i>Aconitum franchetii</i>
DA E BIAN XING XIANG CHA CAI	大萼变型香茶菜	Largesepal Rabdosia	T3513 <i>Isodon macrocalyx</i>
DA E JIN SI TAO	大萼金丝桃	Rose-of-Sharon	T3343 <i>Hypericum calycinum</i>
DA E XIANG CHA CAI	大萼香茶菜	Largesepal Rabdosia	T3511 <i>Isodon macrocalyx</i>
DA ER MA WEI YA LIU CHUAN YU	达耳马威亚柳穿鱼	Balkan Toadflax	T3843 <i>Linaria dalmatica</i>
DA ER WEN XIAO BO	达尔文小槲	Darwin Barberry	T0901 <i>Berberis darwinii</i>
DA FEI YANG CAO	大飞扬草	Garden Euphorbia	T2590 <i>Euphorbia hirta</i>
DA FENG ZI	大风子	Chaulmoogratree Seed	T3300 <i>Hydnocarpus anthelminticus</i>
DA GE NA XIANG	大哥纳香	Big Goniiothalamus*	T3046 <i>Goniiothalamus giganteus</i>
DA GUO BAI MU	大果柏木	Monterey Cypress	T1897 <i>Cupressus macrocarpa</i>

DA GUO DA JI	大果大戟	Largefruit Euphorbia*	T2626 <i>Euphorbia wallichii</i>
DA GUO KA FEI	大果咖啡	Liberian Coffee	T1610 <i>Coffea liberica</i>
DA GUO TAO JIN NIANG	大果桃金娘	Bigfruit Rosemyrtle*	T5527 <i>Rhodomyrtus macrocarpa</i>
DA GUO XI FAN LIAN	大果西番莲	Giant Granadilla	T4667 <i>Passiflora quadrangularis</i>
DA HONG GU	大红菇	Big Russula*	T5621 <i>Russula lepida</i>
DA HONG YING SU	大红罂粟	Bracteate Poppy*	T4623 <i>Papaver bracteatum</i>
DA HUA CAO SU	大花糙苏*	Largeflower Jerusalem sage	T4808 <i>Phlomis grandiflora</i> var. <i>grandiflora</i>
DA HUA DAO DI LING	大花倒地铃	Bigflower Heartseed*	T1196 <i>Cardiospermum grandiflorum</i>
DA HUA DI AO DOU	大花迪奥豆		T2185 <i>Dioclea grandiflora</i>
DA HUA GE NA XIANG	大花哥纳香	Bigflower Goniothalamus	T3047 <i>Goniothalamus griffithii</i>
DA HUA HONG JING TIAN	大花红景天	Bigflower Rhodiola	T5494 <i>Rhodiola crenulata</i> [Syn. <i>Rhodiola euryphylla</i> ]
DA HUA JIAN MU	大花檉木*	Bigflower Pencilwood*	T2311 <i>Dysoxylum macranthum</i>
DA HUA JIAN QIU LUO	大花剪秋罗	Brilliant Campion	T3950 <i>Lychnis fulgens</i>
DA HUA JIN WA ER	大花金挖耳	Bigflower Carpesium*	T1212 <i>Carpesium eximium</i>
DA HUA JU	大花菊*	Large-flowered Dendranthema*	T2093 <i>Dendranthema grandiflorum</i>
DA HUA LUO XIN FU	大花落新妇	Largeflower Astilbe	T0785 <i>Astilbe macroflora</i>
DA HUA MA CHI XIAN	大花马齿苋	Largeflower Purslane	T5172 <i>Portulaca grandiflora</i>
DA HUA SHAN QIAN NIU	大花山牵牛	Bengal Clockvine	T6444 <i>Thunbergia grandiflora</i>
DA HUA SHAO LAN	大花杓兰	Bigflower Lady's slipper	T1984 <i>Cypripedium macranthum</i> [Syn. <i>Cypripedium tibeticum</i> ]
DA HUA WU WEI ZI	大花五味子	Bigflower Magnoliavine*	T5792 <i>Schisandra grandiflora</i>
DA HUA XI XIN	大花细辛	Largeflower Wildginger	T0729 <i>Asarum maximum</i>
DA HUA XUAN FU HUA CAO	大花旋覆花草	British Inula Herb	T3426 <i>Inula britannica</i>
DA HUA YAO WEN SHU LAN	大花药文殊兰*	Macroanther Crinum*	T1802 <i>Crinum macrantherum</i>
DA HUA YIN YANG HUO	大花淫羊藿	Large-flowered Epimedium	T2396 <i>Epimedium grandiflorum</i>
DA HUA YIN YANG HUO BIAN ZHONG	大花淫羊藿变种	Large-flowered Epimedium Variety	T2397 <i>Epimedium grandiflorum</i> var. <i>thunbergianum</i>
DA HUA ZI WEI	大花紫薇	Queen Crapemyrtle	T3673 <i>Lagerstroemia speciosa</i> [Syn. <i>Munchausia speciosa</i> ; <i>Lagerstroemia flos-reginae</i> ]
DA HUA ZI YU PAN	大花紫玉盘	Largeflower Uvaria	T6662 <i>Uvaria grandiflora</i>
DA HUANG	大黄(药用大黄)	Medicinal Rhubarb	T5472 <i>Rheum officinale</i>
DA HUI QIN	大茴芹*	Big Anise*	T4899 <i>Pimpinella magna</i>
DA JI <sup>(4)</sup>	大薊	Japanese Thistle	T1449 <i>Cirsium japonicum</i>
DA JI <sup>(3)</sup>	大戟	Peking Euphorbia	T2608 <i>Euphorbia pekinensis</i>
DA JIN NIU CAO	大金牛草	Chinese Milkwort	T5073 <i>Polygala chinensis</i> [Syn. <i>Polygala glomerata</i> ]
DA JIN QIAN CAO	大金钱草(金钱草)	Christina Loosestrife	T3998 <i>Lysimachia christinae</i>
DA LANG DU	大狼毒	Large Euphorbia Root	T2602 <i>Euphorbia nematocarpa</i>
DA LI HUA	大丽花	Aztec Dahlia	T1996 <i>Dahlia pinnata</i> [Syn. <i>Dahlia variabilis</i> ]
DA LI LU TI CAO	大理鹿蹄草	Forrest Pyrola	T5348 <i>Pyrola forrestiana</i>
DA LIANG JIANG	大良姜	Galanga Galangal	T0356 <i>Alpinia galanga</i>
DA MA DOU LING	大马兜铃*	Maxima Dutchmanspipe*	T0633 <i>Aristolochia maxima</i>
DA MA JIN	大麻槿	Kenaf Hibiscus	T3238 <i>Hibiscus cannabinus</i>
DA MA SHI GE QIANG WEI	大马士革蔷薇	Damask Rose	T5564 <i>Rosa damascena</i>
DA MA YE ZE LAN	大麻叶泽兰	Hemp-agrimony	T2554 <i>Eupatorium cannabinum</i>
DA MU JIANG ZI	大木姜子	Grand Litse*	T3890 <i>Litsea grandis</i>
DA PENG TENG	搭棚藤	Disciform Prana*	T5190 <i>Prana discifera</i>
DA PO WAN HUA HUA	打破碗花花	Hupeh Anemone	T0468 <i>Anemone hupehensis</i>
DA QIAN HU	大前胡	Big Hogfennel*	T4757 <i>Peucedanum grande</i>
DA QING YANG	大青杨	Ussuri Poplar	T5165 <i>Populus ussuriensis</i>
DA QING YE	大青叶	Indigo-coloured Woad Leaf	T3476 <i>Isatis indigotica</i>

DA SAN YE SHENG MA	大三叶升麻	Cowparsnipleaf Bugbane	T1421 <i>Cimicifuga heracleifolia</i>
DA SUAN	大蒜	Garlic	T0318 <i>Allium sativum</i>
DA TIAO WEN XIE HAO	大条纹邪蒿*	Bigstreak Seseli*	T5930 <i>Seseli grandivittatum</i>
DA TOU SUAN	大头蒜	Wild Leek	T0309 <i>Allium ampeloprasum</i>
DA TOU TUO WU	大头橐吾	Japanese Goldenray	T3808 <i>Ligularia japonica</i> [Syn. <i>Arnica japonica</i> ; <i>Senecio japonica</i> ]
DA TU SI ZI	大菟丝子	Japanese Dodder Seed	T1913 <i>Cuscuta japonica</i>
DA TUAN NANG CHONG CAO	大团囊虫草	Goldenthrad Cordyceps	T1682 <i>Cordyceps ophioglossoides</i>
DA WEI YAO	大尾摇	Indian Heliotrope	T3174 <i>Heliotropium indicum</i>
DA WU LI QIN JIAO	达乌里秦艽	Dahuria Gentian	T2910 <i>Gentiana dahurica</i>
DA XIAN YUAN ZHI	大腺远志	Macradenous Milkwort*	T5077 <i>Polygala macradenia</i>
DA XING QIN	大星芹	Astrantia	T0810 <i>Astrantia major</i>
DA XUE HUA LIAN	大雪花莲	Giant Snowdrop	T2821 <i>Galanthus elweli</i>
DA XUE TENG	大血藤	Sargentgloryvine	T5741 <i>Sargentodoxa cuneata</i>
DA YE AN YE	大叶桉叶	Swamp Mahogany Leaf	T2517 <i>Eucalyptus robusta</i>
DA YE BAI TOU WENG	大叶白头翁	Common Pearleverbasting	T0446 <i>Anaphalis margaritacea</i>
DA YE CAI	大叶菜	Doederlein's Spikemoss	T5861 <i>Selaginella doederleinii</i>
DA YE CHAI HU	大叶柴胡	Bigleaf Thorowax	T1065 <i>Bupleurum longiradiatum</i>
DA YE CHOU HUA JIAO	大叶臭花椒	Manyspiny Pricklyash*	T6883 <i>Zanthoxylum myriacanthum</i>
DA YE DIAO LAN	大叶吊兰	Bigleaf Breaketplant	T1380 <i>Chlorophytum malayense</i>
DA YE DONG QING	大叶冬青	Broadleaf Holly	T3393 <i>Ilex latifolia</i>
DA YE GOU TENG	大叶钩藤	Largeleaf Gambirplant	T6625 <i>Uncaria macrophylla</i>
DA YE GU SUI BU	大叶骨碎补	Taiwan Davallia	T2052 <i>Davallia divaricata</i> [Syn. <i>Davallia formosana</i> ; <i>Davallia orientalis</i> ]
DA YE GUA TAI MU	大叶瓜泰木		T3069 <i>Guatteria amplifolia</i>
DA YE HOU PO	大叶厚朴	Bigleaf Magnolia	T4048 <i>Magnolia rostrata</i>
DA YE HUA JIAO	大叶花椒	Shellfish Pricklyash	T6876 <i>Zanthoxylum dissitum</i>
DA YE HUA JIAO GEN	大叶花椒根	Shellfish Pricklyash Root	T6877 <i>Zanthoxylum dissitum</i>
DA YE JIN HUA CAO	大叶金花草	Common Wedgelet Fern	T6116 <i>Stenoloma chusanum</i>
DA YE JING KOU BIAN CAO	大叶井口边草	Cretan Brake	T5287 <i>Pteris cretica</i>
DA YE JU	大叶薷	Largeleaf Pipper*	T4951 <i>Piper laetispicum</i>
DA YE KU NUO NI	大叶库诺尼*		T1891 <i>Cunonia macrophylla</i>
DA YE LUO FU MU	大叶萝芙木	Largeleaf Devilpepper*	T5437 <i>Rauwolfia macrophylla</i>
DA YE MAO ZHU MU	大叶帽柱木	Abura Mitragyna	T4257 <i>Mitragyna macrophylla</i>
DA YE NAN YANG SHAN	大叶南洋杉	Bunya Bunya	T0578 <i>Araucaria bidwillii</i>
DA YE NAN YANG SHEN	大叶南洋参*	Bigleaf Polyscias*	T5130 <i>Polyscias amplifolia</i>
DA YE NIU FANG FENG	大叶牛防风	Giant Hogweed	T3216 <i>Heracleum mantegazzianum</i>
DA YE NIU NAI CAI	大叶牛奶菜	Ko Condorvine	T4117 <i>Marsdenia koi</i>
DA YE QIAN CAO	大叶茜草	Smoothstalk Madder	T5583 <i>Rubia schumannina</i>
DA YE SHE PU TAO	大叶蛇葡萄	Largeleaf Ampelopsis	T0428 <i>Ampelopsis megalophylla</i>
DA YE SHU LAN	大叶树兰	Largeleaf Aglaia*	T0235 <i>Aglaia elliptifolia</i>
DA YE TANG JIAO SHU	大叶糖胶树	Deviltree Alstonia	T0370 <i>Alstonia macrophylla</i>
DA YE TANG SONG CAO	大叶唐松草	Faber Meadowrue	T6381 <i>Thalictrum faberi</i>
DA YE TENG HUANG	大叶藤黄	Yellowjuice Garcinia	T2880 <i>Garcinia xanthochymus</i>
DA YE TU MU XIANG	大叶土木香	Largeleaf Inula	T3430 <i>Inula grandis</i>
DA YE XIAN MAO	大叶仙茅	Largeleaf Curculigo	T1900 <i>Curculigo capitulata</i> [Syn. <i>Leucojum capitulata</i> ]
DA YE XIANG CHA CAI	大叶香茶菜	Largeleaf Rabdosia	T5394 <i>Rabdosia macrophylla</i>
DA YE XIANG RU	大叶香薷	Twoanther Mosla	T4305 <i>Mosla dianthera</i>
DA YE YANG	大叶杨	Bigleaf Poplar	T5155 <i>Populus lasiocarpa</i>
DA YE YOU MU YUN XIANG	大叶柚木芸香*		T6320 <i>Teclea grandifolia</i>
DA YE YUN XIANG CAO	大叶芸香草	Perforated Haplophyllum	T3104 <i>Haplophyllum perforatum</i>
DA YE ZI YU PAN	大叶紫玉盘	Largeleaf Uvaria*	T6665 <i>Uvaria macrophylla</i>

DA YE ZI ZHU	大叶紫珠	Bigleaf Beautyberry	T1120 <i>Callicarpa macrophylla</i>
DA YE ZUI YU CAO	大叶醉鱼草	Orangeeye Butterflybush	T1046 <i>Buddleja davidii</i>
DA YI ZHI JIAN	大一枝箭	Golden Lycoris	T3983 <i>Lycoris aurea</i>
DA YU BIAO HUA	大鱼鳔花	Shortclustered Plantainlily	T3283 <i>Hosta sieboldiana</i>
DA YUN SHI	大云实	Large Caesalpinia*	T1105 <i>Caesalpinia major</i>
DA ZAO	大枣	Chinese Date	T6916 <i>Ziziphus jujuba</i>
DA ZHUI XIANG CHA CAI	大锥香茶菜	Bigthyrse Rabdosia	T3514 <i>Isodon megathyrsus</i>
DA ZI JIN GU CAO	大籽筋骨草	Largeseed Bugle	T0266 <i>Ajuga macrosperma</i>
DA ZI MAI MA TENG	大籽买麻藤	Bigseed Jointfir	T3032 <i>Gnetum montanum</i> f. <i>megalocarpum</i>
DA ZI XUE DAN	大籽雪胆	Largeseed Hemsleya	T3208 <i>Hemsleya macrosperma</i>
DA ZI ZHANG YA CAI	大籽獐牙菜	Bigseed Swertia	T6225 <i>Swertia macrosperma</i>
DAI DAI HUA	玳玳花	Bitter Citrus	T1469 <i>Citrus aurantium</i> var. <i>amara</i>
DAN BAN GOU YA HUA	单瓣狗牙花	Divaricate Ervatamia	T2442 <i>Ervatamia divaricata</i>
DAN GAI TIE XIAN JUE	单盖铁线蕨	Monochlamys Maidenhair	T0174 <i>Adiantum monochlamys</i>
DAN HONG QIANG DAO YAO	淡红枪刀药*	Rose Hypoestes*	T3374 <i>Hypoestes rosea</i>
DAN HUANG BA DOU	淡黄巴豆*	Flavescent Croton*	T1845 <i>Croton flavens</i>
DAN HUANG KU MA DOU	淡黄苦马豆*	Yellowish Swainsonia*	T6209 <i>Swainsonia luteola</i>
DAN HUANG MU XI CAO	淡黄木犀草	Yellowish Rabdosia	T5452 <i>Reseda luteola</i>
DAN HUANG XIANG CHA CAI	淡黄香茶菜	Yellowish Swertia*	T3488 <i>Isodon flavidus</i>
DAN HUANG ZHANG YA CAI	淡黄獐牙菜	Light-hoar Tickclover*	T6235 <i>Swertia punicea</i> var. <i>lutescens</i>
DAN HUI BAI SHAN MA HUANG	淡灰白山蚂蝗*	Tingit Iris	T2128 <i>Desmodium canum</i>
DAN JI ER YUAN WEI	丹吉尔鸢尾	Simple Rostellularia	T3472 <i>Iris tingitana</i>
DAN JUE CHUANG	单爵床	Einkorn	T3610 <i>Justicia simplex</i>
DAN LI XIAO MAI	单粒小麦	Virescent Larkspur	T6545 <i>Triticum monococcum</i>
DAN LV CUI QUE	淡绿翠雀*	Medicinal Fatheadtree	T2090 <i>Delphinium virescens</i>
DAN MU	胆木	Danshen	T4391 <i>Nauclea officinalis</i>
DAN SHEN	丹参	Interrupted Clubmoss	T5680 <i>Salvia miltiorrhiza</i>
DAN SUI SHI SONG	单穗石松	White Pearlweed	T3965 <i>Lycopodium annotinum</i>
DAN TIAO CAO	单条草	Monoleaf Atalantia*	T3996 <i>Lysimachia candida</i>
DAN YE DONG FENG JU	单叶东风橘*	Simpleleaf Shrub Chastetree	T0815 <i>Atalantia monophylla</i>
DAN YE MAN JING	单叶蔓荆	Simpleleaf Shrub Chastetree Fruit	T6790 <i>Vitex rotundifolia</i> [Syn. <i>Vitex trifolia</i> var. <i>simplicifolia</i> ]
DAN YE MAN JING ZI	单叶蔓荆子	Simple Pronephrium	T6791 <i>Vitex rotundifolia</i> [Syn. <i>Vitex trifolia</i> var. <i>simplicifolia</i> ]
DAN YE XIN YUE JUE	单叶新月蕨	Singleleaf Acronychia*	T5209 <i>Pronephrium simplex</i> [Syn. <i>Meniscium simplex</i> ]
DAN YE YOU GAN	单叶油柑*	Simplex Rice-flower*	T0149 <i>Acronychia haplophylla</i>
DAN ZHI DAO HUA	单枝稻花	Monoseed Honeylocust*	T4893 <i>Pimelea simplex</i>
DAN ZHONG ZAO JIA	单种皂荚*	Common Lophatherum	T2977 <i>Gleditsia monosperma</i>
DAN ZHU YE	淡竹叶	Common Lophatherum Root	T3920 <i>Lophatherum gracile</i>
DAN ZHU YE GEN	淡竹叶根	Monoseed Wormwood*	T3921 <i>Lophatherum gracile</i>
DAN ZI HAO	单籽蒿*	Oneseed Ephedra	T0686 <i>Artemisia monosperma</i>
DAN ZI MA HUANG	单子麻黄	Common Hawthorn	T2375 <i>Ephedra monosperma</i>
DAN ZI SHAN ZHA	单子山楂	Bengal Kino	T1773 <i>Crataegus monogyna</i>
DAN ZI ZI MAO	单籽紫柳	Chinese Angelica	T1083 <i>Butea monosperma</i>
DANG GUI	当归	Pilose Asiabell	T0495 <i>Angelica sinensis</i>
DANG SHEN	党参	Chinese Swertia*	T1599 <i>Codonopsis pilosula</i>
DANG YAO	当药	Rice Straw	T6214 <i>Swertia chinensis</i>
DAO CAO	稻草	Sword Jackbean	T4544 <i>Oryza sativa</i>
DAO CHI MEI JUN	稻赤霉菌	Dawo Rabdosia	T2960 <i>Gibberella zeae</i>
DAO DOU	刀豆		T1169 <i>Canavalia gladiata</i>
DAO FU XIANG CHA CAI	道孚香茶菜		T3484 <i>Isodon dawoensis</i>
DAO GEN MEI	稻根霉*		T5490 <i>Rhizopus oryzae</i>

DAO LUAN YE FU SHI JUE	倒卵叶伏石蕨	Obovateleaf Lemnaphyllum*	T3737 <i>Lemnaphyllum microphyllum</i> var. <i>obovatum</i>
DAO LUAN YE PU GONG YING GEN	倒卵叶蒲公英根	Obovaleaf Dandelion Root	T6302 <i>Taraxacum obovatum</i>
DAO NIAN ZI	倒捻子	Mangosteen	T2863 <i>Garcinia mangostana</i>
DAO SHI HAO	道氏蒿	Douglas Wormwood*	T0675 <i>Artemisia douglasiana</i>
DAO YE LIU ZU JUE	倒叶瘤足蕨	Dunn's Plagiogyria	T4997 <i>Plagiogyria dunnii</i>
DAO ZHUANG JI GU CHANG SHAN	刀状鸡骨常山*	Spatulate Alstonia*	T0375 <i>Alstonia spatulata</i>
DE GUO LONG DAN	德国龙胆	German Gentian	T2911 <i>Gentiana germanica</i>
DE GUO YUAN WEI	德国鸢尾	German Iris	T3459 <i>Iris germanica</i>
DE KA RUI HUA JIAO	得卡瑞花椒	Decary Pricklyash*	T6873 <i>Zanthoxylum decaryi</i>
DE LA KE BA DOU	得拉克巴豆	Drac Croton*	T1843 <i>Croton draconoide</i>
DE LA MENG DE JIN SI TAO	德拉蒙德金丝桃*	Drummond St.John'swort	T3347 <i>Hypericum drummondii</i>
DE QIN HONG JING TIAN	德钦红景天	Atuntsuen Rhodiola	T5492 <i>Rhodiola atuntsuensis</i>
DENG LONG CAO	灯笼草	Peruvian Groundcherry	T4852 <i>Physalis peruviana</i>
DENG TAI SHU	灯台树	Giant Dogwood	T1697 <i>Cornus controversa</i> [Syn. <i>Bothrocaryum controversum</i> ]
DENG XIN CAO	灯芯草	Common Rush	T3578 <i>Juncus effusus</i>
DENG XIN DAI ER DOU	灯心戴尔豆		T5273 <i>Psorothamnus junceus</i>
DENG XIN LIU SHAN HU	灯心柳珊瑚	Gorgonian <i>Junceella juncea</i>	T3576 <i>Junceella juncea</i>
DENG YOU TENG ZI	灯油藤子	Paniculed Bittersweet Seed	T1292 <i>Celastrus paniculatus</i>
DENG ZHAN XI XIN	灯盏细辛	Shortscape Fleabane	T2422 <i>Erigeron breviscapus</i>
DI BU RONG	地不容	Delavay Stephania	T6120 <i>Stephania delavayi</i> [Syn. <i>Stephania epigaea</i> ]
DI ER CAO	地耳草	Japanese St.John'swort	T3356 <i>Hypericum japonicum</i>
DI FENG PI	地枫皮	Difengpi Anisetree	T3400 <i>Illicium difengpi</i>
DI GEN JIN SI TAO	迪根金丝桃*	Degen St.John'swort*	T3346 <i>Hypericum degenii</i>
DI GUA ZI	地瓜子	Wayaka Yambean Seed	T4572 <i>Pachyrhizus erosus</i>
DI JIN	地筋	Contorted Tanglehead	T3234 <i>Heteropogon contortus</i>
DI JIN	地锦	Japanese Creeper	T4662 <i>Parthenocissus tricuspidata</i>
DI JIN CAO	地锦草	Humifuse Euphorbia	T2591 <i>Euphorbia humifusa</i>
DI KE DONG	敌克冬	Swamp Loosestrife	T2057 <i>Decodon verticillatus</i>
DI SHAO GUA	地梢瓜	Bastardtoadflaxlike Swallowwort	T1961 <i>Cynanchum thesioides</i>
DI SHI WU TAN	迪氏乌檀	Diderrichi Fatheadtree*	T4389 <i>Nauclea diderrichii</i>
DI SUO LUO	地梭罗		T4109 <i>Marchantia polymorpha</i>
DI TANG BAI BU	棣棠百部*	Kerri Stemon*	T6112 <i>Stemona kerrii</i>
DI TANG CAO	棣棠草	Japanese Hypecoum*	T3333 <i>Hypecoum japonicum</i>
DI TANG HUA	棣棠花	Japanese Kerria Flower	T3628 <i>Kerria japonica</i>
DI TAO HUA	地桃花	Rose Mallow	T6645 <i>Urena lobata</i>
DI TU YI	地图衣		T5485 <i>Rhizocarpon geographicum</i>
DI XIA CHE ZHOU CAO	地下车轴草	Subterranean Clover	T6525 <i>Trifolium subterraneum</i>
DI YANG QUE	地羊鹊	Birdsfoot Trefoil	T3928 <i>Lotus corniculatus</i>
DI YU	地榆	Garden Burnet	T5712 <i>Sanguisorba officinalis</i>
DI ZHONG HAI BAI MU	地中海柏木	Mediterranean Cypress	T1899 <i>Cupressus sempervirens</i>
DI ZHONG HAI DA JI	地中海大戟*	Mediterranean Euphorbia;	T2582 <i>Euphorbia characias</i>
		Mediterranean Spurge	
DI ZHONG HAI JU	地中海菊		T1580 <i>Cnicus benedictu</i>
DI ZHONG HAI MA SANG	地中海马桑*	Mediterranean Coriaria	T1691 <i>Coriaria myrtifolia</i>
DI ZHONG HAI MAO RUI HUA	地中海毛蕊花	Mediterranean Mullein	T6704 <i>Verbascum sinuatum</i>
DI ZHONG HAI ZONG HAI ZAO	地中海棕海藻	Mediterranean Brown Alga <i>Dilophus ligulatus</i>	T2183 <i>Dilophus ligulatus</i>
DIAN BAI ZHI	滇白芷	Scabrous Cowparsnip	T3222 <i>Heracleum scabridum</i>

DIAN BAI ZHU SHU	滇白珠树	Yunnan Gaultheria	T2895 <i>Gaultheria yunnanensis</i>
DIAN DI MEI YE CHA YE HUA	点地梅叶茶叶花	Spreading Dogbane	T0550 <i>Apocynum androsaemifolium</i>
DIAN GOU TENG	滇钩藤	Yunnan Gambirplant	T6639 <i>Uncaria yunnanensis</i>
DIAN HUANG JING	滇黄精	King Solomonseal	T5092 <i>Polygonatum kingianum</i>
DIAN HUANG QIN	滇黄芩	Yunnan Skullcap	T5833 <i>Scutellaria amoena</i>
DIAN JI GU CHANG SHAN	滇鸡骨常山	Yunnan Alstonia	T0378 <i>Alstonia yunnanensis</i>
DIAN JIANG HUA	滇姜花	Yunnan Gingerlily	T3121 <i>Hedychium yunnanense</i>
DIAN LONG DAN	滇龙胆	Rigescens Gentian	T2928 <i>Gentiana rigescens</i>
DIAN MU DAN	滇牡丹	Delavay Peony	T4582 <i>Paeonia delavayi</i>
DIAN NAN HONG HOU KE	滇南红厚壳	S. Yunnan Beautyleaf	T1130 <i>Calophyllum polyanthum</i>
DIAN QIE	颠茄	Common Atropa	T0825 <i>Atropa belladonna</i>
DIAN QIN	滇芹	Common Sinodielsia	T5963 <i>Sinodielsia yunnanensis</i>
DIAN XI WU TOU	滇西乌头	Yunnanwest Monkshood	T0081 <i>Aconitum bulleyanum</i>
DIAN ZHUANG JUAN BAI	垫状卷柏	Cushion-shaped Spikemoss	T5865 <i>Selaginella pulvinata</i>
DIAN ZI CAO	滇紫草	Paniculate Onosma	T4500 <i>Onosma paniculatum</i>
DIAO DENG SHU	吊灯树	Sausagetre	T3629 <i>Kigelia pinnata</i>
DIAO GAN MA	吊干麻	Angled Bittersweet	T1285 <i>Celastrus angulatus</i>
DIAO ZHANG GEN PI	钓樟根皮	Largeleaf Spicebush Root-bark	T3856 <i>Lindera umbellata</i> [Syn. <i>Lindera erythrocarpa</i> ]
DIAO ZHANG ZHI YE	钓樟枝叶	Largeleaf Spicebush Branch-leaf	T3857 <i>Lindera umbellata</i> [Syn. <i>Lindera erythrocarpa</i> ]
DIE DA LAO	跌打老	Whorlleaf Litsea	T3897 <i>Litsea verticillata</i>
DIE QIAO SHI HU	叠鞘石斛	Denne Denrdobium	T2096 <i>Dendrobium aurantiacum</i> var. <i>denneanum</i>
DING GONG TENG	丁公藤	Obtuseleaf Erycibe	T2449 <i>Erycibe obtusifolia</i>
DING HU DIAO ZHANG	鼎湖钓樟	Chun's Spicebush	T3849 <i>Lindera chunii</i>
DING KE LA QIAN JIN TENG	丁克拉千金藤	Dinklage Stephania*	T6123 <i>Stephania dinklagei</i>
DING QIE	丁茄(野颠茄)	Aculeate Nightshade*	T5989 <i>Solanum aculeatissimum</i>
DING XIANG	丁香	Clove Tree	T6263 <i>Syzygium aromaticum</i> [Syn. <i>Eugenia caryophyllata</i> ]
DING XIANG LUO LE	丁香罗勒	Sweetscented Basil	T4473 <i>Ocimum gratissimum</i>
DING YU JU	顶羽菊	Creeping Acroptilon	T0154 <i>Acroptilon repens</i>
DONG AN NA TUO LI YA SHI CHE JU	东安纳托利亚矢车菊	East-Anatolia Centaurea*	T1307 <i>Centaurea pseudoscabiosa</i> ssp. <i>pseudoscabiosa</i>
DONG BEI AN HUA JIN WA ER	东北暗花金挖耳*	Northeast Dim-flower Carpesium*	T1214 <i>Carpesium triste</i> var. <i>manshuricum</i>
DONG BEI CI REN SHEN	东北刺人参	Northeast Spineginseng*, Tall Oplopanax	T4516 <i>Oplopanax elatus</i>
DONG BEI DUO ZU JUE	东北多足蕨	North-east Polypody*	T5126 <i>Polypodium virginianum</i>
DONG BEI HE SHI	东北鹤虱	European Stickseed	T3688 <i>Lappula echinata</i>
DONG BEI HU TAO	东北胡桃*	Northeast Walnut*	T3565 <i>Juglans mandshurica</i> var. <i>sieboldiana</i>
DONG BEI HUI HAO	东北蛔蒿	Northeast Seriphidium	T5921 <i>Seriphidium finitum</i> [Syn. <i>Artemisia finita</i> ]
DONG BEI LONG DAN	东北龙胆	Linearleaf Gentian	T2921 <i>Gentiana manshurica</i>
DONG BEI SHI SHAN	东北石杉	Northeast Clubmos*	T3293 <i>Huperzia miyoshiana</i>
DONG BEI TIAN NAN XING	东北天南星	Amur Jackintheulpit	T0617 <i>Arisaema amurense</i>
DONG BEI YAN HU SUO	东北延胡索	Amur Corydalis	T1706 <i>Corydalis ambigua</i> var. <i>amurense</i> [Syn. <i>Corydalis ambigua</i> ]
DONG CHONG XIA CAO	冬虫夏草	Aweto (Chinese Caterpillar Fungus)	T1683 <i>Cordyceps sinensis</i>
DONG DANG GUI	东当归	Acutelobed Angelica	T0474 <i>Angelica acutiloba</i> [Syn. <i>Ligusticum acutilobum</i> ]
DONG DU HUI	东毒茴	Religious Anisetree*	T3406 <i>Illicium religiosum</i>
DONG E LUO DU WU	东俄洛囊吾	Tongol Goldenray	T3816 <i>Ligularia tongolensis</i>
DONG FANG CANG ER	东方苍耳*	Oriental Cocklebur*	T6840 <i>Xanthium orientale</i>
DONG FANG FEI YAN CAO	东方飞燕草*	Oreintal Consolida*	T1647 <i>Consolida orientalis</i>
DONG FANG GOU JI	东方狗脊	Oriental Chain Fern	T6831 <i>Woodwardia orientalis</i>

DONG FANG GOU TENG	东方钩藤*	Oriental Gambirplant*	T6627 <i>Uncaria orientalis</i>
DONG FANG GOU YA HUA	东方狗牙花	Oriental Ervatamia*	T2446 <i>Ervatamia orientalis</i>
DONG FANG JIA GUO JUE	东方荚果蕨	Oriental Ostrich Fern	T4126 <i>Matteuccia orientalis</i>
DONG FANG TIAN XIAN ZI	东方天仙子	Oriental Henbane*	T3330 <i>Hyoscyamus orientalis</i>
DONG FANG WEI SI MU	东方维斯木*	Oriental Vismia*	T6780 <i>Vismia orientalis</i>
DONG FANG WU TAN	东方乌檀	Oriental Fatheadtree*	T4392 <i>Nauclea orientalis</i>
DONG FANG XI MEN FEI CAO	东方西门肺草*	Soft Comfrey	T6247 <i>Symphytum orientale</i>
DONG FANG XIANG KE KE	东方香科科	Oriental Germander	T6364 <i>Teucrium orientale</i>
DONG FANG YANG DI HUANG	东方洋地黄	Oriental Foxglove*	T2176 <i>Digitalis orientalis</i>
DONG FEI JUE MING	东非决明	East-African Senna*	T1246 <i>Cassia singueana</i>
DONG FEI MA QIAN	东非马钱	East-African Poisonnut*	T6191 <i>Strychnos usambarensis</i>
DONG FENG CAI	东风菜	Scabrous Doellingeria	T2244 <i>Doellingeria scaber</i> [Syn. <i>Aster scaber</i> ]
DONG FENG JU GEN	东风橘根	Boxleaf Atalantia Root	T0813 <i>Atalantia buxifolia</i> [Syn. <i>Severinia buxifolia</i> ]
DONG FENG JU YE	东风橘叶	Boxleaf Atalantia Leaf	T0814 <i>Atalantia buxifolia</i> [Syn. <i>Severinia buxifolia</i> ]
DONG GUA PI	冬瓜皮	Chinese Waxgourd Peel	T0894 <i>Benincasa hispida</i>
DONG GUA ZI	冬瓜籽	Chinese Waxgourd Seed	T0895 <i>Benincasa hispida</i>
DONG JIN BA DOU	东京巴豆*	Viet Nam Croton*; Kho Sam Cho La	T1859 <i>Croton tonkinensis</i>
DONG LANG DANG	东莨菪	Japanese Scopolia	T5821 <i>Scopolia japonica</i>
DONG LING CAO	冬凌草(碎米槌)	Blushred Rabdosia	T5396 <i>Rabdosia rubescens</i>
DONG NAN JING TIAN	东南景天	Alfred Stonecrop	T5851 <i>Sedum alfredii</i> [Syn. <i>Sedum formosanum</i> ]
DONG QIANG	东廡	Whitethorn*	T4435 <i>Nitraria schoberi</i>
DONG QING YE MEI DENG MU	冬青叶美登木	Ilicis-leaf Mayten*	T4135 <i>Maytenus ilicifolia</i>
DONG YA TANG SONG CAO	东亚唐松草		T6401 <i>Thalictrum minus</i> var. <i>hypoleucum</i>
DONG YA ZHI YE TAI	东亚指叶苔		T3761 <i>Lepidozia fauriana</i>
DONG YA ZI JIN NIU	东亚紫金牛		T0603 <i>Ardisia sieboldii</i>
DONG YI HAO JIAN MA	东一号剑麻	Cultivate Sisalan Agave East-1	T0221 <i>Agave east-one</i>
DONG YING SHAN HU MU	东赢珊瑚木	Japanese Aucuba	T0828 <i>Aucuba japonica</i>
DOU BAN CAI	豆瓣菜	Watercress	T4388 <i>Nasturtium officinale</i>
DOU BAO JUN	豆包菌	Dye-maker's False Puffball	T4978 <i>Pisolithus tinctorius</i> [Syn. <i>Lycoperdon capitatum</i> ; <i>Scleroderma tinctorium</i> ]
DOU CHI CAO	豆豉草	Bloodred Iris	T3468 <i>Iris sanguinea</i>
DOU FU CHAI	豆腐柴	Japanese Premna	T5194 <i>Premna microphylla</i>
DOU SHU	豆薯	Wayaka Yambean	T4573 <i>Pachyrrhizus erosus</i>
DOU YE JIU LI XIANG	豆叶九里香	Euchretaleaf Common Jasminorange	T4317 <i>Murraya euchrestifolia</i> [Syn. <i>Clausena euchrestifolia</i> ]
DOU YOU	豆油	Soybean Oil	T2999 <i>Glycine max</i>
DOU ZHUANG HE BAO MU DAN	兜状荷包牡丹	Dutchman's Breeches	T2148 <i>Dicentra cucullaria</i>
DU AI BA JIAO	毒矮八角	Poisonous-shrub Anise*	T3408 <i>Illicium tsangii</i>
DU BIAN DOU	毒扁豆	Deadly Calabarbean	T4860 <i>Physostigma venenosum</i>
DU DOU	毒豆	Goldenchain Laburnum	T3648 <i>Laburnum anagyroides</i>
DU E GAO	毒鹅膏	Death Cap	T0385 <i>Amanita phalloides</i>
DU HENG	杜衡	Forbes Wildginger	T0726 <i>Asarum forbesii</i>
DU HONG HUA	杜虹花	Taiwan Beautyberry	T1118 <i>Callicarpa formosana</i>
DU HU LUO BO	毒胡萝卜	Deadly Carrot	T6419 <i>Thapsia garganica</i>
DU HUA JIAO	毒花椒*	Venous Pricklyash*	T6899 <i>Zanthoxylum veneficium</i>
DU HUI MAO DOU	毒灰毛豆	Toxic Tephrosia*	T6341 <i>Tephrosia toxicaria</i>
DU HUO	独活	Doubleteeth Pubescent Angelica	T0492 <i>Angelica pubescens</i> f. <i>biserrata</i> [Syn. <i>Angelica pubescens</i> ]
DU JING SHAN	杜茎山	Japanese Maesa	T4029 <i>Maesa japonica</i>



DU JUAN HUA	杜鹃花	Indian Azalea	T5523 <i>Rhododendron simsii</i>
DU JUAN HUA YE	杜鹃花叶	Indian Azalea Leaf	T5524 <i>Rhododendron simsii</i>
DU JUAN LAN	杜鹃兰	Appendiculate Cremastra	T1787 <i>Cremastra appendiculata</i>
DU MA QIAN	毒马钱	Toxic Poisonnut*	T6188 <i>Strychnos toxifera</i>
DU QI TENG	毒漆藤	Poison Ivy	T6481 <i>Toxicodendron radicans</i>
DU QIN GEN	毒芹根	European Waterhemlock Root	T1416 <i>Cicuta virosa</i>
DU SHEN	毒参	Poisonhemlock	T1642 <i>Conium maculatum</i>
DU SONG SHI	杜松实	Stiffleaf Juniper Fruit	T3594 <i>Juniperus rigida</i>
DU WO JU	毒萹苳	Blue Lettuce	T3664 <i>Lactuca virosa</i>
DU XIAN ZI	都咸子	Common Cashew Fruit	T0438 <i>Anacardium occidentale</i>
DU YI WEI	独一味	Common Lamiophlomis	T3679 <i>Lamiophlomis rotata</i> [Syn. <i>Phlomis rotata</i> ]
DU YU SHU WEI CAO	毒鱼鼠尾草	<i>Salvia pisidica</i>	T5684 <i>Salvia pisidica</i>
DU ZHONG	杜仲	Eucommia	T2530 <i>Eucommia ulmoides</i>
DU ZHONG YE	杜仲叶	Eucommia Leaf	T2531 <i>Eucommia ulmoides</i>
DUA JING GU DANG GUI	短茎古当归	Shortstem Archangelica*	T0582 <i>Archangelica brevicaulis</i> [Syn. <i>Angelica brevicaulis</i> ; <i>Angelica brevicaulis</i> ]
DUAN BAN HUA	短瓣花	Shortpetalflower	T1001 <i>Brachystemma calycinum</i>
DUAN BAN JIN LIAN HUA	短瓣金莲花	Ledebour Globeflower	T6553 <i>Trollius ledebourii</i>
DUAN BANG SHI HU	短棒石斛	Hairstalk Denrdobium	T2097 <i>Dendrobium capillipes</i>
DUAN BAO YE SHA CAO	短苞叶莎草	Shortbractleaf Galingale*	T1974 <i>Cyperus brevibracteatus</i>
DUAN BING HE YE LAN	短柄禾叶兰*	Short-stipe Agrostophyllum*	T0253 <i>Agrostophyllum brevipes</i>
DUAN CHI HUANG QI	短齿黄芪*	Shorttooth Milkvetch*	T0788 <i>Astragalus canadensis</i> var. <i>brevidens</i>
DUAN CI HUA JIAO	短刺花椒*	Shortspine Pricklyash*	T6868 <i>Zanthoxylum brachyacanthum</i>
DUAN E HUANG LIAN	短萼黄连	Shortsepal Goldthread	T1663 <i>Coptis chinensis</i> var. <i>brevisepala</i>
DUAN GENG HU ZHI ZI	短梗胡枝子	Shortstalk Bushclover	T3771 <i>Lespedeza cyrtobotrya</i>
DUAN HUA HU LU	短花葫芦*	Shortflower Bottle Gourd*	T3667 <i>Lagenaria breviflora</i>
DUAN HUA ZHU SHI DOU	短花猪屎豆	Shortflower Crotalaria*	T1816 <i>Crotalaria breviflora</i>
DUAN JIE SHEN	断节参	Kunming Mosquitotrap	T1963 <i>Cynanchum wallichii</i>
DUAN JU	短蒟	Globular Pepper	T4956 <i>Piper mullesua</i>
DUAN MAO DU HUO	短毛独活	Shorthair Cowparsnip	T3217 <i>Heracleum moellendorffii</i> [Syn. <i>Heracleum microcarpum</i> ; <i>Heracleum morifolium</i> ]
DUAN MAO JIN XIAN CAO GEN	短毛金线草根	Shorthairy Antenoron	T0519 <i>Antenoron neofiliforme</i>
DUAN PIAN GAO BEN	短片藜本	Shortlobe Ligusticum	T3819 <i>Ligusticum brachylobum</i>
DUAN RONG MAO GOU TENG	短绒毛钩藤*	Velutinous Gambirplant*	T6638 <i>Uncaria velutina</i>
DUAN RONG MAO OU XIA ZHI CAO	短绒毛欧夏至草*	Velutinous Hoarhound*	T4113 <i>Marrubium velutinum</i>
DUAN ROU MAO DA JI	短柔毛大戟*	Shortfluff Euphorbia*	T2613 <i>Euphorbia pubescens</i>
DUAN ROU MAO FEI YAN CAO	短柔毛飞燕草*	Shortfluff Consolida*	T1648 <i>Consolida pubescens</i>
DUAN ROU MAO MA DOU LING	短柔毛马兜铃*	Shortfluff Dutchmanspipe*	T0636 <i>Aristolochia pubescens</i>
DUAN ROU MAO ZHI XIE MU	短柔毛止泻木*	Shortfluff Holarrhena*	T3268 <i>Holarrhena pubescens</i>
DUAN SHE GU	短蛇菰*	Abbreviate Balanophora*	T0857 <i>Balanophora abbreviata</i>
DUAN SHU	椴树*	Common Lime	T6461 <i>Tilia vulgaris</i>
DUAN SUI HU JIAO	短穗胡椒	Shortspike Pepper*	T4939 <i>Piper brachystachyum</i>
DUAN TING SHAN MAI DONG	短葶山麦冬	Short-stipe Liriope*	T3872 <i>Liriope muscari</i>
DUAN XIAN XIAO MI CAO	短腺小米草	Regel Eyebright	T2629 <i>Euphrasia regelii</i>
DUAN XIAO SHE GEN CAO	短小蛇根草	Dwarf Ophiorrhiza	T4514 <i>Ophiorrhiza pumila</i>
DUAN YE HONG DOU SHAN	短叶红豆杉	Pacific Yew	T6308 <i>Taxus brevifolia</i>
DUAN YE JIA MU ZEI	短叶假木贼	Shortleaf Anabasis	T0436 <i>Anabasis brevifolia</i>
DUAN YE JUAN HAO	短叶绢蒿	Shortleaf Wormwood*	T0667 <i>Artemisia brevifolia</i>
DUAN YE LONG DAN	短叶龙胆*	Shortleaf Gentian*	T2904 <i>Gentiana brachyphylla</i>

DUAN YE LONG SHE LAN	短叶龙舌兰	Narrowleaf Agave	T0217 <i>Agave angustifolia</i>
DUAN YE LUO HAN SONG SHI	短叶罗汉松实	Chinese Podocarpus Seed	T5044 <i>Podocarpus macrophyllus</i> var. <i>maki</i>
DUAN YE LUO HAN SONG YE	短叶罗汉松叶	Chinese Podocarpus Leaf	T5045 <i>Podocarpus macrophyllus</i> var. <i>maki</i>
DUAN YE PENG QI JU	短叶虻蜚菊*		T6905 <i>Zexmenia brevifolia</i>
DUAN YE SHAN MA HUANG	椴叶山蚂蝗	Lindenleaf Tickclover*	T2135 <i>Desmodium tiliaefolium</i>
DUAN YE ZHU SHI DOU	短叶猪屎豆*	Shortleaf Crotalaria*	T1817 <i>Crotalaria brevifolia</i>
DUI SHENG MA QIAN	对生马钱	Opposite Poisonnut*	T6169 <i>Strychnos decussata</i>
DUI XIN JU	堆心菊	Sneezeweed	T3134 <i>Helenium autumnale</i>
DUI YE JIN YAO	对叶金腰	Oppositeleaf Goldsaxifrage*	T1407 <i>Chrysosplenium oppositifolium</i>
DUI YE RONG	对叶榕	Oppositeleaf Fig	T2720 <i>Ficus hispida</i>
DUI YE YUAN HU	对叶元胡	Ledeour Corydalis*	T1720 <i>Corydalis ledebouriana</i>
DUN BAO XUE LIAN	钝苞雪莲	Blacken Saussurea	T5762 <i>Saussurea nigrescens</i>
DUN LIE YIN LIAN HUA	钝裂银莲花	Obtuselobed Anemone	T0469 <i>Anemone obtusifolia</i>
DUN XING AO DING ZAO	钝形凹顶藻	Blunt Concave-top Alga*	T3722 <i>Laurencia obtusa</i>
DUN XING BAI YE TENG	钝形白叶藤*	Obtuse Cryptolepis*	T1865 <i>Cryptolepis obtusa</i>
DUN XING CHI AN YE	钝形赤桉叶*	Obtuse Eucalyptus Leaf*	T2503 <i>Eucalyptus camaldulensis</i> var. <i>obtusa</i>
DUN XING JI DAN HUA	钝形鸡蛋花*	Obtuse Frangipani*	T5031 <i>Plumeria obtusa</i>
DUN YE CHE ZHOU CAO	钝叶车轴草	Suckling Clover	T6517 <i>Trifolium dubium</i>
DUN YE DA JI	钝叶大戟*	Obtuseleaf Euphorbia*	T2605 <i>Euphorbia obtusifolia</i> var. <i>obtusifolia</i>
DUN YE DA JI XIANG JIANG	钝叶大戟橡浆*	Obtuseleaf Euphorbia Latex*	T2604 <i>Euphorbia obtusifoli</i>
DUN YE GUI JIU	盾叶鬼臼	Common Mayapple	T5058 <i>Podophyllum peltatum</i>
DUN YE GUI PI	钝叶桂皮	Obtuseleaf Cassia Bark, Wild Cinnamon Bark	T1434 <i>Cinnamomum bejolghota</i> [Syn. <i>Cinnamomum obtusifolium</i> ; <i>Laurus bejolghota</i> ]
DUN YE HU JIAO	盾叶胡椒*	Peltateleaf Pepper*	T4960 <i>Piper peltatum</i>
DUN YE JUE MING	钝叶决明	Obtuseleaf Senna*	T1240 <i>Cassia obtusifolia</i>
DUN YE SHU YU	盾叶薯蕷	Peltate Yam	T2213 <i>Dioscorea zingiberensis</i>
DUN YE SUAN MO	钝叶酸模	Bluntleaf Dock	T5613 <i>Rumex obtusifolius</i>
DUN YE TANG SONG CAO	盾叶唐松草	Peltateleaf Meadowrue	T6393 <i>Thalictrum ichangense</i> [Syn. <i>Thalictrum tripeltatum</i> ; <i>Thalictrum multipeltatum</i> ]
DUN YE TU NIU XI	钝叶土牛膝	Obtuseleaf Achyranthes	T0072 <i>Achyranthes aspera</i> var. <i>indica</i>
DUN ZHUANG LI JU	盾状粒菊	Matarique (in Mexico)	T5248 <i>Psacalium peltatum</i>
DUN ZHUANG MAO GAO CAI	盾状茅膏菜*	Peltate Sundew*	T2266 <i>Drosera peltata</i>
DUO BAN LV TI CAO	多瓣驴蹄草	Manypetal Marshmarigold	T1138 <i>Caltha polypetala</i>
DUO BEI YIN LIAN HUA	多被银莲花(两头尖)	Radde Windflower	T0470 <i>Anemone raddeana</i>
DUO BIAN HUA BAI LAI SHI JU	多边花白菜氏菊*	Manyradiate Bailai's Chrysanthemum*	T0856 <i>Baileya pleniradiata</i>
DUO BIAN XIAO GUAN HUA	多变小冠花	Crown Vetch	T1702 <i>Coronilla varia</i>
DUO CHI QIAN LI GUANG	多齿千里光	Manytoothed Groundsel*	T5898 <i>Senecio polyodon</i>
DUO CI CHAI HU	多刺柴胡*	Spiny Thorowax*	T1076 <i>Bupleurum spinosum</i>
DUO CI DI SHI MU	多刺迪氏木	Desfontainia spinosa	T2126 <i>Desfontainia spinosa</i>
DUO CI HUANG HUA REN	多刺黄花稔	Spiny Sida*	T5944 <i>Sida spinosa</i>
DUO CI LUO CAO	多刺骡草*	Argentin <i>Mulinum spinosum</i>	T4313 <i>Mulinum spinosum</i>
DUO CI LV RONG HAO	多刺绿绒蒿	Spiny Meconopsis	T4143 <i>Meconopsis horridula</i>
DUO GEN WU TOU	多根乌头	Manyroot Monkshood	T0105 <i>Aconitum karakolicum</i>
DUO GUO SHU	多果树		T5015 <i>Pleiocarpa mutica</i>
DUO GUO YI NAN MU	多果依南木*		T2358 <i>Enantia polycarpa</i>
DUO HUA A WEI	多花阿魏*	Manyflower Giantfennel*	T2705 <i>Ferula polyantha</i>
DUO HUA BA JIAO LIAN	多花八角莲	Manyflower Dysosma*	T2297 <i>Dysosma aurantiocaulis</i>
DUO HUA BAI JIAN MU	多花白坚木*	Multiflower White Quebracho*	T0767 <i>Aspidosperma multiflorum</i>
DUO HUA CAI DOU	多花菜豆	Scarlet Runner Bean	T4781 <i>Phaseolus coccineus</i>
DUO HUA HEI MAI CAO	多花黑麦草	Italian Ryegrass	T3903 <i>Lolium multiflorum</i>
DUO HUA HUANG JING	多花黄精	Manyflower Solomonseal	T5091 <i>Polygonatum cyrtoneuma</i> [Syn.

DUO HUA LAN GUO SHU	多花蓝果树	Manyflower Tupelo*	<i>Polygonatum multiflorum</i>
DUO HUA SHAN MA GAN	多花山麻杆	Manyflower Christmasbush*	T4458 <i>Nyssa sylvatica</i>
DUO HUA SHAO YAO	多花芍药	Himalayan Peony	T0296 <i>Alchornea floribunda</i>
DUO HUA SHUI XIAN	多花水仙	Polyanthus Narcissus	T4583 <i>Paeonia emodi</i>
DUO HUA TENG HUANG	多花藤黄*	Manyflower Garcinia*	T4383 <i>Narcissus tazetta</i>
DUO HUA U LIAN	多花杜楝	Manyflower Starbush*	T2870 <i>Garcinia polyantha</i>
DUO HUA XIAO BO	多花小檗	Free-flowering Barberry	T6569 <i>Turraea floribunda</i>
DUO HUA YANG MEI	多花杨梅	Manyflower Bayberry*	T0904 <i>Berberis floribunda</i>
DUO JIA CAO	多莢草	Manyseed	T4345 <i>Myrica multiflora</i>
DUO LIE WEI LING CAI	多裂委陵菜	Many-cleft Cinquefoil	T5069 <i>Polycarpon prostratum</i>
DUO LIE WU TOU	多裂乌头	Manysplitted Monkshood	T5185 <i>Potentilla multifida</i>
DUO MAI GOU TENG	多脉钩藤*	Many-veined Gambirplant*	T0123 <i>Aconitum polyschistum</i>
DUO MAI NAN MEI ROU DOU KOU	多脉南美肉豆蔻*		T6626 <i>Uncaria nervosa</i>
DUO NI FEI SHA REN	多尼非砂仁		T6769 <i>Virola multinervia</i>
DUO RU TOU HUANG YANG	多乳头黄杨*	Papillose Box*	T0206 <i>Aframomum daniellin</i>
DUO RUI BAI HUA CAI	多蕊白花菜*	Multipistillate Spiderflower*	T1093 <i>Buxus papillosa</i>
DUO SAN A WEI	多伞阿魏	Manyumbell Giantfennel	T1551 <i>Cleome icosandra</i>
DUO SHE FEI PENG	多舌飞蓬	Multiradiate	T2698 <i>Ferula ferulaeoides</i>
DUO SUI LIAO	多穗蓼	Manyspike Knotweed	T2423 <i>Erigeron multiradiatus</i>
DUO SUI LUO HAN SONG SHI	多穗罗汉松实	Manyspike Podocarpus Seed	T5114 <i>Polygonum polystachyum</i>
DUO SUI PO BU MU	多穗破布木*	Manyspike Cordia*	T5052 <i>Podocarpus polystachyus</i>
DUO SUI SHI KE YE	多穗石柯叶	Manyspike Tanoak Leaf	T1678 <i>Cordia multispicata</i>
DUO SUI SHU WEI CAO	多穗鼠尾草		T3878 <i>Lithocarpus polystachyus</i>
DUO SUI TUN CAO	多穗豚草	Manyspike Ragweed	T5686 <i>Salvia polystachya</i>
DUO TOU GE NI DI MU	多头格尼迪木*		T0404 <i>Ambrosia polystachya</i>
DUO XIANG GUO	多香果	Allspice	T3039 <i>Gnidia polycephala</i>
DUO XING JIN FA XIAN	多形金发藓	Polymorphism Gold-hair Moss*	T4894 <i>Pimenta dioica</i>
DUO XIONG RUI LING CHUN MU	多雄蕊领春木*	Polyandrous Euptelea*	T5134 <i>Polytrichum ohioense</i>
DUO XIONG RUI SHANG LU	多雄蕊商陆	Polyandrous Pokeweed	T2630 <i>Euptelea polyandra</i>
DUO XU GONG	多须公	Lavender-gustatory Eupatorium*	T4867 <i>Phytolacca polyandra</i>
DUO XU YAN HUANG QI	多序岩黄芪	Manyraceme Sweetvetch	T2576 <i>Eupatorium stoechadosmum</i>
DUO YE BAI MAI GEN	多叶百脉根	Leafy Trefoil*	T3129 <i>Hedysarum polybotrys</i>
DUO YE JI DOU	多叶棘豆	Leafy Crazyweed	T3931 <i>Lotus polyphyllus</i>
DUO YE JIN SI TAO	多叶金丝桃*	Leafy St.John'swort*	T4568 <i>Oxytropis myriophylla</i>
DUO ZHI AN	多枝椴	Ribbon Gum	T3351 <i>Hypericum foliosum</i>
DUO ZHI CHAI HU	多枝柴胡	Ramose Thorowax*	T2522 <i>Eucalyptus viminalis</i>
DUO ZHI CHENG LIU	多枝柞柳	Branchy Tamarisk	T1068 <i>Bupleurum polyclonum</i>
DUO ZHI KUO BAO JU	多枝阔苞菊*	Ramose Pluchea*	T6290 <i>Tamarix ramosissima</i>
DUO ZHI LONG DAN	多枝龙胆*	Ramose Gentian*	T0849 <i>Baccharis ramosissima</i>
DUO ZHI LONG XUE SHU	多枝龙血树*		T2926 <i>Gentiana ramosa</i>
DUO ZHI PU TE MU	多痣普特木		T2255 <i>Dracaena surculosa</i>
DUO ZHI RU GU	多汁乳菇	Juicy Milky*	T5336 <i>Putterlickia verrucosa</i>
DUO ZHI SONG	多脂松	Red Pine	T3654 <i>Lactarius rolemus</i>
DUO ZHI TIAN JIE CAI	多枝天芥菜	Ramose Heliotrope*	T4921 <i>Pinus resinosa</i>
DUO ZHI ZHI TENG HUANG	多直枝藤黄*		T3178 <i>Heliotropium ramosissimum</i>
DUO ZHONG LU HUI TI QU WU	多种芦荟提取物	Extracts of Aloe spp.	T2879 <i>Garcinia virgata</i>
DUO ZU JUE	多足蕨	Common Polypody	T0346 <i>Aloe</i> spp.
E BAO CHUN	鄂报春	Top Primrose	T5127 <i>Polypodium vulgare</i>
E BEI BEI MU	鄂北贝母	Ebei Fritillary	T5202 <i>Primula obconica</i>
E BU SHI CAO	鹅不食草	Small Centipeda	T2785 <i>Fritillaria ebeiensis</i>
			T1312 <i>Centipeda minima</i>

E CHANG CAI	鹅肠菜	Goose-bowel Vegetable*	T2359 <i>Endarachne binghamiae</i>
E CHI TENG	萼翅藤		T1142 <i>Calycopteris floribunda</i>
E CUI	鹅胛	Goose Tail-meat	T0517 <i>Anser cygnoides domestica</i>
E GUO QIAN HU	俄国前胡	Russian Hogfennel*	T4770 <i>Peucedanum ruthenicum</i>
E GUO XI MEN FEI CAO	俄国西門肺草*	Russian Comfrey	T6249 <i>Symphytum x uplandicum</i>
E LE GANG HE BAO MU DAN	俄勒冈荷包牡丹	Oregon Bleedingheart	T2151 <i>Dicentra oregana</i>
E LI	鳄梨	American Avocado	T4731 <i>Persea americana</i> [Syn. <i>Persea gratissima</i> ]
E MEI CUI QUE HUA	峨眉翠雀花	Emei Larkspur	T2081 <i>Delphinium omeiense</i>
E MEI GE	峨眉葛	Emei Kudzuvine	T5316 <i>Pueraria omeiensis</i>
E MEI JUAN BAI	峨眉卷柏	Emei Spikemoss*	T5864 <i>Selaginella omeiensis</i>
E MEI TANG SONG CAO	峨眉唐松草	Emei Meadowrue	T6402 <i>Thalictrum omeiense</i>
E MEI YE HUANG LIAN	峨眉野黄连	Emei Mountain Goldthread	T1669 <i>Coptis omeiensis</i>
E RONG TENG	鹅绒藤	Chinese Swallowwort	T1954 <i>Cynanchum chinense</i>
E RONG WEI LING CAI	鹅绒委陵菜	Silverweed Cinquefoil	T5179 <i>Potentilla anserina</i>
E SHEN	峨参	Woodland Beakchervil	T0529 <i>Anthriscus sylvestris</i>
E SUN ZI TAN	娥孙紫檀	Osun Padauk*	T5304 <i>Pterocarpus osun</i>
E XI XIANG CHA CAI	鄂西香茶菜	Henry Rabdosia	T3493 <i>Isodon henryi</i>
E ZHANG CAO	鹅掌草	Flaccid Anemone	T0467 <i>Anemone flaccida</i>
E ZHANG TENG	鹅掌藤	Scandent Schefflera	T5781 <i>Schefflera arboricola</i>
EN GE MU	恩格木		T4489 <i>Ongokea gore</i>
ER CAO	耳草	Auricled Hedyotis	T3123 <i>Hedyotis auricularia</i>
ER CHA GOU TENG	儿茶钩藤	Gambier Gambirplant	T6615 <i>Uncaria gambir</i>
ER CHI XIANG KE KE	二齿香科科	Twodenntate Germander	T6359 <i>Teucrium bidentatum</i>
ER CI YUN SHI	二雌云实*	Digyna Caesalpinia*	T1102 <i>Caesalpinia digyna</i>
ER DUN ZHUANG HUA JIAO	二盾状花椒	Twopetaline Pricklyash*	T6875 <i>Zanthoxylum dipetalum</i>
ER GOU HUANG QI	二沟黄芪	Bisulcate Milkvetch*	T0787 <i>Astragalus bisulcatus</i>
ER JIAO DUO JIA ZAO	二角多甲藻		T4712 <i>Peridinium bipes</i>
ER QI GOU YA HUA	二歧狗牙花	Dichotomous Ervatamia*	T2441 <i>Ervatamia dichotoma</i>
ER RUI HE LIAN DOU	二蕊荷莲豆		T2272 <i>Drymaria diandra</i> [Syn. <i>Drymaria cordata</i> ssp. <i>diandra</i> ]
ER RUI ZI SU	二蕊紫苏		T1622 <i>Collinsonia canadensis</i>
ER SE HUA SHU WEI CAO	二色花鼠尾草	Twocolor-flower Sage*	T5670 <i>Salvia dichroantha</i>
ER SHI RUI SHANG LU	二十蕊商陆	Icosandrous Pokeweed*	T4865 <i>Phytolacca icosandra</i>
ER XING JI XUE TENG	耳形鸡血藤	Auriculate Millettia*	T4233 <i>Millettia auriculata</i>
ER XING JIN HE HUAN	耳形金合欢	Auriculate Acacia	T0017 <i>Acacia auriculaeformis</i>
ER XING LIU ZU JUE	耳形瘤足蕨	Auriform Plagiogyria	T5000 <i>Plagiogyria stenoptera</i>
ER XING YANG ER LAN	耳形羊耳兰	Auriculate Twayblade*	T3861 <i>Liparis auriculata</i>
ER YE BAO YING SU	二叶苞罌粟	Celandine Poppy	T6195 <i>Stylophorum diphyllum</i>
ER YE NIU PI XIAO	耳叶牛皮消	Auriculate Swallowwort	T1952 <i>Cynanchum auriculatum</i>
ER YI TUO BAO DI QIAN	二翼托苞地钱	Twowing Palea Liverwort*	T4108 <i>Marchantia paleacea</i> var. <i>diptera</i>
ER ZHUANG BAO CHUN HUA	耳状报春花	Auricula	T5197 <i>Primula auricula</i>
FA CAI	发菜	Hair Vegetable*	T4438 <i>Nostoc flagelliforme</i>
FA GUO CHENG LIU	法国怪柳	French Tamarisk	T6287 <i>Tamarix gallica</i>
FA GUO JIN QUE ER	法国金雀儿	French Broom	T1989 <i>Cytisus monspessulanus</i>
FA GUO QIANG WEI	法国蔷薇	French Rose	T5565 <i>Rosa gallica</i>
FA KANG WU TOU	法康乌头	Falcon Monkshood*	T0092 <i>Aconitum falconeri</i>
FAN BAI CAO	翻白草	Discolor Cinquefoil	T5182 <i>Potentilla discolor</i>
FAN HUA ZHI XIE MU	繁花止泻木*	Purplequeen Holarrhena*	T3266 <i>Holarrhena floribunda</i>
FAN LI ZHI	番荔枝	Custard Apple	T0513 <i>Annona squamosa</i>
FAN MA	番麻	American Agave	T0215 <i>Agave americana</i>
FAN MU GUA	番木瓜	Papaya Fruit	T1205 <i>Carica papaya</i>
FAN MU GUA YE	番木瓜叶	Papaya Leaf	T1206 <i>Carica papaya</i>

FAN QIE	番茄	Tomato	T3962 <i>Lycopersicon esculentum</i>
FAN SHI LIU GAN	番石榴干	Guava Unripe Fruit	T5265 <i>Psidium guajava</i>
FAN SHI LIU PI	番石榴皮	Guava Bark	T5266 <i>Psidium guajava</i>
FAN SHI LIU YE	番石榴叶	Guava Leaf	T5267 <i>Psidium guajava</i>
FAN SHI LIU ZI	番石榴籽	Guava Seed	T5268 <i>Psidium guajava</i>
FAN XIE YE	番泻叶	Narrowleaf Senna Leaf	T1230 <i>Cassia angustifolia</i>
FANG FENG	防风	Divaricate Saposhnikovia	T5727 <i>Saposhnikovia divaricata</i> [Syn. <i>Ledebouriella seseloides</i> ]
FANG JI	防己粉防己)	Fourstamen Stephania	T6136 <i>Stephania tetrandra</i>
FANG JI YE BA QIA	防己叶菝葜	Gansu Greenbrier	T5980 <i>Smilax menispermoidea</i>
FANG XIANG BAI ZHU	芳香白珠	Fragrant Gaultheria	T2891 <i>Gaultheria fragrantissima</i>
FANG XIANG DUI XIN JU	芳香堆心菊	Fragrant Sneezeweed*	T3133 <i>Helenium aromaticum</i>
FANG XIANG JIANG	芳香姜	Aromatic Ginger	T6907 <i>Zingiber aromaticum</i>
FANG XIANG MU BAN SHU	芳香木瓣树*	Aromatic Xylopia*	T6850 <i>Xylopia aromatica</i>
FEI CAI	费菜	Aizoon Stonecrop	T5850 <i>Sedum aizoon</i>
FEI CHENG FEI PENG	费城飞蓬	Philadelphia Fleabane	T2424 <i>Erigeron philadelphicus</i>
FEI CHENG SUAN JIANG	费城酸浆	Philadelphia Groundcherry*	T4853 <i>Physalis philadelphica</i>
FEI E TENG	飞蛾藤	Racemose Porana	T5167 <i>Porana racemosa</i>
FEI HOU MIAN BAO GUO	肥厚面包果*	Fleshy Artocarpus*	T0709 <i>Artocarpus altilis</i>
FEI JI AI JIAO	斐济崖椒	Fiji Fagara*	T2655 <i>Fagara vitiensis</i>
FEI JI CAO	飞机草	Fragrant Eupatorium	T2567 <i>Eupatorium odoratum</i>
FEI JI TENG HUANG	斐济藤黄*	Fiji Garcinia*	T2871 <i>Garcinia pseudoguttifera</i>
FEI LI GUI LI	菲利桂栎	Mocketprivet-like Oak	T5376 <i>Quercus phillyraeoides</i>
FEI LIAN	飞廉	Curly Bristlethistle	T1200 <i>Carduus crispus</i>
FEI LONG ZHANG XUE	飞龙掌血	Asiatic Toddalia	T6471 <i>Toddalia asiatica</i> [Syn. <i>Toddalia aculeata</i> ; <i>Paullinia asiatica</i> ]
FEI LV BIN LUO HAN SONG	菲律宾罗汉松	Philippine Podocarpus	T5051 <i>Podocarpus philippinensis</i>
FEI LV BIN PIAO SHU	菲律宾朴树	Philippine Nettle tree	T1298 <i>Celtis philippinensis</i>
FEI LV BIN QIAN JIN BA	菲律宾千斤拔*	Philippine Flemingia	T4260 <i>Moghania philippinensis</i>
FEI LV BIN QIAN LI GUANG	菲律宾千里光*	Philippine Groundsel*	T5896 <i>Senecio philippicus</i>
FEI LV BIN ROU DOU KOU	菲律宾肉豆蔻	Antao Nutmeg	T4354 <i>Myristica simiarum</i>
FEI LV BIN SHI ZI	菲律宾石梓*	Philippine Bushbeech*	T3025 <i>Gmelina philippensis</i>
FEI NI JI CI BAI	腓尼基刺柏	Poienician Juniper	T3593 <i>Juniperus phoenicea</i>
FEI SHU	榷树	Torreya*	T6477 <i>Torreya grandis</i>
FEI YAN CAO	飞燕草	Rocket Consolida	T1645 <i>Consolida ajacis</i> [Syn. <i>Delphinium ajacis</i> ]
FEI YI DIAN HONG	绯一点红*	Red Tasseflower*	T2356 <i>Emilia coccinea</i>
FEI YUE GUO	费约果	Pineapple Guava	T2693 <i>Feijoa sellowiana</i>
FEI ZAO CAO	肥皂草	Soapwort	T5726 <i>Saponaria officinalis</i>
FEI ZHOU BAI ZI LIAN	非洲百子莲*	African Lily	T0209 <i>Agapanthus africanus</i>
FEI ZHOU BI QIAO JIANG	非洲闭鞘姜	African Costus*	T1754 <i>Costus afer</i>
FEI ZHOU FAN LI ZHI	非洲番荔枝	African Custard Apple*	T3237 <i>Hexalobus crispiflorus</i>
FEI ZHOU FANG JI	非洲防己	Calumba Root	T3559 <i>Jateorhiza palmata</i>
FEI ZHOU GAN LAN	非洲橄榄	African Olive*	T4486 <i>Olea africana</i>
FEI ZHOU GE MU	非洲格木	African Erythrophleum	T2482 <i>Erythrophleum africanum</i>
FEI ZHOU GOU TENG	非洲钩藤*	African Gambirplant*	T6605 <i>Uncaria africana</i>
FEI ZHOU HUANG GUA	非洲黄瓜*	African Cucumber*	T1873 <i>Cucumis africanus</i>
FEI ZHOU HUANG GUO MU	非洲黄果木	African Mammey Apple	T4092 <i>Mammea africana</i>
FEI ZHOU HUANG TAN	非洲黄檀	African Rosewood	T2004 <i>Dalbergia melanoxylon</i>
FEI ZHOU JIAN XUE FENG HOU	非洲见血封喉	African Antiaris*	T0532 <i>Antiaris africana</i>
FEI ZHOU KU MU	非洲苦木	African Quassia*	T5369 <i>Quassia africana</i>
FEI ZHOU LUO LE	非洲罗勒	African Basil*	T4474 <i>Ocimum kilimandscharicum</i>
FEI ZHOU MAO ZHU MU	非洲帽柱木*	African Mitragyna*	T4255 <i>Mitragyna africanus</i>
FEI ZHOU WA	非洲蛙	African frog	T0207 African frog

FEI ZHOU ZHI XIE MU	非洲止泻木*	African Holarrhena*	T3262 <i>Holarrhena africana</i>
FEI ZHOU ZI WEI	非州紫葳	Africa Trumpet creeper*	T4422 <i>Newbouldia laevis</i>
FEN BA JIAO	粉芭蕉	Plantain Banana	T4330 <i>Musa paradisiaca</i>
FEN BA JIAO ZA JIAO ZHONG ZHI BIAN ZHONG	粉芭蕉杂交种植变种*	Plantain Banana Cultivariaty*	T4332 <i>Musa x paradisiaca</i> cultivar
FEN CHA DANG GUI	分叉当归	Furcate Angelica*	T0481 <i>Angelica furcijuga</i>
FEN CHA MA QIAN ZI	分叉马钱子*	Divaricate Poisonnut*	T6170 <i>Strychnos divaricans</i>
FEN GE	粉葛	Thomson Kudzu vine	T5314 <i>Pueraria lobata</i> var. <i>thomsonii</i>
FEN HONG SE XI FAN LIAN	粉红色西番莲	May-apple	T4666 <i>Passiflora incarnata</i>
FEN JI DU	粪箕笃	Long Stephania	T6131 <i>Stephania longa</i>
FEN LAI SHI HU	芬来石斛	Findley Dendrobium*	T2103 <i>Dendrobium findleyanum</i>
FEN LIU JUN	粉瘤菌	Wolfs-milk Slime	T3960 <i>Lycogala epidendrum</i>
FEN LU ZHU YANG YANG	粉绿猪殃殃	Glaucous Bedstraw*	T2831 <i>Galium glaucum</i>
FEN NIE CONG TOU	分蘖葱头	Tillering Onion	T0312 <i>Allium cepa</i> var. <i>agrogatum</i>
FEN ROU CENG KONG JUN	粉肉层孔菌		T2747 <i>Fomes cajanderi</i>
FEN SHI TANG SONG CAO	芬氏唐松草	Fendler's Meadowrue	T6383 <i>Thalictrum fendleri</i>
FEN TUAN HUA	粉团花	Paniculate Hydrangea	T3306 <i>Hydrangea paniculata</i>
FEN ZHI PO JU	分枝珀菊*	Ramose Amberboa*	T0394 <i>Amberboa ramosa</i>
FENG CHAO CAO	蜂巢草	Rough Leucas	T3779 <i>Leucas aspera</i>
FENG CHAO MI ZI LAN	蜂巢米仔兰*	Foveolate Aglaia*	T0236 <i>Aglaia foveolata</i>
FENG CHENG JI XUE TENG	丰城鸡血藤	Hirsute Millettia	T4239 <i>Millettia nitida</i> var. <i>hirsutissima</i>
FENG DOU CAI	蜂斗菜	Japanese Butterbur	T4740 <i>Petasites japonicus</i>
FENG DU	蜂毒	Apisin	T0539 <i>Apis cerana</i>
FENG GUA	风瓜	Entireleaf Gymnopetalum	T3081 <i>Gymnopetalum integrifolium</i>
FENG HUANG MU	凤凰木	Flamboyant tree	T2060 <i>Delonix regia</i>
FENG JIAO	蜂胶	Propolis	T0543 <i>Apis mellifera ligustica</i>
FENG LI	风梨	Pineapple	T0444 <i>Ananas comosus</i>
FENG LING CAO	风铃草	Canterbury bells	T1156 <i>Campanula medium</i>
FENG LUN CAI	风轮菜	Chinese Clinopodium	T1573 <i>Clinopodium chinense</i>
FENG MAO JU	风毛菊	Wildhair daisy	T5756 <i>Saussurea japonica</i>
FENG MI	蜂蜜	Honey	T0540 <i>Apis cerana</i>
FENG RU	蜂乳	Royal Jelly	T0541 <i>Apis cerana</i>
FENG WEI CAO	凤尾草	Chinese Brake	T5295 <i>Pteris multifida</i>
FENG WEI CHA	凤尾茶		T2340 <i>Elsholtzia bodinieri</i>
FENG WEI JUE	凤尾蕨	Nervous Brake	T5288 <i>Pteris cretica</i> var. <i>nervosa</i> [Syn. <i>Pteris nervosa</i> ]
FENG WEI PA SHAN HU	凤尾爬山虎	Mary Arthromeris	T0708 <i>Arthromeris mairei</i> [Syn. <i>Polypodium mairei</i> ]
FENG XIAN	凤仙	Garden Balsam	T3410 <i>Impatiens balsamina</i>
FENG XIAN HUA	凤仙花	Garden Balsam Flower	T3411 <i>Impatiens balsamina</i>
FENG XIANG JI SHENG	枫香寄生	Flatshoot Mistletoe	T6774 <i>Viscum articulatum</i>
FENG XIANG SHU	枫香树	Beautiful Sweetgum Leaf	T3866 <i>Liquidambar formosana</i> [Syn. <i>Liquidambar taiwaniana</i> ]
FENG XIANG SHU YE	风箱树叶	Common Butterbush	T1316 <i>Cephalanthus occidentalis</i>
FENG XIN ZI	风信子	Common Hyacinth	T3297 <i>Hyacinthus orientalis</i>
FENG YA JUE	风丫蕨	Japanese Coniogramme	T1640 <i>Coniogramme japonica</i> [Syn. <i>Hemionitis japonica</i> ]
FENG YU HUA	风雨花	Rosepink Zephyrily	T6904 <i>Zephyranthes grandiflora</i> [Syn. <i>Zephyranthes carinata</i> ]
FO JIA CAO	佛甲草	Linear Stonecrop	T5856 <i>Sedum lineare</i> [Syn. <i>Sedum obtuso-lineare</i> ]
FO SHOU	佛手	Fleshfingered Citron	T1501 <i>Citrus medica</i> var. <i>sarcodactylis</i>
FU AN	富桉*	Dives Eucalyptus*	T2508 <i>Eucalyptus dives</i>

FU CHUI FE LAO JU	俯垂弗劳菊	Tarbush	T2740 <i>Flourensia cernua</i>
FU ER JIA CE JIN ZHAN HUA	伏尔加侧金盏花	Volga Adonis	T0192 <i>Adonis wolgensis</i>
FU FANG TENG	扶芳藤	Forture Euonymus	T2540 <i>Euonymus fortunei</i>
FU JI NI YA DI SUN	弗吉尼亚地笋*	Bugleweed	T3982 <i>Lycopus virginicus</i>
FU JI NI YA GOU JI JUE	弗吉尼亚狗脊蕨	Virginia Chain Fern	T6832 <i>Woodwardia virginica</i>
FU JIAN XI XIN	福建细辛	Fukien Wildginger	T0727 <i>Asarum fukienense</i>
FU JU	福橘	Blessing Citrus*	T1515 <i>Citrus tangemna</i>
FU KANG A WEI GEN	阜康阿魏根	Fukang Giantfennel Root	T2701 <i>Ferula fukanensis</i>
FU KE CI TONG	福克刺桐	Folk Coralbean*	T2465 <i>Erythrina folkersii</i>
FU LANG HUA	扶郎花	Flameray Gerbera	T2951 <i>Gerbera jamesonii</i>
FU LEI SHI DU JUAN HUA	福雷氏杜鹃花	Pere L. F. Faurie's Rhododendron	T5509 <i>Rhododendron fauriei</i>
FU LING	茯苓	Indian Bread	T5169 <i>Poria cocos</i>
FU MAO SHAN DOU GEN	覆毛山豆根	Hirsute Euchresta*	T2529 <i>Euchresta strigillosa</i>
FU MU	福木		T2877 <i>Garcinia subelliptica</i>
FU NING TENG	富宁藤		T4645 <i>Parepigynum funingense</i>
FU PEN ZI	覆盆子	Red-and-Yellow Garden Raspberry	T5593 <i>Rubus idaeus</i>
FU PING	浮萍	Common Duckwood	T3738 <i>Lemna minor</i>
FU RONG JU GEN	芙蓉菊根	Chinese Crossostephium Root	T1812 <i>Crossostephium chinense</i>
FU RUI ER JUE	福瑞耳蕨*	Faurie Shield Fern*	T5132 <i>Polystichum fauriei</i>
FU RUI ZI WEI	福瑞紫薇*	Faurie Crapemyrtle*	T3669 <i>Lagerstroemia fauriei</i>
FU SANG HUA	扶桑花	Chinese Hibiscus Flower	T3242 <i>Hibiscus rosa-sinensis</i>
FU SANG YE	扶桑叶	Chinese Hibiscus Leaf	T3243 <i>Hibiscus rosa-sinensis</i>
FU SHE SONG	辐射松	Montery Pine	T4920 <i>Pinus radiata</i>
FU SHI MA QIAN ZI	福氏马钱子*	Froes Poisonnut*	T6173 <i>Strychnos froesii</i>
FU SHOU CAO	福寿草	Amur Adonis	T0184 <i>Adonis amurensis</i>
FU SI TE JIU JIE	福斯特九节*	Forster Ninenode*	T5275 <i>Psychotria forsteriana</i>
FU YE RONG	腐叶榕*	Septic Fig*	T2726 <i>Ficus septica</i>
FU YE YAN ZI CAI	浮叶眼子菜	Floatingleaf Pondweed	T5176 <i>Potamogeton natans</i>
FU YE ZE LAN	复叶泽兰	Compositeleaf Eupatorium*	T2556 <i>Eupatorium compositifolium</i>
FU ZHOU SHU YU	福州薯蓣	Foochow Yam	T2197 <i>Dioscorea futschauensis</i>
FU ZHUANG SHUI GUI JIAO	辐状水鬼蕉*	Rotate Hymenocallis*	T3321 <i>Hymenocallis rotata</i>
FU ZI	附子	Prepared Common Monkshood	T0083 <i>Aconitum carmichaeli</i>
		Daughter Root	
GAN	柑	Chachi Citrus	T1471 <i>Citrus chachiensis</i>
GAN CAO	甘草	Ural Licorice	T3022 <i>Glycyrrhiza uralensis</i>
GAN DI HUANG	干地黄	Adhesive Rehmannia Dried Root	T5445 <i>Rehmannia glutinosa</i> [Syn. <i>Rehmannia glutinosa</i> f. <i>huechingensis</i> ]
			T6903 <i>Zephyranthes candida</i>
GAN FENG CAO	肝风草	Autumn Zephyrlily	
GAN GE TENG GEN	甘葛藤根	Thomson Kudzuvine Root	T5320 <i>Pueraria thomsonii</i>
GAN HUA DOU	干花豆	Common Fordia	T2752 <i>Fordia cauliflora</i>
GAN JIANG	干姜	Common Ginger Dried Rhizome	T6909 <i>Zingiber officinale</i>
GAN LAN	甘蓝	Cabbage	T1017 <i>Brassica oleracea</i> var. <i>capitata</i>
GAN LAO JI GU CHANG SHAN	干酪鸡骨常山	Boone Alstonia	T0367 <i>Alstonia boonei</i>
GAN PI	柑皮	Chachi Citrus Pericarp	T1472 <i>Citrus chachiensis</i>
GAN QING TIE XIAN LIAN	甘青铁线莲	Tangut Clematis	T1546 <i>Clematis tangutica</i>
GAN QING WU TOU	甘青乌头	Tangut Monkshood	T0137 <i>Aconitum tanguticum</i>
GAN SHU	甘薯	Sweet Potato	T3447 <i>Ipomoea batatas</i> [Syn. <i>Convolvulus batatas</i> ]
			T4386 <i>Nardostachys chinensis</i>
GAN SONG	甘松	Chinese Nardostachys	
GAN SU BEI MU	甘肃贝母	Przewalsk Fritillary	T2792 <i>Fritillaria przewalskii</i>
GAN SU HUAI SHU	甘肃槐树	Thickfruit Sophora	T6040 <i>Sophora pachycarpa</i>
GAN SU HUANG QIN	甘肃黄芩	Rehder Skullcap;	T5843 <i>Scutellaria rehderiana</i>
GAN SU SHAN ZHA	甘肃山楂	Kansu Hawthorn	T1771 <i>Crataegus kansuensis</i>

GAN SUI	甘遂	Kansui Euphorbia	T2596 <i>Euphorbia kansui</i>
GAN WAN WU TOU	赣皖乌头	Finet Monkshood	T0094 <i>Aconitum finetianum</i>
GAN XI SHU WEI CAO	甘西鼠尾草	Przewalsk Sage	T5688 <i>Salvia przewalskii</i>
GAN ZHE	甘蔗	Sweetcane Culm	T5642 <i>Saccharum sinensis</i>
GANG BAN GUI GEN	杠板归根	Perfoliate Knotweed Root	T5111 <i>Polygonum perfoliatum</i>
GANG GUO HE ZHI XIE MU	刚果河止泻木*	Congo Holarrhena*	T3264 <i>Holarrhena congolensis</i>
GANG GUO JIAN XUE FENG HOU	刚果见血封喉	Congo Antiaris*	T0534 <i>Antiaris welwitschii</i>
GANG GUO LUO FU MU	刚果萝芙木	Obscure Devilpepper*	T5439 <i>Rauwolfia obscura</i>
GANG MAO CHENG LIU	刚毛怪柳	Kashgar Tamarisk	T6288 <i>Tamarix hispida</i>
GANG MAO TENG SHAN LIU	刚毛藤山柳	Hisped Vineclethra	T1549 <i>Clematoclethra scanden</i>
GANG SONG	岗松	Shrubby Baeckea	T0853 <i>Baeckea frutescens</i>
GANG SONG	刚松	Northern Pitch Pine	T4922 <i>Pinus rigida</i>
GAO AO DING ZAO	高凹顶藻	High Concave-top Alga*	T3716 <i>Laurencia elata</i>
GAO BAO CHUN	高报春	Oxlip	T5198 <i>Primula elatior</i>
GAO BEN	藁本	Chinese Ligusticum	T3824 <i>Ligusticum sinense</i>
GAO CHU	高樗	High Ailanthus*	T0256 <i>Ailanthus excelsa</i>
GAO CHUN HUANG JU	高春黄菊	Tall Camomile	T0520 <i>Anthemis altissima</i>
GAO CONG ZHEN ZHU MEI	高丛珍珠梅	Tree Falsespiraea	T6051 <i>Sorbaria arborea</i>
GAO DA CI BAI	高大刺柏	High Juniper*	T3587 <i>Juniperus excelsa</i>
GAO DA CUI QUE HUA	高大翠雀花	High Larkspur*	T2075 <i>Delphinium excelsum</i>
GAO DA HU JIAO	高大胡椒	Pepper-tree	T4025 <i>Macropiper excelsum</i>
GAO DA SHAN LAN	高大山榄*		T5001 <i>Planchonia grandis</i>
GAO DANG GUI	高当归*	High Ligusticum*	T3821 <i>Ligusticum elatum</i>
GAO DI CHA SHAN ZHU ZI	告地查山竹子*	Gaudicha Garcinia*	T2855 <i>Garcinia gaudichaudii</i>
GAO DI DAN CAO	高地胆草	High Elephantfoot*	T2332 <i>Elephantopus elatus</i>
GAO FEI YAN CAO	高飞燕草	Alpine Larkspur	T2074 <i>Delphinium elatum</i>
GAO GUI BO LUO MI	高贵波罗蜜*	Noble Artocarpus*	T0718 <i>Artocarpus nobilis</i>
GAO GUI CHUN HUANG JU	高贵春黄菊*	Common Chamomile	T0523 <i>Anthemis nobilis</i>
GAO GUI JIA ZI CAO	高贵假紫草*	Noble Arnebia*	T0650 <i>Arnebia nobilis</i>
GAO GUI YOU MU YUN XIANG	高贵柚木芸香*		T6322 <i>Teclea nobilis</i>
GAO HAI CONG	高海葱		T6646 <i>Urginea altissima</i>
GAO HONG JIN	高红槿	Tall Hibiscus	T3239 <i>Hibiscus elatus</i>
GAO HUANG LU SANG	高黄绿桑	Iroko Fustic-tree	T1376 <i>Chlorophora excelsa</i>
GAO HUANG QIN	高黄芩	Tall Skullcap	T5831 <i>Scutellaria altissima</i>
GAO HUI MAO DOU	高灰毛豆	High Tephrosia*	T6334 <i>Tephrosia elata</i>
GAO JIA SUO BAI XIAN	高加索白鲜	Caucasian Pittany*	T2166 <i>Dictamnus caucasicus</i>
GAO JIA SUO LAN PEN HUA	高加索蓝盆花*	Caucasian Scabious*	T5774 <i>Scabiosa caucasica</i>
GAO JIA SUO LIN MAO JUE	高加索鳞毛蕨	Caucasian Buckler-fern*	T2278 <i>Dryopteris caucasica</i>
GAO JIA SUO LONG DAN	高加索龙胆*	Caucasian Gentian*	T2907 <i>Gentiana caucasa</i>
GAO JIA SUO WU TOU	高加索乌头	Eastern Monkshood	T0121 <i>Aconitum orientale</i>
GAO JIA SUO YING SU	高加索罂粟	Caucasian Poppy*	T4624 <i>Papaver caucasicum</i>
GAO JIA SUO ZI JIN	高加索紫堇	Caucasian Corydalis*	T1711 <i>Corydalis caucasica</i>
GAO KA FEI	高咖啡	High Coffee*	T1609 <i>Coffea excelsa</i>
GAO LIANG	高粱	Sorghum	T6056 <i>Sorghum vulgare</i>
GAO LIANG HONG QU	高粱红曲*	Red Koji; Angkak	T4270 <i>Monascus kaoliang</i>
GAO LIANG JIANG	高良姜	Lesser Galangal	T0359 <i>Alpinia officinarum</i>
GAO MEI YING BAN	高梅缨瓣	Gaumei Fringe-petal*	T1811 <i>Crossopetalum gaumeri</i>
GAO SHAN BIAN ZHI SHI SONG	高山扁枝石松	Alpine Clubmoss*	T3964 <i>Lycopodium alpinum</i> [Syn. <i>Diphasiastrum alpinum</i> ]
GAO SHAN CHA BIAO	高山茶藨*	Alpine Currant	T5544 <i>Ribes alpinum</i>
GAO SHAN HUA JIAO	高山花椒	Alpine Pricklyash	T6881 <i>Zanthoxylum hamiltonianum</i>
GAO SHAN HUANG HUA	高山黄华	Alplne Thermopsis	T6424 <i>Thermopsis alpina</i>



GAO SHAN HUO RONG CAO	高山火绒草	Alpine Edelweiss	T3749 <i>Leontopodium alpinum</i>
GAO SHAN LUO HAN SONG	高山罗汉松	Alpine Totara	T5049 <i>Podocarpus nivalis</i>
GAO SHAN TANG SONG CAO	高山唐松草	Alpine Meadowrue	T6373 <i>Thalictrum alpinum</i>
GAO SHAN TIAO JUE	高山条蕨	Alpine Oleandra	T4488 <i>Oleandra wallichii</i>
GAO SHAN YAN SHEN	高山岩参	Alpine Sowthistle	T1414 <i>Cicerbita alpina</i>
GAO SHAN YING SU	高山罌粟	Alpine Poppy	T4621 <i>Papaver alpinum</i>
GAO WU TOU	高乌头	Tall Monkshood	T0130 <i>Aconitum sinomontanum</i>
GAO YI ZHI HUANG HUA	高一枝黄花	Canadian Goldenrod	T6022 <i>Solidago altissima</i>
GAO YUAN TANG SONG CAO	高原唐松草	Highland Meadowrue	T6376 <i>Thalictrum cultratum</i>
GAO ZE LAN	高泽兰	Tall Eupatorium	T2550 <i>Eupatorium altissimum</i>
GE BI TIAN MEN	戈壁天门冬	Desertliving Asparagus*	T0750 <i>Asparagus gobicus</i>
GE CAI KE SHI ZI JIN	格蔡科氏紫堇	Gortschakov Corydalis*	T1717 <i>Corydalis gortschakovii</i>
GE CONG	苍葱	Longroot Onion	T0324 <i>Allium victorialis</i>
GE GEN	葛根	Lobed Kudzuvine Root	T5313 <i>Pueraria lobata</i> [Syn. <i>Pueraria thunbergiana</i> ; <i>Pueraria pseudohirsuta</i> ]
GE LI FEI SI SHI DA GONG LAO	格里菲思十大功劳	Griffith Mahonia	T4065 <i>Mahonia griffithii</i>
GE LI FEI SI TENG HUANG	格里菲思藤黄*	Griffith Garcinia*	T2856 <i>Garcinia griffithii</i>
GE LU ZI	葛缕子	Caraway	T1217 <i>Carum carvi</i>
GE LUN BI YA BA DOU	哥伦比亚巴豆	Colombia Croton*; Almizcillo	T1855 <i>Croton schiedeanus</i>
GE LUN BI YA MU BAN SHU	哥伦比亚木瓣树*	Columbia Xylopia*	T6852 <i>Xylopia columbiana</i>
GE NA XIANG	哥纳香	Cheliensis Goniothalamus	T3044 <i>Goniothalamus cheliensis</i>
GE SHAN XIAO	隔山消	Wilford Swallowwort	T1964 <i>Cynanchum wilfordii</i> [Syn. <i>Cynoctonum wilfordii</i> ]
GE SHANG TING CHANG	葛上亭长	Bean Blister Beetle	T2384 <i>Epicauta gorhami</i>
GE SHI SHU WEI CAO	格氏鼠尾草*	Gregg Sage*	T5674 <i>Salvia greggii</i>
GE XUN	葛覃	Japanese Balanophora	T0860 <i>Balanophora japonica</i>
GE YANG XI FAN LIAN	革样西番莲*	Coriaceous Passionflower*	T4664 <i>Passiflora coriacea</i>
GE YE MI HOU TAO	革叶猕猴桃	Coriaceousleaf Actinidia	T0165 <i>Actinidia rubricaulis</i> var. <i>coriacea</i>
GE ZHI HUA DI QIAN	革质花地钱		T1703 <i>Corsinia coriandrina</i>
GONG BU WU TOU	工布乌头	Gongbo Monkshood	T0107 <i>Aconitum kongboense</i>
GONG GA SHAN WU TOU	贡嘎山乌头	Konka Mountain Monkshood	T0112 <i>Aconitum liljestrandii</i>
GONG XING MA DOU LING	弓形马兜铃	Bow-shaped Dutchmanspipe*	T0621 <i>Aristolochia arcuata</i>
GOU GU SHU PI	枸骨树皮	Chinese Holly Bark	T3389 <i>Ilex cornuta</i>
GOU GU YE	枸骨叶	Chinese Holly Leaf	T3390 <i>Ilex cornuta</i>
GOU JI	枸棘	Cochinchina Cudrania	T1884 <i>Cudrania cochinchinensis</i>
GOU JU	枸橘	Trifoliolate-orange	T5137 <i>Poncirus trifoliata</i>
GOU JU HE	枸橘核	Trifoliolate-orange Seed	T5138 <i>Poncirus trifoliata</i>
GOU JU YE	枸橘叶	Trifoliolate-orange Leaf	T5139 <i>Poncirus trifoliata</i>
GOU JU ZHI KE	枸橘枳壳	Trifoliolate-orange Unripe Fruit	T5140 <i>Poncirus trifoliata</i>
GOU JU ZHI SHI	枸橘枳实	Trifoliolate-orange Young Fruit	T5141 <i>Poncirus trifoliata</i>
GOU MAO QIAN CAO	钩毛茜草	Hookedhair Madder	T5582 <i>Rubia oncotricha</i>
GOU QI GEN PI	枸杞根皮(地骨皮)	Chinese Wolfberry Root-bark	T3956 <i>Lycium chinense</i>
GOU QI XIAO BO	枸杞小檗	Medlar Barberry*	T0921 <i>Berberis zycium</i>
GOU QI YE	枸杞叶	Chinese Wolfberry Leaf	T3957 <i>Lycium chinense</i>
GOU QI ZI	枸杞子	Chinese Wolfberry Fruit	T3958 <i>Lycium chinense</i>
GOU ROU	狗肉	Dog Meat	T1170 <i>Canis familiaris</i>
GOU SHE CAO	狗舌草	Kirilow Groundsel Herb	T6330 <i>Tephrosia kirilowii</i> [Syn. <i>Senecio integrifolius</i> var. <i>fauriei</i> ]
GOU SHI HUA	狗屎花	Chinese Forgetmenot	T1967 <i>Cynoglossum amabile</i>
GOU SHU	构树	Common Papermulberry	T1032 <i>Broussonetia papyrifera</i>
GOU SHU BAI PI	构树白皮	Common Papermulberry Bast*	T1033 <i>Broussonetia papyrifera</i>
GOU SHU GEN	构树根	Common Papermulberry Root*	T1034 <i>Broussonetia papyrifera</i>
GOU SHU GUO	构树果	Common Papermulberry Fruit	T1035 <i>Broussonetia papyrifera</i>

GOU TENG	钩藤	Sharpleaf Gambirplant	T6629 <i>Uncaria rhynchophylla</i> [Syn. <i>Nauclea rhynchophylla</i> ]
GOU WEN	钩吻	Graceful Jessamine	T2897 <i>Gelsemium elegans</i>
GOU XIN	狗心	Dog Heart	T1171 <i>Canis familiaris</i>
GOU ZHI TENG	钩枝藤	Ancistrocladus*	T0450 <i>Ancistrocladus korupensis</i>
GOU ZHUANG HU JIAO	钩状胡椒*	Hooked Pepper*	T4928 <i>Piper aduncum</i>
GOU ZHUANG SHI HU	钩状石斛	Hooked Dendrobium	T2094 <i>Dendrobium aduncum</i>
GU BA LUO FU MU	古巴萝芙木	Cuba Devilpepper	T5432 <i>Rauwolfia cubana</i>
GU CHENG MEI GUI SHU	古城玫瑰树	Elliptical Ochrosia	T4469 <i>Ochrosia elliptica</i>
GU CHUI SHI HU	鼓槌石斛	Yellowbow Dendrobium	T2099 <i>Dendrobium chrysotoxum</i>
GU JIE CAO	骨节草	Marsh Horsetail	T2409 <i>Equisetum palustre</i>
GU JING CAO	谷精草	Pipewart	T2434 <i>Eriocaulon buergerianum</i>
GU KE	古柯	Coca Shrub	T2491 <i>Erythroxylum coca</i>
GU LIN XUE DAN	古藜雪胆	Gulin Hemsleya	T3210 <i>Hemsleya penxianensis</i> var. <i>gulinensis</i>
GU LIN YE LIAN	古藜野连	Gulin Goldthread*	T1666 <i>Coptis gulinensis</i>
GU SUI BU	骨碎补	Fortune's Drynaria Rhizome	T2273 <i>Drynaria fortunei</i>
GU TING HUA	孤挺花	Jersey Lily	T0390 <i>Amaryllis belladonna</i>
GU TING HUA ZA JIAO ZHONG	孤挺花杂交种	Jersey Lily Hybrid	T0391 <i>Amaryllis belladonna</i> [hybrida]
GUA DI	瓜蒂	Muskmelon Fruit Pedicel	T1876 <i>Cucumis melo</i>
GUA FU MU	瓜馥木	Oldham Fissistigma	T2735 <i>Fissistigma oldhamii</i> [Syn. <i>Melodorum oldhamii</i> ]
GUA JIN DENG	挂金灯	Franchet Groundcherry	T4846 <i>Physalis alkekengi</i> var. <i>franchetii</i>
GUA JIN DENG GEN	挂金灯根	Franchet Groundcherry Root	T4847 <i>Physalis alkekengi</i> var. <i>franchetii</i>
GUA LOU	栝楼	Mongolian Snakegourd	T6510 <i>Trichosanthes kirilowii</i>
GUA LOU ZI	栝楼子	Mongolian Snakegourd Seed	T6511 <i>Trichosanthes kirilowii</i>
GUA MU	瓜木	Planeleaf Alangium	T0285 <i>Alangium platanifolium</i>
GUA MU BIAN ZHONG	瓜木变种	Planeleaf Alangium Variety*	T0284 <i>Alangium platanifolium</i> var. <i>platanifolium</i>
GUA YE WU TOU	瓜叶乌头	Hemsley Monkshood	T0101 <i>Aconitum hemsleyanum</i>
GUAI QIN	拐芹	Polymorphic Angelica	T0491 <i>Angelica polymorpha</i>
GUAN CANG ZHU	关苍术	Japanese Atractylodes	T0821 <i>Atractylodes japonica</i>
GUAN CONG DONG QING	灌丛冬青	Shrubby Holly*	T3391 <i>Ilex dumosa</i>
GUAN CONG XIANG KE KE	灌丛香科科*	Fluticose Germander*	T6361 <i>Teucrium fruticans</i>
GUAN GUANG MU	观光木	Guanguangtree	T6556 <i>Tsoongiodendron odorum</i>
GUAN HUA DANG SHEN	管花党参	Tubularflower Asiabell	T1603 <i>Codonopsis tubulosa</i>
GUAN HUA MA DOU LING	管花马兜铃	Tubeflower Dutchmanspipe	T0642 <i>Aristolochia tubiflora</i>
GUAN HUA QIN JIAO	管花秦艽	Tubeflower Gentian	T2932 <i>Gentiana siphonantha</i>
GUAN HUA ROU CONG RONG	管花肉苁蓉	Tube-shaped Flower Cistanche	T1458 <i>Cistanche tubulosa</i>
GUAN LUO SUI TUN CAO	冠裸穗豚草	Crestedspike Ragweed	T0406 <i>Ambrosia psilostachya</i> var. <i>coronopifolia</i>
GUAN MU AO TUO SI TE CAO	灌木奥托斯特草*	Shrubby Otostegia*	T4557 <i>Otostegia fruticosa</i>
GUAN MU CHAI HU	灌木柴胡	Shrub Thoroughwax (Shrubby Hare's-ear)	T1062 <i>Bupleurum fruticosum</i>
GUAN MU LUO FU MU	灌木萝芙木*	Shrubby Devilpepper*	T5434 <i>Rauwolfia fruticosa</i>
GUAN MU TIAN MEN DONG	灌木天门冬	Shrubby Asparagus*	T0748 <i>Asparagus dumosus</i>
GUAN MU TONG	关木通	Manchurian Dutchmanspipe	T0632 <i>Aristolochia manshuriensis</i>
GUAN MU WEN SHU LAN	灌木文殊兰*	Shrubby Crinum* 'bush' or 'march lily'	T1801 <i>Crinum macowanii</i>
GUAN MU YA JU	灌木亚菊	Shrubby Ajania	T0260 <i>Ajania fruticulosa</i>
GUAN MU YUAN ZHI	灌木远志	Shrubby Milkwort*	T5076 <i>Polygala fruticosa</i>
GUAN MU ZHUANG CHE	灌木状车轴草*	Shrubby Clover*	T6519 <i>Trifolium fruticosum</i>
ZHOU CAO			
GUAN SHANG ZHANG YA CAI	观赏獐牙菜		T6218 <i>Swertia decora</i>
GUAN YE LIAN QIAO	贯叶连翘	Common St. John'swort	T3361 <i>Hypericum perforatum</i>

GUAN YIN CAO	观音草	Roxburgh Peristrophe	T4730 <i>Peristrophe roxburghiana</i>
GUAN ZHONG	贯众	Male Fern Rhizome	T2281 <i>Dryopteris crassirhizoma</i>
GUAN ZHUANG GOU YA HUA	冠状狗牙花	Coronary Ervatamia*	T2440 <i>Ervatamia coronaria</i>
GUAN ZHUANG MEI YING SU	灌状美罂粟		T0960 <i>Bocconia frutescens</i>
GUAN ZI YU PAN	管紫玉盘	Angola Uvaria*	T6658 <i>Uvaria angolensis</i>
GUANG BU DING GONG TENG	广布丁公藤*	Expanse Erycibe*	T2448 <i>Erycibe expansa</i>
GUANG CI BAO JU	光刺苞菊	Glabrous Acanthospermum*	T0046 <i>Acanthospermum glabratum</i>
GUANG CI GU	光慈姑	Edible Tulip	T6560 <i>Tulipa edulis</i>
GUANG E ZHU SHI DOU	光萼猪屎豆	Glabroussepal Crotalaria	T1837 <i>Crotalaria usaramoensis</i>
GUANG FANG FENG	广防风	Indian Epimeredi	T0503 <i>Anisomeles indica</i> [Syn. <i>Epimeredi indica</i> ]
GUANG FANG JI	广防己	Fangchi	T0628 <i>Aristolochia fangchi</i>
GUANG FEI YAN CAO	光飞燕草	Light Larkspur*	T2069 <i>Delphinium corumbosum</i>
GUANG GUO GAN CAO	光果甘草	Licorice	T3013 <i>Glycyrrhiza glabra</i>
GUANG HUA DANG GUI	光滑当归*	Glabrate Angelica*	T0484 <i>Angelica glabra</i>
GUANG HUO XIANG	广藿香	Cablin Potchouli	T5059 <i>Pogostemon cablin</i> [Syn. <i>Mentha cablin</i> ]
GUANG JIE QIU HAI TANG	光洁秋海棠*	Glabrate Begonia*	T0889 <i>Begonia glabra</i>
GUANG JIN QIAN CAO	广金钱草	Snowbellleaf Tickclover	T2134 <i>Desmodium styracifolium</i>
GUANG JING QIAN CAO	光茎茜草	Wallich Madder	T5585 <i>Rubia wallichiana</i>
GUANG LIANG HUANG TAN	光亮黄檀*	Shining Rosewood*	T2006 <i>Dalbergia nitidula</i>
GUANG LIANG JIA LONG DAN	光亮假龙胆*	Shining Gentianella*	T2940 <i>Gentianella nitida</i>
GUANG LIANG LUO FU MU	光亮萝芙木	Shining Devilpepper*	T5438 <i>Rauwolfia nitida</i>
GUANG LIANG SHI SONG	光亮石松*	Shining Clubmoss*	T3974 <i>Lycopodium lucidulum</i>
GUANG LIANG YANG TONG	光亮杨桐	Shining Adinandra*	T0182 <i>Adinandra nitida</i>
GUANG LIANG YUAN ZHI	光亮远志	Shining Milkwort*	T5078 <i>Polygala nitida</i>
GUANG NANG ZI BING JUE	光囊紫柄蕨	Long-eared Pseudophegopteris	T5259 <i>Pseudophegopteris subaurita</i>
GUANG RONG YIN YU	光荣茵芋	Laureate Skimmia*	T5971 <i>Skimmia laureola</i>
GUANG SHI WEI	光石韦	Bald Pyrrosia	T5353 <i>Pyrrosia calvata</i>
GUANG SI SHI JU	光四室菊	Littleleaf Horsebrush	T6355 <i>Tetradymia glabrata</i>
GUANG XI BA JIAO LIAN	广西八角莲	Guangxi Many-flowered May-apple*	T2300 <i>Dysosma guangxiensis</i>
GUANG XI E SHU	广西莪术	Kwangsi Turmeric	T1904 <i>Curcuma kwangsiensis</i>
GUANG XI JIU LI XIANG	广西九里香	Kwangsi Jasminorange	T4320 <i>Murraya kwangsiensis</i>
GUANG XI MEI DENG MU	广西美登木	Guangxi Mayten*	T4132 <i>Maytenus kwangsiensis</i>
GUANG XI QIAN HU	广西前胡	Guangxi Hogfennel	T4758 <i>Peucedanum kwangxiense</i>
GUANG XI SHI SUAN	广西石蒜	Guangxi Lycoris	T3985 <i>Lycoris kwangxiensis</i>
GUANG YAO DA HUANG HUA	光药大黄花	Mongolian Cymbria	T1938 <i>Cymbria mongolica</i>
GUANG YE BA DOU	光叶巴豆	Nitidleaf Croton	T1853 <i>Croton oblongifolius</i> [Syn. <i>Croton laevigatus</i> ]
GUANG YE DI BU RONG	光叶地不容	Glabrousleaf Stephania*	T6127 <i>Stephania glabra</i>
GUANG YE DING GONG TENG	光叶丁公藤	Glabrousleaf Erycibe	T2450 <i>Erycibe schmidtii</i>
GUANG YE FEN HUA XIU XIAN JU	光叶粉花绣线菊	Fortune Japanese Spiraea	T6082 <i>Spiraea japonica</i> var. <i>fortunei</i>
GUANG YE JUE MING	光叶决明	Nitidleaf Senna*	T1236 <i>Cassia laevigata</i> [Syn. <i>Cassia floribunda</i> ]
GUANG YE SHE PU TAO	光叶蛇葡萄	Hance Snakegrape	T0424 <i>Ampelopsis brevipedunculata</i> var. <i>hancei</i>
GUANG YE SHUI SU	光叶水苏	Marshy Betony	T6092 <i>Stachys palustris</i>
GUANG YE YAN ZI CAI	光叶眼子菜	Glabrousleaf Pondweed	T5175 <i>Potamogeton lucens</i>
GUANG YE ZHU SHI DOU	光叶猪屎豆	Shackshack Crotalaria	T1821 <i>Crotalaria incana</i>
GUANG YE ZI HUA	光叶子花	Naked Leafyflower	T0999 <i>Bougainvillea glabra</i>
GUANG YE ZI YU PAN	光叶紫玉盘	Glabrousleaf Uvaria	T6659 <i>Uvaria boniana</i>
GUANG ZE BA JI	光泽巴戟*	Lucid Indianmulberry*	T4282 <i>Morinda lucida</i>

GUANG ZE WU TOU	光泽乌头	Lucid Monkshood*	T0113 <i>Aconitum lucidusculum</i>
GUANG ZHI GOU ER CHA	光枝勾儿茶	Smoothbranched Supplejack	T0922 <i>Berchemia polyphylla</i> var. <i>leioclada</i>
GUI DENG LONG	鬼灯笼	Redcalyx Glotybower	T1555 <i>Clerodendron fortunatum</i>
GUI GAI	鬼盖	Coprinus Sporocarp	T1660 <i>Coprinus atramentarius</i>
GUI HUA	桂花	Sweet Osmanthus	T4550 <i>Osmanthus fragrans</i>
GUI JIAN JIN JI ER	鬼箭锦鸡儿	Shagspine Peashrub	T1190 <i>Caragana jubata</i>
GUI JIAN YU	鬼箭羽	Winged Euonymus	T2536 <i>Euonymus alatus</i>
GUI JIU	鬼臼	Common Dysosma	T2305 <i>Dysosma versipellis</i> [Syn. <i>Podophyllum versipelle</i> ]
GUI PI	桂皮	Japanese Cinnamon	T1441 <i>Cinnamomum japonicum</i>
GUI PI DIAO ZHANG	桂皮钓樟	Spicebush	T3848 <i>Lindera benzoin</i>
GUI YA NA GOU TENG	圭亚那钩藤	Garabato; Uganangi; Cat's Claw	T6616 <i>Uncaria guianensis</i>
GUI ZHEN CAO	鬼针草	Beggarticks	T0938 <i>Bidens bipinnata</i>
GUI ZHI	桂枝	Cassiabarktree Twig	T1438 <i>Cinnamomum cassia</i> [Syn. <i>Cinnamomum aromaticum</i> ]
GUI ZHOU ZHANG YA CAI	贵州獐牙菜	Guizhou Swertia*	T6224 <i>Swertia kouitchensis</i>
GUI ZHU TANG JIE	桂竹糖芥	Treacle Erysimum	T2452 <i>Erysimum cheiranthoides</i>
GUI ZHU XIANG	桂竹香	Common Wallflower	T1356 <i>Cheiranthus cheiri</i>
GUO JIANG LONG	过江龙	Complanate Clubmoss	T3971 <i>Lycopodium complanatum</i>
GUO YE GE	裹叶葛	Mirifica Kudzuvine	T5315 <i>Pueraria mirifica</i>
HA DA SHI JI NING	哈达石芥苧	Hada Mosla*	T4540 <i>Orthodon hadai</i>
HA SHI LUO HAN SONG	哈氏罗汉松	Hall Podocarpus*	T5040 <i>Podocarpus hallii</i>
HA SHI MA	哈士蟆	Dried Chinese Woodfrog	T5409 <i>Rana temporaria chensinensis</i> ; <i>Rana amurensis</i>
HA SHI SHAN GENG CAI	哈氏山梗菜*	Hassler Lobelia*	T3899 <i>Lobelia hassleri</i>
HAI BA JI	海巴戟	Indianmulberry	T4280 <i>Morinda citrifolia</i>
HAI BIAN MA BIAN CAO	海边马鞭草*	Littoral Verbena*	T6708 <i>Verbena littoralis</i>
HAI BIN LIU CHUAN YU	海滨柳穿鱼	Japanese Toadflax	T3844 <i>Linaria japonica</i>
HAI BIN LUO FU MU	海滨萝芙木*	Littoral Devilpepper*	T5436 <i>Rauwolfia littoralis</i>
HAI BO NA DA JI	海博纳大戟	Hyberna Euphorbia	T2592 <i>Euphorbia hyberna</i>
HAI CONG	海葱	Red Squill	T6649 <i>Urginea maritima</i>
HAI DAI	海带	Ellgrass	T6925 <i>Zostera marina</i>
HAI DAO MIAN	海岛棉	Barbados Cotton	T3054 <i>Gossypium barbadense</i> ]
HAI ER CHA	孩儿茶	Cutechu	T0019 <i>Acacia catechu</i>
HAI FENG TENG	海风藤	Kadsura Pepper	T4950 <i>Piper kadsura</i> [Syn. <i>Piper futokadsura</i> ]
HAI HONG DOU	海红豆	Sandal Beadtree	T0167 <i>Adenanthera pavonina</i>
HAI JIN BI XIE	海锦草薺		T2210 <i>Dioscorea spongiosa</i>
HAI JIN SHA	海金沙	Japanese Climbing Fern	T3990 <i>Lygodium japonicum</i>
HAI JIU CAI	海韭菜	Shore Podgrass	T6526 <i>Triglochin maritimum</i>
HAI NAN CU FEI	海南粗榧	Hainan Plumyew	T1319 <i>Cephalotaxus hainanensis</i> [Syn. <i>Cephalotaxus mannii</i> ]
HAI NAN GE NA XIANG	海南哥纳香	Hainan Goniotalamus	T3048 <i>Goniotalamus howii</i>
HAI NAN GOU YA HUA	海南狗牙花	Heyne Ervatamia*	T2443 <i>Ervatamia hainanensis</i>
HAI NAN JIAN MU	海南榿木	Hainan Pencilwood	T2309 <i>Dysoxylum hainanense</i>
HAI NAN LUO FU MU	海南萝芙木	Hainan Devilpepper	T5426 <i>Rauwolfia verticillata</i> var. <i>hainanensis</i>
HAI NAN MAI MA TENG	海南买麻藤	Hainan Jointfir	T3030 <i>Gnetum hainanense</i>
HAI NAN QING NIU DAN	海南青牛胆	Hainan Tinospora	T6466 <i>Tinospora hainanensis</i>
HAI NAN SHA REN	海南砂仁	Hainan Amonum	T0417 <i>Amonum longiligulare</i>
HAI NAN YE SHAN HUA	海南野山花	Hainan Sarcococca	T5733 <i>Sarcococca vagans</i>
HAI NI GOU ZHI TENG	海尼钩枝藤	Indian Liana	T0449 <i>Ancistrocladus heyneanus</i>
HAI QI	海漆	Bling-your-eye-tree	T2650 <i>Excoecaria agallocha</i>
HAI REN CAO	海人草	Simple Digenea Frond	T2173 <i>Digenea simplex</i>
HAI SHEN CHANG	海参肠	Sea-cucumber Intestines	T6145 <i>Stichopus japonicus</i>

HAI SHENG CHUN MAN ZAO	海生川蔓藻*	Marine Widgeonweed	T5616 <i>Ruppia maritime</i>
HAI SHI	海柿*	Maritime Persimmon*	T2224 <i>Diospyros maritima</i>
HAI SHI GOU YA HUA	海氏狗牙花	Medicinal Ervatamia	T2444 <i>Ervatamia heyneana</i>
HAI SONG ZI	海松子	Korean Pine Seed	T4912 <i>Pinus koraiensis</i>
HAI TANG GUO	海棠果	Kalofilum	T1129 <i>Calophyllum inophyllum</i>
HAI TONG	海通	Tomentose Glorybower	T1567 <i>Clerodendrum mandarinorum</i>
HAI TONG	海桐	Japanese Pittosporum	T4987 <i>Pittosporum tobira</i>
HAI TONG PI	海桐皮	Oriental Variegated Coralbean Bark	T2479 <i>Erythrina variegata</i> var. <i>orientalis</i>
HAI TUN YU	海獐鱼	Dolphin	T2092 <i>Delphinus delphis</i>
HAI XIAKihinouye	海虾	Prawn	T4696 <i>Penaeus orientalis</i>
HAI YAN	海燕		T0782 <i>Asterina pectinifera</i>
HAI YANG DA JI	海洋大戟	Sea Euphorbia*	T2607 <i>Euphorbia paralias</i>
HAI YING SU	海罌粟	Ciliate Hornpoppy*	T2968 <i>Glaucium fimbriigerum</i>
HAI YUN	海蘊		T4403 <i>Nemacystus decipiens</i> [Syn. <i>Mesogloea decipiens</i> ; <i>Cladosiphon decipiens</i> ]
HAI ZHOU GU SUI BU	海州骨碎补	Squirrel's Foot Fern	T2053 <i>Davallia mariesii</i>
HAN CAI	蕻菜	Indian Rorippa	T5560 <i>Rorippa montana</i> [Syn. <i>Rorippa dubia</i> ; <i>Sisymbrium dublium</i> ]
HAN CHENG XI XIN	汉城细辛	Seoul Siebold Wildginger	T0732 <i>Asarum sieboldii</i> var. <i>seoulensis</i>
HAN FANG JI	汉防己	Yellowmouth Dutchmanspipe	T0629 <i>Aristolochia heterophylla</i>
HAN LIAN HUA	旱莲花	Common Nasturtium	T6555 <i>Tropaeolum majus</i>
HAN MAI PING CAO	旱麦瓶草	Dry Silene	T5955 <i>Silene jennisensis</i>
HAN MI ER DUN HUI YE	汉密尔顿灰叶	Hamilton Tephrosia*	T6335 <i>Tephrosia hamiltonii</i>
HAN QIN	旱芹	Wildcelery	T0544 <i>Apium graveolens</i>
HAN QIN BIAN ZHONG	旱芹变种	Wildcelery Variety	T0545 <i>Apium graveolens</i> var. <i>dulce</i>
HAN RUI WU WEI ZI	含蕊五味子	Angletwig Magnoliavine	T5797 <i>Schisandra propinqua</i>
HAN SHENG JUAN BAI	旱生卷柏	Staunton's Spikemoss	T5868 <i>Selaginella stauntoniana</i>
HAN SHENG XIANG CHA CAI	旱生香茶菜	Dry-living Rabdosisia	T3536 <i>Isodon xerophilus</i>
HAN XIN CAO	韩信草	Indian Skullcap	T5840 <i>Scutellaria indica</i>
HAN XIU CAO	含羞草	Sensitive Plant	T4248 <i>Mimosa pudica</i>
HANG BAI ZHI	杭白芷	Taiwan Angelica	T0498 <i>Angelica taiwaniana</i>
HAO WANG JIAO LU HUI	好望角芦荟	Cape of Good Hope Aloe Dried Juice	T0338 <i>Aloe ferox</i>
HAO WANG JIAO LUO HAN SONG	好望角罗汉松	Cape of Good Hope Podocarpus	T5037 <i>Podocarpus elongatu</i>
HAO WANG JIAO XIANG PU	好望角香蒲	Cape-of-Good-Hope Cattail	T6586 <i>Typha capensis</i>
HE AN FU LAO JU	河岸弗劳菊*	Riparian Tarbush*	T2741 <i>Flourensia riparia</i>
HE AN GOU GAN CAI	河岸狗肝菜	Riparian Dicliptera*	T2160 <i>Dicliptera riparia</i>
HE AN HUANG TAN	河岸黄檀	Riparian Rosewood*	T2011 <i>Dalbergia riparia</i>
HE AN ZE LAN	河岸泽兰	Riparian Eupatorium, Riverside Eupatorium	T2570 <i>Eupatorium riparium</i>
HE BAO DI BU RONG	荷包地不容	Dicentrine Stephania*	T6121 <i>Stephania dicentrinifera</i>
HE BAO MU DAN GEN	荷包牡丹根	Showy Bleedingheart Root	T2154 <i>Dicentra spectabilis</i>
HE BEI YANG	河北杨	Hebei Poplar	T5153 <i>Populus hopeiensis</i>
HE CAO XIANG WAN DOU	禾草香豌豆	Grass Vetchling	T3706 <i>Lathyrus nissolia</i>
HE CAO YE JIA BEI FANG FENG	禾草叶假北防风*		T3734 <i>Ledebouria graminifolia</i>
HE ER TI SHAN MA CHA	赫尔梯山马茶		T6273 <i>Tabernaemontana holstii</i>
HE GENG	荷梗	Hindu Lotus Petiole	T4397 <i>Nelumbo nucifera</i>
HE GUO CU FEI	核果粗榧	Drupaceous Plumyew*	T1137 <i>Cephalotaxus drupacea</i>
HE GUO ZHUANG BU GU ZHI	核果状补骨脂	Drupaceous Scurfpea*	T5271 <i>Psoralea drupacea</i>
HE HUA XUE LIAN	褐花雪莲	Brownflower Saussurea	T5765 <i>Saussurea phaeantha</i>
HE HUA YAN LING CAO	褐花延龄草	Brownflower Trillium	T6532 <i>Trillium erectum</i>
HE HUA YU LAN	荷花玉兰	Southern Magnolia	T4039 <i>Magnolia grandiflora</i>
HE HUAN PI	合欢皮	Silktree Albizia Bark	T0292 <i>Albizzia julibrissin</i>

HE KA NI YA HUANG YANG	赫卡尼亚黄杨*	Hyrcanian Box*	T1089 <i>Buxus hyrcana</i>
HE LAN ZHONG ZHI FAN	荷兰种植番红花	Holland Planted Saffron*	T1806 <i>Crocus antalyensis</i> cv
HONG HUA			
HE LU BAI JIAN MU	褐绿白坚木	Olive-green White Quebracho*	T0770 <i>Aspidosperma olivaceum</i>
HE NAN TANG SONG CAO	河南唐松草	Honan Meadowrue	T6392 <i>Thalictrum honanense</i>
HE QING HUA	荷青花	Japanese Hylomecon	T3316 <i>Hylomecon japonica</i>
HE RONG GAI NIU GAN JUN	褐绒盖牛肝菌	Bay Bolete	T6848 <i>Xerocomus badius</i>
HE SE ZHONG HUA SHU	褐色钟花树		T6269 <i>Tabebuia avellanedae</i>
HE SHI FENG	鹤虱风	Wild Carrot	T2048 <i>Daucus carota</i>
HE SHI TANG SONG CAO	鹤氏唐松草	Hernandez Meadowrue*	T6391 <i>Thalictrum hernandezii</i>
HE SHOU WU	何首乌	Tuber Fleecflower	T5107 <i>Polygonum multiflorum</i>
HE SHUO YAO HUA	河朔堯花	Lowdaphne Stringbush	T6819 <i>Wikstroemia chamaedaphne</i>
HE TA CAO	和他草	Florida Waltheria	T6808 <i>Waltheria americana</i>
HE TAO DA HUANG	河套大黄	River-bend Rhubarb*	T5469 <i>Rheum hotaense</i>
HE TUN	河豚	Globefish	T2805 <i>Fugu ocellatus</i>
HE YE	荷叶	Hindu Lotus Leaf	T4398 <i>Nelumbo nucifera</i>
HE YE DI	荷叶蒂	Hindu Lotus Leaf-base	T4399 <i>Nelumbo nucifera</i>
HE YE FENG MAO JU	禾叶凤毛菊	Grassleaf Saussurea	T5754 <i>Saussurea graminea</i>
HE ZI	诃子	Medicine Terminalia	T6346 <i>Terminalia chebula</i>
HE ZI YE	诃子叶	Medicine Terminalia Leaf	T6347 <i>Terminalia chebula</i>
HEI BA LUO CAO	黑巴洛草	Black Bui*	T0863 <i>Ballota nigra</i>
HEI BAI HE	黑百合	Kamchatka Fritillary	T2782 <i>Fritillaria camtschatcensis</i>
HEI BAI JIAN MU	黑白坚木*	Black White Quebracho*	T0769 <i>Aspidosperma nigricans</i>
HEI CHA BIAO	黑茶藨	Black Currant	T5546 <i>Ribes nigrum</i>
HEI CHAI HU	黑柴胡	Black Thorowax	T1074 <i>Bupleurum smithii</i>
HEI CI CI TONG	黑刺刺桐*	Blackstick Coralbean*	T2470 <i>Erythrina melanacantha</i>
HEI DA DOU	黑大豆	Black Soyabean	T3000 <i>Glycine max</i>
HEI DA DOU PI	黑大豆皮	Black Soyabean Spermoderm	T3001 <i>Glycine max</i>
HEI DA DOU YE	黑大豆叶	Black Soyabean Leaf	T3002 <i>Glycine max</i>
HEI FENG TENG	黑风藤	Manyflower Fissistigma	T2736 <i>Fissistigma polyanthum</i>
HEI GANG LIU	黑杠柳	Black Silkvine	T4728 <i>Periploca nigrescens</i>
HEI GUO BA QIA	黑果菝葜	Blackfruit Greenbrier	T5978 <i>Smilax glauco-china</i>
HEI GUO HUANG PI	黑果黄皮	Dunn Wampee	T1534 <i>Clausena dunniana</i>
HEI GUO QIAN CAO	黑果茜草	Blackfruit Madder	T5580 <i>Rubia cordifolia</i> var. <i>pratensis</i>
HEI HU TAO	黑胡桃	Black Walnut	T3566 <i>Juglans nigra</i>
HEI HUA WU GEN TENG	黑花无根藤*	Blackflower Cassytha*	T1253 <i>Cassytha melantha</i>
HEI HUA YAN MING CAO	黑花延命草	Blackflower Rabdosia*	T3531 <i>Isodon trichocarpus</i>
HEI JIE	黑芥	Black Mustard	T1012 <i>Brassica nigra</i>
HEI JIE GENG LAN	黑桔梗兰*	Black Dianella*	T2140 <i>Dianella nigra</i>
HEI JING SHU	黑荆树	Wattle	T0024 <i>Acacia mearnsii</i>
HEI KE NAN	黑壳楠	Largeleaf Spicebush	T3852 <i>Lindera megaphylla</i>
HEI KUN BU	黑昆布	Tangle Thallus	T2321 <i>Ecklonia kurome</i>
HEI MA YI	黑蚂蚁	Silky Ant	T2753 <i>Formica fusca</i>
HEI MAN	黑蔓	Regel Threewingnut	T6541 <i>Tripterygium regelii</i>
HEI MAO SHI HU	黑毛石斛	Blackhair Denrobium	T2111 <i>Dendrobium williamsonii</i>
HEI MU JIN HE HUAN	黑木金合欢	Australian Blackwood	T0025 <i>Acacia melanoxylon</i>
HEI REN DONG	黑忍冬	Black Honeysuckle	T3916 <i>Lonicera nigra</i>
HEI SE MI PI KANG	黑色米皮糠	Black Rice Spermoderm*	T4547 <i>Oryza sativa</i> cv
HEI SHI ER	黑石耳		T2115 <i>Dermatocarpon minutum</i>
HEI SHUI CUI QUE	黑水翠雀	Potanin Larkspur	T2084 <i>Delphinium potaninii</i>
HEI SHUI CUI QUE HUA BIAN	黑水翠雀花变种*	Potanin Larkspur Variety*	T2085 <i>Delphinium potaninii</i> var. <i>jiufengshanense</i>
ZHONG			
HEI SHUI XIE CAO	黑水缬草	Amur Valeriana	T6675 <i>Valeriana amurensis</i>

HEI SHUI YE YING SU	黑水野罌粟	Amur Poppy	T4630 <i>Papaver nudicaule</i> ssp. <i>amurense</i>
HEI XIAN TIAO TENG HUANG	黑线条藤黄*	Nigroline Garcinia*	T2868 <i>Garcinia nigrolineata</i>
HEI YAN SHE GEN CAO	黑岩蛇根草	Black-rock Ophiorrhiza*	T4511 <i>Ophiorrhiza kuroiwai</i>
HEI ZHI MA	黑芝麻	Oriental Sesame (black seed)	T5927 <i>Sesamum indicum</i> [Syn. <i>Sesamum orientale</i> ]
HEI ZHONG CAO	黑种草	Jackinprison	T4431 <i>Nigella damascena</i>
HEI ZI LI GUO JI SHENG	黑紫梨果寄生*	Black-purple Scurrula*	T5830 <i>Scurrula atropurpurea</i>
HENG GEN FEI CAI	横根费菜	Orange Stonecrop	T5855 <i>Sedum kamschaticum</i>
HENG LI DI ER CAO	亨利地耳草	Henry St.John'swort	T3354 <i>Hypericum henryi</i>
HENG ZHOU WU YAO	衡州乌药	Laurelleaf Snailseed	T1586 <i>Cocculus laurifolius</i>
HONG A BU TA CAO	红阿布塔草		T0014 <i>Abuta rufescens</i>
HONG BAI HE MU	红百合木	Lantern-tree	T1792 <i>Crinodendron hookerianum</i>
HONG BEI SHAN MA GAN	红背山麻杆	Redback Christmashush	T0297 <i>Alchornea trewioides</i>
HONG CAO	荳草	Prince's-feather	T5110 <i>Polygonum orientale</i>
HONG CHAI HU	红柴胡	Red Thorowax	T1072 <i>Bupleurum scorzonerifolium</i>
HONG CHE ZHOU CAO	红车轴草	Red Clover	T6521 <i>Trifolium pratense</i>
HONG CHUN	红椿	Burma Toon	T6474 <i>Toona ciliata</i>
HONG DA LI HUA	红大丽花	Coccoxochitl	T1995 <i>Dahlia coccinea</i>
HONG DOU	红豆	Hosie Ormosia	T4530 <i>Ormosia hosiei</i>
HONG DOU SHAN	红豆杉	Chinese Yew	T6310 <i>Taxus chinensis</i>
HONG DU HUO	红独活	Red Cowparsnip*	T3212 <i>Heracleum granatense</i>
HONG E JI XUE TENG	红萼鸡血藤	Redcalyx Millettia*	T4235 <i>Millettia erythrocalyx</i>
HONG GEN CAO	红根草	Hispid Sage	T5687 <i>Salvia prionitis</i>
HONG GUI	红桧	Formosan False Cypress	T1347 <i>Chamaecyparis formosensis</i>
HONG GUO JIAN MU	红果檉木	Redfruit Pencilwood	T2308 <i>Dysoxylum binectariferum</i>
HONG GUO LUO FU MU	红果萝芙木	Redfruit Devilpepper	T5425 <i>Rauvolfia verticillata</i> f. <i>rubrocarpa</i>
HONG HAI JIAO	红海椒	Sweet Pepper	T1186 <i>Capsicum annuum</i>
HONG HAI LAN	红海榄	Stylose Mangrove	T5489 <i>Rhizophora stylosa</i>
HONG HUA	红花	Safflower	T1215 <i>Carthamus tinctorius</i>
HONG HUA CAI DOU	红花菜豆	Runner Bean	T4782 <i>Phaseolus multiflorus</i>
HONG HUA CHU CHONG JU	红花除虫菊	Pyrethrum	T1389 <i>Chrysanthemum coccineum</i>
HONG HUA JIAO	红花椒*	Red Pricklyash*	T6891 <i>Zanthoxylum rubescens</i>
HONG HUA LONG DAN	红花龙胆	Redflower Gentian	T2927 <i>Gentiana rhodantha</i>
HONG HUA LU TI CAO	红花鹿蹄草	Redflower Pyrola	T5349 <i>Pyrola incarnata</i>
HONG HUA LV RONG HAO	红花绿绒蒿	Redflower Meconopsis	T4145 <i>Meconopsis punicea</i>
HONG HUA PI	红桦皮	Japanese White Birch Bark	T0933 <i>Betula platyphylla</i>
HONG HUA QI	红花槭	Red Maple	T0054 <i>Acer rubrum</i>
HONG HUA RUI MU	红花蕊木	Redflower Kopsia	T3640 <i>Kopsia fruticosa</i>
HONG HUA WU WEI ZI	红花五味子 Z1572	Redflower Magnoliavine	T5799 <i>Schisandra rubriflora</i>
HONG HUA YAN HUANG QI	红花岩黄芪	Redflower Sweetvetch	T3128 <i>Hedysarum multijugum</i>
HONG HUI XIANG	红茴香	Henry Anisetree	T3401 <i>Illicium henryi</i>
HONG JI DAN HUA	红鸡蛋花	Frangipani	T5032 <i>Plumeria rubra</i>
HONG JIA MI	红莢蒾	Red Viburnum*	T6736 <i>Viburnum erubescens</i>
HONG JIAN QIU LUO	红剪秋罗	Red Champion	T3949 <i>Lychnis dioica</i>
HONG KOU SHUI XIAN	红口水仙	Poets Narcissus	T4378 <i>Narcissus poeticus</i>
HONG KUAI ZI	红筷子	Great Willowherb (Firewood)	T1352 <i>Chamaenerion angustifolium</i> [Syn. <i>Epilobium angustifolium</i> ]
HONG LI	红栎	Spanish Oak	T5378 <i>Quercus rubra</i>
HONG MA	红麻	Lanceleaf Dogbane*	T0552 <i>Apocynum lancifolium</i>
HONG MAO QI	红毛七	Robust Leontice	T3746 <i>Leontice robustum</i>
HONG MAO WU JIA PI	红毛五加皮	Girald Acanthopanax Root-bark	T0036 <i>Acanthopanax giraldii</i> [Syn. <i>Acanthopanax giraldii</i> var. <i>inermis</i> ; <i>Eleutherococcus giraldii</i> ]

HONG MAO YE HAI TANG	红毛野海棠	Tuberculate Bredia	T1023 <i>Bredia tuberculata</i>
HONG MU	红木	Anattotree	T0947 <i>Bixa orellana</i>
HONG MU JI CAO	红母鸡草	Hookedhairypod Tickclover	T2130 <i>Desmodium gangeticum</i>
HONG NAN PI	红楠皮	Red Nanmu Bark	T4018 <i>Machilus thunbergii</i>
HONG NIANG ZI	红娘子	Red Lady-bug	T3287 <i>Huechys sanguinea</i>
HONG PI YUN SHAN	红皮云杉	Korean Spruce	T4873 <i>Picea koraiensis</i>
HONG QI YE SHU	红七叶树	Red Horsechestnut	T0200 <i>Aesculus carnea</i>
HONG QIE DONG GUO	红茄苳果	Mangrove Fruit	T5488 <i>Rhizophora mucronata</i>
HONG QIU JIANG	红球姜	Zerumbet Ginger	T6911 <i>Zingiber zerumbet</i>
HONG RU CAO	红乳草	Red-milk Grass*	T2623 <i>Euphorbia makinoi</i>
HONG SAN QI	红三七	Ovateleaf Knotweed	T5118 <i>Polygonum suffultum</i>
HONG SE JIN JI NA SHU	红色金鸡纳树	Redbark Cinchona	T1433 <i>Cinchona succirubra</i>
HONG SHI ER	红石耳	Red-Rock-Ears	T6602 <i>Umbilicaria hypococcinea</i>
HONG SHI XIAN TAO	红石仙桃*	Rubi Pholidota*	T4822 <i>Pholidota rubra</i>
HONG SHU	红树	Sharpleaf Mangrove	T5487 <i>Rhizophora apiculata</i>
HONG SHUAN JUN	红栓菌	Cinnabar-red	T6491 <i>Trametes cinnabarina</i> [Syn. <i>Polyporus cinnabarinus</i> ; <i>Boletus cinnabarinus</i> ]
HONG SI XIAN	红丝线	Twoflower Red silkyarn	T3953 <i>Lycianthes biflora</i>
HONG SONG	红松	Korean Pine	T4913 <i>Pinus koraiensis</i>
HONG TOU CAO	红头草	Malay Blumea	T0959 <i>Blumea lacera</i>
HONG WEI SUAN JIAO GAN	宏伟酸脚杆*	Magnific Medinilla*	T4152 <i>Medinilla magnifica</i>
HONG WEN MA XIAN HAO	红纹马先蒿	Redstriate Woodbetony	T4684 <i>Pedicularis striata</i>
HONG YA DA JI	红芽大戟	Red Knoxia	T3632 <i>Knoxia valerianoides</i>
HONG YUAN CENG KONG JUN	红缘层孔菌	Red Belt Polypore	T2750 <i>Fomitopsis pinicola</i> [Syn. <i>Fomes pinicola</i> ; <i>Polyporus pinicola</i> ]
HONG ZE LAN	红泽兰	Japanese Conehead	T6154 <i>Strobilanthes japonicus</i> [Syn. <i>Championella japonica</i> ]
HONG ZHI ZHANG YA CAI	红直獐牙菜	Redspot Swertia	T6219 <i>Swertia erythrosticta</i>
HONG ZU HAO	红足蒿	Redfoot Wormwood	T0691 <i>Artemisia rubripes</i>
HOU GUO DANG GUI	厚果当归	Thickfruit Angelica*	T0490 <i>Angelica pachycarpa</i>
HOU KE GUI	厚壳桂	Chinese Cryptocarya	T1862 <i>Cryptocarya chinensis</i>
HOU PI HUA JIAO	厚皮花椒	Thickbark Pricklyash*	T6879 <i>Zanthoxylum elephantiasis</i>
HOU PI SHU	厚皮树	Coromandel Lannea	T3685 <i>Lannea grandis</i> [Syn. <i>Lannea coromandelica</i> ]
HOU PO	厚朴	Officinal Magnolia	T4045 <i>Magnolia officinalis</i>
HOU SHU SHAN GU	后熟扇菇*	Mukitake (in Japanese)	T4617 <i>Panellus serotinus</i>
HOU TOU JUN	猴头菌	Bearded Tooth Carpophore	T3229 <i>Hericium erinaceus</i> [Syn. <i>Hydnum erinaceus</i> ]
HOU WANG ZAO	厚网藻		T4570 <i>Pachydictyon coriaceum</i>
HOU YE GOU TENG	厚叶钩藤*	Thickleaf Gambirplant*	T6610 <i>Uncaria callophylla</i>
HOU YE HUI MAO DOU	厚叶灰毛豆*	Crassleaf Tephrosia*	T6333 <i>Tephrosia crassifolia</i>
HOU YE YAN BAI CAI	厚叶岩白菜	Thickleaf Bergenia	T0923 <i>Bergenia crassifolia</i>
HU BAO TAI	壶苞苔	Blasia*	T0949 <i>Blasia pusilla</i>
HU BEI BEI MU	湖北贝母	Hupeh Fritillary	T2787 <i>Fritillaria hupehensis</i>
HU BEI GUA LOU	湖北栝楼	Hupeh Snakegourd	T6509 <i>Trichosanthes hupehensis</i>
HU BEI HUANG JING	湖北黄精	Hubei Landpick	T5096 <i>Polygonatum zanlanscianense</i>
HU BEI SHAN MAI DONG	湖北山麦冬	Hubei Liriope	T3875 <i>Liriope spicata</i> var. <i>prolifera</i>
HU BEI SHAN ZHA	湖北山楂	Hupeh Hawthorn	T1770 <i>Crataegus hupehensis</i>
HU BEI SHI DA GONG LAO	湖北十大功劳	Confused Mahonia	T4060 <i>Mahonia confusa</i>
HU CI	虎刺	Indian Damnacanthus	T2020 <i>Damnacanthus indicus</i>
HU CI CONG MU	虎刺楸木	Spine Aralia	T0567 <i>Aralia armata</i>
HU CONG	胡葱	Shallot	T0310 <i>Allium ascalonicum</i>
HU DIE HUA	蝴蝶花	Fringed Iris	T3461 <i>Iris japonica</i>



HU DIE HUA DOU	蝴蝶花豆	Asian Pigeonwings	T1577 <i>Clitoria ternatea</i>
HU ER CAO	虎耳草	Creeping Rockfoil	T5773 <i>Saxifraga stolonifera</i>
HU ER CAO YE HUI QIN	虎耳草叶茴芹	Burnet-saxifrage	T4900 <i>Pimpinella saxifraga</i>
HU GUA	瓠瓜	Bottle Gourd	T3668 <i>Lagenaria siceraria</i> var. <i>depressa</i>
HU HUANG LIAN	胡黄连	Picrorhiza	T4887 <i>Picrorhiza kurrooa</i>
HU JI SHENG	榭寄生	Colored Mistletoe	T6775 <i>Viscum coloratum</i>
HU JIAO	胡椒	Black Pepper	T4957 <i>Piper nigrum</i>
HU JIAO HUA JIAO	胡椒花椒	Japanese Pricklyash	T6886 <i>Zanthoxylum piperitum</i>
HU KE HUANG GUA	虎克黄瓜*	Hooker Cucumber*	T1874 <i>Cucumis hookeri</i>
HU LI	榭栎	Peking Oak	T5371 <i>Quercus aliena</i>
HU LU BA	葫芦巴	Common Fenugreek	T6528 <i>Trigonella foenum-graecum</i>
HU LU CHA	葫芦茶	Triquetrous Tadehagi	T6277 <i>Tadehagi triquetrum</i>
HU LU QI	葫芦七	Kidneyleaf Goldenray	T3805 <i>Ligularia fischeri</i>
HU LU QI BIAN ZHONG	葫芦七变种*	Kidneyleaf Goldenray Variety*	T3806 <i>Ligularia fischeri</i> var. <i>spiciformis</i>
HU LUO BO	胡萝卜	Carrot	T2050 <i>Daucus carota</i> var. <i>sativa</i>
HU LUO BO ZI	胡萝卜子	Carrot Seed	T2051 <i>Daucus carota</i> var. <i>sativa</i>
HU MA GEN	胡麻根	Oriental Sesame Root	T5923 <i>Sesamum indicum</i>
HU MA YE	胡麻叶	Oriental Sesame Leaf	T5924 <i>Sesamum indicum</i>
HU SHE HONG	虎舌红	Teat-shaped Ardisia	T0600 <i>Ardisia mamillata</i> [Syn. <i>Tinus mamillata</i> ]
HU SHENG HONG JING TIAN	互生红景天	Oppositeleaf Rhodiola	T5500 <i>Rhodiola subopposita</i>
HU SHENG YE BAI QIAN CENG	互生叶白千层	Alternatleaf Melaleuca*	T4153 <i>Melaleuca alternifolia</i>
HU SHENG YE YE JUE MING	互生叶野决明	Alternatleaf Thermopsis*	T6425 <i>Thermopsis alternifolia</i>
HU SUI ZI	胡荽子	Coriander Seed	T1687 <i>Coriandrum sativum</i>
HU TAO QING PI	胡桃青皮	English Walnut Exocarp	T3567 <i>Juglans regia</i>
HU TAO QIU	胡桃楸	Manchurian Walnut	T3564 <i>Juglans mandshurica</i>
HU TAO REN	胡桃仁	English Walnut Seed	T3568 <i>Juglans regia</i>
HU TAO SHU PI	胡桃树皮	English Walnut Bark	T3569 <i>Juglans regia</i>
HU TAO YE	胡桃叶	English Walnut Leaf	T3570 <i>Juglans regia</i>
HU WEI LAN	虎尾兰	Snake Sansevieria	T5714 <i>Sansevieria trifasciata</i>
HU YAN WAN NIAN QING	虎眼万年青	Whiplash Star-of-Bethlehem	T4534 <i>Ornithogalum caudatum</i>
HU YE	榭叶	Daimyo Oak Leaf	T5372 <i>Quercus dentata</i>
HU ZHANG	虎杖	Japanese Fleeceflower	T5101 <i>Polygonum cuspidatum</i>
HU ZHANG CAO	虎掌草	Brooklet Anemone	T0471 <i>Anemone rivularis</i>
HU ZHANG YE	虎杖叶	Japanese Fleeceflower Leaf	T5102 <i>Polygonum cuspidatum</i>
HU ZHI ZI	胡枝子	Shrub Lespedeza	T3769 <i>Lespedeza bicolor</i>
HUA BAI LA SHU	花白蜡树	Flowering Ash	T2773 <i>Fraxinus ornus</i>
HUA BAN SHI ZU CAO	花瓣狮足草	Leontice*	T3745 <i>Leontice leontopetalum</i>
HUA BEI BAI QIAN	华北白前	Hancock Swallowwort	T1955 <i>Cynanchum hancockianum</i>
HUA BEI LAN PEN HUA	华北蓝盆花	Huapei Scabious	T5778 <i>Scabiosa tschiliensis</i>
HUA CHA BIAO	华茶藨	China Winterberry Currant	T5545 <i>Ribes fasciculatum</i> var. <i>chinense</i>
HUA CHONG LOU	华重楼	China Paris	T4649 <i>Paris polyphylla</i> var. <i>chinensis</i>
HUA DONG DUAN	华东楸	Japanese Linden	T6457 <i>Tilia japonica</i>
HUA DONG LAN CI TOU	华东蓝刺头	East China Globethistle	T2316 <i>Echinops grijsii</i>
HUA DONG TANG SONG CAO	华东唐松草	Fortune Meadowrue	T6388 <i>Thalictrum fortunei</i>
HUA GENG LONG DAN	花梗龙胆	Pedicellate Gentian	T2925 <i>Gentiana pedicellata</i>
HUA GOU TENG	华钩藤	Chinese Gambirplant	T6633 <i>Uncaria sinensis</i>
HUA GUAN YIN LIAN HUA	花冠银莲花	St. Brigid	T0466 <i>Anemone coronaria</i>
HUA HE KONG JUN	桦褐孔菌	Oblique Fuscoporia*	T2818 <i>Fuscoporia obliqua</i>
HUA JIAO	花椒	Bunge Pricklyash	T6869 <i>Zanthoxylum bungeanum</i>
HUA JIAO GEN	花椒根	Bunge Pricklyash Root	T6870 <i>Zanthoxylum bungeanum</i>
HUA JIAO LE	花椒筋	Cuspidate Pricklyash	T6872 <i>Zanthoxylum cuspidatum</i>
HUA JIN DAN	化金丹	Tetragonal Crotalaria	T1836 <i>Crotalaria tetragona</i>

HUA LAI CI SHU	华来刺树	<i>Fouquieria splendens</i>	T2762 <i>Fouquieria splendens</i>
HUA LI SHE BIAN JU	华丽蛇鞭菊	Pinkscale Gay-feather	T3788 <i>Liatris elegans</i>
HUA LING CAO	花菱草	California Poppy	T2495 <i>Eschscholzia californica</i>
HUA MAO	花锚	Corniculate Spurgentian	T3092 <i>Halenia corniculata</i>
HUA MU PI	桦木皮	Asian White Birch Bark	T0935 <i>Betula platyphylla</i> var. <i>japonica</i>
HUA NAN GONG LAO MU	华南功劳木	Japanese Mahonia	T4066 <i>Mahonia japonica</i>
HUA NAN GONG LAO YE	华南功劳叶	Japanese Mahonia Leaf	T4067 <i>Mahonia japonica</i>
HUA NAN GONG LAO ZI	华南功劳子	Japanese Mahonia Fruit	T4068 <i>Mahonia japonica</i>
HUA NAN HE SHI	华南鹤虱	Japanese Hedgeparsley	T6476 <i>Torilis japonica</i>
HUA NAN MA WEI SHAN	华南马尾杉	Fordi Phlegmariurus	T4800 <i>Phlegmariurus fordii</i>
HUA NAN MI HOU TAO	华南猕猴桃	Greyleaf Actinidia	T0162 <i>Actinidia glaucophylla</i>
HUA NAN REN DONG	华南忍冬(山银花)	Wild Honeysuckle	T3909 <i>Lonicera confusa</i>
HUA NAN WU ZHU YU	华南吴茱萸	South China Evodia	T2638 <i>Evodia austrosinensis</i>
HUA NAN ZAO JIA	华南皂荚	South China Honeylocust	T2976 <i>Gleditsia fera</i>
HUA SANG	华桑	Chinese Mulberry	T4293 <i>Morus cathayana</i>
HUA SHAN FAN	华山矾	Chinese Sweetleaf	T6252 <i>Symplocos chinensis</i>
HUA SHAN SONG	华山松	Armand Pine	T4906 <i>Pinus armandii</i>
HUA TANG SONG CAO	花唐松草	Filamentary Meadowrue	T6384 <i>Thalictrum filamentosum</i>
HUA TAO SHU	滑桃树		T6495 <i>Trewin nudiflora</i>
HUA XI BEI MU	华西贝母	Huaxi Fritillary	T2794 <i>Fritillaria siechuanica</i>
HUA XIANG SHU YE	化香树叶	Dyeteer Leaf	T5010 <i>Platycarya strobilacea</i>
HUA XU GENG BAI MAI GEN	花序梗百脉根*	Greater Bird's-foot-trefoil	T3930 <i>Lotus pedunculatus</i>
HUA YE CAI	花椰菜	Cauliflower	T1014 <i>Brassica oleracea</i> var. <i>botrytis</i>
HUA YE JIA DU JUAN	花叶假杜鹃		T0871 <i>Barleria lupulina</i>
HUA ZE LAN	华泽兰	Chinese Eupatorium	T2555 <i>Eupatorium chinense</i>
HUA ZHONG LIU ZU JUE	华中瘤足蕨	Fine-nerved Plagiogyria	T4998 <i>Plagiogyria euphlebia</i>
HUA ZHONG WU WEI ZI	华中五味子	Orange Magnoliavine	T5802 <i>Schisandra sphenanthera</i>
HUA ZHOU YOU	化州柚	Tomentose Pummelo	T1483 <i>Citrus grandis</i> var. <i>tomentosa</i>
HUA ZI JIN	华紫堇	Chinese Corydalis	T1713 <i>Corydalis cheilanthifolia</i>
HUAI	槐	Japanese Pagodatree	T6034 <i>Sophora japonica</i>
HUAI GEN	槐根	Japanese Pagodatree Root	T6035 <i>Sophora japonica</i>
HUAI JIAO	槐角	Japanese Pagodatree Fruit	T6036 <i>Sophora japonica</i>
HUAI TONG	淮通	Moupin Dutchmanspipe	T0635 <i>Aristolochia moupinensis</i>
HUAN JIE SONG LUO	环节松萝	Diffract Usnea Filament	T6653 <i>Usnea diffracta</i>
HUAN YANG SHEN YE TANG JIE	还阳参叶糖芥	Crepinleaf Erysimum*	T2453 <i>Erysimum crepidifolium</i>
HUAN ZHUANG JIN SI TAO	环状金丝桃	Circularity St.John'swort*	T3339 <i>Hypericum annulatum</i>
HUANG BAI	黄柏(黄檗)	Amur Corktree	T4789 <i>Phellodendron amurense</i>
HUANG BAI HE	黄百合	Hanson Lily	T3834 <i>Lilium hansonii</i>
HUANG BAI HONG GU	黄白红菇	Pale Russula*	T5622 <i>Russula ochroleuca</i>
HUANG BAI TANG JIE	黄白糖芥	Yellowish Erysimum*	T2455 <i>Erysimum ochroleucum</i>
HUANG BIAN BAI	黄扁柏	Yellow Cedar	T1348 <i>Chamaecyparis nootkatensis</i>
HUANG CHAN	黄蝉	Oleanderleaf Allemanda	T0308 <i>Allemanda nerifolia</i>
HUANG CHANG PU	黄菖蒲	Yellowflag Iris	T3467 <i>Iris pseudacorus</i>
HUANG CHONG	蝗虫	Grasshopper	T5559 <i>Romalea microptera</i>
HUANG GAN CAO	黄甘草	Yellow Licorice	T3016 <i>Glycyrrhiza kansuensis</i>
HUANG GEN JIANG HUANG	黄根姜黄*	Xanthorrhiza Turmeric*	T1908 <i>Curcuma xanthorrhiza</i>
HUANG GEN SHU	黄根树	Yellowroot	T6846 <i>Xanthorrhiza simplicissima</i>
HUANG GUA	黄瓜	Cucumber	T1878 <i>Cucumis sativus</i>
HUANG GUO QIE	黄果茄	Yellowfruit Nightshade	T6020 <i>Solanum xanthocarpum</i>
HUANG HAI TANG	黄海棠	Giant St.John'swort	T3340 <i>Hypericum ascyron</i>
HUANG HAI YING SU	黄海罂粟*	Yellow Hornpoppy*	T2969 <i>Glaucium flavum</i>
HUANG HAO	黄蒿	Virgate Wormwood	T0695 <i>Artemisia scoparia</i> [Syn. <i>Artemisia</i>

HUANG HE MAO REN DONG	黄褐毛忍冬	Yellowhair Honeysuckle	<i>capillaris</i> var. <i>scoparia</i> ]
HUANG HONG SE RUI MU	黄红色蕊木*	Yellow-red Kopsia*	T3910 <i>Lonicera fulvotomentosa</i>
HUANG HUA BAI JIANG	黄花败酱	Dahurian Patrinia	T3639 <i>Kopsia flavida</i>
HUANG HUA CAI	黄花菜	Citron Daylily	T4672 <i>Patrinia scabiosaefolia</i>
HUANG HUA CAO	黄花草	Yellowflower Spiderflower*	T3192 <i>Hemerocallis citrina</i>
HUANG HUA DI DING	黄花地丁	Diluteyellow Crotalaria	T1552 <i>Cleome viscosa</i>
HUANG HUA ER LIU	黄花儿柳	Goat Willow	T1813 <i>Crotalaria albida</i>
HUANG HUA HAI YING SU	黄花海罂粟	Yellowflower Hornpoppy*	T5652 <i>Salix caprea</i>
HUANG HUA HAO	黄花蒿	Sweet Wormwood	T2967 <i>Glaucium davum</i>
HUANG HUA JIA ZHU TAO	黄花夹竹桃	Yellow Oleander	T0660 <i>Artemisia annua</i>
			T6433 <i>Thevetia nerifolia</i> [Syn. <i>Thevetia peruviana</i> ]
HUANG HUA JIU LUN CAO	黄花九轮草	Official Primrose*	T5204 <i>Primula veris</i> [Syn. <i>Primula officinalis</i> ]
HUANG HUA MU	黄花木	Greenleaf Piptanthus, Evergreen Laburnum	T4976 <i>Piptanthus nepalensis</i>
HUANG HUA REN	黄花稔	Acute Sida	T5942 <i>Sida acuta</i>
HUANG HUA SHU WEI CAO	黄花鼠尾草	Yellowflower Sage	T5672 <i>Salvia flava</i>
HUANG HUA WU TOU	黄花乌头关白附)	Korean Monkshood	T0088 <i>Aconitum coreanum</i>
HUANG HUA XIANG CHA CAI	黄花香茶菜	Yellowflower Rabdosia	T3524 <i>Isodon sculponeata</i> [Syn. <i>Rabdosia sculponeata</i> ]
HUANG HUA YAN CAO	黄花烟草	Aztec Tobacco	T4427 <i>Nicotiana rustica</i>
HUANG HUA YUAN ZHI	黄花远志	Yellowflower Milkwort	T5071 <i>Polygala arillata</i>
HUANG HUA ZI	黄花仔	Cordateleaf Sida	T5943 <i>Sida cordifolia</i>
HUANG JIE GU DAN	黄接骨丹	Gypsophila	T3089 <i>Gypsophila acutifolia</i>
HUANG JIN	黄槿	Linden Hibiscus	T3248 <i>Hibiscus tiliaceus</i>
HUANG JIN FENG	黄金凤	Incurvedspur Snapweed	T3414 <i>Impatiens siculifer</i>
HUANG JIN GU CAO	黄筋骨草*	Yellow Bugle	T0261 <i>Ajuga chamaepitys</i>
HUANG JIN SHU	黄金树	Northern Catalpa	T1265 <i>Catalpa speciosa</i>
HUANG JING	黄精	Siberian Solomonseal	T5095 <i>Polygonatum sibiricum</i>
HUANG JING GEN	黄荆根	Negundo Chastetree Root	T6787 <i>Vitex negundo</i>
HUANG JING YE	黄荆叶	Negundo Chastetree Leaf	T6788 <i>Vitex negundo</i>
HUANG JING ZHONG ZI	黄荆种子	Negundo Chastetree Seed*	T6789 <i>Vitex negundo</i>
HUANG KUI	黄葵	Musk-mallow	T0002 <i>Abelmoschus moschatus</i> [Syn. <i>Hibiscus abelmoschus</i> ]
HUANG LIAN	黄连	Chinese Goldthread	T1662 <i>Coptis chinensis</i>
HUANG LIAN HUA	黄莲花	Dahurian Loosestrife	T4001 <i>Lysimachia davurica</i>
HUANG LIAN YA	黄练芽	Chinese Pistache	T4979 <i>Pistacia chinensis</i>
HUANG LONG DAN	黄龙胆	Yellow Gentian	T2918 <i>Gentiana lutea</i>
HUANG LU	黄栌	Common Smoketree	T1758 <i>Cotinus coggygria</i>
HUANG LU ZHI YE	黄栌枝叶	Common Smoketree Branch-leaf	T1759 <i>Cotinus coggygria</i> var. <i>cinerea</i>
HUANG MA YE	黄麻叶	Roundpod Jute Leaf	T1673 <i>Corchorus capsularis</i>
HUANG MA ZI	黄麻子	Roundpod Jute Seed	T1674 <i>Corchorus capsularis</i>
HUANG MAO CONG MU	黄毛櫨木	Yellowhair Aralia	T0571 <i>Aralia decaisneae</i>
HUANG MAO GE	黄毛葛	Yellow-hairy Calyx Kudzuvine	T5311 <i>Pueraria calycina</i>
HUANG MAO LIN MAO JUE	黄毛鳞毛蕨	Goldencoma Shield Fern	T2280 <i>Dryopteris chrysocoma</i>
HUANG MAO WU TOU	黄毛乌头	Yellowhair Monkshood	T0087 <i>Aconitum chrysotrichum</i>
HUANG MIAN GUI	黄缅甸桂	Champac Michelia	T4210 <i>Michelia champaca</i>
HUANG MING JIAO	黄明胶	Oxhide Gelatin	T0982 <i>Bos taurus domesticus</i>
HUANG NIU MU	黄牛木	Common Oxwood	T1784 <i>Cratoxylum cochinchinense</i>
HUANG PI GEN	黄皮根	Chinese Wampee Root	T1537 <i>Clausena lansium</i>
HUANG PI SHU	黄皮树	Chinese Corktree	T4791 <i>Phellodendron chinense</i>
HUANG PI YE	黄皮叶	Chinese Wampee Leaf	T1538 <i>Clausena lansium</i>
HUANG PING ZI CAO	黄瓶子草	Yellow Pitcherplant	T5742 <i>Sarracenia flava</i>

HUANG QI	黄芪(膜荚黄芪)	Membranous Milkvetch	T0798 <i>Astragalus membranaceus</i>
HUANG QI II	黄杞	Roxburgh Engelhardtia Root	T2360 <i>Engelhardia roxburghiana</i>
HUANG QIAO RUI HUA	黄鞘蕊花	Yellowflower Coleus	T1621 <i>Coleus xanthanthus</i>
HUANG QIN	黄芩	Baikal Skullcap	T5834 <i>Scutellaria baicalensis</i>
HUANG QIN JIAO	黄秦艽	Baillon Veratrilla	T6691 <i>Veratrilla baillonii</i>
HUANG SAI JIN LIAN MU	黄赛金莲木*	Yellow Ouratea*	T4560 <i>Ouratea flava</i>
HUANG SAN QI	黄三七	Common Souliea	T6060 <i>Souliea vaginata</i>
HUANG SE AO DING CAO	黄色凹顶藻	Yellow Concave-top Alga*	T3721 <i>Laurencia nipponica</i>
HUANG SE BAN RUI DOU	黄色瓣蕊豆	Yellow Prairie-clover	T4737 <i>Petalostemum purpureum</i>
HUANG SE QIAN LI GUANG	黄色千里光*	Yellow Groundsel*	T5888 <i>Senecio flavus</i>
HUANG SHAN	黄杉	China Douglas Fir	T5261 <i>Pseudotsuga sinensis</i>
HUANG SHAN YAO	黄山药	Yellow Yam	T2205 <i>Dioscorea panthaica</i>
HUANG SHU KUI HUA	黄蜀葵花	Setose Abelmoschus	T0001 <i>Abelmoschus manihot</i>
HUANG SHUI JING LAN	黄水晶兰	Yellow Bird's-nest	T4275 <i>Monotropa hypopitys</i>
HUANG SHUI XIAN	黄水仙	Daffodil	T4379 <i>Narcissus pseudonarcissus</i>
HUANG SI TAN BAO	黄斯坦堡	Winter Daffodil	T6144 <i>Sternbergia lutea</i>
HUANG TANG SONG CAO	黄唐松草	Maidenhair Meadowrue	T6385 <i>Thalictrum flavum</i>
HUANG WAN	黄菀	Shady Groundsel	T5892 <i>Senecio nemorensis</i>
HUANG WEI	黄薇	Myrtleleaf Heimia	T3130 <i>Heimia myrtifolia</i>
HUANG WU TOU	黄乌头*	Yellow Monkshood	T0076 <i>Aconitum anthora</i>
HUANG XI XIN	黄细心	Diffuse Boerhavia	T0969 <i>Boerhavia diffusa</i>
HUANG XIAO BO	黄小檗	Yellow Barberry	T0917 <i>Berberis tschonoskiana</i>
HUANG XIN HUA JIAO	黄心花椒	Yellow-heart Pricklyash	T6880 <i>Zanthoxylum flavum</i>
HUANG YAN MU	黄颜木		T1378 <i>Chlorophora tinctoria</i>
HUANG YANG MU YE	黄杨木叶	Chinese Box Juvenile Leaf	T1092 <i>Buxus microphylla</i> var. <i>sinica</i>
HUANG YANG XIAO BO	黄杨小檗	Box-leaved Barberry	T0899 <i>Berberis buxifolia</i>
HUANG YANG YE DUI CI TENG	黄杨叶对刺藤*	Boxleaf Scutia*	T5846 <i>Scutia buxifolia</i>
HUANG YANG YE MU BAN SHU	黄杨叶木瓣树	Boxleaf Xylopia*	T6851 <i>Xylopia buxifolia</i>
HUANG YAO	黄药	Oriental Buckthorn	T5456 <i>Rhamnus crenatus</i>
HUANG YAO ZI	黄药子	Airpotato Yam	T2191 <i>Dioscorea bulbifera</i>
HUANG YE DI BU RONG	黄叶地不容	Greenyellow Stephania	T6137 <i>Stephania viridiflavens</i>
HUANG YE DU XING CAI	荒野独行菜	Field Pepperwort	T3756 <i>Lepidium campestre</i>
HUANG YE HUAI	黄叶槐	Yellowleaf Sophora	T6030 <i>Sophora chrysophylla</i>
HUANG YING PI MA BO	黄硬皮马勃	Yellow Hardpeel Puff-ball*	T5814 <i>Scleroderma citrinum</i>
HUANG YU SHAN DOU	黄羽扇豆	Yellow Lupin	T3943 <i>Lupinus luteus</i>
HUANG ZHONG HUA	黄钟花	Florida Yellowtrumpet	T6324 <i>Tecoma stans</i>
HUANG ZI JIN	黄紫堇	Ochotsk Corydalis	T1728 <i>Corydalis ochotensis</i>
HUI BA QIA	灰菝葜	Grey Greenbrier*	T5973 <i>Smilax aristolochiaefolia</i>
HUI BAI DU HUO	灰白独活*	Canescent Cowparsnip*	T3211 <i>Heracleum canescens</i>
HUI BAI KU MA DOU	灰白苦马豆*	Canescent Swainsonia*	T6207 <i>Swainsonia canescens</i>
HUI BAI MAO LUO FU MU	灰白毛茛苳木	Canescent Devilpepper*	T5431 <i>Rauwolfia canescens</i>
HUI BAI QIE	灰白茄*	Greywhite Nightshade*	T5999 <i>Solanum incanum</i>
HUI BAI SHI CAN	灰白石蚕*	Narrowleaf Germander	T6366 <i>Teucrium polium</i>
HUI BAI XIANG RI KUI	灰白向日葵*	Canescent Sunflower*	T3147 <i>Helianthus canescens</i>
HUI BAI XIE HAO	灰白邪蒿*	Greywhite Seseli*	T5931 <i>Seseli incanum</i>
HUI BAI YI MU CAO	灰白益母草	Glaucouscent Motherwort	T3751 <i>Leonurus glaucescens</i>
HUI BAO HAO	灰苞蒿	Roxburgh Wormwood	T0690 <i>Artemisia roxbugiana</i>
HUI CI TONG	灰刺桐	Grey Coralbean*	T2466 <i>Erythrina glauca</i>
HUI GUO JIAO GU LAN	喙果绞股蓝	Rostratefruit Gynostemma	T3086 <i>Gynostemma yixingense</i>
HUI HAO	蛔蒿	Chinese Seriphidium	T5920 <i>Seriphidium cinum</i> [Syn. <i>Artemisia cina</i> ]
HUI HU TAO	灰胡桃	Butternut	T3563 <i>Juglans cinerea</i>
HUI HUANG HUA	灰黄华*	Cinereous Thermopsis*	T6427 <i>Thermopsis cinerea</i>

HUI HUI DOU	回回豆	Gram Chickpea	T1412 <i>Cicer arietinum</i>
HUI HUI SU	回回苏	Crisped Common Perilla	T4722 <i>Perilla frutescens</i> var. <i>crispa</i>
HUI HUI SU GENG	回回苏梗	Crisped Common Perilla Stem	T4723 <i>Perilla frutescens</i> var. <i>crispa</i>
HUI JIN SE TUAN WANG JUN	灰烬色团网菌*	Grey Arcyria*	T0589 <i>Arcyria cinerea</i>
HUI LV YAN HU SUO	灰绿延胡索	Greyish-green Corydalis	T1705 <i>Corydalis adunca</i>
HUI MAO DANG SHEN	灰毛党参	Greyhair Asiabell	T1596 <i>Codonopsis canescens</i>
HUI QIN	茴芹	Anise	T4895 <i>Pimpinella anisum</i>
HUI SE OU SHI NAN	灰色欧石南	Bell Heather	T2417 <i>Erica cinerea</i>
HUI TE KE MAO GAO CAI	惠特克茅膏菜*	Whittaker Sundew*	T2270 <i>Drosera whittakeri</i>
HUI XIANG	茴香	Fennel Fruit	T2744 <i>Foeniculum vulgare</i>
HUI XIANG GEN	茴香根	Fennel Root	T2745 <i>Foeniculum vulgare</i>
HUI XIANG JING YE	茴香茎叶	Fennel Stem and Leaf	T2746 <i>Foeniculum vulgare</i>
HUI <sup>(4)</sup> YE	桧叶	Chinese Juniper Leaf	T5987 <i>Sobina chinensis</i>
HUI YE	灰叶	Purple Tephrosia	T6338 <i>Tephrosia purpurea</i>
HUI YE DU JING SHAN	灰叶杜茎山	Greyleaf Maesa	T4027 <i>Maesa chisia</i>
HUI YE GEN	灰叶根	Purple Tephrosia Root	T6339 <i>Tephrosia purpurea</i>
HUI YE YAN CAO	灰叶烟草	Leadwordleaf Tobacco	T4426 <i>Nicotiana plumbaginifolia</i>
HUI ZHAN MAO REN DONG	灰毡毛忍冬	Largeflower-like Honeysuckle	T3914 <i>Lonicera macranthoides</i>
HUI ZHU NIU NAI CAI	喙柱牛奶菜	Beakstyle Condorvine	T4118 <i>Marsdenia oreophila</i>
HUI ZHUANG JIU JIE	喙状九节*	Rostral Ninenode*	T5278 <i>Psychotria rostrata</i>
HUN TOU JI	昏头鸡	Fortune's Holly Fern	T1986 <i>Cyrtomium fortunei</i>
HUN XIAO MO YAO	混淆没药*	Confuse Myrrhree*	T1634 <i>Commiphora confusa</i>
HUO MA REN	火麻仁	Hemp Fimble Seed	T1173 <i>Cannabis sativa</i>
HUO SHAN YAN CAO HU JIAO	火山岩草胡椒	Volcanic Peperomia*	T4708 <i>Peperomia vulcanica</i>
HUO SUO MA	火索麻	Tortedfruit Screwtree	T3164 <i>Helicteres isora</i>
HUO TAN MU CAO	火炭母草	Chinese Knotweed	T5100 <i>Polygonum chinense</i>
HUO XIANG	藿香	Wrinkled Gianthyssop	T0212 <i>Agastache rugosus</i>
HUO XIANG YE LV RONG HAO	藿香叶绿绒蒿	Betonyleaf Meconopsis	T4141 <i>Meconopsis betonicifolia</i>
HUO YAN HUA	火焰花	Curvedflower Phlogacanthus	T4803 <i>Phlogacanthus curviflorus</i>
HUO YANG LE	火秧箭	Ancients Euphorbia	T2580 <i>Euphorbia antiquorum</i>
IN DU TIE XIAN ZI		Indian Balata*	T4105 <i>Manilkara indica</i>
JI BEI	吉贝	Kapok Ceiba	T1284 <i>Ceiba pentandra</i>
JI CAI	芥菜	Shepherdspurse	T1184 <i>Capsella bursa-pastoris</i>
JI CAI ZI	芥菜子	Shepherdspurse Seed	T1185 <i>Capsella bursa-pastoris</i>
JI CHA KAI LA RUI A	极叉开拉瑞阿	Spreading Creosote-bush	T3693 <i>Larrea divaricata</i>
JI CHANG LANG DU	鸡肠狼毒	Leafy Euphorbia	T2585 <i>Euphorbia esula</i>
JI DAN GUO	鸡蛋果	Passionfruit	T4665 <i>Passiflora edulis</i>
JI DAN SHEN	鸡蛋参	Convolvulate Asiabell	T1598 <i>Codonopsis convolvulacea</i>
JI GAN CAO	棘甘草*	Echinate Licorice*	T3012 <i>Glycyrrhiza echinata</i>
JI GU CAO	鸡骨草	Canton Abrus	T0010 <i>Abrus fruticosus</i> [Syn. <i>Abrus cantoniensis</i> ]
JI GUAN CI TONG	鸡冠刺桐	Folkers Coralbean*	T2463 <i>Erythrina crysragalli</i>
JI GUAN HUA	鸡冠花	Common Cockscomb Flower	T1299 <i>Celosia cristata</i>
JI GUAN ZI	鸡冠子	Common Cockscomb Seed	T1297 <i>Celosia cristata</i>
JI JI	及己	Serrate Chloranthus	T1372 <i>Chloranthus serratus</i>
JI JI JING YE	及己茎叶	Serrate Chloranthus Stem-leaf	T1373 <i>Chloranthus serratus</i>
JI JI QIN	芨芨芹	Heart-leaved Alexanders	T6913 <i>Zizia aptera</i>
JI JIAN DAN QING MEI	极简单青霉*		T4699 <i>Penicillium simplicissimum</i>
JI JIAN LONG SHE LAN	极坚龙舌兰*	Very-hard Agave*	T0224 <i>Agave rigidissima</i>
JI JIAN XIU XIAN JU	急尖绣线菊	Acute Spiraea	T6081 <i>Spiraea japonica</i> var. <i>acuta</i>
JI JIAO SHEN	鸡脚参	Common Javatea	T4542 <i>Orthosiphon wulfenoides</i> [Syn. <i>Coleus wulfenoides</i> ]
JI JUE	姬蕨	Punctate Flakelet Fern	T3376 <i>Hypolepis punctata</i> [Syn. <i>Polypodium</i>

JI KUAN CI TONG	极宽刺桐*	Extreme-wide Coralbean*	<i>punctatum</i> ] T2467 <i>Erythrina latissima</i>
JI LI GEN	蒺藜根	Puncturevine Caltrap Root	T6498 <i>Tribulus terrestris</i>
JI LI MIAO	蒺藜苗	Puncturevine Caltrap Shoot*	T6499 <i>Tribulus terrestris</i>
JI LIN WU TOU	吉林乌头	Kirin Monkshood*	T0106 <i>Aconitum kirinense</i>
JI LIN YAN LING CAO	吉林延龄草	Whiteflower Trillium*	T6533 <i>Trillium kamschaticum</i>
JI MAO CAI	鸡毛菜	Chicken-feather Vegetable*	T5309 <i>Pterocladia tenuis</i>
JI MAO SONG	鸡毛松	Imbricate Podocarpus	T5041 <i>Podocarpus imbricatus</i>
JI MEI YUN SHI	极美云实*	Prettiest Caesalpinia	T1107 <i>Caesalpinia pulcherrima</i>
JI MU	欐木	Chinese Loropetalum	T3926 <i>Loropetalum chinense</i>
JI NAO	鸡脑	Chicken Brain	T2836 <i>Gallus gallus domesticus</i>
JI NEI JIN	鸡内金	Chicken's Gizzard Endothelium	T2838 <i>Gallus gallus domesticus</i>
JI NEI YA BAN JIU JU	几内亚斑鸠菊	Guinea Bitterleaf*	T6718 <i>Vernonia guineensis</i>
JI NEI YA GE MU	几内亚格木	Red-water Tree	T2485 <i>Erythrophleum guineense</i>
JI NEI YA HU JIAO	几内亚胡椒	Ashanti Pepper	T4946 <i>Piper guineense</i>
JI NING	芥苧	Largeserrate Mosla	T4306 <i>Mosla grosseserrata</i>
JI ROU	鸡肉	Chicken	T2837 <i>Gallus gallus domesticus</i>
JI RUAN RONG TAI	极软绒苔*		T6502 <i>Trichocolea mollissima</i>
JI SHI HONG JING TIAN	吉氏红景天	Algid Rhodiola*	T5491 <i>Rhodiola algida</i>
JI SHI LU HUI	基氏芦荟*	Gililand Aloe*	T0339 <i>Aloe gililandii</i>
JI SHI TENG	鸡屎藤	Fevervine	T4577 <i>Paederia scandens</i>
JI SHI TENG GUO	鸡屎藤果	Fevervine Fruit	T4578 <i>Paederia scandens</i>
JI SU ZI	鸡嗉子	Evergreen Dogwood	T1696 <i>Cornus capitata</i> [Syn. <i>Dendrobenthamia capitata</i> ]
JI WA CAO	鸡娃草	Littleflower Plumbagella	T5026 <i>Plumbagella micrantha</i>
JI WU BING JIN SI TAO	近无柄金丝桃	Subsessile St.John'swort	T3365 <i>Hypericum subsessile</i>
JI XIANG CAO	吉祥草	Pink Reineckea	T5449 <i>Reineckea carnea</i>
JI XIANG RUN NAN	极香润楠*	Extreme-fragrant Machilus*	T4017 <i>Machilus odoratissima</i>
JI XIANG SHI CAO	极香薷草*	Extreme-fragrant Yarrow*	T0062 <i>Achillea fragrantissima</i>
JI XIANG YING ZHAO	极香鹰爪*	Extreme-fragrant Tailgrape*	T0655 <i>Artabotrys odoratissimus</i>
JI XIAO XIAO YUN XIANG MU	极小小芸香木*	Minima Micromelum*	T4224 <i>Micromelum minutum</i>
JI XING ZI	急性子	Garden Balsam Seed	T3412 <i>Impatiens balsamina</i>
JI XUAN HUA	棘旋花*	Mucronate Glorybind*	T1652 <i>Convolvulus erinaceus</i>
JI XUE CAO	积雪草	Asiatic Pennywort	T1311 <i>Centella asiatica</i>
JI XUE TENG GEN	鸡血藤根	Leatherleaf Millettia Root	T4243 <i>Millettia reticulata</i>
JI YAN CAO	鸡眼草	Striate Kummerowia	T3645 <i>Kummerowia striata</i>
JI YE MA BIAN CAO	戟叶马鞭草	Hastate Verbena	T6707 <i>Verbena hastata</i>
JI YE QIU HAI TANG	戟叶秋海棠	Limpricht Begonia	T0890 <i>Begonia limprichtii</i>
JI YE SHU WEI CAO	戟叶鼠尾草	Hastateleaf Sage	T5664 <i>Salvia bulleyana</i>
JI YE SUAN MO	戟叶酸膜	Hastate Dock*	T5609 <i>Rumex hastatus</i>
JI YING SU	蓟罌粟	Mexican Pricklepoppy	T0610 <i>Argemone mexicana</i>
JI YU DAN	鲫鱼胆	Treasure Maesa	T4031 <i>Maesa perlarius</i>
JI YUN SHI	棘云实	Brazil-wood	T1103 <i>Caesalpinia echinata</i>
JI ZI BAI	鸡子白	Hen's Egg-albumen	T2839 <i>Gallus gallus domesticus</i>
JI ZI HUANG	鸡子黄	Hen's Egg Yolk	T2840 <i>Gallus gallus domesticus</i>
JI ZI KE	鸡子壳	Hen's Egg Shell	T2841 <i>Gallus gallus domesticus</i>
JI ZI MU	鸡子木	Racemose Adina	T5960 <i>Sinoadina racemosa</i> [Syn. <i>Adina racemosa</i> ]
JI ZONG	鸡塚	Collybia Albuminosa Sporocarp	T1623 <i>Collybia albuminosa</i>
JIA BAI HE	假百合	Hyacinth Falselily	T4443 <i>Notholirion hyacinthinum</i> [Syn. <i>Notholirion bulbuliferum</i> ]
JIA BEI MU	假贝母	Paniculate Bolbostemma	T0971 <i>Bolbostemma paniculatum</i>
JIA DAN BAO JUN YANG HUAI	假单胞菌洋槐*	Pseudomonas Locust*	T5553 <i>Robinia pseudomonas</i>
JIA DI DAN CAO	假地胆草	Spicate Pseudoelephantopus	T5253 <i>Pseudoelephantopus spicatus</i>

JIA DI FENG PI	假地枫皮	Jiadifengpi Anisetree	T3402 <i>Illicium jiadifengpi</i>
JIA DONG FANG QIAN LI GUANG	假东方千里光	Pseud-oriental Groundsel*	T5899 <i>Senecio pseudoorientalis</i>
JIA DU XING CAI	家独行菜	Garden Cress	T3758 <i>Lepidium sativum</i>
JIA HONG SHU	假红树	White Mangrove	T3677 <i>Laguncularia racemosa</i>
JIA HUANG HUA YUAN ZHI	假黄花远志	Fasle Yellowflower Milkwort*	T5075 <i>Polygala fallax</i> [Syn. <i>Polygala aureocauda</i> ]
JIA HUI SE JIU LI XIANG PO PO NA	假灰色九里香婆婆纳*	Thyme Speedwell*	T6730 <i>Veronica thymoides</i> ssp. <i>pseudocinerea</i>
JIA JIN DONG YING SU	假近东罂粟	Pseudoriental Poppy*	T4634 <i>Papaver pseudorientale</i>
JIA JING JIE	假荆芥	Catnip	T4413 <i>Nepeta cataria</i>
JIA JU	假蒟	Sarmentose Pepper	T4965 <i>Piper sarmentosum</i>
JIA JU ZI	假蒟子	Sarmentose Pepper Spike	T4966 <i>Piper sarmentosum</i>
JIA KU GUA	假苦瓜	Balloonvine Heartseed	T1197 <i>Cardiospermum halicacabum</i>
JIA LAN	嘉兰	Lovely Gloriosa	T2995 <i>Gloriosa superba</i>
JIA LE BI CI TONG	加勒比刺桐*	Caribbean Coralbean*	T2462 <i>Erythrina caribea</i>
JIA LEI JUE MING	加雷决明	Garretti Senna*	T1233 <i>Cassia garrettiana</i>
JIA LIAN QIAO	假连翘	Creeping Skyflower	T2295 <i>Duranta repens</i>
JIA LIAN QIAO YE	假连翘叶	Creeping Skyflower Leaf	T2296 <i>Duranta repens</i>
JIA MA BIAN	假马鞭	Jamaica Falsevalerian	T6095 <i>Stachytarpheta jamaicensis</i>
JIA MA CHI XIAN	假马齿苋	Coastal Waterhyssop	T0852 <i>Bacopa monniera</i>
JIA MA SHU	家麻树	Hazel Sterculia	T6138 <i>Sterculia foetida</i>
JIA MI	莨菪	Linden Viburnum	T6735 <i>Viburnum dilatatum</i>
JIA MIAN YU YE QIU	假面羽叶楸*	Personator Padritree*	T6142 <i>Stereospermum personatum</i>
JIA MU DOU	假木豆	Capitulum Tickclover*	T2129 <i>Desmodium cephalotes</i>
JIA NA DA BAO CHUN	加拿大报春*	Mistassini Primrose	T5200 <i>Primula mistassinica</i>
JIA NA DA CANG ER	加拿大苍耳	Canadian Cocklebur*	T6835 <i>Xanthium canadense</i>
JIA NA DA HONG DOU SHAN	加拿大红豆杉	Canadian Yew	T6309 <i>Taxus canadensis</i>
JIA NA DA HUANG QI	加拿大黄芪*	Canadian Milkvetch*	T0789 <i>Astragalus canadensis</i> var. <i>mortonii</i>
JIA NA DA WO JU	加拿大莴苣	Canada Lettuce	T3658 <i>Lactuca canadensis</i>
JIA NA DA XI XIN	加拿大细辛	Canadian Snakeroot	T0723 <i>Asarum canadense</i>
JIA NA LI HAO	加那利蒿*	Canary Island Wormwood*	T0671 <i>Artemisia canariensis</i>
JIA NA LI MEI DENG MU	加那利美登木	Canari Mayten*	T4129 <i>Maytenus canariensis</i>
JIA NA LI SHU WEI CAO	加那利鼠尾草*	Canari Sage*	T5665 <i>Salvia canariensis</i>
JIA PENG ZI YU PAN	加蓬紫玉盘	Gabon Uvaria*	T6663 <i>Uvaria klaineana</i>
JIA SHAN HU JIAO	假山胡椒		T4640 <i>Parabenzoin trilobum</i>
JIA SHUI XIAN	假水仙	False Narcissus*	T4380 <i>Narcissus pseudonarcissus</i> ssp. <i>pseudonarcissus</i>
JIA SUAN JIANG	假酸浆	Apple of Peru	T4423 <i>Nicandra physaloides</i>
JIA TUO WU	假橐吾	False Goldenray*	T3818 <i>Ligulariopsis shichuana</i>
JIA XI ZHUI XIANG CHA CAI	假细锥香茶菜	Falselittleconical Rabdosia	T5390 <i>Rabdosia coetsoides</i>
JIA YANG	加杨	Canada Poplar	T5149 <i>Populus canadensis</i>
JIA YE SHU	假叶树	Butchersbroom	T5618 <i>Ruscus aculeatus</i>
JIA YING ZHAO	假鹰爪	Chinese Desmos	T2136 <i>Desmos cochinchinensis</i> [Syn. <i>Desmos chinensis</i> ]
JIA YUAN WEI	假鸢尾	False Iris*	T3470 <i>Iris spuria</i>
JIA ZE LAN	假泽兰	Heartshape Mikania	T4228 <i>Mikania cordata</i>
JIA ZHOU LI LU	加州藜芦	Californian Falsehellebore*	T6694 <i>Veratrum californicum</i>
JIA ZHOU QI YE SHU	加州七叶树	Californian Buckeye	T0199 <i>Aesculus californica</i>
JIA ZHOU SHAN SONG	加州山松	Californian Mountain Pine	T4918 <i>Pinus monticola</i>
JIA ZHOU XIA LA MEI	加州夏腊梅	Californian Allspice	T1140 <i>Calycanthus occidentalis</i>
JIA ZHU TAO	夹竹桃	Sweet-scented Oleander	T4418 <i>Nerium indicum</i>
JIA ZHU TAO MA	夹竹桃麻	Black Indian Hemp	T0551 <i>Apocynum cannabinum</i>
JIA ZI CAO	假紫草	Common Arnebia	T0649 <i>Arnebia guttata</i>

JIA ZONG ZHUANG HUA XU SHAN XIAO JU	假总状花序山小橘*	Pseudo-racemose Glycosmis*	T3009 <i>Glycosmis pseudoracemosa</i>
JIAN BAI JIAN MU	尖白坚木*	Cusplate	T0762 <i>Aspidosperma cuspa</i>
JIAN CHI BU LI KE ER CAO	尖齿布里克尔草		T1027 <i>Brickellia arguta</i> var. <i>odontolepis</i>
JIAN DENG XIN CAO	尖灯芯草	Acute Rush*	T3577 <i>Juncus acutus</i>
JIAN GAN YANG	箭杆杨	Arrowshaft Poplar	T5156 <i>Populus nigra</i> var. <i>thevestina</i>
JIAN GEN SHU	箭根薯	Arrowroot Tacca	T6275 <i>Tacca chantrieri</i> [Syn. <i>Tacca minor</i> ; <i>Tacca esquirolii</i> ]
JIAN HAI LONG	尖海龙	Acute Syngnathus*	T6257 <i>Syngnathus acus</i>
JIAN JIAN AO YANG	渐尖澳杨	Acuminate Aussiepoplar*	T3273 <i>Homalanthus acuminatus</i>
JIAN JIAN MU LAN	渐尖木兰	Cucumber-tree	T4033 <i>Magnolia acuminata</i>
JIAN JIAN SUAN PAN ZI	渐尖算盘子*	Acuminate Glochidion*	T2987 <i>Glochidion acuminatum</i>
JIAN JU ZI JIN	尖距紫堇	Sharpspur Corydalis	T1745 <i>Corydalis suaveolens</i> [Syn. <i>Corydalis shearerii</i> ]
JIAN LIE HAI YING SU	尖裂海罂粟	Acutelobed Hornpoppy	T2970 <i>Glaucium oxylobum</i>
JIAN MA	剑麻	Sisal Hemp-plant	T0226 <i>Agave sisalana</i>
JIAN PU ZHAI GU KE	柬埔寨古柯*	Cambodia Coca Shrub*	T2490 <i>Erythroxylum cambodianum</i>
JIAN PU ZHAI ZAO	柬埔寨枣*	Cambodia Jujube*	T6915 <i>Ziziphus cambodiana</i>
JIAN QIU LUO MAO RUI HUA	剪秋罗毛蕊花	White Mullein	T6701 <i>Verbascum lychnites</i>
JIAN RUI MAO CHA	尖锐毛茶*	Acute Antirhea*	T0536 <i>Antirhea acutata</i>
JIAN TENG BAI JIU CAO	坚挺白酒草*	Strict Conyza	T1658 <i>Conyza stricta</i>
JIAN TING MA BIAN CAO	坚挺马鞭草*	Strict Verbena*	T6710 <i>Verbena stricta</i>
JIAN WEI YU	尖尾芋	Chinese Taro	T0333 <i>Alocasia cucullata</i> [Syn. <i>Arum cucullatum</i> ]
JIAN XING SI GUO XIANG CHA CAI	间型四国香茶菜	Intermediate Shiko Rabdosia*	T3526 <i>Isodon shikokiana</i> var. <i>intermedius</i>
JIAN XING YAN CAO	尖形烟草*	Acuminate Tobacco*	T4424 <i>Nicotiana acuminata</i>
JIAN XUE FENG HOU	见血封喉	Common Antiaris	T0533 <i>Antiaris toxicaria</i> [Syn. <i>Ambora toxicaria</i> ]
JIAN XUE QING	见血清	Nervate Twayblade	T3863 <i>Liparis nervosa</i>
JIAN YE BAO SHI MU	尖叶饱食木*		T1030 <i>Brosimum acutifolium</i>
JIAN YE CEN	尖叶椴	Acuteleaf Ash Bark	T2780 <i>Fraxinus szaboana</i> [Syn. <i>Fraxinus chinensis</i> var. <i>acuminata</i> ]
JIAN YE FAN XIE YE	尖叶番泻叶	Sharpleaf Senna Leaf	T1229 <i>Cassia acutifolia</i>
JIAN YE HUA JIAO	尖叶花椒	Acute-leaf Pricklyash*	T6859 <i>Zanthoxylum acutifolium</i>
JIAN YE LONG XUE SHU	剑叶龙血树	Swordleaf Dracaena	T2253 <i>Dracaena cochinchinensis</i>
JIAN YE QING FENG TENG	尖叶清风藤	Sharpleaf Sabia	T5638 <i>Sabia swinhoei</i>
JIAN YE SHI DA GONG LAO	尖叶十大功劳*	Oregon-grape	T4054 <i>Mahonia aquifolium</i>
JIAN YE TANG SONG CAO	尖叶唐松草	Sharpleaf Meadowrue	T6372 <i>Thalictrum acutifolium</i>
JIAN YE TIE SHU YE	剑叶铁树叶	Strictleaf Dracaena Leaf	T1684 <i>Cordyline strcta</i>
JIAN YE TOU WU GEN	箭叶橐吾根	Arrowleaf Goldenray Root	T3812 <i>Ligularia sagitta</i>
JIAN YE YE XIA ZHU	尖叶叶下珠	Sharpleaf Leafflower*	T4832 <i>Phyllanthus acuminatus</i>
JIAN YE YIN YANG HUO	箭叶淫羊藿	Sagittate Epimedium	T2402 <i>Epimedium sagittatum</i>
JIAN YE YUN XIANG CAO	尖叶芸香草*	Haplophyllum*	T3100 <i>Haplophyllum acutifolium</i>
JIAN YE ZAO	尖叶枣	Mucronated Jujube*	T6922 <i>Zizyphus mucronata</i>
JIAN YING CHAI HU	坚硬柴胡*	Thorowax	T1069 <i>Bupleurum rigidum</i>
JIAN YING XUAN GOU ZI	坚硬悬钩子*	Rigid Blackberry*	T5596 <i>Rubus rigidus</i>
JIAN ZHUANG CHANG CHUN HUA	剑状长春花	Lanceolate Periwinkle*	T1267 <i>Catharanthus lanceus</i>
JIAN ZI SU	尖紫苏	Acute Common Perilla	T4717 <i>Perilla frutescens</i> var. <i>acuta</i> [Syn. <i>Perilla frutescens</i> var. <i>purpurascens</i> ]
JIAN ZI SU YE	尖紫苏叶	Acute Common Perilla Leaf	T4718 <i>Perilla frutescens</i> var. <i>acuta</i> [Syn. <i>Perilla frutescens</i> var. <i>purpurascens</i> ]
JIAN ZI YU PAN	尖紫玉盘*	Acuminate Uvaria*	T6657 <i>Uvaria acuminata</i>



JIANG	酱	Soybean Paste	T3003 <i>Glycine max</i>
JIANG CAN	僵蚕		T0974 <i>Bombyx batryticatus</i>
JIANG DOU	豇豆	Cow-pea	T6754 <i>Vigna unguiculata</i>
JIANG GUO KU SHU	浆果苦树		T4886 <i>Picrodendron baccatum</i>
JIANG GUO SHU YU	浆果薯蓣	Black Bryony	T6291 <i>Tamus communis</i>
JIANG GUO XIAN	浆果苋	Frutescent Cladostachys	T2058 <i>Deeringia amaranthoides</i> [Syn. <i>Cladostachys frutescens</i> ]
JIANG GUO ZI SHAN	酱果紫杉	Common Yew	T6307 <i>Taxus baccata</i>
JIANG HUANG	姜黄	Common Turmeric	T1905 <i>Curcuma longa</i>
JIANG LI MU GEN	降梨木根	Thinleaf Buckthorn Root	T5461 <i>Rhamnus leptophylla</i>
JIANG MANG	苕芒	Inflatedfruit Senna	T1247 <i>Cassia sophera</i>
JIANG NAN JUAN BAI	江南卷柏	Moellendorff Spikemoss	T5863 <i>Selaginella moellendorffii</i>
JIANG XI QING NIU DAN	江西青牛胆	Jiangxi Tinospora*	T6465 <i>Tinospora craveniana</i>
JIANG ZHEN XIANG	降真香(降香)	Odorate Rosewood	T2008 <i>Dalbergia odorifera</i>
JIANG ZI SHA JI	江孜沙棘	Jiangzi Seabuckthorn*	T3255 <i>Hippophae rhamnoides</i> subsp. <i>gyantsensis</i>
JIAO CHA CAI	角叉菜		T1384 <i>Chondrus ocelladus</i>
JIAO GAN	蕉柑	Tankan Citrus	T1516 <i>Citrus tankan</i>
JIAO GAN PI	蕉柑皮	Tankan Citrus Pericarp	T1517 <i>Citrus tankan</i>
JIAO GU LAN	绞股蓝	Fiveleaf Gynostemma	T3085 <i>Gynostemma pentaphyllum</i>
JIAO GUO MU	角果木	Common Ceriops	T1336 <i>Ceriops tagal</i> [Syn. <i>Rhizophora tagal</i> ]
JIAO HAO	角蒿	Chinese Incarvillea	T3420 <i>Incarvillea sinensis</i>
JIAO MO	礁膜		T4274 <i>Monostroma nitidum</i>
JIAO NIAN XIANG CHA CAI	胶黏香茶菜	Slimy Rabdosia	T3492 <i>Isodon glutinosa</i>
JIAO RANG MU	交让木	Macropodous Daphniphyllum	T2033 <i>Daphniphyllum macropodum</i>
JIAO XI XIAN	胶豨莶	Gummy St. Paulswort*	T5949 <i>Siegesbeckia gummifer</i>
JIAO YAN CAO	胶烟草	Slimy Tobacco*	T4425 <i>Nicotiana glutinosa</i>
JIAO YU	蕉芋	Edible Canna	T1172 <i>Canna edulis</i>
JIAO ZHI HUANG TAN	交趾黄檀	Siam Rosewood	T1999 <i>Dalbergia cochinchinensis</i>
JIAO ZHI SHU WEI CAO	胶质鼠尾草	Sticky Clary	T5673 <i>Salvia glutinosa</i>
JIAO ZHI ZI	胶梔子	Gummy Gardenia*	T2881 <i>Gardenia gummifera</i>
JIAO ZHU HUA	角柱花	Blue Ceratostigma, Blue Bluesnow	T1328 <i>Ceratostigma plumbaginoides</i>
JIAO ZHUANG CHE QIAN	角状车前*	Cornuted Plantain*	T5003 <i>Plantago cornuti</i>
JIE CAI	芥菜	India Mustard	T1007 <i>Brassica juncea</i>
JIE GENG	桔梗	Balloonflower	T5011 <i>Platycodon grandiflorum</i>
JIE GU MU	接骨木	Elder*	T5707 <i>Sambucus williamsii</i>
JIE JIE LEI A WEI	结节类阿魏	Node Ferulago*	T2713 <i>Ferulago nodosa</i>
JIE JING SHI XIAN TAO	节茎石仙桃	Articulate Pholidota	T4821 <i>Pholidota articulata</i>
JIE LIAO	节蓼	Pale Persicaria	T5109 <i>Polygonum nodosum</i>
JIE MAO FEI LIAN	节毛飞廉	Wetted Thistle	T1199 <i>Carduus acanthoides</i>
JIE MAO TAI	睫毛苔	Blepharostoma*	T0953 <i>Blepharostoma trichophyllum</i>
JIE MAO YE SHU WEI CAO	睫毛叶鼠尾草*	Eyelid-leaf Sage*	T5660 <i>Salvia blepharophylla</i>
JIE XING YE TAI	截形叶苔*		T3581 <i>Jungermannia truncata</i>
JIE ZHI HONG DOU SHAN	介质红豆杉	Media Yew	T6313 <i>Taxus media</i>
JIE ZI	芥子	India Mustard Seed	T1008 <i>Brassica juncea</i>
JIN BU HUAN	金不换	Chinese Stephania	T6133 <i>Stephania sinica</i>
JIN CAO	菘草	Hispid Arthraxon	T0707 <i>Arthraxon hispidus</i>
JIN CAO	金草	Acuteangle Hedyotis	T3122 <i>Hedyotis acutangula</i>
JIN CHAI FENG WEI JUE	金钗凤尾蕨	Faurie's Brake	T5290 <i>Pteris fauriei</i> [Syn. <i>Pteris fauriei</i> var. <i>minor</i> ]
JIN DAN	金弹	Meiwa Kumquat	T2758 <i>Fortunella crassifolia</i>
JIN DONG YING SU	近东罂粟	Oriental Poppy	T4632 <i>Papaver orientale</i>
JIN FA XIAN	金发藓	Common Gold-hair Moss*	T5133 <i>Polytrichum commune</i>

JIN FEI CAO	金沸草	Japanese Inula	T3433 <i>Inula japonica</i>
JIN FEN JUE	金粉蕨	Siliculose Onychium	T4504 <i>Onychium siliculosum</i>
JIN GAN	金柑	Japanese Kumquat	T2759 <i>Fortunella japonica</i>
JIN GANG DA	金刚大	Japanese Croomia	T1810 <i>Croomia japonica</i>
JIN GU CAO	筋骨草	Ciliate Bugle	T0262 <i>Ajuga ciliata</i>
JIN GUANG JU	金光菊	Cutleaf Coneflower	T5604 <i>Rudbeckia laciniata</i>
JIN GUO LAN	金果榄	Hairystalk Tinospora	T6463 <i>Tinospora capillipes</i>
JIN HUA MI HOU TAO	金花猕猴桃	Goldflower Actinidia	T0159 <i>Actinidia chrysantha</i>
JIN HUA XIAO BO	金花小檗	Wilson Barberry	T0920 <i>Berberis wilsonae</i>
JIN HUANG CAO SU	金黄糙苏*	Goldenyellow Jerusalem sage*	T4806 <i>Phlomis aurea</i>
JIN HUANG CE JIN ZHAN HUA	金黄侧金盏花	Golden Adonis	T0186 <i>Adonis chrysocyatha</i>
JIN HUANG CHAI HU	金黄柴胡	Goldenyellow Thorowax	T1056 <i>Bupleurum aureum</i>
JIN HUANG GE JUN	金黄革菌	Goldenyellow Thelephora*	T6420 <i>Thelephora aurantiotincta</i>
JIN HUANG JIN	金黄堇	Golden Corydalis	T1707 <i>Corydalis aurea</i>
JIN HUANG LIAN	金黄莲*	American Lotus	T4396 <i>Nelumbo lutea</i>
JIN JI ER	锦鸡儿	Peashrub*	T1188 <i>Caragana chamlagu</i>
JIN JI LE	金鸡勒	Ledger Cinchona	T1428 <i>Cinchona ledgeriana</i>
JIN JI WEI	金鸡尾	Figurleaved Brake	T5289 <i>Pteris dactylina</i>
JIN JI WEI BA CAO GEN	金鸡尾巴草根	Needle-leaf Fern*	T4026 <i>Macrothelypteris oligophlebia</i>
JIN JI ZE LAN	近戟泽兰	Halberd-like Eupatorium*	T2577 <i>Eupatorium subhastatum</i>
JIN JIN BANG	金金棒	Sericeous Cinquefoil	T5186 <i>Potentilla reptans</i> var. <i>sericophylla</i>
JIN JIN XIANG	金锦香	Chinese Osbeckia	T4549 <i>Osbeckia chinensis</i>
JIN JU	金橘	Oval Kumquat	T2760 <i>Fortunella margarita</i>
JIN JU YE	金橘叶	Oval Kumquat Leaf	T2761 <i>Fortunella margarita</i>
JIN LIAN HUA	金莲花	Chinese Globeflower	T6552 <i>Trollius chinensis</i> [Syn. <i>Trollius asiaticus</i> var. <i>chinensis</i> ]
JIN LIAN HUA ZHU SHI DOU	金链花猪屎豆	Laburnum Crotalaria*	T1824 <i>Crotalaria laburnifolia</i>
JIN LIAN MU	金莲木	Entire Ochna	T4465 <i>Ochna integerrima</i>
JIN MAO ER CAO	金毛耳草	Goldhair Hedyotis	T3125 <i>Hedyotis chrysotricha</i> [Syn. <i>Oldenlandia chrysotricha</i> ]
JIN MAO GOU	金毛狗	Scythian Lamb	T1411 <i>Cibotium barometz</i> [Syn. <i>Polypodium barometz</i> ]
JIN PING GE NA XIANG	金屏哥纳香	Leiocarpus Goniotalamus	T3049 <i>Goniotalamus leiocarpus</i>
JIN QIAN KU YE CAO	金钱苦叶草	Gold saxifrage Herb	T1403 <i>Chrysosplenium grayanum</i>
JIN QIAN PU	金钱蒲	Grassleaf Sweetflag	T0144 <i>Acorus gramineus</i>
JIN QIAN PU YE	金钱蒲叶	Grassleaf Sweetflag Leaf	T0145 <i>Acorus gramineus</i>
JIN QIN ZHUANG BA DOU	近琴状巴豆	Lyrate-like Croton*	T1857 <i>Croton sublyratus</i>
JIN QUE ER	金雀儿	Scotch Broom	T1991 <i>Cytisus scoparius</i> [Syn. <i>Spartium scoparium</i> ]
JIN QUE GEN	金雀根	Chinese Peashrub Root	T1191 <i>Caragana sinica</i>
JIN SE MU JU	金色母菊*	Aureate Mayweed*	T4123 <i>Matricaria aurea</i>
JIN SHU HUANG YANG	锦熟黄杨	European Boxwood	T1094 <i>Buxus sempervirens</i>
JIN SHUA BA	金刷把	Fallax Cladonia Lichen	T1525 <i>Cladonia fallax</i>
JIN SI DAI	金丝带	Green Alecortia Filament	T0298 <i>Alecortia vivens</i>
JIN SI MA WEI LIAN	金丝马尾连	Gold-enthrad Meadowrue	T6389 <i>Thalictrum glandulosissimum</i>
JIN SI MEI	金丝梅	Spreading St. John's wort	T3360 <i>Hypericum patulum</i>
JIN SI SHUA	金丝刷	Gold-wire Brush*	T3775 <i>Lethariella cladonioides</i>
JIN SI TAO GUO SHI	金丝桃果实	Chinese St. John's wort Fruit	T3344 <i>Hypericum chinense</i>
JIN SU LAN	金粟兰	Chulan Tree	T1374 <i>Chloranthus spicatus</i>
JIN TIE SUO	金铁锁	Tuniclike Psammosilene	T5250 <i>Psammosilene tunicoides</i>
JIN WU MAO HUI YAN XIANG CHA CAI	近无毛灰岩香茶菜	Calcicole Rabdosia	T3483 <i>Isodon calcicola</i>
JIN WU MAO SAO JU	近无毛掃菊*	Longflower Bloomdaisy	T4735 <i>Pertya glabrescens</i>

JIN XIAN CAO	金线草	Longtube Ground Ivy	T2973 <i>Glechoma longituba</i>
JIN YAO	金腰	Alternate-leaved Golden-saxifrage	T1402 <i>Chrysosplenium alternifolium</i>
JIN YAO DAI	金腰带	Goldon-belt*	T3776 <i>Lethariella zahlbruckneri</i>
JIN YE ZI	金叶子	Yunnan Craibiodendron	T1767 <i>Craibiodendron yunnanese</i>
JIN YI HUANG QI	金翼黄芪	Golden-wing Milkvetch*	T0791 <i>Astragalus chrysopterus</i>
JIN YIN HUA	金银花(忍冬)	Japanese Honeysuckle	T3912 <i>Lonicera japonica</i>
JIN YING YE	金樱叶	Cherokee Rose Leaf	T5567 <i>Rosa laevigata</i>
JIN YING ZI	金樱子	Cherokee Rose Seed	T5568 <i>Rosa laevigata</i>
JIN YU	金鱼	Crucian Carp	T1194 <i>Carassius auratus</i>
JIN YU CAO	金鱼草	Common Snapdragon	T0537 <i>Antirrhinum majus</i>
JIN ZHAN JU	金盏菊	Potmarigold Calendula	T1113 <i>Calendula officinalis</i>
JIN ZHONG HUA	金钟花	Greenstem Forsythia	T2757 <i>Forsythia viridissima</i>
JIN ZI TA MU LAN	金字塔木兰*	Pyramidal Magnolia*	T4047 <i>Magnolia pyramidata</i>
JIN ZI TA XING QIAN LI GUANG	金字塔形千里光	Pyramidal Groundsel*	T5900 <i>Senecio pyramidatus</i>
JING DIAN MEI	茎点霉*		T4824 <i>Phoma lingam</i>
JING DOU	荆豆	Common Gorse	T6590 <i>Ulex europaeus</i>
JING GU NU	梗谷奴	Fungus-infected Rice Spike	T6655 <i>Ustilaginoidea virens</i>
JING HONG AN LUO	景洪暗罗	Jinghong Greenstar	T5064 <i>Polyalthia cheliensis</i>
JING HUA HUA YE CAI	茎花花椰菜*	Cauliflory Brassica*	T1015 <i>Brassica oleracea</i> var. <i>botrytis</i> subvar. <i>cauliflora</i>
JING JI GUA TAI MU	荆棘瓜泰木*		T3071 <i>Guatteria dumetorum</i>
JING JI SHU YU	荆棘薯蕷*	Thorny Yam*	T2196 <i>Dioscorea dumetorum</i>
JING JIE	荆芥	Fineleaf Schizonepeta	T5804 <i>Schizonepeta tenuifolia</i> [Syn. <i>Nepeta tenuifolia</i> ]
JING JIE HUA	旌节花	praecox Stachyurus*	T6096 <i>Stachyurus praecox</i>
JING JIE YE SHI ER CAO	荆芥叶狮耳草	Nepetaleaf Leontis	T3744 <i>Leonotis nepetaefolia</i>
JING LI MI HOU TAO	京梨猕猴桃	Henry Actinidia	T0157 <i>Actinidia callosa</i> var. <i>henryi</i>
JING MI	粳米	Rice	T4545 <i>Oryza sativa</i>
JING NI PING	京尼平	Genipa	T2900 <i>Genipa americana</i>
JING SHENG HUA AI SUO LUO NA	茎生花艾索罗那*		T3537 <i>Isolona cauliflora</i>
JING XIANG MAO	精香茅	Citronella-grass	T1944 <i>Cymbopogon nardus</i>
JING YA MA YE RUI XIANG	茎亚麻叶瑞香	Garou Bush	T2025 <i>Daphne gnidium</i>
JIU	酒	Liquor	T3869 Liquor
JIU BI YING	救必应	Ovateleaf Holly	T3398 <i>Ilex rotunda</i>
JIU BING YE	酒饼叶	Malay Glycosmis	T3008 <i>Glycosmis pentaphylla</i>
JIU CAI	韭菜	Tuber Onion	T0322 <i>Allium tuberosum</i>
JIU CENG FENG	九层风		T1530 <i>Cladostachys amaranthoides</i> [Syn. <i>Achyranthes amaranthoides</i> ; <i>Cladostachys frutescens</i> ; <i>Deeringia amaranthoides</i> ]
JIU CONG	韭葱	Leek	T0317 <i>Allium porrum</i>
JIU HUA DA E XIANG CHA CAI	九华大萼香茶菜	Jiuhua Largesepal Rabdosia	T3512 <i>Isodon macrocalyx</i> var. <i>jiuhua</i>
JIU JIE CHA	九节茶	Glabrous Sarcandra	T5730 <i>Sarcandra glabra</i> [Syn. <i>Chloranthus glaber</i> ]
JIU LI XIANG	九里香	Common Jasminorange	T4323 <i>Murraya paniculata</i> [Syn. <i>Chalcas paniculata</i> ]
JIU LI XIANG GEN	九里香根	Common Jasminorange Root	T4324 <i>Murraya paniculata</i> [Syn. <i>Chalcas paniculata</i> ]
JIU ZI	韭子	Tuber Onion Seed	T0323 <i>Allium tuberosum</i>
JU AN	巨桉	Toolur	T2511 <i>Eucalyptus grandis</i>
JU CHI SANG	锯齿桑*	Serrate Mulberry*	T4299 <i>Morus serrata</i>
JU CHI SHI SONG	锯齿石松	Sawtooth Clubmoss*	T3977 <i>Lycopodium serratum</i> var. <i>thunbergii</i>
JU DA JI	巨大戟	Enormous Euphorbia	T2593 <i>Euphorbia ingens</i>

JU DA LAN CI TOU	巨大蓝刺头*	Grand Globethistle*	T2315 <i>Echinops giganteus</i>
JU DA MI ZI LAN	巨大米仔兰*	Grand Aglaia*	T0237 <i>Aglaia grandis</i>
JU GUO RONG	聚果榕	Racemose Fig*	T2724 <i>Ficus racemosa</i>
JU HAO	菊蒿	Common Tansy	T6298 <i>Tanacetum vulgare</i>
JU HE	橘核	Tangerine Seed	T1504 <i>Citrus reticulata</i>
JU HUA	菊花	Florists Chrysanthemum Flower	T1395 <i>Chrysanthemum morifolium</i> [Syn. <i>Dendranthema morifolium</i> ]
JU HUA GUO LU HUANG	聚花过路黄	Denseflower Loosestrife	T4000 <i>Lysimachia congestiflora</i>
JU HUA HUANG LIAN	菊花黄连	Yellowflower Corydalis	T1731 <i>Corydalis pallida</i>
JU HUA HUANG TAN	聚花黄檀*	Congested-flower Rosewood*	T2000 <i>Dalbergia congestiflora</i>
JU HUA SHI HU	聚花石斛*	Thyrseflower Dendrobium	T2110 <i>Dendrobium thyrsiflorum</i>
JU HUA XUE DAN	巨花雪胆	Giant Hemsleya	T3206 <i>Hemsleya gigantea</i>
JU HUANG YING SU	桔黄罂粟*	Orange Poppy*	T4622 <i>Papaver auranticum</i>
JU JIANG YE	蒟酱叶	Betel Pepper Leaf	T4937 <i>Piper betle</i>
JU MAO LEI A WEI	具毛类阿魏*		T2712 <i>Ferulago capillaries</i>
JU MI JIN HE HUAN	具蜜金合欢	Honeyed Acacia	T0026 <i>Acacia mellifera</i>
JU MI SHU WEI CAO	具蜜鼠尾草	Melliferous Sage*	T5678 <i>Salvia mellifera</i>
JU PI	橘皮(陈皮)	Tangerine Pericarp	T1506 <i>Citrus reticulata</i>
JU QU	菊苣	Common Chicory	T1415 <i>Cichorium intybus</i>
JU REN ZHU	巨人柱		T1209 <i>Carnegiea gigantea</i>
JU SAN HUA YE CAI	聚伞花椰菜	Cymose Brassica*	T1016 <i>Brassica oleracea</i> var. <i>botrytis</i> subvar. <i>cymosa</i>
JU SE GOU SUAN JIANG	橘色沟酸浆	Orange Monkeyflower*	T4251 <i>Mimulus aurantiacus</i>
JU SE MAO RUI HUA	橘色毛蕊花*	Orange Mullein	T6702 <i>Verbascum phlomoides</i>
JU SHAN	巨杉	Giant Sequoia	T5917 <i>Sequoia gigantea</i>
JU SHI QIE	菊氏茄*	Juzepczuk Nightshade*	T6002 <i>Solanum juzepczukii</i>
JU TAI XIANG CHA CAI	苴苔香茶菜	Gesnerialike Rabdosia	T3491 <i>Isodon gesneroides</i>
JU YU	菊芋	Jerusalem Artichoke	T3155 <i>Helianthus tuberosus</i>
JU YUAN	枸橼	Medicinal Citron	T1498 <i>Citrus medica</i>
JU YUAN YE	枸橼叶	Medicinal Citron Leaf	T1499 <i>Citrus medica</i>
JU YUAN YE HUANG QI	矩圆叶黄芪*	Oblongleaf Milkvetch*	T0799 <i>Astragalus miser</i> var. <i>oblongifolia</i>
JU YUAN YE LONG NAO	矩圆叶龙脑香*	Oblong-leaf Borneol Oil-Resin*	T2276 <i>Dryobalanops oblongifolia</i>
XIANG			
JU ZI JIN	巨紫堇	Gigantic Corydalis*	T1716 <i>Corydalis gigantea</i>
JUAN BAI	卷柏	Tamariskoid Spikemoss	T5869 <i>Selaginella tamariscina</i>
JUAN DAN	卷丹	Tiger Lily	T3839 <i>Lilium tigrinum</i> [Syn. <i>Lilium lancifolium</i> ]
JUAN MAO HUANG TAN	绢毛黄檀	Sericeous-leaf Rosewood	T2012 <i>Dalbergia sericea</i>
JUAN MAO KUO BAO JU	绢毛阔苞菊*	Sericeous Pluchea*	T5025 <i>Pluchea sericea</i>
JUAN MAO QIANG WEI	绢毛蔷薇	Silky Rose	T5573 <i>Rosa sericea</i>
JUAN QIAO YUAN WEI	卷鞘鸢尾	Potanin Iris	T3466 <i>Iris potaninii</i>
JUE	蕨	Eastern Bracken Fern	T5284 <i>Pteridium aquilinum</i> var. <i>latiusculum</i>
JUE CHUANG	爵床	Creeping Rostellularia	T5576 <i>Rostellularia procumbens</i> [Syn. <i>Justicia procumbens</i> ]
JUE MING ZI	决明子	Sickle Senna Seed	T1250 <i>Cassia tora</i>
JUN QIAN ZI	君迁子	Dateplum Persimmon	T2222 <i>Diospyros lotus</i>
JUN ZI LAN	君子兰	Scarlet Kafirlily	T1578 <i>Clivia miniata</i>
KA BU LI FENG DOU CAI	卡布里蜂斗菜	Kabliki Butterbur*	T4741 <i>Petasites kablikianus</i>
KA FEI HUANG KUI	咖啡黄葵	Edible Abelmoschus	T3240 <i>Hibiscus esculentus</i>
KA FU LA LUO FU MU	卡夫拉萝芙木	Caffra Devilpepper*	T5430 <i>Rauwolfia caffra</i>
KA LA BA DAN SHEN	卡拉巴丹参	Karaba Sage*	T5676 <i>Salvia karabachensis</i>
KA LI YU RUI	卡里玉蕊		T1204 <i>Careya arborea</i>
KA LUO JIN HE HUAN	卡罗金合欢*	Karoo Acacia	T0022 <i>Acacia karroo</i>

KA LUO LAI NA CUI QUE	卡罗来纳翠雀*	Carolina Larkspur*	T2065 <i>Delphinium carolinianum</i>
KA LUO LAI NA DI DAN CAO	卡罗来纳地胆草	Carolina Elephantfoot*	T2331 <i>Elephantopus carolinianus</i>
KA LUO LAI NA SHI SONG	卡罗来纳石松*	Carolina Clubmoss*	T3967 <i>Lycopodium carolinianum</i>
KA MAI LONG JIN LIAN MU	喀麦隆金莲木	Cameroon Ochna*	T4464 <i>Ochna calodendron</i>
KA MAI LONG XIN FO NI A	喀麦隆辛佛尼阿*	Cameroon Symphonia*	T6242 <i>Symphonia globulifera</i>
KA MEI XIANG CHA CAI	卡美香茶菜	Kamei Rabdosia*	T3498 <i>Isodon kameba</i>
KA MING BA DOU	卡明巴豆*	Cuming Croton*	T1842 <i>Croton cumingii</i>
KA SHI QIAN GOU ZAO	卡氏前沟藻		T0429 <i>Amphidinium carterae</i>
KA SI HAO	卡斯蒿*	Caruth Wormwood*	T0673 <i>Artemisia caruthii</i>
KA WA HU JIAO	卡瓦胡椒	Kava Pepper	T4955 <i>Piper methysticum</i>
KA XI YA SONG	卡西亚松	Khasya Pine	T4911 <i>Pinus kesiya</i>
KA ZHU BA DOU	卡朱巴豆		T1839 <i>Croton cajucara</i>
KAI KOU JIAN	开口箭	Chinese Tupistra	T6566 <i>Tupistra chinensis</i>
KAI LUO HUANG QI	开罗黄芪	开罗 Milkvetch*	T0797 <i>Astragalus kahiricus</i>
KAI SHI DANG GUI	凯氏当归*	Keislce Angelica*	T0487 <i>Angelica keislcei</i>
KAI TE LENG ZHU MU	凯特棱柱木	Kaith Ramin*	T3052 <i>Gonystylus keithii</i>
KAI ZHAN XIANG CHA CAI	开展香茶菜	Spreading Rabdosia*	T3485 <i>Isodon effusa</i>
KAN CHA JIA MAO LIAN CAI	堪察加毛莲菜	Kamchatka Oxtongue	T4885 <i>Picris kamschatica</i>
KAN MAI NIANG ZHUANG SHA CAO	看麦娘状莎草	Foxtail-like Galingale	T1973 <i>Cyperus alopecuroides</i>
KANG DING CUI QUE HUA	康定翠雀花	Kangting Larkspur	T2087 <i>Delphinium tatsienense</i>
KANG DING YU ZHU	康定玉竹	Pratt Solomonseal	T5094 <i>Polygonatum prattii</i>
KANG LI YA DAN ZI	抗痢鸦胆子	Antidysenteric Brucea*	T1037 <i>Brucea antidysenterica</i>
KANG PI DU MAO XUAN HUA	康毗毒毛旋花*	Kombe Strophanthus*	T6157 <i>Strophanthus kombe</i>
KAO MING GE MU	考明格木	Couminga Erythrophleum*	T2484 <i>Erythrophleum couminga</i>
KE AI HUANG QIN	可爱黄芩*	Delightful Skullcap*	T5832 <i>Scutellaria amabilis</i>
KE AI SHI HU	可爱石斛	Delightful Dendrobium	T2095 <i>Dendrobium amoenum</i>
KE DI SI WANG ZHE JUN	柯蒂斯网褶菌*	Curtisi Paxillus*	T4680 <i>Paxillus curtisii</i>
KE KE	可可	Cocoa	T6423 <i>Theobroma cacao</i>
KE LE TENG HUANG	可乐藤黄*	Kola Garcinia*	T2860 <i>Garcinia kola</i>
KE LEI NI JUE MING	克雷尼决明	Kleini Senna*	T1235 <i>Cassia kleinii</i>
KE MING XI LUO FU MU	柯明西萝芙木	Cummins Devilpepper*	T5433 <i>Rauwolfia cumminsii</i>
KE MO SEN QIE	克默森茄	Commerson Nightshade*	T5995 <i>Solanum commersonii</i>
KE NAN SHU	柯楠树	Corinan Tree*	T1752 <i>Corynanthe johimbe</i>
KE SHEN MI ER CUI QUE	克什米尔翠雀	Kashmir Larkspur	T2066 <i>Delphinium cashmerianum</i>
KE SHI FAN YING TAO	可食番樱桃*	Edible Eugenia*	T2532 <i>Eugenia edulis</i>
KE SHI HAO	克氏蒿*	Klotzsch Wormwood*	T0679 <i>Artemisia klotzschiana</i>
KE SHI MEI DENG MU	克氏美登木*	Krukov Mayten*	T4136 <i>Maytenus krukovii</i>
KE SHI MI ZI LAN	可食米仔兰*	Edible Aglaia*	T0233 <i>Aglaia edulis</i>
KE TENG ZI	榼藤子	Climbing Entada Seed	T2363 <i>Entada phaseoloides</i> [Syn. <i>Lens phaseoloides</i> ]
KE XI JIA SONG	科西嘉松*	Corsican Pine	T4914 <i>Pinus laricio</i>
KE YI YI SHOU SHEN	可疑翼手参		T1625 <i>Colochirous anceps</i>
KEN NI YA CI TONG	肯尼亚刺桐	Kenya Coralbean*	T2461 <i>Erythrina burttii</i>
KEN NI YA HUI YE	肯尼亚灰叶	Kenya Tephrosia*	T6331 <i>Tephrosia aequilata</i>
KEN NI YA MO YAO	肯尼亚没药	Kenya Myrrhree*	T1636 <i>Commiphora kua</i> var. <i>gowlollo</i>
KEN NI YA WEN SHU LAN	肯尼亚文殊兰*	Kenya Crinum*	T1798 <i>Crinum kirkii</i>
KEN NI YA XIAN SUAN QIANG	肯尼亚威酸蕈	Kenya Embelia*	T2350 <i>Embelia schimperii</i>
KONG QUE CAO	孔雀草	French Marigold	T6282 <i>Tagetes patula</i>
KONG SHI CHUN	孔石莼	Pertusate Ulva Frond	T6600 <i>Ulva pertusa</i>
KONG XIN XIAN	空心苋	Alligator Alternanthera	T0379 <i>Alternanthera philoxeroides</i>
KU A MO YAO	库阿没药*	Kua Myrrhree*	T1635 <i>Commiphora kua</i>
KU AO	苦苣	Chinese Thistle	T1448 <i>Cirsium chinense</i>

KU BAO	桔苞	Monarch-of-the-East	T5747 <i>Sauromatum guttatum</i>
KU CAO	苦草	Eelgrass	T6683 <i>Vallisneria spiralis</i>
KU DI DAN	苦地胆	Scabrous Elephantfoot	T2334 <i>Elephantopus scaber</i>
KU DI DING	苦地丁	Bunge Corydalis	T1709 <i>Corydalis bungeana</i>
KU DING CHA	苦丁茶	Plumleaf Cratoxylum	T1785 <i>Cratoxylum prunifolium</i>
KU DING CHA DONG QING	苦丁茶冬青	Kudincha Holly	T3392 <i>Ilex kudingcha</i>
KU DOU GEN	苦豆根	Foxtail-like Sophora Root*	T6028 <i>Sophora alopecuroides</i>
KU DOU ZI	苦豆子	Foxtail-like Sophora	T6029 <i>Sophora alopecuroides</i>
KU GUA	苦瓜	Balsampear	T4263 <i>Momordica charantia</i>
KU HAO	苦蒿	Blin Conyza	T1655 <i>Conyza blinii</i>
KU HE LONG DAN	库赫龙胆*	Koch Gentian*	T2914 <i>Gentiana kochiana</i>
KU HONG GU	苦红菇	Bitter Russula	T5624 <i>Russula rosacea</i>
KU HUANG GUA	苦黄瓜	Bitter Cucumber*	T1879 <i>Cucumis sativus</i> var. <i>hanzil</i>
KU LANG SHU	苦郎树	Unarmed Glorybower	T1566 <i>Clerodendrum inerme</i>
KU LI MU YE	苦栎木叶	Retuse Ash Leaf	T2770 <i>Fraxinus insularis</i>
KU LIAN PI	苦楝皮	Chinaberry-tree Bark	T4156 <i>Melia azedarach</i>
KU LIAN SHI	苦楝实	Chinaberry-tree Fruit	T4157 <i>Melia azedarach</i>
KU LIAN YE	苦楝叶	Chinaberry-tree Leaf*	T4158 <i>Melia azedarach</i>
KU MA DOU	苦马豆	Saline Swainsonia	T6210 <i>Swainsonia salsula</i> [Syn. <i>Sphaerophysa salsula</i> ]
KU MANG HUANG JIN	库莽黄堇	Govan Corydalis	T1718 <i>Corydalis govaniana</i>
KU MU	苦木	Indian Quassia-wood	T4881 <i>Picrasma quassioides</i> [Syn. <i>Picrasma ailanthoides</i> ]
KU QIAO MAI	苦荞麦	Tartarian Buckwheat	T2661 <i>Fagopyrum tataricum</i>
KU RUO LONG DAN	库若龙胆*	Kuroo Gentian*	T2915 <i>Gentiana kuroo</i>
KU SHAN NAI	苦山柰	Bitter	T3621 <i>Kaempferia marginata</i>
KU SHEN	苦参	Lightyellow Sophora	T6031 <i>Sophora flavescens</i> [Syn. <i>Sophora angustifolia</i> ]
KU SHEN SHI	苦参实	Lightyellow Sophora Seed	T6032 <i>Sophora flavescens</i> [Syn. <i>Sophora angustifolia</i> ]
KU SHENG	苦绳	Chinese Dregea	T2262 <i>Dregea sinensis</i>
KU SHI LIAN	苦石莲	Whiteflower Caesalpinia	T1106 <i>Caesalpinia minax</i>
KU SHU PI	苦树皮	Indian Quassia-wood Bark	T4882 <i>Picrasma quassioides</i> [Syn. <i>Picrasma ailanthoides</i> ]
KU TAN ZI	苦檀子	Thickfruit Millettia	T4240 <i>Millettia pachycarpa</i>
KU WEI DUI XIN JU	苦味堆心菊	Bitterness Sneezeweed*	T3131 <i>Helenium amarum</i>
KU WEI YUAN ZHI	苦味远志	Bitter Milkwort*	T5070 <i>Polygala amarella</i>
KU XIANG SHU	苦香树	Cascarilla	T1844 <i>Croton eluteria</i>
KU XUAN SHEN	苦玄参	Common Bitterfigwort	T4884 <i>Picria felterrae</i>
KU YA DAN ZI	苦鸦胆子	Bitter Brucea*	T1036 <i>Brucea amarissima</i>
KU YE DAO HUANG BAI	库页岛黄柏	Sachaline Corktree*	T4794 <i>Phellodendron sachalinense</i>
KU YE DAO ZE LAN	库页岛泽兰	Sachalin Eupatorium*	T2573 <i>Eupatorium sachalinense</i> [Syn. <i>Eupatorium glehni</i> ]
KU YE WU TOU	库页乌头*	Sachalin Monkshood*	T0127 <i>Aconitum sachalinense</i>
KU YUAN ZHI	苦远志	Racemed Milkwort	T5081 <i>Polygala polygama</i>
KU ZHI	苦蕒	Cutleaf Groundcherry	T4848 <i>Physalis angulata</i>
KU ZHI	毛酸浆	Downy Groundcherry	T4854 <i>Physalis pubescens</i>
KUAI GEN CHUI TOU JU	块根垂头菊	Root-tuber Cremanthodium	T1786 <i>Cremanthodium ellisii</i>
KUAI JING CAO SU	块茎糙苏	Tuberousroot Jerusalem sage	T4813 <i>Phlomis tuberosa</i>
KUAI JING GE	块茎葛*	Tuberous Kudzu vine*	T5321 <i>Pueraria tuberosa</i>
KUAI JING MA DOU LING	块茎马兜铃	Tuberous Dutchmans pipe	T0641 <i>Aristolochia tuberosa</i>
KUAI JING MA LI JIN	块茎马利筋	Tuberous Milkweed	T0741 <i>Asclepias tuberosa</i>
KUAI JING SHUI SU	块茎水苏	Chinese Artichoke	T6094 <i>Stachys tuberifera</i>

KUAI JING XI MEN FEI CAO	块茎西门肺草*	Tuberous Comfrey	T6248 <i>Symphytum tuberosum</i>
KUAI JING ZI JIN	块茎紫堇	Tuberous Corydalis*	T1748 <i>Corydalis tuberosa</i>
KUAN BAO SHI DA GONG LAO	宽苞十大功劳	Broad-bracteate Mahonia	T4061 <i>Mahonia eurybracteata</i>
KUAN DONG HUA	款冬花	Common Coltsfoot	T6574 <i>Tussilago farfara</i>
KUAN SHE TUO WU	宽舌橐吾	Broad-tongue Goldenray*	T3811 <i>Ligularia platyglossa</i>
KUAN YE GE NI DI MU	宽叶格尼迪木		T3038 <i>Gnidia latifolia</i>
KUAN YE KUO BAO JU	宽叶阔苞菊*	Broadleaf Pluchea*	T0848 <i>Baccharis latifolia</i>
KUAN YE MAI MA TENG	宽叶买麻藤	Broadleaf Jointfir	T3031 <i>Gnetum latifolium</i>
KUAN YE MEI YUAN ZHI	宽叶美远志	Broadleaf Milkwort*	T5085 <i>Polygala senega</i> var. <i>latifolia</i>
KUAN YE QIAN LI GUANG	宽叶千里光	Broadleaf Groundsel*	T5897 <i>Senecio platyphyllus</i>
KUAN YE QIANG HUO	宽叶羌活	Forbes Notopterygium	T4445 <i>Notopterygium forbesii</i> [Syn. <i>Notopterygium franchetii</i> ]
KUAN YE SHAN YUE GUI	宽叶山月桂	Mountain Laurel	T3623 <i>Kalmia latifolia</i>
KUAN YE WU TAN	宽叶乌檀	Broadleaf Fatheadtree*	T4390 <i>Nauclea latifolia</i>
KUAN YE XIANG PU	宽叶香蒲	Broadleaf Cattail Pollen	T6587 <i>Typha latifolia</i>
KUAN YU XIAN JUE	宽羽线蕨	Broad-pinna Colysis	T1629 <i>Colysis pothifolia</i> [Syn. <i>Hemionitis pothifolia</i> ]
KUI BAN ER YE TAI	盔瓣耳叶苔	Armet-petal Ear-leaf Muscus*	T2802 <i>Frullania muscicola</i>
KUI HAO	魁蒿	First Wormwood	T0689 <i>Artemisia princeps</i>
KUN BU	昆布	Kelp Thallus	T3678 <i>Laminaria japonica</i>
KUN LAN SHU	昆栏树	Wheelstamentree	T6549 <i>Trochodendron aralioides</i>
KUN MING CHAI HU	昆明柴胡*	Kunming Thorowax*	T1064 <i>Bupleurum kunmingense</i>
KUN MING JI XUE TENG	昆明鸡血藤	Diels Millettia	T4234 <i>Millettia dielsiana</i>
KUN MING SHAN HAI TANG	昆明山海棠	Glaucousback Threewingnut	T6540 <i>Tripterygium hypoglaucum</i>
KUN MING XIANG CHA CAI	昆明香茶菜	Kunming Rabdosia*	T3499 <i>Isodon kunmingensis</i>
KUO BAO JU	阔苞菊	Indian Pluchea	T0847 <i>Baccharis indica</i> [Syn. <i>Pluchea indica</i> ]
KUO GUO JI YING SU	阔果蓟罂粟	Platyangle Pricklepoppy*	T0611 <i>Argemone platyceras</i>
KUO JIA HE HUAN	阔荚合欢	Siris-acacia	T0293 <i>Albizzia lebbek</i>
KUO YE GU SUI BU	阔叶骨碎补	Broadleaf Davallia	T2054 <i>Davallia solida</i>
KUO YE LUO FU MU	阔叶萝芙木	Broadleaf Devilpepper	T5435 <i>Rauwolfia latifrons</i>
KUO YE MI HOU TAO	阔叶猕猴桃	Broadleaf Actinidia	T0163 <i>Actinidia latifolia</i>
KUO YE OU NV ZFEN	阔叶欧女贞	Tree Phyllirea	T4797 <i>Phillyrea latifolia</i>
KUO YE SHAN MAI DONG	阔叶山麦冬	Broadleaf Liriope*	T3873 <i>Liriope platyphylla</i>
KUO YE XIE CAO	阔叶缬草	Broadleaf Common Valeriana	T6680 <i>Valeriana officinalis</i> var. <i>latifolia</i>
KUO ZHANG SONG YE JU	扩张松叶菊	Expansum Fig*	T4201 <i>Mesembryanthemum expansum</i>
LA BA CHA	喇叭茶	Crystal Tea	T3735 <i>Ledum palustre</i>
LA BA FEN SHI RUI	喇叭粉石蕊		T1523 <i>Cladonia chlorophaea</i>
LA BA ZHUANG DUO GUO SHU	喇叭状多果树*		T5017 <i>Pleiocarpa tubicina</i>
LA BO HE	辣薄荷	Pepper Mint	T4186 <i>Mentha piperita</i>
LA GEN	辣根	Horseradish	T0647 <i>Armoracia lapathifolia</i>
LA GEN HE GUO MU	辣根核果木*	Armoracia Drypetes*	T2288 <i>Drypetes armoracia</i>
LA JIAO	辣椒	Bush Redpepper	T1187 <i>Capsicum frutescens</i>
LA KOU SHA MIAN BAO GUO	拉口沙面包果	Lakoocha Artocarpus*	T0717 <i>Artocarpus lakoocha</i>
LA LIAO	辣蓼	Flaccid Knotweed	T5105 <i>Polygonum hydropiper</i> var. <i>flaccidum</i> [Syn. <i>Polygonum flaccidum</i> ]
LA MEI HUA	腊梅花	Wintersweet Bud	T1366 <i>Chimonanthus fragrans</i> [Syn. <i>Chimonanthus praecox</i> ]
LA QIAN LI GUANG	辣千里光	Smirch Groundsel*	T5908 <i>Senecio sceleratus</i>
LA RU GU	辣乳菇	Peppery Milky	T3653 <i>Lactarius piperatus</i> [Syn. <i>Agaricus piperatus</i> ]
LA SHI LU HUI	拉氏芦荟*	Ruspol Aloe*	T0343 <i>Aloe ruspoliana</i>
LA ZHI MU JIANG ZI	蜡质木姜子*	Waxy Litse*	T3895 <i>Litsea sebifera</i>
LA ZHU GUO	蜡烛果	Corniculate Aegiceras	T0194 <i>Aegiceras corniculatum</i>

LAI FU	莱菔	Garden Radish	T5419 <i>Raphanus sativus</i>
LAI FU ZI	莱菔子	Garden Radish Seed	T5420 <i>Raphanus sativus</i>
LAI JIANG TENG	来江藤	Hance Brandisia	T1003 <i>Brandisia hancei</i>
LAI KE BA DOU	莱克巴豆	Lechler Croton*	T1849 <i>Croton lechleri</i>
LAI MENG	来檬	Lime	T1466 <i>Citrus aurantifolia</i>
LAI SHI NA TE SHI DA GONG LAO	莱施纳特十大功劳	Leschenault Mahonia	T4069 <i>Mahonia leschenaultii</i>
LAN BO TE XIAO BO	兰伯特小檗	Lambert Barberry	T0908 <i>Berberis lambertii</i>
LAN E XIANG CHA CAI	兰萼香茶菜	Bluesepal Rabdosia*	T3497 <i>Isodon japonica</i> var. <i>glaucocalyx</i>
LAN HU LU BA	兰葫芦巴	Blue Trigonella	T6527 <i>Trigonella caerulea</i>
LAN HUANG HONG GU	兰黄红菇	Blue-yellow Redmushroom*	T5619 <i>Russula cyanoxantha</i>
LAN JI	蓝蓟	Blue Thistle	T2320 <i>Echium vulgare</i>
LAN JI CHUAN XIN LIAN	蓝蓟穿心莲	Echiumlike Andrographis	T0453 <i>Andrographis echiioides</i>
LAN SE YA CHI JUN	蓝色亚齿菌*	Inedible Mushroom	T3299 <i>Hydnellum caeruleum</i>
LAN SHAI PIAO	蓝筛朴	Siebold Elder	T5705 <i>Sambucus sieboldiana</i>
LAN SHUI LIAN	兰睡莲	Blue Waterlily	T4454 <i>Nymphaea caerulea</i>
LAN YU BAI JI	兰屿白芨	Taiwan Bletilla*	T0954 <i>Bletilla formosana</i>
LAN YU LUO YE RONG	兰屿落叶榕		T2725 <i>Ficus ruficaulis</i> var. <i>antaoensis</i>
LANG DANG GEN	莨菪根	Black Henbane Root	T3327 <i>Hyoscyamus niger</i>
LANG DANG YE	莨菪叶	Black Henbane Leaf	T3328 <i>Hyoscyamus niger</i>
LANG DANG ZI	莨菪子	Black Henbane Seed	T3329 <i>Hyoscyamus niger</i>
LANG DU	狼毒	Chinese Stellera	T6105 <i>Stellera chamaejasme</i>
LANG DU DA JI	狼毒大戟	Fischer Euphorbia	T2587 <i>Euphorbia fischeriana</i>
LANG DU WU TOU	狼毒乌头	Badgersbane	T0114 <i>Aconitum lycocotnum</i>
LANG PA CAO	狼把草	Bur Beggarticks	T0941 <i>Bidens tripartita</i>
LANG YU PI	榔榆皮	Chinese Elm Bark	T6596 <i>Ulmus parvifolia</i>
LAO GUAN CAO	老鹳草	Wilford Cranesbill	T2949 <i>Geranium wilfordii</i>
LAO NIU JIN	老牛筋	Junc-like Sandwort	T0607 <i>Arenaria juncea</i>
LAO PO ZI ZHEN XIAN	老婆子针线	Lopseed	T4830 <i>Phryma leptostachya</i>
LAO SHI WEN SHU LAN	劳氏文殊兰*	Laurent Crinum*	T1800 <i>Crinum laurentii</i>
LAO SHU GUA	老鼠瓜	Common Caper	T1180 <i>Capparis spinosa</i>
LAO SHU LE	老鼠筋	Hollyleaf Acanthus	T0048 <i>Acanthus ilicifolius</i>
LAO YA SHI	老鸦柿	Diamondleaf Persimmon	T2226 <i>Diospyros rhombifolia</i>
LE SHI JIN HE HUAN	勒氏金合欢*	Luederitz Acacia*	T0023 <i>Acacia luederitzii</i>
LEI A WEI	短裂片类阿魏*		T2711 <i>Ferulago brachyloba</i>
LEI BO WU TOU	雷波乌头	Leabo Monkshood	T0124 <i>Aconitum pseudohuiliense</i>
LEI DENG XIN LIU SHAN HU	蕾灯心柳珊瑚	Gorgonian <i>Junceella gemmacea</i>	T3575 <i>Junceella gemmacea</i>
LEI GONG QI	雷公七	Common Broadlily	T1574 <i>Clintonia alpina</i>
LEI GONG TENG	雷公藤	Common Threewingnut	T6542 <i>Tripterygium wilfordii</i>
LEI GUO SHA JI	肋果沙棘	Veinfruit Seabuckthorn	T3253 <i>Hippophae neurocarpa</i>
LEI SHI QIAN LI GUANG	雷氏千里光*	Renard Groundsel*	T5901 <i>Senecio renardii</i>
LEI YE SHENG MA	类叶升麻	Asica Baneberry	T1418 <i>Cimicifuga asiatica</i>
LENG FAN TUAN[yn]	冷饭团	Blacktiger Kadsura	T3613 <i>Kadsura coccinea</i> [Syn. <i>Kadsura chenensis</i> ; <i>Kadsura hainanensis</i> ]
LENG JIAO QIAN LI GUANG	棱角千里光	Angulate Groundsel*	T5880 <i>Senecio angulatus</i>
LENG SHA BEI MU	棱砂贝母	Delavay Fritillary	T2784 <i>Fritillaria delavayi</i>
LENG ZHI HU JI SHENG	棱核榭寄生	Angulate Mistletoe*	T6772 <i>Viscum angulatum</i>
LENG ZHUANG BAI JIAN MU	棱状白坚木*	Rhombic-sign White Quebracho*	T0774 <i>Aspidosperma rhombeosignatum</i>
LI	藜	Lambsquarters Juvenile	T1359 <i>Chenopodium album</i>
LI BA NEN XIE HAO	黎巴嫩邪蒿*	Moon-carrot	T5933 <i>Seseli libanotis</i>
LI BIAN ZHI YI	栎扁枝衣		T2637 <i>Evernia prunastri</i>
LI BING FENG WEI JUE	栗柄凤尾蕨	Lead-coloured Brake	T5297 <i>Pteris plumbea</i>
LI BING JIN FEN JUE	栗柄金粉蕨	Lucidum Onychium	T4503 <i>Onychium lucidum</i>



LI CAI	蜆菜	Conglobate Ulva Frond*	T6598 <i>Ulva conglobata</i>
LI CHUN HUA	丽春花	Corn Poppy	T4625 <i>Papaver commutatum</i> [Syn. <i>Papaver rhoeas</i> ]
LI DE LI FAN LONG YAN	里德利番龙眼*	Ridley Pometia*	T5136 <i>Pometia ridleyi</i>
LI DOU	黎豆	Capitateflower Velvetbean	T6147 <i>Stizolobium capitatum</i>
LI FEI MU JIANG ZI	里菲木姜子	Leeffe Litse*	T3892 <i>Litsea leefeana</i>
LI GUO XIAN REN ZHANG	梨果仙人掌	Prickly Pear	T4520 <i>Opuntia ficus-indica</i>
LI HE REN	李核仁	Japanese Plum Kernel	T5238 <i>Prunus salicina</i>
LI HUA JU	立花橘	Japanese Tachibana	T1513 <i>Citrus tachibana</i>
LI JI SAN CHU MAI MA QIAN	离基三出脉马钱*	Triplinervia Poisonnut*	T6190 <i>Strychnos triplinervia</i>
LI JIANG CHAI HU	丽江柴胡	Rock Thorowax	T1070 <i>Bupleurum rockii</i>
LI JIANG HUANG QIN	丽江黄芩	Likiang Skullcap	T5841 <i>Scutellaria likiangensis</i>
LI JIANG MA HUANG	丽江麻黄	Likiang Ephedra	T2372 <i>Ephedra likiangensis</i>
LI JIANG QIAN HU	漓江前胡	Likiang Hogfennel	T4756 <i>Peucedanum govanianum</i> var. <i>bicolor</i>
LI JIANG WU TOU	丽江乌头	Likiang Monkshood*	T0096 <i>Aconitum forrestii</i> [Syn. <i>Aconitum likiangense</i> ]
LI JUE	栗蕨	Incised Histiopteris	T3260 <i>Histiopteris incisa</i>
LI LA GEN	黎辣根	Oriental Buckthorn	T5455 <i>Rhamnus crenata</i>
LI LU	藜芦	Black Falsehellebore	T6698 <i>Veratrum nigrum</i>
LI MENG	黎檬	Lemonlike Citrus	T1494 <i>Citrus limonia</i>
LI MENG GEN	黎檬根	Lemonlike Citrus Root	T1495 <i>Citrus limonia</i>
LI MENG PI	黎檬皮	Lemonlike Citrus Pericarp	T1496 <i>Citrus limonia</i>
LI MENG YE	黎檬叶	Lemonlike Citrus Leaf	T1497 <i>Citrus limonia</i>
LI MI ZI LAN	梨米仔兰*	Pear Aglaia*	T0242 <i>Aglaia pirifera</i>
LI MU	悞木	Tibet Lyonia	T3991 <i>Lyonia ovalifolia</i>
LI PU PO JU	利普珀菊*	Lipp Amberboa*	T0392 <i>Amberboa lippii</i>
LI QI HUAI	利奇槐	Leachiana Sophora	T6038 <i>Sophora leachiana</i>
LI SE SHU WEI CAO	栗色鼠尾草	Chestnut Sage	T5667 <i>Salvia castanea</i>
LI SHU PI	栗树皮	Chinese Chestnut Bast	T1256 <i>Castanea mollissima</i>
LI SHUO ZHU XIAN	梨蒴珠藓		T0874 <i>Bartramia pomiformis</i>
LI XIAN XIANG CHA CAI	理县香茶菜	Lihsien Rabdosia	T3505 <i>Isodon lihsienensis</i>
LI XING MA BO	梨形马勃	Pear-like Puff-ball	T3961 <i>Lycoperdon pyriforme</i>
LI YE	梨叶	Bretschneider Pear Leaf	T5362 <i>Pyrus bretschneideri</i>
LI YU	鲤鱼	Carp	T1980 <i>Cyprinus carpio</i>
LI YU DAN	鲤鱼胆	Carp Gall	T1981 <i>Cyprinus carpio</i>
LI YU PI	鲤鱼皮	Carp Skin	T1982 <i>Cyprinus carpio</i>
LI ZHI	荔枝	Lychee	T3876 <i>Litchi chinensis</i>
LI ZHI CAO	荔枝草	Common Sage	T5685 <i>Salvia plebeia</i>
LI ZHI HAO	痢止蒿	Forrest Bugle	T0264 <i>Ajuga forrestii</i>
LI ZHI HE	荔枝核	Lychee Seed	T3877 <i>Litchi chinensis</i>
LI ZI	李子	Japanese Plum	T5239 <i>Prunus salicina</i>
LIAN HUA	楝花	Chinaberry-tree Flower	T4159 <i>Melia azedarach</i>
LIAN HUA JIN QUE ER	链花金雀儿*	Goldregen	T1988 <i>Cytisus laburnum</i>
LIAN JIANG	廉姜	Chinese Galangal	T0354 <i>Alpinia chinensis</i>
LIAN PENG CAO	莲蓬草	Japanese Farfugium	T2691 <i>Farfugium japonicum</i>
LIAN QIAN CAO	连钱草		T2974 <i>Glechoma lungituba</i>
LIAN QIAO	连翘	Weeping Forsythia	T2756 <i>Forsythia suspensa</i>
LIAN SHENG GUI ZI HUA	莲生桂子花	Bloodflower Milkweed	T0736 <i>Asclepias curassavica</i>
LIAN XIANG SHU	连香树	Katsura-tree	T1333 <i>Cercidiphyllum japonicum</i> var. <i>sinense</i>
LIAN XING HUANG QI	镰形黄芪*	Falcate Milkvetch*	T0795 <i>Astragalus falcatus</i>
LIAN YE TONG	莲叶桐	Lotusleafung	T3231 <i>Hernandia sonora</i> [Syn. <i>Hernandia ovigera</i> ]
LIAN YE TUO WU	莲叶橐吾	Waterlilyleaf Goldenray	T3810 <i>Ligularia nelumbifolia</i>

LIAN YE WU ZHU YU	棟叶吴茱萸	Dyebark Evodia	T2643 <i>Evodia meliifolia</i>
LIAN ZHU TENG	链珠藤	China Alyxia	T0383 <i>Alyxia sinensis</i>
LIAN ZI	莲子	Hindu Lotus Seed	T4400 <i>Nelumbo nucifera</i>
LIAN ZI XIN	莲子心	Hindu Lotus Plumule	T4401 <i>Nelumbo nucifera</i>
LIAN ZUO GE JUN	莲座革菌	Vase Thelephore	T6422 <i>Thelephora vialis</i>
LIANG BAI MEI RONG JUN	亮白煤绒菌*	White Fuliga*	T2806 <i>Fuligo candida</i>
LIANG HUA GE NI DI MU	亮花格尼迪木		T3037 <i>Gnidia lamprantha</i>
LIANG JUN	亮菌	Armillariella Tabescens	T0646 <i>Armillariella tabescens</i>
LIANG MIAN QING	两面青	Indian Maesa	T4028 <i>Maesa indica</i>
LIANG NIAN SHI SONG	两年石松	Sharpleaf Clubmoss*	T3966 <i>Lycopodium annotinum</i> var. <i>acrifolium</i>
LIANG QI LIAO	两栖蓼	Amphibious Knotweed	T5097 <i>Polygonum amphibium</i>
LIANG SHAN DU JUAN	凉山杜鹃		T5510 <i>Rhododendron huianum</i>
LIANG SHAN XIANG CHA CAI	凉山香茶菜	Liangshan Rabdosia	T3504 <i>Isodon liangshanica</i>
LIANG SI FEI YAN CAO	两似飞燕草*	Ambiguous Consolida*	T1646 <i>Consolida ambigua</i>
LIANG YE HUA PI	亮叶桦皮	Shingleleaf Birch Bark	T0932 <i>Betula luminifera</i>
LIANG YE RONG	亮叶榕	Bright Fig*	T2722 <i>Ficus nitida</i>
LIANG YE YAN DOU TENG	亮叶岩豆藤	Shingleleaf Millettia	T4238 <i>Millettia nitida</i>
LIAO DONG CONG MU	辽东槲木	Liaodong Aralia	T0572 <i>Aralia elata</i>
LIAO DONG CONG MU YE	辽东槲木叶	Liaodong Aralia Leaf*	T0573 <i>Aralia elata</i>
LIAO GAO BEN	辽藁本	Jehol Ligusticum	T3822 <i>Ligusticum jeholense</i>
LIAO GE WANG GEN	了哥王根	Indian Stringbush Root	T6820 <i>Wikstroemia indica</i>
LIAO LAN GUO	蓼蓝果	Indigoplant Fruit	T5120 <i>Polygonum tinctorium</i>
LIAO LAN YE	蓼蓝叶	Indigoplant Leaf	T5121 <i>Polygonum tinctorium</i>
LIAO NING SHAN ZHA	辽宁山楂	Redhaw Hawthorn	T1780 <i>Crataegus sanguinea</i>
LIAO SHANG RONG MAO HUA	疗伤绒毛花	Kidney Vetch	T0531 <i>Anthyllis vulneraria</i>
LIAO SHI	蓼实	Red-knees Fruit	T5103 <i>Polygonum hydropiper</i>
LIAO XI XIN	辽细辛	Manchurian Wildginger	T0728 <i>Asarum heterotropoides</i> var. <i>mandshuricum</i>
LIE DANG	列当	Skyblue Broomrape	T4536 <i>Orobanche coerulescens</i>
LIE E TAI	裂萼苔	Polybract Split-calyx Liverwort*	T1365 <i>Chiloscyphus polyanthus</i>
LIE GUO SHU	裂果薯	Lobedfruit Tacca	T6276 <i>Tacca plantaginea</i> [Syn. <i>Schizocapsa plantaginea</i> ]
LIE TI MU CENG KONG JUN	裂蹄木层孔菌		T4788 <i>Phellinus linteus</i>
LIE WEI LIE LAN	烈味裂榄	Bursera*	T1080 <i>Bursera graveolens</i>
LIE YE QIAN NIU	裂叶牵牛	Lobedleaf Morningglory*	T3449 <i>Ipomoea hederacea</i>
LIE YE YE YING SU	裂叶野罂粟	Splidleaf Poppy*	T4631 <i>Papaver nudicaule</i> var. <i>chinense</i>
LIN BAI ZHI	林白芷	Wild Angelica	T0497 <i>Angelica sylvestris</i>
LIN BEI ZI	林背子	Field Lacquertree	T6482 <i>Toxicodendron succedaneum</i> [Syn. <i>Rhus succedanea</i> ]
LIN DI HAO	林地蒿*	Woodland Wormwood	T0700 <i>Artemisia sylvatica</i>
LIN DI SHUI SU	林地水苏	Whitespot Betony	T6093 <i>Stachys sylvatica</i>
LIN DI WU TOU	林地乌头	Woodland Monkshood	T0120 <i>Aconitum nemorum</i>
LIN DI XIANG RI KUI	林地向日葵*	Woodland Sunflower	T3154 <i>Helianthus strumosus</i>
LIN JING ZHONG ZI WEN SHU LAN	鳞茎种子文殊兰*	Bulb-spermo Crinum*	T1797 <i>Crinum bulbispermum</i>
LIN DI HAO	林地蒿*	Woodland Wormwood	T0700 <i>Artemisia sylvatica</i>
LIN DI SHUI SU	林地水苏	Whitespot Betony	T6093 <i>Stachys sylvatica</i>
LIN DI WU TOU	林地乌头	Woodland Monkshood	T0120 <i>Aconitum nemorum</i>
LIN DI XIANG RI KUI	林地向日葵*	Woodland Sunflower	T3154 <i>Helianthus strumosus</i>
LIN JING ZHONG ZI WEN SHU LAN	鳞茎种子文殊兰*	Bulb-spermo Crinum*	T1797 <i>Crinum bulbispermum</i>
LIN PIAN XUAN SHEN	鳞片玄参*	Scale Figwort*	T5827 <i>Scrophularia lepidota</i>
LIN QIN	林檎	Chinese Pearleaf Crabapple	T4086 <i>Malus asiatica</i>
LIN SHENG SHAN LI DOU	林生山黧豆	Wild Pea	T3713 <i>Lathyrus sylvestris</i>
LIN SHENG XUAN SHEN	林生玄参	Common Figwort	T5829 <i>Scrophularia nodosa</i>
LIN SHI CAN	林石蚕	Wood Sage	T6369 <i>Teucrium scorodonia</i>
LIN WEN JING	林问荆	Forest Horsetail	T2412 <i>Equisetum sylvaticum</i>
LING	菱	Singharanut	T6492 <i>Trapa bispinosa</i>
LING LAN	铃兰	Lily of Valley	T1649 <i>Convallaria keiskei</i> [Syn. <i>Convallaria</i>

LING MAO XIANG	灵猫香	Civet	<i>majalis</i> ] T6800 <i>Viverra zibetha</i>
LING MU	铃木	Japanese Eurya	T2631 <i>Eurya japonica</i>
LING NAN DU JUAN	岭南杜鹃	Lingnan Rhododendron*	T5513 <i>Rhododendron mariae</i>
LING NAN HUAI SHU	岭南槐树	Tomentose Sophora	T6045 <i>Sophora tomentosa</i>
LING SHUI AN LUO	陵水暗罗	Nemoriculous Greenstar*	T5067 <i>Polyalthia nemoralis</i>
LING XIANG CAO	灵香草	Strongfragrant Loosestrife	T4002 <i>Lysimachia foenum-graecum</i>
LING XING CHANG CHUN TENG	菱形常春藤	Japanese Ivy	T3115 <i>Hedera rhombea</i>
LING YE ZI JU	菱叶紫菊	Rhombicleaf Purpledaisy	T4447 <i>Notoseris rhombiformis</i>
LING ZHI	灵芝(赤芝)	Lucid Ganoderma	T2848 <i>Ganoderma lucidum</i>
LIU BAI PI	柳白皮	Babylon Weeping Willow Root-bast	T5650 <i>Salix babylonica</i>
LIU CHUAN YU	柳穿鱼	Yellow Toadflax	T3845 <i>Linaria vulgaris</i>
LIU GUO ZI YU PAN	瘤果紫玉盘	Kweichou Uvaria	T6664 <i>Uvaria kweichowensis</i>
LIU HUANG TIE XIAN JUE	硫磺铁线蕨*	Sulphur Maidenhair Fern*	T0178 <i>Adiantum sulphureum</i>
LIU JI NU	刘寄奴	Diverse Worm-wood	T0661 <i>Artemisia anomala</i>
LIU JIAO LIAN	六角莲	Sixangular Dysosma	T2302 <i>Dysosma pleiantha</i> [Syn. <i>Podophyllum pleianthum</i> ]
LIU LAN XIANG	留兰香	Spearmint	T4190 <i>Mentha spicata</i>
LIU LENG JU	六棱菊	Winged Laggera	T3674 <i>Laggera alata</i>
LIU LI CAO	琉璃草	Ceylon Houndstongue	T1971 <i>Cynoglossum zeylanicum</i> [Syn. <i>Anchusa zeylanica</i> ; <i>Cynoglossum furcatum</i> ; <i>Cynoglossum formosanum</i> ]
LIU LI FAN LV	琉璃繁缕	Scarlet Pimpernel	T0440 <i>Anagallis arvensis</i>
LIU LI JU	琉璃苣	Common Borage	T0981 <i>Borago officinalis</i>
LIU QIU SHE GEN CAO	硫球蛇根草	Liukiu Ophiorrhiza*	T4512 <i>Ophiorrhiza liukiuensis</i>
LIU SHAN	柳杉	Chinese Cedar	T1867 <i>Cryptomeria fortunei</i>
LIU SHAN HU	柳珊瑚 <i>Gorgoniae suberogorgia</i>	Gorgonian <i>Gorgoniae suberogorgia</i>	T3053 <i>Gorgoniae suberogorgia</i>
LIU SU JIN SHI HU	流苏金石斛	Fimbriate Dendrobium*	T2101 <i>Dendrobium fimbriatum</i>
LIU SU LI LU	流苏藜芦	Fimbriate Falsehellebore*	T6696 <i>Veratrum fimbriatum</i>
LIU SU SHI HU	流苏石斛	Eyeshaped Dendrobium	T2102 <i>Dendrobium fimbriatum</i> var. <i>oculatum</i>
LIU TU HU JIAO	瘤突胡椒	Tuberculate Pepper*	T4972 <i>Piper tuberculatum</i>
LIU YE BAI QIAN	柳叶白前	Willowleaf Swallowwort	T1960 <i>Cynanchum stauntonii</i>
LIU YE CAI HUANG QIN	柳叶菜黄芩*	Willowweedleaf Skullcap	T5837 <i>Scutellaria epilobifolia</i>
LIU YE CEN	柳叶桤	Willowleaf Ash Bark	T2779 <i>Fraxinus stylosa</i>
LIU YE MU LAN	柳叶木兰	Willowleaf Magnolia*	T4049 <i>Magnolia salicifolia</i>
LIU ZHI	柳枝	Babylon Weeping Willow Branch	T5651 <i>Salix babylonica</i>
LIU ZHUANG DAN YE YUN XIANG	瘤状单叶芸香	Tuberculate Rue*	T5633 <i>Ruta tuberculata</i> [Syn. <i>Haplophyllum tuberculatum</i> ]
LIU ZI SAI JIN LIAN MU	六籽赛金莲木*	Hexaseed Ouratea*	T4561 <i>Ouratea hexasperma</i>
LONG BAI	龙柏	Dragon Juniper	T3582 <i>Juniperus chinensis</i> var. <i>kaizuka</i>
LONG CHUAN HUA	龙船花	Chinese Ixora	T3549 <i>Ixora chinensis</i>
LONG DAN	龙胆	Rough Gentian	T2930 <i>Gentiana scabra</i>
LONG KUI	龙葵	Black Nightshade	T6008 <i>Solanum nigrum</i>
LONG NAO GAO XIANG	龙脑膏香	Borneol Oil-Resin	T2275 <i>Dryobalanops aromatica</i>
LONG SHENG XIANG CHA CAI	龙胜香茶菜	Longshen Rabdosia	T3510 <i>Isodon lungshengensis</i>
LONG SHU DU JUAN	陇蜀杜鹃	Przewalsk Rhododendron*	T5521 <i>Rhododendron przewalskii</i>
LONG TU ZHU	龙吐珠	Bleedingheart Glorybower	T1570 <i>Clerodendrum thomsonae</i>
LONG XIAN XIANG	龙涎香	Ambergris	T4855 <i>Physeter catodon</i>
LONG XU CAO	龙须草	Hard Bluegrass	T5033 <i>Poa sphondylodes</i>
LONG XU TENG	龙须藤	Champion Bauhinia	T0877 <i>Bauhinia championii</i>
LONG XUE SHU	龙血树	Dragon tree	T2254 <i>Dracaena draco</i>
LONG YA CAO	龙芽草	Hairyvein Agrimonia	T0248 <i>Agrimonia pilosa</i>

LONG YAN DU HUO	龙眼独活	Farges Aralia	T0574 <i>Aralia fargesii</i>
LONG YAN JING	龙眼睛	Reticulate Leafflower*	T4842 <i>Phyllanthus reticulatus</i>
LONG YAN YE	龙眼叶	Longan Leaf	T2627 <i>Euphoria longan</i> [Syn. <i>Dimocarpus longan</i> ]
LOU DI QING MEI	娄地青霉		T4698 <i>Penicillium roqueforti</i>
LOU DOU PAO NANG CAO	漏斗泡囊草	Funneled Physochlaina	T4858 <i>Physochlaina infundibularis</i>
LOU LU	漏芦	Uniflower Swissscentaury	T5466 <i>Rhaponticum uniflorum</i>
LU BEI GUI HUA	绿背桂花		T2651 <i>Excoecaria cochinchinensis</i> var. <i>viridis</i>
LU BIAN QING	路边青	Manyflower Glorybower Leaf	T1154 <i>Clerodendron cyrtophyllum</i>
LU BIAN ZI CAO	路边紫草	Wild Gromwell*	T3883 <i>Lithospermum ruderale</i>
LU CAO	鹿草	Redflowered Swissscentaury*	T5465 <i>Rhaponticum carthamoides</i>
LU CONG	鹿葱	Autumn Lycoris	T3988 <i>Lycoris squamigera</i>
LU CUI QUE	露翠雀	Denuded Larkspur*	T2071 <i>Delphinium denudatum</i>
LU DE WEI HAO	陆得威蒿	Western Sage	T0682 <i>Artemisia ludoviciana</i>
LU DI MIAN	陆地棉	Upland Cotton	T3058 <i>Gossypium hirsutum</i> [Syn. <i>Gossypium mexicanum</i> ]
LU DOU LE HUA	露兜筋花	Thatch Screwpine Flower	T4616 <i>Pandanus tectorius</i>
LU GEN	芦根	Common Reed Rhizome	T4829 <i>Phragmites communis</i>
LU HUI	芦荟(库拉索芦荟)	Kulaso Aloe Dried Juice	T0347 <i>Aloe vera</i> [Syn. <i>Aloe barbadensis</i> ]
LU JIAO CAI	鹿角菜	Furcate Gloiopeltis Frond	T2994 <i>Gloiopeltis furcata</i>
LU JIAO QI SHU	鹿角漆树	Stag's-horn Sumach	T5540 <i>Rhus typhina</i>
LU LU TONG	路路通	Beautiful Sweetgum	T3867 <i>Liquidambar formosana</i> [Syn. <i>Liquidambar taiwaniana</i> ]
LU RONG	鹿茸	Hairy Antler	T1137 <i>Cervus nippon</i> ; <i>Cervus elaphus</i>
LU RUI WU TOU	露蕊乌头	Nakedstamen Monkshood	T0099 <i>Aconitum gymnantrum</i>
LU SHAN SHI WEI	庐山石韦	Shearer's Pyrrosia Frond	T5360 <i>Pyrrosia sheareri</i>
LU SHAN XIANG CHA CAI	鲁山香茶菜	Lushan Rabdosia*	T3521 <i>Isodon rubescens</i> var. <i>lushanensis</i>
LU SHENG GE JUN	陆生革菌*	Terrestrial Thelephora*	T6421 <i>Thelephora terrestris</i>
LU SHI DONG LING CAO	卢氏冬凌草	Lushien Rabdosia*	T3522 <i>Isodon rubescens</i> var. <i>lushiensis</i>
LU SHUI CAO	露水草	Common Cyanotis	T1922 <i>Cyanotis vaga</i>
LU SUI GE MU	绿穗格木	Greenspik Erythrophleum*	T2483 <i>Erythrophleum chlorostachyum</i>
LU XIAN CAO	鹿衔草	Chinese Pyrola	T5345 <i>Pyrola calliantha</i> [Syn. <i>Pyrola rotundifolia</i> ssp. <i>chinensis</i> ]
LU YI CI JU	路易刺橘	Louis Vepris*	T6690 <i>Vepris louisii</i>
LU YU SHU	绿玉树	Malabartree Euphorbia	T2624 <i>Euphorbia tirucalli</i>
LU ZHU GEN	芦竹根	Giantreed Rhizome	T0722 <i>Arundo donax</i>
LU ZHU XIANG CHA CAI	露珠香茶菜	Dew Rabdosia	T3495 <i>Isodon irrorata</i>
LUAN BAN ZAO ZHUI	卵瓣蚤缀	Ovatepetal Sandwort	T0609 <i>Arenaria kansuensis</i> var. <i>ovatipeatala</i>
LUAN DA SHAN ZHANG YA CAI	峦大山獐芽菜*	Randain Swertia*	T6237 <i>Swertia randainensis</i>
LUAN HUA	栾华	Paniculate Goldraintree Flower	T3635 <i>Koelreuteria paniculata</i>
LUAN SHU	栾树	Paniculate Goldraintree Root-bark	T3636 <i>Koelreuteria paniculata</i>
LUAN YE HU JI SHENG	卵叶槲寄生	White Mistletoe	T6771 <i>Viscum album</i>
LUAN YE HU JIAO	卵叶胡椒	Ovateleaf Pepper	T4933 <i>Piper attenuatum</i>
LUAN YE MEI DENG MU	卵叶美登木	Ovateleaf Mayten*	T4138 <i>Maytenus ovatus</i>
LUAN YE SAN ZHE MAI ZI WAN	卵叶三褶脉紫苑	Ovate-leaf Threevein Aster*	T0777 <i>Aster ageratooides</i> var. <i>ovatus</i>
LUAN YE TENG HUANG	卵叶藤黄*	Ovateleaf Garcinia*	T2869 <i>Garcinia ovalifolia</i>
LUAN YE TIAN JIE CAI	卵叶天芥菜	Ovateleaf Heliotrope*	T3177 <i>Heliotropium ovalifolium</i>
LUAN YE WA ER TENG	卵叶娃儿藤*	Ovateleaf Tylophora	T6582 <i>Tylophora ovata</i>
LUAN YE YIN LIAN HUA	卵叶银莲花	Ovateleaf Anemone	T0465 <i>Anemone begoniifolia</i>
LUAN YUAN CHANG CHUN HUA	卵圆长春花	Oval Periwinkle*	T1269 <i>Catharanthus ovalis</i>
LUE DA AO DING ZAO	略大凹顶藻	Smaller Concave-top Alga*	T3718 <i>Laurencia majuscula</i>
LUN HUAN TENG	轮环藤	Racemose Cyclea	T1932 <i>Cyclea racemosa</i>

LUN SHENG SHAN XIANG	轮生山香*	Verticillate Bushmint*	T3383 <i>Hyptis verticillata</i>
LUO BO HUA LING CAO	罗勃花菱草	Lobb Poppy*	T2496 <i>Eschscholzia lobbii</i>
LUO BU MA	罗布麻	Dogbane	T0553 <i>Apocynum venetum</i>
LUO DI DAN CAO	裸地胆草	Node Elephantfoot*	T2335 <i>Elephantopus nudatus</i>
LUO DI SHENG GEN	落地生根	Air-plant	T1043 <i>Bryophyllum pinnatum</i>
LUO E YE XIA ZHU	落萼叶下珠	Flexuose Leafflower*	T4838 <i>Phyllanthus flexuosus</i>
LUO FU MU	萝芙木	Common Devilpepper	T5423 <i>Rauvolfia verticillata</i>
LUO FU MU JING YE	萝芙木茎叶	Common Devilpepper Stem and Leaf	T5424 <i>Rauvolfia verticillata</i>
LUO GUO DI	罗锅底	Lovely Hemsleya	T3203 <i>Hemsleya amabilis</i>
LUO HAN BAI	罗汉柏	Broadleaf Arborvitae Hiba	T6443 <i>Thuopsis dolobrata</i>
LUO HAN GUO	罗汉果	Grosvenor Siraitia	T5967 <i>Siraitia grosvenorii</i> [Syn. <i>Momordica grosvenorii</i> ]
LUO HAN SONG SHI	罗汉松实	Longleaf Podocarpus Seed	T5042 <i>Podocarpus macrophyllus</i>
LUO HAN SONG YE	罗汉松叶	Longleaf Podocarpus Leaf	T5043 <i>Podocarpus macrophyllus</i>
LUO HUA NAN MEI ROU DOU KOU	落花南美洲肉豆蔻*		T6768 <i>Virola caducifolia</i>
LUO HUA SHENG	落花生	Peanut	T0559 <i>Arachis hypogaea</i>
LUO HUA SHENG YOU	落花生油	Peanut Oil	T0560 <i>Arachis hypogaea</i>
LUO HUA SHENG ZHI YE	落花生枝叶	Peanut Branch-leaf	T0561 <i>Arachis hypogaea</i>
LUO JI SHAN YUAN BAI	落矶山圆柏	Western Red Cedar	T3597 <i>Juniperus scopulorum</i>
LUO JING ER CAO	裸茎耳草	Nude-stem Eargrass*	T3127 <i>Hedyotis nudicaulis</i>
LUO KE SI BAO MI ZI LAN	罗克斯堡米仔兰	Roxburg Aglaia*	T0244 <i>Aglaia roxburghiana</i>
LUO KUI HUA	落葵花	Red Vinespinach flower	T0875 <i>Basella rubra</i>
LUO KUI SHU	落葵薯		T0515 <i>Anredera cordifolia</i> [Syn. <i>Baussingaultia cordifolia</i> ; <i>Baussingaultia gracilis</i> f. <i>pseudobaselloides</i> ; <i>Baussingaultia gracilis</i> var. <i>pseudobaselloides</i> ]
LUO LE	罗勒	Basil	T4470 <i>Ocimum basilicum</i>
LUO LE ZI	罗勒子	Basil Fruit	T4471 <i>Ocimum basilicum</i>
LUO MO	萝摩	Japanese Metaplexis	T4206 <i>Metaplexis japonica</i>
LUO MO ZI	萝摩子	Japanese Metaplexis Seed	T4207 <i>Metaplexis japonica</i>
LUO SAN SHU	罗伞树	Pentagonous Ardisia	T0602 <i>Ardisia quinquegona</i>
LUO SHI TENG	络石藤	Chinese Star Jasmine	T6484 <i>Trachelospermum jasminoides</i>
LUO SUI TUN CAO	裸穗豚草	Perennial Ragweed	T0405 <i>Ambrosia psilostachya</i>
LUO TUO CI	骆驼刺	Manaplant Alhagi Sweet Secretion	T0302 <i>Alhagi pseudalhagi</i>
LUO TUO HAO	骆驼蒿	Little Peganum	T4689 <i>Peganum nigellastrum</i>
LUO TUO PENG	骆驼蓬	Common Peganum	T4687 <i>Peganum harmala</i>
LUO TUO PENG ZI	骆驼蓬子	Common Peganum Seed	T4688 <i>Peganum harmala</i>
LUO XI YANG ER SUAN	洛西羊耳蒜	Fen Orchid	T3862 <i>Liparis loeselii</i>
LUO XIAO E TAI	裸小萼苔		T4339 <i>Mylia nuda</i>
LUO XIN FU	落新妇	Chinese Astilbe	T0784 <i>Astilbe chinensis</i>
LUO XUAN JIN HE HUAN	螺旋金合欢*	Spiral Acacia*	T0031 <i>Acacia spirorbis</i>
LUO YAN CAO	螺厝草	Littleleaf Lemnaphyllum Herb	T3736 <i>Lemnaphyllum microphyllum</i>
LUO YE SONG	落叶松	Dahurian Larch	T3690 <i>Larix gmelini</i>
LUO YE SONG YE JIN SI TAO	落叶松叶金丝桃*	Larch-leaf St.John'swort*	T3358 <i>Hypericum laricifolium</i>
LUO YU SHAN	落羽杉	Deciduous Cypress	T6305 <i>Taxodium distichum</i>
LV BAI TIAN XIAN TENG	绿白天仙藤	Chloro-white Fibraurea*	T2714 <i>Fibraurea chloroleuca</i>
LV CAO	律草	Japanese Hop	T3288 <i>Humulus japonicus</i> [Syn. <i>Humulus scandens</i> ]
LV DOU	驴豆	Common Sainfoin	T4491 <i>Onobrychis viciifolia</i>
LV GAN BAI	绿干柏	Arizona Cypress	T1895 <i>Cupressus arizonica</i>
LV HAI KUI	绿海葵	Green Anemone	T0526 <i>Anthopleura stell</i>
LV LI LU	绿藜芦	Green Falsehellebore	T6700 <i>Veratrum viride</i>

LV SE MU MEI	绿色木霉		T6503 <i>Trichoderma virida</i>
LV SONG GUO	吕宋果	Ignat Poisonnut Seed	T6177 <i>Strychnos ignatii</i>
LV SONG JIA MI	吕宋荚蒾	Luzon Viburnum*	T6737 <i>Viburnum luzonicum</i>
LV SONG QIU MAO	吕宋楸毛	Kamalatree	T4084 <i>Mallotus philippinensis</i>
LV SUN PIAN	绿笋片	Oldham Bamboo Shoot	T5961 <i>Sinocalamus oldhami</i>
LV TANG SONG CAO	绿唐松草	Glaucous Meadowrue*	T6390 <i>Thalictrum glaucum</i>
LV TI CAO YE TUO WU	驴蹄草叶橐吾	Marshmarigold-like Goldenray*	T3800 <i>Ligularia calthaefolia</i>
LV TI GEN CAO	绿嚏根草	Green Hellebore*	T3189 <i>Helleborus viridis</i>
LV XIAN REN ZHANG	绿仙人掌	Common Prickly Pear	T4521 <i>Opuntia vulgaris</i>
LV ZAO JI GEN YING MAO ZAO	绿藻基根硬毛藻		T1346 <i>Chaetomorpha basiretorsa</i>
LV ZI SHAN XIAO JU	绿籽山小橘*		T3005 <i>Glycosmis chlorosperma</i>
MA BI MU	马比木	Pittosporumlike Nothapodytes	T4439 <i>Nothapodytes pittosporoides</i>
MA BIAN CAO	马鞭草	European Verbena	T6709 <i>Verbena officinalis</i>
MA BING LANG	马槟榔	Masaikai Caper	T1179 <i>Capparis masaikai</i>
MA BO	马勃	Bark-less Puff-ball	T3701 <i>Lasiosphaera fenzi</i>
MA CAN DOU	马蚕豆	Horse Bean	T6748 <i>Vicia faba</i> var. <i>equina</i>
MA CHANG LI ZI JIN	马长里紫堇	Marschall Corydalis *	T1724 <i>Corydalis marschalliana</i>
MA CHI XIAN	马齿苋	Purslane	T5173 <i>Portulaca oleracea</i>
MA DAN GUO	马蛋果	Fragrant Gynocardia	T3082 <i>Gynocardia odorata</i>
MA DAO CHOU TAN	马岛臭檀	Madagascar Evodia*	T2642 <i>Evodia madagascariensis</i>
MA DAO HA NI MU	马岛哈尼木	Madagascar Hani-wood*	T3110 <i>Harungana madagascariensis</i>
MA DAO HUANG LIAN SHU	马岛黄楝树*	Fatraina (in Madagascar)	T5702 <i>Samadera madagascariensis</i>
MA DAO SI WO CI DOU	马岛斯沃茨豆	Madagascar Swartzia*	T6211 <i>Swartzia madagascariensis</i>
MA DE LI MIAN ZAO ER	马德里绵枣儿*	Madrid Squill*	T5810 <i>Scilla maderensis</i> [Syn. <i>Autonoë madeirensis</i> ]
MA DOU LING	马兜铃	Slender Dutchmanspipe	T0626 <i>Aristolochia debilis</i> [Syn. <i>Aristolochia longa</i> ]
MA DU LA ZHU SHI DOU	马都拉猪屎豆	Madura Crotalaria*	T1825 <i>Crotalaria madurensis</i>
MA ER SHAN WU TOU	马耳山乌头	Delavy Monkshood	T0090 <i>Aconitum delavayi</i>
MA FENG MU	马疯木	Manchineel	T3252 <i>Hippomane mancinella</i>
MA FENG SHU	麻风树	Leprous Tree	T3560 <i>Jatropha curcas</i>
MA GEN	麻根	Hemp Fimble Root	T1174 <i>Cannabis sativa</i>
MA GUI HUA	马桂花	Manynerve Embelia	T2346 <i>Embelia oblongifolia</i>
MA HUA	麻花	Hemp Fimble Flower*	T1175 <i>Cannabis sativa</i>
MA HUA JIAO	麻花苳	Straw-coloured Gentian	T2934 <i>Gentiana straminea</i>
MA HUANG	麻黄(草麻黄)	Chinese Ephedra	T2380 <i>Ephedra sinica</i>
MA HUANG GEN	麻黄根	Chinese Ephedra Root	T2381 <i>Ephedra sinica</i>
MA LA BA CHU	马拉巴樗	Hairyleaf South Ailanthus	T0258 <i>Ailanthus malabarica</i>
MA LA BA JIAN MU	马拉巴榿木*	Malaba Pencilwood*	T2312 <i>Dysoxylum malabaricum</i>
MA LA BA YANG TI JIA	马拉巴羊蹄甲*	Malaba Bauhinia*	T0878 <i>Bauhinia malabarica</i>
MA LAI BAN DAO RAN MU SHU	马来半岛染木树*	Malaya Dieingtree*	T5729 <i>Saprosma scortechinii</i>
MA LAI XI YA HUANG YANG	马来西亚黄杨*	Malaysian Box*	T1090 <i>Buxus malaiana</i>
MA LAI XI YA MAI MA TENG	马来西亚买麻藤	Spinach-like Jointfir	T3029 <i>Gnetum gnetonoides</i>
MA LAI XI YA RUI MU	马来西亚蕊木	Malaysia Kopsia*	T3641 <i>Kopsia griffithii</i>
MA LAN GEN	马蓝根	Common Baphicacanthus Root	T0866 <i>Baphicacanthus cusia</i> [Syn. <i>Strobilanthes cusia</i> ]
MA LAN YE	马蓝叶	Common Baphicacanthus Leaf	T0867 <i>Baphicacanthus cusia</i> [Syn. <i>Strobilanthes cusia</i> ]
MA LIAN	麻楝	Chittagong Chickrassy	T1410 <i>Chukrasia tabularis</i>
MA LIN	马蔺	Chinese Iris	T3465 <i>Iris pallasii</i> var. <i>chinensis</i>
MA LIN ZI	马蔺子	Chinese Iris	T3464 <i>Iris lactea</i> var. <i>chinensis</i> [Syn. <i>Iris pallasii</i> var. <i>chinensis</i> ]

MA LING SHU	马铃薯	Potato	T6017 <i>Solanum tuberosum</i>
MA LIU JIA YU TENG	马六甲鱼藤	Malacca Jewelvine*	T2120 <i>Derris malaccensis</i>
MA LIU YE	麻柳叶	Chinese Wingnut	T5308 <i>Pterocarya stenoptera</i>
MA NIAO PAO	马尿泡	Tangut Przewalskia	T5247 <i>Przewalskia tangutica</i>
MA NIU XI	麻牛膝	Capitate Cyathula	T1923 <i>Cyathula capitata</i>
MA QIAN ZI	马钱子	Nut-vomitive Poissonnut	T6184 <i>Strychnos nux-vomica</i>
MA SANG	马桑	Chinese Coriaria	T1692 <i>Coriaria sinica</i> [Syn. <i>Coriaria nepalensis</i> ]
MA SANG YE	马桑叶	Chinese Coriaria Leaf	T1693 <i>Coriaria sinica</i> [Syn. <i>Coriaria nepalensis</i> ]
MA SHAN QIAN HU	马山前胡	Mashan Hogfennel	T4762 <i>Peucedanum mashanens</i>
MA SHI DA HUANG	马氏大黄*	Maximowicz Rhubarb*	T5470 <i>Rheum maximowiczii</i>
MA SHI JIN YAO	马氏金腰*	Maximowicz Goldsaxifrage*	T1405 <i>Chrysosplenium maximowiczii</i>
MA SHI LU HUI	马氏芦荟	Marloth Aloe	T0341 <i>Aloe marlothii</i>
MA SHI XIANG KE KE	马氏香科科	Cat Thyme	T6362 <i>Teucrium marum</i>
MA SHI XIANG RI KUI	马氏向日葵*	Maximilian's Sunflower	T3149 <i>Helianthus maximiliani</i>
MA SI TE SI DU YING	马斯特斯杜英	Masters Elaeocarpus	T2329 <i>Elaeocarpus mastersii</i>
MA TI WEN TIAN ZHU KUI	马蹄纹天竺葵	Zonal Geranium	T4694 <i>Pelargonium zonale</i>
MA TI YE	马蹄叶	Common Marsharigold	T1137 <i>Caltha palustris</i>
MA TONG HUA	马桶花	Sharptooth Incarvillea	T3418 <i>Incarvillea arguta</i>
MA WEI LIAN	马尾连	Manyleaf Meadowrue	T6387 <i>Thalictrum foliolosum</i>
MA WEI SHAN	马尾杉	Slender Phlegmariusus	T4801 <i>Phlegmariusus phlegmaria</i> [Syn. <i>Lycopodium phlegmaria</i> ]
MA WEI SONG YE	马尾松叶	Masson Pine Leaf:	T4916 <i>Pinus massoniana</i>
MA YE	麻叶	Hemp Fimble Leaf	T1176 <i>Cannabis sativa</i>
MA YE QIAN LI GUANG	麻叶千里光	Hempleaf Groundsel	T5883 <i>Senecio cannabifolius</i>
MA YIN HUA	马银花	Ovateleaf Rhododendron*	T5520 <i>Rhododendron ovatum</i> [Syn. <i>Rhododendron lamprophyllum</i> ; <i>Azalea ovata</i> ]
MA ZHUANG QIE	麻状茄*	Abutilon Nightshade*	T5988 <i>Solanum abutiloides</i>
MA ZHUANG SAI YA MA	马状赛亚麻	Hippomane Cupflower*	T4429 <i>Nierembergia hippomanica</i>
MAI DONG	麦冬	Liriope	T4507 <i>Ophiopogon japonicus</i>
MAI JIA GONG	麦家公	Corn Gromwell	T3880 <i>Lithospermum arvense</i>
MAI JIAO	麦角菌	Ergot	T1541 <i>Claviceps purpurea</i>
MAI KE LIN JIU	麦克林韭	MacLean Leek*	T0315 <i>Allium macleanii</i>
MAI XIAN WENG	麦仙翁	Githago Agrostemma	T0252 <i>Agrostemma githago</i>
MAI YA	麦芽	Barley Germinating Fruit	T3282 <i>Hordeum vulgare</i>
MAN CHANG CHUN HUA	蔓长春花	Common Periwinkle	T6761 <i>Vinca minor</i>
MAN GE YING ZHAO	曼戈鹰爪	Mainge Tailgrape*	T0654 <i>Artabotrys maingayi</i>
MAN HUO XIANG	蔓藿香		T6371 <i>Teucrium viscidum</i> var. <i>miquelianum</i>
MAN JIANG HONG	满江红	Imbricate Mosquito Fern	T0838 <i>Azolla imbricata</i> [Syn. <i>Salvinia imbricata</i> ]
MAN JING YE	蔓荆叶	Threeleaf Chastetree Leaf	T6792 <i>Vitex trifolia</i>
MAN JING ZI	蔓荆子	Threeleaf Chastetree Fruit	T6793 <i>Vitex trifolia</i>
MAN JIU JIE	蔓九节	Creeping Ninenode	T5279 <i>Psychotria serpens</i>
MAN LI YU	鳃鲰鱼	Japanese Eel	T0500 <i>Anguilla japonica</i>
MAN NI DUO TAN CAO	曼尼多坦草*		T2250 <i>Dorstenia mannii</i>
MAN NI PU ER SHI DA GONG LAO	曼尼普尔十大功劳	Manipur Mahonia	T4070 <i>Mahonia manipurensis</i>
MAN SHAN HONG	满山红(兴安杜鹃)	Dahurian Rhododendron	T5508 <i>Rhododendron dauricum</i>
MAN SHENG JUAN BAI	蔓生卷柏	David's Spikemoss	T5860 <i>Selaginella davidii</i>
MAN SUO NI YA XIN CAI	曼索尼亚心材	Mansonia Heartwood	T4107 <i>Mansonia gagei</i>
MAN TENG HUANG	曼藤黄*	Mann Garcinia*	T2864 <i>Garcinia mannii</i>
MAN TUO LUO GEN	曼陀罗根	Hindu Datura Root	T2041 <i>Datura metel</i>
MAN TUO LUO YE	曼陀罗叶	Hindu Datura Leaf	T2042 <i>Datura metel</i>
MAN TUO LUO ZI	曼陀罗子	Hindu Datura Seed	T2043 <i>Datura metel</i>

MAN XING QIAN JIN BA	蔓性千斤拔	Philippine Flemingia	T2737 <i>Flemingia philippinensis</i> [Syn. <i>Moghania philippinensis</i> ]
MAN ZHI LONG DAN	蔓枝龙胆	Spread Gentian	T2917 <i>Gentiana leptoclada</i>
MANG GUO	杧果	Mango	T4099 <i>Mangifera indica</i>
MANG GUO HE	杧果核	Mango Seed	T4100 <i>Mangifera indica</i>
MANG GUO SHU PI	杧果树皮	Mango Bark	T4101 <i>Mangifera indica</i>
MANG GUO YE	杧果叶	Mango Leaf	T4102 <i>Mangifera indica</i>
MANG JING	芒茎	Chinese Silvergrass	T4254 <i>Miscanthus sinensis</i>
MANG NIU ER MIAO	牻牛儿苗	Common Heron's Bill	T2438 <i>Erodium stephanianum</i>
MANG QI GU	芒萁骨	Dichotoma Forked Fern	T2161 <i>Dicranopteris pedata</i> [Syn. <i>Polypodium pedatum</i> ; <i>Dicranopteris dichotoma</i> ]
MANG SHE	蟒蛇	Indian Python	T5368 <i>Python molurus bivittatus</i>
MAO BA JIAO FENG	毛八角枫	Kurz Alangium	T0282 <i>Alangium kurzii</i>
MAO BAI YANG	毛白杨	Chinese White Poplar	T5161 <i>Populus tomentosa</i>
MAO CAO LONG	毛草龙	Water Seedbox*	T3932 <i>Ludwigia octovalvis</i>
MAO CAO YE	茅草叶	Lalang Grass Leaf	T3417 <i>Imperata cylindrica</i> var. <i>major</i>
MAO CHUN BEI MU LAN	毛唇贝母兰	Cristate Coelogyne	T1605 <i>Coelogyne cristata</i>
MAO CI JIN JI ER	毛刺锦鸡儿	Tibet Peasshrub	T1193 <i>Caragana tibetica</i>
MAO DA DING CAO	毛大丁草	Pilose Gerbera	T2952 <i>Gerbera piloselloides</i>
MAO DAO DI LING	毛倒地铃	Hairy Heartseed*	T1198 <i>Cardiospermum hirsutum</i>
MAO DI HUANG	毛地黄(紫花洋地黄)	Common Foxglove	T2177 <i>Digitalis purpurea</i>
MAO DI HUANG SHU WEI CAO	毛地黄鼠尾草	Foxglove-like Sage	T5671 <i>Salvia digitaloides</i>
MAO DI QIAN	毛地钱		T2293 <i>Dumortiera hirsuta</i>
MAO DONG QING	毛冬青	Pubescent Holly	T3396 <i>Ilex pubescens</i>
MAO DOU	猫豆	Cochinchina Mucuna*	T4309 <i>Mucuna cochinchinensis</i>
MAO DU XING CAI	毛独行菜	Hoary Pepperwort	T3757 <i>Lepidium draba</i>
MAO E MEI	毛萼梅	Hairysepal Raspberry	T5590 <i>Rubus chroosepalus</i>
MAO E XIANG CHA CAI	毛萼香茶菜	Hairysepal Rabdosia	T5391 <i>Rabdosia eriocalyx</i>
MAO GAO CAI	茅膏菜	Lunate Peltate Sundew	T2267 <i>Drosera peltata</i> var. <i>lunata</i>
MAO GEN	毛茛	Japanese Buttercup	T5414 <i>Ranunculus japonicus</i>
MAO GENG HONG MAO WU JIA	毛梗红毛五加	Hispidus Girald Acanthopanax	T0037 <i>Acanthopanax giraldii</i> var. <i>hispidus</i>
MAO GENG XI XIAN	毛梗豨薟	Hairstalk St. Paulswort	T5951 <i>Siegesbeckia orientalis</i> var. <i>glabrescens</i> [Syn. <i>Siegesbeckia glabrescens</i> ]
MAO GENG XIA YE XIANG CHA CAI	毛梗狭叶香茶菜	Hairstalk Narrowleaf Rabdosia*	T3481 <i>Isodon angustifolius</i> var. <i>glabrescens</i>
MAO GOU TENG	毛钩藤	Hirsute Gambirplant*	T6617 <i>Uncaria hirsuta</i>
MAO GUAN ZHONG	毛贯众	Champion Wood Fern	T2279 <i>Dryopteris championii</i>
MAO GUO DI JIN	毛果地锦	Groundfig Spurge	T2581 <i>Euphorbia chamaesyce</i>
MAO GUO DU JUAN	毛果杜鹃	Hairfruit Rhododendron*	T5522 <i>Rhododendron seniavinii</i>
MAO GUO HAN XIAO	毛果含笑	Hairyfruit Michelia	T4214 <i>Michelia spaerantha</i>
MAO GUO MA LI JIN	毛果马利筋*	Hairyfruit Milkweed*	T0737 <i>Asclepias eriocarpa</i>
MAO GUO QI	毛果槭	Nikoo Maple	T0050 <i>Acer nikoense</i>
MAO GUO SUAN PAN ZI	毛果算盘子	Hairypod Glochidion*	T2988 <i>Glochidion eriocarpum</i>
MAO GUO TIAN JIE CAI	毛果天芥菜	Hairyfruit Heliotrope*	T3175 <i>Heliotropium lasiocarpum</i>
MAO GUO XIANG CHA CAI	毛果香茶菜	Hairyfruit Rabdosia*	T3530 <i>Isodon trichocarpa</i>
MAO GUO YANG	毛果杨	Black Cottonwood	T5164 <i>Populus trichocarpa</i>
MAO GUO YI HE GUO	毛果翼核果	Hairyfruit Ventilago	T6688 <i>Ventilago calyculata</i>
MAO GUO YI ZHI HUANG HUA	毛果一枝黄花	European Goldenrod	T6023 <i>Solidago virgaurea</i>
MAO GUO YU TENG	毛果鱼藤	Hairyrod Fishvane	T2119 <i>Derris eriocarpa</i>
MAO GUO YUN XIANG	毛果芸香		T4891 <i>Pilocarpus jaborandi</i>
MAO HANG ZI SHAO	毛杭子梢	Hairy Clovershrub	T1163 <i>Campylotropis hirtella</i>
MAO HOU QIAO RUI HUA	毛喉鞘蕊花	Forskahl Coleus	T1620 <i>Coleus forskahlii</i>



MAO HUA MAO DI HUANG	毛花毛地黄	Grecian Foxglove	T2175 <i>Digitalis lanata</i>
MAO HUA MI HOU TAO	毛花猕猴桃	Hairyflower Actinidia	T0161 <i>Actinidia eriantha</i>
MAO HUA SHI NAN	毛花石楠	Hairyflower Photinia*	T4826 <i>Photinia lactiflora</i>
MAO JIAN QIU LUO	毛剪秋罗	Hairy Campion	T3948 <i>Lychnis coronaria</i>
MAO JIE XIE CAO	毛节缣草	Hairnode Valeriana*	T6674 <i>Valeriana alternifolia</i> var. <i>stolonifera</i>
MAO JU	毛茛	Hairy Pepper	T4962 <i>Piper puberulum</i>
MAO LIAN HAO	毛莲蒿	Hairy Wormwood	T0705 <i>Artemisia vestita</i>
MAO LIE FENG DOU CAI	毛裂蜂斗菜*	Hairylobed Butterbur	T4745 <i>Petasites tricholobus</i>
MAO MA CHI XIAN	毛马齿苋	Pilose Purslane*	T5174 <i>Portulaca pilosa</i>
MAO MAI LIAO	毛脉蓼		T5018 <i>Pleuropterus ciliinervis</i>
MAO MAN TUO LUO GEN	毛曼陀罗根	Hairy Datura Root	T2036 <i>Datura innoxia</i>
MAO MAN TUO LUO HUA	毛曼陀罗花	Hairy Datura Flower	T2037 <i>Datura innoxia</i>
MAO MAN TUO LUO YE	毛曼陀罗叶	Hairy Datura Leaf	T2038 <i>Datura innoxia</i>
MAO MAN TUO LUO ZI	毛曼陀罗子	Hairy Datura Seed	T2039 <i>Datura innoxia</i>
MAO MEI	茅莓	Japanese Raspberry	T5595 <i>Rubus parviflorus</i>
MAO PAO TONG	毛泡桐	Royal Paulownia	T4679 <i>Paulownia tomentosa</i>
MAO REN GE JUN	毛韧革菌		T6143 <i>Stereum hirsutum</i>
MAO RUI HUA	毛蕊花	Flannel Mullein	T6705 <i>Verbascum thapsus</i>
MAO RUI HUA YE TU MU XIANG	毛蕊花叶土木香	Mulleinleaf Inula*	T3440 <i>Inula verbascifolia</i>
MAO SHAN ZHA	毛山楂	Maximowicz Hawthorn	T1772 <i>Crataegus maximowiczii</i>
MAO SHI JUN ZI	毛使君子	Villous Rangooncreeper*	T5386 <i>Quisqualis indica</i> var. <i>villosa</i>
MAO SHU	毛薯	Winged Yam	T2188 <i>Dioscorea alata</i>
MAO SHU MEI	毛束莓		T6515 <i>Trichurus terrophilus</i>
MAO SUI HU JIAO	毛穗胡椒	Hairspike Pepper*	T4971 <i>Piper trichostachyon</i>
MAO TOU RU GU	毛头乳菇	Pink-fringed Milky	T3656 <i>Lactarius torminosus</i>
MAO XIAN MAO	毛仙茅*	Pilose Curculigo*	T1902 <i>Curculigo pilosa</i>
MAO XIAN ZHU JU TAI	毛线柱苴苔	Hairy Rhynchotechum	T5543 <i>Rhynchotechum vestitum</i>
MAO XIANG HUA	茅香花	Vanillagrass	T3250 <i>Hierochloa odorata</i>
MAO XU CAO	猫须草	Spicate Clerodendranthus	T1553 <i>Clerodendranthus spicatus</i>
MAO YAN CAO	猫眼草	Crescent-shaped Euphorbia	T2599 <i>Euphorbia lunulata</i>
MAO YANG MEI	毛杨梅	Hairy Bayberry	T4343 <i>Myrica esculent</i>
MAO YE BA DOU	毛叶巴豆	Tomentose Caudate Croton	T1841 <i>Croton caudatus</i> var. <i>tomentosus</i>
MAO YE FAN LI ZHI	毛叶番荔枝	Cherimoya	T0505 <i>Annona cherimolia</i>
MAO YE JIA YING ZHAO GEN	毛叶假鹰爪根	Piloseleaf Desmos Root	T2137 <i>Desmos dumosus</i>
MAO YE LI LU	毛叶藜芦	Largeflower Falsehellebore	T6697 <i>Veratrum grandiflorum</i>
MAO YE WEI MAO	毛叶卫矛	Sacred Spindle-tree	T2546 <i>Euonymus sacrosancta</i>
MAO YE XIANG CHA CAI	毛叶香茶菜	Japanese Rabdosia	T3496 <i>Isodon japonica</i> [Syn. <i>Rabdosia japonica</i> ]
MAO YU TENG	毛鱼藤	Tubaroot Jewelvine	T2118 <i>Derris elliptica</i>
MAO ZHANG YA CAI	毛獐牙菜	Pubescent Swertia	T6232 <i>Swertia pubescens</i>
MAO ZHI HUA	毛枝桦	Pubescent Birch*	T0934 <i>Betula pubescens</i>
MAO ZHI JUAN BAI	毛枝卷柏	Braun's Spikemoss	T5859 <i>Selaginella braunii</i>
MAO ZHU MA QIAN	毛竹马钱	Hairstyle Poisonnut	T6183 <i>Strychnos nitida</i>
MAO ZHU YE HUA JIAO	毛竹叶花椒	Armata-leaf Pricklyash*	T6864 <i>Zanthoxylum armatum</i>
MEI GUAN MA XIAN HAO	美观马先蒿	Smallecalyx Woodbetony	T4681 <i>Pedicularis decora</i>
MEI GUI HONG JIN	玫瑰红堇	Rose Corydalis*	T1737 <i>Corydalis rosea</i>
MEI GUI HUA	玫瑰花	Rugose Rose Flower	T5572 <i>Rosa rugosa</i>
MEI GUO BIAN FU GE	美国蝙蝠葛	Canada Moonseed	T4181 <i>Menispermum canadense</i>
MEI GUO BO HE	美国薄荷	Oswegotea	T4269 <i>Monarda didyma</i>
MEI GUO CI JIAO	美国刺椒	Hercules' Club	T6871 <i>Zanthoxylum clava-hercules</i>
MEI GUO HAI MO JU	美国海墨菊	Burro Bush	T3322 <i>Hymenoclea salsola</i>
MEI GUO KE YA SHU	美国柯桤树*	American Vouacapoua*	T6804 <i>Vouacapoua americana</i>

MEI GUO QING TENG	美国青藤	Carolina Snailseed*	T1584 <i>Cocculus carolinus</i>
MEI GUO SHAN HE TAO	美国山核桃	Pecan	T1218 <i>Carya illinoensis</i>
MEI GUO XIA LA MEI	美国夏腊梅	Carolina Allspice	T1139 <i>Calycanthus floridus</i>
MEI GUO ZI	美国梓	Southern Catalpa	T1260 <i>Catalpa bignonioides</i>
MEI HE REN	梅核仁	Japanese Apricot Kernel	T5227 <i>Prunus mume</i>
MEI HUA FENG MAO JU	美花风毛菊	Beautiful-flowered Saussurea	T5767 <i>Saussurea pulchella</i>
MEI HUA SHI HU	美花石斛	Loddiges Dendrobium	T2105 <i>Dendrobium loddigesii</i>
MEI LI BU KU	美丽布枯*	Rutaceae Diosma	T1617 <i>Coleonema pulchellum</i>
MEI LI FAN HONG HUA	美丽番红花	Pretty Crocus	T1809 <i>Crocus speciosus</i>
MEI LI HAI YING SU	美丽海罂粟*	Beautiful Hornpoppy*	T2971 <i>Glaucium pulchrum</i>
MEI LI HE BAO MU DAN	美丽荷包牡丹	Bleedingheart	T2150 <i>Dicentra formosa</i>
MEI LI HONG DOU SHAN	美丽红豆杉	Maire Yew	T6312 <i>Taxus mairei</i>
MEI LI HUA QIU	美丽花楸	Showy Mountainsah	T6054 <i>Sorbus decora</i>
MEI LI JIN SI TAO	美丽金丝桃	Beautiful St.John'swort	T3342 <i>Hypericum bellum</i>
MEI LI MA LI JIN	美丽马利筋	Beautiful Milkweed*	T0739 <i>Asclepias speciosa</i>
MEI LI MA ZUI MU	美丽马醉木	Taiwan Pieris*	T4889 <i>Pieris formosa</i>
MEI LI MAO ZHU MU	美丽帽柱木	Beautiful Mitragyna*	T4258 <i>Mitragyna speciosa</i>
MEI LI TE LE JU	美丽特勒菊		T6326 <i>Telekia speciosa</i>
MEI LI TENG HUANG	美丽藤黄*	Beautiful Garcinia*	T2875 <i>Garcinia speciosa</i>
MEI LI XIN MU JIANG ZI	美丽新木姜子	Beautiful Newlitse	T4405 <i>Neolitsea pulchella</i>
MEI LI XUAN FU HUA	美丽旋覆花*	Beautiful Inula*	T3435 <i>Inula magnifica</i>
MEI LI YE HUI MAO DOU	美丽叶灰毛豆*	Beautiful-leaf Tephrosia*	T6332 <i>Tephrosia calophylla</i>
MEI LI YIN BEI TENG	美丽银背藤*	Woolly Morning Glory	T0616 <i>Argyreia speciosa</i>
MEI LI ZHU SHI DOU	美丽猪屎豆	Beautiful Crotalaria	T1834 <i>Crotalaria spectabilis</i>
MEI SHANG LU	美商陆	American Pokeweed	T4861 <i>Phytolacca americana</i> [Syn. <i>Phytolacca decandra</i> ]
MEI SUI XIAO BO	美穗小檗	Beautiful-raceme Barberry	T0900 <i>Berberis calliobotrys</i>
MEI TE NI DU JUAN HUA	梅特尼杜鹃花	Metternich Rhododendron*	T5514 <i>Rhododendron metternichii</i> var. <i>hondoese</i>
MEI WEI CHI JUN	美味齿菌	Sweet Tooth	T3302 <i>Hydnum repandum</i>
MEI WEI HONG GU	美味红菇	Milk-white Russula	T5620 <i>Russula delica</i>
MEI WEI MI HOU TAO	美味猕猴桃	Delicious Actinidia	T0160 <i>Actinidia deliciosa</i>
MEI YI	梅衣	Tinctorial Parmelia*	T4658 <i>Parmelia tinctorum</i>
MEI YUAN ZHI	美远志	Senega Snakeroot	T5084 <i>Polygala senega</i>
MEI ZHOU CHA MU	美洲檫木	Sassafras	T5744 <i>Sassafras albidum</i>
MEI ZHOU CI SHEN	美洲刺参	American Spineginseng*	T4517 <i>Oplopanax horridus</i>
MEI ZHOU CI TONG	美洲刺桐	American Coralbean*	T2458 <i>Erythrina americana</i>
MEI ZHOU GAN CAO	美洲甘草	Scale Licorice*	T3017 <i>Glycyrrhiza lepidota</i>
MEI ZHOU GUAN YIN LIAN	美洲观音莲	Skunk Cabbage	T3994 <i>Lysichitum americanum</i>
MEI ZHOU HUA JIAO	美洲花椒	Pricklyash	T6863 <i>Zanthoxylum americanum</i> [Syn. <i>Xanthoxylum americanum</i> ]
MEI ZHOU JIN LV MEI	美洲金缕梅	Virginia Witch Hazel	T3095 <i>Hamamelis virginiana</i>
MEI ZHOU KU MU	美洲苦木	Surinam Quassia	T5370 <i>Quassia amara</i>
MEI ZHOU LU QI MU	美洲绿桤木	American Green Alder	T0325 <i>Alnus crispa</i>
MEI ZHOU MAN MI PING GUO	美洲曼密苹果	Mammee Apple	T4093 <i>Mammea americana</i>
MEI ZHOU NAN SHE TENG	美洲南蛇藤	American Bittersweet	T1293 <i>Celastrus scandens</i>
MEI ZHOU SAN BAI CAO	美洲三白草	Lizard's-tail	T5749 <i>Saururus cernuus</i>
MEI ZHOU SUAN GUO LUO	美洲酸果萝	American Cranberry	T6671 <i>Vaccinium macrocarpon</i>
MEI ZHOU TUN CAO	美洲豚草	American Ragweed*	T0397 <i>Ambrosia artemisiaefolium</i> )
MEI ZHOU XUE GEN CAO	美洲血根草	Bloodroot	T5709 <i>Sanguinaria canadensis</i>
MEI ZHOU YE BAI HE	美洲野百合	American Crotalaria*	T1814 <i>Crotalaria anagyroides</i>
MEI ZHOU YU	美洲榆	American Elm	T6594 <i>Ulmus americana</i>
MENG DA NA CHUN HUANG JU	蒙大拿春黄菊	Montana Chamomile*	T0522 <i>Anthemis cretica</i> ssp. <i>cretica</i> [Syn.

MENG DA NA SHAN XIAO JU	蒙大拿山小橘*	Montana Glycosmis*	<i>Anthemis montana</i>
MENG DA NA YUN XIANG	蒙大拿芸香	Montana Rue*	T3007 <i>Glycosmis montana</i>
MENG DA NA ZI JIN	蒙大拿紫堇*	Montana Corydalis*	T5628 <i>Ruta montana</i>
MENG DI TENG	蒙迪藤		T1726 <i>Corydalis montana</i>
MENG GU CAO SU	蒙古糙苏	Mongolian Jerusalem sage	T4271 <i>Mondia whitei</i>
MENG GU CE JIN ZHAN HUA	蒙古侧金盏花	Mongolian Adonis*	T4810 <i>Phlomis mongolica</i>
MENG GU FENG MAO JU	蒙古风毛菊	Mongolian Saussurea*	T0187 <i>Adonis mongolica</i>
MENG GU HAO	蒙古蒿	Mongolian Wormwood	T5760 <i>Saussurea mongolica</i>
MENG GU HUANG QI	蒙古黄芪	Mongolian Milkvetch	T0685 <i>Artemisia mongolica</i>
MENG GU LI	蒙古栎	Mongolian Oak	T0800 <i>Astragalus mongholicus</i>
MENG GU SHAN LUO BO	蒙古山萝卜	Narrowleaf Scabious	T5375 <i>Quercus mongolica</i>
MENG GU XIU XIAN JU	蒙古绣线菊	Mongolian Spiraea	T5775 <i>Scabiosa comosa</i>
MENG MAI ROU DOU KOU	孟买肉豆蔻	Bombay Nutmeg*	T6083 <i>Spiraea mongolica</i>
MENG SANG	蒙桑	Mongolian Mulberry	T4352 <i>Myristica malabarica</i>
MENG ZI CAO HU JIAO	蒙自草胡椒	Mengzi Peperomia*	T4298 <i>Morus mongolica</i>
MENG ZONG ZHU	孟宗竹	Edible Bamboo	T4704 <i>Peperomia duclouxii</i>
MI DIE XIANG	迷迭香	Rosemary	T4844 <i>Phyllostachys edulis</i>
MI DIE XIANG YE QIAN LI GUANG	迷迭香叶千里光*	Rosmarin-leaf Groundsel*	T5575 <i>Rosmarinus officinalis</i>
MI GUO HUANG GUA	密果黄瓜*	Densefruit Cucumber*	T5905 <i>Senecio rosmarinifolius</i>
MI HAO	密蒿	Compact Wormwood*	T1877 <i>Cucumis myriocarpus</i>
MI HOU LI	猕猴桃	Bower Actinidia	T0674 <i>Artemisia compacta</i>
MI HOU LI GEN	猕猴桃根	Bower Actinidia Root*	T0155 <i>Actinidia arguta</i>
MI HOU TAO	猕猴桃	Yangtao Actinidia	T0156 <i>Actinidia arguta</i>
MI HUA DOU	密花豆	Suberect Spatholobus	T0158 <i>Actinidia chinensis</i>
MI HUA MEI DENG MU	密花美登木	Crown-flowered Mayten	T6066 <i>Spatholobus suberectus</i>
MI HUA SHI DOU LAN	密花石豆兰	Flowery Stonebean-orchid	T4131 <i>Maytenus confertiflorus</i>
MI HUA SHI HU	密花石斛	Denseflower Dendrobium	T1053 <i>Bulbophyllum odoratissimum</i> [Syn. <i>Stelis odoratissimum</i> ]
MI HUA TUN CAO	密花豚草	Denseflower Ragweed*	T2100 <i>Dendrobium densiflorum</i>
MI HUA WA ER TENG	密花娃儿藤	Denseflower Tylophora*	T0400 <i>Ambrosia confertiflora</i>
MI HUA XIANG MAO	密花香茅	Denseflower Lemongrass*	T6579 <i>Tylophora crebriiflora</i>
MI HUA YAN FENG	密花岩凤	Denseflower Libanotis	T1940 <i>Cymbopogon densiflorus</i>
MI HUAN JUN	蜜环菌	Armillary Mushroom*	T3797 <i>Libanotis condensata</i>
MI HUO DA JI	迷惑大戟*		T0644 <i>Armillaria mellea</i>
MI LA	蜜蜡	Bee Wax	T2583 <i>Euphorbia decipiens</i>
MI MAI E ZHANG CHAI	密脉鹅掌柴	Densevein Schefflera	T0542 <i>Apis cerana</i>
MI MENG HUA	密蒙花	Pale Butterflybush	T5785 <i>Schefflera venulosa</i>
MI PI KANG	米皮糠	Rice Spermoderm	T1048 <i>Buddleja officinalis</i>
MI PU LUO TI YA MU	蜜普罗梯亚木	Sugar Bush	T4546 <i>Oryza sativa</i>
MI SAN QIAN LI GUANG	密伞千里光	Faber Groundsel	T5212 <i>Protea mellifera</i>
MI SHI MA QIAN ZI	米氏马钱子*	Mittschelich Poisonnut*	T5887 <i>Senecio faberi</i>
MI SI KE HUANG TAN	米斯科黄檀	Miscol Rosewood*	T6180 <i>Strychnos mittschelichii</i>
MI SUI HUA SHE BIAN JU	密穗花蛇鞭菊*	Kansas Gay-feather	T2005 <i>Dalbergia miscolobium</i>
MI TI BING HUA JU	米梯柄花菊		T3790 <i>Liatris pycnostachya</i>
MI XIAO YING QIN	密小鹰芹*		T5034 <i>Podanthus mitiqui</i>
MI ZI LAN	米仔兰	Chu-lan Tree	T0839 <i>Azorella compacta</i>
MIAN BAO GUO	面包果	Common Artocarpus*	T0240 <i>Aglaita odorata</i>
MIAN BI XIE	绵萆薢	Sevenlobed Yam	T0714 <i>Artocarpus incisa</i> [Syn. <i>Artocarpus communis</i> ]
MIAN GEN TENG	面根藤	Ivy Glorybind	T2208 <i>Dioscorea septemloba</i>
MIAN HUA	棉花	Levant Cotton	T1143 <i>Calystegia hederacea</i>
			T3055 <i>Gossypium herbaceum</i>

MIAN HUA GEN	棉花根	Levant Cotton Root	T3056 <i>Gossypium herbaceum</i>
MIAN MA	绵马	Male-fern	T2282 <i>Dryopteris filix-mas</i>
MIAN MAO GOU TENG	绵毛钩藤*	Woolly Gambirplant*	T6623 <i>Uncaria lanosa</i>
MIAN MAO GUO XIANG CHA CAI	绵毛果香茶菜	Woollyfruit Rabdosia*	T3501 <i>Isodon lasiocarpus</i>
MIAN MAO HUANG QI	绵毛黄芪	Sieversia Milkvetch	T0804 <i>Astragalus sieversianus</i>
MIAN MAO MA DOU LING	绵毛马兜铃	Woolly Dutchmanspipe	T0634 <i>Aristolochia mollissima</i>
MIAN MAO WA ER TENG	绵毛娃儿藤	Woolly Tylophora	T6581 <i>Tylophora mollissima</i>
MIAN MAO XIE HAO	绵毛邪蒿	Woolly Seseli*	T5929 <i>Seseli ericephalum</i>
MIAN NING WU TOU	冕宁乌头	Legendre Monkshood	T0110 <i>Aconitum legendrei</i>
MIAN TENG Warb	绵藤	Pale Bittersweet	T1287 <i>Celastrus hypoleucus</i>
MIAN TOU XUE LIAN	绵头雪莲	Lanatchead Saussurea	T5757 <i>Saussurea laniceps</i>
MIAN TOU YE	面头叶	Smallleaf Knema	T3630 <i>Kleinhovia hospita</i>
MIAN YE MA FENG SHU	棉叶麻风树	Cotton-leaf Leprous Tree*	T3561 <i>Jatropha gossypifolia</i>
MIAN ZAO	缅枣	Indian Jujube	T6920 <i>Ziziphus mauritiana</i>
MIAN ZAO ER	绵枣儿	Common Squill	T5813 <i>Scilla scilloides</i>
MIAN ZI YOU	棉籽油	Levant Cotton Oil	T3057 <i>Gossypium herbaceum</i>
MIN HUAI	闽槐	Franchet Sophora	T6033 <i>Sophora franchetiana</i>
MIN WAN BA JIAO	闽皖八角	Minwan Anisetree	T3405 <i>Illicium minwanense</i>
MING DANG SHEN	明党参	Medicinal Changium	T1353 <i>Changium smyrnioides</i>
MING SONG YE JU	明松叶菊	Anatomicum Fig*	T4199 <i>Mesembryanthemum anatomicum</i>
MING XIAN HUA ZHU CHANG ZHU LIU LI CAO	明显花柱长柱琉璃草*	Longstyle Lindelofia	T3846 <i>Lindelofia stylosa</i>
MO E SUAN MO	膜萼酸模	Canaigre	T5610 <i>Rumex hymenosepalus</i>
MO GU	蘑菇	Mushroom	T0211 <i>Agaricus campestris</i>
MO GUO MA HUANG	膜果麻黄	Przewalsk Ephedra	T2377 <i>Ephedra przewalskii</i>
MO GUO QIN	迷果芹	Thin Sphallerocarpus	T6073 <i>Sphallerocarpus gracilis</i>
MO HAN LIAN	墨旱莲	Yerbadetajo	T2323 <i>Eclipta prostrata</i> [Syn. <i>Eclipta alba</i> ]
MO JUE	膜蕨	Barbate Filmy Fern	T3324 <i>Hymenophyllum barbatum</i>
MO LEI NAN YANG SHEN	墨累南洋参*	Murri Polyscias*	T5131 <i>Polyscias murrayi</i>
MO LI HUA	茉莉花	Arabian Jasmine	T3557 <i>Jasminum sambac</i>
MO LI YU TENG	莫里鱼藤*	Molly Jewelvine*	T2121 <i>Derris mollis</i>
MO LUO SHI REN DONG	莫罗氏忍冬	Morrow Honeysuckle	T3915 <i>Lonicera morrowii</i>
MO PAN CAO	磨盘草	Indian Abutilon	T0015 <i>Abutilon indicum</i>
MO SANG BI KE MEI DENG MU	莫桑比克美登木*	Mozambique Mayten*	T4137 <i>Maytenus mossambicensis</i>
MO SHI ZI	没食子	Aleppo Gall (Galla Halepensis)	T5374 <i>Quercus infectoria</i>
MO XI GE DUI XIN JU	墨西哥堆心菊	Mexico Sneezeweed*	T3138 <i>Helenium mexicanum</i>
MO XI GE HAO	墨西哥蒿	Mexico Wormwood*	T0684 <i>Artemisia mexicana</i> var. <i>angustifolia</i>
MO XI GE LUO YU SHAN	墨西哥落羽杉	Mexican Cypress*	T6306 <i>Taxodium mucronatum</i>
MO XI GE XIANG RI KUI	墨西哥向日葵	Mexican Sunflower	T6470 <i>Tithonia tagiliflora</i>
MO XI GE XUAN HUA	墨西哥旋花	Mexico Glorybind*	T5551 <i>River corymbosa</i>
MO XIANG JING	抹香鲸	Cachalot	T4856 <i>Physeter catodon</i>
MO YAO	没药	Myrrh	T1638 <i>Commiphora myrrha</i> [Syn. <i>Commiphora molmo</i> ]
MO ZHI JIAO GU CUI	膜质脚骨脆*	Membranous Casearia*	T1224 <i>Casearia membranacea</i>
MO ZHI JU	膜质菊		T3325 <i>Hymenoxys grandiflora</i>
MU BAN SHU	木瓣树	Common Xylophia	T6855 <i>Xylophia vielana</i>
MU BIE GEN	木鳖根	Cochinchina Momordica Root	T4264 <i>Momordica cochinchinensis</i>
MU BIE ZI	木鳖子	Cochinchina Momordica Seed	T4265 <i>Momordica cochinchinensis</i>
MU CHAI HU	木柴胡	Fruticose Thorowax*	T1061 <i>Bupleurum fruticoscens</i>
MU DAN PI	牡丹皮	Subshrubby Peony Bark	T4585 <i>Paeonia moutan</i> [Syn. <i>Paeonia suffruticosa</i> ]
MU DI XIANG WAN DOU	牧地香豌豆	Meadow Peavine	T3709 <i>Lathyrus pratensis</i>
MU DOU SHU	牧豆树	Algarroba	T5210 <i>Prosopis juliflora</i>

MU ER	木耳	Jew's Ear	T0830 <i>Auricularia auricula</i>
MU ER DU MA CAO	穆尔毒马草*	Moor Sideritis*	T5945 <i>Sideritis moorei</i>
MU FANG JI	木防己	Japanese Snailseed	T1589 <i>Cocculus trilobus</i> [Syn. <i>Cocculus sarmentosus</i> ]
MU FU RONG HUA	木芙蓉花	Cottonrose Hibiscus Flower	T3241 <i>Hibiscus mutabilis</i>
MU GUA	木瓜	Chinese Floweringquince	T1343 <i>Chaenomeles sinensis</i>
MU GUI	牡桂	Lourei Cinnamon*	T1442 <i>Cinnamomum loureirii</i>
MU HAO	牡蒿	Japanese Wormwood	T0678 <i>Artemisia japonica</i>
MU HE	慕荷	Fingerleaf Rodgersflower	T5554 <i>Rodgersia aesculifolia</i>
MU HU DIE	木蝴蝶	Indian Trumpetflower	T4537 <i>Oroxylum indicum</i>
MU HU DIE SHU PI	木蝴蝶树皮	Indian Trumpetflower Bark	T4538 <i>Oroxylum indicum</i>
MU JIN HUA	木槿花	Shrubalthea Flower	T3244 <i>Hibiscus syriacus</i>
MU JIN PI	木槿皮	Shrubalthea Bark	T3245 <i>Hibiscus syriacus</i>
MU JIN ZI	木槿子	Shrubalthea Fruit	T3246 <i>Hibiscus syriacus</i>
MU <sup>(3)</sup> JU	母菊	Mayweed	T4124 <i>Matricaria chamomilla</i> [Syn. <i>Matricaria recutita</i> ]
MU <sup>(4)</sup> JU	木橘	Sepiaria	T0197 <i>Aegle marmelos</i>
MU KU ER MO YAO	穆库尔没药	Muhul Myrrhree*	T1637 <i>Commiphora mukul</i>
MU LAN <sup>(3)</sup>	木榄	Common Bruguiera	T1039 <i>Bruguiera gymnorrhiza</i>
MU LAN <sup>(2)</sup>	木蓝	True Indigo	T3423 <i>Indigofera tinctoria</i>
MU LI	牡蛎	Oyster	T1768 <i>Crassostrea gigas</i>
MU LI LU	木藜芦	One Sided Racemes Leucothoe	T3784 <i>Leucothoe grayana</i>
MU LI ROU	牡蛎肉	Oyster Meat	T4555 <i>Ostrea rivularis</i> ; <i>Ostrea talienwhanensis</i> ; <i>Ostrea gigas</i>
MU MA DOU	牧马豆	Lanceleaf Thermopsis	T6428 <i>Thermopsis lanceolata</i>
MU MA HUANG	木麻黄	Horsetail Beefwood	T1258 <i>Casuarina equisetifolia</i>
MU MIAN HUA	木棉花	Common Bombax Flower	T0973 <i>Bombax malabaricum</i> [Syn. <i>Gossampinus malabarica</i> ]
MU SHU DI SHANG BU FEN	木薯地上部分	Cassave Aerial Parts	T4104 <i>Manihot esculenta</i>
MU TI CENG KONG JUN	木蹄层孔菌		T2748 <i>Fomes fomentarius</i> [Syn. <i>Pyropolyporus fomentarius</i> ; <i>Boletus fomentarius</i> ; <i>Polyporus fomentarius</i> ]
MU TIAN LIAO	木天蓼	Silvervine Actinidia	T0164 <i>Actinidia polygama</i>
MU TONG	木通	Fiveleaf Akebia	T0273 <i>Akebia quinata</i>
MU TONG GEN	木通根	Fiveleaf Akebia Root	T0274 <i>Akebia quinata</i>
MU TONG HAO	木茼蒿	Marguerite	T1391 <i>Chrysanthemum frutescens</i>
MU XIANG	木香	Common Aucklandia (Costustoot)	T5758 <i>Saussurea lappa</i> [Syn. <i>Aucklandia lappa</i> ]
MU XU	苜蓿	Alfalfa	T4148 <i>Medicago sativa</i>
MU XU GEN	苜蓿根	Alfalfa Root	T4149 <i>Medicago sativa</i>
MU YE LONG DAN	牧野龙胆	Pasture Gentian*	T2920 <i>Gentiana makinoi</i>
MU ZEI	木贼	Common Scouring Rush	T2408 <i>Equisetum hiemale</i>
MU ZEI MA HUANG	木贼麻黄	Mongolian Ephedra	T2367 <i>Ephedra equisetina</i>
NA ER ZI YU PAN	那耳紫玉盘	Nar Uvaria*	T6666 <i>Uvaria narum</i>
NA SHI XI GUA	纳氏西瓜*	Naudin Citrullus*	T1462 <i>Citrullus naudinianus</i>
NA TENG	那藤	Japanese Stauntonvine	T6100 <i>Stauntonia hexaphylla</i>
NA TENG GUO	那藤果	Japanese Stauntonvine Fruit	T6101 <i>Stauntonia hexaphylla</i>
NAI SANG	奶桑	Long-tail Mulberry*	T4297 <i>Morus macroua</i>
NAN CHUAN GUAN CHUN HUA	南川冠唇花	Prairie Microtoena	T4226 <i>Microtoena prainiana</i>
NAN CHUAN LU SI CAO	南川鹭鸶草	S. Sichuan Egretgrass	T2240 <i>Diuranthera inarticulata</i>
NAN CHUAN SHENG MA	南川升麻	Nanchuan Bugbane*	T1423 <i>Cimicifuga nanchuanensis</i>
NAN DA JI	南大戟	Jolkin Euphorbia	T2594 <i>Euphorbia jolkini</i>
NAN DAN SHEN	南丹参	Bowley Sage	T5661 <i>Salvia bowleyana</i>
NAN DE WA MIAN	南德瓦棉	Nandewa Cotton*	T3060 <i>Gossypium sturtianum</i> var.

NAN FANG LIU LI CAO	南方琉璃草*	South Houndstongue*	<i>nandewarence</i>
NAN FANG OU SHI NAN	南方欧石南*	Spanish Heath	T1968 <i>Cynoglossum australe</i>
NAN FANG TU SI ZI	南方菟丝子	South Dodder Seed	T2416 <i>Erica australis</i>
NAN FEI CONG SHENG LA JU	南非丛生蜡菊*	South-Africa Tufted Everlasting*	T1911 <i>Cuscuta australis</i>
NAN FEI GOU MA	南非钩麻	Devil's Clow	T3157 <i>Helichrysum caespitium</i>
NAN FEI JI TOU SHU	南非鸡头薯	South-African Eriosema*	T3106 <i>Harpagophytum procumbens</i>
NAN FEI ZHANG GUI	南非樟桂*		T2436 <i>Eriosema kraussianum</i>
NAN GUA	南瓜	Cushaw	T4477 <i>Ocotea bullata</i>
NAN GUA ZI	南瓜子	Cushaw Seed	T1880 <i>Cucurbita moschata</i>
NAN HE SHI	南鹤虱	Wild Carrot Fruit	T1881 <i>Cucurbita moschata</i>
NAN LING QIAN HU	南岭前胡	Nanling Hogfennel	T2049 <i>Daucus carota</i>
NAN LUN HUAN TENG	南轮环藤	Tonkin Cyclea	T4761 <i>Peucedanum longshengens</i>
NAN MEI FANG JI	南美防己		T1934 <i>Cyclea tonkinensis</i>
NAN MEI NIU NAI CAI	南美牛奶菜	Condurango	T1383 <i>Chondrodendron tomentosum</i>
NAN MEI ZHOU GUI	南美洲桧	Southern Red-cedar	T4115 <i>Marsdenia condurango</i>
NAN MU	楠木	Nanmu	T3598 <i>Juniperus silicicola</i>
NAN OU DAN SHEN	南欧丹参	Clary	T4818 <i>Phoebe nanmu</i>
NAN RI BEN LEI GONG TENG	南日本雷公藤	South-Japan Threewingnut*	T5691 <i>Salvia sclarea</i>
NAN SHAN HUA	南山花	Furstamen Pristomeris	T6539 <i>Tripterygium doianum</i>
NAN SHAN TENG	南山藤	Twisting Dregea	T5207 <i>Pristomeris tetrandra</i>
NAN SHE TENG	南蛇藤	Oriental Bittersweet	T2263 <i>Dregea volubilis</i>
			T1288 <i>Celastrus orbiculatus</i> [Syn. <i>Celastrus articulatus</i> ]
NAN SHE TENG GEN	南蛇藤根	Oriental Bittersweet Root	T1289 <i>Celastrus orbiculatus</i> [Syn. <i>Celastrus articulatus</i> ]
NAN SHE TENG YE	南蛇藤叶	Oriental Bittersweet Leaf	T1290 <i>Celastrus orbiculatus</i> [Syn. <i>Celastrus articulatus</i> ]
NAN SHE TENG GUO	南蛇藤果	Oriental Bittersweet Fruit	T1291 <i>Celastrus orbiculatus</i> [Syn. <i>Celastrus articulatus</i> ]
NAN SHE TENG ZHUANG	南蛇藤状山橙	<i>Celastrus Melodinus*</i>	T4177 <i>Melodinus celastroides</i>
SHAN CHENG			
NAN SU GE LAN JIA SHAN LUO	南苏格兰假山萝*	Southern-caledonian Tulipwood*	T3107 <i>Harpullia austro-caledonica</i>
NAN SUAN ZAO	南酸枣	Axillary Southem Wildjujube	T1381 <i>Choerospondias axillaris</i>
NAN TIAN ZHU GEN	南天竹根	Common Nandina Root	T4368 <i>Nandina domestica</i>
NAN TIAN ZHU GENG	南天竹梗	Common Nandina Stem	T4369 <i>Nandina domestica</i>
NAN TIAN ZHU YE	南天竹叶	Common Nandina Leaf	T4370 <i>Nandina domestica</i>
NAN TIAN ZHU ZI	南天竹子	Common Nandina Fruit	T4371 <i>Nandina domestica</i>
NAN TONG HAO	南茼蒿	South Chrysanthemum	T1397 <i>Chrysanthemum segetum</i>
NAN TOU QIU HAI TANG	南投秋海棠	Nantou Begonia*	T0891 <i>Begonia nantoensis</i>
NAN XI BAN YA HUAN YANG SHEN	南西班牙还阳参	Southern-Spain Hawksbeard*	T1790 <i>Crepis tingitana</i>
NAN YA HAN XIAO	南亚含笑	South Asia Michelia	T4212 <i>Michelia doltsopa</i>
NAN YIN DU CHUAN XIN LIAN	南印度穿心莲	South-India Andrographis*	T0460 <i>Andrographis viscosula</i>
NAN YIN DU SU TIE SHU GUO	南印度苏铁树果	South-India Sago Seed*	T1925 <i>Cycas beddomei</i>
NAN ZHU ZHI	南烛子	Oriental Blueberry Fruit	T6670 <i>Vaccinium bracteatum</i>
NANG GAI SI GUA	囊盖丝瓜*	Buchinha (Brazil Herb)	T3936 <i>Luffa operculata</i>
NANG ZHUANG MAO RUI HUA	囊状毛蕊花*	Saccate Mullein*	T6703 <i>Verbascum saccatum</i>
NANG ZHUANG ZI TAN	囊状紫檀	Vengai Padauk	T5302 <i>Pterocarpus marsupium</i>
NAO YANG HUA	闹羊花	Chinese Azalea	T5516 <i>Rhododendron molle</i>
NAO YANG HUA ZI	闹羊花子	Chinese Azalea Fruit	T5517 <i>Rhododendron molle</i>
NEI FENG XIAO	内风消五味子	Black Magnoliavine*	T5796 <i>Schisandra nigra</i>
NEI GUO BAI CEN	美国白栉	White Ash	T2765 <i>Fraxinus americana</i>
NEI HUA YI WA JU	内华依瓦菊		T3545 <i>Iva nevadensis</i>

NEI NAN WU WEI ZI	内南五味子	Fengqing Kadsura	T3615 <i>Kadsura interior</i>
NEI ZHE XIANG CHA CAI	内折香茶菜	Inflexed Rabdosia	T3494 <i>Isodon inflexa</i> [Syn. <i>Rabdosia inflexa</i> ]
NEN YE JIU LI XIANG	嫩叶九里香	Juvenileleaf Common Jasminorange	T4321 <i>Murraya microphylla</i>
NI A LUO	逆阿落		T5112 <i>Polygonum perigrinatoris</i>
NI BO ER DU HUO	尼泊尔独活	Nepal Cowparsnip	T3219 <i>Heracleum nepalense</i>
NI BO ER LAO GUAN CAO	尼泊尔老鹳草	Nepal Cranesbill	T2943 <i>Geranium nepalense</i>
NI BO ER LV RONG HAO	尼泊尔绿绒蒿	Nepal Meconopsis	T4144 <i>Meconopsis nepaulensis</i>
NI BO ER SONG CAO	尼泊尔嵩草	Nepal Kobresia*	T3633 <i>Kobresia nepalensis</i>
NI BO ER WU TOU	尼泊尔乌头	Nepal Monkshood	T0093 <i>Aconitum ferox</i>
NI BO ER YANG TI	尼泊尔羊蹄	Nepal Dock	T5612 <i>Rumex nepalensis</i>
NI DAN SHEN	拟丹参	Chinese Sage	T5692 <i>Salvia sinica</i>
NI DONG FENG LUO	泥东风螺*		T0843 <i>Babylonia lutosa</i>
NI GU LA SHI CHE JU	尼古拉矢车菊*	Nicola Centaurea*	T1306 <i>Centaurea nicolai</i>
NI GUANG SHI WEI	拟光石韦	Pseudobald Pyrrosia*	T5359 <i>Pyrrosia pseudocalvata</i>
NI HU CAI	泥胡菜	Lyrate Hemistepta	T3202 <i>Hemistepta lyrata</i> [Syn. <i>Hemistepta carthamoides</i> ; <i>Saussurea carthamoides</i> ]
NI JIN ZHAN JU	拟金盏菊	Cape Dandelion	T6687 <i>Venidium decurrens</i>
NI LUO HE CHENG LIU	尼罗河柽柳*	Nilotic Tamarisk*	T6289 <i>Tamarix nilotica</i>
NI LUO HE JIN YIN LIAN	尼罗河金银棘	Nile Starbush*	T6570 <i>Turraea nilotica</i>
NI RI LI YA LIANG RUI SU MU	尼日利亚两蕊苏木	Nigerian Satinwood	T2239 <i>Distemonanthus benthamianus</i>
NI TAN XIAN	泥炭藓		T6072 <i>Sphagnum palustre</i> [Syn. <i>Sphagnum obtusifolium</i> ; <i>Sphagnum cymbifolium</i> ]
NI YU LONG WU TOU	拟玉龙乌头	Pseudostapfia Monkshood	T0125 <i>Aconitum pseudostapfianum</i>
NI ZHAO MU JIANG ZI	泥沼木姜子	Sloughy Litsea*	T3896 <i>Litsea turfosa</i>
NIAN BAO CHUN	黏报春*	Viscid Primrose*	T5205 <i>Primula viscosa</i>
NIAN HAO	黏蒿*	Viscid Wormwood*	T0670 <i>Artemisia cana</i> ssp. <i>viscidula</i>
NIAN MAO SHU WEI CAO	黏毛鼠尾草	Roborowsk Sage	T5690 <i>Salvia roborowskii</i>
NIAN WEI LING CAI	黏委陵菜	Viscose Cinquefoil*	T5188 <i>Potentilla viscosa</i>
NIAN XING AI LEI JU	黏性埃勒菊		T2324 <i>Egletes viscosa</i>
NIAN XING GUO SHI SUAN JIANG	黏性果实酸浆*		T4850 <i>Physalis ixocarpa</i>
NIAN XING TU MU XIANG	黏性土木香*	Woody Fleabane	T3441 <i>Inula viscosa</i>
NIAN YE YOU <sup>(2)</sup>	黏叶菘	Glutinous Bluebeard	T1222 <i>Caryopteris glutinosa</i>
NIAN YU	鲇鱼		T4644 <i>Parasilurus asotus</i>
NIAN YU XU	鲇鱼须	Siebold Greenbrier	T5982 <i>Smilax sieboldii</i>
NIAN ZHI JIN ZHI JU	黏质金枝菊*		T1409 <i>Chrysothamnus viscidiflorus</i>
NIAN ZHI LUO LIN	黏质罗林	Mucosa Rollinia*	T5558 <i>Rollinia mucosa</i>
NING BIAN E TAI	宁扁萆苈		T5404 <i>Radula perrottetii</i>
NING GU SHUI QIE	凝固睡茄	Coagulate Withania	T6828 <i>Withania coagulans</i>
NING GUO BEI MU	宁国贝母	Ningguo Fritillary	T2789 <i>Fritillaria ningguoensis</i>
NING MENG	柠檬	Lemon	T1490 <i>Citrus limon</i>
NING MENG AN YE	柠檬桉叶	Lemon Eucalyptus Leaf	T2505 <i>Eucalyptus citriodora</i>
NING MENG GEN	柠檬根	Lemon Root	T1491 <i>Citrus limon</i>
NING MENG PI	柠檬皮	Lemon Pericarp	T1492 <i>Citrus limon</i>
NING MENG YE	柠檬叶	Lemon Leaf	T1493 <i>Citrus limon</i>
NING XIA BEI MU	宁夏贝母	Ningxia Fritillary	T2795 <i>Fritillaria taipaiensis</i> var. <i>ningxiaensis</i>
NING XIA GOU QI GEN PI	宁夏枸杞根皮	Barbary Wolfberry Root-bark*	T3954 <i>Lycium barbarum</i>
NING XIA GOU QI ZI	宁夏枸杞子	Barbary Wolfberry Fruit	T3955 <i>Lycium barbarum</i>
NIU BANG GEN	牛蒡根	Great Burdock Root	T0584 <i>Arctium lappa</i>
NIU BANG YE	牛蒡叶	Great Burdock Leaf*	T0585 <i>Arctium lappa</i>
NIU BANG YE DU WU	牛蒡叶囊吾	Dockleaf Goldenray	T3809 <i>Ligularia lapathifolia</i>
NIU BANG ZI	牛蒡子	Great Burdock Fruit	T0586 <i>Arctium lappa</i>
NIU BIAN	牛扁	Puberulent Monkshood	T0078 <i>Aconitum barbatum</i> var. <i>puberulum</i>

NIU DAN	牛胆	Ox Gall	[Syn. <i>Aconitum ochranthum</i> ]
NIU ER DA HUANG	牛耳大黄	Crisped Dock	T0984 <i>Bos taurus domesticus</i> ; <i>Bubalus bubalis</i>
NIU ER FENG ZI	牛耳枫子	Calyx-shaped Daphniphyllum Fruit	T5607 <i>Rumex crispus</i>
NIU FANG FENG	牛防风	Hogweed	T2032 <i>Daphniphyllum calycinum</i>
NIU FEI	牛肺	Ox Lung	T3224 <i>Heracleum sphondylium</i>
NIU GAN	牛肝	Ox Liver	T0985 <i>Bos taurus domesticus</i> ; <i>Bubalus bubalis</i>
NIU HAO	牛蒿	Taurine Wormwood*	T0986 <i>Bos taurus domesticus</i> ; <i>Bubalus bubalis</i>
NIU HUANG	牛黄	Cow-bezoar (Ox-gallstone)	T0701 <i>Artemisia taurica</i>
NIU JIN GUO	牛筋果	Perforated Harrisonia	T0987 <i>Bos taurus domesticus</i> ; <i>Bubalus bubalis</i>
NIU JIN QIAN LI GUANG	牛津千里光*	Oxford Ragwort	T3109 <i>Harrisonia perforata</i>
NIU JIN TIAO	牛筋条	Common Oxmuscle	T5912 <i>Senecio squalidus</i>
NIU NAO	牛脑	Ox Brain	T2157 <i>Dichotomanthes tristaniaecarpa</i>
NIU PI CHA	牛皮茶	Goldmat Rhododendron	T0988 <i>Bos taurus domesticus</i> ; <i>Bubalus bubalis</i>
NIU QU SONG YE JU	扭曲松叶菊	Tortuous Fig*	T5505 <i>Rhododendron chrysanthum</i>
NIU QU TI GEN CAO	扭曲嚏根草*	Tortuous Hellebore*	T4202 <i>Mesembryanthemum tortuosum</i>
			T3188 <i>Helleborus torquatus</i> [Syn. <i>Helleborus serbicus</i> ]
NIU RU	牛乳	Cow Milk	T0989 <i>Bos taurus domesticus</i> ; <i>Bubalus bubalis</i>
NIU SHE CAO	牛舌草	Toothedfruit Dock	T5608 <i>Rumex dentatus</i>
NIU SHE TOU	牛舌头	Field Sowthistle	T6025 <i>Sonchus arvensis</i>
NIU SHEN	牛肾	Ox Kidney	T0990 <i>Bos taurus domesticus</i> ; <i>Bubalus bubalis</i>
NIU TI DOU	牛蹄豆	Guamachil Apea-earring	T4985 <i>Pithecolobium dulce</i>
NIU WEI CAI	牛尾菜	Oxtail Greenbrier	T5981 <i>Smilax riparia</i>
NIU WEI CAO XIANG CHA CAI	牛尾草	Ternateleaf Rabdosia	T3528 <i>Isodon ternifolia</i>
NIU WEI DU HUO	牛尾独活	Hemsley Cowparsnip	T3213 <i>Heracleum hemsleyanum</i>
NIU XI	牛膝	Twotooth Achyranthes	T0073 <i>Achyranthes bidentata</i>
NIU XI XI	牛西西	Patience Dock	T5614 <i>Rumex patientia</i>
NIU XIN FAN LI ZHI	牛心番荔枝	Bullocksheart Custardapple	T0511 <i>Annona reticulata</i>
NIU XIN PIAO ZI	牛心朴子	Komarov Mosquitotrap	T1957 <i>Cynanchum komarovii</i>
NIU XIN QIE ZI	牛心茄子	Common Cerberustree	T1330 <i>Cerbera manghas</i>
NIU XUAN JIN HE HUAN	扭旋金合欢*	Tortile Acacia*	T0033 <i>Acacia tortilis</i> ssp. <i>raddiana</i>
NIU XUE	牛血	Ox Blood	T0991 <i>Bos taurus domesticus</i> ; <i>Bubalus bubalis</i>
NIU YAN MA QIAN	牛眼马钱	Narrowflower Poisonnut	T6166 <i>Strychnos angustiflora</i>
NIU YAN PENG QI JU	牛眼蟛蜞菊		T6906 <i>Zexmenia buphthalmiflora</i>
NIU YE	牛膈	Ox Thyroid	T0992 <i>Bos taurus domesticus</i> ; <i>Bubalus bubalis</i>
NONG DA JI	浓大戟*	Dense Euphorbia*	T2588 <i>Euphorbia fortissima</i>
NU JIANG SHAN CHA	怒江山茶	Salwin Camellia	T1148 <i>Camellia saluenensis</i>
NUO DAO	糯稻	Sticky Rice	T4548 <i>Oryza sativa</i> var. <i>glutinosa</i>
NUO WEI QI	挪威槭	Norway Maple	T0052 <i>Acer platanoides</i>
NV ZHEN XIAO LA SHU	女贞小蜡树	Chinese Privet	T3830 <i>Ligustrum sinense</i>
NV ZHEN ZI	女贞子	Glossy Privet Fruit	T3828 <i>Ligustrum lucidum</i>
OU	藕	Hindu Lotus Large Rhizome	T4402 <i>Nelumbo nucifera</i>
OU BO HE	欧薄荷	Horse Mint	T4185 <i>Mentha longifolia</i>
OU CANG ZHU	欧苍术	Gummy Atractylodes*	T0820 <i>Atractylodes gummifera</i>
OU DANG GUI	欧当归	Garden Lovage	T3785 <i>Levisticum officinale</i>
OU DI SUN	欧地笋	European Bugleweed	T3979 <i>Lycopus europaeus</i>
OU DING XIANG	欧丁香	Common Lilac	T6262 <i>Syringa vulgaris</i>
OU FANG FENG	欧防风	Garden Parsnip	T4669 <i>Pastinaca sativa</i>
OU JIN KUI	欧锦葵	High Mallow	T4091 <i>Malva sylvestris</i>
OU LANG DANG	欧菘蓂	European Scopolia	T5820 <i>Scopolia carniolica</i>
OU LI REN	欧李仁	Chinese Dwarf Cherry Seed	T5223 <i>Prunus humilis</i> [Syn. <i>Cerasus humilis</i> ]
OU MAN TUO LUO GEN	欧曼陀罗根	Jimsonweed Root	T2046 <i>Datura stramonium</i>
OU QIAN HU	欧前胡	Masterwort	T4766 <i>Peucedanum ostruthium</i>



OU SHI NAN	欧石南	Tree Heath	T2415 <i>Erica arborea</i>
OU SHU LI	欧鼠李	Glossy Buckthorn	T5460 <i>Rhamnus frangula</i> [Syn. <i>Frangula alnus</i> ]
OU WUTOU	欧乌头	Aconite	T0118 <i>Aconitum napellus</i>
OU XI XIN	欧细辛	Asarabacca	T0725 <i>Asarum europaeum</i>
OU XIA ZHI CAO	欧夏至草	Common Hoarhound	T4114 <i>Marrubium vulgare</i>
OU YA GAN CAO	欧亚甘草	Typical Licorice*	T3014 <i>Glycyrrhiza glabra</i> var. <i>typica</i>
OU YA QI	欧亚槭	Great Maple	T0053 <i>Acer pseudoplatanus</i>
OU YA RUI XIANG	欧亚瑞香	Mezereon	T2026 <i>Daphne mezereon</i>
OU ZE QIN	欧泽芹	Greater Water-parsnip	T5969 <i>Sium latifolium</i>
OU ZHOU BAI LA SHU	欧洲白蜡树	European Ash	T2768 <i>Fraxinus excelsior</i>
OU ZHOU BAI LI	欧洲白栎	Common Oak	T5377 <i>Quercus robur</i>
OU ZHOU CHI SONG	欧洲赤松	Scotch Pine	T4926 <i>Pinus sylvestris</i>
OU ZHOU CI BAI	欧洲刺柏	Common Juniper	T3583 <i>Juniperus communis</i>
OU ZHOU CI BAI BIAN ZHONG	欧洲刺柏变种	Common Juniper Variety*	T3584 <i>Juniperus communis</i> var. <i>depressa</i>
OU ZHOU DU HUO	欧洲独活	European Cowparsnip*	T3220 <i>Heracleum pyrenaicum</i>
OU ZHOU HUA QIU	欧洲花楸	European Mountainash	T6053 <i>Sorbus aucuparia</i>
OU ZHOU JIA ZHU TAO	欧洲夹竹桃	Common Oleander	T4420 <i>Nerium oleander</i>
OU ZHOU JUE	欧洲蕨	Bracken	T5283 <i>Pteridium aquilinum</i>
OU ZHOU LAN MO LI	欧洲蓝茉莉	European Leadwort*	T5027 <i>Plumbago europaea</i>
OU ZHOU LENG SHAN	欧洲冷杉	European Silver Fir	T0003 <i>Abies alba</i>
OU ZHOU LI	欧洲栗	Spanish Chestnut	T1255 <i>Castanea sativa</i>
OU ZHOU LOU DOU CAI	欧洲楼斗菜	European Columbine	T0558 <i>Aquilegia vulgaris</i>
OU ZHOU MA DOU LING	欧洲马兜铃	Dutchmanspipe	T0638 <i>Aristolochia siphon</i>
OU ZHOU MI FENG HUA	欧洲蜜蜂花	Balmleaf Metittis	T4175 <i>Melittis melissophyllum</i>
OU ZHOU MO YAO	欧洲没药	Sweet Cicely	T4360 <i>Myrrhis odorata</i>
OU ZHOU NV ZHEN	欧洲女贞	European Privet	T3831 <i>Ligustrum vulgare</i>
OU ZHOU PING PENG CAO	欧洲萍蓬草	European Cowlily	T4449 <i>Nuphar luteum</i>
OU ZHOU QI MU	欧洲槲木	European Alder	T0326 <i>Alnus glutinosa</i>
OU ZHOU QI YE SHU	欧洲七叶树	Horsechestnut	T0202 <i>Aesculus hippocastanum</i>
OU ZHOU QIAN LI GUANG	欧洲千里光	Common Groundsel	T5915 <i>Senecio vulgaris</i>
OU ZHOU SHAN JIE	欧洲山芥	Upland Cress	T0870 <i>Barbarea vulgaris</i>
OU ZHOU SHAN YANG	欧洲山杨	Aspen	T5162 <i>Populus tremula</i>
OU ZHOU SHENG GU YOU	欧洲省沽油	European Bladdernut, Pinnate Bladdernut	T6098 <i>Staphylea pinnata</i>
OU ZHOU SHUI QING GANG	欧洲水青冈	European Beech	T2662 <i>Fagus sylvatica</i>
OU ZHOU SONG LAN	欧洲菘蓝	Dyers Woad	T3477 <i>Isatis tinctoria</i>
OU ZHOU TIAN JIE CAI	欧洲天芥菜*	Heliotrope	T3171 <i>Heliotropium europaeum</i>
OU ZHOU WEI MAO	欧洲卫矛	European Euonymus	T2539 <i>Euonymus europaeus</i>
OU ZHOU XIAN KE LAI	欧洲仙客来	Cyclamen	T1929 <i>Cyclamen europaeum</i>
OU ZHOU XIAO BO	欧洲小檗	European Barberry	T0919 <i>Berberis vulgaris</i>
OU ZHOU YUN SHAN	欧洲云杉	Common Spruce	T4869 <i>Picea abies</i>
OU ZI CAO	欧紫草	Dyer's Alkanet	T0304 <i>Alkanna tinctoria</i>
OU ZI QI	欧紫萁	Flowering Fern	T4553 <i>Osmunda regalis</i>
OW ZHOU YOU CAI	欧洲油菜	Rape	T1009 <i>Brassica napus</i>
PA KE YE XIANG SHU	帕克夜香树	Parqui Cestrum	T1339 <i>Cestrum parqui</i>
PA LI BEI FANG SHI DA GONG LAO	帕里北方十大功劳	Parry Northern Mahonia	T4059 <i>Mahonia borealis</i>
PA SHI BEI KE SHAN	帕氏贝壳杉	Palmerston Pitch Tree*	T0214 <i>Agathis palmerstoni</i>
PAI QIAN CAO	排钱草	Beautiful Phyllodium	T2131 <i>Desmodium pulchellum</i> [Syn. <i>Phyllodium pulchellum</i> ]
PAI QIAN CAO GEN	排钱草根	Beautiful Phyllodium Root	T2132 <i>Desmodium pulchellum</i> [Syn. <i>Phyllodium pulchellum</i> ]
PAN YUAN CHOU HUANG JING	攀援臭黄荆	Climbing Premna	T5195 <i>Premna subscandens</i>
PAN YUAN YU TENG	攀援鱼藤	Climbing Jewelvine	T2123 <i>Derris scandens</i>

PAN ZHI GOU TENG	攀枝钩藤	Climbing Gambirplant	T6631 <i>Uncaria scandens</i> [Syn. <i>Nauclea pilosa</i> ; <i>Uruparia pilosa</i> ; <i>Uncaria pilosa</i> ]
PAN ZHUANG YE XIA ZHU	盘状叶下珠*	Discoïd Leafflower*	T4833 <i>Phyllanthus discoïdes</i>
PANG DA HAI	胖大海		T6139 <i>Sterculia lychnophora</i>
PAO DAN GUO	炮弹果	Calabash-tree	T1791 <i>Crescentia cujete</i>
PAO NANG CAO	泡囊草	Common Physochlaina	T4859 <i>Physochlaina physaloides</i>
PAO PAO SHU	泡泡树	Pawpaw	T0744 <i>Asimina triloba</i>
PAO TONG	泡桐	Fortune Paulownia	T4678 <i>Paulownia fortunei</i>
PAO ZHUANG FAN LI ZHI	泡状番荔枝	Bullate Custardapple*	T0504 <i>Annona bullata</i>
PEI LAN	佩兰	Fortune Eupatorium	T2559 <i>Eupatorium fortunei</i>
PEI LI LU HUI	佩里芦荟*	Perry Aloe*	T0342 <i>Aloe perryi</i>
PEI NI YUAN ZHI	佩尼远志	Paene Milkwort*	T5079 <i>Polygala paena</i>
PEN GUA	喷瓜	Squirting Cucumber	T2313 <i>Ecballium elaterium</i>
PEN JIA SHU	盆架树	Prettyleaf Winchia	T6825 <i>Winchia calophylla</i>
PEN TUO PO TI CAO	盆托坡梯草	<i>Pentopetia androsaernifolia</i>	T4702 <i>Pentopetia androsaernifolia</i>
PENG LAI CAO	蓬莱草	Knottflower Phyla Herb	T3865 <i>Lippia nodiflora</i>
PENG QI JU	虻蜈菊	Chinese Wedelia	T6814 <i>Wedelia chinensis</i> [Syn. <i>Solidago chinensis</i> ; <i>Wedelia calendulacea</i> ]
PENG TE MAN DE MU	彭特曼得木	Pentland Mandevilla*	T4098 <i>Mandevilla pentlandiana</i>
PENG XIAN XUE DAN	彭县雪胆	Pengxian Hemsleya	T3209 <i>Hemsleya pengxianensis</i>
PENG ZI CAI	蓬子菜	Yellow Bedstraw	T2835 <i>Galium verum</i>
PI HAN CAO	辟汗草	Daghestan Sweetclover	T4172 <i>Melilotus suaveolens</i>
PI HAN CAO GEN	辟汗草根	Daghestan Sweetclover Root	T4173 <i>Melilotus suaveolens</i>
PI JIU HUA	啤酒花	European Hop Female-flower	T3289 <i>Humulus lupulus</i>
PI JIU HUA TU SI ZI	啤酒花菟丝子	Hop-shaped Dodder	T1914 <i>Cuscuta lupuliformis</i>
PI LI LUO FU MU	霹雳萝芙木	Perak Devilpepper	T5441 <i>Rauwolfia perakensis</i>
PI PA	枇杷	Loquat	T2431 <i>Eriobotrya japonica</i>
PI PA HE	枇杷核	Loquat Seed	T2432 <i>Eriobotrya japonica</i>
PI PA YE	枇杷叶	Loquat Leaf	T2433 <i>Eriobotrya japonica</i>
PI QI QIE	皮契茄	Peru False Heath	T2652 <i>Fabiana imbricata</i>
PI SHAO ZI	皮哨子	Chuan dian Soapberry Seed	T5717 <i>Sapindus delavayi</i> [Syn. <i>Pancovia delavayi</i> ]
PI XI DI GE SHE SHU	匹西狄割舌树*	Piscidi Cuttongue tree*	T6806 <i>Walsura piscidia</i>
PI ZHEN DU JING SHAN	披针杜茎山	Lanceolate Maesa*	T4030 <i>Maesa lanceolata</i>
PI ZHEN QI SHU	披针漆树*	Lanceolate Sumac*	T5533 <i>Rhus lanceolata</i>
PI ZHEN XING YAO HUA	披针形堇花*	Lanceolate Stringbush*	T6821 <i>Wikstroemia lanceolata</i>
PI ZHEN YE GOU TENG	披针叶钩藤*	Lance-leaved Gambirplant	T6622 <i>Uncaria lancifolia</i>
PI ZHEN YE HUANG ROU NAN	披针叶黄肉楠	Lanceleaf Actinodaphne*	T0166 <i>Actinodaphne lancifolia</i>
PI ZHEN YE NAN WU WEI ZI	披针叶南五味子	Lanceolate Kadsura*	T3617 <i>Kadsura lancilimba</i>
PIAN CHI TANG SONG CAO	偏翅唐松草	Delavay Meadowrue	T6378 <i>Thalictrum delavayi</i>
PIAO FU CAO	飘拂草	Dichotomous Fimbristylis	T2730 <i>Fimbristylis dichotoma</i>
PIE LAN	撇蓝	Kohl-rabi	T1019 <i>Brassica oleracea</i> var. <i>gongylodes</i>
PING	苹	Water-clover	T4121 <i>Marsilea quadrifolia</i>
PING BEI MU	平贝母	Ussuri Fritillary	T2797 <i>Fritillaria ussuriensis</i>
PING CHE QIAN	平车前	Depressed Plantain	T5004 <i>Plantago depressa</i>
PING DI XI FENG QIN	平地西风芹*	Campestral Seseli*	T5928 <i>Seseli campestre</i>
PING E SHU	平莪术	Zedoary Turmeric	T1909 <i>Curcuma zedoaria</i> [Syn. <i>Curcuma aeruginosa</i> ]
PING ER XIAO CAO	瓶尔小草	Adder's Tongue	T4506 <i>Ophioglossum vulgatum</i>
PING GUO	苹果	Apple	T4088 <i>Malus pumila</i>
PING GUO HAI TANG	苹果海棠*	Domestic Apple*	T4087 <i>Malus domestica</i>
PING HUA FA LIANG GOU TENG	平滑发亮钩藤*	Smooth Gambirplant	T6621 <i>Uncaria laevigata</i>
PING HUA FENG DOU CAI	平滑蜂斗菜*	Smooth Butterbur*	T4742 <i>Petasites laevigatus</i>

PING HUA GUO JIU JE	平滑果九节*	Leio-fruit Ninenode*	T5276 <i>Psychotria leiocarpa</i>
PING HUA SANG	平滑桑*	Smooth Mulberry*	T4295 <i>Morus laevigata</i>
PING PENG CAO	萍蓬草	Cowlily	T4450 <i>Nuphar pumilum</i>
PING PU YUAN BAI	平铺圆柏	Creeping Juniper	T3589 <i>Juniperus horizontalis</i>
PING QIAN LI GUANG	瓶千里光	Bottle Groundsel*	T5906 <i>Senecio sarracenicus</i>
PING WO DAO HUA	平卧稻花	Prostrate Rice-flower*	T4892 <i>Pimelea prostrata</i>
PING YU FENG WEI JUE	平羽凤尾蕨	Kiushu Brake	T5292 <i>Pteris kiuschiensis</i>
PING YUAN BA DOU	平原巴豆*		T1840 <i>Croton campestris</i>
PING ZHAN JIAO HUI XIANG	平展角茴香*	Procumbent Hypecoum*	T3335 <i>Hypecoum procumbens</i>
PO BU YE	破布叶	Paniculate Microcos	T4217 <i>Microcos paniculata</i> [Syn. <i>Grewia microcos</i> ]
PO LUO MEN ZAO JIA	婆罗门皂荚	Goldenshower Senna Fruit	T1232 <i>Cassia fistula</i>
PO LUO ZHOU GOU TENG	婆罗洲钩藤*	Borneo Gambirplant*	T6609 <i>Uncaria borneensis</i>
PO SEN DA JI	泊森大戟*	Poison Euphorbia*	T2610 <i>Euphorbia poisonii</i>
PU DI WU GONG	铺地蜈蚣	Cernuous Clubmoss	T3970 <i>Lycopodium cernuum</i>
PU DUN LI	普敦李	Puddun Plum*	T5237 <i>Prunus puddun</i>
PU ER CHA	普洱茶	Assam Tea	T1153 <i>Camellia sinensis</i> var. <i>assamica</i>
PU ER DI LUO HAN SONG	普尔迪罗汉松	Purdie Podocarpus*	T5053 <i>Podocarpus purdieana</i>
PU FU JIN GU CAO	匍匐筋骨草	Creeping Bugle	T0271 <i>Ajuga reptans</i>
PU FU JING TU ER CAO	匍匐茎兔耳草*	Creeping Lagotis*	T3676 <i>Lagotis stolonifera</i>
PU FU QIANG DAO YAO	匍匐枪刀药	Creeping Hypoestes*	T3375 <i>Hypoestes serpens</i>
PU FU SHI DA GONG LAO	匍匐十大功劳	Creeping Mahonia	T4071 <i>Mahonia repens</i>
PU GE WU TOU	普葛乌头	Pukee Monkshood	T0126 <i>Aconitum pukeese</i>
PU GONG YING	蒲公英	Mongolian Dandelion	T6301 <i>Taraxacum mongolicum</i>
PU HUANG	蒲黄	Longbract Cattail Pollen	T6584 <i>Typha angustata</i>
PU QI BEI MU	蒲圻贝母	Puqi Fritillary*	T2793 <i>Fritillaria puqiensis</i>
PU SUO MU	普梭木		T5272 <i>Psorospermum febrifugum</i>
PU TAO	葡萄	European Grape	T6798 <i>Vitis vinifera</i>
PU TAO TENG YE	葡萄藤叶	European Grape Stem and Leaf	T6799 <i>Vitis vinifera</i>
PU TAO YE MU JIN	葡萄叶木槿	Grapeleaf Hibiscus*	T3249 <i>Hibiscus vitifolius</i>
PU TAO YOU	葡萄柚	Grapefruit	T1503 <i>Citrus paradisi</i>
PU <sup>(3)</sup> TAO	蒲桃	Roseapple	T6267 <i>Syzygium jambos</i>
PU TAO YOU DA HONG JU ZA	葡萄柚大红橘杂交种		T1505 <i>Citrus paradisi</i> x <i>Citrus tangerina</i>
JIAO ZHONG			
PU TI SHU HUA	菩提树花	Miquel Linden	T6458 <i>Tilia miqueliana</i>
PU TONG BAI JIAN MU	普通白坚木*	Common White Quebracho	T0772 <i>Aspidosperma quebracho-blanco</i>
PU TONG CANG ER	普通苍耳*	Common Cocklebur*	T6838 <i>Xanthium commune</i>
PU TONG LU TI CAO	普通鹿蹄草	Common Pyrola	T5347 <i>Pyrola decorata</i>
PU TONG TUN CAO	普通豚草*	Ragweed	T0396 <i>Ambrosia ambrosioides</i>
PU TONG XUAN GOU ZI	普通悬钩子	Common Raspberry*	T5588 <i>Rubus allegheniensis</i>
PU TONG YUAN ZHI	普通远志	Common Milkwort*	T5089 <i>Polygala vulgaris</i>
PU TONG ZHANG YA CAI	普通獐芽菜*	Common Swertia*	T6239 <i>Swertia swertiopsis</i>
PU YE SHAN YOU ZI	朴叶山柚子	Celtis-leaf Opilia*	T4515 <i>Opilia celtidifolia</i>
QI BAI ZHI	祁白芷	Qibaizhi Angelica*	T0479 <i>Angelica dahurica</i> cv. <i>qibaizhi</i>
QI GU CAO	漆姑草	Pearlwort	T5646 <i>Sagina japonica</i> [Syn. <i>Spergula japonica</i> ]
QI GUO JIU LI XIANG	脐果九里香*	Omphalo-fruit Common	T4322 <i>Murraya omphalocarpa</i>
		Jasminorange*	
QI GUO QIAN LI XIANG	脐果千里香*	Omphalo-fruit Jasminorange*	T4326 <i>Murraya paniculata</i> var. <i>omphalocarpa</i>
QI HAN NING HUA JIAO	齐汉宁花椒	Tsihanim Pricklyash*	T6898 <i>Zanthoxylum tsihanimposia</i>
QI LIN CAI	麒麟菜	Muriculate Eucheuma Frond	T2525 <i>Eucheuma muricatum</i>
QI LIN JIE	麒麟竭	Draco Yellowvine*	T1994 <i>Daemonorops draco</i>
QI PAN SHA CAO	畦畔莎草	Asidefield Galingale	T1975 <i>Cyperus haspan</i>
QI SHI HUA	脐石花*	Omphalos Parmelia*	T4657 <i>Parmelia saxatilis</i> var. <i>omphalodes</i>

QI YE HUANG PI	七叶黄皮*	Heptaleaf Wampee*	T1536 <i>Clausena heptaphylla</i>
QI YE PAN GUO JU	槭叶盘果菊	Rattlesnakeroot	T5196 <i>Prenanthes acerifolia</i>
QI YE SHU	七叶树	Chinese Buckeye	T0201 <i>Aesculus chinensis</i>
QI YI PU TAO FENG XIN ZI	奇异葡萄风信子*	Paradoxy Grape-hyacinth*	T4333 <i>Muscari paradoxum</i>
QI ZHOU YI ZHI HAO	祁州一支蒿	Horseweed Fleabane	T1657 <i>Conyza canadensis</i> [Syn. <i>Erigeron canadensis</i> ]
QI ZI	漆子	True Lacquer Seed	T5541 <i>Rhus verniciflua</i> [Syn. <i>Toxicodendron verniciflum</i> ]
QIAN CAO GEN	茜草根	Indian Madder Root	T5578 <i>Rubia cordifolia</i>
QIAN CAO TENG	茜草藤	Indian Madder Stem	T5579 <i>Rubia cordifolia</i>
QIAN CENG TA	千层塔(蛇足石杉)	Serrate Clubmoss	T3295 <i>Huperzia serrata</i> [Syn. <i>Lycopodium serratum</i> ]
QIAN HU	前胡	Common Hogfennel	T0480 <i>Angelica decursiva</i> [Syn. <i>Peucedanum decursivum</i> ]
QIAN HUI GOU TENG	浅灰钩藤*	Greyish Gambirplant*	T6611 <i>Uncaria canescens</i>
QIAN HUI MAO GUAN JU	浅灰毛冠菊*	Greyish Nannoglottis*	T4372 <i>Nannoglottis ravida</i>
QIAN JIE CAO	千解草	Herbaceous Pygmaeopremna	T5341 <i>Pygmaeopremna herbacea</i> [Syn. <i>Premna herbacea</i> ]
QIAN JIN TENG	千金藤	Japanese Staphania	T6129 <i>Stephania japonica</i>
QIAN JIN ZI	千金子	Caper Euphorbia Seed	T2597 <i>Euphorbia lathyris</i>
QIAN LI GUANG	千里光	Climbing Groundsel	T5907 <i>Senecio scandens</i> [Syn. <i>Senecio chinensis</i> ]
QIAN LIE LIN MAO JUE	浅裂鳞毛蕨	Fortunate Wood Fern	T2287 <i>Dryopteris sublaeta</i>
QIAN LING YIN YANG HUO	黔岭淫羊藿	Thin-rhizome Epimedium	T2399 <i>Epimedium leptorrhizum</i>
QIAN MA	荨麻	Hemleaf Nettle	T6651 <i>Urtica cannabina</i>
QIAN MA YE ZE LAN	荨麻叶泽兰	White Snakeroot	T2579 <i>Eupatorium urticaefolium</i>
QIAN NIAN BU LAN XIN	千年不烂心	Bitter Nightshade Fruit	T5998 <i>Solanum dulcamara</i>
QIAN NIU ZI	牵牛子	Lobedleaf Pharbitis Seed	T4779 <i>Pharbitis nil</i>
QIAN QU CAI	千屈菜	Spiked Loosestrife	T4007 <i>Lythrum salicaria</i>
QIAN RI HONG	千日红	Globeamaranth	T3040 <i>Gomphrena globosa</i>
QIAN SHI GEN	芡实根	Gordon Euryale Root	T2632 <i>Euryale ferox</i>
QIAN YU DA QING	欠榆大青	Unfortunate Glorybower	T1559 <i>Clerodendron infortunatum</i>
QIANG DAO YAO	枪刀药	Purple Hypoestes	T3373 <i>Hypoestes purpurea</i> [Syn. <i>Justicia purpurea</i> ; <i>Hypoestes sinica</i> ]
QIANG GU FEI YAN CAO	强固飞燕草*	Consolidated Larkspur*	T2068 <i>Delphinium consolida</i>
QIANG HUO	羌活	Incised Notopterygium	T4446 <i>Notopterygium incisum</i>
QIANG WEI GEN	蔷薇根	Japanese Rose Root	T5569 <i>Rosa multiflora</i>
QIANG XIANG	青葙	Feather Cockscorn	T1296 <i>Celosia argentea</i>
QIAO BING BA QIA	鞘柄菝葜	Sheathstipe Greenbrier	T5984 <i>Smilax stans</i> [Syn. <i>Smilax vaginata</i> var. <i>stans</i> ]
QIAO CHA	巧茶	Khat	T1266 <i>Catha edulis</i>
QIAO GUAN JU	鞘冠菊	Common Coleostephus	T1618 <i>Coleostephus myconis</i>
QIAO GUI	乔桧	Bhutan Pine	T4910 <i>Pinus excelsa</i>
QIAO HUANG TAN	俏黄檀*	Spruce Rosewood*	T2016 <i>Dalbergia spruceana</i>
QIAO MAI	荞麦	Common Buckwheat	T2658 <i>Fagopyrum esculentum</i>
QIAO MAI JIE	荞麦秸	Common Buckwheat Stem	T2659 <i>Fagopyrum esculentum</i>
QIAO MU CI TONG	乔木刺桐	Himalayan Coralbean	T2459 <i>Erythrina arborescens</i>
QIAO MU HU JIAO	乔木胡椒	Arboreous Pepper*	T4932 <i>Piper arboreum</i>
QIAO MU SHAO YAO	乔木芍药*	Arboreous Peony	T4581 <i>Paeonia arborea</i>
QIAO MU ZHUANG HUANG NIU MU	乔木状黄牛木*	Genonggang	T1783 <i>Cratoxylum arborescens</i>
QIAO MU ZHUANG LAN REN	乔木状榄仁	Arboreous Terminalia*	T6343 <i>Terminalia arborea</i>
QIAO MU ZHUANG YANG MEI	乔木状杨梅*	Arboreous Bayberry*	T4342 <i>Myrica arborea</i>
QIAO MU ZI ZHU	乔木紫珠	Tree Beautyberry	T1116 <i>Callicarpa arborea</i>

QIAO SHI DOU LAN	鞘石豆兰	Vaginate Stonebean-orchis*	T1054 <i>Bulbophyllum vaginatum</i>
QIAO TOU	芥头	Chinese Onion	T0313 <i>Allium chinense</i>
QIE YE	茄叶	Garden Eggplant Leaf	T6006 <i>Solanum melongena</i>
QIE ZI	茄子	Garden Eggplant	T6007 <i>Solanum melongena</i>
QIN HUA	芹花	Javan Waterdropwort Flower	T4481 <i>Oenanthe javanica</i>
QIN JIAO	秦艽	Largeleaf Gentian	T2919 <i>Gentiana macrophylla</i>
QIN LING BAI LA SHU	秦岭白蜡树	Pax Ash	T2774 <i>Fraxinus paxiana</i>
QIN LING CUI QUE HUA	秦岭翠雀花	Girald Larkspur	T2076 <i>Delphinium giraldii</i>
QIN LING DA HUANG	秦岭大黄	Qinling Rhubarb*	T5475 <i>Rheum qinlingense</i>
QIN LING ZHU ZI SHEN	秦岭珠子参	Largeleaf Japanese Ginseng	T4605 <i>Panax japonicus</i> var. <i>major</i>
QIN ZHUANG AO CHUN JIANG	琴状凹唇姜	Lyrate Boesenbergia*	T0970 <i>Boesenbergia pandurata</i>
QING AI	清艾	Graywhite Wormwood*	T0669 <i>Artemisia cana</i>
QING FENG TENG	青风藤	Orientvine	T5964 <i>Sinomenium acutum</i>
QING GUO	青果	Olive	T1165 <i>Canarium album</i>
QING HAO	青蒿	Celery Wormwood	T0662 <i>Artemisia apiacea</i> [Syn. <i>Artemisia carvifolia</i> ; <i>Artemisia caruifolia</i> ]
QING JIAO	青椒	Peppertree Pricklyash	T6892 <i>Zanthoxylum schinifolium</i>
QING LIANG BAI HE	清亮百合*	Madonna Lily	T3833 <i>Lilium candidum</i>
QING MEI	青梅	Rassak Vatica*	T6686 <i>Vatica rassak</i>
QING MING HUA	清明花	Easter Heraldtrumpet	T0886 <i>Beaumontia grandiflora</i>
QING MU XIANG	青木香(马兜铃根)	Slender Dutchmanspipe Root	T0627 <i>Aristolochia debilis</i> [Syn. <i>Aristolochia longa</i> ]
QING NIANG ZI	青娘子	Mung Bean Blister Beetle	T4008 <i>Lytta caraganae</i>
QING NIU DAN	青牛胆	Arrowshaped Tinospora	T6467 <i>Tinospora sagittata</i>
QING QIAN LIU	青钱柳	Roundwingfruit Cyclocarya	T1936 <i>Cyclocarya paliurus</i>
QING SHE TENG	青蛇藤	Greensnake vine	T4725 <i>Periploca calophylla</i>
QING TENG XIANG	青藤香	Japanese Snailseed Stem	T1590 <i>Cocculus trilobus</i> [Syn. <i>Cocculus sarmentosus</i> ]
QING WA	青蛙	Pond Frog	T5407 <i>Rana nigromaculata</i> ; <i>Rana plancyi</i>
QING WA DAN	青蛙胆	Pond Frog Gall	T5408 <i>Rana nigromaculata</i> ; <i>Rana plancyi</i>
QING XIANG MU JIANG ZI	清香木姜子	Fourflower Litsea	T3886 <i>Litsea euosma</i>
QING YANG	青杨	Green Poplar	T5150 <i>Populus cathayana</i>
QING YANG SHEN	青羊参	Auricledleaf Mosquitotrap	T1958 <i>Cynanchum otophyllum</i>
QING YE DAN	青叶胆	Mileen Swertia	T6226 <i>Swertia mileensis</i>
QING ZI QIAN NIU	青紫牵牛	Violet Morningglory*	T3453 <i>Ipomoea violacea</i>
QING ZI SU	青紫苏	Viridian Common Perilla*	T4716 <i>Perilla frutescens</i> f. <i>viridis</i>
QIU FENG MU	秋枫木	Javan Bishopwood	T0945 <i>Bischofia javanica</i> [Syn. <i>Bischofia trifoliata</i> ]
QIU FU SHOU CAO	秋福寿草	Annual Adonis*	T0185 <i>Adonis annua</i>
QIU HUA DANG SHEN	球花党参	Subglobose Asiabell	T1601 <i>Codonopsis subglobosa</i>
QIU HUA NIU NAI CAI	球花牛奶菜	Globose Condorvine	T4116 <i>Marsdenia globifera</i>
QIU HUA ZUI YU CAO	球花醉鱼草	Orange-ball-tree	T1047 <i>Buddleja globosa</i>
QIU MU GUA	秋木瓜	Common Floweringquince	T1342 <i>Chaenomeles lagenaria</i> [Syn. <i>Chaenomeles speciosa</i> ]
QIU QIE SHU	秋茄树	Kandelia	T3626 <i>Kandelia candel</i>
QIU RUI WU WEI ZI	球蕊五味子	Ballander Magnoliavine	T5801 <i>Schisandra sphaerandra</i>
QIU SHENG BI HUA MU	丘生闭花木		T1543 <i>Cleistanthus collinus</i>
QIU SHI MEI DENG MU	丘氏美登木	Chuchuhuasc Mayten*	T4130 <i>Maytenus chuchuhuasca</i>
QIU SHUI XIAN	秋水仙	Meadow Saffron	T1616 <i>Colchicum autumnale</i>
QIU SHUI XIAN CHANG CHUN TENG	秋水仙常春藤*	Colchicum Ivy*	T3111 <i>Hedera colchica</i>
QIU SUI QIAN JIN BA	球穗千斤拔	Conespike Flemingia	T2738 <i>Flemingia strobilifera</i>
QIU YAO GE CHONG LOU	球药隔重楼	Farges Paris	T4647 <i>Paris fargesii</i>

QIU YIN	蚯蚓	Earthworm	T4796 <i>Pheretima aspergillum</i> ; <i>Allolobophora caliginosa trapezoides</i>
QIU YUAN YE TAI	秋圆叶苔		T3552 <i>Jamesoniella autumnalis</i>
QIU ZHUANG PO BU MU	球状破布木*	Globe Cordia*	T1677 <i>Cordia globosa</i>
QU CHONG BAN JIU JU	驱虫斑鸠菊	Worm-killed Bitterleaf	T6713 <i>Vernonia anthelmintica</i>
QU CHONG CAO	驱虫草		T6074 <i>Spigelia anthelmia</i>
QU CHONG HE HUAN	驱虫合欢*	Musenna Albizia	T0291 <i>Albizzia anthelmintica</i>
QU MAI	瞿麦	Lilac Pink	T2145 <i>Dianthus superbus</i>
QU QU HUA	屈曲花	Rocket Candytuft	T3385 <i>Iberis amara</i>
QU XI DANG GUI	曲膝当归*	Genuflex Angelica*	T0482 <i>Angelica genuflexa</i>
QU YU CAO DI LAO GUAN CAO	区域草地老鹳草		T2945 <i>Geranium pratense</i> ssp. <i>funitimum</i>
QU ZHOU HAI JIN SHA	曲轴海金沙	Flexuose Climbing Fern	T3989 <i>Lygodium flexuosum</i> [Syn. <i>Lygodium pinnatifidum</i> ; <i>Ophioglossum flexuosum</i> ]
QUAN CHI QIANG WEI	犬齿蔷薇	Dog Rose	T5561 <i>Rosa canina</i>
QUAN JU GUA YE WU TOU	拳距瓜叶乌头	Circinate Hemsley Monkshood	T0100 <i>Aconitum hemsleyanum</i> var. <i>circinacum</i>
QUAN NENG HUA	全能花	Twoflower Pancratium	T4612 <i>Panocratium biflorum</i>
QUAN SHEN	拳参	Bistort	T5099 <i>Polygonum bistorta</i>
QUAN XIE	全蝎	Scorpion	T1084 <i>Buthus martensi</i>
QUAN YE SU TIE	拳叶苏铁	Crozier Cycas	T1926 <i>Cycas circinalis</i>
QUAN YE YAN HU SUO	全叶延胡索	Creeping Corydalis	T1735 <i>Corydalis repens</i>
QUAN YUAN CHU	全缘栲	Integrifolious Ailanthus*	T0257 <i>Ailanthus integrifolia</i> ssp. <i>calycina</i>
QUAN YUAN GUI MU	全缘桂木	Integerleaf Artocarpus	T0715 <i>Artocarpus integra</i>
QUAN YUAN QIAN LI GUANG	全缘千里光	Entire Groundsel	T5889 <i>Senecio integerrimus</i>
QUAN YUAN YE AO TUO SI TE CAO	全缘叶奥托斯特草*	Integrifolious Otostegia*	T4558 <i>Otostegia integrifolia</i>
QUAN YUAN YE BO LUO MI	全缘叶波罗蜜*	Integrifolious Artocarpus*	T0716 <i>Artocarpus integrifolia</i>
QUAN YUAN YE HUA JIAO	全缘叶花椒	Integrifolious Pricklyash*	T6882 <i>Zanthoxylum integrifoliolum</i>
QUAN YUAN YE MEI ZHOU CHA	全缘叶美洲茶	Deerbrush	T1276 <i>Ceanothus integerrimus</i>
QUAN YUAN YE TE SA JU	全缘叶特萨菊		T6351 <i>Tessaria integrifolia</i>
QUAN YUAN YE XIAO BO	全缘叶小檗	Integrifolious Barberry	T0905 <i>Berberis integerrima</i>
QUE BAI MAI JIAO	雀稗麦角	Paspalum Ergot*	T1540 <i>Claviceps paspali</i>
QUE MEI TENG	雀梅藤	Hedge Sageretia	T5645 <i>Sageretia theezans</i> [Syn. <i>Sageretia thea</i> ]
QUE SHE HUANG YANG	雀舌黄杨	Bodnier Box	T1087 <i>Buxus bodinieri</i>
QUN DAI CAI	裙带菜	Undaria	T6640 <i>Undaria pinnatifida</i>
QUN XIN CAI	群心菜	Common Cardaria	T1195 <i>Cardaria draba</i>
RAN LIAO MU	染料木	Common Woadwaxen	T2901 <i>Genista tinctoria</i>
RAN LIAO SI SHI MU	染料斯氏木		T5940 <i>Sickingia tinctoria</i>
RAN MAO QIAO RUI HUA	髯毛鞘蕊花	Forskahl Coleus	T1619 <i>Coleus barbatus</i>
RAN SE JI YAN TENG	染色鸡眼藤	Dyed Morinda	T4285 <i>Morinda tinctoria</i>
RAN SE SANG	染色桑	Tinctorial Mulberry*	T4302 <i>Morus tinctoria</i>
RE BEN MO GU	日本蘑菇	Japanese Mushroom*(Sheep Polypore)	T0288 <i>Albatrellus ovinus</i>
REN DONG TENG	忍冬藤	Japanese Honeysuckle Vine	T3913 <i>Lonicera japonica</i>
REN GONG YONG CHONG CAO	人工蛹虫草	Cultivated Scarlet Caterpillar Fungus*	T1681 <i>Cordyceps militaris</i> cv
REN NIAO	人尿	Human Urine	T3276 <i>Homo sapiens</i>
REN SHEN	人参	Ginseng	T4599 <i>Panax ginseng</i> [Syn. <i>Panax schinseng</i> ]
REN SHEN HUA LEI	人参花蕾	Ginseng Buds	T4600 <i>Panax ginseng</i> [Syn. <i>Panax schinseng</i> ]
REN SHEN LU	人参芦	Ginseng Reed	T4601 <i>Panax ginseng</i> [Syn. <i>Panax schinseng</i> ]
REN SHEN XI YANG SHEN ZA JIAO ZHONG	人参西洋参杂交种		T4603 <i>Panax ginseng</i> x <i>P. quinquefolium</i>

REN SHEN YE	人参叶	Ginseng Leaf	T4602 <i>Panax ginseng</i> [Syn. <i>Panax schinseng</i> ]
REN ZHONG BAI	人中白	Human Urine Sediment	T3277 <i>Homo sapiens</i>
RI BEN AN XI XIANG JING PI	日本安息香茎皮*	Japanese Snowbell Stem-bark	T6200 <i>Styrax japonica</i>
RI BEN BAI LA SHU	日本白蜡树	Japanese Ash*	T2771 <i>Fraxinus japonica</i>
RI BEN BAI SI CAO	日本白丝草	Japanese Chionographis*	T1369 <i>Chionographis japonica</i>
RI BEN BAI SONG FENG CAO	日本白松风草	Japanese White Chinaure*	T0965 <i>Boenninghausenia albiflora</i> var. <i>japonica</i>
RI BEN BIAN BAI	日本扁柏	Hinoki False Cypress	T1349 <i>Chamaecyparis obtusa</i>
RI BEN BIAN TAI	日本鞭苔	Japanese Flagelliform Liverwort*	T0883 <i>Bazzania japonica</i>
RI BEN CE ER	日本侧耳		T3684 <i>Lamptreomyces japonicus</i>
RI BEN CHANG PU	日本菖蒲	Japanese Sweetflag*	T0143 <i>Acorus calamus</i> var. <i>angustatus</i>
RI BEN CHOU JIE CAO	日本臭节草*	Japanese Chinaure*	T0966 <i>Boenninghausenia japonica</i>
RI BEN CU FEI	日本粗榧	Japanese Plumyew	T1320 <i>Cephalotaxus harringtonia</i>
RI BEN DANG GUI	日本当归	Japanese Angelica*	T0485 <i>Angelica japonica</i>
RI BEN DONG FENG LUO	日本东风螺*		T0842 <i>Babylonia japonica</i>
RI BEN DU JUAN HUA	日本杜鹃花	Japanese Azalea	T5511 <i>Rhododendron japonicum</i>
RI BEN DUO CI YU TAI	日本多刺羽苔*		T4991 <i>Plagiochila acanthophylla</i> ssp. <i>japonica</i>
RI BEN GUI DENG QING	日本鬼灯擎	Bronzeleaf Rodgersflower	T5556 <i>Rodgersia podophylla</i>
RI BEN HOU PI XIANG	日本厚皮香	Japanese Cleyera	T6350 <i>Ternstroemia japonica</i>
RI BEN HOU PO	日本厚朴	Whiteleaf Japanese Magnolia	T4044 <i>Magnolia obovata</i>
RI BEN HUA BAI	日本花柏	Sawara False Cypress	T1350 <i>Chamaecyparis pisifera</i>
RI BEN HUANG BAI	日本黄柏	Japan Corktree*	T4793 <i>Phellodendron japonicum</i>
RI BEN HUANG LIAN	日本黄连	Japanese Goldthread*	T1667 <i>Coptis japonica</i>
RI BEN JIA MI	日本莢蒾	Japanese Viburnum	T6734 <i>Viburnum awabuki</i>
RI BEN JIN YAO	日本金腰	Japanese Goldsaxifrage	T1404 <i>Chrysosplenium japonicum</i>
RI BEN KU LIAN	日本苦楝	Japanese Chinaberry-tree	T4160 <i>Melia azedarach</i> var. <i>japonica</i>
RI BEN LIAN XIANG SHU	日本连香树*	Japanese Katsura-tree	T1332 <i>Cercidiphyllum japonicum</i>
RI BEN LIN MAO JUE	日本鳞毛蕨	Brown-margin Wood Fern	T2286 <i>Dryopteris sacrosancta</i>
RI BEN LIU SHAN	日本柳杉	Japanese Cedar	T1868 <i>Cryptomeria japonica</i>
RI BEN LONG DAN	日本龙胆*	Japanese Gentian*	T2912 <i>Gentiana japonica</i>
RI BEN LONG YA CAO	日本龙芽草*	Japanese Agrimonia*	T0247 <i>Agrimonia japonica</i>
RI BEN LU TI CAO	日本鹿蹄草	Japanese Pyrola	T5350 <i>Pyrola japonica</i>
RI BEN LUO SHI	日本络石	Japanese Star Jasmine*	T6483 <i>Trachelospermum asiaticum</i>
RI BEN MA SANG	日本马桑	Japanese Coriaria*	T1690 <i>Coriaria japonica</i>
RI BEN MA ZUI MU	日本马醉木	Japanese Pieris	T4890 <i>Pieris japonica</i>
RI BEN MANG CAO	日本莽草	Japanese Anisetree	T3399 <i>Illicium anisatum</i>
RI BEN NAN	日本楠	Japanese Machilus*	T4016 <i>Machilus japonica</i>
RI BEN NAN WU WEI ZI	日本南五味子	Japanese Kadsura	T3616 <i>Kadsura japonica</i>
RI BEN NIU PI XIAO	日本牛皮消	Japanese Swallowwort*	T1956 <i>Cynanchum japonicum</i>
RI BEN NIU XI	日本牛膝	Japanese Achyranthes	T0074 <i>Achyranthes fauriei</i>
RI BEN NV ZHEN	日本女贞	Japanese Privet	T3827 <i>Ligustrum japonicum</i>
RI BEN PING PENG CAO	日本萍蓬草	Japanese Cowlily*	T4448 <i>Nuphar japonicum</i>
RI BEN QI YE SHU	日本七叶树	Japanese Buckeye	T0204 <i>Aesculus turbinata</i>
RI BEN QIAN QU CAI	日本千屈菜	Twoedged Loosestrife	T4006 <i>Lythrum anceps</i>
RI BEN SAN YE SHA SEN	日本三叶沙参	Japanese Trileaf Ladybell*	T0169 <i>Adenophora triphylla</i> var. <i>japonica</i>
RI BEN SHE GEN CAO	日本蛇根草	Japanese Ophiorrhiza	T4510 <i>Ophiorrhiza japonica</i>
RI BEN SHENG MA	日本升麻	Japanese Bugbane*	T1422 <i>Cimicifuga japonica</i>
RI BEN SHU YU	日本薯蕷	Japanese Yam	T2202 <i>Dioscorea japonica</i>
RI BEN SHUANG HU DIE	日本双蝴蝶*	Japanese Dualbutterfly*	T6537 <i>Tripterospermum japonicum</i>
RI BEN SU MU	日本苏木	Japanese Caesalpinia*	T1104 <i>Caesalpinia japonica</i>
RI BEN WEN SHU LAN	日本文殊兰	Japanese Crinum	T1795 <i>Crinum asiaticum</i> var. <i>japonicum</i>
RI BEN WU JIA	日本五加	Japanese Acanthopanax*	T0039 <i>Acanthopanax japonicum</i>
RI BEN WU TOU	日本乌头	Japanese Monkshood*	T0104 <i>Aconitum japonicum</i>
RI BEN XIANG BAI JING PI	日本香柏茎皮	Japanese Arbovriate Stem-bark	T6442 <i>Thuja standishii</i>

RI BEN XIANG RU	日本香薷*	Japanese Elsholtzia*	T2342 <i>Elsholtzia nipponica</i>
RI BEN XIAO BO	日本小檗	Japanese Barberry	T0916 <i>Berberis thunbergii</i>
RI BEN XIAO HE YI	日本小核衣*	Asian lichen	T5342 <i>Pyrenula japonica</i>
RI BEN XIN YI	日本辛夷	Kobus Magnolia	T4040 <i>Magnolia kobus</i>
RI BEN YING HUA	日本樱花	Tokyo Cherry	T5246 <i>Prunus yedoensis</i>
RI BEN YU LIN SONG	日本鱼鳞松	Yeddo Spruce	T4871 <i>Picea jezoensis</i>
RI BEN YUAN WEI	日本鸾尾	Japanese Iris*	T3462 <i>Iris komonoensis</i>
RI BEN ZHANG YA CAI	日本獐牙菜	Japanese Swertia*	T6223 <i>Swertia japonica</i>
RI BEN ZI ZHU	日本紫珠	Japanese Beautyberry	T1119 <i>Callicarpa japonica</i>
RONG BAI RU GU	绒白乳菇	Fleecy Milk-cap	T3657 <i>Lactarius vellereus</i>
RONG MAO DAI XING CAO	绒毛戴星草	Indian Sphaeranthus	T6071 <i>Sphaeranthus indicus</i>
RONG MAO DAN SHEN	绒毛丹参	Tomentose Sage*	T5696 <i>Salvia tomentosa</i>
RONG MAO HU TONG	茸毛胡桐	Tomentose Calaba	T1135 <i>Calophyllum tomentosum</i>
RONG MAO MI ZI LAN	绒毛米仔兰*	Tomentose Aglaia*	T0246 <i>Aglaia tomentosa</i>
RONG MAO SHAN XIANG	茸毛山香	Tomentose Bushmint*	T3382 <i>Hyptis tomentosa</i>
RONG MAO XIANG KE KE	绒毛香科科	Tomentose Germander	T6370 <i>Teucrium tomentosum</i>
RONG SHU	榕树	Smallfruit Fig	T2721 <i>Ficus microcarpa</i>
ROU CONG RONG	肉苁蓉	Desertliving Cistanche	T1455 <i>Cistanche deserticola</i>
ROU DOU KOU	肉豆蔻	Common Nutmeg	T4351 <i>Myristica fragrans</i>
ROU GUI	肉桂	Cassiabarktree	T1439 <i>Cinnamomum cassia</i> [Syn. <i>Cinnamomum aromaticum</i> ]
ROU HONG MA LI JIN	肉红马利筋	Incarnate Milkweed*	T0738 <i>Asclepias incarnata</i>
ROU HUA XUE DAN	肉花雪胆	Fleshy-flower Hemsleya	T3204 <i>Hemsleya carnosiflora</i>
ROU JIN HE HUAN	柔金合欢	Black Wattle	T0027 <i>Acacia mollissima</i>
ROU JING XIANG CHA CAI	柔茎香茶菜	Flexedstem Rabdosia	T3489 <i>Isodon flexicaulis</i>
ROU LEI NIU NAI CAI	柔雷牛奶菜	Roylei Condorvine*	T4119 <i>Marsdenia roylei</i>
ROU MAO DI DAN CAO	菜毛地胆草	Hawaiian Elephantfoot	T2333 <i>Elephantopus mollis</i>
ROU MAO FAN LI ZHI	柔毛番荔枝	Glaucous Custardapple*	T0507 <i>Annona glauca</i>
ROU MAO HUANG QI	柔毛黄芪*	Darkhairly Milkvetch*	T0786 <i>Astragalus atropubescens</i>
ROU MAO QIE	柔毛茄	Pubescent Nightshade	T6010 <i>Solanum pubescens</i>
ROU MAO SHAN LI DOU	柔毛山黧豆	Pilosity Peavine*	T3708 <i>Lathyrus palustris</i> var. <i>pilosus</i>
ROU MAO XIANG RI KUI	柔毛向日葵	Pubescent Sunflower*	T3150 <i>Helianthus mollis</i>
ROU MAO XIAO RU XIANG	柔毛肖乳香	Hairy Peppertree*	T5788 <i>Schinus molle</i>
ROU MAO YIN YANG HUO	柔毛淫羊藿	Pubescence Epimedium	T2401 <i>Epimedium pubescens</i>
ROU SE HUAN YANG SHEN	柔色还阳参	Soft Hawksbeard	T1788 <i>Crepis mollis</i>
RU BAI LONG DAN	乳白龙胆*	Milky Gentian*	T2916 <i>Gentiana lactea</i>
RU DI JIN NIU	入地金牛(两面针)	Shinyleaf Pricklyash	T6884 <i>Zanthoxylum nitidum</i>
RU DI WU GONG	入地蜈蚣	Ceylan Helminthostachys	T3190 <i>Helminthostachys zeylanica</i>
RU DU XIANG	藤笃香	Turpentine Tree	T4981 <i>Pistacia terebinthus</i>
RU JU	乳桔	Kinokuni Citrus	T1489 <i>Citrus kinokuni</i>
RU LAN	汝兰	Hernandialeaf Stephania	T6128 <i>Stephania hernandifolia</i>
RU NI WENG DAO MI ZHU YU	儒尼翁岛蜜茱萸	Reunion-Island Melicope*	T4164 <i>Melicope coodeana</i>
RU XIANG	乳香	Olibanum	T0994 <i>Boswellia carterii</i>
RU XIANG BAI	乳香柏	Mastic Juniper*	T3601 <i>Juniperus thurifera</i>
RU YUAN DU JUAN	乳源杜鹃	Ruyuan Rhododendron	T5512 <i>Rhododendron lingii</i>
RUAN GU HAI TOU HONG	软骨海头红		T5023 <i>Plocamium cartilagineum</i>
RUAN GU ZAO	软骨藻		T1382 <i>Chondria armata</i> [Syn. <i>Lophura armata</i> ]
RUAN MAO DU HUO	软毛独活	Soft-hair Cowparsnip	T3214 <i>Heracleum lanatum</i>
RUAN RUO DU JING SHAN	软弱杜茎山	Slender Maesa	T4032 <i>Maesa tenera</i>
RUAN SHI	软柿	Soft Persimmon*	T2225 <i>Diospyros mollis</i>
RUAN TIAO QI QIANG WEI	软条七蔷薇	Henry's Rose	T5566 <i>Rosa henryi</i>
RUAN YIN BEI TENG	软银背藤	Soft Argyreia*	T0613 <i>Argyreia mollis</i>
RUAN ZHI HUANG CHAN	软枝黄蝉	Common Allemanda	T0307 <i>Allemanda cathartica</i>



RUI DE QIAN LI GUANG	瑞德千里光*	Riddell Groundsel	T5903 <i>Senecio riddellii</i>
RUI DIAN GAN LAN	瑞典甘蓝*	Swedish Turnip	T1022 <i>Brassica rutabaga</i>
RUI JIAO JIAN MU	锐角檫木*	Acuteangulus Pencilwood*	T2306 <i>Dysoxylum acutangulum</i>
RUI SHI QIAN NIU	瑞氏牵牛	Regnell Morningglory*	T3451 <i>Ipomoea regnellii</i>
RUI SHI SHI SONG	瑞士石松	Arolla Pine	T4909 <i>Pinus cembra</i>
RUI XIANG GEN	瑞香根	Winter Daphne Root	T2027 <i>Daphne odora</i>
RUI XIANG HUA	瑞香花	Winter Daphne Flower	T2028 <i>Daphne odora</i>
RUI ZI SU	锐紫苏	Argute Perilla*	T4713 <i>Perilla arguta</i>
SA BA LU HUI	萨芭芦荟	Saba Aloe	T0344 <i>Aloe sabaea</i>
SA HA LIN YUN SHAN	萨哈林云杉	Saghalin Spruce	T4870 <i>Picea glehnii</i>
SA JIN TE BAI MU	萨金特柏木	Sargent Cypress	T1898 <i>Cupressus sargentii</i>
SA LI LA WO JU	萨利拉莴苣	Sariola Lettuce*	T3661 <i>Lactuca sariola</i>
SA SHI MAO DI HUANG	萨氏毛地黄*	Thaps Foxglove*	T2180 <i>Digitalis thapsii</i>
SAI ER WEI YA SHI CAO	塞尔维亚薯草	Serbian Yarrow	T0059 <i>Achillea alexandri-regis</i>
SAI LA LI ANG SHUI XIAN	塞拉利昂水仙		T4375 <i>Narcissus leonensis</i>
SAI LANG DANG	赛茛菪	Common Anisodus	T0501 <i>Anisodus luridus</i>
SAI LE LUO LE	塞勒罗勒	Sello Basil*	T4475 <i>Ocimum selloi</i>
SAI NEI JIA ER CI TONG	塞内加尔刺桐*	Senegal Coralbean*	T2474 <i>Erythrina senegalensis</i>
<i>Salvia</i> spp.	鼠尾草属		T5694 <i>Salvia</i> spp.
SAN BAI CAO	三白草	Chinese Lizardtail	T5750 <i>Saururus chinensis</i>
SAN CHA FENG WEI JUE	三叉凤尾蕨	Wallich's Brake	T5299 <i>Pteris wallichiana</i>
SAN CHA KU	三叉苦	Thin Evodia	T2641 <i>Evodia leptota</i> [Syn. <i>Ilex leptota</i> ]
SAN CHI HAO	三齿蒿	Big Sagebrush	T0702 <i>Artemisia tridentata</i>
SAN CHI LA RUI A	三齿拉瑞阿	Creosote-bush	T3695 <i>Larrea tridentata</i>
SAN CHU SHAN XIANG YUAN	三出山香圆*	Threeleaf Turpinia	T6568 <i>Turpinia ternata</i>
SAN CI ZAO JIA	三刺皂荚	Honeylocust	T2982 <i>Gleditsia triacanthos</i>
SAN FANG HUA XU HONG YUE	伞房花序红月桂*	Corymb Rose-bay*	T6272 <i>Tabernaemontana corymbosa</i>
GUI			
SAN FEN DAN	三分丹	Brackfollicle	T6578 <i>Tylophora atrofolliculata</i>
SAN FEN SAN	三分三	Acutangular Scopolia	T5819 <i>Scopolia acutangula</i> [Syn. <i>Anisodus acutangulus</i> ]
SAN HUA BA DOU	散花巴豆	Sparseflower Croton*	T1856 <i>Croton sparsiflorus</i>
SAN HUA LONG DAN	三花龙胆	Threeflower Gentian	T2938 <i>Gentiana triflora</i>
SAN HUA MI HUA SHU	伞花密花树*	Umbellate Rapanea*	T5418 <i>Rapanea umbellata</i>
SAN JIAN SHAN	三尖杉	Fortune Plumyew	T1318 <i>Cephalotaxus fortunei</i>
SAN JIAO FEN YE JUE	三角粉叶蕨*	Goldback Fern	T4988 <i>Pityrogramma triangularis</i>
SAN JIAO MA DOU LING	三角马兜铃*	Triangular Dutchmanspipe*	T0640 <i>Aristolochia triangularis</i>
SAN JIAO YE HUANG LIAN	三角叶黄连	Deltoid Goldthread	T1664 <i>Coptis deltoidea</i>
SAN JIAO YE SHU YU	三角叶薯蓣	Deltoid Yam	T2195 <i>Dioscorea deltoidea</i>
SAN JU AI CUI QUE	三距矮翠雀	Spring Larkspur	T2088 <i>Delphinium tricorne</i>
SAN LENG	三棱	Common Burreed	T6062 <i>Sparganium stoloniferum</i>
SAN LENG YE JIN SI TAO	三棱叶金丝桃*	Triangular-leaf St. John'swort*	T3366 <i>Hypericum triquetrifolium</i>
SAN LIE HAO	三裂蒿*	Tripertite Wormwood*	T0704 <i>Artemisia tripartita</i>
SAN LIE QIE	三裂茄	Tripertite Nightshade*	T6016 <i>Solanum tripartitum</i>
SAN LIE XUE TONG	三裂血桐*	Trilobate Macaranga*	T4014 <i>Macaranga triloba</i>
SAN LIE YE GE	三裂叶葛	Trilobedleaf Kudzuvine	T5318 <i>Pueraria phaseoloides</i>
SAN MIAN DAO	三面刀	Small Bugbane	T1417 <i>Cimicifuga acerina</i>
SAN QI	三七	Sanchi	T4608 <i>Panax pseudo-ginseng</i> var. <i>notoginseng</i> [Syn. <i>Panax notoginseng</i> ]
SAN QI CAO	三七草	Gynura	T3088 <i>Gynura segetum</i> [Syn. <i>Gynura japonica</i> ]
SAN QI HUA LEI	三七花蕾	Sanchi Buds	T4609 <i>Panax pseudo-ginseng</i> var. <i>notoginseng</i> [Syn. <i>Panax notoginseng</i> ]
SAN QIU BO SI SHI SUAN	三球波斯石蒜	Trisphare Ungernia*	T6642 <i>Ungernia trisphaera</i>

SAN RUI LIAN GUI	三蕊莲柱	Threestamen Dehaasia*	T2059 <i>Dehaasia triandra</i>
SAN SE BAI ZHUANG GU	三色白桩菇	Tricolor Leucopaxillus*	T3783 <i>Leucopaxillus tricolor</i>
SAN SE JIN	三色堇	Garden Pansy	T6766 <i>Viola tricolor</i>
SAN SE QIAN NIU	三色牵牛	Trichroism Morningglory*	T3452 <i>Ipomoea tricolor</i>
SAN SHI HUANG MA	三室黄麻*	Three-room Roundpod Jute*	T1676 <i>Corchorus trilocularis</i>
SAN TAI HONG HUA	三台红花	Serrate Glorybower	T1561 <i>Clerodendron serratum</i>
SAN TAI HUA	三台花	Amplexifolious Glorybower	T1569 <i>Clerodendrum serratum</i> var. <i>amplexifolium</i>
SAN TIAO JIN	三条筋	Tibet Cinnamon Bark	T1444 <i>Cinnamomum tamala</i>
SAN WEI ZHI FAN YING TAO	三维治番樱桃*	Sandwich Eugenia*	T2534 <i>Eugenia sandwicensis</i>
SAN XIAO CAO	三消草	White Clover	T6522 <i>Trifolium repens</i>
SAN XIAO YE CUI QUE HUA	三小叶翠雀花	Threefoliolate Larkspur	T2089 <i>Delphinium trifoliolatum</i>
SAN XIAU YE SHAN DOU GEN	三小叶山豆根	Trifoliate Euchresta	T2527 <i>Euchresta japonica</i>
SAN XING HU JIAO	伞形胡椒*	Umbellate Pepper*	T4973 <i>Piper umbellatum</i>
SAN XING HUA XU YIN JIA	伞形花序因加*	Inga*	T3424 <i>Inga umbellifera</i>
SAN XING OU SHI NAN	伞形欧石南	Umbels Heath	T2418 <i>Erica umbellata</i>
SAN XING QU QU HUA	伞形屈曲花	Globe Candytuft	T3386 <i>Iberis umbellata</i>
SAN XING XIU QIU	伞形绣球	Umbellate Hydrangea	T3308 <i>Hydrangea umbellata</i>
SAN YE DIAO ZHANG	三叶钓樟	Threeleaf Spicebush*	T3855 <i>Lindera triloba</i>
SAN YE FANG FENG	三叶防风	Bambooleaf Seseli	T5934 <i>Seseli meirei</i>
SAN YE HUANG LIAN	三叶黄连	Three-leaf Goldthread	T1671 <i>Coptis trifolia</i>
SAN YE MA BIAN CAO	三叶马鞭草	Trifoliate Verbena*	T6711 <i>Verbena triphylla</i> [Syn. <i>Lippia citriodora</i> ]
SAN YE MAI MA QIAN	三叶脉马钱*	Trinervure Poisonnut*	T6189 <i>Strychnos trinervis</i>
SAN YE MI ZHU YU	三叶蜜茱萸	Threeleaf Melicope	T4169 <i>Melicope triphylla</i>
SAN YE MU	三叶木	Trileaf Wood*	T6536 <i>Triphyophyllum peltatum</i>
SAN YE MU TONG	三叶木通	Threeleaf Akebia	T0277 <i>Akebia trifoliata</i>
SAN YE MU TONG GEN	三叶木通根	Threeleaf Akebia Root	T0278 <i>Akebia trifoliata</i>
SAN YE SHU WEI CAO	三叶鼠尾草	Threeleaf Sage	T5697 <i>Salvia trijuga</i>
SAN YE TENG JU	三叶藤桔	India Luvunga	T3946 <i>Luvunga scandens</i>
SAN YING JIAN GUA LOU	三硬尖栝楼	Tri-hard-tip Snakegourd*	T6514 <i>Trichosanthes tricuspidata</i>
SAN ZHONG JU ZA JIAO	三种桔杂交种		T1519 [ <i>Citrus unshiu</i> x <i>Citrus sinensis</i> ] x <i>Citrus iyo</i>
ZHONG [xx			
SAN ZUAN FENG	三钻风	Japanese Spicebush	T3853 <i>Lindera obtusiloba</i>
SANG BAI PI	桑白皮	White Mulberry Root-bast	T4287 <i>Morus alba</i>
SANG CHENG	桑橙	Osage Orange	T4022 <i>Maclura pomifera</i>
SANG DAO BU SHI MU	桑岛布氏木		T1002 <i>Brackenridgea zanguebarica</i>
SANG HUANG	桑黄	<i>Phellinus igniarius</i>	T4787 <i>Phellinus igniarius</i>
SANG JI SHENG	桑寄生	Parasite Scurrella	T3925 <i>Loranthus parasiticus</i> [Syn. <i>Loranthus chinensis</i> ; <i>Taxillus chinensis</i> ]
SANG SHI	桑实	White Mulberry Fruit	T4289 <i>Morus alba</i>
SANG YE	桑叶	White Mulberry Leaf	T4289 <i>Morus alba</i>
SANG ZHI	桑枝	White Mulberry Branch	T4290 <i>Morus alba</i>
SE BO GE XIU QIU	瑟博格绣球土常山*	Thunberg Hydrangea*	T3305 <i>Hydrangea macrophylla</i> var. <i>thunbergii</i>
SE LUN YANG JIAO AO	瑟伦羊角拗*	Thollon Strophanthus*	T6162 <i>Strophanthus thollonii</i>
SE ZE YUN SHI	色泽云实*	Tinctorial Caesalpinia*	T1109 <i>Caesalpinia tinctoria</i>
SEN LIN BO HE	森林薄荷	Forest Mint	T4192 <i>Mentha sylvestris</i>
SHA DI YUAN ZHI	沙地远志*	Sandland Milkwort*	T5083 <i>Polygala sabulosa</i>
SHA DONG QING	沙冬青	Mongolian Ammopiptanthus	T0414 <i>Ammopiptanthus mongolicus</i> [Syn. <i>Piptanthus mongolicus</i> ]
SHA HE SHU	沙盒树	Sandbox-tree	T3296 <i>Hura crepitans</i>
SHA LI YE	沙梨叶	Sand Pear Leaf	T5366 <i>Pyrus pyrifolia</i>
SHA MO QIANG WEI	沙漠蔷薇	Desert Rose	T0168 <i>Adenium obesum</i>
SHA QIAN HU	沙前胡	Bunge Giantfennel	T2697 <i>Ferula borealis</i>

SHA REN	砂仁(阳春砂)	Villous Amomum	T0419 <i>Amomum villosum</i>
SHA SHENG HUAI	砂生槐	Sandliving Sophora	T6039 <i>Sophora moorcroftiana</i>
SHA SHENG LA JU	沙生蜡菊	Yellow Everlasting	T3156 <i>Helichrysum arenarium</i>
SHA SHENG QIAN LI GUANG	沙生千里光*	Desertliving Groundsel*	T5886 <i>Senecio eremophilus</i>
SHA SHENG SHUI GUI JIAO	砂生水鬼蕉*	Arenaceous Hymenocallis*	T3319 <i>Hymenocallis arenicola</i>
SHA TANG MU	沙塘木	Pedunculate Acronychia	T0151 <i>Acronychia pedunculata</i>
SHA ZAO	沙枣	Russianolive	T2326 <i>Elaeagnus angustifolia</i>
SHA ZAO SHU PI	沙枣树皮	Russianolive Bark	T2327 <i>Elaeagnus angustifolia</i>
SHA ZUAN TAI CAO	砂钻苔草	Sieve Sedge	T1202 <i>Carex kobomugi</i>
SHAN BI XIE	山萆薢	Mountain Yam	T2212 <i>Dioscorea tokoro</i>
SHAN BIAN DOU ZI	山扁豆子	Sensitiveplant-like Senna	T1238 <i>Cassia mimosoides</i>
SHAN CHA	山茶	Japanese Camellia	T1145 <i>Camellia japonica</i>
SHAN CI BAI	山刺柏	Taiwan Juniper	T3600 <i>Juniperus taiwaniana</i>
SHAN CI GU	山慈菇	Arrowhead-like Wildginger	T0730 <i>Asarum sagittarioides</i>
SHAN DI CI TONG	山地刺桐	Mountain Immortelle	T2471 <i>Erythrina poeppigiana</i>
SHAN DI DUI XIN JU	山地堆心菊*	Mountain Sneezeweed*	T3135 <i>Helenium autumnale</i> var. <i>montanum</i>
SHAN DI LUO HAN SONG	山地罗汉松*	Mountain Podocarpus*	T5046 <i>Podocarpus montanus</i>
SHAN DI WU TOU	山地乌头	Country Monkshood	T0115 <i>Aconitum monticola</i>
SHAN DI XIANG CHA CAI	山地香茶菜	Montane Rabdosia	T3516 <i>Isodon oresbia</i>
SHAN DI XIANG WAN DOU	山地香豌豆	Bitter Vetch	T3705 <i>Lathyrus montanus</i>
SHAN DI YAO HUA	山地尧花*	Country Stringbush*	T6822 <i>Wikstroemia monticola</i>
SHAN DONG ZHONG ZU JUE	山东肿足蕨	Shandong Hypodematium	T3372 <i>Hypodematium sinense</i>
SHAN DOU GEN	山豆根	Tonkin Sophora Root	T6043 <i>Sophora subprostrata</i> [Syn. <i>Sophora tonkinensis</i> ]
SHAN FAN GEN	山矾根	Caudate Sweetleaf Root	T6250 <i>Symplocos caudata</i>
SHAN FAN LI ZHI	山番荔枝	Montana Custardapple*	T0508 <i>Annona montana</i>
SHAN FAN YE	山矾叶	Caudate Sweetleaf Leaf	T6251 <i>Symplocos caudata</i>
SHAN FENG GUO	山风果	Mountainous Garcinia	T2858 <i>Garcinia hombroniana</i>
SHAN GAN CAO	山甘草	Buddha's Lamp	T4335 <i>Mussaenda pubescens</i>
SHAN GAN RUI XIANG	陕甘瑞香	Tangut Daphne	T2031 <i>Daphne tangutica</i>
SHAN GANG TUO WU	山冈橐吾	Leopard Plant	T3801 <i>Ligularia clivorum</i>
SHAN HE YE	山荷叶	Japanese Umbrellaleaf	T2231 <i>Diphylleia grayi</i>
SHAN HU GEN HAI TOU HONG	珊瑚根海头红*		T5024 <i>Plocamium corallorrhiza</i>
SHAN HU JIAO	山胡椒	Greyblue Spicebush	T3850 <i>Lindera glauca</i>
SHAN HU JIAO YE	山胡椒叶	Greyblue Spicebush Leaf	T3851 <i>Lindera glauca</i>
SHAN HU LAN	珊瑚兰	Faber Galeola	T2826 <i>Galeola faberi</i>
SHAN HUANG PI	山黄皮	Hollowed Wampee	T1535 <i>Clausena excavata</i>
SHAN JIN CHE	山金车	Mountain Tobacco	T0651 <i>Arnica montana</i>
SHAN JIU	山韭	Aging Leek	T0320 <i>Allium senescens</i>
SHAN JU	山药	Hance Pepper	T4948 <i>Piper hancei</i>
SHAN KU GUA	山苦瓜	Mountain Balsampear	T4266 <i>Momordica dioica</i>
SHAN KU MAI	山苦荚	China Ixeris	T3547 <i>Ixeris chinensis</i>
SHAN LI HONG	山里红	Red Fruit	T1778 <i>Crataegus pinnatifida</i> var. <i>major</i>
SHAN LING MA HUANG	山岭麻黄	Gerard Ephedra	T2368 <i>Ephedra gerardiana</i>
SHAN MA HUANG	山蚂蝗	Acutifoliate Podocarpium	T2133 <i>Desmodium racemosum</i> [Syn. <i>Podocarpium podocarpum</i> var. <i>oxyphyllum</i> ]
SHAN MAI DONG	山麦冬		T3874 <i>Liriope spicata</i>
SHAN MAO ER	山猫儿	Swordleaf Dianella	T2139 <i>Dianella ensifolia</i>
SHAN MO LI YUN XIANG	山茉莉芸香	Mountjasmine Rue*	T5629 <i>Ruta oreojasme</i>
SHAN NAI	山柰	Galanga Resurrectionlily	T3620 <i>Kaempferia galanga</i>
SHAN PU TAO	山葡萄	Amur Grape	T6794 <i>Vitis amurensis</i>
SHAN QIAN HU	山前胡*	Mountain Parsley	T4765 <i>Peucedanum oreoselinum</i>
SHAN QIU JU PAN MU	山丘巨盘木*	Hill Flindersia*	T2739 <i>Flindersia collina</i>

SHAN REN YE	山稔叶	Downy Rosemyrtle Leaf	T5528 <i>Rhodomyrtus tomentosa</i>
SHAN SHAN JIANG	扇山姜	Flabellate Galangal*	T0355 <i>Alpinia flabellata</i>
SHAN SHI LIU	山石榴	Malabar Randia; Sping Randia	T5411 <i>Randia spinosa</i>
SHAN TAO JING BAI PI	山桃茎白皮	David Peach Bast	T5220 <i>Prunus davidiana</i>
SHAN TAO ZHI	山桃枝	David Peach Juvenile Branch	T5221 <i>Prunus davidiana</i>
SHAN TENG	鱗藤	Common Anodendron	T0514 <i>Anodendron affine</i>
SHAN TONG ZI	山桐子	Manyfruit Idesia	T3387 <i>Idesia polycarpa</i>
SHAN WO JU	山莴苣	Indian Lettuce	T3659 <i>Lactuca indica</i>
SHAN XI WO ER QI	陕西窝儿七	American Umbrellaleaf	T2230 <i>Diphylleia cymosa</i>
SHAN XIANG KE KE	山香科科	Montane Germander*	T6363 <i>Teucrium montanum</i>
SHAN XIAO JU	山小橘	Citrusleaf Glycosmis	T3006 <i>Glycosmis citrifolia</i>
SHAN XING KUO BAO JU	扇形阔苞菊	Sector Pluchea	T0845 <i>Baccharis flabellata</i>
SHAN XING REN	山杏仁	Ansu Apricot Seed	T5219 <i>Prunus armeniaca</i> var. <i>ansu</i>
SHAN YAN HU SUO	山延胡索	Bird-in-a-bush	T1708 <i>Corydalis bulbosa</i> [Syn. <i>Corydalis solida</i> ]
SHAN YANG	山杨	Wild poplar	T5151 <i>Populus davidiana</i>
SHAN YANG DOU	山羊豆	Common Goatsrue	T2824 <i>Galega officinalis</i>
SHAN YANG DOU YE KU MA DOU	山羊豆叶苦马豆	Darling Pea	T6208 <i>Swainsonia galegifolia</i>
SHAN YANG HUANG QI	山羊黄芪*		T0790 <i>Astragalus caprinus</i>
SHAN YANG WU TOU	山阳乌头	Shanyang Monkshood*	T0128 <i>Aconitum sanyoense</i>
SHAN YAO	山药	Common Yam	T2190 <i>Dioscorea batatas</i> [Syn. <i>Dioscorea opposita</i> ]
SHAN YE WAN DOU	山野豌豆	Broadleaf Vetch	T6742 <i>Vicia amoena</i>
SHAN YIN CHAI HU	山银柴胡	Pacific Gypsophila	T3091 <i>Gypsophila pacifica</i>
SHAN YING TAO	山樱桃	Downy Cherry	T5244 <i>Prunus tomentosa</i>
SHAN YOU MA	山油麻	Diels Trema	T6494 <i>Trema dielsiana</i>
SHAN YU	山榆	Wych Elm	T6595 <i>Ulmus glabra</i>
SHAN ZHA	山楂	Chinese Hawthorn	T1775 <i>Crataegus pinnatifida</i>
SHAN ZHA HUA	山楂花	Chinese Hawthorn Flower	T1776 <i>Crataegus pinnatifida</i>
SHAN ZHA YE	山楂叶	Chinese Hawthorn Leaf	T1777 <i>Crataegus pinnatifida</i>
SHAN ZHI MA	山芝麻	Narrowleaf Screwtree	T3163 <i>Helicteres angustifolia</i>
SHAN ZHU YU	山茱萸	Asiatic Cornelian Cherry	T1698 <i>Cornus officinalis</i> [Syn. <i>Macrocarpium officinale</i> ]
SHAN ZHU ZI	山竹子	Manyflower Garcinia	T2867 <i>Garcinia multiflora</i>
SHAN ZHUANG AO DING ZAO	栅状凹顶藻		T3723 <i>Laurencia palisada</i>
SHAN ZUO JIANG CAO	山酢浆草	Wood-sorrel	T4562 <i>Oxalis acetosella</i>
SHANG JU TIAN MEN DONG	上举天门冬*	Ascendent Asparagus*	T0745 <i>Asparagus adscendens</i>
SHANG LU	商陆	Indian Pokeweed	T4864 <i>Phytolacca esculenta</i> [Syn. <i>Phytolacca acinosa</i> ]
SHANG ZUO JIAN YE GUANG E TAI	上佐尖叶光萼苔*		T5168 <i>Porella acutifolia</i> ssp. <i>tosana</i>
SHANG ZUO ZHOU JIN YAO	上佐州金腰*	Tosa Goldsaxifrage*	T1408 <i>Chrysosplenium tosaense</i>
SHANG ZUO ZHOU ZHANG YA CAI	上佐州獐芽菜*	Tosa Swertia*	T6240 <i>Swertia tosaensis</i>
SHAO BIAN HUA BAI LAI SHI JU	少边花白菜氏菊*	Fewradiate Bailai's Chrysanthemum*	T0855 <i>Baileya pauciradiata</i>
SHAO CHI XIAO BO	少齿小檗	Potanin Barberry	T0913 <i>Berberis potaninii</i>
SHAO FU E QIAN LI GUANG	少副萼千里光	Fewcalycle Groundsel*	T5895 <i>Senecio paucicazyculatus</i>
SHAO HUA RUI MU	少花蕊木	Fewflower Kopsia*	T3644 <i>Kopsia pauciflora</i>
SHAO HUA XI PA MU	少花西帕木	Limoncillo (in Costa Rica)	T5965 <i>Siparuna pauciflora</i>
SHAO LAN	杓兰	European Ladyslipper	T1983 <i>Cypripedium calceolus</i>
SHE BAI ZI	蛇百子	Wild Spikenard	T3381 <i>Hyptis suaveolens</i>

SHE BIAN JU	蛇鞭菊	Gay-feather	T3793 <i>Liatris spicata</i>
SHE CHUANG ZI	蛇床子	Common Cnidium	T1582 <i>Cnidium monnieri</i>
SHE GAN	射干	Blackberrylily	T0892 <i>Belamcanda chinensis</i>
SHE GEN CAO	蛇根草	Common Ophiorrhiza	T4513 <i>Ophiorrhiza mungos</i>
SHE GUO HUANG JIN	蛇果黄堇	Snakefruit Corydalis	T1730 <i>Corydalis ophiocarpa</i>
SHE HAN WEI LING CAI	蛇含委陵菜	Klein Cinquefoil	T5184 <i>Potentilla kleiniana</i>
SHE MEI	蛇莓	Indian Mockstrawberry	T2290 <i>Duchesnea indica</i>
SHE PAO JIN	蛇泡筋	Snakebubble Raspberry	T5591 <i>Rubus cochinchinensis</i>
SHE PU TAO	蛇葡萄	Ampelopsis	T0423 <i>Ampelopsis brevipedunculata</i>
SHE TAI	蛇苔	Conicum Conocephalus*	T1644 <i>Conocephalum conicum</i>
SHE TENG	蛇藤	Asian Colubrina	T1627 <i>Colubrina asiatica</i>
SHE XIANG	麝香	Abelmusk	T4303 <i>Moschus moschiferus; Moschus berezovskii; Moschus sifanicus</i>
SHE XIANG BAI HE	麝香百合	Longflower Lily	T3835 <i>Lilium longiflorum</i>
SHE XIANG CAO	麝香草	Thyme	T6454 <i>Thymus vulgaris</i>
SHE XIANG MANG ZI	麝香芒籽		T0817 <i>Atherosperma moschatum</i>
SHE XIANG SHI CAO	麝香薯草	Musky Yarrow	T0066 <i>Achillea moschata</i>
SHE XIANG SHI ZHU	麝香石竹	Carnation	T2142 <i>Dianthus caryophyllus</i>
SHE XIANG XUAN	麝香萱	Thunberg's Daylily	T3198 <i>Hemerocallis thunbergii</i>
SHE XING LIN SHENG JIAO GU CUI	舌形林生脚骨脆*	Lingual Forest-in Casearia*	T1225 <i>Casearia sylvestris</i> var. <i>lingua</i>
SHEN CHANG CHUAN XIN LIAN	伸长穿心莲*	Elongate Andrographis*	T0454 <i>Andrographis elongata</i>
SHEN HAO	伸蒿*	Porrect Wormwood*	T0688 <i>Artemisia porrecta</i>
SHEN HONG HONG JING TIAN	深红红景天	Darkred Rhodiola	T5493 <i>Rhodiola coccinea</i>
SHEN HUANG DOU	神黄豆	Jointwood Senna	T1239 <i>Cassia nodosa</i>
SHEN HUANG ZI JIN	深黄紫堇*	Dark-yellow Corydalis	T1723 <i>Corydalis lutea</i>
SHEN JIN CAO	伸筋草	Common Japanese Clubmoss	T3973 <i>Lycopodium japonicum</i> [Syn. <i>Lycopodium clavatum</i> ]
SHEN LIE CUI QUE HUA	深裂翠雀花	Deeplobed Larkspur*	T2073 <i>Delphinium dissectum</i>
SHEN LIE YE JIAO HAO	深裂叶角蒿*	Deep-lobed-leaf Incarvillea*	T3419 <i>Incarvillea dissectifoliola</i>
SHEN LIE YU HUANG CAO	深裂鱼黄草*	Deeplobed Merremia*	T4197 <i>Merremia dissecta</i>
SHEN LU SHAN LONG YAN	深绿山龙眼	Nilgiris Helicia	T3162 <i>Helicia nilagirica</i>
SHEN SHENG XUAN GOU ZI	神圣悬钩子*	Sanctity Blackberry*	T5597 <i>Rubus sanctus</i>
SHEN XIANG CAO	神香草	Medicinal Hyssop	T3384 <i>Hyssopus officinalis</i>
SHEN XIANG CAO YE ZE LAN	神香草叶泽兰	Hyssop-leaved Boneset	T2562 <i>Eupatorium hyssopifolium</i>
SHEN XING XIANG CHA CAI	肾形香茶菜	Reniform Rabdosia*	T3502 <i>Isodon latifolia</i> var. <i>reniformis</i>
SHEN YE TIAN ZHU KUI	肾叶天竺葵	Reniform Pelargonium*	T4692 <i>Pelargonium reniforme</i>
SHENG DI HONG JING TIAN	圣地红景天	Integripetal Rhodiola	T5499 <i>Rhodiola sacra</i>
SHENG GU YOU	省沽油	Bumalda Bladdernut	T6097 <i>Staphylea bumalda</i>
SHENG HONG JI	胜红蓟	Tropic Ageratum	T0229 <i>Ageratum conyzoides</i>
SHENG JIANG	生姜	Fresh Common Ginger	T6910 <i>Zingiber officinale</i>
SHENG MA	升麻	Bugbane	T1420 <i>Cimicifuga foetida</i>
SHENG MU	升木		T3884 <i>Lithraea caustica</i>
SHENG QI	生漆	True Lacquer	T5542 <i>Rhus verniciflua</i> [Syn. <i>Toxicodendron verniciflum</i> ]
SHENG TENG	生藤	Common Stelmatocrypton	T6106 <i>Stelmatocrypton khasianum</i>
SHENG ZAO	绳藻		T1385 <i>Chorda filum</i>
SHI CAN XIANG KE KE	石蚕香科科	Chamaedrys Germander	T6360 <i>Teucrium chamaedrys</i>
SHI CHANG PU	石菖蒲	Grassleaved Sweetflag	T0146 <i>Acorus tatarinowii</i>
SHI CHE JU	矢车菊	Cornflower	T1305 <i>Centaurea cyanus</i>
SHI CHUN	石蕲	Lettuce Ulva Frond	T6599 <i>Ulva lactuca</i>
SHI DA GONG LAO MU	十大功劳木	Leatherleaf Mahonia	T4055 <i>Mahonia bealei</i>

SHI DA GONG LAO YE	十大功劳叶	Leatherleaf Mahonia Leaf	T4056 <i>Mahonia bealei</i>
SHI DA GONG LAO ZI	十大功劳子	Leatherleaf Mahonia Fruit	T4057 <i>Mahonia bealei</i>
SHI DAN CAO	石胆草	Fan-shaped Corallodiscus	T1672 <i>Corallodiscus flabellatus</i> [Syn. <i>Didissandra flabellat</i> ]
SHI DI	柿蒂	Persimmon Persistent Calyx	T2217 <i>Diospyros kaki</i>
SHI DI QIAN	石地钱		T5444 <i>Reboulia hemisphaerica</i>
SHI DIAO BAI	石刁柏	Curinary Asparagus	T0751 <i>Asparagus officinalis</i>
SHI DIAO LAN	石吊兰	Fewflower Lysionotus	T4005 <i>Lysionotus pauciflorus</i>
SHI ER	石耳	Rock-Ears*	T6601 <i>Umbilicaria esculenta</i> [Syn. <i>Gyrophora esculenta</i> ]
SHI ER RUI CHOU SHI CAI	十二蕊臭矢菜*	Dodecapistil Spiderflower*	T5060 <i>Polanisia dodecandra</i>
SHI ER RUI SHANG LU	十二蕊商陆	Decapistil Pokeweed*	T4863 <i>Phytolacca dodecandra</i>
SHI FANG FENG	石防风	Terebinthaceous Hogfennel	T4773 <i>Peucedanum terebinthaceum</i>
SHI GAN ZI	石柑子	Chinese Pothos	T5189 <i>Pothos chinensis</i>
SHI GEN	柿根	Persimmon Root	T2218 <i>Diospyros kaki</i>
SHI GUAN YUAN WEI	饰冠鸢尾	Crest Iris	T3456 <i>Iris cristata</i>
SHI HU	石斛	Noble Dendrobium	T2107 <i>Dendrobium nobile</i>
SHI HU DIE	石蝴蝶	Kerri Petrocosmea*	T4747 <i>Petrocosmea kerrii</i>
SHI HU XIAO GU	石斛小菇	Dendrob Mycena	T4336 <i>Mycena dendrobii</i>
SHI HU <sup>(3)</sup>	石虎	Officinal Evodia	T2646 <i>Evodia rutaecarpa</i> var. <i>officinalis</i>
SHI HUA	石花	Parmelia Lichen	T4656 <i>Parmelia saxatilis</i>
SHI JI NING	石芥苧	Scabrous Mosla	T4307 <i>Mosla scabra</i> [Syn. <i>Mosla punctata</i> ]
SHI JIAO CAO	石椒草	Sessile-fruit Chinaure	T0967 <i>Boeninghausenia sessilicarpa</i>
SHI JUN ZI	使君子	Rangooncreeper	T5384 <i>Quisqualis indica</i>
SHI JUN ZI YE	使君子叶	Rangooncreeper Leaf	T5385 <i>Quisqualis indica</i>
SHI KU JU	史库菊	Dwarf Marigold	T5805 <i>Schkuhria pinnata</i>
SHI LA HONG	石腊红	Fish Pelargonium	T4691 <i>Pelargonium hortorum</i>
SHI LI ZI	石栗子	Belgaum Walnut Seed	T0300 <i>Aleurites moluccana</i>
SHI LIU GEN	石榴根	Pomegranate Root	T5327 <i>Punica granatum</i>
SHI LIU PI	石榴皮	Pomegranate Peel	T5328 <i>Punica granatum</i>
SHI LIU XIN CAI	石榴心材	Pomegranate Heartwood	T5329 <i>Punica granatum</i>
SHI LIU YE	石榴叶	Pomegranate Leaf	T5330 <i>Punica granatum</i>
SHI LIU ZHONG ZI	石榴种子	Pomegranate Seed	T5331 <i>Punica granatum</i>
SHI LONG RUI	石龙芮	Poisonous Buttercup	T5415 <i>Ranunculus sceleratus</i>
SHI LUO ZI	蒔萝子	Dill Fruit	T0472 <i>Anethum graveolens</i>
SHI NAN	石楠	Chinese Photinia	T4828 <i>Photinia serrulata</i>
SHI NAN TENG	石南藤		T4974 <i>Piper wallichii</i> [Syn. <i>Piper wallichii</i> var. <i>hupehense</i> ]
SHI QI	柿漆	Immature Persimmon Fruit Juice	T2219 <i>Diospyros kaki</i>
SHI RUI	石蕊	Reindeer Moss	T1526 <i>Cladonia rangiferina</i>
SHI SHENG BIAN LEI	湿生扁蕾	Swampy Gentianopsis	T2941 <i>Gentianopsis paludosa</i>
SHI SHENG JIN SI TAO	湿生金丝桃	Wetland St.John'swort*	T3367 <i>Hypericum uliginosum</i>
SHI SHI DANG GUI	施氏当归*	Shkioki Angelica*	T0494 <i>Angelica shkiokiana</i>
SHI SHUA BA	石刷把	Nude Fern	T5269 <i>Psilotum nudum</i>
SHI SUAN	石蒜	Shorttube Lycoris	T3986 <i>Lycoris radiata</i> [Syn. <i>Amaryllis radiata</i> ]
SHI WEI	石韦	Japanese Felt Fern Frond	T5357 <i>Pyrrosia lingua</i>
SHI XIAN QIE	十线茄*	Decaline Nightshade*	T5996 <i>Solanum decemlineata</i>
SHI XIANG RU	石香薷	Chinese Orthodon	T4304 <i>Mosla chinensis</i> [Syn. <i>Orthodon chinensis</i> ]
SHI XIONG RUI JIAO GUO MU	十雄蕊角果木	Ten-stamen Ceriops*	T1335 <i>Ceriops decandra</i>
SHI YAN FENG	石岩枫	Stone Mallotus*	T4085 <i>Mallotus repandus</i> var. <i>chrysocarpus</i> [Syn. <i>Mallotus chrysocarpus</i> ; <i>Mallotus repandus</i> ]
SHI YE	柿叶	Persimmon Leaf	T2220 <i>Diospyros kaki</i>

SHI YE CAO	柿叶草	Reini Milkwort*	T5082 <i>Polygala reinii</i>
SHI YE GAN SONG	匙叶甘松	Spoonleaf Nardostachys	T4387 <i>Nardostachys jatamansi</i>
SHI YONG DA HUANG	食用大黄	Rhubarb	T5476 <i>Rheum rhaponticum</i>
SHI YONG GE	食用葛	Edible Kudzuvine	T5312 <i>Pueraria edulis</i>
SHI YONG HUANG QI	食用黄芪	Edible Milkvetch*	T0792 <i>Astragalus cibarius</i>
SHI YONG RI ZHONG HUA	食用日中花	Hottentot Fig	T4200 <i>Mesembryanthemum edule</i>
SHI ZHI JIA	石指甲	Stringy Stonecrop	T5857 <i>Sedum sarmentosum</i>
SHI ZHU	石竹	Chinese Pink	T2143 <i>Dianthus chinensis</i>
SHI ZI	柿子	Persimmon	T2221 <i>Diospyros kaki</i>
SHI ZI XING FENG JI SHENG	十字形槲寄生*	Cruciate Mistletoe*	T6776 <i>Viscum cruciatum</i>
SHOU LIAN LIANG YI MU	收敛两翼木	Cuachalalate (local name)	T0431 <i>Amphipterygium adstringens</i>
SHOU ZHANG SHEN	手掌参	Conic Gymnadenia	T3077 <i>Gymnadenia conopsea</i>
SHU CE JIN ZHAN HUA	蜀侧金盏花	Szechwan Adonis	T0190 <i>Adonis sutchuenensis</i>
SHU CHI PO PO NA	梳齿婆婆纳*	Pectinate Speedwell*	T6726 <i>Veronica pectinata</i> var. <i>glandulosa</i>
SHU DI HUANG	熟地黄	Adhesive Rehmannia Cocked Root	T5446 <i>Rehmannia glutinosa</i> [Syn. <i>Rehmannia glutinosa</i> f. <i>huechingensis</i> ]
SHU HUA JIE CAO	疏花缬草*	Laxflower Valeriana*	T6678 <i>Valeriana laxiflora</i>
SHU HUA MAO E XIANG CHA CAI	疏花毛萼香茶菜	Laxflower Hairyscal Rabdosia	T3487 <i>Isodon eriocalyx</i> var. <i>laxiflora</i>
SHU HUA SHI HU	束花石斛	Goldenflower Dendrobium	T2098 <i>Dendrobium chrysanthum</i>
SHU JI GU CHANG SHAN	束鸡骨常山*	Constricted Alstonia*	T0368 <i>Alstonia constricta</i>
SHU KUI HUA	蜀葵花	Hollyhock Flower	T0382 <i>Althaea rosea</i>
SHU KUI YE SHU YU	蜀葵叶薯蓣	Hollyhock-like Yam	T2189 <i>Dioscorea althaeoides</i>
SHU LI	鼠李	Davurian Buckthorn	T5457 <i>Rhamnus davurica</i>
SHU LIANG	薯蓣	Shoulang Yam	T2193 <i>Dioscorea cirrhosa</i> [Syn. <i>Dioscorea pogonoides</i> ]
SHU MA	菽麻	Sunn Crotalaria	T1823 <i>Crotalaria juncea</i>
SHU MI	黍米	Broomcorn Millet	T4618 <i>Panicum miliaceum</i>
SHU QU CAO	鼠曲草	Cudweed	T3026 <i>Gnaphalium affine</i> [Syn. <i>Gnaphalium multiceps</i> ]
SHU QU FENG MAO JU	鼠麴风毛菊	Cudweed-like Saussurea	T5753 <i>Saussurea gnaphaloides</i>
SHU SHE	树舌	Tongue-on-tree	T2844 <i>Ganoderma applanatum</i>
SHU WEI CAO HUA CI TONG	鼠尾草花刺桐	Salviaflower Coralbean*	T2473 <i>Erythrina salviflora</i>
SHU XING DU JUAN	树形杜鹃	Treelike Rhododendron	T5503 <i>Rhododendron arboreum</i>
SHU XU ZHU MA	束序苎麻	Siam Falsenettle	T0963 <i>Boehmeria siamensis</i>
SHU ZHANG LAO GUAN CAO	鼠掌老鹳草	Siberian Cranesbill	T2947 <i>Geranium sibiricum</i>
SHU ZHI BAN RI HUA	树脂半日花	Resinoid Cistus*	T1870 <i>Cistus ladaniferus</i>
SHU ZHI DA JI	树脂大戟	Resinoid Euphorbia*	T2616 <i>Euphorbia resinifera</i>
SHU ZHI YAN FU MU	树脂盐肤木*	Resinoid Sumac*	T5535 <i>Rhus retinorrhoea</i>
SHU ZHUANG MA HUANG	树状麻黄	Tall Ephedra	T2376 <i>Ephedra procera</i>
SHUAN CHI QIN	栓翅芹	Common Prangos	T5191 <i>Prangos pabularia</i>
SHUAN CHI WEI MAO	栓翅卫矛	Corkywing Euonymus	T2545 <i>Euonymus phellomana</i>
SHUAN ZHUANG CI TONG	拴状刺桐*	Suberose Coralbean*	T2477 <i>Erythrina suberosa</i>
SHUANG BAO MO GU	双孢蘑菇	Bispore Mushroom*	T0210 <i>Agaricus bisporus</i>
SHUANG BIAN GUA LOU	双边栝楼	Rosthorn Snakegourd	T6513 <i>Trichosanthes rosthornii</i> [Syn. <i>Trichosanthes uniflora</i> ]
SHUANG CHA ZAO	双叉藻	Brown Alga <i>Bifurcaria bifurcata</i>	T0943 <i>Bifurcaria bifurcata</i>
SHUANG HUA FAN HONG HUA	双花番红花*	Biflower Crocus*	T1807 <i>Crocus chrysanthus-biflorus</i>
SHUANG HUA JIN SI TAO	双花金丝桃*	Biflower St. John'swort*	T3353 <i>Hypericum geminiflorum</i>
SHUANG SE JI DAN HUA	双色鸡蛋花*	Twocoloured Frangipani*	T5030 <i>Plumeria bicolor</i>
SHUANG SE JIN GUANG JU	双色金光菊*	Pinewoods Coneflower	T5603 <i>Rudbeckia bicolor</i>
SHUANG SE SUO ZI QIN	双色梭子芹	Twocoloured Pleurospermum	T5019 <i>Pleurospermum govanianum</i> var. <i>bicolor</i>

SHUANG SUI MA HUANG	双穗麻黄	Jointfir Ephedra	T2366 <i>Ephedra distachya</i>
SHUANG YE XI XIN	双叶细辛	Caulescent Wildginger	T0724 <i>Asarum caulescens</i>
SHUANG ZHONG ZI SHU LI	双种子鼠李*	Diseed Buckthorn*	T5458 <i>Rhamnus disperma</i>
SHUI CAI	睡菜	Bogbean	T4194 <i>Menyanthes trifoliata</i>
SHUI CAI GEN	睡菜根	Bogbean Root	T4195 <i>Menyanthes trifoliata</i>
SHUI CHAO YANG	水朝阳	Aquatic-sunflower Inula	T3432 <i>Inula helianthus-aquatica</i>
SHUI FEI JI	水飞蓟	St. Marys	T5957 <i>Silybum marianum</i>
SHUI GAN CAO	水甘草	China Amsonia	T0434 <i>Amsonia sinensis</i>
SHUI GUI JIAO YE	水鬼蕉叶	Tropical American Hymenocallis Leaf	T3320 <i>Hymenocallis littoralis</i> [Syn. <i>Hymenocallis americana</i> ; <i>Pancreatium littoralis</i> ]
SHUI HU LU	水葫芦	Common Waterhyacinth	T2325 <i>Eichhornia crassipes</i>
SHUI HU MAN	水胡满	Unarmed Glorybower	T1558 <i>Clerodendron inerme</i>
SHUI HUANG YANG MU	水黄杨木	Caudate Milkwort	T5072 <i>Polygala caudata</i>
SHUI HUI XIANG	水茴香	Winked Marshweed	T3840 <i>Limnophila rugosa</i>
SHUI HUI XIANG AN	水茴香桉	Phellandral Eucalyptus*	T2515 <i>Eucalyptus phellandra</i>
SHUI JIE GU DAN	水接骨丹	Hairy Willowweed	T2387 <i>Epilobium hirsutum</i>
SHUI JIN FENG	水金凤	Lightyellow Snapweed	T3413 <i>Impatiens nolitangere</i>
SHUI JING LAN	水晶兰	Indianpipe	T4276 <i>Monotropa uniflora</i>
SHUI LIAN YE TONG	睡莲叶桐*	Sleeping Lotusleafung	T3230 <i>Hernandia nymphaeifolia</i>
SHUI LIAO	水蓼	Red-knees	T5104 <i>Polygonum hydropiper</i>
SHUI LIU DOU	水流豆	Poongaoil Pongamia	T5143 <i>Pongamia pinnata</i>
SHUI LONG GU	水龙骨	Japanese Polypody	T5124 <i>Polypodium niponicum</i>
SHUI LU ZAO	水陆枣	Amphibian Jujube*	T6914 <i>Ziziphus amphibia</i>
SHUI MA TIAO	水麻芳	Thunberg Knotweed	T5119 <i>Polygonum thunbergii</i>
SHUI MU CAO	水木草	Cuspidate Mnium Herb	T4259 <i>Mnium cuspidatum</i>
SHUI MU XUE LIAN	水母雪莲	Medusa Saussurea	T5759 <i>Saussurea medusa</i>
SHUI NIU JIAO	水牛角	Buffalo Horn	T1045 <i>Bubalus bubalis</i>
SHUI QIE	水茄	Water Nightshade	T6015 <i>Solanum torvum</i>
SHUI QIN	水芹	Javan Waterdropwort	T4482 <i>Oenanthe javanica</i>
SHUI QING SHU	水青树	Tetracentron	T6352 <i>Tetracentron sinense</i>
SHUI QU LIU	水曲柳	Manchurian Ash	T2772 <i>Fraxinus mandshurica</i>
SHUI RONG	水榕	Liddeed Cleistocalyx	T1544 <i>Cleistocalyx operculatus</i>
SHUI SHAN	水杉	Dawn Redwood	T4208 <i>Metasequoia glyptostroboides</i>
SHUI SONG	水松	Fragile Codium Frond	T1595 <i>Codium fragile</i>
SHUI TONG MU	水桐木	Harland Fig	T2719 <i>Ficus fistulosa</i> [Syn. <i>Ficus harlandii</i> ]
SHUI TUAN HUA	水团花	Pilular Adina	T0180 <i>Adina pilulifera</i> [Syn. <i>Cephalanthus pilulifera</i> ]
SHUI WU GONG	水蜈蚣	Shortleaf Kyllinga	T3646 <i>Kyllinga brevifolia</i>
SHUI XIAN CAO	水线草	Corymbose Hedyotis	T3126 <i>Hedyotis corymbosa</i> [Syn. <i>Oldenlandia corymbosa</i> ]
SHUI XIAN GEN	水仙根	Chinese Narcissus Bulb	T4384 <i>Narcissus tazetta</i> var. <i>chinensis</i>
SHUI XIAN HUA	水仙花	Chinese Narcissus Flower	T4385 <i>Narcissus tazetta</i> var. <i>chinensis</i>
SHUI YANG MEI	水杨梅	Japanese Avens	T2955 <i>Geum japonicum</i>
SHUI YANG MEI GEN	水杨梅根	Japanese Avens Root	T2956 <i>Geum japonicum</i>
SHUI YANG MU BAI PI	水杨木白皮	Bitter Willow Bast	T5653 <i>Salix purpurea</i>
SHUI YANG ZHI YE	水杨枝叶	Bitter Willow Branch-leaf	T5654 <i>Salix purpurea</i>
SHUI ZHI	水栀	Bigflower Cape Jasmine	T2884 <i>Gardenia jasminoides</i> var. <i>grandiflora</i>
SHUI ZHI YE	水栀叶	Bigflower Cape Jasmine Leaf	T2885 <i>Gardenia jasminoides</i> var. <i>grandiflora</i>
SI BO LI YA AI JU	西伯利亚艾菊	Siberian Tansy	T6295 <i>Tanacetum sibiricum</i> [Syn. <i>Filifolium sibiricum</i> ]
SI CHI HUAI	四翅槐	New Zealand Kowhai	T6044 <i>Sophora tetraptera</i>
SI CHI HUANG QI	四翅黄芪*	Fourwing Milkvetch*	T0808 <i>Astragalus tetraplerus</i>



SI CHI SI LENG CAO	四齿四棱草	Fourteech Schnabelia	T5807 <i>Schnabelia tetradonta</i>
SI CHI YUE JIAN CAO	四翅月见草	Fourwing Eveningprimrose*	T4483 <i>Oenothera tetraptera</i>
SI CHUAN CHAN DA HUANG	四川产大黄		T5479 <i>Rheum</i> sp.
SI CHUAN LUN HUAN TENG	四川轮环藤	Szechwan Cyclea	T1933 <i>Cyclea sutchuenensis</i>
SI CHUAN QING FENG TENG	四川清风藤	Szechwan Sabia	T5637 <i>Sabia schumanniana</i>
SI CHUAN XIANG CHA CAI	四川香茶菜	Sichuna Rabdosia	T3525 <i>Isodon setschwanensis</i>
SI CHUAN YIN YANG HUO	四川淫羊藿	Szechuan Epimedium	T2404 <i>Epimedium sutchuenense</i>
SI GE MENG XUAN HAU	司格蒙旋花*	Scammony Glorybind	T1654 <i>Convolvulus scammonia</i>
SI GUA	丝瓜	Suakwa Vegetablesponge	T3934 <i>Luffa cylindrica</i>
SI GUA ZI	丝瓜子	Suakwa Vegetablesponge Seed	T3935 <i>Luffa cylindrica</i>
SI GUO HUANG QI	四国黄芪*	Siko Milkvetch*	T0803 <i>Astragalus shikokianus</i>
SI GUO XIANG CHA CAI	四国香茶菜	Shiko Rabdosia*	T5398 <i>Rabdosia shikokiana</i>
SI GUO YAO HUA	四国尧花*	Siko Stringbush*	T6823 <i>Wikstroemia sikokiana</i>
SI JI QING	四季青	Purpleflower Holly	T3388 <i>Ilex chinensis</i> [Syn. <i>Ilex purpurea</i> ]
SI JI XIANG ROU GUO	四基香肉果	Tetrabase Casimiroa*	T1227 <i>Casimiroa tetrameria</i>
SI JIAO SHU	丝胶树	Silk-rubber Tree	T2811 <i>Funtumia elastica</i>
SI JING JIE BA DOU	似荆芥巴豆*	Nepeta-like Croton*	T1852 <i>Croton nepetaefolius</i>
SI KA LUO LAI NA SHI SONG	似卡罗来纳石松*	Carolina-like Clubmoss*	T3968 <i>Lycopodium carolinianum</i> var. <i>affine</i>
SI KAO LE ZI JIN	斯考勒紫堇	Scouler Corydalis*	T1739 <i>Corydalis scouleri</i>
SI LENG JIAO MAO KE JUN	四棱角毛壳菌*		T1344 <i>Chaetomium quadrangulatum</i>
SI LENG LA SHU	四棱蜡树	Blue Ash	T2776 <i>Fraxinus quadrangulata</i>
SI LENG ZE LAN	四棱泽兰	Four-arris Eupatorium*	T2568 <i>Eupatorium quadrangulare</i>
SI LI LAN KA TU MI SHU	斯里兰卡土密树	Sri-Lankan Bridelia	T1028 <i>Bridelia retusa</i>
SI LIE BAI ZHU	四裂白珠	Four Sepals Gaultheria	T2894 <i>Gaultheria tetramera</i>
SI LIE HONG JING TIAN	四裂红景天	Foursplit Rhodiola	T5498 <i>Rhodiola quadrifida</i>
SI MA LI JIN SHI LIAN	似马利筋石莲*		T5962 <i>Sinocrassula asclepiadea</i>
SI MAO TENG	思茅藤	Longeared Epigynum	T2386 <i>Epigynum auritum</i>
SI MI SHI MU DAN CAO	斯密氏牡丹草	Smirnaw Leontice*	T3747 <i>Leontice smirnowii</i>
SI MIAN MAO JIA MI YE ZE LAN	似绵毛茛菪叶泽兰	Tinileaf Eupatorium*	T2578 <i>Eupatorium tinifolium</i>
SI MIAN MU	丝棉木	Winterberry Euonymus	T2538 <i>Euonymus bungeanus</i>
SI ROU TUO GUO YE MI ZHU YU	似肉托果叶蜜茱萸*		T4166 <i>Melicope semecarpifolia</i>
SI SHI MAO DI HUANG	斯氏毛地黄	Schischkin Foxglove*	T2178 <i>Digitalis schischkinii</i>
SI SHI TIAN JIE CAI	斯氏天芥菜*	Steudner Heliotrope*	T3181 <i>Heliotropium steudneri</i>
SI SHU JI GU CHANG SHAN	四数鸡骨常山*	Quaternary Alstonia*	T0372 <i>Alstonia quaternata</i>
SI TA WEI CUI QUE HUA	斯塔维翠雀花	Stavisacre	T2086 <i>Delphinium staphisagria</i>
SI TE WEN HUANG TAN	斯特文黄檀	Stevenson Rosewood*	T2017 <i>Dalbergia stevensonii</i>
SI TU JI XUE TENG	斯图鸡血藤*	Stuhlmann Millettia*	T4244 <i>Millettia stuhlmannii</i>
SI TUO HOU BING HUA	斯托厚柄花		T4571 <i>Pachypodanthium staudii</i>
SI XIAO BO SHUANG YE YU GU MU	似小槩双叶鱼骨木	Barberry-like-dileaf Canthium	T1178 <i>Canthium berberidifolium</i>
SI YANG PI ZHI RU GU	似羊皮纸乳菇*	Parchment-like Milky*	T3652 <i>Lactarius pergamenus</i>
SI YANG SHU YE BAI JIAN MU	似杨树叶白坚木*	Poplar-leaf-like White Quebracho*	T0771 <i>Aspidosperma populifolium</i>
SI ZI TAN	似紫檀*	Sandalwood Padauk	T5305 <i>Pterocarpus santalinus</i>
SONG HAO	松蒿	Japanese Phtheirospermum	T4831 <i>Phtheirospermum japonicum</i> [Syn. <i>Gerardia japonica</i> ]
SONG LUO	松萝	Long Usnea Filament	T6654 <i>Usnea longissima</i>
SONG PAN WU TOU	松潘乌头	Sungpan Monkshood	T0135 <i>Aconitum sungpanense</i>
SONG XIANG	松香	Colophony	T4917 <i>Pinus massoniana</i>
SONG XUN	松蕈	Pine Mushroom	T6504 <i>Tricholoma matsutake</i> [Syn. <i>Armillaria matsutake</i> ]
SONG YE FANG FENG	松叶防风	Yunnan Seseli	T5937 <i>Seseli yunnanense</i>

SONG YE QIAN LI GUANG	松叶千里光	Pineleaf Groundsel	T5874 <i>Senecio abrotanifolius</i>
SU DA QI GAN JU	苏打其柑桔	Sudach Citrus*	T1511 <i>Citrus sudachii</i>
SU DAN KE LE GUO	苏丹可乐果	Acuminate Colanut	T1615 <i>Cola acuminata</i>
SU FANG HUA	素方花	Common White Jasmine	T3556 <i>Jasminum officinale</i>
SU GE LAN DANG GUI	苏格兰当归	Scots Lovage	T3823 <i>Ligusticum scoticum</i>
SU GE LAN HU TONG	苏格兰胡桐*	Caledonian Beautyleaf*	T1126 <i>Calophyllum caledonicum</i>
SU GEN XIANG WAN DOU	宿根香豌豆	Everlasting Pea	T3704 <i>Lathyrus latifolius</i>
SU GEN ZHANG YA CAI	宿根獐芽菜	Alpine Bog-swertia	T6230 <i>Swertia perennis</i>
SU HE XIANG	苏合香	Oriental Sweetgum Resin	T3868 <i>Liquidambar orientalis</i>
SU HUA DANG SHEN	素花党参	Moderate Asiabell	T1600 <i>Codonopsis pilosula</i> var. <i>modesta</i> [Syn. <i>Codonopsis modesta</i> ]
SU KU BA DOU HUA	苏库巴斗花	Bellaco-Caspi	T3251 <i>Himatanthus sucuuba</i>
SU LI NAN ROU DOU KOU	苏里南肉豆蔻	Ucahub; Baboen	T6770 <i>Virola surinamensis</i> [Syn. <i>Myristica surinamensis</i> ]
SU MEN BAI JIU CAO	苏门白酒草		T2426 <i>Erigeron sumatrensis</i>
SU MEN DA LA HONG DOU SHAN	苏门答腊红豆杉	Sumatran Yew	T6316 <i>Taxus sumatrana</i>
SU MEN DA LA WEN SHU LAN	苏门答腊文殊兰	Lovely Crinum*	T1793 <i>Crinum amabile</i>
SU MI	粟米	Foxtail Millet	T5938 <i>Setaria italica</i>
SU MI CAO	粟米草	Fiveleaf Carpetweed	T4261 <i>Mollugo pentaphylla</i>
SU MU	苏木	Sappan Caesalpinia	T1108 <i>Caesalpinia sappan</i>
SU TIE SHU GUO	苏铁树果	Sago Seed	T1927 <i>Cycas revoluta</i>
SU TIE YE	苏铁叶	Sago Frond	T1928 <i>Cycas revoluta</i>
SU XIN HUA	素馨花	Largeflower Jasmine*	T3554 <i>Jasminum grandiflorum</i>
SU XIN YE BAI YING	素馨叶白英	Jasmine Nightshade	T6001 <i>Solanum jasminoides</i>
SU ZHU YANG YANG	粟猪殃殃	Hedge Bedstraw	T2832 <i>Galium mollugo</i>
SUAN CHOU MU JI CAO	蒜臭母鸡草		T4746 <i>Petiveria alliacea</i>
SUAN GOU TENG	酸钩藤*	Acid Gambirplant*	T6604 <i>Uncaria acida</i>
SUAN JIANG	酸浆	Japanese-lantern	T4845 <i>Physalis alkekengi</i>
SUAN JIAO	酸角	Tamarind Fruit	T6285 <i>Tamarindus indica</i>
SUAN MO	酸模	Garden Sorrel	T5605 <i>Rumex acetosa</i>
SUAN MO YE	酸模叶	Garden Sorrel Leaf	T5606 <i>Rumex acetosa</i>
SUAN SHI LIU	酸石榴	Pomegranate	T5332 <i>Punica granatum</i>
SUAN SHUI CAO	酸水草	Thorowort Pondweed	T5178 <i>Potamogeton perfoliatus</i>
SUAN WEI XIANG KE KE	蒜味香科科	Garlicsmell Germander*	T6368 <i>Teucrium scordium</i>
SUAN YE PO LUO MEN SHEN	蒜叶婆罗门参	Salsify	T6489 <i>Tragopogon porrifolius</i>
SUAN ZAO	酸枣	Spine Date	T6918 <i>Ziziphus jujuba</i> var. <i>spinosa</i>
SUAN ZAO REN	酸枣仁	Spine Date Seed	T6919 <i>Ziziphus jujuba</i> var. <i>spinosa</i>
SUI BA QIA	穗菝葜	Eurasia Greenbrier	T5974 <i>Smilax aspera</i>
SUI BIAN WO JU	穗变莴苣*	Laciniate Lettuce*	T3660 <i>Lactuca laciniata</i>
SUI HUA LUO HAN SONG	穗花罗汉松	Matai	T5055 <i>Podocarpus spicatus</i>
SUI HUA MA XIAN HAO	穗花马先蒿	Spicate Woodbetony	T4683 <i>Pedicularis spicata</i>
SUI HUA MU JING	穗花牡荆	Lilac Chastetree	T6782 <i>Vitex agnuscastus</i>
SUI MAO HE BAO MU DAN	繸毛荷包牡丹	Wild Bleedingheart	T2149 <i>Dicentra eximia</i>
SUI MI SHA CAO	碎米莎草	Rice Galingale	T1976 <i>Cyperus iria</i>
SUI ZHUANG BAI JIN HUA	穗状百金花	Spicate Centaury*	T1310 <i>Centaury spicatum</i>
SUI ZHUANG BI QIAO JIANG	穗状闭鞘姜*	Cana do brejo (in Brazil)	T1757 <i>Costus spicatus</i>
SUI ZHUANG WU TOU	穗状乌头*	Spiked Monkshood	T0133 <i>Aconitum spicatum</i>
SUI ZHUANG YUN XIANG	繸状芸香	Syrian Rue*	T5625 <i>Ruta chalepensis</i>
SUO DUO MI QIE	索多米茄	Sodome Nightshade*	T6012 <i>Solanum sodomeum</i> [Syn. <i>Solanum sodomaicum</i> ]
SUO GUO HUANG QI	梭果黄芪	Ernest Milkvetch*	T0794 <i>Astragalus ernestii</i>
SUO LA MU	桫拉木	Prinos-like Salacia	T5648 <i>Salacia prinoides</i> [Syn. <i>Salacia chinensis</i> ]

SUO LUO	桫欏	Spiny Alsophila	T0364 <i>Alsophila spinulosa</i>
SUO LUO ZI	娑罗子	Wilson Buckeye Seed	T0205 <i>Aesculus wilsonii</i>
SUO SHA MI	缩砂密	Locklebur-like Amomum	T0420 <i>Amomum xanthioides</i>
SUO YANG	锁阳	Songaria Cynomorium	T1972 <i>Cynomorium songaricum</i>
TA HUA BAI LI XIANG	塔花百里香*		T6451 <i>Thymus satuireioides</i>
TA LA WU TOU	塔拉乌头	Tala Monkshood*	T0136 <i>Aconitum talassicum</i>
TA SI MA NI YA JIE GENG LAN	塔斯马尼亚桔梗兰	Flax Lily	T2141 <i>Dianella tasmanica</i>
TA YOU XIE GUA	塔尤泻瓜	Taiuia Root*	T1274 <i>Cayaponia tayuya</i>
TAI BAI CONG MU	太白樛木	Taibaen Aralia	T0576 <i>Aralia taibaiensis</i>
TAI BAI HUA	太白花	Stellate Cladonia	T1528 <i>Cladonia stellaris</i> [Syn. <i>Cladonia alpestris</i> ]
TAI DA SONG	台大松	Loblolly Pine, Old Field Pine	T4927 <i>Pinus taeda</i>
TAI DONG XI XIN	台东细辛	Taiton Wildginger	T0734 <i>Asarum taitoense</i>
TAI GUO BA JI	泰国巴戟	Thailand Indianmulberry*	T4281 <i>Morinda coreia</i>
TAI GUO NIU XU HUA	泰国扭序花	Thailand Clinacanthus*; Lin-Nguu-Hao (Thai name)	T1572 <i>Clinacanthus siamensis</i>
TAI GUO SHAN QIAN NIU	泰国山牵牛	Thailand Clockvine (Raang-Chuet)	T6445 <i>Thunbergia laurifolia</i>
TAI GUO ZHI ZI	泰国梔子*	Thailand Gardenia*	T2887 <i>Gardenia thailandica</i>
TAI JING TIAN	苔景天	Biting Stonecrop	T5849 <i>Sedum acre</i>
TAI PING YANG JIA ZE LAN	太平洋假泽兰	Pacific Mikania*	T4229 <i>Mikania mendocina</i>
TAI PING YANG LIN MAO JUE	太平洋鳞毛蕨	Pacific Wood Fern	T2285 <i>Dryopteris pacifica</i>
TAI SHAN YAN FU ZI	泰山盐麸子	Taishan Sumac Fruit	T5539 <i>Rhus taishanensis</i>
TAI WAN AN XI XIANG	台湾安息香	Taiwan Snowbell	T6199 <i>Styrax formosanus</i>
TAI WAN CHA MU	台湾檫木	Taiwan Sassafras	T5745 <i>Sassafras randainense</i>
TAI WAN CU FEI	台湾粗榧	Wilson Plumyew	T1325 <i>Cephalotaxus wilsoniana</i>
TAI WAN CUI BAI	台湾翠柏	Taiwan Incense Cedar	T1121 <i>Calocedrus macrolepis</i> var. <i>formosana</i>
TAI WAN FENG DOU CAI	台湾蜂斗菜*	Taiwan Butterbur*	T4739 <i>Petasites formosanus</i>
TAI WAN FU RONG	台湾芙蓉	Taiwan Hibiscus	T3247 <i>Hibiscus taiwanensis</i>
TAI WAN GE NA XIANG	台湾哥纳香	Taiwan Goniothalamus	T3041 <i>Goniothalamus amuyon</i>
TAI WAN GUO SONG	台湾果松	Masters Pine	T4907 <i>Pinus armandii</i> var. <i>mastersiana</i>
TAI WAN HU JIAO	台湾胡椒*	Taiwan Pepper*	T4970 <i>Piper taiwanense</i>
TAI WAN HUANG BO	台湾黄槿	Taiwan Corktree*	T4790 <i>Phellodendron amurense</i> var. <i>wilsonii</i>
TAI WAN JI	台湾薊	Taiwan Thistle*	T1447 <i>Cirsium japonica</i> var. <i>takaoense</i>
TAI WAN JI NING	台湾芥苧	Taiwan Mosla	T4539 <i>Orthodon formosanus</i>
TAI WAN JIN GU CAO	台湾筋骨草	Taiwan Bugle*	T0272 <i>Ajuga taiwanensis</i>
TAI WAN JIU LI XIANG	台湾九里香	Taiwan Common Jasminorange	T4316 <i>Murraya crenulata</i>
TAI WAN LUO HAN SONG	台湾罗汉松	Nakai Podocarpus	T5047 <i>Podocarpus nakaii</i>
TAI WAN LV DAO TENG HUANG	台湾绿岛藤黄*	Lanyu Garcinia	T2861 <i>Garcinia linii</i>
TAI WAN PI PA	台湾枇杷	Taiwan Loquat	T2430 <i>Eriobotrya deflexa</i>
TAI WAN PU GONG YING	台湾蒲公英	Taiwan Dandelion*	T6300 <i>Taraxacum formosanum</i>
TAI WAN QIAN HU	台湾前胡	Taiwan Hogfennel	T4755 <i>Peucedanum formosanum</i>
TAI WAN QIAN JIN TENG	台湾千金藤	Sasak Stephania*	T6132 <i>Stephania sasakii</i>
TAI WAN RUI FANG RUN NAN	台湾瑞芳润楠*	Zuiho Machilus	T4019 <i>Machilus zuihoensis</i>
TAI WAN SHAN	台湾杉	Cryptomeria-like Taiwania	T6284 <i>Taiwania cryptomerioides</i>
TAI WAN SHAN DOU GEN	台湾山豆根	Taiwan Euchresta	T2526 <i>Euchresta formosana</i>
TAI WAN SHAN MU	台湾杉木	Konish Chinafir	T1890 <i>Cunninghamia konishii</i>
TAI WAN SHU LI	台湾鼠李	Taiwan Buckthorn*	T5459 <i>Rhamnus formosana</i>
TAI WAN SHUANG HU DIE	台湾双蝴蝶	Taiwan Dualbutterfly	T6538 <i>Tripterospermum taiwanense</i>
TAI WAN TANG SONG CAO	台湾唐松草	Taiwan Meadowrue	T6415 <i>Thalictrum urbainii</i>
TAI WAN XIAO BO	台湾小檗	Taiwan Barberry	T0907 <i>Berberis kawakamii</i>
TAI WAN XIU XIAN JU	台湾绣线菊	Taiwan Spiraea*	T6077 <i>Spiraea formosana</i>
TAI WAN YUN SHAN	台湾云杉	Taiwan Spruce	T4874 <i>Picea morrisonicola</i>
TAI WAN ZE LAN	台湾泽兰	Taiwan Agrimony	T2558 <i>Eupatorium formosanum</i>

TAI ZHONG SHU LI	台中鼠李	Taizhong Buckthorn*	T5462 <i>Rhamnus nakaharai</i>
TAN MANG GUO	坦杠果		T6299 <i>Tanghinia venenifera</i>
TAN XIANG	檀香	Sandalwood	T5715 <i>Santalum album</i>
TANG GU TE DA HUANG	唐古特大黄	Tangut Rhubarb	T5481 <i>Rheum tanguticum</i>
TANG JIE	糖芥	Diffuse Erysimum	T2454 <i>Erysimum diffusum</i>
TANG LI	棠梨	Birchleaf Pear	T5361 <i>Pyrus betulaefolia</i>
TANG MU XUN DU HUO	汤姆逊独活	Thomson Cowparsnip*	T3226 <i>Heracleum thomsoni</i>
TANG QI	糖槭	Sugar Maple	T0056 <i>Acer saccharum</i>
TANG SONG CAO ZHUANG	唐松草状扁果草	Meadowruelike Isopyrum	T3540 <i>Isopyrum thalictroides</i>
BIAN GUO CAO			
TAO	桃	Peach	T5229 <i>Prunus persica</i>
TAO BEI MU	桃贝母	Peach Fritillary*	T2791 <i>Fritillaria persica</i>
TAO ER QI	桃儿七	Common Sinopodophyllm	T5057 <i>Podophyllum emodii</i> [Syn. <i>Podophyllum emodii</i> var. <i>chinense</i> ; <i>Podophyllum sikkimensis</i> ; <i>Sinopodophyllum emodii</i> ]
TAO GEN	桃根	Peach Root	T5230 <i>Prunus persica</i>
TAO HUA	桃花	Peach Flower	T5231 <i>Prunus persica</i>
TAO HUA XIN MU	桃花心木	West Indian Mahogany	T6241 <i>Swietenia mahogany</i>
TAO JIN NIANG	桃金娘	Rosemyrtle	T5529 <i>Rhodomyrtus tomentosa</i>
TAO JING BAI PI	桃茎白皮	Peach Bast	T5232 <i>Prunus persica</i>
TAO NAN GUA	桃南瓜	Peachliking Pumpkin	T1883 <i>Cucurbita pepo</i> var. <i>akoda</i>
TAO REN	桃仁	Peach Kernel	T5233 <i>Prunus persica</i>
TAO YE	桃叶	Peach Leaf	T5234 <i>Prunus persica</i>
TAO YE LIAO	桃叶蓼	Spring Knotweed	T5113 <i>Polygonum persicaria</i>
TAO ZHI	桃枝	Peach Juvenile Branch	T5235 <i>Prunus persica</i>
TE LI NI DA HU JIAO	特立尼达胡椒	Trinidad Pepper*	T4929 <i>Piper aequale</i>
TE LUO YI HUANG QI	特洛伊黄芪	Trojan Milkvetch*	T0809 <i>Astragalus trojanus</i>
TE SI MAN NI HU TONG	特思曼尼胡桐	Teysmanni Beautyleaf*	T1133 <i>Calophyllum teysmannii</i>
TE SI MAN NI HU TONG BIAN	特思曼尼胡桐变种*	Teysmanni Beautyleaf Variaty*	T1134 <i>Calophyllum teysmannii</i> var. <i>inophylloide</i>
ZHONG			
TENG CANG CHI MEI	藤仓赤霉		T2959 <i>Gibberella fujikuroi</i>
TENG HUANG	藤黄	Gamboge Tree Resin	T2866 <i>Garcinia morella</i>
TENG HUANG SHAN ZHU ZI	藤黄山竹子*	Camboge Garcinia*	T2851 <i>Garcinia cambogia</i>
TENG HUANG SHU	藤黄树	Hanbury Garcinia*	T2857 <i>Garcinia hanburyi</i>
TENG SHI SONG	藤石松		T3969 <i>Lycopodium casuarinoides</i>
TI GAI JUE	蹄盖蕨	Painted Fern	T0818 <i>Athyrium filix-femina</i>
TI GEN CAO	嚏根草	Black Hellebore	T3183 <i>Helleborus niger</i>
TI MU CAO	梯牧草	Timothy	T4802 <i>Phleum pratense</i>
TI QIN ZHUANG SHAN NAI	提琴状山奈*	Fiddle-leaf Resurrectionlily*	T3622 <i>Kaempferia pandurata</i>
TIAN CAI	甜菜	Common Beet	T0928 <i>Beta vulgaris</i>
TIAN CHA	甜茶	Sweet Blackberry*	T5600 <i>Rubus suavissimus</i>
TIAN CHENG	甜橙	Sweet Orange	T1508 <i>Citrus sinensis</i>
TIAN CONG	田葱	Woolly Philydrum	T4799 <i>Philydrum lanuginosum</i>
TIAN GEN DUO ZU JUE	甜根多足蕨	Sweetroot Polypody*	T5123 <i>Polypodium glycyrrhiza</i>
TIAN HU SUI	天胡荽	Lawn Pennywort	T3311 <i>Hydrocotyle sibthorpioides</i>
TIAN HUA FEN	天花粉	Mongolian Snakegourd Root	T6512 <i>Trichosanthes kirilowii</i>
TIAN JIAO BAN	天脚板	Chinese Aucuba	T0827 <i>Aucuba chinensis</i> ssp. <i>omeiensis</i>
TIAN LAN ZE LAN	天蓝泽兰	Azure Eupatorium*	T2553 <i>Eupatorium azureum</i>
TIAN LIAO MU	天料木	Cochinchina Homalium	T3275 <i>Homalium cochinchinensis</i>
TIAN MA	天麻	Tall Gastrodia	T2890 <i>Gastrodia elata</i>
TIAN MEN DONG	天门冬	Cochinchinese Asparagus	T0746 <i>Asparagus cochinchinensis</i> [Syn. <i>Asparagus lucidus</i> ]

TIAN MING JING	天名精	Common Carpesium	T1210 <i>Carpesium abrotanoides</i>
TIAN MING JING GUO	天名精果	Common Carpesium Fruit	T1211 <i>Carpesium abrotanoides</i>
TIAN NAN XING	天南星	Reddish Jackintheulpit	T0618 <i>Arisaema consanguineum</i>
TIAN NIU ZHI	甜牛至*	Sweet Marjoram	T4524 <i>Origanum majorana</i>
TIAN NV MU LAN	天女木兰	Oyama Magnolia	T4050 <i>Magnolia sieboldii</i>
TIAN PAO ZI	天泡子	Little Groundcherry	T4851 <i>Physalis minima</i>
TIAN PENG ZI	天蓬子	Chinese Atropanthe	T5822 <i>Scopolia sinensis</i>
TIAN PING SHAN YIN YANG HUO	天平山淫羊藿	Tianpingshan Epimedium*	T2400 <i>Epimedium myrianthum</i>
TIAN QIAO MAI GEN	天荞麦根	Golden Buckwheat Root	T2657 <i>Fagopyrum cymosum</i> [Syn. <i>Polygonum cymosum</i> ]
TIAN QIE ZI	天茄子	Indian Nightshade	T6000 <i>Solanum indicum</i>
TIAN REN JU	天人菊	Rosering Gaillardia	T2820 <i>Gaillardia pulchella</i>
TIAN SHAN DA HUANG	天山大黄	Tianshan Mountain Rhubarb	T5482 <i>Rheum wittrockii</i>
TIAN SHAN HUA QIU	天山花楸	Tianshan Mountain Mountainash	T6055 <i>Sorbus tianschanica</i>
TIAN SHAN LING ZI QIN	天山棱子芹	Lindley Pleurospermum	T5020 <i>Pleurospermum lindleyanum</i>
TIAN SHAN QIN JIAO	天山秦艽	Tianshan Mountain Gentian	T2936 <i>Gentiana tianschanica</i>
TIAN SHAN SHI	天山薯	Hairyleaf Handelia	T3097 <i>Handelia trichophylla</i>
TIAN SHAN ZHU ZI	甜山竹子*	Dulcin Garcinia*	T2853 <i>Garcinia dulcis</i>
TIAN SHE CAO	甜舌草	Sweet-tongue Lippia*	T3864 <i>Lippia dulcis</i>
TIAN WEN CAO	天文草	Paniculate Spotflower	T6075 <i>Spilanthes acmella</i>
TIAN XIAN GUO	天仙果	Erect Fig	T2716 <i>Ficus beecheyana</i> [Syn. <i>Ficus erecta</i> var. <i>beecheyana</i> ]
TIAN XIAN TENG	天仙藤	Common Fibraurea	T2715 <i>Fibraurea recisa</i>
TIAN XUAN HUA	田旋花	Field Bindweed	T1650 <i>Convolvulus arvensis</i>
TIAN YE CI QIN	田野刺芹		T2451 <i>Eryngium campestre</i>
TIAN YE GE NA XIANG	田野哥纳香*	Field Goniotalamus*	T3042 <i>Goniotalamus arvensis</i>
TIAN YE HAO	田野蒿*	Campestral Mugwort	T0668 <i>Artemisia campestris</i>
TIAN YE JI DOU	田野棘豆	Yellow Oxytropis	T4567 <i>Oxytropis campestris</i>
TIAN YE JU	甜叶菊	Rebaud Eupatorium*	T2569 <i>Eupatorium rebaudianum</i>
TIAN YE LONG DAN	田野龙胆	Meadow Gentian	T2906 <i>Gentiana campestris</i>
TIAN ZHOU WEI JIA XIONG RUI	甜周围假雄蕊		T4709 <i>Periandra dulcis</i>
TIAN ZI YU PAN	甜紫玉盘*	Sweet Uvaria*	T6661 <i>Uvaria dulcis</i>
TIAO HU TAI	条蒴苔		T2365 <i>Enteromorpha clathrata</i>
TIAO JING CAO	调经草	Evergreen Euonymus	T2542 <i>Euonymus japonicus</i>
TIAO LIE HUANG JIN	条裂黄堇	Linearsegmented Corydalis	T1721 <i>Corydalis linearoides</i>
TIAO WEN CHUAN XIN LIAN	条纹穿心莲*	Linea Andrographis*	T0455 <i>Andrographis lineata</i>
TIAO WEN LONG SHE LAN	条纹龙舌兰	Stria Agave*	T0227 <i>Agave striata</i>
TIAO WEN SHU WEI CAO	条纹鼠尾草*		T5677 <i>Salvia lineata</i>
TIAO YE JI	条叶蓟	Linearleaf Thistle	T1450 <i>Cirsium lineare</i>
TIE BANG CHUI	铁棒锤	Pendulous Monkshood	T0122 <i>Aconitum pendulum</i>
TIE DAO MU	铁刀木	Siamese Senna	T1244 <i>Cassia siamea</i>
TIE HAI TANG	铁海棠	Crownofhorns Euphorbia	T2601 <i>Euphorbia milii</i>
TIE JIAO JUE YU TAI	铁角蕨羽苔*		T4992 <i>Plagiochila asplenoides</i>
TIE KUAI ZI	铁筷子	Tibetan Hellebore	T3187 <i>Helleborus thibetanus</i>
TIE LI MU	铁力木	Common Mesua	T4203 <i>Mesua ferrea</i>
TIE PI SHI HU	铁皮石斛	Iron-sheet Denrdobium	T2108 <i>Dendrobium officinale</i>
TIE PO LUO	铁破锣	Marshmarigold-leaved Beesia	T0888 <i>Beesia calthaeifolia</i>
TIE SE JIAN	铁色箭	Orange Lycoris	T3987 <i>Lycoris sanguinea</i>
TIE SHENG QIAN LI GUANG	贴生千里光*	Adnate Groundsel*	T5875 <i>Senecio adnatus</i>
TIE SI QI	铁丝七	American Maidenhair Fern	T0175 <i>Adiantum pedatum</i>
TIE XIAN JUE YE TANG SONG CAO	铁线蕨叶唐松草*	Maidenhair-like Meadowrue*	T6400 <i>Thalictrum minus</i> var. <i>adiantifolium</i>

TIE XIU SE HUANG TAN	铁锈色黄檀	Ferruginous Rosewood*	T2003 <i>Dalbergia ferruginea</i>
TIE ZHOU CAO	铁轴草	Fourfile Germander	T6367 <i>Teucrium quadrifarium</i>
TIE ZI	铁仔	African Myrsine	T4361 <i>Myrsine africana</i>
TING JING BIAN DI JIN	挺茎遍地金	Elodia St.John'swort	T3348 <i>Hypericum elodeoides</i>
TING LI ZI	葶苈子	Pepperweed Seed	T3755 <i>Lepidium apetalum</i> [Syn. <i>Lepidium micranthum</i> ]
TING YUAN ZI JIN NIU	庭园紫金牛*	Curtilage Ardisia*	T0596 <i>Ardisia hortorum</i>
TONG BAN CAO	同瓣草	Longflower Laurentia	T3541 <i>Isotoma longiflora</i> [Syn. <i>Laurentia longiflora</i> ]
TONG CHUI YU DAI CAO	铜锤玉带草	Common Pratia	T5193 <i>Pratia nummularia</i>
TONG GUANG TENG	通光藤	Tenacious Condorvine	T4120 <i>Marsdenia tenacissima</i>
TONG HAO	茼蒿	Crowndaisy Chrysanthemum	T1390 <i>Chrysanthemum coronarium</i>
TONG HUA GEN	通花根	Ricepaperplant Root	T6356 <i>Tetrapanax papyriferus</i>
TONG JING CAO	通经草	Silvery Aleuritopteris	T0301 <i>Aleuritopteris argentea</i>
TONG LUO HAN	铜罗汉		T4231 <i>Milingtonia hortensis</i>
TONG QIAO SHE GU	筒鞘蛇菰	Involucrate Balanophora	T0859 <i>Balanophora involucrata</i>
TONG SE JI NA SHU	铜色鸡纳树*	Cupreous Cinchona*	T1427 <i>Cinchona cuprea</i>
TONG TUO MU	通脱木	Ricepaperplant	T6357 <i>Tetrapanax papyriferus</i>
TONG XING LIE PIAN HU ZHI ZI	同形裂片胡枝子*	Homoloba Lespedeza*	T3772 <i>Lespedeza homoloba</i>
TONG XU SHOU GONG MU	同序守宫木*	Geckowood	T5748 <i>Sauropus androgynus</i>
TONG YOU	桐油	Tung Oil	T0299 <i>Aleurites cordata</i> [Syn. <i>Aleurites fordii</i> ]
TOU GU CAO	透骨草	Tuberculate Speranskia	T6069 <i>Speranskia tuberculata</i>
TOU HUA DU JUAN	头花杜鹃	Capitate Rhododendron	T5504 <i>Rhododendron capitatum</i>
TOU HUA LONG DAN	头花龙胆	Headflower Gentian	T2908 <i>Gentiana cephalantha</i>
TOU MING TANG SONG CAO	透明唐松草*	Lucid Meadowrue*	T6397 <i>Thalictrum lucidum</i>
TOU XU CONG MU	头序榧木	Hairyleaf Aralia	T0570 <i>Aralia dasyphylla</i>
TU BAI BU	土百部	Fernlike Asparagus	T0749 <i>Asparagus filicinus</i>
TU CHUANG HUA	秃疮花	Slenderstalk Dicranostigma	T2162 <i>Dicranostigma franchetianum</i> [Syn. <i>Dicranostigma leptopodium</i> ]
TU DANG GUI	土当归	Udo	T0569 <i>Aralia cordata</i>
TU DING GUI	土丁桂	Common Evolvulus	T2649 <i>Evolvulus alsinoides</i>
TU ER FENG	兔耳风	Provincialis Gayfeather*	T3789 <i>Liatris provincialis</i>
TU ER FENG XIE JIA CAO	兔儿风蟹甲草	Ainsliaefolia Calacia	T1097 <i>Cacalia ainsliaeflora</i>
TU ER QI CUI QUE HUA	土耳其翠雀花	Turkish Larkspur*	T2070 <i>Delphinium crispulum</i>
TU ER QI SHU WEI CAO	土耳其鼠尾草	Turkish Sage*	T5668 <i>Salvia cilicica</i>
TU ER QI SI TAN BAI LA SHU	土耳其斯坦白蜡树	Turkestan Ash	T2775 <i>Fraxinus potamophila</i>
TU ER QI SI TAN LONG DAN	土耳其斯坦龙胆*	Turkestan Gentian*	T2939 <i>Gentiana turkestanorum</i>
TU ER QI XUE HUA LIAN	土耳其雪花莲	Turkish Snowdrop*	T2823 <i>Galanthus plicatus</i> ssp. <i>byzantinus</i>
TU ER QI YU JIN XIANG	土耳其郁金香*	Turkey Tulip*	T6565 <i>Tulipa turkestanii</i>
TU ER SAN	兔儿伞	Syneilesis*	T6256 <i>Syneilesis palmata</i>
TU FU LING	土茯苓	Glabrous Greenbrier	T5977 <i>Smilax glabra</i>
TU GEN	吐根	Ipecacuanha	T1315 <i>Cephaelis ipecacuanha</i>
TU GUA LANG DU	土瓜狼毒	Proliferous Euphorbia*	T2612 <i>Euphorbia prolifera</i>
TU HUANG LIAN	土黄连	Wintergreen Barberry	T0906 <i>Berberis julianae</i>
TU JING JIE	土荆芥	Mexican Tea	T1361 <i>Chenopodium ambrosioides</i>
TU JING PI	土荆皮	Chinese Golden Larch	T5256 <i>Pseudolarix amabilis</i> [Syn. <i>Larix amabilis</i> ; <i>Pseudolarix kaempferi</i> ]
TU LIAN QIAO	土连翘	Tall Hymenodictyon	T3323 <i>Hymenodictyon excelsum</i>
TU LIANG JIANG	土良姜	Spiked Gingerlily	T3120 <i>Hedychium spicatum</i>
TU MAO DONG QING	秃毛冬青	Glabrous Holly*	T3397 <i>Ilex pubescens</i> var. <i>glaber</i>
TU MU XIANG	土木香	Elecampane Inula	T3431 <i>Inula helenium</i>
TU NIU XI	土牛膝	Common Achyranthes	T0071 <i>Achyranthes aspera</i>

TU QIANG HUO	土羌活	Coronarius Gingerlily	T3118 <i>Hedychium coronarium</i>
TU SAN JIN SI TAO	土三金丝桃	Tutsan	T3338 <i>Hypericum androsaemum</i>
TU SAN QI	土三七	Chrusanthemum-like Groundsel	T5884 <i>Senecio chrysanthemoides</i>
TU SHA REN	土砂仁	Japanese Galangal	T0357 <i>Alpinia japonica</i>
TU SI ZI	菟丝子	Chinese Dodder Seed	T1912 <i>Cuscuta chinensis</i>
TU XIANG RU	土香薷	Common Origanum	T4526 <i>Origanum vulgare</i>
TU YAN HU	土延胡	Repent Corydalis*	T1736 <i>Corydalis repens</i> var. <i>humosides</i>
TU YE HUANG PI SHU	秃叶黄皮树	Glabrousleaf Chinese Corktree	T4792 <i>Phellodendron chinense</i> var. <i>glabriusculum</i>
TUAN HUA SHAN FAN	团花山矾	Glomerule Sweetleaf	T6253 <i>Symplocos glomerata</i>
TUAN JI AI NA XIANG	团集艾纳香*	Glomerate Blumea*	T0958 <i>Blumea glomerata</i>
TUE YUAN MI ZI LAN	椭圆米仔兰*	Elliptic Aglaia*	T0234 <i>Aglaia elliptica</i>
TUI RE ZHI XIE MU	退热止泻木	Febrifuge Holarrhena*	T3265 <i>Holarrhena febrifuga</i>
TUN CAO	豚草	Common Ragweed	T0398 <i>Ambrosia artemisiifolia</i>
TUN CAO QIAN LI GUANG	豚草千里光*	Ragweed Groundsel*	T5879 <i>Senecio ambrosioides</i>
TUN CAO ZI WAN	豚草紫菀	Upland White Aster	T0780 <i>Aster ptarmicoides</i>
TUN XING GUO	臀形果	Topeng Pygeum	T5340 <i>Pygeum topengii</i>
TUO YE ZHU SHI DOU	托叶猪屎豆*	Stipular Crotalaria*	T1835 <i>Crotalaria stipularia</i>
TUO YUAN DUO TAN CAO	椭圆多坦草		T2248 <i>Dorstenia elliptica</i>
TUO YUAN GOU TENG	椭圆钩藤	Elliptic Gambirplant*	T6614 <i>Uncaria elliptica</i>
TUO YUAN SAN QI CAO	椭圆三七草*	Elliptic Gynura*	T3087 <i>Gynura elliptica</i>
TUO YUAN YE HUA JIAO	椭圆叶花椒	Ellipticleaf Pricklyash*	T6885 <i>Zanthoxylum ovalifolium</i>
TUO YUAN YE RU XIANG SHU	椭圆叶乳香树*	Ellipticleaf Olibanum*	T0995 <i>Boswellia ovalifoliolata</i>
TUO YUAN ZHOU XING ZAO	椭圆舟形藻	Ellipse Navicula*	T4394 <i>Navicula delognei</i> f. <i>elliptica</i>
WA BU BEI MU	瓦布贝母	Wabu Fritillary*	T2799 <i>Fritillaria wabuensis</i>
WA ER TENG	娃儿藤	Manyflower Tylophora	T6580 <i>Tylophora floribunda</i>
WA LI XI HUANG YANG	瓦利希黄杨	Himalayan Box	T1095 <i>Buxus wallichiana</i>
WA SHI DU HUO	瓦氏独活	Wallich Cowparsnip*	T3227 <i>Heracleum wallichii</i>
WA SHI MA WEI ZAO	瓦氏马尾藻	Vachelli Gulfweed*	T5740 <i>Sargassum vachellianum</i>
WA SHI XIAO BO	瓦氏小檗*	Valdiv Barberry	T0918 <i>Berberis valdiviana</i>
WA SHI ZONG LV	瓦氏棕榈	Wagner Windmill Palm	T6486 <i>Trachycarpus wagnerianus</i>
WA SI YA NA SAN CHI HAO	瓦斯亚那三齿蒿	Vaseyana Big Sagebrush*	T0703 <i>Artemisia tridentata</i> ssp. <i>vaseyana</i>
WA WEI	瓦韦	Thunberg's Lepisorus	T3764 <i>Lepisorus thunbergianus</i>
WAI JUAN TANG SONG CAO	外卷唐松草	Waxy Meadowrue	T6406 <i>Thalictrum revolutum</i>
WAI LAI CAI ZONG	外来菜棕*		T5636 <i>Sabal peregriana</i>
WAN DOU	豌豆	Garden Pea	T4983 <i>Pisum sativum</i>
WAN E JIN SI TAO	弯萼金丝桃	Curvedsepal St. John'swort	T3345 <i>Hypericum curvisepalum</i>
WAN HUA ZE LAN	晚花泽兰*	Late-flower Boneset	T2575 <i>Eupatorium serotinum</i>
WAN JUE	碗蕨	Scabrous Boulder Fern	T2113 <i>Dennstaedtia scabra</i> [Syn. <i>Dicksonia scabra</i> ]
WAN NIAN QING GEN	万年青根	Omoto Nipponlily Root	T5557 <i>Rohdea japonica</i> [Syn. <i>Orontium japonicum</i> ]
WAN QU QIAN LI GUANG	弯曲千里光*	Retrorse Groundsel*	T5902 <i>Senecio retrorsus</i>
WAN QU TIAN MEN DONG	弯曲天门冬*	curillus Asparagus*	T0747 <i>Asparagus curillus</i>
WAN QU TIAN NAN XING	弯曲天南星	Curvatura Jackinthepulpit*	T0619 <i>Arisaema curvatum</i>
WAN QU ZHI YE TAI	弯曲指叶苔*		T3762 <i>Lepidozia incurvata</i>
WAN RUI KAI KOU JIAN	弯蕊开口箭	Watt Tupistra	T6567 <i>Tupistra wattii</i> [Syn. <i>Campylandra wattii</i> ]
WAN SHAN YIN YANG HUO	万山淫羊藿	Wanshan Epimedium	T2405 <i>Epimedium wanshanense</i>
WAN SHENG BAI BU	蔓生百部	Japanese Stemona	T6111 <i>Stemona japonica</i>
WAN SHENG BAI WEI	蔓生白薇	Versicolorous Mosquitotrap	T1962 <i>Cynanchum versicolor</i>
WAN SHOU JU	万寿菊	Aztec Marigold	T6278 <i>Tagetes erecta</i>
WAN SHOU JU YE	万寿菊叶	Aztec Marigold Leaf	T6279 <i>Tagetes erecta</i>
WAN TAO HUA ZI	万桃花子	Jimsonweed Seed*	T2047 <i>Datura stramonium</i>

WAN XIANG YU	晚香玉	Tuberose	T5061 <i>Polianthes tuberosa</i>
WAN YAN BAN JIU JU	蜿蜒斑鸠菊	Flexuous Bitterleaf*	T6717 <i>Vernonia flexuosa</i>
WAN YAN HUANG QI	蜿蜒黄芪*	Flexuous Milkvetch *	T0796 <i>Astragalus flexuosus</i>
WAN YAN XIANG MAO	蜿蜒香茅	Flexuous Lemongrass*	T1942 <i>Cymbopogon flexuosus</i>
WAN ZHUI XIANG CHA CAI	弯锥香茶菜	Bowedconical Rabdosia*	T3509 <i>Isodon loxothyrsa</i>
WAN ZHUO WU TOU	万啄乌头	Curvebeak Monkshood	T0082 <i>Aconitum campylorrhynchum</i>
WANG BU LIU XING	王不留行	Cowherb	T6668 <i>Vaccaria segetalis</i> [Syn. <i>Vaccaria pyramidata</i> ]
WANG CHUN YU LAN	望春玉兰	Biond Magnolia	T4035 <i>Magnolia biondii</i> [Syn. <i>Magnolia fargesii</i> ]
WANG DI ZAO	网地藻		T2169 <i>Dictyota dichotoma</i>
WANG GUA	王瓜	Japanese Snakegourd	T6507 <i>Trichosanthes cucumeroides</i>
WANG GUA ZI	王瓜子	Japanese Snakegourd Seed	T6508 <i>Trichosanthes cucumeroides</i>
WANG GUO CUI QUE HUA	网果翠雀花	Reticulatefruit Larkspur	T2072 <i>Delphinium dictyocarpum</i>
WANG JIANG NAN	望江南	Coffee Senna	T1241 <i>Cassia occidentalis</i>
WANG JIANG NAN ZI	望江南子	Coffee Senna Seed	T1242 <i>Cassia occidentalis</i>
WANG MAI TOU WU	网脉囊吾	Netvein Goldenray	T3803 <i>Ligularia dictyoneura</i> [Syn. <i>Senecio dictyoneurus</i> ]
WANG SUN	王孙	Tetraphyllous Paris	T4655 <i>Paris tetraphylla</i>
WEI BAI BAI JIAN MU	微白白坚木*	Microwhite White Quebracho*	T0775 <i>Aspidosperma subincanum</i>
WEI DUO LI YA JIN HE HUAN	维多利亚金合欢*	Bramble Acacia	T0034 <i>Acacia victoria</i>
WEI ER SHI LV RONG HAO	威尔士绿绒蒿	Welsh Poppy	T4142 <i>Meconopsis cambrica</i>
WEI GAN JU	薇甘菊	Climbing Hempweed	T4230 <i>Mikania scandens</i>
WEI GAN JU ZE LAN	薇甘菊泽兰	Mikanioid Eupatorium*	T2566 <i>Eupatorium mikanioides</i>
WEI JING BAI HE	葶茎百合	<i>Schoenocoulon officinale</i>	T5808 <i>Schoenocaulon officinale</i>
WEI KONG CAO	微孔草	Sikkim Microula	T4227 <i>Microula sikkimensis</i>
WEI LAN QIU GUO ZI JIN	维兰球果紫堇	Few-flowered Fumitory	T2810 <i>Fumaria vaillantii</i>
WEI LIAN SI SHI MU	威廉斯氏木		T5941 <i>Sickingia williamsii</i>
WEI LING CAI	委陵菜	Chinese Cinquefoil	T5181 <i>Potentilla chinensis</i>
WEI LING XIAN	威灵仙	Chinese Clematis	T1545 <i>Clematis chinensis</i>
WEI MAO DUI XIN JU	微毛堆心菊*	Puberulent Sneezeweed*	T3140 <i>Helenium puberulum</i>
WEI MAO HE ZI	微毛诃子	<i>Terminalia chebula</i> var. <i>tomentella</i>	T6348 <i>Terminalia chebula</i> var. <i>tomentella</i>
WEI NAO	猬脑	Hedgehog Brain	T2427 <i>Erinaceus europaeus</i> ; <i>Hemiechinus dauuricus</i> ; <i>Hemiechinus auritus</i>
WEI RUI LI	味瑞李	Verecun Plum*	T5245 <i>Prunus verecunda</i>
WEI SHI DA FENG ZI	韦氏大风子	Wightiana Chaulmoogratree Seed*	T3301 <i>Hydnocarpus wightiana</i>
WEI SHI SHU WEI CAO	威氏鼠尾草		T5700 <i>Salvia wiedemanni</i>
WEI SUI XIAN	尾穗苋	Love-lies-bleeding	T0387 <i>Amaranthus caudatus</i>
WEI XI XIANG CHA CAI	维西香茶菜	Weisi Rabdosia	T3534 <i>Isodon weisiensis</i>
WEI XIAO WAN SHOU JU	微小万寿菊*	Southern Marigold	T6281 <i>Tagetes minuta</i>
WEI XIN GAN	猬心肝	Hedgehog Heart and Liver	T2428 <i>Erinaceus europaeus</i> ; <i>Hemiechinus dauuricus</i> ; <i>Hemiechinus auritus</i>
WEI YE BAI ZHU	尾叶白珠	Long Acuminate Leaves Gaultheria	T2892 <i>Gaultheria griffithiana</i>
WEI YE XI ZI JUE	尾叶稀子蕨	Tail-leaf Monachosorum	T4267 <i>Monachosorum flagellare</i>
WEI YE XIANG CHA CAI	尾叶香茶菜	Taillikeleaf Rabdosia	T5392 <i>Rabdosia excisa</i>
WEI YI MU CAO	胃益母草	Stomach Motherwort	T3750 <i>Leonurus cardiaca</i>
WEN CHUAN CHAI HU	汶川柴胡	Wenchuan Thorowax*	T1078 <i>Bupleurum wenchuanense</i>
WEN DAN YOU	文旦柚	Buntan Pummelo*	T1481 <i>Citrus grandis</i> f. <i>buntan</i>
WEN GUAN MU	文冠木	Shinyleaf yellowhorn	T6845 <i>Xanthoceras sorbifolia</i>
WEN JING	问荆	Bottle-brush	T2407 <i>Equisetum arvense</i>
WEN PO	檯梔	Common Quince	T1937 <i>Cydonia oblonga</i>
WEN ROU ZHI XIE MU	温柔止泻木	Suave Holarrhena*	T3267 <i>Holarrhena mitis</i>
WEN SHU LAN	文殊兰	Chinese Crinum	T1796 <i>Crinum asiaticum</i> var. <i>sinicum</i>



WEN TE XIANG MAO	文特香茅	Winter Lemongrass*	T1948 <i>Cymbopogon winterianus</i>
WEN YU JIN	温郁金(片姜黄)	Wengujin Culcuma*	T1907 <i>Curcuma wengujin</i>
WEN ZHU	文竹	Setose Asparagus	T0753 <i>Asparagus setaceus</i> [Syn. <i>Asparagus plumosus</i> ]
WENG CAI	蕹菜	Aquatic Morning Glory	T3444 <i>Ipomoea aquatica</i> [Syn. <i>Convolvulus repens</i> ; <i>Ipomoea reptans</i> ]
WO ER QI	窝儿七	Chinese Umbrellaleaf	T2232 <i>Diphylleia sinensis</i>
WO JING YE LAI XIANG	卧茎夜来香	Creeping Telosma	T6329 <i>Telosma procumbens</i>
WO JU	莴苣	Garden Lettuce	T3662 <i>Lactuca sativa</i>
WO LI HE GUAN BAN	沃利赫冠瓣	Wallich Crestpetal-tree	T3922 <i>Lophopetalum wallichii</i>
WO SHI AN	沃氏桉*	Wandoo Eucalyptus*	T2523 <i>Eucalyptus wandoo</i>
WO SHI ZHI XIE MU	沃氏止泻木*	Waltsberg Holarrhena*	T3269 <i>Holarrhena waltsbergii</i>
WU BING TANG SONG CAO	无柄唐松草*	Javan Meadowrue	T6408 <i>Thalictrum sessile</i>
WU BING XIN WU TAN	无柄新乌檀	Sessile Neonauclea	T4408 <i>Neonauclea sessilifolia</i> [Syn. <i>Nauclea sessilifolia</i> ; <i>Adina sessilifolia</i> ]
WU BING YE AN	无柄叶桉*	Non-stipe Eucalyptus*	T2500 <i>Eucalyptus apodophylla</i>
WU CI FAN MA	无刺番麻	Spineless Agave	T0216 <i>Agave americana</i> var. <i>marginata</i> [Syn. <i>Agave americana</i> var. <i>variegata</i> ]
WU CI KE YA SHU	无刺柯桉树	Angelin-tree	T0452 <i>Andira inermis</i>
WU CI MAO ZHU MU	无刺帽柱木	Spineless Mitragyna*	T4256 <i>Mitragyna inermis</i>
WU CI ZAO	无刺枣	Spineless Common Jujube	T6917 <i>Ziziphus jujuba</i> var. <i>inermis</i>
WU CI ZHU YING HUA	无刺朱缨花*	Spineless Powderpuff*	T1115 <i>Calliandra inermis</i>
WU DANG MU LAN	武当木兰	Sprenger Magnolia	T4052 <i>Magnolia sprengeri</i>
WU FU HUA	五福花	Muskroot	T0193 <i>Adoxa moschatellina</i>
WU GAN DA YU YE QIU	乌干达羽叶楸	Uganda Padritree*	T6141 <i>Stereospermum kunthianum</i>
WU GENG WU JIA PI	无梗五加皮	Sessileflower Acanthopanax Root-bark	T0044 <i>Acanthopanax sessiliflorus</i>
WU GONG	蜈蚣	Centipede	T5817 <i>Scolopendra subspinipes mutilans</i>
WU GONG CAO	蜈蚣草	Chinese Brake	T5298 <i>Pteris vittata</i>
WU GONG ZHANG	蜈蚣掌	Arborescent Aloe*	T0334 <i>Aloe arborescens</i> var. <i>natalensis</i>
WU HE MI JU	无核蜜桔	Satsuma	T1518 <i>Citrus unshiu</i>
WU HUA GUO	无花果	Fig	T2717 <i>Ficus carica</i>
WU HUA GUO YE	无花果叶	Fig Leaf	T2718 <i>Ficus carica</i>
WU HUAN ZI	无患子	Chinese Soapberry Seed	T5719 <i>Sapindus mukorossi</i>
WU HUAN ZI PI	无患子皮	Chinese Soapberry Peel	T5720 <i>Sapindus mukorossi</i>
WU HUAN ZI YE	无患子叶	Chinese Soapberry Leaf	T5721 <i>Sapindus mukorossi</i>
WU JIA PI	五加皮	Slenderstyle Acanthopanax Root-bark	T0038 <i>Acanthopanax gracilistylus</i>
WU JIA QIAN HU	五加前胡		T6103 <i>Steganotaenia araliacea</i>
WU JING GAN LAN	芜菁甘蓝	Swede Seed	T1010 <i>Brassica napus</i> var. <i>napobrassica</i>
WU JIU MU GEN PI	乌柏木根皮	Chinese Tallowtree Bark	T5723 <i>Sapium sebiferum</i>
WU JIU YE	乌柏叶	Chinese Tallowtree Leaf	T5724 <i>Sapium sebiferum</i>
WU JU LOU DOU CAI	无距楼斗菜	Spurless Columbine	T0557 <i>Aquilegia ecalcarata</i>
WU JU YIN YANG HUO	无距淫羊藿	Spurless Barrenwort*	T2393 <i>Epimedium ecalcaratum</i>
WU JUAN XU XI GUA	无卷须西瓜	Non-cirrose Citrullus*	T1461 <i>Citrullus ecirrhosus</i>
WU KE LAN XIA YE SHUI XIAN	乌克兰狭叶水仙	Ukrainian Narrowleaf Narcissus*	T4373 <i>Narcissus angustifolius</i>
WU LA ER DI YI	乌拉尔地衣	Ural's Lichen	T6603 <i>Umbilicaria proboscidea</i>
WU LENG JUE MING	五棱决明	Fiveangular Senna*	T1243 <i>Cassia quinquangula</i>
WU LI	乌鳢	Serpent-head	T4505 <i>Ophiocephalus argus</i>
WU LIAN MEI	乌藟莓	Japanese Cayratia	T1275 <i>Cayratia japonica</i>
WU LING ZHI	五灵脂	Trogopteris Dung	T6551 <i>Trogopteris xanthipes</i> ; <i>Pteromys volans</i>
WU LONG CHA	乌龙茶	Oolong Tea	T1155 <i>Camellia sinensis</i> var. <i>viridis</i>
WU LOU ZI	无漏子	Phoenix Date	T4820 <i>Phoenix dactylifera</i>
WU MAI BAI LI XIANG	五脉百里香	Fiveribbed Thyme	T6450 <i>Thymus quinquecostatus</i>
WU MAO CHAN GAO SHU	无毛潺槁树	Glabrous Litsea*	T3888 <i>Litsea glutinosa</i> var. <i>glabrata</i>

WU MAO FENG CHE ZI	无毛风车子	Glabrous Combretum*	T1631 <i>Combretum imberbe</i>
WU MAO HAO	无毛蒿	Glabrous Wormwood*	T0677 <i>Artemisia glabella</i>
WU MAO JUE	乌毛蕨	Oriental Blechnum Frond	T0952 <i>Blechnum orientale</i>
WU MAO SHAN ZHA	无毛山楂	Hairless Chinese Hawthorn	T1779 <i>Crataegus pinnatifida</i> var. <i>psilosa</i>
WU MAO WU GEN TENG	无毛无根藤*	Glabrous Cassytha*	T1252 <i>Cassytha glabella</i>
WU MEI	乌梅	Japanese Apricot	T5228 <i>Prunus mume</i>
WU MO	乌墨		T2533 <i>Eugenia jambolana</i> [Syn. <i>Syzygium cumin</i> ; <i>Myrtus cumini</i> ]
WU MU XIE	乌木屑	Ceylon Persimmon Sawdust	T2216 <i>Diospyros ebenum</i>
WU PAO ZI	乌泡子	Parker Raspberry	T5594 <i>Rubus parkeri</i>
WU QING	芜菁	Turnip	T1021 <i>Brassica rapa</i>
WU SE MEI	五色梅	Common Lantana	T3687 <i>Lantana camara</i>
WU SHAN YIN YANG HUO	巫山淫羊藿	Wushan Epimedium	T2406 <i>Epimedium wushanense</i>
WU SHI REN DONG	五室忍冬*	Five-room Honeysuckle*	T3917 <i>Lonicera quinquelocularis</i>
WU SU LI LI LU	乌苏里藜芦	Ussuri Falsehellebore	T6699 <i>Veratrum nigrum</i> var. <i>ussuriense</i>
WU SU LI WA WEI	乌苏里瓦韦	Ussuri Lepisorus	T3765 <i>Lepisorus ussuriensis</i>
WU TONG BAI PI	梧桐白皮	Phoenix Tree Bast	T2731 <i>Firmiana simplex</i>
WU TONG YE	梧桐叶	Phoenix Tree Leaf	T2732 <i>Firmiana simplex</i>
WU TONG ZI	梧桐子	Phoenix Tree Seed	T2733 <i>Firmiana simplex</i>
WU TOU	乌头(川乌)	Common Monkshood	T0084 <i>Aconitum carmichaeli</i>
WU WEI CAO	五味草	Tali Corydalis	T1746 <i>Corydalis taliensis</i>
WU WEI ZI	五味子(北五味子)	Chinese Magnoliavine	T5791 <i>Schisandra chinensis</i>
WU WEN ZI BEI TAI	无纹紫背苔	Intermediate Plagiochasma	T4989 <i>Plagiochasma intermedium</i>
WU XIN SHI	乌心石	Formosan Michelia*	T4211 <i>Michelia compressa</i> var. <i>formosana</i>
WU XIONG RUI JI LI	五雄蕊蒺藜*	Penta-androus Caltrap*	T6496 <i>Tribulus pentandrus</i>
WU YA GUO	五椴果	Hondapara	T2181 <i>Dillenia indica</i>
WU YAO	乌药	Combined Spicebush	T3854 <i>Lindera strychnifolia</i> [Syn. <i>Lindera aggregata</i> ]
WU YE BAI QIAN	无叶白前*	Leafless Swallowwort*	T1949 <i>Cynanchum aphyllum</i>
WU YE GUA TENG	五叶瓜藤	Farges Holboellia	T3270 <i>Holboellia fargesii</i>
WU YE JIA MU ZEI	无叶假木贼	Leafless Anabasis	T0435 <i>Anabasis aphylla</i>
WU YE TENG	无爷藤	Filiform Cassytha	T1251 <i>Cassytha filiformis</i>
WU YE YU HUANG CAO	五叶鱼黄草*	Five-leaf Merremia*	T4198 <i>Merremia quinquefolia</i>
WU YE ZHU SHI DOU	五叶猪屎豆*	Fiveleaf Crotalaria*	T1829 <i>Crotalaria quinquefolia</i>
WU YUE CHA	五月茶	Bignay Chinalaurel	T0535 <i>Antidesma bunius</i>
WU ZHAO LONG	五爪龙	Cairo Morningglory	T3448 <i>Ipomoea cairica</i> [Syn. <i>Ipomoea palmata</i> ]
WU ZHU FEI YAN CAO	五柱飞燕草	Fivestyle Larkspur*	T2083 <i>Delphinium pentagynum</i>
WU ZHU MAI DA JI	五主脉大戟*		T2615 <i>Euphorbia quinquecostata</i>
WU ZHU YU	吴茱萸	Medicinal Evodia	T2644 <i>Evodia rutaecarpa</i>
WULU BA DOU	乌鲁巴豆	Wru Croton*	T1860 <i>Croton urucurana</i>
XI A LA HUANG TAN	西阿拉黄檀	Cearan Rosewood*	T1998 <i>Dalbergia cearensis</i>
XI BAN WU TOU	膝瓣乌头	Geniculate Monkshood	T0098 <i>Aconitum geniculatum</i>
XI BAN YA HUANG YANG	西班牙黄杨	Balearic Box	T1086 <i>Buxus balearica</i>
XI BAN YA YUN XIANG CAO	西班牙芸香草	Spanish Haplophyllum*	T3102 <i>Haplophyllum hispanicum</i>
XI BEI MU	西贝母	Crown Imperial	T2788 <i>Fritillaria imperialis</i>
XI BING MU JIANG ZI	细柄木姜子*	Slenderstalk Litsea*	T3889 <i>Litsea gracilipes</i>
XI BING SHI DA GONG LAO	细柄十大功劳	Subtriplinerved Mahonia	T4064 <i>Mahonia gracilipes</i>
XI BING SHU YU	细柄薯蓣	Thinstiped Yam	T2211 <i>Dioscorea tenuipes</i>
XI BO DE QI MU	西博德杞木*	Siebold Alder*	T0331 <i>Alnus sieboldiana</i>
XI BO JIN HE HUAN	西博金合欢*	Sieber Acacia*	T0029 <i>Acacia sieberiana</i>
XI BO JUE MING	西博决明	Sieber Senna	T1245 <i>Cassia sieberiana</i>
XI BO LI YA HONG SONG	西伯利亚红松	Siberian Stone Pine	T4923 <i>Pinus sibirica</i>
XI BO LI YA LENG SHAN	西伯利亚冷杉	Siberian Fir	T0007 <i>Abies sibirica</i>

XI BO LI YA LIAO <sup>yn</sup>	西伯利亚蓼	Siberian Knotweed*	T5115 <i>Polygonum sibiricum</i> [Syn. <i>Persicaria sibirica</i> ]
XI BO LI YA TOU WU	西伯利亚橐吾	Siberian Goldenray	T3813 <i>Ligularia sibirica</i>
XI BO LI YA YUAN ZHI	西伯利亚远志	Siberian Milkwort	T5086 <i>Polygala sibirica</i>
XI BO LI YA YUN SHAN	西伯利亚云杉	Siberian Spruce	T4875 <i>Picea obovata</i>
XI BO SHI WEI MAO	西博氏卫矛	Seibo Euonymus*	T2547 <i>Euonymus sieboldianus</i>
XI CHANG NAN MEI DOU	细长南美豆		T0439 <i>Anadenanthera colubrine</i>
XI DIAN ZHANG YA CAI	细点獐牙菜	Punctate Swertia*	T6233 <i>Swertia punctata</i>
XI FAN LIAN	西番莲	Passionflower	T4663 <i>Passiflora caerulea</i>
XI FANG CANG ER	西方苍耳*	Occidental Cocklebur*	T6839 <i>Xanthium occidentale</i>
XI FANG CI BAI	西方刺柏*	Western Juniper	T3591 <i>Juniperus occidentalis</i>
XI FANG CUI QUE	西方翠雀	Occidental Larkspur*	T2080 <i>Delphinium occidentale</i>
XI FEI HONG DOU SHU	西非红豆树	West Africa Afrosmosia	T0208 <i>Afrosmosia elata</i>
XI FEI LI ZHI GUO	西非荔枝果	Akee	T0956 <i>Blighia sapida</i>
XI FEI YANG JIAO AO	西非羊角拗	Senegalese Strophanthus*	T6159 <i>Strophanthus sarmentosus</i> var. <i>senegambiae</i>
XI GENG XIANG CAO	细梗香草	Hairydtalk Loosestrife	T3997 <i>Lysimachia capillipes</i>
XI GUA	西瓜	Watermelon	T1464 <i>Citrullus vulgaris</i> [Syn. <i>Citrullus lanatus</i> ]
XI GUA ZI REN	西瓜籽仁	Watermelon Seed	T1465 <i>Citrullus vulgaris</i> [Syn. <i>Citrullus lanatus</i> ]
XI GUO JIAO HUI XIANG	细果角茴香	Thinfruit Hypecoum	T3334 <i>Hypecoum leptocarpum</i>
XI HU LU	西葫芦	Pumpkin	T1882 <i>Cucurbita pepo</i>
XI HUA DIAN ZI CAO	细花滇紫草	Hooker Onosma	T4499 <i>Onosma hookeri</i>
XI HUA HAN XIU CAO	细花含羞草	Smallflower Mimosa*	T4250 <i>Mimosa tenuiflora</i>
XI HUA XIAN WEN XIANG CHA CAI	细花线纹香茶菜	Linearstripe Rabdosia	T3507 <i>Isodon lophanthoides</i> [Syn. <i>Rabdosia lophanthoides</i> ; <i>Hyssopus lophanthoides</i> ; <i>Plectranthus striatus</i> ; <i>Isodon striatus</i> ]
XI HUA XUE DAN	细花雪胆	Smallflower Hemsleya	T3207 <i>Hemsleya graciliflora</i> [Syn. <i>Alsomitra graciliflora</i> ]
XI HUANG CAO	溪黄草	Serrate Rabdosia	T5397 <i>Rabdosia serra</i>
XI JIAO	犀角	Rhinoceros Horn	T5484 <i>Rhinoceros unicornis</i> ; <i>Rhinoceros sondaicus</i> ; <i>Rhinoceros sumatrensis</i>
XI JIN SHI DA GONG LAO	锡金十大功劳	Sikkim Mahonia	T4073 <i>Mahonia sikkimensis</i>
XI JING SHI HU	细茎石斛	Moliniiform Dendrobium*	T2106 <i>Dendrobium moniliforme</i>
XI JUAN YA CONG	细卷鸦葱	Scorzonera	T5824 <i>Scorzonera hispanica</i>
XI LA GANG LIU	希腊杠柳	Grecian Silkvine	T4727 <i>Periploca graeca</i>
XI LA SHI CAO	希腊蓍草	Greek Yarrow	T0058 <i>Achillea ageratifolia</i>
XI LA SI MAO SHI	希腊丝毛蓍	Greek Silk-hair Yarrow*	T0063 <i>Achillea holosericea</i>
XI LAN GU KE	锡兰古柯*	Ceylon Coca Shrub*	T2493 <i>Erythroxylum zeylanicum</i>
XI LAN ROU GUI	锡兰肉桂	Ceylon Cinnamon	T1445 <i>Cinnamomum zeylanicum</i>
XI LIU ZHU YANG YANG	溪流猪殃殃*	River Bedstraw*	T2833 <i>Galium rivale</i>
XI LUO HAN SONG	西罗汉松	Musengerra Podocarpus	T5039 <i>Podocarpus gracilior</i>
XI MA BAI LA SHU	喜马白蜡树	Manyflower Ash	T2769 <i>Fraxinus floribunda</i>
XI MA DU WEI CAO	喜马独尾草	Himalayan Desertcandle	T2414 <i>Eremurus himalaicus</i>
XI MA HONG JING TIAN	喜马红景天	Himalaya Rhodiola	T5495 <i>Rhodiola himalansis</i>
XI MA LA YA HONG DOU SHAN	喜马拉雅红豆杉	Himalayan Yew	T6317 <i>Taxus wallichiana</i>
XI MA LA YA YUAN WEI	喜马拉雅鸢尾	Himalayan Iris*	T3463 <i>Iris kumaonensis</i>
XI MA LA YA YUAN ZHI	喜马拉雅远志	Himalayan Milkwort*	T5074 <i>Polygala emodi</i>
XI MA XUAN FU HUA	喜马旋覆花	Himalayan Inula	T3438 <i>Inula royleana</i>
XI MAI FU PING	稀脉浮萍	Minute Duckweed	T3739 <i>Lemna perpusilla</i>
XI MEN FEI CAO	西门肺草	Comfrey	T6246 <i>Symphytum officinale</i>
XI MENG SI SHI DA GONG LAO	西蒙斯十大功劳	Simons Mahonia	T4074 <i>Mahonia simonsii</i>

XI MING	蕺冥	Boor's Mustard	T6436 <i>Thlaspi arvense</i>
XI MING ZI	蕺冥子	Boor's Mustard Seed	T6437 <i>Thlaspi arvense</i>
XI NAN BA QIA	西南菝葜	<i>Smilax bockii</i>	T5975 <i>Smilax bockii</i>
XI NAN GANG LIU	西南杠柳	Forrest Silkvine	T4726 <i>Periploca forrestii</i>
XI NAN MAO WEI SHU	西南猫尾树	Stipulate Dolichandrone	T2245 <i>Dolichandrone stipulata</i>
XI NAN REN DONG	西南忍冬	South-western Honeysuckle	T3908 <i>Lonicera bournei</i>
XI NAN SHI WEI	西南石韦	Stilted Pyrrosia	T5356 <i>Pyrrosia gralla</i>
XI NAN WEN SHU LAN	西南文殊兰	Broadleaf Crinum	T1799 <i>Crinum latifolium</i>
XI NAN ZHANG YA CAI	西南獐牙菜	Surrounded Swertia	T6216 <i>Swertia cincta</i>
XI NANG MA WEI ZAO	细囊马尾藻	Parvivesiculose Gulfweed*	T5739 <i>Sargassum parvivesiculosum</i>
XI OU YUAN WEI	西欧鸢尾	Orris	T3458 <i>Iris florentina</i>
XI PA JING TIAN	西帕景天*	Cepaea Stonecrop*	T5853 <i>Sedum cepaea</i>
XI QIAN LI GUANG	溪千里光	Rivulet Groundsel*	T5904 <i>Senecio rivularis</i>
XI QUE MEI TENG	细雀梅藤	Thin Sageretia	T5644 <i>Sageretia gracilis</i>
XI SHAN CUI QUE	喜山翠雀*	Montane Larkspur	T2082 <i>Delphinium oreophilum</i>
XI SHEN SHAN ZI JIN	细深山紫堇	Tenuous Corydalis*	T1732 <i>Corydalis pallida</i> var. <i>tenuis</i>
XI SHENG TENG	锡生藤	Common Cissampelos	T1452 <i>Cissampelos pareira</i>
XI SHI HUI MAO DOU	希氏灰毛豆*	Hildebrandt Tephrosia*	T6336 <i>Tephrosia hildebrandtii</i>
XI SHU	喜树	Common Camptotheca	T1162 <i>Camptotheca acuminata</i>
XI SHU MU BAN SHU	稀疏木瓣树	Discrete Xylopia*	T6853 <i>Xylopia discreta</i>
XI SHU QIE	稀疏茄*	Lax Nightshade*	T6004 <i>Solanum laxum</i>
XI SHUAI	蟋蟀	Chinese Cricket	T3066 <i>Gryllus chinensis</i>
XI SI GUO XIANG CHA CAI	西四国香茶菜	West-Shiko Rabdosia*	T3527 <i>Isodon shikokiana</i> var. <i>occidentalis</i>
XI TAI	溪苔		T4695 <i>Pellia epiphylla</i>
XI TE KA YUN SHAN	西特喀云杉	Sitka Spruce	T4876 <i>Picea sitchensis</i>
XI XI LI CAO MU XI	西西里草木犀	Messania Sweetclover*	T4171 <i>Melilotus messanensis</i>
XI XI LI QI SHU	西西里漆树	Sumach	T5532 <i>Rhus coriaria</i>
XI XIAN	豨薟	Common St. Paulswort	T5950 <i>Siegesbeckia orientalis</i>
XI XIANG CONG	细香葱	Chive-like	T0319 <i>Allium schoenoprasum</i>
XI XIAO CHANG CHUN HUA	细小长春花	Slender Periwinkle*	T1270 <i>Catharanthus pusillus</i>
XI XIAO HE BAO MU DAN	细小荷包牡丹	Little Bleedingheart*	T2153 <i>Dicentra pusilla</i>
XI XIAO LUO ZAO	细小裸藻		T2535 <i>Euglena gracilis</i>
XI XIN	细辛	Siebold Wildginger	T0731 <i>Asarum sieboldii</i>
XI XIN YE QIAN NIU	细辛叶牵牛*	Wildginger-leaf Morning Glory*	T3446 <i>Ipomoea asarifolia</i>
XI YAN YUAN WEI	喜盐鸢尾	Salt-loving Iris	T3460 <i>Iris halophila</i>
XI YANG HONG	西洋红	Scarlet Sage	T5693 <i>Salvia splendens</i>
XI YANG JIE GU MU	西洋接骨木	Black Elder	T5704 <i>Sambucus nigra</i>
XI YANG LI	西洋梨	Common Pear	T5364 <i>Pyrus communis</i>
XI YANG SHEN	西洋参	American Ginseng	T4610 <i>Panax quinquefolium</i>
XI YANG SHEN JING YE	西洋参茎叶	American Ginseng Stem-leaf	T4611 <i>Panax quinquefolium</i>
XI YE AN YE	细叶桉叶	Forest Gray Gum Leaf	T2521 <i>Eucalyptus tereticornis</i>
XI YE BAI HE	细叶百合	Low Lily	T3836 <i>Lilium pumilum</i> [Syn. <i>Lilium tenuifolium</i> ]
XI YE DA JI	细叶大戟	Narrowleaf Euphorbia	T2586 <i>Euphorbia esula</i> var. <i>cyparissoides</i>
XI YE DUI XIN JU	细叶堆心菊	Fine-leaved Sneezeweed	T3141 <i>Helenium tenuifolium</i>
XI YE GONG LAO MU	细叶功劳木	Chinese Mahonia	T4062 <i>Mahonia fortunei</i>
XI YE GONG LAO YE	细叶功劳叶	Chinese Mahonia Leaf	T4063 <i>Mahonia fortunei</i>
XI YE HUANG YANG	细叶黄杨	Harland Box	T1088 <i>Buxus harlandii</i>
XI YE SHE BIAN JU	细叶蛇鞭菊	Fine-leaved Gay-feather*	T3795 <i>Liatris tenuifolia</i>
XI YE SHI	细叶蓍	Fine-leaved Yarrow	T0064 <i>Achillea leptophylla</i>
XI YE SHUI TUAN HUA	细叶水团花	Thinleaf Adina	T0181 <i>Adina rubella</i>
XI YE TENG	锡叶藤	Asian Tetracera	T6353 <i>Tetracera asiatica</i>
XI YE TIE XIAN JUE	细叶铁线蕨	Venus Maidenhair	T0179 <i>Adiantum venustum</i>
XI YE XIAO BO	细叶小檗	Poiret Barberry	T0912 <i>Berberis poiretii</i>

XI YE YI MU CAO	细叶益母草	Siberian Motherwort	T3754 <i>Leonurus sibiricus</i>
XI YE ZHU SHI DOU	细叶猪屎豆*	Slender-leaf Crotalaria	T1822 <i>Crotalaria intermedia</i>
XI YUAN TENG	细圆藤	Greyblue Pericampylus	T4710 <i>Pericampylus glaucus</i>
XI ZANG HU HUANG LIAN	西藏胡黄连	Figwortflower Picrorhiza	T4888 <i>Picrorhiza scrophulariiflora</i>
XI ZANG LU TI CAO	西藏鹿蹄草	Tibet Pyrola*	T5346 <i>Pyrola calliantha</i> var. <i>tibetana</i>
XI ZANG QIN JIAO	西藏秦艽	Tibet Gentian	T2937 <i>Gentiana tibetica</i>
XI ZANG SHA JI	西藏沙棘	Tibet Seabuckthorn	T3259 <i>Hippophae thibetana</i>
XI ZANG TIE XIAN LIAN	西藏铁线莲*	Tibet Clematis*	T1548 <i>Clematis tibetana</i>
XI ZANG ZHONG MA HUANG	西藏中麻黄	Tibet Intermediate Ephedra	T2370 <i>Ephedra intermedia</i> var. <i>tibetica</i>
XI ZE LAN	细泽兰*	Gracile Eupatorium*	T2561 <i>Eupatorium gracile</i>
XI ZHAN MAO REN DONG	细毡毛忍冬	Shortbraet Honeysuckle	T3918 <i>Lonicera similis</i>
XI ZHUI XIANG CHA CAI	细锥香茶菜	Littleconical Rabdosia	T5389 <i>Rabdosia coetsa</i>
XI ZI JUE	稀子蕨	Henry's Monachosorum	T4268 <i>Monachosorum henryi</i>
XI ZI MA HUANG	细子麻黄	Regel Ephedra	T2378 <i>Ephedra regeliana</i>
XIA BAO TUO WU	狭苞橐吾	Narrowbract Goldenray	T3807 <i>Ligularia intermedia</i>
XIA CAO	霞草	Oldham Gypsophila	T3090 <i>Gypsophila oldhamiana</i>
XIA CHUI AO YANG	下垂澳杨	Nutant Aussiepoplar*	T3274 <i>Homalanthus nutans</i>
XIA CHUI TAI CAO	下垂苔草*	Drooping Sedge*	T1203 <i>Carex pendula</i>
XIA FENG XIN ZI	夏风信子	Summer-hyacinth	T2842 <i>Galtonia candicans</i>
XIA GOU TENG	狭钩藤	Narrow Gambirplant*	T6606 <i>Uncaria attenuata</i>
XIA GUO QIAN HU	狭果前胡	Narrowfruit Hogfennel*	T4772 <i>Peucedanum stenocarpum</i>
XIA GUO SHAN XIAO JU GEN	狭果山小橘根*	Narrowfruit Glycosmis Root*	T3010 <i>Glycosmis stenocarpa</i>
XIA JI XIAN WEN XIANG CHA CAI	狭基线纹香茶菜	Gerard Linearstripe Rabdosia*	T3508 <i>Isodon lophanthoides</i> var. <i>gerardiana</i>
XIA KU CAO	夏枯草	Common Selfheal	T5214 <i>Prunella vulgaris</i>
XIA MA DAN	虾蟆胆	Rice Frog Gall	T5406 <i>Rana limnocharis</i>
XIA MA SANG	狭马桑*	Narrow Coriaria*	T1688 <i>Coriaria angustissima</i>
XIA TIAN GAO	霞天膏	Concentrated Beef Extract	T0983 <i>Bos taurus domesticus</i>
XIA TIAN WU	夏天无	Decumbent Corydalis	T1715 <i>Corydalis decumbens</i> [Syn. <i>Corydalis amabilis</i> ]
XIA WAN NUO LIN	下弯诺林*	Recurvate Nolina*	T4437 <i>Nolina recurvata</i>
XIA XIE NAN WU WEI ZI	狭叶南五味子	Narrowleaf Kadsura*	T3612 <i>Kadsura angustifolia</i>
XIA XU TANG SONG CAO	狭序唐松草	Narrowraceme Meadowrue	T6374 <i>Thalictrum atriplex</i>
XIA XUE PIAN LIAN	夏雪片莲	Summer Snowflake	T3781 <i>Leucojum aestivum</i>
XIA YAN GU DANG GUI	下延古当归	Decurrent Archangelica	T0583 <i>Archangelica decurrens</i>
XIA YE BAI XIAN	狭叶白鲜	Narrowleaf Dittary*	T2165 <i>Dictamnus angustifolius</i>
XIA YE CHONG LOU	狭叶重楼	Narrowleaf Paris	T4651 <i>Paris polyphylla</i> var. <i>stenophylla</i>
XIA YE CU CAO SHI CHE JU ub	狭叶粗糙矢车菊*	Narrow Rough Star Thistle*	T1302 <i>Centaurea aspera</i> subsp. <i>stenophylla</i>
XIA YE DANG GUI	狭叶当归(川白芷)	Narrowleaf Angelica	T0476 <i>Angelica anomala</i>
XIA YE HONG JING TIAN	狭叶红景天	Kirilow Rhodiola	T5497 <i>Rhodiola kirilowii</i>
XIA YE HU JIAO	狭叶胡椒	Matico Pepper	T4931 <i>Piper angustifolium</i>
XIA YE JI GU CHANG SHAN	狭叶鸡骨常山	Narrowleaf Alstonia*	T0366 <i>Alstonia angustifolia</i>
XIA YE JIN JI ER	狭叶锦鸡儿	Narrowleaf Peashrub	T1192 <i>Caragana stenophylla</i>
XIA YE JUE MING	狭叶决明	Narrowleaf Senna*	T1237 <i>Cassia leptophylla</i>
XIA YE LONG SHE LAN	狭叶龙舌兰	Shortleaf Agave	T0219 <i>Agave cantala</i>
XIA YE QING HAO	狭叶青蒿	Tarragon	T0676 <i>Artemisia dracunculus</i>
XIA YE SHAN HU JIAO	狭叶山胡椒	Narrowleaf Spicebush	T3847 <i>Lindera angustifolia</i>
XIA YE SHE GEN CAO	狭叶蛇根草	Hayata Ophiorrhiza	T4509 <i>Ophiorrhiza hayatana</i>
XIA YE TANG SONG CAO	狭叶唐松草	Narrowleaf Meadowrue	T6394 <i>Thalictrum incidum</i>
XIA YE WU WEI ZI	狭叶五味子	Narrowleaf Magnoliavine*	T5794 <i>Schisandra lancifolia</i>
XIA YE XIANG CHA CAI	狭叶香茶菜	Narrowleaf Rabdosia*	T3480 <i>Isodon angustifolia</i>
XIA YE XIANG PU	狭叶香蒲	Narrowleaf Cattail Pollen	T6585 <i>Typha angustifolia</i>
XIA YE ZHANG YA CAI	狭叶獐牙菜	Narrowleaf Swertia	T6212 <i>Swertia angustifolia</i>

XIA ZHI CAO	夏至草	Lagopsis	T3675 <i>Lagopsis supina</i>
XIA ZI HUA	虾子花	Shrubby Woodwardia	T6830 <i>Woodfordia fruticosa</i>
XIAN CHI SHE PU TAO	显齿蛇葡萄	Bigdentate Ampelopsis	T0426 <i>Ampelopsis grossedentata</i> [Syn. <i>Ampelopsis cantoniensis</i> var. <i>grossedentata</i> ]
XIAN CHI ZI JIN NIU	腺齿紫金牛	Glandtooth Ardisia*	T0593 <i>Ardisia cornudentata</i>
XIAN DI HUANG	鲜地黄(生地)	Adhesive Rehmannia Fresh Root	T5447 <i>Rehmannia glutinosa</i> [Syn. <i>Rehmannia glutinosa</i> f. <i>huechingensis</i> ]
XIAN E HUANG LIAN	线萼黄连	Linearisepal Goldthread*	T1668 <i>Coptis linearisepala</i>
XIAN GENG XI XIAN	腺梗豨莩	Glandularstalk St. Paulswort	T5952 <i>Siegesbeckia orientalis</i> var. <i>pubescens</i> [Syn. <i>Siegesbeckia pubescens</i> ]
XIAN HE CAO	仙鹤草	Japanese Argimonia	T0249 <i>Agrimonia pilosa</i> var. <i>japonica</i>
XIAN HE CAO GEN	仙鹤草根	Japanese Argimonia Root	T0250 <i>Agrimonia pilosa</i> var. <i>japonica</i>
XIAN HE CAO GEN YA	仙鹤草根芽	Japanese Argimonia Rhizome	T0251 <i>Agrimonia pilosa</i> var. <i>japonica</i>
XIAN HUA XIANG CHA CAI	腺花香茶菜	Glandularflower Rabdosia	T5388 <i>Rabdosia adenantha</i>
XIAN HUANG XIAO BO	鲜黄小檗	Reddrop Barberry	T0902 <i>Berberis diaphana</i>
XIAN KE LAI	仙客来	Florists Cyclamen	T1930 <i>Cyclamen persicum</i>
XIAN MAI JU	腺脉药	Glandularnerve Pepper	T4936 <i>Piper bavinum</i>
XIAN MAI XIANG CHA CAI	显脉香茶菜	Veined Rabdosia	T5395 <i>Rabdosia nervosa</i>
XIAN MAI XUAN FU HUA	显脉旋覆花	Veined Inula	T3436 <i>Inula nervosa</i>
XIAN MAI ZHANG YA CAI	显脉獐牙菜	Veined Swertia*	T6228 <i>Swertia nervosa</i>
XIAN MAO	仙茅	Common Cruculigo	T1901 <i>Curculigo orchoides</i>
XIAN MAO HEI ZHONG CAO	腺毛黑种草	Glandular Fennelflower	T4432 <i>Nigella glandulifera</i>
XIAN REN ZHANG	仙人掌	Cholla	T4519 <i>Opuntia dillenii</i>
XIAN SE LI	苋色藜	Amaranthinecolor Goosefoot*	T1360 <i>Chenopodium amaranticolor</i>
XIAN SHENG MA XIAN HAO	藓生马先蒿	Muscicolous Woodbetony	T4682 <i>Pedicularis muscicola</i>
XIAN SUAN QIANG	咸酸强	Whiteflower Embelia	T2348 <i>Embelia ribes</i>
XIAN WEN XIANG CHA CAI	线纹香茶菜	Linearstripe Rabdosia	T3506 <i>Isodon lophanthoides</i>
XIAN XI LAO GUAN CAO	纤细老鹳草	Robert Cranesbill	T2946 <i>Geranium robertianum</i>
XIAN XI SHU YU	纤细薯蓣	Thinnest Yam	T2198 <i>Dioscorea gracillima</i>
XIAN YE BA DOU	线叶巴豆	Linear Croton*	T1850 <i>Croton linearis</i>
XIAN YE CHAI HU	线叶柴胡	Linearleaf Thorowax	T1055 <i>Bupleurum angustissimum</i>
XIAN YE JIN JI JU	线叶金鸡菊	Lance Coreopsis	T1685 <i>Coreopsis lanceolata</i>
XIAN YE QIN	纤叶芹	Thinleaf Celery	T0546 <i>Apium leptophyllum</i>
XIAN YE REN DONG	腺叶忍冬	Glaucousback Honeysuckle	T3911 <i>Lonicera hypoglauca</i>
XIAN YE XUAN FU HUA	线叶旋覆花	Linearleaf Inula	T3434 <i>Inula linariaefolia</i>
XIAN YU FENG WEI JUE	线羽凤尾蕨	Linear Brake	T5293 <i>Pteris linearis</i>
XIAN ZE LAN	腺泽兰*	Glandulous Eupatorium*	T2560 <i>Eupatorium glandulosum</i>
XIAN ZHOU MAI MA TENG	显轴买麻藤	Spinach Jointfir	T3028 <i>Gnetum gnemon</i>
XIAN ZHUANG WANG DI ZAO	线状网地藻		T2170 <i>Dictyota linearis</i>
XIANG BA DOU	香巴豆*	Balsam Croton*	T1838 <i>Croton balsamifera</i>
XIANG CAO SHUI YANG MEI	香草水杨梅*	Herb Bennet	T2958 <i>Geum urbanum</i>
XIANG CHA CAI	香茶菜	Common Rabdosia	T3479 <i>Isodon amethystoides</i>
XIANG CHE YE CAO	香车叶草	Sweet Woodruff	T0757 <i>Asperula odorata</i>
XIANG CI BAI FEI ZHOU BIAN ZHONG	香刺柏非洲变种*	Mastic Africa Juniper*	T3602 <i>Juniperus thurifera</i> var. <i>africana</i>
XIANG DAN	象胆	Elephant Gall	T2336 <i>Elephas maximus</i>
XIANG DOU	香豆		T2237 <i>Dipteryx odorata</i>
XIANG FENG HUA	香蜂花	Bee Balm	T4174 <i>Melissa officinalis</i>
XIANG FU	香附	Nutgrass Galingale	T1978 <i>Cyperus rotundus</i>
XIANG GANG JIAN MU	香港檉木	Hongkong Pencilwood	T2310 <i>Dysoxylum hongkongense</i>
XIANG GEN QIN	香根芹	Laxleaf Sweetroot	T4551 <i>Osmorhiza aristata</i> var. <i>laxa</i>
XIANG GU	象骨	Elephant Bone	T2337 <i>Elephas maximus</i>
XIANG HE HUAN	香合欢	Fragrant Albizia*	T0295 <i>Albizia odoratissima</i>

XIANG HUANG LIAN MU	香黄连木	Mastic-tree	T4980 <i>Pistacia lentiscus</i>
XIANG JIA PI	香加皮	Chinese Silkvine Root-bark	T4729 <i>Periploca sepium</i>
XIANG JIAO	香蕉	Common Banana	T4331 <i>Musa paradisiaca</i> var. <i>sapientum</i> [Syn. <i>Musa sapientum</i> ]
XIANG JIAO SHU	橡胶树	Para Rubbertree	T3236 <i>Hevea brasiliensis</i>
XIANG LI	香藜	Feathered Geranium	T1362 <i>Chenopodium botrys</i>
XIANG LING CAO	响铃草	Rust-coloured Croton	T1819 <i>Crotalaria ferruginea</i>
XIANG MAN TUO LUO	香曼陀罗	Fragrant Datura*	T2040 <i>Datura metaloides</i>
XIANG MAO	香茅	Lemongrass	T1939 <i>Cymbopogon citratus</i>
XIANG MO ZHI JU	香膜质菊		T3326 <i>Hymenoxys odorata</i>
XIANG NING MENG	香柠檬	Bergamot Orange	T1470 <i>Citrus bergamia</i>
XIANG PI MU	象皮木	Common Alstonia	T0374 <i>Alstonia scholaris</i>
XIANG QI JIA MI	香气茛菪*	Sweet Viburnum*	T6738 <i>Viburnum odoratissimum</i>
XIANG QING LAN	香青兰	Dragonhead	T2257 <i>Dracocephalum moldavicum</i>
XIANG RI KUI HUA	向日葵花	Sunflower Flower	T3142 <i>Helianthus annuus</i>
XIANG RI KUI JING SUI	向日葵茎髓	Sunflower Stem Pith	T3143 <i>Helianthus annuus</i>
XIANG RI KUI YE	向日葵叶	Sunflower Leaf	T3144 <i>Helianthus annuus</i>
XIANG RI KUI ZI	向日葵籽	Sunflower Seed	T3145 <i>Helianthus annuus</i>
XIANG ROU	象肉	Elephant Meat	T2338 <i>Elephas maximus</i>
XIANG ROU GUO	香肉果	Edible Casimiroa	T1226 <i>Casimiroa edulis</i>
XIANG RU	香薷	Haichow Elsholtzia	T2343 <i>Elsholtzia splendens</i>
XIANG SI CAO	香丝草	Bona Conyza	T1656 <i>Conyza bonariensis</i> [Syn. <i>Erigeron bonariensis</i> ; <i>Erigeron linifolius</i> ; <i>Erigeron crispus</i> ]
XIANG SI TENG	相思藤	Coralhead Plant Vine	T0011 <i>Abrus precatorius</i>
XIANG SI ZI	相思子	Coralhead Plant	T0012 <i>Abrus precatorius</i>
XIANG TANG SONG CAO	香唐松草	Tibetan Meadowrue	T6386 <i>Thalictrum foetidum</i>
XIANG TIE KUAI ZI	香铁筷子	Odorous Hellebore*	T3184 <i>Helleborus odoratus</i>
XIANG WAN DOU	香豌豆	Sweet Pea	T3707 <i>Lathyrus odoratus</i>
XIANG XUN	香蕈	Champignon	T3742 <i>Lentinus edodes</i>
XIANG YA HAI AN GE MU	象牙海岸格木	Ivory Coast Erythrophleum	T2486 <i>Erythrophleum ivorense</i>
XIANG YANG	香杨	Korea Poplar	T5154 <i>Populus koreana</i>
XIANG YANG MEI	香杨梅	Bog-myrtle	T4344 <i>Myrica gale</i>
XIANG YE	香叶	Roce Pelargonium	T4690 <i>Pelargonium graveolens</i>
XIANG YE YANG	响叶杨	Chinese Aspen	T5144 <i>Populus adenopoda</i>
XIANG YIN YU	香茵芋	Japanese Skimmia	T5970 <i>Skimmia japonica</i>
XIANG YING ZHAO	香鹰爪	Fragrant Tailgrape*	T0656 <i>Artabotrys suaveolens</i>
XIANG YUAN	香椽	Wilson Citron	T1520 <i>Citrus wilsonii</i>
XIANG YUAN ZHI SHI	香椽枳实	Wilson Orange Young Fruit	T1521 <i>Citrus wilsonii</i>
XIANG ZHANG	香樟	Yellow Cinnamon	T1443 <i>Cinnamomum parthenoxylum</i> [Syn. <i>Cinnamomum porrectum</i> ]
XIANG ZHI LENG SHAN	香脂冷杉	Balsam Fir	T0004 <i>Abies balsamea</i>
XIANG ZI LAN	香子兰	Vanilla	T6684 <i>Vanilla planifolia</i>
XIAO BA JIAO LIAN	小八角莲	Dwarf Many-flowered May-apple	T2298 <i>Dysosma difformis</i>
XIAO BAI BU	小百部	Officinal Asparagus	T0752 <i>Asparagus officinalis</i>
XIAO BAI CHENG	小白撑	Unequalhair Paoshan Monkshood	T0116 <i>Aconitum nagarum</i> var. <i>heterotrichum</i> [Syn. <i>Aconitum bullatifolium</i> ]
XIAO BANG XIYOU QIYOU HAI MIAN	小棒绣球海绵	Sponge <i>Iotrochota baculifera</i>	T3442 <i>Iotrochota baculifera</i>
XIAO BO	小檗	Amur Barberry	T0897 <i>Berberis amurensis</i>
XIAO BO SI SHI SUAN	小波斯石蒜	Small Ungernia*	T6641 <i>Ungernia minor</i>
XIAO CAO WU	小草乌	Yunnan Larkspur	T2091 <i>Delphinium yunnanense</i>
XIAO CHAO CAI	小巢菜	Pigeon Vetch	T6749 <i>Vicia hirsuta</i>

XIAO DAO XING HUANG TAN	小刀形黄檀	Cultrate Rosewood*	T2001 <i>Dalbergia cultrata</i>
XIAO DI YU	小地榆*	Small Burnet*	T5711 <i>Sanguisorba minor</i>
XIAO E TAI	小萼苔		T4340 <i>Mylia taylorii</i>
XIAO GAI SHU WEI CAO	小盖鼠尾草	Microcap Sage*	T5679 <i>Salvia microstegia</i>
XIAO GAN	小柑	Falcate Micromelum	T4221 <i>Micromelum falcatum</i>
XIAO GOU SHU	小构树	Kazinoki Papermulberry	T1031 <i>Broussonetia kazinoki</i>
XIAO GUO KA FEI	小果咖啡	Arabian Coffeetree	T1608 <i>Coffea arabica</i>
XIAO GUO NAN ZHU	小果南烛	Littlefruit Lyonia	T3992 <i>Lyonia ovalifolia</i> var. <i>elliptica</i>
XIAO GUO QIANG WEI GEN	小果蔷薇根	Smallfruit Rose	T5563 <i>Rosa cymosa</i>
XIAO GUO SHI DA GONG LAO	小果十大功劳	Bodinier Mahonia	T4058 <i>Mahonia bodinieri</i>
XIAO GUO TANG SONG CAO	小果唐松草	Smallfruit Meadowrue	T6398 <i>Thalictrum microgynum</i>
XIAO GUO XIANG CAO	小果香草	Smallfruit Loosestrife*	T4003 <i>Lysimachia microcarpa</i>
XIAO GUO YE JIAO	小果野蕉	Acuminate Banana	T4329 <i>Musa acuminata</i>
XIAO GUO YIN MAO QIU	小果银毛球	Fishhook Cactus	T4097 <i>Mammillaria microcarpa</i>
XIAO GUO YUN XIANG	小果芸香*	Smallfruit Rue*	T5627 <i>Ruta microcarpa</i>
XIAO GUO ZAO	小果枣	Littlefruit Jujube	T6923 <i>Zizyphus oenoplia</i>
XIAO HEI YANG	小黑杨	Slamm Black Poplar	T5166 <i>Populus xiaohei</i>
XIAO HONG SHEN	小红参	Yunnan Madder	T5586 <i>Rubia yunnanensis</i>
XIAO HONG SUAN	小红蒜	American Eleutherine	T2339 <i>Eleutherine americana</i>
XIAO HUA DUN YE SHU YU	小花盾叶薯蓣	Smallflower Yam	T2206 <i>Dioscorea parviflora</i>
XIAO HUA FENG MAO JU	小花凤毛菊	Smallflower Saussurea*	T5763 <i>Saussurea parviflora</i>
XIAO HUA GUI ZHEN	小花鬼针	Smallflower Beggarticks	T0939 <i>Bidens parviflora</i>
XIAO HUA HUANG JIN	小花黄堇	Racemose Corydalis	T1733 <i>Corydalis racemosa</i>
XIAO HUA LAO SHU LE.	小花老鼠筋	Smallflower Acanthus*	T0047 <i>Acanthus ebracteatus</i>
XIAO HUA MU BAN SHU	小花木瓣树	Smallflower Xylopia*	T6854 <i>Xylopia parviflora</i>
XIAO HUA MU LAN GUO	小花木橐果*	Smallflower Bruguiera Fruit*	T1040 <i>Bruguiera parviflora</i>
XIAO HUA PAO PAO	小花泡泡	Smallflower Pawpaw	T0743 <i>Asimina parviflora</i>
XIAO HUA PO LEI	小花坡垒	Kongu	T3280 <i>Hopea parviflora</i>
XIAO HUA QIU GUO ZI JIN	小花球果紫堇*	Fine-leaved Fumitory	T2808 <i>Fumaria parviflora</i>
XIAO HUA SHA ZHEN	小花沙针*	East African Sandalwood	T4556 <i>Osyris tenuifolia</i>
XIAO HUA SUAN TENG ZI	小花酸藤子	Smallflower Embelia	T2347 <i>Embelia parviflora</i>
XIAO HUA WU WEI ZI	小花五味子	Smallflower Magnoliavine*	T5795 <i>Schisandra micrantha</i>
XIAO HUA WU YA GUO	小花五桠果	Pentagynous Dillenia	T2182 <i>Dillenia pentagyna</i>
XIAO HUA XIA KU CAO	小花夏枯草*	Smallflower Bugle*	T0268 <i>Ajuga parviflora</i>
XIAO HUA YUAN ZHI	小花远志	Smallflower Milkwort	T5087 <i>Polygala telephioides</i>
XIAO HUA ZI JIN	小花紫堇*	Micranthine Corydalis*	T1725 <i>Corydalis micrantha</i>
XIAO HUANG ZI JIN	小黄紫堇	Small Ochotsk Corydalis	T1729 <i>Corydalis ochotensis</i> var. <i>raddeana</i>
XIAO JI	小薊	Setose Thistle	T1451 <i>Cirsium setosum</i> [Syn. <i>Cerratula setosa</i> ; <i>Cirsium segetum</i> ; <i>Cephalanoplos segetum</i> ]
XIAO JIAN CAO	小箭草	Bulbiferous Stonecrop	T5852 <i>Sedum bulbiferum</i>
XIAO JIAO HAI YING SU	小角海罂粟	Black-spot Hornpoppy	T2966 <i>Glaucium corniculatum</i>
XIAO JIAO ZHU HUA	小角柱花	Creeping Ceratostigma, Creeping Bluesnow	T1327 <i>Ceratostigma minus</i>
XIAO JIE JIN CAO	小接筋草	Selago-like Climbing Fern	T3294 <i>Huperzia selago</i> [Syn. <i>Lycopodium selago</i> ]
XIAO JIN ZHAN HUA	小金盏花	Field Marigold	T1112 <i>Calendula arvensis</i>
XIAO JING DOU	小荆豆*	Small Gorse*	T6591 <i>Ulex minor</i>
XIAO LA BA	小喇叭	Verticillate Cladonia	T1529 <i>Cladonia verticillata</i>
XIAO LIAN QIAO	小连翘	Erect St. John'swort	T3349 <i>Hypericum erectum</i>
XIAO LONG YE KUO BAO JU	小龙叶阔苞菊*	Dracunculi-leaf Pluchea*	T0844 <i>Baccharis dracunculifolia</i>
XIAO LU QIE	小路茄*	Viatic Nightshade*	T6019 <i>Solanum viarium</i>
XIAO MAI	小麦	Wheat	T6544 <i>Triticum aestivum</i> [Syn. <i>Triticum vulgare</i> ]
XIAO MEI WEI QIN	小美味芹		T5986 <i>Smyrniium olusatrum</i>



XIAO MI CAO	小米草	Meadow Eyebright	T2628 <i>Euphrasia officinalis</i>
XIAO MU MA HUANG	小木麻黄	Small Beefwood*	T1259 <i>Casuarina stricta</i>
XIAO PO PO NA	小婆婆纳	Thymeleaf Speedwell	T6728 <i>Veronica serpyllifolia</i>
XIAO QIAO MU ZI JIN NIU	小乔木紫金牛	Small-tree Ardisia*	T0591 <i>Ardisia arborescens</i>
XIAO QING YANG	小青杨	False Simon Poplar	T5157 <i>Populus pseudo-simonii</i>
XIAO QIU BAI BU	小丘百部	Hill Stemona*	T6109 <i>Stemona collinsae</i>
XIAO RU XIANG	肖乳香	Brazilian Peppertree	T5789 <i>Schinus terebinthifolius</i>
XIAO SHA DONG QING	小沙冬青	Small Piptanthus*	T4975 <i>Piptanthus nanus</i>
XIAO SHE JU GEN	小舌菊根	Pearleaf Microglossa Root	T4218 <i>Microglossa pyriformis</i>
XIAO SHE ZI WAN	小舌紫菀	Smallligulatecorolla Aster	T0778 <i>Aster albescens</i>
XIAO TANG SONG CAO	小唐松草	Low Meadowrue	T6399 <i>Thalictrum minus</i>
XIAO TOU DUI XIN JU	小头堆心菊	Littlehead Sneezeweed	T3139 <i>Helenium microcephalum</i>
XIAO TOU LIANG HOU CHA	小头凉喉茶	Capitellate Hedyotis	T3124 <i>Hedyotis capitellata</i>
XIAO TOU TIE ZI	小头铁仔*	Capitellate Myrsine*	T4362 <i>Myrsine capitellata</i>
XIAO WU MAO JUE	小乌毛蕨*	Minus Hard-fern*	T0951 <i>Blechnum minus</i>
XIAO XI CANG ER	小溪苍耳*	Ripply Cocklebur*	T6842 <i>Xanthium riparium</i>
XIAO XIAN AO DING ZAO	小腺凹顶藻	Small-grand Concave-top Alga*	T3717 <i>Laurencia glandulifera</i>
XIAO XIN YE SHU	小心叶薯	Smallheartleaved Morningglory	T3450 <i>Ipomoea obscura</i>
XIAO XING HUA YAN QIANG WEI	小形花岩蔷薇*		T1459 <i>Cistus parviflorus</i>
XIAO XUAN CAO GEN	小萱草根	Small Yellow Daylily	T3197 <i>Hemerocallis minor</i>
XIAO XUE REN SHEN	小雪人参	Woolly Lespedeza	T3774 <i>Lespedeza tomentosa</i>
XIAO YE CEN	小叶椴	Bunga Ash Bark	T2766 <i>Fraxinus bungeana</i>
XIAO YE DI BU RONG	小叶地不容	Littleleaf Stephania	T6135 <i>Stephania succifera</i>
XIAO YE DU LIAN	小叶杜楝	Littleleaf Starbush*	T6571 <i>Turraea parvifolia</i>
XIAO YE DU YING	小叶杜英*	Small-leafElaeocarpus*	T2330 <i>Elaeocarpus parvifolius</i>
XIAO YE GUAN ZHONG	小叶贯众	Matteuccia Frond	T4127 <i>Matteuccia struthiopteris</i>
XIAO YE HEI CHAI HU	小叶黑柴胡	Smallleaf Black Thorowax	T1075 <i>Bupleurum smithii</i> var. <i>parvifolium</i>
XIAO YE HONG GUANG SHU	小叶红光树	Small-leaf Knema	T3631 <i>Knema globularia</i>
XIAO YE HUA	笑靥花	Bridalwreath Spiraea	T6084 <i>Spiraea prunifolia</i>
XIAO YE HUA BEI XIU XIAN JU	小叶华北绣线菊	Smallleaf Fritsch Spiraea*	T6078 <i>Spiraea fritschiana</i> var. <i>parvifolia</i>
XIAO YE HUANG YANG	小叶黄杨	Small-leaved Box	T1091 <i>Buxus microphylla</i>
XIAO YE JI WEI	小野鸡尾	Japanese Clave Fern	T4502 <i>Onychium japonicum</i> [Syn. <i>Tricomanes japonicum</i> ]
XIAO YE JIU LI XIANG	小叶九里香	Littleleaf Common Jasminorange	T4325 <i>Murraya paniculata</i> var. <i>exotica</i>
XIAO YE JU HAO	小叶菊蒿	Small-leaf Tansy*	T6293 <i>Tanacetum microphyllum</i>
XIAO YE LIE LAN	小叶裂榄	Elephant Tree	T1081 <i>Bursera microphylla</i>
XIAO YE MAI MA TENG	小叶买麻藤	Smallleaf Jointfir	T3033 <i>Gnetum parvifolium</i> [Syn. <i>Gnetum indicum</i> ]
XIAO YE PI PA	小叶枇杷	Savory Rhododendron	T5502 <i>Rhododendron anthopogonoides</i>
XIAO YE SHI NAN	小叶石楠	Small-leaf Photinia*	T4827 <i>Photinia parvifolia</i>
XIAO YE TANG SONG CAO	小叶唐松草	Small-leaf Meadowrue	T6380 <i>Thalictrum elegans</i>
XIAO YE XIANG CHA CAI	小叶香茶菜	Smallleaf Rabdosia*	T3517 <i>Isodon parvifolia</i>
XIAO YE XUAN GOU ZI	小叶悬钩子	Small-leaf Raspberry	T5601 <i>Rubus taiwanicolus</i>
XIAO YE YANG	小叶杨	Simon Poplar	T5158 <i>Populus simonii</i>
XIAO YE YE JUE MING	小叶野决明	Chinese Thermopsis	T6426 <i>Thermopsis chinensis</i>
XIAO YE YING MAO QI MU	小叶硬毛槲木	Smallleaf-hirsute Alder*	T0327 <i>Alnus hirsute</i> var. <i>microphylla</i>
XIAO YE ZHI MA	小野芝麻	China Weasel-snout	T2825 <i>Galeobdolon chinense</i> [Syn. <i>Lamium chinense</i> ]
XIAO YUN MU	小芸木	Entire Micromelum	T4223 <i>Micromelum integerrimum</i>
XIAO ZHU SHI DOU	小猪屎豆	Small Rattle-box	T1827 <i>Crotalaria nana</i>
XIE BAI	薤白	Longstamen Onion	T0316 <i>Allium macrostemon</i>
XIE CAO	缬草	Common Valeriana	T6679 <i>Valeriana officinalis</i>

XIE FEI ZI YU PAN	谢飞紫玉盘*	Scheffleri Uvaria*	T6667 <i>Uvaria scheffleri</i>
XIE JI CU YE MU	斜基粗叶木	Wallich Lasianthus	T3698 <i>Lasianthus wallichii</i>
XIE JING ZHANG YA CAI	斜茎獐牙菜	Spreading Swertia*	T6229 <i>Swertia patens</i>
XIE KE	蟹壳	Mitten Crab Chelae	T2435 <i>Eriocheir sinensis</i>
XIE PU TAO	楔葡萄	Coigne Grape*	T6795 <i>Vitis coignetiae</i>
XIE SHI ZI JIN	谢氏紫堇	Sewerzow Corydalis*	T1741 <i>Corydalis sewerzowi</i>
XIE WEI JU	蝎尾菊	Linear Koelpinia	T3634 <i>Koelpinia linearis</i>
XIE XING WU TOU	楔形乌头*	Cuneate Monkshood*	T0134 <i>Aconitum subcuneatum</i>
XIE YE ZE LAN	楔叶泽兰	Cuneateleaf Eupatorium*	T2557 <i>Eupatorium cuneifolium</i>
XIE YU FENG WEI JUE	斜羽凤尾蕨	Oblique Pinna Brake	T5296 <i>Pteris oshimensis</i>
XIE ZHUA LAN	蟹爪兰	Crab-craw Orchis*	T5806 <i>Schlumbergera truncata</i>
XIN FEI CAO	辛菲草	Caucasian Comfrey	T6245 <i>Symphytum caucasicum</i>
XIN HE LAN HU JIAO	新荷兰胡椒*	Novel-Holland Pepper*	T4958 <i>Piper nove-hollandae</i>
XIN JIANG BEI MU	新疆贝母	Sinkiang Fritillary	T2800 <i>Fritillaria wahjewisii</i>
XIN JIANG DANG SHEN	新疆党参	Clematis Asiabell	T1597 <i>Codonopsis clematidea</i>
XIN JIANG GAO BEN	新疆藜本	Vaginate Hemlockparsley	T1641 <i>Conioselinum vaginatum</i>
XIN JIANG LAN CI TOU	新疆蓝刺头	Sinkiang Globethistle	T2317 <i>Echinops ritro</i>
XIN JIANG YANG	新疆杨	Sinkiang Poplar*	T5146 <i>Populus alba</i> var. <i>pyramdalis</i>
XIN JIANG YI ZHI HAO	新疆一支蒿	Rock Wormwood	T0692 <i>Artemisia rupestris</i> [Syn. <i>Artemisia dentata</i> ; <i>Artemisia viridis</i> ; <i>Artemisia viridifolia</i> ]
XIN MEI FENG MAO JU	新美风毛菊*	New Beauty Saussurea*	T5761 <i>Saussurea neopulchella</i>
XIN NONG XIANG MAO	信浓香茅	Senna Lemongrass*	T1947 <i>Cymbopogon sennaarensis</i>
XIN SHAO NA CAO	新哨纳草	Fringecups	T6328 <i>Tellima grandifolia</i>
XIN SU GE LAN XUE GUO MU	新苏格兰穴果木	Newcaledonian Coelospermum*	T1607 <i>Coelospermum billardieri</i>
XIN XI LAN LUO HAN SONG	新西兰罗汉松	New Zealand Podocarpus*	T5038 <i>Podocarpus ferrugineu</i>
XIN XI LAN MA	新西兰麻	New Zealand Flax	T4825 <i>Phormium tenax</i>
XIN XI LAN MU JING	新西兰牡荆	Puriri	T6785 <i>Vitex lucens</i>
XIN XI LAN YE TAI	新西兰叶苔*	Cardia-petal Goniothalamus*	T3580 <i>Jungermannia</i> sp. T3043 <i>Goniothalamus cardiopetalus</i>
XIN XING BAN GE NA XIANG	心形瓣哥纳香	Cordate Gambirplant*	T6612 <i>Uncaria cordata</i>
XIN XING GOU TENG	心形钩藤*	Cordate Syzygium*	T6265 <i>Syzygium cordatum</i>
XIN XING PU TAO	心形蒲桃*	Cardialeaf Tinospora*	T3579 <i>Jungermannia exsertifolia</i> ssp. <i>cordifolia</i> T6464 <i>Tinospora cordifolia</i>
XIN XING SHEN YE YE TAI	心形伸叶叶苔*	Heartleaf Tubergourd	T6435 <i>Thladiantha cordifolia</i>
XIN XING YE QING NIU DAN	心形叶青牛胆*	Lily Magnolia Buds	T4041 <i>Magnolia liliiflora</i> T4809 <i>Phlomis lunariifolia</i>
XIN YE CHI BO	心叶赤廔	Sinkiang-Tibet Arnebia	T0648 <i>Arnebia euchroma</i>
XIN YI	辛夷	Dahurian Pulsatilla*	T5326 <i>Pulsatilla dahurica</i>
XIN YUE XING YE CAO SU	新月型叶糙苏*	Siberia Thorowax	T1073 <i>Bupleurum sibiricum</i>
XIN ZANG JIA ZI CAO	新藏假紫草	Dahurian Bugbane	T1419 <i>Cimicifuga dahurica</i>
XING AN BAI TOU WENG	兴安白头翁	Shield Floatingheart	T4456 <i>Nymphoides peltatum</i>
XING AN CHAI HU	兴安柴胡	Punctated Microsorium*	T4225 <i>Microsorium punctatum</i>
XING AN SHENG MA	兴安升麻	Apricot Seed	T5216 <i>Prunus armeniaca</i>
XING CAI	苍菜	Apricot Root	T5217 <i>Prunus armeniaca</i>
XING JUE	星蕨	Stellate hair Carpetweed	T2984 <i>Glinus lotoides</i> [Syn. <i>Mollugo lotoides</i> ]
XING REN	杏仁	Apricot	T5218 <i>Prunus armeniaca</i>
XING SHU GEN	杏树根	Bear Gall	T5871 <i>Selenarctos thibetanus</i> ; <i>Ursus arctos</i>
XING SU CAO	星粟草	Mexican Ageratum	T0230 <i>Ageratum houstonianum</i>
XING ZI	杏子	Bearberry	T0588 <i>Arctostaphylos uva-ursi</i>
XIONG DAN	熊胆	Common Tritonia	T6548 <i>Tritonia crocosmaeflora</i>
XIONG ER CAO	熊耳草	Staminate Sage*	T5695 <i>Salvia staminea</i>
XIONG GUO	熊果	Big-flowered Javatea	T4541 <i>Orthosiphon stamineus</i> [Syn.
XIONG HUANG LAN	雄黄兰		
XIONG RUI ZHUANG SHU WEI CAO	雄蕊状鼠尾草*		
XIONG RUI ZHUANG ZHI CAO	雄蕊状直管草		

## GUAN CAO

XIONG ZHANG	熊掌	Bear's Paw	<i>Orthosiphon aristatus</i> ; <i>Orthosiphon grandiflorus</i> ; <i>Orthosiphon spicatus</i>
XIU HONG QIANG WEI	锈红蔷薇*	Sweet-briar	T5872 <i>Selenarctos thibetanus</i> ; <i>Ursus arctos</i>
XIU LI YING ZHAO	秀丽鹰爪*	Venus Tailgrape*	T5571 <i>Rosa rubiginosa</i>
XIU MAO DI HUANG	锈毛地黄	Rusty Foxglove	T0658 <i>Artabotrys venustus</i>
XIU MAO JI SHENG	锈毛寄生	Rustyhair Taxillus	T2174 <i>Digitalis ferruginea</i>
XIU MAO YE TONG	锈毛野桐	Anomalous Mallotu	T6304 <i>Taxillus levinei</i>
XIU QIU QIAN CAO	绣球茜草	Chinese Dunnia	T4079 <i>Mallotus anomalus</i>
XIU QIU SHU WEI CAO	绣球鼠尾草*		T2294 <i>Dunnia sinensis</i>
XIU SE AN XI XIANG	锈色安息香	Ferruginous Snowbell*	T5675 <i>Salvia hydrangea</i>
XIU XIAN JU	绣线菊	Japanese Spiraea	T6198 <i>Styrax ferrugineus</i>
XIU XIAN JU YE	绣线菊叶	Japanese Spiraea Leaf	T6079 <i>Spiraea japonica</i>
XU CHANG QING	徐长卿	Paniculate Swallowwort	T6080 <i>Spiraea japonica</i>
XU DUAN	续断	Japanese Teasel	T1959 <i>Cynanchum paniculatum</i>
XU DUAN JU	续断菊	Prickly Sowthistle	T2235 <i>Dipsacus japonicus</i>
			T6026 <i>Sonchus asper</i> [Syn. <i>Sonchus oleraceus</i> var. <i>asper</i> ]
XU LI YA MA LI JIN	叙利亚马利筋	Milkweed	T0740 <i>Asclepias syriaca</i>
XU LI YA NIU ZHI	叙利亚牛至*	Syria Origanum*	T4525 <i>Origanum syriacum</i>
XU SUI ZI JING ZHONG BAI ZHI	续随子茎中白汁	Caper Euphorbia Latex	T2598 <i>Euphorbia lathyris</i>
XUAN CAO GEN	萱草根	Orange Daylily	T3193 <i>Hemerocallis fulva</i>
XUAN CHUI GEN NAI LA CAO	悬垂根乃拉草*		T3073 <i>Gunnera perpensa</i>
XUAN CHUI JIA MI	悬垂荚蒾	Weeping Viburnum*	T6740 <i>Viburnum suspensum</i>
XUAN FU HUA	旋覆花	British Inula	T3427 <i>Inula britannica</i>
XUAN GOU ZI	悬钩子	Avrons	T5589 <i>Rubus chamaemorus</i>
XUAN GUO WEN ZI CAO	旋果蚊子草	Queen-of-the-Meadows	T2729 <i>Filipendula ulmaria</i>
XUAN HUA YANG JIAO AO	旋花羊角拗	Spinyflower Strophanthus	T6156 <i>Strophanthus gratus</i>
XUAN NIU XIE HAO	旋扭邪蒿	Tortuous Seseli*	T5936 <i>Seseli tortuosum</i>
XUAN SHEN	玄参	Ningpo Figwort	T5828 <i>Scrophularia ningpoensis</i>
XUAN WEI WU TOU	宣威乌头	Haoryanther Paoshan Monkshood	T0117 <i>Aconitum nagarum</i> var. <i>lasiandrum</i>
XUAN YA MEI GUI	悬崖玫瑰*	Cliffrose	T1766 <i>Cowania mexicana</i>
XUAN YE XIANG QING	旋叶香青	Coiledleaf Pearleverlasting	T0445 <i>Anaphalis contorta</i>
XUE BAI XIANG RI KUI	雪白向日葵*	Snowwhite Sunflower*	T3151 <i>Helianthus niveus</i>
XUE CHA	雪茶	Vermiculate Thamnoia Thallus	T6416 <i>Thamnoia vermicularis</i>
XUE GUANG HUA	雪光花	Glory-of-the-snow	T1368 <i>Chionodoxa luciliae</i>
XUE HONG SHUAN JUN	血红栓菌		T5339 <i>Pycnoporus sanguineus</i>
XUE HUA LIAN	雪花莲	Snowdrop	T2822 <i>Galanthus nivalis</i>
XUE LIAN	雪莲	Snow Lotus	T5755 <i>Saussurea involucreta</i>
XUE LING HAO	雪岭蒿	Schrenk Wormwood*	T0694 <i>Artemisia schrenkiana</i>
XUE LING ZHI	雪灵芝	Kansu Sandwort	T0608 <i>Arenaria kansuensis</i> [Syn. <i>Arenaria kumaonensis</i> ]
			T2922 <i>Gentiana nivalis</i>
XUE LONG DAN	雪龙胆	Snaw Gentian	T3782 <i>Leucogium vernum</i>
XUE PIAN LIAN	雪片莲	Spring Snowflake	T6122 <i>Stephania dielsiana</i>
XUE SAN SHU	血散薯	Diels Stephania	T4575 <i>Pachysandra terminalis</i>
XUE SHAN LIN	雪山林	Japanese Pachysandra	T0079 <i>Aconitum brachypodium</i>
XUE SHANG YI ZHI HAO	雪上一支蒿	Shortstalk Monkshood	T4376 <i>Narcissus nivalis</i>
XUE SHENG SHUI XIAN	雪生水仙		T1282 <i>Cedrus deodara</i>
XUE SONG	雪松	Deodar Cedar	T4013 <i>Macaranga tanarius</i>
XUE TONG	血桐	Common Macaranga	T0528 <i>Anthriscus cerefolium</i>
XUE WEI CAI	雪维菜	Garden Chervil	T3278 <i>Homo sapiens</i>
XUE YU	血余	Human Hair	T0942 <i>Biebersteinia heterostemon</i>
XUN DAO NIU	熏倒牛	Heterostemonous Biebersteinia	T0183 <i>Adlumia cirrhosa</i> [Syn. <i>Adlumia fungosa</i> ]
XUN ZHUANG SHAN YUAN CAO	蕈状山缘草	Climbing Fumitory	

YA DAN ZI	鸦胆子	Java Brucea	T1038 <i>Brucea javanica</i> [Syn. <i>Brucea sumatrana</i> ; <i>Rhus javanica</i> ]
YA DONG WU TOU	亚东乌头	Yadong Monkshood	T0077 <i>Aconitum balfourii</i>
YA ER QIN	鸭儿芹	Japanese Cryptotaenia	T1869 <i>Cryptotaenia japonica</i>
YA HU NU	亚乎奴	Hirsute Cissampelos*	T1453 <i>Cissampelos pareira</i> var. <i>hirsute</i>
YA JIAO AI	鸭脚艾	Ghostplant Wormwood	T0680 <i>Artemisia lactiflora</i>
YA KE BEI QIAN LI GUANG	牙克贝千里光	Alpine Groundsel*	T5878 <i>Senecio alpinus</i>
YA LI QIAN JIN TENG	雅丽千金藤	Elegant Stephania	T6125 <i>Stephania elegans</i>
YA LI SANG NA DUI XIN JU	亚利桑那堆心菊*	Arizona Sneezeweed*	T3132 <i>Helenium arizonicum</i>
YA LIE XING HAO	亚列兴蒿	Sublessing Wormwood*	T0699 <i>Artemisia sublessingiana</i>
YA LUO CHUN	亚罗椿	Bacciform Cipadessa	T1446 <i>Cipadessa baccifera</i>
YA MA	亚麻	Common Flax	T3859 <i>Linum usitatissimum</i>
YA MA XUN BAI HE	亚马逊百合*	Amazon lily	T2524 <i>Eucharis amazonica</i>
YA MA XUN MA QIAN ZI	亚马逊马钱子	Amazonian Poisonnut*	T6165 <i>Strychnos amazonica</i>
YA MA XUN YU TENG	亚马逊鱼藤*	Amazonian Jewelvine*	T2117 <i>Derris amazonica</i>
YA MA ZI	亚麻子	Common Flax Seed	T3860 <i>Linum usitatissimum</i>
YA MAI JIA DU YU DOU	牙买加毒鱼豆	<i>Piscidia erythrina</i>	T4977 <i>Piscidia erythrina</i>
YA MAI JIA KU MU	牙买加苦木	Jamaica Quassia-wood	T4880 <i>Picrasma excelsa</i>
YA MAI JIA YING TAO	牙买加樱桃	Jamaica Cherry*	T4314 <i>Muntingia calabura</i>
YA MEI DUI XIN JU	雅美堆心菊*	Elegant Sneezeweed*	T3137 <i>Helenium elegans</i>
YA PIAN	鸦片	Opium	T4635 <i>Papaver somniferum</i>
YA RONG GAI RU GU	亚绒盖乳菇	Subtomentose Milky*	T3655 <i>Lactarius subvellereus</i>
YA ZHI CAO	鸭跖草	Common Dayflower	T1633 <i>Commelina communis</i>
YA ZHI TUO WU	雅致橐吾*	Elegant Goldenray*	T3804 <i>Ligularia elegans</i>
YA ZHOU DU HUO	亚洲独活*	Asian Cowparsnip*	T3215 <i>Heracleum lanatum</i> var. <i>asiaticum</i>
YA ZHOU SHI	亚洲薺	Asiatic Yarrow	T0061 <i>Achillea asiatica</i>
YA ZHOU WEN SHU LAN	亚洲文殊兰*	Grand Crinum	T1794 <i>Crinum asiaticum</i>
YAN BAI CAI	岩白菜	Purple Bergenia	T0924 <i>Bergenia purpurascens</i>
YAN CAO	烟草	Common Tobacco	T4428 <i>Nicotiana tabacum</i>
YAN CAO HUA SHAN GENG CAI	烟草花山梗菜*	Nicotianflower Lobelia*	T3901 <i>Lobelia nicotianaefolia</i>
YAN DI FENG MAO JU	盐地风毛菊	Saline Saussurea	T5768 <i>Saussurea salsa</i>
YAN DI HE	盐地禾	Big Cord-grass	T6063 <i>Spartina cynosuroides</i>
YAN FENG	岩凤	Buchtorm Libanotis	T3796 <i>Libanotis buchtormensis</i>
YAN FU YE	盐麸叶	Chinese Sumac Leaf	T5530 <i>Rhus chinensis</i> [Syn. <i>Rhus semialata</i> ]
YAN FU ZI	盐麸子	Chinese Sumac Fruit	T5531 <i>Rhus chinensis</i> [Syn. <i>Rhus semialata</i> ]
YAN GUO CAO	烟锅草	East-Asia Low Meadowrue	T6414 <i>Thalictrum thunbergii</i>
YAN HAI TUN CAO	沿海豚草	Oak-of-Cappadocia	T0403 <i>Ambrosia maritima</i>
YAN HU SUO	延胡索(元胡)	Yanhusuo	T1750 <i>Corydalis yanhusuo</i> [Syn. <i>Corydalis turtshaninovii</i> f. <i>yanhusuo</i> ]
YAN HUANG LIAN	岩黄连	Rockliving Corydalis	T1747 <i>Corydalis thalictrifolia</i>
YAN JIAO CAO	岩椒草	White Chinaure	T0964 <i>Boenninghausenia albiflora</i>
YAN JIAO CAO SUO SUO	盐角草梭梭*		T3094 <i>Haloxylon salicornicum</i>
YAN JIN	烟堇	Schleicher Fumitory	T2809 <i>Fumaria schleicheri</i>
YAN JIN CAI	岩筋菜	Tibet Berneuxine	T0926 <i>Berneuxia thibetica</i>
YAN LAI HONG	雁来红	Three-coloured Amaranth	T0389 <i>Amaranthus tricolor</i>
YAN LAN CAO	岩兰草	Vetiver	T6733 <i>Vetiveria zizanioides</i>
YAN LING CAO	延龄草	Tschonosk Trillium	T6535 <i>Trillium tschonoskii</i>
YAN MAI	燕麦	Oat	T0833 <i>Avena sativa</i>
YAN MU	胭木	Tomentose Wrightia	T6834 <i>Wrightia tomentosa</i>
YAN QU MEI	烟曲霉		T0755 <i>Aspergillus fumigatus</i>
YAN SE LONG YAN	烟色龙眼	Smoke Longan*	T2184 <i>Dimocarpus fumatus</i>
YAN SHENG JIA MU ZEI	盐生假木贼	Saltliving Anabasis	T0437 <i>Anabasis salsa</i>
YAN SHENG ROU CONG RONG	盐生肉苁蓉	Saline Cistanche	T1456 <i>Cistanche salsa</i>

YAN TIAN JIE CAI	盐天芥菜	Curassow Heliotrope*	T3169 <i>Heliotropium curassavicum</i>
YAN XIANG JU	岩香菊	Lavanduleaf Chrysanthemum	T1394 <i>Chrysanthemum lavandulifolium</i>
YAN YANG CHUN	烟洋椿	Cigarbox Cedrela	T1277 <i>Cedrela odorata</i>
YAN ZHOU JUAN BAI	兖州卷柏	Involute Spikemoss	T5862 <i>Selaginella involvens</i>
YANG CHANG CHUN TENG	洋常春藤	English Ivy	T3112 <i>Hedera helix</i>
YANG CONG	洋葱	Common Onion	T0311 <i>Allium cepa</i>
YANG DAO DOU	洋刀豆	Sword-bean	T1168 <i>Canavalia ensiformis</i>
YANG HONG SHAN	羊红膶	Thellung Pimpinella	T4902 <i>Pimpinella thelungiana</i>
YANG JIAN QIU LUO	洋剪秋罗	German Catchfly	T3951 <i>Lychnis viscaria</i>
YANG JIAO AO ZI	羊角拗子	Divaricate Strophanthus Seed	T6155 <i>Strophanthus divaricatus</i>
YANG JIAO MIAN	羊角棉	Maire Alstonia	T0371 <i>Alstonia mairei</i>
YANG JIAO TENG	羊角藤	Common Indianmulberry	T4286 <i>Morinda umbellata</i>
YANG JIN HUA	洋金花	Hindu Datura Flower	T2044 <i>Datura metel</i>
YANG LI	洋李	Garden Plum	T5222 <i>Prunus domestica</i>
YANG MEI	杨梅	Chinese Waxmyrtle	T4348 <i>Myrica rubra</i>
YANG MEI CHANG SHAN	杨梅常山	Bayberry Glorybower*	T1560 <i>Clerodendron myricoides</i>
YANG MEI SHU PI	杨梅树皮	Chinese Waxmyrtle Bark	T4349 <i>Myrica rubra</i>
YANG OU XIA ZHI CAO	洋欧夏至草	Peregrine Hoarhound	T4111 <i>Marrubium peregrinum</i>
YANG PI	羊皮	Goat Hide	T1181 <i>Capra hircus; Ovis aries</i>
YANG PU TAO YE	洋蒲桃叶	Samalanga Syzygium	T6268 <i>Syzygium samarangense</i>
YANG QIAN CAO	洋茜草	Madder	T5584 <i>Rubia tinctorum</i>
YANG QING LAN	岩青兰	Rupestrine Dragonhead	T2258 <i>Dracocephalum rupestre</i>
YANG RU	羊乳	Goat Milk	T1182 <i>Capra hircus; Ovis aries</i>
YANG SHI CAO	洋蓍草	Common Yarrow	T0065 <i>Achillea millefolium</i>
YANG SHI GUO	羊屎果	Duhat	T6266 <i>Syzygium cumini</i>
YANG TAO	洋桃	Carambola; Country Gooseberry	T0834 <i>Averrhoa carambola</i>
YANG TI	羊蹄	Japanese Dock	T5611 <i>Rumex japonicus</i>
YANG TONG	杨桐	Japanese Clevera	T1571 <i>Cleyera ochracea</i> [Syn. <i>Cleyera japonica</i> ]
YANG WO BAN DENG GUO	仰卧板凳果*	Prostrate Pachysandra*	T4574 <i>Pachysandra procumbens</i>
YANG XIN TIAN JIE CAI	仰心天芥菜*	Supine Heliotrope*	T3182 <i>Heliotropium supinum</i>
YANG YE AN	杨叶桉	Bimble Box	T2516 <i>Eucalyptus populnea</i>
YANG YE XIAO JIN	杨叶肖槿	Portiatree	T6432 <i>Thespesia populnea</i> [Syn. <i>Hibiscus populneus</i> ]
YANG YE YIN BEI TENG	杨叶银背藤	Poplar-leaf Argyreia*	T0615 <i>Argyrea populifolia</i>
YANG YI	羊胰	Goat Pancreas	T1183 <i>Capra hircus; Ovis aries</i>
YANG ZI XIAO LIAN QIAO	扬子小连翘	Faber's St. John'swort	T3350 <i>Hypericum faberi</i>
YAO HUA XIANG CHA CAI	茺花香茶菜	Stringbushlike Rabdosia	T3535 <i>Isodon wikstroemioides</i>
YAO SHU KUI	药蜀葵	Marshmallow	T0381 <i>Althaea officinalis</i>
YAO SHU LI	药鼠李	Common Buckthorn	T5454 <i>Rhamnus cathartica</i>
YAO SHUI BA JIAO	药水八角	Gratiola	T3061 <i>Gratiola officinalis</i>
YAO SHUI SU	药水苏	Medicinal Betonica	T0929 <i>Betonica officinalis</i>
YAO SHUI SU JUE CHUANG	药水苏爵床*		T3605 <i>Justicia betonica</i>
YAO XI GUA	药西瓜	Wild Gourd	T1460 <i>Citrullus colocynthis</i>
YAO YONG AN XI XIANG	药用安息香	Drug Snowbell	T6202 <i>Styrax officinalis</i>
YAO YONG BAI QIAN	药用白前	White Swallow-wort	T6763 <i>Vincetoxicum officinale</i> [Syn. <i>Cynanchum vincetoxicum</i> ]
YAO YONG DAN SHEN	药用丹参*	Medicinal Sage	T5682 <i>Salvia officinalis</i>
YAO YONG DAN SHEN YE	药用丹参叶*	Medicinal Sage Leaf	T5683 <i>Salvia officinalis</i>
YAO YONG DANG GUI	药用当归*	Medicinal Angelica*	T0489 <i>Angelica officinalis</i>
YAO YONG DAO TI HU	药用倒提壶	Common Houndstongue	T1969 <i>Cynoglossum officinale</i>
YAO YONG GAN ZHE	药用甘蔗*	Sugarcane	T5641 <i>Saccharum officinarum</i>
YAO YONG GOU YA HUA	药用狗牙花	Official Ervatamia*	T2445 <i>Ervatamia officinalis</i>
YAO YONG HEI MIAN SHEN YE	药用黑面神叶*	Medicinal Breynia Leaf*	T1026 <i>Breynia officinalis</i>

YAO YONG MU DAN	药用牡丹	Kingsbloom	T4587 <i>Paeonia officinalis</i>
YAO YONG NIU SHE CAO	药用牛舌草	Alkanet	T0447 <i>Anchusa officinalis</i>
YAO YONG PU GONG YING	药用蒲公英	Officinal Dandelion	T6303 <i>Taraxacum officinale</i>
YAO YONG QIAN HU	药用前胡	Hog's Fennel	T4764 <i>Peucedanum officinale</i>
YAO YONG QIU GUO ZI JIN	药用球果紫堇	Medicinal Fumaria	T2807 <i>Fumaria officinalis</i>
YAO YONG SHE CHUANG	药用蛇床	Medicinal Ligusticum	T1583 <i>Cnidium officinale</i> [Syn. <i>Ligusticum officinale</i> ]
YAO YONG XUN YI CAO	药用薰衣草	Medicinal Lavender*	T3728 <i>Lavandula officinalis</i>
YAO YONG ZI TAN	药用紫檀*	Medicinal Padauk*	T5303 <i>Pterocarpus officinalis</i>
YE AI HAO	野艾蒿	Lavenderleaf Wormwood	T0681 <i>Artemisia lavandulaefolia</i>
YE BAI HE	野百合	Purpleflower Crotalaria	T1831 <i>Crotalaria sessiliflora</i>
YE CAO MEI	野草莓	European Strawberry	T2764 <i>Fragaria vesca</i>
YE DIAN QIE	野颠茄	Soda-apple Nightshade	T6014 <i>Solanum surattense</i>
YE DU ZHONG	野杜仲	Largeflower Euonymus	T2541 <i>Euonymus grandiflorus</i>
YE GAN CAO	野甘草	Sweet Broomwort	T5818 <i>Scoparia dulcis</i>
YE GU	野菰	Indian Aeginetia	T0195 <i>Aeginetia indica</i>
YE GUAN MEN	夜关门	Cuneate Lespedeza	T3770 <i>Lespedeza cuneata</i>
YE GUO QIE	叶果茄*	Leafy-fruited Nightshade	T6011 <i>Solanum sarrachoides</i>
YE HAI JIAO	野海椒	Twoflower Jerusalemcherry	T5993 <i>Solanum capsicastrum</i>
YE HE HUA	夜合花	Chinese Magnolia Flower	T4036 <i>Magnolia coco</i>
YE HEI YING	野黑樱	Wild Rum-cherry	T5240 <i>Prunus serotina</i>
YE HEI ZHONG CAO	野黑种草	Devil-in-a-bush	T4430 <i>Nigella arvensis</i>
YE HUA	夜花	Nightjasmine	T4453 <i>Nyctanthes arbor-tristis</i>
YE HUA HUI MAO DOU	夜花灰毛豆	Long Inflorescence Tephrosia	T6337 <i>Tephrosia noctiflora</i>
YE HUA JIAO GEN	野花椒根	Flatspine Pricklyash Root	T6893 <i>Zanthoxylum simulans</i>
YE HUA JIAO PI	野花椒皮	Flatspine Pricklyash Bark	T6894 <i>Zanthoxylum simulans</i>
YE HUA JIAO YE	野花椒叶	Flatspine Pricklyash Leaf	T6895 <i>Zanthoxylum simulans</i>
YE HUANG PI	野黄皮	Henry Wampee	T1533 <i>Clausena dentata</i>
YE JIANG	野姜	Cassumuna Ginger*	T6908 <i>Zingiber cassumunar</i>
YE JIAO TENG	夜交藤	Tuber Fleecflower Stem	T5108 <i>Polygonum multiflorum</i>
YE JIE	野芥*	Wild Cabbage	T1013 <i>Brassica oleracea</i>
YE JU	野菊	Indian Wild Chrysanthemum	T1392 <i>Chrysanthemum indicum</i>
YE JU HUA	野菊花	Indian Wild Chrysanthemum Flower	T1393 <i>Chrysanthemum indicum</i>
YE JUE MING	野决明	Wild Thermopsis	T6429 <i>Thermopsis lupinoides</i>
YE LI ZHI YE	野梨枝叶	Callery Pear Branch-leaf	T5363 <i>Pyrus calleryana</i>
YE MAI YIN BEI TENG	叶脉银背藤*	Veined Argyreia	T0614 <i>Argyreia nervosa</i>
YE MING SHA	夜明砂	Bat Dung	T6732 <i>Vespertilio superans</i>
YE MU GUA	野木瓜	Chinese Stauntonvine	T6099 <i>Stauntonia chinensis</i>
YE MU XU	野苜蓿	Sickle Alfalfa	T4147 <i>Medicago falcata</i>
YE OU BAI JIE	野欧白芥	Charlock	T5959 <i>Sinapis arvensis</i>
YE QI SHU YE	野漆树叶	Woods Lcaquertree Leaf	T5537 <i>Rhus sylvestris</i>
YE QI SHU ZI	野漆树子	Woods Lcaquertree	T5538 <i>Rhus sylvestris</i>
YE SHAN HUA	野扇花	Willowleaf Sarcococca	T5732 <i>Sarcococca saligna</i>
YE SHAN ZHA	野山楂	Nippon Hawthorn	T1769 <i>Crataegus cuneata</i>
YE SHENG MA	野升麻	Kamchatka Bugbane	T1425 <i>Cimicifuga simplex</i>
YE SHENG QIAN LI GUANG	野生千里光*	Heath Groundsel	T5913 <i>Senecio sylvaticus</i>
YE SHENG SHAN YING TAO	野生山櫻桃*		T5241 <i>Prunus serrulata</i> var. <i>spontanea</i>
YE SUI XIANG CHA CAI	叶穗香茶菜	Leafspike Rabdosia	T3519 <i>Isodon phyllostachys</i>
YE TAI	叶苔		T6550 <i>Trocholejeunea sandvicensis</i>
YE WO JU	野葛苳	Prickly Lettuce	T3663 <i>Lactuca serriola</i>
YE WU TONG	野梧桐	Japanese Mallotus	T4082 <i>Mallotus japonicus</i>
YE XIA ZHU	叶下珠	Common Leafflower	T4843 <i>Phyllanthus urinaria</i>
YE XIANG GE MU	叶香格木	Fragrant Erythrophleum	T2487 <i>Erythrophleum suaveolens</i>

YE XIANG MAO	野香茅	Goering Lemongrass	T1943 <i>Cymbopogon goeringii</i>
YE XIANG SHU	夜香树	Nightblooming Cestrum	T1338 <i>Cestrum nocturnum</i>
YE YA CHUN	野鸦椿	Common Euscaphis	T2636 <i>Euscaphis japonica</i>
YE YAN YE	野烟叶	Mullein Nightbrier Leaf	T6018 <i>Solanum verbascifolium</i>
YE YING SU	野罌粟	Iceland Poppy	T4629 <i>Papaver nudicaule</i>
YE YU	野芋	Taro	T1624 <i>Colocasia antiquorum</i>
YE ZHI MA	野芝麻	Barbate Deadnettle	T3681 <i>Lamium barbatum</i>
YE ZHU DAN	野猪胆	Wild Boar Gall	T6205 <i>Sus scrofa</i>
YE ZI	椰子	Coconut	T1591 <i>Cocos nucifera</i>
YE ZI PI	椰子皮	Coconut Root-bark	T1592 <i>Cocos nucifera</i>
YE ZI RANG	椰子瓤	Coconut Albumen	T1593 <i>Cocos nucifera</i>
YE ZI YOU	椰子油	Coconut Oil	T1594 <i>Cocos nucifera</i>
YI BAO MA HUA TOU	缢苞麻花头	Contracted Sawwort	T5922 <i>Serratula strangulata</i>
YI BEI MU	伊贝母	Siberian Fritillary	T2790 <i>Fritillaria pallidiflora</i>
YI BI LI YA LI	伊比利亚栎	Iberian Oak*	T5373 <i>Quercus iberica</i>
YI BI LI YA SHUI XIAN	伊比利亚水仙	Iberian Narcissus*	T4374 <i>Narcissus bujei</i>
YI BIAN HE SHE ZAO	易变褐舌藻*		T6067 <i>Spatoglossum variabile</i>
YI BIAN HUANG TAN	易变黄檀	Variable Rosewood*	T2018 <i>Dalbergia variabilis</i>
YI CAO	藨草	Reed Canary-grass	T4777 <i>Phalaris arundinacea</i>
YI CHI LING JU	翼翅苓菊*	Winged Jurinea*	T3604 <i>Jurinea alata</i>
YI DA LI JIASNG NAN XING	意大利疆南星	Italian Arum	T0719 <i>Arum italicum</i>
YI DA LI JUE MING ZI	意大利决明子	Italian Senna*	T1234 <i>Cassia italika</i>
YI DA LI LA JU	意大利蜡菊*	Italian Everlasting*	T3158 <i>Helichrysum italicum</i>
YI DIAN HONG	一点红	Sowthistle Tasselflower	T2357 <i>Emilia sonchifolia</i>
YI GENG WU WEI ZI	翼梗五味子	Henry Magnoliavine	T5793 <i>Schisandra henryi</i>
YI HE GUO	翼核果	Smoothfruit Ventilago	T6689 <i>Ventilago leiocarpa</i>
YI HUA	仪花	Redbracted Lysidice	T3995 <i>Lysidice rhodostegia</i>
YI HUA MU LAN	异花木兰	Different-flowered Indigo	T3422 <i>Indigofera heteranthazha</i>
YI HUA WU ZHU YU	异花吴茱萸		T2639 <i>Evodia baberi</i>
YI KA TUO YE HUANG TAN	伊卡托叶黄檀	Ecasto-leaf Rosewood*	T2002 <i>Dalbergia ecastophyllum</i>
YI KANG BA DOU	益康巴豆*	Salutary Croton*	T1854 <i>Croton salutaris</i>
YI KOU KE MEI	一口可梅	Coco-plum	T1401 <i>Chrysobalanus icaco</i>
YI KUA	伊夸	Manyflower Wormwood	T0687 <i>Artemisia myriantha</i>
YI LAN	依兰	Fragrant Gananga	T1164 <i>Cananga odorata</i>
YI LANG A WEI	伊朗阿魏	Iran Giantfennel*	T2703 <i>Ferula kuhistanica</i>
YI LANG QING LAN	伊朗青兰*	Iran Dragonhead*	T2256 <i>Dracocephalum kotschyi</i>
YI LI CUI QUE HUA	伊犁翠雀花	Ili Larkspur	T2078 <i>Delphinium iliense</i>
YI LI LI YA DA CHI JI	伊利里亚大翅蓟*	Illyrian Cottonthistle*	T4497 <i>Onopordum illyricum</i>
YI LI NUO HE HUAN CAO	伊利诺合欢草	Prairie Mimosa	T2127 <i>Desmanthus illinoensis</i>
YI LYE GAN LAO JUN	易裂干酪菌*	Easy-lobed Tyromyces*	T6589 <i>Tyromyces fissilis</i>
YI MEI NI A BU TA CAO	依美尼阿布塔草		T0013 <i>Abuta imene</i>
YI MI	薏米	Adlay	T1613 <i>Coix lacryma-jobi</i>
YI MU CAO	益母草	Wormwood-like Motherwort	T3752 <i>Leonurus heterophyllus</i> [Syn. <i>Leonurus artemisia</i> ]
YI NIAN PENG	一年蓬	Annual Fleabane	T2421 <i>Erigeron annuus</i>
YI NIAN SHENG SHAN DIAN	一年生山靛	Annual Mercury	T4196 <i>Mercurialis annua</i>
YI PAO NANG CAO	翼泡囊草	Winged Physochlaina*	T4857 <i>Physochlaina alaica</i>
YI PIN HONG	一品红	Common Poinsettia	T2614 <i>Euphorbia pulcherrima</i>
YI SI CUI QUE	疑似翠雀*	Confusable Larkspur*	T2067 <i>Delphinium confusum</i>
YI SI MEI GUI SHU	疑似玫瑰树	Confusable Ochrosia	T4468 <i>Ochrosia confusa</i>
YI WA JU	依瓦菊	Sumpweed	T3543 <i>Iva frutescens</i>
YI WO SI JING TIAN	伊沃斯景天	Ewers Stonecrop*	T5854 <i>Sedum ewersii</i>
YI XIAN HAI CONG	一现海葱*		T6648 <i>Urginea fugax</i>

YI XIAN YING SU	一现罌粟*	Fugacious Poppy*	T4628 <i>Papaver fugax</i>
YI XING NAN WU WEI ZI	异型南五味子	Curious Kadsura	T3614 <i>Kadsura heteroclita</i> [Syn. <i>Uvaria heteroclita</i> ]
YI XING TANG SONG CAO	异性唐松草	Early Meadowrue	T6379 <i>Thalictrum dioicum</i>
YI YANG HE BAO MU DAN	异样荷包牡丹*	Peregrin Bleedingheart*	T2152 <i>Dicentra peregrina</i>
YI YE BAI JIANG	异叶败酱(墓头回)	Diversifolious Patrinia	T4670 <i>Patrinia heterophylla</i>
YI YE JIA FAN LV	异叶假繁缕(太子参)	Heterophylla Falsestarwort	T5260 <i>Pseudostellaria heterophylla</i>
YI YE LIANG WANG CHA	异叶梁王茶	David Falsepanax	T4444 <i>Nothopanax davidii</i>
YI YE MEI DENG MU	异叶美登木	Heteroleaf Mayten*	T4133 <i>Maytenus heterophylla</i>
YI YE QIU	一叶萩	Suffrutescent Securinega	T5848 <i>Securinega suffruticosa</i>
YI YE ROU TUO GUO	异叶肉托果	Heteroleaf Markingnut*	T5873 <i>Semecarpus heterophylla</i>
YI YE TIAN NAN XING	异叶天南星	Diversileaf Jackinthepulpit	T0620 <i>Arisaema heterophyllum</i>
YI YE TIE SHAN	异叶铁杉	Western Hemlock	T6558 <i>Tsuga heterophylla</i>
YI YE WU TOU	异叶乌头	Heteroleaf Monkshood*	T0103 <i>Aconitum heterophyllum</i>
YI YE YANG	异叶杨	Swamp Cottonwood	T5152 <i>Populus heterophylla</i>
YI YE REN	薏苡仁	Jobstears Seed	T1614 <i>Coix lacryma-jobi</i> var. <i>ma-yuen</i>
YI ZHI HAO	一支蒿	Alpine Yarrow	T0060 <i>Achillea alpina</i> [Syn. <i>Achillea sibirica</i> ]
YI ZHI HUANG HUA	一枝黄花	Common Goldenrod	T6024 <i>Solidago virgaurea</i> var. <i>leiocarpa</i> [Syn. <i>Solidago decurrens</i> ]
YI ZHI REN	益智仁	Sharpleaf Galangal	T0360 <i>Alpinia oxyphylla</i>
YI ZHI XIANG	一支香	Bastard Speedwell	T6729 <i>Veronica spuria</i>
YI ZHU AI MA HUANG	异株矮麻黄	Dioecious Small Ephedra	T2374 <i>Ephedra minuta</i> var. <i>dioeca</i>
YI ZHU QIAN MA	异株荨麻	Dioecious Nettle	T6652 <i>Urtica dioica</i>
YI ZU SUO SHA CAN	异足索沙蚕	Heterofoot Lumbrinereis*	T3937 <i>Lumbriconeis heteropoda</i>
YIN BAI HUANG YANG	银白黄杨*	Argentine Box*	T1085 <i>Buxus argentea</i>
YIN BAI JIN HE HUAN	银白金合欢*	Silver Wattle	T0020 <i>Acacia dealbata</i>
YIN BAI QI	银白槭	Silver Maple	T0055 <i>Acer saccharinum</i>
YIN BAI QIAN LI GUANG	银白千里光*	Silver Ragwort	T5885 <i>Senecio cineraria</i>
YIN BAI YANG	银白杨	White Aspen	T5145 <i>Populus alba</i>
YIN BIAN LONG SHE LAN	银边龙舌兰	Silveredge Agave	T0218 <i>Agave angustifolia</i> var. <i>marginata</i>
YIN BU HUAN	银不换	Barbate Cyclea	T1931 <i>Cyclea barbata</i>
YIN CHAI HU	银柴胡	Lanceolate Starwort	T6104 <i>Stellaria dichotoma</i> var. <i>lanceolata</i>
YIN CHEN HAO	茵陈蒿	Capillary Wormwood	T0672 <i>Artemisia capillaris</i>
YIN DI KUAN YE XIANG CHA CAI	阴地宽叶香茶菜	Shady Broadleaf Rabdosia*	T3532 <i>Isodon umbrosa</i>
YIN DI XIANG CHA CAI	阴地香茶菜	Shady Rabdosia*	T3533 <i>Isodon umbrosa</i> var. <i>latifolia</i>
YIN DU BA QIA	印度菝葜	Ananmul	T3200 <i>Hemidesmus indicus</i>
YIN DU BAI MAO	印度白茅	Cogon Satintail	T3415 <i>Imperata cylindrica</i>
YIN DU DA MA	印度大麻*	Indian Hemp*	T1177 <i>Cannabis sativa</i> var. <i>indica</i>
YIN DU DUO ZHI DA JI	印度多汁大戟	Indian Juicy Euphorbia*	T2603 <i>Euphorbia nivulia</i>
YIN DU E LI	印度鳄梨*	Indian Avocado*	T4733 <i>Persea indica</i>
YIN DU FANG JI	印度防己		T0443 <i>Anamirta paniculata</i>
YIN DU HUANG TAN	印度黄檀	Sisso Rosewood	T2013 <i>Dalbergia sissoo</i>
YIN DU JIA JING JIE	印度假荆芥	Indian Catnip*	T4415 <i>Nepeta hindostana</i>
YIN DU JIU LI XIANG	印度九里香	Indian Common Jasminorange	T4319 <i>Murraya koenigii</i>
YIN DU KUAI JUN	印度块菌	Indian Truffle	T6559 <i>Tuber indicum</i>
YIN DU LIAN	印度楝	Neem Tree	T0836 <i>Azadiractia indica</i>
YIN DU LUO FU MU	印度萝芙木	Java Devilpepper	T5442 <i>Rauwolfia serpentina</i>
YIN DU MA DOU LING	印度马兜铃*	Indian Dutchmanspipe*	T0630 <i>Aristolochia indica</i>
YIN DU MAI MA TENG	印度买麻藤	India Jointfir	T3035 <i>Gnetum ula</i>
YIN DU MIAN	印度棉*	Bluntleaf Cotton	T3059 <i>Gossypium indicum</i>
YIN DU MU FANG JI	印度木防己*	Indian Snailseed*	T1585 <i>Cocculus indicus</i>
YIN DU SHAN DAO LIAN YE	印度山道楝叶	Indian Katon	T5708 <i>Sandoricum koetjape</i> [Syn. <i>Sandoricum indicum</i> ]



YIN DU SHE GU	印度蛇菇	Indian Balanophora	T0858 <i>Balanophora indica</i> [Syn. <i>Langodorffia indica</i> ]
YIN DU SI LI LAN KA YE XIA ZHU	印度斯里兰卡叶下珠*	Indian-Sri-Lankan Leafflower*	T4839 <i>Phyllanthus myritifolius</i>
YIN DU TENG HUANG	印度藤黄*	Indian Garcinia*	T2859 <i>Garcinia indica</i>
YIN DU WA ER TENG	印度娃儿藤	Indian Tylophora*	T6577 <i>Tylophora asthmatica</i> [Syn. <i>Tylophora indica</i> ]
YIN DU XIE HAO	印度邪蒿	Indian Seseli*	T5932 <i>Seseli indicum</i>
YIN DU YA JIAO SHU	印度鸭脚树	Venous Alstonia*	T0377 <i>Alstonia venenata</i>
YIN DU ZANG HUI XIANG	印度藏茴香	India Caraway*	T1216 <i>Carum ajowan</i>
YIN DU ZHI NA BAI BU	印度支那百部*	Indochina Stemona*	T6108 <i>Stemona cochinchinensis</i>
YIN FEN BAO CHUN	银粉报春	Pulverulent Primrose	T5203 <i>Primula pulverulenta</i>
YIN HE HUAN	银合欢	Hedge Acacia	T3778 <i>Leucaena glauca</i> [Syn. <i>Leucaena leucocephala</i> ]
YIN HUA	银桦	Robust Silk Oak	T3063 <i>Grevillea robusta</i>
YIN HUA YAO XIAO YING QIN	隐花药小鹰芹*		T0840 <i>Azorella cryptantha</i>
YIN JIAN	印楝	Indica Melia*	T4161 <i>Melia indica</i>
YIN JIAO JU	银胶菊	Common Parthenium	T4660 <i>Parthenium hysterophorus</i>
YIN JU CHUAN BEI HAI MIAN	隐居穿贝海绵	Burrowing sponge	T1575 <i>Cliona celata</i>
YIN MAO XIAO YUN MU	硬毛小芸木*	Hairy Micromelum*	T4222 <i>Micromelum hirsutum</i>
YIN MIAN YU	印缅榆	Vellayim	T3271 <i>Holoptelea integrifolia</i>
YIN NI MIAN BAO GUO	印尼面包果	Cempedak	T0710 <i>Artocarpus champeden</i>
YIN SE MI ZI LAN	银色米仔兰	Argenti Aglaia*	T0231 <i>Aglaia argentea</i>
YIN XIAN CAO	银线草	Japanese Chloranthus	T1371 <i>Chloranthus japonicus</i>
YIN XING CAO	阴行草	Chinese Siphonostegia	T5966 <i>Siphonostegia chinensis</i>
YIN YANG HUO	淫羊藿	Shorthorned Epimedium	T2390 <i>Epimedium brevicornum</i>
YIN YANG HUO GEN	淫羊藿根	Shorthorned Epimedium Root	T2391 <i>Epimedium brevicornum</i>
YIN YE SHU	银叶薯*	Silverleaf Morningglory*	T3445 <i>Ipomoea argyrophylla</i>
YIN YU	茵芋	Reeves Skimmia	T5972 <i>Skimmia reevesiana</i>
YIN ZHOU CHAI HU	银洲柴胡	Yinchow Thorowax	T1079 <i>Bupleurum yinchowense</i>
YING BU BO	鹰不泊	Avicenna's Pricklyash	T6866 <i>Zanthoxylum avicennae</i>
YING CHUN HUA	迎春花	Winter Jasmine	T3555 <i>Jasminum nudiflorum</i>
YING GUO OU SHI NAN	英国欧石南	Cornish Heath	T2419 <i>Erica vagans</i>
YING GUO SHAN ZHA	英国山楂	Hawthorn	T1774 <i>Crataegus oxyacantha</i>
YING HE	硬核	Wallich Scleropyrum	T5815 <i>Scleropyrum wallichianum</i>
YING HE CI TONG	硬核刺桐	Hardhilum Coralbean*	T2468 <i>Erythrina lithosperma</i>
YING HUA XIANG CHA CAI	瘿花香茶菜	Rosthorn Rabdosia	T3520 <i>Isodon rosthornii</i>
YING MAO HU JIAO	硬毛胡椒	Hispid Pepper*	T4949 <i>Piper hispidum</i>
YING MAO JIN SI TAO	硬毛金丝桃	Hairy St. John's wort	T3355 <i>Hypericum hirsutum</i>
YING MAO TI GEN CAO	硬毛嚏根草	Hairy Hellebore*	T3185 <i>Helleborus orientalis</i> var. <i>hirsutus</i>
YING MAO TIAN JIE CAI	硬毛天芥菜*	Hairy Heliotrope*	T3173 <i>Heliotropium hirsutum</i>
YING PI HE YE LAN	硬皮禾叶兰	Callose Agrostophyllum	T0254 <i>Agrostophyllum callosum</i>
YING SHAN HONG	迎山红	Korean Rhododendron	T5519 <i>Rhododendron mucronulatum</i>
YING SHUI HUANG LIAN	硬水黄连	Slim-top Meadowrue	T6409 <i>Thalictrum simplex</i> [Syn. <i>Thalictrum simplex</i> var. <i>brevipes</i> ]
YING SU	罂粟	Opium Poppy	T4636 <i>Papaver somniferum</i>
YING SU KE	罂粟壳	Opium Poppy Pericarp	T4637 <i>Papaver somniferum</i>
YING TAO	樱桃	Falsesour Cherry	T5236 <i>Prunus pseudocerasus</i>
YING TAO FAN QIE	樱桃番茄	Cherry Tomato*	T3963 <i>Lycopersicon esculentum</i> var. <i>cerasiforme</i>
YING YE JIA MI	樱叶荚蒾	Blackhaw	T6739 <i>Viburnum prunifolium</i>
YING YE NV LOU CAI	硬叶女娄菜	Robust Silene*	T5953 <i>Silene firma</i>
YING ZHAO	鹰爪	Sixpetal Tailgrape	T0653 <i>Artabotrys hexapetalus</i> [Syn. <i>Annona hexapetalus</i> ]

YING ZHAO DOU	鹰爪豆	Weaversbroom	T6064 <i>Spartium junceum</i>
YING ZHAO DOU ZHU SHI DOU	鹰爪豆猪屎豆*	Sparteine Crotalaria*	T1833 <i>Crotalaria spartioides</i>
YING ZHI YE TAI	硬指叶苔		T3763 <i>Lepidozia vitrea</i>
YING ZI CAO	蝇子草	Catch-fly	T5954 <i>Silene fortunei</i>
YONG CHONG CAO	蛹虫草	Scarlet Caterpillar Fungus	T1680 <i>Cordyceps militaris</i>
YONG NING DU HUO	永宁独活	Yungning Cowparsnip	T3228 <i>Heracleum yungningense</i>
YOU AN DI JIN	幽暗地锦*	Stygian Euphorbia*	T2621 <i>Euphorbia stygiana</i>
YOU BING SHI WEI	有柄石韦	Petioled Pyrrosia Frond	T5358 <i>Pyrrosia petiolosa</i>
YOU CAI ZI	油菜籽	Rapeseed*	T1011 <i>Brassica napus</i> var. <i>napus</i>
YOU CHA GEN PI	油茶根皮	Oiltea Camellia Root-bark	T1147 <i>Camellia oleifera</i>
YOU CHOU YE ZHI MA	鼬臭野芝麻*	Stoat-osmyl Deadnettle*	T3682 <i>Lamium galeobdolon</i>
YOU CI PO BU MU	有刺破布木	Spined Cordia*	T1679 <i>Cordia spinescens</i>
YOU DIAN WEI MAO	疣点卫矛	Verrucatespot Euonymus	T2548 <i>Euonymus verrucosides</i>
YOU GAN GEN	油柑根	Emblic Leafflower Root	T4835 <i>Phyllanthus emblica</i>
YOU GAN LAN	油橄榄	Common Olive	T4487 <i>Olea europaea</i>
YOU GAN LAN JIU JIE	油橄榄九节	Olive Ninenode*	T5277 <i>Psychotria oleoides</i>
YOU GAN MU PI	油柑木皮	Emblic Leafflower Bark	T4836 <i>Phyllanthus emblica</i>
YOU GAN YE	油柑叶	Emblic Leafflower Leaf	T4837 <i>Phyllanthus emblica</i>
YOU GOU YING ZHAO	有钩鹰爪*	Uncinate Tailgrape*	T0657 <i>Artabotrys uncinatus</i>
YOU GUO DOU KOU	疣果豆蔻	Wartyfruit Amomum	T0418 <i>Amomum muricarpum</i>
YOU HE	柚核	Pummelo Seed	T1479 <i>Citrus grandis</i>
YOU KA MEI JU	尤卡美菊	Juanislama (in Salvador)	T1111 <i>Calea urticifolia</i>
YOU MU	柚木	Common Teak	T6325 <i>Tectona grandis</i>
YOU PU TAO YOU ZA JIAO	柚葡萄柚杂交种		T1480 <i>Citrus grandis</i> cv. x <i>Citrus paradisi</i>
ZHONG			
YOU RUI XIANG	油瑞香	Oily Daphne*	T2029 <i>Daphne oleoides</i>
YOU SE BAN JIU JU	有色斑鸠菊	Colorful Bitterleaf	T6715 <i>Vernonia colorata</i>
YOU SE ZI JIN NIU	有色紫金牛*	Colorate Ardisia*	T0592 <i>Ardisia colorata</i>
YOU XIAN YA JIAO SHU	有限鸭脚树	Limited Alstonia*	T0373 <i>Alstonia restricta</i>
YOU YAN AO TUO SI TE CAO	有檐奥托斯特草	Limbate Otostegia	T4559 <i>Otostegia limbata</i>
YOU YE HUANG QI	油叶黄芪*	Oily-leaf Milkvetch*	T0801 <i>Astragalus oleifolius</i>
YOU YONG PO LEI	有用坡垒*	Utilizable Hopea*	T3281 <i>Hopea utilis</i>
YOU ZONG	油棕	Oilpalm	T2328 <i>Elaeis guineensis</i>
YOU <sup>(2)</sup>	莩	Divaricate Bluebeard	T1221 <i>Caryopteris divaricata</i>
YOU <sup>(4)</sup>	柚	Pummelo	T1478 <i>Citrus grandis</i>
YU BAI FU	禹白附	Giant Typhonium	T6588 <i>Typhonium giganteum</i>
YU BAI SHI SONG	玉柏石松	Tree Clubmoss	T3976 <i>Lycopodium obscurum</i>
YU CHUANG MU	愈疮木	Lignum-vitae	T3067 <i>Guajacum officinale</i>
YU DA HUANG	芋大黄		T5478 <i>Rheum</i> sp.
YU DAI GEN	玉带根	Tithymalus-like Pedilanthus	T4686 <i>Pedilanthus tithymaloides</i>
YU ER	榆耳	Incarinate Gloeostereum	T2993 <i>Gloeostereum incarnatum</i>
YU ER QI	鱼儿七	Whiteflower Trillium	T6531 <i>Trillium camtschaticum</i>
YU FU YE XIA ZHU	渔夫叶下珠	Fisherman Leafflower*	T4841 <i>Phyllanthus piscatorum</i>
YU GUO XIAO YE NAN	玉桂小叶楠	Cinnamomi-leaf Phoebe*	T4816 <i>Phoebe cinnamomifolia</i>
YU JIN	郁金	Aromatic Turmeric	T1903 <i>Curcuma aromatica</i>
YU JIN XIANG	郁金香	Common Tulip	T6561 <i>Tulipa gesneriana</i>
YU JIN XIANG GEN	郁金香根	Common Tulip Root	T6562 <i>Tulipa gesneriana</i>
YU JIN XIANG ZA JIAO ZHONG	郁金香杂交种	Tulip Hybrid*	T6563 <i>Tulipa hybrida</i>
YU JU	渝橘	Common Hoptree	T5282 <i>Ptelea trifoliata</i>
YU KE GAN JU	玉克柑桔	Yuko Citrus*	T1522 <i>Citrus yuko</i>
YU LAN	玉兰	Yulan Magnolia	T4038 <i>Magnolia denudata</i> [Syn. <i>Magnolia heptapata</i> ]
YU LI REN	郁李仁	Dwarf Flowering Cherry Seed	T5224 <i>Prunus japonica</i> [Syn. <i>Cerasus japonica</i> ]

YU LIAO	鱼蓼	Dockleaved Knotweed	T5106 <i>Polygonum lapathifolium</i>
YU LIN CAI	鱼鳞菜	Broadleaf Blainvillea*	T0948 <i>Blainvillea acmella</i> [Syn. <i>Verbesina acmella</i> ; <i>Eclipta latifolia</i> ; <i>Blainvillea latifolia</i> ]
YU LIN YUN SHAN	鱼鳞云杉	Yeddo Spruce	T4872 <i>Picea jezoensis</i> var. <i>jezoensis</i>
YU LING HUA	玉铃花	Fragrant Snowbell	T6201 <i>Styrax obassia</i>
YU MI FU	玉米麸	Maize Bran	T6900 <i>Zea mays</i>
YU MI HEI MEI	玉米黑霉	Black-powder Fungus in Corn	T6656 <i>Ustilago maydis</i>
YU MI XU	玉米须	Maize Style	T6901 <i>Zea mays</i>
YU SHAN HU GEN	玉珊瑚根	Jerusalemcherry Root	T6009 <i>Solanum pseudo-capsicum</i>
YU SHU	雨树	Raintree	T5703 <i>Samanea saman</i>
YU SHU	榆树	Siberian Elm	T6597 <i>Ulmus pumila</i>
YU SHU SHU	玉蜀黍	Maize	T6902 <i>Zea mays</i>
YU TENG	鱼藤	Trifoliate Jewelvine	T2124 <i>Derris trifoliata</i>
YU XIANG CAO	鱼香草	Apple Mint	T4188 <i>Mentha rotundifolia</i>
YU XING CAO	鱼腥草	Heartleaf Houttuynia	T3284 <i>Houttuynia cordata</i>
YU YE DING XIANG	羽叶丁香	Pinnateleaf Lilac	T6261 <i>Syringa pinnatifolia</i>
YU YE GUI DENG QING	羽叶鬼灯笼	Featherleaf Rodgersflower	T5555 <i>Rodgersia pinnata</i>
YU YE JIN HUA	玉叶金花	Mussaenda*	T4334 <i>Mussaenda hirsutissim</i>
YU YE MAO MEI	榆叶茅莓	Elm-leaf Raspberry*	T5602 <i>Rubus ulmifolius</i>
YU YE SAN QI	羽叶三七	Bipinnatifid Ginseng	T4604 <i>Panax japonicus</i> var. <i>bipinnatifidus</i>
YU YE SHE PU TAO	羽叶蛇葡萄	Chaffanjon Ampelopsis	T0425 <i>Ampelopsis chaffanjonii</i>
YU YI GAN LAN	羽衣甘蓝	Savoy Cabbage	T1020 <i>Brassica oleracea</i> var. <i>sabauda</i>
YU ZAN YE CHE QIAN	玉簪叶车前*	Jadehairpin-leaf Plantain*	T5005 <i>Plantago hostifolia</i>
YU ZHI ZI	预知子	Fiveleaf Akebia Seed	T0275 <i>Akebia quinata</i>
YU ZHU	玉竹	Fragrant Solomonseal	T5093 <i>Polygonatum odoratum</i> [Syn. <i>Polygonatum officinale</i> ]
YU ZHUANG HE HUAN	羽状合欢	Cape Leeuwin Wattle	T0294 <i>Albizzia lophantha</i>
YU ZHUANG YUN XIANG	羽状芸香	Pinnate Rue*	T5630 <i>Ruta pinnata</i>
YUAN BAI	圆柏	Chinese Juniper	T5639 <i>Sabina chinensis</i>
YUAN BAN JIANG HUA	圆瓣姜花	Forrest Gingerlily	T3119 <i>Hedychium forrestii</i>
YUAN BAN XIANG CHA CAI	圆板香茶菜*	Nummulate Rabdosia*	T5014 <i>Plectranthus nummularius</i>
YUAN BAO CAO	元宝草	Sampson St. John'swort	T3363 <i>Hypericum sampsonii</i>
YUAN CAN E	原蚕蛾	Silkworm King	T0977 <i>Bombyx mori</i>
YUAN CAN SHA	原蚕沙	Silkworm Feculae	T0978 <i>Bombyx mori</i>
YUAN CAN ZI	原蚕子	Silkworm Egg	T0979 <i>Bombyx mori</i>
YUAN CHI KU MU	圆齿苦木	Crenate Quassia-wood*	T4879 <i>Picrasma crenata</i>
YUAN CONG HONG JING TIAN	园丛红景天	Jupar Rhodiola	T5496 <i>Rhodiola juparensis</i>
YUAN DANG GUI	圆当归	Angelica	T0477 <i>Angelica archangelica</i>
YUAN DONG JIU LI XIANG	远东九里香	Siamense Common Jasminorange	T4327 <i>Murraya siamensis</i>
YUAN E CI XU DUAN	圆萼刺续断	Chinese Morina	T4279 <i>Morina chinensis</i>
YUAN GUO GAN CAO	圆果甘草	Roundfruit Licorice	T3021 <i>Glycyrrhiza squamulosa</i>
YUAN GUO SUAN PAN ZI	圆果算盘子	Roundfruit Glochidion*	T2989 <i>Glochidion sphaerogynum</i>
YUAN HUA	芫花	Lilac Daphne	T2023 <i>Daphne genkwa</i>
YUAN HUA FAN LI ZHI	圆滑番荔枝	Glabrous Custardapple	T0506 <i>Annona glabra</i>
YUAN HUA GEN	芫花根	Lilac Daphne Root	T2024 <i>Daphne genkwa</i>
YUAN JING HUAN YANG SHEN	芫菁还阳参	Turnip-shaped Hawksbeard	T1789 <i>Crepis napifera</i>
YUAN JU JIN GU CAO	远距筋骨草*	Manybracteole Bugle	T0270 <i>Ajuga remota</i>
YUAN MAO JING JIE	缘毛荆芥	Ciliate Catnip	T4414 <i>Nepeta ciliaris</i>
YUAN MAO XIANG RI KUI	缘毛向日葵	Ciliate Sunflower*	T3148 <i>Helianthus ciliaris</i>
YUAN SHU YU	圆薯蕷	Guinea Yam	T2207 <i>Dioscorea rotundata</i> [Syn. <i>Dioscorea cayenensis</i> ]
YUAN WEI	鳶尾(川射干)	Roof Iris	T3471 <i>Iris tectorum</i>
YUAN XING YE GU KE	圆形叶古柯*	Roundleaf Coca Shrub*	T2489 <i>Erythroxylon rotundifolium</i>

YUAN YE BU YING CAO	圆叶捕蝇草	Round-leaf Flytrap*	T2187 <i>Dionaea rotundifolia</i>
YUAN YE CHAI HU	圆叶柴胡	Roundleaf Thorowax*	T1071 <i>Bupleurum rotundifolium</i>
YUAN YE E ZHANG CHAI	圆叶鹅掌柴*	Roundleaf Schefflera*	T5783 <i>Schefflera rotundifolia</i>
YUAN YE FENG LING CAO	圆叶风铃草	Harebell	T1157 <i>Campanula rotundifolia</i>
YUAN YE LU TI CAO	圆叶鹿蹄草	European Pyrola	T5351 <i>Pyrola rotundifolia</i>
YUAN YE MAO GAO CAI	圆叶茅膏菜	Roundleaf Sundew	T2268 <i>Drosera rotundifolia</i>
YUAN YE QIAN NIU ZI	圆叶牵牛子	Roundleaf Pharbitis Seed	T4780 <i>Pharbitis purpurea</i>
YUAN YE SHAN WU GUI	圆叶山乌龟	Roundleaf Corydalis*	T1738 <i>Corydalis rotundatour</i>
YUAN YE TAI	园叶苔		T3553 <i>Jamesoniella colorata</i>
YUAN YE TIAN JIE CAI	圆叶天芥菜*	Roundleaf Heliotrope*	T3179 <i>Heliotropium rotundifolium</i>
YUAN YE ZE LAN	圆叶泽兰	Roundleaf Eupatorium*	T2571 <i>Eupatorium rotundifolium</i>
YUAN ZHI	远志	Thinleaf Milkwort	T5088 <i>Polygala tenuifolia</i>
YUAN ZHI JUAN BAI	圆枝卷柏	Sanguineous Spikemoss	T5866 <i>Selaginella sanguinolenta</i>
YUAN ZHI YE AO ZHOU CHA	远志叶澳洲茶*	Australian Tea-tree	T3767 <i>Leptospermum polygalifolium</i> ssp. <i>polygalifolium</i>
YUAN ZHUI HUA YE LUN MU	圆锥花叶轮木	Paniculate Ostodes*	T4554 <i>Ostodes paniculata</i>
YUAN ZHUI ZHU SHI DOU	圆锥猪屎豆	Paniculate Crotalaria*	T1828 <i>Crotalaria paniculata</i>
YUE GUI SHU YE MU JIANG ZI	月桂树叶木姜子*	Laurelleaf Litsea*	T3891 <i>Litsea laurifolia</i>
YUE GUI XIAO BO	月桂小檗	Laurel-like Barberry	T0909 <i>Berberis laurina</i>
YUE GUI YE	月桂叶	Grecian Laurel Leaf	T3725 <i>Laurus nobilis</i>
YUE GUI YE SHAN YOU GAN	月桂叶山油柑*	Laurel-leaf Acronychia*	T0150 <i>Acronychia laurifolia</i>
YUE GUI ZI	月桂子	Grecian Laurel Fruit	T3726 <i>Laurus nobilis</i>
YUE HAN SI TONG SHAN MA CHA	约翰司通山马茶		T6274 <i>Tabernaemontana johnstonii</i>
YUE HUA	岳桦	Ermans Birch	T0931 <i>Betula ermanii</i>
YUE JI HUA	月季花	Chinese Rose	T5562 <i>Rosa chinensis</i>
YUE JI SHI LIU	月季石榴	Dwarf Pomegranate	T5333 <i>Punica granatum</i> cv. <i>nana</i>
YUE JU YE	越橘叶	Cowberry Leaf	T6673 <i>Vaccinium vitis-idaea</i>
YUE NAN AN XI XIANG	越南安息香	Tonkin Snowbell	T6204 <i>Styrax tonkinensis</i>
YUE NAN LIE LAN	越南裂榄*	Tonkin Bursera*	T1082 <i>Bursera tonkinensis</i>
YUE SI GUA	粤丝瓜	Singkwa Towelgourd	T3933 <i>Luffa acutangula</i>
YUE XI MU XIANG	越西木香	Denticulate Vladimiria	T6801 <i>Vladimiria denticulata</i>
YUE XIAN DA JI	月腺大戟	Ebracteolate Euphorbia	T2584 <i>Euphorbia ebracteolata</i>
YUN NAN BA JIAO	云南八角	Yunnan Anisetree	T3407 <i>Illicium simonsii</i>
YUN NAN CAO KOU	云南草蔻	Yunnan Galangal	T0353 <i>Alpinia blepharocalyx</i>
YUN NAN CHONG LOU	云南重楼	Yunnan Manyleaf Paris	T4652 <i>Paris polyphylla</i> var. <i>yunnanensis</i>
YUN NAN DI HUA JUN	云南地花菌	Yunnan Landflower Mushroom*	T0287 <i>Albatrellus confluens</i>
YUN NAN FEI SHU	云南榧树	Yunnan Torreya	T6479 <i>Torreya yunnanensis</i>
YUN NAN FENG CHE ZI	云南风车子	Yunnan Combretum*	T1632 <i>Combretum yunnanensis</i>
YUN NAN GAN CAO	云南甘草	Yunnan Licorice	T3023 <i>Glycyrrhiza yunnanensis</i>
YUN NAN GE SHE SHU	云南割舌树	Yunnan Cuttongue tree	T6807 <i>Walsura yunnanensis</i>
YUN NAN GE TENG	云南葛藤	Yunnan Kudzuvine	T5317 <i>Pueraria peduncularis</i>
YUN NAN HAN XIAO	云南含笑	Yunnan Michelia	T4215 <i>Michelia yunnanensis</i>
YUN NAN HONG DOU SHAN	云南红豆杉	Yunnan Yew	T6319 <i>Taxus yunnanensis</i>
YUN NAN HONG JING TIAN	云南红景天	Yunnan Rhodiola	T5501 <i>Rhodiola yunnanensis</i>
YUN NAN HUANG LIAN	云南黄连	Yunnan Goldthread	T1670 <i>Coptis teetoides</i> [Syn. <i>Coptis teeta</i> ]
YUN NAN LUO FU MU	云南萝芙木	Yunnan Devilpepper	T5428 <i>Rauvolfia yunnanensis</i>
YUN NAN MEI DENG MU	云南美登木	Yunnan Mayten	T4134 <i>Maytenus hookeri</i>
YUN NAN NI DAN XING MU LAN	云南拟单性木兰	Yunnan Parakmeria	T4641 <i>Parakmeria yunnanensis</i>
YUN NAN QIANG HUO	云南羌活	Yunnan Pleurospermum	T5021 <i>Pleurospermum rivulorum</i>
YUN NAN RUI MU	云南蕊木	Medicinal Kopsia	T3643 <i>Kopsia officinalis</i>
YUN NAN SHA JI	云南沙棘	Yunnan Seabuckthorn*	T3258 <i>Hippophae rhamnoides</i> subsp. <i>yunnanensis</i>

YUN NAN SHAN ZHA	云南山楂	Yunnan Hawthorn	T1781 <i>Crataegus scabrifolia</i>
YUN NAN SHAN ZHU ZI	云南山竹子	Yunnan Garcinia	T2852 <i>Garcinia cowa</i>
YUN NAN SHI	云南蓍	Wilson Yarrow	T0069 <i>Achillea wilsoniana</i>
YUN NAN SHI XIAN TAO	云南石仙桃	Yunnan Pholidota	T4823 <i>Pholidota yunnanensis</i>
YUN NAN SHI ZI	云南石梓	Malay Bushbeech	T3024 <i>Gmelina arborea</i>
YUN NAN SHU WEI CAO	云南鼠尾草	Yunnan Sage	T5701 <i>Salvia yunnanensis</i>
YUN NAN SUI HUA SHAN	云南穗花杉	Yunnan Amentotaxus	T0409 <i>Amentotaxus yunnanensis</i>
YUN NAN TIE SHAN	云南铁杉	Yunnan Hemlock	T6557 <i>Tsuga dumosa</i>
YUN NAN TU SI ZI	云南菟丝子	Yunnan Dodder	T1915 <i>Cuscuta reflexa</i>
YUN NAN YE SHAN HUA	云南野扇花	Yunnan Sarcococca	T5731 <i>Sarcococca coriacea</i> [Syn. <i>Sarcococca wallichii</i> ]
YUN NAN ZAO JIA	云南皂荚	Delacay Honeylocust	T2975 <i>Gleditsia delavayi</i>
YUN NAN ZHANG	云南樟	Nepal Camphortree	T1440 <i>Cinnamomum glanduliferum</i>
YUN QIAN HU	云前胡	Yun Hogfennel	T4769 <i>Peucedanum rubricaula</i>
YUN SHI YE	云实叶	Caesalpinia*	T1101 <i>Caesalpinia decapetala</i>
YUN TAI ZI	芸薹子	Bird Rape	T1005 <i>Brassica campestris</i> [Syn. <i>Brassica campestris</i> var. <i>oleifera</i> ]
YUN WU LUO HAN SONG	云雾罗汉松	Manio	T5050 <i>Podocarpus nubigenus</i>
YUN XIANG CAO	芸香草	Remote Lemongrass	T1941 <i>Cymbopogon distans</i>
YUN XIANG YE HAO	芸香叶蒿	Rueleaf Wormwood*	T0693 <i>Artemisia sativum</i>
ZA JIAO BAI HEx	杂交百合	Hybrid Lily*	T3838 <i>Lilium speciosum</i> x <i>L. nobilissimum</i>
ZA JIAO CHE ZHOU CAO	杂交车轴草	Hybrid Clover*	T6520 <i>Trifolium hybridum</i>
ZA JIAO JIE ZHI HONG DOU SHAN	杂交介质红豆杉	Media Yew (hybrid)	T6318 <i>Taxus x media</i>
ZA JIAO YIN JIAO JU	杂交银胶菊	Hybrid Pathenium*	T4659 <i>Parthenium argentatum</i> x <i>P. tomentosa</i>
ZA JIAO YOU <sup>(2)</sup>	杂交莠*	Hybrid Bluebeard*	T1220 <i>Caryopteris clandonensis</i>
ZA XING TANG SONG CAO	杂性唐松草	Tall Meadowrue	T6405 <i>Thalictrum polygamum</i>
ZAI PEI GAN JU	栽培柑桔*	Cultivated Citrus*	T1473 <i>Citrus cultivars</i>
ZAI PEI HEI ZHONG CAO	栽培黑种草	Cultivated Fennelflower*	T4433 <i>Nigella sativa</i>
ZAI PEI XIANG RI KUI YE	栽培向日葵叶*	Cultivated Sunflower Leaf*	T3146 <i>Helianthus annuus</i> cv
ZAI PEI ZI WAN	栽培紫菀	Cultivated Aster*	T0779 <i>Aster cultivars</i>
ZAI ZHONG LANG SE MU	栽种椰色木	Cultivated Langsat*	T3686 <i>Lansium domesticum</i>
ZAN BI XI BA DOU	赞比西巴豆	Zambesi Croton*	T1861 <i>Croton zambesicus</i>
ZAN SHI LONG DAN	赞氏龙胆	Thunberg Gentian*	T2935 <i>Gentiana thunbergii</i>
ZANG BIAN DA HUANG	藏边大黄	Austral Rhubarb	T5468 <i>Rheum emodi</i> [Syn. <i>Rheum australe</i> ]
ZANG HONG HUA	藏红花	Saffron Crocus Stigma	T1808 <i>Crocus sativus</i>
ZANG HONG HUA SE SHUI QIN	藏红花色水芹	Hemlock Waterdropwort	T4480 <i>Oenanthe crocata</i>
ZANG MA HUANG	藏麻黄	Cliff Ephedra	T2379 <i>Ephedra saxatilis</i>
ZANG QIE	藏茄(山莨菪)	Tangut Anisodus	T0502 <i>Anisodus tanguticus</i> [Syn. <i>Scopolia tangutica</i> ]
ZANG SAN QI	藏三七	Tibet Ginseng	T4606 <i>Panax pseudo-ginseng</i>
ZANG YAO LUO JING JIN YAO	藏药裸茎金腰	Naked-caule Goldsaxifrage	T1406 <i>Chrysosplenium nudicaule</i>
ZAO CAO	蚤草	Pulicaria*	T5322 <i>Pulicaria wightiana</i>
ZAO JIA	皂荚	Chinese Honeylocust	T2978 <i>Gleditsia sinensis</i> [Syn. <i>Gleditsia horrida</i> ]
ZAO JIA CI	皂荚刺	Chinese Honeylocust Thom	T2979 <i>Gleditsia sinensis</i> [Syn. <i>Gleditsia horrida</i> ]
ZAO JIA GEN PI	皂荚根皮	Chinese Honeylocust Root-bark	T2980 <i>Gleditsia sinensis</i> [Syn. <i>Gleditsia horrida</i> ]
ZAO JIA YE	皂荚叶	Chinese Honeylocust Leaf	T2981 <i>Gleditsia sinensis</i> [Syn. <i>Gleditsia horrida</i> ]
ZAO PI SHU	皂皮树*	Soapbark Tree	T5382 <i>Quillaja saponaria</i>
ZAO WEI KOU MO	皂味口蘑		T6506 <i>Tricholoma saponaceum</i>

ZAO XIU	蚤休(七叶一枝花)	Manyleaf Paris	T4648 <i>Paris polyphylla</i>
ZE LAN	泽兰	Shiny Bugleweed	T3980 <i>Lycopus lucidus</i>
ZE LAN GEN	泽兰根	Shiny Bugleweed Root	T3981 <i>Lycopus lucidus</i>
ZE LAN YANG ER JU	泽兰羊耳菊	Eupatoriumlike Inula	T3429 <i>Inula eupatorioides</i>
ZE QI	泽漆	Sun Euphorbia	T2589 <i>Euphorbia helioscopia</i>
ZE WU TOU	泽乌头		T0141 <i>Aconitum zeravschanicum</i>
ZE XIAN	泽藓		T4798 <i>Philonotis fontana</i>
ZE XIE	泽泻	Oriental Waterplantain	T0303 <i>Alisma orientale</i> [Syn. <i>Alisma plantago-aquatica</i> var. <i>orientale</i> ]
ZHAI RUI TA ZHANG YA CAI	其瑞塔獐牙菜	Chirata Swertia*	T6215 <i>Swertia chirata</i>
ZHAI TOU TUO WU	窄头橐吾	Narrowhead Goldenray	T3815 <i>Ligularia stenocephala</i>
ZHAI YE BAN FENG HE	窄叶半枫荷	Lanceleaf Wingseedtree	T5310 <i>Pterospermum lanceaeifolium</i>
ZHAI YE NAN YANG SHAN	窄叶南洋杉	Candelabar Tree	T0577 <i>Araucaria angustifolia</i>
ZHAI YE YE WAN DOU	窄叶野豌豆	Narrowleaf Vetch	T6743 <i>Vicia angustifolia</i>
ZHAI ZHU YE CHAI HU	窄竹叶柴胡	Narrowbambooleaf Thorowax	T1067 <i>Bupleurum marginatum</i> var. <i>stenophyllum</i>
ZHAN E JIN SI TAO	展萼金丝桃	Lancaster's St. John'swort	T3357 <i>Hypericum lancasteri</i>
ZHAN HUA WU TOU	展花乌头	Patentflower Monkshood	T0086 <i>Aconitum chasmanthum</i>
ZHAN LONG JIAN	斩龙剑	Siberian Veronicastrum	T6731 <i>Veronicastrum sibiricum</i>
ZHAN MAO CUI QUE HUA	展毛翠雀花	Hair Larkspur	T2079 <i>Delphinium kamaonense</i> var. <i>glabrescens</i>
ZHAN MAO HUANG QIN	黏毛黄芩	Viscidhair Skullcap	T5845 <i>Scutellaria viscidula</i>
ZHAN MAO LIAO	粘毛蓼	Viscidhairy Knotweed	T5122 <i>Polygonum viscosum</i>
ZHAN MAO SHI WEI	毡毛石韦	Panniform Pyrrosia	T5355 <i>Pyrrosia drakeana</i>
ZHAN MAO XUN ZI	毡毛枸子	Silverleaf Cotoneaster	T1761 <i>Cotoneaster pannosus</i>
ZHAN ZHI TANG SONG CAO	展枝唐松草	Spreading Meadowrue*	T6412 <i>Thalictrum squarrosus</i>
ZHANG GUO GAN CAO	胀果甘草	Inflated Licorice	T3015 <i>Glycyrrhiza inflata</i>
ZHANG GUO QIN	胀果芹	Siberian Phlojodicarpus	T4804 <i>Phlojodicarpus sibiricus</i>
ZHANG LANG	蟑螂	Cockroach	T0950 <i>Blatta orientalis</i>
ZHANG LIU TOU	樟柳头	Canereed Spiralflag	T1756 <i>Costus speciosus</i>
ZHANG MU	樟木	Camphortree	T1435 <i>Cinnamomum camphora</i>
ZHANG NAO LUO LE	樟脑罗勒	Grey Basil	T4472 <i>Ocimum canum</i>
ZHANG SHU PI	樟树皮	Camphortree Bark	T1436 <i>Cinnamomum camphora</i>
ZHANG SHU YE	樟树叶	Camphortree Leaf	T1437 <i>Cinnamomum camphora</i>
ZHANG YA CAI	獐牙菜	False Chinese Swertia	T6231 <i>Swertia pseudochinensis</i>
ZHANG YE BAN XIA	掌叶半夏	Pedate Pinellia	T4903 <i>Pinellia pedatisecta</i>
ZHANG YE DA HUANG	掌叶大黄	Sorrel Rhubarb	T5474 <i>Rheum palmatum</i>
ZHANG YE HU JIAO	掌叶胡椒	Camphortreeleaf Pepper	T4961 <i>Piper polysyphorum</i>
ZHANG YU	章鱼	Common Atlantic Octopus	T4478 <i>Octopus vulgaris</i>
ZHAO JU	沼菊	Common Enhydra	T2361 <i>Enhydra fluctuans</i>
ZHAO SHAN BAI	照山白	Manchurian Rhododendron	T5515 <i>Rhododendron micranthum</i>
ZHAO SHENG DA JI	沼生大戟	Marshy Euphorbia*	T2606 <i>Euphorbia palustris</i>
ZHAO WA DAO DIAO BI	爪哇倒吊笔*	Java Wrightia*	T6833 <i>Wrightia javanica</i>
ZHAO WA GAN LAN	爪哇橄榄	Java Almond Canary-tree	T1166 <i>Canarium commune</i>
ZHAO WA JIA KE TAI	爪哇甲克苔	Japanese liverwort	T3550 <i>Jackiella javanica</i>
ZHAO WA ZHE SHU	爪哇柘树*	Java Cudrania*	T1886 <i>Cudrania javanensis</i>
ZHAO ZE QIAN HU	沼泽前胡*	Marsh Parsley	T4767 <i>Peucedanum palustre</i>
ZHAO ZE SHU HUA	沼泽树花	Marsh Ramalina*	T5405 <i>Ramalina paludosa</i>
ZHE BEI MU	浙贝母	Thunberg Fritillary	T2798 <i>Fritillaria verticillata</i> var. <i>thunbergii</i> [Syn. <i>Fritillaria thunbergii</i> ]
ZHE GU CAI	鹧鸪菜	Leprieur Caloglossa Frond	T1122 <i>Caloglossa leprieurii</i>
ZHE HUANG KAO GU NA	赭黄栲古那	Brown-yellow Kokoona*	T3638 <i>Kokoona ochracea</i>
ZHE JIANG ZHANG YA CAI	浙江獐牙菜	Zhejiang Swertia*	T6222 <i>Swertia hickinii</i>

ZHE SHU	柘树	Tricuspid Cudrania	T1888 <i>Cudrania tricuspidata</i>
ZHE TENG	柘藤	Fruticose Cudrania	T1885 <i>Cudrania fruticosa</i>
ZHEN	榛	Siberian Hazelnut	T1751 <i>Corylus heterophylla</i>
ZHEN CAI	枕材	Pungent Litsea	T3893 <i>Litsea pungens</i>
ZHEN KUI	针葵	Canary Island Date-palm	T4819 <i>Phoenix canariensis</i>
ZHEN MO	榛蘑	Mellea Armillaria Sporocarp	T0645 <i>Armillariella mellea</i>
ZHEN XIAN	真蕨		T1044 <i>Bryum argenteum</i>
ZHEN YE TENG HUANG	真叶藤黄*	Realeaf Garcinia*	T2854 <i>Garcinia eugenifolia</i>
ZHEN YE XUE TONG	针叶血桐	Conifer Macaranga	T4012 <i>Macaranga conifera</i>
ZHEN YE ZE LAN	针叶泽兰*	Lanceleaf Eupatorium*	T2564 <i>Eupatorium lancifolium</i>
ZHEN ZHU CAI	珍珠菜	Clethra Loosestrife	T3999 <i>Lysimachia clethroides</i>
ZHEN ZHU LU SHUI CAO	珍珠露水草	Spiderweb Bluecargrass, Pearl Cyanotis*	T1921 <i>Cyanotis arachnoidea</i> [Syn. <i>Cyanotis bodinieri</i> ]
ZHEN ZHU MEI	珍珠梅	Ural Falsespiraea	T6052 <i>Sorbaria sorbifolia</i>
ZHEN ZHU MU	珍珠母	Mother-of-pearl	T1804 <i>Cristaria plicata; Hyriopsis cumingii</i>
ZHEN ZHU XIU XIAN JU	珍珠绣线菊	Thunberg Spiraea	T6086 <i>Spiraea thunbergii</i>
ZHENG JI NA SHU	正鸡纳树	Medicinal Cinchona	T1429 <i>Cinchona officinalis</i>
ZHI	雉	Common Pheasant	T4786 <i>Phasianus colchicus</i>
ZHI BU LUO TUO CAI HU	直布罗陀柴胡	Gibraltar Thorowax*	T1063 <i>Bupleurum gibraltarium</i>
ZHI GEN DANG GUI	直根当归	Taproot Angelica*	T0493 <i>Angelica radix</i>
ZHI GEN PI	枳根皮	Trifoliolate-orange Root-bark	T5142 <i>Poncirus trifoliata</i>
ZHI JIA HUA YE	指甲花叶	Henna Leaf	T3732 <i>Lawsonia inermis</i>
ZHI JU GEN	枳椇根	Japanese Raisin Tree Root	T3285 <i>Hovenia dulcis</i>
ZHI JU ZI	枳椇子	Japanese Raisin Tree Seed	T3286 <i>Hovenia dulcis</i>
ZHI KE	枳壳	Seville Orange Unripe Fruit	T1467 <i>Citrus aurantium</i>
ZHI LI BAI BU	直立百部	Sessile Stemona	T6113 <i>Stemona sessilifolia</i>
ZHI LI CHANG CHUN HUA	直立长春花	Erect Periwinkle	T6759 <i>Vinca erecta</i>
ZHI LI CI BAI	直立刺柏	Erect Juniper*	T3586 <i>Juniperus erectopatens</i>
ZHI LI DIAN LAN	直立靛兰		T3421 <i>Indigofera arrecta</i>
ZHI LI JIAO HUI XIANG	直立柱茴香	Erect Hypecoum	T3332 <i>Hypecoum erectum</i>
ZHI LI LUO HAN SONG	智利罗汉松	Chile Podocarpus*	T5036 <i>Podocarpus andina</i>
ZHI LI MA DOU LING	智利马兜铃	Aristolochia chilensis	T0623 <i>Aristolochia chilensis</i>
ZHI LI PO PO NA	直立婆婆纳	Common Speedwell	T6723 <i>Veronica arvensis</i>
ZHI LI QIAN JIN TENG	直立千金藤	Erect Stephania*	T6126 <i>Stephania erecta</i>
ZHI LI YE HOU KE GUI	直立叶厚壳桂*	Strictleaf Cryptocarya*	T1864 <i>Cryptocarya strictifolia</i>
ZHI LI ZI JIN	直立紫堇		T1744 <i>Corydalis stricta</i>
ZHI MA CAI	芝麻菜	Roquette	T2439 <i>Eruca sativa</i>
ZHI MU	知母	Common Anemarrhena	T0462 <i>Anemarrhena asphodeloides</i>
ZHI SHA CAO	纸莎草	Paper Reed	T1977 <i>Cyperus papyrus</i>
ZHI SHAN XIANG	栴山香	Pectinat Bushmint*	T3380 <i>Hyptis pectinata</i>
ZHI SHI	枳实	Seville Orange Young Fruit	T1468 <i>Citrus aurantium</i>
ZHI XIE MU PI	止泻木皮	Droughtdysentery Holarrhena Bark	T3263 <i>Holarrhena antidysenterica</i>
ZHI YANG	脂杨	Balsam Poplar	T5147 <i>Populus balsamifera</i>
ZHI YI XIAO BO	置疑小檗	Dubious Barberry	T0903 <i>Berberis dubia</i>
ZHI ZHI SHAN MA CHA	纸质山马茶		T6271 <i>Tabernaemontana chartacea</i>
ZHI ZHU BAO DAN	蜘蛛抱蛋	Common Aspidistra	T0759 <i>Aspidistra elatior</i>
ZHI ZHU XIANG	蜘蛛香	Jatamans Valeriana	T6677 <i>Valeriana jatamansii</i> [Syn. <i>Valeriana wallichii</i> ]
ZHI ZHUANG E AN	枝状萼桉*		T2506 <i>Eucalyptus cladocalyx</i>
ZHI ZI	栀子	Cape Jasmine Fruit	T2882 <i>Gardenia jasminoides</i> [Syn. <i>Gardenia florida</i> ]
ZHI ZI YE	栀子叶	Cape Jasmine Leaf	T2883 <i>Gardenia jasminoides</i> [Syn. <i>Gardenia florida</i> ]

ZHI ZONG ZHUANG HUA XU XIAO BO	直总状花序小檗	Straight-raceme Barberry	T0911 <i>Berberis orthobotrys</i>
ZHONG BA E ZHANG YE FU ZI	中坝鹅掌叶附子	Zhongba Monkshood Daughter Root*	T0085 <i>Aconitum carmichaeli</i> cv
ZHONG BIN JU	肿柄菊	Yucatan Tithonia	T6469 <i>Tithonia diversifolia</i>
ZHONG E BAI TOU WENG	钟萼白头翁	Bellcalyx Pulsatilla	T5323 <i>Pulsatilla campanella</i>
ZHONG FEI GOU ZHI TENG	中非钩枝藤	Central-African Ancistrocladus*	T0451 <i>Ancistrocladus likoko</i>
ZHONG FEI MA QIAN	中非马钱	Central-African Poisonnut*	T6176 <i>Strychnos icaja</i>
ZHONG GUO BAN JIU JU	中国斑鸠菊	Chinese Bitterleaf*	T6714 <i>Vernonia chinense</i>
ZHONG GUO CANG ER	中国苍耳*	Burweed	T6837 <i>Xanthium chinense</i>
ZHONG GUO CU FEI ZHI YE	中国粗榧枝叶	Chinese Plumyew Branch-leaf	T1323 <i>Cephalotaxus sinensis</i> [Syn. <i>Cephalotaxus harringtonia</i> var. <i>sinensis</i> ]
ZHONG GUO CU FEI ZI	中国粗榧子	Chinese Plumyew Seed	T1324 <i>Cephalotaxus sinensis</i> [Syn. <i>Cephalotaxus harringtonia</i> var. <i>sinensis</i> ]
ZHONG GUO SHA JI	中国沙棘	Chinese Seabuckthorn*	T3256 <i>Hippophae rhamnoides</i> subsp. <i>sinensis</i>
ZHONG GUO SHI SUAN	中国石蒜	Chinese Lycoris	T3984 <i>Lycoris chinensis</i>
ZHONG GUO SHOU CAO	中国绶草*	Chinese Spiranthes*	T6087 <i>Spiranthes sinensis</i>
ZHONG GUO XIU QIU	中国绣球	Chinese Hydrangea	T3303 <i>Hydrangea chinensis</i>
ZHONG GUO XUAN FU HUA	中国旋覆花	Chinese Inula	T3428 <i>Inula britannica</i> var. <i>chinensis</i>
ZHONG GUO YANG CHUN	中国洋椿*	Chinese Cedrela*	T1278 <i>Cedrela sinensis</i>
ZHONG HUA JI SHI TENG	中华鸡屎藤*	Chinese Feervine	T4576 <i>Paederia chinensis</i>
ZHONG HUA JIU LI XIANG	中华九里香	Chinese Common Jasminorange	T4318 <i>Murraya exotica</i>
ZHONG HUA JUAN BAI	中华卷柏	Chinese Spikemoss	T5867 <i>Selaginella sinensis</i>
ZHONG HUA QING NIU DAN	中华青牛胆	Chinese Tinospora*	T6468 <i>Tinospora sinensis</i>
ZHONG HUA XIAO JIAN LIU SHAN HU	中华小尖柳珊瑚	Gorgonian <i>Muricella sinensis</i>	T4315 <i>Muricella sinensis</i>
ZHONG JIAN DA YE KE NU CAO	中间大叶科努草*	Intermediate Largeleaf Chastetree*	T1700 <i>Cornutia grandifolia</i> var. <i>intermedia</i>
ZHONG JIAN HE SHI	中间鹤虱	Intermediate Stickseed	T3689 <i>Lappula intermedia</i>
ZHONG JIAN JIN JI ER	中间锦鸡儿	Intermediate Peashrub	T1189 <i>Caragana intermedia</i>
ZHONG JIAN MAO GAO CAI	中间茅膏菜*	Intermediate Sundew*	T2265 <i>Drosera intermedia</i>
ZHONG JIAN WU WEI ZI	中间五味子	Intermediate Magnoliavine	T5798 <i>Schisandra propinqua</i> var. <i>intermedia</i>
ZHONG MA HUANG	中麻黄	Intermediate Ephedra	T2369 <i>Ephedra intermedia</i>
ZHONG YA KU HAO	中亚苦蒿	Common Wormwood	T0659 <i>Artemisia absinthium</i>
ZHONG YA QIN JIAO	中亚秦艽	Central Asia Gentian	T2913 <i>Gentiana kaufmanniana</i>
ZHONG YA SHA JI	中亚沙棘	Central Asia Seabuckthorn*	T3257 <i>Hippophae rhamnoides</i> subsp. <i>turkestanica</i>
ZHOU CHANG JU	舟常桔	Funadoko Orange*	T1477 <i>Citrus funadoko</i>
ZHOU MU ER	皱木耳	Delicate Jew's Ear*	T0831 <i>Auricularia delicata</i>
ZHOU SHAN XIN MU JIANG ZI	舟山新木姜子	Sericeous Newlitse	T4406 <i>Neolitsea sericea</i>
ZHOU SHUO XIAN	皱蒴藓		T0829 <i>Aulacomnium androgynum</i>
ZHOU YE LU TI CAO	皱叶鹿蹄草	Wrinkledleaf Pyrola	T5352 <i>Pyrola rugosa</i>
ZHOU YE MU LAN	皱叶木兰	Wrinkleleaf Magnolia*	T4046 <i>Magnolia praecocissima</i>
ZHOU YE OU QIN	皱叶欧芹	Curly Garden Parsley	T4748 <i>Petroselinum crispum</i>
ZHOU YE XIANG CHA CAI	皱叶香茶菜	Rugose Rabdosia*	T3523 <i>Isodon rugosus</i> [Syn. <i>Rabdosia rugosa</i> ]
ZHOU YE ZE LAN	皱叶泽兰	Mist flower	T2572 <i>Eupatorium rugosum</i>
ZHOU ZHI SHU LI	帚枝鼠李	Twiggy Buckthorn	T5464 <i>Rhamnus virgata</i>
ZHU BAI	竹柏	Nagai Podocarpus	T4346 <i>Myrica nagi</i> [Syn. <i>Podocarpus nagi</i> ]
ZHU BAI GEN	竹柏根	Nagai Podocarpus Root	T4347 <i>Myrica nagi</i> [Syn. <i>Podocarpus nagi</i> ]
ZHU DAN	猪胆	Pig Gall	T6206 <i>Sus scrofa domestica</i>
ZHU HONG JUN	竹红菌	Bambusa Hypocrella*	T3371 <i>Hypocrella bambusae</i>
ZHU HONG LIU HUANG SE	朱红硫黄色绚孔菌*	Vermeil-sulphureous Laetiporus*	T3666 <i>Laetiporus sulphureus</i> var. <i>miniatus</i>
XUN KONG JUN			
ZHU HONG LONG XUE SHU	朱红龙血树	Cinnabar Dracaena	T2252 <i>Dracaena cinnabari</i>
ZHU HONG SHI	朱红柿*	Cinnabar Persimmon*	T2215 <i>Diospyros cinnabarina</i>
ZHU HONG SHU WEI CAO	朱红鼠尾草		T5669 <i>Salvia cinnabarina</i>



ZHU JIE SAN QI	竹节三七	Japanese Ginseng	T4607 <i>Panax pseudo-ginseng</i> var. <i>japonicus</i>
ZHU JU	朱橘	Red Orange	T1476 <i>Citrus erythrosa</i>
ZHU LING	猪苓	Polyporus Agaric	T5129 <i>Polyporus umbellatus</i>
ZHU LUAN	朱栾	Pomelo	T1474 <i>Citrus decumana</i>
ZHU MAO CAI	猪毛菜	Common Russianthistle	T5657 <i>Salsola collina</i>
ZHU SHA DU JUAN	砵砂杜鹃	Vermilion Rhododendron	T5506 <i>Rhododendron cinnabarinum</i>
ZHU SHA GEN	砵砂根	Coral Ardisia	T0594 <i>Ardisia crenata</i>
ZHU SHA LIAN	朱砂莲	Kaempfer Dutchmanspipe	T0631 <i>Aristolochia kaempferi</i>
ZHU SHI DOU	猪屎豆	Striped Crotalaria	T1826 <i>Crotalaria mucronata</i>
ZHU SI HONG WEN MA XIAN HAO	蛛丝红纹马先蒿	Arachnoidea Redstriate Woodbetony*	T4685 <i>Pedicularis striata</i> ssp. <i>arachnoidea</i>
ZHU SUI SHAN JIANG	柱穗山姜	Pinnan Galangal	T0361 <i>Alpinia pinnanensis</i>
ZHU TAI SHU WEI CAO	烛台鼠尾草*		T5666 <i>Salvia candelabrum</i>
ZHU XUANG	竹黄	Bamboo Yellow*	T5939 <i>Shiraia bambusicola</i>
ZHU YE CHAI HU	竹叶柴胡	Bambooleaf Thorowax	T1066 <i>Bupleurum marginatum</i>
ZHU YE JIAO	竹叶椒	Bambooleaf Pricklyash	T6887 <i>Zanthoxylum planispinum</i>
ZHU YE JIAO GEN	竹叶椒根	Bambooleaf Pricklyash Root	T6888 <i>Zanthoxylum planispinum</i>
ZHU YE JU	苎叶蒟	Falsenettleleaf Pepper	T4938 <i>Piper boehmeriaefolium</i>
ZHU YE LAN	竹叶兰	Chinese Arundina	T0721 <i>Arundina chinensis</i>
ZHU ZI CAO	珠子草	Nirur Leafflower*	T4840 <i>Phyllanthus niruri</i>
ZHU ZI SHU	珠子树	Racemose Sweetleaf	T6254 <i>Symplocos racemosa</i>
ZHU ZONG CAO	猪鬃草	Southern Maidenhair	T0171 <i>Adiantum capillus-veneris</i>
ZHUA KUI GUA YE WU TOU	瓜盔瓜叶乌头	Unguiculate Hemsley Monkshood	T0102 <i>Aconitum hemsleyanum</i> var. <i>leueanthus</i>
ZHUAN HONG REN SAN	砖红韧伞	Brick Tops	T4367 <i>Naematoloma sublateritium</i>
ZHUANG GUAN FAN XIE	壮观番泻*	Spectacular Senna*	T5916 <i>Senna spectabilis</i>
ZHUANG GUAN JI GU CHANG SHAN	壮观鸡骨常山*	Spectacular Alstonia*	T0376 <i>Alstonia spectabilis</i>
ZHUI YE CHAI HU	锥叶柴胡	Acicular Thorowax	T1057 <i>Bupleurum bicaule</i>
ZHUN GE ER LAN PEN HUA	准噶尔兰盆花		T5776 <i>Scabiosa soongorica</i>
ZHUN GE ER QIAN HU	准噶尔前胡	Dzungaria Hogfennel*	T4763 <i>Peucedanum morisonii</i>
ZHUN GE ER WU TOU	准葛尔乌头	Dzungaria Monkshood	T0131 <i>Aconitum soongaricum</i>
ZHUO SE CI QIU	着色刺楸*	Picture Kalopanax*	T3624 <i>Kalopanax pictum</i>
ZHUO SE LI	着色栎*	Black Oak	T5381 <i>Quercus tinctoria</i>
ZHUO SE LIU LI CAO	着色琉璃草*	Picture Houndstongue*	T1970 <i>Cynoglossum pictum</i>
ZHUO SE SANG CHENG	着色桑橙*	Tinctorial Osage Orange*	T4023 <i>Maclura tinctoria</i>
ZI BAI PI	梓白皮	Ovate Catalpa Bast	T1261 <i>Catalpa ovata</i>
ZI BEI HUANG QIN	紫背黄芩	Discolored Skullcap*	T5836 <i>Scutellaria discolor</i>
ZI BEI JIN PAN	紫背金盘	Japanese Bulge	T0267 <i>Ajuga nipponensis</i>
ZI BEI LU TI CAO	紫背鹿蹄草	Purpleback Pyrola	T5344 <i>Pyrola atropurpurea</i>
ZI BEI TAI	紫背苔	Argentine Liverwort	T4990 <i>Plagiochasma rupestre</i>
ZI BEI TIAN KUI CAO	紫背天葵草	Nudicaulous Grousel Herb	T5893 <i>Senecio nudicaulis</i>
ZI CAI	紫菜	Laver	T5171 <i>Porphyra tenera</i>
ZI CAO	紫草	Redroot Gromwell	T3881 <i>Lithospermum erythrorhizon</i>
ZI CAO RONG	紫草茸	Lac	T3649 <i>Laccifer lacca</i>
ZI DAN SHEN	紫丹参	Manchurian Sage*	T5689 <i>Salvia przewalskii</i> var. <i>mandarinorum</i>
ZI DAN TENG	紫丹藤	Taiwan Tournefortia*	T6480 <i>Tournefortia sarmentosa</i>
ZI DI HUANG	紫地黄	Purple Adhesive Rehmannia*	T5448 <i>Rehmannia glutinosa</i> var. <i>purpurea</i>
ZI DING XIANG	紫丁香	Early Lilac	T6260 <i>Syringa oblata</i>
ZI DING XIANG MO	紫丁香蘑	Murasakishimeji (in Japanese)	T3766 <i>Lepista nuda</i>
ZI E XIANG CHA CAI	紫萼香茶菜	Forrest Rabdosia*	T3490 <i>Isodon forrestii</i>
ZI FAN LI ZHI	紫番荔枝	Soncoya	T0510 <i>Annona purpurea</i>
ZI FENG DOU CAI	紫蜂斗菜	Purple Butterbur	T4743 <i>Petasites officinalis</i> [Syn. <i>Petasites hybridu</i> ]
ZI GUO WEI MAO	紫果卫矛	Eastern Wahoo	T2537 <i>Euonymus atropurpureus</i>

ZI HE CHE	紫河车	Human Placenta	T3279 <i>Homo sapiens</i>
ZI HONG ZHANG YA CAI	紫红獐牙菜	Scarlet Swertia	T6234 <i>Swertia punicea</i>
ZI HU	紫胡	Sickle-leaved Hare's-ear	T1060 <i>Bupleurum falcatum</i>
ZI HUA DI DING	紫花地丁	Tokyo Violet	T6767 <i>Viola yedoensis</i>
ZI HUA E BEI BEI MU	紫花鄂北贝母	Purpleflower Fritillary	T2786 <i>Fritillaria ebeiensis</i> var. <i>purpurea</i>
ZI HUA GAO WU TOU	紫花高乌头	Purpleflower High Monkshood	T0091 <i>Aconitum excelsum</i>
ZI HUA GUAN MAO RUI HUA	紫花冠毛蕊花*	Purple-red-corolla Mullein*	T6706 <i>Verbascum wiedemannianum</i>
ZI HUA JING TIAN	紫花景天	Purpleflower Stonecrop	T3318 <i>Hylotelephium mingjinianum</i>
ZI HUA SONG GUO JU	紫花松果菊	Purple Conedaisy	T2314 <i>Echinacea purpurea</i>
ZI HUA YU DENG CAO	紫花鱼灯草	Incised Corydalis	T1719 <i>Corydalis incisa</i>
ZI JIN LIAN	紫金莲	Willmott Ceratostigma	T1329 <i>Ceratostigma willmottianum</i>
ZI JIN NIU	紫金牛	Japanese Ardisia	T0598 <i>Ardisia japonica</i>
ZI JIN NIU GEN	紫金牛根	Japanese Ardisia Root	T0599 <i>Ardisia japonica</i>
ZI JIN YE TANG SONG CAO	紫堇叶唐松草	Corydalisleaf Meadowrue	T6395 <i>Thalictrum isopyroides</i>
ZI JING ZE LAN HUA	紫茎泽兰花	Purplestem Eupatorium Flower	T2549 <i>Eupatorium adenophorum</i>
ZI KOU CAO	自扣草	Canton Buttercup	T5413 <i>Ranunculus cantoniensis</i>
ZI LAN SHU	仔榄树	Ceylon Hunteria	T3292 <i>Hunteria zeylanica</i>
ZI LUO KE BAO	紫裸壳胞		T2352 <i>Emericella purpurea</i>
ZI MAO XIANG CHA CAI	紫毛香茶菜	Purplehair Rabdosia	T3486 <i>Isodon enanderianus</i>
ZI MEI SHU	姊妹树	Garden Millingtonia	T4247 <i>Millingtonia hortensis</i>
ZI MO LI GEN	紫茉莉根	Common Four-o'clock Root	T4252 <i>Mirabilis jalapa</i>
ZI MO LI HUA BI DONG QIE	紫茉莉花碧冬茄*	Nyctaginiflower Petunia*	T4752 <i>Petunia nyctaginiflora</i>
ZI MO LI YE	紫茉莉叶	Common Four-o'clock Leaf	T4253 <i>Mirabilis jalapa</i>
ZI MU	梓木	Ovate Catalpa	T1262 <i>Catalpa ovata</i>
ZI QI	紫萁	Japanese Osmunda Frond	T4552 <i>Osmunda japonica</i>
ZI RAN QIN	孜然芹	Cumin	T1889 <i>Cuminum cyminum</i>
ZI SE BAN RUI DOU	紫色瓣蕊豆	Purple Prairie-clover	T4736 <i>Petalostemon purpureus</i>
ZI SE ZHANG YA CAI	紫色獐芽菜*	Purple Swertia*	T6236 <i>Swertia purpurascens</i>
ZI SHA ROU HAI MIAN	紫沙肉海绵*	Sponge <i>Psammaphysilla purpurea</i>	T5249 <i>Psammaphysilla purpurea</i>
ZI SHAN	紫杉	Japanese Yew	T6311 <i>Taxus cuspidata</i>
ZI SHI	梓实	Ovate Catalpa Fruit	T1263 <i>Catalpa ovata</i>
ZI SHU	紫树	Chinese Tupelo	T4457 <i>Nyssa sinensis</i>
ZI SU	紫苏	Common Perilla	T4719 <i>Perilla frutescens</i> var. <i>arguta</i>
ZI SU GENG	紫苏梗	Common Perilla Stem	T4720 <i>Perilla frutescens</i> var. <i>arguta</i>
ZI SU YE	紫苏叶	Common Perilla Leaf	T4721 <i>Perilla frutescens</i> var. <i>arguta</i>
ZI SUI HUAI	紫穗槐	Indigobush Amorpha	T0421 <i>Amorpha fruticosa</i>
ZI TAN	紫檀	Burmacoast Padauk	T5301 <i>Pterocarpus indicus</i>
ZI TENG	紫藤	Chinese Wisteria	T6826 <i>Wisteria sinensis</i>
ZI TENG ZI	紫藤子	Chinese Wisteria Seed	T6827 <i>Wisteria sinensis</i>
ZI TI GEN CAO	紫嚏根草	Purple Hellebore*	T3186 <i>Helleborus purpurascens</i>
ZI WAN	紫菀	Tatarion Aster	T0781 <i>Aster tataricus</i>
ZI WEI	紫葳	Chinese Trumpetcreeper	T1160 <i>Campsis grandiflora</i>
ZI WEI GEN	紫薇根	Common Crapemyrtle Root	T3670 <i>Lagerstroemia indica</i>
ZI WEI HUA	紫薇花	Common Crapemyrtle Flower	T3671 <i>Lagerstroemia indica</i>
ZI WEI JING YE	紫薇茎叶	Chinese Trumpetcreeper Stem-leaf	T1161 <i>Campsis grandiflora</i>
ZI WEI YE	紫薇叶	Common Crapemyrtle Leaf	T3672 <i>Lagerstroemia indica</i>
ZI WU TOU	紫乌头*	Violet Monkshood*	T0140 <i>Aconitum violaceum</i>
ZI XIAO RONG ZI	自消容子	Assam Crotalaria Seed	T1815 <i>Crotalaria assamica</i>
ZI XUE HUA	紫雪花	Indian Leadword	T5028 <i>Plumbago indica</i>
ZI YANG TI JIA	紫羊蹄甲	Purple Bauhinia	T0879 <i>Bauhinia purpurea</i>
ZI YE	梓叶	Ovate Catalpa Leaf	T1264 <i>Catalpa ovata</i>
ZI YU LAN PI	紫玉兰皮	Lily Magnolia Bark	T4042 <i>Magnolia liliflora</i>
ZI YUN YING	紫云英	Chinese Milkvetch	T0805 <i>Astragalus sinicus</i>

ZI YUN YING ZI	紫云英子	Chinese Milkvetch Seed	T0806 <i>Astragalus sinicus</i>
ZI ZHI	紫芝	Japanese Ganoderma	T2846 <i>Ganoderma japonicum</i> [Syn. <i>Ganoderma sinense</i> ]
ZONG BAO GE NI DI MU	总苞格尼迪木*		T3036 <i>Gnidia involucrata</i>
ZONG JUAN SHI RUI	纵卷石蕊*		T1524 <i>Cladonia convoluta</i>
ZONG KUI CAO SU	棕盔糙苏*		T4807 <i>Phlomis brunneogaleata</i>
ZONG LV PI	棕榈皮	Fortune Windmillpalm	T6485 <i>Trachycarpus fortunei</i>
ZONG ZAO	棕藻 <i>Ecklonia stolonifera</i>	Brown Alga <i>Ecklonia stolonifera</i>	T2322 <i>Ecklonia stolonifera</i>
ZONG ZHUANG DONG FENG JU YE	总状东风橘叶*	Racemose Atalantia Leaf*	T0816 <i>Atalantia racemosa</i>
ZONG ZHUANG HUA LI	总状花藜	Racemose Goosefoot*	T1363 <i>Chenopodium championii</i>
ZONG ZHUANG HUA YANG TI JIA	总状花羊蹄甲	Racemose Bauhinia*	T0880 <i>Bauhinia racemosa</i>
ZONG ZHUANG JI XUE TENG	总状鸡血藤*	Racemose Millettia*	T4242 <i>Millettia racemosa</i>
ZONG ZHUANG JIA RUI XIANG	总状假瑞香		T2034 <i>Daphnopsis racemosa</i>
ZONG ZHUANG SHENG MA	总状升麻	Racemose Bugbane*	T1424 <i>Cimicifuga racemosa</i>
ZONG ZHUANG TIE LI MU	总状铁力木	Racemose Mesua*	T4204 <i>Mesua racemosa</i>
ZONG ZHUANG TU MU XIANG	总状土木香	Racemose Inula	T3437 <i>Inula racemosa</i>
ZOU BO ZHUANG ZHU SHI DOU	皱波状猪屎豆	Crispate Crotalaria*	T1818 <i>Crotalaria crispata</i>
ZOU MA QIN	走马芹	Paucivitat Cowparsnip	T3218 <i>Heracleum moellendorffii</i> var. <i>paucivitatum</i>
ZOU WEN TANG SONG CAO	绉纹唐松草	Rugose Meadowrue*	T6407 <i>Thalictrum rugosum</i>
ZU YE CAO	足叶草	Peltate Milkwort*	T5080 <i>Polygala peltatum</i>
ZUAN GUO SUAN JIE	钻果蒜芥	Hedge Mustard	T5968 <i>Sisymbrium officinale</i>
ZUI DA WAN SHOU JU	最大万寿菊*	Maxima Marigold*	T6280 <i>Tagetes maxima</i>
ZUI GAO MU JING YE	最高牡荆叶*	Highest Chastetree Leaf*	T6783 <i>Vitex altissima</i>
ZUO JIANG CAO	酢浆草	Creeping Oxalis	T4564 <i>Oxalis corniculata</i> [Syn. <i>Oxalis repens</i> ]

The asterisk (\*) following a plant name shows that the name is given by authors of the books.

# TCM Plant Traditional Effect Index

This index lists all 1311 normalized TCM traditional effects terms in English appeared in the encyclopedia in alphabetical order and the related plant code number (from T0001 to T6926) and Latin name follow the bold term immediately.

- abate fever** T0947 *Bixa orellana*, T3295 *Huperzia serrata* [Syn. *Lycopodium serratum*], T4516 *Oplopanax elatus*, T5626 *Ruta graveolens*.
- abate jaundice** T0672 *Artemisia capillaris*, T0695 *Artemisia scoparia* [Syn. *Artemisia capillaris* var. *scoparia*], T4538 *Oroxylum indicum*, T5414 *Ranunculus japonicus*, T6227 *Swertia mussotii*.
- abate swelling** T5740 *Sargassum vachellianum*.
- accept qi and calm asthma** T0554 *Aquilaria agallocha*, T0555 *Aquilaria sinensis*, T5270 *Psoralea corylifolia*.
- allay thirst** T0158 *Actinidia chinensis*, T0423 *Ampelopsis brevipedunculata*, T0976 *Bombyx mori*, T0988 *Bos taurus domesticus*; *Bubalus bubalis*, T1266 *Catha edulis*, T2222 *Diospyros lotus*, T2431 *Eriobotrya japonica*, T2763 *Fragaria ananassa*, T4102 *Mangifera indica*, T5332 *Punica granatum*, T5419 *Raphanus sativus*, T6347 *Terminalia chebula*, T6544 *Triticum aestivum* [Syn. *Triticum vulgare*].
- allay vexation and thirst** T3829 *Ligustrum robustum*.
- anesthetize** T0533 *Antiaris toxicaria* [Syn. *Ambora toxicaria*], T1674 *Corchorus capsularis*.
- anesthetize and settle pain** T0502 *Anisodus tanguticus* [Syn. *Scopolia tangutica*], T4323 *Murraya paniculata* [Syn. *Chalcas paniculata*], T4325 *Murraya paniculata* var. *exotica*, T5819 *Scopolia acutangula* [Syn. *Anisodus acutangulus*].
- antiallergic** T3936 *Luffa operculata*.
- anticancer** T0830 *Auricularia auricula*, T0831 *Auricularia delicata*, T1162 *Camptotheca acuminata*, T1271 *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochera rosea*], T1318 *Cephalotaxus fortunei*, T1319 *Cephalotaxus hainanensis* [Syn. *Cephalotaxus mannii*], T1322 *Cephalotaxus oliveri*, T1323 *Cephalotaxus sinensis* [Syn. *Cephalotaxus harringtonia* var. *sinensis*], T1904 *Curcuma kwangsiensis*, T1909 *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*], T2143 *Dianthus chinensis*, T2145 *Dianthus superbus*, T2147 *Dianthus versicolor*, T2748 *Fomes fomentarius* [Syn. *Pyropolyporus fomentarius*; *Boletus fomentarius*; *Polyporus fomentarius*], T2844 *Ganoderma applanatum*, T2897 *Gelsemium elegans*, T3229 *Herichium erinaceus* [Syn. *Hydnum erinaceus*], T3231 *Hernandia sonora* [Syn. *Hernandia ovigera*], T3742 *Lentinus edodes*, T4120 *Marsdenia tenacissima*, T4131 *Maytenus confertiflorus*, T4134 *Maytenus hookeri*, T5129 *Polyporus umbellatus*, T5396 *Rabdosia rubescens*, T6311 *Taxus cuspidata*, T6478 *Torreya jackii*.
- anticarcinoma** T0165 *Actinidia rubricaulis* var. *coriacea*, T3102 *Haplophyllum hispanicum*, T3325 *Hymenoxys grandiflora*, T3326 *Hymenoxys odorata*, T4130 *Maytenus chuchuhuasca*, T4366 *Naematoloma fasciculare*, T4367 *Naematoloma sublateritium*, T4457 *Nyssa sinensis*, T5830 *Scurrura atropurpurea*, T6109 *Stemona collinsae*.
- arouse liquor** T0860 *Balanophora japonica*, T1471 *Citrus chachiensis*, T1472 *Citrus chachiensis*, T1473 *Citrus cultivars*, T1474 *Citrus decumana*, T1478 *Citrus grandis*, T1516 *Citrus tankan*, T1517 *Citrus tankan*, T1518 *Citrus unshiu*, T2758 *Fortunella crassifolia*, T2759 *Fortunella japonica*, T2760 *Fortunella margarita*, T4088 *Malus pumila*.
- arouse spirit** T1608 *Coffea arabica*, T1610 *Coffea liberica*, T6416 *Thamnia vermicularis*.
- arrest diarrhea** T3348 *Hypericum elodeoides*, T3368 *Hypericum wightianum*, T5268 *Psidium guajava*, T5517 *Rhododendron molle*.
- astringe intestines** T4635 *Papaver somniferum*, T4637 *Papaver somniferum*, T5327 *Punica granatum*, T5329 *Punica granatum*, T5332 *Punica granatum*, T5361 *Pyrus betulaeifolia*, T6266 *Syzygium cumini*.
- astringe intestines and check diarrhea** T3162 *Helicia nilagirica*, T3569 *Juglans regia*, T4343 *Myrica esculent*, T4351 *Myristica fragrans*, T4629 *Papaver nudicaule*, T4630 *Papaver nudicaule* ssp. *amurense*, T4631 *Papaver nudicaule* var. *chinense*, T5228 *Prunus mume*, T5328 *Punica granatum*, T5568 *Rosa laevigata*.
- astringe intestines and check dysentery** T5112 *Polygonum perigrinatoris*.
- astringe intestines and secure essence** T5529 *Rhodomyrtus tomentosa*.
- astringe intestines and stanch bleeding** T0255 *Ailanthus altissima*, T6475 *Toona sinensis*.

- attack gastrointestinal accumulation** T2585 *Euphorbia esula*.
- attack toxin** T2650 *Excoecaria agallocha*, T2857 *Garcinia hanburyi*, T3287 *Huechys sanguinea*, T3327 *Hyoscyamus niger*.
- attack toxin and cure sores** T4265 *Momordica cochinchinensis*, T4338 *Mylabris phalerata*; *Mylabris cichorii*.
- attack toxin and dissipate binds** T1084 *Buthus martensi*.
- attack toxin and expel stasis** T4008 *Lytta caraganae*.
- attack toxin and kill worms** T3300 *Hydnocarpus anthelminticus*.
- attack toxin and relieve pain** T4240 *Millettia pachycarpa*.
- boost essence** T3279 *Homo sapiens*, T4658 *Parmelia tinctorum*.
- boost essence and blood** T1337 *Cervus nippon*; *Cervus elaphus*, T1455 *Cistanche deserticola*, T1456 *Cistanche salsa*, T1952 *Cynanchum auriculatum*, T1953 *Cynanchum bungei*, T1972 *Cynomorium songaricum*, T5927 *Sesamum indicum* [Syn. *Sesamum orientale*].
- boost essence and replenish marrow** T5446 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*].
- boost heart and liver** T3743 *Lentinus lepideus*.
- boost intestines and stomach** T1660 *Coprinus atramentarius*.
- boost kidney** T5938 *Setaria italica*, T6073 *Sphallerocarpus gracilis*, T6544 *Triticum aestivum* [Syn. *Triticum vulgare*], T6750 *Vicia sativa*.
- boost kidney and fortify spleen** T1958 *Cynanchum otophyllum*.
- boost kidney and nourish liver** T5498 *Rhodiola quadrifida*.
- boost kidney and quiet spirit** T5697 *Salvia trijuga*.
- boost kidney and secure essence** T4400 *Nelumbo nucifera*.
- boost kidney and settle asthma** T6264 *Syzygium buxifolium*.
- boost kidney and strengthen lumbus** T2540 *Euonymus fortunei*.
- boost kidney and strengthen sinews** T5848 *Securinega suffruticosa*.
- boost kidney and supplement vacuity** T1017 *Brassica oleracea* var. *capitata*.
- boost liver** T0541 *Apis cerana*.
- boost liver and brighten eyes** T0793 *Astragalus complanatus*.
- boost liver and kidney** T3389 *Ilex cornuta*, T3390 *Ilex cornuta*, T4828 *Photinia serrulata*.
- boost lung** T0985 *Bos taurus domesticus*; *Bubalus bubalis*.
- boost lung and kidney** T2195 *Dioscorea deltoidea*.
- boost lung and quiet heart** T6902 *Zea mays*.
- boost lung and relieve cough** T4350 *Myriopterion extensum*.
- boost lung and stomach** T0989 *Bos taurus domesticus*; *Bubalus bubalis*.
- boost qi** T1961 *Cynanchum thesioides*, T2837 *Gallus gallus domesticus*, T5244 *Prunus tomentosa*, T5924 *Sesamum indicum*, T6150 *Streptopelia orientalis*.
- boost qi and disinhibit water** T3981 *Lycopus lucidus*.
- boost qi and engender liquid** T1596 *Codonopsis canescens*, T1597 *Codonopsis clematidea*, T1599 *Codonopsis pilosula*, T1600 *Codonopsis pilosula* var. *modesta* [Syn. *Codonopsis modesta*], T1601 *Codonopsis subglobosa*, T1602 *Codonopsis tangshen*, T1603 *Codonopsis tubulosa*, T3447 *Ipomoea batatas* [Syn. *Convolvulus batatas*], T5791 *Schisandra chinensis*, T5802 *Schisandra sphenanthera*.
- boost qi and fortify spleen** T0041 *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*], T0824 *Atractylodes macrocephala* [Syn. *Atractylis macrocephala*], T1254 *Castanea mollissima*, T1591 *Cocos nucifera*, T1593 *Cocos nucifera*, T4681 *Pedicularis decora*, T4902 *Pimpinella thelungiana*, T5260 *Pseudostellaria heterophylla*, T5465 *Rhaponticum carthamoides*, T6492 *Trapa bispinosa*.
- boost qi and nourish yin** T0163 *Actinidia latifolia*, T6087 *Spiranthes sinensis*.
- boost qi and secure exterior** T0791 *Astragalus chrysopterus*, T0794 *Astragalus ernestii*, T0798 *Astragalus membranaceus*, T0800 *Astragalus mongholicus*, T3128 *Hedysarum multijugum*.
- boost qi and supplement vacuity** T2962 *Ginkgo biloba*, T2963 *Ginkgo biloba*, T4820 *Phoenix dactylifera*.
- boost qi-blood** T2846 *Ganoderma japonicum* [Syn. *Ganoderma sinense*], T2848 *Ganoderma lucidum*.
- boost stomach** T4088 *Malus pumila*, T4099 *Mangifera indica*, T4103 *Mangifera persiciformis*.
- boost stomach and engender liquid** T2094 *Dendrobium aduncum*, T2096 *Dendrobium aurantiacum* var. *denneanum*, T2098 *Dendrobium chrysanthum*, T2100 *Dendrobium densiflorum*, T2102 *Dendrobium fimbriatum* var. *oculatum*, T2105 *Dendrobium loddigesii*, T2106 *Dendrobium moniliforme*, T2107 *Dendrobium nobile*, T2108 *Dendrobium officinale*, T2983 *Glehnia littoralis*.
- boost wits and nourish heart** T5499 *Rhodiola sacra*.
- break accumulation** T2584 *Euphorbia ebracteolata*, T2587 *Euphorbia fischeriana*.
- break accumulation and free stool** T2596 *Euphorbia kansui*.
- break accumulation and kill worms** T6105 *Stellera chamaejasme*, T6820 *Wikstroemia indica*.
- break blood** T3306 *Hydrangea paniculata*, T6062 *Sparganium stoloniferum*.
- break blood and dispel stasis** T1904 *Curcuma kwangsiensis*, T1909 *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*].
- break blood and disperse concretion** T2597 *Euphorbia lathyris*, T4338 *Mylabris phalerata*; *Mylabris cichorii*.
- break blood and disperse swelling** T6267 *Syzygium jambos*.
- break blood and free menstruation** T2143 *Dianthus chinensis*, T2145 *Dianthus superbus*, T2147 *Dianthus versicolor*, T2536 *Euonymus alatus*, T5028 *Plumbago indica*.
- break blood and move qi** T1903 *Curcuma aromatica*, T1905 *Curcuma longa*.
- break blood and soften hard** T3412 *Impatiens balsamina*.
- break foul** T2008 *Dalbergia odorifera*, T2013 *Dalbergia sissoo*, T3868 *Liquidambar orientalis*.
- break phlegm and disinhibit orifices** T1008 *Brassica juncea*.
- break phlegm and open orifices** T2975 *Gleditsia delavayi*, T2976 *Gleditsia fera*.
- break phlegm and repel foulness** T6197 *Styrax benzoin*, T6204 *Styrax tonkinensis*.
- break qi and dissipate binds** T5137 *Poncirus trifoliata*.
- break qi and dissipate glomus** T1468 *Citrus aurantium*, T1521 *Citrus wilsonii*, T5141 *Poncirus trifoliata*.
- break qi and move phlegm** T1467 *Citrus aurantium*, T5140 *Poncirus trifoliata*.
- break stasis** T1210 *Carpesium abrotanoides*, T3287 *Huechys sanguinea*.
- break stasis and dissipate binds** T5103 *Polygonum hydropiper*.
- break stasis and free menstruation** T0661 *Artemisia anomala*.
- brighten eyes** T0819 *Atractylodes chinensis*, T0821 *Atractylodes japonica*,

- T0823 *Atractylodes lancea*, T0986 *Bos taurus domesticus*; *Bubalus bubalis*, T1032 *Broussonetia papyrifera*, T1911 *Cuscuta australis*, T1912 *Cuscuta chinensis*, T1913 *Cuscuta japonica*, T2244 *Doellingeria scaber* [Syn. *Aster scaber*], T2407 *Equisetum arvense*, T2766 *Fraxinus bungeana*, T2767 *Fraxinus chinensis*, T2774 *Fraxinus paxiana*, T2777 *Fraxinus rhynchophylla* [Syn. *Fraxinus chinensis* var. *rhynchophylla*], T2779 *Fraxinus stylosa*, T2780 *Fraxinus szaboana* [Syn. *Fraxinus chinensis* var. *acuminata*], T2803 *Frullania tamarisci* ssp. *moniliata* [Syn. *Frullania moniliata*], T2841 *Gallus gallus domesticus*, T3779 *Leucas aspera*, T3955 *Lycium barbarum*, T3958 *Lycium chinense*, T3969 *Lycopodium casuarinoides*, T4263 *Momordica charantia*, T4471 *Ocimum basilicum*, T4551 *Osmorhiza aristata* var. *laxa*, T4656 *Parmelia saxatilis*, T4658 *Parmelia tinctorum*, T5214 *Prunella vulgaris*, T5227 *Prunus mume*, T5593 *Rubus idaeus*, T5690 *Salvia roborowskii*, T6150 *Streptopelia orientalis*, T6437 *Thlaspi arvense*, T6552 *Trollius chinensis* [Syn. *Trollius asiaticus* var. *chinensis*], T6553 *Trollius ledebourii*.
- brighten eyes and blacken hair** T3828 *Ligustrum lucidum*.
- brighten eyes and eliminate eye screens** T1296 *Celosia argentea*, T2434 *Eriocaulon buergerianum*.
- brighten eyes and transform damp** T1753 *Cosmos bipinnata*.
- brighten eyes; flower: disinhibit urine** T1305 *Centaurea cyanus*.
- calm** T0184 *Adonis amurensis*, T0554 *Aquilaria agallocha*, T0555 *Aquilaria sinensis*, T1084 *Buthus martensi*, T1525 *Cladonia fallax*, T4243 *Millettia reticulata*, T4423 *Nicandra physaloides*, T5817 *Scolopendra subspinipes mutilans*, T6457 *Tilia japonica*, T6458 *Tilia miqueliana*, T6533 *Trillium kamschaticum*, T6535 *Trillium tschonoskii*, T6562 *Tulipa gesneriana*.
- calm and lower blood pressure** T4001 *Lysimachia davurica*.
- calm and quiet spirit** T6358 *Tetraplodon mnioides* [Syn. *Tetraplodon bryoides*; *Splachnum mnioides*].
- calm and relieve pain** T6135 *Stephania succifera*.
- calm asthma** T0078 *Aconitum barbatum* var. *puberulum* [Syn. *Aconitum ochranthum*], T1241 *Cassia occidentalis*, T2039 *Datura innoxia*, T2043 *Datura metel*, T2047 *Datura stramonium*, T2268 *Drosera rotundifolia*, T2279 *Dryopteris championii*, T3850 *Lindera glauca*, T3885 *Litsea cubeba*, T4042 *Magnolia liliflora*, T4371 *Nandina domestica*, T4715 *Perilla frutescens*, T4717 *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*], T4719 *Perilla frutescens* var. *arguta*, T4722 *Perilla frutescens* var. *crispa*, T4796 *Pheretima aspergillum*; *Allolobophora caliginosa trapezoides*, T4908 *Pinus bungeana*, T5502 *Rhododendron anthopogonoides*, T5522 *Rhododendron seniavinii*, T6729 *Veronica spuria*.
- calm liver** T0544 *Apium graveolens*, T2219 *Diospyros kaki*, T3142 *Helianthus annuus*, T3775 *Lethariella cladonioides*, T3859 *Linum usitatissimum*, T4796 *Pheretima aspergillum*; *Allolobophora caliginosa trapezoides*, T6076 *Spinacia oleracea*.
- calm liver and brighten eyes** T1184 *Capsella bursa-pastoris*, T1395 *Chrysanthemum morifolium* [Syn. *Dendranthema morifolium*], T1528 *Cladonia stellaris* [Syn. *Cladonia alpestris*], T5100 *Polygonum chinense*, T5871 *Selenarctos thibetanus*; *Ursus arctos*.
- calm liver and extinguish wind** T0644 *Armillaria mellea*, T0645 *Armillariella mellea*, T6618 *Uncaria homomalla* [Syn. *Uruparia homomalla*; *Uruparia tonkinensis*; *Uruparia lanosa* var. *parviflora*], T6903 *Zephyranthes candida*.
- calm liver and lower blood pressure** T0428 *Ampelopsis megalophylla*, T1927 *Cycas revoluta*, T2729 *Filipendula ulmaria*, T4609 *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*].
- calm liver and quiet spirit** T3372 *Hypodematum sinense*.
- calm liver and raise spirit** T0210 *Agaricus bisporus*, T0211 *Agaricus campestris*.
- calm liver and relieve pain** T0625 *Aristolochia contorta*, T0627 *Aristolochia debilis* [Syn. *Aristolochia longa*], T4580 *Paeonia albiflora* [Syn. *Paeonia lactiflora*].
- calm liver and settle fright** T6651 *Urtica cannabina*, T6652 *Urtica dioica*.
- calm liver and subdue yang** T1804 *Cristaria plicata*; *Hyriopsis cumingii*, T2060 *Delonix regia*, T2890 *Gastrodia elata*, T5657 *Salsola collina*.
- check diarrhea** T0360 *Alpinia oxyphylla*, T1299 *Celosia cristata*, T1493 *Citrus limon*, T1497 *Citrus limonia*, T1911 *Cuscuta australis*, T1912 *Cuscuta chinensis*, T1913 *Cuscuta japonica*, T1937 *Cydonia oblonga*, T1939 *Cymbopogon citratus*, T1943 *Cymbopogon goeringii*, T2346 *Embelia oblongifolia*, T3567 *Juglans regia*, T4625 *Papaver commutatum* [Syn. *Papaver rhoeas*], T4787 *Phellinus igniarius*, T5266 *Psidium guajava*, T5570 *Rosa roxburghii*, T6476 *Torilis japonica*, T6746 *Vicia faba*.
- check discharge** T1183 *Capra hircus*; *Ovis aries*, T1299 *Celosia cristata*, T2632 *Euryale ferox*, T4036 *Magnolia coco*, T5327 *Punica granatum*, T5329 *Punica granatum*, T5567 *Rosa laevigata*.
- check dysentery** T0248 *Agrimonia pilosa*, T0249 *Agrimonia pilosa* var. *japonica*, T0444 *Ananas comosus*, T0542 *Apis cerana*, T2032 *Daphniphyllum calycinum*, T2079 *Delphinium kamaonense* var. *glabrescens*, T2268 *Drosera rotundifolia*, T3145 *Helianthus annuus*, T5531 *Rhus chinensis* [Syn. *Rhus semialata*], T6347 *Terminalia chebula*, T6374 *Thalictrum atriplex*.
- check dysentery and diarrhea** T0197 *Aegle marmelos*, T2438 *Erodium stephanianum*, T2943 *Geranium nepalense*, T2944 *Geranium pratense*, T2947 *Geranium sibiricum*, T2949 *Geranium wilfordii*, T4545 *Oryza sativa*, T6670 *Vaccinium bracteatum*.
- check dysentery and promote astriction** T5573 *Rosa sericea*.
- check flooding and spotting** T2234 *Dipsacus asperoides*, T2235 *Dipsacus japonicus*.
- check hiccups** T1168 *Canavalia ensiformis*, T1169 *Canavalia gladiata*.
- check hyperactivity** T0553 *Apocynum venetum*.
- check sweating** T0824 *Atractylodes macrocephala* [Syn. *Atractylis macrocephala*], T2381 *Ephedra sinica*.
- check tetany** T0979 *Bombyx mori*, T1332 *Cercidiphyllum japonicum*.
- check turbid vaginal discharge** T2961 *Ginkgo biloba*.
- check vomiting** T0012 *Abrus precatorius*, T0554 *Aquilaria agallocha*, T0555 *Aquilaria sinensis*, T1488 *Citrus junos*, T2644 *Evodia rutaecarpa*, T2646 *Evodia rutaecarpa* var. *officinalis*, T3250 *Hierochloe odorata*, T3286 *Hovenia dulcis*, T3427 *Inula britannica*, T3428 *Inula britannica* var. *chinensis*, T3434 *Inula linariaefolia*, T4099 *Mangifera indica*, T4103 *Mangifera persiciformis*, T4829 *Phragmites communis*.
- check vomiting and diarrhea** T4818 *Phoebe nanmu*.
- check vomiting and quiet fetus** T0418 *Amomum muricarpum*.
- check vomiting and stanch bleeding** T0924 *Bergenia purpurascens*.
- clean heat** T0687 *Artemisia myriantha*.

- clear and discharge large intestines** T0624 *Aristolochia contorta*, T0626 *Aristolochia debilis* [Syn. *Aristolochia longa*], T0630 *Aristolochia indica*, T0633 *Aristolochia maxima*, T0640 *Aristolochia triangularis*.
- clear damp heat** T0902 *Berberis diaphana*, T1672 *Corallodiscus flabellatus* [Syn. *Didissandra flabellata*], T1759 *Cotinus coggygria* var. *cinerea*, T1966 *Cynara scolymus*, T2718 *Ficus carica*, T2830 *Galium aparine*, T2909 *Gentiana crassicaulis*, T2910 *Gentiana dahurica*, T2913 *Gentiana kaufmanniana*, T2919 *Gentiana macrophylla*, T2932 *Gentiana siphonantha*, T2934 *Gentiana straminea*, T2936 *Gentiana tianschanica*, T2937 *Gentiana tibetica*, T3342 *Hypericum bellum*, T4369 *Nandina domestica*, T5520 *Rhododendron ovatum* [Syn. *Rhododendron lamprophyllum*; *Azalea ovata*], T5604 *Rudbeckia laciniata*, T5942 *Sida acuta*.
- clear fire** T5214 *Prunella vulgaris*.
- clear fire and engender liquid** T4610 *Panax quinquefolium*.
- clear head and eyes** T1152 *Camellia sinensis* [Syn. *Thea sinensis*], T3392 *Ilex kudingcha*, T3393 *Ilex latifolia*, T3829 *Ligustrum robustum*, T4184 *Mentha haplocalyx* [Syn. *Mentha canadensis*; *Mentha arvensis* var. *haplocalyx*; *Mentha arvensis*], T6791 *Vitex rotundifolia* [Syn. *Vitex trifolia* var. *simplicifolia*], T6793 *Vitex trifolia*.
- clear heart** T2803 *Frullania tamarisci* ssp. *moniliata* [Syn. *Frullania moniliata*].
- clear heart and cool blood** T1907 *Curcuma wengujin*.
- clear heart and cool liver** T0987 *Bos taurus domesticus*; *Bubalus bubalis*.
- clear heart and downbear fire** T3578 *Juncus effusus*.
- clear heart and quiet spirit** T3832 *Lilium brownii* var. *viridulum* [Syn. *Lilium brownii* var. *colchesteri*], T3835 *Lilium longiflorum*, T3836 *Lilium pumilum* [Syn. *Lilium tenuifolium*], T3839 *Lilium tigrinum* [Syn. *Lilium lancifolium*], T4385 *Narcissus tazetta* var. *chinensis*.
- clear heart fire** T0632 *Aristolochia manshuriensis*, T4401 *Nelumbo nucifera*.
- clear heat** T0157 *Actinidia callosa* var. *henryi*, T0423 *Ampelopsis brevipedunculata*, T0544 *Apium graveolens*, T0660 *Artemisia annua*, T0662 *Artemisia apiacea* [Syn. *Artemisia carvifolia*; *Artemisia caruifolia*], T0678 *Artemisia japonica*, T0705 *Artemisia vestita*, T0784 *Astilbe chinensis*, T0834 *Averrhoa carambola*, T0888 *Beesia calthaeifolia*, T0973 *Bombax malabaricum* [Syn. *Gossampinus malabarica*], T1045 *Bubalus bubalis*, T1161 *Campsis grandiflora*, T1165 *Canarium album*, T1172 *Canna edulis*, T1194 *Carassius auratus*, T1199 *Carduus acanthoides*, T1200 *Carduus crispus*, T1210 *Carpesium abrotanoides*, T1266 *Catha edulis*, T1526 *Cladonia rangiferina*, T1746 *Corydalis taliensis*, T1831 *Crotalaria sessiliflora*, T1878 *Cucumis sativus*, T2101 *Dendrobium fimbriatum*, T2221 *Diospyros kaki*, T2222 *Diospyros lotus*, T2263 *Dregea volubilis*, T2293 *Dumortiera hirsuta*, T2334 *Elephantopus scaber*, T2445 *Ervatamia officinalis*, T2495 *Eschscholzia californica*, T2649 *Evolvulus alsinoides*, T2994 *Gloiopeltis furcata*, T3085 *Gynostemma pentaphyllum*, T3125 *Hedyotis chrysotricha* [Syn. *Oldenlandia chrysotricha*], T3143 *Helianthus annuus*, T3277 *Homo sapiens*, T3528 *Isodon ternifolia*, T3529 *Isodon ternifolius*, T3555 *Jasminum nudiflorum*, T3649 *Laccifer lacca*, T3815 *Ligularia stenocephala*, T3935 *Luffa cylindrica*, T4055 *Mahonia bealei*, T4062 *Mahonia fortunei*, T4066 *Mahonia japonica*, T4072 *Mahonia shenii*, T4080 *Mallotus apelta*, T4178 *Melodinus hemsleyanus*, T4331 *Musa paradisiaca* var. *sapientum* [Syn. *Musa sapientum*], T4368 *Nandina domestica*, T4471 *Ocimum basilicum*, T4500 *Onosma paniculatum*, T4616 *Pandanus tectorius*, T4796 *Pheretima aspergillum*; *Allolobophora caliginosa trapezoides*, T4840 *Phyllanthus niruri*, T4848 *Physalis angulata*, T5120 *Polygonum tinctorium*, T5126 *Polypodium virginianum*, T5127 *Polypodium vulgare*, T5239 *Prunus salicina*, T5423 *Rauwolfia verticillata*, T5425 *Rauwolfia verticillata* f. *rubrocarpa*, T5426 *Rauwolfia verticillata* var. *hainanensis*, T5427 *Rauwolfia vomitoria*, T5435 *Rauwolfia latifrons*, T5441 *Rauwolfia perakensis*, T5484 *Rhinoceros unicornis*; *Rhinoceros sondaicus*; *Rhinoceros sumatrensis*, T5719 *Sapindus mukorossi*, T5767 *Saussurea pulchella*, T5857 *Sedum sarmentosum*, T5863 *Selaginella moellendorffii*, T5978 *Smilax glauco-china*, T6330 *Tephrosia kirilowii* [Syn. *Senecio integrifolius* var. *fauriei*], T6372 *Thalictrum acutifolium*, T6381 *Thalictrum faberi*, T6388 *Thalictrum fortunei*, T6403 *Thalictrum petaloideum*, T6431 *Thesium chinense*, T6522 *Trifolium repens*, T6723 *Veronica arvensis*, T6752 *Vigna angularis* [Syn. *Dolichus angularis*; *Phaseolus angularis*], T6820 *Wikstroemia indica*, T6912 *Zinnia elegans*.
- clear heat and allay thirst** T3234 *Heteropogon contortus*, T3957 *Lycium chinense*, T6416 *Thamnia vermicularis*.
- clear heat and boost yin** T1950 *Cynanchum ascyrifolium*, T1951 *Cynanchum atratum*, T1962 *Cynanchum versicolor*, T2952 *Gerbera piloselloides*, T6582 *Tylophora ovata*.
- clear heat and brighten eyes** T1981 *Cyprinus carpio*, T5762 *Saussurea nigrescens*, T6072 *Sphagnum palustre* [Syn. *Sphagnum obtusifolium*; *Sphagnum cymbifolium*], T6426 *Thermopsis chinensis*, T6732 *Vespertilio superans*.
- clear heat and calm liver** T0553 *Apocynum venetum*, T1271 *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochera rosea*], T1697 *Cornus controversa* [Syn. *Bothrocaryum controversum*], T2731 *Firmiana simplex*, T2732 *Firmiana simplex*, T2733 *Firmiana simplex*, T4843 *Phyllanthus urinaria*, T5428 *Rauwolfia yunnanensis*, T6625 *Uncaria macrophylla*, T6629 *Uncaria rhynchophylla* [Syn. *Nauclea rhynchophylla*], T6633 *Uncaria sinensis*.
- clear heat and check dysentery** T0511 *Annona reticulata*, T5299 *Pteris wallichiana*, T5375 *Quercus mongolica*.
- clear heat and cool blood** T0266 *Ajuga macrosperma*, T0379 *Alternanthera philoxeroides*, T0852 *Bacopa monniera*, T0964 *Boenninghausenia albiflora*, T1160 *Campsis grandiflora*, T2231 *Diphylleia grayi*, T2232 *Diphylleia sinensis*, T3155 *Helianthus tuberosus*, T3387 *Idesia polycarpa*, T3549 *Ixora chinensis*, T4148 *Medicago sativa*, T4506 *Ophioglossum vulgatum*, T4582 *Paeonia delavayi*, T4584 *Paeonia lactiflora* wild, T4585 *Paeonia moutan* [Syn. *Paeonia suffruticosa*], T4586 *Paeonia obovata*, T4590 *Paeonia veitchii*, T5447 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], T5826 *Scrophularia buergeriana*, T5828 *Scrophularia ningpoensis*, T5851 *Sedum alfredii* [Syn. *Sedum formosanum*].
- clear heat and disinhibit damp** T0010 *Abrus fruticulosus* [Syn. *Abrus cantoniensis*], T0156 *Actinidia arguta*, T0161 *Actinidia eriantha*, T0180 *Adina pilulifera* [Syn. *Cephalanthus pilulifera*], T0297 *Alchornea trewioides*, T0424 *Ampelopsis brevipedunculata* var. *hancei*, T0428 *Ampelopsis megalophylla*, T0468 *Anemone hupehensis*, T0573 *Aralia elata*, T0601 *Ardisia pusilla*, T0672 *Artemisia capillaris*, T0695

*Artemisia scoparia* [Syn. *Artemisia capillaris* var. *scoparia*], T0696 *Artemisia sieversiana*, T0751 *Asparagus officinalis*, T0859 *Balanophora involucreta*, T0906 *Berberis julianae*, T0933 *Betula platyphylla*, T0935 *Betula platyphylla* var. *japonica*, T1017 *Brassica oleracea* var. *capitata*, T1034 *Broussonetia papyrifera*, T1163 *Campylotropis hirtella*, T1184 *Capsella bursa-pastoris*, T1251 *Cassitha filiformis*, T1261 *Catalpa ovata*, T1275 *Cayratia japonica*, T1282 *Cedrus deodara*, T1311 *Centella asiatica*, T1402 *Chrysosplenium alternifolium*, T1561 *Clerodendron serratum*, T1569 *Clerodendrum serratum* var. *amplexifolium*, T1657 *Conyza canadensis* [Syn. *Erigeron canadensis*], T1733 *Corydalis racemosa*, T1813 *Crotalaria albida*, T1826 *Crotalaria mucronata*, T1967 *Cynoglossum amabile*, T1969 *Cynoglossum officinale*, T2056 *Debregeasia longifolia*, T2272 *Drymaria diandra* [Syn. *Drymaria cordata* ssp. *diandra*], T2348 *Embelia ribes*, T2719 *Ficus fistulosa* [Syn. *Ficus harlandii*], T2927 *Gentiana rhodantha*, T2941 *Gentianopsis paludosa*, T2950 *Gerbera anandria* [Syn. *Leibnitzia anandria*], T2993 *Gloeostereum incarnatum*, T3192 *Hemerocallis citrina*, T3193 *Hemerocallis fulva*, T3195 *Hemerocallis lilio-asphodelus*, T3197 *Hemerocallis minor*, T3243 *Hibiscus rosa-sinensis*, T3244 *Hibiscus syriacus*, T3245 *Hibiscus syriacus*, T3270 *Holboellia fargesii*, T3311 *Hydrocotyle sibthorpioides*, T3356 *Hypericum japonicum*, T3479 *Isodon amethystoides*, T3646 *Kyllinga brevifolia*, T3670 *Lagerstroemia indica*, T3675 *Lagopsis supina*, T3774 *Lespedeza tomentosa*, T3830 *Ligustrum sinense*, T3932 *Ludwigia octovalvis*, T3989 *Lygodium flexuosum* [Syn. *Lygodium pinnatifidum*; *Ophioglossum flexuosum*], T4028 *Maesa indica*, T4109 *Marchantia polymorpha*, T4149 *Medicago sativa*, T4217 *Microcos paniculata* [Syn. *Grewia microcos*], T4220 *Microlepia strigosa* [Syn. *Trichomanes strigosa*], T4225 *Microsorium punctatum*, T4248 *Mimosa pudica*, T4252 *Mirabilis jalapa*, T4361 *Myrsine africana*, T4370 *Nandina domestica*, T4538 *Oroxylum indicum*, T4564 *Oxalis corniculata* [Syn. *Oxalis repens*], T4823 *Pholidota yunnanensis*, T4831 *Phtheirospermum japonicum* [Syn. *Gerardia japonica*], T4835 *Phyllanthus emblica*, T4836 *Phyllanthus emblica*, T4882 *Picrasma quassioides* [Syn. *Picrasma ailanthoides*], T5072 *Polygala caudata*, T5097 *Polygonum amphibium*, T5100 *Polygonum chinense*, T5101 *Polygonum cuspidatum*, T5124 *Polypodium niponicum*, T5151 *Populus davidiana*, T5158 *Populus simonii*, T5161 *Populus tomentosa*, T5174 *Portulaca pilosa*, T5220 *Prunus davidiana*, T5230 *Prunus persica*, T5232 *Prunus persica*, T5284 *Pteridium aquilinum* var. *latiusculum*, T5288 *Pteris cretica* var. *nervosa* [Syn. *Pteris nervosa*], T5290 *Pteris fauriei* [Syn. *Pteris fauriei* var. *minor*], T5295 *Pteris multifida*, T5297 *Pteris plumbea*, T5400 *Rabdosia stracheyi*, T5587 *Rubus alceaefolius*, T5754 *Saussurea graminea*, T5844 *Scutellaria scordifolia*, T5859 *Selaginella braunii*, T5860 *Selaginella davidii*, T5862 *Selaginella involvens*, T5866 *Selaginella sanguinolenta*, T5867 *Selaginella sinensis*, T5870 *Selaginella uncinata*, T5943 *Sida cordifolia*, T5954 *Silene fortunei*, T5957 *Silybum marianum*, T5966 *Siphonostegia chinensis*, T6005 *Solanum lyratum*, T6020 *Solanum xanthocarpum*, T6095 *Stachytarpheta jamaicensis*, T6250 *Symplocos caudata*, T6282 *Tagetes patula*, T6508 *Trichosanthes cucumeroides*.

**clear heat and disinhibit qi** T3063 *Grevillea robusta*.

**clear heat and disinhibit throat** T0595 *Ardisia crispa*, T6046 *Sophora vicifolia*, T6047 *Sophora vicifolia*.

**clear heat and disinhibit urine** T0273 *Akebia quinata*, T0277 *Akebia trifoliata*, T0279 *Akebia trifoliata* var. *australis*, T1148 *Camellia saluenensis*, T2161 *Dicranopteris pedata* [Syn. *Polypodium pedatum*; *Dicranopteris dichotoma*], T2412 *Equisetum sylvaticum*, T2882 *Gardenia jasminoides* [Syn. *Gardenia florida*], T3303 *Hydrangea chinensis*, T3921 *Lophatherum gracile*, T3950 *Lychnis fulgens*, T4194 *Menyanthes trifoliata*, T4636 *Papaver somniferum*, T5002 *Plantago asiatica*, T5004 *Plantago depressa*, T5007 *Plantago major*, T5171 *Porphyra tenera*, T5750 *Saururus chinensis*, T6071 *Sphaeranthus indicus*, T6356 *Tetrapanax papyriferus*, T6794 *Vitis amurensis*.

**clear heat and disinhibit water** T0628 *Aristolochia fangchi*, T0629 *Aristolochia heterophylla*, T0894 *Benincasa hispida*, T1197 *Cardiospermum halicacabum*, T2132 *Desmodium pulchellum* [Syn. *Phyllodium pulchellum*], T4274 *Monostroma nitidum*, T4482 *Oenanthe javanica*, T4847 *Physalis alkekengi* var. *franchetii*, T6357 *Tetrapanax papyriferus*.

**clear heat and dispel damp** T1359 *Chenopodium album*, T1553 *Clerodendranthus spicatus*, T3460 *Iris halophila*, T3464 *Iris lactea* var. *chinensis* [Syn. *Iris pallasii* var. *chinensis*], T4159 *Melia azedarach*.

**clear heat and disperse phlegm** T2525 *Eucheuma muricatum*.

**clear heat and disperse stagnation** T6339 *Tephrosia purpurea*.

**clear heat and disperse swelling** T1338 *Cestrum nocturnum*, T1451 *Cirsium setosum* [Syn. *Cerratura setosa*; *Cirsium segetum*; *Cephalanoplos segetum*].

**clear heat and downbear fire** T0328 *Alnus japonica*, T3233 *Heteropappus altaicus*.

**clear heat and drain fire** T0446 *Anaphalis margaritacea*, T0462 *Anemarrhena asphodeloides*, T0722 *Arundo donax*, T0959 *Blumea lacera*, T2294 *Dunnia sinensis*, T5309 *Pterocladia tenuis*, T5775 *Scabiosa comosa*, T6373 *Thalictrum alpinum*.

**clear heat and dry damp** T0659 *Artemisia absinthium*, T0897 *Berberis amurensis*, T0907 *Berberis kawakamii*, T0912 *Berberis poiratii*, T0916 *Berberis thunbergii*, T0920 *Berberis wilsonae*, T1038 *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*], T1662 *Coptis chinensis*, T1663 *Coptis chinensis* var. *brevisepala*, T1664 *Coptis deltoidea*, T1669 *Coptis omeiensis*, T1670 *Coptis teetoides* [Syn. *Coptis teeta*], T2079 *Delphinium kamaonense* var. *glabrescens*, T2165 *Dictamnus angustifolius*, T2167 *Dictamnus dasycarpus*, T2766 *Fraxinus bungeana*, T2767 *Fraxinus chinensis*, T2772 *Fraxinus mandshurica*, T2774 *Fraxinus paxiana*, T2777 *Fraxinus rhynchophylla* [Syn. *Fraxinus chinensis* var. *rhynchophylla*], T2779 *Fraxinus stylosa*, T2780 *Fraxinus szaboana* [Syn. *Fraxinus chinensis* var. *acuminata*], T2908 *Gentiana cephalantha*, T2921 *Gentiana manshurica*, T2928 *Gentiana rigescens*, T2930 *Gentiana scabra*, T2938 *Gentiana triflora*, T3564 *Juglans mandshurica*, T4060 *Mahonia confusa*, T4064 *Mahonia gracilipes*, T4158 *Melia azedarach*, T4479 *Odontites serotina*, T4887 *Picrorhiza kurroa*, T4888 *Picrorhiza scrophulariiflora*, T5833 *Scutellaria amoena*, T5834 *Scutellaria baicalensis*, T5839 *Scutellaria hypericifolia*, T5841 *Scutellaria likiangensis*, T5843 *Scutellaria rehderiana*, T5845 *Scutellaria viscidula*, T6029 *Sophora alopecuroides*, T6031 *Sophora flavescens* [Syn. *Sophora angustifolia*], T6039 *Sophora moorcroftiana*, T6375 *Thalictrum baicalense*, T6376 *Thalictrum cultratum*, T6378 *Thalictrum delavayi*, T6385 *Thalictrum flavum*, T6386 *Thalictrum*



- foetidum*, T6387 *Thalictrum foliolosum*, T6389 *Thalictrum glandulosissimum*, T6410 *Thalictrum smithii*, T6474 *Toona ciliata*.
- clear heat and eliminate damp** T0635 *Aristolochia moupinensis*, T2134 *Desmodium styracifolium*, T2738 *Flemingia strobilifera*, T5118 *Polygonum suffultum*.
- clear heat and eliminate vexation** T3920 *Lophatherum gracile*, T6060 *Souliea vaginata*.
- clear heat and engender liquid** T2716 *Ficus beecheyana* [Syn. *Ficus erecta* var. *beecheyana*], T2717 *Ficus carica*, T2867 *Garcinia multiflora*, T3416 *Imperata cylindrica* var. *major*, T4402 *Nelumbo nucifera*, T4609 *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*], T4829 *Phragmites communis*, T5642 *Saccharum sinensis*, T6512 *Trichosanthes kirilowii*, T6526 *Triglochin maritimum*.
- clear heat and expel pus** T1614 *Coix lacryma-jobi* var. *ma-yuen*.
- clear heat and free stool** T1232 *Cassia fistula*, T5611 *Rumex japonicus*, T5612 *Rumex nepalensis*.
- clear heat and interrupt malaria** T3109 *Harrisonia perforata*.
- clear heat and lower blood pressure** T2442 *Ervatamia divaricata*, T2444 *Ervatamia heyneana*.
- clear heat and moisten lung** T2783 *Fritillaria cirrhosa*, T2784 *Fritillaria delavayi*, T2792 *Fritillaria przewalskii*, T2796 *Fritillaria unibracteata*, T2797 *Fritillaria ussuriensis*, T3769 *Lespedeza bicolor*, T5483 *Rhinacanthus nasutus*, T5967 *Siraitia grosvenorii* [Syn. *Momordica grosvenorii*].
- clear heat and move qi** T4852 *Physalis peruviana*.
- clear heat and nourish liver** T1048 *Buddleja officinalis*.
- clear heat and nourish yin** T4605 *Panax japonicus* var. *major*.
- clear heat and percolate damp** T2243 *Dodonaea viscosa*.
- clear heat and promote contraction** T3732 *Lawsonia inermis*, T6251 *Symplocos caudata*.
- clear heat and quicken blood** T5183 *Potentilla griffithii* var. *velutina*, T6007 *Solanum melongena*.
- clear heat and rectify damp** T3360 *Hypericum patulum*.
- clear heat and relieve cough** T0608 *Arenaria kansuensis* [Syn. *Arenaria kumaonensis*], T2327 *Elaeagnus angustifolia*, T3926 *Loropetalum chinense*, T4284 *Morinda parvifolia*, T4760 *Peucedanum japonicum*, T5501 *Rhodiola yunnanensis*, T6521 *Trifolium pratense*.
- clear heat and relieve pain** T4143 *Meconopsis horridula*.
- clear heat and remove damp** T0776 *Asplenium prolongatum*, T0963 *Boehmeria siamensis*, T1406 *Chrysosplenium nudicaule*, T1884 *Cudrania cochinchinensis*.
- clear heat and resolve exterior** T1415 *Cichorium intybus*, T2113 *Dennstaedtia scabra* [Syn. *Dicksonia scabra*], T2697 *Ferula borealis*, T3163 *Helicteres angustifolia*, T4527 *Orixa japonica*, T6788 *Vitex negundo*.
- clear heat and resolve phlegm** T0174 *Adiantum monochlamys*, T0971 *Bolbostemma paniculatum*, T2359 *Enderachne binghamiae*, T2798 *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*], T3933 *Luffa acutangula*, T3934 *Luffa cylindrica*, T5145 *Populus alba*, T5720 *Sapindus mukorossi*, T6510 *Trichosanthes kirilowii*, T6513 *Trichosanthes rosthornii* [Syn. *Trichosanthes uniflora*], T6615 *Uncaria gambir*, T6925 *Zostera marina*.
- clear heat and resolve summerheat** T1366 *Chimonanthus fragrans* [Syn. *Chimonanthus praecox*], T1464 *Citrullus vulgaris* [Syn. *Citrullus lanatus*], T1785 *Cratoxylum prunifolium*, T4398 *Nelumbo nucifera*, T4602 *Panax ginseng* [Syn. *Panax schinseng*], T6803 *Volvariella volvacea*.
- clear heat and resolve toxin** T0002 *Abelmoschus moschatus* [Syn. *Hibiscus abelmoschus*], T0011 *Abrus precatorius*, T0012 *Abrus precatorius*, T0045 *Acanthopanax trifoliatum*, T0048 *Acanthus ilicifolius*, T0071 *Achyranthes aspera*, T0072 *Achyranthes aspera* var. *indica*, T0137 *Aconitum tanguticum*, T0171 *Adiantum capillus-veneris*, T0172 *Adiantum caudatum*, T0175 *Adiantum pedatum*, T0181 *Adina rubella*, T0190 *Adonis sutchuenensis*, T0195 *Aeginetia indica*, T0229 *Ageratum conyzoides*, T0262 *Ajuga ciliata*, T0263 *Ajuga decumbens*, T0264 *Ajuga forrestii*, T0267 *Ajuga nipponensis*, T0295 *Albizia odoratissima*, T0299 *Aleurites cordata* [Syn. *Aleurites fordii*], T0302 *Alhagi pseudalhagi*, T0333 *Alocasia cucullata* [Syn. *Arum cucullatum*], T0364 *Alsophila spinulosa*, T0374 *Alstonia scholaris*, T0378 *Alstonia yunnanensis*, T0388 *Amaranthus lividus*, T0389 *Amaranthus tricolor*, T0421 *Amorpha fruticosa*, T0426 *Ampelopsis grossedentata* [Syn. *Ampelopsis cantoniensis* var. *grossedentata*], T0427 *Ampelopsis japonica* [Syn. *Paullinia japonica*], T0434 *Amsonia sinensis*, T0457 *Andrographis paniculata* [Syn. *Justicia paniculata*], T0471 *Anemone rivularis*, T0513 *Annona squamosa*, T0561 *Arachis hypogaea*, T0563 *Arachniodes exilis*, T0565 *Arachniodes simplicior*, T0594 *Ardisia crenata*, T0600 *Ardisia mamillata* [Syn. *Tinus mamillata*], T0602 *Ardisia quinquegona*, T0610 *Argemone mexicana*, T0631 *Aristolochia kaempferi*, T0641 *Aristolochia tuberosa*, T0642 *Aristolochia tubiflora*, T0643 *Aristolochia versicolor*, T0721 *Arundina chinensis*, T0736 *Asclepias curassavica*, T0805 *Astragalus sinicus*, T0827 *Aucuba chinensis* ssp. *omeiensis*, T0853 *Baeckea frutescens*, T0860 *Balanophora japonica*, T0866 *Baphicacanthus cusia* [Syn. *Strobilanthes cusia*], T0867 *Baphicacanthus cusia* [Syn. *Strobilanthes cusia*], T0879 *Bauhinia purpurea*, T0892 *Belamcanda chinensis*, T0931 *Betula ermanii*, T0938 *Bidens bipinnata*, T0941 *Bidens tripartita*, T0952 *Blechnum orientale*, T0962 *Boehmeria platanifolia* [Syn. *Boehmeria tricuspis*], T0967 *Boenninghausenia sessilicarpa*, T0987 *Bos taurus domesticus*; *Bubalus bubalis*, T1003 *Brandisia hancei*, T1004 *Brasenia schreberi*, T1043 *Bryophyllum pinnatum*, T1044 *Bryum argenteum*, T1051 *Bufo bufo gargarizans*; *Bufo melanostictus*, T1087 *Buxus bodinieri*, T1092 *Buxus microphylla* var. *sinica*, T1101 *Caesalpinia decapetala*, T1118 *Callicarpa formosana*, T1119 *Callicarpa japonica*, T1151 *Camellia sinensis* [Syn. *Thea sinensis*], T1162 *Camptotheca acuminata*, T1179 *Capparis masaikai*, T1190 *Caragana jubata*, T1222 *Caryopteris glutinosa*, T1238 *Cassia mimosoides*, T1264 *Catalpa ovata*, T1305 *Centaurea cyanus*, T1316 *Cephalanthus occidentalis*, T1384 *Chondrus ocelladus*, T1387 *Chrysanthemum boreale*, T1392 *Chrysanthemum indicum*, T1393 *Chrysanthemum indicum*, T1394 *Chrysanthemum lavandulifolium*, T1412 *Cicer arietinum*, T1417 *Cimicifuga acerina*, T1419 *Cimicifuga dahurica*, T1420 *Cimicifuga foetida*, T1421 *Cimicifuga heracleifolia*, T1423 *Cimicifuga nanchuanensis*, T1425 *Cimicifuga simplex*, T1448 *Cirsium chinense*, T1530 *Cladostachys amaranthoides* [Syn. *Achyranthes amaranthoides*; *Cladostachys frutescens*; *Deeringia amaranthoides*], T1544 *Cleistocalyx operculatus*, T1554 *Clerodendron cyrtophyllum*, T1555 *Clerodendron fortunatum*, T1624 *Colocasia antiquorum*, T1633 *Commelina communis*,

- T1640 *Coniogramme japonica* [Syn. *Hemionitis japonica*], T1644 *Conocephalum conicum*, T1655 *Conyza blinii*, T1656 *Conyza bonariensis* [Syn. *Erigeron bonariensis*; *Erigeron linifolius*; *Erigeron crispus*], T1692 *Coriaria sinica* [Syn. *Coriaria nepalensis*], T1693 *Coriaria sinica* [Syn. *Coriaria nepalensis*], T1696 *Cornus capitata* [Syn. *Dendrobenthamia capitata*], T1727 *Corydalis mucronifera*, T1728 *Corydalis ochotensis*, T1731 *Corydalis pallida*, T1745 *Corydalis suaveolens* [Syn. *Corydalis sheareri*], T1747 *Corydalis thalictrifolia*, T1753 *Cosmos bipinnata*, T1784 *Cratogeomys cochinchinense*, T1787 *Cremastra appendiculata*, T1796 *Crinum asiaticum* var. *sinicum*, T1799 *Crinum latifolium*, T1810 *Croonia japonica*, T1866 *Cryptolepis sinensis*, T1931 *Cyclea barbata*, T1933 *Cyclea sutchuenensis*, T1934 *Cyclea tonkinensis*, T1954 *Cynanchum chinense*, T1971 *Cynoglossum zeylanicum* [Syn. *Anchusa zeylanica*; *Cynoglossum furcatum*; *Cynoglossum formosanum*], T1986 *Cyrtomium fortunei*, T1996 *Dahlia pinnata* [Syn. *Dahlia variabilis*], T2033 *Daphniphyllum macropodum*, T2050 *Daucus carota* var. *sativa*, T2058 *Deeringia amarantoides* [Syn. *Cladostachys frutescens*], T2131 *Desmodium pulchellum* [Syn. *Phyllodium pulchellum*], T2157 *Dichotomanthes tristaniaecarpa*, T2162 *Dicranostigma franchetianum* [Syn. *Dicranostigma leptopodum*], T2191 *Dioscorea bulbifera*, T2193 *Dioscorea cirrhosa* [Syn. *Dioscorea pogonoides*], T2194 *Dioscorea collettii*, T2200 *Dioscorea hispida*, T2206 *Dioscorea parviflora*, T2218 *Diospyros kaki*, T2233 *Diploclisia glaucescens*, T2244 *Doellingeria scaber* [Syn. *Aster scaber*], T2279 *Dryopteris championii*, T2280 *Dryopteris chrysocoma*, T2281 *Dryopteris crassirhizoma*, T2282 *Dryopteris filix-mas*, T2290 *Duchesnea indica*, T2298 *Dysosma difformis*, T2302 *Dysosma pleiantha* [Syn. *Podophyllum pleianthum*], T2304 *Dysosma veitchii*, T2305 *Dysosma versipellis* [Syn. *Podophyllum versipelle*], T2316 *Echinops grijsii*, T2317 *Echinops ritro*, T2357 *Emilia sonchifolia*, T2387 *Epilobium hirsutum*, T2421 *Erigeron annuus*, T2510 *Eucalyptus globulus*, T2517 *Eucalyptus robusta*, T2529 *Euchresta strigillosa*, T2555 *Eupatorium chinense*, T2590 *Euphorbia hirta*, T2591 *Euphorbia humifusa*, T2628 *Euphrasia officinalis*, T2641 *Evodia lepta* [Syn. *Ilex lepta*], T2657 *Fagopyrum cymosum* [Syn. *Polygonum cymosum*], T2659 *Fagopyrum esculentum*, T2691 *Farfugium japonicum*, T2715 *Fibraurea recisa*, T2730 *Fimbristylis dichotoma*, T2732 *Firmiana simplex*, T2756 *Forsythia suspensa*, T2757 *Forsythia viridissima*, T2826 *Galeola faberi*, T2835 *Galium verum*, T2839 *Gallus gallus domesticus*, T2852 *Garcinia cowa*, T2884 *Gardenia jasminoides* var. *grandiflora*, T2973 *Glechoma longituba*, T2974 *Glechoma lungituba*, T2988 *Glochidion eriocarpum*, T2989 *Glochidion sphaerogynum*, T3092 *Halenia corniculata*, T3122 *Hedyotis acutangula*, T3123 *Hedyotis auricularia*, T3126 *Hedyotis corymbosa* [Syn. *Oldenlandia corymbosa*], T3174 *Heliotropium indicum*, T3187 *Helleborus thibetanus*, T3200 *Hemidesmus indicus*, T3201 *Hemiphragma heterophyllum*, T3202 *Hemistepia lyrata* [Syn. *Hemistepia carthamoides*; *Saussurea carthamoides*], T3203 *Hemsleya amabilis*, T3208 *Hemsleya macrosperma*, T3241 *Hibiscus mutabilis*, T3283 *Hosta sieboldiana*, T3284 *Houttuynia cordata*, T3288 *Humulus japonicus* [Syn. *Humulus scandens*], T3292 *Hunteria zeylanica*, T3295 *Huperzia serrata* [Syn. *Lycopodium serratum*], T3308 *Hydrangea umbellata*, T3318 *Hylotelephium mingjinianum*, T3323 *Hymenodictyon excelsum*, T3332 *Hypecoum erectum*, T3334 *Hypecoum leptocarpum*, T3340 *Hypericum ascyron*, T3348 *Hypericum elodeoides*, T3361 *Hypericum perforatum*, T3363 *Hypericum sampsonii*, T3368 *Hypericum wightianum*, T3376 *Hypolepis punctata* [Syn. *Polypodium punctatum*], T3388 *Ilex chinensis* [Syn. *Ilex purpurea*], T3394 *Ilex paraguariensis*, T3396 *Ilex pubescens*, T3397 *Ilex pubescens* var. *glaber*, T3398 *Ilex rotunda*, T3414 *Impatiens sicutifer*, T3423 *Indigofera tinctoria*, T3448 *Ipomoea cairica* [Syn. *Ipomoea palmata*], T3457 *Iris dichotoma*, T3461 *Iris japonica*, T3466 *Iris potaninii*, T3471 *Iris tectorum*, T3475 *Isatis indigotica*, T3476 *Isatis indigotica*, T3479 *Isodon amethystoides*, T3495 *Isodon irrorata*, T3496 *Isodon japonica* [Syn. *Rabdosia japonica*], T3507 *Isodon lophanthoides* [Syn. *Rabdosia lophanthoides*; *Hyssopus lophanthoides*; *Plectranthus striatus*; *Isodon striatus*], T3547 *Ixeris chinensis*, T3548 *Ixeris sonchifolia*, T3588 *Juniperus formosana*, T3645 *Kummerowia striata*, T3659 *Lactuca indica*, T3662 *Lactuca sativa*, T3671 *Lagerstroemia indica*, T3672 *Lagerstroemia indica*, T3736 *Lemmaphyllum microphyllum*, T3737 *Lemmaphyllum microphyllum* var. *obovatum*, T3738 *Lemna minor*, T3764 *Lepisorus thunbergianus*, T3765 *Lepisorus ussuriensis*, T3770 *Lespedeza cuneata*, T3845 *Linaria vulgaris*, T3863 *Liparis nervosa*, T3878 *Lithocarpus polystachyus*, T3898 *Lobelia chinensis* [Syn. *Lobelia radicans*], T3908 *Lonicera bournei*, T3909 *Lonicera confusa*, T3910 *Lonicera fulvotomentosa*, T3911 *Lonicera hypoglauca*, T3912 *Lonicera japonica*, T3913 *Lonicera japonica*, T3914 *Lonicera macranthoides*, T3918 *Lonicera similis*, T3928 *Lotus corniculatus*, T3953 *Lycianthes biflora*, T3990 *Lygodium japonicum*, T3996 *Lysimachia candida*, T3998 *Lysimachia christinae*, T4006 *Lythrum anceps*, T4007 *Lythrum salicaria*, T4009 *Maackia amurensis*, T4026 *Macrothelypteris oligophlebia*, T4082 *Mallotus japonicus*, T4091 *Malva sylvestris*, T4120 *Marsdenia tenacissima*, T4121 *Marsilea quadrifolia*, T4124 *Matricaria chamomilla* [Syn. *Matricaria recutita*], T4127 *Matteuccia struthiopteris*, T4144 *Meconopsis nepaulensis*, T4145 *Meconopsis punicea*, T4170 *Melilotus albus*, T4173 *Melilotus suaveolens*, T4182 *Menispermum dauricum*, T4183 *Menispermum dauricum*, T4208 *Metasequoia glyptostroboides*, T4215 *Michelia yunnanensis*, T4219 *Microlepis marginata*, T4227 *Microula sikkimensis*, T4253 *Mirabilis jalapa*, T4280 *Morinda citrifolia*, T4384 *Narcissus tazetta* var. *chinensis*, T4391 *Nauclea officinalis*, T4423 *Nicandra physaloides*, T4456 *Nymphoides peltatum*, T4485 *Oldenlandia diffusa* [Syn. *Hedyotis diffusa*], T4502 *Onychium japonicum* [Syn. *Tricomanes japonicum*], T4503 *Onychium lucidum*, T4514 *Ophiorrhiza pumila*, T4530 *Ormosia hosiei*, T4552 *Osmunda japonica*, T4562 *Oxalis acetosella*, T4568 *Oxytropis myriophylla*, T4648 *Paris polyphylla*, T4649 *Paris polyphylla* var. *chinensis*, T4650 *Paris polyphylla* var. *pseudothibetica*, T4651 *Paris polyphylla* var. *stenophylla*, T4652 *Paris polyphylla* var. *yunnanensis*, T4672 *Patrinia scabiosaefolia*, T4676 *Patrinia villosa*, T4686 *Pedilanthus tithymaloides*, T4691 *Pelargonium hortorum*, T4705 *Peperomia pellucida*, T4710 *Pericampylus glaucus*, T4730 *Peristrophe roxburghiana*, T4740 *Petasites japonicus*, T4798 *Philonotis fontana*, T4800 *Phlegmariurus fordii*, T4801 *Phlegmariurus phlegmaria* [Syn. *Lycopodium phlegmaria*], T4803 *Phlogacanthus curviflorus*, T4827 *Photinia parvifolia*, T4837 *Phyllanthus emblica*, T4838 *Phyllanthus flexuosus*, T4845 *Physalis alkekengi*, T4846 *Physalis alkekengi* var. *franchetii*, T4854 *Physalis pubescens*, T4859 *Physochlaina physaloides*, T4881 *Picrasma quassioides* [Syn. *Picrasma*

*ailanthoides*], T4884 *Picria felterrae*, T4998 *Plagiogyria euphlebia*, T5000 *Plagiogyria stenoptera*, T5018 *Pleuropterus ciliinervis*, T5033 *Poa sphondylodes*, T5061 *Polianthes tuberosa*, T5099 *Polygonum bistorta*, T5109 *Polygonum nodosum*, T5110 *Polygonum orientale*, T5114 *Polygonum polystachyum*, T5121 *Polygonum tinctorium*, T5149 *Populus canadensis*, T5150 *Populus cathayana*, T5172 *Portulaca grandiflora*, T5173 *Portulaca oleracea*, T5176 *Potamogeton natans*, T5177 *Potamogeton pectinatus*, T5181 *Potentilla chinensis*, T5182 *Potentilla discolor*, T5188 *Potentilla viscosa*, T5194 *Premna microphylla*, T5199 *Primula malacoides*, T5209 *Pronephrium simplex* [Syn. *Meniscium simplex*], T5267 *Psidium guajava*, T5289 *Pteris dactylina*, T5323 *Pulsatilla campanella*, T5324 *Pulsatilla cernua*, T5325 *Pulsatilla chinensis*, T5326 *Pulsatilla dahurica*, T5363 *Pyrus calleryana*, T5388 *Rabdosia adenantha*, T5393 *Rabdosia longituba*, T5396 *Rabdosia rubescens*, T5397 *Rabdosia serra*, T5407 *Rana nigromaculata*; *Rana plancyi*, T5408 *Rana nigromaculata*; *Rana plancyi*, T5415 *Ranunculus sceleratus*, T5424 *Rauvolfia verticillata*, T5444 *Reboulia hemisphaerica*, T5455 *Rhamnus crenata*, T5457 *Rhamnus davurica*, T5466 *Rhaponticum uniflorum*, T5468 *Rheum emodi* [Syn. *Rheum australe*], T5497 *Rhodiola kirilowii*, T5524 *Rhododendron simsii*, T5557 *Rohdea japonica* [Syn. *Orontium japonicum*], T5567 *Rosa laevigata*, T5569 *Rosa multiflora*, T5576 *Rostellularia procumbens* [Syn. *Justicia procumbens*], T5592 *Rubus hirsutus*, T5595 *Rubus parviflorus*, T5607 *Rumex crispus*, T5608 *Rumex dentatus*, T5613 *Rumex obtusifolius*, T5614 *Rumex patientia*, T5654 *Salix purpurea*, T5685 *Salvia plebeia*, T5712 *Sanguisorba officinalis*, T5714 *Sansevieria trifasciata*, T5730 *Sarcandra glabra* [Syn. *Chloranthus glaber*], T5741 *Sargentodoxa cuneata*, T5797 *Schisandra propinqua*, T5798 *Schisandra propinqua* var. *intermedia*, T5818 *Scoparia dulcis*, T5835 *Scutellaria barbata* [Syn. *Scutellaria rivularis*], T5836 *Scutellaria discolor*, T5838 *Scutellaria galericulata*, T5840 *Scutellaria indica*, T5852 *Sedum bulbiferum*, T5856 *Sedum lineare* [Syn. *Sedum obtuso-lineare*], T5861 *Selaginella doederleinii*, T5871 *Selenarctos thibetanus*; *Ursus arctos*, T5884 *Senecio chrysanthemoides*, T5892 *Senecio nemorensis*, T5894 *Senecio oryzetorum*, T5907 *Senecio scandens* [Syn. *Senecio chinensis*], T5950 *Siegesbeckia orientalis*, T5951 *Siegesbeckia orientalis* var. *glabrescens* [Syn. *Siegesbeckia glabrescens*], T5952 *Siegesbeckia orientalis* var. *pubescens* [Syn. *Siegesbeckia pubescens*], T5953 *Silene firma*, T5998 *Solanum dulcamara*, T6003 *Solanum khasianum*, T6008 *Solanum nigrum*, T6025 *Sonchus arvensis*, T6026 *Sonchus asper* [Syn. *Sonchus oleraceus* var. *asper*], T6032 *Sophora flavescens* [Syn. *Sophora angustifolia*], T6043 *Sophora subprostrata* [Syn. *Sophora tonkinensis*], T6087 *Spiranthes sinensis*, T6092 *Stachys palustris*, T6116 *Stenoloma chusanum*, T6118 *Stephania brachyandra*, T6119 *Stephania cepharantha*, T6121 *Stephania dicentrifera*, T6122 *Stephania dielsiana*, T6125 *Stephania elegans*, T6128 *Stephania hernandifolia*, T6129 *Stephania japonica*, T6131 *Stephania longa*, T6133 *Stephania sinica*, T6135 *Stephania succifera*, T6137 *Stephania viridiflavens*, T6139 *Sterculia lychnophora*, T6205 *Sus scrofa*, T6206 *Sus scrofa domestica*, T6214 *Swertia chinensis*, T6217 *Swertia davidii*, T6219 *Swertia erythrosticta*, T6224 *Swertia kouitchensis*, T6226 *Swertia mileensis*, T6228 *Swertia nervosa*, T6234 *Swertia punicea*, T6252 *Symplocos chinensis*, T6260 *Syringa oblata*, T6275 *Tacca chancieri* [Syn. *Tacca minor*; *Tacca esquirolii*], T6277 *Tadehagi*

*triquetrum*, T6278 *Tagetes erecta*, T6279 *Tagetes erecta*, T6285 *Tamarindus indica*, T6295 *Tanacetum sibiricum* [Syn. *Filifolium sibiricum*], T6301 *Taraxacum mongolicum*, T6365 *Teucrium pilosum* [Syn. *Teucrium japonicum* var. *pilosum*], T6374 *Thalictrum atriplex*, T6393 *Thalictrum ichangense* [Syn. *Thalictrum tripeltatum*; *Thalictrum multipeltatum*], T6398 *Thalictrum microgynum*, T6402 *Thalictrum omeiense*, T6409 *Thalictrum simplex* [Syn. *Thalictrum simplex* var. *brevipes*], T6412 *Thalictrum squarrosum*, T6414 *Thalictrum thunbergii*, T6432 *Thespesia populnea* [Syn. *Hibiscus populneus*], T6435 *Thladiantha cordifolia*, T6436 *Thlaspi arvense*, T6463 *Tinospora capillipes*, T6467 *Tinospora sagittata*, T6469 *Tithonia diversifolia*, T6537 *Tripterispermum japonicum*, T6538 *Tripterispermum taiwanense*, T6552 *Trollius chinensis* [Syn. *Trollius asiaticus* var. *chinensis*], T6553 *Trollius ledebourii*, T6554 *Trollius macropetalus*, T6555 *Tropaeolum majus*, T6560 *Tulipa edulis*, T6566 *Tupistra chinensis*, T6567 *Tupistra wattii* [Syn. *Campylandra wattii*], T6598 *Ulva conglobata*, T6599 *Ulva lactuca*, T6600 *Ulva pertusa*, T6601 *Umbilicaria esculenta* [Syn. *Gyrophora esculenta*], T6645 *Urena lobata*, T6653 *Usnea diffracta*, T6654 *Usnea longissima*, T6655 *Ustilaginoidea virens*, T6684 *Vanilla planifolia*, T6691 *Veratrilla baillonii*, T6705 *Verbascum thapsus*, T6716 *Vernonia esculenta*, T6722 *Veronica anagallis-aquatica*, T6731 *Veronicastrum sibiricum*, T6735 *Viburnum dilatatum*, T6767 *Viola yedoensis*, T6814 *Wedelia chinensis* [Syn. *Solidago chinensis*; *Wedelia calendulacea*].

**clear heat and settle fright** T0942 *Biebersteinia heterostemon*, T5184 *Potentilla kleiniana*.

**clear heat and stanch bleeding** T1112 *Calendula arvensis*, T5354 *Pyrrhosia davidii*, T5355 *Pyrrhosia drakeana*, T5356 *Pyrrhosia gralla*, T5357 *Pyrrhosia lingua* T5358 *Pyrrhosia petiolosa*, T5360 *Pyrrhosia sheareri*.

**clear heat and transform damp** T1106 *Caesalpinia minax*, T2984 *Glinus lotoides* [Syn. *Mollugo lotoides*], T4261 *Mollugo pentaphylla*, T4799 *Philydrum lanuginosum*, T5554 *Rodgersia aesculifolia*, T6049 *Sophora vicifolia*.

**clear heat toxin** T1709 *Corydalis bungeana*.

**clear intestines and dry damp** T6028 *Sophora alopecuroides*.

**clear liver** T1241 *Cassia occidentalis*, T1242 *Cassia occidentalis*, T5690 *Salvia roborowskii*.

**clear liver and brighten eyes** T0049 *Acer ginnala*, T0984 *Bos taurus domesticus*; *Bubalus bubalis*, T1035 *Broussonetia papyrifera*, T1236 *Cassia laevigata* [Syn. *Cassia floribunda*], T1240 *Cassia obtusifolia*, T1250 *Cassia tora*, T1746 *Corydalis taliensis*, T1804 *Cristaria plicata*; *Hyriopsis cumingii*, T2336 *Elephas maximus*, T2772 *Fraxinus mandshurica*, T3040 *Gomphrena globosa*, T3635 *Koeleruteria paniculata*, T3636 *Koeleruteria paniculata*, T4289 *Morus alba*, T4291 *Morus australis*, T4293 *Morus cathayana*, T4298 *Morus mongolica*, T4976 *Piptanthus nepalensis*, T5413 *Ranunculus cantoniensis*, T6034 *Sophora japonica*, T6036 *Sophora japonica*.

**clear liver and disinhibit gallbladder** T1705 *Corydalis adunca*, T6227 *Swertia musotii*, T6234 *Swertia punicea*, T6901 *Zea mays*.

**clear liver and relieve constipation** T0338 *Aloe ferox*, T0347 *Aloe vera* [Syn. *Aloe barbadensis*], T0348 *Aloe vera* var. *chinensis*.

**clear liver fire** T1296 *Celosia argentea*, T3827 *Ligustrum japonicum*, T4401 *Nelumbo nucifera*.

- clear lung** T1241 *Cassia occidentalis*, T2790 *Fritillaria pallidiflora*, T2800 *Fritillaria walujewii*, T3242 *Hibiscus rosa-sinensis*, T4388 *Nasturtium officinale*, T5521 *Rhododendron przewalskii*.
- clear lung and boost qi** T5494 *Rhodiola crenulata* [Syn. *Rhodiola euryphylla*].
- clear lung and calm liver** T1150 *Camellia sinensis* [Syn. *Thea sinensis*].
- clear lung and disinhibit throat** T3701 *Lasiosphaera fenzlii*, T3961 *Lycoperdon pyriforme*, T4537 *Oroxylum indicum*, T6139 *Sterculia lychnophora*.
- clear lung and downbear fire** T0746 *Asparagus cochinchinensis* [Syn. *Asparagus lucidus*].
- clear lung and downbear qi** T0624 *Aristolochia contorta*, T0626 *Aristolochia debilis* [Syn. *Aristolochia longa*], T0630 *Aristolochia indica*, T0633 *Aristolochia maxima*, T0640 *Aristolochia triangularis*.
- clear lung and engender liquid** T4573 *Pachyrrhizus erosus*.
- clear lung and moisten dryness** T2301 *Dysosma majorensis* [Syn. *Podophyllum majorensis*; *Dysosma lichuanensis*], T4289 *Morus alba*, T4291 *Morus australis*, T4293 *Morus cathayana*, T4298 *Morus mongolica*, T4665 *Passiflora edulis*.
- clear lung and relieve cough** T0173 *Adiantum lunulatum*, T0759 *Aspidistra elatior*, T1705 *Corydalis adunca*, T1789 *Crepis napifera*, T2213 *Dioscorea zingiberensis*, T2433 *Eriobotrya japonica*, T2565 *Eupatorium lindleyanum*, T3247 *Hibiscus taiwanensis*, T3248 *Hibiscus tiliaceus*, T3373 *Hypoestes purpurea* [Syn. *Justicia purpurea*; *Hypoestes sinica*], T3736 *Lemmaphyllum microphyllum*, T3737 *Lemmaphyllum microphyllum* var. *obovatum*, T4520 *Opuntia ficus-indica*, T5449 *Reineckea carnea*, T6304 *Taxillus levinei*.
- clear lung and suppress cough** T6055 *Sorbus tianschanica*.
- clear lung and transform phlegm** T0895 *Benincasa hispida*, T1006 *Brassica chinensis*, T1465 *Citrullus vulgaris* [Syn. *Citrullus lanatus*], T1967 *Cynoglossum amabile*, T3190 *Helminthostachys zeylanica*, T3246 *Hibiscus syriacus*, T6511 *Trichosanthes kirilowii*.
- clear lung heat** T6581 *Tylophora mollissima*.
- clear summerheat** T2554 *Eupatorium cannabinum*, T4335 *Mussaenda pubescens*, T4526 *Origanum vulgare*, T4979 *Pistacia chinensis*, T5227 *Prunus mume*.
- clear summerheat and eliminate damp** T4307 *Mosla scabra* [Syn. *Mosla punctata*], T4399 *Nelumbo nucifera*.
- clear summerheat and resolve toxin** T0537 *Antirrhinum majus*, T1595 *Codium fragile*, T5402 *Radermachera sinica*.
- clear summerheat and transform damp** T4172 *Melilotus suaveolens*.
- clear summerheat heat** T4101 *Mangifera indica*, T6492 *Trapa bispinosa*.
- clear vacuity fire** T1961 *Cynanchum thesioides*.
- clear vacuity heat** T0607 *Arenaria juncea*, T3090 *Gypsophila oldhamiana*, T3091 *Gypsophila pacifica*, T3390 *Ilex cornuta*, T4056 *Mahonia bealei*, T4057 *Mahonia bealei*, T4063 *Mahonia fortunei*, T4067 *Mahonia japonica*, T4068 *Mahonia japonica*, T5955 *Silene jennisseensis*, T6104 *Stellaria dichotoma* var. *lancoelata*.
- close sores** T0563 *Arachniodes exilis*, T1336 *Ceriops tagal* [Syn. *Rhizophora tagal*], T1594 *Cocos nucifera*, T1777 *Crataegus pinnatifida*, T2598 *Euphorbia lathyris*, T3673 *Lagerstroemia speciosa* [Syn. *Munchausia speciosa*; *Lagerstroemia flos-reginae*], T3775 *Lethariella cladonioides*, T5228 *Prunus mume*, T5266 *Psidium guajava*, T6745 *Vicia faba*, T6747 *Vicia faba*.
- close sores and engender flesh** T0019 *Acacia catechu*, T0427 *Ampelopsis japonica* [Syn. *Paullinia japonica*], T0791 *Astragalus chrysopterus*, T0794 *Astragalus ernestii*, T0798 *Astragalus membranaceus*, T0800 *Astragalus mongolicus*, T1896 *Cupressus funebris*, T1994 *Daemonorops draco*, T2253 *Dracaena cochinchinensis*, T3128 *Hedysarum multijugum*, T3388 *Ilex chinensis* [Syn. *Ilex purpurea*].
- close sores and stanch bleeding** T3857 *Lindera umbellata* [Syn. *Lindera erythrocarpa*], T5290 *Pteris fauriei* [Syn. *Pteris fauriei* var. *minor*].
- constrain blood** T5142 *Poncirus trifoliata*.
- constrain lung** T4637 *Papaver somniferum*, T5361 *Pyrus betulaefolia*, T5374 *Quercus infectoria*.
- constrain lung and astringe intestines** T2964 *Ginkgo biloba*, T6346 *Terminalia chebula*, T6348 *Terminalia chebula* var. *tomentella*.
- constrain lung and relieve cough** T2454 *Erysimum diffusum*, T4371 *Nandina domestica*, T4629 *Papaver nudicaule*, T4630 *Papaver nudicaule* ssp. *amurense*, T4631 *Papaver nudicaule* var. *chinense*, T5228 *Prunus mume*.
- constrain lung and settle asthma** T2961 *Ginkgo biloba*, T6266 *Syzygium cumini*.
- constrain sweat** T0944 *Biota orientalis* [Syn. *Thuja orientalis*; *Platycladus orientalis*], T4548 *Oryza sativa* var. *glutinosa*, T5531 *Rhus chinensis* [Syn. *Rhus semialata*], T6918 *Ziziphus jujuba* var. *spinosa*, T6919 *Ziziphus jujuba* var. *spinosa*.
- constrain sweat and astringe intestines** T5821 *Scopolia japonica*.
- constrain sweat and dry damp** T4670 *Patrinia heterophylla*, T4673 *Patrinia scabra*.
- constrain sweat and secure exterior** T3129 *Hedysarum polybotrys*.
- constrain yin and check sweating** T4580 *Paeonia albiflora* [Syn. *Paeonia lactiflora*].
- consume sore and kill worms** T1858 *Croton tiglium*.
- contract damp** T0019 *Acacia catechu*.
- contract damp and close sores** T6615 *Uncaria gambir*.
- contract damp and kill worms** T0299 *Aleurites cordata* [Syn. *Aleurites fordii*].
- contract damp and relieve itch** T1316 *Cephalanthus occidentalis*, T6339 *Tephrosia purpurea*, T6476 *Torilis japonica*.
- contract uterus and stanch bleeding** T1541 *Claviceps purpurea*.
- cool blood** T0607 *Arenaria juncea*, T0678 *Artemisia japonica*, T1045 *Bubalus bubalis*, T1161 *Campsis grandiflora*, T2334 *Elephantopus scaber*, T3090 *Gypsophila oldhamiana*, T3091 *Gypsophila pacifica*, T3242 *Hibiscus rosa-sinensis*, T3334 *Hypocoum leptocarpum*, T3649 *Laccifer lacca*, T4388 *Nasturtium officinale*, T4402 *Nelumbo nucifera*, T4500 *Onosma paniculatum*, T5002 *Plantago asiatica*, T5004 *Plantago depressa*, T5007 *Plantago major*, T5018 *Pleuropterus ciliinervis*, T5120 *Polygonum tinctorium*, T5484 *Rhinoceros unicornis*; *Rhinoceros sondaicus*; *Rhinoceros sumatrensis*, T5955 *Silene jennisseensis*, T6048 *Sophora viciifolia*, T6522 *Trifolium repens*.
- cool blood and check diarrhea** T2993 *Gloeostereum incarnatum*, T5323 *Pulsatilla campanella*, T5324 *Pulsatilla cernua*, T5325 *Pulsatilla chinensis*, T5326 *Pulsatilla dahurica*.
- cool blood and check dysentery** T5181 *Potentilla chinensis*.
- cool blood and clear heat** T3444 *Ipomoea aquatica* [Syn. *Convolvulus*

- repens*; *Ipomoea reptans*], T5545 *Ribes fasciculatum* var. *chinense*.
- cool blood and disinhibit throat** T3475 *Isatis indigotica*.
- cool blood and disperse macula** T3476 *Isatis indigotica*, T5121 *Polygonum tinctorium*.
- cool blood and disperse stasis** T6276 *Tacca plantaginea* [Syn. *Schizocapsa plantaginea*].
- cool blood and disperse swelling** T0262 *Ajuga ciliata*, T0866 *Baphicacanthus cusia* [Syn. *Sirobilanthes cusia*], T3123 *Hedyotis auricularia*, T6046 *Sophora viciifolia*, T6047 *Sophora viciifolia*, T6484 *Trachelospermum jasminoides*, T6767 *Viola yedoensis*.
- cool blood and disperse welling abscess** T5680 *Salvia miltiorrhiza*, T5681 *Salvia miltiorrhiza* f. *alba*, T5688 *Salvia przewalskii*.
- cool blood and dissipate blood** T0263 *Ajuga decumbens*.
- cool blood and dissipate stasis** T0267 *Ajuga nipponensis*, T1034 *Broussonetia papyrifera*, T4564 *Oxalis corniculata* [Syn. *Oxalis repens*], T5685 *Salvia plebeia*, T6814 *Wedelia chinensis* [Syn. *Solidago chinensis*; *Wedelia calendulacea*].
- cool blood and extinguish wind** T1986 *Cyrtomium fortunei*, T4730 *Peristrophe roxburghiana*.
- cool blood and quicken blood** T0648 *Arnebia euchroma*, T0649 *Arnebia guttata*, T1448 *Cirsium chinense*, T3881 *Lithospermum erythrorhizon*, T5647 *Sagittaria sagittifolia*, T6092 *Stachys palustris*.
- cool blood and relieve pain** T4479 *Odonites serotina*.
- cool blood and resolve toxin** T0297 *Alchornea trewioides*, T0753 *Asparagus setaceus* [Syn. *Asparagus plumosus*], T0875 *Basella rubra*, T1197 *Cardiospermum halicacabum*, T1251 *Cassytha filiformis*, T2927 *Gentiana rhodantha*, T3002 *Glycine max*, T3192 *Hemerocallis citrina*, T3244 *Hibiscus syriacus*, T3247 *Hibiscus taiwanensis*, T3933 *Luffa acutangula*, T3934 *Luffa cylindrica*, T4248 *Mimosa pudica*, T4520 *Opuntia ficus-indica*, T4658 *Parmelia tinctorum*, T4836 *Phyllanthus emblica*, T5100 *Polygonum chinense*, T5156 *Populus nigra* var. *thevestina*, T5472 *Rheum officinale*, T5474 *Rheum palmatum*, T5481 *Rheum tanguticum*, T5646 *Sagina japonica* [Syn. *Spergula japonica*], T5773 *Saxifraga stolonifera*, T6367 *Teucrium quadrifarium*.
- cool blood and stanch bleeding** T0226 *Agave sisalana*, T0687 *Artemisia myriantha*, T0696 *Artemisia sieversiana*, T0805 *Astragalus sinicus*, T0859 *Balanophora involucreta*, T0867 *Baphicacanthus cusia* [Syn. *Sirobilanthes cusia*], T0890 *Begonia limprichtii*, T1043 *Bryophyllum pinnatum*, T1116 *Callicarpa arborea*, T1113 *Calendula officinalis*, T1145 *Camellia japonica*, T1199 *Carduus acanthoides*, T1200 *Carduus crispus*, T1212 *Carpesium eximum*, T1299 *Celosia cristata*, T1449 *Cirsium japonicum*, T1451 *Cirsium setosum* [Syn. *Cerratula setosa*; *Cirsium segetum*; *Cephalanoplos segetum*], T1529 *Cladonia verticillata*, T1547 *Clematis terniflora* [Syn. *Clematis maximowicziana*], T1554 *Clerodendron cyrtophyllum*, T1684 *Cordyline stricta*, T1896 *Cupressus funebris*, T2191 *Dioscorea bulbifera*, T2218 *Diospyros kaki*, T2281 *Dryopteris crassirhizoma*, T2282 *Dryopteris filix-mas*, T2290 *Duchesnea indica*, T2323 *Eclipta prostrata* [Syn. *Eclipta alba*], T2412 *Equisetum sylvaticum*, T2591 *Euphorbia humifusa*, T2691 *Farfugium japonicum*, T3092 *Halenia corniculata*, T3193 *Hemerocallis fulva*, T3195 *Hemerocallis lilio-asphodelus*, T3197 *Hemerocallis minor*, T3241 *Hibiscus mutabilis*, T3340 *Hypericum ascyron*, T3363 *Hypericum sampsonii*, T3373 *Hypoestes purpurea* [Syn. *Justicia purpurea*; *Hypoestes sinica*], T3416 *Imperata cylindrica* var. *major*, T3423 *Indigofera tinctoria*, T3547 *Ixeris chinensis*, T3681 *Lamium barbatum*, T3736 *Lemmaphyllum microphyllum*, T3737 *Lemmaphyllum microphyllum* var. *obovatum*, T3863 *Liparis nervosa*, T4009 *Maackia amurensis*, T4259 *Mnium cuspidatum*, T4398 *Nelumbo nucifera*, T4519 *Opuntia dillenii*, T4521 *Opuntia vulgaris*, T5133 *Polytrichum commune*, T5173 *Portulaca oleracea*, T5182 *Potentilla discolor*, T5207 *Prismatomeris tetrandra*, T5295 *Pteris multifida*, T5449 *Reineckea carnea*, T5557 *Rohdea japonica* [Syn. *Orontium japonicum*], T5578 *Rubia cordifolia*, T5582 *Rubia oncotricha*, T5583 *Rubia schumanniana*, T5584 *Rubia tinctorum*, T5585 *Rubia wallichiana*, T5605 *Rumex acetosa*, T5607 *Rumex crispus*, T5611 *Rumex japonicus*, T5612 *Rumex nepalensis*, T5613 *Rumex obtusifolius*, T5701 *Salvia yunnanensis*, T5712 *Sanguisorba officinalis*, T5754 *Saussurea graminea*, T5852 *Sedum bulbiferum*, T5868 *Selaginella stauntoniana*, T6034 *Sophora japonica*, T6036 *Sophora japonica*, T6119 *Stephania cepharantha*, T6250 *Symplocos caudata*, T6440 *Thuja orientalis* [Syn. *Platyclusus orientalis*; *Biota orientalis*], T6508 *Trichosanthes cucumeroides*, T6584 *Typha angustata*, T6585 *Typha angustifolia*, T6587 *Typha latifolia*, T6601 *Umbilicaria esculenta* [Syn. *Gyrophora esculenta*], T6904 *Zephyranthes grandiflora* [Syn. *Zephyranthes carinata*].
- cool blood and supplement blood** T5445 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*].
- cool liver** T1526 *Cladonia rangiferina*, T6374 *Thalictrum atriplex*.
- cool liver and resolve toxin** T2258 *Dracocephalum rupestre*.
- cool liver and settle fright** T4648 *Paris polyphylla*, T4649 *Paris polyphylla* var. *chinensis*, T4650 *Paris polyphylla* var. *pseudothibetica*, T4651 *Paris polyphylla* var. *stenophylla*, T4652 *Paris polyphylla* var. *yunnanensis*.
- cool liver and stanch bleeding** T1184 *Capsella bursa-pastoris*, T2257 *Dracocephalum moldavicum*, T5606 *Rumex acetosa*.
- course liver and disinhibit gallbladder** T1907 *Curcuma wengujin*, T1966 *Cynara scolymus*, T5957 *Silybum marianum*.
- course liver and free network vessels** T3360 *Hypericum patulum*.
- course liver and harmonize stomach** T0275 *Akebia quinata*, T4537 *Oroxylum indicum*.
- course liver and quicken blood** T2555 *Eupatorium chinense*.
- course liver and rectify qi** T1479 *Citrus grandis*.
- course liver and resolve depression** T5137 *Poncirus trifoliata*.
- course wind** T1675 *Corchorus olitorius*, T6889 *Zanthoxylum podocarpum*.
- course wind and clear heat** T0015 *Abutilon indicum*, T0167 *Adenantha pavonina*, T0948 *Blainvillea acmella* [Syn. *Verbesina acmella*; *Eclipta latifolia*; *Blainvillea latifolia*], T1395 *Chrysanthemum morifolium* [Syn. *Dendranthema morifolium*], T1410 *Chukrasia tabularis*, T1573 *Clinopodium chinense*, T2257 *Dracocephalum moldavicum*, T2258 *Dracocephalum rupestre*, T2720 *Ficus hispida*, T3749 *Leontopodium alpinum*, T4413 *Nepeta cataria*, T5115 *Polygonum sibiricum* [Syn. *Persicaria sibirica*], T5687 *Salvia prionitis*, T6023 *Solidago virgaurea*.
- course wind and diffuse lung** T4714 *Perilla frutescens*.
- course wind and dispel damp** T2189 *Dioscorea althaeoides*.
- course wind and dissipate cold** T4937 *Piper betle*.
- course wind and dissipate heat** T0480 *Angelica decursiva* [Syn. *Peucedanum decursivum*], T0586 *Arctium lappa*, T3819 *Ligusticum brachylobum*, T4186 *Mentha piperita*, T4289 *Morus alba*, T4291 *Morus*

*australis*, T4293 *Morus cathayana*, T4298 *Morus mongolica*, T4761 *Peucedanum longshengens*, T4768 *Peucedanum praeruptorum*, T4769 *Peucedanum rubricaula*.

**course wind and outthrust papules** T1417 *Cimicifuga acerina*, T1423 *Cimicifuga nanchuanensis*.

**course wind and overcome damp** T3520 *Isodon rosthornii*.

**course wind and resolve exterior** T0967 *Boeninghausenia sessilicarpa*, T1446 *Cipadessa baccifera*, T1535 *Clausena excavata*, T1538 *Clausena lansium*, T3646 *Kyllinga brevifolia*, T4223 *Micromelum integerrimum*, T4307 *Mosla scabra* [Syn. *Mosla punctata*], T4317 *Murraya euchrestifolia* [Syn. *Clausena euchrestifolia*], T4320 *Murraya kwangsiensis*, T4470 *Ocimum basilicum*, T6286 *Tamarix chinensis*, T6290 *Tamarix ramosissima*, T6735 *Viburnum dilatatum*.

**decay wart and mole** T5026 *Plumbagella micrantha*.

**diffuse damp and arouse spleen** T0463 *Anemone altaica*.

**diffuse lung** T5011 *Platycodon grandiflorum*.

**diffuse lung and calm asthma** T2367 *Ephedra equisetina*, T2368 *Ephedra gerardiana*, T2369 *Ephedra intermedia*, T2372 *Ephedra likiangensis*, T2373 *Ephedra minuta*, T2375 *Ephedra monosperma*, T2379 *Ephedra saxatilis*, T2380 *Ephedra sinica*.

**diffuse lung and calm panting** T0591 *Ardisia arborescens*.

**diffuse lung and effuse exterior** T2521 *Eucalyptus tereticornis*.

**diffuse lung and outthrust papules** T0586 *Arctium lappa*.

**diffuse lung and rectify qi** T3803 *Ligularia dictyoneura* [Syn. *Senecio dictyoneurus*].

**diffuse lung and resolve exterior** T4003 *Lysimachia microcarpa*.

**diffuse lung and suppress cough** T0676 *Artemisia dracunculus*, T1258 *Casuarina equisetifolia*, T1479 *Citrus grandis*, T4689 *Peganum nigellastrum*.

**diffuse lung and transform phlegm** T4718 *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*], T4721 *Perilla frutescens* var. *arguta*, T6259 *Syringa amurensis* [Syn. *Syringa reticulata* var. *amurensis*].

**diffuse lung qi** T4687 *Peganum harmala*.

**disinhibit damp** T0137 *Aconitum tanguticum*, T0157 *Actinidia callosa* var. *henryi*, T0567 *Aralia armata*, T0895 *Benincasa hispida*, T0941 *Bidens tripartita*, T0973 *Bombax malabaricum* [Syn. *Gossampinus malabarica*], T1143 *Calystegia hederacea*, T1172 *Canna edulis*, T1199 *Carduus acanthoides*, T1200 *Carduus crispus*, T1258 *Casuarina equisetifolia*, T1526 *Cladonia rangiferina*, T1675 *Corchorus olitorius*, T1747 *Corydalis thalictrifolia*, T1831 *Crotalaria sessiliflora*, T2334 *Elephantopus scaber*, T2649 *Evolvulus alsinoides*, T2715 *Fibraurea recisa*, T2902 *Gentiana algida*, T3126 *Hedyotis corymbosa* [Syn. *Oldenlandia corymbosa*], T3142 *Helianthus annuus*, T3361 *Hypericum perforatum*, T3524 *Isodon sculponeata* [Syn. *Rabdosia sculponeata*], T3528 *Isodon ternifolia*, T3529 *Isodon ternifolius*, T3555 *Jasminum nudiflorum*, T4144 *Meconopsis nepalensis*, T4145 *Meconopsis punicea*, T4183 *Menispermum dauricum*, T4335 *Mussaenda pubescens*, T4485 *Oldenlandia diffusa* [Syn. *Hedyotis diffusa*], T4502 *Onychium japonicum* [Syn. *Tricomanes japonicum*], T4526 *Origanum vulgare*, T4840 *Phyllanthus niruri*, T4979 *Pistacia chinensis*, T5687 *Salvia prionitis*, T5856 *Sedum lineare* [Syn. *Sedum obtuso-lineare*], T5863 *Selaginella moellendorffii*, T5939 *Shiraiia bambusicola*, T5978 *Smilax glauco-china*,

T6116 *Stenoloma chusanum*, T6217 *Swertia davidii*, T6224 *Swertia kouitchensis*, T6231 *Swertia pseudochinensis*, T6234 *Swertia punicea*, T6359 *Teucrium bidentatum*, T6398 *Thalictrum microgynum*, T6431 *Thesium chinense*, T6912 *Zinnia elegans*.

**disinhibit damp and abate jaundice** T0608 *Arenaria kansuensis* [Syn. *Arenaria kumaonensis*], T3507 *Isodon lophanthoides* [Syn. *Rabdosia lophanthoides*; *Hyssopus lophanthoides*; *Plectranthus striatus*; *Isodon striatus*], T4148 *Medicago sativa*, T5207 *Prismatomeris tetrandra*, T5397 *Rabdosia serra*, T5560 *Rorippa montana* [Syn. *Rorippa dubia*; *Sisymbrium dubium*], T6219 *Swertia erythrosticta*, T6226 *Swertia mileensis*, T6260 *Syringa oblata*, T6409 *Thalictrum simplex* [Syn. *Thalictrum simplex* var. *brevipes*].

**disinhibit damp and check diarrhea** T2387 *Epilobium hirsutum*, T5528 *Rhodomyrtus tomentosa*.

**disinhibit damp and disperse glomus** T3928 *Lotus corniculatus*.

**disinhibit damp and disperse stagnation** T5576 *Rostellularia procumbens* [Syn. *Justicia procumbens*].

**disinhibit damp and disperse swelling** T0426 *Ampelopsis grossedentata* [Syn. *Ampelopsis cantoniensis* var. *grossedentata*], T1921 *Cyanotis arachnoidea* [Syn. *Cyanotis bodinieri*], T2363 *Entada phaseoloides* [Syn. *Lens phaseoloides*], T3628 *Kerria japonica*, T3681 *Lamium barbatum*, T3996 *Lysimachia candida*, T4837 *Phyllanthus emblica*, T6131 *Stephania longa*, T6367 *Teucrium quadrifarium*.

**disinhibit damp and eliminate impediment** T4814 *Phlomis umbrosa*.

**disinhibit damp and eliminate turbidity** T2208 *Dioscorea septemloba*.

**disinhibit damp and fortify stomach** T6214 *Swertia chinensis*.

**disinhibit damp and free milk** T4120 *Marsdenia tenacissima*.

**disinhibit damp and free strangury** T2213 *Dioscorea zingiberensis*, T2973 *Glechoma longituba*, T2974 *Glechoma lungituba*.

**disinhibit damp and harmonize center** T4305 *Mosla dianthera*.

**disinhibit damp and harmonize stomach** T5395 *Rabdosia nervosa*.

**disinhibit damp and quicken blood** T4842 *Phyllanthus reticulatus*.

**disinhibit damp and relieve itch** T4154 *Melaleuca leucadendra*.

**disinhibit damp and relieve pain** T2327 *Elaeagnus angustifolia*, T3398 *Ilex rotunda*.

**disinhibit damp and resolve toxin** T3444 *Ipomoea aquatica* [Syn. *Convolvulus repens*; *Ipomoea reptans*], T5671 *Salvia digitaloides*.

**disinhibit damp and stanch bleeding** T3672 *Lagerstroemia indica*.

**disinhibit damp and transform turbidity** T6504 *Tricholoma matsutake* [Syn. *Armillaria matsutake*].

**disinhibit damp and turbidity** T2197 *Dioscorea futschauensis*, T2198 *Dioscorea gracillima*, T2201 *Dioscorea hypoglauca* [Syn. *Dioscorea colletii* var. *hypoglauca*], T2210 *Dioscorea spongiosa*, T2212 *Dioscorea tokoro*.

**disinhibit damp heat** T5185 *Potentilla multifida*.

**disinhibit diaphragm** T1488 *Citrus junos*, T5993 *Solanum capsicastrum*.

**disinhibit gallbladder** T0647 *Armoracia lapathifolia*, T1315 *Cephaelis ipecacuanha*.

**disinhibit gallbladder and free intestines** T0984 *Bos taurus domesticus*; *Bubalus bubalis*.

**disinhibit joints** T1411 *Cibotium barometz* [Syn. *Polypodium barometz*], T4290 *Morus alba*, T4445 *Notopterygium forbesii* [Syn. *Notopterygium franchetii*], T4446 *Notopterygium incisum*.

- disinhibit liver and gallbladder** T6656 *Ustilago maydis*.
- disinhibit lung and transform phlegm** T1007 *Brassica juncea*.
- disinhibit pharynx and larynx** T4184 *Mentha haplocalyx* [Syn. *Mentha canadaensis*; *Mentha arvensis* var. *haplocalyx*; *Mentha arvensis*], T4845 *Physalis alkekengi*.
- disinhibit qi** T1750 *Corydalis yanhusuo* [Syn. *Corydalis turtschaninovii* f. *yanhusuo*].
- disinhibit sinews and bones** T0467 *Anemone flaccida*.
- disinhibit throat** T0892 *Belamcanda chinensis*, T1165 *Canarium album*, T1981 *Cyprinus carpio*, T2244 *Doellingeria scaber* [Syn. *Aster scaber*], T3240 *Hibiscus esculentus*, T4210 *Michelia champaca*, T5011 *Platycodon grandiflorum*, T6463 *Tinospora capillipes*, T6467 *Tinospora sagittata*, T6655 *Ustilagoidea virens*.
- disinhibit throat and disperse goiter** T0992 *Bos taurus domesticus*; *Bubalus bubalis*.
- disinhibit throat and disperse swelling** T0197 *Aegle marmelos*, T4538 *Oroxylum indicum*, T6043 *Sophora subprostrata* [Syn. *Sophora tonkinensis*], T6084 *Spiraea prunifolia*, T6086 *Spiraea thunbergii*.
- disinhibit throat and relieve cough** T2257 *Dracocephalum moldavicum*.
- disinhibit throat and restore voice** T5406 *Rana limnocharis*.
- disinhibit urine** T0011 *Abrus precatorius*, T0184 *Adonis amurensis*, T0274 *Akebia quinata*, T0275 *Akebia quinata*, T0278 *Akebia trifoliata*, T0280 *Akebia trifoliata* var. *australis*, T0379 *Alternanthera philoxeroides*, T0388 *Amaranthus lividus*, T0423 *Ampelopsis brevipedunculata*, T0598 *Ardisia japonica*, T0632 *Aristolochia manshuriensis*, T0647 *Armoracia lapathifolia*, T0708 *Arthromeris mairei* [Syn. *Polypodium mairei*], T0722 *Arundo donax*, T0834 *Averrhoa carambola*, T1032 *Broussonetia papyrifera*, T1152 *Camellia sinensis* [Syn. *Thea sinensis*], T1174 *Cannabis sativa*, T1241 *Cassia occidentalis*, T1385 *Chorda filum*, T1464 *Citrullus vulgaris* [Syn. *Citrullus lanatus*], T1471 *Citrus chachiensis*, T1473 *Citrus cultivars*, T1474 *Citrus decumana*, T1516 *Citrus tankan*, T1518 *Citrus unshiu*, T1608 *Coffea arabica*, T1610 *Coffea liberica*, T1922 *Cyanotis vaga*, T2407 *Equisetum arvense*, T2410 *Equisetum pratense*, T2612 *Euphorbia prolifera*, T2628 *Euphrasia officinalis*, T2730 *Fimbristylis dichotoma*, T2749 *Fomes officinalis*, T3066 *Gryllulus chinensis*, T3122 *Hedyotis acutangula*, T3128 *Hedysarum multijugum*, T3143 *Helianthus annuus*, T3174 *Heliotropium indicum*, T3394 *Ilex paraguariensis*, T3594 *Juniperus rigida*, T3662 *Lactuca sativa*, T3758 *Lepidium sativum*, T3765 *Lepisorus ussuriensis*, T3785 *Levisticum officinale*, T3815 *Ligularia stenocephala*, T3885 *Litsea cubeba*, T3920 *Lophatherum gracile*, T3988 *Lycoris squamigera*, T4254 *Miscanthus sinensis*, T4290 *Morus alba*, T4388 *Nasturtium officinale*, T4438 *Nostoc flagelliforme*, T4644 *Parasilurus asotus*, T4785 *Phaseolus vulgaris*, T4829 *Phragmites communis*, T4846 *Physalis alkekengi* var. *franchetii*, T4848 *Physalis angulata*, T4854 *Physalis pubescens*, T5419 *Raphanus sativus*, T5452 *Reseda luteola*, T5605 *Rumex acetosa*, T5606 *Rumex acetosa*, T5626 *Ruta graveolens*, T5651 *Salix babylonica*, T5726 *Saponaria officinalis*, T5953 *Silene firma*, T5963 *Sinodielsia yunnanensis*, T6210 *Swainsonia salsula* [Syn. *Sphaerophysa salsula*], T6423 *Theobroma cacao*, T6598 *Ulva conglobata*, T6673 *Vaccinium vitis-idaea*, T6798 *Vitis vinifera*, T6820 *Wikstroemia indica*, T6862 *Zanthoxylum ailanthoides*, T6902 *Zea mays*.
- disinhibit urine** T4797 *Phillyrea latifolia*.
- disinhibit urine and abate jaundice** T4147 *Medicago falcata*.
- disinhibit urine and disperse edema** T1415 *Cichorium intybus*, T1984 *Cypridium macranthum* [Syn. *Cypridium tibeticum*], T2479 *Erythrina variegata* var. *orientalis*, T3200 *Hemidesmus indicus*, T3752 *Leonurus heterophyllus* [Syn. *Leonurus artemisia*], T3754 *Leonurus sibiricus*, T3898 *Lobelia chinensis* [Syn. *Lobelia radicans*], T4050 *Magnolia sieboldii*, T5818 *Scoparia dulcis*, T5835 *Scutellaria barbata* [Syn. *Scutellaria rivularis*], T6099 *Stauntonia chinensis*, T6100 *Stauntonia hexaphylla*, T6433 *Thevetia neriifolia* [Syn. *Thevetia peruviana*], T6901 *Zea mays*.
- disinhibit urine and draw toxin** T0791 *Astragalus chrysopterus*, T0794 *Astragalus ernestii*, T0798 *Astragalus membranaceus*, T0800 *Astragalus mongolicus*.
- disinhibit urine and free channels** T6311 *Taxus cuspidata*.
- disinhibit urine and free milk** T4573 *Pachyrrhizus erosus*.
- disinhibit urine and free stool** T0389 *Amaranthus tricolor*, T2580 *Euphorbia antiquorum*, T3286 *Hovenia dulcis*, T4091 *Malva sylvestris*, T4845 *Physalis alkekengi*, T4861 *Phytolacca americana* [Syn. *Phytolacca decandra*], T4864 *Phytolacca esculenta* [Syn. *Phytolacca acinosa*].
- disinhibit urine and free strangury** T0001 *Abelmoschus manihot*, T0073 *Achyranthes bidentata*, T0753 *Asparagus setaceus* [Syn. *Asparagus plumosus*], T0759 *Aspidistra elatior*, T0853 *Baeckeke frutescens*, T1931 *Cyclea barbata*, T1933 *Cyclea sutchuenensis*, T1950 *Cynanchum ascyrifolium*, T1951 *Cynanchum atratum*, T1962 *Cynanchum versicolor*, T2119 *Derris eriocarpa*, T2134 *Desmodium styracifolium*, T2143 *Dianthus chinensis*, T2145 *Dianthus superbus*, T2147 *Dianthus versicolor*, T2952 *Gerbera piloselloides*, T3288 *Humulus japonicus* [Syn. *Humulus scandens*], T3416 *Imperata cylindrica* var. *major*, T3764 *Lepisorus thunbergianus*, T3769 *Lespedeza bicolor*, T4456 *Nymphoides peltatum*, T4562 *Oxalis acetosella*, T5033 *Poa sphondylodes*, T5098 *Polygonum aviculare*, T5354 *Pyrrosia davidii*, T5355 *Pyrrosia drakeana*, T5356 *Pyrrosia gralla*, T5357 *Pyrrosia lingua*, T5358 *Pyrrosia petiolosa*, T5360 *Pyrrosia sheareri*, T6301 *Taraxacum mongolicum*, T6582 *Tylophora ovata*, T6597 *Ulmus pumila*.
- disinhibit urine and quiet spirit** T3289 *Humulus lupulus*.
- disinhibit urine and remove stone** T4432 *Nigella glandulifera*.
- disinhibit urine and resolve toxin** T1357 *Chelidonium majus*, T1823 *Crotalaria juncea*, T4760 *Peucedanum japonicum*, T6286 *Tamarix chinensis*, T6290 *Tamarix ramosissima*.
- disinhibit water** T0544 *Apium graveolens*, T1033 *Broussonetia papyrifera*, T1194 *Carassius auratus*, T1229 *Cassia acutifolia*, T1230 *Cassia angustifolia*, T1878 *Cucumis sativus*, T2115 *Dermatocarpon minimum*, T2321 *Ecklonia kurome*, T2585 *Euphorbia esula*, T3668 *Lagenaria siceraria* var. *depressa*, T3678 *Laminaria japonica*, T3867 *Liquidambar formosana* [Syn. *Liquidambar taiwaniana*], T3935 *Luffa cylindrica*, T4616 *Pandanus tectorius*, T5223 *Prunus humilis* [Syn. *Cerasus humilis*], T5224 *Prunus japonica* [Syn. *Cerasus japonica*], T5225 *Prunus japonica* var. *nakaii*, T5238 *Prunus salicina*, T5740 *Sargassum vachellianum*, T6259 *Syringa amurensis* [Syn. *Syringa reticulata* var. *amurensis*], T6330 *Tephrosia kirilowii* [Syn. *Senecio integrifolius* var. *fauriei*], T6640 *Undaria pinnatifida*, T6750 *Vicia sativa*, T6752 *Vigna angularis* [Syn. *Dolichus angularis*; *Phaseolus angularis*], T6826

*Wisteria sinensis*, T6925 *Zostera marina*.

**disinhibit water and disperse distention** T1051 *Bufo bufo gargarizans*; *Bufo melanostictus*, T6602 *Umbilicaria hypococcinea*.

**disinhibit water and disperse edema** T0172 *Adiantum caudatum*, T0553 *Apocynum venetum*, T1004 *Brasenia schreberi*, T1263 *Catalpa ovata*, T1590 *Cocculus trilobus* [Syn. *Cocculus sarmentosus*], T1595 *Codium fragile*, T1633 *Commelina communis*, T1696 *Cornus capitata* [Syn. *Dendrobenthamia capitata*], T1881 *Cucurbita moschata*, T1954 *Cynanchum chinense*, T2282 *Dryopteris filix-mas*, T2367 *Ephedra equisetina*, T2368 *Ephedra gerardiana*, T2369 *Ephedra intermedia*, T2372 *Ephedra likiangensis*, T2373 *Ephedra minuta*, T2375 *Ephedra monosperma*, T2379 *Ephedra saxatilis*, T2380 *Ephedra sinica*, T2589 *Euphorbia helioscopia*, T3738 *Lemna minor*, T3999 *Lysimachia clethroides*, T4026 *Macrothelypteris oligophlebia*, T4121 *Marsilea quadrifolia*, T4287 *Morus alba*, T4306 *Mosla grosseserrata*, T4505 *Ophiocephalus argus*, T4818 *Phoebe nanmu*, T5115 *Polygonum sibiricum* [Syn. *Persicaria sibirica*], T5407 *Rana nigromaculata*; *Rana plancyi*, T5409 *Rana temporaria chensinensis*; *Rana amurensis*, T5685 *Salvia plebeia*, T6129 *Stephania japonica*, T6136 *Stephania tetrandra*, T6227 *Swertia mussotii*, T6436 *Thlaspi arvense*, T6541 *Tripterygium regelii*, T6599 *Ulva lactuca*, T6600 *Ulva pertusa*, T6709 *Verbena officinalis*, T6799 *Vitis vinifera*, T6861 *Zanthoxylum ailanthoides*.

**disinhibit water and free stool** T1240 *Cassia obtusifolia*, T1250 *Cassia tora*, T5231 *Prunus persica*.

**disinhibit water and free strangury** T0171 *Adiantum capillus-veneris*, T0173 *Adiantum lumulatum*, T0175 *Adiantum pedatum*, T0264 *Ajuga forrestii*, T3002 *Glycine max*, T3448 *Ipomoea cairica* [Syn. *Ipomoea palmata*], T3578 *Juncus effusus*, T3990 *Lygodium japonicum*, T3998 *Lysimachia christinae*, T4855 *Physeter catodon*, T5838 *Scutellaria galericulata*, T6596 *Ulmus parvifolia*.

**disinhibit water and harmonize center** T0568 *Aralia chinensis*, T0570 *Aralia dasyphylla*.

**disinhibit water and kill worms** T2051 *Daucus carota* var. *sativa*.

**disinhibit water and percolate damp** T0303 *Alisma orientale* [Syn. *Alisma plantago-aquatica* var. *orientale*], T1352 *Chamaenerion angustifolium* [Syn. *Epilobium angustifolium*], T5129 *Polyporus umbellatus*, T5169 *Poria cocos*.

**disinhibit water and precipitate qi** T1980 *Cyprinus carpio*.

**disinhibit water and resolve toxin** T4843 *Phyllanthus urinaria*, T5362 *Pyrus bretschneideri*, T5366 *Pyrus pyrifolia*.

**disinhibit water and transform damp** T5289 *Pteris dactylina*.

**dispel cold** T2644 *Evodia rutaecarpa*, T2646 *Evodia rutaecarpa* var. *officinalis*, T3877 *Litchi chinensis*, T6528 *Trigonella foenum-graecum*, T6889 *Zanthoxylum podocarpum*.

**dispel cold and relieve pain** T1441 *Cinnamomum japonicum*, T4964 *Piper retrofractum*.

**dispel damp** T0301 *Aleuritopteris argentea*, T4080 *Mallotus apelta*.

**dispel damp and check diarrhea** T6895 *Zanthoxylum simulans*.

**dispel damp and disinhibit urine** T0071 *Achyranthes aspera*, T0072 *Achyranthes aspera* var. *indica*.

**dispel damp and disinhibit water** T5176 *Potamogeton natans*.

**dispel damp and disperse swelling** T0421 *Amorpha fruticosa*.

**dispel damp and dissipate cold** T0932 *Betula luminifera*, T1901 *Curculigo*

*orchiooides*.

**dispel damp and fortify spleen** T3766 *Lepista nuda*.

**dispel damp and fortify stomach** T0142 *Acorus calamus*.

**dispel damp and free network vessels** T1205 *Carica papaya*, T4938 *Piper boehmeriaefolium*, T6653 *Usnea diffracta*, T6654 *Usnea longissima*.

**dispel damp and kill worms** T4859 *Physochlaina physaloides*, T6869 *Zanthoxylum bungeanum*, T6892 *Zanthoxylum schinifolium*.

**dispel damp and relieve itch** T2988 *Glochidion eriocarpum*.

**dispel damp and relieve pain** T0006 *Abies nephrolepis*, T0138 *Aconitum umbrosum*, T0478 *Angelica dahurica* [Syn. *Angelica porphyrocaulis*], T0572 *Aralia elata*, T2805 *Fugu ocellatus*, T5964 *Sinomenium acutum*.

**dispel damp and resolve toxin** T1932 *Cyclea racemosa*, T4689 *Peganum nigellastrum*, T4789 *Phellodendron amurense*, T4790 *Phellodendron amurense* var. *wilsonii*, T4791 *Phellodendron chinense*, T4792 *Phellodendron chinense* var. *glabriusculum*.

**dispel damp and strengthen spleen** T0358 *Alpinia katsumadai*, T0819 *Atractylodes chinensis*, T0821 *Atractylodes japonica*, T0823 *Atractylodes lancea*.

**dispel damp and transform stasis** T1533 *Clausena dentata*, T1534 *Clausena dunniana*.

**dispel phlegm** T0012 *Abrus precatorius*, T0598 *Ardisia japonica*, T1315 *Cephaelis ipecacuanha*, T1385 *Chorda filum*, T2268 *Drosera rotundifolia*, T2321 *Ecklonia kurome*, T3678 *Laminaria japonica*, T3802 *Ligularia dentata*, T3805 *Ligularia fischeri*, T3807 *Ligularia intermedia*, T3813 *Ligularia sibirica*, T3988 *Lycoris squamigera*, T4423 *Nicandra physaloides*, T4518 *Oppopanax chironium*, T4814 *Phlomis umbrosa*, T4858 *Physochlaina infundibularis*, T4908 *Pinus bungeana*, T5011 *Platycodon grandiflorum*, T5073 *Polygala chinensis* [Syn. *Polygala glomerata*], T5087 *Polygala telephioides*, T5502 *Rhododendron anthopogonoides*, T5508 *Rhododendron dauricum*, T5522 *Rhododendron seniavinii*, T5594 *Rubus parkeri*, T5719 *Sapindus mukorossi*, T5726 *Saponaria officinalis*, T6640 *Undaria pinnatifida*.

**dispel phlegm and allay thirst** T1247 *Cassia sophera*.

**dispel phlegm and disinhibit damp** T0595 *Ardisia crispa*.

**dispel phlegm and disinhibit throat** T1858 *Croton tiglium*.

**dispel phlegm and dissipate binds** T3308 *Hydrangea umbellata*.

**dispel phlegm and eliminate damp** T5071 *Polygala arillata*.

**dispel phlegm and interrupt malaria** T0363 *Alpinia speciosa*, T2158 *Dichroa febrifuga*.

**dispel phlegm and open orifices** T5086 *Polygala sibirica*, T5088 *Polygala tenuifolia*.

**dispel phlegm and promote vomiting** T3984 *Lycoris chinensis*, T3986 *Lycoris radiata* [Syn. *Amaryllis radiata*], T6429 *Thermopsis lupinoides*.

**dispel phlegm and relieve cough** T3709 *Lathyrus pratensis*, T5513 *Rhododendron mariae*, T5981 *Smilax riparia*.

**dispel phlegm and settle asthma** T2439 *Eruca sativa*, T4418 *Nerium indicum*.

**dispel phlegm and suppress cough** T2697 *Ferula borealis*, T5560 *Rorippa montana* [Syn. *Rorippa dubia*; *Sisymbrium dubium*].

**dispel stasis** T1181 *Capra hircus*; *Ovis aries*, T1212 *Carpesium eximium*, T1416 *Cicuta virosa*, T1558 *Clerodendron inerme*, T4418 *Nerium indicum*, T5238 *Prunus salicina*, T5587 *Rubus alceaefolius*, T6507 *Trichosanthes cucumeroides*.



- dispel stasis and disperse swelling** T1449 *Cirsium japonicum*, T1784 *Cratogeomys cochinchinense*, T2328 *Elaeis guineensis*, T4670 *Patrinia heterophylla*, T4673 *Patrinia scabra*, T4740 *Petasites japonicus*, T5411 *Randia spinosa*, T5537 *Rhus sylvestris*, T5613 *Rumex obtusifolius*.
- dispel stasis and engender flesh** T5586 *Rubia yunnanensis*, T5697 *Salvia trijuga*.
- dispel stasis and harmonize construction** T5301 *Pterocarpus indicus*.
- dispel stasis and regulate menstruation** T2130 *Desmodium gangeticum*, T4005 *Lysionotus pauciflorus*.
- dispel stasis and relieve pain** T0813 *Atalantia buxifolia* [Syn. *Severinia buxifolia*], T0890 *Begonia limprichtii*, T1101 *Caesalpinia decapetala*, T1129 *Calophyllum inophyllum*, T1491 *Citrus limon*, T1495 *Citrus limonia*, T1796 *Crinum asiaticum* var. *sinicum*, T2298 *Dysosma difformis*, T2302 *Dysosma pleiantha* [Syn. *Podophyllum pleianthum*], T2304 *Dysosma veitchii*, T2305 *Dysosma versipellis* [Syn. *Podophyllum versipelle*], T3360 *Hypericum patulum*, T3479 *Isodon amethystoides*, T4131 *Maytenus confertiflorus*, T5365 *Pyrus pashia*.
- dispel stasis and stanch bleeding** T1566 *Clerodendrum inerme*, T2280 *Dryopteris chrysocoma*, T3278 *Homo sapiens*, T4399 *Nelumbo nucifera*, T4549 *Osbeckia chinensis*, T4552 *Osmunda japonica*.
- dispel summerheat** T0687 *Artemisia myriantha*, T1490 *Citrus limon*, T1494 *Citrus limonia*, T4263 *Momordica charantia*, T4397 *Nelumbo nucifera*.
- dispel summerheat and effuse exterior** T2563 *Eupatorium japonicum*.
- dispel summerheat and engender liquid** T1544 *Cleistocalyx operculatus*.
- dispel summerheat and resolve exterior** T0212 *Agastache rugosus*.
- dispel summerheat and transform damp** T1278 *Cedrela sinensis*.
- dispel wind** T0065 *Achillea millefolium*, T0359 *Alpinia officinarum*, T0544 *Apium graveolens*, T0567 *Aralia armata*, T0750 *Asparagus gobicus*, T0784 *Astilbe chinensis*, T0819 *Atractylodes chinensis*, T0821 *Atractylodes japonica*, T0823 *Atractylodes lancea*, T0888 *Beesia calthaeifolia*, T1032 *Broussonetia papyrifera*, T1171 *Canis familiaris*, T1175 *Cannabis sativa*, T1180 *Capparis spinosa*, T1199 *Carduus acanthoides*, T1200 *Carduus crispus*, T1437 *Cinnamomum camphora*, T1582 *Cnidium monnieri*, T1650 *Convolvulus arvensis*, T1746 *Corydalis taliensis*, T2039 *Datura innoxia*, T2043 *Datura metel*, T2047 *Datura stramonium*, T2113 *Dennstaedtia scabra* [Syn. *Dicksonia scabra*], T2154 *Dicentra spectabilis*, T2263 *Dregea volubilis*, T3082 *Gynocardia odorata*, T3142 *Helianthus annuus*, T3594 *Juniperus rigida*, T3674 *Laggera alata*, T3810 *Ligularia nelumbifolia*, T3847 *Lindera angustifolia*, T3878 *Lithocarpus polystachyus*, T4020 *Macleaya cordata*, T4029 *Maesa japonica*, T4126 *Matteuccia orientalis*, T4188 *Mentha rotundifolia*, T4662 *Parthenocissus tricuspidata*, T4842 *Phyllanthus reticulatus*, T4912 *Pinus koraiensis*, T5107 *Polygonum multiflorum*, T5626 *Ruta graveolens*, T5651 *Salix babylonica*, T5741 *Sargentodoxa cuneata*, T5767 *Saussurea pulchella*, T5804 *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*], T5963 *Sinodielsia yunnanensis*, T5978 *Smilax glauco-china*, T6359 *Teucrium bidentatum*, T6499 *Tribulus terrestris*, T6578 *Tylophora atrofolliculata*, T6843 *Xanthium sibiricum* [Syn. *Xanthium strumarium*].
- dispel wind and attack toxin** T2897 *Gelsemium elegans*.
- dispel wind and brighten eyes** T0805 *Astragalus sinicus*, T0806 *Astragalus sinicus*, T1185 *Capsella bursa-pastoris*, T3957 *Lycium chinense*.
- dispel wind and check tetany** T0617 *Arisaema amurense*, T0618 *Arisaema consanguineum*, T0620 *Arisaema heterophyllum*, T1084 *Buthus martensi*, T4903 *Pinellia pedatisecta*.
- dispel wind and clear heat** T0979 *Bombyx mori*, T3865 *Lippia nodiflora*, T5119 *Polygonum thunbergii*, T5234 *Prunus persica*, T5773 *Saxifraga stolonifera*, T6079 *Spiraea japonica*, T6082 *Spiraea japonica* var. *fortunei*.
- dispel wind and disinherit damp** T0045 *Acanthopanax trifoliatum*, T0600 *Ardisia mamillata* [Syn. *Tinus mamillata*], T0721 *Arundina chinensis*, T1003 *Brandisia hancei*, T1924 *Cyathula officinalis*, T2020 *Damnacanthus indicus*, T2136 *Desmos cochinchinensis* [Syn. *Desmos chinensis*], T2194 *Dioscorea collettii*, T2723 *Ficus pumila*, T3113 *Hedera nepalensis* var. *sinensis*, T3115 *Hedera rhombea*, T3471 *Iris tectorum*, T4439 *Nothapodytes pittosporoides*, T4527 *Orixa japonica*, T4542 *Orthosiphon wulfenoides* [Syn. *Coleus wulfenoides*], T5114 *Polygonum polystachyum*, T5178 *Potamogeton perfoliatus*, T5401 *Rabdosia yunnanensis*, T5645 *Sageretia theezans* [Syn. *Sageretia thea*], T5650 *Salix babylonica*, T5704 *Sambucus nigra*, T5707 *Sambucus williamsii*, T5795 *Schisandra micrantha*, T5976 *Smilax china* [Syn. *Smilax japonica*], T5982 *Smilax sieboldii*, T5984 *Smilax stans* [Syn. *Smilax vaginata* var. *stans*], T6645 *Urena lobata*, T6676 *Valeriana hardwickii*.
- dispel wind and disperse macula** T0583 *Archangelica decurrens*.
- dispel wind and dissipate cold** T0098 *Aconitum geniculatum*, T0138 *Aconitum umbrosum*, T0440 *Anagallis arvensis*, T0676 *Artemisia dracunculus*, T0724 *Asarum caulescens*, T0726 *Asarum forbesii*, T0727 *Asarum fukienense*, T0728 *Asarum heterotropoides* var. *mandshuricum*, T0729 *Asarum maximum*, T0730 *Asarum sagittarioides*, T0731 *Asarum sieboldii*, T0732 *Asarum sieboldii* var. *seoulensis*, T0926 *Berneuxia thibetica*, T1046 *Buddleja davidii*, T1434 *Cinnamomum bejolghota* [Syn. *Cinnamomum obtusifolium*; *Laurus bejolghota*], T1435 *Cinnamomum camphora*, T1440 *Cinnamomum glanduliferum*, T1443 *Cinnamomum parthenoxylum* [Syn. *Cinnamomum porrectum*], T1550 *Cleome gynandra* [Syn. *Gynandropsis gynandra*], T2636 *Euscaphis japonica*, T3026 *Gnaphalium affine* [Syn. *Gnaphalium multiceps*], T3118 *Hedychium coronarium*, T3213 *Heracleum hemsleyanum*, T3217 *Heracleum moellendorffii* [Syn. *Heracleum microcarpum*; *Heracleum morifolium*], T3228 *Heracleum yungningense*, T3653 *Lactarius piperatus* [Syn. *Agaricus piperatus*], T4000 *Lysimachia congestiflora*, T4039 *Magnolia grandiflora*, T4763 *Peucedanum morisonii*, T4938 *Piper boehmeriaefolium*, T4965 *Piper sarmentosum*, T5639 *Sabina chinensis*, T6106 *Stemmatocrypton khasianum*, T6422 *Thelephora vialis*, T6874 *Zanthoxylum dimorphophyllum* var. *spinifolium*, T6877 *Zanthoxylum dissitum*, T6895 *Zanthoxylum simulans*.
- dispel wind and dissipate cold and eliminate damp** T4962 *Piper puberulum*.
- dispel wind and dissipate heat** T2434 *Eriocaulon buergerianum*.
- dispel wind and dissipate stasis** T4444 *Nothopanax davidii*, T6100 *Stauntonia hexaphylla*.
- dispel wind and downbear fire** T3432 *Inula helianthus-aquatica*.
- dispel wind and dry damp** T3300 *Hydnocarpus anthelminticus*, T4906 *Pinus armandii*, T4916 *Pinus massoniana*, T4917 *Pinus massoniana*,

T5517 *Rhododendron molle*, T6073 *Sphallerocarpus gracilis*.

**dispel wind and effuse exterior** T0491 *Angelica polymorpha*, T6365 *Teucrium pilosum* [Syn. *Teucrium japonicum* var. *pilosum*].

**dispel wind and effuse sweat** T3222 *Heracleum scabridum*.

**dispel wind and eliminate damp** T0069 *Achillea wilsoniana*, T0077 *Aconitum balfourii*, T0079 *Aconitum brachypodium*, T0084 *Aconitum carmichaeli*, **T0100** *Aconitum hemsleyanum* var. *circinacum*, T0101 *Aconitum hemsleyanum*, T0105 *Aconitum karakolicum*, T0106 *Aconitum kirinense*, T0107 *Aconitum kongboense*, T0116 *Aconitum nagarum* var. *heterotrichum* [Syn. *Aconitum bullatifolium*], T0117 *Aconitum nagarum* var. *lasiandrum*, T0122 *Aconitum pendulum*, T0130 *Aconitum sinomontanum*, T0274 *Akebia quinata*, T0278 *Akebia trifoliata*, T0280 *Akebia trifoliata* var. *australis*, T0281 *Alangium chinense*, T0285 *Alangium platanifolium*, T0364 *Alsophila spinulosa*, T0383 *Alyxia sinensis*, T0414 *Ammopiptanthus mongolicus* [Syn. *Piptanthus mongolicus*], T0476 *Angelica anomala*, T0479 *Angelica dahurica* cv. *qibaizhi*, T0492 *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*], T0498 *Angelica taiwaniana*, T0500 *Anguilla japonica*, T0539 *Apis cerana*, T0568 *Aralia chinensis*, T0569 *Aralia cordata*, T0570 *Aralia dasyphylla*, T0571 *Aralia decaisneana*, T0574 *Aralia fargesii*, T0582 *Archangelica brevicaulis* [Syn. *Angelicarpa brevicaulis*; *Angelica brevicaulis*], T0634 *Aristolochia mollissima*, T0847 *Baccharis indica* [Syn. *Pluchea indica*], T0877 *Bauhinia championii*, T0886 *Beaumontia grandiflora*, T0922 *Berchemia polyphylla* var. *leioclada*, T0938 *Bidens bipinnata*, T0945 *Bischofia javanica* [Syn. *Bischofia trifoliata*], T0957 *Blumea balsamifera*, T0978 *Bombyx mori*, T1023 *Bredia tuberculata*, T1031 *Broussonetia kazinoki*, T1285 *Celastrus angulatus*, T1286 *Celastrus flagellaris*, T1288 *Celastrus orbiculatus* [Syn. *Celastrus articulatus*], T1290 *Celastrus orbiculatus* [Syn. *Celastrus articulatus*], T1361 *Chenopodium ambrosioides*, T1371 *Chloranthus japonicus*, T1436 *Cinnamomum camphora*, T1545 *Clematis chinensis*, T1547 *Clematis terniflora* [Syn. *Clematis maximowicziana*], T1556 *Clerodendron fragrans*, T1589 *Cocculus trilobus* [Syn. *Cocculus sarmentosus*], T1590 *Cocculus trilobus* [Syn. *Cocculus sarmentosus*], T1640 *Coniogramme japonica* [Syn. *Hemionitis japonica*], T1641 *Conioselinum vaginatum*, T1692 *Coriaria sinica* [Syn. *Coriaria nepalensis*], T1721 *Corydalis linearioides*, T1815 *Crotalaria assamica*, T1900 *Curculigo capitulata* [Syn. *Leucojum capitulata*], T1943 *Cymbopogon goeringii*, T1976 *Cyperus iria*, T2058 *Deeringia amaranthoides* [Syn. *Cladostachys frutescens*], T2062 *Delphinium bonvalotii*, T2081 *Delphinium omeiense*, T2084 *Delphinium potaninii*, T2085 *Delphinium potaninii* var. *jiufengshanense*, T2133 *Desmodium racemosum* [Syn. *Podocarpium podocarpum* var. *oxyphyllum*], T2203 *Dioscorea nipponica*, T2204 *Dioscorea nipponica* ssp. *rosthornii*, T2233 *Diploclostia glaucescens*, T2262 *Dregea sinensis*, T2391 *Epimedium brevicornum*, T2422 *Erigeron breviscapus*, T2459 *Erythrina arborescens*, T2478 *Erythrina variegata* [Syn. *Erythrina indica*], T2541 *Euonymus grandiflorus*, T2631 *Eurya japonica*, T2641 *Evodia lepta* [Syn. *Ilex lepta*], T2657 *Fagopyrum cymosum* [Syn. *Polygonum cymosum*], T2731 *Firmiana simplex*, T2732 *Firmiana simplex*, T2735 *Fissistigma oldhamii* [Syn. *Melodorum oldhamii*], T2737 *Flemingia philippinensis* [Syn. *Moghania philippinensis*], T2749 *Fomes officinalis*, T2750 *Fomitopsis pinicola* [Syn. *Fomes pinicola*; *Polyporus pinicola*], T2895 *Gaultheria*

*yunnanensis*, T2946 *Geranium robertianum*, T3033 *Gnetum parvifolium* [Syn. *Gnetum indicum*], T3201 *Hemiphragma heterophyllum*, T3214 *Heracleum lanatum*, T3221 *Heracleum rapula*, T3234 *Heteropogon contortus*, T3294 *Huperzia selago* [Syn. *Lycopodium selago*], T3371 *Hypocrella bambusae*, T3395 *Ilex pedunculosa*, T3400 *Illicium difengpi*, T3401 *Illicium henryi*, T3403 *Illicium majus*, T3413 *Impatiens nolintangere*, T3414 *Impatiens sicutifer*, T3417 *Imperata cylindrica* var. *major*, T3614 *Kadsura heteroclita* [Syn. *Uvaria heteroclita*], T3624 *Kalopanax pictum*, T3625 *Kalopanax septemlobus*, T3746 *Leontice robustum*, T3776 *Lethariella zahlbruckneri*, T3796 *Libanotis buchtormensis*, T3822 *Ligusticum jeholense*, T3824 *Ligusticum sinense*, T3849 *Lindera chunii*, T3852 *Lindera megaphylla*, T3856 *Lindera umbellata* [Syn. *Lindera erythrocarpa*], T3871 *Liriodendron tulipifera*, T3965 *Lycopodium annotinum*, T3969 *Lycopodium casuarinoides*, T3970 *Lycopodium cernuum*, T3971 *Lycopodium complanatum*, T3973 *Lycopodium japonicum* [Syn. *Lycopodium clavatum*], T3976 *Lycopodium obscurum*, T3997 *Lysimachia capillipes*, T4004 *Lysimachia paridiformis*, T4005 *Lysionotus pauciflorus*, T4085 *Mallotus repandus* var. *chrysocarpus* [Syn. *Mallotus chrysocarpus*; *Mallotus repandus*], T4260 *Moghania philippinensis*, T4267 *Monachosorum flagellare*, T4268 *Monachosorum henryi*, T4324 *Murraya paniculata* [Syn. *Chalcas paniculata*], T4347 *Myrica nagi* [Syn. *Podocarpus nagi*], T4445 *Notopterygium forbesii* [Syn. *Notopterygium franchetii*], T4446 *Notopterygium incisum*, T4453 *Nyctanthes arbor-tristis*, T4503 *Onychium lucidum*, T4577 *Paederia scandens*, T4663 *Passiflora caerulea*, T4690 *Pelargonium graveolens*, T4704 *Peperomia duclouxii*, T4725 *Periploca calophylla*, T4726 *Periploca forrestii*, T4778 *Phallus impudicus*, T4801 *Phlegmarius phlegmaria* [Syn. *Lycopodium phlegmaria*], T4810 *Phlomis mongolica*, T4838 *Phyllanthus flexuosus*, T4948 *Piper hancei*, T4975 *Piptanthus nanus*, T5021 *Pleurospermum rivulorum*, T5029 *Plumbago zeylanica*, T5057 *Podophyllum emodii* [Syn. *Podophyllum emodii* var. *chinense*; *Podophyllum sikkimense*; *Sinopodophyllum emodii*], T5110 *Polygonum orientale*, T5143 *Pongamia pinnata*, T5156 *Populus nigra* var. *thevestina*, T5193 *Pratia nummularia*, T5256 *Pseudolarix amabilis* [Syn. *Larix amabilis*; *Pseudolarix kaempferi*], T5269 *Psilotum nudum*, T5279 *Psychotria serpens*, T5298 *Pteris vittata*, T5341 *Pygmaeopremna herbacea* [Syn. *Premna herbacea*], T5391 *Rabdosia eriocalyx*, T5516 *Rhododendron molle*, T5555 *Rodgersia pinnata*, T5569 *Rosa multiflora*, T5591 *Rubus cochinchinensis*, T5609 *Rumex hastatus*, T5640 *Sabina vulgaris*, T5726 *Saponaria officinalis*, T5730 *Sarcandra glabra* [Syn. *Chloranthus glaber*], T5746 *Sassafras tzumu*, T5756 *Saussurea japonica*, T5793 *Schisandra henryi*, T5799 *Schisandra rubriflora*, T5847 *Securidaca inappendiculata*, T5861 *Selaginella doederleinii*, T5975 *Smilax bockii*, T6069 *Speranskia tuberculata*, T6439 *Thuja orientalis* [Syn. *Platycladus orientalis*; *Biota orientalis*], T6477 *Torreya grandis*, T6540 *Tripterygium hypoglaucum*, T6541 *Tripterygium regelii*, T6542 *Tripterygium wilfordii*, T6566 *Tupistra chinensis*, T6727 *Veronica persica*, T6731 *Veronicastrum sibiricum*, T6737 *Viburnum luzonicum*, T6738 *Viburnum odoratissimum*, T6742 *Vicia amoena*, T6773 *Viscum articulatum*, T6774 *Viscum articulatum*, T6787 *Vitex negundo*, T6799 *Vitis vinifera*, T6845 *Xanthoceras sorbifolia*, T6861 *Zanthoxylum ailanthoides*, T6862 *Zanthoxylum ailanthoides*, T6893 *Zanthoxylum simulans*, T6894

*Zanthoxylum simulans*.

- dispel wind and eliminate evil** T6000 *Solanum indicum*.
- dispel wind and eliminate impediment** T0144 *Acorus gramineus*, T0146 *Acorus tatarinowii*, T0156 *Actinidia arguta*, T5872 *Selenarctos tibetanus*; *Ursus arctos*.
- dispel wind and free impediment** T2208 *Dioscorea septemloba*.
- dispel wind and free network vessels** T0644 *Armillaria mellea*, T1567 *Clerodendrum mandarinorum*, T1629 *Colysis pothifolia* [Syn. *Hemionitis pothifolia*], T1884 *Cudrania cochinchinensis*, T1939 *Cymbopogon citratus*, T2030 *Daphne retusa*, T2031 *Daphne tangutica*, T2738 *Flemingia strobilifera*, T2890 *Gastrodia elata*, T3316 *Hylomecon japonica*, T3363 *Hypericum sampsonii*, T3797 *Libanotis condensata*, T3897 *Litsea verticillata*, T4800 *Phlegmariurus fordii*, T5101 *Polygonum cuspidatum*, T5108 *Polygonum multiflorum*, T5515 *Rhododendron micranthum*, T5964 *Sinomenium acutum*, T6484 *Trachelospermum jasminoides*, T6618 *Uncaria homomalla* [Syn. *Uruparia homomalla*; *Uruparia tonkinensis*; *Uruparia lanosa* var. *parviflora*], T6651 *Urtica cannabina*, T6652 *Urtica dioica*, T6884 *Zanthoxylum nitidum*.
- dispel wind and kill worms** T2980 *Gleditsia sinensis* [Syn. *Gleditsia horrida*], T3857 *Lindera umbellata* [Syn. *Lindera erythrocarpa*], T5028 *Plumbago indica*, T6031 *Sophora flavescens* [Syn. *Sophora angustifolia*].
- dispel wind and move qi** T3886 *Litsea euosma*.
- dispel wind and move water** T2131 *Desmodium pulchellum* [Syn. *Phyllodium pulchellum*], T6127 *Stephania glabra*.
- dispel wind and open orifices** T2275 *Dryobalanops aromatica*.
- dispel wind and outthrust papules** T3742 *Lentinus edodes*.
- dispel wind and overcome damp** T0080 *Aconitum bullatifolium* var. *homotrichum* [Syn. *Aconitum nagarum*], T0086 *Aconitum chasmanthum*, T0108 *Aconitum kusnezoffii*, T0123 *Aconitum polyschistum*, T0135 *Aconitum sungpanense*, T0838 *Azolla imbricata* [Syn. *Salvinia imbricata*], T1289 *Celastrus orbiculatus* [Syn. *Celastrus articulatus*], T5755 *Saussurea involucrata*, T5934 *Seseli meirei*, T5937 *Seseli yunnanense*, T5972 *Skimmia reevesiana*.
- dispel wind and percolate damp** T4253 *Mirabilis jalapa*.
- dispel wind and quicken blood** T0572 *Aralia elata*, T1191 *Caragana sinica*, T1649 *Convallaria keiskei* [Syn. *Convallaria majalis*], T1767 *Craibiodendron yunnanense*, T3411 *Impatiens balsamina*, T5151 *Populus davidiana*, T5158 *Populus simonii*, T5637 *Sabia schumanniana*, T5848 *Securinega suffruticosa*, T6713 *Vernonia anthelmintica*, T6888 *Zanthoxylum planispinum*.
- dispel wind and quicken network vessels** T0645 *Armillariella mellea*, T0708 *Arthromeris mairei* [Syn. *Polypodium mairei*], T3285 *Hovenia dulcis*, T3643 *Kopsia officinalis*, T4219 *Microlepia marginata*, T5368 *Python molurus bivittatus*, T6099 *Stauntonia chinensis*, T6131 *Stephania longa*, T6183 *Strychnos nittida*.
- dispel wind and relieve cough** T2056 *Debregeasia longifolia*, T4443 *Notholirion hyacinthinum* [Syn. *Notholirion bulbiferum*].
- dispel wind and relieve itch** T0963 *Boehmeria siamensis*, T1160 *Campsis grandiflora*, T1730 *Corydalis ophiocarpa*, T1936 *Cyclocarya paliurus*, T2165 *Dictamnus angustifolius*, T2167 *Dictamnus dasycarpus*, T3687 *Lantana camara*, T4231 *Milingtonia hortensis*, T4247 *Millingtonia hortensis*, T5104 *Polygonum hydropiper*, T6325 *Tectona grandis*.
- dispel wind and relieve pain** T0060 *Achillea alpina* [Syn. *Achillea sibirica*], T0078 *Aconitum barbatum* var. *puberulum* [Syn. *Aconitum ochranthum*], T0094 *Aconitum finetianum*, T0628 *Aristolochia fangchi*, T0629 *Aristolochia heterophylla*, T0635 *Aristolochia moupinensis*, T1291 *Celastrus paniculatus*, T1372 *Chloranthus serratus*, T1552 *Cleome viscosa*, T1563 *Clerodendron trichotomum*, T1583 *Cnidium officinale* [Syn. *Ligusticum officinale*], T1586 *Cocculus laurifolius*, T2052 *Davallia divaricata* [Syn. *Davallia formosana*; *Davallia orientalis*], T2053 *Davallia mariesii*, T2267 *Drosera peltata* var. *lunata*, T2412 *Equisetum sylvaticum*, T2447 *Erycibe elliptilimba*, T2883 *Gardenia jasminoides* [Syn. *Gardenia florida*], T3080 *Gymnema sylvestris*, T3820 *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*], T3851 *Lindera glauca*, T4361 *Myrsine africana*, T5144 *Populus adenopoda*, T5308 *Pterocarya stenoptera*, T5781 *Schefflera arboricola*, T5785 *Schefflera venulosa*, T5969 *Sium latifolium*, T6084 *Spiraea prunifolia*, T6086 *Spiraea thunbergii*, T6118 *Stephania brachyandra*, T6119 *Stephania cepharantha*, T6125 *Stephania elegans*, T6129 *Stephania japonica*, T6136 *Stephania tetrandra*, T6250 *Symplocos caudata*, T6468 *Tinospora sinensis*, T6471 *Toddalia asiatica* [Syn. *Toddalia aculeata*; *Paullinia asiatica*].
- dispel wind and remove damp** T1530 *Cladostachys amaranthoides* [Syn. *Achyranthes amaranthoides*; *Cladostachys frutescens*; *Deeringia amaranthoides*].
- dispel wind and resolve exterior** T0478 *Angelica dahurica* [Syn. *Angelica porphyrocaulis*], T0692 *Artemisia rupestris* [Syn. *Artemisia dentata*; *Artemisia viridis*; *Artemisia viridifolia*], T0814 *Atalantia buxifolia* [Syn. *Severinia buxifolia*], T3006 *Glycosmis citrifolia*, T4154 *Melaleuca leucadendra*, T5727 *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*], T6789 *Vitex negundo*.
- dispel wind and resolve summerheat** T6367 *Teucrium quadrifarium*.
- dispel wind and resolve tetany** T0975 *Bombyx mori*, T5547 *Ricinus communis*.
- dispel wind and resolve toxin** T2617 *Euphorbia royleana*, T2981 *Gleditsia sinensis* [Syn. *Gleditsia horrida*], T3000 *Glycine max*, T3001 *Glycine max*, T3991 *Lyonia ovalifolia*, T6005 *Solanum lyratum*.
- dispel wind and settle fright** T1332 *Cercidiphyllum japonicum*, T5290 *Pteris fauriei* [Syn. *Pteris fauriei* var. *minor*].
- dispel wind and soothe liver** T6531 *Trillium camtschaticum*.
- dispel wind and transform damp** T1959 *Cynanchum paniculatum*, T6866 *Zanthoxylum avicennae*.
- dispel wind and transform phlegm** T0088 *Aconitum coreanum*, T4814 *Phlomis umbrosa*, T6580 *Tylophora floribunda*, T6588 *Typhonium giganteum*, T6697 *Veratrum grandiflorum*, T6698 *Veratrum nigrum*.
- dispel wind quicken blood** T1373 *Chloranthus serratus*.
- dispel wind-damp** T0036 *Acanthopanax giraldii* [Syn. *Acanthopanax giraldii* var. *inermis*; *Eleutherococcus giraldii*], T0038 *Acanthopanax gracilistylus*, T0042 *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*], T0044 *Acanthopanax sessiliflorus*, T0090 *Aconitum delavayi*, T0096 *Aconitum forrestii* [Syn. *Aconitum likiangense*], T0099 *Aconitum gymnantrum*, T0125 *Aconitum pseudostapfianum*, T0154 *Acroptilon repens*, T0164 *Actinidia polygama*, T0240 *Aglaia odorata*, T0467 *Anemone flaccida*, T0470 *Anemone raddeana*, T0503 *Anisomeles indica* [Syn. *Epimeredi indica*], T1327 *Ceratostigma minus*, T1343

- Chaenomeles sinensis*, T1374 *Chloranthus spicatus*, T1411 *Cibotium barometz* [Syn. *Polypodium barometz*], T1557 *Clerodendron indicum*, T1562 *Clerodendron trichotomum*, T1565 *Clerodendrum bungei*, T1812 *Crossostephium chinense*, T1922 *Cyanotis vaga*, T1923 *Cyathula capitata*, T1958 *Cynanchum otophyllum*, T2077 *Delphinium grandiflorum*, T2091 *Delphinium yunnanense*, T2197 *Dioscorea futschauensis*, T2198 *Dioscorea gracillima*, T2201 *Dioscorea hypoglauca* [Syn. *Dioscorea collettii* var. *hypoglauca*], T2210 *Dioscorea spongiosa*, T2211 *Dioscorea tenuipes*, T2212 *Dioscorea tokoro*, T2231 *Diphyllia grayi*, T2232 *Diphyllia sinensis*, T2389 *Epimedium acuminatum*, T2390 *Epimedium brevicornum*, T2392 *Epimedium davidii*, T2394 *Epimedium elongatum*, T2398 *Epimedium koreanum*, T2401 *Epimedium pubescens*, T2402 *Epimedium sagittatum*, T2404 *Epimedium sutchuenense*, T2406 *Epimedium wushanense*, T2438 *Erodium stephanianum*, T2479 *Erythrina variegata* var. *orientalis*, T2542 *Euonymus japonicus*, T2721 *Ficus microcarpa*, T2734 *Fissistigma glaucescens* [Syn. *Melodorum glaucescens*], T2736 *Fissistigma polyanthum*, T2909 *Gentiana crassicaulis*, T2910 *Gentiana dahurica*, T2913 *Gentiana kaufmanniana*, T2919 *Gentiana macrophylla*, T2932 *Gentiana siphonantha*, T2934 *Gentiana straminea*, T2936 *Gentiana tianshanica*, T2937 *Gentiana tibetica*, T2943 *Geranium nepalense*, T2944 *Geranium pratense*, T2947 *Geranium sibiricum*, T2949 *Geranium wilfordii*, T3199 *Hemibarbus labeo*, T3390 *Ilex cornuta*, T3410 *Impatiens balsamina*, T3420 *Incarvillea sinensis*, T3436 *Inula nervosa*, T3726 *Laurus nobilis*, T3925 *Loranthus parasiticus* [Syn. *Loranthus chinensis*; *Taxillus chinensis*], T4124 *Matricaria chamomilla* [Syn. *Matricaria recutita*], T4210 *Michelia champaca*, T4279 *Morinda chinensis*, T4286 *Morinda umbellata*, T4290 *Morus alba*, T4575 *Pachysandra terminalis*, T4687 *Peganum harmala*, T4688 *Peganum harmala*, T4710 *Pericampylus glaucus*, T4729 *Periploca sepium*, T4828 *Photinia serrulata*, T4950 *Piper kadsura* [Syn. *Piper futokadsura*], T4974 *Piper wallichii* [Syn. *Piper wallichii* var. *hupehense*], T5102 *Polygonum cuspidatum*, T5189 *Pothos chinensis*, T5344 *Pyrola atropurpurea*, T5345 *Pyrola calliantha* [Syn. *Pyrola rotundifolia* ssp. *chinensis*], T5346 *Pyrola calliantha* var. *tibetana*, T5347 *Pyrola decorata*, T5349 *Pyrola incarnata*, T5350 *Pyrola japonica*, T5351 *Pyrola rotundifolia*, T5523 *Rhododendron simsii*, T5950 *Siegesbeckia orientalis*, T5951 *Siegesbeckia orientalis* var. *glabrescens* [Syn. *Siegesbeckia glabrescens*], T5952 *Siegesbeckia orientalis* var. *pubescens* [Syn. *Siegesbeckia pubescens*], T5981 *Smilax riparia*, T6120 *Stephania delavayi* [Syn. *Stephania epigaea*], T6128 *Stephania hernandifolia*, T6304 *Taxillus levinei*, T6437 *Thlaspi arvense*, T6440 *Thuja orientalis* [Syn. *Platyclusus orientalis*; *Biota orientalis*], T6675 *Valeriana amurensis*, T6679 *Valeriana officinalis*, T6680 *Valeriana officinalis* var. *latifolia*, T6771 *Viscum album*, T6772 *Viscum angulatum*, T6775 *Viscum coloratum*, T6777 *Viscum multinerve*, T6831 *Woodwardia orientalis*, T6883 *Zanthoxylum myriacanthum*.
- dispel wind-heat** T0584 *Arctium lappa*, T1296 *Celosia argentea*, T2325 *Eichhornia crassipes*, T6791 *Vitex rotundifolia* [Syn. *Vitex trifolia* var. *simplicifolia*], T6793 *Vitex trifolia*.
- dispel wind-phlegm** T0599 *Ardisia japonica*.
- disperse accumulation** T0606 *Areca catechu*, T1381 *Choerospondias axillaris*, T1831 *Crotalaria sessiliflora*, T2049 *Daucus carota*, T2422 *Erigeron breviscapus*, T2748 *Fomes fomentarius* [Syn. *Pyropolyporus fomentarius*; *Boletus fomentarius*; *Polyporus fomentarius*], T3412 *Impatiens balsamina*, T5073 *Polygala chinensis* [Syn. *Polygala glomerata*], T5189 *Pothos chinensis*, T5229 *Prunus persica*, T5239 *Prunus salicina*, T5719 *Sapindus mukorossi*, T5720 *Sapindus mukorossi*, T5993 *Solanum capsicastrum*, T6062 *Sparganium stoloniferum*, T6312 *Taxus mairei*.
- disperse accumulation and disinherit damp** T6277 *Tadehagi triquetrum*.
- disperse accumulation and disinherit water** T1049 *Bufo bufo gargarizans*; *Bufo melanostictus*.
- disperse accumulation and expel stone** T4000 *Lysimachia congestiflora*.
- disperse accumulation and fortify stomach** T0692 *Artemisia rupestris* [Syn. *Artemisia dentata*; *Artemisia viridis*; *Artemisia viridifolia*], T1954 *Cynanchum chinense*.
- disperse accumulation and free stool** T0708 *Arthromeris mairei* [Syn. *Polypodium mairei*], T6651 *Urtica cannabina*, T6652 *Urtica dioica*.
- disperse accumulation and gan** T2502 *Eucalyptus camaldulensis*.
- disperse accumulation and kill worms** T1696 *Cornus capitata* [Syn. *Dendrobenthamia capitata*], T4240 *Millettia pachycarpa*, T4779 *Pharbitis nil*, T4780 *Pharbitis purpurea*.
- disperse accumulation and move water** T3468 *Iris sanguinea*.
- disperse accumulation and relieve pain** T3436 *Inula nervosa*, T6049 *Sophora viciifolia*.
- disperse accumulation and resolve toxin** T6551 *Trogopterus xanthipes*; *Pteromys volans*.
- disperse accumulation and transform phlegm** T2720 *Ficus hispida*.
- disperse accumulation and transform stagnation** T5469 *Rheum hotaense*.
- disperse concretion and conglomeration** T0164 *Actinidia polygama*.
- disperse concretion and transform stone** T2838 *Gallus gallus domesticus*.
- disperse damp** T3306 *Hydrangea paniculata*.
- disperse distention** T1508 *Citrus sinensis*, T4264 *Momordica cochinchinensis*.
- disperse edema** T0157 *Actinidia callosa* var. *henryi*.
- disperse edema and abate jaundice** T6752 *Vigna angularis* [Syn. *Dolichus angularis*; *Phaseolus angularis*].
- disperse food** T1152 *Camellia sinensis* [Syn. *Thea sinensis*], T1478 *Citrus grandis*, T1483 *Citrus grandis* var. *tomentosa*, T1488 *Citrus junos*, T1937 *Cydonia oblonga*, T2115 *Dermatocarpon minutum*, T2994 *Gloiopeltis furcata*, T3308 *Hydrangea umbellata*, T3620 *Kaempferia galanga*, T4544 *Oryza sativa*, T5113 *Polygonum persicaria*, T5361 *Pyrus betulaefolia*, T5419 *Raphanus sativus*, T5570 *Rosa roxburghii*.
- disperse food and assisting movement** T6878 *Zanthoxylum echinocarpum*.
- disperse food and check diarrhea** T2421 *Erigeron annuus*.
- disperse food and harmonize center** T0647 *Armoracia lapathifolia*.
- disperse food and precipitate qi** T1021 *Brassica rapa*.
- disperse food and promote lactation** T1205 *Carica papaya*.
- disperse food and rectify qi** T2387 *Epilobium hirsutum*.
- disperse food and relieve pain** T0354 *Alpinia chinensis*.
- disperse food and transform accumulation** T0661 *Artemisia anomala*, T3282 *Hordeum vulgare*, T4577 *Paederia scandens*, T5365 *Pyrus pashia*.
- disperse food and transform phlegm** T2758 *Fortunella crassifolia*, T2759

- Fortunella japonica*, T2760 *Fortunella margarita*, T4820 *Phoenix dactylifera*.
- disperse food and transform stagnation** T5461 *Rhamnus leptophylla*.
- disperse food distention** T5420 *Raphanus sativus*.
- disperse gan** T0387 *Amaranthus caudatus*, T0969 *Boerhavia diffusa*, T1591 *Cocos nucifera*, T1593 *Cocos nucifera*.
- disperse glomus** T0988 *Bos taurus domesticus*; *Bubalus bubalis*.
- disperse glomus and dissipate binds** T4904 *Pinellia ternata*.
- disperse phlegm** T0892 *Belamcanda chinensis*, T1960 *Cynanchum stauntonii*, T3426 *Inula britannica*, T3427 *Inula britannica*, T3428 *Inula britannica* var. *chinensis*, T3433 *Inula japonica*, T3434 *Inula linariaefolia*, T4957 *Piper nigrum*, T5740 *Sargassum vachellianum*.
- disperse phlegm and allay thirst** T1343 *Chaenomeles sinensis*.
- disperse phlegm and disinhibit water** T4403 *Nemacystus decipiens* [Syn. *Mesogloea decipiens*; *Cladosiphon decipiens*].
- disperse phlegm and move water** T0726 *Asarum forbesii*.
- disperse phlegm and relieve cough** T3953 *Lycianthes biflora*.
- disperse phlegm and transform accumulation** T1468 *Citrus aurantium*, T1521 *Citrus wilsonii*, T5141 *Poncirus trifoliata*.
- disperse phlegm rheum** T1390 *Chrysanthemum coronarium*, T1397 *Chrysanthemum segetum*.
- disperse qi** T2048 *Daucus carota*.
- disperse sore toxin** T0503 *Anisomeles indica* [Syn. *Epimeredi indica*].
- disperse stagnation and disinhibit damp** T1544 *Cleistocalyx operculatus*.
- disperse stagnation and harmonize center** T0932 *Betula luminifera*.
- disperse stasis** T3277 *Homo sapiens*, T3295 *Huperzia serrata* [Syn. *Lycopodium serratum*].
- disperse stasis and relieve pain** T1931 *Cyclea barbata*, T6020 *Solanum xanthocarpum*.
- disperse stasis and settle pain** T0180 *Adina pilulifera* [Syn. *Cephalanthus pilulifera*].
- disperse swelling** T0471 *Anemone rivularis*, T0529 *Anthriscus sylvestris*, T0894 *Benincasa hispida*, T1181 *Capra hircus*; *Ovis aries*, T1558 *Clerodendron inerme*, T2048 *Daucus carota*, T2200 *Dioscorea hispida*, T2546 *Euonymus sacrosancta*, T2585 *Euphorbia esula*, T2830 *Galium aparine*, T2857 *Garcinia hanburyi*, T2885 *Gardenia jasminoides* var. *grandiflora*, T3155 *Helianthus tuberosus*, T3570 *Juglans regia*, T3668 *Lagenaria siceraria* var. *depressa*, T3674 *Laggetera alata*, T4029 *Maesa japonica*, T4785 *Phaseolus vulgaris*, T4814 *Phlomis umbrosa*, T4848 *Physalis angulata*, T4951 *Piper laetispicum*, T4965 *Piper sarmentosum*, T5099 *Polygonum bistorta*, T5214 *Prunella vulgaris*, T5247 *Przewalskia tangutica*, T5563 *Rosa cymosa*, T5626 *Ruta graveolens*, T5651 *Salix babylonica*, T5857 *Sedum sarmentosum*, T6177 *Strychnos ignatii*, T6210 *Swainsonia salsula* [Syn. *Sphaerophysa salsula*], T6548 *Tritonia crocosmaeflora*, T6435 *Thladiantha cordifolia*, T6552 *Trollius chinensis* [Syn. *Trollius asiaticus* var. *chinensis*], T6553 *Trollius ledebourii*, T6772 *Viscum angulatum*.
- disperse swelling and close sores** T5712 *Sanguisorba officinalis*.
- disperse swelling and dispel damp** T4985 *Pithecolobium dulce*.
- disperse swelling and dissipate binds** T1007 *Brassica juncea*, T1787 *Cremastra appendiculata*.
- disperse swelling and draw out toxin** T5550 *Ricinus communis*.
- disperse swelling and engender flesh** T0955 *Bletilla striata*, T0994 *Boswellia carterii*, T1638 *Commiphora myrrha* [Syn. *Commiphora molmol*].
- disperse swelling and expel pus** T0479 *Angelica dahurica* cv. *qibaizhi*, T0498 *Angelica taiwaniana*, T3241 *Hibiscus mutabilis*, T3547 *Ixeris chinensis*, T6512 *Trichosanthes kirilowii*.
- disperse swelling and free network vessels** T6866 *Zanthoxylum avicennae*.
- disperse swelling and outthrust pus** T2979 *Gleditsia sinensis* [Syn. *Gleditsia horrida*].
- disperse swelling and relieve pain** T0108 *Aconitum kusnezoffii*, T0122 *Aconitum pendulum*, T0144 *Acorus gramineus*, T0146 *Acorus tatarinowii*, T0267 *Ajuga nipponensis*, T0293 *Albizia lebbek*, T0302 *Alhagi pseudalhagi*, T0476 *Angelica anomala*, T0643 *Aristolochia versicolor*, T0736 *Asclepias curassavica*, T0827 *Aucuba chinensis* ssp. *omeiensis*, T1108 *Caesalpinia sappan*, T1644 *Conocephalum conicum*, T1693 *Coriaria sinica* [Syn. *Coriaria nepalensis*], T1697 *Cornus controversa* [Syn. *Bothrocaryum controversum*], T1731 *Corydalis pallida*, T2162 *Dicranostigma franchetianum* [Syn. *Dicranostigma leptopodium*], T2444 *Ervatamia heyneana*, T2445 *Ervatamia officinalis*, T2449 *Erycibe obtusifolia*, T2450 *Erycibe schmidtii*, T2631 *Eurya japonica*, T2718 *Ficus carica*, T2749 *Fomes officinalis*, T2752 *Fordia cauliflora*, T2884 *Gardenia jasminoides* var. *grandiflora*, T2897 *Gelsemium elegans*, T3088 *Gynura segetum* [Syn. *Gynura japonica*], T3187 *Helleborus thibetanus*, T3203 *Hemsleya amabilis*, T3208 *Hemsleya macrosperma*, T3294 *Huperzia selago* [Syn. *Lycopodium selago*], T3320 *Hymenocallis littoralis* [Syn. *Hymenocallis americana*; *Panocratium littoralis*], T3411 *Impatiens balsamina*, T3461 *Iris japonica*, T3471 *Iris tectorum*, T3679 *Lamiophlomis rotata* [Syn. *Phlomis rotata*], T3796 *Libanotis buchtormensis*, T3852 *Lindera megaphylla*, T3880 *Lithospermum arvense*, T3887 *Litsea glutinosa*, T4018 *Machilus thunbergii*, T4182 *Menispermum dauricum*, T4183 *Menispermum dauricum*, T4303 *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*, T4317 *Murraya euchrestifolia* [Syn. *Clausena euchrestifolia*], T4391 *Nauclea officinalis*, T4605 *Panax japonicus* var. *major*, T4607 *Panax pseudo-ginseng* var. *japonicus*, T4648 *Paris polyphylla*, T4649 *Paris polyphylla* var. *chinensis*, T4650 *Paris polyphylla* var. *pseudothibetica*, T4651 *Paris polyphylla* var. *stenophylla*, T4652 *Paris polyphylla* var. *yunnanensis*, T4800 *Phlegmariurus fordii*, T4852 *Physalis peruviana*, T4884 *Picria felterrae*, T5028 *Plumbago indica*, T5279 *Psychotria serpens*, T5393 *Rabdosia longituba*, T5513 *Rhododendron mariae*, T5592 *Rubus hirsutus*, T5650 *Salix babylonica*, T5731 *Sarcococca coriacea* [Syn. *Sarcococca wallichii*], T5794 *Schisandra lancifolia*, T5797 *Schisandra propinqua*, T5798 *Schisandra propinqua* var. *intermedia*, T6007 *Solanum melongena*, T6051 *Sorbaria arborea*, T6052 *Sorbaria sorbifolia*, T6075 *Spilanthes acemella*, T6166 *Strychnos angustiflora*, T6353 *Tetracera asiatica*, T6432 *Thespesia populnea* [Syn. *Hibiscus populneus*], T6542 *Tripterygium wilfordii*, T6567 *Tupistra wattii* [Syn. *Campylandra wattii*], T6792 *Vitex trifolia*, T6845 *Xanthoceras sorbifolia*, T6884 *Zanthoxylum nitidum*.
- eliminate inflammation and disperse swelling** T6432 *Thespesia populnea* [Syn. *Hibiscus populneus*].
- disperse swelling and resolve toxin** T2062 *Delphinium bonvalotii*, T2081 *Delphinium omeiense*, T2084 *Delphinium potaninii*, T2085 *Delphinium*

- potanii* var. *jiufengshanense*, T2243 *Dodonaea viscosa*, T2866 *Garcinia morella*, T2883 *Gardenia jasminoides* [Syn. *Gardenia florida*].
- disperse swelling and settle pain** T1589 *Cocculus trilobus* [Syn. *Cocculus sarmmentosus*], T4604 *Panax japonicus* var. *bipinnatifidus*, T4606 *Panax pseudo-ginseng*, T4608 *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*].
- disperse swelling and stanch bleeding** T3995 *Lysidice rhodostegia*, T4568 *Oxytropis myriophylla*, T5444 *Reboulia hemisphaerica*.
- disperse swelling and transform stasis** T3936 *Luffa operculata*.
- disperse swelling toxin** T0584 *Arctium lappa*, T2197 *Dioscorea futschauensis*, T2210 *Dioscorea spongiosa*, T4687 *Peganum harmala*, T6018 *Solanum verbascifolium*, T6120 *Stephania delavayi* [Syn. *Stephania epigaea*].
- disperse swollen welling abscess** T0470 *Anemone raddeana*, T0516 *Anser cygnoides domestica*, T1685 *Coreopsis lanceolata*, T1709 *Corydalis bungeana*, T4279 *Morina chinensis*, T5230 *Prunus persica*.
- disperse welling abscess** T4106 *Manis pentadactyla*, T6499 *Tribulus terrestris*.
- disperse welling abscess and dissipate binds** T0750 *Asparagus gobicus*.
- disperse welling abscess and expel pus** T0895 *Benincasa hispida*, T5250 *Psammosilene tunicoides*.
- disperse welling abscess and promote lactation** T0173 *Adiantum lunulatum*.
- dissipate binds** T2024 *Daphne genkwa*, T2599 *Euphorbia lunulata*, T2757 *Forsythia viridissima*, T2790 *Fritillaria pallidiflora*, T2800 *Fritillaria walujewii*, T3287 *Huechys sanguinea*, T3668 *Lagenaria siceraria* var. *depressa*, T3815 *Ligularia stenocephala*, T5214 *Prunella vulgaris*.
- dissipate binds and disperse concretion** T1162 *Camptotheca acuminata*.
- dissipate binds and disperse goiter** T2191 *Dioscorea bulbifera*.
- dissipate binds and disperse swelling** T1005 *Brassica campestris* [Syn. *Brassica campestris* var. *oleifera*], T1092 *Buxus microphylla* var. *sinica*, T2608 *Euphorbia pekinensis*, T2636 *Euscaphis japonica*, T2691 *Farfugium japonicum*, T2756 *Forsythia suspensa*, T2798 *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*], T3202 *Hemistepta lyrata* [Syn. *Hemistepta carthamoides*; *Saussurea carthamoides*], T4265 *Momordica cochinchinensis*, T5139 *Poncirus trifoliata*, T5415 *Ranunculus sceleratus*, T5723 *Sapium sebiferum*, T5958 *Sinapis alba* [Syn. *Brassica alba*; *Brassica hirta*], T6184 *Strychnos nux-vomica*, T6193 *Strychnos wallichiana*, T6257 *Syngnathus acus*, T6301 *Taraxacum mongolicum*, T6521 *Trifolium pratense*, T6560 *Tulipa edulis*.
- dissipate binds and draw out toxin** T0971 *Bolbostemma paniculatum*.
- dissipate binds and relieve pain** T0333 *Alocasia cucullata* [Syn. *Arum cucullatum*], T0427 *Ampelopsis japonica* [Syn. *Paullinia japonica*], T1017 *Brassica oleracea* var. *capitata*, T2632 *Euryale ferox*, T3443 *Iphigenia indica*.
- dissipate blood** T4254 *Miscanthus sinensis*.
- dissipate blood and disperse swelling** T6006 *Solanum melongena*.
- dissipate blood and eliminate accumulation** T6732 *Vespertilio superans*.
- dissipate blood and relieve pain** T1640 *Coniogramme japonica* [Syn. *Hemionitis japonica*].
- dissipate cold** T0356 *Alpinia galanga*, T0359 *Alpinia officinarum*, T0472 *Anethum graveolens*, T1180 *Capparis spinosa*, T3120 *Hedychium spicatum*, T3869 *Liquor*, T6864 *Zanthoxylum armatum*, T6887 *Zanthoxylum planispinum*.
- dissipate cold and dry damp** T0363 *Alpinia speciosa*, T2051 *Daucus carota* var. *sativa*, T3222 *Heracleum scabridum*.
- dissipate cold and effuse exterior** T4551 *Osmorhiza aristata* var. *laxa*.
- dissipate cold and interrupt malaria** T3124 *Hedyotis capitellata*.
- dissipate cold and relieve cough** T3871 *Liriodendron tulipifera*.
- dissipate cold and relieve pain** T0077 *Aconitum balfourii*, T0084 *Aconitum carmichaeli*, T0088 *Aconitum coreanum*, T0105 *Aconitum karakolicum*, T0106 *Aconitum kirinense*, T0123 *Aconitum polyschistum*, T0135 *Aconitum sungpanense*, T0470 *Anemone raddeana*, T0492 *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*], T0664 *Artemisia argyi*, T0681 *Artemisia lavandulaefolia*, T0685 *Artemisia mongolica*, T0689 *Artemisia princeps*, T0691 *Artemisia rubripes*, T0706 *Artemisia vulgaris*, T1217 *Carum carvi*, T1439 *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*], T1641 *Conioselinum vaginatum*, T1889 *Cuminum cyminum*, T2895 *Gaultheria yunnanensis*, T3214 *Heracleum lanatum*, T4550 *Osmanthus fragrans*, T4954 *Piper longum*, T6488 *Trachyspermum ammi*, T6876 *Zanthoxylum dissitum*, T6888 *Zanthoxylum planispinum*, T6893 *Zanthoxylum simulans*, T6894 *Zanthoxylum simulans*.
- dissipate cold and resolve exterior** T1438 *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*], T2422 *Erigeron breviscapus*, T3822 *Ligusticum jeholense*, T3824 *Ligusticum sinense*, T4445 *Notopterygium forbesii* [Syn. *Notopterygium franchetii*], T4446 *Notopterygium incisum*, T4718 *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*], T4721 *Perilla frutescens* var. *arguta*, T5560 *Rorippa montana* [Syn. *Rorippa dubia*; *Sisymbrium dubium*], T6910 *Zingiber officinale*.
- dissipate depression and open binds** T1808 *Crocus sativus*.
- dissipate exopathogen** T2340 *Elsholtzia bodinieri*.
- dissipate heat** T6843 *Xanthium sibiricum* [Syn. *Xanthium strumarium*].
- dissipate heat and relieve pain** T2274 *Dryobalanops aromatica*.
- dissipate lung qi** T2761 *Fortunella margarita*.
- dissipate screen and disperse swelling** T1981 *Cyprinus carpio*.
- dissipate stasis** T0322 *Allium tuberosum*, T0324 *Allium victorialis*, T0567 *Aralia armata*, T0950 *Blatta orientalis*, T1097 *Cacalia ainsliaeflora*, T1161 *Campsis grandiflora*, T1174 *Cannabis sativa*, T2612 *Euphorbia prolifera*, T2830 *Galium aparine*, T3088 *Gynura segetum* [Syn. *Gynura japonica*], T3674 *Laggeta alata*, T4020 *Macleaya cordata*, T5073 *Polygala chinensis* [Syn. *Polygala glomerata*], T5087 *Polygala telephioides*, T5090 *Polygala wattersii*, T5105 *Polygonum hydropiper* var. *flaccidum* [Syn. *Polygonum flaccidum*], T5518 *Rhododendron mucronatum*, T5563 *Rosa cymosa*, T5850 *Sedum aizoon*, T5855 *Sedum kamschaticum*, T5883 *Senecio cannabifolius*, T6872 *Zanthoxylum cuspidatum*.
- dissipate stasis and disperse swelling** T0135 *Aconitum sungpanense*, T0240 *Aglaia odorata*, T0468 *Anemone hupehensis*, T0515 *Anredera cordifolia* [Syn. *Baussingaultia cordifolia*; *Baussingaultia gracilis* f. *pseudobaselloides*; *Baussingaultia gracilis* var. *pseudobaselloides*], T1031 *Broussonetia kazinoki*, T1120 *Callicarpa macrophylla*, T1145 *Camellia japonica*, T1147 *Camellia oleifera*, T1441 *Cinnamomum japonicum*, T1552 *Cleome viscosa*, T1624 *Colocasia antiquorum*, T1657

*Conyza canadensis* [Syn. *Erigeron canadensis*], T1684 *Cordyline stricta*, T2290 *Duchesnea indica*, T2357 *Emilia sonchifolia*, T2973 *Glechoma longituba*, T2974 *Glechoma lungituba*, T3006 *Glycosmis citrifolia*, T3089 *Gypsophila acutifolia*, T3316 *Hylomecon japonica*, T3356 *Hypericum japonicum*, T3387 *Ilesia polycarpa*, T3507 *Isodon lophanthoides* [Syn. *Rabdosia lophanthoides*; *Hyssopus lophanthoides*; *Plectranthus striatus*; *Isodon striatus*], T3560 *Jatropha curcas*, T3845 *Linaria vulgaris*, T3998 *Lysimachia christinae*, T4223 *Micromelum integerrimum*, T4384 *Narcissus tazetta* var. *chinensis*, T4686 *Pedilanthus tithymaloides*, T4730 *Peristrophe roxburghiana*, T4821 *Pholidota articulata*, T5397 *Rabdosia serra*, T5402 *Radermachera sinica*, T5499 *Rhodiola sacra*, T5724 *Sapium sebiferum*, T5884 *Senecio chrysanthemoides*, T6035 *Sophora japonica*.

**dissipate stasis and quicken blood** T3809 *Ligularia lapathifolia*.

**dissipate stasis and relieve pain** T0010 *Abrus fruticosus* [Syn. *Abrus cantoniensis*], T0048 *Acanthus ilicifolius*, T0069 *Achillea wilsoniana*, T0264 *Ajuga forrestii*, T0266 *Ajuga macrosperma*, T0281 *Alangium chinense*, T0282 *Alangium kurzii*, T0285 *Alangium platanifolium*, T0602 *Ardisia quinquegona*, T0721 *Arundina chinensis*, T1215 *Carthamus tinctorius*, T1561 *Clerodendron serratum*, T1569 *Clerodendrum serratum* var. *amplexifolium*, T1574 *Clintonia alpina*, T1629 *Colysis pothifolia* [Syn. *Hemionitis pothifolia*], T1866 *Cryptolepis sinensis*, T1933 *Cyclea sutchuenensis*, T1996 *Dahlia pinnata* [Syn. *Dahlia variabilis*], T2030 *Daphne retusa*, T2031 *Daphne tangutica*, T2124 *Derris trifoliata*, T2139 *Dianella ensifolia*, T2545 *Euonymus phellomana*, T3221 *Heracleum rapula*, T3349 *Hypericum erectum*, T3520 *Isodon rosthornii*, T3549 *Ixora chinensis*, T3849 *Lindera chunii*, T3897 *Litsea verticillata*, T4221 *Micromelum falcatum*, T4284 *Morinda parvifolia*, T4323 *Murraya paniculata* [Syn. *Chalcas paniculata*], T4325 *Murraya paniculata* var. *exotica*, T4642 *Parameria laevigata*, T4705 *Peperomia pellucida*, T4823 *Pholidota yunnanensis*, T4956 *Piper mullesua*, T5517 *Rhododendron molle*, T5595 *Rubus parviflorius*, T5756 *Saussurea japonica*, T5847 *Securidaca inappendiculata*, T5868 *Selaginella stauntoniana*, T5989 *Solanum aculeatissimum*, T6014 *Solanum surattense*, T6015 *Solanum torvum*, T6121 *Stephania dicentrinifera*, T6122 *Stephania dielsiana*, T6133 *Stephania sinica*, T6137 *Stephania viridiflavens*, T6566 *Tupistra chinensis*.

**dissipate stasis and resolve toxin** T2296 *Duranta repens*, T3190 *Helminthostachys zeylanica*, T3373 *Hypoestes purpurea* [Syn. *Justicia purpurea*; *Hypoestes sinica*], T5189 *Pothos chinensis*.

**dissipate stasis and settle pain** T1994 *Daemonorops draco*, T2253 *Dracaena cochinchinensis*, T5250 *Psammosilene tunicoides*, T5516 *Rhododendron molle*, T6874 *Zanthoxylum dimorphophyllum* var. *spinifolium*.

**dissipate stasis and stanch bleeding** T1971 *Cynoglossum zeylanicum* [Syn. *Anchusa zeylanica*; *Cynoglossum furcatum*; *Cynoglossum formosanum*], T3395 *Ilex pedunculosa*, T5501 *Rhodiola yunnanensis*, T6567 *Tupistra wattii* [Syn. *Campylandra wattii*].

**dissipate stasis and strengthen sinews** T5207 *Prismatomeris tetrandra*.

**dissipate stasis blood** T5722 *Sapium japonicum*.

**dissipate toxin swelling** T6440 *Thuja orientalis* [Syn. *Platyclusus orientalis*; *Biota orientalis*].

**dissipate wind and brighten eyes** T6497 *Tribulus terrestris*.

**dissipate wind and clear heat** T4773 *Peucedanum terebinthaceum*.

**dissipate wind and eliminate damp** T2505 *Eucalyptus citriodora*.

**dissipate wind and relieve itch** T4305 *Mosla dianthera*.

**dissipate wind-cold** T4035 *Magnolia biondii* [Syn. *Magnolia fargesii*], T4038 *Magnolia denudata* [Syn. *Magnolia heptapata*], T4041 *Magnolia liliflora*, T4052 *Magnolia sprengeri*, T5822 *Scopolia sinensis*.

**dissipate wind-heat** T2408 *Equisetum hiemale*, T2721 *Ficus microcarpa*, T3392 *Ilex kudingcha*, T3393 *Ilex latifolia*, T3829 *Ligustrum robustum*, T4184 *Mentha haplocalyx* [Syn. *Mentha canadensis*; *Mentha arvensis* var. *haplocalyx*; *Mentha arvensis*].

**downbear counterflow and check vomiting** T1202 *Carex kobomugi*, T1261 *Catalpa ovata*, T2433 *Eriobotrya japonica*, T4904 *Pinellia ternata*, T6910 *Zingiber officinale*.

**downbear counterflow and disperse food** T4954 *Piper longum*.

**downbear counterflow and precipitate qi** T2217 *Diospyros kaki*.

**downbear counterflow qi** T4369 *Nandina domestica*.

**downbear fire** T0708 *Arthromeris mairei* [Syn. *Polypodium mairei*], T1154 *Camellia sinensis* [Syn. *Thea sinensis*], T3277 *Homo sapiens*.

**downbear fire and disinhibit throat** T6346 *Terminalia chebula*, T6348 *Terminalia chebula* var. *tomentella*.

**downbear fire and transform phlegm** T5531 *Rhus chinensis* [Syn. *Rhus semialata*].

**downbear qi** T1960 *Cynanchum stauntonii*, T2008 *Dalbergia odorifera*, T2013 *Dalbergia sissoo*, T3426 *Inula britannica*, T3427 *Inula britannica*, T3428 *Inula britannica* var. *chinensis*, T3433 *Inula japonica*, T3434 *Inula linariaefolia*, T4717 *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*], T4719 *Perilla frutescens* var. *arguta*, T4722 *Perilla frutescens* var. *crispa*, T6261 *Syringa pinnatifolia*.

**downbear qi and disperse phlegm** T4715 *Perilla frutescens*, T4773 *Peucedanum terebinthaceum*.

**downbear qi and transform phlegm** T0480 *Angelica decursiva* [Syn. *Peucedanum decursivum*], T3819 *Ligusticum brachylobum*, T4761 *Peucedanum longshengens*, T4768 *Peucedanum praeruptorum*, T4769 *Peucedanum rubricaula*, T5216 *Prunus armeniaca*, T5219 *Prunus armeniaca* var. *ansu*, T5284 *Pteridium aquilinum* var. *latiusculum*, T5420 *Raphanus sativus*, T5645 *Sageretia theezans* [Syn. *Sageretia thea*].

**drain fire** T0457 *Andrographis paniculata* [Syn. *Justicia paniculata*], T0907 *Berberis kawakamii*, T4370 *Nandina domestica*, T4789 *Phellodendron amurense*, T4790 *Phellodendron amurense* var. *wilsonii*, T4791 *Phellodendron chinense*, T4792 *Phellodendron chinense* var. *glabriusculum*, T6372 *Thalictrum acutifolium*, T6381 *Thalictrum faberi*, T6388 *Thalictrum fortunei*.

**drain fire and relieve dysphoria** T2882 *Gardenia jasminoides* [Syn. *Gardenia florida*].

**drain fire and resolve toxin** T0334 *Aloe arborescens* var. *natalensis*, T0906 *Berberis julianae*, T0912 *Berberis poirerii*, T0916 *Berberis thunbergii*, T0920 *Berberis wilsonae*, T1662 *Coptis chinensis*, T1663 *Coptis chinensis* var. *brevisekala*, T1664 *Coptis deltoidea*, T1669 *Coptis omeiensis*, T1670 *Coptis teetoides* [Syn. *Coptis teeta*], T2902 *Gentiana algida*, T3011 *Glycyrrhiza aspera*, T3013 *Glycyrrhiza glabra*, T3015 *Glycyrrhiza inflata*, T3016 *Glycyrrhiza kansuensis*, T3021 *Glycyrrhiza squamulosa*, T3022 *Glycyrrhiza uralensis*, T3023 *Glycyrrhiza*

- yunnanensis*, T4060 *Mahonia confusa*, T4064 *Mahonia gracilipes*, T4887 *Picrorhiza kurrooa*, T4888 *Picrorhiza scrophulariiflora*, T5833 *Scutellaria amoena*, T5834 *Scutellaria baicalensis*, T5839 *Scutellaria hypericifolia*, T5841 *Scutellaria likiangensis*, T5843 *Scutellaria rehderiana*, T5845 *Scutellaria viscidula*, T6231 *Swertia pseudochinensis*, T6268 *Syzygium samarangense*, T6375 *Thalictrum baicalense*, T6376 *Thalictrum cultratum*, T6378 *Thalictrum delavayi*, T6385 *Thalictrum flavum*, T6387 *Thalictrum foliolosum*, T6389 *Thalictrum glandulosissimum*.
- drain fire and stanch bleeding** T1655 *Conyza blinii*.
- drain heat** T5606 *Rumex acetosa*.
- drain heat and free intestines** T5472 *Rheum officinale*, T5474 *Rheum palmatum*, T5481 *Rheum tanguticum*.
- drain heat and free stool** T5605 *Rumex acetosa*.
- drain heat and free strangury** T0303 *Alisma orientale* [Syn. *Alisma plantago-aquatica* var. *orientale*].
- drain heat and move stagnation** T1229 *Cassia acutifolia*, T1230 *Cassia angustifolia*.
- drain liver and brighten eyes** T3564 *Juglans mandshurica*.
- drain liver and settle fright** T2908 *Gentiana cephalantha*, T2921 *Gentiana manshurica*, T2928 *Gentiana rigescens*, T2930 *Gentiana scabra*, T2938 *Gentiana triflora*.
- drain lung and calm asthma** T2125 *Descurainia sophia*, T3755 *Lepidium apetalum* [Syn. *Lepidium micranthum*], T3759 *Lepidium virginicum*, T4287 *Morus alba*.
- drain lung and disperse phlegm** T1813 *Crotalaria albida*.
- drain precipitation** T0533 *Antiaris toxicaria* [Syn. *Ambora toxicaria*], T1645 *Consolida ajacis* [Syn. *Delphinium ajacis*], T2231 *Diphylleia grayi*, T2232 *Diphylleia sinensis*, T2650 *Excoecaria agallocha*.
- drain precipitation and cold accumulation** T1858 *Croton tiglium*.
- drain precipitation and expel water** T5723 *Sapium sebiferum*, T5724 *Sapium sebiferum*, T6819 *Wikstroemia chamaedaphne*.
- drain precipitation and free stagnation** T5550 *Ricinus communis*.
- drain precipitation and free stool** T3231 *Hernandia sonora* [Syn. *Hernandia ovigera*].
- drain precipitation and kill worms** T5457 *Rhamnus davurica*.
- drain water and expel rheum** T2023 *Daphne genkwa*, T2596 *Euphorbia kansui*, T2608 *Euphorbia pekinensis*, T3632 *Knoxia valerianoides*.
- drain water and free stool** T4779 *Pharbitis nil*, T4780 *Pharbitis purpurea*.
- drain water retension** T5770 *Saussurea superba* [Syn. *Saussurea hieracioides*].
- draw out pus** T2036 *Datura innoxia*, T2041 *Datura metel*, T2046 *Datura stramonium*.
- draw out pus and relieve itch** T5548 *Ricinus communis*.
- draw out toxin** T1416 *Cicuta virosa*, T2293 *Dumortiera hirsuta*, T2584 *Euphorbia ebracteolata*, T2587 *Euphorbia fischeriana*, T2599 *Euphorbia lunulata*.
- draw out toxin and disperse swelling** T2139 *Dianella ensifolia*.
- draw out toxin and engender flesh** T0557 *Aquilegia ecalcarata*, T3887 *Litsea glutinosa*.
- draw out toxin and remove putrid** T2580 *Euphorbia antiquorum*.
- draw sore toxin** T1337 *Cervus nippon*; *Cervus elaphus*.
- draw toxin and close sores** T3129 *Hedysarum polybotrys*.
- draw toxin and expel pus** T3128 *Hedysarum multijugum*.
- dry damp** T0190 *Adonis sutchuenensis*, T0353 *Alpinia blepharocalyx*, T0446 *Anaphalis margaritacea*, T0457 *Andrographis paniculata* [Syn. *Justicia paniculata*], T1582 *Cnidium monnieri*, T2627 *Euphoria longan* [Syn. *Dimocarpus longan*], T2644 *Evodia rutaecarpa*, T2646 *Evodia rutaecarpa* var. *officinalis*, T3120 *Hedychium spicatum*, T4055 *Mahonia bealei*, T4056 *Mahonia bealei*, T4057 *Mahonia bealei*, T4062 *Mahonia fortunei*, T4063 *Mahonia fortunei*, T4066 *Mahonia japonica*, T4067 *Mahonia japonica*, T4068 *Mahonia japonica*, T4072 *Mahonia shenii*, T6393 *Thalictrum ichangense* [Syn. *Thalictrum tripeltatum*; *Thalictrum multipeltatum*], T6402 *Thalictrum omeiense*, T6403 *Thalictrum petaloideum*, T6414 *Thalictrum thunbergii*, T6860 *Zanthoxylum ailanthoides*.
- dry damp and check discharge** T6683 *Vallisneria spiralis*.
- dry damp and disinhibit water** T0824 *Atractylodes macrocephala* [Syn. *Atractylis macrocephala*].
- dry damp and disperse phlegm** T4034 *Magnolia biloba*, T4045 *Magnolia officinalis*.
- dry damp and fortify spleen** T5267 *Psidium guajava*.
- dry damp and kill worms** T1566 *Clerodendrum inerme*, T4881 *Picrasma quassioides* [Syn. *Picrasma ailanthoides*], T5323 *Pulsatilla campanella*, T5324 *Pulsatilla cernua*, T5325 *Pulsatilla chinensis*, T5326 *Pulsatilla dahurica*.
- dry damp and relieve itch** T3588 *Juniperus formosana*.
- dry damp and resolve itch** T0167 *Adenantha pavonina*, T3630 *Kleinhovia hospita*, T4937 *Piper betle*.
- dry damp and resolve toxin** T5234 *Prunus persica*, T6268 *Syzygium samarangense*, T6338 *Tephrosia purpurea*.
- dry damp and transform phlegm** T1483 *Citrus grandis* var. *tomentosa*, T1506 *Citrus reticulata*.
- effuse exterior** T0314 *Allium fistulosum*, T5963 *Sinodielsia yunnanensis*.
- effuse exterior and clear heat** T2627 *Euphoria longan* [Syn. *Dimocarpus longan*].
- effuse exterior and dispel summerheat** T4305 *Mosla dianthera*.
- effuse exterior and dissipate cold** T3796 *Libanotis buchtormensis*.
- effuse exterior and dissipate wind** T5389 *Rabdosia coetsa*.
- effuse exterior and outthrust papules** T1419 *Cimicifuga dahurica*, T1420 *Cimicifuga foetida*, T1421 *Cimicifuga heracleifolia*, T1425 *Cimicifuga simplex*.
- effuse exterior and relieve cough** T5000 *Plagiogyria stenoptera*.
- effuse exterior and resolve summerheat** T5059 *Pogostemon cablin* [Syn. *Mentha cablin*].
- effuse sweat** T1315 *Cephaelis ipecacuanha*, T5452 *Reseda luteola*, T5575 *Rosmarinus officinalis*.
- effuse sweat and abate fever** T6457 *Tilia japonica*, T6458 *Tilia miqueliana*.
- effuse sweat and disinhibit water** T0610 *Argemone mexicana*.
- effuse sweat and eliminate summerheat** T2343 *Elsholtzia splendens*.
- effuse sweat and outthrust papules** T4456 *Nymphoides peltatum*.
- effuse sweat and remove damp** T5113 *Polygonum persicaria*.
- effuse sweat and resolve exterior** T2367 *Ephedra equisetina*, T2368 *Ephedra gerardiana*, T2369 *Ephedra intermedia*, T2372 *Ephedra likiangensis*, T2373 *Ephedra minuta*, T2375 *Ephedra monosperma*,



- T2379 *Ephedra saxatilis*, T2380 *Ephedra sinica*, T3118 *Hedychium coronarium*, T3738 *Lemma minor*, T5609 *Rumex hastatus*.
- effuse sweat and resolve summerheat** T2341 *Elsholtzia ciliata*, T4304 *Mosla chinensis* [Syn. *Orthodon chinensis*].
- eliminate damp** T1180 *Capparis spinosa*, T1437 *Cinnamomum camphora*, T1558 *Clerodendron inerme*, T1876 *Cucumis melo*, T1941 *Cymbopogon distans*, T2263 *Dregea volubilis*, T2584 *Euphorbia ebracteolata*, T2587 *Euphorbia fischeriana*, T3082 *Gynocardia odorata*, T3125 *Hedyotis chrysotricha* [Syn. *Oldenlandia chrysotricha*], T3295 *Huperzia serrata* [Syn. *Lycopodium serratum*], T3594 *Juniperus rigida*, T3674 *Laggera alata*, T3847 *Lindera angustifolia*, T4349 *Myrica rubra*, T4368 *Nandina domestica*, T5105 *Polygonum hydropiper* var. *flaccidum* [Syn. *Polygonum flaccidum*], T5106 *Polygonum lapathifolium*, T5767 *Saussurea pulchella*, T5977 *Smilax glabra*, T5980 *Smilax menispermoides*, T6499 *Tribulus terrestris*, T6843 *Xanthium sibiricum* [Syn. *Xanthium strumarium*].
- eliminate damp and relieve pain** T1656 *Conyza bonariensis* [Syn. *Erigeron bonariensis*; *Erigeron linifolius*; *Erigeron crispus*].
- eliminate damp and resolve cold phlegm** T4904 *Pinellia ternata*.
- eliminate food stagnation** T5384 *Quisqualis indica*.
- eliminate gan fever** T4887 *Picrorhiza kurroo*, T4888 *Picrorhiza scrophulariiflora*, T6104 *Stellaria dichotoma* var. *lanceolata*.
- eliminate heat** T3003 *Glycine max*, T5938 *Setaria italica*, T6507 *Trichosanthes cucumeroides*, T6544 *Triticum aestivum* [Syn. *Triticum vulgare*].
- eliminate heat and dry damp** T0255 *Ailanthus altissima*, T6475 *Toona sinensis*.
- eliminate heat in blood** T2882 *Gardenia jasminoides* [Syn. *Gardenia florida*], T3954 *Lycium barbarum*, T3956 *Lycium chinense*.
- eliminate heat vexation** T1758 *Cotinus coggygria*.
- eliminate impediment** T6826 *Wisteria sinensis*.
- eliminate impediment and check diarrhea** T1614 *Coix lacryma-jobi* var. *ma-yuen*.
- eliminate inflammation** T0423 *Ampelopsis brevipedunculata*, T0646 *Armillariella tabescens*, T0964 *Boenninghausenia albiflora*, T1955 *Cynanchum hancockianum*, T2844 *Ganoderma applanatum*, T3106 *Harpagophytum procumbens*, T3289 *Humulus lupulus*, T3394 *Ilex paraguariensis*, T4503 *Onychium lucidum*, T6139 *Sterculia lychnophora*.
- eliminate inflammation and disinhibit urine** T1557 *Clerodendron indicum*.
- eliminate inflammation and disperse swelling** T6432 *Thespesia populnea* [Syn. *Hibiscus populneus*].
- eliminate inflammation and engender flesh** T6920 *Ziziphus mauritiana*.
- eliminate inflammation and move water** T3432 *Inula helianthus-aquatica*.
- eliminate inflammation and relieve pain** T0543 *Apis mellifera ligustica*, T3643 *Kopsia officinalis*, T3960 *Lycogala epidendrum*, T4208 *Metasequoia glyptostroboides*, T6276 *Tacca plantaginea* [Syn. *Schizocapsa plantaginea*].
- eliminate macula and resolve toxin** T2598 *Euphorbia lathyris*.
- eliminate phlegm and suppress cough** T3803 *Ligularia dictyoneura* [Syn. *Senecio dictyoneurus*].
- eliminate putridity** T2584 *Euphorbia ebracteolata*, T2587 *Euphorbia fischeriana*.
- eliminate putridity and close sores** T2729 *Filipendula ulmaria*, T2857 *Garcinia hanburyi*.
- eliminate putridity and engender flesh** T4031 *Maesa perlaris*, T6080 *Spiraea japonica*.
- eliminate screen** T2408 *Equisetum hiemale*, T5414 *Ranunculus japonicus*.
- eliminate screen and brighten eyes** T1048 *Buddleja officinalis*, T2274 *Dryobalanops aromatica*, T5907 *Senecio scandens* [Syn. *Senecio chinensis*], T6079 *Spiraea japonica*, T6082 *Spiraea japonica* var. *fortunei*.
- eliminate screens** T4471 *Ocimum basilicum*.
- eliminate steam** T0660 *Artemisia annua*, T0662 *Artemisia apiacea* [Syn. *Artemisia carvifolia*; *Artemisia caruifolia*], T0705 *Artemisia vestita*.
- eliminate swelling abscess** T6596 *Ulmus parvifolia*.
- eliminate vexation** T4088 *Malus pumila*, T4829 *Phragmites communis*, T5227 *Prunus mume*.
- eliminate vexation and allay thirst** T0155 *Actinidia arguta*, T0438 *Anacardium occidentale*, T0462 *Anemarrhena asphodeloides*, T1152 *Camellia sinensis* [Syn. *Thea sinensis*], T3286 *Hovenia dulcis*, T3392 *Ilex kudingcha*, T3393 *Ilex latifolia*, T4545 *Oryza sativa*, T4618 *Panicum miliaceum*, T6492 *Trapa bispinosa*.
- eliminate vexation and heat** T1006 *Brassica chinensis*.
- eliminate vexation and quiet spirit** T4121 *Marsilea quadrifolia*.
- eliminate wind-damp** T0298 *Alectoria vivens*, T4283 *Morinda officinalis*, T5638 *Sabia swinhoei*.
- engender blood and harmonize blood** T3615 *Kadsura interior*.
- engender flesh** T0542 *Apis cerana*, T1452 *Cissampelos pareira*, T1453 *Cissampelos pareira* var. *hirsute*, T2092 *Delphinus delphis*, T2293 *Dumortiera hirsuta*, T2420 *Ericerus pela*, T4478 *Octopus vulgaris*.
- engender flesh and close sores** T6716 *Vernonia esculenta*.
- engender flesh and cure sores** T1552 *Cleome viscosa*.
- engender flesh and kill worms** T3407 *Illicium simonsii*.
- engender flesh and relieve pain** T3089 *Gypsophila acutifolia*, T4917 *Pinus massoniana*.
- engender flesh and stanch bleeding** T0180 *Adina pilulifera* [Syn. *Cephalanthus pilulifera*], T4207 *Metaplexis japonica*, T4686 *Pedilanthus tithymaloides*, T5528 *Rhodomyrtus tomentosa*, T5554 *Rodgersia aesculifolia*, T6145 *Stichopus japonicus*.
- engender hairs** T1175 *Cannabis sativa*, T2981 *Gleditsia sinensis* [Syn. *Gleditsia horrida*].
- engender liquid** T0535 *Antidesma bunius*, T0834 *Averrhoa carambola*, T1165 *Canarium album*, T1961 *Cynanchum thesioides*, T2221 *Diospyros kaki*, T4088 *Malus pumila*, T4099 *Mangifera indica*, T4103 *Mangifera persiciformis*, T4288 *Morus alba*, T4599 *Panax ginseng* [Syn. *Panax schinseng*], T4979 *Pistacia chinensis*, T5228 *Prunus mume*, T5229 *Prunus persica*, T5239 *Prunus salicina*, T5312 *Pueraria edulis*, T5313 *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*], T5316 *Pueraria omeiensis*, T5318 *Pueraria phaseoloides*, T5320 *Pueraria thomsonii*, T6266 *Syzygium cumini*, T6507 *Trichosanthes cucumeroides*, T6919 *Ziziphus jujuba* var. *spinosa*.
- engender liquid and allay thirst** T1006 *Brassica chinensis*, T1153 *Camellia sinensis* var. *assamica*, T1179 *Capparis masaikai*, T1471 *Citrus chachiensis*, T1473 *Citrus cultivars*, T1474 *Citrus decumana*,

- T1490 *Citrus limon*, T1494 *Citrus limonia*, T1516 *Citrus tankan*, T1518 *Citrus unshiu*, T2220 *Diospyros kaki*, T2569 *Eupatorium rebaudianum*, T3962 *Lycopersicon esculentum*, T4086 *Malus asiatica*, T4348 *Myrica rubra*, T4600 *Panax ginseng* [Syn. *Panax schinseng*], T4602 *Panax ginseng* [Syn. *Panax schinseng*], T4731 *Persea americana* [Syn. *Persea gratissima*], T4786 *Phasianus colchicus*, T4834 *Phyllanthus emblica*, T5093 *Polygonatum odoratum* [Syn. *Polygonatum officinale*], T5094 *Polygonatum prattii*, T5179 *Potentilla anserina*, T5186 *Potentilla reptans* var. *sericophylla*, T5218 *Prunus armeniaca*.
- engender liquid and boost blood** T3876 *Litchi chinensis*.
- engender liquid and boost lung** T2190 *Dioscorea batatas* [Syn. *Dioscorea opposita*], T2202 *Dioscorea japonica*.
- engender liquid and eliminate vexation** T0713 *Artocarpus heterophyllus*, T0722 *Arundo donax*.
- engender liquid and moisten dryness** T0989 *Bos taurus domesticus*; *Bubalus bubalis*, T5447 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*].
- engender liquid and quiet spirit** T4682 *Pedicularis muscicola*.
- enrich and invigorate** T0541 *Apis cerana*.
- enrich and nourish** T4785 *Phaseolus vulgaris*.
- enrich and nourish blood vessel** T1888 *Cudrania tricuspidata*.
- enrich and supplement** T0541 *Apis cerana*, T0924 *Bergenia purpurascens*, T3200 *Hemidesmus indicus*, T6432 *Thespesia populnea* [Syn. *Hibiscus populneus*].
- enrich kidney** T3955 *Lycium barbarum*, T3958 *Lycium chinense*.
- enrich kidney and replenish essence** T5091 *Polygonatum cyrtanema* [Syn. *Polygonatum multiflorum*], T5092 *Polygonatum kingianum*, T5095 *Polygonatum sibiricum*.
- enrich liver and nourish kidney** T1819 *Crotalaria ferruginea*.
- enrich yin and boost qi** T4821 *Pholidota articulata*.
- enrich yin and clear heat** T0155 *Actinidia arguta*, T2094 *Dendrobium aduncum*, T2096 *Dendrobium aurantiacum* var. *denneanum*, T2098 *Dendrobium chrysanthum*, T2100 *Dendrobium densiflorum*, T2102 *Dendrobium fimbriatum* var. *oculatum*, T2105 *Dendrobium loddigesii*, T2106 *Dendrobium moniliforme*, T2107 *Dendrobium nobile*, T2108 *Dendrobium officinale*, T5133 *Polytrichum commune*, T5445 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*].
- enrich yin and downbear fire** T3276 *Homo sapiens*, T5826 *Scrophularia buergeriana*, T5828 *Scrophularia ningpoensis*.
- enrich yin and moisten dryness** T0462 *Anemarrhena asphodeloides*, T0746 *Asparagus cochinchinensis* [Syn. *Asparagus lucidus*], T0982 *Bos taurus domesticus*, T2840 *Gallus gallus domesticus*.
- enrich yin and nourish blood** T5107 *Polygonum multiflorum*.
- enrich yin and remove heat** T5186 *Potentilla reptans* var. *sericophylla*.
- enrich yin and supplement blood** T1189 *Caragana intermedia*.
- enrich yin and supplement kidney** T1035 *Broussonetia papyrifera*, T2301 *Dysosma majorensis* [Syn. *Podophyllum majorensis*; *Dysosma lichuanensis*], T4681 *Pedicularis decora*.
- enrich yin and supplement vacuity** T4644 *Parasilurus asotus*.
- enrich yin and nourish blood** T4288 *Morus alba*.
- expel phlegm and precipitate qi** T1153 *Camellia sinensis* var. *assamica*.
- expel pus** T0791 *Astragalus chrysopterus*, T0794 *Astragalus ernestii*, T0798 *Astragalus membranaceus*, T0800 *Astragalus mongholicus*, T2601 *Euphorbia milii*, T5011 *Platycodon grandiflorum*.
- expel pus and break stasis** T4672 *Patrinia scabiosaefolia*, T4676 *Patrinia villosa*.
- expel pus and disinhibit urine** T3284 *Houttuynia cordata*.
- expel pus and draw out toxin** T4917 *Pinus massoniana*.
- expel pus and engender flesh** T1673 *Corchorus capsularis*.
- expel pus and relieve cough** T3233 *Heteropappus altaicus*.
- expel roundworm** T0659 *Artemisia absinthium*, T1122 *Caloglossa leprieurii*, T1176 *Cannabis sativa*, T2173 *Digenea simplex*, T4002 *Lysimachia foenum-graecum*, T4231 *Milingtonia hortensis*, T6312 *Taxus mairei*, T6864 *Zanthoxylum armatum*, T6887 *Zanthoxylum planispinum*.
- expel roundworms** T3342 *Hypericum bellum*.
- expel roundworms** T3380 *Hypis pectinata*.
- expel stasis and break accumulation** T2384 *Epicauta gorhami*.
- expel stasis and free menstruation** T5472 *Rheum officinale*, T5474 *Rheum palmatum*, T5481 *Rheum tanguticum*.
- expel stasis blood** T1923 *Cyathula capitata*.
- expel stone and disinhibit water** T1553 *Clerodendranthus spicatus*.
- expel tapeworm** T0251 *Agrimonia pilosa* var. *japonica*.
- expel water** T2024 *Daphne genkwa*, T2599 *Euphorbia lunulata*, T2601 *Euphorbia milii*.
- expel water and dispel phlegm** T6105 *Stellera chamaejasme*.
- expel water and disperse swelling** T1858 *Croton tiglium*, T2597 *Euphorbia lathyris*, T4861 *Phytolacca americana* [Syn. *Phytolacca decandra*], T4864 *Phytolacca esculenta* [Syn. *Phytolacca acinosa*].
- expel wind** T1137 *Caltha palustris*, T2746 *Foeniculum vulgare*.
- expel wind and dissipate cold** T4956 *Piper mullesua*, T5987 *Sobania chinensis*.
- expel wind and eliminate damp** T2449 *Erycibe obtusifolia*, T2450 *Erycibe schmidtii*, T2538 *Euonymus bungeanus*, T3867 *Liquidambar formosana* [Syn. *Liquidambar taiwaniana*], T4678 *Paulownia fortunei*, T4679 *Paulownia tomentosa*, T4873 *Picea koraiensis*, T5648 *Salacia prinooides* [Syn. *Salacia chinensis*], T5998 *Solanum dulcamara*, T6808 *Waltheria americana*.
- expel wind and quicken blood** T6264 *Syzygium buxifolium*.
- expel wind and relieve pain** T6003 *Solanum khasianum*.
- expel worms** T0264 *Ajuga forrestii*, T0446 *Anaphalis margaritacea*, T0511 *Annona reticulata*, T0606 *Areca catechu*, T0952 *Blechnum orientale*, T1101 *Caesalpinia decapetala*, T1382 *Chondria armata* [Syn. *Lophura armata*], T1595 *Codium fragile*, T1881 *Cucurbita moschata*, T1986 *Cyrtomium fortunei*, T2277 *Dryopteris austriaca*, T2279 *Dryopteris championii*, T2282 *Dryopteris filix-mas*, T2346 *Embelia oblongifolia*, T2410 *Equisetum pratense*, T2852 *Garcinia cowa*, T3466 *Iris potaninii*, T3688 *Lappula echinata*, T3935 *Luffa cylindrica*, T4163 *Melia toosendan*, T4364 *Myrsine semiserrata*, T5151 *Populus davidiana*, T5328 *Punica granatum*, T5329 *Punica granatum*, T5921 *Seriphidium finitum* [Syn. *Artemisia finita*], T6201 *Styrax obassia*, T6653 *Usnea diffracta*, T6654 *Usnea longissima*.
- expel worms and relieve itch** T4085 *Mallotus repandus* var. *chrysocarpus* [Syn. *Mallotus chrysocarpus*; *Mallotus repandus*].
- expel worms and treat lichen** T4156 *Melia azedarach*, T4162 *Melia toosendan*.
- extinguish wind and check tetany** T2836 *Gallus gallus domesticus*, T2890

- Gastrodia elata*, T4710 *Pericampylus glaucus*, T5817 *Scolopendra subspinipes mutilans*, T6625 *Uncaria macrophylla*, T6629 *Uncaria rhynchophylla* [Syn. *Nauclea rhynchophylla*], T6633 *Uncaria sinensis*.
- extinguish wind and harmonize blood** T0483 *Angelica gigas*.
- extinguish wind and settle fright** T6424 *Thermopsis alpina*.
- fortify and move spleen** T5573 *Rosa sericea*.
- fortify spleen** T0353 *Alpinia blepharocalyx*, T0387 *Amaranthus caudatus*, T0535 *Antidesma bunius*, T0541 *Apis cerana*, T1143 *Calystegia hederacea*, T2246 *Dolichos lablab*, T3950 *Lychnis fulgens*, T4178 *Melodinus hemsleyanus*, T5244 *Prunus tomentosa*, T5575 *Rosmarinus officinalis*, T6231 *Swertia pseudochinensis*.
- fortify spleen and assisting movement** T4436 *Nitraria tangutorum*.
- fortify spleen and boost kidney** T1188 *Caragana chamlagu*, T1604 *Coeloglossum viride* [Syn. *Coeloglossum viride* var. *bracteatum*], T3000 *Glycine max*, T3077 *Gymnadenia conopsea*.
- fortify spleen and boost lung** T4450 *Nuphar pumilum*.
- fortify spleen and boost qi** T1202 *Carex kobomugi*, T6489 *Tragopogon porrifolius*.
- fortify spleen and boost stomach** T5067 *Polyalthia nemoralis*.
- fortify spleen and check diarrhea** T2188 *Dioscorea alata*, T4548 *Oryza sativa* var. *glutinosa*, T6056 *Sorghum vulgare*.
- fortify spleen and disinhibit damp** T1238 *Cassia mimosoides*, T3418 *Incarvillea arguta*, T3645 *Kummerowia striata*, T3770 *Lespedeza cuneata*, T3840 *Limnophila rugosa*, T3886 *Litsea euosma*, T6264 *Syzygium buxifolium*, T6754 *Vigna unguiculata*.
- fortify spleen and disinhibit water** T1035 *Broussonetia papyrifera*, T2998 *Glycine max*, T6744 *Vicia faba*.
- fortify spleen and disperse accumulation** T2658 *Fagopyrum esculentum*, T6229 *Swertia patens*, T6676 *Valeriana hardwickii*.
- fortify spleen and disperse food** T1769 *Crataegus cuneata*, T1771 *Crataegus kansuensis*, T1772 *Crataegus maximowiczii*, T1780 *Crataegus sanguinea*, T1781 *Crataegus scabrifolia*, T1952 *Cynanchum auriculatum*, T1953 *Cynanchum bungei*, T2189 *Dioscorea althaeoides*, T2838 *Gallus gallus domesticus*, T4194 *Menyanthes trifoliata*, T5341 *Pygmaepremna herbacea* [Syn. *Premna herbacea*], T5758 *Saussurea lappa* [Syn. *Aucklandia lappa*].
- fortify spleen and eliminate damp** T0881 *Bauhinia variegata*, T2720 *Ficus hispida*.
- fortify spleen and harmonize center** T2050 *Daucus carota* var. *sativa*.
- fortify spleen and harmonize stomach** T1623 *Collybia albuminosa*, T1751 *Corylus heterophylla*, T1980 *Cyprinus carpio*, T2136 *Desmos cochinchinensis* [Syn. *Desmos chinensis*], T3431 *Inula helenium*, T3437 *Inula racemosa*.
- fortify spleen and nourish stomach** T0559 *Arachis hypogaea*, T2190 *Dioscorea batatas* [Syn. *Dioscorea opposita*], T2202 *Dioscorea japonica*, T3229 *Hericium erinaceus* [Syn. *Hydnum erinaceus*].
- fortify spleen and percolate damp** T1614 *Coix lacryma-jobi* var. *ma-yuen*.
- fortify spleen and promote digestion** T0210 *Agaricus bisporus*, T0211 *Agaricus campestris*, T2716 *Ficus beecheyana* [Syn. *Ficus erecta* var. *beecheyana*], T2717 *Ficus carica*, T3742 *Lentinus edodes*, T4636 *Papaver somniferum*, T4644 *Parasilurus asotus*.
- fortify spleen and quiet heart** T5169 *Poria cocos*.
- fortify spleen and regulate menstruation** T2326 *Elaeagnus angustifolia*.
- fortify spleen and stomach** T0298 *Alectoria vivens*, T0983 *Bos taurus domesticus*, T1964 *Cynanchum wilfordii* [Syn. *Cynoctonum wilfordii*], T2846 *Ganoderma japonicum* [Syn. *Ganoderma sinense*], T2848 *Ganoderma lucidum*, T5179 *Potentilla anserina*, T5872 *Selenarctos thibetanus*; *Ursus arctos*, T6656 *Ustilago maydis*.
- fortify spleen and supplement center** T0991 *Bos taurus domesticus*; *Bubalus bubalis*.
- fortify spleen and supplement lung** T0500 *Anguilla japonica*, T1596 *Codonopsis canescens*, T1597 *Codonopsis clematidea*, T1599 *Codonopsis pilosula*, T1600 *Codonopsis pilosula* var. *modesta* [Syn. *Codonopsis modesta*], T1601 *Codonopsis subglobosa*, T1602 *Codonopsis tangshen*, T1603 *Codonopsis tubulosa*, T2727 *Ficus simplicissima*.
- fortify spleen and supplement vacuity** T3774 *Lespedeza tomentosa*, T4147 *Medicago falcata*, T5071 *Polygala arillata*.
- fortify spleen and suppress cough** T0151 *Acronychia pedunculata*.
- fortify spleen and warm stomach** T0363 *Alpinia speciosa*, T6267 *Syzygium jambos*.
- fortify stomach** T0158 *Actinidia chinensis*, T0357 *Alpinia japonica*, T0659 *Artemisia absinthium*, T1242 *Cassia occidentalis*, T1608 *Coffea arabica*, T1610 *Coffea liberica*, T1687 *Coriandrum sativum*, T4551 *Osmorhiza aristata* var. *laxa*, T5570 *Rosa roxburghii*, T6889 *Zanthoxylum podocarpum*.
- fortify stomach and disperse accumulation** T1546 *Clematis tangutica*.
- fortify stomach and disperse food** T0418 *Amomum muricarpum*, T1775 *Crataegus pinnatifida*, T1778 *Crataegus pinnatifida* var. *major*, T2763 *Fragaria ananassa*, T3254 *Hippophae rhamnoides*, T3256 *Hippophae rhamnoides* subsp. *sinensis*, T3258 *Hippophae rhamnoides* subsp. *yunnanensis*, T3289 *Humulus lupulus*, T3962 *Lycopersicon esculentum*, T4100 *Mangifera indica*, T5122 *Polygonum viscosum*, T6071 *Sphaeranthus indicus*.
- fortify stomach and disperse stagnation** T4217 *Microcos paniculata* [Syn. *Grewia microcos*].
- fortify stomach and expel worms** T6895 *Zanthoxylum simulans*.
- fortify stomach and harmonize center** T3480 *Isodon angustifolia*, T4172 *Melilotus suaveolens*.
- fortify stomach and rectify qi** T0311 *Allium cepa*, T3725 *Laurus nobilis*.
- fortify stomach and relieve pain** T1492 *Citrus limon*, T1496 *Citrus limonia*, T2505 *Eucalyptus citriodora*, T6435 *Thladiantha cordifolia*.
- fortify stomach and resolve phlegm** T1501 *Citrus medica* var. *sarcodactylis*.
- free bowels and drain heat** T5469 *Rheum hotaoense*.
- free channels and network vessels** T0871 *Barleria lupulina*, T1327 *Cerastostigma minus*, T2438 *Erodium stephanianum*, T2943 *Geranium nepalense*, T2944 *Geranium pratense*, T2947 *Geranium sibiricum*, T2949 *Geranium wilfordii*, T3436 *Inula nervosa*, T4950 *Piper kadsura* [Syn. *Piper futokadsura*], T5950 *Siegesbeckia orientalis*, T5951 *Siegesbeckia orientalis* var. *glabrescens* [Syn. *Siegesbeckia glabrescens*], T5952 *Siegesbeckia orientalis* var. *pubescens* [Syn. *Siegesbeckia pubescens*], T5981 *Smilax riparia*, T6588 *Typhonium giganteum*.
- free channels and quicken blood** T1853 *Croton oblongifolius* [Syn. *Croton laevigatus*], T5648 *Salacia prinoides* [Syn. *Salacia chinensis*].
- free channels and quicken network vessels** T1589 *Cocculus trilobus* [Syn.

- Cocculus sarmentosus*], T2753 *Formica fusca*, T4308 *Mucuna birdwoodiana*, T6166 *Strychnos angustiflora*, T6738 *Viburnum odoratissimum*.
- free channels and relieve pain** T1943 *Cymbopogon goeringii*.
- free intestines and stomach** T1006 *Brassica chinensis*.
- free joints** T5977 *Smilax glabra*, T5980 *Smilax menispermoidea*.
- free medicinal strength** T3869 *Liquor*.
- free menstruation** T0941 *Bidens tripartita*, T1356 *Cheiranthus cheiri*, T2546 *Euonymus sacrosancta*, T3779 *Leucas aspera*.
- free menstruation and check discharge** T4575 *Pachysandra terminalis*.
- free menstruation and milk** T0632 *Aristolochia manshuriensis*, T4106 *Manis pentadactyla*.
- free menstruation and promote lactation** T4178 *Melodinus hemsleyanus*.
- free menstruation and quicken blood** T2734 *Fissistigma glaucescens* [Syn. *Melodorum glaucescens*].
- free menstruation and relieve pain** T0994 *Boswellia carterii*, T1288 *Celastrus orbiculatus* [Syn. *Celastrus articulatus*], T1903 *Curcuma aromatica*, T1905 *Curcuma longa*, T3056 *Gossypium herbaceum*.
- free milk** T1508 *Citrus sinensis*, T1980 *Cyprinus carpio*, T2590 *Euphorbia hirta*, T3662 *Lactuca sativa*, T4206 *Metaplexis japonica*, T6357 *Tetrapanax papyriferus*.
- free milk and disinhibit water** T4983 *Pisum sativum*.
- free nasal orifices** T1312 *Centipeda minima*.
- free network vessels** T2426 *Erigeron sumatrensis*, T3913 *Lonicera japonica*, T4516 *Oplopanax elatus*, T4796 *Pheretima aspergillum*; *Allolobophora caliginosa trapezoides*, T6066 *Spatholobus suberectus*.
- free network vessels and disperse swelling** T1008 *Brassica juncea*.
- free network vessels and dissipate stasis** T3613 *Kadsura coccinea* [Syn. *Kadsura chenensis*; *Kadsura hainanensis*], T4324 *Murraya paniculata* [Syn. *Chalcas paniculata*], T5075 *Polygala fallax* [Syn. *Polygala aureocauda*].
- free network vessels and relieve pain** T0080 *Aconitum bullatifolium* var. *homotrichum* [Syn. *Aconitum nagarum*], T1053 *Bulbophyllum odoratissimum* [Syn. *Stelis odoratissimum*], T1084 *Buthus martensi*, T1545 *Clematis chinensis*, T1715 *Corydalis decumbens* [Syn. *Corydalis amabilis*], T1767 *Craibiodendron yunnanese*, T1799 *Crinum latifolium*, T1921 *Cyanotis arachnoidea* [Syn. *Cyanotis bodinieri*], T2062 *Delphinium bonvalotii*, T2081 *Delphinium omeiense*, T2084 *Delphinium potaninii*, T2085 *Delphinium potaninii* var. *jiufengshanense*, T2194 *Dioscorea colletii*, T2213 *Dioscorea zingiberensis*, T3737 *Lemmaphyllum microphyllum* var. *obovatum*, T4118 *Marsdenia oreophila*, T5021 *Pleurospermum rivulorum*, T5817 *Scolopendra subspinipes mutilans*, T6184 *Strychnos nux-vomica*, T6193 *Strychnos wallichiana*, T6252 *Symplocos chinensis*, T6862 *Zanthoxylum ailanthoides*.
- free orifices and relieve pain** T0479 *Angelica dahurica* cv. *qibaizhi*, T0498 *Angelica taiwaniana*, T0728 *Asarum heterotropoides* var. *mandshuricum*, T0731 *Asarum sieboldii*, T0732 *Asarum sieboldii* var. *seoulensis*.
- free qi and effuse sweat** T0319 *Allium schoenoprasum*.
- free stool** T0334 *Aloe arborescens* var. *natalensis*, T1101 *Caesalpinia decapetala*, T1173 *Cannabis sativa*, T1229 *Cassia acutifolia*, T1230 *Cassia angustifolia*, T1236 *Cassia laevigata* [Syn. *Cassia floribunda*], T1238 *Cassia mimosoides*, T1241 *Cassia occidentalis*, T1242 *Cassia occidentalis*, T1291 *Celastrus paniculatus*, T2612 *Euphorbia prolifera*, T3394 *Ilex paraguariensis*, T3447 *Ipomoea batatas* [Syn. *Convolvulus batatas*], T3935 *Luffa cylindrica*, T5613 *Rumex obtusifolius*, T5272 *Psorospermum febrifugum*, T6032 *Sophora flavescens* [Syn. *Sophora angustifolia*].
- free stool and kill worms** T5607 *Rumex crispus*, T5614 *Rumex patientia*.
- free strangury** T0155 *Actinidia arguta*, T0158 *Actinidia chinensis*, T3240 *Hibiscus esculentus*, T3668 *Lagenaria siceraria* var. *depressa*, T5372 *Quercus dentata*.
- free strangury and expel stone** T4149 *Medicago sativa*.
- free strangury and transform turbid** T1001 *Brachystemma calycinum*.
- free yang** T0310 *Allium ascalonicum*, T0314 *Allium fistulosum*.
- harmonize blood** T4720 *Perilla frutescens* var. *arguta*, T4723 *Perilla frutescens* var. *crispa*, T5518 *Rhododendron mucronatum*, T5523 *Rhododendron simsii*, T5572 *Rosa rugosa*.
- harmonize blood and check dysentery** T4665 *Passiflora edulis*.
- harmonize blood and dispel wind** T1188 *Caragana chamlagu*.
- harmonize blood and relieve pain** T0569 *Aralia cordata*, T0574 *Aralia fargesii*, T1292 *Celastrus orbiculatus* [Syn. *Celastrus articulatus*].
- harmonize blood and resolve toxin** T3113 *Hedera nepalensis* var. *sinensis*, T3115 *Hedera rhombea*.
- harmonize blood and stanch bleeding** T0382 *Althaea rosea*.
- harmonize blood and vanquish toxin** T0094 *Aconitum finetianum*.
- harmonize center** T4190 *Mentha spicata*, T5938 *Setaria italica*.
- harmonize center and check vomiting** T6325 *Tectona grandis*.
- harmonize center and downbear counterflow** T4818 *Phoebe nanmu*.
- harmonize center and moisten intestines** T1465 *Citrullus vulgaris* [Syn. *Citrullus lanatus*].
- harmonize center and precipitate qi** T4983 *Pisum sativum*.
- harmonize center and promote digestion** T1486 *Citrus junos*.
- harmonize center and relieve pain** T4086 *Malus asiatica*.
- harmonize exterior and interior** T1055 *Bupleurum angustissimum*, T1056 *Bupleurum aureum*, T1058 *Bupleurum chaishouii*, T1059 *Bupleurum chinense*, T1065 *Bupleurum longiradiatum*, T1066 *Bupleurum marginatum*, T1067 *Bupleurum marginatum* var. *stenophyllum*, T1072 *Bupleurum scorzoniferolium*, T1073 *Bupleurum sibiricum*, T1075 *Bupleurum smithii* var. *parvifolium*, T1078 *Bupleurum wenchuanense*, T1079 *Bupleurum yinchowense*.
- harmonize spleen and stomach** T1390 *Chrysanthemum coronarium*, T1397 *Chrysanthemum segetum*, T1888 *Cudrania tricuspidata*.
- harmonize stomach** T1182 *Capra hircus*; *Ovis aries*, T1469 *Citrus aurantium* var. *amara*, T2263 *Dregea volubilis*, T4188 *Mentha rotundifolia*, T6145 *Stichopus japonicus*.
- harmonize stomach and arouse spleen** T0417 *Amomum longiligulare*, T0419 *Amomum villosum*, T0420 *Amomum xanthioides*, T4386 *Nardostachys chinensis*, T4387 *Nardostachys jatamansi*.
- harmonize stomach and check vomiting** T3372 *Hypodematium sinense*.
- harmonize stomach and disperse accumulation** T1467 *Citrus aurantium*, T5140 *Poncirus trifoliata*, T6285 *Tamarindus indica*.
- harmonize stomach and disperse food** T2452 *Erysimum cheiranthoides*, T2733 *Firmiana simplex*, T4348 *Myrica rubra*.
- harmonize stomach and fortify center** T6017 *Solanum tuberosum*.
- harmonize stomach and free stool** T1384 *Chondrus ocelladus*.

- harmonize stomach and inhibit acid** T4306 *Mosla grosseserrata*.
- harmonize stomach and soothe sinews** T1343 *Chaenomeles sinensis*.
- harmonize stomach and transform damp** T0212 *Agastache rugosus*, T1342 *Chaenomeles lagenaria* [Syn. *Chaenomeles speciosa*], T4170 *Melilotus albus*, T4284 *Morinda parvifolia*.
- harmonize stomach and transform phlegm** T5226 *Prunus mume*.
- harmonize stomach and transform turbidity** T0978 *Bombyx mori*.
- hasten delivery** T3758 *Lepidium sativum*.
- hasten delivery or stop delivery** T1179 *Capparis masaikai*.
- increase appetite** T0041 *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*], T0472 *Anethum graveolens*, T1341 *Cetraria islandica*, T4546 *Oryza sativa*, T4547 *Oryza sativa* cv.
- increase appetite and check vomiting** T5059 *Pogostemon cablin* [Syn. *Mentha cablin*].
- increase appetite and disperse food** T0416 *Amomum kravanh* [Syn. *Amomum cardamomum*].
- induce sweat** T3394 *Ilex paraguariensis*.
- inhibit acid** T2841 *Gallus gallus domesticus*, T6412 *Thalictrum squarrosum*.
- inhibit secretion** T0825 *Atropa belladonna*.
- interrupt malaria** T0249 *Agrimonia pilosa* var. *japonica*, T0378 *Alstonia yunnanensis*, T0606 *Areca catechu*, T0653 *Artabotrys hexapetalus* [Syn. *Annona hexapetalus*], T0660 *Artemisia annua*, T0662 *Artemisia apiacea* [Syn. *Artemisia carvifolia*; *Artemisia caruifolia*], T0947 *Bixa orellana*, T1176 *Cannabis sativa*, T1446 *Cipadessa baccifera*, T1535 *Clausena excavata*, T1561 *Clerodendron serratum*, T1562 *Clerodendron trichotomum*, T1569 *Clerodendron serratum* var. *amplexifolium*, T1853 *Croton oblongifolius* [Syn. *Croton laevigatus*], T2295 *Duranta repens*, T2310 *Dysoxylum hongkongense*, T2421 *Erigeron annuus*, T2695 *Ferula assafoetida*, T3144 *Helianthus annuus*, T3146 *Helianthus annuus* cv, T3303 *Hydrangea chinensis*, T3304 *Hydrangea macrophylla*, T3308 *Hydrangea umbellata*, T3327 *Hyoscyamus niger*, T4803 *Phlogacanthus curviflorus*, T5107 *Polygonum multiflorum*, T5110 *Polygonum orientale*, T5184 *Potentilla kleiniana*, T5413 *Ranunculus cantoniensis*, T5414 *Ranunculus japonicus*, T5415 *Ranunculus sceleratus*, T5852 *Sedum bulbiferum*, T6402 *Thalictrum omeiense*, T6709 *Verbena officinalis*, T6723 *Veronica arvensis*, T6727 *Veronica persica*.
- interrupt malaria and abate fever** T1428 *Cinchona ledgeriana*, T1429 *Cinchona officinalis*, T1433 *Cinchona succirubra*.
- interrupt malaria and kill worms** T2136 *Desmos cochinchinensis* [Syn. *Desmos chinensis*].
- interrupt malaria and settle pain** T1841 *Croton caudatus* var. *tomentosus*.
- invigorate yang** T6073 *Sphallerocarpus gracilis*.
- invigorate yang and secure essence** T0323 *Allium tuberosum*.
- joint bones** T1206 *Carica papaya*, T2234 *Dipsacus asperoides*, T2235 *Dipsacus japonicus*, T3685 *Lannea grandis* [Syn. *Lannea coromandelica*], T5733 *Sarcococca vagans*.
- joint bones and disperse swelling** T4031 *Maesa perlarium*.
- joint bones and engender flesh** T1871 *Cucubalus baccifer*.
- joint sinews and bones** T0170 *Adhatoda vasica*, T0871 *Barleria lupulina*, T6138 *Sterculia foetida*.
- kill snails** T0398 *Ambrosia artemisiifolia*.
- kill worms** T0012 *Abrus precatorius*, T0215 *Agave americana*, T0248 *Agrimonia pilosa*, T0255 *Ailanthus altissima*, T0314 *Allium fistulosum*, T0318 *Allium sativum*, T0364 *Alsophila spinulosa*, T0435 *Anabasis aphylla*, T0513 *Annona squamosa*, T0707 *Arthraxon hispidus*, T0750 *Asparagus gobicus*, T0752 *Asparagus officinalis*, T1097 *Cacalia ainsliaeflora*, T1210 *Carpesium abrotanoides*, T1211 *Carpesium abrotanoides*, T1278 *Cedrela sinensis*, T1374 *Chloranthus spicatus*, T1388 *Chrysanthemum cinerariaefolium*, T1389 *Chrysanthemum coccineum*, T1437 *Cinnamomum camphora*, T1535 *Clausena excavata*, T1558 *Clerodendron inerme*, T1582 *Cnidium monnieri*, T1591 *Cocos nucifera*, T1593 *Cocos nucifera*, T1645 *Consolida ajacis* [Syn. *Delphinium ajacis*], T1693 *Coriaria sinica* [Syn. *Coriaria nepalensis*], T1815 *Crotalaria assamica*, T1867 *Cryptomeria fortunei*, T2048 *Daucus carota*, T2049 *Daucus carota*, T2162 *Dicranostigma franchetianum* [Syn. *Dicranostigma leptopodium*], T2281 *Dryopteris crassirhizoma*, T2533 *Eugenia jambolana* [Syn. *Syzygium cumini*; *Myrtus cumini*], T2536 *Euonymus alatus*, T2546 *Euonymus sacrosancta*, T2567 *Eupatorium odoratum*, T2584 *Euphorbia ebracteolata*, T2585 *Euphorbia esula*, T2587 *Euphorbia fischeriana*, T2599 *Euphorbia lunulata*, T2612 *Euphorbia prolifera*, T2624 *Euphorbia tirucalli*, T2695 *Ferula assafoetida*, T2857 *Garcinia hanburyi*, T2979 *Gleditsia sinensis* [Syn. *Gleditsia horrida*], T3263 *Holarrhena antidysenterica*, T3327 *Hyoscyamus niger*, T3420 *Incarvillea sinensis*, T3567 *Juglans regia*, T3570 *Juglans regia*, T3630 *Kleinhovia hospita*, T3726 *Laurus nobilis*, T4020 *Macleaya cordata*, T4127 *Matteuccia struthiopteris*, T4157 *Melia azedarach*, T4552 *Osmunda japonica*, T4690 *Pelargonium graveolens*, T4890 *Pieris japonica*, T5098 *Polygonum aviculare*, T5113 *Polygonum persicaria*, T5185 *Potentilla multifida*, T5220 *Prunus davidiana*, T5221 *Prunus davidiana*, T5232 *Prunus persica*, T5234 *Prunus persica*, T5235 *Prunus persica*, T5317 *Pueraria peduncularis*, T5327 *Punica granatum*, T5516 *Rhododendron molle*, T5537 *Rhus sylvestris*, T5542 *Rhus verniciflua* [Syn. *Toxicodendron verniciflum*], T5595 *Rubus parviflorus*, T5605 *Rumex acetosa*, T5613 *Rumex obtusifolius*, T5719 *Sapindus mukorossi*, T5726 *Saponaria officinalis*, T5920 *Seriphidium cinum* [Syn. *Artemisia cina*], T6032 *Sophora flavescens* [Syn. *Sophora angustifolia*], T6035 *Sophora japonica*, T6048 *Sophora vicifolia*, T6177 *Strychnos ignatii*, T6219 *Swertia erythrosticta*, T6277 *Tadehagi triquetrum*, T6330 *Tephrosia kirilowii* [Syn. *Senecio integrifolius* var. *fauriei*], T6474 *Toona ciliata*, T6475 *Toona sinensis*, T6476 *Torilis japonica*, T6691 *Veratrum baillonii*, T6697 *Veratrum grandiflorum*, T6698 *Veratrum nigrum*, T6826 *Wisteria sinensis*, T6827 *Wisteria sinensis*, T6831 *Woodwardia orientalis*, T6860 *Zanthoxylum ailanthoides*, T6870 *Zanthoxylum bungeanum*.
- kill worms and cure sores** T1436 *Cinnamomum camphora*.
- kill worms and disinhibit damp** T5455 *Rhamnus crenata*.
- kill worms and disperse accumulation** T1632 *Combretum yunnanensis*, T4542 *Orthosiphon wulfenoides* [Syn. *Coleus wulfenoides*].
- kill worms and disperse gan** T1049 *Bufo bufo gargarizans*; *Bufo melanostictus*.
- kill worms and dissipate binds** T2978 *Gleditsia sinensis* [Syn. *Gleditsia horrida*].
- kill worms and ejection** T6693 *Veratrum album* var. *lobelianum* [Syn. *Veratrum lobelianum*].
- kill worms and relieve diarrhea** T4083 *Mallotus philippinensis*, T4084

*Mallotus philippinensis*.

- kill worms and relieve itch** T0142 *Acorus calamus*, T0297 *Alchornea trewioides*, T0749 *Asparagus filicinus*, T0853 *Baekkea frutescens*, T1261 *Catalpa ovata*, T1264 *Catalpa ovata*, T1359 *Chenopodium album*, T1361 *Chenopodium ambrosioides*, T1594 *Cocos nucifera*, T2077 *Delphinium grandiflorum*, T2124 *Derris trifoliata*, T2459 *Erythrina arborescens*, T2478 *Erythrina variegata* [Syn. *Erythrina indica*], T2510 *Eucalyptus globulus*, T2517 *Eucalyptus robusta*, T2580 *Euphorbia antiquorum*, T2602 *Euphorbia nematocypha*, T2617 *Euphorbia royleana*, T2651 *Excoecaria cochinchinensis* var. *viridis*, T3245 *Hibiscus syriacus*, T3560 *Jatropha curcas*, T3624 *Kalopanax pictum*, T3625 *Kalopanax septemlobus*, T4158 *Melia azedarach*, T4159 *Melia azedarach*, T4572 *Pachyrhizus erosus*, T4906 *Pinus armandii*, T4916 *Pinus massoniana*, T5010 *Platycarya strobilacea*, T5026 *Plumbagella micrantha*, T5256 *Pseudolarix amabilis* [Syn. *Larix amabilis*; *Pseudolarix kaempferi*], T5308 *Pterocarya stenoptera*, T5368 *Python molurus bivittatus*, T5483 *Rhinacanthus nasutus*, T5608 *Rumex dentatus*, T5611 *Rumex japonicus*, T5612 *Rumex nepalensis*, T5646 *Sagina japonica* [Syn. *Spergula japonica*], T5907 *Senecio scandens* [Syn. *Senecio chinensis*], T6155 *Strophanthus divaricatus*, T6713 *Veronica anthelmintica*.
- kill worms and relieve pain** T0099 *Aconitum gymnandrum*, T6029 *Sophora alopecuroides*, T6101 *Stauntonia hexaphylla*, T6858 *Zanthoxylum acanthopodium*.
- loosen center** T0201 *Aesculus chinensis*, T0202 *Aesculus hippocastanum*, T0205 *Aesculus wilsonii*, T4544 *Oryza sativa*.
- loosen center and induce stagnation** T2998 *Glycine max*.
- loosen center and rectify qi** T4720 *Perilla frutescens* var. *arguta*, T4723 *Perilla frutescens* var. *crispa*.
- loosen chest and disinhibit qi** T1486 *Citrus junos*, T1786 *Cremanthodium ellisii*.
- loosen chest and dissipate binds** T6510 *Trichosanthes kirilowii*, T6513 *Trichosanthes rosthornii* [Syn. *Trichosanthes uniflora*].
- loosen chest and resolve depression** T3192 *Hemerocallis citrina*.
- loosen intestines and stomach** T3447 *Ipomoea batatas* [Syn. *Convolvulus batatas*].
- lower blood pressure** T0544 *Apium graveolens*, T0553 *Apocynum venetum*, T0561 *Arachis hypogaea*, T0625 *Aristolochia contorta*, T0627 *Aristolochia debilis* [Syn. *Aristolochia longa*], T0631 *Aristolochia kaempferi*, T0830 *Auricularia auricula*, T0831 *Auricularia delicata*, T0987 *Bos taurus domesticus*; *Bubalus bubalis*, T1190 *Caragana jubata*, T1241 *Cassia occidentalis*, T1311 *Centella asiatica*, T1385 *Chorda filum*, T1393 *Chrysanthemum indicum*, T1417 *Cimicifuga acerina*, T1562 *Clerodendron trichotomum*, T1565 *Clerodendrum bungei*, T1662 *Coptis chinensis*, T1663 *Coptis chinensis* var. *brevisepala*, T1664 *Coptis deltoidea*, T1669 *Coptis omeiensis*, T1670 *Coptis teetoides* [Syn. *Coptis teeta*], T1776 *Crataegus pinnatifida*, T1777 *Crataegus pinnatifida*, T2115 *Dermatocarpon minutum*, T2445 *Ervatamia officinalis*, T2530 *Eucommia ulmoides*, T2531 *Eucommia ulmoides*, T2565 *Eupatorium lindleyanum*, T2569 *Eupatorium rebaudianum*, T2659 *Fagopyrum esculentum*, T2908 *Gentiana cephalantha*, T2921 *Gentiana manshurica*, T2928 *Gentiana rigescens*, T2930 *Gentiana scabra*, T2938 *Gentiana triflora*, T2973 *Glechoma longituba*, T3144 *Helianthus annuus*, T3146 *Helianthus annuus* cv, T3878 *Lithocarpus polystachyus*, T3898 *Lobelia chinensis* [Syn. *Lobelia radicans*], T3955 *Lycium barbarum*, T3958 *Lycium chinense*, T4028 *Maesa indica*, T4034 *Magnolia biloba*, T4045 *Magnolia officinalis*, T4195 *Menyanthes trifoliata*, T4290 *Morus alba*, T4438 *Nostoc flagelliforme*, T4487 *Olea europaea*, T4796 *Pheretima aspergillum*; *Allolobophora caliginosa trapezoides*, T5423 *Rauwolfia verticillata*, T5424 *Rauwolfia verticillata*, T5425 *Rauwolfia verticillata* f. *rubrocarpa*, T5426 *Rauwolfia verticillata* var. *hainanensis*, T5427 *Rauwolfia vomitoria*, T5435 *Rauwolfia latifrons*, T5441 *Rauwolfia perakensis*, T5442 *Rauwolfia serpentina*, T5657 *Salsola collina*, T5723 *Sapium sebiferum*, T5817 *Scolopendra subspinipes mutilans*, T5969 *Sium latifolium*, T6478 *Torreya jackii*, T6697 *Veratrum grandiflorum*, T6698 *Veratrum nigrum*, T6772 *Viscum angulatum*, T6803 *Volvarella volvacea*.
- lower blood sugar levels** T0303 *Alisma orientale* [Syn. *Alisma plantago-aquatica* var. *orientale*], T3085 *Gynostemma pentaphyllum*, T4599 *Panax ginseng* [Syn. *Panax schinseng*], T5445 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], T5447 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*].
- lower blood-fat** T0311 *Allium cepa*, T4487 *Olea europaea*.
- lower cholesterol** T0303 *Alisma orientale* [Syn. *Alisma plantago-aquatica* var. *orientale*], T1775 *Crataegus pinnatifida*, T1778 *Crataegus pinnatifida* var. *major*, T2731 *Firmiana simplex*, T2732 *Firmiana simplex*, T2733 *Firmiana simplex*, T2846 *Ganoderma japonicum* [Syn. *Ganoderma sinense*], T2848 *Ganoderma lucidum*, T5101 *Polygonum cuspidatum*, T5107 *Polygonum multiflorum*, T6528 *Trigonella foenum-graecum*, T6584 *Typha angustata*, T6585 *Typha angustifolia*, T6587 *Typha latifolia*.
- lower vacuity heat** T3954 *Lycium barbarum*, T3956 *Lycium chinense*, T4887 *Picrorhiza kurroo*, T4888 *Picrorhiza scrophulariiflora*.
- lubricate intestines** T1173 *Cannabis sativa*, T4331 *Musa paradisiaca* var. *sapientum* [Syn. *Musa sapientum*], T5549 *Ricinus communis*.
- lubricate intestines and free stool** T5967 *Siraitia grosvenorii* [Syn. *Momordica grosvenorii*], T6511 *Trichosanthes kirilowii*.
- lubricate intestines and precipitate accumulation** T0560 *Arachis hypogaea*.
- moisten dryness** T0843 *Babylonia lutos*, T1173 *Cannabis sativa*, T1182 *Capra hircus*; *Ovis aries*, T1526 *Cladonia rangiferina*, T4912 *Pinus koraiensis*, T6076 *Spinacia oleracea*, T6206 *Sus scrofa domestica*.
- moisten dryness and free stool** T3860 *Linum usitatissimum*.
- moisten dryness and harmonize center** T5642 *Saccharum sinensis*.
- moisten dryness and lubricate intestines** T0474 *Angelica acutiloba* [Syn. *Ligusticum acutilobum*], T5223 *Prunus humilis* [Syn. *Cerasus humilis*], T5224 *Prunus japonica* [Syn. *Cerasus japonica*], T5225 *Prunus japonica* var. *nakaii*, T6510 *Trichosanthes kirilowii*, T6513 *Trichosanthes rosthornii* [Syn. *Trichosanthes uniflora*].
- moisten dryness and transform phlegm** T0983 *Bos taurus domesticus*.
- moisten intestines** T0300 *Aleurites moluccana*, T4288 *Morus alba*, T4536 *Orobanchae coerulea*, T4715 *Perilla frutescens*, T4717 *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*], T4719 *Perilla frutescens* var. *arguta*, T4722 *Perilla frutescens* var. *crispa*, T5229 *Prunus persica*, T5238 *Prunus salicina*, T5927 *Sesamum indicum* [Syn. *Sesamum orientale*].
- moisten intestines and free stool** T0540 *Apis cerana*, T0944 *Biota*

- orientalis* [Syn. *Thuja orientalis*; *Platyclusus orientalis*], T0993 *Boschniakia rossica*, T1005 *Brassica campestris* [Syn. *Brassica campestris* var. *oleifera*], T1356 *Cheiranthus cheiri*, T1455 *Cistanche deserticola*, T1456 *Cistanche salsa*, T1972 *Cynomorium songaricum*, T2999 *Glycine max*, T3568 *Juglans regia*, T4487 *Olea europaea*, T4976 *Piptanthus nepalensis*, T5107 *Polygonum multiflorum*, T5216 *Prunus armeniaca*, T5219 *Prunus armeniaca* var. *ansu*, T5233 *Prunus persica*, T5454 *Rhamnus cathartica*, T5460 *Rhamnus frangula* [Syn. *Frangula alnus*], T5657 *Salsola collina*, T5925 *Sesamum indicum* [Syn. *Sesamum orientale*], T6139 *Sterculia lychnophora*, T6428 *Thermopsis lanceolata*.
- moisten intestines and relieve constipation** T0495 *Angelica sinensis*, T4804 *Phlojodicarpus sibiricus*.
- moisten lung** T0216 *Agave americana* var. *marginata* [Syn. *Agave americana* var. *variegata*], T2101 *Dendrobium fimbriatum*, T2221 *Diospyros kaki*, T3955 *Lycium barbarum*, T3958 *Lycium chinense*, T4331 *Musa paradisiaca* var. *sapientum* [Syn. *Musa sapientum*], T6111 *Stemona japonica*, T6113 *Stemona sessilifolia*, T6115 *Stemona tuberosa*.
- moisten lung and clear heart** T3875 *Liriope spicata* var. *prolifera*, T4507 *Ophiopogon japonicus*.
- moisten lung and disinhibit throat** T2839 *Gallus gallus domesticus*.
- moisten lung and engender liquid** T1476 *Citrus erythrosa*, T1515 *Citrus tangemna*, T1598 *Codonopsis convolvulacea*, T5260 *Pseudostellaria heterophylla*, T5531 *Rhus chinensis* [Syn. *Rhus semialata*].
- moisten lung and precipitate qi** T0781 *Aster tataricus*, T2431 *Eriobotrya japonica*, T6574 *Tussilago farfara*.
- moisten lung and relieve cough** T0540 *Apis cerana*, T0749 *Asparagus filicinus*, T0830 *Auricularia auricula*, T0831 *Auricularia delicata*, T0859 *Balanophora involucrata*, T1183 *Capra hircus*; *Ovis aries*, T1751 *Corylus heterophylla*, T3011 *Glycyrrhiza aspera*, T3013 *Glycyrrhiza glabra*, T3015 *Glycyrrhiza inflata*, T3016 *Glycyrrhiza kansuensis*, T3021 *Glycyrrhiza squamulosa*, T3022 *Glycyrrhiza uralensis*, T3023 *Glycyrrhiza yunnanensis*, T3344 *Hypericum chinense*, T3983 *Lycoris aurea*, T4050 *Magnolia sieboldii*, T4823 *Pholidota yunnanensis*, T5363 *Pyrus calleryana*, T6097 *Staphylea bumalda*.
- moisten lung and settle asthma** T5218 *Prunus armeniaca*.
- moisten lung and suppress cough** T4195 *Menyanthes trifoliata*, T5215 *Prunus amygdalus*.
- moisten lung and transform phlegm** T0438 *Anacardium occidentale*, T0559 *Arachis hypogaea*, T1053 *Bulbophyllum odoratissimum* [Syn. *Stelis odoratissimum*], T1353 *Changium smyrnioides*.
- moisten skin** T0167 *Adenanthera pavonina*, T0516 *Anser cygnoides domestica*, T1183 *Capra hircus*; *Ovis aries*, T4188 *Mentha rotundifolia*, T5549 *Ricinus communis*.
- moisten skin and engender flesh** T0540 *Apis cerana*, T0543 *Apis mellifera ligustica*.
- move blood and quicken network vessels** T2053 *Davallia mariesii*.
- move blood and relieve itch** T2835 *Galium verum*.
- move qi** T0322 *Allium tuberosum*, T0357 *Alpinia japonica*, T0359 *Alpinia officinarum*, T0472 *Anethum graveolens*, T1328 *Ceratostigma plumbaginoides*, T1329 *Ceratostigma willmottianum*, T1508 *Citrus sinensis*, T2479 *Erythrina variegata* var. *orientalis*, T2612 *Euphorbia prolifera*, T3619 *Kadsura peltigera* [Syn. *Kadsura longipedunculata*], T4002 *Lysimachia foenum-graecum*, T4163 *Melia toosendan*, T4209 *Michelia alba*, T5167 *Porana racemosa*, T6800 *Viverra zibetha*.
- move qi and check diarrhea** T3263 *Holarrhena antidysenterica*.
- move qi and disinhibit damp** T2727 *Ficus simplicissima*.
- move qi and disperse accumulation** T4048 *Magnolia rostrata*, T5717 *Sapindus delavayi* [Syn. *Pancovia delavayi*].
- move qi and disperse food** T1563 *Clerodendron trichotomum*.
- move qi and dissipate binds** T4855 *Physeter catodon*.
- move qi and dissipate blood** T1289 *Celastrus orbiculatus* [Syn. *Celastrus articulatus*].
- move qi and dissipate cold** T3847 *Lindera angustifolia*.
- move qi and dissipate stasis** T1775 *Crataegus pinnatifida*, T1778 *Crataegus pinnatifida* var. *major*, T2720 *Ficus hispida*, T3381 *Hyptis suaveolens*, T4036 *Magnolia coco*.
- move qi and fortify stomach** T0859 *Balanophora involucrata*, T5363 *Pyrus calleryana*.
- move qi and free network vessels** T6106 *Stelmatocrypton khasianum*.
- move qi and harmonize center** T4718 *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*], T4721 *Perilla frutescens* var. *arguta*.
- move qi and loosen center** T3849 *Lindera chunii*.
- move qi and quicken blood** T0151 *Acronychia pedunculata*, T0274 *Akebia quinata*, T0278 *Akebia trifoliata*, T0280 *Akebia trifoliata* var. *australis*, T0814 *Atalantia buxifolia* [Syn. *Severinia buxifolia*], T0877 *Bauhinia championii*, T0967 *Boenninghausenia sessilicarpa*, T0994 *Boswellia carterii*, T1381 *Choerospondias axillaris*, T1113 *Calendula officinalis*, T1443 *Cinnamomum parthenoxylum* [Syn. *Cinnamomum porrectum*], T1583 *Cnidium officinale* [Syn. *Ligusticum officinale*], T1715 *Corydalis decumbens* [Syn. *Corydalis amabilis*], T3418 *Incarvillea arguta*, T3820 *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*], T3885 *Litsea cubeba*, T4323 *Murraya paniculata* [Syn. *Chalcas paniculata*], T4325 *Murraya paniculata* var. *exotica*, T4470 *Ocimum basilicum*, T4519 *Opuntia dillenii*, T4521 *Opuntia vulgaris*, T5029 *Plumbago zeylanica*, T6118 *Stephania brachyandra*, T6197 *Styrax benzoin*, T6204 *Styrax tonkinensis*, T6683 *Vallisneria spiralis*.
- move qi and quicken blood and relieve pain** T4962 *Piper puberulum*.
- move qi and regulate center** T0417 *Amomum longiligulare*, T0419 *Amomum villosum*, T0420 *Amomum xanthioides*.
- move qi and relieve depression** T1907 *Curcuma wengujin*, T1978 *Cyperus rotundus*, T5572 *Rosa rugosa*.
- move qi and relieve pain** T0554 *Aquilaria agallocha*, T0555 *Aquilaria sinensis*, T0631 *Aristolochia kaempferi*, T0642 *Aristolochia tubiflora*, T0942 *Biebersteinia heterostemon*, T1258 *Casuarina equisetifolia*, T1440 *Cinnamomum glanduliferum*, T1444 *Cinnamomum tamala*, T1535 *Clausena excavata*, T1537 *Clausena lansium*, T1734 *Corydalis remota* [Syn. *Corydalis bulbosa* var. *typica*], T1904 *Curcuma kwangsiensis*, T1909 *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*], T2363 *Entada phaseoloides* [Syn. *Lens phaseoloides*], T2636 *Euscaphis japonica*, T2643 *Evodia meliifolia*, T2745 *Foeniculum vulgare*, T3164 *Helicteres isora*, T3270 *Holboellia fargesii*, T3400 *Illicium difengpi*, T3403 *Illicium majus*, T3554 *Jasminum grandiflorum*, T3613 *Kadsura coccinea* [Syn. *Kadsura chenensis*; *Kadsura hainanensis*], T3614 *Kadsura heteroclita* [Syn. *Uvaria heteroclita*], T3746 *Leontice robustum*, T3850 *Lindera glauca*, T3856 *Lindera umbellata* [Syn. *Lindera*

- erythrocarpa*, T3866 *Liquidambar formosana* [Syn. *Liquidambar taiwaniana*], T3997 *Lysimachia capillipes*, T4039 *Magnolia grandiflora*, T4157 *Melia azedarach*, T4158 *Melia azedarach*, T4324 *Murraya paniculata* [Syn. *Chalcas paniculata*], T4428 *Nicotiana tabacum*, T4527 *Orixa japonica*, T4690 *Pelargonium graveolens*, T4938 *Piper boehmeriaefolium*, T4944 *Piper cubeba*, T4948 *Piper hancei*, T4965 *Piper sarmentosum*, T4966 *Piper sarmentosum*, T5042 *Podocarpus macrophyllus*, T5044 *Podocarpus macrophyllus* var. *maki*, T5189 *Pothos chinensis*, T5591 *Rubus cochinchinensis*, T5758 *Saussurea lappa* [Syn. *Aucklandia lappa*], T5793 *Schisandra henryi*, T6062 *Sparganium stoloniferum*, T6339 *Tephrosia purpurea*, T6802 *Vladimiria souliei* [Syn. *Jurinea souliei*], T6878 *Zanthoxylum echinocarpum*.
- move qi and transform phlegm** T1538 *Clausena lansium*, T4100 *Mangifera indica*, T4937 *Piper betle*.
- move qi-blood** T6018 *Solanum verbascifolium*, T6675 *Valeriana amurensis*, T6679 *Valeriana officinalis*, T6680 *Valeriana officinalis* var. *latifolia*.
- move stagnation and transform damp** T5104 *Polygonum hydropiper*.
- move stasis** T5579 *Rubia cordifolia*.
- move water** T0606 *Areca catechu*, T3426 *Inula britannica*, T3427 *Inula britannica*, T3428 *Inula britannica* var. *chinensis*, T3433 *Inula japonica*, T3434 *Inula linariaefolia*.
- move water and disperse swelling** T1756 *Costus speciosus*, T2125 *Descurainia sophia*, T3755 *Lepidium apetalum* [Syn. *Lepidium micranthum*], T3759 *Lepidium virginicum*, T3980 *Lycopus lucidus*, T4304 *Mosla chinensis* [Syn. *Orthodon chinensis*].
- move water and dissipate damp** T2343 *Elsholtzia splendens*.
- move water and free stool** T5461 *Rhamnus leptophylla*.
- normalize qi** T2733 *Firmiana simplex*, T2746 *Foeniculum vulgare*.
- normalize qi and loosen chest** T1586 *Cocculus laurifolius*.
- normalize qi and relieve pain** T3854 *Lindera strychnifolia* [Syn. *Lindera aggregata*].
- normalize qi and transform phlegm** T0813 *Atalantia buxifolia* [Syn. *Severinia buxifolia*].
- nourish blood** T0986 *Bos taurus domesticus*; *Bubalus bubalis*, T0989 *Bos taurus domesticus*; *Bubalus bubalis*, T3279 *Homo sapiens*, T4912 *Pinus koraiensis*, T6076 *Spinacia oleracea*.
- nourish blood and boost essence** T5925 *Sesamum indicum* [Syn. *Sesamum orientale*].
- nourish blood and dispel wind** T3860 *Linum usitatissimum*.
- nourish blood and extinguish wind** T2840 *Gallus gallus domesticus*.
- nourish blood and free milk** T4478 *Octopus vulgaris*.
- nourish blood and free network vessels** T3124 *Hedyotis capitellata*.
- nourish blood and quicken blood** T0991 *Bos taurus domesticus*; *Bubalus bubalis*.
- nourish blood and quiet spirit** T4555 *Ostrea rivularis*; *Ostrea taliwhanensis*; *Ostrea gigas*, T5680 *Salvia miltiorrhiza*, T5681 *Salvia miltiorrhiza* f. *alba*, T5688 *Salvia przewalskii*, T6916 *Ziziphus jujuba*, T6917 *Ziziphus jujuba* var. *inermis*.
- nourish blood and regulate menstruation** T0495 *Angelica sinensis*, T4580 *Paeonia albiflora* [Syn. *Paeonia lactiflora*], T4804 *Phlojodicarpus sibiricus*.
- nourish blood and stanch bleeding** T0982 *Bos taurus domesticus*, T5529 *Rhodomyrtus tomentosa*.
- nourish body and quicken blood** T3675 *Lagopsis supina*.
- nourish heart** T6544 *Triticum aestivum* [Syn. *Triticum vulgare*].
- nourish heart and quiet spirit** T0944 *Biota orientalis* [Syn. *Thuja orientalis*; *Platycladus orientalis*], T1292 *Celastrus orbiculatus* [Syn. *Celastrus articulatus*], T1381 *Choerospondias axillaris*, T4194 *Menyanthes trifoliata*, T4400 *Nelumbo nucifera*, T4902 *Pimpinella thelungiana*, T5108 *Polygonum multiflorum*, T5497 *Rhodiola kirilowii*, T5701 *Salvia yunnanensis*.
- nourish liver** T3955 *Lycium barbarum*, T3958 *Lycium chinense*, T6918 *Ziziphus jujuba* var. *spinosa*.
- nourish liver and boost kidney** T2326 *Elaeagnus angustifolia*.
- nourish liver and brighten eyes** T1789 *Crepis napifera*.
- nourish lung and enrich kidney** T2188 *Dioscorea alata*.
- nourish qi blood** T5586 *Rubia yunnanensis*.
- nourish yin and calm liver** T3001 *Glycine max*.
- nourish yin and clear lung** T2983 *Glehnia littoralis*.
- nourish yin and engender liquid** T3873 *Liriope platyphylla*, T3874 *Liriope spicata*, T3875 *Liriope spicata* var. *prolifera*, T4507 *Ophiopogon japonicus*.
- nourish yin and harmonize stomach** T1353 *Changium smyrnioides*.
- nourish yin and moisten dryness** T5093 *Polygonatum odoratum* [Syn. *Polygonatum officinale*], T5094 *Polygonatum prattii*.
- nourish yin and moisten lung** T3832 *Lilium brownii* var. *viridulum* [Syn. *Lilium brownii* var. *colchesteri*], T3835 *Lilium longiflorum*, T3836 *Lilium pumilum* [Syn. *Lilium tenuifolium*], T3839 *Lilium tigrinum* [Syn. *Lilium lancifolium*], T5091 *Polygonatum cyrtonema* [Syn. *Polygonatum multiflorum*], T5092 *Polygonatum kingianum*, T5095 *Polygonatum sibiricum*, T6601 *Umbilicaria esculenta* [Syn. *Gyrophora esculenta*].
- open orifices** T2978 *Gleditsia sinensis* [Syn. *Gleditsia horrida*], T3868 *Liquidambar orientalis*.
- open orifices and arouse spirit** T1052 *Bufo bufo gargarizans*; *Bufo melanostictus*, T4303 *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*, T6197 *Syrax benzoin*, T6204 *Syrax tonkinensis*.
- open orifices and free spirit** T2274 *Dryobalanops aromatica*.
- open stomach and transform phlegm** T4696 *Penaeus orientalis*.
- open stomach qi** T2761 *Fortunella margarita*.
- outthrust papules** T1687 *Coriandrum sativum*, T3145 *Helianthus annuus*, T4184 *Mentha haplocalyx* [Syn. *Mentha canadaensis*; *Mentha arvensis* var. *haplocalyx*; *Mentha arvensis*], T5312 *Pueraria edulis*, T5313 *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*], T5316 *Pueraria omeiensis*, T5318 *Pueraria phaseoloides*, T5320 *Pueraria thomsonii*, T5804 *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*].
- outthrust papules and relieve itch** T3738 *Lemna minor*.
- outthrust welling abscess and pus** T3145 *Helianthus annuus*.
- overcome damp and relieve pain** T3213 *Heracleum hemsleyanum*, T3217 *Heracleum moellendorffii* [Syn. *Heracleum microcarpum*; *Heracleum morifolium*], T3228 *Heracleum yungningense*, T5727 *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*].
- percolate damp and kill worms** T4851 *Physalis minima*.
- percolate damp and relieve itch** T2590 *Euphorbia hirta*.
- precipitate heat toxin** T5993 *Solanum capsicastrum*.
- precipitate qi** T0606 *Areca catechu*, T1168 *Canavalia ensiformis*, T1169



- Canavalia gladiata*, T1508 *Citrus sinensis*, T2644 *Evodia rutaecarpa*, T2646 *Evodia rutaecarpa* var. *officinalis*, T4544 *Oryza sativa*, T4546 *Oryza sativa*, T4547 *Oryza sativa* cv, T4957 *Piper nigrum*, T5223 *Prunus humilis* [Syn. *Cerasus humilis*], T5224 *Prunus japonica* [Syn. *Cerasus japonica*], T5225 *Prunus japonica* var. *nakaii*, T5419 *Raphanus sativus*.
- precipitate qi and disperse accumulation** T2659 *Fagopyrum esculentum*.
- precipitate qi and disperse food** T1186 *Capsicum annuum*, T1187 *Capsicum frutescens*.
- precipitate qi and disperse phlegm** T6347 *Terminalia chebula*.
- precipitate qi and eliminate fullness** T4034 *Magnolia biloba*, T4045 *Magnolia officinalis*.
- precipitate qi and loosen chest** T4086 *Malus asiatica*.
- precipitate qi and loosen intestines** T2658 *Fagopyrum esculentum*.
- precipitate qi and move blood** T6497 *Tribulus terrestris*.
- precipitate qi and move water** T2439 *Eruca sativa*.
- precipitate qi and regulate center** T1472 *Citrus chachiensis*, T1517 *Citrus tankan*.
- precipitate qi and relieve pain** T4953 *Piper longum*.
- promote astriction** T2181 *Dillenia indica*, T2766 *Fraxinus bungeana*, T2767 *Fraxinus chinensis*, T2774 *Fraxinus paxiana*, T2777 *Fraxinus rhynchophylla* [Syn. *Fraxinus chinensis* var. *rhynchophylla*], T2779 *Fraxinus stylosa*, T2780 *Fraxinus szaboana* [Syn. *Fraxinus chinensis* var. *acuminata*], T2841 *Gallus gallus domesticus*, T5266 *Psidium guajava*, T6474 *Toona ciliata*.
- promote astriction and check drain** T0293 *Albizia lebbekii*.
- promote astriction and secure astriction** T1927 *Cycas revoluta*.
- promote astriction and stanch bleeding** T0248 *Agrimonia pilosa*, T0249 *Agrimonia pilosa* var. *japonica*, T0955 *Bletilla striata*, T0962 *Boehmeria platanifolia* [Syn. *Boehmeria tricuspidata*], T1256 *Castanea mollissima*, T3361 *Hypericum perforatum*.
- promote astriction and stem desertion** T2826 *Galeola faberi*.
- promote contraction** T3394 *Ilex paraguariensis*, T4797 *Phillyrea latifolia*.
- promote contraction and check discharge** T3570 *Juglans regia*.
- promote contraction and check drain** T5265 *Psidium guajava*, T5330 *Punica granatum*.
- promote contraction and resolve toxin** T5530 *Rhus chinensis* [Syn. *Rhus semialata*].
- promote contraction and secure astriction** T5791 *Schisandra chinensis*, T5802 *Schisandra sphenanthera*.
- promote contraction and stanch bleeding** T1118 *Callicarpa formosana*, T1119 *Callicarpa japonica*, T3376 *Hypolepis punctata* [Syn. *Polypodium punctatum*], T3926 *Loropetalum chinense*, T4006 *Lythrum anceps*, T4007 *Lythrum salicaria*, T4082 *Mallotus japonicus*, T4361 *Myrsine africana*, T5183 *Potentilla griffithii* var. *velutina*, T5499 *Rhodiola sacra*, T5555 *Rodgersia pinnata*, T5673 *Salvia glutinosa*, T6485 *Trachycarpus fortunei*.
- promote contraction and stem desertion** T5188 *Potentilla viscosa*, T6353 *Tetracera asiatica*.
- promote lactation** T0533 *Antiaris toxicaria* [Syn. *Ambora toxicaria*], T1881 *Cucurbita moschata*, T1961 *Cynanchum thesioides*, T2624 *Euphorbia tirucalli*, T3018 *Glycyrrhiza pallidiflora*, T3240 *Hibiscus esculentus*, T4436 *Nitraria tangutorum*, T4644 *Parasilurus asotus*, T6507 *Trichosanthes cucumeroides*, T6771 *Viscum album*, T6777 *Viscum multinerve*.
- promote lactation and disperse edema** T6668 *Vaccaria segetalis* [Syn. *Vaccaria pyramidata*].
- promote lactation and free stool** T0002 *Abelmoschus moschatus* [Syn. *Hibiscus abelmoschus*].
- promote vomiting** T0533 *Antiaris toxicaria* [Syn. *Ambora toxicaria*], T1262 *Catalpa ovata*, T1291 *Celastrus paniculatus*, T1315 *Cephaelis ipecacuanha*, T1645 *Consolida ajacis* [Syn. *Delphinium ajacis*], T1876 *Cucumis melo*, T3988 *Lycoris squamigera*, T6132 *Stephania sasakii*, T6697 *Veratrum grandiflorum*, T6698 *Veratrum nigrum*.
- promote vomiting and expel phlegm drool** T0299 *Aleurites cordata* [Syn. *Aleurites fordii*].
- promote yang and dissipate binds** T0313 *Allium chinense*, T0316 *Allium macrostemon*.
- promote yang and transform qi** T1438 *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*].
- protect hepatic function** T3085 *Gynostemma pentaphyllum*.
- quicken blood** T0060 *Achillea alpina* [Syn. *Achillea sibirica*], T0065 *Achillea millefolium*, T0300 *Aleurites moluccana*, T0495 *Angelica sinensis*, T0535 *Antidesma bunioides*, T0598 *Ardisia japonica*, T0886 *Beaumontia grandiflora*, T1175 *Cannabis sativa*, T1189 *Caragana intermedia*, T1328 *Ceratostigma plumbaginoides*, T1329 *Ceratostigma willmottianum*, T1682 *Cordyceps ophioglossoides*, T1750 *Corydalis yanhusuo* [Syn. *Corydalis turtchaninovi* f. *yanhusuo*], T1955 *Cynanchum hancockianum*, T2154 *Dicentra spectabilis*, T2267 *Drosera peltata* var. *lunata*, T2347 *Embelia parviflora*, T2410 *Equisetum pratense*, T2601 *Euphorbia milii*, T3619 *Kadsura peltigera* [Syn. *Kadsura longipedunculata*], T3775 *Lethariella cladonioides*, T3859 *Linum usitatissimum*, T3964 *Lycopodium alpinum* [Syn. *Diphasiastrum alpinum*], T4227 *Microula sikkimensis*, T4253 *Mirabilis jalapa*, T4335 *Mussaenda pubescens*, T4500 *Onosma paniculatum*, T4662 *Parthenocissus tricuspidata*, T4787 *Phellinus igniarius*, T4804 *Phlojodicarpus sibiricus*, T4951 *Piper laetispicum*, T5018 *Pleuropterus ciliinervis*, T5106 *Polygonum lapathifolium*, T5110 *Polygonum orientale*, T5167 *Porana racemosa*, T5193 *Pratia nummularia*, T5229 *Prunus persica*, T5626 *Ruta graveolens*, T5704 *Sambucus nigra*, T5707 *Sambucus williamsii*, T5741 *Sargentodoxa cuneata*, T6015 *Solanum torvum*, T6066 *Spatholobus suberectus*, T6533 *Trillium kamschatcicum*, T6535 *Trillium tschonoskii*, T6578 *Tylophora atropilliculata*, T6735 *Viburnum dilatatum*, T6737 *Viburnum luzonicum*, T6800 *Viverra zibetha*, T6872 *Zanthoxylum cuspidatum*.
- quicken blood and disinhibit water** T0036 *Acanthopanax giraldii* [Syn. *Acanthopanax giraldii* var. *inermis*; *Eleutherococcus giraldii*], T3000 *Glycine max*.
- quicken blood and dispel stasis** T0122 *Aconitum pendulum*, T1108 *Caesalpinia sappan*, T1799 *Crinum latifolium*, T1924 *Cyathula officinalis*, T4584 *Paeonia lactiflora* wild, T4586 *Paeonia obovata*, T4590 *Paeonia veitchii*, T5233 *Prunus persica*, T5671 *Salvia digitaloides*, T5680 *Salvia miltiorrhiza*, T5681 *Salvia miltiorrhiza* f. *alba*, T5688 *Salvia przewalskii*, T5701 *Salvia yunnanensis*, T5794 *Schisandra lancifolia*, T5966 *Siphonostegia chinensis*, T5975 *Smilax bockii*, T6051 *Sorbaria arborea*, T6052 *Sorbaria sorbifolia*, T6584 *Typha angustata*,

- T6585 *Typha angustifolia*, T6587 *Typha latifolia*.
- quicken blood and dispel wind** T1025 *Bretschneidera sinensis*, T5939 *Shiraia bambusicola*.
- quicken blood and disperse swelling** T0130 *Aconitum sinomontanum*, T0537 *Antirrhinum majus*, T0601 *Ardisia pusilla*, T0938 *Bidens bipinnata*, T0982 *Bos taurus domesticus*, T1137 *Caltha palustris*, T1199 *Carduus acanthoides*, T1200 *Carduus crispus*, T1254 *Castanea mollissima*, T1305 *Centaurea cyanus*, T1361 *Chenopodium ambrosioides*, T1556 *Clerodendron fragrans*, T1557 *Clerodendron indicum*, T1869 *Cryptotaenia japonica*, T2020 *Damnacanthus indicus*, T2131 *Desmodium pulchellum* [Syn. *Phyllodium pulchellum*], T2189 *Dioscorea althaeoides*, T2206 *Dioscorea parviflora*, T3414 *Impatiens sicutifera*, T3457 *Iris dichotoma*, T3496 *Isodon japonica* [Syn. *Rabdosia japonica*], T4320 *Murraya kwangsiensis*, T4948 *Piper hancei*, T5424 *Rauwolfia verticillata*, T5547 *Ricinus communis*, T5714 *Sansevieria trifasciata*, T5781 *Schefflera arboricola*, T5785 *Schefflera venulosa*, T6008 *Solanum nigrum*, T6155 *Strophanthus divaricatus*, T6645 *Urena lobata*.
- quicken blood and disperse welling abscess** T0292 *Albizia julibrissin*, T2657 *Fagopyrum cymosum* [Syn. *Polygonum cymosum*], T4726 *Periploca forrestii*.
- quicken blood and dissipate binds** T0751 *Asparagus officinalis*, T4303 *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*.
- quicken blood and dissipate stasis** T0071 *Achyranthes aspera*, T0072 *Achyranthes aspera* var. *indica*, T0591 *Ardisia arborescens*, T0680 *Artemisia lactiflora*, T0692 *Artemisia rupestris* [Syn. *Artemisia dentata*; *Artemisia viridis*; *Artemisia viridifolia*], T0969 *Boerhavia diffusa*, T1372 *Chloranthus serratus*, T1450 *Cirsium lineare*, T1706 *Corydalis ambigua* var. *amurensis* [Syn. *Corydalis ambigua*], T1734 *Corydalis remota* [Syn. *Corydalis bulbosa* var. *typica*], T1735 *Corydalis repens*, T2008 *Dalbergia odorifera*, T2013 *Dalbergia sissoo*, T3187 *Helleborus thibetanus*, T3254 *Hippophae rhamnoides*, T3256 *Hippophae rhamnoides* subsp. *sinensis*, T3258 *Hippophae rhamnoides* subsp. *yunnanensis*, T3479 *Isodon amethystoides*, T3746 *Leontice robustum*, T3853 *Lindera obtusiloba*, T4106 *Manis pentadactyla*, T4317 *Murraya euchrestifolia* [Syn. *Clausena euchrestifolia*], T4582 *Paeonia delavayi*, T4585 *Paeonia moutan* [Syn. *Paeonia suffruticosa*], T5101 *Polygonum cuspidatum*, T5109 *Polygonum nodosum*, T5400 *Rabdosia stracheyi*, T5730 *Sarcandra glabra* [Syn. *Chloranthus glaber*], T5746 *Sassafras tzumu*, T5838 *Scutellaria galericulata*, T6709 *Verbena officinalis*, T6728 *Veronica serpyllifolia*, T6861 *Zanthoxylum ailanthoides*.
- quicken blood and free menstruation** T0571 *Aralia decaisneana*, T0978 *Bombyx mori*, T1215 *Carthamus tinctorius*, T1439 *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*], T2541 *Euonymus grandiflorus*, T4432 *Nigella glandulifera*, T5401 *Rabdosia yunnanensis*, T5755 *Saussurea involucrata*, T6154 *Strobilanthes japonicus* [Syn. *Championella japonica*], T5865 *Selaginella pulvinata*, T5869 *Selaginella tamariscina*, T6668 *Vaccaria segetalis* [Syn. *Vaccaria pyramidata*], T6895 *Zanthoxylum simulans*.
- quicken blood and free network vessels** T0364 *Alsophila spinulosa*, T0428 *Ampelopsis megalophylla*, T0634 *Aristolochia mollissima*, T0926 *Berneuxia thibetica*, T1435 *Cinnamomum camphora*, T2538 *Euonymus bungeanus*, T2723 *Ficus pumila*, T2752 *Fordia cauliflora*, T2895 *Gaultheria yunnanensis*, T3396 *Ilex pubescens*, T3397 *Ilex pubescens* var. *glaber*, T3480 *Isodon angustifolia*, T3680 *Lamium amplexicaule*, T3990 *Lygodium japonicum*, T4085 *Mallotus repandus* var. *chrysocarpus* [Syn. *Mallotus chrysocarpus*; *Mallotus repandus*], T4234 *Milletia dielsiana*, T4542 *Orthosiphon wulfenoides* [Syn. *Coleus wulfenoides*], T5124 *Polypodium niponicum*, T5144 *Populus adenopoda*, T5221 *Prunus davidiana*, T5235 *Prunus persica*, T5982 *Smilax sieboldii*, T5984 *Smilax stans* [Syn. *Smilax vaginata* var. *stans*], T6542 *Tripterygium wilfordii*, T6827 *Wisteria sinensis*.
- quicken blood and free vessels** T0273 *Akebia quinata*, T0277 *Akebia trifoliata*, T0279 *Akebia trifoliata* var. *australis*, T3270 *Holboellia fargesii*, T3869 *Liquor*.
- quicken blood and joint bones** T1147 *Camellia oleifera*, T2387 *Epilobium hirsutum*.
- quicken blood and move qi** T4221 *Micromelum falcatum*, T5731 *Sarcococca coriacea* [Syn. *Sarcococca wallichii*].
- quicken blood and move stasis** T1371 *Chloranthus japonicus*.
- quicken blood and nourish heart** T2964 *Ginkgo biloba*.
- quicken blood and promote milk** T2316 *Echinops grijisii*, T2317 *Echinops ritro*, T5466 *Rhaponticum uniflorum*, T6356 *Tetrapanax papyriferus*.
- quicken blood and quiet spirit** T4906 *Pinus armandii*, T4916 *Pinus massoniana*.
- quicken blood and regulate menstruation** T0073 *Achyranthes bidentata*, T0298 *Alectoria vivens*, T0963 *Boehmeria siamensis*, T0999 *Bougainvillea glabra*, T1023 *Bredia tuberculata*, T1151 *Camellia sinensis* [Syn. *Thea sinensis*], T1163 *Campylotropis hirtella*, T1285 *Celastrus angulatus*, T1352 *Chamaenerion angustifolium* [Syn. *Epilobium angustifolium*], T1900 *Curculigo capitulata* [Syn. *Leucojum capitulata*], T1976 *Cyperus iria*, T2348 *Embelia ribes*, T2542 *Euonymus japonicus*, T2545 *Euonymus phellomana*, T3340 *Hypericum ascyron*, T3363 *Hypericum sampsonii*, T3413 *Impatiens nolitangere*, T3752 *Leonurus heterophyllus* [Syn. *Leonurus artemisia*], T3754 *Leonurus sibiricus*, T3774 *Lespedeza tomentosa*, T3776 *Lethariella zahlbruckneri*, T3785 *Levisticum officinale*, T3999 *Lysimachia clethroides*, T4311 *Mucuna sempervirens*, T4450 *Nuphar pumilum*, T4510 *Ophiorrhiza japonica*, T4513 *Ophiorrhiza mungos*, T4813 *Phlomis tuberosa*, T5118 *Polygonum suffultum*, T5555 *Rodgersia pinnata*, T5562 *Rosa chinensis*, T5566 *Rosa henryi*, T5569 *Rosa multiflora*, T5672 *Salvia flava*, T5697 *Salvia trijuga*, T5762 *Saussurea nigrescens*, T5893 *Senecio nudicaulis*, T6228 *Swertia nervosa*, T6676 *Valeriana hardwickii*, T6677 *Valeriana jatamansii* [Syn. *Valeriana wallichii*].
- quicken blood and relieve pain** T0079 *Aconitum brachypodum*, T0098 *Aconitum geniculatum*, T0100 *Aconitum hemsleyanum* var. *circinacum*, T0101 *Aconitum hemsleyanum*, T0116 *Aconitum nagarum* var. *heterotrichum* [Syn. *Aconitum bullatifolium*], T0117 *Aconitum nagarum* var. *lasiandrum*, T0170 *Adhatoda vasica*, T0275 *Akebia quinata*, T0295 *Albizia odoratissima*, T0383 *Alyxia sinensis*, T0594 *Ardisia crenata*, T0726 *Asarum forbesii*, T0759 *Aspidistra elatior*, T1046 *Buddleja davidii*, T1100 *Caesalpinia crista*, T1286 *Celastrus flagellaris*, T1290 *Celastrus orbiculatus* [Syn. *Celastrus articulatus*], T1374 *Chloranthus spicatus*, T1417 *Cimicifuga acerina*, T1550 *Cleome gynandra* [Syn. *Gynandropsis gynandra*], T1638 *Commiphora myrrha* [Syn. *Commiphora molmo*], T1672 *Corallodiscus flabellatus* [Syn.

*Didissandra flabellat*], T1721 *Corydalis linearoides*, T1730 *Corydalis ophiocarpa*, T1745 *Corydalis suaveolens* [Syn. *Corydalis sheareri*], T1810 *Croomia japonica*, T1907 *Curcuma wengujin*, T1934 *Cyclea tonkinensis*, T1984 *Cypripedium macranthum* [Syn. *Cypripedium tibeticum*], T2027 *Daphne odora*, T2028 *Daphne odora*, T2203 *Dioscorea nipponica*, T2204 *Dioscorea nipponica* ssp. *rosthornii*, T2231 *Diphylleia grayi*, T2232 *Diphylleia sinensis*, T2295 *Duranta repens*, T2409 *Equisetum palustre*, T2719 *Ficus fistulosa* [Syn. *Ficus harlandii*], T2721 *Ficus microcarpa*, T2731 *Firmiana simplex*, T2735 *Fissistigma oldhamii* [Syn. *Melodorum oldhamii*], T2736 *Fissistigma polyanthum*, T3063 *Grevillea robusta*, T3201 *Hemiphragma heterophyllum*, T3292 *Hunteria zeylanica*, T3303 *Hydrangea chinensis*, T3401 *Illicium henryi*, T3410 *Impatiens balsamina*, T3624 *Kalopanax pictum*, T3625 *Kalopanax septemlobus*, T3681 *Lamium barbatum*, T3991 *Lyonia ovalifolia*, T3995 *Lysidice rhodostegia*, T3996 *Lysimachia candida*, T4004 *Lysimachia paridiformis*, T4444 *Nothopanax davidii*, T4577 *Paederia scandens*, T4663 *Passiflora caerulea*, T4689 *Peganum nigellastrum*, T4725 *Periploca calophylla*, T4778 *Phallus impudicus*, T4810 *Phlomis mongolica*, T4827 *Photinia parvifolia*, T4974 *Piper wallichii* [Syn. *Piper wallichii* var. *hupehense*], T5057 *Podophyllum emodii* [Syn. *Podophyllum emodii* var. *chinense*; *Podophyllum sikkimense*; *Sinopodophyllum emodii*], T5119 *Polygonum thunbergii*, T5230 *Prunus persica*, T5341 *Pygmaeopremna herbacea* [Syn. *Premna herbacea*], T5396 *Rabdosia rubescens*, T5576 *Rostellularia procumbens* [Syn. *Justicia procumbens*], T5640 *Sabina vulgaris*, T5793 *Schisandra henryi*, T5799 *Schisandra rubriflora*, T5813 *Scilla scilloides*, T5840 *Scutellaria indica*, T5942 *Sida acuta*, T6099 *Stauntonia chinensis*, T6138 *Sterculia foetida*, T6444 *Thunbergia grandiflora*, T6551 *Trogopterus xanthipes*; *Pteromys volans*, T6580 *Tylophora floribunda*, T6742 *Vicia amoena*, T6777 *Viscum multinerve*.

**quicken blood and resolve toxin** T0440 *Anagallis arvensis*, T0568 *Aralia chinensis*, T0570 *Aralia dasyphylla*, T0595 *Ardisia crispa*, T0729 *Asarum maximum*, T0957 *Blumea balsamifera*, T1288 *Celastrus orbiculatus* [Syn. *Celastrus articulatus*], T2133 *Desmodium racemosum* [Syn. *Podocarpium podocarpum* var. *oxyphyllum*], T2262 *Dregea sinensis*, T2272 *Drymaria diandra* [Syn. *Drymaria cordata* ssp. *diandra*], T2737 *Flemingia philippinensis* [Syn. *Moghania philippinensis*], T2955 *Geum japonicum*, T2956 *Geum japonicum*, T3646 *Kyllinga brevifolia*, T3925 *Loranthus parasiticus* [Syn. *Loranthus chinensis*; *Taxillus chinensis*], T4252 *Mirabilis jalapa*, T4260 *Moghania philippinensis*, T5184 *Potentilla kleiniana*, T5560 *Rorippa montana* [Syn. *Rorippa dubia*; *Sisymbrium dubium*], T5639 *Sabina chinensis*, T5954 *Silene fortunei*, T5987 *Sobina chinensis*.

**quicken blood and settle pain** T1871 *Cucubalus baccifer*, T2614 *Euphorbia pulcherrima*.

**quicken blood and soothe sinews** T0471 *Anemone rivularis*, T5586 *Rubia yunnanensis*, T5866 *Selaginella sanguinolenta*.

**quicken blood and stanch bleeding** T0001 *Abelmoschus manihot*, T0600 *Ardisia mamillata* [Syn. *Tinus mamillata*], T0736 *Asclepias curassavica*, T0952 *Blechum orientale*, T2193 *Dioscorea cirrhosa* [Syn. *Dioscorea pogonoides*], T2220 *Diospyros kaki*, T3318 *Hylotelephium mingjinianum*, T3388 *Ilex chinensis* [Syn. *Ilex purpurea*], T3645 *Kummerowia striata*, T3659 *Lactuca indica*, T3670 *Lagerstroemia indica*, T3671

*Lagerstroemia indica*, T4413 *Nepeta cataria*, T5269 *Psilotum nudum*, T5297 *Pteris plumbea*, T5310 *Pterospermum lanceaefolium*, T5541 *Rhus verniciflua* [Syn. *Toxicadendron verniciflum*], T5567 *Rosa laevigata*, T6531 *Trillium camtschaticum*, T6540 *Tripterygium hypoglaucum*, T6722 *Veronica anagallis-aquatica*, T6830 *Woodfordia fruticosa*.

**quicken blood and strengthen sinews** T3992 *Lyonia ovalifolia* var. *elliptica*.

**quicken blood and transform stasis** T1001 *Brachystemma calycinum*, T1005 *Brassica campestris* [Syn. *Brassica campestris* var. *oleifera*], T1769 *Crataegus cuneata*, T1771 *Crataegus kansuensis*, T1772 *Crataegus maximowiczii*, T1780 *Crataegus sanguinea*, T1781 *Crataegus scabrifolia*, T1808 *Crocus sativus*, T2052 *Davallia divaricata* [Syn. *Davallia formosana*; *Davallia orientalis*], T3679 *Lamiophlomis rotata* [Syn. *Phlomis rotata*], T3980 *Lycopus lucidus*, T4143 *Meconopsis horridula*, T4562 *Oxalis acetosella*, T5231 *Prunus persica*, T5497 *Rhodiola kirilowii*, T5578 *Rubia cordifolia*, T5582 *Rubia oncotricha*, T5583 *Rubia schumannina*, T5584 *Rubia tinctorum*, T5585 *Rubia wallichiana*, T5638 *Sabia swinhoei*, T5661 *Salvia bowleyana*.

**quicken blood and vessels** T0038 *Acanthopanax gracilistylus*, T0042 *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*], T0044 *Acanthopanax sessiliflorus*.

**quicken network vessels** T4965 *Piper sarmentosum*.

**quicken network vessels and relieve pain** T2422 *Erigeron breviscapus*, T5822 *Scopolia sinensis*, T6691 *Veratrum baillonii*.

**quiet fetus** T0824 *Atractylodes macrocephala* [Syn. *Atractylis macrocephala*], T1490 *Citrus limon*, T1494 *Citrus limonia*, T1911 *Cuscuta australis*, T1912 *Cuscuta chinensis*, T1913 *Cuscuta japonica*, T1980 *Cyprinus carpio*, T1982 *Cyprinus carpio*, T2530 *Eucommia ulmoides*, T4399 *Nelumbo nucifera*, T4718 *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*], T4720 *Perilla frutescens* var. *arguta*, T4721 *Perilla frutescens* var. *arguta*, T4723 *Perilla frutescens* var. *crispa*, T5687 *Salvia prionitis*, T5833 *Scutellaria amoena*, T5834 *Scutellaria baicalensis*, T5839 *Scutellaria hypericifolia*, T5841 *Scutellaria likiangensis*, T5843 *Scutellaria rehderiana*, T5845 *Scutellaria viscidula*, T6775 *Viscum coloratum*, T6777 *Viscum multinerve*.

**quiet heart** T6522 *Trifolium repens*, T6919 *Ziziphus jujuba* var. *spinosa*.

**quiet heart and quicken blood** T5071 *Polygala arillata*.

**quiet heart and settle epilepsy** T3329 *Hyoscyamus niger*.

**quiet heart and spirit** T0561 *Arachis hypogaea*, T1390 *Chrysanthemum coronarium*, T1397 *Chrysanthemum segetum*, T2846 *Ganoderma japonicum* [Syn. *Ganoderma sinense*], T2848 *Ganoderma lucidum*, T5086 *Polygala sibirica*, T5088 *Polygala tenuifolia*, T5791 *Schisandra chinensis*, T5802 *Schisandra sphenanthera*, T5850 *Sedum aizoon*, T5855 *Sedum kamschaticum*, T6675 *Valeriana amurensis*, T6679 *Valeriana officinalis*, T6680 *Valeriana officinalis* var. *latifolia*, T6918 *Ziziphus jujuba* var. *spinosa*.

**quiet roundworm** T5228 *Prunus mume*.

**quiet spirit** T0295 *Albizia odoratissima*, T0463 *Anemone altaica*, T1171 *Canis familiaris*, T3229 *Herichium erinaceus* [Syn. *Hydnum erinaceus*], T3775 *Lethariella cladonioides*, T3950 *Lychnis fulgens*, T4243 *Millettia reticulata*, T4436 *Nitraria tangutorum*, T4599 *Panax ginseng* [Syn. *Panax schinseng*], T5423 *Rauvolfia verticillata*, T5425 *Rauvolfia*

- verticillata* f. *rubrocarpa*, T5426 *Rauwolfia verticillata* var. *hainanensis*, T5427 *Rauwolfia vomitoria*, T5435 *Rauwolfia latifrons*, T5441 *Rauwolfia perakensis*, T5465 *Rhaponticum carthamoides*, T5575 *Rosmarinus officinalis*, T6295 *Tanacetum sibiricum* [Syn. *Filifolium sibiricum*], T6656 *Ustilago maydis*, T6800 *Viverra zibetha*.
- quiet spirit and boost wits** T4600 *Panax ginseng* [Syn. *Panax schinseng*].
- quiet spirit and calm** T0298 *Alectoria vivens*, T4248 *Mimosa pudica*.
- quiet spirit and relieve pain** T4665 *Passiflora edulis*.
- quiet spirit and resolve depression** T0292 *Albizia julibrissin*.
- quiet spirit and settle asthma** T4859 *Physochlaina physaloides*.
- quiet spirit and settle fright** T1804 *Cristaria plicata*; *Hyriopsis cumingii*.
- raise spirit** T1266 *Catha edulis*, T1615 *Cola acuminata*, T6423 *Theobroma cacao*.
- rectify qi** T0201 *Aesculus chinensis*, T0202 *Aesculus hippocastanum*, T0205 *Aesculus wilsonii*, T1483 *Citrus grandis* var. *tomentosa*, T3283 *Hosta sieboldiana*, T3524 *Isodon sculponeata* [Syn. *Rabdosia sculponeata*], T3877 *Litchi chinensis*, T4190 *Mentha spicata*, T4526 *Origanum vulgare*, T6801 *Vladimiria denticulata*.
- rectify qi and dispel wind** T5139 *Poncirus trifoliata*.
- rectify qi and disperse accumulation** T3006 *Glycosmis citrifolia*.
- rectify qi and disperse cold** T6677 *Valeriana jatamansii* [Syn. *Valeriana wallichii*].
- rectify qi and disperse food** T4714 *Perilla frutescens*, T5183 *Potentilla griffithii* var. *velutina*, T6356 *Tetrapanax papyriferus*.
- rectify qi and disperse food with relieving pain** T6789 *Vitex negundo*.
- rectify qi and disperse swelling** T1352 *Chamaenerion angustifolium* [Syn. *Epilobium angustifolium*].
- rectify qi and dissipate cold** T4439 *Nothapodytes pittosporoides*.
- rectify qi and dissipate stasis** T4349 *Myrica rubra*.
- rectify qi and downbear counterflow** T1498 *Citrus medica*, T1506 *Citrus reticulata*, T1520 *Citrus wilsonii*.
- rectify qi and eliminate damp** T4042 *Magnolia liliflora*.
- rectify qi and fortify spleen** T5385 *Quisqualis indica*.
- rectify qi and harmonize blood** T1604 *Coeloglossum viride* [Syn. *Coeloglossum viride* var. *bracteatum*], T3077 *Gymnadenia conopsea*.
- rectify qi and harmonize stomach** T1476 *Citrus erythrosa*, T1493 *Citrus limon*, T1497 *Citrus limonia*, T1515 *Citrus tangemna*, T2340 *Elsholtzia bodinieri*, T2744 *Foeniculum vulgare*, T4443 *Notholirion hyacinthinum* [Syn. *Notholirion bulbiferum*], T5715 *Santalum album*.
- rectify qi and loosen chest** T0313 *Allium chinense*, T0316 *Allium macrostemon*.
- rectify qi and open depression** T1366 *Chimonanthus fragrans* [Syn. *Chimonanthus praecox*].
- rectify qi and promote digestion** T1217 *Carum carvi*, T6602 *Umblicaria hypococcinea*.
- rectify qi and quicken blood** T2521 *Eucalyptus tereticornis*, T2563 *Eupatorium japonicum*, T3802 *Ligularia dentata*, T3805 *Ligularia fischeri*, T3807 *Ligularia intermedia*, T3813 *Ligularia sibirica*, T4530 *Ormosia hosiei*, T5795 *Schisandra micrantha*, T6877 *Zanthoxylum dissitum*.
- rectify qi and regulate center** T1889 *Cuminum cyminum*.
- rectify qi and regulate menstruation** T4385 *Narcissus tazetta* var. *chinensis*.
- rectify qi and relieve pain** T0130 *Aconitum sinomontanum*, T0491 *Angelica polymorpha*, T0641 *Aristolochia tuberosa*, T1163 *Campylotropis hirtella*, T1487 *Citrus junos*, T1501 *Citrus medica* var. *sarcodactylis*, T1504 *Citrus reticulata*, T1706 *Corydalis ambigua* var. *amurensis* [Syn. *Corydalis ambigua*], T1735 *Corydalis repens*, T1928 *Cycas revoluta*, T1932 *Cyclea racemosa*, T2193 *Dioscorea cirrhosa* [Syn. *Dioscorea pogonoides*], T2205 *Dioscorea panthaica*, T2529 *Euchresta strigillosa*, T3409 *Illicium verum*, T3557 *Jasminum sambac*, T3876 *Litchi chinensis*, T4386 *Nardostachys chinensis*, T4387 *Nardostachys jatamansi*, T4763 *Peucedanum morisonii*, T6120 *Stephania delavayi* [Syn. *Stephania epigaea*], T6275 *Tacca chantrieri* [Syn. *Tacca minor*; *Tacca esquirolii*], T6527 *Trigonella caerulea*, T6787 *Vitex negundo*.
- rectify qi and remove damp** T5122 *Polygonum viscosum*.
- rectify qi and resolve depression** T2758 *Fortunella crassifolia*, T2759 *Fortunella japonica*, T2760 *Fortunella margarita*.
- rectify qi and stanch bleeding** T1673 *Corchorus capsularis*.
- rectify qi and transform damp** T0680 *Artemisia lactiflora*, T4397 *Nelumbo nucifera*.
- rectify qi and transform phlegm** T1660 *Coprinus atramentarius*, T2510 *Eucalyptus globulus*, T3742 *Lentinus edodes*, T3840 *Limnophila rugosa*, T6504 *Tricholoma matsutake* [Syn. *Armillaria matsutake*].
- reduce phlegm** T6819 *Wikstroemia chamaedaphne*.
- reduce urine** T0360 *Alpinia oxyphylla*, T2961 *Ginkgo biloba*, T4548 *Oryza sativa* var. *glutinosa*.
- regulate center** T0357 *Alpinia japonica*, T1247 *Cassia sophera*.
- regulate center and increase appetite** T1506 *Citrus reticulata*, T6902 *Zea mays*.
- regulate digestive system** T1341 *Cetraria islandica*.
- regulate function among herbs** T3011 *Glycyrrhiza aspera*, T3013 *Glycyrrhiza glabra*, T3015 *Glycyrrhiza inflata*, T3016 *Glycyrrhiza kansuensis*, T3021 *Glycyrrhiza squamulosa*, T3022 *Glycyrrhiza uralensis*, T3023 *Glycyrrhiza yunnanensis*.
- regulate menstruation** T0301 *Aleuritopteris argentea*, T0969 *Boerhavia diffusa*, T1143 *Calystegia hederacea*, T1682 *Cordyceps ophioglossoides*, T2736 *Fissistigma polyanthum*, T3240 *Hibiscus esculentus*, T3997 *Lysimachia capillipes*, T5523 *Rhododendron simsii*, T5545 *Ribes fasciculatum* var. *chinense*, T5594 *Rubus parkeri*, T5953 *Silene firma*, T6295 *Tanacetum sibiricum* [Syn. *Filifolium sibiricum*], T6876 *Zanthoxylum dissitum*.
- regulate menstruation and check discharge** T4777 *Phalaris arundinacea*.
- regulate menstruation and free milk** T3361 *Hypericum perforatum*.
- regulate menstruation and promote pregnancy** T3615 *Kadsura interior*.
- regulate menstruation and quicken blood** T5498 *Rhodiola quadrifida*.
- regulate menstruation and relieve pain** T0474 *Angelica acutiloba* [Syn. *Ligusticum acutilobum*], T1978 *Cyperus rotundus*, T5515 *Rhododendron micranthum*, T5661 *Salvia bowleyana*, T5680 *Salvia miltiorrhiza*, T5681 *Salvia miltiorrhiza* f. *alba*, T5688 *Salvia przewalskii*.
- regulate menstruation and stanch bleeding** T1528 *Cladonia stellaris* [Syn. *Cladonia alpestris*], T2614 *Euphorbia pulcherrima*, T2826 *Galeola faberi*, T3349 *Hypericum erectum*, T5753 *Saussurea gnaphaloides*, T5757 *Saussurea laniceps*, T5759 *Saussurea medusa*, T6653 *Usnea diffracta*, T6654 *Usnea longissima*, T6749 *Vicia hirsuta*.

- regulate qi** T1469 *Citrus aurantium* var. *amara*.
- regulate qi and relieve pain** T1590 *Cocculus trilobus* [Syn. *Cocculus sarmentosus*], T2536 *Euonymus alatus*.
- regulate qi and resolve depression** T3431 *Inula helenium*, T3437 *Inula racemosa*.
- regulate thoroughfare and controlling vessels** T1337 *Cervus nippon*; *Cervus elaphus*.
- relax tension and relieve pain** T0540 *Apis cerana*, T3011 *Glycyrrhiza aspera*, T3013 *Glycyrrhiza glabra*, T3015 *Glycyrrhiza inflata*, T3016 *Glycyrrhiza kansuensis*, T3021 *Glycyrrhiza squamulosa*, T3022 *Glycyrrhiza uralensis*, T3023 *Glycyrrhiza yunnanensis*.
- relieve constipation** T5606 *Rumex acetosa*.
- relieve cough** T0444 *Ananas comosus*, T0948 *Blainvillea acmella* [Syn. *Verbesina acmella*; *Eclipta latifolia*; *Blainvillea latifolia*], T1312 *Centipeda minima*, T1675 *Corchorus olitorius*, T1960 *Cynanchum stauntonii*, T1969 *Cynoglossum officinale*, T2101 *Dendrobium fimbriatum*, T3143 *Helianthus annuus*, T3380 *Hyptis pectinata*, T3457 *Iris dichotoma*, T3567 *Juglans regia*, T3765 *Lepisorus ussuriensis*, T3779 *Leucas aspera*, T3802 *Ligularia dentata*, T3805 *Ligularia fischeri*, T3807 *Ligularia intermedia*, T3813 *Ligularia sibirica*, T3970 *Lycopodium cernuum*, T3973 *Lycopodium japonicum* [Syn. *Lycopodium clavatum*], T4004 *Lysimachia paridiformis*, T4036 *Magnolia coco*, T4099 *Mangifera indica*, T4103 *Mangifera persiciformis*, T4209 *Michelia alba*, T4368 *Nandina domestica*, T4908 *Pinus bungeana*, T5087 *Polygala telephoides*, T5375 *Quercus mongolica*, T5502 *Rhododendron anthopogonoides*, T5508 *Rhododendron dauricum*, T5518 *Rhododendron mucronatum*, T5522 *Rhododendron seniavinii*, T5523 *Rhododendron simsii*, T5594 *Rubus parkeri*, T5609 *Rumex hastatus*, T5836 *Scutellaria discolor*, T5859 *Selaginella braunii*, T5862 *Selaginella involvens*, T5943 *Sida cordifolia*, T6750 *Vicia sativa*, T6772 *Viscum angulatum*, T6787 *Vitex negundo*.
- relieve cough and asthma** T0707 *Arthraxon hispidus*, T0985 *Bos taurus domesticus*; *Bubalus bubalis*, T6581 *Tylophora mollissima*.
- relieve cough and calm asthma** T0364 *Alsophila spinulosa*, T0624 *Aristolochia contorta*, T0626 *Aristolochia debilis* [Syn. *Aristolochia longa*], T0630 *Aristolochia indica*, T0633 *Aristolochia maxima*, T0640 *Aristolochia triangularis*, T0926 *Berneuxia thibetica*, T1604 *Coeloglossum viride* [Syn. *Coeloglossum viride* var. *bracteatum*], T1819 *Crotalaria ferruginea*, T1941 *Cymbopogon distans*, T1943 *Cymbopogon goeringii*, T2749 *Fomes officinalis*, T3056 *Gossypium herbaceum*, T3077 *Gymnadenia conopsea*, T3221 *Heracleum rapula*, T3928 *Lotus corniculatus*, T4003 *Lysimachia microcarpa*, T4120 *Marsdenia tenacissima*, T4124 *Matricaria chamomilla* [Syn. *Matricaria recutita*], T4688 *Peganum harmala*, T4858 *Physochlaina infundibularis*, T4974 *Piper wallichii* [Syn. *Piper wallichii* var. *hupehense*], T5145 *Populus alba*, T5216 *Prunus armeniaca*, T5219 *Prunus armeniaca* var. *ansu*, T5548 *Ricinus communis*, T6259 *Syringa amurensis* [Syn. *Syringa reticulata* var. *amurensis*], T6789 *Vitex negundo*, T6825 *Winchia calophylla*.
- relieve cough and dispel phlegm** T0374 *Alstonia scholaris*, T0729 *Asarum maximum*, T0781 *Aster tataricus*, T0933 *Betula platyphylla*, T0935 *Betula platyphylla* var. *japonica*, T1786 *Cremanthodium ellisii*, T2023 *Daphne genkwa*, T2203 *Dioscorea nipponica*, T2204 *Dioscorea nipponica* ssp. *rosthornii*, T2517 *Eucalyptus robusta*, T2978 *Gleditsia sinensis* [Syn. *Gleditsia horrida*], T3758 *Lepidium sativum*, T3770 *Lespedeza cuneata*, T4203 *Mesua ferrea*, T4358 *Myroxyton pereirae*, T4510 *Ophiorrhiza japonica*, T4513 *Ophiorrhiza mungos*, T4607 *Panax pseudo-ginseng* var. *japonicus*, T4902 *Pimpinella thelungiana*, T5057 *Podophyllum emodii* [Syn. *Podophyllum emodii* var. *chinense*; *Podophyllum sikkimense*; *Sinopodophyllum emodii*], T5457 *Rhamnusa davurica*, T5504 *Rhododendron capitatum*, T6428 *Thermopsis lanceolata*, T6440 *Thuja orientalis* [Syn. *Platyclusus orientalis*; *Biota orientalis*], T6653 *Usnea diffracta*, T6654 *Usnea longissima*.
- relieve cough and free strangury** T5647 *Sagittaria sagittifolia*.
- relieve cough and kill worms** T6111 *Stemona japonica*, T6113 *Stemona sessilifolia*, T6115 *Stemona tuberosa*.
- relieve cough and settle asthma** T0923 *Bergenia crassifolia*, T2220 *Diospyros kaki*.
- relieve cough and transform phlegm** T0015 *Abutilon indicum*, T0078 *Aconitum barbatum* var. *puberulum* [Syn. *Aconitum ochranthum*], T0263 *Ajuga decumbens*, T0814 *Atalantia buxifolia* [Syn. *Severinia buxifolia*], T1493 *Citrus limon*, T1497 *Citrus limonia*, T2050 *Daucus carota* var. *sativa*, T2262 *Dregea sinensis*, T2432 *Eriobotrya japonica*, T2589 *Euphorbia helioscopia*, T2738 *Flemingia strobilifera*, T2783 *Fritillaria cirrhosa*, T2784 *Fritillaria delavayi*, T2787 *Fritillaria hupehensis*, T2792 *Fritillaria przewalskii*, T2796 *Fritillaria unibracteata*, T2797 *Fritillaria ussuriensis*, T2895 *Gaultheria yunnanensis*, T3033 *Gnetum parvifolium* [Syn. *Gnetum indicum*], T3254 *Hippophae rhamnoides*, T3256 *Hippophae rhamnoides* subsp. *sinensis*, T3258 *Hippophae rhamnoides* subsp. *yunnanensis*, T3628 *Kerria japonica*, T3749 *Leontopodium alpinum*, T3810 *Ligularia nelumbifolia*, T4000 *Lysimachia congestiflora*, T4005 *Lysionotus pauciflorus*, T4438 *Nostoc flagelliforme*, T4834 *Phyllanthus emblica*, T5072 *Polygala caudata*, T5161 *Populus tomentosa*, T5184 *Potentilla kleiniana*, T5515 *Rhododendron micranthum*, T5519 *Rhododendron mucronulatum*, T5521 *Rhododendron przewalskii*, T5530 *Rhus chinensis* [Syn. *Rhus semialata*], T5637 *Sabia schumanniana*, T6278 *Tagetes erecta*, T6574 *Tussilago farfara*, T6773 *Viscum articulatum*, T6774 *Viscum articulatum*, T6910 *Zingiber officinale*.
- relieve headache** T3246 *Hibiscus syriacus*.
- relieve itch** T0750 *Asparagus gobicus*, T1650 *Convolvulus arvensis*, T1777 *Crataegus pinnatifida*, T1867 *Cryptomeria fortunei*, T2049 *Daucus carota*, T2533 *Eugenia jambolana* [Syn. *Syzygium cumini*; *Myrtus cumini*], T2584 *Euphorbia ebracteolata*, T2587 *Euphorbia fischeriana*, T3342 *Hypericum bellum*, T3569 *Juglans regia*, T3851 *Lindera glauca*, T4102 *Mangifera indica*, T4828 *Photinia serrulata*, T5098 *Polygonum aviculare*, T5727 *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*], T6072 *Sphagnum palustre* [Syn. *Sphagnum obtusifolium*; *Sphagnum cymbifolium*], T6365 *Teucrium pilosum* [Syn. *Teucrium japonicum* var. *pilosum*], T6499 *Tribulus terrestris*.
- relieve pain** T0065 *Achillea millefolium*, T0086 *Aconitum chasmanthum*, T0090 *Aconitum delavayi*, T0107 *Aconitum kongboense*, T0125 *Aconitum pseudostaphianum*, T0157 *Actinidia callosa* var. *henryi*, T0201 *Aesculus chinensis*, T0202 *Aesculus hippocastanum*, T0205 *Aesculus wilsonii*, T0229 *Ageratum conyzoides*, T0356 *Alpinia galanga*, T0359 *Alpinia officinarum*, T0471 *Anemone rivularis*, T0495 *Angelica sinensis*,

- T0539 *Apis cerana*, T0582 *Archangelica brevicaulis* [Syn. *Angelica brevicaulis*; *Angelica brevicaulis*], T0634 *Aristolochia mollissima*, T0708 *Arthromeris mairei* [Syn. *Polypodium mairei*], T0724 *Asarum caulescens*, T0727 *Asarum fukienense*, T0729 *Asarum maximum*, T0814 *Atalantia buxifolia* [Syn. *Severinia buxifolia*], T0886 *Beaumontia grandiflora*, T1052 *Bufo bufo gargarizans*; *Bufo melanostictus*, T1262 *Catalpa ovata*, T1327 *Ceratostigma minus*, T1416 *Cicuta virosa*, T1434 *Cinnamomum bejolghota* [Syn. *Cinnamomum obtusifolium*; *Laurus bejolghota*], T1452 *Cissampelos pareira*, T1453 *Cissampelos pareira* var. *hirsute*, T1508 *Citrus sinensis*, T1525 *Cladonia fallax*, T1541 *Claviceps purpurea*, T1577 *Clitoria ternatea*, T1592 *Cocos nucifera*, T1604 *Coeloglossum viride* [Syn. *Coeloglossum viride* var. *bracteatum*], T1650 *Convolvulus arvensis*, T1705 *Corydalis adunca*, T1719 *Corydalis incisa*, T1727 *Corydalis mucronifera*, T1746 *Corydalis taliensis*, T1750 *Corydalis yanhusuo* [Syn. *Corydalis turtschaninovii* f. *yanhusuo*], T1955 *Cynanchum hancockianum*, T2036 *Datura innoxia*, T2039 *Datura innoxia*, T2041 *Datura metel*, T2043 *Datura metel*, T2046 *Datura stramonium*, T2047 *Datura stramonium*, T2077 *Delphinium grandiflorum*, T2091 *Delphinium yunnanense*, T2130 *Desmodium gangeticum*, T2263 *Dregea volubilis*, T2546 *Euonymus sacrosancta*, T2644 *Evodia rutaecarpa*, T2646 *Evodia rutaecarpa* var. *officinalis*, T2746 *Foeniculum vulgare*, T3077 *Gymnadenia conopsea*, T3356 *Hypericum japonicum*, T3457 *Iris dichotoma*, T3560 *Jatropha curcas*, T3567 *Juglans regia*, T3619 *Kadsura peltigera* [Syn. *Kadsura longipedunculata*], T3620 *Kaempferia galanga*, T3670 *Lagerstroemia indica*, T3797 *Libanotis condensata*, T3802 *Ligularia dentata*, T3805 *Ligularia fischeri*, T3807 *Ligularia intermedia*, T3809 *Ligularia lapathifolia*, T3813 *Ligularia sibirica*, T3822 *Ligusticum jeholense*, T3824 *Ligusticum sinense*, T3868 *Liquidambar orientalis*, T3877 *Litchi chinensis*, T3964 *Lycopodium alpinum* [Syn. *Diphasiastrum alpinum*], T4002 *Lysimachia foenum-graecum*, T4020 *Macleaya cordata*, T4145 *Meconopsis punicea*, T4163 *Melia toosendan*, T4264 *Momordica cochinchinensis*, T4267 *Monachosorum flagellare*, T4268 *Monachosorum henryi*, T4343 *Myrica esculent*, T4349 *Myrica rubra*, T4445 *Notopterygium forbesii* [Syn. *Notopterygium franchetii*], T4446 *Notopterygium incisum*, T4551 *Osmorhiza aristata* var. *laxa*, T4635 *Papaver somniferum*, T4637 *Papaver somniferum*, T4662 *Parthenocissus tricuspidata*, T4804 *Phlojodicarpus sibiricus*, T4951 *Piper laetispicum*, T5142 *Poncirus trifoliata*, T5268 *Psidium guajava*, T5415 *Ranunculus sceleratus*, T5572 *Rosa rugosa*, T5575 *Rosmarinus officinalis*, T5651 *Salix babylonica*, T5690 *Salvia roborowskii*, T5720 *Sapindus mukorossi*, T5767 *Saussurea pulchella*, T5883 *Senecio cannabifolius*, T5963 *Sinodielsia yunnanensis*, T6009 *Solanum pseudo-capsicum*, T6018 *Solanum verbascifolium*, T6069 *Speranskia tuberculata*, T6100 *Stauntonia hexaphylla*, T6128 *Stephania hernandifolia*, T6177 *Strychnos ignatii*, T6197 *Styrax benzoin*, T6204 *Styrax tonkinensis*, T6463 *Tinospora capillipes*, T6467 *Tinospora sagittata*, T6494 *Trema dielsiana*, T6528 *Trigonella foenum-graecum*, T6533 *Trillium kamschaticum*, T6535 *Trillium tschonoskii*, T6548 *Tritonia crocosmaeflora*, T6578 *Tylophora atrofolliculata*, T6675 *Valeriana amurensis*, T6679 *Valeriana officinalis*, T6680 *Valeriana officinalis* var. *latifolia*, T6693 *Veratrum album* var. *lobelianum* [Syn. *Veratrum lobelianum*], T6731 *Veronicastrum sibiricum*, T6800 *Viverra zibetha*, T6801 *Vladimiria denticulata*, T6860 *Zanthoxylum ailanthoides*, T6864 *Zanthoxylum armatum*, T6872 *Zanthoxylum cuspidatum*, T6887 *Zanthoxylum planispinum*.
- Relieve pain** T3106 *Harpagophytum procumbens*.
- relieve pain and check tetany** T5934 *Seseli meirei*, T5937 *Seseli yunnanense*.
- relieve pain and disperse swelling** T3548 *Ixeris sonchifolia*.
- relieve pain and draw out pus** T2038 *Datura innoxia*, T2042 *Datura metel*.
- relieve pain and itch** T0610 *Argemone mexicana*, T1959 *Cynanchum paniculatum*.
- relieve pain and quiet fetus** T3431 *Inula helenium*, T3437 *Inula racemosa*.
- relieve pain and settle tetany** T2037 *Datura innoxia*, T2044 *Datura metel*.
- relieve pain due to impediment** T0608 *Arenaria kansuensis* [Syn. *Arenaria kumaonensis*], T0990 *Bos taurus domesticus*; *Bubalus bubalis*, T2909 *Gentiana crassicaulis*, T2910 *Gentiana dahurica*, T2913 *Gentiana kaufmanniana*, T2919 *Gentiana macrophylla*, T2932 *Gentiana siphonantha*, T2934 *Gentiana straminea*, T2936 *Gentiana tianschanica*, T2937 *Gentiana tibetica*, T4950 *Piper kadsura* [Syn. *Piper futokadsura*], T5638 *Sabia swinhoei*.
- relieve stuffed nose** T4035 *Magnolia biondii* [Syn. *Magnolia fargesii*], T4038 *Magnolia denudata* [Syn. *Magnolia heptapata*], T4041 *Magnolia liliflora*, T4052 *Magnolia sprengeri*.
- repel foulness** T2554 *Eupatorium cannabinum*.
- repel foulness and harmonize center** T2558 *Eupatorium formosanum*, T2559 *Eupatorium fortunei*.
- repel foulness and open depression** T3557 *Jasminum sambac*.
- replenish essence** T1170 *Canis familiaris*.
- resolve binds** T1504 *Citrus reticulata*, T3877 *Litchi chinensis*.
- resolve depression** T4184 *Mentha haplocalyx* [Syn. *Mentha canadaensis*; *Mentha arvensis* var. *haplocalyx*; *Mentha arvensis*], T4688 *Peganum harmala*.
- resolve depression and quiet heart** T3778 *Leucaena glauca* [Syn. *Leucaena leucocephala*].
- resolve dog toxin** T1958 *Cynanchum otophyllum*.
- resolve epidemic toxin** T4029 *Maesa japonica*.
- resolve exterior** T0310 *Allium ascalonicum*, T0319 *Allium schoenoprasum*, T1941 *Cymbopogon distans*, T3779 *Leucas aspera*, T4002 *Lysimachia foenum-graecum*, T4190 *Mentha spicata*, T4335 *Mussaenda pubescens*, T4526 *Origanum vulgare*, T5167 *Porana racemosa*, T5519 *Rhododendron mucronulatum*, T5804 *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*], T6787 *Vitex negundo*.
- resolve exterior and abate fever** T0557 *Aquilegia ecalcarata*, T5836 *Scutellaria discolor*.
- resolve exterior and allay fever** T0591 *Ardisia arborescens*.
- resolve exterior and clear heat** T6338 *Tephrosia purpurea*.
- resolve exterior and disinhibit damp** T3381 *Hyptis suaveolens*, T6749 *Vicia hirsuta*.
- resolve exterior and outthrust papules** T0838 *Azolla imbricata* [Syn. *Salvinia imbricata*].
- resolve heat** T0158 *Actinidia chinensis*, T0533 *Antiaris toxicaria* [Syn. *Ambora toxicaria*], T3106 *Harpagophytum procumbens*, T4785 *Phaseolus vulgaris*, T3380 *Hyptis pectinata*, T5272 *Psorospermum*

- febrifugum*.
- resolve heat toxin** T0154 *Acroptilon repens*, T0902 *Berberis diaphana*, T1685 *Coreopsis lanceolata*, T3827 *Ligustrum japonicum*, T4254 *Miscanthus sinensis*, T5102 *Polygonum cuspidatum*.
- resolve liquor** T1486 *Citrus junos*, T1937 *Cydonia oblonga*, T3285 *Hovenia dulcis*.
- resolve liquor and arouse spleen** T0713 *Artocarpus heterophyllus*, T1428 *Cinchona ledgeriana*, T1429 *Cinchona officinalis*, T1433 *Cinchona succirubra*.
- resolve liquor jaundice** T1758 *Cotinus coggygria*.
- resolve liquor toxin** T3286 *Hovenia dulcis*, T4573 *Pachyrrhizus erosus*, T5202 *Primula obconica*.
- resolve snake toxin** T1958 *Cynanchum otophyllum*, T2749 *Fomes officinalis*, T5723 *Sapium sebiferum*.
- resolve sore toxin** T1672 *Corallodiscus flabellatus* [Syn. *Didissandra flabellat*], T2718 *Ficus carica*, T4101 *Mangifera indica*, T5520 *Rhododendron ovatum* [Syn. *Rhododendron lamprophyllum*; *Azalea ovata*], T5523 *Rhododendron simsii*.
- resolve spasm** T4518 *Oppopanax chironium*, T5727 *Saposhnikovia divaricata* [Syn. *Ledebouria seseloides*].
- resolve spasm and relieve pain** T0501 *Anisodus luridus*, T0825 *Atropa belladonna*, T3329 *Hyoscyamus niger*, T5247 *Przewalskia tangutica*.
- resolve summerheat** T0660 *Artemisia annua*, T0662 *Artemisia apiacea* [Syn. *Artemisia carvifolia*; *Artemisia caruifolia*], T1137 *Caltha palustris*.
- resolve summerheat and engender liquid** T1464 *Citrullus vulgaris* [Syn. *Citrullus lanatus*].
- resolve summerheat and transform damp** T2558 *Eupatorium formosanum*, T2559 *Eupatorium fortunei*.
- resolve tetany and disperse swelling** T0502 *Anisodus tanguticus* [Syn. *Scopolia tangutica*].
- resolve tetany and settle pain** T5821 *Scopolia japonica*.
- resolve toxin** T0060 *Achillea alpina* [Syn. *Achillea sibirica*], T0065 *Achillea millefolium*, T0174 *Adiantum monochlamys*, T0249 *Agrimonia pilosa* var. *japonica*, T0274 *Akebia quinata*, T0278 *Akebia trifoliata*, T0280 *Akebia trifoliata* var. *australis*, T0310 *Allium ascalonicum*, T0314 *Allium fistulosum*, T0318 *Allium sativum*, T0322 *Allium tuberosum*, T0324 *Allium victorialis*, T0371 *Alstonia mairei*, T0379 *Alternanthera philoxeroides*, T0444 *Ananas comosus*, T0463 *Anemone altaica*, T0535 *Antidesma bunius*, T0540 *Apis cerana*, T0542 *Apis cerana*, T0544 *Apium graveolens*, T0567 *Aralia armata*, T0598 *Ardisia japonica*, T0678 *Artemisia japonica*, T0705 *Artemisia vestita*, T0726 *Asarum forbesii*, T0834 *Averrhoa carambola*, T0838 *Azolla imbricata* [Syn. *Salvinia imbricata*], T0888 *Beesia calthaeifolia*, T0897 *Berberis amurensis*, T0932 *Betula luminifera*, T0947 *Bixa orellana*, T0950 *Blatta orientalis*, T0973 *Bombax malabaricum* [Syn. *Gossampinus malabarica*], T0982 *Bos taurus domesticus*, T0989 *Bos taurus domesticus*; *Bubalus bubalis*, T1045 *Bubalus bubalis*, T1052 *Bufo bufo gargarizans*; *Bufo melanostictus*, T1097 *Cacalia ainslaeflora*, T1152 *Camellia sinensis* [Syn. *Thea sinensis*], T1165 *Canarium album*, T1171 *Canis familiaris*, T1172 *Canna edulis*, T1182 *Capra hircus*; *Ovis aries*, T1188 *Caragana chamlagu*, T1194 *Carassius auratus*, T1206 *Carica papaya*, T1210 *Carpesium abrotanoides*, T1239 *Cassia nodosa*, T1242 *Cassia occidentalis*, T1266 *Catha edulis*, T1271 *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochera rosea*], T1278 *Cedrela sinensis*, T1336 *Ceriops tagal* [Syn. *Rhizophora tagal*], T1353 *Changium smyrnioides*, T1371 *Chloranthus japonicus*, T1381 *Choerospondias axillaris*, T1437 *Cinnamomum camphora*, T1570 *Clerodendrum thomsonae*, T1589 *Cocculus trilobus* [Syn. *Cocculus sarmentosus*], T1831 *Crotalaria sessiliflora*, T1867 *Cryptomeria fortunei*, T1878 *Cucumis sativus*, T1963 *Cynanchum wallichii*, T1964 *Cynanchum wilfordii* [Syn. *Cynoconium wilfordii*], T2024 *Daphne genkwa*, T2027 *Daphne odora*, T2092 *Delphinus delphis*, T2130 *Desmodium gangeticum*, T2165 *Dictamnus angustifolius*, T2167 *Dictamnus dasycarpus*, T2181 *Dillenia indica*, T2216 *Diospyros ebenum*, T2221 *Diospyros kaki*, T2267 *Drosera peltata* var. *lunata*, T2327 *Elaeagnus angustifolia*, T2334 *Elephantopus scaber*, T2533 *Eugenia jambolana* [Syn. *Syzygium cumin*; *Myrtus cumini*], T2563 *Eupatorium japonicum*, T2601 *Euphorbia milii*, T2612 *Euphorbia prolifera*, T2624 *Euphorbia tirucalli*, T2627 *Euphorbia longan* [Syn. *Dimocarpus longan*], T2649 *Evolvulus alsinoides*, T2830 *Galium aparine*, T2941 *Gentianopsis paludosa*, T3003 *Glycine max*, T3040 *Gomphrena globosa*, T3082 *Gynocardia odorata*, T3085 *Gynostemma pentaphyllum*, T3144 *Helianthus annuus*, T3146 *Helianthus annuus* cv, T3162 *Helicia nilagirica*, T3242 *Hibiscus rosa-sinensis*, T3243 *Hibiscus rosa-sinensis*, T3246 *Hibiscus syriacus*, T3356 *Hypericum japonicum*, T3360 *Hypericum patulum*, T3410 *Impatiens balsamina*, T3420 *Incarvillea sinensis*, T3432 *Inula helianthus-aquatica*, T3524 *Isodon sculponeata* [Syn. *Rabdosia sculponeata*], T3528 *Isodon ternifolia*, T3529 *Isodon ternifolius*, T3555 *Jasminum nudiflorum*, T3567 *Juglans regia*, T3569 *Juglans regia*, T3628 *Kerria japonica*, T3649 *Laccifer lacca*, T3673 *Lagerstroemia speciosa* [Syn. *Munchausia speciosa*; *Lagerstroemia flos-reginae*], T3674 *Laggera alata*, T3685 *Lansea grandis* [Syn. *Lansea coromandelica*], T3726 *Laurus nobilis*, T3742 *Lentinus edodes*, T3815 *Ligularia stenocephala*, T3866 *Liquidambar formosana* [Syn. *Liquidambar taiwaniana*], T3886 *Litsea euosma*, T3969 *Lycopodium casuarinoides*, T3970 *Lycopodium cernuum*, T3973 *Lycopodium japonicum* [Syn. *Lycopodium clavatum*], T3988 *Lycoris squamigera*, T3997 *Lysimachia capillipes*, T4004 *Lysimachia paridiformis*, T4020 *Macleaya cordata*, T4055 *Mahonia bealei*, T4056 *Mahonia bealei*, T4062 *Mahonia fortunei*, T4063 *Mahonia fortunei*, T4066 *Mahonia japonica*, T4067 *Mahonia japonica*, T4072 *Mahonia shenii*, T4080 *Mallotus apelta*, T4178 *Melodinus hemsleyanus*, T4188 *Mentha rotundifolia*, T4206 *Metaplexis japonica*, T4225 *Microsorium punctatum*, T4263 *Momordica charantia*, T4264 *Momordica cochinchinensis*, T4331 *Musa paradisiaca* var. *sapientum* [Syn. *Musa sapientum*], T4335 *Mussaenda pubescens*, T4368 *Nandina domestica*, T4370 *Nandina domestica*, T4388 *Nasturtium officinale*, T4478 *Octopus vulgaris*, T4500 *Onosma paniculatum*, T4544 *Oryza sativa*, T4548 *Oryza sativa* var. *glutinosa*, T4618 *Panicum miliaceum*, T4799 *Philydrum lanuginosum*, T4814 *Phlomis umbrosa*, T4831 *Phtheirospermum japonicum* [Syn. *Gerardia japonica*], T4834 *Phyllanthus emblica*, T4848 *Physalis angulata*, T4979 *Pistacia chinensis*, T4983 *Pisum sativum*, T5002 *Plantago asiatica*, T5004 *Plantago depressa*, T5007 *Plantago major*, T5073 *Polygala chinensis* [Syn. *Polygala glomerata*], T5087 *Polygala telephoides*, T5090 *Polygala wattersii*, T5097 *Polygonum amphibium*, T5101 *Polygonum cuspidatum*, T5103 *Polygonum hydropiper*, T5104 *Polygonum hydropiper*, T5105 *Polygonum*

*hydropiper* var. *flaccidum* [Syn. *Polygonum flaccidum*], T5106 *Polygonum laphatifolium*, T5107 *Polygonum multiflorum*, T5120 *Polygonum tinctorium*, T5157 *Populus pseudo-simonii*, T5167 *Porana racemosa*, T5174 *Portulaca pilosa*, T5193 *Pratia nummularia*, T5217 *Prunus armeniaca*, T5220 *Prunus davidiana*, T5221 *Prunus davidiana*, T5232 *Prunus persica*, T5235 *Prunus persica*, T5272 *Psorospermum febrifugum*, T5411 *Randia spinosa*, T5484 *Rhinoceros unicornis*; *Rhinoceros sondaicus*; *Rhinoceros sumatrensis*, T5537 *Rhus sylvestris*, T5563 *Rosa cymosa*, T5606 *Rumex acetosa*, T5626 *Ruta graveolens*, T5642 *Saccharum sinensis*, T5721 *Sapindus mukorossi*, T5850 *Sedum aizoon*, T5855 *Sedum kamschaticum*, T5857 *Sedum sarmentosum*, T5862 *Selaginella involvens*, T5870 *Selaginella uncinata*, T5938 *Setaria italica*, T5977 *Smilax glabra*, T5978 *Smilax glauco-china*, T5980 *Smilax menispermoides*, T6039 *Sophora moorcroftiana*, T6048 *Sophora viciifolia*, T6177 *Strychnos ignatii*, T6359 *Teucrium bidentatum*, T6372 *Thalictrum acutifolium*, T6373 *Thalictrum alpinum*, T6381 *Thalictrum faberi*, T6386 *Thalictrum foetidum*, T6388 *Thalictrum fortunei*, T6403 *Thalictrum petaloideum*, T6410 *Thalictrum smithii*, T6431 *Thesium chinense*, T6482 *Toxicodendron succedaneum* [Syn. *Rhus succedanea*], T6492 *Trapa bispinosa*, T6548 *Tritonia crocosmaeflora*, T6651 *Urtica cannabina*, T6652 *Urtica dioica*, T6673 *Vaccinium vitis-idaea*, T6709 *Verbena officinalis*, T6713 *Vernonia anthelmintica*, T6728 *Veronica serpyllifolia*, T6799 *Vitis vinifera*, T6820 *Wikstroemia indica*, T6827 *Wisteria sinensis*, T6831 *Woodwardia orientalis*, T6843 *Xanthium sibiricum* [Syn. *Xanthium strumarium*], T6893 *Zanthoxylum simulans*, T6894 *Zanthoxylum simulans*, T6912 *Zinnia elegans*.

**resolve toxin and close sores** T2188 *Dioscorea alata*, T2658 *Fagopyrum esculentum*, T4109 *Marchantia polymorpha*, T4487 *Olea europaea*, T5308 *Pterocarya stenoptera*, T5395 *Rabdosia nervosa*, T6746 *Vicia faba*.

**resolve toxin and cure sores** T0976 *Bombyx mori*, T1950 *Cynanchum ascyrifolium*, T1951 *Cynanchum atratum*, T1952 *Cynanchum auriculatum*, T1953 *Cynanchum bungei*, T1962 *Cynanchum versicolor*, T2428 *Erinaceus europaeus*; *Hemiechinus dauuricus*; *Hemiechinus auritus*, T2952 *Gerbera piloselloides*, T3851 *Lindera glauca*, T5010 *Platycarya strobilacea*, T6439 *Thuja orientalis* [Syn. *Platyclusus orientalis*; *Biota orientalis*], T6582 *Tylophora ovata*.

**resolve toxin and disinhibit damp** T1819 *Crotalaria ferruginea*, T4000 *Lysimachia congestiflora*, T4656 *Parmelia saxatilis*, T5126 *Polypodium virginianum*, T5127 *Polypodium vulgare*, T6075 *Spilanthes acmella*, T6488 *Trachyspermum ammi*, T6526 *Triglochin maritimum*, T6788 *Vitex negundo*.

**resolve toxin and disinhibit throat** T0586 *Arctium lappa*, T0975 *Bombyx mori*, T5449 *Reineckea carnea*.

**resolve toxin and disperse swelling** T0001 *Abelmoschus manihot*, T0015 *Abutilon indicum*, T0047 *Acanthus ebracteatus*, T0069 *Achillea wilsoniana*, T0098 *Aconitum geniculatum*, T0156 *Actinidia arguta*, T0161 *Actinidia eriantha*, T0226 *Agave sisalana*, T0424 *Ampelopsis brevipedunculata* var. *hancei*, T0571 *Aralia decaisneana*, T0625 *Aristolochia contorta*, T0627 *Aristolochia debilis* [Syn. *Aristolochia longa*], T0852 *Bacopa monniera*, T0871 *Barleria lupulina*, T0922 *Berchemia polyphylla* var. *leioclada*, T0933 *Betula platyphylla*, T0935 *Betula platyphylla* var. *japonica*, T0959 *Blumea lacera*, T0977 *Bombyx*

*mori*, T0984 *Bos taurus domesticus*; *Bubalus bubalis*, T1001 *Brachystemma calycinum*, T1021 *Brassica rapa*, T1100 *Caesalpinia crista*, T1241 *Cassia occidentalis*, T1256 *Castanea mollissima*, T1275 *Cayratia japonica*, T1286 *Celastrus flagellaris*, T1289 *Celastrus orbiculatus* [Syn. *Celastrus articulatus*], T1290 *Celastrus orbiculatus* [Syn. *Celastrus articulatus*], T1311 *Centella asiatica*, T1359 *Chenopodium album*, T1395 *Chrysanthemum morifolium* [Syn. *Dendranthema morifolium*], T1450 *Cirsium lineare*, T1547 *Clematis terniflora* [Syn. *Clematis maximowicziana*], T1561 *Clerodendron serratum*, T1565 *Clerodendrum bungei*, T1569 *Clerodendrum serratum* var. *amplexifolium*, T1573 *Clinopodium chinense*, T1660 *Coprinus atramentarius*, T1813 *Crotalaria albida*, T1880 *Cucurbita moschata*, T1884 *Cudrania cochinchinensis*, T1928 *Cycas revoluta*, T2161 *Dicranopteris pedata* [Syn. *Polypodium pedatum*; *Dicranopteris dichotoma*], T2205 *Dioscorea panthaica*, T2213 *Dioscorea zingiberensis*, T2301 *Dysosma majorensis* [Syn. *Podophyllum majorensis*; *Dysosma lichuanensis*], T2336 *Elephas maximus*, T2348 *Embelia ribes*, T2365 *Enteromorpha clathrata*, T2435 *Eriocheir sinensis*, T2442 *Ervatamia divaricata*, T2536 *Euonymus alatus*, T2586 *Euphorbia esula* var. *cyparissoides*, T2716 *Ficus beecheyana* [Syn. *Ficus erecta* var. *beecheyana*], T2717 *Ficus carica*, T2723 *Ficus pumila*, T2753 *Formica fusca*, T2946 *Geranium robertianum*, T2950 *Gerbera anandria* [Syn. *Leibnitzia anandria*], T2984 *Glinus lotoides* [Syn. *Mollugo lotoides*], T2998 *Glycine max*, T3080 *Gymnema sylvestre*, T3163 *Helicteres angustifolia*, T3193 *Hemerocallis fulva*, T3195 *Hemerocallis lilio-asphodelus*, T3197 *Hemerocallis minor*, T3248 *Hibiscus tiliaceus*, T3311 *Hydrocotyle sibthorpioides*, T3349 *Hypericum erectum*, T3479 *Isodon amethystoides*, T3680 *Lamium amplexicaule*, T3687 *Lantana camara*, T3778 *Leucaena glauca* [Syn. *Leucaena leucocephala*], T3808 *Ligularia japonica* [Syn. *Arnica japonica*; *Senecio japonica*], T3830 *Ligustrum sinense*, T3847 *Lindera angustifolia*, T3865 *Lippia nodiflora*, T3882 *Lithospermum officinale*, T3932 *Ludwigia octovalvis*, T3983 *Lycoris aurea*, T4085 *Mallotus repandus* var. *chrysocarpus* [Syn. *Mallotus chrysocarpus*; *Mallotus repandus*], T4104 *Manihot esculenta*, T4131 *Maytenus confertiflorus*, T4203 *Mesua ferrea*, T4261 *Mollugo pentaphylla*, T4323 *Murraya paniculata* [Syn. *Chalcas paniculata*], T4325 *Murraya paniculata* var. *exotica*, T4470 *Ocimum basilicum*, T4519 *Opuntia dillenii*, T4521 *Opuntia vulgaris*, T4549 *Osbeckia chinensis*, T4564 *Oxalis corniculata* [Syn. *Oxalis repens*], T4577 *Paederia scandens*, T4678 *Paulownia fortunei*, T4679 *Paulownia tomentosa*, T4704 *Peperomia duclouxii*, T4813 *Phlomis tuberosa*, T4937 *Piper betle*, T4956 *Piper mullesua*, T4978 *Pisolithus tinctorius* [Syn. *Lycoperdon capitatum*; *Scleroderma tinctorium*], T5029 *Plumbago zeylanica*, T5086 *Polygala sibirica*, T5088 *Polygala tenuifolia*, T5111 *Polygonum perfoliatum*, T5288 *Pteris cretica* var. *nervosa* [Syn. *Pteris nervosa*], T5295 *Pteris multifida*, T5375 *Quercus mongolica*, T5401 *Rabdosia yunnanensis*, T5562 *Rosa chinensis*, T5701 *Salvia yunnanensis*, T5750 *Saururus chinensis*, T5806 *Schlumbergera truncata*, T5813 *Scilla scilloides*, T5844 *Scutellaria scordifolia*, T5851 *Sedum alfredii* [Syn. *Sedum formosanum*], T5942 *Sida acuta*, T6017 *Solanum tuberosum*, T6023 *Solidago virgaurea*, T6024 *Solidago virgaurea* var. *leiocarpa* [Syn. *Solidago decurrens*], T6060 *Souliea vaginata*, T6080 *Spiraea japonica*, T6095 *Stachytarpheta jamaicensis*, T6101 *Stauntonia*



- hexaphylla*, T6127 *Stephania glabra*, T6183 *Strychnos nitida*, T6264 *Syzygium buxifolium*, T6429 *Thermopsis lupinoides*, T6444 *Thunbergia grandiflora*, T6580 *Tylophora floribunda*, T6744 *Vicia faba*, T6834 *Wrightia tomentosa*, T6883 *Zanthoxylum myriacanthum*, T6904 *Zephyranthes grandiflora* [Syn. *Zephyranthes carinata*].
- resolve toxin and disperse welling abscess** T6752 *Vigna angularis* [Syn. *Dolichus angularis*; *Phaseolus angularis*].
- resolve toxin and dissipate binds** T0382 *Althaea rosea*, T1049 *Bufo bufo gargarizans*; *Bufo melanostictus*, T1050 *Bufo bufo gargarizans*; *Bufo melanostictus*, T1826 *Crotalaria mucronata*, T2028 *Daphne odora*, T2787 *Fritillaria hupehensis*, T2980 *Gleditsia sinensis* [Syn. *Gleditsia horrida*], T3632 *Knoxia valerianoides*, T3984 *Lycoris chinensis*, T3986 *Lycoris radiata* [Syn. *Amaryllis radiata*], T4186 *Mentha piperita*, T4835 *Phyllanthus emblica*, T4861 *Phytolacca americana* [Syn. *Phytolacca decandra*], T4864 *Phytolacca esculenta* [Syn. *Phytolacca acinosa*], T5647 *Sagittaria sagittifolia*, T5817 *Scolopendra subspinipes mutilans*, T5826 *Scrophularia buergeriana*, T5828 *Scrophularia ningpoensis*, T5975 *Smilax bockii*, T5982 *Smilax sieboldii*, T5984 *Smilax stans* [Syn. *Smilax vaginata* var. *stans*].
- resolve toxin and draw out pus** T0215 *Agave americana*.
- resolve toxin and eliminate damp** T2325 *Eichhornia crassipes*, T5339 *Pycnoporus sanguineus*, T5413 *Ranunculus cantoniensis*, T6491 *Trametes cinnabarina* [Syn. *Polyporus cinnabarinus*; *Boletus cinnabarinus*].
- resolve toxin and eliminate inflammation** T1869 *Cryptotaenia japonica*, T6808 *Waltheria americana*.
- resolve toxin and eliminate welling abscess** T3980 *Lycopus lucidus*, T5604 *Rudbeckia laciniata*, T5943 *Sida cordifolia*, T5976 *Smilax china* [Syn. *Smilax japonica*].
- resolve toxin and engender flesh** T2337 *Elephas maximus*, T4578 *Paederia scandens*.
- resolve toxin and interrupt malaria** T1039 *Bruguiera gymnorrhiza*.
- resolve toxin and kill worms** T0250 *Agrimonia pilosa* var. *japonica*, T0311 *Allium cepa*, T0468 *Anemone hupehensis*, T0500 *Anguilla japonica*, T1038 *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*], T1046 *Buddleja davidii*, T1205 *Carica papaya*, T1285 *Celastrus angulatus*, T1372 *Chloranthus serratus*, T1719 *Corydalis incisa*, T1733 *Corydalis racemosa*, T2023 *Daphne genkwa*, T2521 *Eucalyptus tereticornis*, T2589 *Euphorbia helioscopia*, T2975 *Gleditsia delavayi*, T2976 *Gleditsia fera*, T2999 *Glycine max*, T3057 *Gossypium herbaceum*, T3460 *Iris halophila*, T3464 *Iris lactea* var. *chinensis* [Syn. *Iris pallasii* var. *chinensis*], T4247 *Millingtonia hortensis*, T4358 *Myroxyton pereirae*, T4428 *Nicotiana tabacum*, T4830 *Phryma leptostachya*, T4882 *Picrasma quassioides* [Syn. *Picrasma ailanthoides*], T5143 *Pongamia pinnata*, T5298 *Pteris vittata*, T5330 *Punica granatum*, T5384 *Quisqualis indica*, T5385 *Quisqualis indica*, T5391 *Rabdosia ericalyx*, T5428 *Rauvolfia yunnanensis*, T5717 *Sapindus delavayi* [Syn. *Pancovia delavayi*], T5724 *Sapium sebiferum*, T6540 *Tripterygium hypoglaucum*, T6541 *Tripterygium regelii*, T6542 *Tripterygium wilfordii*, 6764 Vinegar.
- resolve toxin and outthrust papules** T0648 *Arnebia euchroma*, T0649 *Arnebia guttata*, T3881 *Lithospermum erythrorhizon*, T6145 *Stichopus japonicus*.
- resolve toxin and relieve itch** T1373 *Chloranthus serratus*, T2505 *Eucalyptus citriodora*, T3371 *Hypocrella bambusae*, T4307 *Mosla scabra* [Syn. *Mosla punctata*].
- resolve toxin and relieve pain** T0730 *Asarum sagittarioides*, T2538 *Euonymus bungeanus*.
- resolve toxin and repel foulness** T4385 *Narcissus tazetta* var. *chinensis*.
- resolve toxin and settle pain** T4506 *Ophioglossum vulgatum*, T6588 *Typhonium giganteum*.
- resolve toxin and transform damp** T1546 *Clematis tangutica*.
- resolve toxin of fish and crab** T1486 *Citrus junos*, T4714 *Perilla frutescens*, T4718 *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*], T4721 *Perilla frutescens* var. *arguta*.
- resolve toxin of fish and meat** T0472 *Anethum graveolens*.
- restore pulse and stem desertion** T4599 *Panax ginseng* [Syn. *Panax schinseng*].
- return fire to its source** T1439 *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*].
- return yang and free vessels** T6909 *Zingiber officinale*.
- return yang and treat collapse** T0083 *Aconitum carmichaeli*, T0085 *Aconitum carmichaeli* cv.
- rough essence** T0977 *Bombyx mori*.
- rough essence and arrest emission** T2838 *Gallus gallus domesticus*.
- rough essence and stem desertion** T1698 *Cornus officinalis* [Syn. *Macrocarpium officinale*].
- secure essence** T0360 *Alpinia oxyphylla*, T4401 *Nelumbo nucifera*, T5244 *Prunus tomentosa*.
- secure essence and reduce urine** T5569 *Rosa multiflora*.
- secure essence and reduce urine** T1911 *Cuscuta australis*, T1912 *Cuscuta chinensis*, T1913 *Cuscuta japonica*, T5568 *Rosa laevigata*, T5593 *Rubus idaeus*.
- secure essence qi** T6670 *Vaccinium bracteatum*.
- secure qi and rough essence** T5374 *Quercus infectoria*.
- secure teeth** T6498 *Tribulus terrestris*.
- settle asthma** T1176 *Cannabis sativa*, T5414 *Ranunculus japonicus*, T5517 *Rhododendron molle*.
- settle fright** T1045 *Bubalus bubalis*, T2091 *Delphinium yunnanense*, T5289 *Pteris dactylina*, T5299 *Pteris wallichinan*, T5484 *Rhinoceros unicornis*; *Rhinoceros sondaicus*; *Rhinoceros sumatrensis*, T6145 *Stichopus japonicus*.
- settle fright epilepsy** T0088 *Aconitum coreanum*.
- settle pain** T0096 *Aconitum forrestii* [Syn. *Aconitum likiangense*], T0183 *Adlumia cirrhosa* [Syn. *Adlumia fungosa*], T0542 *Apis cerana*, T1328 *Ceratostigma plumbaginoides*, T1329 *Ceratostigma willmottianum*, T2092 *Delphinus delphis*, T2154 *Dicentra spectabilis*, T2420 *Ericerus pela*, T2495 *Eschscholzia californica*, T3594 *Juniperus rigida*, T4418 *Nerium indicum*, T4625 *Papaver commutatum* [Syn. *Papaver rhoeas*], T4629 *Papaver nudicaule*, T4630 *Papaver nudicaule* ssp. *amurense*, T4631 *Papaver nudicaule* var. *chinense*, T5202 *Primula obconica*, T5414 *Ranunculus japonicus*, T6028 *Sophora alopecuroides*, T6132 *Stephania sasakii*, T6889 *Zanthoxylum podocarpum*.
- settle pain and calm** T1716 *Corydalis gigantea*.
- settle pain and relieve cough** T1357 *Chelidonium majus*.
- settle pain and resolve tetany** T3328 *Hyoscyamus niger*.
- settle pain and suppress cough** T2968 *Glaucium fimbriigerum*.

- settle tetany** T6457 *Tilia japonica*, T6458 *Tilia miqueliana*.
- soften hardness** T1385 *Chorda filum*, T5740 *Sargassum vachellianum*.
- soften hardness and disperse swelling** T4555 *Ostrea rivularis*; *Ostrea talienwhanensis*; *Ostrea gigas*.
- soften hardness and dissipate binds** T0275 *Akebia quinata*, T0847 *Baccharis indica* [Syn. *Pluchea indica*], T2321 *Ecklonia kurome*, T2359 *Endarachne binghamiae*, T2365 *Enteromorpha clathrata*, T3678 *Laminaria japonica*, T4403 *Nemacystus decipiens* [Syn. *Mesogloea decipiens*; *Cladosiphon decipiens*], T6640 *Undaria pinnatifida*, T6925 *Zostera marina*.
- soften hardness and transform phlegm** T5309 *Pterocladia tenuis*.
- soothe channels and network vessels** T6689 *Ventilago leiocarpa*.
- soothe channels and quicken blood** T4018 *Machilus thunbergii*.
- soothe channels and quicken network vessels** T4238 *Millettia nitida*, T6504 *Tricholoma matsutake* [Syn. *Armillaria matsutake*].
- soothe depressed liver qi** T2761 *Fortunella margarita*.
- soothe liver** T0201 *Aesculus chinensis*, T0202 *Aesculus hippocastanum*, T0205 *Aesculus wilsonii*, T1469 *Citrus aurantium* var. *amara*, T2644 *Evodia rutaecarpa*, T2646 *Evodia rutaecarpa* var. *officinalis*, T4163 *Melia toosendan*, T5226 *Prunus mume*.
- soothe liver and disinhibit gallbladder** T1406 *Chrysosplenium nudicaule*.
- soothe liver and harmonize stomach** T5362 *Pyrus bretschneideri*, T5366 *Pyrus pyrifolia*.
- soothe liver and move qi** T2432 *Eriobotrya japonica*.
- soothe liver and quicken network vessels** T3867 *Liquidambar formosana* [Syn. *Liquidambar taiwaniana*].
- soothe liver and resolve depression** T3554 *Jasminum grandiflorum*.
- soothe liver and upbear yang** T1055 *Bupleurum angustissimum*, T1056 *Bupleurum aureum*, T1058 *Bupleurum chaishouii*, T1059 *Bupleurum chinense*, T1065 *Bupleurum longiradiatum*, T1066 *Bupleurum marginatum*, T1067 *Bupleurum marginatum* var. *stenophyllum*, T1072 *Bupleurum scorzonerifolium*, T1073 *Bupleurum sibiricum*, T1075 *Bupleurum smithii* var. *parvifolium*, T1078 *Bupleurum wenchuanense*, T1079 *Bupleurum yinchowense*.
- soothe sinews and free network vessels** T3976 *Lycopodium obscurum*, T3989 *Lygodium flexuosum* [Syn. *Lygodium pinnatifidum*; *Ophioglossum flexuosum*].
- soothe sinews and joint bones** T6540 *Tripterygium hypoglaucum*.
- soothe sinews and quicken blood** T0045 *Acanthopanax trifoliatum*, T0282 *Alangium kurzii*, T0414 *Ammopiptanthus mongolicus* [Syn. *Piptanthus mongolicus*], T0964 *Boenninghausenia albiflora*, T1841 *Croton caudatus* var. *tomentosus*, T3125 *Hedyotis chrysotricha* [Syn. *Oldenlandia chrysotricha*], T3320 *Hymenocallis littoralis* [Syn. *Hymenocallis americana*; *Pancratium littoralis*], T3808 *Ligularia japonica* [Syn. *Arnica japonica*; *Senecio japonica*], T3965 *Lycopodium annotinum*, T3969 *Lycopodium casuarinoides*, T3970 *Lycopodium cernuum*, T3971 *Lycopodium complanatum*, T3973 *Lycopodium japonicum* [Syn. *Lycopodium clavatum*], T4575 *Pachysandra terminalis*, T4975 *Piptanthus nanus*, T5100 *Polygonum chinense*, T5797 *Schisandra propinqua*, T5798 *Schisandra propinqua* var. *intermedia*, T6069 *Speranskia tuberculata*, T6773 *Viscum articulatum*, T6774 *Viscum articulatum*.
- soothe sinews and quicken network vessels** T0281 *Alangium chinense*, T0285 *Alangium platanifolium*, T0569 *Aralia cordata*, T0574 *Aralia fargesii*, T1342 *Chaenomeles lagenaria* [Syn. *Chaenomeles speciosa*], T1922 *Cyanotis vaga*, T2211 *Dioscorea tenuipes*, T2459 *Erythrina arborescens*, T2478 *Erythrina variegata* [Syn. *Erythrina indica*], T2540 *Euonymus fortunei*, T2727 *Ficus simplicissima*, T3614 *Kadsura heteroclita* [Syn. *Uvaria heteroclita*], T3653 *Lactarius piperatus* [Syn. *Agaricus piperatus*], T3657 *Lactarius vellereus*, T4147 *Medicago falcata*, T4239 *Millettia nitida* var. *hirsutissima*, T5279 *Psychotria serpens*, T5298 *Pteris vittata*, T5638 *Sabia swinhoei*, T5860 *Selaginella davidii*, T6422 *Thelephora vialis*, T6468 *Tinospora sinensis*, T6830 *Woodfordia fruticosa*.
- soothe sinews and relieve pain** T2273 *Drynaria fortunei*, T5252 *Pseudodrynaria coronans*.
- soothe stagnation and move qi** T1146 *Camellia oleifera*, T1492 *Citrus limon*, T1496 *Citrus limonia*.
- soothe wind and brighten eyes** T2409 *Equisetum palustre*.
- soothe wind and drain heat** T6024 *Solidago virgaurea* var. *leiocarpa* [Syn. *Solidago decurrens*].
- soothe wind and rectify qi** T1533 *Clausena dentata*, T1534 *Clausena dunniana*.
- soothe wind and resolve exterior** T2510 *Eucalyptus globulus*, T2517 *Eucalyptus robusta*.
- stanch bleeding** T0156 *Actinidia arguta*, T0170 *Adhatoda vasica*, T0215 *Agave americana*, T0229 *Ageratum conyzoides*, T0324 *Allium victorialis*, T0328 *Alnus japonica*, T0371 *Alstonia mairei*, T0542 *Apis cerana*, T0544 *Apium graveolens*, T0830 *Auricularia auricula*, T0831 *Auricularia delicata*, T0843 *Babylonia lutosa*, T0881 *Bauhinia variegata*, T0973 *Bombax malabaricum* [Syn. *Gossampinus malabarica*], T0976 *Bombyx mori*, T0977 *Bombyx mori*, T0993 *Boschniakia rossica*, T1033 *Broussonetia papyrifera*, T1044 *Bryum argenteum*, T1087 *Buxus bodinieri*, T1171 *Canis familiaris*, T1174 *Cannabis sativa*, T1210 *Carpesium abrotanoides*, T1254 *Castanea mollissima*, T1336 *Ceriops tagal* [Syn. *Rhizophora tagal*], T1452 *Cissampelos pareira*, T1453 *Cissampelos pareira* var. *hirsute*, T1592 *Cocos nucifera*, T1656 *Conyza bonariensis* [Syn. *Erigeron bonariensis*; *Erigeron linifolius*; *Erigeron crispus*], T1682 *Cordyceps ophioglossoides*, T1866 *Cryptolepis sinensis*, T1969 *Cynoglossum officinale*, T1982 *Cyprinus carpio*, T1994 *Daemonorops draco*, T2157 *Dichotomanthes tristaniae* var. *carpa*, T2253 *Dracaena cochinchinensis*, T2327 *Elaeagnus angustifolia*, T2407 *Equisetum arvense*, T2420 *Ericerus pela*, T2426 *Erigeron sumatrensis*, T2567 *Eupatorium odoratum*, T2659 *Fagopyrum esculentum*, T2734 *Fissistigma glaucescens* [Syn. *Melodorum glaucescens*], T2825 *Galeobdolon chinense* [Syn. *Lamium chinense*], T2841 *Gallus gallus domesticus*, T2857 *Garcinia hanburyi*, T2882 *Gardenia jasminoides* [Syn. *Gardenia florida*], T3054 *Gossypium barbadense*, T3055 *Gossypium herbaceum*, T3058 *Gossypium hirsutum* [Syn. *Gossypium mexicanum*], T3088 *Gynura segetum* [Syn. *Gynura japonica*], T3285 *Hovenia dulcis*, T3294 *Huperzia selago* [Syn. *Lycopodium selago*], T3295 *Huperzia serrata* [Syn. *Lycopodium serratum*], T3324 *Hymenophyllum barbatum*, T3528 *Isodon ternifolia*, T3529 *Isodon ternifolius*, T3560 *Jatropha curcas*, T3701 *Lasiosphaera fenlii*, T3764 *Lepisorus thunbergianus*, T3765 *Lepisorus ussuriensis*, T3769 *Lespedeza bicolor*, T3851 *Lindera glauca*, T3866 *Liquidambar formosana* [Syn.

- Liquidambar taiwaniana*, T3887 *Litsea glutinosa*, T3961 *Lycoperdon pyriforme*, T3989 *Lygodium flexuosum* [Syn. *Lygodium pinnatifidum*; *Ophioglossum flexuosum*], T4080 *Mallotus apelta*, T4101 *Mangifera indica*, T4121 *Marsilea quadrifolia*, T4126 *Matteuccia orientalis*, T4127 *Matteuccia struthiopteris*, T4178 *Melodinus hemsleyanus*, T4343 *Myrica esculent*, T4401 *Nelumbo nucifera*, T4494 *Onopordum acanthium*, T4502 *Onychium japonicum* [Syn. *Tricomanes japonicum*], T4656 *Parmelia saxatilis*, T4705 *Peperomia pellucida*, T4787 *Phellinus igniarius*, T4978 *Pisolithus tinctorius* [Syn. *Lycoperdon capitatum*; *Scleroderma tinctorium*], T5043 *Podocarpus macrophyllus*, T5045 *Podocarpus macrophyllus* var. *maki*, T5099 *Polygonum bistorta*, T5105 *Polygonum hydropiper* var. *flaccidum* [Syn. *Polygonum flaccidum*], T5109 *Polygonum nodosum*, T5138 *Poncirus trifoliata*, T5185 *Potentilla multifida*, T5228 *Prunus mume*, T5250 *Psammosilene tunicoides*, T5265 *Psidium guajava*, T5284 *Pteridium aquilinum* var. *latiusculum*, T5299 *Pteris wallichiana*, T5328 *Punica granatum*, T5332 *Punica granatum*, T5339 *Pycnopus sanguineus*, T5344 *Pyrola atropurpurea*, T5345 *Pyrola calliantha* [Syn. *Pyrola rotundifolia* ssp. *chinensis*], T5346 *Pyrola calliantha* var. *tibetana*, T5347 *Pyrola decorata*, T5349 *Pyrola incarnata*, T5350 *Pyrola japonica*, T5351 *Pyrola rotundifolia*, T5372 *Quercus dentata*, T5374 *Quercus infectoria*, T5389 *Rabdosia coetsa*, T5411 *Randia spinosa*, T5419 *Raphanus sativus*, T5497 *Rhodiola kirilowii*, T5524 *Rhododendron simsii*, T5552 *Robinia pseudoacacia*, T5563 *Rosa cymosa*, T5579 *Rubia cordifolia*, T5587 *Rubus alceaefolius*, T5592 *Rubus hirsutus*, T5594 *Rubus parkeri*, T5609 *Rumex hastatus*, T5687 *Salvia prionitis*, T5704 *Sambucus nigra*, T5707 *Sambucus williamsii*, T5746 *Sassafras tzumu*, T5804 *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*], T5833 *Scutellaria amoena*, T5834 *Scutellaria baicalensis*, T5839 *Scutellaria hypericifolia*, T5841 *Scutellaria likiangensis*, T5843 *Scutellaria rehderiana*, T5845 *Scutellaria viscidula*, T5850 *Sedum aizoon*, T5855 *Sedum kamtschaticum*, T5856 *Sedum lineare* [Syn. *Sedum obtuso-lineare*], T5862 *Selaginella involvens*, T5863 *Selaginella moellendorffii*, T5866 *Selaginella sanguinolenta*, T5867 *Selaginella sinensis*, T5870 *Selaginella uncinata*, T5883 *Senecio cannabinifolius*, T6026 *Sonchus asper* [Syn. *Sonchus oleraceus* var. *asper*], T6076 *Spinacia oleracea*, T6116 *Stenoloma chusanum*, T6491 *Trametes cinnabarina* [Syn. *Polyporus cinnabarinus*; *Boletus cinnabarinus*], T6494 *Trema dielsiana*, T6533 *Trillium kamtschaticum*, T6535 *Trillium tschonoskii*, T6728 *Veronica serpyllifolia*, T6745 *Vicia faba*, T6746 *Vicia faba*, T6747 *Vicia faba*, T6750 *Vicia sativa*, T6773 *Viscum articulatum*, T6774 *Viscum articulatum*.
- stanch bleeding and close sores** T2279 *Dryopteris championii*.
- stanch bleeding and disperse stasis** T2540 *Euonymus fortunei*, T3276 *Homo sapiens*.
- stanch bleeding and disperse swelling** T0374 *Alstonia scholaris*, T0378 *Alstonia yunnanensis*, T0661 *Artemisia anomala*, T1815 *Crotalaria assamica*, T4305 *Mosla dianthera*, T5614 *Rumex patientia*, T5840 *Scutellaria indica*.
- stanch bleeding and dissipate stasis** T1282 *Cedrus deodara*, T1928 *Cycas revoluta*, T1967 *Cynoglossum amabile*, T1986 *Cyrtomium fortunei*, T2435 *Eriocheir sinensis*, T3033 *Gnetum parvifolium* [Syn. *Gnetum indicum*], T3842 *Limonium gmelinii*, T4118 *Marsdenia oreophila*, T4402 *Nelumbo nucifera*, T4604 *Panax japonicus* var. *bipinnatifidus*, T4605 *Panax japonicus* var. *major*, T4607 *Panax pseudo-ginseng* var. *japonicus*, T4608 *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*], T5104 *Polygonum hydropiper*, T5172 *Portulaca grandiflora*, T5835 *Scutellaria barbata* [Syn. *Scutellaria rivularis*], T6471 *Toddalia asiatica* [Syn. *Toddalia aculeata*; *Paullinia asiatica*], T6482 *Toxicodendron succedaneum* [Syn. *Rhus succedanea*], T6705 *Verbascum thapsus*, T6764 *Vinegar*.
- stanch bleeding and engender flesh** T5288 *Pteris cretica* var. *nervosa* [Syn. *Pteris nervosa*], T5468 *Rheum emodi* [Syn. *Rheum australe*], T6874 *Zanthoxylum dimorphophyllum* var. *spinifolium*.
- stanch bleeding and joint bones** T4346 *Myrica nagi* [Syn. *Podocarpus nagi*].
- stanch bleeding and kill worms** T2866 *Garcinia morella*, T4026 *Macrothelypteris oligophlebia*, T5871 *Selenarctos thibetanus*; *Ursus arctos*.
- stanch bleeding and relieve pain** T0298 *Alectoria vivens*, T1120 *Callicarpa macrophylla*, T1747 *Corydalis thalictrifolia*, T5118 *Polygonum suffultum*, T6883 *Zanthoxylum myriacanthum*.
- stanch bleeding and settle pain** T0922 *Berchemia polyphylla* var. *leioclada*, T2008 *Dalbergia odorifera*, T2013 *Dalbergia sissoo*, T3460 *Iris halophila*, T3464 *Iris lactea* var. *chinensis* [Syn. *Iris pallasii* var. *chinensis*], T3776 *Lethariella zahlbruckneri*, T5301 *Pterocarpus indicus*, T6615 *Uncaria gambir*.
- stanch bleeding and transform phlegm** T1683 *Cordyceps sinensis*.
- strengthen bones** T2841 *Gallus gallus domesticus*.
- strengthen essence and enrich kidney** T0572 *Aralia elata*.
- strengthen heart** T0184 *Adonis amurensis*, T0533 *Antiaris toxicaria* [Syn. *Ambora toxicaria*], T1674 *Corchorus capsularis*, T6155 *Strophanthus divaricatus*, T6433 *Thevetia neriifolia* [Syn. *Thevetia peruviana*].
- strengthen heart and calm** T0190 *Adonis sutchuenensis*.
- strengthen heart and disinhibit urine** T1151 *Camellia sinensis* [Syn. *Thea sinensis*], T1991 *Cytisus scoparius* [Syn. *Spartium scoparium*], T2175 *Digitalis lanata*, T2177 *Digitalis purpurea*, T2452 *Erysimum cheiranthoides*, T4418 *Nerium indicum*, T5557 *Rohdea japonica* [Syn. *Orontium japonicum*].
- strengthen heart and lower blood pressure** T4682 *Pedicularis muscicola*.
- strengthen lumbus** T6727 *Veronica persica*.
- strengthen lumbus and knees** T0990 *Bos taurus domesticus*; *Bubalus bubalis*, T1411 *Cibotium barometz* [Syn. *Polypodium barometz*], T2347 *Embelia parviflora*, T4974 *Piper wallichii* [Syn. *Piper wallichii* var. *hupehense*], T5722 *Sapium japonicum*, T6831 *Woodwardia orientalis*.
- strengthen lumbus and legs** T3389 *Ilex cornuta*.
- strengthen sinews and bones** T0036 *Acanthopanax giraldii* [Syn. *Acanthopanax giraldii* var. *inermis*; *Eleutherococcus giraldii*], T0038 *Acanthopanax gracilistylus*, T0042 *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*], T0044 *Acanthopanax sessiliflorus*, T0073 *Achyranthes bidentata*, T0644 *Armillaria mellea*, T0645 *Armillariella mellea*, T0969 *Boerhavia diffusa*, T1337 *Cervus nippon*; *Cervus elaphus*, T1901 *Curculigo orchioides*, T1952 *Cynanchum auriculatum*, T1953 *Cynanchum bungei*, T1963 *Cynanchum wallichii*, T1964 *Cynanchum wilfordii* [Syn. *Cynoctonum wilfordii*], T2234 *Dipsacus asperoides*, T2235 *Dipsacus japonicus*, T2389 *Epimedium acuminatum*, T2390 *Epimedium brevicornum*, T2392 *Epimedium davidii*, T2394 *Epimedium*

- elongatum*, T2398 *Epimedium koreanum*, T2401 *Epimedium pubescens*, T2402 *Epimedium sagittatum*, T2404 *Epimedium sutchuenense*, T2406 *Epimedium wushanense*, T2530 *Eucommia ulmoides*, T2531 *Eucommia ulmoides*, T2736 *Fissistigma polyanthum*, T2737 *Flemingia philippinensis* [Syn. *Moghania philippinensis*], T3199 *Hemibarbus labeo*, T3925 *Loranthus parasiticus* [Syn. *Loranthus chinensis*; *Taxillus chinensis*], T4260 *Moghania philippinensis*, T4283 *Morinda officinalis*, T4536 *Orobanche coerulescens*, T4729 *Periploca sepium*, T4828 *Photinia serrulata*, T5344 *Pyrola atropurpurea*, T5345 *Pyrola calliantha* [Syn. *Pyrola rotundifolia* ssp. *chinensis*], T5346 *Pyrola calliantha* var. *tibetana*, T5347 *Pyrola decorata*, T5349 *Pyrola incarnata*, T5350 *Pyrola japonica*, T5351 *Pyrola rotundifolia*, T5924 *Sesamum indicum*, T6670 *Vaccinium bracteatum*, T6689 *Ventilago leiocarpa*, T6771 *Viscum album*, T6772 *Viscum angulatum*, T6775 *Viscum coloratum*, T6798 *Vitis vinifera*.
- strengthen sinews and lumbus** T2386 *Epigynum auritum*.
- strengthen spleen** T1498 *Citrus medica*, T1520 *Citrus wilsonii*.
- supplement blood** T2347 *Embelia parviflora*, T4178 *Melodinus hemsleyanus*, T4438 *Nostoc flagelliforme*, T6066 *Spatholobus suberectus*.
- supplement blood and enrich yin** T5446 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*].
- supplement blood and quicken blood** T0474 *Angelica acutiloba* [Syn. *Ligusticum acutilobum*], T4238 *Millettia nitida*, T4239 *Millettia nitida* var. *hirsutissima*, T4308 *Mucuna birdwoodiana*.
- supplement blood and soothe sinews** T4311 *Mucuna sempervirens*.
- supplement blood and stanch bleeding** T4234 *Millettia dielsiana*.
- supplement brain and dispel wind** T0988 *Bos taurus domesticus*; *Bubalus bubalis*.
- supplement brain and marrow** T5924 *Sesamum indicum*.
- supplement center and boost qi** T3011 *Glycyrrhiza aspera*, T3013 *Glycyrrhiza glabra*, T3015 *Glycyrrhiza inflata*, T3016 *Glycyrrhiza kansuensis*, T3021 *Glycyrrhiza squamulosa*, T3022 *Glycyrrhiza uralensis*, T3023 *Glycyrrhiza yunnanensis*, T4548 *Oryza sativa* var. *glutinosa*, T4618 *Panicum miliaceum*, T4786 *Phasianus colchicus*, T6916 *Ziziphus jujuba*, T6917 *Ziziphus jujuba* var. *inermis*.
- supplement center and harmonize blood** T3447 *Ipomoea batatas* [Syn. *Convolvulus batatas*].
- supplement essence and boost qi** T4206 *Metaplexis japonica*.
- supplement essence and replenish marrow** T2837 *Gallus gallus domesticus*.
- supplement fire and reinforce yang** T0083 *Aconitum carmichaeli*, T0085 *Aconitum carmichaeli* cv, T1439 *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*].
- supplement kidney** T0322 *Allium tuberosum*, T2803 *Frullania tamarisci* ssp. *moniliata* [Syn. *Frullania moniliata*], T4057 *Mahonia bealei*, T4068 *Mahonia japonica*, T6150 *Streptopelia orientalis*.
- supplement kidney and boost essence** T0990 *Bos taurus domesticus*; *Bubalus bubalis*, T2753 *Formica fusca*, T3568 *Juglans regia*, T4207 *Metaplexis japonica*.
- supplement kidney and disinhibit water** T6527 *Trigonella caerulea*.
- supplement kidney and fortify brain** T4432 *Nigella glandulifera*.
- supplement kidney and invigorate yang** T0977 *Bombyx mori*, T0993 *Boschniakia rossica*, T1337 *Cervus nippon*; *Cervus elaphus*, T1455 *Cistanche deserticola*, T1456 *Cistanche salsa*, T1900 *Curculigo capitulata* [Syn. *Leucojum capitulata*], T1901 *Curculigo orchoides*, T1972 *Cynomorium songaricum*, T2389 *Epimedium acuminatum*, T2390 *Epimedium brevicornum*, T2391 *Epimedium brevicornum*, T2392 *Epimedium davidii*, T2394 *Epimedium elongatum*, T2398 *Epimedium koreanum*, T2401 *Epimedium pubescens*, T2402 *Epimedium sagittatum*, T2404 *Epimedium sutchuenense*, T2406 *Epimedium wushanense*, T4283 *Morinda officinalis*, T4536 *Orobanche coerulescens*, T4696 *Penaea orientalis*, T4974 *Piper wallichii* [Syn. *Piper wallichii* var. *hupehense*], T5270 *Psoralea corylifolia*, T6257 *Syngnathus acus*.
- supplement kidney and quiet spirit** T0041 *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*].
- supplement kidney and rough essence** T2190 *Dioscorea batatas* [Syn. *Dioscorea opposita*], T2202 *Dioscorea japonica*, T3770 *Lespedeza cuneata*, T6754 *Vigna unguiculata*.
- supplement kidney and secure essence** T0793 *Astragalus complanatus*, T5067 *Polyalthia nemoralis*.
- supplement kidney and strengthen bones** T2052 *Davallia divaricata* [Syn. *Davallia formosana*; *Davallia orientalis*], T2053 *Davallia mariesii*, T2273 *Drynaria fortunei*, T5252 *Pseudodrynaria coronans*.
- supplement kidney and strengthen lumbus** T0515 *Anredera cordifolia* [Syn. *Baussingaultia cordifolia*; *Baussingaultia gracilis* f. *pseudobaselloides*; *Baussingaultia gracilis* var. *pseudobaselloides*], T1963 *Cynanchum wallichii*, T4642 *Parameria laevigata*.
- supplement kidney and strengthen sinews** T1254 *Castanea mollissima*.
- supplement liver** T0986 *Bos taurus domesticus*; *Bubalus bubalis*, T6919 *Ziziphus jujuba* var. *spinosa*.
- supplement liver and boost kidney** T4656 *Parmelia saxatilis*, T5593 *Rubus idaeus*, T5925 *Sesamum indicum* [Syn. *Sesamum orientale*].
- supplement liver and kidney** T0038 *Acanthopanax gracilistylus*, T0042 *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*], T0044 *Acanthopanax sessiliflorus*, T0073 *Achyranthes bidentata*, T0323 *Allium tuberosum*, T1698 *Cornus officinalis* [Syn. *Macrocarpium officinale*], T1911 *Cuscuta australis*, T1912 *Cuscuta chinensis*, T1913 *Cuscuta japonica*, T1964 *Cynanchum wilfordii* [Syn. *Cynoctonum wilfordii*], T2234 *Dipsacus asperoides*, T2235 *Dipsacus japonicus*, T2323 *Eclipta prostrata* [Syn. *Eclipta alba*], T2530 *Eucommia ulmoides*, T2531 *Eucommia ulmoides*, T2805 *Fugu ocellatus*, T3828 *Ligustrum lucidum*, T4279 *Morina chinensis*, T5927 *Sesamum indicum* [Syn. *Sesamum orientale*], T6670 *Vaccinium bracteatum*, T6775 *Viscum coloratum*, T6777 *Viscum multinerve*, T6831 *Woodwardia orientalis*.
- supplement lung and boost kidney** T1680 *Cordyceps militaris*, T1681 *Cordyceps militaris* cv, T1683 *Cordyceps sinensis*, T1952 *Cynanchum auriculatum*, T1953 *Cynanchum bungei*, T5409 *Rana temporaria chensinensis*; *Rana amurensis*, T5501 *Rhodiola yunnanensis*.
- supplement lung and boost spleen** T1191 *Caragana sinica*.
- supplement lung and relieve cough** T4276 *Monotropa uniflora*, T6267 *Syzygium jambos*.
- supplement original qi greatly** T4599 *Panax ginseng* [Syn. *Panax schinseng*], T4600 *Panax ginseng* [Syn. *Panax schinseng*], T4682 *Pedicularis muscicola*.
- supplement qi** T3279 *Homo sapiens*.

- supplement qi and blood** T0983 *Bos taurus domesticus*, T3743 *Lentinus lepeideus*, T5179 *Potentilla anserina*, T5872 *Selenarctos thibetanus*; *Ursus arctos*, T6689 *Ventilago leiocarpa*, T6798 *Vitis vinifera*, T6803 *Volvariella volvacea*.
- supplement qi and clear lung** T5499 *Rhodiola sacra*.
- supplement qi and disinhibit water** T3129 *Hedysarum polybotrys*, T3199 *Hemibarbus labeo*.
- supplement qi and fortify spleen** T4545 *Oryza sativa*.
- supplement qi and nourish blood** T0830 *Auricularia auricula*, T0831 *Auricularia delicata*, T1598 *Codonopsis convolvulacea*.
- supplement qi and nourish yin** T4610 *Panax quinquefolium*.
- supplement qi and quiet spirit** T0572 *Aralia elata*.
- supplement qi and reinforce yang** T4516 *Oplopanax elatus*.
- supplement spleen and boost kidney** T3992 *Lyonia ovalifolia* var. *elliptica*, T5236 *Prunus pseudocerasus*.
- supplement spleen and boost lung** T4599 *Panax ginseng* [Syn. *Panax schinseng*], T4600 *Panax ginseng* [Syn. *Panax schinseng*].
- supplement spleen and boost qi** T0529 *Anthriscus sylvestris*, T5091 *Polygonatum cyrtoneura* [Syn. *Polygonatum multiflorum*], T5092 *Polygonatum kingianum*, T5095 *Polygonatum sibiricum*.
- supplement spleen and check diarrhea** T4400 *Nelumbo nucifera*.
- supplement spleen and engender liquid** T6055 *Sorbus tianschanica*.
- supplement spleen and fortify stomach** T4505 *Ophiocephalus argus*.
- supplement spleen and warm stomach** T1170 *Canis familiaris*.
- supplement stomach and spleen** T0513 *Annona squamosa*, T0540 *Apis cerana*, T2195 *Dioscorea deltoidea*.
- supplement vacuity** T1181 *Capra hircus*; *Ovis aries*, T1182 *Capra hircus*; *Ovis aries*, T3085 *Gynostemma pentaphyllum*, T4275 *Monotropa hypopitys*, T4607 *Panax pseudo-ginseng* var. *japonicus*, T5407 *Rana nigromaculata*; *Rana plancyi*.
- supplement vacuity and boost essence** T3957 *Lycium chinense*.
- supplement vacuity and boost kidney** T2955 *Geum japonicum*, T2956 *Geum japonicum*.
- supplement vacuity and fortify spleen** T5075 *Polygala fallax* [Syn. *Polygala aureocauda*].
- supplement vacuity and stanch bleeding** T0923 *Bergenia crassifolia*.
- supplement vacuity detriment** T0989 *Bos taurus domesticus*; *Bubalus bubalis*.
- supplement yin** T3389 *Ilex cornuta*.
- suppress cough** T0216 *Agave americana* var. *marginata* [Syn. *Agave americana* var. *variegata*], T0301 *Aleuritopteris argentea*, T0598 *Ardisia japonica*, T0752 *Asparagus officinalis*, T0784 *Astilbe chinensis*, T1087 *Buxus bodinieri*, T2036 *Datura innoxia*, T2041 *Datura metel*, T2046 *Datura stramonium*, T2157 *Dichotomanthes tristaniaecarpa*, T2268 *Drosera rotundifolia*, T2902 *Gentiana algida*, T4195 *Menyanthes trifoliata*, T4275 *Monotropa hypopitys*, T4516 *Oplopanax elatus*, T4625 *Papaver commutatum* [Syn. *Papaver rhoeas*], T4635 *Papaver somniferum*, T5721 *Sapindus mukorossi*, T6282 *Tagetes patula*, T6537 *Tripterospermum japonicum*, T6538 *Tripterospermum taiwanense*, T6729 *Veronica spuria*, T6766 *Viola tricolor*.
- suppress cough and calm asthma** T2037 *Datura innoxia*, T2038 *Datura innoxia*, T2042 *Datura metel*, T2044 *Datura metel*, T3040 *Gomphrena globosa*, T5989 *Solanum aculeatissimum*, T6014 *Solanum surattense*.
- suppress cough and dispel phlegm** T1050 *Bufo bufo gargarizans*; *Bufo melanostictus*, T1927 *Cycas revoluta*, T2599 *Euphorbia lunulata*, T3394 *Ilex paraguariensis*.
- suppress cough and dispel wind** T1555 *Clerodendron fortunatum*, T6454 *Thymus vulgaris*.
- suppress cough and interrupt malaria** T3323 *Hymenodictyon excelsum*.
- suppress cough and relieve pain** T3332 *Hypecoum erectum*.
- suppress cough and settle asthma** T6075 *Spilanthes acmella*.
- suppress cough and transform phlegm** T3026 *Gnaphalium affine* [Syn. *Gnaphalium multiceps*], T4247 *Millingtonia hortensis*.
- terminate lactation** T3282 *Hordeum vulgare*.
- track wind** T2979 *Gleditsia sinensis* [Syn. *Gleditsia horrida*].
- track wind and dissipate cold** T3657 *Lactarius vellereus*.
- transform accumulation** T0950 *Blatta orientalis*.
- transform concretion and disperse accumulation** T2695 *Ferula assafoetida*.
- transform damp** T2246 *Dolichos lablab*, T2554 *Eupatorium cannabinum*, T3242 *Hibiscus rosa-sinensis*, T4209 *Michelia alba*.
- transform damp and check discharge** T0999 *Bougainvillea glabra*.
- transform damp and check dysentery** T5149 *Populus canadensis*, T5150 *Populus cathayana*.
- transform damp and disinhibit urine** T2341 *Elsholtzia ciliata*.
- transform damp and disinhibit water** T5103 *Polygonum hydropiper*.
- transform damp and disperse stagnation** T1784 *Cratoxylum cochinchinense*, T1785 *Cratoxylum prunifolium*.
- transform damp and disperse swelling** T4966 *Piper sarmentosum*.
- transform damp and harmonize center** T2563 *Eupatorium japonicum*, T4304 *Mosla chinensis* [Syn. *Orthodon chinensis*], T4470 *Ocimum basilicum*, T5389 *Rabdosia coetsa*.
- transform damp and move qi** T0144 *Acorus gramineus*, T0146 *Acorus tatarinowii*, T0416 *Amomum kravanh* [Syn. *Amomum cardamomum*].
- transform damp and repel foulness** T6561 *Tulipa gesneriana*.
- transform damp aromaticly** T5059 *Pogostemon cablin* [Syn. *Mentha cablin*].
- transform phlegm** T0216 *Agave americana* var. *marginata* [Syn. *Agave americana* var. *variegata*], T1152 *Camellia sinensis* [Syn. *Thea sinensis*], T1210 *Carpesium abrotanoides*, T1472 *Citrus chachiensis*, T1478 *Citrus grandis*, T1488 *Citrus junos*, T1498 *Citrus medica*, T1517 *Citrus tankan*, T1520 *Citrus wilsonii*, T1526 *Cladonia rangiferina*, T2048 *Daucus carota*, T2426 *Erigeron sumatrensis*, T2790 *Fritillaria pallidiflora*, T2800 *Fritillaria walujewii*, T2994 *Gloiopeltis furcata*, T3878 *Lithocarpus polystachyus*, T4717 *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*], T4719 *Perilla frutescens* var. *arguta*, T4722 *Perilla frutescens* var. *crispa*, T5419 *Raphanus sativus*, T6729 *Veronica spuria*.
- transform phlegm and calm asthma** T1154 *Camellia sinensis* [Syn. *Thea sinensis*], T2565 *Eupatorium lindleyanum*, T4855 *Physeter catodon*, T5961 *Sinocalamus oldhami*.
- transform phlegm and disinhibit damp** T0048 *Acanthus ilicifolius*, T4549 *Osbeckia chinensis*.
- transform phlegm and disperse accumulation** T2365 *Enteromorpha clathrata*.
- transform phlegm and dissipate binds** T0617 *Arisaema amurense*, T0618

- Arisaema consanguineum*, T0620 *Arisaema heterophyllum*, T0975 *Bombyx mori*, T2298 *Dysosma difformis*, T2302 *Dysosma pleiantha* [Syn. *Podophyllum pleianthum*], T2304 *Dysosma veitchii*, T2305 *Dysosma versipellis* [Syn. *Podophyllum versipelle*], T4903 *Pinellia pedatisecta*.
- transform phlegm and expel rheum** T5958 *Sinapis alba* [Syn. *Brassica alba*; *Brassica hirta*].
- transform phlegm and interrupt malaria** T6252 *Symplocos chinensis*.
- transform phlegm and open orifices** T0142 *Acorus calamus*, T0144 *Acorus gramineus*, T0146 *Acorus tatarinowii*, T0463 *Anemone altaica*.
- transform phlegm and precipitate qi** T5215 *Prunus amygdalus*.
- transform phlegm and quiet spirit** T6056 *Sorghum vulgare*.
- transform phlegm and relieve cough** T2119 *Derris eriocarpa*, T2752 *Fordia cauliflora*, T3006 *Glycosmis citrifolia*, T3520 *Isodon rosthornii*, T4231 *Milingtonia hortensis*, T4274 *Monostroma nitidum*, T5939 *Shiraita bambusicola*.
- transform phlegm and resolve toxin** T4840 *Phyllanthus niruri*.
- transform phlegm and soften hardness** T5171 *Porphyra tenera*, T6599 *Ulva lactuca*, T6600 *Ulva pertusa*.
- transform rheum** T4787 *Phellinus igniarius*.
- transform stagnation** T3674 *Laggera alata*, T4102 *Mangifera indica*.
- transform stagnation and relieve pain** T1232 *Cassia fistula*, T1836 *Crotalaria tetragona*, T4948 *Piper hancei*.
- transform stasis T2748 *Fomes fomentarius* [Syn. *Pyropolyporus fomentarius*; *Boletus fomentarius*; *Polyporus fomentarius*].
- transform stasis and disperse accumulation T0945 *Bischofia javanica* [Syn. *Bischofia trifoliata*].
- transform stasis and disperse concretion** T2132 *Desmodium pulchellum* [Syn. *Phyllodium pulchellum*], T4134 *Maytenus hookeri*.
- transform stasis and disperse swelling** T1287 *Celastrus hypoleucus*.
- transform stasis and dissipate binds** T1160 *Campsis grandiflora*, T2541 *Euonymus grandiflorus*, T4704 *Peperomia duclouxii*.
- transform stasis and move water** T6154 *Strobilanthes japonicus* [Syn. *Championella japonica*].
- transform stasis and relieve pain** T0853 *Baeckea frutescens*, T2136 *Desmos cochinchinensis* [Syn. *Desmos chinensis*], T5672 *Salvia flava*.
- transform stasis and stanch bleeding** T0776 *Asplenium prolongatum*, T2161 *Dicranopteris pedata* [Syn. *Polypodium pedatum*; *Dicranopteris dichotoma*], T2602 *Euphorbia nematocypa*, T3981 *Lycopus lucidus*, T4606 *Panax pseudo-ginseng*, T5566 *Rosa henryi*, T5865 *Selaginella pulvinata*, T5869 *Selaginella tamariscina*, T6551 *Trogopteris xanthipes*; *Pteromys volans*.
- treat lichen** T3630 *Kleinhovia hospita*.
- upbear yang** T4398 *Nelumbo nucifera*.
- upbear yang and check diarrhea** T5312 *Pueraria edulis*, T5313 *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*], T5316 *Pueraria omeiensis*, T5318 *Pueraria phaseoloides*, T5320 *Pueraria thomsonii*.
- upbear yang and effuse exterior** T1991 *Cytisus scoparius* [Syn. *Spartium scoparium*].
- upbear yang and raise fall** T1419 *Cimicifuga dahurica*, T1420 *Cimicifuga foetida*, T1421 *Cimicifuga heracleifolia*, T1423 *Cimicifuga nanchuanensis*, T4601 *Panax ginseng* [Syn. *Panax schinseng*].
- upbear yang and resolve exterior** T5317 *Pueraria peduncularis*.
- warm center** T0322 *Allium tuberosum*, T1168 *Canavalia ensiformis*, T1169 *Canavalia gladiata*, T2837 *Gallus gallus domesticus*, T3758 *Lepidium sativum*, T6261 *Syringa pinnatifolia*, T6860 *Zanthoxylum ailanthoides*.
- warm center and boost qi** T6147 *Stizolobium capitatum*.
- warm center and check diarrhea** T0957 *Blumea balsamifera*, T1258 *Casuarina equisetifolia*.
- warm center and check vomiting** T0416 *Amomum kravanh* [Syn. *Amomum cardamomum*].
- warm center and dissipate cold** T0099 *Aconitum gymnantrum*, T0491 *Angelica polymorpha*, T1008 *Brassica juncea*, T1186 *Capsicum annum*, T1187 *Capsicum frutescens*, T2643 *Evodia meliifolia*, T3850 *Lindera glauca*, T4944 *Piper cubeba*, T4953 *Piper longum*, T4957 *Piper nigrum*, T4966 *Piper sarmentosum*, T6858 *Zanthoxylum acanthopodium*, T6909 *Zingiber officinale*.
- warm center and downbear counterflow** T0554 *Aquilaria agallocha*, T0555 *Aquilaria sinensis*, T6263 *Syzygium aromaticum* [Syn. *Eugenia caryophyllata*].
- warm center and fortify stomach** T4964 *Piper retrofractum*.
- warm center and move qi** T3620 *Kaempferia galanga*, T3852 *Lindera megaphylla*, T3853 *Lindera obtusiloba*, T3880 *Lithospermum arvense*, T4223 *Micromelum integerrimum*, T4351 *Myristica fragrans*, T4954 *Piper longum*.
- warm center and move stagnation** T0318 *Allium sativum*.
- warm center and normalize qi** T4018 *Machilus thunbergii*.
- warm center and precipitate qi** T1937 *Cydonia oblonga*.
- warm center and rectify qi** T1435 *Cinnamomum camphora*.
- warm center and relieve pain** T1443 *Cinnamomum parthenoxylum* [Syn. *Cinnamomum porrectum*], T1812 *Crossostephium chinense*, T1939 *Cymbopogon citratus*, T2087 *Delphinium tatsienense*, T3885 *Litsea cubeba*, T6229 *Swertia patens*, T6869 *Zanthoxylum bungeanum*, T6892 *Zanthoxylum schinifolium*.
- warm center and supplement blood** T5042 *Podocarpus macrophyllus*, T5044 *Podocarpus macrophyllus* var. *maki*.
- warm center and supplement vacuity** T4859 *Physochlaina physaloides*.
- warm center and transform damp** T0418 *Amomum muricarpum*, T4048 *Magnolia rostrata*.
- warm channels** T0077 *Aconitum balfourii*, T0084 *Aconitum carmichaeli*, T0105 *Aconitum karakolicum*.
- warm channels and dissipate cold** T0108 *Aconitum kusnezoffii*.
- warm channels and free network vessels** T1438 *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*], T1444 *Cinnamomum tamala*.
- warm channels and relieve pain** T0164 *Actinidia polygama*, T5541 *Rhus verniciflua* [Syn. *Toxicadendron verniciflum*].
- warm kidney** T0360 *Alpinia oxyphylla*, T4944 *Piper cubeba*, T4982 *Pistacia vera*, T6261 *Syringa pinnatifolia*, T6528 *Trigonella foenum-graecum*.
- warm kidney and disperse cold** T2744 *Foeniculum vulgare*, T3854 *Lindera strychnifolia* [Syn. *Lindera aggregata*].
- warm kidney and harmonize center** T2745 *Foeniculum vulgare*.
- warm kidney and invigorate yang** T1170 *Canis familiaris*, T1582 *Cnidium monnieri*, T5753 *Saussurea gnaphaloides*, T5755 *Saussurea involucrata*, T5757 *Saussurea laniceps*, T5759 *Saussurea medusa*, T6263 *Syzygium aromaticum* [Syn. *Eugenia caryophyllata*].

- warm liver and kidney** T1441 *Cinnamomum japonicum*.
- warm lung** T0752 *Asparagus officinalis*.
- warm lung and settle asthma** T3568 *Juglans regia*.
- warm lung and transform rheum** T0724 *Asarum caulescens*, T0727 *Asarum fukienense*, T0728 *Asarum heterotropoides* var. *mandshuricum*, T0731 *Asarum sieboldii*, T0732 *Asarum sieboldii* var. *seoulensis*, T4550 *Osmanthus fragrans*, T6909 *Zingiber officinale*.
- warm menstruation and quicken blood** T1434 *Cinnamomum bejolghota* [Syn. *Cinnamomum obtusifolium*; *Laurus bejolghota*].
- warm menstruation and stanch bleeding** T0664 *Artemisia argyi*, T0681 *Artemisia lavandulaefolia*, T0685 *Artemisia mongolica*, T0689 *Artemisia princeps*, T0691 *Artemisia rubripes*, T0706 *Artemisia vulgaris*.
- warm spleen** T0360 *Alpinia oxyphylla*, T4982 *Pistacia vera*.
- warm spleen and check diarrhea** T5270 *Psoralea corylifolia*.
- warm spleen and kidney** T0472 *Anethum graveolens*.
- warm spleen and stomach** T1441 *Cinnamomum japonicum*.
- warm stomach** T0353 *Alpinia blepharocalyx*, T0356 *Alpinia galanga*, T0359 *Alpinia officinarum*, T3120 *Hedychium spicatum*, T3250 *Hierochloe odorata*.
- warm stomach and center** T3856 *Lindera umbellata* [Syn. *Lindera erythrocarpa*].
- warm stomach and check vomiting** T0358 *Alpinia katsumadai*.
- warm stomach and dissipate cold** T0354 *Alpinia chinensis*.
- warm stomach and eliminate accumulation** T0847 *Baccharis indica* [Syn. *Pluchea indica*].
- warm stomach and harmonize center** T1436 *Cinnamomum camphora*.
- warm stomach and regulate center** T2343 *Elsholtzia splendens*.
- warm stomach and relieve pain** T5504 *Rhododendron capitatum*.
- warm yang** T6423 *Theobroma cacao*.
- warm yang and disinhibit water** T1649 *Convallaria keiskei* [Syn. *Convallaria majalis*].
- warm yang and dissipate cold** T3409 *Illicium verum*.

# TCM Plant Traditional Indication Index

This index lists all 2528 normalized TCM traditional indications terms in English appeared in the encyclopedia in alphabetical order and the related plant code number (from T0001 to T6926) and Latin name follow the bold term immediately.

**abdominal distention** T0819 *Atractylodes chinensis*, T0821 *Atractylodes japonica*, T0823 *Atractylodes lancea*, T1493 *Citrus limon*, T1497 *Citrus limonia*, T2115 *Dermatocarpon minutum*, T2529 *Euchresta strigillosa*, T3289 *Humulus lupulus*, T3381 *Hyptis suaveolens*, T3758 *Lepidium sativum*, T4184 *Mentha haplocalyx* [Syn. *Mentha canadaensis*; *Mentha arvensis* var. *haplocalyx*; *Mentha arvensis*], T4190 *Mentha spicata*, T4852 *Physalis peruviana*, T6339 *Tephrosia purpurea*.

**abdominal distention and constipation** T4034 *Magnolia biloba*, T4045 *Magnolia officinalis*, T5223 *Prunus humilis* [Syn. *Cerasus humilis*], T5224 *Prunus japonica* [Syn. *Cerasus japonica*], T5225 *Prunus japonica* var. *nakaii*, T5457 *Rhamnus davurica*.

**abdominal distention and diarrhea** T3282 *Hordeum vulgare*, T4983 *Pisum sativum*.

**abdominal distention and emaciation** T4887 *Picrorhiza kurrooa*, T4888 *Picrorhiza scrophulariiflora*.

**abdominal distention and pain** T0357 *Alpinia japonica*, T0942 *Biebersteinia heterostemon*, T3886 *Litsea euosma*.

**abdominal distention and torpid intake** T2998 *Glycine max*.

**abdominal distention with edema** T5409 *Rana temporaria chensinensis*; *Rana amurensis*, T5966 *Siphonostegia chinensis*.

**abdominal fullness with glomus and congestion** T1546 *Clematis tangutica*.

**abdominal lump glomus** T0060 *Achillea alpina* [Syn. *Achillea sibirica*], T4662 *Parthenocissus tricuspidata*.

**abdominal pain** T0060 *Achillea alpina* [Syn. *Achillea sibirica*], T0197 *Aegle marmelos*, T0302 *Alhagi pseudalhagi*, T0631 *Aristolochia kaempferi*, T0963 *Boehmeria siamensis*, T1100 *Caesalpinia crista*, T1147 *Camellia oleifera*, T1258 *Casuarina equisetifolia*, T1357 *Chelidonium majus*, T1359 *Chenopodium album*, T1434 *Cinnamomum bejolghota* [Syn. *Cinnamomum obtusifolium*; *Laurus bejolghota*], T1535 *Clausena excavata*, T1537 *Clausena lansium*, T1555

*Clerodendron fortunatum*, T1586 *Cocculus laurifolius*, T1590 *Cocculus trilobus* [Syn. *Cocculus sarmentosus*], T1673 *Corchorus capsularis*, T1836 *Crotalaria tetragona*, T1931 *Cyclea barbata*, T1943 *Cymbopogon goeringii*, T2343 *Elsholtzia splendens*, T2444 *Ervatamia heyneana*, T2445 *Ervatamia officinalis*, T2529 *Euchresta strigillosa*, T2745 *Foeniculum vulgare*, T3120 *Hedychium spicatum*, T3221 *Heracleum rapula*, T3241 *Hibiscus mutabilis*, T3468 *Iris sanguinea*, T3614 *Kadsura heteroclita* [Syn. *Uvaria heteroclita*], T3619 *Kadsura peltigera* [Syn. *Kadsura longipedunculata*], T4348 *Myrica rubra*, T4544 *Oryza sativa*, T4580 *Paeonia albiflora* [Syn. *Paeonia lactiflora*], T4625 *Papaver commutatum* [Syn. *Papaver rhoeas*], T4636 *Papaver somniferum*, T4789 *Phellodendron amurense*, T4790 *Phellodendron amurense* var. *wilsonii*, T4791 *Phellodendron chinense*, T4792 *Phellodendron chinense* var. *glabriusculum*, T5268 *Psidium guajava*, T5460 *Rhamnus frangula* [Syn. *Frangula alnus*], T5604 *Rudbeckia laciniata*, T5865 *Selaginella pulvinata*, T5869 *Selaginella tamariscina*, T6049 *Sophora viciifolia*, T6787 *Vitex negundo*.

**abdominal pain and clouded spirit** T1052 *Bufo bufo gargarizans*; *Bufo melanostictus*.

**abdominal pain and cramp** T5363 *Pyrus calleryana*.

**abdominal pain and diarrhea** T0354 *Alpinia chinensis*, T0635 *Aristolochia moupinensis*, T1546 *Clematis tangutica*, T1745 *Corydalis suaveolens* [Syn. *Corydalis shearerii*], T1747 *Corydalis thalictrifolia*, T1775 *Crataegus pinnatifida*, T1778 *Crataegus pinnatifida* var. *major*, T1932 *Cyclea racemosa*, T2517 *Eucalyptus robusta*, T3554 *Jasminum grandiflorum*, T4154 *Melaleuca leucadendra*, T4261 *Mollugo pentaphylla*, T4718 *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*], T4721 *Perilla frutescens* var. *arguta*, T4957 *Piper nigrum*, T5469 *Rheum hotaoense*, T5727 *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*], T6119 *Stephania cepharantha*, T6402 *Thalictrum omeiense*, T6410 *Thalictrum smithii*, T6861 *Zanthoxylum ailanthoides*, T6862 *Zanthoxylum ailanthoides*.



- abdominal pain and vomiting due to roundworm** T6869 *Zanthoxylum bungeanum*, T6892 *Zanthoxylum schinifolium*.
- abdominal pain due to ascariasis** T3342 *Hypericum bellum*, T4127 *Matteuccia struthiopteris*.
- abdominal pain due to stagnation** T5541 *Rhus verniciflua* [Syn. *Toxicadendron verniciflum*], T5613 *Rumex obtusifolius*.
- abdominal pain due to static blood** T1640 *Coniogramme japonica* [Syn. *Hemionitis japonica*].
- abdominal pain due to summerheat damage** T3866 *Liquidambar formosana* [Syn. *Liquidambar taiwaniana*].
- abdominal pain due to worm accumulation** T0314 *Allium fistulosum*, T1632 *Combretum yunnanensis*, T2049 *Daucus carota*, T2546 *Euonymus sacrosancta*, T4156 *Melia azedarach*, T4157 *Melia azedarach*, T4162 *Melia toosendan*, T4163 *Melia toosendan*, T4542 *Orthosiphon wulfenioides* [Syn. *Coleus wulfenioides*], T4779 *Pharbitis nil*, T4780 *Pharbitis purpurea*, T5328 *Punica granatum*, T6476 *Torilis japonica*, T6858 *Zanthoxylum acanthopodium*.
- abdominal pain glomus distention** T0417 *Amomum longiligulare*, T0419 *Amomum villosum*, T0420 *Amomum xanthioides*.
- aberratio mensium** T1001 *Brachystemma calycinum*, T4607 *Panax pseudo-ginseng* var. *japonicus*.
- abnormal increase of lipoxigenase** T3106 *Harpagophytum procumbens*.
- abscess** T0945 *Bischofia javanica* [Syn. *Bischofia trifoliata*], T5730 *Sarcandra glabra* [Syn. *Chloranthus glaber*].
- absence of sweating** T2343 *Elsholtzia splendens*, T2367 *Ephedra equisetina*, T2368 *Ephedra gerardiana*, T2369 *Ephedra intermedia*, T2372 *Ephedra likiangensis*, T2373 *Ephedra minuta*, T2375 *Ephedra monosperma*, T2379 *Ephedra saxatilis*, T2380 *Ephedra sinica*.
- abundant and sticky phlegm** T5521 *Rhododendron przewalskii*.
- abundant phlegm** T3427 *Inula britannica*, T3428 *Inula britannica* var. *chinensis*, T3434 *Inula linariaefolia*, T3758 *Lepidium sativum*, T4518 *Oppopanax chironium*, T4908 *Pinus bungeana*, T5502 *Rhododendron anthopogonoides*, T5519 *Rhododendron mucronulatum*.
- abundant phlegm and asthma** T3802 *Ligularia dentata*, T3805 *Ligularia fischeri*, T3807 *Ligularia intermedia*, T3813 *Ligularia sibirica*.
- abundant phlegm and shortness of breath** T6504 *Tricholoma matsutake* [Syn. *Armillaria matsutake*].
- accumulated fire toxin** T6043 *Sophora subprostrata* [Syn. *Sophora tonkinensis*].
- accumulation and diarrhea** T5420 *Raphanus sativus*.
- accumulation and distention-fullness** T2597 *Euphorbia lathyris*.
- accumulation from phlegm** T6105 *Stellera chamaejasme*.
- accumulation with abdominal distention** T1544 *Cleistocalyx operculatus*, T5573 *Rosa sericea*.
- accumulation with abdominal pain** T5472 *Rheum officinale*, T5474 *Rheum palmatum*, T5481 *Rheum tanguticum*.
- accumulation-gathering** T2384 *Epicauta gorhami*, T5229 *Prunus persica*.
- accumulation-gathering and distention-fullness** T3893 *Litsea pungens*.
- aching and weightiness of limbs** T1342 *Chaenomeles lagenaria* [Syn. *Chaenomeles speciosa*].
- aching cold in lumbus and knees** T1441 *Cinnamomum japonicum*.
- aching in lumbus and knees** T0041 *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*], T0073 *Achyranthes bidentata*, T0569 *Aralia cordata*, T0574 *Aralia fargesii*, T1683 *Cordyceps sinensis*, T1698 *Cornus officinalis* [Syn. *Macrocarpium officinale*], T1952 *Cynanchum auriculatum*, T1953 *Cynanchum bungei*, T2540 *Euonymus fortunei*, T3199 *Hemibarbus labeo*, T3925 *Loranthus parasiticus* [Syn. *Loranthus chinensis*; *Taxillus chinensis*], T4279 *Morina chinensis*, T4283 *Morinda officinalis*, T4974 *Piper wallichii* [Syn. *Piper wallichii* var. *hupehense*], T5722 *Sapium japonicum*, T6484 *Trachelospermum jasminoides*.
- aching in lumbus and legs** T0045 *Acanthopanax trifoliatum*, T0568 *Aralia chinensis*, T0570 *Aralia dasyphylla*, T0571 *Aralia decaisneana*, T2347 *Embelia parviflora*, T4308 *Mucuna birdwoodiana*, T6772 *Viscum angulatum*.
- aching lumbus and tinnitus** T4288 *Morus alba*.
- aching pain in back and shoulder** T1550 *Cleome gynandra* [Syn. *Gynandropsis gynandra*].
- aching pain in joints** T0470 *Anemone raddeana*, T1697 *Cornus controversa* [Syn. *Bothrocaryum controversum*], T2909 *Gentiana crassicaulis*, T2910 *Gentiana dahurica*, T2913 *Gentiana kaufmanniana*, T2919 *Gentiana macrophylla*, T2932 *Gentiana siphonantha*, T2934 *Gentiana straminea*, T2936 *Gentiana tianschanica*, T2937 *Gentiana tibetica*, T3970 *Lycopodium cernuum*, T3973 *Lycopodium japonicum* [Syn. *Lycopodium clavatum*], T4290 *Morus alba*, T4688 *Peganum harmala*, T5727 *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*].
- aching pain in limbs** T0819 *Atractylodes chinensis*, T0821 *Atractylodes japonica*, T0823 *Atractylodes lancea*, T4655 *Paris tetraphylla*.
- aching pain in lumbus and back** T1337 *Cervus nippon*; *Cervus elaphus*, T6831 *Woodwardia orientalis*.
- aching pain in lumbus muscle** T0539 *Apis cerana*.
- aching sinews and bones** T0598 *Ardisia japonica*, T2438 *Erodium stephanianum*, T2657 *Fagopyrum cymosum* [Syn. *Polygonum cymosum*], T2943 *Geranium nepalense*, T2944 *Geranium pratense*, T2947 *Geranium sibiricum*, T2949 *Geranium wilfordii*, T3479 *Isodon amethystoides*.
- aching sinews in limb joints** T4950 *Piper kadsura* [Syn. *Piper futokadsura*].
- acid vomiting** T2841 *Gallus gallus domesticus*.
- acne** T1641 *Conioselinum vaginatum*.
- acute appendicitis** T1709 *Corydalis bungeana*, T3908 *Lonicera bournei*, T3909 *Lonicera confusa*, T3910 *Lonicera fulvotomentosa*, T3911 *Lonicera hypoglaucula*, T3912 *Lonicera japonica*, T3914 *Lonicera macranthoides*, T3918 *Lonicera similis*, T5472 *Rheum officinale*, T5474 *Rheum palmatum*, T5481 *Rheum tanguticum*, T5730 *Sarcandra glabra* [Syn. *Chloranthus glaber*], T6554 *Trollius macropetalus*.
- acute bacillary dysentery** T0130 *Aconitum sinomontanum*, T5018 *Pleuropteris ciliinervis*, T5173 *Portulaca oleracea*, T5907 *Senecio scandens* [Syn. *Senecio chinensis*], T6032 *Sophora flavescens* [Syn. *Sophora angustifolia*], T6234 *Swertia punicea*.
- acute bronchitis** T1943 *Cymbopogon goeringii*, T3646 *Kyllinga brevifolia*, T5508 *Rhododendron dauricum*, T6454 *Thymus vulgaris*.
- acute cholecystitis** T1055 *Bupleurum angustissimum*, T1056 *Bupleurum*

- aureum*, T1058 *Bupleurum chaishoui*, T1059 *Bupleurum chinense*, T1065 *Bupleurum longiradiatum*, T1066 *Bupleurum marginatum*, T1067 *Bupleurum marginatum* var. *stenophyllum*, T1072 *Bupleurum scorzonerifolium*, T1073 *Bupleurum sibiricum*, T1075 *Bupleurum smithii* var. *parvifolium*, T1078 *Bupleurum wenchuanense*, T1079 *Bupleurum yinchowense*, T1573 *Clinopodium chinense*, T5400 *Rabdosia stracheyi*.
- acute conjunctivitis** T1573 *Clinopodium chinense*, T1662 *Coptis chinensis*, T1663 *Coptis chinensis* var. *brevisepala*, T1664 *Coptis deltoidea*, T1669 *Coptis omeiensis*, T1670 *Coptis teetoides* [Syn. *Coptis teeta*], T1692 *Coriaria sinica* [Syn. *Coriaria nepalensis*], T2908 *Gentiana cephalantha*, T2921 *Gentiana manshurica*, T2928 *Gentiana rigescens*, T2930 *Gentiana scabra*, T2938 *Gentiana triflora*, T3432 *Inula helianthus-aquatica*, T3827 *Ligustrum japonicum*, T4121 *Marsilea quadrifolia*, T4789 *Phellodendron amurense*, T4790 *Phellodendron amurense* var. *wilsonii*, T4791 *Phellodendron chinense*, T4792 *Phellodendron chinense* var. *glabriusculum*, T6031 *Sophora flavescens* [Syn. *Sophora angustifolia*], T6095 *Stachytarpheta jamaicensis*, T6226 *Swertia mileensis*, T6231 *Swertia pseudochinensis*, T6260 *Syringa oblata*, T6412 *Thalictrum squarrosum*, T6554 *Trollius macropetalus*.
- acute conjunctivitis nephelium** T1747 *Corydalis thalictrifolia*, T4843 *Phyllanthus urinaria*.
- acute dermatitis** T6414 *Thalictrum thunbergii*.
- acute diarrhea** T6260 *Syringa oblata*.
- acute dysentery** T3828 *Ligustrum lucidum*, T5344 *Pyrola atropurpurea*, T5345 *Pyrola calliantha* [Syn. *Pyrola rotundifolia* ssp. *chinensis*], T5346 *Pyrola calliantha* var. *tibetana*, T5347 *Pyrola decorata*, T5349 *Pyrola incarnata*, T5350 *Pyrola japonica*, T5351 *Pyrola rotundifolia*, T6554 *Trollius macropetalus*.
- acute eczema** T0916 *Berberis thunbergii*.
- acute endometritis** T2715 *Fibraurea recisa*.
- acute enteritis** T0060 *Achillea alpina* [Syn. *Achillea sibirica*], T0130 *Aconitum sinomontanum*, T1554 *Clerodendron cyrtophyllum*, T2590 *Euphorbia hirta*, T5018 *Pleuropterus ciliinervis*, T6599 *Ulva lactuca*, T6600 *Ulva pertusa*.
- acute febrile diseases** T5447 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], T5484 *Rhinoceros unicornis*; *Rhinoceros sondaicus*; *Rhinoceros sumatrensis*.
- acute fright wind** T1210 *Carpesium abrotanoides*, T2890 *Gastrodia elata*, T5817 *Scolopendra subspinipes mutilans*.
- acute gastritis** T1101 *Caesalpinia decapetala*, T2422 *Erigeron breviscapus*, T6226 *Swertia mileensis*.
- acute gastroenteritis** T0501 *Anisodus luridus*, T0502 *Anisodus tanguticus* [Syn. *Scopolia tangutica*], T0881 *Bauhinia variegata*, T1785 *Cratogeomys prunifolium*, T2988 *Glochidion eriocarpum*, T3476 *Isatis indigotica*, T3613 *Kadsura coccinea* [Syn. *Kadsura chenensis*; *Kadsura hainanensis*], T4881 *Picrasma quassioides* [Syn. *Picrasma ailanthoides*], T5247 *Przewalskia tangutica*, T5847 *Securidaca inappendiculata*, T6135 *Stephania succifera*, T6469 *Tithonia diversifolia*.
- acute glomerulonephritis** T3416 *Imperata cylindrica* var. *major*.
- acute heart pain** T0542 *Apis cerana*.
- acute hepatitis** T0048 *Acanthus ilicifolius*, T0897 *Berberis amurensis*, T3416 *Imperata cylindrica* var. *major*, T5395 *Rabdosia nervosa*, T5607 *Rumex crispus*, T5957 *Silybum marianum*, T6119 *Stephania cepharantha*.
- acute icterohepatitis** T0468 *Anemone hupehensis*, T1545 *Clematis chinensis*, T1583 *Cnidium officinale* [Syn. *Ligusticum officinale*], T2882 *Gardenia jasminoides* [Syn. *Gardenia florida*], T2908 *Gentiana cephalantha*, T2921 *Gentiana manshurica*, T2928 *Gentiana rigescens*, T2930 *Gentiana scabra*, T2938 *Gentiana triflora*, T3820 *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*], T5400 *Rabdosia stracheyi*, T5472 *Rheum officinale*, T5474 *Rheum palmatum*, T5481 *Rheum tanguticum*, T5857 *Sedum sarmentosum*, T6227 *Swertia mussotii*, T6231 *Swertia pseudochinensis*, T6234 *Swertia punicea*.
- acute infant fright wind** T0987 *Bos taurus domesticus*; *Bubalus bubalis*.
- acute infection of upper respiratory tract** T0975 *Bombyx mori*.
- acute infectious hepatitis** T6540 *Tripterygium hypoglaucum*.
- acute jaundice** T6031 *Sophora flavescens* [Syn. *Sophora angustifolia*].
- acute laryngitis** T3908 *Lonicera bournei*, T3909 *Lonicera confusa*, T3910 *Lonicera fulvotomentosa*, T3911 *Lonicera hypoglauca*, T3912 *Lonicera japonica*, T3914 *Lonicera macranthoides*, T3918 *Lonicera similis*.
- acute leukemia** T1162 *Camptotheca acuminata*.
- acute lymphangitis** T6552 *Trollius chinensis* [Syn. *Trollius asiaticus* var. *chinensis*], T6553 *Trollius ledebourii*, T6554 *Trollius macropetalus*.
- acute mastitis** T0478 *Angelica dahurica* [Syn. *Angelica porphyrocaulis*], T0933 *Betula platyphylla*, T0935 *Betula platyphylla* var. *japonica*, T6510 *Trichosanthes kirilowii*, T6513 *Trichosanthes rosthornii* [Syn. *Trichosanthes uniflora*].
- acute myocardial infarction** T3396 *Ilex pubescens*, T3397 *Ilex pubescens* var. *glaber*.
- acute nephritis** T0598 *Ardisia japonica*, T1553 *Clerodendranthus spicatus*, T2244 *Doellingeria scaber* [Syn. *Aster scaber*], T2327 *Elaeagnus angustifolia*, T5704 *Sambucus nigra*, T5707 *Sambucus williamsii*, T6008 *Solanum nigrum*.
- acute nephritis with edema** T3416 *Imperata cylindrica* var. *major*, T3752 *Leonurus heterophyllus* [Syn. *Leonurus artemisia*], T3754 *Leonurus sibiricus*.
- acute or chronic tonsillitis** T6554 *Trollius macropetalus*.
- acute otitis media** T6251 *Symplocos caudata*, T6554 *Trollius macropetalus*.
- acute pancreatitis** T1055 *Bupleurum angustissimum*, T1056 *Bupleurum aureum*, T1058 *Bupleurum chaishoui*, T1059 *Bupleurum chinense*, T1065 *Bupleurum longiradiatum*, T1066 *Bupleurum marginatum*, T1067 *Bupleurum marginatum* var. *stenophyllum*, T1072 *Bupleurum scorzonerifolium*, T1073 *Bupleurum sibiricum*, T1075 *Bupleurum smithii* var. *parvifolium*, T1078 *Bupleurum wenchuanense*, T1079 *Bupleurum yinchowense*.
- acute parotitis** T3476 *Isatis indigotica*.
- acute pelvic inflammation** T2715 *Fibraurea recisa*.
- acute periostitis** T6552 *Trollius chinensis* [Syn. *Trollius asiaticus* var. *chinensis*], T6553 *Trollius ledebourii*.
- acute peritonitis** T5472 *Rheum officinale*, T5474 *Rheum palmatum*, T5481 *Rheum tanguticum*.

- acute pharyngolaryngitis** T3423 *Indigofera tinctoria*, T5833 *Scutellaria amoena*, T5834 *Scutellaria baicalensis*, T5839 *Scutellaria hypericifolia*, T5841 *Scutellaria likiangensis*, T5843 *Scutellaria rehderiana*, T5845 *Scutellaria viscidula*, T6226 *Swertia mileensis*.
- acute rheumatic arthritis** T1180 *Capparis spinosa*.
- acute spasm in limbs** T3011 *Glycyrrhiza aspera*, T3013 *Glycyrrhiza glabra*, T3015 *Glycyrrhiza inflata*, T3016 *Glycyrrhiza kansuensis*, T3021 *Glycyrrhiza squamulosa*, T3022 *Glycyrrhiza uralensis*, T3023 *Glycyrrhiza yunnanensis*.
- acute spinal cord inflammation** T0502 *Anisodus tanguticus* [Syn. *Scopolia tangutica*].
- acute surgical infection** T1662 *Coptis chinensis*, T1663 *Coptis chinensis* var. *brevisejala*, T1664 *Coptis deltoidea*, T1669 *Coptis omeiensis*, T1670 *Coptis teetoides* [Syn. *Coptis teeta*], T5680 *Salvia miltiorrhiza*, T5681 *Salvia miltiorrhiza* f. *alba*, T5688 *Salvia przewalskii*.
- acute throat wind** T2027 *Daphne odora*.
- acute tonsillitis** T0933 *Betula platyphylla*, T0935 *Betula platyphylla* var. *japonica*, T2715 *Fibraurea recisa*, T4391 *Nauclea officinalis*, T4845 *Physalis alkekengi*, T5445 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], T5447 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], T5833 *Scutellaria amoena*, T5834 *Scutellaria baicalensis*, T5839 *Scutellaria hypericifolia*, T5841 *Scutellaria likiangensis*, T5843 *Scutellaria rehderiana*, T5845 *Scutellaria viscidula*, T6043 *Sophora subprostrata* [Syn. *Sophora tonkinensis*], T6226 *Swertia mileensis*, T6251 *Symplocos caudata*.
- acute urethritis** T0273 *Akebia quinata*, T0277 *Akebia trifoliata*, T0279 *Akebia trifoliata* var. *australis*.
- AD syndrome** T2961 *Ginkgo biloba*.
- adjuvant in anesthesia** T0281 *Alangium chinense*, T0285 *Alangium platanifolium*, T6136 *Stephania tetrandra*.
- agkistrodon bite** T5393 *Rabdosia longituba*.
- allergic conjunctivitis** T3936 *Luffa operculata*.
- allergic dermatitis** T1573 *Clinopodium chinense*, T4838 *Phyllanthus flexuosus*, T5847 *Securidaca inappendiculata*, T6226 *Swertia mileensis*.
- allergic rhinitis** T2367 *Ephedra equisetina*, T2368 *Ephedra gerardiana*, T2369 *Ephedra intermedia*, T2372 *Ephedra likiangensis*, T2373 *Ephedra minuta*, T2375 *Ephedra monosperma*, T2379 *Ephedra saxatilis*, T2380 *Ephedra sinica*, T3936 *Luffa operculata*, T4582 *Paeonia delavayi*, T4585 *Paeonia moutan* [Syn. *Paeonia suffruticosa*], T6843 *Xanthium sibiricum* [Syn. *Xanthium strumarium*].
- alopecia areata** T2048 *Daucus carota*, T2273 *Drynaria fortunei*, T5252 *Pseudodrynaria coronans*, T5270 *Psoralea corylifolia*.
- altitude stress** T5499 *Rhodiola sacra*.
- amebic dysentery** T0318 *Allium sativum*, T1038 *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*], T4034 *Magnolia biloba*, T4045 *Magnolia officinalis*, T5323 *Pulsatilla campanella*, T5324 *Pulsatilla cernua*, T5325 *Pulsatilla chinensis*, T5326 *Pulsatilla dahurica*, T6820 *Wikstroemia indica*.
- amenorrhea** T0071 *Achyranthes aspera*, T0072 *Achyranthes aspera* var. *indica*, T0250 *Agrimonia pilosa* var. *japonica*, T0273 *Akebia quinata*, T0274 *Akebia quinata*, T0277 *Akebia trifoliata*, T0278 *Akebia trifoliata*, T0279 *Akebia trifoliata* var. *australis*, T0280 *Akebia trifoliata* var. *australis*, T0300 *Aleurites moluccana*, T0474 *Angelica acutiloba* [Syn. *Ligusticum acutilobum*], T0680 *Artemisia lactiflora*, T0736 *Asclepias curassavica*, T0941 *Bidens tripartita*, T0978 *Bombyx mori*, T0991 *Bos taurus domesticus*; *Bubalus bubalis*, T0994 *Boswellia carterii*, T1163 *Campylotropis hirtella*, T1175 *Cannabis sativa*, T1215 *Carthamus tinctorius*, T1285 *Celastrus angulatus*, T1286 *Celastrus flagellaris*, T1289 *Celastrus orbiculatus* [Syn. *Celastrus articulatus*], T1356 *Cheiranthus cheiri*, T1361 *Chenopodium ambrosioides*, T1372 *Chloranthus serratus*, T1439 *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*], T1450 *Cirsium lineare*, T1589 *Cocculus trilobus* [Syn. *Cocculus sarmentosus*], T1638 *Commiphora myrrha* [Syn. *Commiphora molmo*], T1808 *Crocus sativus*, T1903 *Curcuma aromatica*, T1905 *Curcuma longa*, T1928 *Cycas revoluta*, T1976 *Cyperus iria*, T2020 *Damnacanthus indicus*, T2130 *Desmodium gangeticum*, T2132 *Desmodium pulchellum* [Syn. *Phyllodium pulchellum*], T2143 *Dianthus chinensis*, T2145 *Dianthus superbus*, T2147 *Dianthus versicolor*, T2347 *Embelia parviflora*, T2348 *Embelia ribes*, T2384 *Epicauta gorhami*, T2387 *Epilobium hirsutum*, T2536 *Euonymus alatus*, T2546 *Euonymus sacrosancta*, T2723 *Ficus pumila*, T3254 *Hippophae rhamnoides*, T3256 *Hippophae rhamnoides* subsp. *sinensis*, T3258 *Hippophae rhamnoides* subsp. *yunnanensis*, T3410 *Impatiens balsamina*, T3412 *Impatiens balsamina*, T3496 *Isodon japonica* [Syn. *Rabdosia japonica*], T3549 *Ixora chinensis*, T3752 *Leonurus heterophyllus* [Syn. *Leonurus artemisia*], T3754 *Leonurus sibiricus*, T3774 *Lespedeza tomentosa*, T3785 *Levisticum officinale*, T3867 *Liquidambar formosana* [Syn. *Liquidambar taiwaniana*], T3980 *Lycopus lucidus*, T4234 *Milletia dielsiana*, T4311 *Mucuna sempervirens*, T4584 *Paeonia lactiflora* wild, T4586 *Paeonia obovata*, T4590 *Paeonia veitchii*, T4604 *Panax japonicus* var. *bipinnatifidus*, T4787 *Phellinus igniarius*, T5028 *Plumbago indica*, T5101 *Polygonum cuspidatum*, T5229 *Prunus persica*, T5230 *Prunus persica*, T5231 *Prunus persica*, T5233 *Prunus persica*, T5269 *Psilotum nudum*, T5541 *Rhus verniciflua* [Syn. *Toxicadendron verniciflum*], T5560 *Rorippa montana* [Syn. *Rorippa dubia*; *Sisymbrium dubium*], T5567 *Rosa laevigata*, T5626 *Ruta graveolens*, T5680 *Salvia miltiorrhiza*, T5681 *Salvia miltiorrhiza* f. *alba*, T5688 *Salvia przewalskii*, T5741 *Sargentodoxa cuneata*, T5755 *Saussurea involucrata*, T5793 *Schisandra henryi*, T5865 *Selaginella pulvinata*, T5869 *Selaginella tamariscina*, T6062 *Sparganium stoloniferum*, T6154 *Strobilanthes japonicus* [Syn. *Championella japonica*], T6278 *Tagetes erecta*, T6357 *Tetrapanax papyriferum*, T6471 *Toddalia asiatica* [Syn. *Toddalia aculeata*; *Paullinia asiatica*], T6507 *Trichosanthes cucumeroides*, T6551 *Trogopterus xanthipes*; *Pteromys volans*, T6668 *Vaccaria segetalis* [Syn. *Vaccaria pyramidata*], T6675 *Valeriana amurensis*, T6676 *Valeriana hardwickii*, T6679 *Valeriana officinalis*, T6680 *Valeriana officinalis* var. *latifolia*, T6895 *Zanthoxylum simulans*.
- amenorrhea and dysmenorrhea** T0069 *Achillea wilsoniana*, T0275 *Akebia quinata*, T0495 *Angelica sinensis*, T0759 *Aspidistra elatior*, T1108 *Caesalpinia sappan*, T1438 *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*], T1583 *Cnidium officinale* [Syn. *Ligusticum officinale*], T1750 *Corydalis yanhusuo* [Syn. *Corydalis turtschaninovii* f. *yanhusuo*], T1904 *Curcuma kwangsiensis*, T1909 *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*], T1934 *Cyclea*

- tonkinensis*, T1978 *Cyperus rotundus*, T3221 *Heracleum rapula*, T3411 *Impatiens balsamina*, T3820 *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*], T4550 *Osmanthus fragrans*, T4804 *Phlojodicarpus sibiricus*, T6709 *Verbena officinalis*.
- amenorrhea and scant milk** T0632 *Aristolochia manshuriensis*.
- amenorrhea due to blood stasis** T0060 *Achillea alpina* [Syn. *Achillea sibirica*], T0065 *Achillea millefolium*, T0073 *Achyranthes bidentata*, T1775 *Crataegus pinnatifida*, T1778 *Crataegus pinnatifida* var. *major*, T1923 *Cyathula capitata*, T2541 *Euonymus grandiflorus*, T2597 *Euphorbia lathyris*, T3287 *Huechys sanguinea*, T4106 *Manis pentadactyla*, T4303 *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*, T4418 *Nerium indicum*, T4530 *Ormosia hosiei*, T4582 *Paeonia delavayi*, T4585 *Paeonia moutan* [Syn. *Paeonia suffruticosa*], T4607 *Panax pseudo-ginseng* var. *japonicus*, T5029 *Plumbago zeylanica*, T5104 *Polygonum hydropiper*, T5472 *Rheum officinale*, T5474 *Rheum palmatum*, T5481 *Rheum tanguticum*, T5578 *Rubia cordifolia*, T5582 *Rubia oncotricha*, T5583 *Rubia schumannina*, T5584 *Rubia tinctorum*, T5585 *Rubia wallichiana*.
- amenorrhea with concretion and conglomeration** T1924 *Cyathula officinalis*, T2838 *Gallus gallus domesticus*.
- amnesia** T0144 *Acorus gramineus*, T0146 *Acorus tatarinowii*, T5086 *Polygala sibirica*, T5088 *Polygala tenuifolia*, T5701 *Salvia yunnanensis*.
- amnesia and heavy dreams** T1292 *Celastrus orbiculatus* [Syn. *Celastrus articulatus*].
- anaphylactic diseases (hay fever, pollinosis, allergic rhinitis, allergic conjunctivitis)** T3936 *Luffa operculata*.
- angylostomiasis** T0318 *Allium sativum*, T1211 *Carpesium abrotanoides*, T1361 *Chenopodium ambrosioides*, T1881 *Cucurbita moschata*, T2049 *Daucus carota*, T2279 *Dryopteris championii*, T2281 *Dryopteris crassirhizoma*, T2510 *Eucalyptus globulus*, T5173 *Portulaca oleracea*, T5537 *Rhus sylvestris*, T6277 *Tadehagi triquetrum*.
- anemia** T1353 *Changium smyrnioides*, T5207 *Prismatomeris tetrandra*, T5586 *Rubia yunnanensis*.
- anemia and amenorrhea** T4478 *Octopus vulgaris*, T6689 *Ventilago leiocarpa*.
- anemia and constipation** T0989 *Bos taurus domesticus*; *Bubalus bubalis*.
- anemia and generalized pain** T5108 *Polygonum multiflorum*.
- anemia and scant milk** T4178 *Melodinus hemsleyanus*.
- anemia due to bleeding** T6066 *Spatholobus suberectus*.
- anemia due to folic acid deficiency** T0495 *Angelica sinensis*, T4804 *Phlojodicarpus sibiricus*.
- anemia due to malnutrition** T6066 *Spatholobus suberectus*.
- anemia with yellow complexion** T0986 *Bos taurus domesticus*; *Bubalus bubalis*, T4580 *Paeonia albiflora* [Syn. *Paeonia lactiflora*], T4600 *Panax ginseng* [Syn. *Panax schinseng*], T5445 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], T6066 *Spatholobus suberectus*.
- anesthesia** T0108 *Aconitum kusnezoffii*, T1330 *Cerbera manghas*, T2037 *Datura innoxia*, T2044 *Datura metel*.
- angiitis** T0264 *Ajuga forrestii*, T3092 *Halenia corniculata*.
- angina pectoris** T1215 *Carthamus tinctorius*, T1395 *Chrysanthemum morifolium* [Syn. *Dendranthema morifolium*], T1775 *Crataegus pinnatifida*, T1778 *Crataegus pinnatifida* var. *major*, T2274 *Dryobalanops aromatica*, T2389 *Epimedium acuminatum*, T2390 *Epimedium brevicornum*, T2392 *Epimedium davidii*, T2394 *Epimedium elongatum*, T2398 *Epimedium koreanum*, T2401 *Epimedium pubescens*, T2402 *Epimedium sagittatum*, T2404 *Epimedium sutchuenense*, T2406 *Epimedium wushanense*, T2846 *Ganoderma japonicum* [Syn. *Ganoderma sinense*], T2848 *Ganoderma lucidum*, T2964 *Ginkgo biloba*, T3388 *Ilex chinensis* [Syn. *Ilex purpurea*], T3396 *Ilex pubescens*, T3397 *Ilex pubescens* var. *glaber*, T3875 *Liriope spicata* var. *prolifera*, T3925 *Loranthus parasiticus* [Syn. *Loranthus chinensis*; *Taxillus chinensis*], T3926 *Loropetalum chinense*, T4303 *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*, T4507 *Ophiopogon japonicus*, T4608 *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*], T4953 *Piper longum*, T5312 *Pueraria edulis*, T5313 *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*], T5316 *Pueraria omeiensis*, T5318 *Pueraria phaseoloides*, T5320 *Pueraria thomsonii*, T5680 *Salvia miltiorrhiza*, T5681 *Salvia miltiorrhiza* f. *alba*, T5688 *Salvia przewalskii*, T6510 *Trichosanthes kirilowii*, T6513 *Trichosanthes rosthornii* [Syn. *Trichosanthes uniflora*], T6584 *Typha angustata*, T6585 *Typha angustifolia*, T6587 *Typha latifolia*.
- angitis** T1327 *Ceratostigma minus*, T6676 *Valeriana hardwickii*.
- animal and insect bites** T4254 *Miscanthus sinensis*, T5950 *Siegesbeckia orientalis*, T5951 *Siegesbeckia orientalis* var. *glabrescens* [Syn. *Siegesbeckia glabrescens*], T5952 *Siegesbeckia orientalis* var. *pubescens* [Syn. *Siegesbeckia pubescens*].
- annexitis** T6217 *Swertia davidii*.
- anorexy for greasy** T1705 *Corydalis adunca*.
- ant-fistula** T2428 *Erinaceus europaeus*; *Hemiechinus dauuricus*; *Hemiechinus auritus*.
- anthrax** T5821 *Scopolia japonica*.
- anxiety and depression** T1808 *Crocus sativus*.
- aphonia** T2839 *Gallus gallus domesticus*, T3701 *Lasiosphaera fenlzii*, T3961 *Lycoperdon pyriforme*, T4537 *Oroxylum indicum*, T5719 *Sapindus mukorossi*.
- aphonia due to lung heat** T0161 *Actinidia eriantha*.
- aphonia due to throat pain** T4609 *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*], T5967 *Siraitia grosvenorii* [Syn. *Momordica grosvenorii*], T6139 *Sterculia lychnophora*, T6346 *Terminalia chebula*, T6348 *Terminalia chebula* var. *tomentella*.
- appendicitis** T0646 *Armillariella tabescens*, T3548 *Ixeris sonchifolia*, T4582 *Paeonia delavayi*, T4585 *Paeonia moutan* [Syn. *Paeonia suffruticosa*], T5101 *Polygonum cuspidatum*, T5173 *Portulaca oleracea*, T5844 *Scutellaria scordifolia*, T5907 *Senecio scandens* [Syn. *Senecio chinensis*], T6025 *Sonchus arvensis*, T6716 *Vernonia esculenta*.
- ardent fever** T0987 *Bos taurus domesticus*; *Bubalus bubalis*, T3323 *Hymenodictyon excelsum*, T4145 *Meconopsis punicea*.
- ardent fever and convulsion** T5295 *Pteris multifida*.
- ardent fever and manic agitation** T4796 *Pheretima aspergillum*; *Allolobophora caliginosa trapezoides*.
- ardent fever incessant** T0002 *Abelmoschus moschatus* [Syn. *Hibiscus abelmoschus*], T1633 *Commelina communis*.
- ardent fever with clouded spirit** T1045 *Bubalus bubalis*, T3476 *Isatis*

- indigotica*, T5447 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*].
- ardent fever with fright wind** T5184 *Potentilla kleiniana*.
- ardent fever with headache** T0866 *Baphicacanthus cusia* [Syn. *Strobilanthes cusia*], T0867 *Baphicacanthus cusia* [Syn. *Strobilanthes cusia*], T2510 *Eucalyptus globulus*, T2517 *Eucalyptus robusta*, T3475 *Isatis indigotica*.
- ardent fever with vexation and thirst** T0462 *Anemarrhena asphodeloides*, T5833 *Scutellaria amoena*, T5834 *Scutellaria baicalensis*, T5839 *Scutellaria hypericifolia*, T5841 *Scutellaria likiangensis*, T5843 *Scutellaria rehderiana*, T5845 *Scutellaria viscidula*.
- ardent fever (hyperpyrexia)** T6295 *Tanacetum sibiricum* [Syn. *Filifolium sibiricum*].
- armpit welling abscess** T6099 *Stauntonia chinensis*.
- arrhythmia** T1991 *Cytisus scoparius* [Syn. *Spartium scoparium*], T3925 *Loranthus parasiticus* [Syn. *Loranthus chinensis*; *Taxillus chinensis*], T5557 *Rohdea japonica* [Syn. *Orontium japonicum*], T6031 *Sophora flavescens* [Syn. *Sophora angustifolia*], T6919 *Ziziphus jujuba* var. *spinosa*.
- arsenic poisoning** T4503 *Onychium lucidum*.
- arthralgia** T5661 *Salvia bowleyana*, T5701 *Salvia yunnanensis*.
- arthritis** T0495 *Angelica sinensis*, T0647 *Armoracia lapathifolia*, T3882 *Lithospermum officinale*, T3970 *Lycopodium cernuum*, T3973 *Lycopodium japonicum* [Syn. *Lycopodium clavatum*], T4689 *Peganum nigellastrum*, T4804 *Phlojodicarpus sibiricus*.
- ascariasis** T0255 *Ailanthus altissima*, T0264 *Ajuga forrestii*, T0338 *Aloe ferox*, T0347 *Aloe vera* [Syn. *Aloe barbadensis*], T0348 *Aloe vera* var. *chinensis*, T0364 *Alsophila spinulosa*, T0446 *Anaphalis margaritacea*, T0468 *Anemone hupehensis*, T0659 *Artemisia absinthium*, T1122 *Caloglossa leprieurii*, T1176 *Cannabis sativa*, T1211 *Carpesium abrotanoides*, T1361 *Chenopodium ambrosioides*, T1382 *Chondria armata* [Syn. *Lophura armata*], T1595 *Codium fragile*, T1696 *Cornus capitata* [Syn. *Dendrobenthamia capitata*], T1881 *Cucurbita moschata*, T2049 *Daucus carota*, T2173 *Digenea simplex*, T2281 *Dryopteris crassirhizoma*, T3466 *Iris potaninii*, T3688 *Lappula echinata*, T3935 *Luffa cylindrica*, T4002 *Lysimachia foenum-graecum*, T4026 *Macrothelypteris oligophlebia*, T4083 *Mallotus philippinensis*, T4084 *Mallotus philippinensis*, T4156 *Melia azedarach*, T4162 *Melia toosendan*, T4231 *Milingtonia hortensis*, T4247 *Millingtonia hortensis*, T4779 *Pharbitis nil*, T4780 *Pharbitis purpurea*, T5098 *Polygonum aviculare*, T5151 *Populus davidiana*, T5158 *Populus simonii*, T5173 *Portulaca oleracea*, T5176 *Potamogeton natans*, T5298 *Pteris vittata*, T5327 *Punica granatum*, T5329 *Punica granatum*, T5384 *Quisqualis indica*, T5717 *Sapindus delavayi* [Syn. *Pancovia delavayi*], T5920 *Seriphidium cinum* [Syn. *Artemisia cina*], T5921 *Seriphidium finitum* [Syn. *Artemisia finita*], T6032 *Sophora flavescens* [Syn. *Sophora angustifolia*], T6035 *Sophora japonica*, T6101 *Stauntonia hexaphylla*, T6111 *Stemona japonica*, T6113 *Stemona sessilifolia*, T6115 *Stemona tuberosa*, T6312 *Taxus mairei*, T6474 *Toona ciliata*, T6475 *Toona sinensis*, T6691 *Veratrum baillonii*, T6713 *Vernonia anthelmintica*.
- ascariasis in biliary tract** T0502 *Anisodus tanguticus* [Syn. *Scopolia tangutica*].
- ascites** T1049 *Bufo bufo gargarizans*; *Bufo melanostictus*, T1263 *Catalpa ovata*, T1357 *Chelidonium majus*, T1633 *Commelina communis*, T1756 *Costus speciosus*, T2023 *Daphne genkwa*, T2131 *Desmodium pulchellum* [Syn. *Phyllodium pulchellum*], T2132 *Desmodium pulchellum* [Syn. *Phyllodium pulchellum*], T2439 *Eruca sativa*, T2580 *Euphorbia antiquorum*, T2585 *Euphorbia esula*, T2596 *Euphorbia kansui*, T2631 *Eurya japonica*, T3066 *Gryllulus chinensis*, T3432 *Inula helianthus-aquatica*, T3668 *Lagenaria siceraria* var. *depressa*, T3774 *Lespedeza tomentosa*, T5129 *Polyporus umbellatus*, T5238 *Prunus salicina*, T5407 *Rana nigromaculata*; *Rana plancyi*, T5461 *Rhamnus leptophylla*, T5557 *Rohdea japonica* [Syn. *Orontium japonicum*], T5723 *Sapium sebiferum*, T5835 *Scutellaria barbata* [Syn. *Scutellaria rivularis*], T5862 *Selaginella involvens*, T6210 *Swainsonia salsula* [Syn. *Sphaerophysa salsula*].
- ascites (hydroperitoneum)** T5770 *Saussurea superba* [Syn. *Saussurea hieracioides*], T5115 *Polygonum sibiricum* [Syn. *Persicaria sibirica*].
- ascites ulcer** T1194 *Carassius auratus*, T2601 *Euphorbia milii*.
- ashen nail** T3411 *Impatiens balsamina*.
- asthma** T0216 *Agave americana* var. *marginata* [Syn. *Agave americana* var. *variegata*], T0364 *Alsophila spinulosa*, T0539 *Apis cerana*, T0923 *Bergenia crassifolia*, T0926 *Berneuxia thibetica*, T1176 *Cannabis sativa*, T1452 *Cissampelos pareira*, T1533 *Clausena dentata*, T1534 *Clausena dunniana*, T1684 *Cordylone stricta*, T1819 *Crotalaria ferruginea*, T1880 *Cucurbita moschata*, T2101 *Dendrobium fimbriatum*, T2268 *Drosera rotundifolia*, T2279 *Dryopteris championii*, T2505 *Eucalyptus citriodora*, T2738 *Flemingia strobilifera*, T2749 *Fomes officinalis*, T3026 *Gnaphalium affine* [Syn. *Gnaphalium multiceps*], T3040 *Gomphrena globosa*, T3056 *Gossypium herbaceum*, T3190 *Helminthostachys zeylanica*, T3758 *Lepidium sativum*, T3765 *Lepisorus ussuriensis*, T3779 *Leucas aspera*, T3850 *Lindera glauca*, T3885 *Litsea cubeba*, T3953 *Lycianthes biflora*, T4003 *Lysimachia microcarpa*, T4371 *Nandina domestica*, T4549 *Osbeckia chinensis*, T4796 *Pheretima aspergillum*; *Allolobophora caliginosa trapezoides*, T4908 *Pinus bungeana*, T4937 *Piper betle*, T5502 *Rhododendron anthopogonoides*, T5513 *Rhododendron mariae*, T5645 *Sageretia theezans* [Syn. *Sageretia thea*], T5943 *Sida cordifolia*, T5989 *Solanum aculeatissimum*, T6014 *Solanum surattense*, T6043 *Sophora subprostrata* [Syn. *Sophora tonkinensis*], T6075 *Spilanthes acmella*, T6105 *Stellera chamaejasme*, T6206 *Sus scrofa domestica*, T6259 *Syringa amurensis* [Syn. *Syringa reticulata* var. *amurensis*], T6264 *Syzygium buxifolium*, T6581 *Tylophora mollissima*, T6789 *Vitex negundo*.
- asthma (for women)** T2391 *Epimedium brevicornum*.
- asthma (raw)** T5865 *Selaginella pulvinata*, T5869 *Selaginella tamariscina*.
- asthma and abundant phlegm** T0591 *Ardisia arborescens*.
- asthma and cough** T0078 *Aconitum barbatum* var. *puberulum* [Syn. *Aconitum ochranthum*], T5517 *Rhododendron molle*.
- asthma and fullness due to external contraction cough** T5216 *Prunus armeniaca*, T5219 *Prunus armeniaca* var. *ansu*.
- atherosclerosis** T2410 *Equisetum pratense*.

- atrial fibrillation** T0184 *Adonis amurensis*.
- aversion of cold** T1337 *Cervus nippon*; *Cervus elaphus*, T2343 *Elsholtzia splendens*.
- aversion of cold during convalescence** T5499 *Rhodiola sacra*.
- aversion to light** T5871 *Selenarctos thibetanus*; *Ursus arctos*.
- bacillary dysentery** T0318 *Allium sativum*, T0457 *Andrographis paniculata* [Syn. *Justicia paniculata*], T0643 *Aristolochia versicolor*, T0897 *Berberis amurensis*, T0912 *Berberis poiretii*, T0920 *Berberis wilsonae*, T1044 *Bryum argenteum*, T1785 *Cratogeomys prunifolium*, T2357 *Emilia sonchifolia*, T2589 *Euphorbia helioscopia*, T2590 *Euphorbia hirta*, T2657 *Fagopyrum cymosum* [Syn. *Polygonum cymosum*], T3203 *Hemyleya amabilis*, T3208 *Hemyleya macrosperma*, T4391 *Nauclea officinalis*, T4882 *Picrasma quassioides* [Syn. *Picrasma ailanthoides*], T5375 *Quercus mongolica*, T5730 *Sarcandra glabra* [Syn. *Chloranthus glaber*], T6043 *Sophora subprostrata* [Syn. *Sophora tonkinensis*], T6119 *Stephania cepharantha*, T6135 *Stephania succifera*, T6277 *Tadehagi triquetrum*.
- backache** T1455 *Cistanche deserticola*, T1456 *Cistanche salsa*, T1683 *Cordyceps sinensis*, T1928 *Cycas revoluta*, T5107 *Polygonum multiflorum*.
- bacteriogenic dysentery** T5149 *Populus canadensis*, T5150 *Populus cathayana*.
- bad breath** T1152 *Camellia sinensis* [Syn. *Thea sinensis*], T2336 *Elephas maximus*, T2558 *Eupatorium formosanum*, T2559 *Eupatorium fortunei*, T4170 *Melilotus albus*, T4172 *Melilotus suaveolens*, T4470 *Ocimum basilicum*, T4550 *Osmanthus fragrans*.
- bad breath and slimy tongue fur** T6561 *Tulipa gesneriana*.
- bald sores** T1955 *Cynanchum hancockianum*, T2162 *Dicranostigma franchetianum* [Syn. *Dicranostigma leptopodium*], T2338 *Elephas maximus*, T3567 *Juglans regia*, T4265 *Momordica cochinchinensis*, T4520 *Opuntia ficus-indica*, T5607 *Rumex crispus*, T5646 *Sagina japonica* [Syn. *Spergula japonica*].
- bald white scalp sore** T1278 *Cedrela sinensis*, T4917 *Pinus massoniana*, T5611 *Rumex japonicus*, T5612 *Rumex nepalensis*.
- bedsore** T0297 *Alchornea trewioides*.
- bee sting** T1624 *Colocasia antiquorum*, T2206 *Dioscorea parviflora*, T2213 *Dioscorea zingiberensis*, T3003 *Glycine max*, T5120 *Polygonum tinctorium*, T6367 *Teucrium quadrifarium*.
- bee-fistula** T2428 *Erinaceus europaeus*; *Hemiechinus dauuricus*; *Hemiechinus auritus*.
- behcet's syndrome** T6542 *Tripterygium wilfordii*.
- belching** T0353 *Alpinia blepharocalyx*.
- belching and low food intake** T1498 *Citrus medica*, T1520 *Citrus wilsonii*.
- beriberi** T0038 *Acanthopanax gracilistylus*, T0042 *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*], T0044 *Acanthopanax sessiliflorus*, T0559 *Arachis hypogaea*, T0606 *Areca catechu*, T0680 *Artemisia lactiflora*, T0721 *Arundina chinensis*, T0853 *Baeckea frutescens*, T0895 *Benincasa hispida*, T1258 *Casuarina equisetifolia*, T1342 *Chaenomeles lagenaria* [Syn. *Chaenomeles speciosa*], T1435 *Cinnamomum camphora*, T1556 *Clerodendron fragrans*, T1614 *Coix lacryma-jobi* var. *ma-yuen*, T1980 *Cyprinus carpio*, T2038 *Datura innoxia*, T2042 *Datura metel*, T2343 *Elsholtzia splendens*, T2744 *Foeniculum vulgare*, T3436 *Inula nervosa*, T3856 *Lindera umbellata* [Syn. *Lindera erythrocarpa*], T3893 *Litsea pungens*, T4287 *Morus alba*, T4386 *Nardostachys chinensis*, T4387 *Nardostachys jatamansi*, T4505 *Ophiocephalus argus*, T4546 *Oryza sativa*, T4785 *Phaseolus vulgaris*, T4799 *Philydrum lanuginosum*, T4906 *Pinus armandii*, T4916 *Pinus massoniana*, T5071 *Polygala arillata*, T5110 *Polygonum orientale*, T5151 *Populus davidiana*, T5171 *Porphyra tenera*, T5189 *Pothos chinensis*, T5223 *Prunus humilis* [Syn. *Cerasus humilis*], T5224 *Prunus japonica* [Syn. *Cerasus japonica*], T5225 *Prunus japonica* var. *nakaii*, T5231 *Prunus persica*, T5238 *Prunus salicina*, T5244 *Prunus tomentosa*, T5548 *Ricinus communis*, T5750 *Saururus chinensis*, T6069 *Speranskia tuberculata*, T6528 *Trigonella foenum-graecum*, T6870 *Zanthoxylum bungeanum*, T6925 *Zostera marina*.
- beriberi with edema** T0500 *Anguilla japonica*, T0629 *Aristolochia heterophylla*, T1343 *Chaenomeles sinensis*, T2119 *Derris eriocarpa*, T2644 *Evodia rutaecarpa*, T2646 *Evodia rutaecarpa* var. *officinalis*, T3996 *Lysimachia candida*, T4720 *Perilla frutescens* var. *arguta*, T4723 *Perilla frutescens* var. *crispa*, T4983 *Pisum sativum*, T6129 *Stephania japonica*, T6136 *Stephania tetrandra*, T6677 *Valeriana jatamansii* [Syn. *Valeriana wallichii*].
- beriberi with general edema** T5818 *Scoparia dulcis*.
- bilharziosis** T1881 *Cucurbita moschata*, T2131 *Desmodium pulchellum* [Syn. *Phylloidium pulchellum*], T5308 *Pterocarya stenoptera*, T6709 *Verbena officinalis*.
- binding depression of liver qi** T5137 *Poncirus trifoliata*.
- bitter taste** T2908 *Gentiana cephalantha*, T2921 *Gentiana manshurica*, T2928 *Gentiana rigescens*, T2930 *Gentiana scabra*, T2938 *Gentiana triflora*, T6228 *Swertia nervosa*.
- bitter taste and slimy tongue fur** T2554 *Eupatorium cannabinum*.
- bitter taste and tidal fever** T6224 *Swertia kouichensis*.
- bladder qi pain** T1504 *Citrus reticulata*.
- bladder vacuity cold** T3854 *Lindera strychnifolia* [Syn. *Lindera aggregata*].
- bleeding** T1299 *Celosia cristata*, T1402 *Chrysosplenium alternifolium*, T2321 *Ecklonia kurome*, T3678 *Laminaria japonica*, T4009 *Maackia amurensis*, T4234 *Milletia dielsiana*, T5173 *Portulaca oleracea*, T5354 *Pyrrosia davidii*, T5355 *Pyrrosia drakeana*, T5356 *Pyrrosia gralla*, T5357 *Pyrrosia lingua*, T5358 *Pyrrosia petiolosa*, T5360 *Pyrrosia sheareri*, T6119 *Stephania cepharantha*, T6584 *Typha angustata*, T6585 *Typha angustifolia*, T6587 *Typha latifolia*, T6640 *Undaria pinnatifida*.
- bleeding due to blood heat** T5578 *Rubia cordifolia*, T5582 *Rubia oncotricha*, T5583 *Rubia schumannina*, T5584 *Rubia tinctorum*, T5585 *Rubia wallichiana*, T5852 *Sedum bulbiferum*.
- bleeding due to external injury** T0019 *Acacia catechu*, T0156 *Actinidia arguta*, T0180 *Adina pilulifera* [Syn. *Cephalanthus pilulifera*], T0181 *Adina rubella*, T0229 *Ageratum conyzoides*, T0248 *Agrimonia pilosa*, T0264 *Ajuga forrestii*, T0267 *Ajuga nipponensis*, T0295 *Albizia odoratissima*, T0298 *Alectoria vivens*, T0328 *Alnus japonica*, T0371 *Alstonia mairei*, T0374 *Alstonia scholaris*, T0378 *Alstonia yunnanensis*, T0423 *Ampelopsis brevipedunculata*, T0427 *Ampelopsis japonica* [Syn. *Paullinia japonica*], T0572 *Aralia elata*, T0634 *Aristolochia mollissima*, T0736 *Asclepias curassavica*, T0776 *Asplenium*

*prolongatum*, T0805 *Astragalus sinicus*, T0859 *Balanophora involucrata*, T0871 *Barleria lupulina*, T0955 *Bletilla striata*, T1043 *Bryophyllum pinnatum*, T1116 *Callicarpa arborea*, T1118 *Callicarpa formosana*, T1119 *Callicarpa japonica*, T1120 *Callicarpa macrophylla*, T1129 *Calophyllum inophyllum*, T1163 *Campylotropis hirtella*, T1210 *Carpesium abrotanoides*, T1212 *Carpesium eximum*, T1251 *Cassytha filiformis*, T1336 *Ceriops tagal* [Syn. *Rhizophora tagal*], T1434 *Cinnamomum bejolghota* [Syn. *Cinnamomum obtusifolium*; *Laurus bejolghota*], T1449 *Cirsium japonicum*, T1451 *Cirsium setosum* [Syn. *Cerratula setosa*; *Cirsium segetum*; *Cephalanoplos segetum*], T1529 *Cladonia verticillata*, T1554 *Clerodendron cyrtophyllum*, T1566 *Clerodendrum inerme*, T1655 *Conyza blinii*, T1656 *Conyza bonariensis* [Syn. *Erigeron bonariensis*; *Erigeron linifolius*; *Erigeron crispus*], T1657 *Conyza canadensis* [Syn. *Erigeron canadensis*], T1672 *Corallodiscus flabellatus* [Syn. *Didissandra flabellat*], T1684 *Cordylone strcta*, T1815 *Crotalaria assamica*, T1928 *Cycas revoluta*, T1932 *Cyclea racemosa*, T1969 *Cynoglossum officinale*, T1971 *Cynoglossum zeylanicum* [Syn. *Anchusa zeylanica*; *Cynoglossum furcatum*; *Cynoglossum formosanum*], T2008 *Dalbergia odorifera*, T2008 *Dalbergia odorifera*, T2013 *Dalbergia sissoo*, T2013 *Dalbergia sissoo*, T2161 *Dicranopteris pedata* [Syn. *Polypodium pedatum*; *Dicranopteris dichotoma*], T2193 *Dioscorea cirrhosa* [Syn. *Dioscorea pogonoides*], T2323 *Eclipta prostrata* [Syn. *Eclipta alba*], T2327 *Elaeagnus angustifolia*, T2348 *Embelia ribes*, T2407 *Equisetum arvense*, T2510 *Eucalyptus globulus*, T2540 *Euonymus fortunei*, T2602 *Euphorbia nematocypha*, T2614 *Euphorbia pulcherrima*, T2631 *Eurya japonica*, T2732 *Firmiana simplex*, T2734 *Fissistigma glaucescens* [Syn. *Melodorum glaucescens*], T2825 *Galeobdolon chinense* [Syn. *Lamium chinense*], T2857 *Garcinia hanburyi*, T2866 *Garcinia morella*, T2950 *Gerbera anandria* [Syn. *Leibnitzia anandria*], T2998 *Glycine max*, T3054 *Gossypium barbadense*, T3055 *Gossypium herbaceum*, T3058 *Gossypium hirsutum* [Syn. *Gossypium mexicanum*], T3088 *Gynura segetum* [Syn. *Gynura japonica*], T3089 *Gypsophila acutifolia*, T3092 *Halenia corniculata*, T3202 *Hemistepta lyrata* [Syn. *Hemistepta carthamoides*; *Saussurea carthamoides*], T3294 *Huperzia selago* [Syn. *Lycopodium selago*], T3324 *Hymenophyllum barbatum*, T3340 *Hypericum ascyron*, T3349 *Hypericum erectum*, T3361 *Hypericum perforatum*, T3376 *Hypolepis punctata* [Syn. *Polypodium punctatum*], T3387 *Idesia polycarpa*, T3388 *Ilex chinensis* [Syn. *Ilex purpurea*], T3395 *Ilex pedunculosa*, T3528 *Isodon ternifolia*, T3529 *Isodon ternifolius*, T3672 *Lagerstroemia indica*, T3701 *Lasiosphaera fenlzii*, T3732 *Lawsonia inermis*, T3851 *Lindera glauca*, T3856 *Lindera umbellata* [Syn. *Lindera erythrocarpa*], T3857 *Lindera umbellata* [Syn. *Lindera erythrocarpa*], T3863 *Liparis nervosa*, T3866 *Liquidambar formosana* [Syn. *Liquidambar taiwaniana*], T3876 *Litchi chinensis*, T3887 *Litsea glutinosa*, T3953 *Lycianthes biflora*, T3961 *Lycoperdon pyriforme*, T3989 *Lygodium flexuosum* [Syn. *Lygodium pinnatifidum*; *Ophioglossum flexuosum*], T3990 *Lygodium japonicum*, T3995 *Lysidice rhodostegia*, T4006 *Lythrum anceps*, T4007 *Lythrum salicaria*, T4026 *Macrothehypteris oligophlebia*, T4029 *Maesa japonica*, T4080 *Mallotus apelta*, T4082 *Mallotus japonicus*, T4118 *Marsdenia oreophila*, T4126 *Matteuccia orientalis*, T4305 *Mosla dianthera*, T4346 *Myrica nagi* [Syn. *Podocarpus nagi*], T4413 *Nepeta*

*cataria*, T4503 *Onychium lucidum*, T4604 *Panax japonicus* var. *bipinnatifidus*, T4605 *Panax japonicus* var. *major*, T4607 *Panax pseudo-ginseng* var. *japonicus*, T4608 *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*], T4658 *Parmelia tinctorum*, T4686 *Pedilanthus tithymaloides*, T4705 *Peperomia pellucida*, T4730 *Peristrophe roxburghiana*, T4836 *Phyllanthus emblica*, T4978 *Pisolithus tinctorius* [Syn. *Lycoperdon capitatum*; *Scleroderma tinctorium*], T5104 *Polygonum hydropiper*, T5109 *Polygonum nodosum*, T5118 *Polygonum suffultum*, T5172 *Portulaca grandiflora*, T5184 *Potentilla kleiniana*, T5185 *Potentilla multifida*, T5194 *Premna microphylla*, T5250 *Psammosilene tunicoides*, T5267 *Psidium guajava*, T5290 *Pteris fauriei* [Syn. *Pteris fauriei* var. *minor*], T5295 *Pteris multifida*, T5299 *Pteris wallichianan*, T5310 *Pterospermum lanceaefolium*, T5339 *Pycnoporus sanguineus*, T5374 *Quercus infectoria*, T5411 *Randia spinosa*, T5444 *Reboulia hemisphaerica*, T5468 *Rheum emodi* [Syn. *Rheum australe*], T5501 *Rhodiola yunnanesis*, T5524 *Rhododendron simsii*, T5528 *Rhodomyrtus tomentosa*, T5529 *Rhodomyrtus tomentosa*, T5537 *Rhus sylvestris*, T5555 *Rodgersia pinnata*, T5563 *Rosa cymosa*, T5566 *Rosa henryi*, T5587 *Rubus alceaefolius*, T5595 *Rubus parviflorius*, T5704 *Sambucus nigra*, T5707 *Sambucus williamsii*, T5746 *Sassafras tzumu*, T5753 *Saussurea gnaphaloides*, T5757 *Saussurea laniceps*, T5759 *Saussurea medusa*, T5785 *Schefflera venulosa*, T5821 *Scopolia japonica*, T5840 *Scutellaria indica*, T5850 *Sedum aizoon*, T5852 *Sedum bulbiferum*, T5855 *Sedum kamschaticum*, T5856 *Sedum lineare* [Syn. *Sedum obtuso-lineare*], T5860 *Selaginella davidii*, T5861 *Selaginella doederleinii*, T5862 *Selaginella involvens*, T5863 *Selaginella moellendorffii*, T5866 *Selaginella sanguinolenta*, T5867 *Selaginella sinensis*, T5870 *Selaginella uncinata*, T5883 *Senecio cannabifolius*, T5942 *Sida acuta*, T5998 *Solanum dulcamara*, T6003 *Solanum khasianum*, T6116 *Stenoloma chusanum*, T6119 *Stephania cepharantha*, T6145 *Stichopus japonicus*, T6177 *Strychnos ignatii*, T6276 *Tacca plantaginea* [Syn. *Schizocapsa plantaginea*], T6367 *Teucrium quadrifarium*, T6482 *Toxicodendron succedaneum* [Syn. *Rhus succedanea*], T6485 *Trachycarpus fortunei*, T6491 *Trametes cinnabarina* [Syn. *Polyporus cinnabarinus*; *Boletus cinnabarinus*], T6531 *Trillium kamschaticum*, T6533 *Trillium kamschaticum*, T6535 *Trillium tschonoskii*, T6544 *Triticum aestivum* [Syn. *Triticum vulgare*], T6548 *Tritonia crocosmaeflora*, T6567 *Tupistra wattii* [Syn. *Campylandra wattii*], T6584 *Typha angustata*, T6585 *Typha angustifolia*, T6587 *Typha latifolia*, T6615 *Uncaria gambir*, T6618 *Uncaria homomalla* [Syn. *Uruparia homomalla*; *Uruparia tonkinensis*; *Uruparia lanosa* var. *parviflora*], T6653 *Usnea diffracta*, T6654 *Usnea longissima*, T6705 *Verbascum thapsus*, T6728 *Veronica serpyllifolia*, T6731 *Veronicastrum sibiricum*, T6747 *Vicia faba*, T6861 *Zanthoxylum ailanthoides*, T6874 *Zanthoxylum dimorphophyllum* var. *spinifolium*, T6883 *Zanthoxylum myriacanthum*.

**bleeding due to internal damage** T5866 *Selaginella sanguinolenta*.

**bleeding due to tympanites** T1181 *Capra hircus*; *Ovis aries*.

**bleeding during operation** T3863 *Liparis nervosa*.

**bleeding from dental extraction** T1120 *Callicarpa macrophylla*.

**bleeding from hemorrhoids** T0060 *Achillea alpina* [Syn. *Achillea sibirica*], T0065 *Achillea millefolium*, T0830 *Auricularia auricula*,

- T0831 *Auricularia delicata*, T1112 *Calendula arvensis*, T1145 *Camellia japonica*, T1662 *Coptis chinensis*, T1663 *Coptis chinensis* var. *brevisepala*, T1664 *Coptis deltoidea*, T1669 *Coptis omeiensis*, T1670 *Coptis teetoides* [Syn. *Coptis teeta*], T1747 *Corydalis thalictrifolia*, T3123 *Hedyotis auricularia*, T3244 *Hibiscus syriacus*, T3295 *Huperzia serrata* [Syn. *Lycopodium serratum*], T3659 *Lactuca indica*, T3933 *Luffa acutangula*, T3934 *Luffa cylindrica*, T4178 *Melodinus hemsleyanus*, T4203 *Mesua ferrea*, T4305 *Mosla dianthera*, T4307 *Mosla scabra* [Syn. *Mosla punctata*], T4502 *Onychium japonicum* [Syn. *Tricomanes japonicum*], T4505 *Ophiocephalus argus*, T4519 *Opuntia dillenii*, T4520 *Opuntia ficus-indica*, T4521 *Opuntia vulgaris*, T5099 *Polygonum bistorta*, T5173 *Portulaca oleracea*, T5176 *Potamogeton natans*, T5323 *Pulsatilla campanella*, T5324 *Pulsatilla cernua*, T5325 *Pulsatilla chinensis*, T5326 *Pulsatilla dahurica*, T5372 *Quercus dentata*, T5569 *Rosa multiflora*, T5611 *Rumex japonicus*, T5612 *Rumex nepalensis*, T5685 *Salvia plebeia*, T5712 *Sanguisorba officinalis*, T6034 *Sophora japonica*, T6036 *Sophora japonica*, T6522 *Trifolium repens*.
- bleeding from wounds** T3363 *Hypericum sampsonii*, T3560 *Jatropha curcas*, T5567 *Rosa laevigata*.
- bleeding hemorrhoids** T0267 *Ajuga nipponensis*, T5181 *Potentilla chinensis*, T5863 *Selaginella moellendorffii*.
- bleeding knife wound** T3373 *Hypoestes purpurea* [Syn. *Justicia purpurea*; *Hypoestes sinica*], T3555 *Jasminum nudiflorum*, T3765 *Lepisorus ussuriensis*, T5288 *Pteris cretica* var. *nervosa* [Syn. *Pteris nervosa*], T5297 *Pteris plumbea*, T5389 *Rabdosia coetsa*.
- bleeding of digestive tract** T0060 *Achillea alpina* [Syn. *Achillea sibirica*], T0922 *Berchemia polyphylla* var. *leioclada*, T1116 *Callicarpa arborea*, T5472 *Rheum officinale*, T5474 *Rheum palmatum*, T5481 *Rheum tanguticum*, T6745 *Vicia faba*, T6747 *Vicia faba*.
- bleeding of skin** T2323 *Eclipta prostrata* [Syn. *Eclipta alba*].
- blood amassment yellowing** T2435 *Eriochloa sinensis*.
- blood and liquid depletion** T1173 *Cannabis sativa*.
- blood conglomeration** T1210 *Carpesium abrotanoides*.
- blood deficiency syndrome** T0495 *Angelica sinensis*, T4804 *Phlojodicarpus sibiricus*.
- blood depletion and amenorrhea** T5445 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*].
- blood dizziness** T3276 *Homo sapiens*.
- blood dysentery** T0249 *Agrimonia pilosa* var. *japonica*, T0302 *Alhagi pseudalhagi*, T0427 *Ampelopsis japonica* [Syn. *Paullinia japonica*], T0601 *Ardisia pusilla*, T0830 *Auricularia auricula*, T0831 *Auricularia delicata*, T0991 *Bos taurus domesticus*; *Bubalus bubalis*, T1005 *Brassica campestris* [Syn. *Brassica campestris* var. *oleifera*], T1441 *Cinnamomum japonicum*, T1451 *Cirsium setosum* [Syn. *Cerratula setosa*; *Cirsium segetum*; *Cephalanoplos segetum*], T1896 *Cupressus funebris*, T2218 *Diospyros kaki*, T2281 *Dryopteris crassirhizoma*, T2323 *Eclipta prostrata* [Syn. *Eclipta alba*], T2363 *Entada phaseoloides* [Syn. *Lens phaseoloides*], T3145 *Helianthus annuus*, T3278 *Homo sapiens*, T4399 *Nelumbo nucifera*, T4604 *Panax japonicus* var. *bipinnatifidus*, T4606 *Panax pseudo-ginseng*, T5372 *Quercus dentata*, T5530 *Rhus chinensis* [Syn. *Rhus semialata*], T5712 *Sanguisorba officinalis*, T5966 *Siphonostegia chinensis*, T6006 *Solanum melongena*, T6034 *Sophora japonica*, T6036 *Sophora japonica*, T6440 *Thuja orientalis* [Syn. *Platyclusus orientalis*; *Biota orientalis*].
- blood ejection** T0001 *Abelmoschus manihot*, T0216 *Agave americana* var. *marginata* [Syn. *Agave americana* var. *variegata*], T0248 *Agrimonia pilosa*, T0249 *Agrimonia pilosa* var. *japonica*, T0266 *Ajuga macrosperma*, T0322 *Allium tuberosum*, T0382 *Althaea rosea*, T0446 *Anaphalis margaritacea*, T0568 *Aralia chinensis*, T0570 *Aralia dasyphylla*, T0598 *Ardisia japonica*, T0600 *Ardisia mamillata* [Syn. *Tinus mamillata*], T0648 *Arnebia euchroma*, T0649 *Arnebia guttata*, T0664 *Artemisia argyi*, T0681 *Artemisia lavandulaefolia*, T0685 *Artemisia mongolica*, T0687 *Artemisia myriantha*, T0689 *Artemisia princeps*, T0691 *Artemisia rubripes*, T0706 *Artemisia vulgaris*, T0722 *Arundo donax*, T0776 *Asplenium prolongatum*, T0860 *Balanophora japonica*, T0867 *Baphicacanthus cusia* [Syn. *Strobilanthes cusia*], T0890 *Begonia limprichtii*, T0923 *Bergenia crassifolia*, T0924 *Bergenia purpurascens*, T0952 *Blechnum orientale*, T0955 *Bletilla striata*, T0973 *Bombax malabaricum* [Syn. *Gossampinus malabarica*], T0982 *Bos taurus domesticus*, T1043 *Bryophyllum pinnatum*, T1045 *Bubalus bubalis*, T1145 *Camellia japonica*, T1184 *Capsella bursa-pastoris*, T1199 *Carduus acanthoides*, T1200 *Carduus crispus*, T1210 *Carpesium abrotanoides*, T1254 *Castanea mollissima*, T1311 *Centella asiatica*, T1449 *Cirsium japonicum*, T1451 *Cirsium setosum* [Syn. *Cerratula setosa*; *Cirsium segetum*; *Cephalanoplos segetum*], T1547 *Clematis terniflora* [Syn. *Clematis maximowicziana*], T1662 *Coptis chinensis*, T1663 *Coptis chinensis* var. *brevisepala*, T1664 *Coptis deltoidea*, T1669 *Coptis omeiensis*, T1670 *Coptis teetoides* [Syn. *Coptis teeta*], T1808 *Crocus sativus*, T1896 *Cupressus funebris*, T1907 *Curcuma wengujin*, T1928 *Cycas revoluta*, T1967 *Cynoglossum amabile*, T1969 *Cynoglossum officinale*, T1986 *Cyrtomium fortunei*, T2191 *Dioscorea bulbifera*, T2193 *Dioscorea cirrhosa* [Syn. *Dioscorea pogonoides*], T2221 *Diospyros kaki*, T2257 *Dracocephalum moldavicum*, T2281 *Dryopteris crassirhizoma*, T2290 *Duchesnea indica*, T2323 *Eclipta prostrata* [Syn. *Eclipta alba*], T2407 *Equisetum arvense*, T2540 *Euonymus fortunei*, T2882 *Gardenia jasminoides* [Syn. *Gardenia florida*], T3054 *Gossypium barbadense*, T3055 *Gossypium herbaceum*, T3058 *Gossypium hirsutum* [Syn. *Gossypium mexicanum*], T3088 *Gynura segetum* [Syn. *Gynura japonica*], T3241 *Hibiscus mutabilis*, T3276 *Homo sapiens*, T3277 *Homo sapiens*, T3278 *Homo sapiens*, T3318 *Hylotelephium mingjianum*, T3334 *Hypocoum leptocarpum*, T3349 *Hypericum erectum*, T3361 *Hypericum perforatum*, T3363 *Hypericum sampsonii*, T3373 *Hypoestes purpurea* [Syn. *Justicia purpurea*; *Hypoestes sinica*], T3387 *Idesia polycarpa*, T3423 *Indigofera tinctoria*, T3460 *Iris halophila*, T3464 *Iris lactea* var. *chinensis* [Syn. *Iris pallasii* var. *chinensis*], T3547 *Ixeris chinensis*, T3736 *Lemmaphyllum microphyllum*, T3737 *Lemmaphyllum microphyllum* var. *obovatum*, T3769 *Lespedeza bicolor*, T3866 *Liquidambar formosana* [Syn. *Liquidambar taiwaniana*], T3881 *Lithospermum erythrorhizon*, T3954 *Lycium barbarum*, T3956 *Lycium chinense*, T3981 *Lycopus lucidus*, T4006 *Lythrum anceps*, T4007 *Lythrum salicaria*, T4121 *Marsilea quadrifolia*, T4127 *Matteuccia struthiopteris*, T4259 *Mnium cuspidatum*, T4398 *Nelumbo nucifera*, T4402 *Nelumbo nucifera*, T4413 *Nepeta cataria*, T4502 *Onychium*



*japonicum* [Syn. *Tricomanes japonicum*], T4519 *Opuntia dillenii*, T4521 *Opuntia vulgaris*, T4549 *Osbeckia chinensis*, T4552 *Osmunda japonica*, T4564 *Oxalis corniculata* [Syn. *Oxalis repens*], T4582 *Paeonia delavayi*, T4584 *Paeonia lactiflora* wild, T4585 *Paeonia moutan* [Syn. *Paeonia suffruticosa*], T4586 *Paeonia obovata*, T4590 *Paeonia veitchii*, T4604 *Panax japonicus* var. *bipinnatifidus*, T4605 *Panax japonicus* var. *major*, T4606 *Panax pseudo-ginseng*, T4607 *Panax pseudo-ginseng* var. *japonicus*, T4608 *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*], T4656 *Parmelia saxatilis*, T4720 *Perilla frutescens* var. *arguta*, T4723 *Perilla frutescens* var. *crispa*, T4730 *Peristrophe roxburghiana*, T5043 *Podocarpus macrophyllus*, T5045 *Podocarpus macrophyllus* var. *maki*, T5099 *Polygonum bistorta*, T5118 *Polygonum suffultum*, T5120 *Polygonum tinctorium*, T5121 *Polygonum tinctorium*, T5182 *Potentilla discolor*, T5230 *Prunus persica*, T5269 *Psilotum nudum*, T5295 *Pteris multifida*, T5354 *Pyrrosia davidii*, T5355 *Pyrrosia drakeana*, T5356 *Pyrrosia gralla*, T5357 *Pyrrosia lingua*, T5358 *Pyrrosia petiolosa*, T5360 *Pyrrosia sheareri*, T5372 *Quercus dentata*, T5419 *Raphanus sativus*, T5449 *Reineckea carnea*, T5484 *Rhinoceros unicornis*; *Rhinoceros sondaicus*; *Rhinoceros sumatrensis*, T5497 *Rhodiola kirilowii*, T5518 *Rhododendron mucronatum*, T5523 *Rhododendron simsii*, T5529 *Rhodomyrtus tomentosa*, T5554 *Rodgersia aesculifolia*, T5557 *Rohdea japonica* [Syn. *Orontium japonicum*], T5579 *Rubia cordifolia*, T5605 *Rumex acetosa*, T5607 *Rumex crispus*, T5611 *Rumex japonicus*, T5612 *Rumex nepalensis*, T5613 *Rumex obtusifolius*, T5614 *Rumex patientia*, T5672 *Salvia flava*, T5673 *Salvia glutinosa*, T5685 *Salvia plebeia*, T5687 *Salvia prionitis*, T5701 *Salvia yunnanensis*, T5712 *Sanguisorba officinalis*, T5754 *Saussurea graminea*, T5804 *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*], T5833 *Scutellaria amoena*, T5834 *Scutellaria baicalensis*, T5835 *Scutellaria barbata* [Syn. *Scutellaria rivularis*], T5839 *Scutellaria hypericifolia*, T5840 *Scutellaria indica*, T5841 *Scutellaria likiangensis*, T5843 *Scutellaria rehderiana*, T5845 *Scutellaria viscidula*, T5850 *Sedum aizoon*, T5855 *Sedum kantschaticum*, T5862 *Selaginella involvens*, T5863 *Selaginella moellendorffii*, T5865 *Selaginella pulvinata*, T5869 *Selaginella tamariscina*, T5870 *Selaginella uncinata*, T5924 *Sesamum indicum*, T6034 *Sophora japonica*, T6036 *Sophora japonica*, T6116 *Stenoloma chusanum*, T6119 *Stephania cepharantha*, T6367 *Teucrium quadrifarium*, T6440 *Thuja orientalis* [Syn. *Platyclusus orientalis*; *Biota orientalis*], T6471 *Toddalia asiatica* [Syn. *Toddalia aculeata*; *Paullinia asiatica*], T6482 *Toxicodendron succedaneum* [Syn. *Rhus succedanea*], T6485 *Trachycarpus fortunei*, T6584 *Typha angustata*, T6585 *Typha angustifolia*, T6587 *Typha latifolia*, T6601 *Umblicaria esculenta* [Syn. *Gyrophora esculenta*], T6615 *Uncaria gambir*, T6764 *Vinegar*, T6895 *Zanthoxylum simulans*, T6904 *Zephyranthes grandiflora* [Syn. *Zephyranthes carinata*].

**blood ejection due to blood heat** T3340 *Hypericum ascyron*, T3416 *Imperata cylindrica* var. *major*, T4401 *Nelumbo nucifera*, T5133 *Polytrichum commune*, T5445 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], T5447 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], T5851 *Sedum alfredii* [Syn. *Sedum formosanum*].

**blood ejection due to internal damage** T1566 *Clerodendrum inerme*.

**blood ejection from knocks and falls** T0529 *Anthriscus sylvestris*, T1448 *Cirsium chinense*.

**blood heat** T4398 *Nelumbo nucifera*, T5833 *Scutellaria amoena*, T5834 *Scutellaria baicalensis*, T5839 *Scutellaria hypericifolia*, T5841 *Scutellaria likiangensis*, T5843 *Scutellaria rehderiana*, T5845 *Scutellaria viscidula*, T6036 *Sophora japonica*.

**blood loss** T1604 *Coeloglossum viride* [Syn. *Coeloglossum viride* var. *bracteatum*], T3077 *Gymnadenia conopsea*.

**blood qi pain** T2835 *Galium verum*.

**blood stagnation and menstrual block** T1160 *Campsia grandiflora*.

**blood stasis** T2435 *Eriochloa sinensis*.

**blood stasis and abdominal pain** T1005 *Brassica campestris* [Syn. *Brassica campestris* var. *oleifera*], T1492 *Citrus limon*, T1496 *Citrus limonia*, T6278 *Tagetes erecta*.

**blood stasis and dysmenorrhea** T1001 *Brachystemma calycinum*, T1561 *Clerodendron serratum*, T1569 *Clerodendron serratum* var. *amplexifolium*, T4450 *Nuphar pumilum*.

**blood stasis and menstrual block** T0383 *Alyxia sinensis*, T0999 *Bougainvillea glabra*.

**blood stasis and qi stagnation** T1903 *Curcuma aromatica*, T1905 *Curcuma longa*.

**blood stasis lumbago** T5648 *Salacia prinoidea* [Syn. *Salacia chinensis*].

**blood stasis swelling and pain** T0108 *Aconitum kusnezoffii*, T0170 *Adhatoda vasica*, T0324 *Allium victorialis*, T1566 *Clerodendrum inerme*, T3853 *Lindera obtusiloba*, T5238 *Prunus salicina*, T5562 *Rosa chinensis*.

**blood strangury** T0073 *Achyranthes bidentata*, T0544 *Apium graveolens*, T0977 *Bombyx mori*, T1001 *Brachystemma calycinum*, T1145 *Camellia japonica*, T1210 *Carpesium abrotanoides*, T1311 *Centella asiatica*, T1451 *Cirsium setosum* [Syn. *Cerratula setosa*; *Cirsium segetum*; *Cephalanoplos segetum*], T1554 *Clerodendron cyrtophyllum*, T1907 *Curcuma wengujin*, T1924 *Cyathula officinalis*, T1950 *Cynanchum ascyrifolium*, T1951 *Cynanchum atratum*, T1962 *Cynanchum versicolor*, T2143 *Dianthus chinensis*, T2145 *Dianthus superbus*, T2147 *Dianthus versicolor*, T2952 *Gerbera piloselloides*, T3002 *Glycine max*, T3143 *Helianthus annuus*, T3278 *Homo sapiens*, T3363 *Hypericum sampsonii*, T3645 *Kummerowia striata*, T3681 *Lamium barbatum*, T3737 *Lemnaphyllum microphyllum* var. *obovatum*, T3933 *Luffa acutangula*, T3934 *Luffa cylindrica*, T3990 *Lygodium japonicum*, T4787 *Phellinus igniarius*, T5354 *Pyrrosia davidii*, T5355 *Pyrrosia drakeana*, T5356 *Pyrrosia gralla*, T5357 *Pyrrosia lingua*, T5358 *Pyrrosia petiolosa*, T5360 *Pyrrosia sheareri*, T5835 *Scutellaria barbata* [Syn. *Scutellaria rivularis*], T5838 *Scutellaria galericulata*, T5966 *Siphonostegia chinensis*, T6006 *Solanum melongena*, T6034 *Sophora japonica*, T6036 *Sophora japonica*, T6582 *Tylophora ovata*, T6722 *Veronica anagallis-aquatica*, T6870 *Zanthoxylum bungeanum*.

**blood strangury with inhibited pain** T6584 *Typha angustata*, T6585 *Typha angustifolia*, T6587 *Typha latifolia*.

**blood vacuity** T3742 *Lentimus edodes*, T4238 *Milletia nitida*, T4308 *Mucuna birdwoodiana*, T4311 *Mucuna sempervirens*, T5042 *Podocarpus macrophyllus*, T5044 *Podocarpus macrophyllus* var. *maki*, T6066 *Spatholobus suberectus*.

**blood vacuity and general weakness** T4234 *Milletia dielsiana*, T4239

- Millettia nitida* var. *hirsutissima*, T5529 *Rhodomyrtus tomentosa*.
- blood vacuity and numbness in limbs** T5701 *Salvia yunnanensis*.
- blood vacuity during convalescence** T5179 *Potentilla anserina*.
- blood vacuity of women** T4438 *Nostoc flagelliforme*.
- blood vacuity with yellow complexion** T3129 *Hedysarum polybotrys*, T5446 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*].
- blood vacuity** T0474 *Angelica acutiloba* [Syn. *Ligusticum acutilobum*], T0495 *Angelica sinensis*, T1598 *Codonopsis convolvulacea*, T1680 *Cordyceps militaris*, T1681 *Cordyceps militaris* cv, T2347 *Embelia parviflora*, T4804 *Phlojodicarpus sibiricus*.
- bloody stool** T0600 *Ardisia mamillata* [Syn. *Timus mamillata*], T1118 *Callicarpa formosana*, T1119 *Callicarpa japonica*, T1254 *Castanea mollissima*, T2927 *Gentiana rhodantha*, T5182 *Potentilla discolor*, T5754 *Saussurea graminea*, T5863 *Selaginella moellendorffii*, T5868 *Selaginella stauntoniana*.
- bloody urine** T1118 *Callicarpa formosana*, T1119 *Callicarpa japonica*, T3765 *Lepisorus ussuriensis*, T5868 *Selaginella stauntoniana*.
- bloody urine (hematuria)** T5002 *Plantago asiatica*, T5004 *Plantago depressa*, T5007 *Plantago major*.
- blurred vision** T2803 *Frullania tamarisci* ssp. *moniliata* [Syn. *Frullania moniliata*], T4656 *Parmelia saxatilis*, T5227 *Prunus mume*.
- body lichen** T0750 *Asparagus gobicus*, T5821 *Scopolia japonica*.
- boil** T4005 *Lysionotus pauciflorus*, T4253 *Mirabilis jalapa*, T4789 *Phellodendron amurense*, T4790 *Phellodendron amurense* var. *wilsonii*, T4791 *Phellodendron chinense*, T4792 *Phellodendron chinense* var. *glabriusculum*, T6494 *Trema dielsiana*.
- boil and lichen** T2036 *Datura innoxia*, T2041 *Datura metel*, T2046 *Datura stramonium*.
- bone marrow infection** T5680 *Salvia miltiorrhiza*, T5681 *Salvia miltiorrhiza* f. *alba*, T5688 *Salvia przewalskii*.
- bone stuck in throat** T1545 *Clematis chinensis*, T1982 *Cyprinus carpio*, T5569 *Rosa multiflora*.
- bone tuberculosis** T1550 *Cleome gynandra* [Syn. *Gynandropsis gynandra*], T3564 *Juglans mandshurica*, T4005 *Lysionotus pauciflorus*, T5279 *Psychotria serpens*, T6105 *Stellera chamaejasme*, T6540 *Tripterygium hypoglaucom*.
- brain leak** T0988 *Bos taurus domesticus*; *Bubalus bubalis*, T4215 *Michelia yunnanensis*.
- brandy nose** T1160 *Campsis grandiflora*, T4020 *Macleaya cordata*.
- breast milk stoppage** T0156 *Actinidia arguta*, T0173 *Adiantum lunulatum*, T2720 *Ficus hispida*, T3270 *Holboellia fargesii*, T4120 *Marsdenia tenacissima*, T6777 *Viscum multinerve*.
- bronchial asthma** T1941 *Cymbopogon distans*, T2367 *Ephedra equisetina*, T2368 *Ephedra gerardiana*, T2369 *Ephedra intermedia*, T2372 *Ephedra likiangensis*, T2373 *Ephedra minuta*, T2375 *Ephedra monosperma*, T2379 *Ephedra saxatilis*, T2380 *Ephedra sinica*, T3106 *Harpagophytum procumbens*, T3885 *Litsea cubeba*, T4796 *Pheretima aspergillum*; *Allolobophora caliginosa trapezoides*, T6820 *Wikstroemia indica*.
- bronchitis** T0151 *Acronychia pedunculata*, T0967 *Boeninghausenia sessilicarpa*, T1381 *Choerospondias axillaris*, T1943 *Cymbopogon goeringii*, T2565 *Eupatorium lindleyanum*, T2720 *Ficus hispida*, T3011 *Glycyrrhiza aspera*, T3013 *Glycyrrhiza glabra*, T3015 *Glycyrrhiza inflata*, T3016 *Glycyrrhiza kansuensis*, T3021 *Glycyrrhiza squamulosa*, T3022 *Glycyrrhiza uralensis*, T3023 *Glycyrrhiza yunnanensis*, T3056 *Gossypium herbaceum*, T3246 *Hibiscus syriacus*, T3568 *Juglans regia*, T3709 *Lathyrus pratensis*, T3749 *Leontopodium alpinum*, T4248 *Mimosa pudica*, T4403 *Nemacystus decipiens* [Syn. *Mesogloea decipiens*; *Cladosiphon decipiens*], T4689 *Peganum nigellastrum*, T5072 *Polygala caudata*, T5907 *Senecio scandens* [Syn. *Senecio chinensis*], T6132 *Stephania sasakii*.
- bubo** T2601 *Euphorbia milii*.
- bulging mounting** T5740 *Sargassum vachellianum*.
- burns** T1084 *Buthus martensi*, T1118 *Callicarpa formosana*, T1119 *Callicarpa japonica*, T2988 *Glochidion eriocarpum*, T4789 *Phellodendron amurense*, T4790 *Phellodendron amurense* var. *wilsonii*, T4791 *Phellodendron chinense*, T4792 *Phellodendron chinense* var. *glabriusculum*, T5018 *Pleuropterus ciliinervis*, T5549 *Ricinus communis*, T6440 *Thuja orientalis* [Syn. *Platyclusus orientalis*; *Biota orientalis*], T6521 *Trifolium pratense*, T6691 *Veratrum baillonii*.
- burns and scalds** T0001 *Abelmoschus manihot*, T0002 *Abelmoschus moschatus* [Syn. *Hibiscus abelmoschus*], T0267 *Ajuga nipponensis*, T0299 *Aleurites cordata* [Syn. *Aleurites fordii*], T0382 *Althaea rosea*, T0421 *Amorpha fruticosa*, T0427 *Ampelopsis japonica* [Syn. *Paullinia japonica*], T0540 *Apis cerana*, T0563 *Arachniodes exilis*, T0680 *Artemisia lactiflora*, T0776 *Asplenium prolongatum*, T0827 *Aucuba chinensis* ssp. *omeiensis*, T0838 *Azolla imbricata* [Syn. *Salvinia imbricata*], T0853 *Baekkea frutescens*, T0879 *Bauhinia purpurea*, T0955 *Bletilla striata*, T1044 *Bryum argenteum*, T1137 *Caltha palustris*, T1146 *Camellia oleifera*, T1147 *Camellia oleifera*, T1151 *Camellia sinensis* [Syn. *Thea sinensis*], T1152 *Camellia sinensis* [Syn. *Thea sinensis*], T1163 *Campylotropis hirtella*, T1251 *Cassiope filiformis*, T1289 *Celastrus orbiculatus* [Syn. *Celastrus articulatus*], T1366 *Chimonanthus fragrans* [Syn. *Chimonanthus praecox*], T1381 *Choerospondias axillaris*, T1437 *Cinnamomum camphora*, T1644 *Conocephalum conicum*, T1692 *Coriaria sinica* [Syn. *Coriaria nepalensis*], T1758 *Cotinus coggygria*, T1759 *Cotinus coggygria* var. *cinerea*, T1878 *Cucumis sativus*, T2092 *Delphinus delphis*, T2161 *Dicranopteris pedata* [Syn. *Polypodium pedatum*; *Dicranopteris dichotoma*], T2188 *Dioscorea alata*, T2243 *Dodonaea viscosa*, T2290 *Duchesnea indica*, T2293 *Dumortiera hirsuta*, T2327 *Elaeagnus angustifolia*, T2505 *Eucalyptus citriodora*, T2510 *Eucalyptus globulus*, T2536 *Euonymus alatus*, T2601 *Euphorbia milii*, T2658 *Fagopyrum esculentum*, T2715 *Fibraea recisa*, T2839 *Gallus gallus domesticus*, T2852 *Garcinia cowa*, T2866 *Garcinia morella*, T2927 *Gentiana rhodantha*, T3241 *Hibiscus mutabilis*, T3361 *Hypericum perforatum*, T3376 *Hypolepis punctata* [Syn. *Polypodium punctatum*], T3387 *Idesia polycarpa*, T3388 *Ilex chinensis* [Syn. *Ilex purpurea*], T3396 *Ilex pubescens*, T3397 *Ilex pubescens* var. *glaber*, T3414 *Impatiens sicutifer*, T3479 *Isodon amethystoides*, T3775 *Lethariella cladonioides*, T3827 *Ligustrum japonicum*, T3845 *Linaria vulgaris*, T3932 *Ludwigia octovalvis*, T3969 *Lycopodium casuarinoides*, T3983 *Lycoris aurea*, T3984 *Lycoris chinensis*, T3986 *Lycoris radiata* [Syn. *Amaryllis radiata*], T3990 *Lygodium japonicum*, T4026 *Macrothelypteris oligophlebia*, T4072 *Mahonia shenii*, T4109 *Marchantia polymorpha*,

- T4261 *Mollugo pentaphylla*, T4349 *Myrica rubra*, T4487 *Olea europaea*, T4502 *Onychium japonicum* [Syn. *Tricomanes japonicum*], T4520 *Opuntia ficus-indica*, T4562 *Oxalis acetosella*, T4564 *Oxalis corniculata* [Syn. *Oxalis repens*], T4705 *Peperomia pellucida*, T4798 *Philonotis fontana*, T4881 *Picrasma quassioides* [Syn. *Picrasma ailanthoides*], T4937 *Piper betle*, T5101 *Polygonum cuspidatum*, T5156 *Populus nigra* var. *thevestina*, T5172 *Portulaca grandiflora*, T5288 *Pteris cretica* var. *nervosa* [Syn. *Pteris nervosa*], T5290 *Pteris fauriei* [Syn. *Pteris fauriei* var. *minor*], T5395 *Rabdosia nervosa*, T5444 *Reboulia hemisphaerica*, T5472 *Rheum officinale*, T5474 *Rheum palmatum*, T5481 *Rheum tanguticum*, T5499 *Rhodiola sacra*, T5614 *Rumex patientia*, T5650 *Salix babylonica*, T5712 *Sanguisorba officinalis*, T5850 *Sedum aizoon*, T5855 *Sedum kamschaticum*, T5856 *Sedum lineare* [Syn. *Sedum obtuso-lineare*], T5857 *Sedum sarmentosum*, T5859 *Selaginella braunii*, T5863 *Selaginella moellendorffii*, T5866 *Selaginella sanguinolenta*, T5867 *Selaginella sinensis*, T5870 *Selaginella uncinata*, T5925 *Sesamum indicum* [Syn. *Sesamum orientale*], T5976 *Smilax china* [Syn. *Smilax japonica*], T6025 *Sonchus arvensis*, T6087 *Spiranthes sinensis*, T6116 *Stenoloma chusanum*, T6234 *Swertia punicea*, T6264 *Syzygium buxifolium*, T6716 *Vernonia esculenta*, T6728 *Veronica serpyllifolia*, T6883 *Zanthoxylum myriacanthum*, T6884 *Zanthoxylum nitidum*, T6920 *Ziziphium mauritiana*.
- calculus of urinary system** T2838 *Gallus gallus domesticus*, T3989 *Lygodium flexuosum* [Syn. *Lygodium pinnatifidum*; *Ophioglossum flexuosum*], T3998 *Lysimachia christinae*, T4248 *Mimosa pudica*.
- cancer of esophagus** T2263 *Dregea volubilis*.
- candida vaginitis** T5101 *Polygonum cuspidatum*.
- carcinoma** T0275 *Akebia quinata*, T0543 *Apis mellifera ligustica*, T1319 *Cephalotaxus hainanensis* [Syn. *Cephalotaxus mannii*], T1322 *Cephalotaxus oliveri*, T1323 *Cephalotaxus sinensis* [Syn. *Cephalotaxus harringtonia* var. *sinensis*], T2191 *Dioscorea bulbifera*, T2846 *Ganoderma japonicum* [Syn. *Ganoderma sinense*], T2848 *Ganoderma lucidum*, T2857 *Garcinia hanburyi*, T3126 *Hedyotis corymbosa* [Syn. *Oldenlandia corymbosa*], T3480 *Isodon angustifolia*, T3742 *Lentinus edodes*, T4120 *Marsdenia tenacissima*, T4131 *Maytenus confertiflorus*, T4134 *Maytenus hookeri*, T4303 *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*, T4485 *Oldenlandia diffusa* [Syn. *Hedyotis diffusa*], T5835 *Scutellaria barbata* [Syn. *Scutellaria rivularis*], T5838 *Scutellaria galericulata*.
- carcinoma in digestive tract** T0156 *Actinidia arguta*, T3229 *Hericium erinaceus* [Syn. *Hydnum erinaceus*].
- carcinoma of cardia** T1162 *Camptotheca acuminata*.
- carcinoma of esophagus** T0161 *Actinidia eriantha*, T1162 *Camptotheca acuminata*, T1318 *Cephalotaxus fortunei*, T1831 *Crotalaria sessiliflora*, T2143 *Dianthus chinensis*, T2145 *Dianthus superbus*, T2147 *Dianthus versicolor*, T2748 *Fomes fomentarius* [Syn. *Pyropolyporus fomentarius*; *Boletus fomentarius*; *Polyporus fomentarius*], T2844 *Ganoderma applanatum*, T5129 *Polyporus umbellatus*, T5396 *Rabdosia rubescens*.
- carcinoma of intestine** T1162 *Camptotheca acuminata*.
- carcinoma of liver** T1162 *Camptotheca acuminata*, T1831 *Crotalaria sessiliflora*.
- carcinoma of lung** T1318 *Cephalotaxus fortunei*, T1831 *Crotalaria sessiliflora*, T1904 *Curcuma kwangsiensis*, T1909 *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*], T5129 *Polyporus umbellatus*.
- carcinoma of mammary glands** T3443 *Iphigenia indica*, T5396 *Rabdosia rubescens*, T6311 *Taxus cuspidata*.
- carcinoma of ovary** T1904 *Curcuma kwangsiensis*, T1909 *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*], T6311 *Taxus cuspidata*.
- carcinoma of rectum** T1318 *Cephalotaxus fortunei*, T2143 *Dianthus chinensis*, T2145 *Dianthus superbus*, T2147 *Dianthus versicolor*.
- carcinoma of salivary gland** T3443 *Iphigenia indica*.
- carcinoma of skin** T1904 *Curcuma kwangsiensis*, T1909 *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*].
- carcinoma of stomach** T0161 *Actinidia eriantha*, T1162 *Camptotheca acuminata*, T1318 *Cephalotaxus fortunei*, T1831 *Crotalaria sessiliflora*, T1904 *Curcuma kwangsiensis*, T1909 *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*], T2263 *Dregea volubilis*, T2748 *Fomes fomentarius* [Syn. *Pyropolyporus fomentarius*; *Boletus fomentarius*; *Polyporus fomentarius*].
- carcinoma of thyroid** T1904 *Curcuma kwangsiensis*, T1909 *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*], T4020 *Macleaya cordata*.
- carcinoma of uterine cervix** T0617 *Arisaema amurense*, T0618 *Arisaema consanguineum*, T0620 *Arisaema heterophyllum*, T0830 *Auricularia auricula*, T0831 *Auricularia delicata*, T1831 *Crotalaria sessiliflora*, T3842 *Limonium gmelinii*, T4020 *Macleaya cordata*, T4903 *Pinellia pedatisecta*.
- carcinoma of vagina** T0830 *Auricularia auricula*, T0831 *Auricularia delicata*.
- cardiac failure** T0553 *Apocynum venetum*, T1468 *Citrus aurantium*, T1521 *Citrus wilsonii*, T2175 *Digitalis lanata*, T2177 *Digitalis purpurea*, T2452 *Erysimum cheiranthoides*, T4599 *Panax ginseng* [Syn. *Panax schinseng*], T5141 *Poncirus trifoliata*, T5557 *Rohdea japonica* [Syn. *Orontium japonicum*], T6155 *Strophanthus divaricatus*, T6433 *Thevetia nerifolia* [Syn. *Thevetia peruviana*].
- cardiac insufficiency** T0184 *Adonis amurensis*.
- cardiovascular diseases** T3231 *Hernandia sonora* [Syn. *Hernandia ovigera*].
- cassava poisoning** T3248 *Hibiscus tiliaceus*, T3685 *Lannea grandis* [Syn. *Lannea coromandelica*], T4503 *Onychium lucidum*.
- center qi fall** T0791 *Astragalus chrysopterus*, T0794 *Astragalus ernestii*, T0798 *Astragalus membranaceus*, T0800 *Astragalus mongholicus*, T1419 *Cimicifuga dahurica*, T1420 *Cimicifuga foetida*, T1421 *Cimicifuga heracleifolia*, T1423 *Cimicifuga nanchuanensis*.
- center vacuity with stomachache** T5067 *Polyalthia nemoralis*.
- centipede bite** T3400 *Illicium difengpi*, T3403 *Illicium majus*, T4217 *Microcos paniculata* [Syn. *Grewia microcos*], T4835 *Phyllanthus emblica*, T6177 *Strychnos ignatii*, T6551 *Trogopterus xanthipes*; *Pteromys volans*.
- central angiospastic retinitis** T3396 *Ilex pubescens*, T3397 *Ilex pubescens* var. *glaber*.
- central retinitis** T3396 *Ilex pubescens*, T3397 *Ilex pubescens* var. *glaber*.
- cerebral and cardiovascular diseases** T6775 *Viscum coloratum*.
- cerebral atherosclerosis** T5680 *Salvia miltiorrhiza*, T5681 *Salvia miltiorrhiza* f. *alba*, T5688 *Salvia przewalskii*.
- cerebral ischemia** T1583 *Cnidium officinale* [Syn. *Ligusticum officinale*],

- T3820 *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*].
- cerebral thrombosis** T0502 *Anisodus tanguticus* [Syn. *Scopolia tangutica*], T1215 *Carthamus tinctorius*, T3396 *Ilex pubescens*, T3397 *Ilex pubescens* var. *glaber*, T4303 *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*.
- cerebrovascular insufficiency diseases** T2961 *Ginkgo biloba*.
- cervical erosion** T0543 *Apis mellifera ligustica*.
- cervicitis** T6008 *Solanum nigrum*.
- chancere** T2200 *Dioscorea hispida*, T2883 *Gardenia jasminoides* [Syn. *Gardenia florida*].
- chest and rib-side pain** T0491 *Angelica polymorpha*, T1750 *Corydalis yanhusuo* [Syn. *Corydalis turtshaninovii* f. *yanhusuo*], T2008 *Dalbergia odorifera*, T2013 *Dalbergia sissoo*, T2555 *Eupatorium chinense*, T4163 *Melia toosendan*, T4604 *Panax japonicus* var. *bipinnatifidus*, T4823 *Pholidota yunnanensis*.
- chest and rib-side stabbing pain** T1583 *Cnidium officinale* [Syn. *Ligusticum officinale*], T3820 *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*].
- chest impediment** T0313 *Allium chinense*, T0316 *Allium macrostemon*, T0322 *Allium tuberosum*, T1438 *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*], T2546 *Euonymus sacrosancta*, T3869 *Liquor*, T4221 *Micromelum falcatum*, T6510 *Trichosanthes kirilowii*, T6513 *Trichosanthes rosthornii* [Syn. *Trichosanthes uniflora*].
- chest impediment and angina** T5661 *Salvia bowleyana*, T5671 *Salvia digitaloides*, T5701 *Salvia yunnanensis*.
- chest impediment and heart pain** T2964 *Ginkgo biloba*, T3396 *Ilex pubescens*, T3397 *Ilex pubescens* var. *glaber*.
- chest oppression and pain** T5497 *Rhodiola kirilowii*.
- chest oppression with cough asthma** T2697 *Ferula borealis*, T3432 *Inula helianthus-aquatica*.
- chest oppression with retching** T5833 *Scutellaria amoena*, T5834 *Scutellaria baicalensis*, T5839 *Scutellaria hypericifolia*, T5841 *Scutellaria likiangensis*, T5843 *Scutellaria rehderiana*, T5845 *Scutellaria viscidula*.
- chest pain** T1381 *Choerospondias axillaris*, T3797 *Libanotis condensata*.
- chest pain due to cough** T0045 *Acanthopanax trifoliatum*.
- child aphonia** T1050 *Bufo bufo gargarizans*; *Bufo melanostictus*, T5406 *Rana limnocharis*.
- child convulsion** T2890 *Gastrodia elata*.
- child epilepsy** T1660 *Coprinus atramentarius*.
- child food accumulation** T0847 *Baccharis indica* [Syn. *Pluchea indica*], T1954 *Cynanchum chinense*.
- child fright epilepsy** T2836 *Gallus gallus domesticus*, T6197 *Styrax benzoin*, T6204 *Styrax tonkinensis*.
- child gan accumulation** T0338 *Aloe ferox*, T0347 *Aloe vera* [Syn. *Aloe barbadensis*], T0348 *Aloe vera* var. *chinensis*, T0387 *Amaranthus caudatus*, T0500 *Anguilla japonica*, T0941 *Bidens tripartita*, T0950 *Blatta orientalis*, T0969 *Boerhavia diffusa*, T1049 *Bufo bufo gargarizans*; *Bufo melanostictus*, T1143 *Calystegia hederacea*, T1188 *Caragana chamlagu*, T1211 *Carpesium abrotanoides*, T1238 *Cassia mimosoides*, T1247 *Cassia sophera*, T1563 *Clerodendron trichotomum*, T1684 *Cordylone stricta*, T1815 *Crotalaria assamica*, T1826 *Crotalaria mucronata*, T1831 *Crotalaria sessiliflora*, T1954 *Cynanchum chinense*, T1958 *Cynanchum otophyllum*, T2020 *Damnacanthus indicus*, T2049 *Daucus carota*, T2267 *Drosera peltata* var. *lunata*, T2272 *Drymaria diandra* [Syn. *Drymaria cordata* ssp. *diandra*], T2422 *Erigeron breviscapus*, T2502 *Eucalyptus camaldulensis*, T2838 *Gallus gallus domesticus*, T3770 *Lespedeza cuneata*, T3950 *Lychnis fulgens*, T3999 *Lysimachia clethroides*, T4000 *Lysimachia congestiflora*, T4240 *Milletia pachycarpa*, T4526 *Origanum vulgare*, T4549 *Osbeckia chinensis*, T4843 *Phyllanthus urinaria*, T4887 *Picrorhiza kurrooa*, T4888 *Picrorhiza scrophulariiflora*, T5071 *Polygala arillata*, T5073 *Polygala chinensis* [Syn. *Polygala glomerata*], T5075 *Polygala fallax* [Syn. *Polygala aureocauda*], T5104 *Polygonum hydropiper*, T5122 *Polygonum viscosum*, T5183 *Potentilla griffithii* var. *velutina*, T5189 *Pothos chinensis*, T5384 *Quisqualis indica*, T5385 *Quisqualis indica*, T5409 *Rana temporaria chensinensis*; *Rana amurensis*, T5717 *Sapindus delavayi* [Syn. *Pancovia delavayi*], T5848 *Securinega suffruticosa*, T6229 *Swertia patens*, T6285 *Tamarindus indica*, T6489 *Tragopogon porrifolius*, T6831 *Woodwardia orientalis*.
- child gan accumulation with fever** T2909 *Gentiana crassicaulis*, T2910 *Gentiana dahurica*, T2913 *Gentiana kaufmanniana*, T2919 *Gentiana macrophylla*, T2932 *Gentiana siphonantha*, T2934 *Gentiana straminea*, T2936 *Gentiana tianschanica*, T2937 *Gentiana tibetica*, T3954 *Lycium barbarum*, T3956 *Lycium chinense*.
- child gan fever** T0607 *Arenaria juncea*, T0678 *Artemisia japonica*, T3090 *Gypsophila oldhamiana*, T3091 *Gypsophila pacifica*, T3932 *Ludwigia octovalvis*, T5955 *Silene jensenseensis*, T6104 *Stellaria dichotoma* var. *lanceolata*.
- child gan sore** T1952 *Cynanchum auriculatum*, T1953 *Cynanchum bungei*.
- child head sore** T2348 *Embelia ribes*.
- child heat sore** T5407 *Rana nigromaculata*; *Rana plancyi*.
- child indigestion** T2715 *Fibraurea recisa*, T2840 *Gallus gallus domesticus*, T5114 *Polygonum polystachyum*, T5375 *Quercus mongolica*, T6145 *Stichopus japonicus*.
- child jaundice** T5101 *Polygonum cuspidatum*.
- child measles** T1366 *Chimonanthus fragrans* [Syn. *Chimonanthus praecox*], T1425 *Cimicifuga simplex*, T5804 *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*], T5818 *Scoparia dulcis*.
- child milk accumulation** T3840 *Limnophila rugosa*.
- child mounting qi** T5362 *Pyrus bretschneideri*, T5366 *Pyrus pyrifolia*.
- child oxyuria disease** T6827 *Wisteria sinensis*.
- child wind papules** T0382 *Althaea rosea*.
- children wind-heat** T0434 *Amsonia sinensis*.
- cholangitis** T5957 *Silybum marianum*.
- cholecystalgia** T0501 *Anisodus luridus*, T0825 *Atropa belladonna*.
- cholecystitis** T0137 *Aconitum tanguticum*, T0646 *Armillariella tabescens*, T0647 *Armoracia lapathifolia*, T0912 *Berberis poiretii*, T0920 *Berberis wilsonae*, T1406 *Chrysosplenium nudicaule*, T1657 *Conyza canadensis* [Syn. *Erigeron canadensis*], T2233 *Diploclisia glaucescens*, T2941 *Gentianopsis paludosa*, T3156 *Helichrysum arenarium*, T3332 *Hypocoum erectum*, T3334 *Hypocoum leptocarum*, T3507 *Isodon lophanthoides* [Syn. *Rabdosia lophanthoides*; *Hyssopus lophanthoides*; *Plectranthus striatus*; *Isodon striatus*], T3547 *Ixeris chinensis*, T4194 *Menyanthes trifoliata*, T4391 *Nauclea officinalis*, T5247 *Przewalskia*

- tangutica*, T5397 *Rabdosia serra*, T5472 *Rheum officinale*, T5474 *Rheum palmatum*, T5481 *Rheum tanguticum*, T5730 *Sarcandra glabra* [Syn. *Chloranthus glaber*], T5867 *Selaginella sinensis*, T6095 *Stachytarpheta jamaicensis*, T6227 *Swertia mussotii*, T6234 *Swertia punicea*, T6789 *Vitex negundo*, T6901 *Zea mays*.
- cholera** T0318 *Allium sativum*, T1153 *Camellia sinensis* var. *assamica*, T1262 *Catalpa ovata*, T4086 *Malus asiatica*, T6056 *Sorghum vulgare*.
- cholera cramp** T4983 *Pisum sativum*, T6439 *Thuja orientalis* [Syn. *Platyclusus orientalis*; *Biota orientalis*].
- cholera with vomiting** T2216 *Diospyros ebenum*.
- cholera with vomiting and diarrhea** T4190 *Mentha spicata*, T5362 *Pyrus bretschneideri*, T5366 *Pyrus pyrifolia*.
- cholera with vomiting of sour matter** T4548 *Oryza sativa* var. *glutinosa*.
- chorioblastoma** T6043 *Sophora subprostrata* [Syn. *Sophora tonkinensis*].
- chorionitis** T2753 *Formica fusca*.
- chronic anemia** T6184 *Strychnos nux-vomica*, T6193 *Strychnos wallichiana*.
- chronic appendicitis** T6705 *Verbascum thapsus*.
- chronic bacillary dysentery** T0130 *Aconitum sinomontanum*.
- chronic bone marrow infection** T0625 *Aristolochia contorta*, T0627 *Aristolochia debilis* [Syn. *Aristolochia longa*].
- chronic bronchitis** T0553 *Apocynum venetum*, T0625 *Aristolochia contorta*, T0627 *Aristolochia debilis* [Syn. *Aristolochia longa*], T1357 *Chelidonium majus*, T1943 *Cymbopogon goeringii*, T2023 *Daphne genkwa*, T2203 *Dioscorea nipponica*, T2204 *Dioscorea nipponica* ssp. *rosthornii*, T2389 *Epimedium acuminatum*, T2390 *Epimedium brevicornum*, T2392 *Epimedium davidii*, T2394 *Epimedium elongatum*, T2398 *Epimedium koreanum*, T2401 *Epimedium pubescens*, T2402 *Epimedium sagittatum*, T2404 *Epimedium suchuenense*, T2406 *Epimedium wushanense*, T2766 *Fraxinus bungeana*, T2767 *Fraxinus chinensis*, T2774 *Fraxinus paxiana*, T2777 *Fraxinus rhynchophylla* [Syn. *Fraxinus chinensis* var. *rhynchophylla*], T2779 *Fraxinus stylosa*, T2780 *Fraxinus szaboana* [Syn. *Fraxinus chinensis* var. *acuminata*], T2783 *Fritillaria cirrhosa*, T2784 *Fritillaria delavayi*, T2792 *Fritillaria przewalskii*, T2796 *Fritillaria unibracteata*, T2798 *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*], T2846 *Ganoderma japonicum* [Syn. *Ganoderma sinense*], T2848 *Ganoderma lucidum*, T3284 *Houttuynia cordata*, T3828 *Ligustrum lucidum*, T3885 *Litsea cubeba*, T4005 *Lysionotus pauciflorus*, T4796 *Pheretima aspergillum*, *Allolobophora caliginosa trapezoides*, T5508 *Rhododendron dauricum*, T5989 *Solanum aculeatissimum*, T6008 *Solanum nigrum*, T6014 *Solanum surattense*, T6043 *Sophora subprostrata* [Syn. *Sophora tonkinensis*], T6259 *Syringa amurensis* [Syn. *Syringa reticulata* var. *amurensis*], T6440 *Thuja orientalis* [Syn. *Platyclusus orientalis*; *Biota orientalis*], T6574 *Tussilago farfara*.
- chronic cervicitis** T6043 *Sophora subprostrata* [Syn. *Sophora tonkinensis*].
- chronic cholecystitis** T0897 *Berberis amurensis*, T6691 *Veratrum baillonii*.
- chronic conjunctivitis** T6031 *Sophora flavescens* [Syn. *Sophora angustifolia*].
- chronic constipation** T4976 *Piptanthus nepalensis*, T5309 *Pterocladia tenuis*.
- chronic cough and asthma** T1049 *Bufo bufo gargarizans*; *Bufo melanostictus*, T2584 *Euphorbia ebracteolata*, T2587 *Euphorbia fischeriana*, T4851 *Physalis minima*, T5637 *Sabia schumanniana*.
- chronic diarrhea** T0197 *Aegle marmelos*, T0255 *Ailanthus altissima*, T0542 *Apis cerana*, T0791 *Astragalus chrysopterus*, T0794 *Astragalus ernestii*, T0798 *Astragalus membranaceus*, T0800 *Astragalus mongholicus*, T1425 *Cimicifuga simplex*, T1604 *Coeloglossum viride* [Syn. *Coeloglossum viride* var. *bracteatum*], T1826 *Crotalaria mucronata*, T2053 *Davallia mariesii*, T3077 *Gymnadenia conopsea*, T4400 *Nelumbo nucifera*, T4635 *Papaver somniferum*, T4637 *Papaver somniferum*, T5169 *Poria cocos*, T5270 *Psoralea corylifolia*, T5327 *Punica granatum*, T5328 *Punica granatum*, T5472 *Rheum officinale*, T5474 *Rheum palmatum*, T5481 *Rheum tanguticum*, T5554 *Rodgersia aesculifolia*, T6347 *Terminalia chebula*, T6474 *Toona ciliata*, T6475 *Toona sinensis*, T6670 *Vaccinium bracteatum*.
- chronic diarrhea and dysentery** T3567 *Juglans regia*, T5228 *Prunus mume*, T5568 *Rosa laevigata*, T6266 *Syzygium cumini*, T6346 *Terminalia chebula*, T6348 *Terminalia chebula* var. *tomentella*, T6670 *Vaccinium bracteatum*.
- chronic dysentery** T0255 *Ailanthus altissima*, T1419 *Cimicifuga dahurica*, T1420 *Cimicifuga foetida*, T1421 *Cimicifuga heracleifolia*, T2032 *Daphniphyllum calycinum*, T2050 *Daucus carota* var. *sativa*, T2051 *Daucus carota* var. *sativa*, T4635 *Papaver somniferum*, T5265 *Psidium guajava*, T5327 *Punica granatum*, T5328 *Punica granatum*, T5332 *Punica granatum*, T5569 *Rosa multiflora*, T5654 *Salix purpurea*, T6251 *Symplocos caudata*, T6267 *Syzygium jambos*, T6347 *Terminalia chebula*, T6474 *Toona ciliata*, T6475 *Toona sinensis*.
- chronic eczema** T2651 *Excoecaria cochinchinensis* var. *viridis*.
- chronic endometritis** T2715 *Fibraurea recisa*.
- chronic enteritis** T0130 *Aconitum sinomontanum*, T6599 *Ulva lactuca*, T6600 *Ulva pertusa*.
- chronic fright wind** T1210 *Carpesium abrotanoides*, T2037 *Datura innoxia*, T2044 *Datura metel*, T2890 *Gastrodia elata*, T5817 *Scolopendra subspinipes mutilans*.
- chronic gastritis** T0791 *Astragalus chrysopterus*, T0794 *Astragalus ernestii*, T0798 *Astragalus membranaceus*, T0800 *Astragalus mongholicus*, T1101 *Caesalpinia decapetala*, T3164 *Helicteres isora*, T3229 *Hericium erinaceus* [Syn. *Hydnum erinaceus*], T3613 *Kadsura coccinea* [Syn. *Kadsura chenensis*; *Kadsura hainanensis*].
- chronic gastroenteritis** T0501 *Anisodus luridus*, T0502 *Anisodus tanguticus* [Syn. *Scopolia tangutica*], T3085 *Gynostemma pentaphyllum*, T5247 *Przewalskia tangutica*.
- chronic glomerulonephritis** T0791 *Astragalus chrysopterus*, T0794 *Astragalus ernestii*, T0798 *Astragalus membranaceus*, T0800 *Astragalus mongholicus*, T3416 *Imperata cylindrica* var. *major*.
- chronic hepatitis** T0048 *Acanthus ilicifolius*, T0541 *Apis cerana*, T0680 *Artemisia lactiflora*, T0897 *Berberis amurensis*, T1604 *Coeloglossum viride* [Syn. *Coeloglossum viride* var. *bracteatum*], T1876 *Cucumis melo*, T1927 *Cycas revoluta*, T3077 *Gymnadenia conopsea*, T3742 *Lentinus edodes*, T5396 *Rabdosia rubescens*, T5607 *Rumex crispus*, T5957 *Silybum marianum*.
- chronic ischiatis** T5848 *Securinega suffruticosa*.
- chronic leukemia** T1162 *Camptotheca acuminata*.

- chronic liver diseases** T6231 *Swertia pseudochinensis*.
- chronic medullitis** T1556 *Clerodendron fragrans*.
- chronic nephritis** T0423 *Ampelopsis brevipedunculata*, T0495 *Angelica sinensis*, T0598 *Ardisia japonica*, T1553 *Clerodendranthus spicatus*, T2327 *Elaeagnus angustifolia*, T3128 *Hedysarum multijugum*, T4804 *Phlojodicarpus sibiricus*, T4906 *Pinus armandii*, T4916 *Pinus massoniana*, T5704 *Sambucus nigra*, T5707 *Sambucus williamsii*, T6540 *Tripterygium hypoglaucum*.
- chronic osteomyelitis** T0333 *Alocasia cucullata* [Syn. *Arum cucullatum*].
- chronic pain in lumbus and legs** T3614 *Kadsura heteroclita* [Syn. *Uvaria heteroclita*].
- chronic pharyngitis** T1053 *Bulbophyllum odoratissimum* [Syn. *Stelis odoratissimum*].
- chronic pharyngolaryngitis** T6507 *Trichosanthes cucumeroides*.
- chronic rheumatic arthritis** T1180 *Capparis spinosa*, T2749 *Fomes officinalis*.
- chronic scab** T1903 *Curcuma aromatica*, T1905 *Curcuma longa*.
- chronic sinus infections** T6843 *Xanthium sibiricum* [Syn. *Xanthium strumarium*].
- chronic sores** T6132 *Stephania sasakii*.
- chronic trachitis** T0598 *Ardisia japonica*, T0933 *Betula platyphylla*, T0935 *Betula platyphylla* var. *japonica*, T1051 *Bufo bufo gargarizans*; *Bufo melanostictus*, T1053 *Bulbophyllum odoratissimum* [Syn. *Stelis odoratissimum*], T1655 *Conyza blinii*, T2203 *Dioscorea nipponica*, T2204 *Dioscorea nipponica* ssp. *rosthornii*, T2327 *Elaeagnus angustifolia*, T3033 *Gnetum parvifolium* [Syn. *Gnetum indicum*], T3085 *Gynostemma pentaphyllum*, T4908 *Pinus bungeana*, T5522 *Rhododendron seniavinii*, T5607 *Rumex crispus*, T6008 *Solanum nigrum*, T6105 *Stellera chamaejasme*, T6729 *Veronica spuria*, T6787 *Vitex negundo*.
- chronic tympanitis** T1570 *Clerodendrum thomsonae*.
- chronic ulcer** T1903 *Curcuma aromatica*, T1905 *Curcuma longa*.
- chronic urticaria** T4184 *Mentha haplocalyx* [Syn. *Mentha canadaensis*; *Mentha arvensis* var. *haplocalyx*; *Mentha arvensis*].
- chronic uterine cervical infection** T3284 *Houttuynia cordata*.
- chronic wound ulcer** T0791 *Astragalus chrysopterus*, T0794 *Astragalus ernestii*, T0798 *Astragalus membranaceus*, T0800 *Astragalus mongholicus*.
- chyluria** T1184 *Capsella bursa-pastoris*, T1199 *Carduus acanthoides*, T1200 *Carduus crispus*, T3125 *Hedyotis chrysotricha* [Syn. *Oldenlandia chrysotricha*], T3143 *Helianthus annuus*, T3646 *Kyllinga brevifolia*, T5098 *Polygonum aviculare*.
- cinnabar toxin** T0838 *Azolla imbricata* [Syn. *Salvinia imbricata*].
- cirrhosis** T0853 *Baeckea frutescens*, T1876 *Cucumis melo*, T5957 *Silybum marianum*.
- cirrhosis with ascites** T0553 *Apocynum venetum*, T1240 *Cassia obtusifolia*, T1250 *Cassia tora*, T2727 *Ficus simplicissima*, T5844 *Scutellaria scordifolia*, T6436 *Thlaspi arvense*.
- clavus** T0318 *Allium sativum*, T0543 *Apis mellifera ligustica*.
- clear-eye blindness** T0986 *Bos taurus domesticus*; *Bubalus bubalis*, T1185 *Capsella bursa-pastoris*, T1240 *Cassia obtusifolia*, T1250 *Cassia tora*, T6732 *Vespertilio superans*.
- clear-eye blindness with internal obstruction** T1981 *Cyprinus carpio*.
- clenched jaw** T3000 *Glycine max*.
- climacteric hypertension** T2389 *Epimedium acuminatum*, T2390 *Epimedium brevicornum*, T2392 *Epimedium davidii*, T2394 *Epimedium elongatum*, T2398 *Epimedium koreanum*, T2401 *Epimedium pubescens*, T2402 *Epimedium sagittatum*, T2404 *Epimedium sutchuenense*, T2406 *Epimedium wushanense*.
- clouded flowery vision** T0049 *Acer ginnala*, T0793 *Astragalus complanatus*.
- clouded spirit** T4855 *Physeter catodon*.
- clouded spirit with delirious speech** T1662 *Coptis chinensis*, T1663 *Coptis chinensis* var. *brevisepala*, T1664 *Coptis deltoidea*, T1669 *Coptis omeiensis*, T1670 *Coptis teetoides* [Syn. *Coptis teeta*], T4401 *Nelumbo nucifera*.
- clouded spirit with loss of speech** T2978 *Gleditsia sinensis* [Syn. *Gleditsia horrida*].
- clove boil** T1372 *Chloranthus serratus*, T2243 *Dodonaea viscosa*.
- clove boil and swollen welling abscess** T3113 *Hedera nepalensis* var. *sinensis*, T3115 *Hedera rhombea*.
- clove sore** T0195 *Aeginetia indica*, T0595 *Ardisia crispa*, T0600 *Ardisia mamillata* [Syn. *Tinus mamillata*], T0805 *Astragalus sinicus*, T1049 *Bufo bufo gargarizans*; *Bufo melanostictus*, T1197 *Cardiospermum halicacabum*, T1275 *Cayratia japonica*, T1387 *Chrysanthemum boreale*, T1392 *Chrysanthemum indicum*, T1394 *Chrysanthemum lavandulifolium*, T1403 *Chrysosplenium grayanum*, T1448 *Cirsium chinense*, T1565 *Clerodendrum bungei*, T2298 *Dysosma difformis*, T2302 *Dysosma pleiantha* [Syn. *Podophyllum pleianthum*], T2304 *Dysosma veitchii*, T2305 *Dysosma versipellis* [Syn. *Podophyllum versipelle*], T2580 *Euphorbia antiquorum*, T2590 *Euphorbia hirta*, T2649 *Evolvulus alsinoides*, T2897 *Gelsemium elegans*, T3144 *Helianthus annuus*, T3146 *Helianthus annuus* cv, T3411 *Impatiens balsamina*, T3928 *Lotus corniculatus*, T3997 *Lysimachia capillipes*, T4206 *Metaplexis japonica*, T4428 *Nicotiana tabacum*, T4530 *Ormosia hosiei*, T4836 *Phyllanthus emblica*, T4837 *Phyllanthus emblica*, T4846 *Physalis alkekengi* var. *franchetii*, T4848 *Physalis angulata*, T4854 *Physalis pubescens*, T4917 *Pinus massoniana*, T5097 *Polygonum amphibium*, T5194 *Premna microphylla*, T5557 *Rohdea japonica* [Syn. *Orontium japonicum*], T5651 *Salix babylonica*, T5750 *Saururus chinensis*, T5856 *Sedum lineare* [Syn. *Sedum obtuso-lineare*], T5894 *Senecio oryzetorum*, T5993 *Solanum capsicastrum*, T6005 *Solanum lyratum*, T6008 *Solanum nigrum*, T6015 *Solanum torvum*, T6205 *Sus scrofa*, T6279 *Tagetes erecta*, T6843 *Xanthium sibiricum* [Syn. *Xanthium strumarium*].
- clove sore and eczema** T2691 *Farfugium japonicum*.
- clove sore and swollen boil** T1199 *Carduus acanthoides*, T1200 *Carduus crispus*, T1831 *Crotalaria sessiliflora*, T2835 *Galium verum*, T4004 *Lysimachia paridiformis*.
- clove sore and swollen welling abscess** T1709 *Corydalis bungeana*, T1884 *Cudrania cochinchinensis*.
- clove sore of nose** T1050 *Bufo bufo gargarizans*; *Bufo melanostictus*.
- clove sore running yellow** T1662 *Coptis chinensis*, T1663 *Coptis chinensis* var. *brevisepala*, T1664 *Coptis deltoidea*, T1669 *Coptis omeiensis*, T1670 *Coptis teetoides* [Syn. *Coptis teeta*].
- clove sore scrofula** T5975 *Smilax bockii*.

- clove sore tubercle** T3983 *Lycoris aurea*.
- clove sore with fever** T6735 *Viburnum dilatatum*.
- clove toxin sores** T1353 *Changium smyrnioides*.
- cns depression** T0184 *Adonis amurensis*.
- cold asthma** T6261 *Syringa pinnatifolia*.
- cold damage febrile disease** T1179 *Capparis masaikai*.
- cold damage mania** T1808 *Crocus sativus*.
- cold dysentery** T0417 *Amomum longiligulare*, T0419 *Amomum villosum*, T0420 *Amomum xanthioides*, T4714 *Perilla frutescens*, T6860 *Zanthoxylum ailanthoides*.
- cold impediment in lumbus and knees** T1901 *Curculigo orchioides*.
- cold limbs and faint pulse** T0083 *Aconitum carmichaeli*, T0085 *Aconitum carmichaeli* cv, T4599 *Panax ginseng* [Syn. *Panax schinseng*].
- cold malaria** T1170 *Canis familiaris*.
- cold mounting** T0472 *Anethum graveolens*, T1439 *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*], T2744 *Foeniculum vulgare*, T2745 *Foeniculum vulgare*, T4954 *Piper longum*, T6488 *Trachyspermum ammi*.
- cold mounting with abdominal pain** T1441 *Cinnamomum japonicum*, T1889 *Cuminum cyminum*, T1978 *Cyperus rotundus*, T2636 *Euscaphis japonica*, T3409 *Illicium verum*, T3885 *Litsea cubeba*, T4550 *Osmanthus fragrans*, T4944 *Piper cubeba*, T6877 *Zanthoxylum dissitum*.
- cold mounting with pain** T0077 *Aconitum balfourii*, T0084 *Aconitum carmichaeli*, T0105 *Aconitum karakolicum*, T0108 *Aconitum kusnezoffii*.
- cold pain in abdomen** T0322 *Allium tuberosum*, T0360 *Alpinia oxyphylla*, T0472 *Anethum graveolens*, T0664 *Artemisia argyi*, T0681 *Artemisia lavandulaefolia*, T0685 *Artemisia mongolica*, T0689 *Artemisia princeps*, T0691 *Artemisia rubripes*, T0706 *Artemisia vulgaris*, T2087 *Delphinium tatsienense*, T4283 *Morinda officinalis*.
- cold pain in chest and abdomen** T3868 *Liquidambar orientalis*.
- cold pain in heart and abdomen** T0077 *Aconitum balfourii*, T0083 *Aconitum carmichaeli*, T0084 *Aconitum carmichaeli*, T0085 *Aconitum carmichaeli* cv, T0105 *Aconitum karakolicum*, T0106 *Aconitum kirinense*, T0108 *Aconitum kusnezoffii*, T0138 *Aconitum umbrosum*, T0363 *Alpinia speciosa*, T1021 *Brassica rapa*, T1439 *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*], T2037 *Datura innoxia*, T2044 *Datura metel*, T2695 *Ferula assafoetida*, T3250 *Hierochloa odorata*, T3869 *Liquor*, T6860 *Zanthoxylum ailanthoides*.
- cold pain in lesser-abdomen** T2744 *Foeniculum vulgare*, T6528 *Trigonella foenum-graecum*.
- cold pain in lumbus and knees** T0582 *Archangelica brevicaulis* [Syn. *Angelica brevicaulis*; *Angelica brevicaulis*], T0993 *Boschniakia rossica*, T1439 *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*], T4324 *Murraya paniculata* [Syn. *Chalcas paniculata*], T4536 *Orobanchae coerulescens*, T5270 *Psoralea corylifolia*.
- cold pain in stomach duct** T0418 *Amomum muricarpum*, T1434 *Cinnamomum bejolghota* [Syn. *Cinnamomum obtusifolium*; *Laurus bejolghota*], T1812 *Crossostephium chinense*.
- cold pain in stomach duct and abdomen** T0318 *Allium sativum*, T0359 *Alpinia officinarum*, T0554 *Aquilaria agallocha*, T0555 *Aquilaria sinensis*, T1113 *Calendula officinalis*, T1217 *Carum carvi*, T1441 *Cinnamomum japonicum*, T1889 *Cuminum cyminum*, T1939 *Cymbopogon citratus*, T2644 *Evodia rutaecarpa*, T2646 *Evodia rutaecarpa* var. *officinalis*, T3222 *Heracleum scabridum*, T3409 *Illicium verum*, T3436 *Inula nervosa*, T3620 *Kaempferia galanga*, T3746 *Leontice robustum*, T3850 *Lindera glauca*, T3852 *Lindera megaphylla*, T3885 *Litsea cubeba*, T4550 *Osmanthus fragrans*, T4944 *Piper cubeba*, T4953 *Piper longum*, T4956 *Piper mullesua*, T6261 *Syringa pinnatifolia*, T6263 *Syzygium aromaticum* [Syn. *Eugenia caryophyllata*], T6488 *Trachyspermum ammi*, T6858 *Zanthoxylum acanthopodium*, T6869 *Zanthoxylum bungeanum*, T6892 *Zanthoxylum schinifolium*, T6893 *Zanthoxylum simulans*, T6894 *Zanthoxylum simulans*, T6909 *Zingiber officinale*.
- cold pain of joints** T0354 *Alpinia chinensis*.
- cold qi retching** T4954 *Piper longum*.
- cold rheum** T6860 *Zanthoxylum ailanthoides*.
- cold rheum asthma cough** T6909 *Zingiber officinale*.
- cold rheum cough** T1007 *Brassica juncea*, T5755 *Saussurea involucrata*.
- cold stagnation lumbago** T1217 *Carum carvi*.
- cold stomachache** T5715 *Santalum album*.
- cold suppurative sore** T5989 *Solanum aculeatissimum*, T6014 *Solanum surattense*.
- cold-damp abdominal pain** T1641 *Conioselinum vaginatum*.
- cold-damp accumulation and obstruction** T0363 *Alpinia speciosa*.
- cold-damp ascites** T3295 *Huperzia serrata* [Syn. *Lycopodium serratum*].
- cold-damp diarrhea** T0680 *Artemisia lactiflora*, T2644 *Evodia rutaecarpa*, T2646 *Evodia rutaecarpa* var. *officinalis*, T4966 *Piper sarmetosum*.
- cold-damp diarrhea and dysentery** T0957 *Blumea balsamifera*.
- cold-damp dribbling urination and turbid urine** T4944 *Piper cubeba*.
- cold-damp impediment pain** T1438 *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*], T1441 *Cinnamomum japonicum*, T1444 *Cinnamomum tamala*, T3885 *Litsea cubeba*, T6909 *Zingiber officinale*.
- cold-damp red swelling** T0319 *Allium schoenoprasum*.
- cold-damp vaginal discharge** T3222 *Heracleum scabridum*.
- cold-damp vomiting and diarrhea** T0353 *Alpinia blepharocalyx*, T1435 *Cinnamomum camphora*.
- cold-damp water drum distention** T3885 *Litsea cubeba*.
- cold-heat headache** T0212 *Agastache rugosus*, T1419 *Cimicifuga dahurica*, T1420 *Cimicifuga foetida*, T1421 *Cimicifuga heracleifolia*.
- cold-heat in turn** T1055 *Bupleurum angustissimum*, T1056 *Bupleurum aureum*, T1058 *Bupleurum chaishoui*, T1059 *Bupleurum chinense*, T1065 *Bupleurum longiradiatum*, T1066 *Bupleurum marginatum*, T1067 *Bupleurum marginatum* var. *stenophyllum*, T1072 *Bupleurum scorzonrifolium*, T1073 *Bupleurum sibiricum*, T1075 *Bupleurum smithii* var. *parvifolium*, T1078 *Bupleurum wenchuanense*, T1079 *Bupleurum yinchowense*.
- cold-heat warm malaria** T5323 *Pulsatilla campanella*, T5324 *Pulsatilla cernua*, T5325 *Pulsatilla chinensis*, T5326 *Pulsatilla dahurica*.
- colic of gastrointestinal tract** T0825 *Atropa belladonna*.
- coma** T0987 *Bos taurus domesticus*; *Bubalus bubalis*, T2274 *Dryobalanops aromatica*.
- common cold** T0011 *Abrus precatorius*, T0015 *Abutilon indicum*, T0099

*Aconitum gymnanthum*, T0151 *Acronychia pedunculata*, T0318 *Allium sativum*, T0730 *Asarum sagittarioides*, T0791 *Astragalus chrysopterus*, T0794 *Astragalus ernestii*, T0798 *Astragalus membranaceus*, T0800 *Astragalus mongholicus*, T0813 *Atalantia buxifolia* [Syn. *Severinia buxifolia*], T0932 *Betula luminifera*, T0952 *Blechnum orientale*, T0964 *Boeninghausenia albiflora*, T0967 *Boeninghausenia sessilicarpa*, T1055 *Bupleurum angustissimum*, T1056 *Bupleurum aureum*, T1058 *Bupleurum chaishouii*, T1059 *Bupleurum chinense*, T1065 *Bupleurum longiradiatum*, T1066 *Bupleurum marginatum*, T1067 *Bupleurum marginatum* var. *stenophyllum*, T1072 *Bupleurum scorzonerifolium*, T1073 *Bupleurum sibiricum*, T1075 *Bupleurum smithii* var. *parvifolium*, T1078 *Bupleurum wenchuanense*, T1079 *Bupleurum yinchowense*, T1152 *Camellia sinensis* [Syn. *Thea sinensis*], T1373 *Chloranthus serratus*, T1387 *Chrysanthemum boreale*, T1392 *Chrysanthemum indicum*, T1393 *Chrysanthemum indicum*, T1394 *Chrysanthemum lavandulifolium*, T1395 *Chrysanthemum morifolium* [Syn. *Dendranthema morifolium*], T1446 *Cipadessa baccifera*, T1533 *Clausena dentata*, T1534 *Clausena dunniana*, T1545 *Clematis chinensis*, T1555 *Clerodendron fortunatum*, T1573 *Clinopodium chinense*, T1633 *Commelina communis*, T1656 *Conyza bonariensis* [Syn. *Erigeron bonariensis*; *Erigeron linifolius*; *Erigeron crispus*], T1784 *Cratogeomys cochinchinense*, T1785 *Cratogeomys prunifolium*, T1986 *Cyrtomium fortunei*, T2263 *Dregea volubilis*, T2267 *Drosera peltata* var. *lunata*, T2279 *Dryopteris championii*, T2290 *Duchesnea indica*, T2334 *Elephantopus scaber*, T2340 *Elsholtzia bodinieri*, T2510 *Eucalyptus globulus*, T2517 *Eucalyptus robusta*, T2521 *Eucalyptus tereticornis*, T2563 *Eupatorium japonicum*, T2627 *Euphorbia longan* [Syn. *Dimocarpus longan*], T2691 *Farfugium japonicum*, T2697 *Ferula borealis*, T3213 *Heracleum hemsleyanum*, T3217 *Heracleum moellendorffii* [Syn. *Heracleum microcarpum*; *Heracleum morifolium*], T3228 *Heracleum yungningense*, T3323 *Hymenodictyon excelsum*, T3360 *Hypericum patulum*, T3381 *Hyptis suaveolens*, T3495 *Isodon irrorata*, T3528 *Isodon ternifolia*, T3529 *Isodon ternifolius*, T3779 *Leucas aspera*, T3803 *Ligularia dictyoneura* [Syn. *Senecio dictyoneurus*], T4003 *Lysimachia microcarpa*, T4121 *Marsilea quadrifolia*, T4188 *Mentha rotundifolia*, T4190 *Mentha spicata*, T4248 *Mimosa pudica*, T4317 *Murraya euchrestifolia* [Syn. *Clausena euchrestifolia*], T4320 *Murraya kwangsiensis*, T4335 *Mussaenda pubescens*, T4423 *Nicandra physaloides*, T4503 *Onychium lucidum*, T4773 *Peucedanum terebinthaceum*, T4798 *Philonotis fontana*, T4810 *Phlomis mongolica*, T4814 *Phlomis umbrosa*, T4848 *Physalis angulata*, T4852 *Physalis peruviana*, T4854 *Physalis pubescens*, T5298 *Pteris vittata*, T5401 *Rabdosia yunnanensis*, T5519 *Rhododendron mucronulatum*, T5592 *Rubus hirsutus*, T5609 *Rumex hastatus*, T5714 *Sansevieria trifasciata*, T5727 *Saposhnikovia divaricata* [Syn. *Ledebouria seseloides*], T5934 *Seseli meirei*, T5937 *Seseli yunnanense*, T5963 *Sinodielsia yunnanensis*, T5967 *Siraitia grosvenorii* [Syn. *Momordica grosvenorii*], T5969 *Sium latifolium*, T6075 *Spilanthes acmella*, T6106 *Stelmatocrypton khasianum*, T6133 *Stephania sinica*, T6286 *Tamarix chinensis*, T6290 *Tamarix ramosissima*, T6359 *Teucrium bidentatum*, T6521 *Trifolium pratense*, T6645 *Urena lobata*, T6722 *Veronica anagallis-aquatica*, T6731 *Veronicastrum sibiricum*, T6738 *Viburnum odoratissimum*, T6787 *Vitex*

*negundo*, T6788 *Vitex negundo*, T6843 *Xanthium sibiricum* [Syn. *Xanthium strumarium*].

**common cold (root)** T5317 *Pueraria peduncularis*.

**common cold due to wind-cold** T4714 *Perilla frutescens*, T4938 *Piper boehmeriaefolium*, T5167 *Porana racemosa*.

**common cold in early stage** T2756 *Forsythia suspensa*.

**common cold with cough** T0814 *Atalantia buxifolia* [Syn. *Severinia buxifolia*], T0838 *Azolla imbricata* [Syn. *Salvinia imbricata*], T1199 *Carduus acanthoides*, T1200 *Carduus crispus*, T1675 *Corchorus olitorius*, T2157 *Dichotomanthes tristianaecarpa*, T2984 *Glinus lotoides* [Syn. *Mollugo lotoides*], T3006 *Glycosmis citrifolia*, T3674 *Laggera alata*, T3997 *Lysimachia capillipes*, T4223 *Micromelum integerrimum*, T4261 *Mollugo pentaphylla*, T4284 *Morinda parvifolia*, T4616 *Pandanus tectorius*.

**common cold with fever** T0045 *Acanthopanax trifoliatum*, T0060 *Achillea alpina* [Syn. *Achillea sibirica*], T0137 *Aconitum tanguticum*, T0171 *Adiantum capillus-veneris*, T0174 *Adiantum monochlamys*, T0229 *Ageratum conyzoides*, T0374 *Alstonia scholaris*, T0378 *Alstonia yunnanensis*, T0379 *Alternanthera philoxeroides*, T0426 *Ampelopsis grossedentata* [Syn. *Ampelopsis cantoniensis* var. *grossedentata*], T0503 *Anisomeles indica* [Syn. *Epimeredi indica*], T0591 *Ardisia arborescens*, T0942 *Biebersteinia heterostemon*, T0948 *Blainvillea acmella* [Syn. *Verbesina acmella*; *Eclipta latifolia*; *Blainvillea latifolia*], T1236 *Cassia laevigata* [Syn. *Cassia floribunda*], T1251 *Cassytha filiformis*, T1258 *Casuarina equisetifolia*, T1410 *Chukrasia tabularis*, T2131 *Desmodium pulchellum* [Syn. *Phyllocladon pulchellum*], T2257 *Dracocephalum moldavicum*, T2282 *Dryopteris filix-mas*, T2720 *Ficus hispida*, T2757 *Forsythia viridissima*, T2902 *Gentiana algida*, T2941 *Gentianopsis paludosa*, T2989 *Glochidion sphaerogynum*, T3123 *Hedyotis auricularia*, T3163 *Helicteres angustifolia*, T3332 *Hypocoum erectum*, T3334 *Hypocoum leptocarpum*, T3398 *Ilex rotunda*, T3555 *Jasminum nudiflorum*, T3645 *Kummerowia striata*, T3769 *Lespedeza bicolor*, T3830 *Ligustrum sinense*, T3932 *Ludwigia octovalvis*, T3990 *Lygodium japonicum*, T4124 *Matricaria chamomilla* [Syn. *Matricaria recutita*], T4154 *Melaleuca leucadendra*, T4217 *Microcos paniculata* [Syn. *Grewia microcos*], T4514 *Ophiorrhiza pumila*, T4526 *Origanum vulgare*, T4834 *Phyllanthus emblica*, T5284 *Pteridium aquilinum* var. *latiusculum*, T5423 *Rauwolfia verticillata*, T5425 *Rauwolfia verticillata* f. *rubrocarpa*, T5426 *Rauwolfia verticillata* var. *hainanensis*, T5427 *Rauwolfia vomitoria*, T5435 *Rauwolfia latifrons*, T5441 *Rauwolfia perakensis*, T5560 *Rorippa montana* [Syn. *Rorippa dubia*; *Sisymbrium dubium*], T5576 *Rostellularia procumbens* [Syn. *Justicia procumbens*], T5595 *Rubus parviflorus*, T5626 *Ruta graveolens*, T5685 *Salvia plebeia*, T5687 *Salvia prionitis*, T5754 *Saussurea graminea*, T5767 *Saussurea pulchella*, T5804 *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*], T5836 *Scutellaria discolor*, T6116 *Stenoloma chusanum*, T6252 *Symplocos chinensis*, T6277 *Tadehagi triquetrum*, T6375 *Thalictrum baicalense*, T6376 *Thalictrum cultratum*, T6385 *Thalictrum flavum*, T6387 *Thalictrum foliolosum*, T6389 *Thalictrum glandulosissimum*, T6552 *Trollius chinensis* [Syn. *Trollius asiaticus* var. *chinensis*], T6553 *Trollius ledebourii*, T6581 *Tylophora mollissima*, T6814 *Wedelia chinensis* [Syn. *Solidago chinensis*; *Wedelia calendulacea*].



- common cold with fever and chills** T1384 *Chondrus ocelladus*.
- common cold with headache** T0479 *Angelica dahurica* cv. *qibaizhi*, T0498 *Angelica taiwaniana*, T0557 *Aquilegia ecalcarata*, T1939 *Cymbopogon citratus*, T2113 *Dennstaedtia scabra* [Syn. *Dicksonia scabra*], T2189 *Dioscorea althaeoides*, T2258 *Dracocephalum rupestre*, T3432 *Inula helianthus-aquatica*, T4002 *Lysimachia foenum-graecum*, T4307 *Mosla scabra* [Syn. *Mosla punctata*], T4470 *Ocimum basilicum*, T4663 *Passiflora caerulea*, T5000 *Plagiogyria stenoptera*, T5391 *Rabdosia eriocalyx*, T5396 *Rabdosia rubescens*, T6888 *Zanthoxylum planispinum*.
- common cold with headache and fever** T3646 *Kyllinga brevifolia*.
- common cold with headache and nasal congestion** T2422 *Erigeron breviscapus*.
- common cold without sweating** T0610 *Argemone mexicana*.
- common wart** T2162 *Dicranostigma franchetianum* [Syn. *Dicranostigma leptopodium*].
- concretion and accumulation** T1049 *Bufo bufo gargarizans*; *Bufo melanostictus*.
- concretion and accumulation with glomus distention** T5103 *Polygonum hydropiper*.
- concretion and conglomeration** T0073 *Achyranthes bidentata*, T0584 *Arctium lappa*, T0661 *Artemisia anomala*, T1160 *Campsis grandiflora*, T1215 *Carthamus tinctorius*, T1406 *Chrysosplenium nudicaule*, T1438 *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*], T1583 *Cnidium officinale* [Syn. *Ligusticum officinale*], T1638 *Commiphora myrrha* [Syn. *Commiphora molmo*], T1706 *Corydalis ambigua* var. *amurensis* [Syn. *Corydalis ambigua*], T1735 *Corydalis repens*, T1858 *Croton tiglium*, T2132 *Desmodium pulchellum* [Syn. *Phylloidium pulchellum*], T2384 *Epicauta gorhami*, T2536 *Euonymus alatus*, T2546 *Euonymus sacrosancta*, T2584 *Euphorbia ebracteolata*, T2587 *Euphorbia fischeriana*, T2695 *Ferula assafoetida*, T3412 *Impatiens balsamina*, T3671 *Lagerstroemia indica*, T3820 *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*], T3980 *Lycopus lucidus*, T4036 *Magnolia coco*, T4106 *Manis pentadactyla*, T4338 *Mylabris phalerata*; *Mylabris cichorii*, T4582 *Paeonia delavayi*, T4585 *Paeonia moutan* [Syn. *Paeonia suffruticosa*], T4607 *Panax pseudo-ginseng* var. *japonicus*, T5101 *Polygonum cuspidatum*, T5231 *Prunus persica*, T5233 *Prunus persica*, T5594 *Rubus parkeri*, T5701 *Salvia yunnanensis*, T5865 *Selaginella pulvinata*, T5869 *Selaginella tamariscina*, T6154 *Strobilanthes japonicus* [Syn. *Championella japonica*], T6497 *Tribulus terrestris*, T6764 *Vinegar*, T6831 *Woodwardia orientalis*.
- concretion and conglomeration (root)** T1113 *Calendula officinalis*.
- concretion and conglomeration with mass** T1001 *Brachystemma calycinum*, T1907 *Curcuma wengujin*.
- concretion conglomeration accumulation and gathering** T0164 *Actinidia polygama*, T0950 *Blatta orientalis*, T1904 *Curcuma kwangsiensis*, T1909 *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*], T2596 *Euphorbia kansui*, T4303 *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*, T4855 *Physeter catodon*, T5680 *Salvia miltiorrhiza*, T5681 *Salvia miltiorrhiza* f. *alba*, T5688 *Salvia przewalskii*, T5723 *Sapium sebiferum*, T5966 *Siphonostegia chinensis*, T6062 *Sparganium stoloniferum*, T6257 *Syngnathus acus*, T6709 *Verbena officinalis*.
- congesting lung** T2367 *Ephedra equisetina*, T2368 *Ephedra gerardiana*, T2369 *Ephedra intermedia*, T2372 *Ephedra likiangensis*, T2373 *Ephedra minuta*, T2375 *Ephedra monosperma*, T2379 *Ephedra saxatilis*, T2380 *Ephedra sinica*.
- congestive cardiac failure** T0184 *Adonis amurensis*, T1649 *Convallaria keiskei* [Syn. *Convallaria majalis*], T4418 *Nerium indicum*.
- conjunctivitis** T1655 *Conyza blinii*, T1709 *Corydalis bungeana*, T2334 *Elephantopus scaber*, T2715 *Fibraurea recisa*, T2720 *Ficus hispida*, T2721 *Ficus microcarpa*, T3969 *Lycopodium casuarinoides*, T4215 *Michelia yunnanensis*, T4248 *Mimosa pudica*, T4976 *Piptanthus nepalensis*, T5804 *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*], T5892 *Senecio nemorensis*, T5907 *Senecio scandens* [Syn. *Senecio chinensis*], T6060 *Souliea vaginata*, T6214 *Swertia chinensis*, T6217 *Swertia davidii*, T6278 *Tagetes erecta*, T6374 *Thalictrum atriplex*.
- constipation** T0002 *Abelmoschus moschatus* [Syn. *Hibiscus abelmoschus*], T0338 *Aloe ferox*, T0347 *Aloe vera* [Syn. *Aloe barbadensis*], T0348 *Aloe vera* var. *chinensis*, T0462 *Anemarrhena asphodeloides*, T0495 *Angelica sinensis*, T0572 *Aralia elata*, T0708 *Arthromeris mairei* [Syn. *Polypodium mairei*], T0746 *Asparagus cochinchinensis* [Syn. *Asparagus lucidus*], T0984 *Bos taurus domesticus*; *Bubalus bubalis*, T1005 *Brassica campestris* [Syn. *Brassica campestris* var. *oleifera*], T1101 *Caesalpinia decapetala*, T1236 *Cassia laevigata* [Syn. *Cassia floribunda*], T1241 *Cassia occidentalis*, T1242 *Cassia occidentalis*, T1291 *Celastrus paniculatus*, T1356 *Cheiranthus cheiri*, T1465 *Citrullus vulgaris* [Syn. *Citrullus lanatus*], T2612 *Euphorbia prolifera*, T2716 *Ficus beecheyana* [Syn. *Ficus erecta* var. *beecheyana*], T2999 *Glycine max*, T3231 *Hernandia sonora* [Syn. *Hernandia ovigera*], T3444 *Ipomoea aquatica* [Syn. *Convolvulus repens*; *Ipomoea reptans*], T3447 *Ipomoea batatas* [Syn. *Convolvulus batatas*], T3845 *Linaria vulgaris*, T3935 *Luffa cylindrica*, T4331 *Musa paradisiaca* var. *sapientum* [Syn. *Musa sapientum*], T4665 *Passiflora edulis*, T4804 *Phlojodicarpus sibiricus*, T5137 *Poncirus trifoliata*, T5231 *Prunus persica*, T5244 *Prunus tomentosa*, T5272 *Psorospermum febrifugum*, T5419 *Raphanus sativus*, T5420 *Raphanus sativus*, T5446 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], T5461 *Rhamnus leptophylla*, T5605 *Rumex acetosa*, T5611 *Rumex japonicus*, T5612 *Rumex nepalensis*, T5613 *Rumex obtusifolius*, T5614 *Rumex patientia*, T6032 *Sophora flavescens* [Syn. *Sophora angustifolia*], T6206 *Sus scrofa domestica*, T6285 *Tamarindus indica*, T6510 *Trichosanthes kirilowii*, T6513 *Trichosanthes rosthornii* [Syn. *Trichosanthes uniflora*].
- constipation with abdominal pain** T1229 *Cassia acutifolia*, T1230 *Cassia angustifolia*.
- constrictive aortitis** T0495 *Angelica sinensis*, T4804 *Phlojodicarpus sibiricus*.
- consumption cough and hemoptysis** T0781 *Aster tataricus*, T2790 *Fritillaria pallidiflora*, T2800 *Fritillaria wahjuewii*, T6574 *Tussilago farfara*.
- consumption cough with phlegm and blood** T2927 *Gentiana rhodantha*.
- consumption damage and cough** T6677 *Valeriana jatamansii* [Syn. *Valeriana wallichii*].
- contracture of muscles and joints** T6069 *Speranskia tuberculata*.

- contracture pain in stomach duct and abdomen** T0502 *Anisodus tanguticus* [Syn. *Scopolia tangutica*].
- contusion from knocks and falls** T6866 *Zanthoxylum avicennae*.
- contusion in chest and rib-side** T3431 *Inula helenium*, T3437 *Inula racemosa*.
- contusion in joints** T3560 *Jatropha curcas*.
- convulsion** T0987 *Bos taurus domesticus*; *Bubalus bubalis*, T1084 *Buthus martensi*, T1841 *Croton caudatus* var. *tomentosus*, T2274 *Dryobalanops aromatica*, T2890 *Gastrodia elata*, T4957 *Piper nigrum*, T5817 *Scolopendra subspinipes mutilans*, T6497 *Tribulus terrestris*.
- convulsion due to high fever** T2995 *Gloriosa superba*.
- convulsion due to liver heat and liver wind** T5871 *Selenarctos thibetanus*; *Ursus arctos*.
- convulsion of hands and feet** T4696 *Penaeus orientalis*.
- convulsion of limbs** T3653 *Lactarius piperatus* [Syn. *Agaricus piperatus*].
- convulsion with cold limbs** T1332 *Cercidiphyllum japonicum*.
- cootie** T6111 *Stemona japonica*, T6113 *Stemona sessilifolia*, T6115 *Stemona tuberosa*.
- copper coin lichen** T2963 *Ginkgo biloba*, T4358 *Myroxyloperaireae*.
- cor pulmonale** T3295 *Huperzia serrata* [Syn. *Lycopodium serratum*].
- corn and common wart** T1038 *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*].
- corneal nephelium** T5100 *Polygonum chinense*.
- coronary heart disease** T0644 *Armillaria mellea*, T2846 *Ganoderma japonicum* [Syn. *Ganoderma sinense*], T2848 *Ganoderma lucidum*, T2964 *Ginkgo biloba*, T3388 *Ilex chinensis* [Syn. *Ilex purpurea*], T4487 *Olea europaea*, T4953 *Piper longum*.
- coronary heart disease with pattern of qi stagnation and blood stasis** T5715 *Santalum album*.
- cough** T0015 *Abutilon indicum*, T0151 *Acronychia pedunculata*, T0301 *Aleuritopteris argentea*, T0364 *Alsophila spinulosa*, T0444 *Ananas comosus*, T0471 *Anemone rivularis*, T0480 *Angelica decursiva* [Syn. *Peucedanum decursivum*], T0571 *Aralia decaisneana*, T0584 *Arctium lappa*, T0753 *Asparagus setaceus* [Syn. *Asparagus plumosus*], T0784 *Astilbe chinensis*, T0813 *Atalantia buxifolia* [Syn. *Severinia buxifolia*], T0923 *Bergenia crassifolia*, T0926 *Berneuxia thibetica*, T1021 *Brassica rapa*, T1087 *Buxus bodinieri*, T1165 *Canarium album*, T1194 *Carassius auratus*, T1258 *Casuarina equisetifolia*, T1357 *Chelidonium majus*, T1359 *Chenopodium album*, T1373 *Chloranthus serratus*, T1440 *Cinnamomum glanduliferum*, T1529 *Cladonia verticillata*, T1555 *Clerodendron fortunatum*, T1751 *Corylus heterophylla*, T1796 *Crinum asiaticum* var. *sinicum*, T1933 *Cyclea sutchuenensis*, T1967 *Cynoglossum amabile*, T2050 *Daucus carota* var. *sativa*, T2056 *Debregeasia longifolia*, T2101 *Dendrobium fimbriatum*, T2119 *Derris eriocarpa*, T2221 *Diospyros kaki*, T2258 *Dracocephalum rupestre*, T2268 *Drosera rotundifolia*, T2302 *Dysosma pleiantha* [Syn. *Podophyllum pleianthum*], T2304 *Dysosma veitchii*, T2305 *Dysosma versipellis* [Syn. *Podophyllum versipelle*], T2367 *Ephedra equisetina*, T2368 *Ephedra gerardiana*, T2369 *Ephedra intermedia*, T2372 *Ephedra likiangensis*, T2373 *Ephedra minuta*, T2375 *Ephedra monosperma*, T2379 *Ephedra saxatilis*, T2380 *Ephedra sinica*, T2521 *Eucalyptus tereticornis*, T2563 *Eupatorium japonicum*, T2749 *Fomes officinalis*, T2752 *Fordia cauliflora*, T2994 *Gloiopeltis furcata*, T3040 *Gomphrena globosa*, T3056 *Gossypium herbaceum*, T3190 *Helminthostachys zeylanica*, T3234 *Heteropogon contortus*, T3289 *Humulus lupulus*, T3332 *Hypecoum erectum*, T3628 *Kerria japonica*, T3701 *Lasiosphaera fenzi*, T3758 *Lepidium sativum*, T3802 *Ligularia dentata*, T3803 *Ligularia dictyoneura* [Syn. *Senecio dictyoneurus*], T3805 *Ligularia fischeri*, T3807 *Ligularia intermedia*, T3813 *Ligularia sibirica*, T3819 *Ligusticum brachylobum*, T3953 *Lycianthes biflora*, T3961 *Lycoperdon pyriforme*, T3970 *Lycopodium cernuum*, T3973 *Lycopodium japonicum* [Syn. *Lycopodium clavatum*], T4003 *Lysimachia microcarpa*, T4004 *Lysimachia paridiformis*, T4099 *Mangifera indica*, T4100 *Mangifera indica*, T4103 *Mangifera persiciformis*, T4190 *Mentha spicata*, T4195 *Menyanthes trifoliata*, T4209 *Michelia alba*, T4307 *Mosla scabra* [Syn. *Mosla punctata*], T4317 *Murraya euchrestifolia* [Syn. *Clausena euchrestifolia*], T4335 *Mussaenda pubescens*, T4350 *Myriopterion extensum*, T4502 *Onychium japonicum* [Syn. *Tricomanes japonicum*], T4510 *Ophiorrhiza japonica*, T4513 *Ophiorrhiza mungos*, T4514 *Ophiorrhiza pumila*, T4527 *Orixa japonica*, T4549 *Osbeckia chinensis*, T4600 *Panax ginseng* [Syn. *Panax schinseng*], T4618 *Panicum miliaceum*, T4625 *Papaver commutatum* [Syn. *Papaver rhoeas*], T4665 *Passiflora edulis*, T4761 *Peucedanum longshengens*, T4763 *Peucedanum morisonii*, T4768 *Peucedanum praeruptorum*, T4769 *Peucedanum rubricaulis*, T4773 *Peucedanum terebinthaceum*, T4798 *Philonotis fontana*, T4834 *Phyllanthus emblica*, T4843 *Phyllanthus urinaria*, T4852 *Physalis peruviana*, T4902 *Pimpinella thelungiana*, T5000 *Plagiogyria stenoptera*, T5057 *Podophyllum emodii* [Syn. *Podophyllum emodii* var. *chinense*; *Podophyllum sikkimensis*; *Sinopodophyllum emodii*], T5087 *Polygala telephioides*, T5119 *Polygonum thunbergii*, T5171 *Porphyra tenera*, T5216 *Prunus armeniaca*, T5219 *Prunus armeniaca* var. *ansu*, T5361 *Pyrus betulaeifolia*, T5374 *Quercus infectoria*, T5502 *Rhododendron anthopogonoides*, T5518 *Rhododendron mucronatum*, T5523 *Rhododendron simsii*, T5560 *Rorippa montana* [Syn. *Rorippa dubia*; *Sisymbrium dubium*], T5576 *Rostellularia procumbens* [Syn. *Justicia procumbens*], T5640 *Sabina vulgaris*, T5645 *Sageretia theezans* [Syn. *Sageretia thea*], T5726 *Saponaria officinalis*, T5804 *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*], T5963 *Sinodielsia yunnanensis*, T6046 *Sophora viciifolia*, T6075 *Spilanthes acmella*, T6079 *Spiraea japonica*, T6082 *Spiraea japonica* var. *fortunei*, T6105 *Stellera chamaejasme*, T6106 *Stelmatocrypton khasianum*, T6116 *Stenoloma chusanum*, T6282 *Tagetes patula*, T6574 *Tussilago farfara*, T6766 *Viola tricolor*, T6772 *Viscum angulatum*, T6789 *Vitex negundo*, T6888 *Zanthoxylum planispinum*.
- cough and abundant phlegm** T0776 *Asplenium prolongatum*, T1343 *Chaenomeles sinensis*, T2426 *Erigeron sumatrensis*, T3520 *Isodon rosthornii*, T4274 *Monostroma nitidum*, T4814 *Phlomis umbrosa*, T5594 *Rubus parkeri*, T5939 *Shiraia bambusicola*.
- cough and asthma** T0462 *Anemarrhena asphodeloides*, T0676 *Artemisia dracunculus*, T0729 *Asarum maximum*, T0892 *Belamcanda chinensis*, T1241 *Cassia occidentalis*, T1493 *Citrus limon*, T1497 *Citrus limonia*, T1538 *Clausena lansium*, T1831 *Crotalaria sessiliflora*, T1941 *Cymbopogon distans*, T2036 *Datura innoxia*, T2038 *Datura innoxia*,

- T2039 *Datura innoxia*, T2041 *Datura metel*, T2042 *Datura metel*, T2043 *Datura metel*, T2046 *Datura stramonium*, T2047 *Datura stramonium*, T2220 *Diospyros kaki*, T2257 *Dracocephalum moldavicum*, T2367 *Ephedra equisetina*, T2368 *Ephedra gerardiana*, T2369 *Ephedra intermedia*, T2372 *Ephedra likiangensis*, T2373 *Ephedra minuta*, T2375 *Ephedra monosperma*, T2379 *Ephedra saxatilis*, T2380 *Ephedra sinica*, T2596 *Euphorbia kansui*, T3222 *Heracleum scabridum*, T3279 *Homo sapiens*, T3328 *Hyoscyamus niger*, T3427 *Inula britannica*, T3428 *Inula britannica* var. *chinensis*, T3434 *Inula linariaefolia*, T3770 *Lespedeza cuneata*, T3840 *Limnophila rugosa*, T3990 *Lygodium japonicum*, T4369 *Nandina domestica*, T4418 *Nerium indicum*, T4432 *Nigella glandulifera*, T4688 *Peganum harmala*, T4714 *Perilla frutescens*, T4715 *Perilla frutescens*, T4717 *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*], T4719 *Perilla frutescens* var. *arguta*, T4722 *Perilla frutescens* var. *crispa*, T4800 *Phlegmarius fordii*, T4956 *Piper mullesua*, T4974 *Piper wallichii* [Syn. *Piper wallichii* var. *hupehense*], T5145 *Populus alba*, T5308 *Pterocarya stenoptera*, T5519 *Rhododendron mucronulatum*, T5521 *Rhododendron przewalskii*, T5609 *Rumex hastatus*, T5981 *Smilax riparia*, T6055 *Sorbus tianschanica*, T6286 *Tamarix chinensis*, T6290 *Tamarix ramosissima*, T6521 *Trifolium pratense*, T6825 *Winchia calophylla*.
- cough and asthma due to lung heat** T2927 *Gentiana rhodantha*, T5182 *Potentilla discolor*.
- cough and asthma due to lung vacuity** T0529 *Anthriscus sylvestris*, T1596 *Codonopsis canescens*, T1597 *Codonopsis clematidea*, T1599 *Codonopsis pilosula*, T1600 *Codonopsis pilosula* var. *modesta* [Syn. *Codonopsis modesta*], T1601 *Codonopsis subglobosa*, T1602 *Codonopsis tangshen*, T1603 *Codonopsis tubulosa*, T1604 *Coeloglossum viride* [Syn. *Coeloglossum viride* var. *bracteatum*], T2190 *Dioscorea batatas* [Syn. *Dioscorea opposita*], T2202 *Dioscorea japonica*, T3077 *Gymnadenia conopsea*, T4599 *Panax ginseng* [Syn. *Panax schinseng*], T6346 *Terminalia chebula*, T6348 *Terminalia chebula* var. *tomentella*.
- cough and asthma with abundant phlegm** T0480 *Angelica decursiva* [Syn. *Peucedanum decursivum*], T0781 *Aster tataricus*, T1813 *Crotalaria albida*, T2125 *Descurainia sophia*, T2439 *Eruca sativa*, T2565 *Eupatorium lindleyanum*, T3426 *Inula britannica*, T3433 *Inula japonica*, T3755 *Lepidium apetalum* [Syn. *Lepidium micranthum*], T3759 *Lepidium virginicum*, T3819 *Ligusticum brachylobum*, T4005 *Lysionotus pauciflorus*, T4231 *Milingtonia hortensis*, T4761 *Peucedanum longshengensis*, T4768 *Peucedanum praeruptorum*, T4769 *Peucedanum rubricaulis*, T4858 *Physochlaina infundibularis*, T4904 *Pinellia ternata*, T5504 *Rhododendron capitatum*, T5515 *Rhododendron micranthum*, T5958 *Sinapis alba* [Syn. *Brassica alba*; *Brassica hirta*], T5961 *Sinocalamus oldhami*, T6574 *Tussilago farfara*, T6580 *Tylophora floribunda*.
- cough and asthma with phlegm-blood** T4610 *Panax quinquefolium*.
- cough and asthma without phlegm** T2037 *Datura innoxia*, T2044 *Datura metel*.
- cough and counterflow** T0438 *Anacardium occidentale*, T0985 *Bos taurus domesticus*; *Bubalus bubalis*, T2839 *Gallus gallus domesticus*, T6497 *Tribulus terrestris*.
- cough and counterflow with asthma and fullness** T6819 *Wikstroemia chamaedaphne*.
- cough and heavy head (flower)** T0240 *Aglaia odorata*.
- cough and hemoptysis** T0881 *Bauhinia variegata*, T0922 *Berchemia polyphylla* var. *leioclada*, T0982 *Bos taurus domesticus*, T2691 *Farfugium japonicum*, T3390 *Ilex cornuta*, T3764 *Lepisorus thunbergianus*.
- cough and hemoptysis or dyspnea** T3954 *Lycium barbarum*, T3956 *Lycium chinense*.
- cough and qi counterflow** T1980 *Cyprinus carpio*.
- cough and shortness of breath** T4687 *Peganum harmala*, T4908 *Pinus bungeana*.
- cough and sore pharynx** T5073 *Polygala chinensis* [Syn. *Polygala glomerata*], T6567 *Tupistra wattii* [Syn. *Campylandra wattii*].
- cough asthma qith phlegm-drool and atrophicexuberant** T2975 *Gleditsia delavayi*, T2976 *Gleditsia fera*.
- cough harmful to lung** T1674 *Corchorus capsularis*.
- cough of phlegm asthma** T1786 *Cremanthodium ellisii*, T2262 *Dregea sinensis*, T2964 *Ginkgo biloba*, T2978 *Gleditsia sinensis* [Syn. *Gleditsia horrida*], T3246 *Hibiscus syriacus*, T3933 *Luffa acutangula*, T3934 *Luffa cylindrica*, T3988 *Lycoris squamigera*, T4247 *Millingtonia hortensis*, T4859 *Physochlaina physaloides*, T5161 *Populus tomentosa*, T5457 *Rhamnus davurica*, T5548 *Ricinus communis*, T5560 *Rorippa montana* [Syn. *Rorippa dubia*; *Sisymbrium dubium*], T6428 *Thermopsis lanceolata*.
- cough of phlegm-rheum** T2020 *Damnacanthus indicus*, T3893 *Litsea pungens*.
- cough of profuse phlegm** T3873 *Liriope platyphylla*, T3874 *Liriope spicata*, T5513 *Rhododendron mariae*.
- cough with blood ejection** T0746 *Asparagus cochinchinensis* [Syn. *Asparagus lucidus*], T1034 *Broussonetia papyrifera*, T1684 *Cordylone stricta*, T2955 *Geum japonicum*, T5773 *Saxifraga stolonifera*, T6087 *Spiranthes sinensis*.
- cough with inhibited phlegm** T0595 *Ardisia crispa*, T0749 *Asparagus filicinus*, T5087 *Polygala telephioides*.
- cough with phlegm** T1660 *Coprinus atramentarius*, T4820 *Phoenix dactylifera*.
- cough with phlegm and blood** T2783 *Fritillaria cirrhosa*, T2784 *Fritillaria delavayi*, T2792 *Fritillaria przewalskii*, T2796 *Fritillaria unibracteata*, T2797 *Fritillaria ussuriensis*, T5595 *Rubus parviflorus*, T5647 *Sagittaria sagittifolia*.
- cough with profuse phlegm** T0586 *Arctium lappa*, T0617 *Arisaema amurense*, T0618 *Arisaema consanguineum*, T0620 *Arisaema heterophyllum*, T0984 *Bos taurus domesticus*; *Bubalus bubalis*, T1312 *Centipeda minima*, T1390 *Chrysanthemum coronarium*, T1397 *Chrysanthemum segetum*, T1488 *Citrus junos*, T1498 *Citrus medica*, T1506 *Citrus reticulata*, T1520 *Citrus wilsonii*, T1927 *Cycas revoluta*, T1960 *Cynanchum stauntonii*, T2023 *Daphne genkwa*, T2432 *Eriobotrya japonica*, T2787 *Fritillaria hupehensis*, T2895 *Gaultheria yunnanensis*, T2961 *Ginkgo biloba*, T3011 *Glycyrrhiza aspera*, T3013 *Glycyrrhiza glabra*, T3015 *Glycyrrhiza inflata*, T3016 *Glycyrrhiza kansuensis*, T3021 *Glycyrrhiza squamulosa*, T3022 *Glycyrrhiza uralensis*, T3023 *Glycyrrhiza yunnanensis*, T3026 *Gnaphalium affine*

- [Syn. *Gnaphalium multiceps*], T3254 *Hippophae rhamnoides*, T3256 *Hippophae rhamnoides* subsp. *sinensis*, T3258 *Hippophae rhamnoides* subsp. *yunnanensis*, T3323 *Hymenodictyon excelsum*, T3528 *Isodon ternifolia*, T3529 *Isodon ternifolius*, T4000 *Lysimachia congestiflora*, T4048 *Magnolia rostrata*, T4203 *Mesua ferrea*, T4438 *Nostoc flagelliforme*, T4718 *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*], T4721 *Perilla frutescens* var. *arguta*, T4903 *Pinellia pedatisecta*, T5011 *Platycodon grandiflorum*, T5071 *Polygala arillata*, T5086 *Polygala sibirica*, T5088 *Polygala tenuifolia*, T5101 *Polygonum cuspidatum*, T6440 *Thuja orientalis* [Syn. *Platycladus orientalis*; *Biota orientalis*], T6653 *Usnea diffracta*, T6654 *Usnea longissima*.
- coughing of blood** T1044 *Bryum argenteum*, T1087 *Buxus bodinieri*, T1451 *Cirsium setosum* [Syn. *Cerratula setosa*; *Cirsium segetum*; *Cephalanoplos segetum*], T1971 *Cynoglossum zeylanicum* [Syn. *Anchusa zeylanica*; *Cynoglossum furcatum*; *Cynoglossum formosanum*], T2193 *Dioscorea cirrhosa* [Syn. *Dioscorea pogonoides*], T3645 *Kummerowia striata*, T3737 *Lemmaphyllum microphyllum* var. *obovatum*, T4502 *Onychium japonicum* [Syn. *Tricomanes japonicum*], T5288 *Pteris cretica* var. *nervosa* [Syn. *Pteris nervosa*], T5870 *Selaginella uncinata*, T6830 *Woodfordia fruticosa*.
- courbature** T6731 *Veronicastrum sibiricum*.
- cracked nipple** T0875 *Basella rubra*.
- cracking** T0516 *Anser cygnoides domestica*, T3388 *Ilex chinensis* [Syn. *Ilex purpurea*], T4188 *Mentha rotundifolia*, T4190 *Mentha spicata*.
- cracking from frostbite** T0299 *Aleurites cordata* [Syn. *Aleurites fordii*].
- cracking of hands and feet** T0540 *Apis cerana*, T0955 *Bletilla striata*, T3857 *Lindera umbellata* [Syn. *Lindera erythrocarpa*].
- cracking of skin** T3395 *Ilex pedunculosa*.
- cramp and swelling of feet** T4018 *Machilus thunbergii*.
- crane's knee wind** T0440 *Anagallis arvensis*, T0569 *Aralia cordata*, T0574 *Aralia fargesii*, T3033 *Gnetum parvifolium* [Syn. *Gnetum indicum*], T3213 *Heracleum hemsleyanum*, T3217 *Heracleum moellendorffii* [Syn. *Heracleum microcarpum*; *Heracleum morifolium*], T3228 *Heracleum yungningense*, T5414 *Ranunculus japonicus*, T5645 *Sageretia theezans* [Syn. *Sageretia thea*].
- crimson tongue** T5826 *Scrophularia buergeriana*, T5828 *Scrophularia ningpoensis*.
- crippling wilt** T0819 *Atractylodes chinensis*, T0821 *Atractylodes japonica*, T0823 *Atractylodes lancea*.
- cystitis** T1553 *Clerodendranthus spicatus*, T1557 *Clerodendron indicum*, T2056 *Debregeasia longifolia*, T2119 *Derris eriocarpa*, T3187 *Helleborus thibetanus*, T3233 *Heteropappus altaicus*, T3284 *Houttuynia cordata*, T3288 *Humulus japonicus* [Syn. *Humulus scandens*], T3289 *Humulus lupulus*, T3471 *Iris tectorum*, T6023 *Solidago virgaurea*, T6731 *Veronicastrum sibiricum*.
- damp beriberi** T0383 *Alyxia sinensis*.
- damp edema** T0819 *Atractylodes chinensis*, T0821 *Atractylodes japonica*, T0823 *Atractylodes lancea*.
- damp evil brew** T2554 *Eupatorium cannabinum*.
- damp impediment** T0819 *Atractylodes chinensis*, T0821 *Atractylodes japonica*, T0823 *Atractylodes lancea*, T0824 *Atractylodes macrocephala* [Syn. *Atractylis macrocephala*], T4505 *Ophiocephalus argus*, T6860 *Zanthoxylum ailanthoides*.
- damp impediment and hypertonicity** T1614 *Coix lacryma-jobi* var. *ma-yuen*, T2316 *Echinops grijsii*, T2317 *Echinops ritro*, T5466 *Rhaponticum uniflorum*.
- damp impediment pain** T0990 *Bos taurus domesticus*; *Bubalus bubalis*.
- damp itchy in genitals** T0038 *Acanthopanax gracilistylus*, T0042 *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*], T0044 *Acanthopanax sessiliflorus*, T4042 *Magnolia liliflora*, T5924 *Sesamum indicum*.
- damp itchy in sore and papules** T2048 *Daucus carota*.
- damp itchy skin** T0088 *Aconitum coreanum*, T3736 *Lemmaphyllum Microphyllum*, T3737 *Lemmaphyllum microphyllum* var. *obovatum*, T5115 *Polygonum sibiricum* [Syn. *Persicaria sibirica*].
- damp lichen** T5907 *Senecio scandens* [Syn. *Senecio chinensis*].
- damp phlegm streaming sore** T5958 *Sinapis alba* [Syn. *Brassica alba*; *Brassica hirta*].
- damp sore** T0427 *Ampelopsis japonica* [Syn. *Paullinia japonica*], T0672 *Artemisia capillaris*, T0695 *Artemisia scoparia* [Syn. *Artemisia capillaris* var. *scoparia*], T1546 *Clematis tangutica*, T1582 *Cnidium monnieri*, T2197 *Dioscorea futschauensis*, T2210 *Dioscorea spongiosa*, T2325 *Eichhornia crassipes*, T2857 *Garcinia hanburyi*, T4172 *Melilotus suaveolens*, T4851 *Physalis minima*, T4906 *Pinus armandii*, T4916 *Pinus massoniana*, T5220 *Prunus davidiana*, T5232 *Prunus persica*, T5950 *Siegesbeckia orientalis*, T5951 *Siegesbeckia orientalis* var. *glabrescens* [Syn. *Siegesbeckia glabrescens*], T5952 *Siegesbeckia orientalis* var. *pubescens* [Syn. *Siegesbeckia pubescens*], T6864 *Zanthoxylum armatum*, T6870 *Zanthoxylum bungeanum*, T6887 *Zanthoxylum planispinum*.
- damp sore with swelling toxin** T2194 *Dioscorea collettii*.
- damp toxin** T3001 *Glycine max*, T3687 *Lantana camara*.
- damp toxin of scab sore** T5266 *Psidium guajava*.
- damp toxin sore** T6031 *Sophora flavescens* [Syn. *Sophora angustifolia*].
- damp toxin with pruritus** T3674 *Laggera alata*.
- damp ulceration on skin** T2165 *Dictamnus angustifolius*, T2167 *Dictamnus dasycarpus*.
- damp warmth** T0660 *Artemisia annua*, T0662 *Artemisia apiacea* [Syn. *Artemisia carvifolia*; *Artemisia caruifolia*].
- damp-erosion of sores** T6268 *Syzygium samarangense*.
- damp-heat diarrhea** T0171 *Adiantum capillus-veneris*, T0573 *Aralia elata*, T1705 *Corydalis adunca*, T1733 *Corydalis racemosa*, T1826 *Crotalaria mucronata*, T2718 *Ficus carica*, T2984 *Glinus lotoides* [Syn. *Mollugo lotoides*], T4057 *Mahonia bealei*, T4068 *Mahonia japonica*, T4564 *Oxalis corniculata* [Syn. *Oxalis repens*], T5767 *Saussurea pulchella*, T6031 *Sophora flavescens* [Syn. *Sophora angustifolia*], T6060 *Souliea vaginata*.
- damp-heat diarrhea dysentery** T0867 *Baphicacanthus cusia* [Syn. *Strobilanthes cusia*], T0906 *Berberis julianae*, T0916 *Berberis thunbergii*, T0920 *Berberis wilsonae*, T1662 *Coptis chinensis*, T1663 *Coptis chinensis* var. *brevispala*, T1664 *Coptis deltoidea*, T1669 *Coptis omeiensis*, T1670 *Coptis teetoides* [Syn. *Coptis teeta*], T1813 *Crotalaria albida*, T1933 *Cyclea sutchuenensis*, T1966 *Cynara scolymus*, T2772 *Fraxinus mandshurica*, T2950 *Gerbera anandria* [Syn. *Leibnitzia anandria*], T3245 *Hibiscus syriacus*, T3288 *Humulus*

*japonicus* [Syn. *Humulus scandens*], T3878 *Lithocarpus polystachyus*, T3932 *Ludwigia octovalvis*, T5576 *Rostellularia procumbens* [Syn. *Justicia procumbens*], T5942 *Sida acuta*, T6226 *Swertia mileensis*, T6375 *Thalictrum baicalense*, T6376 *Thalictrum cultratum*, T6378 *Thalictrum delavayi*, T6385 *Thalictrum flavum*, T6387 *Thalictrum foliolosum*, T6389 *Thalictrum glandulosissimum*, T6403 *Thalictrum petaloideum*, T6767 *Viola yedoensis*.

**damp-heat diarrhea**, T0907 *Berberis kawakamii*.

**damp-heat disease** T6357 *Tetrapanax papyriferus*.

**damp-heat dysentery** T0161 *Actinidia eriantha*, T0446 *Anaphalis margaritacea*, T0641 *Aristolochia tuberosa*, T0902 *Berberis diaphana*, T0912 *Berberis poiretii*, T1004 *Brasenia schreberi*, T1561 *Clerodendron serratum*, T1569 *Clerodendron serratum* var. *amplexifolium*, T1931 *Cyclea barbata*, T2079 *Delphinium kamaonense* var. *glabrescens*, T2387 *Epilobium hirsutum*, T3564 *Juglans mandshurica*, T3765 *Lepisorus ussuriensis*, T4060 *Mahonia confusa*, T4064 *Mahonia gracilipes*, T4072 *Mahonia shenii*, T4789 *Phellodendron amurense*, T4790 *Phellodendron amurense* var. *wilsonii*, T4791 *Phellodendron chinense*, T4792 *Phellodendron chinense* var. *glabriusculum*, T5118 *Polygonum suffultum*, T5174 *Portulaca pilosa*, T5554 *Rodgersia aesculifolia*, T5856 *Sedum lineare* [Syn. *Sedum obtuso-lineare*], T5866 *Selaginella sanguinolenta*, T6028 *Sophora alopecuroides*, T6386 *Thalictrum foetidum*, T6393 *Thalictrum ichangense* [Syn. *Thalictrum tripeltatum*; *Thalictrum multipeltatum*], T6912 *Zinnia elegans*.

**damp-heat edema** T0157 *Actinidia callosa* var. *henryi*, T0635 *Aristolochia moupinensis*, T2730 *Fimbristylis dichotoma*, T4144 *Meconopsis nepaulensis*, T4145 *Meconopsis punicea*.

**damp-heat generalized pain** T0628 *Aristolochia fangchi*.

**damp-heat glomus in chest** T1662 *Coptis chinensis*, T1663 *Coptis chinensis* var. *brevise-pala*, T1664 *Coptis deltoidea*, T1669 *Coptis omeiensis*, T1670 *Coptis teetoides* [Syn. *Coptis teeta*].

**damp-heat impediment** T2132 *Desmodium pulchellum* [Syn. *Phyllodium pulchellum*], T2165 *Dictamnus angustifolius*, T2167 *Dictamnus dasycarpus*.

**damp-heat impediment pain** T0632 *Aristolochia manshuriensis*, T1672 *Corallodiscus flabellatus* [Syn. *Didissandra flabellat*].

**damp-heat inhibited urination** T2719 *Ficus fistulosa* [Syn. *Ficus harlandii*].

**damp-heat itchy sore** T5993 *Solanum capsicastrum*.

**damp-heat jaundice** T0158 *Actinidia chinensis*, T0424 *Ampelopsis brevipedunculata* var. *hancei*, T0457 *Andrographis paniculata* [Syn. *Justicia paniculata*], T0471 *Anemone rivularis*, T0567 *Aralia armata*, T0571 *Aralia decaisneae*, T0595 *Ardisia crispa*, T1017 *Brassica oleracea* var. *capitata*, T1251 *Cassytha filiformis*, T1261 *Catalpa ovata*, T1311 *Centella asiatica*, T1415 *Cichorium intybus*, T1876 *Cucumis melo*, T2165 *Dictamnus angustifolius*, T2167 *Dictamnus dasycarpus*, T2194 *Dioscorea colletii*, T2826 *Galeola faberi*, T2908 *Gentiana cephalantha*, T2921 *Gentiana manshurica*, T2928 *Gentiana rigescens*, T2930 *Gentiana scabra*, T2938 *Gentiana triflora*, T2973 *Glechoma longituba*, T2974 *Glechoma lungituba*, T3126 *Hedyotis corymbosa* [Syn. *Oldenlandia corymbosa*], T3356 *Hypericum japonicum*, T3479 *Isodon amethystoides*, T3507 *Isodon lophanthoides* [Syn. *Rabdosia*

*lophanthoides*; *Hyssopus lophanthoides*; *Plectranthus striatus*; *Isodon striatus*], T3578 *Juncus effusus*, T3830 *Ligustrum sinense*, T3998 *Lysimachia christinae*, T4056 *Mahonia bealei*, T4063 *Mahonia fortunei*, T4067 *Mahonia japonica*, T4109 *Marchantia polymorpha*, T4120 *Marsdenia tenacissima*, T4144 *Meconopsis nepaulensis*, T4194 *Menyanthes trifoliata*, T4368 *Nandina domestica*, T4369 *Nandina domestica*, T4485 *Oldenlandia diffusa* [Syn. *Hedyotis diffusa*], T4502 *Onychium japonicum* [Syn. *Tricomanes japonicum*], T4848 *Physalis angulata*, T4854 *Physalis pubescens*, T5072 *Polygala caudata*, T5101 *Polygonum cuspidatum*, T5397 *Rabdosia serra*, T5472 *Rheum officinale*, T5474 *Rheum palmatum*, T5481 *Rheum tanguticum*, T5754 *Saussurea graminea*, T5775 *Scabiosa comosa*, T5861 *Selaginella doederleinii*, T5862 *Selaginella involvens*, T5863 *Selaginella moellendorffii*, T5943 *Sida cordifolia*, T6039 *Sophora moorcroftiana*, T6217 *Swertia davidii*, T6224 *Swertia kouitchensis*, T6226 *Swertia mileensis*, T6231 *Swertia pseudochinensis*, T6301 *Taraxacum mongolicum*, T6372 *Thalictrum acutifolium*, T6374 *Thalictrum atriplex*, T6381 *Thalictrum faberi*, T6388 *Thalictrum fortunei*, T6393 *Thalictrum ichangense* [Syn. *Thalictrum tripeltatum*; *Thalictrum multipeltatum*], T6402 *Thalictrum omeiense*.

**damp-heat pain in limbs** T0629 *Aristolochia heterophylla*.

**damp-heat sore and papules** T2165 *Dictamnus angustifolius*, T2167 *Dictamnus dasycarpus*.

**damp-heat sore toxin** T2208 *Dioscorea septemloba*, T4127 *Matteuccia struthiopteris*.

**damp-heat strangury** T3360 *Hypericum patulum*.

**damp-heat strangury pain** T2161 *Dicranopteris pedata* [Syn. *Polypodium pedatum*; *Dicranopteris dichotoma*], T2213 *Dioscorea zingiberensis*, T4760 *Peucedanum japonicum*, T5126 *Polypodium virginianum*, T5127 *Polypodium vulgare*.

**damp-heat vaginal discharge** T2908 *Gentiana cephalantha*, T2921 *Gentiana manshurica*, T2928 *Gentiana rigescens*, T2930 *Gentiana scabra*, T2938 *Gentiana triflora*, T5520 *Rhododendron ovatum* [Syn. *Rhododendron lamprophyllum*; *Azalea ovata*], T6116 *Stenoloma chusanum*.

**damp-heat vomiting diarrhea** T5604 *Rudbeckia laciniata*.

**damp-heat with strangury turbidity** T5977 *Smilax glabra*, T5980 *Smilax menispermoidea*.

**damp-sore of skin** T4470 *Ocimum basilicum*.

**damp-sore with flowing water** T6615 *Uncaria gambir*.

**damp-stagnation obstructing internally** T5104 *Polygonum hydropiper*.

**damp-swelling in scrotum** T3413 *Impatiens nolintangere*.

**deadlimb** T0617 *Arisaema amurense*, T0618 *Arisaema consanguineum*, T0620 *Arisaema heterophyllum*, T3971 *Lycopodium complanatum*, T4903 *Pinellia pedatisecta*, T5279 *Psychotria serpens*, T6166 *Strychnos angustiflora*.

**deafness** T0015 *Abutilon indicum*, T0144 *Acorus gramineus*, T0146 *Acorus tatarinowii*, T0516 *Anser cygnoides domestica*, T0517 *Anser cygnoides domestica*, T1084 *Buthus martensi*, T2275 *Dryobalanops aromatica*, T2908 *Gentiana cephalantha*, T2921 *Gentiana manshurica*, T2928 *Gentiana rigescens*, T2930 *Gentiana scabra*, T2938 *Gentiana triflora*.

**deafness in early stage** T5312 *Pueraria edulis*, T5313 *Pueraria lobata*

- [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*], T5316 *Pueraria omeiensis*, T5318 *Pueraria phaseoloides*, T5320 *Pueraria thomsonii*.
- decayed teeth** T1996 *Dahlia pinnata* [Syn. *Dahlia variabilis*], T5646 *Sagina japonica* [Syn. *Spergula japonica*].
- decayed toothache** T0297 *Alchornea trewioides*, T1359 *Chenopodium album*, T4020 *Macleaya cordata*, T5144 *Populus adenopoda*, T5457 *Rhamnus davurica*.
- decayed toothache due to wind** T3329 *Hyoscyamus niger*.
- deep pus ulcer** T0568 *Aralia chinensis*, T0570 *Aralia dasyphylla*.
- deep-lying heat sore pharynx** T2839 *Gallus gallus domesticus*.
- deep-source nasal congestion** T0212 *Agastache rugosus*, T0476 *Angelica anomala*, T0479 *Angelica dahurica* cv. *qibaizhi*, T0498 *Angelica taiwaniana*, T0728 *Asarum heterotropoides* var. *mandshuricum*, T0731 *Asarum sieboldii*, T0732 *Asarum sieboldii* var. *seoulensis*, T2434 *Eriocaulon buergerianum*, T3222 *Heracleum scabridum*, T3680 *Lamium amplexicaule*, T4953 *Piper longum*, T5646 *Sagina japonica* [Syn. *Spergula japonica*], T6000 *Solanum indicum*, T6843 *Xanthium sibiricum* [Syn. *Xanthium strumarium*].
- deep-source nasal congestion and headache** T5059 *Pogostemon cablin* [Syn. *Mentha cablin*].
- deep-source nasal congestion and runny nose** T1312 *Centipeda minima*.
- delacrimation** T6791 *Vitex rotundifolia* [Syn. *Vitex trifolia* var. *simplicifolia*], T6793 *Vitex trifolia*.
- delacrimation and photophobia** T1048 *Buddleja officinalis*, T1240 *Cassia obtusifolia*, T1250 *Cassia tora*, T2434 *Eriocaulon buergerianum*.
- depressed liver-gallbladder heat** T4479 *Odontites serotina*.
- depression** T0292 *Albizia julibrissin*, T5848 *Securinega suffruticosa*.
- depression in heart-chest** T2798 *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*].
- depression of qi and blood** T0945 *Bischofia javanica* [Syn. *Bischofia trifoliata*].
- dermatitis** T0495 *Angelica sinensis*, T2165 *Dictamnus angustifolius*, T2167 *Dictamnus dasycarpus*, T2641 *Evodia lepta* [Syn. *Ilex lepta*], T3381 *Hyptis suaveolens*, T3830 *Ligustrum sinense*, T4391 *Nauclea officinalis*, T4804 *Phlojodicarpus sibiricus*, T4837 *Phyllanthus emblica*, T5445 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], T5447 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], T6018 *Solanum verbascifolium*, T6338 *Tephrosia purpurea*, T6339 *Tephrosia purpurea*.
- dermatitis**<sup>[5509]</sup> T6690 *Vepris louisii*.
- dermatomyositis** T2753 *Formica fusca*.
- desiccation of liquid and intestine dryness** T5223 *Prunus humilis* [Syn. *Cerasus humilis*], T5224 *Prunus japonica* [Syn. *Cerasus japonica*], T5225 *Prunus japonica* var. *nakaii*.
- desire to sleep** T1152 *Camellia sinensis* [Syn. *Thea sinensis*].
- deviated eyes and mouth** T0088 *Aconitum coreanum*, T0617 *Arisaema amurense*, T0618 *Arisaema consanguineum*, T0620 *Arisaema heterophyllum*, T3113 *Hedera nepalensis* var. *sinensis*, T3115 *Hedera rhombea*, T4085 *Mallotus repandus* var. *chrysocarpus* [Syn. *Mallotus chrysocarpus*; *Mallotus repandus*], T4903 *Pinellia pedatisecta*, T6588 *Typhonium giganteum*.
- diabetes mellitus** T0158 *Actinidia chinensis*, T0462 *Anemarrhena asphodeloides*, T0541 *Apis cerana*, T0568 *Aralia chinensis*, T0570 *Aralia dasyphylla*, T0572 *Aralia elata*, T0746 *Asparagus cochinchinensis* [Syn. *Asparagus lucidus*], T0975 *Bombyx mori*, T0976 *Bombyx mori*, T0988 *Bos taurus domesticus*; *Bubalus bubalis*, T0989 *Bos taurus domesticus*; *Bubalus bubalis*, T1182 *Capra hircus*; *Ovis aries*, T1412 *Cicer arietinum*, T1476 *Citrus erythrosa*, T1515 *Citrus tangemna*, T2188 *Dioscorea alata*, T2195 *Dioscorea deltoidea*, T2222 *Diospyros lotus*, T2569 *Eupatorium rebaudianum*, T2837 *Gallus gallus domesticus*, T3668 *Lagenaria siceraria* var. *depressa*, T3954 *Lycium barbarum*, T3955 *Lycium barbarum*, T3956 *Lycium chinense*, T3958 *Lycium chinense*, T4086 *Malus asiatica*, T4102 *Mangifera indica*, T4121 *Marsilea quadrifolia*, T4263 *Momordica charantia*, T4288 *Morus alba*, T4516 *Oplopanax elatus*, T4544 *Oryza sativa*, T4573 *Pachyrrhizus erosus*, T4600 *Panax ginseng* [Syn. *Panax schinseng*], T4602 *Panax ginseng* [Syn. *Panax schinseng*], T4731 *Persea americana* [Syn. *Persea gratissima*], T4786 *Phasianus colchicus*, T4983 *Pisum sativum*, T5091 *Polygonatum cyrtoneura* [Syn. *Polygonatum multiflorum*], T5092 *Polygonatum kingianum*, T5095 *Polygonatum sibiricum*, T5239 *Prunus salicina*, T5312 *Pueraria edulis*, T5313 *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*], T5316 *Pueraria omeiensis*, T5318 *Pueraria phaseoloides*, T5320 *Pueraria thomsonii*, T5419 *Raphanus sativus*, T5445 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], T5446 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], T5447 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], T5642 *Saccharum sinensis*, T5938 *Setaria italica*, T6076 *Spinacia oleracea*, T6087 *Spiranthes sinensis*, T6147 *Stizolobium capitatum*, T6311 *Taxus cuspidata*, T6492 *Trapa bispinosa*, T6507 *Trichosanthes cucumeroides*, T6510 *Trichosanthes kirilowii*, T6513 *Trichosanthes rosthornii* [Syn. *Trichosanthes uniflora*], T6544 *Triticum aestivum* [Syn. *Triticum vulgare*], T6754 *Vigna unguiculata*, T6901 *Zea mays*.
- diabetes mellitus due to internal heat** T0791 *Astragalus chrysopterus*, T0794 *Astragalus ernestii*, T0798 *Astragalus membranaceus*, T0800 *Astragalus mongholicus*, T1698 *Cornus officinalis* [Syn. *Macrocarpium officinale*], T3234 *Heteropogon contortus*, T3875 *Liriope spicata* var. *prolifera*, T4507 *Ophiopogon japonicus*, T4599 *Panax ginseng* [Syn. *Panax schinseng*], T4610 *Panax quinquefolium*, T5093 *Polygonatum odoratum* [Syn. *Polygonatum officinale*], T5094 *Polygonatum prattii*, T6512 *Trichosanthes kirilowii*.
- diabetes mellitus with profuse urination** T4548 *Oryza sativa* var. *glutinosa*.
- diabetes**<sup>[5509]</sup> T3394 *Ilex paraguariensis*.
- diaphragm food** T6744 *Vicia faba*.
- diarrhea** T0015 *Abutilon indicum*, T0293 *Albizia lebbekii*, T0302 *Alhagi pseudalhagi*, T0303 *Alisma orientale* [Syn. *Alisma plantago-aquatica* var. *orientale*], T0318 *Allium sativum*, T0357 *Alpinia japonica*, T0358 *Alpinia katsumadai*, T0359 *Alpinia officinarum*, T0383 *Alyxia sinensis*, T0388 *Amaranthus lividus*, T0418 *Amomum muricarpum*, T0428 *Ampelopsis megalophylla*, T0457 *Andrographis paniculata* [Syn. *Justicia paniculata*], T0468 *Anemone hupehensis*, T0641 *Aristolochia*

*tuberosa*, T0642 *Aristolochia tubiflora*, T0894 *Benincasa hispida*, T0912 *Berberis poiretii*, T0933 *Betula platyphylla*, T0935 *Betula platyphylla* var. *japonica*, T0938 *Bidens bipinnata*, T0963 *Boehmeria siamensis*, T0973 *Bombax malabaricum* [Syn. *Gossampinus malabarica*], T1003 *Brandisia hancei*, T1031 *Broussonetia kazinoki*, T1152 *Camellia sinensis* [Syn. *Thea sinensis*], T1172 *Canna edulis*, T1186 *Capsicum annuum*, T1187 *Capsicum frutescens*, T1251 *Cassytha filiformis*, T1258 *Casuarina equisetifolia*, T1278 *Cedrela sinensis*, T1299 *Celosia cristata*, T1343 *Chaenomeles sinensis*, T1352 *Chamaenerion angustifolium* [Syn. *Epilobium angustifolium*], T1359 *Chenopodium album*, T1381 *Choerospondias axillaris*, T1423 *Cimicifuga nanchuanensis*, T1440 *Cinnamomum glanduliferum*, T1443 *Cinnamomum parthenoxylum* [Syn. *Cinnamomum porrectum*], T1493 *Citrus limon*, T1497 *Citrus limonia*, T1530 *Cladostachys amaranthoides* [Syn. *Achyranthes amaranthoides*; *Cladostachys frutescens*; *Deeringia amaranthoides*], T1641 *Conioselinum vaginatum*, T1784 *Cratoxylum cochinchinense*, T1928 *Cycas revoluta*, T1939 *Cymbopogon citratus*, T1943 *Cymbopogon goeringii*, T1964 *Cynanchum wilfordii* [Syn. *Cynoctonum wilfordii*], T1980 *Cyprinus carpio*, T2058 *Deeringia amaranthoides* [Syn. *Cladostachys frutescens*], T2136 *Desmos cochinchinensis* [Syn. *Desmos chinensis*], T2181 *Dillenia indica*, T2341 *Elsholtzia ciliata*, T2346 *Embelia oblongifolia*, T2348 *Embelia ribes*, T2510 *Eucalyptus globulus*, T2580 *Euphorbia antiquorum*, T2636 *Euscaphis japonica*, T2658 *Fagopyrum esculentum*, T2717 *Ficus carica*, T2719 *Ficus fistulosa* [Syn. *Ficus harlandii*], T2723 *Ficus pumila*, T2766 *Fraxinus bungeana*, T2767 *Fraxinus chinensis*, T2774 *Fraxinus paxiana*, T2777 *Fraxinus rhynchophylla* [Syn. *Fraxinus chinensis* var. *rhynchophylla*], T2779 *Fraxinus stylosa*, T2780 *Fraxinus szaboana* [Syn. *Fraxinus chinensis* var. *acuminata*], T2994 *Gloiopeltis furcata*, T3125 *Hedyotis chrysotricha* [Syn. *Oldenlandia chrysotricha*], T3241 *Hibiscus mutabilis*, T3340 *Hypericum ascyron*, T3348 *Hypericum elodeoides*, T3356 *Hypericum japonicum*, T3368 *Hypericum wightianum*, T3373 *Hypoestes purpurea* [Syn. *Justicia purpurea*; *Hypoestes sinica*], T3381 *Hyptis suaveolens*, T3388 *Ilex chinensis* [Syn. *Ilex purpurea*], T3418 *Incarvillea arguta*, T3507 *Isodon lophanthoides* [Syn. *Rabdosia lophanthoides*; *Hyssopus lophanthoides*; *Plectranthus striatus*; *Isodon striatus*], T3569 *Juglans regia*, T3674 *Laggera alata*, T3758 *Lepidium sativum*, T3770 *Lespedeza cuneata*, T3866 *Liquidambar formosana* [Syn. *Liquidambar taiwaniana*], T3885 *Litsea cubeba*, T3926 *Loropetalum chinense*, T3990 *Lygodium japonicum*, T4006 *Lythrum anceps*, T4007 *Lythrum salicaria*, T4028 *Maesa indica*, T4048 *Magnolia rostrata*, T4055 *Mahonia bealei*, T4060 *Mahonia confusa*, T4062 *Mahonia fortunei*, T4064 *Mahonia gracilipes*, T4066 *Mahonia japonica*, T4072 *Mahonia shenii*, T4183 *Menispermum dauricum*, T4217 *Microcos paniculata* [Syn. *Grewia microcos*], T4343 *Myrica esculent*, T4361 *Myrsine africana*, T4368 *Nandina domestica*, T4369 *Nandina domestica*, T4397 *Nelumbo nucifera*, T4502 *Onychium japonicum* [Syn. *Tricomanes japonicum*], T4544 *Oryza sativa*, T4545 *Oryza sativa*, T4577 *Paederia scandens*, T4600 *Panax ginseng* [Syn. *Panax schinseng*], T4629 *Papaver nudicaule*, T4630 *Papaver nudicaule* ssp. *amurense*, T4636 *Papaver somniferum*, T4789 *Phellodendron amurense*, T4790 *Phellodendron amurense* var. *wilsonii*,

T4791 *Phellodendron chinense*, T4792 *Phellodendron chinense* var. *glabriusculum*, T4802 *Phleum pratense*, T4834 *Phyllanthus emblica*, T4835 *Phyllanthus emblica*, T4840 *Phyllanthus niruri*, T4953 *Piper longum*, T5100 *Polygonum chinense*, T5104 *Polygonum hydropiper*, T5105 *Polygonum hydropiper* var. *flaccidum* [Syn. *Polygonum flaccidum*], T5106 *Polygonum lapathifolium*, T5112 *Polygonum periginatoris*, T5114 *Polygonum polystachyum*, T5124 *Polypodium niponicum*, T5129 *Polyporus umbellatus*, T5171 *Porphyra tenera*, T5194 *Premna microphylla*, T5268 *Psidium guajava*, T5288 *Pteris cretica* var. *nervosa* [Syn. *Pteris nervosa*], T5289 *Pteris dactylina*, T5290 *Pteris fauriei* [Syn. *Pteris fauriei* var. *minor*], T5295 *Pteris multifida*, T5312 *Pueraria edulis*, T5313 *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*], T5316 *Pueraria omeiensis*, T5318 *Pueraria phaseoloides*, T5320 *Pueraria thomsonii*, T5330 *Punica granatum*, T5332 *Punica granatum*, T5341 *Pygmaeopremna herbacea* [Syn. *Premna herbacea*], T5361 *Pyrus betulaeifolia*, T5365 *Pyrus pashia*, T5374 *Quercus infectoria*, T5388 *Rabdosia adenantha*, T5389 *Rabdosia coetsa*, T5397 *Rabdosia serra*, T5419 *Raphanus sativus*, T5497 *Rhodiola kirilowii*, T5499 *Rhodiola sacra*, T5528 *Rhodomyrtus tomentosa*, T5563 *Rosa cymosa*, T5573 *Rosa sericea*, T5626 *Ruta graveolens*, T5687 *Salvia prionitis*, T5754 *Saussurea graminea*, T5833 *Scutellaria amoena*, T5834 *Scutellaria baicalensis*, T5839 *Scutellaria hypericifolia*, T5841 *Scutellaria likiangensis*, T5843 *Scutellaria rehderiana*, T5845 *Scutellaria viscidula*, T5860 *Selaginella davidii*, T5870 *Selaginella uncinata*, T5934 *Seseli meirei*, T5937 *Seseli yunnanense*, T5938 *Setaria italica*, T5943 *Sida cordifolia*, T5976 *Smilax china* [Syn. *Smilax japonica*], T6024 *Solidago virgaurea* var. *leiocarpa* [Syn. *Solidago decurrens*], T6075 *Spilanthes acmella*, T6133 *Stephania sinica*, T6177 *Strychnos ignatii*, T6206 *Sus scrofa domestica*, T6250 *Symplocos caudata*, T6372 *Thalictrum acutifolium*, T6373 *Thalictrum alpinum*, T6381 *Thalictrum faberi*, T6388 *Thalictrum fortunei*, T6436 *Thlaspi arvense*, T6463 *Tinospora capillipes*, T6467 *Tinospora sagittata*, T6488 *Trachyspermum ammi*, T6544 *Triticum aestivum* [Syn. *Triticum vulgare*], T6645 *Urena lobata*, T6801 *Vladimiria denticulata*, T6860 *Zanthoxylum ailanthoides*, T6869 *Zanthoxylum bungeanum*, T6892 *Zanthoxylum schinifolium*, T6909 *Zingiber officinale*, T6910 *Zingiber officinale*, T6920 *Ziziphus mauritiana*.

**diarrhea and abdomen pain** T5391 *Rabdosia eriocalyx*.

**diarrhea and dysentery** T0045 *Acanthopanax trifoliatum*, T0142 *Acorus calamus*, T0661 *Artemisia anomala*, T1858 *Croton tiglium*, T2438 *Erodium stephanianum*, T2521 *Eucalyptus tereticornis*, T2837 *Gallus gallus domesticus*, T2838 *Gallus gallus domesticus*, T2943 *Geranium nepalense*, T2944 *Geranium pratense*, T2947 *Geranium sibiricum*, T2949 *Geranium wilfordii*, T2956 *Geum japonicum*, T2964 *Ginkgo biloba*, T4182 *Menispermum dauricum*, T4549 *Osbeckia chinensis*, T4618 *Panicum miliaceum*, T4884 *Picria felterrae*, T4965 *Piper sarmentosum*, T5517 *Rhododendron molle*, T6131 *Stephania longa*, T6252 *Symplocos chinensis*, T6476 *Torilis japonica*, T6754 *Vigna unguiculata*.

**diarrhea and dysentery due to cold qi** T4306 *Mosla grosseserrata*.

**diarrhea and tenesmus** T0313 *Allium chinense*, T0316 *Allium macrostemon*, T0606 *Areca catechu*, T5758 *Saussurea lappa* [Syn.

- Aucklandia lappa*].
- diarrhea due to spleen-kidney vacuity** T1911 *Cuscuta australis*, T1912 *Cuscuta chinensis*, T1913 *Cuscuta japonica*.
- diarrhea due to spleen-stomach vacuity cold** T4548 *Oryza sativa* var. *glutinosa*.
- diarrhea dysentery** T5182 *Potentilla discolor*.
- diarrhea in pregnancy** T0212 *Agastache rugosus*.
- diarrhea with hematochezia** T0982 *Bos taurus domesticus*.
- diarrhea with pus blood** T2337 *Elephas maximus*.
- diarrhea,** T4663 *Passiflora caerulea*.
- dietary imbalance after illness** T1472 *Citrus chachiensis*, T1517 *Citrus tankan*.
- difficult delivery** T0979 *Bombyx mori*, T1174 *Cannabis sativa*, T2836 *Gallus gallus domesticus*.
- difficult lactation** T6497 *Tribulus terrestris*.
- diffusive intravascular clotting** T5680 *Salvia miltiorrhiza*, T5681 *Salvia miltiorrhiza* f. *alba*, T5688 *Salvia przewalskii*.
- dim vision** T1035 *Broussonetia papyrifera*, T1048 *Buddleja officinalis*, T1152 *Camellia sinensis* [Syn. *Thea sinensis*], T1240 *Cassia obtusifolia*, T1250 *Cassia tora*, T2094 *Dendrobium aduncum*, T2096 *Dendrobium aurantiacum* var. *denneanum*, T2098 *Dendrobium chrysanthum*, T2100 *Dendrobium densiflorum*, T2102 *Dendrobium fimbriatum* var. *oculatum*, T2105 *Dendrobium loddigesii*, T2106 *Dendrobium moniliforme*, T2107 *Dendrobium nobile*, T2108 *Dendrobium officinale*, T3828 *Ligustrum lucidum*, T4658 *Parmelia tinctorum*, T6150 *Streptopelia orientalis*.
- dim vision and eye screen** T1526 *Cladonia rangiferina*.
- diphtheria** T1001 *Brachystemma calycinum*, T1662 *Coptis chinensis*, T1663 *Coptis chinensis* var. *brevisepala*, T1664 *Coptis deltoidea*, T1669 *Coptis omeiensis*, T1670 *Coptis teetoides* [Syn. *Coptis teeta*], T3875 *Liriope spicata* var. *prolifera*, T4507 *Ophiopogon japonicus*, T4834 *Phyllanthus emblica*, T5100 *Polygonum chinense*, T5445 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], T5447 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], T5557 *Rohdea japonica* [Syn. *Orontium japonicum*], T6039 *Sophora moorcroftiana*, T6566 *Tupistra chinensis*, T6580 *Tylophora floribunda*, T6709 *Verbena officinalis*, T6814 *Wedelia chinensis* [Syn. *Solidago chinensis*; *Wedelia calendulacea*].
- dislocation** T1533 *Clausena dentata*, T1534 *Clausena dunniana*.
- disquieted heart spirit** T0292 *Albizia julibrissin*, T4555 *Ostrea rivularis*; *Ostrea talienwhanensis*; *Ostrea gigas*, T5086 *Polygala sibirica*, T5088 *Polygala tenuifolia*, T5169 *Poria cocos*, T6675 *Valeriana amurensis*, T6679 *Valeriana officinalis*, T6680 *Valeriana officinalis* var. *latifolia*.
- disquieted heart spirit (root)** T4859 *Physochlaina physaloides*.
- disquieted spirit-mind** T6358 *Tetraplodon mnioides* [Syn. *Tetraplodon bryoides*; *Splachnum mnioides*].
- disseminated swelling of welling abscess and sores** T3213 *Heracleum hemsleyanum*, T3217 *Heracleum moellendorffii* [Syn. *Heracleum microcarpum*; *Heracleum morifolium*], T3228 *Heracleum yungningense*.
- distended head and headache** T4172 *Melilotus suaveolens*.
- distended head and headache due to liver-gallbladder repletion fire** T2908 *Gentiana cephalantha*, T2921 *Gentiana manshurica*, T2928 *Gentiana rigescens*, T2930 *Gentiana scabra*, T2938 *Gentiana triflora*.
- distended head and oppression in chest** T2558 *Eupatorium formosanum*, T2559 *Eupatorium fortunei*.
- distended red eyes and screen** T2434 *Eriocaulon buergerianum*.
- distending pain in breast** T0201 *Aesculus chinensis*, T0202 *Aesculus hippocastanum*, T0205 *Aesculus wilsonii*, T3282 *Hordeum vulgare*.
- distending pain in chest and abdomen** T0625 *Aristolochia contorta*, T0627 *Aristolochia debilis* [Syn. *Aristolochia longa*], T3854 *Lindera strychnifolia* [Syn. *Lindera aggregata*].
- distending pain in chest and rib-side** T0201 *Aesculus chinensis*, T0202 *Aesculus hippocastanum*, T0205 *Aesculus wilsonii*, T1966 *Cynara scolymus*, T1978 *Cyperus rotundus*, T3431 *Inula helenium*, T3437 *Inula racemosa*.
- distending pain in chest and stomach duct** T1932 *Cyclea racemosa*, T5758 *Saussurea lappa* [Syn. *Aucklandia lappa*].
- distending pain in rib-side** T0275 *Akebia quinata*, T6062 *Sparganium stoloniferum*.
- distending pain in stomach duct** T0275 *Akebia quinata*, T1186 *Capsicum annuum*, T1187 *Capsicum frutescens*, T1415 *Cichorium intybus*, T1440 *Cinnamomum glanduliferum*, T1498 *Citrus medica*, T1520 *Citrus wilsonii*, T1769 *Crataegus cuneata*, T1771 *Crataegus kansuensis*, T1772 *Crataegus maximowiczii*, T1780 *Crataegus sanguinea*, T1781 *Crataegus scabrifolia*, T1876 *Cucumis melo*, T1978 *Cyperus rotundus*, T2136 *Desmos cochinchinensis* [Syn. *Desmos chinensis*], T2387 *Epilobium hirsutum*, T3431 *Inula helenium*, T3437 *Inula racemosa*, T4039 *Magnolia grandiflora*, T4163 *Melia toosendan*, T4351 *Myristica fragrans*, T4937 *Piper betle*, T4966 *Piper sarmentosum*, T5420 *Raphanus sativus*, T5934 *Seseli meirei*, T5937 *Seseli yunnanense*, T6106 *Stelmatocrypton khasianum*, T6602 *Umbilicaria hypococcinea*, T6675 *Valeriana amurensis*, T6679 *Valeriana officinalis*, T6680 *Valeriana officinalis* var. *latifolia*, T6802 *Vladimiria souliei* [Syn. *Jurinea souliei*].
- distending pain in stomach duct and abdomen** T0144 *Acorus gramineus*, T0146 *Acorus tatarinowii*, T0606 *Areca catechu*, T0692 *Artemisia rupestris* [Syn. *Artemisia dentata*; *Artemisia viridis*; *Artemisia viridifolia*], T1469 *Citrus aurantium* var. *amara*, T1483 *Citrus grandis* var. *tomentosa*, T1904 *Curcuma kwangsiensis*, T1909 *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*], T1958 *Cynanchum otophyllum*, T2193 *Dioscorea cirrhosa* [Syn. *Dioscorea pogonoides*], T3725 *Laurus nobilis*, T3849 *Lindera chunii*, T3997 *Lysimachia capillipes*, T4217 *Microcos paniculata* [Syn. *Grewia microcos*], T4443 *Notholirion hyacinthinum* [Syn. *Notholirion bulbuliferum*].
- distention and oppression in stomach duct and abdomen** T2365 *Enteromorpha clathrata*, T4714 *Perilla frutescens*.
- distention fullness** T4944 *Piper cubeba*, T6910 *Zingiber officinale*.
- distention fullness and pain in stomach duct and abdomen** T0358 *Alpinia katsumadai*, T4470 *Ocimum basilicum*.
- distention fullness and rapid asthma** T4287 *Morus alba*.
- distention fullness and sudden pain in chest and abdomen** T1858 *Croton tiglium*, T4048 *Magnolia rostrata*.
- distention fullness in chest and abdomen** T0130 *Aconitum sinomontanum*, T0363 *Alpinia speciosa*, T1468 *Citrus aurantium*, T1521 *Citrus wilsonii*, T3840 *Limnophila rugosa*, T4002 *Lysimachia*



- foenum-graecum*, T4386 *Nardostachys chinensis*, T4387 *Nardostachys jatamansi*, T4786 *Phasianus colchicus*, T5141 *Poncirus trifoliata*.
- distention fullness in chest and diaphragm** T0240 *Aglaiia odorata*, T3620 *Kaempferia galanga*, T4526 *Origanum vulgare*.
- distention fullness in chest and rib-side** T2125 *Descurainia sophia*, T3755 *Lepidium apetalum* [Syn. *Lepidium micranthum*], T3759 *Lepidium virginicum*.
- distention fullness in chest and stomach duct** T4718 *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*], T4721 *Perilla frutescens* var. *arguta*.
- distention fullness in heart and abdomen** T4954 *Piper longum*.
- distention fullness in stomach duct** T0353 *Alpinia blepharocalyx*, T1775 *Crataegus pinnatifida*, T1778 *Crataegus pinnatifida* var. *major*, T1964 *Cynanchum wilfordii* [Syn. *Cynoctonum wilfordii*], T4505 *Ophiocephalus argus*, T4964 *Piper retrofractum*, T4965 *Piper sarmentosum*, T6819 *Wikstroemia chamaedaphne*.
- distention fullness in stomach duct and abdomen** T1170 *Canis familiaris*, T1623 *Collybia albuminosa*, T2048 *Daucus carota*, T5137 *Poncirus trifoliata*, T5385 *Quisqualis indica*, T5469 *Rheum hotaense*.
- distention in rib-side** T1467 *Citrus aurantium*, T1501 *Citrus medica* var. *sarcodactylis*, T5140 *Poncirus trifoliata*.
- distention oppression in stomach duct** T0274 *Akebia quinata*, T0278 *Akebia trifoliata*, T0280 *Akebia trifoliata* var. *australis*.
- dizziness** T0334 *Aloe arborescens* var. *natalensis*, T0553 *Apocynum venetum*, T0645 *Armillariella mellea*, T0859 *Balanophora involucreta*, T0923 *Bergenia crassifolia*, T1337 *Cervus nippon*; *Cervus elaphus*, T1353 *Changium smyrnioides*, T1366 *Chimonanthus fragrans* [Syn. *Chimonanthus praecox*], T1395 *Chrysanthemum morifolium* [Syn. *Dendranthema morifolium*], T1697 *Cornus controversa* [Syn. *Bothrocaryum controversum*], T2060 *Delonix regia*, T2244 *Doellingeria scaber* [Syn. *Aster scaber*], T2805 *Fugu ocellatus*, T2846 *Ganoderma japonicum* [Syn. *Ganoderma sinense*], T2848 *Ganoderma lucidum*, T2890 *Gastrodia elata*, T3001 *Glycine max*, T3142 *Helianthus annuus*, T3372 *Hypodematium sinense*, T3775 *Lethariella cladonioides*, T3776 *Lethariella zahlbruckneri*, T3785 *Levisticum officinale*, T3845 *Linaria vulgaris*, T4238 *Milletia nitida*, T4279 *Morina chinensis*, T4821 *Pholidota articulata*, T4904 *Pinellia ternata*, T5226 *Prunus mume*, T5423 *Rauwolfia verticillata*, T5425 *Rauwolfia verticillata* f. *rubrocarpa*, T5426 *Rauwolfia verticillata* var. *hainanensis*, T5427 *Rauwolfia vomitoria*, T5428 *Rauwolfia yunnanensis*, T5435 *Rauwolfia latifrons*, T5441 *Rauwolfia perakensis*, T5497 *Rhodiola kirilowii*, T5657 *Salsola collina*, T5927 *Sesamum indicum* [Syn. *Sesamum orientale*], T6278 *Tagetes erecta*, T6410 *Thalictrum smithii*, T6843 *Xanthium sibiricum* [Syn. *Xanthium strumarium*].
- dizziness (for men)** T2391 *Epimedium brevicornum*.
- dizziness and dim vision** T0298 *Alectoria vivens*, T1296 *Celosia argentea*, T1525 *Cladonia fallax*, T1528 *Cladonia stellaris* [Syn. *Cladonia alpestris*], T1819 *Crotalaria ferruginea*, T2955 *Geum japonicum*, T3827 *Ligustrum japonicum*, T3955 *Lycium barbarum*, T3958 *Lycium chinense*, T5593 *Rubus idaeus*, T6036 *Sophora japonica*, T6076 *Spinacia oleracea*.
- dizziness and headache** T0625 *Aristolochia contorta*, T0627 *Aristolochia debilis* [Syn. *Aristolochia longa*], T1055 *Bupleurum angustissimum*, T1056 *Bupleurum aureum*, T1058 *Bupleurum chaishoui*, T1059 *Bupleurum chinense*, T1065 *Bupleurum longiradiatum*, T1066 *Bupleurum marginatum*, T1067 *Bupleurum marginatum* var. *stenophyllum*, T1072 *Bupleurum scorzonerifolium*, T1073 *Bupleurum sibiricum*, T1075 *Bupleurum smithii* var. *parvifolium*, T1078 *Bupleurum wenchuanense*, T1079 *Bupleurum yinchowense*, T1240 *Cassia obtusifolia*, T1250 *Cassia tora*, T3557 *Jasminum sambac*, T4289 *Morus alba*, T4291 *Morus australis*, T4293 *Morus cathayana*, T4298 *Morus mongolica*, T6531 *Trillium camtschaticum*, T6533 *Trillium kamschaticum*, T6535 *Trillium tschonoskii*, T6791 *Vitex rotundifolia* [Syn. *Vitex trifolia* var. *simplicifolia*], T6793 *Vitex trifolia*.
- dizziness and insomnia** T1961 *Cynanchum thesioides*.
- dizziness and palpitation** T5446 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*].
- dizziness and tinnitus** T0793 *Astragalus complanatus*, T1698 *Cornus officinalis* [Syn. *Macrocarpium officinale*], T1952 *Cynanchum auriculatum*, T1953 *Cynanchum bungei*, T2323 *Eclipta prostrata* [Syn. *Eclipta alba*], T3828 *Ligustrum lucidum*, T4056 *Mahonia bealei*, T4057 *Mahonia bealei*, T4063 *Mahonia fortunei*, T4067 *Mahonia japonica*, T4068 *Mahonia japonica*, T4432 *Nigella glandulifera*, T5100 *Polygonum chinense*.
- dizziness due to anemia** T3774 *Lespedeza tomentosa*, T5107 *Polygonum multiflorum*.
- dizziness syndrome** T0644 *Armillaria mellea*.
- dizzy and distended head** T1242 *Cassia occidentalis*, T1247 *Cassia sophera*.
- dizzy head** T0644 *Armillaria mellea*, T4060 *Mahonia confusa*, T4064 *Mahonia gracilipes*, T6087 *Spiranthes sinensis*.
- dizzy head and distention eyes** T0428 *Ampelopsis megalophylla*.
- dizzy head and insomnia** T5586 *Rubia yunnanensis*.
- dizzy head and tinnitus** T1188 *Caragana chamlagu*.
- dizzy head and vision** T1964 *Cynanchum wilfordii* [Syn. *Cynoctonum wilfordii*], T3390 *Ilex cornuta*, T5446 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], T5498 *Rhodiola quadrifida*.
- dizzy head and vision due to insufficiency of liver-kidney and blood vacuity essence depletion** T4288 *Morus alba*.
- dizzy head due to blood vacuity** T3675 *Lagopsis supina*.
- dog bite** T1547 *Clematis terniflora* [Syn. *Clematis maximowicziana*], T1932 *Cyclea racemosa*, T1958 *Cynanchum otophyllum*, T4428 *Nicotiana tabacum*.
- dormant papules with pruritus** T3738 *Lemna minor*, T4184 *Mentha haplocalyx* [Syn. *Mentha canadaensis*; *Mentha arvensis* var. *haplocalyx*; *Mentha arvensis*], T4470 *Ocimum basilicum*.
- double tongue** T4042 *Magnolia liliflora*, T4050 *Magnolia sieboldii*.
- dream emission** T5791 *Schisandra chinensis*, T5802 *Schisandra sphenanthera*, T6670 *Vaccinium bracteatum*.
- dribbling and inhibited voidings of urination** T0172 *Adiantum caudatum*, T0175 *Adiantum pedatum*, T1933 *Cyclea sutchuenensis*, T3240 *Hibiscus esculentus*, T3764 *Lepisorus thunbergianus*, T5033 *Poa sphondylodes*, T5978 *Smilax glauco-china*, T6131 *Stephania longa*.
- dribbling pain of urination** T0173 *Adiantum lunulatum*, T0428 *Ampelopsis megalophylla*, T0595 *Ardisia crispa*, T1589 *Cocculus*

- trilobus* [Syn. *Cocculus sarmentosus*], T1813 *Crotalaria albida*, T1823 *Crotalaria juncea*, T1931 *Cyclea barbata*, T1941 *Cymbopogon distans*, T2902 *Gentiana algida*, T2908 *Gentiana cephalantha*, T2921 *Gentiana manshurica*, T2928 *Gentiana rigescens*, T2930 *Gentiana scabra*, T2938 *Gentiana triflora*, T3303 *Hydrangea chinensis*, T3555 *Jasminum nudiflorum*, T3765 *Lepisorus ussuriensis*, T3920 *Lophatherum gracile*, T4502 *Onychium japonicum* [Syn. *Tricomanes japonicum*], T4730 *Peristrophe roxburghiana*, T4802 *Phleum pratense*, T5071 *Polygala arillata*, T5301 *Pterocarpus indicus*, T5372 *Quercus dentata*, T6526 *Triglochin maritimum*.
- dribbling urinary block** T2243 *Dodonaea viscosa*, T3738 *Lemna minor*, T5011 *Platycodon grandiflorum*.
- dribbling urination** T0753 *Asparagus setaceus* [Syn. *Asparagus plumosus*], T0993 *Boschniakia rossica*, T1241 *Cassia occidentalis*, T1826 *Crotalaria mucronata*, T1911 *Cuscuta australis*, T1912 *Cuscuta chinensis*, T1913 *Cuscuta japonica*, T2243 *Dodonaea viscosa*, T3142 *Helianthus annuus*, T4845 *Physalis alkekengi*, T5151 *Populus davidiana*, T5158 *Populus simonii*, T6901 *Zea mays*.
- dripping with inhibited pain** T2143 *Dianthus chinensis*, T2145 *Dianthus superbus*, T2147 *Dianthus versicolor*, T5098 *Polygonum aviculare*, T5354 *Pyrrosia davidii*, T5355 *Pyrrosia drakeana*, T5356 *Pyrrosia gralla*, T5357 *Pyrrosia lingua*, T5358 *Pyrrosia petiolosa*, T5360 *Pyrrosia sheareri*.
- drooling** T0360 *Alpinia oxyphylla*, T0825 *Atropa belladonna*, T2558 *Eupatorium formosanum*, T2559 *Eupatorium fortunei*.
- drug poisoning** T0516 *Anser cygnoides domestica*, T3000 *Glycine max*.
- drunkenness** T1428 *Cinchona ledgeriana*, T1429 *Cinchona officinalis*, T1433 *Cinchona succirubra*, T1471 *Citrus chachiensis*, T1473 *Citrus cultivars*, T1474 *Citrus decumana*, T1478 *Citrus grandis*, T1486 *Citrus junos*, T1488 *Citrus junos*, T1516 *Citrus tankan*, T1518 *Citrus unshiu*, T3286 *Hovenia dulcis*, T5194 *Premna microphylla*, T6492 *Trapa bispinosa*.
- dry blood tisis (consumptive disease due to blood disorders)** T5498 *Rhodiola quadrifida*.
- dry cough** T0318 *Allium sativum*, T0462 *Anemarrhena asphodeloides*, T2783 *Fritillaria cirrhosa*, T2784 *Fritillaria delavayi*, T2792 *Fritillaria przewalskii*, T2796 *Fritillaria unibracteata*, T2797 *Fritillaria ussuriensis*, T3124 *Hedyotis capitellata*, T5093 *Polygonatum odoratum* [Syn. *Polygonatum officinale*], T5094 *Polygonatum prattii*, T6097 *Staphylea bumalda*.
- dry cough due to lung dryness** T0158 *Actinidia chinensis*, T2797 *Fritillaria ussuriensis*, T2983 *Glehnia littoralis*, T3875 *Liriope spicata* var. *prolifera*, T4507 *Ophiopogon japonicus*, T4602 *Panax ginseng* [Syn. *Panax schinseng*], T4912 *Pinus koraiensis*, T5260 *Pseudostellaria heterophylla*.
- dry cough lesser phlegm** T6139 *Sterculia lychnophora*.
- dry cough with hoarseness** T2717 *Ficus carica*.
- dry cough without phlegm** T4635 *Papaver somniferum*.
- dry cracked skin** T3860 *Linum usitatissimum*, T5925 *Sesamum indicum* [Syn. *Sesamum orientale*].
- dry eyes with clouded flowery vision** T5826 *Scrophularia buergeriana*, T5828 *Scrophularia ningpoensis*.
- dry lichen** T4265 *Momordica cochinchinensis*, T5907 *Senecio scandens* [Syn. *Senecio chinensis*].
- dry mouth and throat** T3873 *Liriope platyphylla*, T3874 *Liriope spicata*.
- dry mouth with vexation and thirst** T2094 *Dendrobium aduncum*, T2096 *Dendrobium aurantiacum* var. *denneanum*, T2098 *Dendrobium chrysanthum*, T2100 *Dendrobium densiflorum*, T2102 *Dendrobium fimbriatum* var. *oculatum*, T2105 *Dendrobium loddigesii*, T2106 *Dendrobium moniliforme*, T2107 *Dendrobium nobile*, T2108 *Dendrobium officinale*.
- dry stool** T0559 *Arachis hypogaea*, T0843 *Babylonia lutosa*, T5549 *Ricinus communis*, T5550 *Ricinus communis*, T5642 *Saccharum sinensis*, T6428 *Thermopsis lanceolata*.
- dry throat** T4665 *Passiflora edulis*, T5093 *Polygonatum odoratum* [Syn. *Polygonatum officinale*], T5094 *Polygonatum prattii*.
- dry throat and phlegm node** T1526 *Cladonia rangiferina*.
- dry-itchy skin** T3878 *Lithocarpus polystachyus*.
- dryness in eyes and mouth** T6542 *Tripterygium wilfordii*.
- duodenal bleeding** T2323 *Eclipta prostrata* [Syn. *Eclipta alba*], T3926 *Loropetalum chinense*, T6440 *Thuja orientalis* [Syn. *Platyclusus orientalis*; *Biota orientalis*].
- duodenal ulcer** T0255 *Ailanthus altissima*, T0541 *Apis cerana*, T0825 *Atropa belladonna*, T1884 *Cudrania cochinchinensis*, T1954 *Cynanchum chinense*, T2783 *Fritillaria cirrhosa*, T2784 *Fritillaria delavayi*, T2792 *Fritillaria przewalskii*, T2796 *Fritillaria unibracteata*, T2798 *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*], T3229 *Hericium erinaceus* [Syn. *Hydnum erinaceus*], T3613 *Kadsura coccinea* [Syn. *Kadsura chenensis*; *Kadsura hainanensis*], T4082 *Mallotus japonicus*, T5183 *Potentilla griffithii* var. *velutina*, T5712 *Sanguisorba officinalis*, T6145 *Stichopus japonicus*, T6275 *Tacca chantrieri* [Syn. *Tacca minor*; *Tacca esquirolii*].
- dysentery** T0002 *Abelmoschus moschatus* [Syn. *Hibiscus abelmoschus*], T0071 *Achyranthes aspera*, T0072 *Achyranthes aspera* var. *indica*, T0171 *Adiantum capillus-veneris*, T0172 *Adiantum caudatum*, T0175 *Adiantum pedatum*, T0180 *Adina pilulifera* [Syn. *Cephalanthus pilulifera*], T0190 *Adonis sutchuenensis*, T0197 *Aegle marmelos*, T0226 *Agave sisalana*, T0248 *Agrimonia pilosa*, T0263 *Ajuga decumbens*, T0264 *Ajuga forrestii*, T0275 *Akebia quinata*, T0297 *Alchornea trewioides*, T0314 *Allium fistulosum*, T0318 *Allium sativum*, T0322 *Allium tuberosum*, T0388 *Amaranthus lividus*, T0389 *Amaranthus tricolor*, T0424 *Ampelopsis brevipedunculata* var. *hancei*, T0428 *Ampelopsis megalophylla*, T0444 *Ananas comosus*, T0468 *Anemone hupehensis*, T0495 *Angelica sinensis*, T0500 *Anguilla japonica*, T0563 *Arachniodes exilis*, T0567 *Aralia armata*, T0573 *Aralia elata*, T0594 *Ardisia crenata*, T0598 *Ardisia japonica*, T0600 *Ardisia mamillata* [Syn. *Tinus mamillata*], T0852 *Bacopa monniera*, T0877 *Bauhinia championii*, T0890 *Begonia limprichtii*, T0897 *Berberis amurensis*, T0907 *Berberis kawakamii*, T0933 *Betula platyphylla*, T0935 *Betula platyphylla* var. *japonica*, T0938 *Bidens bipinnata*, T0947 *Bixa orellana*, T0973 *Bombax malabaricum* [Syn. *Gossampinus malabarica*], T1031 *Broussonetia kazinoki*, T1101 *Caesalpinia decapetala*, T1106 *Caesalpinia minax*, T1153 *Camellia sinensis* var. *assamica*, T1163 *Campylotropis hirtella*, T1172 *Canna edulis*, T1205 *Carica papaya*, T1242 *Cassia occidentalis*, T1247 *Cassia sophera*, T1251 *Cassytha filiformis*, T1258 *Casuarina*

*equisetifolia*, T1275 *Cayratia japonica*, T1278 *Cedrela sinensis*, T1282 *Cedrus deodara*, T1286 *Celastrus flagellaris*, T1288 *Celastrus orbiculatus* [Syn. *Celastrus articulatus*], T1289 *Celastrus orbiculatus* [Syn. *Celastrus articulatus*], T1299 *Celosia cristata*, T1311 *Centella asiatica*, T1315 *Cephaelis ipecacuanha*, T1316 *Cephalanthus occidentalis*, T1343 *Chaenomeles sinensis*, T1357 *Chelidonium majus*, T1359 *Chenopodium album*, T1387 *Chrysanthemum boreale*, T1392 *Chrysanthemum indicum*, T1394 *Chrysanthemum lavandulifolium*, T1443 *Cinnamomum parthenoxylum* [Syn. *Cinnamomum porrectum*], T1530 *Cladostachys amaranthoides* [Syn. *Achyranthes amaranthoides*; *Cladostachys frutescens*; *Deeringia amaranthoides*], T1552 *Cleome viscosa*, T1562 *Clerodendron trichotomum*, T1573 *Clinopodium chinense*, T1657 *Conyza canadensis* [Syn. *Erigeron canadensis*], T1662 *Coptis chinensis*, T1663 *Coptis chinensis* var. *brevispala*, T1664 *Coptis deltoidea*, T1669 *Coptis omeiensis*, T1670 *Coptis teetoides* [Syn. *Coptis teeta*], T1673 *Corchorus capsularis*, T1675 *Corchorus olitorius*, T1684 *Cordylina stricta*, T1687 *Coriandrum sativum*, T1709 *Corydalis bungeana*, T1727 *Corydalis mucronifera*, T1728 *Corydalis ochotensis*, T1733 *Corydalis racemosa*, T1747 *Corydalis thalictrifolia*, T1826 *Crotalaria mucronata*, T1831 *Crotalaria sessiliflora*, T1927 *Cycas revoluta*, T1928 *Cycas revoluta*, T1967 *Cynoglossum amabile*, T1969 *Cynoglossum officinale*, T2039 *Datura innoxia*, T2043 *Datura metel*, T2047 *Datura stramonium*, T2058 *Deeringia amaranthoides* [Syn. *Cladostachys frutescens*], T2115 *Dermatocarpon minutum*, T2181 *Dillenia indica*, T2233 *Diploclicia glaucescens*, T2257 *Dracocephalum moldavicum*, T2258 *Dracocephalum rupestre*, T2268 *Drosera rotundifolia*, T2280 *Dryopteris chrysocoma*, T2290 *Duchesnea indica*, T2348 *Embelia ribes*, T2505 *Eucalyptus citriodora*, T2510 *Eucalyptus globulus*, T2533 *Eugenia jambolana* [Syn. *Syzygium cumin*; *Myrtus cumini*], T2580 *Euphorbia antiquorum*, T2591 *Euphorbia humifusa*, T2636 *Euscaphis japonica*, T2644 *Evodia rutaecarpa*, T2646 *Evodia rutaecarpa* var. *officinalis*, T2649 *Evolvulus alsinoides*, T2658 *Fagopyrum esculentum*, T2659 *Fagopyrum esculentum*, T2695 *Ferula assafoetida*, T2715 *Fibraurea recisa*, T2716 *Ficus beecheyana* [Syn. *Ficus erecta* var. *beecheyana*], T2717 *Ficus carica*, T2720 *Ficus hispida*, T2839 *Gallus gallus domesticus*, T2840 *Gallus gallus domesticus*, T2927 *Gentiana rhodantha*, T2988 *Glochidion eriocarpum*, T2994 *Gloiopeltis furcata*, T3040 *Gomphrena globosa*, T3123 *Hedyotis auricularia*, T3125 *Hedyotis chrysotricha* [Syn. *Oldenlandia chrysotricha*], T3126 *Hedyotis corymbosa* [Syn. *Oldenlandia corymbosa*], T3163 *Helicteres angustifolia*, T3242 *Hibiscus rosa-sinensis*, T3263 *Holarrhena antidysenterica*, T3284 *Houttuynia cordata*, T3311 *Hydrocotyle sibthorpioides*, T3332 *Hypocoum erectum*, T3340 *Hypericum ascyron*, T3342 *Hypericum bellum*, T3356 *Hypericum japonicum*, T3363 *Hypericum sampsonii*, T3381 *Hyptis suaveolens*, T3388 *Ilex chinensis* [Syn. *Ilex purpurea*], T3392 *Ilex kudingcha*, T3393 *Ilex latifolia*, T3398 *Ilex rotunda*, T3418 *Incarvillea arguta*, T3507 *Isodon lophanthoides* [Syn. *Rabdosia lophanthoides*; *Hyssopus lophanthoides*; *Plectranthus striatus*; *Isodon striatus*], T3528 *Isodon ternifolia*, T3529 *Isodon ternifolius*, T3547 *Ixeris chinensis*, T3557 *Jasminum sambac*, T3569 *Juglans regia*, T3645 *Kummerowia striata*, T3646 *Kyllinga brevifolia*, T3670 *Lagerstroemia indica*, T3672 *Lagerstroemia indica*,

T3736 *Lemmaphyllum microphyllum*, T3737 *Lemmaphyllum microphyllum* var. *obovatum*, T3758 *Lepidium sativum*, T3770 *Lespedeza cuneata*, T3774 *Lespedeza tomentosa*, T3830 *Ligustrum sinense*, T3847 *Lindera angustifolia*, T3866 *Liquidambar formosana* [Syn. *Liquidambar taiwaniana*], T3926 *Loropetalum chinense*, T3928 *Lotus corniculatus*, T3953 *Lycianthes biflora*, T3989 *Lygodium flexuosum* [Syn. *Lygodium pinnatifidum*; *Ophioglossum flexuosum*], T3990 *Lygodium japonicum*, T3999 *Lysimachia clethroides*, T4006 *Lythrum anceps*, T4007 *Lythrum salicaria*, T4055 *Mahonia bealei*, T4056 *Mahonia bealei*, T4062 *Mahonia fortunei*, T4063 *Mahonia fortunei*, T4066 *Mahonia japonica*, T4067 *Mahonia japonica*, T4086 *Malus asiatica*, T4148 *Medicago sativa*, T4170 *Melilotus albus*, T4172 *Melilotus suaveolens*, T4225 *Microsorium punctatum*, T4261 *Mollugo pentaphylla*, T4263 *Momordica charantia*, T4280 *Morinda citrifolia*, T4307 *Mosla scabra* [Syn. *Mosla punctata*], T4335 *Mussaenda pubescens*, T4343 *Myrica esculent*, T4348 *Myrica rubra*, T4349 *Myrica rubra*, T4361 *Myrsine africana*, T4385 *Narcissus tazetta* var. *chinensis*, T4397 *Nelumbo nucifera*, T4485 *Oldenlandia diffusa* [Syn. *Hedyotis diffusa*], T4502 *Onychium japonicum* [Syn. *Tricomanes japonicum*], T4519 *Opuntia dillenii*, T4520 *Opuntia ficus-indica*, T4521 *Opuntia vulgaris*, T4527 *Orixa japonica*, T4552 *Osmunda japonica*, T4564 *Oxalis corniculata* [Syn. *Oxalis repens*], T4577 *Paederia scandens*, T4582 *Paeonia delavayi*, T4585 *Paeonia moutan* [Syn. *Paeonia suffruticosa*], T4625 *Papaver commutatum* [Syn. *Papaver rhoeas*], T4665 *Passiflora edulis*, T4672 *Patrinia scabiosaefolia*, T4676 *Patrinia villosa*, T4802 *Phleum pratense*, T4804 *Phlojodicarpus sibiricus*, T4835 *Phyllanthus emblica*, T4840 *Phyllanthus niruri*, T4842 *Phyllanthus reticulatus*, T4843 *Phyllanthus urinaria*, T4845 *Physalis alkekengi*, T4846 *Physalis alkekengi* var. *franchetii*, T4848 *Physalis angulata*, T4854 *Physalis pubescens*, T4881 *Picrasma quassioides* [Syn. *Picrasma ailanthoides*], T4887 *Picrorhiza kurroa*, T4888 *Picrorhiza scrophulariiflora*, T5011 *Platycodon grandiflorum*, T5097 *Polygonum amphibium*, T5098 *Polygonum aviculare*, T5100 *Polygonum chinense*, T5104 *Polygonum hydropiper*, T5105 *Polygonum hydropiper* var. *flaccidum* [Syn. *Polygonum flaccidum*], T5106 *Polygonum lapathifolium*, T5109 *Polygonum nodosum*, T5112 *Polygonum perigrinatoris*, T5114 *Polygonum polystachyum*, T5119 *Polygonum thunbergii*, T5151 *Populus davidiana*, T5156 *Populus nigra* var. *thevestina*, T5158 *Populus simonii*, T5161 *Populus tomentosa*, T5183 *Potentilla griffithii* var. *velutina*, T5184 *Potentilla kleiniana*, T5188 *Potentilla viscosa*, T5194 *Premna microphylla*, T5209 *Pronephrium simplex* [Syn. *Meniscium simplex*], T5267 *Psidium guajava*, T5284 *Pteridium aquilinum* var. *latiusculum*, T5288 *Pteris cretica* var. *nervosa* [Syn. *Pteris nervosa*], T5289 *Pteris dactylina*, T5290 *Pteris fauriei* [Syn. *Pteris fauriei* var. *minor*], T5295 *Pteris multifida*, T5297 *Pteris plumbea*, T5298 *Pteris vittata*, T5299 *Pteris wallichiana*, T5339 *Pycnopus sanguineus*, T5361 *Pyrus betulaeifolia*, T5388 *Rabdosia adenantha*, T5397 *Rabdosia serra*, T5401 *Rabdosia yuenmanensis*, T5407 *Rana nigromaculata*; *Rana plancyi*, T5419 *Raphanus sativus*, T5497 *Rhodiola kirilowii*, T5518 *Rhododendron mucronatum*, T5529 *Rhodomyrtus tomentosa*, T5531 *Rhus chinensis* [Syn. *Rhus semialata*], T5555 *Rodgersia pinnata*, T5557 *Rohdea japonica* [Syn. *Orontium*

*japonicum*], T5563 *Rosa cymosa*, T5567 *Rosa laevigata*, T5587 *Rubus alceaefolius*, T5595 *Rubus parviflorus*, T5607 *Rumex crispus*, T5614 *Rumex patientia*, T5685 *Salvia plebeia*, T5687 *Salvia prionitis*, T5859 *Selaginella braunii*, T5862 *Selaginella involvens*, T5867 *Selaginella sinensis*, T5870 *Selaginella uncinata*, T5892 *Senecio nemorensis*, T5943 *Sida cordifolia*, T5954 *Silene fortunei*, T5976 *Smilax china* [Syn. *Smilax japonica*], T6008 *Solanum nigrum*, T6025 *Sonchus arvensis*, T6029 *Sophora alopecuroides*, T6046 *Sophora viciifolia*, T6047 *Sophora viciifolia*, T6060 *Souliea vaginata*, T6092 *Stachys palustris*, T6116 *Stenoloma chusanum*, T6121 *Stephania dicentrifera*, T6128 *Stephania hernandifolia*, T6133 *Stephania sinica*, T6137 *Stephania viridiflavens*, T6177 *Strychnos ignatii*, T6206 *Sus scrofa domestica*, T6214 *Swertia chinensis*, T6217 *Swertia davidii*, T6231 *Swertia pseudochinensis*, T6250 *Symplocos caudata*, T6264 *Syzygium buxifolium*, T6275 *Tacca chantrieri* [Syn. *Tacca minor*; *Tacca esquirolii*], T6282 *Tagetes patula*, T6353 *Tetracera asiatica*, T6359 *Teucrium bidentatum*, T6365 *Teucrium pilosum* [Syn. *Teucrium japonicum* var. *pilosum*], T6372 *Thalictrum acutifolium*, T6373 *Thalictrum alpinum*, T6374 *Thalictrum atriplex*, T6381 *Thalictrum faberi*, T6388 *Thalictrum fortunei*, T6409 *Thalictrum simplex* [Syn. *Thalictrum simplex* var. *brevipes*], T6432 *Thespesia populnea* [Syn. *Hibiscus populneus*], T6436 *Thlaspi arvense*, T6463 *Tinospora capillipes*, T6467 *Tinospora sagittata*, T6491 *Trametes cinnabarina* [Syn. *Polyporus cinnabarinus*; *Boletus cinnabarinus*], T6492 *Trapa bispinosa*, T6508 *Trichosanthes cucumeroides*, T6602 *Umbilicaria hypococcinea*, T6645 *Urena lobata*, T6691 *Veratrilla baillonii*, T6709 *Verbena officinalis*, T6722 *Veronica anagallis-aquatica*, T6788 *Vitex negundo*, T6801 *Vladimiria denticulata*, T6814 *Wedelia chinensis* [Syn. *Solidago chinensis*; *Wedelia calendulacea*], T6830 *Woodfordia fruticosa*, T6831 *Woodwardia orientalis*, T6843 *Xanthium sibiricum* [Syn. *Xanthium strumarium*], T6920 *Ziziphus mauritiana*.

**dysentery (seed)** T0533 *Antiaris toxicaria* [Syn. *Ambora toxicaria*].  
**dysentery abdominal pain** T3524 *Isodon sculponeata* [Syn. *Rabdosia sculponeata*].  
**dysentery with ardent fever** T0181 *Adina rubella*.  
**dysentery with hematochezia and hematuria** T2882 *Gardenia jasminoides* [Syn. *Gardenia florida*].  
**dysentery with pus and blood** T0542 *Apis cerana*, T1038 *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*], T2826 *Galeola faberi*.  
**dysentery,** T6412 *Thalictrum squarrosum*.  
**dysfunctional uterine bleeding** T0541 *Apis cerana*, T1199 *Carduus acanthoides*, T1200 *Carduus crispus*.  
**dysmenorrhea** T0071 *Achyranthes aspera*, T0072 *Achyranthes aspera* var. *indica*, T0073 *Achyranthes bidentata*, T0201 *Aesculus chinensis*, T0202 *Aesculus hippocastanum*, T0205 *Aesculus wilsonii*, T0273 *Akebia quinata*, T0277 *Akebia trifoliata*, T0279 *Akebia trifoliata* var. *australis*, T0474 *Angelica acutiloba* [Syn. *Ligusticum acutilobum*], T0601 *Ardisia pusilla*, T0642 *Aristolochia tubiflora*, T0661 *Artemisia anomala*, T0680 *Artemisia lactiflora*, T0994 *Boswellia carterii*, T1005 *Brassica campestris* [Syn. *Brassica campestris* var. *oleifera*], T1129 *Calophyllum inophyllum*, T1151 *Camellia sinensis* [Syn. *Thea sinensis*], T1160 *Campsis grandiflora*, T1163 *Campylotropis hirtella*, T1215

*Carthamus tinctorius*, T1288 *Celastrus orbiculatus* [Syn. *Celastrus articulatus*], T1356 *Cheiranthus cheiri*, T1361 *Chenopodium ambrosioides*, T1434 *Cinnamomum bejolghota* [Syn. *Cinnamomum obtusifolium*; *Laurus bejolghota*], T1439 *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*], T1441 *Cinnamomum japonicum*, T1444 *Cinnamomum tamala*, T1450 *Cirsium lineare*, T1537 *Clausena lansium*, T1638 *Commiphora myrrha* [Syn. *Commiphora molmo*], T1698 *Cornus officinalis* [Syn. *Macrocarpium officinale*], T1706 *Corydalis ambigua* var. *amurensis* [Syn. *Corydalis ambigua*], T1734 *Corydalis remota* [Syn. *Corydalis bulbosa* var. *typica*], T1735 *Corydalis repens*, T1903 *Curcuma aromatica*, T1905 *Curcuma longa*, T1907 *Curcuma wenguijin*, T1959 *Cynanchum paniculatum*, T1976 *Cyperus iria*, T1994 *Daemonorops draco*, T2193 *Dioscorea cirrhosa* [Syn. *Dioscorea pogonoides*], T2253 *Dracaena cochinchinensis*, T2536 *Euonymus alatus*, T2541 *Euonymus grandiflorus*, T2542 *Euonymus japonicus*, T2644 *Evodia rutaecarpa*, T2646 *Evodia rutaecarpa* var. *officinalis*, T3088 *Gynura segetum* [Syn. *Gynura japonica*], T3222 *Heracleum scabridum*, T3340 *Hypericum ascyron*, T3410 *Impatiens balsamina*, T3413 *Impatiens nolintangere*, T3567 *Juglans regia*, T3613 *Kadsura coccinea* [Syn. *Kadsura chenensis*; *Kadsura hainanensis*], T3614 *Kadsura heteroclita* [Syn. *Uvaria heteroclita*], T3619 *Kadsura peltigera* [Syn. *Kadsura longipedunculata*], T3679 *Lamiophlomis rotata* [Syn. *Phlomis rotata*], T3746 *Leontice robustum*, T3752 *Leonurus heterophyllum* [Syn. *Leonurus artemisia*], T3754 *Leonurus sibiricus*, T3774 *Lespedeza tomentosa*, T3785 *Levisticum officinale*, T3854 *Lindera strychnifolia* [Syn. *Lindera aggregata*], T3897 *Litsea verticillata*, T3970 *Lycopodium cernuum*, T3973 *Lycopodium japonicum* [Syn. *Lycopodium clavatum*], T4005 *Lysionotus pauciflorus*, T4144 *Meconopsis nepaulensis*, T4145 *Meconopsis punicea*, T4190 *Mentha spicata*, T4311 *Mucuna sempervirens*, T4510 *Ophiorrhiza japonica*, T4513 *Ophiorrhiza mungos*, T4549 *Osbeckia chinensis*, T4582 *Paeonia delavayi*, T4584 *Paeonia lactiflora* wild, T4585 *Paeonia moutan* [Syn. *Paeonia suffruticosa*], T4586 *Paeonia obovata*, T4590 *Paeonia veitchii*, T4629 *Papaver nudicaule*, T4630 *Papaver nudicaule* ssp. *amurense*, T4663 *Passiflora caerulea*, T4665 *Passiflora edulis*, T4948 *Piper hancei*, T4956 *Piper mullesua*, T4974 *Piper wallichii* [Syn. *Piper wallichii* var. *hupehense*], T5028 *Plumbago indica*, T5057 *Podophyllum emodii* [Syn. *Podophyllum emodii* var. *chinense*; *Podophyllum sikkimensis*; *Sinopodophyllum emodii*], T5075 *Polygala fallax* [Syn. *Polygala aureocauda*], T5104 *Polygonum hydropiper*, T5233 *Prunus persica*, T5365 *Pyrus pashia*, T5401 *Rabdosia yunnanensis*, T5515 *Rhododendron micranthum*, T5545 *Ribes fasciculatum* var. *chinense*, T5555 *Rodgersia pinnata*, T5562 *Rosa chinensis*, T5569 *Rosa multiflora*, T5680 *Salvia miltiorrhiza*, T5681 *Salvia miltiorrhiza* f. *alba*, T5688 *Salvia przewalskii*, T5697 *Salvia trijuga*, T5701 *Salvia yunnanensis*, T5730 *Sarcandra glabra* [Syn. *Chloranthus glaber*], T5741 *Sargentodoxa cuneata*, T5781 *Schefflera arboricola*, T6099 *Stauntonia chinensis*, T6118 *Stephania brachyandra*, T6154 *Strobilanthes japonicus* [Syn. *Championella japonica*], T6471 *Toddalia asiatica* [Syn. *Toddalia aculeata*; *Paullinia asiatica*], T6488 *Trachyspermum ammi*, T6540 *Tripterygium hypoglaucum*, T6584 *Typha angustata*, T6585 *Typha angustifolia*, T6587 *Typha latifolia*,

- T6668 *Vaccaria segetalis* [Syn. *Vaccaria pyramidata*], T6675 *Valeriana amurensis*, T6676 *Valeriana hardwickii*, T6679 *Valeriana officinalis*, T6680 *Valeriana officinalis* var. *latifolia*, T6830 *Woodfordia fruticosa*.
- dysmenorrhea due to anemia** T0495 *Angelica sinensis*, T4804 *Phlojodicarpus sibiricus*.
- dysphagia-occlusion** T0240 *Aglaia odorata*, T0353 *Alpinia blepharocalyx*, T0417 *Amomum longiligulare*, T0419 *Amomum villosum*, T0420 *Amomum xanthioides*, T1501 *Citrus medica* var. *sarcodactylis*, T2659 *Fagopyrum esculentum*, T2761 *Fortunella margarita*, T3412 *Impatiens balsamina*, T3436 *Inula nervosa*, T4544 *Oryza sativa*, T4546 *Oryza sativa*, T4547 *Oryza sativa* cv, T5139 *Poncirus trifoliata*, T5284 *Pteridium aquilinum* var. *latiusculum*.
- dysphagia-occlusion and stomach reflux** T0322 *Allium tuberosum*, T0354 *Alpinia chinensis*, T0516 *Anser cygnoides domestica*, T6507 *Trichosanthes cucumeroides*.
- ear sore** T3420 *Incarvillea sinensis*.
- early stage of sores and welling abscess toxin** T0333 *Alocasia cucullata* [Syn. *Arum cucullatum*].
- early stage of toxin swelling** T1640 *Coniogramme japonica* [Syn. *Hemionitis japonica*].
- early stage of welling abscess and flat abscess** T0116 *Aconitum nagarum* var. *heterotrichum* [Syn. *Aconitum bullatifolium*].
- eczema** T0019 *Acacia catechu*, T0142 *Acorus calamus*, T0180 *Adina pilulifera* [Syn. *Cephalanthus pilulifera*], T0181 *Adina rubella*, T0297 *Alchornea trewioides*, T0379 *Alternanthera philoxeroides*, T0421 *Amorpha fruticosa*, T0457 *Andrographis paniculata* [Syn. *Justicia paniculata*], T0495 *Angelica sinensis*, T0635 *Aristolochia moupinensis*, T0643 *Aristolochia versicolor*, T0736 *Asclepias curassavica*, T0853 *Baeckea frutescens*, T0897 *Berberis amurensis*, T0906 *Berberis julianae*, T0912 *Berberis poiratii*, T0941 *Bidens tripartita*, T0963 *Boehmeria siamensis*, T0973 *Bombax malabaricum* [Syn. *Gossampinus malabarica*], T1051 *Bufo bufo gargarizans*; *Bufo melanostictus*, T1261 *Catalpa ovata*, T1290 *Celastrus orbiculatus* [Syn. *Celastrus articulatus*], T1359 *Chenopodium album*, T1387 *Chrysanthemum boreale*, T1392 *Chrysanthemum indicum*, T1394 *Chrysanthemum lavandulifolium*, T1558 *Clerodendron inerme*, T1565 *Clerodendron bungei*, T1582 *Cnidium monnieri*, T1589 *Cocculus trilobus* [Syn. *Cocculus sarmentosus*], T1662 *Coptis chinensis*, T1663 *Coptis chinensis* var. *brevisepala*, T1664 *Coptis deltoidea*, T1669 *Coptis omeiensis*, T1670 *Coptis teetoides* [Syn. *Coptis teeta*], T1675 *Corchorus olitorius*, T1719 *Corydalis incisa*, T1921 *Cyanotis arachnoidea* [Syn. *Cyanotis bodinieri*], T1922 *Cyanotis vaga*, T1959 *Cynanchum paniculatum*, T2194 *Dioscorea colletii*, T2267 *Drosera peltata* var. *lunata*, T2334 *Elephantopus scaber*, T2341 *Elsholtzia ciliata*, T2357 *Emilia sonchifolia*, T2459 *Erythrina arborescens*, T2478 *Erythrina variegata* [Syn. *Erythrina indica*], T2479 *Erythrina variegata* var. *orientalis*, T2505 *Eucalyptus citriodora*, T2510 *Eucalyptus globulus*, T2517 *Eucalyptus robusta*, T2590 *Euphorbia hirta*, T2627 *Euphorbia longan* [Syn. *Dimocarpus longan*], T2641 *Evodia lepta* [Syn. *Ilex lepta*], T2721 *Ficus microcarpa*, T2852 *Garcinia cowa*, T2897 *Gelsemium elegans*, T2988 *Glochidion eriocarpum*, T2989 *Glochidion sphaerogynum*, T3080 *Gymnema sylvestre*, T3123 *Hedyotis auricularia*, T3163 *Helicteres angustifolia*, T3246 *Hibiscus syriacus*, T3340 *Hypericum ascyron*, T3381 *Hyptis suaveolens*, T3388 *Ilex chinensis* [Syn. *Ilex purpurea*], T3398 *Ilex rotunda*, T3420 *Incarvillea sinensis*, T3560 *Jatropha curcas*, T3588 *Juniperus formosana*, T3628 *Kerria japonica*, T3672 *Lagerstroemia indica*, T3808 *Ligularia japonica* [Syn. *Arnica japonica*; *Senecio japonica*], T3830 *Ligustrum sinense*, T3866 *Liquidambar formosana* [Syn. *Liquidambar taiwaniana*], T3867 *Liquidambar formosana* [Syn. *Liquidambar taiwaniana*], T3928 *Lotus corniculatus*, T4020 *Macleaya cordata*, T4055 *Mahonia bealei*, T4062 *Mahonia fortunei*, T4066 *Mahonia japonica*, T4080 *Mallotus apelta*, T4085 *Mallotus repandus* var. *chrysocarpus* [Syn. *Mallotus chrysocarpus*; *Mallotus repandus*], T4154 *Melaleuca leucadendra*, T4247 *Millingtonia hortensis*, T4284 *Morinda parvifolia*, T4305 *Mosla dianthera*, T4307 *Mosla scabra* [Syn. *Mosla punctata*], T4324 *Murraya paniculata* [Syn. *Chalcas paniculata*], T4391 *Nauclea officinalis*, T4500 *Onosma paniculatum*, T4564 *Oxalis corniculata* [Syn. *Oxalis repens*], T4789 *Phellodendron amurense*, T4790 *Phellodendron amurense* var. *wilsonii*, T4791 *Phellodendron chinense*, T4792 *Phellodendron chinense* var. *glabriusculum*, T4804 *Phlojodicarpus sibiricus*, T4834 *Phyllanthus emblica*, T4837 *Phyllanthus emblica*, T4845 *Physalis alkekengi*, T4881 *Picrasma quassioides* [Syn. *Picrasma ailanthoides*], T4882 *Picrasma quassioides* [Syn. *Picrasma ailanthoides*], T4884 *Picria felterrae*, T5098 *Polygonum aviculare*, T5100 *Polygonum chinense*, T5104 *Polygonum hydropiper*, T5105 *Polygonum hydropiper* var. *flaccidum* [Syn. *Polygonum flaccidum*], T5106 *Polygonum lapathifolium*, T5172 *Portulaca grandiflora*, T5173 *Portulaca oleracea*, T5178 *Potamogeton perfoliatus*, T5234 *Prunus persica*, T5256 *Pseudolarix amabilis* [Syn. *Larix amabilis*; *Pseudolarix kaempferi*], T5308 *Pterocarya stenoptera*, T5323 *Pulsatilla campanella*, T5324 *Pulsatilla cernua*, T5325 *Pulsatilla chinensis*, T5326 *Pulsatilla dahurica*, T5395 *Rabdosia nervosa*, T5455 *Rhamnus crenata*, T5483 *Rhinacanthus nasutus*, T5576 *Rostellularia procumbens* [Syn. *Justicia procumbens*], T5605 *Rumex acetosa*, T5613 *Rumex obtusifolius*, T5626 *Ruta graveolens*, T5646 *Sagina japonica* [Syn. *Spergula japonica*], T5712 *Sanguisorba officinalis*, T5723 *Sapium sebiferum*, T5724 *Sapium sebiferum*, T5773 *Saxifraga stolonifera*, T5818 *Scoparia dulcis*, T5907 *Senecio scandens* [Syn. *Senecio chinensis*], T5934 *Seseli meirei*, T5937 *Seseli yunnanense*, T6017 *Solanum tuberosum*, T6018 *Solanum verbascifolium*, T6028 *Sophora alopecuroides*, T6029 *Sophora alopecuroides*, T6031 *Sophora flavescens* [Syn. *Sophora angustifolia*], T6111 *Stemona japonica*, T6113 *Stemona sessilifolia*, T6115 *Stemona tuberosa*, T6118 *Stephania brachyandra*, T6136 *Stephania tetrandra*, T6338 *Tephrosia purpurea*, T6339 *Tephrosia purpurea*, T6359 *Teucrium bidentatum*, T6365 *Teucrium pilosum* [Syn. *Teucrium japonicum* var. *pilosum*], T6367 *Teucrium quadrifarium*, T6414 *Thalictrum thunbergii*, T6542 *Tripterygium wilfordii*, T6843 *Xanthium sibiricum* [Syn. *Xanthium strumarium*], T6862 *Zanthoxylum ailanthoides*.
- eczema leukoplakia** T6359 *Teucrium bidentatum*.
- eczema of lower limb** T5867 *Selaginella sinensis*.
- eczema of skin** T0503 *Anisomeles indica* [Syn. *Epimeredi indica*], T1361 *Chenopodium ambrosioides*, T2323 *Eclipta prostrata* [Syn. *Eclipta*

- alba*], T4835 *Phyllanthus emblica*, T6116 *Stenoloma chusanum*.
- eczema shank sore** T5267 *Psidium guajava*.
- eczema titillation** T0229 *Ageratum conyzoides*, T0659 *Artemisia absinthium*, T2533 *Eugenia jambolana* [Syn. *Syzygium cumini*; *Myrtus cumini*], T4102 *Mangifera indica*, T4158 *Melia azedarach*, T4937 *Piper betle*, T5389 *Rabdosia coetsa*, T5685 *Salvia plebeia*.
- eczema with pruritus** T1566 *Clerodendrum inerme*.
- edema** T0038 *Acanthopanax gracilistylus*, T0042 *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*], T0044 *Acanthopanax sessiliflorus*, T0071 *Achyranthes aspera*, T0072 *Achyranthes aspera* var. *indica*, T0172 *Adiantum caudatum*, T0180 *Adina pilulifera* [Syn. *Cephalanthus pilulifera*], T0264 *Ajuga forrestii*, T0273 *Akebia quinata*, T0277 *Akebia trifoliata*, T0279 *Akebia trifoliata* var. *australis*, T0318 *Allium sativum*, T0388 *Amaranthus lividus*, T0553 *Apocynum venetum*, T0567 *Aralia armata*, T0571 *Aralia decaisneana*, T0573 *Aralia elata*, T0606 *Areca catechu*, T0610 *Argemone mexicana*, T0624 *Aristolochia contorta*, T0626 *Aristolochia debilis* [Syn. *Aristolochia longa*], T0629 *Aristolochia heterophylla*, T0630 *Aristolochia indica*, T0632 *Aristolochia manshuriensis*, T0633 *Aristolochia maxima*, T0640 *Aristolochia triangularis*, T0721 *Arundina chinensis*, T0726 *Asarum forbesii*, T0824 *Atractylodes macrocephala* [Syn. *Atractylis macrocephala*], T0838 *Azolla imbricata* [Syn. *Salvinia imbricata*], T0894 *Benincasa hispida*, T0895 *Benincasa hispida*, T1003 *Brandisia hancei*, T1004 *Brasenia schreberi*, T1031 *Broussonetia kazinoki*, T1034 *Broussonetia papyrifera*, T1035 *Broussonetia papyrifera*, T1049 *Bufo bufo gargarizans*; *Bufo melanostictus*, T1170 *Canis familiaris*, T1238 *Cassia mimosoides*, T1263 *Catalpa ovata*, T1282 *Cedrus deodara*, T1352 *Chamaenerion angustifolium* [Syn. *Epilobium angustifolium*], T1357 *Chelidonium majus*, T1533 *Clausena dentata*, T1534 *Clausena dunniana*, T1556 *Clerodendron fragrans*, T1589 *Cocculus trilobus* [Syn. *Cocculus sarmentosus*], T1590 *Cocculus trilobus* [Syn. *Cocculus sarmentosus*], T1595 *Codium fragile*, T1614 *Coix lacryma-jobi* var. *ma-yuen*, T1633 *Commelina communis*, T1649 *Convallaria keiskei* [Syn. *Convallaria majalis*], T1696 *Cornus capitata* [Syn. *Dendrobenthamia capitata*], T1826 *Crotalaria mucronata*, T1921 *Cyanotis arachnoidea* [Syn. *Cyanotis bodinieri*], T1922 *Cyanotis vaga*, T2020 *Damnacanthus indicus*, T2023 *Daphne genkwa*, T2024 *Daphne genkwa*, T2048 *Daucus carota*, T2131 *Desmodium pulchellum* [Syn. *Phyllodium pulchellum*], T2136 *Desmos cochinchinensis* [Syn. *Desmos chinensis*], T2272 *Drymaria diandra* [Syn. *Drymaria cordata* ssp. *diandra*], T2282 *Dryopteris filix-mas*, T2325 *Eichhornia crassipes*, T2341 *Elsholtzia ciliata*, T2432 *Eriobotrya japonica*, T2439 *Eruca sativa*, T2452 *Erysimum cheiranthoides*, T2580 *Euphorbia antiquorum*, T2585 *Euphorbia esula*, T2596 *Euphorbia kansui*, T2597 *Euphorbia lathyris*, T2599 *Euphorbia lunulata*, T2608 *Euphorbia pekinensis*, T2612 *Euphorbia prolifera*, T2617 *Euphorbia royleana*, T2723 *Ficus pumila*, T2727 *Ficus simplicissima*, T2749 *Fomes officinalis*, T2837 *Gallus gallus domesticus*, T3066 *Gryllulus chinensis*, T3125 *Hedyotis chrysotricha* [Syn. *Oldenlandia chrysotricha*], T3126 *Hedyotis corymbosa* [Syn. *Oldenlandia corymbosa*], T3193 *Hemerocallis fulva*, T3195 *Hemerocallis lilio-asphodelus*, T3197 *Hemerocallis minor*, T3199 *Hemibarbus labeo*, T3270 *Holboellia fargesii*, T3288 *Humulus japonicus* [Syn. *Humulus scandens*], T3289 *Humulus lupulus*, T3311 *Hydrocotyle sibthorpioides*, T3416 *Imperata cylindrica* var. *major*, T3448 *Ipomoea cairica* [Syn. *Ipomoea palmata*], T3479 *Isodon amethystoides*, T3528 *Isodon ternifolia*, T3529 *Isodon ternifolius*, T3578 *Juncus effusus*, T3594 *Juniperus rigida*, T3628 *Kerria japonica*, T3668 *Lagenaria siceraria* var. *depressa*, T3675 *Lagopsis supina*, T3738 *Lemna minor*, T3742 *Lentinus edodes*, T3752 *Leonurus heterophyllus* [Syn. *Leonurus artemisia*], T3754 *Leonurus sibiricus*, T3758 *Lepidium sativum*, T3765 *Lepisorus ussuriensis*, T3770 *Lespedeza cuneata*, T3774 *Lespedeza tomentosa*, T3785 *Levisticum officinale*, T3815 *Ligularia stenocephala*, T3840 *Limnophila rugosa*, T3856 *Lindera umbellata* [Syn. *Lindera erythrocarpa*], T3886 *Litsea euosma*, T3898 *Lobelia chinensis* [Syn. *Lobelia radicans*], T3932 *Ludwigia octovalvis*, T3933 *Luffa acutangula*, T3934 *Luffa cylindrica*, T3935 *Luffa cylindrica*, T3981 *Lycopus lucidus*, T3988 *Lycoris squamigera*, T3989 *Lygodium flexuosum* [Syn. *Lygodium pinnatifidum*; *Ophioglossum flexuosum*], T3990 *Lygodium japonicum*, T3999 *Lysimachia clethroides*, T4026 *Macrothelypteris oligophlebia*, T4029 *Maesa japonica*, T4042 *Magnolia liliflora*, T4121 *Marsilea quadrifolia*, T4147 *Medicago falcata*, T4148 *Medicago sativa*, T4194 *Menyanthes trifoliata*, T4195 *Menyanthes trifoliata*, T4248 *Mimosa pudica*, T4252 *Mirabilis jalapa*, T4274 *Monostroma nitidum*, T4287 *Morus alba*, T4304 *Mosla chinensis* [Syn. *Orthodon chinensis*], T4305 *Mosla dianthera*, T4432 *Nigella glandulifera*, T4439 *Nothapodytes pittosporoides*, T4445 *Notopterygium forbesii* [Syn. *Notopterygium franchetii*], T4446 *Notopterygium incisum*, T4456 *Nymphoides peltatum*, T4482 *Oenanthe javanica*, T4485 *Oldenlandia diffusa* [Syn. *Hedyotis diffusa*], T4505 *Ophiocephalus argus*, T4526 *Origanum vulgare*, T4542 *Orthosiphon wulfenoides* [Syn. *Coleus wulfenoides*], T4644 *Parasilurus asotus*, T4785 *Phaseolus vulgaris*, T4799 *Philydrum lanuginosum*, T4801 *Phlegmariurus phlegmaria* [Syn. *Lycopodium phlegmaria*], T4818 *Phoebe nanmu*, T4831 *Phtheirospermum japonicum* [Syn. *Gerardia japonica*], T4837 *Phyllanthus emblica*, T4840 *Phyllanthus niruri*, T4845 *Physalis alkekengi*, T4846 *Physalis alkekengi* var. *franchetii*, T4848 *Physalis angulata*, T4854 *Physalis pubescens*, T4937 *Piper betle*, T4966 *Piper sarmentosum*, T5071 *Polygala arillata*, T5103 *Polygonum hydropiper*, T5115 *Polygonum sibiricum* [Syn. *Persicaria sibirica*], T5129 *Polyporus umbellatus*, T5169 *Poria cocos*, T5171 *Porphyra tenera*, T5176 *Potamogeton natans*, T5179 *Potentilla anserina*, T5220 *Prunus davidiana*, T5223 *Prunus humilis* [Syn. *Cerasus humilis*], T5224 *Prunus japonica* [Syn. *Cerasus japonica*], T5225 *Prunus japonica* var. *nakaii*, T5231 *Prunus persica*, T5232 *Prunus persica*, T5288 *Pteris cretica* var. *nervosa* [Syn. *Pteris nervosa*], T5289 *Pteris dactylina*, T5362 *Pyrus bretschneideri*, T5366 *Pyrus pyrifolia*, T5400 *Rabdosia stracheyi*, T5407 *Rana nigromaculata*; *Rana plancyi*, T5461 *Rhamnus leptophylla*, T5557 *Rohdea japonica* [Syn. *Orontium japonicum*], T5560 *Rorippa montana* [Syn. *Rorippa dubia*; *Sisymbrium dubium*], T5576 *Rostellularia procumbens* [Syn. *Justicia procumbens*], T5645 *Sageretia theezans* [Syn. *Sageretia thea*], T5723 *Sapium sebiferum*, T5750 *Saururus chinensis*, T5770 *Saussurea superba* [Syn. *Saussurea hieracioides*], T5835 *Scutellaria barbata* [Syn. *Scutellaria rivularis*], T5862 *Selaginella involvens*, T5863 *Selaginella moellendorffii*, T5870 *Selaginella uncinata*, T6005 *Solanum lyratum*, T6031 *Sophora*

- flavescens* [Syn. *Sophora angustifolia*], T6046 *Sophora viciifolia*, T6047 *Sophora viciifolia*, T6100 *Stauntonia hexaphylla*, T6127 *Stephania glabra*, T6131 *Stephania longa*, T6210 *Swainsonia salsula* [Syn. *Sphaerophysa salsula*], T6227 *Swertia mussoitii*, T6264 *Syzygium buxifolium*, T6356 *Tetrapanax papyriferus*, T6357 *Tetrapanax papyriferus*, T6367 *Teucrium quadrifarium*, T6527 *Trigonella caerulea*, T6598 *Ulva conglobata*, T6599 *Ulva lactuca*, T6600 *Ulva pertusa*, T6709 *Verbena officinalis*, T6744 *Vicia faba*, T6750 *Vicia sativa*, T6752 *Vigna angularis* [Syn. *Dolichus angularis*; *Phaseolus angularis*], T6798 *Vitis vinifera*, T6799 *Vitis vinifera*, T6819 *Wikstroemia chamaedaphne*, T6820 *Wikstroemia indica*, T6826 *Wisteria sinensis*, T6901 *Zea mays*, T6902 *Zea mays*, T6925 *Zostera marina*.
- edema and enlarged abdomen** T1858 *Croton tiglium*, T3898 *Lobelia chinensis* [Syn. *Lobelia radicans*].
- edema and inhibited urination** T2343 *Elsholtzia splendens*.
- edema and qi fullness** T2589 *Euphorbia helioscopia*.
- edema distention fullness** T0303 *Alisma orientale* [Syn. *Alisma plantago-aquatica* var. *orientale*], T1033 *Broussonetia papyrifera*, T1229 *Cassia acutifolia*, T1230 *Cassia angustifolia*, T3000 *Glycine max*, T3632 *Knoxia valerianoides*, T3867 *Liquidambar formosana* [Syn. *Liquidambar taiwaniana*], T4779 *Pharbitis nil*, T4780 *Pharbitis purpurea*, T4861 *Phytolacca americana* [Syn. *Phytolacca decandra*], T4864 *Phytolacca esculenta* [Syn. *Phytolacca acinosa*], T5457 *Rhamnus davurica*, T6105 *Stellera chamaejasme*.
- edema due to heart disease** T0184 *Adonis amurensis*, T1151 *Camellia sinensis* [Syn. *Thea sinensis*], T1589 *Cocculus trilobus* [Syn. *Cocculus sarmentosus*], T1991 *Cytisus scoparius* [Syn. *Spartium scoparium*], T2175 *Digitalis lanata*, T2177 *Digitalis purpurea*, T5813 *Scilla scilloides*, T6259 *Syringa amurensis* [Syn. *Syringa reticulata* var. *amurensis*].
- edema in body and face** T3980 *Lycopus lucidus*.
- edema in chest and abdomen** T2125 *Descurainia sophia*, T3755 *Lepidium apetalum* [Syn. *Lepidium micranthum*], T3759 *Lepidium virginicum*.
- edema in face and foot** T3898 *Lobelia chinensis* [Syn. *Lobelia radicans*].
- edema in lower limb** T0628 *Aristolochia fangchi*, T1984 *Cypripedium macranthum* [Syn. *Cypripedium tibeticum*], T4729 *Periploca sepium*, T5097 *Polygonum amphibium*.
- edema in pregnancy** T0553 *Apocynum venetum*, T1980 *Cyprinus carpio*, T4505 *Ophiocephalus argus*.
- effusion in thorax** T5770 *Saussurea superba* [Syn. *Saussurea hieracioides*].
- effusion of back** T1049 *Bufo bufo gargarizans*; *Bufo melanostictus*, T1565 *Clerodendrum bungei*, T3479 *Isodon amethystoides*.
- effusion of back from welling abscess and flat abscess** T0542 *Apis cerana*, T2316 *Echinops grijsii*, T2317 *Echinops ritro*, T2658 *Fagopyrum esculentum*, T5086 *Polygala sibirica*, T5088 *Polygala tenuifolia*, T5466 *Rhaponticum uniflorum*.
- effusion of vaginal coat** T2744 *Foeniculum vulgare*.
- elephantiasis** T0852 *Bacopa monniera*, T3082 *Gynocardia odorata*, T3570 *Juglans regia*.
- elephantiasis of scrotum** T2744 *Foeniculum vulgare*.
- emission** T0255 *Ailanthus altissima*, T0303 *Alisma orientale* [Syn. *Alisma plantago-aquatica* var. *orientale*], T0323 *Allium tuberosum*, T0360 *Alpinia oxyphylla*, T0542 *Apis cerana*, T0859 *Balanophora involucreta*, T0993 *Boschniakia rossica*, T1411 *Cibotium barometz* [Syn. *Polypodium barometz*], T1819 *Crotalaria ferruginea*, T1927 *Cycas revoluta*, T1964 *Cynanchum wilfordii* [Syn. *Cynoctonum wilfordii*], T2838 *Gallus gallus domesticus*, T2955 *Geum japonicum*, T2962 *Ginkgo biloba*, T2964 *Ginkgo biloba*, T3279 *Homo sapiens*, T3568 *Juglans regia*, T3615 *Kadsura interior*, T3770 *Lespedeza cuneata*, T3955 *Lycium barbarum*, T3958 *Lycium chinense*, T4206 *Metaplexis japonica*, T4207 *Metaplexis japonica*, T4400 *Nelumbo nucifera*, T4470 *Ocimum basilicum*, T4536 *Orobanchae coerulea*, T4629 *Papaver nudicaule*, T4630 *Papaver nudicaule* ssp. *amurensis*, T4789 *Phellodendron amurense*, T4790 *Phellodendron amurense* var. *wilsonii*, T4791 *Phellodendron chinense*, T4792 *Phellodendron chinense* var. *glabriusculum*, T4821 *Pholidota articulata*, T5107 *Polygonum multiflorum*, T5244 *Prunus tomentosa*, T5374 *Quercus infectoria*, T5529 *Rhodomyrtus tomentosa*, T5568 *Rosa laevigata*, T5593 *Rubus idaeus*, T6025 *Sonchus arvensis*, T6087 *Spiranthes sinensis*, T6257 *Syngnathus acus*, T6353 *Tetracera asiatica*, T6431 *Thesium chinense*, T6474 *Toona ciliata*, T6475 *Toona sinensis*, T6750 *Vicia sativa*, T6754 *Vigna unguiculata*.
- emission and premature ejaculation** T0793 *Astragalus complanatus*, T1972 *Cynomorium songaricum*.
- encephalitis** T2756 *Forsythia suspensa*, T3476 *Isatis indigotica*.
- encephalitis b** T0379 *Alternanthera philoxeroides*, T2282 *Dryopteris filix-mas*, T3423 *Indigofera tinctoria*.
- encephalitis of early stage** T0379 *Alternanthera philoxeroides*.
- endometrorrhagia** T5868 *Selaginella stauntoniana*.
- enduring cough** T1465 *Citrullus vulgaris* [Syn. *Citrullus lanatus*], T3567 *Juglans regia*, T4371 *Nandina domestica*, T4637 *Papaver somniferum*, T5228 *Prunus mume*, T5344 *Pyrola atropurpurea*, T5345 *Pyrola calliantha* [Syn. *Pyrola rotundifolia* ssp. *chinensis*], T5346 *Pyrola calliantha* var. *tibetana*, T5347 *Pyrola decorata*, T5349 *Pyrola incarnata*, T5350 *Pyrola japonica*, T5351 *Pyrola rotundifolia*.
- enduring cough and aphonia** T6347 *Terminalia chebula*.
- enduring cough and asthma** T0707 *Arthraxon hispidus*, T2846 *Ganoderma japonicum* [Syn. *Ganoderma sinense*], T2848 *Ganoderma lucidum*, T3568 *Juglans regia*, T4629 *Papaver nudicaule*, T4630 *Papaver nudicaule* ssp. *amurensis*, T4631 *Papaver nudicaule* var. *chinense*, T6825 *Winchia calophylla*.
- enduring cough and vacuity asthma** T1683 *Cordyceps sinensis*, T5791 *Schisandra chinensis*, T5802 *Schisandra sphenanthera*.
- enduring cough with bloody phlegm** T1819 *Crotalaria ferruginea*.
- enduring diarrhea** T3128 *Hedysarum multijugum*, T4601 *Panax ginseng* [Syn. *Panax schinseng*], T4631 *Papaver nudicaule* var. *chinense*, T5329 *Punica granatum*.
- enduring diarrhea due to damp** T0479 *Angelica dahurica* cv. *qibaizhi*, T0498 *Angelica taiwaniana*.
- enduring dysentery** T2721 *Ficus microcarpa*, T3348 *Hypericum elodeoides*, T3368 *Hypericum wightianum*, T4631 *Papaver nudicaule* var. *chinense*, T5181 *Potentilla chinensis*, T5329 *Punica granatum*, T5573 *Rosa sericea*.
- enduring illness qi vacuity** T4599 *Panax ginseng* [Syn. *Panax schinseng*],

- T6150 *Streptopelia orientalis*.
- enduring illness vacuity** T0163 *Actinidia latifolia*.
- enduring low fever** T3600 *Juniperus taiwaniana*.
- enduring malaria** T0607 *Arenaria juncea*, T3090 *Gypsophila oldhamiana*, T3091 *Gypsophila pacifica*, T5107 *Polygonum multiflorum*, T5955 *Silene jenseensis*, T6727 *Veronica persica*.
- enduring sores** T0019 *Acacia catechu*, T0180 *Adina pilulifera* [Syn. *Cephalanthus pilulifera*], T0540 *Apis cerana*, T0542 *Apis cerana*, T0994 *Boswellia carterii*, T1777 *Crataegus pinnatifida*, T2293 *Dumortiera hirsuta*, T2420 *Ericerus pela*, T3295 *Huperzia serrata* [Syn. *Lycopodium serratum*], T3407 *Illicium simonsii*, T4478 *Octopus vulgaris*, T4696 *Penaeus orientalis*, T5308 *Pterocarya stenoptera*, T5374 *Quercus infectoria*, T6615 *Uncaria gambir*.
- enduring vanquished sore** T1170 *Canis familiaris*.
- enduring welling abscess and flat abscess** T3129 *Hedysarum polybotrys*.
- enduring yin flat abscess** T1337 *Cervus nippon*; *Cervus elaphus*.
- enlargement of testes** T6099 *Stauntonia chinensis*.
- enteritis** T0180 *Adina pilulifera* [Syn. *Cephalanthus pilulifera*], T0424 *Ampelopsis brevipedunculata* var. *hancei*, T0897 *Berberis amurensis*, T1316 *Cephalanthus occidentalis*, T1357 *Chelidonium majus*, T1573 *Clinopodium chinense*, T1657 *Conyza canadensis* [Syn. *Erigeron canadensis*], T1709 *Corydalis bungeana*, T2327 *Elaeagnus angustifolia*, T2357 *Emilia sonchifolia*, T2591 *Euphorbia humifusa*, T2716 *Ficus beecheyana* [Syn. *Ficus erecta* var. *beecheyana*], T3123 *Hedyotis auricularia*, T3126 *Hedyotis corymbosa* [Syn. *Oldenlandia corymbosa*], T3163 *Helicteres angustifolia*, T3203 *Hemsleya amabilis*, T3208 *Hemsleya macrosperma*, T3254 *Hippophae rhamnoides*, T3256 *Hippophae rhamnoides* subsp. *sinensis*, T3258 *Hippophae rhamnoides* subsp. *yunnanensis*, T3363 *Hypericum sampsonii*, T3528 *Isodon ternifolia*, T3529 *Isodon ternifolius*, T3547 *Ixeris chinensis*, T3548 *Ixeris sonchifolia*, T3847 *Lindera angustifolia*, T4148 *Medicago sativa*, T4220 *Microlepis strigosa* [Syn. *Trichomanes strigosa*], T4248 *Mimosa pudica*, T4307 *Mosla scabra* [Syn. *Mosla punctata*], T4391 *Nauclea officinalis*, T4485 *Oldenlandia diffusa* [Syn. *Hedyotis diffusa*], T4834 *Phyllanthus emblica*, T4842 *Phyllanthus reticulatus*, T4843 *Phyllanthus urinaria*, T5104 *Polygonum hydropiper*, T5149 *Populus canadensis*, T5150 *Populus cathayana*, T5173 *Portulaca oleracea*, T5188 *Potentilla viscosa*, T5555 *Rodgersia pinnata*, T5587 *Rubus alceaefolius*, T5607 *Rumex crispus*, T5892 *Senecio nemorensis*, T5907 *Senecio scandens* [Syn. *Senecio chinensis*], T5954 *Silene fortunei*, T6043 *Sophora subprostrata* [Syn. *Sophora tonkinensis*], T6075 *Spilanthes acmella*, T6116 *Stenoloma chusanum*, T6276 *Tacca plantaginea* [Syn. *Schizocapsa plantaginea*], T6277 *Tadehagi triquetrum*, T6353 *Tetracera asiatica*.
- enteritis and diarrhea** T0643 *Aristolochia versicolor*, T2079 *Delphinium kamaonense* var. *glabrescens*, T2529 *Euchresta strigillosa*, T3162 *Helicia nilagirica*, T3164 *Helicteres isora*, T5570 *Rosa roxburghii*, T6028 *Sophora alopecuroides*.
- enteritis and dysentery** T0642 *Aristolochia tubiflora*, T0776 *Asplenium prolongatum*.
- enuresis** T2805 *Fugu ocellatus*, T2838 *Gallus gallus domesticus*, T2962 *Ginkgo biloba*, T3000 *Glycine max*, T3568 *Juglans regia*, T3770 *Lespedeza cuneata*, T5270 *Psoralea corylifolia*, T5569 *Rosa multiflora*.
- enuresis and frequent urination** T1698 *Cornus officinalis* [Syn. *Macrocarpium officinale*], T1911 *Cuscuta australis*, T1912 *Cuscuta chinensis*, T1913 *Cuscuta japonica*, T2961 *Ginkgo biloba*, T3854 *Lindera strychnifolia* [Syn. *Lindera aggregata*], T5568 *Rosa laevigata*.
- enuresis due to kidney vacuity** T0360 *Alpinia oxyphylla*.
- epidemic encephalitis** T0318 *Allium sativum*, T3475 *Isatis indigotica*, T4552 *Osmunda japonica*.
- epidemic febrile diseases** T5484 *Rhinoceros unicornis*; *Rhinoceros sondaicus*; *Rhinoceros sumatrensis*.
- epidemic hemorrhagic conjunctivitis** T0379 *Alternanthera philoxeroides*.
- epidemic meningitis** T4789 *Phellodendron amurense*, T4790 *Phellodendron amurense* var. *wilsonii*, T4791 *Phellodendron chinense*, T4792 *Phellodendron chinense* var. *glabriusculum*.
- epidemic parotitis** T0045 *Acanthopanax trifoliatum*, T0379 *Alternanthera philoxeroides*, T0586 *Arctium lappa*, T0866 *Baphicacanthus cusia* [Syn. *Strobilanthes cusia*], T0867 *Baphicacanthus cusia* [Syn. *Strobilanthes cusia*], T0906 *Berberis julianae*, T0959 *Blumea lacera*, T0975 *Bombyx mori*, T1275 *Cayratia japonica*, T2282 *Dryopteris filix-mas*, T2290 *Duchesnea indica*, T3163 *Helicteres angustifolia*, T3457 *Iris dichotoma*, T3475 *Isatis indigotica*, T3476 *Isatis indigotica*, T4183 *Menispermum dauricum*, T4186 *Mentha piperita*, T4482 *Oenanthe javanica*, T4519 *Opuntia dillenii*, T4520 *Opuntia ficus-indica*, T4521 *Opuntia vulgaris*, T4796 *Pheretima aspergillum*; *Allolobophora caliginosa trapezoides*, T4852 *Physalis peruviana*, T5121 *Polygonum tinctorium*, T5613 *Rumex obtusifolius*, T6003 *Solanum khasianum*, T6017 *Solanum tuberosum*, T6116 *Stenoloma chusanum*, T6128 *Stephania hernandifolia*, T6301 *Taraxacum mongolicum*, T6440 *Thuja orientalis* [Syn. *Platyclusus orientalis*; *Biota orientalis*], T6548 *Tritonia crocosmaeflora*, T6820 *Wikstroemia indica*.
- epididymis tubercle** T6105 *Stellera chamaejasme*, T6540 *Tripterygium hypoglaucum*.
- epilepsy** T0088 *Aconitum coreanum*, T0142 *Acorus calamus*, T0190 *Adonis sutchuenensis*, T0298 *Alectoria vivens*, T0463 *Anemone altaica*, T0617 *Arisaema amurense*, T0618 *Arisaema consanguineum*, T0620 *Arisaema heterophyllum*, T0644 *Armillaria mellea*, T0645 *Armillariella mellea*, T0975 *Bombyx mori*, T1152 *Camellia sinensis* [Syn. *Thea sinensis*], T1525 *Cladonia fallax*, T1876 *Cucumis melo*, T2037 *Datura innoxia*, T2044 *Datura metel*, T2091 *Delphinium yunnanense*, T2412 *Equisetum sylvaticum*, T2596 *Euphorbia kansui*, T2975 *Gleditsia delavayi*, T2976 *Gleditsia fera*, T2978 *Gleditsia sinensis* [Syn. *Gleditsia horrida*], T3775 *Lethariella cladonioides*, T4418 *Nerium indicum*, T4423 *Nicandra physaloides*, T4903 *Pinellia pedatisecta*, T5547 *Ricinus communis*, T5871 *Selenarctos thibetanus*; *Ursus arctos*, T6145 *Stichopus japonicus*, T6358 *Tetraplodon mnioides* [Syn. *Tetraplodon bryoides*; *Splachnum mnioides*], T6416 *Thamnotia vermicularis*, T6522 *Trifolium repens*, T6697 *Veratrum grandiflorum*, T6698 *Veratrum nigrum*, T6819 *Wikstroemia chamaedaphne*, T6903 *Zephyranthes candida*.
- epilepsy and profuse phlegm** T4957 *Piper nigrum*.
- epilepsy of pregnancy** T6625 *Uncaria macrophylla*, T6629 *Uncaria rhynchophylla* [Syn. *Nauclea rhynchophylla*], T6633 *Uncaria sinensis*.



- eruptive dermatitis** T1662 *Coptis chinensis*, T1663 *Coptis chinensis* var. *brevisepala*, T1664 *Coptis deltoidea*, T1669 *Coptis omeiensis*, T1670 *Coptis teetoides* [Syn. *Coptis teeta*].
- erysipelas** T0434 *Amsonia sinensis*, T0457 *Andrographis paniculata* [Syn. *Justicia paniculata*], T0586 *Arctium lappa*, T0678 *Artemisia japonica*, T0866 *Baphicacanthus cusia* [Syn. *Strobilanthes cusia*], T0897 *Berberis amurensis*, T0906 *Berberis julianae*, T0947 *Bixa orellana*, T1005 *Brassica campestris* [Syn. *Brassica campestris* var. *oleifera*], T1043 *Bryophyllum pinnatum*, T1256 *Castanea mollissima*, T1275 *Cayratia japonica*, T1565 *Clerodendron bungei*, T2517 *Eucalyptus robusta*, T2521 *Eucalyptus tereticornis*, T2658 *Fagopyrum esculentum*, T2731 *Firmiana simplex*, T2757 *Forsythia viridissima*, T3396 *Ilex pubescens*, T3397 *Ilex pubescens* var. *glaber*, T3410 *Impatiens balsamina*, T3423 *Indigofera tinctoria*, T3475 *Isatis indigotica*, T3476 *Isatis indigotica*, T3738 *Lemna minor*, T3990 *Lygodium japonicum*, T4206 *Metaplexis japonica*, T4564 *Oxalis corniculata* [Syn. *Oxalis repens*], T4678 *Paulownia fortunei*, T4679 *Paulownia tomentosa*, T4845 *Physalis alkekengi*, T4846 *Physalis alkekengi* var. *franchetii*, T5121 *Polygonum tinctorium*, T5173 *Portulaca oleracea*, T5194 *Premna microphylla*, T5557 *Rohdea japonica* [Syn. *Orontium japonicum*], T5646 *Sagina japonica* [Syn. *Spergula japonica*], T5651 *Salix babylonica*, T5680 *Salvia miltiorrhiza*, T5681 *Salvia miltiorrhiza* f. *alba*, T5688 *Salvia przewalskii*, T5773 *Saxifraga stolonifera*, T5818 *Scoparia dulcis*, T5856 *Sedum lineare* [Syn. *Sedum obtuso-lineare*], T5907 *Senecio scandens* [Syn. *Senecio chinensis*], T6005 *Solanum lyratum*, T6008 *Solanum nigrum*, T6440 *Thuja orientalis* [Syn. *Platycladus orientalis*; *Biota orientalis*], T6767 *Viola yedoensis*.
- erysipelas wandering wind** T6393 *Thalictrum ichangense* [Syn. *Thalictrum tripeltatum*; *Thalictrum multipeltatum*].
- erythematous lupus** T0334 *Aloe arborescens* var. *natalensis*, T2753 *Formica fusca*, T6540 *Tripterygium hypoglaucum*, T6542 *Tripterygium wilfordii*.
- erythra itch-pain** T3630 *Kleinhovia hospita*.
- excessive leukorrhea** T0478 *Angelica dahurica* [Syn. *Angelica porphyrocaulis*], T1411 *Cibotium barometz* [Syn. *Polypodium barometz*], T2208 *Dioscorea septemloba*, T2246 *Dolichos lablab*, T4400 *Nelumbo nucifera*, T5569 *Rosa multiflora*, T6029 *Sophora alopecuroides*.
- exterior damp** T0819 *Atractylodes chinensis*, T0821 *Atractylodes japonica*, T0823 *Atractylodes lancea*.
- exterior vacuity and common cold** T2955 *Geum japonicum*.
- externally contracted ardent fever** T1428 *Cinchona ledgeriana*, T1429 *Cinchona officinalis*, T1433 *Cinchona succirubra*.
- externally contracted wind evil** T5234 *Prunus persica*.
- externally contracted wind-cold** T4039 *Magnolia grandiflora*, T4445 *Notopterygium forbesii* [Syn. *Notopterygium franchetii*], T4446 *Notopterygium incisum*, T4956 *Piper mullesua*, T5727 *Saposhnikovia divaricata* [Syn. *Ledebouria seseloides*].
- externally contracted wind-heat** T0480 *Angelica decursiva* [Syn. *Peucedanum decursivum*], T1395 *Chrysanthemum morifolium* [Syn. *Dendranthema morifolium*], T1933 *Cyclea suchuenensis*, T2798 *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*], T3819 *Ligusticum brachylobum*, T4413 *Nepeta cataria*, T4761 *Peucedanum longshengens*, T4768 *Peucedanum praeruptorum*, T4769 *Peucedanum rubricaulis*, T6791 *Vitex rotundifolia* [Syn. *Vitex trifolia* var. *simplicifolia*], T6793 *Vitex trifolia*.
- externally contracted wind-heat cough** T2787 *Fritillaria hupehensis*.
- exuberance of fire with tidal fever** T4789 *Phellodendron amurense*, T4790 *Phellodendron amurense* var. *wilsonii*, T4791 *Phellodendron chinense*, T4792 *Phellodendron chinense* var. *glabriusculum*.
- exuberant heat and vexation thirst** T1554 *Clerodendron cyrtophyllum*.
- exuberant heat fluid damage** T1464 *Citrullus vulgaris* [Syn. *Citrullus lanatus*], T6526 *Triglochin maritimum*.
- exuberant heat stirring wind** T6625 *Uncaria macrophylla*, T6629 *Uncaria rhynchophylla* [Syn. *Nauclea rhynchophylla*], T6633 *Uncaria sinensis*.
- exudative dermatitis** T6403 *Thalictrum petaloideum*.
- exudative eczema** T6584 *Typha angustata*, T6585 *Typha angustifolia*, T6587 *Typha latifolia*.
- eye diseases** T1528 *Cladonia stellaris* [Syn. *Cladonia alpestris*], T4188 *Mentha rotundifolia*, T6416 *Thamnosia vermicularis*.
- eye pain** T1185 *Capsella bursa-pastoris*, T3635 *Koelreuteria paniculata*.
- eye pain and tearing** T3636 *Koelreuteria paniculata*.
- eye screen** T1035 *Broussonetia papyrifera*, T1185 *Capsella bursa-pastoris*, T1236 *Cassia laevigata* [Syn. *Cassia floribunda*], T1296 *Celosia argentea*, T1746 *Corydalis taliensis*, T1804 *Cristaria plicata*; *Hyriopsis cumingii*, T2267 *Drosera peltata* var. *lunata*, T2272 *Drymaria diandra* [Syn. *Drymaria cordata* ssp. *diandra*], T2336 *Elephas maximus*, T2408 *Equisetum hiemale*, T2517 *Eucalyptus robusta*, T2766 *Fraxinus bungeana*, T2767 *Fraxinus chinensis*, T2772 *Fraxinus mandshurica*, T2774 *Fraxinus paxiana*, T2777 *Fraxinus rhynchophylla* [Syn. *Fraxinus chinensis* var. *rhynchophylla*], T2779 *Fraxinus stylosa*, T2780 *Fraxinus szaboana* [Syn. *Fraxinus chinensis* var. *acuminata*], T2841 *Gallus gallus domesticus*, T3311 *Hydrocotyle sibthorpioides*, T3363 *Hypericum sampsonii*, T3957 *Lycium chinense*, T4349 *Myrica rubra*, T4471 *Ocimum basilicum*, T5413 *Ranunculus cantoniensis*, T5690 *Salvia roborowskii*, T5871 *Selenarctos thibetanus*; *Ursus arctos*, T5907 *Senecio scandens* [Syn. *Senecio chinensis*], T6072 *Sphagnum palustre* [Syn. *Sphagnum obtusifolium*; *Sphagnum cymbifolium*], T6092 *Stachys palustris*, T6843 *Xanthium sibiricum* [Syn. *Xanthium strumarium*].
- eye swelling** T3635 *Koelreuteria paniculata*.
- eyeball night pain** T5214 *Prunella vulgaris*.
- eyebrow bone pain** T0479 *Angelica dahurica* cv. *qibaizhi*, T0498 *Angelica taiwaniana*.
- eyeground hemorrhage** T0830 *Auricularia auricula*, T0831 *Auricularia delicata*, T1184 *Capsella bursa-pastoris*.
- eyelid laceration** T0610 *Argemone mexicana*.
- facial muscle spasm** T2890 *Gastrodia elata*.
- facial paralysis** T0975 *Bombyx mori*, T3680 *Lamium amplexicaule*, T5183 *Potentilla griffithii* var. *velutina*, T5848 *Securinega suffruticosa*.
- fasciolopsiasis** T1591 *Cocos nucifera*, T1593 *Cocos nucifera*.
- fatigue hypodynamia** T0819 *Atractylodes chinensis*, T0821 *Atractylodes japonica*, T0823 *Atractylodes lancea*, T0824 *Atractylodes macrocephala* [Syn. *Atractylis macrocephala*], T2846 *Ganoderma japonicum* [Syn. *Ganoderma sinense*], T2848 *Ganoderma lucidum*,

- T3011 *Glycyrrhiza aspera*, T3013 *Glycyrrhiza glabra*, T3015 *Glycyrrhiza inflata*, T3016 *Glycyrrhiza kansuensis*, T3021 *Glycyrrhiza squamulosa*, T3022 *Glycyrrhiza uralensis*, T3023 *Glycyrrhiza yunnanensis*, T3128 *Hedysarum multijugum*, T3743 *Lentinus lepideus*, T4545 *Oryza sativa*, T5465 *Rhaponticum carthamoides*, T6150 *Streptopelia orientalis*.
- fatigue hypodynamia due to spleen vacuity** T5091 *Polygonatum cyrtoneura* [Syn. *Polygonatum multiflorum*], T5092 *Polygonatum kingianum*, T5095 *Polygonatum sibiricum*.
- fatigue hypodynamia due to spleen-stomach vacuity** T0387 *Amaranthus caudatus*.
- fatigued spirit** T1337 *Cervus nippon*; *Cervus elaphus*, T1608 *Coffea arabica*, T1610 *Coffea liberica*, T1623 *Collybia albuminosa*.
- fatigued spirit and amnesia** T1961 *Cynanchum thesioides*.
- fatigued spirit and desire to sleep** T0210 *Agaricus bisporus*, T0211 *Agaricus campestris*.
- fatigued spirit and dizziness** T4385 *Narcissus tazetta* var. *chinensis*.
- fatigued spirit and hypodynamia** T3742 *Lentinus edodes*.
- fatigued spirit and lassitude** T4516 *Oplopanax elatus*.
- fatty liver** T5957 *Silybum marianum*.
- fearful throbbing** T5701 *Salvia yunnanensis*.
- febrile diseases** T1986 *Cyrtomium fortunei*, T2290 *Duchesnea indica*, T2882 *Gardenia jasminoides* [Syn. *Gardenia florida*], T3155 *Helianthus tuberosus*, T3200 *Hemidesmus indicus*, T3233 *Heteropappus altaicus*.
- febrile diseases clouded spirit** T0144 *Acorus gramineus*, T0146 *Acorus tatarinowii*, T0463 *Anemone altaica*, T0987 *Bos taurus domesticus*; *Bubalus bubalis*, T1907 *Curcuma wengujin*, T4303 *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*.
- febrile diseases due to external contraction** T1554 *Clerodendron cyrtophyllum*.
- febrile diseases fluid damage** T0155 *Actinidia arguta*, T4602 *Panax ginseng* [Syn. *Panax schinseng*], T5186 *Potentilla reptans* var. *sericophylla*.
- febrile diseases macular eruption** T4127 *Matteuccia struthiopteris*, T4500 *Onosma paniculatum*.
- febrile diseases tetanic reversal** T2840 *Gallus gallus domesticus*.
- febrile diseases thirst** T1878 *Cucumis sativus*, T2628 *Euphrasia officinalis*, T6512 *Trichosanthes kirilowii*.
- febrile diseases with vexation and agitation** T6060 *Souliea vaginata*.
- febrile diseases with vexation and fullness** T4148 *Medicago sativa*, T4149 *Medicago sativa*.
- febrile diseases with vexation and thirst** T0722 *Arundo donax*, T3392 *Ilex kudingcha*, T3393 *Ilex latifolia*, T3416 *Imperata cylindrica* var. *major*, T3920 *Lophatherum gracile*, T3933 *Luffa acutangula*, T3934 *Luffa cylindrica*, T4331 *Musa paradisiaca* var. *sapientum* [Syn. *Musa sapientum*], T4402 *Nelumbo nucifera*, T4605 *Panax japonicus* var. *major*, T4829 *Phragmites communis*, T5445 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], T6206 *Sus scrofa domestica*.
- febrile infectious diseases** T1662 *Coptis chinensis*, T1663 *Coptis chinensis* var. *brevisekala*, T1664 *Coptis deltoidea*, T1669 *Coptis omeiensis*, T1670 *Coptis teetoides* [Syn. *Coptis teeta*], T4029 *Maesa japonica*, T4479 *Odontites serotina*.
- fecal stoppage** T1858 *Croton tiglium*, T4845 *Physalis alkekengi*, T6076 *Spinacia oleracea*, T6651 *Urtica cannabina*, T6652 *Urtica dioica*.
- fetal bleeding** T2234 *Dipsacus asperoides*, T2235 *Dipsacus japonicus*.
- fetal spotting** T0664 *Artemisia argyi*, T0681 *Artemisia lavandulaefolia*, T0685 *Artemisia mongolica*, T0689 *Artemisia princeps*, T0691 *Artemisia rubripes*, T0706 *Artemisia vulgaris*, T1982 *Cyprinus carpio*.
- fetal spotting (precipitation of blood in pregnancy)** T5687 *Salvia prionitis*.
- fetal spotting due to kidney vacuity** T1911 *Cuscuta australis*, T1912 *Cuscuta chinensis*, T1913 *Cuscuta japonica*.
- fetus qi disharmony** T4720 *Perilla frutescens* var. *arguta*, T4723 *Perilla frutescens* var. *crispa*.
- fever** T0015 *Abutilon indicum*, T0457 *Andrographis paniculata* [Syn. *Justicia paniculata*], T0947 *Bixa orellana*, T1359 *Chenopodium album*, T1705 *Corydalis adunca*, T2343 *Elsholtzia splendens*, T2367 *Ephedra equisetina*, T2368 *Ephedra gerardiana*, T2369 *Ephedra intermedia*, T2372 *Ephedra likiangensis*, T2373 *Ephedra minuta*, T2375 *Ephedra monosperma*, T2379 *Ephedra saxatilis*, T2380 *Ephedra sinica*, T2697 *Ferula borealis*, T2882 *Gardenia jasminoides* [Syn. *Gardenia florida*], T3921 *Lophatherum gracile*, T4335 *Mussaenda pubescens*, T4789 *Phellodendron amurense*, T4790 *Phellodendron amurense* var. *wilsonii*, T4791 *Phellodendron chinense*, T4792 *Phellodendron chinense* var. *glabriusculum*, T4887 *Picrorhiza kurrooa*, T4888 *Picrorhiza scrophulariiflora*, T5863 *Selaginella moellendorffii*.
- fever and aversion to wind** T2367 *Ephedra equisetina*, T2368 *Ephedra gerardiana*, T2369 *Ephedra intermedia*, T2372 *Ephedra likiangensis*, T2373 *Ephedra minuta*, T2375 *Ephedra monosperma*, T2379 *Ephedra saxatilis*, T2380 *Ephedra sinica*, T6910 *Zingiber officinale*.
- fever and chest pain** T1705 *Corydalis adunca*.
- fever and cough** T4470 *Ocimum basilicum*, T5943 *Sida cordifolia*.
- fever and dry mouth** T2631 *Eurya japonica*.
- fever and headache** T1395 *Chrysanthemum morifolium* [Syn. *Dendranthema morifolium*], T2554 *Eupatorium cannabinum*, T2563 *Eupatorium japonicum*.
- fever and headache due to external contraction** T1544 *Cleistocalyx operculatus*.
- fever and sore pharynx** T4801 *Phlegmarius phlegmaria* [Syn. *Lycopodium phlegmaria*].
- fever due to external contraction** T0071 *Achyranthes aspera*, T0072 *Achyranthes aspera* var. *indica*, T0608 *Arenaria kansuensis* [Syn. *Arenaria kumaonensis*], T1055 *Bupleurum angustissimum*, T1056 *Bupleurum aureum*, T1058 *Bupleurum chaishoui*, T1059 *Bupleurum chinense*, T1065 *Bupleurum longiradiatum*, T1066 *Bupleurum marginatum*, T1067 *Bupleurum marginatum* var. *stenophyllum*, T1072 *Bupleurum scorzoniferifolium*, T1073 *Bupleurum sibiricum*, T1075 *Bupleurum smithii* var. *parvifolium*, T1078 *Bupleurum wenchuanense*, T1079 *Bupleurum yinchowense*, T3749 *Leontopodium alpinum*.
- fever due to summerheat damage** T5402 *Radermachera sinica*.
- fever in children** T6224 *Swertia kouitchensis*, T6375 *Thalictrum baicalense*, T6376 *Thalictrum cultratum*, T6385 *Thalictrum flavum*, T6387 *Thalictrum foliolosum*, T6389 *Thalictrum glandulosissimum*.
- filariasis** T2510 *Eucalyptus globulus*, T2517 *Eucalyptus robusta*.
- fire eye** T3989 *Lygodium flexuosum* [Syn. *Lygodium pinnatifidum*];

*Swertia kouitchensis*.

*Ophioglossum flexuosum*], T5414 *Ranunculus japonicus*, T6224 *Swertia kouitchensis*.

**fire flow** T0594 *Ardisia crenata*.

**fish bone stuck in throat** T4384 *Narcissus tazetta* var. *chinensis*.

**fish mouth sore toxin** T1964 *Cynanchum wilfordii* [Syn. *Cynoctonum wilfordii*].

**fistula** T2384 *Epicauta gorhami*, T4786 *Phasianus colchicus*, T4917 *Pinus massoniana*, T6080 *Spiraea japonica*.

**flat abscess** T6267 *Syzygium jambos*.

**flat abscess (leaf)** T0240 *Aglaiia odorata*.

**flat wart** T1614 *Coix lacryma-jobi* var. *ma-yuen*, T5856 *Sedum lineare* [Syn. *Sedum obtuso-lineare*].

**flooding** T0215 *Agave americana*, T0860 *Balanophora japonica*, T0952 *Blechnum orientale*, T0973 *Bombax malabaricum* [Syn. *Gossampinus malabarica*], T0976 *Bombyx mori*, T1145 *Camellia japonica*, T1174 *Cannabis sativa*, T1191 *Caragana sinica*, T1419 *Cimicifuga dahurica*, T1420 *Cimicifuga foetida*, T1421 *Cimicifuga heracleifolia*, T1673 *Corchorus capsularis*, T1674 *Corchorus capsularis*, T1682 *Cordyceps ophioglossoides*, T1888 *Cudrania tricuspidata*, T1986 *Cyrtomium fortunei*, T2133 *Desmodium racemosum* [Syn. *Podocarpium podocarpum* var. *oxyphyllum*], T2161 *Dicranopteris pedata* [Syn. *Polypodium pedatum*; *Dicranopteris dichotoma*], T2218 *Diospyros kaki*, T2540 *Euonymus fortunei*, T3054 *Gossypium barbadense*], T3055 *Gossypium herbaceum*, T3058 *Gossypium hirsutum* [Syn. *Gossypium mexicanum*], T3547 *Ixeris chinensis*, T3671 *Lagerstroemia indica*, T3957 *Lycium chinense*, T4006 *Lythrum anceps*, T4007 *Lythrum salicaria*, T4307 *Mosla scabra* [Syn. *Mosla punctata*], T4361 *Myrsine africana*, T4606 *Panax pseudo-ginseng*, T4670 *Patrinia heterophylla*, T4673 *Patrinia scabra*, T4787 *Phellinus igniarius*, T5552 *Robinia pseudoacacia*, T5579 *Rubia cordifolia*, T5594 *Rubus parkeri*, T5697 *Salvia trijuga*, T5924 *Sesamum indicum*, T6018 *Solanum verbascifolium*, T6250 *Symplocos caudata*, T6485 *Trachycarpus fortunei*, T6551 *Trogopteris xanthipes*; *Pteromys volans*, T6615 *Uncaria gambir*, T6830 *Woodfordia fruticosa*.

**flooding and spotting** T0170 *Adhatoda vasica*, T0229 *Ageratum conyzoides*, T0249 *Agrimonia pilosa* var. *japonica*, T0255 *Ailanthus altissima*, T0664 *Artemisia argyi*, T0678 *Artemisia japonica*, T0681 *Artemisia lavandulaefolia*, T0685 *Artemisia mongolica*, T0689 *Artemisia princeps*, T0691 *Artemisia rubripes*, T0706 *Artemisia vulgaris*, T0736 *Asclepias curassavica*, T0791 *Astragalus chrysopterus*, T0794 *Astragalus ernestii*, T0798 *Astragalus membranaceus*, T0800 *Astragalus mongolicus*, T0830 *Auricularia auricula*, T0831 *Auricularia delicata*, T0859 *Balanophora involucreta*, T0867 *Baphicacanthus cusia* [Syn. *Stribilanthes cusia*], T0962 *Boehmeria platanifolia* [Syn. *Boehmeria tricuspis*], T0978 *Bombyx mori*, T0982 *Bos taurus domesticus*, T0993 *Boschniakia rossica*, T1116 *Callicarpa arborea*, T1118 *Callicarpa formosana*, T1119 *Callicarpa japonica*, T1160 *Campsis grandiflora*, T1184 *Capsella bursa-pastoris*, T1425 *Cimicifuga simplex*, T1448 *Cirsium chinense*, T1449 *Cirsium japonicum*, T1451 *Cirsium setosum* [Syn. *Cerratala setosa*; *Cirsium segetum*; *Cephalanoplos segetum*], T1547 *Clematis terniflora* [Syn. *Clematis maximowicziana*], T1655 *Conyza blinii*, T1706 *Corydalis ambigua* var. *amurensis* [Syn. *Corydalis ambigua*], T1735 *Corydalis*

*repens*, T1900 *Curculigo capitulata* [Syn. *Leucojum capitulata*], T1971 *Cynoglossum zeylanicum* [Syn. *Anchusa zeylanica*; *Cynoglossum furcatum*; *Cynoglossum formosanum*], T2234 *Dipsacus asperoides*, T2235 *Dipsacus japonicus*, T2281 *Dryopteris crassirhizoma*, T2282 *Dryopteris filix-mas*, T2290 *Duchesnea indica*, T2323 *Eclipta prostrata* [Syn. *Eclipta alba*], T2407 *Equisetum arvense*, T2435 *Eriochloa sinensis*, T2591 *Euphorbia humifusa*, T2826 *Galeola faberi*, T2837 *Gallus gallus domesticus*, T3056 *Gossypium herbaceum*, T3088 *Gynura segetum* [Syn. *Gynura japonica*], T3123 *Hedyotis auricularia*, T3193 *Hemerocallis fulva*, T3195 *Hemerocallis lilio-asphodelus*, T3197 *Hemerocallis minor*, T3241 *Hibiscus mutabilis*, T3242 *Hibiscus rosa-sinensis*, T3278 *Homo sapiens*, T3340 *Hypericum ascyron*, T3349 *Hypericum erectum*, T3361 *Hypericum perforatum*, T3373 *Hypoestes purpurea* [Syn. *Justicia purpurea*; *Hypoestes sinica*], T3659 *Lactuca indica*, T3679 *Lamiophlomis rotata* [Syn. *Phlomis rotata*], T3736 *Lemnaphyllum microphyllum*, T3842 *Limonium gmelinii*, T3863 *Liparis nervosa*, T3926 *Loropetalum chinense*, T3933 *Luffa acutangula*, T3934 *Luffa cylindrica*, T4259 *Mnium cuspidatum*, T4343 *Myrica esculenta*, T4398 *Nelumbo nucifera*, T4399 *Nelumbo nucifera*, T4400 *Nelumbo nucifera*, T4552 *Osmunda japonica*, T4604 *Panax japonicus* var. *bipinnatifidus*, T4605 *Panax japonicus* var. *major*, T4607 *Panax pseudo-ginseng* var. *japonicus*, T4608 *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*], T4656 *Parmelia saxatilis*, T4658 *Parmelia tinctorum*, T5104 *Polygonum hydropiper*, T5118 *Polygonum suffultum*, T5133 *Polytrichum commune*, T5173 *Portulaca oleracea*, T5228 *Prunus mume*, T5265 *Psidium guajava*, T5323 *Pulsatilla campanella*, T5324 *Pulsatilla cernua*, T5325 *Pulsatilla chinensis*, T5326 *Pulsatilla dahurica*, T5328 *Punica granatum*, T5332 *Punica granatum*, T5354 *Pyrrosia davidii*, T5355 *Pyrrosia drakeana*, T5356 *Pyrrosia gralla*, T5357 *Pyrrosia lingua*, T5358 *Pyrrosia petiolosa*, T5360 *Pyrrosia shearerii*, T5497 *Rhodiola kirilowii*, T5518 *Rhododendron mucronatum*, T5523 *Rhododendron simsii*, T5529 *Rhodomyrtus tomentosa*, T5541 *Rhus verniciflua* [Syn. *Toxicodendron verniciflum*], T5554 *Rodgersia aesculifolia*, T5567 *Rosa laevigata*, T5607 *Rumex crispus*, T5609 *Rumex hastatus*, T5611 *Rumex japonicus*, T5612 *Rumex nepalensis*, T5614 *Rumex patientia*, T5661 *Salvia bowleyana*, T5671 *Salvia digitaloides*, T5672 *Salvia flava*, T5685 *Salvia plebeia*, T5701 *Salvia yunnanensis*, T5712 *Sanguisorba officinalis*, T5773 *Saxifraga stolonifera*, T5804 *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*], T5850 *Sedum aizoon*, T5855 *Sedum kantschaticum*, T5856 *Sedum lineare* [Syn. *Sedum obtuso-lineare*], T5862 *Selaginella involvens*, T6034 *Sophora japonica*, T6036 *Sophora japonica*, T6474 *Toona ciliata*, T6475 *Toona sinensis*, T6584 *Typha angustata*, T6585 *Typha angustifolia*, T6587 *Typha latifolia*, T6653 *Usnea diffracta*, T6654 *Usnea longissima*, T6742 *Vicia amoena*, T6831 *Woodwardia orientalis*, T6904 *Zephyranthes grandiflora* [Syn. *Zephyranthes carinata*].

**flooding and spotting [=metrorrhagia and metrostaxis]** T0001 *Abelmoschus manihot*, T1033 *Broussonetia papyrifera*, T1034 *Broussonetia papyrifera*, T2193 *Dioscorea cirrhosa* [Syn. *Dioscorea pogonoides*], T3129 *Hedysarum polybotrys*, T3460 *Iris halophila*, T3464 *Iris lactea* var. *chinensis* [Syn. *Iris pallasii* var. *chinensis*], T4127 *Matteuccia struthiopteris*, T4549 *Osbeckia chinensis*, T5105

- Polygonum hydropiper* var. *flaccidum* [Syn. *Polygonum flaccidum*], T5182 *Potentilla discolor*, T5185 *Potentilla multifida*, T5401 *Rabdosia yuennanensis*, T5573 *Rosa sericea*, T6533 *Trillium kamschatcicum*, T6535 *Trillium tschonoskii*, T6601 *Umbilicaria esculenta* [Syn. *Gyrophora esculenta*].
- flooding and spotting due to blood heat** T5445 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], T5447 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*].
- flooding and spotting with vaginal discharge** T0248 *Agrimonia pilosa*, T0297 *Alchornea trewioides*, T0500 *Anguilla japonica*, T0890 *Begonia limprichtii*, T1337 *Cervus nippon*; *Cervus elaphus*, T1698 *Cornus officinalis* [Syn. *Macrocarpium officinale*], T2280 *Dryopteris chrysocoma*, T5568 *Rosa laevigata*, T6773 *Viscum articulatum*, T6774 *Viscum articulatum*.
- flooding and vaginal discharge with strangury-turbidity** T4584 *Paeonia lactiflora* wild, T4586 *Paeonia obovata*, T4590 *Paeonia veitchii*.
- flooding spotting and vaginal discharge** T4121 *Marsilea quadrifolia*.
- flowing phlegm** T1008 *Brassica juncea*, T2584 *Euphorbia ebracteolata*, T2587 *Euphorbia fischeriana*.
- flowing rheum in chest** T2596 *Euphorbia kansui*.
- fluid damage and constipation** T5826 *Scrophularia buergeriana*, T5828 *Scrophularia ningpoensis*.
- fluid damage and thirst** T0535 *Antidesma bunioides*, T2101 *Dendrobium fimbriatum*, T2983 *Glehnia littoralis*, T3875 *Liriope spicata* var. *prolifera*, T4288 *Morus alba*, T4507 *Ophiopogon japonicus*, T4599 *Panax ginseng* [Syn. *Panax schinseng*], T4600 *Panax ginseng* [Syn. *Panax schinseng*], T4609 *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*], T5218 *Prunus armeniaca*, T5791 *Schisandra chinensis*, T5802 *Schisandra sphenanthera*, T6266 *Syzygium cumini*, T6919 *Ziziphus jujuba* var. *spinosa*.
- fluid damage with vexation and thirst** T5447 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*].
- food accumulation** T1152 *Camellia sinensis* [Syn. *Thea sinensis*], T1467 *Citrus aurantium*, T1563 *Clerodendron trichotomum*, T1687 *Coriandrum sativum*, T1696 *Cornus capitata* [Syn. *Dendrobenthamia capitata*], T1904 *Curcuma kwangsiensis*, T1909 *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*], T1958 *Cynanchum otophyllum*, T2365 *Enteromorpha clathrata*, T2387 *Epilobium hirsutum*, T2505 *Eucalyptus citriodora*, T2580 *Euphorbia antiquorum*, T2612 *Euphorbia prolifera*, T2748 *Fomes fomentarius* [Syn. *Pyropolyporus fomentarius*; *Boletus fomentarius*; *Polyporus fomentarius*], T3282 *Hordeum vulgare*, T4954 *Piper longum*, T5140 *Poncirus trifoliata*, T5239 *Prunus salicina*, T5361 *Pyrus betulaeifolia*, T5401 *Rabdosia yuennanensis*, T5469 *Rheum hotaoense*, T6049 *Sophora viciifolia*, T6105 *Stellera chamaejasme*, T6312 *Taxus mairei*.
- food accumulation abdominal distention** T0680 *Artemisia lactiflora*, T0708 *Arthromeris mairei* [Syn. *Polypodium mairei*], T3308 *Hydrangea umbellata*, T3436 *Inula nervosa*, T4542 *Orthosiphon wulfenoides* [Syn. *Coleus wulfenoides*], T5267 *Psidium guajava*, T5461 *Rhamnus leptophylla*.
- food accumulation abdominal pain** T0142 *Acorus calamus*, T0661 *Artemisia anomala*, T3006 *Glycosmis citrifolia*, T3254 *Hippophae rhamnoides*, T3256 *Hippophae rhamnoides* subsp. *sinensis*, T3258 *Hippophae rhamnoides* subsp. *yunnanensis*.
- food accumulation and distending pain in stomach duct** T1291 *Celastrus paniculatus*.
- food accumulation and qi distention** T3885 *Litsea cubeba*.
- food accumulation and qi stagnation** T0692 *Artemisia rupestris* [Syn. *Artemisia dentata*; *Artemisia viridis*; *Artemisia viridifolia*], T4034 *Magnolia biloba*, T4045 *Magnolia officinalis*, T4048 *Magnolia rostrata*, T5223 *Prunus humilis* [Syn. *Cerasus humilis*], T5224 *Prunus japonica* [Syn. *Cerasus japonica*], T5225 *Prunus japonica* var. *nakaii*.
- food accumulation diarrhea** T2998 *Glycine max*, T6789 *Vitex negundo*.
- food accumulation distention and fullness** T0932 *Betula luminifera*, T1352 *Chamaenerion angustifolium* [Syn. *Epilobium angustifolium*], T2189 *Dioscorea althaeoides*, T5189 *Pothos chinensis*, T5419 *Raphanus sativus*, T5570 *Rosa roxburghii*, T6356 *Tetrapanax papyriferus*.
- food accumulation stomachache** T5183 *Potentilla griffithii* var. *velutina*.
- food damage** T2733 *Firmiana simplex*.
- food damage diarrhea** T5113 *Polygonum persicaria*.
- food damage vomiting and diarrhea** T0356 *Alpinia galanga*.
- food poisoning** T2715 *Fibraurea recisa*, T3000 *Glycine max*, T3162 *Helicia nilagirica*, T3984 *Lycoris chinensis*, T3986 *Lycoris radiata* [Syn. *Amaryllis radiata*], T3988 *Lycoris squamigera*.
- food retention and abdominal distention** T4088 *Malus pumila*.
- food stagnation** T0606 *Areca catechu*, T1478 *Citrus grandis*, T1769 *Crataegus cuneata*, T1771 *Crataegus kansuensis*, T1772 *Crataegus maximowiczii*, T1780 *Crataegus sanguinea*, T1781 *Crataegus scabrifolia*, T2838 *Gallus gallus domesticus*, T4100 *Mangifera indica*, T4428 *Nicotiana tabacum*, T4544 *Oryza sativa*, T5420 *Raphanus sativus*, T5719 *Sapindus mukorossi*, T5720 *Sapindus mukorossi*.
- food stagnation abdominal distention** T5167 *Porana racemosa*.
- food stagnation and abdominal fullness** T1381 *Choerospondias axillaris*.
- food stagnation and diarrhea** T5244 *Prunus tomentosa*.
- food stagnation distention and fullness** T1179 *Capparis masaiikai*.
- food stagnation in torpid stomach** T0417 *Amomum longiligulare*, T0419 *Amomum villosum*, T0420 *Amomum xanthioides*, T2758 *Fortunella crassifolia*, T2759 *Fortunella japonica*, T2760 *Fortunella margarita*.
- food stagnation with torpid intake** T3006 *Glycosmis citrifolia*.
- food-denying dysentery** T0144 *Acorus gramineus*, T0146 *Acorus tatarinowii*.
- foot lichen** T1046 *Buddleja davidii*, T2590 *Euphorbia hirta*, T3524 *Isodon sculponeata* [Syn. *Rabdosia sculponeata*], T3560 *Jatropha curcas*, T4307 *Mosla scabra* [Syn. *Mosla punctata*], T5026 *Plumbagella micrantha*, T5104 *Polygonum hydropiper*, T5105 *Polygonum hydropiper* var. *flaccidum* [Syn. *Polygonum flaccidum*], T5724 *Sapium sebiferum*.
- foot rot** T0180 *Adina pilulifera* [Syn. *Cephalanthus pilulifera*], T1205 *Carica papaya*, T1316 *Cephalanthus occidentalis*, T2136 *Desmos cochinchinensis* [Syn. *Desmos chinensis*], T4799 *Philydrum lanuginosum*.
- forking qi with pain** T3431 *Inula helenium*, T3437 *Inula racemosa*.

- fracture** T0002 *Abelmoschus moschatus* [Syn. *Hibiscus abelmoschus*], T0036 *Acanthopanax giraldii* [Syn. *Acanthopanax giraldii* var. *inermis*; *Eleutherococcus giraldii*], T0038 *Acanthopanax gracilistylus*, T0042 *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*], T0044 *Acanthopanax sessiliflorus*, T0122 *Aconitum pendulum*, T0282 *Alangium kurzii*, T0502 *Anisodus tanguticus* [Syn. *Scopolia tangutica*], T0515 *Anredera cordifolia* [Syn. *Baussingaultia cordifolia*; *Baussingaultia gracilis* f. *pseudobaselloides*; *Baussingaultia gracilis* var. *pseudobaselloides*], T0568 *Aralia chinensis*, T0569 *Aralia cordata*, T0570 *Aralia dasyphylla*, T0574 *Aralia fargesii*, T0708 *Arthomeris mairei* [Syn. *Polypodium mairei*], T0813 *Atalantia buxifolia* [Syn. *Severinia buxifolia*], T0871 *Barleria lupulina*, T1147 *Camellia oleifera*, T1206 *Carica papaya*, T1327 *Ceratostigma minus*, T1328 *Ceratostigma plumbaginoides*, T1329 *Ceratostigma willmottianum*, T1372 *Chloranthus serratus*, T1533 *Clausena dentata*, T1534 *Clausena dunniana*, T1535 *Clausena excavata*, T1644 *Conocephalum conicum*, T1799 *Crinum latifolium*, T1841 *Croton caudatus* var. *tomentosus*, T1853 *Croton oblongifolius* [Syn. *Croton laevigatus*], T1871 *Cucubalus baccifer*, T1963 *Cynanchum wallichii*, T1967 *Cynoglossum amabile*, T2612 *Euphorbia prolifera*, T2614 *Euphorbia pulcherrima*, T2734 *Fissistigma glaucescens* [Syn. *Melodorum glaucescens*], T2955 *Geum japonicum*, T3089 *Gypsophila acutifolia*, T3202 *Hemistepta lyrata* [Syn. *Hemistepta carthamoides*; *Saussurea carthamoides*], T3303 *Hydrangea chinensis*, T3373 *Hypoestes purpurea* [Syn. *Justicia purpurea*; *Hypoestes sinica*], T3387 *Ilesia polycarpa*, T3418 *Incarvillea arguta*, T3444 *Ipomoea aquatica* [Syn. *Convolvulus repens*; *Ipomoea reptans*], T3613 *Kadsura coccinea* [Syn. *Kadsura chenensis*; *Kadsura hainanensis*], T3624 *Kalopanax pictum*, T3625 *Kalopanax septemlobus*, T3685 *Lansea grandis* [Syn. *Lansea coromandelica*], T3778 *Leucaena glauca* [Syn. *Leucaena leucocephala*], T3880 *Lithospermum arvense*, T3991 *Lyonia ovalifolia*, T3995 *Lysidice rhodostegia*, T4109 *Marchantia polymorpha*, T4118 *Marsdenia oreophila*, T4143 *Meconopsis horridula*, T4221 *Micromelum falcatum*, T4223 *Micromelum integerrimum*, T4320 *Murraya kwangsiensis*, T4346 *Myrica nagi* [Syn. *Podocarpus nagi*], T4444 *Nothopanax davidii*, T4542 *Orthosiphon wulfenoides* [Syn. *Coleus wulfenoides*], T4678 *Paulownia fortunei*, T4679 *Paulownia tomentosa*, T4686 *Pedilanthus tithymaloides*, T4726 *Periploca forrestii*, T4938 *Piper boehmeriaefolium*, T5189 *Pothos chinensis*, T5270 *Psoralea corylifolia*, T5279 *Psychotria serpens*, T5402 *Radermachera sinica*, T5515 *Rhododendron micranthum*, T5555 *Rodgersia pinnata*, T5730 *Sarcandra glabra* [Syn. *Chloranthus glaber*], T5733 *Sarcococca vagans*, T5781 *Schefflera arboricola*, T5785 *Schefflera venulosa*, T5794 *Schisandra lancifolia*, T5819 *Scopolia acutangula* [Syn. *Anisodus acutangulus*], T5942 *Sida acuta*, T6051 *Sorbaria arborea*, T6052 *Sorbaria sorbifolia*, T6444 *Thunbergia grandiflora*, T6531 *Trillium camtschaticum*, T6540 *Tripterygium hypoglaucum*, T6580 *Tylophora floribunda*, T6618 *Uncaria homomalla* [Syn. *Uruparia homomalla*; *Uruparia tonkinensis*; *Uruparia lanosa* var. *parviflora*], T6738 *Viburnum odoratissimum*, T2387 *Epilobium hirsutum*, T2540 *Euonymus fortunei*, T3996 *Lysimachia candida*, T4031 *Maesa perlaris*, T6567 *Tupistra wattii* [Syn. *Campylandra wattii*], T6735 *Viburnum dilatatum*, T6883 *Zanthoxylum myriacanthum*.
- fracture with damage** T3124 *Hedyotis capitellata*.
- fracture with wound sinew** T4821 *Pholidota articulata*.
- frequent dreaming** T5108 *Polygonum multiflorum*, T5697 *Salvia trijuga*, T6919 *Ziziphus jujuba* var. *spinosa*.
- frequent urination** T0323 *Allium tuberosum*, T0360 *Alpinia oxyphylla*, T0793 *Astragalus complanatus*, T1411 *Cibotium barometz* [Syn. *Polypodium barometz*], T1604 *Coeloglossum viride* [Syn. *Coeloglossum viride* var. *bracteatum*], T2188 *Dioscorea alata*, T2190 *Dioscorea batatas* [Syn. *Dioscorea opposita*], T2202 *Dioscorea japonica*, T2837 *Gallus gallus domesticus*, T2838 *Gallus gallus domesticus*, T3077 *Gymnadenia conopsea*, T3568 *Juglans regia*, T3770 *Lespedeza cuneata*, T4279 *Morina chinensis*, T4600 *Panax ginseng* [Syn. *Panax schinseng*], T4786 *Phasianus colchicus*, T5270 *Psoralea corylifolia*, T5569 *Rosa multiflora*, T6754 *Vigna unguiculata*.
- frequent urination and enuresis** T5593 *Rubus idaeus*, T5791 *Schisandra chinensis*, T5802 *Schisandra sphenanthera*.
- frequent urination at night** T2962 *Ginkgo biloba*.
- frequent urination in children** T1826 *Crotalaria mucronata*.
- fright epilepsy** T0427 *Ampelopsis japonica* [Syn. *Paullinia japonica*], T0986 *Bos taurus domesticus*; *Bubalus bubalis*, T0987 *Bos taurus domesticus*; *Bubalus bubalis*, T1804 *Cristaria plicata*; *Hyriopsis cumingii*, T1841 *Croton caudatus* var. *tomentosus*, T1907 *Curcuma wengujin*, T2039 *Datura innoxia*, T2043 *Datura metel*, T2047 *Datura stramonium*, T2290 *Duchesnea indica*, T3329 *Hyoscyamus niger*, T3868 *Liquidambar orientalis*, T5086 *Polygala sibirica*, T5088 *Polygala tenuifolia*, T6457 *Tilia japonica*, T6458 *Tilia miqueliana*.
- fright palpitation** T1808 *Crocus sativus*, T4400 *Nelumbo nucifera*, T5701 *Salvia yunnanensis*, T6919 *Ziziphus jujuba* var. *spinosa*.
- fright palpitation and amnesia** T0142 *Acorus calamus*, T4600 *Panax ginseng* [Syn. *Panax schinseng*].
- fright palpitation and fearful throbbing** T0944 *Biota orientalis* [Syn. *Thuja orientalis*; *Platycladus orientalis*], T6918 *Ziziphus jujuba* var. *spinosa*.
- fright palpitation and insomnia** T4599 *Panax ginseng* [Syn. *Panax schinseng*], T5086 *Polygala sibirica*, T5088 *Polygala tenuifolia*, T5169 *Poria cocos*.
- fright palpitation and vacuity vexation** T3832 *Lilium brownii* var. *viridulum* [Syn. *Lilium brownii* var. *colchesteri*], T3835 *Lilium longiflorum*, T3836 *Lilium pumilum* [Syn. *Lilium tenuifolium*], T3839 *Lilium tigrinum* [Syn. *Lilium lancifolium*].
- fright palpitation due to heart heat** T3304 *Hydrangea macrophylla*.
- fright wind** T0338 *Aloe ferox*, T0347 *Aloe vera* [Syn. *Aloe barbadensis*], T0348 *Aloe vera* var. *chinensis*, T0617 *Arisaema amurense*, T0618 *Arisaema consanguineum*, T0620 *Arisaema heterophyllum*, T2272 *Drymaria diandra* [Syn. *Drymaria cordata* ssp. *diandra*], T3764 *Lepisorus thunbergianus*, T4903 *Pinellia pedatisecta*, T5871 *Selenarctos thibetanus*; *Ursus arctos*, T5934 *Seseli meirei*, T5937 *Seseli yunnanense*.
- fright wind and convulsion** T0975 *Bombyx mori*, T2908 *Gentiana*
- fracture and pain** T3560 *Jatropha curcas*.
- fracture due to knocks and falls** T0045 *Acanthopanax trifoliatum*, T0295 *Albizia odoratissima*, T2262 *Dregea sinensis*, T2347 *Embelia*

*cephalantha*, T2921 *Gentiana manshurica*, T2928 *Gentiana rigescens*, T2930 *Gentiana scabra*, T2938 *Gentiana triflora*, T4710 *Pericampylus glaucus*, T4796 *Pheretima aspergillum*; *Allolobophora caliginosa trapezoides*.

**frostbite [ = kibe]** T0122 *Aconitum pendulum*, T0414 *Ammopiptanthus mongolicus* [Syn. *Piptanthus mongolicus*], T0827 *Aucuba chinensis* ssp. *omeiensis*, T0977 *Bombyx mori*, T1007 *Brassica juncea*, T1186 *Capsicum annuum*, T1187 *Capsicum frutescens*, T1594 *Cocos nucifera*, T1769 *Crataegus cuneata*, T1771 *Crataegus kansuensis*, T1772 *Crataegus maximowiczii*, T1780 *Crataegus sanguinea*, T1781 *Crataegus scabrifolia*, T3388 *Ilex chinensis* [Syn. *Ilex purpurea*], T3675 *Lagopsis supina*, T3925 *Loranthus parasiticus* [Syn. *Loranthus chinensis*; *Taxillus chinensis*], T4157 *Melia azedarach*. T4519 *Opuntia dilleanii*, T4521 *Opuntia vulgaris*, T4578 *Paederia scandens*, T4975 *Piptanthus nanus*, T5419 *Raphanus sativus*, T6006 *Solanum melongena*.

**frostbite flowing water and pus** T4978 *Pisolithus tinctorius* [Syn. *Lycoperdon capitatum*; *Scleroderma tinctorium*].

**fullness and oppression in chest and diaphragm** T0480 *Angelica decursiva* [Syn. *Peucedanum decursivum*], T1007 *Brassica juncea*, T3819 *Ligusticum brachylobum*, T4761 *Peucedanum longshengensis*, T4768 *Peucedanum praeruptorum*, T4769 *Peucedanum rubricaula*.

**fullness and oppression in chest and stomach duct** T6561 *Tulipa gesneriana*.

**fullness and oppression in heart and abdomen** T5215 *Prunus amygdalus*.

**fullness in chest** T6497 *Tribulus terrestris*.

**fullness in chest and rapid asthma** T1960 *Cynanchum stauntonii*.

**fullness in chest and rib-side pain** T5011 *Platycodon grandiflorum*, T5958 *Sinapis alba* [Syn. *Brassica alba*; *Brassica hirta*].

**fulminant fever with vexation and thirst** T4482 *Oenanthe javanica*.

**furunculosis** T5330 *Punica granatum*.

**galactostasis** T0273 *Akebia quinata*, T0273 *Akebia quinata*, T0277 *Akebia trifoliata*, T0277 *Akebia trifoliata*, T0279 *Akebia trifoliata* var. *australis*, T0279 *Akebia trifoliata* var. *australis*, T1352 *Chamaenerion angustifolium* [Syn. *Epilobium angustifolium*], T1508 *Citrus sinensis*, T2262 *Dregea sinensis*, T2316 *Echinops grijsii*, T2317 *Echinops ritro*, T3193 *Hemerocallis fulva*, T3195 *Hemerocallis lilio-asphodelus*, T3197 *Hemerocallis minor*, T3282 *Hordeum vulgare*, T3340 *Hypericum ascyron*, T3361 *Hypericum perforatum*, T3662 *Lactuca sativa*, T3867 *Liquidambar formosana* [Syn. *Liquidambar taiwaniana*], T3933 *Luffa acutangula*, T3934 *Luffa cylindrica*, T4106 *Manis pentadactyla*, T4178 *Melodinus hemsleyanus*, T5466 *Rhaponticum uniflorum*, T6356 *Tetrapanax papyriferus*, T6668 *Vaccaria segetalis* [Syn. *Vaccaria pyramidata*], T6901 *Zea mays*.

**galloping gan of teeth and gum** T2435 *Eriocheir sinensis*, T4471 *Ocimum basilicum*.

**galstones** T0502 *Anisodus tanguticus* [Syn. *Scopolia tangutica*], T1406 *Chrysosplenium nudicaule*, T1903 *Curcuma aromatica*, T1905 *Curcuma longa*, T2838 *Gallus gallus domesticus*, T3156 *Helichrysum arenarium*, T3998 *Lysimachia christinae*, T4000 *Lysimachia congestiflora*, T5472 *Rheum officinale*, T5474 *Rheum palmatum*, T5481 *Rheum tanguticum*, T5957 *Silybum marianum*, T6789 *Vitex*

*negundo*, T6901 *Zea mays*.

**gan accumulation** T0541 *Apis cerana*, T0877 *Bauhinia championii*, T1051 *Bufo bufo gargarizans*; *Bufo melanostictus*, T1591 *Cocos nucifera*, T1593 *Cocos nucifera*, T2048 *Daucus carota*, T2115 *Dermatocarpon minutum*, T2336 *Elephas maximus*, T2927 *Gentiana rhodantha*, T4102 *Mangifera indica*, T5106 *Polygonum lapathifolium*, T5179 *Potentilla anserina*, T5423 *Rauvolfia verticillata*, T5425 *Rauvolfia verticillata* f. *rubrocarpa*, T5426 *Rauvolfia verticillata* var. *hainanensis*, T5427 *Rauvolfia vomitoria*, T5435 *Rauvolfia latifrons*, T5441 *Rauwolfia perakensis*, T5528 *Rhodomyrtus tomentosa*, T5576 *Rostellularia procumbens* [Syn. *Justicia procumbens*], T5719 *Sapindus mukorossi*, T6474 *Toona ciliata*, T6475 *Toona sinensis*, T6599 *Ulva lactuca*, T6600 *Ulva pertusa*, T6602 *Umbilicaria hypococcinea*, T6656 *Ustilago maydis*, T6732 *Vespertilio superans*.

**gan disease** T0976 *Bombyx mori*, T3645 *Kummerowia striata*, T4851 *Physalis minima*, T5407 *Rana nigromaculata*; *Rana plancyi*, T6279 *Tagetes erecta*.

**gan of nose** T1150 *Camellia sinensis* [Syn. *Thea sinensis*], T6409 *Thalictrum simplex* [Syn. *Thalictrum simplex* var. *brevipes*].

**gan of teeth and gum** T2131 *Desmodium pulchellum* [Syn. *Phyllodium pulchellum*], T2838 *Gallus gallus domesticus*, T2866 *Garcinia morella*, T3277 *Homo sapiens*, T3865 *Lippia nodiflora*, T4303 *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*, T6615 *Uncaria gambir*.

**gan sore pox toxin** T2841 *Gallus gallus domesticus*.

**gastric ulcer** T0543 *Apis mellifera ligustica*, T0825 *Atropa belladonna*, T1101 *Caesalpinia decapetala*, T1884 *Cudrania cochinchinensis*, T2783 *Fritillaria cirrhosa*, T2784 *Fritillaria delavayi*, T2792 *Fritillaria przewalskii*, T2796 *Fritillaria unibracteata*, T2798 *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*], T3011 *Glycyrrhiza aspera*, T3013 *Glycyrrhiza glabra*, T3015 *Glycyrrhiza inflata*, T3016 *Glycyrrhiza kansuensis*, T3021 *Glycyrrhiza squamulosa*, T3022 *Glycyrrhiza uralensis*, T3023 *Glycyrrhiza yunnanensis*, T3164 *Helicteres isora*, T3229 *Hericium erinaceus* [Syn. *Hydnum erinaceus*], T3613 *Kadsura coccinea* [Syn. *Kadsura chenensis*; *Kadsura hainanensis*], T4082 *Mallotus japonicus*, T5183 *Potentilla griffithii* var. *velutina*, T6145 *Stichopus japonicus*, T6275 *Tacca chantrieri* [Syn. *Tacca minor*; *Tacca esquirolii*].

**gastritis** T1055 *Bupleurum angustissimum*, T1056 *Bupleurum aureum*, T1058 *Bupleurum chaishouii*, T1059 *Bupleurum chinense*, T1065 *Bupleurum longiradiatum*, T1066 *Bupleurum marginatum*, T1067 *Bupleurum marginatum* var. *stenophyllum*, T1072 *Bupleurum scorzonerifolium*, T1073 *Bupleurum sibiricum*, T1075 *Bupleurum smithii* var. *parvifolium*, T1078 *Bupleurum wenchuanense*, T1079 *Bupleurum yinchowense*, T1727 *Corydalis mucronifera*, T1954 *Cynanchum chinense*, T3496 *Isodon japonica* [Syn. *Rabdosia japonica*], T4194 *Menyanthes trifoliata*, T4248 *Mimosa pudica*, T6224 *Swertia kouitchensis*, T6231 *Swertia pseudochinensis*, T6339 *Tephrosia purpurea*, T6691 *Veratrum baillonii*.

**gastritis with edema** T1954 *Cynanchum chinense*.

**gastroenteritis** T0137 *Aconitum tanguticum*, T2421 *Erigeron annuus*, T2563 *Eupatorium japonicum*, T2715 *Fibraurea recisa*, T3092 *Halenia corniculata*, T4144 *Meconopsis nepaulensis*, T6122 *Stephania*

- dielsiana*, T6275 *Tacca chantrieri* [Syn. *Tacca minor*; *Tacca esquirolii*].
- gastrointestinal accumulation** T2658 *Fagopyrum esculentum*.
- gastrointestinal damp-heat diarrhea** T4887 *Picrorhiza kurrooa*, T4888 *Picrorhiza scrophulariiflora*.
- gastrointestinal flatulence** T3263 *Holarrhena antidysenterica*.
- gastrointestinal spasm** T1750 *Corydalis yanhusuo* [Syn. *Corydalis turtschaninovii* f. *yanhusuo*].
- gastrointestinal ulcer** T0060 *Achillea alpina* [Syn. *Achillea sibirica*].
- gastroptosis** T1055 *Bupleurum angustissimum*, T1056 *Bupleurum aureum*, T1058 *Bupleurum chaishouii*, T1059 *Bupleurum chinense*, T1065 *Bupleurum longiradiatum*, T1066 *Bupleurum marginatum*, T1067 *Bupleurum marginatum* var. *stenophyllum*, T1072 *Bupleurum scorzonrifolium*, T1073 *Bupleurum sibiricum*, T1075 *Bupleurum smithii* var. *parvifolium*, T1078 *Bupleurum wenchuanense*, T1079 *Bupleurum yinchowense*.
- gastrospasm** T0572 *Aralia elata*, T0625 *Aristolochia contorta*, T0627 *Aristolochia debilis* [Syn. *Aristolochia longa*].
- ge syndrome** T4369 *Nandina domestica*.
- general arthralgia** T2995 *Gloriosa superba*.
- generalized fever** T5826 *Scrophularia buergeriana*, T5828 *Scrophularia ningpoensis*.
- generalized fever and aversion to cold** T4101 *Mangifera indica*.
- generalized fever with macule** T1950 *Cynanchum ascyrifolium*, T1951 *Cynanchum atratum*, T1962 *Cynanchum versicolor*, T2952 *Gerbera piloselloides*, T6582 *Tylophora ovata*.
- generalized pain** T3118 *Hedychium coronarium*, T3674 *Laggera alata*, T4029 *Maesa japonica*, T4551 *Osmorhiza aristata* var. *laxa*.
- genital carcinoma** T1904 *Curcuma kwangsiensis*, T1909 *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*].
- genital sweating** T4954 *Piper longum*, T5374 *Quercus infectoria*.
- genital swelling** T1662 *Coptis chinensis*, T1663 *Coptis chinensis* var. *brevisepala*, T1664 *Coptis deltoidea*, T1669 *Coptis omeiensis*, T1670 *Coptis teetoides* [Syn. *Coptis teeta*], T4714 *Perilla frutescens*.
- genital swelling and itch** T2908 *Gentiana cephalantha*, T2921 *Gentiana manshurica*, T2928 *Gentiana rigescens*, T2930 *Gentiana scabra*, T2938 *Gentiana triflora*.
- gingiva painful swelling** T0584 *Arctium lappa*, T3201 *Hemiphragma heterophyllum*, T5267 *Psidium guajava*, T6043 *Sophora subprostrata* [Syn. *Sophora tonkinensis*].
- gingiva ulcerating** T3420 *Incarvillea sinensis*.
- gingivitis** T6095 *Stachytarpheta jamaicensis*.
- globus hystericus** T1366 *Chimonanthus fragrans* [Syn. *Chimonanthus praecox*], T5139 *Poncirus trifoliata*, T5226 *Prunus mume*.
- glomerulonephritis** T6542 *Tripterygium wilfordii*.
- glomus** T0357 *Alpinia japonica*.
- glomus accumulation** T6541 *Tripterygium regelii*.
- glomus and congestion in chest and diaphragm** T4086 *Malus asiatica*.
- glomus and oppression in chest and diaphragm** T1808 *Crocus sativus*.
- glomus and oppression in chest and stomach duct** T0212 *Agastache rugosus*, T1978 *Cyperus rotundus*.
- glomus distention in stomach duct and abdomen** T1490 *Citrus limon*, T1494 *Citrus limonia*, T1937 *Cydonia oblonga*.
- glomus fullness** T0472 *Anethum graveolens*, T3850 *Lindera glauca*, T3928 *Lotus corniculatus*, T4720 *Perilla frutescens* var. *arguta*, T4723 *Perilla frutescens* var. *crispa*.
- glomus fullness in chest and diaphragm** T3426 *Inula britannica*, T3427 *Inula britannica*, T3428 *Inula britannica* var. *chinensis*, T3433 *Inula japonica*, T3434 *Inula linariaefolia*.
- glomus in chest** T0819 *Atractylodes chinensis*, T0821 *Atractylodes japonica*, T0823 *Atractylodes lancea*, T1467 *Citrus aurantium*, T4904 *Pinellia ternata*, T5140 *Poncirus trifoliata*.
- glomus qi** T0988 *Bos taurus domesticus*; *Bubalus bubalis*.
- goiter and carcinoma of neck** T0847 *Baccharis indica* [Syn. *Pluchea indica*], T1385 *Chorda filum*, T2365 *Enteromorpha clathrata*, T4403 *Nemacystus decipiens* [Syn. *Mesogloea decipiens*; *Cladosiphon decipiens*], T6257 *Syngnathus acus*, T6599 *Ulva lactuca*, T6600 *Ulva pertusa*.
- goiter and carcinomas of neck** T5740 *Sargassum vachellianum*.
- goiter and tuberculosis** T0275 *Akebia quinata*, T1486 *Citrus junos*, T2191 *Dioscorea bulbifera*, T2302 *Dysosma pleiantha* [Syn. *Podophyllum pleianthum*], T2304 *Dysosma veitchii*, T2305 *Dysosma versipellis* [Syn. *Podophyllum versipelle*], T2321 *Ecklonia kurome*, T2525 *Eucheuma muricatum*, T2756 *Forsythia suspensa*, T2994 *Gloiopeltis furcata*, T3308 *Hydrangea umbellata*, T3678 *Laminaria japonica*, T5171 *Porphyra tenera*, T5214 *Prunella vulgaris*, T6640 *Undaria pinnatifida*, T6925 *Zostera marina*.
- goiters with phlegm node** T4904 *Pinellia ternata*.
- goose-foot wind** T1867 *Cryptomeria fortunei*, T3410 *Impatiens balsamina*, T3411 *Impatiens balsamina*, T5026 *Plumbagella micrantha*, T5548 *Ricinus communis*.
- goose-mouth sore** T4080 *Mallotus apelta*, T4618 *Panicum miliaceum*, T6268 *Syzygium samarangense*, T6393 *Thalictrum ichangense* [Syn. *Thalictrum tripeltatum*; *Thalictrum multipeltatum*].
- great wind sore** T0145 *Acorus gramineus*.
- gum erosion** T0293 *Albizia lebeck*.
- gum hemorrhage** T0155 *Actinidia arguta*, T0805 *Astragalus sinicus*, T0867 *Baphicacanthus cusia* [Syn. *Strobilanthes cusia*], T1118 *Callicarpa formosana*, T1119 *Callicarpa japonica*, T3278 *Homo sapiens*, T4796 *Pheretima aspergillum*; *Allolobophora caliginosa trapezoides*, T5207 *Prismatomeris tetrandra*, T5606 *Rumex acetosa*, T6552 *Trollius chinensis* [Syn. *Trollius asiaticus* var. *chinensis*], T6553 *Trollius ledebourii*.
- gum swelling** T0906 *Berberis julianae*, T4854 *Physalis pubescens*, T5651 *Salix babylonica*.
- gum swelling and pain** T0476 *Angelica anomala*, T0571 *Aralia decaisneana*, T1662 *Coptis chinensis*, T1663 *Coptis chinensis* var. *brevisepala*, T1664 *Coptis deltoidea*, T1669 *Coptis omeiensis*, T1670 *Coptis teetoides* [Syn. *Coptis teeta*], T3396 *Ilex pubescens*, T3397 *Ilex pubescens* var. *glaber*, T3457 *Iris dichotoma*, T4848 *Physalis angulata*, T5199 *Primula malacoides*, T5852 *Sedum bulbiferum*, T6439 *Thuja orientalis* [Syn. *Platyclusus orientalis*; *Biota orientalis*], T6552 *Trollius chinensis* [Syn. *Trollius asiaticus* var. *chinensis*], T6553 *Trollius ledebourii*, T6791 *Vitex rotundifolia* [Syn. *Vitex trifolia* var. *simplicifolia*], T6793 *Vitex trifolia*.
- gum swelling erosion** T1007 *Brassica juncea*.
- habitual abortion** T4505 *Ophiocephalus argus*.

- habitual constipation** T1238 *Cassia mimosoides*, T1240 *Cassia obtusifolia*, T1247 *Cassia sophera*, T1250 *Cassia tora*, T5454 *Rhamnus cathartica*, T5460 *Rhamnus frangula* [Syn. *Frangula alnus*].
- hacking of blood** T0267 *Ajuga nipponensis*, T0600 *Ardisia mamillata* [Syn. *Tinus mamillata*], T5182 *Potentilla discolor*, T5701 *Salvia yunnanensis*.
- hacking of pus blood** T3233 *Heteropappus altaicus*.
- hair loss** T3860 *Linum usitatissimum*.
- hair loss during convalescence** T5927 *Sesamum indicum* [Syn. *Sesamum orientale*].
- hard glomus below heart** T3427 *Inula britannica*, T3428 *Inula britannica* var. *chinensis*, T3434 *Inula linariaefolia*.
- hard swelling** T6521 *Trifolium pratense*, T6522 *Trifolium repens*.
- hasten delivery** T1595 *Codium fragile*.
- hasty asthma** T4600 *Panax ginseng* [Syn. *Panax schinseng*].
- head louse** T1361 *Chenopodium ambrosioides*, T1645 *Consolida ajacis* [Syn. *Delphinium ajacis*], T3630 *Kleinhovia hospita*.
- head sore** T4843 *Phyllanthus urinaria*.
- head wind** T0569 *Aralia cordata*, T0574 *Aralia fargesii*, T2657 *Fagopyrum cymosum* [Syn. *Polygonum cymosum*], T5234 *Prunus persica*, T6792 *Vitex trifolia*, T6843 *Xanthium sibiricum* [Syn. *Xanthium strumarium*].
- head wind dizziness** T0988 *Bos taurus domesticus*; *Bubalus bubalis*, T4773 *Peucedanum terebinthaceum*.
- head wind headache** T0060 *Achillea alpina* [Syn. *Achillea sibirica*], T0077 *Aconitum balfourii*, T0084 *Aconitum carmichaeli*, T0105 *Aconitum karakolicum*, T0108 *Aconitum kusnezoffii*, T0957 *Blumea balsamifera*, T4828 *Photinia serrulata*.
- head wind white scaling** T5531 *Rhus chinensis* [Syn. *Rhus semialata*].
- headache** T0045 *Acanthopanax trifoliatum*, T0080 *Aconitum bullatifolium* var. *homotrichum* [Syn. *Aconitum nagarum*], T0088 *Aconitum coreanum*, T0302 *Alhagi pseudalhagi*, T0319 *Allium schoenoprasum*, T0492 *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*], T0553 *Apocynum venetum*, T0567 *Aralia armata*, T0569 *Aralia cordata*, T0574 *Aralia fargesii*, T0582 *Archangelica brevicaulis* [Syn. *Angelica brevicaulis*; *Angelica brevicaulis*], T0584 *Arctium lappa*, T0644 *Armillaria mellea*, T0645 *Armillariella mellea*, T0708 *Arthromeris mairei* [Syn. *Polypodium mairei*], T0724 *Asarum caulescens*, T0726 *Asarum forbesii*, T0727 *Asarum fukienense*, T0728 *Asarum heterotropoides* var. *mandshuricum*, T0729 *Asarum maximum*, T0731 *Asarum sieboldii*, T0732 *Asarum sieboldii* var. *seoulensis*, T0952 *Blechnum orientale*, T1084 *Buthus martensi*, T1152 *Camellia sinensis* [Syn. *Thea sinensis*], T1288 *Celastrus orbiculatus* [Syn. *Celastrus articulatus*], T1289 *Celastrus orbiculatus* [Syn. *Celastrus articulatus*], T1552 *Cleome viscosa*, T1583 *Cnidium officinale* [Syn. *Ligusticum officinale*], T1586 *Cocculus laurifolius*, T1641 *Conioselinum vaginatum*, T1697 *Cornus controversa* [Syn. *Bothrocaryum controversum*], T1943 *Cymbopogon goeringii*, T1986 *Cyrtomium fortunei*, T2028 *Daphne odora*, T2030 *Daphne retusa*, T2031 *Daphne tangutica*, T2130 *Desmodium gangeticum*, T2257 *Dracocephalum moldavicum*, T2343 *Elsholtzia splendens*, T2434 *Eriocaulon buergerianum*, T2628 *Euphrasia officinalis*, T2643 *Evodia meliifolia*, T2697 *Ferula borealis*, T2890 *Gastrodia elata*, T3001 *Glycine max*, T3040 *Gomphrena globosa*, T3118 *Hedychium coronarium*, T3163 *Helicteres angustifolia*, T3213 *Heracleum hemsleyanum*, T3214 *Heracleum lanatum*, T3217 *Heracleum moellendorffii* [Syn. *Heracleum microcarpum*; *Heracleum morifolium*], T3222 *Heracleum scabridum*, T3228 *Heracleum yungningense*, T3246 *Hibiscus syriacus*, T3283 *Hosta sieboldiana*, T3303 *Hydrangea chinensis*, T3334 *Hypecoum leptocarpum*, T3392 *Ilex kudingcha*, T3393 *Ilex latifolia*, T3548 *Ixeris sonchifolia*, T3779 *Leucas aspera*, T3785 *Levisticum officinale*, T3796 *Libanotis buchtormensis*, T3820 *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*], T3829 *Ligustrum robustum*, T3845 *Linaria vulgaris*, T3847 *Lindera angustifolia*, T3950 *Lychnis fulgens*, T4001 *Lysimachia davurica*, T4035 *Magnolia biondii* [Syn. *Magnolia fargesii*], T4038 *Magnolia denudata* [Syn. *Magnolia heptapata*], T4041 *Magnolia liliiflora*, T4052 *Magnolia sprengeri*, T4144 *Meconopsis nepaulensis*, T4145 *Meconopsis punicea*, T4170 *Melilotus albus*, T4186 *Mentha piperita*, T4190 *Mentha spicata*, T4317 *Murraya euchrestifolia* [Syn. *Clausena euchrestifolia*], T4386 *Nardostachys chinensis*, T4387 *Nardostachys jatamansi*, T4629 *Papaver nudicaule*, T4630 *Papaver nudicaule* ssp. *amurense*, T4631 *Papaver nudicaule* var. *chinense*, T4689 *Peganum nigellastrum*, T4821 *Pholidota articulata*, T4904 *Pinellia ternata*, T4953 *Piper longum*, T5021 *Pleurospermum rivulorum*, T5234 *Prunus persica*, T5301 *Pterocarpus indicus*, T5428 *Rauwolfia yunnanensis*, T5528 *Rhodomyrtus tomentosa*, T5575 *Rosmarinus officinalis*, T5592 *Rubus hirsutus*, T5609 *Rumex hastatus*, T5640 *Sabina vulgaris*, T5657 *Salsola collina*, T5781 *Schefflera arboricola*, T5804 *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*], T5934 *Seseli meirei*, T5937 *Seseli yunnanense*, T5963 *Sinodielsia yunnanensis*, T5969 *Sium latifolium*, T6000 *Solanum indicum*, T6024 *Solidago virgaurea* var. *leiocarpa* [Syn. *Solidago decurrens*], T6076 *Spinacia oleracea*, T6079 *Spiraea japonica*, T6082 *Spiraea japonica* var. *fortunei*, T6128 *Stephania hernandifolia*, T6139 *Sterculia lychnophora*, T6250 *Symplocos caudata*, T6359 *Teucrium bidentatum*, T6497 *Tribulus terrestris*, T6653 *Usnea diffracta*, T6654 *Usnea longissima*.
- headache (especially in forehead and superciliary region)** T0478 *Angelica dahurica* [Syn. *Angelica porphyrocaulis*].
- headache (herb)** T4859 *Physochlaina physaloides*.
- headache**<sup>[5509]</sup> T4797 *Phillyrea latifolia*.
- headache and dizziness** T0544 *Apium graveolens*, T1199 *Carduus acanthoides*, T1200 *Carduus crispus*, T1393 *Chrysanthemum indicum*, T1804 *Cristaria plicata*; *Hyriopsis cumingii*, T4580 *Paeonia albiflora* [Syn. *Paeonia lactiflora*], T5214 *Prunella vulgaris*.
- headache and generalized pain** T0784 *Astilbe chinensis*, T2367 *Ephedra equisetina*, T2368 *Ephedra gerardiana*, T2369 *Ephedra intermedia*, T2372 *Ephedra likiangensis*, T2373 *Ephedra minuta*, T2375 *Ephedra monosperma*, T2379 *Ephedra saxatilis*, T2380 *Ephedra sinica*, T5423 *Rauwolfia verticillata*, T5425 *Rauwolfia verticillata* f. *rubrocarpa*, T5426 *Rauwolfia verticillata* var. *hainanensis*, T5427 *Rauwolfia vomitoria*, T5435 *Rauwolfia latifrons*, T5441 *Rauwolfia perakensis*, T5727 *Saposhnikovia divaricata* [Syn. *Ledebourielia seseloides*], T6457 *Tilia japonica*, T6458 *Tilia miqeliiana*.
- headache and nasal congestion** T0476 *Angelica anomala*, T4039 *Magnolia grandiflora*, T6910 *Zingiber officinale*.



- headache and red eyes** T1241 *Cassia occidentalis*, T4184 *Mentha haplocalyx* [Syn. *Mentha canadaensis*; *Mentha arvensis* var. *haplocalyx*; *Mentha arvensis*], T6373 *Thalictrum alpinum*.
- headache and sore pharynx** T4413 *Nepeta cataria*.
- headache due to externally contracted wind-cold** T3822 *Ligusticum jeholense*, T3824 *Ligusticum sinense*.
- headache due to externally contracted wind-heat** T0049 *Acer ginnala*, T4976 *Piptanthus nepalensis*, T5119 *Polygonum thunbergii*, T5312 *Pueraria edulis*, T5313 *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*], T5316 *Pueraria omeiensis*, T5318 *Pueraria phaseoloides*, T5320 *Pueraria thomsonii*.
- headache due to febrile disease** T1045 *Bubalus bubalis*.
- headache without sweating** T2367 *Ephedra equisetina*, T2368 *Ephedra gerardiana*, T2369 *Ephedra intermedia*, T2372 *Ephedra likiangensis*, T2373 *Ephedra minuta*, T2375 *Ephedra monosperma*, T2379 *Ephedra saxatilis*, T2380 *Ephedra sinica*, T4304 *Mosla chinensis* [Syn. *Orthodon chinensis*], T4445 *Notopterygium forbesii* [Syn. *Notopterygium franchetii*], T4446 *Notopterygium incisum*.
- heart disease** T1452 *Cissampelos pareira*, T1453 *Cissampelos pareira* var. *hirsute*, T3394 *Ilex paraguariensis*.
- heart palpitation** T5661 *Salvia bowleyana*.
- heartache** T1182 *Capra hircus*; *Ovis aries*.
- heart-spleen vacuity** T3743 *Lentinus lepideus*.
- heat bind and accumulation** T1229 *Cassia acutifolia*, T1230 *Cassia angustifolia*.
- heat bind constipation** T5469 *Rheum hotaoense*, T5607 *Rumex crispus*, T6139 *Sterculia lychnophora*.
- heat bind in bladder** T5002 *Plantago asiatica*, T5004 *Plantago depressa*, T5007 *Plantago major*.
- heat blood strangury** T0979 *Bombyx mori*.
- heat cough** T4846 *Physalis alkekengi* var. *franchetii*.
- heat diarrhea** T0853 *Baeckea frutescens*, T4616 *Pandanus tectorius*, T5099 *Polygonum bistorta*.
- heat dysentery** T0696 *Artemisia sieversiana*, T2221 *Diospyros kaki*, T2766 *Fraxinus bungeana*, T2767 *Fraxinus chinensis*, T2774 *Fraxinus paxiana*, T2777 *Fraxinus rhynchophylla* [Syn. *Fraxinus chinensis* var. *rhynchophylla*], T2779 *Fraxinus stylosa*, T2780 *Fraxinus szaboana* [Syn. *Fraxinus chinensis* var. *acuminata*], T3476 *Isatis indigotica*, T3865 *Lippia nodiflora*, T5121 *Polygonum tinctorium*, T5312 *Pueraria edulis*, T5313 *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*], T5316 *Pueraria omeiensis*, T5318 *Pueraria phaseoloides*, T5320 *Pueraria thomsonii*, T5605 *Rumex acetosa*.
- heat entering construction-blood** T5680 *Salvia miltiorrhiza*, T5681 *Salvia miltiorrhiza* f. *alba*, T5688 *Salvia przewalskii*, T5826 *Scrophularia buergeriana*, T5828 *Scrophularia ningpoensis*.
- heat entering pericardium** T4401 *Nelumbo nucifera*.
- heat impediment** T4799 *Philydrum lanuginosum*.
- heat impediment swelling and pain** T4124 *Matricaria chamomilla* [Syn. *Matricaria recutita*], T5680 *Salvia miltiorrhiza*, T5681 *Salvia miltiorrhiza* f. *alba*, T5688 *Salvia przewalskii*.
- heat impediment** T2056 *Debregeasia longifolia*.
- heat pain in stomach duct and abdomen** T6463 *Tinospora capillipes*, T6467 *Tinospora sagittata*.
- heat sore** T2840 *Gallus gallus domesticus*.
- heat strangury** T0073 *Achyranthes bidentata*, T0264 *Ajuga forrestii*, T0297 *Alchornea trewioides*, T0721 *Arundina chinensis*, T0722 *Arundo donax*, T0736 *Asclepias curassavica*, T0853 *Baeckea frutescens*, T0906 *Berberis julianae*, T1001 *Brachystemma calycinum*, T1251 *Cassytha filiformis*, T1526 *Cladonia rangiferina*, T1831 *Crotalaria sessiliflora*, T1950 *Cynanchum ascyrifolium*, T1951 *Cynanchum atratum*, T1962 *Cynanchum versicolor*, T2134 *Desmodium styracifolium*, T2143 *Dianthus chinensis*, T2145 *Dianthus superbus*, T2147 *Dianthus versicolor*, T2325 *Eichhornia crassipes*, T2628 *Euphrasia officinalis*, T2950 *Gerbera anandria* [Syn. *Leibnitzia anandria*], T2952 *Gerbera piloselloides*, T2973 *Glechoma longituba*, T2974 *Glechoma lungituba*, T3284 *Houttuynia cordata*, T3288 *Humulus japonicus* [Syn. *Humulus scandens*], T3528 *Isodon ternifolia*, T3529 *Isodon ternifolius*, T3953 *Lycianthes biflora*, T3990 *Lygodium japonicum*, T3998 *Lysimachia christinae*, T4121 *Marsilea quadrifolia*, T4252 *Mirabilis jalapa*, T4369 *Nandina domestica*, T4370 *Nandina domestica*, T4456 *Nymphoides peltatum*, T4800 *Phlegmariurus fordii*, T4840 *Phyllanthus niruri*, T4848 *Physalis angulata*, T4854 *Physalis pubescens*, T5098 *Polygonum aviculare*, T5354 *Pyrrosia davidii*, T5355 *Pyrrosia drakeana*, T5356 *Pyrrosia gralla*, T5357 *Pyrrosia lingua*, T5358 *Pyrrosia petiolosa*, T5360 *Pyrrosia sheareri*, T5838 *Scutellaria galericulata*, T5857 *Sedum sarmentosum*, T5954 *Silene fortunei*, T6024 *Solidago virgaurea* var. *leiocarpa* [Syn. *Solidago decurrens*], T6095 *Stachytarpheta jamaicensis*, T6582 *Tylophora ovata*, T6709 *Verbena officinalis*.
- heat strangury with inhibited pain** T0303 *Alisma orientale* [Syn. *Alisma plantago-aquatica* var. *orientale*], T0632 *Aristolochia manshuriensis*, T1163 *Commelina communis*, T2756 *Forsythia suspensa*, T3126 *Hedyotis corymbosa* [Syn. *Oldenlandia corymbosa*], T3416 *Imperata cylindrica* var. *major*, T4485 *Oldenlandia diffusa* [Syn. *Hedyotis diffusa*], T4829 *Phragmites communis*, T6226 *Swertia mileensis*, T6301 *Taraxacum mongolicum*.
- heat toxin** T2884 *Gardenia jasminoides* var. *grandiflora*.
- heat toxin and phlegm-fire stasis** T0892 *Belamcanda chinensis*.
- heat toxin blood dysentery** T2193 *Dioscorea cirrhosa* [Syn. *Dioscorea pogonoides*], T3908 *Lonicera bournei*, T3909 *Lonicera confusa*, T3910 *Lonicera fulvotomentosa*, T3911 *Lonicera hypoglauca*, T3912 *Lonicera japonica*, T3913 *Lonicera japonica*, T3914 *Lonicera macranthoides*, T3918 *Lonicera similis*, T5173 *Portulaca oleracea*.
- heat toxin diarrhea dysentery** T1544 *Cleistocalyx operculatus*.
- heat toxin dysentery** T0511 *Annona reticulata*, T1554 *Clerodendron cyrtophyllum*, T6367 *Teucrium quadrifarium*.
- heat toxin macula** T1425 *Cimicifuga simplex*, T2280 *Dryopteris chrysocoma*.
- heat toxin scab and lai** T1538 *Clausena lansium*.
- heat toxin sore and welling abscess** T2293 *Dumortiera hirsuta*, T5836 *Scutellaria discolor*.
- heat toxin sores** T0906 *Berberis julianae*, T1662 *Coptis chinensis*, T1663 *Coptis chinensis* var. *brevisepala*, T1664 *Coptis deltoidea*, T1669 *Coptis omeiensis*, T1670 *Coptis teetoides* [Syn. *Coptis teeta*], T3284 *Houttuynia cordata*, T3288 *Humulus japonicus* [Syn. *Humulus scandens*], T3957 *Lycium chinense*, T5018 *Pleuropterus ciliinervis*,

- T5388 *Rabdosia adenantha*, T5626 *Ruta graveolens*.
- heat toxin swollen welling abscess** T0161 *Actinidia eriantha*, T0902 *Berberis diaphana*, T0920 *Berberis wilsonae*, T1004 *Brasenia schreberi*, T3388 *Ilex chinensis* [Syn. *Ilex purpurea*], T4803 *Phlogacanthus curviflorus*, T5835 *Scutellaria barbata* [Syn. *Scutellaria rivularis*], T5851 *Sedum alfredii* [Syn. *Sedum formosanum*], T5852 *Sedum bulbiferum*, T5856 *Sedum lineare* [Syn. *Sedum obtuso-lineare*], T6007 *Solanum melongena*, T6119 *Stephania cepharantha*.
- heat vexation** T0158 *Actinidia chinensis*, T2222 *Diospyros lotus*, T5227 *Prunus mume*, T5642 *Saccharum sinensis*, T6544 *Triticum aestivum* [Syn. *Triticum vulgare*].
- heat vexation and disquiet** T1390 *Chrysanthemum coronarium*, T1397 *Chrysanthemum segetum*, T1526 *Cladonia rangiferina*.
- heat vexation and insomnia** T4555 *Ostrea rivularis*; *Ostrea talienwhanensis*; *Ostrea gigas*.
- heat vexation and thirst** T2221 *Diospyros kaki*, T2433 *Eriobotrya japonica*, T4834 *Phyllanthus emblica*, T6794 *Vitis amurensis*.
- heat vexation in chest** T0273 *Akebia quinata*, T0277 *Akebia trifoliata*, T0279 *Akebia trifoliata* var. *australis*, T1471 *Citrus chachiensis*, T1473 *Citrus cultivars*, T1474 *Citrus decumana*, T1516 *Citrus tankan*, T1518 *Citrus unshiu*.
- heat wind in heart and diaphragm** T1232 *Cassia fistula*.
- heaven-borne sore** T1316 *Cephalanthus occidentalis*, T4848 *Physalis angulata*, T4851 *Physalis minima*, T4852 *Physalis peruviana*, T4854 *Physalis pubescens*, T6745 *Vicia faba*.
- heavy dreams and amnesia** T0463 *Anemone altaica*.
- heavy head and generalized pain** T0819 *Atractylodes chinensis*, T0821 *Atractylodes japonica*, T0823 *Atractylodes lancea*.
- heavy head and low food intake** T4577 *Paederia scandens*.
- hematochezia** T0226 *Agave sisalana*, T0248 *Agrimonia pilosa*, T0661 *Artemisia anomala*, T0678 *Artemisia japonica*, T0791 *Astragalus chrysopterus*, T0794 *Astragalus ernestii*, T0798 *Astragalus membranaceus*, T0800 *Astragalus mongholicus*, T0955 *Bletilla striata*, T0962 *Boehmeria platanifolia* [Syn. *Boehmeria tricuspis*], T0976 *Bombyx mori*, T0991 *Bos taurus domesticus*; *Bubalus bubalis*, T1033 *Broussonetia papyrifera*, T1145 *Camellia japonica*, T1449 *Cirsium japonicum*, T1451 *Cirsium setosum* [Syn. *Cerratula setosa*; *Cirsium segetum*; *Cephalanoplos segetum*], T1655 *Conyza blinii*, T1684 *Cordyline stricta*, T1928 *Cycas revoluta*, T2193 *Dioscorea cirrhosa* [Syn. *Dioscorea pogonoides*], T2221 *Diospyros kaki*, T2279 *Dryopteris championii*, T2281 *Dryopteris crassirhizoma*, T2363 *Entada phaseoloides* [Syn. *Lens phaseoloides*], T2407 *Equisetum arvense*, T2420 *Ericerus pela*, T2591 *Euphorbia humifusa*, T2691 *Farfugium japonicum*, T3054 *Gossypium barbadense*, T3055 *Gossypium herbaceum*, T3058 *Gossypium hirsutum* [Syn. *Gossypium mexicanum*], T3088 *Gynura segetum* [Syn. *Gynura japonica*], T3129 *Hedysarum polybotrys*, T3193 *Hemerocallis fulva*, T3195 *Hemerocallis lilio-asphodelus*, T3197 *Hemerocallis minor*, T3334 *Hypocoum leptocarpum*, T3340 *Hypericum ascyron*, T3349 *Hypericum erectum*, T3444 *Ipomoea aquatica* [Syn. *Convolvulus repens*; *Ipomoea reptans*], T3460 *Iris halophila*, T3461 *Iris japonica*, T3464 *Iris lactea* var. *chinensis* [Syn. *Iris pallasii* var. *chinensis*], T3736 *Lemnaphyllum microphyllum*, T3769 *Lespedeza bicolor*, T3926 *Loropetalum chinense*, T4006 *Lythrum anceps*, T4007 *Lythrum salicaria*, T4259 *Mnium cuspidatum*, T4361 *Myrsine africana*, T4398 *Nelumbo nucifera*, T4502 *Onychium japonicum* [Syn. *Tricomanes japonicum*], T4510 *Ophiorrhiza japonica*, T4513 *Ophiorrhiza mungos*, T4549 *Osbeckia chinensis*, T4552 *Osmunda japonica*, T4604 *Panax japonicus* var. *bipinnatifidus*, T4605 *Panax japonicus* var. *major*, T4607 *Panax pseudo-ginseng* var. *japonicus*, T4608 *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*], T4629 *Papaver nudicaule*, T4630 *Papaver nudicaule* ssp. *amurense*, T5104 *Polygonum hydropiper*, T5118 *Polygonum suffultum*, T5133 *Polytrichum commune*, T5142 *Poncirus trifoliata*, T5173 *Portulaca oleracea*, T5228 *Prunus mume*, T5288 *Pteris cretica* var. *nervosa* [Syn. *Pteris nervosa*], T5295 *Pteris multifida*, T5328 *Punica granatum*, T5372 *Quercus dentata*, T5374 *Quercus infectoria*, T5419 *Raphanus sativus*, T5449 *Reineckea carnea*, T5468 *Rheum emodi* [Syn. *Rheum australe*], T5518 *Rhododendron mucronatum*, T5529 *Rhodomyrtus tomentosa*, T5530 *Rhus chinensis* [Syn. *Rhus semialata*], T5541 *Rhus verniciflua* [Syn. *Toxicodendron verniciflum*], T5554 *Rodgersia aesculifolia*, T5594 *Rubus parkeri*, T5605 *Rumex acetosa*, T5607 *Rumex crispus*, T5614 *Rumex patientia*, T5673 *Salvia glutinosa*, T5712 *Sanguisorba officinalis*, T5804 *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*], T5840 *Scutellaria indica*, T5850 *Sedum aizoon*, T5855 *Sedum kantschaticum*, T5856 *Sedum lineare* [Syn. *Sedum obtuso-lineare*], T5862 *Selaginella involvens*, T5865 *Selaginella pulvinata*, T5869 *Selaginella tamariscina*, T5870 *Selaginella uncinata*, T6034 *Sophora japonica*, T6046 *Sophora viciifolia*, T6047 *Sophora viciifolia*, T6048 *Sophora viciifolia*, T6076 *Spinacia oleracea*, T6116 *Stenoloma chusanum*, T6251 *Symplocos caudata*, T6346 *Terminalia chebula*, T6348 *Terminalia chebula* var. *tomentella*, T6367 *Teucrium quadrifarium*, T6440 *Thuja orientalis* [Syn. *Platycladus orientalis*; *Biota orientalis*], T6485 *Trachycarpus fortunei*, T6584 *Typha angustata*, T6585 *Typha angustifolia*, T6587 *Typha latifolia*, T6615 *Uncaria gambir*, T6752 *Vigna angularis* [Syn. *Dolichus angularis*; *Phaseolus angularis*], T6764 *Vinegar*, T6904 *Zephyranthes grandiflora* [Syn. *Zephyranthes carinata*].
- hematochezia due to blood heat** T5445 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], T5447 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*].
- hematochezia from hemorrhoids** T3192 *Hemerocallis citrina*, T3928 *Lotus corniculatus*, T4148 *Medicago sativa*.
- hematosepsis** T5907 *Senecio scandens* [Syn. *Senecio chinensis*].
- hematuria** T0248 *Agrimonia pilosa*, T0297 *Alchornea trewioides*, T0322 *Allium tuberosum*, T0379 *Alternanthera philoxeroides*, T0635 *Aristolochia moupinensis*, T0648 *Arnebia euchroma*, T0649 *Arnebia guttata*, T0661 *Artemisia anomala*, T0962 *Boehmeria platanifolia* [Syn. *Boehmeria tricuspis*], T0976 *Bombyx mori*, T0993 *Boschniakia rossica*, T1184 *Capsella bursa-pastoris*, T1199 *Carduus acanthoides*, T1200 *Carduus crispus*, T1275 *Cayratia japonica*, T1449 *Cirsium japonicum*, T1451 *Cirsium setosum* [Syn. *Cerratula setosa*; *Cirsium segetum*; *Cephalanoplos segetum*], T1684 *Cordyline stricta*, T1924 *Cyathula officinalis*, T2193 *Dioscorea cirrhosa* [Syn. *Dioscorea pogonoides*], T2323 *Eclipta prostrata* [Syn. *Eclipta alba*], T2412 *Equisetum*

*sylvaticum*, T2420 *Ericerus pela*, T2590 *Euphorbia hirta*, T2591 *Euphorbia humifusa*, T2691 *Farfugium japonicum*, T2830 *Galium aparine*, T3295 *Huperzia serrata* [Syn. *Lycopodium serratum*], T3340 *Hypericum ascyron*, T3416 *Imperata cylindrica* var. *major*, T3444 *Ipomoea aquatica* [Syn. *Convolvulus repens*; *Ipomoea reptans*], T3662 *Lactuca sativa*, T3736 *Lemmaphyllum microphyllum*, T3737 *Lemmaphyllum microphyllum* var. *obovatum*, T3764 *Lepisorus thunbergianus*, T3769 *Lespedeza bicolor*, T3881 *Lithospermum erythrorhizon*, T4082 *Mallotus japonicus*, T4121 *Marsilea quadrifolia*, T4127 *Matteuccia struthiopteris*, T4248 *Mimosa pudica*, T4370 *Nandina domestica*, T4502 *Onychium japonicum* [Syn. *Tricomanes japonicum*], T4564 *Oxalis corniculata* [Syn. *Oxalis repens*], T4604 *Panax japonicus* var. *bipinnatifidus*, T4605 *Panax japonicus* var. *major*, T4607 *Panax pseudo-ginseng* var. *japonicus*, T5097 *Polygonum amphibium*, T5228 *Prunus mume*, T5288 *Pteris cretica* var. *nervosa* [Syn. *Pteris nervosa*], T5295 *Pteris multifida*, T5354 *Pyrrosia davidii*, T5355 *Pyrrosia drakeana*, T5356 *Pyrrosia gralla*, T5357 *Pyrrosia lingua*, T5358 *Pyrrosia petiolosa*, T5360 *Pyrrosia shearerii*, T5541 *Rhus verniciflua* [Syn. *Toxicodendron verniciflum*], T5685 *Salvia plebeia*, T5712 *Sanguisorba officinalis*, T5850 *Sedum aizoon*, T5855 *Sedum kamtschaticum*, T5865 *Selaginella pulvinata*, T5869 *Selaginella tamariscina*, T6034 *Sophora japonica*, T6046 *Sophora viciifolia*, T6047 *Sophora viciifolia*, T6116 *Stenoloma chusanum*, T6440 *Thuja orientalis* [Syn. *Platycladus orientalis*; *Biota orientalis*], T6485 *Trachycarpus fortunei*, T6584 *Typha angustata*, T6585 *Typha angustifolia*, T6587 *Typha latifolia*, T6615 *Uncaria gambir*, T6745 *Vicia faba*, T6814 *Wedelia chinensis* [Syn. *Solidago chinensis*; *Wedelia calendulacea*].

**hematuria due to blood heat** T5445 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*].

**hemicrania [ = hemilateral headache]** T6618 *Uncaria homomalla* [Syn. *Uruparia homomalla*; *Uruparia tonkinensis*; *Uruparia lanosa* var. *parviflora*].

**hemiplegia** T0077 *Aconitum balfourii*, T0084 *Aconitum carmichaeli*, T0105 *Aconitum karakolicum*, T0298 *Alectoria vivens*, T0617 *Arisaema amurense*, T0618 *Arisaema consanguineum*, T0620 *Arisaema heterophyllum*, T0877 *Bauhinia championii*, T1084 *Buthus martensi*, T1191 *Caragana sinica*, T1562 *Clerodendron trichotomum*, T1567 *Clerodendron mandarinorum*, T1715 *Corydalis decumbens* [Syn. *Corydalis amabilis*], T1767 *Craibiodendron yunnanese*, T2449 *Erycibe obtusifolia*, T2450 *Erycibe schmidtii*, T2540 *Euonymus fortunei*, T2890 *Gastrodia elata*, T2995 *Gloriosa superba*, T3657 *Lactarius vellereus*, T3675 *Lagopsis supina*, T3680 *Lamium amplexicaule*, T4903 *Pinellia pedatisecta*, T5298 *Pteris vittata*, T5401 *Rabdosia yuennanensis*, T5746 *Sassafras tzumu*, T5950 *Siegesbeckia orientalis*, T5951 *Siegesbeckia orientalis* var. *glabrescens* [Syn. *Siegesbeckia glabrescens*], T5952 *Siegesbeckia orientalis* var. *pubescens* [Syn. *Siegesbeckia pubescens*], T6166 *Strychnos angustiflora*, T6184 *Strychnos nux-vomica*, T6193 *Strychnos wallichiana*, T6540 *Tripterygium hypoglaucum*.

**hemoptysis** T0229 *Ageratum conyzoides*, T0248 *Agrimonia pilosa*, T0249 *Agrimonia pilosa* var. *japonica*, T0379 *Alternanthera philoxeroides*, T0678 *Artemisia japonica*, T0753 *Asparagus setaceus* [Syn. *Asparagus*

*plumosus*], T0830 *Auricularia auricula*, T0831 *Auricularia delicata*, T0859 *Balanophora involucrata*, T0923 *Bergenia crassifolia*, T0924 *Bergenia purpurascens*, T0941 *Bidens tripartita*, T0948 *Blainvillea acmella* [Syn. *Verbesina acmella*; *Eclipta latifolia*; *Blainvillea latifolia*], T0955 *Bletilla striata*, T0962 *Boehmeria platanifolia* [Syn. *Boehmeria tricuspis*], T0964 *Boenninghausenia albiflora*, T0973 *Bombax malabaricum* [Syn. *Gossampinus malabarica*], T1118 *Callicarpa formosana*, T1119 *Callicarpa japonica*, T1120 *Callicarpa macrophylla*, T1145 *Camellia japonica*, T1184 *Capsella bursa-pastoris*, T1251 *Cassytha filiformis*, T1465 *Citrullus vulgaris* [Syn. *Citrullus lanatus*], T1547 *Clematis terniflora* [Syn. *Clematis maximowicziana*], T1969 *Cynoglossum officinale*, T2191 *Dioscorea bulbifera*, T2193 *Dioscorea cirrhosa* [Syn. *Dioscorea pogonoides*], T2281 *Dryopteris crassirhizoma*, T2323 *Eclipta prostrata* [Syn. *Eclipta alba*], T2407 *Equisetum arvense*, T2412 *Equisetum sylvaticum*, T2540 *Euonymus fortunei*, T2591 *Euphorbia humifusa*, T2659 *Fagopyrum esculentum*, T3088 *Gynura segetum* [Syn. *Gynura japonica*], T3242 *Hibiscus rosa-sinensis*, T3244 *Hibiscus syriacus*, T3279 *Homo sapiens*, T3340 *Hypericum ascyron*, T3349 *Hypericum erectum*, T3361 *Hypericum perforatum*, T3363 *Hypericum sampsonii*, T3373 *Hypoestes purpurea* [Syn. *Justicia purpurea*; *Hypoestes sinica*], T3736 *Lemmaphyllum microphyllum*, T3829 *Ligustrum robustum*, T3866 *Liquidambar formosana* [Syn. *Liquidambar taiwaniana*], T3926 *Loropetalum chinense*, T3983 *Lycoris aurea*, T4060 *Mahonia confusa*, T4064 *Mahonia gracilipes*, T4549 *Osbeckia chinensis*, T4604 *Panax japonicus* var. *bipinnatifidus*, T4605 *Panax japonicus* var. *major*, T4607 *Panax pseudo-ginseng* var. *japonicus*, T4608 *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*], T4720 *Perilla frutescens* var. *arguta*, T4723 *Perilla frutescens* var. *crispa*, T5043 *Podocarpus macrophyllus*, T5045 *Podocarpus macrophyllus* var. *maki*, T5133 *Polytrichum commune*, T5374 *Quercus infectoria*, T5419 *Raphanus sativus*, T5449 *Reineckea carnea*, T5494 *Rhodiola crenulata* [Syn. *Rhodiola euryphylla*], T5499 *Rhodiola sacra*, T5552 *Robinia pseudoacacia*, T5557 *Rohdea japonica* [Syn. *Orontium japonicum*], T5673 *Salvia glutinosa*, T5685 *Salvia plebeia*, T5712 *Sanguisorba officinalis*, T5840 *Scutellaria indica*, T5850 *Sedum aizoon*, T5855 *Sedum kamtschaticum*, T5862 *Selaginella involvens*, T6092 *Stachys palustris*, T6440 *Thuja orientalis* [Syn. *Platycladus orientalis*; *Biota orientalis*], T6482 *Toxicodendron succedaneum* [Syn. *Rhus succedanea*], T6584 *Typha angustata*, T6585 *Typha angustifolia*, T6587 *Typha latifolia*, T6615 *Uncaria gambir*, T6745 *Vicia faba*, T6772 *Viscum angulatum*, T6895 *Zanthoxylum simulans*.

**hemorrhagic fever** T0379 *Alternanthera philoxeroides*.

**hemorrhoids** T0158 *Actinidia chinensis*, T0226 *Agave sisalana*, T0293 *Albizia lebeck*, T0322 *Allium tuberosum*, T0584 *Arctium lappa*, T0805 *Astragalus sinicus*, T0827 *Aucuba chinensis* ssp. *omeiensis*, T0860 *Balanophora japonica*, T0942 *Biebersteinia heterostemon*, T0984 *Bos taurus domesticus*; *Bubalus bubalis*, T1448 *Cirsium chinense*, T1556 *Clerodendron fragrans*, T1562 *Clerodendron trichotomum*, T1565 *Clerodendron bungei*, T1623 *Collybia albuminosa*, T1687 *Coriandrum sativum*, T1799 *Crinum latifolium*, T1881 *Cucurbita moschata*, T1896 *Cupressus funebris*, T1994 *Daemonorops draco*, T2024 *Daphne genkwa*, T2062 *Delphinium*

*bonvalotii*, T2081 *Delphinium omeiense*, T2084 *Delphinium potaninii*, T2085 *Delphinium potaninii* var. *jiufengshanense*, T2218 *Diospyros kaki*, T2253 *Dracaena cochinchinensis*, T2363 *Entada phaseoloides* [Syn. *Lens phaseoloides*], T2525 *Eucheuma muricatum*, T2627 *Euphoria longan* [Syn. *Dimocarpus longan*], T2716 *Ficus beecheyana* [Syn. *Ficus erecta* var. *beecheyana*], T2718 *Ficus carica*, T2731 *Firmiana simplex*, T2732 *Firmiana simplex*, T2883 *Gardenia jasminoides* [Syn. *Gardenia florida*], T2994 *Gloiopeltis furcata*, T3163 *Helicteres angustifolia*, T3245 *Hibiscus syriacus*, T3320 *Hymenocallis littoralis* [Syn. *Hymenocallis americana*; *Pancreatium littoralis*], T3444 *Ipomoea aquatica* [Syn. *Convolvulus repens*; *Ipomoea reptans*], T3460 *Iris halophila*, T3464 *Iris lactea* var. *chinensis* [Syn. *Iris pallasii* var. *chinensis*], T3479 *Isodon amethystoides*, T3845 *Linaria vulgaris*, T3932 *Ludwigia octovalvis*, T4020 *Macleaya cordata*, T4331 *Musa paradisiaca* var. *sapientum* [Syn. *Musa sapientum*], T4544 *Oryza sativa*, T4548 *Oryza sativa* var. *glutinosa*, T4564 *Oxalis corniculata* [Syn. *Oxalis repens*], T4607 *Panax pseudo-ginseng* var. *japonicus*, T4789 *Phellodendron amurense*, T4790 *Phellodendron amurense* var. *wilsonii*, T4791 *Phellodendron chinense*, T4792 *Phellodendron chinense* var. *glabriusculum*, T4836 *Phyllanthus emblica*, T4884 *Picria felterrae*, T4887 *Picrorhiza kurrooa*, T4888 *Picrorhiza scrophulariiflora*, T4917 *Pinus massoniana*, T5107 *Polygonum multiflorum*, T5142 *Poncirus trifoliata*, T5230 *Prunus persica*, T5375 *Quercus mongolica*, T5563 *Rosa cymosa*, T5606 *Rumex acetosa*, T5773 *Saxifraga stolonifera*, T5862 *Selaginella involvens*, T5925 *Sesamum indicum* [Syn. *Sesamum orientale*], T5942 *Sida acuta*, T6025 *Sonchus arvensis*, T6035 *Sophora japonica*, T6076 *Spinacia oleracea*, T6095 *Stachytarpheta jamaicensis*, T6264 *Syzygium buxifolium*, T6432 *Thespesia populnea* [Syn. *Hibiscus populneus*], T6432 *Thespesia populnea* [Syn. *Hibiscus populneus*], T6814 *Wedelia chinensis* [Syn. *Solidago chinensis*; *Wedelia calendulacea*], T6843 *Xanthium sibiricum* [Syn. *Xanthium strumarium*].

**hemorrhoids and fistulas** T0427 *Ampelopsis japonica* [Syn. *Paullinia japonica*], T0500 *Anguilla japonica*, T1210 *Carpesium abrotanoides*, T1550 *Cleome gynandra* [Syn. *Gynandropsis gynandra*], T2092 *Delphinus delphis*, T2161 *Dicranopteris pedata* [Syn. *Polypodium pedatum*; *Dicranopteris dichotoma*], T3202 *Hemistepta lyrata* [Syn. *Hemistepta carthamoides*; *Saussurea carthamoides*], T3935 *Luffa cylindrica*, T3984 *Lycoris chinensis*, T3986 *Lycoris radiata* [Syn. *Amaryllis radiata*], T4265 *Momordica cochinchinensis*, T5111 *Polygonum perfoliatum*, T5870 *Selaginella uncinata*, T6105 *Stellera chamaejasme*, T6601 *Umbilicaria esculenta* [Syn. *Gyrophora esculenta*].

**hemorrhoids and fistulas**<sup>[5509]</sup> T6139 *Sterculia lychnophora*.

**hemorrhoids and swollen welling abscess** T6615 *Uncaria gambir*.

**hepatic disease and anemia (leaf)** T3110 *Harungana madagascariensis*.

**hepatitis** T0011 *Abrus precatorius*, T0137 *Aconitum tanguticum*, T0155 *Actinidia arguta*, T0423 *Ampelopsis brevipedunculata*, T0495 *Angelica sinensis*, T0572 *Aralia elata*, T0598 *Ardisia japonica*, T0646 *Armillariella tabescens*, T0672 *Artemisia capillaris*, T0695 *Artemisia scoparia* [Syn. *Artemisia capillaris* var. *scoparia*], T0707 *Arthraxon hispidus*, T0751 *Asparagus officinalis*, T0881 *Bauhinia variegata*, T0964 *Boeninghausenia albiflora*, T1055 *Bupleurum angustissimum*,

T1056 *Bupleurum aureum*, T1058 *Bupleurum chaishoui*, T1059 *Bupleurum chinense*, T1065 *Bupleurum longiradiatum*, T1066 *Bupleurum marginatum*, T1067 *Bupleurum marginatum* var. *stenophyllum*, T1072 *Bupleurum scorzonerifolium*, T1073 *Bupleurum sibiricum*, T1075 *Bupleurum smithii* var. *parvifolium*, T1078 *Bupleurum wenchuanense*, T1079 *Bupleurum yinchowense*, T1151 *Camellia sinensis* [Syn. *Thea sinensis*], T1387 *Chrysanthemum boreale*, T1392 *Chrysanthemum indicum*, T1394 *Chrysanthemum lavandulifolium*, T1573 *Clinopodium chinense*, T1657 *Conyza canadensis* [Syn. *Erigeron canadensis*], T1662 *Coptis chinensis*, T1663 *Coptis chinensis* var. *brevispala*, T1664 *Coptis deltoidea*, T1669 *Coptis omeiensis*, T1670 *Coptis teetoides* [Syn. *Coptis teeta*], T1696 *Cornus capitata* [Syn. *Dendrobenthamia capitata*], T1746 *Corydalis taliensis*, T1747 *Corydalis thalictrifolia*, T1967 *Cynoglossum amabile*, T1986 *Cyrtomium fortunei*, T2340 *Elsholtzia bodinieri*, T2601 *Euphorbia milii*, T2657 *Fagopyrum cymosum* [Syn. *Polygonum cymosum*], T2727 *Ficus simplicissima*, T2756 *Forsythia suspensa*, T2835 *Galium verum*, T2840 *Gallus gallus domesticus*, T2846 *Ganoderma japonicum* [Syn. *Ganoderma sinense*], T2848 *Ganoderma lucidum*, T2941 *Gentianopsis paludosa*, T3092 *Halenia corniculata*, T3113 *Hedera nepalensis* var. *sinensis*, T3115 *Hedera rhombea*, T3122 *Hedyotis acutangula*, T3203 *Hemsleya amabilis*, T3208 *Hemsleya macrosperma*, T3332 *Hypocoum erectum*, T3334 *Hypocoum leptocarpum*, T3340 *Hypericum ascyron*, T3342 *Hypericum bellum*, T3360 *Hypericum patulum*, T3457 *Iris dichotoma*, T3461 *Iris japonica*, T3471 *Iris tectorum*, T3475 *Isatis indigotica*, T3476 *Isatis indigotica*, T3496 *Isodon japonica* [Syn. *Rabdosia japonica*], T3990 *Lygodium japonicum*, T4028 *Maesa indica*, T4082 *Mallotus japonicus*, T4145 *Meconopsis punicea*, T4248 *Mimosa pudica*, T4804 *Phlojodicarpus sibiricus*, T4842 *Phyllanthus reticulatus*, T5071 *Polygala arillata*, T5100 *Polygonum chinense*, T5101 *Polygonum cuspidatum*, T5156 *Populus nigra* var. *thevestina*, T5161 *Populus tomentosa*, T5185 *Potentilla multifida*, T5207 *Prismatomeris tetrandra*, T5587 *Rubus alceaefolius*, T5614 *Rumex patientia*, T5680 *Salvia miltiorrhiza*, T5681 *Salvia miltiorrhiza* f. *alba*, T5688 *Salvia przewalskii*, T5690 *Salvia roborowskii*, T5838 *Scutellaria galericulata*, T5844 *Scutellaria scordifolia*, T5860 *Selaginella davidii*, T5892 *Senecio nemorensis*, T6046 *Sophora viciifolia*, T6047 *Sophora viciifolia*, T6116 *Stenoloma chusanum*, T6214 *Swertia chinensis*, T6227 *Swertia mussotii*, T6264 *Syzygium buxifolium*, T6275 *Tacca chantrieri* [Syn. *Tacca minor*; *Tacca esquirolii*], T6301 *Taraxacum mongolicum*, T6656 *Ustilago maydis*.

**hepatitis a** T3011 *Glycyrrhiza aspera*, T3013 *Glycyrrhiza glabra*, T3015 *Glycyrrhiza inflata*, T3016 *Glycyrrhiza kansuensis*, T3021 *Glycyrrhiza squamulosa*, T3022 *Glycyrrhiza uralensis*, T3023 *Glycyrrhiza yunnanensis*, T5543 *Rhynchosyche vestitum*.

**hepatitis b** T5543 *Rhynchosyche vestitum*.

**hepatitis with rib-side pain** T5687 *Salvia prionitis*.

**herpes zoster** T5856 *Sedum lineare* [Syn. *Sedum obtuso-lineare*].

**hiccup** T2217 *Diospyros kaki*, T3758 *Lepidium sativum*, T3876 *Litchi chinensis*, T6150 *Streptopelia orientalis*, T6263 *Syzygium aromaticum* [Syn. *Eugenia caryophyllata*].

**hoarseness** T4665 *Passiflora edulis*.

- hordeolum** T1633 *Commelina communis*.
- hydatid moles** T6043 *Sophora subprostrata* [Syn. *Sophora tonkinensis*].
- hydrothorax** T2023 *Daphne genkwa*.
- hyperchlorhydria** T2644 *Evodia rutaecarpa*, T2646 *Evodia rutaecarpa* var. *officinalis*, T3880 *Lithospermum arvense*, T4306 *Mosla grosseserrata*, T5419 *Raphanus sativus*.
- hypercholesterolemia** T0544 *Apium graveolens*, T2964 *Ginkgo biloba*.
- hyperlipemia** T0303 *Alisma orientale* [Syn. *Alisma plantago-aquatica* var. *orientale*], T0311 *Allium cepa*, T0672 *Artemisia capillaris*, T0695 *Artemisia scoparia* [Syn. *Artemisia capillaris* var. *scoparia*], T0751 *Asparagus officinalis*, T1775 *Crataegus pinnatifida*, T1778 *Crataegus pinnatifida* var. *major*, T2731 *Firmiana simplex*, T2732 *Firmiana simplex*, T2733 *Firmiana simplex*, T2846 *Ganoderma japonicum* [Syn. *Ganoderma sinense*], T2848 *Ganoderma lucidum*, T3085 *Gynostemma pentaphyllum*, T3742 *Lentinus edodes*, T5101 *Polygonum cuspidatum*, T5107 *Polygonum multiflorum*, T6528 *Trigonella foenum-graecum*, T6584 *Typha angustata*, T6585 *Typha angustifolia*, T6587 *Typha latifolia*.
- hyperplasia of mammary glands** T0751 *Asparagus officinalis*, T5214 *Prunella vulgaris*.
- hypertension** T0210 *Agaricus bisporus*, T0211 *Agaricus campestris*, T0428 *Ampelopsis megalophylla*, T0539 *Apis cerana*, T0541 *Apis cerana*, T0544 *Apium graveolens*, T0553 *Apocynum venetum*, T0598 *Ardisia japonica*, T0608 *Arenaria kansuensis* [Syn. *Arenaria kumaonensis*], T0625 *Aristolochia contorta*, T0627 *Aristolochia debilis* [Syn. *Aristolochia longa*], T0631 *Aristolochia kaempferi*, T0644 *Armillaria mellea*, T0830 *Auricularia auricula*, T0831 *Auricularia delicata*, T1084 *Buthus martensi*, T1150 *Camellia sinensis* [Syn. *Thea sinensis*], T1184 *Capsella bursa-pastoris*, T1190 *Caragana jubata*, T1191 *Caragana sinica*, T1241 *Cassia occidentalis*, T1271 *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochera rosea*], T1296 *Celosia argentea*, T1311 *Centella asiatica*, T1385 *Chorda filum*, T1387 *Chrysanthemum boreale*, T1392 *Chrysanthemum indicum*, T1393 *Chrysanthemum indicum*, T1394 *Chrysanthemum lavandulifolium*, T1395 *Chrysanthemum morifolium* [Syn. *Dendranthema morifolium*], T1417 *Cimicifuga acerina*, T1562 *Clerodendron trichotomum*, T1563 *Clerodendron trichotomum*, T1565 *Clerodendrum bungei*, T1586 *Cocculus laurifolius*, T1662 *Coptis chinensis*, T1663 *Coptis chinensis* var. *brevise-pala*, T1664 *Coptis deltoidea*, T1669 *Coptis omeiensis*, T1670 *Coptis teetoides* [Syn. *Coptis teeta*], T1715 *Corydalis decumbens* [Syn. *Corydalis amabilis*], T1776 *Crataegus pinnatifida*, T1777 *Crataegus pinnatifida*, T1927 *Cycas revoluta*, T2115 *Dermatocarpon minutum*, T2219 *Diospyros kaki*, T2442 *Ervatamia divaricata*, T2444 *Ervatamia heyneana*, T2445 *Ervatamia officinalis*, T2530 *Eucommia ulmoides*, T2531 *Eucommia ulmoides*, T2565 *Eupatorium lindleyanum*, T2569 *Eupatorium rebaudianum*, T2659 *Fagopyrum esculentum*, T2729 *Filipendula ulmaria*, T2731 *Firmiana simplex*, T2732 *Firmiana simplex*, T2732 *Firmiana simplex*, T2890 *Gastrodia elata*, T3144 *Helianthus annuus*, T3146 *Helianthus annuus* cv, T3549 *Ixora chinensis*, T3742 *Lentinus edodes*, T3878 *Lithocarpus polystachyus*, T3925 *Loranthus parasiticus* [Syn. *Loranthus chinensis*; *Taxillus chinensis*], T3932 *Ludwigia octovalvis*, T4001 *Lysimachia davurica*, T4028 *Maesa indica*, T4039 *Magnolia grandiflora*, T4145 *Meconopsis punicea*, T4195 *Menyanthes trifoliata*, T4290 *Morus alba*, T4401 *Nelumbo nucifera*, T4438 *Nostoc flagelliforme*, T4516 *Oplopanax elatus*, T4582 *Paeonia delavayi*, T4585 *Paeonia moutan* [Syn. *Paeonia suffruticosa*], T4609 *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*], T4796 *Pheretima aspergillum*; *Allolobophora caliginosa trapezoides*, T4837 *Phyllanthus emblica*, T4906 *Pinus armandii*, T4916 *Pinus massoniana*, T4976 *Piptanthus nepalensis*, T5214 *Prunella vulgaris*, T5312 *Pueraria edulis*, T5313 *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*], T5316 *Pueraria omeiensis*, T5318 *Pueraria phaseoloides*, T5320 *Pueraria thomsonii*, T5365 *Pyrus pashia*, T5423 *Rauwolfia verticillata*, T5424 *Rauwolfia verticillata*, T5425 *Rauwolfia verticillata* f. *rubrocarpa*, T5426 *Rauwolfia verticillata* var. *hainanensis*, T5427 *Rauwolfia vomitoria*, T5435 *Rauwolfia latifrons*, T5441 *Rauwolfia perakensis*, T5442 *Rauwolfia serpentina*, T5516 *Rhododendron molle*, T5657 *Salsola collina*, T5723 *Sapium sebiferum*, T5817 *Scolopendra subspinipes mutilans*, T5950 *Siegesbeckia orientalis*, T5951 *Siegesbeckia orientalis* var. *glabrescens* [Syn. *Siegesbeckia glabrescens*], T5952 *Siegesbeckia orientalis* var. *pubescens* [Syn. *Siegesbeckia pubescens*], T5969 *Sium latifolium*, T6136 *Stephania tetrandra*, T6478 *Torreya jackii*, T6531 *Trillium camtschaticum*, T6533 *Trillium kamtschaticum*, T6535 *Trillium tschonoskii*, T6599 *Ulva lactuca*, T6600 *Ulva pertusa*, T6618 *Uncaria homomalla* [Syn. *Uruparia homomalla*; *Uruparia tonkinensis*; *Uruparia lanosa* var. *parviflora*], T6651 *Urtica cannabina*, T6652 *Urtica dioica*, T6772 *Viscum angulatum*, T6775 *Viscum coloratum*, T6777 *Viscum multinerve*, T6803 *Volvariella volvacea*, T6901 *Zea mays*.
- hypertension (bark)** T3110 *Harungana madagascariensis*.
- hypertension due to ascendant liver yang** T5428 *Rauwolfia yunnanensis*.
- hypertension due to liver heat** T2060 *Delonix regia*.
- hypertonicity** T6183 *Strychnos nitida*.
- hypertonicity and numbness** T2194 *Dioscorea colletii*, T2389 *Epimedium acuminatum*, T2390 *Epimedium brevicornum*, T2392 *Epimedium davidii*, T2394 *Epimedium elongatum*, T2398 *Epimedium koreanum*, T2401 *Epimedium pubescens*, T2402 *Epimedium sagittatum*, T2404 *Epimedium sutchuenense*, T2406 *Epimedium wushanense*, T2438 *Erodium stephanianum*, T2943 *Geranium nepalense*, T2944 *Geranium pratense*, T2947 *Geranium sibiricum*, T2949 *Geranium wilfordii*, T6843 *Xanthium sibiricum* [Syn. *Xanthium strumarium*].
- hypertonicity and pain** T0036 *Acanthopanax giraldii* [Syn. *Acanthopanax giraldii* var. *inermis*; *Eleutherococcus giraldii*].
- hypertonicity in limb joints** T2459 *Erythrina arboreascens*, T2478 *Erythrina variegata* [Syn. *Erythrina indica*].
- hypertonicity of limbs** T0106 *Aconitum kirinense*, T0123 *Aconitum polyschistum*, T0138 *Aconitum umbrosum*, T0470 *Anemone raddeana*, T3867 *Liquidambar formosana* [Syn. *Liquidambar taiwaniana*], T5972 *Skimmia reevesiana*, T6791 *Vitex rotundifolia* [Syn. *Vitex trifolia* var. *simplicifolia*], T6793 *Vitex trifolia*.
- hypertonicity of sinews and bones** T0045 *Acanthopanax trifoliatus*, T0634 *Aristolochia mollissima*, T3653 *Lactarius piperatus* [Syn. *Agaricus piperatus*].
- hypertonicity of sinews and vessels** T1001 *Brachystemma calycinum*, T1342 *Chaenomeles lagenaria* [Syn. *Chaenomeles speciosa*], T1545

- Clematis chinensis*, T2211 *Dioscorea tenuipes*, T2909 *Gentiana crassicaulis*, T2910 *Gentiana dahurica*, T2913 *Gentiana kaufmanniana*, T2919 *Gentiana macrophylla*, T2932 *Gentiana siphonantha*, T2934 *Gentiana straminea*, T2936 *Gentiana tianschanica*, T2937 *Gentiana tibetica*, T3869 *Liquor*, T4950 *Piper kadsura* [Syn. *Piper futokadsura*], T5021 *Pleurospermum rivulorum*, T6422 *Thelephora vialis*, T6484 *Trachelospermum jasminoides*, T6504 *Tricholoma matsutake* [Syn. *Armillaria matsutake*], T6742 *Vicia amoena*.
- hypertrophic spinitis** T6184 *Strychnos nux-vomica*, T6193 *Strychnos wallichiana*.
- hypocortico steroidism [ = Addison's disease]** T3011 *Glycyrrhiza aspera*, T3013 *Glycyrrhiza glabra*, T3015 *Glycyrrhiza inflata*, T3016 *Glycyrrhiza kansuensis*, T3021 *Glycyrrhiza squamulosa*, T3022 *Glycyrrhiza uralensis*, T3023 *Glycyrrhiza yunnanensis*.
- hypotension** T4682 *Pedicularis muscicola*.
- hypovitaminosis** T6055 *Sorbus tianschanica*.
- hypovitaminosis c** T0155 *Actinidia arguta*.
- hysteria** T4386 *Nardostachys chinensis*, T4387 *Nardostachys jatamansi*.
- icterohepatitis** T0010 *Abrus fruticulosus* [Syn. *Abrus cantoniensis*], T0374 *Alstonia scholaris*, T0379 *Alternanthera philoxeroides*, T0426 *Ampelopsis grossedentata* [Syn. *Ampelopsis cantoniensis* var. *grossedentata*], T0678 *Artemisia japonica*, T1655 *Conyza blinii*, T1758 *Cotinus coggygria*, T2165 *Dictamnus angustifolius*, T2167 *Dictamnus dasycarpus*, T2327 *Elaeagnus angustifolia*, T2641 *Evodia lepta* [Syn. *Ilex lepta*], T6260 *Syringa oblata*, T6277 *Tadehagi triquetrum*.
- ileitis** T3106 *Harpagophytum procumbens*.
- ileus** T2999 *Glycine max*, T3164 *Helicteres isora*, T5472 *Rheum officinale*, T5474 *Rheum palmatum*, T5481 *Rheum tanguticum*.
- ileus due to roundworm** T0560 *Arachis hypogaea*.
- impediment** T4655 *Paris tetraphylla*, T4917 *Pinus massoniana*.
- impediment pain** T1008 *Brassica juncea*, T1046 *Buddleja davidii*, T1767 *Craibiodendron yunnanese*, T2038 *Datura innoxia*, T2042 *Datura metel*.
- impediment pain in joints** T1924 *Cyathula officinalis*, T3479 *Isodon amethystoides*, T3964 *Lycopodium alpinum* [Syn. *Diphasiastrum alpinum*], T5101 *Polygonum cuspidatum*, T5578 *Rubia cordifolia*, T5582 *Rubia oncotricha*, T5583 *Rubia schumannina*, T5584 *Rubia tinctorum*, T5585 *Rubia wallichiana*.
- impediment pain in lumbus and knees** T0515 *Anredera cordifolia* [Syn. *Baussingaultia cordifolia*; *Baussingaultia gracilis* f. *pseudobaselloides*; *Baussingaultia gracilis* var. *pseudobaselloides*], T2208 *Dioscorea septemloba*.
- impediment pain in sinew and bone** T5870 *Selaginella uncinata*.
- impediment pain into network vessels** T1001 *Brachystemma calycinum*.
- impediment pain numbness** T3852 *Lindera megaphylla*, T4303 *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*.
- impotence** T0083 *Aconitum carmichaeli*, T0085 *Aconitum carmichaeli* cv, T0298 *Alectoria vivens*, T0500 *Anguilla japonica*, T0990 *Bos taurus domesticus*; *Bubalus bubalis*, T1035 *Broussonetia papyrifera*, T1170 *Canis familiaris*, T1439 *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*], T1455 *Cistanche deserticola*, T1456 *Cistanche salsa*, T1582 *Cnidium monnieri*, T1604 *Coeloglossum viride* [Syn. *Coeloglossum viride* var. *bracteatum*], T1964 *Cynanchum wilfordii* [Syn. *Cynoctonum wilfordii*], T2301 *Dysosma majorensis* [Syn. *Podophyllum majorensis*; *Dysosma lichuanensis*], T2805 *Fugu ocellatus*, T2955 *Geum japonicum*, T3077 *Gymnadenia conopsea*, T3279 *Homo sapiens*, T3568 *Juglans regia*, T4206 *Metaplexis japonica*, T4207 *Metaplexis japonica*, T4516 *Oplopanax elatus*, T4599 *Panax ginseng* [Syn. *Panax schinseng*], T4974 *Piper wallichii* [Syn. *Piper wallichii* var. *hupehense*], T4982 *Pistacia vera*, T5317 *Pueraria peduncularis*, T5697 *Salvia trijuga*, T5753 *Saussurea gnaphaloides*, T5755 *Saussurea involucrata*, T5757 *Saussurea laniceps*, T5759 *Saussurea medusa*, T5848 *Securinega suffruticosa*, T6184 *Strychnos nux-vomica*, T6193 *Strychnos wallichiana*, T6257 *Syngnathus acus*.
- impotence and emission** T0977 *Bombyx mori*, T1337 *Cervus nippon*; *Cervus elaphus*, T1683 *Cordyceps sinensis*, T1698 *Cornus officinalis* [Syn. *Macrocarpium officinale*], T1900 *Curculigo capitulata* [Syn. *Leucogium capitulata*], T1911 *Cuscuta australis*, T1912 *Cuscuta chinensis*, T1913 *Cuscuta japonica*, T1952 *Cynanchum auriculatum*, T1953 *Cynanchum bungei*, T2389 *Epimedium acuminatum*, T2390 *Epimedium brevicornum*, T2392 *Epimedium davidii*, T2394 *Epimedium elongatum*, T2398 *Epimedium koreanum*, T2401 *Epimedium pubescens*, T2402 *Epimedium sagittatum*, T2404 *Epimedium sutchuenense*, T2406 *Epimedium wushanense*, T2753 *Formica fusca*, T4283 *Morinda officinalis*, T5091 *Polygonatum cyrtoneura* [Syn. *Polygonatum multiflorum*], T5092 *Polygonatum kingianum*, T5095 *Polygonatum sibiricum*, T5270 *Psoralea corylifolia*, T5446 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*].
- impotence seminal cool** T1901 *Curculigo orchioides*.
- impotence with emission** T4828 *Photinia serrulata*.
- impotence with premature ejaculation** T5593 *Rubus idaeus*.
- improving cognitive function in elderly dementia patients** T2961 *Ginkgo biloba*.
- inability of legs and knees** T0036 *Acanthopanax giraldii* [Syn. *Acanthopanax giraldii* var. *inermis*; *Eleutherococcus giraldii*], T1411 *Cibotium barometz* [Syn. *Polypodium barometz*], T1963 *Cynanchum wallichii*.
- inappetence** T0041 *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*], T0463 *Anemone altaica*, T0659 *Artemisia absinthium*, T0819 *Atractylodes chinensis*, T0821 *Atractylodes japonica*, T0823 *Atractylodes lancea*, T1278 *Cedrela sinensis*, T1415 *Cichorium intybus*, T1478 *Citrus grandis*, T1490 *Citrus limon*, T1494 *Citrus limonia*, T1608 *Coffea arabica*, T1610 *Coffea liberica*, T1660 *Coprinus atramentarius*, T1687 *Coriandrum sativum*, T1751 *Corylus heterophylla*, T1952 *Cynanchum auriculatum*, T1953 *Cynanchum bungei*, T1964 *Cynanchum wilfordii* [Syn. *Cynoctonum wilfordii*], T2717 *Ficus carica*, T2763 *Fragaria ananassa*, T3282 *Hordeum vulgare*, T3962 *Lycopersicon esculentum*, T4217 *Microcos paniculata* [Syn. *Grewia microcos*], T4400 *Nelumbo nucifera*, T4600 *Panax ginseng* [Syn. *Panax schinseng*], T4607 *Panax pseudo-ginseng* var. *japonicus*, T4957 *Piper nigrum*, T5067 *Polyalthia nemoralis*, T5071 *Polygala arillata*, T5226 *Prunus mume*, T5260 *Pseudostellaria*

- heterophylla*, T5465 *Rhaponticum carthamoides*, T6285 *Tamarindus indica*, T6902 *Zea mays*.
- inappetence due to glomus in stomach duct** T2554 *Eupatorium cannabinum*.
- incarcerated hernia of intestine** T2744 *Foeniculum vulgare*.
- incessant asthma and cough** T3329 *Hyoscyamus niger*.
- incessant bleeding** T1994 *Daemonorops draco*, T2253 *Dracaena cochinchinensis*, T6540 *Tripterygium hypoglaucum*.
- incessant chronic diarrhea** T2190 *Dioscorea batatas* [Syn. *Dioscorea opposita*], T2202 *Dioscorea japonica*, T4351 *Myristica fragrans*, T5791 *Schisandra chinensis*, T5802 *Schisandra sphenanthera*.
- incessant cough** T2867 *Garcinia multiflora*, T6346 *Terminalia chebula*, T6348 *Terminalia chebula* var. *tomentella*.
- incessant flooding and spotting** T5446 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], T6440 *Thuja orientalis* [Syn. *Platycladus orientalis*; *Biota orientalis*].
- incessant intestinal wind bleeding** T5138 *Poncirus trifoliata*.
- incessant nosebleed** T0328 *Alnus japonica*.
- incessant postpartum bleeding** T5183 *Potentilla griffithii* var. *velutina*.
- incessant red and white vaginal discharge** T6551 *Trogopterus xanthipes*; *Pteromys volans*.
- incessant urinary turbidity** T6504 *Tricholoma matsutake* [Syn. *Armillaria matsutake*].
- incessant vaginal discharge** T6670 *Vaccinium bracteatum*.
- incessant vomiting and diarrhea** T4018 *Machilus thunbergii*, T5363 *Pyrus calleryana*.
- incised wound** T0991 *Bos taurus domesticus*; *Bubalus bubalis*, T2154 *Dicentra spectabilis*, T2280 *Dryopteris chrysocoma*, T3980 *Lycopodium lucidum*, T4917 *Pinus massoniana*, T5554 *Rodgersia aesculifolia*, T5653 *Salix purpurea*.
- incised wound and bleeding** T0661 *Artemisia anomala*, T0973 *Bombax malabaricum* [Syn. *Gossampinus malabarica*], T0977 *Bombyx mori*, T2420 *Ericerus pela*, T3776 *Lethariella zahlbruckneri*, T4207 *Metaplexis japonica*, T5301 *Pterocarpus indicus*.
- indigestion** T0156 *Actinidia arguta*, T0158 *Actinidia chinensis*, T0363 *Alpinia speciosa*, T0500 *Anguilla japonica*, T0647 *Armoracia lapathifolia*, T0881 *Bauhinia variegata*, T1101 *Caesalpinia decapetala*, T1217 *Carum carvi*, T1242 *Cassia occidentalis*, T1468 *Citrus aurantium*, T1506 *Citrus reticulata*, T1521 *Citrus wilsonii*, T1623 *Collybia albuminosa*, T1889 *Cuminum cyminum*, T1904 *Curcuma kwangsiensis*, T1909 *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*], T1978 *Cyperus rotundus*, T2050 *Daucus carota* var. *sativa*, T2115 *Dermatocarpon minutum*, T2136 *Desmos cochinchinensis* [Syn. *Desmos chinensis*], T2189 *Dioscorea althaeoides*, T2203 *Dioscorea nipponica*, T2204 *Dioscorea nipponica* ssp. *rosthornii*, T2326 *Elaeagnus angustifolia*, T2340 *Elsholtzia bodinieri*, T2421 *Erigeron annuus*, T2563 *Eupatorium japonicum*, T2659 *Fagopyrum esculentum*, T2717 *Ficus carica*, T2720 *Ficus hispida*, T2763 *Fragaria ananassa*, T2838 *Gallus gallus domesticus*, T3120 *Hedychium spicatum*, T3229 *Hericium erinaceus* [Syn. *Hydnum erinaceus*], T3254 *Hippophae rhamnoides*, T3256 *Hippophae rhamnoides* subsp. *sinensis*, T3258 *Hippophae rhamnoides* subsp. *yunnanensis*, T3289 *Humulus lupulus*, T3318 *Hylotelephium mingjinianum*, T3480 *Isodon angustifolia*, T3628 *Kerria japonica*, T3742 *Lentinus edodes*, T3779 *Leucas aspera*, T3926 *Loropetalum chinense*, T4147 *Medicago falcata*, T4194 *Menyanthes trifoliata*, T4217 *Microcos paniculata* [Syn. *Grewia microcos*], T4284 *Morinda parvifolia*, T4436 *Nitraria tangutorum*, T4644 *Parasilurus asotus*, T4802 *Phleum pratense*, T4887 *Picrorhiza kurroo*, T4888 *Picrorhiza scrophulariiflora*, T5122 *Polygonum viscosum*, T5141 *Poncirus trifoliata*, T5341 *Pygmaepremna herbacea* [Syn. *Premna herbacea*], T5365 *Pyrus pashia*, T5395 *Rabdosia nervosa*, T5419 *Raphanus sativus*, T5472 *Rheum officinale*, T5474 *Rheum palmatum*, T5481 *Rheum tanguticum*, T6056 *Sorghum vulgare*, T6071 *Sphaeranthus indicus*, T6214 *Swertia chinensis*, T6224 *Swertia kouitchensis*, T6229 *Swertia patens*, T6231 *Swertia pseudochinensis*, T6234 *Swertia punicea*, T6275 *Tacca chantrieri* [Syn. *Tacca minor*; *Tacca esquirolii*], T6339 *Tephrosia purpurea*, T6436 *Thlaspi arvense*, T6488 *Trachyspermum ammi*, T6602 *Umbilicaria hypococeinea*, T6651 *Urtica cannabina*, T6652 *Urtica dioica*, T6656 *Ustilago maydis*, T6789 *Vitex negundo*, T6801 *Vladimiria denticulata*.
- indigestion of overnight food** T1021 *Brassica rapa*, T1876 *Cucumis melo*.
- induce abortion** T2023 *Daphne genkwa*, T6512 *Trichosanthes kirilowii*.
- infant ardent fever** T1264 *Catalpa ovata*, T3764 *Lepisorus thunbergianus*, T4248 *Mimosa pudica*, T4506 *Ophioglossum vulgatum*.
- infant ardent fever convulsion** T0942 *Biebersteinia heterostemon*, T5592 *Rubus hirsutus*.
- infant common cold** T6229 *Swertia patens*.
- infant diarrhea** T2161 *Dicranopteris pedata* [Syn. *Polypodium pedatum*; *Dicranopteris dichotoma*], T2941 *Gentianopsis paludosa*, T5344 *Pyrola atropurpurea*, T5345 *Pyrola calliantha* [Syn. *Pyrola rotundifolia* ssp. *chinensis*], T5346 *Pyrola calliantha* var. *tibetana*, T5347 *Pyrola decorata*, T5349 *Pyrola incarnata*, T5350 *Pyrola japonica*, T5351 *Pyrola rotundifolia*.
- infant fetal toxin** T2730 *Fimbristylis dichotoma*.
- infant fright wind** T0088 *Aconitum coreanum*, T0984 *Bos taurus domesticus*; *Bubalus bubalis*, T1045 *Bubalus bubalis*, T1084 *Buthus martensi*, T1288 *Celastrus orbiculatus* [Syn. *Celastrus articulatus*], T1332 *Cercidiphyllum japonicum*, T2091 *Delphinium yunnanense*, T2540 *Euonymus fortunei*, T2927 *Gentiana rhodantha*, T4730 *Peristrophe roxburghiana*, T5183 *Potentilla griffithii* var. *velutina*, T5289 *Pteris dactylina*, T5290 *Pteris fauriei* [Syn. *Pteris fauriei* var. *minor*], T5299 *Pteris wallichiana*, T5626 *Ruta graveolens*, T5863 *Selaginella moellendorffii*, T5939 *Shiraia bambusicola*, T6278 *Tagetes erecta*, T6393 *Thalictrum ichangense* [Syn. *Thalictrum tripeltatum*; *Thalictrum multipeltatum*], T6580 *Tylophora floribunda*, T6618 *Uncaria homomalla* [Syn. *Uruparia homomalla*; *Uruparia tonkinensis*; *Uruparia lanosa* var. *parviflora*], T6651 *Urtica cannabina*, T6652 *Urtica dioica*, T6903 *Zephyranthes candida*.
- infant fright wind and night crying** T6625 *Uncaria macrophylla*, T6629 *Uncaria rhynchophylla* [Syn. *Nauclea rhynchophylla*], T6633 *Uncaria sinensis*.
- infant mouth sore** T0920 *Berberis wilsonae*, T2733 *Firmiana simplex*, T3989 *Lygodium flexuosum* [Syn. *Lygodium pinnatifidum*; *Ophioglossum flexuosum*], T4562 *Oxalis acetosella*.

- infant night crying** T2836 *Gallus gallus domesticus*, T3040 *Gomphrena globosa*, T3578 *Juncus effusus*.
- infant pneumonia** T3348 *Hypericum elodeoides*, T3368 *Hypericum wightianum*.
- infant retardation of walking** T0038 *Acanthopanax gracilistylus*, T0042 *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*], T0044 *Acanthopanax sessiliflorus*.
- infantile cough asthma** T6026 *Sonchus asper* [Syn. *Sonchus oleraceus* var. *asper*].
- infantile night crying** T4838 *Phyllanthus flexuosus*.
- infection due to foot lichen** T4391 *Nauclea officinalis*.
- infection from wounds** T0060 *Achillea alpina* [Syn. *Achillea sibirica*].
- infection of biliary tract** T3388 *Ilex chinensis* [Syn. *Ilex purpurea*], T4881 *Picrasma quassioides* [Syn. *Picrasma ailanthoides*], T4882 *Picrasma quassioides* [Syn. *Picrasma ailanthoides*].
- infection of skin** T0625 *Aristolochia contorta*, T0627 *Aristolochia debilis* [Syn. *Aristolochia longa*], T1959 *Cynanchum paniculatum*, T2023 *Daphne genkwa*, T3926 *Loropetalum chinense*, T6008 *Solanum nigrum*.
- infection of upper respiratory tract** T0457 *Andrographis paniculata* [Syn. *Justicia paniculata*], T0897 *Berberis amurensis*, T0912 *Berberis poiretii*, T0920 *Berberis wilsonae*, T1535 *Clausena excavata*, T1662 *Coptis chinensis*, T1663 *Coptis chinensis* var. *brevisekala*, T1664 *Coptis deltoidea*, T1669 *Coptis omeiensis*, T1670 *Coptis teetoides* [Syn. *Coptis teeta*], T1709 *Corydalis bungeana*, T2357 *Emilia sonchifolia*, T2715 *Fibraurea recisa*, T2783 *Fritillaria cirrhosa*, T2784 *Fritillaria delavayi*, T2792 *Fritillaria przewalskii*, T2796 *Fritillaria unibracteata*, T2798 *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*], T3476 *Isatis indigotica*, T3908 *Lonicera bournei*, T3909 *Lonicera confusa*, T3910 *Lonicera fulvotomentosa*, T3911 *Lonicera hypoglauca*, T3912 *Lonicera japonica*, T3914 *Lonicera macranthoides*, T3918 *Lonicera similis*, T4184 *Mentha haplocalyx* [Syn. *Mentha canadaensis*; *Mentha arvensis* var. *haplocalyx*; *Mentha arvensis*], T4881 *Picrasma quassioides* [Syn. *Picrasma ailanthoides*], T5018 *Pleuropterus ciliinervis*, T5833 *Scutellaria amoena*, T5834 *Scutellaria baicalensis*, T5839 *Scutellaria hypericifolia*, T5841 *Scutellaria likiangensis*, T5843 *Scutellaria rehderiana*, T5845 *Scutellaria viscidula*, T6122 *Stephania dielsiana*, T6135 *Stephania succifera*, T6278 *Tagetes erecta*, T6301 *Taraxacum mongolicum*, T6554 *Trollius macropetalus*, T6574 *Tussilago farfara*, T6766 *Viola tricolor*.
- infection of urinary system** T1199 *Carduus acanthoides*, T1200 *Carduus crispus*, T4388 *Nasturtium officinale*, T5018 *Pleuropterus ciliinervis*, T6071 *Sphaeranthus indicus*, T6234 *Swertia punicea*.
- infections** T0478 *Angelica dahurica* [Syn. *Angelica porphyrocaulis*], T0625 *Aristolochia contorta*, T0627 *Aristolochia debilis* [Syn. *Aristolochia longa*], T5110 *Polygonum orientale*.
- infective cholecystitis** T0672 *Artemisia capillaris*, T0695 *Artemisia scoparia* [Syn. *Artemisia capillaris* var. *scoparia*].
- infective dermatitis** T1959 *Cynanchum paniculatum*.
- infective fever due to external injury** T3092 *Halenia corniculata*.
- infective hepatitis** T1709 *Corydalis bungeana*, T4538 *Oroxylum indicum*, T4843 *Phyllanthus urinaria*, T5651 *Salix babylonica*, T6412 *Thalictrum squarrosum*, T6814 *Wedelia chinensis* [Syn. *Solidago chinensis*; *Wedelia calendulacea*], T6819 *Wikstroemia chamaedaphne*.
- infertility** T0541 *Apis cerana*, T1455 *Cistanche deserticola*, T1456 *Cistanche salsa*, T3279 *Homo sapiens*, T3287 *Huechys sanguinea*, T5566 *Rosa henryi*.
- infertility due to uterus cold** T0664 *Artemisia argyi*, T0681 *Artemisia lavandulaefolia*, T0685 *Artemisia mongolica*, T0689 *Artemisia princeps*, T0691 *Artemisia rubripes*, T0706 *Artemisia vulgaris*, T0993 *Boschniakia rossica*, T1337 *Cervus nippon*; *Cervus elaphus*, T1582 *Cnidium monnieri*, T1900 *Curculigo capitulata* [Syn. *Leucojum capitulata*], T4536 *Orobanchae coerulea*, T4954 *Piper longum*, T5593 *Rubus idaeus*.
- influenza** T0099 *Aconitum gymnandrum*, T0333 *Alocasia cucullata* [Syn. *Arum cucullatum*], T0553 *Apocynum venetum*, T0728 *Asarum heterotropoides* var. *mandshuricum*, T0731 *Asarum sieboldii*, T0732 *Asarum sieboldii* var. *seoulensis*, T0791 *Astragalus chrysopterus*, T0794 *Astragalus ernestii*, T0798 *Astragalus membranaceus*, T0800 *Astragalus mongolicus*, T0866 *Baphicacanthus cusia* [Syn. *Strobilanthes cusia*], T1055 *Bupleurum angustissimum*, T1056 *Bupleurum aureum*, T1058 *Bupleurum chaishouii*, T1059 *Bupleurum chinense*, T1065 *Bupleurum longiradiatum*, T1066 *Bupleurum marginatum*, T1067 *Bupleurum marginatum* var. *stenophyllum*, T1072 *Bupleurum scorzoniferifolium*, T1073 *Bupleurum sibiricum*, T1075 *Bupleurum smithii* var. *parvifolium*, T1078 *Bupleurum wenchuanense*, T1079 *Bupleurum yinchowense*, T1393 *Chrysanthemum indicum*, T1535 *Clausena excavata*, T1633 *Commelina communis*, T1709 *Corydalis bungeana*, T1727 *Corydalis mucronifera*, T2721 *Ficus microcarpa*, T3475 *Isatis indigotica*, T3528 *Isodon ternifolia*, T3529 *Isodon ternifolius*, T3908 *Lonicera bournei*, T3909 *Lonicera confusa*, T3910 *Lonicera fulvotomentosa*, T3911 *Lonicera hypoglauca*, T3912 *Lonicera japonica*, T3914 *Lonicera macranthoides*, T3918 *Lonicera similis*, T4220 *Microlepis strigosa* [Syn. *Trichomanes strigosa*], T4223 *Micromelum integerrimum*, T4552 *Osmunda japonica*, T4568 *Oxytropis myriophylla*, T4998 *Plagiogyria euphlebica*, T5592 *Rubus hirsutus*, T5797 *Schisandra propinqua*, T5798 *Schisandra propinqua* var. *intermedia*, T5907 *Senecio scandens* [Syn. *Senecio chinensis*], T6226 *Swertia mileensis*, T6375 *Thalictrum baicalense*, T6376 *Thalictrum cultratum*, T6385 *Thalictrum flavum*, T6387 *Thalictrum foliolosum*, T6389 *Thalictrum glandulosissimum*.
- influenza in early stage** T2756 *Forsythia suspensa*.
- ingrown eyelash** T4471 *Ocimum basilicum*.
- inhibited urination** T0274 *Akebia quinata*, T0278 *Akebia trifoliata*, T0280 *Akebia trifoliata* var. *australis*, T0303 *Alisma orientale* [Syn. *Alisma plantago-aquatica* var. *orientale*], T0628 *Aristolochia fangchi*, T0629 *Aristolochia heterophylla*, T0647 *Armoracia lapathifolia*, T0672 *Artemisia capillaris*, T0695 *Artemisia scoparia* [Syn. *Artemisia capillaris* var. *scoparia*], T0708 *Arthomeris mairei* [Syn. *Polypodium mairei*], T0722 *Arundo donax*, T0759 *Aspidistra elatior*, T0824 *Atractylodes macrocephala* [Syn. *Atractylis macrocephala*], T0838 *Azolla imbricata* [Syn. *Salvinia imbricata*], T0853 *Baeckea frutescens*, T1004 *Brasenia schreberi*, T1152 *Camellia sinensis* [Syn. *Thea sinensis*], T1238 *Cassia mimosoides*, T1240 *Cassia obtusifolia*, T1250 *Cassia tora*, T1258 *Casuarina equisetifolia*, T1263 *Catalpa ovata*, T1438 *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*], T1464



*Citrullus vulgaris* [Syn. *Citrullus lanatus*], T1471 *Citrus chachiensis*, T1473 *Citrus cultivars*, T1474 *Citrus decumana*, T1516 *Citrus tankan*, T1518 *Citrus unshiu*, T1538 *Clausena lansium*, T1595 *Codium fragile*, T1614 *Coix lacryma-jobi* var. *ma-yuen*, T1819 *Crotalaria ferruginea*, T1980 *Cyprinus carpio*, T2125 *Descurainia sophia*, T2282 *Dryopteris filix-mas*, T2341 *Elsholtzia ciliata*, T2367 *Ephedra equisetina*, T2368 *Ephedra gerardiana*, T2369 *Ephedra intermedia*, T2372 *Ephedra likiangensis*, T2373 *Ephedra minuta*, T2375 *Ephedra monosperma*, T2379 *Ephedra saxatilis*, T2380 *Ephedra sinica*, T2628 *Euphrasia officinalis*, T2730 *Fimbristylis dichotoma*, T2927 *Gentiana rhodantha*, T3143 *Helianthus annuus*, T3199 *Hemibarbus labeo*, T3288 *Humulus japonicus* [Syn. *Humulus scandens*], T3448 *Ipomoea cairica* [Syn. *Ipomoea palmata*], T3578 *Juncus effusus*, T3628 *Kerria japonica*, T3662 *Lactuca sativa*, T3675 *Lagopsis supina*, T3755 *Lepidium apetalum* [Syn. *Lepidium micranthum*], T3758 *Lepidium sativum*, T3759 *Lepidium virginicum*, T3765 *Lepisorus ussuriensis*, T3885 *Litsea cubeba*, T3921 *Lophatherum gracile*, T3950 *Lychnis fulgens*, T3983 *Lycoris aurea*, T3988 *Lycoris squamigera*, T4194 *Menyanthes trifoliata*, T4225 *Micosorium punctatum*, T4254 *Miscanthus sinensis*, T4275 *Monotropa hypopitys*, T4287 *Morus alba*, T4304 *Mosla chinensis* [Syn. *Orthodon chinensis*], T4456 *Nymphoides peltatum*, T4616 *Pandanus tectorius*, T4688 *Peganum harmala*, T4851 *Physalis minima*, T5129 *Polyporus umbellatus*, T5223 *Prunus humilis* [Syn. *Cerasus humilis*], T5224 *Prunus japonica* [Syn. *Cerasus japonica*], T5225 *Prunus japonica* var. *nakaii*, T5231 *Prunus persica*, T5362 *Pyrus bretschneideri*, T5366 *Pyrus pyrifolia*, T5614 *Rumex patientia*, T5626 *Ruta graveolens*, T5953 *Silene firma*, T5966 *Siphonostegia chinensis*, T6031 *Sophora flavescens* [Syn. *Sophora angustifolia*], T6100 *Stauntonia hexaphylla*, T6136 *Stephania tetrandra*, T6210 *Swainsonia salsula* [Syn. *Sphaerophysa salsula*], T6357 *Tetrapanax papyriferus*, T6598 *Ulva conglobata*, T6676 *Valeriana hardwickii*, T6794 *Vitis amurensis*, T6799 *Vitis vinifera*, T6862 *Zanthoxylum ailanthoides*, T6902 *Zea mays*.

**inhibited urination [= dysuria]** T0388 *Amaranthus lividus*, T0894 *Benincasa hispida*, T1032 *Broussonetia papyrifera*, T1033 *Broussonetia papyrifera*, T3460 *Iris halophila*, T3464 *Iris lactea* var. *chinensis* [Syn. *Iris pallasii* var. *chinensis*], T3990 *Lygodium japonicum*, T4120 *Marsdenia tenacissima*, T4121 *Marsilea quadrifolia*, T4274 *Monostroma nitidum*, T4573 *Pachyrrhizus erosus*, T4644 *Parasilurus asotus*, T5002 *Plantago asiatica*, T5004 *Plantago depressa*, T5007 *Plantago major*, T5103 *Polygonum hydropiper*, T6861 *Zanthoxylum ailanthoides*.

**inhibited urine and stool** T0314 *Allium fistulosum*, T1205 *Carica papaya*, T2608 *Euphorbia pekinensis*, T3286 *Hovenia dulcis*, T4779 *Pharbitis nil*, T4780 *Pharbitis purpurea*.

**inhibited voidings of reddish urine** T0635 *Aristolochia moupinensis*, T3920 *Lophatherum gracile*, T4194 *Menyanthes trifoliata*.

**innominate toxin swelling** T0002 *Abelmoschus moschatus* [Syn. *Hibiscus abelmoschus*], T0100 *Aconitum hemsleyanum* var. *circinacum*, T0101 *Aconitum hemsleyanum*, T0122 *Aconitum pendulum*, T0123 *Aconitum polyschistum*, T0424 *Ampelopsis brevipedunculata* var. *hancei*, T0567 *Aralia armata*, T0595 *Ardisia crispa*, T0897 *Berberis amurensis*, T0962 *Boehmeria platanifolia* [Syn. *Boehmeria tricuspis*], T1097

*Cacalia ainsliaeflora*, T1731 *Corydalis pallida*, T1996 *Dahlia pinnata* [Syn. *Dahlia variabilis*], T2056 *Debregeasia longifolia*, T2301 *Dysosma majorensis* [Syn. *Podophyllum majorense*; *Dysosma lichuanensis*], T2599 *Euphorbia lunulata*, T2632 *Euryale ferox*, T2980 *Gleditsia sinensis* [Syn. *Gleditsia horrida*], T3080 *Gymnema sylvestris*, T3125 *Hedyotis chrysotricha* [Syn. *Oldenlandia chrysotricha*], T3495 *Isodon irrorata*, T3619 *Kadsura peltigera* [Syn. *Kadsura longipedunculata*], T3808 *Ligularia japonica* [Syn. *Arnica japonica*; *Senecio japonica*], T3827 *Ligustrum japonicum*, T3886 *Litsea euosma*, T3928 *Lotus corniculatus*, T3933 *Luffa acutangula*, T3934 *Luffa cylindrica*, T4264 *Momordica cochinchinensis*, T4527 *Orixa japonica*, T4530 *Ormosia hosiei*, T4562 *Oxalis acetosella*, T4577 *Paederia scandens*, T4687 *Peganum harmala*, T4843 *Phyllanthus urinaria*, T4979 *Pistacia chinensis*, T5090 *Polygala wattersii*, T5097 *Polygonum amphibium*, T5120 *Polygonum tinctorium*, T5167 *Porana racemosa*, T5193 *Pratia nummularia*, T5247 *Przewalskia tangutica*, T5646 *Sagina japonica* [Syn. *Spergula japonica*], T5720 *Sapindus mukorossi*, T5731 *Sarcococca coriacea* [Syn. *Sarcococca wallichii*], T6279 *Tagetes erecta*, T6367 *Teucrium quadrifarium*, T6742 *Vicia amoena*.

**insect bites** T2206 *Dioscorea parviflora*, T2213 *Dioscorea zingiberensis*, T3003 *Glycine max*, T4384 *Narcissus tazetta* var. *chinensis*, T5120 *Polygonum tinctorium*, T5857 *Sedum sarmentosum*.

**insect bites with itching** T6072 *Sphagnum palustre* [Syn. *Sphagnum obtusifolium*; *Sphagnum cymbifolium*].

**insomnia** T0292 *Albizia julibrissin*, T0295 *Albizia odoratissima*, T0553 *Apocynum venetum*, T0645 *Armillariella mellea*, T1381 *Choerospondias axillaris*, T1393 *Chrysanthemum indicum*, T1826 *Crotalaria mucronata*, T2846 *Ganoderma japonicum* [Syn. *Ganoderma sinense*], T2848 *Ganoderma lucidum*, T3229 *Hericium erinaceus* [Syn. *Hydnum erinaceus*], T3289 *Humulus lupulus*, T3372 *Hypodematium sinense*, T3775 *Lethariella cladonioides*, T3950 *Lychnis fulgens*, T4001 *Lysimachia davurica*, T4248 *Mimosa pudica*, T4400 *Nelumbo nucifera*, T4663 *Passiflora caerulea*, T4665 *Passiflora edulis*, T5107 *Polygonum multiflorum*, T5108 *Polygonum multiflorum*, T5169 *Poria cocos*, T5423 *Rauwolfia verticillata*, T5425 *Rauwolfia verticillata* f. *rubrocarpa*, T5426 *Rauwolfia verticillata* var. *hainanensis*, T5427 *Rauwolfia vomitoria*, T5435 *Rauwolfia latifrons*, T5441 *Rauwolfia perakensis*, T5657 *Salsola collina*, T5697 *Salvia trijuga*, T5850 *Sedum aizoon*, T5855 *Sedum kamtschaticum*, T6416 *Thamnia vermicularis*, T6656 *Ustilago maydis*.

**insomnia and emission** T4401 *Nelumbo nucifera*.

**insomnia and frequent dreaming** T0041 *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*], T2753 *Formica fusca*, T3832 *Lilium brownii* var. *viridulum* [Syn. *Lilium brownii* var. *colchesteri*], T3835 *Lilium longiflorum*, T3836 *Lilium pumilum* [Syn. *Lilium tenuifolium*], T3839 *Lilium tigrinum* [Syn. *Lilium lancifolium*], T4288 *Morus alba*, T4600 *Panax ginseng* [Syn. *Panax schinseng*], T5071 *Polygala arillata*, T6056 *Sorghum vulgare*.

**insomnia and vexation** T1813 *Crotalaria albida*, T2840 *Gallus gallus domesticus*, T3578 *Juncus effusus*, T3778 *Leucaena glauca* [Syn. *Leucaena leucocephala*], T3875 *Liriope spicata* var. *prolifera*, T4507 *Ophiopogon japonicus*, T5680 *Salvia miltiorrhiza*, T5681 *Salvia miltiorrhiza* f. *alba*, T5688 *Salvia przewalskii*.

- insomnia and vexation due to effulgent fire** T1662 *Coptis chinensis*, T1663 *Coptis chinensis* var. *brevisepala*, T1664 *Coptis deltoidea*, T1669 *Coptis omeiensis*, T1670 *Coptis teetoides* [Syn. *Coptis teeta*].
- intercostal neuralgia** T0116 *Aconitum nagarum* var. *heterotrichum* [Syn. *Aconitum bullatifolium*].
- internal bleeding** T2220 *Diospyros kaki*, T6746 *Vicia faba*.
- internal damage due to knocks and falls** T5646 *Sagina japonica* [Syn. *Spergula japonica*].
- internal damage stasis pain** T1994 *Daemonorops draco*, T2253 *Dracaena cochinchinensis*.
- internal heat and abdominal pain** T0565 *Arachniodes simplicior*.
- internal or external obstruction and screen** T6732 *Vespertilio superans*.
- intervallic fever** T1101 *Caesalpinia decapetala*.
- intestinal dry and constipation** T0300 *Aleurites moluccana*, T0474 *Angelica acutiloba* [Syn. *Ligusticum acutilobum*], T0540 *Apis cerana*, T0944 *Biota orientalis* [Syn. *Thuja orientalis*; *Platyclusus orientalis*], T0993 *Boschniakia rossica*, T1173 *Cannabis sativa*, T1384 *Chondrus ocelladus*, T1455 *Cistanche deserticola*, T1456 *Cistanche salsa*, T3568 *Juglans regia*, T3860 *Linum usitatissimum*, T3873 *Liriope platyphylla*, T3874 *Liriope spicata*, T3875 *Liriope spicata* var. *prolifera*, T4288 *Morus alba*, T4487 *Olea europaea*, T4507 *Ophiopogon japonicus*, T4536 *Orobanchae coerulescens*, T4715 *Perilla frutescens*, T4717 *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*], T4719 *Perilla frutescens* var. *arguta*, T4722 *Perilla frutescens* var. *crispa*, T5107 *Polygonum multiflorum*, T5216 *Prunus armeniaca*, T5219 *Prunus armeniaca* var. *ansu*, T5229 *Prunus persica*, T5233 *Prunus persica*, T5238 *Prunus salicina*, T5454 *Rhamnus cathartica*, T5657 *Salsola collina*, T5925 *Sesamum indicum* [Syn. *Sesamum orientale*], T5927 *Sesamum indicum* [Syn. *Sesamum orientale*], T5967 *Siraitia grosvenorii* [Syn. *Momordica grosvenorii*], T6511 *Trichosanthes kirilowii*.
- intestinal heat and constipation** T2717 *Ficus carica*.
- intestinal heat bleeding** T3155 *Helianthus tuberosus*.
- intestinal heat bleeding from hemorrhoids** T0624 *Aristolochia contorta*, T0626 *Aristolochia debilis* [Syn. *Aristolochia longa*], T0630 *Aristolochia indica*, T0633 *Aristolochia maxima*, T0640 *Aristolochia triangularis*.
- intestinal infection** T5344 *Pyrola atropurpurea*, T5345 *Pyrola calliantha* [Syn. *Pyrola rotundifolia* ssp. *chinensis*], T5346 *Pyrola calliantha* var. *tibetana*, T5347 *Pyrola decorata*, T5349 *Pyrola incarnata*, T5350 *Pyrola japonica*, T5351 *Pyrola rotundifolia*.
- intestinal pain due to qi disorder** T0364 *Alsophila spinulosa*.
- intestinal parasitic disease** T0099 *Aconitum gymnantrum*, T0500 *Anguilla japonica*, T0511 *Annona reticulata*, T0513 *Annona squamosa*, T0952 *Blechnum orientale*, T2282 *Dryopteris filix-mas*, T2410 *Equisetum pratense*, T4552 *Osmunda japonica*, T5113 *Polygonum persicaria*, T6826 *Wisteria sinensis*.
- intestinal welling abscess** T0157 *Actinidia callosa* var. *henryi*, T0267 *Ajuga nipponensis*, T0318 *Allium sativum*, T0867 *Baphicacanthus cusia* [Syn. *Strobilanthes cusia*], T0895 *Benincasa hispida*, T0938 *Bidens bipinnata*, T0994 *Boswellia carterii*, T1614 *Coix lacryma-jobi* var. *ma-yuen*, T1638 *Commiphora myrrha* [Syn. *Commiphora molmol*], T2830 *Galium aparine*, T3126 *Hedyotis corymbosa* [Syn. *Oldenlandia corymbosa*], T3356 *Hypericum japonicum*, T3460 *Iris halophila*, T3464 *Iris lactea* var. *chinensis* [Syn. *Iris pallasii* var. *chinensis*], T3466 *Iris potaninii*, T3547 *Ixeris chinensis*, T3659 *Lactuca indica*, T4485 *Oldenlandia diffusa* [Syn. *Hedyotis diffusa*], T4577 *Paederia scandens*, T4672 *Patrinia scabiosaefolia*, T4676 *Patrinia villosa*, T5835 *Scutellaria barbata* [Syn. *Scutellaria rivularis*], T5838 *Scutellaria galericulata*, T5840 *Scutellaria indica*, T6767 *Viola yedoensis*.
- intestinal welling abscess and abdominal pain** T5472 *Rheum officinale*, T5474 *Rheum palmatum*, T5481 *Rheum tanguticum*, T5741 *Sargentodoxa cuneata*.
- intestinal wind** T0427 *Ampelopsis japonica* [Syn. *Paullinia japonica*], T0500 *Anguilla japonica*, T1441 *Cinnamomum japonicum*, T4505 *Ophiocephalus argus*.
- intestinal wind bleeding** T0255 *Ailanthus altissima*, T1005 *Brassica campestris* [Syn. *Brassica campestris* var. *oleifera*], T1112 *Calendula arvensis*, T1282 *Cedrus deodara*, T1289 *Celastrus orbiculatus* [Syn. *Celastrus articulatus*], T3244 *Hibiscus syriacus*, T3245 *Hibiscus syriacus*, T3361 *Hypericum perforatum*, T3863 *Liparis nervosa*, T3933 *Luffa acutangula*, T3934 *Luffa cylindrica*, T3935 *Luffa cylindrica*, T4584 *Paeonia lactiflora* wild, T4586 *Paeonia obovata*, T4590 *Paeonia veitchii*, T4678 *Paulownia fortunei*, T4679 *Paulownia tomentosa*, T5284 *Pteridium aquilinum* var. *latiusculum*, T5611 *Rumex japonicus*, T5612 *Rumex nepalensis*, T5727 *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*], T6006 *Solanum melongena*, T6007 *Solanum melongena*, T6031 *Sophora flavescens* [Syn. *Sophora angustifolia*], T6034 *Sophora japonica*, T6036 *Sophora japonica*, T6474 *Toona ciliata*, T6475 *Toona sinensis*, T6508 *Trichosanthes cucumeroides*, T6601 *Umblicaria esculenta* [Syn. *Gyrophora esculenta*], T6830 *Woodfordia fruticosa*.
- intestinal wind bleeding (flower)** T1113 *Calendula officinalis*.
- intestinal wind blood dysentery** T4550 *Osmanthus fragrans*.
- intestinal worm accumulation** T1101 *Caesalpinia decapetala*.
- intestine gripping sand** T2658 *Fagopyrum esculentum*.
- intractable headache with pulling sensation** T5817 *Scolopendra subspinipes mutilans*.
- intractable impediment** T2597 *Euphorbia lathyris*.
- intractable lichen** T0736 *Asclepias curassavica*, T1084 *Buthus martensi*, T1374 *Chloranthus spicatus*, T1719 *Corydalis incisa*, T2505 *Eucalyptus citriodora*, T2584 *Euphorbia ebracteolata*, T2587 *Euphorbia fischeriana*, T2857 *Garcinia hanburyi*, T2866 *Garcinia morella*, T3567 *Juglans regia*, T3984 *Lycoris chinensis*, T3986 *Lycoris radiata* [Syn. *Amaryllis radiata*], T4020 *Macleaya cordata*, T4085 *Mallotus repandus* var. *chrysocarpus* [Syn. *Mallotus chrysocarpus*; *Mallotus repandus*], T4338 *Mylabris phalerata*, *Mylabris cichorii*, T5010 *Platycarya strobilacea*, T5455 *Rhamnus crenata*, T5516 *Rhododendron molle*, T5531 *Rhus chinensis* [Syn. *Rhus semialata*], T5976 *Smilax china* [Syn. *Smilax japonica*], T6028 *Sophora alopecuroides*, T6029 *Sophora alopecuroides*, T6542 *Tripterygium wilfordii*.
- invisible worm sores** T5221 *Prunus davidiana*, T5235 *Prunus persica*.
- iron or wood intake** T1836 *Crotalaria tetragona*.
- itching in genital region** T6764 Vinegar.

- itching sore of skin** T1316 *Cephalanthus occidentalis*.
- itch-pain in sore and papules** T1352 *Chamaenerion angustifolium* [Syn. *Epilobium angustifolium*].
- itchy body** T1161 *Campsis grandiflora*, T1175 *Cannabis sativa*, T6497 *Tribulus terrestris*.
- itchy eye** T5804 *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*].
- itchy of skin** T0838 *Azolla imbricata* [Syn. *Salvinia imbricata*], T3342 *Hypericum bellum*.
- itchy papules** T0933 *Betula platyphylla*, T0935 *Betula platyphylla* var. *japonica*, T1210 *Carpesium abrotanoides*, T1556 *Clerodendron fragrans*, T5339 *Pycnoporus sanguineus*, T6491 *Trametes cinnabarina* [Syn. *Polyporus cinnabarinus*; *Boletus cinnabarinus*].
- itchy skin** T0664 *Artemisia argyi*, T0672 *Artemisia capillaris*, T0681 *Artemisia lavandulaefolia*, T0685 *Artemisia mongolica*, T0689 *Artemisia princeps*, T0691 *Artemisia rubripes*, T0695 *Artemisia scoparia* [Syn. *Artemisia capillaris* var. *scoparia*], T0706 *Artemisia vulgaris*, T0853 *Baeckea frutescens*, T0963 *Boehmeria siamensis*, T0975 *Bombyx mori*, T1146 *Camellia oleifera*, T1147 *Camellia oleifera*, T1261 *Catalpa ovata*, T1264 *Catalpa ovata*, T1372 *Chloranthus serratus*, T1437 *Cinnamomum camphora*, T1446 *Cipadessa baccifera*, T1721 *Corydalis linearoides*, T1730 *Corydalis ophiocarpa*, T1869 *Cryptotaenia japonica*, T2165 *Dictamnus angustifolius*, T2167 *Dictamnus dasycarpus*, T2348 *Embelia ribes*, T2585 *Euphorbia esula*, T2590 *Euphorbia hirta*, T2805 *Fugu ocellatus*, T2988 *Glochidion eriocarpum*, T3288 *Humulus japonicus* [Syn. *Humulus scandens*], T3471 *Iris tectorum*, T3569 *Juglans regia*, T3646 *Kyllinga brevifolia*, T3675 *Lagopsis supina*, T3851 *Lindera glauca*, T3860 *Linum usitatissimum*, T3990 *Lygodium japonicum*, T4388 *Nasturtium officinale*, T4526 *Origanum vulgare*, T4572 *Pachyrhizus erosus*, T4687 *Peganum harmala*, T4917 *Pinus massoniana*, T5104 *Polygonum hydropiper*, T5178 *Potamogeton perfoliatus*, T5395 *Rabdosia nervosa*, T5640 *Sabina vulgaris*, T5840 *Scutellaria indica*, T6031 *Sophora flavescens* [Syn. *Sophora angustifolia*], T6541 *Tripterygium regelii*, T6843 *Xanthium sibiricum* [Syn. *Xanthium strumarium*], T6843 *Xanthium sibiricum* [Syn. *Xanthium strumarium*].
- jaundice** T0045 *Acanthopanax trifoliatum*, T0048 *Acanthus ilicifolius*, T0156 *Actinidia arguta*, T0175 *Adiantum pedatum*, T0264 *Ajuga forrestii*, T0379 *Alternanthera philoxeroides*, T0594 *Ardisia crenata*, T0600 *Ardisia mamillata* [Syn. *Tinus mamillata*], T0601 *Ardisia pusilla*, T0608 *Arenaria kansuensis* [Syn. *Arenaria kumaonensis*], T0610 *Argemone mexicana*, T0648 *Arnebia euchroma*, T0649 *Arnebia guttata*, T0660 *Artemisia annua*, T0662 *Artemisia apiacea* [Syn. *Artemisia carvifolia*; *Artemisia caruifolia*], T0672 *Artemisia capillaris*, T0695 *Artemisia scoparia* [Syn. *Artemisia capillaris* var. *scoparia*], T0696 *Artemisia sieversiana*, T0721 *Arundina chinensis*, T0859 *Balanophora involucreta*, T0867 *Baphicacanthus cusia* [Syn. *Strobilanthes cusia*], T0902 *Berberis diaphana*, T0912 *Berberis poiretii*, T0920 *Berberis wilsonae*, T0933 *Betula platyphylla*, T0935 *Betula platyphylla* var. *japonica*, T0938 *Bidens bipinnata*, T0941 *Bidens tripartita*, T0947 *Bixa orellana*, T0984 *Bos taurus domesticus*; *Bubalus bubalis*, T0989 *Bos taurus domesticus*; *Bubalus bubalis*, T1003 *Brandisia hancei*, T1004 *Brasenia schreberi*, T1031 *Broussonetia kazinoki*, T1044 *Bryum argenteum*, T1172 *Canna edulis*, T1194 *Carassius auratus*, T1197 *Cardiospermum halicacabum*, T1199 *Carduus acanthoides*, T1200 *Carduus crispus*, T1238 *Cassia mimosoides*, T1275 *Cayratia japonica*, T1357 *Chelidonium majus*, T1402 *Chrysosplenium alternifolium*, T1406 *Chrysosplenium nudicaule*, T1526 *Cladonia rangiferina*, T1554 *Clerodendron cyrtophyllum*, T1705 *Corydalis adunca*, T1733 *Corydalis racemosa*, T1759 *Cotinus coggygia* var. *cinerea*, T1784 *Cratoxylum cochinchinense*, T1785 *Cratoxylum prunifolium*, T1813 *Crotalaria albida*, T1884 *Cudrania cochinchinensis*, T1903 *Curcuma aromatica*, T1905 *Curcuma longa*, T1907 *Curcuma wengujin*, T1966 *Cynara scolymus*, T1980 *Cyprinus carpio*, T2020 *Damnacanthus indicus*, T2048 *Daucus carota*, T2132 *Desmodium pulchellum* [Syn. *Phyllodium pulchellum*], T2257 *Dracocephalum moldavicum*, T2258 *Dracocephalum rupestre*, T2272 *Drymaria diandra* [Syn. *Drymaria cordata* ssp. *diandra*], T2290 *Duchesnea indica*, T2334 *Elephantopus scaber*, T2363 *Entada phaseoloides* [Syn. *Lens phaseoloides*], T2649 *Evolvulus alsinoides*, T2715 *Fibraurea recisa*, T2738 *Flemingia strobilifera*, T2839 *Gallus gallus domesticus*, T2882 *Gardenia jasminoides* [Syn. *Gardenia florida*], T2884 *Gardenia jasminoides* var. *grandiflora*, T2927 *Gentiana rhodantha*, T3125 *Hedyotis chrysotricha* [Syn. *Oldenlandia chrysotricha*], T3192 *Hemerocallis citrina*, T3193 *Hemerocallis fulva*, T3195 *Hemerocallis lilio-asphodelus*, T3197 *Hemerocallis minor*, T3311 *Hydrocotyle sibthorpioides*, T3361 *Hypericum perforatum*, T3373 *Hypoestes purpurea* [Syn. *Justicia purpurea*; *Hypoestes sinica*], T3398 *Ilex rotunda*, T3416 *Imperata cylindrica* var. *major*, T3460 *Iris halophila*, T3464 *Iris lactea* var. *chinensis* [Syn. *Iris pallasii* var. *chinensis*], T3476 *Isatis indigotica*, T3528 *Isodon ternifolia*, T3529 *Isodon ternifolius*, T3645 *Kummerowia striata*, T3646 *Kyllinga brevifolia*, T3668 *Lagenaria siceraria* var. *depressa*, T3680 *Lamium amplexicaule*, T3845 *Linaria vulgaris*, T3881 *Lithospermum erythrorhizon*, T3970 *Lycopodium cernuum*, T3973 *Lycopodium japonicum* [Syn. *Lycopodium clavatum*], T3981 *Lycopus lucidus*, T4000 *Lysimachia congestiflora*, T4055 *Mahonia bealei*, T4060 *Mahonia confusa*, T4062 *Mahonia fortunei*, T4064 *Mahonia gracilipes*, T4066 *Mahonia japonica*, T4121 *Marsilea quadrifolia*, T4147 *Medicago falcata*, T4148 *Medicago sativa*, T4149 *Medicago sativa*, T4183 *Menispermum dauricum*, T4217 *Microcos paniculata* [Syn. *Grewia microcos*], T4482 *Oenanthe javanica*, T4526 *Origanum vulgare*, T4544 *Oryza sativa*, T4564 *Oxalis corniculata* [Syn. *Oxalis repens*], T4656 *Parmelia saxatilis*, T4789 *Phellodendron amurense*, T4790 *Phellodendron amurense* var. *wilsonii*, T4791 *Phellodendron chinense*, T4792 *Phellodendron chinense* var. *glabriusculum*, T4831 *Phtheirospermum japonicum* [Syn. *Gerardia japonica*], T4835 *Phyllanthus emblica*, T4840 *Phyllanthus niruri*, T4845 *Physalis alkekengi*, T4846 *Physalis alkekengi* var. *franchetii*, T4847 *Physalis alkekengi* var. *franchetii*, T4851 *Physalis minima*, T5121 *Polygonum tinctorium*, T5176 *Potamogeton natans*, T5230 *Prunus persica*, T5284 *Pteridium aquilinum* var. *latiusculum*, T5288 *Pteris cretica* var. *nervosa* [Syn. *Pteris nervosa*], T5290 *Pteris fauriei* [Syn. *Pteris fauriei* var. *minor*], T5295 *Pteris multifida*, T5401 *Rabdosia yuennanensis*, T5407 *Rana nigromaculata*; *Rana plancyi*, T5413 *Ranunculus cantoniensis*, T5414 *Ranunculus japonicus*, T5531 *Rhus chinensis* [Syn. *Rhus semialata*], T5560 *Rorippa montana* [Syn. *Rorippa dubia*; *Sisymbrium dubium*], T5576 *Rostellularia procumbens*

- [Syn. *Justicia procumbens*], T5650 *Salix babylonica*, T5750 *Saururus chinensis*, T5833 *Scutellaria amoena*, T5834 *Scutellaria baicalensis*, T5839 *Scutellaria hypericifolia*, T5841 *Scutellaria likiangensis*, T5843 *Scutellaria rehderiana*, T5845 *Scutellaria viscidula*, T5856 *Sedum lineare* [Syn. *Sedum obtuso-lineare*], T5859 *Selaginella braunii*, T5870 *Selaginella uncinata*, T5907 *Senecio scandens* [Syn. *Senecio chinensis*], T5950 *Siegesbeckia orientalis*, T5951 *Siegesbeckia orientalis* var. *glabrescens* [Syn. *Siegesbeckia glabrescens*], T5952 *Siegesbeckia orientalis* var. *pubescens* [Syn. *Siegesbeckia pubescens*], T5966 *Siphonostegia chinensis*, T6005 *Solanum lyratum*, T6024 *Solidago virgaurea* var. *leiocarpa* [Syn. *Solidago decurrens*], T6028 *Sophora alopecuroides*, T6131 *Stephania longa*, T6206 *Sus scrofa domestica*, T6250 *Symplocos caudata*, T6357 *Tetrapanax papyriferus*, T6375 *Thalictrum baicalense*, T6376 *Thalictrum cultratum*, T6378 *Thalictrum delavayi*, T6385 *Thalictrum flavum*, T6386 *Thalictrum foetidum*, T6387 *Thalictrum foliolosum*, T6389 *Thalictrum glandulosissimum*, T6403 *Thalictrum petaloideum*, T6409 *Thalictrum simplex* [Syn. *Thalictrum simplex* var. *brevipes*], T6431 *Thesium chinense*, T6507 *Trichosanthes cucumeroides*, T6508 *Trichosanthes cucumeroides*, T6537 *Tripterospermum japonicum*, T6538 *Tripterospermum taiwanense*, T6541 *Tripterygium regelii*, T6749 *Vicia hirsuta*, T6750 *Vicia sativa*, T6752 *Vigna angularis* [Syn. *Dolichus angularis*; *Phaseolus angularis*], T6764 *Vinegar*, T6767 *Viola yedoensis*, T6788 *Vitex negundo*, T6901 *Zea mays*.
- jaundice** [= **icterus, ICT**] T4072 *Mahonia shenii*, T4827 *Photinia Parvifolia*, T6219 *Swertia erythrosticta*, T6228 *Swertia nervosa*.
- jaundice edema** T3000 *Glycine max*.
- jaundice hepatitis** T5867 *Selaginella sinensis*.
- jaundice with reddish urine** T2134 *Desmodium styracifolium*.
- joint running impediment pain** T2536 *Euonymus alatus*.
- joint running swelling pain** T5517 *Rhododendron molle*.
- joint running wind** T6439 *Thuja orientalis* [Syn. *Platycladus orientalis*; *Biota orientalis*].
- joints wind** T4912 *Pinus koraiensis*.
- keratitis** T1055 *Bupleurum angustissimum*, T1056 *Bupleurum aureum*, T1058 *Bupleurum chaishouii*, T1059 *Bupleurum chinense*, T1065 *Bupleurum longiradiatum*, T1066 *Bupleurum marginatum*, T1067 *Bupleurum marginatum* var. *stenophyllum*, T1072 *Bupleurum scorzoniferifolium*, T1073 *Bupleurum sibiricum*, T1075 *Bupleurum smithii* var. *parvifolium*, T1078 *Bupleurum wenchuanense*, T1079 *Bupleurum yinchowense*, T4320 *Murraya kwangsiensis*.
- kersan disease** T4902 *Pimpinella thelungiana*.
- kersan disease with hypertonicity and pain** T3480 *Isodon angustifolia*.
- kidney disease** T6311 *Taxus cuspidata*.
- kidney qi insecurity** T5270 *Psoralea corylifolia*.
- kidney vacuity** T1604 *Coeloglossum viride* [Syn. *Coeloglossum viride* var. *bracteatum*], T2540 *Euonymus fortunei*, T3077 *Gymnadenia conopsea*, T3770 *Lespedeza cuneata*.
- kidney vacuity and edema** T0568 *Aralia chinensis*, T0570 *Aralia dasyphylla*.
- kidney vacuity and emission** T2188 *Dioscorea alata*, T2190 *Dioscorea batatas* [Syn. *Dioscorea opposita*], T2195 *Dioscorea deltoidea*, T2202 *Dioscorea japonica*, T5067 *Polyalthia nemoralis*, T5236 *Prunus pseudocerasus*.
- kidney vacuity asthma** T1439 *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*], T6257 *Syngnathus acus*.
- kidney vacuity cold** T6528 *Trigonella foenum-graecum*.
- kidney vacuity cough asthma T1900 *Curculigo capitulata* [Syn. *Leucojum capitulata*].
- kidney vacuity dizziness** T2956 *Geum japonicum*.
- kidney vacuity dizziness and tinnitus** T2753 *Formica fusca*.
- kidney vacuity hasty asthma** T5446 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*].
- kidney vacuity impotence** T0322 *Allium tuberosum*, T0323 *Allium tuberosum*, T0993 *Boschniakia rossica*, T1972 *Cynomorium songaricum*, T4536 *Orobanchae coerulea*, T4600 *Panax ginseng* [Syn. *Panax schinseng*], T4696 *Penaeus orientalis*, T6263 *Syzygium aromaticum* [Syn. *Eugenia caryophyllata*].
- kidney vacuity lumbago** T0364 *Alsophila spinulosa*, T1958 *Cynanchum otophyllum*, T1963 *Cynanchum wallichii*, T2052 *Davallia divaricata* [Syn. *Davallia formosana*; *Davallia orientalis*], T2273 *Drynaria fortunei*, T2326 *Elaeagnus angustifolia*, T2530 *Eucommia ulmoides*, T2744 *Foeniculum vulgare*, T3000 *Glycine max*, T3409 *Illicium verum*, T4286 *Morinda umbellata*, T4642 *Parameria laevigata*, T5252 *Pseudodrynaria coronans*, T5697 *Salvia trijuga*, T6527 *Trigonella caerulea*, T6727 *Veronica persica*, T6750 *Vicia sativa*, T6754 *Vigna unguiculata*.
- kidney vacuity lumbar cold** T4982 *Pistacia vera*.
- kidney vacuity lumbar pain** T4828 *Photinia serrulata*, T5501 *Rhodiola yunnanensis*.
- kidney vacuity lumbar pain and back rigidity** T1411 *Cibotium barometz* [Syn. *Polypodium barometz*].
- kidney yang vacuity** T5270 *Psoralea corylifolia*.
- kindey vacuity toothache** T2053 *Davallia mariesii*.
- knee joint pain** T5308 *Pterocarya stenoptera*.
- knee pain and legs weakness** T6831 *Woodwardia orientalis*.
- knife wound** T1866 *Cryptolepis sinensis*, T1896 *Cupressus funebris*, T1927 *Cycas revoluta*, T1967 *Cynoglossum amabile*, T2301 *Dyosma majorensis* [Syn. *Podophyllum majorense*; *Dyosma lichuanensis*], T4031 *Maesa perlarius*, T4109 *Marchantia polymorpha*, T5391 *Rabdosia eriocalyx*, T6471 *Toddalia asiatica* [Syn. *Toddalia aculeata*; *Paullinia asiatica*], T6601 *Umbilicaria esculenta* [Syn. *Gyrophora esculenta*].
- knocks and falls** T0015 *Abutilon indicum*, T0036 *Acanthopanax giraldii* [Syn. *Acanthopanax giraldii* var. *inermis*; *Eleutherococcus giraldii*], T0038 *Acanthopanax gracilistylus*, T0042 *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*], T0044 *Acanthopanax sessiliflorus*, T0060 *Achillea alpina* [Syn. *Achillea sibirica*], T0065 *Achillea millefolium*, T0071 *Achyranthes aspera*, T0072 *Achyranthes aspera* var. *indica*, T0073 *Achyranthes bidentata*, T0079 *Aconitum brachypodium*, T0094 *Aconitum finetianum*, T0096 *Aconitum forrestii* [Syn. *Aconitum likiangense*], T0098 *Aconitum geniculatum*, T0100 *Aconitum hemsleyanum* var. *circinacum*, T0101 *Aconitum hemsleyanum*, T0107 *Aconitum kongboense*, T0108 *Aconitum kusnezoffii*, T0117 *Aconitum nagarum* var. *lasiandrum*, T0122 *Aconitum pendulum*, T0123 *Aconitum polyschistum*, T0130 *Aconitum sinomontanum*, T0135 *Aconitum*

*sunghanense*, T0138 *Aconitum umbrosum*, T0144 *Acorus gramineus*, T0146 *Acorus tatarinowii*, T0156 *Actinidia arguta*, T0161 *Actinidia eriantha*, T0229 *Ageratum conyzoides*, T0240 *Aglaiia odorata*, T0263 *Ajuga decumbens*, T0264 *Ajuga forrestii*, T0274 *Akebia quinata*, T0278 *Akebia trifoliata*, T0280 *Akebia trifoliata* var. *australis*, T0281 *Alangium chinense*, T0285 *Alangium platanifolium*, T0292 *Albizzia julibrissin*, T0322 *Allium tuberosum*, T0324 *Allium victorialis*, T0364 *Alsophila spinulosa*, T0378 *Alstonia yunnanensis*, T0383 *Alyxia sinensis*, T0424 *Ampelopsis brevipedunculata* var. *hancei*, T0427 *Ampelopsis japonica* [Syn. *Paullinia japonica*], T0428 *Ampelopsis megalophylla*, T0467 *Anemone flaccida*, T0468 *Anemone hupehensis*, T0471 *Anemone rivularis*, T0491 *Angelica polymorpha*, T0502 *Anisodus tanguticus* [Syn. *Scopolia tangutica*], T0515 *Anredera cordifolia* [Syn. *Baussingaultia cordifolia*; *Baussingaultia gracilis* f. *pseudobaselloides*; *Baussingaultia gracilis* var. *pseudobaselloides*], T0535 *Antidesma buniis*, T0537 *Antirrhinum majus*, T0561 *Arachis hypogaea*, T0567 *Aralia armata*, T0568 *Aralia chinensis*, T0570 *Aralia dasyphylla*, T0594 *Ardisia crenata*, T0595 *Ardisia crispa*, T0600 *Ardisia mamillata* [Syn. *Tinus mamillata*], T0601 *Ardisia pusilla*, T0602 *Ardisia quinquegona*, T0617 *Arisaema amurense*, T0618 *Arisaema consanguineum*, T0620 *Arisaema heterophyllum*, T0642 *Aristolochia tubiflora*, T0661 *Artemisia anomala*, T0680 *Artemisia lactiflora*, T0721 *Arundina chinensis*, T0726 *Asarum forbesii*, T0729 *Asarum maximum*, T0730 *Asarum sagittarioides*, T0759 *Aspidistra elatior*, T0776 *Asplenium prolongatum*, T0827 *Aucuba chinensis* ssp. *omeiensis*, T0859 *Balanophora involucrata*, T0877 *Bauhinia championii*, T0881 *Bauhinia variegata*, T0886 *Beaumontia grandiflora*, T0922 *Berchemia polyphylla* var. *leioclada*, T0926 *Berneuxia thibetica*, T0938 *Bidens bipinnata*, T0952 *Blechnum orientale*, T0962 *Boehmeria platanifolia* [Syn. *Boehmeria tricuspis*], T0964 *Boenninghausenia albiflora*, T0967 *Boenninghausenia sessilicarpa*, T0969 *Boerhavia diffusa*, T0982 *Bos taurus domesticus*, T1001 *Brachystemma calycinum*, T1008 *Brassica juncea*, T1031 *Broussonetia kazinoki*, T1034 *Broussonetia papyrifera*, T1043 *Bryophyllum pinnatum*, T1046 *Buddleja davidii*, T1053 *Bulbophyllum odoratissimum* [Syn. *Stelis odoratissimum*], T1106 *Caesalpinia minax*, T1129 *Calophyllum inophyllum*, T1137 *Caltha palustris*, T1145 *Camellia japonica*, T1174 *Cannabis sativa*, T1188 *Caragana chamlagu*, T1191 *Caragana sinica*, T1199 *Carduus acanthoides*, T1200 *Carduus crispus*, T1212 *Carpesium eximium*, T1215 *Carthamus tinctorius*, T1251 *Cassytha filiformis*, T1256 *Castanea mollissima*, T1286 *Celastrus flagellaris*, T1290 *Celastrus orbiculatus* [Syn. *Celastrus articulatus*], T1311 *Centella asiatica*, T1316 *Cephalanthus occidentalis*, T1327 *Ceratostigma minus*, T1328 *Ceratostigma plumbaginoides*, T1329 *Ceratostigma willmottianum*, T1361 *Chenopodium ambrosioides*, T1371 *Chloranthus japonicus*, T1372 *Chloranthus serratus*, T1373 *Chloranthus serratus*, T1374 *Chloranthus spicatus*, T1384 *Chondrus ocelladus*, T1417 *Cimicifuga acerina*, T1423 *Cimicifuga nanchuanensis*, T1436 *Cinnamomum camphora*, T1443 *Cinnamomum parthenoxylum* [Syn. *Cinnamomum porrectum*], T1444 *Cinnamomum tamala*, T1450 *Cirsium lineare*, T1452 *Cissampelos pareira*, T1453 *Cissampelos pareira* var. *hirsute*, T1491 *Citrus limon*, T1495 *Citrus limonia*, T1535 *Clausena excavata*, T1555 *Clerodendron fortunatum*, T1561 *Clerodendron serratum*, T1563 *Clerodendron trichotomum*, T1566 *Clerodendrum inerme*, T1569 *Clerodendrum serratum* var. *amplexifolium*, T1570 *Clerodendrum thomsonae*, T1574 *Clintonia alpina*, T1589 *Cocculus trilobus* [Syn. *Cocculus sarmentosus*], T1590 *Cocculus trilobus* [Syn. *Cocculus sarmentosus*], T1604 *Coeloglossum viride* [Syn. *Coeloglossum viride* var. *bracteatum*], T1624 *Colocasia antiquorum*, T1629 *Colysis pothifolia* [Syn. *Hemionitis pothifolia*], T1638 *Commiphora myrrha* [Syn. *Commiphora molmol*], T1640 *Coniogramme japonica* [Syn. *Hemionitis japonica*], T1645 *Consolida ajacis* [Syn. *Delphinium ajacis*], T1657 *Comyza canadensis* [Syn. *Erigeron canadensis*], T1672 *Corallodiscus flabellatus* [Syn. *Didissandra flabellat*], T1684 *Cordyline stricta*, T1692 *Coriaria sinica* [Syn. *Coriaria nepalensis*], T1706 *Corydalis ambigua* var. *amurensis* [Syn. *Corydalis ambigua*], T1715 *Corydalis decumbens* [Syn. *Corydalis amabilis*], T1721 *Corydalis linearoides*, T1730 *Corydalis ophiocarpa*, T1735 *Corydalis repens*, T1745 *Corydalis suaveolens* [Syn. *Corydalis sheareri*], T1767 *Craibiodendron yunnanese*, T1784 *Cratoxylum cochinchinense*, T1796 *Crinum asiaticum* var. *sinicum*, T1810 *Croomia japonica*, T1815 *Crotalaria assamica*, T1823 *Crotalaria juncea*, T1841 *Croton caudatus* var. *tomentosus*, T1866 *Cryptolepis sinensis*, T1871 *Cucubalus baccifer*, T1884 *Cudrania cochinchinensis*, T1900 *Curculigo capitulata* [Syn. *Leucojum capitulata*], T1903 *Curcuma aromatica*, T1905 *Curcuma longa*, T1922 *Cyanotis vaga*, T1924 *Cyathula officinalis*, T1927 *Cycas revoluta*, T1928 *Cycas revoluta*, T1939 *Cymbopogon citratus*, T1943 *Cymbopogon goeringii*, T1959 *Cynanchum paniculatum*, T1963 *Cynanchum wallichii*, T1976 *Cyperus iria*, T1984 *Cypripedium macranthum* [Syn. *Cypripedium tibeticum*], T1986 *Cyrtomium fortunei*, T1991 *Cytisus scoparius* [Syn. *Spartium scoparium*], T1994 *Daemonorops draco*, T2008 *Dalbergia odorifera*, T2013 *Dalbergia sissoo*, T2020 *Damnacanthus indicus*, T2027 *Daphne odora*, T2030 *Daphne retusa*, T2031 *Daphne tangutica*, T2037 *Datura innoxia*, T2039 *Datura innoxia*, T2043 *Datura metel*, T2044 *Datura metel*, T2047 *Datura stramonium*, T2052 *Davallia divaricata* [Syn. *Davallia formosana*; *Davallia orientalis*], T2053 *Davallia mariesii*, T2091 *Delphinium yunnanense*, T2130 *Desmodium gangeticum*, T2131 *Desmodium pulchellum* [Syn. *Phylloidium pulchellum*], T2132 *Desmodium pulchellum* [Syn. *Phylloidium pulchellum*], T2133 *Desmodium racemosum* [Syn. *Podocarpium podocarpum* var. *oxyphyllum*], T2136 *Desmos cochinchinensis* [Syn. *Desmos chinensis*], T2139 *Dianella ensifolia*, T2189 *Dioscorea althaeoides*, T2194 *Dioscorea collettii*, T2211 *Dioscorea tenuipes*, T2231 *Diphyllia grayi*, T2232 *Diphyllia sinensis*, T2234 *Dipsacus asperoides*, T2235 *Dipsacus japonicus*, T2244 *Doellingeria scaber* [Syn. *Aster scaber*], T2253 *Dracaena cochinchinensis*, T2267 *Drosera peltata* var. *lunata*, T2298 *Dysosma difformis*, T2302 *Dysosma pleiantha* [Syn. *Podophyllum pleianthum*], T2304 *Dysosma veitchii*, T2305 *Dysosma versipellis* [Syn. *Podophyllum versipelle*], T2348 *Embelia ribes*, T2357 *Emilia sonchifolia*, T2409 *Equisetum palustre*, T2422 *Erigeron breviscapus*, T2442 *Ervatamia divaricata*, T2459 *Erythrina arboreascens*, T2478 *Erythrina variegata* [Syn. *Erythrina indica*], T2521 *Eucalyptus tereticornis*, T2545 *Euonymus phellomana*, T2546 *Euonymus sacrosancta*, T2555 *Eupatorium chinense*, T2563

- Eupatorium japonicum*, T2601 *Euphorbia milii*, T2612 *Euphorbia prolifera*, T2691 *Farfugium japonicum*, T2721 *Ficus microcarpa*, T2723 *Ficus pumila*, T2727 *Ficus simplicissima*, T2731 *Firmiana simplex*, T2734 *Fissistigma glaucescens* [Syn. *Melodorum glaucescens*], T2735 *Fissistigma oldhamii* [Syn. *Melodorum oldhamii*], T2737 *Flemingia philippinensis* [Syn. *Moghania philippinensis*], T2752 *Fordia cauliflora*, T2830 *Galium aparine*, T2835 *Galium verum*, T2883 *Gardenia jasminoides* [Syn. *Gardenia florida*], T2885 *Gardenia jasminoides* var. *grandiflora*, T2895 *Gaultheria yunnanensis*, T2897 *Gelsemium elegans*, T2973 *Glechoma longituba*, T2974 *Glechoma lungituba*, T3033 *Gnetum parvifolium* [Syn. *Gnetum indicum*], T3063 *Grevillea robusta*, T3077 *Gymnadenia conopsea*, T3088 *Gynura segetum* [Syn. *Gynura japonica*], T3089 *Gypsophila acutifolia*, T3113 *Hedera nepalensis* var. *sinensis*, T3115 *Hedera rhombea*, T3118 *Hedychium coronarium*, T3123 *Hedyotis auricularia*, T3125 *Hedyotis chrysotricha* [Syn. *Oldenlandia chrysotricha*], T3155 *Helianthus tuberosus*, T3187 *Helleborus thibetanus*, T3201 *Hemiphragma heterophyllum*, T3241 *Hibiscus mutabilis*, T3270 *Holboellia fargesii*, T3276 *Homo sapiens*, T3294 *Huperzia selago* [Syn. *Lycopodium selago*], T3295 *Huperzia serrata* [Syn. *Lycopodium serratum*], T3303 *Hydrangea chinensis*, T3311 *Hydrocotyle sibthorpioides*, T3316 *Hylomecon japonica*, T3340 *Hypericum ascyron*, T3349 *Hypericum erectum*, T3356 *Hypericum japonicum*, T3360 *Hypericum patulum*, T3363 *Hypericum sampsonii*, T3381 *Hyptis suaveolens*, T3395 *Ilex pedunculosa*, T3398 *Ilex rotunda*, T3401 *Illicium henryi*, T3411 *Impatiens balsamina*, T3413 *Impatiens nolintangere*, T3414 *Impatiens siculifer*, T3420 *Incarvillea sinensis*, T3457 *Iris dichotoma*, T3479 *Isodon amethystoides*, T3479 *Isodon amethystoides*, T3496 *Isodon japonica* [Syn. *Rabdosia japonica*], T3547 *Ixeris chinensis*, T3549 *Ixora chinensis*, T3555 *Jasminum nudiflorum*, T3613 *Kadsura coccinea* [Syn. *Kadsura chenensis*; *Kadsura hainanensis*], T3614 *Kadsura heteroclita* [Syn. *Uvaria heteroclita*], T3619 *Kadsura peltigera* [Syn. *Kadsura longipedunculata*], T3624 *Kalopanax pictum*, T3625 *Kalopanax septemlobus*, T3645 *Kummerowia striata*, T3646 *Kyllinga brevifolia*, T3674 *Laggera alata*, T3675 *Lagopsis supina*, T3679 *Lamiophlomis rotata* [Syn. *Phlomis rotata*], T3680 *Lamium amplexicaule*, T3681 *Lamium barbatum*, T3725 *Laurus nobilis*, T3746 *Leontice robustum*, T3765 *Lepisorus ussuriensis*, T3770 *Lespedeza cuneata*, T3775 *Lethariella cladonioides*, T3778 *Leucaena glauca* [Syn. *Leucaena leucocephala*], T3802 *Ligularia dentata*, T3805 *Ligularia fischeri*, T3807 *Ligularia intermedia*, T3808 *Ligularia japonica* [Syn. *Arnica japonica*; *Senecio japonica*], T3809 *Ligularia lapathifolia*, T3813 *Ligularia sibirica*, T3830 *Ligustrum sinense*, T3847 *Lindera angustifolia*, T3851 *Lindera glauca*, T3853 *Lindera obtusiloba*, T3859 *Linum usitatissimum*, T3863 *Liparis nervosa*, T3885 *Litsea cubeba*, T3887 *Litsea glutinosa*, T3925 *Loranthus parasiticus* [Syn. *Loranthus chinensis*; *Taxillus chinensis*], T3964 *Lycopodium alpinum* [Syn. *Diphasiastrum alpinum*], T3965 *Lycopodium annotinum*, T3969 *Lycopodium casuarinoides*, T3970 *Lycopodium cernuum*, T3971 *Lycopodium complanatum*, T3973 *Lycopodium japonicum* [Syn. *Lycopodium clavatum*], T3980 *Lycopus lucidus*, T3984 *Lycoris chinensis*, T3986 *Lycoris radiata* [Syn. *Amaryllis radiata*], T3989 *Lygodium flexuosum* [Syn. *Lygodium pinnatifidum*; *Ophioglossum flexuosum*], T3991 *Lyonia ovalifolia*, T3992 *Lyonia ovalifolia* var. *elliptica*, T3995 *Lysidice rhodostegia*, T3998 *Lysimachia christinae*, T3999 *Lysimachia clethroides*, T4004 *Lysimachia paridiformis*, T4005 *Lysionotus pauciflorus*, T4036 *Magnolia coco*, T4080 *Mallotus apelta*, T4085 *Mallotus repandus* var. *chrysocarpus* [Syn. *Mallotus chrysocarpus*; *Mallotus repandus*], T4131 *Maytenus confertiflorus*, T4143 *Meconopsis horridula*, T4219 *Microlepia marginata*, T4225 *Microsorium punctatum*, T4234 *Millettia dielsiana*, T4239 *Millettia nitida* var. *hirsutissima*, T4248 *Mimosa pudica*, T4252 *Mirabilis jalapa*, T4260 *Moghania philippinensis*, T4284 *Morinda parvifolia*, T4303 *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*, T4311 *Mucuna sempervirens*, T4317 *Murraya euchrestifolia* [Syn. *Clausena euchrestifolia*], T4320 *Murraya kwangsiensis*, T4324 *Murraya paniculata* [Syn. *Chalcas paniculata*], T4335 *Mussaenda pubescens*, T4349 *Myrica rubra*, T4444 *Nothopanax davidii*, T4450 *Nuphar pumilum*, T4470 *Ocimum basilicum*, T4502 *Onychium japonicum* [Syn. *Tricomanes japonicum*], T4526 *Origanum vulgare*, T4542 *Orthosiphon wulfenioides* [Syn. *Coleus wulfenioides*], T4562 *Oxalis acetosella*, T4564 *Oxalis corniculata* [Syn. *Oxalis repens*], T4568 *Oxytropis myriophylla*, T4577 *Paederia scandens*, T4584 *Paeonia lactiflora* wild, T4586 *Paeonia obovata*, T4590 *Paeonia veitchii*, T4606 *Panax pseudo-ginseng*, T4607 *Panax pseudo-ginseng* var. *japonicum*, T4631 *Papaver nudicaule* var. *chinense*, T4642 *Parameria laevigata*, T4670 *Patrinia heterophylla*, T4673 *Patrinia scabra*, T4704 *Peperomia duclouxii*, T4705 *Peperomia pellucida*, T4710 *Pericampylus glaucus*, T4725 *Periploca calophylla*, T4726 *Periploca forrestii*, T4740 *Petasites japonicus*, T4800 *Phlegmariurus fordii*, T4801 *Phlegmariurus phlegmaria* [Syn. *Lycopodium phlegmaria*], T4810 *Phlomis mongolica*, T4814 *Phlomis umbrosa*, T4821 *Pholidota articulata*, T4837 *Phyllanthus emblica*, T4842 *Phyllanthus reticulatus*, T4884 *Picria felterrae*, T4903 *Pinellia pedatisecta*, T4906 *Pinus armandii*, T4916 *Pinus massoniana*, T4938 *Piper boehmeriaefolium*, T4948 *Piper hancei*, T4951 *Piper laetispicum*, T4956 *Piper mullesua*, T4965 *Piper sarmentosum*, T5018 *Pleuropterus ciliinervis*, T5057 *Podophyllum emodii* [Syn. *Podophyllum emodii* var. *chinense*; *Podophyllum sikkimensis*; *Sinopodophyllum emodii*], T5071 *Polygala arillata*, T5073 *Polygala chinensis* [Syn. *Polygala glomerata*], T5075 *Polygala fallax* [Syn. *Polygala aureocauda*], T5087 *Polygala telephioides*, T5090 *Polygala wattersii*, T5100 *Polygonum chinense*, T5101 *Polygonum cuspidatum*, T5104 *Polygonum hydropiper*, T5106 *Polygonum lapathifolium*, T5109 *Polygonum nodosum*, T5114 *Polygonum polystachyum*, T5124 *Polypodium niponicum*, T5126 *Polypodium virginianum*, T5127 *Polypodium vulgare*, T5184 *Potentilla kleiniana*, T5189 *Pothos chinensis*, T5193 *Pratia nummularia*, T5207 *Prismatomeris tetrandra*, T5233 *Prunus persica*, T5238 *Prunus salicina*, T5250 *Psammosilene tunicoides*, T5269 *Psilotum nudum*, T5279 *Psychotria serpens*, T5297 *Pteris plumbea*, T5298 *Pteris vittata*, T5330 *Punica granatum*, T5339 *Pycnoporus sanguineus*, T5341 *Pygmaeopremna herbacea* [Syn. *Premna herbacea*], T5401 *Rabdosia yunnanensis*, T5455 *Rhamnus crenata*, T5472 *Rheum officinale*, T5474 *Rheum palmatum*, T5481 *Rheum tanguticum*, T5497 *Rhodiola kirilowii*, T5499 *Rhodiola sacra*, T5513 *Rhododendron mariae*, T5516 *Rhododendron molle*, T5517 *Rhododendron molle*, T5518

- Rhododendron mucronatum*, T5537 *Rhus sylvestris*, T5547 *Ricinus communis*, T5555 *Rodgersia pinnata*, T5560 *Rorippa montana* [Syn. *Rorippa dubia*; *Sisymbrium dubium*], T5562 *Rosa chinensis*, T5563 *Rosa cymosa*, T5576 *Rostellularia procumbens* [Syn. *Justicia procumbens*], T5578 *Rubia cordifolia*, T5579 *Rubia cordifolia*, T5582 *Rubia oncotricha*, T5583 *Rubia schumanniana*, T5584 *Rubia tinctorum*, T5585 *Rubia wallichiana*, T5586 *Rubia yunnanensis*, T5587 *Rubus alceaefolius*, T5595 *Rubus parvifolius*, T5609 *Rumex hastatus*, T5611 *Rumex japonicus*, T5612 *Rumex nepalensis*, T5613 *Rumex obtusifolius*, T5614 *Rumex patientia*, T5626 *Ruta graveolens*, T5637 *Sabia schumanniana*, T5680 *Salvia miltiorrhiza*, T5681 *Salvia miltiorrhiza* f. *alba*, T5685 *Salvia plebeia*, T5688 *Salvia przewalskii*, T5697 *Salvia trijuga*, T5704 *Sambucus nigra*, T5707 *Sambucus williamsii*, T5714 *Sansevieria trifasciata*, T5730 *Sarcandra glabra* [Syn. *Chloranthus glaber*], T5731 *Sarcococca coriacea* [Syn. *Sarcococca wallichii*], T5746 *Sassafras tzumu*, T5756 *Saussurea japonica*, T5793 *Schisandra henryi*, T5794 *Schisandra lancifolia*, T5795 *Schisandra micrantha*, T5797 *Schisandra propinqua*, T5798 *Schisandra propinqua* var. *intermedia*, T5813 *Scilla scilloides*, T5819 *Scopolia acutangula* [Syn. *Anisodus acutangulus*], T5835 *Scutellaria barbata* [Syn. *Scutellaria rivularis*], T5838 *Scutellaria galericulata*, T5840 *Scutellaria indica*, T5844 *Scutellaria scordifolia*, T5847 *Securidaca inappendiculata*, T5850 *Sedum aizoon*, T5855 *Sedum kamschaticum*, T5865 *Selaginella pulvinata*, T5866 *Selaginella sanguinolenta*, T5868 *Selaginella stauntoniana*, T5869 *Selaginella tamariscina*, T5883 *Senecio cannabifolius*, T5893 *Senecio nudicaulis*, T5939 *Shiraita bambusicola*, T5942 *Sida acuta*, T5954 *Silene fortunei*, T5978 *Smilax glauco-china*, T5981 *Smilax riparia*, T5989 *Solanum aculeatissimum*, T6014 *Solanum surattense*, T6023 *Solidago virgaurea*, T6051 *Sorbaria arborea*, T6052 *Sorbaria sorbifolia*, T6062 *Sparganium stoloniferum*, T6075 *Spilanthes acmella*, T6118 *Stephania brachyandra*, T6121 *Stephania dicentrifera*, T6122 *Stephania dielsiana*, T6133 *Stephania sinica*, T6137 *Stephania viridiflavens*, T6154 *Strobilanthes japonicus* [Syn. *Championella japonica*], T6155 *Strophanthus divaricatus*, T6166 *Strychnos angustiflora*, T6184 *Strychnos nux-vomica*, T6193 *Strychnos wallichiana*, T6252 *Symplocos chinensis*, T6257 *Syngnathus acus*, T6276 *Tacca plantaginea* [Syn. *Schizocapsa plantaginea*], T6353 *Tetracera asiatica*, T6367 *Teucrium quadrifarium*, T6393 *Thalictrum ichangense* [Syn. *Thalictrum tripeltatum*; *Thalictrum multipeltatum*], T6398 *Thalictrum microgynum*, T6444 *Thunbergia grandiflora*, T6468 *Tinospora sinensis*, T6471 *Toddalia asiatica* [Syn. *Toddalia aculeata*; *Paullinia asiatica*], T6484 *Trachelospermum jasminoides*, T6491 *Trametes cinnabarina* [Syn. *Polyporus cinnabarinus*; *Boletus cinnabarinus*], T6531 *Trillium kamschaticum*, T6533 *Trillium kamschaticum*, T6535 *Trillium tschonoskii*, T6541 *Tripterygium regelii*, T6566 *Tupistra chinensis*, T6580 *Tylophora floribunda*, T6618 *Uncaria homomalla* [Syn. *Uruparia homomalla*; *Uruparia tonkinensis*; *Uruparia lanosa* var. *parviflora*], T6651 *Urtica cannabina*, T6652 *Urtica dioica*, T6675 *Valeriana amurensis*, T6679 *Valeriana officinalis*, T6680 *Valeriana officinalis* var. *latifolia*, T6689 *Ventilago leiocarpa*, T6691 *Veratrum baillonii*, T6693 *Veratrum album* var. *lobelianum* [Syn. *Veratrum lobelianum*], T6722 *Veronica anagallis-aquatica*, T6728 *Veronica serpyllifolia*, T6737 *Viburnum luzonicum*, T6742 *Vicia amoena*, T6777 *Viscum multinerve*, T6792 *Vitex trifolia*, T6820 *Wikstroemia indica*, T6830 *Woodfordia fruticosa*, T6858 *Zanthoxylum acanthopodium*, T6861 *Zanthoxylum ailanthoides*, T6862 *Zanthoxylum ailanthoides*, T6872 *Zanthoxylum cuspidatum*, T6874 *Zanthoxylum dimorphophyllum* var. *spinifolium*, T6877 *Zanthoxylum dissitum*, T6888 *Zanthoxylum planispinum*, T6889 *Zanthoxylum podocarpum*, T6895 *Zanthoxylum simulans*.
- lack of strength and sloppy stool** T6916 *Ziziphus jujuba*, T6917 *Ziziphus jujuba* var. *inermis*.
- lacquer sore** T0322 *Allium tuberosum*, T0568 *Aralia chinensis*, T0570 *Aralia dasyphylla*, T1007 *Brassica juncea*, T1182 *Capra hircus*; *Ovis aries*, T1256 *Castanea mollissima*, T1758 *Cotinus coggygria*, T1759 *Cotinus coggygria* var. *cinerea*, T1769 *Crataegus cuneata*, T1771 *Crataegus kansuensis*, T1772 *Crataegus maximowiczii*, T1777 *Crataegus pinnatifida*, T1780 *Crataegus sanguinea*, T1781 *Crataegus scabrifolia*, T2723 *Ficus pumila*, T2988 *Glochidion eriocarpum*, T3124 *Hedyotis capitellata*, T5102 *Polygonum cuspidatum*, T5560 *Rorippa montana* [Syn. *Rorippa dubia*; *Sisymbrium dubium*], T5646 *Sagina japonica* [Syn. *Spergula japonica*], T6365 *Teucrium pilosum* [Syn. *Teucrium japonicum* var. *pilosum*].
- lai** T1256 *Castanea mollissima*, T1896 *Cupressus funebris*, T3671 *Lagerstroemia indica*, T4042 *Magnolia liliflora*.
- lai lichen** T1097 *Cacalia ainsliaeflora*.
- lai sore** T3413 *Impatiens nolitangere*, T5330 *Punica granatum*.
- laryngeal carcinoma** T0318 *Allium sativum*.
- laryngeal infection in children** T4845 *Physalis alkekengi*.
- laryngitis** T1179 *Capparis masaikai*, T1545 *Clematis chinensis*, T4274 *Monostroma nitidum*, T4403 *Nemacystus decipiens* [Syn. *Mesogloea decipiens*; *Cladosiphon decipiens*], T5309 *Pterocladia tenuis*, T5818 *Scoparia dulcis*, T5967 *Siraitia grosvenorii* [Syn. *Momordica grosvenorii*], T6043 *Sophora subprostrata* [Syn. *Sophora tonkinensis*], T6301 *Taraxacum mongolicum*, T6599 *Ulva lactuca*, T6600 *Ulva pertusa*.
- lassitude in limbs** T0529 *Anthriscus sylvestris*, T1596 *Codonopsis canescens*, T1597 *Codonopsis clematidea*, T1599 *Codonopsis pilosula*, T1600 *Codonopsis pilosula* var. *modesta* [Syn. *Codonopsis modesta*], T1601 *Codonopsis subglobosa*, T1602 *Codonopsis tangshen*, T1603 *Codonopsis tubulosa*, T2955 *Geum japonicum*.
- lassitude in lumbar and knees** T3992 *Lyonia ovalifolia* var. *elliptica*, T5925 *Sesamum indicum* [Syn. *Sesamum orientale*].
- lassitude in lumbus and knees** T2738 *Flemingia strobilifera*, T3955 *Lycium barbarum*, T3958 *Lycium chinense*, T5344 *Pyrola atropurpurea*, T5345 *Pyrola calliantha* [Syn. *Pyrola rotundifolia* ssp. *chinensis*], T5346 *Pyrola calliantha* var. *tibetana*, T5347 *Pyrola decorata*, T5349 *Pyrola incarnata*, T5350 *Pyrola japonica*, T5351 *Pyrola rotundifolia*, T5950 *Siegesbeckia orientalis*, T5951 *Siegesbeckia orientalis* var. *glabrescens* [Syn. *Siegesbeckia glabrescens*], T5952 *Siegesbeckia orientalis* var. *pubescens* [Syn. *Siegesbeckia pubescens*].
- late afternoon tidal fever** T2909 *Gentiana crassicaulis*, T2910 *Gentiana dahurica*, T2913 *Gentiana kaufmanniana*, T2919 *Gentiana macrophylla*, T2932 *Gentiana siphonantha*, T2934 *Gentiana straminea*, T2936 *Gentiana tianschanica*, T2937 *Gentiana tibetica*.

- leech in nose** T2852 *Garcinia cowa*.
- leg qi [= beriberi]** T3766 *Lepista nuda*, T3937 *Lumbriconeis heteropoda*, T4547 *Oryza sativa* cv., T5158 *Populus simonii*, T5391 *Rabdosia eriocalyx*, T6752 *Vigna angularis* [Syn. *Dolichus angularis*; *Phaseolus angularis*].
- leg qi damp-erosion** T5389 *Rabdosia coetsa*.
- leg qi due to wind-damp** T2272 *Drymaria diandra* [Syn. *Drymaria cordata* ssp. *diandra*].
- leg qi puffy swelling** T5740 *Sargassum vachellianum*.
- leg qi swelling and pain** T1436 *Cinnamomum camphora*, T3413 *Impatiens nolitangere*.
- leg qi with edema** T5156 *Populus nigra* var. *thevestina*.
- leg qi with swelling toxin** T4714 *Perilla frutescens*.
- leprosy** T0099 *Aconitum gymnandrum*, T1046 *Buddleja davidii*, T1282 *Cedrus deodara*, T1624 *Colocasia antiquorum*, T2979 *Gleditsia sinensis* [Syn. *Gleditsia horrida*], T3082 *Gynocardia odorata*, T3289 *Humulus lupulus*, T3569 *Juglans regia*, T3860 *Linum usitatissimum*, T4562 *Oxalis acetosella*, T4917 *Pinus massoniana*, T5368 *Python molurus bivittatus*, T6031 *Sophora flavescens* [Syn. *Sophora angustifolia*], T6542 *Tripterygium wilfordii*, T6820 *Wikstroemia indica*.
- leprosy (leprosy)** T3560 *Jatropha curcas*.
- leptochroa** T4247 *Millingtonia hortensis*.
- leptospirosis** T0333 *Alocasia cucullata* [Syn. *Arum cucullatum*], T2517 *Eucalyptus robusta*, T2521 *Eucalyptus tereticornis*, T3284 *Houttuynia cordata*.
- leukaemia** T1318 *Cephalotaxus fortunei*.
- leukaemia in early stage and carcinoma of uterine cervix in early stage** T1903 *Curcuma aromatica*, T1905 *Curcuma longa*.
- leukopenic complications of carcinoma** T0897 *Berberis amurensis*, T0912 *Berberis poiratii*, T0920 *Berberis wilsonae*.
- leukoplakia of vulva** T3371 *Hypocrella bambusae*.
- leukorrhea** T0427 *Ampelopsis japonica* [Syn. *Paullinia japonica*], T0479 *Angelica dahurica* cv. *qibaizhi*, T0498 *Angelica taiwaniana*, T0567 *Aralia armata*, T0632 *Aristolochia manshuriensis*, T1001 *Brachystemma calycinum*, T1353 *Changium smyrnioides*, T1528 *Cladonia stellaris* [Syn. *Cladonia alpestris*], T1984 *Cyripedium macranthum* [Syn. *Cyripedium tibeticum*], T2161 *Dicranopteris pedata* [Syn. *Polypodium pedatum*; *Dicranopteris dichotoma*], T2194 *Dioscorea collettii*, T2197 *Dioscorea futschauensis*, T2210 *Dioscorea spongiosa*, T2632 *Euryale ferox*, T2721 *Ficus microcarpa*, T3221 *Heracleum rapula*, T3363 *Hypericum sampsonii*, T3776 *Lethariella zahlbruckneri*, T4144 *Meconopsis nepaulensis*, T4145 *Meconopsis punicea*, T4821 *Pholidota articulata*, T4917 *Pinus massoniana*, T5289 *Pteris dactylina*, T5328 *Punica granatum*, T5499 *Rhodiola sacra*, T6008 *Solanum nigrum*, T6095 *Stachytarpheta jamaicensis*, T6378 *Thalictrum delavayi*, T6436 *Thlaspi arvense*, T6754 *Vigna unguiculata*, T6831 *Woodwardia orientalis*.
- lichen** T0338 *Aloe ferox*, T0347 *Aloe vera* [Syn. *Aloe barbadensis*], T0348 *Aloe vera* var. *chinensis*, T2124 *Derris trifoliata*, T2479 *Erythrina variegata* var. *orientalis*, T2521 *Eucalyptus tereticornis*, T2717 *Ficus carica*, T3630 *Kleinhovia hospita*, T3989 *Lygodium flexuosum* [Syn. *Lygodium pinnatifidum*; *Ophioglossum flexuosum*], T4253 *Mirabilis jalapa*, T4906 *Pinus armandii*, T4916 *Pinus massoniana*, T5143 *Pongamia pinnata*.
- lichen and scab sore** T3327 *Hyoscyamus niger*.
- lichen lai** T2062 *Delphinium bonvalotii*, T2081 *Delphinium omeiense*, T2084 *Delphinium potaninii*, T2085 *Delphinium potaninii* var. *jiufengshanense*.
- lichen papules** T6752 *Vigna angularis* [Syn. *Dolichus angularis*; *Phaseolus angularis*].
- lichen sore** T0100 *Aconitum hemsleyanum* var. *circinacum*, T0101 *Aconitum hemsleyanum*, T0318 *Allium sativum*, T0941 *Bidens tripartita*, T0957 *Blumea balsamifera*, T1867 *Cryptomeria fortunei*, T2624 *Euphorbia tirucalli*, T3287 *Huechys sanguinea*, T3413 *Impatiens nolitangere*, T3588 *Juniperus formosana*, T3852 *Lindera megaphylla*, T3991 *Lyonia ovalifolia*, T4208 *Metasequoia glyptostroboides*, T5234 *Prunus persica*.
- limp aching in legs and knees** T1254 *Castanea mollissima*.
- limp aching inability of legs and knees** T2531 *Eucommia ulmoides*.
- limp aching lumbus and knees** T0323 *Allium tuberosum*, T0990 *Bos taurus domesticus*; *Bubalus bubalis*, T1188 *Caragana chamlagu*, T1455 *Cistanche deserticola*, T1456 *Cistanche salsa*, T1604 *Coeloglossum viride* [Syn. *Coeloglossum viride* var. *bracteatum*], T1900 *Curculigo capitulata* [Syn. *Leucogium capitulata*], T1911 *Cuscuta australis*, T1912 *Cuscuta chinensis*, T1913 *Cuscuta japonica*, T1964 *Cynanchum wilfordii* [Syn. *Cynoctonum wilfordii*], T2234 *Dipsacus asperoides*, T2235 *Dipsacus japonicus*, T2323 *Eclipta prostrata* [Syn. *Eclipta alba*], T2805 *Fugu ocellatus*, T3077 *Gymnadenia conopsea*, T3390 *Ilex cornuta*, T4056 *Mahonia bealei*, T4057 *Mahonia bealei*, T4063 *Mahonia fortunei*, T4067 *Mahonia japonica*, T4068 *Mahonia japonica*, T4729 *Periploca sepium*, T5446 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], T5753 *Saussurea gnaphaloides*, T5757 *Saussurea laniceps*, T5759 *Saussurea medusa*, T6773 *Viscum articulatum*, T6774 *Viscum articulatum*, T6775 *Viscum coloratum*.
- limp aching lumbus and knees due to kidney vacuity** T1035 *Broussonetia papyrifera*.
- limp aching lumbus and knees due to kidney yin vacuity** T5091 *Polygonatum cyrtoneura* [Syn. *Polygonatum multiflorum*], T5092 *Polygonatum kingianum*, T5095 *Polygonatum sibiricum*.
- limp aching lumbus and knees due to liver kidney yin vacuity** T5107 *Polygonum multiflorum*.
- limp aching numbness in limbs** T1161 *Campsis grandiflora*.
- limp wilting of lower limb** T1972 *Cynomorium songaricum*.
- limp wilting sinew and bone** T0036 *Acanthopanax giraldii* [Syn. *Acanthopanax giraldii* var. *inermis*; *Eleutherococcus giraldii*], T0038 *Acanthopanax gracilistylus*, T0042 *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*], T0044 *Acanthopanax sessiliflorus*, T1337 *Cervus nippon*; *Cervus elaphus*, T1901 *Curculigo orchioides*, T2389 *Epimedium acuminatum*, T2390 *Epimedium brevicornum*, T2392 *Epimedium davidii*, T2394 *Epimedium elongatum*, T2398 *Epimedium koreanum*, T2401 *Epimedium pubescens*, T2402 *Epimedium sagittatum*, T2404 *Epimedium sutchuenense*, T2406 *Epimedium wushanense*, T6771 *Viscum album*.
- lip sore** T3829 *Ligustrum robustum*.
- liquor damage with thirst** T1472 *Citrus chachiensis*, T1517 *Citrus*



- tankan, T2758 *Fortunella crassifolia*, T2759 *Fortunella japonica*, T2760 *Fortunella margarita*.
- liquor jaundice** T4042 *Magnolia liliiflora*.
- liquor jaundice accumulation** T4050 *Magnolia sieboldii*.
- lithiasis** T5098 *Polygonum aviculare*.
- liver depression and qi pain** T1978 *Cyperus rotundus*, T4036 *Magnolia coco*.
- liver depression and rib-side pain** T1055 *Bupleurum angustissimum*, T1056 *Bupleurum aureum*, T1058 *Bupleurum chaishoui*, T1059 *Bupleurum chinense*, T1065 *Bupleurum longiradiatum*, T1066 *Bupleurum marginatum*, T1067 *Bupleurum marginatum* var. *stenophyllum*, T1072 *Bupleurum scorzonifolium*, T1073 *Bupleurum sibiricum*, T1075 *Bupleurum smithii* var. *parvifolium*, T1078 *Bupleurum wenchuanense*, T1079 *Bupleurum yinchowense*, T4184 *Mentha haplocalyx* [Syn. *Mentha canadaensis*; *Mentha arvensis* var. *haplocalyx*; *Mentha arvensis*].
- liver enlargement** T3461 *Iris japonica*, T3471 *Iris tectorum*.
- liver fire and red eyes** T0049 *Acer ginnala*, T0334 *Aloe arborescens* var. *natalensis*, T3332 *Hypecoum erectum*, T5199 *Primula malacoides*, T6036 *Sophora japonica*.
- liver fire headache** T5775 *Scabiosa comosa*, T6034 *Sophora japonica*, T6625 *Uncaria macrophylla*, T6629 *Uncaria rhynchophylla* [Syn. *Nauclea rhynchophylla*], T6633 *Uncaria sinensis*.
- liver gallbladder effulgent fire** T3233 *Heteropappus altaicus*.
- liver gallbladder pain** T6802 *Vladimiria souliei* [Syn. *Jurinea souliei*].
- liver heat and convulsion** T4648 *Paris polyphylla*, T4649 *Paris polyphylla* var. *chinensis*, T4650 *Paris polyphylla* var. *pseudothibetica*, T4651 *Paris polyphylla* var. *stenophylla*, T4652 *Paris polyphylla* var. *yunnanensis*.
- liver heat and dizziness** T3040 *Gomphrena globosa*.
- liver heat and red eyes** T1236 *Cassia laevigata* [Syn. *Cassia floribunda*], T1804 *Cristaria plicata*; *Hyriopsis cumingii*, T2772 *Fraxinus mandshurica*, T5762 *Saussurea nigrescens*.
- liver kidney vacuity** T0793 *Astragalus complanatus*, T1964 *Cynanchum wilfordii* [Syn. *Cynoctonum wilfordii*], T3389 *Ilex cornuta*, T6670 *Vaccinium bracteatum*.
- liver spleen enlargement** T0048 *Acanthus ilicifolius*, T0680 *Artemisia lactiflora*, T2131 *Desmodium pulchellum* [Syn. *Phyllodium pulchellum*], T3457 *Iris dichotoma*, T4577 *Paederia scandens*, T5029 *Plumbago zeylanica*, T5587 *Rubus alceaefolius*, T5661 *Salvia bowleyana*, T6580 *Tylophora floribunda*.
- liver stomach qi pain** T1928 *Cycas revoluta*, T4537 *Oroxylum indicum*, T5226 *Prunus mume*, T5572 *Rosa rugosa*.
- liver stomach qi stagnation** T0275 *Akebia quinata*.
- liver vacuity dim vision** T1048 *Buddleja officinalis*, T2326 *Elaeagnus angustifolia*.
- liver welling abscess** T0867 *Baphicacanthus cusia* [Syn. *Strobilanthes cusia*].
- liver wind headache** T3859 *Linum usitatissimum*.
- liver yang dizziness** T1986 *Cyrtomium fortunei*, T6625 *Uncaria macrophylla*, T6629 *Uncaria rhynchophylla* [Syn. *Nauclea rhynchophylla*], T6633 *Uncaria sinensis*.
- liver-gallbladder damp-heat** T1705 *Corydalis adunca*.
- liver-kidney yin depletion** T5446 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*].
- lobar pneumonia** T5907 *Senecio scandens* [Syn. *Senecio chinensis*].
- local anesthesia** T0728 *Asarum heterotropoides* var. *mandshuricum*, T0731 *Asarum sieboldii*, T0732 *Asarum sieboldii* var. *seoulensis*, T1052 *Bufo bufo gargarizans*; *Bufo melanostictus*, T4323 *Murraya paniculata* [Syn. *Chalcas paniculata*], T4325 *Murraya paniculata* var. *exotica*.
- lumbago** T0164 *Actinidia polygama*, T0170 *Adhatoda vasica*, T0275 *Akebia quinata*, T0495 *Angelica sinensis*, T0759 *Aspidistra elatior*, T0964 *Boeninghausenia albiflora*, T0967 *Boeninghausenia sessilicarpa*, T1289 *Celastrus orbiculatus* [Syn. *Celastrus articulatus*], T1434 *Cinnamomum bejolghota* [Syn. *Cinnamomum obtusifolium*; *Laurus bejolghota*], T1487 *Citrus junos*, T1504 *Citrus reticulata*, T1550 *Cleome gynandra* [Syn. *Gynandropsis gynandra*], T1680 *Cordyceps militaris*, T1681 *Cordyceps militaris* cv, T1959 *Cynanchum paniculatum*, T2030 *Daphne retusa*, T2031 *Daphne tangutica*, T2053 *Davallia mariesii*, T2263 *Dregea volubilis*, T2538 *Euonymus bungeanus*, T2541 *Euonymus grandiflorus*, T2735 *Fissistigma oldhamii* [Syn. *Melodorum oldhamii*], T3033 *Gnetum parvifolium* [Syn. *Gnetum indicum*], T3221 *Heracleum rapula*, T3287 *Huechys sanguinea*, T4131 *Maytenus confertiflorus*, T4182 *Menispermum dauricum*, T4725 *Periploca calophylla*, T4804 *Phlojodicarpus sibiricus*, T5075 *Polygala fallax* [Syn. *Polygala aureocauda*], T5230 *Prunus persica*, T5298 *Pteris vittata*, T5515 *Rhododendron micranthum*, T5579 *Rubia cordifolia*, T5637 *Sabia schumanniana*, T6431 *Thesium chinense*.
- lumbago and limp aching** T6087 *Spiranthes sinensis*.
- lumbago and limp leg** T0793 *Astragalus complanatus*, T1170 *Canis familiaris*, T3568 *Juglans regia*, T6771 *Viscum album*.
- lumbar and back pain** T2531 *Eucommia ulmoides*, T4118 *Marsdenia oreophila*.
- lumbar and rib-side pain** T3411 *Impatiens balsamina*.
- lumbus kidney cold** T4954 *Piper longum*.
- lump glomus** T0963 *Boehmeria siamensis*, T1215 *Carthamus tinctorius*, T1692 *Coriaria sinica* [Syn. *Coriaria nepalensis*], T2020 *Damnacanthus indicus*, T2580 *Euphorbia antiquorum*, T2695 *Ferula assafoetida*, T3412 *Impatiens balsamina*, T4519 *Opuntia dillenii*, T4521 *Opuntia vulgaris*, T5233 *Prunus persica*, T6356 *Tetrapanax papyriferus*.
- lung abscess** T3295 *Huperzia serrata* [Syn. *Lycopodium serratum*], T3476 *Isatis indigotica*.
- lung cold cough** T1008 *Brassica juncea*, T1479 *Citrus grandis*.
- lung disease** T1555 *Clerodendron fortunatum*, T3344 *Hypericum chinense*.
- lung disease with blood ejection** T2244 *Doellingeria scaber* [Syn. *Aster scaber*].
- lung disease with cough** T3955 *Lycium barbarum*, T3958 *Lycium chinense*.
- lung heat abundant phlegm dry cough** T5309 *Pterocladia tenuis*.
- lung heat asthma and oppression** T5220 *Prunus davidiana*, T5232 *Prunus persica*.
- lung heat cough** T0002 *Abelmoschus moschatus* [Syn. *Hibiscus*

- abelmoschus*], T0011 *Abrus precatorius*, T0171 *Adiantum capillus-veneris*, T0173 *Adiantum lunulatum*, T0174 *Adiantum monochlamys*, T0175 *Adiantum pedatum*, T0263 *Ajuga decumbens*, T0264 *Ajuga forrestii*, T0266 *Ajuga macrosperma*, T0267 *Ajuga nipponensis*, T0378 *Alstonia yunnanensis*, T0457 *Andrographis paniculata* [Syn. *Justicia paniculata*], T0608 *Arenaria kansuensis* [Syn. *Arenaria kumaonensis*], T0736 *Asclepias curassavica*, T0759 *Aspidistra elatior*, T0859 *Balanophora involucrata*, T0860 *Balanophora japonica*, T0867 *Baphicacanthus cusia* [Syn. *Strobilanthes cusia*], T0920 *Berberis wilsonae*, T0941 *Bidens tripartita*, T0959 *Blumea lacera*, T1043 *Bryophyllum pinnatum*, T1353 *Changium smyrnioides*, T1696 *Cornus capitata* [Syn. *Dendrobenthamia capitata*], T1705 *Corydalis adunca*, T1746 *Corydalis taliensis*, T1789 *Crepis napifera*, T1950 *Cynanchum ascyrifolium*, T1951 *Cynanchum atratum*, T1962 *Cynanchum versicolor*, T2191 *Dioscorea bulbifera*, T2213 *Dioscorea zingiberensis*, T2433 *Eriobotrya japonica*, T2628 *Euphrasia officinalis*, T2783 *Fritillaria cirrhosa*, T2784 *Fritillaria delavayi*, T2790 *Fritillaria pallidiflora*, T2792 *Fritillaria przewalskii*, T2796 *Fritillaria unibracteata*, T2800 *Fritillaria walujewii*, T2902 *Gentiana algida*, T2950 *Gerbera anandria* [Syn. *Leibnitzia anandria*], T2952 *Gerbera piloselloides*, T3123 *Hedyotis auricularia*, T3241 *Hibiscus mutabilis*, T3242 *Hibiscus rosa-sinensis*, T3244 *Hibiscus syriacus*, T3247 *Hibiscus taiwanensis*, T3248 *Hibiscus tiliaceus*, T3288 *Humulus japonicus* [Syn. *Humulus scandens*], T3373 *Hypoestes purpurea* [Syn. *Justicia purpurea*; *Hypoestes sinica*], T3388 *Ilex chinensis* [Syn. *Ilex purpurea*], T3448 *Ipomoea cairica* [Syn. *Ipomoea palmata*], T3457 *Iris dichotoma*, T3547 *Ixeris chinensis*, T3736 *Lemmaphyllum microphyllum*, T3749 *Leontopodium alpinum*, T3769 *Lespedeza bicolor*, T3830 *Ligustrum sinense*, T3878 *Lithocarpus polystachyus*, T3926 *Loropetalum chinense*, T3935 *Luffa cylindrica*, T3983 *Lycoris aurea*, T4055 *Mahonia bealei*, T4062 *Mahonia fortunei*, T4066 *Mahonia japonica*, T4144 *Meconopsis nepaulensis*, T4183 *Menispermum dauricum*, T4368 *Nandina domestica*, T4370 *Nandina domestica*, T4506 *Ophioglossum vulgatum*, T4519 *Opuntia dillenii*, T4520 *Opuntia ficus-indica*, T4521 *Opuntia vulgaris*, T4537 *Oroxylum indicum*, T4573 *Pachyrrhizus erosus*, T4730 *Peristrophe roxburghiana*, T4760 *Peucedanum japonicum*, T4823 *Pholidota yunnanensis*, T4829 *Phragmites communis*, T4845 *Physalis alkekengi*, T4848 *Physalis angulata*, T4854 *Physalis pubescens*, T5099 *Polygonum bistorta*, T5100 *Polygonum chinense*, T5151 *Populus davidiana*, T5158 *Populus simonii*, T5177 *Potamogeton pectinatus*, T5184 *Potentilla kleiniana*, T5199 *Primula malacoides*, T5449 *Reineckea carnea*, T5468 *Rheum emodi* [Syn. *Rheum australe*], T5499 *Rhodiola sacra*, T5685 *Salvia plebeia*, T5714 *Sansevieria trifasciata*, T5719 *Sapindus mukorossi*, T5818 *Scoparia dulcis*, T5833 *Scutellaria amoena*, T5834 *Scutellaria baicalensis*, T5839 *Scutellaria hypericifolia*, T5841 *Scutellaria likiangensis*, T5843 *Scutellaria rehderiana*, T5845 *Scutellaria viscidula*, T5859 *Selaginella braunii*, T5861 *Selaginella doederleinii*, T6024 *Solidago virgaurea* var. *leiocarpa* [Syn. *Solidago decurrens*], T6047 *Sophora vicifolia*, T6217 *Swertia davidii*, T6304 *Taxillus levinei*, T6403 *Thalictrum petaloideum*, T6409 *Thalictrum simplex* [Syn. *Thalictrum simplex* var. *brevipes*], T6416 *Thamnia*
- vermicularis*, T6510 *Trichosanthes kirilowii*, T6513 *Trichosanthes rosthornii* [Syn. *Trichosanthes uniflora*], T6581 *Tylophora mollissima*, T6582 *Tylophora ovata*, T6691 *Veratrum baillonii*.
- lung heat cough asthma** T0334 *Aloe arborescens* var. *natalensis*, T0374 *Alstonia scholaris*, T0624 *Aristolochia contorta*, T0626 *Aristolochia debilis* [Syn. *Aristolochia longa*], T0630 *Aristolochia indica*, T0633 *Aristolochia maxima*, T0640 *Aristolochia triangularis*, T2431 *Eriobotrya japonica*, T2510 *Eucalyptus globulus*, T2517 *Eucalyptus robusta*, T3126 *Hedyotis corymbosa* [Syn. *Oldenlandia corymbosa*], T3396 *Ilex pubescens*, T3397 *Ilex pubescens* var. *glaber*, T4120 *Marsdenia tenacissima*, T4124 *Matricaria chamomilla* [Syn. *Matricaria recutita*], T4287 *Morus alba*, T4485 *Oldenlandia diffusa* [Syn. *Hedyotis diffusa*], T5354 *Pyrrosia davidii*, T5355 *Pyrrosia drakeana*, T5356 *Pyrrosia gralla*, T5357 *Pyrrosia lingua* T5358 *Pyrrosia petiolosa*, T5360 *Pyrrosia shearereri*, T5775 *Scabiosa comosa*, T5840 *Scutellaria indica*, T6367 *Teucrium quadrifarium*.
- lung heat cough due to yin vacuity** T4605 *Panax japonicus* var. *major*.
- lung heat dry cough** T0540 *Apis cerana*, T0559 *Arachis hypogaea*, T1490 *Citrus limon*, T1494 *Citrus limonia*, T4289 *Morus alba*, T4291 *Morus australis*, T4293 *Morus cathayana*, T4298 *Morus mongolica*, T4331 *Musa paradisiaca* var. *sapientum* [Syn. *Musa sapientum*], T4388 *Nasturtium officinale*, T5091 *Polygonatum cyrtoneura* [Syn. *Polygonatum multiflorum*], T5092 *Polygonatum kingianum*, T5095 *Polygonatum sibiricum*, T5218 *Prunus armeniaca*, T5967 *Siraitia grosvenorii* [Syn. *Momordica grosvenorii*], T6512 *Trichosanthes kirilowii*.
- lung heat enduring cough** T1183 *Capra hircus*; *Ovis aries*.
- lung heat hemoptysis** T0262 *Ajuga ciliata*, T1866 *Cryptolepis sinensis*, T3681 *Lamium barbatum*, T3863 *Liparis nervosa*, T5863 *Selaginella moellendorffii*.
- lung heat phlegm cough** T3284 *Houttuynia cordata*.
- lung heat phlegm depression** T0480 *Angelica decursiva* [Syn. *Peucedanum decursivum*], T3819 *Ligusticum brachylobum*, T4761 *Peucedanum longshengensis*, T4768 *Peucedanum praeruptorum*, T4769 *Peucedanum rubricaulis*.
- lung heat qi counterflow** T2867 *Garcinia multiflora*.
- lung qi block** T1506 *Citrus reticulata*.
- lung qi distention** T2220 *Diospyros kaki*.
- lung stomach yin damage** T5093 *Polygonatum odoratum* [Syn. *Polygonatum officinale*], T5094 *Polygonatum prattii*.
- lung vacuity** T0985 *Bos taurus domesticus*; *Bubalus bubalis*.
- lung vacuity and shortness of breath** T4600 *Panax ginseng* [Syn. *Panax schinseng*].
- lung vacuity cold cough** T6267 *Syzygium jambos*.
- lung vacuity consumption cough** T0948 *Blainvillea acmella* [Syn. *Verbesina acmella*; *Eclipta latifolia*; *Blainvillea latifolia*].
- lung vacuity cough** T1598 *Codonopsis convolvulacea*, T4050 *Magnolia sieboldii*, T4276 *Monotropa uniflora*, T4821 *Pholidota articulata*, T6798 *Vitis vinifera*.
- lung vacuity dry cough** T6511 *Trichosanthes kirilowii*.
- lung vacuity enduring cough** T0624 *Aristolochia contorta*, T0626 *Aristolochia debilis* [Syn. *Aristolochia longa*], T0630 *Aristolochia indica*, T0633 *Aristolochia maxima*, T0640 *Aristolochia triangularis*,

- T0830 *Auricularia auricula*, T0831 *Auricularia delicata*, T1191 *Caragana sinica*, T2195 *Dioscorea deltoidea*.
- lung vacuity taxation cough** T6601 *Umbilicaria esculenta* [Syn. *Gyrophora esculenta*].
- lung wilting** T0746 *Asparagus cochinchinensis* [Syn. *Asparagus lucidus*], T3277 *Homo sapiens*, T6508 *Trichosanthes cucumeroides*.
- lymphatic sarcoma** T1318 *Cephalotaxus fortunei*.
- lymphnoditis** T3202 *Hemistepta lyrata* [Syn. *Hemistepta carthamoides*; *Saussurea carthamoides*], T5289 *Pteris dactylina*, T6567 *Tupistra wattii* [Syn. *Campylandra wattii*].
- lymphnoditis** T0707 *Arthraxon hispidus*, T0867 *Baphicacanthus cusia* [Syn. *Strobilanthes cusia*], T2359 *Endarachne binghamiae*, T3243 *Hibiscus rosa-sinensis*, T3423 *Indigofera tinctoria*, T4264 *Momordica cochinchinensis*.
- macula** T0648 *Arnebia euchroma*, T0649 *Arnebia guttata*, T1419 *Cimicifuga dahurica*, T1420 *Cimicifuga foetida*, T1421 *Cimicifuga heracleifolia*, T3881 *Lithospermum erythrorhizon*, T5447 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*].
- macular eruption** T0867 *Baphicacanthus cusia* [Syn. *Strobilanthes cusia*], T4582 *Paeonia delavayi*, T4585 *Paeonia moutan* [Syn. *Paeonia suffruticosa*], T5120 *Polygonum tinctorium*, T5826 *Scrophularia buergeriana*, T5828 *Scrophularia ningpoensis*.
- macular eruption and papules** T1045 *Bubalus bubalis*, T3476 *Isatis indigotica*, T5121 *Polygonum tinctorium*.
- maculopapular eruption** T1986 *Cyrtomium fortunei*, T3475 *Isatis indigotica*.
- malaria** T0071 *Achyranthes aspera*, T0072 *Achyranthes aspera* var. *indica*, T0248 *Agrimonia pilosa*, T0249 *Agrimonia pilosa* var. *japonica*, T0318 *Allium sativum*, T0374 *Alstonia scholaris*, T0378 *Alstonia yunnanensis*, T0382 *Althaea rosea*, T0468 *Anemone hupehensis*, T0471 *Anemone rivularis*, T0500 *Anguilla japonica*, T0568 *Aralia chinensis*, T0570 *Aralia dasycphylla*, T0606 *Areca catechu*, T0653 *Artabotrys hexapetalus* [Syn. *Annona hexapetalus*], T0660 *Artemisia annua*, T0662 *Artemisia apiacea* [Syn. *Artemisia carvifolia*; *Artemisia caruifolia*], T0813 *Atalantia buxifolia* [Syn. *Severinia buxifolia*], T0814 *Atalantia buxifolia* [Syn. *Severinia buxifolia*], T0947 *Bixa orellana*, T1038 *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*], T1039 *Bruguiera gymnorrhiza*, T1048 *Buddleja officinalis*, T1055 *Bupleurum angustissimum*, T1056 *Bupleurum aureum*, T1058 *Bupleurum chaishouii*, T1059 *Bupleurum chinense*, T1065 *Bupleurum longiradiatum*, T1066 *Bupleurum marginatum*, T1067 *Bupleurum marginatum* var. *stenophyllum*, T1072 *Bupleurum scorzonerifolium*, T1073 *Bupleurum sibiricum*, T1075 *Bupleurum smithii* var. *parvifolium*, T1078 *Bupleurum wenchuanense*, T1079 *Bupleurum yinchowense*, T1176 *Cannabis sativa*, T1247 *Cassia sophora*, T1428 *Cinchona ledgeriana*, T1429 *Cinchona officinalis*, T1433 *Cinchona succirubra*, T1446 *Cipadessa baccifera*, T1535 *Clausena excavata*, T1538 *Clausena lansium*, T1561 *Clerodendron serratum*, T1562 *Clerodendron trichotomum*, T1563 *Clerodendron trichotomum*, T1569 *Clerodendrum serratum* var. *amplexifolium*, T1656 *Conyza bonariensis* [Syn. *Erigeron bonariensis*; *Erigeron linifolius*; *Erigeron crispus*], T1853 *Croton oblongifolius* [Syn. *Croton laevigatus*], T1888 *Cudrania tricuspidata*, T1931 *Cyclea barbata*, T1986 *Cyrtomium fortunei*, T2023 *Daphne genkwa*, T2131 *Desmodium pulchellum* [Syn. *Phyllodium pulchellum*], T2136 *Desmos cochinchinensis* [Syn. *Desmos chinensis*], T2158 *Dichroa febrifuga*, T2203 *Dioscorea nipponica*, T2204 *Dioscorea nipponica* ssp. *rosthornii*, T2263 *Dregea volubilis*, T2267 *Drosera peltata* var. *lunata*, T2272 *Drymaria diandra* [Syn. *Drymaria cordata* ssp. *diandra*], T2295 *Duranta repens*, T2310 *Dysoxylum hongkongense*, T2421 *Erigeron annuus*, T2505 *Eucalyptus citriodora*, T2517 *Eucalyptus robusta*, T2589 *Euphorbia helioscopia*, T2627 *Euphorbia longan* [Syn. *Dimocarpus longan*], T2641 *Evodia leptota* [Syn. *Ilex leptota*], T2695 *Ferula assafoetida*, T2723 *Ficus pumila*, T3109 *Harrisonia perforata*, T3120 *Hedychium spicatum*, T3124 *Hedyotis capitellata*, T3144 *Helianthus annuus*, T3146 *Helianthus annuus* cv, T3303 *Hydrangea chinensis*, T3304 *Hydrangea macrophylla*, T3308 *Hydrangea umbellata*, T3323 *Hymenodictyon excelsum*, T3327 *Hyoscyamus niger*, T3340 *Hypericum ascyron*, T3460 *Iris halophila*, T3464 *Iris lactea* var. *chinensis* [Syn. *Iris pallasii* var. *chinensis*], T3646 *Kyllinga brevifolia*, T3954 *Lycium barbarum*, T3956 *Lycium chinense*, T4170 *Melilotus albus*, T4172 *Melilotus suaveolens*, T4803 *Phlogacanthus curviflorus*, T4847 *Physalis alkekengi* var. *franchetii*, T5105 *Polygonum hydropiper* var. *flaccidum* [Syn. *Polygonum flaccidum*], T5110 *Polygonum orientale*, T5182 *Potentilla discolor*, T5184 *Potentilla kleiniana*, T5194 *Premna microphylla*, T5234 *Prunus persica*, T5413 *Ranunculus cantoniensis*, T5414 *Ranunculus japonicus*, T5415 *Ranunculus sceleratus*, T5576 *Rostellularia procumbens* [Syn. *Justicia procumbens*], T5852 *Sedum bulbiferum*, T5950 *Siegesbeckia orientalis*, T5951 *Siegesbeckia orientalis* var. *glabrescens* [Syn. *Siegesbeckia glabrescens*], T5952 *Siegesbeckia orientalis* var. *pubescens* [Syn. *Siegesbeckia pubescens*], T6005 *Solanum lyratum*, T6075 *Spilanthes acmella*, T6132 *Stephania sasakii*, T6135 *Stephania succifera*, T6177 *Strychnos ignatii*, T6252 *Symplocos chinensis*, T6375 *Thalictrum baicalense*, T6376 *Thalictrum cultratum*, T6385 *Thalictrum flavum*, T6387 *Thalictrum foliolosum*, T6389 *Thalictrum glandulosissimum*, T6653 *Usnea diffracta*, T6654 *Usnea longissima*, T6697 *Veratrum grandiflorum*, T6698 *Veratrum nigrum*, T6709 *Verbena officinalis*, T6723 *Veronica arvensis*, T6732 *Vespertilio superans*, T6749 *Vicia hirsuta*, T6750 *Vicia sativa*, T6788 *Vitex negundo*, T6866 *Zanthoxylum avicennae*.
- malaria with ardent fever** T1841 *Croton caudatus* var. *tomentosus*.
- malaria with chills and fever** T6402 *Thalictrum omeiense*.
- malaria with fever** T6226 *Swertia mileensis*.
- malaria with splenomegaly** T0834 *Averrhoa carambola*.
- malign malaria** T3323 *Hymenodictyon excelsum*.
- malign obstruction in pregnancy** T0418 *Amomum muricarpum*, T4718 *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*], T4721 *Perilla frutescens* var. *arguta*.
- malign scab and lai sore** T4349 *Myrica rubra*.
- malign sore** T1049 *Bufo bufo* gargarizans; *Bufo melanostictus*, T1660 *Coprinus atramentarius*, T1756 *Costus speciosus*, T2036 *Datura innoxia*, T2041 *Datura metel*, T2046 *Datura stramonium*, T2428 *Erinaceus europaeus*; *Hemiechinus dauuricus*; *Hemiechinus auritus*, T2866 *Garcinia morella*, T2975 *Gleditsia delavayi*, T2976 *Gleditsia fera*, T2980 *Gleditsia sinensis* [Syn. *Gleditsia horrida*], T3057 *Gossypium herbaceum*, T4338 *Mylabris phalerata*; *Mylabris cichorii*,

- T5368 *Python molurus bivittatus*, T5414 *Ranunculus japonicus*, T5605 *Rumex acetosa*, T5998 *Solanum dulcamara*, T6429 *Thermopsis lupinoides*, T6555 *Tropaecolum majus*, T6693 *Veratrum album* var. *lobelianum* [Syn. *Veratrum lobelianum*], T6697 *Veratrum grandiflorum*, T6698 *Veratrum nigrum*.
- malign sore and scab lichen** T1858 *Croton tiglium*.
- malign sore and swelling toxin** T0513 *Annona squamosa*, T1799 *Crinum latifolium*, T3984 *Lycoris chinensis*, T3986 *Lycoris radiata* [Syn. *Amaryllis radiata*], T5671 *Salvia digitaloides*.
- malign sore with welling abscess and flat abscess** T4303 *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*.
- malign sores with welling abscess and flat abscess** T1787 *Cremastra appendiculata*, T4917 *Pinus massoniana*.
- malignant lymphoma** T1904 *Curcuma kwangsiensis*, T1909 *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*].
- malignant tumor (therioma)** T3231 *Hernandia sonora* [Syn. *Hernandia ovigera*].
- malignity stroke stupor** T4303 *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*.
- mammary consumption** T5137 *Poncirus trifoliata*.
- mammary distention** T1055 *Bupleurum angustissimum*, T1056 *Bupleurum aureum*, T1058 *Bupleurum chaishouii*, T1059 *Bupleurum chinense*, T1065 *Bupleurum longiradiatum*, T1066 *Bupleurum marginatum*, T1067 *Bupleurum marginatum* var. *stenophyllum*, T1072 *Bupleurum scorzonrifolium*, T1073 *Bupleurum sibiricum*, T1075 *Bupleurum smithii* var. *parvifolium*, T1078 *Bupleurum wenchuanense*, T1079 *Bupleurum yinchowense*.
- mammary rock** T1043 *Bryophyllum pinnatum*.
- mammary sore** T4696 *Penaeus orientalis*, T5400 *Rabdosia stracheyi*.
- mammary welling abscess** T0010 *Abrus fruticulosus* [Syn. *Abrus cantoniensis*], T0011 *Abrus precatorius*, T0045 *Acanthopanax trifoliatum*, T0161 *Actinidia eriantha*, T0171 *Adiantum capillus-veneris*, T0172 *Adiantum caudatum*, T0267 *Ajuga nipponensis*, T0446 *Anaphalis margaritacea*, T0567 *Aralia armata*, T0600 *Ardisia mamillata* [Syn. *Tinus mamillata*], T0634 *Aristolochia mollissima*, T0643 *Aristolochia versicolor*, T0932 *Betula luminifera*, T0971 *Bolbostemma paniculatum*, T1005 *Brassica campestris* [Syn. *Brassica campestris* var. *oleifera*], T1007 *Brassica juncea*, T1043 *Bryophyllum pinnatum*, T1188 *Caragana chamlagu*, T1190 *Caragana jubata*, T1338 *Cestrum nocturnum*, T1504 *Citrus reticulata*, T1506 *Citrus reticulata*, T1565 *Clerodendrum bungei*, T1624 *Colocasia antiquorum*, T1640 *Coniogramme japonica* [Syn. *Hemionitis japonica*], T1813 *Crotalaria albida*, T1986 *Cyrtomium fortunei*, T2024 *Daphne genkwa*, T2028 *Daphne odora*, T2133 *Desmodium racemosum* [Syn. *Podocarpium podocarpum* var. *oxyphyllum*], T2316 *Echinops grijsii*, T2317 *Echinops ritro*, T2517 *Eucalyptus robusta*, T2521 *Eucalyptus tereticornis*, T2590 *Euphorbia hirta*, T2787 *Fritillaria hupehensis*, T2798 *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*], T3080 *Gymnema sylvestris*, T3193 *Hemerocallis fulva*, T3195 *Hemerocallis lilio-asphodelus*, T3197 *Hemerocallis minor*, T3202 *Hemistepta lyrata* [Syn. *Hemistepta carthamoides*; *Saussurea carthamoides*], T3348 *Hypericum elodeoides*, T3363 *Hypericum sampsonii*, T3368 *Hypericum wightianum*, T3432 *Inula helianthus-aquatica*, T3457 *Iris dichotoma*, T3479 *Isodon amethystoides*, T3815 *Ligularia stenocephala*, T3932 *Ludwigia octovalvis*, T3990 *Lygodium japonicum*, T3996 *Lysimachia candida*, T3999 *Lysimachia clethroides*, T4252 *Mirabilis jalapa*, T4265 *Momordica cochinchinensis*, T4519 *Opuntia dillenii*, T4520 *Opuntia ficus-indica*, T4521 *Opuntia vulgaris*, T4648 *Paris polyphylla*, T4649 *Paris polyphylla* var. *chinensis*, T4650 *Paris polyphylla* var. *pseudothibetica*, T4651 *Paris polyphylla* var. *stenophylla*, T4652 *Paris polyphylla* var. *yunnanensis*, T4726 *Periploca forrestii*, T4827 *Photinia parvifolia*, T5090 *Polygala watersii*, T5193 *Pratia nummularia*, T5214 *Prunella vulgaris*, T5298 *Pteris vittata*, T5466 *Rhaponticum uniflorum*, T5650 *Salix babylonica*, T5672 *Salvia flava*, T5701 *Salvia yunnanensis*, T5813 *Scilla scilloides*, T5862 *Selaginella involvens*, T5942 *Sida acuta*, T6092 *Stachys palustris*, T6301 *Taraxacum mongolicum*, T6367 *Teucrium quadrifarium*, T6431 *Thesium chinense*, T6645 *Urena lobata*, T6668 *Vaccaria segetalis* [Syn. *Vaccaria pyramidata*], T6767 *Viola yedoensis*, T6912 *Zinnia elegans*.
- mammary welling abscess with swelling and pain** T0173 *Adiantum lunulatum*.
- mania and withdrawal** T1804 *Cristaria plicata*; *Hyriopsis cumingii*, T1907 *Curcuma wengujin*, T3329 *Hyoscyamus niger*, T5231 *Prunus persica*, T6675 *Valeriana amurensis*, T6679 *Valeriana officinalis*, T6680 *Valeriana officinalis* var. *latifolia*.
- mania and withdrawal with congesting phlegm** T6693 *Veratrum album* var. *lobelianum* [Syn. *Veratrum lobelianum*].
- manic agitation schizophrenia** T4243 *Milletia reticulata*.
- march hematoglobinuria** T5587 *Rubus alceaefolius*.
- marked emaciation** T1337 *Cervus nippon*; *Cervus elaphus*, T3279 *Homo sapiens*.
- massive head scourge** T0866 *Baphicacanthus cusia* [Syn. *Strobilanthes cusia*], T3475 *Isatis indigotica*, T3495 *Isodon irrorata*.
- mastitis** T0264 *Ajuga forrestii*, T0594 *Ardisia crenata*, T0707 *Arthraxon hispidus*, T0776 *Asplenium prolongatum*, T1450 *Cirsium lineare*, T1573 *Clinopodium chinense*, T1826 *Crotalaria mucronata*, T1959 *Cynanchum paniculatum*, T2357 *Emilia sonchifolia*, T2691 *Farfugium japonicum*, T2988 *Glochidion eriocarpum*, T3123 *Hedyotis auricularia*, T3125 *Hedyotis chrysotricha* [Syn. *Oldenlandia chrysotricha*], T3243 *Hibiscus rosa-sinensis*, T3284 *Houttuynia cordata*, T3288 *Humulus japonicus* [Syn. *Humulus scandens*], T3496 *Isodon japonica* [Syn. *Rabdosia japonica*], T3908 *Lonicera bournei*, T3909 *Lonicera confusa*, T3910 *Lonicera fulvotomentosa*, T3911 *Lonicera hypoglauca*, T3912 *Lonicera japonica*, T3914 *Lonicera macranthoides*, T3918 *Lonicera similis*, T4121 *Marsilea quadrifolia*, T4391 *Nauclea officinalis*, T5295 *Pteris multifida*, T5393 *Rabdosia longituba*, T5587 *Rubus alceaefolius*, T5680 *Salvia miltiorrhiza*, T5681 *Salvia miltiorrhiza* f. *alba*, T5688 *Salvia przewalskii*, T5844 *Scutellaria scordifolia*, T5857 *Sedum sarmentosum*, T5861 *Selaginella doederleinii*, T6003 *Solanum khasianum*, T6008 *Solanum nigrum*, T6025 *Sonchus arvensis*, T6301 *Taraxacum mongolicum*, T6691 *Veratrum baillonii*, T6808 *Waltheria americana*.
- mastocarcinoma** T0161 *Actinidia eriantha*.
- maybe cure prostatic** T5340 *Pygeum topengii*.
- mazischesis** T0560 *Arachis hypogaea*.

- measles papules** T0379 *Alternanthera philoxeroides*, T0586 *Arctium lappa*, T0648 *Arnebia euchroma*, T0649 *Arnebia guttata*, T0867 *Baphicacanthus cusia* [Syn. *Strobilanthes cusia*], T1533 *Clausena dentata*, T1534 *Clausena dunniana*, T2282 *Dryopteris filix-mas*, T2517 *Eucalyptus robusta*, T2946 *Geranium robertianum*, T3163 *Helicteres angustifolia*, T3303 *Hydrangea chinensis*, T3416 *Imperata cylindrica* var. *major*, T3649 *Laccifer lacca*, T3881 *Lithospermum erythrorhizon*, T4028 *Maesa indica*, T4320 *Murraya kwangsiensis*, T4500 *Onosma paniculatum*, T4526 *Origanum vulgare*, T4552 *Osmunda japonica*, T4564 *Oxalis corniculata* [Syn. *Oxalis repens*], T5401 *Rabdosia yunnanensis*, T5804 *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*], T6145 *Stichopus japonicus*, T6375 *Thalictrum baicalense*, T6376 *Thalictrum cultratum*, T6385 *Thalictrum flavum*, T6387 *Thalictrum foliolosum*, T6389 *Thalictrum glandulosissimum*.
- measles papules swelling toxin** T1179 *Capparis masaikai*.
- measles papules with ardent fever** T3588 *Juniperus formosana*.
- measles papules with complicated pneumonia** T5408 *Rana nigromaculata*; *Rana plancyi*.
- measles papulis** T3475 *Isatis indigotica*.
- meat-type food accumulation** T1769 *Crataegus cuneata*, T1771 *Crataegus kansuensis*, T1772 *Crataegus maximowiczii*, T1775 *Crataegus pinnatifida*, T1778 *Crataegus pinnatifida* var. *major*, T1780 *Crataegus sanguinea*, T1781 *Crataegus scabrifolia*, T2695 *Ferula assafoetida*, T5365 *Pyrus pashia*.
- medullitis** T0195 *Aeginetia indica*, T0568 *Aralia chinensis*, T0570 *Aralia dasycphylla*, T1003 *Brandisia hancei*, T1416 *Cicuta virosa*, T2589 *Euphorbia helioscopia*, T6214 *Swertia chinensis*, T6540 *Tripterygium hypoglaucum*.
- melancholia** T2882 *Gardenia jasminoides* [Syn. *Gardenia florida*].
- meningitis** T1393 *Chrysanthemum indicum*, T6432 *Thespesia populnea* [Syn. *Hibiscus populneus*].
- menstrual block** T0571 *Aralia decaisneana*, T0600 *Ardisia mamillata* [Syn. *Timus mamillata*], T0661 *Artemisia anomala*, T0963 *Boehmeria siamensis*, T1001 *Brachystemma calycinum*, T1288 *Celastrus orbiculatus* [Syn. *Celastrus articulatus*], T1434 *Cinnamomum bejolghota* [Syn. *Cinnamomum obtusifolium*; *Laurus bejolghota*], T1640 *Coniogramme japonica* [Syn. *Hemionitis japonica*], T1884 *Cudrania cochinchinensis*, T1907 *Curcuma wenguijin*, T2193 *Dioscorea cirrhosa* [Syn. *Dioscorea pogonoides*], T3413 *Impatiens nolitangere*, T3479 *Isodon amethystoides*, T3674 *Laggera alata*, T3779 *Leucas aspera*, T4432 *Nigella glandulifera*, T4549 *Osbeckia chinensis*, T4726 *Periploca forrestii*, T5401 *Rabdosia yunnanensis*, T5586 *Rubia yunnanensis*, T5594 *Rubus parkeri*, T5661 *Salvia bowleyana*, T5672 *Salvia flava*, T5697 *Salvia trijuga*, T5701 *Salvia yunnanensis*, T6830 *Woodfordia fruticosa*.
- menstrual block and abdominal pain** T3201 *Hemiphragma heterophyllum*.
- menstrual disorder** T0071 *Achyranthes aspera*, T0072 *Achyranthes aspera* var. *indica*, T0298 *Alectoria vivens*, T0301 *Aleuritopteris argentea*, T0474 *Angelica acutiloba* [Syn. *Ligusticum acutilobum*], T0495 *Angelica sinensis*, T0591 *Ardisia arborescens*, T0805 *Astragalus sinicus*, T0859 *Balanophora involucrata*, T0941 *Bidens tripartita*, T0999 *Bougainvillea glabra*, T1053 *Bulbophyllum odoratissimum* [Syn. *Stelis odoratissimum*], T1055 *Bupleurum angustissimum*, T1056 *Bupleurum aureum*, T1058 *Bupleurum chaishoui*, T1059 *Bupleurum chinense*, T1065 *Bupleurum longiradiatum*, T1066 *Bupleurum marginatum*, T1067 *Bupleurum marginatum* var. *stenophyllum*, T1072 *Bupleurum scorzoniferolium*, T1073 *Bupleurum sibiricum*, T1075 *Bupleurum smithii* var. *parvifolium*, T1078 *Bupleurum wenchuanense*, T1079 *Bupleurum yinchowense*, T1143 *Calystegia hederacea*, T1163 *Campylotropis hirtella*, T1352 *Chamaenerion angustifolium* [Syn. *Epilobium angustifolium*], T1356 *Cheiranthus cheiri*, T1443 *Cinnamomum parthenoxylum* [Syn. *Cinnamomum porrectum*], T1450 *Cirsium lineare*, T1492 *Citrus limon*, T1496 *Citrus limonia*, T1528 *Cladonia stellaris* [Syn. *Cladonia alpestris*], T1583 *Cnidium officinale* [Syn. *Ligusticum officinale*], T1706 *Corydalis ambigua* var. *amurensis* [Syn. *Corydalis ambigua*], T1735 *Corydalis repens*, T1871 *Cucubalus baccifer*, T1889 *Cuminum cyminum*, T1900 *Curculigo capitulata* [Syn. *Leucocum capitulata*], T1976 *Cyperus iria*, T1978 *Cyperus rotundus*, T2132 *Desmodium pulchellum* [Syn. *Phyllodium pulchellum*], T2231 *Diphylleia grayi*, T2232 *Diphylleia sinensis*, T2290 *Duchesnea indica*, T2326 *Elaeagnus angustifolia*, T2334 *Elephantopus scaber*, T2347 *Embelia parviflora*, T2387 *Epilobium hirsutum*, T2391 *Epimedium brevicornum*, T2540 *Euonymus fortunei*, T2542 *Euonymus japonicus*, T2545 *Euonymus phellomana*, T2546 *Euonymus sacrosancta*, T2563 *Eupatorium japonicum*, T2636 *Euscaphis japonica*, T2691 *Farfugium japonicum*, T2731 *Firmiana simplex*, T2736 *Fissistigma polyanthum*, T2826 *Galeola faberi*, T2955 *Geum japonicum*, T3056 *Gossypium herbaceum*, T3113 *Hedera nepalensis* var. *sinensis*, T3115 *Hedera rhombea*, T3124 *Hedyotis capitellata*, T3240 *Hibiscus esculentus*, T3340 *Hypericum ascyron*, T3349 *Hypericum erectum*, T3361 *Hypericum perforatum*, T3363 *Hypericum sampsonii*, T3418 *Incarvillea arguta*, T3549 *Ixora chinensis*, T3615 *Kadsura interior*, T3675 *Lagopsis supina*, T3681 *Lamium barbatum*, T3746 *Leontice robustum*, T3752 *Leonurus heterophyllum* [Syn. *Leonurus artemisia*], T3754 *Leonurus sibiricus*, T3765 *Lepisorus ussuriensis*, T3776 *Lethariella zahlbruckneri*, T3820 *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*], T3965 *Lycopodium annotinum*, T3969 *Lycopodium casuarinoides*, T3971 *Lycopodium complanatum*, T3997 *Lysimachia capillipes*, T3999 *Lysimachia clethroides*, T4005 *Lysionotus pauciflorus*, T4178 *Melodinus hemsleyanus*, T4234 *Milletia dielsiana*, T4238 *Milletia nitida*, T4308 *Mucuna birdwoodiana*, T4311 *Mucuna sempervirens*, T4385 *Narcissus tazetta* var. *chinensis*, T4432 *Nigella glandulifera*, T4444 *Nothopanax davidii*, T4450 *Nuphar pumilum*, T4470 *Ocimum basilicum*, T4510 *Ophiorrhiza japonica*, T4513 *Ophiorrhiza mungos*, T4575 *Pachysandra terminalis*, T4580 *Paeonia albiflora* [Syn. *Paeonia lactiflora*], T4604 *Panax japonicus* var. *bipinnatifidus*, T4605 *Panax japonicus* var. *major*, T4689 *Peganum nigellastrum*, T4777 *Phalaris arundinacea*, T4804 *Phlojodicarpus sibiricus*, T4813 *Phlomis tuberosa*, T4956 *Piper mullesua*, T5018 *Pleuropteris ciliinervis*, T5057 *Podophyllum emodii* [Syn. *Podophyllum emodii* var. *chinense*; *Podophyllum sikkimensis*; *Sinopodophyllum emodii*], T5071 *Polygala arillata*, T5075 *Polygala fallax* [Syn. *Polygala aureocauda*], T5087 *Polygala telephioides*, T5106 *Polygonum lapathifolium*, T5184 *Potentilla kleiniana*, T5497 *Rhodiola kirilowii*, T5515 *Rhododendron*

- micranthum*, T5523 *Rhododendron simsii*, T5562 *Rosa chinensis*, T5569 *Rosa multiflora*, T5572 *Rosa rugosa*, T5594 *Rubus parkeri*, T5671 *Salvia digitaloides*, T5672 *Salvia flava*, T5680 *Salvia miltiorrhiza*, T5681 *Salvia miltiorrhiza* f. *alba*, T5688 *Salvia przewalskii*, T5697 *Salvia trijuga*, T5701 *Salvia yunnanensis*, T5753 *Saussurea gnaphaloides*, T5755 *Saussurea involucrata*, T5757 *Saussurea laniceps*, T5759 *Saussurea medusa*, T5762 *Saussurea nigrescens*, T5793 *Schisandra henryi*, T5795 *Schisandra micrantha*, T5797 *Schisandra propinqua*, T5798 *Schisandra propinqua* var. *intermedia*, T5893 *Senecio nudicaulis*, T5966 *Siphonostegia chinensis*, T6066 *Spatholobus suberectus*, T6154 *Strobilanthes japonicus* [Syn. *Championella japonica*], T6295 *Tanacetum sibiricum* [Syn. *Filifolium sibiricum*], T6356 *Tetrapanax papyriferus*, T6645 *Urena lobata*, T6677 *Valeriana jatamansii* [Syn. *Valeriana wallichii*], T6689 *Ventilago leiocarpa*, T6728 *Veronica serpyllifolia*, T6749 *Vicia hirsuta*, T6750 *Vicia sativa*.
- menstrual disorder [= menoxenia]** T0969 *Boerhavia diffusa*, T1189 *Caragana intermedia*, T1373 *Chloranthus serratus*, T1682 *Cordyceps ophioglossoides*, T2193 *Dioscorea cirrhosa* [Syn. *Dioscorea pogonoides*], T2734 *Fissistigma glaucescens* [Syn. *Melodorum glaucescens*], T3413 *Impatiens nolitangere*, T3779 *Leucas aspera*, T4239 *Milletia nitida* var. *hirsutissima*, T4564 *Oxalis corniculata* [Syn. *Oxalis repens*], T4938 *Piper boehmeriaefolium*, T5193 *Pratia nummularia*, T5446 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], T5498 *Rhodiola quadrifida*, T5545 *Ribes fasciculatum* var. *chinense*, T5555 *Rodgersia pinnata*, T5563 *Rosa cymosa*, T5566 *Rosa henryi*, T5586 *Rubia yunnanensis*, T5661 *Salvia bowleyana*, T6533 *Trillium kamschaticum*, T6535 *Trillium tschonoskii*, T6676 *Valeriana hardwickii*, T6722 *Veronica anagallis-aquatica*.
- menstrual disorder**<sup>[509]</sup> T4518 *Oppopanax chironium*.
- menstrual disorder due to cold** T0664 *Artemisia argyi*, T0681 *Artemisia lavandulaefolia*, T0685 *Artemisia mongolica*, T0689 *Artemisia princeps*, T0691 *Artemisia rubripes*, T0706 *Artemisia vulgaris*.
- menstrual pain** T3363 *Hypericum sampsonii*, T4962 *Piper puberulum*, T5661 *Salvia bowleyana*, T5671 *Salvia digitaloides*, T5672 *Salvia flava*.
- menstruant's morbidity** T5993 *Solanum capsicastrum*.
- mental disease** T0298 *Alectoria vivens*, T4423 *Nicandra physaloides*.
- mental manic agitation** T5821 *Scopolia japonica*.
- mercurial poisoning** T5977 *Smilax glabra*, T5980 *Smilax menispermoidea*.
- miasmatic malaria** T2092 *Delphinus delphis*.
- migraine** T0088 *Aconitum coreanum*, T1084 *Buthus martensi*, T1374 *Chloranthus spicatus*, T1528 *Cladonia stellaris* [Syn. *Cladonia alpestris*], T1541 *Claviceps purpurea*, T1562 *Clerodendron trichotomum*, T3822 *Ligusticum jeholense*, T3824 *Ligusticum sinense*, T4625 *Papaver commutatum* [Syn. *Papaver rhoeas*], T4662 *Parthenocissus tricuspidata*, T5414 *Ranunculus japonicus*, T5727 *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*], T6588 *Typhonium giganteum*, T6791 *Vitex rotundifolia* [Syn. *Vitex trifolia* var. *simplicifolia*], T6793 *Vitex trifolia*.
- mough and tongue sores** T3830 *Ligustrum sinense*, T3932 *Ludwigia octovalvis*, T4730 *Peristrophe roxburghiana*, T6268 *Syzygium samarangense*.
- mounting pain** T1537 *Clausena lansium*, T4157 *Melia azedarach*, T4987 *Pittosporum tobira*.
- mounting qi** T0164 *Actinidia polygama*, T0274 *Akebia quinata*, T0275 *Akebia quinata*, T0278 *Akebia trifoliata*, T0280 *Akebia trifoliata* var. *australis*, T0598 *Ardisia japonica*, T0610 *Argemone mexicana*, T0680 *Artemisia lactiflora*, T0721 *Arundina chinensis*, T0813 *Atalantia buxifolia* [Syn. *Severinia buxifolia*], T0814 *Atalantia buxifolia* [Syn. *Severinia buxifolia*], T1092 *Buxus microphylla* var. *sinica*, T1113 *Calendula officinalis*, T1217 *Carum carvi*, T1258 *Casuarina equisetifolia*, T1289 *Celastrus orbiculatus* [Syn. *Celastrus articulatus*], T1359 *Chenopodium album*, T1479 *Citrus grandis*, T1487 *Citrus junos*, T1504 *Citrus reticulata*, T1586 *Cocculus laurifolius*, T1598 *Codonopsis convolvulacea*, T1775 *Crataegus pinnatifida*, T1778 *Crataegus pinnatifida* var. *major*, T1869 *Cryptotaenia japonica*, T2432 *Eriobotrya japonica*, T2536 *Euonymus alatus*, T2632 *Euryale ferox*, T2644 *Evodia rutaecarpa*, T2646 *Evodia rutaecarpa* var. *officinalis*, T2733 *Firmiana simplex*, T2746 *Foeniculum vulgare*, T3221 *Heracleum rapula*, T3852 *Lindera megaphylla*, T3854 *Lindera strychnifolia* [Syn. *Lindera aggregata*], T4100 *Mangifera indica*, T4163 *Melia toosendan*, T4268 *Monachosorum henryi*, T4530 *Ormosia hosiei*, T4616 *Pandanus tectorius*, T4663 *Passiflora caerulea*, T4690 *Pelargonium graveolens*, T4847 *Physalis alkekengi* var. *franchetii*, T4852 *Physalis peruviana*, T4948 *Piper hancei*, T4966 *Piper sarmentosum*, T5110 *Polygonum orientale*, T5137 *Poncirus trifoliata*, T5139 *Poncirus trifoliata*, T5189 *Pothos chinensis*, T5626 *Ruta graveolens*, T5720 *Sapindus mukorossi*, T6101 *Stauntonia hexaphylla*, T6528 *Trigonella foenum-graecum*, T6540 *Tripterygium hypoglaucum*, T6800 *Viverra zibetha*.
- mounting qi [= hernia]** T1381 *Choerospondias axillaris*, T1552 *Cleome viscosa*, T3006 *Glycosmis citrifolia*, T3270 *Holboellia fargesii*, T3613 *Kadsura coccinea* [Syn. *Kadsura chenensis*; *Kadsura hainanensis*], T4158 *Melia azedarach*, T4439 *Nothapodytes pittosporoides*, T4962 *Piper puberulum*, T5661 *Salvia bowleyana*, T5701 *Salvia yunnanensis*, T5717 *Sapindus delavayi* [Syn. *Pancovia delavayi*], T6527 *Trigonella caerulea*, T6876 *Zanthoxylum dissitum*.
- mounting qi [= hernia]** T0036 *Acanthopanax giraldii* [Syn. *Acanthopanax giraldii* var. *inermis*; *Eleutherococcus giraldii*], T1288 *Celastrus orbiculatus* [Syn. *Celastrus articulatus*], T3460 *Iris halophila*, T3464 *Iris lactea* var. *chinensis* [Syn. *Iris pallasii* var. *chinensis*], T5391 *Rabdosia eriocalyx*, T6789 *Vitex negundo*.
- mounting qi pain** T1053 *Bulbophyllum odoratissimum* [Syn. *Stelis odoratissimum*], T3877 *Litchi chinensis*.
- mounting qi with unilateral sagging of one testicle** T3360 *Hypericum patulum*.
- mounting-conglomeration** T6925 *Zostera marina*.
- mounting-conglomeration accumulation-gathering** T4584 *Paeonia lactiflora* wild, T4586 *Paeonia obovata*, T4590 *Paeonia veitchii*.
- mouth and tongue sores** T0378 *Alstonia yunnanensis*, T0959 *Blumea lacera*, T0977 *Bombyx mori*, T0987 *Bos taurus domesticus*; *Bubalus bubalis*, T1045 *Bubalus bubalis*, T1361 *Chenopodium ambrosioides*, T5447 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*].

- mouth sore** T0019 *Acacia catechu*, T0273 *Akebia quinata*, T0277 *Akebia trifoliata*, T0279 *Akebia trifoliata* var. *australis*, T0540 *Apis cerana*, T0632 *Aristolochia manshuriensis*, T0867 *Baphicacanthus cusia* [Syn. *Strobilanthes cusia*], T0897 *Berberis amurensis*, T0907 *Berberis kawakamii*, T0912 *Berberis poiratii*, T0916 *Berberis thunbergii*, T1151 *Camellia sinensis* [Syn. *Thea sinensis*], T1182 *Capra hircus*; *Ovis aries*, T1256 *Castanea mollissima*, T1419 *Cimicifuga dahurica*, T1420 *Cimicifuga foetida*, T1421 *Cimicifuga heracleifolia*, T1464 *Citrullus vulgaris* [Syn. *Citrullus lanatus*], T1554 *Clerodendron cyrtophyllum*, T1662 *Coptis chinensis*, T1663 *Coptis chinensis* var. *brevisepala*, T1664 *Coptis deltoidea*, T1669 *Coptis omeiensis*, T1670 *Coptis teetoides* [Syn. *Coptis teeta*], T2221 *Diospyros kaki*, T2274 *Dryobalanops aromatica*, T2290 *Duchesnea indica*, T2628 *Euphrasia officinalis*, T2838 *Gallus gallus domesticus*, T3277 *Homo sapiens*, T3342 *Hypericum bellum*, T3356 *Hypericum japonicum*, T3361 *Hypericum perforatum*, T3363 *Hypericum sampsonii*, T3420 *Incarvillea sinensis*, T3423 *Indigofera tinctoria*, T3578 *Juncus effusus*, T3624 *Kalopanax pictum*, T3625 *Kalopanax septemlobus*, T3920 *Lophatherum gracile*, T3990 *Lygodium japonicum*, T4172 *Melilotus suaveolens*, T4178 *Melodinus hemsleyanus*, T4303 *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*, T4789 *Phellodendron amurense*, T4790 *Phellodendron amurense* var. *wilsonii*, T4791 *Phellodendron chinense*, T4792 *Phellodendron chinense* var. *glabriusculum*, T4831 *Phtheirospermum japonicum* [Syn. *Gerardia japonica*], T4836 *Phyllanthus emblica*, T4837 *Phyllanthus emblica*, T4843 *Phyllanthus urinaria*, T5099 *Polygonum bistorta*, T5121 *Polygonum tinctorium*, T5151 *Populus davidiana*, T5158 *Populus simonii*, T5457 *Rhamnus davurica*, T5569 *Rosa multiflora*, T6116 *Stenoloma chusanum*, T6224 *Swertia kouitchensis*, T6231 *Swertia pseudochinensis*, T6552 *Trollius chinensis* [Syn. *Trollius asiaticus* var. *chinensis*], T6553 *Trollius ledebourii*, T6615 *Uncaria gambir*, T6728 *Veronica serpyllifolia*.
- mouth-level nape sore** T4616 *Pandanus tectorius*, T5111 *Polygonum perfoliatum*.
- mouth-lever nape sore (nuchal phlegmon)** T5513 *Rhododendron mariae*.
- multi-infarct dementia** T2961 *Ginkgo biloba*.
- multiple swollen swelling abscess** T5279 *Psychotria serpens*.
- mumps** T0048 *Acanthus ilicifolius*, T0471 *Anemone rivularis*, T1384 *Chondrus ocelladus*, T3990 *Lygodium japonicum*, T4884 *Picria felterrae*, T5289 *Pteris dactylina*, T5717 *Sapindus delavayi* [Syn. *Pancovia delavayi*], T6365 *Teucrium pilosum* [Syn. *Teucrium japonicum* var. *pilosum*], T6767 *Viola yedoensis*.
- muscle numbness** T2367 *Ephedra equisetina*, T2368 *Ephedra gerardiana*, T2369 *Ephedra intermedia*, T2372 *Ephedra likiangensis*, T2373 *Ephedra minuta*, T2375 *Ephedra monosperma*, T2379 *Ephedra saxatilis*, T2380 *Ephedra sinica*, T5108 *Polygonum multiflorum*.
- muscle weakness** T3984 *Lycoris chinensis*, T3986 *Lycoris radiata* [Syn. *Amaryllis radiata*], T6184 *Strychnos nux-vomica*, T6193 *Strychnos wallichiana*.
- myocardiac ischemia** T1775 *Crataegus pinnatifida*, T1778 *Crataegus pinnatifida* var. *major*.
- nasal congestion** T0478 *Angelica dahurica* [Syn. *Angelica porphyrocaulis*], T0479 *Angelica dahurica* cv. *qibaizhi*, T0498 *Angelica taiwaniana*, T0728 *Asarum heterotropoides* var. *mandshuricum*, T0731 *Asarum sieboldii*, T0732 *Asarum sieboldii* var. *seoulensis*, T1312 *Centipeda minima*, T2367 *Ephedra equisetina*, T2368 *Ephedra gerardiana*, T2369 *Ephedra intermedia*, T2372 *Ephedra likiangensis*, T2373 *Ephedra minuta*, T2375 *Ephedra monosperma*, T2379 *Ephedra saxatilis*, T2380 *Ephedra sinica*, T6359 *Teucrium bidentatum*.
- nasal congestion and runny nose** T4035 *Magnolia biondii* [Syn. *Magnolia fargesii*], T4038 *Magnolia denudata* [Syn. *Magnolia heptapata*], T4041 *Magnolia liliflora*, T4052 *Magnolia sprengeri*, T4663 *Passiflora caerulea*, T6499 *Tribulus terrestris*.
- nasitis** T0707 *Arthraxon hispidus*, T4035 *Magnolia biondii* [Syn. *Magnolia fargesii*], T4038 *Magnolia denudata* [Syn. *Magnolia heptapata*], T4041 *Magnolia liliflora*, T4052 *Magnolia sprengeri*, T4215 *Michelia yunnanensis*, T4831 *Phtheirospermum japonicum* [Syn. *Gerardia japonica*].
- nasopharyngeal carcinoma** T2844 *Ganoderma applanatum*, T3443 *Iphigenia indica*.
- nasosinusitis** T1044 *Bryum argenteum*, T4035 *Magnolia biondii* [Syn. *Magnolia fargesii*], T4038 *Magnolia denudata* [Syn. *Magnolia heptapata*], T4041 *Magnolia liliflora*, T4052 *Magnolia sprengeri*, T4859 *Physochlaina physaloides*, T5189 *Pothos chinensis*.
- nausea** T3372 *Hypodematium sinense*, T4305 *Mosla dianthera*.
- nausea and vomiting** T1278 *Cedrela sinensis*, T1486 *Citrus junos*, T1488 *Citrus junos*, T2558 *Eupatorium formosanum*, T2559 *Eupatorium fortunei*, T3282 *Hordeum vulgare*, T4718 *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*], T4721 *Perilla frutescens* var. *arguta*, T6325 *Tectona grandis*.
- nephritis** T0933 *Betula platyphylla*, T0935 *Betula platyphylla* var. *japonica*, T1655 *Conyza blinii*, T1709 *Corydalis bungeana*, T1819 *Crotalaria ferruginea*, T2119 *Derris eriocarpa*, T3594 *Juniperus rigida*, T4842 *Phyllanthus reticulatus*, T5687 *Salvia prionitis*, T5795 *Schisandra micrantha*, T5867 *Selaginella sinensis*, T6023 *Solidago virgaurea*, T6277 *Tadehagi triquetrum*, T6691 *Veratrilla baillonii*.
- nephritis with edema** T0273 *Akebia quinata*, T0277 *Akebia trifoliata*, T0279 *Akebia trifoliata* var. *australis*, T1184 *Capsella bursa-pastoris*, T1415 *Cichorium intybus*, T2334 *Elephantopus scaber*, T2884 *Gardenia jasminoides* var. *grandiflora*, T3998 *Lysimachia christinae*, T4843 *Phyllanthus urinaria*, T5685 *Salvia plebeia*, T6129 *Stephania japonica*, T6330 *Tephrosieris kirilowii* [Syn. *Senecio integrifolius* var. *fauriei*], T6436 *Thlaspi arvense*.
- nephropathy syndrome** T6542 *Tripterygium wilfordii*.
- nephropylitis** T0967 *Boenninghausenia sessilicarpa*, T2941 *Gentianopsis paludosa*.
- nervous headache** T6003 *Solanum khasianum*, T6843 *Xanthium sibiricum* [Syn. *Xanthium strumarium*].
- nervous system diseases** T3231 *Hernandia sonora* [Syn. *Hernandia ovigera*].
- neuralgia** T0135 *Aconitum sunpanense*, T0138 *Aconitum umbrosum*, T0495 *Angelica sinensis*, T0539 *Apis cerana*, T0617 *Arisaema amurense*, T0618 *Arisaema consanguineum*, T0620 *Arisaema heterophyllum*, T1589 *Cocculus trilobus* [Syn. *Cocculus sarmentosus*],

- T1715 *Corydalis decumbens* [Syn. *Corydalis amabilis*], T1750 *Corydalis yanhusuo* [Syn. *Corydalis turtschaninovii* f. *yanhusuo*], T2897 *Gelsemium elegans*, T4663 *Passiflora caerulea*, T4804 *Phlojodicarpus sibiricus*, T4903 *Pinellia pedatisecta*, T5848 *Securinega suffruticosa*, T6100 *Stauntonia hexaphylla*, T6122 *Stephania dielsiana*, T6133 *Stephania sinica*, T6135 *Stephania succifera*.
- neurasthenia** T0572 *Aralia elata*, T1381 *Choerospondias axillaris*, T1525 *Cladonia fallax*, T1598 *Codonopsis convolvulacea*, T1604 *Coeloglossum viride* [Syn. *Coeloglossum viride* var. *bracteatum*], T1683 *Cordyceps sinensis*, T1826 *Crotalaria mucronata*, T2389 *Epimedium acuminatum*, T2390 *Epimedium brevicornum*, T2392 *Epimedium davidii*, T2394 *Epimedium elongatum*, T2398 *Epimedium koreanum*, T2401 *Epimedium pubescens*, T2402 *Epimedium sagittatum*, T2404 *Epimedium sutchuenense*, T2406 *Epimedium wushanense*, T3077 *Gymnadenia conopsea*, T4248 *Mimosa pudica*, T4283 *Morinda officinalis*, T4436 *Nitraria tangutorum*, T4906 *Pinus armandii*, T4916 *Pinus massoniana*, T5107 *Polygonum multiflorum*, T5169 *Poria cocos*, T5465 *Rhaponticum carthamoides*, T5848 *Securinega suffruticosa*, T6533 *Trillium kamschaticum*, T6535 *Trillium tschonoskii*, T6919 *Ziziphus jujuba* var. *spinosa*.
- neuritis** T1055 *Bupleurum angustissimum*, T1056 *Bupleurum aureum*, T1058 *Bupleurum chaishouii*, T1059 *Bupleurum chinense*, T1065 *Bupleurum longiradiatum*, T1066 *Bupleurum marginatum*, T1067 *Bupleurum marginatum* var. *stenophyllum*, T1072 *Bupleurum scorzoniferifolium*, T1073 *Bupleurum sibiricum*, T1075 *Bupleurum smithii* var. *parvifolium*, T1078 *Bupleurum wenchuanense*, T1079 *Bupleurum yinchowense*.
- neurodermatitis** T0495 *Angelica sinensis*, T0750 *Asparagus gobicus*, T1215 *Carthamus tinctorius*, T1650 *Convolvulus arvensis*, T1959 *Cynanchum paniculatum*, T2023 *Daphne genkwa*, T4804 *Phlojodicarpus sibiricus*, T5026 *Plumbagella micrantha*, T5256 *Pseudolarix amabilis* [Syn. *Larix amabilis*; *Pseudolarix kaempferi*], T5323 *Pulsatilla campanella*, T5324 *Pulsatilla cernua*, T5325 *Pulsatilla chinensis*, T5326 *Pulsatilla dahurica*, T5680 *Salvia miltiorrhiza*, T5681 *Salvia miltiorrhiza* f. *alba*, T5688 *Salvia przewalskii*, T6119 *Stephania cepharantha*, T6540 *Tripterygium hypoglaucom*.
- neurosis** T4248 *Mimosa pudica*, T5107 *Polygonum multiflorum*, T5499 *Rhodiola sacra*.
- night blindness** T0819 *Atractylodes chinensis*, T0821 *Atractylodes japonica*, T0823 *Atractylodes lancea*, T0986 *Bos taurus domesticus*; *Bubalus bubalis*, T1240 *Cassia obtusifolia*, T1250 *Cassia tora*, T1789 *Crepis napifera*, T2434 *Eriocaulon buergerianum*, T3779 *Leucas aspera*, T3957 *Lycium chinense*, T3969 *Lycopodium casuarinoides*, T6076 *Spinacia oleracea*, T6732 *Vespertilio superans*.
- night sweating** T0607 *Arenaria juncea*, T0825 *Atropa belladonna*, T0944 *Biota orientalis* [Syn. *Thuja orientalis*; *Platycladus orientalis*], T1680 *Cordyceps militaris*, T1681 *Cordyceps militaris* cv, T2658 *Fagopyrum esculentum*, T2727 *Ficus simplicissima*, T3001 *Glycine max*, T3090 *Gypsophila oldhamiana*, T3091 *Gypsophila pacifica*, T3279 *Homo sapiens*, T3742 *Lentinus edodes*, T3950 *Lychnis fulgens*, T3969 *Lycopodium casuarinoides*, T4450 *Nuphar pumilum*, T4580 *Paeonia albiflora* [Syn. *Paeonia lactiflora*], T4887 *Picrorhiza kurrooa*, T4888 *Picrorhiza scrophulariiflora*, T5133 *Polytrichum commune*, T5530 *Rhus chinensis* [Syn. *Rhus semialata*], T5531 *Rhus chinensis* [Syn. *Rhus semialata*], T5955 *Silene jensseensis*.
- nipple moth** T0950 *Blatta orientalis*, T1001 *Brachystemma calycinum*, T1210 *Carpesium abrotanoides*, T3356 *Hypericum japonicum*, T3396 *Ilex pubescens*, T3397 *Ilex pubescens* var. *glaber*, T3984 *Lycoris chinensis*, T3986 *Lycoris radiata* [Syn. *Amaryllis radiata*], T5105 *Polygonum hydropiper* var. *flaccidum* [Syn. *Polygonum flaccidum*], T5717 *Sapindus delavayi* [Syn. *Pancovia delavayi*], T6039 *Sophora moorcroftiana*, T6431 *Thesium chinense*.
- no thought of food and drink** T1492 *Citrus limon*, T1496 *Citrus limonia*, T4470 *Ocimum basilicum*, T4681 *Pedicularis decora*, T5758 *Saussurea lappa* [Syn. *Aucklandia lappa*].
- node swelling** T4954 *Piper longum*.
- non-diffusion of lung qi** T2367 *Ephedra equisetina*, T2368 *Ephedra gerardiana*, T2369 *Ephedra intermedia*, T2372 *Ephedra likiangensis*, T2373 *Ephedra minuta*, T2375 *Ephedra monosperma*, T2379 *Ephedra saxatilis*, T2380 *Ephedra sinica*.
- non-digestion of food accumulation** T0210 *Agaricus bisporus*, T0211 *Agaricus campestris*, T0275 *Akebia quinata*, T1483 *Citrus grandis* var. *tomentosa*, T1488 *Citrus junos*, T1546 *Clematis tangutica*, T1937 *Cydonia oblonga*, T2452 *Erysimum cheiranthoides*, T3620 *Kaempferia galanga*, T4470 *Ocimum basilicum*, T4714 *Perilla frutescens*, T5758 *Saussurea lappa* [Syn. *Aucklandia lappa*].
- non-eruption of macula** T1417 *Cimicifuga acerina*, T1423 *Cimicifuga nanchuanensis*, T1991 *Cytisus scoparius* [Syn. *Spartium scoparium*].
- non-eruption of measles** T0838 *Azolla imbricata* [Syn. *Salvinia imbricata*], T2721 *Ficus microcarpa*, T3649 *Laccifer lacca*, T3738 *Lemna minor*, T3742 *Lentinus edodes*, T4184 *Mentha haplocalyx* [Syn. *Mentha canadensis*; *Mentha arvensis* var. *haplocalyx*; *Mentha arvensis*], T4413 *Nepeta cataria*, T4456 *Nymphoides peltatum*, T5312 *Pueraria edulis*, T5313 *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*], T5316 *Pueraria omeiensis*, T5318 *Pueraria phaseoloides*, T5320 *Pueraria thomsonii*, T5560 *Rorippa montana* [Syn. *Rorippa dubia*; *Sisymbrium dubium*], T6286 *Tamarix chinensis*, T6290 *Tamarix ramosissima*.
- noninfectious fever** T1633 *Commelina communis*.
- non-interaction of heart and kidney** T4401 *Nelumbo nucifera*.
- non-opened welling abscess and flat abscess** T4338 *Mylabris phalerata*; *Mylabris cichorii*.
- nose carcinoma** T2897 *Gelsemium elegans*.
- nose sores** T3361 *Hypericum perforatum*.
- nosebleed** T5323 *Pulsatilla campanella*, T5324 *Pulsatilla cernua*, T5325 *Pulsatilla chinensis*, T5326 *Pulsatilla dahurica*, T6139 *Sterculia lychnophora*.
- nosebleed (epistaxis)** T0843 *Babylonia lutosa*, T0952 *Blechnum orientale*, T1171 *Canis familiaris*, T1251 *Cassytha filiformis*, T1296 *Celosia argentea*, T1528 *Cladonia stellaris* [Syn. *Cladonia alpestris*], T1592 *Cocos nucifera*, T1655 *Conyza blinii*, T1684 *Cordylone stricta*, T2157 *Dichotomanthes tristaniaecarpa*, T2323 *Eclipta prostrata* [Syn. *Eclipta alba*], T2365 *Enteromorpha clathrata*, T2884 *Gardenia jasminoides* var. *grandiflora*, T3242 *Hibiscus rosa-sinensis*, T3278 *Homo sapiens*,



- T3444 *Ipomoea aquatica* [Syn. *Convolvulus repens*; *Ipomoea reptans*], T3701 *Lasiosphaera fenzlii*, T3961 *Lycoperdon pyriforme*, T4190 *Mentha spicata*, T4248 *Mimosa pudica*, T4259 *Mnium cuspidatum*, T5354 *Pyrrosia davidii*, T5355 *Pyrrosia drakeana*, T5356 *Pyrrosia gralla*, T5357 *Pyrrosia lingua* T5358 *Pyrrosia petiolosa*, T5360 *Pyrrosia shearerii*, T5529 *Rhodomyrtus tomentosa*, T5569 *Rosa multiflora*, T6046 *Sophora viciifolia*, T6742 *Vicia amoena*, T6745 *Vicia faba*, T6749 *Vicia hirsuta*, T6750 *Vicia sativa*, T6814 *Wedelia chinensis* [Syn. *Solidago chinensis*; *Wedelia calendulacea*], T6830 *Woodfordia fruticosa*.
- numbing wind** T3300 *Hydnocarpus anthelminticus*.
- numbing wind (leprosy)**<sup>[5509]</sup> T5272 *Psorospermum febrifugum*.
- numbness and paralysis** T2732 *Firmiana simplex*, T4308 *Mucuna birdwoodiana*, T6066 *Spatholobus suberectus*, T6184 *Strychnos nux-vomica*, T6193 *Strychnos wallichiana*.
- numbness in joints** T4290 *Morus alba*.
- numbness in limbs** T0077 *Aconitum balfourii*, T0084 *Aconitum carmichaeli*, T0105 *Aconitum karakolicum*, T0281 *Alangium chinense*, T0285 *Alangium platanifolium*, T0634 *Aristolochia mollissima*, T0644 *Armillaria mellea*, T0645 *Armillariella mellea*, T1175 *Cannabis sativa*, T1286 *Celastrus flagellaris*, T1288 *Celastrus orbiculatus* [Syn. *Celastrus articulatus*], T1545 *Clematis chinensis*, T1562 *Clerodendron trichotomum*, T1921 *Cyanotis arachnoidea* [Syn. *Cyanotis bodinieri*], T2030 *Daphne retusa*, T2031 *Daphne tangutica*, T2211 *Dioscorea tenuipes*, T2753 *Formica fusca*, T2890 *Gastrodia elata*, T3624 *Kalopanax pictum*, T3625 *Kalopanax septemlobus*, T3643 *Kopsia officinalis*, T3653 *Lactarius piperatus* [Syn. *Agaricus piperatus*], T3657 *Lactarius vellereus*, T3680 *Lamium amplexicaule*, T3785 *Levisticum officinale*, T3847 *Lindera angustifolia*, T3867 *Liquidambar formosana* [Syn. *Liquidambar taiwaniana*], T3897 *Litsea verticillata*, T3965 *Lycopodium annotinum*, T4190 *Mentha spicata*, T4238 *Millettia nitida*, T4311 *Mucuna sempervirens*, T4688 *Peganum harmala*, T4800 *Phlegmariurus fordii*, T4956 *Piper mullesua*, T5236 *Prunus pseudocerasus*, T5298 *Pteris vittata*, T5730 *Sarcandra glabra* [Syn. *Chloranthus glaber*], T5848 *Securinega suffruticosa*, T5958 *Sinapis alba* [Syn. *Brassica alba*; *Brassica hirta*], T6183 *Strychnos nitida*, T6504 *Tricholoma matsutake* [Syn. *Armillaria matsutake*].
- numbness in lumbus and leg** T1292 *Celastrus orbiculatus* [Syn. *Celastrus articulatus*].
- numbness of limbs** T3976 *Lycopodium obscurum*, T3989 *Lygodium flexuosum* [Syn. *Lygodium pinnatifidum*; *Ophioglossum flexuosum*], T4725 *Periploca calophylla*.
- odynuria** T1967 *Cynoglossum amabile*, T3284 *Houttuynia cordata*.
- opacity of urine** T1823 *Crotalaria juncea*, T3885 *Litsea cubeba*, T5124 *Polypodium niponicum*.
- open pus sore of lung** T6330 *Tephrosia kirilowii* [Syn. *Senecio integrifolius* var. *fauriei*].
- ophthalmia** T0293 *Albizia lebbekii*.
- oppression and depression in chest** T2758 *Fortunella crassifolia*, T2759 *Fortunella japonica*, T2760 *Fortunella margarita*.
- oppression in chest** T1498 *Citrus medica*, T1520 *Citrus wilsonii*, T2246 *Dolichos lablab*, T5059 *Pogostemon cablin* [Syn. *Mentha cablin*].
- oppression in chest and abdomen distention** T0463 *Anemone altaica*, T1486 *Citrus junos*, T2563 *Eupatorium japonicum*, T4209 *Michelia alba*.
- oppression in chest and qi bind** T4855 *Physeter catodon*.
- oppression in chest and vexation in heart** T3192 *Hemerocallis citrina*.
- oppression in chest due to glomus** T1366 *Chimonanthus fragrans* [Syn. *Chimonanthus praecox*], T1469 *Citrus aurantium* var. *amara*.
- optic nerve atrophy** T5312 *Pueraria edulis*, T5313 *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*], T5316 *Pueraria omeiensis*, T5318 *Pueraria phaseoloides*, T5320 *Pueraria thomsonii*.
- oral gan** T3827 *Ligustrum japonicum*.
- oral putrescence** T0834 *Averrhoa carambola*.
- oral ulcer** T0172 *Adiantum caudatum*, T0543 *Apis mellifera ligustica*, T1247 *Cassia sophera*, T1747 *Corydalis thalictrifolia*, T2357 *Emilia sonchifolia*, T3174 *Heliotropium indicum*, T4979 *Pistacia chinensis*, T5199 *Primula malacoides*.
- osteoarthritis** T0138 *Aconitum umbrosum*, T5704 *Sambucus nigra*, T5707 *Sambucus williamsii*.
- osteomalacia** T5270 *Psoralea corylifolia*.
- osteoporosis** T5270 *Psoralea corylifolia*.
- otitis media** T0015 *Abutilon indicum*, T0516 *Anser cygnoides domestica*, T0517 *Anser cygnoides domestica*, T0646 *Armillariella tabescens*, T1655 *Conyza blinii*, T1662 *Coptis chinensis*, T1663 *Coptis chinensis* var. *brevisepala*, T1664 *Coptis deltoidea*, T1669 *Coptis omeiensis*, T1670 *Coptis teetoides* [Syn. *Coptis teeta*], T1733 *Corydalis racemosa*, T1922 *Cyanotis vaga*, T2830 *Galium aparine*, T3284 *Houttuynia cordata*, T3392 *Ilex kudingcha*, T3393 *Ilex latifolia*, T4303 *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*, T4691 *Pelargonium hortorum*, T4859 *Physochlaina physaloides*, T5100 *Polygonum chinense*, T5189 *Pothos chinensis*, T5680 *Salvia miltiorrhiza*, T5681 *Salvia miltiorrhiza* f. *alba*, T5688 *Salvia przewalskii*, T5773 *Saxifraga stolonifera*, T5836 *Scutellaria discolor*, T5892 *Senecio nemorensis*, T5953 *Silene firma*, T6031 *Sophora flavescens* [Syn. *Sophora angustifolia*], T6206 *Sus scrofa domestica*, T6843 *Xanthium sibiricum* [Syn. *Xanthium strumarium*].
- outcrop** T2272 *Drymaria diandra* [Syn. *Drymaria cordata* ssp. *diandra*].
- outcrop of sore and welling abscess** T5228 *Prunus mume*.
- ovarian carcinoma** T2748 *Fomes fomentarius* [Syn. *Pyropolyporus fomentarius*; *Boletus fomentarius*; *Polyporus fomentarius*].
- oxhide lichen** T2772 *Fraxinus mandshurica*.
- oxyuria** T3466 *Iris potaninii*.
- oxyuria disease** T0318 *Allium sativum*, T0364 *Alsophila spinulosa*, T1211 *Carpesium abrotanoides*, T1361 *Chenopodium ambrosioides*, T1382 *Chondria armata* [Syn. *Lophura armata*], T1881 *Cucurbita moschata*, T2049 *Daucus carota*, T2281 *Dryopteris crassirhizoma*, T3688 *Lappula echinata*, T4083 *Mallotus philippinensis*, T4084 *Mallotus philippinensis*, T4127 *Matteuccia struthiopteris*, T4156 *Melia azedarach*, T4162 *Melia toosendan*, T5185 *Potentilla multifida*, T5384 *Quisqualis indica*, T5920 *Seriphidium cinum* [Syn. *Artemisia cina*], T5921 *Seriphidium finitum* [Syn. *Artemisia finita*], T6111 *Stemona japonica*, T6113 *Stemona sessilifolia*, T6115 *Stemona tuberosa*, T6201 *Styrax obassia*, T6713 *Vernonia anthelmintica*.
- paddy field dermatitis** T2835 *Galium verum*.
- paddy field dermatitis (water ulcer)** T2988 *Glochidion eriocarpum*.

- paddy-field dermatitis** T3996 *Lysimachia candida*.
- pain after operation** T1959 *Cynanchum paniculatum*.
- pain from arthritis** T1589 *Cocculus trilobus* [Syn. *Cocculus sarmmentosus*], T3410 *Impatiens balsamina*, T5964 *Sinomenium acutum*.
- pain from carcinoma** T0079 *Aconitum brachypodum*, T0117 *Aconitum nagarum* var. *lasiandrum*.
- pain from swollen welling abscess** T2718 *Ficus carica*.
- pain from ulcer in digestive tract** T1017 *Brassica oleracea* var. *capitata*, T1357 *Chelidonium majus*.
- pain in chest and abdomen** T0201 *Aesculus chinensis*, T0202 *Aesculus hippocastanum*, T0205 *Aesculus wilsonii*, T5715 *Santalum album*.
- pain in chest and abdomen and rib-side** T1903 *Curcuma aromatica*, T1905 *Curcuma longa*, T1907 *Curcuma wengujin*.
- pain in chest and back** T4143 *Meconopsis horridula*.
- pain in deep tissues** T1715 *Corydalis decumbens* [Syn. *Corydalis amabilis*].
- pain in heart and abdomen** T0036 *Acanthopanax giraldii* [Syn. *Acanthopanax giraldii* var. *inermis*; *Eleutherococcus giraldii*], T0994 *Boswellia carterii*, T1008 *Brassica juncea*, T1706 *Corydalis ambigua* var. *amurensis* [Syn. *Corydalis ambigua*], T1734 *Corydalis remota* [Syn. *Corydalis bulbosa* var. *typica*], T1735 *Corydalis repens*, T2536 *Euonymus alatus*, T3853 *Lindera obtusiloba*, T4631 *Papaver nudicaule* var. *chinense*, T4635 *Papaver somniferum*, T4855 *Physeter catodon*, T5221 *Prunus davidiana*, T5235 *Prunus persica*, T5301 *Pterocarpus indicus*, T5680 *Salvia miltiorrhiza*, T5681 *Salvia miltiorrhiza* f. *alba*, T5688 *Salvia przewalskii*, T6062 *Sparganium stoloniferum*, T6105 *Stellera chamaejasme*, T6197 *Styrax benzoin*, T6204 *Styrax tonkinensis*, T6584 *Typha angustata*, T6585 *Typha angustifolia*, T6587 *Typha latifolia*.
- pain in heart and stomach** T5042 *Podocarpus macrophyllus*, T5044 *Podocarpus macrophyllus* var. *maki*.
- pain in hepatic zone** T3461 *Iris japonica*.
- pain in joints** T0077 *Aconitum balfourii*, T0079 *Aconitum brachypodum*, T0084 *Aconitum carmichaeli*, T0086 *Aconitum chasmanthum*, T0090 *Aconitum delavayi*, T0099 *Aconitum gymnandrum*, T0105 *Aconitum karakolicum*, T0108 *Aconitum kusnezoffii*, T0117 *Aconitum nagarum* var. *lasiandrum*, T0135 *Aconitum sungpanense*, T0483 *Angelica gigas*, T0881 *Bauhinia variegata*, T1043 *Bryophyllum pinnatum*, T1577 *Clitoria ternatea*, T1799 *Crinum latifolium*, T1955 *Cynanchum hancockianum*, T2193 *Dioscorea cirrhosa* [Syn. *Dioscorea pogonoides*], T2203 *Dioscorea nipponica*, T2204 *Dioscorea nipponica* ssp. *rosthornii*, T2302 *Dysosma pleiantha* [Syn. *Podophyllum pleianthum*], T2304 *Dysosma veitchii*, T2305 *Dysosma versipellis* [Syn. *Podophyllum versipelle*], T2750 *Fomitopsis pinicola* [Syn. *Fomes pinicola*; *Polyporus pinicola*], T3332 *Hypocoum erectum*, T3334 *Hypocoum leptocarpum*, T3496 *Isodon japonica* [Syn. *Rabdosia japonica*], T3886 *Litsea euosma*, T4665 *Passiflora edulis*, T4681 *Pedicularis decora*, T4796 *Pheretima aspergillum*; *Allolobophora caliginosa trapezoides*, T5569 *Rosa multiflora*, T6826 *Wisteria sinensis*.
- pain in joints due to rheumatism** T0071 *Achyranthes aspera*, T0072 *Achyranthes aspera* var. *indica*, T0568 *Aralia chinensis*, T0570 *Aralia dasyphylla*, T0631 *Aristolochia kaempferi*, T0642 *Aristolochia tubiflora*, T1005 *Brassica campestris* [Syn. *Brassica campestris* var. *oleifera*], T2745 *Foeniculum vulgare*, T2950 *Gerbera anandria* [Syn. *Leibnitzia anandria*], T3320 *Hymenocallis littoralis* [Syn. *Hymenocallis americana*; *Pancreatium littoralis*], T3349 *Hypericum erectum*, T3400 *Illicium difengpi*, T3403 *Illicium majus*, T3797 *Libanotis condensata*, T3984 *Lycoris chinensis*, T3986 *Lycoris radiata* [Syn. *Amaryllis radiata*], T4020 *Macleaya cordata*, T4527 *Orixa japonica*, T4607 *Panax pseudo-ginseng* var. *japonicus*, T4663 *Passiflora caerulea*, T4842 *Phyllanthus reticulatus*, T5279 *Psychotria serpens*, T5396 *Rabdosia rubescens*, T5414 *Ranunculus japonicus*, T5609 *Rumex hastatus*, T5638 *Sabia swinhoei*, T5639 *Sabina chinensis*, T5987 *Sobina chinensis*, T6005 *Solanum lyratum*, T6888 *Zanthoxylum planispinum*.
- pain in limbs** T0079 *Aconitum brachypodum*, T0117 *Aconitum nagarum* var. *lasiandrum*, T0138 *Aconitum umbrosum*, T3822 *Ligusticum jeholense*, T3824 *Ligusticum sinense*, T6843 *Xanthium sibiricum* [Syn. *Xanthium strumarium*].
- pain in lumbus and knees** T0038 *Acanthopanax gracilistylus*, T0042 *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*], T0044 *Acanthopanax sessiliflorus*, T0492 *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*], T1706 *Corydalis ambigua* var. *amurensis* [Syn. *Corydalis ambigua*], T1734 *Corydalis remota* [Syn. *Corydalis bulbosa* var. *typica*], T1735 *Corydalis repens*, T1923 *Cyathula capitata*, T2479 *Erythrina variegata* var. *orientalis*, T3213 *Heracleum hemsleyanum*, T3214 *Heracleum lanatum*, T3217 *Heracleum moellendorffii* [Syn. *Heracleum microcarpum*; *Heracleum morifolium*], T3228 *Heracleum yungningense*, T4656 *Parmelia saxatilis*, T6862 *Zanthoxylum ailanthoides*.
- pain in lumbus and leg** T3363 *Hypericum sampsonii*, T5591 *Rubus cochinchinensis*.
- pain in lumbus and legs** T0006 *Abies nephrolepis*, T0078 *Aconitum barbatum* var. *puberulum* [Syn. *Aconitum ochranthum*], T0100 *Aconitum hemsleyanum* var. *circinacum*, T0101 *Aconitum hemsleyanum*, T0125 *Aconitum pseudostapfianum*, T0644 *Armillaria mellea*, T0645 *Armillariella mellea*, T1417 *Cimicifuga acerina*, T1921 *Cyanotis arachnoidea* [Syn. *Cyanotis bodinieri*], T2231 *Diphylleia grayi*, T2232 *Diphylleia sinensis*, T3401 *Illicium henryi*, T3653 *Lactarius piperatus* [Syn. *Agaricus piperatus*], T3802 *Ligularia dentata*, T3805 *Ligularia fischeri*, T3807 *Ligularia intermedia*, T3813 *Ligularia sibirica*, T3976 *Lycopodium obscurum*, T4085 *Mallotus repandus* var. *chrysocarpus* [Syn. *Mallotus chrysocarpus*; *Mallotus repandus*], T5236 *Prunus pseudocerasus*, T5978 *Smilax glauco-china*, T6504 *Tricholoma matsutake* [Syn. *Armillaria matsutake*], T6531 *Trillium camtschaticum*, T6533 *Trillium kamschaticum*, T6535 *Trillium tschonoskii*, T6777 *Viscum multinerve*.
- pain in rib-side** T0045 *Acanthopanax trifoliatus*, T1406 *Chrysosplenium nudicaule*, T1498 *Citrus medica*, T1520 *Citrus wilsonii*, T1705 *Corydalis adunca*, T2132 *Desmodium pulchellum* [Syn. *Phyllodium pulchellum*], T2908 *Gentiana cephalantha*, T2921 *Gentiana manshurica*, T2928 *Gentiana rigescens*, T2930 *Gentiana scabra*, T2938 *Gentiana triflora*, T3418 *Incarvillea arguta*, T4580 *Paeonia albiflora* [Syn. *Paeonia lactiflora*].

- pain in rib-side due to stagnation** T4584 *Paeonia lactiflora* wild, T4586 *Paeonia obovata*, T4590 *Paeonia veitchii*.
- pain in sensory nerve endings** T1357 *Chelidonium majus*.
- pain in sinews and bones** T0969 *Boerhavia diffusa*, T1025 *Bretschneidera sinensis*, T1292 *Celastrus orbiculatus* [Syn. *Celastrus articulatus*], T3026 *Gnaphalium affine* [Syn. *Gnaphalium multiceps*], T3360 *Hypericum patulum*, T3619 *Kadsura peltigera* [Syn. *Kadsura longipedunculata*], T3679 *Lamiophlomis rotata* [Syn. *Phlomis rotata*], T3680 *Lamium amplexicaule*, T4510 *Ophiorrhiza japonica*, T4513 *Ophiorrhiza mungos*, T4642 *Parameria laevigata*, T5576 *Rostellularia procumbens* [Syn. *Justicia procumbens*], T5813 *Scilla scilloides*, T5840 *Scutellaria indica*, T6252 *Symplocos chinensis*, T6548 *Tritonia crocosmaeflora*, T6827 *Wisteria sinensis*, T6845 *Xanthoceras sorbifolia*.
- pain in stomach duct** T0045 *Acanthopanax trifoliatum*, T0201 *Aesculus chinensis*, T0202 *Aesculus hippocastanum*, T0205 *Aesculus wilsonii*, T0567 *Aralia armata*, T0568 *Aralia chinensis*, T0570 *Aralia dasycphylla*, T0571 *Aralia decaisneae*, T0642 *Aristolochia tubiflora*, T0877 *Bauhinia championii*, T1163 *Campylotropis hirtella*, T1384 *Chondrus ocellatus*, T1436 *Cinnamomum camphora*, T2027 *Daphne odora*, T3866 *Liquidambar formosana* [Syn. *Liquidambar taiwaniana*], T4305 *Mosla dianthera*, T4323 *Murraya paniculata* [Syn. *Chalcas paniculata*], T4325 *Murraya paniculata* var. *exotica*, T4604 *Panax japonicus* var. *bipinnatifidus*, T5137 *Poncirus trifoliata*, T5341 *Pygmaepremna herbacea* [Syn. *Premna herbacea*], T5401 *Rabdosia yunnanensis*, T5731 *Sarcococca coriacea* [Syn. *Sarcococca wallichii*], T5785 *Schefflera venulosa*, T6548 *Tritonia crocosmaeflora*.
- pain in stomach duct, abdomen and rib-side** T1327 *Ceratostigma minus*.
- pain in stomach duct and abdomen** T0229 *Ageratum conyzoides*, T0491 *Angelica polymorpha*, T0540 *Apis cerana*, T0634 *Aristolochia mollissima*, T0641 *Aristolochia tuberosa*, T0859 *Balanophora involucrata*, T1444 *Cinnamomum tamala*, T1750 *Corydalis yanhusuo* [Syn. *Corydalis turtschaninovii* f. *yanhusuo*], T1934 *Cyclea tonkinensis*, T2643 *Evodia meliifolia*, T3011 *Glycyrrhiza aspera*, T3013 *Glycyrrhiza glabra*, T3015 *Glycyrrhiza inflata*, T3016 *Glycyrrhiza kansuensis*, T3021 *Glycyrrhiza squamulosa*, T3022 *Glycyrrhiza uralensis*, T3023 *Glycyrrhiza yunnanensis*, T3328 *Hyoscyamus niger*, T3329 *Hyoscyamus niger*, T3567 *Juglans regia*, T3867 *Liquidambar formosana* [Syn. *Liquidambar taiwaniana*], T4004 *Lysimachia paridiformis*, T4304 *Mosla chinensis* [Syn. *Orthodon chinensis*], T4577 *Paederia scandens*, T4637 *Papaver somniferum*, T4962 *Piper puberulum*, T5021 *Pleurospermum rivulorum*, T5057 *Podophyllum emodii* [Syn. *Podophyllum emodii* var. *chinense*; *Podophyllum sikkimense*; *Sinopodophyllum emodii*], T5661 *Salvia bowleyana*, T5781 *Schefflera arboricola*, T6120 *Stephania delavayi* [Syn. *Stephania epigaea*].
- pain in stomach duct and rib-side** T4157 *Melia azedarach*, T6801 *Vladimiria denticulata*.
- pain in stomach duct and rib-side due to liver qi depression** T3554 *Jasminum grandiflorum*.
- pain in throat** T0805 *Astragalus sinicus*, T2162 *Dicranostigma franchetianum* [Syn. *Dicranostigma leptopodum*], T5501 *Rhodiola yunnanensis*.
- pain in tooth and cheek** T3822 *Ligusticum jeholense*, T3824 *Ligusticum sinense*.
- pain of blood stasis** T3276 *Homo sapiens*, T4479 *Odontites serotina*, T6895 *Zanthoxylum simulans*.
- pain of hot urine** T0423 *Ampelopsis brevipedunculata*, T2134 *Desmodium styracifolium*.
- pain of hot urine and inhibited urination** T2410 *Equisetum pratense*.
- pain wind** T0319 *Allium schoenoprasum*, T1188 *Caragana chamlagu*, T1191 *Caragana sinica*, T1416 *Cicuta virosa*, T2020 *Damnacanthus indicus*, T2412 *Equisetum sylvaticum*, T3443 *Iphigenia indica*, T3594 *Juniperus rigida*, T4267 *Monachosorum flagellare*, T4324 *Murraya paniculata* [Syn. *Chalcas paniculata*], T5704 *Sambucus nigra*, T5707 *Sambucus williamsii*, T6018 *Solanum verbascifolium*, T6673 *Vaccinium vitis-idaea*.
- pain wind in joints** T6895 *Zanthoxylum simulans*.
- pain wind in limbs** T1262 *Catalpa ovata*.
- painful bind in lesser-abdomen** T2231 *Diphylleia grayi*, T2232 *Diphylleia sinensis*.
- painful joints due to rheumatgia** T0096 *Aconitum forrestii* [Syn. *Aconitum likiangense*], T0100 *Aconitum hemsleyanum* var. *circinacum*, T0101 *Aconitum hemsleyanum*, T0107 *Aconitum kongboense*, T1288 *Celastrus orbiculatus* [Syn. *Celastrus articulatus*], T1640 *Coniogramme japonica* [Syn. *Hemionitis japonica*], T2263 *Dregea volubilis*, T3674 *Laggera alata*, T5102 *Polygonum cuspidatum*.
- painful red eyes** T3203 *Hemsleya amabilis*, T3208 *Hemsleya macrosperma*, T4263 *Momordica charantia*, T5323 *Pulsatilla campanella*, T5324 *Pulsatilla cernua*, T5325 *Pulsatilla chinensis*, T5326 *Pulsatilla dahurica*.
- painful swelling from clove sore** T3426 *Inula britannica*, T3433 *Inula japonica*, T4388 *Nasturtium officinale*, T5723 *Sapium sebiferum*.
- painful swelling from knocks and falls** T0262 *Ajuga ciliata*, T0266 *Ajuga macrosperma*, T0267 *Ajuga nipponensis*, T0293 *Albizia lebeck*, T0310 *Allium ascalonicum*, T0374 *Alstonia scholaris*, T0571 *Aralia decaisneae*, T0813 *Atalantia buxifolia* [Syn. *Severinia buxifolia*], T0814 *Atalantia buxifolia* [Syn. *Severinia buxifolia*], T0871 *Barleria lupulina*, T1120 *Callicarpa macrophylla*, T1181 *Capra hircus*; *Ovis aries*, T1289 *Celastrus orbiculatus* [Syn. *Celastrus articulatus*], T1434 *Cinnamomum bejolghota* [Syn. *Cinnamomum obtusifolium*; *Laurus bejolghota*], T1441 *Cinnamomum japonicum*, T1552 *Cleome viscosa*, T1583 *Cnidium officinale* [Syn. *Ligusticum officinale*], T1697 *Cornus controversa* [Syn. *Bothrocaryum controversum*], T1734 *Corydalis remota* [Syn. *Corydalis bulbosa* var. *typica*], T1750 *Corydalis yanhusuo* [Syn. *Corydalis turtschaninovii* f. *yanhusuo*], T1808 *Crocus sativus*, T1971 *Cynoglossum zeylanicum* [Syn. *Anchusa zeylanica*; *Cynoglossum furcatum*; *Cynoglossum formosanum*], T2062 *Delphinium bonvalotii*, T2081 *Delphinium omeiense*, T2084 *Delphinium potaninii*, T2085 *Delphinium potaninii* var. *juifengshanense*, T2124 *Derris trifoliata*, T2193 *Dioscorea cirrhosa* [Syn. *Dioscorea pogonoides*], T2200 *Dioscorea hispida*, T2290 *Duchesnea indica*, T2449 *Erycibe obtusifolia*, T2450 *Erycibe schmidtii*, T2602 *Euphorbia nematocarpa*, T2614 *Euphorbia pulcherrima*, T2631 *Eurya japonica*, T2719 *Ficus fistulosa* [Syn. *Ficus harlandii*], T2720 *Ficus hispida*, T2736 *Fissistigma polyanthum*, T2857 *Garcinia*

hanburyi, T3006 *Glycosmis citrifolia*, T3190 *Helminthostachys zeylanica*, T3292 *Hunteria zeylanica*, T3320 *Hymenocallis littoralis* [Syn. *Hymenocallis americana*; *Pancreatium littoralis*], T3410 *Impatiens balsamina*, T3471 *Iris tectorum*, T3820 *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*], T3880 *Lithospermum arvense*, T3897 *Litsea verticillata*, T4020 *Macleaya cordata*, T4029 *Maesa japonica*, T4158 *Melia azedarach*, T4190 *Mentha spicata*, T4221 *Micromelum falcatum*, T4223 *Micromelum integerrimum*, T4323 *Murraya paniculata* [Syn. *Chalcas paniculata*], T4325 *Murraya paniculata* var. *exotica*, T4413 *Nepeta cataria*, T4418 *Nerium indicum*, T4503 *Onychium lucidum*, T4506 *Ophioglossum vulgatum*, T4604 *Panax japonicus* var. *bipinnatifidus*, T4608 *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*], T4686 *Pedilanthus tithymalooides*, T4730 *Peristrophe roxburghiana*, T4962 *Piper puberulum*, T4974 *Piper wallichii* [Syn. *Piper wallichii* var. *hupehense*], T5105 *Polygonum hydropiper* var. *flaccidum* [Syn. *Polygonum flaccidum*], T5158 *Populus simonii*, T5172 *Portulaca grandiflora*, T5267 *Psidium guajava*, T5288 *Pteris cretica* var. *nervosa* [Syn. *Pteris nervosa*], T5444 *Reboulia hemisphaerica*, T5501 *Rhodiola yunnanensis*, T5741 *Sargentodoxa cuneata*, T5781 *Schefflera arboricola*, T5884 *Senecio chrysanthemoides*, T5975 *Smilax bockii*, T6018 *Solanum verbascifolium*, T6092 *Stachys palustris*, T6095 *Stachytarpheta jamaicensis*, T6138 *Sterculia foetida*, T6264 *Syzygium buxifolium*, T6578 *Tylophora atrofalliculata*, T6645 *Urena lobata*, T6738 *Viburnum odoratissimum*, T6788 *Vitex negundo*.

**painful swelling throat moth** T2835 *Galium verum*.

**painful swollen breast** T1978 *Cyperus rotundus*, T5086 *Polygala sibirica*, T5088 *Polygala tenuifolia*.

**painful swollen testes** T0274 *Akebia quinata*, T0278 *Akebia trifoliata*, T0280 *Akebia trifoliata* var. *australis*, T1504 *Citrus reticulata*, T2321 *Ecklonia kurome*, T2636 *Euscaphis japonica*, T3678 *Laminaria japonica*, T3877 *Litchi chinensis*, T4324 *Murraya paniculata* [Syn. *Chalcas paniculata*], T6020 *Solanum xanthocarpum*, T6432 *Thespesia populnea* [Syn. *Hibiscus populneus*], T6527 *Trigonella caerulea*, T6640 *Undaria pinnatifida*.

**painful wound from knocks and falls** T0019 *Acacia catechu*, T0634 *Aristolochia mollissima*, T0830 *Auricularia auricula*, T0831 *Auricularia delicata*, T0957 *Blumea balsamifera*, T1092 *Buxus microphylla* var. *sinica*, T1292 *Celastrus orbiculatus* [Syn. *Celastrus articulatus*], T1343 *Chaenomeles sinensis*, T1435 *Cinnamomum camphora*, T1931 *Cyclea barbata*, T1933 *Cyclea sutchuenensis*, T1996 *Dahlia pinnata* [Syn. *Dahlia variabilis*], T2295 *Duranta repens*, T2536 *Euonymus alatus*, T3329 *Hyoscyamus niger*, T3507 *Isodon lophanthoides* [Syn. *Rabdosia lophanthoides*; *Hyssopus lophanthoides*; *Plectranthus striatus*; *Isodon striatus*], T3548 *Ixeris sonchifolia*, T3849 *Lindera chunii*, T4268 *Monachosorum henryi*, T4582 *Paeonia delavayi*, T4585 *Paeonia moutan* [Syn. *Paeonia suffruticosa*], T4648 *Paris polyphylla*, T4649 *Paris polyphylla* var. *chinensis*, T4650 *Paris polyphylla* var. *pseudothibetica*, T4651 *Paris polyphylla* var. *stenophylla*, T4652 *Paris polyphylla* var. *yunnanensis*, T5118 *Polygonum suffultum*, T5119 *Polygonum thunbergii*, T5393 *Rabdosia longituba*, T5397 *Rabdosia serra*, T5447 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], T5572 *Rosa rugosa*, T5591

*Rubus cochinchinensis*, T5606 *Rumex acetosa*, T5822 *Scopolia sinensis*, T6015 *Solanum torvum*, T6100 *Stauntonia hexaphylla*, T6548 *Tritonia crocosmaeflora*, T6676 *Valeriana hardwickii*, T6773 *Viscum articulatum*, T6774 *Viscum articulatum*.

**palms and breathe hard** T1381 *Choerospondias axillaris*.

**palpitation** T0553 *Apocynum venetum*, T1438 *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*], T2452 *Erysimum cheiranthoides*, T2846 *Ganoderma japonicum* [Syn. *Ganoderma sinense*], T2848 *Ganoderma lucidum*, T5107 *Polygonum multiflorum*, T5516 *Rhododendron molle*, T5850 *Sedum aizoon*, T5855 *Sedum kamschaticum*, T6295 *Tanacetum sibiricum* [Syn. *Filifolium sibiricum*], T6358 *Tetraplodon mnioides* [Syn. *Tetraplodon bryoides*; *Splachnum mnioides*], T6750 *Vicia sativa*.

**palpitation and dizziness** T5445 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*].

**palpitation and fearful throbbing** T3778 *Leucaena glauca* [Syn. *Leucaena leucocephala*], T6060 *Souliea vaginata*.

**palpitation and insomnia** T0190 *Adonis sutchuenensis*, T1292 *Celastrus orbiculatus* [Syn. *Celastrus articulatus*], T1804 *Cristaria plicata*; *Hyriopsis cumingii*, T1952 *Cynanchum auriculatum*, T1953 *Cynanchum bungei*, T3743 *Lentinus lepideus*, T4194 *Menyanthes trifoliata*, T5497 *Rhodiola kirilowii*, T5791 *Schisandra chinensis*, T5802 *Schisandra sphenanthera*, T6675 *Valeriana amurensis*, T6679 *Valeriana officinalis*, T6680 *Valeriana officinalis* var. *latifolia*.

**palpitation and night sweating** T6798 *Vitis vinifera*.

**palpitation and shortness of breath** T3011 *Glycyrrhiza aspera*, T3013 *Glycyrrhiza glabra*, T3015 *Glycyrrhiza inflata*, T3016 *Glycyrrhiza kansuensis*, T3021 *Glycyrrhiza squamulosa*, T3022 *Glycyrrhiza uralensis*, T3023 *Glycyrrhiza yunnanensis*, T4729 *Periploca sepium*, T4902 *Pimpinella thelungiana*.

**papules** T1239 *Cassia nodosa*, T5818 *Scoparia dulcis*.

**paralysis in limbs** T3615 *Kadsura interior*.

**paralysis** T0978 *Bombyx mori*, T1288 *Celastrus orbiculatus* [Syn. *Celastrus articulatus*], T1976 *Cyperus iria*, T2422 *Erigeron breviscapus*, T3113 *Hedera nepalensis* var. *sinensis*, T3115 *Hedera rhombea*, T5236 *Prunus pseudocerasus*, T5368 *Python molurus bivittatus*, T5822 *Scopolia sinensis*, T5934 *Seseli meirei*, T5937 *Seseli yunnanense*, T6183 *Strychnos nitida*.

**paralysis in limbs** T5144 *Populus adenopoda*.

**paralytic and pruritus** T5964 *Sinomenium acutum*.

**parkinson's disease** T2964 *Ginkgo biloba*.

**parotitis** T0012 *Abrus precatorius*, T0015 *Abutilon indicum*, T0643 *Aristolochia versicolor*, T0952 *Blechnum orientale*, T1327 *Cerastostigma minus*, T1573 *Clinopodium chinense*, T1709 *Corydalis bungeana*, T1819 *Crotalaria ferruginea*, T1884 *Cudrania cochinchinensis*, T1996 *Dahlia pinnata* [Syn. *Dahlia variabilis*], T2298 *Dysosma difformis*, T3243 *Hibiscus rosa-sinensis*, T3423 *Indigofera tinctoria*, T3475 *Isatis indigotica*, T3736 *Lemmaphyllum microphyllum*, T4127 *Matteuccia struthiopteris*, T4552 *Osmunda japonica*, T5098 *Polygonum aviculare*, T5295 *Pteris multifida*, T5806 *Schlumbergera truncata*, T6119 *Stephania cepharantha*, T6814 *Wedelia chinensis* [Syn. *Solidago chinensis*; *Wedelia calendulacea*], T6843 *Xanthium sibiricum* [Syn. *Xanthium strumarium*].

**paroxysmal fibrillation** T6433 *Thevetia nerifolia* [Syn. *Thevetia*

- peruviana*].
- paroxysmal supraventricular tachycardia** T6433 *Thevetia neriiifolia* [Syn. *Thevetia peruviana*].
- paroxysmal tachycardia** T1649 *Convallaria keiskei* [Syn. *Convallaria majalis*].
- pelvic inflammation** T3547 *Ixeris chinensis*, T6217 *Swertia davidii*.
- pelvic inflammation** T0215 *Agave americana*, T1826 *Crotalaria mucronata*, T5169 *Poria cocos*.
- pemphigus** T5395 *Rabdosia nervosa*.
- peptic ulcer** T3011 *Glycyrrhiza aspera*, T3013 *Glycyrrhiza glabra*, T3015 *Glycyrrhiza inflata*, T3016 *Glycyrrhiza kansuensis*, T3021 *Glycyrrhiza squamulosa*, T3022 *Glycyrrhiza uralensis*, T3023 *Glycyrrhiza yunnanensis*, T6276 *Tacca plantaginea* [Syn. *Schizocapsa plantaginea*].
- periodontitis** T0933 *Betula platyphylla*, T0935 *Betula platyphylla* var. *japonica*, T2749 *Fomes officinalis*, T2852 *Garcinia cowa*.
- periostitis** T1003 *Brandisia hancei*.
- peripheral arterial diseases** T2964 *Ginkgo biloba*.
- pernicious anemia** T0495 *Angelica sinensis*, T4804 *Phlojodicarpus sibiricus*.
- persistent flow of lochia** T0661 *Artemisia anomala*, T3752 *Leonurus heterophyllus* [Syn. *Leonurus artemisia*], T3754 *Leonurus sibiricus*, T4234 *Millettia dielsiana*, T5301 *Pterocarpus indicus*.
- persistent flow with abdominal pain** T5701 *Salvia yunnanensis*.
- pertussis** T0318 *Allium sativum*, T0374 *Alstonia scholaris*, T0457 *Andrographis paniculata* [Syn. *Justicia paniculata*], T0752 *Asparagus officinalis*, T1357 *Chelidonium majus*, T1366 *Chimonanthus fragrans* [Syn. *Chimonanthus praecox*], T1789 *Crepis napifera*, T1881 *Cucurbita moschata*, T2191 *Dioscorea bulbifera*, T2268 *Drosera rotundifolia*, T2334 *Elephantopus scaber*, T2510 *Eucalyptus globulus*, T2721 *Ficus microcarpa*, T2738 *Flemingia strobilifera*, T3040 *Gomphrena globosa*, T3344 *Hypericum chinense*, T3646 *Kyllinga brevifolia*, T3769 *Lespedeza bicolor*, T3779 *Leucas aspera*, T3802 *Ligularia dentata*, T3805 *Ligularia fischeri*, T3807 *Ligularia intermedia*, T3813 *Ligularia sibirica*, T4284 *Morinda parvifolia*, T4370 *Nandina domestica*, T4371 *Nandina domestica*, T4937 *Piper betle*, T5100 *Polygonum chinense*, T5173 *Portulaca oleracea*, T5184 *Potentilla kleiniana*, T5721 *Sapindus mukorossi*, T5939 *Shiraia bambusicola*, T6075 *Spilanthes acmella*, T6092 *Stachys palustris*, T6111 *Stemona japonica*, T6113 *Stemona sessilifolia*, T6115 *Stemona tuberosa*, T6132 *Stephania sasakii*, T6206 *Sus scrofa domestica*, T6276 *Tacca plantaginea* [Syn. *Schizocapsa plantaginea*], T6278 *Tagetes erecta*, T6414 *Thalictrum thunbergii*, T6454 *Thymus vulgaris*, T6814 *Wedelia chinensis* [Syn. *Solidago chinensis*; *Wedelia calendulacea*], T6820 *Wikstroemia indica*.
- pharyngitis** T0015 *Abutilon indicum*, T5086 *Polygala sibirica*, T5088 *Polygala tenuifolia*, T6060 *Souliea vaginata*, T6122 *Stephania dielsiana*.
- pharyngolaryngitis** T0137 *Aconitum tanguticum*, T0707 *Arthraxon hispidus*, T0964 *Boenninghausenia albiflora*, T1655 *Conyza blinii*, T2133 *Desmodium racemosum* [Syn. *Podocarpium podocarpum* var. *oxyphyllum*], T2334 *Elephantopus scaber*, T2563 *Eupatorium japonicum*, T2715 *Fibraurea recisa*, T2844 *Ganoderma applanatum*, T4215 *Michelia yunnanensis*, T4391 *Nauclea officinalis*, T6095 *Stachytarpheta jamaicensis*, T6214 *Swertia chinensis*, T6454 *Thymus vulgaris*, T6814 *Wedelia chinensis* [Syn. *Solidago chinensis*; *Wedelia calendulacea*].
- phlegm aggregation** T1468 *Citrus aurantium*, T1521 *Citrus wilsonii*, T5141 *Poncirus trifoliata*.
- phlegm asthma** T1152 *Camellia sinensis* [Syn. *Thea sinensis*], T2051 *Daucus carota* var. *sativa*, T4773 *Peucedanum terebinthaceum*, T4786 *Phasianus colchicus*.
- phlegm congestion and hasty qi** T0624 *Aristolochia contorta*, T0626 *Aristolochia debilis* [Syn. *Aristolochia longa*], T0630 *Aristolochia indica*, T0633 *Aristolochia maxima*, T0640 *Aristolochia triangularis*.
- phlegm congestion and qi counterflow** T3426 *Inula britannica*, T3433 *Inula japonica*, T4715 *Perilla frutescens*, T4717 *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*], T4719 *Perilla frutescens* var. *arguta*, T4722 *Perilla frutescens* var. *crispa*.
- phlegm congestion cough asthma** T5420 *Raphanus sativus*.
- phlegm containing blood** T0749 *Asparagus filicinus*, T1680 *Cordyceps militaris*, T1681 *Cordyceps militaris* cv, T3832 *Lilium brownii* var. *viridulum* [Syn. *Lilium brownii* var. *colchesteri*], T3835 *Lilium longiflorum*, T3836 *Lilium pumilum* [Syn. *Lilium tenuifolium*], T3839 *Lilium tigrinum* [Syn. *Lilium lancifolium*], T4050 *Magnolia sieboldii*.
- phlegm cough** T4840 *Phyllanthus niruri*, T5530 *Rhus chinensis* [Syn. *Rhus semialata*], T5531 *Rhus chinensis* [Syn. *Rhus semialata*].
- phlegm fire cough** T1006 *Brassica chinensis*, T2798 *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*].
- phlegm node** T0847 *Baccharis indica* [Syn. *Pluchea indica*].
- phlegm reversal** T0144 *Acorus gramineus*, T0146 *Acorus tatarinowii*, T2274 *Dryobalanops aromatica*.
- phlegm reversal with stupor** T2975 *Gleditsia delavayi*, T2976 *Gleditsia fera*.
- phlegm stagnation and qi counterflow** T1007 *Brassica juncea*.
- phlegm stagnation in chest and diaphragm** T1467 *Citrus aurantium*, T5140 *Poncirus trifoliata*.
- phlegm-damp congestion** T1498 *Citrus medica*, T1520 *Citrus wilsonii*.
- phlegm-damp cough** T5862 *Selaginella involvens*, T6056 *Sorghum vulgare*.
- phlegm-drool and congesting lung** T2125 *Descurainia sophia*, T2978 *Gleditsia sinensis* [Syn. *Gleditsia horrida*], T3755 *Lepidium apetalum* [Syn. *Lepidium micranthum*], T3759 *Lepidium virginicum*, T3984 *Lycoris chinensis*, T3986 *Lycoris radiata* [Syn. *Amaryllis radiata*].
- phlegm-heat cough** T0895 *Benincasa hispida*, T1154 *Camellia sinensis* [Syn. *Thea sinensis*], T2525 *Eucommia muricata*, T2738 *Flemingia strobilifera*, T2787 *Fritillaria hupehensis*, T5419 *Raphanus sativus*, T6511 *Trichosanthes kirilowii*, T6615 *Uncaria gambir*.
- phlegm-heat cough asthma** T0048 *Acanthus ilicifolius*.
- phlegmon** T0333 *Alocasia cucullata* [Syn. *Arum cucullatum*], T3779 *Leucas aspera*, T4080 *Mallotus apelta*.
- phlegm-rheum** T0819 *Atractylodes chinensis*, T0821 *Atractylodes japonica*, T0823 *Atractylodes lancea*, T1438 *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*], T1692 *Coriaria sinica* [Syn. *Coriaria nepalensis*], T2597 *Euphorbia lathyris*, T2608 *Euphorbia pekinensis*, T5231 *Prunus persica*, T6819 *Wikstroemia chamaedaphne*.

- phlegm-rheum and accumulation-gathering** T4779 *Pharbitis nil*, T4780 *Pharbitis purpurea*.
- phlegm-rheum and edema** T2321 *Ecklonia kurome*, T3678 *Laminaria japonica*, T6640 *Undaria pinnatifida*.
- phlegm-rheum and food retention** T4086 *Malus asiatica*.
- phlegm-rheum and glomus accumulation** T0983 *Bos taurus domesticus*.
- phlegm-rheum asthma fullness** T1858 *Croton tiglium*.
- phlegm-rheum cough asthma** T0313 *Allium chinense*, T0316 *Allium macrostemon*, T0724 *Asarum caulescens*, T0726 *Asarum forbesii*, T0727 *Asarum fukiense*, T0728 *Asarum heterotropoides* var. *mandshuricum*, T0731 *Asarum sieboldii*, T0732 *Asarum sieboldii* var. *seoulensis*, T1501 *Citrus medica* var. *sarcodactylis*, T2589 *Euphorbia helioscopia*, T2599 *Euphorbia lunulata*, T4034 *Magnolia biloba*, T4045 *Magnolia officinalis*, T4550 *Osmanthus fragrans*, T6910 *Zingiber officinale*.
- phlegm-rheum dizziness** T0303 *Alisma orientale* [Syn. *Alisma plantago-aquatica* var. *orientale*], T0824 *Atractylodes macrocephala* [Syn. *Atractylis macrocephala*], T5169 *Poria cocos*.
- phlegm-rheum rapid asthma** T3632 *Knoxia valerianoides*.
- phthisis** T1884 *Cudrania cochinchinensis*, T3810 *Ligularia nelumbifolia*, T4350 *Myriopterion extensum*.
- pineapple poisoning** T3685 *Lannea grandis* [Syn. *Lannea coromandelica*].
- pleuritis** T1055 *Bupleurum angustissimum*, T1056 *Bupleurum aureum*, T1058 *Bupleurum chaishoui*, T1059 *Bupleurum chinense*, T1065 *Bupleurum longiradiatum*, T1066 *Bupleurum marginatum*, T1067 *Bupleurum marginatum* var. *stenophyllum*, T1072 *Bupleurum scorzonerifolium*, T1073 *Bupleurum sibiricum*, T1075 *Bupleurum smithii* var. *parvifolium*, T1078 *Bupleurum wenchuanense*, T1079 *Bupleurum yinchowense*, T2101 *Dendrobium fimbriatum*.
- pneumonia** T0137 *Aconitum tanguticum*, T0457 *Andrographis paniculata* [Syn. *Justicia paniculata*], T0866 *Baphicacanthus cusia* [Syn. *Strobilanthes cusia*], T0933 *Betula platyphylla*, T0935 *Betula platyphylla* var. *japonica*, T0967 *Boenninghausenia sessilicarpa*, T1869 *Cryptotaenia japonica*, T2298 *Dysosma difformis*, T2357 *Emilia sonchifolia*, T2697 *Ferula borealis*, T3174 *Heliotropium indicum*, T3284 *Houttuynia cordata*, T3295 *Huperzia serrata* [Syn. *Lycopodium serratum*], T3334 *Hypecoum leptocarpum*, T3709 *Lathyrus pratensis*, T3908 *Lonicera bournei*, T3909 *Lonicera confusa*, T3910 *Lonicera fulvotomentosa*, T3911 *Lonicera hypoglauca*, T3912 *Lonicera japonica*, T3914 *Lonicera macranthoides*, T3918 *Lonicera similis*, T4145 *Meconopsis punicea*, T4500 *Onosma paniculatum*, T4881 *Picrasma quassioides* [Syn. *Picrasma ailanthoides*], T5188 *Potentilla viscosa*, T5730 *Sarcandra glabra* [Syn. *Chloranthus glaber*], T5907 *Senecio scandens* [Syn. *Senecio chinensis*], T6705 *Verbascum thapsus*, T6814 *Wedelia chinensis* [Syn. *Solidago chinensis*; *Wedelia calendulacea*], T6820 *Wikstroemia indica*.
- pneumonia with cough and asthma** T5687 *Salvia prionitis*.
- pneumonia, bronchitis** T5494 *Rhodiola crenulata* [Syn. *Rhodiola euryphylla*].
- poison from smoke** T2048 *Daucus carota*.
- poisoning from almonds** T5217 *Prunus armeniaca*.
- poisoning of fish or crab** T1165 *Canarium album*, T4714 *Perilla frutescens*, T4718 *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*], T4721 *Perilla frutescens* var. *arguta*.
- poisoning of mushrooms** T3162 *Helicia nilagirica*, T5362 *Pyrus bretschneideri*, T5366 *Pyrus pyrifolia*.
- poisonous bee stings** T0333 *Alocasia cucullata* [Syn. *Arum cucullatum*], T1880 *Cucurbita moschata*.
- poisonous insect stings** T0107 *Aconitum kongboense*, T1359 *Chenopodium album*, T1436 *Cinnamomum camphora*, T1437 *Cinnamomum camphora*, T2131 *Desmodium pulchellum* [Syn. *Phyllodium pulchellum*], T2161 *Dicranopteris pedata* [Syn. *Polypodium pedatum*; *Dicranopteris dichotoma*], T2435 *Eriocheir sinensis*, T3241 *Hibiscus mutabilis*, T3770 *Lespedeza cuneata*, T3863 *Liparis nervosa*, T4578 *Paederia scandens*, T4881 *Picrasma quassioides* [Syn. *Picrasma ailanthoides*], T5402 *Radermachera sinica*, T5838 *Scutellaria galericulata*, T5850 *Sedum aizoon*, T5855 *Sedum kamschaticum*, T6731 *Veronicastrum sibiricum*.
- poisonous snake and rabid dog bite** T6116 *Stenoloma chusanum*.
- poisonous snake bite** T0122 *Aconitum pendulum*, T0171 *Adiantum capillus-veneris*, T0172 *Adiantum caudatum*, T0263 *Ajuga decumbens*, T0379 *Alternanthera philoxeroides*, T0457 *Andrographis paniculata* [Syn. *Justicia paniculata*], T0617 *Arisaema amurense*, T0618 *Arisaema consanguineum*, T0620 *Arisaema heterophyllum*, T0631 *Aristolochia kaempferi*, T0635 *Aristolochia moupinensis*, T0641 *Aristolochia tuberosa*, T0642 *Aristolochia tubiflora*, T0678 *Artemisia japonica*, T0721 *Arundina chinensis*, T0890 *Begonia limprichtii*, T0941 *Bidens tripartita*, T0947 *Bixa orellana*, T0957 *Blumea balsamifera*, T1106 *Caesalpinia minax*, T1210 *Carpesium abrotanoides*, T1238 *Cassia mimosoides*, T1286 *Celastrus flagellaris*, T1289 *Celastrus orbiculatus* [Syn. *Celastrus articulatus*], T1372 *Chloranthus serratus*, T1589 *Cocculus trilobus* [Syn. *Cocculus sarmentosus*], T1644 *Conocephalum conicum*, T1719 *Corydalis incisa*, T1733 *Corydalis racemosa*, T1810 *Croomia japonica*, T1831 *Crotalaria sessiliflora*, T1896 *Cupressus funebris*, T1932 *Cyclea racemosa*, T1950 *Cynanchum ascyrifolium*, T1951 *Cynanchum atratum*, T1952 *Cynanchum auriculatum*, T1953 *Cynanchum bungei*, T1962 *Cynanchum versicolor*, T2027 *Daphne odora*, T2133 *Desmodium racemosum* [Syn. *Podocarpium podocarpum* var. *oxyphyllum*], T2191 *Dioscorea bulbifera*, T2194 *Dioscorea collettii*, T2205 *Dioscorea panthaica*, T2233 *Diploclisia glaucescens*, T2290 *Duchesnea indica*, T2298 *Dysosma difformis*, T2302 *Dysosma pleiantha* [Syn. *Podophyllum pleianthum*], T2304 *Dysosma veitchii*, T2305 *Dysosma versipellis* [Syn. *Podophyllum versipelle*], T2348 *Embelia ribes*, T2421 *Erigeron annuus*, T2536 *Euonymus alatus*, T2749 *Fomes officinalis*, T2753 *Formica fusca*, T2826 *Galeola faberi*, T2952 *Gerbera piloselloides*, T3080 *Gymnema sylvestre*, T3123 *Hedyotis auricularia*, T3126 *Hedyotis corymbosa* [Syn. *Oldenlandia corymbosa*], T3190 *Helminthostachys zeylanica*, T3318 *Hylotelephium mingjianum*, T3340 *Hypericum ascyron*, T3349 *Hypericum erectum*, T3356 *Hypericum japonicum*, T3479 *Isodon amethystoides*, T3646 *Kyllinga brevifolia*, T3764 *Lepisorus thunbergianus*, T3808 *Ligularia japonica* [Syn. *Arnica japonica*; *Senecio japonica*], T3998 *Lysimachia christinae*, T4000 *Lysimachia congestiflora*, T4004 *Lysimachia paridiformis*, T4109 *Marchantia polymorpha*, T4203 *Mesua ferrea*,

T4261 *Mollugo pentaphylla*, T4413 *Nepeta cataria*, T4456 *Nymphoides peltatum*, T4485 *Oldenlandia diffusa* [Syn. *Hedyotis diffusa*], T4607 *Panax pseudo-ginseng* var. *japonicus*, T4710 *Pericampylus glaucus*, T4740 *Petasites japonicus*, T4800 *Phlegmariurus fordii*, T4837 *Phyllanthus emblica*, T4840 *Phyllanthus niruri*, T4903 *Pinellia pedatisecta*, T5029 *Plumbago zeylanica*, T5073 *Polygala chinensis* [Syn. *Polygala glomerata*], T5099 *Polygonum bistorta*, T5104 *Polygonum hydropiper*, T5109 *Polygonum nodosum*, T5279 *Psychotria serpens*, T5424 *Rauvolfia verticillata*, T5537 *Rhus sylvestris*, T5714 *Sansevieria trifasciata*, T5723 *Sapium sebiferum*, T5797 *Schisandra propinqua*, T5798 *Schisandra propinqua* var. *intermedia*, T5835 *Scutellaria barbata* [Syn. *Scutellaria rivularis*], T5840 *Scutellaria indica*, T5852 *Sedum bulbiferum*, T6024 *Solidago virgaurea* var. *leiocarpa* [Syn. *Solidago decurrens*], T6075 *Spilanthes acmella*, T6120 *Stephania delavayi* [Syn. *Stephania epigaea*], T6121 *Stephania dicentrifera*, T6129 *Stephania japonica*, T6132 *Stephania sasakii*, T6137 *Stephania viridiflavens*, T6367 *Teucrium quadrifarium*, T6482 *Toxicodendron succedaneum* [Syn. *Rhus succedanea*], T6541 *Tripterygium regelii*, T6580 *Tylophora floribunda*, T6582 *Tylophora ovata*, T6588 *Typhonium giganteum*, T6645 *Urena lobata*, T6653 *Usnea diffracta*, T6654 *Usnea longissima*, T6731 *Veronicastrum sibiricum*, T6883 *Zanthoxylum myriacanthum*, T6904 *Zephyranthes grandiflora* [Syn. *Zephyranthes carinata*].

**poisonous snake bites** T0267 *Ajuga nipponensis*, T0333 *Alocasia cucullata* [Syn. *Arum cucullatum*], T0388 *Amaranthus lividus*, T0440 *Anagallis arvensis*, T0479 *Angelica dahurica* cv. *qibaizhi*, T0498 *Angelica taiwaniana*, T0871 *Barleria lupulina*, T0888 *Beesia calthaefolia*, T1118 *Callicarpa formosana*, T1119 *Callicarpa japonica*, T1371 *Chloranthus japonicus*, T1971 *Cynoglossum zeylanicum* [Syn. *Anchusa zeylanica*; *Cynoglossum furcatum*; *Cynoglossum formosanum*], T3292 *Hunteria zeylanica*, T3348 *Hypericum elodeoides*, T3368 *Hypericum wightianum*, T3479 *Isodon amethystoides*, T3932 *Ludwigia octovalvis*, T3996 *Lysimachia candida*, T4121 *Marsilea quadrifolia*, T4221 *Micromelum falcatum*, T4502 *Onychium japonicum* [Syn. *Tricomanes japonicum*], T4514 *Ophiorrhiza pumila*, T4549 *Osbeckia chinensis*, T4730 *Peristrophe roxburghiana*, T4884 *Picria felterrae*, T5087 *Polygala telephioides*, T5105 *Polygonum hydropiper* var. *flaccidum* [Syn. *Polygonum flaccidum*], T5209 *Pronephrum simplex* [Syn. *Meniscium simplex*], T5395 *Rabdosia nervosa*, T5401 *Rabdosia yuennanensis*, T5646 *Sagina japonica* [Syn. *Spergula japonica*], T5856 *Sedum lineare* [Syn. *Sedum obtuso-lineare*], T5954 *Silene fortunei*, T6087 *Spiranthes sinensis*, T6131 *Stephania longa*, T6135 *Stephania succifera*, T6214 *Swertia chinensis*, T6224 *Swertia kouitchensis*, T6252 *Symplocos chinensis*, T6566 *Tupistra chinensis*, T6601 *Umbilicaria esculenta* [Syn. *Gyrophora esculenta*], T6684 *Vanilla planifolia*, T6767 *Viola yedoensis*, T6861 *Zanthoxylum ailanthoides*, T6893 *Zanthoxylum simulans*, T6894 *Zanthoxylum simulans*.

**poliomyelitis** T2389 *Epimedium acuminatum*, T2390 *Epimedium brevicornum*, T2392 *Epimedium davidii*, T2394 *Epimedium elongatum*, T2398 *Epimedium koreanum*, T2401 *Epimedium pubescens*, T2402 *Epimedium sagittatum*, T2404 *Epimedium suchuenense*, T2406 *Epimedium wushanense*, T3984 *Lycoris chinensis*, T3986 *Lycoris radiata* [Syn. *Amaryllis radiata*], T4239 *Millettia nitida* var.

*hirsutissima*.

**pollinosis** T3936 *Luffa operculata*.

**postauricular sore** T3726 *Laurus nobilis*.

**postlithotripsy urinary tract infection** T0457 *Andrographis paniculata* [Syn. *Justicia paniculata*].

**postoperative pain** T3548 *Ixeris sonchifolia*.

**postpartum abdominal pain** T0474 *Angelica acutiloba* [Syn. *Ligusticum acutilobum*], T2193 *Dioscorea cirrhosa* [Syn. *Dioscorea pogonoides*], T3614 *Kadsura heteroclita* [Syn. *Uvaria heteroclita*], T3877 *Litchi chinensis*, T3981 *Lycopus lucidus*, T4234 *Millettia dielsiana*, T4956 *Piper mullesua*, T5595 *Rubus parviflorius*, T5781 *Schefflera arboricola*, T5893 *Senecio nudicaulis*, T5966 *Siphonostegia chinensis*, T6154 *Strobilanthes japonicus* [Syn. *Championella japonica*], T6540 *Tripterygium hypoglaucum*, T6584 *Typha angustata*, T6585 *Typha angustifolia*, T6587 *Typha latifolia*.

**postpartum abdominal pain due to stasis obstruction** T2545 *Euonymus phellomana*, T3675 *Lagopsis supina*.

**postpartum anemia** T4311 *Mucuna sempervirens*.

**postpartum arthralgia** T5586 *Rubia yunnanensis*.

**postpartum bleeding** T1541 *Claviceps purpurea*, T3752 *Leonurus heterophyllus* [Syn. *Leonurus artemisia*], T3754 *Leonurus sibiricus*, T5173 *Portulaca oleracea*, T6584 *Typha angustata*, T6585 *Typha angustifolia*, T6587 *Typha latifolia*.

**postpartum blood dizziness** T3649 *Laccifer lacca*, T5804 *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*], T6197 *Styrax benzoin*, T6204 *Styrax tonkinensis*, T6764 *Vinagar*.

**postpartum blood qi distending pain** T2280 *Dryopteris chrysocoma*.

**postpartum blood qi vacuity** T6773 *Viscum articulatum*, T6774 *Viscum articulatum*.

**postpartum blood stasis** T1108 *Caesalpinia sappan*, T3276 *Homo sapiens*, T3411 *Impatiens balsamina*, T4662 *Parthenocissus tricuspidata*, T5647 *Sagittaria sagittifolia*, T6097 *Staphylea bumalda*.

**postpartum blood stasis abdominal pain** T0073 *Achyranthes bidentata*, T1769 *Crataegus cuneata*, T1771 *Crataegus kansuensis*, T1772 *Crataegus maximowiczii*, T1780 *Crataegus sanguinea*, T1781 *Crataegus scabrifolia*, T1808 *Crocus sativus*, T1994 *Daemonorops draco*, T2253 *Dracaena cochinchinensis*, T2723 *Ficus pumila*, T3613 *Kadsura coccinea* [Syn. *Kadsura chenensis*; *Kadsura hainanensis*], T3659 *Lactuca indica*, T3746 *Leontice robustum*, T3980 *Lycopus lucidus*, T4604 *Panax japonicus* var. *bipinnatifidus*, T4672 *Patrinia scabiosaefolia*, T4676 *Patrinia villosa*, T5365 *Pyrus pashia*, T5730 *Sarcandra glabra* [Syn. *Chloranthus glaber*], T6062 *Sparganium stoloniferum*, T6436 *Thlaspi arvense*, T6551 *Trogopterus xanthipes*; *Pteromys volans*.

**postpartum edema** T1881 *Cucurbita moschata*.

**postpartum fever** T2927 *Gentiana rhodantha*.

**postpartum flooding** T3671 *Lagerstroemia indica*.

**postpartum foot edema** T4965 *Piper sarmentosum*.

**postpartum galactostasis** T0002 *Abelmoschus moschatus* [Syn. *Hibiscus abelmoschus*], T3124 *Hedyotis capitellata*, T3349 *Hypericum erectum*.

**postpartum pain** T1583 *Cnidium officinale* [Syn. *Ligusticum officinale*], T3820 *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*].

**postpartum persistent flow of lochia** T0591 *Ardisia arborescens*, T0600

- Ardisia mamillata* [Syn. *Tinus mamillata*], T1005 *Brassica campestris* [Syn. *Brassica campestris* var. *oleifera*], T1923 *Cyathula capitata*, T4606 *Panax pseudo-ginseng*, T6683 *Vallisneria spiralis*.
- postpartum scant milk** T1881 *Cucurbita moschata*, T1952 *Cynanchum auriculatum*, T1953 *Cynanchum bungei*, T1964 *Cynanchum wilfordii* [Syn. *Cynothonum wilfordii*], T1980 *Cyprinus carpio*, T2624 *Euphorbia tirucalli*, T2727 *Ficus simplicissima*, T2837 *Gallus gallus domesticus*, T2979 *Gleditsia sinensis* [Syn. *Gleditsia horrida*], T3018 *Glycyrrhiza pallidiflora*, T3240 *Hibiscus esculentus*, T4478 *Octopus vulgaris*, T4505 *Ophiocephalus argus*, T4644 *Parasilurus asotus*, T6357 *Tetrapanax papyriferus*, T6771 *Viscum album*.
- postpartum stasis stagnation** T6560 *Tulipa edulis*.
- postpartum stasis stagnation abdominal pain** T0661 *Artemisia anomala*, T0680 *Artemisia lactiflora*, T1706 *Corydalis ambigua* var. *amurensis* [Syn. *Corydalis ambigua*], T1734 *Corydalis remota* [Syn. *Corydalis bulbosa* var. *typica*], T1735 *Corydalis repens*, T1750 *Corydalis yanhusuo* [Syn. *Corydalis turtshchaninovii* f. *yanhusuo*], T1775 *Crataegus pinnatifida*, T1778 *Crataegus pinnatifida* var. *major*, T1903 *Curcuma aromatica*, T1905 *Curcuma longa*, T2536 *Euonymus alatus*, T2546 *Euonymus sacrosancta*, T3088 *Gynura segetum* [Syn. *Gynura japonica*], T4549 *Osbeckia chinensis*, T4607 *Panax pseudo-ginseng* var. *japonicus*, T5661 *Salvia bowleyana*, T5680 *Salvia miltiorrhiza*, T5681 *Salvia miltiorrhiza* f. *alba*, T5688 *Salvia przewalskii*.
- postpartum vacuity taxation** T3628 *Kerria japonica*.
- postpartum vacuity vexation** T1950 *Cynanchum ascyrifolium*, T1951 *Cynanchum atratum*, T1962 *Cynanchum versicolor*, T2952 *Gerbera piloselloides*, T6582 *Tylophora ovata*.
- postpartum vacuity weakness** T1961 *Cynanchum thesioides*, T2347 *Embelia parviflora*, T4238 *Milletia nitida*, T5071 *Polygala arillata*, T5407 *Rana nigromaculata*; *Rana plancyi*.
- postpartum wind pain** T0571 *Aralia decaisneana*.
- postpartum wind tetany** T3000 *Glycine max*, T6651 *Urtica cannabina*, T6652 *Urtica dioica*, T6735 *Viburnum dilatatum*.
- pox** T1239 *Cassia nodosa*.
- pox without coming out** T1188 *Caragana chamlagu*.
- precipitate blood** T4402 *Nelumbo nucifera*.
- precipitate blood of large intestine** T5552 *Robinia pseudoacacia*.
- premature graying in beard and hair** T1964 *Cynanchum wilfordii* [Syn. *Cynothonum wilfordii*], T2323 *Eclipta prostrata* [Syn. *Eclipta alba*], T3828 *Ligustrum lucidum*, T4288 *Morus alba*, T4432 *Nigella glandulifera*, T5091 *Polygonatum cyrtonema* [Syn. *Polygonatum multiflorum*], T5092 *Polygonatum kingianum*, T5095 *Polygonatum sibiricum*, T5107 *Polygonum multiflorum*, T5446 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], T5593 *Rubus idaeus*, T5925 *Sesamum indicum* [Syn. *Sesamum orientale*], T5927 *Sesamum indicum* [Syn. *Sesamum orientale*], T6670 *Vaccinium bracteatum*.
- premenstrual abdominal pain** T3877 *Litchi chinensis*.
- prevention of cataracts** T2321 *Ecklonia kurome*, T3678 *Laminaria japonica*, T6640 *Undaria pinnatifida*.
- prevention of hair loss in early stage** T5575 *Rosmarinus officinalis*.
- prevention of influenza and encephalitis b** T4906 *Pinus armandii*, T4916 *Pinus massoniana*.
- prevention of ptosis** T1419 *Cimicifuga dahurica*, T1420 *Cimicifuga foetida*, T1421 *Cimicifuga heracleifolia*.
- prickly heat** T1878 *Cucumis sativus*, T4159 *Melia azedarach*, T4307 *Mosla scabra* [Syn. *Mosla punctata*], T5818 *Scoparia dulcis*.
- primary degenerative dementia of alzheimer disease** T2961 *Ginkgo biloba*.
- primary hepatoma** T1904 *Curcuma kwangsiensis*, T1909 *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*].
- profuse menstruation** T0170 *Adhatoda vasica*, T0382 *Athaea rosea*, T1199 *Carduus acanthoides*, T1200 *Carduus crispus*, T1819 *Crotalaria ferruginea*, T2234 *Dipsacus asperoides*, T2235 *Dipsacus japonicus*, T2614 *Euphorbia pulcherrima*, T4121 *Marsilea quadrifolia*, T4580 *Paeonia albiflora* [Syn. *Paeonia lactiflora*], T5344 *Pyrola atropurpurea*, T5345 *Pyrola calliantha* [Syn. *Pyrola rotundifolia* ssp. *chinensis*], T5346 *Pyrola calliantha* var. *tibetana*, T5347 *Pyrola decorata*, T5349 *Pyrola incarnata*, T5350 *Pyrola japonica*, T5351 *Pyrola rotundifolia*, T5573 *Rosa sericea*, T5605 *Rumex acetosa*, T6540 *Tripterygium hypoglaucum*, T6551 *Trogopteris xanthipes*; *Pteromys volans*, T6876 *Zanthoxylum dissitum*.
- profuse pus** T2165 *Dictamnus angustifolius*, T2167 *Dictamnus dasycarpus*.
- prolapse of rectum** T0584 *Arctium lappa*, T0791 *Astragalus chrysopterus*, T0794 *Astragalus ernestii*, T0798 *Astragalus membranaceus*, T0800 *Astragalus mongholicus*, T1425 *Cimicifuga simplex*, T1556 *Clerodendron fragrans*, T2038 *Datura innoxia*, T2039 *Datura innoxia*, T2042 *Datura metel*, T2043 *Datura metel*, T2047 *Datura stramonium*, T2130 *Desmodium gangeticum*, T2363 *Entada phaseoloides* [Syn. *Lens phaseoloides*], T2636 *Euscaphis japonica*, T2826 *Galeola faberi*, T3128 *Hedysarum multijugum*, T3245 *Hibiscus syriacus*, T4549 *Osbeckia chinensis*, T4601 *Panax ginseng* [Syn. *Panax schinseng*], T4629 *Papaver nudicaule*, T4630 *Papaver nudicaule* ssp. *amurense*, T4636 *Papaver somniferum*, T4637 *Papaver somniferum*, T5137 *Poncirus trifoliata*, T5328 *Punica granatum*, T5529 *Rhodomyrtus tomentosa*, T5547 *Ricinus communis*, T6261 *Syringa pinnafolia*, T6346 *Terminalia chebula*, T6348 *Terminalia chebula* var. *tomentella*, T6353 *Tetracera asiatica*, T6601 *Umbilicaria esculenta* [Syn. *Gyrophora esculenta*], T6618 *Uncaria homomalla* [Syn. *Uruparia homomalla*; *Uruparia tonkinensis*; *Uruparia lanosa* var. *parviflora*].
- prolapse of rectum (scorch-fry)** T5865 *Selaginella pulvinata*, T5869 *Selaginella tamariscina*.
- prolapse of rectum due to diarrhea** T3329 *Hyoscyamus niger*.
- prolapse of rectum due to enduring diarrhea** T3129 *Hedysarum polybotrys*.
- prolapse of rectum due to qi vacuity fall** T1055 *Bupleurum angustissimum*, T1056 *Bupleurum aureum*, T1058 *Bupleurum chaishoui*, T1059 *Bupleurum chinense*, T1065 *Bupleurum longiradiatum*, T1066 *Bupleurum marginatum*, T1067 *Bupleurum marginatum* var. *stenophyllum*, T1072 *Bupleurum scorzoniferolium*, T1073 *Bupleurum sibiricum*, T1075 *Bupleurum smithii* var. *parvifolium*, T1078 *Bupleurum wenchuanense*, T1079 *Bupleurum yinchowense*.
- prolapse of rectum with bleeding** T4787 *Phellinus igniarius*.
- prolapse of uterus** T0298 *Alectoria vivens*, T1055 *Bupleurum angustissimum*, T1056 *Bupleurum aureum*, T1058 *Bupleurum chaishoui*, T1059 *Bupleurum chinense*, T1065 *Bupleurum*



- longiradiatum*, T1066 *Bupleurum marginatum*, T1067 *Bupleurum marginatum* var. *stenophyllum*, T1072 *Bupleurum scorzonerifolium*, T1073 *Bupleurum sibiricum*, T1075 *Bupleurum smithii* var. *parvifolium*, T1078 *Bupleurum wenchuanense*, T1079 *Bupleurum yinchowense*, T1900 *Curculigo capitulata* [Syn. *Leucojum capitulata*], T2130 *Desmodium gangeticum*, T2540 *Euonymus fortunei*, T2636 *Euscaphis japonica*, T2826 *Galeola faberi*, T2946 *Geranium robertianum*, T3128 *Hedysarum multijugum*, T3270 *Holboellia fargesii*, T4821 *Pholidota articulata*, T5075 *Polygala fallax* [Syn. *Polygala aureocauda*], T5137 *Poncirus trifoliata*, T5188 *Potentilla viscosa*, T5547 *Ricinus communis*, T5563 *Rosa cymosa*, T5569 *Rosa multiflora*, T6261 *Syringa pinnatifolia*, T6264 *Syzygium buxifolium*.
- prostatitis** T4209 *Michelia alba*.
- prevention of influenza** T0364 *Alsophila spinulosa*.
- pruritus of vulva** T3555 *Jasminum nudiflorum*.
- psoriasis** T0495 *Angelica sinensis*, T0543 *Apis mellifera ligustica*, T0750 *Asparagus gobicus*, T0751 *Asparagus officinalis*, T1151 *Camellia sinensis* [Syn. *Thea sinensis*], T1162 *Camptotheca acuminata*, T1657 *Conyza canadensis* [Syn. *Erigeron canadensis*], T1799 *Crinum latifolium*, T2130 *Desmodium gangeticum*, T2165 *Dictamnus angustifolius*, T2167 *Dictamnus dasycarpus*, T2651 *Excoecaria cochinchinensis* var. *viridis*, T2963 *Ginkgo biloba*, T4804 *Phlojodicarpus sibiricus*, T5026 *Plumbagella micrantha*, T5270 *Psoralea corylifolia*, T5680 *Salvia miltiorrhiza*, T5681 *Salvia miltiorrhiza* f. *alba*, T5688 *Salvia przewalskii*, T6540 *Tripterygium hypoglaucum*, T6542 *Tripterygium wilfordii*.
- ptosis of anus or uterus** T1468 *Citrus aurantium*, T1521 *Citrus wilsonii*, T5141 *Poncirus trifoliata*.
- puddal itch** T0249 *Agrimonia pilosa* var. *japonica*, T0853 *Baeckea frutescens*, T1285 *Celastrus angulatus*, T1582 *Cnidium monnieri*, T2049 *Daucus carota*, T2721 *Ficus microcarpa*, T4305 *Mosla dianthera*, T5098 *Polygonum aviculare*, T5323 *Pulsatilla campanella*, T5324 *Pulsatilla cernua*, T5325 *Pulsatilla chinensis*, T5326 *Pulsatilla dahurica*, T5712 *Sanguisorba officinalis*, T6031 *Sophora flavescens* [Syn. *Sophora angustifolia*], T6268 *Syzygium samarangense*.
- puddal itch and vaginal discharge** T6476 *Torilis japonica*.
- puddal itch of women** T1046 *Buddleja davidii*.
- pulmonary abscess** T3548 *Ixeris sonchifolia*.
- pulmonary edema** T1589 *Cocculus trilobus* [Syn. *Cocculus sarmmentosus*].
- pulmonary infection** T5344 *Pyrola atropurpurea*, T5345 *Pyrola calliantha* [Syn. *Pyrola rotundifolia* ssp. *chinensis*], T5346 *Pyrola calliantha* var. *tibetana*, T5347 *Pyrola decorata*, T5349 *Pyrola incarnata*, T5350 *Pyrola japonica*, T5351 *Pyrola rotundifolia*.
- pulmonary welling abscess** T0263 *Ajuga decumbens*, T0457 *Andrographis paniculata* [Syn. *Justicia paniculata*], T0746 *Asparagus cochinchinensis* [Syn. *Asparagus lucidus*], T0895 *Benincasa hispida*, T1614 *Coix lacryma-jobi* var. *ma-yuen*, T1869 *Cryptotaenia japonica*, T1880 *Cucurbita moschata*, T2020 *Damnacanthus indicus*, T2538 *Euonymus bungeanus*, T2590 *Euphorbia hirta*, T2657 *Fagopyrum cymosum* [Syn. *Polygonum cymosum*], T2787 *Fritillaria hupehensis*, T2798 *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*], T3233 *Heteropappus altaicus*, T3254 *Hippophae rhamnoides*, T3256 *Hippophae rhamnoides* subsp. *sinensis*, T3258 *Hippophae rhamnoides* subsp. *yunnanensis*, T3288 *Humulus japonicus* [Syn. *Humulus scandens*], T3356 *Hypericum japonicum*, T3547 *Ixeris chinensis*, T3709 *Lathyrus pratensis*, T3736 *Lemmaphyllum microphyllum*, T3737 *Lemmaphyllum microphyllum* var. *obovatum*, T3778 *Leucaena glauca* [Syn. *Leucaena leucocephala*], T4506 *Ophioglossum vulgatum*, T4573 *Pachyrrhizus erosus*, T4829 *Phragmites communis*, T5613 *Rumex obtusifolius*, T5773 *Saxifraga stolonifera*, T5835 *Scutellaria barbata* [Syn. *Scutellaria rivularis*], T5840 *Scutellaria indica*, T6092 *Stachys palustris*, T6301 *Taraxacum mongolicum*, T6365 *Teucrium pilosum* [Syn. *Teucrium japonicum* var. *pilosum*], T6367 *Teucrium quadrifarium*, T6431 *Thesium chinense*, T6436 *Thlaspi arvense*.
- pulmonary welling abscess with hacking of pus and blood** T3284 *Houttuynia cordata*, T5011 *Platycodon grandiflorum*.
- purpura** T0648 *Arnebia euchroma*, T0649 *Arnebia guttata*, T2659 *Fagopyrum esculentum*, T3881 *Lithospermum erythrorhizon*, T5614 *Rumex patientia*.
- purpuric dermatosis** T1118 *Callicarpa formosana*, T1119 *Callicarpa japonica*.
- purulence due to bone welling abscess** T5010 *Platycarya strobilacea*.
- purulence in ear top** T1552 *Cleome viscosa*.
- putrefying sore** T0557 *Aquilegia ecalcarata*.
- pyothorax** T3174 *Heliotropium indicum*.
- qi and yin vacuity** T1961 *Cynanchum thesioides*, T5260 *Pseudostellaria heterophylla*.
- qi ascent with vexation and fullness** T1472 *Citrus chachiensis*, T1517 *Citrus tankan*.
- qi bind in chest and diaphragm** T1476 *Citrus erythroa*, T1515 *Citrus tangemna*.
- qi bind pain** T4428 *Nicotiana tabacum*.
- qi blood vacuity depletion** T3615 *Kadsura interior*.
- qi counterflow with asthma** T0554 *Aquilaria agallocha*, T0555 *Aquilaria sinensis*.
- qi counterflow with cough and asthma** T4779 *Pharbitis nil*, T4780 *Pharbitis purpurea*, T4855 *Physeter catodon*.
- qi counterflow with rapid asthma** T2433 *Eriobotrya japonica*, T3854 *Lindera strychnifolia* [Syn. *Lindera aggregata*].
- qi depression** T1171 *Canis familiaris*.
- qi depression and fulminant reversal** T4303 *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*.
- qi distention abdominal pain** T1538 *Clausena lansium*, T2521 *Eucalyptus tereticornis*.
- qi distention in chest and abdomen** T1092 *Buxus microphylla* var. *sinica*.
- qi dysentery** T0164 *Actinidia polygama*.
- qi goiter** T0992 *Bos taurus domesticus*; *Bubalus bubalis*.
- qi pain** T3120 *Hedychium spicatum*.
- qi pain in heart and stomach** T0151 *Acronychia pedunculata*, T0356 *Alpinia galanga*, T1943 *Cymbopogon goeringii*, T4530 *Ormosia hosiei*, T5189 *Pothos chinensis*, T5793 *Schisandra henryi*.
- qi stagnation** T5137 *Poncirus trifoliata*.
- qi stagnation abdominal distention** T3619 *Kadsura peltigera* [Syn.

- Kadsura longipedunculata*].
- qi stagnation and blood stasis** T1381 *Choerospondias axillaris*.
- qi stagnation and distention in stomach duct** T0631 *Aristolochia kaempferi*.
- qi stagnation and food accumulation** T6120 *Stephania delavayi* [Syn. *Stephania epigaea*].
- qi stagnation and pain in stomach duct** T6877 *Zanthoxylum dissitum*, T6878 *Zanthoxylum echinocarpum*.
- qi stagnation in chest and diaphragm** T1488 *Citrus junos*.
- qi stagnation stomachache** T1537 *Clausena lansium*, T2194 *Dioscorea colletii*, T2205 *Dioscorea panthaica*, T2505 *Eucalyptus citriodora*.
- qi stagnation with abdominal pain and diarrhea** T1146 *Camellia oleifera*.
- qi strangury** T0554 *Aquilaria agallocha*, T0555 *Aquilaria sinensis*, T6597 *Ulmus pumila*.
- qi vacuity** T0824 *Atractylodes macrocephala* [Syn. *Atractylis macrocephala*], T1188 *Caragana chamlagu*, T4610 *Panax quinquefolium*.
- qi vacuity and blood depletion** T0830 *Auricularia auricula*, T0831 *Auricularia delicata*.
- qi vacuity and dysentery** T0989 *Bos taurus domesticus*; *Bubalus bubalis*.
- qi vacuity and general weakness** T4516 *Oplopanax elatus*, T5497 *Rhodiola kirilowii*, T5499 *Rhodiola sacra*.
- qi vacuity and hypodynamia** T0791 *Astragalus chrysopterus*, T0794 *Astragalus ernestii*, T0798 *Astragalus membranaceus*, T0800 *Astragalus mongholicus*, T3129 *Hedysarum polybotrys*, T3981 *Lycopus lucidus*.
- qi vacuity and verging on desertion** T4599 *Panax ginseng* [Syn. *Panax schinseng*], T4600 *Panax ginseng* [Syn. *Panax schinseng*].
- qi vacuity edema** T0791 *Astragalus chrysopterus*, T0794 *Astragalus ernestii*, T0798 *Astragalus membranaceus*, T0800 *Astragalus mongholicus*, T3129 *Hedysarum polybotrys*, T4577 *Paederia scandens*.
- qi-block deafness** T0463 *Anemone altaica*.
- qi-blood depletion** T1596 *Codonopsis canescens*, T1597 *Codonopsis clematidea*, T1599 *Codonopsis pilosula*, T1600 *Codonopsis pilosula* var. *modesta* [Syn. *Codonopsis modesta*], T1601 *Codonopsis subglobosa*, T1602 *Codonopsis tangshen*, T1603 *Codonopsis tubulosa*, T3279 *Homo sapiens*, T3743 *Lentinus lepideus*, T4682 *Pedicularis muscicola*, T6689 *Ventilago leiocarpa*.
- qi-blood fluids vacuity depletion** T4600 *Panax ginseng* [Syn. *Panax schinseng*].
- qi-blood stagnation** T6062 *Sparganium stoloniferum*.
- rabid dog bite** T0440 *Anagallis arvensis*, T1491 *Citrus limon*, T1495 *Citrus limonia*, T1963 *Cynanchum wallichii*, T2036 *Datura innoxia*, T2041 *Datura metel*, T2046 *Datura stramonium*, T3287 *Huechys sanguinea*, T3953 *Lycianthes biflora*, T4008 *Lytta caraganae*, T4423 *Nicandra physaloides*, T5289 *Pteris dactylina*, T5401 *Rabdosia yuennanensis*, T5797 *Schisandra propinqua*, T5798 *Schisandra propinqua* var. *intermedia*, T6424 *Thermopsis alpina*, T6566 *Tupistra chinensis*.
- rachitis in children** T2841 *Gallus gallus domesticus*, T4536 *Orobanchae coerulea*.
- raynaud's disease** T0495 *Angelica sinensis*, T4804 *Phlojodicarpus sibiricus*.
- recurrent neuritis** T5848 *Securinega suffruticosa*.
- red and white dysentery** T0250 *Agrimonia pilosa* var. *japonica*, T0941 *Bidens tripartita*, T1145 *Camellia japonica*, T1184 *Capsella bursa-pastoris*, T2267 *Drosera peltata* var. *lunata*, T2993 *Gloeostereum incarnatum*, T3244 *Hibiscus syriacus*, T4655 *Paris tetraphylla*.
- red and white dysentery (root)** T0945 *Bischofia javanica* [Syn. *Bischofia trifoliata*].
- red and white turbidity** T3242 *Hibiscus rosa-sinensis*.
- red and white vaginal discharge** T0301 *Aleuritopteris argentea*, T0382 *Althaea rosea*, T0999 *Bougainvillea glabra*, T1672 *Corallodiscus flabellatus* [Syn. *Didissandra flabellata*], T2766 *Fraxinus bungeana*, T2767 *Fraxinus chinensis*, T2774 *Fraxinus paxiana*, T2777 *Fraxinus rhynchophylla* [Syn. *Fraxinus chinensis* var. *rhynchophylla*], T2779 *Fraxinus stylosa*, T2780 *Fraxinus szaboana* [Syn. *Fraxinus chinensis* var. *acuminata*], T3245 *Hibiscus syriacus*, T3615 *Kadsura interior*, T3645 *Kummerowia striata*, T4252 *Mirabilis jalapa*, T4662 *Parthenocissus tricuspidata*, T4670 *Patrinia heterophylla*, T4672 *Patrinia scabiosaefolia*, T4673 *Patrinia scabra*, T4676 *Patrinia villosa*, T4777 *Phalaris arundinacea*, T5118 *Polygonum suffultum*, T5327 *Punica granatum*, T5329 *Punica granatum*, T5614 *Rumex patientia*, T5671 *Salvia digitaloides*, T5712 *Sanguisorba officinalis*, T6226 *Swertia mileensis*, T6860 *Zanthoxylum ailanthoides*.
- red bayberry sore** T3300 *Hydnocarpus anthelminticus*.
- red dysentery** T0266 *Ajuga macrocarpa*, T5099 *Polygonum bistorta*.
- red dysentery and abdominal pain** T5181 *Potentilla chinensis*.
- red dysentery and bloody stool** T4127 *Matteuccia struthiopteris*.
- red eyes** T0540 *Apis cerana*, T0708 *Arthromeris mairei* [Syn. *Polypodium mairei*], T0897 *Berberis amurensis*, T0912 *Berberis poiretii*, T1152 *Camellia sinensis* [Syn. *Thea sinensis*], T1311 *Centella asiatica*, T1395 *Chrysanthemum morifolium* [Syn. *Dendranthema morifolium*], T1746 *Corydalis taliensis*, T1758 *Cotinus coggygria*, T2290 *Duchesnea indica*, T2517 *Eucalyptus robusta*, T2839 *Gallus gallus domesticus*, T2902 *Gentiana algida*, T3392 *Ilex kudingcha*, T3393 *Ilex latifolia*, T3423 *Indigofera tinctoria*, T3557 *Jasminum sambac*, T3829 *Ligustrum robustum*, T4186 *Mentha piperita*, T4190 *Mentha spicata*, T4796 *Pheretima aspergillum*; *Allolobophora caliginosa trapezoides*, T5413 *Ranunculus cantoniensis*, T5472 *Rheum officinale*, T5474 *Rheum palmatum*, T5481 *Rheum tanguticum*, T5605 *Rumex acetosa*, T5775 *Scabiosa comosa*, T6076 *Spinacia oleracea*, T6139 *Sterculia lychnophora*, T6206 *Sus scrofa domestica*, T6301 *Taraxacum mongolicum*, T6580 *Tylophora floribunda*, T6653 *Usnea diffracta*, T6654 *Usnea longissima*, T6799 *Vitis vinifera*, T6843 *Xanthium sibiricum* [Syn. *Xanthium strumarium*].
- red eyes and clouded vision** T4289 *Morus alba*, T4291 *Morus australis*, T4293 *Morus cathayana*, T4298 *Morus mongolica*.
- red eyes and distending pain** T1387 *Chrysanthemum boreale*, T1392 *Chrysanthemum indicum*, T1394 *Chrysanthemum lavandulifolium*, T1981 *Cyprinus carpio*.
- red eyes and eye screen** T2407 *Equisetum arvense*, T2409 *Equisetum palustre*, T5449 *Reineckea carnea*, T6079 *Spiraea japonica*, T6082 *Spiraea japonica* var. *fortunei*, T6497 *Tribulus terrestris*.

- red eyes and itch-pain** T1552 *Cleome viscosa*.
- red eyes and profuse eye discharge** T4471 *Ocimum basilicum*.
- red eyes and sore pharynx** T1439 *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*].
- red eyes and tearing** T3635 *Koelreuteria paniculata*.
- red eyes with gall** T0190 *Adonis sutchuenensis*, T0263 *Ajuga decumbens*, T0426 *Ampelopsis grossedentata* [Syn. *Ampelopsis cantoniensis* var. *grossedentata*], T0805 *Astragalus sinicus*, T0806 *Astragalus sinicus*, T0852 *Bacopa monniera*, T0888 *Beesia calthaefolia*, T0906 *Berberis julianae*, T0916 *Berberis thunbergii*, T0920 *Berberis wilsonae*, T1032 *Broussonetia papyrifera*, T1048 *Buddleja officinalis*, T1100 *Caesalpinia crista*, T1184 *Capsella bursa-pastoris*, T1240 *Cassia obtusifolia*, T1242 *Cassia occidentalis*, T1247 *Cassia sophera*, T1250 *Cassia tora*, T1296 *Celosia argentea*, T1393 *Chrysanthemum indicum*, T1395 *Chrysanthemum morifolium* [Syn. *Dendranthema morifolium*], T1638 *Commiphora myrrha* [Syn. *Commiphora molmo*], T1640 *Coniogramme japonica* [Syn. *Hemionitis japonica*], T1733 *Corydalis racemosa*, T1745 *Corydalis suaveolens* [Syn. *Corydalis sheareri*], T2161 *Dicranopteris pedata* [Syn. *Polypodium pedatum*; *Dicranopteris dichotoma*], T2244 *Doellingeria scaber* [Syn. *Aster scaber*], T2279 *Dryopteris championii*, T2340 *Elsholtzia bodinieri*, T2757 *Forsythia viridissima*, T2766 *Fraxinus bungeana*, T2767 *Fraxinus chinensis*, T2774 *Fraxinus paxiana*, T2777 *Fraxinus rhynchophylla* [Syn. *Fraxinus chinensis* var. *rhynchophylla*], T2779 *Fraxinus stylosa*, T2780 *Fraxinus szaboana* [Syn. *Fraxinus chinensis* var. *acuminata*], T2803 *Frullania tamarisci* ssp. *moniliata* [Syn. *Frullania moniliata*], T2908 *Gentiana cephalantha*, T2921 *Gentiana manshurica*, T2928 *Gentiana rigescens*, T2930 *Gentiana scabra*, T2938 *Gentiana triflora*, T2941 *Gentianopsis paludosa*, T2984 *Glinus lotoides* [Syn. *Mollugo lotoides*], T3040 *Gomphrena globosa*, T3122 *Hedyotis acutangula*, T3241 *Hibiscus mutabilis*, T3334 *Hypocoum leptocarpum*, T3356 *Hypericum japonicum*, T3361 *Hypericum perforatum*, T3564 *Juglans mandshurica*, T3636 *Koelreuteria paniculata*, T3675 *Lagopsis supina*, T3770 *Lespedeza cuneata*, T3990 *Lygodium japonicum*, T4055 *Mahonia bealei*, T4056 *Mahonia bealei*, T4060 *Mahonia confusa*, T4062 *Mahonia fortunei*, T4063 *Mahonia fortunei*, T4064 *Mahonia gracilipes*, T4066 *Mahonia japonica*, T4067 *Mahonia japonica*, T4072 *Mahonia shenii*, T4261 *Mollugo pentaphylla*, T4369 *Nandina domestica*, T4370 *Nandina domestica*, T4506 *Ophioglossum vulgatum*, T4584 *Paeonia lactiflora* wild, T4586 *Paeonia obovata*, T4590 *Paeonia veitchii*, T4672 *Patrinia scabiosaefolia*, T4676 *Patrinia villosa*, T4840 *Phyllanthus niruri*, T5115 *Polygonum sibiricum* [Syn. *Persicaria sibirica*], T5176 *Potamogeton natans*, T5184 *Potentilla kleiniana*, T5193 *Pratia nummularia*, T5214 *Prunella vulgaris*, T5576 *Rostellularia procumbens* [Syn. *Justicia procumbens*], T5690 *Salvia roborowskii*, T5856 *Sedum lineare* [Syn. *Sedum obtuso-lineare*], T5861 *Selaginella doederleinii*, T6034 *Sophora japonica*, T6372 *Thalictrum acutifolium*, T6375 *Thalictrum baicalense*, T6376 *Thalictrum cultratum*, T6378 *Thalictrum delavayi*, T6381 *Thalictrum faberi*, T6385 *Thalictrum flavum*, T6386 *Thalictrum foetidum*, T6387 *Thalictrum foliolosum*, T6388 *Thalictrum fortunei*, T6389 *Thalictrum glandulosissimum*, T6393 *Thalictrum ichangense* [Syn. *Thalictrum tripeltatum*; *Thalictrum multipeltatum*], T6402 *Thalictrum omeiense*, T6403 *Thalictrum petaloideum*, T6409 *Thalictrum simplex* [Syn. *Thalictrum simplex* var. *brevipes*], T6426 *Thermopsis chinensis*, T6436 *Thlaspi arvense*, T6552 *Trollius chinensis* [Syn. *Trollius asiaticus* var. *chinensis*], T6553 *Trollius ledebourii*, T6555 *Tropaeolum majus*, T6767 *Viola yedoensis*, T6791 *Vitex rotundifolia* [Syn. *Vitex trifolia* var. *simplicifolia*], T6793 *Vitex trifolia*.
- red eyes with pain due to liver fire** T1662 *Coptis chinensis*, T1663 *Coptis chinensis* var. *brevisejala*, T1664 *Coptis deltoidea*, T1669 *Coptis omeiensis*, T1670 *Coptis teetoides* [Syn. *Coptis teeta*].
- red face and eyes** T0544 *Apium graveolens*.
- red swelling of clove sore** T3953 *Lycianthes biflora*.
- red swollen breast** T5608 *Rumex dentatus*.
- red swollen due to knocks and falls** T6904 *Zephyranthes grandiflora* [Syn. *Zephyranthes carinata*].
- red swollen in throat** T2244 *Doellingeria scaber* [Syn. *Aster scaber*], T2340 *Elsholtzia bodinieri*, T5199 *Primula malacoides*.
- red swollen of throat** T4730 *Peristrophe roxburghiana*.
- red swollen sore and welling abscess** T4760 *Peucedanum japonicum*, T6904 *Zephyranthes grandiflora* [Syn. *Zephyranthes carinata*].
- reduced food intake** T0387 *Amaranthus caudatus*, T1469 *Citrus aurantium* var. *amara*, T2837 *Gallus gallus domesticus*, T4099 *Mangifera indica*, T4103 *Mangifera persiciformis*, T4545 *Oryza sativa*.
- reduced food intake and diarrhea** T0535 *Antidesma bunius*, T6263 *Syzygium aromaticum* [Syn. *Eugenia caryophyllata*].
- reduced food intake and sloppy stool** T0791 *Astragalus chrysopterus*, T0794 *Astragalus ernestii*, T0798 *Astragalus membranaceus*, T0800 *Astragalus mongholicus*, T1596 *Codonopsis canescens*, T1597 *Codonopsis clematidea*, T1599 *Codonopsis pilosula*, T1600 *Codonopsis pilosula* var. *modesta* [Syn. *Codonopsis modesta*], T1601 *Codonopsis subglobosa*, T1602 *Codonopsis tangshen*, T1603 *Codonopsis tubulosa*, T2246 *Dolichos lablab*, T3129 *Hedysarum polybotrys*.
- reduced food intake due to spleen vacuity** T2190 *Dioscorea batatas* [Syn. *Dioscorea opposita*], T2202 *Dioscorea japonica*, T4436 *Nitraria tangutorum*, T4450 *Nuphar pumilum*, T4599 *Panax ginseng* [Syn. *Panax schinseng*], T5169 *Poria cocos*, T6916 *Ziziphus jujuba*, T6917 *Ziziphus jujuba* var. *inermis*.
- reduced food intake with abdominal distention** T0311 *Allium cepa*, T0824 *Atractylodes macrocephala* [Syn. *Atractylis macrocephala*], T5938 *Setaria italica*, T6878 *Zanthoxylum echinocarpum*.
- reduced food intake with dry mouth** T1353 *Changium smyrnioides*, T5091 *Polygonatum cyrtonema* [Syn. *Polygonatum multiflorum*], T5092 *Polygonatum kingianum*, T5095 *Polygonatum sibiricum*.
- reduced food intake with dry retching** T2094 *Dendrobium aduncum*, T2096 *Dendrobium aurantiacum* var. *denneanum*, T2098 *Dendrobium chrysanthum*, T2100 *Dendrobium densiflorum*, T2102 *Dendrobium fimbriatum* var. *oculatum*, T2105 *Dendrobium loddigesii*, T2106 *Dendrobium moniliforme*, T2107 *Dendrobium nobile*, T2108 *Dendrobium officinale*.
- reduced food intake with fatigue** T2727 *Ficus simplicissima*.
- reduced food intake with nausea and vomiting** T5572 *Rosa rugosa*.
- reduced food intake with vomiting** T4351 *Myristica fragrans*.
- reduced sleep** T3192 *Hemerocallis citrina*.

- renal colic** T0825 *Atropa belladonna*.
- replete body and constipation** T2650 *Excoecaria agallocha*.
- repletion heat constipation** T0334 *Aloe arborescens* var. *natalensis*, T5472 *Rheum officinale*, T5474 *Rheum palmatum*, T5481 *Rheum tanguticum*.
- resolve liquor toxin** T0834 *Averrhoa carambola*, T4088 *Malus pumila*.
- restlessness** T2882 *Gardenia jasminoides* [Syn. *Gardenia florida*], T4400 *Nelumbo nucifera*.
- retching blood** T1118 *Callicarpa formosana*, T1119 *Callicarpa japonica*.
- retching counterflow** T1106 *Caesalpinia minax*, T1217 *Carum carvi*, T1467 *Citrus aurantium*, T1476 *Citrus erythrosa*, T1515 *Citrus tangemna*, T2840 *Gallus gallus domesticus*, T5140 *Poncirus trifoliata*.
- retching counterflow and abdominal pain** T6561 *Tulipa gesneriana*.
- retching counterflow and reduced food intake** T0480 *Angelica decursiva* [Syn. *Peucedanum decursivum*], T3819 *Ligusticum brachylobum*, T4761 *Peucedanum longshengens*, T4768 *Peucedanum praeruptorum*, T4769 *Peucedanum rubricaulis*.
- retching with counterflow** T4618 *Panicum miliaceum*.
- retention of afterbirth** T0001 *Abelmoschus manihot*, T2979 *Gleditsia sinensis* [Syn. *Gleditsia horrida*].
- retention of lochia** T1215 *Carthamus tinctorius*, T2536 *Euonymus alatus*.
- retention of placenta** T0073 *Achyranthes bidentata*, T1174 *Cannabis sativa*, T1924 *Cyathula officinalis*, T5647 *Sagittaria sagittifolia*.
- retinal insufficiency syndrome** T2964 *Ginkgo biloba*.
- retinitis** T5312 *Pueraria edulis*, T5313 *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*], T5316 *Pueraria omeiensis*, T5318 *Pueraria phaseoloides*, T5320 *Pueraria thomsonii*.
- reversal cold of limbs** T0098 *Aconitum geniculatum*, T1438 *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*].
- reverting yin headache** T2644 *Evodia rutaecarpa*, T2646 *Evodia rutaecarpa* var. *officinalis*.
- rheumatic arthritis** T0154 *Acroptilon repens*, T0281 *Alangium chinense*, T0285 *Alangium platanifolium*, T0295 *Albizia odoratissima*, T0539 *Apis cerana*, T0541 *Apis cerana*, T0572 *Aralia elata*, T1545 *Clematis chinensis*, T1553 *Clerodendranthus spicatus*, T1656 *Conyza bonariensis* [Syn. *Erigeron bonariensis*; *Erigeron linifolius*; *Erigeron crispus*], T1715 *Corydalis decumbens* [Syn. *Corydalis amabilis*], T1812 *Crossostephium chinense*, T1943 *Cymbopogon goeringii*, T1959 *Cynanchum paniculatum*, T2231 *Diphylleia grayi*, T2232 *Diphylleia sinensis*, T2538 *Euonymus bungeanus*, T2736 *Fissistigma polyanthum*, T2766 *Fraxinus bungeana*, T2767 *Fraxinus chinensis*, T2774 *Fraxinus paxiana*, T2777 *Fraxinus rhynchophylla* [Syn. *Fraxinus chinensis* var. *rhynchophylla*], T2779 *Fraxinus stylosa*, T2780 *Fraxinus szaboana* [Syn. *Fraxinus chinensis* var. *acuminata*], T3371 *Hypocrella bambusae*, T3594 *Juniperus rigida*, T3646 *Kyllinga brevifolia*, T3984 *Lycoris chinensis*, T3986 *Lycoris radiata* [Syn. *Amaryllis radiata*], T4810 *Phlomis mongolica*, T5110 *Polygonum orientale*, T5207 *Prismatomeris tetrandra*, T5413 *Ranunculus cantoniensis*, T5767 *Saussurea pulchella*, T5799 *Schisandra rubriflora*, T5860 *Selaginella davidii*, T6075 *Spilanthes acmella*, T6129 *Stephania japonica*, T6155 *Strophanthus divaricatus*, T6540 *Tripterygium hypoglaucum*, T6542 *Tripterygium wilfordii*, T6618 *Uncaria homomalla* [Syn. *Uruparia homomalla*; *Uruparia tonkinensis*; *Uruparia lanosa* var. *parviflora*], T6820 *Wikstroemia indica*, T6843 *Xanthium sibiricum* [Syn. *Xanthium strumarium*].
- rheumatic endocarditis** T2203 *Dioscorea nipponica*, T2204 *Dioscorea nipponica* ssp. *rosthornii*.
- rheumatic heart disease** T1649 *Convallaria keiskei* [Syn. *Convallaria majalis*].
- rheumatic pain in joints** T0414 *Ammopiptanthus mongolicus* [Syn. *Piptanthus mongolicus*], T0629 *Aristolochia heterophylla*, T4975 *Piptanthus nanus*.
- rheumatic pain in legs** T1586 *Cocculus laurifolius*.
- rheumatis** T3106 *Harpagophytum procumbens*, T3394 *Ilex paraguariensis*.
- rheumatism** T0354 *Alpinia chinensis*, T1533 *Clausena dentata*, T1534 *Clausena dunniana*, T1555 *Clerodendron fortunatum*, T4690 *Pelargonium graveolens*, T5445 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], T5447 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], T6788 *Vitex negundo*.
- rheumatism numbness** T0099 *Aconitum gymnantrum*, T1692 *Coriaria sinica* [Syn. *Coriaria nepalensis*], T3411 *Impatiens balsamina*, T3414 *Impatiens sicutifer*, T5184 *Potentilla kleiniana*, T5797 *Schisandra propinqua*, T5798 *Schisandra propinqua* var. *intermedia*, T5993 *Solanum capsicastrum*.
- rheumatoid arthritis** T2736 *Fissistigma polyanthum*, T5727 *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*], T6184 *Strychnos nux-vomica*, T6193 *Strychnos wallichiana*, T6541 *Tripterygium regelii*, T6542 *Tripterygium wilfordii*.
- ricketts** T3742 *Lentinus edodes*.
- rigidity of neck** T5312 *Pueraria edulis*, T5313 *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*], T5316 *Pueraria omeiensis*, T5318 *Pueraria phaseoloides*, T5320 *Pueraria thomsonii*.
- ringing in head** T1154 *Camellia sinensis* [Syn. *Thea sinensis*].
- roundworm reversal with abdominal pain** T5228 *Prunus mume*, T5719 *Sapindus mukorossi*.
- rumbling intestines and diarrhea** T4944 *Piper cubeba*, T6802 *Vladimiria souliei* [Syn. *Jurinea souliei*].
- running piglet** T1439 *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*], T3856 *Lindera umbellata* [Syn. *Lindera erythrocarpa*].
- salpingitis** T2715 *Fibraurea recisa*.
- sand** T1288 *Celastrus orbiculatus* [Syn. *Celastrus articulatus*], T5119 *Polygonum thunbergii*, T6015 *Solanum torvum*.
- sand and painful distention in stomach duct and abdomen** T6677 *Valeriana jatamansii* [Syn. *Valeriana wallichii*].
- sand distention and abdominal pain** T2193 *Dioscorea cirrhosa* [Syn. *Dioscorea pogonoides*].
- sand distention and vomiting diarrhea** T2505 *Eucalyptus citriodora*.
- sand foulness** T1986 *Cyrtomium fortunei*.
- sand foulness retching** T0472 *Anethum graveolens*.
- sand qi** T2746 *Foeniculum vulgare*, T6787 *Vitex negundo*.
- sand qi abdominal pain** T0726 *Asarum forbesii*, T1153 *Camellia sinensis* var. *assamica*, T1311 *Centella asiatica*, T2721 *Ficus microcarpa*, T4240 *Milletia pachycarpa*, T5220 *Prunus davidiana*, T5230 *Prunus persica*, T5232 *Prunus persica*.
- sand strangury** T0155 *Actinidia arguta*, T0759 *Aspidistra elatior*, T1007

- Brassica juncea*, T1311 *Centella asiatica*, T1907 *Curcuma wengujin*, T2134 *Desmodium styracifolium*, T5231 *Prunus persica*.
- sarcoma** T4184 *Mentha haplocalyx* [Syn. *Mentha canadaensis*; *Mentha arvensis* var. *haplocalyx*; *Mentha arvensis*].
- scab and lai** T0610 *Argemone mexicana*, T0696 *Artemisia sieversiana*, T1197 *Cardiospermum halicacabum*, T1251 *Cassytha filiformis*, T1693 *Coriaria sinica* [Syn. *Coriaria nepalensis*], T1719 *Corydalis incisa*, T2897 *Gelsemium elegans*, T3687 *Lantana camara*, T4937 *Piper betle*, T5143 *Pongamia pinnata*, T5401 *Rabdosia yunnanensis*, T5717 *Sapindus delavayi* [Syn. *Pancovia delavayi*].
- scab and lichen** T0012 *Abrus precatorius*, T0078 *Aconitum barbatum* var. *puberulum* [Syn. *Aconitum ochranthum*], T0215 *Agave americana*, T0295 *Albizzia odoratissima*, T0297 *Alchornea trewioides*, T0299 *Aleurites cordata* [Syn. *Aleurites fordii*], T0364 *Alsophila spinulosa*, T0463 *Anemone altaica*, T0516 *Anser cygnoides domestica*, T0752 *Asparagus officinalis*, T0805 *Astragalus sinicus*, T0853 *Baeckea frutescens*, T1311 *Centella asiatica*, T1359 *Chenopodium album*, T1361 *Chenopodium ambrosioides*, T1372 *Chloranthus serratus*, T1388 *Chrysanthemum cinerariaefolium*, T1389 *Chrysanthemum coccineum*, T1437 *Cinnamomum camphora*, T1582 *Cnidium monnieri*, T1594 *Cocos nucifera*, T1624 *Colocasia antiquorum*, T1641 *Conioselinum vaginatum*, T1733 *Corydalis racemosa*, T1823 *Crotalaria juncea*, T2136 *Desmos cochinchinensis* [Syn. *Desmos chinensis*], T2162 *Dicranostigma franchetianum* [Syn. *Dicranostigma leptopodium*], T2459 *Erythrina arborescens*, T2478 *Erythrina variegata* [Syn. *Erythrina indica*], T2510 *Eucalyptus globulus*, T2517 *Eucalyptus robusta*, T2580 *Euphorbia antiquorum*, T2599 *Euphorbia lunulata*, T2602 *Euphorbia nematocarpa*, T2612 *Euphorbia prolifera*, T2716 *Ficus beecheyana* [Syn. *Ficus erecta* var. *beecheyana*], T2978 *Gleditsia sinensis* [Syn. *Gleditsia horrida*], T2980 *Gleditsia sinensis* [Syn. *Gleditsia horrida*], T2999 *Glycine max*, T3057 *Gossypium herbaceum*, T3245 *Hibiscus syriacus*, T3300 *Hydnocarpus anthelminticus*, T3420 *Incarvillea sinensis*, T3423 *Indigofera tinctoria*, T3560 *Jatropha curcas*, T3671 *Lagerstroemia indica*, T3709 *Lathyrus pratensis*, T3725 *Laurus nobilis*, T3726 *Laurus nobilis*, T3758 *Lepidium sativum*, T3856 *Lindera umbellata* [Syn. *Lindera erythrocarpa*], T4104 *Manihot esculenta*, T4172 *Melilotus suaveolens*, T4240 *Milletia pachycarpa*, T4324 *Murraya paniculata* [Syn. *Chalcas paniculata*], T4428 *Nicotiana tabacum*, T4505 *Ophiocephalus argus*, T4520 *Opuntia ficus-indica*, T4562 *Oxalis acetosella*, T4564 *Oxalis corniculata* [Syn. *Oxalis repens*], T4572 *Pachyrhizus erosus*, T4656 *Parmelia saxatilis*, T4672 *Patrinia scabiosaefolia*, T4676 *Patrinia villosa*, T4690 *Pelargonium graveolens*, T4799 *Philydrum lanuginosum*, T4881 *Picrasma quassioides* [Syn. *Picrasma ailanthoides*], T4882 *Picrasma quassioides* [Syn. *Picrasma ailanthoides*], T4917 *Pinus massoniana*, T5028 *Plumbago indica*, T5256 *Pseudolarix amabilis* [Syn. *Larix amabilis*; *Pseudolarix kaempferi*], T5308 *Pterocarya stenoptera*, T5368 *Python molurus bivittatus*, T5414 *Ranunculus japonicus*, T5428 *Rauwolfia yunnanensis*, T5457 *Rhamnus davurica*, T5483 *Rhinacanthus nasutus*, T5537 *Rhus sylvestris*, T5605 *Rumex acetosa*, T5607 *Rumex crispus*, T5611 *Rumex japonicus*, T5612 *Rumex nepalensis*, T5613 *Rumex obtusifolius*, T5614 *Rumex patientia*, T5723 *Sapium sebiferum*, T5977 *Smilax glabra*, T5980 *Smilax menispermoides*, T6031 *Sophora flavescens* [Syn. *Sophora angustifolia*], T6048 *Sophora viciifolia*, T6105 *Stellera chamaejasme*, T6111 *Stemona japonica*, T6113 *Stemona sessilifolia*, T6115 *Stemona tuberosa*, T6155 *Strophanthus divaricatus*, T6219 *Swertia erythrosticta*, T6365 *Teucrium pilosum* [Syn. *Teucrium japonicum* var. *pilosum*], T6429 *Thermopsis lupinoides*, T6499 *Tribulus terrestris*, T6693 *Veratrum album* var. *lobelianum* [Syn. *Veratrum lobelianum*], T6697 *Veratrum grandiflorum*, T6698 *Veratrum nigrum*, T6788 *Vitex negundo*, T6843 *Xanthium sibiricum* [Syn. *Xanthium strumarium*], T6862 *Zanthoxylum ailanthoides*.
- scab and lichen with bald sores** T5156 *Populus nigra* var. *thevestina*.
- scab and lichen with itching** T0749 *Asparagus filicinus*, T1435 *Cinnamomum camphora*, T4156 *Melia azedarach*, T4162 *Melia toosendan*, T5029 *Plumbago zeylanica*.
- scab and lichen with itching sores** T3857 *Lindera umbellata* [Syn. *Lindera erythrocarpa*].
- scab and lichen with sore toxin** T1436 *Cinnamomum camphora*, T6217 *Swertia davidii*.
- scab and lichen with swelling of sores** T1357 *Chelidonium majus*.
- scab and lichen with welling abscess and flat abscess** T0144 *Acorus gramineus*, T0146 *Acorus tatarinowii*.
- scab and lichen; bark: dysentery** T6432 *Thespesia populnea* [Syn. *Hibiscus populneus*].
- scab sore** T0142 *Acorus calamus*, T0145 *Acorus gramineus*, T1264 *Catalpa ovata*, T1556 *Clerodendron fragrans*, T1562 *Clerodendron trichotomum*, T1645 *Consolida ajacis* [Syn. *Delphinium ajacis*], T2024 *Daphne genkwa*, T2267 *Drosera peltata* var. *lunata*, T2387 *Epilobium hirsutum*, T2479 *Erythrina variegata* var. *orientalis*, T2521 *Eucalyptus tereticornis*, T2584 *Euphorbia ebracteolata*, T2587 *Euphorbia fischeriana*, T2649 *Evolvulus alsinoides*, T3407 *Illicium simonsii*, T3570 *Juglans regia*, T3630 *Kleinhovia hospita*, T3778 *Leucaena glauca* [Syn. *Leucaena leucocephala*], T4253 *Mirabilis jalapa*, T4358 *Myroxylon pereiarae*, T4432 *Nigella glandulifera*, T4830 *Phryma leptostachya*, T4890 *Pieris japonica*, T5298 *Pteris vittata*, T5455 *Rhamnus crenata*, T5528 *Rhodomyrtus tomentosa*, T5595 *Rubus parviflorus*, T5998 *Solanum dulcamara*, T6330 *Tephrosia kirilowii* [Syn. *Senecio integrifolius* var. *fauriei*], T6542 *Tripterygium wilfordii*.
- scabies** T1278 *Cedrela sinensis*.
- scalds** T0175 *Adiantum pedatum*, T0560 *Arachis hypogaea*, T0648 *Arnebia euchroma*, T0649 *Arnebia guttata*, T0661 *Artemisia anomala*, T0916 *Berberis thunbergii*, T0922 *Berchemia polyphylla* var. *leioclada*, T0933 *Betula platyphylla*, T0935 *Betula platyphylla* var. *japonica*, T0982 *Bos taurus domesticus*, T1043 *Bryophyllum pinnatum*, T1145 *Camellia japonica*, T1199 *Carduus acanthoides*, T1200 *Carduus crispus*, T1271 *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochera rosea*], T1529 *Cladonia verticillata*, T1662 *Coptis chinensis*, T1663 *Coptis chinensis* var. *brevise-pala*, T1664 *Coptis deltoidea*, T1669 *Coptis omeiensis*, T1670 *Coptis teetoides* [Syn. *Coptis teeta*], T1693 *Coriaria sinica* [Syn. *Coriaria nepalensis*], T1867 *Cryptomeria fortunei*, T1880 *Cucurbita moschata*, T1896 *Cupressus funebris*, T2279 *Dryopteris championii*, T2387 *Epilobium hirsutum*, T2517 *Eucalyptus robusta*, T2659 *Fagopyrum esculentum*, T2840 *Gallus gallus domesticus*, T2857 *Garcinia hanburyi*, T3244 *Hibiscus syriacus*, T3295 *Huperzia*

*serrata* [Syn. *Lycopodium serratum*], T3318 *Hylotelephium mingjinianum*, T3340 *Hypericum ascyron*, T3363 *Hypericum sampsonii*, T3460 *Iris halophila*, T3464 *Iris lactea* var. *chinensis* [Syn. *Iris pallasii* var. *chinensis*], T3738 *Lemna minor*, T3830 *Ligustrum sinense*, T3881 *Lithospermum erythrorhizon*, T3970 *Lycopodium cernuum*, T3973 *Lycopodium japonicum* [Syn. *Lycopodium clavatum*], T4055 *Mahonia bealei*, T4062 *Mahonia fortunei*, T4066 *Mahonia japonica*, T4203 *Mesua ferrea*, T4500 *Onosma paniculatum*, T4519 *Opuntia dillenii*, T4521 *Opuntia vulgaris*, T4544 *Oryza sativa*, T4618 *Panicum miliaceum*, T4789 *Phellodendron amurense*, T4790 *Phellodendron amurense* var. *wilsonii*, T4791 *Phellodendron chinense*, T4792 *Phellodendron chinense* var. *glabriusculum*, T4956 *Piper mullesua*, T5308 *Pterocarya stenoptera*, T5419 *Raphanus sativus*, T5529 *Rhodomlyrtus tomentosa*, T5557 *Rohdea japonica* [Syn. *Orontium japonicum*], T5562 *Rosa chinensis*, T5567 *Rosa laevigata*, T5569 *Rosa multiflora*, T5613 *Rumex obtusifolius*, T5714 *Sansevieria trifasciata*, T5860 *Selaginella davidii*, T5862 *Selaginella involvens*, T5907 *Senecio scandens* [Syn. *Senecio chinensis*], T5938 *Setaria italica*, T6017 *Solanum tuberosum*, T6028 *Sophora alopecuroides*, T6048 *Sophora viciifolia*, T6205 *Sus scrofa*, T6440 *Thuja orientalis* [Syn. *Platyclusus orientalis*; *Biota orientalis*], T6544 *Triticum aestivum* [Syn. *Triticum vulgare*], T6601 *Umbilicaria esculenta* [Syn. *Gyrophora esculenta*], T6745 *Vicia faba*, T6746 *Vicia faba*.

**scalp infection** T2023 *Daphne genkwa*.

**scant breast milk** T0210 *Agaricus bisporus*, T0211 *Agaricus campestris*, T0559 *Arachis hypogaea*, T1191 *Caragana sinica*, T1598 *Codonopsis convolvulacea*, T1604 *Coeloglossum viride* [Syn. *Coeloglossum viride* var. *bracteatum*], T1961 *Cynanchum thesioides*, T2717 *Ficus carica*, T3077 *Gymnadenia conopsea*, T3279 *Homo sapiens*, T3925 *Loranthus parasiticus* [Syn. *Loranthus chinensis*; *Taxillus chinensis*], T4206 *Metaplexis japonica*, T4432 *Nigella glandulifera*, T4436 *Nitraria tangutorum*, T4573 *Pachyrrhizus erosus*, T4983 *Pisum sativum*, T5925 *Sesamum indicum* [Syn. *Sesamum orientale*], T6507 *Trichosanthes cucumeroides*.

**scant fluid and thirst** T4088 *Malus pumila*, T5229 *Prunus persica*.

**scant urine** T1035 *Broussonetia papyrifera*.

**scant urine in children** T6008 *Solanum nigrum*.

**scant urine with edema** T0553 *Apocynum venetum*, T1633 *Commelina communis*, T1878 *Cucumis sativus*, T2134 *Desmodium styracifolium*, T3752 *Leonurus heterophyllus* [Syn. *Leonurus artemisia*], T3754 *Leonurus sibiricus*, T5169 *Poria cocos*.

**scar** T3395 *Ilex pedunculosa*.

**scarlatina** T0867 *Baphicacanthus cusia* [Syn. *Strobilanthes cusia*], T1662 *Coptis chinensis*, T1663 *Coptis chinensis* var. *brevisekala*, T1664 *Coptis deltoidea*, T1669 *Coptis omeiensis*, T1670 *Coptis teetoides* [Syn. *Coptis teeta*].

**schizophrenia** T1525 *Cladonia fallax*, T5848 *Securinega suffruticosa*.

**sciatica** T0708 *Arthromeris mairei* [Syn. *Polypodium mairei*], T1715 *Corydalis decumbens* [Syn. *Corydalis amabilis*], T1727 *Corydalis mucronifera*, T2203 *Dioscorea nipponica*, T2204 *Dioscorea nipponica* ssp. *rosthornii*, T2723 *Ficus pumila*, T5279 *Psychotria serpens*, T6129 *Stephania japonica*, T6618 *Uncaria homomalla* [Syn. *Uruparia homomalla*; *Uruparia tonkinensis*; *Uruparia lanosa* var. *parviflora*],

T6843 *Xanthium sibiricum* [Syn. *Xanthium strumarium*].

**scorpion sting** T0382 *Althaea rosea*, T6551 *Trogopterus xanthipes*; *Pteromys volans*.

**scourge epidemic with fever** T0705 *Artemisia vestita*.

**scratch** T0827 *Aucuba chinensis* ssp. *omeiensis*.

**scrofula** T0048 *Acanthus ilicifolius*, T0078 *Aconitum barbatum* var. *puberulum* [Syn. *Aconitum ochranthum*], T0122 *Aconitum pendulum*, T0130 *Aconitum sinomontanum*, T0171 *Adiantum capillus-veneris*, T0175 *Adiantum pedatum*, T0275 *Akebia quinata*, T0333 *Alocasia cucullata* [Syn. *Arum cucullatum*], T0427 *Ampelopsis japonica* [Syn. *Paullinia japonica*], T0446 *Anaphalis margaritacea*, T0468 *Anemone hupehensis*, T0471 *Anemone rivularis*, T0567 *Aralia armata*, T0617 *Arisaema amurense*, T0618 *Arisaema consanguineum*, T0620 *Arisaema heterophyllum*, T0643 *Aristolochia versicolor*, T0726 *Asarum forbesii*, T0941 *Bidens tripartita*, T1049 *Bufo bufo gargarizans*; *Bufo melanostictus*, T1051 *Bufo bufo gargarizans*; *Bufo melanostictus*, T1254 *Castanea mollissima*, T1385 *Chorda filum*, T1387 *Chrysanthemum boreale*, T1392 *Chrysanthemum indicum*, T1394 *Chrysanthemum lavandulifolium*, T1692 *Coriaria sinica* [Syn. *Coriaria nepalensis*], T1709 *Corydalis bungeana*, T1787 *Cremastra appendiculata*, T1871 *Cucubalus baccifer*, T1967 *Cynoglossum amabile*, T1986 *Cyrtomium fortunei*, T1994 *Daemonorops draco*, T2024 *Daphne genkwa*, T2139 *Dianella ensifolia*, T2158 *Dichroa febrifuga*, T2162 *Dicranostigma franchetianum* [Syn. *Dicranostigma leptopodium*], T2253 *Dracaena cochinchinensis*, T2267 *Drosera peltata* var. *lunata*, T2298 *Dysosma difformis*, T2302 *Dysosma pleiantha* [Syn. *Podophyllum pleianthum*], T2304 *Dysosma veitchii*, T2305 *Dysosma versipellis* [Syn. *Podophyllum versipelle*], T2316 *Echinops grijsii*, T2317 *Echinops ritro*, T2321 *Ecklonia kurome*, T2365 *Enteromorpha clathrata*, T2428 *Erinaceus europaeus*; *Hemiechinus dauuricus*; *Hemiechinus auritus*, T2432 *Eriobotrya japonica*, T2525 *Eucheuma muricatum*, T2584 *Euphorbia ebracteolata*, T2585 *Euphorbia esula*, T2587 *Euphorbia fischeriana*, T2589 *Euphorbia helioscopia*, T2599 *Euphorbia lunulata*, T2602 *Euphorbia nematocypa*, T2608 *Euphorbia pekinensis*, T2657 *Fagopyrum cymosum* [Syn. *Polygonum cymosum*], T2658 *Fagopyrum esculentum*, T2691 *Farfugium japonicum*, T2697 *Ferula borealis*, T2718 *Ficus carica*, T2756 *Forsythia suspensa*, T2757 *Forsythia viridissima*, T2761 *Fortunella margarita*, T2787 *Fritillaria hupehensis*, T2790 *Fritillaria pallidiflora*, T2798 *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*], T2800 *Fritillaria walujewii*, T2897 *Gelsemium elegans*, T2979 *Gleditsia sinensis* [Syn. *Gleditsia horrida*], T2980 *Gleditsia sinensis* [Syn. *Gleditsia horrida*], T3080 *Gymnema sylvestre*, T3163 *Helicteres angustifolia*, T3193 *Hemerocallis fulva*, T3195 *Hemerocallis lilio-asphodelus*, T3197 *Hemerocallis minor*, T3201 *Hemiphragma heterophyllum*, T3287 *Huechys sanguinea*, T3443 *Iphigenia indica*, T3460 *Iris halophila*, T3464 *Iris lactea* var. *chinensis* [Syn. *Iris pallasii* var. *chinensis*], T3674 *Laggera alata*, T3678 *Laminaria japonica*, T3680 *Lamium amplexicaule*, T3736 *Lemmaphyllum microphyllum*, T3815 *Ligularia stenocephala*, T3847 *Lindera angustifolia*, T3876 *Litchi chinensis*, T3988 *Lycoris squamigera*, T4005 *Lysionotus pauciflorus*, T4008 *Lytta caraganae*, T4091 *Malva sylvestris*, T4106 *Manis pentadactyla*, T4121 *Marsilea quadrifolia*, T4172 *Melilotus*

- suaveolens*, T4173 *Melilotus suaveolens*, T4182 *Menispermum dauricum*, T4206 *Metaplexis japonica*, T4265 *Momordica cochinchinensis*, T4338 *Mylabris phalerata*; *Mylabris cichorii*, T4368 *Nandina domestica*, T4370 *Nandina domestica*, T4482 *Oenanthe javanica*, T4555 *Ostrea rivularis*; *Ostrea talienwhanensis*; *Ostrea gigas*, T4577 *Paederia scandens*, T4730 *Peristrophe roxburghiana*, T4796 *Pheretima aspergillum*; *Allolobophora caliginosa trapezoides*, T4835 *Phyllanthus emblica*, T4851 *Physalis minima*, T4903 *Pinellia pedatisecta*, T4917 *Pinus massoniana*, T5073 *Polygala chinensis* [Syn. *Polygala glomerata*], T5099 *Polygonum bistorta*, T5103 *Polygonum hydropiper*, T5105 *Polygonum hydropiper* var. *flaccidum* [Syn. *Polygonum flaccidum*], T5106 *Polygonum lapathifolium*, T5107 *Polygonum multiflorum*, T5109 *Polygonum nodosum*, T5182 *Potentilla discolor*, T5214 *Prunella vulgaris*, T5214 *Prunella vulgaris*, T5220 *Prunus davidiana*, T5226 *Prunus mume*, T5232 *Prunus persica*, T5295 *Pteris multifida*, T5323 *Pulsatilla campanella*, T5324 *Pulsatilla cernua*, T5325 *Pulsatilla chinensis*, T5326 *Pulsatilla dahurica*, T5401 *Rabdosia yuennanensis*, T5415 *Ranunculus sceleratus*, T5457 *Rhamnus davurica*, T5466 *Rhaponticum uniflorum*, T5550 *Ricinus communis*, T5562 *Rosa chinensis*, T5592 *Rubus hirsutus*, T5646 *Sagina japonica* [Syn. *Spergula japonica*], T5740 *Sargassum vachellianum*, T5835 *Scutellaria barbata* [Syn. *Scutellaria rivularis*], T5840 *Scutellaria indica*, T5862 *Selaginella involvens*, T5925 *Sesamum indicum* [Syn. *Sesamum orientale*], T5977 *Smilax glabra*, T5978 *Smilax glauco-china*, T5980 *Smilax menispermoidea*, T5982 *Smilax sieboldii*, T5984 *Smilax stans* [Syn. *Smilax vaginata* var. *stans*], T5989 *Solanum aculeatissimum*, T6014 *Solanum surattense*, T6018 *Solanum verbascifolium*, T6105 *Stellera chamaejasme*, T6257 *Syngnathus acus*, T6301 *Taraxacum mongolicum*, T6431 *Thesium chinense*, T6497 *Tribulus terrestris*, T6541 *Tripterygium regelii*, T6560 *Tulipa edulis*, T6588 *Typhonium giganteum*, T6640 *Undaria pinnatifida*, T6653 *Usnea diffracta*, T6654 *Usnea longissima*, T6732 *Vespertilio superans*, T6766 *Viola tricolor*, T6767 *Viola yedoensis*, T6820 *Wikstroemia indica*, T6884 *Zanthoxylum nitidum*.
- scrofula (juice)** T0533 *Antiaris toxicaria* [Syn. *Ambora toxicaria*].
- scrofula in early stage** T1050 *Bufo bufo gargarizans*; *Bufo melanostictus*.
- scrofula with phlegm node** T0971 *Bolbostemma paniculatum*, T1084 *Buthus martensi*, T5826 *Scrophularia buergeriana*, T5828 *Scrophularia ningpoensis*.
- scrofula with ulceration** T5817 *Scolopendra subspinipes mutilans*.
- scrotal damp itch** T1582 *Cnidium monnieri*, T2584 *Euphorbia ebracteolata*, T2587 *Euphorbia fischeriana*.
- scrotal eczema** T2902 *Gentiana algida*, T3245 *Hibiscus syriacus*, T3547 *Ixeris chinensis*, T4690 *Pelargonium graveolens*, T4836 *Phyllanthus emblica*, T5010 *Platycarya strobilacea*, T6742 *Vicia amoena*.
- scrotal enlargement** T1352 *Chamaenerion angustifolium* [Syn. *Epilobium angustifolium*].
- scrotal wind** T3306 *Hydrangea paniculata*, T3569 *Juglans regia*.
- scurvy** T3394 *Ilex paraguariensis*, T4388 *Nasturtium officinale*.
- seasonal diaphragm qi** T0599 *Ardisia japonica*.
- seasonal epidemic fire toxin** T1419 *Cimicifuga dahurica*, T1420 *Cimicifuga foetida*, T1421 *Cimicifuga heracleifolia*.
- seeper in chest and abdomen** T2608 *Euphorbia pekinensis*, T3984 *Lycoris chinensis*, T3986 *Lycoris radiata* [Syn. *Amaryllis radiata*].
- seminal efflux** T1604 *Coeloglossum viride* [Syn. *Coeloglossum viride* var. *bracteatum*], T3077 *Gymnadenia conopsea*.
- senile bronchitis** T3926 *Loropetalum chinense*.
- senile cough and asthma** T0752 *Asparagus officinalis*, T6111 *Stemona japonica*, T6113 *Stemona sessilifolia*, T6115 *Stemona tuberosa*.
- senile dementia** T5848 *Securinega suffruticosa*.
- senile nocturia** T0529 *Anthriscus sylvestris*.
- senile vacuity weakness** T0541 *Apis cerana*.
- senile vacuity weakness headache** T1786 *Cremanthodium ellisii*.
- septicemia** T0541 *Apis cerana*, T1337 *Cervus nippon*; *Cervus elaphus*, T1662 *Coptis chinensis*, T1663 *Coptis chinensis* var. *brevispala*, T1664 *Coptis deltoidea*, T1669 *Coptis omeiensis*, T1670 *Coptis teetoides* [Syn. *Coptis teeta*], T2846 *Ganoderma japonicum* [Syn. *Ganoderma sinense*], T2848 *Ganoderma lucidum*, T3085 *Gynostemma pentaphyllum*, T3409 *Illicium verum*, T3828 *Ligustrum lucidum*, T4308 *Mucuna birdwoodiana*, T6031 *Sophora flavescens* [Syn. *Sophora angustifolia*], T6043 *Sophora subprostrata* [Syn. *Sophora tonkinensis*], T6066 *Spatholobus suberectus*, T6119 *Stephania cepharantha*.
- sequel of poliomyelitis** T1567 *Clerodendrum mandarinorum*, T1715 *Corydalis decumbens* [Syn. *Corydalis amabilis*], T2736 *Fissistigma polyanthum*, T3976 *Lycopodium obscurum*, T5848 *Securinega suffruticosa*, T6184 *Strychnos nux-vomica*, T6193 *Strychnos wallichiana*, T6651 *Urtica cannabina*, T6652 *Urtica dioica*.
- shank sore** T0299 *Aleurites cordata* [Syn. *Aleurites fordii*], T1437 *Cinnamomum camphora*, T2732 *Firmiana simplex*, T6747 *Vicia faba*.
- schizophrenia** T6819 *Wikstroemia chamaedaphne*.
- shedding of eyebrow and hair** T1175 *Cannabis sativa*.
- shock** T0502 *Anisodus tanguticus* [Syn. *Scopolia tangutica*], T1468 *Citrus aurantium*, T1521 *Citrus wilsonii*, T5141 *Poncirus trifoliata*.
- shock due to acute infectious diseases** T0502 *Anisodus tanguticus* [Syn. *Scopolia tangutica*].
- short voidings of reddish urine** T0273 *Akebia quinata*, T0277 *Akebia trifoliata*, T0279 *Akebia trifoliata* var. *australis*, T0932 *Betula luminifera*, T1878 *Cucumis sativus*, T2882 *Gardenia jasminoides* [Syn. *Gardenia florida*], T3192 *Hemerocallis citrina*, T3270 *Holboellia fargesii*, T5098 *Polygonum aviculare*, T6357 *Tetrapanax papyriferum*.
- shortness of breath and hypodynamia** T5497 *Rhodiola kirilowii*, T5499 *Rhodiola sacra*.
- shortness of breath and palpitation** T3128 *Hedysarum multijugum*.
- shortness of breath and spontaneous sweating** T1596 *Codonopsis canescens*, T1597 *Codonopsis clematidea*, T1599 *Codonopsis pilosula*, T1600 *Codonopsis pilosula* var. *modesta* [Syn. *Codonopsis modesta*], T1601 *Codonopsis subglobosa*, T1602 *Codonopsis tangshen*, T1603 *Codonopsis tubulosa*.
- shoulder swelling** T2243 *Dodonaea viscosa*.
- silicosis** T2846 *Ganoderma japonicum* [Syn. *Ganoderma sinense*], T2848 *Ganoderma lucidum*.
- sinew and bone numbness** T3796 *Libanotis buchtormensis*, T6893 *Zanthoxylum simulans*, T6894 *Zanthoxylum simulans*.
- sinew and bone wound** T0170 *Adhatoda vasica*, T2273 *Drynaria fortunei*, T5252 *Pseudodrynaria coronans*, T6138 *Sterculia foetida*.
- sinew and bone wound with swelling pain** T1254 *Castanea mollissima*.

- skin cancer** T4130 *Maytenus chuchuhuasca*.
- skin chap and pain** T0543 *Apis mellifera ligustica*.
- skin diseases** T0495 *Angelica sinensis*, T3082 *Gynocardia odorata*, T3845 *Linaria vulgaris*, T4804 *Phlojodicarpus sibiricus*, T5726 *Saponaria officinalis*, T6072 *Sphagnum palustre* [Syn. *Sphagnum obtusifolium*; *Sphagnum cymbifolium*], T6432 *Thespesia populnea* [Syn. *Hibiscus populneus*], T6713 *Vernonia anthelmintica*.
- skin heat papules** T4261 *Mollugo pentaphylla*.
- skin intractable ulcer** T2650 *Excoecaria agallocha*.
- skin lichen** T1240 *Cassia obtusifolia*, T1250 *Cassia tora*, T1936 *Cyclocarya paliurus*, T2617 *Euphorbia royleana*, T3600 *Juniperus taiwaniana*, T4519 *Opuntia dillenii*, T4521 *Opuntia vulgaris*, T5719 *Sapindus mukorossi*.
- skin lichen lai** T3308 *Hydrangea umbellata*.
- skin numbness** T3970 *Lycopodium cernuum*, T3973 *Lycopodium japonicum* [Syn. *Lycopodium clavatum*].
- skin scabies** T5411 *Randia spinosa*.
- skin sores** T4170 *Melilotus albus*, T6893 *Zanthoxylum simulans*, T6894 *Zanthoxylum simulans*.
- skin suppurations** T3908 *Lonicera bournei*, T3909 *Lonicera confusa*, T3910 *Lonicera fulvotomentosa*, T3911 *Lonicera hypoglauca*, T3912 *Lonicera japonica*, T3914 *Lonicera macranthoides*, T3918 *Lonicera similis*.
- sleepless** T0644 *Armillaria mellea*, T5701 *Salvia yunnanensis*, T6295 *Tanacetum sibiricum* [Syn. *Filifolium sibiricum*], T6358 *Tetraplodon mnioides* [Syn. *Tetraplodon bryoides*; *Splachnum mnioides*].
- sleepless and amnesia** T0944 *Biota orientalis* [Syn. *Thuja orientalis*; *Platyclusus orientalis*], T1964 *Cynanchum wilfordii* [Syn. *Cynoconum wilfordii*].
- sleepless and vexation** T4121 *Marsilea quadrifolia*.
- sloppy stool** T0824 *Atractylodes macrocephala* [Syn. *Atractylis macrocephala*].
- sloppy stool and diarrhea** T5169 *Poria cocos*.
- slowness to work** T3199 *Hemibarbus labeo*.
- snake bite** T0060 *Achillea alpina* [Syn. *Achillea sibirica*], T0595 *Ardisia crispa*, T0601 *Ardisia pusilla*, T0692 *Artemisia rupestris* [Syn. *Artemisia dentata*; *Artemisia viridis*; *Artemisia viridifolia*], T0726 *Asarum forbesii*, T0730 *Asarum sagittarioides*, T0977 *Bombyx mori*, T1084 *Buthus martensi*, T1197 *Cardiospermum halicacabum*, T1434 *Cinnamomum bejolghota* [Syn. *Cinnamomum obtusifolium*; *Laurus bejolghota*], T1450 *Cirsium lineare*, T1547 *Clematis terniflora* [Syn. *Clematis maximowicziana*], T1958 *Cynanchum otophyllum*, T2244 *Doellingeria scaber* [Syn. *Aster scaber*], T2323 *Eclipta prostrata* [Syn. *Eclipta alba*], T2555 *Eupatorium chinense*, T2563 *Eupatorium japonicum*, T2598 *Euphorbia lathyris*, T2691 *Farfugium japonicum*, T2927 *Gentiana rhodantha*, T3002 *Glycine max*, T3363 *Hypericum sampsonii*, T3460 *Iris halophila*, T3464 *Iris lactea* var. *chinensis* [Syn. *Iris pallasii* var. *chinensis*], T3984 *Lycoris chinensis*, T3986 *Lycoris radiata* [Syn. *Amaryllis radiata*], T3997 *Lysimachia capillipes*, T4178 *Melodinus hemsleyanus*, T4335 *Mussaenda pubescens*, T4428 *Nicotiana tabacum*, T4642 *Parameria laevigata*, T4838 *Phyllanthus flexuosus*, T4882 *Picrasma quassioides* [Syn. *Picrasma ailanthoides*], T5102 *Polygonum cuspidatum*, T5428 *Rauwolfia yunnanensis*, T5557 *Rohdea japonica* [Syn. *Orontium japonicum*], T5721 *Sapindus mukorossi*, T5724 *Sapium sebiferum*, T5857 *Sedum sarmentosum*, T5870 *Selaginella uncinata*, T6444 *Thunbergia grandiflora*, T6551 *Trogopteris xanthipes*; *Pteromys volans*, T6831 *Woodwardia orientalis*, T6834 *Wrightia tomentosa*, T6889 *Zanthoxylum podocarpum*.
- snake bite or scorpion sting**<sup>[5509]</sup> T3200 *Hemidesmus indicus*.
- snake or dog bite** T4085 *Mallotus repandus* var. *chrysocarpus* [Syn. *Mallotus chrysocarpus*; *Mallotus repandus*].
- snake or insect bites** T0045 *Acanthopanax trifoliatum*, T0069 *Achillea wilsoniana*, T0274 *Akebia quinata*, T0278 *Akebia trifoliata*, T0280 *Akebia trifoliata* var. *australis*, T0318 *Allium sativum*, T0389 *Amaranthus tricolor*, T0503 *Anisomeles indica* [Syn. *Epimeredi indica*], T0625 *Aristolochia contorta*, T0627 *Aristolochia debilis* [Syn. *Aristolochia longa*], T0853 *Baeckea frutescens*, T0867 *Baphicacanthus cusia* [Syn. *Strobilanthes cusia*], T0938 *Bidens bipinnata*, T0950 *Blatta orientalis*, T0971 *Bolbostemma paniculatum*, T1241 *Cassia occidentalis*, T1290 *Celastrus orbiculatus* [Syn. *Celastrus articulatus*], T1357 *Chelidonium majus*, T1361 *Chenopodium ambrosioides*, T1787 *Cremastra appendiculata*, T1866 *Cryptolepis sinensis*, T2334 *Elephantopus scaber*, T2950 *Gerbera anandria* [Syn. *Leibnitzia anandria*], T3088 *Gynura segetum* [Syn. *Gynura japonica*], T3113 *Hedera nepalensis* var. *sinensis*, T3115 *Hedera rhombea*, T3410 *Impatiens balsamina*, T3423 *Indigofera tinctoria*, T3444 *Ipomoea aquatica* [Syn. *Convolvulus repens*; *Ipomoea reptans*], T3496 *Isodon japonica* [Syn. *Rabdosia japonica*], T3662 *Lactuca sativa*, T3851 *Lindera glauca*, T3898 *Lobelia chinensis* [Syn. *Lobelia radicans*], T4020 *Macleaya cordata*, T4158 *Melia azedarach*, T4183 *Menispermum dauricum*, T4206 *Metaplexis japonica*, T4305 *Mosla dianthera*, T4307 *Mosla scabra* [Syn. *Mosla punctata*], T4323 *Murraya paniculata* [Syn. *Chalcas paniculata*], T4325 *Murraya paniculata* var. *exotica*, T4470 *Ocimum basilicum*, T4519 *Opuntia dillenii*, T4520 *Opuntia ficus-indica*, T4521 *Opuntia vulgaris*, T4564 *Oxalis corniculata* [Syn. *Oxalis repens*], T4648 *Paris polyphylla*, T4649 *Paris polyphylla* var. *chinensis*, T4650 *Paris polyphylla* var. *pseudohibetica*, T4651 *Paris polyphylla* var. *stenophylla*, T4652 *Paris polyphylla* var. *yunnanensis*, T4714 *Perilla frutescens*, T4956 *Piper mullesua*, T5173 *Portulaca oleracea*, T5184 *Potentilla kleiniana*, T5194 *Premna microphylla*, T5267 *Psidium guajava*, T5295 *Pteris multifida*, T5298 *Pteris vittata*, T5396 *Rabdosia rubescens*, T5685 *Salvia plebeia*, T5712 *Sanguisorba officinalis*, T5844 *Scutellaria scordifolia*, T6651 *Urtica cannabina*, T6652 *Urtica dioica*.
- soft tissue sprain** T2206 *Dioscorea parviflora*.
- sore** T0319 *Allium schoenoprasum*, T0500 *Anguilla japonica*, T4368 *Nandina domestica*, T4789 *Phellodendron amurense*, T4790 *Phellodendron amurense* var. *wilsonii*, T4791 *Phellodendron chinense*, T4792 *Phellodendron chinense* var. *glabriusculum*, T4796 *Pheretima aspergillum*; *Allolobophora caliginosa trapezoides*, T5530 *Rhus chinensis* [Syn. *Rhus semialata*], T6279 *Tagetes erecta*.
- sore (leaf)** T0945 *Bischofia javanica* [Syn. *Bischofia trifoliata*].
- sore and boil** T0011 *Abrus precatorius*, T0130 *Aconitum sinomontanum*, T0293 *Albizia lebbbeck*, T0379 *Alternanthera philoxeroides*, T0468 *Anemone hupehensis*, T0867 *Baphicacanthus cusia* [Syn. *Strobilanthes cusia*], T0879 *Bauhinia purpurea*, T0888 *Beesia calthaefolia*, T1003



*Brandisia hancei*, T1046 *Buddleja davidii*, T1785 *Cratogeomys prunifolium*, T2092 *Delphinium delphis*, T2193 *Dioscorea cirrhosa* [Syn. *Dioscorea pogonoides*], T2334 *Elephantopus scaber*, T2357 *Emilia sonchifolia*, T2365 *Enteromorpha clathrata*, T2505 *Eucalyptus citriodora*, T2591 *Euphorbia humifusa*, T2715 *Fibraurea recisa*, T2946 *Geranium robertianum*, T2984 *Glinus lotoides* [Syn. *Mollugo lotoides*], T3040 *Gomphrena globosa*, T3080 *Gymnema sylvestre*, T3233 *Heteropappus altaicus*, T3241 *Hibiscus mutabilis*, T3244 *Hibiscus syriacus*, T3398 *Ilex rotunda*, T3423 *Indigofera tinctoria*, T3471 *Iris tectorum*, T3709 *Lathyrus pratensis*, T3840 *Limnophila rugosa*, T3887 *Litsea glutinosa*, T3998 *Lysimachia christinae*, T4026 *Macrothelypteris oligophlebia*, T4120 *Marsdenia tenacissima*, T4188 *Mentha rotundifolia*, T4190 *Mentha spicata*, T4305 *Mosla dianthera*, T4423 *Nicandra physaloides*, T4881 *Picrasma quassioides* [Syn. *Picrasma ailanthoides*], T5126 *Polypodium virginianum*, T5127 *Polypodium vulgare*, T5172 *Portulaca grandiflora*, T5174 *Portulaca pilosa*, T5177 *Potamogeton pectinatus*, T5199 *Primula malacoides*, T5449 *Reineckea carnea*, T5548 *Ricinus communis*, T5850 *Sedum aizoon*, T5855 *Sedum kamtschaticum*, T5982 *Smilax sieboldii*, T5984 *Smilax stans* [Syn. *Smilax vaginata* var. *stans*], T6024 *Solidago virgaurea* var. *leiocarpa* [Syn. *Solidago decurrens*], T6029 *Sophora alopecuroides*, T6121 *Stephania dicentrinifera*, T6129 *Stephania japonica*, T6137 *Stephania viridiflavens*, T6145 *Stichopus japonicus*, T6275 *Tacca chantrieri* [Syn. *Tacca minor*; *Tacca esquirolii*], T6304 *Taxillus levinei*, T6386 *Thalictrum foetidum*, T6444 *Thunbergia grandiflora*, T6580 *Tylophora floribunda*, T6599 *Ulva lactuca*, T6600 *Ulva pertusa*, T6645 *Urena lobata*, T6716 *Vernonia esculenta*, T6772 *Viscum angulatum*.

**sore and boil in children** T5266 *Psidium guajava*.

**sore and boil with swelling of clove** T0047 *Acanthus ebracteatus*.

**sore and lichen** T1106 *Caesalpinia minax*, T1296 *Celosia argentea*, T2139 *Dianella ensifolia*, T3624 *Kalopanax pictum*, T3625 *Kalopanax septemlobus*, T3738 *Lemna minor*, T6474 *Toona ciliata*, T6475 *Toona sinensis*.

**sore and papules** T4979 *Pistacia chinensis*, T5231 *Prunus persica*.

**sore and papules with intractable lichen** T2979 *Gleditsia sinensis* [Syn. *Gleditsia horrida*].

**sore and scab** T1261 *Catalpa ovata*, T1558 *Clerodendron inerme*, T5549 *Ricinus communis*, T5724 *Sapium sebiferum*, T5804 *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*].

**sore and scab in children** T3893 *Litsea pungens*.

**sore and welling abscess** T0457 *Andrographis paniculata* [Syn. *Justicia paniculata*], T1673 *Corchorus capsularis*, T3192 *Hemerocallis citrina*, T4323 *Murraya paniculata* [Syn. *Chalcas paniculata*], T4325 *Murraya paniculata* var. *exotica*, T4370 *Nandina domestica*, T4618 *Panicum miliaceum*, T5107 *Polygonum multiflorum*, T5288 *Pteris cretica* var. *nervosa* [Syn. *Pteris nervosa*], T5457 *Rhamnus davurica*, T6101 *Stauntonia hexaphylla*, T6122 *Stephania dielsiana*, T6788 *Vitex negundo*.

**sore and welling abscess with scab and lichen** T6214 *Swertia chinensis*.

**sore in lower body** T1171 *Canis familiaris*.

**sore lai** T4240 *Millettia pachycarpa*.

**sore lichen and scab lai** T1566 *Clerodendrum inerme*, T4158 *Melia*

*azedarach*.

**sore pharynx** T0045 *Acanthopanax trifoliatum*, T0071 *Achyranthes aspera*, T0072 *Achyranthes aspera* var. *indica*, T0834 *Averrhoa carambola*, T0912 *Berberis poirerii*, T0947 *Bixa orellana*, T1417 *Cimicifuga acerina*, T1419 *Cimicifuga dahurica*, T1420 *Cimicifuga foetida*, T1421 *Cimicifuga heracleifolia*, T2290 *Duchesnea indica*, T2902 *Gentiana algida*, T3174 *Heliotropium indicum*, T3190 *Helminthostachys zeylanica*, T3201 *Hemiphragma heterophyllum*, T3396 *Ilex pubescens*, T3397 *Ilex pubescens* var. *glaber*, T3829 *Ligustrum robustum*, T4186 *Mentha piperita*, T4190 *Mentha spicata*, T4502 *Onychium japonicum* [Syn. *Tricomanes japonicum*], T5840 *Scutellaria indica*, T6028 *Sophora alopecuroides*, T6121 *Stephania dicentrinifera*, T6137 *Stephania viridiflavens*, T6276 *Tacca plantaginea* [Syn. *Schizocapsa plantaginea*], T6301 *Taraxacum mongolicum*, T6722 *Veronica anagallis-aquatica*.

**sore red eyes and clouded vision** T3957 *Lycium chinense*.

**sore red swollen eyes and tearing** T6437 *Thlaspi arvense*.

**sore swollen throat** T0267 *Ajuga nipponensis*, T3240 *Hibiscus esculentus*, T3548 *Ixeris sonchifolia*, T3765 *Lepisorus ussuriensis*, T3830 *Ligustrum sinense*, T6125 *Stephania elegans*, T6219 *Swertia erythrosticta*, T6224 *Swertia kouitchensis*, T6365 *Teucrium pilosum* [Syn. *Teucrium japonicum* var. *pilosum*].

**sore toxin** T0098 *Aconitum geniculatum*, T0389 *Amaranthus tricolor*, T0423 *Ampelopsis brevipedunculata*, T0434 *Amsonia sinensis*, T0561 *Arachis hypogaea*, T0932 *Betula luminifera*, T0973 *Bombax malabaricum* [Syn. *Gossampinus malabarica*], T1733 *Corydalis racemosa*, T1866 *Cryptolepis sinensis*, T2154 *Dicentra spectabilis*, T2612 *Euphorbia prolifera*, T2617 *Euphorbia royleana*, T2798 *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*], T3163 *Helicteres angustifolia*, T3283 *Hosta sieboldiana*, T3557 *Jasminum sambac*, T3687 *Lantana camara*, T3853 *Lindera obtusiloba*, T4502 *Onychium japonicum* [Syn. *Tricomanes japonicum*], T4830 *Phryma leptostachya*, T5298 *Pteris vittata*, T5537 *Rhus sylvestris*, T5554 *Rodgersia aesculifolia*, T6125 *Stephania elegans*, T6136 *Stephania tetrandra*, T6540 *Tripterygium hypoglaucom*, T6555 *Tropaeolum majus*, T6705 *Verbascum thapsus*, T6744 *Vicia faba*.

**sore toxin and intractable lichen** T4658 *Parmelia tinctorum*.

**sore toxin of sore and boil** T0659 *Artemisia absinthium*.

**sore toxin of welling abscess and boil** T5523 *Rhododendron simsii*, T6128 *Stephania hernandifolia*.

**sore toxin of welling abscess and flat abscess** T0982 *Bos taurus domesticus*, T2442 *Ervatamia divaricata*, T4009 *Maackia amurensis*, T5826 *Scrophularia buergeriana*, T5828 *Scrophularia ningpoensis*.

**sore welling abscess and lichen lai** T2077 *Delphinium grandiflorum*.

**sores** T0295 *Albizzia odoratissima*, T0478 *Angelica dahurica* [Syn. *Angelica porphyrocaulis*], T0495 *Angelica sinensis*, T0838 *Azolla imbricata* [Syn. *Salvinia imbricata*], T0912 *Berberis poirerii*, T0947 *Bixa orellana*, T0962 *Boehmeria platanifolia* [Syn. *Boehmeria tricuspis*], T1100 *Caesalpinia crista*, T1655 *Conyza blinii*, T2198 *Dioscorea gracillima*, T2201 *Dioscorea hypoglauca* [Syn. *Dioscorea collettii* var. *hypoglauca*], T2212 *Dioscorea tokoro*, T2274 *Dryobalanops aromatica*, T2521 *Eucalyptus tereticornis*, T2641 *Evodia lepta* [Syn. *Ilex lepta*], T2657 *Fagopyrum cymosum* [Syn.

- Polygonum cymosum*], T3970 *Lycopodium cernuum*, T3973 *Lycopodium japonicum* [Syn. *Lycopodium clavatum*], T4055 *Mahonia bealei*, T4062 *Mahonia fortunei*, T4066 *Mahonia japonica*, T4082 *Mallotus japonicus*, T4172 *Melilotus suaveolens*, T4217 *Microcos paniculata* [Syn. *Grewia microcos*], T4604 *Panax japonicus* var. *bipinnatifidus*, T4804 *Phlojodicarpus sibiricus*, T5401 *Rabdosia yunnanensis*, T5419 *Raphanus sativus*, T5594 *Rubus parkeri*, T5727 *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*], T6260 *Syringa oblata*, T6373 *Thalictrum alpinum*, T6548 *Tritonia crocosmaeflora*.
- sores and scrofula** T3568 *Juglans regia*.
- sores clove boil** T4519 *Opuntia dillenii*, T4521 *Opuntia vulgaris*.
- sores eczema** T3860 *Linum usitatissimum*.
- sores scab and lichen** T0088 *Aconitum coreanum*, T0707 *Arthraxon hispidus*.
- sores with pus blood** T2729 *Filipendula ulmaria*.
- sores with welling abscess and flat abscess** T0215 *Agave americana*, T0479 *Angelica dahurica* cv. *qibaizhi*, T0498 *Angelica taiwaniana*, T3878 *Lithocarpus polystachyus*, T3933 *Luffa acutangula*, T3934 *Luffa cylindrica*.
- sparse vaginal discharge** T5075 *Polygala fallax* [Syn. *Polygala aureocauda*].
- spasm** T0617 *Arisaema amurense*, T0618 *Arisaema consanguineum*, T0620 *Arisaema heterophyllum*, T1084 *Buthus martensi*, T4518 *Oppopanax chironium*, T4903 *Pinellia pedatisecta*, T5817 *Scolopendra subspinipes mutilans*.
- spasm in limbs** T2890 *Gastrodia elata*, T4580 *Paeonia albiflora* [Syn. *Paeonia lactiflora*].
- spasm of biliary ducts or duodenum** T0502 *Anisodus tanguticus* [Syn. *Scopolia tangutica*].
- spasmodic abdominal pain** T6229 *Swertia patens*.
- spasmodic abdominal pain of gastrointestinal tract** T6527 *Trigonella caerulea*.
- spasmodic cough** T4275 *Monotropa hypopitys*.
- spider bite** T1182 *Capra hircus*; *Ovis aries*.
- spill pulse** T4481 *Oenanthe javanica*.
- spleen qi vacuity** T0824 *Atractylodes macrocephala* [Syn. *Atractylis macrocephala*].
- spleen vacuity and abdominal distention** T4147 *Medicago falcata*.
- spleen vacuity and fatigued body** T4600 *Panax ginseng* [Syn. *Panax schinseng*], T5260 *Pseudostellaria heterophylla*.
- spleen vacuity and food distention** T0529 *Anthriscus sylvestris*.
- spleen vacuity and functional weakness** T1964 *Cynanchum wilfordii* [Syn. *Cynoctonum wilfordii*].
- spleen vacuity and marked emaciation** T0991 *Bos taurus domesticus*; *Bubalus bubalis*.
- spleen vacuity and vaginal discharge** T2720 *Ficus hispida*.
- spleen vacuity cold dysentery** T4982 *Pistacia vera*.
- spleen vacuity diarrhea** T1254 *Castanea mollissima*, T1419 *Cimicifuga dahurica*, T1420 *Cimicifuga foetida*, T1421 *Cimicifuga heracleifolia*, T1614 *Coix lacryma-jobi* var. *ma-yuen*, T1751 *Corylus heterophylla*, T2188 *Dioscorea alata*, T2195 *Dioscorea deltoidea*, T2326 *Elaeagnus angustifolia*, T3992 *Lyonia ovalifolia* var. *elliptica*, T4088 *Malus pumila*, T4398 *Nelumbo nucifera*, T4786 *Phasianus colchicus*, T5179 *Potentilla anserina*, T5236 *Prunus pseudocerasus*, T5606 *Rumex acetosa*, T6056 *Sorghum vulgare*, T6267 *Syzygium jambos*, T6492 *Trapa bispinosa*.
- spleen vacuity edema** T2727 *Ficus simplicissima*, T2998 *Glycine max*, T3447 *Ipomoea batatas* [Syn. *Convolvulus batatas*], T5075 *Polygala fallax* [Syn. *Polygala aureocauda*].
- spleen vacuity qi fall** T4601 *Panax ginseng* [Syn. *Panax schinseng*].
- spleen vacuity with damp** T2246 *Dolichos lablab*.
- spleen weakness and functional weakness** T6878 *Zanthoxylum echinocarpum*.
- spleen-kidney vacuity** T4681 *Pedicularis decora*, T5270 *Psoralea corylifolia*.
- spleen-kidney yang vacuity** T0041 *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*].
- spleen-stomach cold-damp obstructing** T0358 *Alpinia katsumadai*.
- spleen-stomach damp turbidity** T0819 *Atractylodes chinensis*, T0821 *Atractylodes japonica*, T0823 *Atractylodes lancea*, T6561 *Tulipa gesneriana*.
- spleen-stomach disharmony** T1390 *Chrysanthemum coronarium*, T1397 *Chrysanthemum segetum*, T2452 *Erysimum cheiranthoides*.
- spleen-stomach qi stagnation** T4720 *Perilla frutescens* var. *arguta*, T4723 *Perilla frutescens* var. *crispa*.
- spleen-stomach qi stagnation and damp obstruction** T1506 *Citrus reticulata*.
- spleen-stomach qi stagnation due to damp obstructing middle-jiao** T0416 *Amomum kravanh* [Syn. *Amomum cardamomum*].
- spleen-stomach vacuity** T1202 *Carex kobomugi*, T1596 *Codonopsis canescens*, T1597 *Codonopsis clematidea*, T1599 *Codonopsis pilosula*, T1600 *Codonopsis pilosula* var. *modesta* [Syn. *Codonopsis modesta*], T1601 *Codonopsis subglobosa*, T1602 *Codonopsis tangshen*, T1603 *Codonopsis tubulosa*, T3011 *Glycyrrhiza aspera*, T3013 *Glycyrrhiza glabra*, T3015 *Glycyrrhiza inflata*, T3016 *Glycyrrhiza kansuensis*, T3021 *Glycyrrhiza squamulosa*, T3022 *Glycyrrhiza uralensis*, T3023 *Glycyrrhiza yunnanensis*, T4178 *Melodinus hemsleyanus*, T4545 *Oryza sativa*, T4644 *Parasilurus asotus*, T5872 *Selenarctos thibetanus*; *Ursus arctos*, T6754 *Vigna unguiculata*.
- spleen-stomach vacuity cold** T0360 *Alpinia oxyphylla*, T4351 *Myristica fragrans*, T6869 *Zanthoxylum bungeanum*, T6892 *Zanthoxylum schinifolium*.
- spleen-stomach vacuity heat** T5938 *Setaria italica*.
- splitting of anus** T0955 *Bletilla striata*.
- spontaneous external bleeding** T0001 *Abelmoschus manihot*, T0226 *Agave sisalana*, T0229 *Ageratum conyzoides*, T0266 *Ajuga macrosperma*, T0322 *Allium tuberosum*, T0324 *Allium victorialis*, T0382 *Althaea rosea*, T0568 *Aralia chinensis*, T0570 *Aralia dasyphylla*, T0648 *Arnebia euchroma*, T0649 *Arnebia guttata*, T0664 *Artemisia argyi*, T0678 *Artemisia japonica*, T0681 *Artemisia lavandulaefolia*, T0685 *Artemisia mongolica*, T0687 *Artemisia myriantha*, T0689 *Artemisia princeps*, T0691 *Artemisia rubripes*, T0706 *Artemisia vulgaris*, T0830 *Auricularia auricula*, T0831 *Auricularia delicata*, T0867 *Baphicacanthus cusia* [Syn. *Strobilanthes cusia*], T0955 *Bletilla striata*, T0962 *Boehmeria plataniifolia* [Syn.

- Boehmeria tricuspidis*, T0964 *Boenninghausenia albiflora*, T0982 *Bos taurus domesticus*, T1044 *Bryum argenteum*, T1045 *Bubalus bubalis*, T1116 *Callicarpa arborea*, T1118 *Callicarpa formosana*, T1119 *Callicarpa japonica*, T1120 *Callicarpa macrophylla*, T1145 *Camellia japonica*, T1184 *Capsella bursa-pastoris*, T1199 *Carduus acanthoides*, T1200 *Carduus crispus*, T1210 *Carpesium abrotanoides*, T1254 *Castanea mollissima*, T1311 *Centella asiatica*, T1449 *Cirsium japonicum*, T1451 *Cirsium setosum* [Syn. *Cerratala setosa*; *Cirsium segetum*; *Cephalanoplos segetum*], T1554 *Clerodendron cyrtophyllum*, T1662 *Coptis chinensis*, T1663 *Coptis chinensis* var. *brevisepala*, T1664 *Coptis deltoidea*, T1669 *Coptis omeiensis*, T1670 *Coptis teetoides* [Syn. *Coptis teeta*], T1907 *Curcuma wenguijin*, T1969 *Cynoglossum officinale*, T2191 *Dioscorea bulbifera*, T2193 *Dioscorea cirrhosa* [Syn. *Dioscorea pogonoides*], T2257 *Dracocephalum moldavicum*, T2280 *Dryopteris chrysocoma*, T2281 *Dryopteris crassirhizoma*, T2407 *Equisetum arvense*, T2538 *Euonymus bungeanus*, T2882 *Gardenia jasminoides* [Syn. *Gardenia florida*], T3088 *Gynura segetum* [Syn. *Gynura japonica*], T3113 *Hedera nepalensis* var. *sinensis*, T3115 *Hedera rhombea*, T3193 *Hemerocallis fulva*, T3195 *Hemerocallis lilio-asphodelus*, T3197 *Hemerocallis minor*, T3276 *Homo sapiens*, T3277 *Homo sapiens*, T3334 *Hypocoum leptocarpum*, T3349 *Hypericum erectum*, T3363 *Hypericum sampsonii*, T3373 *Hypoestes purpurea* [Syn. *Justicia purpurea*; *Hypoestes sinica*], T3416 *Imperata cylindrica* var. *major*, T3460 *Iris halophila*, T3464 *Iris lactea* var. *chinensis* [Syn. *Iris pallasii* var. *chinensis*], T3547 *Ixeris chinensis*, T3645 *Kummerowia striata*, T3736 *Lemmaphyllum microphyllum*, T3737 *Lemmaphyllum microphyllum* var. *obovatum*, T3769 *Lespedeza bicolor*, T3881 *Lithospermum erythrorhizon*, T3926 *Loropetalum chinense*, T3954 *Lycium barbarum*, T3956 *Lycium chinense*, T3981 *Lycopus lucidus*, T4006 *Lythrum anceps*, T4007 *Lythrum salicaria*, T4121 *Marsilea quadrifolia*, T4127 *Matteuccia struthiopteris*, T4305 *Mosla dianthera*, T4398 *Nelumbo nucifera*, T4402 *Nelumbo nucifera*, T4413 *Nepeta cataria*, T4549 *Osbeckia chinensis*, T4552 *Osmunda japonica*, T4564 *Oxalis corniculata* [Syn. *Oxalis repens*], T4582 *Paeonia delavayi*, T4584 *Paeonia lactiflora* wild, T4585 *Paeonia moutan* [Syn. *Paeonia suffruticosa*], T4586 *Paeonia obovata*, T4590 *Paeonia veitchii*, T4604 *Panax japonicus* var. *bipinnatifidus*, T4605 *Panax japonicus* var. *major*, T4606 *Panax pseudo-ginseng*, T4607 *Panax pseudo-ginseng* var. *japonicus*, T4608 *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*], T4720 *Perilla frutescens* var. *arguta*, T4723 *Perilla frutescens* var. *crispa*, T5002 *Plantago asiatica*, T5004 *Plantago depressa*, T5007 *Plantago major*, T5099 *Polygonum bistorta*, T5120 *Polygonum tinctorium*, T5121 *Polygonum tinctorium*, T5133 *Polytrichum commune*, T5230 *Prunus persica*, T5295 *Pteris multifida*, T5372 *Quercus dentata*, T5419 *Raphanus sativus*, T5449 *Reineckea carnea*, T5484 *Rhinoceros unicornis*; *Rhinoceros sondaicus*; *Rhinoceros sumatrensis*, T5523 *Rhododendron simsii*, T5554 *Rodgersia aesculifolia*, T5594 *Rubus parkeri*, T5607 *Rumex crispus*, T5611 *Rumex japonicus*, T5612 *Rumex nepalensis*, T5614 *Rumex patientia*, T5701 *Salvia yunnanensis*, T5712 *Sanguisorba officinalis*, T5804 *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*], T5833 *Scutellaria amoena*, T5834 *Scutellaria baicalensis*, T5835 *Scutellaria barbata* [Syn. *Scutellaria rivularis*], T5839 *Scutellaria hypericifolia*, T5841 *Scutellaria likiangensis*, T5843 *Scutellaria rehderiana*, T5845 *Scutellaria viscidula*, T5850 *Sedum aizoon*, T5851 *Sedum alfredii* [Syn. *Sedum formosanum*], T5855 *Sedum kantschaticum*, T5863 *Selaginella moellendorffii*, T6034 *Sophora japonica*, T6036 *Sophora japonica*, T6047 *Sophora viciifolia*, T6048 *Sophora viciifolia*, T6076 *Spinacia oleracea*, T6119 *Stephania cepharantha*, T6440 *Thuja orientalis* [Syn. *Platyclusus orientalis*; *Biota orientalis*], T6471 *Toddalia asiatica* [Syn. *Toddalia aculeata*; *Paullinia asiatica*], T6485 *Trachycarpus fortunei*, T6584 *Typha angustata*, T6585 *Typha angustifolia*, T6587 *Typha latifolia*, T6601 *Umbilicaria esculenta* [Syn. *Gyrophora esculenta*], T6764 *Vinegar*.
- spontaneous external bleeding due to blood heat** T5445 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], T5447 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*].
- spontaneous sweating** T0824 *Atractylodes macrocephala* [Syn. *Atractylis macrocephala*], T1598 *Codonopsis convolvulacea*, T2658 *Fagopyrum esculentum*, T4548 *Oryza sativa* var. *glutinosa*, T4580 *Paeonia albiflora* [Syn. *Paeonia lactiflora*].
- spontaneous sweating and night sweating** T2381 *Ephedra sinica*, T3128 *Hedysarum multijugum*, T5791 *Schisandra chinensis*, T5802 *Schisandra sphenanthera*.
- spontaneous sweating and night sweating due to vacuity** T6918 *Ziziphus jujuba* var. *spinosa*.
- spontaneous sweating due to exterior vacuity** T0791 *Astragalus chrysopterus*, T0794 *Astragalus ernestii*, T0798 *Astragalus membranaceus*, T0800 *Astragalus mongholicus*, T3129 *Hedysarum polybotrys*.
- sprain** T0170 *Adhatoda vasica*, T3318 *Hylotelephium mingianum*, T4221 *Micromelum falcatum*, T4917 *Pinus massoniana*.
- sprain and contusion** T0948 *Blainvillea acmella* [Syn. *Verbesina acmella*; *Eclipta latifolia*; *Blainvillea latifolia*], T1147 *Camellia oleifera*, T1533 *Clausena dentata*, T1534 *Clausena dunniana*, T1931 *Cyclea barbata*, T2884 *Gardenia jasminoides* var. *grandiflora*, T2946 *Geranium robertianum*, T4018 *Machilus thunbergii*, T4510 *Ophiorrhiza japonica*, T4513 *Ophiorrhiza mungos*.
- sprain from knocks and falls** T1288 *Celastrus orbiculatus* [Syn. *Celastrus articulatus*], T1557 *Clerodendron indicum*, T2213 *Dioscorea zingiberensis*, T3976 *Lycopodium obscurum*, T5028 *Plumbago indica*, T5029 *Plumbago zeylanica*, T6008 *Solanum nigrum*, T6705 *Verbascum thapsus*.
- sprain in joints** T0116 *Aconitum nagarum* var. *heterotrichum* [Syn. *Aconitum bullatifolium*].
- sprain of hands and feet** T0569 *Aralia cordata*, T0574 *Aralia fargesii*.
- squamous carcinoma of skin** T1831 *Crotalaria sessiliflora*.
- stabbing pain in chest and abdomen** T1108 *Caesalpinia sappan*, T4608 *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*].
- stabbing pain in heart and abdomen** T1775 *Crataegus pinnatifida*, T1778 *Crataegus pinnatifida* var. *major*.
- stable intermittent claudication** T2961 *Ginkgo biloba*.
- stagnation of damp-heat in liver and gall** T2882 *Gardenia jasminoides* [Syn. *Gardenia florida*].
- stasis heat yellowing** T1045 *Bubalus bubalis*.
- stasis of lung qi** T1960 *Cynanchum stauntonii*.

- stasis pain from knocks and falls** T0010 *Abrus fruticulosus* [Syn. *Abrus cantoniensis*], T0077 *Aconitum balfourii*, T0084 *Aconitum carmichaeli*, T0105 *Aconitum karakolicum*, T0151 *Acronychia pedunculata*, T0890 *Begonia limprichtii*, T0994 *Boswellia carterii*, T5400 *Rabdosia stracheyi*, T5966 *Siphonostegia chinensis*.
- stasis pain in chest and abdomen** T1638 *Commiphora myrrha* [Syn. *Commiphora molmol*].
- stasis stagnation pain in stomach duct and abdomen** T6872 *Zanthoxylum cuspidatum*.
- stasis swelling due to injury** T5419 *Raphanus sativus*.
- stasis swelling from knocks and falls** T0069 *Achillea wilsoniana*, T0282 *Alangium kurzii*, T0692 *Artemisia rupestris* [Syn. *Artemisia dentata*; *Artemisia viridis*; *Artemisia viridifolia*], T0853 *Baeckea frutescens*, T0879 *Bauhinia purpurea*, T1558 *Clerodendron inerme*, T2296 *Duranta repens*, T3221 *Heracleum rapula*, T3254 *Hippophae rhamnoides*, T3256 *Hippophae rhamnoides* subsp. *sinensis*, T3258 *Hippophae rhamnoides* subsp. *yunnanensis*, T3373 *Hypoestes purpurea* [Syn. *Justicia purpurea*; *Hypoestes sinica*], T3520 *Isodon rosthornii*, T3560 *Jatropha curcas*, T5411 *Randia spinosa*, T5424 *Rauwolfia verticillata*, T5701 *Salvia yunnanensis*.
- stasis swelling pain** T3809 *Ligularia lapathifolia*.
- static blood** T3842 *Limonium gmelinii*.
- static blood from knocks and falls** T5151 *Populus davidiana*.
- static blood pain** T5868 *Selaginella stauntoniana*.
- static blood pain due to injury** T5144 *Populus adenopoda*.
- static blood swelling and distention** T4568 *Oxytropis myriophylla*.
- static blood swelling pain** T4951 *Piper laetispicum*, T5883 *Senecio cannabifolius*, T6874 *Zanthoxylum dimorphophyllum* var. *spinifolium*.
- steaming bone** T2994 *Gloiopeltis furcata*.
- steaming bone fever and chills** T1232 *Cassia fistula*.
- steaming bone taxation cough** T5826 *Scrophularia buergeriana*, T5828 *Scrophularia ningpoensis*.
- steaming bone taxation fever** T0705 *Artemisia vestita*, T2231 *Diphylleia grayi*, T2232 *Diphylleia sinensis*, T3279 *Homo sapiens*, T5445 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], T5498 *Rhodiola quadrifida*, T5762 *Saussurea nigrescens*, T6104 *Stellaria dichotoma* var. *lanceolata*.
- steaming bone tidal fever** T0462 *Anemarrhena asphodeloides*, T0607 *Arenaria juncea*, T0687 *Artemisia myriantha*, T1950 *Cynanchum ascyrifolium*, T1951 *Cynanchum atratum*, T1962 *Cynanchum versicolor*, T2952 *Gerbera piloselloides*, T3090 *Gypsophila oldhamiana*, T3091 *Gypsophila pacifica*, T4056 *Mahonia bealei*, T4057 *Mahonia bealei*, T4063 *Mahonia fortunei*, T4067 *Mahonia japonica*, T4068 *Mahonia japonica*, T4681 *Pedicularis decora*, T5955 *Silene jensenseensis*, T6060 *Souliea vaginata*, T6139 *Sterculia lychnophora*, T6582 *Tylophora ovata*.
- steaming bone tidal fever due to yin vacuity** T4582 *Paeonia delavayi*, T4585 *Paeonia moutan* [Syn. *Paeonia suffruticosa*], T4887 *Picrorhiza kurroa*, T4888 *Picrorhiza scrophulariiflora*, T5133 *Polytrichum commune*.
- steaming bone vexation thirst** T0302 *Alhagi pseudalhagi*.
- sterility** T6257 *Syngnathus acus*.
- sterility and infertility** T5446 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*].
- sticky phlegm** T0480 *Angelica decursiva* [Syn. *Peucedanum decursivum*], T3819 *Ligusticum brachylobum*, T4761 *Peucedanum longshengens*, T4768 *Peucedanum praeruptorum*, T4769 *Peucedanum rubricaulis*.
- sticky phlegm and oppression in chest** T2790 *Fritillaria pallidiflora*, T2800 *Fritillaria walujewii*.
- stiffness in joints** T1017 *Brassica oleracea* var. *capitata*.
- stings** T0388 *Amaranthus lividus*.
- stirring fetus disquieted** T0418 *Amomum muricarpum*, T6772 *Viscum angulatum*, T6777 *Viscum multinerve*.
- stirring fetus in pregnancy** T0417 *Amomum longiligulare*, T0419 *Amomum villosum*, T0420 *Amomum xanthioides*, T0824 *Atractylodes macrocephala* [Syn. *Atractylis macrocephala*], T1911 *Cuscuta australis*, T1912 *Cuscuta chinensis*, T1913 *Cuscuta japonica*, T1980 *Cyprinus carpio*, T1982 *Cyprinus carpio*, T2530 *Eucommia ulmoides*, T3431 *Inula helenium*, T3437 *Inula racemosa*, T4399 *Nelumbo nucifera*, T5833 *Scutellaria amoena*, T5834 *Scutellaria baicalensis*, T5839 *Scutellaria hypericifolia*, T5841 *Scutellaria likiangensis*, T5843 *Scutellaria rehderiana*, T5845 *Scutellaria viscidula*, T6775 *Viscum coloratum*.
- stirring fetus with bleeding** T0542 *Apis cerana*.
- stomach and esophagus hemorrhage** T4978 *Pisolithus tinctorius* [Syn. *Lycoperdon capitatum*; *Scleroderma tinctorium*].
- stomach cold** T0356 *Alpinia galanga*, T6864 *Zanthoxylum armatum*, T6887 *Zanthoxylum planispinum*.
- stomach cold abdominal pain** T0353 *Alpinia blepharocalyx*, T1443 *Cinnamomum parthenoxylum* [Syn. *Cinnamomum porrectum*], T5504 *Rhododendron capitatum*.
- stomach cold and hiccough** T6267 *Syzygium jambos*.
- stomach cold and qi stagnation** T1186 *Capsicum annum*, T1187 *Capsicum frutescens*.
- stomach cold distending pain** T1435 *Cinnamomum camphora*, T3880 *Lithospermum arvense*, T4763 *Peucedanum morisonii*.
- stomach cold pain** T2895 *Gaultheria yunnanensis*, T3120 *Hedychium spicatum*, T4964 *Piper retrofractum*.
- stomach cold with retching counterflow** T0554 *Aquilaria agallocha*, T0555 *Aquilaria sinensis*, T2745 *Foeniculum vulgare*, T4944 *Piper cubeba*, T6263 *Syzygium aromaticum* [Syn. *Eugenia caryophyllata*].
- stomach disease** T3394 *Ilex paraguariensis*.
- stomach disease and acid vomiting** T6412 *Thalictrum squarrosum*.
- stomach duck pain** T1100 *Caesalpinia crista*, T2841 *Gallus gallus domesticus*.
- stomach duct pain and abdominal distention** T2555 *Eupatorium chinense*.
- stomach fire toothache** T0446 *Anaphalis margaritacea*, T0959 *Blumea lacera*.
- stomach heat blood ejection** T3863 *Liparis nervosa*.
- stomach heat fluid damage** T1490 *Citrus limon*, T1494 *Citrus limonia*, T2867 *Garcinia multiflora*.
- stomach heat pain** T0916 *Berberis thunbergii*.
- stomach heat vexation thirst** T6526 *Triglochin maritimum*.
- stomach heat vomiting** T0423 *Ampelopsis brevipedunculata*, T1662 *Coptis chinensis*, T1663 *Coptis chinensis* var. *brevisekala*, T1664

*Coptis deltoidea*, T1669 *Coptis omeiensis*, T1670 *Coptis teetoides* [Syn. *Coptis teeta*], T2337 *Elephas maximus*, T2433 *Eriobotrya japonica*, T4829 *Phragmites communis*.

**stomach hemorrhage** T1866 *Cryptolepis sinensis*.

**stomach qi pain** T5122 *Polygonum viscosum*.

**stomach reflux** T0353 *Alpinia blepharocalyx*, T0559 *Arachis hypogaea*, T0976 *Bombyx mori*, T1182 *Capra hircus*; *Ovis aries*, T2837 *Gallus gallus domesticus*, T2841 *Gallus gallus domesticus*, T4544 *Oryza sativa*, T4547 *Oryza sativa* cv, T4636 *Papaver somniferum*, T5139 *Poncirus trifoliata*.

**stomach reflux and dysphagia-occlusion** T0989 *Bos taurus domesticus*; *Bubalus bubalis*.

**stomach reflux vomiting** T1254 *Castanea mollissima*, T3885 *Litsea cubeba*, T5363 *Pyrus calleryana*, T5938 *Setaria italica*.

**stomach yin insufficiency** T2983 *Glehnia littoralis*, T3873 *Liriope platyphylla*, T3874 *Liriope spicata*, T4602 *Panax ginseng* [Syn. *Panax schinseng*].

**stomachache** T0010 *Abrus fruticosus* [Syn. *Abrus cantoniensis*], T0048 *Acanthus ilicifolius*, T0069 *Achillea wilsoniana*, T0099 *Aconitum gymnandrum*, T0130 *Aconitum sinomontanum*, T0374 *Alstonia scholaris*, T0383 *Alyxia sinensis*, T0471 *Anemone rivularis*, T0478 *Angelica dahurica* [Syn. *Angelica porphyrocaulis*], T0501 *Anisodus luridus*, T0529 *Anthriscus sylvestris*, T0625 *Aristolochia contorta*, T0627 *Aristolochia debilis* [Syn. *Aristolochia longa*], T0631 *Aristolochia kaempferi*, T0726 *Asarum forbesii*, T0730 *Asarum sagittarioides*, T0813 *Atalantia buxifolia* [Syn. *Severinia buxifolia*], T0814 *Atalantia buxifolia* [Syn. *Severinia buxifolia*], T1043 *Bryophyllum pinnatum*, T1205 *Carica papaya*, T1242 *Cassia occidentalis*, T1357 *Chelidonium majus*, T1437 *Cinnamomum camphora*, T1501 *Citrus medica* var. *sarcodactylis*, T1533 *Clausena dentata*, T1534 *Clausena dunniana*, T1555 *Clerodendron fortuneatum*, T1590 *Cocculus trilobus* [Syn. *Cocculus sarmentosus*], T1592 *Cocos nucifera*, T1745 *Corydalis suaveolens* [Syn. *Corydalis sheareri*], T1931 *Cyclea barbata*, T1980 *Cyprinus carpio*, T2030 *Daphne retusa*, T2031 *Daphne tangutica*, T2062 *Delphinium bonvalotii*, T2081 *Delphinium omeiense*, T2084 *Delphinium potaninii*, T2085 *Delphinium potaninii* var. *jiufengshanense*, T2091 *Delphinium yunnanense*, T2154 *Dicentra spectabilis*, T2267 *Drosera peltata* var. *lunata*, T2301 *Dysosma majorensis* [Syn. *Podophyllum majorensis*; *Dysosma lichuanensis*], T2327 *Elaeagnus angustifolia*, T2529 *Euchresta strigillosa*, T2612 *Euphorbia prolifera*, T2636 *Euscaphis japonica*, T2657 *Fagopyrum cymosum* [Syn. *Polygonum cymosum*], T2721 *Ficus microcarpa*, T2733 *Firmiana simplex*, T2735 *Fissistigma oldhamii* [Syn. *Melodorum oldhamii*], T2744 *Foeniculum vulgare*, T2749 *Fomes officinalis*, T3120 *Hedychium spicatum*, T3203 *Hemsleya amabilis*, T3208 *Hemsleya macrosperma*, T3221 *Heracleum rapula*, T3254 *Hippophae rhamnoides*, T3256 *Hippophae rhamnoides* subsp. *sinensis*, T3258 *Hippophae rhamnoides* subsp. *yunnanensis*, T3398 *Ilex rotunda*, T3418 *Incarvillea arguta*, T3457 *Iris dichotoma*, T3461 *Iris japonica*, T3468 *Iris sanguinea*, T3548 *Ixeris sonchifolia*, T3614 *Kadsura heteroclita* [Syn. *Uvaria heteroclita*], T3619 *Kadsura peltigera* [Syn. *Kadsura longipedunculata*], T3840 *Limnophila rugosa*, T3876 *Litchi chinensis*, T3897 *Litsea verticillata*, T3925 *Loranthus parasiticus* [Syn.

*Loranthus chinensis*; *Taxillus chinensis*], T4188 *Mentha rotundifolia*, T4190 *Mentha spicata*, T4223 *Micromelum integerrimum*, T4343 *Myrica esculent*, T4386 *Nardostachys chinensis*, T4387 *Nardostachys jatamansi*, T4503 *Onychium lucidum*, T4506 *Ophioglossum vulgatum*, T4519 *Opuntia dillenii*, T4521 *Opuntia vulgaris*, T4527 *Orixa japonica*, T4605 *Panax japonicus* var. *major*, T4618 *Panicum miliaceum*, T4629 *Papaver nudicaule*, T4630 *Papaver nudicaule* ssp. *amurense*, T4631 *Papaver nudicaule* var. *chinense*, T4823 *Pholidota yunnanensis*, T4938 *Piper boehmeriaefolium*, T4948 *Piper hancei*, T5247 *Przewalskia tangutica*, T5250 *Psammosilene tunicoides*, T5414 *Ranunculus japonicus*, T5645 *Sageretia theezans* [Syn. *Sageretia thea*], T5720 *Sapindus mukorossi*, T5795 *Schisandra micrantha*, T5819 *Scopolia acutangula* [Syn. *Anisodus acutangulus*], T5939 *Shiraia bambusicola*, T5989 *Solanum aculeatissimum*, T6003 *Solanum khasianum*, T6014 *Solanum surattense*, T6015 *Solanum torvum*, T6017 *Solanum tuberosum*, T6029 *Sophora alopecuroides*, T6049 *Sophora viciifolia*, T6055 *Sorbus tianschanica*, T6118 *Stephania brachyandra*, T6121 *Stephania dicentrinifera*, T6122 *Stephania dielsiana*, T6128 *Stephania hernandifolia*, T6129 *Stephania japonica*, T6133 *Stephania sinica*, T6135 *Stephania succifera*, T6137 *Stephania viridiflavens*, T6177 *Strychnos ignatii*, T6339 *Tephrosia purpurea*, T6471 *Toddalia asiatica* [Syn. *Toddalia aculeata*; *Paullinia asiatica*], T6566 *Tupistra chinensis*, T6772 *Viscum angulatum*, T6787 *Vitex negundo*, T6884 *Zanthoxylum nitidum*.

**stomachache and abdominal distention** T0967 *Boeninghausenia sessilicarpa*.

**stomachache blood ejection** T6567 *Tupistra wattii* [Syn. *Campylandra wattii*].

**stomachache due to roundworm** T6864 *Zanthoxylum armatum*, T6887 *Zanthoxylum planispinum*.

**stomachache with acid regurgitation** T6789 *Vitex negundo*.

**stomachache with distention and oppression** T0354 *Alpinia chinensis*.

**stomatitis** T1655 *Conyza blinii*, T2340 *Elsholtzia bodinieri*, T2852 *Garcinia cowa*, T2989 *Glochidion sphaerogynum*, T3348 *Hypericum elodeoides*, T3368 *Hypericum wightianum*, T5587 *Rubus alceaefolius*, T5730 *Sarcandra glabra* [Syn. *Chloranthus glaber*], T6060 *Souliea vaginata*, T6278 *Tagetes erecta*, T6580 *Tylophora floribunda*.

**stone strangury** T0045 *Acanthopanax trifoliatum*, T0155 *Actinidia arguta*, T0158 *Actinidia chinensis*, T0297 *Alchornea trewioides*, T0834 *Averrhoa carambola*, T1007 *Brassica juncea*, T1251 *Cassytha filiformis*, T2134 *Desmodium styracifolium*, T2143 *Dianthus chinensis*, T2145 *Dianthus superbus*, T2147 *Dianthus versicolor*, T2962 *Ginkgo biloba*, T2973 *Glechoma longituba*, T2974 *Glechoma lungituba*, T3568 *Juglans regia*, T3935 *Luffa cylindrica*, T3990 *Lygodium japonicum*, T4840 *Phyllanthus niruri*, T5231 *Prunus persica*, T5354 *Pyrrosia davidii*, T5355 *Pyrrosia drakeana*, T5356 *Pyrrosia gralla*, T5357 *Pyrrosia lingua*, T5358 *Pyrrosia petiolosa*, T5360 *Pyrrosia sheareri*, T6095 *Stachytarpheta jamaicensis*.

**strangury** T0071 *Achyranthes aspera*, T0072 *Achyranthes aspera* var. *indica*, T0610 *Argemone mexicana*, T1143 *Calystegia hederacea*, T1197 *Cardiospermum halicacabum*, T1487 *Citrus junos*, T1869 *Cryptotaenia japonica*, T1984 *Cypripedium macranthum* [Syn. *Cypripedium tibeticum*], T2143 *Dianthus chinensis*, T2145 *Dianthus*

*superbus*, T2147 *Dianthus versicolor*, T2412 *Equisetum sylvaticum*, T2590 *Euphorbia hirta*, T2730 *Fimbristylis dichotoma*, T3200 *Hemidesmus indicus*, T3311 *Hydrocotyle sibthorpioides*, T3448 *Ipomoea cairica* [Syn. *Ipomoea palmata*], T3479 *Isodon amethystoides*, T3578 *Juncus effusus*, T3668 *Lagenaria siceraria* var. *depressa*, T3865 *Lippia nodiflora*, T4170 *Melilotus albus*, T4225 *Microsorium punctatum*, T4397 *Nelumbo nucifera*, T4482 *Oenanthe javanica*, T4542 *Orthosiphon wulfenioides* [Syn. *Coleus wulfenioides*], T4678 *Paulownia fortunei*, T4679 *Paulownia tomentosa*, T5124 *Polypodium niponicum*, T5171 *Porphyra tenera*, T5647 *Sagittaria sagittifolia*, T5651 *Salix babylonica*, T5863 *Selaginella moellendorffii*, T5870 *Selaginella uncinata*, T5943 *Sida cordifolia*, T6005 *Solanum lyratum*, T6752 *Vigna angularis* [Syn. *Dolichus angularis*; *Phaseolus angularis*], T6798 *Vitis vinifera*.

**strangury syndrome** T0001 *Abelmoschus manihot*, T0457 *Andrographis paniculata* [Syn. *Justicia paniculata*], T0895 *Benincasa hispida*, T1174 *Cannabis sativa*, T1402 *Chrysosplenium alternifolium*, T1561 *Clerodendron serratum*, T1569 *Clerodendrum serratum* var. *amplexifolium*, T1590 *Cocculus trilobus* [Syn. *Cocculus sarmentosus*], T3243 *Hibiscus rosa-sinensis*, T3769 *Lespedeza bicolor*, T4172 *Melilotus suaveolens*, T4564 *Oxalis corniculata* [Syn. *Oxalis repens*], T4855 *Physeter catodon*, T4979 *Pistacia chinensis*, T5288 *Pteris cretica* var. *nervosa* [Syn. *Pteris nervosa*], T5862 *Selaginella involvens*, T6046 *Sophora viciifolia*, T6047 *Sophora viciifolia*, T6356 *Tetrapanax papyriferus*, T6431 *Thesium chinense*, T6645 *Urena lobata*, T6673 *Vaccinium vitis-idaea*, T6912 *Zinnia elegans*.

**strangury with pain** T0266 *Ajuga macrocarpa*, T2194 *Dioscorea colletii*, T2197 *Dioscorea futschauensis*, T2210 *Dioscorea spongiosa*, T3932 *Ludwigia octovalvis*, T6357 *Tetrapanax papyriferus*.

**strangury with white turbidity** T2208 *Dioscorea septemloba*.

**strangury-turbidity** T0171 *Adiantum capillus-veneris*, T0273 *Akebia quinata*, T0277 *Akebia trifoliata*, T0279 *Akebia trifoliata* var. *australis*, T0379 *Alternanthera philoxeroides*, T0462 *Anemarrhena asphodeloides*, T0567 *Aralia armata*, T0571 *Aralia decaisneana*, T0608 *Arenaria kansuensis* [Syn. *Arenaria kumaonensis*], T0708 *Arthromeris mairei* [Syn. *Polypodium mairei*], T0924 *Bergenia purpurascens*, T1106 *Caesalpinia minax*, T1884 *Cudrania cochinchinensis*, T2649 *Evolvulus alsinoides*, T2830 *Galium aparine*, T3193 *Hemerocallis fulva*, T3195 *Hemerocallis lilio-asphodelus*, T3197 *Hemerocallis minor*, T3270 *Holboellia fargesii*, T3444 *Ipomoea aquatica* [Syn. *Convolvulus repens*; *Ipomoea reptans*], T3460 *Iris halophila*, T3464 *Iris lactea* var. *chinensis* [Syn. *Iris pallasii* var. *chinensis*], T4057 *Mahonia bealei*, T4068 *Mahonia japonica*, T4562 *Oxalis acetosella*, T4616 *Pandanus tectorius*, T5129 *Polyporus umbellatus*, T5161 *Populus tomentosa*, T5295 *Pteris multifida*, T5419 *Raphanus sativus*, T5605 *Rumex acetosa*, T5650 *Salix babylonica*, T5750 *Saururus chinensis*, T5976 *Smilax china* [Syn. *Smilax japonica*], T6264 *Syzygium buxifolium*, T6601 *Umbilicaria esculenta* [Syn. *Gyrophora esculenta*].

**strangury-turbidity and vaginal discharge** T0161 *Actinidia eriantha*, T1552 *Cleome viscosa*, T5002 *Plantago asiatica*, T5004 *Plantago depressa*, T5007 *Plantago major*, T6087 *Spiranthes sinensis*.

**stream toxin** T1595 *Codium fragile*.

**stubborn lichen with sore toxin** T5157 *Populus pseudo-simonii*.

**stupor due to phlegm reversal** T0142 *Acorus calamus*.

**sty** T3564 *Juglans mandshurica*.

**subcutaneous static blood** T0964 *Boenninghausenia albiflora*.

**sudden clouding collapse** T3868 *Liquidambar orientalis*.

**sudden pain in heart and abdomen** T4303 *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*, T6800 *Viverra zibetha*.

**sudden stroke and fulminant reversal** T6197 *Syrax benzoin*, T6204 *Syrax tonkinensis*.

**summer common cold** T0212 *Agastache rugosus*, T0678 *Artemisia japonica*, T0687 *Artemisia myriantha*, T2341 *Elsholtzia ciliata*.

**summer externally contracted wind-cold** T4304 *Mosla chinensis* [Syn. *Orthodon chinensis*].

**summer unacclimation in child** T4121 *Marsilea quadrifolia*.

**summerhea-damp and damage center** T1278 *Cedrela sinensis*.

**summerheat damage** T1941 *Cymbopogon distans*, T2554 *Eupatorium cannabinum*, T4101 *Mangifera indica*.

**summerheat stroke** T1573 *Clinopodium chinense*, T2341 *Elsholtzia ciliata*, T4209 *Michelia alba*, T4261 *Mollugo pentaphylla*, T4307 *Mosla scabra* [Syn. *Mosla punctata*], T4335 *Mussaenda pubescens*, T4470 *Ocimum basilicum*, T4526 *Origanum vulgare*, T5109 *Polygonum nodosum*, T5400 *Rabdosia stracheyi*, T6285 *Tamarindus indica*, T6416 *Thamnia vermicularis*, T6431 *Thesium chinense*, T6598 *Ulva conglobata*, T6788 *Vitex negundo*, T6889 *Zanthoxylum podocarpum*.

**summerheat stroke and anidrosis** T6367 *Teucrium quadrifarium*.

**summerheat stroke with abdominal pain** T5393 *Rabdosia longituba*.

**summerheat stroke with fever** T0687 *Artemisia myriantha*, T1784 *Cratoxylum cochinchinense*, T1785 *Cratoxylum prunifolium*.

**summerheat stroke with sand** T1137 *Caltha palustris*.

**summerheat stroke with vexation and thirst** T1490 *Citrus limon*, T1494 *Citrus limonia*, T4573 *Pachyrrhizus erosus*.

**summerheat stroke with vomiting and diarrhea** T1052 *Bufo bufo gargarizans*; *Bufo melanostictus*, T3885 *Litsea cubeba*.

**summerheat-damp** T0660 *Artemisia annua*, T0662 *Artemisia apiacea* [Syn. *Artemisia carvifolia*; *Artemisia caruifolia*].

**summerheat-damp and oppression in chest** T4172 *Melilotus suaveolens*, T4397 *Nelumbo nucifera*.

**summerheat-damp damage center** T6499 *Tribulus terrestris*.

**summerheat-damp diarrhea** T0631 *Aristolochia kaempferi*, T3398 *Ilex rotunda*, T4335 *Mussaenda pubescens*, T4398 *Nelumbo nucifera*, T4399 *Nelumbo nucifera*, T5002 *Plantago asiatica*, T5004 *Plantago depressa*, T5007 *Plantago major*.

**summerheat-damp exterior syndrome** T2558 *Eupatorium formosanum*, T2559 *Eupatorium fortunei*.

**summerheat-damp lassitude** T5059 *Pogostemon cablin* [Syn. *Mentha cablin*].

**summerheat-damp vomiting and diarrhea** T2246 *Dolichos lablab*, T3645 *Kummerowia striata*, T3886 *Litsea euosma*.

**summerheat-heat** T0660 *Artemisia annua*, T0662 *Artemisia apiacea* [Syn. *Artemisia carvifolia*; *Artemisia caruifolia*].

**summerheat-heat and cholera** T5227 *Prunus mume*.

**summerheat-heat and oppression in chest** T4170 *Melilotus albus*.

- summerheat-heat and thirst** T1179 *Capparis masaikai*, T2989 *Glochidion sphaerogynum*, T4602 *Panax ginseng* [Syn. *Panax schinseng*].
- summerheat-heat and vexation and thirst** T1544 *Cleistocalyx operculatus*, T3829 *Ligustrum robustum*.
- summerheat-heat and vomiting diarrhea** T1238 *Cassia mimosoides*.
- summerheat-heat diarrhea** T1311 *Centella asiatica*, T5818 *Scoparia dulcis*.
- summerheat-heat thirst** T4979 *Pistacia chinensis*.
- summerheat-heat vexation and thirst** T1366 *Chimonanthus fragrans* [Syn. *Chimonanthus praecox*], T1464 *Citrullus vulgaris* [Syn. *Citrullus lanatus*], T4263 *Momordica charantia*, T4398 *Nelumbo nucifera*, T4785 *Phaseolus vulgaris*, T6492 *Trapa bispinosa*, T6803 *Volvariella volvacea*.
- suppurative hematochezia** T4789 *Phellodendron amurense*, T4790 *Phellodendron amurense* var. *wilsonii*, T4791 *Phellodendron chinense*, T4792 *Phellodendron chinense* var. *glabriusculum*.
- suppurative infection** T0019 *Acacia catechu*, T0634 *Aristolochia mollissima*, T4882 *Picrasma quassoides* [Syn. *Picrasma ailanthoides*].
- suppurative nest sore** T6031 *Sophora flavescens* [Syn. *Sophora angustifolia*].
- suppurative osteomyelitis** T6217 *Swertia davidii*.
- suppurative sore** T5143 *Pongamia pinnata*.
- suppurative tympanitis** T4080 *Mallotus apelta*.
- sweat macule** T1878 *Cucumis sativus*.
- sweet-greasy in mouth** T2558 *Eupatorium forosanum*, T2559 *Eupatorium fortunei*.
- swelling and pain of sore and welling abscess** T2974 *Glechoma lungituba*, T4279 *Morina chinensis*.
- swelling and pus of sores** T1656 *Conyza bonariensis* [Syn. *Erigeron bonariensis*; *Erigeron linifolius*; *Erigeron crispus*], T4335 *Mussaenda pubescens*, T6820 *Wikstroemia indica*.
- swelling and toxin of sore and welling abscess** T4814 *Phlomis umbrosa*, T6219 *Swertia erythrosticta*, T6374 *Thalictrum atriplex*.
- swelling hemorrhoids** T1007 *Brassica juncea*, T3624 *Kalopanax pictum*, T3625 *Kalopanax septemlobus*, T6125 *Stephania elegans*.
- swelling in ear** T2908 *Gentiana cephalantha*, T2921 *Gentiana manshurica*, T2928 *Gentiana rigescens*, T2930 *Gentiana scabra*, T2938 *Gentiana triflora*.
- swelling in joints** T5964 *Sinomenium acutum*.
- swelling of clove** T1660 *Coprinus atramentarius*, T2627 *Euphoria longan* [Syn. *Dimocarpus longan*], T3203 *Hemsleya amabilis*, T3208 *Hemsleya macrosperma*, T3876 *Litchi chinensis*, T4031 *Maesa perlaris*, T5579 *Rubia cordifolia*.
- swelling of skin** T3443 *Iphigenia indica*.
- swelling of sore welling abscess and boil** T0602 *Ardisia quinquegona*, T4203 *Mesua ferrea*.
- swelling of sores** T0476 *Angelica anomala*, T0866 *Baphicacanthus cusia* [Syn. *Strobilanthes cusia*], T0894 *Benincasa hispida*, T1162 *Camptotheca acuminata*, T2336 *Elephas maximus*, T2387 *Epilobium hirsutum*, T2533 *Eugenia jambolana* [Syn. *Syzygium cumini*; *Myrtus cumini*], T2536 *Euonymus alatus*, T2586 *Euphorbia esula* var. *cyparissoides*, T2631 *Eurya japonica*, T2955 *Geum japonicum*, T3460 *Iris halophila*, T3464 *Iris lactea* var. *chinensis* [Syn. *Iris pallasii* var. *chinensis*], T3507 *Isodon lophanthoides* [Syn. *Rabdosia lophanthoides*; *Hyssopus lophanthoides*; *Plectranthus striatus*; *Isodon striatus*], T4124 *Matricaria chamomilla* [Syn. *Matricaria recutita*], T4385 *Narcissus tazetta* var. *chinensis*, T4813 *Phlomis tuberosa*, T5109 *Polygonum nodosum*, T5110 *Polygonum orientale*, T5397 *Rabdosia serra*, T5661 *Salvia bowleyana*, T5672 *Salvia flava*, T5701 *Salvia yunnanensis*, T5781 *Schefflera arboricola*, T5934 *Seseli meirei*, T5937 *Seseli yunnanense*, T6062 *Sparganium stoloniferum*, T6155 *Strophanthus divaricatus*, T6560 *Tulipa edulis*, T6722 *Veronica anagallis-aquatica*.
- swelling of sores and boils** T0642 *Aristolochia tubiflora*, T1152 *Camellia sinensis* [Syn. *Thea sinensis*], T1290 *Celastrus orbiculatus* [Syn. *Celastrus articulatus*], T3126 *Hedyotis corymbosa* [Syn. *Oldenlandia corymbosa*], T3549 *Ixora chinensis*, T4485 *Oldenlandia diffusa* [Syn. *Hedyotis diffusa*], T6252 *Symplocos chinensis*.
- swelling of sores and damp toxin** T3201 *Hemiphragma heterophyllum*.
- swelling of welling abscess** T3624 *Kalopanax pictum*, T3625 *Kalopanax septemlobus*, T5642 *Saccharum sinensis*, T6764 *Vinegar*.
- swelling of welling abscess and boil** T0631 *Aristolochia kaempferi*.
- swelling pain due to external injury** T1108 *Caesalpinia sappan*, T1550 *Cleome gynandra* [Syn. *Gynandropsis gynandra*], T1853 *Croton oblongifolius* [Syn. *Croton laevigatus*], T4678 *Paulownia fortunei*, T4679 *Paulownia tomentosa*.
- swelling pain due to stasis accumulation** T2328 *Elaeis guineensis*.
- swelling pain from fracture** T0886 *Beaumontia grandiflora*, T1285 *Celastrus angulatus*, T1715 *Corydalis decumbens* [Syn. *Corydalis amabilis*], T3155 *Helianthus tuberosus*, T5704 *Sambucus nigra*, T5707 *Sambucus williamsii*.
- swelling pain from hemorrhoids** T0624 *Aristolochia contorta*, T0626 *Aristolochia debilis* [Syn. *Aristolochia longa*], T0630 *Aristolochia indica*, T0633 *Aristolochia maxima*, T0640 *Aristolochia triangularis*, T0852 *Bacopa monniera*, T0859 *Balanophora involucrata*, T4182 *Menispermum dauricum*, T4183 *Menispermum dauricum*, T5871 *Selenarctos thibetanus*; *Ursus arctos*.
- swelling pain in joints** T0130 *Aconitum sinomontanum*, T0659 *Artemisia absinthium*, T2546 *Euonymus sacrosancta*, T2624 *Euphorbia tirucalli*, T3679 *Lamiophlomis rotata* [Syn. *Phlomis rotata*], T4143 *Meconopsis horridula*, T4252 *Mirabilis jalapa*, T4286 *Morinda umbellata*, T4800 *Phlegmariurus fordii*, T5958 *Sinapis alba* [Syn. *Brassica alba*; *Brassica hirta*].
- swelling pain in knees and feet** T4789 *Phellodendron amurense*, T4790 *Phellodendron amurense* var. *wilsonii*, T4791 *Phellodendron chinense*, T4792 *Phellodendron chinense* var. *glabriusculum*.
- swelling pain in perineum** T2243 *Dodonaea viscosa*.
- swelling pain in throat** T0011 *Abrus precatorius*, T0073 *Achyranthes bidentata*, T0195 *Aeginetia indica*, T0197 *Aegle marmelos*, T0229 *Ageratum conyzoides*, T0262 *Ajuga ciliata*, T0263 *Ajuga decumbens*, T0264 *Ajuga forrestii*, T0378 *Alstonia yunnanensis*, T0426 *Ampelopsis grossedentata* [Syn. *Ampelopsis cantoniensis* var. *grossedentata*], T0457 *Andrographis paniculata* [Syn. *Justicia paniculata*], T0471 *Anemone rivularis*, T0567 *Aralia armata*, T0571 *Aralia decaisneana*, T0584 *Arctium lappa*, T0586 *Arctium lappa*, T0594 *Ardisia crenata*, T0595 *Ardisia crispa*, T0602 *Ardisia quinquegona*, T0641 *Aristolochia*

- tuberosa*, T0643 *Aristolochia versicolor*, T0736 *Asclepias curassavica*, T0746 *Asparagus cochinchinensis* [Syn. *Asparagus lucidus*], T0867 *Baphicacanthus cusia* [Syn. *Strobilanthes cusia*], T0892 *Belamcanda chinensis*, T0906 *Berberis julianae*, T0916 *Berberis thunbergii*, T0938 *Bidens bipinnata*, T0941 *Bidens tripartita*, T0959 *Blumea lacera*, T0975 *Bombyx mori*, T0977 *Bombyx mori*, T0987 *Bos taurus domesticus*; *Bubalus bubalis*, T1006 *Brassica chinensis*, T1043 *Bryophyllum pinnatum*, T1045 *Bubalus bubalis*, T1052 *Bufo bufo gargarizans*; *Bufo melanostictus*, T1161 *Campsis grandiflora*, T1165 *Canarium album*, T1361 *Chenopodium ambrosioides*, T1366 *Chimonanthus fragrans* [Syn. *Chimonanthus praecox*], T1384 *Chondrus ocellatus*, T1423 *Cimicifuga nanchuanensis*, T1425 *Cimicifuga simplex*, T1554 *Clerodendron cyrtophyllum*, T1561 *Clerodendron serratum*, T1569 *Clerodendrum serratum* var. *amplexifolium*, T1589 *Cocculus trilobus* [Syn. *Cocculus sarmentosus*], T1633 *Commelina communis*, T1672 *Corallodiscus flabellatus* [Syn. *Didissandra flabellat*], T1697 *Cornus controversa* [Syn. *Bothrocaryum controversum*], T1810 *Croomia japonica*, T1933 *Cyclea sutchuenensis*, T1950 *Cynanchum ascyrifolium*, T1951 *Cynanchum atratum*, T1962 *Cynanchum versicolor*, T2028 *Daphne odora*, T2131 *Desmodium pulchellum* [Syn. *Phyllodium pulchellum*], T2157 *Dichotomanthes tristaniae-carpa*, T2233 *Diploclisia glaucescens*, T2257 *Dracocephalum moldavicum*, T2258 *Dracocephalum rupestre*, T2267 *Drosera peltata* var. *lunata*, T2274 *Dryobalanops aromatica*, T2298 *Dysosma difformis*, T2302 *Dysosma pleiantha* [Syn. *Podophyllum pleianthum*], T2304 *Dysosma veitchii*, T2305 *Dysosma versipellis* [Syn. *Podophyllum versipelle*], T2442 *Ervatamia divaricata*, T2444 *Ervatamia heyneana*, T2445 *Ervatamia officinalis*, T2517 *Eucalyptus robusta*, T2529 *Euchresta strigillosa*, T2628 *Euphrasia officinalis*, T2641 *Evodia lepta* [Syn. *Ilex lepta*], T2657 *Fagopyrum cymosum* [Syn. *Polygonum cymosum*], T2691 *Farfugium japonicum*, T2717 *Ficus carica*, T2723 *Ficus pumila*, T2737 *Flemingia philippinensis* [Syn. *Moghania philippinensis*], T2749 *Fomes officinalis*, T2952 *Gerbera piloselloides*, T3080 *Gymnema sylvestre*, T3113 *Hedera nepalensis* var. *sinensis*, T3115 *Hedera rhombea*, T3122 *Hedyotis acutangula*, T3123 *Hedyotis auricularia*, T3126 *Hedyotis corymbosa* [Syn. *Oldenlandia corymbosa*], T3203 *Hemsleya amabilis*, T3208 *Hemsleya macrosperma*, T3308 *Hydrangea umbellata*, T3332 *Hypocoum erectum*, T3388 *Ilex chinensis* [Syn. *Ilex purpurea*], T3398 *Ilex rotunda*, T3457 *Iris dichotoma*, T3461 *Iris japonica*, T3471 *Iris tectorum*, T3479 *Isodon amethystoides*, T3528 *Isodon ternifolia*, T3529 *Isodon ternifolius*, T3643 *Kopsia officinalis*, T3659 *Lactuca indica*, T3736 *Lemmaphyllum microphyllum*, T3764 *Lepisorus thunbergianus*, T3779 *Leucas aspera*, T3852 *Lindera megaphylla*, T3928 *Lotus corniculatus*, T3932 *Ludwigia octovalvis*, T3984 *Lycoris chinensis*, T3986 *Lycoris radiata* [Syn. *Amaryllis radiata*], T3988 *Lycoris squamigera*, T3990 *Lygodium japonicum*, T3996 *Lysimachia candida*, T4000 *Lysimachia congestiflora*, T4002 *Lysimachia foenum-graecum*, T4091 *Malva sylvestris*, T4120 *Marsdenia tenacissima*, T4121 *Marsilea quadrifolia*, T4124 *Matricaria chamomilla* [Syn. *Matricaria recutita*], T4182 *Menispermum dauricum*, T4183 *Menispermum dauricum*, T4184 *Mentha haplocalyx* [Syn. *Mentha canadaensis*; *Mentha arvensis* var. *haplocalyx*; *Mentha arvensis*], T4210 *Michelia champaca*, T4260 *Moghania philippinensis*, T4335 *Mussaenda pubescens*, T4485 *Oldenlandia diffusa* [Syn. *Hedyotis diffusa*], T4538 *Oroxylum indicum*, T4564 *Oxalis corniculata* [Syn. *Oxalis repens*], T4568 *Oxytropis myriophylla*, T4605 *Panax japonicus* var. *major*, T4710 *Pericampylus glaucus*, T4740 *Petasites japonicus*, T4798 *Philonotis fontana*, T4845 *Physalis alkekengi*, T4848 *Physalis angulata*, T4854 *Physalis pubescens*, T4859 *Physochlaina physaloides*, T4884 *Picria felterrae*, T4979 *Pistacia chinensis*, T5011 *Platycodon grandiflorum*, T5072 *Polygala caudata*, T5100 *Polygonum chinense*, T5120 *Polygonum tinctorium*, T5171 *Porphyra tenera*, T5172 *Portulaca grandiflora*, T5184 *Potentilla kleiniana*, T5209 *Pronephrum simplex* [Syn. *Meniscium simplex*], T5339 *Pycnoporus sanguineus*, T5396 *Rabdosia rubescens*, T5423 *Rauvolfia verticillata*, T5424 *Rauvolfia verticillata*, T5425 *Rauvolfia verticillata* f. *rubrocarpa*, T5426 *Rauvolfia verticillata* var. *hainanensis*, T5427 *Rauvolfia vomitoria*, T5435 *Rauvolfia latifrons*, T5441 *Rauvolfia perakensis*, T5447 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], T5449 *Reineckea carnea*, T5468 *Rheum emodi* [Syn. *Rheum australe*], T5557 *Rohdea japonica* [Syn. *Orontium japonicum*], T5560 *Rorippa montana* [Syn. *Rorippa dubia*; *Sisymbrium dubium*], T5576 *Rostellularia procumbens* [Syn. *Justicia procumbens*], T5592 *Rubus hirsutus*, T5606 *Rumex acetosa*, T5685 *Salvia plebeia*, T5687 *Salvia prionitis*, T5804 *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*], T5826 *Scrophularia buergeriana*, T5828 *Scrophularia ningpoensis*, T5836 *Scutellaria discolor*, T5856 *Sedum lineare* [Syn. *Sedum obtuso-lineare*], T5857 *Sedum sarmentosum*, T5861 *Selaginella doederleini*, T5953 *Silene firma*, T5954 *Silene fortunei*, T6023 *Solidago virgaurea*, T6024 *Solidago virgaurea* var. *leiocarpa* [Syn. *Solidago decurrens*], T6043 *Sophora subprostrata* [Syn. *Sophora tonkinensis*], T6046 *Sophora viciifolia*, T6047 *Sophora viciifolia*, T6084 *Spiraea prunifolia*, T6086 *Spiraea thunbergii*, T6087 *Spiranthes sinensis*, T6092 *Stachys palustris*, T6116 *Stenoloma chusanum*, T6119 *Stephania cepharantha*, T6128 *Stephania hernandifolia*, T6129 *Stephania japonica*, T6183 *Strychnos nitida*, T6217 *Swertia davidii*, T6234 *Swertia punicea*, T6275 *Tacca chantrieri* [Syn. *Tacca minor*; *Tacca esquirolii*], T6277 *Tadehagi triquetrum*, T6463 *Tinospora capillipes*, T6467 *Tinospora sagittata*, T6491 *Trametes cinnabarina* [Syn. *Polyporus cinnabarinus*; *Boletus cinnabarinus*], T6552 *Trollius chinensis* [Syn. *Trollius asiaticus* var. *chinensis*], T6553 *Trollius ledebourii*, T6560 *Tulipa edulis*, T6566 *Tupistra chinensis*, T6582 *Tylophora ovata*, T6655 *Ustilaginoidea virens*, T6866 *Zanthoxylum avicennae*.
- swelling pain of scrotum** T5548 *Ricinus communis*.
- swelling pain of sore and boil** T1657 *Conyza canadensis* [Syn. *Erigeron canadensis*], T1727 *Corydalis mucronifera*, T3248 *Hibiscus tiliaceus*, T3659 *Lactuca indica*, T4956 *Piper mullesua*, T6488 *Trachyspermum ammi*.
- swelling pain of sores** T1359 *Chenopodium album*, T4526 *Origanum vulgare*, T5106 *Polygonum lapathifolium*, T6231 *Swertia pseudochinensis*.
- swelling pain of welling abscess and flat abscess** T6184 *Strychnos nux-vomica*, T6193 *Strychnos wallichiana*.
- swelling pain of welling abscess and sore** T0314 *Allium fistulosum*,



T0324 *Allium victorialis*, T0334 *Aloe arborescens* var. *natalensis*, T0470 *Anemone raddeana*, T2752 *Fordia cauliflora*, T2973 *Glechoma longituba*, T4109 *Marchantia polymorpha*, T4605 *Panax japonicus* var. *major*, T5712 *Sanguisorba officinalis*, T5813 *Scilla scilloides*, T5871 *Selenarctos tibetanus*; *Ursus arctos*.

**swelling toxin malign sore** T3555 *Jasminum nudiflorum*.

**swelling toxin of clove sore** T0388 *Amaranthus lividus*, T0938 *Bidens bipinnata*, T1210 *Carpesium abrotanoides*, T1395 *Chrysanthemum morifolium* [Syn. *Dendranthema morifolium*], T1547 *Clematis terniflora* [Syn. *Clematis maximowicziana*], T1573 *Clinopodium chinense*, T1819 *Crotalaria ferruginea*, T2538 *Euonymus bungeanus*, T3243 *Hibiscus rosa-sinensis*, T3932 *Ludwigia octovalvis*, T5267 *Psidium guajava*, T5295 *Pteris multifida*, T6301 *Taraxacum mongolicum*, T6552 *Trollius chinensis* [Syn. *Trollius asiaticus* var. *chinensis*], T6553 *Trollius ledebourii*, T6814 *Wedelia chinensis* [Syn. *Solidago chinensis*; *Wedelia calendulacea*].

**swelling toxin of clove welling abscess** T1311 *Centella asiatica*.

**swelling toxin of flat abscess** T0077 *Aconitum balfourii*, T0084 *Aconitum carmichaeli*, T0105 *Aconitum karakolicum*, T0108 *Aconitum kusnezoffii*, T5639 *Sabina chinensis*, T5958 *Sinapis alba* [Syn. *Brassica alba*; *Brassica hirta*].

**swelling toxin of incised wound** T5793 *Schisandra henryi*.

**swelling toxin of limbs** T2650 *Excoecaria agallocha*.

**swelling toxin of sore and boil** T0267 *Ajuga nipponensis*, T1190 *Caragana jubata*, T2033 *Daphniphyllum macropodum*, T2941 *Gentianopsis paludosa*, T3187 *Helleborus tibetanus*, T3308 *Hydrangea umbellata*, T3349 *Hypericum erectum*, T3479 *Isodon amethystoides*, T3547 *Ixeris chinensis*, T4261 *Mollugo pentaphylla*, T4831 *Phtheirospermum japonicum* [Syn. *Gerardia japonica*], T5444 *Reboulia hemisphaerica*, T6025 *Sonchus arvensis*, T6075 *Spilanthes acmella*.

**swelling toxin of sore and lichen** T6069 *Speranskia tuberculata*.

**swelling toxin of sore and scab** T3649 *Laccifer lacca*.

**swelling toxin of sore and welling abscess** T0015 *Abutilon indicum*, T0427 *Ampelopsis japonica* [Syn. *Paullinia japonica*], T0721 *Arundina chinensis*, T1950 *Cynanchum ascyrifolium*, T1951 *Cynanchum atratum*, T1952 *Cynanchum auriculatum*, T1953 *Cynanchum bungei*, T1962 *Cynanchum versicolor*, T2732 *Firmiana simplex*, T2826 *Galeola faberi*, T2839 *Gallus gallus domesticus*, T2952 *Gerbera piloselloides*, T2998 *Glycine max*, T3475 *Isatis indigotica*, T3670 *Lagerstroemia indica*, T3913 *Lonicera japonica*, T3988 *Lycoris squamigera*, T3989 *Lygodium flexuosum* [Syn. *Lygodium pinnatifidum*; *Ophioglossum flexuosum*], T4263 *Momordica charantia*, T4384 *Narcissus tazetta* var. *chinensis*, T4859 *Physochlaina physaloides*, T5010 *Platycarya strobilacea*, T5176 *Potamogeton natans*, T5181 *Potentilla chinensis*, T5409 *Rana temporaria chensinensis*; *Rana amurensis*, T5569 *Rosa multiflora*, T5654 *Salix purpurea*, T5821 *Scopolia japonica*, T6060 *Souliea vaginata*, T6131 *Stephania longa*, T6582 *Tylophora ovata*.

**swelling toxin of welling abscess and boil** T0318 *Allium sativum*, T2206 *Dioscorea parviflora*, T2691 *Farfugium japonicum*, T2950 *Gerbera anandria* [Syn. *Leibnitzia anandria*], T3123 *Hedyotis auricularia*, T3356 *Hypericum japonicum*, T3361 *Hypericum perforatum*, T5415

*Ranunculus sceleratus*, T5907 *Senecio scandens* [Syn. *Senecio chinensis*], T6118 *Stephania brachyandra*.

**swelling toxin of welling abscess and flat abscess** T0310 *Allium ascalonicum*, T0471 *Anemone rivularis*, T0502 *Anisodus tanguticus* [Syn. *Scopolia tangutica*], T0827 *Aucuba chinensis* ssp. *omeiensis*, T0994 *Boswellia carterii*, T1118 *Callicarpa formosana*, T1119 *Callicarpa japonica*, T1278 *Cedrela sinensis*, T1289 *Celastrus orbiculatus* [Syn. *Celastrus articulatus*], T1451 *Cirsium setosum* [Syn. *Cerratula setosa*; *Cirsium segetum*; *Cephalanoplos segetum*], T1554 *Clerodendron cyrtophyllum*, T1561 *Clerodendron serratum*, T1569 *Clerodendrum serratum* var. *amplexifolium*, T1932 *Cyclea racemosa*, T2200 *Dioscorea hispida*, T2857 *Garcinia hanburyi*, T2866 *Garcinia morella*, T2979 *Gleditsia sinensis* [Syn. *Gleditsia horrida*], T3628 *Kerria japonica*, T3865 *Lippia nodiflora*, T4514 *Ophiorrhiza pumila*, T4904 *Pinellia ternata*, T5517 *Rhododendron molle*, T5550 *Ricinus communis*, T5607 *Rumex crispus*, T6133 *Stephania sinica*, T6166 *Strychnos angustiflora*.

**swelling toxin of welling abscess and sore** T0060 *Achillea alpina* [Syn. *Achillea sibirica*], T0065 *Achillea millefolium*, T0069 *Achillea wilsoniana*, T0106 *Aconitum kirinense*, T0135 *Aconitum sungpanense*, T0154 *Acroptilon repens*, T0157 *Actinidia callosa* var. *henryi*, T0180 *Adina pilulifera* [Syn. *Cephalanthus pilulifera*], T0190 *Adonis sutchuenensis*, T0229 *Ageratum conyzoides*, T0249 *Agrimonia pilosa* var. *japonica*, T0322 *Allium tuberosum*, T0371 *Alstonia mairei*, T0378 *Alstonia yunnanensis*, T0503 *Anisomeles indica* [Syn. *Epimeredi indica*], T0535 *Antidesma buniis*, T0601 *Ardisia pusilla*, T0661 *Artemisia anomala*, T0736 *Asclepias curassavica*, T0931 *Betula ermanii*, T0950 *Blatta orientalis*, T0955 *Bletilla striata*, T0959 *Blumea lacera*, T0977 *Bombyx mori*, T1001 *Brachystemma calycinum*, T1044 *Bryum argenteum*, T1084 *Buthus martensi*, T1172 *Canna edulis*, T1241 *Cassia occidentalis*, T1271 *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochera rosea*], T1419 *Cimicifuga dahurica*, T1420 *Cimicifuga foetida*, T1421 *Cimicifuga heracleifolia*, T1449 *Cirsium japonicum*, T1644 *Conocephalum conicum*, T1745 *Corydalis suaveolens* [Syn. *Corydalis sheareri*], T1813 *Crotalaria albida*, T2191 *Dioscorea bulbifera*, T2435 *Eriocheir sinensis*, T2510 *Eucalyptus globulus*, T2601 *Euphorbia milii*, T2723 *Ficus pumila*, T3000 *Glycine max*, T3011 *Glycyrrhiza aspera*, T3013 *Glycyrrhiza glabra*, T3015 *Glycyrrhiza inflata*, T3016 *Glycyrrhiza kansuensis*, T3021 *Glycyrrhiza squamulosa*, T3022 *Glycyrrhiza uralensis*, T3023 *Glycyrrhiza yunnanensis*, T3242 *Hibiscus rosa-sinensis*, T3311 *Hydrocotyle sibthorpioides*, T3329 *Hyoscyamus niger*, T3567 *Juglans regia*, T3632 *Knoxia valerianoides*, T3673 *Lagerstroemia speciosa* [Syn. *Munchausia speciosa*; *Lagerstroemia flos-reginae*], T3736 *Lemnaphyllum microphyllum*, T3770 *Lespedeza cuneata*, T3830 *Ligustrum sinense*, T3983 *Lycoris aurea*, T3996 *Lysimachia candida*, T4178 *Melodinus hemsleyanus*, T4208 *Metasequoia glyptostroboides*, T4252 *Mirabilis jalapa*, T4520 *Opuntia ficus-indica*, T4552 *Osmunda japonica*, T4568 *Oxytropis myriophylla*, T4582 *Paeonia delavayi*, T4585 *Paeonia moutan* [Syn. *Paeonia suffruticosa*], T4648 *Paris polyphylla*, T4649 *Paris polyphylla* var. *chinensis*, T4650 *Paris polyphylla* var. *pseudothibetica*, T4651 *Paris polyphylla* var. *stenophylla*, T4652 *Paris polyphylla* var. *yunnanensis*, T4705 *Peperomia pellucida*, T4821 *Pholidota articulata*,

- T4823 *Pholidota yunnanensis*, T4861 *Phytolacca americana* [Syn. *Phytolacca decandra*], T4864 *Phytolacca esculenta* [Syn. *Phytolacca acinosa*], T5002 *Plantago asiatica*, T5004 *Plantago depressa*, T5007 *Plantago major*, T5028 *Plumbago indica*, T5061 *Polianthes tuberosa*, T5087 *Polygala telephioides*, T5101 *Polygonum cuspidatum*, T5182 *Potentilla discolor*, T5391 *Rabdosia ericalyx*, T5468 *Rheum emodi* [Syn. *Rheum australe*], T5611 *Rumex japonicus*, T5612 *Rumex nepalensis*, T5613 *Rumex obtusifolius*, T5614 *Rumex patientia*, T5680 *Salvia miltiorrhiza*, T5681 *Salvia miltiorrhiza* f. *alba*, T5685 *Salvia plebeia*, T5688 *Salvia przewalskii*, T5797 *Schisandra propinqua*, T5798 *Schisandra propinqua* var. *intermedia*, T5833 *Scutellaria amoena*, T5834 *Scutellaria baicalensis*, T5839 *Scutellaria hypericifolia*, T5841 *Scutellaria likiangensis*, T5843 *Scutellaria rehderiana*, T5845 *Scutellaria viscidula*, T5943 *Sida cordifolia*, T5950 *Siegesbeckia orientalis*, T5951 *Siegesbeckia orientalis* var. *glabrescens* [Syn. *Siegesbeckia glabrescens*], T5952 *Siegesbeckia orientalis* var. *pubescens* [Syn. *Siegesbeckia pubescens*], T5976 *Smilax china* [Syn. *Smilax japonica*], T5978 *Smilax glauco-china*, T6116 *Stenoloma chusanum*, T6120 *Stephania delavayi* [Syn. *Stephania epigaea*], T6183 *Strychnos nitida*, T6278 *Tagetes erecta*, T6414 *Thalictrum thunbergii*, T6436 *Thlaspi arvense*, T6510 *Trichosanthes kirilowii*, T6511 *Trichosanthes kirilowii*, T6513 *Trichosanthes rosthornii* [Syn. *Trichosanthes uniflora*], T6691 *Veratrum baillonii*.
- swelling toxin sores** T1371 *Chloranthus japonicus*, T6752 *Vigna angularis* [Syn. *Dolichus angularis*; *Phaseolus angularis*].
- swelling welling abscess and sore and boil** T1784 *Cratogeomys cochinchinense*, T1971 *Cynoglossum zeylanicum* [Syn. *Anchusa zeylanica*; *Cynoglossum furcatum*; *Cynoglossum formosanum*], T3548 *Ixeris sonchifolia*, T4730 *Peristrophe roxburghiana*, T4798 *Philonotis fontana*, T6403 *Thalictrum petaloideum*.
- swift digestion with rapid hungering** T1662 *Coptis chinensis*, T1663 *Coptis chinensis* var. *brevispala*, T1664 *Coptis deltoidea*, T1669 *Coptis omeiensis*, T1670 *Coptis teetoides* [Syn. *Coptis teeta*].
- swollen and painful eyes** T2274 *Dryobalanops aromatica*.
- swollen boil** T0933 *Betula platyphylla*, T0935 *Betula platyphylla* var. *japonica*, T1101 *Caesalpinia decapetala*, T1417 *Cimicifuga acerina*, T1555 *Clerodendron fortunatum*, T2290 *Duchesnea indica*, T2325 *Eichhornia crassipes*, T2830 *Galium aparine*, T4884 *Picria felterrae*, T5120 *Polygonum tinctorium*, T5592 *Rubus hirsutus*, T5595 *Rubus parviflorus*, T6330 *Tephrosia kirilowii* [Syn. *Senecio integrifolius* var. *fauriei*], T6431 *Thesium chinense*, T6912 *Zinnia elegans*.
- swollen boil and malign sore** T3737 *Lemnaphyllum microphyllum* var. *obovatum*.
- swollen boil with pus and ulcer** T4391 *Nauclea officinalis*.
- swollen hard breast** T2028 *Daphne odora*.
- swollen liver and spleen due to bilharziosis** T1162 *Camptotheca acuminata*, T5189 *Pothos chinensis*.
- swollen pain due to bleeding** T1215 *Carthamus tinctorius*.
- swollen pain in red eyes due to liver heat** T5871 *Selenarctos thibetanus*; *Ursus arctos*.
- swollen pain of sore toxin** T1728 *Corydalis ochotensis*.
- swollen sore of welling abscess and boil** T0264 *Ajuga forrestii*, T0426 *Ampelopsis grossedentata* [Syn. *Ampelopsis cantoniensis* var. *grossedentata*], T2262 *Dregea sinensis*, T4219 *Microlepis marginata*.
- swollen throat** T1311 *Centella asiatica*, T5472 *Rheum officinale*, T5474 *Rheum palmatum*, T5481 *Rheum tanguticum*.
- swollen welling abscess** T0175 *Adiantum pedatum*, T0379 *Alternanthera philoxeroides*, T0468 *Anemone hupehensis*, T0516 *Anser cygnoides domestica*, T0544 *Apium graveolens*, T0617 *Arisaema amurense*, T0618 *Arisaema consanguineum*, T0620 *Arisaema heterophyllum*, T0641 *Aristolochia tuberosa*, T0952 *Blechnum orientale*, T0976 *Bombyx mori*, T0984 *Bos taurus domesticus*; *Bubalus bubalis*, T1005 *Brassica campestris* [Syn. *Brassica campestris* var. *oleifera*], T1046 *Buddleja davidii*, T1106 *Caesalpinia minax*, T1275 *Cayratia japonica*, T1387 *Chrysanthemum boreale*, T1392 *Chrysanthemum indicum*, T1394 *Chrysanthemum lavandulifolium*, T1756 *Costus speciosus*, T1866 *Cryptolepis sinensis*, T1880 *Cucurbita moschata*, T1903 *Curcuma aromatica*, T1905 *Curcuma longa*, T2203 *Dioscorea nipponica*, T2204 *Dioscorea nipponica* ssp. *rosthornii*, T2231 *Diphylleia grayi*, T2232 *Diphylleia sinensis*, T2296 *Duranta repens*, T2298 *Dysosma difformis*, T2302 *Dysosma pleiantha* [Syn. *Podophyllum pleianthum*], T2304 *Dysosma veitchii*, T2305 *Dysosma versipellis* [Syn. *Podophyllum versipelle*], T2357 *Emilia sonchifolia*, T2365 *Enteromorpha clathrata*, T2517 *Eucalyptus robusta*, T2563 *Eupatorium japonicum*, T2591 *Euphorbia humifusa*, T2608 *Euphorbia pekinensis*, T2628 *Euphrasia officinalis*, T2659 *Fagopyrum esculentum*, T2717 *Ficus carica*, T2746 *Foeniculum vulgare*, T2787 *Fritillaria hupehensis*, T2790 *Fritillaria pallidiflora*, T2800 *Fritillaria walujewii*, T2946 *Geranium robertianum*, T2978 *Gleditsia sinensis* [Syn. *Gleditsia horrida*], T3163 *Helicteres angustifolia*, T3174 *Heliotropium indicum*, T3241 *Hibiscus mutabilis*, T3244 *Hibiscus syriacus*, T3410 *Impatiens balsamina*, T3418 *Incarvillea arguta*, T3423 *Indigofera tinctoria*, T3444 *Ipomoea aquatica* [Syn. *Convolvulus repens*; *Ipomoea reptans*], T3476 *Isatis indigotica*, T3668 *Lagenaria siceraria* var. *depressa*, T3687 *Lantana camara*, T3778 *Leucaena glauca* [Syn. *Leucaena leucocephala*], T3887 *Litsea glutinosa*, T3998 *Lysimachia christinae*, T4050 *Magnolia sieboldii*, T4106 *Manis pentadactyla*, T4265 *Momordica cochinchinensis*, T4572 *Pachyrhizus erosus*, T4607 *Panax pseudo-ginseng* var. *japonicus*, T4672 *Patrinia scabiosaefolia*, T4676 *Patrinia villosa*, T4903 *Pinellia pedatisecta*, T4983 *Pisum sativum*, T5073 *Polygala chinensis* [Syn. *Polygala glomerata*], T5099 *Polygonum bistorta*, T5100 *Polygonum chinense*, T5104 *Polygonum hydropiper*, T5121 *Polygonum tinctorium*, T5126 *Polypodium virginianum*, T5127 *Polypodium vulgare*, T5194 *Premna microphylla*, T5199 *Primula malacoides*, T5230 *Prunus persica*, T5375 *Quercus mongolica*, T5402 *Radermachera sinica*, T5413 *Ranunculus cantoniensis*, T5414 *Ranunculus japonicus*, T5447 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], T5449 *Reineckea carnea*, T5562 *Rosa chinensis*, T5750 *Saururus chinensis*, T5804 *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*], T5850 *Sedum aizoon*, T5855 *Sedum kamschaticum*, T5857 *Sedum sarmentosum*, T5977 *Smilax glabra*, T5980 *Smilax menispermoides*, T5998 *Solanum dulcamara*, T6006 *Solanum melongena*, T6008 *Solanum nigrum*, T6015 *Solanum torvum*, T6017 *Solanum tuberosum*, T6024 *Solidago virgaurea* var. *leiocarpa* [Syn. *Solidago decurrens*], T6121 *Stephania dicentrifera*, T6129 *Stephania japonica*, T6137 *Stephania*

- viridiflavens*, T6154 *Strobilanthes japonicus* [Syn. *Championella japonica*], T6264 *Syzygium buxifolium*, T6276 *Tacca plantaginea* [Syn. *Schizocapsa plantaginea*], T6386 *Thalictrum foetidum*, T6484 *Trachelospermum jasminoides*, T6499 *Tribulus terrestris*, T6507 *Trichosanthes cucumeroides*, T6544 *Triticum aestivum* [Syn. *Triticum vulgare*], T6580 *Tylophora floribunda*, T6588 *Typhonium giganteum*, T6653 *Usnea diffracta*, T6654 *Usnea longissima*, T6799 *Vitis vinifera*.
- swollen welling abscess and clove sores** T0071 *Achyranthes aspera*, T0072 *Achyranthes aspera* var. *indica*, T0263 *Ajuga decumbens*, T0625 *Aristolochia contorta*, T0627 *Aristolochia debilis* [Syn. *Aristolochia longa*], T1043 *Bryophyllum pinnatum*, T1393 *Chrysanthemum indicum*, T2244 *Doellingeria scaber* [Syn. *Aster scaber*], T2753 *Formica fusca*, T3202 *Hemistepta lyrata* [Syn. *Hemistepta carthamoides*; *Saussurea carthamoides*], T3859 *Linum usitatissimum*, T3898 *Lobelia chinensis* [Syn. *Lobelia radicans*], T3908 *Lonicera bournei*, T3909 *Lonicera confusa*, T3910 *Lonicera fulvotomentosa*, T3911 *Lonicera hypoglauca*, T3912 *Lonicera japonica*, T3914 *Lonicera macranthoides*, T3918 *Lonicera similis*, T4020 *Macleaya cordata*, T4506 *Ophioglossum vulgatum*, T4564 *Oxalis corniculata* [Syn. *Oxalis repens*], T5105 *Polygonum hydropiper* var. *flaccidum* [Syn. *Polygonum flaccidum*], T5173 *Portulaca oleracea*, T5472 *Rheum officinale*, T5474 *Rheum palmatum*, T5481 *Rheum tanguticum*, T5520 *Rhododendron ovatum* [Syn. *Rhododendron lamprophyllum*; *Azalea ovata*], T5524 *Rhododendron simsii*, T5560 *Rorippa montana* [Syn. *Rorippa dubia*; *Sisymbrium dubium*], T5567 *Rosa laevigata*, T5724 *Sapium sebiferum*, T6048 *Sophora viciifolia*, T6206 *Sus scrofa domestica*, T6257 *Syngnathus acus*.
- swollen welling abscess and malign sore** T0073 *Achyranthes bidentata*, T0122 *Aconitum pendulum*, T0635 *Aristolochia moupinensis*, T2213 *Dioscorea zingiberensis*.
- swollen welling abscess and scrofula** T5029 *Plumbago zeylanica*, T5547 *Ricinus communis*.
- swollen welling abscess and sore toxin** T0001 *Abelmoschus manihot*, T0586 *Arctium lappa*, T0871 *Barleria lupulina*, T2555 *Eupatorium chinense*, T4121 *Marsilea quadrifolia*, T4704 *Peperomia duclouxii*, T5604 *Rudbeckia laciniata*, T6135 *Stephania succifera*, T6566 *Tupistra chinensis*.
- swollen welling abscess and sores** T0374 *Alstonia scholaris*, T1425 *Cimicifuga simplex*, T1638 *Commiphora myrrha* [Syn. *Commiphora molmo*], T3764 *Lepisorus thunbergianus*, T3866 *Liquidambar formosana* [Syn. *Liquidambar taiwaniana*], T4056 *Mahonia bealei*, T4060 *Mahonia confusa*, T4063 *Mahonia fortunei*, T4064 *Mahonia gracilipes*, T4067 *Mahonia japonica*, T4085 *Mallotus repandus* var. *chrysocarpus* [Syn. *Mallotus chrysocarpus*; *Mallotus repandus*], T4584 *Paeonia lactiflora* wild, T4586 *Paeonia obovata*, T4590 *Paeonia veitchii*, T5103 *Polygonum hydropiper*, T5234 *Prunus persica*, T6034 *Sophora japonica*, T6087 *Spiranthes sinensis*, T6295 *Tanacetum sibiricum* [Syn. *Filifolium sibiricum*].
- swollen welling abscess and toxin of clove** T0174 *Adiantum monochlamys*, T1021 *Brassica rapa*, T1242 *Cassia occidentalis*, T1633 *Commelina communis*, T3448 *Ipomoea cairica* [Syn. *Ipomoea palmata*], T4740 *Petasites japonicus*, T5840 *Scutellaria indica*, T6023 *Solidago virgaurea*.
- swollen welling abscess and toxin of clove sore** T3363 *Hypericum sampsonii*.
- swollen welling abscess of sore and boil** T0750 *Asparagus gobicus*.
- syphilis** T0610 *Argemone mexicana*, T2200 *Dioscorea hispida*, T3200 *Hemidesmus indicus*, T3737 *Lemmaphyllum microphyllum* var. *obovatum*, T4813 *Phlomis tuberosa*, T5401 *Rabdosia yuennanensis*, T5977 *Smilax glabra*, T5980 *Smilax menispermoides*, T6219 *Swertia erythrosticta*.
- systemma** T4575 *Pachysandra terminalis*.
- tachycardia** T5516 *Rhododendron molle*.
- taenia infection** T0318 *Allium sativum*.
- taeniasis** T0250 *Agrimonia pilosa* var. *japonica*, T0251 *Agrimonia pilosa* var. *japonica*, T0957 *Blumea balsamifera*, T1211 *Carpesium abrotanoides*, T1881 *Cucurbita moschata*, T2049 *Daucus carota*, T2277 *Dryopteris austriaca*, T2346 *Embelia oblongifolia*, T3688 *Lappula echinata*, T4083 *Mallotus philippinensis*, T4084 *Mallotus philippinensis*, T4085 *Mallotus repandus* var. *chrysocarpus* [Syn. *Mallotus chrysocarpus*; *Mallotus repandus*], T4364 *Myrsine semiserrata*, T4779 *Pharbitis nil*, T4780 *Pharbitis purpurea*, T5327 *Punica granatum*, T5329 *Punica granatum*.
- taxation cough** T5483 *Rhinacanthus nasutus*.
- taxation damage** T1417 *Cimicifuga acerina*, T1423 *Cimicifuga nanchuanensis*, T1786 *Cremanthodium ellisii*, T3802 *Ligularia dentata*, T3805 *Ligularia fischeri*, T3807 *Ligularia intermedia*, T3813 *Ligularia sibirica*, T4859 *Physochlaina physaloides*, T4954 *Piper longum*, T5722 *Sapium japonicum*, T6367 *Teucrium quadrifarium*.
- taxation damage and blood ejection** T1003 *Brandisia hancei*, T3295 *Huperzia serrata* [Syn. *Lycopodium serratum*], T4510 *Ophiorrhiza japonica*, T4513 *Ophiorrhiza mungos*, T5793 *Schisandra henryi*.
- taxation damage and coughing of blood** T1884 *Cudrania cochinchinensis*.
- taxation damage and lumbago** T1552 *Cleome viscosa*, T4444 *Nothopanax davidii*, T4604 *Panax japonicus* var. *bipinnatifidus*, T5981 *Smilax riparia*, T6009 *Solanum pseudo-capsicum*.
- taxation damage and pain** T4562 *Oxalis acetosella*, T6128 *Stephania hernandifolia*.
- taxation damage and sinew bone pain** T2087 *Delphinium tatsienense*, T2301 *Dysosma majorensis* [Syn. *Podophyllum majorensis*; *Dysosma lichuanensis*], T4234 *Milletia dielsiana*.
- taxation damage and strength desertion** T0598 *Ardisia japonica*.
- taxation damage cough** T0924 *Bergenia purpurascens*, T6266 *Syzygium cumini*, T6773 *Viscum articulatum*, T6774 *Viscum articulatum*.
- taxation damage due to knocks and falls** T5230 *Prunus persica*.
- taxation damage fever** T5954 *Silene fortunei*.
- taxation damage hemoptysis** T1683 *Cordyceps sinensis*, T3276 *Homo sapiens*, T4248 *Mimosa pudica*, T5529 *Rhodomyrtus tomentosa*, T6722 *Veronica anagallis-aquatica*.
- taxation damage hypodynamia** T2211 *Dioscorea tenuipes*.
- taxation damage in lumbar muscle** T0048 *Acanthus ilicifolius*, T0116 *Aconitum nagarum* var. *heterotrichum* [Syn. *Aconitum bullatifolium*], T0569 *Aralia cordata*, T0574 *Aralia fargesii*, T0886 *Beaumontia grandiflora*, T1958 *Cynanchum otophyllum*, T2267 *Drosera peltata* var. *lunata*, T2737 *Flemingia philippinensis* [Syn. *Moghania*

- philippinensis*], T3318 *Hylotelephium mingjinianum*, T3400 *Illicium difengpi*, T3403 *Illicium majus*, T3969 *Lycopodium casuarinoides*, T4260 *Moghania philippinensis*, T4284 *Morinda parvifolia*, T5279 *Psychotria serpens*, T5746 *Sassafras tzumu*, T6015 *Solanum torvum*, T6468 *Tinospora sinensis*, T6689 *Ventilago leiocarpa*, T6830 *Woodfordia fruticosa*.
- taxation damage pain in lumbus and legs** T0298 *Alectoria vivens*, T3776 *Lethariella zahlbruckneri*.
- taxation detriment and sprain** T2203 *Dioscorea nipponica*, T2204 *Dioscorea nipponica* ssp. *rosthornii*.
- taxation detriment due to knocks and falls** T2205 *Dioscorea panthaica*.
- taxation fatigue and hypodynamia** T5075 *Polygala fallax* [Syn. *Polygala aureocauda*].
- taxation fever** T2994 *Gloiopeltis furcata*, T3277 *Homo sapiens*, T5407 *Rana nigromaculata*; *Rana plancyi*.
- taxation fever cough** T5447 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*].
- taxation fever steaming bone** T4060 *Mahonia confusa*, T4064 *Mahonia gracilipes*.
- tearing in wind** T2408 *Equisetum hiemale*, T2409 *Equisetum palustre*.
- tearing with wind** T3564 *Juglans mandshurica*.
- temporomandibular lymphadenitis** T0975 *Bombyx mori*.
- tenesmus** T1038 *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*], T4789 *Phellodendron amurense*, T4790 *Phellodendron amurense* var. *wilsonii*, T4791 *Phellodendron chinense*, T4792 *Phellodendron chinense* var. *glabriusculum*, T6802 *Vladimiria souliei* [Syn. *Jurinea souliei*].
- terrene leech bite** T2567 *Eupatorium odoratum*.
- testitis** T0594 *Ardisia crenata*, T2723 *Ficus pumila*, T3270 *Holboellia fargesii*, T4100 *Mangifera indica*, T6264 *Syzygium buxifolium*.
- tetanus** T0088 *Aconitum coreanum*, T0617 *Arisaema amurense*, T0618 *Arisaema consanguineum*, T0620 *Arisaema heterophyllum*, T0979 *Bombyx mori*, T1049 *Bufo bufo gargarizans*; *Bufo melanostictus*, T1084 *Buthus martensi*, T2890 *Gastrodia elata*, T4903 *Pinellia pedatisecta*, T5547 *Ricinus communis*, T5727 *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*], T5817 *Scolopendra subspinipes mutilans*, T5822 *Scopolia sinensis*, T5934 *Seseli meirei*, T5937 *Seseli yunnanense*, T5998 *Solanum dulcamara*, T6588 *Typhonium giganteum*, T6903 *Zephyranthes candida*.
- tetradon poisoning** T3685 *Lannea grandis* [Syn. *Lannea coromandelica*], T3726 *Laurus nobilis*, T3815 *Ligularia stenocephala*.
- thirst** T2763 *Fragaria ananassa*, T2867 *Garcinia multiflora*, T3163 *Helicteres angustifolia*, T3921 *Lophatherum gracile*, T3962 *Lycopersicon esculentum*, T4029 *Maesa japonica*, T4099 *Mangifera indica*, T4103 *Mangifera persiciformis*, T5312 *Pueraria edulis*, T5313 *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*], T5316 *Pueraria omeiensis*, T5318 *Pueraria phaseoloides*, T5320 *Pueraria thomsonii*.
- thirst due to spontaneous sweating** T5260 *Pseudostellaria heterophylla*.
- thirst with dry throat** T4610 *Panax quinquefolium*, T5186 *Potentilla reptans* var. *sericophylla*.
- three worms** T1232 *Cassia fistula*.
- throat erosion** T5408 *Rana nigromaculata*; *Rana plancyi*.
- throat impediment** T0318 *Allium sativum*, T0950 *Blatta orientalis*, T0992 *Bos taurus domesticus*; *Bubalus bubalis*, T1008 *Brassica juncea*, T1210 *Carpesium abrotanoides*, T1464 *Citrullus vulgaris* [Syn. *Citrullus lanatus*], T1547 *Clematis terniflora* [Syn. *Clematis maximowicziana*], T1858 *Croton tiglium*, T1876 *Cucumis melo*, T1981 *Cyprinus carpio*, T2191 *Dioscorea bulbifera*, T2363 *Entada phaseoloides* [Syn. *Lens phaseoloides*], T2434 *Eriocaulon buergerianum*, T2756 *Forsythia suspensa*, T2978 *Gleditsia sinensis* [Syn. *Gleditsia horrida*], T3277 *Homo sapiens*, T3460 *Iris halophila*, T3464 *Iris lactea* var. *chinensis* [Syn. *Iris pallasii* var. *chinensis*], T3476 *Isatis indigotica*, T3578 *Juncus effusus*, T3908 *Lonicera bournei*, T3909 *Lonicera confusa*, T3910 *Lonicera fulvotomentosa*, T3911 *Lonicera hypoglauca*, T3912 *Lonicera japonica*, T3914 *Lonicera macranthoides*, T3918 *Lonicera similis*, T4303 *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*, T4537 *Oroxylum indicum*, T4544 *Oryza sativa*, T4648 *Paris polyphylla*, T4649 *Paris polyphylla* var. *chinensis*, T4650 *Paris polyphylla* var. *pseudothibetica*, T4651 *Paris polyphylla* var. *stenophylla*, T4652 *Paris polyphylla* var. *yunnanensis*, T4796 *Pheretima aspergillum*; *Allolobophora caliginosa trapezoides*, T5121 *Polygonum tinctorium*, T5531 *Rhus chinensis* [Syn. *Rhus semialata*], T5550 *Ricinus communis*, T5840 *Scutellaria indica*, T6035 *Sophora japonica*, T6131 *Stephania longa*, T6206 *Sus scrofa domestica*, T6484 *Trachelospermum jasminoides*, T6645 *Urena lobata*, T6655 *Ustilagoidea virens*, T6709 *Verbena officinalis*, T6884 *Zanthoxylum nitidum*.
- throat impediment sore with gall** T5719 *Sapindus mukorossi*, T5720 *Sapindus mukorossi*.
- throat impediment with nipple moth** T2838 *Gallus gallus domesticus*, T5295 *Pteris multifida*.
- throat moth** T3865 *Lippia nodiflora*.
- throat pain** T0273 *Akebia quinata*, T0277 *Akebia trifoliata*, T0279 *Akebia trifoliata* var. *australis*, T0888 *Beesia calthaeifolia*, T1179 *Capparis masaiikai*, T1555 *Clerodendron fortunatum*, T1796 *Crinum asiaticum* var. *sinicum*, T1931 *Cyclea barbata*, T1932 *Cyclea racemosa*, T1961 *Cynanchum thesioides*, T2716 *Ficus beecheyana* [Syn. *Ficus erecta* var. *beecheyana*], T3334 *Hypecoum leptocarpum*, T3361 *Hypericum perforatum*, T3475 *Isatis indigotica*, T3999 *Lysimachia clethroides*, T4221 *Micromelum falcatum*, T4519 *Opuntia dillenii*, T4521 *Opuntia vulgaris*, T4527 *Orixa japonica*, T4834 *Phyllanthus emblica*, T4846 *Physalis alkekengi* var. *franchetii*, T4852 *Physalis peruviana*, T5804 *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*], T5835 *Scutellaria barbata* [Syn. *Scutellaria rivularis*], T5967 *Siraitia grosvenorii* [Syn. *Momordica grosvenorii*], T6133 *Stephania sinica*, T6889 *Zanthoxylum podocarpum*, T6920 *Ziziphus mauritiana*.
- throat pain and swollen tongue** T1934 *Cyclea tonkinensis*.
- throat pain and throat impediment** T1787 *Cremastra appendiculata*.
- throat swelling** T1152 *Camellia sinensis* [Syn. *Thea sinensis*], T3311 *Hydrocotyle sibthorpioides*.
- throat wind** T1858 *Croton tiglium*, T3984 *Lycoris chinensis*, T3986 *Lycoris radiata* [Syn. *Amaryllis radiata*].
- thromboangiitis obliterans** T0967 *Boenninghausenia sessilicarpa*.

- thromboangiitis obliterans (buerger's disease)** T2538 *Euonymus bungeanus*, T3388 *Ilex chinensis* [Syn. *Ilex purpurea*], T3396 *Ilex pubescens*, T3397 *Ilex pubescens* var. *glaber*, T4917 *Pinus massoniana*.
- thrombocytopenia** T1337 *Cervus nippon*; *Cervus elaphus*.
- thrombocytopenic purpura** T0805 *Astragalus sinicus*.
- thrombophlebitis** T0495 *Angelica sinensis*, T3388 *Ilex chinensis* [Syn. *Ilex purpurea*], T3396 *Ilex pubescens*, T3397 *Ilex pubescens* var. *glaber*, T4804 *Phlojodicarpus sibiricus*, T5680 *Salvia miltiorrhiza*, T5681 *Salvia miltiorrhiza* f. *alba*, T5688 *Salvia przewalskii*.
- thyroid enlargement** T2359 *Endarachne binghamiae*, T4403 *Nemacystus decipiens* [Syn. *Mesogloea decipiens*; *Cladosiphon decipiens*], T5214 *Prunella vulgaris*, T6598 *Ulva conglobata*.
- tidal fever** T5097 *Polygonum amphibium*, T6228 *Swertia nervosa*.
- tidal fever with night sweat** T3954 *Lycium barbarum*, T3956 *Lycium chinense*, T4789 *Phellodendron amurense*, T4790 *Phellodendron amurense* var. *wilsonii*, T4791 *Phellodendron chinense*, T4792 *Phellodendron chinense* var. *glabriusculum*, T5446 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*].
- tinea capitis** T1285 *Celastrus angulatus*, T2023 *Daphne genkwa*, T2092 *Delphinus delphis*, T3363 *Hypericum sampsonii*, T3560 *Jatropha curcas*, T4157 *Melia azedarach*, T5010 *Platycarya strobilacea*, T5026 *Plumbagella micrantha*, T5455 *Rhamnus crenata*, T6489 *Tragopogon porrifolius*, T6541 *Tripterygium regelii*.
- tinnitus** T0144 *Acorus gramineus*, T0146 *Acorus tatarinowii*, T1819 *Crotalaria ferruginea*, T3142 *Helianthus annuus*, T3829 *Ligustrum robustum*, T5107 *Polygonum multiflorum*.
- tinnitus and deafness** T0142 *Acorus calamus*, T1337 *Cervus nippon*; *Cervus elaphus*, T2273 *Drynaria fortunei*, T5252 *Pseudodrynaria coronans*, T5446 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], T5927 *Sesamum indicum* [Syn. *Sesamum orientale*], T6234 *Swertia punicea*.
- tinnitus and dim vision** T1911 *Cuscuta australis*, T1912 *Cuscuta chinensis*, T1913 *Cuscuta japonica*, T5091 *Polygonatum cyrtoneura* [Syn. *Polygonatum multiflorum*], T5092 *Polygonatum kingianum*, T5095 *Polygonatum sibiricum*.
- toad head scourge** T5407 *Rana nigromaculata*; *Rana plancyi*.
- tongue sores** T0273 *Akebia quinata*, T0277 *Akebia trifoliata*, T0279 *Akebia trifoliata* var. *australis*, T0632 *Aristolochia manshuriensis*, T1662 *Coptis chinensis*, T1663 *Coptis chinensis* var. *brevispala*, T1664 *Coptis deltoidea*, T1669 *Coptis omeiensis*, T1670 *Coptis teetoides* [Syn. *Coptis teeta*], T3277 *Homo sapiens*, T3920 *Lophatherum gracile*, T4178 *Melodinus hemsleyanus*, T5099 *Polygonum bistorta*.
- tonsillitis** T0457 *Andrographis paniculata* [Syn. *Justicia paniculata*], T0967 *Boeninghausenia sessilicarpa*, T1545 *Clematis chinensis*, T1655 *Conyza blinii*, T1709 *Corydalis bungeana*, T1819 *Crotalaria ferruginea*, T2334 *Elephantopus scaber*, T2563 *Eupatorium japonicum*, T2697 *Ferula borealis*, T2721 *Ficus microcarpa*, T3288 *Humulus japonicus* [Syn. *Humulus scandens*], T3360 *Hypericum patulum*, T3908 *Lonicera bournei*, T3909 *Lonicera confusa*, T3910 *Lonicera fulvotomentosa*, T3911 *Lonicera hypoglauca*, T3912 *Lonicera japonica*, T3914 *Lonicera macranthoides*, T3918 *Lonicera similis*, T5018 *Pleuropterus ciliinervis*, T5680 *Salvia miltiorrhiza*, T5681 *Salvia miltiorrhiza* f. *alba*, T5688 *Salvia przewalskii*, T5907 *Senecio scandens* [Syn. *Senecio chinensis*], T6214 *Swertia chinensis*, T6301 *Taraxacum mongolicum*, T6567 *Tupistra wattii* [Syn. *Campylandra wattii*], T6691 *Veratrilla baillonii*, T6814 *Wedelia chinensis* [Syn. *Solidago chinensis*; *Wedelia calendulacea*].
- tooth decay** T3827 *Ligustrum japonicum*, T5651 *Salix babylonica*.
- tooth mobilizing** T2273 *Drynaria fortunei*, T2323 *Eclipta prostrata* [Syn. *Eclipta alba*], T5252 *Pseudodrynaria coronans*.
- toothache** T0060 *Achillea alpina* [Syn. *Achillea sibirica*], T0069 *Achillea wilsoniana*, T0079 *Aconitum brachypodium*, T0106 *Aconitum kirinense*, T0117 *Aconitum nagarum* var. *lasiantrum*, T0135 *Aconitum sungpanense*, T0471 *Anemone rivularis*, T0478 *Angelica dahurica* [Syn. *Angelica porphyrocaulis*], T0479 *Angelica dahurica* cv. *qibaizhi*, T0492 *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*], T0498 *Angelica taiwaniana*, T0569 *Aralia cordata*, T0574 *Aralia fargesii*, T0582 *Archangelica brevicaulis* [Syn. *Angelica brevicaulis*; *Angelica brevicaulis*], T0708 *Arthromeris mairei* [Syn. *Polypodium mairei*], T0724 *Asarum caulescens*, T0726 *Asarum forbesii*, T0727 *Asarum fukienense*, T0728 *Asarum heterotropoides* var. *mandshuricum*, T0730 *Asarum sagittarioides*, T0731 *Asarum sieboldii*, T0732 *Asarum sieboldii* var. *seoulensis*, T0834 *Averrhoa carambola*, T1084 *Buthus martensi*, T1092 *Buxus microphylla* var. *sinica*, T1210 *Carpesium abrotanoides*, T1288 *Celastrus orbiculatus* [Syn. *Celastrus articulatus*], T1292 *Celastrus orbiculatus* [Syn. *Celastrus articulatus*], T1316 *Cephalanthus occidentalis*, T1650 *Convolvulus arvensis*, T1655 *Conyza blinii*, T1746 *Corydalis taliensis*, T1796 *Crinum asiaticum* var. *sinicum*, T1799 *Crinum latifolium*, T1931 *Cyclea barbata*, T1933 *Cyclea sutchuenensis*, T1955 *Cynanchum hancockianum*, T1959 *Cynanchum paniculatum*, T2023 *Daphne genkwa*, T2028 *Daphne odora*, T2056 *Debregeasia longifolia*, T2130 *Desmodium gangeticum*, T2162 *Dicranostigma franchetianum* [Syn. *Dicranostigma leptopodium*], T2340 *Elsholtzia bodinieri*, T2387 *Epilobium hirsutum*, T2434 *Eriocaulon buergerianum*, T3203 *Hemsleya amabilis*, T3208 *Hemsleya macrosperma*, T3213 *Heracleum hemsleyanum*, T3214 *Heracleum lanatum*, T3217 *Heracleum moellendorffii* [Syn. *Heracleum microcarpum*; *Heracleum morifolium*], T3221 *Heracleum rapula*, T3228 *Heracleum yungningense*, T3328 *Hyoscyamus niger*, T3392 *Ilex kudingcha*, T3393 *Ilex latifolia*, T3460 *Iris halophila*, T3464 *Iris lactea* var. *chinensis* [Syn. *Iris pallasii* var. *chinensis*], T3528 *Isodon ternifolia*, T3529 *Isodon ternifolius*, T3548 *Ixeris sonchifolia*, T3670 *Lagerstroemia indica*, T3675 *Lagopsis supina*, T3737 *Lemmaphyllum microphyllum* var. *obovatum*, T3779 *Leucas aspera*, T3796 *Libanotis buchtormensis*, T3829 *Ligustrum robustum*, T3876 *Litchi chinensis*, T3885 *Litsea cubeba*, T4002 *Lysimachia foenum-graecum*, T4349 *Myrica rubra*, T4361 *Myrsine africana*, T4470 *Ocimum basilicum*, T4527 *Oriza japonica*, T4549 *Osbeckia chinensis*, T4550 *Osmanthus fragrans*, T4827 *Photinia parvifolia*, T4953 *Piper longum*, T4956 *Piper mullesua*, T4966 *Piper sarmentosum*, T5109 *Polygonum nodosum*, T5142 *Poncirus trifoliata*, T5151 *Populus davidiana*, T5158 *Populus simonii*, T5266 *Psidium guajava*, T5308 *Pterocarya stenoptera*, T5374 *Quercus infectoria*, T5414 *Ranunculus japonicus*, T5592 *Rubus hirsutus*, T5650 *Salix babylonica*, T5690 *Salvia*

- roborowskii*, T5781 *Schefflera arboricola*, T5840 *Scutellaria indica*, T5934 *Seseli meirei*, T5937 *Seseli yunnanense*, T6000 *Solanum indicum*, T6003 *Solanum khasianum*, T6018 *Solanum verbascifolium*, T6020 *Solanum xanthocarpum*, T6028 *Sophora alopecuroides*, T6075 *Spilanthes acmella*, T6079 *Spiraea japonica*, T6082 *Spiraea japonica* var. *fortunei*, T6122 *Stephania dielsiana*, T6133 *Stephania sinica*, T6135 *Stephania succifera*, T6139 *Sterculia lychnophora*, T6217 *Swertia davidii*, T6224 *Swertia kouitchensis*, T6231 *Swertia pseudochinensis*, T6276 *Tacca plantaginea* [Syn. *Schizocapsa plantaginea*], T6278 *Tagetes erecta*, T6414 *Thalictrum thunbergii*, T6498 *Tribulus terrestris*, T6860 *Zanthoxylum ailanthoides*, T6862 *Zanthoxylum ailanthoides*, T6864 *Zanthoxylum armatum*, T6877 *Zanthoxylum dissitum*, T6884 *Zanthoxylum nitidum*, T6887 *Zanthoxylum planispinum*, T6888 *Zanthoxylum planispinum*, T6893 *Zanthoxylum simulans*, T6894 *Zanthoxylum simulans*.
- torpid intake** T0210 *Agaricus bisporus*, T0211 *Agaricus campestris*, T3742 *Lentinus edodes*.
- toxemia** T5907 *Senecio scandens* [Syn. *Senecio chinensis*].
- toxic hepatitis** T0379 *Alternanthera philoxeroides*.
- toxic jaundice** T5101 *Polygonum cuspidatum*.
- toxin of clove sore** T2883 *Gardenia jasminoides* [Syn. *Gardenia florida*], T5892 *Senecio nemorensis*.
- toxin of sore welling abscess and boils** T2272 *Drymaria diandra* [Syn. *Drymaria cordata* ssp. *diandra*].
- toxin swelling** T0250 *Agrimonia pilosa* var. *japonica*, T0293 *Albizia lebbbeck*, T0598 *Ardisia japonica*, T0726 *Asarum forbesii*, T0924 *Bergenia purpurascens*, T1051 *Bufo bufo gargarizans*; *Bufo melanostictus*, T1240 *Cassia obtusifolia*, T1250 *Cassia tora*, T1624 *Colocasia antiquorum*, T1693 *Coriaria sinica* [Syn. *Coriaria nepalensis*], T1928 *Cycas revoluta*, T2590 *Euphorbia hirta*, T2756 *Forsythia suspensa*, T3295 *Huperzia serrata* [Syn. *Lycopodium serratum*], T3662 *Lactuca sativa*, T3680 *Lamium amplexicaule*, T3681 *Lamium barbatum*, T5411 *Randia spinosa*, T5719 *Sapindus mukorossi*, T5982 *Smilax sieboldii*, T5984 *Smilax stans* [Syn. *Smilax vaginata* var. *stans*], T5987 *Sobina chinensis*, T6205 *Sus scrofa*.
- toxin swelling from hemorrhoids** T1199 *Carduus acanthoides*, T1200 *Carduus crispus*, T4678 *Paulownia fortunei*, T4679 *Paulownia tomentosa*.
- toxin swelling of sores** T0045 *Acanthopanax trifoliatum*, T0079 *Aconitum brachypodum*, T0117 *Aconitum nagarum* var. *lasiandrum*, T0537 *Antirrhinum majus*, T0907 *Berberis kawakamii*, T0971 *Bolbostemma paniculatum*, T1087 *Buxus bodinieri*, T1151 *Camellia sinensis* [Syn. *Thea sinensis*], T1206 *Carica papaya*, T1437 *Cinnamomum camphora*, T1589 *Cocculus trilobus* [Syn. *Cocculus sarmentosus*], T1672 *Corallodiscus flabellatus* [Syn. *Didissandra flabellat*], T1685 *Coreopsis lanceolata*, T1719 *Corydalis incisa*, T2205 *Dioscorea panthaica*, T2927 *Gentiana rhodantha*, T3222 *Heracleum scabridum*, T3247 *Hibiscus taiwanensis*, T3447 *Ipomoea batatas* [Syn. *Convolvulus batatas*], T3646 *Kyllinga brevifolia*, T3765 *Lepisorus ussuriensis*, T3847 *Lindera angustifolia*, T3851 *Lindera glauca*, T3863 *Liparis nervosa*, T3885 *Litsea cubeba*, T3925 *Loranthus parasiticus* [Syn. *Loranthus chinensis*; *Taxillus chinensis*], T3969 *Lycopodium casuarinoides*, T4104 *Manihot esculenta*, T4248 *Mimosa pudica*, T4445 *Notopterygium forbesii* [Syn. *Notopterygium franchetii*], T4446 *Notopterygium incisum*, T4456 *Nymphoides peltatum*, T4660 *Parthenium hysterophorus*, T4686 *Pedilanthus tithymaloides*, T4710 *Pericampylus glaucus*, T4799 *Philydrum lanuginosum*, T4937 *Piper betle*, T5184 *Potentilla kleiniana*, T5341 *Pygmaeopremna herbacea* [Syn. *Premna herbacea*], T5714 *Sansevieria trifasciata*, T5806 *Schlumbergera truncata*, T5838 *Scutellaria galericulata*, T5884 *Senecio chrysanthemoides*, T5942 *Sida acuta*, T6026 *Sonchus asper* [Syn. *Sonchus oleraceus* var. *asper*], T6127 *Stephania glabra*, T6275 *Tacca chantrieri* [Syn. *Tacca minor*; *Tacca esquirolii*], T6378 *Thalictrum delavayi*, T6469 *Tithonia diversifolia*, T6512 *Trichosanthes kirilowii*, T6541 *Tripterygium regelii*, T6750 *Vicia sativa*, T6820 *Wikstroemia indica*.
- toxin swelling of sores and open sores** T5817 *Scolopendra subspinipes mutilans*.
- trachitis** T1050 *Bufo bufo gargarizans*; *Bufo melanostictus*, T1387 *Chrysanthemum boreale*, T1392 *Chrysanthemum indicum*, T1394 *Chrysanthemum lavandulifolium*, T2697 *Ferula borealis*, T4275 *Monotropa hypopitys*, T5396 *Rabdosia rubescens*, T6814 *Wedelia chinensis* [Syn. *Solidago chinensis*; *Wedelia calendulacea*].
- trachoma** T4789 *Phellodendron amurense*, T4790 *Phellodendron amurense* var. *wilsonii*, T4791 *Phellodendron chinense*, T4792 *Phellodendron chinense* var. *glabriusculum*.
- trance** T3832 *Lilium brownii* var. *viridulum* [Syn. *Lilium brownii* var. *colchesteri*], T3835 *Lilium longiflorum*, T3836 *Lilium pumilum* [Syn. *Lilium tenuifolium*], T3839 *Lilium tigrinum* [Syn. *Lilium lancifolium*].
- trichomonal vaginitis** T4158 *Melia azedarach*.
- trichomonas vaginalis** T3420 *Incarvillea sinensis*, T3560 *Jatropha curcas*.
- trichomoniasis** T0248 *Agrimonia pilosa*, T0311 *Allium cepa*, T0318 *Allium sativum*, T1582 *Cnidium monnieri*, T1662 *Coptis chinensis*, T1663 *Coptis chinensis* var. *brevisepala*, T1664 *Coptis deltoidea*, T1669 *Coptis omeiensis*, T1670 *Coptis teetoides* [Syn. *Coptis teeta*], T3245 *Hibiscus syriacus*, T4020 *Macleaya cordata*, T5234 *Prunus persica*, T5308 *Pterocarya stenoptera*, T5719 *Sapindus mukorossi*, T5907 *Senecio scandens* [Syn. *Senecio chinensis*], T6031 *Sophora flavescens* [Syn. *Sophora angustifolia*], T6048 *Sophora viciifolia*.
- trichuriasis** T6101 *Stauntonia hexaphylla*.
- trigeminal neuralgia** T2890 *Gastrodia elata*.
- try to using for carcinoma of stomach and carcinoma of esophagus** T4704 *Peperomia duclouxii*.
- tuberculosis** T0163 *Actinidia latifolia*, T0318 *Allium sativum*, T0457 *Andrographis paniculata* [Syn. *Justicia paniculata*], T0641 *Aristolochia tuberosa*, T0752 *Asparagus officinalis*, T1680 *Cordyceps militaris*, T1681 *Cordyceps militaris* cv, T2101 *Dendrobium fimbriatum*, T2359 *Endarachne binghamiae*, T2584 *Euphorbia ebracteolata*, T2587 *Euphorbia fischeriana*, T2756 *Forsythia suspensa*, T2783 *Fritillaria cirrhosa*, T2784 *Fritillaria delavayi*, T2792 *Fritillaria przewalskii*, T2796 *Fritillaria unibracteata*, T2798 *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*], T3011 *Glycyrrhiza aspera*, T3013 *Glycyrrhiza glabra*, T3015 *Glycyrrhiza inflata*, T3016 *Glycyrrhiza kansuensis*, T3021 *Glycyrrhiza squamulosa*, T3022 *Glycyrrhiza uralensis*, T3023 *Glycyrrhiza*

- yunnanensis*, T3288 *Humulus japonicus* [Syn. *Humulus scandens*], T3289 *Humulus lupulus*, T3709 *Lathyrus pratensis*, T4005 *Lysionotus pauciflorus*, T4039 *Magnolia grandiflora*, T4145 *Meconopsis punicea*, T4280 *Morinda citrifolia*, T4789 *Phellodendron amurense*, T4790 *Phellodendron amurense* var. *wilsonii*, T4791 *Phellodendron chinense*, T4792 *Phellodendron chinense* var. *glabriusculum*, T5071 *Polygala arillata*, T6055 *Sorbus tianschanica*, T6075 *Spilanthes acmella*, T6111 *Stemona japonica*, T6113 *Stemona sessilifolia*, T6115 *Stemona tuberosa*, T6132 *Stephania sasakii*, T6276 *Tacca plantaginea* [Syn. *Schizocapsa plantaginea*], T6440 *Thuja orientalis* [Syn. *Platycladus orientalis*; *Biota orientalis*], T6574 *Tussilago farfara*, T6731 *Veronicastrum sibiricum*.
- tuberculosis and coughing of blood** T1746 *Corydalis taliensis*, T5586 *Rubia yunnanensis*, T6026 *Sonchus asper* [Syn. *Sonchus oleraceus* var. *asper*].
- tuberculosis and hacking of blood** T4730 *Peristrophe roxburghiana*.
- tuberculosis and hemoptysis** T0226 *Agave sisalana*, T0598 *Ardisia japonica*, T1053 *Bulbophyllum odoratissimum* [Syn. *Stelis odoratissimum*], T1728 *Corydalis ochotensis*, T1866 *Cryptolepis sinensis*, T4056 *Mahonia bealei*, T4063 *Mahonia fortunei*, T4067 *Mahonia japonica*, T4361 *Myrsine africana*, T4519 *Opuntia dillenii*, T4520 *Opuntia ficus-indica*, T4521 *Opuntia vulgaris*, T4823 *Pholidota yunnanensis*, T5119 *Polygonum thunbergii*, T5284 *Pteridium aquilinum* var. *latiusculum*, T5613 *Rumex obtusifolius*, T6251 *Symplocos caudata*, T6747 *Vicia faba*, T6814 *Wedelia chinensis* [Syn. *Solidago chinensis*; *Wedelia calendulacea*].
- tuberculosis and vacuity** T4505 *Ophiocephalus argus*.
- tuberculosis tidal fever** T0678 *Artemisia japonica*.
- tuberculosis with blood ejection** T4506 *Ophioglossum vulgatum*.
- tuberculosis with cough** T0500 *Anguilla japonica*, T0749 *Asparagus filicinus*, T2727 *Ficus simplicissima*, T5133 *Polytrichum commune*, T5494 *Rhodiola crenulata* [Syn. *Rhodiola euryphylla*].
- tuberculosis fistula** T2589 *Euphorbia helioscopia*.
- tumor** T0165 *Actinidia rubricaulis* var. *coriacea*.
- turbid vaginal discharge** T5186 *Potentilla reptans* var. *sericophylla*.
- tympanites** T1884 *Cudrania cochinchinensis*, T2092 *Delphinus delphis*, T6548 *Tritonia crocosmaeflora*.
- tympanitis** T6131 *Stephania longa*.
- typhoid fever** T1662 *Coptis chinensis*, T1663 *Coptis chinensis* var. *brevisepala*, T1664 *Coptis deltoidea*, T1669 *Coptis omeiensis*, T1670 *Coptis teetoides* [Syn. *Coptis teeta*], T5907 *Senecio scandens* [Syn. *Senecio chinensis*].
- ulcer** T0311 *Allium cepa*, T1043 *Bryophyllum pinnatum*, T1727 *Corydalis mucronifera*, T2274 *Dryobalanops aromatica*, T2857 *Garcinia hanburyi*, T4789 *Phellodendron amurense*, T4790 *Phellodendron amurense* var. *wilsonii*, T4791 *Phellodendron chinense*, T4792 *Phellodendron chinense* var. *glabriusculum*.
- ulcer in gastrointestinal tract** T0495 *Angelica sinensis*, T4804 *Phlojodicarpus sibiricus*, T6656 *Ustilago maydis*.
- ulcer of lower limb** T0446 *Anaphalis margaritacea*, T1994 *Daemonorops draco*, T2253 *Dracaena cochinchinensis*, T2337 *Elephas maximus*, T2950 *Gerbera anandria* [Syn. *Leibnitzia anandria*], T3388 *Ilex chinensis* [Syn. *Ilex purpurea*], T3560 *Jatropha curcas*, T4020 *Macleaya cordata*, T4391 *Nauclea officinalis*, T5978 *Smilax glauco-china*.
- ulcer of uterine cervix** T4020 *Macleaya cordata*, T6043 *Sophora subprostrata* [Syn. *Sophora tonkinensis*].
- ulcerating sore and boil** T5385 *Quisqualis indica*.
- ulcerating sore of leg** T5415 *Ranunculus sceleratus*.
- ulcerating sore toxin** T2279 *Dryopteris championii*.
- ulcerating sores** T1251 *Cassytha filiformis*, T1285 *Celastrus angulatus*, T1336 *Ceriops tagal* [Syn. *Rhizophora tagal*], T1552 *Cleome viscosa*, T2188 *Dioscorea alata*, T2989 *Glochidion sphaerogynum*, T4006 *Lythrum anceps*, T4007 *Lythrum salicaria*, T4500 *Onosma paniculatum*, T6476 *Torilis japonica*.
- ulcerating welling abscess and sore** T2852 *Garcinia cowa*.
- ulcerative bleeding** T3033 *Gnetum parvifolium* [Syn. *Gnetum indicum*].
- ulcerative colitis** T3106 *Harpagophytum procumbens*.
- unctuous strangury** T2198 *Dioscorea gracillima*, T2201 *Dioscorea hypoglauca* [Syn. *Dioscorea colletii* var. *hypoglauca*], T2212 *Dioscorea tokoro*.
- upflaming vacuity fire** T1961 *Cynanchum thesioides*.
- urethral stone** T1553 *Clerodendranthus spicatus*, T1823 *Crotalaria juncea*, T2134 *Desmodium styracifolium*, T2325 *Eichhornia crassipes*, T2749 *Fomes officinalis*, T3143 *Helianthus annuus*, T4000 *Lysimachia congestiflora*, T4148 *Medicago sativa*, T4149 *Medicago sativa*, T4432 *Nigella glandulifera*, T5354 *Pyrrosia davidii*, T5355 *Pyrrosia drakeana*, T5356 *Pyrrosia gralla*, T5357 *Pyrrosia lingua* T5358 *Pyrrosia petiolosa*, T5360 *Pyrrosia sheareri*, T6264 *Syzygium buxifolium*, T6488 *Trachyspermum ammi*, T6902 *Zea mays*.
- urethritis** T2119 *Derris eriocarpa*, T3187 *Helleborus thibetanus*, T5098 *Polygonum aviculare*.
- urinary and fecal stoppage** T0382 *Althaea rosea*, T0389 *Amaranthus tricolor*, T1390 *Chrysanthemum coronarium*, T1397 *Chrysanthemum segetum*, T2596 *Euphorbia kansui*, T2597 *Euphorbia lathyris*, T2978 *Gleditsia sinensis* [Syn. *Gleditsia horrida*], T4091 *Malva sylvestris*, T4861 *Phytolacca americana* [Syn. *Phytolacca decandra*], T4864 *Phytolacca esculenta* [Syn. *Phytolacca acinosa*], T5723 *Sapium sebiferum*.
- urinary incontinence** T3742 *Lentinus edodes*, T4283 *Morinda officinalis*.
- urinary stoppage** T0310 *Allium ascalonicum*, T2143 *Dianthus chinensis*, T2145 *Dianthus superbus*, T2147 *Dianthus versicolor*, T3066 *Gryllulus chinensis*, T4562 *Oxalis acetosella*, T4796 *Pheretima aspergillum*; *Allolobophora caliginosa trapezoides*, T5354 *Pyrrosia davidii*, T5355 *Pyrrosia drakeana*, T5356 *Pyrrosia gralla*, T5357 *Pyrrosia lingua* T5358 *Pyrrosia petiolosa*, T5360 *Pyrrosia sheareri*, T5605 *Rumex acetosa*, T5651 *Salix babylonica*.
- urinary strangury** T2723 *Ficus pumila*.
- urinary tract infection** T0015 *Abutilon indicum*, T0195 *Aeginetia indica*, T0776 *Asplenium prolongatum*, T0897 *Berberis amurensis*, T0912 *Berberis poirerii*, T0920 *Berberis wilsonae*, T0933 *Betula platyphylla*, T0935 *Betula platyphylla* var. *japonica*, T1450 *Cirsium lineare*, T1557 *Clerodendron indicum*, T1969 *Cynoglossum officinale*, T2143 *Dianthus chinensis*, T2145 *Dianthus superbus*, T2147 *Dianthus versicolor*, T2233 *Diploclisia glaucescens*, T2357 *Emilia sonchifolia*, T2908 *Gentiana cephalantha*, T2921 *Gentiana manshurica*, T2928

- Gentiana rigescens*, T2930 *Gentiana scabra*, T2938 *Gentiana triflora*, T3122 *Hedyotis acutangula*, T3203 *Hemsleya amabilis*, T3208 *Hemsleya macrosperma*, T3284 *Houttuynia cordata*, T3361 *Hypericum perforatum*, T3388 *Ilex chinensis* [Syn. *Ilex purpurea*], T3594 *Juniperus rigida*, T3989 *Lygodium flexuosum* [Syn. *Lygodium pinnatifidum*; *Ophioglossum flexuosum*], T4391 *Nauclea officinalis*, T4789 *Phellodendron amurense*, T4790 *Phellodendron amurense* var. *wilsonii*, T4791 *Phellodendron chinense*, T4792 *Phellodendron chinense* var. *glabriusculum*, T4843 *Phyllanthus urinaria*, T5207 *Prismatomeris tetrandra*, T5344 *Pyrola atropurpurea*, T5345 *Pyrola calliantha* [Syn. *Pyrola rotundifolia* ssp. *chinensis*], T5346 *Pyrola calliantha* var. *tibetana*, T5347 *Pyrola decorata*, T5349 *Pyrola incarnata*, T5350 *Pyrola japonica*, T5351 *Pyrola rotundifolia*, T5354 *Pyrrosia davidii*, T5355 *Pyrrosia drakeana*, T5356 *Pyrrosia gralla*, T5357 *Pyrrosia lingua*, T5358 *Pyrrosia petiolosa*, T5360 *Pyrrosia sheareri*, T5393 *Rabdosia longituba*, T5639 *Sabina chinensis*, T6129 *Stephania japonica*, T6217 *Swertia davidii*, T6794 *Vitis amurensis*.
- urinary turbidity** T0323 *Allium tuberosum*.
- urticari with sore and scab** T1160 *Campsis grandiflora*.
- urticaria** T0539 *Apis cerana*, T0838 *Azolla imbricata* [Syn. *Salvinia imbricata*], T1561 *Clerodendron serratum*, T1569 *Clerodendrum serratum* var. *amplexifolium*, T1959 *Cynanchum paniculatum*, T2020 *Damnacanthus indicus*, T2835 *Galium verum*, T2988 *Glochidion eriocarpum*, T3294 *Huperzia selago* [Syn. *Lycopodium selago*], T3628 *Kerria japonica*, T3742 *Lentinus edodes*, T3847 *Lindera angustifolia*, T4247 *Millingtonia hortensis*, T4801 *Phlegmariurus phlegmaria* [Syn. *Lycopodium phlegmaria*], T5455 *Rhamnus crenata*, T5524 *Rhododendron simsii*, T5639 *Sabina chinensis*, T5987 *Sobina chinensis*, T6651 *Urtica cannabina*, T6652 *Urtica dioica*.
- uterine bleeding** T2426 *Erigeron sumatrensis*, T3926 *Loropetalum chinense*.
- uterus cold** T0083 *Aconitum carmichaeli*, T0085 *Aconitum carmichaeli* cv, T1439 *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*], T4599 *Panax ginseng* [Syn. *Panax schinseng*].
- uterus cold and abdominal pain** T5755 *Saussurea involucreta*.
- vacuity and edema** T0036 *Acanthopanax giraldii* [Syn. *Acanthopanax giraldii* var. *inermis*; *Eleutherococcus giraldii*], T3128 *Hedysarum multijugum*.
- vacuity and fever** T4810 *Phlomis mongolica*.
- vacuity and hypodynamia** T0041 *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*], T3085 *Gynostemma pentaphyllum*, T3229 *Hericium erinaceus* [Syn. *Hydnum erinaceus*], T6803 *Volvariella volvacea*.
- vacuity and marked emaciation** T0038 *Acanthopanax gracilistylus*, T0042 *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*], T0044 *Acanthopanax sessiliflorus*, T5091 *Polygonatum cyrtonea* [Syn. *Polygonatum multiflorum*], T5092 *Polygonatum kingianum*, T5095 *Polygonatum sibiricum*.
- vacuity and profuse sweating** T1698 *Cornus officinalis* [Syn. *Macrocarpium officinale*], T4600 *Panax ginseng* [Syn. *Panax schinseng*], T5097 *Polygonum amphibium*, T6919 *Ziziphus jujuba* var. *spinosa*.
- vacuity asthma** T5186 *Potentilla reptans* var. *sericophylla*, T5270 *Psoralea corylifolia*, T6266 *Syzygium cumini*.
- vacuity cold and abdominal pain** T2955 *Geum japonicum*.
- vacuity cold and hiccough** T1168 *Canavalia ensiformis*, T1169 *Canavalia gladiata*.
- vacuity cold chronic diarrhea and dysentery** T0083 *Aconitum carmichaeli*, T0085 *Aconitum carmichaeli* cv.
- vacuity cold cough asthma** T3221 *Heracleum rapula*.
- vacuity cold diarrhea** T1434 *Cinnamomum bejolghota* [Syn. *Cinnamomum obtusifolium*; *Laurus bejolghota*], T4859 *Physochlaina physaloides*.
- vacuity cold in lumbus and knees** T0554 *Aquilaria agallocha*, T0555 *Aquilaria sinensis*, T6263 *Syzygium aromaticum* [Syn. *Eugenia caryophyllata*].
- vacuity cold of kidney and bladder** T6870 *Zanthoxylum bungeanum*.
- vacuity cold of uterus** T4283 *Morinda officinalis*.
- vacuity cold vomiting and diarrhea** T1439 *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*].
- vacuity constipation** T0554 *Aquilaria agallocha*, T0555 *Aquilaria sinensis*, T1972 *Cynomorium songaricum*, T4912 *Pinus koraiensis*.
- vacuity consumption with cough** T3875 *Liriope spicata* var. *prolifera*, T4507 *Ophiopogon japonicus*.
- vacuity cough** T4516 *Oplonanax elatus*.
- vacuity desertion due to great sweating** T1698 *Cornus officinalis* [Syn. *Macrocarpium officinale*].
- vacuity desertion failure** T4682 *Pedicularis muscicola*.
- vacuity detriment** T1017 *Brassica oleracea* var. *capitata*, T1888 *Cudrania tricuspidata*, T3279 *Homo sapiens*, T4820 *Phoenix dactylifera*, T5872 *Selenarctos thibetanus*; *Ursus arctos*.
- vacuity detriment and emaciation weakness** T4644 *Parasilurus asotus*.
- vacuity detriment and taxation damage** T4206 *Metaplexis japonica*.
- vacuity detriment sterility** T3615 *Kadsura interior*.
- vacuity fever in children** T3681 *Lamium barbatum*.
- vacuity heat and diabetes mellitus** T2190 *Dioscorea batatas* [Syn. *Dioscorea opposita*], T2202 *Dioscorea japonica*.
- vacuity heat and hypodynamia** T5545 *Ribes fasciculatum* var. *chinense*.
- vacuity heat and vexation fatigue** T4610 *Panax quinquefolium*.
- vacuity heat cough** T3344 *Hypericum chinense*, T5642 *Saccharum sinensis*.
- vacuity heat during convalescence** T2094 *Dendrobium aduncum*, T2096 *Dendrobium aurantiacum* var. *denneanum*, T2098 *Dendrobium chrysanthum*, T2100 *Dendrobium densiflorum*, T2102 *Dendrobium fimbriatum* var. *oculatum*, T2105 *Dendrobium loddigesii*, T2106 *Dendrobium moniliforme*, T2107 *Dendrobium nobile*, T2108 *Dendrobium officinale*.
- vacuity heat with vexation and thirst** T3288 *Humulus japonicus* [Syn. *Humulus scandens*], T5228 *Prunus mume*.
- vacuity of qi and blood** T6798 *Vitis vinifera*.
- vacuity strangury** T2391 *Epimedium brevicornum*.
- vacuity taxation** T1191 *Caragana sinica*, T2846 *Ganoderma japonicum* [Syn. *Ganoderma sinense*], T2848 *Ganoderma lucidum*, T3774 *Lespedeza tomentosa*, T4207 *Metaplexis japonica*.
- vacuity taxation blood ejection** T2840 *Gallus gallus domesticus*, T3285 *Hovenia dulcis*.



- vacuity taxation cough** T0216 *Agave americana* var. *marginata* [Syn. *Agave americana* var. *variegata*], T1188 *Caragana chamlagu*, T2188 *Dioscorea alata*, T2454 *Erysimum diffusum*, T4607 *Panax pseudo-ginseng* var. *japonicus*, T5215 *Prunus amygdalus*, T5409 *Rana temporaria chensinensis*; *Rana amurensis*, T5836 *Scutellaria discolor*.
- vacuity taxation detriment** T0989 *Bos taurus domesticus*; *Bubalus bubalis*.
- vacuity taxation hemoptysis** T2983 *Glehnia littoralis*.
- vacuity taxation lung wilting** T0982 *Bos taurus domesticus*.
- vacuity taxation with cough** T5501 *Rhodiola yunnanensis*.
- vacuity taxation with emaciation** T1604 *Coeloglossum viride* [Syn. *Coeloglossum viride* var. *bracteatum*], T3077 *Gymnadenia conopsea*.
- vacuity taxation with emaciation and weakness** T1181 *Capra hircus*; *Ovis aries*, T1182 *Capra hircus*; *Ovis aries*.
- vacuity taxation with fever** T3957 *Lycium chinense*, T5186 *Potentilla reptans* var. *sericophylla*.
- vacuity taxation with kidney depletion** T0990 *Bos taurus domesticus*; *Bubalus bubalis*.
- vacuity taxation with marked emaciation** T0983 *Bos taurus domesticus*, T0986 *Bos taurus domesticus*; *Bubalus bubalis*, T2837 *Gallus gallus domesticus*.
- vacuity taxation with profuse sweating** T4682 *Pedicularis muscicola*.
- vacuity taxation with steaming bone** T0722 *Arundo donax*, T5239 *Prunus salicina*.
- vacuity vexation and egersis** T6918 *Ziziphus jujuba* var. *spinosa*.
- vacuity vexation and insomnia** T0462 *Anemarrhena asphodeloides*, T5826 *Scrophularia buergeriana*, T5828 *Scrophularia ningpoensis*, T6919 *Ziziphus jujuba* var. *spinosa*.
- vacuity vexation and thirst** T1961 *Cynanchum thesioides*.
- vacuity weakness** T4275 *Monotropa hypopitys*.
- vacuity with dizziness** T0924 *Bergenia purpurascens*.
- vacuity-fire toothache** T4602 *Panax ginseng* [Syn. *Panax schinseng*].
- vaginal discharge** T0045 *Acanthopanax trifoliatum*, T0171 *Adiantum capillus-veneris*, T0249 *Agrimonia pilosa* var. *japonica*, T0255 *Ailanthus altissima*, T0274 *Akebia quinata*, T0278 *Akebia trifoliata*, T0280 *Akebia trifoliata* var. *australis*, T0298 *Alectoria vivens*, T0323 *Allium tuberosum*, T0476 *Angelica anomala*, T0542 *Apis cerana*, T0571 *Aralia decaisneana*, T0678 *Artemisia japonica*, T0736 *Asclepias curassavica*, T0805 *Astragalus sinicus*, T0895 *Benincasa hispida*, T0902 *Berberis diaphana*, T0924 *Bergenia purpurascens*, T0952 *Blechnum orientale*, T0993 *Boschniakia rossica*, T1143 *Calystegia hederacea*, T1145 *Camellia japonica*, T1163 *Campylotropis hirtella*, T1174 *Cannabis sativa*, T1183 *Capra hircus*; *Ovis aries*, T1188 *Caragana chamlagu*, T1191 *Caragana sinica*, T1199 *Carduus acanthoides*, T1200 *Carduus crispus*, T1299 *Celosia cristata*, T1419 *Cimicifuga dahurica*, T1420 *Cimicifuga foetida*, T1421 *Cimicifuga heracleifolia*, T1425 *Cimicifuga simplex*, T1582 *Cnidium monnieri*, T1604 *Coeloglossum viride* [Syn. *Coeloglossum viride* var. *bracteatum*], T1819 *Crotalaria ferruginea*, T1927 *Cycas revoluta*, T1967 *Cynoglossum amabile*, T1969 *Cynoglossum officinale*, T1986 *Cyrtomium fortunei*, T2133 *Desmodium racemosum* [Syn. *Podocarpium podocarpum* var. *oxyphyllum*], T2188 *Dioscorea alata*, T2190 *Dioscorea batatas* [Syn. *Dioscorea opposita*], T2198 *Dioscorea gracillima*, T2201 *Dioscorea hypoglauca* [Syn. *Dioscorea collettii* var. *hypoglauca*], T2202 *Dioscorea japonica*, T2212 *Dioscorea tokoro*, T2281 *Dryopteris crassirhizoma*, T2326 *Elaeagnus angustifolia*, T2327 *Elaeagnus angustifolia*, T2334 *Elephantopus scaber*, T2387 *Epilobium hirsutum*, T2391 *Epimedium brevicornum*, T2649 *Evolvulus alsinoides*, T2657 *Fagopyrum cymosum* [Syn. *Polygonum cymosum*], T2658 *Fagopyrum esculentum*, T2659 *Fagopyrum esculentum*, T2718 *Ficus carica*, T2727 *Ficus simplicissima*, T2772 *Fraxinus mandshurica*, T2837 *Gallus gallus domesticus*, T2961 *Ginkgo biloba*, T2962 *Ginkgo biloba*, T2964 *Ginkgo biloba*, T3026 *Gnaphalium affine* [Syn. *Gnaphalium multiceps*], T3077 *Gymnadenia conopsea*, T3193 *Hemerocallis fulva*, T3195 *Hemerocallis lilio-asphodelus*, T3197 *Hemerocallis minor*, T3241 *Hibiscus mutabilis*, T3242 *Hibiscus rosa-sinensis*, T3243 *Hibiscus rosa-sinensis*, T3244 *Hibiscus syriacus*, T3295 *Huperzia serrata* [Syn. *Lycopodium serratum*], T3570 *Juglans regia*, T3649 *Laccifer lacca*, T3671 *Lagerstroemia indica*, T3681 *Lamium barbatum*, T3770 *Lespedeza cuneata*, T3932 *Ludwigia octovalvis*, T3957 *Lycium chinense*, T3981 *Lycopus lucidus*, T3990 *Lygodium japonicum*, T3999 *Lysimachia clethroides*, T4036 *Magnolia coco*, T4056 *Mahonia bealei*, T4057 *Mahonia bealei*, T4063 *Mahonia fortunei*, T4067 *Mahonia japonica*, T4068 *Mahonia japonica*, T4082 *Mallotus japonicus*, T4091 *Malva sylvestris*, T4172 *Melilotus suaveolens*, T4206 *Metaplexis japonica*, T4209 *Michelia alba*, T4397 *Nelumbo nucifera*, T4482 *Oenanthe javanica*, T4526 *Origanum vulgare*, T4552 *Osmunda japonica*, T4562 *Oxalis acetosella*, T4564 *Oxalis corniculata* [Syn. *Oxalis repens*], T4575 *Pachysandra terminalis*, T4629 *Papaver nudicaule*, T4630 *Papaver nudicaule* ssp. *amurense*, T4787 *Phellinus igniarius*, T5098 *Polygonum aviculare*, T5100 *Polygonum chinense*, T5129 *Polyporus umbellatus*, T5284 *Pteridium aquilinum* var. *latiusculum*, T5295 *Pteris multifida*, T5323 *Pulsatilla campanella*, T5324 *Pulsatilla cernua*, T5325 *Pulsatilla chinensis*, T5326 *Pulsatilla dahurica*, T5332 *Punica granatum*, T5529 *Rhodomyrtus tomentosa*, T5554 *Rodgersia aesculifolia*, T5567 *Rosa laevigata*, T5586 *Rubia yunnanensis*, T5750 *Saururus chinensis*, T5753 *Saussurea gnaphaloides*, T5757 *Saussurea laniceps*, T5759 *Saussurea medusa*, T5939 *Shiraiia bambusicola*, T5954 *Silene fortunei*, T5966 *Siphonostegia chinensis*, T5976 *Smilax china* [Syn. *Smilax japonica*], T5977 *Smilax glabra*, T5980 *Smilax menispermoides*, T6031 *Sophora flavescens* [Syn. *Sophora angustifolia*], T6357 *Tetrapanax papyriferus*, T6474 *Toona ciliata*, T6475 *Toona sinensis*, T6601 *Umbilicaria esculenta* [Syn. *Gyrophora esculenta*], T6645 *Urena lobata*, T6653 *Usnea diffracta*, T6654 *Usnea longissima*, T6683 *Vallisneria spiralis*, T6749 *Vicia hirsuta*, T6808 *Waltheria americana*.
- vaginal discharge and pudendal itch** T0318 *Allium sativum*.
- vaginal protrusion (prolapse of uterus)** T5671 *Salvia digitaloides*.
- vaginitis** T2715 *Fibraurea recisa*, T5724 *Sapium sebiferum*.
- varicella** T4552 *Osmunda japonica*.
- variola** T4548 *Oryza sativa* var. *glutinosa*.
- various hemorrhage** T2841 *Gallus gallus domesticus*, T4568 *Oxytropis myriophylla*, T5018 *Pleuropterus ciliinervis*.
- various pain** T0183 *Adlumia cirrhosa* [Syn. *Adlumia fungosa*], T6135 *Stephania succifera*.
- various pains** T1716 *Corydalis gigantea*, T5821 *Scopolia japonica*.

- various pains due to blood stasis and rheumatic impediment** T0495  
*Angelica sinensis*, T4804 *Phlojodicarpus sibiricus*.
- vascular headache** T0644 *Armillaria mellea*.
- vascular migraine** T4303 *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*.
- vertex headache** T3822 *Ligusticum jeholense*, T3824 *Ligusticum sinense*, T4551 *Osmorhiza aristata* var. *laxa*.
- vesical calculus** T3174 *Heliotropium indicum*.
- vesicle sore** T1197 *Cardiospermum halicacabum*.
- vesication** T2060 *Delonix regia*, T2882 *Gardenia jasminoides* [Syn. *Gardenia florida*], T3921 *Lophatherum gracile*, T5661 *Salvia bowleyana*.
- vesication and agitation** T1662 *Coptis chinensis*, T1663 *Coptis chinensis* var. *brevise-pala*, T1664 *Coptis deltoidea*, T1669 *Coptis omeiensis*, T1670 *Coptis teetoides* [Syn. *Coptis teeta*], T3304 *Hydrangea macrophylla*, T4029 *Maesa japonica*, T5680 *Salvia multiorrhiza*, T5681 *Salvia multiorrhiza* f. *alba*, T5688 *Salvia przewalskii*.
- vesication and agitation in night** T4904 *Pinellia ternata*.
- vesication and agitation with insomnia** T5428 *Rauwolfia yunnanensis*.
- vesication and fullness** T2839 *Gallus gallus domesticus*.
- vesication and oppression due to summerheat-heat** T1448 *Cirsium chinense*.
- vesication and reddish urine** T0632 *Aristolochia manshuriensis*.
- vesication and thirst** T0438 *Anacardium occidentale*, T0834 *Averrhoa carambola*, T1152 *Camellia sinensis* [Syn. *Thea sinensis*], T1165 *Canarium album*, T2246 *Dolichos lablab*, T2431 *Eriobotrya japonica*, T3286 *Hovenia dulcis*, T3876 *Litchi chinensis*, T3957 *Lycium chinense*, T4348 *Myrica rubra*, T4545 *Oryza sativa*, T4618 *Panicum miliaceum*, T5826 *Scrophularia buergeriana*, T5828 *Scrophularia ningpoensis*, T6416 *Thamnia vermicularis*.
- vesication due to febrile disease** T2803 *Frullania tamarisci* ssp. *moniliata* [Syn. *Frullania moniliata*].
- viral conjunctivitis** T3908 *Lonicera bournei*, T3909 *Lonicera confusa*, T3910 *Lonicera fulvotomentosa*, T3911 *Lonicera hypoglaucula*, T3912 *Lonicera japonica*, T3914 *Lonicera macranthoides*, T3918 *Lonicera similis*.
- viral infection** T0866 *Baphicacanthus cusia* [Syn. *Strobilanthes cusia*], T3085 *Gynostemma pentaphyllum*.
- viral hepatitis** T0379 *Alternanthera philoxeroides*.
- visceral agitation** T6544 *Triticum aestivum* [Syn. *Triticum vulgare*], T6562 *Tulipa gesneriana*, T6675 *Valeriana amurensis*, T6679 *Valeriana officinalis*, T6680 *Valeriana officinalis* var. *latifolia*, T6916 *Ziziphus jujuba*, T6917 *Ziziphus jujuba* var. *inermis*.
- vomiting** T0012 *Abrus precatorius*, T0156 *Actinidia arguta*, T0357 *Alpinia japonica*, T0358 *Alpinia katsumadai*, T0359 *Alpinia officinarum*, T0417 *Amomum longiligulare*, T0418 *Amomum muricarpum*, T0419 *Amomum villosum*, T0420 *Amomum xanthioides*, T1168 *Canavalia ensiformis*, T1169 *Canavalia gladiata*, T1182 *Capra hircus*; *Ovis aries*, T1186 *Capsicum annuum*, T1187 *Capsicum frutescens*, T1469 *Citrus aurantium* var. *amara*, T1501 *Citrus medica* var. *sarcodactylis*, T1506 *Citrus reticulata*, T2643 *Evodia meliifolia*, T2744 *Foeniculum vulgare*, T2867 *Garcinia multiflora*, T3286 *Hovenia dulcis*, T3372 *Hypodematium sinense*, T4048 *Magnolia rostrata*, T4099 *Mangifera indica*, T4103 *Mangifera persiciformis*, T4443 *Notholirion hyacinthinum* [Syn. *Notholirion bulbuliferum*], T4600 *Panax ginseng* [Syn. *Panax schinseng*], T4953 *Piper longum*, T5139 *Poncirus trifoliata*, T5389 *Rabdosia coetsa*, T5419 *Raphanus sativus*, T5754 *Saussurea graminea*, T6869 *Zanthoxylum bungeanum*, T6892 *Zanthoxylum schinifolium*, T6909 *Zingiber officinale*, T6910 *Zingiber officinale*.
- vomiting and diarrhea** T0190 *Adonis sutchuenensis*, T0212 *Agastache rugosus*, T0360 *Alpinia oxyphylla*, T0363 *Alpinia speciosa*, T0374 *Alstonia scholaris*, T0819 *Atractylodes chinensis*, T0821 *Atractylodes japonica*, T0823 *Atractylodes lancea*, T1436 *Cinnamomum camphora*, T1441 *Cinnamomum japonicum*, T1592 *Cocos nucifera*, T2343 *Elsholtzia splendens*, T3234 *Heteropogon contortus*, T3431 *Inula helenium*, T3437 *Inula racemosa*, T4034 *Magnolia biloba*, T4039 *Magnolia grandiflora*, T4045 *Magnolia officinalis*, T4304 *Mosla chinensis* [Syn. *Orthodon chinensis*], T4348 *Myrica rubra*, T4470 *Ocimum basilicum*, T4714 *Perilla frutescens*, T6499 *Tribulus terrestris*, T6677 *Valeriana jatamansii* [Syn. *Valeriana wallichii*], T6788 *Vitex negundo*, T6888 *Zanthoxylum planispinum*, T6893 *Zanthoxylum simulans*, T6894 *Zanthoxylum simulans*.
- vomiting and diarrhea with cramp** T0978 *Bombyx mori*, T1342 *Chaenomeles lagenaria* [Syn. *Chaenomeles speciosa*], T1343 *Chaenomeles sinensis*, T4818 *Phoebe nanmu*.
- vomiting and dysentery** T4979 *Pistacia chinensis*.
- vomiting and eructation** T3427 *Inula britannica*, T3428 *Inula britannica* var. *chinensis*, T3434 *Inula linariaefolia*.
- vomiting and hiccough** T1202 *Carex kobomugi*, T1483 *Citrus grandis* var. *tomentosa*.
- vomiting diarrhea with abdominal pain** T1941 *Cymbopogon distans*, T2205 *Dioscorea panthaica*, T4086 *Malus asiatica*, T4526 *Origanum vulgare*, T5059 *Pogostemon cablin* [Syn. *Mentha cablin*], T5103 *Polygonum hydropiper*, T5836 *Scutellaria discolor*, T6827 *Wisteria sinensis*.
- vomiting due to liver stomach qi stagnation** T1498 *Citrus medica*, T1520 *Citrus wilsonii*.
- vomiting in pregnancy** T1490 *Citrus limon*, T1494 *Citrus limonia*, T2263 *Dregea volubilis*, T6277 *Tadehagi triquetrum*, T6285 *Tamarindus indica*.
- vomiting nausea** T0825 *Atropa belladonna*, T1353 *Changium smyrnioides*, T2838 *Gallus gallus domesticus*, T4904 *Pinellia ternata*, T5642 *Saccharum sinensis*, T6488 *Trachyspermum ammi*.
- vomiting of milk in infants with stomach cold** T0416 *Amomum kravanh* [Syn. *Amomum cardamomum*].
- vomiting of sour matter** T1937 *Cydonia oblonga*, T2431 *Eriobotrya japonica*, T4983 *Pisum sativum*, T6754 *Vigna unguiculata*.
- vomiting of water due to congealing cold qi stagnation** T5715 *Santalum album*.
- vomiting with stomach cold** T0416 *Amomum kravanh* [Syn. *Amomum cardamomum*], T1008 *Brassica juncea*, T3409 *Illicium verum*, T4957 *Piper nigrum*.
- wandering wind of head and face** T0167 *Adenanthera pavonina*.
- warm disease** T2756 *Forsythia suspensa*, T3868 *Liquidambar orientalis*.
- warm disease ardent fever** T5120 *Polygonum tinctorium*.

- warm disease fever** T0457 *Andrographis paniculata* [Syn. *Justicia paniculata*], T1538 *Clausena lansium*, T1727 *Corydalis mucronifera*, T3908 *Lonicera bournei*, T3909 *Lonicera confusa*, T3910 *Lonicera fulvotomentosa*, T3911 *Lonicera hypoglauca*, T3912 *Lonicera japonica*, T3913 *Lonicera japonica*, T3914 *Lonicera macranthoides*, T3918 *Lonicera similis*, T5121 *Polygonum tinctorium*.
- warm disease macular eruption** T5445 *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*].
- warm evil in construction** T3476 *Isatis indigotica*.
- warm heat disease** T0462 *Anemarrhena asphodeloides*, T0867 *Baphicacanthus cusia* [Syn. *Strobilanthes cusia*].
- warm heat disease with fever** T0942 *Biebersteinia heterostemon*, T1950 *Cynanchum ascyrifolium*, T1951 *Cynanchum atratum*, T1962 *Cynanchum versicolor*, T2952 *Gerbera piloselloides*, T4582 *Paeonia delavayi*, T4585 *Paeonia moutan* [Syn. *Paeonia suffruticosa*], T6582 *Tylophora ovata*.
- warm heat macular eruption** T2281 *Dryopteris crassirhizoma*.
- warm malaria** T0427 *Ampelopsis japonica* [Syn. *Paullinia japonica*], T4670 *Patrinia heterophylla*, T4673 *Patrinia scabra*.
- warm toxin macular eruption** T0866 *Baphicacanthus cusia* [Syn. *Strobilanthes cusia*], T3475 *Isatis indigotica*, T4584 *Paeonia lactiflora* wild, T4586 *Paeonia obovata*, T4590 *Paeonia veitchii*.
- wart** T0971 *Bolbostemma paniculatum*, T1954 *Cynanchum chinense*, T2597 *Euphorbia lathyris*, T3659 *Lactuca indica*, T4102 *Mangifera indica*, T4338 *Mylabris phalerata*; *Mylabris cichorii*, T5026 *Plumbagella micrantha*.
- water diarrhea** T0328 *Alnus japonica*, T1937 *Cydonia oblonga*, T1943 *Cymbopogon goeringii*, T2193 *Dioscorea cirrhosa* [Syn. *Dioscorea pogonoides*], T6746 *Vicia faba*.
- water gu** T5542 *Rhus verniciflua* [Syn. *Toxicodendron verniciflum*].
- water-damp fullness** T1980 *Cyprinus carpio*.
- water-rheum collecting internally** T0824 *Atractylodes macrocephala* [Syn. *Atractylis macrocephala*].
- water-rheum collecting lung** T4287 *Morus alba*.
- weakness during convalescence** T0515 *Anredera cordifolia* [Syn. *Baussingaultia cordifolia*; *Baussingaultia gracilis* f. *pseudobaselloides*; *Baussingaultia gracilis* var. *pseudobaselloides*], T0541 *Apis cerana*, T1751 *Corylus heterophylla*, T2837 *Gallus gallus domesticus*, T4607 *Panax pseudo-ginseng* var. *japonicus*, T5260 *Pseudostellaria heterophylla*, T6087 *Spiranthes sinensis*, T6489 *Tragopogon porrifolius*.
- weakness in limbs** T3970 *Lycopodium cernuum*, T3973 *Lycopodium japonicum* [Syn. *Lycopodium clavatum*].
- weakness in lumbus and knees** T3389 *Ilex cornuta*, T5755 *Saussurea involucreta*.
- weakness in sinews and bones** T1455 *Cistanche deserticola*, T1456 *Cistanche salsa*, T2530 *Eucommia ulmoides*, T4536 *Orobanchae coerulea*, T5638 *Sabia swinhoei*, T6670 *Vaccinium bracteatum*.
- weakness of legs** T5972 *Skimmia reevesiana*.
- weakness of righth qi** T3742 *Lentinus edodes*.
- weakness in legs and knees** T4828 *Photinia serrulata*.
- welling abscess** T0012 *Abrus precatorius*, T0226 *Agave sisalana*, T0421 *Amorpha fruticosa*, T0495 *Angelica sinensis*, T2341 *Elsholtzia ciliata*, T2756 *Forsythia suspensa*, T3001 *Glycine max*, T3190 *Helminthostachys zeylanica*, T3908 *Lonicera bournei*, T3909 *Lonicera confusa*, T3910 *Lonicera fulvotomentosa*, T3911 *Lonicera hypoglauca*, T3912 *Lonicera japonica*, T3914 *Lonicera macranthoides*, T3918 *Lonicera similis*, T4253 *Mirabilis jalapa*, T4804 *Phlojodicarpus sibiricus*, T5118 *Polygonum suffutum*, T5323 *Pulsatilla campanella*, T5324 *Pulsatilla cernua*, T5325 *Pulsatilla chinensis*, T5326 *Pulsatilla dahurica*, T5531 *Rhus chinensis* [Syn. *Rhus semialata*], T6018 *Solanum verbascifolium*, T6279 *Tagetes erecta*.
- welling abscess and boil** T0584 *Arctium lappa*, T1031 *Broussonetia kazinoki*, T1373 *Chloranthus serratus*, T1450 *Cirsium lineare*, T1731 *Corydalis pallida*, T2162 *Dicranostigma franchetianum* [Syn. *Dicranostigma leptopodium*], T3808 *Ligularia japonica* [Syn. *Arnica japonica*; *Senecio japonica*], T5250 *Psammisilene tunioides*, T5339 *Pycnoporus sanguineus*, T5892 *Senecio nemorensis*, T6020 *Solanum xanthocarpum*, T6095 *Stachytarpheta jamaicensis*, T6491 *Trametes cinnabarina* [Syn. *Polyporus cinnabarinus*; *Boletus cinnabarinus*], T6808 *Waltheria americana*.
- welling abscess and clove sore** T1869 *Cryptotaenia japonica*, T3674 *Laggera alata*.
- welling abscess and eczema** T5925 *Sesamum indicum* [Syn. *Sesamum orientale*].
- welling abscess and flat abscess** T0463 *Anemone altaica*, T0648 *Arnebia euchroma*, T0649 *Arnebia guttata*, T1049 *Bufo bufo gargarizans*; *Bufo melanostictus*, T1051 *Bufo bufo gargarizans*; *Bufo melanostictus*, T1286 *Celastrus flagellaris*, T1562 *Clerodendron trichotomum*, T1565 *Clerodendrum bungei*, T1693 *Coriaria sinica* [Syn. *Coriaria nepalensis*], T1858 *Croton tiglium*, T1871 *Cucubalus baccifer*, T2139 *Dianella ensifolia*, T2580 *Euphorbia antiquorum*, T2584 *Euphorbia ebracteolata*, T2587 *Euphorbia fischeriana*, T2756 *Forsythia suspensa*, T3128 *Hedysarum multijugum*, T3396 *Ilex pubescens*, T3397 *Ilex pubescens* var. *glaber*, T3411 *Impatiens balsamina*, T3881 *Lithospermum erythrorhizon*, T4042 *Magnolia liliflora*, T4428 *Nicotiana tabacum*, T5220 *Prunus davidiana*, T5232 *Prunus persica*, T6497 *Tribulus terrestris*, T6560 *Tulipa edulis*.
- welling abscess and flat abscess with clove sore** T0138 *Aconitum umbrosum*, T0987 *Bos taurus domesticus*; *Bubalus bubalis*, T2132 *Desmodium pulchellum* [Syn. *Phyllodium pulchellum*], T3088 *Gynura segetum* [Syn. *Gynura japonica*], T4000 *Lysimachia congestiflora*, T5576 *Rostellularia procumbens* [Syn. *Justicia procumbens*], T6463 *Tinospora capillipes*, T6467 *Tinospora sagittata*, T6767 *Viola yedoensis*.
- welling abscess and flat abscess with clove sores** T0922 *Berberis polyphylla* var. *leioclada*, T1052 *Bufo bufo gargarizans*; *Bufo melanostictus*.
- welling abscess and flat abscess with swelling sore** T3624 *Kalopanax pictum*, T3625 *Kalopanax septemlobus*, T5642 *Saccharum sinensis*, T6764 *Vinegar*.
- welling abscess and flat abscess with swollen boil** T0382 *Althaea rosea*.
- welling abscess and open sore** T3026 *Gnaphalium affine* [Syn. *Gnaphalium multiceps*].
- welling abscess and sores** T0292 *Albizia julibrissin*, T1338 *Cestrum nocturnum*, T1546 *Clematis tangutica*, T2062 *Delphinium bonvalotii*,

- T2081 *Delphinium omeiense*, T2084 *Delphinium potaninii*, T2085 *Delphinium potaninii* var. *jiufengshanense*, T2757 *Forsythia viridissima*, T3675 *Lagopsis supina*.
- welling abscess and sores with sore and boil** T0156 *Actinidia arguta*.
- welling abscess and toxin of clove** T4264 *Momordica cochinchinensis*.
- welling abscess boil and clove sores** T3645 *Kummerowia striata*.
- welling abscess of ear** T2517 *Eucalyptus robusta*.
- welling abscess toxin** T5579 *Rubia cordifolia*.
- welling abscess with pus swelling** T0002 *Abelmoschus moschatus* [Syn. *Hibiscus abelmoschus*], T3145 *Helianthus annuus*.
- welling abscess and sores** T2716 *Ficus beecheyana* [Syn. *Ficus erecta* var. *beecheyana*].
- white dysentery** T4305 *Mosla dianthera*.
- white mouth sore in children** T3348 *Hypericum elodeoides*, T3368 *Hypericum wightianum*, T5894 *Senecio oryzetorum*.
- white patch wind** T0583 *Archangelica decurrens*, T1359 *Chenopodium album*, T1911 *Cuscuta australis*, T1912 *Cuscuta chinensis*, T1913 *Cuscuta japonica*, T2273 *Drynaria fortunei*, T2598 *Euphorbia lathyris*, T3390 *Ilex cornuta*, T3567 *Juglans regia*, T4432 *Nigella glandulifera*, T5252 *Pseudodrynaria coronans*, T5270 *Psoralea corylifolia*, T6713 *Vernonia anthelmintica*.
- white turbidity** T0048 *Acanthus ilicifolius*, T0255 *Ailanthus altissima*, T0360 *Alpinia oxyphylla*, T0895 *Benincasa hispida*, T0977 *Bombyx mori*, T1001 *Brachystemma calycinum*, T1275 *Cayratia japonica*, T1756 *Costus speciosus*, T2194 *Dioscorea colletii*, T2197 *Dioscorea futschauensis*, T2198 *Dioscorea gracillima*, T2201 *Dioscorea hypoglauca* [Syn. *Dioscorea colletii* var. *hypoglauca*], T2210 *Dioscorea spongiosa*, T2212 *Dioscorea tokoro*, T2391 *Epimedium brevicornum*, T2658 *Fagopyrum esculentum*, T3615 *Kadsura interior*, T3770 *Lespedeza cuneata*, T3932 *Ludwigia octovalvis*, T3990 *Lygodium japonicum*, T4252 *Mirabilis jalapa*, T5554 *Rodgersia aesculifolia*, T5651 *Salix babylonica*, T5685 *Salvia plebeia*, T6025 *Sonchus arvensis*, T6095 *Stachytarpheta jamaicensis*, T6474 *Toona ciliata*, T6475 *Toona sinensis*, T6754 *Vigna unguiculata*.
- white turbidity vaginal discharge** T1900 *Curculigo capitulata* [Syn. *Leucojum capitulata*].
- whole body swelling** T2995 *Gloriosa superba*.
- wilting-impediment of limbs** T0569 *Aralia cordata*, T0574 *Aralia fargesii*.
- wilting-weakness in limbs** T2737 *Flemingia philippinensis* [Syn. *Moghania philippinensis*], T4260 *Moghania philippinensis*.
- wind damage and common cold** T2056 *Debregeasia longifolia*, T3520 *Isodon rosthornii*, T6789 *Vitex negundo*.
- wind damage common cold** T1137 *Caltha palustris*.
- wind due to blood heat** T1161 *Campsis grandiflora*.
- wind eye with ulceration of eyelid rim** T6251 *Symplocos caudata*.
- wind impediment** T1171 *Canis familiaris*, T1205 *Carica papaya*, T3001 *Glycine max*, T4912 *Pinus koraiensis*, T5151 *Populus davidiana*, T5234 *Prunus persica*, T5368 *Python molurus bivittatus*, T5579 *Rubia cordifolia*, T6439 *Thuja orientalis* [Syn. *Platycladus orientalis*; *Biota orientalis*].
- wind impediment and hypertonicity of sinews** T3000 *Glycine max*.
- wind impediment and lumbago** T6197 *Styrax benzoin*, T6204 *Styrax tonkinensis*.
- wind lai** T6843 *Xanthium sibiricum* [Syn. *Xanthium strumarium*].
- wind lai lichen** T5091 *Polygonatum cyrtonema* [Syn. *Polygonatum multiflorum*], T5092 *Polygonatum kingianum*, T5095 *Polygonatum sibiricum*.
- wind papule itching** T0540 *Apis cerana*, T0978 *Bombyx mori*, T2257 *Dracocephalum moldavicum*, T2367 *Ephedra equisetina*, T2368 *Ephedra gerardiana*, T2369 *Ephedra intermedia*, T2372 *Ephedra likiangensis*, T2373 *Ephedra minuta*, T2375 *Ephedra monosperma*, T2379 *Ephedra saxatilis*, T2380 *Ephedra sinica*, T2434 *Eriocaulon buergerianum*, T3202 *Hemistepta lyrata* [Syn. *Hemistepta carthamoides*; *Saussurea carthamoides*], T3222 *Heracleum scabridum*, T4231 *Milingtonia hortensis*, T4906 *Pinus armandii*, T4916 *Pinus massoniana*, T5107 *Polygonum multiflorum*, T5108 *Polygonum multiflorum*, T5126 *Polypodium virginianum*, T5127 *Polypodium vulgare*, T5727 *Saposhnikovia divaricata* [Syn. *Ledebouria seseloides*], T6286 *Tamarix chinensis*, T6290 *Tamarix ramosissima*, T6325 *Tectona grandis*.
- wind papule itching due to blood heat** T1160 *Campsis grandiflora*.
- wind papule itching of skin** T6499 *Tribulus terrestris*.
- wind papules** T0297 *Alchornea trewioides*, T0423 *Ampelopsis brevipedunculata*, T0586 *Arctium lappa*, T0692 *Artemisia rupestris* [Syn. *Artemisia dentata*; *Artemisia viridis*; *Artemisia viridifolia*], T0932 *Betula luminifera*, T1032 *Broussonetia papyrifera*, T1084 *Buthus martensi*, T1161 *Campsis grandiflora*, T1311 *Centella asiatica*, T2136 *Desmos cochinchinensis* [Syn. *Desmos chinensis*], T2194 *Dioscorea colletii*, T2325 *Eichhornia crassipes*, T2505 *Eucalyptus citriodora*, T2517 *Eucalyptus robusta*, T2984 *Glinus lotoides* [Syn. *Mollugo lotoides*], T3417 *Imperata cylindrica* var. *major*, T3737 *Lemnaphyllum microphyllum* var. *obovatum*, T4154 *Melaleuca leucadendra*, T4307 *Mosla scabra* [Syn. *Mosla punctata*], T5104 *Polygonum hydropiper*, T5269 *Psilotum nudum*, T5401 *Rabdosia yunnanensis*, T5704 *Sambucus nigra*, T5707 *Sambucus williamsii*, T5773 *Saxifraga stolonifera*, T5804 *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*], T5934 *Seseli meirei*, T5937 *Seseli yunnanense*, T5950 *Siegesbeckia orientalis*, T5951 *Siegesbeckia orientalis* var. *glabrescens* [Syn. *Siegesbeckia glabrescens*], T5952 *Siegesbeckia orientalis* var. *pubescens* [Syn. *Siegesbeckia pubescens*], T6367 *Teucrium quadrifarium*.
- wind papules [= rubella]** T4828 *Photinia serrulata*, T6365 *Teucrium pilosum* [Syn. *Teucrium japonicum* var. *pilosum*].
- wind sore** T2981 *Gleditsia sinensis* [Syn. *Gleditsia horrida*].
- wind stroke** T0142 *Acorus calamus*, T1876 *Cucumis melo*, T2274 *Dryobalanops aromatica*, T2975 *Gleditsia delavayi*, T6183 *Strychnos nitida*.
- wind stroke (apoplexy)** T2976 *Gleditsia fera*.
- wind stroke clenched jaw** T2978 *Gleditsia sinensis* [Syn. *Gleditsia horrida*].
- wind stroke paralysis** T0116 *Aconitum nagarum* var. *heterotrichum* [Syn. *Aconitum bullatifolium*].
- wind stroke with congesting phlegm** T0088 *Aconitum coreanum*, T0617 *Arisaema amurense*, T0618 *Arisaema consanguineum*, T0620 *Arisaema heterophyllum*, T4903 *Pinellia pedatisecta*, T6588 *Typhonium*

- giganteum*, T6697 *Veratrum grandiflorum*, T6698 *Veratrum nigrum*.
- wind stroke with deviated eyes and mouth** T1084 *Buthus martensi*.
- wind stroke with hemiplegia** T0108 *Aconitum kusnezoffii*, T0164 *Actinidia polygama*, T0983 *Bos taurus domesticus*, T2753 *Formica fusca*, T3396 *Ilex pubescens*, T3397 *Ilex pubescens* var. *glaber*, T4696 *Penaeus orientalis*, T4796 *Pheretima aspergillum*; *Alloobophora caliginosa trapezoides*.
- wind stroke with loss of speech** T6358 *Tetraplodon mnioides* [Syn. *Tetraplodon bryoides*; *Splachnum mnioides*].
- wind stroke with orifice block** T0987 *Bos taurus domesticus*; *Bubalus bubalis*.
- wind stroke with phlegm reversal** T3868 *Liquidambar orientalis*, T4303 *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*.
- wind swelling** T5651 *Salix babylonica*.
- wind swelling and pruritus** T5650 *Salix babylonica*.
- wind toxin and beriberi** T3000 *Glycine max*, T4937 *Piper betle*.
- wind toxin and swollen welling abscess** T5301 *Pterocarpus indicus*.
- wind toxin swollen face** T0584 *Arctium lappa*.
- wind warmth** T1395 *Chrysanthemum morifolium* [Syn. *Dendranthema morifolium*].
- wind water edema** T2367 *Ephedra equisetina*, T2368 *Ephedra gerardiana*, T2369 *Ephedra intermedia*, T2372 *Ephedra likiangensis*, T2373 *Ephedra minuta*, T2375 *Ephedra monosperma*, T2379 *Ephedra saxatilis*, T2380 *Ephedra sinica*, T5963 *Sinodielsia yunnanensis*.
- wind yang harassing upper body** T1528 *Cladonia stellaris* [Syn. *Cladonia alpestris*].
- wind-cold common cold** T0310 *Allium ascalonicum*, T0314 *Allium fistulosum*, T0476 *Angelica anomala*, T0478 *Angelica dahurica* [Syn. *Angelica porphyrocaulis*], T0676 *Artemisia dracunculus*, T0692 *Artemisia rupestris* [Syn. *Artemisia dentata*; *Artemisia viridis*; *Artemisia viridifolia*], T0724 *Asarum caulescens*, T0726 *Asarum forbesii*, T0727 *Asarum fukiense*, T0728 *Asarum heterotropoides* var. *mandshuricum*, T0729 *Asarum maximum*, T0731 *Asarum sieboldii*, T0732 *Asarum sieboldii* var. *seoulensis*, T0752 *Asparagus officinalis*, T0926 *Berneuxia thibetica*, T0957 *Blumea balsamifera*, T1312 *Centipeda minima*, T1371 *Chloranthus japonicus*, T1435 *Cinnamomum camphora*, T1440 *Cinnamomum glanduliferum*, T1443 *Cinnamomum parthenoxylum* [Syn. *Cinnamomum porrectum*], T1641 *Conioselinum vaginatum*, T1941 *Cymbopogon distans*, T2505 *Eucalyptus citriodora*, T2956 *Geum japonicum*, T3026 *Gnaphalium affine* [Syn. *Gnaphalium multiceps*], T3124 *Hedyotis capitellata*, T3221 *Heracleum rapula*, T3222 *Heracleum scabridum*, T3796 *Libanotis buchtormensis*, T3847 *Lindera angustifolia*, T4000 *Lysimachia congestiflora*, T4035 *Magnolia biondii* [Syn. *Magnolia fargesii*], T4038 *Magnolia denudata* [Syn. *Magnolia heptapata*], T4041 *Magnolia liliflora*, T4052 *Magnolia sprengeri*, T4305 *Mosla dianthera*, T4551 *Osmorhiza aristata* var. *laxa*, T4763 *Peucedanum morisonii*, T5021 *Pleurospermum rivulorum*, T5113 *Polygonum persicaria*, T5389 *Rabdosia coetsa*, T5639 *Sabina chinensis*, T5987 *Sobina chinensis*, T6457 *Tilia japonica*, T6458 *Tilia miqueliana*, T6677 *Valeriana jatamansii* [Syn. *Valeriana wallichii*], T6883 *Zanthoxylum myriacanthum*, T6910 *Zingiber officinale*.
- wind-cold cough** T1046 *Buddleja davidii*, T3426 *Inula britannica*, T3427 *Inula britannica*, T3428 *Inula britannica* var. *chinensis*, T3433 *Inula japonica*, T3434 *Inula linariaefolia*, T3810 *Ligularia nelumbifolia*, T3871 *Liriodendron tulipifera*, T4443 *Notholirion hyacinthinum* [Syn. *Notholirion bulbuliferum*], T4937 *Piper betle*, T4948 *Piper hancei*, T4965 *Piper sarmentosum*, T6111 *Stemona japonica*, T6113 *Stemona sessilifolia*, T6115 *Stemona tuberosa*, T6874 *Zanthoxylum dimorphophyllum* var. *spinifolium*.
- wind-cold cough and asthma with abundant phlegm** T1483 *Citrus grandis* var. *tomentosa*.
- wind-cold exterior repletion syndrome** T2367 *Ephedra equisetina*, T2368 *Ephedra gerardiana*, T2369 *Ephedra intermedia*, T2372 *Ephedra likiangensis*, T2373 *Ephedra minuta*, T2375 *Ephedra monosperma*, T2379 *Ephedra saxatilis*, T2380 *Ephedra sinica*.
- wind-cold exterior syndrome** T0491 *Angelica polymorpha*, T1438 *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*], T4718 *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*], T4721 *Perilla frutescens* var. *arguta*.
- wind-cold headache** T4962 *Piper puberulum*.
- wind-cold impediment pain** T1434 *Cinnamomum bejolghota* [Syn. *Cinnamomum obtusifolium*; *Laurus bejolghota*], T1939 *Cymbopogon citratus*, T3869 *Liquor*.
- wind-cold sinew and bone numbness** T1550 *Cleome gynandra* [Syn. *Gynandropsis gynandra*].
- wind-cold-damp impediment** T0036 *Acanthopanax giraldii* [Syn. *Acanthopanax giraldii* var. *inermis*; *Eleutherococcus giraldii*], T0038 *Acanthopanax gracilistylus*, T0042 *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*], T0044 *Acanthopanax sessiliflorus*, T0077 *Aconitum balfourii*, T0080 *Aconitum bullatifolium* var. *homotrichum* [Syn. *Aconitum nagarum*], T0083 *Aconitum carmichaeli*, T0084 *Aconitum carmichaeli*, T0085 *Aconitum carmichaeli* cv, T0086 *Aconitum chasmanthum*, T0090 *Aconitum delavayi*, T0098 *Aconitum geniculatum*, T0105 *Aconitum karakolicum*, T0106 *Aconitum kirinense*, T0108 *Aconitum kusnezoffii*, T0123 *Aconitum polyschistum*, T0135 *Aconitum sungpanense*, T0138 *Aconitum umbrosum*, T0164 *Actinidia polygama*, T0470 *Anemone raddeana*, T0582 *Archangelica brevicaulis* [Syn. *Angelicarpa brevicaulis*; *Angelica brevicaulis*], T0696 *Artemisia sieversiana*, T0726 *Asarum forbesii*, T1641 *Conioselinum vaginatum*, T1923 *Cyathula capitata*, T2039 *Datura innoxia*, T2043 *Datura metel*, T2047 *Datura stramonium*, T2091 *Delphinium yunnanense*, T2203 *Dioscorea nipponica*, T2204 *Dioscorea nipponica* ssp. *rosthornii*, T2750 *Fomitopsis pinicola* [Syn. *Fomes pinicola*; *Polyporus pinicola*], T3213 *Heracleum hemsleyanum*, T3217 *Heracleum moellendorffii* [Syn. *Heracleum microcarpum*; *Heracleum morifolium*], T3221 *Heracleum rapula*, T3222 *Heracleum scabridum*, T3228 *Heracleum yungningense*, T3401 *Illicium henryi*, T3822 *Ligusticum jeholense*, T3824 *Ligusticum sinense*, T3970 *Lycopodium cernuum*, T3973 *Lycopodium japonicum* [Syn. *Lycopodium clavatum*], T4283 *Morinda officinalis*, T4439 *Nothapodytes pittosporoides*, T4445 *Notopterygium forbesii* [Syn. *Notopterygium franchetii*], T4446 *Notopterygium incisum*, T4516 *Oplopanax elatus*, T4725 *Periploca calophylla*, T4948 *Piper hancei*, T4950 *Piper kadsura* [Syn. *Piper fuokadsura*], T4974 *Piper wallichii* [Syn. *Piper wallichii* var. *hupehense*], T5021 *Pleurospermum rivulorum*, T5113 *Polygonum persicaria*, T5517

*Rhododendron molle*, T5822 *Scopolia sinensis*, T5924 *Sesamum indicum*, T6106 *Stemmatocrypton khasianum*, T6858 *Zanthoxylum acanthopodium*, T6862 *Zanthoxylum ailanthoides*, T6874 *Zanthoxylum dimorphophyllum* var. *spinifolium*, T6877 *Zanthoxylum dissitum*, T6893 *Zanthoxylum simulans*, T6894 *Zanthoxylum simulans*.

**wind-cold-damp impediment (especially in lower part of body)** T0492 *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*], T3214 *Heracleum lanatum*.

**wind-damp** T4838 *Phyllanthus flexuosus*, T6155 *Strophanthus divaricatus*, T6326 *Telekia speciosa*.

**wind-damp (rheumatis)**<sup>55091</sup> T5248 *Psacalium peltatum*.

**wind-damp bone pain** T0010 *Abrus fruticosus* [Syn. *Abrus cantoniensis*], T0012 *Abrus precatorius*, T0079 *Aconitum brachypodium*, T0117 *Aconitum nagarum* var. *lasiandrum*, T0500 *Anguilla japonica*, T0847 *Baccharis indica* [Syn. *Pluchea indica*], T0888 *Beesia calthaefolia*, T0922 *Berchemia polyphylla* var. *leioclada*, T1120 *Callicarpa macrophylla*, T1191 *Caragana sinica*, T1537 *Clausena lansium*, T1556 *Clerodendron fragrans*, T1557 *Clerodendron indicum*, T1657 *Conyza canadensis* [Syn. *Erigeron canadensis*], T1815 *Crotalaria assamica*, T1871 *Cucubalus baccifer*, T2052 *Davallia divaricata* [Syn. *Davallia formosana*; *Davallia orientalis*], T2233 *Diploclosia glaucescens*, T2505 *Eucalyptus citriodora*, T2641 *Evodia lepta* [Syn. *Ilex lepta*], T2721 *Ficus microcarpa*, T2980 *Gleditsia sinensis* [Syn. *Gleditsia horrida*], T3414 *Impatiens sicutifer*, T3736 *Lemmaphyllum microphyllum*, T3849 *Lindera chunii*, T4154 *Melaleuca leucadendra*, T4268 *Monachosorum henryi*, T4317 *Murraya euchrestifolia* [Syn. *Clausena euchrestifolia*], T4937 *Piper betle*, T5401 *Rabdosia yuennanensis*, T5587 *Rubus alceaefolius*, T5626 *Ruta graveolens*, T5650 *Salix babylonica*, T5672 *Salvia flava*, T5795 *Schisandra micrantha*, T5847 *Securidaca inappendiculata*, T6095 *Stachytarpheta jamaicensis*, T6286 *Tamarix chinensis*, T6290 *Tamarix ramosissima*, T6866 *Zanthoxylum avicennae*, T6884 *Zanthoxylum nitidum*.

**wind-damp bone pain (root cortex branchlet-leaf )** T0945 *Bischofia javanica* [Syn. *Bischofia trifoliata*].

**wind-damp edema** T1097 *Cacalia ainsliaeflora*.

**wind-damp impediment** T1084 *Buthus martensi*, T1562 *Clerodendron trichotomum*, T2479 *Erythrina variegata* var. *orientalis*, T4085 *Mallotus repandus* var. *chrysocarpus* [Syn. *Mallotus chrysocarpus*; *Mallotus repandus*], T5648 *Salacia prinoides* [Syn. *Salacia chinensis*], T5753 *Saussurea gnaphaloides*, T5757 *Saussurea laniceps*, T5759 *Saussurea medusa*, T5975 *Smilax bockii*, T5978 *Smilax glauco-china*, T5981 *Smilax riparia*.

**wind-damp impediment pain** T0045 *Acanthopanax trifoliatum*, T0060 *Achillea alpina* [Syn. *Achillea sibirica*], T0065 *Achillea millefolium*, T0088 *Aconitum coreanum*, T0094 *Aconitum finetianum*, T0125 *Aconitum pseudostapfianum*, T0130 *Aconitum sinomontanum*, T0144 *Acorus gramineus*, T0146 *Acorus tatarinowii*, T0156 *Actinidia arguta*, T0161 *Actinidia eriantha*, T0170 *Adhatoda vasica*, T0229 *Ageratum conyzoides*, T0266 *Ajuga macrosperma*, T0273 *Akebia quinata*, T0274 *Akebia quinata*, T0277 *Akebia trifoliata*, T0278 *Akebia trifoliata*, T0279 *Akebia trifoliata* var. *australis*, T0280 *Akebia trifoliata* var. *australis*, T0281 *Alangium chinense*, T0285 *Alangium plataniifolium*,

T0364 *Alsophila spinulosa*, T0383 *Alyxia sinensis*, T0463 *Anemone altaica*, T0491 *Angelica polymorpha*, T0503 *Anisomeles indica* [Syn. *Epimeredi indica*], T0567 *Aralia armata*, T0571 *Aralia decaisneae*, T0584 *Arctium lappa*, T0595 *Ardisia crispa*, T0600 *Ardisia mamillata* [Syn. *Tinus mamillata*], T0601 *Ardisia pusilla*, T0602 *Ardisia quinquegona*, T0608 *Arenaria kansuensis* [Syn. *Arenaria kumaonensis*], T0628 *Aristolochia fangchi*, T0634 *Aristolochia mollissima*, T0661 *Artemisia anomala*, T0721 *Arundina chinensis*, T0724 *Asarum caulescens*, T0727 *Asarum fukienense*, T0728 *Asarum heterotropoides* var. *mandshuricum*, T0731 *Asarum sieboldii*, T0732 *Asarum sieboldii* var. *seoulensis*, T0759 *Aspidistra elatior*, T0776 *Asplenium prolongatum*, T0814 *Atalantia buxifolia* [Syn. *Severinia buxifolia*], T0877 *Bauhinia championii*, T0886 *Beaumontia grandiflora*, T0932 *Betula luminifera*, T0938 *Bidens bipinnata*, T0957 *Blumea balsamifera*, T0963 *Boehmeria siamensis*, T0978 *Bombyx mori*, T0994 *Boswellia carterii*, T1031 *Broussonetia kazinoki*, T1053 *Bulbophyllum odoratissimum* [Syn. *Stelis odoratissimum*], T1092 *Buxus microphylla* var. *sinica*, T1282 *Cedrus deodara*, T1285 *Celastrus angulatus*, T1286 *Celastrus flagellaris*, T1289 *Celastrus orbiculatus* [Syn. *Celastrus articulatus*], T1290 *Celastrus orbiculatus* [Syn. *Celastrus articulatus*], T1291 *Celastrus paniculatus*, T1342 *Chaenomeles lagenaria* [Syn. *Chaenomeles speciosa*], T1343 *Chaenomeles sinensis*, T1361 *Chenopodium ambrosioides*, T1371 *Chloranthus japonicus*, T1372 *Chloranthus serratus*, T1411 *Cibotium barometz* [Syn. *Polypodium barometz*], T1435 *Cinnamomum camphora*, T1436 *Cinnamomum camphora*, T1437 *Cinnamomum camphora*, T1440 *Cinnamomum glanduliferum*, T1443 *Cinnamomum parthenoxylum* [Syn. *Cinnamomum porrectum*], T1530 *Cladostachys amaranthoides* [Syn. *Achyranthes amaranthoides*; *Cladostachys frutescens*; *Deeringia amaranthoides*], T1545 *Clematis chinensis*, T1547 *Clematis terniflora* [Syn. *Clematis maximowicziana*], T1563 *Clerodendron trichotomum*, T1565 *Clerodendron bungei*, T1582 *Cnidium monnieri*, T1583 *Cnidium officinale* [Syn. *Ligusticum officinale*], T1589 *Cocculus trilobus* [Syn. *Cocculus sarmentosus*], T1590 *Cocculus trilobus* [Syn. *Cocculus sarmentosus*], T1650 *Convolvulus arvensis*, T1721 *Corydalis linearoides*, T1831 *Crotalaria sessiliflora*, T1841 *Croton caudatus* var. *tomentosus*, T1884 *Cudrania cochinchinensis*, T1900 *Curculigo capitulata* [Syn. *Leucojum capitulata*], T1921 *Cyanotis arachnoidea* [Syn. *Cyanotis bodinieri*], T1922 *Cyanotis vaga*, T1934 *Cyclea tonkinensis*, T1941 *Cymbopogon distans*, T1958 *Cynanchum otophyllum*, T1959 *Cynanchum paniculatum*, T1984 *Cypripedium macranthum* [Syn. *Cypripedium tibeticum*], T2020 *Damnacanthus indicus*, T2030 *Daphne retusa*, T2031 *Daphne tangutica*, T2036 *Datura innoxia*, T2037 *Datura innoxia*, T2041 *Datura metel*, T2044 *Datura metel*, T2046 *Datura stramonium*, T2053 *Davallia mariesii*, T2058 *Deeringia amaranthoides* [Syn. *Cladostachys frutescens*], T2077 *Delphinium grandiflorum*, T2113 *Dennstaedtia scabra* [Syn. *Dicksonia scabra*], T2131 *Desmodium pulchellum* [Syn. *Phyllodium pulchellum*], T2133 *Desmodium racemosum* [Syn. *Podocarpium podocarpum* var. *oxyphyllum*], T2136 *Desmos cochinchinensis* [Syn. *Desmos chinensis*], T2189 *Dioscorea althaeoides*, T2194 *Dioscorea colletii*, T2197 *Dioscorea futschauensis*, T2198 *Dioscorea gracillima*, T2201 *Dioscorea hypoglauca* [Syn. *Dioscorea colletii* var.

*hypoglauca*], T2210 *Dioscorea spongiosa*, T2211 *Dioscorea tenuipes*, T2212 *Dioscorea tokoro*, T2234 *Dipsacus asperoides*, T2235 *Dipsacus japonicus*, T2262 *Dregea sinensis*, T2267 *Drosera peltata* var. *lunata*, T2367 *Ephedra equisetina*, T2368 *Ephedra gerardiana*, T2369 *Ephedra intermedia*, T2372 *Ephedra likiangensis*, T2373 *Ephedra minuta*, T2375 *Ephedra monosperma*, T2379 *Ephedra saxatilis*, T2380 *Ephedra sinica*, T2389 *Epimedium acuminatum*, T2390 *Epimedium brevicornum*, T2392 *Epimedium davidii*, T2394 *Epimedium elongatum*, T2398 *Epimedium koreanum*, T2401 *Epimedium pubescens*, T2402 *Epimedium sagittatum*, T2404 *Epimedium suchuenense*, T2406 *Epimedium wushanense*, T2422 *Erigeron breviscapus*, T2426 *Erigeron sumatrensis*, T2438 *Erodium stephanianum*, T2449 *Erycibe obtusifolia*, T2450 *Erycibe schmidtii*, T2459 *Erythrina arborescens*, T2478 *Erythrina variegata* [Syn. *Erythrina indica*], T2517 *Eucalyptus robusta*, T2540 *Euonymus fortunei*, T2542 *Euonymus japonicus*, T2545 *Euonymus phellomana*, T2631 *Eurya japonica*, T2720 *Ficus hispida*, T2723 *Ficus pumila*, T2727 *Ficus simplicissima*, T2731 *Firmiana simplex*, T2734 *Fissistigma glaucescens* [Syn. *Melodorum glaucescens*], T2735 *Fissistigma oldhamii* [Syn. *Melodorum oldhamii*], T2737 *Flemingia philippinensis* [Syn. *Moghania philippinensis*], T2738 *Flemingia strobilifera*, T2752 *Fordia cauliflora*, T2753 *Formica fusca*, T2805 *Fugu ocellatus*, T2890 *Gastrodia elata*, T2895 *Gaultheria yunnanensis*, T2897 *Gelsemium elegans*, T2909 *Gentiana crassicaulis*, T2910 *Gentiana dahurica*, T2913 *Gentiana kaufmanniana*, T2919 *Gentiana macrophylla*, T2932 *Gentiana siphonantha*, T2934 *Gentiana straminea*, T2936 *Gentiana tianschanica*, T2937 *Gentiana tibetica*, T2943 *Geranium nepalense*, T2944 *Geranium pratense*, T2946 *Geranium robertianum*, T2947 *Geranium sibiricum*, T2949 *Geranium wilfordii*, T2994 *Gloiopeltis furcata*, T3033 *Gnetum parvifolium* [Syn. *Gnetum indicum*], T3080 *Gymnema sylvestre*, T3113 *Hedera nepalensis* var. *sinensis*, T3115 *Hedera rhombea*, T3201 *Hemiphragma heterophyllum*, T3234 *Heteropogon contortus*, T3270 *Holboellia fargesii*, T3294 *Huperzia selago* [Syn. *Lycopodium selago*], T3316 *Hylomecon japonica*, T3329 *Hyoscyamus niger*, T3363 *Hypericum sampsonii*, T3381 *Hyptis suaveolens*, T3390 *Ilex cornuta*, T3395 *Ilex pedunculosa*, T3398 *Ilex rotunda*, T3410 *Impatiens balsamina*, T3413 *Impatiens nolintangere*, T3417 *Imperata cylindrica* var. *major*, T3420 *Incarvillea sinensis*, T3520 *Isodon rosthornii*, T3613 *Kadsura coccinea* [Syn. *Kadsura chenensis*; *Kadsura hainanensis*], T3614 *Kadsura heteroclita* [Syn. *Uvaria heteroclita*], T3615 *Kadsura interior*, T3624 *Kalopanax pictum*, T3625 *Kalopanax septemlobus*, T3628 *Kerria japonica*, T3643 *Kopsia officinalis*, T3726 *Laurus nobilis*, T3746 *Leontice robustum*, T3796 *Libanotis buchtormensis*, T3809 *Ligularia lapathifolia*, T3820 *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*], T3847 *Lindera angustifolia*, T3851 *Lindera glauca*, T3852 *Lindera megaphylla*, T3867 *Liquidambar formosana* [Syn. *Liquidambar taiwaniana*], T3871 *Liriodendron tulipifera*, T3897 *Litsea verticillata*, T3925 *Loranthus parasiticus* [Syn. *Loranthus chinensis*; *Taxillus chinensis*], T3965 *Lycopodium annotinum*, T3969 *Lycopodium casuarinoides*, T3971 *Lycopodium complanatum*, T3976 *Lycopodium obscurum*, T3990 *Lygodium japonicum*, T3995 *Lysidice rhodostegia*, T3996 *Lysimachia candida*, T3997 *Lysimachia capillipes*, T4005 *Lysionotus pauciflorus*, T4106 *Manis pentadactyla*, T4126 *Matteuccia orientalis*, T4147 *Medicago falcata*, T4183 *Menispermum dauricum*, T4210 *Michelia champaca*, T4219 *Microlepis marginata*, T4221 *Micromelum falcatum*, T4223 *Micromelum integerrimum*, T4234 *Millettia dielsiana*, T4238 *Millettia nitida*, T4239 *Millettia nitida* var. *hirsutissima*, T4260 *Moghania philippinensis*, T4267 *Monachosorum flagellare*, T4279 *Morina chinensis*, T4311 *Mucuna sempervirens*, T4323 *Murraya paniculata* [Syn. *Chalcas paniculata*], T4324 *Murraya paniculata* [Syn. *Chalcas paniculata*], T4325 *Murraya paniculata* var. *exotica*, T4347 *Myrica nagi* [Syn. *Podocarpus nagi*], T4361 *Myrsine africana*, T4368 *Nandina domestica*, T4444 *Nothopanax davidii*, T4470 *Ocimum basilicum*, T4542 *Orthosiphon wulfenioides* [Syn. *Coleus wulfenioides*], T4549 *Osbeckia chinensis*, T4605 *Panax japonicus* var. *major*, T4631 *Papaver nudicaule* var. *chinense*, T4687 *Peganum harmala*, T4704 *Peperomia duclouxii*, T4710 *Pericampylus glaucus*, T4726 *Periploca forrestii*, T4729 *Periploca sepium*, T4801 *Phlegmariurus phlegmaria* [Syn. *Lycopodium phlegmaria*], T4814 *Phlomis umbrosa*, T4828 *Photinia serrulata*, T4873 *Picea koraiensis*, T4906 *Pinus armandii*, T4916 *Pinus massoniana*, T4938 *Piper boehmeriaefolium*, T4956 *Piper mullesua*, T4962 *Piper puberulum*, T4965 *Piper sarmentosum*, T4966 *Piper sarmentosum*, T5018 *Pleuropteris ciliinervis*, T5028 *Plumbago indica*, T5029 *Plumbago zeylanica*, T5057 *Podophyllum emodii* [Syn. *Podophyllum emodii* var. *chinense*; *Podophyllum sikkimense*; *Sinopodophyllum emodii*], T5071 *Polygala arillata*, T5075 *Polygala fallax* [Syn. *Polygala aureocauda*], T5104 *Polygonum hydropiper*, T5105 *Polygonum hydropiper* var. *flaccidum* [Syn. *Polygonum flaccidum*], T5106 *Polygonum lapathifolium*, T5108 *Polygonum multiflorum*, T5114 *Polygonum polystachyum*, T5124 *Polypodium niponicum*, T5144 *Populus adenopoda*, T5156 *Populus nigra* var. *thevestina*, T5179 *Potentilla anserina*, T5189 *Pothos chinensis*, T5230 *Prunus persica*, T5267 *Psidium guajava*, T5269 *Psilotum nudum*, T5284 *Pteridium aquilinum* var. *latiusculum*, T5308 *Pterocarya stenoptera*, T5341 *Pygmaeopremna herbacea* [Syn. *Premna herbacea*], T5344 *Pyrola atropurpurea*, T5345 *Pyrola calliantha* [Syn. *Pyrola rotundifolia* ssp. *chinensis*], T5346 *Pyrola calliantha* var. *tibetana*, T5347 *Pyrola decorata*, T5349 *Pyrola incarnata*, T5350 *Pyrola japonica*, T5351 *Pyrola rotundifolia*, T5391 *Rabdosia eriocalyx*, T5515 *Rhododendron micranthum*, T5516 *Rhododendron molle*, T5523 *Rhododendron simsii*, T5547 *Ricinus communis*, T5560 *Rorippa montana* [Syn. *Rorippa dubia*; *Sisymbrium dubium*], T5591 *Rubus cochinchinensis*, T5637 *Sabia schumanniana*, T5640 *Sabina vulgaris*, T5651 *Salix babylonica*, T5704 *Sambucus nigra*, T5707 *Sambucus williamsii*, T5727 *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*], T5730 *Sarcandra glabra* [Syn. *Chloranthus glaber*], T5741 *Sargentodoxa cuneata*, T5746 *Sassafras tzumu*, T5755 *Saussurea involucrata*, T5756 *Saussurea japonica*, T5781 *Schefflera arboricola*, T5785 *Schefflera venulosa*, T5793 *Schisandra henryi*, T5817 *Scolopendra subspinipes mutilans*, T5861 *Selaginella doederleinii*, T5934 *Seseli meirei*, T5937 *Seseli yunnanense*, T5939 *Shiraia bambusicola*, T5950 *Siegesbeckia orientalis*, T5951 *Siegesbeckia orientalis* var. *glabrescens* [Syn. *Siegesbeckia glabrescens*], T5952 *Siegesbeckia orientalis* var. *pubescens* [Syn. *Siegesbeckia pubescens*], T5963 *Sinodielsia yunnanensis*, T5964

*Sinomenium acutum*, T5972 *Skimmia reevesiana*, T5976 *Smilax china* [Syn. *Smilax japonica*], T5982 *Smilax sieboldii*, T5984 *Smilax stans* [Syn. *Smilax vaginata* var. *stans*], T6020 *Solanum xanthocarpum*, T6051 *Sorbaria arborea*, T6052 *Sorbaria sorbifolia*, T6066 *Spatholobus suberectus*, T6069 *Speranskia tuberculata*, T6084 *Spiraea prunifolia*, T6086 *Spiraea thunbergii*, T6100 *Stauntonia hexaphylla*, T6118 *Stephania brachyandra*, T6119 *Stephania cepharantha*, T6120 *Stephania delavayi* [Syn. *Stephania epigaea*], T6125 *Stephania elegans*, T6127 *Stephania glabra*, T6128 *Stephania hernandifolia*, T6129 *Stephania japonica*, T6131 *Stephania longa*, T6133 *Stephania sinica*, T6136 *Stephania tetrandra*, T6166 *Strychnos angustiflora*, T6250 *Symplocos caudata*, T6356 *Tetrapanax papyriferus*, T6422 *Thelephora vialis*, T6437 *Thlaspi arvense*, T6440 *Thuja orientalis* [Syn. *Platycladus orientalis*; *Biota orientalis*], T6468 *Tinospora sinensis*, T6484 *Trachelospermum jasminoides*, T6540 *Tripterygium hypoglaucum*, T6566 *Tupistra chinensis*, T6580 *Tylophora floribunda*, T6645 *Urena lobata*, T6651 *Urtica cannabina*, T6652 *Urtica dioica*, T6675 *Valeriana amurensis*, T6676 *Valeriana hardwickii*, T6679 *Valeriana officinalis*, T6680 *Valeriana officinalis* var. *latifolia*, T6693 *Veratrum album* var. *lobelianum* [Syn. *Veratrum lobelianum*], T6727 *Veronica persica*, T6737 *Viburnum luzonicum*, T6738 *Viburnum odoratissimum*, T6771 *Viscum album*, T6772 *Viscum angulatum*, T6773 *Viscum articulatum*, T6774 *Viscum articulatum*, T6775 *Viscum coloratum*, T6777 *Viscum multinerve*, T6787 *Vitex negundo*, T6791 *Vitex rotundifolia* [Syn. *Vitex trifolia* var. *simplicifolia*], T6793 *Vitex trifolia*, T6798 *Vitis vinifera*, T6799 *Vitis vinifera*, T6830 *Woodfordia fruticosa*, T6843 *Xanthium sibiricum* [Syn. *Xanthium strumarium*], T6861 *Zanthoxylum ailanthoides*, T6883 *Zanthoxylum myriacanthum*.

**wind-damp impediment pattern** T5158 *Populus simonii*.

**wind-damp intractable impediment** T6184 *Strychnos nux-vomica*, T6193 *Strychnos wallichiana*.

**wind-damp lumbago** T0122 *Aconitum pendulum*, T1453 *Cissampelos pareira* var. *hirsute*, T1629 *Colysis pothifolia* [Syn. *Hemionitis pothifolia*], T2213 *Dioscorea zingiberensis*, T5794 *Schisandra lancifolia*, T5848 *Securinega suffruticosa*.

**wind-damp numbness** T1327 *Ceratostigma minus*.

**wind-damp numbness pain** T5389 *Rabdosia coetsa*.

**wind-damp pain** T0069 *Achillea wilsoniana*, T0116 *Aconitum nagarum* var. *heterotrichum* [Syn. *Aconitum bullatifolium*], T0142 *Acorus calamus*, T0467 *Anemone flaccida*, T0471 *Anemone rivularis*, T0569 *Aralia cordata*, T0574 *Aralia fargesii*, T0729 *Asarum maximum*, T0813 *Atalantia buxifolia* [Syn. *Severinia buxifolia*], T0838 *Azolla imbricata* [Syn. *Salvinia imbricata*], T1129 *Calophyllum inophyllum*, T1186 *Capsicum annuum*, T1187 *Capsicum frutescens*, T1275 *Cayratia japonica*, T1373 *Chloranthus serratus*, T1932 *Cyclea racemosa*, T2028 *Daphne odora*, T2409 *Equisetum palustre*, T2412 *Equisetum sylvaticum*, T2510 *Eucalyptus globulus*, T2732 *Firmiana simplex*, T3088 *Gynura segetum* [Syn. *Gynura japonica*], T3418 *Incarvillea arguta*, T3436 *Inula nervosa*, T3460 *Iris halophila*, T3464 *Iris lactea* var. *chinensis* [Syn. *Iris pallasii* var. *chinensis*], T3471 *Iris tectorum*, T3737 *Lemmaphyllum microphyllum* var. *obovatum*, T3765 *Lepisorus ussuriensis*, T3989 *Lygodium flexuosum* [Syn. *Lygodium pinnatifidum*; *Ophioglossum flexuosum*], T4004 *Lysimachia paridiformis*, T4195

*Menyanthes trifoliata*, T4423 *Nicandra physaloides*, T4503 *Onychium lucidum*, T4577 *Paederia scandens*, T4778 *Phallus impudicus*, T4823 *Pholidota yunnanensis*, T5122 *Polygonum viscosum*, T5193 *Pratia nummularia*, T5250 *Psammosilene tunicoides*, T5555 *Rodgersia pinnata*, T5563 *Rosa cymosa*, T5586 *Rubia yunnanensis*, T5720 *Sapindus mukorossi*, T5819 *Scopolia acutangula* [Syn. *Anisodus acutangulus*], T5989 *Solanum aculeatissimum*, T5998 *Solanum dulcamara*, T6003 *Solanum khasianum*, T6014 *Solanum surattense*, T6264 *Syzygium buxifolium*, T6367 *Teucrium quadrifarium*, T6471 *Toddalia asiatica* [Syn. *Toddalia aculeata*; *Paullinia asiatica*], T6578 *Tylophora atrofoliculata*, T6689 *Ventilago leiocarpa*, T6742 *Vicia amoena*, T6895 *Zanthoxylum simulans*.

**wind-damp pain (external use with high toxicity)** T1416 *Cicuta virosa*.

**wind-damp pain in lumbus and legs** T0151 *Acronychia pedunculata*, T6304 *Taxillus levinei*, T6731 *Veronicastrum sibiricum*.

**wind-damp pain in sinew and bone** T0708 *Arthromeris mairei* [Syn. *Polypodium mairei*], T1003 *Brandisia hancei*, T1976 *Cyperus iria*, T2062 *Delphinium bonvalotii*, T2081 *Delphinium omeiense*, T2084 *Delphinium potaninii*, T2085 *Delphinium potaninii* var. *jiufengshanense*, T3118 *Hedychium coronarium*, T3285 *Hovenia dulcis*, T4662 *Parthenocissus tricuspidata*, T5298 *Pteris vittata*, T5592 *Rubus hirsutus*, T6889 *Zanthoxylum podocarpum*.

**wind-damp pain in sinews and bones** T1746 *Corydalis taliensis*.

**wind-damp papules** T6476 *Torilis japonica*.

**wind-damp sore toxin** T6477 *Torreya grandis*.

**wind-damp with painful swollen joints** T0078 *Aconitum barbatum* var. *puberulum* [Syn. *Aconitum ochranthum*].

**wind-damp-heat impediment** T0594 *Ardisia crenata*, T0635 *Aristolochia moupinensis*, T1561 *Clerodendron serratum*, T1569 *Clerodendrum serratum* var. *amplexifolium*, T3913 *Lonicera japonica*, T4060 *Mahonia confusa*, T4064 *Mahonia gracilipes*, T4575 *Pachysandra terminalis*, T4582 *Paeonia delavayi*, T4585 *Paeonia moutan* [Syn. *Paeonia suffruticosa*], T4678 *Paulownia fortunei*, T4679 *Paulownia tomentosa*, T5126 *Polypodium virginianum*, T5127 *Polypodium vulgare*, T6386 *Thalictrum foetidum*, T6845 *Xanthoceras sorbifolia*.

**wind-fire eye** T1251 *Cassythia filiformis*, T5907 *Senecio scandens* [Syn. *Senecio chinensis*].

**wind-fire toothache** T0181 *Adina rubella*, T0364 *Alsophila spinulosa*, T0722 *Arundo donax*, T0922 *Berchemia polyphylla* var. *leioclada*, T1692 *Coriaria sinica* [Syn. *Coriaria nepalensis*], T1869 *Cryptotaenia japonica*, T3432 *Inula helianthus-aquatica*, T3624 *Kalopanax pictum*, T3625 *Kalopanax septemlobus*, T3736 *Lemmaphyllum microphyllum*, T4605 *Panax japonicus* var. *major*, T5184 *Potentilla kleiniana*, T6234 *Swertia punicea*, T6250 *Symplocos caudata*, T6378 *Thalictrum delavayi*.

**wind-heat common cold** T0319 *Allium schoenoprasum*, T0457 *Andrographis paniculata* [Syn. *Justicia paniculata*], T0584 *Arctium lappa*, T0586 *Arctium lappa*, T0784 *Astilbe chinensis*, T0888 *Beesia calthaeifolia*, T1106 *Caesalpinia minax*, T1425 *Cimicifuga simplex*, T1633 *Commelina communis*, T1746 *Corydalis taliensis*, T1931 *Cyclea barbata*, T2244 *Doellingeria scaber* [Syn. *Aster scaber*], T2281 *Dryopteris crassirhizoma*, T2325 *Eichhornia crassipes*, T2555 *Eupatorium chinense*, T2756 *Forsythia suspensa*, T3340 *Hypericum*



- ascyron*, T3396 *Ilex pubescens*, T3397 *Ilex pubescens* var. *glaber*, T4056 *Mahonia bealei*, T4063 *Mahonia fortunei*, T4067 *Mahonia japonica*, T4186 *Mentha piperita*, T4289 *Morus alba*, T4291 *Morus australis*, T4293 *Morus cathayana*, T4298 *Morus mongolica*, T4502 *Onychium japonicum* [Syn. *Tricomanes japonicum*], T4527 *Orixa japonica*, T4831 *Phtheirospermum japonicum* [Syn. *Gerardia japonica*], T4884 *Picria felterrae*, T6023 *Solidago virgaurea*, T6024 *Solidago virgaurea* var. *leiocarpa* [Syn. *Solidago decurrens*], T6234 *Swertia punicea*, T6338 *Tephrosia purpurea*, T6365 *Teucrium pilosum* [Syn. *Teucrium japonicum* var. *pilosum*], T6367 *Teucrium quadrifarium*, T6431 *Thesium chinense*, T6567 *Tupistra wattii* [Syn. *Campylandra wattii*], T6735 *Viburnum dilatatum*.
- wind-heat common cold and headache** T0571 *Aralia decaisneae*.
- wind-heat cough** T0834 *Averrhoa carambola*, T3928 *Lotus corniculatus*, T6219 *Swertia erythrosticta*, T6537 *Tripterospermum japonicum*, T6538 *Tripterospermum taiwanense*.
- wind-heat exterior syndrome** T3738 *Lemna minor*, T4184 *Mentha haplocalyx* [Syn. *Mentha canadaensis*; *Mentha arvensis* var. *haplocalyx*; *Mentha arvensis*].
- wind-heat headache** T4143 *Meconopsis horridula*, T4796 *Pheretima aspergillum*; *Allolobophora caliginosa trapezoides*.
- wind-heat impediment pain** T1199 *Carduus acanthoides*, T1200 *Carduus crispus*, T1903 *Curcuma aromatica*, T1905 *Curcuma longa*.
- wind-heat itching of skin** T1296 *Celosia argentea*.
- wind-heat macular eruption** T0860 *Balanophora japonica*.
- wind-heat red eye** T0984 *Bos taurus domesticus*; *Bubalus bubalis*, T2408 *Equisetum hiemale*.
- wind-heat toothache** T2077 *Delphinium grandiflorum*.
- wind-phlegm cough** T0805 *Astragalus sinicus*.
- wind-phlegm dizziness** T0088 *Aconitum coreanum*, T0617 *Arisaema amurense*, T0618 *Arisaema consanguineum*, T0620 *Arisaema heterophyllum*, T4903 *Pinellia pedatisecta*.
- withered-yellow facial complexion** T5042 *Podocarpus macrophyllum*, T5044 *Podocarpus macrophyllum* var. *maki*.
- wolf-fistula** T2427 *Erinaceus europaeus*; *Hemiechinus dauuricus*; *Hemiechinus auritus*.
- women's diseases** T0495 *Angelica sinensis*, T1978 *Cyperus rotundus*, T4804 *Phlojodicarpus sibiricus*.
- women's hormone dysfunction diseases** T1419 *Cimicifuga dahurica*, T1420 *Cimicifuga foetida*, T1421 *Cimicifuga heracleifolia*.
- worm accumulation** T0606 *Areca catechu*, T1210 *Carpesium abrotanoides*, T2048 *Daucus carota*, T2365 *Enteromorpha clathrata*, T2695 *Ferula assafoetida*, T3460 *Iris halophila*, T3464 *Iris lactea* var. *chinensis* [Syn. *Iris pallasii* var. *chinensis*], T5385 *Quisqualis indica*, T5542 *Rhus verniciflua* [Syn. *Toxicadendron verniciflum*], T5720 *Sapindus mukorossi*, T6105 *Stellera chamaejasme*, T6177 *Strychnos ignatii*.
- wound** T0311 *Allium cepa*, T0543 *Apis mellifera ligustica*, T2293 *Dumortiera hirsuta*, T3388 *Ilex chinensis* [Syn. *Ilex purpurea*], T3578 *Juncus effusus*, T4253 *Mirabilis jalapa*, T4303 *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*, T5308 *Pterocarya stenoptera*.
- wound swelling from knocks and falls** T1287 *Celastrus hypoleucus*, T1799 *Crinum latifolium*, T2161 *Dicranopteris pedata* [Syn. *Polypodium pedatum*; *Dicranopteris dichotoma*], T2538 *Euonymus bungeanus*, T3796 *Libanotis buchtormensis*, T3990 *Lygodium japonicum*, T4549 *Osbeckia chinensis*, T4605 *Panax japonicus* var. *major*, T4937 *Piper betle*, T5785 *Schefflera venulosa*.
- wrenching and contusion** T0483 *Angelica gigas*.
- wrenching and contusion from knocks and falls** T1958 *Cynanchum otophyllum*, T2273 *Drynaria fortunei*, T5252 *Pseudodrynaria coronans*.
- yang brightness headache** T1425 *Cimicifuga simplex*.
- yang vacuity cold diarrhea** T1901 *Curculigo orchoides*.
- yang vacuity dizziness** T1439 *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*].
- yang vacuity external contraction** T0083 *Aconitum carmichaeli*, T0085 *Aconitum carmichaeli* cv.
- yang-collapse reversal flow** T6909 *Zingiber officinale*.
- yang-collapse vacuity desertion** T0083 *Aconitum carmichaeli*, T0085 *Aconitum carmichaeli* cv.
- yellow eyes** T6398 *Thalictrum microgynum*.
- yellow sweating** T6764 Vinegar.
- yellow swelling** T1538 *Clausena lansium*, T6018 *Solanum verbascifolium*, T6866 *Zanthoxylum avicennae*.
- yellow swelling in whole body** T6398 *Thalictrum microgynum*.
- yellow thick foul leukorrhagia** T4789 *Phellodendron amurense*, T4790 *Phellodendron amurense* var. *wilsonii*, T4791 *Phellodendron chinense*, T4792 *Phellodendron chinense* var. *glabriusculum*.
- yellow thick vaginal discharge** T3564 *Juglans mandshurica*.
- yellow-water sore** T0557 *Aquilegia ecalcarata*, T1163 *Campylotropis hirtella*, T1693 *Coriaria sinica* [Syn. *Coriaria nepalensis*], T2165 *Dictamnus angustifolius*, T2167 *Dictamnus dasycarpus*, T3246 *Hibiscus syriacus*, T3340 *Hypericum ascyron*, T3348 *Hypericum elodeoides*, T3368 *Hypericum wightianum*, T3680 *Lamium amplexicaule*, T4830 *Phryma leptostachya*, T4845 *Physalis alkekengi*, T5033 *Poa sphondylodes*, T5717 *Sapindus delavayi* [Syn. *Pancovia delavayi*].
- yin cold abdominal pain** T0310 *Allium ascalonicum*, T0314 *Allium fistulosum*.
- yin cold edema** T0083 *Aconitum carmichaeli*, T0085 *Aconitum carmichaeli* cv.
- yin damage liquid depletion** T2094 *Dendrobium aduncum*, T2096 *Dendrobium aurantiacum* var. *denneanum*, T2098 *Dendrobium chrysanthum*, T2100 *Dendrobium densiflorum*, T2102 *Dendrobium fimbriatum* var. *oculatum*, T2105 *Dendrobium loddigesii*, T2106 *Dendrobium moniliforme*, T2107 *Dendrobium nobile*, T2108 *Dendrobium officinale*.
- yin depletion and effulgent fire** T4610 *Panax quinquefolium*.
- yin flat abscess** T5109 *Polygonum nodosum*, T6263 *Syzygium aromaticum* [Syn. *Eugenia caryophyllata*].
- yin flat abscess and phlegm node** T2367 *Ephedra equisetina*, T2368 *Ephedra gerardiana*, T2369 *Ephedra intermedia*, T2372 *Ephedra likiangensis*, T2373 *Ephedra minuta*, T2375 *Ephedra monosperma*, T2379 *Ephedra saxatilis*, T2380 *Ephedra sinica*.
- yin flat abscess and sores** T0083 *Aconitum carmichaeli*, T0085 *Aconitum carmichaeli* cv.

- yin summerheat and headache** T4305 *Mosla dianthera*.
- yin syndrome with sores** T0440 *Anagallis arvensis*.
- yin vacuity and heat vexation** T3001 *Glycine max*.
- yin vacuity blood heat** T2323 *Eclipta prostrata* [Syn. *Eclipta alba*].
- yin vacuity consumption fever** T3983 *Lycoris aurea*.
- yin vacuity cough** T1969 *Cynoglossum officinale*, T4450 *Nuphar pumilum*.
- yin vacuity enduring cough** T3832 *Lilium brownii* var. *viridulum* [Syn. *Lilium brownii* var. *colchesteri*], T3835 *Lilium longiflorum*, T3836 *Lilium pumilum* [Syn. *Lilium tenuifolium*], T3839 *Lilium tigrinum* [Syn. *Lilium lancifolium*].
- yin vacuity fever** T0660 *Artemisia annua*, T0662 *Artemisia apiacea* [Syn. *Artemisia carvifolia*; *Artemisia caruifolia*], T0746 *Asparagus cochinchinensis* [Syn. *Asparagus lucidus*], T3276 *Homo sapiens*, T6104 *Stellaria dichotoma* var. *lanceolata*.
- yin vacuity internal heat** T6087 *Spiranthes sinensis*.
- yin vacuity lung dryness** T0749 *Asparagus filicinus*, T0753 *Asparagus setaceus* [Syn. *Asparagus plumosus*], T3873 *Liriope platyphylla*, T3874 *Liriope spicata*.
- yin vacuity taxation cough** T2783 *Fritillaria cirrhosa*, T2784 *Fritillaria delavayi*, T2792 *Fritillaria przewalskii*, T2796 *Fritillaria unibracteata*, T2797 *Fritillaria ussuriensis*, T5091 *Polygonatum cyrtonema* [Syn. *Polygonatum multiflorum*], T5092 *Polygonatum kingianum*, T5095 *Polygonatum sibiricum*.
- yin vacuity taxation fever** T3390 *Ilex cornuta*.
- yin vacuity tidal fever** T6416 *Thamnia vermicularis*.
- yin vacuity tuberculosis** T0607 *Arenaria juncea*, T3090 *Gypsophila oldhamiana*, T3091 *Gypsophila pacifica*, T5955 *Silene jensseensis*.
- zoster** T0543 *Apis mellifera ligustica*, T0805 *Astragalus sinicus*, T0866 *Baphicacanthus cusia* [Syn. *Strobilanthes cusia*], T1151 *Camellia sinensis* [Syn. *Thea sinensis*], T1288 *Celastrus orbiculatus* [Syn. *Celastrus articulatus*], T1290 *Celastrus orbiculatus* [Syn. *Celastrus articulatus*], T1799 *Crinum latifolium*, T1869 *Cryptotaenia japonica*, T1959 *Cynanchum paniculatum*, T2193 *Dioscorea cirrhosa* [Syn. *Dioscorea pogonoides*], T2658 *Fagopyrum esculentum*, T3233 *Heteropappus altaicus*, T3311 *Hydrocotyle sibthorpioides*, T3318 *Hylotelephium mingjinianum*, T3865 *Lippia nodiflora*, T3970 *Lycopodium cernuum*, T3973 *Lycopodium japonicum* [Syn. *Lycopodium clavatum*], T3990 *Lygodium japonicum*, T4248 *Mimosa pudica*, T5184 *Potentilla kleiniana*, T5680 *Salvia miltiorrhiza*, T5681 *Salvia miltiorrhiza* f. *alba*, T5688 *Salvia przewalskii*, T6092 *Stachys palustris*, T6217 *Swertia davidii*.